WARREN D. WILLIAMS
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RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

September 14, 2015

Sent via email to: sandiego@waterboards.ca.gov

Mr. Wayne Chiu
CRWQCB - San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92108

Dear Mr. Chiu:

Re: Comment - Tentative Order No. R9-2015-0100, Place ID: 786088WChiu

The Riverside County Flood Control and Water Conservation District (District) appreciates this opportunity to submit comments on the above named Tentative Order, on behalf of the Riverside County MS4 Permittees within the San Diego Region (Riverside County Co-Permittees), which includes the District, the County of Riverside, and the Cities of Murrieta, Temecula and Wildomar. Tentative Order No. R9-2015-0100 (Tentative Order) proposes to amend the National Pollutant Discharge Elimination System (NPDES) Permit for Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region, Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Regional Permit) to include the Riverside County Co-Permittees, and also incorporate limited permit provisions for the City of Menifee.

The Riverside County Co-Permittees have previously commented that the San Diego Regional Water Quality Control Board (Regional Board) lacks authority to adopt a Regional Permit covering San Diego, Orange, and Riverside Counties. Our concerns and legal objections to inclusion into the Regional Permit, as well as other comments on provisions in the Regional Permit, are more completely set forth in our written comment letters dated January 10, 2013 (regarding Order No. R9-2013-0001) and November 19, 2014 (regarding Order R9-2015-0001), and also in the Santa Margarita Region Report of Waste Discharge (ROWD) dated May 10, 2015. We respectfully request that these written comments and ROWD, as well as the testimony of the District and Riverside County witnesses at the Regional Board hearings held in 2013 and 2015 in connection with the adoption of these Orders, be incorporated in the record for this Tentative Order. We note that our previous comments regarding the absence of an alternative compliance pathway may no longer be relevant, given that an alternative compliance pathway is being proposed for adoption in the Tentative Order. For the convenience of the Board and staff, those previous written comments have been submitted under a separate cover.

Notwithstanding the above concerns, on August 26, 2015, District staff met with Regional Board staff on behalf of the Riverside County Co-Permittees to discuss issues relating to the Regional Permit; Regional Board staff provided valuable compliance assistance and recommendations during this meeting. Our discussion focused on the following issues:

- Permit implementation challenges resulting from the Riverside County Co-Permittees' necessary late entry into the 2013 Regional Permit;
- The Tentative Order's proposed receiving water limitations alternative compliance pathway language;
- The Tentative Order's proposal to include limited permit provisions for the City of Menifee; and
- Monitoring and assessment under Regional Permit Provision D.4.a(1)(a).

In what follows, we summarize the understandings that we reached with Regional Board staff on those issues as well as set forth our suggested revisions to certain elements of the Tentative Order's alternative compliance pathway section. Finally, we include a request for re-inclusion of a third-party certification program into the Regional Permit's existing development inspection provisions.

Permit Implementation Challenges Resulting from Late Entry into the 2013 Regional Permit

During our meeting with staff, we noted that several of the ROWD requirements of the Regional Permit[1], could not feasibly be completed by the Riverside County Co-Permittees because we would not have an approved Water Quality Improvement Plan (WQIP) or Jurisdictional Runoff Management Plan (JRMP) at the time of ROWD submittal, December 2017. We estimated the earliest possible date for Regional Board acceptance of our WQIP to be May 2018, just one month before Regional Permit expiration. It is our understanding that, while the ROWD must be submitted by the date specified in the Regional Permit, it only need address the provisions that can feasibly be completed with the data and information that is available to us prior to the deadline for ROWD submittal.

Additionally, we noted several other Regional Permit provisions, including requirements to submit certification of legal authority[2], assessment and subsequent WQIP revision requirements[3], and requirements to submit a regional monitoring and assessment report[4], which either require data gathered under an approved WQIP, or are due for submittal outside of the Regional Permit's term. From our discussion, we understand that the Regional Board would agree that: 1) the certification of legal authority which was submitted by the Riverside County Co-Permittees under Order No. R9-2010-0016 will remain effective until a new certification is submitted with our first WQIP annual report (after the current Permit term has ended), 2) any provisions regarding assessments or requiring data gathered under an approved WQIP will not be due until such time that the necessary data are gathered and the assessments made under time periods described in the Regional Permit, and 3) we should complete the regional monitoring and assessment report for the current Regional Permit term utilizing data gathered during the transitional monitoring period, as these will be the only data that will be available to us at that time.

Receiving Water Limitations Alternative Compliance Pathway Language

As the Regional Board Executive Officer and staff indicated in hearings on the Regional Permit, neither the Riverside County Co-Permittees, nor co-permittees from the other two counties in the Permit will be able to meet the Regional Permit's Receiving Water Limitations (RWL) provisions for some years. In light of that fact, which was also recognized by the State Water Board in its precedential Order WQ 2015-0075 regarding the Los Angeles County MS4 Permit, we appreciate that the Tentative Order proposes to incorporate a pathway to compliance with RWLs. We support the alternative compliance pathway concept set forth in Tentative Order Provision B.3.c, and for purposes of additional clarity and utility in the language, we offer the following three comments:

Comment #1

Proposed Provision B.3.c(1)(a)(vii) would require that co-permittees develop at least one annual milestone and date for its achievement for each final numeric goal included in the WQIP. We believe that this proposed provision may place undue burden on municipalities and municipal agencies, including the Riverside County Co-Permittees, particularly in the case of longer-term projects. For example, due to the nature of municipal budget and project approval processes, final numeric goals requiring 20 years or more to complete will necessarily generate annual milestones which will be less definitive and more speculative the farther out in time that they are projected. Moreover, we are sensitive to the even greater burden that this proposed

[1] Including Provisions B.5.a, B.5.c, D.4.d(1) through (3), and F.5.b(3) and (4)
[2] Provision E.1.b
[3] Provisions D.4.a(2), D.4.b(1)(c), D.4.b(2)(c), D.4.c, D.4.d
[4] Provision F.3.c

provision would place on other regional co-permittees that have jurisdiction over multiple watershed management areas (WMAs). To ease their burden, we believe that some accommodation should be made in the Tentative Order language to allow milestones to be spaced further apart. We propose the following revision to accommodate both concerns, but ask that these two concerns be considered as separate requests (proposed revised language in ***bold, underline***):

> Provision B.3.c(1)(a)(vii): *"For each final numeric goal developed pursuant to Provisions B.3.a and B.3.c.(1)(a)(i)-(v), at least* ~~***one annual two***~~ *milestones[footnote omitted] and dates for* ~~***its***~~***their*** *achievement must be* ~~***included within each Water Quality Improvement Plan Annual Report reporting period until the final numeric goal is achieved***~~ ***developed for the permit term. The two, or more, milestones and dates for their achievement shall be submitted in the first Water Quality Improvement Plan Annual Report of each permit term. When a subsequent permit is adopted, a new set of milestones and dates for their achievement shall be submitted as part of the first Water Quality Improvement Plan Annual Report under that permit, until the final numeric goal is achieved."***

Comment #2

Proposed Provisions B.3.c(2) and B.3.c(2)(d) would enable co-permittees who opt to use the WQIP for RWL compliance to remain in compliance as long as they have a WQIP which has been accepted by the Regional Board in accordance with the WQIP update requirements of Provision F.2.c. While this language appears to provide that co-permittees remain in compliance so long as they meet the requirements for updates set forth in Provision B.3.c(2), other provisions of the Tentative Order or Regional Permit appear to introduce some uncertainty. First, we note that footnote 10 on page 36 states that proposed changes to the WQIP do not stay any permit provision. Second, Provision A.4.c states that, in connection with the updating of a WQIP, "[n]othing in Provisions A.4.a and A.4.b prevents the San Diego Water Board from enforcing any provision of this Order while the applicable Copermittees prepare and implement the above update to the Water Quality Improvement Plan and jurisdictional runoff management programs."

Additionally, it is unclear what the proper action should be in situations where one or more, but not all, co-permittees within a WMA require revision to their individual jurisdictional programs under the WQIP. Taken together, the Tentative Order language is unclear whether all of the other co-permittees would be covered during individual co-permittee-proposed periods of WQIP revision, public review, and Regional Board consideration, because during any periods of revision, the entire WMA would not have a Regional Board accepted WQIP as is required under Tentative Order Provision B.3.c.(2)(d). We believe that it is logical that co-permittees should be covered under the compliance pathway, as long as they continue to meet the other requirements of Provision B.3.c.(2), and the WMA has a WQIP which has been initially accepted by the Regional Board. In order to address these issues, we offer the following revisions to clarify:

> Provision B.3.c(2): *"Each Copermittee that voluntarily completes the requirements of Provision B.3.c.(1) is deemed in compliance with Provisions A.1.a, A.1.c, A.1.d, A.2.a, and A.3.b for the pollutants and conditions for which numeric goals are developed when the Water Quality Improvement Plan, incorporating the requirements of Provision B.3.c.(1), is accepted by the San Diego Water Board pursuant to Provision F.1.b* ~~***or F.2.c***~~*. The Copermittee is deemed in compliance during the term of this Order as long as:"*
>
> Provision B.3.c(2)(d): Delete.
>
> Provision A.4.c: ***"Except as provided in Provision B.3.c(2),*** *nothing in Provisions A.4.a and A.4.b prevents the San Diego Water Board from enforcing any provision of this Order while the applicable Copermittees prepare and implement the above update to the Water Quality Improvement Plan and jurisdictional runoff management programs."*

Comment #3

Proposed Provision B.3.c does not provide for interim compliance for co-permittees who are engaged in the WQIP planning phase. The State Water Board, in Section II.B.6 of Order WQ 2015-0075, endorsed this provision in the 2012 Los Angeles County MS4 permit, which allows interim compliance for co-permittees under that permit while they are preparing their planning documents, subject to rigorous requirements.

We believe that the provision of interim compliance is consistent with Principle Number 3 in Section II.B.7 of the State Water Board Order WQ 2015-0075, which expects that every regional board have incorporated in their alternative compliance pathways a mechanism that "allows permittees appropriate time to come into compliance . . . during full implementation of the compliance alternative." When read with Section II.B.6 of the State Water Board's Order, we believe that the compliance pathway option should also apply during the development and approval period for the WQIP, so long as co-permittees are in compliance with all applicable permit requirements and time schedules. To effectuate such an option, we suggest the following language to be included as a new Provision B.3.c(3):

> ***"A Copermittee who provides written notice to the Regional Board Executive Officer of its intent to utilize the compliance option provided in Provision B.3.c shall be deemed in compliance with Provisions A.1.a, A.1.c, A.1.d, A.2.a, and A.3.b within a Watershed Management Area from the date of that notice to the date that the San Diego Water Board accepts the Water Quality Improvement Plan pursuant to Provisions F.1.b or F.2.c, provided that the Copermittee meets all deadlines set forth in Provisions F.1.a and b for the development of the Water Quality Improvement Plan, and is otherwise in compliance with the requirements of Provision B.3.c. Any failure by the Copermittee to meet such deadlines or to be in compliance shall, from the date of such failure, remove the "deemed complaint" status of the Copermittee unless and until the Copermittee's Water Quality Improvement Plan is accepted by the San Diego Water Board."***

Proposed Inclusion of the City of Menifee in WQIP Development and Implementation

The City of Menifee lies primarily within the Santa Ana Regional Board's jurisdiction; less than 1.3 square miles of the City are located within the Santa Margarita River WMA. Finding number 29.b and various portions of Attachment F of the Tentative Order describe the circumstances under which the Regional Board proposes, through agreements, to require the City of Menifee to participate during development and implementation of the Santa Margarita River WMA WQIP; Table B-1 also proposes to add the City as a "Responsible Co-Permittee" within the WMA.

During our aforementioned meeting, we presented MS4 inventory and mapping which shows that the City of Menifee does not currently own or operate any MS4 within the Santa Margarita River WMA. Regional Board staff explained that should the Regional Board adopt the Tentative Order, the City would be bound by the provisions of its Phase 1 MS4 Permit in the Santa Ana Region only, with the exception of applicable TMDLs which may be developed for the Santa Margarita River WMA in the future. It was further explained that, with the exception of adoption of applicable future TMDLs, the City's implementation of the WQIP would be achieved through implementation of Santa Ana Region MS4 Permit compliance documents and programs.

The City of Menifee has provided comments on the Tentative Order requesting removal of language in the Tentative Order that requires the City to participate in the development and implementation of the Santa Margarita WMA WQIP; the Riverside County Co-Permittees support the City's comments, which are attached to this letter.

Monitoring and Assessment

Provision D.4.a(1)(a) prescribes that assessments required to be made under Provision D.4.a(2) must be included in each co-permittee's transitional monitoring and assessment reports; however, Provision D.4.a(2) requires determination of whether strategies identified in the co-permittee's WQIP are progressing towards

achieving interim and final numeric goals described in the WQIP. It is our understanding that transitional monitoring and assessment applies to the time period when a co-permittee's WQIP is being developed, and therefore assessments made during this time period cannot provide information on the progress of the WQIP. In light of this issue, which appears to have been a typographical error, we suggest the following revision:

> Provision D.4.a(1)(a): "***~~Based on~~ The*** *data collected pursuant to Provision D.1.a****~~, the assessments under Provision D.4.a(2)~~*** *must be included in the Transitional Monitoring and Assessment Program Annual Reports required pursuant to Provision F.3.b.(2).*"

Re-Inclusion of the Optional Third-Party Certification Program into the Regional Permit's Existing Development Inspection Provisions

Section F.3.b(4)(c) of Order No. R9-2010-0016 allowed the Riverside County Co-Permittees the option to propose a third-party certification program for commercial and industrial inspection programs, subject to Regional Board Executive Officer acceptance. We note that a similar provision does not exist in the Tentative Order, and respectfully request inclusion of this option in the Regional Permit.

Conclusion

The Riverside County Co-Permittees are committed to water quality in the Santa Margarita River WMA, and look forward to continued collaboration with Regional Board staff. Thank you for your consideration of these comments. If you have any questions, please contact me at smckibbi@rcflood.org, or 951.955.1273.

Very truly yours,

STUART E. MCKIBBIN
Chief of Watershed Protection Division

Attachment
- City of Menifee Comment Letter dated September 10, 2015

SEB:cw
P8/172444

Scott A. Mann
Mayor

John V. Denver
Mayor Pro Tem

Greg August
Councilmember

Matthew Liesemeyer
Councilmember

Vacant
Councilmember
District 3

September 10, 2015

Wayne Chiu
California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Subject: **Comment - Tentative Order No. R9-2015-0100, Place ID: 786088WChiu**

Dear Mr. Chiu,

The City of Menifee (the "City") would like to thank the San Diego Regional Water Quality Control Board ("San Diego Water Board") for the opportunity to comment on Tentative Order No. R9-2015-0100, an Order amending Order No. R9-2013-0001 as amended by Order No. R9-2015-0001 ("Tentative Order"). The City is committed to developing and implementing jurisdictional and regional programs and strategies that will improve overall water quality.

The City has been working hard to meet the requirements of the Santa Ana Region Permit under Order No. R8-2010-0033. The Report of Waste Discharge (ROWD) submitted to the Santa Ana Board in July 2015 highlights the Santa Ana Region's major water quality accomplishments since the Permit issuance. The City has been an active participant in the region, including in the development and implementation of the Comprehensive Nutrient Reduction Plan (CNRP) (approved July 2013) to address nutrient Total Maximum Daily Loads (TMDL) for Canyon Lake and Lake Elsinore and in the development of the Watershed Action Plan (WAP) (pending Santa Ana Regional Board approval). The City has also developed a Local Implementation Plan (LIP), which details the day-to-day jurisdictional storm water program to meet Permit requirements.

As stated in the Tentative Order, the City is located partially within the jurisdiction of both the San Diego Water Board and the Santa Ana Regional Water Quality Control Board ("Santa Ana Water Board"). More specifically, less than 1.3 square miles in the City is located in the Santa Margarita Watershed Management Area (WMA). To date, the San Diego Water Board and the Santa Ana Water Board have maintained agreements that designate the Santa Ana Water Board as the single Regional Water Board to regulate the City on matters pertaining to Phase I municipal separate storm sewer system (MS4) permits. The Tentative Order proposes continuing this practice, following past agreements, with the significant exception of now requiring the City to participate in the development and implementation of the Santa Margarita WMA Water Quality Improvement Plan (WQIP).

Both the City and the Riverside County Flood Control and Water Conservation District (RCFCWCD) maintain GIS layers of MS4 infrastructure that they own and

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operate within the City. Since the release of the Tentative Order, the City of Menifee has coordinated with RCFCWCD to investigate ownership of MS4 within the small portion of the City that is within the Santa Margarita WMA. As shown on the attached maps, MS4 within the portion of the City in the Santa Margarita WMA is owned and operated exclusively by RCFCWCD. The City of Menifee does not own or operate MS4 within the Santa Margarita WMA.

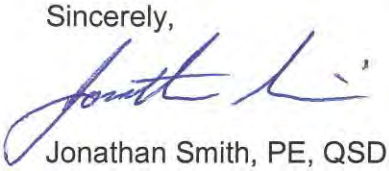
It is the City's understanding, according to the Code of Federal Regulations, title 40, section 122.1(b)(1), that "[t]he NPDES program requires permits for the discharge of 'pollutants' from any 'point source' into 'waters of the United States'". The City does not own or operate any "point sources," as defined in 40 C.F.R. § 122.2 or section 502(14) of the Clean Water Act, within the Santa Margarita WMA. Because the City is not responsible for any MS4 within the Santa Margarita

WMA, it should not be required to develop and implement the Santa Margarita WMA WQIP. For this reason, the City respectfully requests removal of language in the Tentative Order that requires the City to participate in the development and implementation of the Santa Margarita WMA WQIP. Suggested edits to the text of the Tentative Order are shown below:

- Attachment 1, Finding 29(b): "...the City of Menifee is largely regulated by the Santa Ana Water Board under Order No. R8-2010-0033 as it may be amended or reissued, including those portions of the City of Menifee within the San Diego Water Board's jurisdiction, upon the effective date of this Order. ~~The agreement also requires the City of Menifee to actively participate during development and implementation of the Santa Margarita River Watershed Management Area Water Quality Improvement Plan required pursuant to this Order~~..."
- Attachment 1, Table B-1 "Watershed Management Areas": Please strike the City of Menifee from the table and remove the associated footnote.
- Attachment 2, Provision B.1: "~~Footnote 3 to Table B-1 has been included to specify that Phase I MS4 discharges within the jurisdictional boundaries of the City of Menifee located within the San Diego Region will be regulated under Santa Ana Water Board Order No. R8-2010-0033 (NPDES No. CAS618033) and any reissuance thereof. At this time, the City of Menifee is not identified as a responsible Copermittee for any TMDLs established by the San Diego Water Board. Under the terms of the agreement, the City of Menifee must actively participate in the development and implementation of the Santa Margarita River Watershed Management Area Water Quality Improvement Plan required pursuant to Order No. R9-2013-0001, and any reissuance thereof.~~"
- Attachment 2: "The City of Menifee is not regulated as a Copermittee under this Order because it <u>does not own or operate</u> ~~Phase I~~ MS4 ~~discharges~~ <u>within the portion of the City that is located within the San Diego Region.</u> ~~Are regulated by Santa Ana Water Board Order No. R8-2010-0033 as it may be amended or issued pursuant to Water Code section 13228 designation. The requirements of this Order that apply to the City of Menifee for the duration of this Order, consistent with the Water Code section 13228 written agreement dated [Month][Day], 2015, are described in Finding 29 and Footnote 3 to Table B-1.~~"

Thank you for your consideration. Please feel free to contact me or Yolanda Macalalad at 951-639-1368 extension 169 if you have any questions regarding the above comments.

Sincerely,



Jonathan Smith, PE, QSD
Director of Public Works/City Engineer

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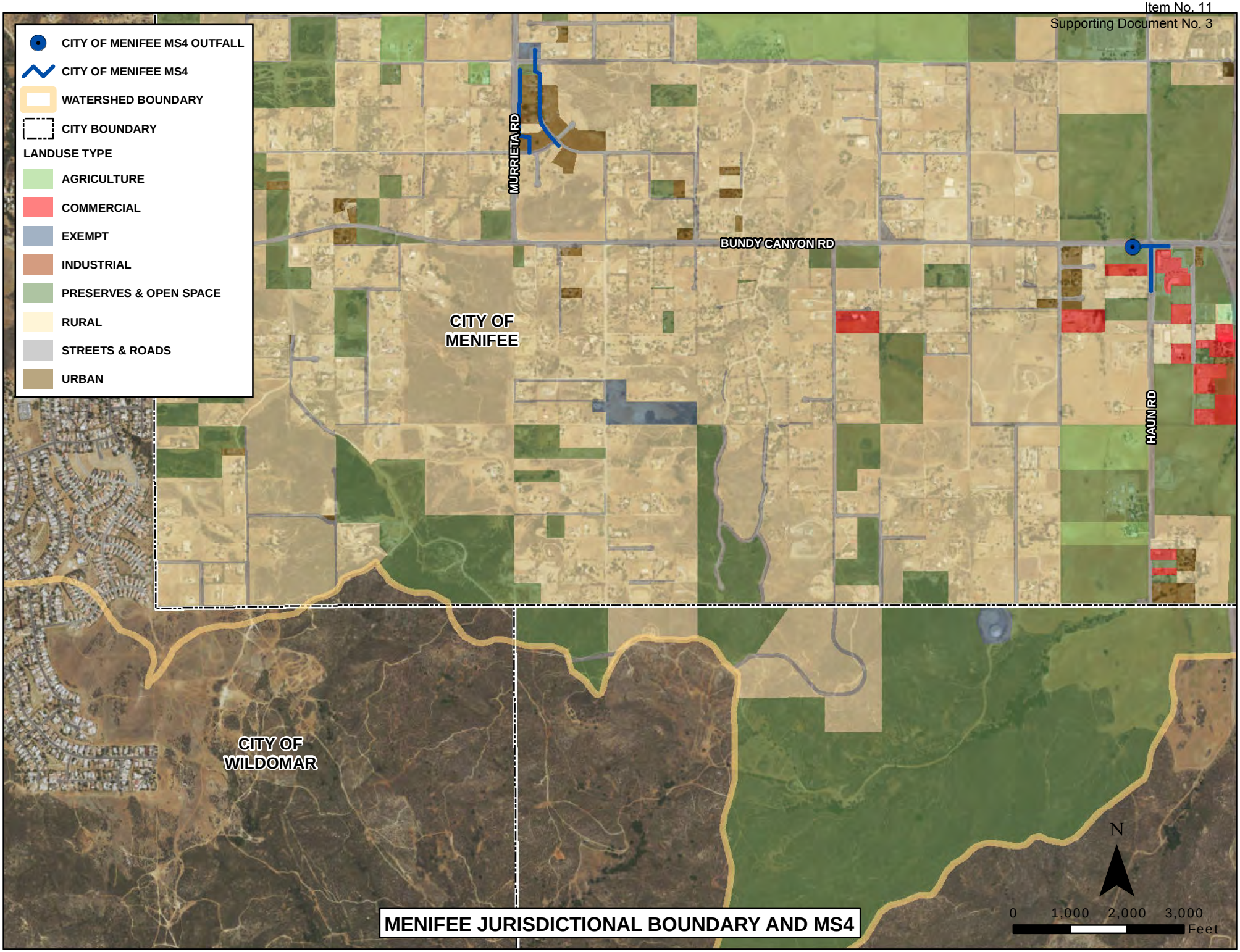
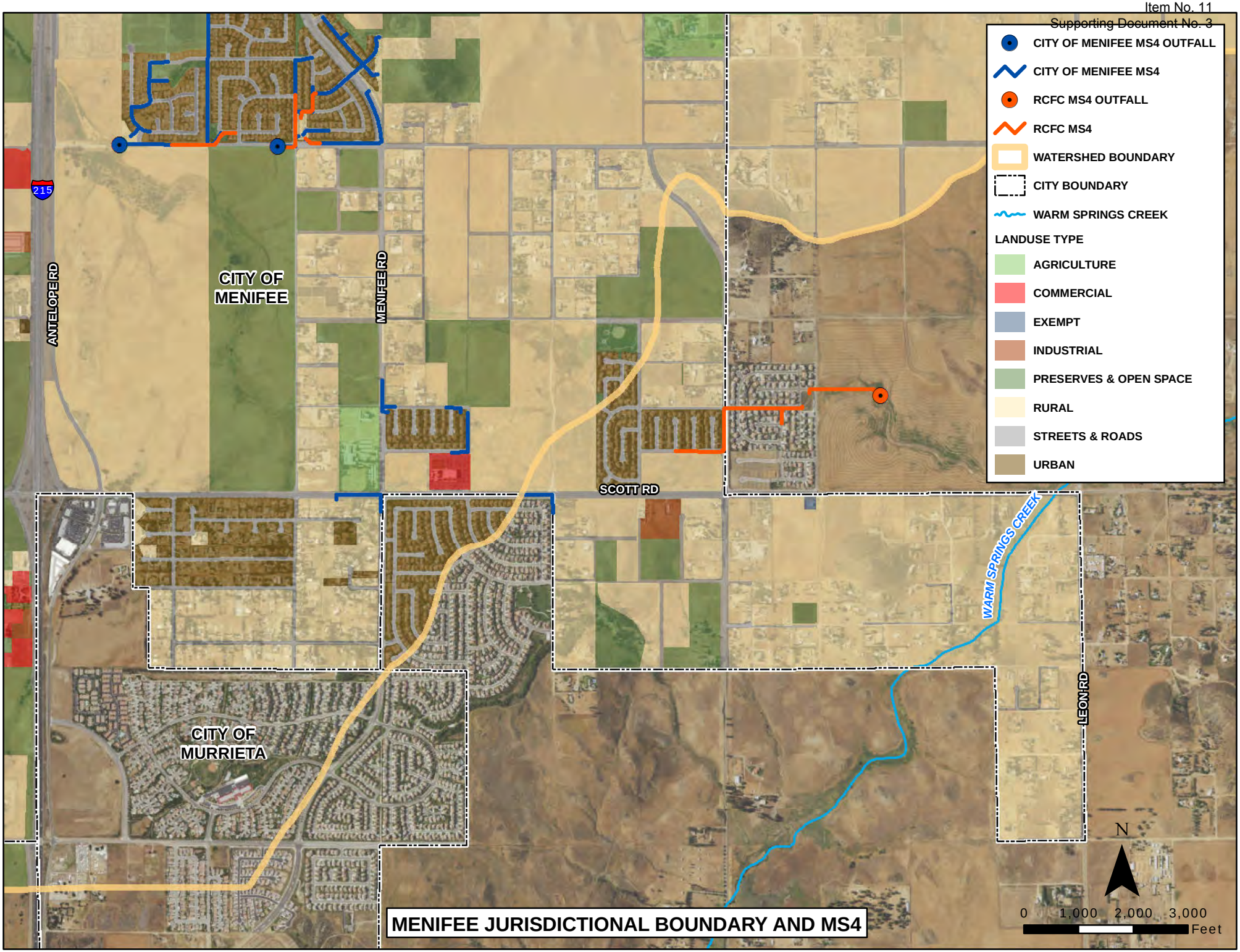


MENIFEE JURISDICTIONAL BOUNDARY AND MS4



MENIFEE JURISDICTIONAL BOUNDARY AND MS4

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General Manager-Chief Engineer

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RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
September 14, 2015

Sent via email to: sandiego@waterboards.ca.gov

Mr. Wayne Chiu
CRWQCB - San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

Dear Mr. Chiu:

Re: Comment - Tentative Order No. R9-2015-0100, Place ID: 786088WChiu

In conjunction with our comment letter dated September 14, 2015, the Riverside County Co-Permittees[1] are submitting for inclusion into the administrative record for Tentative Order No. R9-2015-0100, comments which were submitted on previous Orders. Please find attached the following items:

- Comment letter dated January 10, 2013 regarding Order No. R9-2013-0001;
- Comment letter dated November 19, 2014 regarding Order R9-2015-0001; and
- Section 4.0 of the Santa Margarita Region Report of Waste Discharge (ROWD), dated May 10, 2015.

If you have any questions, please contact me at smckibbi@rcflood.org, or 951.955.1273.

Very truly yours,

STUART E. MCKIBBIN
Chief of Watershed Protection Division

Attachments

SEB:cw
P8/172432

[1] The Riverside County Flood Control and Water Conservation District, County of Riverside and the Cities of Murrieta, Temecula and Wildomar

4.0 Additional Comments on Proposed Permit

- **Previous Comments** - The Co-Permittees previously have expressed concerns regarding inclusion in the San Diego Regional Board's Regional Permit (Order No. R9-2013-0001, as modified by Order No. R9-2015-0001). The Co-Permittees' concerns and legal objections to inclusion in a regional permit are set out more fully in our written comment letter dated January 10, 2013, in Order No. R9-2013-0001 and November 19, 2014 regarding Order R9-2015-0001. For your convenience, these comments are included as Appendix D.

- **Receiving Water Limitations Language -** The Riverside County Co-Permittees continue to believe strongly that every MS4 Permit should incorporate a clear and achievable path to compliance for Co-Permittees. The Co-Permittees are actively participating in the workshops held by Regional Board staff concerning this important topic.

  The focus of the Watershed Workplan is on an iterative, flexible, and priority-setting approach that is intended to enable the Co-Permittees to focus on the most important water quality impairments in the SMR, and improve water quality. As we have previously commented, if the Co-Permittees have no protection from automatic liability for exceedances of water quality standards, they must address each such exceedance, even when that exceedance may be transitory or of minimal environmental or public health consequence. Stretching resources to address such issues diverts limited Co-Permittee resources from the most important threats to water quality and delays overall water quality improvement.

  State Board staff has already strongly signaled its support of alternative compliance language in MS4 permits, as set forth in the draft Order on the petitions challenging the 2012 Los Angeles County MS4 Permit. The Co-Permittees look forward to working with Regional Board staff, permittees from Orange and San Diego Counties, and the other stakeholders to develop appropriate alternative compliance language.

- **Prior Lawful Approval Language -** The Co-Permittees request language that allows each Co-Permittee to evaluate each project independently, in order to determine at their sole discretion, compliance as it relates to Prior Lawful Approval.

- **CEQA Processing Considerations** – Programmatic requirements that entail structural improvements such as retrofits and/or BMPs will trigger CEQA compliance. Future Permit language should discuss lead agency designation and consider CEQA processing in future workplan implementation timelines.

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RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

November 19, 2014

sent via email 11/19/14: Laurie.Walsh@waterboards.ca.gov

Ms. Laurie Walsh, P.E., WRC Engineer
CRWQCB - San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Dear Ms. Walsh:

Re: Comment - Tentative Order No. R9-2015-0001Place ID:65801LWalsh

This letter is written by the Riverside County Flood Control and Water Conservation District (District), on behalf of itself, the County of Riverside and the Cities of Murrieta, Temecula, and Wildomar (collectively, the Riverside County Co-Permittees) regarding Tentative Order No. R9-2015-0001 (Tentative Order). The Tentative Order proposes to add the County of Orange and other agencies located in South Orange County within the existing San Diego County Municipal Separate Storm Sewer System (MS4) Permit. The Riverside County Co-Permittees appreciate the opportunity provided by the San Diego Regional Water Quality Control Board (Regional Board) to offer its comments on the Tentative Order.

The Riverside County Co-Permittees wish to reiterate their concerns regarding a Regional MS4 Permit for San Diego, Orange, and Riverside Counties. Those concerns are set out more fully in our written comment letter dated January 10, 2013, on Order No. R9-2013-0001. The Riverside County Co-Permittees will be submitting a Report of Waste Discharge prior to the expiration of their current MS4 Permit, seeking either modification to the Regional Permit or an individual permit covering only those Co-Permittees. For your convenience, the January 10, 2013 comments are attached to this letter. The Co-Permittees request that this comment letter and attachments be added to the record for the Tentative Order, since most of the issues raised in those comments still pertain to the Tentative Order. The Co-Permittees also request that the oral testimony of Riverside County Co-Permittees on Order No. R9-2013-0001 be included in the record for the Tentative Order. The Riverside County Co-Permittees support the South Orange County Co-Permittees general approach to the issues raised by the Tentative Order.

Notwithstanding the Riverside County Co-Permittees' concerns to a Regional Permit, and subject to it, the Co-Permittees offer the following observations regarding the Tentative Order.

1. Need for Path to Compliance

As set forth in our written and oral comments on Order No. R9-2013-0001, the Riverside County Co-Permittees continue to believe strongly that every MS4 permit, including the Tentative Order, should

incorporate a clear and achievable path to compliance for Co-Permittees. As the Executive Officer and staff indicated in the hearings on Order No. R9-2013-0001, the San Diego County Co-Permittees will be out of compliance with the Permit's receiving water limitations (RWL) provisions for years. We agree with staff's assessment, and state further, that the lack of a provision to allow Co-Permittees to be considered in compliance with the RWL provisions leaves the Co-Permittees open to possible enforcement by third-parties and, as importantly, threatens the compliance approach that has been successfully employed by the Riverside County Co-Permittees to address water quality impairments in the Santa Margarita Region.

The Riverside County Co-Permittees agree with staff that a MS4 permit which allows the Permittees to adopt a "fail early and fail often" iterative approach to water quality is preferable to a permit which simply mandates certain actions. The Santa Margarita River Watershed Water Quality Workplan in Riverside County follows an iterative, flexible, and priority-setting approach that is intended to enable the Co-Permittees to focus on the most important water quality impairments in the Region, and make real, quantifiable improvements in water quality. As we have previously commented, if the Co-Permittees have no protection from liability for exceedances of water quality standards, they must address each such exceedance, even when that exceedance may be transitory or of minimal environmental or public health consequence. Stretching resources to address such issues diverts limited Co-Permittee resources from the most important threats to water quality and delays overall water quality improvement.

Recognizing this deficiency in the 2001 MS4 Permit for the Los Angeles County Co-Permittees, in its 2012 Permit, the Los Angeles Water Board adopted a path to compliance with RWLs through the development of adaptive and prioritized watershed management plans. The Riverside County Co-Permittees believe that a similar approach to RWL compliance should be included in the Tentative Order.

2. Hydromodification Provisions

While most of the substantive changes in the Tentative Order have specific application only to San Diego and/or South Orange Counties, the Riverside County Co-Permittees support exemptions for engineered channels and large river reaches in Provision E.3.c.(2)(e). This provision also provides an interim timeframe exemption for the implementation of hydromodification management BMP requirements for priority development projects.

The exemptions identified in Provision E.3.c.(2)(e) are appropriate and reasonable, and should be made permanent exemptions moving forward.

3. Basin Planning and Water Quality Improvement Plan (WQIP) General Comments

For the WQIPs to ultimately succeed, they need to be based upon regionally appropriate water quality standards. These water quality standards require review to ensure that they reflect sustainable conditions for beneficial uses, explicitly consider regulatory policy and environmental trade-offs

inherent in the protection of beneficial uses, and address the nature and impact of stormwater upon beneficial uses.

The Riverside County Co-Permittees would like to thank the Regional Board and staff for working with the Santa Margarita River Nutrient Initiative Group on such a review. This group, which includes dischargers, tribal interests, interested non-profits, scientists, and Regional Board staff, is using a scientifically based and rigorous approach to evaluate potential water quality targets for, and sources of, nutrients in the Santa Margarita Watershed. It is our belief that this effort will lead to more considered, effective, and appropriate management of local receiving waters, and thereby promote quicker and more effective environmental outcomes. It may also assist with the identification and development of innovative and alternative programs to manage nutrients within the Region. This effort will inform the development of the Santa Margarita River Watershed Water Quality Workplan and other regulatory programs.

The Co-Permittees request and encourage Regional Board staff to work with other stakeholders to consider, prioritize, and address other perceived constraints and inconsistencies within the San Diego Region Basin Plan. Such efforts will ultimately result in a better focus of local and regional compliance programs, including the WQIPs, on actions that are more likely to effectively and quickly address public health risks and environmental risks to receiving waters. Such an approach is exactly in line with staff's emphasis on workable solutions to these challenges.

The Riverside County Co-Permittees appreciate the opportunity to comment on the Tentative Order. Should you have any questions regarding these comments, please contact David Garcia at 951.955.1330/dhgarcia@rcflood.org.

Very truly yours,



foc JASON E. UHLEY
Chief of Watershed Protection Division

Attachment

DHG:cw
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RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

January 10, 2013

Mr. Wayne Chiu, P.E.
California Regional Water Quality
Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123-4340

Dear Mr. Chiu:

Re: Tentative Order No. R9-2013-0001
Regional MS4 Permit
Place ID: 786088Wchiu

The Riverside County Flood Control and Water Conservation District (District) is submitting this comment letter on the above listed Tentative Draft Order on behalf of the Riverside County MS4 Copermittees within the San Diego Region (Riverside County Copermittees) which includes the District, the County of Riverside and the Cities of Murrieta, Temecula and Wildomar. Tentative Draft Order R9-2013-0001 (Draft Permit) was drafted by Board staff to cover Phase I municipal separate storm sewer system (MS4) Copermittees in San Diego County, southern Orange County, and the portion of southwestern Riverside County within the Santa Margarita Hydrologic Unit.

The Riverside County Copermittees have previously commented that the San Diego Water Board lacks authority to adopt a regional permit covering Orange and Riverside Counties, in addition to San Diego County; a comment which is discussed in further detail below and in the attached legal comments. Notwithstanding such objection, and subject to it, the Riverside County Copermittees are providing comments on the Draft Permit.

In the workshop on the Administrative Draft Order held on April 22, 2012 San Diego Water Board staff identified the following desired outcomes for the proposed permit:

- Improving the quality of water discharged from the MS4
- Restoring or enhancing Beneficial Uses and Receiving Water quality

It was further identified by Board staff that to be able to meet those goals, the proposed regional MS4 permit needed to be 1) Strategic, 2) Adaptive, and 3) Synergistic.

Notwithstanding the concerns of the Riverside County Copermittees with regard to the legal authority to issue a regional MS4 permit, the Copermittees agree that being able to adapt and direct resources toward specific water quality priorities in a given watershed, rather than all potential problems simultaneously, is more likely to result in actual and meaningful improvements in water quality. However, to be able to achieve those improvements the MS4 Permit must be crafted to provide the Copermittees with the ability to truly and fully

adaptively manage their programs to focus resources on those BMP strategies and monitoring efforts that are identified as being most effective, consistent with the MEP standard, at addressing watershed priorities.

Unfortunately, many provisions in the Draft Permit, including but not limited to the Receiving Water limitation provisions in Provision A and others discussed in this letter, still do not fully support the achievement of those outcomes. The Draft Permit does not provide the Copermittees with the flexibility to be fully strategic in managing their resources nor the ability to fully adapt their programs to focus on the highest priority water quality needs of the watershed. This comment letter and the other documents submitted herewith (a redline of the Draft Permit and Legal Comments) identify some suggestions which, if adopted by the San Diego Water Board, will help to address these limitations and facilitate the desired improvements.

This comment letter is organized as follows:

1 BACKGROUND 3
2 GENERAL COMMENTS 3
2.1 REGIONAL PERMIT 3
2.2 OUTCOME FOCUS 4
2.3 RESPONSIBILITY FOR MEETING GOALS OF CWA 5
3 SPECIFIC COMMENTS 5
3.1 FINDINGS 5
3.2 PROVISION A, PROHIBITIONS AND LIMITATIONS 9
3.3 PROVISION B, WATER QUALITY IMPROVEMENT PLANS 12
3.4 PROVISION C, ACTION LEVELS 14
3.5 PROVISION D, MONITORING AND ASSESSMENT 14
3.6 PROVISION E.1, LEGAL AUTHORITY 19
3.7 PROVISION E.2, IDDE 20
3.8 PROVISION E.3, DEVELOPMENT PLANNING 24
3.9 PROVISION E.4, CONSTRUCTION 29
3.10 PROVISION E.5., EXISTING DEVELOPMENT 30
3.11 PROVISION E.6, ENFORCEMENT RESPONSE PLANS 31
3.12 PROVISION E.7, PUBLIC ED 31
3.13 PROVISION, E.8 FISCAL ANALYSIS 32
3.14 PROVISION F 32
3.15 ATTACHMENT C 33

As noted, the Riverside County Copermittees also are submitting a redline of the Draft Permit ("Redline") that proposes alternative language intended at achieving solutions to the various issues raised in this letter, and a Legal Comment document ("Legal Comments") that provides additional legal context for the various issues raised in this letter. The Riverside County Copermittees reserve their right, in the context of filing a Report of Waste Discharge ("ROWD") prior to the expiration of Order R9-2010-0016 (the 2010 MS4 Permit), to again address these issues and others relevant and appropriate to the SMR.

1 BACKGROUND

The Riverside County Copermittees were issued an extensive and prescriptive MS4 Permit in November 2010 which greatly expanded monitoring obligations, required special studies, a jurisdictional runoff management program, and Watershed Workplan requirements that were very different than the requirements set forth in the previous MS4 Permit issued to the Copermittees. Development and implementation of the 2010 MS4 Permit compliance requirements has been very expensive, especially in comparison to the relatively few demonstrated impairments of Beneficial Uses in the region and the Copermittees' resources. These requirements have left other important societal needs unfulfilled by the Riverside County Copermittees during a period of unprecedented and continuing economic distress. Further, the Riverside County Copermittees are still in the process of developing and implementing these 2010 MS4 Permit requirements, which is a serious concern given the very different compliance approach proposed in the Draft Permit. The Copermittees hope that the compliance efforts under the current MS4 Permit are taken into account when they submit their ROWD at the expiration of the 2010 MS4 Permit.

2 General Comments

2.1 Regional Permit

The Riverside County Copermittees respectfully submit that the San Diego Water Board is not authorized under the Clean Water Act or under its implementing regulations to issue a regional permit to Copermittees in San Diego County, South Orange County and the Santa Margarita Region (SMR) of Riverside County. As discussed more fully in the Legal Comments, the only circumstance under which the San Diego Water Board could issue such a permit would be if the Copermittees in these counties agreed to such a permit. Additionally, while the Draft Permit purports to affect the conduct of the Riverside County Copermittees upon expiration of the 2010 MS4 Permit in November 2015, the Riverside County Copermittees have not submitted a ROWD requesting coverage under a regional permit. Because no application has been made for the regional permit, which is a requirement set forth in the CWA regulations, the San Diego Water Board lacks jurisdiction to name the Riverside County Copermittees on the Draft Permit at this time.

Notwithstanding the above, the Riverside County Copermittees are submitting the comments in this letter based on:

- The San Diego Water Board staff's stated intent to enroll the Riverside County Copermittees in this permit upon expiration of the 2010 MS4 Permit.
- Statements made by San Diego Water Board staff that this comment period would serve as the primary opportunity for the Riverside County Copermittees to influence their next term MS4 Permit. The Riverside County Copermittees are entitled, as part of the ROWD process, to again raise relevant issues regarding permit provisions, but have undertaken in these comments to address major current concerns.

2.2 Outcome Focus

As mentioned above, the Copermittees agree that being able to adapt and direct resources toward addressing the specific water quality priorities in a given watershed, rather than all potential problems simultaneously, is more likely to result in actual/meaningful improvements in water quality. However, to be able to achieve those improvements, the MS4 Permit must fully integrate the following principles:

- **The Jurisdictional Program requirements must be fully flexible:** The Permit must be written in a way that allows the Copermittees to truly and adaptively manage their programs to fully focus their existing resources on those BMP strategies and monitoring efforts that are identified within the Water Quality Improvement Plan (WQIP) as being most effective, consistent with the Maximum Extent Practicable (MEP) standard, at addressing the watershed's priorities. We understand this to be the goal of the San Diego Water Board as well. While some elements of the Draft Permit embody this need, others do not and require dedication of resources to specific pre-defined efforts, regardless of the identified need for that effort in the watershed. The specific program areas that need more work to this end are:

    - The approach to addressing Non-stormwater discharges
    - Development Planning
    - Retrofitting
    - Channel Rehabilitation

These issues and proposed new language to address these issues are included throughout this letter and/or in the attached Redline.

- **Basin Plan updates need to be Prioritized by the San Diego Water Board:** For outcome-based permitting to be successful, the desired outcomes must be achievable by and appropriate to the Copermittee. To do that, the outcomes must take into account the background conditions in the watershed, and be appropriate for the attainment of Beneficial Uses in the specific waterbody, based on the specific conditions within and influencing that waterbody. The values in the Basin Plan should be comprehensively re-evaluated to ensure that water quality standards are scientifically justified to protect Beneficial Uses. Without updating the Basin Plan, the outcomes that the Copermittees target in the WQIPs would be arbitrary and not guaranteed to achieve the desired beneficial use improvements. Such an update should be pursued aggressively, led by and adequately funded by the San Diego Water Board, with participation by the MS4 Copermittees and other dischargers and stakeholders in the watershed.

- **Other Dischargers need to be Similarly Regulated by the San Diego Water Board:** The MS4 Copermittees are not the only dischargers of pollutants in the watershed. For example, the SMR of Riverside County includes State Lands (such as Caltrans), Tribal Lands, Agricultural Operators, Industrial Permit dischargers, Construction Permit dischargers, Phase II entities, Water Districts, and 'De Minimus' dischargers issued general permit coverage; all of which:

- Have separate regulatory programs (such as permits or waivers) implemented by the San Diego Water Board;
- May discharge pollutants, including non-stormwater, that can affect the quantity and quality of runoff, both directly within Receiving Waters, and in runoff discharges that may enter into and be discharged from the MS4; and
- Cannot be regulated by the Copermittees for the quantity and quality of their runoff because of their separate permits or waivers granted by the NPDES Program Administrator.

As such, while MS4 Copermittees can implement programs to reduce pollutants in discharges that are within their legal jurisdiction, no amount of effort by the MS4 Copermittees can be expected to fully attain water quality standards in the Receiving Waters. The only way to achieve that outcome will be for the NPDES Program Administrator (the San Diego Water Board in most cases) to directly regulate each of these entities to similar levels and standards as set forth by this Permit.

2.3 Responsibility for meeting goals of CWA

The CWA requires Copermittees subject to any MS4 permit, including the Draft Permit, only to address discharges from their MS4s. 33 U.S.C. § 1342(p)(3)(B). The Copermittees are not required to restore Beneficial Uses in any Receiving Water, or to address sources of pollution to those Receiving Waters that are not being discharged into or from those MS4s. However, in various provisions in the Draft Permit, there is a suggestion that the Copermittees are solely responsible for attaining water quality standards in their respective Receiving Waters. The San Diego Water Board must make clear in the Draft Permit that the responsibilities of the Copermittees are limited to their MS4s and the requirements of the CWA for municipal stormwater dischargers. Redline changes have been proposed in the above referenced portions of the Draft Permit to address this issue.

3 Specific Comments

The following comments represent specific high level concerns that the Riverside County Copermittees have identified at this time. Additional comments on the Draft Permit can be found in the Redline, as well as in the attached Legal Comments.

3.1 Findings

The Riverside County Copermittees have two separate sets of comments on the Findings. The first addresses the need for additional findings, with respect to aspects of California law and the physical setting of the SMR. The second set of comments focuses on existing Findings in the Draft Permit.

3.1.1 Needed Additional Findings

The Findings in the Draft Permit fail to fully address the context and conditions under which the proposed permit requirements are to be applied. A more complete explanation of this background is necessary to ensure that the Provisions ultimately included in the Draft Permit are credible, appropriate and legally required, and that the Permit Provisions (which must stem from the Findings) reflect the

context of the broader issues that affect MS4s within the region. The Riverside County Copermittees request that San Diego Water Board staff work with the MS4 Copermittees to expand the Findings, including the addition of findings to address the following:

California Water Law

California law requires that downstream entities must accept runoff from up-gradient properties. Owners and operators of MS4s are not exempt from this legal mandate, even if that runoff contains pollutants. Moreover, flood control districts, including the District, are mandated by the California Legislature (Legislature) to protect the lives and property of residents from floodwaters. The Riverside County Copermittees request that a finding, in the form set forth in the Redlines, be added to the Draft Permit.

Flooding

Many areas that would be under the jurisdiction of the Draft Permit are subject to periodic catastrophic flooding, which results from natural conditions, specifically the presence of mountains and hilly areas in close proximity to development, along with the effect of strong Pacific storms. This flooding would occur even in the absence of development. The Legislature recognized the importance of this issue in the early 20th Century, when it established flood control districts across the state, including in Riverside, Orange and San Diego Counties. Such flooding has, and if not controlled, could result in loss of life and widespread property damage. Further, the flooding can mobilize significant amounts of pollutants from industrial, commercial, residential and agricultural lands, damaging watercourses, habitat, and the Beneficial Uses therein. MS4 systems are designed and constructed to mitigate these impacts. The Riverside County Copermittees request that a finding in the form set forth in the Redline be added to the Draft Permit.

Flood Control District Acts

As noted above, the Legislature established Flood Control Districts in Orange, Riverside, and San Diego Counties through a series of Flood Control Acts. The Legislature determined that protection of life and property from the effects of flooding through the implementation of flood control improvements was a priority, and assigned those Districts with the sole responsibility to design, construct and maintain those improvements necessary to manage and contain floodwaters to prevent such negative impacts, as well as to conserve floodwaters for beneficial use. As noted above, these improvements represent fundamental water quality BMPs inasmuch as they reduce the widespread exposure of runoff to pollutants. The Flood Control Districts, while owners and operators of MS4s, have no authority or powers beyond those granted by the Legislature. The Legislature did not provide the Flood Control Districts, for example, the authority to regulate land uses within the municipal jurisdictions of Riverside County, nor to control the volume or quality of runoff discharged by those land uses. Findings describing the legislative priority for flood control and the limitations on the governing power of the Flood Control Districts should be added to set forth the appropriate role of the Flood Control Districts as MS4 Copermittees. The Riverside County Copermittees request that a finding, in the form set forth in the Redline, be added to the Draft Permit.

Limits on Extent of Permittee Legal Authority

The MS4 Copermittees lack the authority to regulate many significant sources of pollutants that may impact Receiving Waters. For example, the Copermittees cannot regulate pollutants discharged from federal and state lands, facilities, tribal lands, special districts, utilities, agricultural lands, or railroads. Moreover, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) preclude local regulation of pesticides. The Riverside County Copermittees request that a finding in the form set forth in the Redline be added to the Draft Permit.

3.1.2 Comments on Existing Findings

Findings 3 and 15 (and elsewhere in Draft Permit)

In Findings 3 and 15 (and throughout the Draft Permit), it is stated that the CWA requires controls to reduce the discharge of pollutants "in stormwater" to the MEP. Finding 15, moreover, states that non-stormwater discharges from the MS4 are "not considered stormwater discharges and therefore are not subject to the MEP standard, stating that the MEP standard "is explicitly for 'Municipal . . . Stormwater Discharges" from the MS4s.

These conclusions are directly contrary to the plain language of the CWA, as set forth in the November 16, 1990 preamble accompanying the CWA stormwater regulations. Those authorities provide that the MEP standard applies to *all* pollutants discharged from the MS4, notwithstanding that some may be transported by non-stormwater. Additionally, the Redline reflects deletion of the limitation of the MEP standard to stormwater discharges in multiple locations, reflecting federal law. For a further discussion of this issue, please see the Legal Comments. The Riverside County Copermittees also request deletion of Finding 15.

Finding 11

This Finding states that "[r]ivers, streams and creeks in developed areas used [to convey runoff] . . . are part of the Copermittees' MS4s regardless of whether they are natural, anthropogenic, or partially modified features. In these cases, the rivers, streams and creeks in the developed areas of the Copermittees' jurisdictions are both an MS4 and Receiving Water." This statement is incorrect and must be deleted (as reflected in the Redline). For reasons more fully set forth in the Legal Comments, natural streams cannot be considered MS4; there is no MS4 "outfall" from a channelized river or stream to a natural stream; and, USEPA itself requires a distinction between MS4s and Receiving Waters.

Finding 12

This Finding states that as operators of MS4s, "Copermittees cannot passively receive and discharge pollutants from third parties." By providing free and open access to an MS4 that conveys discharges to Waters of the U.S., the operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or otherwise control. This statement is incorrect and must be deleted (as set forth in the Redline). As the discussion in the Legal Comments indicates, municipalities must maintain the MS4 to protect the lives and property of their citizens and to prevent nuisance. Flood Control Districts have a statutory obligation to operate and maintain such MS4, an obligation which is not affected by

either the CWA or the terms of the Draft Permit. While an MS4 operator has the obligation to effectively prohibit the entry of non-stormwater into the MS4, it does not have legal responsibility for such discharges, which are the responsibility of the discharger itself and subject to the jurisdiction of the San Diego Water Board, pursuant to Water Code section 13260 *et seq.*

Finding 28

This Finding recites that the San Diego Water Board finds that the requirements of the Draft Permit "are not more stringent than the minimum federal requirements." The Riverside County Copermittees disagree with this finding, as it is not supported by the evidence, *i.e.*, the many requirements in the Draft Permit which exceed the federal MEP standard. Moreover, any decision by the San Diego Water Board to adopt "other provisions" going beyond MEP is not a federal requirement, but rather a discretionary decision taken by a state agency under authorization in the CWA. *See Defenders of Wildlife v. Browner,* 191 F.3d 1159, 1164-65 (9th Cir. 1999). Please see discussion in the Legal Comments. The Finding also indicates that the San Diego Water Board has developed an economic analysis of the Draft Permit. As set forth in the Legal Comments, the Riverside County Copermittees challenge the adequacy of that analysis.

Finding 29

This finding purports to find that the Draft Permit does not constitute an unfunded state mandate. The Riverside County Copermittees disagree with the conclusions set forth in this finding. More importantly, the finding is without legal effect because exclusive jurisdiction as to whether a state mandate exists, and whether it is unfunded lies with the Commission on State Mandates. Government Code §§ 17751 and 17552; *Lucia Mar Unified School District v. Honig* (1988) 44 Cal.3d 830, 837; *Hayes v. Commission on State Mandates* (1992) 11 Cal.App.4th 1546, 1596-97. The finding of an agency that has no jurisdiction to make that finding is entitled to no weight and should be deleted, as shown in the Redline. For an additional discussion of these issues, please see the Legal Comments.

Finding 31

The Riverside County Copermittees believe that the Receiving Water Limitation ("RWL") language set forth in the Draft Permit renders compliance with the permit impossible, since exceedances of water quality standards occur routinely through no fault of the MS4 Permittees. Thus, unless the RWL is modified to provide the Copermittees with a means to be in compliance, those Copermittees risk the threat of arbitrary San Diego Water Board enforcement or the bringing of citizen suit lawsuits under the CWA, which could nullify compliance with all other terms set forth in the Draft Permit, as discussed more fully in the Legal Comments. The exposure to third party litigation from the proposed RWL language is one of the most significant threats to an otherwise collaborative approach to achieving long term water quality improvement. This threat was emphasized by the recent bringing of a citizen suit lawsuit against the City of Malibu, the County of Los Angeles and the Los Angeles County Flood Control District based on similar language in the 2001 Los Angeles County MS4 Permit. The Riverside County Copermittees have suggested modifications to Provision A in the Redline and as discussed below and in the Legal Comments that are intended to better support the Iterative Process for compliance authorized by the State Water Resources Control Board in Order No.

2001-15, through the WQIP process. The Copermittees also note that the State Board considered the problems with the RWL language at a recent workshop, which may eventually result in modifications which should, if applicable, be reflected in the Draft Permit. Other requested changes to the Findings are set forth in the Redline.

3.2 Provision A, Prohibitions and Limitations

As noted above, the requirements set forth in Provision A are of great concern to the Riverside County Copermittees. The Copermittees generally support an approach to compliance that utilizes WIQPs as the implementing mechanism for the 'Iterative Process' described in Provision A.4, and that by implementing that iterative process in accordance with A.4, that the Copermittee should be in compliance with Provisions A.1 and A.2. The Redline reflects edits of Provision A to clarify the linkage between the prohibitions and limitations in Provisions A.1. through A.3. and Provision A.4 – which is described as the method for complying with the prohibitions and limitations. It must be noted, however, that the Riverside County Copermittees do not agree with the approach suggested, that any WQIP-based compliance approach be necessarily accompanied by a Reasonable Assurance Analysis. Such analyses can be extremely complex, expensive and time-intensive to develop, and similar analyses are commonly developed within TMDL models; taking a number of years to develop and refine. Given that the Santa Margarita Watershed has no adopted TMDLs; thus, comprehensive pollutant transport and BMP models are not available for the suite of constituents that might be considered for prioritization within a WQIP for the Santa Margarita Watershed. In the context of a TMDL, such models would be developed by the combined resources of the San Diego Water Board and a range of stakeholders and dischargers. Undertaking such an exercise solely with the public resources of the 275,000 residents of the SMR is beyond the financial ability of the Copermittees and would shift the responsibility for development of TMDLs from the San Diego Water Board to the Copermittees. Comments on Provision A can be found below, in the Redline and in the Legal Comments.

3.2.1 Overview of Key Issues

As noted above, an overriding issue for the Riverside County Copermittees is having a permit that, while being appropriately proactive and aggressive at addressing the prioritized water quality conditions with the Receiving Waters, is one that all Copermittees can remain in compliance with while implementing those requirements. As presently drafted (and as made clear by statements in the Fact Sheet), Provision A imposes immediate potential liability on every Copermittee if monitoring in the Receiving Waters reflects exceedances of water quality standards that may have been caused or contributed to by MS4 discharges. San Diego Water Board staff has repeatedly indicated in workshop presentations that they expect that Copermittees will not be able to comply with the Receiving Water Limitations and Discharge Prohibitions for some time. Staff has separately indicated that they are interested in having the Copermittees undertake bold initiatives in trying to address urban runoff pollution, and that the Copermittees have actually been encouraged to "fail early and fail often" as this would reflect such progress in refining these initiatives. The iterative, flexible and priority-setting approach reflected in the WQIP is intended to allow the Copermittees to focus on the most important problems in their watershed. The entire approach is endangered, however, by RWL provisions which would allow either the San Diego Water Board or a citizen plaintiff to sue the Copermittees for any individual exceedance of the

RWLs. Under the current version of Provision A, the unmitigated risk of such actions leads not to bold initiatives but rather to attempts to minimize liability.

As set forth in the Legal Comments, this approach is not mandated by the CWA, State Board orders or the opinion of the Ninth Circuit Court of Appeals in *Natural Resources Defense Council v. County of Los Angeles*, 673 F.3d 880 (9th Cir. 2011), *reversed*, 568 U.S. __ (January 8, 2013). As importantly, the threat of immediate potential noncompliance actually interferes with the ability of the Copermittees, including the Riverside County Copermittees, to comply with the Draft Permit. Instead of being able to focus on pollutants of highest concern in the watershed, as called for in the WQIP, the Copermittees will be forced to try to address every pollutant monitored, since the exceedance of any water quality standard leads to immediate potential liability. Moreover, because citizen plaintiffs are entitled to injunctive relief under Section 505(a) of the CWA, a federal judge could order the Copermittees to undertake steps completely independent of the WQIP or other compliance provisions in the Draft Permit.

The Riverside County Copermittees do not object to compliance provisions that will provide a means to achieve real improvement in water quality. The Copermittees are willing to undertake these Provisions, because the success or failure is in their control. Compliance with the requirements of Provision A, however, is beyond the control of the Copermittees. Based on the statements made during the workshop process, the Riverside County Copermittees believe that the San Diego Water Board is serious about working with the Copermittees on a permit that provides flexibility and problem solving approaches. To ensure that this flexibility is not lost, the Draft Permit must tie in compliance with Provisions A.1 through A.3 to a process set forth in Provision A.4. This approach is shown in the Redline and is discussed further below.

3.2.2 Comments in support of specific changes

Provision A, Introduction

The introduction notes that pollutants "in stormwater discharges" from the MS4 must be controlled to the MEP. As discussed above, the CWA does not differentiate between stormwater and non-stormwater discharges from the MS4; both must be controlled to the MEP standard. The Riverside County Copermittees have requested revised language in the Redline. Additionally, the linkage between compliance with Discharge Prohibitions (Provision A.1), Receiving Water Limitations (Provision A.2) and Effluent Limitations (Provision A.3) should be noted as being defined by Provision A.4. This change is reflected in the Redline.

A.1.a

First, language must be added providing that compliance may be addressed through the process set forth in Provision A.4. This language is provided in the Redline. Second, the Provision prohibiting discharges which are "threatening to cause" a condition of pollution, etc., is unenforceable, because it prohibits an action that, with respect to MS4 operators, is beyond their control. Moreover, there is no authority for such provisions in the Porter-Cologne Act. The Riverside County Copermittees request

deletion of this phrase, as shown in the Redline. Additionally, as set forth in the Legal Comments, the Provision improperly expands the Discharge Prohibitions to Waters of the State.

A.1.b

40 CFR § 122.26(d)(2)(iv)(B)(1) clarifies that the requirement for an MS4 Copermittee to "effectively prohibit" the discharge of Non-stormwater/illegal discharges into its MS4s is to be accomplished through "a program, including inspections, to implement and enforce an ordinance, orders or similar means…". The language of this Provision should reflect federal law in this respect. The Redline reflects this change.

A.1.c

First, this Provision requires the Copermittees to comply with the Basin Plan prohibitions listed in Attachment A. This list is over-inclusive, as it contains requirements that are not applicable to some or all of the Copermittees' MS4 discharges, or to the Riverside County Copermittees in particular. The Riverside County Copermittees request that this Provision be amended to read as follows: "Discharges from MS4s are subject to all applicable waste Discharge Prohibitions in the Basin Plan." This change is noted in the Redline. Second, language must be added providing that compliance with this restriction can be obtained through the process set forth in Provision A.4. This language is provided in the Redline.

A.2.a

First, this Provision and Provisions A.1. and A.3 should be linked to the iterative process described in A.4. Please see the Redline.

Second, not all plans, policies, etc. set forth in Provision A.2.a.(1)-(4) may qualify as "water quality standards" or be applicable to all the MS4 Copermittees. These subsections should be deleted, and replaced with a reference to "Water Quality Standards," which is a defined term in the Draft Permit (This change is reflected in the Redline). Otherwise, the MS4 Permit would become over inclusive with respect to what is considered a water quality standard. Such standards must be established in accordance with federal and state law. If this process has not been followed for a particular requirement, it is not a "water quality standard."

A.3.a

As discussed above, this Provision erroneously states that pollutants "in stormwater discharges" from MS4s must be reduced to the MEP. Please see the Redline.

A.3.b

This Provision should also provide that compliance with a TMDL constitutes compliance with Provisions A.1 and A.2, for those pollutants/waterbodies subject to the TMDL.

A.4.a

The Riverside County Copermittees support an approach whereby compliance with Provisions A.1 through A.3 are achieved through a truly iterative approach, one which reflects the intent of the

precedential State Water Board Order Nos. 99-05 and 2001-015. As set forth in the Redline, the Riverside County Copermittees believe that they and the other Copermittees under the Draft Permit should be considered in compliance with Provisions A.1, A.2 and A.3, as applicable, through development of the WQIP, unless the San Diego Water Board denies approval of a WQIP or amendment thereof. This ensures that the Iterative Process which is the focus of the WQIP, is utilized to provide a means to be in compliance for the Copermittees.

A.4.c

This Provision should be deleted, as is reflected in the Redline. Again, this Provision defeats the purpose of an iterative approach to compliance with the Provisions A.1 through A.3, because it allows the San Diego Water Board to enforce any provision of the Draft Permit, including those provisions at any time. The San Diego Water Board obviously retains full ability to enforce the provisions of the Draft Permit, including with respect to the failure of the Copermittees to carry out required provisions. To short circuit the WQIP/JRMP process, however, is to defeat the entire intent of the Draft Permit.

3.3 Provision B, Water Quality Improvement Plans

3.3.1 Overview of Key Issues

- The goals and requirements of the WQIP need to be aligned with the requirements of the CWA that were established specifically for MS4 permits, and not impose the restoration of Receiving Waters entirely upon MS4 Copermittees.
- The WQIP should focus on addressing sources of pollutants within the jurisdiction of the respective Copermittees.
- The BMP strategies identified in the WQIP should fully inform the selection and design of programs identified in the JRMP. Some minor edits were proposed in Provision B, with additional edits as warranted in Provisions D and E.

3.3.2 Comments in support of specific changes

Introductory paragraph

The introductory language implies that the WQIP should be designed to unilaterally protect, preserve, enhance, and restore water quality and Beneficial Uses in waters of the state. As noted in Section 2.3 above, MS4 Copermittees are responsible only for discharges from their MS4s, not the unilateral protection of Beneficial Uses within their watersheds.

Redline edits were provided to:

- Tie the goals of the WQIP to the requirements of the CWA applicable to MS4 Permits.
- Replace 'waters of the state' with 'Receiving Waters' to be consistent with federal law.
- Clarify the linkage between Provision A and Provision B.

Additionally, Redline edits were provided to clarify that the strategies identified in the WQIP are intended to guide the specific actions that will be implemented by the Copermittees pursuant to Provision E.

B.1

The Riverside Copermittees support the redlines of the San Diego County Copermittees with regard to setting forth that the WQIP for the Santa Margarita Watershed Management Area (WMA) would commence upon enrollment of the Riverside County Copermittees into the Order.

B.2.e.

Two changes have been proposed, as shown in the Redline:

- The introductory paragraph includes language that clarifies that the Numeric Goals are not enforceable compliance standards, effluent limitations, or Receiving Water limitations. This clarification is consistent with San Diego Water Board staffs' verbally stated intent.
- Provision B.2.e.(1) as written requires that the final Numeric Goals be "capable of demonstrating the achievement of the restoration and/or protection of water quality standards in Receiving Waters". As discussed in Provision 2.3 above, meeting WQS in Receiving Waters is a goal of the overall NPDES regulatory programs under the CWA and not as a requirement to be accomplished alone by MS4 Copermittees. Redline edits have been provided to clarify that such goals are only required to be for MS4 discharges.

B.3.

In the Redline, edits were made to the introductory paragraph to ensure that the requirements are consistent with federal law. The CWA requires the 'effective prohibition' of non-stormwater discharges, not 'preventing' or 'eliminating' them.

Edits were also made to Provision B.3.a. to link the strategies more clearly to the Numeric Goals developed pursuant to Provision B.2.e, as well as to link them to the JRMP programs in Provision E.

B.5

In the Redline, edits were made to the introductory paragraph to clarify that the WQIP (and by extension the JRMP and Monitoring programs) are intended to meet the requirements of Provisions A.1, A.2, and A.3. The Tentative Order particularly excluded Provision A.1.b. (dealing with non-stormwater discharges). However, as discussed in the attached Legal Comments, the CWA requires that illegal discharges must be addressed via a program (as included in Provision E.2), and it is appropriate that the program be guided by the priorities and strategies included in the WQIP.

Other edits were made to clearly link Provision B.5 to the applicable requirements of Provision F.

3.4 Provision C, Action Levels

3.4.1 Overview of Key Issues

- The Action Levels (non-stormwater, and stormwater) applicable within each watershed should only be those that are associated with the priority water quality conditions in that watershed, or that are 303(d) listed for that watershed. For example, if Zinc is not a priority pollutant for a watershed, and is not 303(d) listed, there should not be a Zinc action level. This change is needed because Provision D requires analysis for all 'action level' parameters. Analysis for pollutants that are not a priority for a watershed is a waste of Copermittee resources.
- The Copermittees should be able to establish alternative action levels that are appropriate to the WMA within their WQIP. Such alternative action levels would be subject to Executive Officer approval as part of the WQIP approval process.
- Footnote 8 and 10 need to clarify that the NALs and SALs are not enforceable limitations.
- Various references to 'waters of the state' need to be changed to Receiving Waters for consistency with the Draft Order and the CWA.

Please see the Redline for further detailed comments and language changes.

3.5 Provision D, Monitoring and Assessment

The Riverside County Copermittees appreciate the changes in the monitoring program reflected in the Draft Permit, as compared to the Administrative Draft. However, elements of the revised requirements are still infeasible for the Riverside County Copermittees. The comments below identify modifications of areas of the monitoring requirement's which can significantly improve the Copermittees' ability to implement and comply with the requirements, while still maintaining appropriate jurisdictional accountability and assessment requirements to guide the implementation of the WQIPs and JRMP programs. The Redline provides further detailed comments and language changes.

3.5.1 Overview of Key Issues

- Dry Weather MS4 Outfall Monitoring
  - The level of effort dedicated to monitoring and addressing outfalls with non-stormwater discharges should be commensurate with the potential impact that discharge has on a Receiving Water. If a discharge, whether persistent or transient, has no or little potential for impacting a flowing Receiving Water, (e.g. due to infiltration, evaporation, or treatment of the flows), the outfall should be de-emphasized relative to other outfalls that have discharges that have connectivity to a flowing Receiving Water.
  - Outfall Dry Weather Field Screening – As currently drafted, the number of required visual inspections of outfalls during dry weather required per Provision D.2.a.(2)(a) and Provision D.2.b.(1) is both excessive and disproportionate. This will particularly impact smaller jurisdictions, which may be required to do more visual inspections of MS4 outfalls than would larger jurisdictions with more outfalls and more resources.
  - Similarly, as written, the Persistent Flow Outfall Monitoring requirements of Provision D.2.b.(2)(b) are excessive and also will disproportionately impact smaller jurisdictions.

Jurisdictions with several hundred outfalls will likely have significantly more resources to perform the required monitoring than smaller jurisdictions with fewer outfalls, yet both are required to implement the same level of persistent flow monitoring.

- Assessment Requirements
  - The assessment requirements require modeled extrapolation of monitored outfall data to non-monitored outfalls for the purposes of calculating loads from each outfall in each jurisdiction. Such extrapolations though modeling or other calculations will not accurately reflect actual jurisdictional loads, and have no benefit that directly analyzing the monitored data cannot more accurately provide.

3.5.2 Other Global Issues

- As currently drafted, MS4s operated by a flood control district within a city or county would be effectively double-counted for identification of outfalls in each jurisdiction and for performance of the load calculations from each jurisdiction. Additionally, Flood Control Districts have no land use or enforcement authorities outside of the MS4 and rely on the local Copermittee to address pollutant sources and discharges to their MS4. Redline edits have been included to clarify the relationship between districts and the municipal jurisdictions they serve for the purposes of outfall monitoring and the assessment requirements.
- Timelines for monitoring and assessments were clarified throughout and linked to specific reporting requirements of Provision F in the Redline.

3.5.3 Comments in support of specific changes

D.1.a.(3) and D.1.e.

The Redline clarifies that the Receiving Water monitoring described in these sections must be conducted as applicable to the WMA and the Copermittees' MS4 discharges, because some of the monitoring requirements only apply to MS4 discharges to certain waterbodies. Not all Copermittees within a WMA will have discharges to that waterbody.

D.1.b.

The Redline proposes language to allow for alternative long-term monitoring stations to be identified. Using the SMR as an example, the Copermittees might wish to utilize a location other than the existing stations due to the influence of groundwater during dry weather and/or the general lack of MS4 contributions in dry weather to those locations.

Table D-1 and D-6

The Redline proposes an addition to the list of field observations, an assessment for flow connectivity of any MS4 discharges to the sampled Receiving Water. It is important to know whether the sampled Receiving Water included a contribution of flows from MS4 discharges, or whether the data reflect conditions in the absence of an apparent MS4 discharge contribution.

D.2.a.(2)

The Redline clarifies that the identification of annual outfall monitoring requirements is based on municipal Copermittee boundaries, inclusive of Flood Control District MS4 outfalls within their jurisdiction.

The Redline clarifies that the field screening requirements apply to those outfalls in the Copermittee's inventory that are 'accessible'. If an outfall is inaccessible for safety reasons or due to habitat restrictions, it would not need to be field screened.

The Redline simplifies the 'tiers' in Provision D.2.a.(2)(a) by removing the lower tier (i), and expanding the second tier (ii) to cover all Copermittees with 500 or less outfalls. This resolves the disproportionality that occurs for Copermittees with a number of outfalls near the current 125 outfall threshold. For example, as currently drafted, a city with 150 outfalls would be required to do 150 visual inspections per year, but a smaller city with 120 outfalls would be required to do 192 visual inspections per year. The Redline also maintains the 80% requirement from the first tier to help smaller Copermittees manage their workload for meeting the field screening requirements while also conducting the additional source identifications that are required under the Draft Permit.

The Redline includes edits to Footnote 19 to clarify that persistent flow should effectively be a discharge that is hydraulically connected to a flowing Receiving Water. Any other discharges that are not affecting a flowing Receiving Water (such as pooled or ponded water) would be addressed as a Transient Discharge, with source IDs any time an obvious illegal discharge (i.e. color or odor) is identified.

D.2.a.(3)

The Redline incorporates edits proposed by the San Diego County Copermittees to require 10% of the samples in each WMA to be from a first storm event. As described in the comments of the San Diego County Copermittees, this will help avoid overly skewing of the data to 'first flush' data, while still incorporating such data into the data and analyses.

D.2.b.(1)

The Redline removes the requirement that the number of visual inspections performed be equivalent to the number of inspections required under Provision D.2.a.(2)(a).

As areas within a jurisdiction are confirmed not to have non-stormwater discharges, inspections of other outfalls would have to be perpetually (and unnecessarily) increased to maintain compliance with this requirement. For example, if a Copermittee had 150 outfalls, but after the transitional period it confirmed that 100 of those outfalls had no evidence of non-stormwater discharges to flowing Receiving Waters, it would have to visit the remaining 50 outfalls for up to three times a year to meet the requirement in this Provision. As the Copermittee got closer to eliminating non-stormwater flows at more outfalls, inspections at the remaining outfalls would quickly become excessive and unreasonable. Removing this requirement will better incentivize the elimination of non-stormwater

flows, as a Copermittee can look forward to reducing its workload in areas confirmed to not have non-stormwater flows.

D.2.b.(2)(b)

While the Riverside County Copermittees support the San Diego County Copermittees' proposal to reduce the number of required outfalls from 10 to 5 persistently flowing outfalls per WMA, the Riverside County Copermittees believe that applying the same minimum bar to all Copermittees is inappropriate and disproportionately affects smaller Copermittees that have commensurately less staff and resources.

The Riverside County Copermittees propose requiring monitoring of the top 10% of the prioritized persistent flow outfalls, with a lower and upper limit of 1 and 5 respectively, as shown in the redlines. With this change, the level of effort required of any individual Copermittee would scale consistent with the number of persistent flow outfalls within each Copermittees' jurisdiction.

Additionally, the Riverside County Copermittees request changing the requirement of Provision D.2.b.(2)(b)(ii) to require annual monitoring rather than semi-annual monitoring. With this change, a Copermittee could focus more of their annual budget on conduction Source ID efforts – which can result in eliminating problematic non-stormwater flows, rather than on a second monitoring event. Copermittees would still have the option to conduct a second monitoring event if they have more resources available and want to remove the outfall from their monitoring list sooner in accordance with Sub-Provisions [a] through [d].

D.2.b.(2)(e)

The Riverside County Copermittees support the San Diego County Copermittees' comments regarding allowing for a tailored list of constituents to be developed for each WMA. The Redline incorporates those edits.

D.3.

The Riverside County Copermittees support the changes recommended by the San Diego County Copermittees to this section, and these changes are reflected in the Redline.

D.4.a.(2)

This Provision as drafted would require the MS4 Copermittees to make comprehensive evaluations of Beneficial Uses that are beyond their expertise or the scope of an MS4 permit. Such evaluations and determinations would require advanced studies and cannot be answered with the monitoring data collected through this permit. This Provision should either be deleted or, alternatively the Riverside County Copermittees request that the assessments be focused on determining the status and progress toward addressing any Numeric Goals established for those Receiving Waters in the WQIP. Please see the Redline.

D.4.b.(1)

The Redline clarifies that outfall assessments are to be done for the area covered by each Municipal Copermittee (consistent with the proposed definition), and that the data to be used by each Municipal Copermittee would include the data collected from any Flood Control District Copermittee operated MS4s within its jurisdiction. This ensures that jurisdictional data is not double reported for Flood Control District MS4s within a city or county.

For Sub-Provision D.4.b.(1)(c)(iv) three key changes are requested in the Redline:

1) Annual volumes and pollutant loads should only be calculated from the monitored outfalls with persistent discharge to a flowing Receiving Water. This is directly applicable to the purpose of the Draft Permit and an important change, because volume and pollutant data extrapolated to non-monitored MS4 outfalls would be inaccurate and potentially misused if taken out of context. It is understood that San Diego Water Board staff want to ensure that jurisdictional accountability is maintained. However, since MS4 outfall monitoring will be conducted within each jurisdiction, inter-jurisdiction comparisons and accountability can be accomplished using the monitoring data directly without such extrapolations.
2) Added language to require a Copermittee to include in its jurisdictional load calculations any discharge that was demonstrated to have entered another Copermittees' MS4 before being discharged into the flowing Receiving Waters. This is important to ensure that each Copermittee maintains accountability for pollutants discharged to flowing Receiving Waters from within its jurisdiction.
3) The Redline proposes that the calculations of pollutant loads be only for the priority water quality constituents identified in the WQIP.

D.4.b.(2)(b)

Two key changes are recommended in the Redline:

1) Annual volumes and pollutant loads should only be calculated from the monitored outfalls for the monitored storm events. This is an important change because volume and pollutant data extrapolated to non-monitored events would be inaccurate and potentially misused if taken out of context. It is understood that San Diego Water Board staff want to ensure that jurisdictional accountability is maintained, so the Redline proposes that data from the monitored outfalls be extrapolated to identify loads for each jurisdiction during each monitored event. With this information, inter-jurisdiction comparisons and the desired 'accountability' can be accomplished using the monitoring data directly without such extrapolations to non-monitored events.
2) The Redline requests that calculations of pollutant loads be performed only for the priority water quality constituents identified in the WQIP.

D.4.b.(2)(c)

The Redline edits are consistent with those proposed by the San Diego County Copermittees, with minor modifications for clarity.

D.4.d.(2)(c)

It would be difficult to proactively determine the pollutant load reductions that ***would*** be necessary to demonstrate that discharges ***are not*** causing or contributing to exceedances of Receiving Water Limitations. Instead it would make more sense to calculate the necessary pollutant load reductions where the discharge has been demonstrated to be causing or contributing to such exceedances. In such circumstances, the necessary parameters would be known to calculate the needed load reduction. These changes are set forth in the Redline.

3.6 Provision E.1, Legal Authority

3.6.1 Overview of Key Issues

The Riverside County Copermittees note that Provision E.1, relating to the establishment of adequately legal authority, exceeds the requirements of federal CWA regulations in several respects. The federal regulations at 40 CFR 122.26(d)(2)(i)(A)-(F), provide explicit guidance for the Copermittees in developing the necessary legal authority to control MS4 discharges within its jurisdiction. However, several of the subsections of Provision E.1 go beyond these federal requirements, with respect to areas not within the responsibility of MS4 dischargers, such as negotiating with non-Copermittee entities. The Riverside County Copermittees have provided requested changes in the Redline, which are explained briefly below.

3.6.2 Comments in support of specific changes

E.1.a(1)

Changes in the Redline to accurately reflect the language of 40 CFR 122.26(d)(2)(i)(B).

E.1.a(2)

Changes in the Redline to accurately reflect the language of 40 CFR 122.26(d)(2)(i)(A). In addition, the Provision as written improperly requires the Copermittees to control the quality of runoff from sites covered by the state general permits for industrial activity and construction. These general permits are enforced by the State Board and the regional boards, and it is a state responsibility which cannot be handed off to the Municipal Copermittees.

E.1.a(3)

Changes in the Redline to accurately reflect the language of 40 CFR 122.26(d)(2)(i)(C).

E.1.a(5)

The Redline requests deletion of this Provision, which is not a requirement for municipal stormwater dischargers set forth in the CWA regulations. The Provision also improperly requests the Municipal Copermittees to attempt to negotiate with third parties the contribution of pollutants to the Copermittees' MS4. The Copermittees have no jurisdiction over such parties. The San Diego Water

Board has such jurisdiction, and should take responsibility for addressing non-MS4 sources of pollutants that may ultimately enter the MS4.

E.1.a(6)

Changes in the Redline to reflect accurately the language of 40 CFR 122.26(d)(2)(i)(E).

E.1.a(7)

The Redline requests deletion of this Provision, which is not a requirement for municipal stormwater dischargers set forth in the CWA regulations.

E.1.a(8)

The Redline requests deletion of this Provision, which is not a requirement for municipal stormwater dischargers set forth in the CWA regulations.

E.1.a(9)

The Redline requests deletion of this Provision, which is not a requirement for municipal stormwater dischargers set forth in the CWA regulations.

E.1.a(10)

The Redline requests both correction of the language in this Provision to comport with the federal regulations in 40 CFR 122.26(d)(2)(i)(F) and deletion of the second clause of this Provision, which is not found in 40 CFR 122.26(d)(2)(i)(F). Moreover, the requirement to inspect and monitor in the first clause of this Provision covers the issues set forth in the second clause. It is therefore unnecessary.

3.7 Provision E.2, IDDE

3.7.1 Overview of Key Issues

- The Draft Permit requires the Copermittees to address all non-stormwater discharges from the MS4 as illegal discharges, and then describes certain sources that need not be prohibited. This is effectively a 'guilty until proven innocent' provision, where a Copermittee will be required to expend potentially significant resources conducting source identification efforts any time non-stormwater is observed discharging from the MS4. In addition to the issues discussed in the Legal Comments, the Provision raises two practical and logistical problems:

    - This requirement is entirely independent of the determination that there are in fact any significant pollutants in such a discharge. A Copermittee could be spending substantial sums tracking (and then potentially enforcing upon) the source of a discharge that is not negatively impacting Receiving Waters. This not only is a waste of public resources, but would undermine the credibility of stormwater programs.
    - The San Diego Water Board and the State Water Board do not treat non-stormwater flows in the same manner across all of their regulatory mechanisms. For example, Order

> No. R9-2008-0002 allows non-stormwater discharges to occur, POTWs are issued permits for their discharges and agricultural operators can discharge irrigation water. The Copermittees should not be forced to conduct an expensive source investigation, only to find that the discharge complies with a permit or a waiver granted by the Water Board. The Copermittee would have no ability to address such a discharge as an 'illegal discharge', and further would have no ability to recuperate their costs for the source identification.

The best way to address these issues, is to require the Copermittee to have and enforce an effective prohibition of illegal discharges of ***pollutants*** (through statutes, ordinances, permits, contracts, orders or similar means), and then allow the Copermittee full discretion to determine which non-stormwater discharges have the potential to negatively impact Receiving Waters, consistent with the WQIP priorities – and address those as illegal discharges.

- Several categories of non-stormwater discharge that were previously conditionally exempt consistent with the CWA, are required by the Draft Permit to be treated as illegal discharges, unless they have coverage under another order issued by the San Diego Water Board. In addition to the problems identified above for conducting enforcement in the absence of a pollutant discharge, the San Diego Water Board, not the Copermittees, is responsible for evaluating coverage, need for coverage, and compliance with other orders issued by the Water Board. The Copermittees have neither authority nor jurisdiction. Please see the Redline.
- Several categories of non-stormwater discharge that were previously conditionally exempt consistent with the CWA, are required by the draft permit to be 'controlled' or otherwise prohibited by the Copermittees. The Fact Sheet further describes that such controls are warranted because they could potentially contain pollutants. However, the CWA only requires controls where the discharges are determined to be a significant source of pollutants. Please see Legal Comments for a further discussion of this issue as well as the Redline.
- The Draft Permit eliminates the conditional exemptions for Landscape Irrigation, Irrigation Water, and Lawn Watering (collectively 'irrigation runoff'). The San Diego Water Board has provided no data demonstrating that these discharge categories have contributed a significant pollutant load to Receiving Waters within Riverside County. Information discussed in the Fact Ssheet focuses on data from other counties. The only data from Riverside County is public educational material referring to irrigation runoff; this material, however, was adapted from public education material from other counties. That public educational material was intended to help prevent such discharges from becoming a significant source of impact on the Receiving Waters, and did not constitute a determination that such discharges are in fact, actually a significant source that needs to be subject to a prohibition. See the discussion in the Legal Comments as well as the Redline.
- The Draft Permit, in Provision E.2.a.(7) requires efforts to minimize or eliminate all non-stormwater flows, including those that are natural, conditionally exempt, or otherwise permitted by the San Diego Water Board, regardless of whether or not such discharges are not contributing pollutants to the MS4. Such a requirement conflicts with the prior Provisions E.2.a.(1) through

(5), which state conditions where such discharges need not be prohibited. The requirement should therefore be removed, as set forth in the Redline.

3.7.2 Comments in support of specific changes

E.2.a.(1) and (3)

The Riverside County Copermittees request that this Provision be deleted (as shown in the Redline) and the categories of non-stormwater discharges be re-incorporated into Provision E.2.a.(3). The apparent premise of Provision E.2.a(1) as drafted is that since the San Diego Water Board requires those discharges to have coverage under a separate order, they are illegal if they lack such coverage. The MS4 Copermittees, however, are not responsible for enforcing discharge coverage under separate San Diego Water Board orders; that is the responsibility of the San Diego Water Board itself. Requiring the Copermittees to enforce such entities for their lack of coverage under a separate San Diego Order shifts that responsibility from the Board to Copermittees. This is not authorized by the CWA or the Porter-Cologne Water Quality Act. The Copermittees are, under the CWA, only required to address such discharges as illegal discharges if the discharge is found to be contributing a significant pollutant load to the MS4. By moving those categories to Provision E.2.a.(3), as shown in the Redline, the Copermittees will still be required to treat such discharges as illegal discharges if and when they are found to be contributing significant pollutants to the MS4. This proposed approach is consistent with other MS4 permits in the state, including prior San Diego Water Board orders, and is further consistent with the approach taken for the WQIP, which is intended to allow the Copermittees to focus resources on addressing the specific impacts that MS4 discharges are having on Receiving Water quality.

E.2.a.(2)

This Provision requires the Copermittees to treat water line breaks as illegal discharges, which in turn requires the Copermittee to conduct enforcement measures. Water main breaks are accidental occurrences, or may be the result of acts of nature. It is no more appropriate to treat accidents as illegal and subject to enforcement than it would be for a city to declare vehicular accidents as illegal, and conduct enforcement against those involved. This language needs to be removed as shown in the Redline. Additionally, as discussed in the Legal Comments, a recent case from the federal district court in Virginia suggests that the regulation of mere flow may exceed the authority of the CWA.

E.2.a.(4)

The Redline clarifies that if the 'statues, ordinances, permits, contracts, orders or similar means' are enacted/adopted by a Copermittee, the categories of non-stormwater discharges listed do not need to be treated as illegal discharges. Otherwise, the language could be read to imply that, for example, if it was infeasible for a particular resident to direct wash water to landscaped areas, that the Copermittee would be required to treat that residents' discharge as illegal and enforce upon them.

E.2.a.(5)

Contrary to the provisions of the CWA regulations, prior MS4 permits issued by the San Diego Water Board and other permits in the state, the Draft Permit requires implementation of BMPs, where

feasible, during emergency firefighting activities. During such emergencies, all focus of public resources must appropriately be dedicated to protecting life and property. Any diversions from that mission would only serve to diminish and potentially compromise that mission. The Redline proposes language consistent with that adopted by the San Diego Water Board in 2010 for the Riverside County MS4 Permit (Order R9-2010-0016).

E.2.a.(7)

Provisions E.2.a.(1) through E.2.a.(6) describe circumstances where non-stormwater discharges need not be prohibited. This Provision then requires the Copermittees to minimize such 'conditionally allowed' flows anyway. This requirement exceeds the scope of the CWA and its implementing regulations and makes no sense. The Redline requests deletion of these Provisions.

E.2.b.(1)(d)

This Provision requires the MS4 Copermittees to map all known private outfalls to Receiving Waters. Such a requirement is beyond the scope of an MS4 permit and should be removed, as shown in the Redline. The Draft Permit does not require a Copermittee to address private outfalls to Receiving Waters; this is the responsibility of the San Diego Water Board, which governs all waste dischargers under the authority of the CWA or the Porter-Cologne Act.

E.2.b.(4)

This Provision requires the Copermittees, in conjunction with a spill, to 'prevent contamination of surface water, groundwater, and soil.'This requirement is clearly beyond the scope of an MS4 permit issued under the CWA (which regulates only discharges of water containing pollutants *from* the MS4 to Receiving Waters) and must be removed, as shown in the Redline. The Draft Permit could more appropriately require the Copermittees to 'coordinate, to the extent possible, with spill response teams to prevent entry of spills into the MS4.'

E.2.d.(2)(e)

The Redline requests edits to clarify that the intent of this Provision is to document and attempt to quantify any obvious sources of non-stormwater illegal discharges in response to the outfall monitoring, and that it is not necessary to conduct a full source identification any time there is evidence of water near an outfall.

New Provisions E.2.d.(3)(e)-(f)

The Redline adds two new provisions to this section to address a gap in potential outcomes from a source identification effort. These Provisions address scenarios where a Copermittee identifies A) the illegal discharge is coming from another upstream Copermittees' MS4, or B) that the discharge has been authorized by the San Diego Water Board, either through an order or waiver of WDRs. In the first scenario, the responsibility to continue the source identification, and conduct enforcement, would be transferred to the upstream Copermittee. In the second scenario, the responsibility for follow-up would fall on the San Diego Water Board, after receiving relevant information from the Copermittee. This Provision also provides for reimbursement to the Copermittee for the cost of the source identification, since the San Diego Water Board required the Copermittee to conduct the investigation,

while not commensurately prohibiting all non-storm water discharges from all other sources regulated by the Water Boards.

3.8 Provision E.3, Development Planning

3.8.1 Overview of Key Issues

- Priority Development Projects - The Tentative Order identifies categories of projects that are to be defined as 'Priority Development Projects' (PDPs), which in turn will be required to comply with specific water quality and Hydromodification mitigation and quantitative requirements. The criteria for PDPs is quite broad and would include the majority of development projects, from small convenience stores and residences, to mega malls and specific plan developments. The Fact Sheet describes that while some smaller project types may not have significant pollutant loads, they may have a hydrologic impact upon Receiving Waters. However, it is important to recognize that pursuant to Provision E.3.a., All projects are required to implement a variety of LID principles such as disconnecting impervious surfaces, draining impervious surfaces to landscaped areas, and minimization of soil compaction in landscaped areas. Since such LID principles will be implemented wherever feasible consistent with the MEP standard, these smaller development projects are unlikely to create a pollutant or hydrologic impact. Additionally, the Fact Sheet advocates incentivizing LID design concepts and green infrastructure and building principles. Accordingly, the Redline requests changes to Provision E.3.b.(3) as described in Provision 3.8.2 below. The Legal Comments further note the potential impact of the Virginia case (*Virginia Dept. of Transp. v. U.S. Environmental Protection* Agency) holding that the CWA does not regulate stormwater as a pollutant.
- Design Capture Volume – There are two problems with how the Draft Permit defines the Design Capture Volume:
    - The Draft Permit changes the 'design capture volume' from previous permits by eliminating the term 'runoff'. Prior permits described that the design capture volume is the volume of stormwater runoff from the 24-hour 85th percentile storm event. This permit changes that to be the volume of stormwater produced from a 24-hour 85th percentile storm event. The elimination of the term 'runoff' means that BMPs would need to be sized potentially much larger than previously. For example, if the 85th percentile storm is 1" and a BMP is designed to treat 1 acre of residential land with a coefficient of runoff of 0.6, then under the current permits the BMP must be sized to hold 2,178 cubic feet of water. However, under the language of the Draft Permit, the BMP treating the same area would be required to hold 3,630 cubic feet of water, a 70% increase in BMP size. Accordingly, the Redline restores the term 'runoff'.
    - Additionally, the Draft Permit defines the Design Capture Volume alternatively as: *"the volume of storm water that would be retained onsite if the site was fully undeveloped and naturally vegetated, as determined using continuous simulation modeling techniques based on site-specific soil conditions and typical native vegetative cover."* In addition, to the problem identified above regarding the volume of storm water runoff, this language does not provide a temporal standard for determining which volume to

calculate from a continuous simulation model. Additionally, such models are not commonly used among general practitioners in the civil engineering community. The Redlines propose an alternative and simpler approach for this second definition: "The volume of stormwater runoff produced from a 24-hour 85th percentile storm event, that would be retained onsite in the pre-project condition." This definition is advantageous for several reasons: 1) it is simple for any civil engineer to understand, calculate, and comply with and is based on the same storm and hydrologic calculations as the first option, 2) it respects natural hydrology for the site, which may have had runoff in the pre-project condition, and as such, is more compatible with the intent of LID to mimic natural hydrology, and 3) as a result it is less likely to result in potential degradation of Beneficial Uses downstream, from reductions in flows beyond the pre-project condition.

- Pre-Project vs Pre-Development – Both the Storm Water Pollutant Control BMP requirements and the Hydromodification Management BMP requirements in the Draft Permit specify a 'pre-development' condition as the mitigation standard for all PDPs. In addition to the legal problems with such a standard as set forth in the Legal Comments, there are practical problems with the standard.
    - The presumption made in the discussions in the Fact Sheet are that all Receiving Waters can, and will, be restored to a fully natural condition - effectively to a natural floodplain. This presumption does not address reality, which is that development has occurred in those floodplains over many generations. The San Diego Water Board obviously lacks the authority to force homeowners and businesses to vacate such floodplains to effectuate restored natural conditions. Such an action would represent an unconstitutional taking. Moreover, the Legislature, in the Flood Control Acts covering all three counties proposed to be covered by the Draft Permit, has specifically authorized Flood Control Districts to construct flood control structures required to protect the lives and properties of the citizens.
    - Mitigation to a pre-development condition also may not be necessary to protect Receiving Waters from the effects of Hydromodification. If, for example a Receiving Water with existing development tributary to it, has not experienced increased erosion due to that existing development, there is no reason to require Hydromodification mitigation to anything more than the existing condition. In the counter-example, if under the existing condition the Receiving Water has experienced increased erosion due to that existing development, then, legal issues aside, there would be technical benefit to mitigating to that pre-development condition.

  The Redline proposes alternative language that requires mitigation to a pre-development standard only where it is legal and technically justified based on the conditions of the Receiving Water.
- Alternative Compliance – The alternative compliance project options as set forth in the Draft Permit pose two key problems:

- Several statements are conflicting and thus confusing as to what the required standard is for the various alternative compliance projects. For example, throughout Provision E.3.c. it is stated that 'a PDP may be allowed to comply with Provision E.3.c.(1)(a) and/or Provision E.3.c.(2) if they …'. This language can be mis-read to imply that the project must comply both with Provisions E.3.c.(1)(a) and E.3.c.(2) *and* implement the alternative compliance project (thus negating the benefit of alternative compliance). The Redline clarifies this language.
- The Biofiltration option set forth in the Draft Permit arbitrarily, and without technical basis or justification, **doubles** the sizing standard for biofiltration BMPs from 0.75 times the design capture volume (as set forth in the 2010 MS4 Permit and the 2009 Orange County Permit) to 1.5 times the design capture volume. The existing 0.75 standard was set due to the fact that 1) the 85th percentile 24-hour storm occurs over a period of time, and 2) such BMPs have outflows and will regain some capacity during the storm event, and as such, do not need to instantaneously hold the entire 'Design Capture Volume' to have fully treated that volume. In fact, studies have shown that in addition to yielding excellent pollutant concentration reductions, LID Biofiltration BMPs are excellent at reducing the volume of runoff similar to retention BMPs. According to the ASCE International BMP database 60% or more of the long-term volume of runoff from a site can be retained within a Bioretention BMP (Bioretention BMPs are the primary 'biofiltration' BMP now allowed in Riverside County). In comparison, a Retention BMP sized to hold the runoff from the 85th percentile storm event (the Design Capture Volume) will end up retaining approximately 80% of the long-term volume of runoff. Thus, by simple proportions, a Bioretention BMP sized to 'hold' 100% of the Design Capture Volume may also be able to retain 80% of the long-term volume of runoff. $\left(\frac{0.75\times DCV}{60\%\ retained} = \frac{1.0\times DCV}{80\%\ retained}\right)$. This is being validated through Bioretention BMPs that have been constructed and are being monitored for such volume reductions at the Riverside County Flood Control District's headquarters in Riverside. Further, Biofiltration BMPs have the added benefit of providing better overall treatment of back to back storms. Where a Retention BMP would be full after the first storm, fully bypassing the second storm without treatment, a Biofiltration BMP will have restored some capacity after the first storm, providing for treatment of some or all of the second of the back to back storms. Thus, the attached redlines propose changing the sizing factor for Biofiltration BMPs to 1.0 times the Design Capture Volume. The Redline proposes changes consistent with these comments.

3.8.2 Comments in support of specific changes

Introduction

Provision E.3.g (Strategies to address the highest priority water quality conditions) was moved to the beginning to support and better integrate the development planning programs in the JRMP with the strategies developed in the WQIP.

E.3.a.(3)

The Redline changes the title of this section (and other appropriate references to this Provision) to refer to LID Principles, as identified in the CASQA LID Manual for Southern California (https://www.casqa.org/LIDDemo/LowImpactDevelopmentManual/tabid/242/Default.aspx)

E.3.b.(1)(c) (New Provision)

This Provision was added to clarify the requirements if a project that was already subjected to SSMP requirements redevelops a portion of the site.

E.3.b.(2)

The Redline edits shown for this Provision are primarily to simplify this Provision, by grouping various categories by their applicable square footage threshold and including some of the specifics in the definitions (Attachment C). Other changes (beyond reorganization) include:

- Removing the addition of 'driveways' from subsection (g) as described in Provision 3.8.1 of this letter.
- Adding a footnote for parking lots, to clarify that the trigger would not include parking lots that are not exposed to runoff, such as subterranean or covered parking lots. It is beneficial to not have parking lots exposed to runoff; excluding such parking lots from being defined as a PDP is a good way to encourage such practices.
- Hillside development projects were not included as it is not believed to be necessary anymore with the relatively low threshold (10,000 square feet) identified for other categories included in this and other recent MS4 permits.
- The definition for "Environmentally Sensitive Areas" from existing MS4 permits was restored to include the language referring to discharges that are not commingled with flows from adjacent or other upstream lands (note that the change is shown in the definitions per the re-organization suggested above).

E.3.b.(3)

- The PDP exemption for sidewalks, bicycle lanes, or trails, [E.3.b.(3)(a)] has been expanded to as shown in the Redline to include driveways and parking lots. If those projects implement criteria already described in that section, they are also unlikely to create an impact to Receiving Waters. Further, including those project types in that exemption will further incentivize developers to utilize those LID Principles.
- The exemption described in Provision E.3.b(3)(b), was modified as shown in the Redline, and as discussed in the comment letter submitted by the Riverside County Transportation Department. Please see that letter for a justification for the requested changes.
- As shown in the Redline, the exemptions for new and redeveloped single family residences [E.3.b.(3)(c) and (d)] were consolidated into a new provision [E.3.b.(3)(c)], covering all single family residential projects (both new and redeveloped). The key difference is that such projects would be considered exempt if they are both 1) not part of a larger common plan of development or planned subdivision, and 2) successfully incorporate each of the applicable source control and LID Principles identified in Provision E.2.a.(2)-(3) to the MEP.

- A new Provision-E.3.b.(3)(d), titled 'Watershed Protection Projects' was added in the Redline. The project types described therein are all projects that are undertaken to rehabilitate or prevent environmental, social, and economic damage within the watershed, including Receiving Waters. These projects, while they may in some cases require some level of impervious surfaces to be constructed, are 1) not designed for human use or activity that would generate pollutants, or are designed specifically to mitigate such pollutants; and 2) will implement each of the applicable source control and LID Principles identified in Provision E.2.a.(2)-(3) to the MEP.

E.3.c.(1)

In addition to the edits discussed in Provision 3.8.1 of this letter, the Redline removed subprovision E.3.c.(1)(c) , for two reasons:

- The requirements that must be met to when implementing an alternative compliance project are more fully described in Provision E.3.c.(3).
- The language, as drafted, appeared to require double-mitigation. It requires that: 1) conventional treatment is required to treat the entire volume not retained onsite, and 2) the pollutant load discharged must also be mitigated with an alternative compliance project. Such a scenario would be requiring double-mitigation. The Redline provides a clearer and more simple mitigation standard.

E.3.c.(2)

The Riverside County Copermittees have two concerns with this Provision:

- The first concern is the universal requirement to mitigate to the 'pre-development' standard, as discussed above in section 3.8.1 of this letter. The Copermittees in the Redline propose that this language be changed to the 'pre-project' condition. For new development projects, the 'pre-project' condition will be equivalent to the 'pre-development' condition. For redevelopment projects, the standard would be the conditions that exist onsite prior to the construction of the project. This is appropriate, because in many areas, particularly in areas of existing development that would be subject to 'redevelopment', Receiving Waters are engineered and maintained to 1) provide flood protection for the public, 2) ensure that floodwaters don't comingle with pollutants on adjacent private properties and 3) to ensure that the existing development draining to that system does not cause erosion. In cases where the Receiving Waters are not engineered and maintained, and erosion problems caused by existing development are observed, language has been added to the Redline to provide for additional standards to be developed in the WQIP, based on the WQIP priorities.
- Additionally, the Redline proposes an additional exemption from HMP requirements for projects that discharge into conveyance channels that are engineered and maintained for the build-out condition all the way from the project to a waterbody that is sufficiently resistant to Hydromodification. This language is consistent with the above discussions, and ensures the PDPs are not required to mitigate for non-existent impacts. Please see the specific language in the Redline. The engineered channel exemption can be found in other recent MS4 permits, including the recently adopted Los Angeles County MS4 Permit.

E.3.c.(3)(a) and (b)

These two Provisions were re-written in the Redline to be simpler and clearer on what BMPs, criteria, sizing standards are required for what type of project. This alternative language still meets the intent of the Draft Permit, while being easier to understand and comply with. Aside from simplifying the language, the following other changes were made in the Redline:

- The alternative compliance options must be determined to provide an equal or greater overall water quality benefit for the WMA.
- Additional options were provided for who can design the alternative compliance projects
- All alternative compliance projects are required to be consistent with the strategies in the WQIP. While the specific alternative compliance project would not be required to be identified in the WQIP, the goal of this language is to ensure that allowing the alternative compliance project would not in any way be detrimental to or contrary to the strategies in the WQIP.
- Requirements E.3.c.(3)(a)(iv) and (v) were removed entirely, as they conflict with E.3.c.(3)(a)(iii) which allowed the projects to be in the same WMA (preferably the same HSA)
- Changed the sizing factor for Biofiltration BMPs to 1.0 as discussed in section 3.8.1 of this letter, and deleted the option [d] which required triple mitigation by requiring Biofiltration + Conventional Treatment + Alternative Compliance projects.
- Added Conventional Treatment Control BMPs as an alternative compliance option, only where it has been shown to be technically infeasible to meet E.3.c.(1) and technically infeasible to implement LID Biofiltration Treatment Control BMPs.

E.3.c.(3)(c)

Redline edits in this section are primarily to simplify and consolidate the requirements. Sub-Provision [C] was removed, as it was duplicative of the mitigation standards for the alternative compliance project are specified in E.3.c.(3)(b) and E.3.c.(3)(c)(i)[a].

3.9 Provision E.4, Construction

3.9.1 Overview of Key Issues

This Riverside County Copermittees' comments and edits are set forth in the Redline.

- One key issue for the Copermittees is the edit shown in the Redline to Provision E.4.c, which clarifies that the Copermittees are responsible for *requiring* BMPs at private construction sites, and *implementing* BMPs at Copermittee construction sites.

3.9.2 Comments in support of specific changes

The Redline edits include comments supporting the requested edits.

3.10 Provision E.5., Existing Development

3.10.1 Overview of Key Issues

The Draft Permit includes requirements for advanced programs to identify opportunities and implement programs to facilitate the construction of Retrofit and Stream/Channel/Habitat Rehabilitation projects on private properties. Such requirements are clearly beyond the requirements of the CWA for a management plan to be implemented by an MS4 Copermittee. The Riverside County Copermittees request deletion of these requirements.

Alternatively, the Riverside County Copermittees have the following comments:

While these retrofitting and rehabilitation approaches can be helpful and/or needed in some circumstances, they are not required in all circumstances, nor are required to address all pollutants that may be identified in a WQIP as the highest priority water quality conditions. For example, some pollutants are best addressed with regulatory source controls at the state or federal level, such as the removal of copper from brake pads, and controls on pesticides, while other pollutants can be adequately addressed through inspections and enforcement. There are several problems with requiring Copermittee resources to be invested in such Retrofit and/or Rehabilitation strategies (collectively referred to as 'retrofit'):

- Land Ownership: The land that could potentially be identified for retrofit would likely not be owned by a Copermittee. The Copermittee therefore has no ability to force the property owner to retrofit their property. Although the Copermittee could potentially implement programs to "facilitate" implementation, such a program would still be limited by the rights of the individual property owner. Even if a Copermittee were to attempt to purchase a privately owned existing development for the purposes of retrofit (a step going far beyond any requirements in the CWA or the Porter-Cologne Act), such a process can take many years, and if the owner is unwilling to sell, the retrofit project could never be realized. In any scenario, the process to facilitate such "retrofits" is extremely costly and lengthy, with no guarantee of a benefit to water quality. Retrofits should only be undertaken where the Copermittee identifies it as a necessary step to addressing the MS4 contributions to Receiving Water problems to the MEP. Otherwise, it forces the Copermittee to utilize resources very ineffectively, which is contrary to the goals of the WQIP and may actually be detrimental to water quality.
- Permitting: Aside from the limitations discussed above, stream/channel/habitat restorations have the additional complexities of requiring other regulatory permits that are not the discretion of the San Diego Water Board nor the Copermittees to issue. Such projects can take many decades to implement, and thus, are not expected to be highly effective at addressing the goals of the WQIP, except in rare circumstances.

Redline edits have been provided to clarify that these strategies and programs should only be used when, and to the extent directed by the strategies developed in the WQIP.

3.10.2 Comments in support of specific changes

E.5.b.(1)(b) and (d)

BMP implementation requirements of Provision E.5.b.(1)(b) and (d) have been clarified in the Redline to require the Copermittee to implement BMPs on their existing development, and require implementation of BMPs on private existing development.

E.5.c.(1)(a)(iv)

The Riverside County Copermittees request deletion of this Provision. The Copermittees should be provided the flexibility to schedule inspections as they see fit, provided that the schedules they establish pursuant to E.5.c.(1)(a), and the minimum frequency in E.5.c.(1)(a)(i) are met. Requiring 20% every year will be difficult to track as businesses may be opened or closed throughout the year and throughout the permit term.

Additionally, the Riverside Copermittees understand that other Copermittees may be recommending that E.5.c.(1)(a)(i) be changed to 'once per permit term'. The Riverside Copermittees believe that the current language of 'once every five years' is more appropriate for two reasons: 1) not all Copermittees (i.e. OC and Riverside) will be enrolled into the permit at the beginning of the 'permit term', and 2) not all businesses will be in existence at the beginning of the permit term. Accordingly it is more appropriate to simply require the minimum to be once every five years, that way a program manager can simply look at the last time a facility was inspected, and use that date to schedule the next inspection.

3.11 Provision E.6, Enforcement Response Plans

3.11.1 Overview of Key Issues

The Riverside County Copermittees' edits and comments are shown in the Redline and discussed below.

3.11.2 Comments in support of specific changes

E.6.d.

The terminology in this Provision was changed in the Redline from 'escalated' enforcement to 'progressive' enforcement. The proposed language better reflects the nature of enforcement actions, which are not simply 'escalated' or 'not escalated', as implied by Provision E.6.d.(2), but are progressive as needed in response to the severity of the violation. Since every violation comes with a unique set of circumstances, it is not reasonable to presume that a single set of 'triggers' will universally result in the same level of enforcement.

3.12 Provision E.7, Public Education

3.12.1 Overview of Key Issues

The Riverside County Copermittees' edits and comments are shown in the Redline.

3.13 Provision, E.8 Fiscal Analysis

3.13.1 Overview of Key Issues

The requirement that the Copermittees "must secure all the resources necessary to comply with this Order" exceeds the requirements of the CWA and illegally intrudes on the home rule authority of municipalities to govern themselves. This must be deleted. Please also see Legal Comments.

With regard to other provisions, the Riverside County Copermittees' edits and comments are shown in the Redline.

3.14 Provision F

3.14.1 Overview of Key Issues

- F.1 – WQIP Submittal
  - Based on the schedule for the initial submittal of the Priority Water Quality Conditions and Numeric Goals, and the subsequent 60-day public review, only one month would be left for the Copermittees to finalize strategies based on those conditions and goals and the public input received. This is an insufficient amount of time. The Redline requests modifications to the schedule that would provide for the submittal of the final WQIP within 24 months (instead of 18), to provide additional time for the development of strategies.
- F.1 and F.2.
  - The schedules for submittals should be linked to the receipt of comments on prior submittals, or the approval of prior submittals, rather than the permit adoption date. If it is tied to the permit adoption date, the submittal dates could become out of sync with the comment periods or San Diego Water Board approvals if any unexpected delays occur (for example if the San Diego Water Board is delayed in approving a document, or posting a document online for public comment). The Redline requests appropriate modifications.
  - Implementation dates for the plans are unclear / undefined. The Redline clarifies this issue.
- F.3. Progress Reports
  - The reporting requirements across the transitional period were unclear. Redlines are provided to clarify and consolidate.
  - The Regional Monitoring and Assessment Report language was revised to be consistent with the requirements of the Integrated Assessment of the Water Quality Improvement Plan, rather than an additional, slightly different report, due at the same time.

3.15 Attachments B and C

Comments and edits to Attachments B and C are shown in the Redline.

Very truly yours,

for JASON E. UHLEY
Chief of Watershed Protection Division

CP:cw
P8/

Riverside Copermittee Redlines

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

TENTATIVE
ORDER NO. R9-2013-0001
NPDES NO. CAS0109266

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) DRAINING THE WATERSHEDS WITHIN THE SAN DIEGO REGION

The San Diego County Copermittees in Table 1a are subject to waste discharge requirements set forth in this Order.

Table 1a. San Diego County Copermittees

Municipal Copermittees	
City of Carlsbad	City of Oceanside
City of Chula Vista	City of Poway
City of Coronado	City of San Diego
City of Del Mar	City of San Marcos
City of El Cajon	City of Santee
City of Encinitas	City of Solana Beach
City of Escondido	City of Vista
City of Imperial Beach	County of San Diego
City of La Mesa	San Diego County Regional Airport Authority
City of Lemon Grove	San Diego Unified Port District
City of National City	

After the San Diego Water Board receives and considers the Orange County Copermittees' Report of Waste Discharge and makes any necessary changes to the Order, the Orange County Copermittees in Table 1b will become subject to waste discharge requirements set forth in this Order after expiration of Order No. R9-2009-0002, NPDES No. CAS0108740 on or after December 16, 2014.

Table 1b. Orange County Copermittees

Municipal Copermittees	
City of Aliso Viejo	City of Rancho Santa Margarita
City of Dana Point	City of San Clemente
City of Laguna Beach	City of San Juan Capistrano
City of Laguna Hills	City of Laguna Woods
City of Laguna Niguel	County of Orange
City of Lake Forest	~~Orange County Flood Control District~~

Riverside Copermittee Redlines

City of Mission Viejo	
Special District Copermittee	
Orange County Flood Control District	

After the San Diego Water Board receives and considers the Riverside County Copermittees' Report of Waste Discharge and makes any necessary changes to this Order, the Riverside County Copermittees in Table 1c will become subject to waste discharge requirements set forth in this Order after expiration of Order No. R9-2010-0016, NPDES No. CAS0108766 on or after November 10, 2015.

Table 1c. Riverside County Copermittees

Municipal Copermittee	
City of Murrieta	County of Riverside
City of Temecula	~~Riverside County Flood Control and Water Conservation District~~
City of Wildomar	
Special District Copermittee	
Riverside County Flood Control and Water Conservation District	

The Orange County Copermittees and Riverside County Copermittees may become subject to the requirements of this Order at a date earlier than the expiration date of their current Orders subject to the conditions described in Provision F.6 of this Order if the Copermittees in the respective county receive a notification of coverage from the San Diego Water Board.

The term Copermittee in this Order refers to any San Diego County, Orange County, or Riverside County Copermittee covered under this Order, unless specified otherwise.

This Order provides permit coverage for the Copermittee discharges described in Table 2.

Table 2. Discharge Locations and Receiving Waters

Discharge Points	Locations throughout San Diego Region
Discharge Description	Municipal Separate Storm Sewer System (MS4) Discharges
Receiving Waters	Inland Surface Waters, Enclosed Bays and Estuaries, and Coastal Ocean Waters of the San Diego Region

Table 3. Administrative Information

This Order was adopted by the San Diego Water Board on:	**Month Day, 2013**
This Order will become effective on:	**Month Day, 2013**
This Order will expire on:	**Month Day, 2018**
The Copermittees must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than 180 days in advance of the Order expiration date.	

Riverside Copermittee Redlines

I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on Month Day, 2013.

TENTATIVE

David W. Gibson
Executive Officer

Riverside Copermittee Redlines

TABLE OF CONTENTS

I. FINDINGS
Jurisdiction 1
Discharge Characteristics and Runoff Management 4
Water Quality Standards 7
Considerations Under Federal and State Law 9
State Water Board Decisions 12
Administrative Findings 13

II. PROVISIONS
A. Prohibitions and Limitations 15
1. Discharge Prohibitions 15
2. Receiving Water Limitations 16
3. Effluent Limitations 18
4. Compliance with Discharge Prohibitions and Receiving Water Limitations 18
B. Water Quality Improvement Plans 21
1. Watershed Management Areas 21
2. Priority Water Quality Conditions 24
3. Water Quality Improvement Strategies and Schedules 30
4. Water Quality Improvement Monitoring and Assessment Program 31
5. Iterative Approach and Adaptive Management Process 31
6. Water Quality Improvement Plan Submittal, Updates, and Implementation 33
C. Action Levels 35
1. Non-Storm Water Action Levels 35
2. Storm Water Action Levels 39
D. Monitoring and Assessment Program Requirements 41
1. Receiving Water Monitoring Requirements 41
2. MS4 Outfall Discharge Monitoring Requirements 50
3. Special Studies 63
4. Assessment Requirements 65
5. Monitoring Provisions 73
E. Jurisdictional Runoff Management Programs 74
1. Legal Authority Establishment and Enforcement 74
2. Illicit Discharge Detection and Elimination 75
3. Development Planning 84
4. Construction Management 108
5. Existing Development Management 112
6. Enforcement Response Plans 123
7. Public Education and Participation 125
8. Fiscal Analysis 127

Riverside Copermittee Redlines

II. PROVISIONS (Cont'd)

F. Reporting 128
1. Water Quality Improvement Plans 128
2. Updates 130
3. Progress Reporting 131
4. Regional Clearinghouse 135
5. Report of Waste Discharge 136
6. Application for Early Coverage 137
7. Reporting Provisions 137
G. Principal Watershed Copermittee Responsibilities 138
H. Modification of Programs 139
I. Standard Permit Provisions and General Provisions 140

ATTACHMENTS

Attachment A - Discharge Prohibitions and Special Protections A-1
Attachment B - Standard Permit Provisions and General Provisions B-1
Attachment C - Acronyms, Abbreviations and Definitions C-1
Attachment D - Jurisdictional Runoff Management Program Annual Report Form D-1
Attachment E - Specific Provisions for Total Maximum Daily Loads Applicable to Order No. R9-2013-0001 ..... E-1
Attachment F - Fact Sheet / Technical Report for Order No. R9-2013-0001 ..... F-1

Riverside Copermittee Redlines

I. FINDINGS

Comment [A1]: See discussions in section 3.1 of the comment letter

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), finds that:

JURISDICTION

1. **MS4 Ownership or Operation.** Each of the Copermittees owns or operates an MS4, through which it discharges storm water and non-storm water into waters of the U.S. within the San Diego Region. These MS4s fall into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) a small MS4 that is "interrelated" to a medium or large MS4; or (3) an MS4 which contributes to a violation of a water quality standard; or (4) an MS4 which is a significant contributor of pollutants to waters of the U.S.

Many geographical areas subject to this Order are subject to the threat of periodic catastrophic flooding resulting from natural conditions, specifically the presence of mountains and hilly areas in close proximity to urban development and the effect of period strong Pacific Ocean storms. Such flooding would occur in the absence of development. The Legislature recognized the importance of this issue when it established flood control districts across the state, including in Orange, Riverside and San Diego Counties. Such flooding has in the past, and if not controlled, could in the future result in loss of life and property damage. Such flooding can also mobilize significant Pollutants from industrial, commercial, residential and agricultural lands, damaging watercourses and the beneficial uses thereof, including habitat. MS4s are designed and constructed to mitigate such impacts.

2. Riverside County Flood Control and Water Conservation District.

Comment [A2]: See discussion in section 3.1.1 of the comment letter.

In 1945, the California Legislature enacted the Riverside County Flood Control and Water Conservation District Act, establishing the Riverside County Flood Control and Water Conservation District (District). The objects and purposes of the Act are to provide for the control and conservation of flood and storm waters and for the protection of watercourses, watersheds, public highways, life and property within the District from damage or destruction from flood waters. Among its other powers, the District also has the power to conserve, reclaim and save such waters for beneficial use. However the Act does not provide the District with the power to control the volume or quality of discharges that runs off of private property, which may end up in the District's flood control system. The District is governed by the District's Board of Supervisors as a separate legal entity from the County of Riverside.

Many of the flood management systems that the District operates are defined by the Clean Water Act as an MS4, and include many of the larger MS4s within the Santa Margarita watershed region of Riverside County (SMR). District does not however

Riverside Copermittee Redlines

own or operate streets, catch basins or storm drains smaller than 36 inches that collect runoff from the incorporated and unincorporated jurisdictions within the SMR, and commonly connect into the District's flood management system. Such systems are typically owned and operated by either the County of Riverside or the incorporated Cities within the SMR.

The waters and pollutants that may enter the regional receiving waters and/or the District's flood management systems come from various sources. These sources can include storm water and non-storm water from the Municipal Copermittees under this permit as well as from other NPDES and non-NPDES permittees, including industrial waste water dischargers, waste water treatment facilities, industrial and construction stormwater dischargers, water suppliers, tribal lands, other state and federal government entities, and Caltrans. Sources can also include discharges from Phase II entities such as school districts and discharges from entities that have been granted waste discharge requirements or waivers of waste discharge requirements, including agricultural operations.

The District does not own or operate any municipal sanitary sewer systems, public streets, roads, or highways. The District has no planning, zoning, development permitting or other land use authority, thus, it has no permitting or governing authority over industrial or commercial facilities, residents, new developments or re-development projects, and development construction sites located in any incorporated or unincorporated areas within its service area, including the SMR. The Copermittees that have such authority are responsible for implementing a storm water management program to address pollutants discharged from such industrial and commercial facilities, residential areas, new development and re-development projects, and development construction sites within their jurisdictional boundaries. Nonetheless, as an owner and operator of an MS4, the District is required to control pollutant discharges into and from its MS4, such as through interagency agreements among Copermittees and other owners of a MS4, the contribution of pollutants from one portion of the MS4 to another portion of the MS4 within their jurisdiction.

2. **Legal and Regulatory Authority.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations (Code of Federal Regulations [CFR] Title 40, Part 122 [40 CFR 122]) adopted by the United States Environmental Protection Agency (USEPA), and chapter 5.5, division 7 of the California Water Code (CWC) (commencing with section 13370). This Order serves as an NPDES permit for discharges from MS4s to surface waters. This Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).

   The San Diego Water Board has the legal authority to issue a regional MS4 permit pursuant to its authority under CWA section 402(p)(3)(B) and 40 CFR 122.26(a)(1)(v). The USEPA also made it clear that the permitting authority, in this case the San Diego Water Board, has the flexibility to establish system- or region-wide permits (55 Federal Register [FR] 47990, 48039-48042). The regional nature of this Order will ensure consistency of regulation within watersheds and is expected

Riverside Copermittee Redlines

to result in overall cost savings for the Copermittees and San Diego Water Board.

The federal regulations make it clear that the Copermittees need only comply with permit conditions relating to discharges from the MS4s for which they are operators (40 CFR 122.26(a)(3)(vi)). This Order does not require the Copermittees to manage storm water outside of their jurisdictional boundaries, but rather to work collectively to improve storm water management within watersheds.

3. **CWA NPDES Permit Conditions.** Pursuant to CWA section 402(p)(3)(B), NPDES permits for storm water discharges from MS4s must include requirements to effectively prohibit non-storm water discharges into MS4s, and require controls to reduce the discharge of pollutants from the MS4s ~~in storm water~~ to the maximum extent practicable (MEP), and to require other provisions as the San Diego Water Board determines are appropriate to control such pollutants. This Order prescribes conditions to assure compliance with the CWA requirements for owners and operators of MS4s to effectively prohibit non-storm water discharges in to the MS4s, and require controls to reduce the discharge of pollutants ~~in storm water~~ from the MS4s to the MEP.

Comment [A3]: See discussion in section 3.1.2 of the comment letter.

4. **CWA and CWC Monitoring Requirements.** CWA section 308(a) and 40 CFR 122.41(h),(j)-(l) and 122.48 require that NPDES permits must specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements in 40 CFR 122.26(d)(1)(iv)(D), 122.26(d)(1)(v)(B), 122.26(d)(2)(i)(F), 122.26(d)(2)(iii)(D), 122.26(d)(2)(iv)(B)(2) and 122.42(c). CWC section 13383 authorizes the San Diego Water Board to establish monitoring, inspection, entry, reporting and recordkeeping requirements. This Order establishes monitoring and reporting requirements to implement federal and State requirements.

5. **Total Maximum Daily Loads.** CWA section 303(d)(1)(A) requires that "[e]ach state shall identify those waters within its boundaries for which the effluent limitations…are not stringent enough to implement any water quality standard applicable to such waters." The CWA also requires states to establish a priority ranking of impaired water bodies known as Water Quality Limited Segments and to establish Total Maximum Daily Loads (TMDLs) for such waters. This priority list of impaired water bodies is called the Clean Water Act Section 303(d) List of Water Quality Limited Segments, commonly referred to as the 303(d) List. The CWA requires the 303(d) List to be updated every two years.

   TMDLs are numerical calculations of the maximum amount of a pollutant that a water body can assimilate and still meet water quality standards. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point sources (waste load allocations or WLAs) and non-point sources (load allocations or LAs), background contribution, plus a margin of safety. Discharges from MS4s are point source discharges. The federal regulations (40 CFR 122.44(d)(1)(vii)(B)) require that NPDES permits to incorporate water quality based effluent limitations (WQBELs) developed to protect a narrative water quality criterion, a numeric water

Riverside Copermittee Redlines

quality criterion, or both, consistent with the assumptions and requirements of any available WLA for the discharge. Requirements of this Order implement the TMDLs adopted by the San Diego Water Board and approved by USEPA.

6. **Non-Storm Water Discharges.** Pursuant to CWA section 402(p)(3)(B)(ii), this Order requires each Copermittee to effectively prohibit discharges of non-storm water into its MS4. Nevertheless, non-storm water discharges into and from the MS4s continue to be reported to the San Diego Water Board by the Copermittees and other persons. Monitoring conducted by the Copermittees, as well as the 303(d) List, have identified dry weather, non-storm water discharges from the MS4s as a source of pollutants causing or contributing to receiving water quality impairments in the San Diego Region. The federal regulations (40 CFR 122.26(d)(2)(iv)(B)(1)) require the Copermittees to have a program to prevent illicit discharges to the MS4. The federal regulations, however, allow for specific categories of non-storm water discharges or flows to be addressed as illicit discharges only where such discharges are identified as sources of pollutants to waters of the U.S.

7. **In-Stream Treatment Systems.** Pursuant to federal regulations (40 CFR 131.10(a)), in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S. Authorizing the construction of a runoff treatment facility within a water of the U.S., or using the water body itself as a treatment system or for conveyance to a treatment system, would be tantamount to accepting waste assimilation as an appropriate use for that water body. Runoff treatment must occur prior to the discharge of runoff into receiving waters. Treatment control best management practices (BMPs) must not be constructed in waters of the U.S. Construction, operation, and maintenance of a pollution control facility in a water body can negatively impact the physical, chemical, and biological integrity, as well as the beneficial uses, of the water body.

DISCHARGE CHARACTERISTICS AND RUNOFF MANAGEMENT

8. **Point Source Discharges of Pollutants.** Discharges from the MS4s may contain waste, as defined in the CWC, and pollutants that adversely affect the quality of the waters of the state. A discharge from an MS4 is a "discharge of pollutants from a point source" into waters of the U.S. as defined in the CWA. Storm water and non-storm water discharges from the MS4s may contain pollutants that cause or threaten to cause a violation of surface water quality standards, as outlined in the Water Quality Control Plan for the San Diego Basin (Basin Plan). ~~Storm water and non-storm water discharges from the MS4s are subject to the conditions and requirements established in the Basin Plan for point source discharges.~~

9. **Potential Beneficial Use Impairment.** The discharge of pollutants and/or increased flows from MS4s may cause or threaten to cause the concentration of pollutants to exceed applicable receiving water quality objectives and impair or threaten to impair designated beneficial uses or which may result~~ing~~ in a condition of pollution, contamination, or nuisance. In addition, the reduction of flows below the

Riverside Copermittee Redlines

existing condition may impact negatively impact beneficial uses.

10. **Pollutants Generated by Land Development.** Land development has created and continues to create new sources of non-storm water discharges and pollutants in storm water discharges as human population density increases. This brings higher levels of car emissions, car maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, and trash. Pollutants from these sources are dumped or washed off the surface by non-storm water or storm water flows into and from the MS4s. When development converts natural vegetated pervious ground cover to impervious surfaces such as paved highways, streets, rooftops, and parking lots, the natural absorption and infiltration abilities of the land are lost. Therefore, runoff leaving a developed area without BMPs that can maintain pre-development conditions will contain greater pollutant loads and have significantly greater runoff volume, velocity, and peak flow rate than pre-development runoff from the same area.

11. **Runoff Discharges to Receiving Waters.** The MS4s discharge runoff into lakes, drinking water reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within the eleven hydrologic units comprising the San Diego Region. ~~Historic and current development makes use of natural drainage patterns and features as conveyances for runoff. Rivers, streams and creeks in developed areas used in this manner are part of the Copermittees' MS4s regardless of whether they are natural, anthropogenic, or partially modified features. In these cases, the rivers, streams and creeks in the developed areas of the Copermittees' jurisdictions are both an MS4 and receiving water.~~ Numerous receiving water bodies and water body segments have been designated as impaired by the San Diego Water Board pursuant to CWA section 303(d).

Comment [A4]: See discussion in section 3.1.2 of the comment letter.

Pollutants in Runoff. The most common pollutants in runoff discharged from the MS4s include total suspended solids, sediment, pathogens (e.g., bacteria, viruses, protozoa), heavy metals (e.g., cadmium, copper, lead, and zinc), petroleum products and polynuclear aromatic hydrocarbons, synthetic organics (e.g., pesticides, herbicides, and PCBs), nutrients (e.g., nitrogen and phosphorus), oxygen-demanding substances (e.g., decaying vegetation, animal waste), detergents, and trash. ~~As operators of the MS4s, the Copermittees cannot passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the operator essentially accepts responsibility for discharges into the MS4 that it does not effectively prohibit or otherwise control.~~ These discharges may cause or contribute to a condition of pollution or a violation of water quality standards. California law requires downstream landowners, including owners and operators of MS4, to accept upstream flows, even if that flow contains Pollutants. Failure to do can create conditions.

Comment [A5]: See discussion in section 3.1.2 of the comment letter.

Limitation on Powers of Copermittees. This Order regulates the discharge of non-stormwater into and Pollutants from non-agricultural Anthropogenic sources from the MS4s owned and/or operated by the Copermittees. The Copermittees lack legal

Comment [A6]: This finding is based on Findings I.B and I.C in Order R8-2010-33, applicable to portions of Riverside County within the Santa Ana region.

Riverside Copermittee Redlines

jurisdiction over discharges into their MS4 from agricultural activities, State and federal facilities, public schools and hospitals, utilities, railroads, special districts, Native American tribal lands, wastewater management agencies and other point and non-point source discharges otherwise permitted by the Water Board. The Water Board recognizes that the Copermittees should not be held responsible for discharges from such facilities or Pollutants in those discharges. Also, certain activities and sources that generate pollutants present in urban runoff may be beyond the ability of the Copermittees to prevent or eliminate. Examples of these activities and sources include, but are not limited to: emissions from internal combustion engines, brake pad wear and tear, atmospheric deposition, non-Anthropogenic sources of bacteria (including wildlife and feral cats and dogs), the regulation of pesticides and leaching of naturally occurring nutrients and minerals from local soils. This Order is not intended to address background or naturally occurring Pollutants or flows.

12.

13. **Human Health and Aquatic Life Impairment.** Pollutants in runoff discharged from the MS4s can threaten and adversely affect human health and aquatic organisms. Adverse responses of organisms to chemicals or physical agents in runoff range from physiological responses such as impaired reproduction or growth anomalies to mortality. Increased volume, velocity, rate, and duration of storm water runoff greatly accelerate the erosion of downstream natural channels. This alters stream channels and habitats and can adversely affect aquatic and terrestrial organisms.

14. **Water Quality Effects.** The Copermittees' water quality monitoring data submitted to date documents various persistent exceedances of Basin Plan water quality objectives for runoff-related pollutants at various watershed monitoring stations. Persistent toxicity has also been observed at several watershed monitoring stations. In addition, bioassessment data indicate that the majority of the monitored receiving waters have Poor to Very Poor Index of Biological Integrity (IBI) ratings. ~~These findings indicate that runoff discharges are causing or contributing to water quality impairments, and are a leading cause of such impairments in the San Diego Region. Non-storm water discharges from the MS4s have been shown to contribute significant levels of pollutants and flow in arid, developed Southern California watersheds, and contribute significantly to exceedances of applicable receiving water quality objectives.~~

Comment [A7]: These statements are completely unsubstantiated.

15. ~~**Non-Storm Water and Storm Water Discharges.** Non-storm water discharges from the MS4s are not considered storm water discharges and therefore are not subject to the MEP standard of CWA section 402(p)(3)(B)(iii), which is explicitly for "Municipal … *Stormwater Discharges* (emphasis added)" from the MS4s. Pursuant to CWA 402(p)(3)(B)(ii), non-storm water discharges into the MS4s must be effectively prohibited.~~

Comment [A8]: See discussion in section 3.1.2 of the comment letter.

16. **Best Management Practices.** Waste and pollutants which are deposited and accumulate in MS4 drainage structures may~~will~~ be discharged from these structures

Riverside Copermittee Redlines

to waters of the U.S. unless they are removed. These discharges may cause or contribute to, or threaten to cause or contribute to, a condition of pollution in receiving waters. For this reason, pollutants in storm water discharges from the MS4s can be and must be effectively reduced in runoff by the application of a combination of pollution prevention, source control, and treatment control BMPs. Pollution prevention is the reduction or elimination of pollutant generation at its source and is the best "first line of defense". Source control BMPs (both structural and non-structural) minimize the contact between pollutants and runoff, therefore keeping pollutants onsite and out of receiving waters. Treatment control BMPs remove pollutants that have been mobilized by storm water or non-storm water flows.

17. **BMP Implementation.** Runoff needs to be addressed during the three major phases of development (planning, construction, and use) in order to reduce the discharge of storm water pollutants to the MEP, effectively prohibit non-storm water discharges, and protect receiving waters. Development which is not guided by water quality planning policies and principles can result in increased pollutant load discharges, flow rates, and flow durations which can negatively affect receiving water beneficial uses. Construction sites without adequate BMP implementation result in sediment runoff rates which greatly exceed natural erosion rates of undisturbed lands, causing siltation and impairment of receiving waters. Existing development can generate substantial pollutant loads which are discharged in runoff to receiving waters. Retrofitting areas of existing development with storm water pollutant control and hydromodification management BMPs may in many cases be ~~is~~ necessary to address storm water discharges from existing development that may cause or contribute to a condition of pollution or a violation of water quality standards.

Comment [A9]: It is not necessary in all cases.

18. **Long Term Planning and Implementation.** Federal regulations require municipal storm water permits to expire 5 years from adoption, after which the permit must be renewed and reissued. The San Diego Water Board recognizes that the degradation of water quality and impacts to beneficial uses of the waters in the San Diego Region occurred over several decades. The San Diego Water Board further recognizes that a decade or more may be necessary to realize demonstrable improvement to the quality of waters in the Region. This Order includes a long term planning and implementation approach that will require more than a single permit term to complete.

WATER QUALITY STANDARDS

19. **Basin Plan.** The San Diego Water Board adopted the Water Quality Control Plan for the San Diego Basin (Basin Plan) on September 8, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters addressed through the plan. The Basin Plan was subsequently approved by the State Water

Riverside Copermittee Redlines

Resources Control Board (State Water Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the San Diego Water Board and approved by the State Water Board. Requirements of this Order implement the Basin Plan.

The Basin Plan identifies the following existing and potential beneficial uses for inland surface waters in the San Diego Region: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Process Supply (PROC), Industrial Service Supply (IND), Ground Water Recharge (GWR), Contact Water Recreation (REC1), Non-contact Water Recreation (REC2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE), Freshwater Replenishment (FRSH), Hydropower Generation (POW), and Preservation of Biological Habitats of Special Significance (BIOL). The following additional existing and potential beneficial uses are identified for coastal waters of the San Diego Region: Navigation (NAV), Commercial and Sport Fishing (COMM), Estuarine Habitat (EST), Marine Habitat (MAR), Aquaculture (AQUA), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), and Shellfish Harvesting (SHELL).

20. **Ocean Plan.** The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. Requirements of this Order implement the Ocean Plan.

    The Ocean Plan identifies the following beneficial uses of ocean waters of the state to be protected: Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance; rare and endangered species; marine habitat; fish spawning and shellfish harvesting

21. **Sediment Quality Control Plan**. On September 16, 2008, the State Water Board adopted the Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality (Sediment Quality Control Plan). The Sediment Quality Control Plan became effective on August 25, 2009. The Sediment Quality Control Plan establishes: 1) narrative sediment quality objectives for benthic community protection from exposure to contaminants in sediment and to protect human health, and 2) a program of implementation using a multiple lines of evidence approach to interpret the narrative sediment quality objectives. Requirements of this Order implement the Sediment Quality Control Plan.

22. **National Toxics Rule and California Toxics Rule.** USEPA adopted the National Toxics Rule (NTR) on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the California Toxics Rule (CTR). The CTR promulgated

Riverside Copermittee Redlines

new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

23. **Antidegradation Policy.** This Order is in conformance with the federal Antidegradation Policy described in 40 CFR 131.12, and State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California*. Federal regulations at 40 CFR 131.12 require that the State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. State Water Board Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. State Water Board Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

CONSIDERATIONS UNDER FEDERAL AND STATE LAW

24. **Coastal Zone Act Reauthorization Amendments.** Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) requires coastal states with approved coastal zone management programs to address non-point source pollution impacting or threatening coastal water quality. CZARA addresses five sources of non-point source pollution: agriculture, silviculture, urban, marinas, and hydromodification. This Order addresses the management measures required for the urban category, with the exception of septic systems. The runoff management programs developed pursuant to this Order fulfills the need for coastal cities to develop a runoff non-point source plan identified in the Non-Point Source Program Strategy and Implementation Plan. The San Diego Water Board addresses septic systems through the administration of other programs.

25. **Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 USC sections 1531 to 1544). This Order requires compliance with receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Copermittees are responsible for meeting all requirements of the applicable Endangered Species Act.

26. **Report of Waste Discharge Process.** The waste discharge requirements set forth in this Order are based upon the Report of Waste Discharge submitted by the San Diego County Copermittees prior to the expiration of Order No. R9-2007-0001 (NPDES No. CAS0109266). The Orange County and Riverside County Copermittees are not immediately covered by the waste discharge requirements in this Order. The San Diego Water Board understands that each municipality is

Riverside Copermittee Redlines

unique although the Counties share watersheds and geographical boundaries. The Order will continue to use the Report of Waste Discharge process prior to initially making Orange County or Riverside County Copermittees subject to the requirements of this Order.

The federal regulations (40 CFR 122.21(d)(2)) and CWC section 13376 impose a duty on the Copermittees to reapply for continued coverage through submittal of a Report of Waste Discharge no later than 180 days prior to expiration of a currently effective permit. This requirement is set forth in the Orange County Copermittees' and Riverside County Copermittees' currently effective permits at Provisions K.2.b and K.2.c, respectively. The Orange County Permit, Order No. R9-2009-0002 (NPDES No. CAS0108740) expires on December 16, 2014 and the Riverside County MS4 Permit, Order No. R9-2010-0016 (NPDES No. CAS0108766) expires on November 10, 2015.

Unless the Orange County or Riverside County Copermittees apply for and receive early coverage under this Order, the Orange County Copermittees' and the Riverside County Copermittees' respective permits will be superseded by this Order upon expiration of their respective permits, subject to any necessary revisions to the requirements of this Order made after the San Diego Water Board considers their respective Reports of Waste Discharge through the public process provided in 40 CFR 124.

Comment [A10]: Please see Comment Letter and Legal Comments regarding regional permit authority,

27. **Integrated Report and Clean Water Act Section 303(d) List.** The San Diego Water Board and State Water Board submit an Integrated Report to USEPA to comply with the reporting requirements of CWA sections 303(d), 305(b) and 314, which lists the attainment status of water quality standards for water bodies in the San Diego Region. USEPA issued its *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act* on July 29, 2005, which advocates the use of a five category approach for classifying the attainment status of water quality standards for water bodies in the Integrated Report. Water bodies included in Category 5 in the Integrated Report indicate at least one beneficial use is not being supported or is threatened, and a TMDL is required. Water bodies included in Category 5 in the Integrated Report are placed on the 303(d) List.

Water bodies with available data and/or information that indicate at least one beneficial use is not being supported or is threatened, but a TMDL is not required, are included in Category 4 in the Integrated Report. Impaired surface water bodies may be included in Category 4 if a TMDL has been adopted and approved (Category 4a); if other pollution control requirements required by a local, state or federal authority are stringent enough to implement applicable water quality standards within a reasonable period of time (Category 4b); or, if the failure to meet an applicable water quality standard is not caused by a pollutant, but caused by other types of pollution (Category 4c).

Implementation of the requirements of this Order may allow the San Diego Water Board to include surface waters impaired by discharges from the Copermittees'

Riverside Copermittee Redlines

MS4s in Category 4 in the Integrated Report for consideration during the next 303(d) List submittal by the State to USEPA.

28. **Economic Considerations.** The California Supreme Court has ruled that although CWC section 13263 requires the State and Regional Water Boards (collectively Water Boards) to consider factors set forth in CWC section 13241 when issuing an NPDES permit, the Water Board may not consider the factors to justify imposing pollutant restrictions that are less stringent than the applicable federal regulations require. (*City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 618, 626-627.) However, when pollutant restrictions in an NPDES permit are more stringent than federal law requires, CWC section 13263 requires that the Water Boards consider the factors described in CWC section 13241 as they apply to those specific restrictions.

    As noted in the following finding, the San Diego Water Board finds that the requirements in this permit are not more stringent than the minimum federal requirements. Therefore, a CWC section 13241 analysis is not required for permit requirements that implement the effective prohibition on the discharge of non-storm water into the MS4 or for controls to reduce the discharge of pollutants ~~in storm water~~ to the MEP, or other provisions that the San Diego Water Board has determined appropriate to control such pollutants, as those requirements are mandated by federal law. Notwithstanding the above, the San Diego Water Board has developed an economic analysis of the requirements in this Order. The economic analysis is provided in the Fact Sheet.

Comment [A11]: See discussion in section 3.1.2 of the Comment Letter and also Legal Comments..

29. ~~**Unfunded Mandates.** This Order does not constitute an unfunded local government mandate subject to subvention under Article XIIIB, Section (6) of the California Constitution for several reasons, including, but not limited to, the following:~~

    ~~**a.** This Order implements federally mandated requirements under CWA section 402 (33 USC section 1342(p)(3)(B)).~~

    ~~**b.** The local agency Copermittees' obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental and new dischargers who are issued NPDES permits for storm water and non-storm water discharges.~~

    ~~**c.** The local agency Copermittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order.~~

    ~~**d.** The Copermittees have requested permit coverage in lieu of compliance with the complete effective prohibition against the discharge of pollutants contained in CWA section 301(a) (33 USC section 1311(a)) and in lieu of numeric restrictions on their MS4 discharges (i.e. effluent limitations).~~

    ~~**e.** The local agencies' responsibility for preventing discharges of waste that can create conditions of pollution or nuisance from conveyances that are within their ownership or control under State law predates the enactment of Article XIIIB, Section (6) of the California Constitution.~~

Comment [A12]: See discussion in section 3.1.2 of the comment letter and in the Legal Comments.

Riverside Copermittee Redlines

~~f. The provisions of this Order to implement TMDLs are federal mandates. The CWA requires TMDLs to be developed for water bodies that do not meet federal water quality standards (33 USC section 1313(d)). Once the USEPA or a state develops a TMDL, federal law requires that permits must contain water quality based effluent limitations consistent with the assumptions and requirements of any applicable wasteload allocation (40 CFR 122.44(d)(1)(vii)(B)).~~

~~See the Fact Sheet for further discussion of unfunded mandates.~~

30. **California Environmental Quality Act.** The issuance of waste discharge requirements and an NPDES permit for the discharge of runoff from MS4s to waters of the U.S. is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, section 21000 et seq.) in accordance with CWC section 13389.

STATE WATER BOARD DECISIONS

31. **Compliance with Prohibitions and Limitations.** The receiving water limitation language specified in this Order is consistent with language recommended by the USEPA and established in State Water Board Order WQ 99-05, *Own Motion Review of the Petition of Environmental Health Coalition to Review Waste Discharge Requirements Order No. 96-03, NPDES Permit No. CAS0108740*, adopted by the State Water Board on June 17, 1999. The receiving water limitation language in this Order requires storm water discharges from MS4s to not cause or contribute to a violation of water quality standards, which is to be achieved through an iterative approach requiring the implementation of improved and better-tailored BMPs over time. Implementation of the iterative approach to comply with receiving water limitations based on applicable water quality standards is necessary to ensure that Pollutant ~~storm water~~ discharges from the MS4 will not ultimately cause or contribute to violations of water quality standards and will not create conditions of pollution, contamination, or nuisance.

Comment [A13]: See discussion in section 3.1.2 of the comment letter.

Comment [A14]: Please see discussion in section 3.1.2 of the Comment Letter and Legal Comments.

32. **Special Conditions for Areas of Special Biological Significance.** On March 20, 2012, the State Water Board approved Resolution No. 2012-0012 approving an exception to the Ocean Plan effective prohibition against discharges to Areas of Special Biological Significance (ASBS) for certain nonpoint source discharges and NPDES permitted municipal storm water discharges. State Water Board Resolution No. 2012-0012 requires monitoring and testing of marine aquatic life and water quality in several ASBS to protect California's coastline during storms when rain water overflows into coastal waters. Specific terms, effective prohibitions, and special conditions were adopted to provide special protections for marine aquatic life and natural water quality in ASBS. The City of San Diego's municipal storm water discharges to the San Diego Marine Life Refuge in La Jolla, and the City of Laguna Beach's municipal storm water discharges to the Heisler Park ASBS are subject terms and conditions of State Water Board Resolution No. 2012-0012. The Special

Riverside Copermittee Redlines

Protections contained in Attachment B to Resolution No. 2012-0012, applicable to these discharges, are hereby incorporated into this Order as if fully set forth herein.

ADMINISTRATIVE FINDINGS

33. **Executive Officer Delegation of Authority.** The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to CWC section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this Order unless such delegation is unlawful under CWC section 13223 or this Order explicitly states otherwise.

34. **Standard Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment B to this Order.

35. **Fact Sheet.** The Fact Sheet for this Order contains background information, regulatory and legal citations, references and additional explanatory information and data in support of the requirements of this Order. The Fact Sheet is hereby incorporated into this Order and constitutes part of the Findings of this Order.

36. **Public Notice.** In accordance with State and federal laws and regulations, the San Diego Water Board notified the Copermittees, and interested agencies and persons of its intent to prescribe waste discharge requirements for the control of discharges into and from the MS4s to waters of the U.S. and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet.

37. **Public Hearing.** The San Diego Water Board held a public hearing on Month Day, 2013 and heard and considered all comments pertaining to the terms and conditions of this Order. Details of the public hearing are provided in the Fact Sheet.

38. **Effective Date.** This Order serves as an NPDES permit pursuant to CWA section 401 or amendments thereto, and becomes effective fifty (50) days after the date of its adoption, provided that the Regional Administrator, USEPA, Region IX, does not object to this Order.

39. **Review by the State Water Board.** Any person aggrieved by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050, et seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the San Diego Water Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday or State holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the

Riverside Copermittee Redlines

Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

Riverside Copermittee Redlines

THEREFORE, IT IS HEREBY ORDERED that the Copermittees, in order to meet the provisions contained in division 7 of the CWC and regulations adopted thereunder, and the provisions of the CWA and regulations adopted thereunder, must each comply with the following:

II. PROVISIONS

A. PROHIBITIONS AND LIMITATIONS

Comment [A15]: See discussion in section 3.2 of the comment letter.

The purpose of this provision is to describe the conditions under which storm water and non-storm water discharges into and from MS4s are to be effectively prohibited or limited. The goal of the prohibitions and limitations is to protect the water quality and designated beneficial uses of waters of the state from adverse impacts caused or contributed to by MS4 discharges. This goal will be accomplished through the implementation of water quality improvement strategies and runoff management programs that effectively prohibit non-storm water discharges into the Copermittees' MS4s, and reduce pollutants in ~~storm water~~ discharges from the Copermittees' MS4s to the MEP. The process for determination of compliance with the Discharge Prohibitions (A.1), Receiving Water Limitations (A.2), and Effluent Limitations (A.3) is defined in Provisions A.3.b and A.4.

1. Discharge Prohibitions

a. Discharges from MS4s in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance in receiving waters ~~of the state~~ are to be ~~prohibited.~~ effectively prohibited, unless the Regional Board determines such discharges are addressed by the Copermittee through A.3.b or A.4, including any modifications.~~prohibited.~~

Comment [A16]: See discussion in section 3.2.2 of the comment letter.

b. Non-storm water discharges into MS4s are to be effectively prohibited through a program consistent with the requirements of provision E.2. of this order, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the MS4, unless such discharges are either authorized by a separate NPDES permit, or the discharge is a category of non-storm water discharges or flows that must be addressed pursuant to Provisions E.2.a.(1)-(5) of this Order.

Comment [A17]: See discussion in section 3.2.2 of the comment letter.

c. Discharges from MS4s are subject to all applicable waste discharge prohibitions in the Basin Plan, included in Attachment A to this Order, unless the Regional Board determines such discharges are addressed by the Copermittee through A.3.b or A.4, including any modifications.

Comment [A18]: See discussion in section 3.2.2 of the comment letter.

d. Storm water discharges from the City of San Diego's MS4 to the San Diego Marine Life Refuge in La Jolla, and the City of Laguna Beach's MS4 to the Heisler Park ASBS are authorized under this Order subject to the Special Protections contained in Attachment B to State Water Board Resolution No.

Riverside Copermittee Redlines

2012-0012 applicable to these discharges, included in Attachment A to this Order. All other discharges from the Copermittees' MS4s to ASBS are ~~to be effectively~~ prohibited.

2. Receiving Water Limitations

Comment [A19]: See discussion in section 3.2.2 of the comment letter.

a. Discharges from MS4s must not cause or contribute to the violation of water quality standards in any receiving waters, including but not limited to all applicable provisions ~~contained in:~~below, unless the Regional Board determines such discharges are addressed by the Copermittee through A.3.b or A.4::~~contained in:~~

(1) The San Diego Water Board's Basin Plan, including beneficial uses, water quality objectives, and implementation plans;

(2) State Water Board plans for water quality control including the following:

(a) Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries (Thermal Plan), and

(b) The Ocean Plan, including beneficial uses, water quality objectives, and implementation plans;

(3) State Water Board policies for water and sediment quality control including the following:

(a) Water Quality Control Policy for the Enclosed Bays and Estuaries of California,

(b) Sediment Quality Control Plan which includes the following narrative objectives for bays and estuaries:

(i) Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities, and

(ii) Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health,

(c) The Statement of Policy with Respect to Maintaining High Quality of Waters in California;[1]

(4) Priority pollutant criteria promulgated by the USEPA through the following:

[1] State Water Board Resolution No. 68-16

Riverside Copermittee Redlines

(a) National Toxics Rule (NTR)[2] (promulgated on December 22, 1992 and amended on May 4, 1995), and

(b) California Toxics Rule (CTR).[3,4]

b. Discharges from MS4s composed of storm water runoff must not alter natural ocean water quality in an ASBS.

[2] 40 CFR 131.36
[3] 65 Federal Register 31682-31719 (May 18, 2000), adding Section 131.38 to 40 CFR
[4] If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies.

Riverside Copermittee Redlines

3. Effluent Limitations

a. TECHNOLOGY BASED EFFLUENT LIMITATIONS

Comment [A20]: See discussion in section 3.2.2 of the comment letter.

Pollutants in ~~storm water~~ discharges from MS4s must be reduced to the MEP.[5]

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

This Order establishes water quality based effluent limitations (WQBELs) consistent with the assumptions and requirements of all available TMDL waste load allocations (WLAs) assigned to discharges from the Copermittees' MS4s. Each Copermittee must comply with applicable WQBELs established for the TMDLs in Attachment E to this Order, pursuant to the applicable TMDL compliance schedules.

4. Compliance with Discharge Prohibitions and Receiving Water Limitations

Comment [A21]: See discussion in section 3.2.2 of the comment letter.

Each Copermittee must achieve compliance with Provisions A.1.a~~,~~ through A.1.c and A.2.a of this Order through timely implementation of control measures and other actions as specified in Provisions B and E of this Order, including any modifications. The Water Quality Improvement Plans required under Provision B must be designed and adapted to ultimately achieve compliance with Provisions A.1.a~~,~~ through A.1.c and A.2.a~~.~~, as described in Provision B.2.~~.~~

a. If exceedance(s) of water quality standards persist in receiving waters notwithstanding implementation of this Order, the Copermittees must comply with the following procedures:

(1) For exceedance(s) of a water quality standard in the process of being addressed by the Water Quality Improvement Plan, the Copermittee(s) must implement the Water Quality Improvement Plan as accepted by the San Diego Water Board, and update the Water Quality Improvement Plan, as necessary, pursuant to Provision F.2.c;

(2) Upon a determination by either the Copermittees or the San Diego Water Board that discharges from the MS4 are causing or contributing to a new exceedance of an applicable water quality standard not addressed by the Water Quality Improvement Plan, the Copermittees must submit the following updates to the Water Quality Improvement Plan pursuant to Provision F.2.c or as part of the Annual Report required under Provision F.3.b, unless the San

[5] This does not apply to MS4 discharges which receive subsequent treatment to reduce pollutants in storm water discharges to the MEP prior to entering receiving waters (e.g., low flow diversions to the sanitary sewer). Runoff treatment must occur prior to the discharge of runoff into receiving waters per Finding 7.

Riverside Copermittee Redlines

Diego Water Board directs an earlier submittal:

(a) The water quality improvement strategies being implemented that are effective and will continue to be implemented,

(b) Water quality improvement strategies (i.e. BMPs, retrofitting projects, stream and/or habitat rehabilitation or restoration projects, adjustments to jurisdictional runoff management programs, etc.) that will be implemented to reduce or eliminate any pollutants or conditions that are causing or contributing to the exceedance of water quality standards,

(c) Updates to the schedule for implementation of the existing and additional water quality improvement strategies, and

(d) Updates to the monitoring and assessment program to track progress toward achieving compliance with Provisions A.1.a, A.1.c and A.2.a of this Order;

(3) The San Diego Water Board may require the incorporation of additional modifications to the Water Quality Improvement Plan required under Provision B. The applicable Copermittees must submit any modifications to the update to the Water Quality Improvement Plan within 90 days of notification that additional modifications are required by the San Diego Water Board, or as otherwise directed;

(4) Within 90 days of the San Diego Water Board determination that the update to the Water Quality Improvement Plan meets the requirements of this Order, the applicable Copermittees must revise the jurisdictional runoff management program documents to incorporate the updated water quality improvement strategies that have been and will be implemented, the implementation schedule, and any additional monitoring required; and

(5) Each Copermittee must implement the updated Water Quality Improvement Plan.

b. The procedure set forth above to achieve compliance with Provisions A.1.a, A.1.c and A.2.a of this Order do not have to be repeated for continuing or recurring exceedances of the same water quality standard(s) following implementation of scheduled actions unless directed to do otherwise by the San Diego Water Board.

c. Nothing in Provisions A.4.a and A.4.b prevents the San Diego Water Board from enforcing any of provisions B through I of this Order while the applicable Copermittees prepare and implement the above update to the Water Quality Improvement Plan and jurisdictional runoff management programs.

Riverside Copermittee Redlines

Riverside Copermittee Redlines

B. WATER QUALITY IMPROVEMENT PLANS

The purpose of this provision is to develop Water Quality Improvement Plans (WQIPs) that guide the Copermittees' jurisdictional runoff management programs towards achieving the outcome of improved water quality in MS4 discharges and receiving waters. The goal of the Water Quality Improvement Plans is to ~~protect, preserve, enhance, and restorerestore the~~address the impacts of MS4 discharges so that such discharges do not impair water quality and designated beneficial uses of receiving waters~~. of the state.~~ Therefore, implementation of the WQIPs also provides the basis for complying with Provisions II.A.1, II.A.2, and II.A.3, as described in Provision II.A.4. This goal will be accomplished through an adaptive planning and management process that identifies the highest priority water quality conditions within a watershed and implements strategies through the jurisdictional runoff management programs to achieve improvements in the quality of discharges from the MS4s ~~and~~ to receiving waters. As such, the requirements outlined in Provision E may be modified for consistency with the WQIP priorities for the applicable Watershed Management Area, if appropriate justification is provided approved within the WQIP.

Comment [A22]: See section 3.3 of the comment letter for discussions of the changes requested herein.

Comment [A23]: See discussion in section 3.3.2 of the comment letter.

1. Watershed Management Areas

Comment [A24]: See discussion in section 3.3.2 of the comment letter.

The Copermittees must develop a Water Quality Improvement Plan for each of the Watershed Management Areas in Table B-1. A total of ten Water Quality Improvement Plans must be developed for the San Diego Region.

Development of the Water Quality Improvement Plan for the Santa Margarita River Watershed Management Area shall commence upon notification of coverage of the Riverside County Copermittees under this Order. Until this time, the County of San Diego shall use the water quality priorities in the Santa Margarita River Watershed Urban Runoff Management Plan, developed pursuant to Order No. R9-2007-0001, to guide implementation of Provisions D and E within its jurisdiction

Table B-1. Watershed Management Areas

Hydrologic Unit(s)	Watershed Management Area	Major Surface Water Bodies	Responsible Copermittees
San Juan (901.00)	South Orange County	- Aliso Creek - San Juan Creek - San Mateo Creek - Pacific Ocean - Heisler Park ASBS	- City of Aliso Viejo[1] - City of Dana Point[1] - City of Laguna Beach[1] - City of Laguna Hills[1] - City of Laguna Niguel[1] - City of Laguna Woods[1] - City of Lake Forest[1] - City of Mission Viejo[1] - City of Rancho Santa Margarita[1] - City of San Clemente[1] - City of San Juan Capistrano[1] - County of Orange[1] - Orange County Flood Control District[1]

Riverside Copermittee Redlines

Table B-1. Watershed Management Areas

Hydrologic Unit(s)	Watershed Management Area	Major Surface Water Bodies	Responsible Copermittees
Santa Margarita (902.00)	Santa Margarita River	- Murrieta Creek - Temecula Creek - Santa Margarita River - Santa Margarita Lagoon - Pacific Ocean	- City of Murrieta[2] - City of Temecula[2] - City of Wildomar[2] - County of Riverside[2] - County of San Diego[3] - Riverside County Flood Control and Water Conservation District[2]
San Luis Rey (903.00)	San Luis Rey River	- San Luis Rey River - San Luis Rey Estuary - Pacific Ocean	- City of Oceanside - City of Vista - County of San Diego
Carlsbad (904.00)	Carlsbad	- Loma Alta Slough - Buena Vista Lagoon - Agua Hedionda Lagoon - Batiquitos Lagoon - San Elijo Lagoon - Pacific Ocean	- City of Carlsbad - City of Encinitas - City of Escondido - City of Oceanside - City of San Marcos - City of Solana Beach - City of Vista - County of San Diego
San Dieguito (905.00)	San Dieguito River	- San Dieguito River - San Dieguito Lagoon - Pacific Ocean	- City of Del Mar - City of Escondido - City of Poway - City of San Diego - City of Solana Beach - County of San Diego
Penasquitos (906.00)	Penasquitos	- Los Penasquitos Lagoon - Pacific Ocean	- City of Del Mar - City of Poway - City of San Diego - County of San Diego
	Mission Bay	- Mission Bay - Pacific Ocean - San Diego Marine Life Refuge ASBS	- City of San Diego
San Diego (907.00)	San Diego River	- San Diego River - Pacific Ocean	- City of El Cajon - City of La Mesa - City of San Diego - City of Santee - County of San Diego
Pueblo San Diego (908.00) Sweetwater (909.00) Otay (910.00)	San Diego Bay	- Sweetwater River - Otay River - San Diego Bay - Pacific Ocean	- City of Chula Vista - City of Coronado - City of Imperial Beach - City of La Mesa - City of Lemon Grove - City of National City - City of San Diego - County of San Diego - San Diego County Regional Airport Authority - San Diego Unified Port District
Tijuana (911.00)	Tijuana River	- Tijuana River - Tijuana Estuary - Pacific Ocean	- City of Imperial Beach - City of San Diego - County of San Diego

Notes:
1. The Orange County Copermittees will be covered under this Order after expiration of Order No. R9-2009-0002, or earlier if the Orange County Copermittees meet the conditions in Provision F.6.
2. The Riverside County Copermittees will be covered under this Order after expiration of Order No. R9-2010-0016, or earlier if the Riverside County Copermittees meet the conditions in Provision F.6.
3. The County of San Diego is required to implement the requirements of Provision B for its jurisdiction within the Santa

Riverside Copermittee Redlines

Margarita River Watershed Management Area until the Riverside County Copermittees have been notified of coverage under this Order.

Riverside Copermittee Redlines

2. Priority Water Quality Conditions

The Copermittees must identify the water quality priorities within each Watershed Management Area that will be addressed by the Water Quality Improvement Plan. Where appropriate, Watershed Management Areas may be separated into subwatersheds to focus water quality prioritization and jurisdictional runoff management program implementation efforts by receiving water.

a. Assessment of Receiving Water Conditions

The Copermittees must consider the following, at a minimum, to identify water quality priorities based on impacts of MS4 discharges on receiving water beneficial uses:

(1) Receiving waters listed as impaired on the CWA Section 303(d) List of Water Quality Limited Segments (303(d) List);

(2) TMDLs adopted and under development by the San Diego Water Board;

(3) Receiving waters recognized as sensitive or highly valued by the Copermittees, including estuaries designated under the National Estuary Program under CWA section 320, wetlands defined by the State or U.S. Fish and Wildlife Service's National Wetlands Inventory as wetlands, and receiving waters identified as ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-0012 (Attachment A);

(4) The receiving water limitations of Provision A.2;

(5) Known historical versus current physical, chemical, and biological water quality conditions;

(6) Available, relevant, and appropriately collected and analyzed physical, chemical, and biological receiving water monitoring data, including, but not limited to, data describing:

(a) Chemical constituents,

(b) Water quality parameters (i.e. pH, temperature, conductivity, etc.),

(c) Toxicity Identification Evaluations for both receiving water column and sediment,

(d) Trash impacts,

(e) Bioassessments, and

(f) Physical habitat;

Riverside Copermittee Redlines

(7) Available evidence of erosional impacts in receiving waters due to accelerated flows (i.e. hydromodification);

(8) Available evidence of adverse impacts to the chemical, physical, and biological integrity of receiving waters; and

(9) The potential improvements in the overall condition of the Watershed Management Area that can be achieved.

b. ASSESSMENT OF IMPACTS FROM MS4 DISCHARGES

The Copermittees must consider the following, at a minimum, to identify the potential impacts to receiving waters that may be caused or contributed to by discharges from the Copermittees' MS4s:

(1) The discharge prohibitions of Provision A.1 and effluent limitations of Provision A.3; and

(2) Available, relevant, and appropriately collected and analyzed storm water and non-storm water monitoring data from the Copermittees' MS4 outfalls;

(3) Locations of each Copermittee's MS4 outfalls that discharge to receiving waters;

(4) Locations of MS4 outfalls that are known to persistently discharge non-storm water to receiving waters likely causing or contributing to impacts on receiving water beneficial uses;

(5) Locations of MS4 outfalls that are known to discharge pollutants in storm water causing or contributing to impacts on receiving water beneficial uses; and

(6) The potential improvements in the quality of discharges from the MS4 that can be achieved.

c. IDENTIFICATION OF PRIORITY WATER QUALITY CONDITIONS

(1) The Copermittees must use the information gathered for Provisions B.2.a and B.2.b to develop a list of priority water quality conditions as pollutants, stressors and/or receiving water conditions that are the highest threat to receiving water quality or that most adversely affect the physical, chemical, and biological integrity of receiving waters. The list must include the following information for each priority water quality condition:

Riverside Copermittee Redlines

(a) The beneficial use(s) associated with the priority water quality condition;

(b) The geographic extent of the priority water quality condition within the Watershed Management Area, if known;

(c) The temporal extent of the priority water quality condition (e.g., dry weather and/or wet weather);

(d) The Copermittees with MS4s discharges that may cause or contribute to the priority water quality condition; and

(e) An assessment of the adequacy of and data gaps in the monitoring data to characterize the conditions causing or contributing to the priority water quality condition, including a consideration of spatial and temporal variation.

(2) The Copermittees must identify the highest priority water quality conditions to be addressed by the Water Quality Improvement Plan, and provide a rationale for selecting a subset of the water quality conditions identified pursuant to Provision B.2.c.(1) as the highest priorities.

d. IDENTIFICATION OF MS4 SOURCES OF POLLUTANTS AND/OR STRESSORS

The Copermittees must identify and prioritize known and suspected sources of storm water and non-storm water pollutants and/or other stressors within their jurisdiction, associated with MS4 discharges that cause or contribute to the highest priority water quality conditions identified under Provision B.2.c. ~~The identification of known and suspected sources of pollutants and/or stressors that cause or contribute to the highest priority water quality conditions as identified for Provision B.2.c must~~ considering the following:

(1) Pollutant generating facilities, areas, and/or activities within the Watershed Management Area, including:

(a) Each Copermittee's inventory of construction sites, commercial facilities or areas, industrial facilities, municipal facilities, and residential areas,

(b) Publicly owned parks and/or recreational areas,

(c) Open space areas,

(d) All currently operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste,,, and

(e) Areas not within the Copermittees' jurisdictions (e.g., Phase II MS4s, tribal lands, state lands, federal lands) that are known or suspected to be discharging to the Copermittees' MS4s;

Riverside Copermittee Redlines

(2) Locations of the Copermittees' MS4s, including the following:

(a) All major MS4 outfalls [per 40CFR 122.26 (b)(5)] that discharge to receiving waters, and

(b) Locations of major structural controls for storm water and non-storm water (e.g., retention basins, detention basins, major infiltration devices, etc.);

(3) Other known and suspected sources of non-storm water or pollutants in storm water discharges to receiving waters within the Watershed Management Area, including the following:

(a) Other MS4 outfalls (e.g., Phase II Municipal and Caltrans),

(b) Other NPDES permitted discharges,

(c) Any other discharges that may be considered point sources (e.g., private outfalls), and

(d) Any other discharges that may be considered non-point sources (e.g., agriculture, wildlife or other natural sources);

(4) Review of available data, including but not limited to:

(a) Findings from the Copermittees' illicit discharge detection and elimination programs,

(b) Findings from the Copermittees' MS4 outfall discharge monitoring,

(c) Findings from the Copermittees' receiving water monitoring,

(d) Findings from the Copermittees' MS4 outfall discharge and receiving water assessments, and

(e) Other available, relevant, and appropriately collected data, information, or studies related to pollutant sources and/or stressors that contribute to the highest priority water quality conditions as identified for Provision B.2.c.

(5) The adequacy of the available data to identify and prioritize sources and/or stressors associated with MS4 discharges that cause or contribute to the highest priority water quality conditions identified under Provision B.2.c.

Riverside Copermittee Redlines

e. NUMERIC GOALS AND SCHEDULES

Comment [A25]: See discussion in section 3.3.2 of the comment letter.

The Copermittees must develop and incorporate action levels, interim and final numeric goals[6] and schedules into the Water Quality Improvement Plan. Numeric goals must be used to support Water Quality Improvement Plan implementation and measure progress towards addressing the highest priority water quality conditions identified under Provision B.2.c. . Action Levels, Numeric goals are not enforceable compliance standards, effluent limitations, or receiving water limitations. When establishing numeric goals and corresponding schedules, the Copermittees must consider the following:

(1) Final numeric goals must be based on measureable criteria or indicators, to be achieved in ~~the receiving waters and/or~~ MS4 discharges for the highest priority water quality conditions which will ~~be capable of demonstrating the achievement of the restoration and/or protection~~ comply with the Receiving Water Limitations (A.2) of this Order; ~~water quality standards in receiving waters;~~

(2) Interim numeric goals must be based on measureable criteria or indicators capable of demonstrating incremental progress toward achieving the final numeric goals in the receiving waters and/or MS4 discharges; and

(3) Schedules must be adequate for measuring progress toward achieving the interim and final numeric goals required for Provisions B.2.e.(1) and B.2.e.(2). Schedules must incorporate the following:

(a) Interim dates for achieving the interim numeric goals,

(b) Compliance schedules for any applicable TMDLs in Attachment E to this Order,

(c) Compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-0012 (see Attachment A),

(d) Achievement of the final numeric goals in the receiving waters and/or MS4 discharges for the highest water quality priorities must be as soon as possible, and

[6] Interim and final numeric goals may take a variety of forms such as TMDL established WQBELs, action levels, pollutant concentration, load reductions, number of impaired water bodies delisted from the List of Water Quality Impaired Segments, Index of Biotic Integrity (IBI) scores, or other appropriate metrics. Interim and final numeric goals are not necessarily limited to one criterion or indicator, but may include multiple criteria and/or indicators. Except for TMDL established WQBELs, interim and final numeric goals and corresponding schedules may be revised through the adaptive management process under Provision B.5.

Riverside Copermittee Redlines

(e) Final dates for achieving the final numeric goals must not initially extend more than 10 years beyond the effective date of this Order, unless a longer period of time is authorized by the San Diego Water Board Executive Officer through an approved WQIP or the schedule includes an applicable TMDL in Attachment E to this Order[7].

Comment [A26]: Clarify that a longer period can be granted through the WQIP process.

[7] Achievement of final numeric goals within 10 years represents progress towards attainment of water quality standards, but is not a requirement to fully attain all applicable water quality standards or all priority receiving water conditions within 10 years.

Riverside Copermittee Redlines

3. Water Quality Improvement Strategies and Schedules

Comment [A27]: See discussion in section 3.3.2 of the comment letter.

The Copermittees must develop specific water quality improvement strategies to address the highest priority water quality conditions identified within a Watershed Management Area. The water quality improvement strategies must address the highest priority water quality conditions by ensuring the effective prohibition of~~preventing or eliminating~~ non-storm water discharges to and from the MS4, reducing pollutants in ~~storm water~~ discharges from the MS4 to the MEP, as applicable to the priority water quality conditions established per provision B.2. ~~and restoring and/or protecting the water quality standards of receiving waters~~.

a. Water Quality Improvement Strategies

The Copermittees must identify and prioritize water quality improvement strategies based on their likely effectiveness and efficiency, and design the JRMP programs to focus resources on those strategies to~~implement strategies to effectively prohibit non-storm water discharges to the MS4, reduce pollutants in storm water discharges from the MS4 to the MEP, improve the physical, chemical, and biological receiving water conditions, and~~ achieve the interim and final numeric goals in accordance with the schedules required for Provision B.2.e.(3). The following water quality improvement strategies must be included and described in the Water Quality Improvement Plan:

(1) Specific strategies and/or activities that may be implemented by one or more Copermittees within their jurisdictions through the jurisdictional runoff management programs that will address the highest priority water quality conditions within the Watershed Management Area, in accordance with the following requirements:

(a) Strategies and/or activities must, at a minimum, be described for each jurisdictional runoff management program component where strategies to address the highest priority water quality conditions are required under Provision E;

(b) The Water Quality Improvement Plan must describe the circumstances or conditions when and where the strategies or/activities should be or will be implemented, but specific details about how each Copermittee will implement the strategies and/or activities within its jurisdiction are not required; and

(c) Descriptions of strategies and/or activities must include any monitoring, information collection, special studies, and/or data analysis that is necessary to assess the effectiveness of the strategy and/or activity toward addressing the highest priority water quality conditions.

(2) Additional strategies and/or activities that may be implemented within the Watershed Management Area on a jurisdictional, sub-watershed, or watershed scale by one or more Copermittees, not specifically required under

Riverside Copermittee Redlines

Provision E, which are designed to achieve the interim and final numeric goals identified in Provisions B.2.e.(1) and B.2.e.(2);

b. IMPLEMENTATION SCHEDULES

(1) The Copermittees must develop schedules for implementing the water quality improvement strategies identified under Provision B.3.a to achieve the interim and final numeric goals identified under Provision B.2.e.(1) and B.2.e.(2). Schedules must be developed for both the water quality improvement strategies implemented by each Copermittee within its jurisdiction and for strategies that the Copermittees choose to implement on a collaborative basis.

(2) The Copermittees must incorporate the implementation compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-0012 (see Attachment A).

4. Water Quality Improvement Monitoring and Assessment Program

a. The Copermittees in each Watershed Management Area must develop and incorporate an integrated monitoring and assessment program into the Water Quality Improvement Plan that assesses: 1) the progress toward achieving the numeric goals and schedules, 2) the progress toward addressing the highest priority water quality conditions for each Watershed Management Area, and 3) each Copermittee's overall efforts to implement the Water Quality Improvement Plan.

b. The monitoring and assessment program must incorporate the monitoring and assessment requirements of Provision D, which may allow the Copermittees to modify the program to be consistent with and focus on the highest priority water quality conditions for each Watershed Management Area.

c. For Watershed Management Areas with applicable TMDLs, the monitoring and assessment program must incorporate the specific monitoring and assessment requirements of Attachment E.

d. For Watershed Management Areas with any ASBS, the water quality monitoring and assessment program must incorporate the monitoring requirements of Attachment B to State Water Board Resolution No. 2012-0012 (see Attachment A).

5. Iterative Approach and Adaptive Management Process

Comment [A28]: See discussion in section 3.3.2 of the comment letter.

The Copermittees in each Watershed Management Area must implement the iterative approach pursuant to Provision A.4 to adapt the Water Quality Improvement Plan, monitoring and assessment program, and jurisdictional runoff management

programs to become more effective toward achieving compliance with Provisions A.1, A.2, and A.3.~~A.1.a, A.1.c and A.2.a~~, and must include the following:

a. Re-Evaluation of Priority Water Quality Conditions

The priority receiving water quality conditions, and numeric goals and corresponding schedules, included in the Water Quality Improvement Plan pursuant to Provisions B.2.c and B.2.e, may be re-evaluated by the Copermittees as needed during the term of this Order as part of the Annual Report. Re-evaluation and recommendations for modifications to the priority water quality conditions, and numeric goals and corresponding schedules must be provided in the Regional Monitoring and Assessment Report pursuant to F.3.c~~Report of Waste Discharge~~, and must consider the following:

(1) Achieving the outcome of improved water quality in MS4 discharges and receiving waters through implementation of the water quality improvement strategies identified in the Water Quality Improvement Plan;

(2) Progress toward achieving interim and final numeric goals in receiving waters and/or MS4 discharges for the highest priority water quality conditions in the Watershed Management Area,

(3) Progress toward achieving outcomes according to established schedules;

(4) New information developed when the requirements of Provisions B.2.a-c have been re-evaluated;

(5) New policies or regulations that may affect identified numeric goals;

(6) Spatial and temporal accuracy of monitoring data collected to inform prioritization of water quality conditions and implementation strategies to address the highest priority water quality conditions;

(7) Availability of new information and data from sources other than the jurisdictional runoff management programs within the Watershed Management Area that informs the effectiveness of the actions implemented by the Copermittees;

(8) San Diego Water Board recommendations; and

(9) Recommendations for modifications solicited through a public participation process.

b. Adaptation of Strategies and Schedules

The water quality improvement strategies and schedules, included in the Water Quality Improvement Plan pursuant to Provisions B.3, must be re-evaluated and adapted as new information becomes available to result in more effective and efficient measures to achieve the numeric goals established pursuant to

Riverside Copermittee Redlines

Provision B.2.e. Re-evaluation of and modifications to the water quality improvement strategies, if determined to be necessary, must be provided in the applicable Annual Report per F.3.b.(3)., and must consider the following:

(1) Modifications to the priority water quality conditions, and numeric goals and corresponding schedules based on Provision B.5.a;

(2) Measurable or demonstrable reductions of non-storm water discharges to and from each Copermittee's MS4;

(3) Measurable or demonstrable reductions of pollutants in ~~storm water~~ discharges from each Copermittee's MS4 to the MEP;

(4) New information developed when the requirements of Provisions B.2.b and B.2.d have been re-evaluated;

(5) Efficiency in implementing the Water Quality Improvement Plan;

(6) San Diego Water Board recommendations; and

(7) Recommendations for modifications solicited through a public participation process.

c. ADAPTATION OF MONITORING AND ASSESSMENT PROGRAM

The water quality improvement monitoring and assessment program, included in the Water Quality Improvement Plan pursuant to Provisions B.4, must be re-evaluated and adapted when new information becomes available. Re-evaluation and recommendations for modifications to the monitoring and assessment program, pursuant to the requirements of Provision D, may be provided in the Annual Report, but must be provided in the Report of Waste Discharge.

6. Water Quality Improvement Plan Submittal, Updates, and Implementation

a. The Copermittees must submit the Water Quality Improvement Plans in accordance with the requirements of Provision F.1.

b. The Copermittees must submit proposed updates to the Water Quality Improvement Plan for acceptance by the San Diego Water Board Executive Officer in accordance with the requirements of Provision F.2.c.

c. The Copermittees must commence with implementation of the Water Quality Improvement Plans ~~immediately after acceptance by the San Diego Water Board, in accordance with the schedules, or subsequently updated schedules, within the Water Quality Improvement Plan.~~in accordance with Provision F.1.b.(5).

Riverside Copermittee Redlines

Riverside Copermittee Redlines

C. ACTION LEVELS

Comment [A29]: See comment letter section 3.4 for a discussion of the redlines shown herein.

The purpose of this provision is for the Copermittees to incorporate numeric non-stormwater action levels (NALs) and stormwater action levels (SALs) in the Water Quality Improvement Plans (Provision B), and numeric non-stormwater action levels (NALs) in the Illicit Discharge Detection and Elimination (IDDE) program (Provision E.2.).

- For the purposes of the WQIPs, ~~T~~the goal of the action levels is to guide ~~Water Quality Improvement Plan~~ the implementation efforts and measure progress towards the protection of the identified high priority water quality conditions and associated designated beneficial uses of waters of the state from adverse impacts caused or contributed to by MS4 discharges. This goal will be accomplished through monitoring and assessing the quality of the MS4 discharges during the implementation of the Water Quality Improvement Plans.

- For the purposes of the IDDE program, the goal of the non-stormwater action levels is to assist in determining whether a persistent non-stormwater discharge into or from the MS4 contains pollutants at levels that have the potential to negatively affect the identified high priority water quality conditions.

Action levels will be developed and incorporated into the WQIP (Provision B) and the IDDE Program (Provision E). Depending upon the goals/objectives for the use of the action levels and the priority receiving water conditions, the constituents and values at which they are set may differ between watersheds. Copermittees may develop Watershed Management Area specific numeric action levels for non-stormwater and stormwater MS4 discharges using an approach approved by the Regional Board or use the default non-stormwater and stormwater action levels prescribed in C.1 and C.2 below.

The Copermittees will submit the action levels as a part of the WQIP and JRMP submittals. The action levels currently established will serve as the interim action levels until revised action levels are completed and approved. Exceedances of the action levels are not subject to enforcement or non-compliance actions under this Order.

1. Default Non-Storm Water Action Levels[8]

~~The Copermittees must develop and incorporate numeric non-storm water action levels (NALs) into the Water Quality Improvement Plan to: 1) support the development and prioritization of water quality improvement strategies for addressing non-storm water discharges to and from the MS4s, 2) assess the effectiveness of the water quality improvement strategies toward addressing MS4~~

Comment [A30]: As discussed in section 2.4 of the Riverside comment letter.

[8] NALs are not ~~considered by the San Diego Water Board to be~~ enforceable limitations under this Order.

Riverside Copermittee Redlines

~~non-storm water discharges, required pursuant to Provision D.4.b.(1), and 3) support the detection and elimination of non-storm water and illicit discharges to and from the MS4, required pursuant to Provision E.2.~~[9]

a. The following NALs must be incorporated as applicable to the WMA and the Copermittees' MS4 discharges~~.~~ if the Copermittees do not establish numeric action levels within the WQIP based on watershed priorities:

(1) Non-Storm Water Discharges from MS4s to Ocean Surf Zone

Table C-1. Non-Storm Water Action Levels for Discharges from MS4s to Ocean Surf Zone

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Total Coliform	MPN/100 ml	1,000	-	10,000/1,000[1]	OP
Fecal Coliform	MPN/100 ml	200[2]	-	400	OP
Enterococci	MPN/100 ml	35	-	104[3]	OP

Abbreviations/Acronyms
AMAL – average monthly action level
MDAL – maximum daily action level
OP – Ocean Plan water quality objective
MPN/100 ml – most probable number per 100 milliliters

Notes:
1. Total coliform density NAL is 1,000 MPN/100 ml when the fecal/total coliform ratio exceeds 0.1.
2. Fecal coliform density NAL is 200 MPN per 100 ml during any 30 day period.
3. This value has been set to the Basin Plan water quality objective for saltwater "designated beach areas."

[9] ~~The Copermittees may utilize NALs or other benchmarks currently established by the Copermittees as interim NALs until the Water Quality Improvement Plans are accepted by the San Diego Water Board Executive Officer.~~

Riverside Copermittee Redlines

(2) Non-Storm Water Discharges from MS4s to Bays, Harbors, and Lagoons/Estuaries

Table C-2. Non-Storm Water Action Levels for Discharges from MS4s to Bays, Harbors, and Lagoons/Estuaries

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Turbidity	NTU	75	-	225	OP
pH	Units	Within limit of 6.0 to 9.0 at all times			OP
Fecal Coliform	MPN/100 ml	200[1]	-	400[2]	BP
Enterococci	MPN/100 ml	35	-	104[3]	BP
Priority Pollutants	ug/L	See Table C-3			

Abbreviations/Acronyms:
AMAL – average monthly action level
OP – Ocean Plan water quality objective
NTU – Nephelometric Turbidity Units
ug/L – micrograms per liter
MDAL – maximum daily action level
BP – Basin Plan water quality objective
MPN/100 ml – most probable number per 100 milliliters

Notes:
1. Based on a minimum of not less than five samples for any 30-day period.
2. The NAL is reached if more than 10 percent of total samples exceed 400 MPN per 100 ml during any 30 day period.
3. This value has been set to the Basin Plan water quality objective for saltwater "designated beach areas" and is not applicable to waterbodies that are not designated with the water contact recreation (REC-1) beneficial use.

Table C-3. Non-Storm Water Action Levels for Priority Pollutants

Parameter	Units	Freshwater (CTR)		Saltwater (CTR)	
		MDAL	AMAL	MDAL	AMAL
Cadmium	ug/L	**	**	16	8
Copper	ug/L	*	*	5.8	2.9
Chromium III	ug/L	**	**	-	-
Chromium VI	ug/L	16	8.1	83	41
Lead	ug/L	*	*	14	2.9
Nickel	ug/L	**	**	14	6.8
Silver	ug/L	*	*	2.2	1.1
Zinc	ug/L	*	*	95	47

Abbreviations/Acronyms:
CTR – California Toxic Rule
AMAL – average monthly action level
ug/L – micrograms per liter
MDAL – maximum daily action level

Notes:
* Action levels developed on a case-by-case basis (see below)
** Action levels developed on a case-by-case basis (see below), but calculated criteria are not to exceed Maximum Contaminant Levels (MCLs) under the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64431

The Cadmium, Copper, Chromium (III), Lead, Nickel, Silver and Zinc NALs for MS4 discharges to freshwater receiving waters will be developed on a case-by-case basis because the freshwater criteria are based on site-specific water quality data (receiving water hardness). For these priority pollutants, refer to ~~the following equations (~~40 CFR 131.38.b.2 for details~~) will be required~~:

~~Cadmium (Total Recoverable) = exp(0.7852[ln(hardness)] - 2.715)~~
~~Chromium III (Total Recoverable) = exp(0.8190[ln(hardness)] + 0.6848)~~
~~Copper (Total Recoverable) = exp(0.8545[ln(hardness)] - 1.702)~~
~~Lead (Total Recoverable) = exp(1.273[ln(hardness)] - 4.705)~~
~~Nickel (Total Recoverable) = exp(.8460[ln(hardness)] + 0.0584)~~
~~Silver (Total Recoverable) = exp(1.72[ln(hardness)] - 6.52)~~
~~Zinc (Total Recoverable) = exp(0.8473[ln(hardness)] + 0.884)~~

Comment [A31]: Consistent with SD Permittee recommendations.

Riverside Copermittee Redlines

(3) Non-Storm Water Discharges from MS4s to Inland Surface Waters

Table C-4. Non-Storm Water Action Levels for Discharges from MS4s to Inland Surface Waters

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Dissolved Oxygen	mg/L	Not less than 5.0 in WARM waters and not less than 6.0 in COLD waters			BP
Turbidity	NTU	-	20	See MDAL	BP
pH	Units	Within limit of 6.5 to 8.5 at all times			BP
Fecal Coliform	MPN/100 ml	200[1]	-	400[2]	BP
Enterococci	MPN/100 ml	33	-	61[3]	BP
Total Nitrogen	mg/L	-	1.0	See MDAL	BP
Total Phosphorus	mg/L	-	0.1	See MDAL	BP
MBAS	mg/L	-	0.5	See MDAL	BP
Iron	mg/L	-	0.3	See MDAL	BP
Manganese	mg/L	-	0.05	See MDAL	BP
Priority Pollutants	ug/L	See Table C-3			

Abbreviations/Acronyms:
AMAL – average monthly action level
BP – Basin Plan water quality objective
COLD – cold freshwater habitat beneficial use
NTU – Nephelometric Turbidity Units
mg/L – milligrams per liter
MDAL – maximum daily action level
WARM – warm freshwater habitat beneficial use
MBAS – Methylene Blue Active Substances
MPN/100 ml – most probable number per 100 milliliters
ug/L – micrograms per liter

Notes:
1. Based on a minimum of not less than five samples for any 30-day period.
2. The NAL is reached if more than 10 percent of total samples exceed 400 MPN per 100 ml during any 30 day period.
3. This value has been set to the Basin Plan water quality objective for freshwater "designated beach areas" and is not applicable to waterbodies that are not designated with the water contact recreation (REC-1) beneficial use.

b. NALs must be identified, developed and incorporated in the Water Quality Improvement Plan for any pollutants or waste constituents that cause or contribute, or are threatening to cause or contribute to a condition of pollution or nuisance in Receiving waters ~~of the state~~ associated with the highest priority water quality conditions related to non-storm water discharges from the MS4s. NALs must be based on:

(1) Applicable water quality standards which may be dependent upon site-specific or receiving water-specific conditions or assumptions to be identified by the Copermittees; or

(2) Applicable numeric WQBELs required to meet the WLAs established for the TMDLs in Attachment E to this Order.

c. ~~For the NALs incorporated into the Water Quality Improvement Plan, the Copermittees may develop and incorporate secondary NALs specific to the Watershed Management Area at levels greater than the NALs required by Provisions C.1.a and C.1.b which can be utilized to further refine the prioritization and assessment of water quality improvement strategies for addressing non-~~

Riverside Copermittee Redlines

~~storm water discharges to and from the MS4s, as well as the detection and elimination of non-storm water and illicit discharges to and from the MS4. The secondary NALs may be developed using an approach acceptable to the San Diego Water Board.~~

d. Dry weather monitoring data from MS4 outfalls collected in accordance with Provision D.2.b may be utilized to develop or revise NALs based on watershed-specific data, subject to San Diego Water Board Executive Officer approval.

2. Default Storm Water Action Levels[10]

The Copermittees must develop and incorporate numeric storm water action levels (SALs) in the Water Quality Improvement Plans to: 1) support the development and prioritization of water quality improvement strategies for reducing pollutants in storm water discharges from the MS4s, and 2) assess the effectiveness of the water quality improvement strategies toward reducing pollutants in storm water discharges, required pursuant to Provision D.4.b.(2).[11]

a. The following SALs for discharges of storm water from the MS4 must be incorporated~~:~~ if the Copermittees do not establish stormwater action levels within the WQIP based on watershed priorities:~~:~~

Table C-5. Storm Water Action Levels for Discharges from MS4s to Receiving Waters

Parameter	Units	Action Level
Turbidity	NTU	126
Nitrate & Nitrite (Total)	mg/L	2.6
Phosphorus (Total P)	mg/L	1.46
Cadmium (Total Cd)*	µg/L	3.0
Copper (Total Cu)*	µg/L	127
Lead (Total Pb)*	µg/L	250
Zinc (Total Zn)*	µg/L	976

Abbreviations/Acronyms:
NTU – Nephelometric Turbidity Units
mg/L – milligrams per liter
ug/L – micrograms per liter

Notes:
* The sampling must include a measure of receiving water hardness at each MS4 outfall. If a total metal concentration exceeds the corresponding metals SAL in Table C-5, that concentration must be compared to the California Toxics Rule criteria and the USEPA 1-hour maximum concentration for the detected level of receiving water hardness associated with that sample. If it is determined that the sample's total metal concentration for that specific metal exceeds that SAL, but does not exceed the applicable USEPA 1-hour maximum concentration criterion for the measured level of hardness, then the sample result will not be considered above the SAL for that measurement.

[10] SALs are not ~~considered by the San Diego Water Board to be~~ enforceable limitations under this Order.
[11] The Copermittees may utilize SALs or other benchmarks currently established by the Copermittees as interim SALs until the Water Quality Improvement Plans are accepted by the San Diego Water Board Executive Officer.

Riverside Copermittee Redlines

b. SALs must be identified, developed and incorporated in the Water Quality Improvement Plan for pollutants or waste constituents that cause or contribute, or are threatening to cause or contribute to a condition of pollution or nuisance in Receiving waters ~~of the state~~ associated with the highest water quality priorities related to storm water discharges from the MS4s. SALs must be based on:

(1) Federal and State water quality guidance and/or water quality standards; and

(2) Site-specific or receiving water-specific conditions; or

(3) Applicable numeric WQBELs required to meet the WLAs established for the TMDLs in Attachment E to this Order.

c. ~~For the SALs incorporated into the Water Quality Improvement Plan, the Copermittees may develop and incorporate secondary SALs specific to the Watershed Management Area at levels greater than the SALs required by Provisions C.2.a and C.2.b which can be utilized to further refine the prioritization and assessment of water quality improvement strategies for reducing pollutants in storm water discharges from the MS4s. The secondary SALs may be developed based on the approaches recommended by the State Water Board's Storm Water Panel[12] or using an approach acceptable to the San Diego Water Board.~~

d. Wet weather monitoring data from MS4 outfalls collected in accordance with Provision D.2.c may be used to develop or revise SALs based upon watershed-specific data, subject to San Diego Water Board Executive Officer approval.

[12] ~~Storm Water Panel Recommendations to the California State Water Resources Control Board: The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities (June 2006)~~

Riverside Copermittee Redlines

D. MONITORING AND ASSESSMENT PROGRAM REQUIREMENTS

Comment [A32]: See discussion in section 3.5 of the comment letter.

The purpose of this provision is for the Copermittees to monitor and assess the impact on the chemical, physical, and biological conditions of receiving waters caused by discharges from the Copermittees' MS4s under wet weather and dry weather conditions. The goal of the monitoring and assessment program is to inform the Copermittees about the nexus between the health of receiving waters and the water quality condition of the discharges from their MS4s to those receiving waters. ~~.~~ This goal will be accomplished through monitoring and assessing the conditions of the receiving waters, discharges from the MS4s to those receiving waters, pollutant sources and/or stressors, and effectiveness of the water quality improvement strategies implemented as part of the Water Quality Improvement Plans.

1. Receiving Water Monitoring Requirements

The Copermittees must develop and conduct a program to monitor the condition of the receiving waters in each Watershed Management Area during dry weather and wet weather. Following acceptance of the Water Quality Improvement Plans for each Watershed Management Area, the Copermittees must conduct long-term receiving water monitoring during implementation of the Water Quality Improvement Plan to assess the long term trends and determine if water quality conditions in receiving waters are improving. Any available monitoring data not collected specifically for this Order that meet the quality assurance criteria of the Copermittees and the monitoring requirements of this Order may be utilized by the Copermittees. The Copermittees must conduct the following receiving water monitoring procedures:

a. TRANSITIONAL RECEIVING WATER MONITORING

Beginning October 1st or May 1st (whichever is sooner) following enrollment under this order and until ~~Until~~ the monitoring requirements of Provisions D.1.b-e are incorporated into a Water Quality Improvement Plan that is accepted by the San Diego Water Board pursuant to Provision F.1, the Copermittees must conduct the following receiving water monitoring in the Watershed Management Area:

(1) Continue the receiving water monitoring programs required in Order Nos. R9-2007-0001~~,~~ (Attachment A, Section II. A. 1-5),~~,~~ R9-2009-0002, and R9-2010-0016;

(2) Continue the monitoring in the Hydromodification Management Plans approved by the San Diego Water Board;

(3) Participate in the following regional receiving water monitoring programs, as applicable to the Watershed Management Area and each Copermittees' MS4 discharges:

Comment [A33]: See discussion in section 3.5.3 of the comment letter.

Riverside Copermittee Redlines

(a) Storm Water Monitoring Coalition Regional Monitoring,

(b) Southern California Bight Regional Monitoring, and

(c) Sediment Quality Monitoring;

(4) Implement the monitoring programs developed as part of any implementation plans or load reduction plans (e.g. Bacteria Load Reduction Plans, Comprehensive Load Reduction Plans) for the TMDLs in Attachment E to this Order; and

(5) For Watershed Management Areas with ASBS, implement the monitoring requirements of Attachment B to State Water Board Resolution No. 2012-0012, included in Attachment A to this Order.

b. LONG-TERM RECEIVING WATER MONITORING STATIONS

The Copermittees must select at least one long-term receiving water monitoring station from among the existing mass loading stations, temporary watershed assessment stations, bioassessment stations, and stream assessment stations previously established by the Copermittees to be representative of the receiving water quality in the Watershed Management Area. Additional or alternative long-term receiving water monitoring stations may~~must~~ be selected where necessary to support the implementation and adaptation of the Water Quality Improvement Plan.

Comment [A34]: See discussion in section 3.5.3 of the comment letter.

c. DRY WEATHER RECEIVING WATER MONITORING

During the term of the Order, the Copermittees must perform monitoring during at least three dry weather monitoring events at each of the long-term receiving water monitoring stations. At least one monitoring event must be conducted during the dry season (May 1 – September 30) and at least one monitoring event must be conducted during a dry weather period during the wet season (October 1 – April 30), after the first wet weather event of the season, with an antecedent dry period of at least 72 hours following a storm event producing measureable rainfall of greater than 0.1 inch.

(1) Dry Weather Receiving Water Field Observations

For each dry weather monitoring event, the Copermittees must record field observations consistent with Table D-1 at each long-term receiving water monitoring station.

Riverside Copermittee Redlines

Table D-1. Field Observations for Receiving Water Monitoring Stations

Field Observations
• Station identification and location • Presence of flow, or pooled or ponded water • If flow is present: - Flow estimation (i.e. width of water surface, approximate depth of water, approximate flow velocity, flow rate) - Flow characteristics (i.e. presence of floatables, surface scum, sheens, odor, color) • If pooled or ponded water is present: - Characteristics of pooled or ponded water (i.e. presence of floatables, surface scum, sheens, odor, color) • Assessment of any observed connectivity of MS4 discharges to a flowing receiving water. • Station description (i.e. deposits or stains, vegetation condition, structural condition, and observable biology) • Presence and assessment of trash in and around station

Comment [A35]: See discussion in section 3.5.3 of the comment letter.

(2) Dry Weather Receiving Water Field Monitoring

For each dry weather monitoring event, if conditions allow the collection of the data, the Copermittees must monitor and record the parameters in Table D-2 at each long-term receiving water monitoring station.

Table D-2. Field Monitoring Parameters for Receiving Water Monitoring Stations

Parameters
• pH • Temperature • Specific conductivity • Dissolved oxygen • Turbidity

(3) Dry Weather Receiving Water Analytical Monitoring

For each dry weather monitoring event, the Copermittees must collect and analyze samples from each long-term receiving water monitoring station as follows:

(a) Analytes that are field measured are not required to be analyzed by a laboratory;

(b) The Copermittees must implement consistent sample collection methods for regional comparability of data, unless site-specific conditions indicate the need for alternate methods;

(c) Grab samples may be collected for pH, temperature, specific conductivity,

Riverside Copermittee Redlines

dissolved oxygen, turbidity, hardness, and indicator bacteria Grab samples may also be collected for the analyses described in (f) where MS4 discharge runoff constitutes less than ten percent of the flow;

Comment [A36]: The receiving water stations in Riverside County either do not receive runoff from MS4 discharges or receive deminimus flows during dry weather conditions. The flow at these stations during dry weather consists virtually entirely of rising groundwater. Background receiving water quality conditions In such cases composite samples of receiving waters not affected by MS4 discharges is not warranted.

(d) For all other constituents where runoff constitutes more than ten percent of the flow, composite samples must be collected for a duration adequate to be representative of changes in pollutant concentrations and runoff flows using one of the following techniques:

(i) Time-weighted composites composed of 24 discrete hourly samples, which may be collected through the use of automated equipment, or

(ii) Flow-weighted composites collected over a typical 24-hour period, which may be collected through the use of automated equipment;

(e) Only one analysis of the composite of aliquots is required;

(f) Analysis for the following constituents is required:

(i) Constituents contributing to the highest priority water quality conditions identified in the Water Quality Improvement Plan,

(ii) Constituents listed as a cause for impairment of receiving waters in the Watershed Management Area listed on the CWA section 303(d) List,

(iii) Constituents for implementation plans or load reduction plans (e.g. Bacteria Load Reduction Plans, Comprehensive Load Reduction Plans) developed for watersheds where the Copermittees are listed responsible parties under the TMDLs in Attachment E to this Order,

(iv) Applicable NAL constituents, and

(v) Constituents listed in Table D-3.

Table D-3. Analytical Monitoring Constituents for Receiving Water Monitoring Stations

Conventionals, Nutrients	Metals (Total and Dissolved)	Pesticides	Indicator Bacteria
• Total Dissolved Solids • Total Suspended Solids • Turbidity • Total Hardness • Total Organic Carbon • Dissolved Organic Carbon • Sulfate • Methylene Blue Active Substances (MBAS) • Total Phosphorus • Orthophosphate • Nitrite[1]	• Arsenic • Cadmium • Chromium • Copper • Iron • Lead • Mercury • Nickel • Selenium • Thallium • Zinc	• Organophosphate Pesticides • Pyrethroid Pesticides	• Total Coliform • Fecal Coliform[2] • *Enterococcus*

Riverside Copermittee Redlines

• Nitrate[1] • Total Kjeldhal Nitrogen • Ammonia			

Notes:
1. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
2. *E. Coli* may be substituted for Fecal Coliform.

(4) Dry Weather Receiving Water Toxicity Monitoring

For each dry weather monitoring event, the Copermittees must collect grab or composite samples from each long-term receiving water monitoring station to be analyzed for toxicity in accordance with Table D-4:

Table D-4. Dry Weather Toxicity Testing for Receiving Water Monitoring Stations

Freshwater Organism	Test Approach	USEPA Protocol[2]
Pimephales promelas	1 acute 1 chronic[1]	EPA-821-R-02-012
Hyalella Azteca	1 acute 1 chronic[1]	EPA-821-R-02-012
Psuedokirchneriella subcapitata	1 acute 1 chronic[1]	EPA-821-R-02-013

Notes:
1. Chronic toxicity testing is not required at receiving water monitoring stations located at mass loading stations if the channel flows are diverted year-round during dry weather conditions to the sanitary sewer for treatment.
2. USEPA protocols must be utilized for toxicity testing unless alternate toxicity testing protocols have been approved by the San Diego Water Board.

(5) Dry Weather Receiving Water Bioassessment Monitoring

Bioassessment monitoring for each long-term receiving water monitoring station is required at least once during the term of this Order. The Copermittees must conduct bioassessment monitoring during at least one dry weather monitoring event at each long-term receiving water monitoring station as follows:

(a) The following bioassessment samples and measurements must be collected:

(i) Macroinvertebrate samples must be collected in accordance with the "Reachwide Benthos (Multihabitat) Procedure" in the most current Surface Water Ambient Monitoring Program (SWAMP) Bioassessment Standard Operating Procedures (SOP), and amendments, as applicable;[13]

(ii) The "Full" suite of physical habitat characterization measurements

[13] Ode, P.R.. 2007. Standard operating procedures for collecting macroinvertebrate samples and associated physical and chemical data for ambient bioassessments in California. California State Water Resources Control Board Surface Water Ambient Monitoring Program (SWAMP) Bioassessment SOP 001. http://www.swrcb.ca.gov/water_issues/programs/swamp/tools.shtml#monitoring

Riverside Copermittee Redlines

must be collected in accordance with the most current SWAMP Bioassessment SOP, and as summarized in the SWAMP Stream Habitat Characterization Form – Full Version;[14] and

(iii) Freshwater algae samples must be collected in accordance with the SWAMP Standard Operating Procedures for Collecting Algae Samples.[15] Analysis of samples must include algal taxonomic composition (diatoms and soft algae) and algal biomass.

(b) The bioassessment samples, measurements, and appropriate water chemistry data must be used to calculate the following:

(i) An Index of Biological Integrity (IBI) for macroinvertebrates for each monitoring station where bioassessment monitoring was conducted, based on the most current calculation method;[16] and

(ii) An IBI for algae for each monitoring station where bioassessment monitoring was conducted, when a calculation method is developed.[17]

(c) In lieu of the requirements of Provision D.1.c.(5)(a), the Copermittees may conduct the bioassessment monitoring in accordance with the "Triad" assessment approach[18] to calculate the IBIs required for Provision D.1.c.(5)(b). The Copermittees must conduct sampling, analysis, and reporting of specified in-stream biological and habitat data according to the protocols specified in the SCCWRP Technical Report No. 539, or subsequent protocols, if developed.

(6) Dry Weather Receiving Water Hydromodification Monitoring

In addition to the hydromodification monitoring conducted as part of the Copermittees' Hydromodification Management Plans, hydromodification monitoring for each long-term receiving water monitoring station is required at least once during the term of this Order. The Copermittees must collect the

[14] Available at: http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/fieldforms_fullversion052908.pdf
[15] Fetscher et al. 2009. Standard Operating Procedures for Collecting Stream Algae Samples and Associated Physical Habitat and Chemical Data for Ambient Bioassessments in California.
[16] The most current calculation method at the time the Order was adopted is outlined in "A Quantitative Tool for Assessing the Integrity of Southern California Coastal Streams" (Ode, et al. 2005. Environmental Management. Vol. 35, No. 1, pp. 1-13). If an updated or new calculation method is developed, either both (i.e. current and updated/new) methods must be used, or historical IBIs must be recalculated with the updated or new calculation method.
[17] When a calculation method is developed, IBIs must be calculated for all available and appropriate historical data.
[18] Stormwater Monitoring Coalition Model Monitoring Technical Committee, 2004. Model Monitoring Program for Municipal Separate Storm Sewer Systems in Southern California. Technical Report #419. August 2004.

Riverside Copermittee Redlines

following hydromodification monitoring observations and measurements within an appropriate domain of analysis during at least one dry weather monitoring event for each long-term receiving water monitoring station:

(a) Channel conditions, including:

(i) Channel dimensions,

(ii) Hydrologic and geomorphic conditions, and

(iii) Presence and condition of vegetation and habitat;

(b) Location of discharge points;

(c) Habitat integrity;

(d) Photo documentation of existing erosion and habitat impacts, with location (i.e. latitude and longitude coordinates) where photos were taken;

(e) Measurement or estimate of dimensions of any existing channel bed or bank eroded areas, including length, width, and depth of any incisions; and

(f) Known or suspected cause(s) of existing downstream erosion or habitat impact, including flow, soil, slope, and vegetation conditions, as well as upstream land uses and contributing new and existing development.

d. WET WEATHER RECEIVING WATER MONITORING

During the term of the Order, the Copermittees must perform monitoring during at least three wet weather monitoring events at each long-term receiving water monitoring station. At least one wet weather monitoring event must be conducted during the first wet weather event of the wet season (October 1 – April 30), and at least one wet weather monitoring event during a wet weather event that occurs after February 1.

(1) Wet Weather Receiving Water Field Observations

For each wet weather monitoring event, the following narrative descriptions and observations must be recorded at each long-term receiving water monitoring station:

(a) A narrative description of the station that includes the location, date and duration of the storm event(s) sampled, rainfall estimates of the storm event, and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;

(b) The flow rates and volumes measured or estimated (data from nearby

Riverside Copermittee Redlines

USGS gauging stations may be utilized, or flow rates may be measured or estimated in accordance with the USEPA Storm Water Sampling Guidance Document (EPA-833-B-92-001), section 3.2.1, or other method proposed by the Copermittees that is acceptable to the San Diego Water Board);

(c) Station condition (i.e. deposits or stains, vegetation condition, structural condition, observable biology); and

(d) Presence and assessment of trash in and around station.

(2) Wet Weather Receiving Water Field Monitoring

For each wet weather monitoring event, the Copermittees must monitor and record the parameters in Table D-2 at each long-term receiving water monitoring station.

(3) Wet Weather Receiving Water Analytical Monitoring

For each wet weather monitoring event, the Copermittees must collect and analyze samples from each long-term receiving water monitoring station as follows:

(a) Analytes that are field measured are not required to be analyzed by a laboratory;

(b) The Copermittees must implement consistent sample collection methods for regional comparability of data, unless site-specific conditions indicate the need for alternate methods;

(c) Grab samples may be collected for pH, temperature, specific conductivity, dissolved oxygen, turbidity, hardness, and indicator bacteria;

(d) For all other constituents, composite samples must be collected for a duration adequate to be representative of changes in pollutant concentrations and runoff flows using one of the following techniques:

(i) Time-weighted composites composed of 24 discrete hourly samples, which may be collected through the use of automated equipment, or

(ii) Flow-weighted composites collected over the length of the storm event or a typical 24-hour period, which may be collected through the use of automated equipment;

(e) Only one analysis of the composite of aliquots is required;

(f) Analysis for the following constituents is required:

Riverside Copermittee Redlines

(i) Constituents contributing to the highest priority water quality conditions identified in the Water Quality Improvement Plan,

(ii) Constituents listed as a cause for impairment of receiving waters in the Watershed Management Area listed on the CWA section 303(d) List,

(iii) Constituents for implementation plans or load reduction plans (e.g. Bacteria Load Reduction Plans, Comprehensive Load Reduction Plans) developed for watersheds where the Copermittees are listed responsible parties under the TMDLs in Attachment E to this Order,

(iv) Applicable SAL constituents, and

(v) Constituents listed in Table D-3.

(4) Wet Weather Receiving Water Toxicity Monitoring

For each wet weather monitoring event, the Copermittees must collect grab or composite samples from each long-term receiving water monitoring station to be analyzed for toxicity in accordance with Table D-5:

Table D-5. Wet Weather Toxicity Testing for Receiving Water Monitoring Stations

Freshwater Organism	Test Approach	USEPA Protocol[1]
Pimephales promelas	1 acute	EPA-821-R-02-012
Hyalella Azteca	1 acute	EPA-821-R-02-012
Psuedokirchneriella subcapitata	1 acute	EPA-821-R-02-013

Notes:
1. USEPA protocols must be utilized for toxicity testing unless alternate toxicity testing protocols have been approved by the San Diego Water Board.

e. OTHER RECEIVING WATER MONITORING REQUIREMENTS

(1) Regional Monitoring

The Copermittees must participate in the following regional receiving waters monitoring programs, as applicable to the Watershed Management Area and the Copermittee's MS4 discharges:

(a) Storm Water Monitoring Coalition Regional Monitoring; and

(b) Southern California Bight Regional Monitoring.

(2) Sediment Quality Monitoring

The applicable Copermittees must perform sediment monitoring to assess compliance with sediment quality receiving water limits applicable to MS4

Riverside Copermittee Redlines

discharges to enclosed bays and estuaries. The monitoring may be performed either by individual or multiple affected Copermittees to assess compliance with receiving water limits, or through participation in a water body monitoring coalition. The Copermittees must identify sediment sampling stations that are spatially representative of the sediment within the water body segment or region of interest. Sediment quality monitoring must be conducted in conformance with the monitoring requirements set forth in the State Water Board Sediment Quality Control Plan.

(3) ASBS Monitoring

For Watershed Management Areas with ASBS, the applicable Copermittees must implement the monitoring requirements of Attachment B to State Water Board Resolution No. 2012-0012, included in Attachment A to this Order.

f. ALTERNATIVE WATERSHED MONITORING REQUIREMENTS

The San Diego Water Board may direct the Copermittees to participate in an effort to develop alternative watershed monitoring with other regulated entities, other interested parties, and the San Diego Water Board to refine, coordinate, and implement regional monitoring and assessment programs to determine the status and trends of water quality conditions in 1) coastal waters, 2) enclosed bays, harbors, estuaries, and lagoons, and/or 3) streams. As directed by the San Diego Water Board, such alternative watershed monitoring would be done in place and stead of the commensurate requirements set forth in Provision D.1.

2. MS4 Outfall Discharge Monitoring Requirements

The Copermittees must develop and conduct a program to monitor the discharges from the major MS4 outfalls to receiving waters in each Watershed Management Area during dry weather and wet weather. Following acceptance of the Water Quality Improvement Plans and schedule for implementation of monitoring for each Watershed Management Area, the Copermittees must conduct MS4 outfall discharge monitoring during implementation of the Water Quality Improvement Plan to assess the effectiveness of their jurisdictional runoff management programs toward effectively prohibiting non-storm water discharges into the MS4 and reducing pollutants in ~~storm water~~ discharges ~~to and~~ from their MS4s to the MEP. Any available monitoring data not collected specifically for this Order that meet the quality assurance criteria of the Copermittees and the monitoring requirements of this Order may be utilized by the Copermittees. The Copermittees must conduct the following MS4 outfall monitoring procedures:

Comment [A37]: Suggest same edits for SD and OC.

a. TRANSITIONAL MS4 OUTFALL DISCHARGE MONITORING

Beginning October 1st or May 1st (whichever is sooner) following enrollment under this order and until~~Until~~ the monitoring requirements of Provisions D.2.b-c

Riverside Copermittee Redlines

are incorporated into a Water Quality Improvement Plan and schedule for implementation of monitoring that is accepted by the San Diego Water Board pursuant to Provision F.1, the Copermittees must conduct the following monitoring of MS4 outfall discharges to flowing receiving waters ~~monitoring~~ in the Watershed Management Area:

(1) MS4 Outfall Discharge Monitoring Station Inventory

Each Municipal Copermittee must identify all major MS4 outfalls (including those operated by a Special District Copermittee) that discharge directly to receiving waters within its jurisdiction and geo-locate those outfalls on a map of the MS4 pursuant to Provision E.2.b.(1). This information must be compiled into a MS4 outfall discharge monitoring station inventory, and must include the following information:

(a) Latitude and longitude of MS4 outfall point of discharge;

(b) Watershed Management Area;

(c) Hydrologic subarea;

(d) Outlet size;

(e) Accessibility (i.e. safety and without disturbance of critical habitat);

(f) Approximate drainage area; and

(g) Classification of whether the MS4 outfall is known to have persistent dry weather flows, transient dry weather flows, no dry weather flows, or unknown dry weather flows.

(2) Transitional Dry Weather MS4 Outfall ~~Discharge~~ Field Screening ~~Monitoring~~

Until the monitoring requirements of Provision D.2.b are incorporated into a Water Quality Improvement Plan that is accepted by the San Diego Water Board pursuant to Provision F.1, each Municipal Copermittee must perform the following dry weather MS4 outfall field screening monitoring to identify non-storm water and illicit discharges being discharged from MS4s within its jurisdiction in accordance with Provision E.2.c, to determine which discharges are transient ~~flows~~ and which are persistent discharges to flowing receiving waters~~flows~~, and prioritize the dry weather MS4 discharges that will be investigated and eliminated in accordance with Provision E.2.d. ~~Each Copermittee must conduct the following dry weather MS4 outfall discharge field screening monitoring within its jurisdiction:~~

Comment [A38]: Suggested change of title to better characterize the requirements of this section, compared to that of D.2.b.

Comments in this section are discussed in section 3.5.3 of the comment letter.

Comment [A39]: Duplicative of previous sentence

Riverside Copermittee Redlines

(a) Transitional Dry Weather MS4 Outfall Discharge Field Screening Monitoring Frequency

Each Municipal Copermittee must field screen the accessible MS4 outfalls in its inventory developed pursuant to Provision D.2.a.(1) as follows:

(i) ~~For Copermittees with less than 125 major MS4 outfalls that discharge to receiving waters within a Watershed Management Area, at least 80 percent of the outfalls must be visually inspected two times per year during dry weather conditions.~~

(ii) For Municipal Copermittees with ~~125 major MS4 outfalls or more, but~~ less than or equal to 500 MS4 outfalls~~,~~ that discharge to receiving waters within a Watershed Management Area, ~~all~~ at least 80 percent of the accessible outfalls must be visually inspected at least annually during dry weather conditions.

(iii) For Municipal Copermittees with more than 500 major MS4 outfalls that discharge to receiving waters within a Watershed Management Area, at least 500 outfalls must be visually inspected at least annually during dry weather conditions. Copermittees with more than 500 major MS4 outfalls within a Watershed Management Area must identify and prioritize at least 500 outfalls to be inspected considering the following:

[a] Assessment of connectivity of the discharge to a flowing receiving water;
[b] Reported exceedances of NALs in water quality monitoring data;
[c] Surrounding land uses;
[d] Presence of constituents listed as a cause for impairment of receiving waters in the Watershed Management Area listed on the CWA section 303(d) List; and
[e] Flow rate.

(iv) Municipal Copermittees with more than 500 major MS4 outfalls within its jurisdiction that are located in more than one Watershed Management Area, at least 500 major MS4 outfalls within its inventory must be visually inspected at least annually during dry weather conditions. Copermittees with more than 500 major MS4 outfalls in more than one Watershed Management Area must identify and prioritize at least 500 outfalls to be inspected considering the following:

[a] Assessment of connectivity of the discharge to a flowing receiving water;
[b] Reported exceedances of NALs in water quality monitoring data;
[c] Surrounding land uses;

Riverside Copermittee Redlines

[d] Presence of constituents listed as a cause for impairment of receiving waters in the Watershed Management Area listed on the CWA section 303(d) List; and
[e] Flow rate.

(v) Inspections of major MS4 outfalls conducted in response to public reports and staff or contractor reports and notifications may count toward the required visual inspections of MS4 outfall discharge monitoring stations.

(b) Transitional Dry Weather MS4 Outfall Discharge Field Screening Visual Observations

(i) An antecedent dry period of at least 72 hours following any storm event producing measurable rainfall greater than 0.1 inch is required prior to conducting field screening visual observations during a field screening monitoring event.

(ii) During the field screening monitoring event, each Municipal Copermittee must record visual observations consistent with Table D-6 at each MS4 outfall discharge monitoring station inspected.

Table D-6. Field Screening Visual Observations for MS4 Outfall Discharge Monitoring Stations

Field Observations
• Station identification and location • Presence of flow, or pooled or ponded water • If flow is present: - Flow estimation (i.e. width of water surface, approximate depth of water, approximate flow velocity, flow rate) - Flow characteristics (i.e. presence of floatables, surface scum, sheens, odor, color) - Flow source(s) suspected or identified from non-storm water source investigation - Flow source(s) eliminated during non-storm water source identification • If pooled or ponded water is present: - Characteristics of pooled or ponded water (i.e. presence of floatables, surface scum, sheens, odor, color) - Known or suspected source(s) of pooled or ponded water • Assessment of any observed MS4 discharge ~~with~~ to a flowing receiving water. • Station description (i.e. deposits or stains, vegetation condition, structural condition, observable biology) • Presence and assessment of trash in and around station • Evidence or signs of illicit connections or illegal dumping

(iii) Each Municipal Copermittee must implement the requirements of Provisions E.2.d.(2)(c)-(e) based on the field observations.

(iv) Each Copermittee must evaluate field observations together with existing information available from prior reports, inspections and monitoring results to determine whether any observed flowing,

Riverside Copermittee Redlines

pooled, or ponded waters are likely to be transient or persistent flow.[19]

Comment [A40]: See footnote edits

(c) Transitional Dry Weather MS4 Outfall Discharge Field Screening ~~Monitoring~~ Records

Based upon the results of the transitional dry weather MS4 outfall discharge field screening monitoring conducted pursuant to Provisions D.2.a.(2)(a)-(b), each Municipal Copermittee must update its MS4 outfall discharge monitoring station inventory, compiled pursuant to Provision D.2.a.(1), with any new information on the classification of whether the MS4 outfall produces persistent flow, transient flow, or no dry weather flow.

(3) Transitional Wet Weather MS4 Outfall Discharge Monitoring

Comment [A41]: See discussion in section 3.5.3 of the comment letter.

Until the monitoring requirements of Provision D.2.c are incorporated into a Water Quality Improvement Plan that is accepted by the San Diego Water Board pursuant to Provision F.1, the Copermittees must conduct the following wet weather MS4 outfall discharge monitoring within the Watershed Management Area:

(a) Transitional Wet Weather MS4 Outfall Discharge Monitoring Stations

The Copermittees must select at least five wet weather MS4 outfall discharge monitoring stations from the inventories developed pursuant to Provision D.2.a.(1) that are representative of storm water discharges from areas consisting primarily of residential, commercial, industrial, and typical mixed-use land uses present within the Watershed Management Area.

(b) Transitional Wet Weather MS4 Outfall Discharge Monitoring Frequency

Each wet weather MS4 outfall discharge monitoring station selected pursuant to Provision D.2.a.(3)(a) must be monitored twice during the wet season (October 1 – April 30~~)~~.) in the transitional period. The~~). One~~ wet weather monitoring ~~event~~events shall be selected to be representative of the range of hydrologic conditions experienced in the region. At least 10% of samples~~event~~ must be conducted during the first wet weather event of the wet season, ~~and~~to include~~and one wet weather monitoring event~~ at least one such sample in each Watershed Management Area~~, a month after the first wet weather event of the wet season.~~

[19] Persistent flow, for the purposes of provision II.D.2.b.(2) is defined as the presence of an MS4 discharge that is hydraulically connected to a flowing receiving~~, pooled, or ponded~~ water more than 72 hours after a measureable rainfall event of 0.1 inch or greater, during three consecutive monitoring and/or inspection events. All other flowing, pooled, or ponded water is considered transient.

Riverside Copermittee Redlines

(c) Transitional Wet Weather MS4 Outfall Discharge Field Observations

For each wet weather monitoring event, the following narrative descriptions and observations must be recorded of the flow from~~at~~ each wet weather MS4 outfall discharge monitoring station:

(i) A narrative description of the station that includes the location, date and duration of the storm event(s) sampled, rainfall estimates of the storm event, and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and

(ii) The flow rates and volumes measured or estimated from the outfall (data from nearby USGS gauging stations may be utilized, or flow rates may be measured or estimated in accordance with the USEPA Storm Water Sampling Guidance Document (EPA-833-B-92-001), section 3.2.1, or other method proposed by the Copermittees that is acceptable to the San Diego Water Board);

(iii) ~~Station condition (i.e. deposits or stains, vegetation condition, structural condition, observable biology); and~~

(iv) Presence ~~and assessment~~ of trash in and around station.

Comment [A42]: This isn't appropriate for a wet weather event.

Comment [A43]: This isn't appropriate for a wet weather event.

(d) Transitional Wet Weather MS4 Outfall Discharge Field Monitoring

For each wet weather monitoring event, the Copermittees must monitor and record the parameters in Table D-2 at each wet weather MS4 outfall discharge monitoring station.

(e) Transitional Wet Weather MS4 Outfall Discharge Analytical Monitoring

For each wet weather monitoring event, the Copermittees must collect and analyze samples from each wet weather MS4 outfall discharge monitoring station as follows:

(i) Analytes that are field measured are not required to be analyzed by a laboratory;

(ii) The Copermittees must implement consistent sample collection methods for regional comparability of data, unless site-specific conditions indicate the need for alternate methods;

(iii) Grab samples may be collected for pH, temperature, specific conductivity, dissolved oxygen, turbidity, and indicator bacteria;

(iv) For all other constituents, composite samples must be collected for a duration adequate to be representative of changes in pollutant

Riverside Copermittee Redlines

concentrations and runoff flows using one of the following techniques:

[a] Time-weighted composites composed of 24 discrete hourly samples, which may be collected through the use of automated equipment, or
[b] Flow-weighted composites collected over the length of the storm event or a typical 24 hour period, whichever is shorter, which may be collected through the use of automated equipment, or
[c] If automated compositing is not feasible, a composite sample may be collected using a minimum of 4 grab samples, collected during the first 24 hours of the storm water discharge, or for the entire storm water discharge if the storm event is less than 24 hours;

(v) Only one analysis of the composite of aliquots is required;

(vi) The samples must be analyzed for the following constituents:

[a] Constituents listed as a cause for impairment of receiving waters in the Watershed Management Area listed on the CWA section 303(d) List,
[b] Constituents for implementation plans or load reduction plans (e.g. Bacteria Load Reduction Plans, Comprehensive Load Reduction Plans) developed for watersheds where the Copermittees are listed responsible parties under the TMDLs in Attachment E to this Order, and
[c] Constituents listed in in Table D-7.

Riverside Copermittee Redlines

Table D-7. Analytical Monitoring Constituents for Wet Weather MS4 Outfall Discharge Monitoring Stations

Conventionals, Nutrients	Metals (Total and Dissolved)	Indicator Bacteria
• Total Dissolved Solids • Total Suspended Solids • Turbidity • Total Hardness • Total Organic Carbon • Dissolved Organic Carbon • Sulfate • Methylene Blue Active Substances (MBAS) • Total Phosphorus • Orthophosphate • Nitrite[1] • Nitrate[1] • Total Kjeldhal Nitrogen • Ammonia	• Arsenic • Cadmium • Chromium • Copper • Iron • Lead • Nickel • Selenium • Thallium • Zinc	• Total Coliform • Fecal Coliform[2] • *Enterococcus*

Notes:
1. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
2. *E. Coli* may be substituted for Fecal Coliform.

(f) Other Transitional Wet Weather MS4 Outfall Discharge Monitoring

The San Diego County Copermittees must continue the wet weather MS4 outfall monitoring program developed under Order No. R9-2007-0001, as approved by the San Diego Water Board, through its planned completion.

b. DRY WEATHER MS4 OUTFALL DISCHARGE MONITORING

Each Municipal Copermittee must perform the following dry weather MS4 outfall monitoring within its jurisdiction to identify non-storm water and illicit discharges within its jurisdiction pursuant to Provision E.2.c, and to prioritize the dry weather MS4 discharges that will be investigated and eliminated pursuant to Provision E.2.d. ~~Each Copermittee must conduct the following dry weather MS4 outfall discharge monitoring within its jurisdiction:~~

Comment [A44]: Repetitive of previous sentence

(1) Dry Weather MS4 Outfall Discharge Field Screening Monitoring

Comment [A45]: See discussion in section 3.5.3 of the comment letter.

Each Municipal Copermittee must continue to perform the dry weather MS4 outfall discharge field screening monitoring in accordance with the requirements of Provision D.2.a.(2). ~~The~~ however the Municipal Copermittee may adjust the field screening monitoring frequencies and locations for the MS4 outfalls in its inventory, as needed, to identify and eliminate sources of persistent ~~flow~~ non-storm water illegal discharges from the MS4 to flowing receiving waters in accordance with the highest priority water quality conditions identified in the Water Quality Improvement Plan. ~~, provided the~~

Riverside Copermittee Redlines

~~number of visual inspections performed is equivalent to the number of visual inspections required under Provision D.2.a.(2)(a).~~

Comment [A46]: See comments in comment letter

(2) Non-Storm Water Persistent Flow MS4 Outfall Discharge Monitoring

Each Municipal Copermittee must perform the following non-storm water monitoring of MS4 outfalls that persistently ~~flow MS4 outfall~~ discharge to flowing receiving waters ~~monitoring~~ to determine which persistent non-storm water discharges contain concentrations of pollutants below NALs, and which persistent non-storm water discharges impact receiving water quality during dry weather. ~~Each Copermittee must conduct the following non-storm water persistent flow MS4 outfall discharge monitoring within its jurisdiction:~~

Comment [A47]: Repetitive of previous sentence.

(a) Prioritization of Non-Storm Water Persistent Flow MS4 Outfalls

Based upon the dry weather MS4 outfall discharge field screening monitoring records developed pursuant to Provision D.2.a.(2)(c), each Municipal Copermittee must identify and prioritize the MS4 outfalls within its jurisdiction that have~~with~~ persistent discharges to flowing receiving waters ~~flows~~ based on the highest priority water quality conditions identified in the Water Quality Improvement Plan and any additional criteria developed by the Copermittee, which may include historical data and data from sources other than what the Copermittee collects.

(b) Non-Storm Water Persistent Flow MS4 Outfall Discharge Monitoring Frequency

Comment [A48]: See comment letter section 3.5.3

(i) Based on the prioritization of major MS4 outfalls developed under Provision D.2.b.(2)(a), each Municipal Copermittee must identify, at a minimum, the top 10 percent of the~~10~~ highest priority major MS4 outfalls with non-storm water persistent flows that the Copermittee will monitor within each Watershed Management Area within its jurisdiction, with a minimum of one persistent ~~flow~~discharge outfall, and a maximum of 5 required per WMA. The location of the selected highest priority non-storm water persistent ~~flow~~ discharge MS4 outfall monitoring stations must be identified on the map required pursuant to Provision E.2.b.(1).

(ii) Each of the highest priority non-storm water persistent flow MS4 outfall monitoring stations identified pursuant to Provision D.2.b.(2)(b)(i) must be monitored under dry weather conditions at least ~~semi~~ annually until one of the following occurs:

[a] The non-storm water discharges have been effectively eliminated (i.e. no flowing, pooled, or ponded water) for three consecutive dry weather monitoring events; or

Riverside Copermittee Redlines

[b] The source(s) of the persistent flows has been identified as a category of non-storm water discharges that does not require an NPDES permit and does not have to be addressed as an illicit discharge because it was not identified as a source of pollutants (i.e. constituents in non-storm water discharge do not exceed NALs), and the persistent flow can be re-prioritized to a lower priority; or

[c] The constituents in the persistent flow non-storm water discharge do not exceed NALs, and the persistent flow can be re-prioritized to a lower priority; or

[d] The source(s) of the persistent flows has been identified as a non-storm water discharge authorized by a separate NPDES permit.

(iii) Where the criteria under Provision D.2.b.(2)(c)(ii) are not met, but the threat to water quality has been reduced by the Copermittee, the highest priority persistent flow MS4 outfall monitoring stations may be reprioritized accordingly for continued dry weather MS4 outfall discharge field screening monitoring required pursuant to Provision D.2.b.(1).

(iv) Each Municipal Copermittee must document removal or re-prioritization of the highest priority persistent flow MS4 outfall monitoring stations identified under Provision D.2.b.(2)(b) in the Annual Report. Persistent flow MS4 outfall monitoring stations that have been removed must be replaced with the next highest prioritized MS4 major outfall in the Watershed Management Area within its jurisdiction, unless there are no remaining qualifying major MS4 outfalls within the Copermittee's jurisdiction in the Watershed Management Area.

(c) Non-Storm Water Persistent Flow MS4 Outfall Discharge Field Observations

During each semi-annual monitoring event, each Municipal Copermittee must record field observations consistent with Table D-6 at each of the highest priority persistent flow MS4 outfall monitoring stations within its jurisdiction.

(d) Non-Storm Water Persistent Flow MS4 Outfall Discharge Field Monitoring

During each ~~semi-annual~~ monitoring event, if conditions allow the collection of the data, each Municipal Copermittee must monitor and record the parameters in Table D-2 at each of the highest priority persistent flow MS4 outfall monitoring stations within its jurisdiction.

(e) Non-Storm Water Persistent Flow MS4 Outfall Discharge Analytical Monitoring

Comment [A49]: See discussion in section 3.5.3 of the comment letter.

Riverside Copermittee Redlines

During each semi-annual monitoring event in which measurable flow from the MS4 outfall to a flowing receiving water is present, each Municipal Copermittee must collect and analyze samples from each of the highest priority persistent flow MS4 outfall monitoring stations within its jurisdiction as follows:

(i) Analytes that are field measured are not required to be analyzed by a laboratory;

(ii) The Copermittees must implement consistent sample collection methods for regional comparability of data, unless site-specific conditions indicate the need for alternate methods;

(iii) During development of the WQIP, for each WMA, consider the following sources to select constituents for collection of~~Collect~~ grab or composite samples to be analyzed at a qualified analytical laboratory::~~for the following constituents:~~

[a] Constituents contributing to the highest priority water quality conditions identified in the Water Quality Improvement Plan,
[b] Constituents listed as a cause for impairment of receiving waters in the Watershed Management Area listed on the CWA section 303(d) List,
[c] Constituents for implementation plans or load reduction plans (e.g. Bacteria Load Reduction Plans, Comprehensive Load Reduction Plans) developed for watersheds where the Copermittees are listed responsible parties under the TMDLs in Attachment E to this Order,
[d] Applicable NAL constituents, and
[e] Constituents listed in Table D-8, unless the Copermittee has historical data that can demonstrate or provide justification that the analysis of the constituent is not necessary.

(iv) Copermittees may adjust the analytical list for a given WMA in successive monitoring events to add or eliminate constituents based on data that can demonstrate or provide justification regarding need or lack of need for the analysis of specific constituents.

Table D-8. Analytical Monitoring Constituents for Persistent Flow MS4 Outfall Discharge Monitoring Stations

Conventionals, Nutrients	Metals (Total and Dissolved)	Indicator Bacteria
• Total Dissolved Solids • Total Suspended Solids • Total Hardness • Total Phosphorus • Orthophosphate • Nitrite[1] • Nitrate[1] • Total Kjeldhal Nitrogen	• Cadmium • Copper • Lead • Zinc	• Total Coliform • Fecal Coliform[2] • *Enterococcus*

Riverside Copermittee Redlines

• Ammonia		

Notes:
1. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
2. *E. Coli* may be substituted for Fecal Coliform.

~~(iv)~~(v) If the Copermittee identifies and eliminates the source of the persistent flow non-storm water discharge, analysis of the sample is not required.

c. WET WEATHER MS4 OUTFALL DISCHARGE MONITORING

The Copermittees must perform wet weather MS4 outfall monitoring to identify sources areas of pollutants in ~~storm water~~ discharges from the MS4s in the Watershed Management Area. The Copermittees must conduct the following wet weather MS4 outfall discharge monitoring within the Watershed Management Area:

(1) Wet Weather MS4 Outfall Discharge Monitoring Stations

The Copermittees may adjust the wet weather MS4 outfall discharge monitoring locations and frequencies in the Watershed Management Area, as needed, to identify sources of pollutants in storm water discharges from MS4s in the Watershed Management Area in accordance with the highest priority water quality conditions identified in the Water Quality Improvement Plan, provided the number of stations is at least equivalent to the number of stations required under Provision D.2.a.(3)(a).

(2) Wet Weather MS4 Outfall Discharge Monitoring Frequency

The Copermittees must monitor the wet weather MS4 outfall discharge monitoring stations in the Watershed Management Area at an appropriate frequency to identify source areas of pollutants in ~~storm water~~ discharges from the MS4s causing or contributing to the highest priority water quality conditions identified in the Water Quality Improvement Plan.

(3) Wet Weather MS4 Outfall Discharge Field Observations

For each wet weather monitoring event, the following narrative descriptions and observations must be recorded at each wet weather MS4 outfall discharge monitoring station:

(a) A narrative description of the station that includes the location, date and duration of the storm event(s) sampled, rainfall estimates of the storm event, and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and

(b) The flow rates and volumes measured or estimated (data from nearby USGS gauging stations may be utilized, or flow rates may be measured or

Riverside Copermittee Redlines

estimated in accordance with the USEPA Storm Water Sampling Guidance Document (EPA-833-B-92-001), section 3.2.1, or other method proposed by the Copermittees that is acceptable to the San Diego Water Board);

~~(c) Station condition (i.e. deposits or stains, vegetation condition, structural condition, observable biology); and~~

~~(d) Presence and assessment of trash in and around station.~~

Comment [A50]: These are inappropriate for wet weather observations.

(4) Wet Weather MS4 Outfall Discharge Field Monitoring

For each wet weather monitoring event, the Copermittees must monitor and record the parameters in Table D-2 at each wet weather MS4 outfall discharge monitoring station.

(5) Wet Weather MS4 Outfall Discharge Analytical Monitoring

For each wet weather monitoring event, the Copermittees must collect and analyze samples from each wet weather MS4 outfall discharge monitoring station as follows:

(a) Analytes that are field measured are not required to be analyzed by a laboratory;

(b) The Copermittees must implement consistent sample collection methods for regional comparability of data, unless site-specific conditions indicate the need for alternate methods;

(c) Grab samples may be collected for pH, temperature, specific conductivity, dissolved oxygen, turbidity, hardness, and indicator bacteria;

(d) For all other constituents, composite samples must be collected for a duration adequate to be representative of changes in pollutant concentrations and runoff flows using one of the following techniques:

(i) Time-weighted composites composed of 24 discrete hourly samples, which may be collected through the use of automated equipment, or

(ii) Flow-weighted composites collected over the length of the storm event or a typical 24 hour period, whichever is shorter, which may be collected through the use of automated equipment, or

Riverside Copermittee Redlines

(iii) If automated compositing is not feasible, a composite sample may be collected using a minimum of 4 grab samples, collected during the first 24 hours of the storm water discharge, or for the entire storm water discharge if the storm event is less than 24 hours.

(e) Only one analysis of the composite of aliquots is required;

(f) Analysis for the following constituents is required:

(i) Constituents contributing to the highest priority water quality conditions identified in the Water Quality Improvement Plan,

(ii) Constituents listed as a cause for impairment of receiving waters in the Watershed Management Area listed on the CWA section 303(d) List,

(iii) Constituents for implementation plans or load reduction plans (e.g. Bacteria Load Reduction Plans, Comprehensive Load Reduction Plans) developed for watersheds where the Copermittees are listed responsible parties under the TMDLs in Attachment E to this Order, and

(iv) Applicable SAL constituents.

3. Special Studies

Comment [A51]: See discussion in section 3.5.3 of the comment letter.

a. Within the term of this Order, the Copermittees must initiate~~develop and implement~~ the following special studies:

(1) At least two~~three~~ special studies in each Watershed Management Area to address pollutant and/or stressor data gaps and/or develop information necessary to more effectively address the pollutants and/or stressors that cause or contribute to highest priority water quality conditions identified in the Water Quality Improvement Plan.

(2) At least one~~two~~ special study~~studies~~ for the San Diego Region to address pollutant and/or stressor data gaps and/or develop information necessary to more effectively address the pollutants and/or stressors that are impacting receiving waters on a regional basis in the San Diego Region.

(3) One of the two~~three~~ special studies in each Watershed Management Area may be replaced by a special study implemented pursuant to Provision D.3.a.(2).

b. The special studies must, at a minimum, be in conformance with the following criteria:

Riverside Copermittee Redlines

(1) The special studies must be related to the highest priority water quality conditions identified by the Copermittees in the Watershed Management Area and/or for the entire San Diego Region;

(2) The special studies developed pursuant to Provision D.3.a.(1) must:

(a) Be implemented within the applicable Watershed Management Area, and

(b) Require some form of participation by all the Copermittees within the Watershed Management Area;

(3) The special studies developed pursuant to Provision D.3.a.(2) must:

(a) Be implemented within the San Diego Region, and

(b) Require some form of participation by all Copermittees covered under the requirements of this Order.

c. Special studies developed to identify sources of pollutants and/or stressors should be pollutant and/or stressor specific and based on historical monitoring data and monitoring performed pursuant to Provisions D.1 and D.2. Development of source identification special studies should include the following:

(1) A compilation of known information on the specific pollutant and/or stressor, including data on potential sources and movement of the pollutant and/or stressor within the watershed. Data generated by the Copermittees and others, as well as information available from a literature research on the pollutant and/or stressor should be compiled and analyzed as appropriate.

(2) An identification of data gaps, based on the compiled information generated on the specific pollutant and/or stressor in Provision D.3.d.(1). Source identification special studies should be developed to fill identified data gaps.

(3) A monitoring plan that will collect and provide data the Copermittees can utilize to do the following:

(a) Quantify the relative loading or impact of a pollutant and/or stressor from a particular source or pollutant generating activity;

(b) Improve understanding of the fate of a pollutant and/or stressor in the environment;

(c) Develop an inventory of known and suspected sources of a pollutant and/or stressor in the Watershed Management Area; and/or

(d) Prioritize known and suspected sources of a pollutant and/or stressor based on relative magnitude in discharges, geographical distribution (i.e.,

Riverside Copermittee Redlines

regional or localized), frequency of occurrence in discharges, human health risk, and controllability.

d. Special studies initiated prior to the termacceptance of thethis Orderthe Water Quality Improvement Plan that meet the requirements of Provision D.3.b and are implementedcompleted during the term of this Order may be utilized to fulfill the special study requirements of Provision D.3.a.

e. The Copermittees must submit the monitoring plans for the special studies in the Water Quality Improvement Plans required pursuant to Provision F.1.

f. The Copermittees are encouraged to share the results of the special studies regionally among the Copermittees to provide information useful in improving and adapting the management of non-storm water and storm water runoff through the implementation of the Water Quality Improvement Plans.

4. Assessment Requirements

Each Copermittee must evaluate the data collected pursuant to Provisions D.1, D.2 and D.3, and information collected during the implementation of the jurisdictional runoff management programs required pursuant to Provision E, to assess the progress of the water quality improvement strategies in the Water Quality Improvement Plan toward achieving compliance with Provisions A.1.a, A.1.c and A.2.a. Assessments must be performed as described in the following provisions:

a. Receiving Waters Assessments

(1) The Copermittees must assess and report the conditions of the receiving waters in the Watershed Management Area as follows:

(a) Based on data collected pursuant to Provision D.1.a, the assessments under Provision D.4.a.(2) must be included in the transitionalfirst Annual Report required pursuant to Provision F.3.b.(21).

(b) Based on the data collected pursuant to Provisions D.1.a-e, the assessments required under Provision D.4.a.(2) must be included in the Report of Waste Discharge required pursuant to Provision F.5.b.

(2) The Copermittees must assess the status and trends of receiving water quality conditions in 1) coastal waters, 2) enclosed bays, harbors, estuaries, and lagoons, and 3) streams under dry weather and wet weather conditions, as those conditions are affected by discharges from the Copermittees' MS4, to determine the progress towards meeting interim or final goals of the Water Quality Implementation Plan for the Watershed Management Area. For each of the three types of receiving waters that are present in each Watershed Management Area the applicable Copermittees must:

Comment [A52]: See our edits to that section

Comment [A53]: See discussion in section 3.5.3 of the comment letter.

Riverside Copermittee Redlines

(a) Determine whether or not the conditions of the receiving waters are meeting any applicable numeric goals established pursuant to provision B.2.e.~~protective of the designated beneficial uses~~;

~~(b) Identify the most critical beneficial uses that must be protected or restored to ensure overall health of the receiving water;~~

~~(c) Determine whether or not those critical beneficial uses are being protected and where those beneficial used must be restored;~~

~~(d)~~(b) Identify short-term and/or long-term improvements or degradation of Receiving Water conditions related to those numeric goals~~those critical beneficial uses~~;

~~(e)~~(c) Identify data gaps in the monitoring data necessary to assess Provisions D.4.a.(2)(a)-(d).

b. MS4 OUTFALL DISCHARGES ASSESSMENTS

(1) Non-Storm Water Discharges Reduction Assessments

(a) ~~Each Copermittee must assess and report the progress of its illicit discharge detection and elimination program, required to be implemented pursuant to Provision E.2, toward reducing and effectively prohibiting non-storm water and illicit discharges into the MS4 within its jurisdiction as follows:~~

~~(i) Based on data collected pursuant to Provisions D.2.a.(2), the assessments under Provision D.4.b.(1)(b) must be included when complete in the Annual Report required pursuant to Provision F.3.b.(1).~~

~~(ii) Based on the data collected pursuant to Provisions D.2.b, the assessments required under Provision D.4.b.(1)(c) must be included in the first Annual Report required pursuant to Provision F.3.b.(1), and annually thereafter.~~

~~(iii) Based on the data collected pursuant to Provisions D.2.b, the assessment required under Provision D.4.b.(1)(c) must be included in the Report of Waste Discharge required pursuant to F.5.b.~~

(b) Based on the transitional dry weather MS4 outfall discharge field screening monitoring required pursuant to Provision D.2.a.(2), each

Comment [A54]: See discussion in section 3.5.3 of the comment letter for key changes. Other changes are described in comments below.

Comment [A55]: For clarity and simplicity, these timelines were integrated into the following sections.

Riverside Copermittee Redlines

Municipal Copermittee must assess and report the following, as applicable to discharges from the MS4 (including Special District Copermittee MS4s) to flowing receiving waters within their jurisdiction, in the Annual Report required pursuant to Provision F.3.b.(2):~~:~~

Comment [A56]: Per edits to that section

(i) Identify the known and suspected controllable sources (e.g. facilities, areas, land uses, pollutant generating activities) of transient and persistent flow discharges to flowing receiving waters~~flows~~ within the Copermittee's jurisdiction in the Watershed Management Area;

(ii) Identify sources of transient and persistent flow discharges to flowing receiving waters~~flows~~ within the Copermittee's jurisdiction in the Watershed Management Area that have been reduced or eliminated; and

(iii) Identify modifications to the field screening monitoring locations and frequencies for the MS4 outfalls in its inventory necessary to identify and eliminate sources of persistent flow non-storm water discharges to flowing receiving waters, pursuant to Provision D.2.b.(1).

(c) Based on the dry weather MS4 outfall discharge field screening monitoring required pursuant to Provision D.2.b, each Municipal Copermittee must assess and report the following, as applicable to discharges from the MS4 (including Special District Copermittee MS4s) within their jurisdiction, in each Annual Report required pursuant to F.3.b.(3) and in the Report of Waste Discharge required pursuant to Provision F.5.b.:~~:~~

Comment [A57]: Per edits to that section

(i) The assessments required pursuant to Provision D.4.b.(1)(a~~b~~);

Comment [A58]: Per edits above

(ii) Based on the data collected and applicable NALs in the Water Quality Improvement Plan, rank the MS4 outfalls in the Copermittee's jurisdiction according to potential threat to receiving water quality, and produce a prioritized list of major MS4 outfalls for follow-up action to update the Water Quality Improvement Plan, with the goal of eliminating persistent flow non-storm water discharges to flowing receiving waters and/or pollutant loads in order of the ranked priority list through targeted programmatic actions and source investigations;

(iii) For the highest priority major MS4 outfalls with persistent flow discharges to a flowing receiving water~~flows~~ that are in exceedance of NALs, identify the known and suspected sources within the Copermittee's jurisdiction in the Watershed Management Area that may cause or contribute to the NAL exceedances;

(iv) Each Copermittee must analyze the data collected pursuant to Provision D.2.b.(2), and: ~~utilize a model or other method, to calculate or estimate the non-storm water volumes and pollutant loads collectively discharged from all the major MS4s outfalls in its jurisdiction identified as having persistent dry weather flows during~~

Comment [A59]: Edits to this section (and sub-sections) is different than SD edits.

Riverside Copermittee Redlines

~~the monitoring year. These calculations or estimates must be updated annually. Each Copermittee must calculate or estimate:~~

[a] Calculate or estimate annual non-storm water volumes and pollutant loads (associated with the priority constituents identified in the WQIP) collectively discharged from the monitored persistently flowing ~~Copermittee's~~ major MS4 outfalls discharging to flowing receiving waters within the Copermittee's jurisdiction, or discharged into another Copermittee's MS4 as demonstrated through provision E.2.d.~~with an estimate of the percent contribution from each known and suspected source for each MS4 outfall~~;

[b] Identify ~~identify~~ and quantify, where feasible, known sources of non-stormwater flows not ~~[b] Annual non-storm water volumes and pollutant loads from areas or facilities~~ subject to the Copermittee's legal authority that are discharged from the Copermittee's major MS4 outfalls to downstream receiving waters.

(v) Each Copermittee must review the data collected pursuant to Provision D.2.b and findings from the assessments required pursuant to Provision D.4.b.(1)(c)(i)-(iv) ~~once per Permit term on an annual basis, and then report~~ within the Regional Monitoring and Assessment Report per Provision F.3.c., the following ~~to~~:

[a] Identify reductions and progress in achieving reductions in non-storm water and illicit discharges to the Copermittee's MS4 in the Watershed Management Area;

[b] Assess the effectiveness of water quality improvement strategies being implemented by the Copermittees within the Watershed Management Area toward reducing or eliminating non-storm water and pollutant loads discharging from the MS4 to receiving waters within its jurisdiction, with an estimate, if possible, of the non-storm water volume and/or pollutant load reductions attributable to specific water quality strategies implemented by the Copermittee; and

[c] Identify modifications necessary to increase the effectiveness of the water quality improvement strategies implemented by the Copermittee in the Watershed Management Area toward reducing or eliminating non-storm water and pollutant loads discharging from the MS4 to receiving waters within its jurisdiction.

(vi) Identify data gaps in the monitoring data necessary to assess Provisions D.4.b.(2)(c)(i)-(v).

(2) Storm Water Pollutant Discharges Reduction Assessments

(a) ~~The Copermittees must assess and report the progress of the water quality improvement strategies, required to be implemented pursuant to~~

Comment [A60]: This is to help ensure jurisdictional accountability for what is being discharged from their jurisdiction.

Riverside Copermittee Redlines

~~Provisions B and E, toward reducing pollutants in storm water discharges from the MS4s within the Watershed Management Area as follows:~~

~~(i) Based on data collected pursuant to Provisions D.2.a.(3), the assessments under Provision D.4.b.(2)(b) must be included in the first Annual Report required pursuant to Provision F.3.b.(1).~~

~~Based on the data collected pursuant to Provisions D.2.c, the assessments required under ProvisionProvision first Annual Report required pursuant to Provision F.3.b.(1), and annually thereafter.~~

~~Based on the data collected pursuant to Provisions D.2.c, the assessment required under Provisions D.4.b.(2)(c)-(d) must be included in the Report of Waste Discharge required pursuant to F.5.b.~~

(b) Based on the transitional wet weather MS4 outfall discharge monitoring required pursuant to Provision D.2.a.(3) the Copermittees must assess and report the following in the Transitional Period Monitoring Report required pursuant to Provision F.3.b.(2):

(i) The Copermittees must analyze the monitoring data collected pursuant to Provision D.2.a.(3), and utilize a watershed model or other method, to calculate or estimate: ~~storm water volumes and pollutant loads discharged from the MS4s in each Copermittee's jurisdiction within the Watershed Management Area. The Copermittees must calculate or estimate the following for each monitoring year:~~

[a] The average storm water runoff coefficient for each land use type within the Watershed Management Area;

[b] The volume of storm water and pollutant loads discharged from each of the Copermittee's monitored major MS4 outfalls in its jurisdiction to receiving waters within the Watershed Management Area for each monitored storm event with measurable rainfall greater than 0.1 inch, for each of the priority water quality constituents identified in the WQIP;

[c] The total volume and pollutant loads potentially discharged from each Municipal Copermittee's jurisdiction within the watershed management area, for each monitored event, extrapolated from the data produced from the monitored outfalls.

~~The pollutant loads discharged from each of the Copermittee's major MS4 outfalls in its jurisdiction to receiving waters within the Watershed Management Area for each storm event with measurable rainfall greater than 0.1 inch; and~~

~~[d] The percent contribution of storm water volumes and pollutant loads discharged from each land use type within the drainage basin to each of the Copermittee's major MS4 outfalls in its~~

Comment [A61]: See discussion in section 3.5.3 of the comment letter.

Comment [A62]: Removed as this was confusing as it was duplicative of the subsections below.

Comment [A63]: There is no need to perform this analysis for other pollutants not identified as priorities in the WQIP.

Riverside Copermittee Redlines

~~jurisdiction to receiving waters within the Watershed Management Area for each storm event with measurable rainfall greater than 0.1 inch.~~

(ii) Identify modifications to the wet weather MS4 outfall discharge monitoring locations and frequencies necessary to identify ~~sources~~ pollutants in storm water discharges from the MS4s in the Watershed Management Area pursuant to Provision D.2.c.(1).

(c) Based on the wet weather MS4 outfall discharge monitoring required pursuant to Provision D.2.c the Copermittees must assess and report (i) and (ii) below in the annual reports required per F.3.b.(3), and (i) through (iv) below in the Regional Monitoring and Assessment Report required per F.3.c. ~~the following~~:

(i) The assessments required pursuant to Provision D.4.b.(2)(a~~b~~);

(ii) Based on the data collected and applicable SALs in the Water Quality Improvement Plan, analyze and compare the monitoring data to the analyses and assumptions used to develop the Water Quality Improvement Plans, including strategies developed per Provision B.3, and evaluate whether ~~,rank the MS4 outfalls in the Watershed Management Area according to potential threat to receiving water quality, and produce a prioritized list of major MS4~~ there is a need to update the Water Quality Improvement Plan;

(iii) The Copermittees must review the data collected pursuant to Provision D.2.c and findings from the assessments required pursuant to Provisions D.4.b.(2)(c)(i)-(ii) ~~on an annual basis~~ to:

[a] Identify reductions and progress in achieving reductions in pollutant concentrations and/or pollutant loads from different land uses and/or drainage areas discharging from the Copermittees' MS4s in the Watershed Management Area;

[b] Assess the effectiveness of water quality improvement strategies being implemented by the Copermittees within the Watershed Management Area toward reducing pollutants in ~~storm water~~ discharges from the MS4s to receiving waters within the Watershed Management Area to the MEP, with an estimate, if possible, of the pollutant load reductions attributable to specific water quality strategies implemented by the Copermittees; and

[c] Identify modifications necessary to increase the effectiveness of the water quality improvement strategies implemented by the Copermittees in the Watershed Management Area toward reducing pollutants in ~~storm water~~ discharges from the MS4s to receiving waters in the Watershed Management Area to the MEP.

(iv) Identify data gaps in the monitoring data necessary to assess Provisions D.4.b.(2)(c)(i)-(iii).

Comment [A64]: See discussion in section 3.5.3 of the comment letter.

Comment [A65]: Per edits to that section

Comment [A66]: Per edits above

Riverside Copermittee Redlines

(d) Within the Regional Monitoring and Assessment report required pursuant to F.3.c. ~~The~~ Copermittees must evaluate all the data collected pursuant to Provision D.2.c, and incorporate new outfall monitoring data into time series plots for each long-term monitoring constituent for the Watershed Management Area, and perform statistical trends analysis on the cumulative long-term wet weather MS4 outfall discharge water quality data set.

c. SPECIAL STUDIES ASSESSMENTS

The Copermittees must in the applicable annual report required pursuant to F.3.b., ~~annually~~ evaluate the results and findings from the special studies developed and implemented pursuant to Provision D.3, and assess their relevance to the Copermittees' efforts to characterize receiving water conditions, understand sources of pollutants and/or stressors, and control and reduce the discharges of pollutants from the MS4 outfalls to receiving waters in the Watershed Management Area. The Copermittees must report the results of the special studies assessments applicable to the Watershed Management Area, and identify any necessary modifications or updates to the Water Quality Improvement Plan based on the results in the Annual Reports required pursuant to Provision F.3.b.

d. INTEGRATED ASSESSMENT OF WATER QUALITY IMPROVEMENT PLAN

As part of the iterative approach and adaptive management process required for the Water Quality Improvement Plan pursuant to Provision B.5, the Copermittees in each Watershed Management Area must integrate the data collected pursuant to Provisions D.1-D.3, the findings from the assessments required pursuant to Provisions D.4.a-c, and information collected during the implementation of the jurisdictional runoff management programs required pursuant to Provision E to assess the effectiveness of, and identify necessary modifications to, the Water Quality Improvement Plan as follows:

(1) The Copermittees must re-evaluate the priority water quality conditions and numeric goals for the Watershed Management Area, as needed, during the term of this Order pursuant to Provision B.5.a. The re-evaluation and recommendations for modifications to the priority water quality conditions, and/or numeric goals and corresponding schedules may be provided in the Annual Reports required pursuant to Provision F.3.b, but must at least be provided in the Regional Monitoring and Assessment Report ~~of Waste Discharge~~ pursuant to Provision F.3.c ~~5.b~~. The priority water quality conditions and numeric goals for the Watershed Management Area must be re-evaluated as follows:

(a) Re-evaluate the receiving water conditions in the Watershed Management Area in accordance with Provision B.2.a;

Riverside Copermittee Redlines

(b) Re-evaluate the impacts on receiving waters in the Watershed Management Area from MS4 discharges in accordance with Provision B.2.b;

(c) Re-evaluate the identification of MS4 sources of pollutants and/or stressors in accordance with Provision B.2.d;

(d) Identify beneficial uses of the receiving waters that are protected or must be restored in accordance with Provision D.4.a;

(e) Evaluate the progress toward achieving the interim and final numeric goals for restoring impacted beneficial uses in the receiving waters.

(2) The Copermittees must re-evaluate the water quality improvement strategies for the Watershed Management Area during the term of this Order pursuant to Provision B.5.b. The re-evaluation and recommendations for modifications to the water quality improvement strategies and schedules may be provided in the Annual Reports required pursuant to Provision F.3.b, but must at least be provided in the Regional Monitoring and Assessment Report pursuant to Provision F.3.c~~must be provided in the Annual Reports required pursuant to Provision F.3.b, and provided in the Report of Waste Discharge pursuant to Provision F.5.b~~. The water quality improvement strategies for the Watershed Management Area must be re-evaluated as follows:

(a) Identify the non-storm water and storm water pollutant loads from the Copermittees' MS4 outfalls in the Watershed Management Area, calculated or estimated pursuant to Provisions D.4.b;

(b) Identify the non-storm water and storm water pollutant load reductions, or other improvements to receiving water or water quality conditions, that are necessary to attain the interim and final numeric goals identified in the WQIP~~for restoring impacted beneficial uses in the receiving waters~~;

(c) Identify any~~the~~ non-storm water and storm water pollutant load reductions, or other improvements to the quality of MS4 discharges, that are necessary for the Copermittees to ~~demonstrate that non-storm water and storm water~~ reduce discharges of pollutants from their MS4s that have been demonstrated to be~~are not~~ causing or contributing to exceedances of receiving water limitations;

Comment [A67]: See discussion in section 3.5.3 of the comment letter.

(d) Evaluate the progress of the water quality improvement strategies toward achieving the interim and final numeric goals identified in the WQIP~~for restoring impacted beneficial uses in the receiving waters~~.

(3) The Copermittees must re-evaluate and adapt the water quality monitoring and assessment program for the Watershed Management Area when new information becomes available to improve the monitoring and assessment

Riverside Copermittee Redlines

program pursuant to Provision B.5.c. The re-evaluation and recommendations for modifications to the monitoring and assessment program may be provided in the Annual Reports required pursuant to Provision F.3.b, but must at least be provided in the Regional Monitoring and Assessment Report ~~of Waste Discharge~~ pursuant to Provision F.3.c~~5.b~~. Modifications to the water quality monitoring and assessment program must be consistent with the requirements of Provision D.1-D.3. The re-evaluation of the water quality monitoring and assessment program for the Watershed Management Area must consider the data gaps identified by the assessments required pursuant to Provisions D.4.a-b, and results of the special studies implemented pursuant to Provision D.4.c.

5. Monitoring Provisions

Each Copermittee must comply with all the monitoring, reporting, and recordkeeping provisions of the Standard Permit Provisions and General Provisions contained in Attachment B to this Order.

Riverside Copermittee Redlines

E. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAMS

The purpose of this provision is for each Copermittee to implement a program to control the contribution of pollutants to and the discharges from the MS4 within its jurisdiction. The goal of the jurisdictional runoff management programs is to implement strategies that effectively prohibit non-storm water discharges to the MS4 and reduce the discharge of pollutants in ~~storm water~~ to the MEP. This goal will be accomplished through implementing the jurisdictional runoff management programs in accordance with the strategies identified in the Water Quality Improvement Plans.

Each Copermittee must update its jurisdictional runoff management program document, in accordance with Provision F.2.a, to incorporate all the requirements of Provision E, consistent with their legal authority. Until the Copermittee has updated its jurisdictional runoff management program document with the applicable requirements of Provision E, the Copermittee must continue implementing its current jurisdictional runoff management program.

Modification of Jurisdictional Runoff Management Program Requirements

Modifications shall be considered and where selected, proposed according to the process in Provision B.5. Proposed modifications may increase, decrease, and/or replace minimum requirements identified in Provision E.

1. Legal Authority Establishment and Enforcement

Comment [A68]: See discussion in section 3.6 of the comment letter.

a. Each Copermittee must establish, maintain, and enforce adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 through statute, ordinance, permit, or series of contracts, ~~order, or similar means~~ which~~.~~ ~~This legal authority must~~, at a minimum, authorize the Copermittee to:

(1) Effectively prohibit through ordinance, order or other similar means~~Prohibit and eliminate all~~ illicit discharges ~~and illicit connections~~ to its MS4;

(2) Control, through ordinance, permit, contract, order or similar means the contribution of pollutants in discharges to the MS4 by storm water discharges ~~of runoff~~ associated with industrial and construction activity ~~to its MS4~~, and ~~control~~ the quality of storm water discharges ~~runoff~~ from sites of industrial and construction activity~~sites~~, whose discharges have not been separately authorized through ~~that do not, including industrial and construction sites which~~ have coverage under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit) or General Permit for Discharges of Storm Water Associated with Construction Activities (Construction General Permit)~~, as well as to those sites which do not;~~

Comment [A69]: See discussion in section 3.6.2 of the comment letter.

(3) Control, through ordinance, order or similar means the discharge to the MS4 of spills, dumping, or disposal of materials other than storm water ~~into its~~

Comment [A70]: See discussion in section 3.6.2 of the comment letter.

Riverside Copermittee Redlines

~~MS4~~;

(4) Control through interagency agreements among Copermittees the contribution of pollutants from one portion of the MS4 to another portion of the MS4;

(5) ~~Control, by coordinating and cooperating with other owners of the MS4 such as Caltrans, the U.S. federal government, or sovereign Native American Tribes through interagency agreements, where possible, the contribution of from their portion of the MS4 to the portion of the MS4 within the Copermittee's jurisdiction;~~

(6) Require compliance with conditions in its ~~statutes,~~ ordinances, permits, contracts, or orders~~, or similar means to hold dischargers to its MS4 accountable for their contributions of pollutants and flows~~;

(7) ~~Require the use of BMPs to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP;~~

(8) ~~Require documentation on the effectiveness of BMPs implemented to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP;~~

(9) ~~Utilize enforcement mechanisms to require compliance with its statutes, ordinances, permits, contracts, orders, or similar means; and~~

(10) Carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions~~its statutes, ordinances, permits, contracts, orders, or similar means and with the requirements of this Order~~, including the prohibition of illicit discharges and connections to its MS4; ~~the Copermittee must also have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from industrial facilities, including construction sites, discharging into its MS4.~~

b. With the first Annual Report required pursuant to Provision F.3.b, each Copermittee must submit a statement certified by its Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative that the Copermittee has taken the necessary steps to obtain and maintain full legal authority within its jurisdiction to implement and enforce each of the requirements contained in this Order.

2. Illicit Discharge Detection and Elimination

Each Copermittee must implement a program to actively detect and eliminate illicit discharges and improper disposal into the MS4, or otherwise require the discharger

Comment [A71]: See discussion in section 3.6.2 of the comment letter.

Comment [A72]: See discussion in section 3.6.2 of the comment letter.

Comment [A73]: See discussion in section 3.6.2 of the comment letter.

Comment [A74]: See discussion in section 3.6.2 of the comment letter.

Comment [A75]: See discussion in section 3.7 of the comment letter.

Riverside Copermittee Redlines

to apply for and obtain a separate NPDES permit. The illicit discharge detection and elimination program must be implemented in accordance with the strategies identified in the Water Quality Improvement Plan and include, at a minimum, the following requirements:

STRATEGIES TO ADDRESS THE HIGHEST PRIORITY WATER QUALITY CONDITIONS

Each Copermittee must describe in its jurisdictional runoff management program document the strategies and/or activities that will be implemented as part of the illicit discharge detection and elimination program to address ~~non-storm water and~~ illicit discharges and connections that the Copermittee has identified as potential sources of pollutants and/or stressors that contribute to the highest priority water quality conditions in the Watershed Management Area as follows:

(1) Provide specific details about how the strategies and/or activities will be implemented (e.g. designate ~~additional~~ BMPs, focus education, and/or increase/decrease frequency of inspections in specific areas); and

(2) The strategies and/or activities ~~must~~ may be modified from ~~consistent with~~ the default requirements of Provisions E.2.b-e~~a-d and~~ to be consistent with the strategies identified in the Water Quality Improvement Plan;

(3) The requirements of the programs as outlined in the following sub-provisions may be modified and prioritized as appropriate for consistency with the highest water quality priorities and strategies as identified in the corresponding Water Quality improvement Plan(s).

a. NON-STORM WATER DISCHARGES

To the extent allowable by law, each~~Each~~ Copermittee must address all non-storm water discharges ~~from~~into the MS4 as illicit discharges, where the likelihood exists that they are a source of pollutants to the Receiving Waters, unless ~~a non-storm water~~the discharge is either identified as a discharge authorized by a separate NPDES permit, or identified as a category of non-storm water discharges or flows that is consistent with~~must be addressed pursuant to~~ the following requirements:

(1) ~~Discharges of non-storm water to the MS4 from the following categories must be addressed as illicit dischargeunless the discharge has coverage under NPDES Permit No. CAG919001 (Order No. R9-2007-0034, or subsequent order) for discharges to San Diego Bay, or NPDES Permit No. CAG919002 (Order No. R9-2008-0002, or subsequent order) for discharges to surface waters other than San Diego Bay.~~

Comment [A76]: See discussion in section 3.7.2 of the comment letter.

Riverside Copermittee Redlines

~~(a) Uncontaminated pumped ground water;~~

~~(b) Discharges from foundation drains;~~[20]

~~(c) Water from crawl space pumps; and~~

~~(d) Water from footing drains.~~[19]

(2) Discharges of non-storm water from water line flushing and water main breaks to the MS4 must be addressed as illicit discharges unless the discharge has coverage under a valid NPDES Permit~~, No. CAG 679001~~ (Order No. R9-2010-0003, or a subsequent order). This category includes potable water line flushing ~~and water main break~~ discharges from water purveyors issued a water supply permit by the California Department of Public Health or federal military installations. Discharges from recycled or reclaimed water lines to the MS4 must be addressed as illicit discharges, unless the discharges have coverage under a separate NPDES permit.

Comment [A77]: See discussion in section 3.7.2 of the comment letter.

(3) Discharges of non-storm water into the MS4 from the following categories must be addressed by the Copermittee as illicit discharges only if the Copermittee or the San Diego Water Board identifies the individual discharge as a source of pollutants to receiving waters:

Comment [A78]: See discussion in section 3.7.2 of the comment letter.

(a) Diverted stream flows;

(b) Rising ground waters;

(c) Uncontaminated ground water infiltration to MS4s;

(d) Uncontaminated pumped ground water;

(e) Springs;

(f) Water from crawl space pumps;

~~(c)~~(g) Flows from riparian habitats and wetlands;

(h) Landscape irrigation;

(i) Irrigation water;

(j) Lawn watering;

Comment [A79]: See Legal Comments discussion.

~~[20] Provision E.2.a.(1) only applies to this category on non-storm water if the system is designed to be located at or below the highest historical groundwater table to actively or passively extract groundwater during any part of the year.~~

Riverside Copermittee Redlines

~~(d)~~(k) Discharges from potable water sources;

~~(e)~~(l) Discharges from foundation drains;[21] ~~and~~

(m)Discharges from footing drains. .[21]

(4) Discharges of non-storm water into the MS4 from the following categories must be controlled by the requirements given below through statute, ordinance, permit, contract, order, or similar means~~. Discharges of non-storm water to the MS4 from the following categories not controlled by the requirements given below through~~ If such statutes, ordinances, permits, contracts, orders, or similar means have not been enacted by the Copermittee, the applicable categories below must be addressed by the Copermittee as illicit discharges.

Comment [A80]: See discussion in section 3.7.2 of the comment letter.

(a) Air conditioning condensation

The discharge of air conditioning condensation should~~must~~ be directed to landscaped areas or other pervious surfaces where feasible.

(b) Individual residential vehicle washing

(i) The discharge of wash water ~~must~~ should be directed to landscaped areas or other pervious surfaces where feasible; and

(ii) Minimize the use of water for vehicle washing, use as little washing detergent and other vehicle wash products as possible, wash vehicles at commercial wash facilities, and implement other practices or behaviors that will prevent the discharge of pollutants associated with individual residential vehicle washing from entering the MS4.

(c) Dechlorinated swimming pool discharges

(i) Eliminate residual chlorine, algaecide, filter backwash, or other pollutants from swimming pools prior to discharging to the MS4; and

(ii) The discharge of saline swimming pool water must be directed to the sanitary sewer, landscaped areas, or other pervious surfaces that can accommodate the volume of water, unless the saline swimming pool water can be discharged via a pipe or concrete channel directly to a naturally saline water body (e.g. Pacific Ocean).

(5) Firefighting discharges to the MS4 must be addressed by the Copermittee as

Comment [A81]: See discussion in section 3.7.2 of the comment letter.

[21] ~~Provision E.2.a.(3) only applies to this category of non-storm water discharge if the system is designed to be located above the highest historical groundwater table at all times of the year, and the system is only expected to discharge non-storm water under unusual circumstances.~~

Riverside Copermittee Redlines

follows:~~illicit discharges only if the Copermittee or the San Diego Water Board identifies the discharge as a significant source of pollutants to receiving waters. Firefighting discharges to the MS4 not identified as a significant source of pollutants to receiving waters, must be addressed, at a minimum, as follows:~~

(a) Non-emergency firefighting discharges

(i) Building fire suppression system maintenance discharges (e.g.~~,~~ sprinkler line flushing) to the MS4 must be addressed as illicit discharges unless appropriate BMPs are implemented.

(ii) Non-emergency firefighting discharges (i.e., discharges from controlled or practice blazes, firefighting training, and maintenance activities not associated with building fire suppression systems) must be addressed by a program, to be developed and implemented by the Copermittee in conjunction with the local Fire Authority/District, to reduce or eliminate pollutants in such discharges from entering the MS4.

(b) Emergency firefighting discharges (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited.

~~Each Copermittee should develop and encourage implementation of BMPs to reduce or eliminate pollutants in emergency firefighting discharges to the MS4s and receiving waters within its jurisdiction. During emergency situations, priority of efforts should be directed toward life, property, and the environment (in descending order). BMPs should not interfere with immediate emergency response operations or impact public health and safety.~~

(6) If the Copermittee or San Diego Water Board identifies any category of non-storm water discharges listed under Provisions E.2.a.(1)-(4) as a source of pollutants to receiving waters, the category must be effectively prohibited through ordinance, order, or similar means and addressed as an illicit discharge.

(7) ~~Each Copermittee must, where feasible, reduce or eliminate non-storm water discharges listed under Provisions E.2.a.(1)-(4) into its MS4 whether or not the non-storm water discharge has been identified as an illicit discharge, unless a non-storm water discharge is identified as a discharge authorized by a separate NPDES permit.~~

Comment [A82]: See discussion in section 3.7.2 of the comment letter.

b. Prevent And Detect Illicit Discharges And Connections

Each Copermittee must include the following measures within its program to prevent and detect illicit discharges to the MS4:

Riverside Copermittee Redlines

(1) Each Copermittee must maintain an updated map of its entire MS4 and the corresponding drainage areas. The accuracy of the MS4 map must be confirmed during the field screening required pursuant to Provision E.2.c. The MS4 map must be included as part of the jurisdictional runoff management program document. Any geographic information system (GIS) layers or files used by the Copermittee to maintain the MS4 map must be made available to the San Diego Water Board upon request. The MS4 map must identify the following:

(a) All segments of the MS4 owned, operated, and maintained by the Copermittee;

(b) All known locations of inlets that discharge and/or collect runoff into the Copermittee's MS4;

(c) All known locations of connections with other MS4s not owned or operated by the Copermittee (e.g. Caltrans MS4s);

(d) All known locations of major MS4 outfalls as defined by 40 CFR §122.26(b)(5-6) ~~and private outfalls,~~ that discharge runoff collected from areas within the Copermittee's jurisdiction;

Comment [A83]: See discussion in section 3.7.2 of the comment letter.

(e) All segments of receiving waters within the Copermittee's jurisdiction that receive and convey runoff discharged from the Copermittee's MS4 outfalls;

(f) Locations of the MS4 outfalls, identified pursuant to Provision D.2.a.(1), within its jurisdiction; and

(g) Locations of the non-storm water persistent flow MS4 outfall discharge monitoring stations, identified pursuant to Provision D.2.b.(2)(b), within its jurisdiction.

(2) Each Copermittee must use Copermittee personnel and contractors to assist in identifying and reporting illicit discharges and connections during their daily employment activities.

(3) Each Copermittee must promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges to or from the MS4, including the following methods for public reporting:

(a) Operate a public hotline, which can be Copermittee-specific or shared by the Copermittees, and must be capable of receiving reports in both English and Spanish 24 hours per day and seven days per week; and

Riverside Copermittee Redlines

(b) Designate an e-mail address for receiving electronic reports from the public, which can be Copermittee-specific or shared by the Copermittees, and must be prominently displayed on the Copermittee's webpage and the Regional Clearinghouse required pursuant to Provision F.4.

(4) Each Copermittee must implement practices and procedures (including a notification mechanism) to prevent, respond to, contain, and clean up any spills that may discharge into the MS4 within its jurisdiction from any source. Such practices and procedures may include the coordination with other parties, such as sanitary sewer operators. The Copermittee must coordinate, to the extent possible, with spill response teams to prevent entry of spills into the MS4~~, and prevent contamination of surface water, ground water, and soil.~~ The Copermittee must coordinate spill prevention, containment, and response activities throughout all appropriate internal~~Copermittee~~ departments, programs, and agencies.

Comment [A84]: See discussion in section 3.7.2 of the comment letter.

(5) Each Copermittee must implement practices and procedures to ~~prevent~~ control and limit infiltration of seepage from sanitary sewers owned by a Copermittee agency (including private laterals and failing septic systems) to the MS4.

(6) Each Copermittee shall~~must~~ coordinate, when necessary, with upstream Copermittees and/or entities to prevent illicit discharges from upstream sources into the MS4 within its jurisdiction.

c. Field Screening

Each Copermittee must conduct field screening (i.e. visual observations, field testing, and/or analytical testing) of MS4 outfalls and other portions of its MS4 within its jurisdiction to detect non-storm water and illicit discharges and connections to the MS4 in accordance with the dry weather MS4 outfall discharge monitoring requirements in Provisions D.2.a.(2) and D.2.b.(1).

d. Investigate and Eliminate Illicit Discharges And Connections

Each Copermittee must include the following measures within its program to investigate and eliminate illicit discharges to the MS4 to comply with provision A.1.b:

(1) Each Copermittee must prioritize and determine when follow-up investigations will be performed in response to visual observations and/or water quality monitoring data collected during an investigation of a detected non-storm water ~~or~~ illicit discharge into or from the MS4. The criteria for prioritizing investigations must consider the following:

(a) Pollutants identified as causing or contributing to the highest water quality

Riverside Copermittee Redlines

priorities identified in the Water Quality Improvement Plan;

(b) Pollutants identified as causing or contributing, or threatening to cause or contribute to impairments in water bodies on the 303(d) List and/or in environmentally sensitive areas (ESAs), located within its jurisdiction;

(c) Pollutants identified from sources or land uses known to exist within the area, drainage basin, or watershed that discharges to the portion of the MS4 within its jurisdiction included in the investigation;

(d) Pollutants identified as causing or contributing to an exceedance of a NAL in the Water Quality Improvement Plan, where the source has not been identified as natural or otherwise permitted; and

(e) Pollutants identified as an immediate and significant threat to human health or the environment.

(2) Each Copermittee must implement procedures to investigate and inspect portions of its MS4 that, based on reports or notifications, field screening, or other appropriate information, indicate a reasonable potential of receiving, containing, or discharging pollutants due to illicit discharges, or illicit connections~~, or other sources of non-storm water~~. The procedures must include the following:

(a) Each Copermittee must develop criteria to:

(i) Assess the validity of each report or notification received; and

(ii) Prioritize the response to each report or notification received.

(b) Each Copermittee must prioritize and respond to each valid report or notification (e.g., public reports, staff or contractor reports and notifications, etc.) of an incident in a timely manner.

(c) ~~Each~~In accordance with the procedures defined in Provision E.2.d.(1), each~~Each~~ Copermittee must investigate and seek to identify the source(s) of discharges of non-storm water illicit discharges or illicit connections ~~where flows are~~ observed into and from the MS4 during the field screening required pursuant to Provision D.2.b.(1) as follows:

(i) Obvious illicit discharges (i.e., unusual color or odor) must be immediately investigated to identify the source(s) of non-storm water illegal discharges;

(ii) The investigation must include field investigations to identify sources or potential sources for the discharge, unless the source or potential source has already been identified during previous investigations; and

Riverside Copermittee Redlines

(iii) The investigation may include follow-up field investigations and/or reviewing Copermittee inventories and other land use data to identify potential sources of the discharge.

(d) Each Copermittee must maintain records and a database of the following information:

(i) Location of incident, including hydrologic subarea, portion of MS4 receiving the non-storm water ~~or~~ illicit discharge, and point of discharge or potential discharge from MS4 to receiving water;

(ii) Source of information initiating the investigation (e.g., public reports, staff or contractor reports and notifications, field screening, etc.);

(iii) Date the information used to initiate the investigation was received;

(iv) Date the investigation was initiated;

(v) Dates of follow-up investigations;

(vi) Identified or suspected source of the illicit discharge or connection, if determined;

(vii) Known or suspected related incidents, if any;

(viii) Result of the investigation; and

(ix) If a source cannot be identified and the investigation is not continued, a rationale for why a discharge does not pose a threat to water quality and/or does not require additional investigation.

(e) Each Copermittee must ~~track~~ document, and where feasible quantify, any readily~~and seek to~~ identifiable~~y~~ the source(s) of non-storm water illegal discharges from the MS4 where there is evidence of non-storm water ~~having been discharged~~illegal discharges or connections into or from the MS4 (e.g., pooled water), in accordance with MS4 outfall discharge monitoring requirements in Provisions D.2.a.(2) and D.2.b.

Comment [A85]: See discussion in section 3.7.2 of the comment letter.

(3) Each Copermittee must initiate the implementation of procedures, in a timely manner, to eliminate all detected and identified illicit discharges and connections within its jurisdiction. The procedures must include the following responses:

(a) Each Copermittee must enforce its legal authority, as required under Provision E.1, to eliminate illicit discharges and connections to the MS4.

(b) If the Copermittee identifies the source as a controllable source of non-storm water ~~or~~ illicit discharge or connection, the Copermittee must implement its Enforcement Response Plan pursuant to Provision E.6 and enforce its legal authority to effectively prohibit and with the goal of eliminati~~ng~~e illicit discharges and connections to its MS4.

Riverside Copermittee Redlines

(c) If the Copermittee identifies the source of the discharge as a category of non-storm water discharges in Provision E.2.a, and the discharge is in exceedance of NALs in the Water Quality Improvement Plan, then the Copermittee must determine if: (1) this is an isolated incident or set of circumstances that will be addressed through its Enforcement Response Plan pursuant to Provision E.6, or (2) the category of discharge must be addressed through the effective prohibition of that category of discharge as an illicit discharge pursuant to Provision E.2.a.(6).

(d) If the Copermittee suspects the source of the non-storm water discharge as natural in origin (i.e. non-anthropogenically influenced) and in conveyance into the MS4, then the Copermittee must document and provide the data and evidence necessary to demonstrate to the San Diego Water Board that it is natural in origin and does not require further investigation.

(e) If the Copermittee identifies that the discharge is coming from another Copermittees' jurisdiction, the receiving Copermittee must document and provide the findings to the upstream Copermittee. The obligation to implement the requirements of provision E.2.d.(3) are thenceforth the responsibility of the upstream Copermittee.

(f) If the Copermittee identifies the source as a non-storm water discharge that has been separately authorized by the San Diego Water Board, or that is contributing pollutants to the MS4 and that may require coverage under a WDR from the San Diego Water Board, the Copermittee shall provide all relevant findings to the San Diego Water Board and may back charge the Regional Board for the entire cost of conducting the source investigation.

Comment [A86]: See discussion in section 3.7.2 of the comment letter.

~~(e)~~(g) If the Copermittee is unable to identify and document the source of a recurring non-storm water discharge to or from the MS4, then the Copermittee must ~~address the discharge as an illicit discharge and~~ update its jurisdictional runoff management program to address the common and suspected sources of the non-storm water discharge within its jurisdiction in accordance with the Copermittee's priorities.

(4) Each Copermittee must submit a summary of the non-storm water discharges and illicit discharges and connections investigated and eliminated within its jurisdiction with each Annual Report required under Provision F.3.b of this Order.

3. Development Planning

Comment [A87]: See discussion in section 3.8 of the comment letter.

Each Copermittee must, within their jurisdiction, use their land use and planning

Riverside Copermittee Redlines

authorities, to the extent that they may lawfully impose requirements, to implement a development planning program in accordance with the strategies identified in the Water Quality Improvement Plan and includes, at a minimum, the following requirements:

STRATEGIES TO ADDRESS THE HIGHEST PRIORITY WATER QUALITY CONDITIONS

Comment [A88]: See discussion in section 3.8.2 of the comment letter.

Each Copermittee must describe in its jurisdictional runoff management program document the strategies and/or activities that will be implemented as part of the development planning program to address development and redevelopment projects that may become sources of pollutants and/or stressors that contribute to the highest priority water quality conditions in the Watershed Management Area as follows:

(1) Provide specific details about how the strategies and/or activities will be implemented (e.g. designate additional or alternative BMPs, focus education, increase frequency of verifications and/or inspections, alternative compliance options);

(2) Each Copermittee must identify areas within its jurisdiction where Priority Development Projects may be allowed or should be encouraged to implement or contribute toward the implementation of alternative compliance retrofitting and/or stream, channel, or habitat rehabilitation projects;

(3) Each Copermittee should collaborate and cooperate with other Copermittees and/or entities in the Watershed Management Area to identify regional alternative compliance projects that Priority Development Projects may be allowed or should be encouraged to implement or participate in implementing; and

(4) The requirements of the programs as outlined in the following sub-provisions may be modified and prioritized as appropriate for consistency with the highest water quality priorities and strategies as identified in the corresponding Water Quality improvement Plan(s). ~~The strategies and/or activities must be consistent with the requirements of Provisions E.3.a-c and E.3.e-f and the strategies identified in the Water Quality Improvement Plan.~~

a. BMP REQUIREMENTS FOR ALL DEVELOPMENT PROJECTS

Each Copermittee, as practical and feasible, must prescribe the following BMP requirements during the planning process (i.e. prior to project approval and issuance of local permits) for all development projects (regardless of project type or size), where local permits are issued, including unpaved roads and flood management projects, except emergency / public safety projects implemented for the protection of persons and property:

(1) General Requirements

Riverside Copermittee Redlines

(a) Onsite BMPs must be located so as to remove pollutants from runoff prior to its discharge to any receiving waters, and as close to the source as possible; and

(b) Structural BMPs must not be constructed within a waters of the U.S.. ~~or waters of the state.~~

(2) Source Control BMP Requirements

The following source control BMPs must be implemented at all development projects where applicable and feasible:

(a) Prevention of illicit discharges into the MS4;

(b) Storm drain system stenciling or signage;

(c) Properly designed outdoor material storage areas;

(d) Properly designed outdoor work areas;

(e) Properly designed trash storage areas; and

(f) Any additional BMPs determined necessary by the Copermittee to minimize pollutant generation at each project.

(3) Low Impact Development (LID) ~~BMP Requirements~~Principles

Comment [A89]: See discussion in section 3.8.2 of the comment letter.

The following LID ~~BMPs~~ Principles must be implemented at all development projects where applicable and feasible:

(a) Maintenance or restoration of natural storage reservoirs and drainage corridors (including topographic depressions, areas of permeable soils, natural swales, and ephemeral and intermittent streams);[22]

(b) Buffer zones for natural water bodies (where buffer zones are technically infeasible, require project applicant to include other buffers such as trees, access restrictions, etc.);

(c) Conservation of natural areas within the project footprint including existing trees, other vegetation, and soils;

[22] Development projects proposing to dredge or fill materials in waters of the U.S. must obtain a CWA Section 401 Water Quality Certification. Projects proposing to dredge or fill waters of the state must obtain waste discharge requirements.

Riverside Copermittee Redlines

(d) Construction of streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided public safety is not compromised;

(e) Minimization of the impervious footprint of the project;

(f) Minimization of soil compaction to landscaped areas;

(g) Disconnection of impervious surfaces through distributed pervious areas;

(h) Landscaped or other pervious areas designed and constructed to effectively receive and infiltrate, retain and/or treat runoff from impervious areas, prior to discharging to the MS4;

(i) Small collection strategies located at, or as close as possible to, the source (i.e. the point where storm water initially meets the ground) to minimize the transport of runoff and pollutants to the MS4 and receiving waters;

(j) Use of permeable materials for projects with low traffic areas and appropriate soil conditions;

(k) Landscaping with native or drought tolerant species; and

(l) Harvesting and using precipitation.

b. PRIORITY DEVELOPMENT PROJECTS

(1) Definition of Priority Development Project

Priority Development Projects include the following:

(a) All new development projects that fall under the Priority Development Project categories listed under Provision E.3.b.(2) (where a new development project feature, such as a parking lot, falls into a Priority Development Project category, the entire project footprint is subject to Priority Development Project requirements); and

(b) Those redevelopment projects that create, add, or replace at least 5,000 square feet of impervious surfaces on an already developed site, and the redevelopment project is a Priority Development Project category listed under Provision E.3.b.(2) (where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to Priority Development Project requirements, the performance requirements of Provisions E.3.c.(1) and E.3.c.(2) apply only to the addition or replacement, and not to the entire development; where redevelopment

Riverside Copermittee Redlines

results in an increase of more than fifty percent of the impervious surfaces of a previously existing development, the performance requirements of Provisions E.3.c.(1) and E.3.c.(2) apply to the entire development).

(c) Projects where redevelopment results in an increase of more than fifty percent of impervious surfaces of a previously existing development, and the existing development *was* subject to previous Priority Project Development Requirements, only the altered portion of development is subject to the new Priority Development Project requirements.

Comment [A90]: See discussion in section 3.8.2 of the comment letter.

(2) Priority Development Project Categories

Comment [A91]: See discussion in section 3.8.2 of the comment letter.

(a) New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This category includes commercial, industrial, residential, mixed-use, and public development projects on public or private land which fall under the planning and building authority of the Copermittee.

(b) New development projects that create 5,000 square feet or more of impervious surfaces (collectively over the entire project site), and are designed for support one or more of the following uses (see Appendix for definitions):

(i) Automotive repair shop
(ii) Restaurant
(iii) Parking lot[23]
(iv) Street, road, highway, freeway
(v) Retail gasoline outlet (RGO)

Comment [A92]: See footnote

~~(b) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.~~

~~(c) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is 5,000 square feet or more.~~

~~(d) Hillside development projects. This category includes any development which creates 5,000 square feet or more of impervious surface which is~~

[23] Excluding parking lots that are not subject to runoff, such as but not limited to covered or subterranean parking lots

Riverside Copermittee Redlines

~~located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.~~

~~(e)~~(c) New development projects that create 2,500 square feet or more of impervious surfaces (collectively over the entire project site), and are ~~Environmentally sensitive areas (ESAs). This category includes any development~~ located within, directly adjacent to, or discharging directly to an ESA, ~~which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring condition.~~ "Directly adjacent to" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that collects runoff from the subject development or redevelopment site and terminates at or in receiving waters within the ESA and is not commingled with flows from adjacent or other upstream lands.

~~(f) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce that has 5,000 square feet or more of impervious surface.~~

~~(g) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface that is 5,000 square feet or more used for the transportation of automobiles, trucks, motorcycles, and other vehicles.~~

~~(h) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.~~

~~(i)~~(d) Large development projects. This category includes any post-construction pollutant-generating new development projects that result in the permanent disturbance of one acre or more of land.

(3) Priority Development Project Exemptions

Comment [A93]: See discussion in section 3.8.2 of the comment letter.

Each Copermittee has the discretion to exempt the following projects from being defined as Priority Development Projects:

(a) New paved sidewalks, driveways, parking lots, bicycle lanes, or trails that meet the following criteria:

(i) Designed and constructed to direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas; OR

Riverside Copermittee Redlines

(ii) Designed and constructed to be hydraulically disconnected from paved streets or roads; OR

(iii) Designed and constructed with permeable pavements or surfaces in accordance with USEPA Green Streets guidance.[24]

(b) Any impervious surface that is 5,000 square feet or more used for the transportation of automobiles, trucks, motorcycles, and other vehicles that is designed and constructed to the Maximum Extent Practicable in accordance with the USEPA Green Streets Guidance "Managing Wet Weather with Green Infrastructure: Green Streets"[25]. ~~Retrofitting of existing paved alleys, streets or roads that meet the following criteria:~~

~~(i) Must be two lanes or less; AND~~

~~(ii) Must be a retrofitting project implemented as part of an alternative compliance project option under Provision E.3.c.(3)(b)(v) to achieve the performance requirements of Provisions E.3.c.(1) and/or E.3.c.(2) for a Priority Development Project; AND~~

~~(iii) Designed and constructed in accordance with the USEPA Green Streets guidance.[26]~~

(c) Single-family residential projects that meet the following criteria:

(i) Must not be constructed as part of a larger development or proposed subdivision;

(ii) Successfully incorporate and document that they have incorporated, each of the applicable Source Control and LID BMP strategies identified in provisions E.3.a.(2)-(3) to the MEP.

~~(c) New single family residences that meet the following criteria:~~

~~(i) Must not be constructed as part of a larger development or proposed subdivision; AND~~

~~(ii) Designed and constructed to be certified under the U.S. Green Building Council (USGCB) Leadership in Energy and Environmental Design (LEED) for Homes green building certification program, receiving at least four (4) Surface Water Management credits under the Sustainable Sites category[27] OR~~

~~Designed and constructed with structural BMPs that will achieve the~~

[24] USEPA. 2008. http://water.epa.gov/infrastructure/greeninfrastructure/upload/gi_munichandbook_green_streets.pdf and http://water.epa.gov/infrastructure/greeninfrastructure/gi_policy.cfm#municipalhandbook ~~See "Managing Wet Weather with Green Infrastructure – Municipal Handbook: Green Streets" (USEPA, 2008).~~

~~[26] Ibid.~~

~~[27] See LEED for Homes rating system at http://www.usgbc.org~~

Riverside Copermittee Redlines

~~performance requirements of Provisions E.3.c.(1) and E.3.c.(2) onsite~~

~~(d) Redevelopment of existing single family residences that meet the following criteria:~~

~~(i) Designed and constructed to be certified under the USGCB LEED for Homes green building certification program, receiving at least four (4) Surface Water Management credits under the Sustainable Sites category;[28] OR~~

~~(ii) Designed and constructed with structural BMPs that will achieve the performance requirements of Provisions E.3.c.(1) and E.3.c.(2) onsite.~~

(d) Watershed Protection Projects that meet the following criteria:

(i) Projects undertaken to rehabilitate or prevent environmental, social, and economic damage to the watershed, including receiving waters, by providing one or more of the following:

- Water quality protection by the proper management of stormwater and floodplains
- Flood risk reduction to adjacent land uses, stored matter and stockpiled material
- Elimination of the comingling of stormwater and hazardous materials
- Erosion Mitigation
- Restoration of Rivers and Ecosystems
- Groundwater Recharge
- Creation of new open space and wetlands
- Programs for water conservation, stormwater capture and management
- Retrofit projects constructed to improve water quality or address hydromodification.

(ii) AND are not expected to be pollutant generating or are designed to reduce existing pollutant loads

(iii) AND incorporate and document that they have incorporated, each of the applicable Source Control and LID BMP strategies identified in provisions E.3.a.(2)-(3) to the MEP.

(e) Emergency public safety projects in any of the Priority Development Categories may be excluded if the delay caused due to the requirement for a SSMP compromises public safety, public health and/or environmental protection

~~[28] See LEED for Homes rating system at http://www.usgbc.org~~

Riverside Copermittee Redlines

c. Priority Development Project Structural BMP Performance Requirements

In addition to the BMP requirements listed for all development projects under Provision E.3.a, Priority Development Projects must also implement structural BMPs that conform to performance requirements below. If watershed-specific performance requirements are ~~may be~~ developed as part of a Water Quality Improvement Plan; these requirements would take precedence over the general performance requirements below. The watershed-specific requirement must provide at least equal protection as the general performance requirements below.

(1) Storm Water Pollutant Control BMP Requirements

Each Copermittee must require each Priority Development Project to implement onsite structural BMPs to control pollutants in storm water that may be discharged from a project as follows:

(a) Each Priority Development Project must be required to implement LID BMPs that are designed to retain (i.e. intercept, store, infiltrate, evaporate, and evapotranspire) onsite the pollutants contained in the design capture volume. The design capture volume is equivalent to:

(i) The volume of storm water runoff produced from a 24-hour 85th percentile storm event;[29] OR

(ii) The volume of storm water runoff produced from a 24-hour 85th percentile storm event, that would be retained onsite ~~if~~ in the pre-project condition. ~~site was fully undeveloped and naturally vegetated, as determined using continuous simulation modeling techniques based on site-specific soil conditions and typical native vegetative cover.~~

(b) A Priority Development Project may be allowed to utilize alternative compliance under Provision E.3.c.(3) in lieu of~~to~~ complying with the storm water pollutant control BMP performance requirements of Provision E.3.c.(1)(a).

~~(c) If a Priority Development project is allowed to utilize alternative compliance pursuant to Provisions E.3.c.(1)(b), flow-thru conventional~~

[29] This volume is not a single volume to be applied to all areas covered by this Order. The size of the 85th percentile storm event is different for various parts of the San Diego Region. The Copermittees are encouraged to calculate the 85th percentile storm event for each of its jurisdictions using local rain data pertinent to its particular jurisdiction. In addition, isopluvial maps may be used to extrapolate rainfall data to areas where insufficient data exists in order to determine the volume of the local 85th percentile storm event in such areas. Where the Copermittees will use isopluvial maps to determine the 85th percentile storm event in areas lacking rain data, the Copermittees must describe their method for using isopluvial maps in its BMP Design Manuals. The volume is a single event-based volume that occurs after an extended dry period.

Comment [A94]: See discussion in section 3.8.2 of the comment letter.

Riverside Copermittee Redlines

~~treatment control BMPs must be implemented to treat the portion of the design capture volume that is not retained onsite. Additionally, project applicants must mitigate for the portion of the pollutant load in the design capture volume that is not retained onsite through one or more alternative compliance options under Provision E.3.c.(3). Conventional treatment control BMPs must be sized and designed to:~~

~~(i) Remove pollutants from storm water to the MEP;~~

~~(ii) Filter or treat either: 1) the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event, or 2) the maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity (for each hour of a storm event), as determined from the local historical rainfall record, multiplied by a factor of two;~~

~~(iii) Be ranked with high or medium pollutant removal efficiency for the Priority Development Project's most significant pollutants of concern. Conventional treatment control BMPs with a low removal efficiency ranking must only be approved by a Copermittee when a feasibility analysis has been conducted which exhibits that implementation of conventional treatment control BMPs with high or medium removal efficiency rankings are infeasible for a Priority Development Project or portion of a Priority Development Project.~~

(2) Hydromodification Management BMP Requirements

Comment [A95]: See discussion in section 3.8.2 of the comment letter.

Each Copermittee must require each Priority Development Project disturbing greater than one acre to implement management measures~~onsite structural BMPs~~ to ensure ~~manage hydromodification~~ that ~~may be caused by~~ storm water runoff discharged from the~~a~~ project won't cause adverse Hydromodification impacts in the downstream receiving waters as follows:

The Copermittees in each Watershed Management Area may establish within the WQIP, watershed specific mitigation requirements that will apply to priority development projects, based on the susceptibility of the receiving waters to Hydromodification impacts caused by the project, and consistent with the priorities and strategies identified in the WQIP. Such requirements may be uniform across a Hydrologic Unit, or identified at an appropriate smaller scale to ensure that receiving waters are properly protected.

(a) Post-project runoff flow rates and durations must not exceed pre-project ~~development (naturally occurring)~~ runoff flow rates and durations by more than 10 percent (for the range of flows that result in increased potential for erosion, or degraded instream habitat conditions downstream of Priority Development Projects~~)~~.

(i) In evaluating the range of flows that results in increased potential for

Riverside Copermittee Redlines

erosion of natural (non-hardened) channels, the lower boundary must correspond with the critical channel flow that produces the critical shear stress that initiates channel bed movement or that erodes the toe of channel banks.

~~(ii) For artificially hardened channels, analysis to identify the lower boundary must use characteristics of a natural stream segment similar to that found in the watershed. The lower boundary must correspond with the critical channel flow that produces the critical shear stress that initiates channel bed movement or erodes the toe of the channel banks.~~

~~(iii)~~(ii) The Copermittees may use monitoring results collected pursuant to Provision D.1.a.(2) to re-define the range of flows resulting in increased potential for erosion, or degraded instream habitat conditions, as warranted by the data.

(b) Priority Development Projects ~~Post-project runoff flow rates and durations~~ must implement appropriate measures to minimize the ~~compensate for~~ the loss of sediment supply delivered ~~due~~ to the Receiving Waters, consistent with WQIP priorities, ~~development project,~~ should loss of sediment supply be anticipated to occur as a result of the development project.

(c) A Priority Development Project may be allowed to utilize alternative compliance under Provision E.3.c.(3) in lieu of~~to comply with~~ the performance requirements of Provisions E.3.c.(2)(a)-(b).

(d) Exemptions

Each Copermittee has the discretion to exempt a Priority Development Project from the hydromodification management BMP performance requirements of Provisions E.3.c.(2)(a)-(b) where the project:

(i) Discharges storm water runoff into existing underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean;

(ii) Discharges of storm water into conveyance channels whose bed and bank are engineered and maintained for the 10-year ultimate development flow rate all the way from the point of discharge from the project to an water body that is sufficiently resistant to hydromodification (water storage reservoirs, lakes, enclosed embayments, pacific ocean, or other water bodies identified in the WQIP);

~~(ii)~~(iii) Is a redevelopment Priority Development Project that meets the alternative compliance requirements of Provision E.3.c.(3)(b)(ii); or

Riverside Copermittee Redlines

~~(iii)~~(iv) Discharges storm water runoff into other areas identified by the San Diego Water Board as exempt from the requirements of Provisions E.3.c.(2)(a)-(b), through an approved WQIP.

(3) Alternative Compliance to Onsite Structural BMP Performance Requirements

Comment [A96]: See discussion in section 3.8.2 of the comment letter.

(a) Applicability

At the discretion of each Copermittee, Priority Development Projects may be allowed to implement one or more of the alternative compliance project options described in E.3.c.(3)(b) below, in lieu of complying with the onsite structural BMP performance requirements of Provisions E.3.c.(1) and E.3.c.(2), under the following conditions:

(i) The Copermittee must determine that implementation of the alternative compliance option will have an equal or greater overall water quality benefit for the Watershed Management Area than fully complying with the performance requirements of Provisions E.3.c.(1) and E.3.c.(2) onsite;

(ii) The alternative compliance options must be designed by a registered professional engineer, geologist, architect, biologist, hydrologist, landscape architect, or other appropriate certified professional;

(iii) The alternative compliance option must be consistent with the strategies developed within the WQIP, for the highest priority water quality conditions.

(iv) The alternative compliance options must be implemented within the same Watershed Management Area as the Priority Development Project, and preferably within the same hydrologic subarea;

(v) The alternative compliance options must have reliable sources of funding for operation and maintenance.

(b) Alternative Compliance Options

(i) *LID Biofiltration Treatment Control BMPs*

LID biofiltration treatment control BMPs may be used as an alternative compliance option if the BMPs are sized and designed to:

[a] Remove pollutants from storm water to the MEP; AND
[b] Have an appropriate surface loading rate to prevent erosion, scour and channeling; AND
[c] Biofilter at least 1.0 times the design capture volume that is not reliably retained onsite

Riverside Copermittee Redlines

(ii) *LEED Certified Redevelopment Projects*

Priority Development Projects that are designed and constructed to be certified under the USGCB LEED for New Construction and Major Renovations green building certification program, or other locally accepted certification of equivalent effectiveness, may be considered as an acceptable alternative compliance option if the project meets the following criteria:

[a] The project is designed to receive at least: One (1) Site Design credit, and Two (2) Stormwater Design credits under the Sustainable Sites category.[30], and

[b] The existing and future configuration of the receiving water must not be unnaturally altered or adversely impacted by the project.

(iii) *Watershed-Based Planned Development Projects*

Priority Development Projects greater than 100 acres in total project size (or smaller than 100 acres in size yet part of a larger common plan of development that is over 100 acres) may be considered as an acceptable alternative compliance option if the project meets the following conditions:

[a] The Priority Development Project was planned utilizing watershed and/or subwatershed based water quality, hydrologic, and fluvial geomorphologic planning principles that implement regional LID BMPs in accordance with the performance and location criteria of this Order and acceptable to the San Diego Water Board;

[b] Regional LID BMPs may be used provided that the BMPs capture and retain the volume of runoff produced from the design capture volume defined in Provision E.3.c.(1)(a)(i) and that such controls are located upstream of receiving waters;

[c] Regional LID BMPs must clearly exhibit that they will not result in a net impact from pollutant loadings over and above the impact caused by capture and retention of the design capture volume;

[d] Any portion of the design capture volume that is not retained by the regional LID BMPs must be treated using biofiltration BMPs; and

[e] Where regional LID BMPs are demonstrated to the Copermittee as technically infeasible to retain the entire design capture volume, any volume up to and including the design capture volume not retained by regional LID BMPs, nor treated by biofiltration BMPs, must be treated using conventional treatment control BMPs and the project applicant must implement additional alternative compliance project, in-lieu fee and/or water quality

[30] See LEED for New Construction and Major Renovations rating system at http://www.usgbc.org

Riverside Copermittee Redlines

credit system options below.

(iv) *Offsite Projects*

Offsite Projects, such as but not limited to Regional BMPs; Retrofitting Projects; Channel, Stream or Habitat Rehabilitation Projects; Water Supply Augmentation Projects; or other Offsite Projects proposed by a project proponent, may be considered as an acceptable alternative compliance option if the offsite project meets the following requirements:

- The project must provide a net result of at least the same level of pollutant removal, and/or protection from potential downstream and upstream erosion in the receiving water as would be required to meet the performance requirements of Provision E.3.c.(1) and E.3.c.(2), as applicable.
- The project must be consistent with the strategies identified in the WQIP.
- The project must be constructed and operational prior to occupancy being granted for the PDP.

(v) *Conventional Treatment Control BMPs*

Onsite Conventional Treatment Control BMPs may be used as an alternative compliance option, only if the following criteria have been met:

[a] It has been demonstrated to the satisfaction of the Copermittee that it is technically infeasible to comply with the onsite requirements of E.3.c.(1), AND

[b] It has been demonstrated to the satisfaction of the Copermittee that it is technically infeasible to implement onsite Biofiltration Treatment Control BMPs, AND

[c] The Conventional Treatment Control BMPs will remove pollutants from storm water to the MEP; AND

[d] The Conventional Treatment Control BMPs will filter or treat either: 1) the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event, or 2) the maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity (for each hour of a storm event), as determined from the local historical rainfall record, multiplied by a factor of two; AND

[e] The Conventional Treatment Control BMPs are ranked with high or medium pollutant removal efficiency for the Priority Development Project's most significant pollutants of concern. Conventional treatment control BMPs with a low removal

Riverside Copermittee Redlines

efficiency ranking must only be approved by a Copermittee when a feasibility analysis has been conducted which exhibits that implementation of conventional treatment control BMPs with high or medium removal efficiency rankings are infeasible for a Priority Development Project or portion of a Priority Development Project.

~~(a) Applicability~~

~~At the discretion of each Copermittee, Priority Development Projects may be allowed to utilize an alternative option to comply with the onsite structural BMP performance requirements of Provisions E.3.c.(1) and E.3.c.(2) under the following conditions:~~

~~(i) The Copermittee must determine that implementation of the alternative compliance option will have a greater overall water quality benefit for the Watershed Management Area than fully complying with the performance requirements of Provisions E.3.c.(1) and E.3.c.(2) onsite;~~

~~(ii) The alternative compliance options must be designed by a registered professional engineer, geologist, architector landscape architect;~~

~~(iii) The alternative compliance options must be implemented within the same hydrologichydrologic unit as the Priority Development Project, and preferably within the same hydrologic subarea;~~

~~(iv) Receiving waters must not be utilized to convey storm water runoff to the alternative compliance options;~~

~~(v) The pollutants in storm water runoff from the Priority Development Project must be treated to the MEP by the alternative compliance options prior to being discharged to receiving waters;~~

~~(vi) Unless otherwise allowed by Provision E.3.c.(3)(b), the alternative compliance options must have a net result of at least the same level of pollutant removal as would have been achieved if the Priority Development Project had fully complied with the storm water pollutant control BMP performance requirements of Provision E.3.c.(1) onsite;~~

~~(vii) Unless otherwise allowed by Provision E.3.c.(3)(b), the alternative compliance options must have a net result of at least the same level of protection from potential downstream and upstream erosion in the receiving water as would have been achieved if the Priority Development Project had fully complied with the hydromodification management BMP performance requirements of Provision E.3.c.(2) onsite; and~~

~~(viii) The alternative compliance options utilized by the Priority Development Project must have reliable sources of funding for operation and maintenance.~~

Riverside Copermittee Redlines

(b) Alternative Compliance Project Options

The Copermittee may allow implementation of one or more of the following project options as part of an alternative approach to complying with the onsite structural BMP performance requirements of Provisions E.3.c.(1) and E.3.c.(2):

(i) *Onsite LID Biofiltration Treatment Control BMPs*

The Copermittee may allow Priority Development Projects to utilize onsite LID biofiltration treatment control BMPs to comply with the storm water pollutant control BMP performance requirements of Provision E.3.c.(1). Onsite LID biofiltration treatment control BMPs must be sized and designed to:

[a] Remove pollutants from storm water to the MEP; AND
[b] Have an appropriate surface loading rate to prevent erosion, scour and channeling within the BMP; AND
[c] Biofilter at least 1.5 times the design capture volume that is not reliably retained onsite; OR
[d] Biofilter up to the design capture volume that is not reliably retained onsite, AND 1) treat the remaining portion of the design capture volume not retained onsite with conventional treatment control BMPs in accordance with Provision E.3.c.(1)(c), and 2) if necessary, mitigate for the portion of the pollutant load in the design capture volume not retained onsite through one or more alternative compliance project, in-lieu fee and/or water quality credit system options below.

(ii) *LEED Certified Redevelopment Projects*

The Copermittee may allow redevelopment Priority Development Projects to comply with designed and constructed to be certified under the USGCB LEED for New Construction and Major Renovations green building certification program. The Priority Development Project must receive at least one (1) Site Design credit and two (2) Stormwater Design credits under the Sustainable Sites category.[31] In addition, the existing and future configuration of the receiving water must not be unnaturally altered or adversely impacted by storm water flow rates and durations discharged from the site.

(iii) *Watershed Based Planned Development Projects*

The Copermittee may allow Priority Development Projects greater than 100 acres in total project size (or smaller than 100 acres in size

[31] See LEED for New Construction and Major Renovations rating system at http://www.usgbc.org

Riverside Copermittee Redlines

yet part of a larger common plan of development that is over 100 acres) to comply with the onsite structural BMP performance requirements of Provisions E.3.c.(1) and E.3.c.(2). The Priority Development Project must comply with the following conditions:

[a] The Priority Development Project was planned utilizing watershed and/or subwatershed based water quality, hydrologic, and fluvial geomorphologic planning principles that implement regional LID BMPs in accordance with the performance and location criteria of this Order and acceptable to the San Diego Water Board;

[b] Regional LID BMPs may be used provided that the BMPs capture and retain the volume of runoff produced from the design capture volume defined in Provision E.3.c.(1)(a)(i) and that such controls are located upstream of receiving waters;

[c] Regional LID BMPs must clearly exhibit that they will not result in a net impact from pollutant loadings over and above the impact caused by capture and retention of the design capture volume;

[d] Any portion of the design capture volume that is not retained by the regional LID BMPs must be treated using biofiltration BMPs; and

[e] Where regional LID BMPs are demonstrated to the Copermittee as technically infeasible to retain the entire design capture volume, any volume up to and including the design capture volume not retained by regional LID BMPs, nor treated by biofiltration BMPs, must be treated using conventional treatment control BMPs and the project applicant must implement additional alternative compliance project, in-lieu fee and/or water quality credit system options below.

(iv) *Offsite Regional BMPs*

[a] The Copermittee may allow Priority Development Projects to utilize offsite regional BMPs to comply with the storm water pollutant control BMP performance requirements of Provision E.3.c.(1) if the offsite regional BMPs have the capacity to receive and retain at least 1.1 times the design capture volume that is not reliably retained onsite.

[b] The Copermittee may allow Priority Development Projects to utilize offsite regional BMPs to comply with the hydromodification management BMP performance requirements of Provision E.3.c.(2) if the offsite regional BMPs have the capacity to manage the storm water flows rates and durations from the site such that the receiving waters are protected from the potential for increased erosion that would be caused if the unmanaged portion of the runoff was discharged from the site.

(v) *Offsite Retrofitting Projects*

Riverside Copermittee Redlines

~~The Copermittee may allow Priority Development Projects to utilize offsite retrofitting projects to comply with the storm water pollutant control and hydromodification management BMP performance requirements of Provisions E.3.c.(1) and E.3.c.(2) if the retrofitting projects have been identified within the strategies included in the Water Quality Improvement Plan, or identified as potential retrofitting projects by the Copermittee pursuant to Provision E.5.~~

~~(vi) *Offsite Channel, Stream, or Habitat Rehabilitation Projects*~~

~~The Copermittee may allow Priority Development Projects to utilize offsite channel, stream, or habitat rehabilitation projects to comply with the hydromodification management BMP performance requirements of Provision E.3.c.(2) if the rehabilitation projects have been identified within the strategies included in the Water Quality Improvement Plan, or identified as potential channel rehabilitation projects by the Copermittee pursuant to Provision E.5. The channel, stream, or habitat rehabilitation project cannot be utilized for pollutant treatmentexcept where artificial wetlands areand located upstream of receiving waters.~~

~~(vii) *Offsite Regional Water Supply Augmentation Projects*~~

~~The Copermittee may allow Priority Development Projects to utilize offsite regional water supply augmentation projects (i.e. groundwater recharge, recycled water, storm water harvesting) to comply with the storm water pollutant control and hydromodification management BMP performance requirements of Provisions E.3.c.(1) and E.3.c.(2) if the projects have been identified within the strategies included in the Water Quality Improvement Plan.~~

~~(viii) *Project Applicant Proposed Alternative Compliance Projects*~~

~~The Copermittee may allow one or more Priority Development Project applicant(s) to propose and implement alternative compliance projects to comply with the storm water pollutant control and hydromodification management BMP performance requirements of Provisions E.3.c.(1) and E.3.c.(2) if the alternative compliance projects are consistent with, and will address the highest water quality priorities of the Water Quality Improvement Plan, and comply with the requirements of Provision E.3.c.(3)(a).~~

(c) Alternative Compliance In-Lieu Fee Option

The Copermittee may develop and implement an alternative compliance in-lieu fee option, individually or with other Copermittees and/or entities, as a means for designing, developing, constructing, operating and/or maintaining offsite alternative compliance projects under Provision E.3.c.(3)(b). Priority Development Projects allowed to utilize the

Riverside Copermittee Redlines

alternative compliance in-lieu fee option must comply with the following conditions:

(i) The in-lieu fee must be collected and held in accordance with the Mitigation Fee Act and all other applicable development fee laws. ~~transferred to the Copermittee (for public projects) or an escrow account (for private projects) prior to the date construction of the Priority Development Project is initiated~~.

(ii) If the in-lieu fee is applied to the development, design, ~~and~~ construction, operation and maintenance of offsite alternative compliance projects, the following conditions must be met:

[a] The offsite alternative compliance projects must meet ~~allow~~ the criteria identified within E.3.c.(3)(b), for each Priority Development Project relying on~~to comply with~~ the alternative compliance project;~~onsite BMP performance requirements of Provisions E.3.c.(1) and E.3.c.(2);~~

[b] The offsite alternative compliance projects must be constructed as soon as possible, but no later than 4 years after the certificate of occupancy is granted for the first Priority Development Project that contributed funds toward the construction of the offsite alternative compliance projects, unless a longer period of time is provided for in an approved WQIP~~authorized by the San Diego Water Board Executive Officer~~;

~~[c] The in-lieu fee for the Priority Development Project must include mitigation of the pollutant loads and increased storm water flow rates and durations that are allowed to discharge from the site before the offsite alternative compliance projects are constructed; and~~

[d] The in-lieu fee must also include the cost to operate and maintain the offsite alternative compliance projects for the anticipated life of the constructed priority development project.

(iii) If the in-lieu fee applies only~~is applied~~ to the operation and maintenance of offsite alternative compliance projects that have already been constructed, the offsite alternative compliance projects must meet~~allow~~ the requirements of E.3.c.(3)(a)(iv) and (v) as applicable, for each Priority Development Project relying on~~to comply with~~ the alternative compliance project..~~onsite structural BMP performance requirements of Provisions E.3.c.(1) and E.3.c.(2).~~

(d) Alternative Compliance Water Quality Credit System Option

The Copermittee may develop and implement an alternative compliance water quality credit system option, individually or with other Copermittees

Comment [A97]: Please see Legal Comments.

Riverside Copermittee Redlines

and/or entities, provided that such a credit system clearly exhibits that it will not allow discharges from Priority Development Projects to cause or contribute to a net impact over and above the impact caused by projects meeting the onsite structural BMP performance requirements of Provisions E.3.c.(1) and E.3.c.(2). Any credit system that a Copermittee chooses to implement must be submitted to the San Diego Water Board Executive Officer for review and acceptance as part of the Water Quality Improvement Plan.

(4) Long-Term Structural BMP Maintenance

Each Copermittee must require the project applicant to submit proof of the mechanism under which ongoing long-term maintenance of all structural BMPs will be conducted.

(5) Infiltration and Groundwater Protection

(a) Structural BMPs designed to primarily function as large, centralized infiltration devices (such as large infiltration trenches and infiltration basins) must not cause or contribute to an exceedance of an applicable groundwater quality objective. At a minimum, such infiltration BMPs must be in conformance with the design criteria listed below, unless the development project applicant demonstrates to the Copermittee that one or more of the specific design criteria listed below are not necessary to protect groundwater quality. The design criteria listed below do not apply to small infiltration systems dispersed throughout a development project.

(i) Runoff must undergo pretreatment such as sedimentation or filtration prior to infiltration;

(ii) Pollution prevention and source control BMPs must be implemented at a level appropriate to protect groundwater quality at sites where infiltration BMPs are to be used;

(iii) Infiltration BMPs must be adequately maintained to remove pollutants in storm water to the MEP;

(iv) The vertical distance from the base of any infiltration BMP to the seasonal high groundwater mark must be at least 10 feet. Where groundwater basins do not support beneficial uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained;

(v) The soil through which infiltration is to occur must have physical and chemical characteristics (e.g., appropriate cation exchange capacity, organic content, clay content, and infiltration rate) which are adequate for proper infiltration durations and treatment of runoff for the protection of groundwater beneficial uses;

(vi) Infiltration BMPs must not be used for areas of industrial or light

Riverside Copermittee Redlines

industrial activity, and other high threat to water quality land uses and activities as designated by each Copermittee, unless first treated or filtered to remove pollutants prior to infiltration; and

(vii) Infiltration BMPs must be located a minimum of 100 feet horizontally from any water supply wells.

(b) The Copermittee may develop, individually or with other Copermittees, alternative mandatory design criteria to that listed above for infiltration BMPs which are designed to primarily function as centralized infiltration devices. Before implementing the alternative design criteria in the development planning process the Copermitee(s) must:

(i) Notify the San Diego Water Board of the intent to implement the alternative design criteria submitted; and

(ii) Comply with any conditions set by the San Diego Water Board.

d. BMP DESIGN MANUAL UPDATE

Each Copermittee must update and implement its BMP Design Manual[32] pursuant to Provision F.2.b. ~~Until the Copermittee has updated its BMP Design Manual with the requirements of Provisions E.3.a-c, the Copermittee must continue implementing its current BMP Design Manual. Unless directed otherwise by the San Diego Water Board, the Copermittee must implement the BMP Design Manual within 180 days of completing the update.~~ The update of the BMP Design Manual must include the following:

Comment [A98]: This info was incorporated into F.2.b.

(1) Updated procedures to determine the nature and extent of storm water requirements applicable to a potential development or redevelopment projects. These procedures must inform project applicants of the storm water management requirements applicable to their project including, but not limited to, general requirements for all development projects, structural BMP design procedures and requirements, hydromodification management requirements, requirements specific to phased projects, and procedures specific to private developments and public improvement projects;

(2) Updated procedures to identify ~~pollutants and conditions of concern for selecting~~ the most appropriate structural BMPs that consider, at a minimum, the following:

(a) The requirements of E.3.c.(1) and (2)

~~(a)~~(b) Receiving water quality (including pollutants for which receiving waters are listed as impaired under the CWA section 303(d) List);

[32] The BMP Design Manual was formerly known as the Standard Storm Water Mitigation Plan under Order Nos. R9-2007-0001, R9-2009-0002, and R9-2010-0016.

Riverside Copermittee Redlines

~~(b)~~(c) Pollutants, stressors, and/or receiving water conditions that cause or contribute to the highest priority water quality conditions identified in the Water Quality Improvement Plan;

~~(c)~~(d) Land use type of the project and pollutants associated with that land use type; and

~~(d)~~(e) Pollutants expected to be present onsite.

(3) Updated procedures for designing structural BMPs, including any updated performance requirements to be consistent with the requirements of Provision E.3.c for all structural BMPs listed in the BMP Design Manual;

(4) Long-term maintenance criteria for each structural BMP listed in the BMP Design Manual; and

(5) Alternative compliance criteria, in accordance with the requirements under Provision E.3.c.(3), if the Copermittee elects to allow Priority Development Projects within its jurisdiction to utilize alternative compliance.

e. PRIORITY DEVELOPMENT PROJECT BMP IMPLEMENTATION AND OVERSIGHT

Each Copermittee must implement a program that requires and confirms structural BMPs on all Priority Development Projects are designed, constructed, and maintained to remove pollutants in storm water to the MEP.

(1) Structural BMP Approval and Verification Process

(a) Each Copermittee must require and confirm that for all Priority Development Project applications that have not received prior lawful approval by the Copermittee by 18 months after the commencement of coverage under this Order, the requirements of Provision E.3 are implemented. For project applications that have received prior lawful approval by 18 months after the commencement of coverage under this Order, the Copermittee may allow previous land development requirements to apply.

(b) Each Copermittee must identify the roles and responsibilities of their various municipal departments in implementing the structural BMP requirements, including each stage of a project from application review and approval through BMP maintenance and inspections.

(c) Each Copermittee must require and confirm that appropriate easements and ownerships are properly recorded in public records and the information is conveyed to all appropriate parties when there is a change in project or site ownership.

Riverside Copermittee Redlines

(d) Each Copermittee must require and confirm that prior to occupancy and/or intended use of any portion of the Priority Development Project, each structural BMP is inspected to verify that it has been constructed and is operating in compliance with all of its specifications, plans, permits, ordinances, and the requirements of this Order.

(2) Priority Development Project Inventory and Prioritization

(a) Each Copermittee must develop, maintain, and update ~~at~~regularly~~at least annually~~, a watershed-based database to track and inventory all constructed Priority Development Projects and associated structural BMPs within its jurisdiction. Inventories must be accurate and complete beginning from January 2002 for the San Diego County Copermittees, February 2003 for the Orange County Copermittees, and July 2005 for the Riverside County Copermittees~~.~~, where data is available.~~.~~ The use of an automated database system, such as GIS, is highly recommended. The database must include, at a minimum, the following information:

(i) Priority Development Project location (address and hydrologic subarea);

(ii) Descriptions of structural BMP type(s);

(iii) Date(s) of construction;

(iv) Party responsible for structural BMP maintenance;

(v) Dates and findings of structural BMP maintenance verifications; and

(vi) Corrective actions and/or resolutions when applicable.

(b) Each Copermittee must prioritize the Priority Development Projects with structural BMPs within its jurisdiction. The designation of Priority Development Projects as high priority must consider the following:

(i) The highest water quality priorities identified in the Water Quality Improvement Plan;

(ii) Receiving water quality;

(iii) Number and sizes of structural BMPs;

(iv) Recommended maintenance frequency of structural BMPs;

(v) Likelihood of operation and maintenance issues of structural BMPs;

(vi) Land use and expected pollutants generated; and

(vii) Compliance record.

(3) Structural BMP Maintenance Verifications and Inspections

Each Copermittee is required to verify that structural BMPs on each Priority

Riverside Copermittee Redlines

Development Project are adequately maintained, and continue to operate effectively to remove pollutants in storm water to the MEP through inspections, self-certifications, surveys, or other equally effective approaches.

(a) All (100 percent) of the structural BMPs at Priority Development Projects that are designated as high priority must be inspected directly by the Copermittee annually prior to each rainy season;

(b) For verifications performed through a means other than direct Copermittee inspection, adequate documentation must be required by the Copermittee to provide assurance that the required maintenance of structural BMPs at each Priority Development Project has been completed; and

(c) Appropriate follow-up measures (including re-inspections, enforcement, etc.) must be conducted to ensure that structural BMPs at each Priority Development Project continue to reduce pollutants in storm water to the MEP as originally designed.

f. DEVELOPMENT PROJECT ENFORCEMENT

Each Copermittee must enforce its legal authority established pursuant to Provision E.1 for all development projects, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision E.6.

g. ~~STRATEGIES TO ADDRESS THE HIGHEST PRIORITY WATER QUALITY CONDITIONS~~

Comment [A99]: This section was moved to the beginning of provision E.3.

~~Each Copermittee must describe in its jurisdictional runoff management program document the strategies and/or activities that will be implemented as part of the development planning program to address development and redevelopment projects that may become sources of pollutants and/or stressors that contribute to the highest priority water quality conditions in the Watershed Management Area as follows:~~

~~(5) Provide specific details about how the strategies and/or activities will be implemented (e.g. designate additional BMPs, focus education, increase frequency of verifications and/or inspections, alternative compliance options);~~

~~(6) Each Copermittee must identify areas within its jurisdiction where Priority Development Projects may be allowed or should be encouraged to implement or contribute toward the implementation of alternative compliance retrofitting and/or stream, channel, or habitat rehabilitation projects;~~

~~(7) Each Copermittee should collaborate and cooperate with other Copermittees and/or entities in the Watershed Management Area to identify regional alternative compliance projects that Priority Development Projects may be allowed or should be encouraged to implement or participate in implementing; and~~

Riverside Copermittee Redlines

~~(8) The strategies and/or activities must be consistent with the requirements of Provisions E.3.a-c and E.3.e-f and the strategies identified in the Water Quality Improvement Plan.~~

4. Construction Management

Each Copermittee must implement a construction management program in accordance with the strategies identified in the Water Quality Improvement Plan and includes, at a minimum, the following requirements:

STRATEGIES TO ADDRESS THE HIGHEST PRIORITY WATER QUALITY CONDITIONS

Comment [A100]: This section was moved from provision E.4.f, Changes are shown in Redline

Each Copermittee must describe in its jurisdictional runoff management program document the strategies and/or activities that will be implemented as part of the construction management program to address construction sites that the Copermittee has identified as potential sources of pollutants and/or stressors that contribute to the highest priority water quality conditions in the Watershed Management Area as follows:

(1) Provide specific details about how the strategies and/or activities will be implemented (e.g. designate additional BMPs, focus education, and/or increase/decrease frequency of inspections for specific types of sites and/or activities); and

(2) The strategies and/or activities must be consistent with the requirements of Provisions E.4.c-e and the strategies identified in the Water Quality Improvement Plan.

(3) The requirements of the programs as outlined in the following sub-provisions may be modified and prioritized as appropriate for consistency with the highest water quality priorities and strategies as identified in the corresponding Water Quality improvement Plan(s).

a. PROJECT APPROVAL PROCESS

Prior to issuance of any local permit(s) that allows the commencement of construction projects that involve ground disturbance or soil disturbing activities that has the reasonable potential to discharge a pollutant load to and from the MS4, as defined in each Copermittees' JRMP~~can potentially generate pollutants in storm water runoff~~, each Copermittee must:

(1) Require a ~~site-specific~~ Pollution Control Plan~~pollution control~~, construction BMP, and/or erosion and sediment control plan, to be submitted by the project applicant to the Copermittee;

Riverside Copermittee Redlines

(2) Confirm the Pollution Control Plan~~pollution control~~, construction BMP, and/or erosion and sediment control plan, complies with the local grading ordinance, other applicable local ordinances, and the requirements of this Order;

(3) Confirm the Pollution Control Plan~~pollution control~~, construction BMP, and/or erosion and sediment control plan, includes seasonally appropriate and effective BMPs and management measures described in Provision E.4.c, as applicable to the project; and

(4) Verify that the project applicant has obtained coverage under ~~applicable permits, including, but not limited to~~ the Construction General Permit~~, Clean Water Act Section 401 Water Quality Certification and Section 404 Permit, and California Department of Fish and Game Streambed Alteration Agreement~~.

b. CONSTRUCTION SITE INVENTORY AND TRACKING

(1) Each Copermittee must maintain, and update ~~at least monthly~~regularly, a watershed-based inventory of all construction projects issued a local permit that allows ground disturbance or soil disturbing activities that can potentially generate pollutants in storm water runoff. The use of an automated database system, such as GIS, is highly recommended. The inventory must include:

(a) Relevant contact information for each site (e.g., name, address, phone, and email for the owner and contractor);

(b) The basic site information including location (address and hydrologic subarea), Waste Discharge Identification (WDID) number (if applicable), size of the site, and approximate area of disturbance;

(c) Whether or not the site is considered a high threat to water quality, as defined in Provision E.4.b.(2) below;

(d) The project start and ~~anticipated~~ completion dates;

~~(e) Current construction phase;~~

~~(f)~~(e) The required inspection frequency, as defined in the Copermittee's jurisdictional runoff management program document;

~~(g)~~(f) The date the Copermittee accepted and/or approved the ~~site-specific~~ pollution control plan, construction BMP, and/or erosion and sediment control plan; and

~~(h)~~(g) Whether or not there are ongoing enforcement actions administered to the site.

Comment [A101]: Some of the info can only be updated based on an inspection, which may or may not be monthly year round for all sites.

Comment [A102]: The anticipated completion date is often unknown and can fluctuate based on unpredictable and unforeseen circumstances. Keeping track of accurate dates in an inventory would be difficult and would not add significant value to the database. Construction Inspectors keep a close eye on the progress of projects and would not need to rely on inventory data to achieve effective stormwater management and oversight. Once a project is completed, the date can be entered into the database,.

Riverside Copermittee Redlines

(2) Each Copermittee must identify all construction sites within its jurisdiction that represent a high threat to downstream surface water quality. The designation of construction sites as high threat to water quality must consider the following:

(a) Sites located within a hydrologic subarea where sediment is known or suspected to contribute to the highest priority water quality conditions identified in the Water Quality Improvement Plan;

(b) Sites located within the same hydrologic subarea and tributary to a water body segment listed as impaired for sediment on the CWA section 303(d) List;

(c) Sites located within, directly adjacent to, or discharging directly to a receiving water within an ESA; and

(d) Other sites determined by the Copermittees or the San Diego Water Board as a high threat to water quality.

c. CONSTRUCTION SITE BMP IMPLEMENTATION

Each Copermittee must implement, or require the implementation of effective BMPs (for Copermittee construction sites and private construction sites, respectively) to reduce discharges of pollutants in ~~storm water~~ runoff from construction sites to the MEP, and effectively prohibit~~prevent~~ non-storm water discharges from construction sites into the MS4. These BMPs must be site specific, seasonally appropriate, and construction phase appropriate. BMPs must be implemented at each construction site year round. Dry season BMP implementation must plan for and address unseasonal rain events that may occur during the dry season (May 1 through September 30). Copermittees must implement, or require the implementation of, BMPs in the following categories:

(1) Project Planning;

(2) Good Site Management "Housekeeping", including waste management;

(3) Non-storm Water Management;

(4) Erosion Control;

(5) Sediment Control;

(6) Run-on and Run-off Control; and

(7) Active/Passive Sediment Treatment Systems, where applicable.

Comment [A103]: See discussion in section 3.9.1 of the comment letter.

Riverside Copermittee Redlines

d. CONSTRUCTION SITE INSPECTIONS

Each Copermittee must conduct construction site inspections to require and confirm compliance with its local permits and applicable local ordinances, and the requirements of this Order. Priority for site inspections must consider threat to water quality pursuant to Provision E.4.b as well as the nature of the construction activity, topography, and the characteristics of soils and receiving water quality.

(1) Inspection Frequency

(a) Each Copermittee must conduct inspections at all inventoried sites, including high threat to water quality sites, at an appropriate frequency for each phase of construction to confirm~~ensure~~ the site reduces the discharge of pollutants in runoff~~storm water~~ from construction sites to the MEP, and effectively prevents non-storm water discharges from entering the MS4.

(b) Each Copermittee must establish appropriate inspection frequencies for high threat to water quality sites, and all other sites, for each phase of construction. Inspection frequencies appropriate for addressing the highest water quality priorities identified in the Water Quality Improvement Plan, and for complying with the requirements of this Order must be identified in each Copermittee's jurisdictional runoff management program document.

(c) Based upon inspection findings, each Copermittee must implement all follow-up actions (i.e., re-inspection, enforcement) necessary to require and confirm site compliance with its local permits and applicable local ordinances, and the requirements of this Order.

(2) Inspection Content

Inspections of construction sites by the Copermittee must include, at a minimum:

(a) Verification of coverage under the Construction General Permit (Notice of Intent (NOI) and/or WDID number) during initial inspections, when applicable;

(b) Assessment of compliance with its local permits and applicable local ordinances related to pollution prevention, including the implementation and maintenance of applicable BMPs;

(c) Assessment of BMP adequacy and effectiveness;

(d) Visual observations of actual non-storm water discharges;

Riverside Copermittee Redlines

(e) Visual observations of actual or potential discharge of sediment and/or construction related materials from the site;

(f) Visual observations of actual or potential illicit connections; and

(g) If any violations are found and BMP corrections are needed, inspectors must take and document appropriate actions in accordance with the Enforcement Response Plan pursuant to Provision E.6.

(3) Inspection Tracking and Records

Each Copermittee must track all inspections and re-inspections at all inventoried construction sites. The Copermittee must retain all inspection records in an electronic database or tabular format, which must be made available to the San Diego Water Board upon request. Inspection records must include, at a minimum:

(a) Site name, location (address and hydrologic subarea), and WDID number (if applicable);

(b) Inspection date;

(c) Weather condition during~~Approximate amount of rainfall since last~~ inspection;

(d) Description of problems observed with BMPs and indication of need for BMP addition/repair/replacement and any scheduled re-inspection, and date of re-inspection;

(e) Descriptions of any other specific inspection comments which must, at a minimum, include rationales for longer compliance time;

(f) Description of enforcement actions issued in accordance with the Enforcement Response Plan pursuant to Provision E.6; and

(g) Resolution of problems noted and date problems fixed.

e. CONSTRUCTION SITE ENFORCEMENT

Each Copermittee must enforce its legal authority established pursuant to Provision E.1 for all its inventoried construction sites, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision E.6.

5. Existing Development Management

Comment [A104]: See discussion in section 3.10 of the comment letter.

Riverside Copermittee Redlines

Each Copermittee must implement an existing development management program in accordance with the strategies identified in the Water Quality Improvement Plan. and includes, at a minimum, the following requirements:

STRATEGIES TO ADDRESS THE HIGHEST PRIORITY WATER QUALITY CONDITIONS

Comment [A105]: Moved from sub-provision e. Changes shown in redline

Each Copermittee must implement the water quality improvement strategies, where necessary, to address areas of existing development within its jurisdiction that are identified as sources of pollutants and/or stressors contributing to the highest priority water quality conditions in the Watershed Management Area. For the existing development management program, the following strategies must be implemented:

(1) Specific Existing Development Management Program Strategies

Each Copermittee must describe in its jurisdictional runoff management program document the strategies and/or activities that will be implemented within its jurisdiction to address areas of existing development that the Copermittee has identified as sources of pollutants and/or stressors that contribute to the highest priority water quality conditions in the Watershed Management Area as follows:

(a) Provide specific details about how the strategies and/or activities will be implemented (e.g. designate additional BMPs, focus education, and/or increase/decrease frequency of inspections for specific types of facilities, areas and/or activities);

(b) The facilities and/or areas within the Copermittee's jurisdiction where the strategies and/or activities will be implemented; and

(2) The requirements of the programs as outlined in the following sub-provisions may be modified and prioritized as appropriate for consistency with the highest water quality priorities and strategies as identified in the corresponding Water Quality improvement Plan(s). ~~The strategies and/or activities must be consistent with the requirements of Provisions E.5.b-d and the strategies identified in the Water Quality Improvement Plan.~~

a. EXISTING DEVELOPMENT INVENTORY AND TRACKING

Each Copermittee must maintain, and update at least annually, a watershed-based inventory of the existing development within its jurisdiction that ~~may~~has the reasonable potential to~~may~~ discharge a high priority pollutant load to and from the MS4, as defined in the Copermittee's JRMP. The use of an automated database system, such as GIS, is highly recommended. The inventory must, at a minimum, evaluate and include the following if identified as a source of a high priority pollutant~~include~~:

Riverside Copermittee Redlines

(1) Name, location (hydrological subarea and address, if applicable) of the following types of existing development with its jurisdiction:

(a) Commercial facilities or areas;

(b) Industrial facilities;

(c) Copermittee owned Municipal facilities, including:

(i) MS4 and related structures,[33]

(ii) Roads, streets, and highways,

(iii) Parking facilities,

(iv) Municipal airfields,

(v) Parks and recreation facilities,

(vi) Flood management projects and flood control devices and structures,

(vii) Operating or closed municipal landfills,

(viii) Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewer collection systems,

(ix) Corporate yards, including maintenance and storage yards for materials, waste, equipment, and vehicles,

(x) Hazardous waste collection facilities,

(xi) Other treatment, storage or disposal facilities for municipal waste, and

(xii) Other Copermittee owned municipal facilities that the Copermittee determines may contribute a significant high priority pollutant load to the MS4; and

(d) Residential areas, which may be designated by one or more of the following:

(i) Residential management area,

(ii) Drainage basin or area,

(iii) Land use (e.g., single family, multi-family, rural),

(iv) Neighborhood,

[33] The inventory may refer to the MS4 map required to be maintained pursuant to Provision E.2.b.(1).

Riverside Copermittee Redlines

(v) Common Interest Area,

(vi) Home Owner Association,

(vii) Mobile home park, and/or

(viii) Other designations accepted by the San Diego Water Board Executive Officer.

(2) A description of the facility or area, including the following information:

(a) Classification as commercial, industrial, municipal, or residential;

(b) Status of facility or area as active or inactive;

(c) Identification if a business is a mobile business;

(d) SIC Code or NAICS Code, if applicable;

(e) Industrial General Permit NOI and/or WDID number, if applicable;

(f) Identification if a residential area is or includes a Common Interest Area / Home Owner Association, or mobile home park;

(g) Identification of pollutants generated and potentially generated by the facility or area;

(h) Whether the facility or area is adjacent to an ESA;

(i) Whether the facility or area is tributary to and within the same hydrologic subarea as a water body segment listed as impaired on the CWA section 303(d) List and generates pollutants for which the water body segment is impaired; and

(j) Whether the facility or area contributes or potentially contributes to the highest priority water quality conditions identified in the Water Quality Improvement Plan.

(3) An annually updated map showing the location of inventoried existing development, watershed boundaries, and water bodies.

b. EXISTING DEVELOPMENT BMP IMPLEMENTATION AND MAINTENANCE

Each Copermittee must designate a minimum set of BMPs required for all inventoried existing development, including special event venues. The designated minimum BMPs must be specific to facility or area types and pollutant generating activities, as appropriate.

Riverside Copermittee Redlines

(1) Commercial, Industrial, and Municipal Facilities and Areas

(a) Pollution Prevention

Each Copermittee must require the use of appropriate pollution prevention methods by the commercial, industrial, and municipal facilities and areas in its inventoried existing development, as determined necessary by the Copermittee to address the priorities and strategies addressed in the WQIP.

(b) BMP Implementation

Each Copermittee must ~~implement, or~~ require the implementation of, designated BMPs at commercial facilities and areas, industrial facilities, and implement designated BMPs at municipal facilities in its inventoried existing development, as determined necessary by the Copermittee to address the priorities and strategies addressed in the WQIP.

Comment [A106]: See discussion in section 3.10.2 of the comment letter.

(c) BMP Operation and Maintenance

(i) Each Copermittee must properly operate and maintain, or require the proper operation and maintenance of designated BMPs at commercial facilities and areas, industrial facilities, and municipal facilities in its inventoried existing development.

(ii) Each Copermittee must implement a schedule of operation and maintenance activities for its MS4 and related structures (including but not limited to catch basins, storm drain inlets, detention basins, etc.), and verify proper operation of all its municipal structural treatment controls designed to reduce pollutants (including floatables) in storm water discharges to or from its MS4s and related drainage structures. Operation and maintenance activities may include, but is not limited to, the following:

[a] Inspections of the MS4 and related structures;
[b] Cleaning of the MS4 and related structures; and
[c] Proper disposal of materials removed from cleaning of the MS4 and related structures.

(iii) Each Copermittee must implement a schedule of operation and maintenance for public streets, unpaved roads, paved roads, and paved highways and freeways within its jurisdiction to minimize pollutants that can be discharged in storm water.

(iv) Each Copermittee must implement the following controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers:

[a]. Copermittees that operate both a municipal sanitary sewer system and a MS4 must implement controls and measures to

Riverside Copermittee Redlines

prevent and eliminate seeping sewage from infiltrating the MS4.

[b]~~-~~ Copermittees that do not operate both a municipal sanitary sewer system and a MS4 must coordinate with sewering agencies to keep themselves informed of relevant and appropriate maintenance activities and sanitary sewage projects in their jurisdiction that may cause or contribute to seepage of sewage into the MS4.

(d) Pesticides, Herbicides, and Fertilizers BMPs

Each Copermittee must ~~implement BMPs, or~~ require the implementation of BMPs, to reduce pollutants in runoff~~storm water~~ discharges to the MEP and effectively prohibit non-storm water discharges associated with the application, storage, and disposal of pesticides, herbicides and fertilizers from commercial facilities and areas, industrial facilities;~~,~~ and implement such BMPs at municipal facilities in its inventoried existing development. Such BMPs must include, as appropriate, educational activities, permits, certifications and other measures for applicators and distributors.

(2) Residential Areas

(a) Pollution Prevention

Each Copermittee must promote and encourage the use of pollution prevention methods, where appropriate, by the residential areas in its inventoried existing development.

(b) BMP Implementation

Each Copermittee must promote and encourage the implementation of designated BMPs at residential areas in its inventoried existing development.

(c) BMP Operation and Maintenance

Each Copermittee must properly operate and maintain, or require the proper operation and maintenance of designated BMPs at residential areas in its inventoried existing development.

(d) Pesticides, Herbicides, and Fertilizers BMPs

Each Copermittee must promote and encourage the implementation of BMPs to reduce pollutants in runoff~~storm water~~ discharges to the MEP and effectively prohibit non-storm water discharges associated with the application, storage, and disposal of pesticides, herbicides and fertilizers from residential areas in its inventoried existing development.

Comment [A107]: See discussion in section 3.10.2 of the comment letter.

Riverside Copermittee Redlines

c. EXISTING DEVELOPMENT INSPECTIONS

Each Copermittee must conduct inspections of inventoried existing development that have been identified by the Copermittee as having the reasonable potential to discharge pollutant loads from their MS4, to ensure compliance with applicable local ordinances and permits, and the requirements of this Order.

(1) Inspection Frequency

(a) Each Copermittee must establish appropriate inspection frequencies for inventoried existing development in accordance with the following requirements:

(i) At a minimum, inventoried existing development must be inspected once every five years utilizing one or more of the following methods:

[a] Drive-by inspections by Copermittee municipal and contract staff,
[b] Onsite inspections by Copermittee municipal and contract staff, and/or
[c] Inspections by volunteer monitoring or patrol programs trained by the Copermittee;

(ii) The frequency of inspections must be appropriate to confirm that BMPs are being implemented to reduce the discharge of pollutants in runoff~~storm water~~ from the MS4 to the MEP and effectively prohibit non-storm water discharges to the MS4;

(iii) The frequency of inspections must be based on the potential for a facility or area to discharge non-storm water and pollutants in storm water, and should reflect the priorities set forth in the Water Quality Improvement Plan;

~~(iv) Each Copermittee must annually perform onsite inspections of an equivalent of at least 20 percent of the commercial facilities and areas, industrial facilities, and municipal facilities in its inventoried existing development;[34] and~~

~~(v)~~(iv) Inventoried existing development must be inspected by the Copermittee, as needed, in response to valid public complaints and findings from the Copermittee's municipal and contract staff or volunteer monitoring or patrol program inspections.

(b) Based upon inspection findings, each Copermittee must implement all follow-up actions (i.e. education and outreach, re-inspection, enforcement) necessary to require and confirm compliance with its applicable local

Comment [A108]: Recommend keeping this instead of SD proposed 'during the permit term'. The 'during the permit term' language is problematic for businesses that are added to the inventory during the permit term. For example, if a business is added to the inventory one month before the expiration of the permit, it may not be reasonable to expect it to be immediately inspected. It is also problematic for Riverside (and OC?), who may be added to the permit less than two years before the end of the permit term.

Comment [A109]: See discussion in section 3.10.2 of the comment letter.

~~[34] If any commercial, industrial, or municipal facilities or areas require multiple onsite inspections during any given year, those additional inspection may count toward the total annual inspection requirement. This requirement excludes linear municipal facilities (i.e., MS4, streets, roads and highways).~~

Riverside Copermittee Redlines

ordinances and permits and the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision E.6.

(2) Inspection Content

(a) Inspections of existing development by the Copermittee or volunteer monitoring or patrol programs must include, at a minimum:

(i) Visual inspections for actual non-storm water discharges, if present;

(ii) Visual inspections for actual or potential discharge of pollutants, if present;

(iii) Visual inspections for actual or potential illicit connections, if present; and

(iv) Verification that the description of the facility or area in the inventory, required pursuant to Provision E.5.a.(2), has not changed.

(b) Onsite inspections of existing development by the Copermittee must include, at a minimum:

(i) Assessment of compliance with its applicable local ordinances and permits related to non-storm water and storm water discharges and runoff;

(ii) Assessment of the implementation of the designated BMPs;

(iii) Verification of coverage under the Industrial General Permit, when applicable; and

(iv) If any problems or violations are found, inspectors must take and document appropriate actions in accordance with the Enforcement Response Plan pursuant to Provision E.6.

(3) Inspection Tracking and Records

Each Copermittee must track all inspections and re-inspections at all inventoried existing development. The Copermittee must retain all inspection records in an electronic database or tabular format, which must be made available to the San Diego Water Board upon request. Inspection records must include, at a minimum:

(a) Name and location of facility or area (address and hydrologic subarea) consistent with the inventory name and location, pursuant to Provision E.5.a.(1);

(b) Inspection and re-inspection date(s);

(c) Inspection method(s) (i.e. drive-by, onsite);

Riverside Copermittee Redlines

(d) Observations and findings from the inspection(s);

(e) For onsite inspections of existing development by Copermittee municipal or contract staff, the records must also include, as applicable:

(i) Description of any problems or violations found during the inspection(s),

(ii) Description of enforcement actions issued in accordance with the Enforcement Response Plan pursuant to Provision E.6, and

(iii) The date problems or violations were resolved.

d. EXISTING DEVELOPMENT ENFORCEMENT

Each Copermittee must enforce its legal authority established pursuant to Provision E.1 for all its inventoried existing development, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision E.6.

e. RETROFITTING AND REHABILITATION~~STRATEGIES TO ADDRESS THE HIGHEST PRIORITY WATER QUALITY CONDITIONS~~

~~Each Copermittee must implement the water quality improvement strategies, where necessary, to address areas of existing development within its jurisdiction that are identified as sources of pollutants and/or stressors contributing to the highest priority water quality conditions in the Watershed Management Area. For the existing development management program, the following strategies must be implemented:~~

~~(3)~~ Specific Existing Development Management Program Strategies

~~Each Copermittee must describe in its jurisdictional runoff management program document the strategies and/or activities that will be implemented within its jurisdiction to address areas of existing development that the Copermittee has identified as sources of pollutants and/or stressors that contribute to the highest priority water quality conditions in the Watershed Management Area as follows:~~

~~(a) Provide specific details about how the strategies and/or activities will be implemented (e.g. designate additional BMPs, focus education, and/or increase/decrease frequency of inspections for specific types of facilities, areas and/or activities);~~

~~(b) The facilities and/or areas within the Copermittee's jurisdiction where the strategies and/or activities will be implemented; and~~

Riverside Copermittee Redlines

~~(c)~~(a) ~~The strategies and/or activities must be consistent with the requirements of Provisions E.5.b-d and the strategies identified in the Water Quality Improvement Plan.~~

~~(4)~~(3) Retrofitting Areas of Existing Development

Where identified in the WQIP as a required strategy to address the highest priority water quality conditions, each~~Each~~ Copermittee must describe in its jurisdictional runoff management program document, a program to retrofit areas of existing development within its jurisdiction to address identified sources of pollutants and/or stressors that contribute to the highest priority water quality conditions in the Watershed Management Area. The program must be implemented as follows:

(a) Each Copermittee must, where necessary pursuant to the strategies identified in the WQIP, identify areas of existing development as candidates for retrofitting, focusing on areas where retrofitting will address pollutants and/or stressors that contribute to the highest priority water quality conditions identified in the Water Quality Improvement Plan;

(b) Candidates for retrofitting projects may be utilized to reduce pollutants that may be discharged in storm water from areas of existing development, and/or address storm water runoff flows and durations from areas of existing development that cause or contribute to hydromodification in receiving waters;

(c) Each Copermittee must develop a strategy to facilitate the implementation of retrofitting projects, where needed in areas of existing development identified as candidates;

(d) Each Copermittee should identify areas of existing development where Priority Development Projects may be allowed or should be encouraged to implement or contribute toward the implementation of alternative compliance retrofitting projects; and

(e) Where retrofitting projects within specific areas of existing development are determined to be infeasible to address the highest priority water quality conditions in the Water Quality Improvement Plan, the Copermittee should collaborate and cooperate with other Copermittees and/or entities in the Watershed Management Area to identify, develop, and implement regional retrofitting projects (i.e. projects that can receive and/or treat storm water from one or more areas of existing development and will result in a net benefit to water quality and the environment) adjacent to and/or downstream of the areas of existing development.

Riverside Copermittee Redlines

~~(5)~~(4) Stream, Channel and/or Habitat Rehabilitation in Areas of Existing Development

Where identified in the WQIP as a required strategy to address the highest priority water quality conditions, each~~Each~~ Copermittee must describe in its jurisdictional runoff management program document, a program to rehabilitate streams, channels, and/or habitats in areas of existing development within its jurisdiction to address the highest priority water quality conditions in the Watershed Management Area. The program must be implemented as follows:

(a) Each Copermittee must, where necessary pursuant to the strategies identified in the WQIP, identify streams, channels, and/or habitats in areas of existing development as candidates for rehabilitation, focusing on areas where stream, channel, and/or habitat rehabilitation projects will address the highest priority water quality conditions identified in the Water Quality Improvement Plan;

(b) Candidates for stream, channel, and/or habitat rehabilitation projects may be utilized to address storm water runoff flows and durations from areas of existing development that cause or contribute to hydromodification in receiving waters, rehabilitate channelized or hydromodified streams, restore wetland and riparian habitat, restore watershed functions, and/or ~~restore~~ protect beneficial uses of receiving waters;

(c) Each Copermittee must develop a strategy to facilitate the implementation of stream, channel, and/or habitat rehabilitation projects, where needed, in areas of existing development identified as candidates;

(d) Each Copermittee should identify areas of existing development where Priority Development Projects may be allowed or should be encouraged to implement or contribute toward the implementation of alternative compliance stream, channel, and/or habitat rehabilitation projects; and

(e) Where stream, channel, and/or habitat rehabilitation projects within specific areas of existing development are determined to be infeasible to address the highest priority water quality conditions in the Water Quality Improvement Plan, the Copermittee should collaborate and cooperate with other Copermittees and/or entities in the Watershed Management Area to identify, develop, and implement regional stream, channel, and/or habitat rehabilitation projects (i.e. projects that can receive storm water from one or more areas of existing development and will result in a net benefit to water quality and the environment).

(5) Upon Regional Board Executive Officer approval the Copermittees may reallocate resources in the WQIPs for retrofit and rehabilitation project(s).

Riverside Copermittee Redlines

6. Enforcement Response Plans

Each Copermittee must develop and implement an Enforcement Response Plan as part of its jurisdictional runoff management program document. The Enforcement Response Plan must describe the applicable approaches and options to enforce its legal authority established pursuant to Provision E.1, as necessary, to achieve compliance with the requirements of this Order. Copermittees may continue to utilize and implement established, equivalent guidelines and procedures for enforcement. If such equivalent guidelines and procedures have not been developed, ~~T~~the Enforcement Response Plan must include the following:

a. Enforcement Response Plan Components

The Enforcement Response Plan must include the following individual components:

(1) Illicit Discharge Detection and Elimination Enforcement Component;

(2) Development Planning Enforcement Component;

(3) Construction Management Enforcement Component; and

(4) Existing Development Enforcement Component.

b. Enforcement Response Approaches and Options

Each component of the Enforcement Response Plan must describe the enforcement response approaches that the Copermittee will implement to compel compliance with its statutes, ordinances, permits, contracts, orders, or similar means, and the requirements of this Order. The description must include the protocols for implementing progressively stricter enforcement responses. The enforcement response approaches must include appropriate sanctions, as legally appropriate, to compel compliance, including, at a minimum, the following tools or their equivalent:

(1) Verbal and written notices of violation;

(2) Cleanup requirements;

(3) Fines;

(4) Bonding requirements;

Riverside Copermittee Redlines

(5) Administrative and criminal (if intentional or criminally negligent) penalties;

(6) Liens;

(7) Stop work orders; and

(8) Permit and occupancy denials.

c. CORRECTION OF VIOLATIONS

(1) Violations must be corrected in a timely manner with the goal of correcting the violations within 30 calendar days after the violations are discovered, or prior to the next predicted rain event, whichever is sooner.

(2) The status of the enforcement actions ~~If more than 30 calendar days are required to achieve compliance, then a rationale~~ must be recorded and updated in the applicable electronic database or tabular system used to track violations.

d. ~~ESCALATED~~ PROGRESSIVE ENFORCEMENT

(1) The Enforcement Response Plan must include a definition of "~~escalated~~ progressive enforcement." ~~Escalated~~ Progressive enforcement must include a series of enforcement actions that match the severity of the violations and include distinct, progressive steps. ~~any enforcement scenario where a violation or other non-compliance is determined to cause or contribute to the highest priority water quality conditions identified in the Water Quality Improvement Plan~~. ~~Escalated~~ Progressive enforcement may be defined differently for development planning, construction sites, commercial facilities or areas, industrial facilities, municipal facilities, and/or residential areas.

(2) Where the Copermittee determines ~~escalated~~ the identified progressive enforcement steps ~~is~~are not required, a rationale must be recorded in the applicable electronic database or tabular system used to track violations.

(3) ~~Escalated~~ Progressive enforcement actions must continue to increase in severity, as necessary, to compel compliance as soon as possible.

e. REPORTING OF NON-COMPLIANT SITES

(1) Each Copermittee must notify the San Diego Water Board in writing within ~~22~~5 calendar~~2 working~~ days of issuing escalated enforcement (as defined in the Copermittee's Enforcement Response Plan) to a construction site that poses a significant threat to water quality as a result of violations or other non-compliance with its permits and applicable local ordinances, and the requirements of this Order. Written notification may be provided electronically by email.

Comment [A110]: This is just asking for paperwork violations if someone forgets to write a specific justification – even if all appropriate steps are being diligently pursued. Request alternatively to simply require that the status be updated as appropriate.

Comment [A111]: See discussion in section 3.11.2 of the comment letter.

Riverside Copermittee Redlines

(2) Each Copermittee must notify the San Diego Water Board of non-filers under the Industrial General Permit and Construction General Permit by email to Nonfilers_R9@waterboards.ca.gov.

7. Public Education and Participation

Each Copermittee must implement, individually or with other Copermittees, a public education and participation program in accordance with the strategies identified in the Water Quality Improvement Plan to promote and encourage the development of programs, management practices, and behaviors that reduce the discharge of pollutants in runoff~~storm water~~ to the MEP, prevent controllable non-storm water discharges from entering the MS4, and protect water quality standards in receiving waters.

STRATEGIES TO ADDRESS THE HIGHEST PRIORITY WATER QUALITY CONDITIONS

Comment [A112]: Recommended move from (c)

Each Copermittee must describe in its jurisdictional runoff management program document the strategies and/or activities that will be implemented within its jurisdiction, as applicable, to educate the public and encourage public participation to address potential sources of pollutants and/or stressors that contribute to the highest priority water quality conditions in the Watershed Management Area as follows:

(1) The target audiences and/or areas within the Copermittee's jurisdiction where the strategies and/or activities will be implemented;

(2) Provide specific details about how the strategies and/or activities will be implemented (e.g. educational topics, materials and/or activities, public outreach and participation programs and/or opportunities);

(3) Each Copermittee should collaborate and cooperate with other Copermittees and/or entities in the Watershed Management Area to identify and implement regional public education and participation activities, programs and opportunities;

(4) Each Copermittee must incorporate a mechanism for evaluating and assessing educational and other public outreach activities, as needed, to identify progress and incorporate modifications necessary to increase the effectiveness of the public education and participation program.

(5) The requirements of the programs as outlined in the following sub-provisions

Riverside Copermittee Redlines

may be modified and prioritized as appropriate for consistency with the highest water quality priorities and strategies as identified in the corresponding Water Quality improvement Plan(s).

a. PUBLIC EDUCATION

The public education program component implemented within the Copermittee's jurisdiction must include, at a minimum, the following:

(1) Educational activities, public information activities, and other appropriate outreach activities intended to reduce pollutants associated with the ~~application of pesticides, herbicides and fertilizer and other pollutants of concern in storm water discharges to and from its MS4 to the MEP, as determined and prioritized by the Copermittee(s) by jurisdiction and/or watershed to address the~~ highest priority water quality conditions identified in the Water Quality Improvement Plan;

(2) Educational activities, public information activities, and other appropriate outreach activities to facilitate the proper management and disposal of used oil and toxic materials; and

(3) Appropriate education and training measures for specific target audiences, such as construction site operators, residents, underserved target audiences and school-aged children, as determined and prioritized by the Copermittee(s) by jurisdiction and/or watershed, based on high risk behaviors and pollutants of concern.

b. PUBLIC PARTICIPATION

The public participation program component implemented within the Copermittee's jurisdiction must include, at a minimum, the following:

(1) A process for members of the public to participate in updating the highest priority water quality conditions, numeric goals, and water quality improvement strategies in the Water Quality Improvement Plan.

(2) Opportunities for members of the public to participate in providing the Copermittee recommendations for improving the effectiveness of the water quality improvement strategies implemented within its jurisdiction.

(3) Opportunities for members of the public to participate in programs and/or activities that can result in the prevention or elimination of non-storm water discharges to the MS4, reduction of pollutants in ~~storm wate~~r discharges from

Riverside Copermittee Redlines

the MS4, and/or ~~restoration and~~ protection of the quality of receiving waters.

8. Fiscal Analysis

a. ~~Each Copermittee must secure the resources necessary to meet all the requirements of this Order~~.

b. Each Copermittee must conduct an annual fiscal analysis of its jurisdictional runoff management program in its entirety. The fiscal analysis must include the following:

(1) Identification of the various categories of expenditures necessary to implement the requirements of this Order, including a description of the specific capital, operation and maintenance, and other expenditure items to be accounted for in each category of expenditures;

(2) The staff resources needed and allocated to meet the requirements of this Order, including any development, implementation, and enforcement activities required;

(3) The estimated expenditures for Provisions E.8.b.(1) and E.8.b.(2) for the current fiscal year; and

(4) The source(s) of funds that are proposed to meet the necessary expenditures described in Provisions E.8.b.(1) and E.8.b.(2), including legal restrictions on the use of such funds, for the current fiscal year and next fiscal year.

c. Each Copermittee must submit a summary of the annual fiscal analysis with each Annual Report required pursuant to Provision F.3.b.

d. Each Copermittee must provide the documentation used to develop the summary of the annual fiscal analysis upon request by the San Diego Water Board.

Comment [A113]: Since the monitoring period is different than a fiscal year, we won't be able to consistently and accurately report monitoring costs incurred by the Copermittees. (which are a big part of overall budgets)

Comment [A114]: Please see Legal Comments.

Riverside Copermittee Redlines

F. REPORTING

Comment [A115]: See discussion in section 3.14 of the comment letter.

The purpose of this provision is to determine and document compliance with the requirements set forth in this Order. The goal of reporting is to communicate to the San Diego Water Board and the people of the State of California the implementation status of each jurisdictional runoff management program and compliance with the requirements of this Order. This goal is to be accomplished through the submittal of specific deliverables to the San Diego Water Board by the Copermittees.

1. Water Quality Improvement Plans

Comment [A116]: See discussion in section 3.14.1 of the comment letter.

The Copermittees for each Watershed Management Area must develop and submit the Water Quality Improvement Plan in accordance with the following requirements:

a. Water Quality Improvement Plan Development

Each Water Quality Improvement Plan must be developed in accordance with the following process:

(1) Priority Water Quality Conditions and Numeric Goals

(a) The Copermittees must implement a public participation process to solicit data and information to be utilized in the development and identification of the priority water quality conditions for the Watershed Management Area.

(b) The Copermittees are encouraged to involve the public and key stakeholders as early and often as possible during the development of the priority water quality conditions and numeric goals to be included in the Water Quality Improvement Plan.

(c) Within 6 months after the commencement of coverage under this Order, the Copermittees must develop and submit the Water Quality Improvement Plan requirements of Provision B.2 to the San Diego Water Board. The San Diego Water Board will issue a public notice and solicit public comments on the Water Quality Improvement Plan for a minimum of 60 days.

(d) The Copermittees must revise the priority water quality conditions and numeric goals based on comments received and/or recommendations or direction from the San Diego Water Board Executive Officer.

(2) Water Quality Improvement Strategies and Schedules

(a) The Copermittees are encouraged to involve the public and key stakeholders as early and often as possible during the development of the water quality improvement strategies and schedules to be included in the Water Quality Improvement Plan.

Riverside Copermittee Redlines

(b) Within 9 months after receiptthe commencement of public comments and/or recommendations from the Executive Officer per (1)(c) abovecoverage under this Order, the Copermittees must develop and submit the Water Quality Improvement Plan requirements of Provision B.3 to the San Diego Water Board. The San Diego Water Board will issue a public notice and solicit public comments on the Water Quality Improvement Plan for a minimum of 60 days.

(c) The Copermittees must revise the water quality improvement strategies and schedules based on comments received and/or recommendations or direction from the San Diego Water Board Executive Officer.

b. WATER QUALITY IMPROVEMENT PLAN SUBMITTAL

(1) Within 618 months after receiptthe commencement of public comments and/or recommendations from the Executive Officer per (2)(c) abovecoverage under this Order, the Copermittees for each Watershed Management Area must submit a complete Water Quality Improvement Plan in accordance with the requirements of Provision B to the San Diego Water Board. The San Diego Water Board will issue a public notice and solicit public comments on the Water Quality Improvement Plan for a minimum of 30 days.

(2) Based on the comments received, the San Diego Water Board will determine whether to hold a public hearing or to limit public input to submittal of written comments. If no hearing is held the San Diego Water Board will notify the Copermittees within 6 months that the Water Quality Improvement Plan has been accepted as complete following its review and determination that the Water Quality Improvement Plan meets the requirements of this Order.

(3) The Copermittees must revise the Water Quality Improvement Plan based on comments received and/or recommendations or direction from the San Diego Water Board Executive Officer.

(4) The Water Quality Improvement Plan must be made available on the Regional Clearinghouse required pursuant to Provision F.4 within 30 days of acceptance by the San Diego Water Board.

(5) Copermittees must commence with implementation of the BMP strategies identified in the Water Quality Improvement Plan no later than the fiscal year (July 1) following San Diego Water Board approval of the Water Quality Improvement Plan, and the monitoring strategies identified in the Water Quality Improvement Plan no later than October 1st (or May 1st, whichever is sooner) following the San Diego Water Board approval of the Water Quality Improvement Plan.

Riverside Copermittee Redlines

2. Updates

Comment [A117]: See discussion in section 3.14.1 of the comment letter.

a. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATES

Each Copermittee must update its jurisdictional runoff management program document in accordance with the following requirements:

(1) Each Copermittee is encouraged to involve the public and key stakeholders as early and often as possible to solicit recommendations for updates to its jurisdictional runoff management program document.

(2) Each Copermittee must update its jurisdictional runoff management program document to incorporate the requirements of Provision E and the strategies identified in the applicable WQIPs no later than 6~~18~~ months after approval~~the commencement~~ of the applicable Water Quality Improvement Plans (or updates thereto).~~coverage under this Order.~~

(3) The updated JRMP document must be implemented beginning July 1st following completion of the update, unless directed otherwise by the Executive Officer.

~~(3)~~(4) Each Copermittee must submit any subsequent updates to its jurisdictional runoff management program, with a rationale for the modifications, either in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge required pursuant to Provision F.5.b.

~~(4)~~(5) The Copermittee must revise the modifications as directed by the San Diego Water Board Executive Officer.

~~(5)~~(6) Updated jurisdictional runoff management program documents must be made available on the Regional Clearinghouse required pursuant to Provision F.4 within 30 days of submitting the Annual Report.

b. BMP DESIGN MANUAL UPDATES

Each Copermittee must update its BMP Design Manual in accordance with the following requirements:

(1) Each Copermittee must update its BMP Design Manual to incorporate the requirements of Provisions E.3.a-d, and E.3.g. no later than 6~~18~~ months after approval~~the commencement~~ of the applicable Water Quality Improvement Plans..

Comment [A118]: This is necessary for the WQIP strategies to inform the Development Planning process

(2) Unless directed otherwise by the San Diego Water Board, the Copermittee must implement the updated BMP Design Manual within 180 days of

Comment [A119]: An implementation date was missing from the Tentative Order

Riverside Copermittee Redlines

completing updates to the BMP Design Manual.

~~(1)~~(3) Until the Copermittee begins implementation of its updated BMP Design Manual, the Copermittee must continue implementing its current BMP Design Manual~~coverage under this Order~~.

Comment [A120]: This was moved to here

~~(2)~~(4) Subsequent updates must be consistent with the requirements of Provisions E.3.a-d and must be submitted as part of the Annual Reports required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge required pursuant to Provision F.5.b.

~~(3)~~(5) Updated BMP Design Manuals must be made available on the Regional Clearinghouse required pursuant to Provision F.4 within 30 days of completing the update.

c. Water Quality Improvement Plan Updates

The Water Quality Improvement Plans must be updated in accordance with the following process:

(1) The Copermittees must implement a public participation process to solicit data and information to be utilized in updating the Water Quality Improvement Plan.

(2) The Copermittees are encouraged to involve the public and key stakeholders as early and often as possible during the updates to the Water Quality Improvement Plan.

(3) The Copermittees for each Watershed Management Area must submit requested updates to the Water Quality Improvement Plan, with the public input received and the rationale for the requested updates, either in the Annual Reports required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge required pursuant to Provision F.5.b. The requested updates are considered accepted by the San Diego Water Board if no response is provided to the Copermittee after 3 months of submitting the request.

(4) The Copermittees must revise the requested updates as directed by the San Diego Water Board Executive Officer.

(5) Updated Water Quality Improvement Plans must be made available on the Regional Clearinghouse required pursuant to Provision F.4 within 30 days of acceptance of the requested updates by the San Diego Water Board.

3. Progress Reporting

Comment [A121]: See discussion in section 3.14.1 of the comment letter.

Riverside Copermittee Redlines

a. PROGRESS REPORT PRESENTATIONS

The Copermittees for each Watershed Management Area must appear before the San Diego Water Board, as requested by the San Diego Water Board, to provide progress reports on the implementation of the Water Quality Improvement Plan and jurisdictional runoff management programs.

b. ANNUAL REPORTS

Comment [A122]: See discussion in section 3.14.1 of the comment letter.

(1) Transitional Period JRMP Reports: Each Copermittee must complete and submit a Jurisdictional Runoff Management Program Annual Report Form (Attachment D or accepted revision) no later than October 31 of each year prior to the implementation of updated JRMP programs pursuant to F.2.a. Each Copermittee must submit the information on the Jurisdictional Runoff Management Program Annual Report Form specific to the area within its jurisdiction in each Watershed Management Area.

(2) Transitional Period Monitoring Report: The transitional period monitoring conducted pursuant to D.1.a and D.2.a. shall be reported in a single report that covers the entire reporting period from the initiation of the transitional period monitoring (as described in D.1.a and D.2.a.), through September 30th following approval of the Water Quality Improvement Plan. The Transitional Period Monitoring Report shall include the assessments required per D.4.a.(1)(a), D.4.b.(1)(a) and D.4.b.(2)(a); and be submitted by January 31st following completion of the above mentioned transitional period.

~~(1)~~(3) Post-Transitional Annual Reports – Following the initial transitional period after enrollment into this Order, the~~The~~ Copermittees for each Watershed Management Area must submit an combined Annual Report for each reporting period no later than January 31 of the following year. The annual reporting period consists of two periods: 1) July 1 to June 30 of the following year for the jurisdictional runoff management programs, 2) October 1 to September 30 of the following year for the monitoring and assessment programs~~. The first Annual Report must be prepared for the reporting period beginning July 1 after commencement of coverage under this Order, and upon San Diego Water Board determination that the Water Quality Improvement Plan meets the requirements of this Order to June 30 in the following year for the jurisdictional runoff management programs, and September 30 in the following year for the monitoring and assessment programs.~~ Annual Reports must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Each Annual Report must include the following:

(a) The receiving water and MS4 outfall discharge monitoring data collected pursuant to Provisions D.1 and D.2, summarized and presented in tabular and graphical form;

Riverside Copermittee Redlines

(b) Progress of the special studies required pursuant to Provision D.3, and the results or findings when a special study, or each phase of a special study, is completed;

(c) The findings from the applicable assessments required pursuant to Provision D.4;

Comment [A123]: Not all are required annually.

(d) The progress of implementing the Water Quality Improvement Plan, including, but not limited to, the following:

(i) The progress toward achieving the interim and final numeric goals for the highest water quality priorities for the Watershed Management Area,

(ii) The water quality improvement strategies that were implemented and/or no longer implemented by each of the Copermittees during the reporting period and previous reporting periods, and are planned to be implemented during the next reporting period,

(iii) Proposed modifications to the water quality improvement strategies, with public input received and rationale for the proposed modifications,

(iv) Previously proposed modifications or updates incorporated into the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document and implemented by the Copermittees in the Watershed Management Area, and

(v) Proposed modifications or updates to the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document;

(e) A completed Jurisdictional Runoff Management Program Annual Report Form (Attachment D or accepted revision) for each Copermittee in the Watershed Management Area, certified by a Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative.

~~(2) Each Copermittee must complete and submit a Jurisdictional Runoff Management Program Annual Report Form (Attachment D or accepted revision) no later than October 31 of each year until the first Annual Report is required to be submitted. Each Copermittee must submit the information on the Jurisdictional Runoff Management Program Annual Report Form specific to the area within its jurisdiction in each Watershed Management Area.~~

Comment [A124]: Adapted into new section (1)

~~(3)~~(4) Each Copermittee must provide any data or documentation utilized in

Riverside Copermittee Redlines

developing the Annual Report upon request by the San Diego Water Board. ~~AnyAny~~Copermittee~~Any~~ monitoring data utilized in developing the Annual Report must be uploaded to the California Environmental Data Exchange Network (CEDEN).[35] Any Copermittee monitoring and assessment data utilized in developing the Annual Report must be provided on the Regional Clearinghouse required pursuant to Provision F.4.

c. Regional Monitoring and Assessment Report

(1) The Copermittees must submit a Regional Monitoring and Assessment Report no later than 180 days in advance of the expiration date of this Order. The Regional Monitoring and Assessment Report may be submitted as part of the Report of Waste Discharge required pursuant to Provision F.5.b. The Regional Monitoring and Assessment Report shall incorporate the Integrated Assessment of the Water Quality Improvement Plan per D.4.d.

~~(1) The Copermittees must review the receiving water and MS4 outfall discharge monitoring data collected pursuant to Provisions D.1 and D.2, and findings from the assessments required pursuant to Provision D.4, to assess the following:~~

~~(2)~~

~~(3) The beneficial uses of the receiving waters within the San Diego Region that are protected or must be restored;~~

~~(4)~~

~~(5) The progress toward restoring impacted beneficial uses in the receiving waters within the San Diego Region; and~~

~~(6)~~

~~(7) Pollutants or conditions of emerging concern that may impact beneficial uses in the receiving waters within the San Diego Region.~~

~~(8)~~

~~(9) The Regional Monitoring and Assessment Report must include recommendations for improving the implementation and assessment of the Water Quality Improvement Plans and jurisdictional runoff management programs.~~

(2) Each Copermittee must provide any data or documentation utilized in developing the Regional Monitoring and Assessment Report upon request by the San Diego Water Board. Any monitoring and assessment data utilized in developing the Regional Monitoring and Assessment Report must be provided on the Regional Clearinghouse required pursuant to Provision F.4.

[35] Data must be uploaded to CEDEN Southern California Regional Data Center (http://www.sccwrp.org/Data/DataSubmission/SouthernCaliforniaRegionalDataCenter.aspx) using the templates provided on the CEDEN website.

Riverside Copermittee Redlines

4. Regional Clearinghouse

The Copermittees must develop, update, and maintain an internet-based Regional Clearinghouse that is made available to the public no later than 18 months after the effective date of this Order.[36]

a. The Copermittees, through the Regional Clearinghouse, must make the following documents and data available, organized by Watershed Management Area, which may be linked to other internet-based data portals and databases where the original documents are stored:

(1) Water Quality Improvement Plan for the Watershed Management Area, and all updated versions with date of update;

(2) Annual Reports for the Watershed Management Area;

(3) Jurisdictional Runoff Management Program document for each Copermittee within the Watershed Management Area, and all updated versions with date of update;

(4) BMP Design Manual for each Copermittee within the Watershed Management Area, and all updated versions with date of update;

(5) Reports from special studies (e.g. source identification, BMP effectiveness assessment) conducted in the Watershed Management Area;

(6) Monitoring data collected pursuant to Provision D for each Watershed Management Area must be uploaded to CEDEN,[37] with links to the uploaded data; and

(7) Available GIS data, layers, and/or shapefiles used to develop the maps generated and maintained by the Copermittees for the Water Quality Improvement Plans, Annual Reports, and jurisdictional runoff management program documents.

b. The Copermittees, through the Regional Clearinghouse, must make the following information and documents available:

(1) Contact information (point of contact, phone number, email address, and mailing address) for each Copermittee;

[36] The Copermittee may elect to develop and maintain the clearinghouse(s) provided by other Copermittees or agencies.

[37] Data must be uploaded to CEDEN Southern California Regional Data Center (http://www.sccwrp.org/Data/DataSubmission/SouthernCaliforniaRegionalDataCenter.aspx) using the templates provided on the CEDEN website.

Riverside Copermittee Redlines

(2) Public hotline number for reporting non-storm water and illicit discharges for each Copermittee;

(3) Email address for reporting non-storm water and illicit discharges for each Copermittee;

(4) Link to each Copermittee's website, if available, where the public may find additional information about the Copermittee's storm water management program and for requesting records for the implementation of its program;

(5) Information about opportunities for the public to participate in programs and/or activities that can result in the prevention or elimination of non-storm water discharges to the MS4, reduction of pollutants in ~~storm water~~ discharges from the MS4, and/or restoration and protection of the quality of receiving waters; and

(6) Reports from regional monitoring programs in which the Copermittees participate (e.g. Southern California Monitoring Coalition, Southern California Coastal Water Research Project Bight Monitoring);

(7) Regional Monitoring and Assessment Reports; and

(8) Any other information, data, and documents the Copermittees determine as appropriate for making available to the public.

5. Report of Waste Discharge

a. The Orange County Copermittees and the Riverside County Copermittees are required to submit a complete Report of Waste Discharge pursuant to the requirements of their current Orders. The San Diego Water Board will review and consider the Reports of Waste Discharge to determine whether modification to this Order, pursuant to the requirements of Provision H, will be required prior the Orange County Copermittees and/or Riverside County Copermittees becoming covered under this Order. The current Orders for the Orange County Copermittees and Riverside County Copermittees are rescinded upon notification of coverage under this Order except for enforcement purposes.

b. The Copermittees subject to the requirements of this Order must submit to the San Diego Water Board a complete Report of Waste Discharge as an application for the re-issuance of this Order and NPDES permit. The Report of Waste Discharge must be submitted no later than 180 days in advance of the expiration date of this Order. The Report of Waste Discharge must contain the following minimum information:

(1) Names and addresses of the Copermittees;

Riverside Copermittee Redlines

(2) Names and titles of the primary contacts of the Copermittees;

(3) Proposed changes to the Copermittees' Water Quality Improvement Plans and the supporting justification;

(4) Proposed changes to the Copermittees' jurisdictional runoff management programs and the supporting justification;

(5) Any other information necessary for the re-issuance of this Order;

(6) Any information to be included as part of the Report of Waste Discharge pursuant to the requirements of this Order; and

(7) Any other information required by federal regulations for NPDES permit reissuance.

6. Application for Early Coverage

a. The Orange County Copermittees, collectively, or Riverside County Copermittees, collectively, may apply for early coverage under this Order by submitting a Report of Waste Discharge Form 200 with a written request for early coverage under this Order.

Comment [A125]: This form requests information that is not applicable to MS4s.

b. The San Diego Water Board will review the application for early coverage. A notification of coverage under this Order will be issued to the Copermittees in the respective county by the San Diego Water Board upon completion of the early coverage application requirements. The effective coverage date will be specified in the notification of coverage. The Copermittees in the respective county are authorized to have MS4 discharges pursuant to the requirements of this Order starting on the effective coverage date specified in the notification of coverage. The existing Order for the respective county is rescinded upon the effective coverage date specified in the notification of coverage except for enforcement purposes.

7. Reporting Provisions

Each Copermittee must comply with all the reporting and recordkeeping provisions of the Standard Permit Provisions and General Provisions contained in Attachment B to this Order.

Riverside Copermittee Redlines

G. PRINCIPAL WATERSHED COPERMITTEE RESPONSIBILITIES

1. The Copermittees within each Watershed Management Area must designate a Principal Watershed Copermittee and notify the San Diego Water Board of the name of the Principal Watershed Copermittee. ~~An individual Copermittee should not be designated a Principal Watershed Copermittee for more than two Watershed Management Areas.~~ The notification may be submitted with the Water Quality Improvement Plan required pursuant to Provision F.1 of this Order.

2. The Principal Watershed Copermittee is responsible for, at a minimum, the following:

a. Serving as liaison between the Copermittees in the Watershed Management Area and the San Diego Water Board on general permit issues, and when necessary and appropriate, representing the Copermittees in the Watershed Management Area before the San Diego Water Board.

b. Facilitating the development of the Water Quality Improvement Plan in accordance with the requirements of Provision B of this Order

c. Coordinating the submittal of the deliverables required by Provisions F.1, F.2, F.3.a, and F.3.b of this Order.

d. Coordinating the development of~~and developing~~, with the other Principal Watershed Copermittees, the requirements of Provisions F.3.c, F.4, and F.5.b of this Order.

Riverside Copermittee Redlines

H. MODIFICATION OF PROGRAMS

1. Modifications of the Order may be initiated by the San Diego Water Board or by the Copermittees, including as part of the ROWD process applicable to the Orange County and Riverside County Copermittees. Requests by Copermittees must be made to the San Diego Water Board.

2. Minor modifications to the Order may be made by the San Diego Water Board Executive Officer, where the proposed modification complies with all the effective prohibitions and limitations, and other requirements of this Order.

3. Proposed modifications to the Order outside of the WQIP process that are not minor require amendment of this Order in accordance with this Order's rules, policies, and procedures.

4. The San Diego Water Board may re-open and modify this Order at any time prior to its expiration, after opportunity for public comment and a public hearing, if the State Water Board determines that revisions are warranted to those provisions of the Order addressing compliance with water quality standards in the receiving water and/or those provisions of the Order establishing an iterative process for implementation of management practices to assure compliance with water quality standards in the receiving water.

Riverside Copermittee Redlines

I. STANDARD PERMIT PROVISIONS AND GENERAL PROVISIONS

Each Copermittee must comply with all the Standard Permit Provisions and General Provisions contained in Attachment B to this Order.

Riverside Copermittee Redlines

ATTACHMENT A

DISCHARGE PROHIBITIONS AND SPECIAL PROTECTIONS

1. Basin Plan Waste Discharge Prohibitions

California Water Code Section 13243 provides that a Regional Water Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste or certain types of waste is not permitted. The following waste discharge effective prohibitions in the Water Quality Control Plan for the San Diego Basin (Basin Plan) are applicable to any person, as defined by Section 13050(c) of the California Water Code, who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

1. The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code Section 13050, is prohibited.

2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code Section 13264 is prohibited.

3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by a National Pollutant Discharge Elimination System (NPDES) permit or a dredged or fill material permit (subject to the exemption described in California Water Code Section 13376) is prohibited.

4. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this San Diego Water Board issues a NPDES permit authorizing such a discharge; the proposed discharge has been approved by the State Department of Health Services (DHS) and the operating agency of the impacted reservoir; and the discharger has an approved fail-safe long-term disposal alternative.

5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the San Diego Water Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.

6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the San Diego Water Board.

Riverside Copermittee Redlines

7. The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the San Diego Water Board.

8. Any discharge to a storm water conveyance system that is not composed entirely of "*storm water*" is effectively prohibited unless authorized by the San Diego Water Board. [The federal regulations, 40 CFR 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40 CFR 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities.] [§122.26 amended at 56 FR 56553, November 5, 1991; 57 FR 11412, April 2, 1992].

9. The unauthorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited.

10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in California Water Code Section 13264, is prohibited.

11. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the state is prohibited.

12. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited.

13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the San Diego Water Board.

14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the state or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.

15. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.

16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.

17. The discharge of treated sewage from vessels to portions of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.

18. The discharge of treated sewage from vessels, which do not have a properly functioning US Coast Guard certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep at mean lower low water (MLLW) is prohibited.

Riverside Copermittee Redlines

2. Attachment B to State Water Board Resolution 2012-0012

Special Protections for Areas of Special Biological Significance, Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges

I. PROVISIONS FOR POINT SOURCE DISCHARGES OF STORM WATER AND NONPOINT SOURCE WASTE DISCHARGES

The following terms, effective prohibitions, and special conditions (hereafter collectively referred to as special conditions) are established as limitations on point source storm water and nonpoint source discharges. These special conditions provide Special Protections for marine aquatic life and natural water quality in Areas of Special Biological Significance (ASBS), as required for State Water Quality Protection Areas pursuant to California Public Resources Code Sections 36700(f) and 36710(f). These Special Protections are adopted by the State Water Board as part of the California Ocean Plan (Ocean Plan) General Exception.

The special conditions are organized by category of discharge. The State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (Regional Water Boards) will determine categories and the means of regulation for those categories [e.g., Point Source Storm Water National Pollutant Discharge Elimination System (NPDES) or Nonpoint Source].

A. PERMITTED POINT SOURCE DISCHARGES OF STORM WATER

1. General Provisions for Permitted Point Source Discharges of Storm Water

   a. Existing storm water discharges into an ASBS are allowed only under the following conditions:

      (1) The discharges are authorized by an NPDES permit issued by the State Water Board or Regional Water Board;

      (2) The discharges comply with all of the applicable terms, effective prohibitions, and special conditions contained in these Special Protections; and

      (3) The discharges:

         (i) Are essential for flood control or slope stability, including roof, landscape, road, and parking lot drainage;

         (ii) Are designed to prevent soil erosion;

         (iii) Occur only during wet weather;

         (iv) Are composed of only storm water runoff.

   b. Discharges composed of storm water runoff shall not alter natural ocean water quality in an ASBS.

   c. The discharge of trash is effectively prohibited.

Riverside Copermittee Redlines

d. Only discharges from existing storm water outfalls are allowed. Any proposed or new storm water runoff discharge shall be routed to existing storm water discharge outfalls and shall not result in any new contribution of waste to an ASBS (i.e., no additional pollutant loading). “Existing storm water outfalls” are those that were constructed or under construction prior to January 1, 2005. “New contribution of waste” is defined as any addition of waste beyond what would have occurred as of January 1, 2005. A change to an existing storm water outfall, in terms of re-location or alteration, in order to comply with these special conditions, is allowed and does not constitute a new discharge.

e. Non-storm water discharges are effectively prohibited except as provided below:

(1) The term “non-storm water discharges” means any waste discharges from a municipal separate storm sewer system (MS4) or other NPDES permitted storm drain system to an ASBS that are not composed entirely of storm water.

(2) (i) The following non-storm water discharges are allowed, provided that the discharges are essential for emergency response purposes, structural stability, slope stability or occur naturally:

(a) Discharges associated with emergency fire fighting operations.

(b) Foundation and footing drains.

(c) Water from crawl space or basement pumps.

(d) Hillside dewatering.

(e) Naturally occurring groundwater seepage via a storm drain.

(f) Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain, as long as there are no contributions of anthropogenic runoff.

(ii) An NPDES permitting authority may authorize non-storm water discharges to an MS4 with a direct discharge to an ASBS only to the extent the NPDES permitting authority finds that the discharge does not alter natural ocean water quality in the ASBS.

(3) Authorized non-storm water discharges shall not cause or contribute to a violation of the water quality objectives in Chapter II of the Ocean Plan nor alter natural ocean water quality in an ASBS.

2. Compliance Plans for Inclusion in Storm Water Management Plans (SWMP) and Storm Water Pollution Prevention Plans (SWPPP).

The discharger shall specifically address the effective prohibition of non-storm water runoff and the requirement to maintain natural water quality for storm water discharges to an ASBS in an ASBS Compliance Plan to be included in its SWMP or a SWPPP, as appropriate to permit type. If a statewide permit includes a SWMP, then the discharger shall prepare a stand-alone compliance plan for ASBS discharges. The ASBS Compliance Plan is subject to approval by the Executive Director of the State Water Board (statewide permits) or

Riverside Copermittee Redlines

Executive Officer of the Regional Water Board (for permits issued by Regional Water Boards).

a. The Compliance Plan shall include a map of surface drainage of storm water runoff, showing areas of sheet runoff, prioritize discharges, and describe any structural Best Management Practices (BMPs) already employed and/or BMPs to be employed in the future. Priority discharges are those that pose the greatest water quality threat and which are identified to require installation of structural BMPs. The map shall also show the storm water conveyances in relation to other features such as service areas, sewage conveyances and treatment facilities, landslides, areas prone to erosion, and waste and hazardous material storage areas, if applicable. The SWMP or SWPPP shall also include a procedure for updating the map and plan when changes are made to the storm water conveyance facilities.

b. The ASBS Compliance Plan shall describe the measures by which all non-authorized non-storm water runoff (e.g., dry weather flows) has been eliminated, how these measures will be maintained over time, and how these measures are monitored and documented.

c. For Municipal Separate Storm Sewer System (MS4s), the ASBS Compliance Plan shall require minimum inspection frequencies as follows:

   (1) The minimum inspection frequency for construction sites shall be weekly during rainy season;

   (2) The minimum inspection frequency for industrial facilities shall be monthly during the rainy season;

   (3) The minimum inspection frequency for commercial facilities (e.g., restaurants) shall be twice during the rainy season; and

   (4) Storm water outfall drains equal to or greater than 18 inches (457 mm) in diameter or width shall be inspected once prior to the beginning of the rainy season and once during the rainy season and maintained to remove trash and other anthropogenic debris.

d. The ASBS Compliance Plan shall address storm water discharges (wet weather flows) and, in particular, describe how pollutant reductions in storm water runoff, that are necessary to comply with these special conditions, will be achieved through BMPs. Structural BMPs need not be installed if the discharger can document to the satisfaction of the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits) that such installation would pose a threat to health or safety. BMPs to control storm water runoff discharges (at the end-of-pipe) during a design storm shall be designed to achieve on average the following target levels:

   (1) Table B Instantaneous Maximum Water Quality Objectives in Chapter II of the Ocean Plan; or

   (2) A 90% reduction in pollutant loading during storm events, for the applicant's total discharges. The baseline for the reduction is the effective date of the Exception. The

Riverside Copermittee Redlines

baseline for these determinations is the effective date of the Exception, and the reductions must be achieved and documented within four (4) years of the effective date.

e. The ASBS Compliance Plan shall address erosion control and the prevention of anthropogenic sedimentation in ASBS. The natural habitat conditions in the ASBS shall not be altered as a result of anthropogenic sedimentation.

f. The ASBS Compliance Plan shall describe the non-structural BMPs currently employed and planned in the future (including those for construction activities), and include an implementation schedule. The ASBS Compliance Plan shall include non-structural BMPs that address public education and outreach. Education and outreach efforts must adequately inform the public that direct discharges of pollutants from private property not entering an MS4 are effectively prohibited. The ASBS Compliance Plan shall also describe the structural BMPs, including any low impact development (LID) measures, currently employed and planned for higher threat discharges and include an implementation schedule. To control storm water runoff discharges (at the end-of-pipe) during a design storm, permittees must first consider using LID practices to infiltrate, use, or evapotranspirate storm water runoff on-site.

g. The BMPs and implementation schedule shall be designed to ensure that natural water quality conditions in the receiving water are achieved and maintained by either reducing flows from impervious surfaces or reducing pollutant loading, or some combination thereof.

h. If the results of the receiving water monitoring described in IV.B. of these special conditions indicate that the storm water runoff is causing or contributing to an alteration of natural ocean water quality in the ASBS, the discharger shall submit a report to the State Water Board and Regional Water Board within 30 days of receiving the results.

(1) The report shall identify the constituents in storm water runoff that alter natural ocean water quality and the sources of these constituents.

(2) The report shall describe BMPs that are currently being implemented, BMPs that are identified in the SWMP or SWPPP for future implementation, and any additional BMPs that may be added to the SWMP or SWPPP to address the alteration of natural water quality. The report shall include a new or modified implementation schedule for the BMPs.

(3) Within 30 days of the approval of the report by the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits), the discharger shall revise its ASBS Compliance Plan to incorporate any new or modified BMPs that have been or will be implemented, the implementation schedule, and any additional monitoring required.

(4) As long as the discharger has complied with the procedures described above and is implementing the revised SWMP or SWPPP, the discharger does not have to repeat the same procedure for continuing or recurring exceedances of natural ocean water quality conditions due to the same constituent.

Riverside Copermittee Redlines

(5) Compliance with this section does not excuse violations of any term, effective prohibition, or condition contained in these Special Protections.

3. Compliance Schedule

a. On the effective date of the Exception, all non-authorized non-storm water discharges (e.g., dry weather flow) are effectively prohibited.

b. Within one year from the effective date of the Exception, the discharger shall submit a written ASBS Compliance Plan to the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits) that describes its strategy to comply with these special conditions, including the requirement to maintain natural water quality in the affected ASBS. The ASBS Compliance Plan shall include a time schedule to implement appropriate non-structural and structural controls (implementation schedule) to comply with these special conditions for inclusion in the discharger's SWMP or SWPPP, as appropriate to permit type.

c. Within 18 months of the effective date of the Exception, any non-structural controls that are necessary to comply with these special conditions shall be implemented.

d. Within four (4) years of the effective date of the Exception, any structural controls identified in the ASBS Compliance Plan that are necessary to comply with these special conditions shall be operational.

e. Within four (4) years of the effective date of the Exception, all dischargers must comply with the requirement that their discharges into the affected ASBS maintain natural ocean water quality. If the initial results of post-storm receiving water quality testing indicate levels higher than the 85th percentile threshold of reference water quality data and the pre-storm receiving water levels, then the discharger must re-sample the receiving water, pre- and post-storm. If after re-sampling the post-storm levels are still higher than the 85th percentile threshold of reference water quality data, and the pre-storm receiving water levels, for any constituent, then natural ocean water quality is exceeded. See attached Flowchart.

f. The Executive Director of the State Water Board (statewide permits) or Executive Officer of the Regional Water Board (Regional Water Board permits) may only authorize additional time to comply with the special conditions d. and e., above if good cause exists to do so. Good cause means a physical impossibility or lack of funding.

If a discharger claims physical impossibility, it shall notify the Board in writing within thirty (30) days of the date that the discharger first knew of the event or circumstance that caused or would cause it to fail to meet the deadline in d. or e. The notice shall describe the reason for the noncompliance or anticipated noncompliance and specifically refer to this Section of this Exception. It shall describe the anticipated length of time the delay in compliance may persist, the cause or causes of the delay as well as measures to minimize the impact of the delay on water quality, the measures taken or to be taken by the discharger to prevent or minimize the delay, the schedule by which the measures will be implemented, and the anticipated date of compliance. The discharger shall adopt all reasonable measures to avoid and minimize such delays and their impact on water quality.

Riverside Copermittee Redlines

The discharger may request an extension of time for compliance based on lack of funding. The request for an extension shall require:

(1) for municipalities, a demonstration of significant hardship to discharger ratepayers, by showing the relationship of storm water fees to annual household income for residents within the discharger's jurisdictional area, and the discharger has made timely and complete applications for all available bond and grant funding, and either no bond or grant funding is available, or bond and/or grant funding is inadequate; or
(2) for other governmental agencies, a demonstration and documentation of a good faith effort to acquire funding through that agency's budgetary process.

B. NONPOINT SOURCE DISCHARGES

[NOT INCLUDED]
[PROVISIONS FOR NONPOINT SOURCE DISCHARGES NOT APPLICABLE]

II. ADDITIONAL REQUIREMENTS FOR PARKS AND RECREATION FACILITIES

[NOT INCLUDED]
[ADDITIONAL REQUIREMENTS FOR PARKS AND RECREATION FACILITIES NOT APPLICABLE]

III. ADDITIONAL REQUIREMENTS – WATERFRONT AND MARINE OPERATIONS

[NOT INCLUDED]
[ADDITIONAL REQUIREMENTS FOR WATERFRONT AND MARINE OPERATIONS NOT APPLICABLE]

IV. MONITORING REQUIREMENTS

Monitoring is mandatory for all dischargers to assure compliance with the Ocean Plan. Monitoring requirements include both: (A) core discharge monitoring, and (B) ocean receiving water monitoring. The State and Regional Water Boards must approve sampling site locations and any adjustments to the monitoring programs. All ocean receiving water and reference area monitoring must be comparable with the Water Boards' Surface Water Ambient Monitoring Program (SWAMP).

Safety concerns: Sample locations and sampling periods must be determined considering safety issues. Sampling may be postponed upon notification to the State and Regional Water Boards if hazardous conditions prevail.

Analytical Chemistry Methods: All constituents must be analyzed using the lowest minimum detection limits comparable to the Ocean Plan water quality objectives. For metal analysis, all samples, including storm water effluent, reference samples, and ocean receiving water samples, must be analyzed by the approved analytical method with the lowest minimum detection limits (currently Inductively Coupled Plasma/Mass Spectrometry) described in the Ocean Plan.

Riverside Copermittee Redlines

A. CORE DISCHARGE MONITORING PROGRAM

1. General sampling requirements for timing and storm size:

   Runoff must be collected during a storm event that is greater than 0.1 inch and generates runoff, and at least 72 hours from the previously measurable storm event. Runoff samples shall be collected when post-storm receiving water is sampled, and analyzed for the same constituents as receiving water and reference site samples (see section IV B) as described below.

2. Runoff flow measurements

   a. For municipal/industrial storm water outfalls in existence as of December 31, 2007, 18 inches (457mm) or greater in diameter/width (including multiple outfall pipes in combination having a width of 18 inches, runoff flows must be measured or calculated, using a method acceptable to and approved by the State and Regional Water Boards.
   b. This will be reported annually for each precipitation season to the State and Regional Water Boards.

3. Runoff samples – storm events

   a. For outfalls equal to or greater than 18 inches (0.46m) in diameter or width:

      (1) samples of storm water runoff shall be analyzed during the same storm as receiving water samples for oil and grease, total suspended solids, and, within the range of the southern sea otter indicator bacteria or some other measure of fecal contamination, ; and

      (2) samples of storm water runoff shall be analyzed for critical life stage chronic toxicity (one invertebrate or algal species) at least once during each storm season when receiving water is sampled in the ASBS

      (3) If an applicant has no outfall greater than 36 inches, then storm water runoff from the applicant's largest outfall shall be further analyzed during the same storm as receiving water samples for Ocean Plan Table B metals for protection of marine life, Ocean Plan polynuclear aromatic hydrocarbons (PAHs), current use pesticides (pyrethroids and OP pesticides), and nutrients (ammonia, nitrate and phosphates).

   b. For outfalls equal to or greater than 36 inches (0.91m) in diameter or width:

      (1) samples of storm water runoff shall be analyzed during the same storm as receiving water samples for oil and grease, total suspended solids, and, within the range of the southern sea otter indicator bacteria or some other measure of fecal contamination; and

      (2) samples of storm water runoff shall be further analyzed during the same storm as receiving water samples for Ocean Plan Table B metals for protection of marine life, Ocean Plan polynuclear aromatic hydrocarbons (PAHs), current use pesticides

Riverside Copermittee Redlines

(pyrethroids and OP pesticides), and nutrients (ammonia, nitrate and phosphates) and

(3) samples of storm water runoff shall be analyzed for critical life stage chronic toxicity (one invertebrate or algal species) at least once during each storm season when receiving water is sampled in the ASBS.

c. For an applicant not participating in a regional monitoring program [see below in Section IV (B)] in addition to (a.) and (b.) above, a minimum of the two largest outfalls or 20 percent of the larger outfalls, whichever is greater, shall be sampled (flow weighted composite samples) at least three times annually during wet weather (storm event) and analyzed for all Ocean Plan Table A constituents, Table B constituents for marine aquatic life protection (except for toxicity, only chronic toxicity for three species shall be required), DDT, PCBs, Ocean Plan PAHs, OP pesticides, pyrethroids, nitrates, phosphates, and Ocean Plan indicator bacteria. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one (the largest) such discharge shall be sampled annually in each Region.

4. The Executive Director of the State Water Board (statewide permits) or Executive Officer of the Regional Water Board (Regional Water Board permits) may reduce or suspend core monitoring once the storm runoff is fully characterized. This determination may be made at any point after the discharge is fully characterized, but is best made after the monitoring results from the first permit cycle are assessed.

B. OCEAN RECEIVING WATER AND REFERENCE AREA MONITORING PROGRAM

In addition to performing the Core Discharge Monitoring Program in Section II.A above, all applicants having authorized discharges must perform ocean receiving water monitoring. In order to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within their ASBS, dischargers may choose either (1) an individual monitoring program, or (2) participation in a regional integrated monitoring program.

1. Individual Monitoring Program: The requirements listed below are for those dischargers who elect to perform an individual monitoring program to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within the affected ASBS. In addition to Core Discharge Monitoring, the following additional monitoring requirements shall be met:

   a. Three times annually, during wet weather (storm events), the receiving water at the point of discharge from the outfalls described in section (IV)(A)(3)(c) above shall be sampled and analyzed for Ocean Plan Table A constituents, Table B constituents for marine aquatic life, DDT, PCBs, Ocean Plan PAHs, OP pesticides, pyrethroids, nitrates, phosphates, salinity, chronic toxicity (three species), and Ocean Plan indicator bacteria.

      The sample location for the ocean receiving water shall be in the surf zone at the point of discharges; this must be at the same location where storm water runoff is sampled. Receiving water shall be sampled at approximately the same time prior to (pre-storm) and during (or immediately after) the same storm (post storm). Reference water quality shall also be sampled and analyzed for the same constituents pre-storm and post-storm, during the same storms when receiving water is sampled. Reference stations will be

Riverside Copermittee Redlines

determined by the State Water Board's Division of Water Quality and the applicable Regional Water Board(s).

b. Sediment sampling shall occur at least three times during every five (5) year period. The subtidal sediment (sand or finer, if present) at the discharge shall be sampled and analyzed for Ocean Plan Table B constituents for marine aquatic life, DDT, PCBs, PAHs, pyrethroids, and OP pesticides. For sediment toxicity testing, only an acute toxicity test using the amphipod Eohaustorius estuarius must be performed.

c. A quantitative survey of intertidal benthic marine life shall be performed at the discharge and at a reference site. The survey shall be performed at least once every five (5) year period. The survey design is subject to approval by the Regional Water Board and the State Water Board's Division of Water Quality. The results of the survey shall be completed and submitted to the State Water Board and Regional Water Board at least six months prior to the end of the permit cycle.

d. Once during each five (5) year period, a bioaccumulation study shall be conducted to determine the concentrations of metals and synthetic organic pollutants at representative discharge sites and at representative reference sites. The study design is subject to approval by the Regional Water Board and the State Water Board's Division of Water Quality. The bioaccumulation study may include California mussels (Mytilus californianus) and/or sand crabs (Emerita analoga or Blepharipoda occidentalis). Based on the study results, the Regional Water Board and the State Water Board's Division of Water Quality, may adjust the study design in subsequent permits, or add or modify additional test organisms (such as shore crabs or fish), or modify the study design appropriate for the area and best available sensitive measures of contaminant exposure.

e. Marine Debris: Representative quantitative observations for trash by type and source shall be performed along the coast of the ASBS within the influence of the discharger's outfalls. The design, including locations and frequency, of the marine debris observations is subject to approval by the Regional Water Board and State Water Board's Division of Water Quality.

f. The monitoring requirements of the Individual Monitoring Program in this section are minimum requirements. After a minimum of one (1) year of continuous water quality monitoring of the discharges and ocean receiving waters, the Executive Director of the State Water Board (statewide permits) or Executive officer of the Regional Water Board (Regional Water Board permits) may require additional monitoring, or adjust, reduce or suspend receiving water and reference station monitoring. This determination may be made at any point after the discharge and receiving water is fully characterized, but is best made after the monitoring results from the first permit cycle are assessed.

2. Regional Integrated Monitoring Program: Dischargers may elect to participate in a regional integrated monitoring program, in lieu of an individual monitoring program, to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within their ASBS. This regional approach shall characterize natural water quality, pre- and post-storm, in ocean reference areas near the mouths of identified open space watersheds and the effects of the discharges on natural water quality (physical, chemical, and toxicity) in the ASBS receiving waters, and should include benthic marine aquatic life and bioaccumulation components. The design of the ASBS stratum of a regional integrated monitoring program may deviate from the otherwise prescribed individual

Riverside Copermittee Redlines

monitoring approach (in Section IV.B.1) if approved by the State Water Board's Division of Water Quality and the Regional Water Boards.

a. Ocean reference areas shall be located at the drainages of flowing watersheds with minimal development (in no instance more than 10% development), and shall not be located in CWA Section 303(d) listed waterbodies or have tributaries that are 303(d) listed. Reference areas shall be free of wastewater discharges and anthropogenic non-storm water runoff. A minimum of low threat storm runoff discharges (e.g. stream highway overpasses and campgrounds) may be allowed on a case-by-case basis. Reference areas shall be located in the same region as the ASBS receiving water monitoring occurs. The reference areas for each Region are subject to approval by the participants in the regional monitoring program and the State Water Board's Division of Water Quality and the applicable Regional Water Board(s). A minimum of three ocean reference water samples must be collected from each station, each from a separate storm. A minimum of one reference location shall be sampled for each ASBS receiving water site sampled per responsible party. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one reference station and one receiving water station shall be sampled in each region.

b. ASBS ocean receiving water must be sampled in the surf zone at the location where the runoff makes contact with ocean water (i.e. at "point zero"). Ocean receiving water stations must be representative of worst-case discharge conditions (i.e. co-located at a large drain greater than 36 inches, or if drains greater than 36 inches are not present in the ASBS then the largest drain greater than18 inches.) Ocean receiving water stations are subject to approval by the participants in the regional monitoring program and the State Water Board's Division of Water Quality and the applicable Regional Water Board(s). A minimum of three ocean receiving water samples must be collected during each storm season from each station, each from a separate storm. A minimum of one receiving water location shall be sampled in each ASBS per responsible party in that ASBS. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one reference station and one receiving water station shall be sampled in each region.

c. Reference and receiving water sampling shall commence during the first full storm season following the adoption of these special conditions, and post-storm samples shall be collected when annual storm water runoff is sampled. Sampling shall occur in a minimum of two storm seasons. For those ASBS dischargers that have already participated in the Southern California Bight 2008 ASBS regional monitoring effort, sampling may be limited to only one storm season.

d. Receiving water and reference samples shall be analyzed for the same constituents as storm water runoff samples. At a minimum, constituents to be sampled and analyzed in reference and discharge receiving waters must include oil and grease, total suspended solids, Ocean Plan Table B metals for protection of marine life, Ocean Plan PAHs, pyrethroids, OP pesticides, ammonia, nitrate, phosphates, and critical life stage chronic toxicity for three species. In addition, within the range of the southern sea otter, indicator bacteria or some other measure of fecal contamination shall be analyzed.

3. Waterfront and Marine Operations: In addition to the above requirements for ocean receiving water monitoring, additional monitoring must be performed for marinas and boat launch and pier facilities:

Riverside Copermittee Redlines

a. For all marina or mooring field operators, in mooring fields with 10 or more occupied moorings, the ocean receiving water must be sampled for Ocean Plan indicator bacteria, residual chlorine, copper, zinc, grease and oil, methylene blue active substances (MBAS), and ammonia nitrogen.

   (1) For mooring field operators opting for an individual monitoring program (Section IV.B.1 above), this sampling must occur weekly (on the weekend) from May through October.

   (2) For mooring field operators opting to participate in a regional integrated monitoring program (Section IV.B.2 above), this sampling must occur monthly from May through October on a high use weekend in each month. The Water Boards may allow a reduction in the frequency of sampling, through the regional monitoring program, after the first year of monitoring.

b. For all mooring field operators, the subtidal sediment (sand or finer, if present) within mooring fields and below piers shall be sampled and analyzed for Ocean Plan Table B metals (for marine aquatic life beneficial use), acute toxicity, PAHs, and tributyltin. For sediment toxicity testing, only an acute toxicity test using the amphipod Eohaustorius estuarius must be performed. This sampling shall occur at least three times during a five (5) year period. For mooring field operators opting to participate in a regional integrated monitoring program, the Water Boards may allow a reduction in the frequency of sampling after the first sampling effort's results are assessed.

Riverside Copermittee Redlines

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Riverside Copermittee Redlines

ATTACHMENT B

STANDARD PERMIT PROVISIONS AND GENERAL PROVISIONS

1. Standard Permit Provisions

Code of Federal Regulations Title 40 Section 122.41 (40 CFR 122.41) includes conditions, or provisions, that apply to all National Pollutant Discharge Elimination System (NPDES) permits. Additional provisions applicable to NPDES permits are in 40 CFR 122.42. All applicable provisions in 40 CFR 122.41 and 40 CFR 122.42 must be incorporated into this Order and NPDES permit. The applicable 40 CFR 122.41 and 40 CFR 122.42 provisions are as follows:

a. DUTY TO COMPLY [40 CFR 122.41(a)]

The Copermittee must comply with all of the provisions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

(1) The Copermittee must comply with effluent standards or effective prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or effective prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement. [40 CFR 122.41(a)(1)]

(2) The CWA provides that any person who violates Section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under Section 402, or any requirement imposed in a pretreatment program approved under Section 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who *negligently* violates Section 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA, or any requirement imposed in a pretreatment program approved under Section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates Section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of

Riverside Copermittee Redlines

not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.
[40 CFR 122.41(a)(2)]

(3) Any person may be assessed an administrative penalty by the San Diego Regional Water Quality Control Board (San Diego Water Board), State Water Resources Control Board (State Water Board), or United States Environmental Protection Agency (USEPA) for violating Section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.
[40 CFR 122.41(a)(3)]

b. DUTY TO REAPPLY [40 CFR 122.41(b)]

If a Copermittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Copermittee must apply for and obtain a new permit.

c. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE [40 CFR 122.41(c)]

It shall not be a defense for a Copermittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

d. DUTY TO MITIGATE [40 CFR 122.41(d)]

The Copermittee must take all reasonable steps to minimize or prevent any discharge or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

e. PROPER OPERATION AND MAINTENANCE [40 CFR 122.41(e)]

The Copermittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Copermittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a Copermittee only when the operation is necessary to achieve compliance with the conditions of this permit.

Riverside Copermittee Redlines

f. PERMIT ACTIONS [40 CFR 122.41(f)]

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Copermittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

g. PROPERTY RIGHTS [40 CFR 122.41(g)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

h. DUTY TO PROVIDE INFORMATION [40 CFR 122.41(h)]

The Copermittee must furnish to the San Diego Water Board, State Water Board, or USEPA within a reasonable time, any information which the San Diego Water Board, State Water Board, or USPEA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Copermittee must also furnish to the San Diego Water Board, State Water Board, or USPEA upon request, copies of records required to be kept by this permit.

i. INSPECTION AND ENTRY [40 CFR 122.41(i)]

The Copermittee must allow the San Diego Water Board, State Water Board, USEPA, and/or their authorized representative (including an authorized contractor acting as their representative), upon presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the Copermittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; [40 CFR 122.41(i)(1)]

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; [40 CFR 122.41(i)(2)]

(3) Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; [40 CFR 122.41(i)(3)] and

(4) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location. [40 CFR 122.41(i)(4)]

j. MONITORING AND RECORDS [40 CFR 122.41(j)]

(1) Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity. [40 CFR 122.41(j)(1)]

(2) Except for records of monitoring information required by this permit related to the Copermittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR Part 503), the

Riverside Copermittee Redlines

Copermittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the San Diego Water Board at any time. [40 CFR 122.41(j)(2)]

(3) Records for monitoring information must include: [40 CFR 122.41(j)(3)]

(a) The date, exact place, and time of sampling or measurements; [40 CFR 122.41(j)(3)(i)]
(b) The individual(s) who performed the sampling or measurements; [40 CFR 122.41(j)(3)(ii)]
(c) The date(s) analyses were performed; [40 CFR 122.41(j)(3)(iii)]
(d) The individual(s) who performed the analyses; [40 CFR 122.41(j)(3)(iv)]
(e) The analytical techniques or methods used; [40 CFR 122.41(j)(3)(v)] and
(f) The results of such analyses. [40 CFR 122.41(j)(3)(vi)]

(4) Monitoring must be conducted according to test procedures under 40 CFR Part 136 unless another method is required under 40 CFR Subchapters N or O. [40 CFR 122.41(j)(4)]

In the case of pollutants for which there are no approved methods under 40 CFR Part 136 or otherwise required under 40 CFR Subchapters N and O, monitoring must be conducted according to a test procedure specified in the permit for such pollutants. [40 CFR 122.44(i)(1)(iv)]

(5) The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both. [40 CFR 122.41(j)(5)]

k. SIGNATORY REQUIREMENT [40 CFR 122.41(k)]

(1) All applications, reports, or information submitted to the San Diego Water Board, State Water Board, or USEPA must be signed and certified. (See 40 CFR 122.22) [40 CFR 122.41(k)(1)]

(a) *For a municipality, State, Federal, or other public agency.* [All applications must be signed] [b]y either a principal executive officer or ranking elected official. [40 CFR 122.22(a)(3)]

(b) All reports required by permits, and other information requested by the San Diego Water Board, State Water Board, or USEPA must be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if: [40 CFR 122.22(b)]

Riverside Copermittee Redlines

(i) The authorization is made in writing by a person described in paragraph (a) of this section; [40 CFR 122.22(b)(1)]

(ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [40 CFR 122.22(b)(2)] and,

(iii) The written authorization is submitted to the San Diego Water Board and State Water Board. [40 CFR 122.22(b)(3)]

(c) *Changes to authorization.* If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications to be signed by an authorized representative. [40 CFR 122.22(c)]

(d) *Certification.* Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [40 CFR 122.22(d)]

(2) The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. [40 CFR 122.41(k)(2)]

I. REPORTING REQUIREMENTS [40 CFR 122.41(l)]

(1) *Planned changes.* The Copermittee must give notice to the San Diego Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when: [40 CFR 122.41(l)(1)]

(a) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); [40 CFR 122.41(l)(1)(i)] or

(b) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which

Riverside Copermittee Redlines

are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1). [40 CFR 122.41(l)(1)(ii)]

(c) The alteration or addition results in a significant change in the Copermittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. [40 CFR 122.41(l)(1)(iii)]

(2) *Anticipated noncompliance*. The Copermittee must give advance notice to the San Diego Water Board or State Water Board of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. [40 CFR 122.41(l)(2)]

(3) *Transfers*. This permit is not transferable to any person except after notice to the San Diego Water Board. The San Diego Water Board may require modification or revocation and reissuance of the permit to change the name of the Copermittee and incorporate such other requirements as may be necessary under the CWA. [40 CFR 122.41(l)(3)]

(4) *Monitoring reports.* Monitoring results must be reported at the intervals specified elsewhere in this permit. [40 CFR 122.41(l)(4)]

(a) Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the San Diego Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. [40 CFR 122.41(l)(4)(i)]

(b) If the Copermittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or another method required for an industry-specific waste stream under 40 CFR Subchapters N or O, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the San Diego Water Board or State Water Board. [40 CFR 122.41(l)(4)(ii)]

(c) Calculations for all limitations which require averaging of measurements must utilize an arithmetic mean unless otherwise specified in the permit. [40 CFR 122.41(l)(4)(iii)]

(5) *Compliance schedules*. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. [40 CFR 122.41(l)(5)]

Riverside Copermittee Redlines

(6) *Twenty-four hour reporting.*

(a) The Copermittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally within 24 hours from the time the Copermittee becomes aware of the circumstances. A written submission must also be provided within five (5) days of the time the Copermittee becomes aware of the circumstances. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6)(i)]

(b) The following must be included as information which must be reported within 24 hours under this paragraph: [40 CFR 122.41(l)(6)(ii)]

(i) Any unanticipated bypass that exceeds any effluent limitation in the permit (See 40 CFR 122.41(g)). [40 CFR 122.41(l)(6)(ii)(A)]
(ii) Any upset which exceeds any effluent limitation in the permit. [40 CFR 122.41(l)(6)(ii)(B)] and,
(iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the San Diego Water Board in the permit to be reported within 24 hours. (See 40 CFR 122.44(g)) [40 CFR 122.41(l)(6)(ii)(C)]

(c) The San Diego Water Board may waive the above-required written report on a case-by-case basis if the oral report has been received within 24 hours. [40 CFR 122.41(l)(6)(iii)]

(7) *Other noncompliance.* The Copermittee must report all instances of noncompliance not reported in accordance with the standard provisions required under 40 CFR 122.41(l)(4), (5), and (6), at the time monitoring reports are submitted. The reports must contain the information listed in the standard provisions required under 40 CFR 122.41(l)(6). [40 CFR 122.41(l)(7))]

(8) *Other information.* When the Copermittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the San Diego Water Board, State Water Board, or USEPA, the Copermittee must promptly submit such facts or information. [40 CFR 122.41(l)(8)]

~~**m. BYPASS** [40 CFR 122.41(m)]~~

~~(1) *Definitions.*~~

~~(a) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. [40 CFR 122.41(m)(1)(i)] or~~

~~(b) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be~~

Comment [A126]: While this is a standard condition for NPDES permits, it is manifestly inapplicable to MS4 permits. Since BMPs constructed to comply with the Order include bypass provisions to protect their entirety, the Copermittees would have to notify the Regional Board whenever a storm was predicted. This provision should be deleted.

Riverside Copermittee Redlines

~~expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.~~
~~[40 CFR 122.41(m)(1)(ii)]~~

~~(2) *Bypass not exceeding limitations*. The Copermittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the standard provisions required under 40 CFR 122.41(m)(3) and (4).~~
~~[40 CFR 122.41(m)(2)]~~

~~(3) *Notice.*~~

~~(a) *Anticipated bypass*. If the Copermittee knows in advance of the need for a bypass, it must submit a notice, if possible at least ten days before the date of the bypass. [40 CFR 122.41(m)(3)(i)] or~~

~~(b) *Unanticipated bypass*. The Copermittee must submit notice of an unanticipated bypass in accordance with the standard provisions required under 40 CFR 122.41(l)(6) (24 hour notice).~~
~~[40 CFR 122.41(m)(3)(ii)]~~

~~(4) *Prohibition of Bypass.*~~

~~(a) Bypass is prohibited, and the San Diego Water Board may take enforcement action against a Copermittee for bypass, unless:~~
~~[40 CFR 122.41(m)(4)(i)]~~

~~(i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; [40 CFR 122.41(m)(4)(i)(A)]~~
~~(ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance;~~
~~[40 CFR 122.41(m)(4)(i)(B)] and,~~
~~(iii) The Copermittee submitted notice in accordance with the standard provisions required under 40 CFR 122.41(m)(3).~~
~~[40 CFR 122.41(m)(4)(i)(C)]~~

~~(b) The San Diego Water Board may approve an anticipated bypass, after considering its adverse effects, if the San Diego Water Board determines that it will meet the three conditions listed above.~~
~~[40 CFR 122.41(m)(4)(ii)]~~

~~n.~~m. **UPSET** [40 CFR 122.41(n)]

(1) *Definition.* "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Copermittee. An upset does not

Riverside Copermittee Redlines

include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. [40 CFR 122.41(n)(1)]

(2) *Effect of an upset*. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the standard provisions required under 40 CFR 122.41(n)(3) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. [40 CFR 122.41(n)(2)]

(3) *Conditions necessary for a demonstration of upset*. A Copermittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: [40 CFR 122.41(n)(3)]

(a) An upset occurred and that the Copermittee can identify the cause(s) of the upset; [40 CFR 122.41(n)(3)(i)]
(b) The permitted facility was at the time being properly operated; [40 CFR 122.41(n)(3)(ii)] and
(c) The Copermittee submitted notice of the upset in accordance with the standard provisions required under 40 CFR 122.41(l)(6)(ii)(B) (24-hour notice). [40 CFR 122.41(n)(3)(iii)]
(d) The Copermittee complied with any remedial measures pursuant to the standard provisions required under 40 CFR 122.41(d). [40 CFR 122.41(n)(3)(iii)]

(4) *Burden of proof*. In any enforcement proceeding, the Copermittee seeking to establish the occurrence of an upset has the burden of proof. [40 CFR 122.41(n)(4)]

~~o.~~n. **STANDARD PERMIT PROVISIONS FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS**
[40 CFR 122.42(c)]

The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the San Diego Water Board or State Water Board under 40 CFR 122.26(a)(1)(v) must submit an annual report by the anniversary of the date of the issuance of the permit for such system. The report must include:

(1) The status of implementing the components of the storm water management program that are established as permit conditions; [40 CFR 122.42(c)(1)]

(2) Proposed changes to the storm water management programs that are established as permit conditions. Such proposed changes must be consistent with 40 CFR 122.26(d)(2)(iii); [40 CFR 122.42(c)(2)] and

(3) Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under 40 CFR 122.26(d)(2)(iv) and (v); [40 CFR 122.42(c)(3)]

Riverside Copermittee Redlines

(4) A summary of data, including monitoring data, that is accumulated throughout the reporting year; [40 CFR 122.42(c)(4)]

(5) Annual expenditures and budget for year following each annual report; [40 CFR 122.42(c)(5)]

(6) A summary describing the number and nature of enforcement actions, inspections, and public education programs; [40 CFR 122.42(c)(6)]

(7) Identification of water quality improvements or degradation. [40 CFR 122.42(c)(7)]

~~p.~~o. **STANDARD PERMIT PROVISIONS FOR STORM WATER DISCHARGES** [40 CFR 122.42(d)]

The initial permits for discharges composed entirely of storm water issued pursuant to 40 CFR 122.26(e)(7) must require compliance with the conditions of the permit as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit.

2. General Provisions

In addition to the standard provisions required to be incorporated into the Order and NPDES permit pursuant to 40 CFR 122.41 and 40 CFR 122.42, several other general provisions apply to this Order. The general provisions applicable to this Order and NPDES permit are as follows:

a. DISCHARGE OF WASTE IS A PRIVILEGE

No discharge of waste into the waters of the State, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the State are privileges, not rights. [CWC Section 13263(g)]

b. DURATION OF ORDER AND NPDES PERMIT

(1) *Effective date*. This Order and NPDES permit becomes effective on the 50th day after its adoption provided the USEPA has no objection. If the USEPA objects to its issuance, this Order shall not become effective until such objection is withdrawn. This Order supersedes Order No. R9-2007-0001 upon the effective date of this Order, and supersedes Order Nos. R9-2009-0002 and R9-2010-0016 upon their expiration or earlier notice of coverage.

(2) *Expiration*. This Order and NPDES permit expires five years after its effective date. [40 CFR 122.46(a)]

(3) *Continuation of expired order*. After this Order and NPDES permit expires, the terms and conditions of this Order and NPDES permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits (40 CFR 122.6) are complied with.

Riverside Copermittee Redlines

c. AVAILABILITY

A copy of this Order must be kept at a readily accessible location and must be available to on-site personnel at all times.

d. CONFIDENTIALITY OF INFORMATION

Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this Order will be considered confidential, and all such information and documents shall be available for review by the public at the San Diego Water Board office.

Claims of confidentiality for the following information will be denied:
[40 CFR 122.7(b)]

(1) The name and address of any permit applicant or Copermittee;
[40 CFR 122.7(b)(1)] and

(2) Permit applications and attachments, permits, and effluent data.
[40 CFR 122.7(b)(2)]

e. EFFLUENT LIMITATIONS

(1) *Interim effluent limitations*. The Copermittee must comply with any interim effluent limitations as established by addendum, enforcement action, or revised waste discharge requirements which have been, or may be, adopted by the San Diego Water Board.

(2) *Other effluent limitations and standards*. If any applicable toxic effluent standard or effective prohibition (including any schedule of compliance specified in such effluent standard or effective prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or effective prohibition is more stringent than any limitation on the pollutant in the permit, the San Diego Water Board shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or effective prohibition. [40 CFR 122.44(b)(1~~)}]}]~~.~~}~~

f. DUTY TO MINIMIZE OR CORRECT ADVERSE IMPACTS

The Copermittee must take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

g. PERMIT ACTIONS

The filing of a request by the Copermittee for modification, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated

Riverside Copermittee Redlines

noncompliance with this Order does not stay any condition of this Order. (See 40 CFR 122.41(f)) In addition, the following provisions apply to this Order:

(1) Upon application by any affected person, or on its own motion, the San Diego Water Board may review and revise the requirements in this Order. All requirements must be reviewed periodically. [CWC Section 13263(e)]

(2) This Order may be terminated or modified for cause, including, but not limited to, all of the following: [CWC Section 13381]

(a) Violation of any condition contained in the requirements of this Order. [CWC Section 13381(a)]

(b) Obtaining the requirements in this Order by misrepresentation, or failure to disclose fully all relevant facts. [CWC Section 13381(b)]

(c) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge. [CWC Section 13381(c)]

(3) When this Order is transferred to a new owner or operator, such requirements as may be necessary under the CWC may be incorporated into this Order.

h. NPDES PERMITTED NON-STORM WATER DISCHARGES

The San Diego Water Board has, in prior years, issued a limited number of individual NPDES permits for non-storm water discharges to MS4s. The San Diego Water Board or State Water Board may in the future, upon prior notice to the Copermittee(s), issue an NPDES permit for any non-storm water discharge (or class of non-storm water discharges) to an MS4. A Copermittee will not be held responsible for pollutants in its MS4 discharge originating from an NPDES-permitted non-storm water discharge.

Comment [A127]: This comment reflects the appropriate responsibility between NPDES dischargers.

i. MONITORING

In addition to the standard provisions required under 40 CFR 122.41(j) and (l)(4), the following general monitoring provisions apply to this Order:

(1) Where procedures are not otherwise specified in Order, sampling, analysis and quality assurance/quality control must be conducted in accordance with the Quality Assurance Management Plan (QAMP) for the State of California's Surface Water Ambient Monitoring Program (SWAMP), adopted by the State Water Resources Control Board (State Water Board).

(2) Pursuant to 40 CFR 122.41(j)(2) and CWC Section 13383(a), each Copermittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the San Diego Water Board at any time.

Comment [A128]: This provision and the provision in Attachment B 1.j(2) conflict. The Water Board should reconcile these provisions or delete one.

Riverside Copermittee Redlines

(3) All chemical, bacteriological, and toxicity analyses must be conducted at a laboratory certified for such analyses by the California Department of Public Health or a laboratory approved by the San Diego Water Board.

(4) For priority toxic pollutants that are identified in the California Toxics Rule (CTR) (65 Fed. Reg. 31682), the Copermittees must instruct their laboratories to establish calibration standards that are equivalent to or lower than the Minimum Levels (MLs) published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). If a Copermittee can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR Part 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the SIP. The Copermittee must submit documentation from the laboratory to the San Diego Water Board for approval prior to raising the ML for any priority toxic pollutant.

j. ENFORCEMENT

(1) The San Diego Water Board is authorized to enforce the terms of this Order under several provisions of the CWC, including, but not limited to, CWC Sections 13385, 13386, and 13387.

(2) Nothing in this Order shall be construed to protect the Copermittee from its liabilities under federal, state, or local laws.

(3) The CWC provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the CWA.

(4) Except as provided in the standard conditions required under 40 CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the Copermittee from civil or criminal penalties for noncompliance.

(5) Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Copermittee from any responsibilities, liabilities, or penalties to which the Copermittee is or may be subject to under Section 311 of the CWA.

(6) Nothing in this Order shall be construed to preclude institution of any legal action or relieve the Copermittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authoring preserved by Section 510 of the CWA.

k. SEVERABILITY

The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected thereby.

l. APPLICATIONS

Riverside Copermittee Redlines

Any application submitted by a Copermittee for reissuance or modification of this Order must satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the CWC and the California Code of Regulations.

m. IMPLEMENTATION

All plans, reports and subsequent amendments submitted in compliance with this Order must be implemented immediately (or as otherwise specified). All submittals by Copermittees must be adequate to implement the requirements of this Order.

n. REPORT SUBMITTALS

(1) All report submittals must include an executive summary, introduction, conclusion, recommendations, and signed certified statement.

(2) Each Copermittee must submit a signed certified statement covering its responsibilities for each applicable submittal.

(3) The Principal Watershed Copermittee(s) must submit a signed certified statement covering its responsibilities for each applicable submittal and the sections of the submittals for which it is responsible.

(4) Unless otherwise directed, the Copermittees must submit one hard copy and one electronic copy of each report required under this Order to the San Diego Water Board, and one electronic copy to the USEPA.

(5) The Copermittees must submit reports and provide notifications as required by this Order to the following:

EXECUTIVE OFFICER
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
9174 SKY PARK COURT, SUITE 100
SAN DIEGO CA 92123-4340
Telephone: (858) 467-2952 Fax: (858) 571-6972

EUGENE BROMLEY
US ENVIRONMENTAL PROTECTION AGENCY
REGION IX
PERMITS ISSUANCE SECTION (W-5-1)
75 HAWTHORNE STREET
SAN FRANCISCO CA 94105

Riverside Copermittee Redlines

ATTACHMENT C

ACRONYMS AND ABBREVIATIONS

AMAL	Average Monthly Action Level
ASBS	Area(s) of Special Biological Significance
BMP	Best Management Practice
Basin Plan	Water Quality Control Plan for the San Diego Basin
CEQA	California Environmental Quality Act
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWC	California Water Code
CZARA	Coastal Zone Act Reauthorization Amendments of 1990
ESAs	Environmentally Sensitive Areas
GIS	Geographic Information System
IBI	Index of Biological Integrity
LID	Low Impact Development
MDAL	Maximum Daily Action Level
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NAL	Non-Storm Water Action Level
NAICS	North American Industry Classification System
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
ROWD	Report of Waste Discharge (application for NPDES reissuance)
SAL	Storm Water Action Level
San Diego Water Board	California Regional Water Quality Control Board, San Diego Region
SIC	Standard Industrial Classification Code
State Water Board	State Water Resources Control Board
TMDL	Total Maximum Daily Load
USEPA	United States Environmental Protection Agency
WDID	Waste Discharge Identification Number
WLA	Waste Load Allocation
WQBEL	Water Quality Based Effluent Limitation

Riverside Copermittee Redlines

DEFINITIONS

Active/Passive Sediment Treatment - Using mechanical, electrical or chemical means to flocculate or coagulate suspended sediment for removal from runoff from construction sites prior to discharge.

Anthropogenic Litter – Trash generated from human activities, not including sediment.

Automotive Repair Shop – a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539 or equivalent NAICS code.

Average Monthly Action Level – The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month, or the geometric mean for bacteria, as applicable.

Beneficial Uses - The uses of water necessary for the survival or wellbeing of man, plants, and wildlife. These uses of water serve to promote tangible and intangible economic, social, and environmental goals. "Beneficial Uses" ~~of the waters of the State~~ that may be protected include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)].

Best Management Practices (BMPs) - Defined in 40 CFR 122.2 as schedules of activities, effective prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the case of municipal discharge permits, BMPs may be used in the place of numeric effluent limits.

Bioassessment - The use of biological community information to evaluate the biological integrity of a water body and its watershed. With respect to aquatic ecosystems, bioassessment is the collection and analysis of samples of the benthic macroinvertebrate community together with physical/habitat quality measurements associated with the sampling site and the watershed to evaluate the biological condition (i.e. biotic integrity) of a water body.

Biofiltration - Practices that use vegetation and amended soils to detain and treat runoff from impervious areas. Treatment is through filtration, infiltration, adsorption, ion exchange, and biological uptake of pollutants.

Biological Integrity - Defined in Karr J.R. and D.R. Dudley. 1981. Ecological perspective on water quality goals. *Environmental Management* 5:55-68 as: "A balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitat of the region." Also referred to as ecosystem health.

Riverside Copermittee Redlines

BMP Design Manual – A plan developed to eliminate, reduce, or mitigate the impacts of runoff from development projects, including Priority Development Projects.

Channel Rehabilitation and Improvement – Remedial measures or activities for the purpose of improving or restoring the environmental health of streams, channels or river systems. Techniques may vary from in-stream restoration techniques to off-line stormwater management practices installed in the system corridor or upland areas. Rehabilitation techniques may include, but are not limited to the following: riparian zone restoration, constructed wetlands, bank stabilization, channel modifications, and day lighting of drainage systems.

Comment [A129]: This term should be defined in Attachment C given its use in the Order.

Clean Water Act Section 303(d) Water Body - An impaired water body in which water quality does not meet applicable water quality standards and/or is not expected to meet water quality standards, even after the application of technology based pollution controls required by the CWA. The discharge of runoff to these water bodies by the Copermittees is significant because these discharges can cause or contribute to violations of applicable water quality standards.

Construction Site – Any project, including projects requiring coverage under the Construction General Permit, that involves soil disturbing activities greater than 10,000 square feet including, but not limited to, clearing, grading, disturbances to ground such as stockpiling, and excavation. This does not include interior construction activities such as interior remodeling, plumbing, electrical, or mechanical work.

Contamination - As defined in the Porter-Cologne Water Quality Control Act, contamination is "an impairment of the quality of waters of the State by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. 'Contamination' includes any equivalent effect resulting from the disposal of waste whether or not waters of the State are affected."

Copermittee – An incorporated city within the County of Orange, County of Riverside, or County of San Diego in the San Diego Region~~,~~ (Region 9),~~,~~ the County of Orange, the County of Riverside, the County of San Diego, the Orange County Flood Control District, the Riverside County Water Conservation and Flood Control District, the San Diego Regional Airport Authority, or the San Diego Unified Port District. See also "Municipal Copermittee" and "Special District Copermittee".

Comment [A130]: As set forth above, the Riverside County Copermittees make a distinction in these classes of Copermittees based on their respective legal authorities.

Copermittees – All of the individual Copermittees, collectively, unless the obligation in question is directed to one or a sub-group of Copermittees.

Comment [A131]: This clarifies that not all obligations in the Order directed to "Copermittees" are in fact applicable to all Copermittees.

Critical Channel Flow (Qc) – The channel flow that produces the critical shear stress that initiates bed movement or that erodes the toe of channel banks. When measuring Qc, it should be based on the weakest boundary material – either bed or bank.

Daily Discharge – Defined as either: (1) the total mass of the constituent discharged over the calendar day or any 24 hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g. concentration.)

The Daily Discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day, or other 24 hour period other than a day), or by the arithmetic mean of analytical results from one or more grab samples taken over the course of a

Riverside Copermittee Redlines

day.

Development Projects - Construction, rehabilitation, redevelopment, or reconstruction of any public or private residential project, industrial~~,~~ or commercial facility, or any other projects designed for post-construction human activity or occupation and involving land disturbance activities.

Direct Discharge to an Environmentally Sensitive Area – refers to outflow from a drainage conveyance system that collects runoff from the subject development or redevelopment site and terminates at or in receiving waters within the ESA, and is not commingled with flows from adjacent or other upstream lands.

Comment [A132]: This definition clarifies the nature of Development Projects covered under the Order.

Dry Season –May 1 to September 30.

Dry Weather – Weather is considered dry if the preceding 72 hours has been without measurable precipitation (>0.1 inch).

Enclosed Bays – Enclosed bays are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost bay works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays do not include inland surface waters or ocean waters.

Erosion – When land is diminished or worn away due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via storm water runoff. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road building, and timber harvesting. This permit is concerned particularly with non-naturally occurring Erosion that eventually results in a Sediment discharge from MS4s into Receiving Waters.

Environmentally Sensitive Areas (ESAs) - Areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and San Diego Water Board; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and San Diego Water Board; areas designated as preserves or their equivalent under the Natural Communities Conservation Program within the Cities and County of Orange; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees.

Estuaries – Waters, including coastal lagoons, located at the mouth of streams that serve as areas of mixing fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and ocean water. Estuaries do not include inland surface waters or ocean waters.

Existing Development – Any area that has been developed and exists for municipal, commercial, industrial, or residential purposes, uses, or activities. May include areas that are not actively used for its originally developed purpose, but may be re-purposed or redeveloped

Riverside Copermittee Redlines

for another use or activity.

Flow Duration – The long-term period of time that flows occur above a threshold that causes significant sediment transport and may cause excessive erosion damage to creeks and streams (not a single storm event duration). The simplest way to visualize this is to consider a histogram of pre- and post-project flows using long-term records of hourly data. To maintain pre-development flow duration means that the total number of hours (counts) within each range of flows in a flow-duration histogram cannot increase between the pre- and post-development condition. Flow duration within the range of geomorphologically significant flows is important for managing erosion.

Grading - The cutting and/or filling of the land surface to a desired slope or elevation.

Hazardous Material – Any substance that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity. These also include materials named by the USEPA in 40 CFR 116 to be reported if a designated quantity of the material is spilled into the waters of the U.S. or emitted into the environment.

Hazardous Waste - Hazardous waste is defined as "any waste which, under Section 600 of Title 22 of this code, is required to be managed according to Chapter 30 of Division 4.5 of Title 22 of this code" [CCR Title 22, Division 4.5, Chapter 11, Article 1].

Household Hazardous Waste – Paints, cleaning products, and other hazardous wastes generated during home improvement or maintenance activities.

Hydromodification – The change in the natural watershed hydrologic processes and runoff characteristics (i.e., interception, infiltration, overland flow, and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and sediment transport. In addition, alteration of stream and river channels, such as stream channelization, concrete lining, installation of dams and water impoundments, and excessive streambank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

Illicit Connection – Any connection to the MS4 that conveys an illicit discharge.

Illicit Discharge - Any discharge to the MS4 that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities [40 CFR 122.26(b)(2)]. Discharges from natural sources or from conditionally exempt sources described in this Order are not considered Illicit Discharges.

Inactive Areas – Areas of construction activity that are not active and those that have been active and are not scheduled to be re-disturbed for at least 14 days.

Infiltration – Water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow [40 CFR 35.2005(20)].

Comment [A133]: Wrong definition. Should be defining infiltration (of stormwater into soil)

Inland Surface Waters – Includes all surface waters of the U.S.~~State~~ that do not include the ocean, enclosed bays, or estuaries.

Riverside Copermittee Redlines

Jurisdictional Runoff Management Program Document – A written description of the specific jurisdictional runoff management measures and programs that each Copermittee will implement to comply with this Order and ensure that illicit discharges are effectively prohibited, and storm water pollutant discharges in runoff are reduced to the MEP and do not cause or contribute to a violation of water quality standards.

Low Impact Development (LID) – A storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

Low Impact Development Best Management Practices (LID BMPs) – LID BMPs include schedules of activities, effective prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States through storm water management and land development strategies that emphasize conservation ~~s~~and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. LID BMPs include retention practices that do not allow runoff, such as infiltration, rain water harvesting and reuse, and evapotranspiration. LID BMPs also include flow-through practices such as biofiltration that may have some discharge of storm water following pollutant reduction.

Major Outfall – As defined in the Code of Federal Regulations, a major outfall is a MS4 outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (i.e. discharge from a single conveyance other than a circular pipe which is associated with a drainage area of more than 50 acres); or, for MS4s that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or equivalent), a MS4 outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (i.e. discharge from other than a circular pipe associated with a drainage area of 2 acres or more).

Maximum Daily Action Level (MDAL) –The highest allowable daily discharge of a pollutant, over a calendar day (or 24 hour period). For pollutants with action levels expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with action levels expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Maximum Extent Practicable (MEP) – The technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) ~~for storm water~~ that operators of MS4s must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of source control and treatment control BMPs. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their runoff management programs. Their total collective and individual activities conducted pursuant to the runoff management programs becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for MS4 maintenance). In the absence of a proposal acceptable to the San Diego Water Board, the San Diego Water Board

Riverside Copermittee Redlines

defines MEP.

In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel, SWRCB addressed the achievement of the MEP standard as follows:

> "*To achieve the MEP standard, municipalities must employ whatever Best Management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive. In selecting BMPs to achieve the MEP standard, the following factors may be useful to consider:*
>
> a. *Effectiveness: Will the BMPs address a pollutant (or pollutant source) of concern?*
> b. *Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?*
> c. *Public Acceptance: Does the BMP have public support?*
> d. *Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?*
> e. *Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc.?*
>
> *The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPs and chooses to select only a few of the least expensive, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPs that should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPs that would address a pollutant source, or to pick a BMP based solely on cost, which would be clearly less effective. In selecting BMPs the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPs, it is the responsibility of the discharger to ensure that all BMPs are implemented."*

Monitoring Year – October 1 to September 30

Municipal Copermittee – Any Copermittee, exclusive of Special District Copermittees.

Comment [A134]: This definition clarifies distinction between municipal and special district copermittees.

Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designated or used for collecting or conveying storm water;

Riverside Copermittee Redlines

(iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.226. Copermittees need only comply with permit conditions relating to "discharges from the municipal separate storm sewers for which they are operators." 40 CFR 122.26(a)(vi).

Comment [A135]: These changes correct a citation and clarifies the responsibility of the copermittees as to other MS4s.

National Pollutant Discharge Elimination System (NPDES) - The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the CWA.

Non-Storm Water - All discharges to and from a MS4 that do not originate from precipitation events (i.e., all discharges from a MS4 other than storm water). ~~Non storm water includes illicit discharges and NPDES permitted discharges.~~

Comment [A136]: This is overly limiting, There are other types of Non-storm discharges that do not fit these two categories (e.g. irrigated agriculture, natural flows, conditionally exempt flows, others). Rather than trying to identify all types of non-stormwater discharges, suggest just deleting this sentence.

Nuisance - As defined in the Porter-Cologne Water Quality Control Act, a nuisance is "anything which meets all of the following requirements: 1) Is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. 2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. 3) Occurs during, or as a result of, the treatment or disposal of wastes."

Ocean Waters – the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Board's California Ocean Plan.

Order – Unless otherwise specified, refers to this Order, Order No. R9-2013-0001 (NPDES No. CAS0109266)

Outfall – *Outfall* means a *point source* as defined by 40 CFR 122.2 at the point where a MS4 discharges to waters of the United States and does not include open conveyances connecting two MS4s, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United. 40 CFR 122.26(b)(9).

Comment [A137]: This federal regulatory definition clarifies the nature of an outfall.

Parking Lot – a land area or facility for the tempraory parking or storage of motor vehicles used personally, for business, or for commerce.

Comment [A138]: Definition placed in Attachment C for consistency.

Persistent Flow - Persistent flow is defined as the presence of an MS4 discharge that is hydraulically connected to a flowing~~, pooled, or ponded~~ receiving water more than 72 hours after a measureable rainfall event of 0.1 inch or greater during three consecutive monitoring and/or inspection events. All other flowing, pooled, or ponded water is considered transient.

Comment [A139]: Changes reflect the necessity of a connection to flowing receiving waters. Discharges that are pooled are not discharges to waters of the United States. Please see Comment Letter section 3.5.3.

Person - A person is defined as an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof [40 CFR 122.2].

Point Source - Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return

Riverside Copermittee Redlines

flows from irrigated agriculture or agricultural storm water runoff.

Pollutant - Any agent that may cause or contribute to the degradation of water quality such that a condition of pollution or contamination is created or aggravated.

Pollution - As defined in the Porter-Cologne Water Quality Control Act, pollution is "the alteration of the quality of the waters of the State by waste, to a degree that unreasonably affects the either of the following: 1) The waters for beneficial uses; or 2) Facilities that serve these beneficial uses." Pollution may include contamination.

Pollution Prevention - Pollution prevention is defined as practices and processes that reduce or eliminate the generation of pollutants, in contrast to source control BMPs, treatment control BMPs, or disposal.

Pre-Project~~Development~~ Runoff Conditions – Runoff conditions that exist~~existed~~ onsite immediately before the ~~existing development was constructed, or exists onsite before~~ planned development activities occur. Pre-development is not intended to be interpreted as that period before any human-induced land disturbance has occurred. 64 FR 68761.

Comment [A140]: This definition reflects the exact language used by U.S. EPA in the Federal Register. Moreover, it avoids the constitutional and statutory problems with requiring developers to mitigate for impacts not attributable to their project. It also is consistent with the CEQA standard for project impact mitigation.

Priority Development Projects - New development and redevelopment projects defined under Provision E.3.b of Order No. R9-2012-0011.

Properly Designed – Designed in accordance with the Copermittee's BMP Design Manual and/or any appropriate design requirements set forth by the Copermittee and based on widely accepted design criteria and in accordance with this Order.

Comment [A141]: This definition is required to address this standard, which is mentioned in the Order but not defined.

Rainy Season (aka Wet Season) –October 1 to April 30

Receiving Waters – Waters of the United States.

Receiving Water Limitations - Waste discharge requirements issued by the San Diego Water Board typically include both: (1) "Effluent Limitations" (or "Discharge Limitations") that specify the technology-based or water-quality-based effluent limitations; and (2) "Receiving Water Limitations" that specify the water quality objectives in the Basin Plan as well as any other limitations necessary to attain those objectives. In summary, the "Receiving Water Limitations" provision is the provision used to implement the requirements of CWA section 402(p)(3)(B).

Redevelopment - The creation, addition, and or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; parking lots; resurfacing existing roadways; cutting and reconfiguring of surface parking lots; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair and emergency restoration and public safety projects.

Comment [A142]: The changes requested in this definition appropriately exempts de minimis or emergency/public safety projects.

Reporting Period – The period of information that is reported in the Annual Report. The reporting period consists of two components: 1) July 1 to June 30, consistent with the fiscal

Riverside Copermittee Redlines

year, for the implementation of the jurisdictional runoff management programs, and 2) October 1 to September 30, consistent with the monitoring year for the monitoring and assessment programs. Together, these two time periods constitute the reporting year for the Annual Report due January 31 following the end of the monitoring year.

Restaurant – a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812).

Retail gasoline outlet (RGO) – a business that sells automotive or truck fuel to the general public with a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

Retain –Keep or hold in a particular place, condition, or position without discharge to ~~surface~~ Receiving W~~w~~aters.

Retrofitting – Storm water management practices put into place after development has occurred in watersheds where the practices previously did not exist~~.~~ or are ineffective.~~.~~ Retrofitting of developed areas is intended to improve water quality, protect downstream channels, reduce flooding, or meet other specific objectives. Retrofitting developed areas may include, but is not limited to replacing roofs with green roofs, disconnecting downspouts or impervious surfaces to drain to pervious surfaces, replacing impervious surfaces with pervious surfaces, installing rain barrels, installing rain gardens, and trash area enclosures.

Runoff - All flows in a storm water conveyance system that consists of the following components: (1) storm water (wet weather flows) and (2) non-storm water including dry weather flows.

San Diego Water Board – As used in this document the term "San Diego Water Board" is synonymous with the term "Regional Board" as defined in Water Code section 13050(b) and is intended to refer to the California Regional Water Quality Control Board for the San Diego Region as specified in Water Code Section 13200.

Sediment - Soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human induced land disturbance activities) that is discharged into Receiving Waters is considered a pollutant. This Order regulates only the discharges of sediment from anthropogenic sources into Receiving Waters and does not regulate naturally occurring sources of sediment. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

Special District Copermittee – A separate legal entity that may own or operate MS4 systems, but has no land use authorities outside of their MS4. The Riverside County Flood Control and Water Conservation District [and Orange County Flood Control District?] is a [are] Special District Copermittee[s].

Source Control BMP – Land use or site planning practices, or structural or nonstructural measures that aim to prevent runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and runoff.

Storm Water – Per 40 CFR 122.26(b)(13), means storm water runoff, snowmelt runoff and surface runoff and drainage. ~~Surface runoff and drainage pertains to runoff and drainage resulting from precipitation events.~~

Comment [A143]: Relocation of definition to Attachment C.

Comment [A144]: Definition added for clarity and consistency with prior redlines

Comment [A145]: Edit clarifies intent of definition.

Riverside Copermittee Redlines

Stream, Channel, or Habitat Rehabilitation – Measures or activities for the purpose of improving or restoring the environmental health (i.e. physical, chemical and biological integrity) of streams, channels, or river systems. Rehabilitation techniques may include, but are not limited to, riparian zone restoration, constructed wetlands, bank stabilization, channel reconfiguration, and daylighting drainage systems.

Street, Road, Highway, Freeway– Any paved impervious surface that is used for the transportation of automobiles, trucks, motorcycles, and other vehicles, with an ADT of at least 100 vehicles per day.

Comment [A146]: Definition relocated to Attachment C.

Comment [A147]: Consistent with RGO definition.

Structural BMPs - A subset of BMPs which detains, retains, filters, removes, or prevents the release of pollutants to surface waters from development projects in perpetuity, after construction of a project is completed.

Total Maximum Daily Load (TMDL) - The maximum amount of a pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain water quality standards. Under CWA section 303(d), TMDLs must be developed for all water bodies that do not meet water quality standards after application of technology-based controls.

Toxicity - Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies). The water quality objectives for toxicity provided in the Basin Plan, state in part…"All waters shall be free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life….The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge".

Treatment Control BMP – Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

Unpaved Road – Any long, narrow stretch without pavement used for traveling by motor passenger vehicles between two or more points. Unpaved roads are generally constructed of dirt, gravel, aggregate or macadam and may be improved or unimproved.

Waste - As defined in CWC Section 13050(d), "waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal."

Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste classification system that applies to solid and semi-solid waste, which cannot be discharged directly or indirectly to water of the state and which therefore must be discharged to land for treatment, storage, or disposal in accordance with Chapter 15. There are four classifications of waste (listed in order of highest to lowest threat to water quality): hazardous waste, designated waste, non-hazardous solid waste, and inert waste.

Water Quality Objective - Numerical or narrative limits on constituents or characteristics of

Riverside Copermittee Redlines

water designated to protect designated beneficial uses of the water. [California Water Code Section 13050 (h)]. California's water quality objectives are established by the State and Regional Water Boards in the Water Quality Control Plans. Numeric or narrative limits for pollutants or characteristics of water designed to protect the beneficial uses of the water. In other words, a water quality objective is the maximum concentration of a pollutant that can exist in a receiving water and still generally ensure that the beneficial uses of the receiving water remain protected (i.e., not impaired). Since water quality objectives are designed specifically to protect the beneficial uses, when the objectives are violated the beneficial uses are, by definition, no longer protected and become impaired. This is a fundamental concept under the Porter Cologne Act. Equally fundamental is Porter Cologne's definition of pollution. A condition of pollution exists when the water quality needed to support designated beneficial uses has become unreasonably affected or impaired; in other words, when the water quality objectives have been violated. These underlying definitions (regarding beneficial use protection) are the reason why all waste discharge requirements implementing the federal NPDES regulations require compliance with water quality objectives. (Water quality objectives are also called water quality criteria in the CWA.)

Water Quality Standards - Water quality standards, as defined in Clean Water Act section 303(c) consist of the beneficial uses (e.g., swimming, fishing, municipal drinking water supply, etc.,) of a water body and criteria (referred to as water quality objectives in the California Water Code) necessary to protect those uses. Under the Water Code, the water boards establish beneficial uses and water quality objectives in water quality control or basin plans. Together with an anti-degradation policy, these beneficial uses and water quality objectives serve as water quality standards under the Clean Water Act. In Clean Water Act parlance, state beneficial uses are called "designated uses" and state water quality objectives are called "criteria." Throughout this Order, the relevant term is used depending on the statutory scheme.

Waters of the State - Any water, surface or underground, including saline waters within the boundaries of the State [CWC section 13050 (e)]. The definition of the Waters of the State is broader than that for the Waters of the United States in that all water in the State is considered to be a Waters of the State. ~~regardless of circumstances or condition.~~

Comment [A148]: The intent of the definition is to cover natural water sources, and not anthropogenic structures that collect runoff to reduce volume/velocity or pollutants.

Waters of the United States - As defined in the 40 CFR 122.2, the Waters of the U.S. are defined as: "(a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition: (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial seas; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA."

Riverside Copermittee Redlines

Watershed - That geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).

Wet Season (aka Rainy Season) –October 1 to April 30

Wet Weather – Weather is considered wet if there is a storm event of 0.1 inches and greater and the following 72 hours, unless otherwise defined by the Copermittee for the purposes of monitoring consistent with the USEPA Storm Water Sampling Guidance Document (EPA-833-B-92-001), or developed pursuant to another regulatory mechanism.

Comment [A149]: This is important as the monitoring requirements require you to sample the first 'Wet Weather' event. 0.1" of rainfall doesn't result in runoff in all watersheds. Copermittees should be able to define mobilization criteria to identify storms that are likely to produce runoff in that drainage area consistent with this EPA guidance.

LEGAL AND FACT SHEET COMMENTS ON TENTATIVE ORDER R9-2013-0001 MADE ON BEHALF OF THE RIVERSIDE COUNTY COPERMITTEES

This document provides comments on various legal issues raised by Tentative Order No. R9-2013-0001 (the "Draft Permit") and associated attachments, including Attachment F, the Fact Sheet/Technical Report ("Fact Sheet"), and are made on behalf of the Riverside County Flood Control & Water Conservation District ("District"), the County of Riverside and the Cities of Murrieta, Temecula and Wildomar (collectively, the "Riverside County Copermittees").

These legal comments are in addition to the other comments on the Draft Permit and attachments made by the Riverside County Copermittees (including the Comment Letter dated January 10, 2013 and signed by Jason E. Uhley, Chief of the District's Watershed Protection Division) and the redline attachment ("Redline"), as well as any comments or testimony which may be offered at the public hearing(s) on the Draft Permit. The Comment Letter and Redline also discuss legal issues. The Riverside County Copermittees appreciate this opportunity to comment and welcome any questions that Water Board staff may have.

These comments are submitted subject to the same reservations set forth in the Comment Letter regarding the Water Board's lack of authority, in the absence of agreement by the Riverside County Copermittees or the filing of a Report of Waste Discharge ("ROWD"), to issue a regional municipal separate storm sewer system ("MS4") permit to the Riverside County Copermittees. Submission of these comments does not waive this objection.

Request for Additional Public Comment

Before turning to comments on the Draft Permit, the Riverside County Copermittees wish to note that in view of the extensive comments made by them, as well as what we anticipate will be extensive comments by the South Orange County and San Diego County Copermittees, as well as from other stakeholders, it would greatly facilitate the permit adoption process if the Water Board were to release a revised Tentative Order for further review and comment prior to final adoption of the Permit. This will enable the Water Board staff to address the comments in a more orderly fashion and provide all parties with the opportunity to see how staff proposes to incorporate the comments in the Draft Permit.

Comments on Findings

Finding 2 and Fact Sheet Section VII.B: This finding recites that the Water Board "has the legal authority to issue a regional MS4 permit pursuant to its authority under Clean Water Act ("CWA") section 402(p)(3)(B) and 40 CFR 122.26(a)(i)(v)." Section VII.B of the Fact Sheet provides a more detailed rationale for this finding (at pages F-22-23).

The Riverside County Copermittees respectfully disagree with this finding and the analysis provided in the Fact Sheet. We do not believe that a regional MS4 permit is authorized under the CWA or the implementing regulations, absent agreement by the copermittees to be bound by such a MS4 permit (as is the case with the Bay Area MS4 permit covering discharges into the Bay).

The CWA itself does not explicitly authorize MS4 permits that, like the Draft Permit, cross county lines. CWA section 402(p)(3)(B) provides only that "[p]ermits for discharges from municipal storm sewers . . . may be issued on a system- or jurisdiction-wide basis." This language, contrary to the conclusion in Finding 2, indicates that a multi-county permit, covering several distinct non-interconnected municipal stormwater "systems" in multiple watersheds with multiple receiving waters, is not one issued on a "system-wide" basis and that an MS4 permit covering multiple jurisdictions in three different counties is not one issued on a "jurisdiction-wide basis." Because neither "system-wide" nor "jurisdiction-wide" are defined in the CWA, however, the CWA regulations must also be reviewed.

The regulatory provision cited in Finding 2, 40 CFR § 122.26(a)(1)(v), does not add clarity, since it merely repeats the "system-wide" and "jurisdiction-wide" language of the Act and the regulations define neither term. The regulations do, however, suggest that "system-wide" is not intended to cover multiple large MS4s in different jurisdictions. The regulations, at 40 CFR § 122.26(a)(1)(v) state that in making the determination to designate a system-wide or jurisdiction-wide basis" the permitting authority should consider the location of the "discharge" with respect to waters of the United States, the size of the discharge, the quantity and nature of the pollutants discharge and other relevant factors.

The Draft Permit covers multiple "discharges" into receiving waters located in three separate counties and the size, quality and nature of the discharges vary widely, due to varying hydrologic and climatic conditions in the three areas.

The Fact Sheet cites 40 CFR § 122.26(a)(3)(iv), which provides, in relevant part, that the Water Board "may issue one systemwide permit covering all, or a portion of all municipal separate storm systems in adjacent or interconnected large or medium municipal separate storm sewer systems." This provision does not, however, authorize issuance of a regional MS4 permit covering multiple counties and multiple watersheds that are not interconnected and which do not share a common receiving water. In fact, the only common fact uniting the various MS4s in the three counties under the Water Board's jurisdiction is that common jurisdiction.

First, even if the subject MS4 facilities otherwise met the criteria specified in the federal regulations (which, as noted below, they do not), the prospective permittees must apply for such a MS4 permit, as set forth in the first sentence of 40 CFR § 122.26(a)(3)(iv): "*One permit application may be submitted for all or a portion of all* municipal separate storm sewers within adjacent or interconnected large or medium municipal separate storm sewer systems." (emphasis supplied). No such application has been filed with respect to the Draft Permit. Only the San Diego County copermittees submitted a ROWD for MS4 facilities within that county.[1]

[1] Moreover, the fact that permittees have the ability to determine the geographic scope of the permit is reinforced by the language in 40 CFR § 122.26(a)(3)(iii)(B), which allows an individual municipality to submit "a distinct permit application which only covers discharges from the [MS4] for which the owner is responsible . . ." If a permittee can "opt out" of a multi-MS4 permit by submitting a individual permit application, a permitting authority such as a water board cannot impose a multi-MS4 permit on that permittee.

Second, this provision requires that the MS4s to be covered in the permit be "adjacent or interconnected." This is not true with respect to the MS4s proposed to be included within the Draft Permit. For example, the MS4 within the Santa Margarita Region of Riverside County is not "interconnected" with any other MS4s except those within that region. This is true also of the MS4s within South Orange County and San Diego County, which are not interconnected. Additionally, none of the MS4s in the three counties is "adjacent" to each other – each is separated by miles of non-urban area. In the SMR for example, the confluence of Temecula and Murrieta Creeks to form the Santa Margarita River is miles upstream of Rainbow Creek, the first discharge from San Diego County to the River. And, the confluence of Temecula and Murrieta Creeks is over 30 miles from the discharge of the Santa Margarita River to the Pacific Ocean.

The next inquiry is whether the three separate county MS4s could be considered, together, to form a single "large municipal separate storm sewer system." The federal MS4 regulations define this term as follows:

> *Large municipal separate storm sewer system* means all municipal separate storm sewers that are either:
>
> (i) Located in an incorporated place with a population of 250,000 or more . . . ."
>
> (ii) Located in the counties listed in Appendix H, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
>
> (iii) Owned or operated by a municipality other than those described [in paragraphs (i) and (ii)] . . . and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described [in paragraphs (i) and (ii)]. In making this determination the Director may consider the following factors:
>
> (A) Physical interconnections between the municipal separate storm sewers;
>
> (B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in [paragraph (i)];
>
> (C) The quantity and nature of pollutants discharged to waters of the United States;
>
> (D) The nature of the receiving waters; and
>
> (E) Other relevant factors, or
>
> (iv) The Director may, upon petition, designate as a large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region

> defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described [in paragraphs (i), (ii) or (iii)].

40 CFR § 122.26(b)(4).

None of paragraphs (i), (ii) or (iii) authorizes a regional MS4 permit such as that envisioned in the Draft Permit. The Draft Permit applies beyond a single incorporated place, County or municipality. Of these paragraphs, only paragraph (iv) could arguably be used to define the MS4s in the three Counties as a single MS4 and thus authorize a regional permit. The key limiting language is, however, "within the boundaries of a region **defined by a storm water management regional authority,** based on a jurisdictional, watershed, or other appropriate basis . . . ." A regional water board is not a stormwater management regional authority. This is clear from the MS4 regulations, which provide that a "**regional authority may be responsible for submitting a permit application"** under certain conditions. 40 CFR § 122.26(a)(3)(iii)(C). Clearly, a Water Board is not responsible for submitting MS4 permit applications.

U.S. EPA, in the Preamble to the final Phase I MS4 regulations (55 Fed Reg. 47990, November 16, 1990), further illuminated the meaning of the regulatory language. The Preamble indicates that commenters proposed eight different MS4 permitting options:

> Option 1 – systems owned or operated by incorporated places augmented by integrated discharges; Option 2 – systems owned or operated by incorporated places augmented with significant other municipal discharges; Option 3 – systems owned or operated by counties; Option 4 – systems owned and operated by States or State departments of transportation; Option 5 – systems within the boundaries of an incorporated place; Option 6 – systems within the boundaries of counties; Option 7 – systems in census designated urbanized areas; and Option 8 – systems defined by watershed boundaries.

55 Fed Reg. at 48039. None of these options encompasses the fact pattern presented by the Draft Permit, which covers multiple counties and multiple watersheds, are not interconnected, do not share common receiving waters and are located in separate census designated urbanized areas.

In explaining the derivation of 40 CFR 122.26(b)(4)(iv), U.S. EPA noted that it was "an outgrowth of comments on all options, especially Option 4 (State owned systems/State highways) and Option 8 (watersheds)." 55 Fed. Reg. at 48040. Thus, the Caltrans MS4 permit (which applies statewide) is authorized under paragraph (iv), since the "storm water management regional authority" defining the region to be covered is Caltrans itself. No such single authority exists for the three-county area proposed to be included in the Draft Permit, which also would encompass multiple watersheds.

Moreover, paragraph (iv) provides that the regional authority must "petition" the U.S. EPA Director to have a single MS4 designated within the boundaries of the region defined by the regional authority. Because California has been delegated NPDES permitting authority, a regional authority would presumably need to petition its Water Board to authorize such a regional permit. Since no such regional authority exists to establish the geographical basis for a

three-county MS4 permit, there is no such entity to "petition" the Water Board to establish a regional permit. This is clear from the Preamble to the Phase I regulations, which indicate that "regional storm water authorities" established by "some States or counties" may "petition the Director [or its state designee] to assume a regional role. 55 Fed. Reg. at 48042. It is clear from the Preamble that it is not the Water Board that has the authority to make such a petition, but rather the "storm water authorities" (i.e., municipalities, districts and Caltrans).

It should be noted that the Bay Area Regional MS4 Permit was a joint Bay Area Water Board and copermittee effort, coordinated by the Bay Area Stormwater Agencies Management Association ("BASMAA"). It is not the case that the Bay Area Water Board imposed this regional MS4 permit. The copermittees, coordinated by BASMAA, themselves determined to develop a regional MS4 permit. Further, all of the copermittees to the Bay Area Regional MS4 Permit discharge to a common receiving water, San Francisco Bay. Also, an Alaska MS4 permit cited in a letter from the Office of Chief Counsel to county counsel for Orange and Riverside Counties was issued to several municipalities and entities within a single "borough," which is equivalent in Alaska to a county.

Additionally, neither the Riverside County Copermittees nor those in South Orange County have filed ROWDs with the San Diego Water Board, which serve as the application for an NPDES MS4 permit in California. Water Code § 13260. The current Riverside County MS4 permit for the Santa Margarita Region provides that the ROWD is not required to be filed until May 2015, 180 days prior to the November 10, 2015 expiration date of that permit. Order R9-2010-0016, Part II.K.2.c.

> This ROWD must include:
>
> (1) Proposed changes to the Copermittees' runoff management programs; (2) Proposed changes to monitoring programs; (3) Justification for proposed changes; (4) Name and mailing addresses of the Copermittees; (5) Names and titles of primary contacts of the Copermittees; (6) Any other information necessary for the reissuance of this Order and (7) Any other information required by federal regulations for permit reapplications.

Id. It should be noted that several items of this ROWD are specifically intended to assist in the formulation of a new, SMR-specific MS4 permit, including proposed changes to the runoff management and monitoring programs, as well as justification for such changes, information necessary for "reissuance" of the SMR MS4 permit and information required by the federal regulations for MS4 permit reapplications.

As a simple jurisdictional matter, the Water Board cannot issue a regional MS4 permit to MS4 dischargers that have not applied for it. Moreover, as noted above, the SMR copermittees are entitled to apply for an MS4 permit applicable to their jurisdiction. Further, each individual copermittee has the right to apply for a MS4 permit covering only its discharges, as has the City of Long Beach in the Los Angeles Region.

Finding 3, Finding 15, in Fact Sheet Section VII.A and in Multiple Locations Throughout Draft Permit: In Finding 3, the Fact Sheet and in multiple locations throughout the Draft Permit (which are identified in the redline of the Draft Permit submitted with these comments by the Riverside County Copermittees ("Redline")), it is stated that the maximum extent practicable ("MEP") applies only to "storm water" discharges from the MS4. This is not correct.[2]

In fact, the Clean Water Act does not distinguish between non-stormwater and stormwater in terms of MS4 discharges which must be controlled to the MEP standard. *See* 33 U.S.C. § 1342(p)(3)(B)(iii)(the MS4 permit "shall require controls to reduce the discharge of pollutants to the maximum extent practicable . . . ." While the heading of 33 U.S.C. § 1342(p) refers to "Municipal and industrial stormwater discharges," this is not dispositive, as 33 U.S.C. § 1342(p)(3)(B)(ii), which requires the effective prohibition of "non-stormwater discharges" into the MS4. Thus, the language of this heading does not in fact support the argument that the MEP standard applies only to pollutants in stormwater discharges.

That both non-stormwater and stormwater must be controlled to the MEP standard was made clear by U.S. EPA itself in the preamble to the final Phase I stormwater regulations. In that preamble, U.S. EPA made it clear that "MEP control measures" would be implemented to address not only pollutants in "storm water" but also from "non-storm water discharges." As the preamble states:

> "Permittees are required to develop management programs for four types of pollutant sources which discharge to large and medium municipal storm sewer systems. Discharges from [such systems] are usually expected to be composed primarily of: (1) Runoff from commercial and residential areas; (2) storm water runoff from industrial areas; (3) runoff from construction sites; and (4) *non-storm water discharges*. Part 2 of the permit application has been designed to allow [permittees] the opportunity to propose *MEP control measures for each* of these components of the discharge."

55 Fed. Reg. at 48052 (emphasis supplied).

This language sets forth USEPA's understanding of the plain language of the CWA: "pollutants" must be controlled to the MEP from any MS4 "discharge," not merely pollutants in stormwater.

Finding 11: This finding, in relevant part, states that "[h]istoric and current development makes use of natural drainage patterns and features as conveyances for runoff. Rivers, streams and creeks in developed areas used in this manner are part of the Copermittees' MS4s regardless of whether they are natural, anthropogenic, or partially modified features. In these cases, the rivers, streams and creeks in the developed areas of the Copermittees' jurisdictions are both an MS4 and receiving water." This conclusion is legally incorrect.

First, under no circumstance can a natural stream constitute an MS4. The definition of "MS4" in the CWA regulations (a definition found in Attachment C of the Draft Permit) refers to a

[2] Finding 15 also states, erroneously, that the MEP standard "is explicitly for "Municipal . . . *Stormwater Discharges* (emphasis added)" from the MS4.

"conveyance or system of conveyances" "owned or operated" by a municipality. 40 CFR §122.26(b)(8). In California, natural rivers and streams are not "owned" nor "operated" by the municipality through which they flow. Moreover, a municipality obviously cannot "operate" a natural creek or stream. In further support of the point that a MS4 is an artificial, not natural, watercourse, the types of "conveyances" identified in the regulation ("roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains") all refer to anthropogenic structures, not natural streams. 40 CFR § 122.26(b)(8).

Second, a "receiving water" cannot also be an MS4, as is plain from the CWA regulations. An MS4 is itself defined as discharging to waters of the United States. 40 C.F.R. §122.26(b)(8). An MS4 cannot, in essence, discharge to itself. Moreover, an "outfall" from an MS4 (the point at which the discharge enters a receiving water) does not, pursuant to 40 C.F.R §122.26 (b)(9), include conveyances connecting "segments of the same stream or other waters of the United States and are used to convey waters of the United States."

Moreover, U.S. EPA, in the Preamble to the initial version of the MS4 regulations (53 Fed. Reg. 49416 (Dec. 7, 1988)) expressly determined that "streams, wetlands and other water bodies that are waters of the United States are not storm sewers for the purposes of this rule" and that "stream channelization, and stream bed stabilization, which occur in waters of the United States" were not subject to National Pollutant Discharge Elimination System ("NPDES") permits under Section 402 of the CWA. 53 Fed. Reg. at 49442.

Additionally, the United States Supreme Court recently reversed the Ninth Circuit Court of Appeals and ruled that flows from sections of the Los Angeles and San Gabriel Rivers that are comprised of concrete flood control channels are not a "discharge" under the CWA, confirming that such rivers, even if improved, are "receiving waters" along with any natural portions of those rivers. *Los Angeles County Flood Control Dist. v. Natural Resources Defense Council*, 568 U.S. __(January 8, 2013) (slip op.).

The above-cited statement in the finding is incorrect and should be stricken, as recommended in the Redline.

Finding 12: This finding states, in relevant part, that "[a]s operators of the MS4s, the Copermittees cannot passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or otherwise control." This statement is legally incorrect, and ignores the salient point that the "discharger" of a pollutant is primarily responsible for controlling/permitting that discharge, under both the CWA and the Porter-Cologne Act. For example, under the Porter-Cologne Act, any persons discharging or proposing to discharge "waste" into waters of the state must file a report of waste discharge and obtain a waste discharge requirement. Water Code §§ 13260, 13263. The operator of the MS4 into which that water eventually flows is not "essentially accepting" responsibility for the discharge. The responsibility of the MS4 operator is established under the CWA, and that is to effectively prohibit non-stormwater discharges into [the MS4] and to control the discharge of pollutants from the MS4 to the MEP.

Moreover, the statement ignores the fact that in California, downstream property owners (including municipalities owning and operating MS4 facilities) must accept the flow of upstream waters. In fact, for a downstream municipality to block such flow would constitute an inverse condemnation or the creation of a nuisance under California law. *See Arreola v. County of Monterey* (2002) 99 Cal.App.4th 722 (obstruction of flood waters by improperly designed highway constituted inverse condemnation and nuisance).

Finding 28 and Fact Sheet Section VI: In the Finding, it is stated that the Water Board "finds that the requirements in this permit are not more stringent than the minimum federal requirements" and that therefore "a CWC section 13241 analysis is not required." The Finding further recites that notwithstanding this fact, "the San Diego Water Board has developed an economic analysis of the requirements in this Order."

For the reasons set forth in the comments of the Riverside County Copermittees, numerous provisions in the Draft Permit are in fact more stringent than the requirements of the CWA and its implementing regulations and therefore require an adequate Water Code § 13241 analysis. Unfortunately, this analysis is not provided in the Fact Sheet.

First, the economic analysis set forth in the Fact Sheet does not meet the requirements of Section 13241, as it does not analyze the six specific factors required to be analyzed under the section. Second, the analysis uses cost data from other sources, only a few of which were from the municipalities proposed to be included under the Draft Permit. These data are also a number of years old; the most recent study referenced in the Fact Sheet, the one done for the State Board by Cal State Sacramento, was dated January 2005 and included decade-old cost data from the City of Encinitas that dated from 2002-2003.

Third, the section of the Fact Sheet discussing the benefits of water quality notes that "there have been no studies for the San Diego Region to quantify the added value that surface waters with healthy water quality can provide." Thus, the Water Board has no evidence with which to compare the costs and benefits of the programs set forth in the Draft Permit. Moreover, the discussion makes the incorrect assumption that the alternative to the programs in the Draft Permit would be no controls on pollutants in urban runoff. As the Fact Sheet correctly notes, the Draft Permit is the fifth term MS4 permit for the copermittees. The previous four permits all contained increasingly complex and expensive control requirements, both structural and non-structural, designed to improve the quality of MS4 discharges. Thus, an appropriate cost analysis must compare the incremental costs of the programs set forth in the Draft Permit and the incremental benefits attributable to that permit. This has not been done in the Fact Sheet. Finally, the analysis does not recognize that the receiving waters provided economic benefits to residents of the San Diego Region long before issuance of the first MS4 permits in 1990. It is thus illogical to suggest that these pre-existing economic benefits would be lost if the Draft Permit is not adopted.

Finding 29 and Fact Sheet Section VII.F: The finding and the supporting argument in the Fact Sheet represents an attempt by Water Board staff to address whether the requirements of the Draft Permit represent an unfunded state mandate. That attempt, however, is beyond the scope of the Water Board's powers, since the *only* agency charged by the Legislature with determining

the presence of a state mandate, and whether that mandate is unfunded, is the Commission on State Mandates. Govt. Code § 17552; *Kinlaw v. State of California* (1991) 54 Cal.3d 326, 333. The Water Board has no jurisdiction to make a legal finding or discuss in the Fact Sheet that the Draft Permit, in whole or in part, does not constitute an unfunded state mandate.

Additionally fact sheets are required, under the CWA regulations, to provide the legal authority and reasons for each substantive permit provision (40 CFR § 124.8(a)(4); 40 CFR § 124.56(a)). *See also City of Rancho Cucamonga v. Regional Water Quality Control Board-Santa Ana Region* (2006), 135 Cal.App.4th 1377, 1382 (stating that fact sheets contains "the legal and factual grounds for the Water Board's recommendation to adopt the . . . permit"). Finding 29 and the discussion in Section VII.F of the Fact Sheet do not relate to any Draft Permit provision, nor provide legal authority or justification for the Draft Permit's adoption. As such, the finding and Fact Sheet discussion are surplussage and should be deleted.

The Riverside County Copermittees disagree with each of the arguments set forth in the Finding and Fact Sheet as to why the Draft Permit does not constitute an unfunded state mandate. Nevertheless, because the exclusive arena for such disagreements is the Commission on State Mandates, whose jurisdiction does not commence unless and until a test claim is filed before the Commission, the Copermittees need not and will not address those arguments.

Comments on Provisions in Draft Permit

Provision A and Fact Sheet Section VIII.A:

Lack of True Iterative Compliance Process

As set forth in the Redline and in the Comment Letter, the Riverside County Copermittees believe that to effectuate the iterative approach to compliance with water quality standards and other discharge prohibitions in the Draft Permit, the copermittees must be provided with the means to be in compliance. Based on monitoring, exceedances of water quality standards are occurring in the receiving waters subject to the Draft Permit, as set forth in Table G-14 to the latest 2011-2012 monitoring report submitted by the Riverside County Copermittees. Thus, if the copermittees are not provided an iterative means to be in compliance, which was contemplated by State Board's Order No. 2001-15, the copermittees will be issued an illegal MS4 permit, since it is a permit with which they cannot comply. This violates the intent of Congress in the CWA, which "is presumed not to have intended absurd (impossible) results." *Hughey v. JMS Development Corp.*, 78 F.3d 1523, 1529 (11th Cir. 1996); *accord, Mississippi River Revival v. City of Minneapolis*, 319 F.3d 1013, 1017-1018 (8th Cir. 2003).

With regard to the iterative process, Water Board staff has indicated numerous times during the workshop process that achievement of water quality standards is expected to take many years. The entire WQIP approach is aimed at the eventual attainment of such standards, as are the TMDLs issued to other copermittees, which have final compliance dates years into the future.

This approach is, however, put into jeopardy by the requirement, as expressed in the Fact Sheet at F-39, that the discharge prohibition and receiving water limitation provisions are

"independently applicable, meaning that compliance with one provision does not provide a 'safe harbor' where there is non-compliance with another provision (i.e., compliance with Provision A.4 does not shield a Copermittee who may have violated Provision A.1.a, A.1.c, or A.2.a from an enforcement action." While the Fact Sheet appropriately notes how this process should work through Provision A.4 (which "essentially requires the Copermittees to implement additional BMPs until MS4 discharges no longer cause or contribute to a violation of water quality standards") it also states that despite this iterative process, "the San Diego Water Board retains the discretion to take other appropriate enforcement and the iterative process does not shield dischargers from citizen suits under the CWA." Fact Sheet at F-40.

The consequences of this approach cannot be overemphasized. Despite the copermittees' good faith undertaking to follow the iterative process outlined in Provision A.4, a Water Board enforcement proceeding or a citizen suit can be brought for violations of water quality standards and, if the citizen plaintiff is successful, a federal judge is empowered to use his/her injunctive powers under Section 505(a) of the CWA to throw out the WQIP, JRMP or other compliance efforts of the copermittees and require other efforts. In such a case, the time and money spent by the copermittees in trying to comply with the Draft Permit, as well as the effort spent by the copermittees and Water Board staff in developing the Draft Permit's terms, are completely wasted.

Thus, the essential conundrum of Provision A, as presently drafted, is clearly exposed. Even though a copermittee may spend significant sums and undertake significant tasks under its WQIP or JRMP, be conducting expensive monitoring and special studies, and be in *full compliance* with all of the programmatic requirements of the Draft Permit, it would still face either a Water Board enforcement action or a citizen suit under Section 505 of the CWA. And, such a suit would allege exceedances of water quality standards (some of which are hardly capable of laboratory detection, much less control) that the Water Board acknowledges cannot be achieved for years.

Provision A is not, however, required by the CWA, as held by the Ninth Circuit in *Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9th Cir. 1999). The holding in *Browner* is further reflected in State Board Order WQ 2001-15 (which the Fact Sheet acknowledges incorporates an "iterative process") which states:

> [O]ur [receiving water limitation] language, similar to the U.S. EPA's permit language discussed in the Browner case, **does not require strict compliance with water quality standards.** Our language requires that **storm water management plans be designed to achieve compliance with water quality standards**. **Compliance is to be achieved over time, through an iterative approach requiring improved BMPs**. As pointed out by the Browner court, there is nothing inconsistent between this approach and the determination that the Clean Water Act does not mandate strict compliance with water quality standards.

Order WQ 2001-15 at 7 (emphasis added). Thus, Provision A is inconsistent with the State Board's own precedential order, which requires the iterative approach effectuated by the suggested Redline changes.[3]

In further support, it may be noted that the U.S. EPA-drafted MS4 permit for the District of Columbia does not contain the type of language found in Provision A, but rather requires "an iterative and an adaptive management process for pollutant reduction and for achieving applicable water quality standard and/or total maximum daily load (TMDL) compliance." DC MS4 Permit Fact Sheet, page 5 (attached as Exhibit A).

Also, despite the assertion in the Fact Sheet that the copermittees are seeking a "safe harbor" from liability, this is incorrect. Every provision of an MS4 permit is subject to enforcement; given the complexity of the Draft Permit, the failure by a copermittee to comply with any provision could lead to such enforcement.

As noted above, MS4 discharges may not be achieving compliance with strict water quality standards, as recognized by the Issue Paper released by State Board staff in preparation for a November 20, 2012 workshop on receiving water limitation issues raised by *NRDC v. County of Los Angeles*. That Issue Paper stated that as "the storm water management programs of municipalities have matured, **an increasing body of monitoring data indicates that water quality standards are in fact not being met by many MS4s.**" (State Board Issue Paper, Page 2, emphasis supplied) (*see* Exhibit B.)

Perhaps most importantly, requiring strict and immediate compliance with discharge prohibition and receiving water limitations inhibits, not supports, the philosophy of the Draft Permit, which is to encourage the copermittees to focus on the most significant problems in their watersheds and to prioritize their resources to address those problems. Provision A, by contrast, discourages innovative approaches or prioritization, since all pollutants exceeding water quality standards create liability. Moreover, as discussed above, in the event of a citizen suit being brought such as that in the *NRDC* case, a federal judge could award injunctive relief to a successful plaintiff that could completely ignore or supplant the WQIP and other permit terms.

For additional discussion of receiving water limitations issues, please see Exhibit C, a letter submitted by the District to the State Board in connection with the recent workshop held by the State Board on receiving water limitations language. The Riverside County Copermittees hereby reference and incorporate this Exhibit into these comments.

The Riverside County Copermittees support a true iterative process that requires refinement and amendment of the WQIP and associated BMPs when receiving water limitation violations are recorded. That is the essence of the iterative process; the identification of problems and the development of BMPs to attempt to address those problems.

[3] While the Fact Sheet cites as authority *Natural Resources Defense Council v. County of Los Angeles*, discussed above, the Ninth Circuit was simply responding to language in the former Los Angeles County MS4 permit, and did not determine that such non-iterative language was required by the CWA.

The Redline proposes a means to achieve compliance using the WQIPs, which are intended to bring the copermittees into compliance with the discharge prohibition and receiving water limitation provisions of the Draft Permit over time. The Redline links compliance with Provisions A.1, A.2 and A.3 to A.4, which indicates that compliance is obtained through the preparation and updating of the WQIPs.

It must be noted, however, that the Riverside County Copermittees do not agree with the approach suggested by others, that any WQIP-based compliance approach be necessarily accompanied by a "Reasonable Assurance Analysis." Such an analysis could be extremely complex, expensive and time intensive to develop. Generally, such analyses are developed in the preparation of TMDLs and take a number of years to develop and refine. Given that the Santa Margarita Watershed has no adopted TMDLs, there are no comprehensive pollutant transport or BMP models available for the suite of constituents that might be considered for prioritization within a WQIP for that watershed. In the context of a TMDL, such models would be developed by the combined resources of the Water Board, stakeholders and dischargers. Requiring such an exercise to be undertaken solely with the public resources of the residents of the SMR is beyond the Copermittees' financial ability and would shift responsibility for development of TMDLs from the Water Board to the Copermittees.

Discussion in Fact Sheet

The Fact Sheet discussion also contains a number of legal and factual errors. First, the statement on page F-34 that non-stormwater discharges from the MS4 are subject to NPDES permitting requirements is unsupported by the plain language of the CWA, which (as noted above) applies the MEP standard to *all* discharges of pollutants from the MS4, not just those in stormwater. Also, such discharges are not subject to separate requirements under the NPDES program, as suggested on F-34, and non-storm water discharges are not the same, legally, as "illicit discharges." Please see discussion below.

Similarly, the Fact Sheet's conclusion that "Regional Water Boards are not limited by the iterative MEP approach to storm water regulation in crafting appropriate regulations for non-storm water discharges" is incorrect. The Fact Sheet correctly states that MEP has not been defined in the CWA or by U.S. EPA in the CWA regulations. However, the Fact Sheet incorrectly concludes that MEP is "ultimately defined" by the Water Boards or the State Board. What constitutes "MEP" is a question of federal law under the CWA, not a matter for definition by agencies which merely have been delegated the authority to enforce the CWA in California. The only source for such a finding is a memorandum from a State Board attorney, not case authority.

Moreover, Provisions B-E of the Draft Permit, far from establishing a "minimum framework" for the copermittees to achieve the MEP standard, sets forth in many cases requirements that far exceed the plain requirements of the CWA, the implementing regulations and in some cases even state law, or which require the copermittees to undertake steps that are not "practicable." These requirements are identified in the comments of the Riverside County Copermittees. In such respects, those requirements do not represent a "minimum framework" for MEP.

Other Issues

The Riverside County Copermittees also object to the provision in A.1.a and other portions of the Draft Permit that prohibit certain discharges into "waters of the state." The CWA regulates discharges into waters of the United States, which are surface waters. Expanding the prohibition to cover waters of the state expands the scope of the Draft Permit to protect groundwater, as a matter of state law. It should be noted that the recent Los Angeles County MS4 Permit appropriately applies this prohibition to waters of the United States.

Provision B.5: As noted in the Comment Letter, the CWA requires that illegal discharges into the MS4 be addressed by a program of steps taken to address such discharges. The Redline emphasizes that this program be guided by WQIP priorities, which is consistent with the overall intent of the Draft Program.

Provision E.2.a and E.2.a.(7): These provisions require the Copermittees to, as a part of their Illicit Discharge Detection and Elimination (IDDE) program, address all non-stormwater discharges as "illicit discharges," thus requiring the copermittees to "reduce or eliminate non-stormwater discharges" whether or not the discharges have been identified as "illicit."

The Fact Sheet asserts that "Provision E.2.a.(7) is consistent with the requirements of the CWA section 402(p)(3)(B)(ii) and 40CFR 122.26(d)(1)(v)(B). That assertion is not correct. Section 402(p)(3)(B)(ii) of the CWA states that MS4 permits "shall include a requirement to *effectively prohibit* non-stormwater discharges into the storm sewers" (emphasis supplied). The CWA regulations include two provisions designed to begin implementation of the "effective prohibition." The first provision requires MS4 permittees to perform a screening analysis, intended to provide sufficient information to develop priorities for a program to detect and remove illicit discharges. 40 CFR 122.26(d)(1)(iv)(D). The second requires MS4 permittees to develop a recommended site-specific management plan to detect and remove illicit discharges (or ensure they are covered by an NPDES permit) and to control improper disposal to MS4s. 40 CFR 122.26(d)(1)(iv)(D) and 122.26(d)(2)(B). The MS4 permittees are required to identify the non-stormwater discharge as an illicit discharge prior to having an obligation to effectively prohibit it. There is not otherwise a presumption to reduce or eliminate it.

40 CFR 122.26(d)(1)(v)(B), cited in the Fact Sheet, requires "[a] description of the existing program to identify illicit connections to the municipal storm sewer system. The description should include inspection procedures and methods for detecting and preventing illicit discharges, and describe areas where this program has been implemented."

The provision and rationale within the Fact Sheet blur the distinction between the copermittees' need to "effectively" prohibit non-stormwater discharges and to detect and eliminate illicit discharges.

- The requirement is "effectively prohibit" non-stormwater discharges, not "reduce or eliminate" non-stormwater discharges.
- Although copermittees are required to have a program to prevent illicit discharges to the MS4, non-stormwater discharges should only be addressed as illicit discharges where

such discharges are identified as sources of pollutants that may cause or contribute to an exceedance of a water quality objective.

- The IDDE program is established to detect and eliminate "illicit discharges", not non-stormwater discharges in general.

Please see the Redline for modifications to Provision E.2 addressing these issues.

Provision E.2.a.(3): In the Redline, the Riverside County Copermittees request that categories of irrigation runoff discharges (landscape irrigation, irrigation water and lawn watering) be considered as conditionally exempt discharges (not subject to treatment as illicit discharges).

The rationale for not including irrigation runoff discharges lacks a legal and factual basis. As noted in the Comment Letter, the only factual basis for this provision with respect to the Riverside County Copermittees is discussion in a public information informational brochure, which was itself based on a similar document from Orange County. Fact Sheet F-76. Despite assertions to the contrary in the Fact Sheet, this brochure does not represent a determination by the Riverside County Copermittees that irrigation runoff is a category of non-stormwater discharge that must be effectively prohibited. The other evidence in support of prohibiting the conditional exemption for irrigation runoff is entirely from different areas of the region, with different urban development patterns, lithology and hydrology. No specific determination has been made by the Copermittees (or the Water Board) that irrigation runoff in the Santa Margarita Region has actually been shown to be significant source of pollutants to receiving waters in the SMR.

EPA, in the preamble to the federal MS4 regulations, required that a *permittee* must make a finding that the "irrigation water" discharges must be a "source of pollutants to waters of the United States . . . ." 55 Fed. Reg. 48037. Moreover, such discharges must represent a "significant" source of pollutants to waters of the United States "under certain conditions." U.S. EPA, *Guidance Manual for the Preparation of Part 2 of the NPDES Permit Application for Discharges from Municipal Separate Storm Sewer Systems,* November 1992 ("EPA Part 2 Guidance Manual"), at p. 6-33. These conditions require a focus not on an entire category of discharges, but rather a discharger-by-discharger examination.

In the MS4 regulatory preamble, EPA stated that "[i]n general, municipalities will not be held responsible for prohibited some specific components of discharges or flows listed below through their [MS4], even though such components may be considered non-storm water discharges, unless such discharges *are specifically identified on a case-by-case basis as needing to be addressed."* 55 Fed. Reg. 47995 (emphasis supplied). In the Guidance Manual, EPA states:

> If an applicant knows . . . that landscape irrigation water from a ***particular site*** flows through and picks up pesticides **or *excess*** nutrients from fertilizer applications, there may be a reasonable potential for a storm water discharge to result in a water quality impact. In such an event, the applicant should contact the NPDES permitting authority to request that the authority order ***the discharger*** . . . to obtain a separate NPDES permit (or in this case, the discharge could be controlled through the storm water management program of the MS4).

EPA Part 2 Guidance Manual, p. 6-33 (emphasis added). Read in this context of this language, the Water Board has no power greater than a municipality in terms of its ability to identify non-stormwater discharges as "illicit" and thus required to be regulated, and must identify specific discharges, and not entire categories of discharges. *See* 55 Fed. Reg. 48037. This has not been done in the Fact Sheet.

Provision E.3(c): This provision requires the Copermittees to compel development projects that may not result in a hydromodification impact to the applicable receiving waters, to implement on-site or "alternative compliance" hydromodification mitigation measures and to use using "pre-development (naturally occurring)" runoff reference condition as applied to sites that are, in fact, developed.

The Riverside County Copermittees are concerned that implementing these requirements would subject the Copermittees to liability under the takings clauses of the U.S. and California Constitutions as well as under the Mitigation Fee Act because of the questionable nexus between such a project's lack of actual hydromodification impacts upon the receiving waters, and the hydromodification management measures required in the Draft Permit.

When imposing a condition on a development permit, a local government is required under the federal and state constitutions to establish that the condition bears a reasonable relationship to the impacts of the development project. This rule applies even to legislatively enacted requirements and impact fees or exactions.[4] Moreover, fees imposed on a discretionary ad hoc basis are subject to heightened scrutiny under a two-part test. First, local governments must show that there is a substantial relationship between the burden created by the impact of development and any fee or exaction.[5] Second, a development project's impacts must bear a "rough proportionality" to any development fee or exaction.[6] Under California law, the *Nollan/Dolan* heightened scrutiny test also applies to in-lieu fees.[7]

The Legislature has memorialized these requirements in the Mitigation Fee Act, which establishes procedures that local governments must follow to impose impact fees.[8] Irrespective of whether the hydromodification management requirements are implemented by legislative act or on an ad hoc basis, the copermittees' attempt to enforce them as proposed in the Draft Permit would likely result in claims by developers and property owners alleging unconstitutional takings of private property and violations of the Mitigation Fee Act. This is because a developer could argue that limiting hydromodification impacts of already developed property to its "naturally occurring" state, or requiring hydromodification mitigation measures for impacts not imposed by the project, would not have a legally sufficient nexus to the impact of the development project.

In addition, the Copermittees wish to bring the Water Board's attention to a recent case, *Virginia Dept. of Transportation v. United States Environmental Protection Agency*, Civ. Action No.

[4] *Building Indus. Ass'n v. City of Patterson* (2009)171 Cal. App. 4th 886, 898.
[5] *Nollan v. California Coastal Comm'n*, 483 U.S. 825, 837 (1987).
[6] *Dolan v. City of Tigard*, 512 U.S. 374, 391 (1994).
[7] *Ehrlich v. City of Culver City* (1996) 12 Cal. 4th 854, 876.
[8] Cal. Gov't Code §§ 66000-66025.

1:12-CV-775 (E.D. Va. January 3, 2013) (slip op.), which is attached for the Water Board's convenience as Exhibit D. In this case, a federal district judge found that the CWA did not authorize U.S. EPA to regulate stormwater itself as a pollutant. The impact of this case is not known at this time, as it will probably be appealed to the Fourth Circuit Court of Appeals. Still, any approach to hydromodification which focuses on flows *per se*, as opposed to pollutants, may not withstand legal scrutiny.

Provision E.3.c.(3)(c)(i): This provision requires the entire alternative compliance in-lieu fee to be transferred to the copermittee or an escrow account prior to construction of a Priority Development Project (PDP). This provision is problematic, as development fees (which would include the in-lieu fees) are collected at the time of building permit issuance. In large-scale projects, permits may be issued (and development fees collected) in phases. Further, for master-planned developments, fees are generally negotiated through a development agreement to be collected based on certain development milestones. Therefore, collecting and holding the entire in-lieu fee prior to construction interferes with the development practice and may violate the Mitigation Fee Act and local development ordinances. The Redline requests that in-lieu fees be collected in accordance with state and local law.

Provision E.5: In addition to other comments on this provision and others in the Draft Permit relating to retrofitting, any requirements in Draft Permit relating to the retrofitting of engineered channels and other structures employed for flood control purposes must be consistent with the judgment of the flood control districts, to which the Legislature has assigned sole authority for the protection of the lives and property of their citizens from flooding. (Please see Comment Letter and proposed new findings in Redline for further discussion). Due to the urbanization of the counties over the past 150 years, as well as the particular topography and weather conditions found in Southern California, there is a great risk of flooding and hence the need for flood control structures and channels. The flood control districts have both the expertise and the sole legal authority to determine whether retrofitting of flood control structures can be accomplished in light of their statutory obligations, and that expertise and authority must be recognized in the Draft Permit.

Provision E.8: As noted in the Redline, the first requirement under Fiscal Analysis, that each "Copermittee must secure the resources necessary to meet all the requirements of this Order" has been deleted. This requirement is not found in the CWA regulations, which require only the conduct of a fiscal analysis. Moreover, this requirement intrudes on the home rule power of cities and counties by requiring, in essence, that municipal budgets must reflect the priority of compliance with the Order over any competing obligation, including police, fire protection and public health. A key issue in complying with stormwater and MS4 obligations is the ability of municipalities to afford the increasing costs associated with those obligations. In California, of course, the ability to raise taxes to pay for such obligations has been severely curtailed through several voter-approved propositions.

The Riverside County Copermittees request that Provision E.8.a be deleted.

EXHIBIT A

NPDES Permit No. DC0000221

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*

Government of the District of Columbia
The John A. Wilson Building
1350 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

is authorized to discharge from all portions of the municipal separate storm sewer system owned and operated by the District of Columbia to receiving waters named:

Potomac River, Anacostia River, Rock Creek and stream segments tributary to each such water body

in accordance with the Stormwater Management Program(s) dated February 19, 2009, subsequent updates, and related reports, strategies, effluent limitations, monitoring requirements and other conditions set forth in Parts I through IX herein.

The effective issuance date of this permit is: October 7, 2011.

This permit and the authorization to discharge shall expire at midnight, on: October 7, 2016.

Signed this 30th day of September, 2011.

Jon M. Capacasa, Director
Water Protection Division
U.S. Environmental Protection Agency
Region III

1. DISCHARGES AUTHORIZED UNDER THIS PERMIT

1.1 Permit Area

This permit covers all areas within the jurisdictional boundary of the District of Columbia served by, or otherwise contributing to discharges from, the Municipal Separate Storm Sewer System (MS4) owned or operated by the District of Columbia. This permit also covers all areas served by or contributing to discharges from MS4s owned or operated by other entities within the jurisdictional boundaries of the District of Columbia unless those areas have separate NPDES MS4 permit coverage or are specifically excluded herein from authorization under the District's stormwater program. Hereinafter these areas collectively are referred to as "MS4 Permit Area".

1.2 Authorized Discharges

This permit authorizes all stormwater point source discharges to waters of the United States from the District of Columbia's MS4 that comply with the requirements of this permit. This permit also authorizes the discharge of stormwater commingled with flows contributed by process wastewater, non-process wastewater, or stormwater associated with industrial activity provided such discharges are authorized under separate NPDES permits.

This permit authorizes the following non-stormwater discharges to the MS4 when appropriate stormwater activities and controls required through this permit have been applied and which are: (1) discharges resulting from clear water flows, roof drainage, dechlorinated water line flushing, landscape irrigation, ornamental fountains, diverted stream flows, rising ground waters, uncontaminated ground water infiltration to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation waters, springs, footing drains, lawn watering, individual resident car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, wash water, fire fighting activities, and similar types of activities; and (2) which are managed so that water quality is not further impaired and that the requirements of the federal Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*, and EPA regulations are met.

1.3 Limitations to Coverage

1.3.1 Non-stormwater Discharges

The permittee, as defined herein, shall effectively prohibit non-stormwater discharges into the MS4, except to the extent such discharges are regulated with an NPDES permit.

1.3.2 Waivers and Exemptions

This permit does not authorize the discharge of any pollutant from the MS4 which arises from or is based on any existing waivers and exemptions that may otherwise apply and are not consistent with the Federal Clean Water Act and other pertinent guidance, policies, and regulations. This narrative prohibition on the applicability of such waivers and exemptions extends to any activity that would otherwise be authorized under District law, regulations or

ordinance but which impedes the reduction or control of pollutants through the use of stormwater control measures and/or prevents compliance with the narrative /numeric effluent limits of this permit. Any such discharge not otherwise authorized may constitute a violation of this permit.

1.4 Discharge Limitations

The permittee must manage, implement and enforce a stormwater management program (SWMP) in accordance with the Clean Water Act and corresponding stormwater NPDES regulations, 40 C.F.R. Part 122, to meet the following requirements:

1.4.1. Effectively prohibit pollutants in stormwater discharges or other unauthorized discharges into the MS4 as necessary to comply with existing District of Columbia Water Quality Standards (DCWQS);

1.4.2. Attain applicable wasteload allocations (WLAs) for each established or approved Total Maximum Daily Load (TMDL) for each receiving water body, consistent with 33 U.S.C. § 1342(p)(3)(B)(iii); 40 C.F.R. § 122.44(k)(2) and (3); and

1.4.3. Comply with all other provisions and requirements contained in this permit, and in plans and schedules developed in fulfillment of this permit.

Compliance with the performance standards and provisions contained in Parts 2 through 8 of this permit shall constitute adequate progress toward compliance with DCWQS and WLAs for this permit term.

2. LEGAL AUTHORITY, RESOURCES AND STORMWATER PROGRAM ADMINSTRATION

2.1 Legal Authority

2.1.1 The permittee shall use its existing legal authority to control discharges to and from the Municipal Separate Storm Sewer System in order to prevent or reduce the discharge of pollutants to achieve water quality objectives, including but not limited to applicable water quality standards. To the extent deficiencies can be addressed through regulation or other Executive Branch action, the permittee shall remedy such deficiencies within 120 days. Deficiencies that can only be addressed through legislative action shall be remedied within 2 years of the effective date of this permit, except where otherwise stipulated, in accordance with the District's legislative process. Any changes to or deficiencies in the legal authority shall be explained in each Annual Report.

2.1.2 No later than 18 months following the effective date of this permit, the District shall update and implement Chapter 5 of Title 21 of District of Columbia Municipal Regulations (Water Quality and Pollution) ("updated DC Stormwater Regulations"), to address the control of stormwater throughout the MS4 Permit Area. Such regulations shall be consistent with this

FACT SHEET

National Pollutant Discharge Elimination System (NPDES)
Municipal Separate Storm Sewer System (MS4)
Permit No. DC0000221 (Government of the District of Columbia)

NPDES PERMIT NUMBER: DC0000221 (Reissuance)

FACILITY NAME AND MAILING ADDRESS:

Government of the District of Columbia
The John A. Wilson Building
1350 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

MS4 ADMINISTRATOR NAME AND MAILING ADDRESS:

Director, District Department of the Environment
1200 First Street, N.E., 6th Floor
Washington, D.C. 20002

FACILITY LOCATION:

District of Columbia's Municipal Separate Storm Sewer System (MS4)

RECEIVING WATERS:

Potomac River, Anacostia River, Rock Creek, and Stream Segments Tributary
To Each Such Water Body

INTRODUCTION:

Today's action finalizes reissuance of the District of Columbia Municipal Separate Storm Sewer System (MS4) Permit. In the Final Permit EPA has continued to integrate the adaptive management approach with enhanced control measures to address the complex issues associated with urban stormwater runoff within the corporate boundaries of the District of Columbia, where stormwater discharges via the Municipal Separate Storm Sewer System (MS4).

Since the United States Environmental Protection Agency, Region III (EPA) issued the District of Columbia (the District) its first MS4 Permit in 2000, the Agency has responded to a number of legal challenges involving both that Permit (as well as amendments thereto) and the second-round MS4 Permit issued in 2004. For the better part of ten years, the Agency has worked with various parties in the litigation, including the District and two non-governmental organizations, Defenders of Wildlife and Friends of the Earth, to address the concerns of the various parties. The Agency has engaged in both litigation and negotiation, including formal

mediation.[1] These activities ultimately led to an enhanced stormwater management strategy in the District, consisting of measurable outputs for addressing the issues raised during the litigation and mediation process.

FACILITY BACKGROUND AND DESCRIPTION:

The Government of the District of Columbia owns and operates its own MS4, which discharges stormwater from various outfall locations throughout the District into its waterways.[2]

On April 21, 2010 EPA public noticed the Draft Permit. The Draft Fact Sheet published with that Draft Permit contains more extensive permit background information, and the reader is referred to that document for the history of the District of Columbia MS4 permit.

The public comment period closed on June 4, 2010. EPA received comments from 21 individual commenters and an additional 53 form letters. The Draft Permit, Draft Fact Sheet, and comments received on those documents are all available at: http://www.epa.gov/reg3wapd/npdes/draft_permits.html. The Final Permit reflects many of the comments received. EPA is simultaneously releasing a responsiveness summary responding to these comments.

ACTION TO BE TAKEN:

EPA is today reissuing the District of Columbia NPDES MS4 Permit. The Final Permit replaces the 2004 Permit, which expired on August 18, 2009 and has been administratively extended since that time. The Final Permit incorporates concepts and approaches developed from studies and pilot projects that were planned and implemented by the District under the 2000 and 2004 MS4 permits and modifying Letters of Agreement, and implements Total Maximum Daily Loads (TMDLs) that have been finalized since the prior permit was issued, including the Chesapeake Bay TMDL. A number of applicable measurable performance standards have been incorporated into the Final Permit. These and other changes between the 2004 Permit and today's Final Permit are reflected in a Comparison Document that is part of today's Permit issuance.

WATER QUALITY IN DISTRICT RECEIVING WATERS:

The District's *2008 Integrated Report to the Environmental Protection Agency and U.S. Congress Pursuant to Sections 305(b) and 303(d) Clean Water Act*[3] documents the serious water

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1 A procedural history of Permit appeals can be viewed at the EPA Environmental Appeals Board web: http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/77355bee1a56a5aa8525711400542d23/b5e5b68e89edabe98525714f00731c6f!OpenDocument&Highlight=2,municipal.

2 Portions of the District are served by a combined sanitary and storm sewer system. The discharges from the combined sewer system are not subject to the MS4 permit, but are covered under NPDES Permit No. xxxx issued to the District of Columbia Water and Sewer Authority.

3 District Department of the Environment, *The District of Columbia Water Quality Assessment, 2008 Integrated Report to the Environmental Protection Agency and U.S. Congress Pursuant to Sections 305(b) and 303(d) Clean Water Act* (hereinafter "2008 Integrated Report").

quality impairments in the surface waters in and around the District. A number of the relevant designated uses are not being met, *e.g.*, aquatic life, fish consumption, and full body contact, and there are a number of specific pollutants of concern that have been identified (for additional discussion on relevant TMDLs *see* Section 4.10 of this Final Fact Sheet).

Commenters on the Draft Permit expressed some frustration over very slow progress or even lack of progress after a decade of implementation of the MS4 program and even longer for other water quality programs. EPA appreciates this concern. Although the District's receiving waters are affected by a range of discharge sources, discharges from the MS4 are a significant contributor of pollutants and cause of stream degradation. EPA also recognizes, however, that stormwater management efforts that achieve a reversal of the ongoing degradation of water quality caused by urban stormwater discharges entail a long term, multi-faceted approach.

Consistent with the federal stormwater regulations for characterizing discharges from the MS4 (40 C.F.R. §122.26(d)(2)(iii)), the first two permit terms for the District's MS4 program required end-of-pipe monitoring to determine the type and severity of pollutants discharging via the system. The monitoring program was not designed to evaluate receiving water quality *per se*, therefore detection of trends or patterns was not reasonably possible. Today's Final Permit includes requirements for a Revised Monitoring Program, and one of the objectives for the program is to use a suite of approaches and indicators to evaluate and track water quality over the long-term (*see* discussion of Section 5.1 in this Final Fact Sheet).
There have been identified improvements in some areas. For example the *2008 Integrated Report* noted improvements in the diversity of submerged aquatic vegetation in the Potomac River, as well as improvements in fish species richness in Rock Creek. Biota metrics are often the best indicators of the integrity of any aquatic system.

EPA also notes that there are a variety of indirect measures indicative of improvement. The federal stormwater regulations foresaw the difficulty, especially in the near-term, of detecting measurable improvement in receiving waters, and relied instead on indirect measures, such as estimates of pollutant load reductions (40 C.F.R. §122.26(d)(2)(v)). The District documents these types of indirect measures in its annual reports, *e.g.*, tons of solids collected from catch basin clean-outs, amount of household hazardous waste collected, number of trees planted, square footage of green roofs installed, and many other measures of success.[4]

EPA believes that documenting trends in water quality, whether improvements, no change, or even further degradation, is an important element of a municipal water quality program. Today's Final Permit recognizes this principle, both in the types of robust measures required as well as the transition to new monitoring paradigms. EPA encourages all interested parties to provide the District with input during the development of these program elements.

THIS FACT SHEET:

(http://ddoe.dc.gov/ddoe/frames.asp?doc=/ddoe/lib/ddoe/information2/water.reg.leg/DC_IR_2008_Revised_9-9-2008.pdf)

4 District MS4 Annual Reports can be found at: http://ddoe.dc.gov/ddoe/cwp/view,a,1209,q,495855.asp

This Final Fact Sheet is organized to correspond with the chronological organization and numbering in today's Final Permit. Where descriptions or discussions may be relevant to more than one element of the Final Permit the reader will be referred to the relevant section(s).

To keep today's Final Fact Sheet of readable length, many of the elements included in the fact sheet published with the Draft Permit (Draft Fact Sheet) on April 21, 2010 have not been repeated, but are referenced. Readers are referred to the Draft Fact Sheet published with the Draft Permit for additional discussion on provisions that have been finalized as proposed.[5] The Final Fact Sheet does discuss significant changes since the 2004 Permit (even if discussed in the Draft Fact Sheet). The Final Fact Sheet also contains additional explanation of the Final Permit where commenters requested additional clarification. In addition, this Final Fact Sheet explains modifications to the Final Permit where provisions were changed in response to comments.

In many cases EPA made a number of very simple modifications to the Final Permit, *e.g.*, a word, phrase, or minor reorganization, simply for purposes of clarification. These modifications were not intended to change the substance of the permit provisions, only to clarify them. Most of those types of edits are not discussed in this Final Fact Sheet, but EPA has provided a Comparison Document of the Draft and Final Permits for readers who would like that level of detail.

Many commenters noted that the Draft Permit was not logically organized. EPA agrees. The major reorganization principles include:

1) There is a new Section 3, Stormwater Management Program (SWMP) Plan consolidating the various plans, strategies and other documents developed in fulfillment of permit requirements.
2) All implementation measures, *i.e.*, those stipulating management measures and implementation policies, are included in Section 4 of today's Final Permit. This includes "Source Identification" elements (Section 3 in the Draft Permit) and "Other Applicable Provisions" elements (Section 8 in the Draft Permit), which included TMDL requirements.
3) All monitoring requirements are consolidated in Section 5 of the Final Permit.
4) All reporting requirements are consolidated in Section 6 of the Final Permit.

EPA also refers readers to the Responsiveness Summary released today along with the Final Permit and Final Fact Sheet, for responses to comments and questions received on the Draft Permit. That document contains additional detailed explanations of the rationale for changes made to the Draft Permit in the Final Permit.

Finally, EPA made significant effort to avoid appending or incorporating by reference other documents containing permit requirements into the Final Permit. In the interest of clarity

5 The Permit and Fact Sheet proposed on April 21, 2010 can be viewed at: http://www.epa.gov/reg3wapd/npdes/draft_permits.html

and transparency EPA, to the extent possible, has included all requirements directly in the permit. Thus, EPA reviewed a variety of documents with relevant implementation measures, *e.g.*, TMDL Implementation Plans and the 2008 Modified Letter of Agreement to the 2004 permit[6], and translated elements of those plans and strategies into specific permit requirements that are now contained in the Final Permit. This Fact Sheet provides an explanation of the sources of provisions that are significant and are a direct result of one of those strategies.

1. DISCHARGES AUTHORIZED UNDER THIS PERMIT

(1.2 Authorized Discharges): The Final Permit authorizes certain non-stormwater discharges, including discharges from water line flushing. One commenter noted that many of these discharges, especially from potable water systems, contain concentrations of chlorine that may exceed water quality standards. EPA agrees, and has therefore clarified that dechlorinated water line flushing is authorized to be discharged under the Final Permit.

(1.4 Discharge Limitations): Comments on the language in Part 1.4 varied widely. Some commenters did not believe it was reasonable to require discharges to meet water quality standards. Other commenters believed this to be an unambiguous requirement of the Clean Water Act.

Today's Final Permit is premised upon EPA's longstanding view that the MS4 NPDES permit program is both an iterative and an adaptive management process for pollutant reduction and for achieving applicable water quality standard and/or total maximum daily load (TMDL) compliance. *See generally,* "National Pollutant Discharge Elimination System Permit Application Regulations for Stormwater Discharges," 55 F.R. 47990 (Nov. 16, 1990).

EPA is aware that many permittees, especially those in highly urbanized areas such as the District, likely will be unable to attain all applicable water quality standards within one or more MS4 permit cycles. Rather the attainment of applicable water quality standards as an incremental process is authorized under section 402(p)(3)(B)(iii) of the Clean Water Act, 33 U.S.C. § 1342(p)(3)(B)(iii), which requires an MS4 permit "to reduce the discharge of pollutants to the maximum extent practicable" (MEP) "and such other provisions" deemed appropriate to control pollutants in municipal stormwater discharges. To be clear, the goal of EPA's stormwater program is attainment of applicable water quality standards, but Congress expected that many municipal stormwater dischargers would need several permit cycles to achieve that goal.

Specifically, the Agency expects that attainment of applicable water quality standards in waters to which the District's MS4 discharges, requires staged implementation and increasingly more stringent requirements over several permitting cycles. During each cycle, EPA will continue to review deliverables from the District to ensure that its activities constitute sufficient progress toward standards attainment. With each permit reissuance EPA will continue to increase

6 District Department of the Environment, *Modification to the Letter of Agreement dated November 27, 2007 for the NPDES Municipal Separate Storm Sewer (MS4) Permit DC0000222* (2008) http://www.epa.gov/reg3wapd/npdes/pdf/DCMS4/Letter.PDF

stringency until such time as standards are met in all receiving waters. Therefore today's Final Permit is clear that attainment of applicable water quality standards and consistency with the assumptions and requirements of any applicable WLA are requirements of the Permit, but, given the iterative nature of this requirement under CWA Section 402(p)(3)(B)(iii), the Final Permit is also clear that "compliance with all performance standards and provisions contained in the Final Permit shall constitute adequate progress toward compliance with DCWQS and WLAs for this permit term" (Section 1.4).

EPA believes that permitting authorities have the obligation to write permits with clear and enforceable provisions and thus the determination of what is the "maximum extent practicable" under a permit is one that must be made by the permitting authority and translated into provisions that are understandable and measurable. In this Final Permit EPA has carefully evaluated the maturity of the District stormwater program and the water quality status of the receiving waters, including TMDL wasteload allocations. In determining whether certain measures, actions and performance standards are practicable, EPA has also looked at other programs and measures around the country for feasibility of implementation. Therefore today's Final Permit does not qualify any provision with MEP thus leaving this determination to the discretion of the District. Instead each provision has already been determined to be the maximum extent practicable for this permit term for this discharger.

EPA modified the language in the Final Permit to provide clarity on the expectations consistent with the preceding explanation. Specifically Section 1.4.2 of the Final Permit requires that discharges 'attain' applicable wasteload allocations rather than just 'be consistent' with them, since the latter term is somewhat ambiguous.

In addition, the general discharge limitation 'no increase in pollutant loadings from discharges from the MS4 may occur to receiving waters' was removed because of the difficulty in measuring, demonstrating and enforcing this provision. Instead, consistent with EPA's belief that the Final Permit must include all of the enforceable requirements that would achieve this principle, the following discharge limitation is substituted: "comply with all other provisions and requirements contained in this permit, and in plans and schedules developed in fulfillment of this permit."

In addition, EPA made the following modifications: "Compliance with <u>the</u> performance standards and provisions contained in <u>Parts 2 through 8 of</u> this permit shall constitute adequate progress towards compliance with DCWQS <u>and WLAs for this permit term</u>" (*<u>underlined text added</u>*) (Section 1.4 of the Final Permit). EPA eliminated circularity with the addition of "Parts 2 through 8", clarifying that this requirement does not circle back to include the statements in 1.4.1 and 1.4.2, but rather interprets them. Also, although WLAs are a mechanism for attainment of water quality standards, EPA added the specific language "and WLAs" to make this concept explicit rather than just implicit. In addition this revised language emphasizes that the specific measures contained in the Final Permit, while appropriate for this permit term, will not necessarily constitute full compliance in subsequent permit terms. It is the expectation that with each permit reissuance, additional or enhanced requirements will be included with the objective

of ensuring that MS4 discharges do not cause or contribute to an exceedance of applicable water quality standards, including attainment of relevant WLAs.

2. LEGAL AUTHORITY, RESOURCES, AND STORMWATER PROGRAM ADMINISTRATION

(2.1 Legal Authority): Several commenters pointed out that there were a number of requirements in the Draft Permit without clear compliance schedules or deadlines, or with deadlines that did not correspond well to others in the permit. In the Final Permit, EPA has made several revisions to address these comments. For example, EPA changed a requirement that deficiencies in legal authority must be remedied "as soon as possible" to a 120-day requirement for deficiencies that can be addressed through regulation, and two years for deficiencies that require legislative action (Section 2.1.1). Also, EPA increased the compliance schedule for updating the District's stormwater regulation from twelve months to eighteen months, *id.,* so that this action could be adequately coordinated with the development of the District's new offsite mitigation/payment-in-lieu program (for more discussion see Section 4.1.3 below).

(2.2 Fiscal Resources): One commenter suggested eliminating the reference to the District's Enterprise Fund since funding was likely to come from a number of different budgets within the District. EPA agrees with this comment and has removed this reference.

On the other hand, many commenters noted that the implementation costs of the District's stormwater program will be significant. EPA agrees. The federal stormwater regulations identify the importance of adequate financial resources [40 C.F.R. §122.26(d)(1)(vi) and (d)(2)(vi)]. In addition, after seeing notable differences in the caliber of stormwater programs across the country, EPA recognizes that dedicated funding is critical for implementation of effective MS4 programs.[7,8,9] In 2009 the District established, and in 2010 revised, an impervious-based surface area fee for service to provide core funding to the stormwater program[10] (understanding that stormwater-related financing may still come from other sources as they fulfill multiple purposes, *e.g.,* street and public right-of-way retrofits). In conjunction with the 2010 rule-making to revise the fee the District issued a Frequently Asked Questions document[11] that indicates the intent to restrict this fee to its original purpose, *i.e.*, dedicated funding to implement the stormwater program and comply with MS4 permit requirements. EPA believes this action is essential, and he expects that the District will maintain a dedicated source of funding for the stormwater program.

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7 National Research Council, *Urban Stormwater Management in the United States* (2009) National Academy of Sciences http://www.nap.edu/catalog.php?record_id=12465

8 National Association of Flood and Stormwater Agencies, Funded by EPA, *Guidance for Municipal Stormwater Funding* (2006) http://www.nafsma.org/Guidance%20Manual%20Version%202X.pdf

9 EPA, *Funding Stormwater Programs* (2008) http://www.epa.gov/npdes/pubs/region3_factsheet_funding.pdf

10 District of Columbia, Rule 21-566 Stormwater Fees, http://www.dcregs.dc.gov/Gateway/RuleHome.aspx?RuleID=474056

11 District of Columbia, FAQ Document *Changes to the District's Stormwater Fee* (2010) http://ddoe.dc.gov/ddoe/frames.asp?doc=/ddoe/lib/ddoe/information2/water_reg_leg/Stormwater_Fee_FAQ_10-5-10_-final.pdf

EXHIBIT B

CALIFORNIA Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

State Water Resources Control Board

Issue Paper
Municipal Storm Water Permit Receiving Water Limitations
Board Workshop
November 20, 2012

ISSUE:

The State Water Resources Control Board (State Water Board) has been asked, in public comments received on National Pollutant Discharge Elimination System (NPDES) permits for Municipal Separate Storm Sewer Systems (MS4s), to adopt permit provisions that create a partial or complete exemption from enforcement for violations of water quality standards while a discharger engages in an iterative process of improving controls (commonly referred to as a "safe harbor" provision). The State Water Board has scheduled a public workshop to consider the issue.

DISCUSSION:

Background:

The Clean Water Act generally requires NPDES permits to include technology-based effluent limitations and any more stringent limitations necessary to meet water quality standards. In the context of NPDES permits for MS4s, however, the Clean Water Act does not reference the requirement to meet water quality standards. MS4 discharges must meet a technology-based standard of reducing pollutants in the discharge to the Maximum Extent Practicable (MEP), but requirements to meet water quality standards are at the discretion of the permitting agency.[1] Further, under the Porter-Cologne Water Quality Control Act, waste discharge requirements must implement applicable water quality control plans, including water quality objectives; however, the Porter-Cologne Act also affords the State Water Board and regional water quality control boards (collectively, Water Boards) flexibility to consider other factors, such as economics, when establishing any NPDES permit requirements that are more stringent than required by the Clean Water Act.[2]

The State Water Board has exercised its discretion with regard to requiring compliance with water quality standards in MS4 permits by directing, in precedential orders, that MS4 permits contain provisions requiring discharges to be controlled so as not to cause or contribute to exceedances of water quality standards in receiving waters.[3] However, consistent with federal

[1] 33 U.S.C. § 1342(p); *Defenders of Wildlife v. Browner* (9th Cir. 1999) 191 F.3d 1159.

[2] Wat. Code, §§ 13241, 13263; *City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613.

[3] SWRCB Order WQ 98-01 (*Environmental Health Coalition*), WQ 99-05 (*Environmental Health Coalition)*.

law, the State Water Board has found it appropriate to implement Best Management Practices (BMPs) in lieu of numeric water quality-based effluent limitations to meet water quality standards.[4] Additionally, in lieu of "strict compliance" with water quality standards, the State Water Board has prescribed an iterative process whereby an exceedance of a water quality standard triggers a process of BMP improvements: reporting of the violation, submission of a report describing proposed improvements to BMPs expected to better meet water quality standards, and implementation of these new BMPs.

While the Water Boards have generally directed dischargers to achieve compliance with water quality standards by improving control measures through the iterative process, the iterative process does not provide a "safe harbor" to MS4 permittees: that is, when a discharger is shown to be causing or contributing to an exceedance of water quality standards, that discharger is in violation of the relevant discharge prohibitions and receiving water limitations of the permit and potentially subject to enforcement by the Water Boards or through a citizen suit, even if the discharger is actively engaged in the iterative process. Despite the lack of a safe harbor provision, however, the Water Boards have, as a matter of practice, declined to initiate enforcement actions against MS4 permittees who have been actively engaged in the iterative process. The Water Boards' decisions to decline to include a safe harbor in MS4 permits have been upheld by courts of appeal.[5]

Need for and Purpose of Workshop:

The lack of a safe harbor in the iterative process was recently highlighted by the Ninth Circuit's decision in a citizen suit brought by the Natural Resources Defense Council (NRDC) against the County of Los Angeles and the Los Angeles County Flood Control District for violations of the receiving water limitations of their MS4 permit. The Ninth Circuit confirmed that, as the receiving water limitations of the Water Boards' MS4 permits are currently drafted, engagement in the iterative process does not excuse liability for violations of water quality standards.[6]

As the storm water management programs of municipalities have matured, an increasing body of monitoring data indicates that water quality standards are in fact not being met by many MS4s. MS4s accordingly assert that the receiving water limitations and iterative process provisions of the Water Boards' permits do not afford them with a viable path to compliance for these violations, which may take years of technical efforts to correct, especially for wet weather discharges. MS4s argue that they are increasingly vulnerable to citizen suits and/or Water Board enforcement. This concern has been raised by the California Stormwater Quality Association (CASQA) in comments on the proposed Phase II MS4 permit and by the California Department of Transportation (Caltrans) in comments on the Caltrans MS4 permit adopted

[4] *See* SWRCB Orders WQ 91-03 (*Citizens for a Better Environment)*, WQ 98-01 (*Environmental Health Coalition*), WQ 2001-15 (*Building Industry Association of San Diego County*); *See also* 40 C.F.R. § 122.44(k); Interim Permitting Approach for Water Quality-Based Effluent Limitations In Storm Water Permits, USEPA, September 1995. In such orders and guidance, the State Water Board and Environmental Protection Agency acknowledge that the storm water program may evolve over time to incorporate stricter limitations, including improved BMPs to meet water quality standards or numeric water quality based effluent limitations.

[5] *Building Industry Assn. of San Diego County v. State Water Resources Control Bd.* (2004) 124 Cal.App.4th 866; *City of Rancho Cucamonga v. Regional Water Quality Control Bd.* (2006) 135 Cal.App.4th 1377; see also *Natural Resources Defense Council v. County of Los Angeles* (9th Cir. 2011) 673 F.3d 880, 897, n.7.

[6] *Natural Resources Defense Council v. County of Los Angeles, supra*, 673 F.3d at p. 897. On July 13, 2012, the United States Supreme Court granted review of this case on other grounds.

September 19, 2012, as well as by numerous MS4s and interested persons in comments on both permits. The issue is additionally relevant to the Phase I MS4 permits issued by the regional water quality control boards.[7]

At the same time, the environmental community has commented that the iterative process has been underutilized and ineffective to date in bringing MS4 discharges into compliance with water quality standards. Environmental parties argue that direct enforcement of water quality standards is necessary to protect water quality, especially in such second- or third-generation permits where dischargers have already had a number of years to come into compliance.

Because of the broad applicability of any policy decisions regarding the receiving water limitations and iterative process provisions, the State Water Board is holding a public workshop to consider several alternatives in addressing the issue and to seek public input on these alternatives. Following the workshop, the State Water Board may propose revisions to the receiving water limitations in the Caltrans MS4 and Phase II MS4 permits, and as necessary, re-open those permits after public review and comment, to make the revisions.

ALTERNATIVES FOR CONSIDERATION:

The State Water Board may consider the alternatives below, individually or in combination, to address concerns with the receiving water limitations in the Caltrans or Phase II MS4 permits. While the listed alternatives attempt to capture the range of alternatives before the State Water Board, the Board welcomes comments proposing other options and will not be limiting its consideration to the alternatives as listed in this issue paper.

The receiving water limitations language prescribed by State Water Board Order WQ 99-05 is attached as Attachment 1 and forms the basis of Alternative 1. CASQA has submitted specific proposed language for the Receiving Water Limitations provision of the proposed Phase II MS4 permit (CASQA Proposal). The CASQA Proposal is attached as Attachment 2 and is referenced as appropriate in the discussion of the alternatives below.

Alternative 1: Keep the status quo of no safe harbor.

This alternative makes no changes to the existing State Water Board approach or to the current language of the adopted Caltrans MS4 permit or the proposed Phase II MS4 permit. As stated previously, the current MS4 permit provisions laying out the iterative process are based on language set forth in precedential State Water Board orders. (See Attachment 1.) Alternative 1 adheres to the prescribed language. Under this alternative, the Water Boards may choose to exercise their enforcement discretion to refrain from taking action against dischargers engaged in good faith implementation of the iterative process; however, they would not be constrained from enforcing the receiving water limitations when an MS4 causes or contributes to exceedances of water quality standards. As a limitation within an NPDES permit, dischargers who cause or contribute to an exceedance of water quality standards could be subject to citizen suits.

[7] Note that the issue is not relevant to any other NPDES permits, including permits for storm water discharges associated with industrial activity, because all other NPDES permits must include technology-based effluent limitations and any more stringent limitations necessary to meet water quality standards. (33 U.S.C. § 1311(b)(1)(C).)

Alternative 2: No safe harbor, but provide greater clarity and specificity for iterative process implementation and wet weather data analysis.

Greater clarity and specificity in the MS4 permits as to the iterative process requirements may result in increased efforts to improve controls and achieve compliance. Such clarity and specificity may include:

1. Clarification on how compliance with the relevant discharge prohibitions and receiving water limitations is determined, including type and frequency of monitoring;
2. Clarification that dischargers must begin the iterative process after documentation of violations without waiting to be directed to do so by the Water Boards;
3. Specification of the minimum efforts that will constitute meaningful compliance with the iterative process;
4. Specification of the scope of any corrective action, including whether it applies only at the location where exceedances are measured or throughout the relevant watershed;
5. Specification of additional wet weather data analysis to better define and assess the impact of municipal storm water discharges on receiving waters, as well as the efficacy of specific best management practices.

As the MS4 program continues to mature and more data becomes available, this alternative may be enhanced by the development of water quality-based effluent limitations for pollutants, as appropriate, as a means of determining compliance with receiving water limitations. In addition, the enhanced wet weather data could be used to identify surrogates that could be used as a measure of protecting beneficial uses. In time, the data could be used to develop actual wet weather water quality standards or wet weather implementation provisions for existing water quality standards that could be applied consistently on a statewide basis.

Given the nature of storm water discharges and of MS4s, questions such as where and how compliance with water quality standards should be measured and how narrowly or broadly corrective actions should be applied, pose complicated technical issues that require careful study and consideration. These challenges notwithstanding, water quality improvements are more likely to be achieved as the iterative process becomes automatic and dischargers follow clear guidelines for determining and addressing non-compliance with permit terms. Such improvements may dissuade the Water Boards and the public from bringing enforcement actions/citizen suits for all except the most egregious and repeated violations.

In addition to being a stand-alone alternative, Alternative 2 may be considered in combination with Alternatives 3 through 5. The CASQA Proposal incorporates some greater specificity in the iterative process requirements as a component of its proposed receiving water limitations.

Alternative 3: Safe harbor that applies only if a discharger is in compliance with the implementation provisions of an approved TMDL.

Under Alternative 3, the receiving water limitations would be amended to provide a safe harbor for permittees that are in compliance with the implementation provisions of a TMDL. In effect, as long as the permittee is in compliance with the TMDL (including any compliance schedule) the terms of the TMDL would replace the requirement to comply with water quality standards for the pollutants that are covered by the TMDL.

The CASQA Proposal contemplates a safe harbor for dischargers in compliance with a TMDL as a component of the receiving water limitations.

Alternative 4: Safe harbor that applies if a discharger is in compliance with the implementation provisions of an approved TMDL, as in Alternative 3, and, in addition, that applies when the discharger engages in good faith compliance with the iterative process for exceedances caused by wet weather discharges.

In addition to the safe harbor for TMDL implementation, Alternative 4 would provide a safe harbor when dischargers engage in the iterative process in good faith to address violations of permit terms caused by wet weather discharges. Thus, if a storm water discharge from an MS4 is causing or contributing to an exceedance of a water quality standard in the receiving water, the exceedance would not constitute a violation of the permit as long as the discharger was engaged in good faith efforts to address the exceedance through improved controls. Alternative 4 recognizes that wet weather discharges from MS4s frequently cause or contribute to violations of water quality standards and allows the MS4s time to address these violations by improving control measures.

However, the safe harbor would not extend to dry weather discharges. Non-storm water discharges are generally prohibited in MS4 permits and only a few categories of non-storm water discharges are exempted from the prohibition, with the condition that these exempted discharges also be prohibited if they are identified as sources of pollutants to receiving waters.

Alternative 5: Full safe harbor.

This alternative would provide a full safe harbor to dischargers complying with the implementation provisions of a TMDL or engaging in the iterative process to address exceedances caused by wet or dry weather discharges.

The CASQA Proposal attached provides for a full safe harbor.

Attachments Removed

EXHIBIT C

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RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

November 13, 2012

Honorable Members of the State Water Resources Control Board
Attn: Ms. Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Dear Honorable Board Members and Ms. Townsend: Re: Comment Letter – Receiving Water Limitations Language Workshop

I am writing on behalf of the Riverside County Flood Control and Water Conservation District ("District") regarding the State Water Resources Control Board's consideration of Receiving Water Limitations ("RWL") language in MS4 permits. This review was triggered by a decision of the Ninth Circuit United States Court of Appeals in *Natural Resources Defense Council v. County of Los Angeles* (9th Cir. 2011) 673 F.3d 880, *cert granted,* __ U.S. __ (June 25, 2012) ("*NRDC*"). This letter is being submitted in advance of the State Board's November 20, 2012 workshop on reform of the RWL language to be incorporated into MS4 permits as a matter of statewide policy.

The District is the Principal Permittee for three Phase I MS4 permits applicable to municipalities across Riverside County: Order R8-2010-0033, issued by the Santa Ana Regional Water Board to municipalities within the Santa Ana River Region of Riverside County; Order R9-2010-016, issued by the San Diego Regional Water Board to municipalities within the Santa Margarita Region of Riverside County; and Order R7-2008-0001, issued by the Colorado River Regional Water Board to municipalities within the Whitewater River Region of Riverside County. Given our unique perspective as the manager of three Phase 1 MS4 permits, the District and its staff thus, have considerable experience and expertise in developing and administering MS4 permits, and a keen understanding of the issues that the above mentioned court case creates.

The District strongly supports reform of the RWL language to make clear the State Board's often-expressed intention that MS4 Permittees' compliance with RWL be effectuated through an iterative process. However, under the Ninth Circuit's interpretation, any MS4 discharge that causes or contributes to an exceedance of a Water Quality Standard subjects the MS4 Permittee to civil penalty liability, injunctive relief and the payment of attorneys' fees in an action brought by a citizen plaintiff, even where the Permittee is fully implementing the programmatic requirements of their MS4 Permit.

The District supports the California Stormwater Quality Association's ("CASQA") efforts to obtain RWL language that ensures that the iterative process favored by the State Board is honored. The District also supports the comments of the California State Association of Counties, and believes the proposed RWL language attached to those comments is a step in the right direction.

This letter contains additional District comments about the RWL language and the iterative process. We believe that they are best expressed in terms of correcting misperceptions regarding the current RWL language, as interpreted by the Ninth Circuit.

Misperception Number One: Strict compliance with Water Quality Standards is required of MS4 Permittees by the Clean Water Act.

The Clean Water Act provides that MS4 discharges must control pollutants in discharges from the MS4 to the "Maximum Extent Practicable" (33 U.S.C. § 1342(p)(3)(B)(iii)). Unlike the case with other NPDES Permittees, the Clean Water Act does not require that municipalities strictly comply with Water Quality Standards, as determined by the Ninth Circuit in *Browner v. Defenders of Wildlife*. The State Board's own precedential Order WQ 2001-15 recognizes this fact and states that the RWL language was intended to be consistent with the *Browner* case. In that Order, which interpreted RWL language similar to that in *NRDC*, the Board stated:

> *[O]ur language, similar to the U.S. EPA's permit language discussed in the Browner case, does not require strict compliance with water quality standards. Our language requires that storm water management plans be designed to achieve compliance with water quality standards. Compliance is to be achieved over time, through an iterative approach requiring improved BMPs. As pointed out by the Browner court, there is nothing inconsistent between this approach and the determination that the Clean Water Act does not mandate strict compliance with water quality standards.* [*Order WQ 2001-15 at 7 (emphasis added)].*

Unfortunately, the Ninth Circuit completely disregarded this language, and the Order, in holding that strict compliance was required of MS4 Permittees.

USEPA itself has issued MS4 permits (in non-delegated states) that do not contain RWL language requiring strict compliance with Water Quality Standards. Therefore, it is clear that such compliance is not required by the Clean Water Act nor is such compliance established by USEPA policy. The most prominent example of a recent MS4 permit promulgated by USEPA is that for the District of Columbia ("DC Permit") (relevant portions of which are attached as Exhibit A), which was adopted in 2011.

Part 1.4 of the DC Permit contains the requirements relating to Water Quality Standards and provides, in relevant part: "Compliance with the performance standards and provisions contained in Parts 2 through 8 of the permit shall constitute adequate progress towards compliance with DCWQS [water quality standards] and WLAs [established under TMDLs] for this permit term." The DC Permit Fact Sheet explains the rationale for that language as follows [DC Permit Fact Sheet, Pages 5-6, emphasis added, attached as Exhibit B]:

> *Comments on the language in Part 1.4 varied widely. Some commenters did not believe it was reasonable to require discharges to meet water quality standards. Other commenters believed this to be an unambiguous requirement of the Clean Water Act.*

Today's Final Permit is premised upon **EPA's longstanding view that the MS4 NPDES permit program is both an iterative and an adaptive management process for pollutant reduction and for achieving applicable water quality standard and/or total maximum daily load (TMDL) compliance.** *See generally, "National Pollutant Discharge Elimination System Permit Application Regulations for Stormwater Discharges," 55 F.R. 47990 (Nov. 16, 1990).*

EPA is aware that many Permittees, especially those in highly urbanized areas such as the District, likely will be unable to attain all applicable water quality standards within one or more MS4 permit cycles. *Rather the attainment of applicable water quality standards* **as an incremental process** *is authorized under section 402(p)(3)(B)(iii) of the Clean Water Act, 33 U.S.C. § 1342(p)(3)(B)(iii), which requires an MS4 permit "to reduce the discharge of pollutants to the maximum extent practicable" (MEP) "and such other provisions" deemed appropriate to control pollutants in municipal stormwater discharges.* **To be clear, the goal of EPA's stormwater program is attainment of applicable water quality standards, but Congress expected that many municipal stormwater dischargers would need several permit cycles to achieve that goal.**

Specifically, the Agency expects that attainment of applicable water quality standards in waters to which the District's MS4 discharges, requires staged implementation and increasingly more stringent requirements over several permitting cycles. During each cycle, EPA will continue to review deliverables from the District to ensure that its activities constitute sufficient progress toward standards attainment. With each permit reissuance EPA will continue to increase stringency until such time as standards are met in all receiving waters. **Therefore today's Final Permit is clear that attainment of applicable water quality standards and consistency with the assumptions and requirements of any applicable WLA are requirements of the Permit, but, given the iterative nature of this requirement under CWA Section 402(p)(3)(B)(iii), the Final Permit is also clear that "compliance with all performance standards and provisions contained in the Final Permit shall constitute adequate progress toward compliance with DCWQS and WLAs for this permit term" (Section 1.4).**

USEPA is now proposing clarifying changes to this language and to other sections of the DC Permit as the result of a settlement with various parties. However, those changes do not require strict compliance with Water Quality Standards, but rather compliance through the programs developed under the Permit.

The State Board is thus, free to adopt new RWL language that effectuates its previously expressed intent that MS4 permits not require strict compliance with Water Quality Standards with regard to contributions from discharges from MS4s.

Misperception Number Two: The MS4 Permittees are Seeking a "Safe Harbor" that would Insulate them from Responsibility Under the Clean Water Act.

While State Board staff's "Issue Paper" uses the term "safe harbor" in describing the iterative process, the District believes that this is fundamentally misleading. Even a cursory review of the terms of a typical MS4 permit in California reveals that it is full of compliance points. In the three MS4 Permits in which the District serves as Principal Permittee, literally every sentence is a separate point of compliance.

This fact is supported by the language of the Permits themselves. For example, in Order R8-2010-0033 Part XX.G provides: **"The Permittees must comply with all terms, requirements, and conditions of this Order. Any violation of this Order constitutes a violation of the CWA, its regulations and the California Water Code, and is grounds for enforcement action . . . ."** (emphasis added). Similar provisions are contained in the other two Riverside County MS4 Permits. Even without the strict Water Quality Standard language imposed under the Ninth Circuit's opinion, there is no "safe harbor" from liability under the Clean Water Act or, where applicable, the California Water Code, for any Permittee that fails to fully implement each the detailed and prescriptive requirements of its MS4 Permit.

There is a fundamental difference however, between fully complying with activities within the control and responsibility of the Permittees, such as monitoring, implementing BMPs and performing other programmatic requirements of the MS4 Permit; and being forced to guarantee that MS4 discharges will not cause or contribute to exceedances of Water Quality Standards in Receiving Waters, a guarantee that the Permittees' have no ability to make.

What the District and other MS4 Permittees seek is relief from what is essentially "guaranteed non-compliance" where a Permittee can be found in violation of their MS4 Permit even if the exceedance occurs at no fault of or failure by the Permittee, or put another way, even in circumstances where there is nothing a Permittee could have done to prevent that exceedance from occurring. In such a case, the Permittee can be held liable for potentially millions of dollars in legal costs, penalties and other expenses. We note that the City of Malibu, a city of only 13,000 residents, spent more than $2 million in defending against a citizen suit filed with respect to its MS4 Permit and more than $6 million to settle the case, including payment of $750,000 in attorney fees to plaintiffs. Given the tremendous financial challenges faced by every California municipality, including the District, the County of Riverside and the Permittee cities within the County, such a diversion of resources that otherwise would be directed at clean water programs or other vital municipal programs is a poor policy choice. And, as noted, it is not a policy choice that is required by the Clean Water Act, nor is it required by USEPA in their own Permits.

The District recognizes that regulatory enforcement actions and citizen suits are authorized by the Clean Water Act and that such suits may be an appropriate remedy where, for example, a Permittee has failed to comply with the programmatic requirements of its MS4 Permit. Where, however, the Permittees are complying with those requirements in good faith but, due to circumstances beyond

their control, their MS4 discharge causes or contributes to a Water Quality Standard exceedance in Receiving Waters, a citizen suit based on those exceedances potentially throws away the work done by the Permittees and the Water Boards under the MS4 Permit, as discussed below.

Misperception Number Three: MS4 can achieve compliance with strict Water Quality Standards.

MS4 Permittees cannot guarantee that discharges from their MS4s will in fact, not cause or contribute to an exceedance of Water Quality Standards in a Receiving Water. The monitoring conducted under our MS4 Permits reflects exceedances of various Water Quality Standards in Receiving Waters, and we understand that such results are typical for MS4 discharges around the state (please see Pages 2-3 of the CASQA comment letter dated November 2, 2012). The extreme variability of stormwater quality and quantity itself (which, in Southern California, arrives infrequently and from widely varying storm sizes) combined with a multitude of potential pollutant sources beyond a Permittee's ability to truly "control", make it impossible for a municipality to ensure that no discharges from its MS4 will ever cause or contribute to exceedances of Water Quality Standards in Receiving Waters. This was recognized by the Issue Paper released by State Board staff in preparation for the November 20th workshop, which found that as "the storm water management programs of municipalities have matured, **an increasing body of monitoring data indicates that water quality standards are in fact not being met by many MS4s**" (Issue Paper, Page 2 (emphasis supplied)).

Thus, even if municipal Permittees are to be held strictly liable for the ensuring that no discharges from their MS4s cause or contribute to an exceedance of Water Quality Standards, as the Ninth Circuit has interpreted the current RWL language, those Permittees have no ability to attain those standards. The reasons are several-fold and include the following:

1) Unlike an industrial NPDES Permittee, a municipal Permittee is not typically the source of the pollutants in the MS4 discharge (whether wet or dry). The municipality can regulate sources to some degree (through, for example, the operation of structural and non-structural BMPs and implementation of an Illegal Connection/Illicit Discharge program), but the municipality cannot guarantee that pollutants will not enter the MS4 and then be discharged into the Receiving Waters.

2) Municipalities cannot control natural sources of pollutants that are discharged through the MS4. Monitoring has indicated that many pollutants are likely from natural and not anthropogenic sources.

3) While Permittees conduct extensive public education programs as part of their MS4 programs, municipalities cannot "control" human behavior, or "prevent" an individual from taking an action that might cause pollution to enter the MS4. As an example, a resident may, despite all ordinances, regulations, potential penalties or enforcement, public outreach, available BMPs, etc., choose not to pick up after their pets, and

stormwater may, through no fault of the Permittee, pick up animal waste and deposit into the MS4.

4) MS4 Permittees cannot "prevent" flows from entering their MS4. To protect the health and property of their residents, MS4 operators must allow the legitimate flows of water into their drains. This is especially true for the District, which is charged directly by the Legislature [in Water Code App. §48-9] with the task of taking necessary steps to protect the people, properties and watersheds of Riverside County from the negative impacts of flooding. The District cannot, in effect, cause flooding by preventing flows from entering their storm drain, simply because such flows may contain pollutants that cause a violation of the Receiving Waters Limitation provisions of their MS4 Permits. In fact, California law requires downstream property owners (such as MS4 operators) to accept flows from upstream property owners.

5) Further, the authorities granted to flood control districts, such as this District, by the Legislature are narrow and do not include the authority to condition or regulate the quality or nature of stormwater runoff discharged from up gradient properties. This responsibility is appropriately assigned by the Legislature to the Regional Boards.

Similarly, MS4 Permittees cannot guarantee compliance with Water Quality Standards in dry weather. "Alternative 4" in the staff's Issue Paper suggests an alternative RWL approach that would not extend the iterative approach to dry weather discharges. The District submits that this alternative does not reflect the reality of urban runoff. Monitoring conducted under the Riverside County MS4 Permits reflects exceedances of Water Quality Standards during dry weather as well as wet weather. There is no justification for imposition of strict liability for exceedances during such conditions, for the following reasons:

1) During dry weather, other NPDES-permitted discharges continue to flow into the Receiving Waters. For example, much of the flow in the Santa Ana River during dry weather conditions is from non-MS4 sources, such as publicly owned treatment works. Additionally, numerous other separate NPDES-permitted discharges will occur, potentially at concentrations of pollutants that exceed Water Quality Standards. Evidence generated during the *NRDC* case involving the County of Los Angeles, for example, indicated that NPDES permits covering hundreds of these dischargers, including POTWs allowed the discharge of pollutants at concentrations *greater* than Water Quality Standards. Because of these discharges, which are legal and authorized by the Regional Boards, the MS4 Permittees have essentially no more control over compliance with Water Quality Standards in dry weather than they would have during wet weather conditions.

2) Accidental or even intentional illicit discharges by third parties into the MS4 obviously can occur during dry weather as well as wet weather. Such discharges would potentially have an even greater impact on sampling, since they are not diluted by large volumes of stormwater. For example, a vehicular accident recently caused hundreds of gallons of

asphalt tar to enter Sandia Creek, a Receiving Water in Riverside County. While this spill was not discharged through an MS4, if the vehicular accident had occurred in another portion of the watershed, the spill could feasibly have entered into and been discharged from an MS4. Similarly in many places throughout the State, sanitary sewer systems are owned and operated by special districts that have no relation to the MS4 Permittees that own or operate the MS4 systems. Nevertheless, an overflow of such sanitary sewer systems may cause an unavoidable discharge into, and from a Permittee-owned MS4. Such accidental or illicit discharges cannot be "prevented" or "controlled" by the Permittees except to the extent that they can be cleaned up or blocked if promptly reported. However, if the discharge has reached Receiving Waters and caused a measured exceedance of Water Quality Standards, under the Ninth Circuit's interpretation, liability for civil penalties, injunctive relief and attorneys fees will attach to the MS4 Permittee.

3) Enforcing strict Water Quality Standard limits in dry or wet weather is counter-productive to the watershed planning-based MS4 Permits currently being promulgated by many regional water boards. Enforcing such limits will divert Permittee attention and resources from watershed-based, monitoring-heavy compliance programs, as will be discussed in greater detail below.

In essence, under the Ninth Circuit's interpretation of the current RWL language, the District, and potentially every other MS4 Permittee in the state, is in violation of its Permit any time that an exceedance of a Water Quality Standard is recorded and attributed to a discharge from its MS4. This means that the Regional Water Boards have issued, and continue to adopt permits that include RWL language **which cannot be complied with**. The Clean Water Act, however, does not require Permittees to achieve the impossible. *See, e.g., Hughey v. JMS Development Corp.* (11th Cir. 1996) 78 F.3d 1523, 1530 ("In interpreting the liability provisions of the CWA, we realize that Congress is presumed not to have intended absurd (impossible) results.").

Misperception Number Four: The Current RWL Language is more Protective of Receiving Water Quality.

This statement is not only untrue but maintaining the current RWL language actually **impedes** efforts to protect Receiving Water Quality.

We understand that some stakeholders believe that there should be Numeric Effluent Limitations (NELs) contained in the MS4 Permits for purposes of accountability. In response, we note that many MS4 permits now contain numeric Stormwater and Non-stormwater Action Levels ("SALs" and "NALs") or other numeric targets or goals, the exceedance of which trigger specific compliance responses by the Permittees. It is these action levels (which were advocated by the Blue Ribbon Panel established by the State Board to investigate the appropriateness of NELs in MS4 permits) which provide such "numeric" accountability. This is in addition to the numerous other compliance documentation and reporting provisions required of MS4 Permittees that also provide measures of accountability.

More importantly, the current RWL language as interpreted by the Ninth Circuit actually impedes efforts by municipalities to protect water quality. First, by requiring immediate compliance, the language undermines efforts to bring Water Quality Standard-impaired waterbodies into compliance through the Total Maximum Daily Load ("TMDL") program. TMDLs are designed with the recognition that, due to the complexity of the issues causing the waterbody to be impaired in the first place, meeting these requirements cannot be achieved immediately. Therefore, TMDL compliance plans include timelines to achieve such compliance over periods of years and sometimes decades.

Second, most MS4 permits have begun incorporating sophisticated watershed management plans, which prioritize pollutants by waterbody and attempt, through aggressive monitoring and source identification efforts, to identify and address the sources of those prioritized pollutants. Municipalities subject to strict RWL language will have no ability to prioritize pollutants, since they must address any pollutant that exceeds a Water Quality Standard, irrespective of the relative impact that that discharge may have had upon the environment or beneficial uses. Moreover, these watershed management plan approaches employ cooperative monitoring and other watershed-based approaches. Permittees faced with potential liability for any exceedance of Water Quality Standards in Receiving Waters that may be caused or contributed to by discharges of their MS4s, will not likely volunteer to cooperate on any watershed-based approach, if cooperation could subject them to additional unnecessary liability.

Third, in a citizen suit brought under the Clean Water Act, a federal judge is free to impose any appropriate injunctive relief to enforce a permit (33 U.S.C. § 1365(a)). Thus, for example, a court could ignore the provisions of a MS4 permit in ordering municipal defendants to address Water Quality Standard exceedances in Receiving Water. This means that the thousands of people-hours invested in the Permit's development, implementation and oversight by municipalities, the Regional Water Boards and other stakeholders would be wasted. In essence, under the Ninth Circuit's reading of the RWL language, all other language in an MS4 permit appears to be superfluous, since the RWL language would control all compliance efforts. This result, of course, is not required by plain language of the Clean Water Act.

Fourth, if a municipality is in unavoidable and automatic non-compliance with the requirements of its MS4 Permit, it will be unable to justify budgeting for water quality management programs and BMPs otherwise required by the Permit as the municipality will simply receive no benefit from making compliance investments. To gain public support for stormwater programs, a municipality must demonstrate to its residents that such investments will constitute compliance with the Permit.

Discussion of Alternatives

The State Board staff's Issue Paper sets forth five alternatives for consideration. Alternative 1, no change in the current RWL language, is completely unacceptable to the District (and, we believe, to other municipalities across the state) because it fails to address the "guaranteed non-compliance" problem of the current language.

Alternative 2, which proposes to maintain the language that puts the MS4 Permittees in a situation of unavoidable and potentially "guaranteed" non-compliance, but would add greater specification as to how the iterative process might be carried out, is also unacceptable as the MS4 Permittees will still have no viable means to ensure their compliance with the RWL language. While the District does not object in principle to RWL language that spells out clearly, and in achievable terms, what is required of MS4 Permittees when exceedances are recorded, such a change alone does not address the fundamental issues identified in this letter.

Alternative 3, which proposes to provide an iterative process for compliance with the RWL only for pollutants being addressed by dischargers in compliance with an approved TMDL, is better than the first two alternatives, but is still entirely insufficient. By failing to provide a viable means for compliance with the RWL language for non-TMDL pollutants, this alternative language would force Permittees into unavoidable non-compliance, and require them to redirect their efforts and resources away from the TMDL activities, to those other pollutants, due to the strict liability attached to those exceedances. This would be a poor policy choice, as pollutants that are not subject to a TMDL may have significantly less, or even no impact on beneficial uses in the Receiving Waters, as noted in the CASQA comment letter.

Alternative 4, which excludes dry weather discharges from the iterative process to comply with the RWL, is unacceptable for the reasons previously set forth regarding an MS4 Permittees inability to truly "prevent" or "control" accidental or illegal dry weather discharges.

Alternative 5, which provides viable means for compliance with the RWL, for all types of MS4 discharges, is the only viable solution among the alternatives presented by State Board staff. In an era of limited budgets, the only and best way to make progress toward improving the quality our Receiving Waters, is to provide MS4 Permittees the ability to prioritize their efforts, as required in the Watershed Management Plan provisions contained in the most recent MS4 Permits, including the Los Angeles County Permit and the proposed Regional Permit for the San Diego Regional Water Board. As previously discussed, such prioritization cannot occur in the context of strict liability for the exceedance of Water Quality Standards in the Receiving Waters. For all of the reasons set forth in this letter, no other alternative makes policy sense or is congruent with the Maximum Extent Practicable standard in the Clean Water Act.

The District would add that Alternative 5 should additionally incorporate the concept of achieving RWL compliance through watershed management plans, and requests the Board to direct staff to work with stakeholders to ensure that any revised RWL language does not force intermittent or minor exceedances of Water Quality Standards to become de-facto higher priorities than those set by the watershed stakeholders.

In summary, the District supports CASQA, the California State Association of Counties and other municipal stakeholders in advocating for a fully iterative and viable approach to compliance with RWL language in both wet and dry weather conditions. Only when such an approach is in place and endorsed by the State Board will Permittees, including the District, feel confident that they can focus

fully on efforts to address pollutants in discharges into and from their MS4s, and not on preparing for costly and pointless litigation.

The District therefore, respectfully requests the State Board direct its staff to commence development of new language providing for an enforceable, iterative and viable process for MS4 Permittees to comply with the RWL language included in MS4 permits.

We wish to thank you and State Board staff for your consideration of these comments and any further comments, written or oral, that the District may make on these important issues.

Very truly yours,

Steve Thomas

for WARREN D. WILLIAMS
General Manager-Chief Engineer

CP:cw
P8/150189

EXHIBIT D

FILED
JAN - 3 2013
CLERK, U.S. DISTRICT COURT
ALEXANDRIA, VIRGINIA

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

VIRGINIA DEPARTMENT OF TRANSPORTATION, ET AL, Plaintiffs, -v- UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, ET AL, Defendants.	Civil Action No. 1:12-CV-775

Memorandum Opinion

Before the Court is the Plaintiffs' motion for judgment on the pleadings under Federal Rule of Civil Procedure 12(c). The Defendants opposed the motion, and the Plaintiffs replied. The Court heard oral arguments on December 14, 2012 and now issues this memorandum opinion and accompanying order granting the Plaintiffs' motion.

Background

The Clean Water Act, 33 U.S.C. § 1251 et seq., establishes the basic structure for regulating discharge of pollutants into the waters of the United States, and provides certain mechanisms to improve and maintain the quality of surface waters.

One such mechanism is the requirement that states identify "designated uses" for each body of water within their borders, as well as "water quality criteria" sufficient to support those uses. 33 U.S.C. § 1313(c)(2)(A). The Environmental Protection Agency ("EPA") evaluates the uses and criteria developed by the states, and either approves them or else proposes and

promulgates its own set of standards. § 1313(c)(3).

Once the standards are in place, each state is required to maintain a list—also subject to approval or modification by EPA—of its waterbodies that are "impaired" because they do not meet their respective water quality criteria. 33 U.S.C. § 1313(d)(1)(A). For each waterbody on the impaired list, the state is required to establish a set of total maximum daily loads ("TMDLs") sufficient to bring the body back into compliance with its water quality criteria. § 1313(d)(1)(C). Each TMDL establishes the maximum amount of a pollutant that may be added to the waterbody daily from all sources (runoff, point sources, etc.). EPA is required to publish a list of pollutants suitable for maximum daily load measurement, § 1314(a)(2)(D), and it has determined that *all* pollutants are suitable for TMDLs, *see* Total Maximum Daily Loads Under Clean Water Act, 43 Fed. Reg. 60,662. Therefore, any pollutant that falls within the relatively broad definition of "pollutant" set forth in § 1362(6) may be regulated via TMDL. EPA can approve or modify as it sees fit TMDLs proposed by the states. § 1313(d)(2).

Here the state in question is Virginia, and the waterbody is a 25-mile long tributary of the Potomac River, located in Fairfax County, called Accotink Creek. The creek has been the subject of litigation in the past that is not relevant to this matter except the result: EPA was required to set TMDLs for Accotink Creek once Virginia failed to do so by a certain date. Specifically, the creek had been identified as having "benthic impairments," which is to say the community of organisms that live on or near the bottom of the creek were not as numerous or healthy as they should be. EPA was to set appropriate TMDLs to improve the health of the benthic community in Accotink Creek.

On April 18, 2011, EPA established a TMDL for Accotink Creek which limited the flow rate of stormwater into Accotink Creek to 681.8 ft^3/acre-day. The TMDL was designed to

regulate the amount of sediment in the Accotink, because EPA believed sediment was a primary cause of the benthic impairment. Both parties agree that sediment is a pollutant, and that stormwater is not. EPA refers to stormwater flow rate as a "surrogate" for sediment.

The Plaintiffs are now challenging the TMDL on multiple grounds, but presently before the Court is a single issue: Does the Clean Water Act authorize the EPA to regulate the level of a pollutant in Accotink Creek by establishing a TMDL for the flow of a nonpollutant into the creek?

Analysis

I. Standard of Review

Count I of the complaint, at issue here, is brought under the Administrative Procedures Act. *See* Comp. ¶ 169. The APA "confines judicial review of executive branch decisions to the administrative record of proceedings before the pertinent agency." *Shipbuilders Council of Am. V. U.S. Dept. of Homeland Sec.*, 770 F. Supp. 2d 793, 802 (E.D. Va. 2011). As such, the district court "sits as an appellate tribunal," and APA claims can be resolved equally well in the context of Rule 12 or Rule 56. *Univ. Med. Ctr. Of S. Nev. V. Shalala*, 173 F.3d 438, 441 n. 3 (D.C. Cir. 1999).

Because Count I presents a question of statutory interpretation, the Court reviews EPA's decision using the two-step analysis set forth in *Chevron, U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837 (1984). For a given question of statutory interpretation, the first step under *Chevron* is to determine whether Congress addressed the "precise question at issue." 467 U.S. at 842. "If the intent of Congress is clear, that is the end of the matter . . . ." *Id.* If the Court cannot find that Congress has squarely addressed the question, the Court must move to Chevron's second step. In

the second step of statutory construction under *Chevron*, the Court must determine whether the agency's interpretation of the statute is "permissible." *Id.* at 843. The agency's construction is permissible if it is reasonable, but it need not be what the Court considers the *best* or *most reasonable* construction. *See id.* at 845. The Court is not to simply impose its own construction on the statute, but instead it gives deference to any reasonable statutory construction by the agency. *Id.* at 843.

II. Chevron Step One

Whether statutory ambiguity exists so that the issue cannot be settled at *Chevron's* first step is for the Court to decide, and the Court "owe[s] the agency no deference on the existence of ambiguity." *Am. Bar Ass'n v. FTC*, 430 F.3d 457, 468 (D.C. Cir. 2005). The Court begins the inquiry by "employing traditional tools of statutory construction." *Chevron*, 467 U.S. at 843 n.9. As always, the analysis begins with the text of the statute. *Nat'l Elec. Mfrs. Ass'n v. U.S. Dept't of Energy*, 654 F.3d 496, 504 (4th Cir. 2011).

The text of the statute that requires states to establish their own TMDLs, 33 U.S.C. § 1313(d)(1)(C), is:

> Each State shall establish for the waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, **the total maximum daily load, for those pollutants which the Administrator identifies** under section 1314(a)(2) of this title as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality. (emphasis added)

The next subsection, § 1313(d)(2), grants EPA the authority to set TMDLs when the state

has not done so adequately. "Pollutant" is a statutorily defined term. 33 U.S.C. § 1362(6).

The Court sees no ambiguity in the wording of this statute. EPA is charged with establishing TMDLs for the appropriate pollutants; that does not give them authority to regulate nonpollutants. The parties agree that sediment is a pollutant under 33 U.S.C. § 1362(6), and stormwater is not. Then how does EPA claim jurisdiction over setting TMDLs for stormwater?

EPA frames the stormwater TMDL as a surrogate. EPA's research apparently indicates that the "[sediment] load in Accotink Creek is a function of the amount of stormwater runoff generated within the watershed." Def. Opp. at 8. And EPA believes that framing the TMDL in terms of stormwater flow rate is superior to simply expressing it in terms of maximum sediment load.

The DC Circuit has considered and rejected a similar attempt by EPA to take liberties with the way Congress intended it to express its TMDLs. In *Friends of the Earth, Inc. v. Env. Protection Agency*, EPA had promulgated TMDLs for the Anacostia River that expressed the maximum load of certain pollutants in terms of annual and seasonal amounts. 446 F.3d 140, 143 (D.C. Cir. 2006). The court found that expressing a TMDL in terms of annual or seasonal maximums was not allowed, because the statute granted authority only for daily loads. *Id.* at 148. The court reached its conclusion even though EPA apparently made a strong argument that expressing TMDLs in terms of annual or seasonal loads was an effective and reasonable approach. *See id.* Presumably a daily load could have been derived by simply dividing the annual load by 365, yet the court still required expression in the terms dictated by Congress.

Here too, EPA hopes to express a TMDL in terms other than those contemplated by the statute, arguing that such an expression is the most effective method. But, as *Friends of the Earth* illustrates, EPA may not regulate something over which it has no statutorily granted power—

annual loads or nonpollutants—as a proxy for something over which it *is* granted power—daily loads or pollutants.

EPA's argument that its surrogate approach should be allowed because the statute does not specifically forbid it fails. EPA is not explicitly forbidden from establishing total maximum *annual* loads any more than they are explicitly barred from establishing TMDLs for nonpollutants. The question is whether the statute grants the agency the authority it is claiming, not whether the statute explicitly withholds that authority. And in this case, as in *Friends of the Earth*, the statute simply does not grant EPA the authority it claims.

The dicta in *Weyerhaeuser Co. v. Costle* is not as helpful to EPA's case as it would like. 590 F.2d 1011, 1022 n.6 (D.C. Cir. 1978). It is true that the court said in a footnote "[i]t is well recognized that EPA can use pollution parameters that are not harmful in themselves, but act as indicators of harm." *Id.* But in that case, the non-harmful pollution parameters the EPA sought to regulate were components of the effluent commonly discharged from paper mills, *id.* at 1022, making them effluents themselves. And power to regulate effluents is expressly granted to the EPA in the relevant statutory section. *See* 33 U.S.C. § 1314(b).

EPA would like to create the impression that Congress has given it loose rein to determine exactly what it could and could not regulate. On page 16 of its opposition to this motion, EPA points out that "Congress authorized EPA to determine which pollutants were suitable for TMDL calculation and measurement." (Internal quotes removed). While this may be true, EPA glosses over the fact that 33 U.S.C. § 1314(a)(2)(D) only gives EPA the power to regulate pollutants as that term is defined—by Congress—elsewhere in the statute. And, as discussed above, sediment is a pollutant for these purposes, but stormwater is not.

In a similar vein, EPA regulations which imply that the agency has discretion to set the

TMDL as it sees fit do not bear on the question now before the Court. EPA has promulgated a regulation allowing TMDLs to be "expressed in terms of either mass per time, toxicity, or other appropriate measure," 40 C.F.R. § 130.2(i), and another that allows TMDLs to be expressed as a "property of pollution," 50 Fed. Reg. 1774, 1776 (Jan. 11, 1985). But, EPA citing these regulations to demonstrate that the surrogate TMDL approach is permissible is mere bootstrapping. To the extent the regulations allow EPA to set TMDLs for nonpollutants, they exceed the statutory authority of EPA.

The plain language of the statute trumps all, but legislative history also supports Plaintiffs' argument. Congress's intent to limit EPA's discretion in this context is evidenced by the committee record cited by Plaintiffs, which has also been used by the Ninth Circuit, in which Senator Randolph, Chairman of the Senate committee that amended the act in 1972, explained, "We have written into law precise standards and definite guidelines on how the environment should be protected. We have done more than just provide broad directives [for] administrators to follow." Pl. Mot. 7, *citing Nw. Envtl. Def. Ctr. v. Brown*, 640 F.3d 1063, 1072 (9th Cir. 2011). Congress created a statutory scheme that included a precise definition of the word "pollutant," and then gave EPA authority to set TMDLs for those pollutants. Senator Randolph's comments strongly imply that Congress did not intend anything more or less than what is written in the statute.

The Court considers the language of 33 U.S.C. § 1313(d)(1)(C) to be unambiguous. Congress has spoken directly on the question at issue, and its answer is that EPA's authority does not extend to establishing TMDLs for nonpollutants as surrogates for pollutants. The legislative history of the CWA is consistent with this reading. Therefore, this Court finds EPA's interpretation of § 1313 and the related provisions to be impermissibly broad based on analysis

under the first step of *Chevron* analysis.

III. Chevron Step Two

Because the Court considers Congress's intent to be clear and unambiguously expressed by the language of the statute, it need not move to the second step of *Chevron* analysis. But the Court notes that there is substantial reason to believe EPA's motives go beyond "permissible gap-filling."

Page 9 of EPA's opposition says, "stormwater flow rates as a surrogate would more effectively address the process by which sediment impairs aquatic life in Accontink Creek." If the sediment levels in Accotink Creek have become dangerously high, what better way to address the problem than by limiting the amount of sediment permitted in the creek? If sediment level is truly "a function of" the amount of stormwater runoff, as EPA claims, then the TMDL could just as easily be expressed in terms of sediment load.

In fact, the Board of Supervisors of Fairfax County argued at the December 14th hearing (without objection from EPA) that EPA has approved 3,700 TMDLs for sediment nationwide, and in Virginia has addressed 111 benthic impairments with TMDLs. None of them regulated the flow rate of stormwater. By comparison, EPA has tried out its novel approach of regulating sediment via flow in only four instances nationwide, and all four attempts were challenged in court. One has settled, the other three are still pending.

The Court suspects that the decision to regulate stormwater flow as a surrogate for sediment load would not constitute a permissible construction of § 1313(d)(1)(C), even given the deference due at *Chevron's* second step. This is especially likely because EPA is attempting to increase the extent of its own authority via flow TMDLs, which courts must examine carefully.

See Brown & Williamson Tobacco Corp. v. Food & Drug Admin., 153 F.3d 155, 161-62 (4th Cir. 1998). EPA's attempt to set TMDLs for nonpollutants probably goes beyond "permissible gap-filling" and is instead an impermissible construction of the statute.

Conclusion

The language of § 1313(d)(1)(C) is clear. EPA is authorized to set TMDLs to regulate pollutants, and pollutants are carefully defined. Stormwater runoff is not a pollutant, so EPA is not authorized to regulate it via TMDL. Claiming that the stormwater maximum load is a surrogate for sediment, which is a pollutant and therefore regulable, does not bring stormwater within the ambit of EPA's TMDL authority. Whatever reason EPA has for thinking that a stormwater flow rate TMDL is a better way of limiting sediment load than a sediment load TMDL, EPA cannot be allowed to exceed its clearly limited statutory authority. For these reasons, the Plaintiffs' motion for Rule 12(c) judgment on the pleadings on Count I of their complaint is granted.

January 3, 2013
Alexandria, Virginia

/s/
Liam O'Grady
United States District Judge

FILED
JAN - 3 2013
CLERK, U.S. DISTRICT COURT
ALEXANDRIA, VIRGINIA

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

VIRGINIA DEPARTMENT OF TRANSPORTATION, ET AL, Plaintiffs, -v- UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, ET AL, Defendants.	Civil Action No. 1:12-CV-775

Order

In accordance with the memorandum opinion that accompanies this order, it is now **ORDERED**:

1. Plaintiffs' motion (Dkt. No. 29) for judgment on the pleadings as to Count I of the complaint is **GRANTED**.
2. The clerk shall enter judgment in favor of the Plaintiffs.
3. The Accotink Creek TMDL is remanded to EPA for reconsideration consistent with this order.

January 3, 2013
Alexandria, Virginia

/s/
Liam O'Grady
United States District Judge

Scott A. Mann
Mayor

John V. Denver
Mayor Pro Tem

Greg August
Councilmember

Matthew Liesemeyer
Councilmember

Vacant
Councilmember
District 3

September 10, 2015

Wayne Chiu
California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Subject: **Comment - Tentative Order No. R9-2015-0100, Place ID: 786088WChiu**

Dear Mr. Chiu,

The City of Menifee (the "City") would like to thank the San Diego Regional Water Quality Control Board ("San Diego Water Board") for the opportunity to comment on Tentative Order No. R9-2015-0100, an Order amending Order No. R9-2013-0001 as amended by Order No. R9-2015-0001 ("Tentative Order"). The City is committed to developing and implementing jurisdictional and regional programs and strategies that will improve overall water quality.

The City has been working hard to meet the requirements of the Santa Ana Region Permit under Order No. R8-2010-0033. The Report of Waste Discharge (ROWD) submitted to the Santa Ana Board in July 2015 highlights the Santa Ana Region's major water quality accomplishments since the Permit issuance. The City has been an active participant in the region, including in the development and implementation of the Comprehensive Nutrient Reduction Plan (CNRP) (approved July 2013) to address nutrient Total Maximum Daily Loads (TMDL) for Canyon Lake and Lake Elsinore and in the development of the Watershed Action Plan (WAP) (pending Santa Ana Regional Board approval). The City has also developed a Local Implementation Plan (LIP), which details the day-to-day jurisdictional storm water program to meet Permit requirements.

As stated in the Tentative Order, the City is located partially within the jurisdiction of both the San Diego Water Board and the Santa Ana Regional Water Quality Control Board ("Santa Ana Water Board"). More specifically, less than 1.3 square miles in the City is located in the Santa Margarita Watershed Management Area (WMA). To date, the San Diego Water Board and the Santa Ana Water Board have maintained agreements that designate the Santa Ana Water Board as the single Regional Water Board to regulate the City on matters pertaining to Phase I municipal separate storm sewer system (MS4) permits. The Tentative Order proposes continuing this practice, following past agreements, with the significant exception of now requiring the City to participate in the development and implementation of the Santa Margarita WMA Water Quality Improvement Plan (WQIP).

Both the City and the Riverside County Flood Control and Water Conservation District (RCFCWCD) maintain GIS layers of MS4 infrastructure that they own and

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operate within the City. Since the release of the Tentative Order, the City of Menifee has coordinated with RCFCWCD to investigate ownership of MS4 within the small portion of the City that is within the Santa Margarita WMA. As shown on the attached maps, MS4 within the portion of the City in the Santa Margarita WMA is owned and operated exclusively by RCFCWCD. The City of Menifee does not own or operate MS4 within the Santa Margarita WMA.

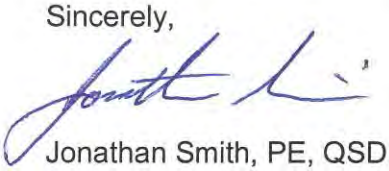
It is the City's understanding, according to the Code of Federal Regulations, title 40, section 122.1(b)(1), that "[t]he NPDES program requires permits for the discharge of 'pollutants' from any 'point source' into 'waters of the United States'". The City does not own or operate any "point sources," as defined in 40 C.F.R. § 122.2 or section 502(14) of the Clean Water Act, within the Santa Margarita WMA. Because the City is not responsible for any MS4 within the Santa Margarita

WMA, it should not be required to develop and implement the Santa Margarita WMA WQIP. For this reason, the City respectfully requests removal of language in the Tentative Order that requires the City to participate in the development and implementation of the Santa Margarita WMA WQIP. Suggested edits to the text of the Tentative Order are shown below:

- Attachment 1, Finding 29(b): "...the City of Menifee is largely regulated by the Santa Ana Water Board under Order No. R8-2010-0033 as it may be amended or reissued, including those portions of the City of Menifee within the San Diego Water Board's jurisdiction, upon the effective date of this Order. ~~The agreement also requires the City of Menifee to actively participate during development and implementation of the Santa Margarita River Watershed Management Area Water Quality Improvement Plan required pursuant to this Order~~..."
- Attachment 1, Table B-1 "Watershed Management Areas": Please strike the City of Menifee from the table and remove the associated footnote.
- Attachment 2, Provision B.1: "~~Footnote 3 to Table B-1 has been included to specify that Phase I MS4 discharges within the jurisdictional boundaries of the City of Menifee located within the San Diego Region will be regulated under Santa Ana Water Board Order No. R8-2010-0033 (NPDES No. CAS618033) and any reissuance thereof. At this time, the City of Menifee is not identified as a responsible Copermittee for any TMDLs established by the San Diego Water Board. Under the terms of the agreement, the City of Menifee must actively participate in the development and implementation of the Santa Margarita River Watershed Management Area Water Quality Improvement Plan required pursuant to Order No. R9-2013-0001, and any reissuance thereof.~~"
- Attachment 2: "The City of Menifee is not regulated as a Copermittee under this Order because it <u>does not own or operate</u> ~~Phase I~~ MS4 ~~discharges~~ <u>within the portion of the City that is located within the San Diego Region.</u> ~~Are regulated by Santa Ana Water Board Order No. R8-2010-0033 as it may be amended or issued pursuant to Water Code section 13228 designation. The requirements of this Order that apply to the City of Menifee for the duration of this Order, consistent with the Water Code section 13228 written agreement dated [Month][Day], 2015, are described in Finding 29 and Footnote 3 to Table B-1.~~"

Thank you for your consideration. Please feel free to contact me or Yolanda Macalalad at 951-639-1368 extension 169 if you have any questions regarding the above comments.

Sincerely,



Jonathan Smith, PE, QSD
Director of Public Works/City Engineer

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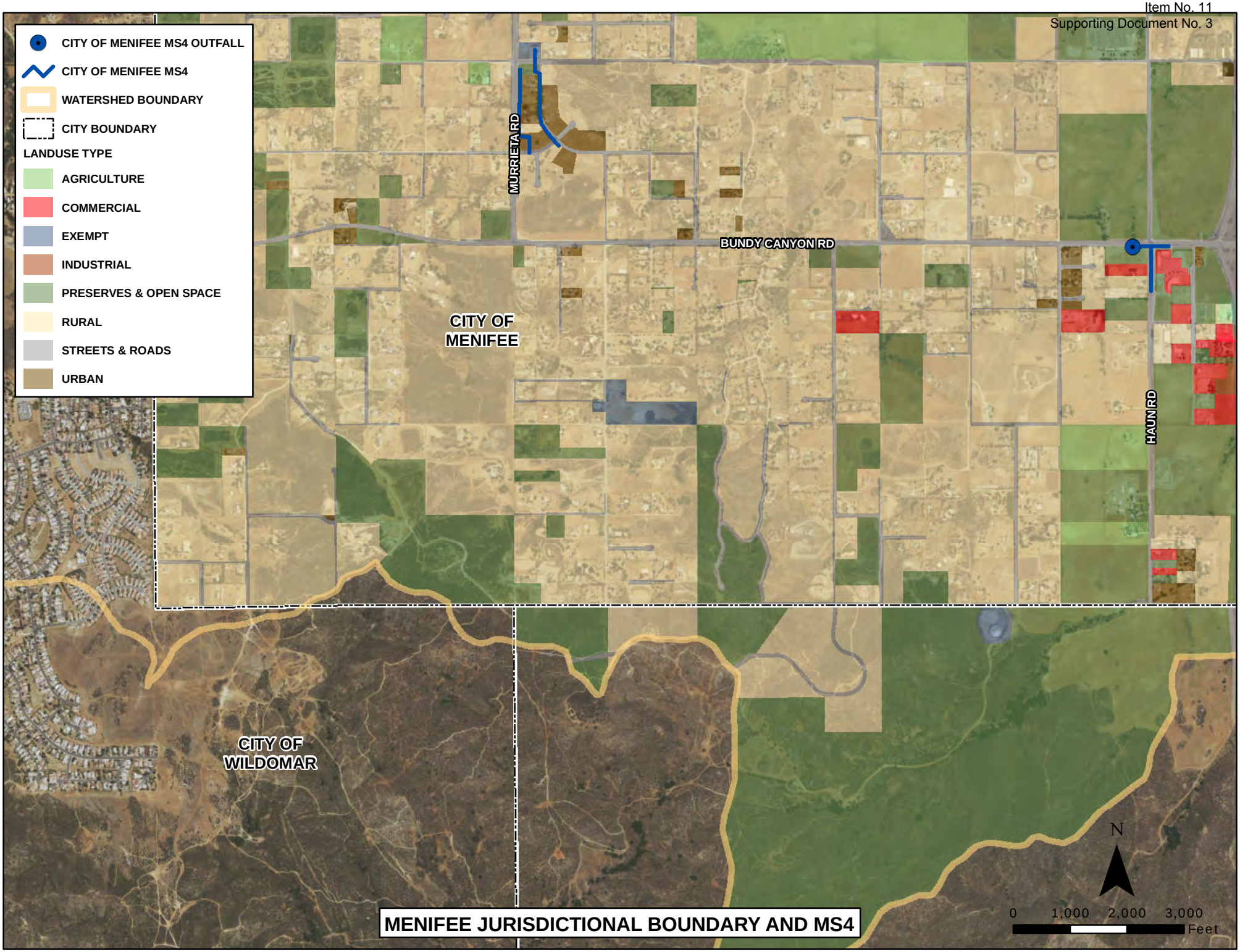
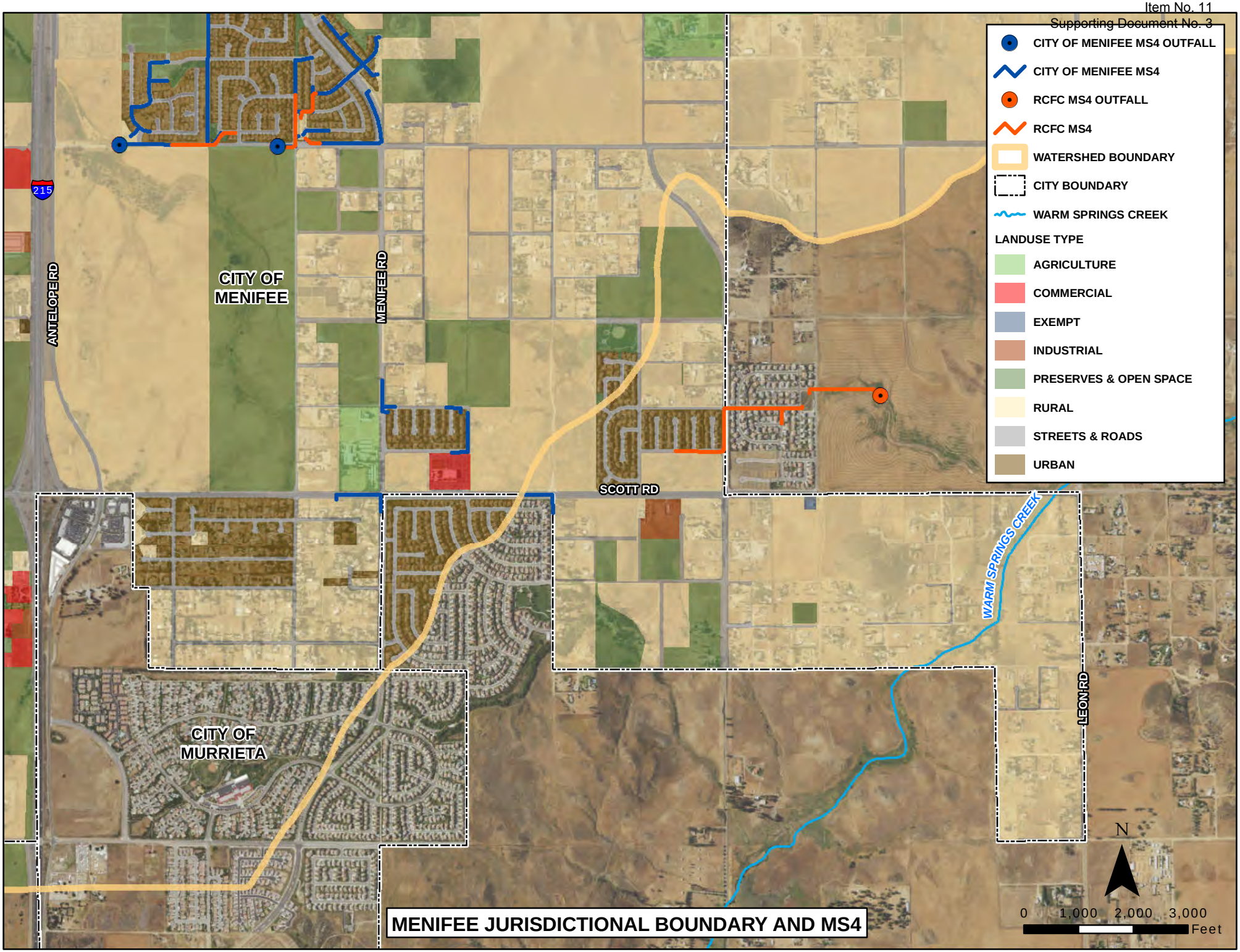


MENIFEE JURISDICTIONAL BOUNDARY AND MS4



MENIFEE JURISDICTIONAL BOUNDARY AND MS4

OC Public Works
Integrity, Accountability, Service, Trust
Shane L. Silsby, Director

September 14, 2015

By E-Mail

Mr. Wayne Chiu
California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Dear Mr. Chiu

The County of Orange, as Principal Permittee of the Orange County Stormwater Program, and the Orange County Flood Control District (collectively, "County"), appreciate the opportunity to provide comments on Tentative Order No. R9-2015-0100 ("Tentative Order") proposing to amend the National Pollutant Discharge Elimination System (NPDES) Permit for *Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region, Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Regional MS4 Permit)* ("Regional MS4 Permit" or "Permit"). In addition to the County, the Cities of Dana Point, Laguna Beach, Laguna Hills, Laguna Niguel, Mission Viejo and San Juan Capistrano (collectively, "Permittee") were involved in the development of these comments and hereby concur with the issues herein. Where a Copermittee has more specific comments relevant to its jurisdiction, these will be expressed in separate written comments provided by the individual Copermittee.

The County supports vigorous implementation of programs and projects that will further water quality improvements in south Orange County. The County hereby submits these comments in belief that modifications to the Regional MS4 Permit are needed in order to better effectuate improvements to water quality as well as balance the role and obligations of the MS4s under the Clean Water Act and Porter-Cologne Water Quality Control Act.[1]

[1] In addition to these supplemental comments, the County by this reference incorporates all prior letters, comments, reports, presentations, oral and written testimony, data, communications, and other evidence made by, on behalf of, and in support of the County and the Permittees during the various workshops, hearings, and meetings relevant to the adoption of Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and Tentative Order No. R9-2015-0100. The County and Permittees reserve the right to provide further comment as applicable.

I. Stakeholder Workshops Have Been Effective.

The Permittee laud the efforts of Regional Board staff to collaboratively engage the Permittee and other stakeholders through the use of mediated, roundtable workshops. This manner of comment has worked well in allowing all viewpoints to be expressed with sufficient time provided to allow for vigorous discussion of issues regarding the Regional MS4 Permit.

II. The Alternative Compliance Pathway for Prohibitions and Limitations Is Necessary, But It Must Contain Compliance During the Planning Period Along With Workable Implementation Milestones.

The Tentative Order proposes to include an alternative compliance pathway that would offer the Permittees compliance with the prohibitions and limitations provisions of the Regional MS4 Permit. The Permittees generally support this approach, and believe that an alternative compliance pathway is necessary in light of the difficulties in achieving water quality standards, the strict liability regime created by the Ninth Circuit's decision in *Los Angeles County Flood Control District v. NRDC*,[2] and recent clarification on receiving water limitations language by the State Water Resources Control Board ("State Board") on the LA MS4 Permit.[3]

As has been stated in prior comments by the Permittee, federal law does not require MS4 dischargers to strictly comply with water quality standards. In the Ninth Circuit Court of Appeals decision in *Defenders of Wildlife v. Browner*,[4] the court held that Congress only intended MS4 dischargers to meet the maximum extent practicable standard and that compliance with numeric effluent limitations was not required.[5] In fact, EPA has not promulgated any binding regulation requiring strict compliance with numeric limits, but has only issued guidance

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[1]In addition, for the reasons provided by the Permittees in prior oral and written comments, the Permittees continue to assert that the Regional Board has no system-wide, jurisdiction-wide, watershed or other basis by which to enroll the Permittees in the Regional MS4 Permit. By virtue of filing this comment letter, the Permittees do not waive any argument with respect to this issue, and have enrolled in the Regional MS4 Permit under protest.

[2] *NRDC v. County of Los Angeles* 673 F.3d 880, 886 (9th Cir. 2011) (revd. on other grounds and remanded by *Los Angeles County Flood Control District v. Natural Resources Defense Council* (133 S.Ct. 710 (2013)) ("NRDC II).

[3] Order WQ 2015-0075, *In the Matter of Review of Order No. R4-2012-0175, NPDES Permit No. CAS004001, Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4*. ("State Board Order").

[4] 191 F.3d 1159 (9th Cir. 1999); *see also* 33 U.S.C. § 1342(p)(3)(B).

[5] This interpretation of the Clean Water Act has recently been upheld in the State of Maryland, and is thus, not unique to the Ninth Circuit. *Chesapeake Bay Foundation v. Md. Dep't of the Envt.*, Case No. 02-C-14-186144 (Anne Arundel Cir. Ct., Dec. 2, 2014); *In re Baltimore County MS4 Permit*, Case No. 03-C-14-000761 (Baltimore Cir. Ct., Oct. 7, 2014).

encouraging EPA regions and the States to adopt and require strict compliance with numeric effluent limits where feasible.[6] Thus, compliance with receiving water limitations is a State and Regional Board requirement. To further emphasize this point, the Ninth Circuit Court of Appeals in *NRDC II* interpreted the LA MS4 Permit's receiving water limitations language as a contract requiring the LA permittees to strictly meet numeric standards in that any exceedance was a violation of the permit.[7]

Regional Board staff has interpreted the Regional MS4 Permit as requiring strict compliance with water quality standards, noting at the Regional Board's May 8, 2013 adoption hearing on Order No. R9-2013-0001 that the Permittees were in immediate noncompliance with the Permit and that compliance would not be achieved within the 5-year Permit term.[8] The State Board, too, has clarified and mandated that regional water boards require strict compliance with water quality standards.[9]

As noted in Comments 13 through 15 in the County's November 19, 2014 comment letter and in various presentations by the Permittee and others throughout the adoption proceedings for the Permit, the Permittee have demonstrated that compliance with certain of the Permit's prohibitions, receiving water limitations and numeric effluent limits is not yet achievable, and may not be achievable in certain environmental conditions. This is due to the long-time urbanization of certain watersheds, the need to extensively retrofit this urbanization, the nature of stormwater transport, the lack of control municipalities have over certain pollutants, the technical and economic infeasibility of meeting certain numeric standards, and the need to change certain standards. Indeed, the Permittee have previously noted in testimony the key finding in *Pathogens In Urban Stormwater Systems* (American Society of Civil Engineers, 2014) that current recreational water quality criteria may likely be unattainable in wet weather. Therefore, in light of the State's mandate that water quality standards be strictly adhered to and the difficulties in attaining standards, an alternative compliance pathway is needed so that the

[6] *See, e.g.*, Letter from Andrew D. Sawyers, Office of Wastewater Management, and Benita Best-Wong, Office of Wetlands, Ocean and Watersheds, United States Environmental Protection Agency, to Water Division Directors, Regions 1-10, United States Environmental Protection Agency, *Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on LAs"* (Nov. 26, 2014) ("EPA recommends . . . where feasible and appropriate, numeric requirements that attempt to maintain pre-development runoff conditions." "This memorandum is guidance. It is not a regulation and does not impose legally binding requirements on EPA or States.").

[7] *NRDC v. County of Los Angeles*, 673 F.3d at 892.

[8] Transcript vol. II, 75:15-19 (May 8, 2013).

[9] Order WQ 2015-0075, *In the Matter of Review of Order No. R4-2012-0175, NPDES Permit No. CAS004001, Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4*. ("State Board Order").

Permittee can continue to diligently plan, fund and rigorously implement their watershed programs without the trepidation of open-ended enforcement that follows from a strict liability regime. If the Regional Board is to require strict compliance with the prohibitions and limitations provisions of the Regional MS4 Permit, the Permittee support the addition of an alternative compliance pathway where it is robust, provides for regulatory certainty, and its implementation is technically and economically feasible.

A. The Permittee Support The Flexibility Of The Alternative Compliance Pathway

The proposed alternative compliance pathway at Provision B.3.c provides flexibility

B. Alternative Compliance Should Be Provided During The WQIP Planning Process.

The Permittees fundamental issue with the proposed alternative compliance pathway is that it does not address compliance during the WQIP planning process. It is only after a plan has been submitted and approved by the Executive Officer of the Regional Board that a Permittee is in compliance with the Permit's prohibitions and limitations.[10] This is directly contrary to the State Board's Order directing regional water boards to establish alternative compliance pathways and is in conflict with the findings and conclusions on which the Order is predicated. It is also raises questions of the Permit's fairness as well as its legal validity. The Permittees request that the Regional Board include a provision that allows compliance during the planning phase of the WQIP consistent with the State Board Order.

In the State Board Order, the State Board recognized that strict compliance with receiving water limitations "may result in many years of permit noncompliance, because it may take years of technical efforts to achieve compliance with the receiving water limitations, especially for wet weather discharges."[11] This statement is also referenced in the Tentative Order.[12] In recognizing the difficulties with attaining water quality standards, the State Board not only directed regional water boards to adopt alternative compliance pathways, it also upheld the interim compliance provisions of the LA Permit that allow the LA County Permittees to maintain compliance during the planning process for the WMP/EWMP (the functional equivalent of the Regional MS4 Permit's WQIP), so long as the planning process "is clearly constrained in a manner that sustains incentives to move on to approval and implementation and is structured with clear, enforceable provisions."[13] In fact, the State Board thought that there should have been more flexibility during the planning period than what was initially in the LA Permit, and allowed interim compliance

[10] Tentative Order, Provision B.3(c)(2).

[11] State Board Order, pg. 15.

[12]Tentative Order, Finding 10, pg. 4. The Tentative Order attributes this to the Permittees, but it is actually a direct quote from the State Board Order. The Permittees assert there are broader grounds by which strict compliance is unwarranted and, in some cases, unachievable.

[13] State Board Order, pp. 48-50.

even when there were deviations to the development schedule.[14] The State Board went even further and directed regional water boards to consider and adopt the WMP/EWMP approach unless regional differences dictated variances.[15]

The Tentative Order does not incorporate interim compliance during the planning phase of a WQIP, and the accompanying Fact Sheet does not indicate any region-specific or permit-specific reason why a material variance is warranted. The only justification that has been given during workshops on the alternative compliance option is that EPA has supported San Diego's proposed approach and that the San Diego Region "is not L.A." This insufficiently addresses the issue of why the Permittee should not be afforded a basic threshold of compliance during the 18-month planning period. It is also in direct conflict with the State Board Order, which describes in detail the issues with meeting water quality standards and the need for compliance over time. It is also the County's understanding that other regional water boards are following the State Board Order's compliance directive, such as the forthcoming MS4 permit by the Santa Ana Water Board for North Orange County where staff has indicated that the alternative compliance option will allow for interim compliance.

The absence of interim compliance when a Copermittee is diligently undergoing WQIP planning is patently unfair. As explained above, it undermines the State Board Order as well as the Tentative Order's recognition that compliance with water quality standards may take years to achieve.16 It is unreasonable to insist on strictly meeting water quality standards and establishing a compliance pathway, but not extending such compliance to the point at which a Copermittee most needs it.

The WQIP planning process is a significant financial undertaking. In Los Angeles County, preparation of equivalent watershed management plans has cost approximately $250,000 per watershed and these plans have identified final implementation costs per watershed in the range of $300 million to $6 billion.[17] It also unnecessarily exposes the Permittee to potentially

[14] *Id.* at pg. 50 (adding Part VI.C.4.g. to the LA Permit allowing deviation from the WMP/EWMP development schedule).

[15] *Id.* at pg. 51 ("We direct all regional water boards to consider the WMP/EWMP approach to receiving water limitations compliance when issuing Phase I MS4 permits going forward. In doing so, we acknowledge that regional differences may dictate a variation on the WMP/EWMP approach, but believe that such variations must nevertheless be guided by a few principles. We expect the regional water boards to follow these principles unless a regional water board makes a specific showing that application of a given principle is not appropriate for region-specific or permit-specific reasons.").

[16] State Board Order, Conclusion 2, pg. 76. ("However, we find that municipal storm water dischargers may not be able to achieve water quality standards in the near term and therefore that it is appropriate for municipal storm water permits to incorporate a well-defined, transparent, and finite alternative path to permit compliance that allows MS4 dischargers that are willing to pursue significant undertakings beyond the iterative process to be deemed in compliance with the receiving water limitations.").

[17] County of Los Angeles Cost Study, *Projected WMP/EWMP Implementation Costs* (attached hereto).

unnecessary enforcement when significant resources and expenditures are underway to develop a long-term plan to improve water quality, particularly when a pollutant that is being addressed through the planning process is now the subject of an enforcement action or third party challenge. In other words, it would be unjustifiable to allow enforcement of a standard when the plan for attaining that standard is being developed and being reviewed by Regional Board staff. Furthermore, if the Regional MS4 Permit does not contain interim compliance, for the reasons set forth in the County's prior comments on the Regional MS4 Permit, it is unlawful. A permit that does not contain a compliance pathway or that is impossible to comply with is not in accordance with federal and state law.[18]

C. The Annual Milestone Requirement in the Alternative Compliance Pathway Is Arbitrary and Unworkable, and Should be Modified to Correspond to the Term of the MS4 Permit.

The alternative compliance pathway proposed in the Tentative Order includes Provision B.3.c(1)(a)(vii), recommended by certain stakeholders, requiring an annual milestone in the WQIP for each numeric goal. The Permittee believe that an annual milestone requirement is arbitrary, unworkable and may put the Permittee in a position to violate the California Constitution.

As has been expressed by the Permittee and Regional Board staff in the workshops leading up to the Tentative Order, the proposed alternative compliance pathway essentially requires the Permittee to develop an implementation plan and time schedule for each and every waterbody pollutant combination that exceeds or is likely to exceed a numeric limit. Thus, the alternative compliance pathway essentially requires the Permittee to develop a total maximum daily load (TMDL) and be under a Time Schedule Order for each pollutant to be deemed in compliance with the Permit.[19] When EPA or the State establish a TMDL, Section 303(d) of the Clean Water Act does not require implementation plans, but instead, implementation plans are left to a State's discretion as to whether one will be established as part of the MS4 permit. When an implementation plan is established by a State, it is a document or section of a document detailing the suite of corrective actions needed to reduce pollution and remediate an impaired waterbody.[20]

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[18] See County Comment Letter, Comments 13-15. See also, *Atlantic States Legal Fdn., Inc. v. Eastman Kodak Co.* 12 F.3d 353, 357 (2nd Cir, 1994); *Hughey v. JMS Development Corp.* 78 F.3d 1523, 1530 (11th Cir. 1996); *Divers Envt'l Conservation Organization v. State Water Resources Control Board*, 145 Cal.App.4th 246, 256 and 258 (2006).

[19] The County has previously commented on the Regional MS4 Permit that the imposition of an implementation plan and a time schedule sidesteps the procedures called for in the Clean Water Act and shifts the Regional Board's regulatory obligations to the Permittees. See County Comments, Comment 17, pg. 26, fn. 35 (Jan. 11, 2013).

[20] US EPA, Total Maximum Daily Loads, Glossary http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/glossary.cfm#implementationplan ("Current 303(d)

Section 130.33(b)(10) of the Code of Federal Regulations sets forth certain criteria that an implementation plan must include, such as a description of actions and/or management measures and a general timeline for implementing those actions or measures along with interim milestones. There is no federal (or state) legal requirement, or EPA guidance, regarding the specific timing of the milestone or even that the milestone be anything more than a suggested target to attain.

It has been consistently recognized that the WQIPs will develop plans over a multi-year period that may span 10, 20 or 30 years in order to attain standards. It is inconceivable that an implementation plan will contain 20 annual milestones or even that a Copermittee could identify what that milestone might be in year 16, for example, in either the development or early implementation of the plan. WQIPs will focus on studies, monitoring, and review of data to inform the Copermittee as to what corrective actions are necessary, which will result in revisions to the plan. To imbed a milestone into a WQIP for each and every year is arbitrary. It is simply not how project or program development works from a planning perspective. For instance, in developing a project for the benefit of multiple MS4s across a watershed, a few years can be spent applying for grant funding and encumbering monies for the project. Oftentimes, environmental studies and the design of a project are being prepared concurrent with funding planning. A watershed-based program or project involves the letting of multiple contracts with various partners and stakeholders. Contracts include grant agreements; right-of-way dedications and other real property agreements; cooperative agreements with state, municipal and developer partners; architect-engineer agreements; construction contracts; operations and maintenance agreements; and procurement contracts. Although a general schedule is put together, project milestones often span multiple years and can fluctuate as new information is obtained or in the event of changing circumstances. Based on the robustness of the planning and development process, it is simply arbitrary to imbed an annual milestone for each and every numeric goal into an enforceable regulatory document. It also has Regional Board staff micro-managing the implementation process whereby unnecessary time will be spent developing an annual milestone and getting Regional Board staff's re-approval for any slippage in the timeline.

In many cases, WQIPs will be predicated on finding the necessary funds for carrying out implementation. The costs to address the numeric goals contemplated in a WQIP will be significant. Many of years of planning funding will go into even one numeric goal where monies will be allocated by the legislative body on a fiscal year basis and encumbered over many years. In addition to outside grant funds, a program or project's source of revenue will also be derived from taxes and fees, which fluctuate annually depending on factors like the market, inflation and cost indices, income, development, and other factors. Taxes and fees are further constrained in California by Propositions 218 and 26. Most fee programs, for instance, are designed for 10 or

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regulations do not require implementation plans, though some state regulations do require an implementation plan for a TMDL."); *see also*, 40 CFR § 130.

more years of fee collection in order to fund the necessary infrastructure or housing improvements needed. Therefore, a long-term implementation plan utilizing rigid annual milestones that include the funding and financing of projects is unworkable.

While an annual milestone may be the norm for a 5-year TSO that focuses on BMPs for a specific pollutant where final numeric limits are close to being attained, as demonstrated above, annual milestones for a 10 or 20-year plan for a difficult regulatory problem are arbitrary and unworkable. Instead, the Regional Board should consider a time period already used by state and federal law, which is the 5-year term of the Permit. When a TMDL implementation plan is developed, the plan is reported on in the annual report and then again in the Report of Waste Discharge. The next permit is fashioned based on the progress the Copermittee has made in that 5-year permit term.[21] The Regional Board should not deviate then from the established timelines already set forth in the law as the appropriate place to review progress is at the renewal of the Regional MS4 Permit. Compliance should not hinge on whether an individual action has occurred, but should be predicated on the collective actions of the Permit term, such that a Copermittee can demonstrate that reasonable progress has been made in attaining water quality standards.

D. The Prohibitions and Limitations Language of Provision A Should Specify That Compliance Can Be Determined By Utilizing The Alternative Compliance Pathway At Provision B.3.c.

The Prohibitions and Limitations language in Provision A should be aligned with the Water Quality Improvement Planning process described in Provision B. The Permittee appreciate the efforts to clarify the compliance determination in Provision B.3.c by linking it back to Provision A. However, as currently incorporated into the Tentative Order, Provision A makes no reference to Provision B.3.c, and thus, the Prohibitions and Limitations language may still be interpreted as stand-alone provisions that could subject the Permittee to state and federal enforcement actions as well as third party actions under the Clean Water Act's citizen suit provisions. To prevent this from occurring, a clear linkage between the compliance provisions in Provision B and the prohibitions, receiving water limitations, and effluent limitations must be established. Compliance with Provisions A.1, A.2 and A.3 should be linked to Provision B so that it is clear that the compliance mechanism for A.4 is the Water Quality Improvement Plan (Provision B) and/or the TMDL (Attachment E), as applicable. Permits are construed as contracts, and such a change would be a routine matter of contract drafting whereby contract provisions refer to one another for ease of reading and interpretation.

This change has been requested throughout the workshop and adoption proceedings for the Regional MS4 Permit, but no reason has been given for why this change could not be made. The

[21] This is also how air quality laws work under the Clean Air Act where a state implementation plan must demonstrate reasonable progress towards national ambient air quality standards, and is revisited on an 8-year basis.

Provision A language is not sacrosanct, and could be modified accordingly without changing the substance of the prohibitions and limitations set forth therein.

III. Provision E.2 Should Be Clarified That Implementation of A Copermittee's Illicit Discharge Detection and Elimination Program Constitutes Compliance with Effectively Prohibiting Non-Stormwater Discharges.

Section 402(p)(3)(B)(ii) of the Clean Water Act imposes a requirement to "effectively prohibit" non-storm water discharges. The State Board Order acknowledged that preventing all non-stormwater runoff into an MS4 can be a nearly impossible standard to meet at times, since third parties—such as residents watering their lawns in a reasonable manner—are likely to cause at least some incidental runoff to enter a Copermittee's MS4.[22] Other regional water boards have determined that Permittee are in compliance with the Clean Water Act's mandate to "effectively prohibit" all dry weather discharges when the Copermittee is implementing its illicit discharge prevention program. However, the Tentative Order in Provision E.2 could be interpreted to impose strict liability on the Permittee even where: (1) all or most dry weather flows are diverted before the water reaches a water of the State, (2) the discharge to the MS4 resulted from actions that the Copermittee may have very limited ability to control, and (3) the Copermittee was fully implementing its illicit discharge prevention program.

Provision E.2 of the Tentative Order should be amended to clarify that implementation of a Copermittee's illicit discharge, detection and elimination constitutes compliance with the requirement to effectively prohibit non-stormwater discharges.

IV. Compliance Dates For The Bacteria TMDL Should Be Changed.

Attachment E notes that the Responsible Permittee for MS4 discharges to waterbodies listed in Table 6.0 must be in compliance with final TMDL compliance requirements. However, the TMDL includes language stating that specific waterbody or beach segments included in the TMDL that have been delisted from the 2008 303(d) list are not subject to any further action as long as monitoring data continues to support compliance with water quality standards. Thus, the language in Attachment E is in conflict with the TMDL, and should be revised to reflect that no action is needed for delisted waterbody segments.

V. Exemption For Self Remediating Priority Development Projects

The list Priority Development Exemptions (Section E.3.b.(3)) should be revised to include projects that are effectively self remediating (i.e. all rainfall is retained) including, but not limited to, reservoirs and swimming pools.

[22] State Board Order, pg. 48, fn. 133 ("We recognize that even the most comprehensive efforts to address unauthorized non-storm water discharges may not eliminate all such discharges.").

Thank you for your attention to our comments. Please contact each of the undersigned directly if you have questions. For technical questions please also contact Chris Crompton at (714)955-0630 or Richard Boon at (714)955-0670.

Sincerely,

Mary Anne Skorpanich, Deputy Director
OC Environmental Resources

Ryan Baron, Senior Deputy County Counsel
Office of the County Counsel

Attachments: A - Summary of Projected WMP/EWMP Costs

Attachments: A - Summary of Projected WMP/EWMP Costs

Watershed	Project Type	Capital Costs	O/M Costs	TOTAL
Upper Santa Clara River	EWMP	$623.7 Million	-	$623.7 Million
Upper LA River	EWMP	$6.097 Billion	$210.84 Million (Annually)	$6.308 Billion
Rio Hondo/San Gabriel River	EWMP	$1.417 Billion	-	$1.417 Billion
Upper San Gabriel River	EWMP			$2.14 Billion
Malibu Creek	EWMP	$194.6 Million	$3.7 Million	$198.3 Million
Marina Del Rey	EWMP	$347.4 Million	$44.5 Million (Total)	$391.9 Million
North Santa Monica Bay Coastal Watersheds	EWMP	$32.5 Million	$21.7 Million (20-year life cycle)	$52.2 Million (20-year life Cycle)
Santa Monica Bay Jurisdictions 2 & 3	EWMP	$648.7 Million	$94.7 Million (20-year life cycle)	$743.4 Million
Santa Monica Bay and Dominguez Channel (Beach Cities)	EWMP	$89 Million	$3.1 Million (Annually)	$150 Million (20-year life cycle)
Palos Verdes Peninsula Agencies	EWMP	$129.5 Million	$1.52 Million (Annually)	$131.02 Million
Ballona Creek	EWMP	$2.723 Billion (by year 2021)	$77.74 Million (annually)	$2.8 Billion
Dominguez Channel	EWMP	$1.294 Billion	$12.4 Million (in year 2041)	$1.3064 Billion
Los Angeles River Upper Reach 2	WMP	$311 Million	-	$311 Million
Lower Los Angeles River	WMP	$293 Million	-	$293 Million
East San Gabriel Valley	WMP	$646.5 Million	-	$646.5 Million
Lower San Gabriel River	WMP	$64.63 Million	-	$64.63 Million
Los Cerritos Channel	WMP	$332 Million?		$332 Million?

CITY OF DANA POINT

CITY COUNCIL

Carlos N. Olvera
Mayor

John A. Tomlinson
Mayor Pro Tem

Joseph L. Muller

J. Scott Schoeffel

Richard A. Viczorek

September 14, 2015

Via Electronic Submission to sandiego@waterboards.ca.gov, Attn: Wayne Chiu

Honorable Henry Abarbanel, Chair
Honorable Board Members
Attn: Mr. Wayne Chiu
California Regional Water Quality Control Board
San Diego - Region 9
2375 Northside Drive, Suite 100
San Diego, California 92108

Dear Chairman Abarbanel, Honorable Board Members, and Mr. Chiu:

Subject: Comment Letter — Tentative Order No. R9-2015-0100 Place ID: 786088WChiu

As the Mayor of the City of Dana Point, I write to express the City's serious concerns with certain aspects of the proposed amendments to San Diego Regional Water Quality Control Board ("Board") Tentative Order No. R9-2015-0100 (Tentative Order) amending Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 ("Regional Permit"). I understand from my staff that the current revisions to the Regional Permit, if they are not amended to address the concerns raised in this letter, put the City of Dana Point (and other southern Orange County Cities) at risk of large unfunded liabilities without a meaningful path to obtain "compliance" with the Regional Permit (and by extension the Clean Water Act) for up to 18 months (and potentially longer). Of even greater concern, the open ended liability potentially created by the Regional Permit in its current form is likely to lead to litigation and piecemeal development of projects in response to specific federal court orders rather than a careful and collaborative process to develop and implement achievable watershed-wide water quality improvement plans ("WQIPs") for southern Orange County that will protect water quality within the City. I hope that the Board will seriously consider the City's comments provided in this letter and make revisions to the Regional Permit accordingly. I'd also ask that you carefully consider the comments provided by the legal counsel (attached to this letter as Exhibit A) in making needed changes to the Regional Permit prior to approval.

1. *The City is Already an Environmental Leader With a Strong Ethos for Clean Water*

I would not have sent this letter unless I was convinced the current approach advocated in the Regional Permit is likely to do more harm than good for the City's and Region's water quality improvements. I also realize that the City owes much of its success and economic prosperity to its high quality water resources and beaches. A clean environment is one of the things that draws people to the City of Dana Point. Dana Point citizens want clean water, but they also want regulations that achieve desired environmental outcomes in a reasonable manner, and at a cost that is proportional to benefits

received. The City's ethos of practical and proactive water quality regulation owes much to the City's former Mayor, Wayne Rayfield, a long-time advocate for ocean water quality, who served on the San Diego Regional Board from 2007 until 2012 and currently serves as the President of the Board for South Coast Water District, the City's main water and sewer agency. During Mr. Rayfield's tenure in City leadership, the City became a pioneer in efforts to eliminate stormwater pollution, and the City's extensive program to systematically improve and maintain water quality can be found on the City's website at www.danapoint.org/waterquality.

In addition to implementing source control management strategies and a robust illicit discharge control program, the City championed watershed-based management and elimination/diversion of dry weather discharges long before the City was directed to do so by the Regional Board. The City's approach to water quality is catalogued in the City's Strategic Plan (www.danapoint.org/index.aspx?page=54) and in the City's Guidance Document entitled "Protect Our Earth, Protect Our Ocean, a Paradigm for Water Quality." The Guidance Document is available online at www.danapoint.org/Modules/ShowDocument.aspx?documentid=3195, and it describes on pages 6-7 the City's 18 existing dry weather diversions that effectively capture most of the dry weather flows attributable to non-stormwater discharges of human origin within the City. These sanitary sewer diversion facilities were constructed at a cost of approximately 12 million dollars—primarily funded by City residents. The City also has pioneered innovative and extensive dry weather treatment Best Management Practices, such as the award-winning Salt Creek ozone Treatment Facility, bans on styrofoam and other types of plastics likely to wind up in City waters, a robust street sweeping program, and partnerships with local water districts to curb and eliminate excess irrigation that leads to runoff. Dana Point, as its Guidance Document and extensive list of water quality improvement projects can attest, is a City that is willing to do its share to address stormwater pollution and maximize water quality. Unfortunately, as addressed below, it does not appear that the Regional Permit (as proposed) is likely to lead to measurable water quality improvements within the City, only new costs and potential liabilities.

2. *Areas of Concern and Recommendations for Improvement*

a. The City Needs Interim Compliance While it Develops the Required WQIP for Southern Orange County. Dana Point supports in principle the WQIP concept as a practical vehicle for solving difficult water quality problems on a watershed-wide basis. The County and City staff have already demonstrated success in working collaboratively with other southern Orange County stakeholders, public and private, as evidenced by the South Orange County Watershed Management Area (SOCWMA), and will build on this experience and success to develop a scientifically defensible plan and associated projects that have the potential for enhanced protection of City waters. However, the proposed Regional Permit's departure from the previous best management practice ("BMP") based iterative approach to water quality improvement in favor of a strict liability framework during WQIP development is likely to pose severe compliance challenges for the City—making it far more difficult to adopt a collaborative problem solving posture.

Under the current language proposed by Board staff, the City will be potentially liable for a violation of the Regional Permit, and thus the Clean Water Act, every time it rains. While the City has

already diverted the vast majority of dry weather flows to the sanitary sewer (at great expense), it is not feasible to do so during wet weather due to sanitary sewer facility capacity and cost, and indeed trying to do so would risk drying up existing beneficial uses in San Juan Creek and other drainages within the City (indeed the drought has had a severe effect on riparian habitat in some locations—a condition that removing all runoff from the City MS4s could exacerbate). Because the San Diego Board has some of the most stringent water quality objectives in the state for bacteria, nutrients, and other contaminants that are in many cases caused by natural processes, it is likely that wet weather discharges from the City's MS4, at least some of the time, will contain pollutant concentrations in excess of the very stringent receiving water limitations contained in the San Diego Basin Plan. When that happens, if the Regional Permit is not amended, the City will presumably be strictly liable to third parties under the CWA—notwithstanding that any exceedances may have little or no nexus to controllable pollution within the City's boundaries. This is not a fair outcome, and we believe that it is not what Congress intended when it required regulation of municipal stormwater under the CWA in 1987.

It is my understanding that other Regional Boards around the state are also developing alternative compliance options ("ACOs") that would avoid the potentially harsh results associated with exceedances of receiving water limitations described in the last paragraph. Under the approach sanctioned by the State Water Resources Control Board ("State Board") in June of this year, municipal stormwater permittees that agree to participate in development of a WQIP, or a WQIP like plan for improving water quality, are deemed to be in compliance during the preparation and implementation of the WQIP if the permittee otherwise complies with the terms and timelines of its MS4 Permit (and the WQIP once it is developed/approved). The ACOs proposed in the current version of the Regional Permit, on the other hand, would leave the City strictly liable for any exceedance of basin plan standards (whether the result of City culpability or not), even as the City continues to aggressively implement its water pollution prevention efforts—leaving it vulnerable, potentially on a permanent basis, to third party lawsuits for any random exceedance even as it aggressively implements its robust clean water program.

Fundamentally, the City is most concerned with the current framework because it mandates the development of expensive projects and the City's extensive regulation of the day to day behavior of City residents where such actions may do very little to actually achieve water quality objectives (since impairment in the San Diego Region may be a result of non-point sources of pollution or non-controllable sources), while at the same time providing no assurances that the City will ever obtain compliance during and after WQIP development. At minimum, the current proposed ACOs proposed in the Regional Permit would have the City out of compliance with the Regional Permit, and subject to increasingly frequent CWA litigation, for a period of up to two years while the WQIP is in development, and this assumes that the Regional Board quickly acts to approve a southern Orange County WQIP. To be successful in improving water quality and maximizing the likelihood of obtaining numeric water quality objectives, the WQIP needs to be a data intensive and collaborative effort between the City, environmental advocates, the Regional Board and all of the other south Orange County stormwater permittees (and recycled water producers—who themselves may contribute significant loading to area streams). The WQIP, in order to obtain the reductions in non-point source pollution that are likely to be required, will have to be creative—with opportunities for offsets and other "credits" that provide compliance to municipal dischargers in exchange for undertaking projects that reduce or eliminate non-

point sources of pollution that the dischargers did not cause. The WQIP for southern Orange County, if it is to be effective, will not be a plan that can be developed quickly, or in a vacuum. Thus, the ability of the City to have interim compliance while working with its neighbors to develop a scientifically rigorous and effective WQIP—a plan that will accomplish what it was intended to do—becomes all the more important.

The City understands that most of the other Regional Boards around the state appear intent on providing ACOs for municipal dischargers that include some form of interim compliance while watershed based plans are in development. The San Diego Board should follow suit. Failure to provide interim compliance is fundamentally unfair for Cities like Dana Point that are already aggressively combatting stormwater pollution. The City would rather work collaboratively with the Regional Board (and the City's neighbors), as a full partner in the development of a robust WQIP that will result in significant and meaningful reductions in water pollution throughout southern Orange County. However, the current Regional Permit language that imposes strict liability for exceedances of water quality objectives—exceedances that appear inevitable no matter what action the City takes or doesn't take—will, because of the likelihood of liability to third parties , push the City away from collaborative efforts and towards a more defensive posture associated with litigation defense. This outcome is not good for the Regional Board, the City, or for southern Orange County watersheds. I accordingly ask you to strongly consider adding to the Regional Permit a mechanism for interim compliance for southern Orange County agencies who aggressively pursue WQIP development and implementation. It is the right thing to do, and the Regional Board can only gain by providing such a provision.

b. *It is Unfair to Impose Strict Liability for Non-Stormwater Discharges to the MS4 Where Nuisance Flows Are Diverted, and the Permittee Is Aggressively Implementing Its Illicit Discharge Program:* As the SWRCB acknowledged in its recent LA MS4 precedential order, preventing all non-stormwater runoff into an MS4 system can be a nearly impossible standard to meet at times since third parties—such as residents watering their lawns in a reasonable manner— may cause at least some incidental runoff to enter the City's MS4. Other Regional Boards have determined that permittees are in compliance with the CWA's direction to "effectively prohibit" all dry weather discharges when the City is implementing its illicit discharge prevention program and diverting, where feasible, residual "nuisance" flows to the sanitary sewer prior to entering a stream or the ocean. However, the Regional Permit in proposed paragraph E.2 of the Regional Permit, would arguably impose liability on the City even where: (1) all or most dry weather flows are diverted before the water reaches a Water of the State; (2) the discharge to the MS4 resulted from actions that the City may have very limited ability to control (such as sewer spills that are the responsibility of separate sewer agencies and runoff from irrigation of the steep slopes that predominate in Dana Point); (3) the City was fully implementing its illicit discharge prevention program. I respectfully ask that the Board direct its staff to work with the City to develop clarifying language, such as that recommended by our legal counsel in Exhibit A, that explains liability for non-stormwater discharges entering the MS4 is only appropriate when discharges are the result of culpability on the part of the City.

The City has other concerns that are reflected in Exhibit A, all of which the City incorporates herein by reference and formally requests that the Board consider. The City also reincorporates and reiterates here all of the comments it previously made on prior iterations of the Regional Permit and the

comments provided by the County of Orange submitted under separate cover. However, resolution of the issues discussed in this letter would go a long way towards resolving the City's concerns with the Regional Permit on a permanent basis.

I thank you for your consideration, and I look forward to a productive dialogue between our respective staffs that produces a win-win outcome for the City, the Regional Board and water quality in the San Diego Region.

Sincerely,

Carlos N. Olvera
Mayor

Attachment: Exhibit A

CC: David Gibson, Executive Officer, SDRWQCB
Patrick Munoz, Jeremy Jungreis, Rutan & Tucker LLP
Doug Chotkevys, Brad Fowler, Lisa Zawaski, Dana Point
Orange County Copermittees

Exhibit A

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Jeremy N. Jungreis
Direct Dial: (714) 338-1882

September 14, 2015

VIA ELECTRONIC MAIL

Mr. Wayne Chiu
Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108
sandiego@waterboards.ca.gov

Re: Comments of the Cities of Dana Point and Laguna Beach on Proposed Tentative Order No. R9-2015-0100, Place ID: 786088

Dear Mr. Chiu:

This letter, which supplements and augments the letters submitted concurrently by the Mayors of the Cities of Dana Point and Laguna Beach, constitutes the further legal and technical comments of the Cities of Laguna Beach and Dana Point (the "Cities") to proposed amendments to San Diego Regional Water Quality Control Board ("Board") Order No. R9-2013-0001 (as amended by Order No. R9-2015-0001), proposed as Tentative Order No. R9-2015-0100 (the "Regional Permit"). The Cities also incorporate by reference, and assert as if separately stated herein, the comments submitted by the County of Orange ("County") on September 14, 2015, and the previous comments on the Regional Permit submitted by, or on behalf of, the City of Dana Point.[1]

The Cities appreciate the efforts of Regional Board staff to collaboratively engage the Permittees and other stakeholders in workshops where a variety of views on the question of receiving water limitations ("RWLs"), and how they should be achieved, were expressed. This manner of comment and stakeholder participation worked well in allowing all viewpoints to be expressed with sufficient time for vigorous discussion of issues with the Regional MS4 Permit. The Cities are hopeful that the issues addressed in this letter can be resolved via further

[1] The Cities by this reference incorporate, to the maximum extent allowed by law, all prior letters, comments, reports, presentations, oral and written testimony, data, communications, and other evidence made by, on behalf of, and in support of the County of Orange during the various workshops, hearings, and meetings relevant to the adoption of Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and Tentative Order No. R9-2015-0100. The Cities reserve the right to provide further comment as applicable.

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productive dialogue prior to the approval hearing for the Regional Permit scheduled for November 18.

1. LEGAL CONCERNS WITH RECEIVING WATER LIMITATIONS AND ALTERNATIVE COMPLIANCE OPTIONS.

a. <u>IT IS LIKELY IMPOSSIBLE, AND CERTAINLY NOT "PRACTICABLE," TO COMPLY WITH ALL OF THE DISCHARGE PROHIBITIONS IN THE REGIONAL PERMIT UNDER ALL CIRCUMSTANCES</u>

Part II.A.2 (a) of the Regional Permit strictly prohibits discharges of municipal stormwater to Waters of the U.S. that do not meet all water quality objectives—notwithstanding that such discharges may in fact control pollutants to the "maximum extent practicable," and notwithstanding that exceedances of numeric objectives in the San Diego Basin Plan may be the result of factors that the Cities have no ability to control. In other words, as currently drafted, the Regional Permit will impose strict liability on the Cities for regulatory requirements that will, in some cases, be impossible to meet,[2] no matter how robust or aggressive the WQIP ultimately developed. Imposing strict liability on the Cities and thereby subjecting them to CWA Citizen Suits and Regional Board enforcement every time it rains,[3] when there is no realistic possibility of ever achieving the currently applicable numeric RWLs, is inconsistent with both state and federal law. Neither requires municipal stormwater permittees, who unlike private businesses do not have the option to "go out of business" (or otherwise shut down non-compliant stormwater facilities), to achieve the impossible, or to control what MS4 permittees have no ability or authority to control. (*See* CA Civ. Code, § 3531 ["The law never requires impossibilities"]; CA

[2] As Regional Board staff is aware, some of the existing water quality objectives in the San Diego Basin Plan which give rise to the receiving water limitations referenced in Section II.A.2, may be at or below natural background levels, or be set at levels so low that they cannot be achieved without diverting all of the water in the MS4 to a reverse osmosis ("RO") treatment plant—thereby in most cases removing the water from the watershed altogether and changing its composition in ways that could be harmful to the watershed if reintroduced post-treatment (*See, e.g.,*http://news.stanford.edu/news/2015/september/arsenic-mystery-solved-090215.html [Stanford study showing association between rising arsenic levels and water treated with RO]. Even with RO treatment, it still would not be possible to reliably meet the current default San Diego Basin Plan standard for total nitrogen in surface waters of 1 part per million. (*See, e.g., U.S. v. Eastern Municipal Water District* Case. No. CV 04-8182 (C.D. Ca 2010) (noting infeasibility of meeting 1 ppm total nitrogen standard required for NPDES issuance).

[3] (*See, e.g., NRDC v. County of Los Angeles* (C.D. Cal. Mar. 30, 2015) 2015 U.S. Dist. LEXIS 40761 ["Defendants are liable for the 147 exceedances described in Defendants' monitoring reports, which the Ninth Circuit found were conclusively demonstrated to be Permit violations by Defendants' own pollution monitoring."].)

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Civ. Code, § 3526 ["No man is responsible for that which no man can control"]; *Defenders of Wildlife v. Browner* (9th Cir. 1999) 191 F.3d 1159, 1162; *Hughey v. JMS Dev. Corp.*, (11th Cir. 1996) 78 F.3d 1523, 1527-29; *Atlantic States Legal Foundation, Inc. v. Eastman Kodak Co.*, (2d Cir. 1993) 12 F.3d 353.)

The *Hughey* case referenced above is material to the scenario faced by the Cities with regard to the Regional Permit. In *Hughey*, the Plaintiff sued Defendant JMS for an alleged failure to obtain a storm water permit for the discharge of storm water from its construction project. The Plaintiff argued JMS had no authority to discharge any quantity or type of storm water from the project, i.e. a "zero discharge standard." until JMS had first obtained an NPDES permit. (*Id.* at 1527.) JMS did not dispute that storm water was discharged from its property and that it had not obtained an NPDES permit (allegedly in contravention of 33 U.S.C. § 1311), but claimed it was not in violation of the Clean Water Act because the Georgia Environmental Protection Division, the NPDES permitting authority, was not yet able to issue such permits. As a result, it was impossible for JMS to comply. (*Id.)* The Eleventh Circuit Court of Appeal held that the CWA does not require a permittee to achieve the impossible, finding that "Congress is presumed not to have intended an absurd (impossible) result." (*Id.* at 1529.) Specifically, the 11th Circuit found that: "***Congress could not have intended a strict application of the zero discharge standard in section 1311 (a) when compliance is factually impossible***. The evidence was uncontroverted that whenever it rained in Gwinnett County some discharge was going to occur; nothing JMS could do would prevent all rain water discharge. . . Lex non cogit ad impossibilia: The law does not compel the doing of impossibilities.") (*Id.*)

b. **IT IS PARAMOUNT THAT THE REGIONAL PERMIT PROVIDE INTERIM COMPLIANCE**

The ultimate outcome of imposing an unachievable discharge prohibition during the preparation and implementation of WQIPs will not be to improve water quality, but instead to increase litigation and costs incurred by public agencies in fighting enforcement actions and citizen suits, an opportunity not lost on entrepreneurial plaintiffs' attorneys. As the Regional Board is aware, the State Water Resources Control Board ("SWRCB") issued WQ 2015-0075 (hereinafter LA MS4 Order) in June of 2015. The LA MS4 Order is a precedential order that provides an alternative compliance option ("ACO") to permittees that would at least permit the Cities to remain in compliance with the CWA notwithstanding the current inability to demonstrate current attainment of all water quality standards in receiving waters at all times. Under the approach approved by the SWRCB, a city that agrees to participate in the development of the LA Regional Board's equivalent of a WQIP is deemed to be in compliance during the preparation of the WQIP if the city otherwise complies with the terms and timelines of its MS4 Permit. The "in compliance" status remains for as long as the city continues to diligently perform its obligations under the ACO in furtherance of projects and management actions that

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result in the ultimate achievement of water quality objectives (which the LA Regional Board admitted would likely take decades in some cases). The ACO proposed in the current version of the Regional Permit, on the other hand, would hold the Cities strictly liable immediately for any exceedance (whether the result of the Cities' culpability or not), even as the Cities continue to spend substantial sums to develop projects that reduce pollution.

Perhaps more significantly, the approach proposed in the Regional Permit is, from what the Cities have learned, different from the approach currently being considered by other Regional Board in the state, in that the WQIP provides no interim compliance of any kind while the WQIP is in development (a period of 18 months in Orange County assuming no extensions are granted), and indeed the proposed ACO provides no compliance to any MS4 until such time as all of the watersheds within southern Orange County can demonstrate to a level of certainty that implementation of the WQIP will actually result in the complete achievement of all numeric water quality objectives—a task in and of itself that, as previously referenced, may not be physically possible in some locations for certain naturally occurring constituents such as bacteria, nutrients and metals. To be successful in improving water quality to the maximum extent within the Cities, the WQIP needs to be deliberate, scientifically rigorous, and a collaborative effort between the Cities, concerned citizens, the Regional Board and all of the other south Orange County stormwater permittees.

The current version of the Regional Permit would make such an effort difficult to achieve. All of the Orange County Co-Permittees, being currently out of compliance (and unlike the San Diego County permittees having no draft plan already completed), and facing CWA citizen suits at any time during plan development, will be forced to rush to develop a plan that may have little chance of being funded (Prop 218 and Prop 26 limitations) or implemented, while at the same time Co-Permittee funds that would otherwise go to collaboratively developing scientifically validated projects with immediate water quality benefits will need to be held back to facilitate ability to defend against filed by environmental groups seeking to impose strict liability.. Meanwhile, the Regional Board will presumably have less and less influence over the process of improving water quality as collaborative efforts break down and decisions about water quality projects, improvement plans, and pertinent timelines, shift to Federal Judges and environmental plaintiffs rather than the Regional Board. All sides would benefit from a carefully tailored interim compliance option that ensures rapid preparation of the WQIP while also ensuring the WQIP effort is not rendered superfluous by Federal Court decisions and consent decrees that may impose disparate and conflicting obligations on different permittees throughout the San Diego Region.

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c. THE REGIONAL PERMIT SHOULD PROVIDE FOR THE DEVELOPMENT OF SITE SPECIFIC OBJECTIVES

The impossibility/impracticability of ever attaining RWLs in San Diego Region watersheds could be mitigated by specific reference in the Regional Permit to the potential development of site specific objectives that would potentially be attainable while also ensuring full protection of existing beneficial uses in southern Orange County. However, the San Diego Regional Board Staff has historically resisted stakeholder efforts to develop attainable site specific objectives for bacteria, nutrients and toxics, and has not offered the possibility of site specific objective development as a potential mechanism for the Cities to obtain long term compliance in conjunction with WQIP development. Taken to its logical conclusion, the Regional Board's current position on strict liability of MS4s for non-attainment of existing numeric objectives could result in development moratoria, and inability of local water agencies to undertake any kind of significant recycled water project requiring storage or conveyance of recycled water (or otherwise resulting in increased nutrient or salinity loading to southern Orange County streams).

San Juan Creek, which has been discussed as a potential site for a large scale indirect potable reuse ("IPR") project to recharge the depleted San Juan Groundwater Basin (classified as a surface water by the SWRCB), is already listed as being impaired for total nitrogen and phosphorous according to the 2012 SWRCB 303 (d) list. Since RO cannot reliably take recycled water below 1 ppm total nitrogen, and the 303 (d) listing indicates that there is no current assimilative capacity in San Juan Creek, it is unclear how such a project could ever be permitted by the Regional Board—notwithstanding the San Diego Region's dire need for additional local water supplies, and the Regional Board's desire to curtail existing ocean outfall discharges whenever practicable. Accordingly, the Cities, both of whom could benefit from the development of additional recycled water supplies in the Region, recommend that the Regional Permit and Staff Report specifically acknowledge the potential wisdom of developing site specific objectives in concert with the mandated WQIP development—even where site specific development may extend the period required to complete the WQIP process.

2. DISCHARGES OF NON-STORMWATER SHOULD NOT GIVE RISE TO LIABILITY UNDER THE PERMIT WHERE THE PERMITTEE IS FULLY IMPLEMENTING ITS ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM.

The Cities understand the desire of the Regional Board to prohibit discharges of non-stormwater "dry weather" or "nuisance" flows to the MS4. Such flows may, at times, contain significant amounts of pollutants that impair beneficial uses, so diversion of such flows where feasible makes sense. And that is precisely what both Cities have done in their respective service areas with the installation of dry weather flow diversion units that divert nuisance flows

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whenever feasible.[4] However, language in Section E.2 can be read to hold the owner of the MS4 strictly liable under the Regional Permit where non-permitted discharges enter the MS4 and the owner of the MS4 did not otherwise prevent them from occurring. Indeed, it is often difficult for an MS4 operator to even identify the source of the broad universe of what the Regional Permit defines as illicit discharges on a given day (e.g., numerous houses in a neighborhood may be the cumulative cause of small amounts of runoff entering an MS4 with the "source" of the "non-stormwater discharge" varying each day according to residential irrigation patterns).[5] As the SWRCB acknowledged in footnote 133 of its recent decision in the LA MS4 Decision, Order No. WQ 2015-0075 , "[w]e recognize that even the most comprehensive efforts to address unauthorized non-storm water discharges may not eliminate all such discharges."

Because of the apparent intention of some environmental groups, as evidenced by recent Federal Court filings initiating Clean Water Act citizen suits (and seeking strict liability for alleged violations of MS4 permits), to impose liability on cities who are otherwise fully implementing their illicit detection programs (and diverting non-stormwater flows, whenever feasible, to the sanitary sewer),[6] the Cities urge the Regional Board to clarify that it does not intend to impose liability on MS4 permittees who are not otherwise complicit or culpable in dry weather flows entering the MS4 (and subsequently a Water of the U.S.). Accordingly, the Cities respectfully request that the Regional Board amend Section II.E.2 of the Regional Permit to read as follows:

"Each Copermittee must implement a program to actively detect and eliminate illicit discharges and improper disposal into the MS4, or otherwise require the discharger to apply for and obtain a separate NPDES permit. Compliance with the terms of this Provision E.2 shall constitute compliance with the requirement under Provision A.1.b to "effectively prohibit" non-

[4] Dry weather diversions may be infeasible within the Cities where inadequate sewer line or wastewater treatment plant capacity exists, where the flows are a mix of non-stormwater runoff and rising groundwater, or where the geography or hydrology of the location makes installation of the units impracticable to install or maintain.

[5] It will also be very difficult for the Cities to determine on any given day what volume of dry weather (and wet weather) discharges are derived from separately permitted activities, or activities that fall outside of the CWA altogether such as agricultural return flows. To the extent that such identification is even physically possible, it may nevertheless be impossible for the Cities to determine which sources of dry weather flows are benign and which ones contain pollutants above RWLs.

[6] On at least two occasions within the past six months, the environmental group River Watch has sued MS4 operators for allegedly violating the prohibitions on municipal stormwater discharges that exceed RWLs, and for allegedly permitting non-stormwater discharges to enter the MS4 from non-permitted sources. The concerns expressed herein regarding third party liability associated with the Regional Permit are far from theoretical.

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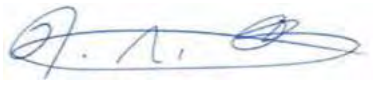
storm discharges into the MS4, provided the Copermittee is in full compliance with all requirements in this Provision E.2 or is otherwise working diligently to address any identified deficiency. The illicit discharge detection and elimination program must be implemented in accordance with the strategies in the Water Quality Improvement Plan described pursuant to Provision B.3.b.(1) and include, at a minimum, the following requirements . . ."

It would also be beneficial for the Regional Board to clarify the definition of "discharges from potable water sources" in Section II.E.2.a (3)(f). Potable water used for residential irrigation that runs off in small quantities (and not otherwise invoking an issue of wasteful water use) would potentially be appropriate for exclusion from treatment as an illicit discharge (allowing permittees to focus on illicit discharges with significant water quality ramifications). However, as currently drafted, it is not clear whether "potable discharges" are intended to include runoff derived from turf or ornamental plant irrigation.

Thank you for the opportunity to comment. Both Cities look forward to working with Regional Board staff to develop language that will address the concerns expressed herein.

Very truly yours,

RUTAN & TUCKER, LLP



Jeremy N. Jungreis

JNJ:nd

Electronic Submission to sandiego@waterboards.ca.gov
Honorable Chairman Henry Abarbanel and Board Members
Attn: Mr. Wayne Chiu
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, California 92108

Dear Chairman Abarbanel, Honorable Board Members, and Mr. Chiu:

Subject: Comment Letter — Tentative Order No. R9-2015-0100 Place ID: 786088WChiu

I am writing at the direction of a unanimous City Council of the City of Laguna Beach (the "City") to urge you to make certain changes to the language being proposed by staff to the Regional Board as amendments to the City's Regional Permit. This is a matter of great importance to the City. Specifically, we are concerned that the proposed amendments create undue liability for the City during the interim period prior to the adoption of a water quality improvement plan, and creates strict liability for the City for third party actions that it cannot control.

First, let me assure you that the City Council is fully committed to aggressively pursuing improvements in water quality. As demonstrated by our past actions, Laguna Beach is a community where water quality is taken very seriously, and we generally support the actions of the Board to make our beaches and watersheds cleaner. We are a leader in efforts to protect and improve water quality through a vigorous source control program and active investigation and enforcement of illicit discharges. As one of many examples of the City's strong commitment to improving water quality, the City has broadly invested in urban stormwater diversion units. These costly diversion units collect dry weather runoff and divert it to the sanitary sewer system. To date, 25 urban water diversion units have been installed and divert approximately 83% of the City's urban drainage area (all of the areas where diversion is feasible). This aggressive approach to stormwater pollution prevention has earned the City a summer and winter dry weather "grade" from Heal the Bay of an "A" or higher at all beaches within the City.

We understand Board staff is proposing to amend the Regional Permit with revisions that would impose strict liability on cities for any non-attainment of water quality standards, no matter what the cause, and irrespective of the feasibility of achieving numeric standards (at all times) in a water body. While we applaud the efforts of the Board to improve water quality in

the region, there are several aspects of what is being proposed that are likely to have adverse consequences. Accordingly, the City Council respectfully asks you and your staff to carefully consider the comments and recommendations in this letter, as well as those provided by our legal counsel (Exhibit A), and to work with the City to develop a fair resolution of our concerns.

The Proposed Amendments Unequivocally Should Require Interim Compliance While the City Develops a Water Quality Improvement Plan ("WQIP"). The draft language requires the City to develop a WQIP as a practical vehicle for improving water quality on a watershed basis but appears to impose strict liability on the City for discharges while the WQIP is being developed. A watershed approach to water quality improvement makes sense, and the City is generally supportive of the WQIP concept. However, the proposed Regional Permit's departure from the previous best management practice ("BMP") based approach in favor of a strict liability regime that mandates immediate attainment of numeric water quality objectives (some of which may be lower than natural background levels) poses a severe compliance challenge for the City. Under the proposed amendment, the City will be potentially liable for a violation of the Regional Permit, and thus the Clean Water Act, every time it rains. While the City has already diverted the vast majority of dry weather flows to the sanitary sewer, it is not feasible (nor good for the environment) to divert all wet weather flows. Because of the extremely stringent standards for bacteria, nutrients, and metals—constituents that the City may have little to no ability to control—wet weather flows from the City's MS4 are likely, no matter what actions the City takes, to contain pollutants in excess of receiving water limitations. When exceedances occur, the City will face fines/penalties from the Board (and the likelihood of Clean Water Act citizen suits) whether the City caused exceedances of receiving water limitations or not. This is not a fair result, and arbitrarily imposing liability without culpability will not lead to cleaner water.

To be successful in improving water quality to the maximum extent within the City, the WQIP needs to be a deliberate, scientifically rigorous, and collaborative effort between all interested stakeholders ***that recognizes the need for interim and long term compliance by the City*** while the WQIP is developed and implemented. A hastily compiled plan, speedily prepared because of fear of immediate strict liability, will not be the sort of plan that will accomplish the Board's objectives or the needs of City residents. It will only lead to litigation and uncertainty for all involved. We urge you to add some form of interim compliance for southern Orange County agencies who aggressively pursue WQIP development and implementation.

The Regional Permit Should not Impose Strict Liability Where the City Fully Implements a Robust Illicit Discharge Prevention Program and Diverts All Feasible Dry Weather Flows. The Regional Permit amendments would create what amounts to a ban on runoff into the MS4 when it is not raining (except for separately authorized discharges). Unfortunately, as the State Water Board recently acknowledged in its LA MS4 decision, preventing all runoff into an MS4 system can be nearly impossible since third parties—such as residents watering their lawns in a

reasonable manner—may nevertheless cause at least some incidental runoff to enter the MS4. The City has limited ability to stop third party sewage spills or other third party actions (e.g., washing of vehicles) that may result in small amounts of runoff entering the MS4 when it is not raining (even where the City is fully implementing and enforcing its illicit discharge program). The City will follow the Clean Water Act and "effectively prohibit" all dry weather discharges to receiving waters with its illicit discharge prevention program and diversion of dry weather flows. What the City cannot do is guarantee that runoff or illicit discharges never reach the City's MS4 (as the amended permit can be read to require). Please strongly consider revising the Regional Permit to eliminate any inference of strict liability where the City fully implements its illicit discharge program by adding the clarifying language recommended by our legal counsel.

Thank you for considering our requests. Our staff is available to assist in crafting language to address City concerns while facilitating the Board's continued improvement of water quality. If you have any questions please feel free to contact our Director of Water Quality, David Shissler at (949) 497-0328.

Sincerely,

Bob Whalen, Mayor

CC: David Gibson, Executive Officer, SDRWQCB
Jeremy Jungreis, Rutan & Tucker, LLP

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Jeremy N. Jungreis
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September 14, 2015

EXHIBIT A

VIA ELECTRONIC MAIL

Mr. Wayne Chiu
Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108
sandiego@waterboards.ca.gov

Re: Comments of the Cities of Dana Point and Laguna Beach on Proposed Tentative Order No. R9-2015-0100, Place ID: 786088

Dear Mr. Chiu:

This letter, which supplements and augments the letters submitted concurrently by the Mayors of the Cities of Dana Point and Laguna Beach, constitutes the further legal and technical comments of the Cities of Laguna Beach and Dana Point (the "Cities") to proposed amendments to San Diego Regional Water Quality Control Board ("Board") Order No. R9-2013-0001 (as amended by Order No. R9-2015-0001), proposed as Tentative Order No. R9-2015-0100 (the "Regional Permit"). The Cities also incorporate by reference, and assert as if separately stated herein, the comments submitted by the County of Orange ("County") on September 14, 2015, and the previous comments on the Regional Permit submitted by, or on behalf of, the City of Dana Point.[1]

The Cities appreciate the efforts of Regional Board staff to collaboratively engage the Permittees and other stakeholders in workshops where a variety of views on the question of receiving water limitations ("RWLs"), and how they should be achieved, were expressed. This manner of comment and stakeholder participation worked well in allowing all viewpoints to be expressed with sufficient time for vigorous discussion of issues with the Regional MS4 Permit. The Cities are hopeful that the issues addressed in this letter can be resolved via further

[1] The Cities by this reference incorporate, to the maximum extent allowed by law, all prior letters, comments, reports, presentations, oral and written testimony, data, communications, and other evidence made by, on behalf of, and in support of the County of Orange during the various workshops, hearings, and meetings relevant to the adoption of Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and Tentative Order No. R9-2015-0100. The Cities reserve the right to provide further comment as applicable.

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productive dialogue prior to the approval hearing for the Regional Permit scheduled for November 18.

1. LEGAL CONCERNS WITH RECEIVING WATER LIMITATIONS AND ALTERNATIVE COMPLIANCE OPTIONS.

a. IT IS LIKELY IMPOSSIBLE, AND CERTAINLY NOT "PRACTICABLE," TO COMPLY WITH ALL OF THE DISCHARGE PROHIBITIONS IN THE REGIONAL PERMIT UNDER ALL CIRCUMSTANCES

Part II.A.2 (a) of the Regional Permit strictly prohibits discharges of municipal stormwater to Waters of the U.S. that do not meet all water quality objectives—notwithstanding that such discharges may in fact control pollutants to the "maximum extent practicable," and notwithstanding that exceedances of numeric objectives in the San Diego Basin Plan may be the result of factors that the Cities have no ability to control. In other words, as currently drafted, the Regional Permit will impose strict liability on the Cities for regulatory requirements that will, in some cases, be impossible to meet,[2] no matter how robust or aggressive the WQIP ultimately developed. Imposing strict liability on the Cities and thereby subjecting them to CWA Citizen Suits and Regional Board enforcement every time it rains,[3] when there is no realistic possibility of ever achieving the currently applicable numeric RWLs, is inconsistent with both state and federal law. Neither requires municipal stormwater permittees, who unlike private businesses do not have the option to "go out of business" (or otherwise shut down non-compliant stormwater facilities), to achieve the impossible, or to control what MS4 permittees have no ability or authority to control. (*See* CA Civ. Code, § 3531 ["The law never requires impossibilities"]; CA

[2] As Regional Board staff is aware, some of the existing water quality objectives in the San Diego Basin Plan which give rise to the receiving water limitations referenced in Section II.A.2, may be at or below natural background levels, or be set at levels so low that they cannot be achieved without diverting all of the water in the MS4 to a reverse osmosis ("RO") treatment plant—thereby in most cases removing the water from the watershed altogether and changing its composition in ways that could be harmful to the watershed if reintroduced post-treatment (*See, e.g.*,http://news.stanford.edu/news/2015/september/arsenic-mystery-solved-090215.html [Stanford study showing association between rising arsenic levels and water treated with RO]. Even with RO treatment, it still would not be possible to reliably meet the current default San Diego Basin Plan standard for total nitrogen in surface waters of 1 part per million. (*See, e.g., U.S. v. Eastern Municipal Water District* Case. No. CV 04-8182 (C.D. Ca 2010) (noting infeasibility of meeting 1 ppm total nitrogen standard required for NPDES issuance).

[3] (*See, e.g., NRDC v. County of Los Angeles* (C.D. Cal. Mar. 30, 2015) 2015 U.S. Dist. LEXIS 40761 ["Defendants are liable for the 147 exceedances described in Defendants' monitoring reports, which the Ninth Circuit found were conclusively demonstrated to be Permit violations by Defendants' own pollution monitoring."].)

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Civ. Code, § 3526 ["No man is responsible for that which no man can control"]; *Defenders of Wildlife v. Browner* (9th Cir. 1999) 191 F.3d 1159, 1162; *Hughey v. JMS Dev. Corp.*, (11th Cir. 1996) 78 F.3d 1523, 1527-29; *Atlantic States Legal Foundation, Inc. v. Eastman Kodak Co.*, (2d Cir. 1993) 12 F.3d 353.)

The *Hughey* case referenced above is material to the scenario faced by the Cities with regard to the Regional Permit. In *Hughey*, the Plaintiff sued Defendant JMS for an alleged failure to obtain a storm water permit for the discharge of storm water from its construction project. The Plaintiff argued JMS had no authority to discharge any quantity or type of storm water from the project, i.e. a "zero discharge standard." until JMS had first obtained an NPDES permit. (*Id.* at 1527.) JMS did not dispute that storm water was discharged from its property and that it had not obtained an NPDES permit (allegedly in contravention of 33 U.S.C. § 1311), but claimed it was not in violation of the Clean Water Act because the Georgia Environmental Protection Division, the NPDES permitting authority, was not yet able to issue such permits. As a result, it was impossible for JMS to comply. (*Id.)* The Eleventh Circuit Court of Appeal held that the CWA does not require a permittee to achieve the impossible, finding that "Congress is presumed not to have intended an absurd (impossible) result." (*Id.* at 1529.) Specifically, the 11th Circuit found that: "***Congress could not have intended a strict application of the zero discharge standard in section 1311 (a) when compliance is factually impossible***. The evidence was uncontroverted that whenever it rained in Gwinnett County some discharge was going to occur; nothing JMS could do would prevent all rain water discharge. . . Lex non cogit ad impossibilia: The law does not compel the doing of impossibilities.") (*Id.*)

b. **IT IS PARAMOUNT THAT THE REGIONAL PERMIT PROVIDE INTERIM COMPLIANCE**

The ultimate outcome of imposing an unachievable discharge prohibition during the preparation and implementation of WQIPs will not be to improve water quality, but instead to increase litigation and costs incurred by public agencies in fighting enforcement actions and citizen suits, an opportunity not lost on entrepreneurial plaintiffs' attorneys. As the Regional Board is aware, the State Water Resources Control Board ("SWRCB") issued WQ 2015-0075 (hereinafter LA MS4 Order) in June of 2015. The LA MS4 Order is a precedential order that provides an alternative compliance option ("ACO") to permittees that would at least permit the Cities to remain in compliance with the CWA notwithstanding the current inability to demonstrate current attainment of all water quality standards in receiving waters at all times. Under the approach approved by the SWRCB, a city that agrees to participate in the development of the LA Regional Board's equivalent of a WQIP is deemed to be in compliance during the preparation of the WQIP if the city otherwise complies with the terms and timelines of its MS4 Permit. The "in compliance" status remains for as long as the city continues to diligently perform its obligations under the ACO in furtherance of projects and management actions that

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result in the ultimate achievement of water quality objectives (which the LA Regional Board admitted would likely take decades in some cases). The ACO proposed in the current version of the Regional Permit, on the other hand, would hold the Cities strictly liable immediately for any exceedance (whether the result of the Cities' culpability or not), even as the Cities continue to spend substantial sums to develop projects that reduce pollution.

Perhaps more significantly, the approach proposed in the Regional Permit is, from what the Cities have learned, different from the approach currently being considered by other Regional Board in the state, in that the WQIP provides no interim compliance of any kind while the WQIP is in development (a period of 18 months in Orange County assuming no extensions are granted), and indeed the proposed ACO provides no compliance to any MS4 until such time as all of the watersheds within southern Orange County can demonstrate to a level of certainty that implementation of the WQIP will actually result in the complete achievement of all numeric water quality objectives—a task in and of itself that, as previously referenced, may not be physically possible in some locations for certain naturally occurring constituents such as bacteria, nutrients and metals. To be successful in improving water quality to the maximum extent within the Cities, the WQIP needs to be deliberate, scientifically rigorous, and a collaborative effort between the Cities, concerned citizens, the Regional Board and all of the other south Orange County stormwater permittees.

The current version of the Regional Permit would make such an effort difficult to achieve. All of the Orange County Co-Permittees, being currently out of compliance (and unlike the San Diego County permittees having no draft plan already completed), and facing CWA citizen suits at any time during plan development, will be forced to rush to develop a plan that may have little chance of being funded (Prop 218 and Prop 26 limitations) or implemented, while at the same time Co-Permittee funds that would otherwise go to collaboratively developing scientifically validated projects with immediate water quality benefits will need to be held back to facilitate ability to defend against filed by environmental groups seeking to impose strict liability. Meanwhile, the Regional Board will presumably have less and less influence over the process of improving water quality as collaborative efforts break down and decisions about water quality projects, improvement plans, and pertinent timelines, shift to Federal Judges and environmental plaintiffs rather than the Regional Board. All sides would benefit from a carefully tailored interim compliance option that ensures rapid preparation of the WQIP while also ensuring the WQIP effort is not rendered superfluous by Federal Court decisions and consent decrees that may impose disparate and conflicting obligations on different permittees throughout the San Diego Region.

c. <u>THE REGIONAL PERMIT SHOULD PROVIDE FOR THE DEVELOPMENT OF SITE SPECIFIC OBJECTIVES</u>

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The impossibility/impracticability of ever attaining RWLs in San Diego Region watersheds could be mitigated by specific reference in the Regional Permit to the potential development of site specific objectives that would potentially be attainable while also ensuring full protection of existing beneficial uses in southern Orange County. However, the San Diego Regional Board Staff has historically resisted stakeholder efforts to develop attainable site specific objectives for bacteria, nutrients and toxics, and has not offered the possibility of site specific objective development as a potential mechanism for the Cities to obtain long term compliance in conjunction with WQIP development. Taken to its logical conclusion, the Regional Board's current position on strict liability of MS4s for non-attainment of existing numeric objectives could result in development moratoria, and inability of local water agencies to undertake any kind of significant recycled water project requiring storage or conveyance of recycled water (or otherwise resulting in increased nutrient or salinity loading to southern Orange County streams).

San Juan Creek, which has been discussed as a potential site for a large scale indirect potable reuse ("IPR") project to recharge the depleted San Juan Groundwater Basin (classified as a surface water by the SWRCB), is already listed as being impaired for total nitrogen and phosphorous according to the 2012 SWRCB 303 (d) list. Since RO cannot reliably take recycled water below 1 ppm total nitrogen, and the 303 (d) listing indicates that there is no current assimilative capacity in San Juan Creek, it is unclear how such a project could ever be permitted by the Regional Board—notwithstanding the San Diego Region's dire need for additional local water supplies, and the Regional Board's desire to curtail existing ocean outfall discharges whenever practicable. Accordingly, the Cities, both of whom could benefit from the development of additional recycled water supplies in the Region, recommend that the Regional Permit and Staff Report specifically acknowledge the potential wisdom of developing site specific objectives in concert with the mandated WQIP development—even where site specific development may extend the period required to complete the WQIP process.

2. <u>DISCHARGES OF NON-STORMWATER SHOULD NOT GIVE RISE TO LIABILITY UNDER THE PERMIT WHERE THE PERMITTEE IS FULLY IMPLEMENTING ITS ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM</u>.

The Cities understand the desire of the Regional Board to prohibit discharges of non-stormwater "dry weather" or "nuisance" flows to the MS4. Such flows may, at times, contain significant amounts of pollutants that impair beneficial uses, so diversion of such flows where feasible makes sense. And that is precisely what both Cities have done in their respective service areas with the installation of dry weather flow diversion units that divert nuisance flows whenever feasible.[4] However, language in Section E.2 can be read to hold the owner of the MS4

[4] Dry weather diversions may be infeasible within the Cities where inadequate sewer line or wastewater treatment plant capacity exists, where the flows are a mix of non-stormwater runoff

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strictly liable under the Regional Permit where non-permitted discharges enter the MS4 and the owner of the MS4 did not otherwise prevent them from occurring. Indeed, it is often difficult for an MS4 operator to even identify the source of the broad universe of what the Regional Permit defines as illicit discharges on a given day (e.g., numerous houses in a neighborhood may be the cumulative cause of small amounts of runoff entering an MS4 with the "source" of the "non-stormwater discharge" varying each day according to residential irrigation patterns).[5] As the SWRCB acknowledged in footnote 133 of its recent decision in the LA MS4 Decision, Order No. WQ 2015-0075 , "[w]e recognize that even the most comprehensive efforts to address unauthorized non-storm water discharges may not eliminate all such discharges."

Because of the apparent intention of some environmental groups, as evidenced by recent Federal Court filings initiating Clean Water Act citizen suits (and seeking strict liability for alleged violations of MS4 permits), to impose liability on cities who are otherwise fully implementing their illicit detection programs (and diverting non-stormwater flows, whenever feasible, to the sanitary sewer),[6] the Cities urge the Regional Board to clarify that it does not intend to impose liability on MS4 permittees who are not otherwise complicit or culpable in dry weather flows entering the MS4 (and subsequently a Water of the U.S.). Accordingly, the Cities respectfully request that the Regional Board amend Section II.E.2 of the Regional Permit to read as follows:

"Each Copermittee must implement a program to actively detect and eliminate illicit discharges and improper disposal into the MS4, or otherwise require the discharger to apply for and obtain a separate NPDES permit. Compliance with the terms of this Provision E.2 shall constitute compliance with the requirement under Provision A.1.b to "effectively prohibit" non-storm discharges into the MS4, provided the Copermittee is in full compliance with all requirements in this Provision E.2 or is otherwise working diligently to address any identified deficiency. The illicit discharge detection and elimination program must be implemented in

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and rising groundwater, or where the geography or hydrology of the location makes installation of the units impracticable to install or maintain.

[5] It will also be very difficult for the Cities to determine on any given day what volume of dry weather (and wet weather) discharges are derived from separately permitted activities, or activities that fall outside of the CWA altogether such as agricultural return flows. To the extent that such identification is even physically possible, it may nevertheless be impossible for the Cities to determine which sources of dry weather flows are benign and which ones contain pollutants above RWLs.

[6] On at least two occasions within the past six months, the environmental group California River Watch has sued MS4 operators for allegedly violating the prohibitions on municipal stormwater discharges that exceed RWLs, and for allegedly permitting non-stormwater discharges to enter the MS4 from non-permitted sources. The concerns expressed herein regarding third party liability associated with the Regional Permit are far from theoretical.

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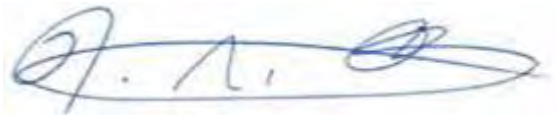
accordance with the strategies in the Water Quality Improvement Plan described pursuant to Provision B.3.b.(1) and include, at a minimum, the following requirements . . ."

It would also be beneficial for the Regional Board to clarify the definition of "discharges from potable water sources" in Section II.E.2.a (3)(f). Potable water used for residential irrigation that runs off in small quantities (and not otherwise invoking an issue of wasteful water use) would potentially be appropriate for exclusion from treatment as an illicit discharge (allowing permittees to focus on illicit discharges with significant water quality ramifications). However, as currently drafted, it is not clear whether "potable discharges" are intended to include runoff derived from turf or ornamental plant irrigation.

Thank you for the opportunity to comment. Both Cities look forward to working with Regional Board staff to develop language that will address the concerns expressed herein.

Very truly yours,

RUTAN & TUCKER, LLP



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September 14, 2015

VIA E-MAIL [SANDIEGO@WATERBOARDS.CA.GOV]

David Gibson, Executive Officer
c/o Wayne Chiu
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100,
San Diego, CA 92108

Re: Comment - Tentative Order No. R9-2015-0100, Place ID:786088WChiu

Dear Mr. Gibson and Mr. Chiu:

Best Best & Krieger represents the City of Lake Forest ("City"). The City submits the following comments on the California Regional Water Quality Control Board, San Diego Region ("SDRWQCB"), Tentative Order No. R9-2015-0100 ("Tentative Order") amending Order No. R9-2013-0001, NPDES No. CAS010266, as amended by Order No. R9-2015-0001, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region ("MS4 Permit"). The City is committed to improving and sustaining water quality in the San Diego region and has undertaken extensive efforts to further these goals. The City is aware that the County of Orange has prepared and submitted comments on the Tentative Order. The City would like to express its support for the County's comment letter and join with the County in the submission of those comments. The comments in this letter supplement the County's letter and are intended to allow the City and other Co-permittees to continue working toward the common goal of improving water quality in the region.

1. THE CITY SUPPORTS INCORPORATION OF THE ALTERNATIVE COMPLIANCE PATHWAY FOR PROHIBITIONS AND LIMITATIONS

The City appreciates the efforts of SDRWQCB staff to develop an alternative compliance pathway for incorporation into the MS4 Permit. MS4s face special challenges in attaining water quality objectives and immediate compliance with many of the objectives is not feasible. An alternative to strict compliance is consistent with the Ninth Circuit Court's recognition that the Clean Water Act "does not require municipal storm-sewer discharges to comply strictly with 33 U.S.C. § 1311(b)(1)(C)" regarding limitations. (*Defenders of Wildlife v. Browner* (9th Cir. 1999)

191 F.3d 1159, 1165.) The WQIP process establishes a rigorous, flexible and transparent pathway for compliance with Provisions A.1.a, A.1.c, A.1.d, A.2.a, and A.3.b. The City joins with other Co-Permittees in expressing its support for an alternative compliance pathway.

2. CLARIFY PROVISION A TO STATE THAT COMPLIANCE WITH PROVISION B.3 CONSTITUTES COMPLIANCE WITH PROVISIONS A.1.a, A.1.C, A.1.D, A.2, AND A.3.b OF THE MS4 PERMIT

The City is concerned that the prohibitions and limitations in Provisions A.1.a, A.1.c, A.1.d, A.2, and A.3.b, as currently written, may be interpreted independent of the alternative compliance pathway in Provision B.3. The Ninth Circuit Court's decision in *Los Angeles County Flood Control District v. NRDC* interpreted an MS4 permit as a contract, with each provision as a stand-alone requirement. A stand-alone reading of the prohibitions and limitations, without any reference to the compliance pathway provision may expose the Co-Permittees to unintended liability, despite our rigorous efforts to successfully implement the alternative compliance pathway. The City joins with Co-Permittees in requesting the simple solution of adding language to Provision A that clarifies intent of the alternative compliance pathway is to create an alternative means of complying with Provisions A.1.a, A.1.c, A.1.d, A.2, and A.3.b. In other words, the City requests adding language in Provision A simply referencing and linking the alternative compliance pathway in Provision B.

The City also seeks this clarification from its unique position pursuant to the Water Code section 13228 designation agreement between the San Diego and Santa Ana Regional Water Quality Control Boards. The City will actively participate in the development and implementation of the Aliso Creek Watershed Area Water Quality Improvement Plan even though its discharges within the SDRWQCB's jurisdiction are regulated by the Santa Ana Regional Water Quality Control Board. The City will invest substantial time and resources into the Water Quality Improvement Plan and seeks assurance that its efforts will not increase its exposure to liability rather than decrease exposure.

3. INCLUDE THE WQIP PLANNING PROCESS IN THE ALTERNATIVE COMPLIANCE PATHWAY

In light of the direction from the State Water Resources Control Board ("State Board"), the alternative compliance pathway should be extended to include the WQIP planning phase. The alternative compliance pathway currently begins after the WQIP has been completed and is being implemented. It does not extend to the WQIP planning process. The Permit establishes a structure, with timelines over two years, for the WQIP planning process. During the planning process, Co-Permittees will, among other activities, identify water quality priorities, identify and prioritize known and suspected sources of pollutants and stressors, identify potential strategies to improve water quality, create an integrated monitoring and assessment program, and develop

stormwater action levels and non-stormwater action levels into the WQIP. Each of these steps, and others, including the public participation process, occurs on a schedule and requires a substantial investment of time and resources.

Even though the City will participate in the Aliso Creek Watershed Area Water Quality Improvement Plan and anticipates meeting all Permit-established planning requirements, the City and other Co-Permittees remain open to liability for prohibitions and limitations violations, especially from third parties, during the planning process. The ultimate goal of the planning process is to create a WQIP designed to address prioritized water quality conditions. If the City is forced to divert funds away from the planning process to defend a third-party lawsuit during the planning period, such diversion will impede the City's ability to develop a thorough WQIP and undercuts the ultimate goal of the Permit.

Recognizing the need for a long-term approach to addressing water quality conditions, the State Board directed regional boards to "incorporate an ambitious, rigorous, and transparent alternative compliance path that allows permittees appropriate time to come into compliance with receiving water limitations without being in violation of the receiving water limitations during full implementation of the compliance alternative." (State Water Resources Control Board, Order WQ 2015-0075, p. 52.) With direction from the State Board to create a space and time for Co-Permittees to come into compliance with receiving water limitation without being in violation of the Permit, it is imperative that the Board extend the Permit's alternative compliance pathway to the planning phase. Because the planning process is integral to addressing water quality conditions, the City joins with the Co-Permittees in requesting that the alternative compliance pathway include the WQIP planning process.

4. REVISE ANNUAL MILESTONE REQUIREMENT TO INCLUDE MEANINGFUL MILESTONES (PROVISION B.3.c.(1)(a)(vii), B.3.c.(1)(d), B.3.c.(2)(c), B.3.c.(2)(d) and footnote 9)

The Tentative Order's alternative compliance pathway requires Water Quality Improvement Plans to set annual milestones for each numeric goal. These milestones must build on previous milestones and lead to the achievement of a final numeric goal. While improvements to water quality may be more difficult to attain in the absence of clear goals and milestones, an artificial annual milestone for each goal does not account for the complicated and long-term nature of the strategies designed to attain water quality objectives. Further, requiring annual milestones for every water body – pollutant combination restricts the Co-Permittees' ability to prioritize water quality conditions and dedicate limited resources to the highest priority milestones. In order to establish meaningful milestones over time, the milestones should be developed as part of the adaptive management process. The City therefore joins with the Co-Permittees in requesting a revision to the annual milestone requirement in Provisions B.3.c.(1)(a)(vii), B.3.c.(1)(d), B.3.c.(2)(c), B.3.c.(2)(d) and footnote 9.

BEST BEST & KRIEGER LLP
ATTORNEYS AT LAW

The City is grateful for SDRWQCB staff's efforts in drafting a fair and workable alterative compliance pathway. We believe that with the minor modifications requested in this comment letter and those of the County on behalf of the City and other Co-Permittees, the City will be a position to move forward with confidence in attaining water quality improvements in the region.

Sincerely,

Rebecca Andrews

Rebecca Andrews
for BEST BEST & KRIEGER LLP

cc: Tom Wheeler, P.E., Director of Public Works/City Engineer, City of Lake Forest
Devin Slaven, Environmental Manager, City of Lake Forest
Andre Monette, Special Counsel

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File No. 55452.02300

September 14, 2015

VIA E-MAIL [SANDIEGO@WATERBOARDS.CA.GOV]

David Gibson, Executive Officer
c/o Wayne Chiu
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100,
San Diego, CA 92108

Re: Comment - Tentative Order No. R9-2015-0100, Place ID:786088WChiu

Dear Mr. Gibson and Mr. Chiu:

Best Best & Krieger represents the City of San Clemente ("City"). The City submits the following comments on the California Regional Water Quality Control Board, San Diego Region ("SDRWQCB"), Tentative Order No. R9-2015-0100 ("Tentative Order") amending Order No. R9-2013-0001, NPDES No. CAS010266, as amended by Order No. R9-2015-0001, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region ("MS4 Permit"). The City is committed to improving and sustaining water quality in the San Diego region and has undertaken extensive efforts to further these goals. The City is aware that the County of Orange has prepared and submitted comments on the Tentative Order. The City would like to express its support for the County's comment letter and join with the County in the submission of those comments. The comments in this letter supplement the County's letter and are intended to allow the City and other Co-permittees to continue working toward the common goal of improving water quality in the region.

1. THE CITY SUPPORTS INCORPORATION OF THE ALTERNATIVE COMPLIANCE PATHWAY FOR PROHIBITIONS AND LIMITATIONS

The City appreciates the efforts of SDRWQCB staff to develop an alternative compliance pathway for incorporation into the MS4 Permit. MS4s face special challenges in attaining water quality objectives and immediate compliance with many of the objectives is not feasible. An alternative to strict compliance is consistent with the Ninth Circuit Court's recognition that the Clean Water Act "does not require municipal storm-sewer discharges to comply strictly with 33 U.S.C. § 1311(b)(1)(C)" regarding limitations. (*Defenders of Wildlife v. Browner* (9th Cir. 1999)

191 F.3d 1159, 1165.) The WQIP process establishes a rigorous, flexible and transparent pathway for compliance with Provisions A.1.a, A.1.c, A.1.d, A.2.a, and A.3.b. The City joins with other Co-Permittees in expressing its support for an alternative compliance pathway.

2. CLARIFY PROVISION A TO STATE THAT COMPLIANCE WITH PROVISION B.3 CONSTITUTES COMPLIANCE WITH PROVISIONS A.1.a, A.1.C, A.1.D, A.2, AND A.3.b OF THE MS4 PERMIT

The City is concerned that the prohibitions and limitations in Provisions A.1.a, A.1.c, A.1.d, A.2, and A.3.b, as currently written, may be interpreted independent of the alternative compliance pathway in Provision B.3. The Ninth Circuit Court's decision in *Los Angeles County Flood Control District v. NRDC* interpreted an MS4 permit as a contract, with each provision as a stand-alone requirement. A stand-alone reading of the prohibitions and limitations, without any reference to the compliance pathway provision may expose the Co-Permittees to unintended liability, despite our rigorous efforts to successfully implement the alternative compliance pathway. The City joins with Co-Permittees in requesting the simple solution of adding language to Provision A that clarifies intent of the alternative compliance pathway is to create an alternative means of complying with Provisions A.1.a, A.1.c, A.1.d, A.2, and A.3.b. In other words, the City requests adding language in Provision A simply referencing and linking the alternative compliance pathway in Provision B.

3. INCLUDE THE WQIP PLANNING PROCESS IN THE ALTERNATIVE COMPLIANCE PATHWAY

In light of the direction from the State Water Resources Control Board ("State Board"), the alternative compliance pathway should be extended to include the WQIP planning phase. The alternative compliance pathway currently begins after the WQIP has been completed and is being implemented. It does not extend to the WQIP planning process. The Permit establishes a structure, with timelines over two years, for the WQIP planning process. During the planning process, Co-Permittees will, among other activities, identify water quality priorities, identify and prioritize known and suspected sources of pollutants and stressors, identify potential strategies to improve water quality, create an integrated monitoring and assessment program, and develop stormwater action levels and non-stormwater action levels into the WQIP. Each of these steps, and others, including the public participation process, occurs on a schedule and requires a substantial investment of time and resources.

Even though the City will participate in a Water Quality Improvement Plan and anticipates meeting all Permit-established planning requirements, the City and other Co-Permittees remain open to liability for prohibitions and limitations violations, especially from third parties, during the planning process. The ultimate goal of the planning process is to create a WQIP designed to address prioritized water quality conditions. If the City is forced to divert funds away from the

planning process to defend a third-party lawsuit during the planning period, such diversion will impede the City's ability to develop a thorough WQIP and undercuts the ultimate goal of the Permit.

Recognizing the need for a long-term approach to addressing water quality conditions, the State Board directed regional boards to "incorporate an ambitious, rigorous, and transparent alternative compliance path that allows permittees appropriate time to come into compliance with receiving water limitations without being in violation of the receiving water limitations during full implementation of the compliance alternative." (State Water Resources Control Board, Order WQ 2015-0075, p. 52.) With direction from the State Board to create a space and time for Co-Permittees to come into compliance with receiving water limitation without being in violation of the Permit, it is imperative that the Board extend the Permit's alternative compliance pathway to the planning phase. Because the planning process is integral to addressing water quality conditions, the City joins with the Co-Permittees in requesting that the alternative compliance pathway include the WQIP planning process.

4. REVISE ANNUAL MILESTONE REQUIREMENT TO INCLUDE MEANINGFUL MILESTONES (PROVISION B.3.c.(1)(a)(vii), B.3.c.(1)(d), B.3.c.(2)(c), B.3.c.(2)(d) and footnote 9)

The Tentative Order's alternative compliance pathway requires Water Quality Improvement Plans to set annual milestones for each numeric goal. These milestones must build on previous milestones and lead to the achievement of a final numeric goal. While improvements to water quality may be more difficult to attain in the absence of clear goals and milestones, an artificial annual milestone for each goal does not account for the complicated and long-term nature of the strategies designed to attain water quality objectives. Further, requiring annual milestones for every water body – pollutant combination restricts the Co-Permittees' ability to prioritize water quality conditions and dedicate limited resources to the highest priority milestones. In order to establish meaningful milestones over time, the milestones should be developed as part of the adaptive management process. The City therefore joins with the Co-Permittees in requesting a revision to the annual milestone requirement in Provisions B.3.c.(1)(a)(vii), B.3.c.(1)(d), B.3.c.(2)(c), B.3.c.(2)(d) and footnote 9.

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BEST BEST & KRIEGER LLP
ATTORNEYS AT LAW

The City is grateful for SDRWQCB staff's efforts in drafting a fair and workable alterative compliance pathway. We believe that with the minor modifications requested in this comment letter and those of the County on behalf of the City and other Co-Permittees, the City will be a position to move forward with confidence in attaining water quality improvements in the region.

Sincerely,

Rebecca Andrews

Rebecca Andrews
for BEST BEST & KRIEGER LLP

cc: Mary Vondrak, City of San Clemente

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September 14, 2015

VIA E-MAIL [SANDIEGO@WATERBOARDS.CA.GOV]

David Gibson, Executive Officer
c/o Wayne Chiu
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100,
San Diego, CA 92108

Re: Comment - Tentative Order No. R9-2015-0100, Place ID:786088WChiu

Dear Mr. Gibson and Mr. Chiu:

The City of San Juan Capistrano (City) is committed to improving and sustaining water quality in the San Diego region and has undertaken extensive efforts to further these goals. The City is aware that the County of Orange has prepared and submitted comments on the Tentative Order No. R9-2015-0100. The City would like to express its support for the County's comment letter and join with the County in the submission of those comments. The comments in the enclosed letter from BEST BEST & KRIEGER LLP supplement the County's letter and are intended to allow the City and other Co-permittees to continue working toward the common goal of improving water quality in the region.

Sincerely,

Hossein Ajideh, Ph.D., P.E.
Senior Civil Engineer

cc: Richard Boon, County of Orange
Rebecca Andrews, BEST BEST & KRIEGER LLP
Keith Till, Interim City Manager
Thom Coughran, P.E., Interim Public Works & Utilities Director
George Alvarez, P.E., City Engineer

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September 14, 2015

VIA E-MAIL [SANDIEGO@WATERBOARDS.CA.GOV]

David Gibson, Executive Officer
c/o Wayne Chiu
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100,
San Diego, CA 92108

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BEST BEST & KRIEGER
ATTORNEYS AT LAW

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Sincerely,

Rebecca Andrews

Rebecca Andrews
for BEST BEST & KRIEGER LLP

cc: Richard Boon, County of Orange

County of San Diego

RICHARD E. CROMPTON
DIRECTOR

DEPARTMENT OF PUBLIC WORKS
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September 14, 2015

Wayne Chiu, WRC Engineer
Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Electronic Submission: sandiego@waterboards.ca.gov

Dear Mr. Chiu:

COMMENT LETTER – TENTATIVE ORDER NO. R9-2015-0100 PLACE ID:786088WCHIU

The San Diego Copermittees (Copermittees) appreciate the opportunity to comment on the Regional Water Board's *Tentative Order R9-2015-0100, an Order Amending Order No. R9-2013-0001, NPDES No. CAS010266, as amended by Order No. R9-2015-0001, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region* (Tentative Order). The County of San Diego submits this letter on behalf of the San Diego Copermittees. The Copermittees include the Cities of Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach, Vista, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District.

The Copermittees support water quality improvements in our watersheds through implementation of the MS4 Permit. We request modifications of specified elements of the Tentative Order that we believe will clarify the Permit requirements and facilitate Permit implementation. The comments include the Copermittees' requests for modifications of the Tentative Order, followed by rationale for the requests, and then specific suggested modifications to the language in the Tentative Order. The noted references and page numbers are based on a review of the redline strikeout version of the Tentative Order provided on the Regional Water Board's website[1].

[1] http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/2015-0731_Tentative_Order_Attachment%201_(Amended_Order).pdf, accessed on August 24, 2015

These comments were developed jointly and represent a general consensus among the San Diego Copermittees. Where individual Copermittees have specific concerns relevant to their jurisdictions, these will be expressed in separate written comments provided by individual Copermittees.

1. Receiving Water Limitations Provision A. Prohibitions and Limitations (page 16/138)
Request: Add sentence to Provision A to clarify its link to Provision B.
Rationale: The Prohibitions and Limitations language in Provision A should be aligned with the Water Quality Improvement Planning process described in Provision B. We appreciate the efforts to date to align the two provisions, as Provision B does currently link back to Provision A. However, as currently incorporated into the Tentative Order, the proposed Prohibitions and Limitations provisions may still be interpreted as stand-alone provisions that could subject the Copermittees to state and federal enforcement actions, as well as to third party actions under the federal Clean Water Act's citizen suit provisions. To prevent this from occurring, a clear linkage between the compliance provisions in Provision B and the prohibitions, receiving water limitations, and effluent limitations must be established. Compliance with Provisions A.1, A.2 and A.3 should be linked to Provision B so that it is clear that the compliance mechanism for A.4 is the Water Quality Improvement Plan (Provision B) and/or the TMDL (Attachment E), as applicable.

Recommendation: Include streamlined language in Provision A to indicate that compliance can be achieved through implementation of the Water Quality Improvement Plan, specifically through the Alternative Compliance Pathway added as Provision B.3.c. Add a sentence at end of first paragraph:

Implementation of the Alternative Compliance Option described in Provision B.3.c of this Order shall constitute compliance with the Discharge Prohibitions (A.1.a, A.1.c, A.1.d), Receiving Water Limitations (A.2), and Effluent Limitations (A.3.b) Provisions of this Order.

2. Provision B.3.c. Prohibitions and Limitations Compliance Option (page 33/138)
Request: Restructure the annual milestone requirements in the Compliance Option to be more meaningful.

Rationale: The Tentative Order was revised to include an option for prohibitions and limitations compliance through the implementation of the Water Quality Improvement Plan, subject to conditions specified in Provision B.3.c.(1) and (2). Provision B.3.c.(1)(a)(vii) that requires at least one annual milestone to be established for each numeric goal. Footnote (9) states:
Annual milestones for each final numeric goal must build upon previous milestones and lead to the achievement of the final numeric goal. The annual milestones may consist of water quality improvement strategy implementation phases, interim numeric goals, and other acceptable metrics.

The Copermittees appreciate that the Regional Board has included the additional language for compliance through Water Quality Improvement Plan implementation. However, the Copermittees are concerned that the specific requirement for annual milestones will be overly constrictive and burdensome. Each Copermittee would potentially need to establish and track annual milestones for multiple goals within multiple waterbodies in each watershed

management area, resulting in dozens of annual milestones. Furthermore, it would likely be difficult to establish meaningful milestones for such a high number of goals over each year, especially far into the future. Practically speaking, it is reasonable to identify concrete milestones in Years 1 – 5 of a 30 year effort. More than five years into the future, milestones identified today lose significant meaning and value; milestones would be more meaningful if they were developed adaptively, based on the results of previous efforts.

The Copermittees recognize that milestones would benefit accountability for working towards their goals, but feel that the milestones would be more meaningful if they focus on the priority water quality conditions and were based on the permit cycle (i.e., one milestone per 5 year permit term for each waterbody pollutant combination to be covered under the alternative compliance pathway).

The Copermittees request that the Regional Board consider the following modifications to the language to make the milestone requirement more meaningful.

Recommendation: Modify Provision B.3.c.(1)(a)(vii) , footnote 9, B.3.c.(2)(c), and B.3.c.(2)(d) as follows:

B.3.c.(1)(a) (vii): For each final numeric goal developed pursuant to Provisions B.3.a and B.3.c.(1)(a)(i)-(v), at least one annual milestone[9] and date for its achievement must be included **for the permit term** within each Water Quality Improvement Plan **and progress towards attaining the milestone(s) reported upon during each** Annual Report reporting period**. Further, for each final numeric goal developed pursuant to Provisions B.3.a and B.3.c.(1)(a)(i)-(v), at least one milestone forecasted to be achieved in subsequent permit terms must be included within each Water Quality Improvement Plan. This process will continue** until the final numeric goal is achieved.

Footnote 9: Milestones for each final numeric goal must build upon previous milestones and **cumulatively result in** lead to the achievement of the final numeric goal. The annual milestones may consist of water quality improvement strategy implementation phases, interim numeric goals, and other acceptable metrics. **The milestones may also address multiple numeric goals and/or multiple waterbodies, as applicable and appropriate.**

B.3.c.(2)(c): The Copermittee's assessments in the Water Quality Improvement Plan Annual Report submitted pursuant to Provision F.3.b.(3) support a conclusion that: 1) the Copermittee is in compliance with the annual **milestones** and dates for achievement developed pursuant to Provision B.3.c.(1)(a)(vii), OR 2) the Copermittee has provided acceptable rationale and recommends appropriate modifications to the interim numeric goals, and/or water quality improvement strategies, and/or schedules to improve the rate of progress toward achieving the final numeric goals developed pursuant to Provisions B.3.a and B.3.c.(1)(a)(i)-(vi); AND

B.3.c.(2)(d): Any proposed modifications to the numeric goals, schedules, and/or annual milestones are accepted by the San Diego Water Board as part of subsequent updates to the Water Quality Improvement Plan pursuant to Provision F.2.c; AND

3. Provision B.5. Iterative Approach and Adaptive Management Process (page 37/138)
Request: Clarify timing and conditions for watershed model/analysis updates.

Rationale: Provision B.5 requires annual performance of the adaptive management process. As drafted, the new Provision B.3.c language could be interpreted to mean that the watershed model/analysis must be updated annually (B.3.c.(1)(b)(iv)). To add clarity, Provision B.5 should specify that updates to the watershed modeling/analysis are to be performed as determined through the adaptive management process.

Recommendation: Add a new Provision B.5.d to clarify that updates to watershed model/analysis are required only if it is determined through the adaptive management process that conditions have changed significantly such that they would alter the results of the previously completed model. As part of the Report of Waste Discharge, the Copermittees would conduct an analysis to determine whether conditions have sufficiently changed to warrant an update to the watershed model/analysis and if so, provide a schedule for conducting the updated analysis.[2]

B.5.d. Updates to Optional Watershed Analysis [B.3.c.(1)(b)]
Updates to the optional watershed analysis included in Provision B.3.c.(1)(b) are required only if conditions have changed significantly within the watershed or where new information is available that would significantly alter the model results.

4. Provision F.2.b. BMP Design Manual Updates (Page 126/138)
Request: Allow adequate time for Copermittees to update and implement their BMP Design Manuals.

Rationale: The current Order establishes the Effective Date of the BMP Design Manual (and therefore of the requirements of Permit Section E.3.a-d) as December 24, 2015. This date was appropriate at the time of initial Permit adoption because it provided sufficient time for the development of updated content and for the modification of Copermittee programs and regulatory authorities needed for implementation. The Tentative Order would require the Copermittees to update their BMP Design Manuals to incorporate the amended Provisions E.3.a-d within 90 days after the amended Provisions E.3.a-d are adopted by the Regional Board. Given that critical new modifications are now proposed in the Tentative Order, additional time should be provided to allow for their completion and implementation. The first of these are the changes in the definition of redevelopment Priority Development Projects (PDPs) proposed in Section II.E.3.b.(1)(c) through (e). The second is the addition of a modified process for establishing Prior Lawful Approval (PLA) under Section E.3.e.(1). The Copermittees appreciate the work that Regional Board staff put into working with stakeholders and crafting these PLA provisions, and we support their adoption. However, we must also note that the current implementation schedule for implementing updated BMP Design Manual provisions under the Tentative Order severely limits their potential application. In both instances, additional time is requested to: allow Copermittees to ensure regional consistency; modify local BMP Design Manuals; develop updated policies, procedures, and other program documentation; conduct outreach to industry and project proponents; and modify local ordinances.

At a minimum, six months from the adoption of new requirements should be allowed to complete and implement these tasks. However, if these provisions are adopted as proposed at

[2] Consistent with CASQA recommendations to SWRCB. California Stormwater Quality Association, Letter to Ms. Jeanine Townsend, Clerk to the Board, State Water Resources Control Board, Subject: SWRCB/OCC Files A-2236(a) through (kk); Comments on Proposed Order *In Re Petitions Challenging 2012 Los Angeles Municipal Separate Storm Sewer System Permit (Order No. R4-2012-0175)*, January 19, 2015.

the November 18, 2015 Regional Board hearing, Copermittees would have just 90 days to implement them.

Please note the following inconsistency in the Tentative Order and Technical Report regarding the extension of dates. The Technical Report (page F-110) states "Provisions E.3.e.(1)(a)[a]-[d] are dependent on the effective date of the BMP Design Manual. Unless otherwise directed by the San Diego Water Board, the effective date of the BMP Design Manual is December 24, 2015 for the San Diego County Copermittees ..." This is in contrast to Provision F.2.b.(4), which requires that revision of the updated BMP Design Manual be completed not later than 90 days after the date the San Diego Water Board adopts the amendments (i.e., by February 16, 2016). Since it is not possible for the BMP Design Manual effective date to precede its revision date, it must be assumed that the intent of Provision F.2.b.(4) is to also extend the effective date.

In recent correspondence on this issue, Regional Board staff has indicated their intent to explicitly extend the effective date by the same 90 days allowed for the BMP Design Manual revision using the discretion granted the Executive Officer under other proposed amendments to Section E.3.d. However, this is problematic for three reasons. First, since any such extension granted by the Executive Officer could only be executed after the hearing, Copermittees would have no assurances that it would actually occur. Second, extending the effective date by 90 days would merely make the revision and effective dates concurrent rather than rectifying the inconsistencies causing the confusion. Third, a 90-day extension of the effective date simply does not provide adequate time to both complete and implement the BMP Design Manual update. For these reasons, the Copermittees request that the effective date of the BMP Design Manual for the Copermittees be extended 180 days from the adoption of the Tentative Order (i.e., May 14, 2016). Modifying the Permit to specifically incorporate this this new effective date, rather than relying on the ability of the RWQCB Executive Officer to do so after the fact, would both provide the time necessary for critical program updates and the certainty needed to plan for them. It would also ensure that these critical changes are fully vetted in an open public forum.

We also recommend that Provision E.3.d. be modified to clarify that the date the BMP Design Manual is implemented (rather than revised) is the same as the "effective date". This will help to prevent any future confusion regarding the applicability of dates.

Since Copermittees have already modified their ordinances to reflect existing Permit content in anticipation of the December 24, 2015 effective date, most will now need to repeat this process for these new provisions. Depending on each Copermittees' process, the time needed to modify ordinances alone can greatly exceed the 90 days currently proposed in the Tentative Order. Moreover, even if ordinance revisions can be completed within 90 days, there would still not be sufficient time to complete all of the other required tasks described above. While Regional Board staff has suggested that Copermittees can start this process now, it is unrealistic to expect that they do so based only on the proposed requirements of a this Tentative Order. It would be speculative to assume that the Tentative Order will be adopted as currently drafted, and Copermittees should not be expected to initiate specific program changes or ordinance revisions based on speculation. We therefore request that the BMP Design Manual effective date be extended by 180 days in the adopted Order.

Recommendations: The Copermittees recommend that the Regional Board modify the requirement to specify that the updates be made to the BMP Design Manual within 180 days, as follows:

Provision E.3.d
Each Copermittee must update its BMP Design Manual pursuant to Provision F.2.b. Until the Copermittee has updated its BMP Design Manual pursuant to Provision F.2.b.(1), the Copermittee must continue implementing its current BMP Design Manual. The Copermittee must implement the updated BMP Design Manual within 180 days following completion of the update pursuant to Provision F.2.b.(1), unless directed otherwise by the San Diego Regional Water Board Executive Officer. The date the BMP Design Manual is implemented is the "effective date" of the BMP Design Manual. The update of the BMP Design Manual required pursuant to Provision F.2.b.(1) must include the following:

Provision F.2.b.(4)
If the San Diego Water Board amends Provisions E.3.a-d during the permit term but after the Copermittee has completed the update pursuant to Provision F.2.b.(1), the Copermittee must revise its BMP Design Manual to incorporate the amended Provision E.3.a-d requirements as soon as possible but no later than **180** days after the date the San Diego Water Board adopts the amendments to Provisions E.3.a-d, unless otherwise directed by the San Diego Water Board Executive Officer. **Under these circumstances, the effective date of the BMP Design Manual is 180 days after the date the San Diego Water Board adopts the amendments to Provisions E.3.a-d.**

5. **Attachment E-6. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek) (Page 227/236)**

Request: Modify draft Tentative Order Attachment E Tables 6.1 and 6.4 for consistency with the TMDL.

Rationale: The proposed addition of a 10-year wet-weather compliance deadline of April 4, 2021, to Table 6.1 for water bodies in a WQIP that do not include load reductions for pollutants besides bacteria is inconsistent with the adopted TMDL and thereby violates the Clean Water Act regulations at 40 C.F.R. § 122.44(d)(1)(vii)(B). This proposed amendment would subject the segments of beaches and creeks that were removed from the 303(d) list to requirements from which the de-listed segments are specifically exempt under the adopted TMDL. Under the TMDL, no BLRP or CLRP is required for the de-listed segments. The WQIP is a requirement of the MS4 Permit, not the TMDL, and it is not a BLRP. Thus, there is no justification to require a 10-year compliance schedule for the de-listed segments, and the proposed amendment is not consistent with the TMDL.

Recommendation: Delete proposed language in Table 6.1 and footnote.

The Copermittees submit the foregoing comments with respect to Tentative Order R9-2015-0100. These comments should not be construed as amending or modifying any of the Copermittees' positions with respect to any prior Regional Board order or action. Each of the

Copermittees reserves its right to continue to pursue any and all of its positions, arguments, challenges, petitions, and appeals with respect to any such prior Regional Board order or action.

The San Diego Copermittees thank you for your consideration of these comments. If you have questions or require additional information, please contact Jo Ann Weber at (858) 495-5317 or e-mail at JoAnn.Weber@sdcounty.ca.gov.

Sincerely,

Jo Ann Weber, Planning Program Manager
Watershed Protection Program

cc: Elaine, Lukey, City of Carlsbad
Boshra Salem, City of Chula Vista
Kim Goodby, City of Coronado
Kathleen Garcia, City of Del Mar
Jaime Campos, City of El Cajon
Erik Steenblock, City of Encinitas
Helen Perry, City of Escondido
Chris Helmer, City of Imperial Beach
Joe Kuhn, City of La Mesa
Malik Tamimi, City of Lemon Grove
Kuna Muthusamy, City of National City
Mo Lahsaie, City of Oceanside
Steve Strapac, City of Poway
Clem Brown, City of San Diego
Reed Thornberry, City of San Marcos
Cecilia Tipton, City of Santee
Dan Goldberg, City of Solana Beach
Cheryl Filer, City of Vista
Allison Vosskuhler, Port of San Diego
Richard Gilb, San Diego County Regional Airport Authority

ESCONDIDO
City of Choice

Emailed to: sandiego@waterboards.ca.gov
San Diego Regional Water Quality Control Board (RWQCB)
2375 Northside Drive, Suite 100
San Diego, CA 92108
Attention: Mr. Wayne Chiu
September 14, 2015

RE: Comment - Tentative Order No. R9-2015-0100, Place ID:786088WChiu.

Thank you for the opportunity to comment on the above-referenced permit. The City of Escondido is working with other San Diego County Copermittees in developing regional comments. This letter has been prepared to address an additional item of concern to staff.

In Attachment C, page C-3 a definition of construction activities has been added. Although staff understands that it may be useful to clarify what is considered construction activities, there is concern at the description of some of the types of activities as "phases." Phases of construction are significant as they are required to be considered when defining inspection frequencies for construction. The permit requires Copermittees to conduct inspections "at an appropriate frequency for each phase of construction."

This definition as written introduces additional phases (Preliminary Phase, Land Development Phase and Streets and Utility Phase) that are not necessarily discrete. Utilities and streets can be installed during any part of the construction project. The "Preliminary Phase" as described would be covered under the grading phase. It is not clear what the "Land Development Phase" covers. At present the City of Escondido tracks construction in two phases, grading and vertical which covers all construction activities.

The use of the word "Phase" to describe these aspects of construction activities introduces unnecessary complication to the inventorying and inspection of construction sites as it introduces artificial phases that will not be readily tracked. City of Escondido staff have just completed a two year process of updating their inspection programs to include systems to track construction sites through the grading and vertical phases and trained staff to follow these requirements. Adding the phase to these terms will require a reworking of the program to introduce artificial "phases" that are not discrete from what is already being addressed.

Recommendation: Eliminate the use of the term phase when describing construction activities as presented below.

> **Construction Activities** – Actions implemented during construction of development or redevelopment projects during the Preliminary Tasks~~Phase~~ (including rough grading and/or disking, clearing and grubbing operations, or any soil disturbance prior to mass grading), Grading or Land Development ~~Phase~~ (including topography and slope reconfiguration, alluvium removals, canyon cleanouts, rock undercuts,

keyway excavations, land form grading, and stockpiling of select material for capping operations), Streets and Utility Installation ~~Phase~~ (including excavation and street paving, lot grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm sewer systems and/or other drainage improvements), or Vertical Construction ~~Phase~~ (including the build out of structures from foundations to roofing, including rough landscaping).

I appreciate the opportunity to comment on the draft Tentative Order. I can be contacted at hdavies@escondido.org or at (760) 839-6315.

Helen M. Davies

Helen M. Davies, M.S, CPSWQ
Environmental Programs Manager

THE CITY OF SAN DIEGO

September 14, 2015

VIA EMAIL TO: Laurie.Walsh@waterboards.ca.gov

Laurie Walsh, Water Resource Control Engineer
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

Subject: Comment Letter – Tentative Order No. R9-2015-0100

Dear Ms. Walsh:

The City of San Diego (City) appreciates the opportunity to provide comments on the Amendment to the Regional Municipal Separate Storm Sewer System (MS4) Permit for the San Diego Region (Tentative Order No. R9-2015-0100, herein referred to as the "Draft Tentative Order"). The City is committed to protecting and improving water quality in the San Diego Region. From this perspective, the City provides the following comments below. More detailed comments are included in the attached table (Attachment 1).

- *The Draft Tentative Order should include revisions to Provision B.3.c to align requirements with a once per permit term approach to milestones.* The City appreciates the inclusion of a Water Quality Improvement Plan (WQIP)-based alternative for complying with the receiving water limitations and discharge prohibitions in Provision A. In its recent order upholding a similar compliance alternative in the Los Angeles MS4 permit, the State Water Board recognized that allowing permit compliance to be based on implementation of watershed plans provide an opportunity to achieve greater water quality improvement than the status quo compliance approach. The City recommends several revisions to ensure an effective alternative compliance approach that is consistent with the State Water Board's guidance. Milestones and interim goals provide opportunities to achieve key outcomes, measure progress to final goals, and support the adaptive management process. The City understands that the transparency that goals and milestones create is important for the Regional Water Board and the public to track progress and evaluate compliance. However, the annual milestones proposed may be counterproductive because they do not allow the City enough time to reprogram activities and secure funding the following fiscal year to make any necessary adaptations to implement the WQIPs. While the shift to implementing programs and building water quality improvement projects is our primary focus moving forward, effective adaptive management, which allows for adequate time and consideration, is a key component of successful WQIP implementation.

- *The Draft Tentative Order should include revisions to Provision B.3.c to include alternative compliance coverage for Provision A.2.b.* The City supports the inclusion of the receiving water limitations in the alternative compliance pathway of Provision B.3.c. As proposed, however, Provision B.3.c. omits alternative compliance coverage for the receiving water limitations regarding the Area of Special Biological Significance (ASBS) in Provision A.2.b. To be consistent with the intent of the alternative compliance pathway approach, the ASBS provisions should be included in the alternative compliance provisions similar to the other receiving water limitations provisions.

- *Draft Tentative Order Attachment E Tables 6.1 and 6.4 should be modified for consistency with the TMDL.* The proposed addition of a 10-year wet-weather compliance deadline of April 4, 2021 to Table 6.1, for water bodies in a WQIP that does not include load reductions for pollutants besides bacteria, is inconsistent with the adopted TMDL and thereby violates the Clean Water Act regulations at 40 C.F.R. § 122.44(d)(1)(vii)(B). This proposed amendment would subject the segments of beaches and creeks that were removed from the 303(d) list to requirements from which the de-listed segments are specifically exempt under the adopted TMDL. Under the TMDL, no BLRP or CLRP is required for the de-listed segments. The WQIP is a requirement of the MS4 Permit, not the TMDL, and is not a BLRP. Thus, there is no justification to require a 10-year compliance schedule for the de-listed segments, and the proposed amendment is not consistent with the TMDL.

- *Draft Tentative Order Attachment E should be modified to allow individual jurisdictional compliance with the TMDLs.* The City is committed to protecting and improving water quality and achieving compliance with TMDLs via the implementation of Water Quality Improvement Plans. However, language throughout Attachment E appears to preclude any Copermittee from using the WQIP compliance pathway unless all other Copermittees also are in compliance. The City has no authority to compel other Copermittees to comply and cannot be held liable for the actions or inactions of other agencies. Under federal Clean Water Act regulations that have been incorporated into the MS4 Permit, a Copermittee is responsible only for conditions relating to the discharges for which it is an operator.

- *Draft Tentative Order, Section E.3.e.(1), should be modified to include for development approvals.* The City supports the inclusion of the language proposed in the Draft Tentative Order which provides clarifications when a development project should be subject to the Priority Development Projects Requirements. However, the City recommends incorporating additional language allowing for development approvals as suggested in the language submitted by the City of San Diego to Regional Board staff on June 10, 2015 (Attachment 2).

Thank you for your time and consideration of these comments. If you have questions, please contact Ruth Kolb at (858) 541-4328 or at rkolb@sandiego.gov.

Sincerely,

for

Drew Kleis
Deputy Director

DK\rk

Attachments: 1. City of San Diego Comment Table
2. June 10, 2015 proposed permit language regarding applicability of Priority Development Project requirements

cc: Paz Gomez, Deputy Chief Operating Officer
Mike Hansen, Director of Land Use and Environmental Policy, Office of the Mayor
Kris McFadden, Director, Transportation & Storm Water Department
Heather Stroud, Deputy City Attorney, City Attorney's Office
Ruth Kolb, Program Manager, Transportation & Storm Water Department
Sumer Hasenin, Senior Engineer, Transportation & Storm Water Department
Clem Brown, Program Manager, Transportation & Storm Water Department

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
General Comment	NA	NA	NA	The proposed amendments do not address the issues raised in the City's Petition for Review of San Diego Regional Water Quality Control Board (Regional Board) Order No. R9-2013-0001, filed on June 7, 2013. The City does not waive any of those arguments, and urges the Regional Board to address those issues as part of this permit amendment.
Provision A. Prohibitions and Limitations				
II.A.1.d	16	Prohibitions and Limitations	Correction to updated ASBS resolution number.	Change reference from State Water Board Resolution No. 2012-0012, to Resolution No. 2012-0031.
Provision B. Water Quality Improvement Plans				
II.B.1	17	Watershed Management Areas	This NPDES Permit is applicable to discharges from Copermittee MS4s as stated in Section A.1. Discharges from other NPDES permits are governed by requirements within those permits.	Modify Section B.1 as follows: The Copermittees must develop a WQIP for <u>their MS4 discharges within</u> each of the Watershed Management Areas in Table B-1<u>.</u>
II.B.3.c.(1)(a)(ii)	33-34	Prohibitions and Limitations	Correction to updated ASBS resolution number.	Change reference from State Water Board Resolution No. 2012-0012, to Resolution No. 2012-0031.
II.B.3.c.(1)(a)(iii) through (vii)	33-34	Prohibitions and Limitations Compliance Option	The "and/or" in subsection (iii) creates confusion regarding whether the categories of numeric goals that follow are mandatory or optional. The proposed revision and renumbering adds clarity and is consistent with the City's understanding of Regional Board staff's intent.	(a) Numeric goals, water quality improvement strategies, and schedules developed pursuant to Provisions B.3.a and B.3.b that include the following: (i) Interim and final WQBELs established by the TMDLs in Attachment E to this Order applicable to the Copermittee's jurisdiction within the Watershed Management Area; AND (ii) Interim and final numeric goals for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-0012 applicable to the Copermittee's jurisdiction within the Watershed Management Area; AND (iii) Interim and final numeric goals applicable to the Copermittee's MS4 discharges within the Watershed Management Area expressed as numeric concentration-based or load-based goals for all pollutants and conditions listed on the Clean Water Act Section 303(d) List of Water Quality

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				Impaired Segments for the receiving waters in the Watershed Management Area that do not have a TMDL incorporated into Attachment E to this Order; ~~AND/~~OR ~~(iv)~~ Interim and final numeric goals for pollutants and conditions identified as receiving water priorities in the Water Quality Improvement Plan that will result in chemical, physical, and biological conditions protective of the beneficial uses of the receiving waters impacted by the Copermittee's MS4 discharges within the Watershed Management Area; AND (iv) The Copermittee has the option to include interim and final numeric goals applicable to the Copermittee's MS4 discharges and/or receiving waters within the Watershed Management Area for any pollutants or conditions in addition to those described in Provisions B.3.c.(1)(a)(i)-(iii); AND (v~~i~~) Schedules for achieving each final numeric goal that reflect a realistic assessment of the shortest practicable time needed for achievement; AND (vi~~i~~) For each final numeric goal developed pursuant to Provisions B.3.a and B.3.c.(1)(a)(i)-(iv), at least one annual milestone and date for its achievement must be included within each Water Quality Improvement Plan Annual Report reporting period until the final numeric goal is achieved.
II.B.3.c, II.B.3.c.(1), and II.B.3.c.(2)	33, 35	Prohibitions and Limitations Compliance Option	State Board Order No. WQ 2015-0075 (p. 52) requires the Regional Board to "incorporate an ambitious, rigorous, and transparent alternative compliance path that allows permittees appropriate time to come into compliance with receiving water limitations without being in violation of the receiving water limitations during full implementation of the compliance alternative." The City appreciates the inclusion of most of the receiving water limitations in the alternative	**c. Prohibitions and Limitations Compliance Option** Each Copermittee has the option to utilize the implementation of the Water Quality Improvement Plan to demonstrate compliance with the requirements of Provisions A.1.a, A.1.c, A.1.d, A.2.~~a~~, and A.3.b within a Watershed Management Area subject to the following conditions: (1) A Copermittee is eligible to be deemed in compliance with Provisions A.1.a, A.1.c, A.1.d, A.2.~~a~~, and A.3.b within a Watershed Management Area when the Water Quality Improvement Plan for a Watershed Management Area incorporates the following:

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			compliance pathway of Provision B.3.c. As proposed, however, Provision B.3.c. omits alternative compliance coverage for the receiving water limitations regarding the ASBS in Provision A.2.b, which states that "Discharges from MS4s composed of storm water runoff must not alter natural ocean water quality in an ASBS." Without inclusion in the alternative compliance pathway, the City does not have appropriate time to come into compliance with this provision.	. . . . (2) Each Copermittee that voluntarily completes the requirements of Provision B.3.c.(1) is deemed in compliance with Provisions A.1.a, A.1.c, A.1.d, A.2.~~a~~, and A.3.b for the pollutants and conditions for which numeric goals are developed when the Water Quality Improvement Plan, incorporating the requirements of Provision B.3.c.(1), is accepted by the San Diego Water Board pursuant to Provision F.1.b or F.2.c. The Copermittee is considered to be in compliance during the term of this Order as long as:
II.B.3.c.(1)(a)(vii) II.B.3.c.(1)(d) II.B.3.c.(2)(c)-(d)	34, 35, 36	Prohibitions and Limitations Compliance Option	Milestones and interim goals provide opportunities to achieve key outcomes, measure progress to final goals, and support the adaptive management process. The transparency that goals and milestones create is important for the Regional Water Board and the public to track progress and evaluate compliance as well as for the Copermittees to secure funding to implement the WQIPs. As the Copermittees complete the WQIP development/planning phase we are shifting to implementation. Upon completion of WQIPs, Copermittees will require much effort to transition from plan development to implementation, capital improvement planning, and seeking of funding sources to ensure that projects can be scheduled within the short planning periods. With the uncertainty of much of these efforts, Copermittee staff will	The following changes to Provision II.B.3.c are proposed to align requirements with a once per permit term approach to milestones: II.B.3.c.(1)(a)(vii) For each final numeric goal developed pursuant to Provisions B.3.a and B.3.c.(1)(a)(i)-(v), at least one ~~annual~~ milestone[9] and date for its achievement must be included within the permit term ~~each Water Quality Improvement Plan Annual Report reporting period~~ until the final numeric goal is achieved. Footnote 9 ~~Annual m~~Milestones for each final numeric goal must build upon previous milestones and lead to the achievement of the final numeric goal. The ~~annual~~ milestones may consist of water quality improvement strategy implementation phases, interim numeric goals, and other acceptable metrics. II.B.3.c.(1)(d) Documentation showing that the numeric goals, schedules, and ~~annual~~ milestones proposed pursuant to Provision B.3.c.(1)(a), the analysis performed pursuant to Provision B.3.c.(1)(b), and the specific monitoring and

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			be creating internal planning mechanisms and systems to restructure procedures and operations to facilitate this process. As part of the shift, Copermittees will work to secure funding via the budgeting process, which for the City is on two to five year planning horizons. The City submits annual budget requests the year before the funds are approved for implementation. . A five year planning horizon allows for implementation of more effective adaptive management. While the shift to implementing programs and building water quality improvement projects is our primary focus moving forward, adaptive management is a key component of WQIP implementation. As part of annual reporting Copermittees are required to describe the progress of implementing the WQIPs as well as identify modifications to the WQIP. These requirements include, but are not limited to reporting on the following: 1. Progress toward achieving the interim and final numeric goals; 2. The water quality improvement strategies that were implemented and/or no longer implemented; 3. The water quality improvement strategies planned for implementation during the next reporting period;	assessments proposed pursuant to Provision B.3.c.(1)(c) have been reviewed by the Water Quality Improvement Consultation Panel (see Provision F.1.a.(1)(b)). Updates must be reviewed by the Water Quality Improvement Consultation Panel for any recommendations. II.B.3.c.(2)(c) The Copermittee's assessments in the Water Quality Improvement Plan Annual Report submitted pursuant to Provision F.3.b.(3) support a conclusion that: 1) the Copermittee is in compliance with the ~~annual~~ milestones and dates for achievement developed pursuant to Provision B.3.c.(1)(a)(vii), OR 2) the Copermittee has provided acceptable rationale and recommends appropriate modifications to the interim numeric goals, and/or water quality improvement strategies, and/or schedules to improve the rate of progress toward achieving the final numeric goals developed pursuant to Provisions B.3.a and B.3.c.(1)(a)(i)-(vi); AND II.B.3.c.(2)(d) Any proposed modifications to the numeric goals, schedules, and/or ~~annual~~ milestones are accepted by the San Diego Water Board as part of subsequent updates to the Water Quality Improvement Plan pursuant to Provision F.2.c;10 AND

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			4. Proposed modifications to the water quality improvement strategies, the public comments received and the supporting rationale for the proposed modifications; 5. Previous modifications or updates incorporated into the WQIP and/or jurisdictional runoff management program document, which have been implemented; and 6. Proposed modifications or updates to the WQIPs and/or jurisdictional runoff management program document. These requirements, in conjunction with additional adaptive management provisions of the Permit, ensure a transparent measure of progress and meaningful modifications to the program are considered and implemented. However, requiring the identification and achievement of specific annual milestones as part of the Prohibitions and Limitations Compliance Options effectively keeps City staff within the planning framework with a major focus on reporting that dilutes resources for the shift to implementation. Additionally, the annual milestone requirement effectively accelerates the adaptive management process, lessening the ability to evaluate	

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			meaningful information and creatively adapt programs without risking non-compliance with the Permit. Because the City operates on two to five year planning horizons (described earlier, above), obtaining funding to significantly modify programs in response to information on an annual basis is not feasible. Furthermore, as required by the Permit, modifications must be reviewed and revised based on separate reviews by the Water Quality Improvement Consultation Panel, the public review, and Regional Water Board staff. Given this lengthy process, the City could identify modifications, but not be able to implement those modifications within the construct and compliance coverage of the Prohibitions and Limitations Compliance Options on an annual basis. While the City understands the desire to utilize milestones and supports interim measures of progress, the City feels that consideration should be given to an alternative approach or timeframe. Such an alternative should meet the goal of providing a transparent measure of progress (which is already supported by the Permit's annual reporting and adaptive management requirements) and support a determination of compliance while also supporting the shift to implementation in a manner consistent with both WQIP revision and review	

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			requirements and internal Copermittee processes. The 2013 Permit's approach of permit term interim limits and corresponding strategies with annual and permit term adaptive management requirements are manageable and appropriate. The approach was an improvement over the Los Angeles Region's disparate approach of requiring some water quality priorities to follow a schedule based on unrelated TMDLs and requiring others to meet annual milestones. The San Diego Region's approach provided opportunity to gather sufficient information to adapt where possible annually and approach more complex modifications on a permit term basis. This approach ~~9~~provides essential time for responsible agencies to shift planning and operational procedures, while seeking funding opportunities. A single milestone within the permit term also provides sufficient time to not only plan and implement projects, but to develop reporting procedures that demonstrate reasonable assurance and quantitative documentation of the progress towards meeting milestones. As such, the City proposes that the Regional Water Board maintain the balance set forth in the 2013 Permit and require the establishment of a single milestone within the permit term that measures progress towards meeting the interim or final goals set	

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			for the permit term.	
Provision E.3. Development Planning				
E.3.b.(1)	91, 92	Definition of Priority Development Projects	Sub-sections c and e should be combined to improve clarity of the requirements. Both sections have the same requirements for new and redevelopment projects but list different categories under each one.	Combine sub-sections (c) and (e). If sub-sections are not combined, add "collectively over the entire project site" to sub-section e, for consistency.
		Definition of Priority Development Projects	To provide clarity regarding redevelopment projects. There has been confusion of what is considered redevelopment vs. maintenance on "not redevelopment".	
E.3.d.	101	BMP Design Manual Update	This section should define the implementation date of the BMP Design Manual as the "effective date of the BMP Design Manual", to avoid confusion. Section E.3.e(1)(a)(i) references the "effective date of the BMP Design Manual".	Add the following clarifying language to Provision E.3.d: **d. BMP DESIGN MANUAL UPDATE** Each Copermittee must update its BMP Design Manual pursuant to Provision F.2.b. Until the Copermittee has updated its BMP Design Manual pursuant to Provision F.2.b.(1), the Copermittee must continue implementing its current BMP Design Manual. The Copermittee must implement the updated BMP Design Manual within 180 days following completion of the update pursuant to Provision F.2.b.(1), unless directed otherwise by the San Diego Water Board Executive Officer. <u>The date the BMP Design Manual is implemented is the "effective date" of the BMP Design Manual.</u> The update of the BMP Design Manual required pursuant to Provision F.2.b.(1) must include the following:
E.4		Construction Management	To streamline the requirements, minimize confusion and improve readability, sub-sections E.4.b. and E.4.d.(3) should be combined and duplicates deleted. Both sections contain information that needs to be collected, inventoried and tracked.	Combine sections E.4.b and E.4.d.(3).
Attachment	c-9	Definitions	The Redevelopment Definition is not	Revise the definition as follows to provide clarity:

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
C			easily understood.	Redevelopment – The creation and/or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, ~~and creation or addition of impervious surfaces.~~ Replacement of impervious surfaces includes any activity ~~that is not part of a routine maintenance activity~~ where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include routine maintenance activities; trenching and resurfacing associated with utility work; resurfacing existing roadways and parking lots; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair, overlay and pavement grinding.
F.2.b.(4)	126, 127	BMP Design Manual Update	It is unclear whether the 90 days to incorporate permit amendments changes the BMP Design Manual implementation date, which is also its effective date for the purpose of applicability of the development project requirements. There is a lot of confusion related to the initial effective date of Dec 24, 2015 and the update date anticipated to be Feb 18, 2016. If the intent is to change the implementation date (the "effective date") of all of the requirements of the BMP Design Manual to February 18, 2016, which appears to be the case based on correspondence with Regional Board staff, then clarifying language is needed.	Add the following clarifying language to Provision F.2.b.(4): (4) If the San Diego Water Board amends Provisions E.3.a-d during the permit term but after the Copermittee has completed the update pursuant to Provision F.2.b.(1), the Copermittee must revise its BMP Design Manual to incorporate the amended Provision E.3.a-d requirements as soon as possible but not later than 90 days after the date the San Diego Water Board adopts the amendments to Provisions E.3.a-d, unless otherwise directed by the San Diego Water Board Executive Officer. Under these circumstances, the effective date of the BMP Design Manual is 90 days after the date the San Diego Water Board adopts the amendments to Provisions E.3.a-d.

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
Attachment E. Specific Provisions for Total Maximum Daily Loads Applicable to Order No. R9-2015-0001				
Attachment E, Sections 1.b(3)(d) 1.b(3)(d)(iv) 1.b(3)(d)(v) 2.b(3)(d)(iv) 2.b(3)(d)(v) 3.b(3)(d)(iv) 3.b(3)(d)(v) 4.b(3)(d) 4.b(3)(d)(iv) 4.b(3)(d)(v) 5.b(1)(a) 5.b(3)(d) 5.b(3)(e) 5.b(3)(f) 4.b(3)(g) 4.b(3)(g)(iv) 4.b(3)(g)(v) 5.c(1)(b)(iv) 5.c(1)(b)(v) 5.c(1)(b)(vi) 5.c(1)(b)(vii) 5.c(1)(b)(viii) 6.b(2)(b)(ii) 6.b(3)(d) 6.b(3)(e) 6.b(3)(f) 6.b(3)(f)(iv) 6.b(3)(f)(v) 6.c(2)(a)(i) 6.c(2)(a)(ii) 6.c(3)(d) 6.c(3)(e) 6.c(3)(f) 6.c(3)(g) 6.c(3)(h)	E-4 E-8 E-11 E-16 E-19 E-23 E-24 E-25 E-34 E-36 E-37 E-41 E-42 E-47	Final TMDL Compliance Determination	Compliance language requires all Copermittees to implement a WQIP for any of the Copermittees to utilize the WQIP based compliance approach for TMDLs. Copermittees have no authority to compel other Copermittees to implement BMPs and should not be held liable for the actions or inactions of others. Under 40 C.F.R. §§ 122.26(a)(3)(vi) and 122.26(b)(1), a Copermittee is responsible only for conditions relating to the discharges for which it is the operator.	Revise Attachment E Provisions to allow independent jurisdictional compliance. For example, revise Provisions E.1.b(3)(d) as follows: (d) The Responsible ~~Copermittees~~ Copermittee ~~d~~develop<u>s</u> and ~~implement~~ <u>implements</u> the Water Quality Improvement Plan as follows: . . . . (iv) The Responsible ~~Copermittees~~ <u>Copermittee</u> ~~continue~~ <u>continues</u> to implement the BMPs required under Specific Provision 1.b.(2)(c), AND (v) The Responsible ~~Copermittees~~ <u>Copermittee</u> ~~continue~~ <u>continues</u> to perform the specific monitoring and assessments specified in Specific Provision 1.d, to demonstrate compliance with Specific Provisions 1.b.(3)(a), 1.b.(3)(b) and/or 1.b.(3)(c).

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September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
Attachment E. 6.	E-31	Final TMDL Compliance Requirement, Table 6.1	The proposed addition of a 10-year wet-weather compliance deadline of April 4, 2021 to Table 6.1, for water bodies in a Water Quality Improvement Plan (WQIP) that does not include load reductions for pollutants besides bacteria, is inconsistent with the adopted TMDL and thereby violates the Clean Water Act regulations at 40 C.F.R. § 122.44(d)(1)(vii)(B). This proposed amendment would subject the segments of beaches and creeks that were removed from the 303(d) list to requirements from which the de-listed segments are specifically exempt under the adopted TMDL. The adopted TMDL states in multiple instances (pp. A-2; A-12; A-65; and A-66) that for these delisted shorelines of the Pacific Ocean, no further action is required as long as monitoring data continues to support compliance with water quality standards, i.e., the beaches remain off future iterations of the 303(d) list: "Specific beach segments from some of the Pacific Ocean shorelines listed in the above table have been delisted from the 2008 303(d) list that was approved by the San Diego Board on December 16, 2009, <u>and therefore are not subject to any further action</u> as long as monitoring data continues to support compliance with water quality standards." Reso. No. R9-2010-0001 at	Delete proposed language in Table 6.1 and footnote.

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Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			A-2 [emphasis added]. Accordingly, the adopted TMDL specifies that for the de-listed segments, no Comprehensive Load Reduction Plan or Bacteria Load Reduction Plan is required: "For watersheds in [Insert table number] [sic]where there are no longer any impairments listed on the 2008 303(d) List, the Phase I MS4s and Caltrans are not required to submit a BLRP or CLRP within 18 months of the effective date of these TMDLs. If, however, any segment of a waterbody for the watershed (Pacific Ocean shoreline, creek, or mouth as shown in Table 11-5) is re-listed on a future 303(d) List for any type of indicator bacteria, the Phase I MS4s and Caltrans will be required to submit a BLRP or CLRP within 6 months of the adoption of the 303(d) List by the San Diego Regional Board." Reso. No. R9-2010-0001 at A-66 [emphasis added]. Under the TMDL, no BLRP or CLRP is required for the de-listed segments. The WQIP is a requirement of the MS4 Permit, not the TMDL, and is not a BLRP. Thus, there is no justification to require a 10-year compliance schedule for the de-listed segments, and the proposed amendment is not consistent with the TMDL and should not be adopted.	
Attachment	E-38	Interim TMDL	See above comment.	Delete proposed language in Table 6.4 and footnote.

Attachment 1: City of San Diego Comment Table Regarding Tentative Order No. R9-2015-0100
September 14, 2015

Permit Section	Permit Page	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
E. 6.	through E-40	Compliance Requirements, Table 6.4		
Attachment F. Fact Sheet/Technical Report				
Applicable Statutes, Regulations, Plans and Policies	F-30 – F-32	Antidegradation Policy & Anti-Backsliding Policy	The City supports the proposed amendments to the discussion on the MS4 Permit's consistency with the antidegradation policy and anti-backsliding policy.	NA
Provisions	F-60	Provision B.3 (Water Quality Improvement Plan Goals, Strategies and Schedules)	Finding no. 3 is not accurate as the MS4 Permit is currently drafted. Finding no. 3 states: "3. Provision B.3.c is an ambitious, rigorous, and transparent alternative compliance pathway that allows a Copermittee appropriate time to come into compliance with receiving water limitations without being in violation of the receiving water limitations during implementation of the compliance alternative." As currently drafted, Provision B.3.c does not allow the City appropriate time to come into compliance with the ASBS receiving water limitations in Provision A.2.b.	No changes are needed to this portion of the Fact Sheet so long as the City's proposed change to Provision B.3.c. to include compliance coverage for Provision A.2.b is accepted.

Revise May 14, 2015, Draft of Provision E.3.e.(1)(a) as follows:

e. **PRIORITY DEVELOPMENT PROJECT BMP IMPLEMENTATION AND OVERSIGHT**

Each Copermittee must implement a program that requires and confirms structural BMPs on all Priority Development Projects are designed, constructed, and maintained to remove pollutants in storm water to the MEP.

(1) Structural BMP Approval and Verification Process

(a) Each Copermittee must require and confirm that all Priority Development Projects implement the requirements of Provision E.3, except that the Copermittee may allow previous land development requirements to apply to a Priority Development Project if all of the following conditions are met:

(i) The Copermittee has, prior to the effective date of the BMP Design Manual required to be developed pursuant to Provision E.3.d, approved[1] a design that incorporates the storm water drainage system for the Priority Development Project in its entirety, including all applicable structural pollutant treatment control and hydromodification management BMPs, and that complies with the Priority Development Project requirements of the Previous Term MS4 permit;[2] AND

(ii) For private projects, the Copermittee has, prior to the effective date of the BMP Design Manual required to be developed pursuant to Provision E.3.d, issued a development approval or construction permit based on a design that incorporates the approved storm water drainage system for the Priority Development Project in its entirety; AND

(iii) All subsequent development approvals and construction permits, or equivalent approvals for public projects, that are needed to implement the initial approval, must be issued within 5 years of the effective date of the BMP Design Manual pursuant to Provision E.3.d. BMP installation must remain in substantial conformity with the design of the storm water drainage system included in the initial approval.

(b) Alternatively, the Copermittee may allow previous land development requirements to apply to a Priority Development Project if application of Provision E.3 would be legally infeasible.

[1] For public projects, approval means that the design of the storm water drainage system for the project in its entirety has been stamped by the City or County Engineer, or engineer of record for the project.
[2] Order Nos. R9-2007-0001, R9-2009-0002, and R9-2010-0016 for San Diego, Orange, and Riverside Counties, respectively.

CITY OF SANTEE

MAYOR
Randy Voepel

CITY COUNCIL
Jack E. Dale
Ronn Hall
Rob McNelis
John W. Minto

September 11, 2015

Via E-Mail [sandiego@waterboards.ca.gov]

David Gibson, Executive Officer
c/o Wayne Chiu
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

Re: Comment - Tentative Order No. R9-2015-0100, Place ID:786088WChiu

Dear Mr. Gibson and Mr. Chiu:

The City of Santee ("City") appreciates the opportunity to provide comments on San Diego Regional Water Quality Control Board ("Regional Board") Tentative Order No. R9-2015-0100 ("Tentative Order") amending Order No. R9-2013-0001, NPDES No. CAS010266, as amended by Order No. R9-2015-0001, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region ("MS4 Permit"). The City is committed to improving and sustaining water quality in the San Diego region and has undertaken extensive efforts to further these goals. The City is aware that the County of San Diego has prepared and submitted comments on the Tentative Order on behalf of Co-Permittees. The City would like to express its support for the County's comment letter and join with the County in the submission of those comments. The comments in this letter supplement the County's letter and are intended to allow the City and other Co-Permittees to continue working toward the common goal of improving water quality in the region.

1. THE CITY SUPPORTS INCORPORATION OF THE ALTERNATIVE COMPLIANCE PATHWAY FOR PROHIBITIONS AND LIMITATIONS

The City recognizes and appreciates the efforts of Regional Board staff to develop an alternative compliance pathway for incorporation into the MS4 Permit. Attaining water quality objectives is a long term commitment that poses special challenges for MS4s. Incorporation of an alternative compliance pathway recognizes the special challenges and long-term commitments necessary to make measurable steps in reaching water quality objectives. Use of the Water Quality Improvement Plan process establishes a rigorous and transparent pathway for compliance with Provisions A.1.a, A.1.c, A.1.d, A.2.a, and A.3.b. The City joins with other Co-Permittees in expressing its support for the alternative compliance pathway.

2. CLARIFY PROVISION A TO STATE THAT COMPLIANCE WITH PROVISION B.3 CONSTITUTES COMPLIANCE WITH PROVISIONS A.1.a, A.1.c, A.1.d, A.2, AND A.3.b OF THE MS4 PERMIT

The City is concerned that the prohibitions and limitations in Provisions A.1.a, A.1.c, A.1.d, A.2, and A.3.b, as currently written, may be interpreted independent of the alternative compliance pathway in Provision B.3. A stand-alone reading of the prohibitions and limitations, without any reference to the compliance pathway provision, may expose the Co-Permittees to unintended liability, despite our rigorous efforts to successfully implement the alternative compliance pathway. The City joins with Co-Permittees in requesting that language be added to Provision A to clarify that the intent of the alternative compliance pathway is to create an alternative means of complying with Provisions A.1.a, A.1.c, A.1.d, A.2, and A.3.b.

3. REVISE ANNUAL MILESTONE REQUIREMENT TO INCLUDE MEANINGFUL MILESTONES (PROVISION B.3.c.(1)(a)(vii), B.3.c.(1)(d), B.3.c.(2)(c), B.3.c.(2)(d) and footnote 9)

The Tentative Order's alternative compliance pathway requires Water Quality Improvement Plans to set annual milestones for each numeric goal. These milestones must build on previous milestones and lead to the achievement of a final numeric goal. While improvements to water quality may be more difficult to attain in the absence of clear goals and milestones, an artificial annual milestone for each goal does not account for the complicated and long-term nature of the strategies designed to attain water quality objectives. To establish meaningful milestones over time, the milestones should be developed as part of the adaptive management process. The City therefore joins with the Co-Permittees in requesting a revision to the annual milestone requirement in Provisions B.3.c.(1)(a)(vii), B.3.c.(1)(d), B.3.c.(2)(c), B.3.c.(2)(d) and footnote 9.

The City is grateful for Regional Board staff's extensive efforts in drafting a fair and workable alterative compliance pathway. We believe that with the minor modifications requested in this comment letter and those of the County on behalf of the City and other Co-Permittees, the City will be a position to move forward with confidence in attaining water quality improvements in the region.

Sincerely,

Melanie Kush, AICP
Acting Director of Development Services

C: Paul Malone, Interim City Manager
Scott Johnson, Principal Civil Engineer
Cecilia Tipton, Storm Water Program Manager
City Attorney

County of San Diego

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September 14, 2015

Wayne Chiu, WRC Engineer
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Electronic Submission: sandiego@waterboards.ca.gov

Dear Mr. Chiu:

COMMENT LETTER – TENTATIVE ORDER NO. R9-2015-0100 PLACE ID:786088WCHIU

The County of San Diego (County) appreciates the opportunity to comment on the Regional Water Board's *Tentative Order R9-2015-0100, an Order Amending Order No. R9-2013-0001, NPDES No. CAS010266, as amended by Order No. R9-2015-0001, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region* (Tentative Order or Permit). Comments are followed by specific recommendations for modifications to the language in the Tentative Order. The noted references and page numbers refer to the redline strikeout version of the Tentative Order provided on the Regional Water Board's website.

County comments on the Tentative Order address the following general areas of concern:

- Receiving Water Limitations and the Alternative Compliance Pathway in Provisions A and B;
- BMP Design Manual Updates; and
- Total Maximum Daily Loads (TMDLs), specifically for Indicator Bacteria Project I and Los Peñasquitos Lagoon.

The County respectfully submits the following comments with respect to Tentative Order R9-2015-0100. These comments should not be construed as amending or modifying any of the County's positions with respect to any prior Regional Board order or action. The County reserves its right to continue to pursue any and all of its positions, arguments, challenges, petitions, and appeals with respect to any such prior Regional Board order or action.

1. **Provision A.2. Receiving Water Limitations (page 17/138)**
   Receiving Water Limitations Provisions are not required in the Tentative Order

   The County appreciates the inclusion of a Compliance Option in Provision B.3.c of the Tentative Order; however, we continue to believe that the Regional Board has ultimate discretion in regards to requiring strict numeric compliance with water quality standards as noted in the State Board Order addressing receiving water limitations[1]. The County respectfully requests that the Regional Board use its discretion to remove the requirement to comply with receiving water limitations in Provision A.2 of the Tentative Order. While the County recognizes that the State Board has issued an order on the Los Angeles MS4 Permit that includes findings about the receiving water limitations language, the County feels that the San Diego Regional Water Board should utilize the discretion discussed in the order:

   > "Although it would be inconsistent with USEPA's general practice of requiring compliance with water quality standards over time through an iterative process, we may even have the flexibility to reverse our own precedent regarding receiving water limitations and receiving water limitations provisions and make a policy determination that, going forward, we will either no longer require compliance with water quality standards in MS4 permits, or will deem good faith engagement in the iterative process to constitute such compliance." (Footnotes omitted).[2]

   While the State Board Order declined to reverse course and discontinue including receiving water limitations provisions in MS4 permits, the County respectfully submits that this is not a sound policy decision. The State Board broadly concluded that "the iterative process has been underutilized and ineffective to date in bringing MS4 discharges into compliance with water quality standards."[3] To the contrary, significant advances in reducing pollutants in receiving waters have been made and will continue to be made as science and technology improve and watershed management approaches are implemented. The County feels the Regional Water Board should allow the comprehensive and prioritized watershed planning efforts to be implemented and the effectiveness evaluated prior to incorporating receiving water limitations.

   The inclusion of receiving water limitations language seems to overlook the intent of Congress in enacting §402(p) of the Clean Water Act, the Chief Counsel 1993 Memorandum explaining the rationale for the separate Maximum Extent Practicable (MEP) standard for MS4 systems, and Congress' recognition of the unique challenges that an MS4 faces with an open system.[4]

   For example, the Caltrans Permit (Order 2012-0011 DWQ) contains language that is more consistent with Clean Water Act §402(p).[5] It recognizes the infeasibility of setting

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[1] Order WQ 2015-0075, p. 13; http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/2015-0731_Tentative_Order_Attachment%201_(Amended_Order).pdf.
[2] *Id* at 14
[3] *Ibid.*
[4] 1993 Memorandum of Chief Counsel, p. 2
[5] Order 2012-0011 DWQ, Finding 20, p. 11; Provision A.1., p. 18.

numeric effluent criteria for municipal BMPs and urban discharges. Setting a policy consistent with these realities and using language that reflects the appropriate MEP standard and iterative process would advance improvement of water quality by creating a climate of cooperation and innovative solutions.

The County requests that the Regional Water Board use the discretion noted to remove the receiving water limitations from this MS4 permit. However, should the Board decide to keep the receiving water limitations language, we have recommended some modifications for consideration in the specific comments below.

SPECIFIC COMMENTS ON RECEIVING WATER LIMITATIONS

2. **Provision A. Prohibitions and Limitations (page 16/138)**
Request: **Add sentence to Provision A to clarify its link to Provision B.**

Rationale: The Prohibitions and Limitations language in Provision A should be aligned with and reference the compliance alternatives provided through the Water Quality Improvement Planning process described in Provision B.

The proposed Prohibitions and Limitations provisions may be construed as standalone provisions that could expose the Copermittees to state and federal enforcement actions, as well as to third-party actions under the federal Clean Water Act's citizen suit provisions. A clear linkage between the compliance provisions and the prohibitions, receiving water limitations, and effluent limitations must be established. Compliance with Provisions A.1, A.2, and A.3 should be linked to Provision B so that it is clear that the compliance mechanism for A.4 is the Water Quality Improvement Plan (Provision B) and/or the TMDL (Attachment E), as applicable.

Recommendation: *Include language in Provision A to indicate that compliance can be achieved through implementation of the Water Quality Improvement Plan, specifically through the Alternative Compliance Pathway added as Provision B.3.c. Add a sentence at end of first paragraph:*

Implementation of the Compliance Option described in Provision B.3.c of this Order shall constitute compliance with the Discharge Prohibitions (A.1.a, A.1.c, A.1.d), Receiving Water Limitations (A.2), and Effluent Limitations (A.3.b) Provisions of this Order.

3. **Provision B.3.c. Prohibitions and Limitations Compliance Option (page 33/138)**
Request: Restructure the annual milestone requirements in the Compliance Option so they are meaningful and realistic.

Rationale: Provision B.3.c.(1)(a)(vii) requires annual milestones to be established for each numeric goal. Further, footnote #9 requires the following:

"Annual milestones for each final numeric goal must build upon previous milestones and lead to the achievement of the final numeric goal. The annual

milestones may consist of water quality improvement strategy implementation phases, interim numeric goals, and other acceptable metrics."

While the County appreciates the desire to establish additional accountability toward the attainment of final numeric goals, the approach proposed in the Tentative Order is unrealistic and will not provide meaningful goals beyond the first few years. The County has three specific issues with the annual milestone approach:

Issue 3A: The process of implementing BMPs is often not linear in such a manner that actions would consistently "build upon" previous milestones. Copermittees may proceed with the implementation of one BMP (or packages of BMPs), but may later determine that a change of course is needed (e.g., a BMP's not effective, a better approach is identified). This concept has been recognized many times by the Regional Board in discussing the approach to Water Quality Improvement Plans. The County requests that this language be modified to reflect that course corrections may be warranted.

> ***Recommendation:*** *Replace "build upon previous milestones" with "cumulatively." (For complete proposed text revisions, see the Overall Recommendation at the end of this comment that integrates all suggested revisions for Comment #3.)*

Issue 3B: Annual milestones lose meaning after a certain timeframe. For example, it is reasonable to foresee milestones in the first several years of implementing a project, or even to foresee bigger picture milestones over a longer timeframe. Indeed, it is important to forecast the amount of time needed to implement projects to obtain the final goals. However, in forecasting longer-term efforts, milestones are typically not annual, but are at a much larger scale (e.g., multi-year periods). Practically speaking, it is reasonable to identify concrete milestones in Years 1 – 5 of a 30 year effort, whereas the milestones identified today for Year 10, 15, 20, etc. lose significant meaning and value.

> ***Recommendation:*** *Revise the annual milestones to require establishment of committed milestones for the permit term (e.g., Years 1 -5) and the forecasting of additional milestones for the next permit term (e.g., Years 6 – 10). This approach will result in firm commitments for each permit term and ensure that Copermittees are planning ahead in a meaningful way for the following permit term. This process continues until the final numeric goals are achieved. (For complete proposed text revisions, see the Overall Recommendation at the end of this comment that integrates all suggested revisions for Comment #3.)*

Issue 3C: While a requirement to identify annual milestones for each numeric goal may initially sound reasonable, the realistic number of annual milestones generated by such a requirement is unrealistic to measure and track. Take for example an estimate of the number of milestones that would be required just of the County:

> 8 Watershed Management Areas (WMA) x
> 2 waterbodies (assuming 1 creek and 1 beach) per WMA x
> 3 to 5 numeric goals per waterbody x
> 5 years in a permit term =
> 48 to 80 annual goals; 240 to 400 goals per permit term

The intent of the milestones is to increase accountability. However, tracking 48 to 80 milestones each year just for the County of San Diego would create an administratively intensive process that far outweighs the benefit. Alternatively, milestones could be established based on the permit term, rather than on an annual basis. Further, the Tentative Order should also explicitly acknowledge and allow for a specific milestone to apply to multiple numeric goals and/or waterbodies (as justified to be applicable and appropriate). This approach would streamline the process and create a more meaningful and clearer process of accountability.

Recommendations: *(1) Replace the requirement for annual milestones with a requirement to establish at least one milestone per permit term. This would result in approximately 48 – 80 goals in a permit term (based upon the estimate above), still providing significant accountability. (2) Explicitly allow a milestone to apply to more than one numeric goal and/or waterbody (as applicable and appropriate). (For complete proposed text revisions, see the Overall Recommendation at the end of this comment that integrates all suggested revisions for Comment #3.)*

Overall Recommendation for Comment #3: *Modify Provision B.3.c.(1)(a)(vii) , footnote 9,* B.3.c.(2)(c), and B.3.c.(2)(d) *as follows:*

B.3.c.(1)(a) (vii): For each final numeric goal developed pursuant to Provisions B.3.a and B.3.c.(1)(a)(i)-(v), at least one ~~annual~~ milestone[9] and date for its achievement must be included **for the permit term** within each Water Quality Improvement Plan **and progress toward attaining the milestone(s) reported upon during each** Annual Report reporting period**. Further, for each final numeric goal developed pursuant to Provisions B.3.a and B.3.c.(1)(a)(i)-(v), at least one milestone forecasted to be achieved in the next subsequent permit term must be included within each Water Quality Improvement Plan. This process will continue** until the final numeric goal is achieved.

Footnote 9: ~~Annual~~ ~~m~~**M**ilestones for each final numeric goal must ~~build upon previous milestones and~~ **cumulatively result in** ~~lead to~~ the achievement of the final numeric goal. The ~~annual~~ milestones may consist of water quality improvement strategy implementation phases, interim numeric goals, and other acceptable metrics. **The milestones may also address multiple numeric goals and/or multiple waterbodies, as applicable and appropriate.**

B.3.c.(2)(c): The Copermittee's' assessments in the Water Quality Improvement Plan Annual Report submitted pursuant to Provision F.3.b.(3) support a conclusion that: 1) the Copermittee is in compliance with the ~~annual~~ milestones and dates for achievement developed pursuant to Provision B.3.c.(1)(a)(vii), OR 2) the Copermittee has provided acceptable rationale and recommends appropriate modifications to the interim numeric goals, and/or water quality improvement strategies, and/or schedules to improve the rate of progress toward achieving the final numeric goals developed pursuant to Provisions B.3.a and B.3.c.(1)(a)(i)-(vi); AND

B.3.c.(2)(d): Any proposed modifications to the numeric goals, schedules, and/or ~~annual~~ milestones are accepted by the San Diego Water Board as part of subsequent updates to the Water Quality Improvement Plan pursuant to Provision F.2.c; AND

4. **Provision B.3.c. Prohibitions and Limitations Compliance Option (page 36/138)**
Request: **Add a compliance pathway to Provision B.3.c during development of or updates to the WQIP.**

Rationale: While developing a plan to comply with the Alternative Compliance Pathway, Copermittees should be deemed in compliance with Receiving Water Limitations where all Permit-required milestones related to development and/or implementation of the Water Quality Improvement Plan is met.

Recommendation: *Add language consistent with former recommendations provided during the reissuance process in 2013[6], consistent with the Los Angeles MS4 Permit[7], and consistent with the recently adopted State Board Order[8] upholding the alternative compliance approach used in the Los Angeles MS4 Permit. This would require: (1) language to require a Notice of Intent to utilize a WQIP-based compliance option, and (2) all deadlines for development and implementation of a WQIP pursuant to Provision F.1.(a) and (b), and Provision B are met AND the WQIP, or revised WQIP, ultimately receives approval. The following language should be added as Provision B.3.c.(3):*

(3) For cases when applicable discharge prohibitions (A.1.a, A.1.c, A.1.d), receiving water limitations (A.2.a), or effluent limitations (A.3.b) are not attained during the time period between a Copermittee's notification of intent to utilize a Water Quality Improvement Plan based compliance option and San Diego Water Board executive officer acceptance of the Water Quality Improvement Plan, a Copermittee is in compliance with Provision A.1.a, A.1.c,, A.1.d, A.2.a, and A.3.b if all of the following conditions are met:

a. All deadlines for development of a Water Quality Improvement Plan pursuant to Provision F.1.(a) and (b) or implementation of an existing Water Quality Improvement Plan pursuant to Provision B are met;
b. For the areas of the watershed to be covered by the alternative compliance option, the Copermittee(s) must initiate targeted implementation of programs through the agencies' existing programs that focus on the watershed's priority pollutants to effectively prohibit non-stormwater discharges to the MS4 and to reduce pollutants in stormwater discharges from the MS4 to the MEP;
c. Receives acceptance of the Water Quality Improvement Plan or updated Water Quality Improvement Plan within the time periods specified in Provision F.

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[6] "SDCopermitteeFinal R9-2013-0001 Tentative Order DRAFT Strikeout_010413 –comments_3_27_TO_Copy.doc"
[7] Order No. R4-2012-0175, Part VI.C.2.d
[8] Order WQ-2015-0075, B.6, page 48

5. **Provision B.3.c.(1)(a)(iii) Prohibitions and Limitations Compliance Option (page 34/138)**

Request: Numeric goals developed for 303(d) listed constituents should be applicable only if the MS4 is determined to be a source of the pollutant causing the impairment.

Rationale: Provision B.3.c.(1)(a)(iii) appears to include all 303(d) listings in receiving waters without specifying that the impairment must be linked to MS4 discharges. There may be instances where MS4 discharges are not causing or contributing to the impairment. While that situation would result in a Permittee complying with Provision A without the need for the alternative compliance pathway in Provision B.3.c, clarity would avoid future confusion as to whether or not interim and final numeric goals need to be developed.[9]

Recommendation: *Modify Provision B.3.c.(1)(a)(iii) as follows:*

(iii) Interim and final numeric goals applicable to the Copermittee's MS4 discharges within the Watershed Management Area expressed as numeric concentration-based or load-based goals for all pollutants and conditions listed on the Clean Water Act Section 303(d) List of Water Quality Impaired Segments for the receiving waters in the Watershed Management Area that do not have a TMDL incorporated into Attachment E to this Order **and where MS4 discharges are causing or contributing to the impairment;** AND/OR

6. **Provision B.5. Iterative Approach and Adaptive Management Process (page 37/138)**

Request: Permit language should address a trigger for updates to the watershed modeling/analysis as part of the adaptive management process.

Rationale: Provision B.5 requires that the adaptive management process is performed annually. As drafted, the language could be interpreted to mean that the watershed model/analysis would have to be updated annually.

Recommendation: *Include a new Provision B.5.d to clarify that updates to the watershed model/analysis within the adaptive management process are required only if conditions have changed significantly such that they would alter the model results. As part of the ROWD, the watersheds would conduct an analysis of whether conditions have changed sufficiently to warrant an update to the watershed model/analysis and, if so, provide a schedule for conducting the updated analysis.*[10]

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[9] Consistent with CASQA recommendations to SWRCB. California Stormwater Quality Association, Letter to Ms. Jeanine Townsend, Clerk to the Board, State Water Resources Control Board, Subject: SWRCB/OCC Files A-2236(a) through (kk); Comments on Proposed Order *In Re Petitions Challenging 2012 Los Angeles Municipal Separate Storm Sewer System Permit (Order No. R4-2012-0175)*, January 19, 2015.

[10] Consistent with CASQA recommendations to SWRCB. California Stormwater Quality Association, Letter to Ms. Jeanine Townsend, Clerk to the Board, State Water Resources Control Board, Subject: SWRCB/OCC Files A-2236(a) through (kk); Comments on Proposed Order *In Re Petitions Challenging 2012 Los Angeles Municipal Separate Storm Sewer System Permit (Order No. R4-2012-0175)*, January 19, 2015.

B.5.d. Updates to Optional Watershed Analysis [B.3.c.(1)(b)]
Updates to the optional watershed analysis included in Provision B.3.c.(1)(b) are required only if conditions have changed significantly within the watershed or where new information is available that would significantly alter the model results.

7. Provision F.2.b. BMP Design Manual Updates (Page 126/138)
Request: Allow adequate time for Copermittees to update and implement their BMP Design Manuals.

Rationale: The current Order establishes the Effective Date of the BMP Design Manual (and therefore of the requirements of Permit Section E.3.a-d) as December 24, 2015. This date was appropriate at the time of initial Permit adoption because it provided Copermittees sufficient time to develop updated content and modify the programs and regulatory authorities needed for implementation. The Tentative Order would now require Copermittees to *update* their BMP Design Manuals to incorporate the amended Provisions E.3.a-d within 90 days after the amended Provisions E.3.a-d are adopted by the Regional Board. Given that the Tentative Order proposes critical new modifications, additional time is requested to allow for their completion *and implementation*. The first of these are the changes in the definition of redevelopment Priority Development Projects (PDPs) proposed in Section II.E.3.b.(1)(c) through (e). The second is the addition of a modified process for establishing Prior Lawful Approval (PLA) under Section E.3.e.(1). We appreciate the work that Regional Board staff put into working with stakeholders and crafting these PLA provisions, and we support their adoption. However, we must also note that the current schedule for implementing updated BMP Design Manual provisions under the Tentative Order severely limits their potential application. Additional time is needed to: allow Copermittees to ensure regional consistency; modify local BMP Design Manuals; update policies, procedures, and other program documentation; conduct outreach to industry and project proponents; and modify local ordinances.

At a minimum, the Regional Board should allow six months from the adoption of new requirements to complete and implement these tasks. As currently written, if these provisions are adopted as proposed on November 18, Copermittees would have just 90 days to implement them. Please note the following inconsistencies in the Tentative Order and Technical Report regarding the extension of dates. First, the Technical Report (page F-110) states "Provisions E.3.e.(1)(a)[a]-[d] are dependent on the effective date of the BMP Design Manual. Unless otherwise directed by the San Diego Water Board, the effective date of the BMP Design Manual is December 24, 2015 for the San Diego County Copermittees …" This is in contrast to Provision F.2.b.(4), which requires that *revision* of the updated BMP Design Manual be completed not later than 90 days after the date the San Diego Water Board adopts the amendments (i.e., by February 16, 2016). Since it is not possible for the BMP Design Manual effective date to precede its revision date, it must be assumed that the intent of Provision F.2.b.(4) is to also extend the effective date.

In recent correspondence on this issue, Regional Board staff has indicated their intent to explicitly extend the effective date by the same 90 days allowed for the BMP Design Manual revision using the discretion granted the Executive Officer under other proposed amendments to Section E.3.d. However, this is problematic for three reasons. First, since any extension granted by the Executive Officer could only be executed after the hearing,

Copermittees would have no assurances that it would actually occur. Second, extending the effective date by 90 days would merely make the revision and effective dates concurrent rather than rectifying the inconsistencies causing the confusion. Third, a 90-day extension of the effective date simply does not provide adequate time for both completing and implementing the BMP Design Manual update. We recommend that the *effective* date of the BMP Design Manual for the Copermittees be extended 180 days from the adoption of the Tentative Order (i.e., May 14, 2016). Modifying the Permit to specifically incorporate this effective date, rather than relying on the ability of the RWQCB Executive Officer to do so after the fact, would both provide the time necessary for critical program updates and the certainty needed to plan for them. It would also ensure that these critical changes are fully vetted in an open public forum.
We also recommend that Provision E.3.d. be modified to clarify that the date the BMP Design Manual is implemented (rather than revised) is the same as the "effective date". This will help to prevent any future confusion regarding the applicability of dates.

Since the County has already modified its Watershed Protection Ordinance (WPO) to reflect existing Permit content in anticipation of the December 24, 2015 BMP Design Manual effective date, we will now need to repeat this process to incorporate the modified PDP definition and the updated PLA process. The schedule below illustrates an anticipated *best case scenario* for updating and obtaining Board of Supervisors approval of the WPO.

12/06/15	Deadline for first draft Board letter and supporting materials (incl. update Watershed Protection Ordinance)
12/30/15	File the public notice with the Clerk of the Board
12/31/15	Official Public Notice Period
01/05/16	Board of Supervisors Hearing, 1st reading
01/26/16	Board of Supervisors Hearing, 2nd reading and approval
02/16/16	BMP Design Manual Effective Date if Extended by RWQCB Executive Officer
02/25/16	Revised WPO effective date (30 days after approval of amendments)
05/16/16	BMP Design Manual Effective Date proposed by County and Copermittees

As shown, completion of a WPO update alone would exceed the 90 days currently allowed by the Tentative Order. This means that even if the County is able to move another WPO update forward on the most aggressive possible schedule (which we cannot guarantee since this item would have to compete with other potential content on the Board agenda), the anticipated effective date of the WPO revisions would be after the BMP Design Manual effective date. We expect that other Copermittees will experience similar problems with the timing of their ordinance updates. While a nine-day discrepancy might not initially sound significant, it's important to emphasize that this could be much more, depending on actual WPO hearing schedules. This means, for instance, that the County would lack the legal authority to require that redevelopment projects under the updated PDP definition be considered PDPs during that interim period. It is not sound policy to knowingly impose updated Permit requirements on a schedule that the County or any other Copermittee

cannot meet. The RWQCB has been responsive to such concerns in the past, and we are requesting the same consideration here.

Even if ordinance revisions could be completed within 90 days, it is still insufficient time for completing other critical tasks (updating the County BMP Design Manual, then training staff and conducting industry outreach, etc.), all of which are required to responsibly and legally impose updated requirements on public and private projects. While Regional Board staff has suggested that Copermittees can start this process now, it is unrealistic to expect that they do so based only on the proposed requirements of this Tentative Order. It would be speculative to assume that the Tentative Order will be adopted as currently drafted, and Copermittees should not be expected to initiate specific program changes or ordinance revisions based on speculation. Moreover, asking project proponents to implement updated requirements without sufficient time to consider and design to them is unreasonable. We therefore request that the BMP Design Manual effective date be extended by 180 days in the adopted Order. As shown in the table above, this would provide additional time that necessary to avoid imposing a de facto condition of Copermittee non-compliance, and that is critical to getting these new requirements right.

Recommendations: *The County recommends that the Regional Board modify the requirement to specify that the updates be made to the BMP Design Manual, as follows:*

Provision E.3.d
Each Copermittee must update its BMP Design Manual pursuant to Provision F.2.b. Until the Copermittee has updated its BMP Design Manual pursuant to Provision F.2.b.(1), the Copermittee must continue implementing its current BMP Design Manual. The Copermittee must implement the updated BMP Design Manual within 180 days following completion of the update pursuant to Provision F.2.b.(1), unless directed otherwise by the San Diego Regional Water Board Executive Officer. **The date the BMP Design Manual is implemented is the "effective date" of the BMP Design Manual**. The update of the BMP Design Manual required pursuant to Provision F.2.b.(1) must include the following:

Provision F.2.b.(4)
If the San Diego Water Board amends Provisions E.3.a-d during the permit term but after the Copermittee has completed the update pursuant to Provision F.2.b.(1), the Copermittee must revise its BMP Design Manual to incorporate the amended Provision E.3.a-d requirements as soon as possible but no later than **180** days after the date the San Diego Water Board adopts the amendments to Provisions E.3.a-d, unless otherwise directed by the San Diego Water Board Executive Officer. **Under these circumstances, the effective date of the BMP Design Manual is 180 days after the date the San Diego Water Board adopts the amendments to Provisions E.3.a-d**.

8. Provision E.3.c.(2)(b) – Requirements to Manage Critical Coarse Sediment Yield

Request: Allow adequate time for Copermittees to study and collaboratively develop approaches to compensate for the loss of critical sediment supply.

Rationale: Section E.3.c.(2)(b) of the Order requires that each development project conduct studies and compensate for the loss of onsite sediment supply. In our January 11,

2013, comment letter on the initial adoption of this Permit, the County noted that the imposition of these requirements is speculative and premature given the current state of science and technology regarding these impacts and potential mitigation options. While the County and others continue to work to meet these requirements, we reiterate our previous comments. Until the impact of individual development projects on receiving water coarse sediment supply is better understood, the ability of Copermittees to require sediment compensation on a project-by-project basis in a technically and legally defensible manner will remain severely limited. Moreover, pursuing a longer-term, study-based approach will help to avoid unintended environmental impacts.

Recommendations: *We recommend the language be removed from Section E.c.3.(2)(b) and moved to Section E.3.d as line item (6) so that it can be addressed regionally instead of at a project level.*

9. Provision E.3.c. Priority Development Project Structural BMP Performance Requirements

Request: Clarify the intent and applicability of TCBMP treatment requirements to flow-thru BMP designs.

Rationale: Provision E.3.c.(1)(a)(i) describes performance requirements for biofiltration BMPs where retention of the full design capture volume is not feasible. Proposed revisions would clarify that option [a] under this Provision is intended for flow-based BMPs and that option [b] is intended for volume-based BMPs. Removal of the reference to "flow-thru design" would eliminate any unintended implications that the flow-thru treatment requirements of Provision E.3.c.(1)(a)(ii)[b] apply to BMPs addressed by the design criteria of Provision E.3.c.(1)(a)(i)[b]. The addition of "static storage" language clarifies this volume based BMP is not subject to flow routing requirements.

Recommendation: *Modify Provision E.3.c.(1)(a)(i)[b] as follows:*

[b] Treat the design capture volume not reliably retained onsite with a ~~flow-thru design that has a~~ total **static storage** volume, including pore spaces and pre-filter detention volume, sized to hold at least 0.75 times the portion of the design capture volume not reliably retained

SPECIFIC COMMENTS ON TMDL PROVISIONS

10. Attachment E-6. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)

Request: Issue 10A: Modify wet weather compliance timelines for delisted 303(d) waterbodies to 20 years to be consistent with the TMDL Resolution.

Rationale: **Issue 10A:** Footnotes and dates were added to Tables 6.1 and 6.4 to note earlier final and interim wet weather compliance dates, respectively, if the Water Quality Improvement Plans do not include "load reduction programs" to address other constituents.

Draft Tentative Order Attachment E Tables 6.1 and 6.4 should be modified for consistency with the TMDL. The proposed addition of a 10-year wet-weather compliance deadline of April 4, 2021, to Table 6.1, for water bodies in a WQIP that does not include load reductions for pollutants besides bacteria, is inconsistent with the adopted TMDL and thereby violates the Clean Water Act regulations at 40 C.F.R. § 122.44(d)(1)(vii)(B). This proposed amendment would subject the segments of beaches and creeks that were removed from the 303(d) list to requirements from which the de-listed segments are specifically exempt under the adopted TMDL. Under the TMDL, no BLRP or CLRP is required for the de-listed segments. The WQIP is a requirement of the MS4 Permit, not the TMDL, and is not a BLRP. Thus, there is no justification to require a 10-year compliance schedule for the de-listed segments, and the proposed amendment is not consistent with the TMDL.

Recommendation: *Delete proposed language in Table 6.1 and footnote.* However, should the Regional Water Board decide to keep the footnote, we recommend modifications to be consistent with the adopted TMDL:

Recommendations:

Table 6.1 Footnote: **Except for segments removed from the 303(d) list,** ~~T~~the Wet Weather TMDL Compliance Date in parenthesis applies if the applicable Water Quality Improvement Plan does not include **anticipated** load reduction**s** ~~**programs**~~ for other constituents **analogous to the Comprehensive Load Reduction Plan** together with bacteria load reduction requirements of this TMDL.

Table 6.4: Remove dates included in parentheses for segments removed from the 303(d) list.

Table 6.4 Footnote: The Interim Compliance Dates to achieve the Interim Wet Weather WQBELs in parenthesis apply if the applicable Water Quality Improvement Plan does not include **anticipated** load reduction**s** ~~programs~~ for other constituents **analogous to the Comprehensive Load Reduction Plan** together with bacteria load reduction requirements of this TMDL.

Request: Issue 10B: Clarify that compliance with receiving water limitations will be assessed at the compliance points identified in the TMDL Monitoring Plan.

Rationale: **Issue 10B:** Compliance with the final and interim receiving water limitations as allowed by Attachment E-6.b.(3)(b), E-6.c.(3)(b), and E-6.c.(3)(f) should be consistent with the TMDL, Basin Plan Amendment, and approved TMDL Monitoring Plan. The Basin Plan Amendment defines the points for compliance in the receiving waters as follows:

"For beaches addressed by these TMDLs, monitoring locations should consist of, at a minimum, the same locations used to collect data required under MS4 NPDES monitoring requirements and beach monitoring for Health and Safety Code section 115880" and "[f]or creeks addressed by these TMDLs, monitoring locations should consist of, at a minimum, a location at or near the mouth of the creek (e.g., Mass

Loading Station or Mass Emission Station) and one or more locations upstream of the mouth (e.g., Watershed Assessment Stations)." [11]

The approved monitoring plans have defined monitoring compliance points consistent with the language in the Basin Plan Amendment. For consistency, the language in Attachment E-6 should be modified.

Recommendation: *Modify the appropriate language in the final and interim compliance pathways in Attachment E-6 as follows:*

E-6.b.(3) Final TMDL Compliance Determination

(b) There are no exceedances of the final receiving water limitations under Specific Provision 6.b.(2)(a) in the receiving water at~~, or downstream of the Responsible Copermittee's MS4 outfalls~~ **the compliance point in the receiving water as defined in the approved TMDL monitoring plan**; OR

E-6.c.(3) Interim TMDL Compliance Determination

(b) There are no exceedances of the final receiving water limitations under Specific Provision 6.b.(2)(a) in the receiving water at~~, or downstream of the Responsible Copermittee's MS4 outfalls~~ **the compliance point in the receiving water as defined in the approved TMDL monitoring plan**; OR

(f) There are no exceedances of the interim receiving water limitations under Specific Provision 6.c.(2)(a) in the receiving water at~~, or downstream of the Responsible Copermittee's MS4 outfalls~~ **the compliance point in the receiving water as defined in the approved TMDL monitoring plan**; OR

11. Attachment E-7. Total Maximum Daily Load for Sediment in Los Peñasquitos Lagoon

Request: Incorporate a land use-based compliance pathway that is consistent with the approach used to develop the TMDL[12].

Rationale: Attachment E-7 incorporates Los Peñasquitos Sediment TMDL (Sediment TMDL) requirements for Phase I MS4 Permittees. Both the TMDL and its incorporation into the MS4 Permit through Revised Tentative Order R9-2015-0100 provide multiple pathways for the responsible parties to demonstrate compliance. The County supports the flexibility provided by these options and, based on the following rationale, requests that the Regional Board also include an option for land use-based TMDL compliance.

The Sediment TMDL provides the framework and milestones to restore lagoon

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[11] California Regional Water Quality Control Board, San Diego Region. *Resolution No. R9-2010-0001, Attachment A. Amendment to the Water Quality Control Plan for the San Diego Basin (9) to Incorporate Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek).* Chapter 7(h)(7)(i) – Monitoring for TMDL Compliance and Compliance Assessment, p. A50.

[12] California Regional Water Quality Control Board, San Diego Region. *Resolution No. R9-2012-0033* and *Sediment TMDL for Los Penasquitos Lagoon, Staff Report, June 13, 2012.*
http://www.waterboards.ca.gov/sandiego/water_issues/programs/tmdls/los_penasquitos_lagoon.shtml

saltmarsh habitat to 80% of the acreage that existed in 1973 through numeric targets for sediment loading during the critical wet period based on 1970s conditions, when the sediment water quality standard was met.

The Sediment TMDL provides the following support for this approach:

- The numeric targets section finds that the water quality objective for sediment in the Lagoon was attained and beneficial uses were supported under 1970s land use conditions, and that the Lagoon was capable of assimilating 1970s sediment loads.

- The source assessment section links hydromodification caused by land development within the watershed to increased scouring and sediment transport. Phase I MS4s are noted as the main point source of sediment, primarily through the increased volume, velocity, frequency and discharge duration of runoff from developed areas, which transports built-up sediment, and accelerates downstream erosion. Hydromodification, the change in natural runoff characteristics caused by urbanization or other land use changes, is named as the driver for increased sediment loads from MS4s.

- The linkage analysis section relies on results from a computer model that relates sediment loading to land use, and notes that the 1970s condition represents a time period prior to major land development in the watershed.

Consequently, if the land use of a TMDL Responsible Party has not changed significantly since the 1970s baseline, the sediment loads from that Party's MS4 outfalls are expected to be approximately the same as the baseline level and within the amount allowed as part of the approved wasteload allocation. Therefore, since wasteload allocations are based on achieving 1970s sediment loads, if it can be demonstrated that limited land use change has resulted in sediment loads from a Responsible Party that have remained the same since the 1970s, and within the levels allowed by the wasteload allocation, the Party should be deemed in compliance with the Sediment TMDL.

> ***Recommendation:*** *The County requests that a land use-based TMDL compliance pathway be incorporated into Attachment E-7 through the following amendments (<u>underlined</u> text to be inserted):*

7.b.(2).(c) Best Management Practices

(i) The Water Quality Improvement Plan for the Los Penasquitos Watershed Management Area must incorporate the Sediment Load Reduction Plan required to be developed pursuant to Resolution No. R9-2012-0033. <u>Areas within the Los Penasquitos Watershed Management Area where it can be demonstrated that sediment loading has not increased beyond the allowable wasteload allocation as a result of limited or no land use changes since the 1973 baseline may be excluded from the Sediment Load Reduction Plan or Water Quality Improvement Plan.</u>

(ii) The Responsible Copermittees must implement BMPs to achieve the receiving water limitations under Specific Provision 7.b.(2)(a) and/or the Copermittee's portion of the effluent limitations under Specific Provision 7.b.(2)(b) for Los Penasquitos Lagoon, unless it can be shown pursuant to Specific Provision 7.b.(2)(c)(i) that sediment loading has not increased beyond the allowable wasteload allocation as a result of limited or no land use changes since the 1973 baseline.

7.b.(3) Final TMDL Compliance Determination

(b) The Responsible Copermittees develop and implement the Water Quality Improvement Plan as follows:

(ii) Include an analysis in the Water Quality Improvement Plan, utilizing a watershed model or other watershed analytical tools, to demonstrate that the implementation of the BMPs required under Provision 7.b.(2)(c)(ii) for land areas with significant land use changes from the TMDL baseline, or other implementation actions achieve compliance with Specific Provision 7.b.(3)(a).

(v) The Responsible Copermittees continue to perform the specific monitoring and assessments specified in Specific Provision 7.d to demonstrate compliance with Specific Provision 7.b.(3)(a). Responsible Copermittees that can demonstrate land use-based TMDL compliance per the requirements in provision 7.b.(2)(c)(i) , and any jurisdictional areas with changes that are demonstrated to be in compliance with the TMDL as specified in Specific Provision 7.b.(3)(b)(ii), are exempt from Specific Provision 7.d, as they are fully attaining the final TMDL requirements.

7.c.(2) Interim TMDL Compliance Determination

(e) The Responsible Copermittees have demonstrated they are in compliance with the final TMDL as specified in Specific Provision 7.b.(3).

If you have questions or require additional information, please contact Jo Ann Weber, Planning Program Manager at (858) 495-5317 or e-mail at JoAnn.Weber@sdcounty.ca.gov.

Sincerely,

TODD E. SNYDER, Manager
Watershed Protection Program

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SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD
2015 SEP 14 AM 10 10

September 14, 2015

San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108
Attn: Wayne Chiu

Subject: **Comment - Tentative Order No. R9-2015-0100, Place ID:786088WChiu**

Dear Mr. Chiu:

The San Diego Unified Port District (District) submits the following comments to Tentative Order No. R9-2015-0100 (Tentative Order), which proposes to amend the *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region* (the Permit). The District continues to support the San Diego Regional Water Quality Control Board's (Regional Board) efforts to develop a Permit that appropriately regulates MS4 discharges in a manner protective of human and ecological health and that addresses the substantial economic and feasibility constraints faced by the Copermittees. The District also appreciates the workshops held by the Regional Board to consider and develop proposed language prior to the issuance of the Tentative Order.

The District reiterates the comments it has made on Order No. R9-2013-001 and Order No. R9-2015-001 and repeats and incorporates by reference these previously submitted comments, which were set forth in letters dated September 14, 2012, January 11, 2013, November 19, 2014, and in the transcript from the hearing that took place before the Regional Board on April 10 and 11 and on May 8, 2013. The District also incorporates by reference its position on the provision identified and addressed in its petition to the State Board, submitted on June 7, 2013 (Petition No. A-2254(o)).

As set forth in these previously submitted comments, the District continues to request that the Regional Board add language to the Permit clarifying that the location of an MS4 facility within the District's jurisdictional boundaries does not, without more, render the District an owner or operator of that facility. Though obvious, this concept is singularly important to the District given its unique status as the trustee of tidelands resources with boundaries that overlap with the Cities of San Diego, National City, Chula Vista, Imperial Beach, and Coronado (member cities). MS4 facilities owned and operated by the member cities traverse District boundaries, many without any storm water contribution from the District. These MS4 facilities were reserved by the member cities in the 1962 conveyances of tidelands properties to the District, and continue to be owned and operated by the member cities (and not the District) to this day. Attachment A includes the 1962 conveyance document for the record.

The law is clear: the District is not responsible for discharges from an MS4 that it does not own or operate, even if a portion of the MS4 falls within its boundaries. *See* 33 U.S.C. 1316(a)(4) ("owner or operator" defined as "any person who owns, leases, operates, controls, or supervises a source"); 40 C.F.R. 122.26(a)(3)(vi) ("Co-permittee need only comply with permit conditions relating to discharges from the municipal separate storm sewers *for which they are operators*.") (emphasis added); State Board, Order No. WQ 2015-0075, at 66 ("Permittees that have commingled MS4 discharges need only comply with permit conditions relating to discharges from the MS4 *for which they are owners or operators*.") (emphasis added). Indeed, as the Permit recognizes, "[t]he federal regulations make it clear that the Copermittees need only comply with permit conditions relating to discharges from the MS4s for which they are operators (40 CFR 122.26(a)(3)(vi))."

Despite the clarity of the law, there has been substantial confusion as to the District's responsibility for MS4 facilities within its boundaries that are owned and operated by other Copermittees. For example, the District has been named to Draft Investigative Order R9-2015-0058, which pertains to an investigation of sediment quality in the Mouth of Chollas Creek, based on its status as an MS4 Copermittee—despite the fact that the District does not own or operate any portion of the MS4 that discharges into Chollas Creek.[1] As stated above, it would be improper to name the District to an investigative order based solely on its status as MS4 Copermittee. Yet it has become clear that without the clarifying language requested by the District, the Regional Board and others may look to the District to take responsibility for MS4 facilities that it does not own or operate and, thus, cannot legally control.

Thank you again for this opportunity to provide comments on the Tentative Order. If you have any questions please contact Karen Holman at (619) 725-6073 or via email at kholman@portofsandiego.org.

Respectfully,

Jason H. Giffen

D2#1035048
cc: Randa Coniglio, John Bolduc, John Carter, Karen Holman, Paul Brown
Attachments:
Attachment A: February 16, 1963, City of San Diego Conveyance Document and Drawings (CD)
Attachment B: July 30, 2015 District Comment Letter on Mouth of Chollas Creek Draft Investigative Order R9-2015-0058

[1] The District attaches and incorporates by reference its July 30, 2015 comments on Draft Investigative Order R9-2015-0058 (Attachment B to this letter).

Unified Port
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July 30, 2015

Sean McClain
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Subject: San Diego Unified Port District Comments on Mouth of Chollas Creek-Draft Investigative Order R9-2015-0058

Dear Mr. McClain,

The San Diego Unified Port District ("District") appreciates the opportunity to submit comments on Investigative Order No. R9-2015-0058, Pertaining to an Investigation of Sediment Quality in the Mouth of Chollas Creek, dated June 1, 2015 ("draft Order").

The District supports the Regional Board's continued efforts to identify and eliminate sources of contamination impacting San Diego Bay (the "Bay"), including those that might exist within the Mouth of Chollas Creek and the Chollas Creek Tidal Prism ("Investigation Area"). As you know, the District acts as the public trustee and steward of its tidelands properties located in and adjacent to the Bay and works collaboratively with the Regional Board to ensure the health of Bay's ecosystems and their ability to sustain beneficial uses.

As set forth below, the District disputes the draft Order's findings regarding the District's responsibility for waste discharges to sediment within the Mouth of Chollas Creek and the Tidal Prism. Contrary to the draft Order's findings, the District does not own or operate the municipal separate storm sewer system ("MS4") that discharges storm water runoff to the Investigation Area, and does not own or operate any facilities that could reasonably be viewed as a source of Investigation Area contamination. Though the District fully supports the investigation of Chollas Creek Mouth and Tidal Prism sediments and asks that the Regional Board ensure contamination is eliminated, the parties responsible for the contamination should bear the cost and burden of its investigation and removal.

The District is submitting the following comments regarding factual findings of land ownership[1], corrections to the draft Order, and general points which have been coordinated with the other stakeholders on the draft Order's structure and timing.

1. <u>The Order Should Not Be Directed To The District.</u>

   a. The District Does Not Own Or Operate Any MS4 That Discharges Into the Investigation Area

[1] The District previously provided the Regional Board with information detailing the ownership and control over the Mouth of Chollas Creek and discharges to the same in the District's comment letters and technical report submitted to the Regional Board on April 8 and December 20, 2013. The District's expert, Robert Collacott, also testified to the fact that the District does not own or operate any portion of the Municipal Separate Storm Sewer system ("MS4") that discharges to this area during the administrative proceedings leading up to Regional Board Order No. R9-2012-0024. These prior submissions and related briefs and petitions are incorporated by reference.

The draft Order incorrectly states that the Mouth of Chollas Creek "receives discharges from the municipal separate storm sewer systems (MS4s) of ... the [District]" and that the District "own[s] and/or operate[s] MS4s that discharge storm water runoff directly into Chollas Creek." (draft Order Findings 7 & 10). Additionally, the draft Order (Finding 3) incorrectly identifies the Chollas Creek Tidal Prism area as ".immediately adjacent to San Diego Bay under the jurisdiction of the San Diego Unified Port District and the U.S. Navy (Naval Base San Diego)."

The District does not own or operate any portion of the MS4 that discharges into the Investigation Area. Rather, the only MS4 located within the District's jurisdiction that discharges into Chollas Creek is owned and operated by the City of San Diego ("City"), which runs beneath 28th Street to outfall SW9. The City, which maintains overlapping jurisdictional boundaries within this area, retained this MS4 facility in the 1963 Conveyance of certain tideland property from the City to the District. This Conveyance excluded from the property transfer "all existing water, sewer and drainage facilities, known or unknown, the location ... being designated by engineering drawings" referenced in the Conveyance and to be "more specifically located by survey and location maps" at a later date. Attachment A, Page 6 (emphasis added). In fact, the City's own engineering drawings referenced in the Conveyance and City engineering drawings created years later identify this line as a City drainage facility (Attachments B and C). Furthermore, the City conceded that it owns this portion of the MS4 during the Shipyard Sediment Site administrative proceedings. Attachment D ("[T]he City storm drain system enters the NASSCO leasehold at the foot of 28th Street and terminates at the southeasterly corner" where it "discharges into Chollas Creek" at the SW9 outfall). The City's ownership and operation of this MS4 is beyond dispute.[1] Additionally, the Tidal Prism area lies upstream of the tidelands boundary and is within the City of San Diego and U.S. Navy jurisdictions.

It is possible that the Regional Board named the District due to the District's status as a Co-permittee on the municipal MS4 permit, Order No. R9-2013-0001 ("MS4 Permit"). However, this is inappropriate. The law is clear: the District is not responsible for discharges from portions of an MS4 that it does not own or operate, even if portions of those facilities fall within its jurisdiction. *See* 33 U.S.C. 1316(a)(4) ("owner or operator" defined as "any person who owns, leases, operates, controls, or supervises a source"); 40 C.F.R. 122.26(a)(3)(vi) ("Co-permittee need only comply with permit conditions relating to discharges from the municipal separate storm sewers *for which they are operators*.") (emphasis added); State Board Order No. WQ 2015-0075, at 66 ("Permittees that have commingled MS4 discharges need only comply with permit conditions relating to discharges from the MS4 *for which they are owners or operators*.") (emphasis added). Thus, Co-permittee status without more does not render the District an owner or operator of all MS4 covered by the permit and does not constitute a valid reason to direct the District to conduct an investigation within Chollas Creek. *See* MS4 Permit Paragraph 2 ("The federal regulations make it clear that the Co-permittees need only comply with permit conditions relating to discharges from the MS4s for which they are operators (40 CFR 122.26(a)(3)(vi))"; State Board, Order No. WQ 2015-0075, at 67 ("joint responsibility in an MS4 Order is only appropriate if the ultimate responsibility for addressing an exceedance rests with those permittees

[1] The District has identified a single minor storm drain within its jurisdiction that drains approximately 870 ft² of non-industrial property in the vicinity of Chollas Creek. The drain appears to lead to a storm water line underneath Harbor Drive owned by the City that appears to be non-operational or potentially abandoned. In any event, the location of this drain does not render the District an owner or operator of an MS4 relevant to the investigation directed by the Order.

that actually cause or contribute to the exceedance in question."). Requiring the District to participate in this investigation would improperly require the District to address contamination caused by others.

Because the District does not own or operate any portion of the MS4 discharging to the Mouth of Chollas Creek, it should not be named to the Order. The draft Order should be revised to reflect the true ownership of MS4 facilities discharging to Chollas Creek and directed to those responsible for Investigation Area contamination.

b. The Regional Board Should Look To NASSCO To Address Any Contamination Caused By Its Operations

The draft Order identifies NASSCO as a source of pollutant discharges in Chollas Creek (Finding 12). NASSCO has been the exclusive operator of the shipbuilding and repair facilities at the current location since before the District came into existence. *See* Cleanup and Abatement Order No. R9-2012-0024, Finding 2. If NASSCO is in fact responsible for contamination within the Investigation Area, the Regional Board should look to NASSCO to address that contamination.

It is the long-established practice of the State Board to hold a non-discharging public entity landlord responsible for compliance only after the primary discharger has failed to perform or comply with its administrative obligations. *See* Petition of Wenwest, WQ 92-13; Petition of Schmidl, WQ 89-1; Petition of Forest, WQ 87-5. It has also been the Regional Board's practice not to order the District to participate in investigations of contamination caused by others, even if located within the District's jurisdiction. *See* Attachment E, Letter from James G. Smith, Regional Board to Gene Matsushita, Lockheed Martin (November 19, 2012). Indeed, it would be improper for the Regional Board to assign liability for contamination caused by private parties to the public trustee, especially if the only basis for this liability shift were the fact that the location of the contamination is land held in trust.

Comments Submitted With Other Stakeholders:
The following comments have been discussed with the other stakeholders identified on the draft Order; the District is in general agreement with these points.

2. Limit The Investigative Order To Phase One Elements Only. The District is in agreement with other stakeholders that this draft Order should be limited to Phase One elements. It is recommended that all actions and deadlines relating to Phase Two be removed. Including Phase Two in this initial Order appears to be premature, as the stakeholder roles, phase design, and implementation efforts in the second phase are reliant on Phase One findings. As such, determination of potential work elements and the stakeholder roles in Phase Two cannot be determined at this time.

3. Proposed Timelines Should Be Extended. The District agrees with the other stakeholders that the timeline for Phase One deliverables be extended. Developing a well-designed and comprehensive Phase One Work Plan and Quality Assurance Project Plan (QAPP) is a complex process that involves collaboration amongst the stakeholders on work products, contracting mechanisms and cost sharing, as well as

discussions with the Regional Board. The timeline in the Order does not provide adequate time to develop the aforementioned documents and incorporate any revisions suggested by Regional Board staff.

In addition, the Order's timeline should be extended to take into account field efforts, time to perform data analysis, and development of a report. The Order currently states that the Work Plan is due on November 19, 2015, and the Sediment Chemistry Assessment Report (Report) is due on August 31, 2016. The District respectfully requests that the timeline be extended as follows:

- Work Plan due March 30, 2016;
- Report due March 30, 2017.

This request is based on the understanding that the most appropriate time to assess ambient conditions is during summer months (May September). Monitoring in the summer of 2016 would then enable stakeholders to obtain monitoring results in the fall of 2016, and present findings in a report the following spring (2017).

4. Identify A Work Plan Approval Process. The District recommends that the final Order include language clarifying the Regional Board approval process for the Phase One Work Plan. The final Order should specify the review process and time period by which the Regional Board will review and approve the Work Plan. To avoid potential confusion or unnecessary delay, the District strongly recommends that the final Order provide at least a 90-day Work Plan review and approval process. In addition, the Order should clarify that the Regional Board will indicate concurrence with the Work Plan if no comments are received by the end of the 90-day period so the Work Plan implementation can begin.

5. Provide Clear Delineation of the Tidal Prism. The District agrees with the other stakeholders that the Order should define the geographical extent of the Chollas Creek Tidal Prism, similarly to the delineation of the Mouth of Chollas Creek. While the draft Order discusses the Chollas Creek Tidal Prism, the description of the geographical extent of the investigation does not clearly identify that the tidal prism is part of the overall Chollas Creek study area.

   The Investigation Area is comprised of two distinct segments: 1) the Mouth of Chollas Creek and 2) the Chollas Creek Tidal Prism. Because the Order calls for an investigation of the Tidal Prism, the tidal prism area should be clarified in the final Order and include a figure depicting the boundaries of the Chollas Creek Tidal Prism.

Factual Corrections to the Order

The District has reviewed the draft Order and the information relating to land ownership, leases, and jurisdictional authorities within the Chollas Creek drainage area. Based upon review of records of land ownership and leases, the District requests that the items below be corrected as detailed herein.

6. MS4 Ownership Operation. Findings 7 and 10 should be revised to reflect the fact that the District does not own or operate the MS4 discharging to Chollas Creek.

7. Tidal Prism. The District requests that Finding 3 be revised to correct the statements relating to the Tidal Prism, as follows:

   a) Replace the "San Diego Unified Port District" with the "City of San Diego" for jurisdictional ownership.

   b) Include a map of the Tidal Prism area within the body of the draft Order.

8. U.S. Navy and Nassco Leased Parcels. The draft Order (Findings 12 and 13) identifies the land owners for portions of the Chollas Creek Mouth. In particular it states that the Nassco facility is leased from the District. The draft Order does not state that Nassco also leases a portion of their facility from the U.S. Navy. The U.S. Navy is the land owner for areas on both sides of the Chollas Creek Mouth. The portion of U.S. Navy property on the northern side of the Chollas Creek Mouth is leased to Nassco. The District requests the following corrections to the draft Order:

   a) Revise the draft Order to identify that Nassco leases land from both the District and the U.S. Navy(Page 7), and

   b) Include correlating language on page 9 to indicate that the U.S. navy leases land to Nassco.

The District remains firm in its commitment to conduct operations and manage resources in an environmentally sensitive and responsible manner. As such, the District believes that efforts such as this Chollas Creek investigation supports the Regional Board's overarching efforts to develop a strategy that will achieve healthy waters in San Diego Bay. The District, as an interested party, is encouraged by the Regional Board's desire to investigate and address contamination within this area. We encourage you to continue to move these investigations forward in a manner that is consistent with the San Diego Bay Strategy.

Thank you again for this opportunity to provide comments on this important project. If you have any questions please contact Karen Holman at (619) 725-6073.

Sincerely,

Jason H. Giffen
Director, Environmental and Land Use Management

Attachments

Attachment A	February 16, 1963. City of San Diego Conveyance Document
Attachments B and C	City of San Diego Engineering Dept. Drainage Drawings
Attachment D	July 15, 2004 Report for the Investigation of Exceedances of the Sediment Quality Objectives at National Steel and Shipbuilding Company Shipyard
Attachment E	November 19, 2012. Letter from James G Smith Regional Board to Gene Matsushita Lockheed Martin

D2#965199 cc: John Carter, Jason H Giffen, Karen Holman, Paul Brown

Attachment A

PORT OF SAN DIEGO
P.O. Box 488
San Diego 12, Calif.

(86)
ORIGINAL

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 75
FILED FEB 15 1963
MICROFILM NO. 8
OFFICE OF THE CLERK

CONVEYANCE

THE CITY OF SAN DIEGO, a municipal corporation, in the County of San Diego, State of California, hereby conveys, without warranty, to the SAN DIEGO UNIFIED PORT DISTRICT, a Public Corporation established pursuant to the provisions of the San Diego Unified Port District Act, all those lands situate within the City of San Diego, County of San Diego, State of California, which are more particularly described as follows:

PARCEL I:

All those lands lying between the line of mean high tide of San Diego Bay and the pierhead line of said bay, and between the prolongation into said bay to the pierhead line of the northerly line of the United States military reservation on Point Loma and the prolongation into said bay to the pierhead line of the southwesterly line of the United States Naval Training Center and reserving therefrom such roadways and easements as hereinafter described, such boundaries, roadways and easements being shown in detail upon engineering drawings Nos. 1, 2, 2a, 2b, 2c, 3, 3a, 3b, 3c, 3d, 3e, 3f, 3g, 4, 4a, 4b, 14a, 14b, 14c, & 15a, 15b, 15c, 16a, 16b, 16c.

PARCEL II:

All those lands lying between the line of mean high tide of San Diego Bay and the pierhead line of said bay, and between an irregular westerly boundary being an irregular line beginning at Government Station 488 on the combined pierhead and bulkhead line and proceeding northerly; thence easterly; thence northerly; thence easterly; thence northeasterly along the boundary of the United States Marine Corps Base to the point where such boundary intersects the mean high tide line in the vicinity of Washington Street and Pacific Highway, and the northwesterly boundary lines of the United States Naval Station between the mean high tide line and the United States Pierhead Line being an irregular line, omitting therefrom the United States Coast Guard Base lying southerly of North Harbor Drive and in the vicinity of Lindbergh Field; and the Civic Center lying between North Harbor Drive and Pacific Highway and between Grape and Ash Streets; and the United States Naval Supply Center consisting of four parcels, (1) the block lying between Broadway and "E" Street and between North Harbor Drive and Pacific Highway, (2) the block lying between "B" and "F" Streets and between North Harbor Drive and Pacific Highway, (3) a portion of a block between "F" and Market Streets and North Harbor Drive and Pacific

I hereby certify that, if impressed with the seal of the San Diego Unified Port District, this is a true copy of the original record filed in the Office of the District Clerk of the San Diego Unified Port District as Document No 75.

By _____ Date 9/22/2010 No. Pages: 8

Timothy A. Deuel
Deputy District Clerk

Highway, (4) The United States Naval Pier at the foot of "G" Street; and adding portions of fractional blocks 18 and 19, New San Diego, according to the Map thereof No. 456, lying above the mean high tide line; such boundaries, roadways, easements and omissions being shown in detail upon engineering drawings Nos. 4, 5, 6, 6a, 6b, 6c, 7, 8, 8a, 8b, 9, 9a, 9b, 9c, 9d, 9e, 10, 10a, 10b, 10c, 10d, 10e, 10f, 10g, 10h, 11, 12, 12a, 13, 13a, 13b, 13c, 14c, 14d 14e, 14f, 15c, 15d, 15e, 15f, 16e, 16f, 14g, 15g, 16c, 16d, 16g.

The City retains from the conveyance of Parcel II the right of control and possession of that block surrounded by Pacific Highway on the west, Kettner Boulevard on the east, Market Street on the north, and Harbor Drive on the south, for a Police Station and for so long as the City continues to use it for that purpose.

PARCELS III through XIV:

The following described uplands lying above the line of mean high tide of San Diego Bay:

(Parcel III):

Lot 8, Block 135, La Playa, Couts Miscellaneous Map No. 37, lying above mean high tide line, and as shown on engineering drawing No. 2a.

(Parcel IV):

Portion Closed Street, Adjacent Lot 2, Block 154, La Playa, Couts Miscellaneous Map No. 37, lying above mean high tide line, and as shown on engineering drawing No. 2b.

(Parcel V):

Portions of Right of Way Lots 73 and 74 of Middletown, according to Jackson's Map of Middletown, and as shown on engineering drawing No. 8a.

(Parcel VI):

Portion of Lot 6, Block 272 of Middletown, according to Jackson's Map of Middletown, and as shown on engineering drawing No. 8b.

(Parcel VII):

Lot E, Block 22, New SanDiego, according to the Map thereof No. 456, lying above the mean high tide line.

(Parcel VIII):

Lot E, Block 23, New San Diego, according to the Map thereof No. 456, filed in the office of the County Recorder, said County of San Diego, excepting therefrom that portion, if any, lying below the mean high tide line of the Bay of San Diego, and excepting therefrom the Right of Way of the Atchison, Topeka and Santa Fe Railway Company.

(Parcel IX):

Portion of Lot F, Block 23, New San Diego, lying above the mean high tide line, and as shown on engineering drawing No. 10e.

(Parcel X):

All of Block 31, New San Diego, Map No. 458.

(Parcel XI):

Portion of Pueblo Lot 1164 northwesterly of Sampson Street, as shown on engineering drawing No. 12a.

(Parcel XII):

All of Block 45, Roseville, Map No. 165, lying above the mean high tide line.

(Parcel XIII):

Lot 6, Block 67 of Roseville, according to Map No. 165 of Roseville, lying above the mean high tide line, as shown on engineering drawing No. 13a.

(Parcel XIV):

The portions of Fractional Block 64 and the Unnumbered Fractional Block in San Diego Land and Town Company's Addition, according to record map thereof No. 379, lying between the mean high tide line of the Bay of San Diego, and the southerly right of way line of the Atchison, Topeka and Santa Fe Railroad, as shown on engineering drawing No. 13a.

ROADWAYS RESERVED

The City of San Diego specifically reserves easements for street purposes, as more particularly set forth hereinafter, including within such reservations the right to construct, maintain and operate all utilities and the right to grant franchises on such streets and to require franchise payments to The City of San Diego as authorized by the Charter of The City of San Diego:

PARCEL A: (Roads within Parcel I described above)

For San Antonio Avenue - an easement over that portion included between the mean high tide line and the prolongation of the easterly line of San Antonio Avenue as it now exists, as shown on engineering drawing No. 2.

For Talbot Street - an easement 70' in width extending from the mean high tide line to the southeasterly line of Anchorage Lane, as shown on engineering drawing No. 1f.

For Canyon Street - an easement 70' in width extending from the mean high tide line to the southeasterly line of the most southeasterly line of Anchorage Lane, as shown on engineering drawing No. 3a.

PORT020527

For Anchorage Lane - an easement 48' in width between the northeasterly line of Talbot Street and the southwesterly line of Canyon Street, and an easement 55' in width between the northeasterly line of Canyon Street and the southwesterly line of Byron Street, as shown on engineering drawings Nos. 3e and 3f.

For Byron Street - an easement 60' in width between the mean high tide line and the traffic circle at Byron Street and Yacht Harbor Drive, as shown on engineering drawings Nos. 3c, 3d.

For Yacht Harbor Drive - an easement of variable widths as shown on engineering drawings Nos. 2c, 2d, 2e, 4b.

For the traffic circle at Byron Street and Yacht Harbor Drive - easements of variable widths as shown on engineering drawing No. 2c.

For the traffic circle at the southwesterly end of Yacht Harbor Drive - easements of variable widths as shown on engineering drawing No. 2c.

For Garrison Street - an easement 70' in width extending from the mean high tide line to the northwesterly line of Scott Street, as shown on engineering drawing No. 3g.

For Scott Street - an easement 70' in width extending from the point where the mean high tide line intersects the southeasterly line of Scott Street to the southwesterly boundary of North Harbor Drive, the variable widths of such easement as shown on engineering drawing No. 3g.

For North Harbor Drive - an easement 167.5' in width extending easterly from the mean high tide line to the southwesterly line of the United States Naval Training Center, as shown on engineering drawing No. 4a.

For Lowell Street - an easement 73.5' in width extending southeasterly from the mean high tide line to the northerly line of North Harbor Drive, as shown on engineering drawing No. 4a.

PARCEL B: (Roads within Parcel II described above)

For 28th Street - an easement 126' in width extending from the mean high tide line to the northerly line of Harbor Drive, as shown on engineering drawing No. 13d.

For 8th Avenue - an easement 80' in width extending from the mean high tide line to the northeasterly line of Harbor Drive, as shown on engineering drawing No. 11.

For 5th Avenue - an easement 80' in width extending from the mean high tide line to the northeasterly line of Harbor Drive, as shown on engineering drawing No. 11.

For Kettner Boulevard - an easement 75' in width extending southerly from the mean high tide line to the northeasterly line of Harbor Drive, as shown on engineering drawing No. 10.

PORT020528

Broadway - an easement 125' in width extending from the westerly line of Pacific Highway to a line parallel to and 200' easterly from the United States bulkhead lines, as shown on engineering drawing No. 10a.

For Ash Street - an easement 80' in width extending from the westerly line of Pacific Highway to the easterly line of North Harbor Drive, as shown on engineering drawing No. 9a.

For Grape Street - an easement 80' in width extending from the westerly line of Pacific Highway to the easterly line of North Harbor Drive, as shown on engineering drawing No. 9b.

For Hawthorn Street - an easement 80' in width extending from the mean high tide line to the easterly line of Pacific Highway; an easement 80' in width extending from the northwesterly line of Pacific Highway to the northeasterly line of North Harbor Drive, as shown on engineering drawing No. 9.

For Ivy Street - an easement 80' in width extending from the mean high tide line to the easterly line of Pacific Highway, as shown on engineering drawing No. 9.

For Laurel Street - an easement 80' in width extending from the mean high tide line to the northeasterly line of Pacific Highway; an easement 80' in width extending from the southwesterly line of Pacific Highway to the northerly line of North Harbor Drive with a variable width at the Harbor Drive end of said easement, as shown on engineering drawings Nos. 9b, 9a.

For Palm Street - an easement 80' in width extending from the mean high tide line to the northeasterly line of Pacific Highway, as shown on engineering drawing No. 8.

For Sassafras Street - an easement 80' in width extending from the mean high tide line to the northeasterly line of Pacific Highway, as shown on engineering drawing No. 8.

For Vine Street - an easement 80' in width extending from the mean high tide line to the northeasterly line of Pacific Highway, as shown on engineering drawing No. 8.

For North Harbor Drive - an easement 200' in width extending from the westerly boundary line of Parcel II to the easterly line of the United States Coast Guard Base; an easement 179' in width extending from the easterly line of the United States Coast Guard Base to the vicinity of the prolongation of Date Street; an easement 165' in width extending from the vicinity of the prolongation of Date Street to the southerly line of Ash Street, as shown on engineering drawings Nos. 4, 5, 6, 7, 9.

For Harbor Drive - an easement of variable widths extending from the easterly line of Pacific Highway to where said street intersects the mean high tide line in

the vicinity of the prolongation of 16th Street; an easement providing for a right of way 120' in width from the vicinity of Schley Street to the vicinity of the United States Naval Repair Base; the variable widths of such easements as shown on engineering drawings Nos. 10, 11, 13.

For Pacific Highway - an easement providing for a right of way of variable widths between that point where the mean high tide line intersects the southwesterly line of Pacific Highway in the vicinity of Washington Street and the southerly line of Harbor Drive, as shown on engineering drawings Nos. 8, 9, 10.

For all the above-mentioned streets - an easement of such width for intersection purposes at the intersection of any of the aforementioned streets with each other or with any other roadway and as shown on the appropriate engineering drawings in Exhibit "A."

OTHER EASEMENTS RESERVED

City reserves easements in Parcels I through XIV for all existing water, sewer and drainage facilities, known or unknown, the location of known existing utilities being designated by engineering drawings Nos. 14a - 14g; 15a - 15g; 16a - 16g; unknown easements shall be more specifically located by survey and location maps of such easements shall be prepared, which maps shall become a part of this conveyance as a subsequent exhibit when approved by District and City.

QUITCLAIM

Parcel XV:

City quitclaims all its right, title and interest in all those submerged lands in the Bay of San Diego bayward of the pierhead line within the city limits of said city, excepting those lying easterly of the jetty and southerly of the peninsular of San Diego; and southerly of the common boundary of the City of San Diego and the City of National City as shown on engineering drawing No. 1.

EXHIBITS

All engineering drawing numbers referred to in this document under Parcels I through XIV; Roadways Parcels A and B; and Easements, by reference thereto are incorporated herein and attached hereto as Exhibit "A".

PORT020530

IN WITNESS WHEREOF, The City of San Diego has caused this conveyance to be executed by its Mayor and City Clerk, pursuant to resolution of the Council authorizing such execution, this 14th day of February, 1963.

THE CITY OF SAN DIEGO

By _____
Mayor of said City

ATTEST:

_____
City Clerk of said City

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN DIEGO)

On this 14th day of February, 19 63, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared CHARLES C. DAIL, known to me to be the Mayor, and PHILLIP ACKER, known to me to be the City Clerk of The City of San Diego, the municipal corporation that executed the within instrument, and known to me to be the persons who executed the within instrument on behalf of the municipal corporation therein named, and acknowledged to me that such municipal corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal; in the County of San Diego, State of California, the day and year in this certificate first above written.

Helen M. Willig
Notary Public in and for the County of San Diego, State of California
HELEN M. WILLIG

(SEAL)
My Commission Expires
Sept. 11, 1966

FILE/PAGE NO. 28389
RECORDED REQUEST OF
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OFFICIAL RECORDS
SAN DIEGO COUNTY, CALIF.
A. S. GRAY, RECORDER
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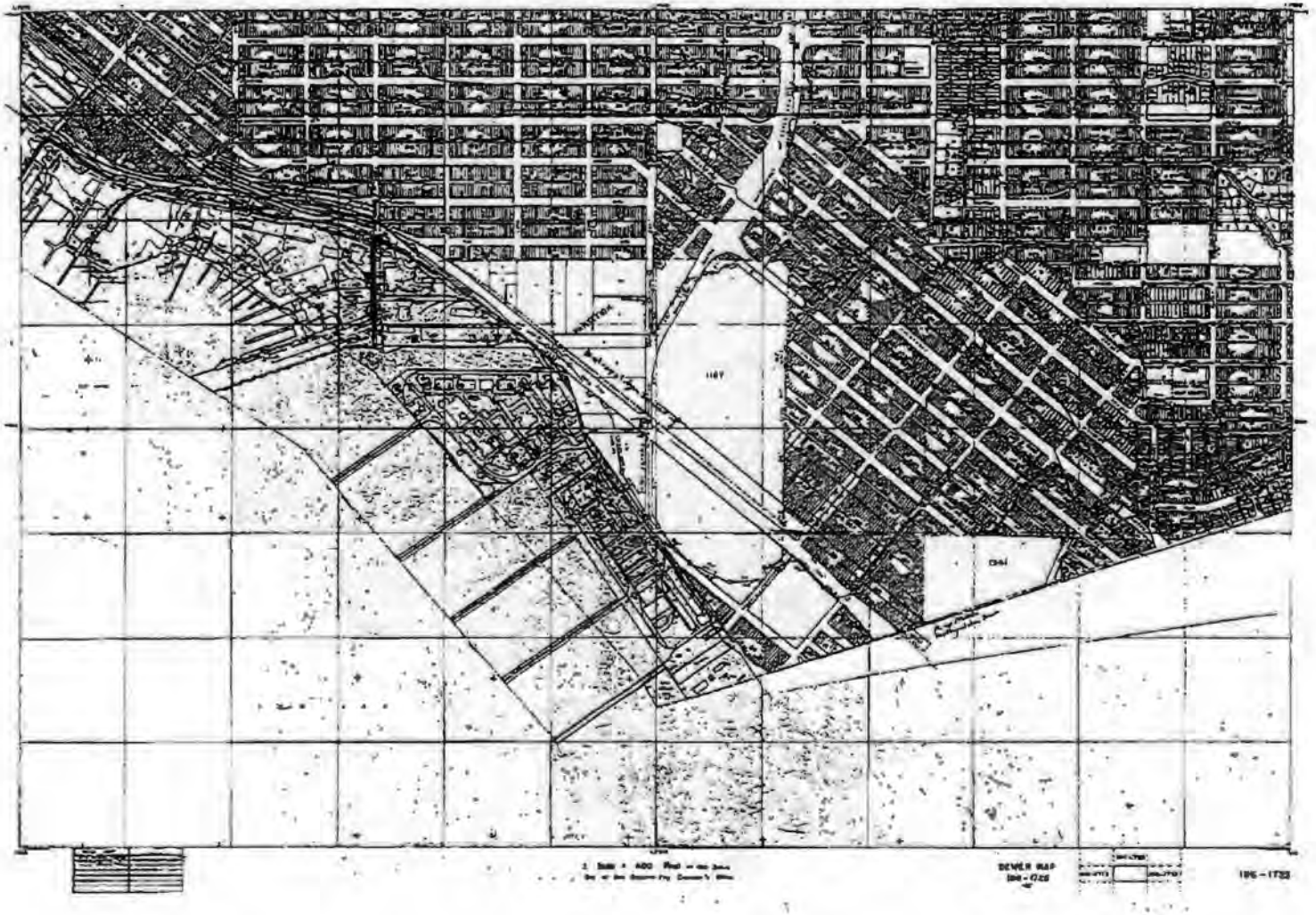
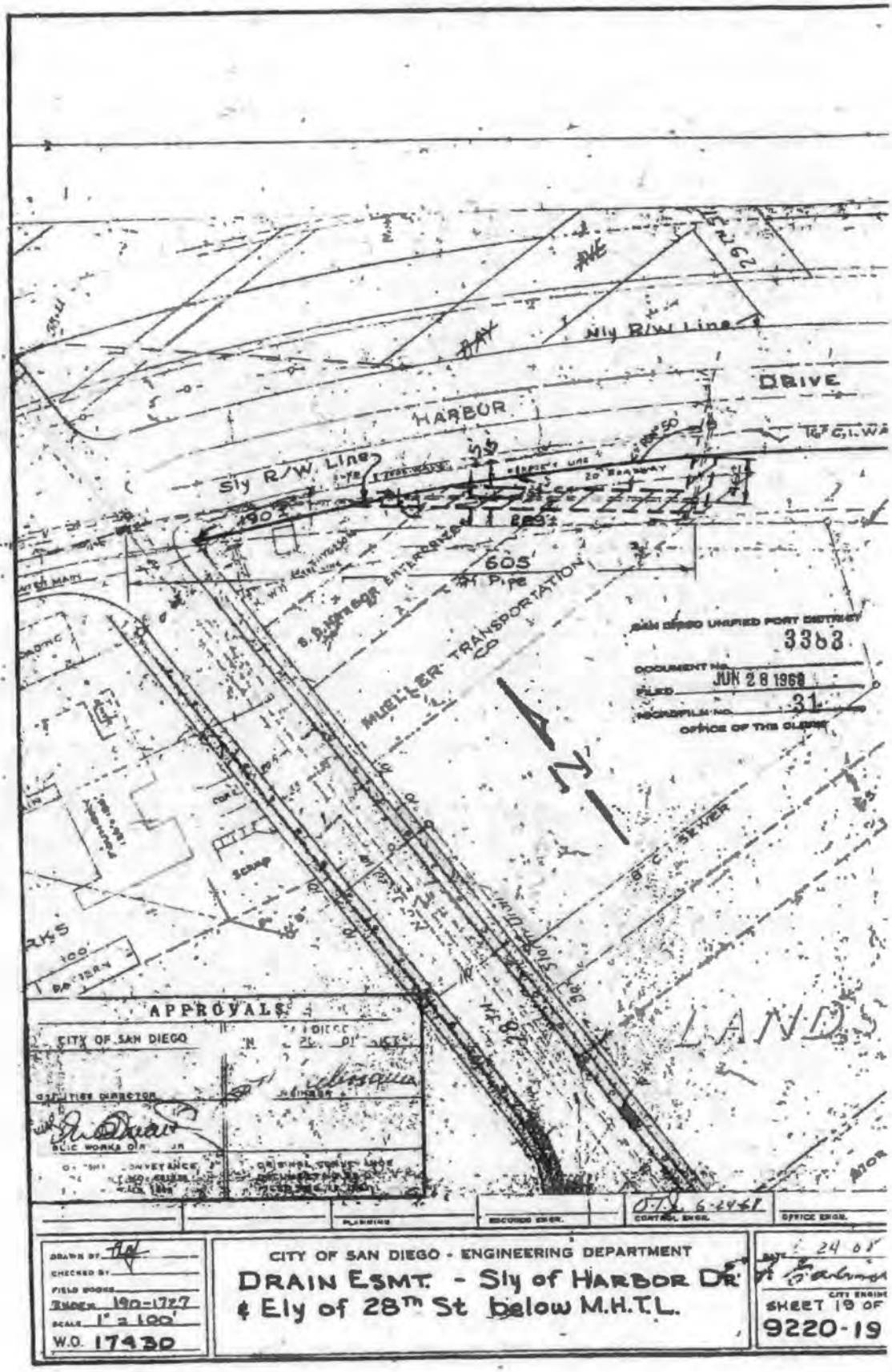
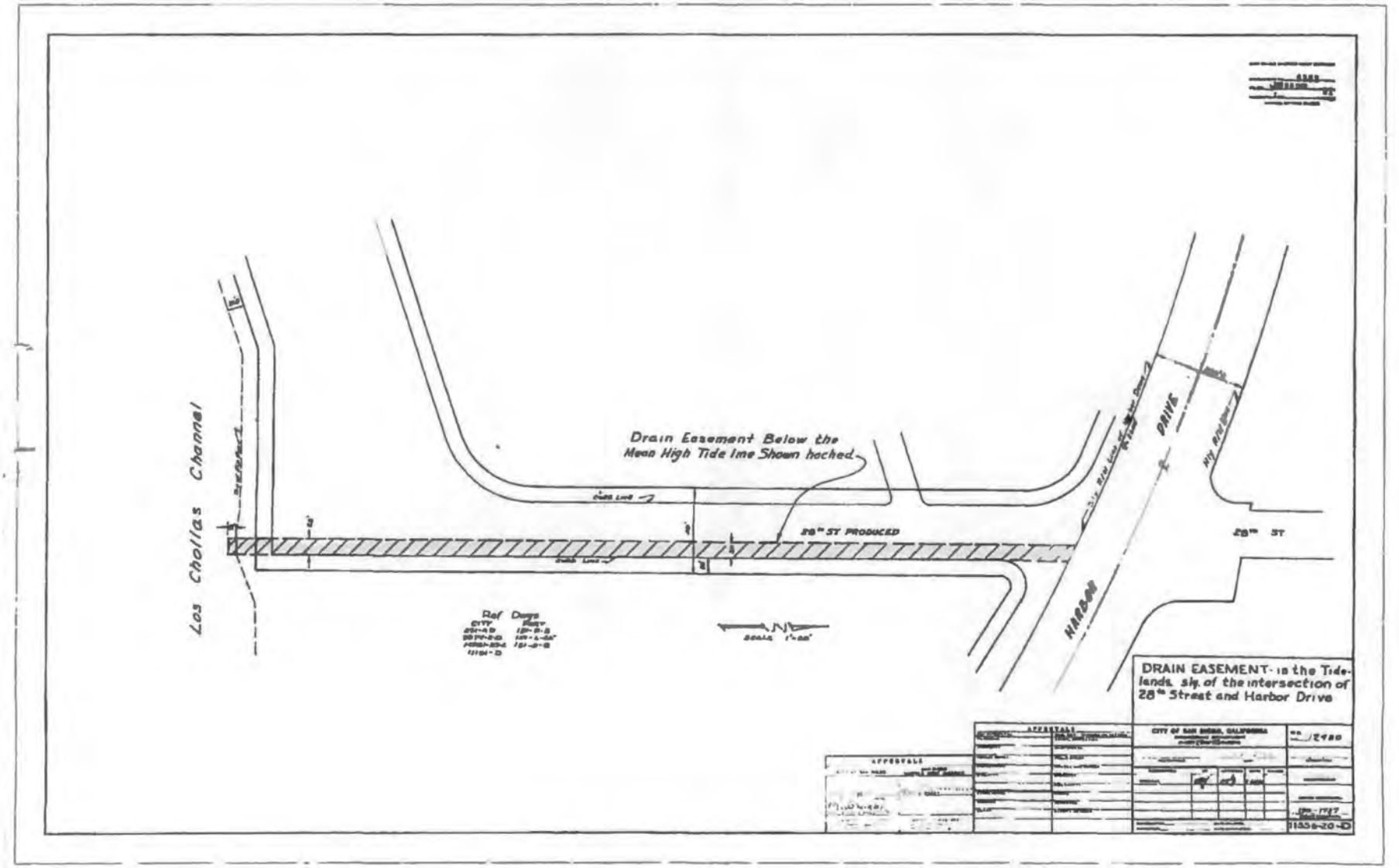
Attachment B



Attachment C




Los Chollas Channel
Drain Easement Below the Mean High Tide line Shown hached
28th ST PRODUCED
28th ST
HARBOR DRIVE
DRAIN EASEMENT - is the Tide-lands s/y of the intersection of 28th Street and Harbor Drive

Attachment D

City of San Diego

REPORT FOR THE INVESTIGATION OF EXCEEDANCES OF THE SEDIMENT QUALITY OBJECTIVES AT NATIONAL STEEL AND SHIPBUILDING COMPANY SHIPYARD

July 15, 2004

Storm Water Pollution Prevention Program
1970 B Street, MS 27A
San Diego, CA 92102

SAR158787

City's records do not contain all storm drain system information from the beginning of the twentieth century. The only historical map available is from 1942 (Attachment 4) The storm drain system is shown as a 4 x 3.5 foot reinforced concrete box along the southerly side of Belt Street in this drawing.

A current storm drain system map is enclosed for your reference as Attachment 5. This map indicates that the City storm drain system enters the NASSCO leasehold at the foot to 28th Street and terminates at the southeasterly corner and discharges into Chollas Creek. This storm drain outfall is referred to as SW9 in NASSCO sediment report map prepared by Exponent, a private company, dated September 23, 2003 (Attachment 6). Our research did not validate the Exponent report that storm drain SW3 is part of the City of San Diego storm drain conveyance system.

Scaled figures delineating tenant boundaries are enclosed as Attachment 7 and entitled NASSCO Shipyard Tenant Information Parcel Animation Supplement. The maps start at with the first tenant on record through 1962. There is a map for every year that a change in boundaries was recorded. Included with each map is a table providing information on the business name, parcel size, business code and lease start and end dates. The Shipyard Business Code spreadsheet (Attachment 8) was developed for color coding of parcel types for viewing of these maps on the enclosed CD (Attachment 9). This CD has instructions on how to open and view the maps in any ArcView program.

3. Monitoring Data Analysis

In order to link sediment to wet weather one should rely on multiple lines of evidence and one of those lines of evidence is to look at gradients to see if a strong gradient signal indicates that sediments are moving out from or into the river channel. The data collected offshore as dry weight concentrations do not provide evidence of this gradient. Second we would expect to see some correlation in the chemistry collected in the urban runoff program monitored samples (wet and dry weather sampling) and the contaminants observed in the sediments.

Historical urban runoff monitoring data both wet and dry seasons suggest signals of copper, zinc, and diazinon in Chollas Creek. Therefore, if there is a link between offshore contaminant of sediments and creek inputs one might reasonably expect to find a gradient of contamination of offshore sediments of these contaminants. Review of the historical sediment monitoring data collected at offshore station locations shows no evidence of a gradient of contamination.

Monitoring data from the Co-Permittee monitoring program was reviewed for this analysis and included sediment samples collected upstream in Chollas Creek and at the mouth of Chollas Creek in San Diego Bay from 1996 to 2000, wet weather data from the mass loading station in Chollas Creek from 1996 to 2004, dry weather data within the Chollas Creek watershed areas MS4 system from 2002 to 2003 (Table 1 and Table 2).

SDR158701

Water Boards

California Regional Water Quality Control Board, San Diego Region

November 19, 2012

In reply refer to / attn:
T10000002642:Janderson

Mr. Gene Matsushita
Sr. Manager, Environmental Remediation
Lockheed Martin Enterprise Business Services
2950 North Hollywood Way, Suite 125
Burbank, CA 91505

Subject: Lockheed Request to Direct the San Diego Unified Port District to Participate in the Investigation at the Marine Terminal and Railway

Mr. Matsushita:

Your letter dated June 18, 2012 requested that the San Diego Unified Port District (Port) be directed to participate in the investigation at the Lockheed Marine Terminal and Railway property. The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) does not routinely add a property owner to an enforcement order as a matter of course unless the Board determines that the property owner had discharged, or caused or permitted a discharge of waste. In this case the Lockheed Martin Corporation, as the owner and operator of the Marine Terminal and Railway facility, and lessee of the property, is primarily responsible for any discharges of waste to soil, groundwater, and to bay sediment from its operation of the Marine Terminal and Railway facility. The Port, as the lessor, did not discharge or cause or permit the discharges of waste from the Marine Terminal and Railway facility to the environment. Therefore, the San Diego Water Board will not direct the Port to participate in the investigation at this property

You also requested that the San Diego Water Board investigate the 48-inch storm water outfall that drains into the Harbor Island East Basin (East Basin). At this time, the San Diego Water Board does not intend to require further investigation of the 48-inch storm drain and outfall. Other than the Tow Basin property, which has been cleaned up, the San Diego Water Board has no knowledge of any other contaminated properties that are or were connected to the 48-inch storm drain that could have contributed contaminated sediment to the East Basin.

In the subject line of any response, please include the reference number **T10000002642:Janderson**. For questions or comments, please contact Mr. John Anderson by phone at (858) 467-2975, or by email Janderson@waterboards ca gov

Respectfully,

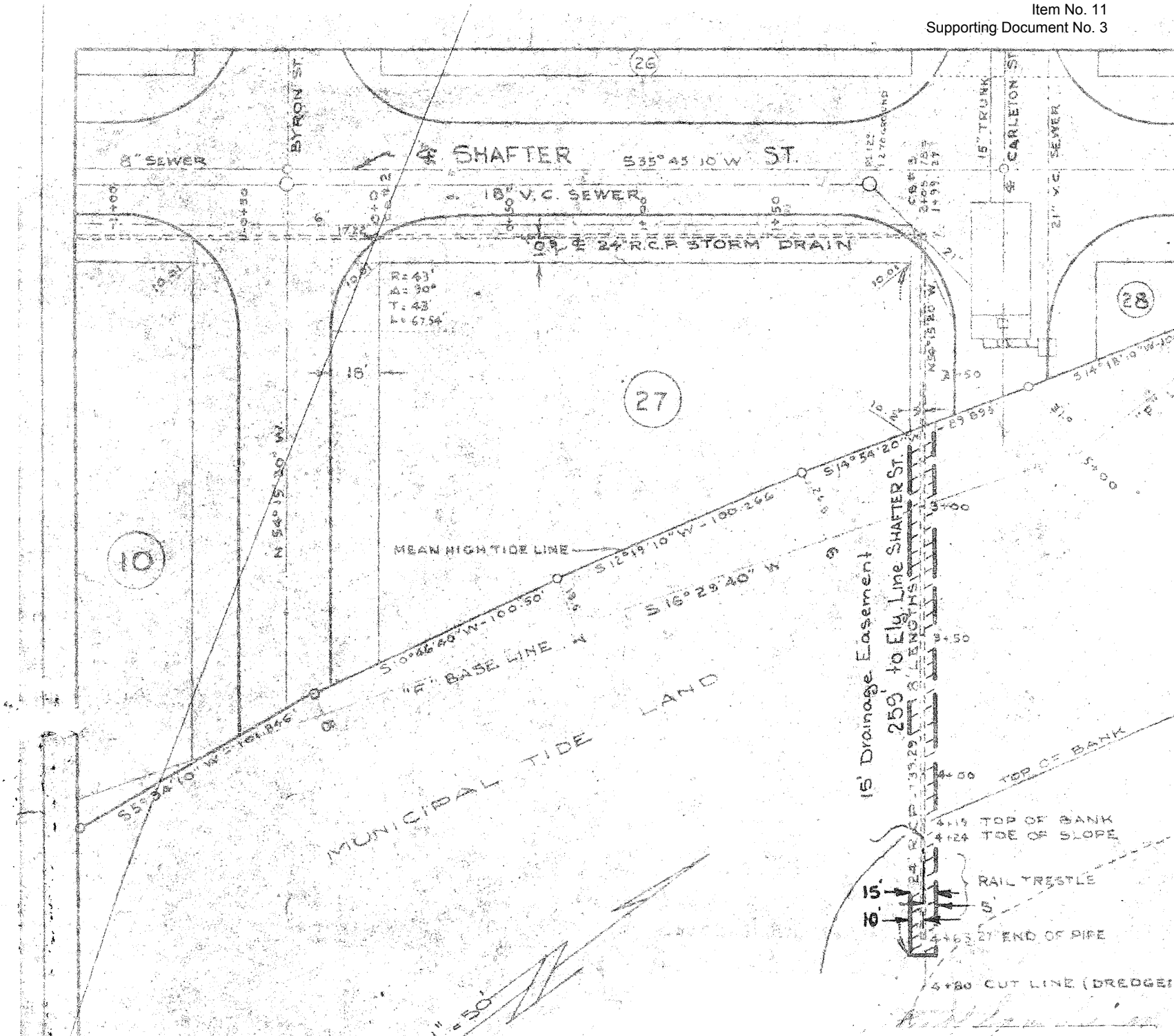
James G. Smith
Assistant Executive Officer

JGS jc jpa

cc via email:

Ms Kara Edewaard, Lockheed Martin, Kara.I.edewaard@lmco com
Mr Bill Hays, Port of San Diego, Bhays@portofsandiego.org
Ms. Karen Holman, Port of San Diego, Kholman@portofsandiego.org

Tech Staff Info & Use	
Order No	**R9-2011-002**
Geotracker Place ID	**T10000002642**



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

15' Drainage Easement below M.H.T.L. shown hatched

		PLANNING	RECORDS ENGR	CONTROL ENGR	OFFICE ENGR.
				O.K. J. C-24-68	

DRAWN BY J.B.
CHECKED BY
FIELD BOOKS 202-1699
SCALE 1" = 50'
WO 17430

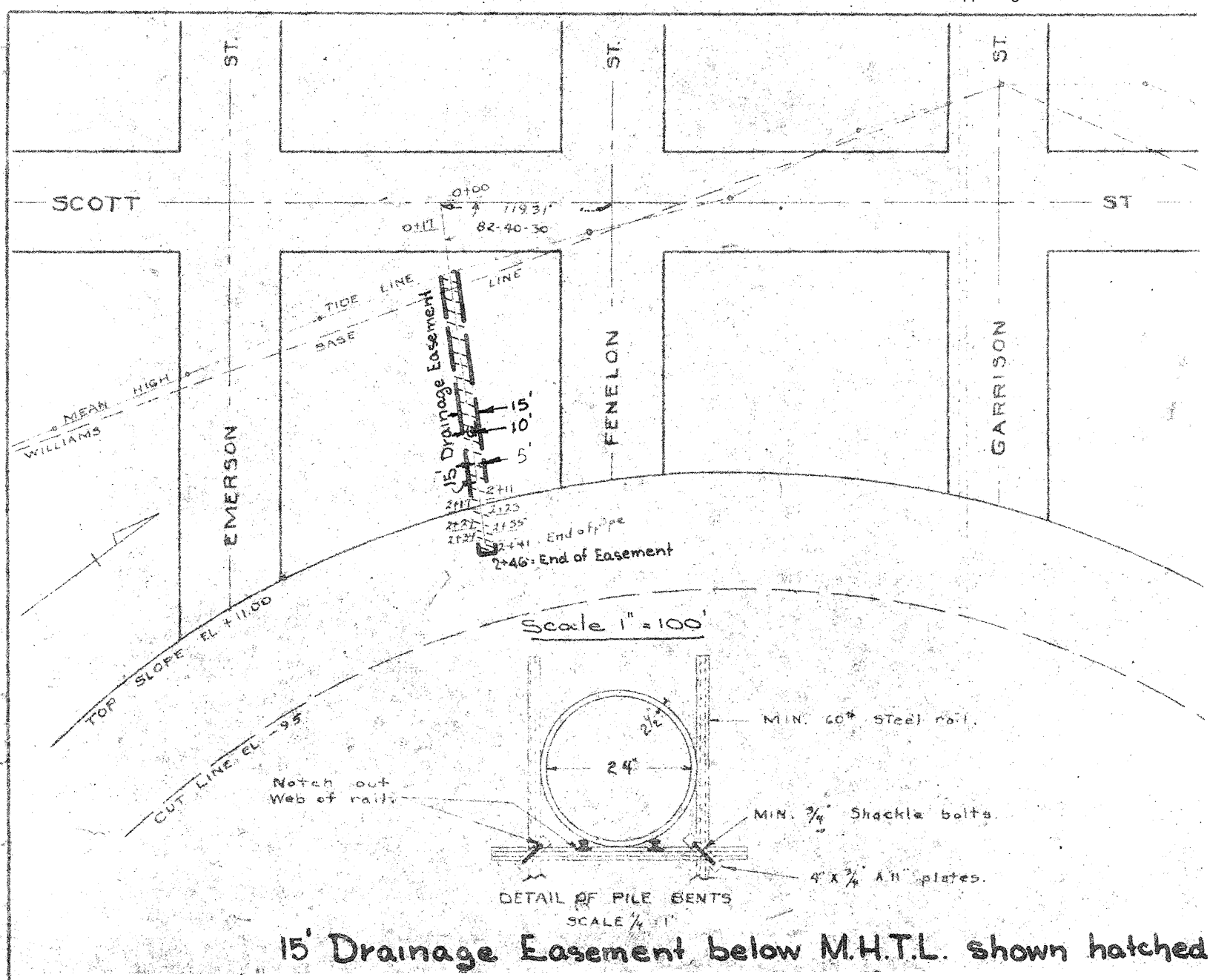
CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

DRAINAGE EASEMENT
Ext. Carleton St., below M.H.T.L.

TIDELANDS

HARBOR DEP 220-MB

DATE 6/20/68
CITY ENGINEER
SHEET 1 OF
9220-1-



15' Drainage Easement below M.H.T.L. shown hatched

SAN DIEGO UNIFIED PORT DISTRICT
3383
DOCUMENT No.
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

APPROVALS

CITY OF SAN DIEGO

SAN DIEGO UNIFIED PORT DISTRICT

PLANNING	RECORDS ENGR.	CONTROL ENGR.	OFFICE ENGR.
		O.J. 6-24-68	

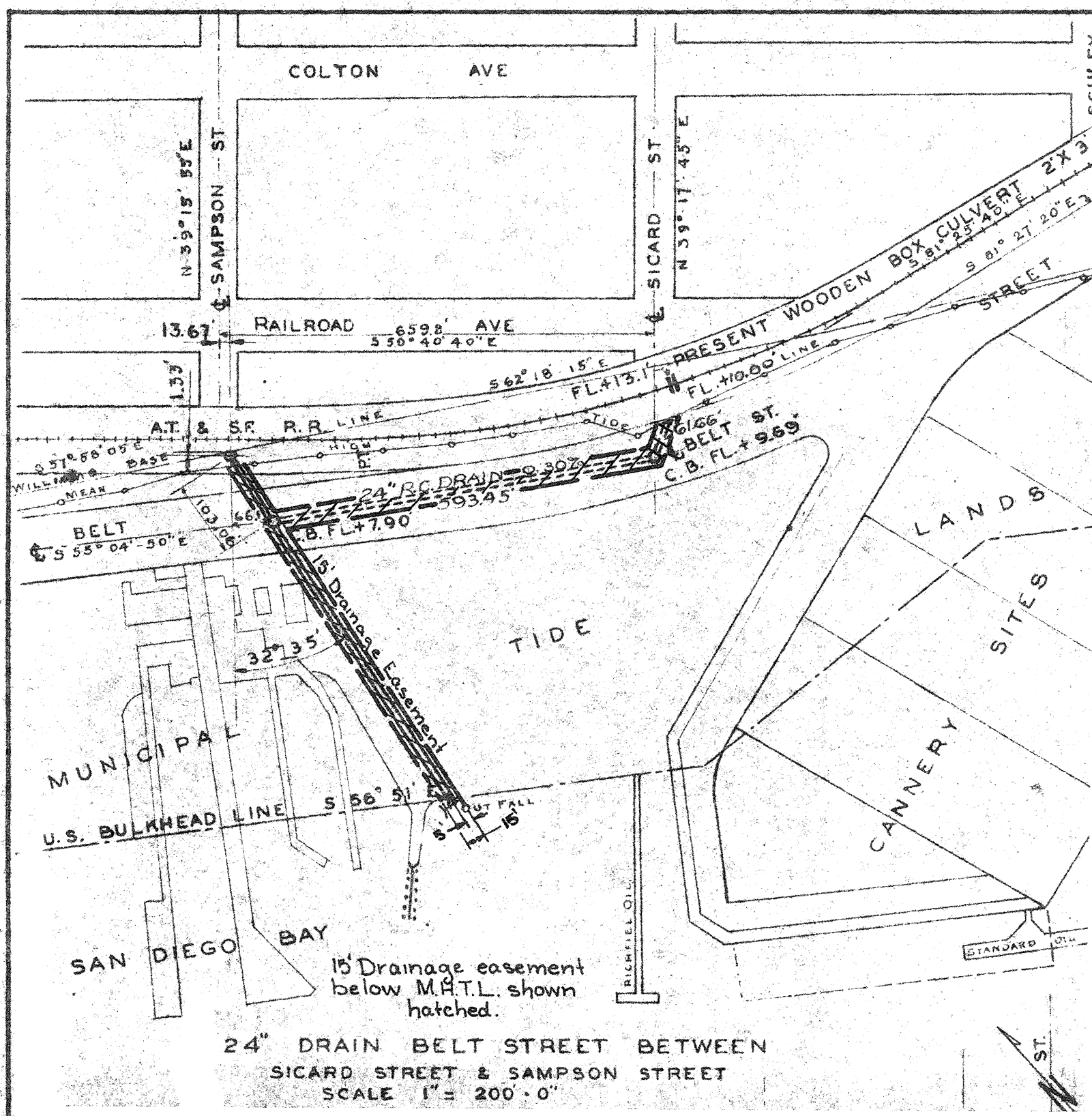
DRAWN BY J.M.
CHECKED BY
FIELD BOOKS 204-1699
SCALE 1" = 100'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
DRAINAGE EASEMENT
119Ft. South of Fenelon below M.H.T.L.
TIDELANDS

DATE 6/24/68
T. Gabrielson
CITY ENGINEER

SHEET 2 OF 19
9220-2-B

HARBOR No. 219-MB



APPROVALS

SAN DIEGO UNIFIED PORT DISTRICT

SAN DIEGO UNIFIED PORT DISTRICT
3383
DOCUMENT No.
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

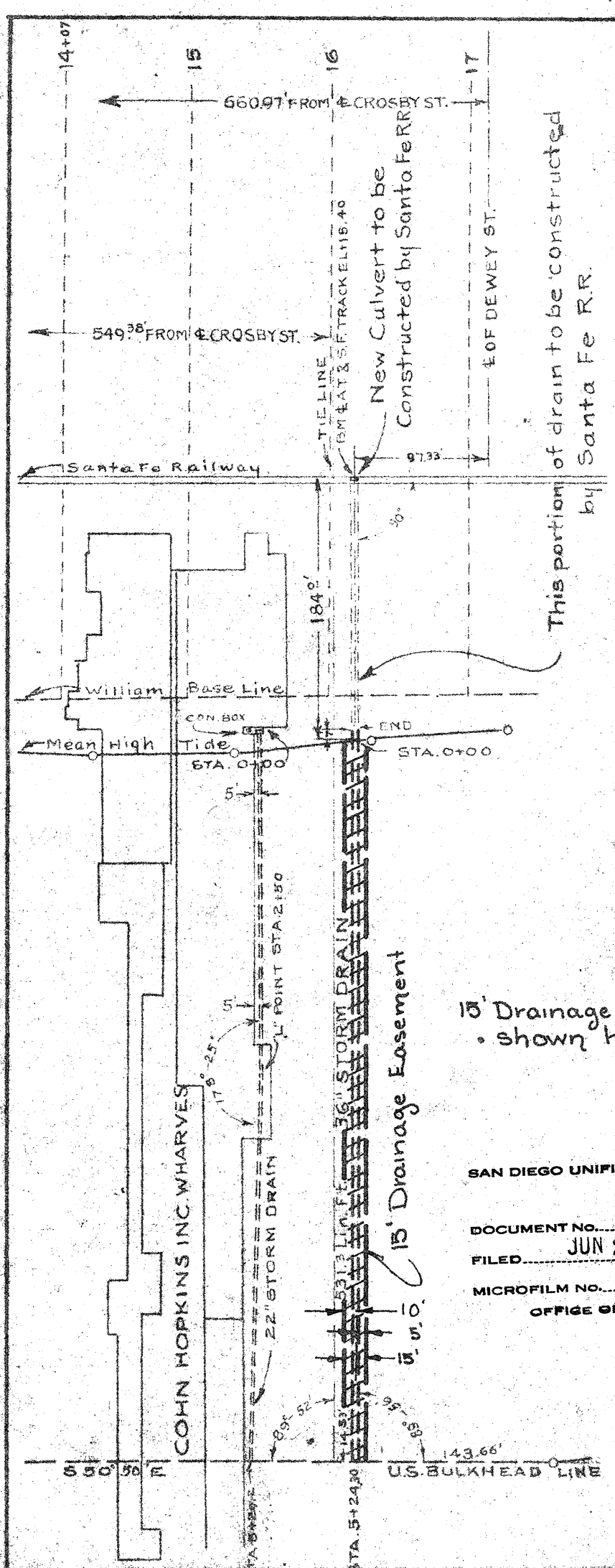
		PLANNING	RECORDS ENGR	CONTROL ENGR	OFFICE ENGR
				O.T.J. 6-24-68	

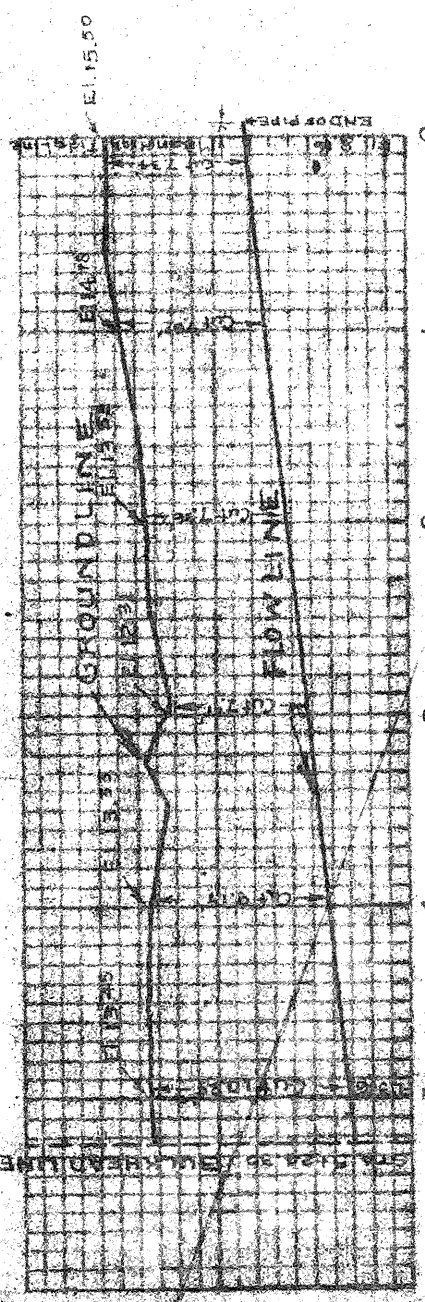
DRAWN BY J.A.
CHECKED BY
FIELD BOOKS 192-1725
SCALE 1" = 200'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
DRAINAGE EASEMENT
S.Wly. of Sampson St. below M.H.T.L.
TIDELANDS

DATE 6/24/68
E. F. Gabriel
CITY ENGR
SHEET 3 OF
9220-3

HARBOR No 68MB





SAN DIEGO UNIFIED PORT DISTRICT
3383
DOCUMENT NO.
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
FOR PUBLIC WORKS DIRECTOR	CHIEF ENGINEER
ORIGINAL CONVEYANCE DOCUMENT NO. [illegible] FILED [illegible]	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1968

PLANNING	RECORDS ENGR.	CONTROL ENGR. 6-24-68	OFFICE ENGR.

DRAWN BY J.A.
CHECKED BY
FIELD BOOKS 192-1723
SCALE 1" = 100'
W.O. 17430.

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

DRAINAGE EASEMENT

S'ly of Dewey St. & E'ly of Crosby St.

TIDELANDS

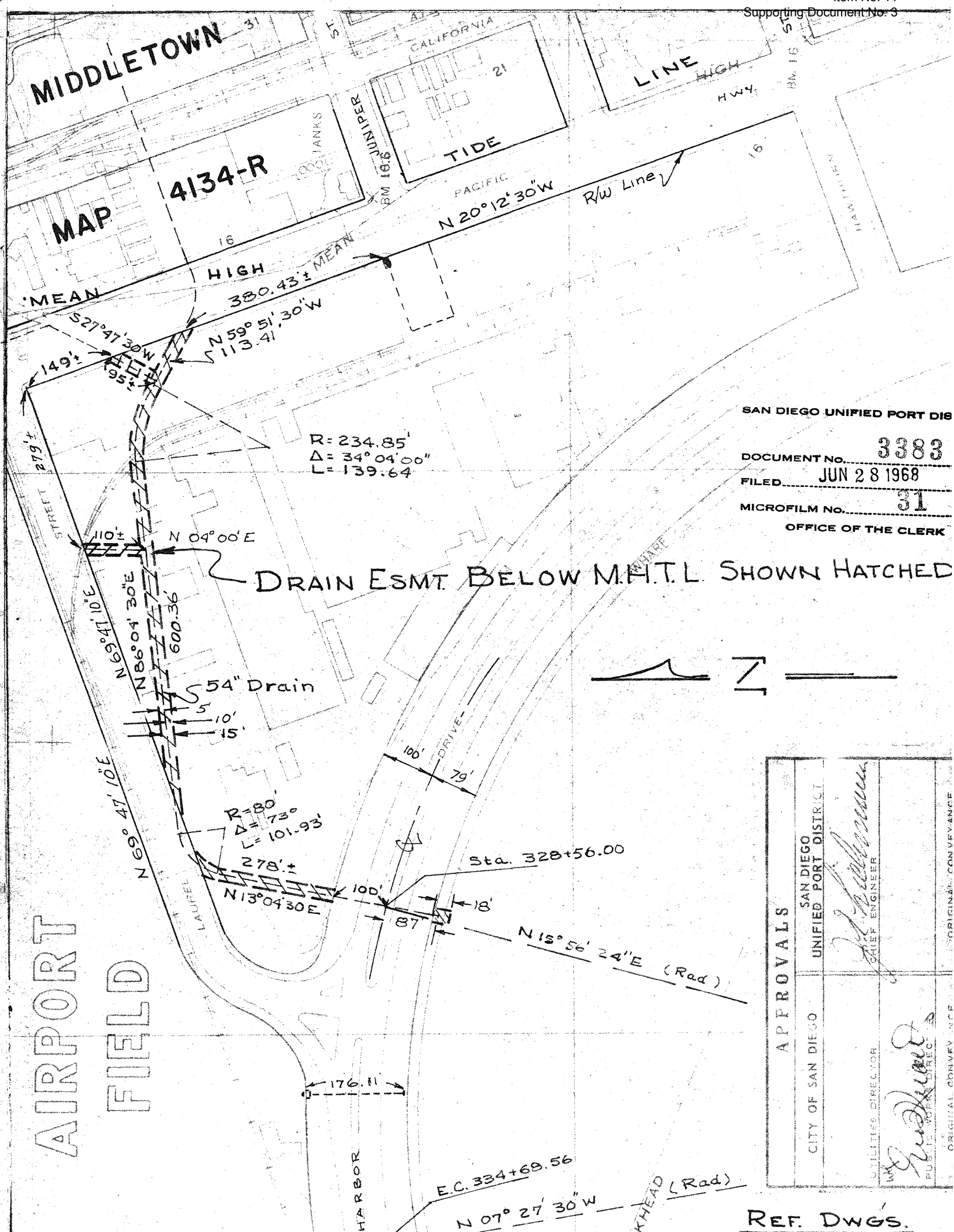
DATE 6-24-68

CITY ENGINEER

SHEET 4 OF 1[illegible]

9220-4-

HARBOR NO. 49MB



DRAWN BY O.T.J. 6-24-68
COORD. INDEX 204-1715
SCALE 1" = 200'
W.O. 17430

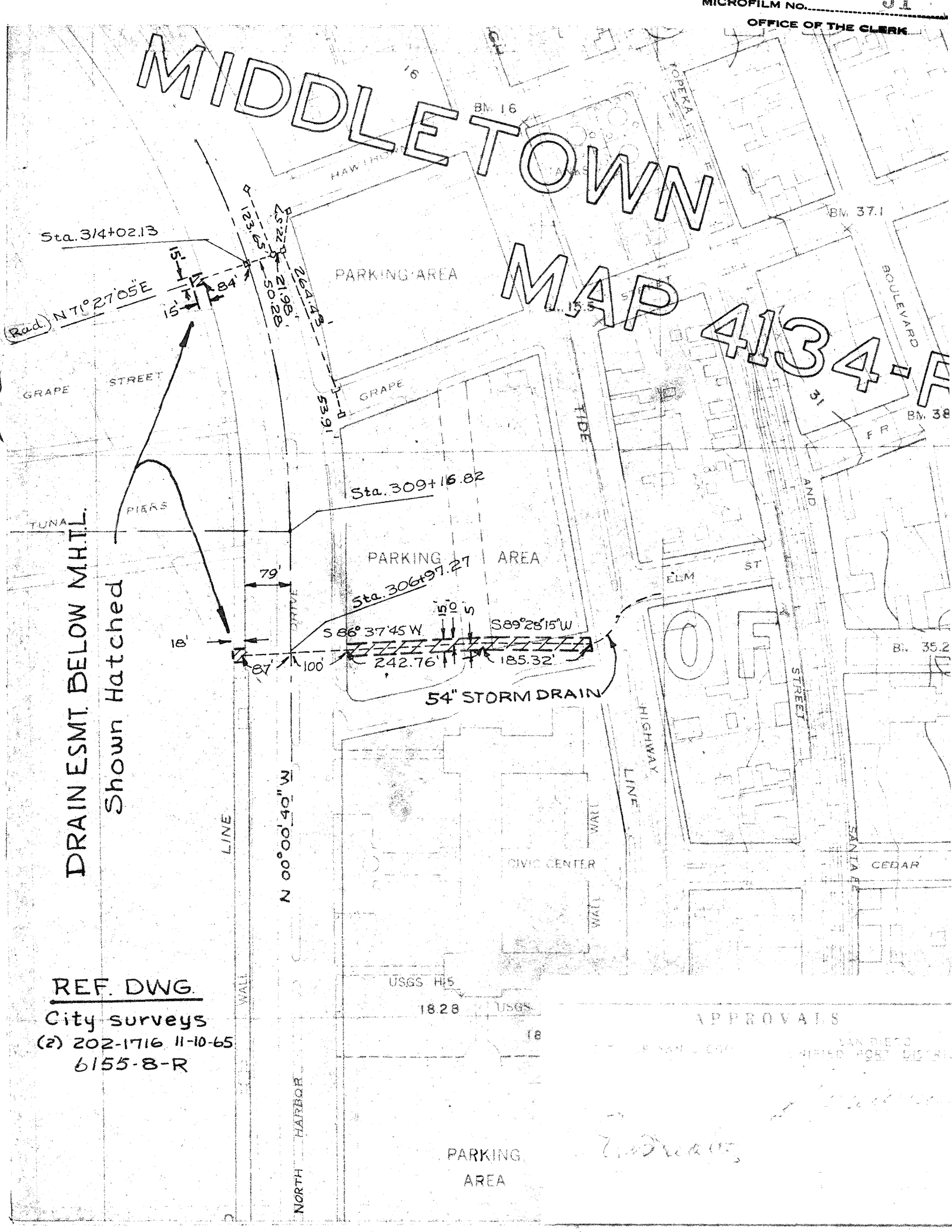
CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

DRAIN ESMTS below M.H.T.L. sly of Laural Street in Tidelands.

TIDELANDS

DATE 6-24-68
CITY ENGINEER
SHEET 5 OF 19
9220-5-1

SAN DIEGO UNIFIED PORT DISTRIC
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK



REF. DWG.
City surveys
(2) 202-1716 11-10-65
6155-8-R

O.T.J. 6-24-68

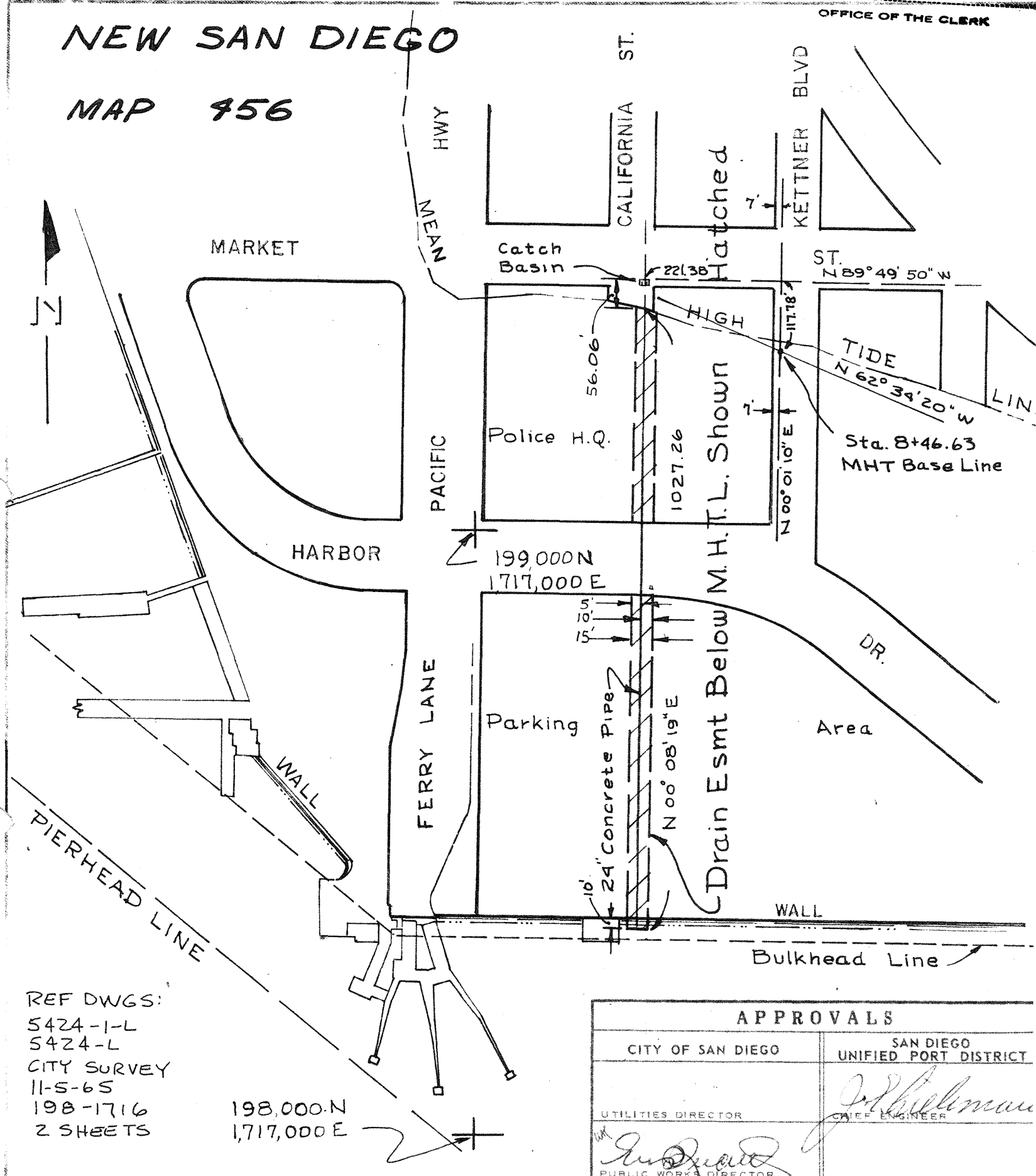
INDEX 202-1716
1" = 200'
17430

DRAIN ESM'T. in Tidelands wly of Pacific Hwy nly of Cedar St. & sly of Hawthorn St.

TIDELANDS

SHEET 6 OF 1
9220-6-

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



REF DWGS:
5424-1-L
5424-L
CITY SURVEY
11-5-65
198-1716
2 SHEETS

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

PLANNING | RECORDS ENGR. | CONTROL ENGR. 6-24-68 | OFFICE ENGR.

DRAWN BY
CHECKED BY
Coord Index 198-1717
SCALE 1" = 200'
W.O. 17430

CITY OF SAN DIEGO ENGINEERING DEPARTMENT
Drain Esmt. - in California St.
Extended Below M. H. T. L.
TIDELANDS

DATE 6-24-68
SHEET 7 OF 19
9220-7-8

SAN DIEGO UNIFIED PORT DI
338
DOCUMENT NO.
JUN 28 1968
FILED
31
MICROFILM NO.
OFFICE OF THE CLERK

SEE SHEET 11556-12-D FOR ESMT.

RUNWAY

UNICIPAL AIRPORT

15'
5'
10'

N 01° 13' 45" E 497.76'

LINDBERGH FIELD

RUNWAY

15' DRAIN ESMT. BELOW M.H.T.L. SHOWN HATCHED

N

TAXIWAY

N 35° 09' 15" W 559.64'

42" DRAIN PIPE

N 39° 48' 15" W 243.50'

N 5° 18' 15" W 238.86'

MUNICIPAL AIRPORT

LINDBERGH FIELD

TAXIWAY

TANK

AREA

HARBOR

TAXIWAY

100'

STA. 333+65.10

DRIVE

86.79

17.79'

7.79'

HARD

MUNICIPAL SEAPLANE LANDING

663

WALL

REF. DWG.
City Survey 204-1713,
206-1713 Oct. 28, 1965

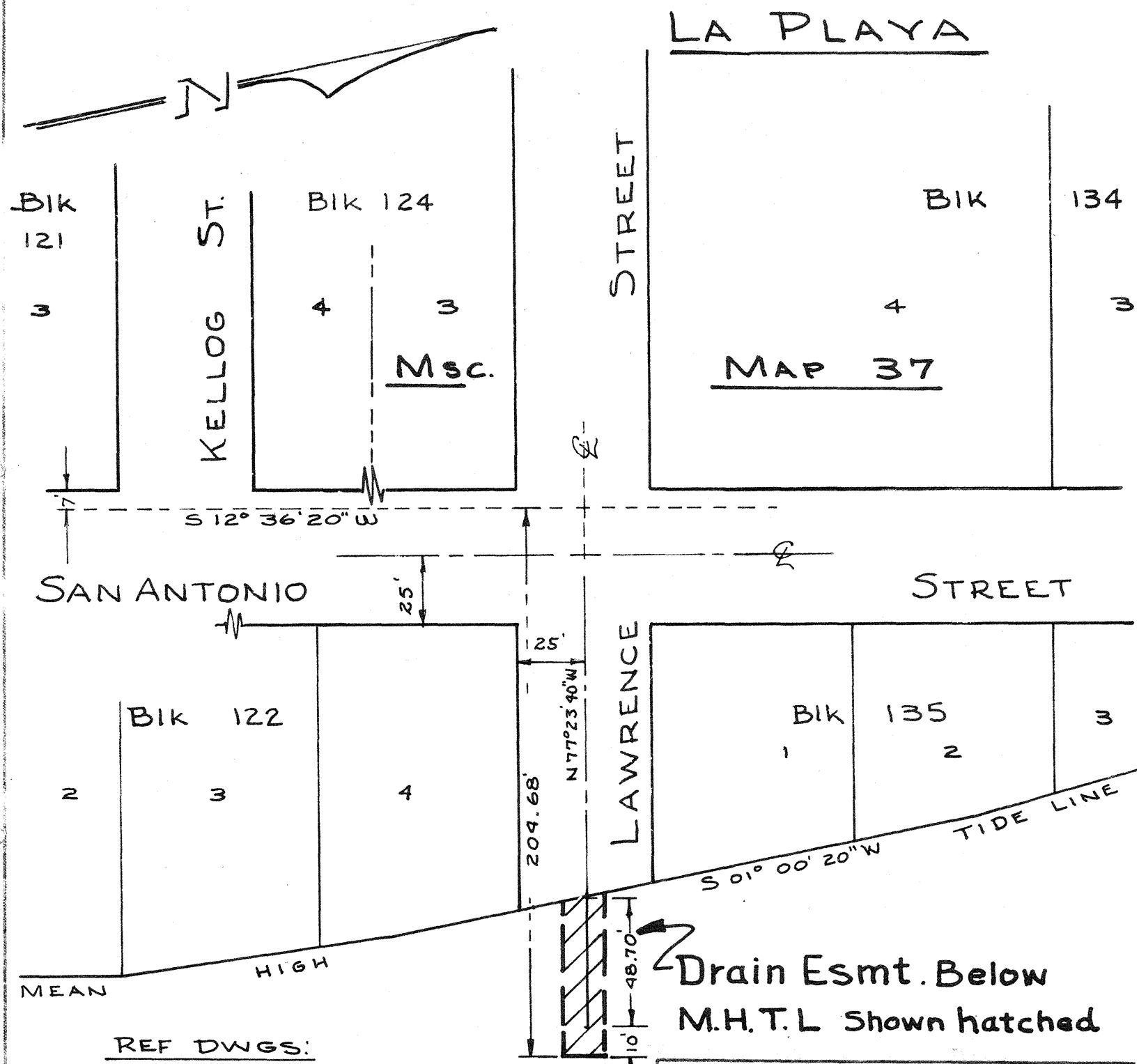
O.T.J. Ref. 6-24-68

INDEX 204-1713
1" = 200'
17430

DRAIN ESMT. in Lindberg Field
w'ly of Laurel Street

SHEET 8 O
9220-

SAN DIEGO UNIFIED PORT DISTRI
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK



REF DWGS:

14370-L Sheet 12 of 12
City Survey Sheet 1 of 1 index
198-1695 Oct 22, 1965

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

PLANNING	RECORDS ENGR	CONTROL ENGR.	OFFICE ENGR.
		6-24-68	

DRAWN BY RCT
CHECKED BY
INDEX 198-1695
SCALE 1" = 50'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

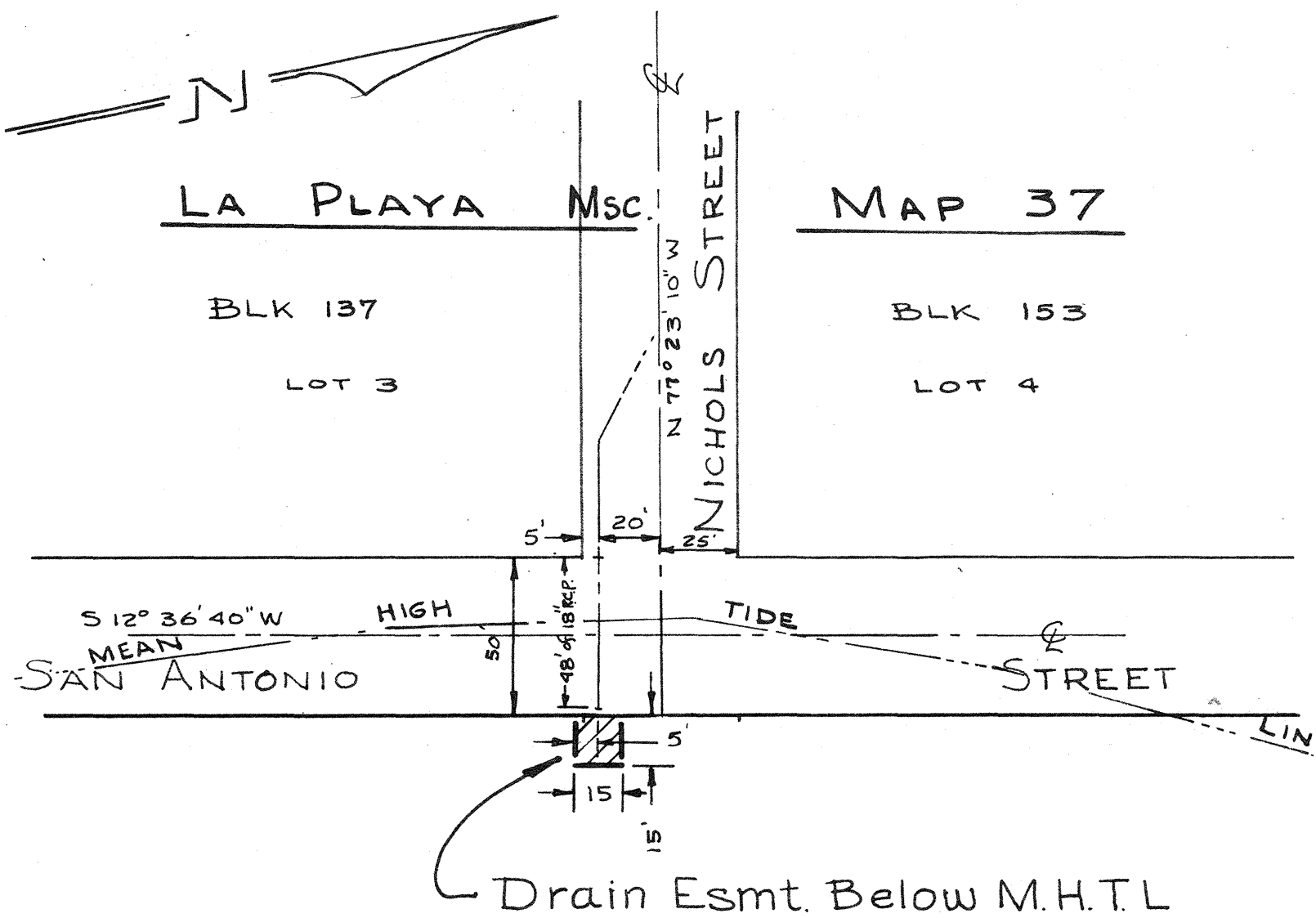
Drain Esmt. Ely. of LAWRENCE STREET termination, below M.H.T.L.

TIDELANDS

DATE

SHEET 9 OF 1
9220-9-

SAN DIEGO UNIFIED PORT DI
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK



Ref Dwgs:

5657-D
14307-L Sh. 12 of 12

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

PLANNING	RECORDS ENGR	CONTROL ENGR.	OFFICE ENGR.
		O.J. 6-24-68	

DRAWN BY
CHKD
INDEX 198-1695
SCALE 1" = 50'
W.O. 17430

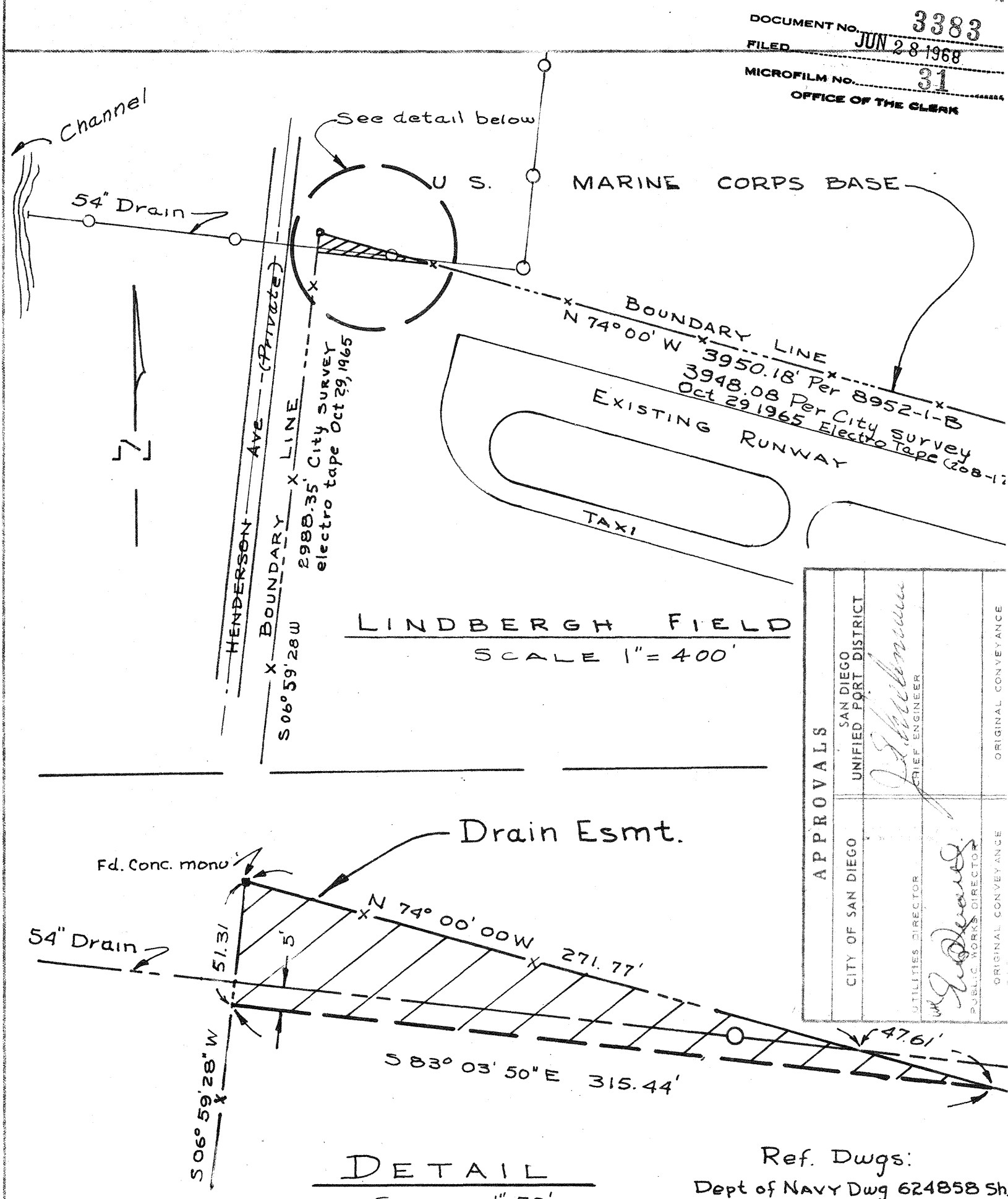
CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

Drain Esmt Ely of the intersection of Nichols & San Antonio St's in tidelands

DATE
CITY ENGINEER

SHEET 10 OF 19
9220-10-E

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK



DETAIL
SCALE 1"=50'

APPROVALS

SAN DIEGO UNIFIED PORT DISTRICT
CHIEF ENGINEER
ORIGINAL CONVEYANCE

CITY OF SAN DIEGO
UTILITIES DIRECTOR
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE

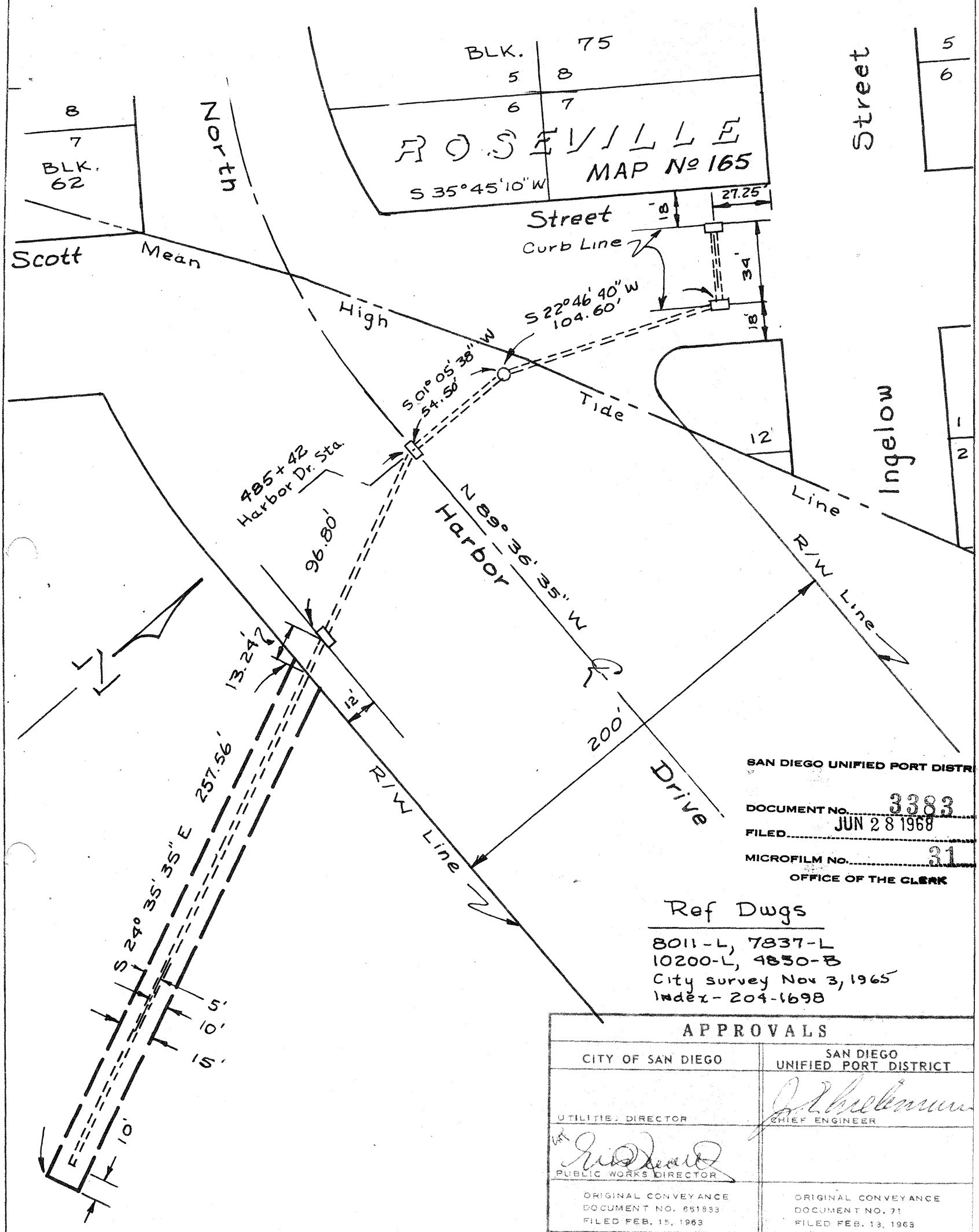
Ref. Dwgs:
Dept of Navy Dwg 624858 Sh
City 8952-1-B, City SURVEY O
54" Drain Oct 29, 1965 INDEX -
208-1707 Sh 1 of 1

PLANNING | RECORDS ENGR | CONTROL ENGR. C.T. 6-24-68 | OFFICE ENGR.

DRAWN BY
CHECKED BY
C. INDEX 208-1707
SCALE As Noted
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
Drain Esmt. in tidelands of Lindbergh Field at N'wly. end of runway
TIDELANDS

DATE 6-24-68
CITY ENGINEER
SHEET 11 OF 19
9220-11-E



SAN DIEGO UNIFIED PORT DISTRICT

DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

Ref Dwgs

8011-L, 7837-L
10200-L, 4850-B
City survey Nov 3, 1965
Index - 204-1698

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

PLANNING	RECORDS ENGR.	CONTROL ENGR.	OFFICE ENGR.
		CTJ 6-24-68	

DRAWN BY Ref
CHECKED BY
INDEX: 204-1699
SCALE 1" = 50'
W.O. 17430

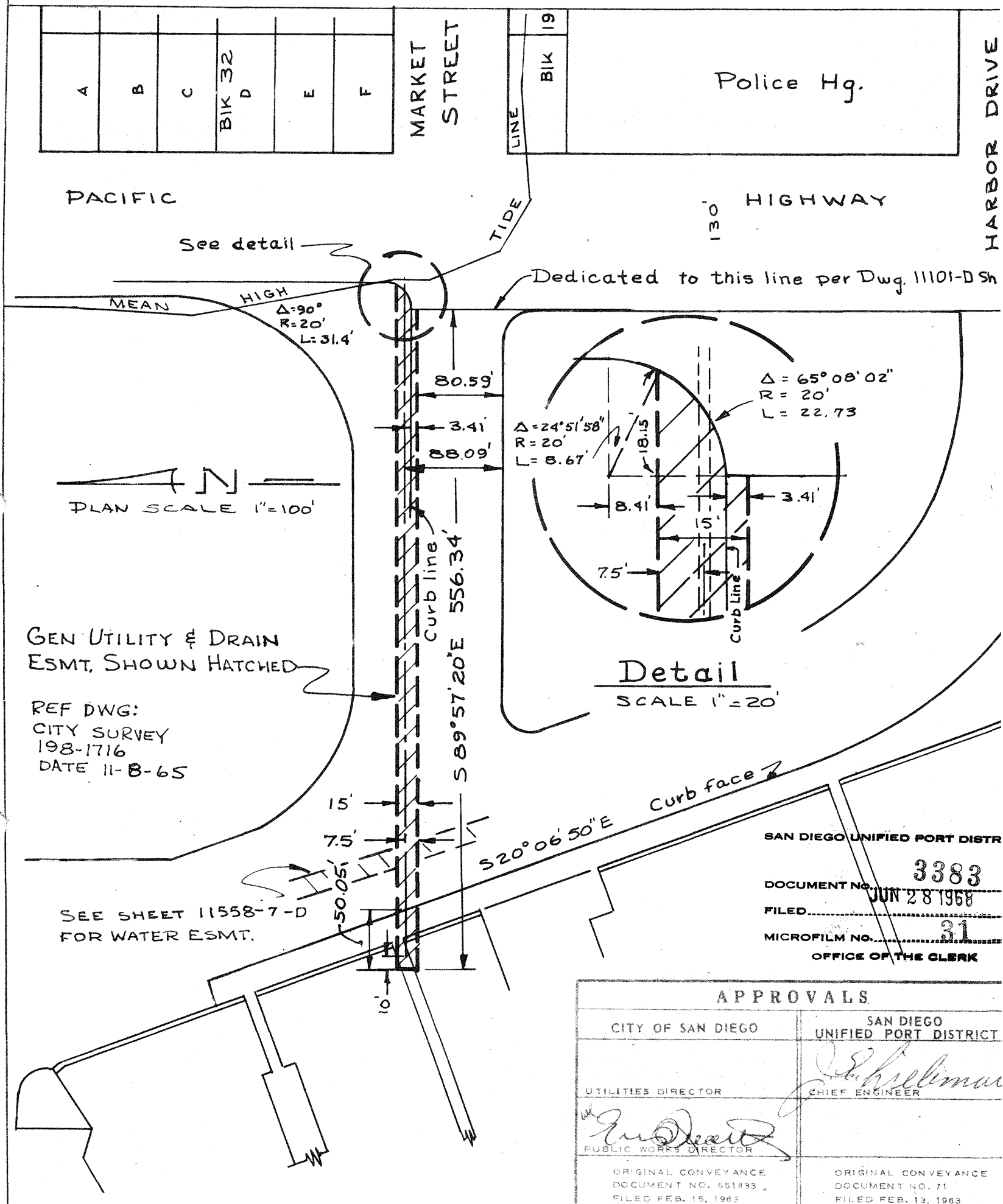
CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

Drain Esmt. S'ly of the intersection of North Harbor Dr & Scott Street in Tideland

TIDELANDS

DATE 6-24-68
CITY ENGINEER

SHEET 12 OF 19
9220-12-B



SAN DIEGO UNIFIED PORT DISTR

DOCUMENT NO. 3383

FILED JUN 28 1968

MICROFILM NO. 31

OFFICE OF THE CLERK

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651838 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

		PLANNING	RECORDS ENGR.	O.T.J. 6-24-68 CONTROL ENGR.	OFFICE ENGR.

DRAWN BY
CHECKED BY
INDEX 198-1715
SCALE AS NOTED
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

GEN. UTILITY & DRAIN ESMT. - Wly of the intersection of Pacific Hwy. & Market Street, in TIDELANDS

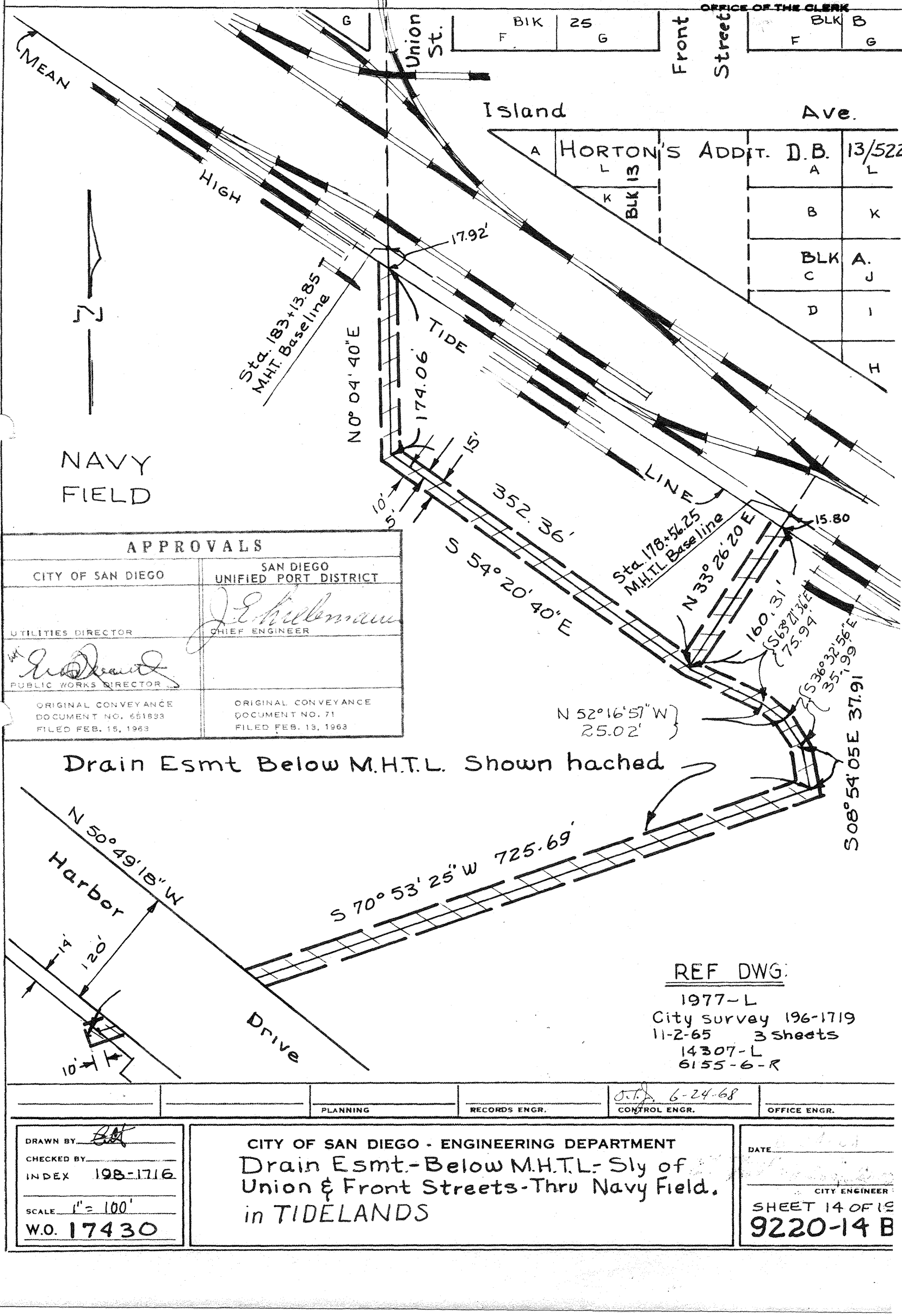
DATE 6-26-68

CITY ENGINEER

SHEET 13 OF 19

9220-13-B

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651893 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

REF DWG:
1977-L
City survey 196-1719
11-2-65 3 Sheets
14307-L
6155-6-R

PLANNING	RECORDS ENGR.	CONTROL ENGR.	OFFICE ENGR.
		O.T.A. 6-24-68	

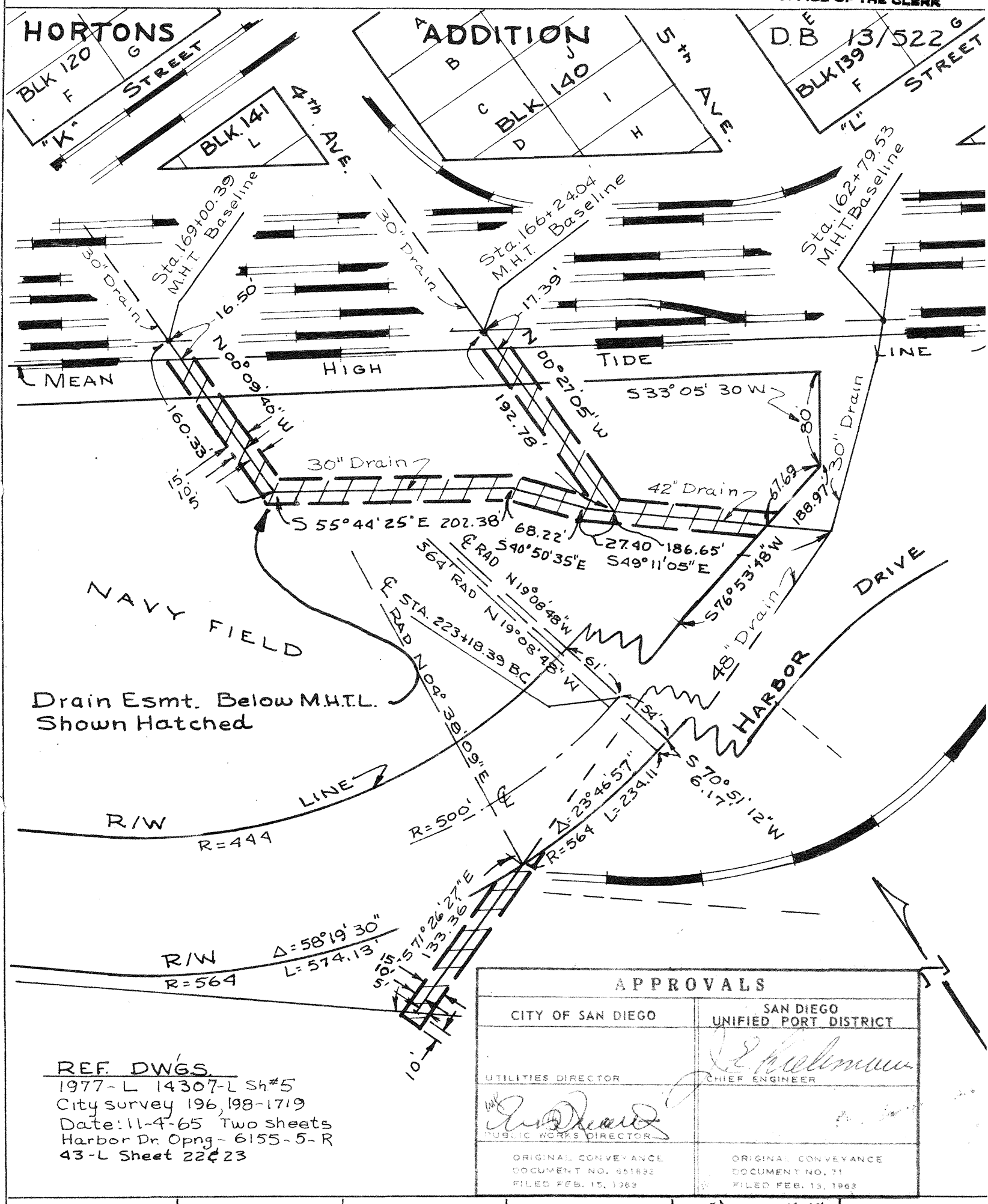
DRAWN BY
CHECKED BY
INDEX 198-1716
SCALE 1" = 100'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
Drain Esmt.-Below M.H.T.L.-Sly of Union & Front Streets-Thru Navy Field. in TIDELANDS

DATE
CITY ENGINEER
SHEET 14 OF 19
9220-14 B

SAN DIEGO UNIFIED PORT DISTRICT

DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK



REF. DWGS.
1977-L 14307-L Sh#5
City survey 196, 198-1719
Date: 11-4-65 Two sheets
Harbor Dr. Opng - 6155-5-R
43-L Sheet 22 & 23

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 951835 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

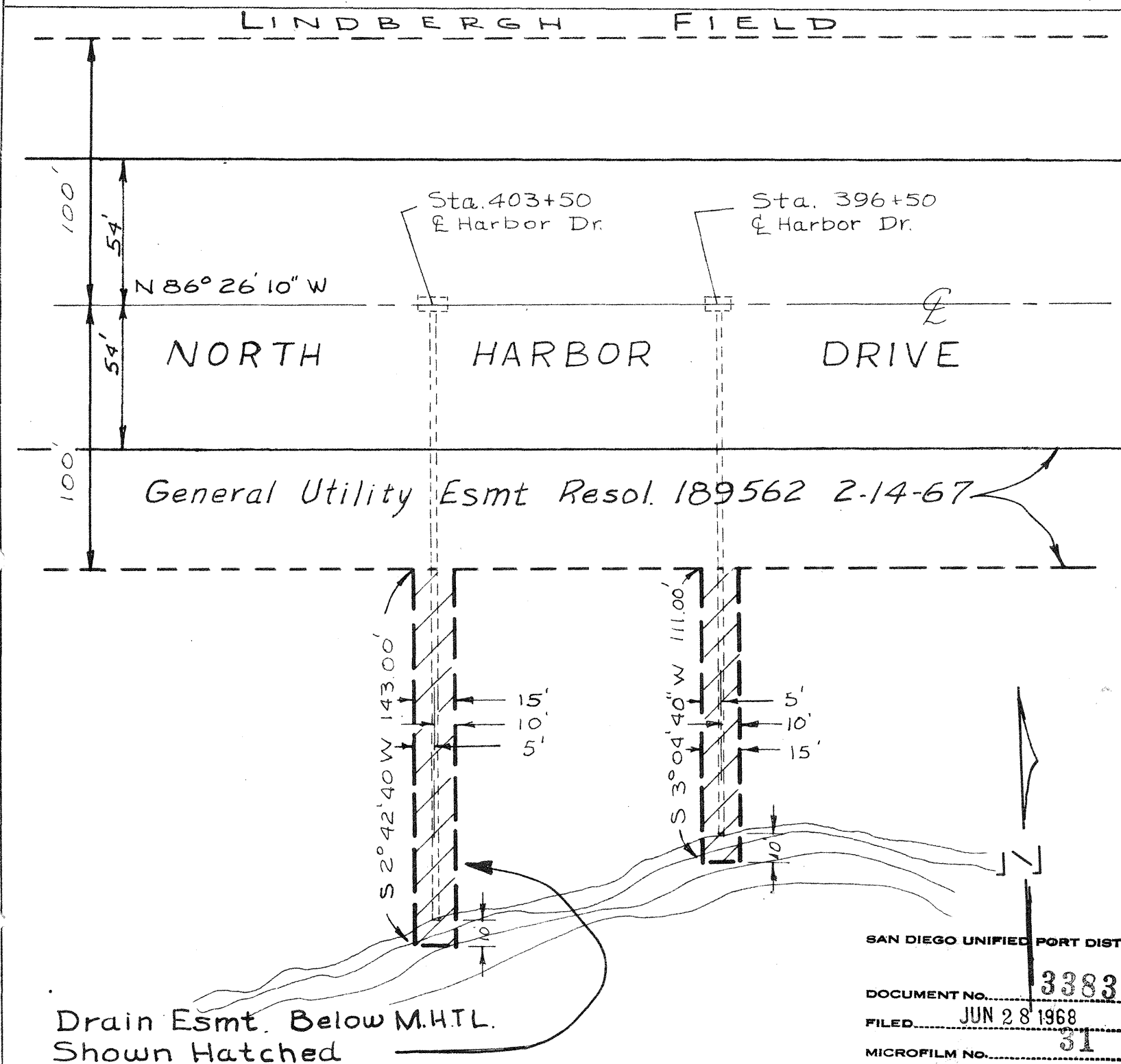
PLANNING	RECORDS ENGR.	CONTROL ENGR.	OFFICE ENGR.
		O.T.J. 6-24-68	

DRAWN BY
CHECKED BY
FIELD BOOKS
INDEX 196-1719
SCALE 1"=100'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

Drain Esmts Below M.H.T.L. Sly. of 3RD & 4Th Streets. & Sly. of Harbor Drive, in Tidelands

DATE 6-21-68
CITY ENGINEER
SHEET 15 OF 19
9220-15-B



SAN DIEGO UNIFIED PORT DIST

DOCUMENT No. 3383

FILED JUN 28 1968

MICROFILM No. 31

OFFICE OF THE CLERK

Ref Dwg's
6155-9-R
City survey 204-1707 Oct. 29, 1965

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 691833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1968

		PLANNING	RECORDS ENGR.	CONTROL ENGR. 6-24-68	OFFICE ENGR.

DRAWN BY
CHECKED BY
FIELD BOOKS
INDEX 204-1707
SCALE 1" = 50'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

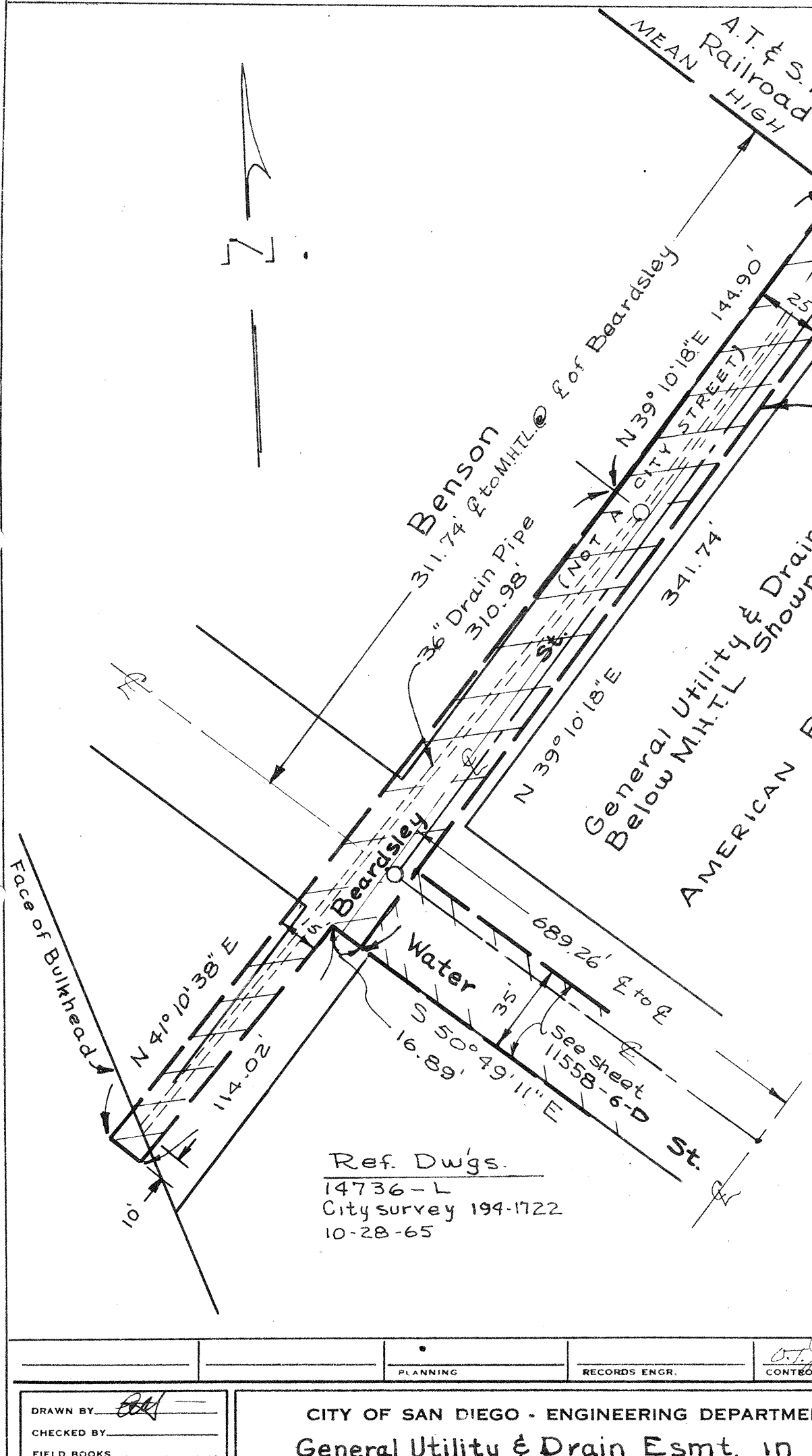
Drain Esmt. Below M.H.T.L Sly of Lindbergh Field in Tidelands

DATE 6-24-68

CITY ENGINEER

SHEET 16 OF 19

9220-16-E



Ref. Dwgs.
14736-L
City survey 194-1722
10-28-65

SAN DIEGO UNIFIED PORT DI

DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

APPROVALS

SAN DIEGO UNIFIED PORT DISTRICT
CHIEF ENGINEER
ORIGINAL CONVEYANCE DOCUMENT NO. 71

CITY OF SAN DIEGO
UTILITIES DIRECTOR / PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 65183

PLANNING	RECORDS ENGR.	CONTROL ENGR.	OFFICE ENGR.
		O.T.J. 6-24-68	

DRAWN BY
CHECKED BY
FIELD BOOKS 194-1721
SCALE 1" = 50
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

General Utility & Drain Esmt. in Tidelands swly. of Beardsly St. & Harbor Dr. Below M.H.T.L.

DATE
CITY ENGINEER
SHEET 17 OF 19
9220-17-B

REF 206-D-2 HARBOR

ESMTS BELOW M.H.T.L. SHOWN HATCHED

SAN DIEGO BAY

BULKHEAD LINE

R/W LINE

N 00° 00' 40" E

DRIVE

R/W LINE

ADMIN.

CENTER

R.O.S. 6194

Sta. 303+06.50

Sta. 304+00.60

15'
5'
3'
S 89° 16' 40" W
13'

75'
90'

Sta. 298+22.08

15'
5'
3'
S 89° 44' 40" W
13'

U. S.

Sta. 295+43.52

15'
5'
3'
S 88° 26' 40" W
13'

Sta. 294+41.42

NORTH HARBOR DRIVE

COUNTY

ASH STREET

REF: DWGS
40-L Sheets 4 & 5
6155- R
City survey 202-1716
11-10-65

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT		ORIGINAL CONVEYANCE
UTILITIES DIRECTOR	CHIEF ENGINEER	PUBLIC WORKS DIRECTOR	ORIGINAL CONVEYANCE

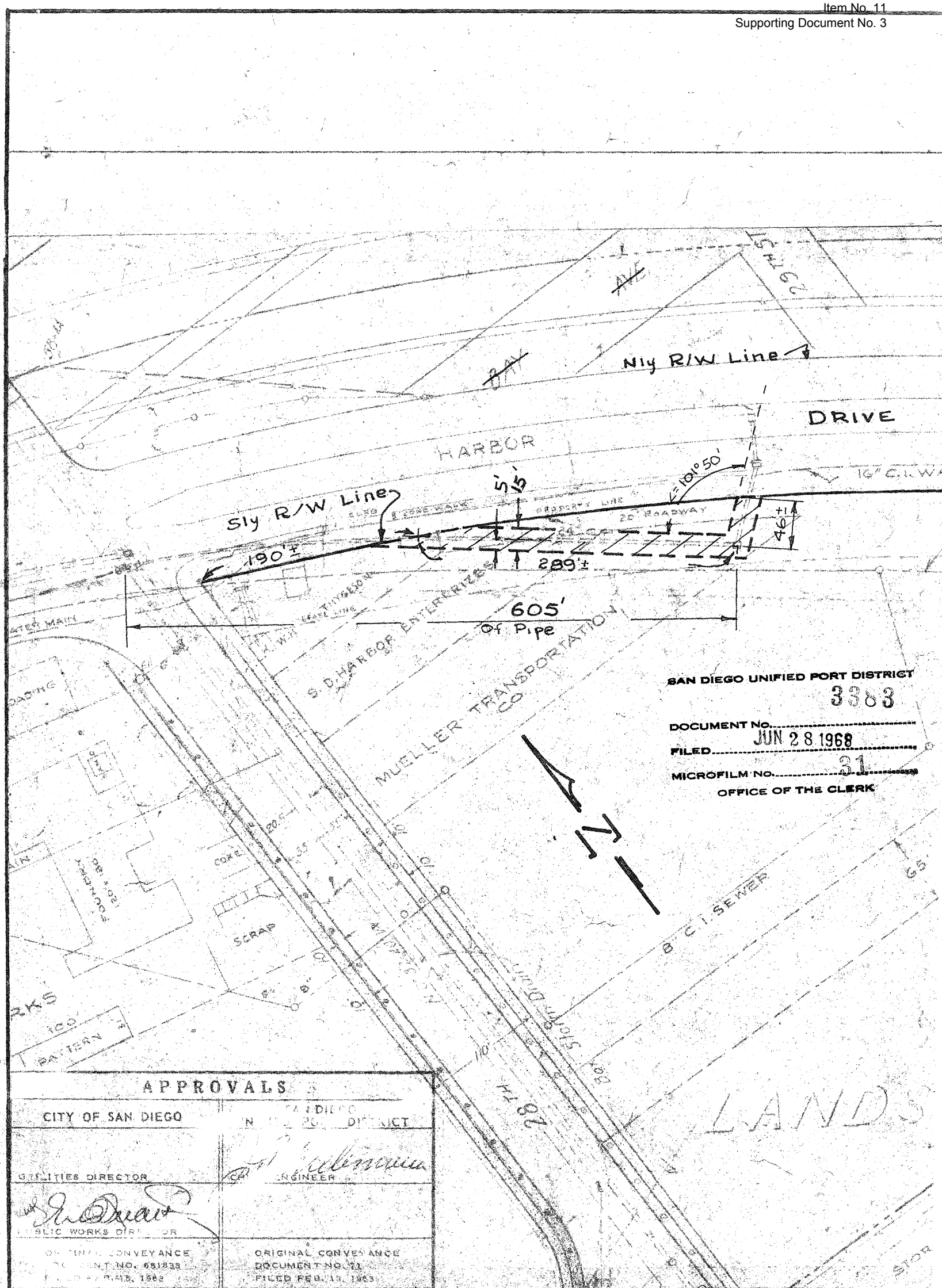
PLANNING		RECORDS ENGR.	CONTROL ENGR.	OFFICE ENGR.
			O.T.J. 6-24-68	

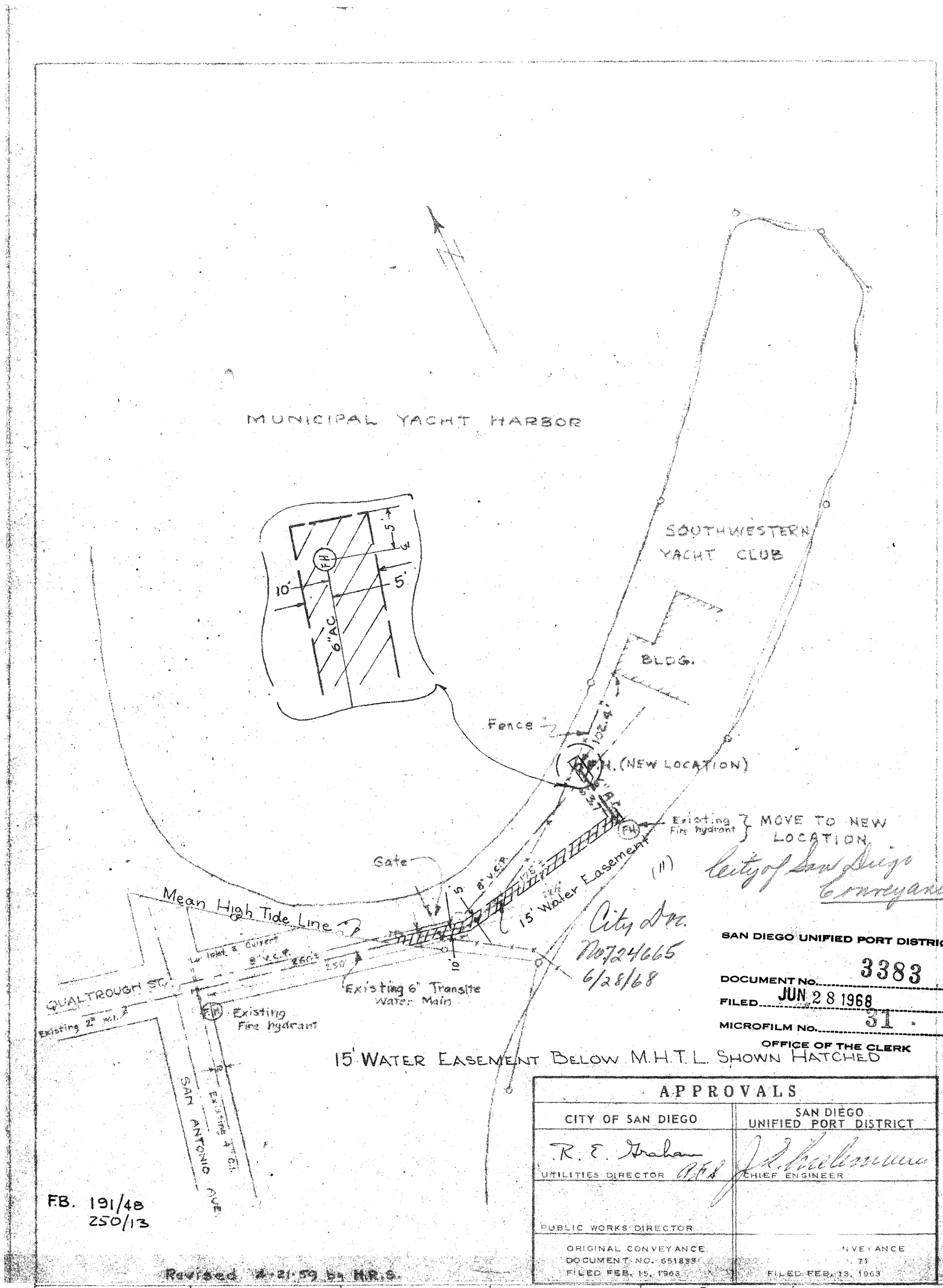
DRAWN BY
CHECKED BY
FIELD BOOKS
INDEX 202-1716
SCALE 1" = 100'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

Drain Esmts Wly. of North Harbor Drive & Nly. of Ash St. in Tidelands

DATE
CITY ENGINEER
SHEET 18 OF 19
9220-18-E


Nly R/W Line
DRIVE
HARBOR
Sly R/W Line
5'
15'
101°50'
190'±
289'±
46'±
605'
Of Pipe
S.D. HARBOR ENTERPRISES
MUELLER TRANSPORTATION CO
8" C.I. SEWER
28TH
LANDS
SCRAP
FOUNDRY
PATTERN
SAN DIEGO UNIFIED PORT DISTRICT
3383
DOCUMENT No.
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR
CHIEF ENGINEER
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 13, 1963
ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963
PLANNING
RECORDS ENGR.
O.T.J. 6-24-68
CONTROL ENGR.
OFFICE ENGR.
DRAWN BY
CHECKED BY
FIELD BOOKS
INDEX 190-1727
SCALE 1" = 100'
W.O. 17430
CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
DRAIN ESMT. - Sly of HARBOR DR. & Ely of 28th St below M.H.T.L.
DATE 6-24-68
CITY ENGINEER
SHEET 19 OF
9220-19


MUNICIPAL YACHT HARBOR
SOUTHWESTERN YACHT CLUB
BLDG.
Fence
F.H. (NEW LOCATION)
Existing Fire hydrant
MOVE TO NEW LOCATION
Gate
8" V.C.P.
15' Water Easement
Mean High Tide Line
Inlet & Current
8" V.C.P.
QUALTROUGH ST.
Existing 2" W.L.
Existing 6" Transite Water Main
Existing Fire hydrant
SAN ANTONIO AVE.
Existing 4" T.C.
10'
5'
6" AC
5'
10'
City of San Diego
Conveyance
(11)
City Dr.
No 24665
6/28/68
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK
15' WATER EASEMENT BELOW M.H.T.L. SHOWN HATCHED
F.B. 191/48
250/13
Revised 4-21-59 by M.R.S.
APPROVALS
CITY OF SAN DIEGO
R. E. Graham
UTILITIES DIRECTOR
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 651835 FILED FEB. 15, 1963
SAN DIEGO UNIFIED PORT DISTRICT
CHIEF ENGINEER
CONVEYANCE FILED FEB. 13, 1963
PLANNING
RECORDS ENGR.
O.K.J. 6-24-68
CONTROL ENGR.
OFFICE ENGR.
DRAWN BY J.A.
CHECKED BY
FIELD BOOKS 200-1697
SCALE 1" = 100'
W.O. 17430
CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
WATER EASEMENT
Qualtrough St. below M.H.T.L.
TIDELANDS
DATE 6/24/68
CITY ENGINEER
SHEET 1 OF 11
9222-1-B
HARBOR No. 297-MB

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

APPROVALS
CITY OF SAN DIEGO
UTILITIES DIRECTOR R. E. Graham
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963
UNIFIED PORT DISTRICT
CHIEF ENGINEER
ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 1963

ROSECRANS ST.
FENELON ST.
GARRISON ST.
JEFFERSON ST.
SCOTT ST.
MAKE CONNECTION TO EXISTING 6" WATER MAIN
6" SLEEVE
6" GATE VALVE
NOTE
WATER DEPARTMENT
MEAN HIGH TIDE LINE
21" VC SEWER
46
59
45
44
43
168'
20'
10'
77'
5'
15'
TIDELAND
PIER
BLDG.
STAIRWAY
ENG. PIER FOOTING
PLANNING
RECORDS ENGR
O.K.J. 6-24-68
CONTROL ENGR.
OFFICE ENGR.

General Utility Easement below M.H.T.L. shown hatched.

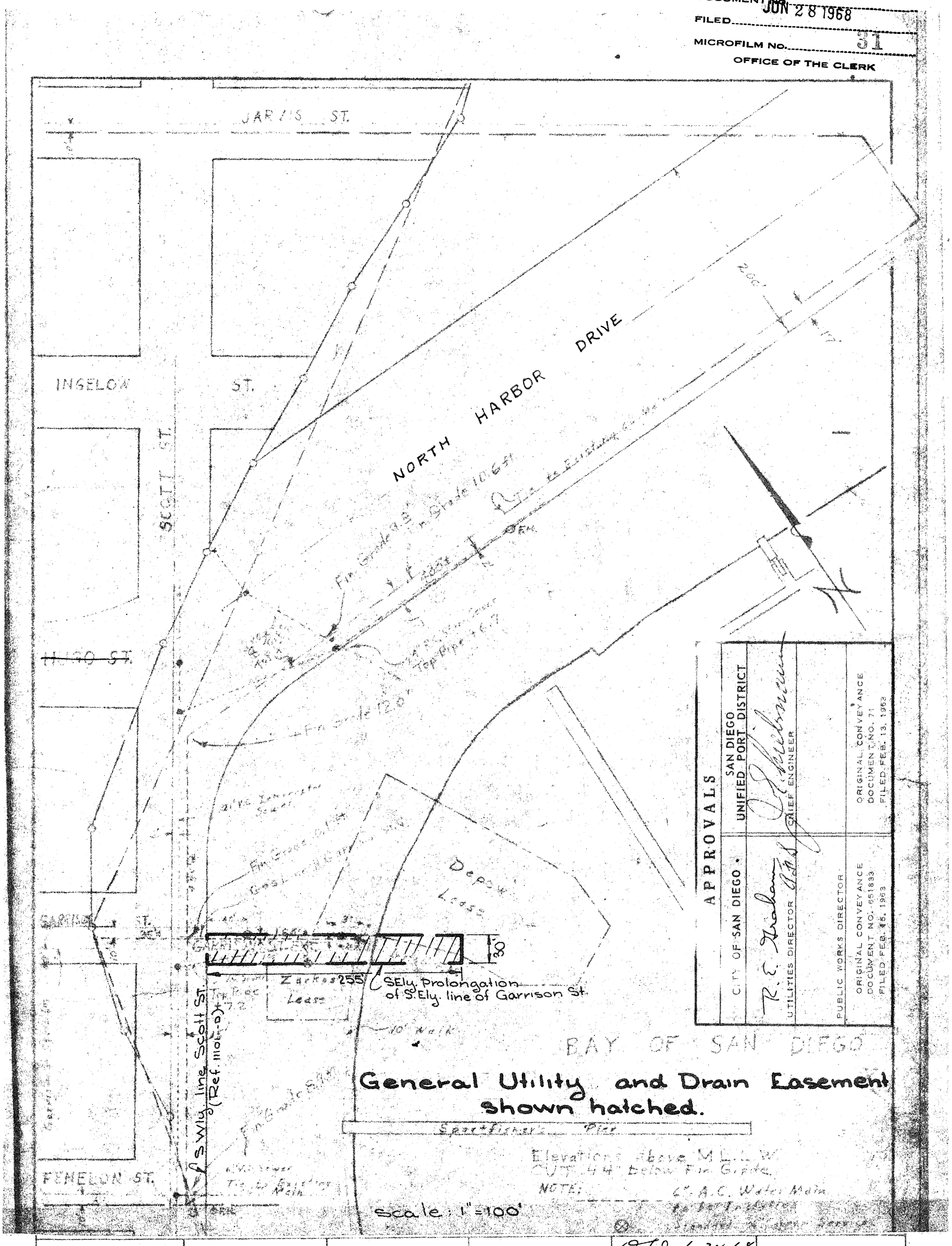
DRAWN BY JA.
CHECKED BY
FIELD BOOKS 204-1699
SCALE 1" = 100'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
WATER EASEMENT
Ext. Fenelon St. below M.H.T.L.
TIDELANDS

DATE 6-24-68
E. F. Gardiner
CITY ENGINEER
SHEET 2 OF 11
9222-2-B

HARBOR No 237-MB

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK



APPROVALS

CITY OF SAN DIEGO
UTILITIES DIRECTOR R. E. Graham
PUBLIC WORKS DIRECTOR

SAN DIEGO UNIFIED PORT DISTRICT
CHIEF ENGINEER

ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963

PLANNING	RECORDS ENGR.	CONTROL ENGR.	OFFICE ENGR.
		O.T.J. 6-24-68	

DRAWN BY J.A.
CHECKED BY
FIELD BOOKS 204-1699
SCALE 1" = 100'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

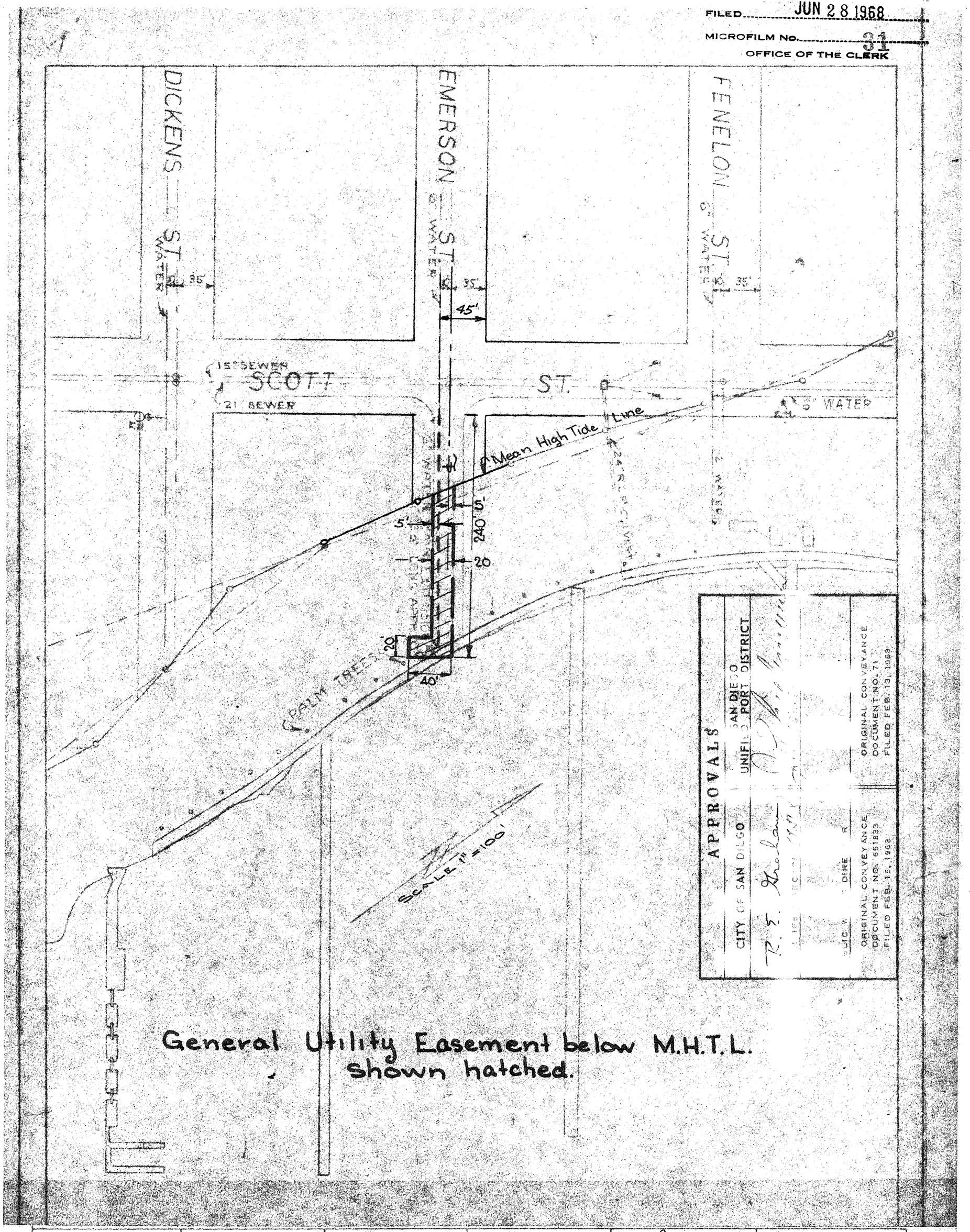
WATER EASEMENT
Ext. Garrison St. below M.H.T.L.

TIDELANDS

DATE 6-24-68
E. F. Gardiner
CITY ENGINEER
SHEET 3 OF 11
9222-3-B

HARBOR Nº 258-MB-1

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



General Utility Easement below M.H.T.L.
shown hatched.

PLANNING	RECORDS ENGR.	CONTROL ENGR.	OFFICE ENGR.
		O.T.J. 6-24-68	

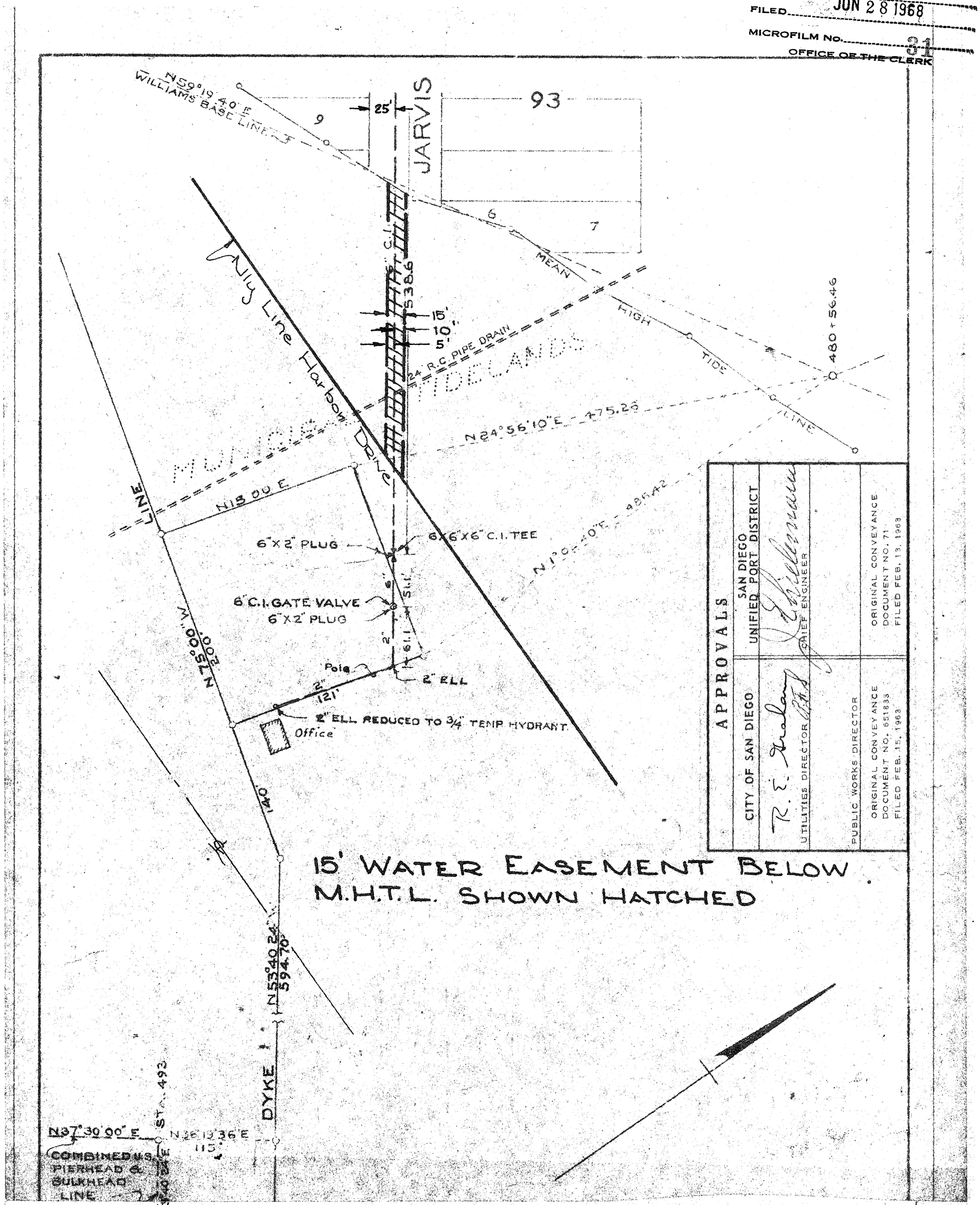
DRAWN BY J.A.
CHECKED BY
FIELD BOOKS 202-1699
SCALE 1" = 100'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
WATER EASEMENT
Ext. Emerson St. below M.H.T.L.
TIDELANDS

DATE 6-24-68
E. F. Gabrielson
CITY ENGINEER
SHEET 4 OF 11
9222-4-B

HARBOR No. 264-MB

SAN DIEGO UNIFIED PORT DISTRICT
3383
DOCUMENT NO.
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



APPROVALS		
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT	
UTILITIES DIRECTOR R. E. Graham	CHIEF ENGINEER E. A. Gilleland	
PUBLIC WORKS DIRECTOR		
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1969	

15' WATER EASEMENT BELOW M.H.T.L. SHOWN HATCHED

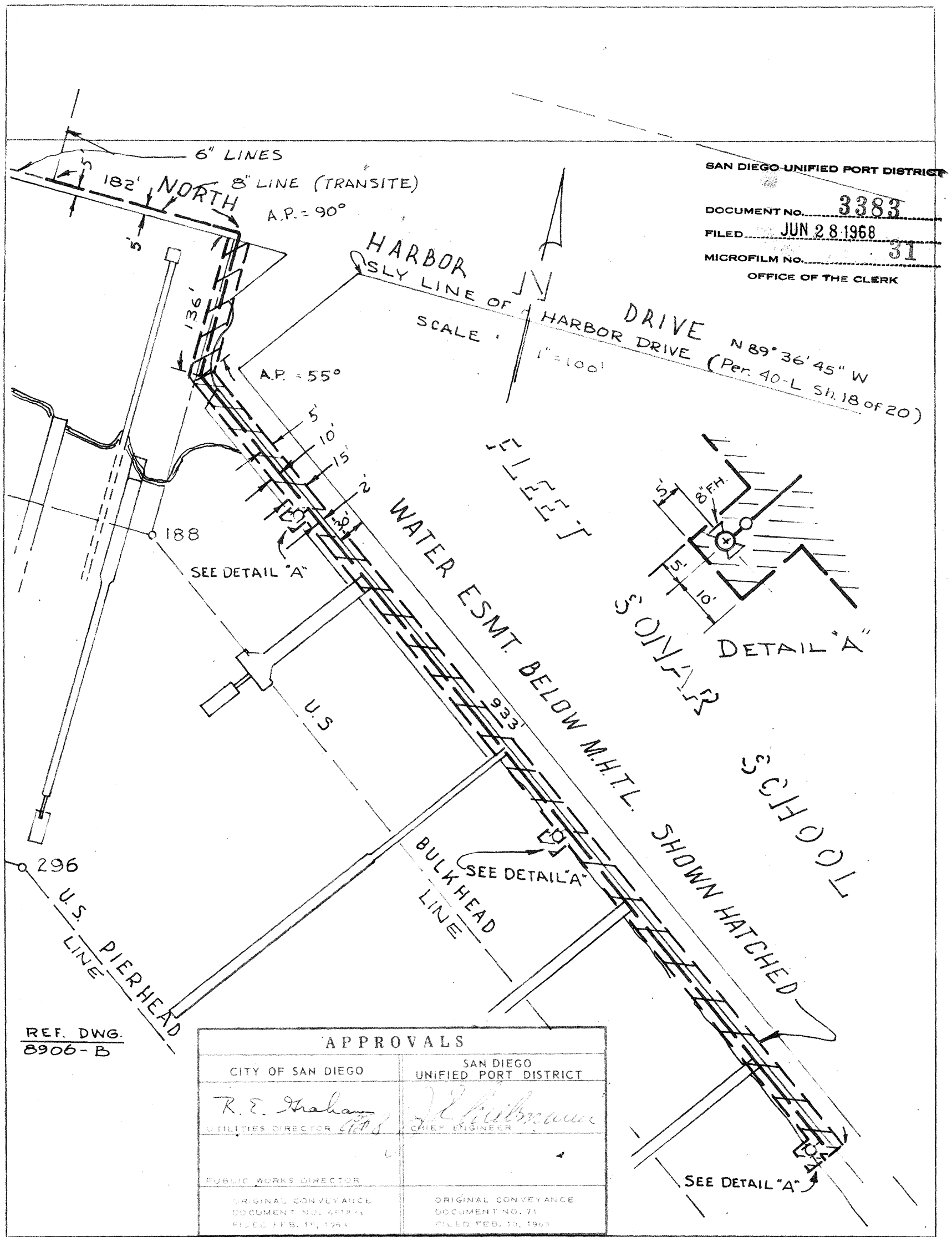
		PLANNING	RECORDS ENGR.	O.T.J. 6-24-68 CONTROL ENGR.	OFFICE ENGR.

DRAWN BY J.A.
CHECKED BY
FIELD BOOKS 204-1699
SCALE 1"=100'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
WATER EASEMENT
Ext. Jarvis Street
TIDELANDS

DATE 6-24-68
E. A. Gilleland
CITY ENGINEER
SHEET 5 OF 11
9222-5-B

HARBOR No. 139-MB



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 65194-3 FILED FEB. 15, 1968	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1968

PLANNING	RECORDS ENGR.	C.T.K. 6-24-68 CONTROL ENGR.	OFFICE ENGR.

DRAWN BY R.C.J.
CHECKED BY
FIELD BOOKS
INDEX 204-1699
SCALE 1" = 100'
W.O. 17430

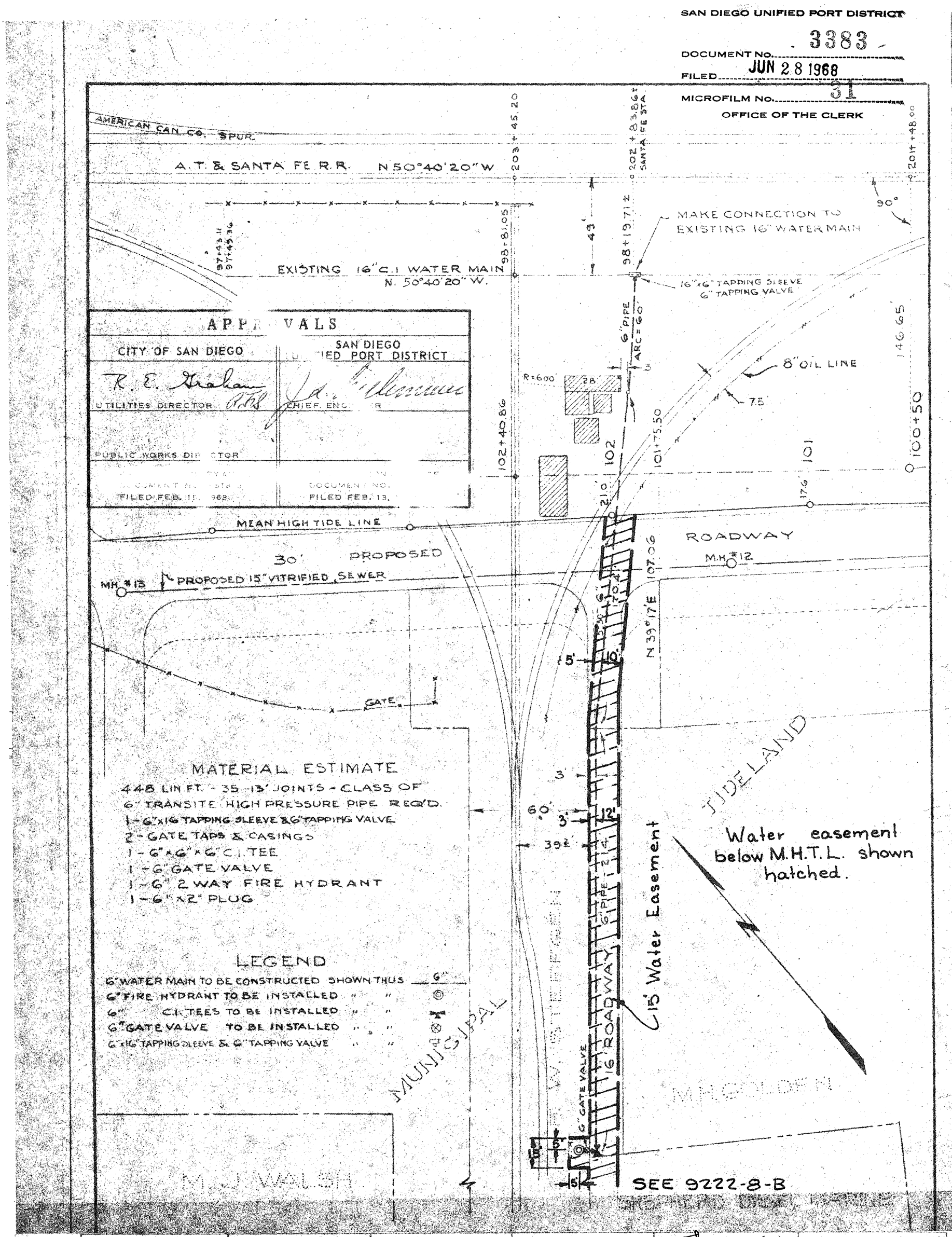
CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

WATER ESMT. - Approx. 1,150' ely of Scott St., sly of North Harbor Dr. & sly of Fleet Sonar School, below M.H.T.L.

DATE
CITY ENGINEER
SHEET 6 OF 11
9222-6-B

HARBOR Nº 292-MB

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham	J. A. Clemmens
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
DOCUMENT NO. 57869 FILED FEB. 15, 1968	DOCUMENT NO. FILED FEB. 13,

MATERIAL ESTIMATE

448 LIN FT. - 35 -13' JOINTS - CLASS OF 6" TRANSITE HIGH PRESSURE PIPE REQ'D.
1 - 6"x16 TAPPING SLEEVE & 6" TAPPING VALVE
2 - GATE TAPS & CASINGS
1 - 6"x6"x6" C.I. TEE
1 - 6" GATE VALVE
1 - 6" 2 WAY FIRE HYDRANT
1 - 6"x2" PLUG

LEGEND

6" WATER MAIN TO BE CONSTRUCTED SHOWN THUS — 6" —
6" FIRE HYDRANT TO BE INSTALLED " " ⊙
6" C.I. TEES TO BE INSTALLED " " ⊥
6" GATE VALVE TO BE INSTALLED " " ⋈
6"x16" TAPPING SLEEVE & 6" TAPPING VALVE " "

PLANNING		RECORDS ENGR	CONTROL ENGR. O.J. 6-24-68	OFFICE ENGR.

DRAWN BY J.A.
CHECKED BY
FIELD BOOKS 192-1723
SCALE 1" = 50'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

WATER EASEMENT

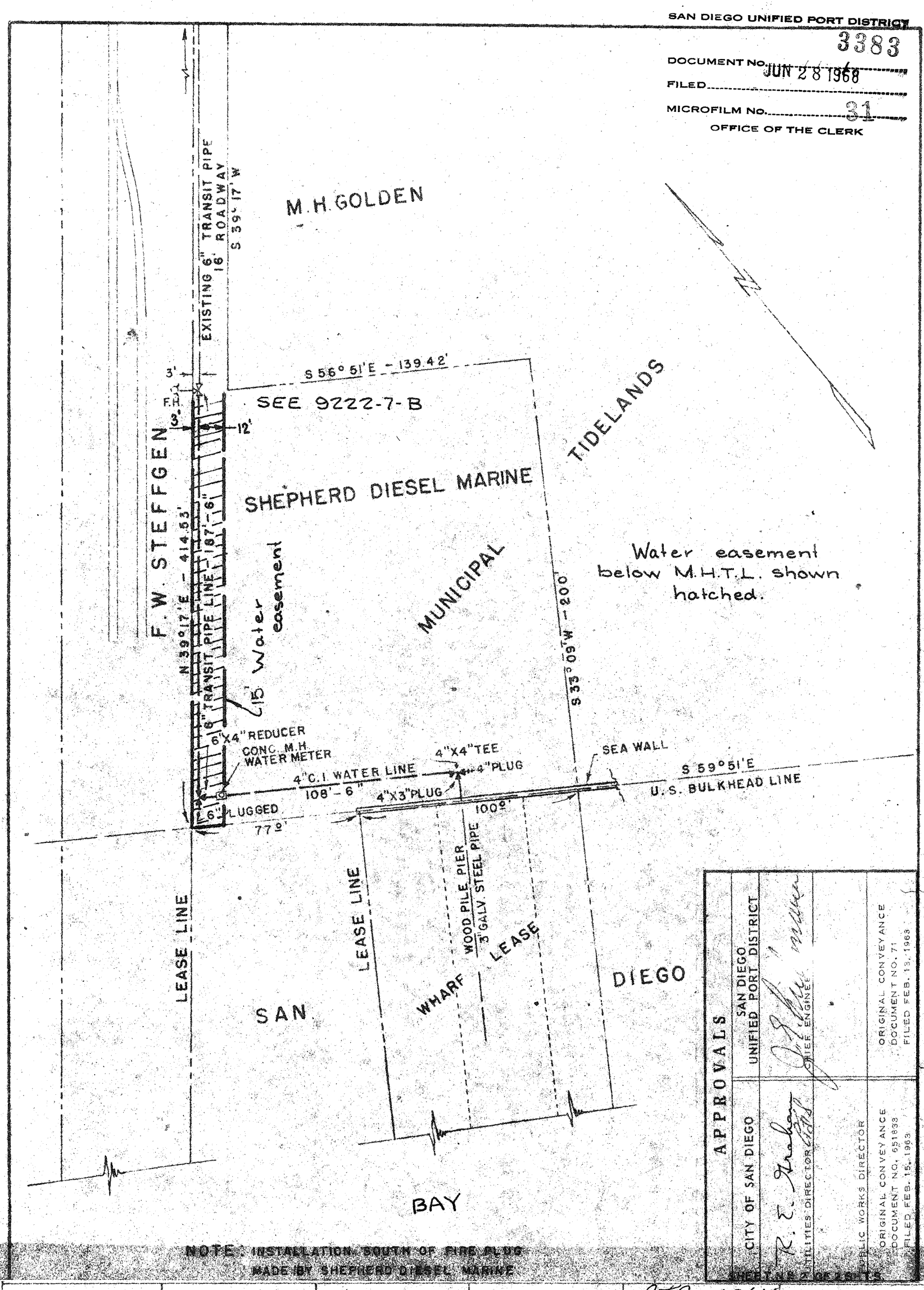
1127'± N.Wly. from foot of Sampson St. below M.H.T.L.

TIDELANDS

DATE 6-24-68
CITY ENGINEER
SHEET 7 OF 11
9222-7-B

HARBOR No 178-MB, Sht. 1 of 2

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



APPROVALS

SAN DIEGO UNIFIED PORT DISTRICT
CHIEF ENGINEER
ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1968

CITY OF SAN DIEGO
UTILITIES DIRECTOR
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963

SHEET NO. 2 OF 2 SHEETS

NOTE: INSTALLATION SOUTH OF FIRE PLUG MADE BY SHEPHERD DIESEL MARINE

PLANNING	RECORDS ENGR.	CONTROL ENGR.	OFFICE ENGR.
		O.T.J. 6-24-68	

DRAWN BY J.A
CHECKED BY
FIELD BOOKS 192-1723
SCALE 1" = 50'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

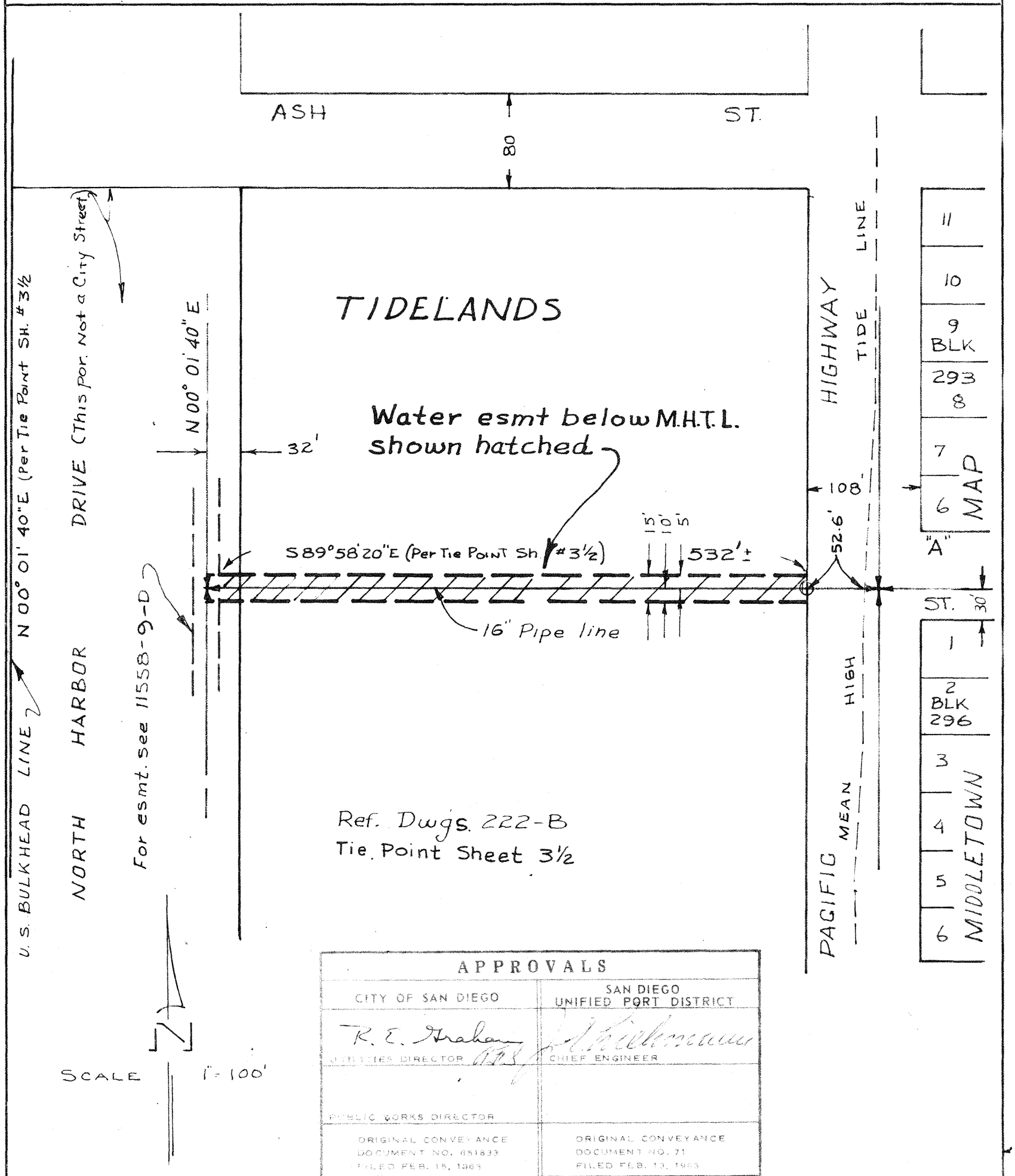
WATER EASEMENT

1127'± N.Wly. from foot of Sampson St. below M.H.T.L. TIDELANDS

DATE 6-24-68
E. F. Faulkner
CITY ENGINEER
SHEET 8 OF 11
9222-8-B

HARBOR No. 178-MB, Sht. 1 of 2

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968 31
MICROFILM No.
OFFICE OF THE CLERK



APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

PLANNING	RECORDS ENGR.	CONTROL ENGR.	OFFICE ENGR.
		6-24-68	

DRAWN BY R.G.J.
CHECKED BY
FIELD BOOKS
INDEX 202-1715
SCALE 1" = 100'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

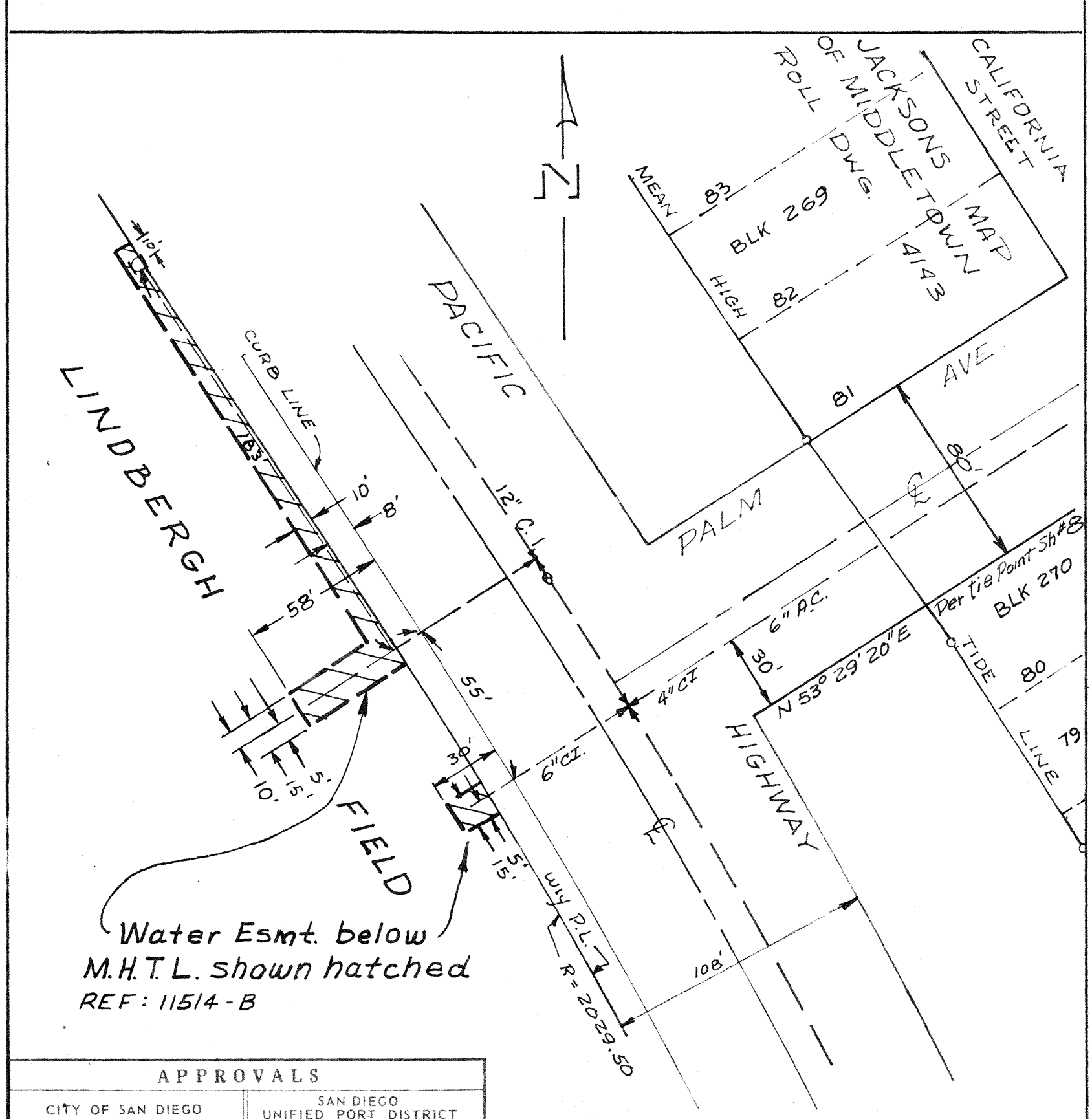
WATER ESMT. - Wly of "A" St. below M.H.T.L. bet. Pacific Hwy. & North Harbor Dr.

DATE
CITY ENGINEER

SHEET 9 OF 11
9222-9-B

SAN DIEGO UNIFIED PORT DISTRICT

DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK



APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham UTILITIES DIRECTOR	J. L. Kuhlemeier CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

		PLANNING	RECORDS ENGR.	C.T.J. 6-24-68 CONTROL ENGR.	OFFICE ENGR.

DRAWN BY R.C.J.
CHECKED BY
FIELD BOOKS 206-1715
SCALE 1" = 50'
W.O. 17430

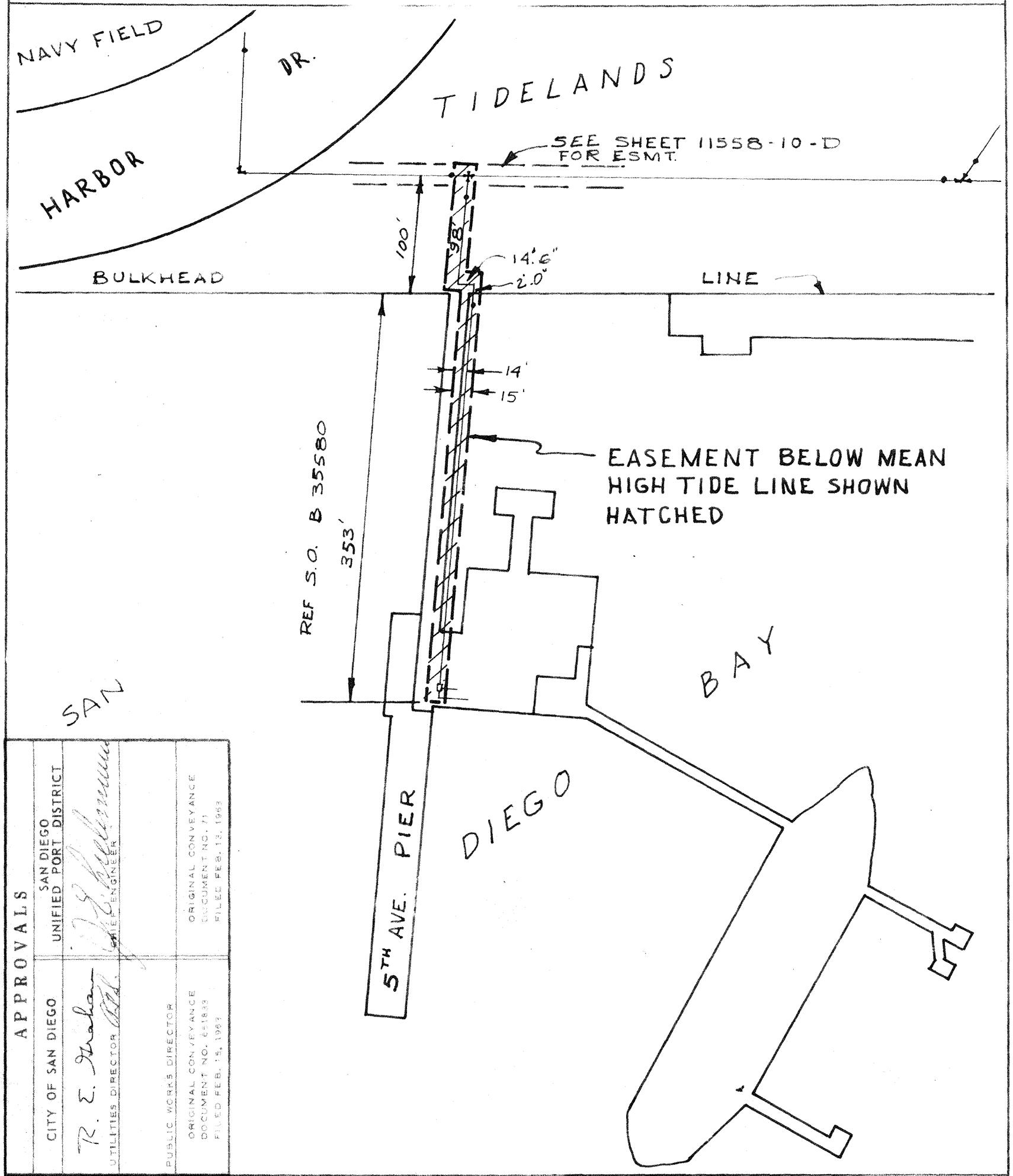
CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

WATER EASEMENT - wly of Pacific Hwy at Palm Ave. in TIDELANDS

DATE
CITY ENGINEER

SHEET 10 OF 11
9222-10-B

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



APPROVALS

CITY OF SAN DIEGO
UTILITIES DIRECTOR R. E. Graham
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 611833 FILED FEB. 15, 1963

SAN DIEGO UNIFIED PORT DISTRICT
CHIEF ENGINEER
ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

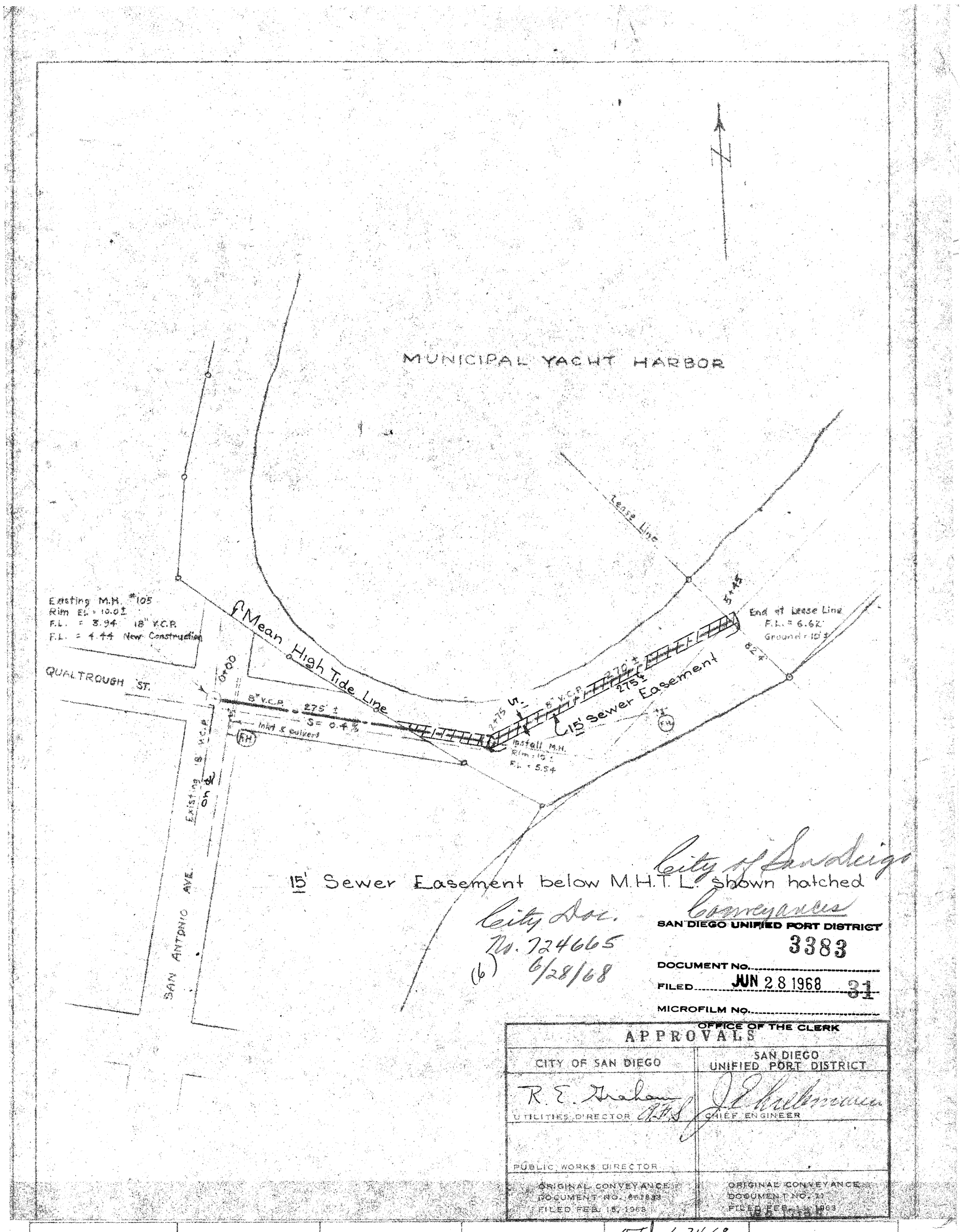
PLANNING | RECORDS ENGR. | CONTROL ENGR. O.K.J. 6-24-68 | OFFICE ENGR.

DRAWN BY BCJ
CHECKED BY
FIELD BOOKS 196 - 17/9
SCALE 1" = 100'
W.O. 17430

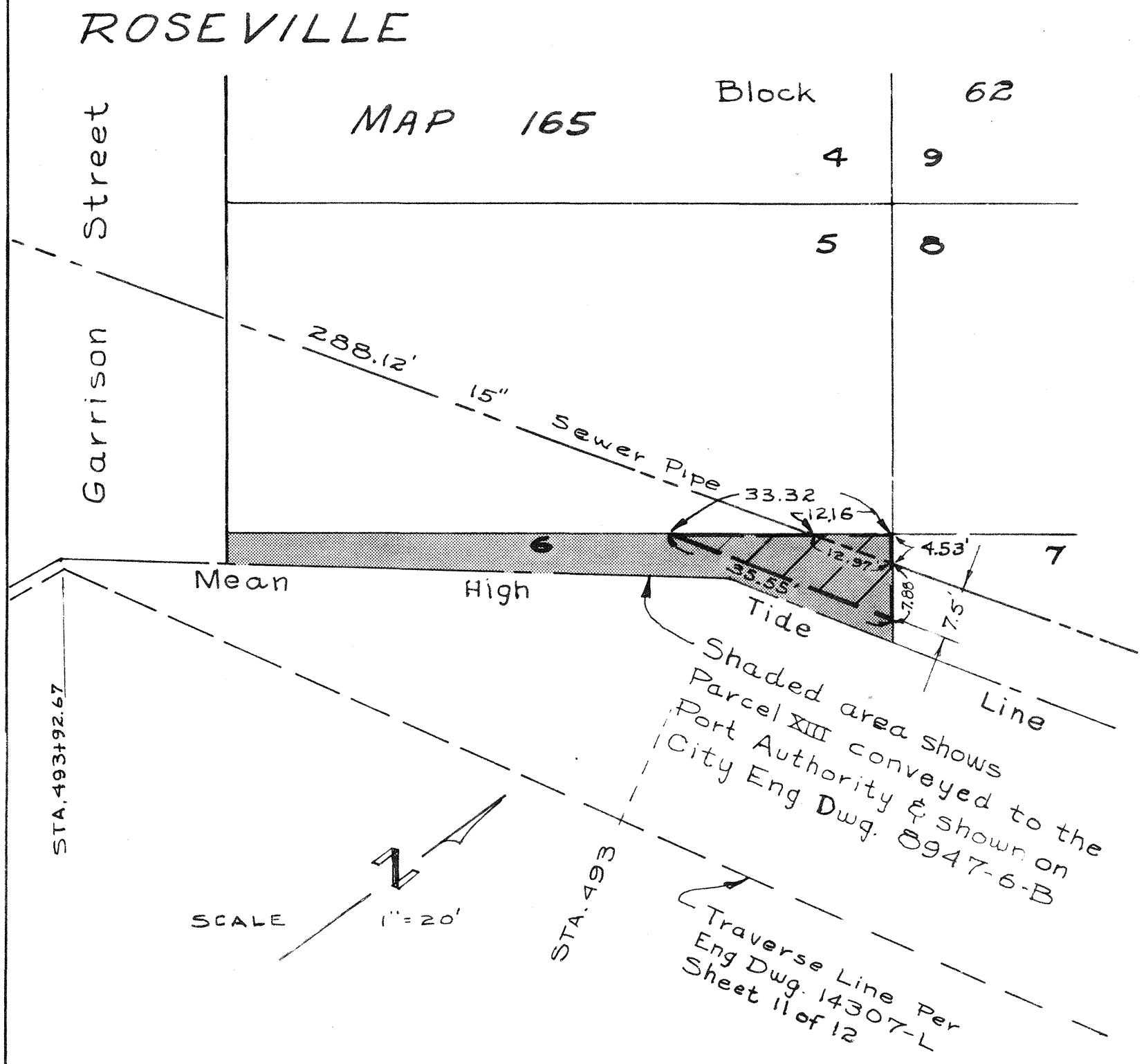
CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

WATER EASEMENT- ON 5TH AVE PIER BELOW MEAN HIGH TIDE LINE TIDELANDS

DATE 6-20-68
CITY ENGINEER
SHEET 11 OF 11
9222-11-3


MUNICIPAL YACHT HARBOR
Lease Line
Existing M.H. #105
Rim El. = 10.0±
F.L. = 3.94 18" V.C.P.
F.L. = 4.44 New Construction
Mean High Tide Line
QUALTROUGH ST.
8+00
8" V.C.P. 275'±
S= 0.4%
Inlet & Culvert
F.H.
1+75 ±
8" V.C.P. 270'±
275'±
15' Sewer Easement
Outfall M.H.
Rim = 15'±
F.L. = 5.54
3+45
End of Lease Line
F.L. = 6.62'
Ground = 10'±
6.2'±
"I"
F.H.
Existing 18" V.C.P.
SAN ANTONIO AVE.
15' Sewer Easement below M.H.T.L. shown hatched
City Doc. No. 124665 (6) 6/28/68
City of San Diego
Conveyances
SAN DIEGO UNIFIED PORT DISTRICT
3383
DOCUMENT No.
FILED JUN 28 1968
MICROFILM No.
OFFICE OF THE CLERK
APPROVALS
CITY OF SAN DIEGO
R. E. Graham
UTILITIES DIRECTOR
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 661833 FILED FEB. 15, 1968
SAN DIEGO UNIFIED PORT DISTRICT
J. Kattenraven
CHIEF ENGINEER
ORIGINAL CONVEYANCE DOCUMENT NO. 31 FILED FEB. 1, 1963
PLANNING
RECORDS ENGR.
O.T.J. 6-24-68
CONTROL ENGR.
OFFICE ENGR.
DRAWN BY J.R. RAF
CHECKED BY
FIELD BOOKS 200-1697
SCALE 1" = 100'
W.O. 17430
CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
SEWER EASEMENT
Qualtrough St. below M.H.T.L.
TIDELANDS
DATE 6/24/68
E. T. Sommers
CITY ENGINEER
SHEET 1 OF 6
9221-1-B
HARBOR No 296-MB

ROSEVILLE



APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. L. Hudson	

Sewer Esmt. Shown hatched thus ▨

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

6-24-68

R.C.J.
C. INDEX 204-1699
1"=20'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT
Sewer Easement, in lot 6 Block 62 of Roseville Map 165

SHEET 2 OF 6
9221-2-B

APPROVALS

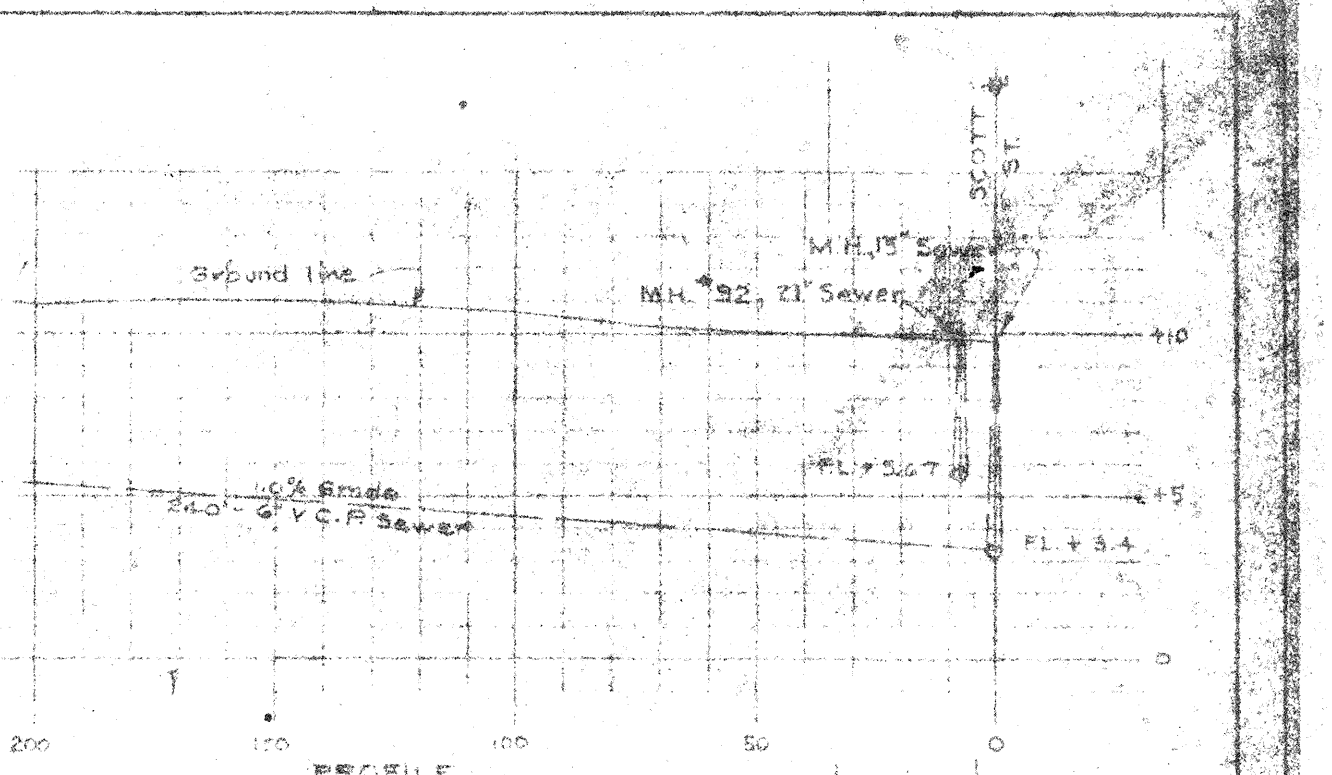
CITY OF SAN DIEGO
UTILITIES DIRECTOR — APPROVED FEB. 15, 1968

SAN DIEGO UNIFIED PORT DISTRICT
CHIEF ENGINEER — APPROVED FEB. 1 1968

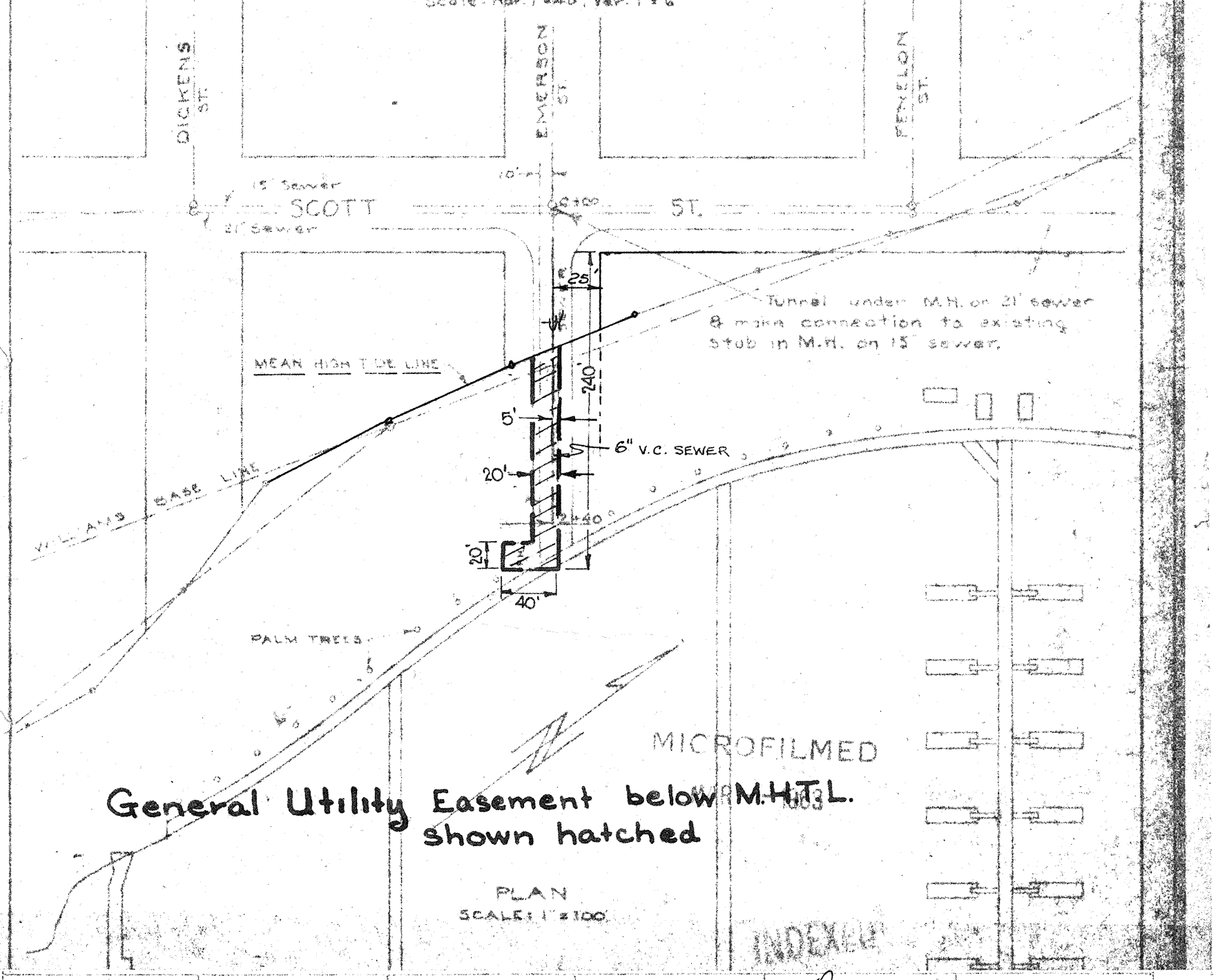
PUBLIC WORKS DIRECTOR

ORIGINAL CONVEYANCE DOCUMENT NO. 6
FILED FEB. 15, 1968

ORIGINAL CONVEYANCE DOCUMENT NO. 11
FILED FEB. 1 1968



PROFILE
Scale: Hor. 1"=40', Ver. 1"=6'



MICROFILMED

General Utility Easement below M.H.T.L. shown hatched

PLAN
SCALE: 1" = 100'

INDEXED

PLANNING	RECORDS ENGR	CONSTR. ENGR	O.E. 6-24-68 OFFICE ENGR.

DRAWN BY J.A.
CHECKED BY
FIELD BOOKS 204-1699
SCALE AS SHOWN
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

SEWER EASEMENT
Ext. Emerson St. below M.H.T.L.
TIDELANDS

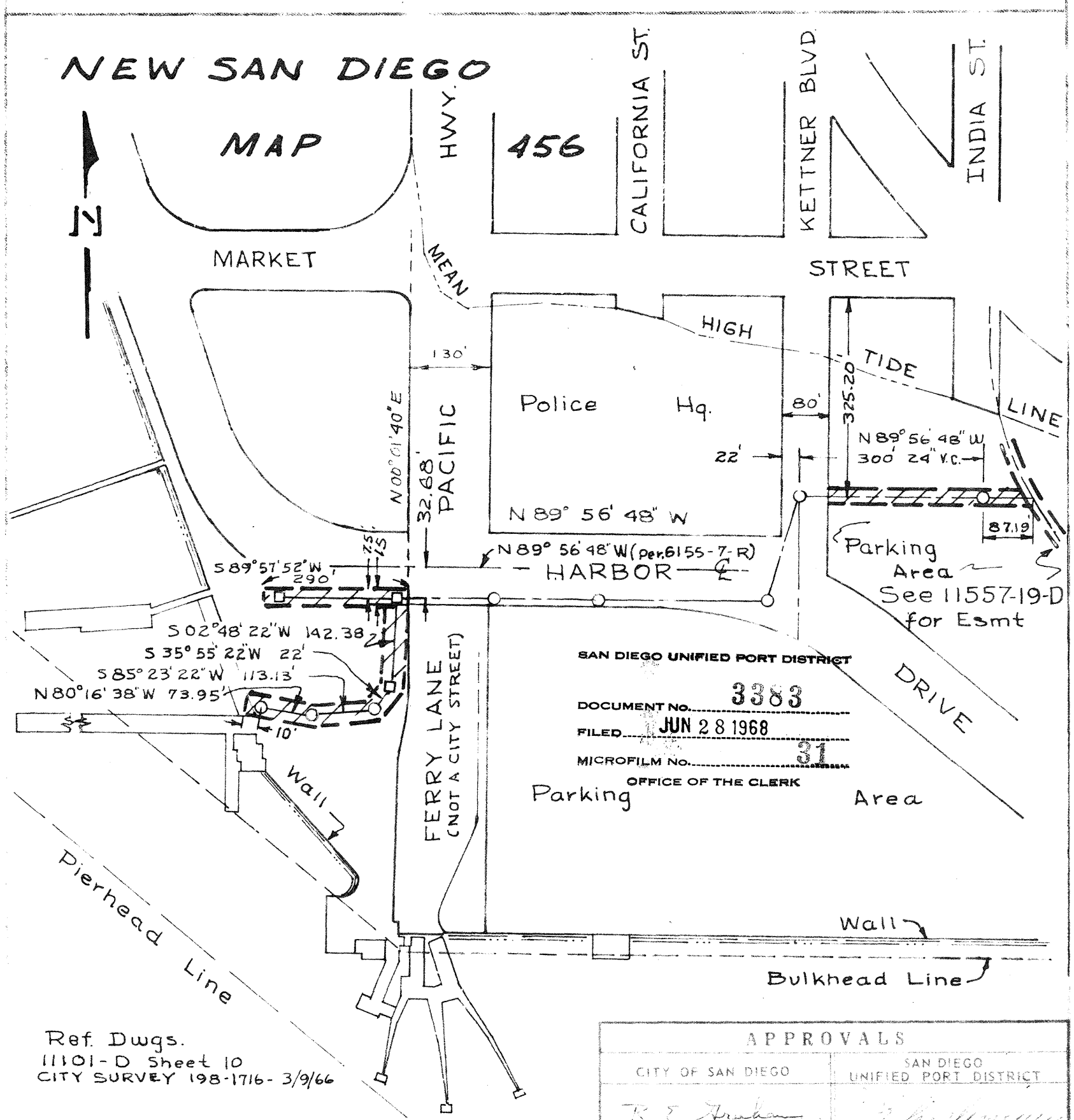
DATE 6-24-68
F. Gotschalk
CITY ENGINEER

SHEET 3 OF 6
9221-3-B

HARBOR No. 271-MB-1

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

NEW SAN DIEGO MAP 456



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

Ref. Dwgs.
11101-D Sheet 10
CITY SURVEY 198-1716- 3/9/66

198,000 N
1717,000 E

SEWER ESM'T BELOW
M.H.T.L. SHOWN HATCHED.

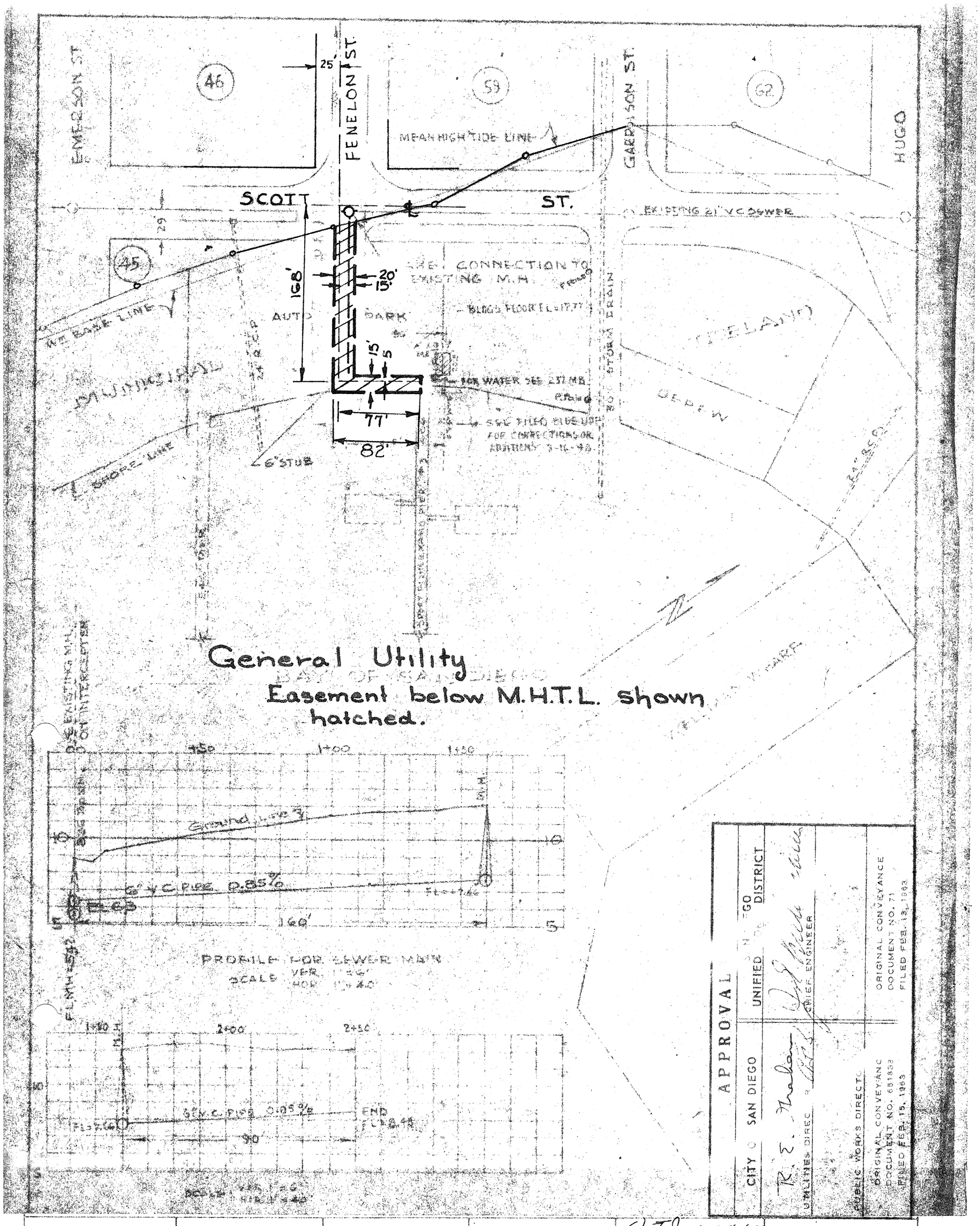
APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
K. E. Graham	[illegible]
PUBLIC WORKS DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
SURVEYS APPROVED FOR RECORD FEB. 19, 1968	RIGHT OF WAY APPROVED FOR RECORD APRIL 1968

J. T. J. 6-24-68

C. INDEX 198-1717
1" = 200'
17430

Sewer Esmt Sly of Harbor Drive & Wly of Ferry Lane. Also S. E'ly of Kettner & Market Sts.

SHEET 4 OF 6
9221-4-D



APPROVAL

CITY OF SAN DIEGO — UNIFIED PORT DISTRICT

UTILITIES DIRECTOR — CHIEF ENGINEER

PUBLIC WORKS DIRECTOR

ORIGINAL CONVEYANCE DOCUMENT NO. 651838 FILED FEB. 15, 1963

ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

		PLANNING	RECORDS ENGR.	CONTR. ENGR. O.T.J. 6-24-68	OFFICE ENGR.

DRAWN BY J.A.
CHECKED BY
FIELD BOOKS 204-1699
SCALE 1" = 100'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

SEWER EASEMENT
Ext. Fenelon St below M.H.T.L.

TIDELANDS

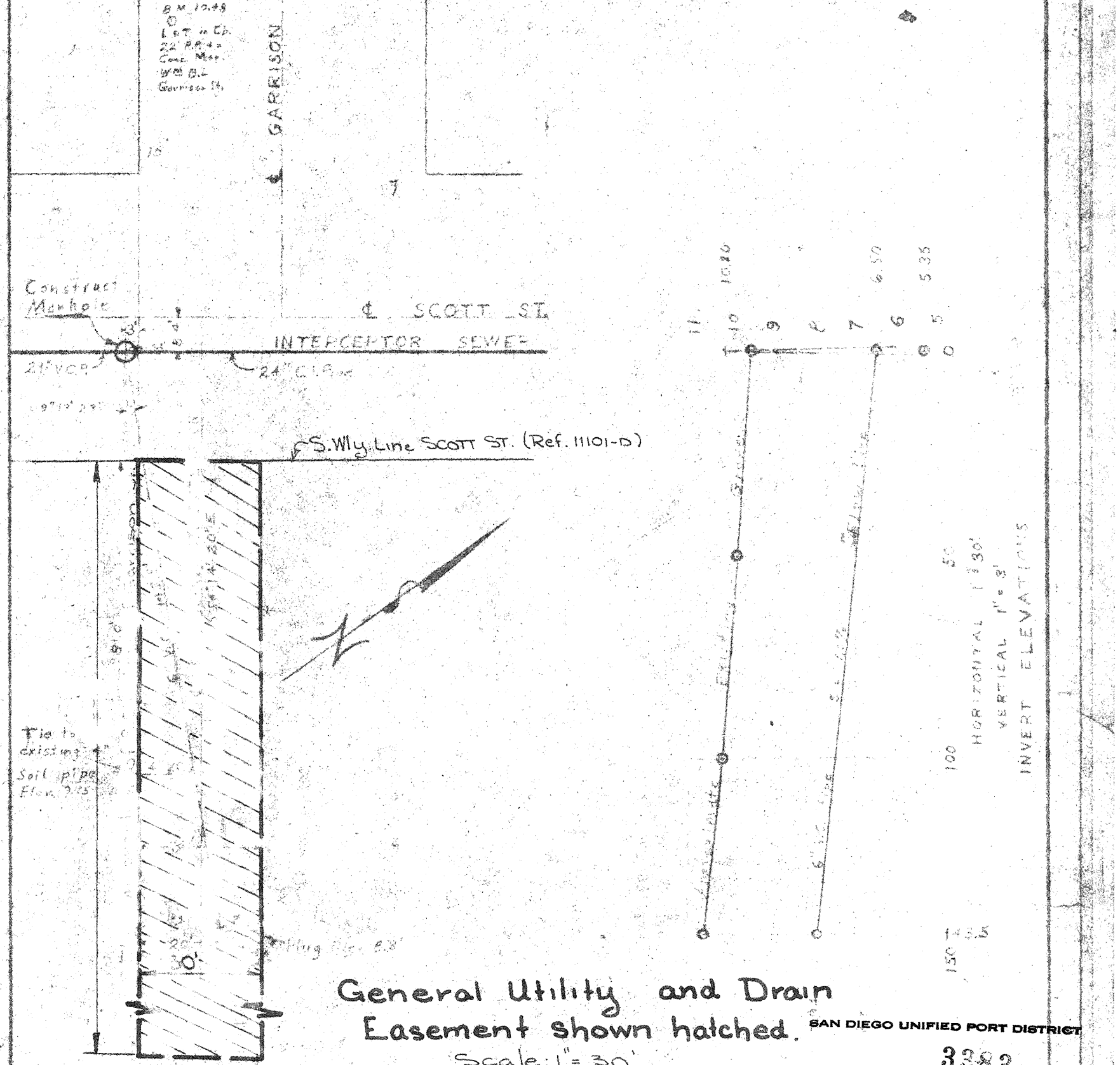
HARBOR Nº 229-MB

DATE 6-21-68
H. Fairbairn
CITY ENGINEER

SHEET 5 OF 6
9221-5-B

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651838 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963



General Utility and Drain Easement shown hatched.

Scale: 1" = 30'

MANHOLE TO BE PLACED AT JUNCTION OF 24" C.I. PIPE & 21" V.C. PIPE
ELEVATION OF TOP OF MH = 10.20

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

		PLANNING	RECORDS ENGR.	O.T.J. 6-24-68 CONTROL ENGR.	OFFICE ENGR.

DRAWN BY J.B. CHECKED BY
FIELD BOOKS 204-1699
SCALE 1" = 30'
W.O. 17430

CITY OF SAN DIEGO - ENGINEERING DEPARTMENT

SEWER EASEMENT
Ext. Garrison St. below M.H.T.L.

TIDELANDS

DATE 2-4-68
A. Graham
CITY ENGINEER

SHEET 6 OF 6
9221-6-B

HARBOR NO 256-MB

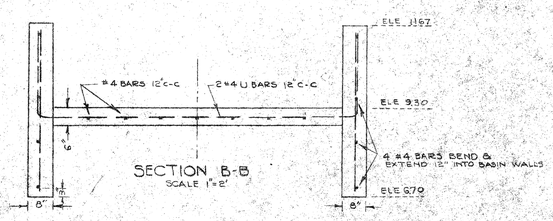
November 18, 2015
Item No. 11
Supporting Document No. 3

City of San Diego
Comptroller

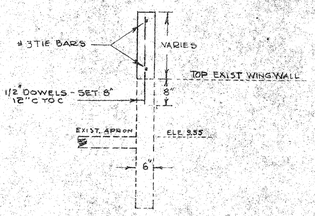
City Drc No.
724665
4/2/68

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 21
OFFICE OF THE CLERK

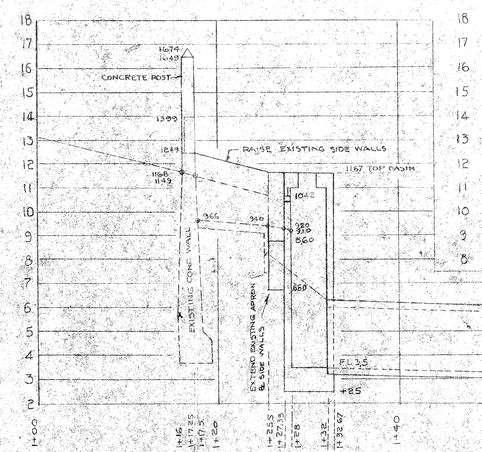
(27)



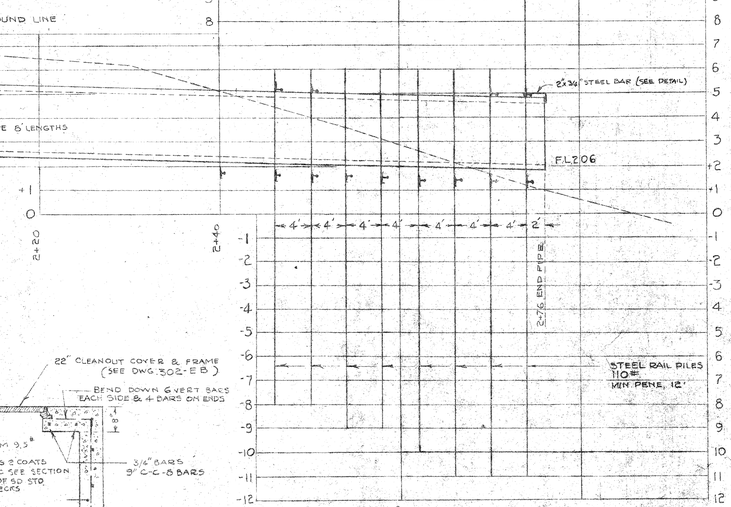
SECTION B-B
SCALE 1"=2'

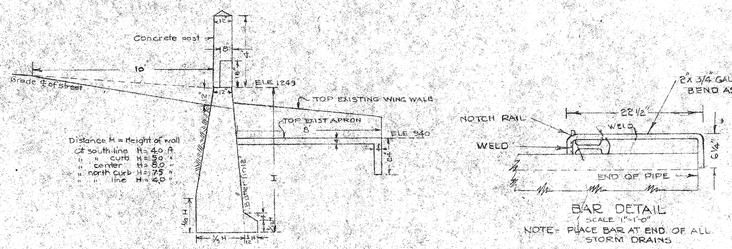


SECTION A-A
SCALE 1"=2'

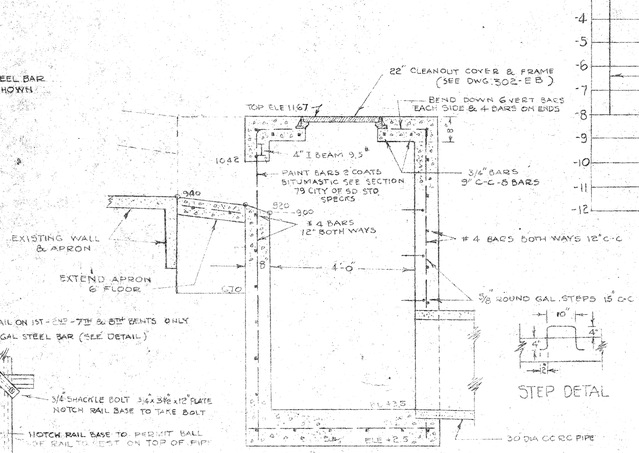


PROFILE OF STORM DRAIN AT FOOT OF KELLOGG STREET
SCALE HORIZ 1"=8'
VERT 1"=3'





BAR DETAIL
SCALE 1"=1'-0"
NOTE- PLACE BAR AT END OF ALL STORM DRAINS



STEP DETAIL

SECTION OF EXISTING CONCRETE WALL ON KELLOGG ST
SCALE 1"=4'-0"

PLAN OF STORM DRAIN AT FOOT OF KELLOGG ST.
'15' Drainage Easement below M.H.T.L. shown hatched
(KELLOGG ST.)

END ELEVATION OF PIPE
SCALE 1"=2'-0"

SECTION ON ℄ BASIN NO 1
SCALE 1"=2'-0"

FRONT ELEVATION OF EXISTING WALL ON KELLOGG STREET
SCALE 1"=2'-0"

WORK TO BE DONE

The improvement consists of the following work to be done according to these plans and the specifications prepared therefor by the Harbor Engineer of the City of San Diego. The construction of concrete box waterway, catch basin & 72 lin.f. of 24" dia. CCRC pipe Storm drain at the foot of McCall Street, The construction of wing walls, catch basin and 144 lin.f. of 30" dia. CCRC pipe storm drain at the foot of Kellogg Street, The construction of Catch Basins approximately 23 lin.ft. of 18" dia CCRC pipe and 72 lin.ft. of 24" dia CCRC pipe storm drain at the foot of Owen Street including all other work appurtenant thereto.

Elevations shown hereon are in feet and decimals of foot and are above or below mean lower low water or zero datum established for the Bay of San Diego by the U.S.C. & G. Survey.

DRAINAGE EASEMENT

Foot of Kellogg St. below M.H.T.L.
City Standard Dwg. No 302-EB accompanies these plans.

TIDELANDS

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	PRESIDENT
PUBLIC WORKS DIRECTOR	SECRETARY
ORIGINAL CONVEYANCE DOCUMENT NO. 151833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 73 FILED FEB. 12, 1963

CITY OF SAN DIEGO
ENGINEERING DEPARTMENT

SHEET 1 OF 23 SHEETS

W.O. NO 17430

PLAN CHANGE	REVISION BY	DATE	APPROVAL

E. F. Gutierrez 6/24/68
CITY ENGINEER DATE

OFFICE ENGINEER

CONSTRUCTION RECORD

WATER DEPT.		SEWERAGE	
PLANNING DEPT.		DRAINAGE	SUPERVISOR
ELECTRICAL		HIGHWAY	CHECKED
STRUCTURAL		GRADES	DESIGNED J. Allen
TRAFFIC		CONTROL	

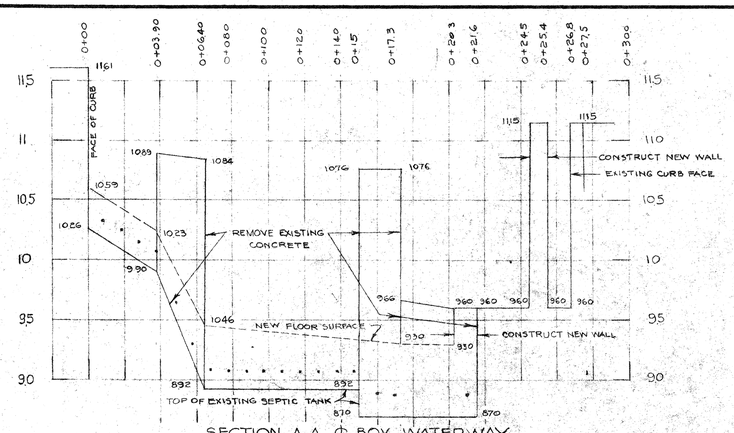
DATE STARTED DATE COMPLETED
CONTR INSP.
FIELD BOOK 198 - 1695

11556-1-D

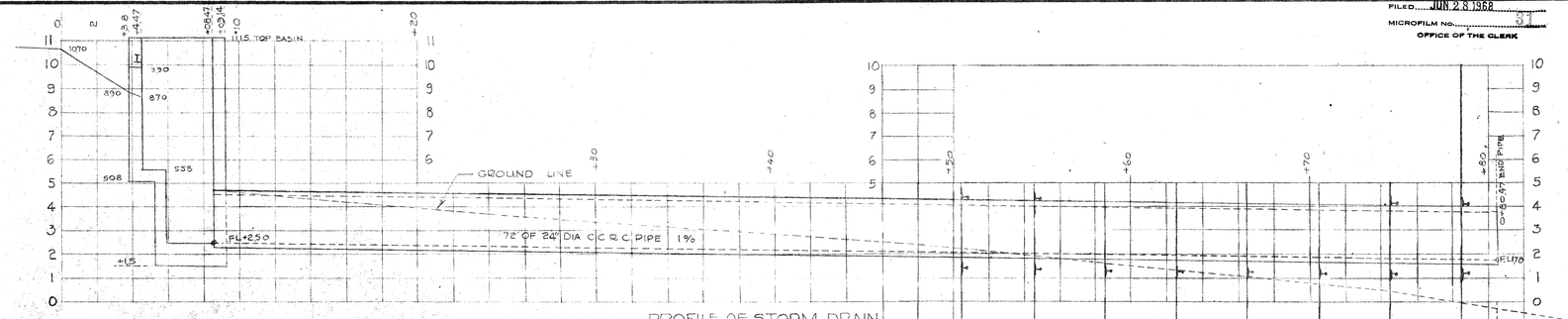
HARBOR NO 440-D, SH 1.

November 18, 2015
Item No. 11
Supporting Document No. 3

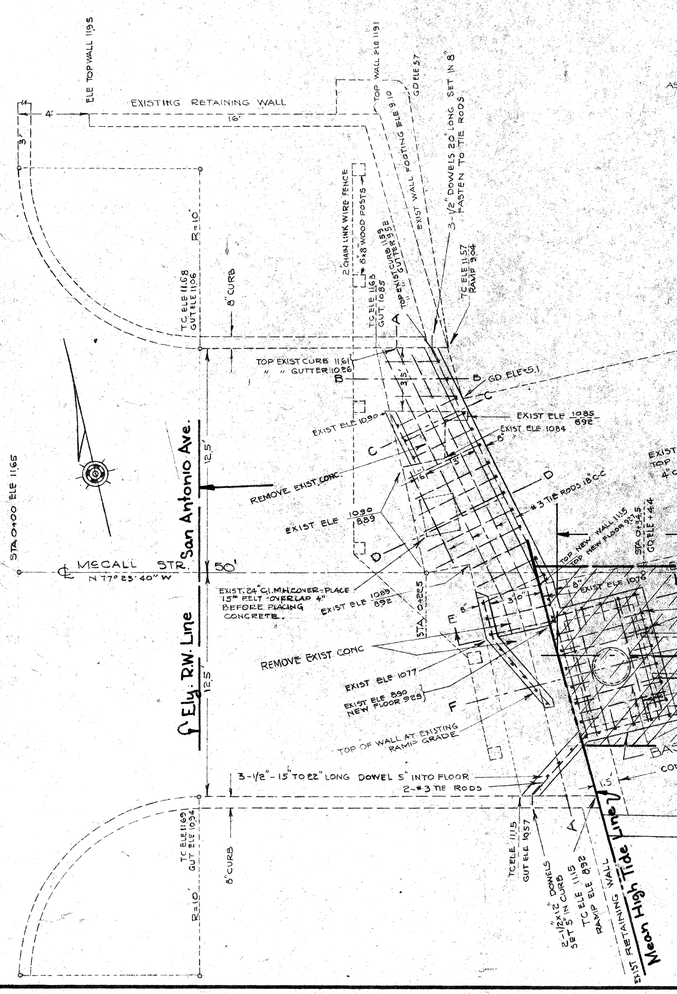
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM NO. 37
OFFICE OF THE CLERK



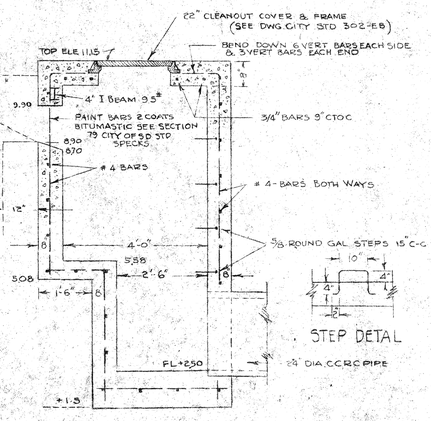
SECTION A-A & BOX WATERWAY
SCALE HORIZ 1"=4'
VERT 1"=0.6'



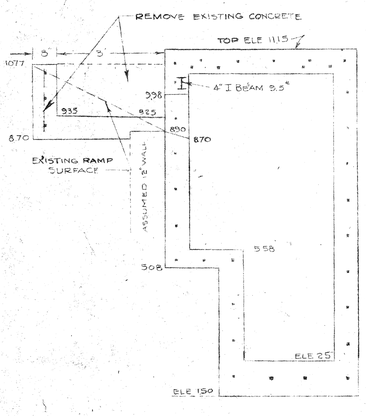
PROFILE OF STORM DRAIN
SCALE HORIZ 1"=4'
VERT 1"=3'



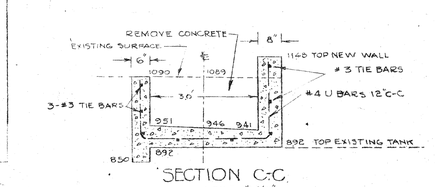
PLAN OF STORM DRAIN AT FOOT OF Mc CALL ST.
SCALE 1"= 4'-0"



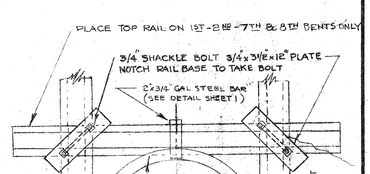
SECTION F-F & BASIN
SCALE 1"= 2'-0"

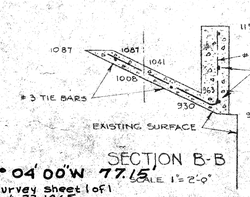


SECTION E-E
SCALE 1"= 2'-0"

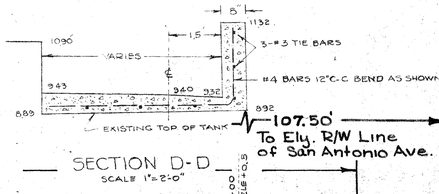


SECTION C-C
SCALE 1"= 2'-0"





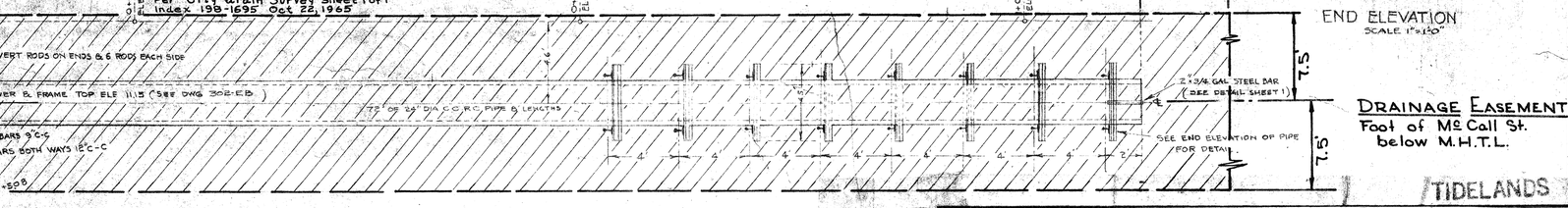
SECTION B-B
SCALE 1"= 2'-0"



SECTION D-D
SCALE 1"= 2'-0"

N 78° 04' 00" W 77.15'
Per City drain Survey sheet 1 of 1
Index 198-1695 Oct 22, 1965

107.50'
To Ely. R/W Line of San Antonio Ave.



END ELEVATION
SCALE 1"=1.50'

15' Drainage Easement below M.H.T.L. shown (Mc CALL STR.) HATCHED.

Drainage Easement
Foot of Mc Call St.
below M.H.T.L.

TIDELANDS

APPROVED

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTION	CHIEF ENGINEER
ORIGINAL CONVEYANCE DOCUMENT NO. 401933 FILED FEB. 15, 1952	ORIGINAL CONVEYANCE DOCUMENT # FILED/VOL. #

DRAIN EASEMENT - E'ly of San Antonio Ave & Mc Call St.

CITY OF SAN DIEGO
ENGINEERING DEPARTMENT
SHEET 2 OF 23 SHEETS
W.O. NO 17430

CHANGE	BY	DATE	APPROVAL
PLAN REVISION			

CITY ENGINEER 6/29/68 DATE

CONSTRUCTION RECORD

DATE STARTED — DATE COMPLETED
CONTR — INSP.
RET. DRAT. 198-1695

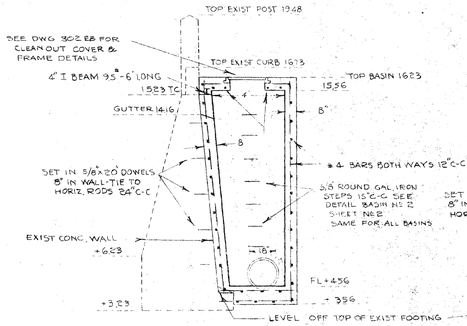
WATER DEPT	SEWERAGE
PLANNING DEPT	DRAINAGE
ELECTRICAL	HIGHWAY
STRUCTURAL	GRADES
TRAFFIC	CONTROL O.T.J. 6-24-68

OFFICE ENGINEER
SUPERVISOR
CHECKED
DESIGNED J. Altman
1155G-2-D

HARBOR No 440-D, Sht. 3

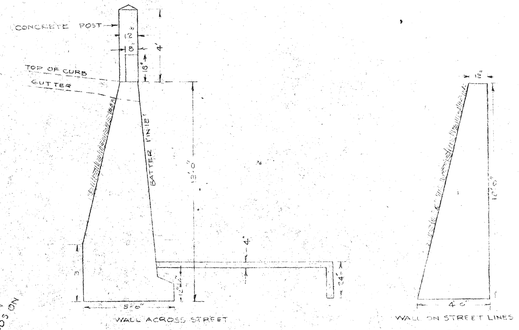
November 18, 2015
Item No. 11
Supporting Document No. 3

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK



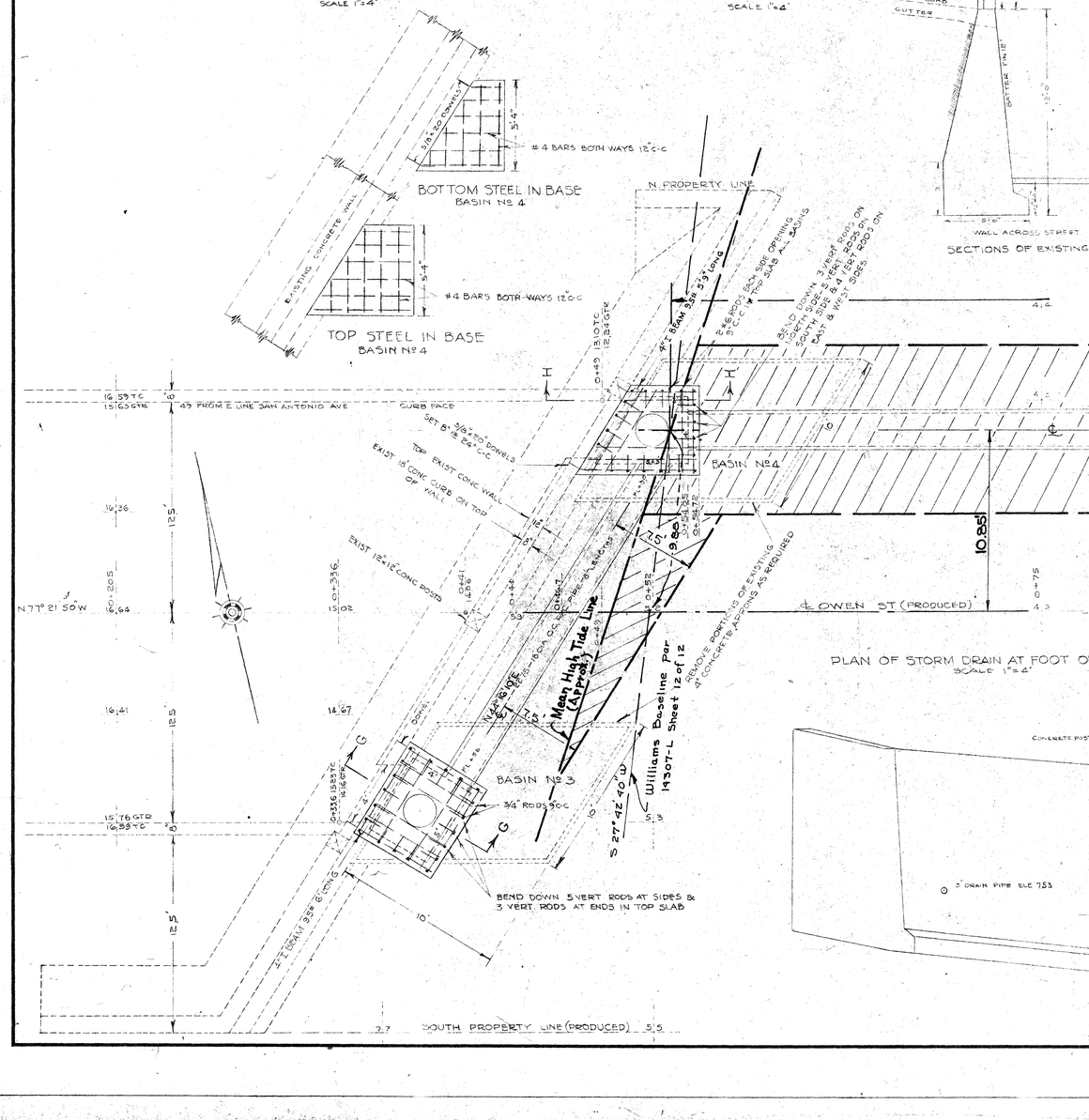
SECTION G-G
SCALE 1"=4'

SECTION H-H
SCALE 1"=4'

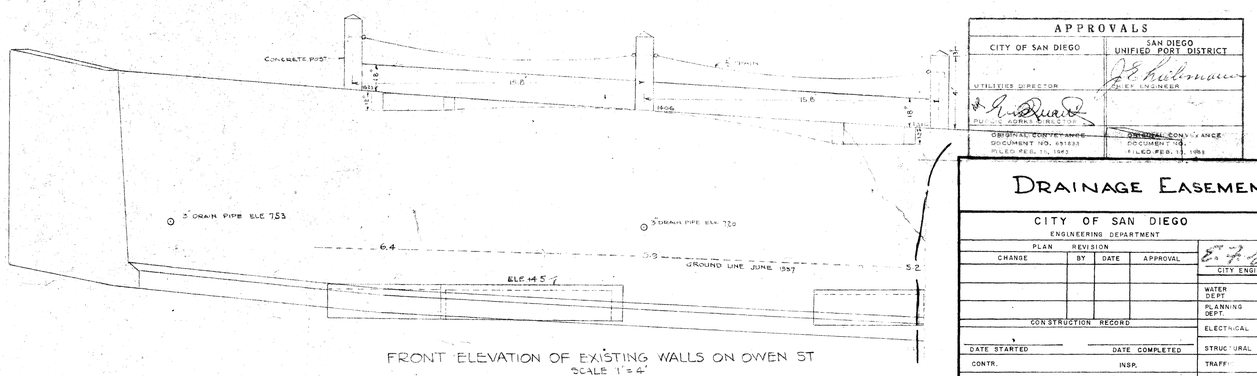


SECTIONS OF EXISTING CONCRETE WALLS ON OWEN ST
SCALE 1"=4'

PROFILE OF STORM DRAIN AT FOOT OF OWEN ST.
SCALE HORIZ. 1"=8'
VERT 1"=3'



PLAN OF STORM DRAIN AT FOOT OF OWEN ST
SCALE 1"=4'



FRONT ELEVATION OF EXISTING WALLS ON OWEN ST
SCALE 1"=4'

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 451833 FILED FEB. 15, 1945	ORIGINAL CONVEYANCE DOCUMENT NO. FILED FEB. 15, 1945

TIDELANDS

DRAINAGE EASEMENT, Foot of Owen below M.H.T.L.

CITY OF SAN DIEGO
ENGINEERING DEPARTMENT

SHEET 3 OF 23 SHEETS

W.O. NO 17430

PLAN REVISION				
CHANGE	BY	DATE	APPROVAL	
CONSTRUCTION RECORD				
DATE STARTED			DATE COMPLETED	
CONTR.			INSP.	
FIELD BOOK 198-1695				

E. J. Gudmundson 6/24/68
CITY ENGINEER DATE

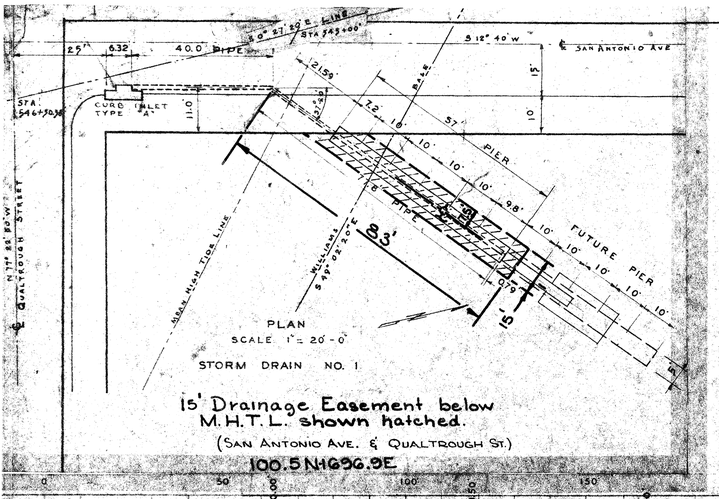
WATER DEPT.	SEWERAGE
PLANNING DEPT.	DRAINAGE
ELECTRICAL	HIGHWAY
STRUCTURAL	GRADES
TRAFFIC	CONTROL W.J. 6-24-68

OFFICE ENGINEER
SUPERVISOR
CHECKED
DESIGNED J.A.

11556-3-D

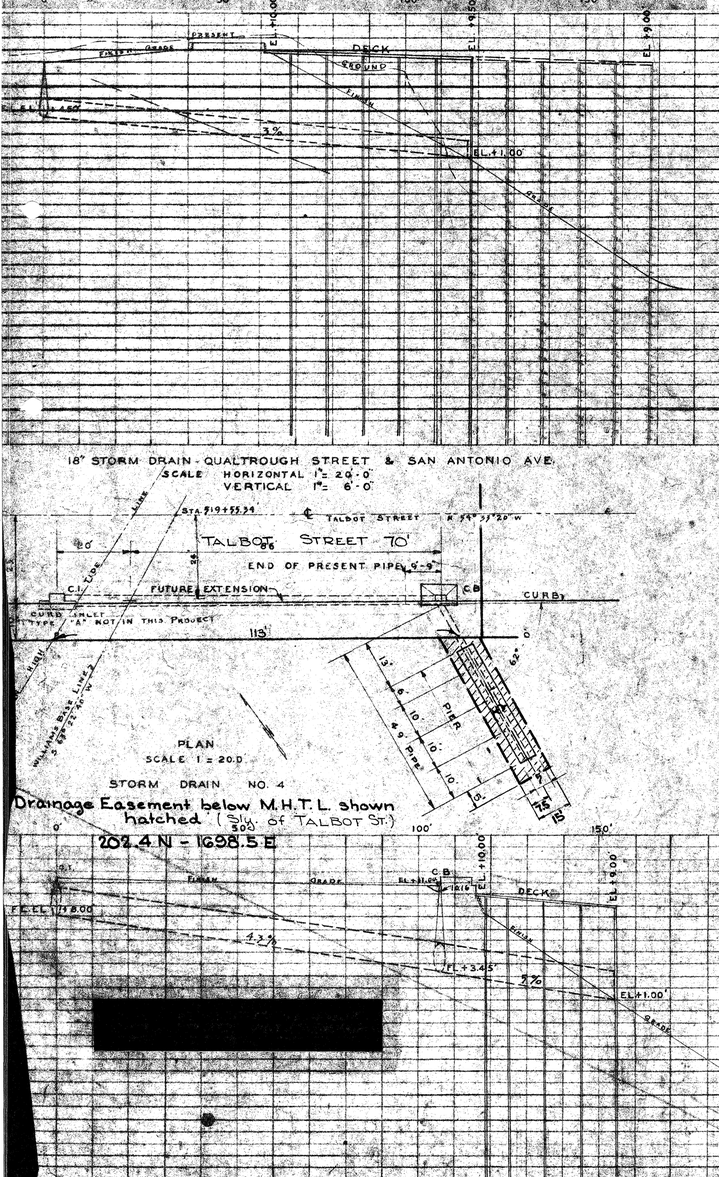
HARBOR NO 440-D, Sht. 3

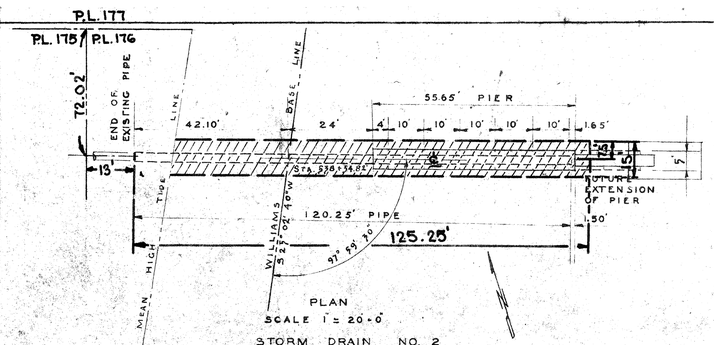
November 18, 2015
Item No. 11
Supporting Document No. 3



15' Drainage Easement below M.H.T.L. shown hatched.
(San Antonio Ave. & Qualtrough St.)

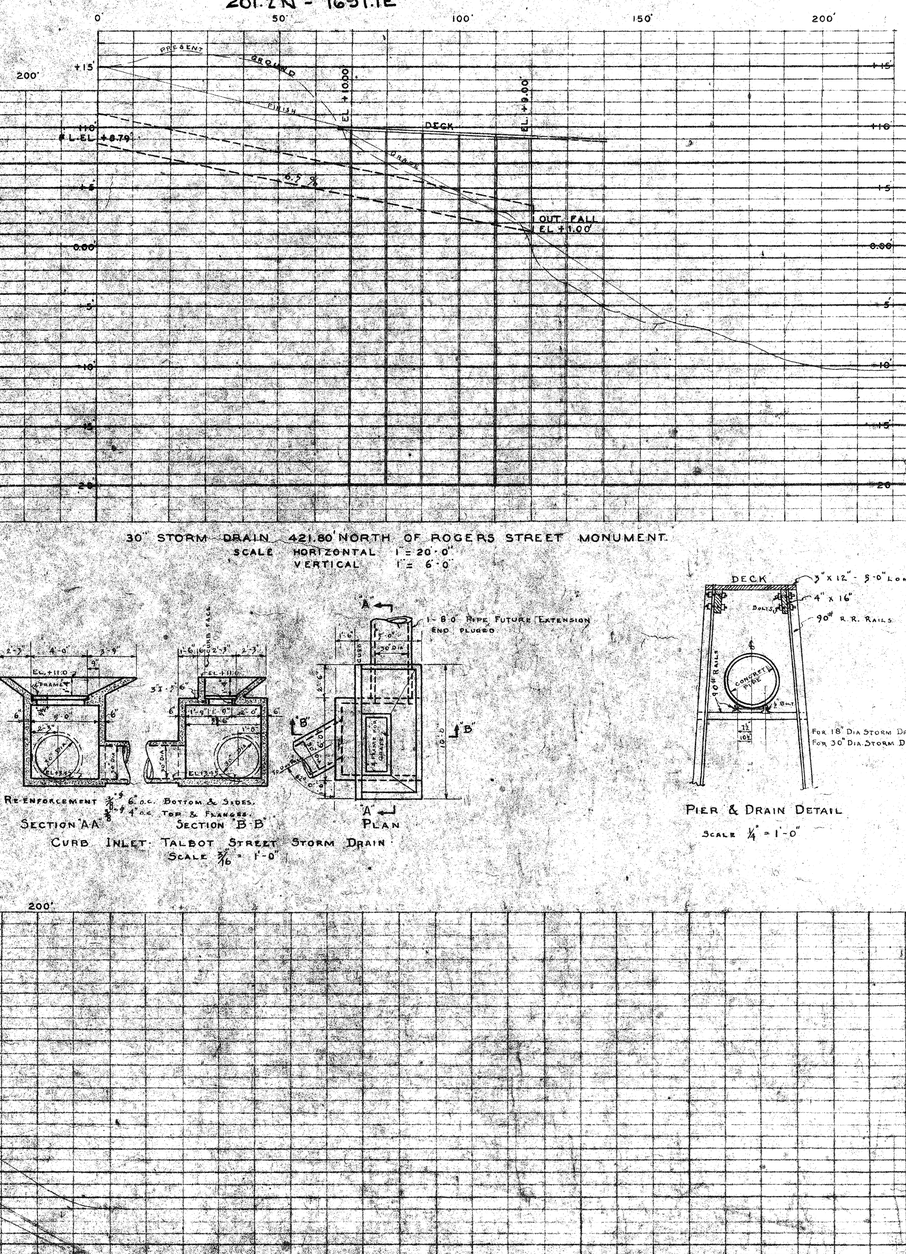
100.5 N 1696.9 E

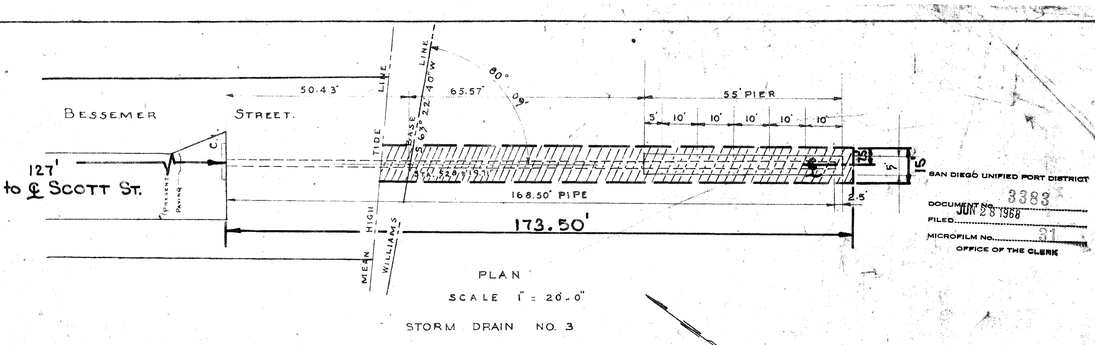




15' Drainage Easement below M.H.T.L. shown hatched
(East of P.L. 176)

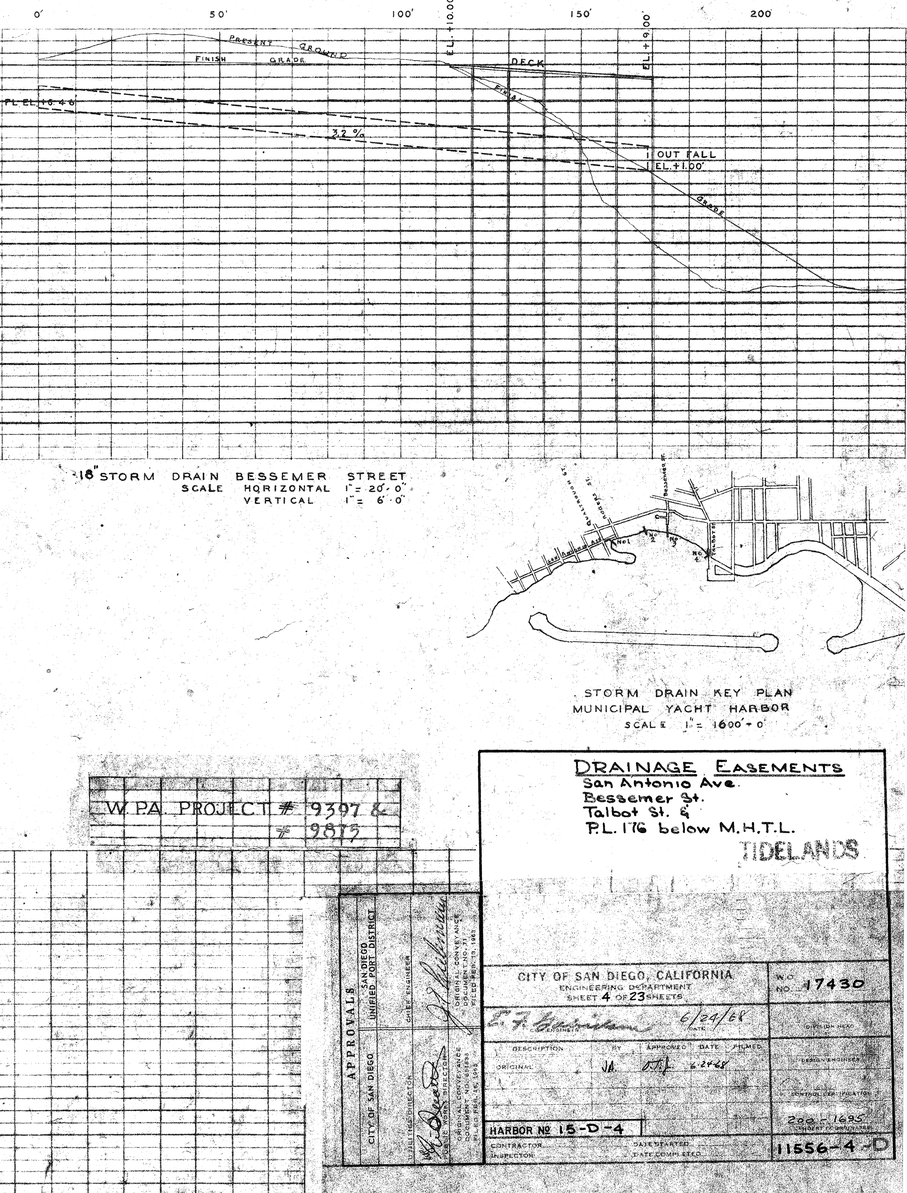
201.2 N - 1697.1 E





15' Drainage Easement below M.H.T.L. shown hatched
(S.Ely. of Bessemer St.)

202.1 N - 1697.8 E



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
JUN 28 1968
FILED
MICROFILM NO. 31
OFFICE OF THE CLERK

18" STORM DRAIN - QUALTROUGH STREET & SAN ANTONIO AVE.
SCALE HORIZONTAL 1" = 20'-0"
VERTICAL 1" = 6'-0"

Drainage Easement below M.H.T.L. shown hatched (S'ly. of TALBOT ST.)

202.4 N - 1698.5 E

30" STORM DRAIN 421.80' NORTH OF ROGERS STREET MONUMENT.
SCALE HORIZONTAL 1" = 20'-0"
VERTICAL 1" = 6'-0"

Pier & Drain Detail
Scale 1/4" = 1'-0"

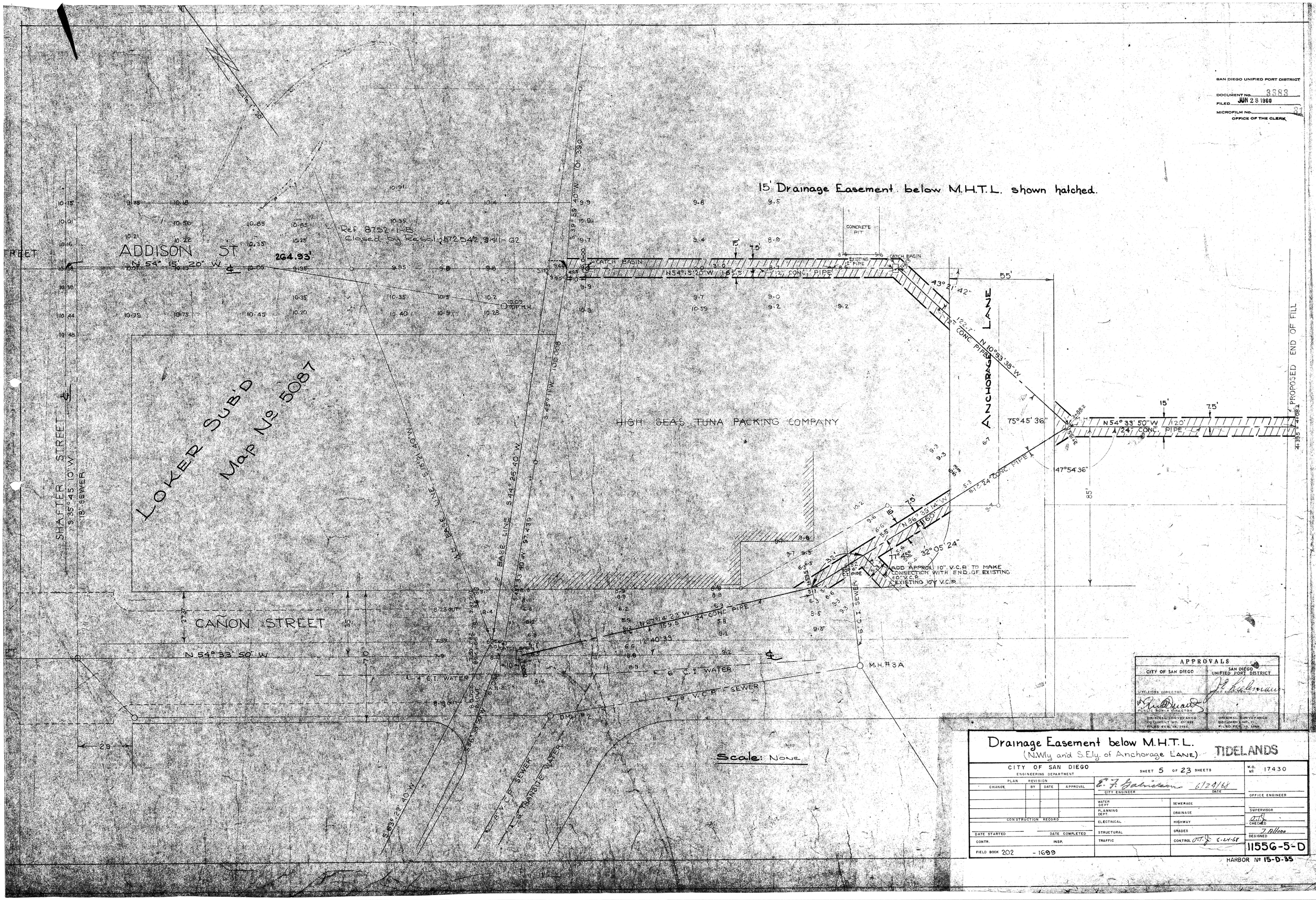
18" STORM DRAIN BESSEMER STREET
SCALE HORIZONTAL 1" = 20'-0"
VERTICAL 1" = 6'-0"

W.P.A. PROJECT # 9397 &
9813

DRAINAGE EASEMENTS
San Antonio Ave.
Bessemer St.
Talbot St. &
P.L. 176 below M.H.T.L.
TIDELANDS

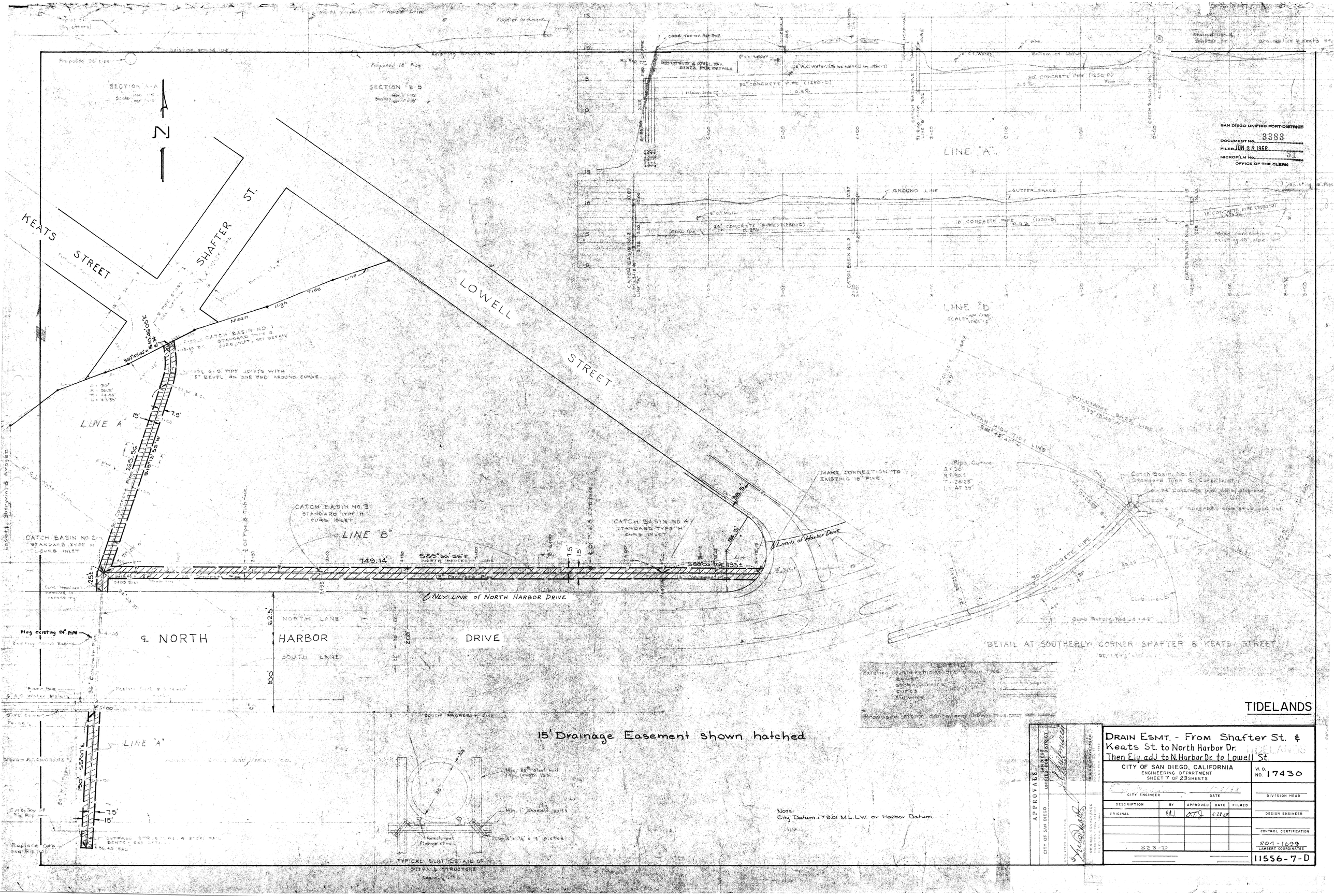
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
CHIEF ENGINEER
DIRECTOR OF PUBLIC WORKS
DIRECTOR OF PORT DEVELOPMENT
DOCUMENT NO. 3383 FILED JUN 28 1968 OFFICE OF THE CLERK
RECOMMENDED FOR APPROVAL

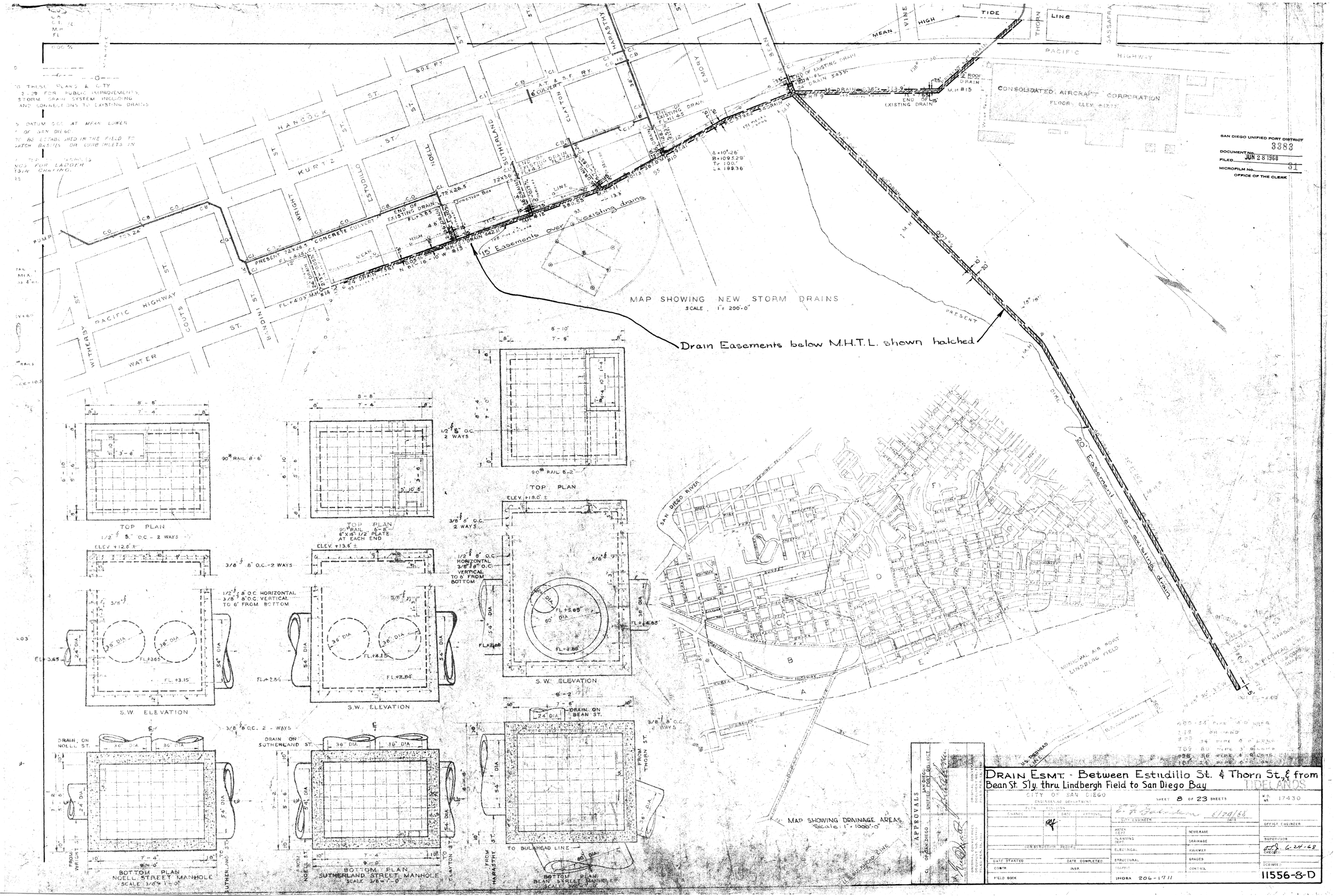
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 4 OF 23 SHEETS
W.O. NO. 17430
E. F. Williamson 6/24/68
DATE
DESCRIPTION BY APPROVED DATE FILED
ORIGINAL JA 6-24-68
HARBOR NO. 15-D-4
CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED
DRAWING NO. 11556-4-D


SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK
15' Drainage Easement below M.H.T.L. shown hatched.
ADDISON ST
N 54° 15' 20" W
264.93'
Ref. 8752-1-B
Closed by Resol. 172542, 3-11-62
LOKER SUB'D
Map No. 5087
HIGH SEAS TUNA PACKING COMPANY
ANCHORAGE LANE
CONCRETE PIT
CATCH BASIN
N 54° 15' 20" W
12" CONC. PIPE
43° 21' 42"
N 10° 53' 38" W
75° 45' 36"
N 54° 33' 50" W
24" CONC. PIPE
47° 54' 36"
PROPOSED END OF FILL
SHAFTER STREET
S 35° 45' 10" W
18" SEWER
CAÑON STREET
N 54° 33' 50" W
N 67° 14' 23" W
24" CONC. PIPE
12° 40' 33"
ADD APPROX. 10" V.C.P. TO MAKE CONNECTION WITH END OF EXISTING 10" V.C.P.
EXISTING 10" V.C.P.
6" C.I. SEWER
M.H. #3A
4" C.I. WATER
6" C.I. WATER
8" V.C.P. SEWER
DMH #2
8" V.C.P. SEWER
6" TRANSITE WATER
Scale: None
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 45-1839 FILED FEB. 13, 1969
ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1969
Drainage Easement below M.H.T.L.
(N.Wly and S.Ely. of Anchorage Lane)
TIDELANDS
CITY OF SAN DIEGO
ENGINEERING DEPARTMENT
SHEET 5 OF 23 SHEETS
W.O. No. 17430
PLAN REVISION
CHANGE
BY
DATE
APPROVAL
CITY ENGINEER
DATE 6/24/68
OFFICE ENGINEER
WATER DEPT.
SEWERAGE
PLANNING DEPT.
DRAINAGE
SUPERVISOR
CONSTRUCTION RECORD
ELECTRICAL
HIGHWAY
CHECKED
DATE STARTED
DATE COMPLETED
STRUCTURAL
GRADES
DESIGNED
CONTR.
INSP.
TRAFFIC
CONTROL
FIELD BOOK 202 - 1699
11556-5-D
HARBOR No. 15-D-35

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

STREET
N35°44'40"E
GARRISON STREET
S54°14'20"E
SCOTT STREET
ROSECRANS STREET
N35°44'40"E
S54°14'20"E
83+69.42
83+96.00
50.00 Left
26.58
0+00
1+00
2+00
3+00
3+43.28
35.0
350
Existing top of fill
Existing dredger fill
Construct new support See detail
Grade -3.9%
Grade -0.30%
8" to 12" Crushed rock (Note 1 as directed)
Reinforced Concrete Storm Drain See Sheet 2
Existing 8'x5' R.C.B.C. Storm Drain
Existing 8'x5' R.C.B.C. Storm Drain
Existing 6'x5' R.C.B.C. Storm Drain
Existing 6'x5' R.C.B.C. Storm Drain
Existing 24" C.I. Sewer
Existing 24" C.I. Sewer
Existing 12" C.I. Sewer
Existing 12" C.I. Sewer
Existing 12


SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK
KEATS STREET
SHAFTER ST.
LOWELL STREET
LINE "A"
LINE "B"
Mean High Tide Line
CATCH BASIN NO. 1
CATCH BASIN NO. 2
CATCH BASIN NO. 3
CATCH BASIN NO. 4
MAKE CONNECTION TO EXISTING 18" PIPE
Limits of Harbor Drive
℄ NLY. LINE of NORTH HARBOR DRIVE
℄ NORTH HARBOR DRIVE
NORTH LANE
SOUTH LANE
Plug existing 24" pipe
DETAIL AT SOUTHERLY CORNER SHAFTER & KEATS STREET
15' Drainage Easement shown hatched
TYPICAL BENT DETAIL OF OUTFALL STRUCTURE
Note:
City Datum = +9.01 M.L.L.W. or Harbor Datum.
TIDELANDS
DRAIN ESMT. - From Shafter St. & Keats St. to North Harbor Dr.
Then Ely. adj to N. Harbor Dr. to Lowell St.
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 7 OF 23 SHEETS
W. O. NO. 17430
CITY ENGINEER
DATE
DIVISION HEAD
DESCRIPTION
BY
APPROVED
DATE
FILMED
ORIGINAL
DESIGN ENGINEER
CONTROL CERTIFICATION
223-D
204-1699
LAMBERT COORDINATES
11556-7-D
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT


MAP SHOWING NEW STORM DRAINS
SCALE 1" = 200'-0"
Drain Easements below M.H.T.L. shown hatched
15' Easements over existing drains
20' Easement over existing drain
CONSOLIDATED AIRCRAFT CORPORATION
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK
MAP SHOWING DRAINAGE AREAS
Scale: 1" = 1000'-0"
TOP PLAN
S.W. ELEVATION
BOTTOM PLAN
NOELL STREET MANHOLE
SUTHERLAND STREET MANHOLE
BEAN STREET MANHOLE
DRAIN ESMT. - Between Estudillo St. & Thorn St., & from Bean St. S'ly. thru Lindbergh Field to San Diego Bay
TIDELANDS
CITY OF SAN DIEGO
SHEET 8 OF 23 SHEETS
W.O. No. 17430
6/24/68
INDEX 206-1711
11556-8-D

November 18, 2015
Item No. 11
Supporting Document No. 3

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 24
OFFICE OF THE CLERK

PLAN-PROFILE SCALE H

60 61 62 63 64 65 66 67

CALIFORNIA ST. — NUTMEG ST. — PACIFIC HIGHWAY

Match Line Sta 59+75 — See Sheet 5 — Match Line — See Sheet 7

El. 20 — El. 10 — El. 0

Ground Line — P.C.C. Concrete pipe collar — E.C. — 4" Asphalt Concrete — Railroad Tracks Upset — 24" Drain — W — Light Pole — 12" Water — 3" RCP — Minimum Clearance — 2" MTD — Phone Co. to relocate — Asphalt Pavement — Channel Flow Line

Invert — 84" Concrete Pipe — 16" Sewer (Encase per 124.5.5) — 8" Sewer — NOTE: 0.4' Clearance between Sewer and Storm drain

1750-D — 1250-D

60+06.82 Equation 61+12.13

120 - 84" Concrete Pipe to be jacked into place — Concrete Pipe Collars — 2" Asphalt on 6" Concrete Bases — Obstruction — P.C. 64+58.56 — P.T. 64+90.41 — El. 1300 Type E Cleanout 65+10 — B.C. 66+86.12 — E.C. 67+40.16

63+10 El. 1.75 — 64+10 El. 1.45 — El. 0.40 — El. 0.32 — El. -1.18 — El. -1.64

Profile of 84" Storm Drain

Profile Scale: Horizontal 1"=50'
Vertical 1"=6'

KETTNER ST. — CALIFORNIA ST.

Existing pipe (abandon) — Abandoned street railway tracks — Asphalt pavement — 16" Pipe — Ground Line — Future Street Grade — El. 50 — El. 40 — El. 30

Type G Cleanout 4'x 10' — Connect to existing 12" and 8" pipes — 6.8 % — Invert — 18" Concrete Pipe — 169'

Type G Cleanout 4'x 10' — 1" Conduit — 30° — 18" Concrete Pipe — 6" Water — 8" Sewer — 34.75' — Type H Curb Inlet with 5' Portland cement concrete apron. Meet existing curb grade (Use 10" Curb Face) — A.C. paving per City Std. — 1" Gas — El. 40 — El. 30

Profile of 18" Storm Drain in CHALMERS ST.

KETTNER ST. — CALIFORNIA ST.

Existing 18" pipe (Abandon) — Ground Line — Established Grade — 8% — 18" Concrete Pipe — 8" Sewer — 6" Water — El. 25 — El. 20 — El. 15

Concrete Thrust Block — 6" Water — 8" Sewer — 6" Gas — 18" Concrete Pipe — Invert — 174.5' — 4.7 % — 59'

Profile of 24" Storm Drain in WALNUT ST.

20' Drain easement below M.H.T.L. shown hatched.

MIDDLETOWN — NUTMEG ST. — CALIFORNIA ST. — PACIFIC HIGHWAY — Tidelands of the Bay of San Diego

SEE SHEET 5 — SEE SHEET 7 — See Dwg 11556-10-D

3-182-84" Concrete Pipe — (1.15%)

Sewer Manhole Line Thrust — Steam High Tide Line — Gunnel Jog — Steel Tanks — Underground storage tanks — Steel Piles — 8" Sewer (Abd.) — Steel Jetties — 8" Water Main — 2-84" Concrete Pipe (1250-D) 60+06.82 to 63+10 — 78-84" Concrete Pipe (1250-D) 64+10 to 65+08 — 228-84" Concrete Pipe (1250-D) 65+08 to 67+36.77 — 156.11' — Chain link fence — 4" Asphalt Pavement — Concrete Pipe Collars — Concrete Pipe Collar — Concrete Cradle — Survey (78-331-5) — Sewer Manhole — Storm Drain Manhole — Type G Cleanout — Type D Cleanout — Connect to existing 12" pipe — Abandon existing 12" pipe — Abandon existing 18" pipe — Abandon existing 24" pipe — Clean & concrete cradle under drain to one diameter above bottom — To be removed — Abandon existing — Concrete Slope Protection — Rip Rap — Concrete Bag Support — Concrete Pipe Collar — Asphalt — Frame Co. to relocate — TEST HOLE NO 1 — TEST HOLE NO 2 — 8" Sewer (Dwg 9188) — 8" Sewer (Dwg 9189) — 8" Sewer (Dwg 9190) — 8" Sewer (Dwg 9191) — 8" Sewer (Dwg 9192) — 8" Sewer (Dwg 9193) — 8" Sewer (Dwg 9194) — 8" Sewer (Dwg 9195) — 8" Sewer (Dwg

November 18, 2015
Item No. 11
Supporting Document No. 3

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. - 3383
FILED JUN 28 1968
MICROFILM NO. 84
OFFICE OF THE CLERK

67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82

Match Line E.C. 67+40.76

El. 10 — El. 0 — El. -10

See Sheet 6

El. -1.64

0.85 %

2.08 %

1.58 %

0.15 %

El. -3.38

El. -4.00

El. -6.81

El. -7.28

El. -9.37

El. -9.70

El. -9.83

El. -10.48

B.C. 69+45.4

E.C. 69+96.72

B.C. 71+41.84

E.C. 71+71.81

B.C. 77+06.43

Ground Line

Type E Cleanout (Modified) 74+83

E. 3.6

75+82 Concrete Lug

Sta. 70+01 to 82+24 Pipe to be installed with Double Rubber Gasket Joints and crusher run rock bedding

PROFILE of Storm Drain

Scale: Horizontal 1" = 50'
Vertical 1" = 6

Ground line

El. 150

E 84" pipe

El. 0

Type G Cleanout
Connect to existing pipe
8'-24" concrete pipe

Plug

Existing 24" pipe

El. -6.04

El. -10

Concrete lug

PROFILE-Storm Drain-Sta. 80+48

Equation 79+05.55 = 79+02.14

LAUREL ST.

HARBOR DR.

Asphalt paved yard

Asphalt surfacing

Concrete Lug 80+48

82+24

Type G Cleanout (Modified) 74+83

8" sewer Built-in cleanout

6" W

8" Pipe (Abandoned)

6" MTB

5" Gas

Gate Valve

Check Valve

Curb Inlet

Chainlink fence

Curb Walls

3" asphalt on soil cement

Elect. ducts

Storm A.C.

Curb A.C.

7" A.C.C.

Cone. pad timber wharf

Bollard

Concrete Cutoff Wall

Sta. 71+00 El. -6.15

Sta. 72+75 El. -8.91

Sta. 73+00 El. -9.10

Sta. 74+00 El. -9.37

Sta. 80+48 El. -9.83

Sta. 82+24 El. -10.48

Note: all rails to be 110 lb min.

Existing wall

Min. 7 shackle bolts 4"x4"x12" plates

24"I rail at each bent

Rail fastened with 4-1" bolts at each bent

2 rails 82+24 to 82+08

3 rails 39' long drilled under pier at each bent

El. -10.45

Notch flanges

84 pipe

Front

Existing concrete bulk

84" Concrete Pipe

Side

82+09 82+15 82+17 82+23

SEE SHEET 6

Detail of Steel Rail Pier

Scale: ¼" = 1'-0"

½" x 9" steel joint sleeve

Cement mortar coating rent by 2"x 4" #19 mesh welded wire mesh applied in plant.

15/16 ø rubber gaskets

Cement grout poured in field

Pipe interior

96" inst. dia. centrifugally spun reinforced concrete pipe (1250-D load)

Detail of Double Rubber Gasket Joint

Scale: 1½" = 1'-0"

PACIFIC HIGHWAY

LINDBERGH FIELD

LAUREL STREET

SCALE: 1" = 50'

20' Drain easement below M.H.T.L. shown hatched.

San Diego Bay

Tidelands

of the

20' Easement over existing drain

SOLAR AIRCRAFT CO.

NORTH HARBOR DRIVE

Asphalt paved Yard

Chain link fence

Sewer Main

Storm Drain Sta. 81+33.11 Harbor Drive Sta. 332+03

Place 20 T. of rip-rap

Construct pier (See detail)

Survey F.B. 2526-18

479'-84" Concrete Pipe With Double Rubber Gasket Joints

204.30 (1250-D) 84" Concrete Pipe

145.01

Δ 8°-18'-58" R 350' T 26.29 L 51.03

Δ 11°-19'-58" R 350' T 35.68 L 71.98

Δ 19°-13'-58" R 350' T 59.15 L 116.37

Δ 17°-46'-40" R 350' T 54.66 L 108.15 L 212.5

Δ 17°-46'-40" R 350' T 54.66 L 108.15

Δ 17°-46'-40" R 350' T 54.66 L 108.15

Δ 17°-46'-40" R 350' T 54.66 L 108.15

November 18, 2015
Item No. 11
Supporting Document No. 3

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

14 15 16 17 18 19 20 21 22 23 24 25

SEE SHEET 9 Match Line Sta. 14+00

El. 10 El. 5 El. 0 El.-5

42" Concrete Pipe — Invert — 0.11 % — 42" Concrete Pipe — Invert — 0.11 % — 36" Concrete Pipe — 30" Concrete Pipe

El. 2.16 El.-2.40 El.-0.93 El.-1.85 El.-1.83 El.-1.12 El.-2.87 El.-0.67 El.-0.17 El.-2.05

PROFILE OF 12" Storm Drain B

Top of existing pavement

Elevator Duct

Pipe Tunnel (See Plans)

Railway Track Spur

Electric Duct

Oxygen

Gas

Sprinkler

Manhole

Fire Hydrant

Type B Cleanout

Type H Cleanout

Type M Cleanout

Type N Cleanout

Type O Cleanout

Type P Cleanout

Type R Cleanout

Type S Cleanout

Type T Cleanout

Type U Cleanout

Type V Cleanout

Type W Cleanout

Type X Cleanout

Type Y Cleanout

Type Z Cleanout

Type AA Cleanout

Type BB Cleanout

Type CC Cleanout

Type DD Cleanout

Type EE Cleanout

Type FF Cleanout

Type GG Cleanout

Type HH Cleanout

Type II Cleanout

Type JJ Cleanout

Type KK Cleanout

Type LL Cleanout

Type MM Cleanout

Type NN Cleanout

Type OO Cleanout

Type PP Cleanout

Type QQ Cleanout

Type RR Cleanout

Type SS Cleanout

Type TT Cleanout

Type UU Cleanout

Type VV Cleanout

Type WW Cleanout

Type XX Cleanout

Type YY Cleanout

Type ZZ Cleanout

Type AAA Cleanout

Type BBB Cleanout

Type CCC Cleanout

Type DDD Cleanout

Type EEE Cleanout

Type FFF Cleanout

Type GGG Cleanout

Type HHH Cleanout

Type III Cleanout

Type JJJ Cleanout

Type KKK Cleanout

Type LLL Cleanout

Type MMM Cleanout

Type NNN Cleanout

Type OOO Cleanout

Type PPP Cleanout

Type QQQ Cleanout

Type RRR Cleanout

Type SSS Cleanout

Type TTT Cleanout

Type UUU Cleanout

Type VVV Cleanout

Type WWW Cleanout

Type XXX Cleanout

Type YYY Cleanout

Type ZZZ Cleanout

Type AAAA Cleanout

Type BBBB Cleanout

Type CCCC Cleanout

Type DDDD Cleanout

Type EEEE Cleanout

Type FFFF Cleanout

Type GGGG Cleanout

Type HHHH Cleanout

Type IIII Cleanout

Type JJJJ Cleanout

Type KKKK Cleanout

Type LLLL Cleanout

Type MMMM Cleanout

Type NNNN Cleanout

Type OOOO Cleanout

Type PPPP Cleanout

Type QQQQ Cleanout

Type RRRR Cleanout

Type SSSS Cleanout

Type TTTT Cleanout

Type UUUU Cleanout

Type VVVV Cleanout

Type WWWW Cleanout

Type XXXX Cleanout

Type YYYY Cleanout

Type ZZZZ Cleanout

PACIFIC HIGHWAY

— PROFILE of Storm Drain —
Convair Property
Scale: Horizontal 1" = 50'
Vertical 1" = 6'

SAN DIEGO AVE.

CALIFORNIA ST.

El. 120 110 100 90 80 El. 70

Ground Line

6" Sewer Cleanout per 12.98

El. 91.74

Existing 30" pipe

17+14.37 Make Connection Concrete Collar Existing Headwall

17+12.5 El. 88.10 to 17+12.5 El. 83.98

17+28.5 El. 85.02

Existing 30" pipe

16+82.81 (18.0-2.0) Make Connection Concrete Collar

16+32.81 B.C.

E.C. 16+56.37

El. 75.98

El. 73.05

Invert

30" concrete pipe

El. 78.03

Existing 30" pipe

- PROFILE -

Scale: Horizontal 1"=50'
Vertical 1"=6

BLOCK 205
MIDDLETOWN

SAN DIEGO AVE.

CALIFORNIA ST.

8" Sewer

25 lin. ft. concrete encasement per 12.98

Make connection concrete collar

30" Pipe (8.10-1.)

8" Sewer

(1250-D)

175' 30" Concrete Pipe

42.79'

6" Sewer Cleanout

6 lin ft. concrete encasement

Support

Closed

18"

18"

68°40'30"

B.C. 67+71.91

E.C. 68+46.91

50' Pipe (7.12-1.)

Make connection concrete collar

R=90'
Δ=16°
T=11.85'
L=23.56'

Estudillo St. (Closed)

For easement see Dwg. 3433-B

SCALE: 1" = 50'

DETAIL CROSS-SECTION OF PIPE TUNNEL
Scale: 1/4" = 1'-0"

Top of asphalt pavement El. 8.0 ±

Pipe tunnel

Precast portions of pipe tunnel reinforced during construction so as to tie shaft wall to exterior of pipe.

Grout pipe

El. 1.80 ± Z

Class B concrete cradle under drain to depth of 1/4 pipe dia. above bottom of pipe.

Asphalt pavement

739.77'

AOE

18" Concrete Pipe (1250 D)

30" Concrete Pipe (1250 D)

15' Easement over existing easement

Convair to raise or relocate duct

Connect to existing drop inlet Plug 12" pipe to mig

Type H Cleanout Connect to 12" pipe to Equator

12" V.C. Pipe Drain

Type M Cleanout Connect to 8" pipe to Equator

Water vault Raised

Pedestrian Over-pass

Sprinkler

Electric Duct

Railway Track Spur

Oxygen

Gas

Fire Hydrant

Manhole

Water Line

8" Storm Drain

14" R.C.P.

BLDG. 2

BLDG. 7

BLDG. 13

BLDG. 15

BLDG. 1

CONVAIR

PACIFIC HIGHWAY

P.O.B. Pacific Hwy Sta. 383+08.07

108'

43' A.C. surface 9" P.C.C. base

SEE SHEET 9
See Dwg. 11556-12-D

SCALE: 1" = 50'

Easement below M.H.T.L. shown hatched

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 65783 FILED MAY 19, 1961	ORIGINAL CONVEYANCE DOCUMENT NO. 11 FILED JAN. 13, 1965

DRAINAGE ESMT. - from Pacific Hwy between Convair Buildings & across Lindbergh Field

TIDELANDS

CITY OF SAN DIEGO
ENGINEERING DEPARTMENT

SHEET 11 OF 23 SHEETS

W.O. No. 17430

PLAN REVISION			
CHANGE	BY	DATE	APPROVAL

CONSTRUCTION RECORD

DATE STARTED — DATE COMPLETED

CONTR. — INSP.

FIELD BOOK

E. F. Gabrielson 6/24/68
CITY ENGINEER DATE

WATER DEPT.	SEWERAGE
PLANNING DEPT.	DRAINAGE
ELECTRICAL	HIGHWAY
STRUCTURAL	GRADES
TRAFFIC	CONTROL OTJ 6-24-68

Index 208-1713

OFFICE ENGINEER

SUPERVISOR

CHECKED.

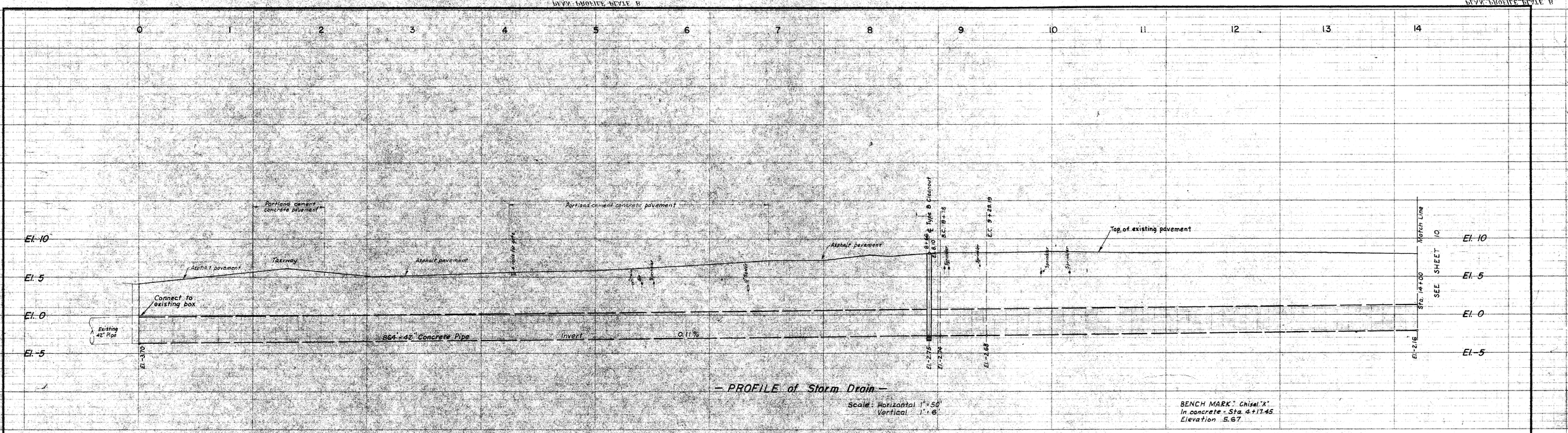
R.C.J. DESIGNED

11556-11-D

HARBOR No
Ref. Dwg. 2756-D

November 18, 2015
Item No. 11
Supporting Document No. 3

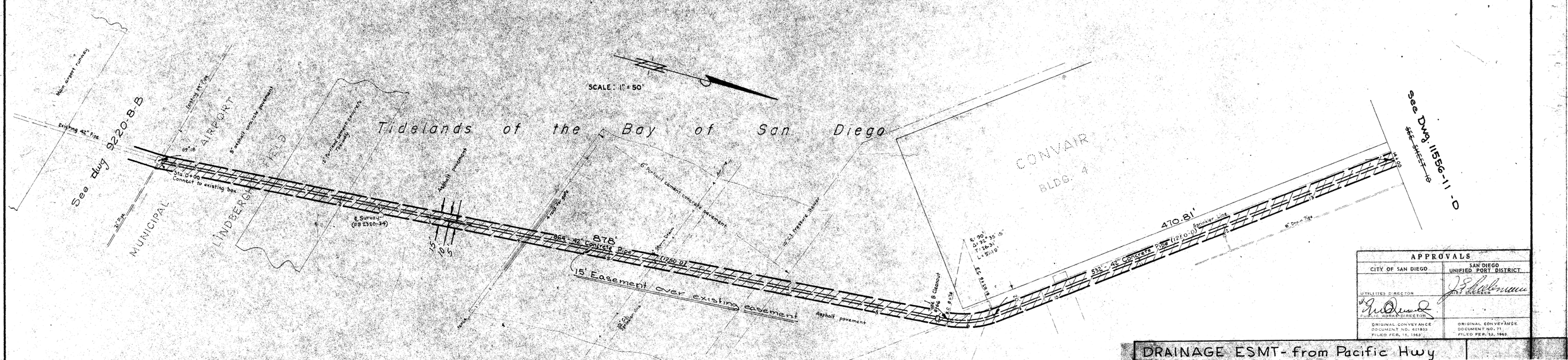
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



— PROFILE of Storm Drain —

Scale: Horizontal 1"=50'
Vertical 1"=6'

BENCH MARK: Chisel 'X' in concrete - Sta. 4+17.45 Elevation 5.67



Easement below M.H.T.L. shown hatched

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR PUBLIC WORKS DIRECTION	CITY ENGINEER
ORIGINAL CONVEYANCE DOCUMENT NO. 621833 FILED FEB. 13, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 12, 1963

DRAINAGE ESMT- from Pacific Hwy between Convair Buildings & across Lindbergh Field

TIDELANDS

CITY OF SAN DIEGO
ENGINEERING DEPARTMENT

SHEET 12 OF 23 SHEETS

W.O. Nº 17430

PLAN REVISION					
CHANGE	BY	DATE	APPROVAL	E. F. Gabrielson 6/24/68 CITY ENGINEER DATE	OFFICE ENGINEER
				WATER DEPT. / SEWERAGE	
				PLANNING DEPT. / DRAINAGE	SUPERVISOR
CONSTRUCTION RECORD				ELECTRICAL / HIGHWAY	CHECKED
DATE STARTED		DATE COMPLETED		STRUCTURAL / GRADES	DESIGNED R.C.d
CONTR.		INSP.		TRAFFIC / CONTROL O.K. J. 6-24-68	11556-12-D
FIELD BOOK				INDEX 209-1713	

HARBOR Nº
Ref City Dwg. 2755-D

November 18, 2015
Item No. 11
Supporting Document No. 3

SAN DIEGO UNIFIED PORT DISTRICT
3383
DOCUMENT NO.
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

NAVY-ARMORY, BLOCK B

Station 0 1 2 3 4 4 5 7 8 9 10

3rd AVE. — NAVY FIELD — HARBOR DR.

0-61.94 Concrete Collar (see detail) — 0+00+W.Y. Line 3rd Ave. — 0+05.64, ∆ = 4°45' Lt. — 1+47.64 Concrete Collar (see detail) — 3+15 Cleanout No.2 (see detail) — 6+67.64 Concrete Collar (see detail) — 9+75.64 Concrete Collar (see detail) — 10+09.72 Bulkhead Connection (see detail)

El. 7.6 — El. 8.10 — El. 8.71 — El. 9.25

Ground Line (Flown)

6" FUEL OIL LINE — Rip Rap under fill — 12" G — 4" C.I. CURB — CONC. BLOCK WALL — A.C. PAVING — 8" W — 12" S — A.C. WALK — 2" W — 20" W — 16" W — CURB

See Dwg. 2342-D

(1) 136' of 51" (4000-D) Centrifugal Concrete Pipe to be jacked into place

0.40 %

(2) 36.96' of 48" Centrifugal Concrete Pipe (3000-D)

(3) 740' of 51" Centrifugal Concrete Pipe with Concrete Collars

0.20 %

Invert

Concrete Slab over 60" Sewer (see detail)

Crusher Run. Rock Bedding (see detail)

(4) 88' of 51" (3600-D) Centrifugal Concrete Pipe to be jacked into place.

(5) 34.08' of 51" Centrifugal Concrete Pipe with Concrete Collars.

PROFILE OF STORM DRAIN
Scale Vertical 1"= 6'
Horizontal 1"=50'

Beach Mark Elevation 4.76
Top N.E. F.H. 4th and K
F.B. 23/6-5.6

CITY DATUM
Zero City Datum equals +9.01 U.S.C. & G. Datum

48" Pipe from 1+47.64 to 0-53.94 is encased in Class A Concrete forming Support for 54" Sewer & also formed Collar at -53.94
Bedding Factor of 300%

NOTE
Concrete Collars shall be furnished with the centrifugal concrete pipe to be used between stations 1+47.64 and 6+67.64 and stations 9+75.64 and 10+09.72.

DETAIL OF CONCRETE COLLAR
to be furnished with the centrifugal concrete pipe

Concrete Collar — Cement Calked in yard — Calked in the field — Pipe Interior — Cement mortar placed in field

TRENCH WIDTH — Concrete Pipe — 4" MIN — Pipe Subgrade see 303-SB — 2" Max. size Crusher Run Rock Bedding

DETAIL OF CRUSHER RUN ROCK BEDDING
SCALE 1"=1'

51" Concrete Pipe — Class A Concrete Collar to be poured in dry pit or tremie. — SECTION

NOTE: For details of existing bulkhead see drawings in City Engineer's file Nº 21225.

51" Concrete Pipe — Do not disturb concrete tie — PLAN

DETAIL OF COLLAR AT BULKHEAD CONNECTION
SCALE 1/8"= 1'

Scale 1"= 50'

DRAIN EASEMENT BELOW M.H.T.L. SHOWN HATCHED

BLOCK 141 — BLOCK 120 — BLOCK 119 — HORTON'S ADDITION

3rd AVENUE — 3rd STREET — 24" SEWER

Right of Way S.D. & A.E. Ry. Co. — Right of Way S.D. & A.E. Ry. Co.

Concrete Support for Underslot Sewer — Make Connection — Concrete Collar (see detail) — 36" RCP — 0-61.94 — 0+05.64 ∆ = 4°45' Lt. Special Cleanout No.1 (see detail) — 1+47.64 Concrete Collar (see detail) — 3+15 Cleanout No.2 (see detail) — 6" FUEL OIL LINE (ABANDONED) — 6" FUEL OIL LINE — 6" WIRE FENCE — Mean High Tide Line — M.H.T.L.

Lawn — 2.5 CONC. BLOCK WALL — CURB — A.C. PAVING — A.C. WALK — 12" GAS — 60" SEWER (see detail) — 8" WATER — 12" S — 2" W

Timber Bleachers set on concrete blocks

N 44° 58' 55" E — 733.08'

136' of 51" (4000-D) Centrifugal Concrete Pipe to be jacked into place — Concrete Slab over 60" Sewer (See detail) — 740' of 51" Centrifugal Concrete Pipe with Concrete Collars

LAWN SPRINKLING SYSTEM, 2" PIPES (APPROX. LOCATION)

Ball Field — Lawn — NAVY FIELD

STA. 228+27.91 E.C. HARBOR DR. IN S.D. STATE DIVISION OF HIGHWAYS

20" WATER — 8" WIRE FENCE — 16" WATER — 2" WATER — POLE — POLE — 6" WIRE FENCE — P.C.C. PAVING — 9+87.64 Concrete Collar (see detail) — 9+75.64 Concrete Collar (see detail) — 10+09.72 Bulkhead Connection (see detail) — Timber Piles

DRIVE — HARBOR — N 50° 49' 18" W — 60.31

88' of 51" (3600-D) Centrifugal Concrete Pipe to be jacked into place.

34.08' of 51" Centrifugal Concrete Pipe with Concrete Collars.

R/W — 120 — R/W — U.S. Bulkhead Line

NOTE: Information has been received from the Railway Company that buried rip rap will be encountered approximately from Sta. 1+32 to Sta. 1+48 and that it may be impossible to jack pipe through this area. Should this be the case it shall be the entire responsibility of the contractor to arrange with the Railway Company to support and/or remove and restore the tracks in order to install the pipe by open-cut method and the contractor shall assume all expense incurred by the Railway Company in this connection.

This spur track to be placed out of service to permit construction of storm drain and the contractor shall bear all expense of removal and restoration of track to its original condition. Contractor to accomplish same in the minimum of time possible to lessen interfere with operations of industries served by said track.

Class A Concrete — 51" Pipe (4000-D) — 51" Pipe — CENTER LINE SECTION — ELEVATION

DETAIL OF CONCRETE COLLAR at Sta. -0+61.94, Sta. 1+47.64, Sta. 6+67.64 and Sta. 9+75.64
SCALE 1/4"= 1'

A — 60" SEWER — 51" PIPE — 12" — A — PLAN — TRENCH WIDTH 6.3'

Class A Concrete — 51" PIPE — Pipe Subgrade and Crushed Rock Bedding — 8" MINIMUM — 1/2 # BARS 12" C.C. BOTH WAYS — 60" SEWER — 2" MINIMUM CLEARANCE — SECTION AA

Jet at least 60% of materials between 60" sewer and concrete slab over an area 3' wide sym. about vert. ℄ of sewer pipe, after placing of concrete slab.

DETAIL OF CONCRETE SLAB OVER 60" SEWER MAIN
SCALE 1/8"= 1'

1/2" # BARS — PLAN

NOTE: For steel and other details not shown see dwg. 311-SB

Pressure Manhole Frame and Cover per dwg. 315-SB. — For elevation see profile

6" — 6" Construction joint — 10" MIN — Class A Concrete — 8" — 8" — For elevation see profile

SECTION

DETAIL OF CLEANOUT NO. 2
SCALE 1/4"=1'

Reinforcing Steel per Detail of Dwg. 311-SB — 1/2" # BARS 9" C.C. — 46" Pipe — 5-1/2" # BARS 2" C.C. (BOTTOM) — 51" Pipe — 8" — 3'-6" — 8" — 1/2" # BARS 6" C.C.

TOP

Pressure Manhole Frame and Cover per Dwg. 315-SB. — 5'-1" — Class A Concrete — 4-1/2" # BARS — 6-1/2" # BARS — 13-1/2" # BARS — 46" Pipe — 51" Pipe — 1/2" # BARS 10" C.C. — 2-5/8" # BARS I.S. & O.S. — 6-1/2" # BARS — 4-5/8" # BARS — END ELEVATION — SIDE ELEVATION

DETAIL OF SPECIAL CLEANOUT NO. 1
SCALE "=1'

APPROVALS
SAN DIEGO UNIFIED PORT DISTRICT
ORIGINAL CONFORMANCE

DRAIN ESMT. - Sly of 3rd & K Sts. thru Navy Field

13 23

C.F. Sammann 6/24/68

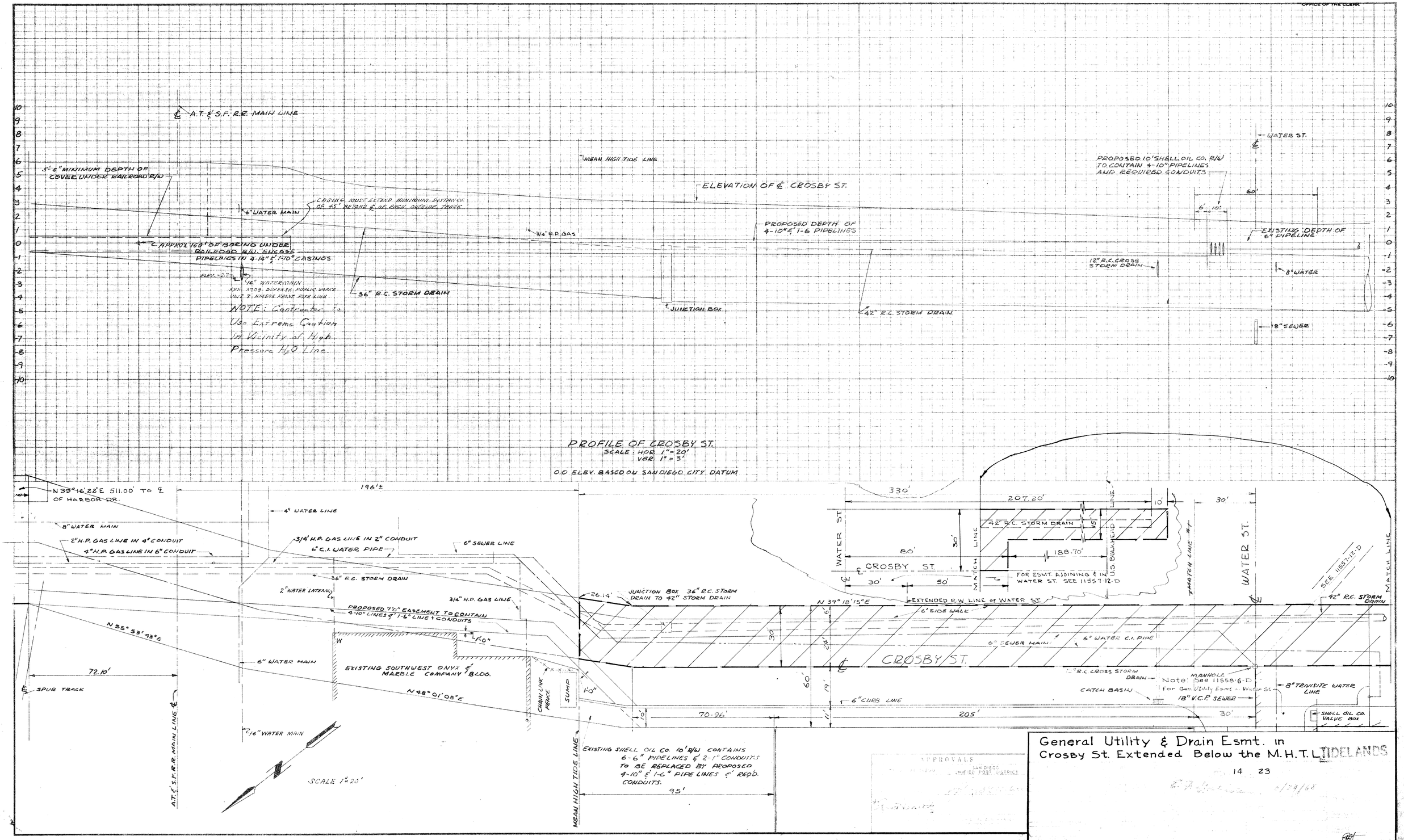
D.T.J. 6-24-68

COORD. INDEX: 1198 - 1719 — SCALE: 1"=50'

11556-13-D

CONSTRUCTION RECORD		W.O. No. 21225
CONTRACTOR Dorfman	INSPECTOR Bashor	
DATE STARTED 5-2-55	REVISIONS (3)	DATE 8-30-55 1170
DATE COMPLETED 8-13-55		

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



General Utility & Drain Esmt. in Crosby St. Extended Below the M.H.T.L.

TIDELANDS

14 23

6/24/68

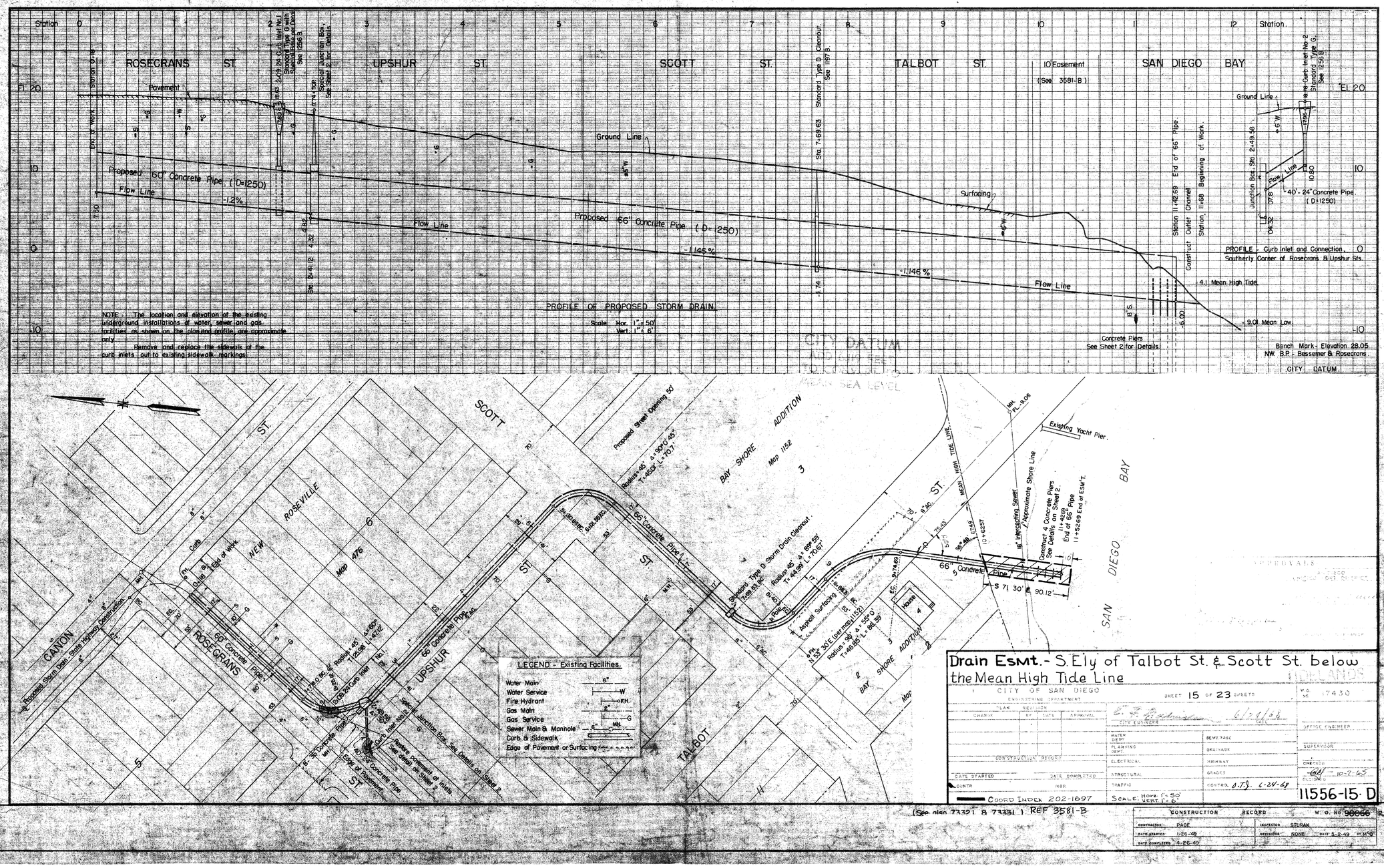
OJ 6-24-68

COORD. INDEX 192-1743 SCALE 1" = 20'

11556-14-D

REF 7811-D

SAN DIEGO UNIFIED PORT DISTRICT
3383
DOCUMENT No.
FILED JUN 28 1968
MICROFILM No.
OFFICE OF THE CLERK



November 18, 2015
Item No. 11
Supporting Document No. 3

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1966
MICROFILM NO.
OFFICE OF THE CLERK

Station 7.5 | 7.6 | 7.7 | 7.8 | 7.9 | 8.0 | 8.1 | 8.2 | 8.3

Bench Mark Elevation 3.00
N.W.B.P. 13th and Imperial

10
5
0 CITY DATUM
-5
-9.01 = M.L.L.W.
-10

75+25.75 End Transition Structure and Begin Double 13'x8' Concrete Box.

Backfill to grade of adjacent ground

¾"G.I. ①

8" C.P. ①

237.21 lin. ft. of Double 13'x8' Concrete Box (see detail sheet 2©)

18" R.C.P. ①

Ground Line

0.10 %

Crushed Rock Bedding

El. - 7.23

See Sheet 10

77+63.0 End Double 13'x8' Concrete Box and Begin Unlined Open Channel

El. - 7.47

0.10 %

Invert of Open Channel

0.10 %

S.D. & A.E. Ry. Trucks

A.T. & S.F. Ry. Trucks

834+21.85 End of Unlined Channel

DOUBLE 13' X 8' CONCRETE BOX

El. - 8.03

PROFILE

Scale Vertical 1" = 6'
Horizontal 1" = 40'

Drain Esmt. Below M.H.T.L. Shown Hatched

6"C.I. ③ STANDPIPE (PLUGGED) ACCESS FOR PUMP HOSE LIGHTS, ETC.

Transition Structure No. 2

NEWTON AVE.

12" GAS 6" GAS 6" WATER

2" DRAIN

(CONTRACTOR TO REMOVE AND DISPOSE OF EXISTING TIMBER BULKHEAD TO 1' BELOW BOTTOM OF BOX SECTION)

75+23.77 Δ = 34°34' 30" End of Transition Structure and Begin Double 13'x8' Conc. Box.

77+18.9

77+63.0 End Double 13'x8' Concrete Box and Begin Unlined Open Channel.

79+32.3

ACTUAL C.P.

Right of Way

558.9 lin. ft. of Unlined Open Channel (see detail this sheet)

DR.

Right of Way

S 39° 21' 15" W 52.33'

See Sheet 11/556-17 D

7.8 | 7.7 | 7.8 | 7.9 | 8.0 | 8.1 | 8.2 | 8.3

257.21 lin. ft. of Double 13'x8' Concrete Box (see detail sheet 2©)

2.50

30.00

10' 10.3 L.F. NEW 18" R.C.P.

SURVEY LINE FB 221-22

30.0

60.0

87° 19'

S 39° 07' 15" W

550.61'

24" WATER

MEAN HIGH TIDE LINE

8" C.P. ①

24" WATER

75+23.77

75+22.10 (CESSPOOL) 75+19

74+13.40

¾" G.I. PIPE 74+13.68

74+67.10

74+60.52 ① 74+60.60 ②

74+39.25 End Double 10'x5' Concrete Box and Begin Transition Structure

See Sheet 10

10' X 5' CONCRETE BOX 6" WATER

12" GAS

13th ST

UNNUMBERED PUEBLO LOT
Know as the "Hartupee Tract"

MUNICIPAL TIDELANDS OF THE BAY OF SAN DIEGO

S.D. & A.E. Ry.

HARBOR DR.

A.T. & S.F. Ry.

Match line

DOUBLE 10'X5' CONCRETE BOX ABANDONED

DOUBLE 13'X8' CONCRETE BOX

SCALE 1"=40'

1½:1 Slope

For elevation see profile

10'

CROSS SECTION DETAIL of UNLINED OPEN CHANNEL
Sta. 77+63 to Sta. 83+22
NO SCALE

REVISIONS

① EXISTING 18", 8", ¾" DRAINS
②{ CONSTRUCTION JOINT LOCATIONS
  CONSTRUCTION SEQUENCE AS NUMBERED
③ STANDPIPE LOCATION

Ref. Dwg: 3624-D

Right of Way plat dwg. 6103-B

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
LETTER DATED	CHIEF ENGINEER
CITY CLERK	
FINAL CONVEYANCE (OPEN NO. 1473)	ORIGINAL CONVEYANCE DOCUMENT (NO. 7) FILED FEB. 3, 1953

DRAIN ESMT.- Switzer Creek from Mean High Tide Line to Wly. of R.R. R/W

16 23

17430

07 6045

196 - 17 21

11556-16 -

CONSTRUCTION RECORD W. O. No. 21269

CONTRACTOR	H.F. VanValkenburgh Co.	ENGINEER	Walker F. Parsons
DATE STARTED	9-26-57	AS BUILT	③
DATE COMPLETED	10-21-58	AS BUILT	6-15-59 GWE

November 18, 2015
Item No. 11
Supporting Document No. 3

SECTION TYPE "B" (SEE SHEET #2)

SECTION TYPE "A" (SEE SHEET #2)

SECTION TYPE "C" (SEE SHEET #3)

SECTION TYPE "A" (SEE SHEET #2)

S 54° 21' 15" W

E. STORM DRAIN & CONTROL WALL & EQUALY

0+59.00

0+79.40

10'

10'

0+73.40

Δ = 23°00'

20.40'

29.40'

HEAD WALL (INLET END) (SEE SHT #1)

Match line See sheet 1155-16-D

0+79.09

S 79° 21' 15" W

866.43'

40'

20'

Δ = 7°00'

0+91.59

0+12.09

3+45.83

S 69° 21' 15" W 160.11'

10'

SAN DIEGO UNIFIED PORT DISTRICT
3383
DOCUMENT NO.
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

END 24" STORM DRAIN & FACE OF HEADWALL (OUTLET END) (SEE SECT. (TH #3)

11+05.34

3+45.83

DRAIN ESMT. Below M.H.T.L. Shown Hatched

NORTH

PLAN OF STORM DRAIN

SCALE - 1" = 40'

10'-4"

10'-4"

10'-4"

10"

10"

10"

3'-0"

3'-0"

3'-0"

3'-0"

3'-0" ROOF PANEL (TYP.)

EXTEND VERT. WALL REINF. TO CURB BEAM AND HOOK

0.5

FACE OF HEAD WALL

8"

CONCRETE BRACKET

49'-0"

STORM DRAIN

FOR PIPE LINE DETAILS SEE SH. NO 6965

PLAN

SCALE - 1/4" = 1'-0"

NOTE A
PIPE LAYOUT REVISED SEE SHEET 4

TOP WALL EL. 12.45'

EL. 9.0'

EL. -3.95'

FLOW LINE EL. -8.03'

EL. -9.5'

STORM DRAIN

CONCRETE BRACKET

FOR PIPE LINE DETAILS SEE SH. NO. 4

NOTE - SEE CROSS SECTION SHEET 2 FOR DETAILS

3/4" RISER 20.0" OC. (TOP END OF HEADWALL SIMILAR)

11'-7"

10'-8"

ELEVATION

SCALE - 1/4" = 1'-0"

TOP OF WALL EL. 7.45'

2'-0"

1'-6"

3'-0" ROOF PANEL (TYP.)

#3 TIES @ 12" O.C.

1" CL. (TYP.)

2-#6

2-#6

CONC. BRACKET

FOR PIPE LINES OR FAUCE SEE DWG. NO. 6965 SH. NO. 4

10'-8"

2'-0"

11" MAX. FILL OVER PIPE FOR BEDDING

SECTION @ A1

SCALE - 1/4" = 1'-0"

1'-10"

REINF. SIM. TO A1

2-1½ø BOLTS @ EA. STRAP

2-#5 BARS

CONC. BRACKET (ALL BRACKETS 8" WIDE)

11'-7½"

3"

6'-0"

SECTION @ B1

SCALE - 1/4" = 1'-0"

DET. OF HEADWALL (INLET END) STA. 0 + 59

GENERAL NOTES

1. FOR GROUND CONDITIONS & OTHER WORK SEE CITY OF SAN DIEGO DRAWINGS Nº — 3145-D; 3145-D; 3147-D; 6965.

APPROVED

Engineering Dept. A

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTION	
ORIGINAL CONVEYANCE DOCUMENT NO. 561933 FILED FEB. 12, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 21 FILED FEB. 19, 1963

Approved:
FOR DESIGN ONLY
by J.H.K. Wilson DATE

DRAIN ESMT- Switzer Creek TIDELANDS from W'ly of A.T.&S.F. R.R. to San Diego Bay

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 17 OF 23 SHEETS

W.O. NO. 17430

E. F. Gudmundson 6/29/68
CITY ENGINEER DATE

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL			6/29/68	

DESIGN ENGINEER

DRAFTING CERTIFICATION

HARBOR Nº 303-D

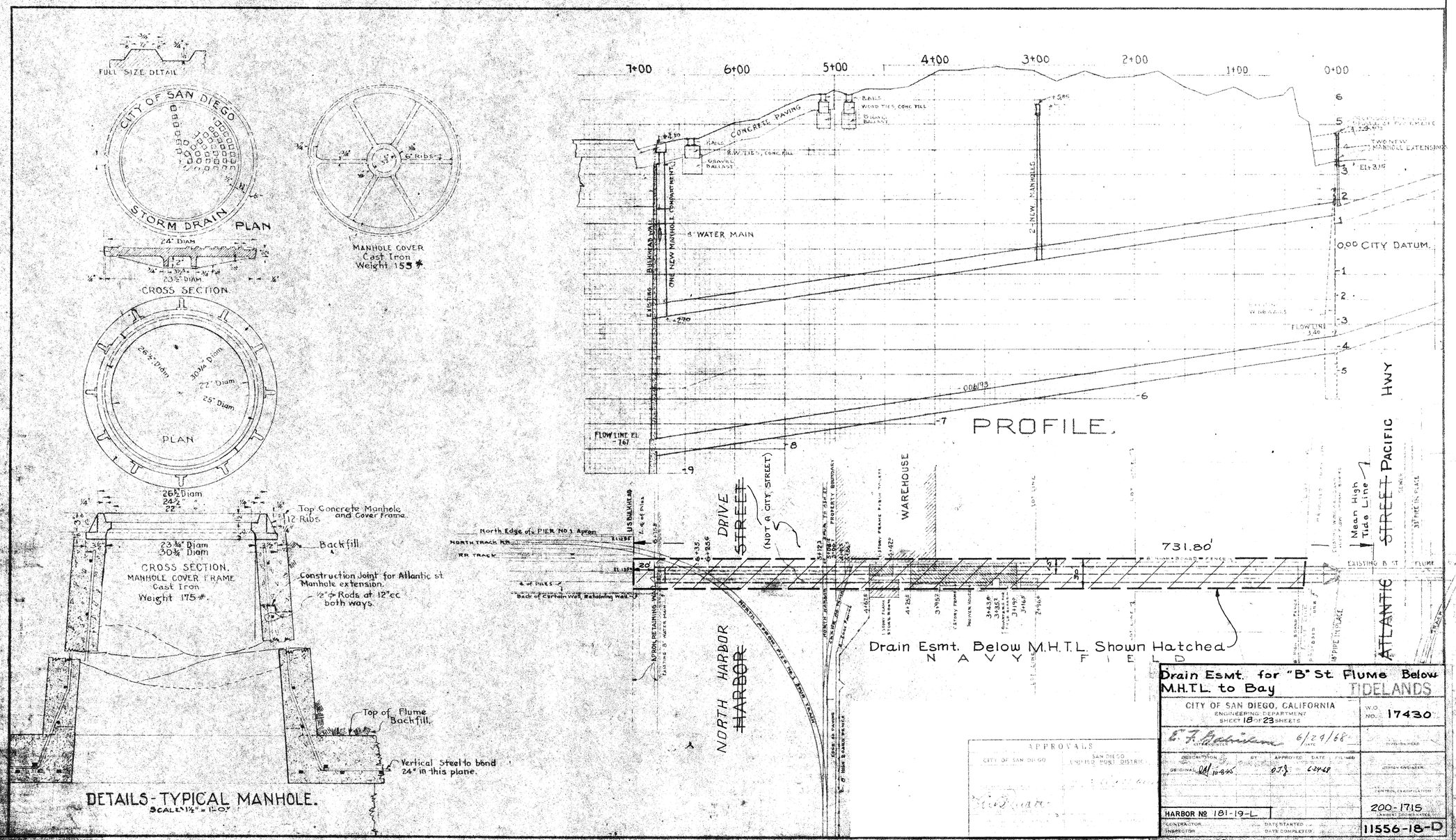
194 - 17.19
LATITUDE & LONGITUDE

CONTRACTOR
INSPECTOR

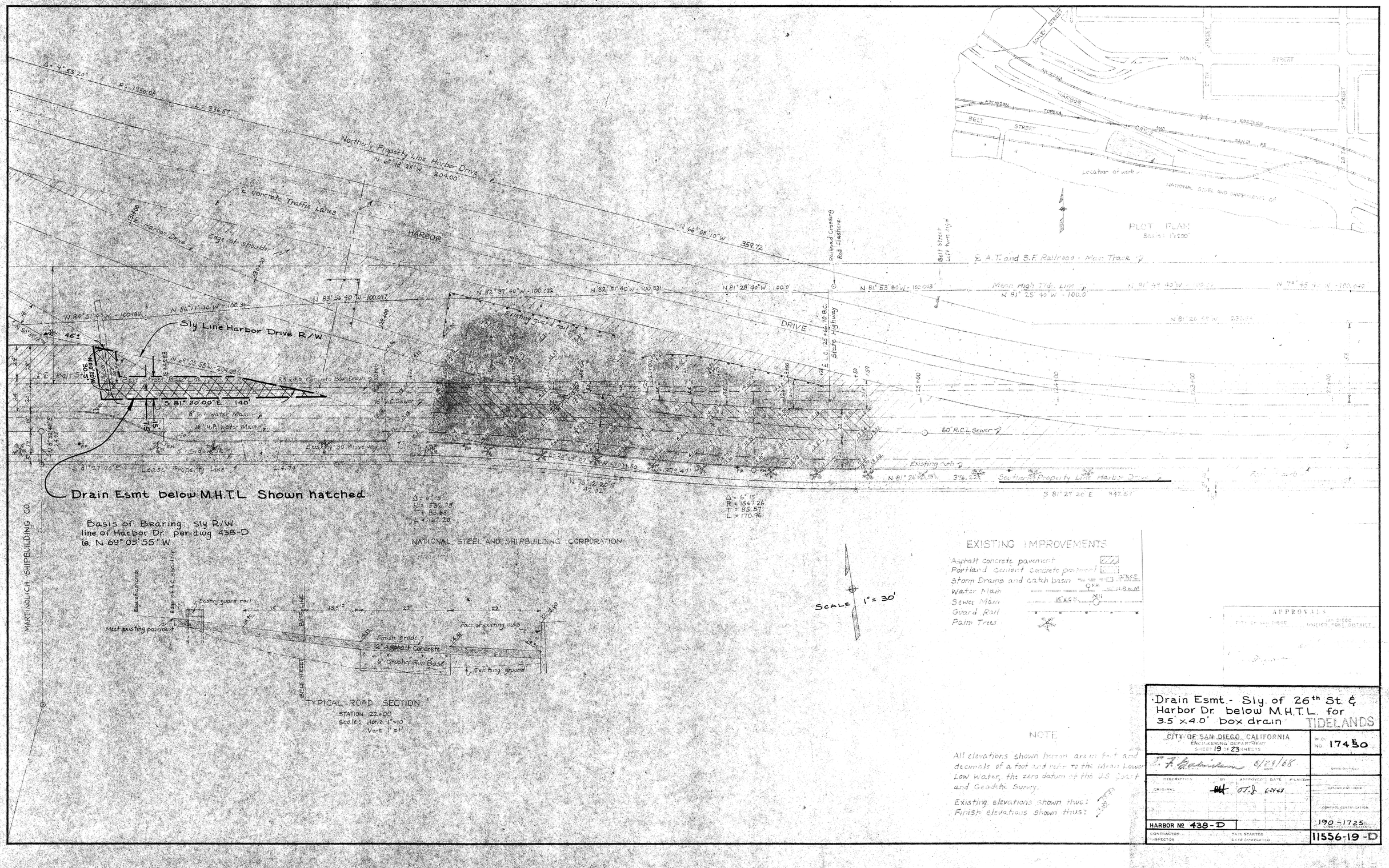
DATE STARTED
DATE COMPLETED

1155-17 -D

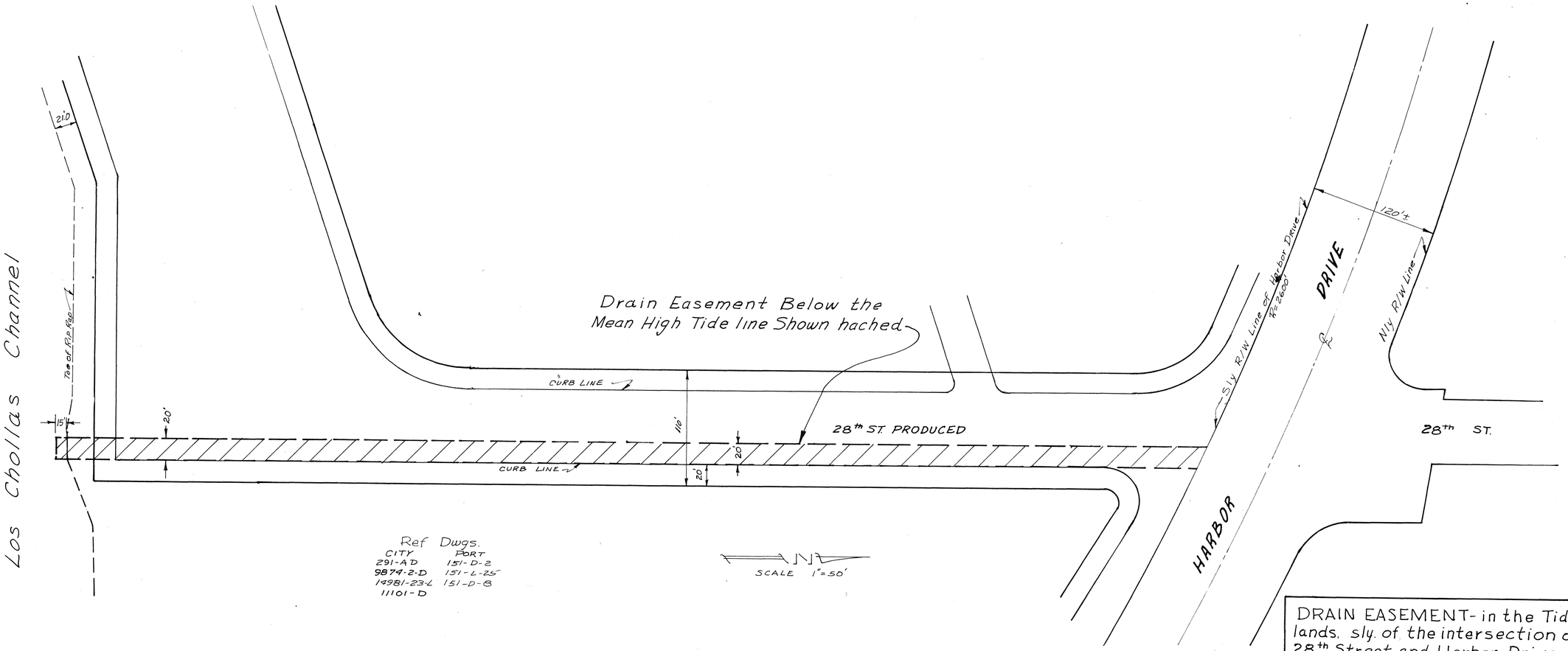
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 51
OFFICE OF THE CLERK



Ref Dwgs.

CITY	PORT
291-AD	151-D-2
9874-2-D	151-L-25
14981-23-L	151-D-8
11101-D	

DRAIN EASEMENT- in the Tidelands, sly. of the intersection of 28th Street and Harbor Drive

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED REC. 10, 1967	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED REC. 10, 1961

APPROVALS	
DEPARTMENTAL	ENG. DEPT. DIVISION OR SECTION
PLANNING	CONST. INSPECTION
PROPERTY	ELECTRICAL
PUBLIC WORKS	FIELD CHECK
RECREATION	GRADES AND DRAINS
UTILITIES	HIGHWAYS
	MONUMENTS
STRUCTURAL	PARKS
TRAFFIC	SEWERAGE
WATER	STREET ACTIONS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 20 OF 23 SHEETS

W.O. NO. 17430

CITY ENGINEER — DATE — DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	[illegible]	O.J.	6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

190-1727
LAMBERT COORDINATES

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

11556-20-D

NORTH
HARBOR DRIVE

South property line of Harbor Drive

Existing 48" R.C.P.

Existing 30" R.C.P.

Sta. 387+80.93 ℄

Sta. 384+62.09 ℄

Sta. 382+89.89

Collection along Harbor Dr.

S 56° 37' 58" W
166.47'

S86° 26' 49"E

℄ NORTH HARBOR DRIVE

Abandoned

Make connection

F.L. 0.32

NOT IN CONTRACT

Construct 232' of 48" R.C.P. storm drain @ 2.7%

See detail of outfall

+L -0.14

F.L. 5.58'

Construct Type D catch basin with Type S-2 grate. See Dwgs. D-12-55 D-33-59

El. 12.0

Remove 12' of projecting rails

Construct 190' of 36" R.C.P. storm drain @ 2.3%

El. 12.5

C.O.

Fill joints of last four lengths of existing 36" R.C.P. on inside and where visible on outside.

Existing railroad rail outfall extends approx. 12' past end of existing 36" pipe.

Construct 100' of 36" R.C.P. storm drain @ 2.3%

F.L. 5.36

S 48°26' 26" W

Construct 198' of 36" R.C.P. storm drain @ 2.3%

F.L. 4.46

F.L. 4.48

F.L. 4.30

∠ = 102° ±

El. 13.6

Note:
Fill will be to approx. elevations shown before start of work.

Existing 12" R.C.P.

Make connection

Re-align last length of existing 12" R.C.P. with existing portion.

Construct 92' ± of 12" R.C.P. storm drain

F.L. 10.10

El. 13.5

S 29° 23' 34" E

See detail of concrete lug.

Construct 298' ± of 12" R.C.P. storm drain @ 2.4%

El. 14.0

TOWING BASIN BUILDING

Existing concrete wall

See detail of out fall

El. 14.5

F.L. 3.3

101' ±

Approximate top of bank (Under construction)

WEST BASIN

EAST BASIN

San Diego Speedboat Club

INSTITUTE OF OCEANOGRAPHICAL SCIENCES

Existing concrete wall

SCALE 1" = 50'

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM No. 34
OFFICE OF THE CLERK

WORK TO BE DONE

The improvement consists of the construction of storm drains, including all appurtenant structures, as shown on the plans and as specified in the Standard Specifications for Public Works Construction (the "Standards") and in the Special Provisions.

The construction of approximately 32' of 12" R.C.P., 308' of 36" R.C.P., 124' of 36" R.C.P., and 265' of 48" R.C.P. storm drain, all as shown hereon.

CITY STANDARD DRAWINGS

D-12-55 Type S-2 cast iron frame and square bar grate
D-33-59 Type D catch basin

All elevations shown hereon are in feet and decimals of a foot, and refer to the mean lower low water, the zero datum of the U.S. Coast & Geodetic Survey.

Basis of Bearing: ℄ of Harbor Dr
per dwg. 204-D-1 (Harbor dwg) I.E. S86°26'49"E

Ref Dwgs:
603-D (HARBOR DWG)
17-D-114 " "
204-D-1 " "
6155-3R CITY
12125-2A-D CITY

LOCATION PLAN

Scale 1000' 2000' 3000' 4000' 5000'

BROADWAY
CONVAIR
LINDBERGH FIELD
HARBOR DRIVE
RYAN
LAUSEN ST.
WEST BASIN
EAST BASIN
HARBOR ISLAND
LOCATION OF WORK
COAST GUARD
Bay of San Diego
CIVIC CENTER
ASH ST.
HARBOR DEPT. ADMIN. BLDG.

DRAIN ESMT. - S'ly of HARBOR DR. adjacent to the ENTRANCE of HARBOR ISLAND

EXHIBIT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 21 OF 23 SHEETS

W.O. NO. 17430

CITY ENGINEER — DATE — DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL			6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

204-1709
LAMBERT COORDINATES

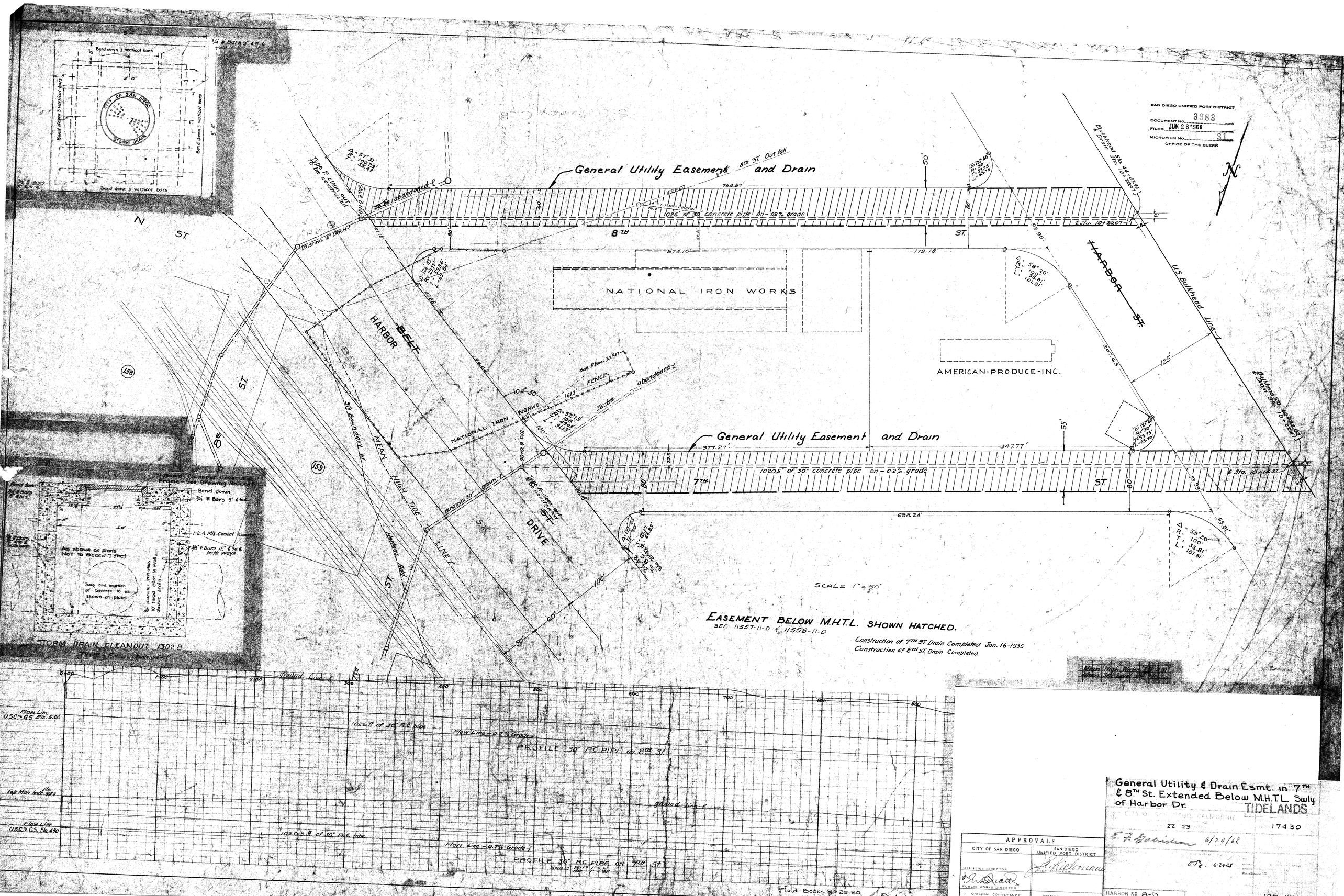
CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

11556-21-D

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
ASSISTANT DIRECTOR	
PUBLIC WORKS INSPECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 1835	ORIGINAL CONVEYANCE DOCUMENT NO. 71 DATED JULY 13, 1963

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK


Bend down 3 vertical bars
1/4 E Bars 3' c to c
5' 4"
10"
CITY OF SAN DIEGO
STORM DRAIN
Bend down 3 vertical bars
Bend down 3 vertical bars
Bend down 3 vertical bars
N ST.
Type F clean out to be constructed
Δ = 57° 51'
R = 100.25'
L = 101.22'
to be abandoned
EXISTING 18" DRAIN
General Utility Easement and Drain
8TH ST. Out fall
764.57'
14" Steam Exhaust
1026' of 30" concrete pipe on - 0.2% grade
8 STD. 10" SOIL
8TH ST.
179.18'
NATIONAL IRON WORKS
HARBOR BELT
Δ = 57° 51'
R = 100.25'
L = 101.22'
Δ = 59° 30'
R = 100.81'
L = 101.81'
HARBOR ST.
U.S. Bulkhead Line
Bulkhead Sta. 41+43.86
Bulkhead Sta. 10+22.05
AMERICAN-PRODUCE-INC.
227.65'
125'
158
8TH
ST.
50' Boundary of MEAN HIGH TIDE LINE
Δ = 57° 51'
R = 100.25'
L = 101.22'
See FBook 30 P47
FENCE
1613'
104.30'
NATIONAL IRON WORKS
Δ = 57° 51'
R = 100.25'
L = 101.22'
to be abandoned
15% Bevel
100'
EXISTING 30" DRAIN
Type F clean out to be constructed
DRIVE
7TH ST.
General Utility Easement and Drain
377.27'
347.77'
1020.5' of 30" concrete pipe on - 0.2% grade
7TH ST.
8 STD. 10" SOIL
698.24'
Δ = 59° 30'
R = 100.81'
L = 101.81'
Δ = 57° 51'
R = 100.25'
L = 101.22'
159
Δ = 57° 51'
R = 100.25'
L = 101.22'
Δ = 59° 30'
R = 100.81'
L = 101.81'
Δ = 57° 51'
R = 100.25'
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Δ = 59° 30'
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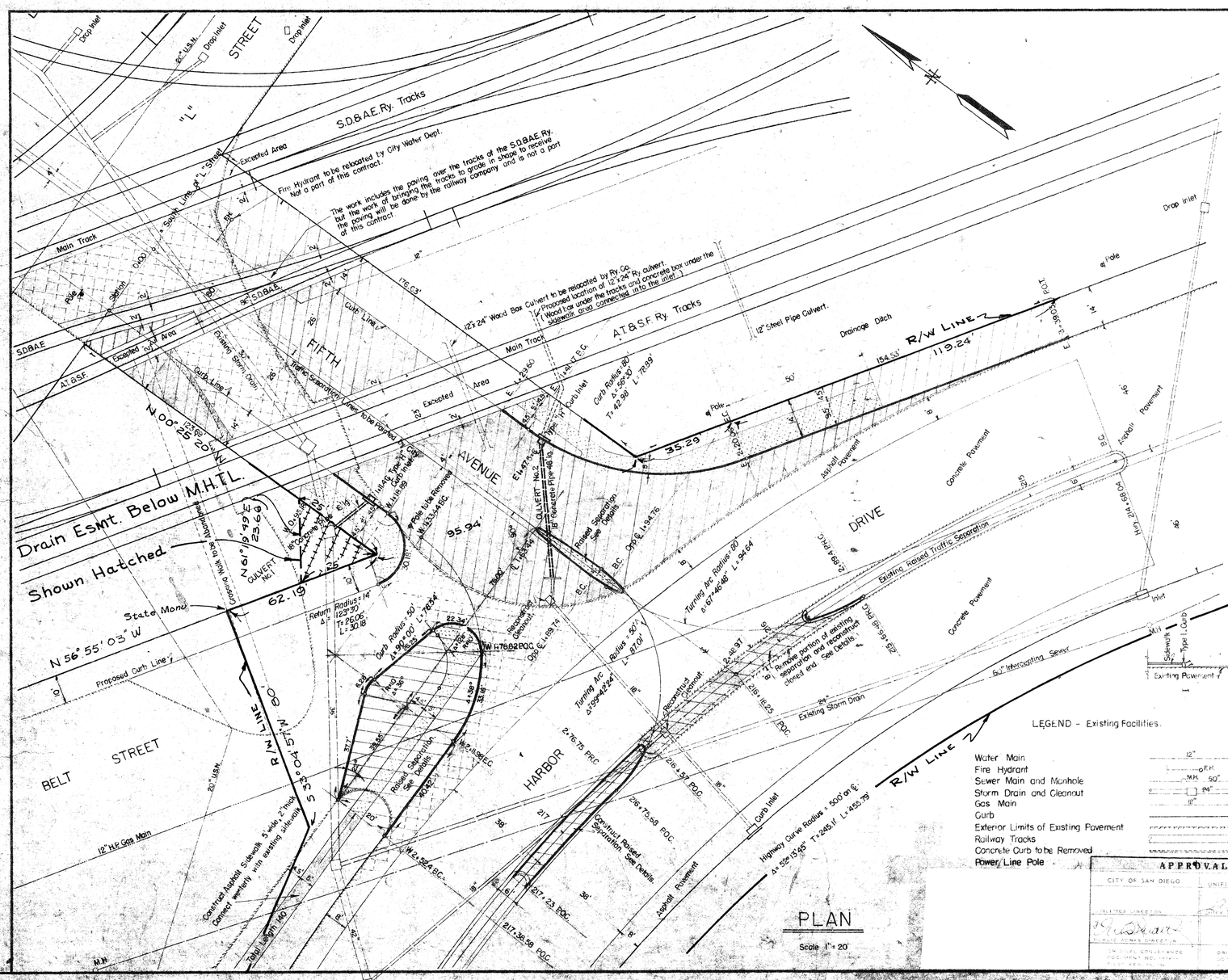
L = 101.22'
Δ = 59° 30'
R = 100.81'
L = 101.81'
Δ = 57° 51'
R = 100.25'
L = 101.22'
Δ = 59° 30'
R = 100.81'
L = 101.81'
N
SCALE 1" = 50'
EASEMENT BELOW M.H.T.L. SHOWN HATCHED.
SEE 11557-11-D & 11558-11-D
Construction of 7TH ST. Drain Completed Jan. 16-1935
Construction of 8TH ST. Drain Completed
Water Pipe Water 8" 10" 12" 16" 20" 24" 30" 36"
Water 24" on 8" Pipe
Tie Easement Out
Tie Easement Out
Bend down 3 vertical bars
Bend down 3 vertical bars
Bend down 3 vertical bars

November 18, 2015
Item No. 11
Supporting Document No. 3

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK


STREET
Drop Inlet
12"C.I.S.P.
"L"
S.D.&A.E.Ry. Tracks
Excepted Area
"L" Street
South Line of "L" Street
Fire Hydrant to be relocated by City Water Dept.
Not a part of this contract.
The work includes the paving over the tracks of the S.D.B.&E.Ry. but the work of bringing the tracks to grade in shape to receive the paving will be done by the railway company and is not a part of this contract.
Main Track
FIFTH
AVENUE
Curb Line
Traffic Separation Lines to be Painted
Existing Storm Drain
Excepted Area
SDB&AE
AT&SF
Drain Esmt. Below M.H.T.L. Shown Hatched
N 00° 25' 20" W
State Mon.
N 56° 55' 03" W
Proposed Curb Line
Roadway
Crossing Main to be Reconstructed
Return Radius = 14'
Δ = 123°30'
T = 26.06
L = 30.18
Curb Radius = 50'
Δ = 39°00'
T = 17.69
L = 34.05
Curb Radius = 50'
L = 78.54
Reconstruct Cleanout
Proposed Separation See Details
Construct Asphalt Sidewalk 5' wide, 2" thick. Connect smoothly with existing sidewalk
Total length 140'
12" H.P. Gas Main
BELT
HARBOR
R/W LINE
S 33° 04' 57" W
20" USM.
MH
Culvert to be relocated by Ry. Co.
Proposed location of 12'x24' Ry. culvert.
(Wood bar under the tracks and concrete box under the sidewalk and connected into this inlet.)
12'x24" Wood Box Culvert to be relocated by Ry. Co.
AT&S.F. Ry. Tracks
12" Steel Pipe Culvert.
Drainage Ditch
R/W LINE
154.53'
119.24'
Curb Radius = 80'
T = 42.58'
L = 78.89'
Pole
Fence
Asphalt Pavement
Concrete Pavement
DRIVE
Anchor
Curb Inlet
Type "H"
Elev. 14.45
CULVERT No. 2
18" Concrete Pipe 46 lin. ft.
Raised Separation See Details
P.C. 0+96.14 P.T.
Turning Arc Radius = 80'
Δ = 67°46'48"
L = 94.64'
Existing Raised Traffic Separation
P.C. 2+82.97
P.T. 3+59.62
Remove portion of existing separation and reconstruct dotted end. See Details.
Existing Storm Drain
Reconstruct Cleanout
Turning Arc Radius = 50'
L = 87.01'
Construct Raised Separation See Details
Highway Curve Radius = 500' on ℄
Δ = 52°13'55" T = 245.11' L = 455.79'
Drain Esmt. Below M.H.T.L. Shown Hatched
N61° 19' 49"E 23.66'
62.13'
35.29'
95.94'
Elev. 13.49
Elev. 13.35
Elev. 13.23
Elev. 13.11
Elev. 13.00
Elev. 12.89
Elev. 12.84
Elev. 12.79
Elev. 12.74
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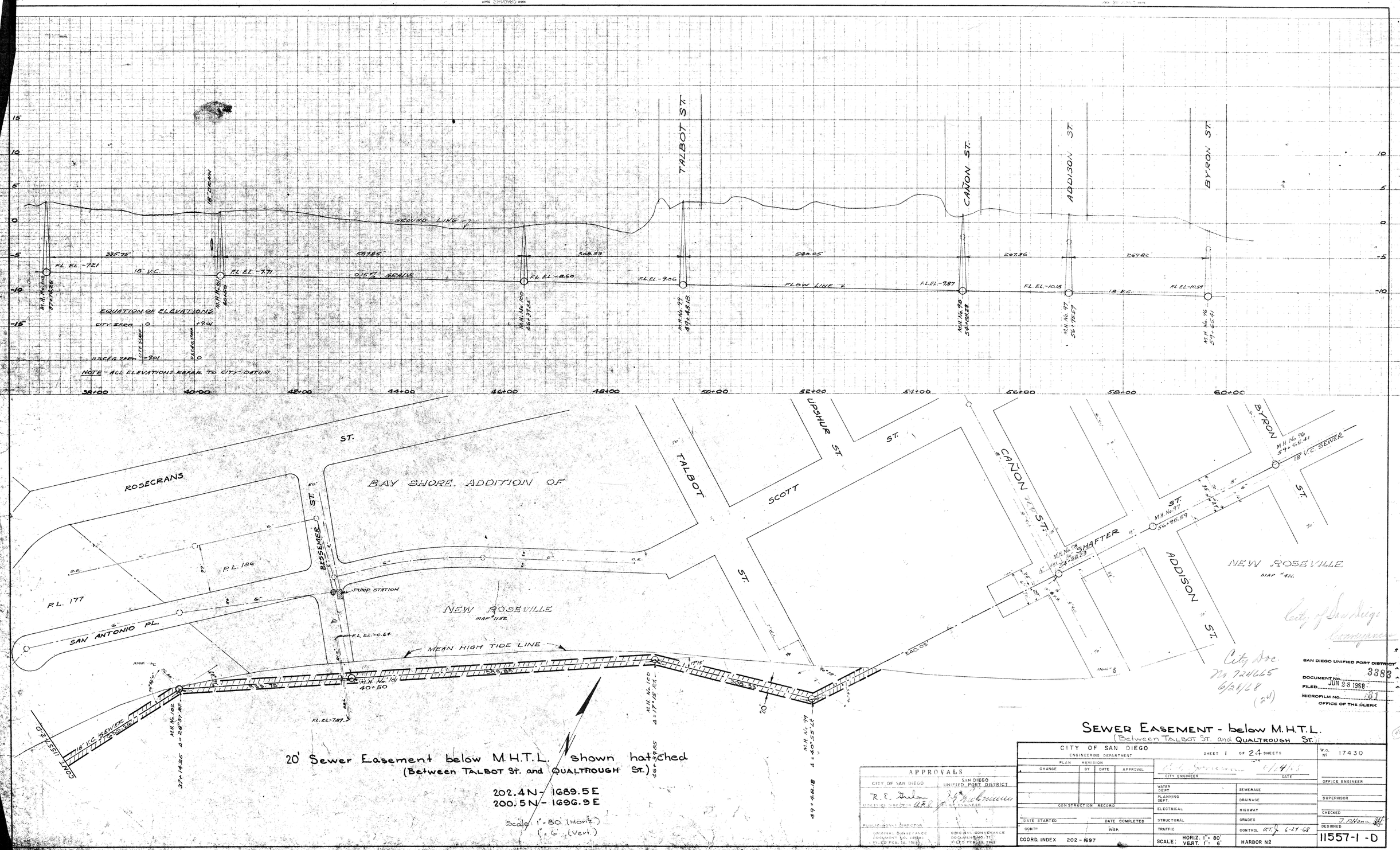
SEWER EASEMENT - below M.H.T.L.
(Between TALBOT ST. and QUALTROUGH ST.)



20' Sewer Easement below M.H.T.L. shown hatched
(Between TALBOT ST. and QUALTROUGH ST.)

202.4N - 1689.5E
200.5N - 1696.9E

Scale: 1" = 80' (Horiz.)
1" = 6' (Vert.)

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Thulen UTILITIES DIRECTOR	E. M. Schumann V.P. ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL SURVEYANCE DOCUMENT NO. 37383 FILED FEB. 16, 1962	ORIGINAL CONVEYANCE DOCUMENT NO. 77 FILED FEB. 8, 1962

CITY OF SAN DIEGO
ENGINEERING DEPARTMENT
SHEET 1 OF 24 SHEETS

PLAN REVISION			
CHANGE	BY	DATE	APPROVAL

R. E. Thulen 6/14/68
CITY ENGINEER DATE

CONSTRUCTION RECORD
DATE STARTED — DATE COMPLETED
CONTR — INSP.
COORD. INDEX 202 - 1697

WATER DEPT.	SEWERAGE
PLANNING DEPT.	DRAINAGE
ELECTRICAL	HIGHWAY
STRUCTURAL	GRADES
TRAFFIC	CONTROL OK'd 6-24-68
SCALE: HORIZ. 1" = 80' VERT. 1" = 6'	HARBOR No.

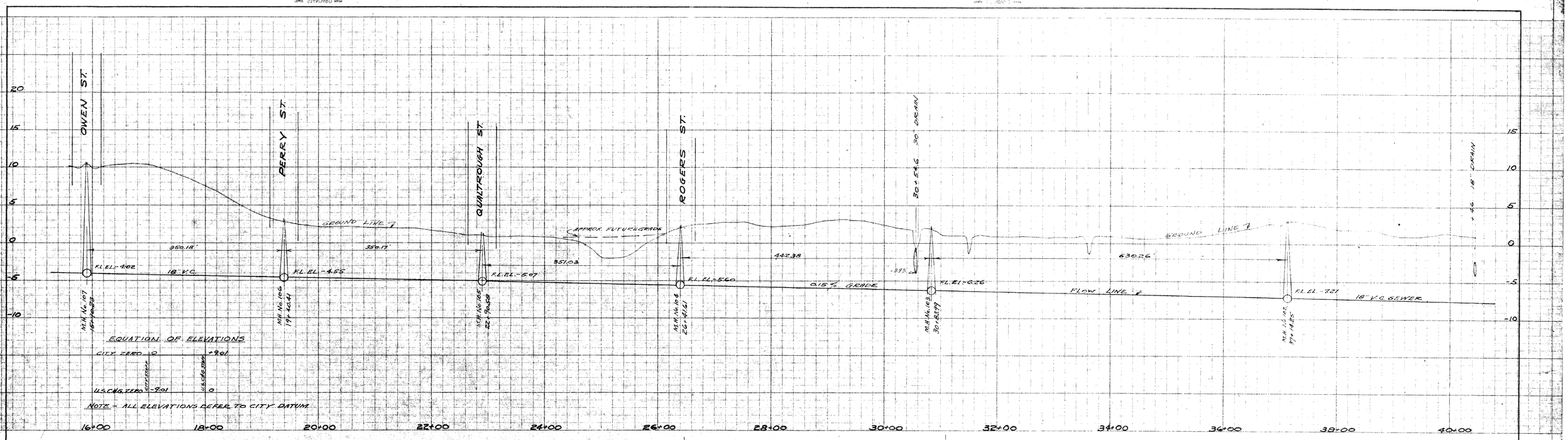
W.O. No. 17430
OFFICE ENGINEER
SUPERVISOR
CHECKED
DESIGNED T. Pihos
11557-1-D

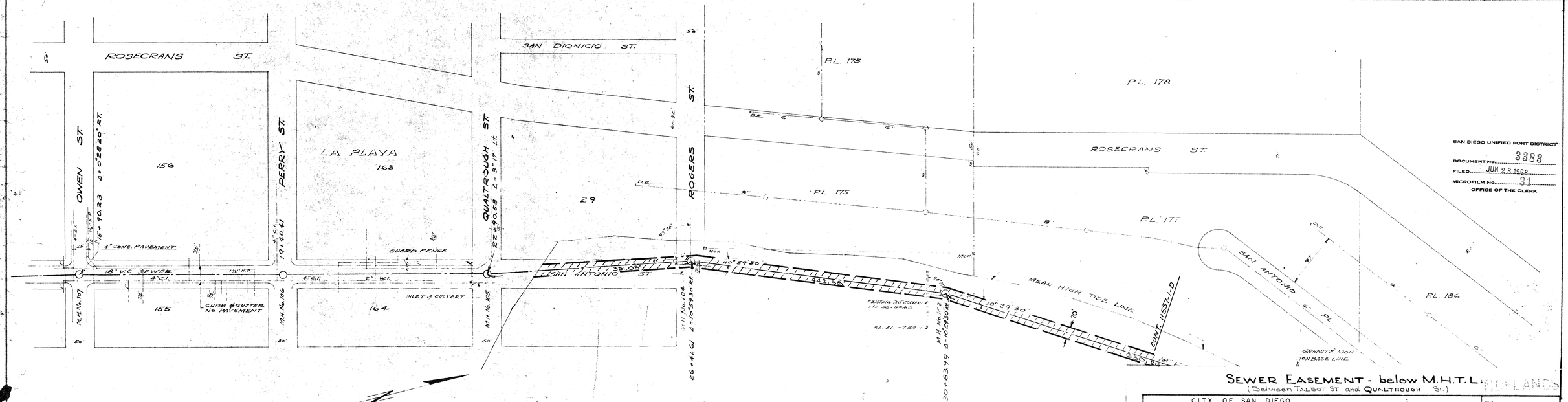
City of San Diego
Compared

City Doc. No. 724665 6/24/68 (24)

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 01
OFFICE OF THE CLERK

Ref. 981-D, Sht. 18





20' Sewer Easement below M.H.T.L. shown hatched
(Between TALBOT ST. and QUALTROUGH ST.)

202.4 N - 1689.5 E
200.5 N - 1696.9 E

Scale: 1" = 80' (Horiz)
1" = 6' (Vert.)

SEWER EASEMENT - below M.H.T.L.
(Between TALBOT ST. and QUALTROUGH ST.)

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Taylor	J. Wilkinson
CITY ENGINEER	PORT ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. (S) FILED	ORIGINAL CONVEYANCE DOCUMENT NO. (S) FILED FEB. 13 1963

CITY OF SAN DIEGO
ENGINEERING DEPARTMENT
SHEET 2 OF 24 SHEETS

PLAN REVISION			
CHANGE	BY	DATE	APPROVAL

CONSTRUCTION RECORD
DATE STARTED — DATE COMPLETED
CONTR. — INSP.
COORD. INDEX 200-1695

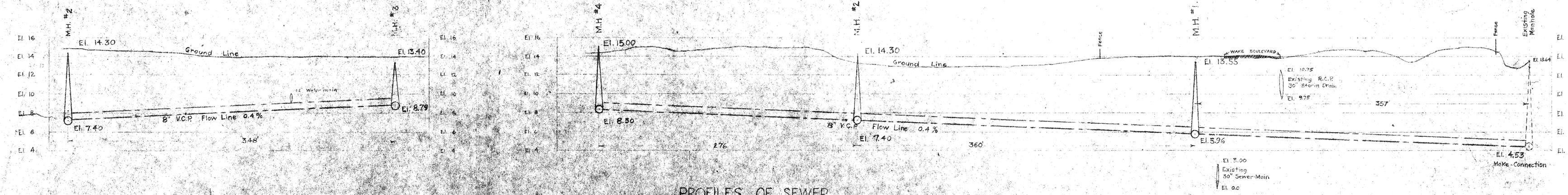
E. H. Gudmundsen 6/28/68
CITY ENGINEER — DATE

WATER DEPT.	SEWERAGE
PLANNING DEPT.	DRAINAGE
ELECTRICAL	HIGHWAY
STRUCTURAL	GRADES
TRAFFIC	CONTROL 6-24-68

W.O. NO. 17430
OFFICE ENGINEER
SUPERVISOR
CHECKED
DESIGNED T. Wilson
11557-2-D

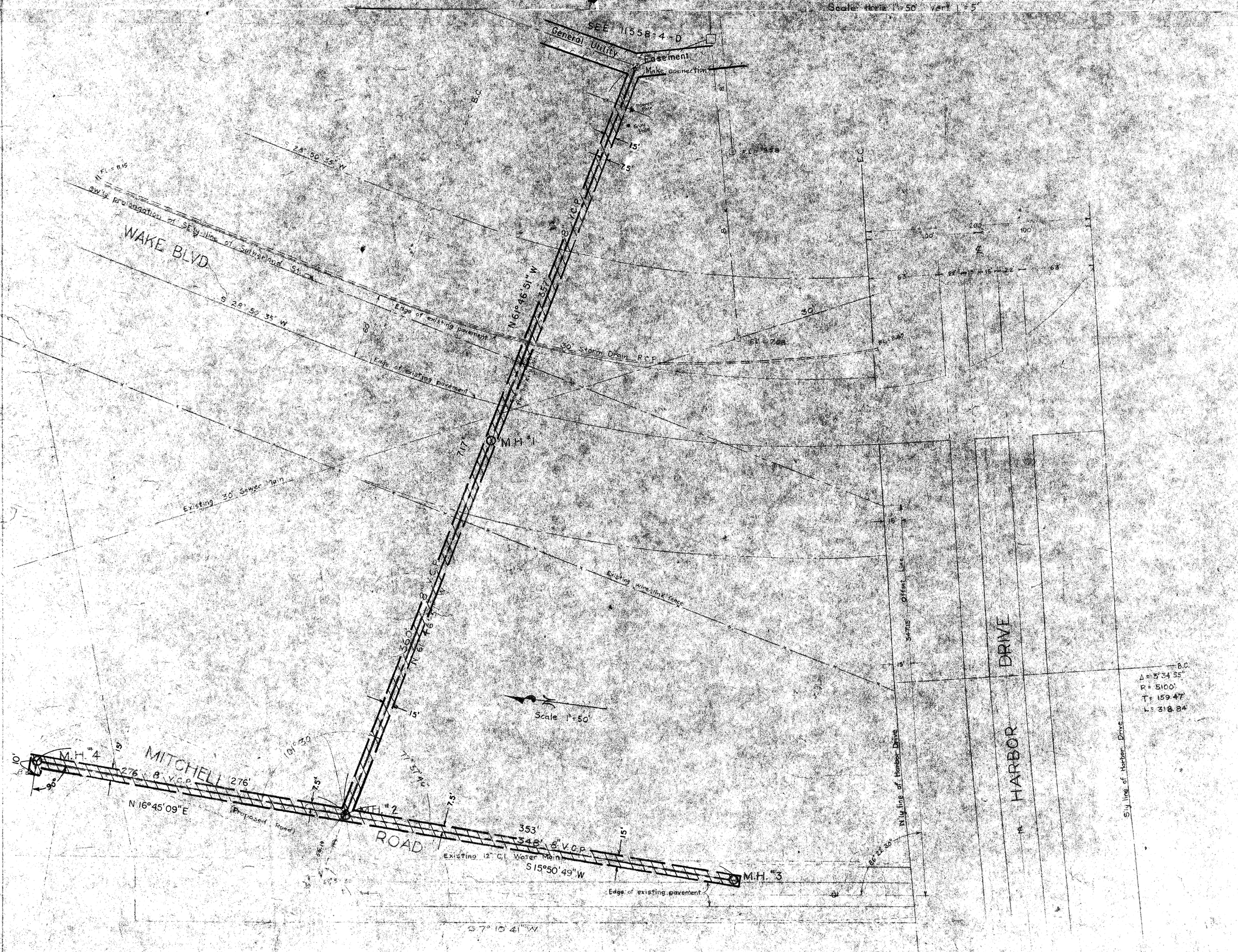
Ref. 981-D, Sht. 19

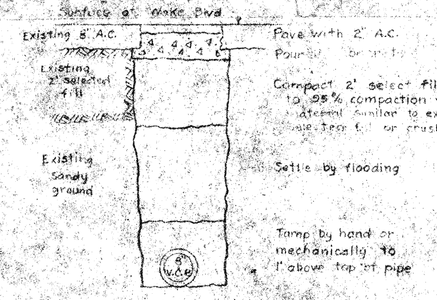
November 18, 2015
Supplement No. 11
Supplement No. 3



PROFILES OF SEWER

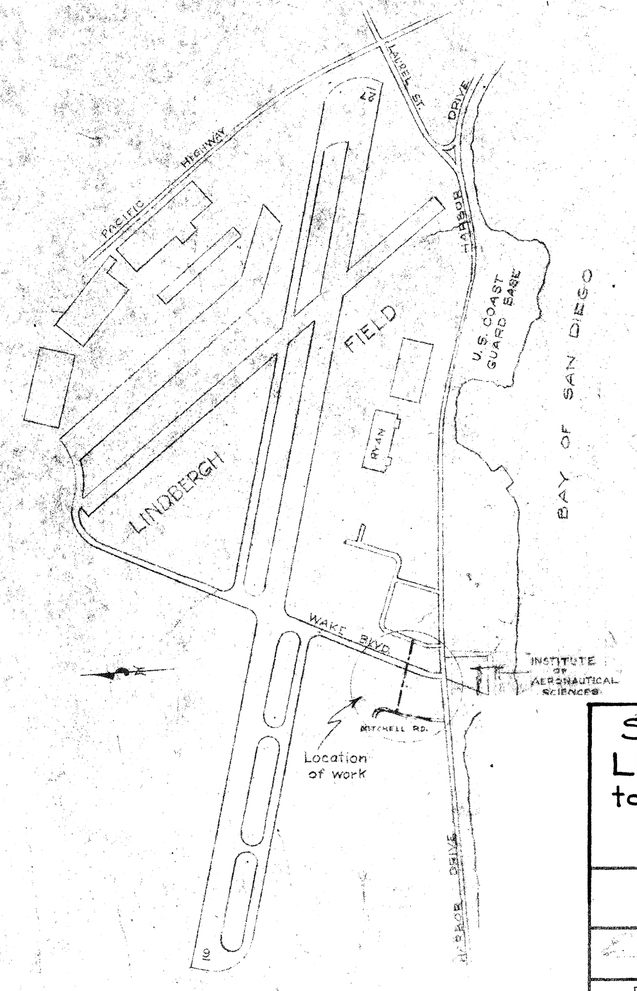
Scale: Horiz. 1"=50' Vert. 1"=5'





Cross section of trench crossing Wake Blvd.

Easement below M.H.T.L. shown hatched



PLOT PLAN

SHOWING LOCATION OF WOR

Scale 1" = 1000'

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Hinderman UTILITIES DIRECTOR 6-24-68	J. H. Wellenkamp CHIEF ENGINEER
SURVEYS INSPECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 45183 FILED FEB. 17, 1953	ORIGINAL CONVEYANCE DOCUMENT NO. 11 FILED FEB. 13, 1953

SEWER ESMT. - Air freight area Lindbergh Field (E'ly of Wake Blvd to Mitchell Rd.) Below M.H.T.L.

TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 3 OF 24 SHEETS

W.O. NO. 17430

CITY ENGINEER ____ DATE 6/24/68

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	[illegible]	[illegible]	6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

206-1709 LAMBERT COORDINATES

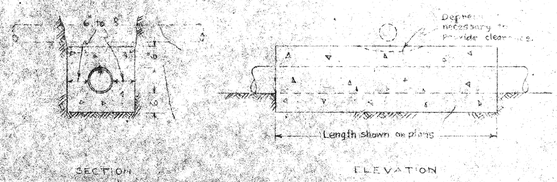
CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

11557-3 -D

HARBOR No 17-0-93

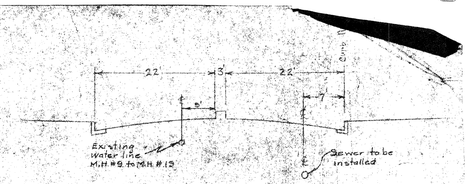
See 11557-5-D

DETAIL OF CRUSHED ROCK BASE
(FOR SEWER PIPE IN MUCKY SOILS)



SECTION ELEVATION

DETAIL OF CONCRETE ENCASEMENT



TYPICAL CROSS-SECTION OF THE ROADWAY ON THE SW'LY END OF SHELTER ISLAND, LOOKING SW'LY. AFTER PROPOSED IMPROVEMENTS

NOTE
Curbs or Back of walks as shown, and all underground services within section are in place. All other curbs, walks to be constructed to new grades in connection with this contract.

Sewer Easement ~ N.Ely. of N.Wly. R/W Line of Shelter Island Drive.

NOTE: ALL EASEMENT SHOWN HATCHED.

SEWER ESMT. ~ N.Wly. of N.Ely R/W of YACHT HARBOR DRIVE
PIPE ALIGNMENT FOR INTAKE AND DISCHARGE
PUMP PITS #2 & #3
SCALE: 1"=10'

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R.C. Snider	

SEWER EASEMENTS on SHELTER ISLAND TIDELANDS

CITY OF SAN DIEGO
ENGINEERING DEPARTMENT
SHEET 4 OF 24 SHEETS

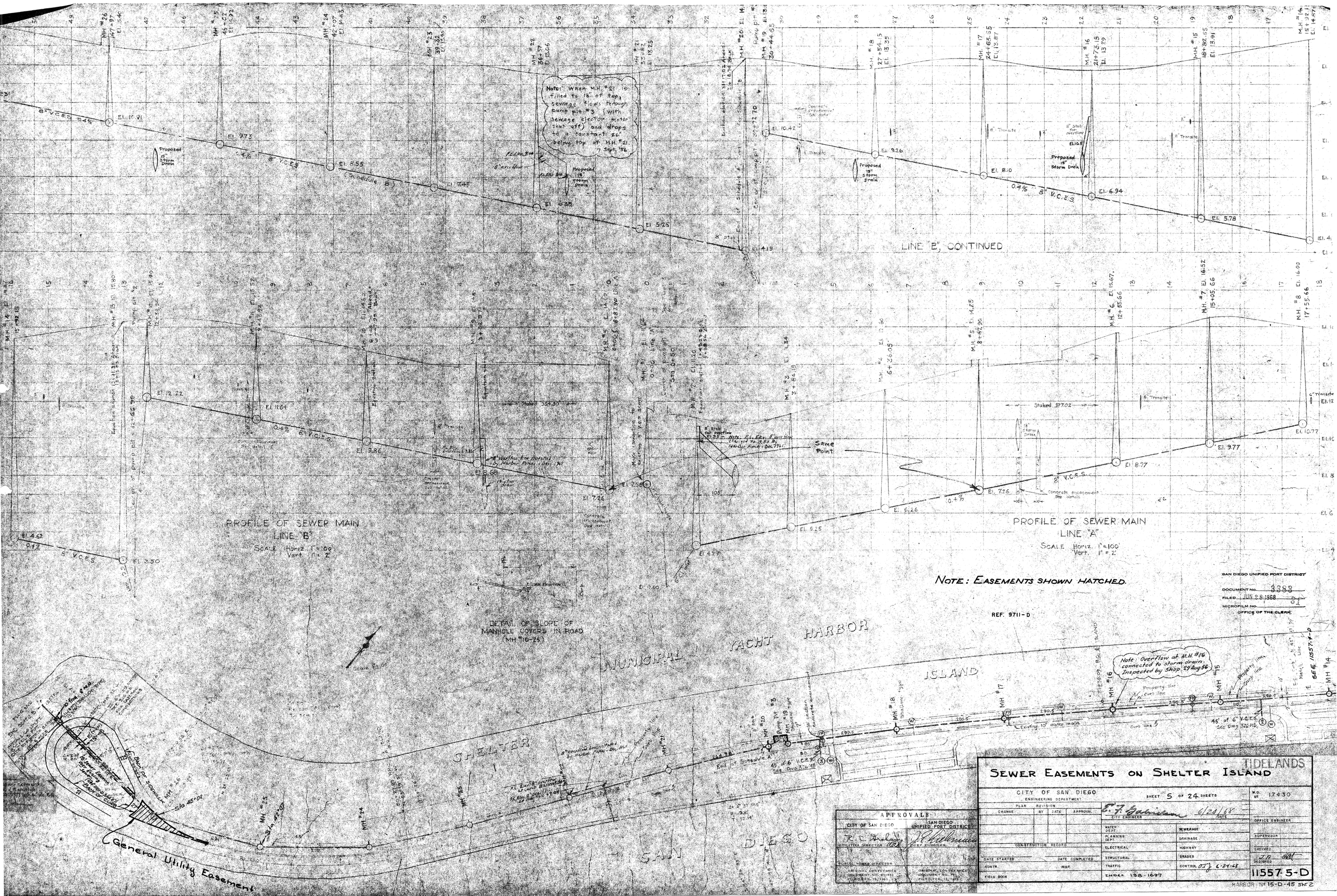
W.O. NO. 17430

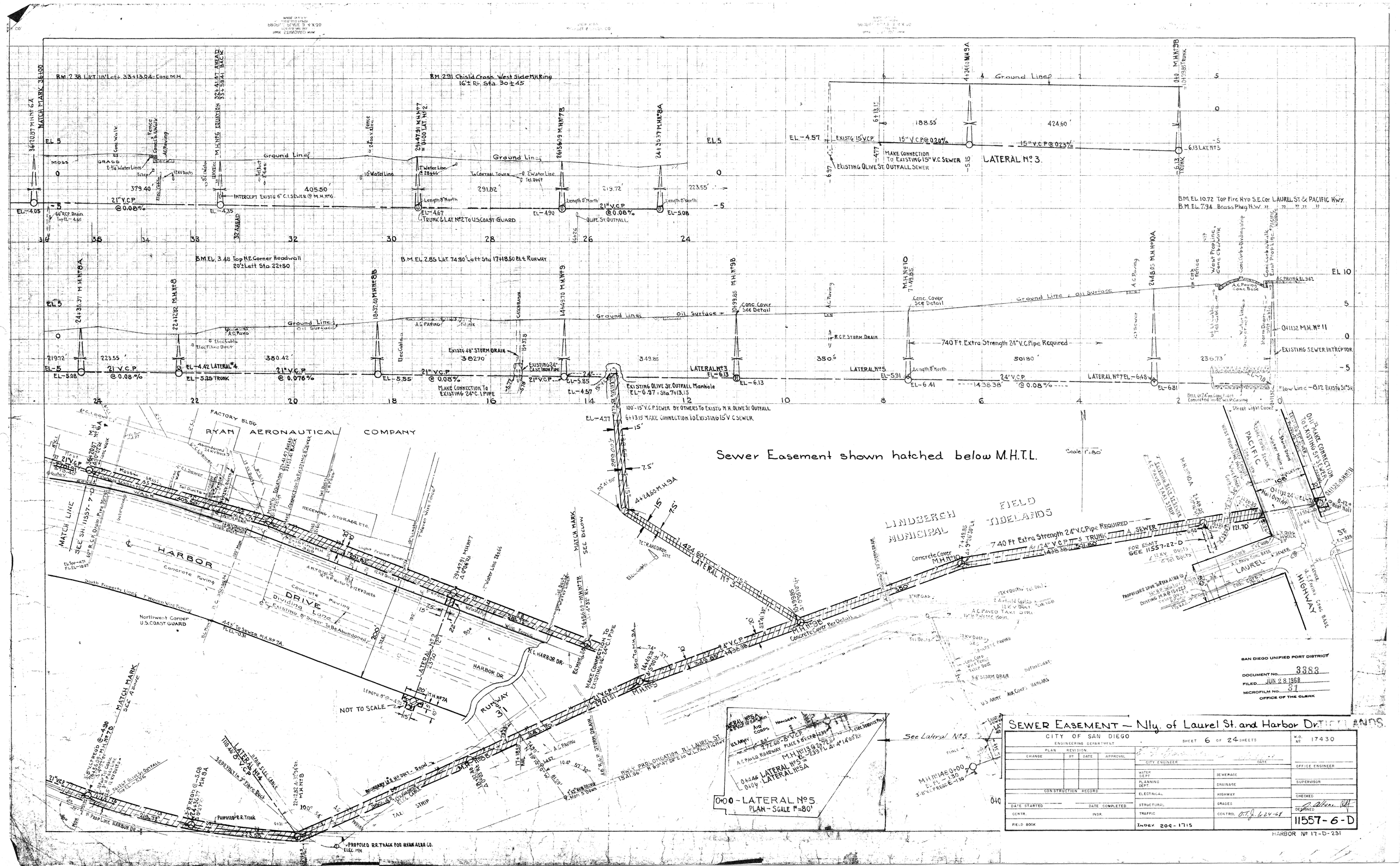
PLAN REVISION				
CHANGE	BY	DATE	APPROVAL	
				E. F. Gabrielson 6/24/68
				CITY ENGINEER DATE

OFFICE ENGINEER

WATER DEPT.	SEWERAGE	SUPERVISOR
PLANNING DEPT.	DRAINAGE	
CONSTRUCTION RECORD	ELECTRICAL	HIGHWAY	CHECKED
DATE STARTED / DATE COMPLETED	STRUCTURAL	GRADES	DESIGNED Hatton
CONTR. / INSP.	TRAFFIC	CONTROL O.J. 6-24-68	
FIELD BOOK	SCALE 1"=100'	COORD. INDEX 202-1701	11557-4-D

HARBOR No 15-D-45, Sh 1


LINE "B", CONTINUED
PROFILE OF SEWER MAIN
LINE "B"
SCALE Horiz. 1"=100'
Vert. 1"=2'
PROFILE OF SEWER MAIN
LINE "A"
SCALE Horiz. 1"=100'
Vert. 1"=2'
Note: When M.H. #21 is filled to 18" of top, sewage flows through pump pit #3 (with sewage ejector motor shut off) and drops to a constant 26" below top of M.H. #21. 7 Sept. '56
Proposed 15" Storm Drain
Same Point
Staked 377.02
Note: Easements shown hatched.
REF. 9711-D
DETAIL OF SLOPE OF MANHOLE COVERS IN ROAD (MH #10-25)
MUNICIPAL YACHT HARBOR
SHELTER ISLAND
SAN DIEGO
General Utility Easement
Note: Overflow at M.H. #16 connected to storm drain. Inspected by Shop 29 Aug 56
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No.
OFFICE OF THE CLERK
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR
CHIEF ENGINEER
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 65193
ORIGINAL CONVEYANCE DOCUMENT NO. 71
TIDELANDS
SEWER EASEMENTS ON SHELTER ISLAND
CITY OF SAN DIEGO
ENGINEERING DEPARTMENT
SHEET 5 OF 24 SHEETS
W.O. No. 17430
PLAN REVISION
CHANGE
BY
DATE
APPROVAL
CITY ENGINEER
6/24/68
DATE
OFFICE ENGINEER
WATER DEPT.
SEWERAGE
PLANNING DEPT.
DRAINAGE
SUPERVISOR
CONSTRUCTION RECORD
ELECTRICAL
HIGHWAY
CHECKED
DATE STARTED
DATE COMPLETED
STRUCTURAL
GRADES
DESIGNED
CONTR.
INSP.
TRAFFIC
CONTROL
6-24-68
FIELD BOOK
INDEX 198-1697
11557-5-D
HARBOR No. 15-D-45 Sht 2


Sewer Easement shown hatched below M.H.T.L.
RYAN AERONAUTICAL COMPANY
FACTORY BLDG
HARBOR DRIVE
LINDBERGH MUNICIPAL FIELD TIDELANDS
LATERAL No 3
LATERAL No 5
LATERAL No 7
LATERAL No 4
LATERAL No 2
LATERAL No 1
RUNWAY 31
HARBOR DR
PACIFIC
LAUREL
HIGHWAY
MATCH LINE
MATCH MARK
NOT TO SCALE
Scale 1"=80'
See Lateral No 5
0+00 - LATERAL No 5
PLAN - SCALE 1"=80'
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK
SEWER EASEMENT — Nly. of Laurel St. and Harbor Dr.
CITY OF SAN DIEGO
ENGINEERING DEPARTMENT
SHEET 6 OF 24 SHEETS
W.O. No 17430
11557-6-D
HARBOR No 17-D-231

B.M. EL 5.69 on Sly Rim of Manhole
10' Rt. 57+95

B.M. EL 5.30 Sly Top R.R. Rail of 3 Rails
Around Fire Hyd Left 48+88

B.M. EL. 3.21 Brass Plug in North Curb HARBOR DRIVE
71' Left Sta. 39+64.55 & 200' No. of Mon. on S.L. HARBOR DR.

Officers Quarters
Elev. Floor = 6.21

Building

Ground Line

Grade of Existing Sewer

Ex. M.H. 10 Rt. FL. 0.16

Existing M.H. Rim 4.61
FL. North 3.16
FL. South 3.16
FL. East 1.96
FL. West 1.96

Existing 8" Sewer

Existing Manhole FL. 0.16

Barracks

Officers

Elec. Duct

Existing Boundary U.S. Marine Corps Base

Points on Extension to Southward of Long Tangent on East Edge of Paving along Eastern boundary of Municipal Airport and Camp Sahara

Concrete Paving

Woven Wire Fence

16" C.I. Water Main

North Right of Way Line of Harbor Drive

HARBOR DRIVE

Dividing Lane

Match Line

Sewer Easement shown hatched

Scale 1" = 80'

CAMP SAHARA

Barracks

Administration

CONSAIR

Officers

Latrines

Existing 8" S.C.P.

Existing 8" Sewer

Manhole No. 2
Sta. 95+54.71 on Centerline of Existing M.H.
10' South of Existing M.H.
Connect to Existing M.H.

Manhole No. 1
Sta. 95+54.71 on Centerline of Existing M.H.
10' South of Existing M.H.
Connect to Existing M.H.
Set 5" C.P. on FL. Grade

Manhole No. 2
Sta. 95+54.71 on Centerline of Existing M.H.
10' South of Existing M.H.
Connect to Existing M.H.

Manhole No. 3
Sta. 95+34.53
As 4°44'30" Rt. of Tangent

Existing M.H. No. 3A

Existing M.H. No. 4

Existing M.H. No. 4A

Existing M.H. No. 5

Existing M.H. No. 5A

Existing M.H. No. 6

Existing M.H. No. 6A

Existing Sewer

Existing Gas Pump

Existing Trailer

Existing Garage

Existing Shop

Existing Tank

Existing Fence

Existing Gate

Existing Bldg.

Existing Tree

Existing Telephone Pole

Existing Power Pole

Existing Light Standard

Existing Fire Hydrant

Existing Water Valve

Existing Water Meter

Existing Sign

Existing Curb Inlet

Existing Catch Basin

Existing Manhole

Existing Concrete Paving

Existing Asphalt Paving

Existing Concrete Walk

Existing Curb

Existing Gutter

Existing Driveway

Existing Retaining Wall

Existing Steps

Existing Flagpole

Existing Mail Box

Existing Bench

Existing Trash Can

Existing Drinking Fountain

Existing Telephone Booth

Existing Telephone Manhole

Existing Telephone Pedestal

Existing Telephone Ducts

Existing Electric Manhole

Existing Electric Pedestal

Existing Electric Cable

Existing Gas Main

Existing Water Main

Existing Storm Drain

Existing Concrete Cradle

Existing Concrete Encasement

Existing Concrete Cap

Existing Concrete Collar

Existing Concrete Anchor

Existing Concrete Thrust Block

Existing Concrete Bulkhead

Existing Concrete Headwall

Existing Concrete Wingwall

Existing Concrete Apron

Existing Concrete Slab

Existing Concrete Footing

Existing Concrete Foundation

Existing Concrete Pier

Existing Concrete Abutment

Existing Concrete Retaining Wall

Existing Concrete Steps

Existing Concrete Curb

Existing Concrete Gutter

Existing Concrete Driveway

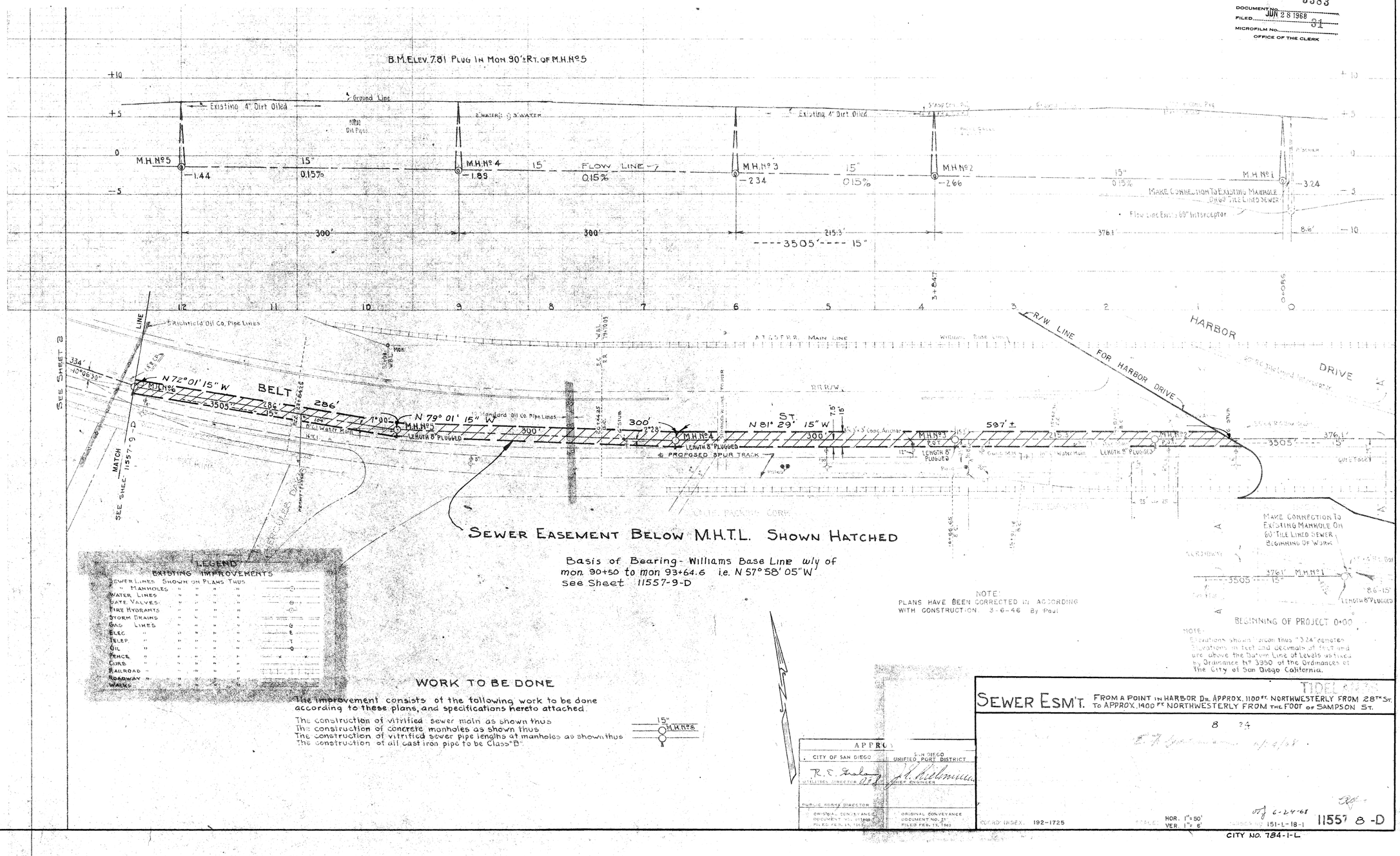
Existing Concrete Walk

Existing Concrete Paving

Existing Asphalt Paving

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

B.M. ELEV. 7.81 PLUG IN MON 90'± RT. OF M.H. Nº 5



SEWER EASEMENT BELOW M.H.T.L. SHOWN HATCHED

Basis of Bearing - Williams Base Line w'ly of mon. 90+50 to mon. 93+64.6 i.e. N 57° 58' 05" W
See Sheet 11557-9-D

NOTE:
PLANS HAVE BEEN CORRECTED IN ACCORDING WITH CONSTRUCTION 3-6-46 By Paul

NOTE:
Elevations shown thus "3.24" denote Elevations in feet and decimals of feet and are above the Datum Line of Levels adopted by Ordinance Nº 3350 of the Ordinances of The City of San Diego California.

LEGEND

EXISTING IMPROVEMENTS	
Sewer Lines Shown on Plans Thus	
" Manholes " " "	○
Water Lines " " "	W
Gate Valves " " "	G
Fire Hydrants " " "	⊙
Storm Drains " " "	
Gas Lines " " "	G
Elec. " " "	E
Telep. " " "	T
Oil " " "	O
Fence " " "	× ×
Curb " " "	
Railroad " " "	
Roadway " " "	
Walks " " "	

WORK TO BE DONE

The improvement consists of the following work to be done according to these plans, and specifications hereto attached.

The construction of vitrified sewer main as shown thus
The construction of concrete manholes as shown thus
The construction of vitrified sewer pipe lengths at manholes as shown thus
The construction of all cast iron pipe to be Class "B"

15" M.H. Nº s

APPROVED

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. C. Seals, UTILITIES DIRECTOR	A. Kellmann, PORT ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 61 FILED FEB. 13, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 21 FILED FEB. 13, 1963

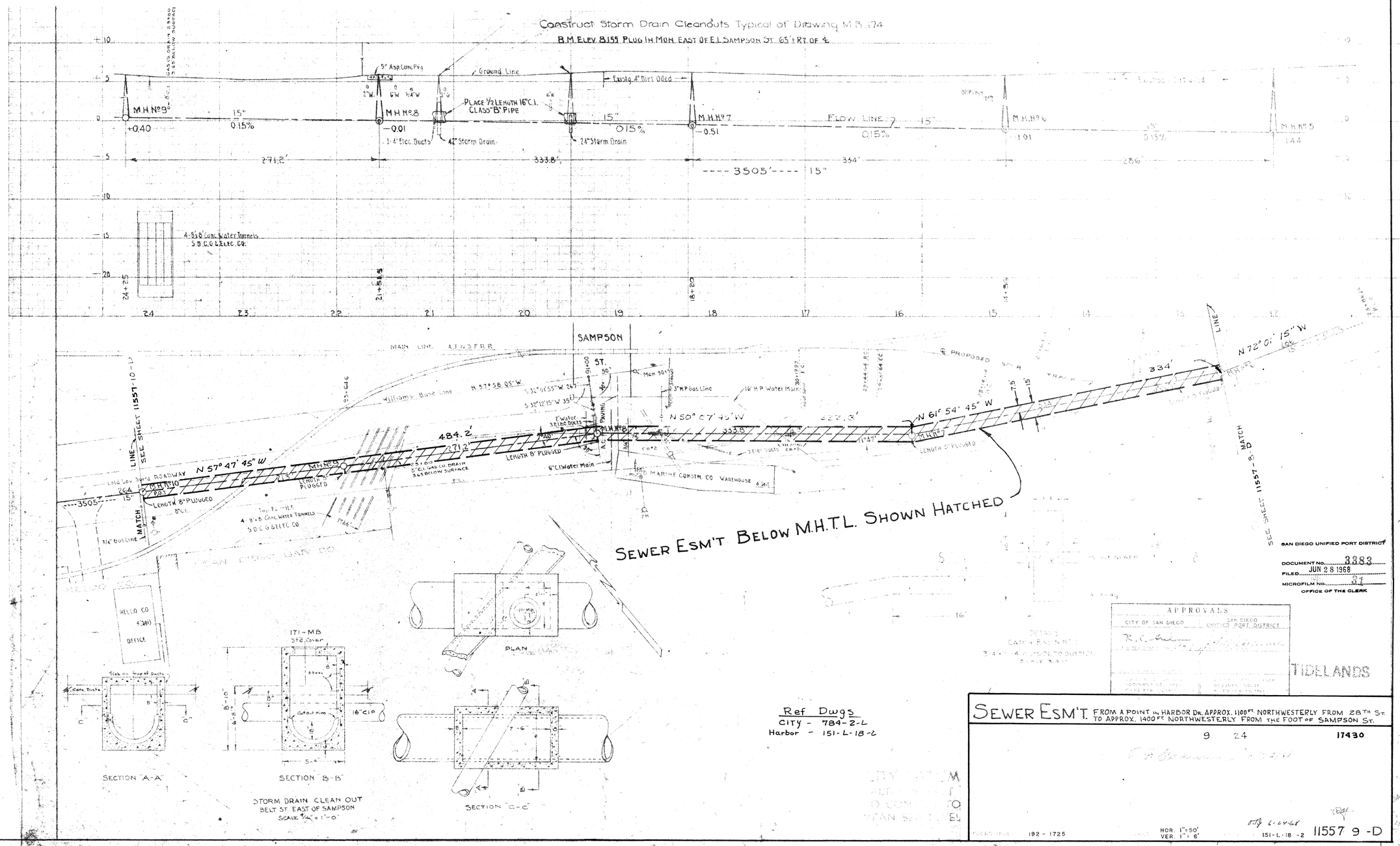
TIDELANDS

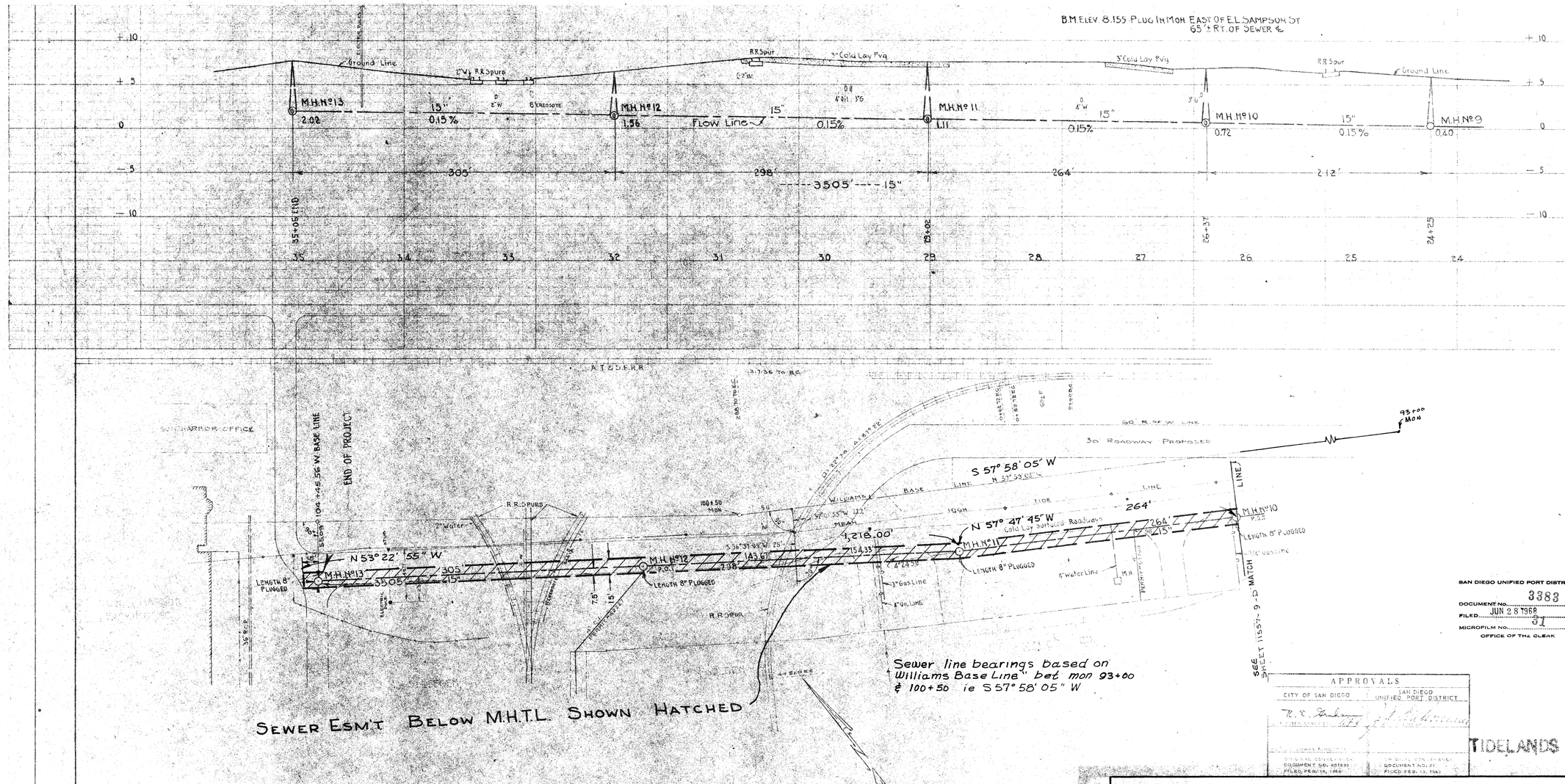
SEWER ESM'T. FROM A POINT IN HARBOR DR. APPROX. 1100 FT. NORTHWESTERLY FROM 28TH ST. TO APPROX. 1400 FT NORTHWESTERLY FROM THE FOOT OF SAMPSON ST.

8 34

OCRD INDEX 192-1725 SCALES HOR. 1"=50' VER. 1"= 6' APPROVED 6-24-68 CHIEF ENGINEER 151-L-18-1 11557 8-D

CITY NO. 784-1-L


Construct Storm Drain Cleanouts Typical of Drawing M.B. 174
B.M. Elev. 8.155 Plug In Mon. East of E.L. Sampson St. 65' ± Rt. of ℄
M.H. No. 9
M.H. No. 8
M.H. No. 7
M.H. No. 6
M.H. No. 5
Ground Line
Existg. 4" Dirt Oiled
Place 1/2 Length 16" C.I. Class "B" Pipe
42" Storm Drain
24" Storm Drain
3-4" Elec. Ducts
Flow Line
271.2'
333.8'
334'
286'
3505'
15"
0.15%
4-8'x8' Conc. Water Tunnels S.D.C.G.&Elec. Co.
SAMPSON ST.
Main Line A.T.&S.F.R.R.
Williams Base Line
N 57° 47' 45" W
N 50° 07' 45" W
N 61° 54' 45" W
N 72° 01' 15" W
484.2'
Length 8" Plugged
6" C.I. Water Main
Sewer Esm't Below M.H.T.L. Shown Hatched
Hello Co. Office
Section "A-A"
Section "B-B"
Section "C-C"
Plan
Storm Drain Clean Out
Belt St. East of Sampson
Scale 1/4" = 1'-0"
Ref Dwgs
City - 784-2-L
Harbor - 151-L-18-2
Sewer Esm't. From a Point in Harbor Dr. Approx. 1100 Ft. Northwesterly from 28th St. to Approx. 1400 Ft. Northwesterly from the Foot of Sampson St.
9 24
17430
192 - 1725
Hor. 1" = 50'
Ver. 1" = 6'
151-L-18-2
11557 9-D
Tidelands
Approvals
City of San Diego
San Diego Unified Port District
San Diego Unified Port District
Document No. 3383
Filed JUN 28 1968
Microfilm No. 31
Office of the Clerk



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham	J. A. Bilbrough
DIVISION CONVEYANCE DOCUMENT NO. 451633 FILED FEB. 14, 1968	DIVISION CONVEYANCE DOCUMENT NO. 31 FILED FEB. 13, 1968

TIDELANDS

REF: CITY. 784-3-L

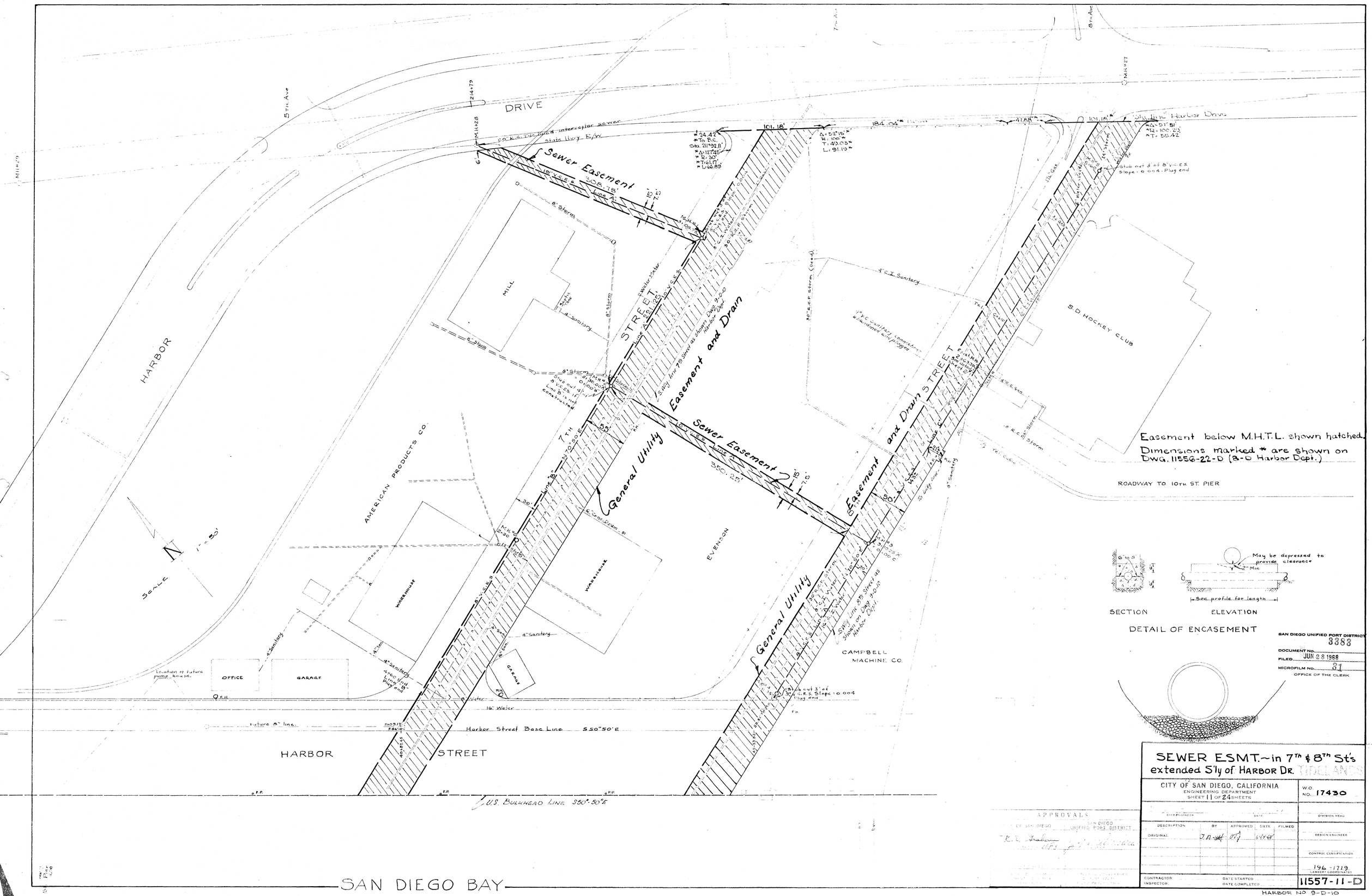
SEWER ESM'T. FROM A POINT IN HARBOR DR. APPROX. 1100 FT. NORTHWESTERLY FROM 28TH ST. TO APPROX. 1400 FT. NORTHWESTERLY FROM THE FOOT OF SAMPSON ST.

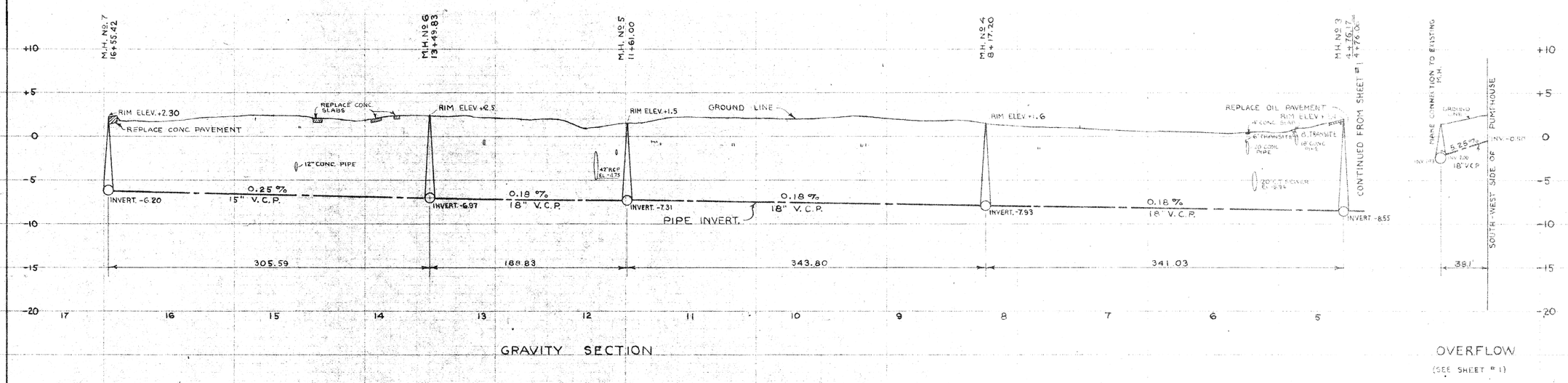
10 24 WO No 17430

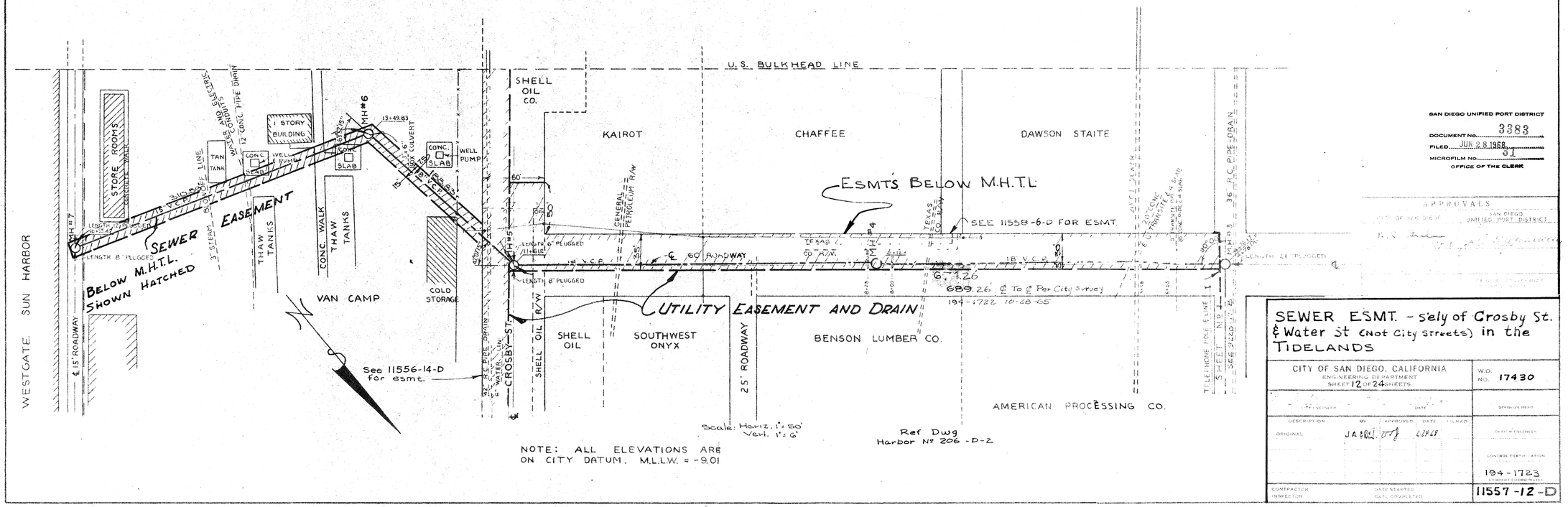
E. F. Gabrielson 6/24/68

COORD. INDEX 192-1723 SCALE HOR. 1" = 50' VER. 1" = 6' HARBOR No 151-L-18 -3 11557-10-D

OT 6-24-68


DRIVE
HARBOR
Sewer Easement
308.78'
Line A
Sewer Easement
350.25'
Line A
General Utility Easement and Drain
Easement and Drain
General Utility
STREET
Sta. line Harbor Drive
S.D. HOCKEY CLUB
ROADWAY TO 10TH ST. PIER
AMERICAN PRODUCTS CO.
EVENSON
WAREHOUSE
MILL
OFFICE
GARAGE
CAMPBELL MACHINE CO.
Harbor Street Base Line S50°50'E
HARBOR STREET
U.S. BULKHEAD LINE S50°50'E
SCALE 1" = 50'
Easement below M.H.T.L. shown hatched.
Dimensions marked * are shown on DWG. 11556-22-D (8-D Harbor Dept.)
May be depressed to provide clearance
See profile for length
SECTION
ELEVATION
DETAIL OF ENCASEMENT
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK
SEWER ESMT.~in 7th & 8th St's extended S'ly of HARBOR DR.
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 11 OF 24 SHEETS
W.O. NO. 17430
APPROVALS
CITY ENGINEER
DATE
DIVISION HEAD
DESCRIPTION
BY
APPROVED
DATE
FILMED
ORIGINAL
DESIGN ENGINEER
CONTROL CERTIFICATION
196-1719
LAMBERT COORDINATES
CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED
11557-11-D
HARBOR NO 9-D-10
SAN DIEGO BAY





SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

APPROVALS
CITY OF SAN DIEGO — SAN DIEGO UNIFIED PORT DISTRICT

SEWER ESMT. - s'ely of Crosby St. & Water St (Not City Streets) in the TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA ENGINEERING DEPARTMENT SHEET 12 OF 24 SHEETS	W.O. NO. 17430
CITY ENGINEER — DATE	DIVISION HEAD
DESCRIPTION — BY — APPROVED — DATE — FILMED ORIGINAL — J.A. [illegible] — 6-24-68	DESIGN ENGINEER
	CONTROL CERTIFICATION 194-1723 LAMBERT COORDINATES
CONTRACTOR — DATE STARTED INSPECTOR — DATE COMPLETED	11557-12-D

EXTRA WORK ORDER NO 2
INSTALL 10-6 V.C. PIPE
6" I.D. INCREASED
4" V.C.P. TO BE REMOVED
REBUILD EXISTING M.H. AS PER CONNECTION
INSTALL 6" V.C. PIPE AND FURNISH & INSTALL DEPT.
REMOVE & REBUILD 6" CURB TO MATCH EXISTING
REMOVE & REBUILD 6" CURB TO MATCH EXISTING
PLUG OUTFALL INTO BAY

BM 18" LH of Sta 5+39.99 on top S.W. Cb at Point Tee E. +11.13

BM 22' LH of Sta 0+83.67 S.W. Cb at Sta. 81 +12.59 U.S.C.G. DATUM

EXISTING 24" STORM DRAIN E NORTH FL +4.70

MAKE CONNECTION WITH EXISTING 24" SEWER FLOW LINE +1.02 E

BEGINNING OF WORK AT M.H. # 1

M.H.#1 M.H.#2 M.H.#3 M.H.#4 M.H.#5 M.H.#6

10" SEWER @ 0.3% — 97.5 Lin. Ft — 10" SEWER @ 0.3% — 210.5 Lin. Ft — 10" SEWER @ 0.3% — 200.72 Lin. Ft — 10" SEWER @ 0.3% — 244.68 Lin. Ft — 10" SEWER @ 0.3% — 238.13 Lin. Ft

FL +1.15 FL +1.87 FL +2.50 FL +3.10 FL +3.68 FL +4.28

0+17.5 1+15 3+25 5+22.72 6+22.4 7+7.10 10+08.18

0 5 10 15

10 9 8 7 6 5 4 3 2 1 0

PACIFIC HIGHWAY

8" STORM DRAIN

EXISTING 5'-1" V.C. SEWER

Scale: 1"=50' Ver. 1"=5'

Sewer Easement below M.H.T.L. shown hatched.

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 81
OFFICE OF THE CLERK

NOTE.
N°1 ELEVATIONS SHOWN HEREON ARE BASED ON U.S.C.G. DATUM ELEVATIONS IN FEET AND DECIMALS OF FEET OF +9.01 ABOVE CITY ZERO
N°2 N°1 MANHOLE TO BE CONSTRUCTED OF BRICK, ALL OTHERS TO BE CONCRETE MANHOLES
N°3 ALL MANHOLE COVERS TO BE STANDARD CAST IRON

STANDARD STORM DRAIN CLEAN OUT FOOT OF MARKET ST
SCALE ½" = 1'-0"
AT STA 6+22 APPROX
SEE 174-MB
FOR FURTHER DETAILS

VIEW B-B PLAN

See 9220-13-B for esmt.

Prolongation N'ly line Market St.

Prolongation of W'ly line of Pacific Hwy. 130' wide

SEWER ESMT. - from "G" St Pier along North Harbor Dr. to Market St. along Market St. to Pacific Hwy

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 13 OF 24 SHEETS

W.O. NO. 17430

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R.E. Hudson	

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.G.J.	O.K.	6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

198-1716 LAMBERT COORDINATES

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

11557-13-D

W.A.R.M.O. NO 58-L-4

MEM. MORK
KEUFFEL & ESSER CO.

DIAZOTYPE STYLE B 9 X 20

QUINCE STREET Not Opened
PALM STREET
6" P.C. Conc. PAV.
SIDEWALK
6" Sewer @ El. 8.42
6188.5'
52+84.60
M.H. No. 45 46+15.75
Fill Office Floor 3.81
Curve St Not Opened
3" Con. Walls
Con. Drive
24" Con. Walk
NUTMEG STREET Not Opened
GROUND LINE
24" R.C. Pipe
6193.75'
Olive St. 18" Outfall Sewer El. -1.72
MAPLE STREET Not Opened
M.H. No. 44 39+96
Oil Rock Surfacing
LAUREL STREET
A.C. P.V.
Sidewalk
776.00'
Pipe Laid in open Trench, Supported on Rock Cradle
KALMIA STREET Closed
Top Pipe El. 7.04
54" Con. Pipe
6" El. Box to Drain
T&R Inlet B'Rep El. 8.65
395.35'
198.00'
182.65'
M.H. No. 43 36+00.65
34+01.65 414.15 R
32+20.0
EL. -6.86
Flow Line of 45" R.C. Tile Lined Pipe 0.07%
EL. -7.38
Flow Line of 51" R.C. Tile Lined Pipe 0.08%
EL. -7.87
0.08%
FL. -8.19 0.08%
FL. -8.35 0.08%
EL. -8.49
City Zero 0 Equation of Elevations +9.01
U.S.C.&G. Zero +9.01
U.S.C.&G. Stamp
M.H.D. Stamp
NOTE: ALL ELEVATIONS REFER TO CITY DATUM
BEGIN CONTRACT No. 2
351+59.10 = 4L+12.15'

52+00 50+00 48+00 46+00 44+00 42+00 40+00 38+00 36+00 34+00 32+00

MATCH LINE See Sheet 11557-15-D

QUINCE STREET 80' Not Opened
PALM STREET 80'
Golden Eagle Oil Co. Overhead Mech. Digr. 15 Above Ground Two 4000 Gal. Tanks
4' Wire Fence
10,000 Gal. Tank
Pipe Pump
WILSHIRE OIL Co.
City Electrical Conduit
Auto Park
Auto Jack Hoist
Conc. Slab 10'x16'
Con. Drive
2" Support Pipe
PACIFIC
2" H.P. Gas
Telephone Conduit
18" Outfall Sewer
3" Con. Walls
Con. Drive
24" Con. Walk
M.H. No. 45 46+15.75
NUTMEG STREET 80' Not Opened
SEWER EASEMENT
MAPLE STREET 80' Not Opened
M.H. No. 44 39+96.60
20' TYP.
BELOW M.H.T.L.
NOTE: From Laurel St. N'ly., Palms 20 ctrs., 2' back of Curb
No Sidewalk & from P.L. to Curb
Edge Paved Street
Gas Pumps
4" Dia. Conc. Pipe
Tank
Island
4" Conc. Curb
4" Conc. Walk
Sidewalk
Curb
Gutter
Asphalt Paving
Concrete Paving
Reinforced Concrete Pipe
Storm Drain
HIGHWAY
STREET 80'
M.H. No. 43 36+00.65
35+59.10 = 4L+12.15'
35+00
Sidewalk
Telephone
18" R.C.P.
Conc. Pipe
34+44.24 = 4R+12.15'
Sta. 33+44.24 Intercepting Sewer
KALMIA STREET 80' (Closed)
32+20
1½" H.P.
Edge pavement when Sewer Const.
JUNIPER STREET 80'
4" L.P. Gas
10" C.I.
6" C.I.
12" C.I.
6-Elec. Ducts - Dead 104' Long under Hwy. 5½' N. of S. Curb
18" R.C.P.
24" R.C. Pipe
Santa Fe Ry. Spur
Sewer
Storm
Drain
LAUREL 80'
16" C.I.
8" C.I.
Curb
Gutter
Asphalt Paving
Concrete Paving
Reinforced Concrete Pipe
Storm Drain
MUNICIPAL TIDE LANDS SUBDIVISION TRACT
BEGIN CONTRACT No. 2
AUTO PARK
MUNICIPAL LINDBERGH FIELD AIRPORT
E.C. 44+16.55
B.C. 43+08.85

For Location 3' S. of Easterly P.L.
CURVE DATA FOR INTERCEPTING SEWER
R = 2140.5'
Δ = 16° 16' Lt.
L = 607.7'
T = 305.90

CURVE DATA FOR HIGHWAY
℄ R = 2083.5'
Δ = 16° 16'
L = 591.52'
T = 297.75

Sewer Easement below M.H.T.L. shown hatched.

Scale: Horiz. 1" = 80'
Vert. 1" = 6'

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

SEWER EASEMENT — TIDELANDS
Between Laurel and Bean St., below M.H.T.L.

CITY OF SAN DIEGO
ENGINEERING DEPARTMENT
SHEET 14 OF 24 SHEETS
W.O. NO. 17430

PLAN REVISION			
CHANGE	BY	DATE	APPROVAL

CONSTRUCTION RECORD
DATE STARTED — DATE COMPLETED
CONTR. — INSP.
COORD. INDEX: 206-1715

E. F. Gardner — 6/11/68
CITY ENGINEER — DATE

WATER DEPT.	SEWERAGE
PLANNING DEPT.	DRAINAGE
ELECTRICAL	HIGHWAY
STRUCTURAL	GRADES
TRAFFIC	CONTROL AJ 6-24-68

SCALE: HORIZ. 1" = 80' VERT. 1" = 6'

OFFICE ENGINEER
SUPERVISOR
CHECKED
DESIGNED J.D. 4/67

11557-14-D

APPROVALS

CITY OF SAN DIEGO
R. E. Dolan
UTILITIES DIRECTOR

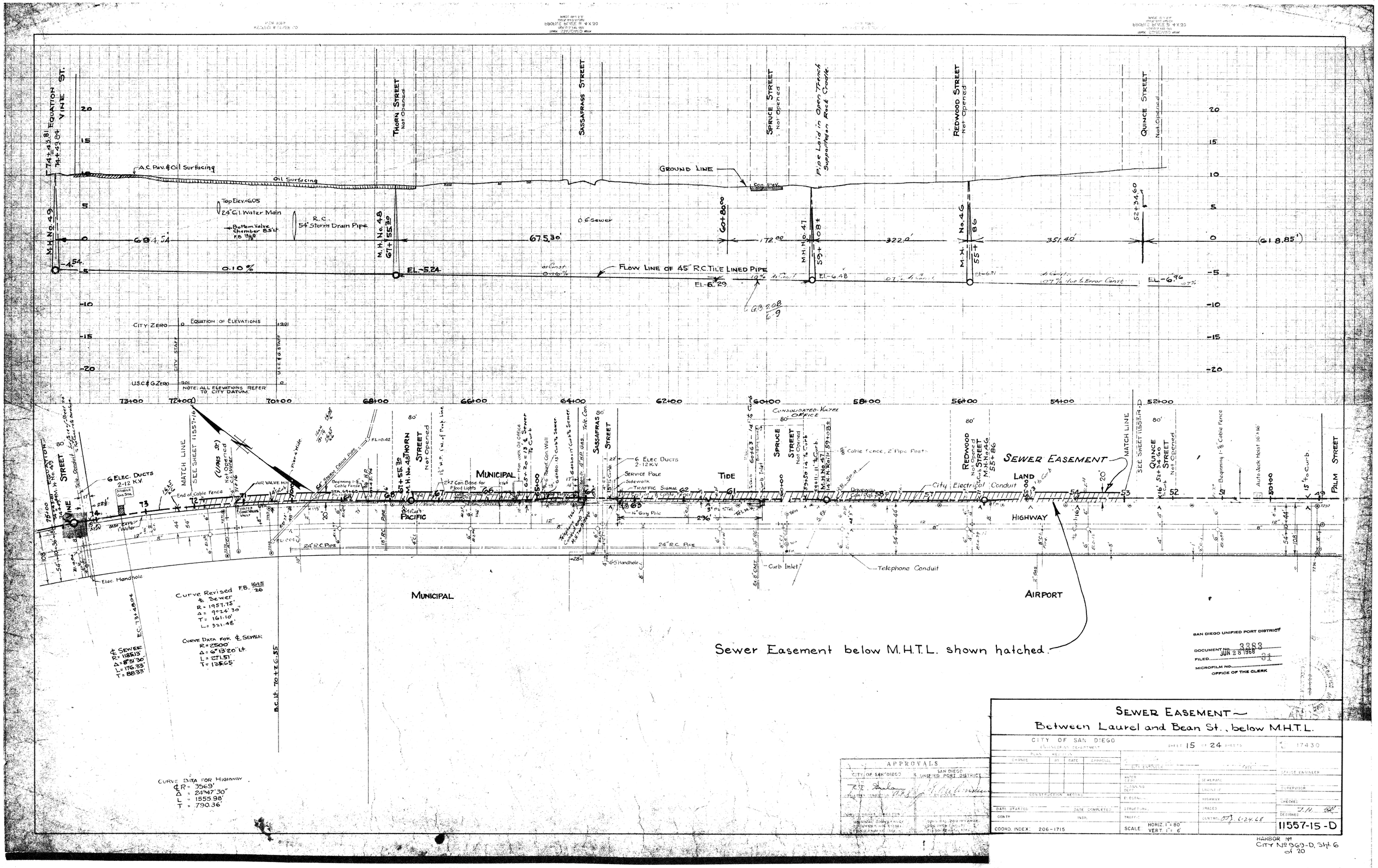
SAN DIEGO UNIFIED PORT DISTRICT
J. Kuhlemeier
CHIEF ENGINEER

PUBLIC WORKS DIRECTOR

ORIGINAL CONVEYANCE DOCUMENT NO. OR FILED MAP NO.

ORIGINAL CONVEYANCE DOCUMENT NO. OR FILED MAP NO.

HARBOR No
CITY No 968-D, Sht. 5, of 20


EQUATION VINE ST.
THORN STREET Not Opened
SASSAFRASS STREET
SPRUCE STREET Not Opened
Pipe Laid in Open Trench Supported on Rock Cradle
REDWOOD STREET Not Opened
QUINCE STREET Not Opened
A.C. Pav. & Oil Surfacing
Oil Surfacing
GROUND LINE
Con. Pav.
Top Elev. 605
24" C.I. Water Main
Bottom Valve Chamber 8.5' Lt.
R.C. 54" Storm Drain Pipe
6" Sewer
M.H. No. 49
M.H. No. 48
M.H. No. 47
M.H. No. 46
694.54'
675.30'
172.00'
322.0'
351.40'
(618.85')
0.10%
EL. -5.24
FLOW LINE OF 45" R.C. TILE LINED PIPE
EL. -6.29
EL. -6.48
EL. -6.96
CITY ZERO
EQUATION OF ELEVATIONS
U.S.C. & G. ZERO
NOTE: ALL ELEVATIONS REFER TO CITY DATUM.
73+00
72+00
70+00
68+00
66+00
64+00
62+00
60+00
58+00
56+00
54+00
52+00
MATCH LINE
SEE SHEET 11557-16
SEE SHEET 11557-14-D
6 ELEC. DUCTS 2-12 K.V.
MOBILE GAS STA.
End of Cable Fence
AIR VALVE M.H.
Beginning 1-5/8" Cable Fence
Pier & Wide
Pier & Wide
Beginning 1-5/8" Cable Fence
Auto Jack Hoist 16'x16'
15' to Curb
PALM STREET
MUNICIPAL
PACIFIC
TIDE
SPRUCE STREET Not Opened
CONSOLIDATED-VULTEE OFFICE
SERVICE POLE
Sidewalk
TRAFFIC SIGNAL
16" Guy Pole
Cable Fence, 2" Pipe Posts
City Electrical Conduit
Driveway
Con. Pav.
LAND
HIGHWAY
AIRPORT
SEWER EASEMENT
24" R.C. PIPE
Curb Inlet
Telephone Conduit
Elec. Handhole
Curve Revised F.B. 1625/26
℄ Sewer
R = 1957.75'
Δ = 9°24'30"
T = 161.10'
L = 321.48'
CURVE DATA FOR ℄ SEWER
R = 2500'
Δ = 6°13'20" Lt.
L = 271.51'
T = 135.65'
℄ SEWER
R = 1185.13'
Δ = 8°31'30"
L = 176.33'
T = 88.33'
B.C. Lt. 70+26.55
CURVE DATA FOR HIGHWAY
℄ R = 3569'
Δ = 24°47'30"
L = 1555.98'
T = 790.36'
Sewer Easement below M.H.T.L. shown hatched.
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
SEWER EASEMENT —
Between Laurel and Bean St., below M.H.T.L.
CITY OF SAN DIEGO
ENGINEERING DEPARTMENT
SHEET 15 OF 24 SHEETS
No. 17430
CITY ENGINEER
DATE
OFFICE ENGINEER
WATER DEPT.
SEWERAGE
PLANNING DEPT.
DRAINAGE
ELECTRICAL
HIGHWAY
STRUCTURAL
GRADES
TRAFFIC
CONTROL
DATE STARTED
DATE COMPLETED
CONTR.
INSP.
COORD. INDEX: 206-1715
SCALE: HORIZ. 1" = 80' VERT. 1" = 6'
DESIGNED
11557-15-D
HARBOR No. 969-D, Sht. 6 of 20

SUTHERLAND STREET

CLAYTON STREET

HARASTHY STREET

EMORY STREET

BEAN STREET

VINE STREET

EQUATION 84+11.56 = 82+11.56

EQUATION 88+50.00 = 86+00.00

EQUATION 74+43.81 = 74+49.81

EQUATION 74+49.84 = 74+96

Ground Line

Base of Fill

Top of Cut

647.63

799.99'

762.35'

682.40'

694.54'

M.H. No. 52 96+88.75

M.H. No. 51 89+71.98 89+71.98

M.H. No. 50 81+28.21

M.H. No. 49 74+43.81

36" R.C. Pipe EL. 4.95

24" R.C. Pipe FL. EL. 0.44

18" R.C. Pipe FL. EL. -4.5

66" Sewer

8" Sewer FL. 2.4

0.10%

EL. -2.38

EL. -3.08

EL. -3.88

EL. -4.54

Flow Line of 45" R.C. Tile Lined Pipe

Cased in Conc. G 70 / 12

CITY ZERO 0 EQUATION OF ELEVATIONS +9.01

USC&GS ZERO -9.01 NOTE: ALL ELEVATIONS REFER TO CITY DATUM

USE 4.0 STAFF

CITY STAFF

KURTZ STREET

PACIFIC STREET

SUTHERLAND

CLAYTON

HARASTHY

EMORY

MUNICIPAL

AIRPORT

Highway

Street Lighting Conduit

Construct 24" Storm drop inlet Std. Dwg.

6 Elec. Ducts, 2-12 W.V., 24" below surface of St. to top concrete encasement.

Sewer Easement

Elec. M.H.

Tide Gate

Tide Channel

Concrete Box Culvert

Ry. Line Pacific Hwy.

MATCH LINE See Sheet 11557-15-D

Easement below M.H.T.L. shown hatched.

CURVE DATA FOR ℄ SEWER
R = 3000'
Δ = 10°00'
L = 523.84
T = 262.34
FB 1608-4

Curve Revised FB 1625 '26
Δ 7° 41' 00"
R 3660.
L = 490.80
T = 245.11

CURVE DATA FOR HIGHWAY
℄ R = 3596'
Δ = 24°47' 30"
L = 1555.98'
T = 790.36'

℄ SEWER
R 11857.5
Δ 1°43' 30"
L 356.33'
T 178.3'
FB 1608-2

Curve Revised FB 1625
℄ Sewer
R 11857.5
Δ 9°24' 30"
T 161.10
L 321.48

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 51
OFFICE OF THE CLERK

APPROVALS

CITY OF SAN DIEGO
R. C. Hanson
UTILITIES DIRECTOR

SAN DIEGO UNIFIED PORT DISTRICT
F. Quick Marcus
CHIEF ENGINEER

SEWER EASEMENT
Between Laurel and Bean St., below M.H.T.L.

CITY OF SAN DIEGO
ENGINEERING DEPARTMENT

SHEET 16 OF 24 SHEETS

P.O. NO. 17430

PLAN CHANGE	REVISION BY	DATE	APPROVAL

CONSTRUCTION RECORD

DATE STARTED ____ DATE COMPLETED ____

CONTR. ____ INSP. ____

COORD. INDEX 208-1713

CITY ENGINEER ____ DATE ____

WATER DEPT. ____ SEWERAGE ____

PLANNING DEPT. ____ DRAINAGE ____

ELECTRICAL ____ HIGHWAY ____

STRUCTURAL ____ GRADES ____

TRAFFIC ____ CONTROL ____

SCALE: HORIZ. 1" = 80' VERT. 1" = 6'

OFFICE ENGINEER ____

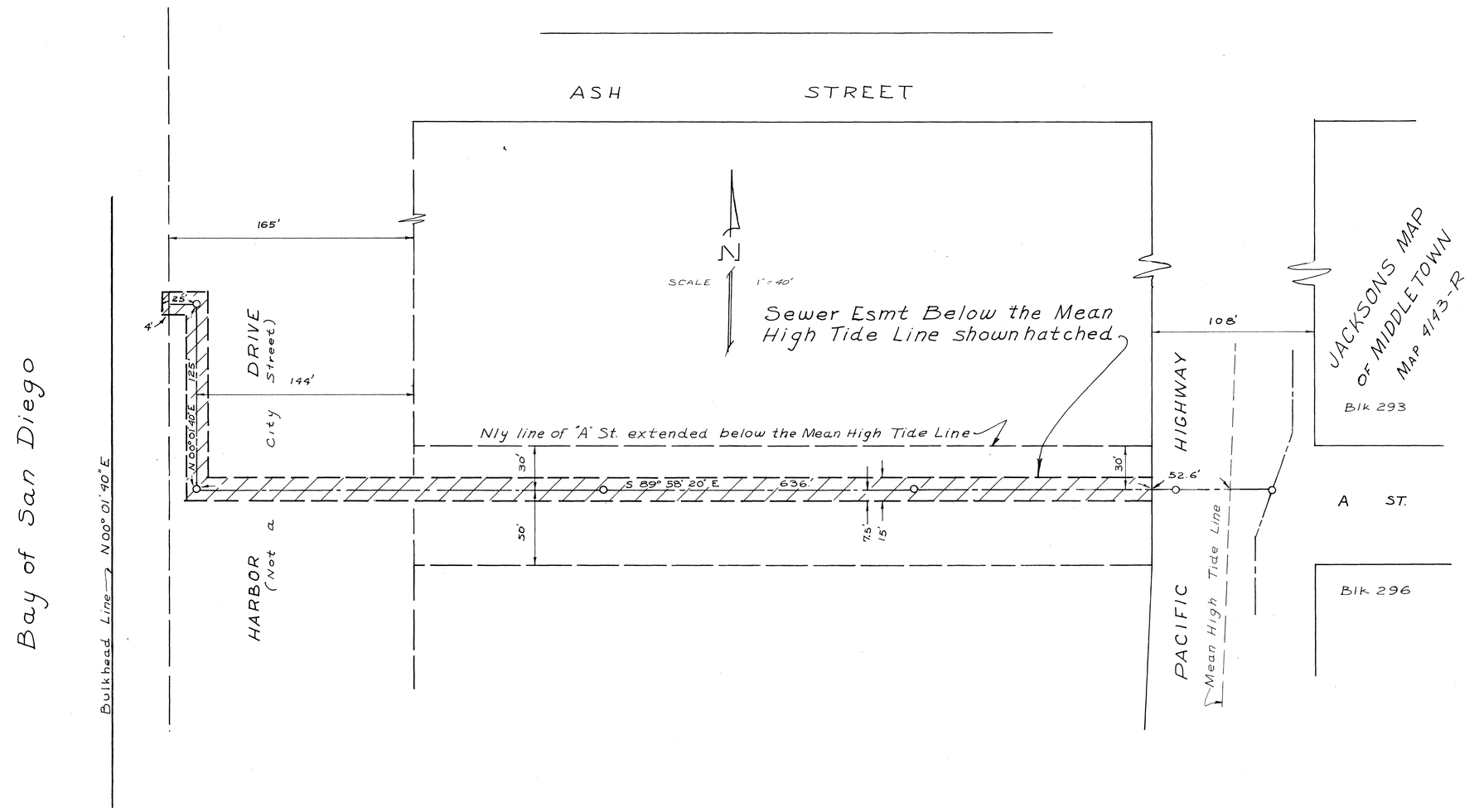
SUPERVISOR ____

CHECKED ____

DESIGNED J.J.D. 11-24-61

11557-16-D

HARBOR № CITY NS 969-D, Sht. 7 of 20



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

SEWER ESMT.- Wly of the intersection of Pacific Hwy. & 'A' St. below the Mean High Tide Line (TIDELANDS)

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 17 OF 24 SHEETS

W.O. NO. 17430

CITY ENGINEER — DATE — DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.J.	OTJ	6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

202 - 1715
LAMBERT COORDINATES

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

11557-17-D

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. [signature]	[signature]
CITIES DIRECTOR U.S.S.	ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. [illegible] FILED [illegible] 1963	ORIGINAL CONVEYANCE DOCUMENT NO. [illegible] FILED [illegible] 1963

EQUATION OF ELEVATION
CITY ZERO = U.S.C.&G. ZERO + 9.01
CITY STAFF 0.00 = U.S.C.&G. STAFF 9.01
CITY STAFF 9.01 = U.S.C.&G. STAFF 0.00

NOTE: ALL ELEVATIONS REFER TO CITY ELEVATIONS.

Approx. Grade Harbor Drive

Ground Line

Flow Line of 60" R.C. Tile Lined Pipe

47+01.00 M.H. No. 29 El. -16.072 El. -16.31 (Book 205/8) -0.08%

700.00'

41+16.00 M.H. No. 28

535.00'

829.98'

32+89.00 M.H. No. 27 El. -17.45

-6.79 Existing Sewer

863.15'

24+25.85 M.H. No. 26 El. -18.13 -0.08%

24" Storm Drain F.L. -4.97

36" Storm Drain F.L. -4.77

42" Storm Drain F.L. -5.49

30" Storm Drain F.L. -4.99

30" R.C. Culvert Pipe

Fill Rubbish

Fill Rubbish

See State Plans for Details

MATCH LINE 11557-19-D

SEWER EASEMENT BELOW M.H.T.L. SHOWN HATCHED

A.T. & S.F. RY.

Mean High Tide

HARBOR DRIVE

COLTON AVE.

IMPERIAL AVE.

COMMERCIAL ST.

7TH AVENUE

8TH AVENUE

9TH AVENUE

6TH AVENUE

144 145 146 158 159

N 56° 55' 03" W 420.75'

R = 2060 Δ = 4° 48' 30" L = 172.88

N 54° 25' 03" W 33.97'±

N 56° 55' 03" W 115.69'

R = 1940 Δ = 4° 48' 30" L = 162.81'

S 33° 04' 57" W 80.00'

N 37° 43' 27" E

S 70° 51' 12" W 398.19'

S 76° 53' 15" W 388.97'

Δ = 52° 13' 45" L = 401.09'

R = 440'

N 19° 08' 48" W 396.63'

500' R.C.P. Tile Lined Pipe

60" R.C.P. Tile Lined Pipe

42" Storm Drain

24" Storm Drain

Asphalt Paving

State Highway

Notional Iron Marks

Wedge to Mark Iron Marks

Concrete Pipe to be Constructed in Overpass of Highway at Rly. Xing

Location of Future Concrete Pipe to be Constructed in Overpass of Highway at Rly. Xing

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 34
OFFICE OF THE CLERK

REF. DWGS:
CITY ROLL DWG. 6155- Sheet 5 of 12
1023-D
1024-D
13408-68-L

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Hale, UTILITIES DIRECTOR	J. E. Richardson, CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 21 FILED FEB. 13, 1968

SEWER EASEMENT - Sly of 4th Ave in Navy Field (Tidelands)

E. F. Robinson 6/24/68

OTJ 6-24-68

11557-18-D

EQUATION OF ELEVATION

CITY ZERO — 0.00 — CITY STAFF — +9.01

U.S.C.&G. ZERO — -9.01 — U.S.C.&G. STAFF — 0.00

NOTE: ALL ELEVATIONS REFER TO CITY ELEVATIONS.

76+02.61 = ℄ MARKET ST.

℄ Market St. N.L. India St. Existing M.H.

NORTH OF MARKET ST. See Drawing No. 965-D

STA 74+57.24 Sta. from South

Elev. Rim 2.48

R.I. El. 2.64

M.H. No. 33

24" Sewer F.L. -6.79

El. -7.11

℄ Mark. Hole

El. -11.43

El. -14.06

2.5

60.12'

0.08%

El. -14.37

EQUATION 75+37.91 = 74+42.54

610.65'

24" V.C. CORONADO - NORTH ISLAND SEWER

U/L F.L. -12.0'

M.H. No. 32

68+31.89

△ Rt. 37° 38' 00"

Ground Line Z

727.84'

El. -14.60

Flow Line of 60" R.C. Tile Lined Pipe Z

61+03.00

R=444.19' (Rad.)

F=224.00'

59+00.00

△ Rt. 100° 00"

M.H. No. 31

El. -15.19

702.00'

54+01.00

M.H. No. 30

El. -15.75

0.08%

700.00'

El. -16.07

EQUATION 63+32.58 = 63+31.53

Flow Line of 60" R.C. Tile Lined Pipe Z

EASEMENT BELOW M.H.T.L. SHOWN HATCHED

N

INDIA

M.H. No. 33 EQUATION 75+37.91 = 74+42.54

Manhole

Gas Valve

Water Valve

Pedestal

Gas Meter

Sewer

Telephone Manhole

W.U. T.P. Co.

P.G.&E. Co.

MARKET STREET

30" Stub Cons. here.

LINE TO NORTH 965-D

℄ MARKET STREET

74+57.24 Sta. from South

E.C. 74+09.80

Δ 31° 22'

R. 530'

T. = 148.91'

L. 290.15

530 R.

Special Connection See Drawing 2667-B

Existing M.H.

24" V.C. Coronado Sewer

Y.O. Drwg. No. 176-731

CITY 2107-D

See 9221-4-B for esmt.

S. 79° 11' 62" 56' 57" W.

270.76'

287.76'

19° 50'

S. 79° 25' 03" W.

421.24'

N 32° 04' 57" W.

10' 20'

M.H. No. 32

68+31.89

△ Rt. 37° 38' 00"

Crane

Office

Finished Lumber Shed

Planing Mill

Planing Mill

Sash & Door Bldg.

Sprinkler Heater

Trainerator

EQUATION 63+32.58 = 63+31.53

E.C. 63+31.53

B.C. 62+87

Δ 33° 30'

R. 300'

T. = 88.96'

L. = 175.45'

G.V.C. pipe Connection Constructed from spring line at M.H. No. 31 up on 45° angle to within 5'± of ground on North side of M.H.

G.V.C. Connection Constructed on back side of M.H. No. 32 Connection up on 45° angle from spring line of 60" out thru M.H. wall and up to within 5'± of ground surface. End plugged.

REF: CITY 1023-D

LOT A HORTONS ADDITION

1ST. ST.

J

8" C.I.

30'

2ND AVE.

118

119

3RD AVE.

K

ST.

SEE SHEET 11557-18-D

MATCH LINE

A.T.&S.F. Ry. R/W

N 56° 55' 03" W

Beginning of Oiled Surface

12" H.P. Gas

Williams Base Line Z

Bldg. Christian Society

Open Court

Toilets

Adm. Bldg.

Hand Ball Ct.

Gym Bldg.

Pole 123

24" Storm Drain

36" Storm Drain

8" C.I.

12" H.P. Gas

10' 20'

900'

60" R.C.T.L.R.C.P.

BELT

NAVY FIELD

M.H. No. 31 61+03

59+00.00 △ Rt. 100° 00"

54+01.00 M.H. No. 30

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

APPROVALS

CITY OF SAN DIEGO — R. C. Anderson — UTILITIES DIRECTOR — PUBLIC WORKS DIRECTOR

ORIGINAL CONVEYANCE DOCUMENT NO. R51632 FILED FEB. 15, 1961

SAN DIEGO UNIFIED PORT DISTRICT — R. Hulsmann — CHIEF ENGINEER

ORIGINAL CONVEYANCE DOCUMENT NO. 78 FILED FEB. 13, 1963

SEWER ESMT. – from India to 3RD Ave, in Navy Field, below M.H.T.L.

CITY OF SAN DIEGO — ENGINEERING DEPARTMENT — SHEET 19 OF 24 SHEETS

W.O. NO. 17430

PLAN REVISION			
CHANGE	BY	DATE	APPROVAL

E. F. Gabrielson 6/24/68 — CITY ENGINEER — DATE

OFFICE ENGINEER

CONSTRUCTION RECORD

DATE STARTED — DATE COMPLETED — INSP.

FIELD BOOK

WATER DEPT. — SEWERAGE

PLANNING DEPT. — DRAINAGE

ELECTRICAL — HIGHWAY

STRUCTURAL — GRADES

TRAFFIC — CONTROL

SUPERVISOR

CHECKED

DESIGNED

INDEX 198-1717 — SCALE HORIZ. 1"=80 VERT. 1"=8

11557-19-D

HARBOR №

CITY ZERO | EQUATION OF ELEVATIONS | +9.01
CITY STAFF | U.S.C.&G. STAFF
USC&GZERO -9.01 | 0
NOTE: ALL ELEVATIONS REFER TO CITY DATUM.

HARBOR DRIVE

48+00 Δ 2°00' Lt.

EQUATION 42+39.95 = 42+25.57 Δ=10°41' R.

INSIDE FACE OF CHAMBER WALL 35+56.93 Δ 12°11'45" Lt. SPECIAL CHAMBER = M.H. No. 8

Inverted Siphon 2-42" V.C. Pipe. See Dwg. 1025-D.

INSIDE FACE OF CHAMBER WALL EQUATION 32+83.45 = 32+36.13 Δ 11°40'36" Lt. SPECIAL CHAMBER = M.H. No. 7

25+91.23 Δ 20°34' Lt.

Approx. Grade Harbor Drive ℄

Ground Line ℄

M.H. No. 10

M.H. No. 9

El.-7.29 (G.B. 168/18)

Flow Line of 60" R.C. Tile Lined Pipe ℄ 0.10%

El.-7.85 (198/4)

El.-8.52

End of Bridge

223.00'

El.-8.80

El.-13.0

El.-14.0

1.2 = Highest Tide

4.1' = Mean High Tide

11.17' = Lowest Tide.

El.-9.50 (G.B. 342/11)

El.-9.69

560.05'

668.64'

273.50'

644.90'

551.23'

K 60.05 × 25.57 <

16.57 × K 36.13 ×

48 46 44 42 40 38 36 34 32 30 28 26 24

SCALE HOR.- 1"=80' VERT. 1"=8'

MATCH LINE SEE SHEET 11557-21-D

HARBOR

S 50° 42' 40" E R/W For HARBOR DRIVE

Clean Out-Storm Drain

MEAN HIGH TIDE

M.H. No. 10 48+00 Δ 2°00' Lt.

N 54° 13' 25" W

N 52° 13' 25" W. 560.05'

60" R.C. Tile-Lined-Pipe ℄

EQUATION 42+39.95 = 42+25.57 Δ=10°41' R.

M.H. No. 9 42+25.57

N 62° 54' 25" W 355.5'

120'

193.29'

111.04'

(G-5+89.37 Harbor Dept. Map 151-L-5)

(G-5+89.37 Harbor Dept. Map 151-L-5)

LINE

Granite Mon

SPECIAL CHAMBER M.H. No. 8

A.T. & S.F. Pile Trestle Ry. Bridge ℄

313.0'

223.0'

152.0'

20°

16°

N 50° 42' 40" W (Per 43-L)

2-42" V.C. PIPE

Inverted Siphon Under Creek See Dwg. 1025-D

Tan of Face of Chamber Wall 35+56.93 Δ 12°11'45" Lt.

35+36.43 = End of Bridge

Highway Storm Drain 67-22

Chollas Creek

East Face of Bridge 33+13.23

Highway Storm Drain 67-22 89+45.00

Tan. in 78 & End of A.T.& S.F. Ry. Bridge

SPECIAL CHAMBER M.H. No. 7

INSIDE FACE OF CHAMBER WALL EQUATION 32+83.45 = 32+36.13 Δ 11°40'36" Lt.

Found C.T. in Tie

Concrete Monument Exposed

Concrete Monument Buried

30' Tie

50'

30'

100'

162.36'

218.66'

188.66'

26.31'

31.32'

DRIVE

Sign

R.R.

M.H. No. 6 25+91.23 Δ 20°34' Lt.

Sand

Rip Rap

Bulkhead

BAY FRONT ST.

To Fleet School Barracks

50'

TIDELANDS

EASEMENT BELOW M.H.T.L SHOWN HATCHED

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

REF:
CITY DWGS 1018-D
6289-L
9391-B
RL 6155-1-R
13408-57-L
13408-58-L
43-L

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Nelson Apl. UTILITIES REGION	A. Hellmann CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 45181 FILED FEB. 15, 1949	ORIGINAL CONVEYANCE DOCUMENT NO. 71- FILED FEB. 12, 1969

SEWER ESMT-Sly of HARBOR DR. Bet. 28TH & 32ND Sts below M.H.T.L.

CITY OF SAN DIEGO — ENGINEERING DEPARTMENT — SHEET 20 OF 24 SHEETS — W.O. No. 17430

PLAN CHANGE	REVISION BY	DATE	APPROVAL

CONSTRUCTION RECORD

DATE STARTED ____ DATE COMPLETED ____
CONTR. ____ INSP. ____
FIELD BOOK ____

E. F. Eastman 6/24/68
CITY ENGINEER — DATE

WATER DEPT.	SEWERAGE
PLANNING DEPT.	DRAINAGE
ELECTRICAL	HIGHWAY
STRUCTURAL	GRADES
TRAFFIC	CONTROL O.T.J. 6-24-68
INDEX 190-1727	

OFFICE ENGINEER
SUPERVISOR
CHECKED
DESIGNED
11557-20-D

HARBOR №

CITY ZERO — EQUATION OF ELEVATIONS — +3.01
CITY STAFF — U.S.C.&G. STAFF
U.S.C.&G. ZERO — +3.01
NOTE: ALL ELEVATIONS REFER TO CITY DATUM

HARBOR DRIVE

Approx. Grade Harbor Drive
Ground Line
Storm Drain Proj.
M.H. No. 13
64+00.18
EQUATION
59+81.72
59+80.30
59+24.20 L
M.H. No. 12
61+61.63
Storm Drain, El.
1.14 Bottom of Drain Concrete
El. -5.24
Flow Line of 60" R.C. Tile Lined Pipe
-0.10%
El. 5.14
(610.37')
267.63'
854.90'
68+10.
66+32.
65+79.28 (LT)
65+79.28
Special Chamber M.H. No. 12
Inside Face of Chamber Wall
Equation
55+43.68 P.O.T.
54+94.43
2-42" C.M.P. Pipe in Siphon
Special Chamber M.H. No. 11
Inside Face of Chamber Wall
54+32.18
45° 24' 41" Lt.
See Dwg. 1016-D
Existing Box Culvert
Double 5'x4' Concrete
El. -6.60
El. -4.67
Flow Line of 60" R.C. Tile Lined Pipe
0.09%
622.42'
56.32'
72.0'
22.0'
9858'
M.H. No. 10
48+10.0
47+87.68
0.12%

70 68 66 64 62 60 58 56 54 52 50 48

SEWER ℄
Δ=30° 40' Rt.
R=1780.
L=956.77
T=490.20
Def per ft=9.656'

Sta. 59+50 to 60+00 for Details of Cross Section of Concrete Encasement

M.H. No. 13
64+00.18

Storm Drain

SCHLEY ST.
M.H. No. 14
72+30.56
72+00
Proposed Grading
Sta. 0+00 to 2+00 for Details of Cross Section of Fill Grading
R/W For HARBOR DRIVE
Mean High Tide Line
8" C.I. Water Main
M.H. No. 13A
66+67.63
60" R.C. Tile Lined Pipe
HARBOR DRIVE
COLTON ST.
HARBOR DRIVE
Lateral to Standard Iron Works installed by City Sewer Dept. 9-27-48 as E.R.M. Book 1507 page 12

HARBOR DRIVE
40"x6'-6" R.C. Box Drain
SEWER ℄
Δ=21° 40' 22" Lt.
R=615.21'
L=169.30'
T=85.10'
Def per ft=9.308'
SEWER ℄
Δ=8° 14' 26" Lt.
R=1777'
L=255.53'
T=127.96'
Def per ft=9.673'
Sta. 58+84 Box Culvert Siphon Under Storm Drain See Dwg. No. 1016-D
2-42" C.M.P. Pipe
Clean Out
Storm Drain
M.H. No. 11
54+22.42
45° 44' Lt.
Special Chamber M.H. No. 11
Inside Face of Chamber Wall
54+32.18
R.C.P. Storm Drain
N54° 13' 25" W 422'±
LINE
SEE SHEET 11557-20-D
MATCH
M.H. No. 10
48+10.0
47+87.68
0.12%
20
10

SEWER ESM'T BELOW M.H.T.L. SHOWN HATCHED

CITY REF. 1019-D

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 24
OFFICE OF THE CLERK

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Hanley UTILITIES DIRECTOR	J. E. Lichtman CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 151631 FILED FEB. 15, 1968	ORIGINAL CONVEYANCE DOCUMENT NO. FILED FEB. 15, 1968

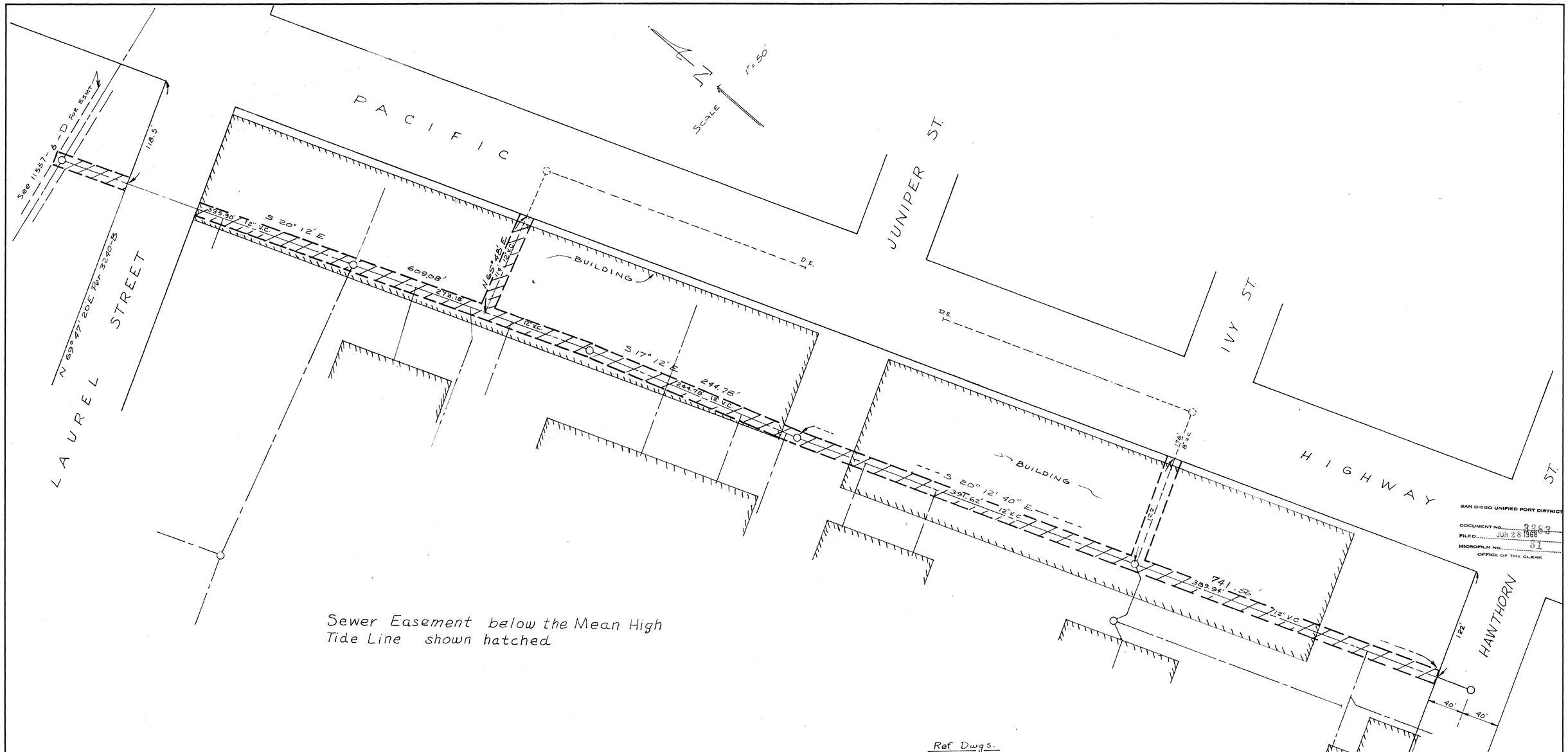
SEWER ESMT. ~ Sly of Harbor Dr., Wly of 28th St., below M.H.T.L.

21 24

INDEX 190-1727 SCALE HORIZ 1"=50' VERT 1"=5'

6-27-68

11557-21-D



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

SEWER EASEMENT - sly of LAUREL & wly of Pacific Hwy in the TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 22 OF 24 SHEETS

W.O. NO. 17430

CITY ENGINEER — DATE — DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.J.	[illegible]	6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

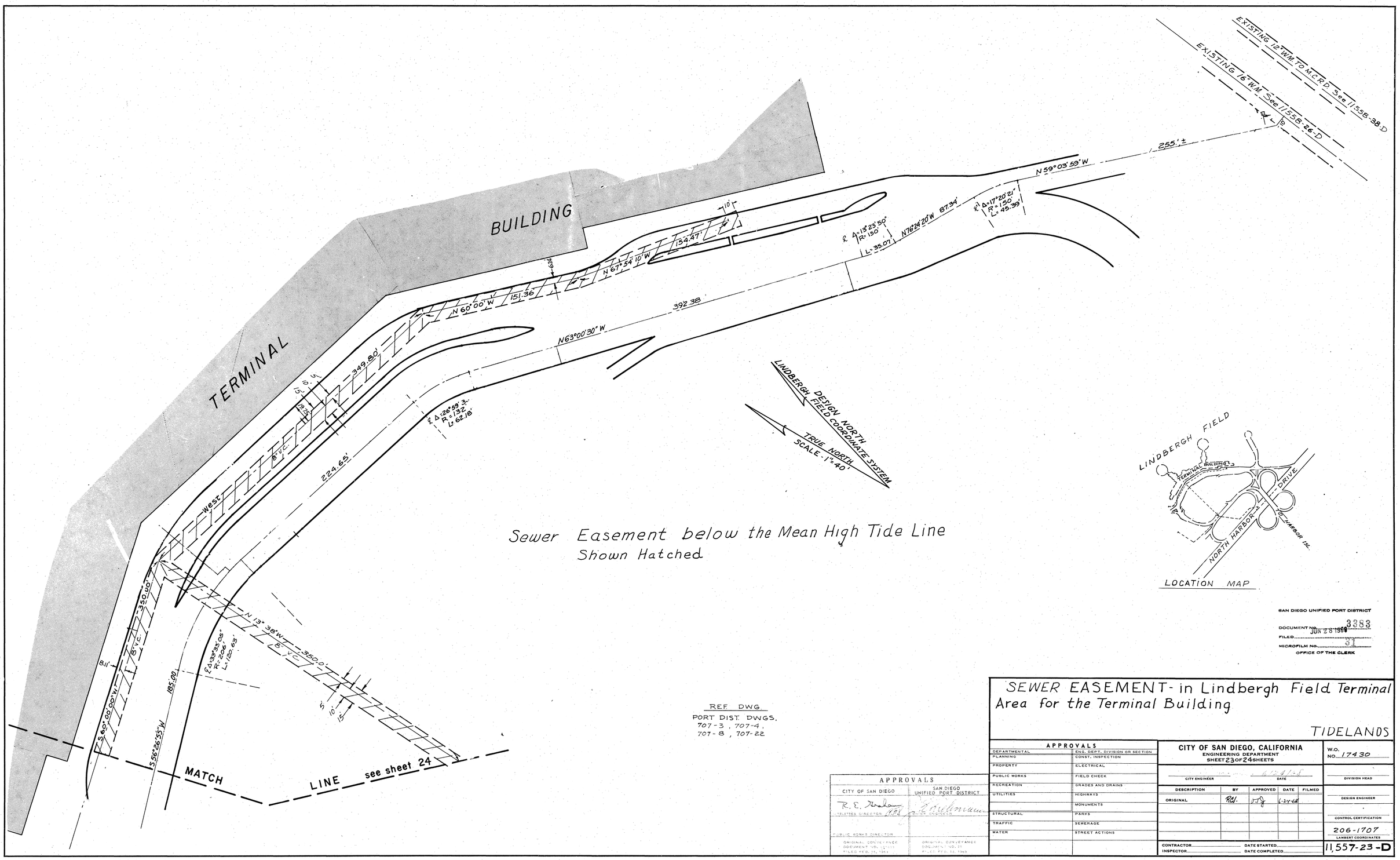
204-1716
LAMBERT COORDINATES

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

11557-22-D

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Gralan	[illegible]
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 151575 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 17, 1963



Sewer Easement below the Mean High Tide Line
Shown Hatched

REF. DWG.
PORT DIST. DWGS.
707-3, 707-4,
707-8, 707-22

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

SEWER EASEMENT - in Lindbergh Field Terminal Area for the Terminal Building

TIDELANDS

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. [signature] UTILITIES DIRECTOR	[signature] CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. [illegible] FILED FEB. 15, 1969	ORIGINAL CONVEYANCE DOCUMENT NO. 31 FILED FEB. 15, 1969

APPROVALS	
DEPARTMENTAL	ENG. DEPT. DIVISION OR SECTION
PLANNING	CONST. INSPECTION
PROPERTY	ELECTRICAL
PUBLIC WORKS	FIELD CHECK
RECREATION	GRADES AND DRAINS
UTILITIES	HIGHWAYS
	MONUMENTS
STRUCTURAL	PARKS
TRAFFIC	SEWERAGE
WATER	STREET ACTIONS

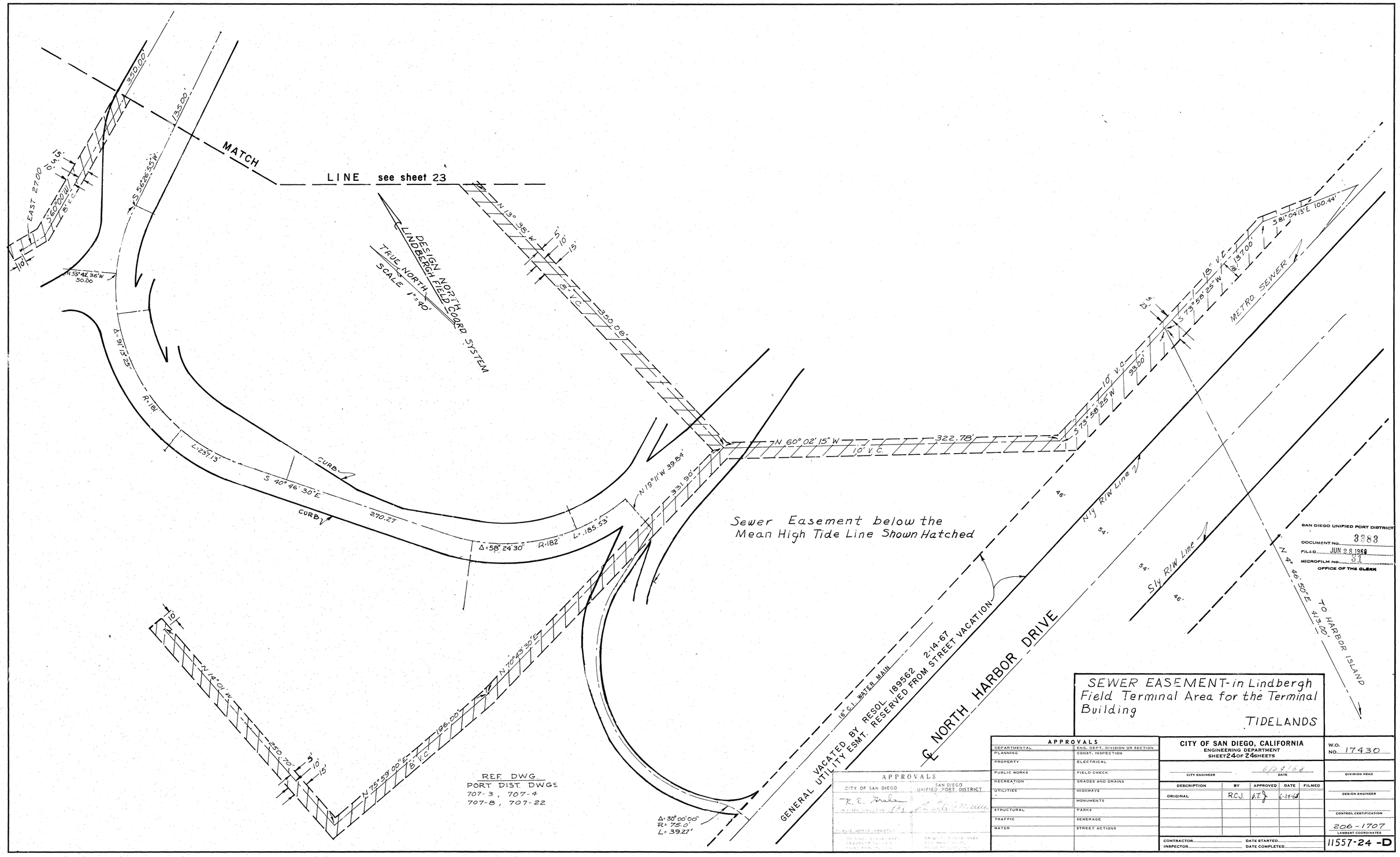
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 23 OF 24 SHEETS

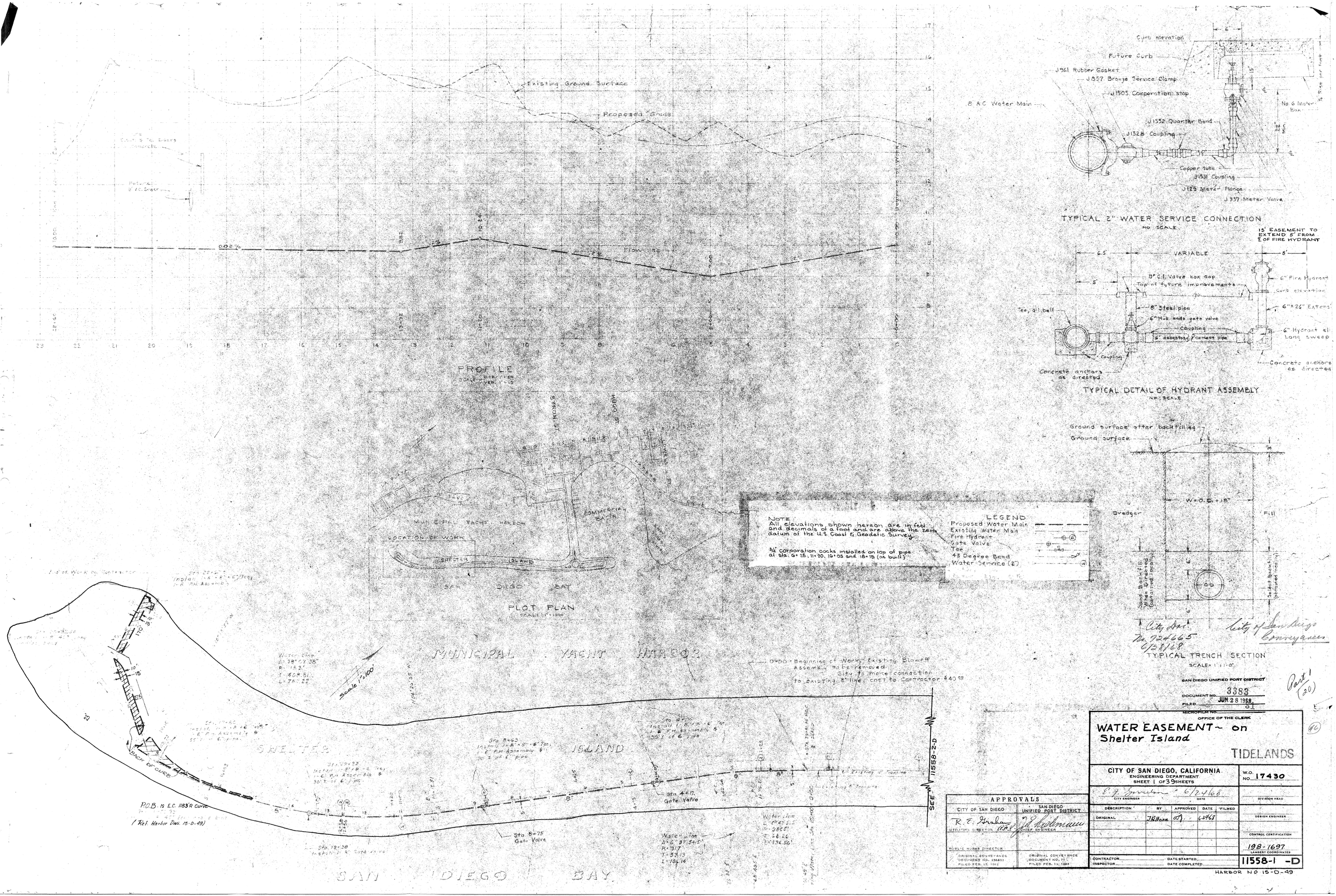
CITY ENGINEER — DATE 6/24/68

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RCS	[illegible]	6-24-68	

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

W.O. NO. 17430
DIVISION HEAD
DESIGN ENGINEER
CONTROL CERTIFICATION
206-1707
LAMBERT COORDINATES
11,557-23-D


MATCH LINE see sheet 23
DESIGN NORTH
LINDBERGH FIELD COORD. SYSTEM
TRUE NORTH
SCALE 1"=40'
N 13° 38' W
350.08'
N 60° 02' 15" W
322.78'
10' V.C.
S 73° 58' 25" W
93.00'
18" V.C.
137.00'
S 81° 04' 13" E 100.44'
METRO. SEWER
N 19° 11' W 39.84'
331.90'
Δ=58° 24' 30"
R=182'
L=185.53'
CURB
S 40° 46' 30" E
270.27
L=237.13'
R=181'
Δ=91° 13' 25"
N 55° 42' 36" W
50.00
S 56° 26' 55" W
135.00'
350.00'
EAST 27.00
S 60° 00' W
8' V.C.
Sewer Easement below the
Mean High Tide Line Shown Hatched
N 14° 01' W
250.70'
N 75° 59' 00" E
196.00'
N 70° 43' 30" E
8' V.C.
Δ=30° 00' 00"
R=75.0'
L=39.27'
16" C.I. WATER MAIN
VACATED BY RESOL. 189562 2-14-67
GENERAL UTILITY ESMT. RESERVED FROM STREET VACATION
℄ NORTH HARBOR DRIVE
N'ly R/W Line
S'ly R/W Line
N 4° 46' 50" E 413.00'
TO HARBOR ISLAND
REF. DWG.
PORT DIST. DWGS
707-3, 707-4
707-8, 707-22
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK
SEWER EASEMENT-in Lindbergh Field Terminal Area for the Terminal Building
TIDELANDS
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
APPROVALS
DEPARTMENTAL
ENG. DEPT. DIVISION OR SECTION
PLANNING
CONST. INSPECTION
PROPERTY
ELECTRICAL
PUBLIC WORKS
FIELD CHECK
RECREATION
GRADES AND DRAINS
UTILITIES
HIGHWAYS
MONUMENTS
STRUCTURAL
PARKS
TRAFFIC
SEWERAGE
WATER
STREET ACTIONS
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 24 OF 24 SHEETS
W.O. No. 17430
CITY ENGINEER
DATE 6/24/68
DIVISION HEAD
DESCRIPTION
BY
APPROVED
DATE
FILMED
ORIGINAL
R.C.J.
6-24-68
DESIGN ENGINEER
CONTROL CERTIFICATION
206-1707
LAMBERT COORDINATES
CONTRACTOR
DATE STARTED
INSPECTOR
DATE COMPLETED
11557-24-D



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

Part 1 (20)

WATER EASEMENT ~ on Shelter Island

TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 1 OF 39 SHEETS

W.O. NO. 17430

E. F. Gravelson 6/24/68
CITY ENGINEER DATE

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	J.R. Hanna	[illegible]	6-24-68	

DIVISION HEAD
DESIGN ENGINEER
CONTROL CERTIFICATION
198-1697
LAMBERT COORDINATES

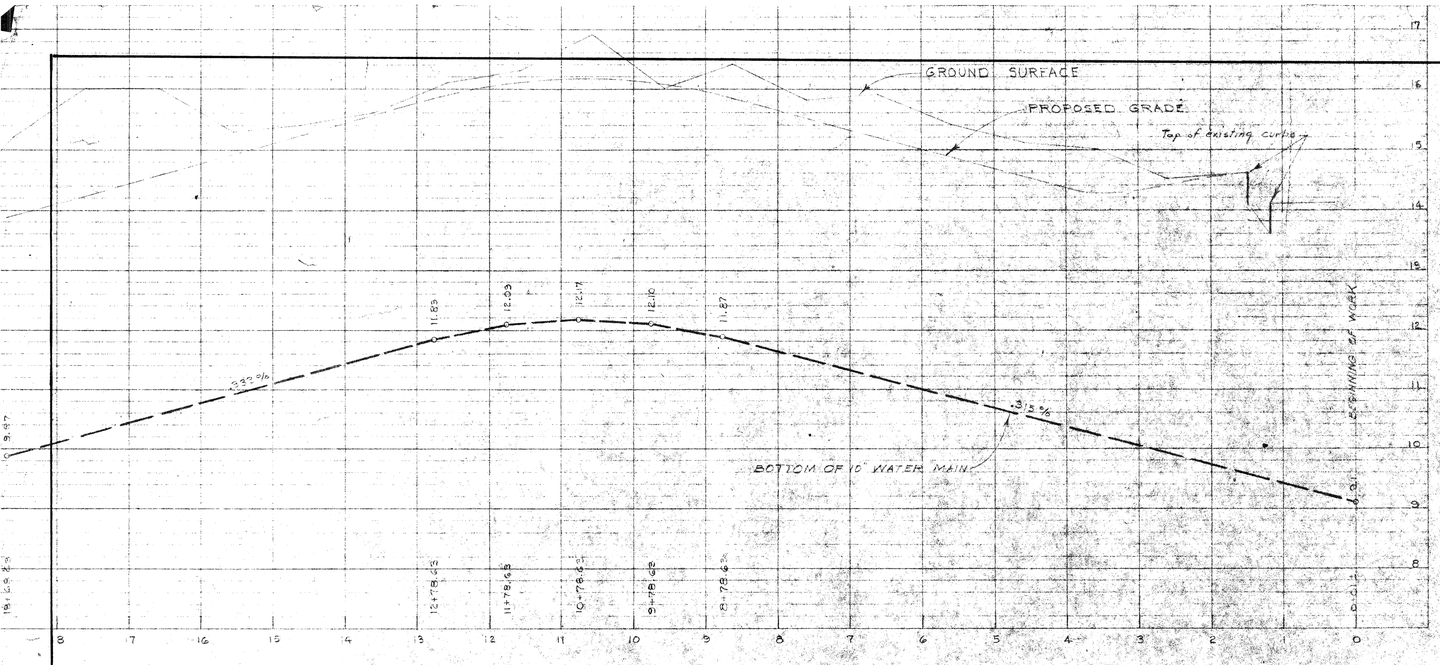
CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

11558-1 -D

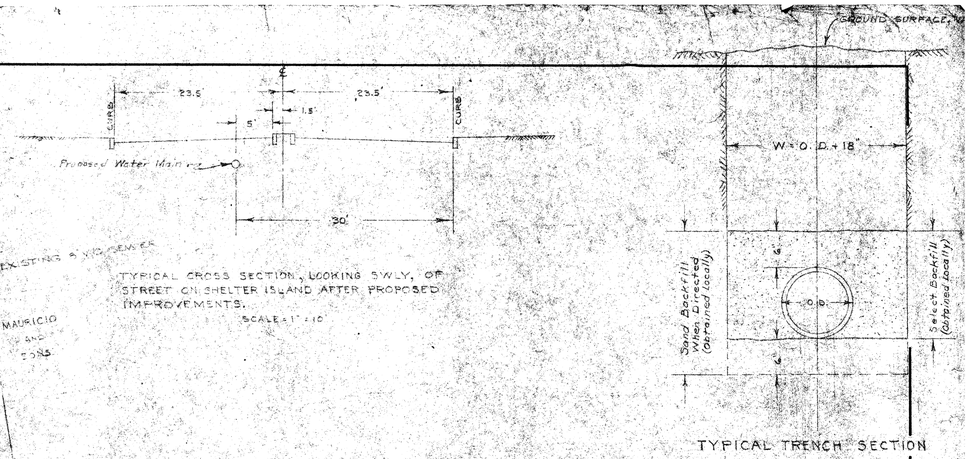
HARBOR NO 15-D-49

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham, A.F.S.	J. E. Kirkman
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 694633 FILED FEB. 15, 1962	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1969

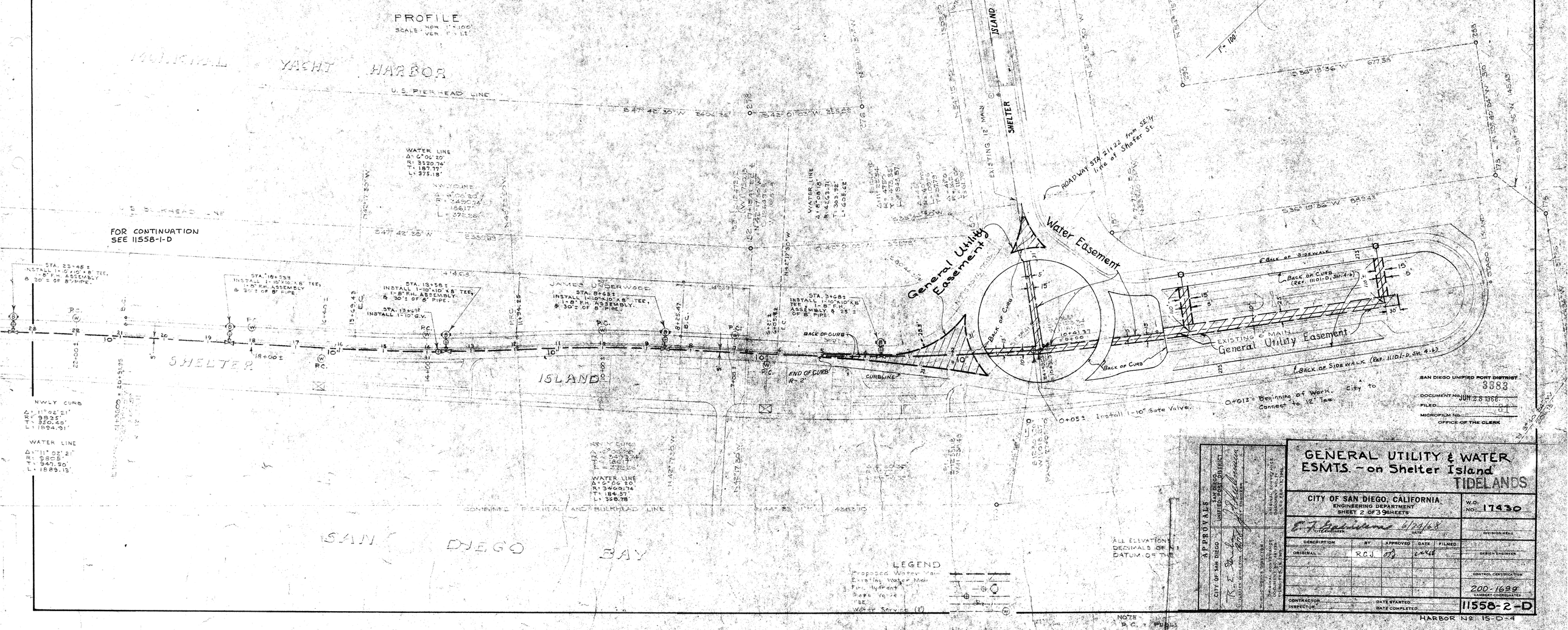


PROFILE
SCALE: HOR. 1" = 100'
VER. 1" = 12'



TYPICAL CROSS SECTION, LOOKING S.W.LY. OF STREET ON SHELTER ISLAND AFTER PROPOSED IMPROVEMENTS.
SCALE: 1" = 10'

TYPICAL TRENCH SECTION
SCALE: 1" = 1'-0"



LEGEND
Proposed Water Main
Existing Water Main
Fire Hydrant
Gate Valve
P.B.E.
Water Service (2")

NOTES
P.C. = PUBLIC
SEE FIELD BOOK

SAN DIEGO UNIFIED PORT DISTRICT
3383
DOCUMENT NO. JUN 23 1966
FILED:
MICROFILM NO.
OFFICE OF THE CLERK

APPROVALS
SAN DIEGO UNIFIED PORT DISTRICT
CITY OF SAN DIEGO
R. C. Smith
CHIEF ENGINEER
RECOMMENDED FOR APPROVAL
DIRECTOR OF PUBLIC WORKS
APPROVED AS TO FORM AND LEGALITY
CITY ATTORNEY

GENERAL UTILITY & WATER ESMTS. - on Shelter Island
TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 2 OF 39 SHEETS

W.O. NO. 17430

E. A. Engelbrecht 6/24/68
CITY ENGINEER DATE

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.J.	[illegible]	2-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

200-1699
LAMBERT COORDINATES

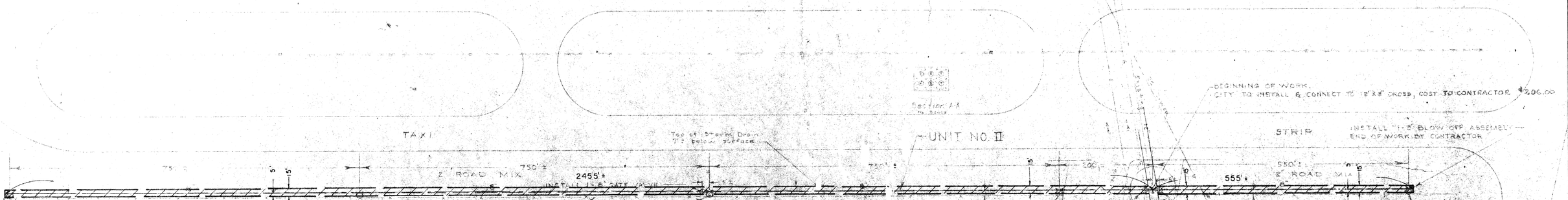
CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

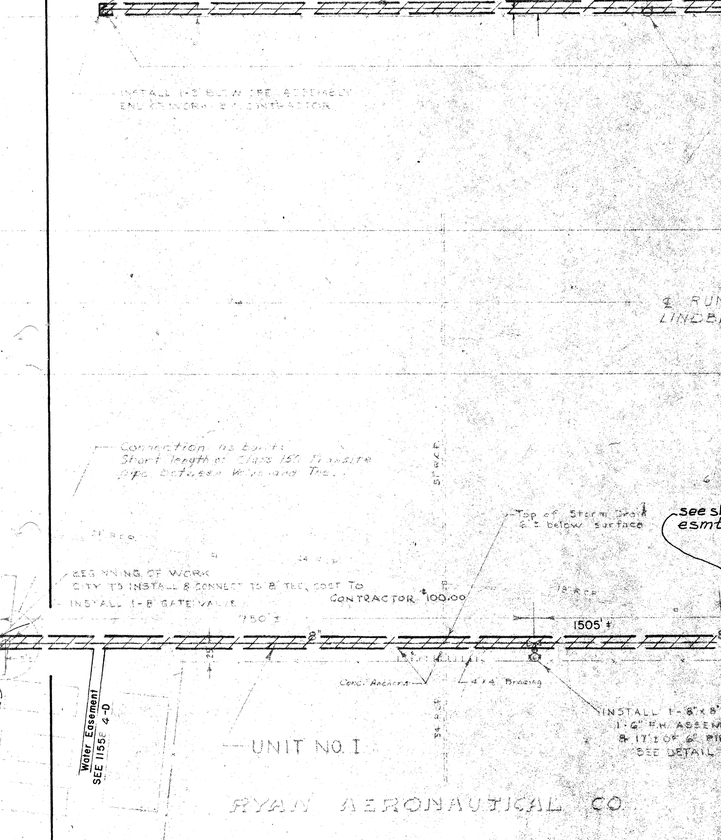
11558-2-D

HARBOR No. 15-D-4

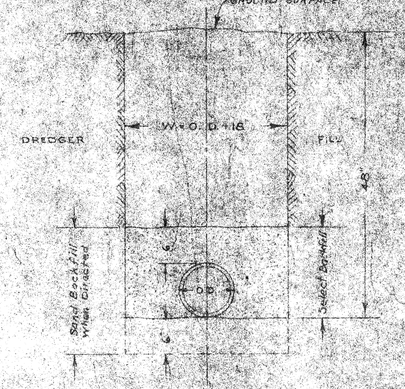
LINDBERGH FIELD

RUNWAY 9-27

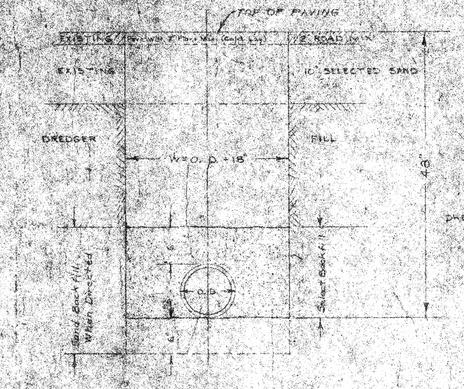




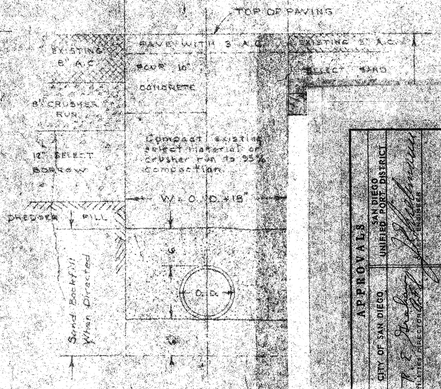
PLOT PLAN
SHOWING LOCATION OF WORK



TYPICAL TRENCH SECTION
UNIT NO. I



TYPICAL TRENCH SECTION
UNIT NO. II



TYPICAL TRENCH SECTION
CROSSING A.C. PAVEMENT

LEGEND

Proposed Water Main

Exist. Water Main
Fire Hydrant
Gate Valve
TEE
Sewer
Gas
Electric
Storm Drain
Cross

NOTE: ALL F.F.P. CLASS 200 TRANSITE EXCEPT AS NOTED

Easement below M.H.T.L. shown hatched.

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

APPROVED
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
PUBLIC WORKS DIRECTOR
CITY ENGINEER
DEPUTY DIRECTOR
DEPUTY CITY ENGINEER

WATER ESMTS - 8" fire line in Lindbergh Field, E'ly & W'ly of Wake Blvd, N'ly of North Harbor Dr.
TIDELANDS

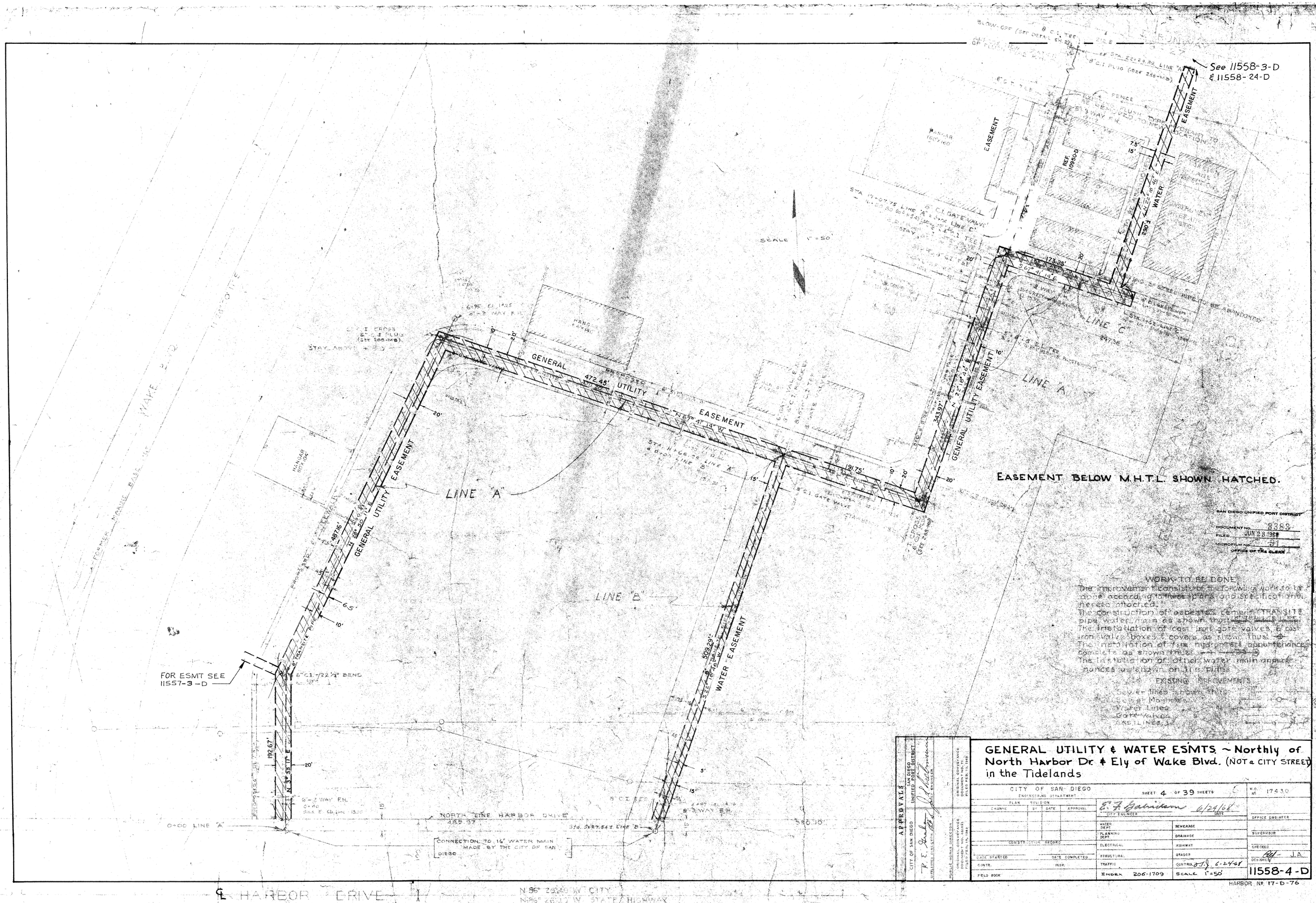
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 3 OF 39 SHEETS
W.O. NO. 17430
DIVISION HEAD
DESIGNED ENGINEER
CONTROL CERTIFICATION
206-1707
LAMBERT COORDINATES

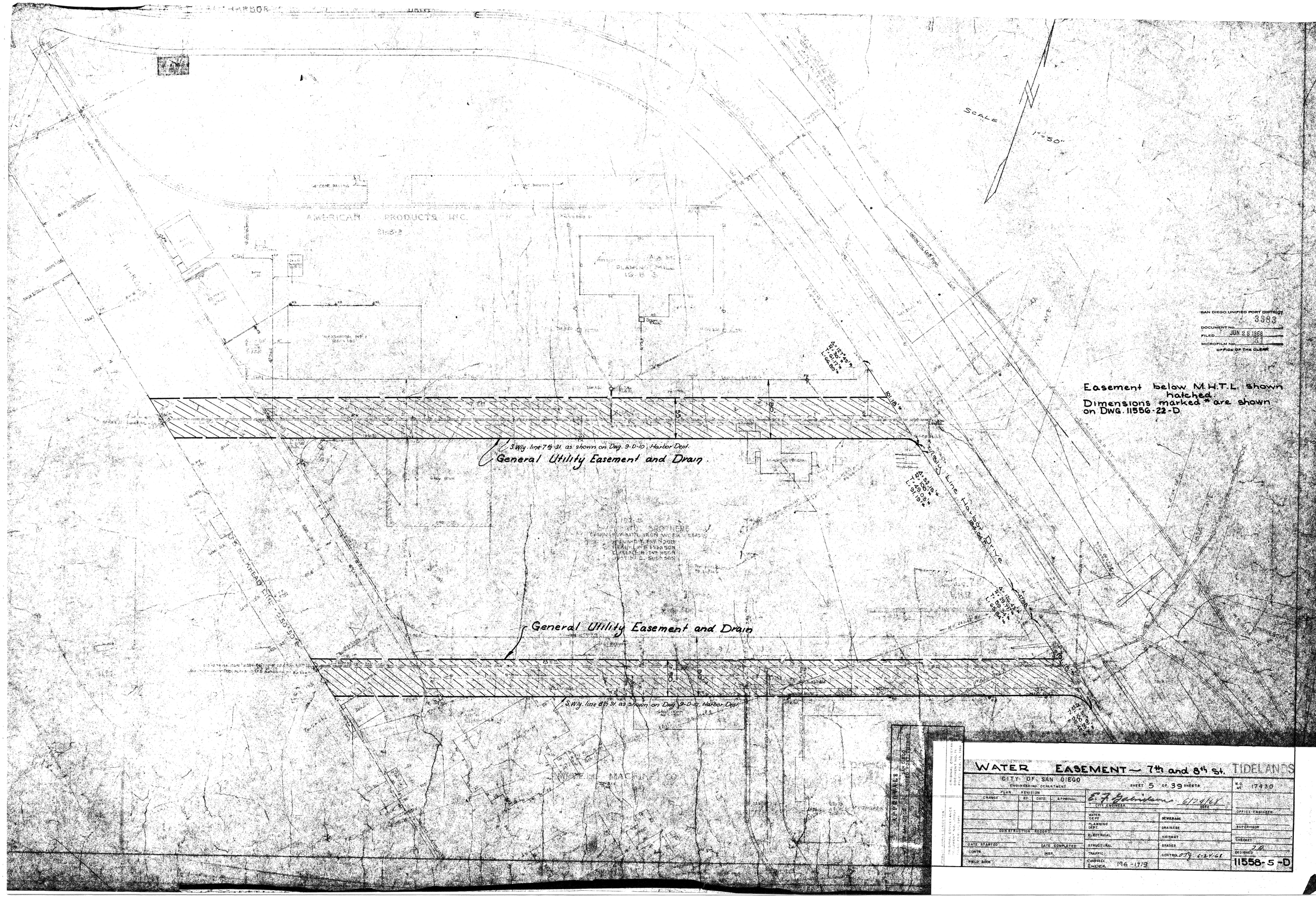
DESCRIPTION	BY	APPROVED	DATE	FILED
ORIGINAL			6-24-68	

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

11558-3-D

HARBOR No. 17-D-100


SCALE 1" = 50'
See 11558-3-D & 11558-24-D
EASEMENT
WATER
REF. 10950-D
7.5'
15'
230.4'
BLOW-OFF (See DETAIL SH 23)
8" C.I. TEE
8" C.I. PLUG (See 258-M8)
FENCE
SLOPE PAVING TO BE REMOVED AND REPLACED
STA 22+28.80 LINE "A"
STA 21+07.75 LINE "A"
8" C.I. GATE VALVE
8" C.I. TEE
20'
173.25'
N 67° 41' 14" E
8" C.I. PIPE TO BE ABANDONED
LINE "C"
847.36'
10'
LINE "A"
GENERAL UTILITY EASEMENT
343.97'
N 22° 18' 46" E
HANGAR 804-1041
HANGAR 804-1042
HANGAR 804-1043
HANGAR 804-1044
HANGAR 804-1045
HANGAR 804-1046
HANGAR 804-1047
HANGAR 804-1048
HANGAR 804-1049
HANGAR 804-1050
HANGAR 804-1051
HANGAR 804-1052
HANGAR 804-1053
HANGAR 804-1054
HANGAR 804-1055
HANGAR 804-1056
HANGAR 804-1057
HANGAR 804-1058
HANGAR 804-1059
HANGAR 804-1060
HANGAR


SCALE 1"=50'
AMERICAN PRODUCTS INC.
PLANING MILL
Easement below M.H.T.L. shown hatched.
Dimensions marked * are shown on DWG. 11556-22-D
S.Wly. line 7th St. as shown on Dwg. 9-D-10, Harbor Dept.
General Utility Easement and Drain
General Utility Easement and Drain
S.Wly. line 8th St. as shown on Dwg. 9-D-10, Harbor Dept.
Sly. Line Harbor Drive
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No.
OFFICE OF THE CLERK
WATER EASEMENT — 7th and 8th St. TIDELANDS
CITY OF SAN DIEGO
ENGINEERING DEPARTMENT
SHEET 5 OF 39 SHEETS
W.O. No. 17430
PLAN REVISION
CHANGE BY DATE APPROVAL
E. F. Gabrielson 6/24/68
CITY ENGINEER DATE
WATER DEPT.
PLANNING DEPT.
ELECTRICAL
STRUCTURAL
TRAFFIC
COORD. INDEX 196-1719
SEWERAGE
DRAINAGE
HIGHWAY
GRADES
CONTROL
OFFICE ENGINEER
SUPERVISOR
CHECKED
DESIGNED
11558-5-D
CONSTRUCTION RECORD
DATE STARTED
DATE COMPLETED
CONTR.
INSP.
FIELD BOOK
APPROVALS
SAN DIEGO UNIFIED PORT DISTRICT

GENERAL UTILITY ESMT. in Water Street bet Beardsley St & Crosby St. (Not City Streets) In Tidelands

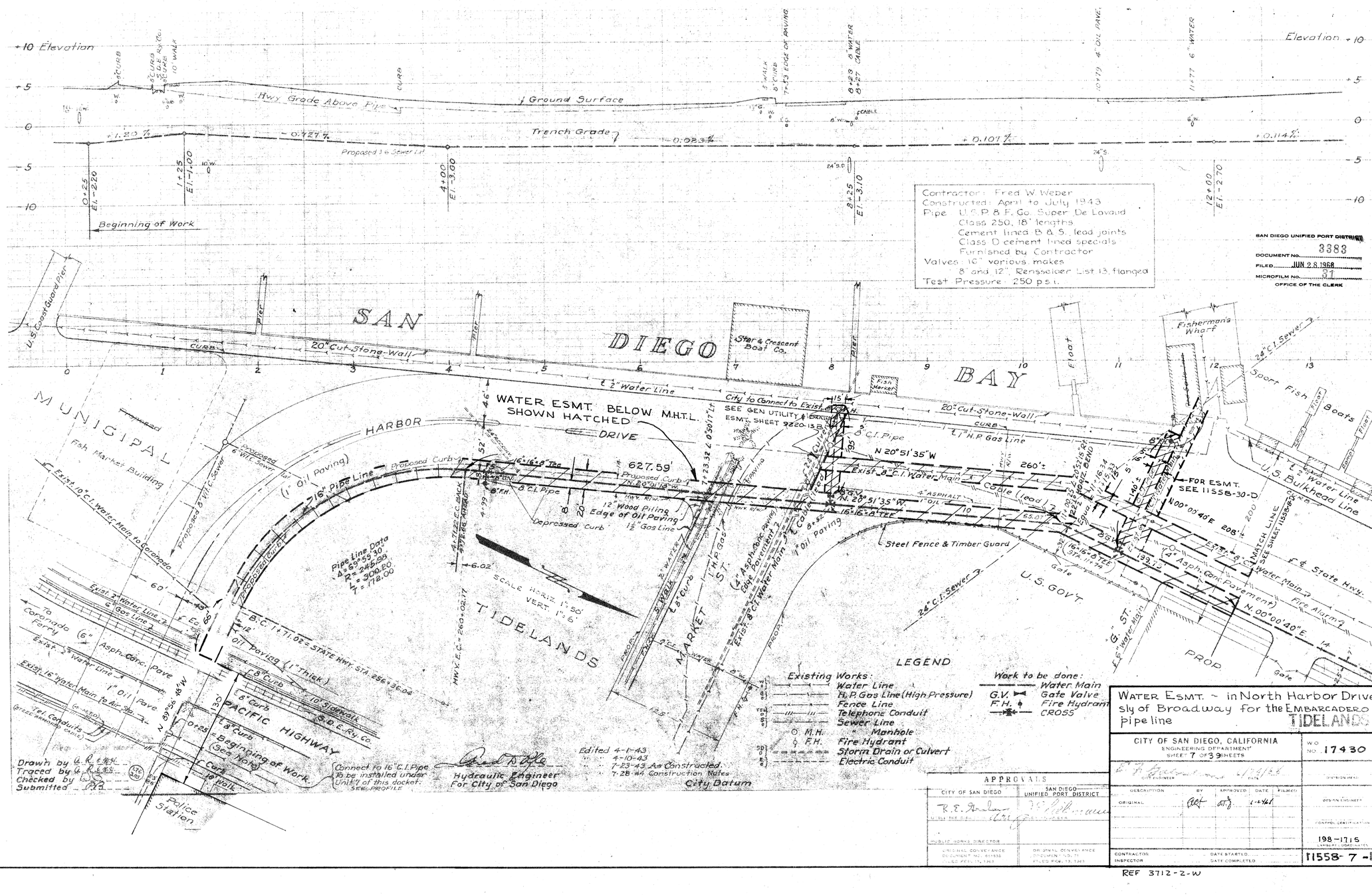
CITY OF SAN DIEGO — SHEET 6 OF 39 SHEETS — NO. 11743-D

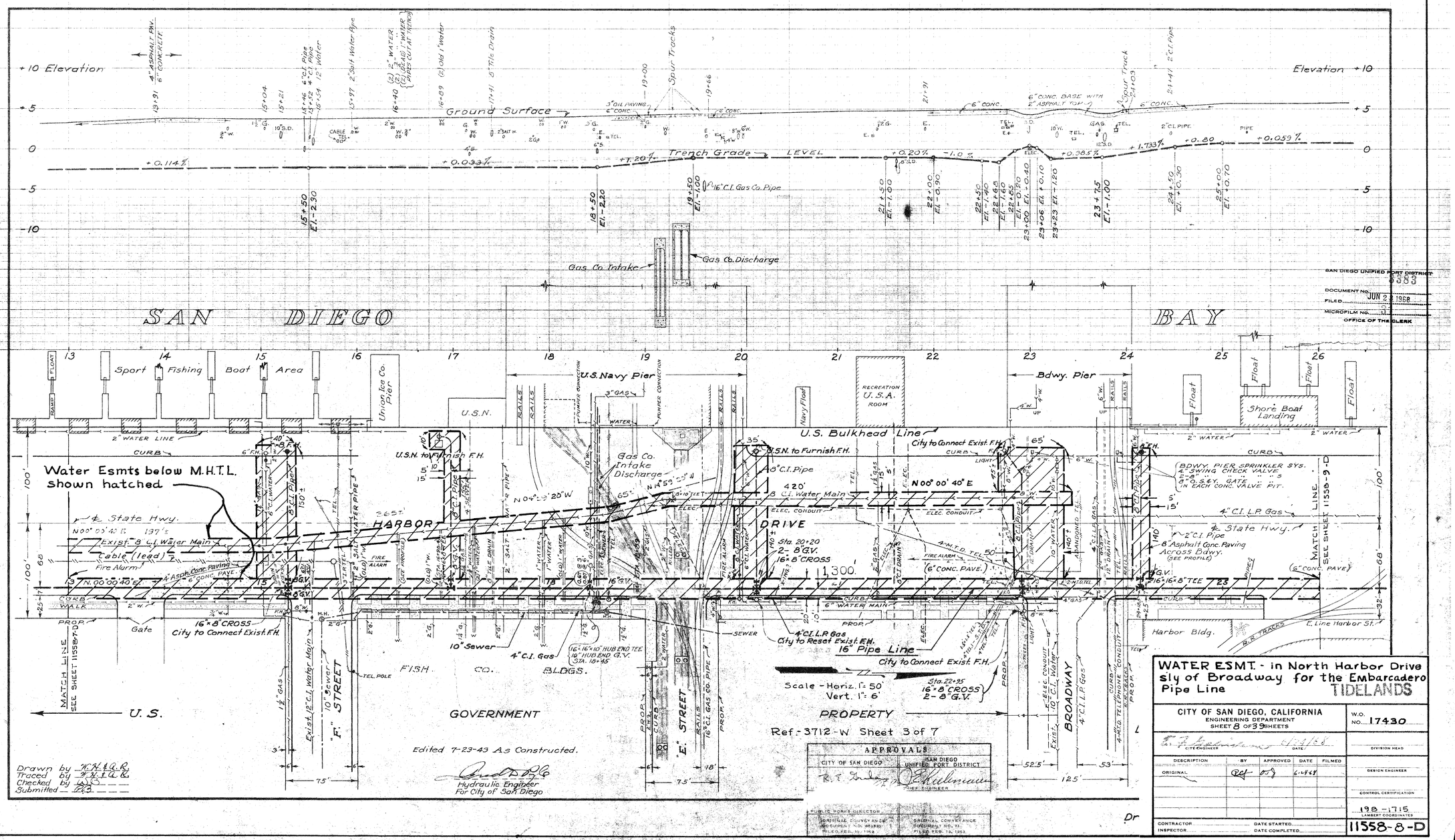
APPROVALS

CITY OF SAN DIEGO	UNIFIED PORT DISTRICT
R. E. Hinkle, CITY ENGR. DIRECTOR	

E. H. Greenman 12-2-68

DRAWN — TRACED — CHECKED — QUANTITIES — CHECKED — APPROVED — APPROVED — APPROV


Elevation
Hwy Grade Above Pipe
Ground Surface
Trench Grade
Proposed 16 Sewer Lt.
Beginning of Work
Contractor: Fred W. Weber
Constructed: April to July 1943
Pipe U.S.P.&F. Co. Super De Lavaud
Class 250, 18' lengths
Cement lined B & S, lead joints
Class D cement lined specials
Furnished by Contractor
Valves: 16" various makes
8" and 12", Rensselaer List 13, flanged
Test Pressure: 250 p.s.i.
SAN DIEGO BAY
Star & Crescent Boat Co.
Fisherman's Wharf
Sport Fish Boats
U.S. Bulkhead Line
MUNICIPAL
HARBOR DRIVE
WATER ESMT. BELOW M.H.T.L. SHOWN HATCHED
City to Connect to Exist.
SEE GEN UTILITY & DRAIN ESMT. SHEET 9220-13B
N 20°51'35"W
Exist. 8" C.I. Water Main
Steel Fence & Timber Guard
U.S. GOV'T.
PROP.
TIDELANDS
MARKET ST.
PACIFIC HIGHWAY
Pipe Line Data
Δ = 69°55'30"
R = 245.88
L = 300.20
T = 172.00
SCALE HORIZ. 1" = 50'
VERT. 1" = 6'
Connect to 16" C.I. Pipe To be installed under Unit 7 of this docket. SEE PROFILE
Hydraulic Engineer For City of San Diego
Edited 4-1-43
4-10-43
7-23-43 As Constructed
7-28-44 Construction Notes
City Datum
Police Station
Drawn by
Traced by
Checked by
Submitted
LEGEND
Existing Works:
Water Line
H.P. Gas Line (High Pressure)
Fence Line
Telephone Conduit
Sewer Line
M.H. Manhole
F.H. Fire Hydrant
Storm Drain or Culvert
Electric Conduit
Work to be done:
Water Main
G.V. Gate Valve
F.H. Fire Hydrant
CROSS
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK
WATER ESMT. ~ in North Harbor Drive sly of Broadway for the EMBARCADERO pipe line
TIDELANDS
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 7 OF 39 SHEETS
W.O. NO. 17430
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
198-1715
11558-7-D
REF 3712-2-W


SAN DIEGO BAY
Ground Surface
Trench Grade LEVEL
Elevation
Spur Tracks
Gas Co. Intake
Gas Co. Discharge
Sport Fishing Boat Area
U.S. Navy Pier
Bdwy. Pier
U.S. Bulkhead Line
Shore Boat Landing
Water Esmts below M.H.T.L. shown hatched
HARBOR DRIVE
Gas Co. Intake Discharge
16" Pipe Line
City to Connect Exist. F.H.
Harbor Bldg.
FISH CO. BLDGS.
GOVERNMENT PROPERTY
"F" STREET
"E" STREET
BROADWAY
U.S.
Scale - Horiz. 1" = 50'
Vert. 1" = 6'
Ref.-3712-W Sheet 3 of 7
Edited 7-23-43 As Constructed.
Hydraulic Engineer For City of San Diego
Drawn by W.H.&A.R.
Traced by W.H.&A.R.
Checked by
Submitted
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 8383
FILED JUN 2 1968
MICROFILM NO.
OFFICE OF THE CLERK
WATER ESMT. - in North Harbor Drive sly of Broadway for the Embarcadero Pipe Line
TIDELANDS
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 8 OF 39 SHEETS
W.O. NO. 17430
198-1715
LAMBERT COORDINATES
11558-8-D

November 18, 2015
Item No. 11
Supporting Document No. 3

+10 Elevation
+5
0
-5
-10
Elevation +10
+5
0
-5
-10

Spur Track
Spur Track
Spur Track
"B" ST. FLUME
Ground Surface
34+60
4"C.I.PIPE
2" ELEC.
8"C.I. GAS
+0.059 %
Trench Grade
-1.60 %
+1.20 %
+0.05 %
16" W.
NOTE: Grade raised to about +3.5 over concrete duct not shown. No details available.
33+50 El. +1.20
34+50 El. -0.40
35+00 El. +0.20

"B" STREET PIER

26 27 28 29 30 31 32 33 34 35 36 37 38 39

Float
Float
Float
Shore Boat Landing
Shed "1"
2"W.
F.H.
6" WATER MAIN
6"W.
6"W.

SAN DIEGO BAY

SCALE HORIZ: 1"=50'
VERT: 1"=6'
REF. 3712-W Sh 4 of 7

2" WATER
U.S. Bulkhead Line
CURB
100'
2%
8"F.H.
B" ST. PIER SPRINKLER CONNECTIONS
4" Swing check valve
2-8" " " "
6" O.S.& Y. Gate "
Concrete Valve Pit.
PRESSURE REDUCING VALVE
METER
Exist. 8"CI. Water Main
ABANDONED
8"F.H.
8"CI.W.
8"CI. Pipe
U.S. Bulkhead Line
LIMITS OF HARBOR DR.
D.G. Surfacing
4"C.I.L.P.GAS
4"C.I.L.P.GAS
2"GAS
2"GAS
HARBOR
DRIVE
E. State Hwy.
E. State Hwy.
234+44 Hwy Sta.
234+44 Hwy Sta.
100'
90'
60'
140'
5'
15'
B" St. Flume (2-6' Dia. Conc. Pipes)
WATER ESMT below M.H.T.L shown hatched
10'
20'
10'
20'
8"C.I. PIPE
8"C.I. PIPE
8"GV
16"x16"x8"TEE
16" Pipe Line
(34+32) 16"GV
8"GV
16"x16"x8"TEE
(6" CONC. PAVE.)
(6" CONC. PAVE.)
Cuff Plugged 4-4-22
8"GV
(16"GV Sta. 35+10)
N.0°00'40"E
39+01
16"x16"x8"TEE
8"GV
E7+48
16"x16"x8"CROSS
8"GV
13 : 9.35'
30'
Sta. 30+44.5
16"x16"x8"TEE
8"GV
Sta. 31+57
12" BLIND FLANGE, 12"GV & 16"x16"x12"TEE
WATER GV @ M.H.T.L.
Sta. 35+00
16"x16"x8"TEE
8"C.I. Pipe
12"
8"F.H.
8"F.H.
8"F.H.
RAILS
RAILS
RAILS
RAILS
B" ST. TRACKS
East Line of Harbor St.
FENCE
GAS METER
Longshoremen Bldg.
8"CI.W. FOR FIRE
PROP.
CURB
CURB
CURB
PROP.
Entrance
WRIGHT'S
AUTO
PARK
Garage
Bleachers
Warehouse
State Hwy. Bldg.
ASH ST.
4"C.I. HYD.
8"F.H.
Parking lot
DRIVEWAY
FLARE
FLARE
POWER POLE "A" 1099
Exist. 16"CI. Water Main
"A" STREET
For esmt see 9222-9-B
80'
80'
MATCH LINE SEE SHEET 11558-8
32'
42'
Edited 7-23-43 As Constructed.
City Datum

Drawn by J.K.L. & R.
Traced by R.R. & J.K.L.
Checked by [illegible]
Submitted [illegible]

Hydraulic Engineer
For City of San Diego

Federal Works Agency
DEFENSE PUBLIC WORKS
Docket Calif. 4-140, Water System San Diego
UNIT 10 - EMBARCADERO PIPE LINE
Plan and Profile
August 1942
Scales, Hor. 1"=50' Vertical 1"=6'

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

WATER ESMT. - in North Harbor Drive sly of Broadway For the EMBARCADERO pipe line
TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 9 OF 39 SHEETS
W.O. NO. 17430

APPROVALS

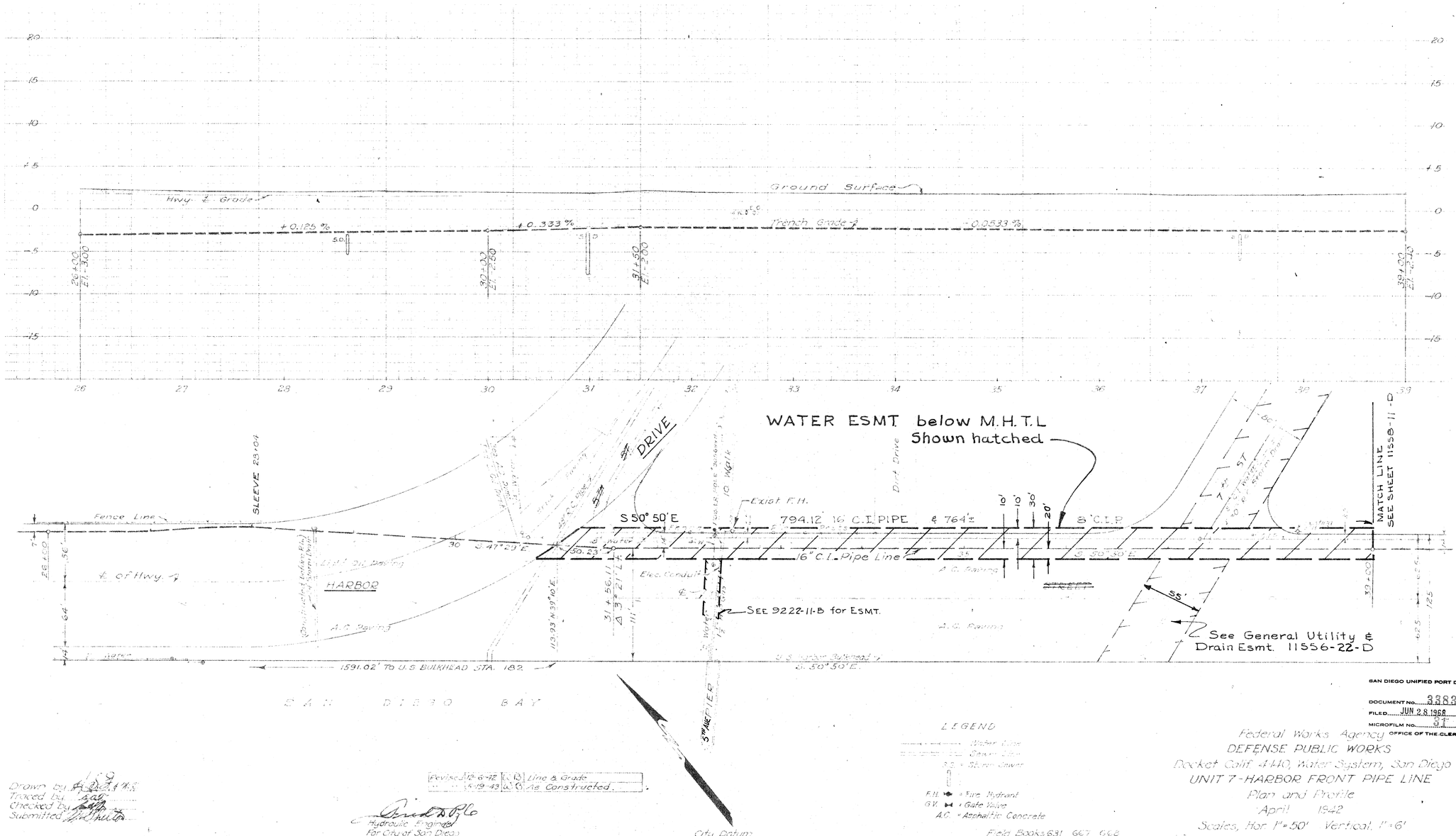
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Shaba, UTILITIES DIRECTOR	[illegible], CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. [illegible] FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. [illegible] FILED FEB. [illegible], 1963

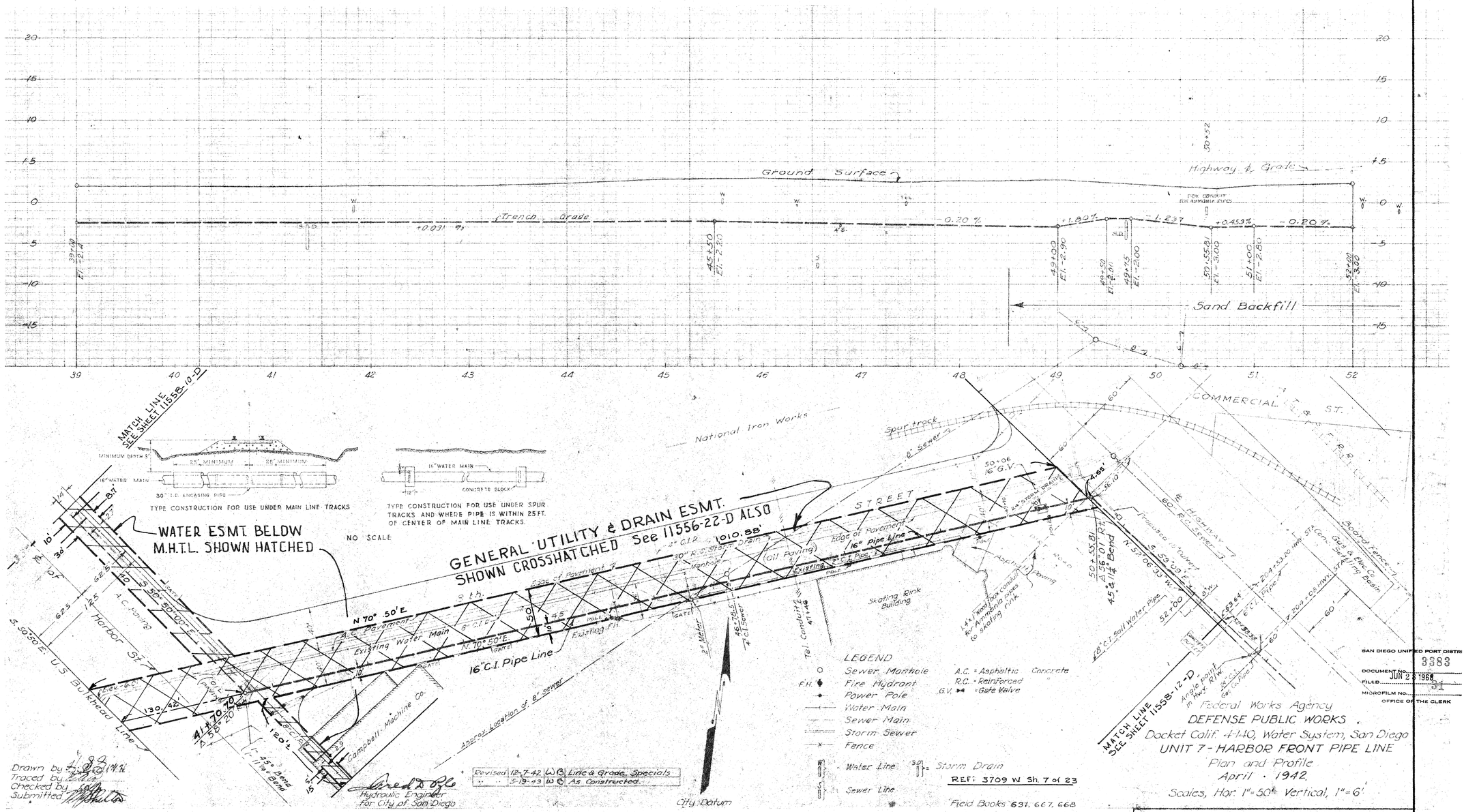
DESCRIPTION	BY	APPROVED	DATE	FILE NO.
ORIGINAL	[illegible]	[illegible]	[illegible]	[illegible]

202-1715

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

11558 9-D


Ground Surface
Hwy. ℄ Grade
Trench Grade
+0.125 %
+0.333 %
-0.0533 %
26+00 El. -3.00
30+00 El. -2.50
31+50 El. -2.00
39+00 El. -2.40
WATER ESMT. below M.H.T.L
Shown hatched
DRIVE
SLEEVE 23+04
Fence Line
S 50° 50' E
794.12' 16" C.I. PIPE & 764'± 8" C.I.P.
16" C.I. Pipe Line
Exist F.H.
Dirt Drive
MATCH LINE SEE SHEET 11558-11-D
℄ of Hwy.
HARBOR
A.C. Paving
Elec. Conduit
SEE 9222-11-B for ESMT.
See General Utility & Drain Esmt. 11556-22-D
1591.02' TO U.S. BULKHEAD STA. 182
U.S. Harbor Bulkhead
S. 50° 50' E.
SAN DIEGO BAY
5TH AVE PIER
City Datum
LEGEND
Water Line
Sewer Line
Storm Sewer
F.H. = Fire Hydrant
G.V. = Gate Valve
A.C. = Asphaltic Concrete
Field Books 631, 667, 668
Ref. Dwg.
3709-W 6 of 23
Drawn by
Traced by
Checked by
Submitted
Revised 12-6-42 Line & Grade
5-19-43 As Constructed.
Hydraulic Engineer
For City of San Diego
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK
Federal Works Agency
DEFENSE PUBLIC WORKS
Docket Calif. 4440, Water System, San Diego
UNIT 7-HARBOR FRONT PIPE LINE
Plan and Profile
April 1942
Scales, Hor. 1"=50' Vertical 1"=6'
WATER ESMT. - swly of 5th Ave & Harbor Drive
TIDELANDS
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 10 OF 39 SHEETS
W.O. NO. 17430
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
DESIGN ENGINEER
CONTROL CERTIFICATION
194-1719
CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED
11558-10-D



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 23 1968
MICROFILM NO. 34
OFFICE OF THE CLERK

WATER ESMT. - Bet. 6TH St & 8TH St. sly of Harbor Drive, below M.H.T.L.
TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 11 OF 39 SHEETS

W.O. NO. 17430

CITY ENGINEER — DATE 6/19/68 — DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL			6-19-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

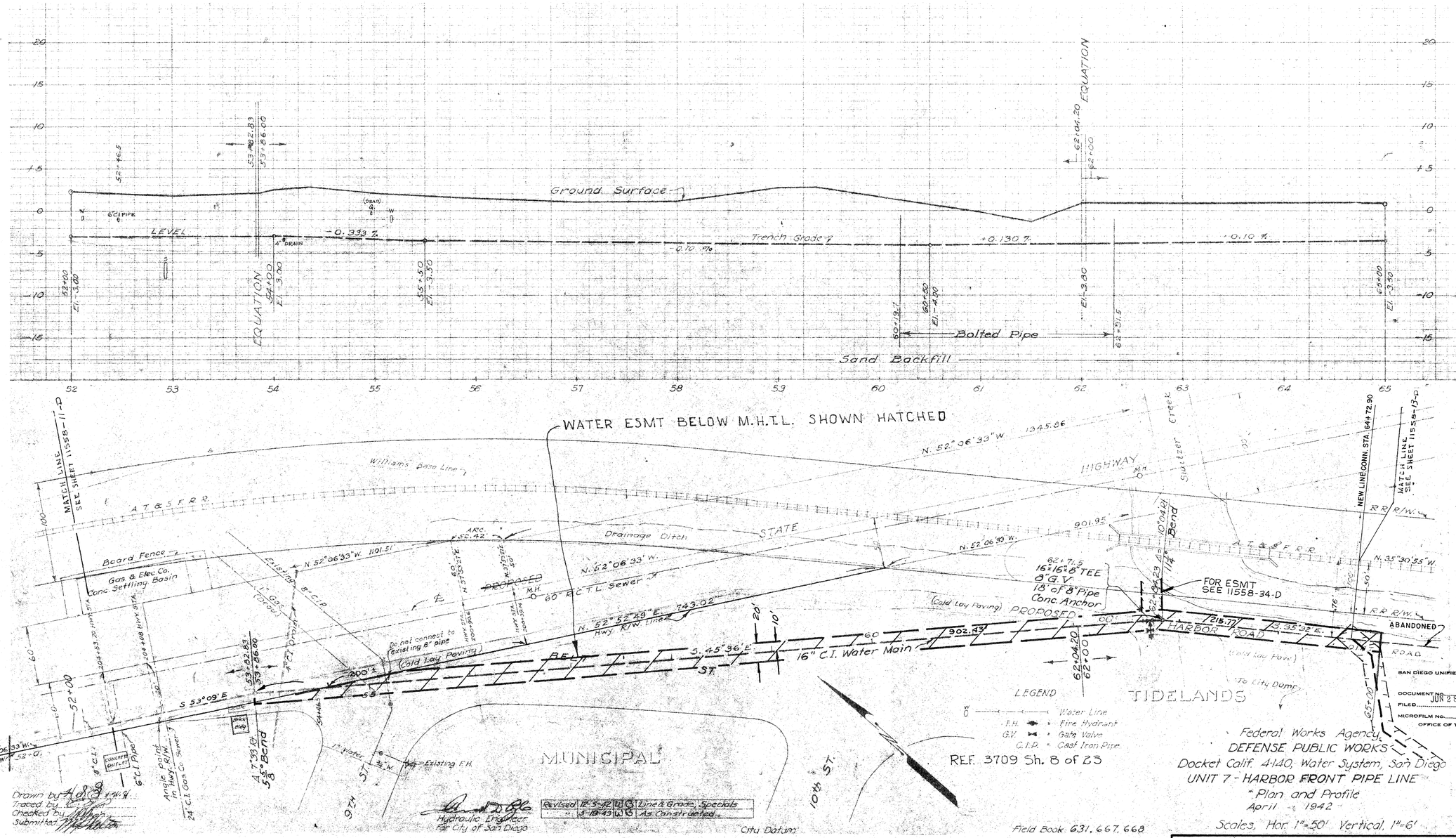
194-1719
STANDARD COORDINATES

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

11558-11-D

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 21, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 19, 1963



Federal Works Agency
DEFENSE PUBLIC WORKS
Docket Calif. 4-140, Water System, San Diego
UNIT 7 - HARBOR FRONT PIPE LINE
Plan and Profile
April - 1942
Scales, Hor. 1"=50' Vertical, 1"=6'

SAN DIEGO UNIFIED PORT DIST
DOCUMENT No. 83383
FILED JUN 28 1968
MICROFILM NO. 61
OFFICE OF THE CLERK

Drawn by H.B.S. 1-14-42
Traced by
Checked by
Submitted

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. T. Brake, UTILITIES DIRECTOR	J. F. Butterworth, CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 631332 FILED FEB. 15, 1943	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1969

WATER ESMT. - Sly of Harbor Drive from 9th St. ely to Switzer Creek, below M.H.T.L.
TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 12 OF 39 SHEETS

W.O. NO. 17430

E. T. Gabrielson 6/24/68
CITY ENGINEER DATE

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RBH	OTF	6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

194 - 1721
LAMBERT COORDINATES

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

11558-12-D

WATER ESMT. - From Switzer Creek to Beardsley St., below M.H.T.L.

TIDELANDS

SCALE: 1" = 50' Horizontal
1" = 6' Vertical

SCALE: 1" = 50'

FUTURE R.R. TRACKS

FUTURE S. P. TRACK

GROUND LINE

3'6" COVER IN CRUSHED ROCK

LEVEL

BOTTOM OF PIPE

6"x18"x16" C.I. (TO BE REMOVED)

CAISSON 16" C.I. PL. 43.62

34" CASING

36" CASING

10'

20'

MATCH LINE
Sheet 11558-12-D

FURNISH & INSTALL, BY CITY:-
STA. 0+20.00 Rt.
1-16" 22½° BEND
13'± Rt. CONN.
TOXIC C.V. (BY CONTR.)
PLUG 16" I.D. CLY
& REMOVED EXIST. 16" G.V.

1-16"A.C. ADAPTER
1-16"A.C. COLLAR
11.5'± OF 16"A.C. PIPE
1-16"A.C. COLLAR

A.C. PAVEMENT

R.R. TRACKS (UNDER CONSTR.)

S 34°55'W 78.6'

S 10° 05' E

247.05'

S 32°35' E

S 10°05 E 30.0'

FURNISH & INSTALL BY CONTR:-
STA. 2+32 10½°Rt.
1-16"C.V. (RCP12.W/TOXY PASS) (RICH)
STA. 2+40
1-16"45°BEND
STA. 2+60.6
A.P. △= 44°22'45"Lt. (FIELD ADJUST)
1-16"45°BEND

FURNISH & INSTALL, BY CONTR:-
STA. 3+65.65 (FIELD ADJUST)
A.P. △= 44°22'45"Rt. (FIELD ADJUST)
1-16" 45° BEND

CONTRACTOR NOTE - INSTALL 12 GAUGE COPPER WIRE FULL LENGTH OF JOB

WATER ESMT. below M.H.T.L. shown hatched

EXIST. FENCE

S 34°55'W 368.62

S 55° 05' E

365.73'

CONCR. GUTTER

STORM DRAIN

EXIST. R.R. TRACK

ELEC. DUCT

MATCH LINE SEE Sh 11558-14-D
STA. 11+00

FURNISH & INSTALL, BY CONTR:-
STA. 7+31.278Rt. = 7+57.98 AH.
A.P. △= 99°00'Lt.
1-16"30° BEND

28" I.D. Steel Casing Pipe, 5/16" Thick

18"A.C.Pipe

DETAIL OF STEEL CASING ENCASEMENT
No Scale

NOTE:- 1. Steel Casing to be jacked under R.R. Tracks to the satisfaction of the A.T.& S.F. R.R.

2. Center pipe using steel spacers, Pilco 505 or equal. Use two per pipe length, at 1/5 points.

3. Cap ends with sleeve type casing seals Pilco 860 or equal.

21'-0"

STA. 0+20.00 Rt.

6"

15"

10"

8"

PLAN

COMPACTED SOIL TO 95% COMPACTION

31'-0"

21'-0"

1.5 CU. YDS. CRUSHER RUN ROCK 15"

FRONT ELEVATION

SIDE ELEVATION

ANCHOR DETAIL FOR 30° BEND @ BEGIN WORK

AS BUILT DATA

CONSTRUCTED BY:- AL RILEY
W.O. 22374 (CONSTR.), W.O. 48304 (ENGR.).
PIPE: J.M. RING-TITE (Kind)
GATE VALVES: Rich & Mueller (Kind)
SOIL: Sandy (Kind)
STAKED: 3-14-63 (Date)
TESTED: 4-22-63 (Date)
BACKFILL: Native (Kind)
NOTE: Include "CONSTRUCTION RECORD".
CONNECTIONS BY:- CITY FORCE.
W.O. 22375
PIPE: 16" A.C.
GATE VALVES: None

BENCH MARKS: (City Datum)
B.M.: M.W. B.P. - Dewey & Logan Sts. EL. 48.96
T.B.M.: Cut in Center Concr. Vault STA. 0+37 29'Rt. EL. 2.27
T.B.M.: P.K. in P. pole #657526H STA. 26+42 10' Ft. EL. 5.12

REFERENCES:
Water Rk. II, Shts. G-23-C.D, G-24-B.
Gt. Bk. A-614.
315-D (R.R. Layout)
Harbor Dept. Plot Plan (Near Skyview)
L-50-25184 (A.T.& S.F. R.R.)
206-D-2 (Sewer, Harbor Dept.)
8294-W (Water)
Field Notes: G-23.A,B,C,D.
Dwg. D.P.K.-7 (Harbor Front P.L.)
Dwg. 206-D-2 (Sewer, Harbor Dept.)

RETIREMENT:
1928' of 16" C.I. (1942)
3-16" G.V.'s (1942)
600'± of 6"C.I. (1941)
2-6" G.V.'s (1941)
1-6" G.V. (1959)
1-6" Reg. Valve (1941)
2-6" F.H.S. F.H. Servs. (1942)

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3389
FILED JUN 28 1968
MICROFILM NO. 51
OFFICE OF THE CLERK

REF. DWGS
10735-2-AD
3709 W Sh 8 of 23

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham (ASSISTANT) DIRECTOR	(CHIEF) ENGINEER
PUBLIC WORKS INSPECTOR	

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 13 OF 39 SHEETS

W.O. NO. 17430

CITY ENGINEER — 6/24/68 DATE — DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RDJ		6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

196-1721
LAMBERT COORDINATES

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

11558-13-D

HARBOR FRONT 16" A.C. PL.

BEARDSLEY STREET

DANGER ELEC. DUCT

DANGER 8" OIL LINE

DANGER VARIOUS GAS & OIL LINES

4" A.C. Pav't. Over 9" Crushed R...k

EXIST. 6"C.I.

GROUND LINE

EXIST. ELECT. DUCT 1.2'x 1.5'

LEVEL

4% GRAD.

LEVEE

8" Sewer El. -2.3 △ Concr. Supports per Std. Dwg. S-21-67

BOTTOM OF PIPE

21" R.C.P. Drain El. 4.5

Provide 3" Min. Sand Cushion

4" A.C. Pav't.

27' ±RR Cars

RIP. TRACKS

12" x 24" BOW CULV. EL. 0.90 ±

8" Oil Line El.

Steel Encas. See Detail on Sht. 2

EXIST. 16" C.I. EL. +1.6 △

SCALE: 1" = 50' Horizontal
1" = 5' Vertical

MATCH LINE See Sheet 11558-13-D

STA. 14+00

S 55° 05' E

20'

10'

352'

ELECT. CABLE

CONCR. GUTTER

STORM DRAIN

A.C. PAVEMENT

R.R. TRACK

FURNISH & INSTALLED BY CONTR: STA. 14+52 1-16" 22½° BEND

WATER ESMT. below M.H.T.L. shown hatched

TRANSFORMER HOUSE △

JUNCTION HOUSE

58' Sewer

EXIST. ELECT. DUCT

CONCR. SUPPORTS FOR CONVEYOR △

6" C.I.

A = 42°
R = 282
L = 206.72

FURNISH & INSTALL BY CONTR: STA. 17+40 CO. IN! A.P. △ = 21°07½' Lt. 1-16" 22½° BEND STA. 17+72 1-16" HORIZONTAL GATE VALVE WITH 3" BY-PASS (MUELLER) △

E.C. 16.53.39

S 39° 50' E 1285

S 54° 27' E 14.20'

STA. 16+16.34 P.I. △ = 9°24' Lt.

S 60° 51' E 50.00'

STA. 16+66.34 P.I. △ = 7°29' Lt.

S 60° 51' E 40.00'

STA. 19+06.34 P.I. △ = 9°55' Lt.

S 75° 15' E 50.00'

STA. 19+56.34 P.I. △ = 7°29' Lt.

S 81° 39' E 40.00'

STA. 19+96.34 P.I. △ = 9°55' Lt.

S 84° 55' W 150'±

21" R.C.P. DRAIN

STA. 22+47 1-16" 90° BEND

FURNISH & INSTALLED BY CONTR: STA. 22+27 1-16" 90° BEND

REF. DWG. 14307-L Sh. 4 of 12 10735-3-D

Conc. Gutter

MEAN HIGH TIDE LINE

WILLIAMS BASE LINE

HARBOR DEPT. PROPERTY

RETAINING WALL

FUTURE R.R. TRACK & RAMP

EQUATION = 23191 BACK = 23465 AHEAD

2 - 2"
2 - 4"
7 - 6"
1 - 8"
1 - 10"

13 OIL & GAS LINES

VARIOUS GAS & OIL LINES

20' R/W

8" OIL LINE

RAILWAY COMPANY PROPERTY

8" Off Line

CITY NOTE:
SALVAGE FIRE HYDRANTS ON PORTION OF 16"C.I. WATER MAIN TO BE ABANDONED - CUT & PLUG SERVICE A MINIMUM OF 12" BELOW GROUND
REMOVE G.V. CAP & PATCH PAVEMENT
SALVAGE 16" G.V.'S, TAPPING VALVES, & REGULATOR ETC., IF NECESSARY
ABANDON 6" W.M. NW'LY OF BEARDSLEY ST. BY CLOSING G.V. SEE CALLOUT

1-16"A.C. COLLAR
2'± OF 16"A.C. PIPE
1-16"A.C. COLLAR
1-16"A.C. ADAPTER △

FURNISH & INSTALL BY CITY: STA. 25+17± △ 1-16" 22½° BEND CONN. TO EXIST. 16"C.I. PLUG 16"C.I. NW'LY.

23 City Close G.V. 12"x24" Box Culvert

S.Efly. Ext. P.L. of Beardsley

N 900 or 33400

G.V.

16" C.I. Water

Exist. R.R. Tracks

Exist. P.L.

Corrugated Iron Stag.

FURNISH & INSTALLED BY CONTR: STA. 23163 1-16"45° BEND STA. 23191 1-16"45° BEND

FOR BENCH MARK (City Datum) REFERENCES & AS BUILT DATA SEE SHT. 2

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 3371
OFFICE OF THE CLERK

WATER ESMT. From Switzer Creek to Beardsley St., Continued, below M.H.T.L.

TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 14 OF 39 SHEETS

W.O. NO. 17430

CITY ENGINEER — DATE — DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RCL	[illegible]	6/24/68	

DESIGN ENGINEER

CONTROL CERTIFICATION

194 - 1721
LAMBERT COORDINATES

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

11558-14-D

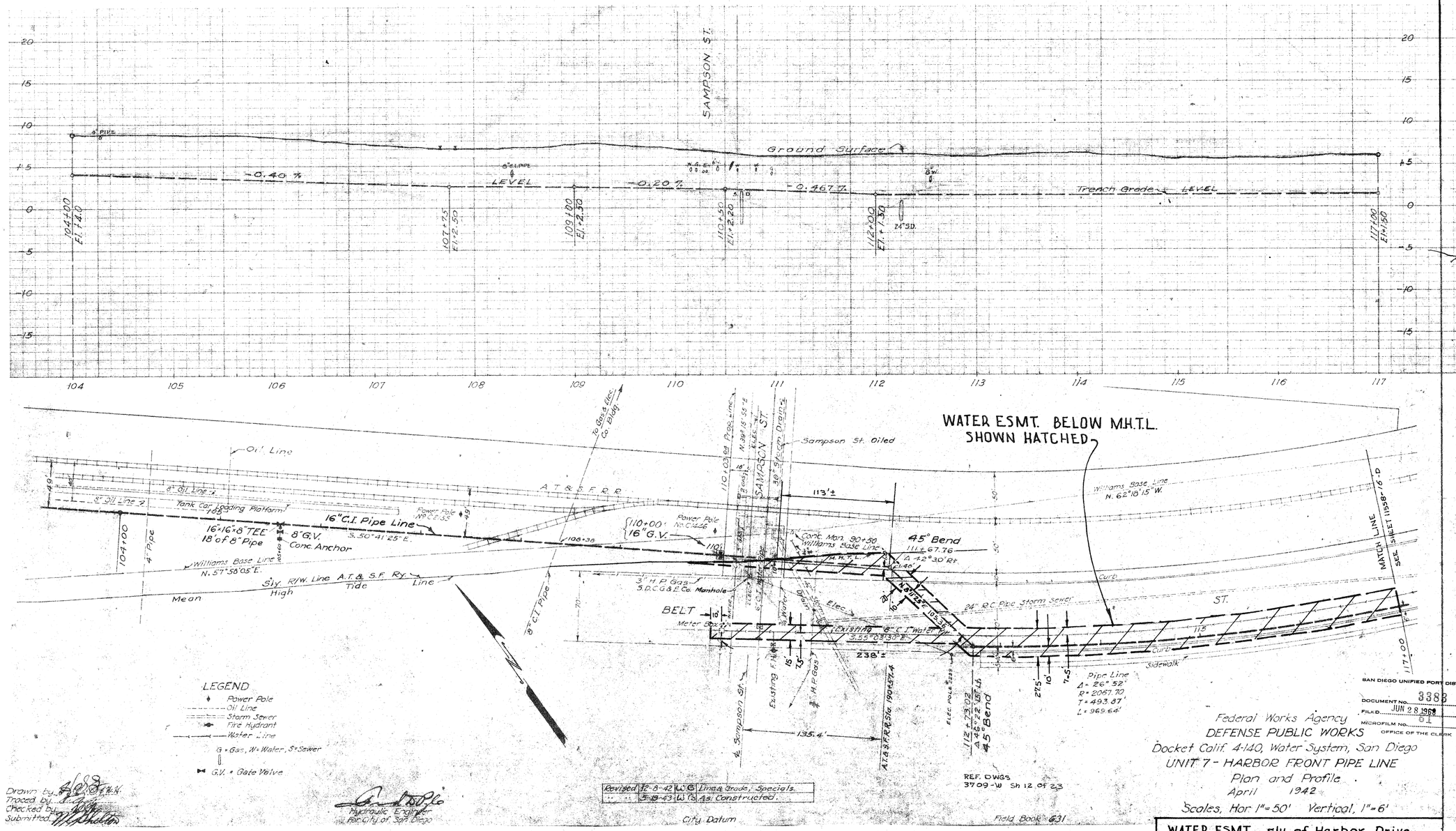
APPROVALS

CITY OF SAN DIEGO
TR E. Jenkins
UTILITIES DIRECTOR

SAN DIEGO UNIFIED PORT DISTRICT
E.G. Wilkinson
PUBLIC WORKS DIRECTOR

PUBLIC WORKS DIRECTOR — ORIGINAL CONVEYANCE
UTILITIES DIRECTOR — ORIGINAL CONVEYANCE

HARBOR FRONT 16"A.C. PL.



WATER ESMT. sly of Harbor Drive between Sampson St. & Sicard St. below M.H.T.L. (TIDELANDS)

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 15 OF 39 SHEETS

W.O. NO. 17430

E. F. Gaudenzi 6/24/68
CITY ENGINEER DATE

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.J.	[illegible]	6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

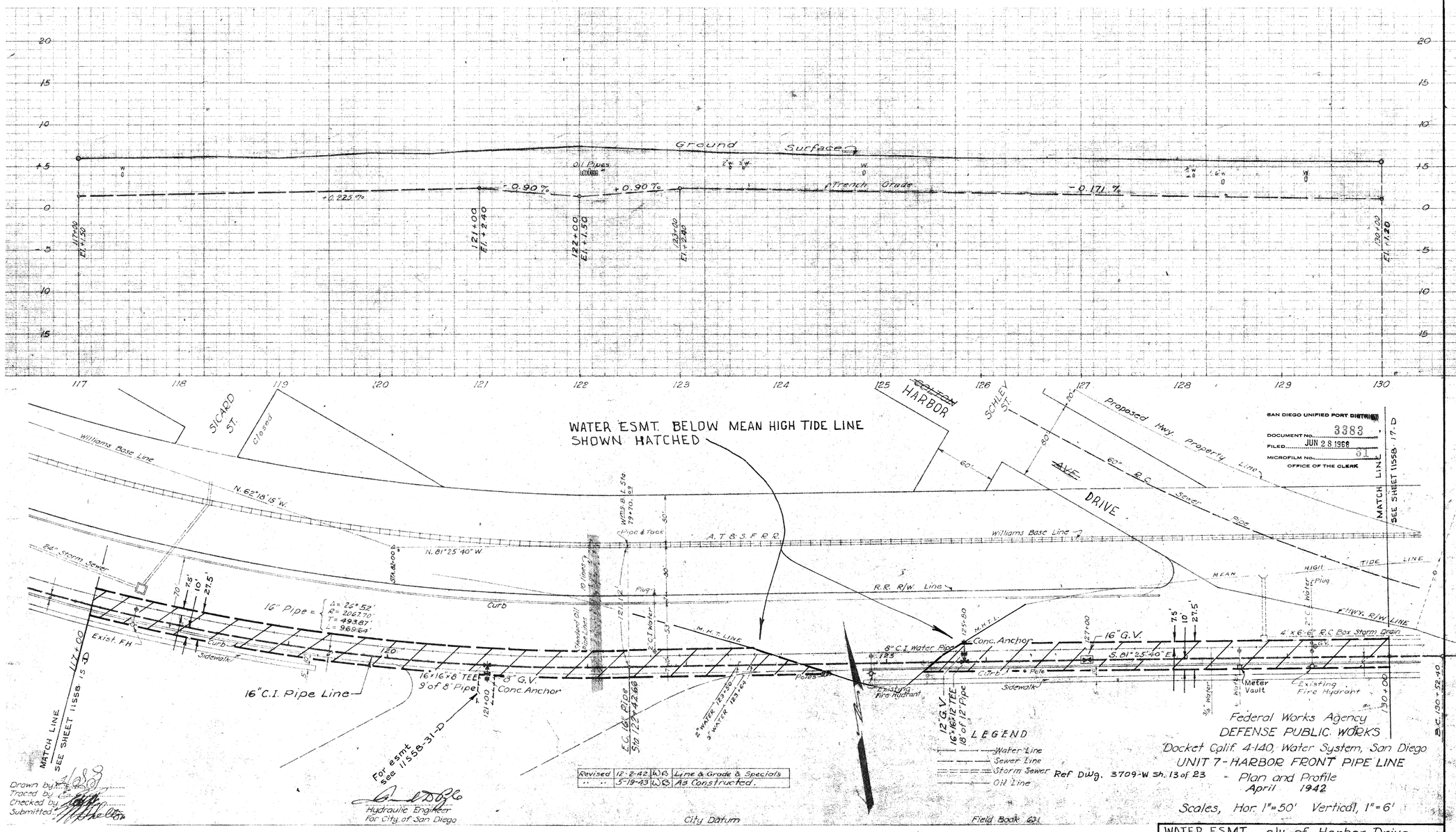
192-1725
LAMBERT COORDINATES

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

11558-15-D

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham, UTILITIES DIRECTOR	E. Hellmann, CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 051833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 15, 1963



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

Drawn by [illegible]
Traced by [illegible]
Checked by [illegible]
Submitted [illegible]

Hydraulic Engineer
For City of San Diego

APPROVALS			
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT		
R. E. Jacobs UTILITIES DIRECTOR	J. Wellemeyer CHIEF ENGINEER		
PUBLIC WORKS DIRECTOR			
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 13, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963		

WATER ESMT. sly. of Harbor Drive from Sicard St. to 500' Ely of Schley St.
TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 16 OF 39 SHEETS

W.O. NO. 17430

E. A. Galvanson 6/24/68
CITY ENGINEER DATE

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RCL	[illegible]	6/24/68	

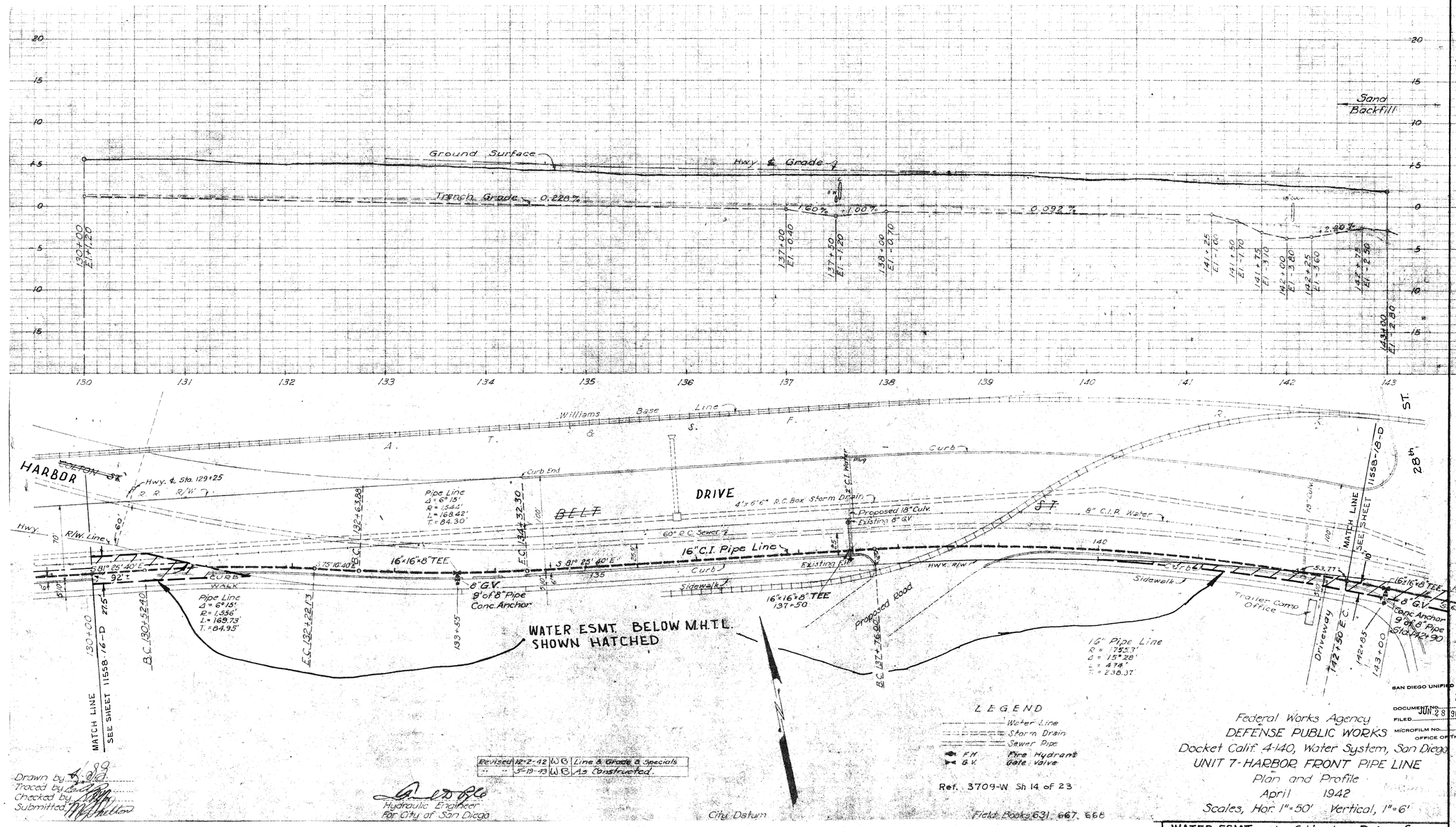
DESIGN ENGINEER

CONTROL CERTIFICATION

192-1725
LAMBERT COORDINATES

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

11558-16-D



Revised	12-2-42	W.B.	Line & Grade & Specials
"	3-19-43	W.B.	As Constructed.

Drawn by L.B.
Traced by
Checked by
Submitted M.F. Hellman

Hydraulic Engineer
For City of San Diego

City Datum

LEGEND
Water Line
Storm Drain
Sewer Pipe
F.H. Fire Hydrant
G.V. Gate Valve

Ref. 3709-W Sh 14 of 23

Field Books 631, 667, 668

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 61
OFFICE OF THE CLERK

Federal Works Agency
DEFENSE PUBLIC WORKS
Docket Calif. 4-140, Water System, San Diego
UNIT 7-HARBOR FRONT PIPE LINE
Plan and Profile
April 1942
Scales, Hor. 1"=50' Vertical, 1"=6'

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham, UTILITIES DIRECTOR	J. Hellmann, CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 455829 FILED FEB. 15, 1961	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1962

WATER ESMT. Sly of Harbor Drive from approx 500' ely of Schley St to 28TH St., Below M.H.T.L. TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 17 OF 39 SHEETS

W.O. NO. 17430

T. E. Graham, CITY ENGINEER, 6/24/68, DATE

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RCJ	WB	6-27-68	

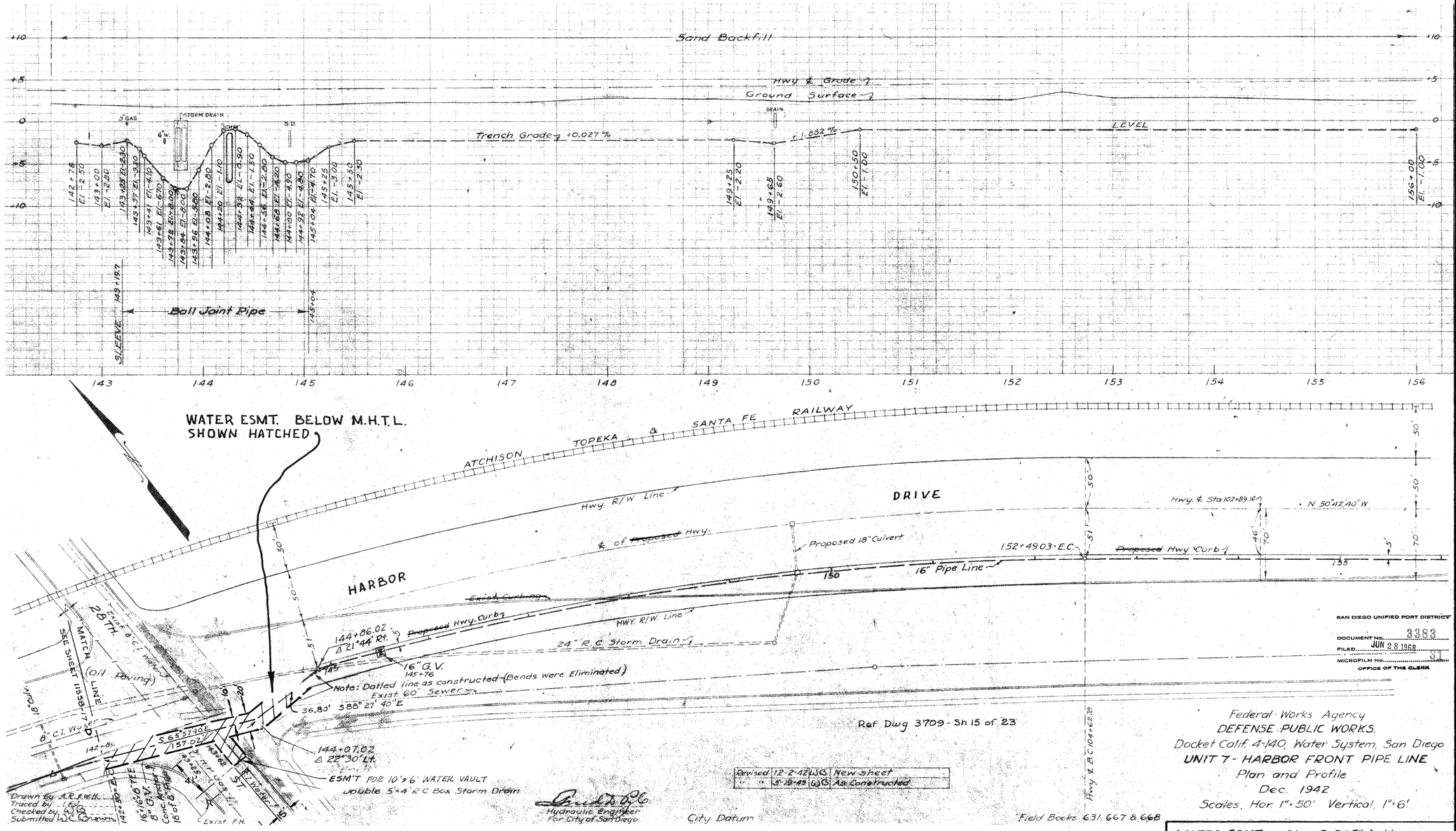
DESIGN ENGINEER

CONTROL CERTIFICATION

190-1727 LAMBERT COORDINATES

CONTRACTOR ..... DATE STARTED .....
INSPECTOR ..... DATE COMPLETED .....

11558-17-D



Drawn by A.R.F. with
Traced by [illegible]
Checked by
Submitted W.C. Brown

Ref. Dwg. 3709 - Sh 15 of 23

Revised	12-2-42	W.G.	New Sheet
"	5-19-43	W.G.	As Constructed

Hydraulic Engineer
For City of San Diego

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 3
OFFICE OF THE CLERK

Federal Works Agency
DEFENSE PUBLIC WORKS
Docket Calif. 4-140, Water System, San Diego
UNIT 7 - HARBOR FRONT PIPE LINE
Plan and Profile
Dec. 1942
Scales, Hor. 1"=50' Vertical 1"=6'

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R.S. Shaw 6/24/68 UTILITIES DIRECTOR	J.F. Williamson CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 61383 FILED FEB. 16, 1953	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1953

WATER ESMT. - S'ly of 28TH & Harbor Drive Below M.H.T.L. TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 18 OF 39 SHEETS

W.O. NO. 17430

C.F. Gabrielson 6/24/68
CITY ENGINEER DATE

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.J.	[illegible]	6-24-68	

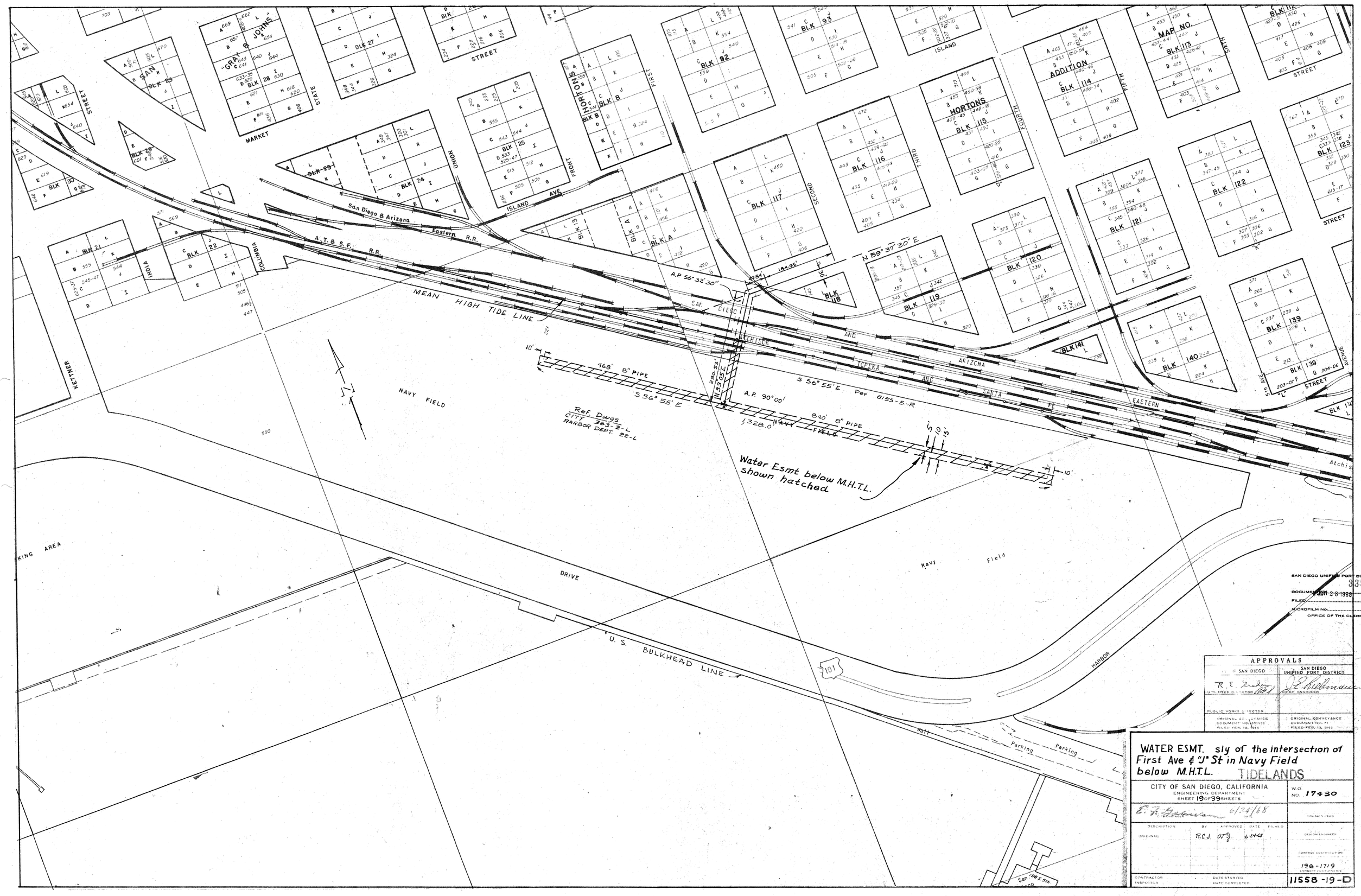
DESIGN ENGINEER

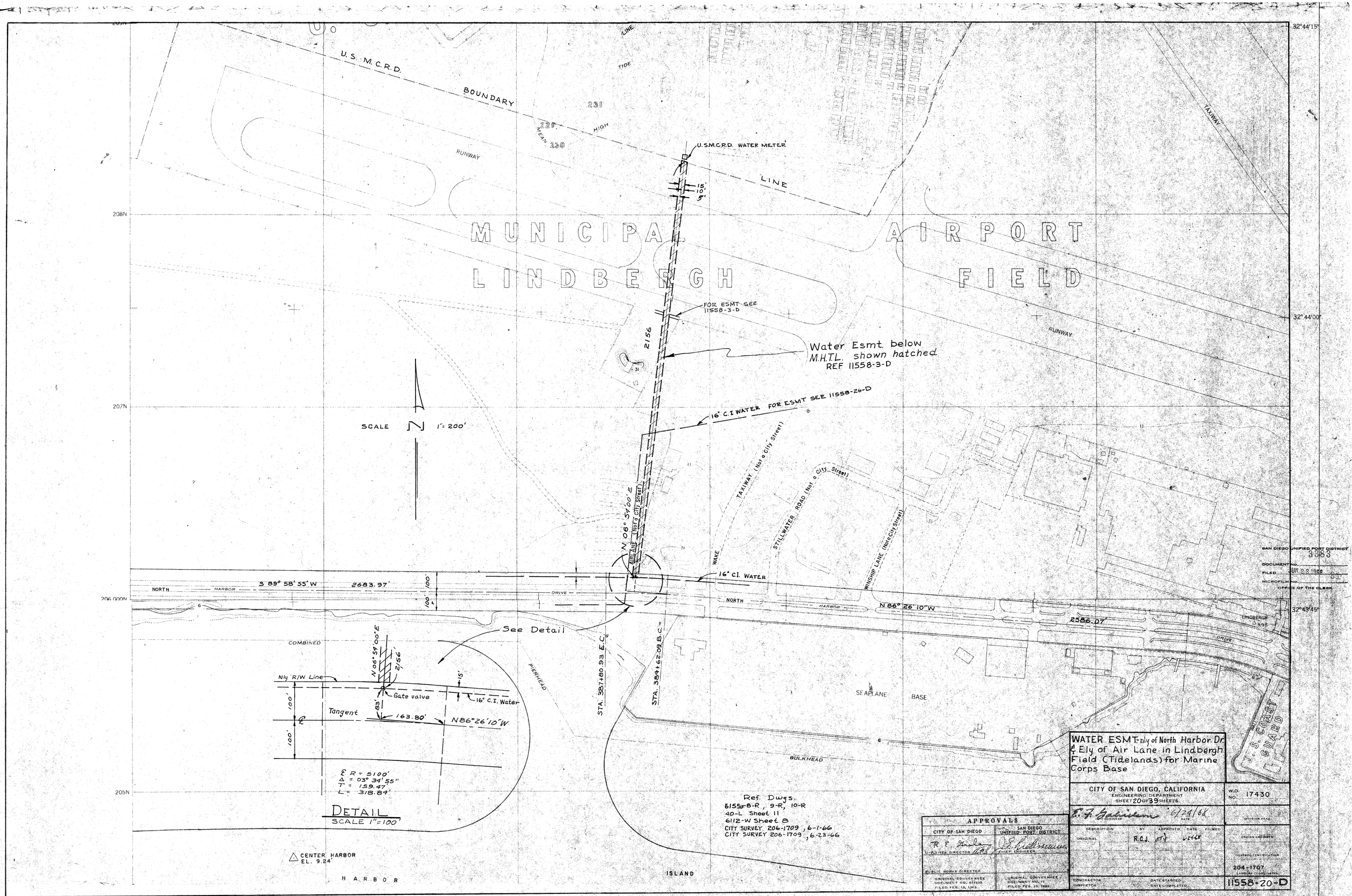
CONTROL CERTIFICATION

190 - 1727
LAMBERT COORDINATES

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

11558-18-D


MEAN HIGH TIDE LINE
San Diego & Arizona Eastern R.R.
A.T. & S.F. R.R.
SAN DIEGO AND ARIZONA EASTERN
ATCHISON TOPEKA AND SANTA FE
NAVY FIELD
Ref. Dwgs
CITY 363-2-L
HARBOR DEPT. 22-L
468' 8" PIPE
S 56° 55' E
A.P. 90°00'
840' 8" PIPE
1,328.0'
S 56° 55' E Per 6155-5-R
N 89° 37' 30" E
A.P. 56° 32' 30"
Water Esmt below M.H.T.L. shown hatched
U.S. BULKHEAD LINE
Navy Field
HARBOR
DRIVE
Parking
Parking
Wall
KETTNER
INDIA
COLUMBIA
MARKET
STATE
UNION
FRONT
FIRST
SECOND
THIRD
FOURTH
FIFTH
SIXTH
ISLAND
STREET
AVENUE
5th AVE
"L" STREET
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR
CHIEF ENGINEER
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 65/1933 FILED FEB. 13, 1963
ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963
WATER ESMT. sly of the intersection of First Ave & "J" St in Navy Field below M.H.T.L.
TIDELANDS
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 19 OF 39 SHEETS
W.O. NO. 17430
6/24/68
DIVISION HEAD
DESCRIPTION
BY
APPROVED
DATE
FILMED
ORIGINAL
R.C.J.
6-24-68
DESIGN ENGINEER
CONTROL CERTIFICATION
198-1719
LAMBERT COORDINATES
CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED
11558-19-D


U.S. M.C.R.D. BOUNDARY LINE
TIDE LINE
MEAN HIGH
RUNWAY
U.S.M.C.R.D. WATER METER
15'
10'
5'
MUNICIPAL AIRPORT
LINDBERGH FIELD
FOR ESMT SEE 11558-3-D
2156
Water Esmt. below M.H.T.L. shown hatched REF 11558-3-D
16" C.I WATER FOR ESMT SEE 11558-26-D
SCALE 1" = 200'
N 06° 54' 00" E
AIRLANE (Not a City Street)
TAXIWAY (Not a City Street)
STILLWATER ROAD (Not a City Street)
WINSHIP LANE (Not a City Street)
WAKE
16" CI. WATER
NORTH HARBOR DRIVE
S 89° 58' 55" W 2683.97'
N 86° 26' 10" W 2586.07'
LINDBERGH DRIVE
COMBINED
See Detail
PIERHEAD
STA. 387+80.93 E.C.
STA. 384+62.09 B.C.
SEAPLANE BASE
BULKHEAD
Nly R/W Line
Gate valve
16" C.I. Water
Tangent
163.80'
N86°26'10"W
℄ R = 5100'
Δ = 03° 34' 55"
T = 159.47'
L = 318.84'
DETAIL
SCALE 1" = 100'
CENTER HARBOR EL. 9.24'
HARBOR
ISLAND
Ref. Dwgs.
6155-8-R, 9-R, 10-R
40-L Sheet 11
6112-W Sheet 8
CITY SURVEY 206-1709, 6-1-66
CITY SURVEY 206-1709, 6-23-66
32°44'15"
32°44'00"
32°43'45"
208N
207N
206 000N
205N
U.S. COAST GUARD
WATER ESMT-nly of North Harbor Dr. & Ely of Air Lane in Lindbergh Field (Tidelands) for Marine Corps Base
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 20 OF 39 SHEETS
W.O. NO. 17430
E. F. Gabrielson 6/24/68
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
R. E. Gralan
CHIEF ENGINEER
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 655333 FILED FEB. 19, 1963
ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 19, 1963
DESCRIPTION BY APPROVED DATE FILMED
ORIGINAL R.C.J. 6-24-68
CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED
204-1707
11558-20-D
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

November 18, 2015
Item No. 11
Supporting Document No. 3

City of San Diego
Conveyances

City Doc.
No. 224625
6/24/08

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968 9 1
MICROFILM No.
OFFICE OF THE CLERK

Page 2 of 17

CHARLES BRUNING COMPANY

IMPORTANT:
Locate & expose all electric cables, tele-cables, lighting, etc..

Ground Line

6" A.C.

1" Oil Paving (broken and patched)

Level

12" C.I. Sewer

Bottom of Pipe

6" Asphalt Paving

Airport Light

0.08%

21" Sewer 5.8' Below Surface

Landing Strip

Water Esmt below M.H.T.L. shown hatched thus

BY CONTR:
STA. 8+80
1-16" 45° BEND. B&B
ANCHOR WITH 20 SQ. FT. OF BEARING SURFACE PLUS SHACKLE ASSEMBLY SHOWN ON SHEET 21

R=1940'

N. 75° 09' 55" E.

280.24'

MATCH LINE

See Sheet 11558-22-D

RUNWAY

6" A.C.

16+05

15+60

S 55° 10' 05" E

N. 39° 15' 30" E.

819.76'

20'

10'

1" Oil Pavement

16" C.I.

Sta. 2+60 Existing cable broken

6" Asphalt Paving

Ref. Dwg. 6112-W Sh 3

Abd. 10" C.I. Sewer

Abd. 10" Water Line

Abd. 12" Water Line

Airport Lighting

LINDBERGH FIELD
City of San Diego

SCALE
1"=50'

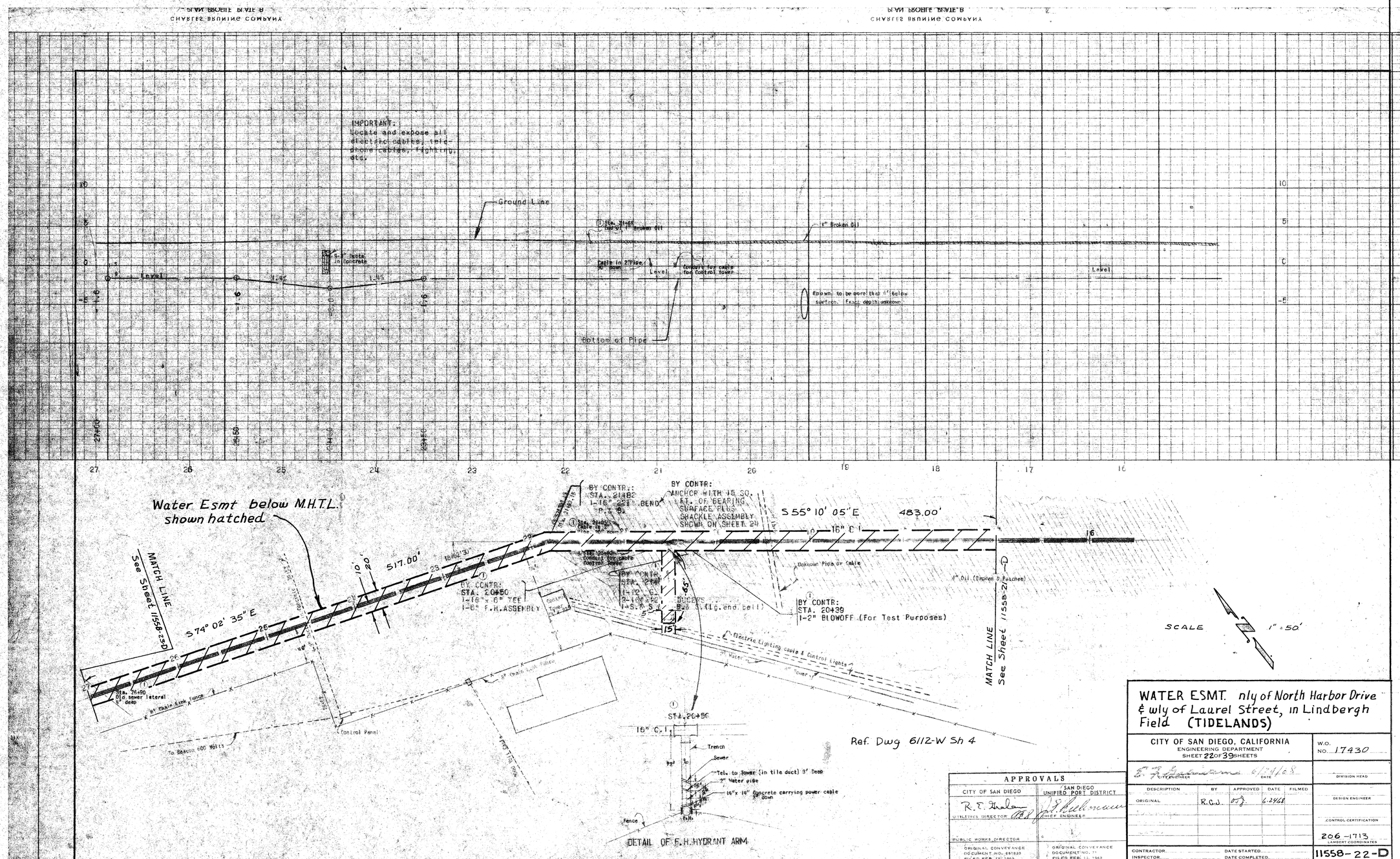
MATCH LINE

Taxi Strip

Taxi Strip

Taxi Strip

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK



WATER ESMT. nly of North Harbor Drive & wly of Laurel Street, in Lindbergh Field (TIDELANDS)

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 22 OF 39 SHEETS

W.O. NO. 17430

CITY ENGINEER — DATE 6/24/68

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.G.J.	O.J.	6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

206-1713
LAMBERT COORDINATES

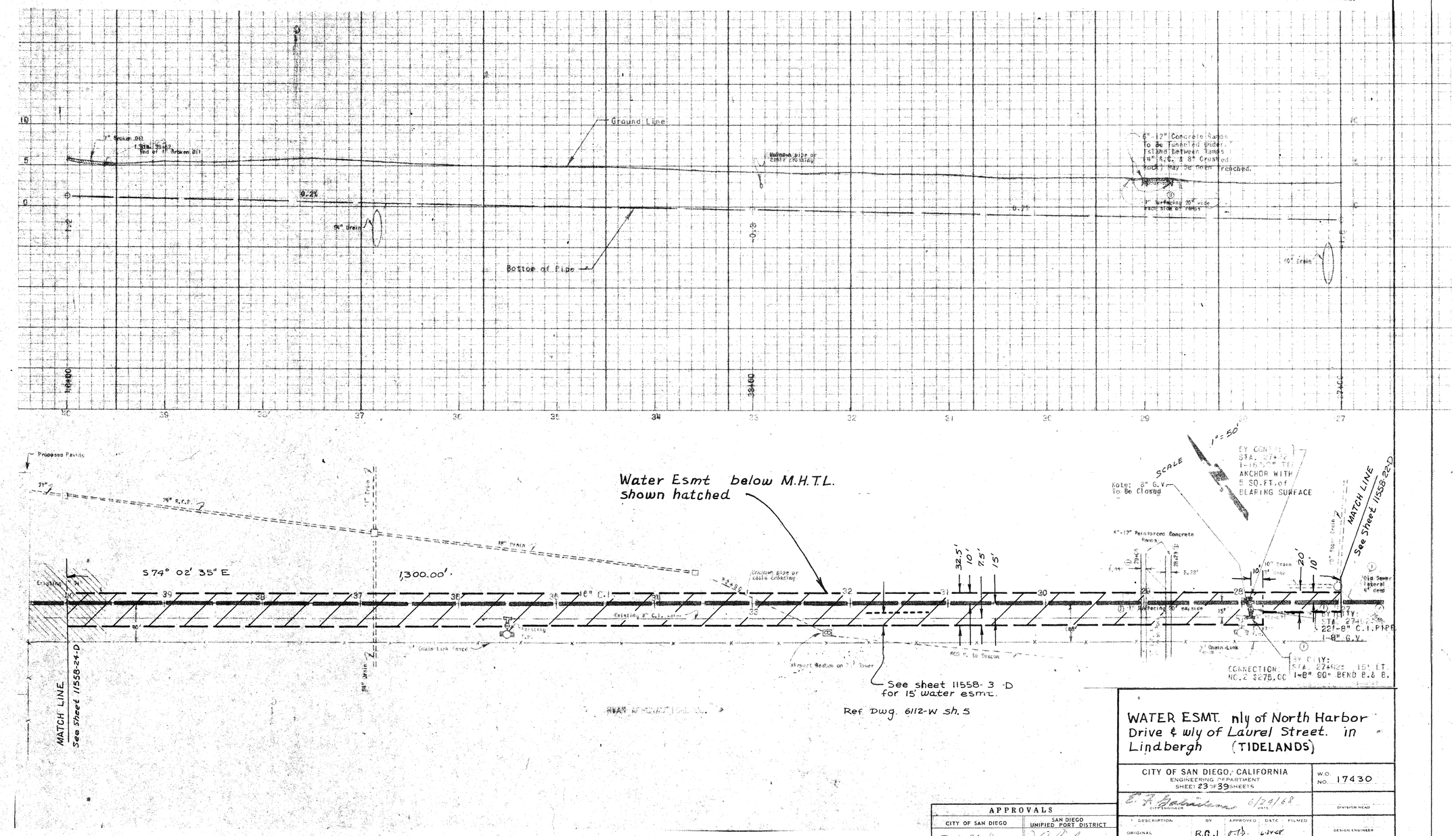
CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

11558-22-D

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham	J. E. Kuhlmann
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 13, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 51
OFFICE OF THE CLERK



WATER ESMT. nly of North Harbor Drive & wly of Laurel Street. in Lindbergh (TIDELANDS)

CITY OF SAN DIEGO, CALIFORNIA ENGINEERING DEPARTMENT SHEET 23 OF 39 SHEETS	W.O. NO. 17430
CITY ENGINEER — DATE 6/24/68	DIVISION HEAD
DESCRIPTION: ORIGINAL — BY: R.G.J. — APPROVED: O.T.J. — DATE: 6-24-68 — FILMED	DESIGN ENGINEER
	CONTROL CERTIFICATION
	206-1711 LAMBERT COORDINATES
CONTRACTOR — DATE STARTED INSPECTOR — DATE COMPLETED	11558-23-D

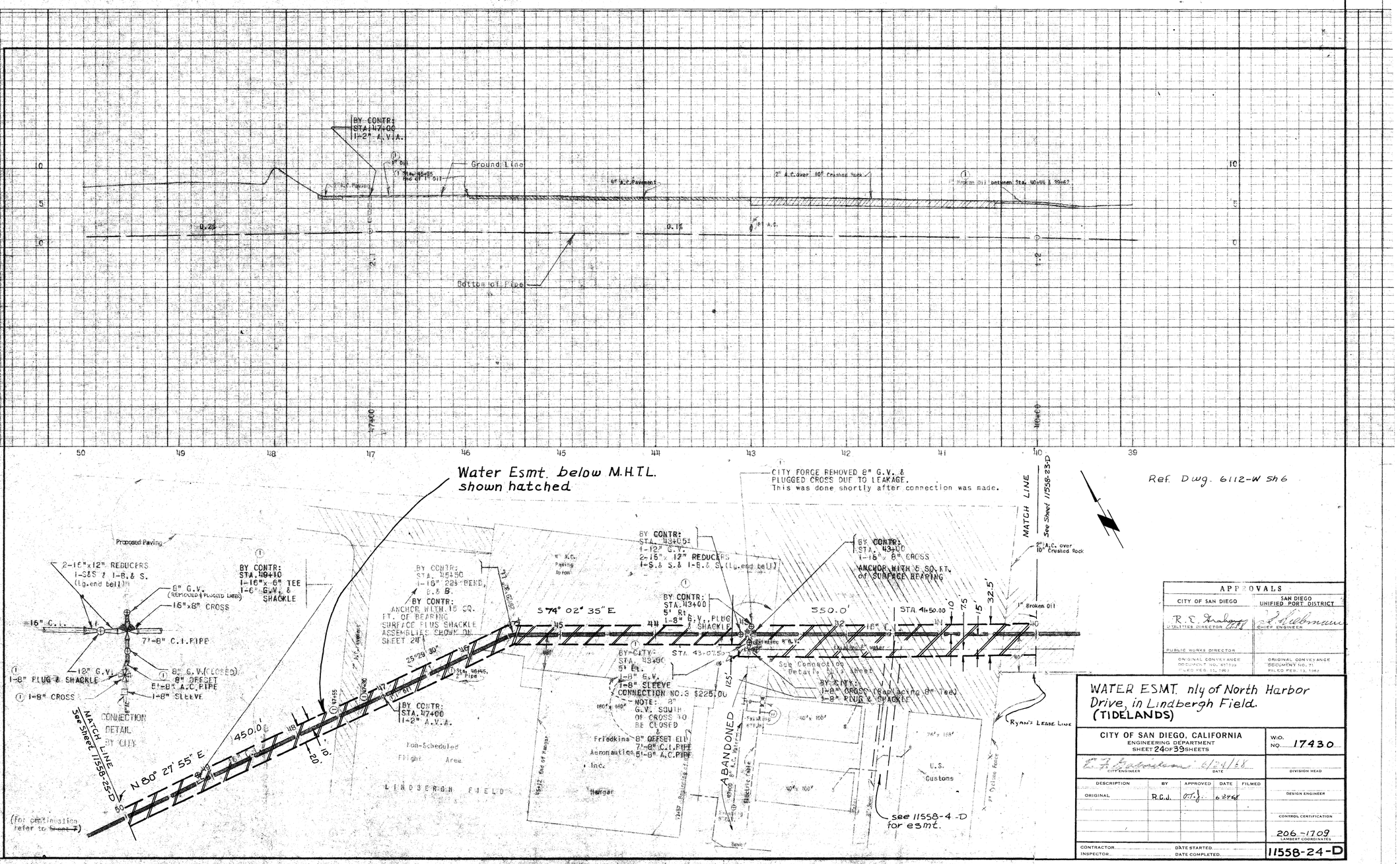
APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham — UTILITIES DIRECTOR	J. E. Rubinstein — CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

November 18, 2015
Item No. 11
Supporting Document No. 3

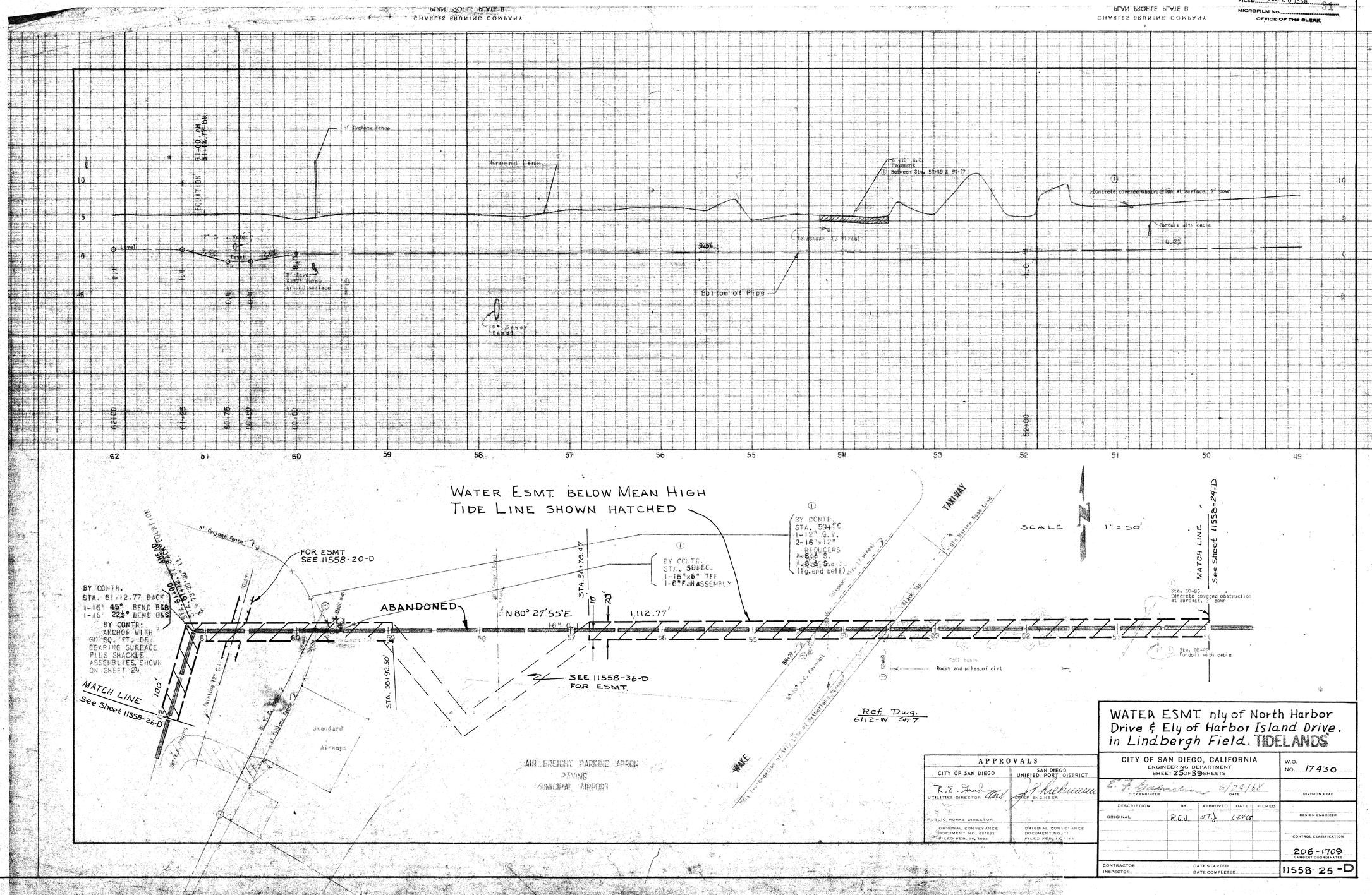
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No.
OFFICE OF THE CLERK

PLAN PROFILE PLATE B
CHARLES BRANIGAN COMPANY

PLAN PROFILE PLATE B
CHARLES BRANIGAN COMPANY


BY CONTR:
STA. 47+06
1-2" A.V.A.
2" Dia
1" Sta. 46+95
End of 1" Dia
Ground Line
6" A.C. Pavement
2" A.C. over 10" Crushed Rock
1" Broken Dia between Sta. 40+95 & 39+62
0.2%
0.1%
6" A.C.
Bottom of Pipe
Water Esmt. below M.H.T.L. shown hatched
CITY FORCE REMOVED 8" G.V. & PLUGGED CROSS DUE TO LEAKAGE. This was done shortly after connection was made.
Ref. Dwg. 6112-W sh 6
Proposed Paving
2-16"x12" REDUCERS 1-S&S & 1-B.& S. (Lg.end bell)
8" G.V. (REMOVED & PLUGGED LATER)
16"x8" CROSS
16" C.I.
7'-8" C.I.PIPE
18" G.V.
1-8" PLUG & SHACKLE
8" G.V.(CLOSED)
8" OFFSET
5'-8" A.C.PIPE
1-8" CROSS
1-8" SLEEVE
CONNECTION DETAIL BY CITY
BY CONTR: STA. 46+10 1-16"x 6" TEE 1-6" G.V. & SHACKLE
BY CONTR: STA. 46+50 1-16" 22½° BEND, B.& B.
BY CONTR: ANCHOR WITH 15 SQ. FT. OF BEARING SURFACE PLUS SHACKLE ASSEMBLIES SHOWN ON SHEET 21
BY CONTR: STA. 47+00 1-2" A.V.A.
BY CONTR: STA. 43+05 1-12" G.V. 2-15"x 12" REDUCERS 1-S.& S. & 1-B.& S. (Lg.end bell)
BY CONTR: STA. 43+00 1-8" G.V., PLUG & SHACKLE
BY CONTR: STA. 43+00 5' Rt. 1-8" G.V. 1-8" SLEEVE CONNECTION NO.3 $225.00
NOTE: 8" G.V. SOUTH OF CROSS TO BE CLOSED
BY CONTR: ANCHOR WITH 15 SQ.FT. of SURFACE BEARING
BY CONTR: STA. 41+00 1-16"x 8" CROSS
BY CITY: 1-8" CROSS (Replacing 8" Tee) 1-8" PLUG & SHACKLE
Sta. 46+45, 2 Pipe
Sta. 43+07.5
Sta. 41+50.00
S 74° 02' 35" E
550.0'
125'
450.0'
N 80° 27' 55" E
MATCH LINE See Sheet 11558-23-D
MATCH LINE See Sheet 11558-25-D
(For continuation refer to Sheet 7)
Non-Scheduled Flight Area
LINDBERGH FIELD
Friedkins Aeronautics, Inc.
8" Offset Ell 7'-8" C.I.PIPE 5'-8" A.C.PIPE
Hangar
ABANDONED
Electric Pole
U.S. Customs
see 11558-4-D for esmt.
Ryan's Lease Line
Existing 8" Water
Sta. 43+07.5 Connection 8" G.V.
See Connection Details Sh 3 sheet
Existing 8" Water
Existing 8" Water
Existing 8" Water

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 51
OFFICE OF THE CLERK



APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Gaskins	J. F. Kielmann
UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651633 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

WATER ESMT. nly of North Harbor Drive & Ely of Harbor Island Drive. in Lindbergh Field. TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 25 OF 39 SHEETS

W.O. NO. 17430

E. F. Gaskins 6/24/68
CITY ENGINEER DATE

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.G.J.	O.T.J.	6-24-68	

DESIGN ENGINEER

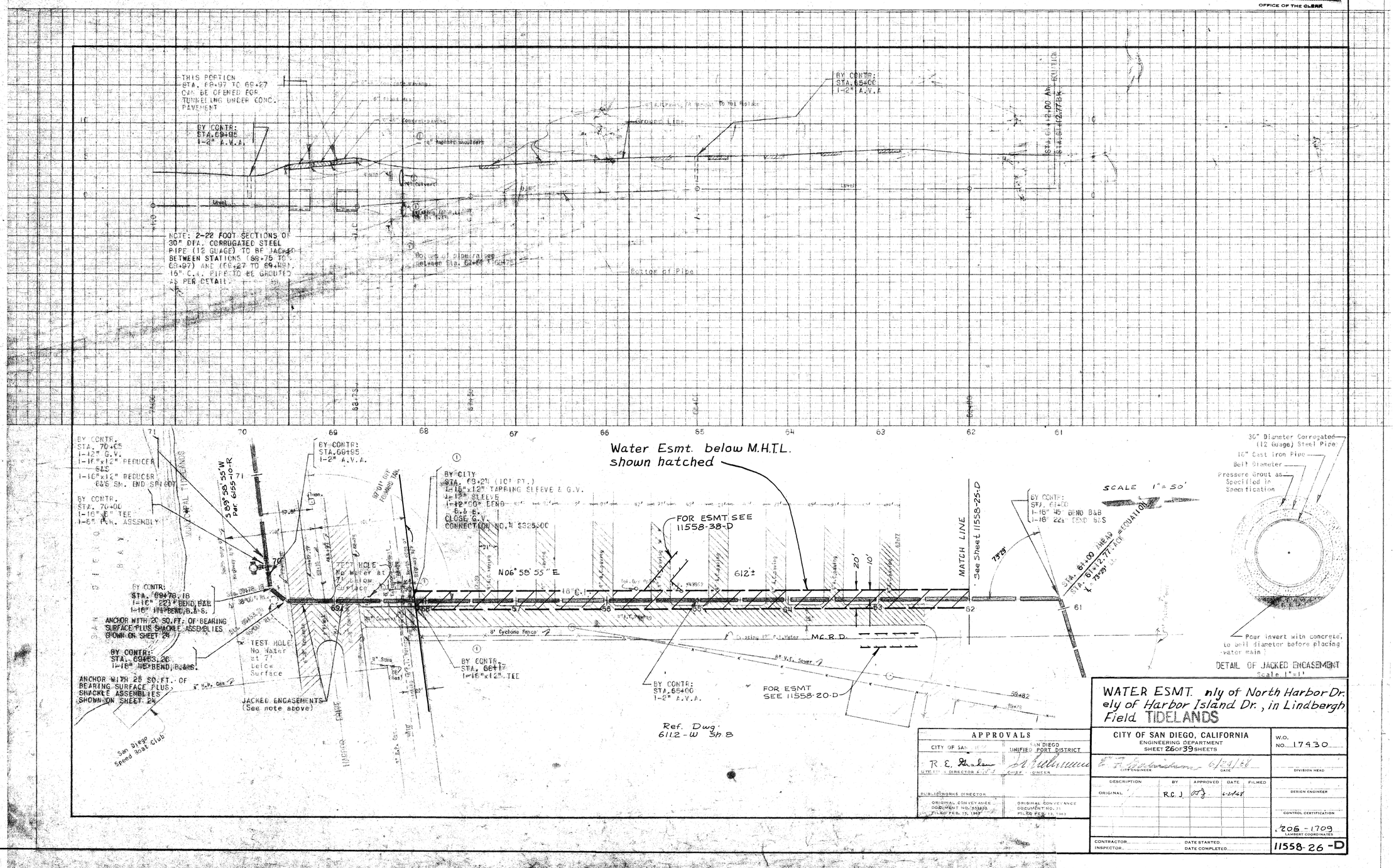
CONTROL CERTIFICATION

206-1709
LAMBERT COORDINATES

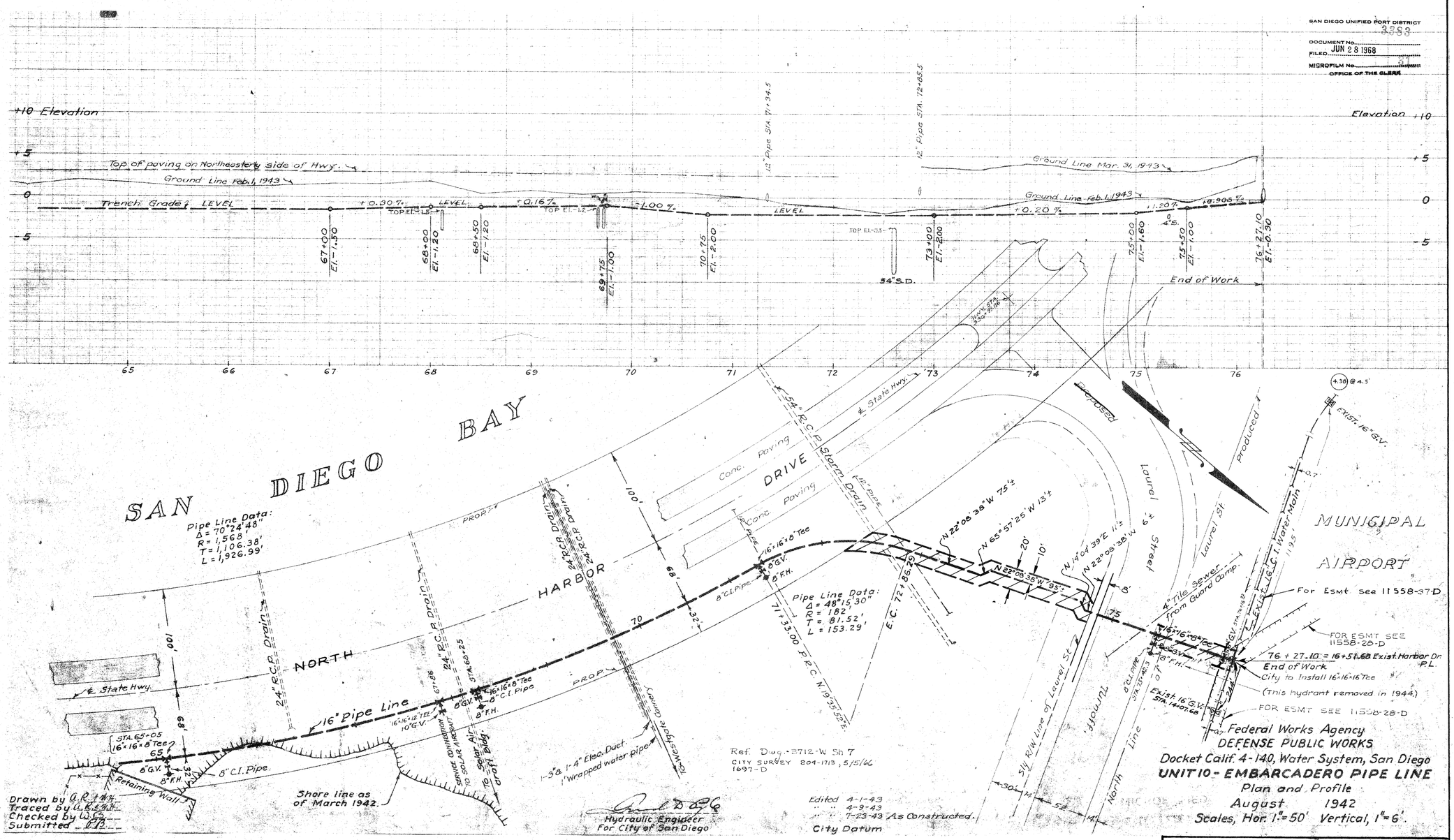
CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

11558-25-D

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 2383
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK



APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. S. Stralem, UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 15, 1943	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1968

WATER ESMT. sly of Laurel Street & nly of North Harbor Drive

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 27 OF 39 SHEETS

W.O. NO. 17430

E. F. Johnson 6/24/68
CITY ENGINEER — DATE — DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.J.	F.B.	6/24/68	

DESIGN ENGINEER

CONTROL CERTIFICATION

204-1715
LAMBERT COORDINATES

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

11558-27-D

24" CONCRETE STEEL CYLINDER PIPE
CLASS 170

16" C.I. CLASS 200

FIELD WELDED JOINTS

Ground Line

3"H.P.GAS El.Unknown

4" Asphalt Pavmt.

12 K.V.Cable El.Unknown

4 MTD Tele. El.UNKN.

2"Lig. Gas El.Unknown

600 V Cable El. Unknown

4 K.V. Cable & 50 Pr. Tele. El. Unknown

Exist. 16"C.I. El.-1.8

El.-2.0

El.-2.0

Top of 24" Pipe

4 K.V. El. Unknown

80" R.C.P. (Exact Elev. Unknown Approx. only)

84" Storm Drain

Tele.Cable El.Unknown

4 K.V.Cable & 50 Pr.Tele.El.Unkn.

3/4"H.P.Gas El. Unknown

2"Water

6"C.I.Water

12 K.V. Cable El.Unknown

3"H.P.Gas El.Unkn.

2 Air Field Cables DEAD, El.Unknown

El.-3.0

B.M. B.P.K.W.Cor. of Pacific & Laurel, Elev. 7.94

STA.0+00 SEE SHEET 11558-21-D FOR ESMT.

Exist.16"C.I.

3"H.P.Gas

12 K.V. Caple

16"C.I.

8' Chain Link Fence

Conc. Footings

12 K.V. Cable

4 H.P.G. Cable

LIQ. GAS TANK

Pump

Elec.Cond. into ground

Exist. 16" C.I.

Construct 8'± of 8' Chain Link Fence

4 K.V. Cable & 50 Pr.Tele. F.H.

Conc. Plug 16"C.I. Pipeline

Construct 11'± of Chain Link Fence

106'± of 8' Chain Link Fence to be Removed

FOR ESMT. SEE 11558-27-D

STA. 0+00.78 CONN. TO EXIST. 16" PIPE (SEE DETAIL "A" THIS SHEET)

FOR ESMT SEE 11558-37-D

STA. 0+85.79 (SEE DETAIL "B" THIS SHEET)

284'±

86°±

64.21'

86.40'

46'±

39'±

20'

10'

Water Esmt. below M.H.T.L. shown hatched.

308.20'

663.60'

325'±

Existing 16"C.I. Harbor Drive Pipeline

Sta. 2+38.00 2' Air Valve Type B

STA. 2+36.40 = 45°ZL6' LT.

R.R. Spur

LAUREL 1ST. ST.

N'LY R/W LINE

30'

2 Air Field Cables

12 K.V. Cable

3"H.P.Gas

20'

10'

17'

5450 G" B.O. Type "C" RICH G.V.

2"W

No service Transfer

4" H.P. Gas

Ref. Dwg: 10015-2-D, 6112-2-W, 6269-L

MATCH LINE SEE SHEET 11558-29-D

20" Butterfly Valve Horizontal Type

20" Nipple

24"x20"Reducer

24" Laurel Street Pipeline

STA.17428.00 End Pipe Installation By Contractor

20"Flanged & Spigot Adaptor

Split Butt Strap Per Std. Dwg. W-51-58

24"x20"Reducer (Flange & Spigot)

Existing 12" C.I.

STA.17442.45

Existing 24" Laurel St. Pipeline

Existing 24"x 12" Cross

Existing 12" C.I.

PLAN DETAIL "C" No Scale

Existing Harbor Drive Pipeline 16" C.I. Concrete Lined Class 200

16" Sleeve

16"Nipple

16" Tee

0+05.04

16" 11¼° Ell

16"Nipple

0+13.93 Begin Pipe Installation by Contractor

16" 45° Bend

0+12.69

16" C.I.

SCALE: Horiz. 1"=30' Vert. 1"=6'

PLAN DETAIL "A" Not to Scale

End Pipe Installation By Contractor 0477.0

16"C.I.

16"45°Bend S & S

0480.79

16"Gate Valve With By Pass

16" Nipple

20"Flange & Spigot Adapter

20" Butterfly Valve Horizontal Type

24"x20" Reducer (Flanged & Bell or Spigot)

Weld Joint

24" Laurel St. Pipeline

Existing 16"C.I. Harbor Drive Pipeline

16" Sleeve

16" Nipple

0489.79

16"Gate Valve with By Pass

20"x16" Reducer

20x16 Cross

16" Nipple

16" Sleeve

STA.0491.00 Begin Pipe Installation By Contractor

Existing 16" Embarcadero Pipeline

8'

PLAN DETAIL "B" Not to Scale

NOTE: FOR EXACT LOCATION OF ELECTRIC CABLES CONTACT JACK BROWN, SAN DIEGO GAS & ELECTRIC, BE-2-4252, EXT. 6-214, 48 HOURS IN ADVANCE OF EXCAVATION.

SHADED CONNECTION DETAIL AREAS SHALL BE INSTALLED BY CITY FORCES.

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R.E. Grahaw UTILITIES DIRECTOR	[signature] CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 85383 FILED FEB. 10, 1961	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 1, 1961

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK

WATER ESMT. - Nly of Laurel St. bet. Pacific Hwy & North Harbor Drive
TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 28 OF 39 SHEETS

W.O. NO. 17430

[signature] CITY ENGINEER 6/29/68 DATE

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.J.-B.P.	[signature]	6-1968	

DIVISION HEAD

DESIGN ENGINEER

CONTROL CERTIFICATION

204 - 1715 LAMBERT COORDINATES

CONTRACTOR DATE STARTED

INSPECTOR DATE COMPLETED

11558-28-D

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

24" CONCRETE STEEL CYLINDER PIPE CLASS 150

EQUATION 12433.93 Back = 12418.95 Ahead

12422 24" S.Side Outlet

12422 24" S.Side Outlet

PACIFIC HIGHWAY

Ground Line

3/4" H.P. Gas El. Unknown

4 M.T.O. TELE. El. Unknown

3" 12 K.V. Cable El. Unk. (Dead)

2 MTD Tele. El. Unknown

4 M.T.O. Cable

4" H.P. Gas

12" C.I.

St. Lt. Cable

Signal Cable

10" Sewer Abandoned

Top of 24" Pipe

12" Sewer

127 LF 42" casing TO BE JACKED

51" Sewer

El. 1.0

El. 1.0

El. 1.0

El. 1.0

El. 3.0

Street Surface

St. Lt. Cable

Traffic Pad

Top of Pipe

Bottom of Pipe

El. 5.5

El. 9.0

El. 15.6

4-4" Conduits In Conc. El. Unknown

14" Sewer

821

54" CASING TO BE JACKED

FIELD WELDED JOINTS

24" CONCRETE STEEL CYLINDER PIPE CLASS 150

9446.86

9460.00

11742.39

12215.35

12433.93

12446.00

13436

13446.00

14456

14469

15446.00

15460.00

16425

16446.00

17442.00

74+00

B.M. B.P. in top of Pacific Hwy at Laurel Elev. 20.4

SOLAR AIRCRAFT

MATCH LINE SEE 11558-28-D

SEE SHEET 2

212.47'

12 K.V. Cable

4 M.T.O. Tele.

Compounded Water Meter

One 2" Water

Existing 16" C.I.

LAUREL ST.

Existing G.W.S.

A.C. on 6" Conc. Base Pave.

3" H.P. Gas

50 PR. Tele.

St. Lights

St. Lt. Cable

12" C.I. on R.E.

6" Sewer Plugged

12" C.I.

8" C.I.

Plugged

F.H.

Signal Cable

6" Conc. PACIFIC

Water Esmt below M.H.T.L. shown hatched

SCALES: Horiz. 1" = 30'
Vert. 1" = 6'

Ref. Dwg 10015-3-D

STA. 11+14.00 TO STA. 12+32.00 INSTALL 118.00' OF 24" PIPELINE IN CASING PIPE (SEE DETAILS RIGHT)

EQUATION 12433.93 Back = 12418.95 Ahead

STA. 12433.93 Δ = 22°45'54" LT.

Signal Cable

6" Asphalt Conc. Plug, 15' C.I. 1 ft. East of Water M.H.

Water M.H. (To remain in place)

Existing 12" C.I.

R.R. Signal

Traffic Pad

Traffic Pad Cable

Conc. Plug & Abandon Exist. 16" C.I.

12 K.V.C.

12 K.V.

St. Light

Abandon

CASING PIPE:
34" (for 24" SCRCP) or 30" (for 24" WSP)-1/2" Steel R., or pipe conforming to A.C.T.M. Spec. C-76-577, Table V, Wall C.

Provide "I" & rules & acts equals casing & as shed on two foot centers to allow grout to fill voids around casing.

Sweep Stock

24" C.L.

Pressure Grout Space between Pipes

Pour Concrete in Invert to Spill Flx. of 24" Conc. Steel Pipe

ENCASEMENT DETAIL
(No Scale)

A.T. & S.F. R/W

A.T. & S.F. MAIN LINE R.R.

STA. 14+31.00 TO STA. 15+13.00
INSTALL 82' OF 24" PIPELINE IN CASING PIPE
(SEE DETAILS THIS SHEET)

12422 24" Air Valve

Existing

Proposed

5 Ducts

3" H.P. Gas

Exist. 16" C.I.

24" LAUREL STREET PIPELINE

Cap, Plug & Abandon Existing 18" C.I.

Conduits in Conc.

3" H.P. Gas

St. Lt. Cable

STA. 17+42.45 TYPE CONN. TO EXIST. 24" W.S.P. CONC. SEE DETAIL "C" SHEET 2

22.1'

SEE SHEET 2

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R.F. Brahm UTILITIES DIRECTOR	B. Hellmann CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 655835 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 21 FILED FEB. 13, 1963

WATER ESMT.- Nly of Laurel Street from Pacific Hwy wly. TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 29 OF 39 SHEETS

W.O. NO. 17430

E.F. Bachmann 6/24/68
CITY ENGINEER DATE

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.J.		6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

204-1715
COORDINATE (GRID) DATUM

CONTRACTOR

INSPECTOR

DATE STARTED

DATE COMPLETED

11558-29-D

Existing Sewer lines shown thus ——— S ———
Existing Water lines shown thus ——— W ———

NOTE
[illegible] for S & D view Sewer line.
Cap [illegible] for W Water line.

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 81
OFFICE OF THE CLERK

Scale 1" = 30'

PAN PACIFIC FISHERIES INC.

Existing wharf - plank deck

outface of wall

N 35° 11' 55" E

10'

Δ 39° 53' 35"

N 75° 05' 30" E

232.67'

100'

12.5'

25'

S 70° 07' 20" W

49.32'

EDGE OF GUTTER
OUTFACE OF CURB

8" V.C.

S 62° 37' 13" E

258'

6" WATER MAIN

75.29

12.5'

N 11° 53' 30" W

AMERICAN TUNA BOAT ASSOCIATION

General Utility Esmt. Shown Hatched

S 58° 45' 30" W

257.4'

10" V.C.

253.52'

520'

6" WATER MAIN

OUTFACE OF CURB

Base Line

F.H.

Associated Oil Co.

Union Ice Co

Crofton Diesel Engine Co

American Tuna Boat Ass'n

FENCE 10'±

S 89° 54' 30" E

S 70° 00' 30" W 102.16'

120'

145.06'

S 70° 00' 30" W

181.50'

5.00'

M.H. #6

Wall 105.05'

SEE 11558-7-D

Float

Float

Float

U.S. NAVY FLEET LANDING

U.S. BULKHEAD LINE

BASE LINE N 00° 01' 40" E 329.30'

Curb Face

HARBOR DRIVE (NOT A CITY STREET)

NORTH 200'

N 00° 01' 40" E 246.38'

East property line of Harbor Drive

South property line of F Street

FOR ESMT SEE 11557-13-D

FOR ESMT SEE 11558-7-D

BAY OF SAN DIEGO

Ref. HARBOR Dwg
58-L-9
58-L-7

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R.E. Grahe UTILITIES DIRECTOR	J. Bildemann CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 685833 FILED FEB. 15, 1965	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 12, 1965

GENERAL UTILITY ESMT. - on "G" St. Pier. TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 30 OF 39 SHEETS

W.O. NO. 17430

E.T. Hanrahan 6/24/68
CHIEF ENGINEER DATE — DIVISION HEAD

DESCRIPTION	BY	APPROVED DATE	FILMED
ORIGINAL	R.C.J.	6/24/68	

DESIGN ENGINEER

CONTROL IDENTIFICATION
198-1715
LAMBERT COORDINATES

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

11558-30-D

Sta 230

SCALE 1" = 30'

U. S. BULKHEAD LINE

S 89° 37' 30" W

STANDARD OIL COMPANY

16" C.I. Water Main

BELT

WATER ESMT below M.H.T.L. shown hatched

CALIFORNIA CARTAGE COMPANY INC.

ATCHISON TOPEKA AND SANTA FE RAILROAD COMPANY

For esmt see 11558-16-D

N 15° 39' E

N 55° 39' E 138'

Sta. 12100 on 16" WATER MAIN

STREET (NOT A CITY STREET)

Face of curb

Face of curb

BLDG.

N 33° 09' E 10' A.C.

SCHLEY STREET (NOT A CITY STREET)

N 33° 09' E PER CITY DWG 11164-D — HARBOR DWG 526-D

BLDG.

SOUTHERN CALIFORNIA FREIGHT LINES

N 56° 51' W 127'

REF. DWGS.

CITY:	HARBOR:
11558-16-D	526-D
11164-D	
3709-W sh #13	

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

WATER ESMT. - in Schley Street (not a City St.) extended below the Mean High Tide Line

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 31 OF 39 SHEETS

W.O. NO. 17430

CITY ENGINEER — DATE — DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.L.	O.K.	6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

192-1725
LAMBERT COORDINATES

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

11558-31-D

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Graham UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. R51433 FILED FEB. 19, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 37 FILED FEB. 19, 1963

POLICE STATION

HIGHWAY

DRIVE

Ely line of Pacific Hwy Produced

N 01°03' W

N 00° 01' 40" E

N 01°03' W

340'±

FERRY

LANE

Water Esmt shown hatched

Scale 1" = 40'

For Esmt see 11558-33-D
MATCH LINE

N 89°58' 20" W

N 89°58' 20" W 131.44'

N 39°10' E 132'±

N 42°45' W 22.00'±

N 28°41' W 142'±

N 20°22' W 109'±

Tele Cables Overhead

Tel Cables Overhead

Top Line of Coping

Bulk Head

Curb

Curb

Curb

Curb

20'

10'

15'

10'

5'

12'

22'

FERRY
SHOREBOAT DOCK

FIRE STATION

SAN DIEGO SEAFOOD MART

HARBOR

COMMERCIAL FISHERMANS PIER

MARKET

Rock Wall

Rock Wall

Curb

Curb

Curb

Curb

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

(As Dedicated)

PACIFIC HIGHWAY

KETTNER

MEAN HIGH TIDE LINE

HARBOR

S 89°56'48" E (Par. 6/55-7-R)

Δ = 39°07'30"
R = 440'
L = 300.46

LANE

N 00°01'40" E 477'

N 89°58'20" W 35.7

N 89°58'20" W 721'

S 20°49'18" W (Par. 6/55-7-R)

DRIVE

16 C.T.

FERRY

FOR ESMT SEE 11558-32-D

15' 0 15'

N 89°58'20" W 328'

20' WATER LINE FOR ESMT SEE 11558-35-D

RIP RAP WALL

U. S. BULKHEAD LINE N 89°37'30" E

SCALE 1" = 100'

N

Water Esmt below M.H.T.L. shown hatched

SAN DIEGO BAY

Ref Dwgs
6/55-7-R
4-L-18 HARBOR

WATER ESMT. - sly of Harbor Dr. & ely of Ferry Lane TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 33 OF 39 SHEETS

W.O. NO. 17430

E. F. Gabrielson 6/29/68
DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RCJ		6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

198-1715
ASBUILT SUPERVISOR

CONTRACTOR

INSPECTOR

DATE STARTED

DATE COMPLETED

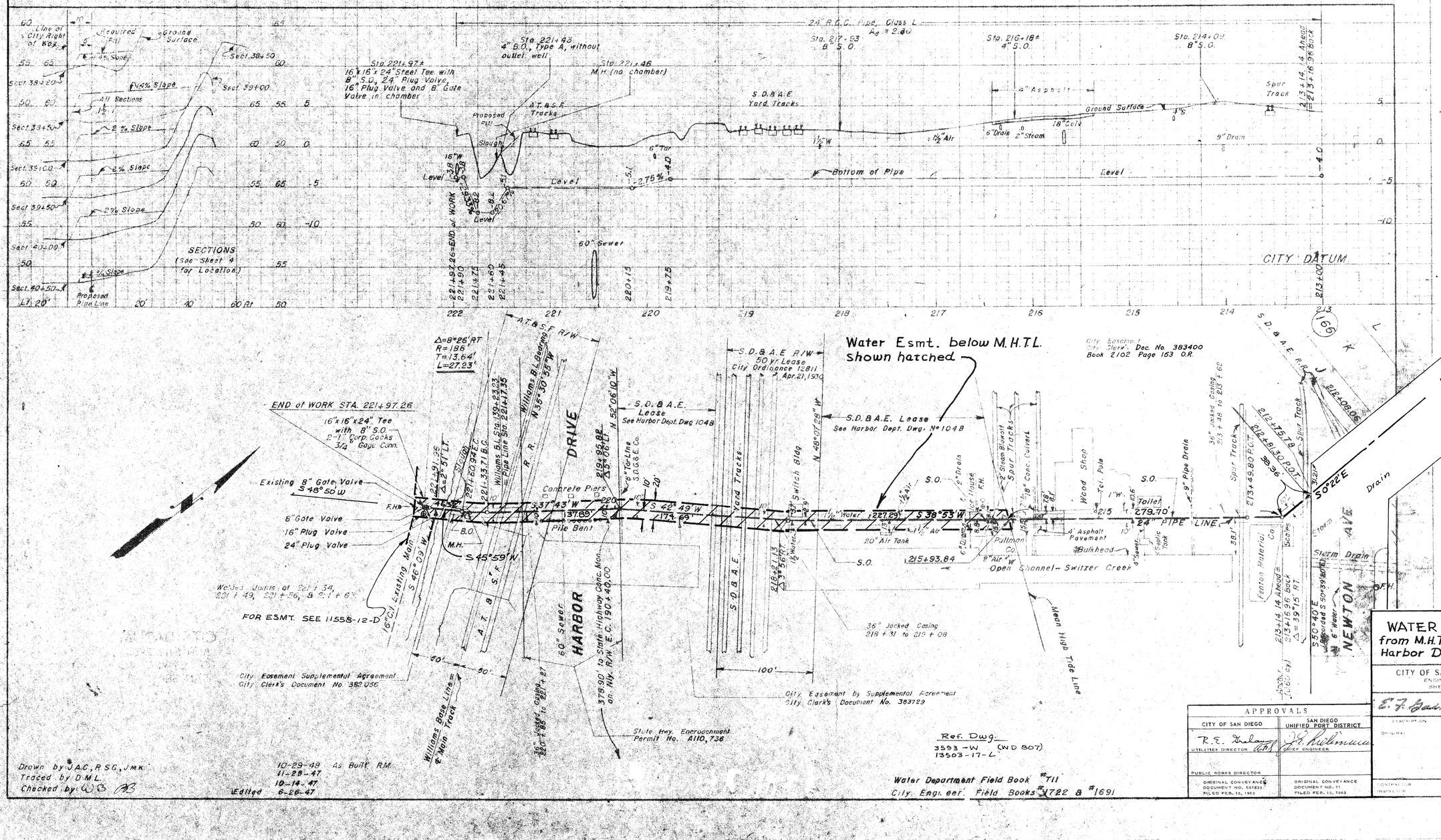
11558-33-D

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Hendy 6/28 UTILITIES DIRECTOR	J. E. Kuhlmann CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651833 FILED FEB. 19, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 19, 1963

November 18, 2015
Item No. 11
Supporting Document No. 3

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3998
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK



Drawn by J.A.C., R.S.G., J.M.K.
Traced by D.M.L.
Checked by: [illegible]

10-29-48 As Built R.M.
11-25-47
10-14-47
Edited 6-26-47

Ref. Dwg.:
3593-W (W.D. 807)
13503-17-L

Water Department Field Book #711
City Engineer's Field Books #1722 & #1691

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Dolan, UTILITIES DIRECTOR	J. E. Kuhlmann, CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 551823 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963

WATER ESMT. - Switzer Creek from M.H.T.L. to 16" water main s'ly of Harbor Drive. TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 34 OF 39 SHEETS

W.O. NO. 17430

E. Z. Hardcastle 6/24/68
DIVISION HEAD

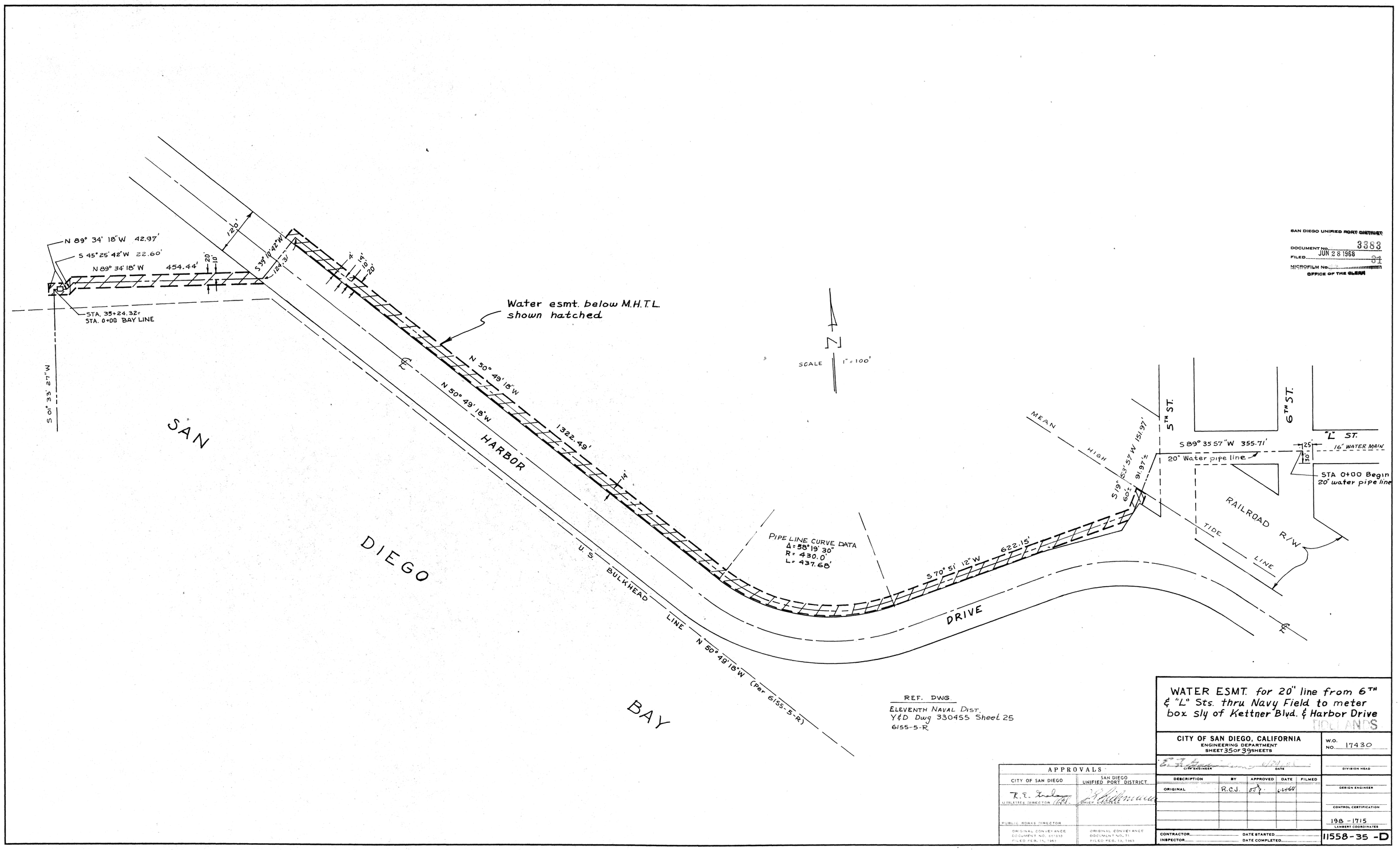
DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.G.J.		6/24/68	

DESIGN ENGINEER

CONTRACT IDENTIFICATION
194-1721

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

11558-34-D



SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK

WATER ESMT. for 20" line from 6TH & "L" Sts. thru Navy Field to meter box sly of Kettner Blvd. & Harbor Drive

TIDELANDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 35 OF 39 SHEETS

W.O. NO. 17430

CITY ENGINEER — DATE — DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.J.	[illegible]	6-24-68	

DESIGN ENGINEER

CONTROL CERTIFICATION

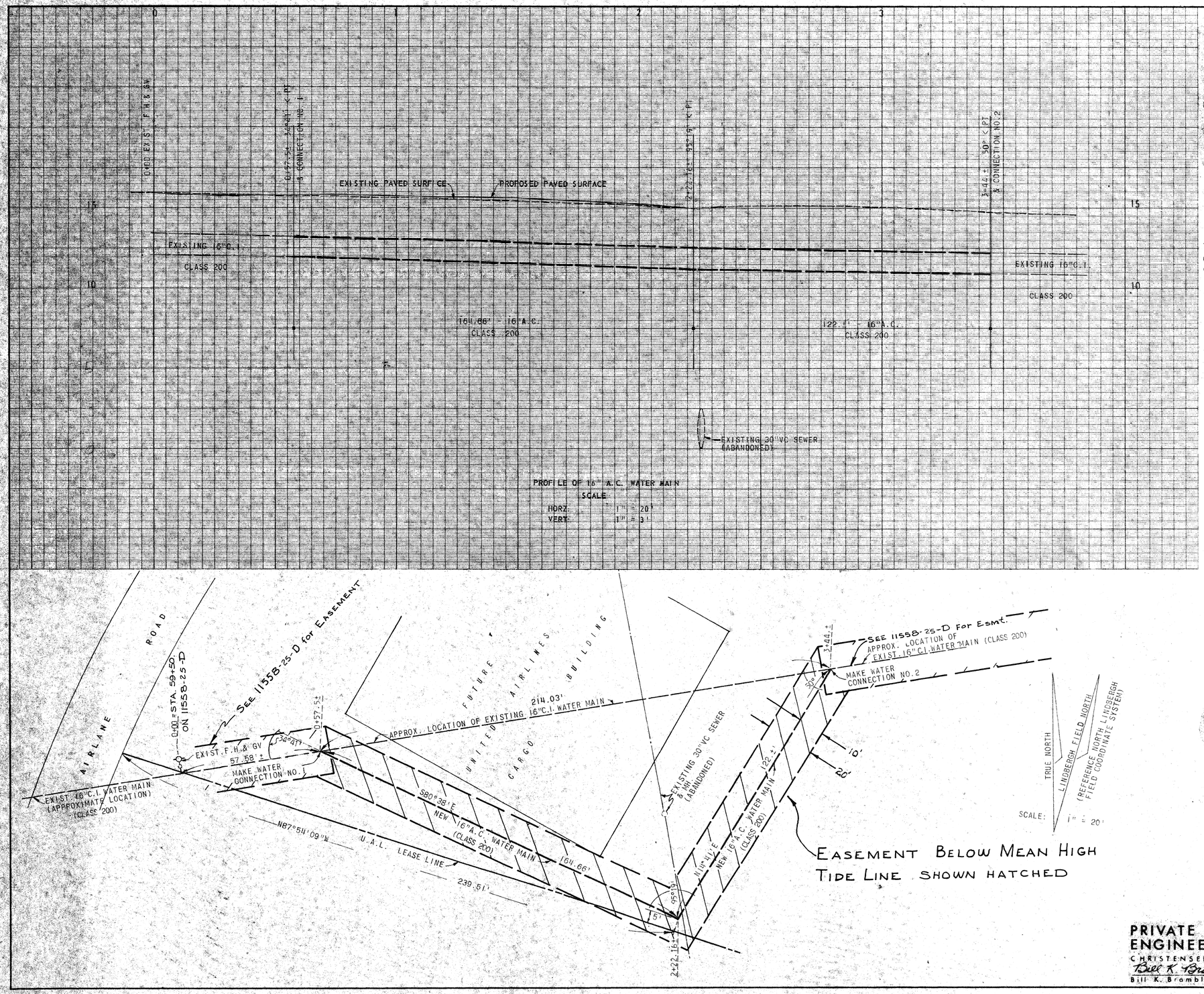
198 - 1715
LAMBERT COORDINATES

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

11558-35 -D

APPROVALS

CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. [illegible] UTILITIES DIRECTOR	[illegible] CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. 651333 FILED FEB. 15, 1963	ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 13, 1963



WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE FOLLOWING STANDARD DRAWINGS AND SPECIFICATIONS OF THE CITY OF SAN DIEGO.

SPECIFICATIONS

PART I FILED APRIL 9, 1958 INCLUDING AMENDMENTS TO PART I FILED APRIL 8, 1959 AND NOVEMBER 29, 1962; PART I, SECTION 1, FILED APRIL 5, 1967 ,, PART II, FILED DECEMBER 14, 1966; PART III FILED FEBRUARY 16, 1966; PART IV FILED FEBRUARY 25, 1966; PART V FILED MARCH 1, 1966 SPECIAL CONDITIONS P-18 REVISED NOVEMBER 21, 1966, HERETO ATTACHED.

IMPROVEMENTS	STD DWGS	SYMBOL
A.C. WATER MAIN & APPURTENANCES	W-6-59; W-61-60	
LEGEND EXISTING WORK	P-1-56	

REFERENCE DRAWINGS

6112-7 W

THE COST OF WATER MAIN CONNECTIONS ON THESE PLANS ARE AS FOLLOWS:

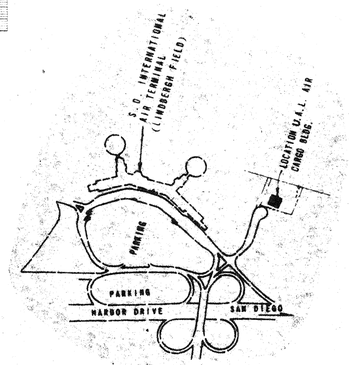
CONNECTION NO. 1 $ 971.00

CONNECTION NO. 2 $ 971.00

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

BENCH MARK

U.S.C.& G. DISC # K899 IN
NORTH FACE OF AEROSPACE BLDG.
ELEV: 15.851 (M.L.L.W. DATUM)



LOCATION MAP
NO SCALE

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR R.E. Gulow	CHIEF ENGINEER J.B. Lichtenauer
PUBLIC WORKS DIRECTOR	
DOCUMENT NO. 651932 FILED FEB. 15, 1963	DOCUMENT NO. 71 FILED FEB. 12, 1963

PRIVATE CONTRACT ENGINEER OF DESIGN

CHRISTENSEN, EVENSON & ASSOCIATES
Bill K. Bramble
Bill K. Bramble, R.C.E 8102

WATER EASEMENT- RELOCATION OF 16" LINE IN LINDBERGH FIELD N'ly of N. HARBOR DR. W'LY OF LAUREL ST. FOR UNITED AIRLINES CARGO BUILDING

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 36 OF 39 SHEETS

W.O. NO. 17430

CITY ENGINEER DATE

DIVISION HEAD

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	R.C.J.		6-14-61	

DESIGN ENGINEER

CONTROL CERTIFICATION

206-1707 LAMBERT COORDINATES

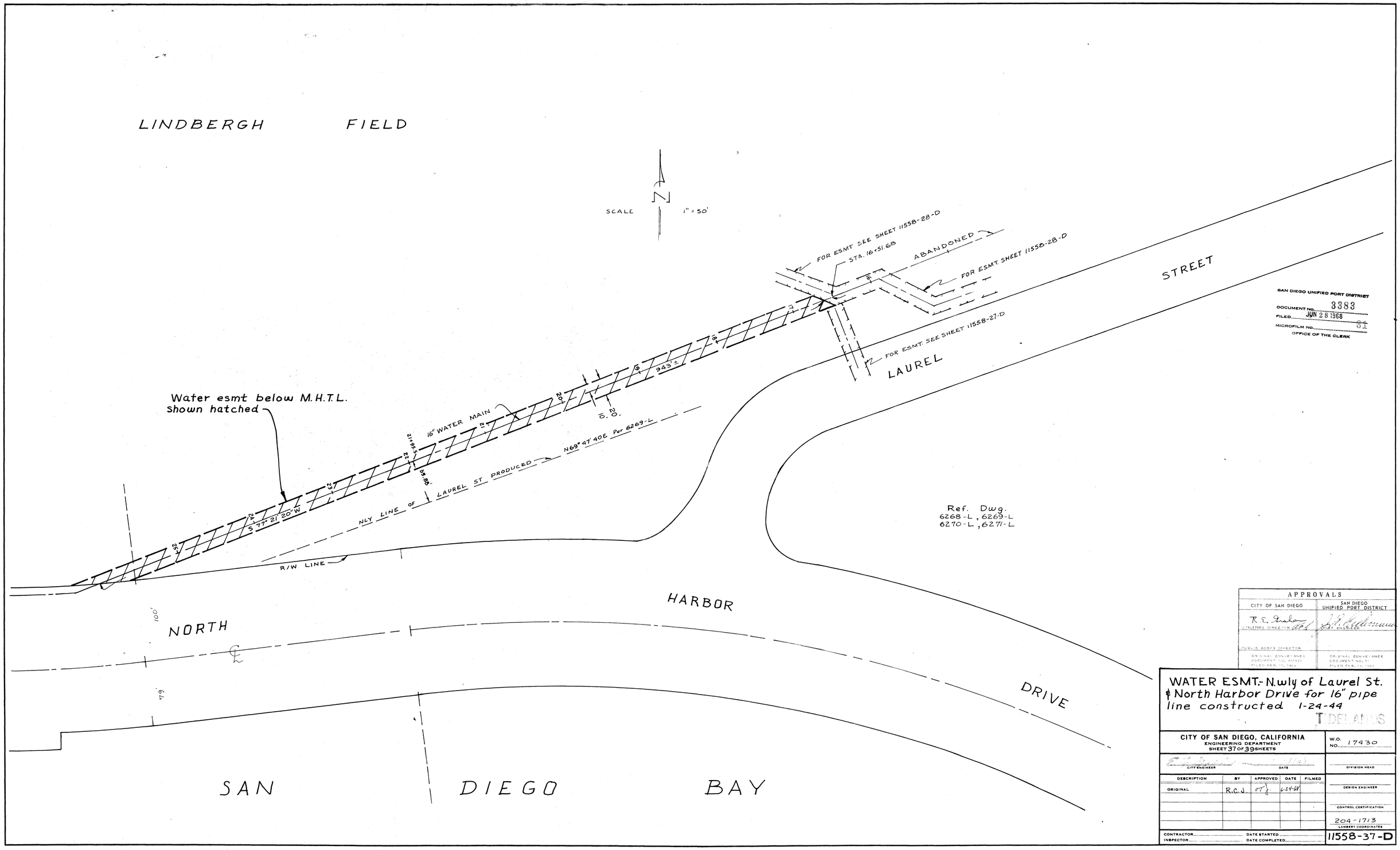
CONTRACTOR DATE STARTED

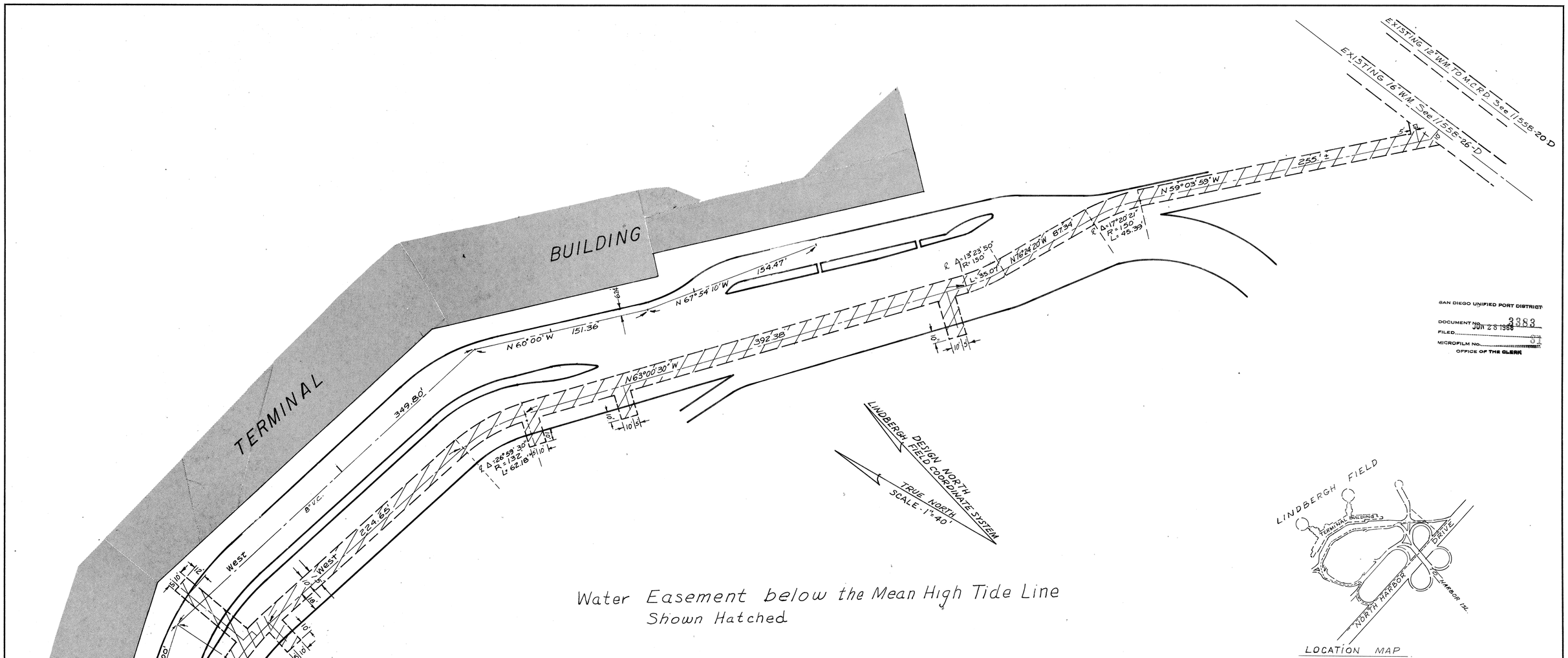
INSPECTOR DATE COMPLETED

11558-36-D

A-5781

A-5781


LINDBERGH FIELD
SCALE 1" = 50'
N
FOR ESMT SEE SHEET 11558-28-D
STA. 16+51.68
ABANDONED
FOR ESMT. SHEET 11558-28-D
FOR ESMT. SEE SHEET 11558-27-D
STREET
LAUREL
Water esmt below M.H.T.L. shown hatched
16" WATER MAIN
943'±
N69° 47' 40E Per 6269-L
NLY LINE OF LAUREL ST PRODUCED
S 77° 21' 20" W
R/W LINE
Ref. Dwg.
6268-L, 6269-L
6270-L, 6271-L
NORTH
HARBOR
DRIVE
SAN DIEGO BAY
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO. 31
OFFICE OF THE CLERK
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
UTILITIES DIRECTOR
CHIEF ENGINEER
PUBLIC WORKS DIRECTOR
ORIGINAL CONVEYANCE DOCUMENT NO. 651633 FILED FEB. 11, 1963
ORIGINAL CONVEYANCE DOCUMENT NO. 71 FILED FEB. 12, 1963
WATER ESMT.- N.wly of Laurel St. & North Harbor Drive for 16" pipe line constructed 1-24-44
TIDELANDS
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 37 OF 39 SHEETS
W.O. NO. 17430
CITY ENGINEER
DATE
DIVISION HEAD
DESCRIPTION
BY
APPROVED
DATE
FILMED
ORIGINAL
R.C.J.
6-24-68
DESIGN ENGINEER
CONTROL CERTIFICATION
204-1713
LAMBERT COORDINATES
CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED
11558-37-D



Water Easement below the Mean High Tide Line
Shown Hatched

REF DWG.
PORT DIST. DWGS.
707-3, 707-4,
707-8, 707-22
CITY DWGS.
13036-1-705 D

LOCATION MAP

SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT NO. 3383
FILED JUN 28 1968
MICROFILM NO.
OFFICE OF THE CLERK

APPROVALS	
CITY OF SAN DIEGO	SAN DIEGO UNIFIED PORT DISTRICT
R. E. Hudson UTILITIES DIRECTOR	CHIEF ENGINEER
PUBLIC WORKS DIRECTOR	
ORIGINAL CONVEYANCE DOCUMENT NO. (FILED FEB. 15, 19__)	ORIGINAL CONVEYANCE DOCUMENT NO. (FILED FEB. 13, 1968)

WATER EASEMENT - in Lindbergh Field Terminal Area for the Terminal Building

TIDELANDS

APPROVALS	
DEPARTMENTAL	ENG. DEPT. DIVISION OR SECTION
PLANNING	CONST. INSPECTION
PROPERTY	ELECTRICAL
PUBLIC WORKS	FIELD CHECK
RECREATION	GRADES AND DRAINS
UTILITIES	HIGHWAYS
	MONUMENTS
STRUCTURAL	PARKS
TRAFFIC	SEWERAGE
WATER	STREET ACTIONS

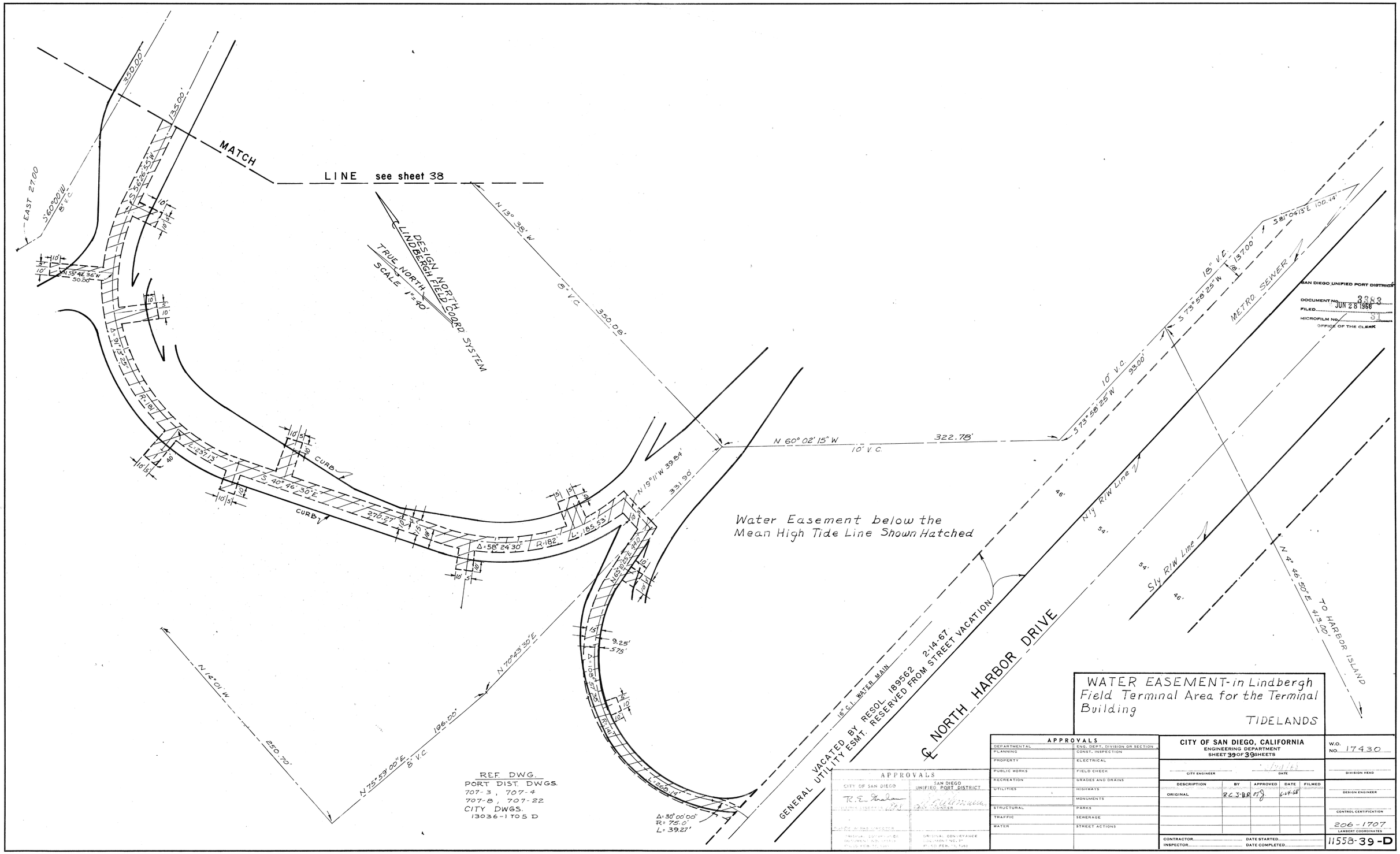
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 38 OF 39 SHEETS

CITY ENGINEER — DATE

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RJG	[illegible]	6-24-68	

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

W.O. NO. 17430
DIVISION HEAD
DESIGN ENGINEER
CONTROL CERTIFICATION 206-1707
LAMBERT COORDINATES
11,558-38-D


MATCH LINE see sheet 38
DESIGN NORTH LINDBERGH FIELD COORD SYSTEM
TRUE NORTH
SCALE 1"=40'
N 13° 38' W
8" V.C.
350.08'
N 60° 02' 15" W
322.78'
10" V.C.
S 73° 58' 25" W
137.00'
S 81° 04' 13" E 100.44'
18" V.C.
METRO SEWER
10" V.C.
93.00'
S 73° 58' 25" W
N 19° 11' W 39.84'
331.90'
Water Easement below the Mean High Tide Line Shown Hatched
N 1y R/W Line
S 1y R/W Line
N 4° 46' 50" E 413.00'
TO HARBOR ISLAND
16" C.I. WATER MAIN
VACATED BY RESOL. 189562 2-14-67
GENERAL UTILITY ESMT. RESERVED FROM STREET VACATION
℄ NORTH HARBOR DRIVE
N 70° 43' 30" E
196.00'
N 75° 59' 00" E
8" V.C.
N 14° 01' W
250.70'
Δ=30° 00' 00"
R= 75.0'
L= 39.27'
CURB
S 40° 46' 30" E
270.27'
Δ=58° 24' 30"
R=182'
L=185.53'
L=237.13'
R=181'
EAST 27.00
S 60° 00' W
8" V.C.
350.00'
135.00'
S 56° 26' 55" W
N 55° 42' 36" W
50.00'
Δ=91° 13' 25"
Δ=108° 57' 38"
R=141'
L=268.14'
9.25'
5.75'
REF. DWG.
PORT DIST. DWGS.
707-3, 707-4
707-8, 707-22
CITY DWGS.
13036-1 TO 5 D
SAN DIEGO UNIFIED PORT DISTRICT
DOCUMENT No. 3383
FILED JUN 28 1968
MICROFILM No. 31
OFFICE OF THE CLERK
WATER EASEMENT-in Lindbergh Field Terminal Area for the Terminal Building
TIDELANDS
APPROVALS
CITY OF SAN DIEGO
SAN DIEGO UNIFIED PORT DISTRICT
CITY ENGINEER
DATE
DESCRIPTION
BY
APPROVED
DATE
FILMED
ORIGINAL
R.C.J-B.R.
6-24-68
CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED
CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 39 OF 39 SHEETS
W.O. NO. 17430
DIVISION HEAD
DESIGN ENGINEER
CONTROL CERTIFICATION
206-1707
LAMBERT COORDINATES
11558-39-D

September 10, 2015

San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108-2700
Attn: Wayne Chiu
sandiego@waterboards.ca.gov

Sent via email

Re: Environmental Groups Comments on Tentative Order R9-2015-0100; Receiving Water Limitations Alternative Compliance Pathway

Dear Wayne Chiu, Laurie Walsh, and Christina Arias:

Thank you for the opportunity to comment on Tentative Order R9-2015-0100 ("Tentative Order", "San Diego Order", or "TO"). San Diego Coastkeeper, Coastal Environmental Rights Foundation, and Surfrider Foundation San Diego Chapter ("Environmental Groups") are local non-profit organizations dedicated to the protection and restoration of regional waters and related environmental issues in San Diego. Our groups represent numerous San Diegans, act through community involvement, regulatory participation, and legal action to ensure the protection and restoration of our region's ocean, bays, and inland waters.

I. Introduction

Since the passage of the 2013 MS4 permit with our support, Environmental Groups have maintained the position that our regional stormwater permit is one that, if properly implemented with the appropriate resources and political will, could - and perhaps would - result in significant improvements to our waterways. We appreciate that the 2013 permit was born out of a more collaborate approach to permit development with broad stakeholder involvement. And while no single interest group received each and every provision it had hoped for, most recognize that the 2013 permit at least has the potential to realize significant water quality improvements.

The proposed draft language on alternative compliance for receiving water limitations ("safe harbor"), however, instead takes us in a very different direction than the one contemplated by the existing permit. The San Diego Regional Board's objective for the safe harbor development process was to come up with an, "ambitious, rigorous and transparent alternative compliance path," that would allow Copermittees, "to come into compliance with receiving water limitations".[1] Instead, adoption of the Tentative Order as written would result in a safe harbor

[1] *See* Public Workshop Agendas, April 28, 2015, May 21, 2015 and June 30, 2015; and Attachment 2 to TO No. R9-2015-0100, page F-61.

protection lacking guidance, objectivity, and accountability, that is inconsistent with Order WQ 2015-0075 (or "State Board's Order") and its findings, that violates the Clean Water Act and its governing regulations, and that would likely simply mimic the failed iterative approach.

Importantly, the State Board's Order provided specific guiding principles for other regions to follow when developing safe harbor provisions.[2] The State Board's Order repeatedly points out the acceptable justifications for and mechanisms through which a safe harbor provision would be allowable. The Tentative Order as drafted, however, ignores several of the principles (as discussed in more detail below) and it fails to adopt mechanisms that assure the process and outcomes of the State Board's Order and the Clean Water Act are met. As such, the TO is inconsistent with the State Board's Order. The San Diego Regional Board could cure this defect by instead looking to the guidance and mechanisms established in the State Board's Order, and in particular by adopting the Reasonable Assurance Analysis and Enhanced Watershed Management Plan (EWMP) approaches taken in the LA region. Combined, these approaches allow for the ambitious, rigorous, and transparent pathway to compliance, while providing for multi-benefit best management practices.

Furthermore, as drafted the proposed TO would violate the Clean Water Act. Specifically, the safe harbor provision – one that would excuse compliance with Water Quality Standards (WQS) in the Permit's Receiving Water Limitations (RWL) section - is illegal for several principal reasons: 1) the safe harbor violates anti-backsliding requirements; 2) without a more detailed accompanying analysis, the safe harbor violates state and federal antidegradation requirements; 3) the safe harbor violates CTR compliance deadlines; and 4) the Regional Board has thus far failed to make sufficient findings or provide evidence to support the inclusion of the safe harbor in the Tentative Order.

To avoid this result and for the reasons we have expressed to date in workshops, previous public comments to both the Regional Board and State Board, and below, Environmental Groups respectfully request the Regional Board reconsider the adoption of this draft language and strike the entire draft provision that would adopt a safe harbor, and instead require implementation of watershed management programs as one way to achieve, rather than demonstrate, compliance with RWLs and WQSs. Should the Board choose to adopt safe harbor language despite these concerns, we respectfully request the TO be made consistent with the State Board's Order through an amendment that includes the following: (1) the Reasonable Assurance Analysis guidance, modeling, and standards that were expressly approved by the State Board's Order and that are the lynchpin of the safe harbor approach, (2) a requirement that multi-benefit projects that incorporate pollutant removal and water supply augmentation as envisioned by the Los Angeles EWMPs be a necessary element of compliance BMPs, and (3) removal of the iterative process from the safe harbor scheme.

II. The Tentative Order As Drafted Is Inconsistent With The State Board's Order

The State Board makes their intentions very clear in their Order when they state, quite simply, "we believe that the MS4 permits should incorporate a well-defined, transparent, and finite alternative path to permit compliance that allows MS4 dischargers that are willing to pursue

[2] Order WQO 2015-0075, pages 51-52.

significant undertakings beyond the iterative process to be deemed in compliance with the receiving water limitations."[3]

The State Board's Order provided specific guidance principles for other regions to follow when developing safe harbor provisions.[4] Of particular relevance to the Tentative Order, the following principles are to apply to any region's safe harbor provisions:

1. The receiving water limitations provisions…should not deem good faith engagement in the iterative process to constitute such compliance.[5]
2. Permits should incorporate an ambitious, rigorous, and transparent alternative compliance path.[6]
3. The safe harbor should encourage multi-benefit regional projects that capture, infiltrate, and reuse storm water and support a local sustainable water supply.[7]
4. The safe harbor should have rigor and accountability.[8]

In upholding the LA Order's safe harbor scheme, the State Board affirmed in particular the Reasonable Assurance Analysis and multi-benefit requirements and incentives in the LA Order. With regard to the principles, the Board specifically stated that they, "direct all regional water boards to consider the WMP/EWMP approach to receiving water limitations compliance when issuing Phase I MS4 permits going forward,"[9] and that, they, "expect the regional water boards to follow these principles unless a regional water board makes a specific showing that application of a given principle is not appropriate for region-specific or permit-specific reasons."[10] As discussed below the Tentative Order is inconsistent with the State Board's Order insofar as it fails to follow the principles listed above and provides no specific showing as to why a given principle is not appropriate for the San Diego MS4 permit.

a. The Tentative Order is Inconsistent with the State Board Order Because It Contains No Reasonable Assurance Analysis ("RAA"), Protocols, or Guidelines to Ensure the Copermittee's Analysis and Resulting Plans Will Actually Achieve RWLs and WQSs.

While Environmental Groups fully support the comments submitted on the LA Order and State Board Order by NRDC, LA Waterkeeper, and Heal the Bay regarding the deficiencies and illegalities of the LA Order, and we agree the L.A. Order is illegal, at the very least the State Board-approved Order contained a Reasonable Assurance Analysis (or "RAA") based on modeling, as well as associated guidelines and protocols under which watershed strategies and safe harbor analyses must be conducted. Together the RAA and guidelines and protocols add a considerable degree of objectivity, rigor, and accountability not present in the San Diego Tentative Order or 2013 MS4 permit. In fact, earlier San Diego draft language had contained

[3] Order WQO 2015-0075, at page 16.
[4] Order WQO 2015-0075, pages 51-52.
[5] Order WQO 2015-0075, page 51.
[6] Id, page 52.
[7] Id.
[8] Id.
[9] Id. At 51
[10] Id.

the word "model", but it has since been removed.[11] Besides lacking the guidance that exists in the L.A scenario, the Tentative Order before us requires no validation, peer review, or minimum data requirements, nor does it appear to consider such requirements necessary. In short, it offers no guidance or protocols whatsoever to Copermittees, the citizenry, the State, and Regional Board.[12] Despite its own claims in the Fact Sheet[13], the Tentative Order is not "transparent", nor is it "ambitious" or "rigorous", and it lacks "rigor and accountability" and is inconsistent with the State Board's Order.[14]

The State Board-approved LA permit scheme, on the other hand, includes the requirement to conduct a Reasonable Assurance Analysis ("RAA") for both WMPs and EWMPs. The relevant permit language describes:

> (5) Permittees shall conduct a Reasonable Assurance Analysis for each water body-pollutant combination addressed by the Watershed Management Program. A Reasonable Assurance Analysis (RAA) shall be quantitative and performed using an approved model in the public domain. Models to be considered for the RAA, without exclusion, are the Watershed Management Modeling System (WMMS), Hydrologic Simulation Program-FORTRAN (HSPF), and the Structural BMP Prioritization and Analysis Tool (SBPAT). The RAA shall commence with assembly of all available, relevant subwatershed data collected within the last 10 years, including land use and pollutant loading data, establishment of quality assurance/quality control (QA/QC) criteria, QA/QC checks of the data, and identification of the data set meeting the criteria for use in the analysis. Data on performance of watershed control measures needed as model input shall be drawn only from peer-reviewed sources. These data shall be statistically analyzed to determine the best estimate of performance and the confidence limits on that estimate for the pollutants to be evaluated. The objective of the RAA shall be to demonstrate the ability of Watershed Management Programs and EWMPs to ensure that Permittees' MS4 discharges achieve applicable water quality based effluent limitations and do not cause or contribute to exceedances of receiving water limitations.[15]

The guidelines issued by the LA Regional Board for conducting RAA's go on to discuss the rigor and transparency of the RAA requirements by highlighting the level of detail required in the RAA saying, "the RAA must be adequate to identify the required reduction for each water body-

[11] Language from May 2015 Draft, found at http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/2015-0514_Revised_Draft_RWL.pdf. While the May 2015 language itself was also inconsistent with the State Board Order for failure to include RAAs and other guidance, it did at the very least mention modeling as the acceptable methodology.
[12] See Tentative Order Section B.3.c.1.(b)(i), which calls only for, "an analysis, with clearly stated assumptions".
[13] Attachment 2 to TO No. R9-2015-0100, page F-60.
[14] State Board required principles, Order WQO 2015-0075 at p. 51-52.
[15] Order No. R4-2012-0175 as amended by Order WQ 2015-0075, page 65.

pollutant combination at each compliance deadline and analyze the BMP scenario to achieve that deadline."[16]

The RAA in the LA Order and approved by the State Board is a "well-defined, transparent", detailed, pre-reviewed and approved modeling exercise, which includes minimum data point considerations and quality assurance criteria, and which taken together are intended to ensure that Copermittee's plans implement stormwater pollution control measures of the correct type, location, and size to achieve compliance with WQSs in receiving water bodies. The RAA, in fact, forms the bedrock for the plan development, and therefore for pollution control and compliance with the CWA for those Permittees that chose to develop such plans. As noted by the State Board in Order WQ 2015-0075 with respect to the LA MS4 permit,

> …the requirement for a reasonable assurance analysis in particular is designed to ensure that Permittees are choosing appropriate controls and milestones for the WMP/EWMP. Competent use of the reasonable assurance analysis should facilitate achievement of final compliance within the specified deadlines[17].

In stark contrast to the requirements of the State Board-approved LA Order, the San Diego Tentative Order calls only for, "an analysis, with clearly stated assumptions"[18]. The existing WQIPs in the San Diego permit contain no RAA or equivalent, and largely lack any of the objective criteria and guidelines that are present in the RAA.[19] The Tentative Order, then, is neither "well-defined" nor "transparent".[20]

What results from the TO is a completely subjective, ad-hoc process and review without standards or guidance. Importantly the lack of an RAA, standards, and guidance exists not only as related to the actual *development* of watershed plans that would receive full protection under the safe harbor (see above discussion on RAA), but also to staff, Board, and public *review* of those plans. When Board staff were questioned by Environmental Groups at the June 2015 workshop as to whether guidelines, protocols, or other criteria would be developed to dictate how such analyses would be conducted or reviewed, the response was that no such guidance would be developed. In essence, copermittees would be free to devise whatever type or kind of analysis they wish, and if such a plan was acceptable to the Board the safe harbor would apply.

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[16] Guidelines For Conducting Reasonable Assurance Analysis In A Watershed Management Program, Including An Enhanced Watershed Management Program; March 25, 2014; Prepared by Nguyen, Lai, Ridgeway, and Zhu for the Los Angeles Regional Water Quality Control Board, page 4.

[17] Order, at p.37.

[18] Tentative Order, p. 34, Section B.3.c.1.(b).(i).

[19] This issue was brought to light recently in the Regional Board's review of the final submitted WQIPs by Copermittees. The Board staff found most, if not all, WQIPs to be noncompliant with the permit. See: http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/wqip/comments/SDWB.pdf last accessed August 17, 2015. Copermittees continue to complain the regulations governing WQIP development are unclear and subjective. The approved RAA methodology that is lacking from the San Diego permit and TO is meant to provide objectivity to the Board, the public, and the Copermittees.

[20] To further illustrate that lack of rigor and transparency in the TO, while the draft TO does include annual milestones that show progress towards a final numeric goal, such milestones "may consist of…other acceptable means." What these means are or might be is entirely lacking in transparency or clarity to both the public and the Copermittees.

Unfortunately the Tentative Order fails to require rigorous or transparent methods for either the regular WQIP or the safe harbor plans. As written, the existing San Diego permit and Tentative Order fail to include a rigorous, proven, pre-reviewed, approved test, and further fail to include accompanying guidelines or standards that provide for assurances of compliance. **The result is that the Tentative Order ignores not only the justifications used for developing and supporting the LA Order[21], but also ignores the language and mechanisms by which the LA Order will be implemented and that were expressly approved by the State Board.** In both of these ways the Tentative Order fails to realize the circumstances under which, and justification for, adoption of a safe harbor *might* even be appropriate in San Diego.

The Tentative Order would adopt a process without a performance standard and with no analysis or evidence in the record to demonstrate that implementing the devised plans will actually achieve compliance with WQSs. And while the Tentative Order Fact Sheet professes to incorporate each of the State Board's seven principles[22] the proposed safe harbor, which lacks any form of guidance[23], cannot under any imaginable circumstances be said to be "ambitious, rigorous, and transparent". [24]

These shortcomings are fatal to the Tentative Order's safe harbor inclusion into the San Diego MS4 permit. As such the language should be substantially revised based on comments made to date and herein, or removed altogether. While we acknowledge San Diego is not Los Angeles, the legal and factual basis upon which the LA Order was approved by the State Board very much dictates the acceptable circumstances under which San Diego's safe harbor language might pass muster under the State Board's Order.[25] As written the TO is inconsistent with the State Board's Order and guidelines.

b. The Tentative Order Is Inconsistent with the State Board's Order Because It Allows Good Faith Engagement and Implementation of the Iterative Process to Constitute as Compliance with Receiving Water Limitations

While the Fact Sheet claims that the seven principles included in Order WQ 2015-0075 have been incorporated into this Tentative Order, the Tentative Order fails to assure that "good faith engagement in the iterative process" will not deem a Copermittee in compliance and thus is inconsistent with the State Board's Order.[26] For instance, while the Tentative Order requires the monitoring and assessment program of the safe harbor to demonstrate only, "whether the implementation of the water quality improvement strategies are making progress towards

[21] See comments below, specifically sections III.A.(1)a.-c., for more on the failures of the TO to adequately justify a safe harbor be included in the San Diego MS4 permit.
[22] Attachment 2 to Tentative Order No. R9-2015-0100, page F-60.
[23] For an example of the type of guidance that would be required of any analysis, see Guidelines For Conducting Reasonable Assurance Analysis In A Watershed Management Program, Including An Enhanced Watershed Management Program; March 25, 2014; Prepared by Nguyen, Lai, Ridgeway, and Zhu for the Los Angeles Regional Water Quality Control Board.
[24] For similar reasons the safe harbor fails to incorporate Principle 7 of the State Board which requires "rigor and accountability", and a program that is "transparent". Without more, Environmental Groups and the public are left to guess what "acceptable rational" and "appropriate modifications" are.
[25] See Order WQO 2015-0075. "We expect the regional water boards to follow these principles", p. 51.
[26] Attachment 2 to Tentative Order, Page F-60.

achieving the numeric goals"[27], the TO language does not require achievement of those goals. In actuality, the approach proposed by the draft language mirrors the flawed iterative process from previous permits and will result in more delay and confusion.

While at first glance it might appear that the eventual achievement of WQS and RWL is required to be considered compliant with the safe harbor provision, upon further inspection it becomes clear that this is not the case. Section B.3.c.(1).(c). of the Tentative Order states that "The Copermittee is deemed in compliance during the term of this Order as long as…(a) The Copermittee is implementing the water quality improvement strategies with its jurisdiction developed pursuant to Provision B.3.b.(1) and in compliance with the schedules for implementing the strategies established…".[28] Section B.3.c.(2)(c) states, however, the Copermittee must submit annual report assessments that either, "support a conclusion that: 1) the Copermittee is in compliance with the annual milestones and dates for achievement…, **OR** 2) the Copermittee has provided acceptable rationale and recommends appropriate modifications."[29]

Taken together, it becomes clear that once Copermittees develop a plan that is acceptable to the Regional Board they need only continue to provide "acceptable rationale" and recommend "appropriate modifications" when they fail to implement strategies or achieve the goals set out in their plan, including WQS, RWLs, and perhaps even WQBELs. Such an approach is not "finite", as the State Board Order requires[30], and it fails to necessarily require "significant undertakings beyond the iterative process".

The State Board Order once again makes it clear that such an approach would not be acceptable when it states, "we…ultimately disagree with Permittee Petitioners that implementation of the iterative process does or should constitute compliance with receiving water limitations."[31] The State Board Order discusses at length their position, as follows:

> We can support an alternative approach to compliance with receiving water limitations only to the extent that that approach requires clear and concrete milestones and deadlines toward achievement of receiving water limitations and a rigorous and transparent process to ensure that those milestones and deadlines are in fact met. Conversely, we cannot accept a process that leads to a continuous loop of iterative WMP/EWMP implementation without ultimate achievement of receiving water limitations.[32]

The Tentative Order language itself includes language clarifying that the safe harbor provisions and requirements are little more than a continuation of the, "iterative approach and adaptive management process" in addition to requiring nothing more than an "acceptable rationale and appropriate modifications" to continue receiving protections. With no standards as to what would be considered "acceptable rational" or "appropriate modifications", The Tentative Order

[27] Tentative Order No. R9-2015-0100, Section B.3.c.(1).(c).
[28] Tentative Order No. R9-2015-0100, Section B.3.c.(2)-(a).
[29] Tentative Order No. R9-2015-0100, Section B.3.c.(2)(c), emphasis added.
[30] Order WQO 2015-0075, page 16.
[31] Order WQO 2015-0075, page 10.
[32] Order WQO 2015-0075, page 33.

may require nothing more than a good faith engagement in what, on its face, is a continuing iterative process.[33] In fact, in several places the safe harbor makes it explicitly clear that it embraces the iterative process.[34]

We note that Board staff rejected a proposal by Environmental Groups to include language that would remove a Copermittee from safe harbor protection if annual milestones were not met for two years in a row.[35] Our proposed language would have helped ensure that Copermittees were not deemed in compliance simply for good faith engagement in the iterative process and that strict measurable requirements would continue to be met. The end goal of this suggested language was meant to ensure that if the best laid plans of the jurisdictions were not being implemented for one reason or another, the safe harbor would once again allow for citizen oversight and accountability as the Clean Water Act has always done. That proposal was ignored and instead language was included that would allow the safe harbor to be another version of the existing iterative process so long as a Copermittee who is not meeting its annual milestones (or RWLs, WQSs, or WQBELs) offers an "acceptable rationale and recommends appropriate modifications". This approach is both inconsistent with the State Board's Order and unlawful.[36]

c. The Tentative Order Is Inconsistent with the State Board's Order Because It Does Not Include Requirements for Multi-Benefit Projects or Stormwater Resource Projects

The State Board's Order is based, in part, on a fundamental shift in how stormwater pollution is addressed and the transition of stormwater from a nuisance to an asset (see discussion below in Section III.A.1.). This idea is embodied in the principle that any safe harbor, "should encourage multi-benefit regional projects that capture, infiltrate, and reuse storm water and support a local sustainable water supply."[37]

There are, however, no provisions that encourage or require the inclusion or evaluation of multi-beneficial projects in the San Diego permit. In fact, Environmental Groups failed to find even a single reference to the world "multi-benefit" in the 2013 permit or the Tentative Order, and our review of the eight Water Quality Improvement Plans (WQIPs) found a near total lack of commitment to the development and incorporation of multi-benefit regional projects in the San Diego region. This may be, in part, because San Diego's WQIPs differ in at least one important way from LA's EWMPs. Specifically, the San Diego WQIPs do not require any evaluation of

[33] In several sections of the safe harbor the Board goes through great pains to note that the safe harbor embraces the iterative process.
[34] c(1)(b): "The analysis must be updates as part of the iterative approach and adaptive management process" and c(1)(c): "The specific monitoring and assessments must be updated as part of the iterative approach and adaptive management process".
[35] The relevant language read, "Failure to comply with and to achieve the numeric goals, schedules, strategies, and/or dates under c(1)(a)(i)-(v) for any two consecutive reporting periods will automatically result in that Copermittee's forfeiture of RWL Alternative Compliance status." From SD Coastkeeper's proposed amendments, available at: http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/2015-0603_Enviro_RWL_Proposed_Revisions.pdf. Last accessed August 6, 2015.
[36] *See* comments in Section III below.
[37] Order WQO 2015-0075, p. 52.

collaboration on multi-benefit projects in our region to retain all non-storm water runoff or to retain all storm water runoff from the 85th percentile, 24-hour storm event. Where retention requirements are present in the San Diego permit they exist only for development or redevelopment projects over a certain size. Unlike in the LA Order, then, the San Diego permit does not require, or even incentivize, such multi-benefit evaluations or considerations for general compliance strategies.

Thus, while the Fact Sheet claims this safe harbor incorporates the seven principles of the State Board's Order, it fails to ensure that, "the strategies required to be included in the Water Quality Improvement Plans encourage multi-benefit regional projects that capture, infiltrate, and reuse storm water and support a local sustainable water supply."[38] As such, the TO is inconsistent with the State Board's Order.

d. The Draft Language As Written Would Allow for a Safe Harbor During Plan Review Periods

The San Diego Regional Board staff have made it clear that the Board will not allow a compliance option during plan review. However, the draft as written does exactly that in at least one instance Environmental Groups can think of. Specifically, the safe harbor would still apply between the period where a Copermittee (who is not complying with its annual milestones and dates for achievement) provides to the Regional Board under section (c) an "acceptable rationale" and recommends "appropriate modifications" to their plan, and the period of acceptance by the Regional Board (since section (d) requires express approval by the Board). The lag time between these two instances, which could potentially be as long as a permit cycle, would allow for a safe harbor during the non-attainment and non-acceptance period/during each plan review period. Such an instance would allow for a safe harbor even where the Copermittee was not fulfilling its obligations of its approved plan. To remedy this, section (c)(2) and section (d) should be removed, and strict compliance deadlines with the plan should be required.

III. If Adopted, the Tentative Order Would Be Illegal

As discussed in detail below, the draft language fails to comply with federal and state anti-degradation and anti-backsliding requirements, and allows illegal compliance schedules for the TMDL-based limitations necessary to implement the California Toxics Rule ("CTR").

A. The Draft Language Violates Anti-Backsliding Provisions

The Clean Water Act, through its anti-backsliding provisions, prohibits a permit from being renewed, reissued, or modified with effluent limitations less stringent than the comparable limitations in the previous permit.[39] Water quality based effluent limits in NPDES permits can be revised to be less stringent only where consistent with a TMDL properly incorporated into that

[38] Attachment 2 to Tentative Order R9-2015-0100.
[39] 33 U.S.C. § 1342(o)(1).

permit.[40] And any TMDL implementation must be consistent with the requirements for compliance schedules in NPDES permits.[41]

Federal regulations further require that "when a permit is renewed or reissued, interim effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit."[42] The receiving water limitations in existing MS4 Permits have been required to be incorporated into permits across the state since 1999, and many MS4 permits have included this language for over a decade. Any attempt to now include safe harbors in those permits from the required receiving water limitations would violate anti-backsliding provisions.[43]

Quite simply stated, the draft language as proposed violates the anti-backsliding provisions of the Clean Water Act, and adoption of the safe harbor would be in violation of the law. Any arguments to the contrary or assertions of exceptions or exemptions to anti-backsliding provisions would fail in the context of the San Diego MS4 permit, as discussed in more detail below.

(1) State Board and Los Angeles Legal Justifications for LA Order Are Inapplicable to San Diego Region

The Tentative Order appears to rely exclusively on justifications offered by both the Los Angeles Regional Board and the State Water Board Order WQ 2015-0075 in seeking to include a safe harbor in the San Diego permit. As we did in our comments to the State Board on the LA Draft Order in oral comments on December 2014 and in written comments from January 2015, Environmental Groups finds the Tentative Order's use of information, justifications, and processes gained from permit development in LA (and a long overdue permit at that) and its seemingly wholesale extrapolation of that reasoning, interpretation, and justifications to our region unpersuasive. Below we explore the justifications put forth by the Board to demonstrate why they do not apply outside of the LA region and are why they are wholly inapplicable to San Diego[44].

As mentioned above, the application of a safe harbor that weakens the applicability of RWL language to the San Diego region would fail to meet minimum federal requirements and would constitute a violation of the Clean Water Act's anti-backsliding provisions. The Clean Water Act and associated Federal Regulations, specifically 40 CFR 122.44(l)(1), provide that except in a narrow set of enumerated circumstances, "when a permit is renewed or reissued, interim effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit."

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[40] Id.

[41] See *In the Matter of Star-Kist Caribe, Inc.*, 1989 EPA App. LEXIS 38, at *7 (E.A.B. 1989); 33 U.S.C. § 1313(e)(3)(F); 40 C.F.R. § 122.47.)

[42] 40 C.F.R. 122.44(l)(1).

[43] *See* also United States Environmental Protection Agency Region III letter, "Backsliding is prohibited in NPDES permits. . . . Allowing additional time to complete a task that was required by the previous permit constitutes a less stringent condition and violates the prohibition against anti-backsliding." August 8, 2012.

[44] We should note that Environmental Groups join our sister organizations in Los Angeles in the assertion that the LA permit and Order have similar legal defects.

San Diego's justification for the safe harbor is the same justification used in the LA Order; namely that an exception to anti-backsliding exists.[45] Thus, we turn to the LA Order itself for justification. The LA Order, like this SD Tentative Order, makes slight mention of why the LA permit *may* not violate anti-backsliding[46], but then without discussing the justification in detail the orders simply state that justification isn't necessary because an exception allowing for backsliding exists.[47]

The Tentative Order itself appears to base the bulk of its acceptance that the safe harbor does not constitute backsliding on the LA Regional Board's Response to Comments document, wherein an argument was made that an exception to backsliding exists. The Order includes little analysis as to whether anti-backsliding actually applies (and importantly, the Order does not find that anti-backsliding provisions *do not* apply here), and instead focuses its attention on finding that an exception to backsliding exists in the case of the LA permit. The SD Tentative Order more or less mirrors this language and the related justifications.

The SD Tentative Order Fact Sheet states:

> The alternative compliance pathway option in Provision B.3.c. of this Order was informed by new information available to the Board from experience and knowledge gained through the Los Angeles Water Board's process of developing over 30 watershed-based TMDLs and implementing several TMDLs since the adoption of the previous permits. In particular, the Los Angeles Water Board recognized the significance of allowing time to plan, design, fund, operate and maintain watershed-based BMPs necessary to attain water quality improvements and additionally recognized the potential for municipal storm water to benefit water supply. Thus, even if the receiving water limitations are subject to anti-backsliding requirements, they were revised based on new information that would support an exception to the anti-backsliding provisions.[48]

It is clear, then, that the entire justification for claiming that an anti-backsliding exception applies to the SD Tentative Order is based upon the justifications listed in the LA Order and State Board Order, as we found no additional data or information presented in the SD Tentative Order or accompanying documents.

a. Water Board Rationales Fail to Support an Anti-Backsliding Exception in San Diego: "New Information", Paradigm Shift, Prioritization, and Lessons Learned

The LA Regional Board's Response to Comments upon which the State Board's justification hinges (and upon which San Diego's justification also relies), in turn, states that an exception exists, "if the circumstances on which the previous permit was based have materially and substantially changed since the time the previous permit was issued and would constitute cause

[45] Attachment 2 to Tentative Order No. R9-2015-011, page F-32.
[46] The Fact Sheet states, "although the non-applicability is less clear with respect to regulatory anti-backsliding provisions in 40 CFR 122.44(l)…" Id, p. F-32.
[47] Id.
[48] Attachment 2 to Tentative Order No. R9-2015-0100, page F-32.

for permit modification or revocation or reissuance under 40 CFR section 122.2. Like section 122.41(l), section 122.62 includes new information not available at the time the previous permit was issued as a cause for modification" (p. 51 of Response). The Response then goes on to justify an exception based largely upon the differences between the 2001 and 2012 permits in Los Angeles, a paradigm shift towards treating stormwater as an asset, and information gained during that lengthy 10-plus year time frame.

In stark contrast, no such large time gap between permits and no such large-scale paradigm shifts or information downloads have occurred between any two MS4 permits in San Diego. To its credit, the San Diego Regional Board has continually updated MS4 permits based upon lessons learned and the result has been a series of permits increasingly aimed at integrated water management approaches and watershed-wide planning. So while we disagree with the State Board Order and the LA Regional Board that an exception to anti-backsliding exists in LA based on those lessons learned and shifts in thinking, it is even more plain to us that the justification for any such exception clearly does not apply to San Diego.

To illustrate, the San Diego MS4 permits have since 2001 incorporated the RWL language of Order 99-05. In fact, the San Diego region has adopted several iterations of MS4 permits since 2001, including one in 2007 and another in 2013. Each of these has gradually evolved to include the paradigm shift included in Los Angeles' permit, as well as the lessons learned via the iterative process and its monitoring and assessment. Low impact development provisions have been included since 2007 in the San Diego permit[49], and on-site retention requirements[50], as well as incentives and direction towards onsite capture and use, already exist.[51] Further, San Diego's newest permit includes provisions for on-site capture and infiltration for development projects over a certain threshold.[52] In addition to the onsite capture and use provisions of those permits, watershed-wide planning efforts aimed at prioritization of waterbodies or pollutants also are already present in our permit.[53] Thus, the San Diego region has already adopted over time a series of permits that have gradually embraced and incorporated the paradigm shift and new information sited as the justification for the anti-backsliding exception.

The most recent San Diego 2013 MS4 permit also incorporates a framework to achieve RWLs in our region through the utilization of Water Quality Improvement Plans (WQIPs) and an adaptive management process[54]. Like the Los Angeles WMPs and EWMPs, WQIPs include prioritization of watershed conditions and pollutants[55], and contain numeric interim and final goals aimed at achieving RWLs[56]. Unlike the LA permit, however, our existing WQIPs do not require RAAs or any type of pre-reviewed modeling, nor do they require proof that the chosen actions and timeframes of the Copermittees will result in the attainment of RWLs and WQSs.

[49] Order No. R9-2007-0001, Section D.1.d.(4).
[50] Order No. R9-2007-0001, Section D.1.c.(2)., and Order No. R9-2015-001 Section E.3.a.(3)(h)
[51] Order No. R9-2015-0001 Section E.3.a.(3)(l).
[52] Order No. R9-2015-0001 Section E.3.c.(1).(a).
[53] Order No. R9-2015-0001 Section B.1.
[54] Id, Section B.
[55] Id, Section B.2.
[56] Id, Section B.3.

Importantly, the RWL provisions have remained in place throughout these processes and permitting schemes that included the paradigm shifts, watershed planning, and prioritization planning. Certainly the reasoning behind the LA exception - if applicable at all - is not applicable to San Diego, and any directive to include a safe harbor in an existing permit that already includes watershed-based planning and integrated water management would run afoul of the anti-backsliding provisions of the Clean Water Act. Quite simply, since the San Diego permit already incorporates the paradigm shift, already contains prioritization and plans for meeting RWL requirements, and has chosen *not* to have a safe harbor, any relaxing of the conditions of the permit would not be as stringent as our existing permit, and thus would constitute backsliding under the Clean Water Act.

b. Water Board Rationales Fail to Support an Anti-Backsliding Exception in San Diego: Multi-benefit Projects and Local Water Supply

To further illustrate the problem with relying solely on the justifications used for the LA MS4 permit, we note that one of the fundamental reasons both the State and LA Regional Board found this approach appropriate was the incorporation into the LA permit of multi-beneficial regional projects that capture and infiltrate the 85th percent storm.[57] Multi-benefit approaches that consider water supply benefits underlie a core justification for the shift in approaches in general, and for the safe harbor specifically.

The SD Tentative Order Fact Sheet recognizes this when it states part of its justification for an anti-backsliding exception:

> The alternative compliance pathway option in Provision B.3.c. of this Order was informed by new information available to the Board…In particular, the Los Angeles Water Board…recognized the potential for municipal storm water to benefit water supply. Thus, even if the receiving water limitations are subject to anti-backsliding requirements, they were revised based on new information that would support an exception to the anti-backsliding provisions.[58]

In San Diego, however, the 85th percent storm capture requirement applies only to individual Priority Development Projects[59], and not to regional compliance or alternative compliance projects aimed at achieving WQSs or RWLs and benefitting local water supply. There are no requirements or incentives for regional multi-beneficial projects in the San Diego permit. In fact, Environmental Groups failed to find even a single reference to the world "multi-benefit" in the 2013 permit or the Tentative Order, and our review of the eight Water Quality Improvement Plans (WQIPs) found a near total lack of commitment to the development and incorporation of multi-benefit regional projects in the San Diego region. As such, while the Fact Sheet claims this safe harbor incorporates the seven principles of the State Board's Order, it completely fails to ensure that, "the strategies required to be included in the Water Quality Improvement Plans

[57] Order No. R4-2012-0175 as amended by Order WQ 2015-0075, Section VI.C.1.g.
[58] Attachment 2 to Tentative Order No. R9-2015-0100, page F-32.
[59] Order R9-2015-0001, Section E.3.c(.1)(a)

encourage multi-benefit regional projects that capture, infiltrate, and reuse storm water and support a local sustainable water supply."[60]

From a practical perspective relative to water supply benefits in stormwater management, the San Diego region differs in some important and substantial ways from its neighbor up north. First, while Los Angeles and other regions in Southern California generally have the ability to utilize groundwater basins for infiltration and groundwater aquifer recharge for local water supply production in a large-scale integrated water management fashion, the San Diego region does not have available to it the larger underground basins for such storage. While our region's permit may seek to incentivize and strive for more water supply from stormwater, it may very well be that solutions to our serious and continuing water quality issues come in the form of more traditional source and treatment control technologies that have been part of the repertoire of stormwater management for many years. Once again, the justification proposed for an anti-backsliding exception is simply not applicable to the San Diego region and its permitting scheme and history.[61]

c. Water Board Rationales Fail to Support an Anti-Backsliding Exception in San Diego: TMDL Incorporation into MS4 Permits and Lessons Learned

To an equally large degree the justification for an anti-backsliding exception is based on the development, monitoring, and analysis of 33 TMDLs in Los Angeles, coupled with a paradigm shift. In fact, in justifying the exception the LA Regional Board mentions the importance of its TMDLs toward the achievement of fishable and swimmable waters in LA when it says, "the majority of pollutants of concern from the Los Angeles County MS4 are addressed by the 33 TMDLs that are included in the Permit," (p. 37, Response to Comments), and it recognizes the prioritization of TMDLs as highest priority issues (p. 40, Response to Comments). The San Diego Tentative Order itself points to the experience in LA for its own justifications.[62]

In contrast to the LA region, however, the San Diego region has only a handful of TMDLs and the San Diego Regional Board remains much more reluctant to develop new TMDLs, choosing instead to look towards alternatives to TMDLs. Two instances where TMDL alternatives have been developed in just the last few years are in Oceanside's Loma Alta Slough (for nitrate impairment), and the Tijuana River Valley (for impairments of sedimentation and trash). In these instances, the San Diego Regional Board has chosen to utilize processes, avenues, or

[60] Attachment 2 to Tentative Order R9-2015-0100.

[61] Further, even if these approaches could be considered "new", it would still not justify backsliding. An improvement or development of new technology provides the Copermittee with *additional* options for meeting the requirements imposed on them by the prior permit and hence does not justify eliminating or delaying those requirements.

[62] "The alternative compliance pathway option in Provision B.3.c. of this Order was informed by new information available to the Board from experience and knowledge gained through the Los Angeles Water Board's process of developing over 30 watershed-based TMDLs and implementing several TMDLs since the adoption of the previous permits." Attachment 2 to Tentative Order No. R9-2015-0100, page F-32.

procedures that do not have the strict interim and final milestones and deadlines for achieving receiving water limitations and objectives that are found in TMDLs.[63]

Our own regional permit includes Water Quality Improvement Plans that aim to prioritize and address pollutants within the Region and those WQIPs contain interim and final measurable benchmarks to show progress of meeting the goals of achieving RWLs. Without the RWLs kept in place and with few TMDLs to fall back on, however, insufficient enforcement mechanisms would exist for citizens of our region if the WQIPs fail to meet the goals of the Clean Water Act. This regional variation in strict controls makes it all the more imperative that the RWLs be kept and no safe harbor provided. Arguments that, as the State Board makes, "TMDL requirements and receiving water limitations, which may be implemented through the WMP/EWMP provisions, will be the means for achieving water quality standards for the majority of degraded water bodies in the region,"[64] ring hollow when regions outside of the LA region have so few TMDLs and the implementation of TMDLs can be measured in decades.

Finally with respect to time allowances the appropriate way for our region, which lacks the suite of TMDLs present in LA to address RWL issues, is through the MS4 permit and Time Schedule or other Orders that include strict interim and final milestones for compliance rather than an excuse from RWLs.

Without the definitive requirements of TMDLs, Environmental Groups and our members are left with just one way to measure whether our Copermittees are meeting, or will meet, the requirements of the CWA. That measure is the Clean Water Act itself, and the receiving water limitations provisions of the permits under the Act.

To date few, if any, third party lawsuits have been filed in San Diego for MS4 noncompliance. And yet while the new permits for LA and for San Diego region contain "carrots" to incentivize certain plans and programs aimed at meeting RWLs and WQSs, the San Diego permit has, to date, maintained the "stick" of possible enforcement actions when and where necessary to ensure RWLs will be achieved. Without TMDLs or other time-certain measures, it is vital to our success that third-party enforcement actions for RWL requirements not be precluded.

B. The Tentative Order Would Violate Anti-Degradation Requirements and the Anti-Degradation Findings Are Unsupported by the Evidence

The Tentative Order's anti-degradation analysis and findings are improper and lack basis.

(1) The Revised Draft Order's Anti-Degradation Analysis Fails to Comply with EPA Requirements and Lack Support in the Record

[63] While the Fact Sheet, in discussing anti-degradation, states that for water bodies listed on the State's CWA Section 303(d) List, the "San Diego Water Board has established TMDLs to address the impairments", Environmental Groups find this statement to be disingenuous. In actuality the San Diego Board has adopted only a handful of TMDLs and has failed to adopt TMDLs for two known impairments for which the TMDL process had already begun.

[64] Order WQ 2015-0075, page 26.

The Tentative Order claims "allowing limited degradation of high quality water bodies through MS4 discharges is necessary to accommodate important economic or social development in the area and is consistent with the maximum benefit to the people of the state."[65] However, the Regional Board has not undertaken the required analysis necessary to support such a finding.

EPA's Economic Guidance for Water Quality Standards Workbook[66] ("EPA Workbook") establishes a test to determine if there might be interference with an important social and economic development. The EPA Workbook outlines three steps involved in performing an economic impact analysis as part of an anti-degradation review: (1) verify the project's costs and calculate annual costs of the pollution control project; (2) determine if maintaining high-quality waters will interfere with development; and (3) determine if development is economically and socially important.[67] The EPA Workbook provides several worksheets for addressing these factors.[68] Yet neither the State Board nor the Regional Board have addressed these basic factors or completed the EPA worksheets – or provided any evidence even remotely resembling such an analysis – in reaching their conclusion.

As a result, the Revised Draft Order and the 2012 MS4 Permit are inconsistent with the procedures established by the EPA.

(2) The Tentative Order and 2013 MS4 Permit's Anti-Degradation Findings Are Flawed and Lack Basis

The Tentative Order must "set forth findings that bridge the analytical gap between the raw evidence and ultimate decision."[69] The Board's findings must provide "the analytic route [it] traveled from evidence to action" to satisfy this requirement, so as to allow the reviewing court to satisfy its duty to "compare the evidence and ultimate decision to 'the findings.'"[70] And mere recitation of legal requirements - as here - is not sufficient.[71] The Tentative Order as drafted does meet the requirements of law.

As noted above, the Tentative Order fails to follow the procedures and requirements outlined in the EPA Workbook. Rather than following EPA procedures, the Order proceeds to conduct an anti-degradation analysis that is unsupported by the evidence and is inadequate.

First, the Tentative Order lacks any evidence supporting the findings that any degradation of San Diego area waters will in fact "assist with maintaining instream flows that support beneficial uses, may spur the development of multiple benefit projects, and may be necessary for flood control, and public safety, as well as to accommodate development in the area."[72]

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[65] Attachment 2 to Tentative Order No. R9-2015-0100.
[66] U.S. Environmental Protection Agency, *Interim Economic Guidance for Water Quality Standards Workbook* (March 1995), available at http://water.epa.gov/scitech/swguidance/standards/economics/chaptr5.cfm
[67] *Id.* at 5-2
[68] *Id.* at Worksheets AA, AB, and O-Y.
[69] *See Topanga Association for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d, 506, 514-516.
[70] *Id.* at 515.
[71] *Id.* at 515, n.16.
[72] Attachment 2 to TO No. R9-2015-0100, page F-32.

Second, the Tentative Order's anti-degradation analysis is flawed and cannot support the finding that degradation of San Diego area waterbodies justified. The Order improperly omits from its anti-degradation analysis an evaluation of impacts on water quality from the discharge of *polluted* storm water regulated by the 2013 MS4 Permit.[73] The conclusion that discharge of storm water is to the maximum benefit of the people is therefore flawed. In fact, it is highly doubtful any discharges of *polluted* stormwater "can assist in maintaining instream flows that support beneficial uses" because, regardless of any contribution to instream flows, *polluted* stormwater, as shown by the record, uniformly degrades waterbodies' beneficial uses. Further, the anti-degradation findings improperly conclude that the alternative to allowing water quality degradation is "capturing all storm water from all storm events."[74] Capturing all storm water from all storm events is *not* the only alternative to ensure no degradation occurs as a result of *polluted* stormwater discharges. There may be other alternatives. The Tentative Order, however, improperly fails to mention, let alone analyze, other alternatives in its anti-degradation analysis. As a result, the anti-degradation findings lack basis.

Finally, the State Board Order expressly recognizes the important, if not paramount, role the LA TMDLs play in anti-degradation, stating, "where water quality is already impaired, the Order requires implementation of TMDL requirements to achieve water quality standards over time."[75] They go on to state, "we expect that the Los Angeles MS4 Order's TMDL requirements and receiving water limitations, which may be implemented through the WMP/EWMP provisions, will be the means for achieving water quality standards for the majority of degraded water bodies in the region".[76] As discussed above, however, the San Diego region has far fewer TMDLs and has failed to develop TMDLs for several identified 303(d) impairments in the region for which TMDLs are proper.[77] Instead, the San Diego Board rely on the MS4 permit as a substitute to address impairments. Thus, when the Tentative Order copies verbatim the language of the State Board Order and states regarding impaired water bodies that, "many such water bodies are listed on the State's CWA Section 303(d) List and the San Diego Water Board has established TMDLs to address these impairment", it is not entirely incorrect.

For these reasons and the reasons provided in our comments to date, the Tentative Order fails to comply with anti-degradation requirements.

(3) The Draft Language and the 2013 MS4 Permit Illegally Authorize Compliance Schedules for California Toxics Rule ("CTR")-based TMDLs Beyond May 18, 2010.

The Tentative Order fails to recognize the requirements of the Inland Surface Water Plan, which prohibits compliance schedules for CTR-based TMDLs past May 18, 2010.[78] Since the WLAs

[73] *Id.*
[74] *Id.*
[75] WQO Order 2015-0075, p 25.
[76] WQO Order 2015-0075, p 26.
[77] See discussion infra, Section III.A.(1).(c).
[78] 40 C.F.R. 131.38(e)(8); *see also* California Toxics Rule Response to Comments Report, Volume 1 (December 1999), prepared by the U.S. Environmental Protection Agency, Response to Comment CTR-002-010b (explaining that compliance scheduled for CTR-based WQBELs may not exceed five years), available at http://water.epa.gov/lawsregs/rulesregs/ctr/upload/2009_03_26_standards_rules_ctr_responses.pdf.

for the metal TMDLs in the San Diego region are based on the CTR criteria, compliance schedules for these TMDLs are only authorized for a maximum of 10 years from the time the CTR criteria were first promulgated in 2001. Thus, no discharger can be given a compliance schedule to meet Permit provisions based on CTR criteria after May 18, 2010. As a result, to the extent the safe harbor provisions are characterized as compliance schedules for CTR pollutants, they are illegal.

IV. Conclusion

Environmental Groups appreciate the time and effort by Board staff in working with stakeholders to find acceptable solutions to ensuring discharges from MS4s do not cause or contribute to the violation of water quality standards. Despite that hard work, however, the Tentative Order as proposed is inconsistent with the State Board's Order and would violate the Clean Water Act for the reasons described above and in discussions and comments Environmental Groups have made to Board staff and the Board thus far.

The Regional Board could correct each of these fatal deficiencies in the draft TO language and the safe harbor by choosing to not adopt the proposed language and instead continue to require implementation of watershed management programs as one way to achieve, rather than demonstrate, compliance with RWLs and WQSs. Environmental Groups respectfully request the Regional Board remove the safe harbor language. Should the Board chose to adopt safe harbor language despite the TO's legal and practical deficiencies, we respectfully request the TO be made consistent with the State Board's Order through an amendment that includes the following requirements, at a minimum: (1) the Reasonable Assurance Analysis and EWMP guidance, modeling, and standards that were expressly approved by the State Board's Order and that are the lynchpin of the approved safe harbor approach, (2) regional multi-benefit projects be a necessary element of compliance BMPs, (3) language that automatically triggers an end to the safe harbor protections, as earlier proposed by Environmental Groups and referenced above, and (4) removal of the iterative process from the safe harbor scheme.

Thank you for the opportunity to comment.

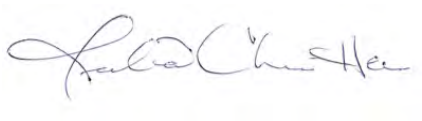
Sincerely,



Matt O'Malley
Legal & Policy Director
San Diego Coastkeeper



Livia Borak
Legal Advisor
Coastal Environmental Rights Foundation



Julia Chunn-Heer
Policy Manager
Surfrider Foundation San Diego Chapter

cc:
David Gibson, Executive Officer
Cindy Lin, EPA

September 11, 2015

San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108-2700
Attn: Wayne Chiu
sandiego@waterboards.ca.gov

Sent via email

Re: Environmental Groups Comments on Tentative Order R9-2015-0100; Prior Lawful Approval Language

Dear Wayne Chiu, Laurie Walsh, and Christina Arias:

Thank you for the opportunity to comment on Tentative Order R9-2015-0100 ("Tentative Order", "San Diego Order", or "TO". San Diego Coastkeeper and Coastal Environmental Rights Foundation ("Environmental Groups") are local non-profit organizations dedicated to the protection and restoration of regional waters and related environmental issues in San Diego. Our groups represent numerous San Diegans, act through community involvement, regulatory participation, and legal action to ensure the protection and restoration of our region's ocean, bays, and inland waters.

The Tentative Order aims to more accurately define when land development requirements from earlier MS4 permits would apply to Priority Development Projects ("PDPs"). In doing so, the Order allows Copermittees to apply earlier permit requirements to PDPs under two scenarios.

The second scenario is straightforward in that it allows previous permit requirements if a, "Copermittee demonstrates that it lacks the land use authority or legal authority to require a Priority Development Project to implement the requirements of Provision E.3." Environmental Groups read this section, in conjunction with Section E.3.[1] and the TO Fact Sheet[2] to mean the Copermittee must be legally prevented from requiring compliance with the 2013 development requirements. Further, even if a Copermittee is legally prevented from requiring *some* development requirements under E.3., they must enforce those provisions that they are not legally prevented from requiring.

The first scenario, however, is more precise and includes a set of distinct conditions. That language reads:

[1] Order R9-2013-001 as amended by Order R9-2015-0001.
[2] Attachment 2 to TO R9-2015-0100, p. F-110.

(i) The Copermittee has, prior to the effective date of the BMP Design Manual required to be developed pursuant to Provision E.3.d:

[a] Approved a design that incorporates the storm water drainage system for the Priority Development Project in its entirety, including all applicable structural pollutant treatment control and hydromodification management BMPs consistent with the previous applicable MS4 permit requirements; AND

[b] Issued a private project permit or approval, or functional equivalent for public projects, that authorizes the Priority Development Project applicant to commence construction activities based on a design that incorporates the storm water drainage system approved in conformance with Provision E.3.e.(1)(a)(i)[a]; AND

[c] Confirmed that there have been construction activities on the Priority Development Project site within the 365 days prior to the effective date of the BMP Design Manual, *OR* the Copermittee confirms that construction activities have commenced on the Priority Development Project site within the 180 days after the effective date of the BMP Design Manual, where construction activities are undertaken in reliance on the permit or approval, or functional equivalent for public projects, issued by the Copermittee in conformance with Provision E.3.e.(1)(a)(i)[b]; AND

[d] Issued all subsequent private project permits or approvals, or functional equivalent for public projects, that are needed to implement the design initially approved in conformance with Provision E.3.e.(1)(a)(i)[a] within 5 years of the effective date of the BMP Design Manual. The storm water drainage system for the Priority Development Project in its entirety, including all applicable structural pollutant treatment control and hydromodification management BMPs must remain in substantial conformity with the design initially approved in conformance with Provision E.3.e.(1)(a)(i)[a].

The language essentially states that a PDP proponent must have received approval of its *specific* stormwater plans draft under the 2007 permit and must have begun construction activities within a year of the BMP manual taking effect or 180 after it takes effect. Finally, any additional approvals must be in substantial conformance and must be issued within 5 years of the BMP manual's effective date (December 24, 2015).

We appreciate the time and effort Board staff have put into researching and understanding the governing law on this issue. We believe the language has come a long way to more closely match the prevailing law that governs this issue. That said Environmental Groups continue to have a few concerns, discussed below in more detail.

Analysis

While more closely mirroring the governing law on this issue than previous drafts the Tentative Order, in seeking to reach a clear and concise definition, appears to some degree to back track on requirements of the existing MS4 permit and the law.

Avco remains the principal governing case law on the issue of judicial vested rights as applied to development. In *Avco*, the California Supreme Court held that no vested right existed where a

plaintiff had not *both* obtained a final building permit *and* begun grading. *Avco Cmty. Developers, Inc. v. S. Coast Reg'l Com.*, 17 Cal. 3d 785, 791 (1976). Courts of Appeal continue to follow the *Avco* model, holding that public entities may enforce changes in regulations notwithstanding prior subdivision approval unless the owner or developer "(1) has obtained a building permit for an identifiable structure, and (2) has performed substantial work in reliance thereon." *Hafen v. Cnty. of Orange*, 128 Cal. App. 4th 133, 143 (2005). A leading treatise further explains: "The vested rights rule requires that the government agency exercise its *final discretion* to issue a grant of authority or permit which *specifically describes* a particular approval or work of improvement. Thereafter, *if the developer begins to perform the work described* in the grant or permit, he or she may acquire a vested right to complete the *specific and particular* work that is described. The grant or permit does not give any rights to complete any work not specifically described." (emphasis added) *Miller & Starr, Cal. Real Estate* (3d ed.2001) § 25:70, pp. 324-325, 327-328.

If adopted, the proposed language would expand developers' rights beyond what is required by *Avco* and its progeny. By allowing for up to 6 months after the BMP manual, plus up to an additional 5 years for subsequent approvals, PDP proponents could have until 2021 to implement the requirements of the 2007 permit. The MEP standard is - and should be - more rigorous than a 14 year implementation schedule of an expired permit.

As written the Order's new provisions would be inconsistent with, and contrary to, the existing permit's requirements and federal law. While it certainly is legally permissible for the Regional Board to define prior lawful approval as requiring both a final permit and the commencement of work, it is actually inconsistent with other provisions of the MS4 to define it as anything short of that. Section E.1.a. requires each Copermittee to "establish, maintain, and enforce adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4," and adequate legal authority includes, at a minimum, "requiring the use of BMPs to prevent or reduce the discharge of pollutants into MS4s" *Order No. R9-2013-0001 E.1.a.(7)*. As explained above, it is well within all copermittees' legal authority to apply new BMPs to projects that have not begun substantial work and expended "hard costs"[3]. And, under the existing E.1.a. standard they would be required to use the full extent of that authority to apply updated requirements.

To that end Environmental Groups respectfully requests that the Tentative Order language be amended to require that construction activities have begun and substantial hard costs have been expended *prior* to the effective date of the BMP Design Manual. To achieve that result we respectfully request the removal of the following language, starting with [c]:

> *…OR* the Copermittee confirms that construction activities have commenced on the Priority Development Project site within the 180 days after the effective date of the BMP Design Manual, where construction activities are undertaken in reliance on the permit or approval, or functional equivalent for public projects, issued by the Copermittee in conformance with Provision E.3.e.(1)(a)(i)[b]; AND
> [d] Issued all subsequent private project permits or approvals, or functional equivalent for public projects, that are needed to implement the design initially approved in conformance with Provision E.3.e.(1)(a)(i)[a] within 5 years of the effective date of the BMP Design Manual. The storm water drainage system for the Priority Development Project in its entirety, including all applicable structural pollutant treatment control and

[3] *Hermosa Beach Stop Oil Coalition vs City of Hermosa Beach* (2001), 86 Cal.App.4th 534

hydromodification management BMPs must remain in substantial conformity with the design initially approved in conformance with Provision E.3.e.(1)(a)(i)[a].

This amendment would bring the new language in line with prevailing law on vested rights while preserving the requirements under the current permit for Copermittees to use their full legal authority to implement the Provisions of E.3.

Thank you for the opportunity to comment on the Tentative Order's Prior Lawful Approval amendments. Please feel free to contact me with any questions or for additional feedback.

Sincerely,



Livia Borak
Legal Advisor
Coastal Environmental Rights Foundation



Matt O'Malley
Legal & Policy Director
San Diego Environmental Groups

Via e-mail to *lwalsh@waterboards.ca.gov*

San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

September 15, 2015

RE: **PROPOSED AMENDMENTS TO ORDER NO. R9-2013-0001, TENTATIVE ORDER NO. R9-2015-0100**

The South Laguna Civic Association (SLCA), established in 1946, is the principle community most impacted in the Aliso Watershed by the Orange County MS4 Permit. While over $20 million in public funds have been devoted to monitoring activities and reports, Co-permittees still concede they are out of compliance with most of the previous and current water quality regulations under the jurisdiction of the SDRWQCB MS4 Permit.

Pursuant to CWA Section 402(p)(3)(B), previous Aliso Watershed NPDES permits for storm water discharges from MS4s must include requirements to effectively prohibit non-storm water discharges into MS4s. However, present requirements have yet to achieve this mandate. Lacking is clear enforcement measures to incentivize Co-permitee compliance. Despite clear and mounting evidence of accumulated impacts from non-compliance, Co-permitees do not face fines and penalties for a pattern of careless management of MS4 outfalls. Instead of compliance, Co-permitees have chosen legal measures to hold MS4 permit regulations in permanent abeyance.

Public expectations require regulatory enforcement from the SDRWQCB. Clean up and Abatement Orders will motivate prompt mitigation measures and alternatives to include:

a) Immediate MS4 dry weather diversion to Publically Owned Treatment Facilities (POTWs)
b) Penalties and fines directed to Supplemental Environmental Projects by Third Party water quality NGOs and experts.
c) Local native tree planting to re-direct flows for irrigation and groundwater replenishment.

Fortunately, the iterative process from previous permitting cycles appears to have incorporated recommendations from SLCA and others for comprehensive mapping of the entire watershed and regulated coastal receiving waters in the present Tentative Order.

Public education can be best achieved if all facts are presented in clear map layers to determine MS4 impacts to all mandated beneficial uses. Likewise, elected officials as Co-Permitees must become literate in local natural baseline conditions and protected species through maps indicating Environmentally Sensitive Areas (ESHAs) within the watershed creek, wetland, estuary and coastal habitats to understand how best to achieve MS4 Permit compliance. Maps are the first step in restoring native flow rates to support indigenous drought tolerant trees and vegetation among impaired creek and coastal waters regulated by SDRWQCB.

Issues and recommendations submitted by SLCA in April 11, 2007 (Tentative Order No. R9-2007-2002) and December 10, 2012 (Tentative Order No. R9-2012-0011) remain relevant as Public Comment in the refining the Proposed Amendments to Order NO. R9-2013-0001, Tentative Order NO. R9-2015-0100 and are re-submitted as attachments.

The Aliso Watershed is a compact 34 square mile area suffering decades of neglect and pollution originating from poorly engineered residential developments among inland cities. Plans to add 17,000 new houses to South Orange County in the coming years will exacerbate the water pollution crisis facing Laguna Beach. Runoff management plans fail to control dry weather urban runoff and knowingly contribute directly to increased flows and erosion during routine storm events.

The Aliso Creek Wilderness Park remains degraded from erosion impacts to streambed habitat and threatens to expose critical sewage infrastructure transporting 10 to 15 million gallons of secondary sewage to the Aliso Creek Ocean Outfall only 1.2 miles offshore. A recent study by TetraTech for the South Orange County Wastewater Authority (SOCWA) determined the integrity of creek infrastructure to be capable of failure in as little as 5 years. Coastal receiving waters at the mouth of Aliso Creek are impaired by polluted urban runoff flowing at 1 to 5 million gallons per day (GPD). Aliso Creek is listed as a 303(d) Impaired Water Body by the Clean Water Act and continues to fail to meet present and previous MS4 Permit requirements. (Exhibit B – Aliso Creek Watershed 303(d) Impaired Waterbodies)

All Co-Permitees, as signatories to the MS4 Permit, are legally responsible for water quality in terms of coastal receiving waters. The regulatory and legal nexus is clear between unpermitted discharges by inland Co-Permitees, creek erosion and infrastructure damage, ocean pollution and public health hazards associated with these contaminated daily flows.

Aliso Beach, at the mouth of the federally listed contaminated creek, is permanently posted as a Clean Water Act 303(d) Impaired Water Body. Daily flows of urban runoff pollutes coastal receiving waters protected as the Laguna Beach State Marine Conservation Area established unanimously by the California Fish & Game Commission on January 1, 2012. Recent MPA coastal receiving water quality protections are referenced in Amended Order 2013-001 on page 21 of 313 section 2, A, 3 : http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/updates030415/2015-0303_Final_Amended_Attachment_No_1_Order_2013-0001.pdf

Known and persistent water quality violations at Aliso Beach continue due to a lack of enforcement of MS4 permit regulations.

Additional comments to the CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION ORDER NO. R9-2013-0001, AS AMENDED BY ORDER NO. R9-2015-0001 NPDES NO. CAS0109266 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) DRAINING THE WATERSHEDS WITHIN THE SAN DIEGO REGION Amended February 11, 2015 are:

2. Priority Water Quality Conditions

The Co-permittees must identify the water quality priorities within each Watershed Management Area that will be addressed by the Water Quality Improvement Plan. Where appropriate, Watershed Management Areas may be separated into subwatersheds to focus water quality prioritization and

jurisdictional runoff management program implementation efforts by receiving water. However, the Co-permitees lack maps identifying Environmentally Sensitive Habitat Areas (ESHA) such as the degraded Aliso Coastal Wetlands Estuary and State Marine Conservation Areas as well as local coastal receiving water tide pools, kelp forests and recreational sites. Similarly, maps must incorporate current studies for the Aliso watershed urban runoff coastal plume.

ASSESSMENT OF RECEIVING WATER CONDITIONS

The Co-permittees must consider the following, at a minimum, to identify water quality priorities based on impacts of MS4 discharges on receiving water beneficial uses:

(1) Map all creek and coastal receiving waters listed as impaired on the CWA Section 303(d) List of Water Quality Limited Segments (303(d) List);

(2) TMDLs adopted and under development by the San Diego Water Board;

(3) Map all receiving waters recognized as sensitive or highly valued by the Co-permittees, including estuaries designated under the National Estuary Program under CWA section 320, marine protected areas to include the Laguna Beach State Marine Conservation Area (SMCA), wetlands defined by the State or U.S. Fish and Wildlife Service's National Wetlands Inventory as wetlands that include the Aliso Estuary, waters having the Preservation of Biological Habitats of Special Significance (BIOL) beneficial use designation, and receiving waters identified as ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-0012;

(4) The receiving water limitations of Provision A.2;

(5) Map and illustrate known historical versus current physical, chemical, and biological water quality conditions and coastal receiving water urban runoff plumes;

(6) Publish for Public Education available, relevant, and appropriately collected and analyzed physical, chemical, and biological receiving water monitoring data, including, but not limited to, data describing: (a) Chemical constituents, (b) Water quality parameters (i.e. pH, temperature, conductivity, etc.), (c) Toxicity Identification Evaluations for both receiving water column and sediment (pathogens, viruses, nitrogen, phosphorous, microbeads, pharmaceuticals, etc.), (d) Trash impacts. Include map overlays for protected species and habitats. (See Attachment No. 1 Order No. R9-2013-0001 Page 22 of 131 May 8, 2013 As amended by Order No. R9-2015-0001 Amended February 11, 2015 PROVISION B: WATER QUALITY IMPROVEMENT PLANS B.2. Priority Water Quality Conditions (e) Bioassessments, and (f) Physical habitat).

(7) Present available evidence of erosional impacts in receiving waters due to accelerated flows (i.e. hydromodification). Map and identify inland dry weather urban runoff storm drain flow rates and on-going MS4 Permit violations. Indicate storm water erosion impacts from Laguna Beach Fuel Modification goat grazing. Identify existing erosion threats to the South Orange County Wastewater Authority (SOCWA) Effluent Transmission Main alongside Aliso Creek.

(8) Map protected whale and dolphin migration and foraging areas, Tidewater goby estuaries, creek wetlands and coastal urban runoff plumes among available evidence of adverse impacts to the chemical, physical, and biological integrity of receiving waters; and

(9) The potential improvements in the overall condition of the Watershed Management Area that can be achieved.
b. ASSESSMENT OF IMPACTS FROM MS4 DISCHARGES The Co-permittees must consider the following, at a minimum, to identify the potential impacts to receiving waters that may be caused or contributed to by discharges from the Co-permittees' MS4s: (1) The discharge prohibitions of Provision A.1 and effluent limitations of Provision A.3; and (2) Available, relevant, and appropriately collected and analyzed storm water and non-storm water monitoring data from the Co-permittees' MS4 outfalls; (3) Mapped locations of each Co-permittee's MS4 outfalls that discharge to receiving waters; (4) Mapped locations of MS4 outfalls that are known to persistently discharge non-storm water to receiving waters likely causing or contributing to impacts on receiving water beneficial uses; (5) Mapped locations of MS4 outfalls that are known to discharge pollutants in storm water causing or contributing to impacts on receiving water beneficial uses; and (6) The potential improvements in the quality of discharges from the MS4 that can be achieved.

IDENTIFICATION OF PRIORITY WATER QUALITY CONDITIONS

(1) The Co-permittees must use the information gathered for Provisions B.2.a and B.2.b to develop a list of priority water quality conditions as pollutants, stressors and/or receiving water conditions that are the highest threat to receiving water quality or that most adversely affect the quality of receiving waters. The list must include the following information for each priority water condition (Attachment No. 1 Order No. R9-2013-0001 Page 23 of 131 May 8, 2013 As amended by Order No. R9-2015-0001 Amended February 11, 2015).

(2) PROVISION B: WATER QUALITY IMPROVEMENT PLANS B.2. Priority Water Quality Conditions quality condition: (a) The beneficial use(s) associated with the priority water quality condition; (b) The geographic extent of the priority water quality condition within the Watershed Management Area, if known; (c) The temporal extent of the

priority water quality condition (e.g., dry weather and/or wet weather); (d) The Co-permittees with MS4s discharges that may cause or contribute to the priority water quality condition; and (e) An assessment of the adequacy of missing ESHA and MPA maps, coastal receiving water plume maps and data gaps in the monitoring data to characterize the conditions causing or contributing to the priority water quality condition, including a consideration of spatial and temporal variation.

(3) The Co-permittees must identify the highest priority water quality conditions to be addressed by the Water Quality Improvement Plan, and provide a rationale for selecting a subset of the water quality conditions identified pursuant to Provision B.2.c.(1) as the highest priorities.

d. IDENTIFICATION OF MS4 SOURCES OF POLLUTANTS AND/OR STRESSORS The Co-permittees must identify and prioritize known and suspected sources of storm water and non-storm water pollutants and/or other stressors associated with MS4 discharges that cause or contribute to the highest priority water quality conditions identified under Provision B.2.c. The identification of known and suspected sources of pollutants and/or stressors that cause or contribute to the highest priority water quality conditions as identified for Provision B.2.c must consider the following: (1) Pollutant generating facilities, areas, and/or activities within the Watershed Management Area, including: (a) Each Co-permittee's inventory of construction sites, commercial facilities or areas, industrial facilities, municipal facilities, and residential areas, (b) Publicly owned parks and/or recreational areas, (c) Open space areas and goat grazed Fuel Modification Zones, (d) All currently operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste, and (e) Areas not within the Co-permittees' jurisdictions.

Priority Water Quality Conditions lands, state lands, federal lands including the Irvine Desalter Project that are known or suspected to be discharging to the Co-permittees' MS4s; (2) Mapped locations of the Co-permittees' MS4s, including the following: (a) All MS4 outfalls mapped plumes that discharge to receiving waters, and (b) Locations of major structural controls for storm water and non-storm water (e.g., retention basins, detention basins, major infiltration devices, etc.); (3) Other known and suspected sources of non-storm water or pollutants in storm water discharges to receiving waters within the Watershed Management Area, including the following: (a) Other MS4 outfalls (e.g., Phase II Municipal and Caltrans), (b) Other NPDES permitted discharges, (c) Any other discharges that may be considered point sources (e.g., private outfalls), and (d) Any other discharges that may be considered non-point sources (e.g., agriculture, wildlife or other natural sources);

(4) Review of available data, including but not limited to: (a) Findings from the Co-permittees' illicit discharge detection and elimination programs, (b) Findings from the Co-permittees' MS4 outfall discharge monitoring, (c) Findings from the Co-permittees' receiving water monitoring, (d) Findings from the Co-permittees' MS4 outfall discharge and receiving water assessments, and (e) Other available, relevant, and appropriately collected data, information, or studies related to pollutant sources and/or stressors that contribute to the highest priority water quality conditions as identified for Provision B.2.c. (5) The adequacy of the available data to identify and prioritize sources and/or stressors associated with MS4 discharges that cause or contribute to the highest priority water quality conditions identified under Provision B.2.c. for timely Cleanup and Abatement Orders from the SDRWQCB.

Recommended Actions

Poorly engineered projects can be re-engineered to achieve mandated water quality objectives.

1. Maps of all creek and coastal receiving waters indicating water quality impacts can be created by SCCWRP, Scripps, NOAA or any number of competent university or regulatory groups. A Bioregional Watershed Map will identify degraded land elements, offending storm drain outlets and candidate areas for re-forestation and estuarine/coastal restoration.

2. On an annual basis, citations against the primary six known storm drain point sources in each watershed can incrementally compel clean-up and abatement throughout a given watershed bioregion without the burden of costs to abate all points of contamination at once. Enforcement is a powerful economic incentive to achieve MS4 permit compliance. Failed Best Management Practices (BMPs) among urban runoff facilities, required as a Condition of Approval for inland residential developments, can be retrofitted with dry weather diversions to local Publically Owned Treatment Works (POTWs) or, alternatively, re-engineered with deep groundwater injection wells.

3. Fines must be allocated to re-vegetate impaired watersheds and kelp forests to restore the native functions of semi-arid creeks and protected coastal receiving waters. A re-forested Aliso Canyon with a canopy similar to San Mateo Creek will qualify for California Cap and Trade funding to offset costs. Restoration of natural habitats is demonstrated to be the best, most cost effective measure for improving watershed water quality.

4. Restoration of high value coastal wetlands and estuaries will guarantee protection of natural beach sand berms and provide measurable improvement to coastal receiving waters. Funds from the California Coastal Conservancy and other wetland recovery resources can offset costs.

5. Watershed restoration will offer multiple community benefits by reducing destructive stormwater flows, eliminating pollutants and increasing eco-tourist revenues to surrounding cities. Large street cisterns incorporating designs proposed by GeoSynTech for the re-development of the Aliso Golf Course can serve as a model for extensive rainwater

harvest/reuse systems. Street cisterns common throughout San Francisco since 1906, can capture and mitigate storm water flows for local beneficial reuse. Restoration of some or all of the 1500 foot Aliso Creek Ox Bow in Laguna Niguel will assist in restoring hydric soils to reduce stormwater impacts.

6. Increased use of recycled water for wildland fire suppression along the entire Highway 73 Toll Road bisecting the Laguna Greenbelt will maintain a healthy, fire safe wilderness area. Orange County Measure M and State Proposition funds are available to offset costs. Increased use of recycled water reduces ocean discharges to the Laguna State Marine Conservation Area.

7. A citywide network of recycled water for all of Laguna Beach will reduce imported water demand significantly and increase water security, disaster preparedness and fire suppression resources. Revenues from routine use for irrigation mandated Fuel Modification Zones will provide new revenue streams. Laguna Beach is the only Orange County city without a comprehensive recycled water program and remains a "once use" community of valuable imported water.

The MS4 Permit Renewal process offers the opportunity to advance beyond failed measures and begin the renewal of the region's unique watershed and coastal ecology. All Stakeholders can benefit through proactive initiatives and, as the overall watershed ecology improves, the cost savings from stormwater damage, water pollution, protracted litigation and public health threats will become evident. The South Laguna Civic Association has offered constructive, critical information and suggestions during the previous MS4 Permit cycle which have been often ignored to the public's detriment.

Cooperation and courage are essential and the South Laguna Civic Association remains committed to working towards real, measurable, sustainable solutions. On behalf of our community and the many visitors from throughout the world to our shores, we thank you for your review and support of our recommended actions.

Michael Beanan
Vice President
South Laguna Civic Association

mike@southlaguna.org

Attachments

SLCA Comments to Tentative Order No. R9-2007-0002 NPDES, No. CAS0108740
SLCA Comments to Tentative Order No. R9-2012-0011



July 7, 2014

Laurie,

Please convey my thanks and appreciation for SDRWQCB staff's willingness to host a workshop in South Orange County.

While many important issues were covered, I would like to supplement my comments and recommendations with a few useful images, links and docs.

"The Regional MS4 Permit will regulate MS4 discharges to inland surface waters, bays and estuaries and **coastal waters** throughout the three counties within the San Diego Region." http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/

MS4 Coastal Receiving Waters & Federally Protected Marine Mammals

Relative to regulated coastal receiving waters, federally protected migrating California Grey Whales and young calves frequent coves along South Laguna and immediately at the mouth of Aliso Creek - a CWA listed 303(d) Impaired Water Body with urban runoff dry weather summer flows averaging 1 MGD. Protected coastal dolphins suffer compromised immune systems from urban runoff plumes. Coastal receiving waters at Aliso Beach are part of a designated Laguna State Marine Conservation Area (SMCA).

The Laguna State Marine Conservation Area and Laguna State Marine Reserve are mapped marine life protection zones similar to an Area of Special Biological Significance (ASBS). Incorporation of coastal receiving waters among Co-Permittee documents represent a threshold requirement to determine MS4 impacts to protected State waters. Layed maps can illustrate Grey whale migration routes and local resting areas. Additional layers will map protected Coastal dolphin habitats and birthing grounds. Important recreational sites such as the Aliso Beach World Skimboard Championships, popular SCUBA diving sites and surfing beaches might constitute another map layer for stakeholder and public education of areas impacted by dry weather and stormwater runoff.

Co-permittees have a variety of resources to properly map and post coastal receiving waters with layered features to illustrate protected resources and beneficial uses. http://www.dfg.ca.gov/marine/mpa/scmpas_list.asp

Likewise, SCCWRP has dynamic mapping capabilities available to Co-permitees. http://www.sccwrp.org/Data/SearchAndMapData.aspx

Sound science and public education require a better understanding of coastal receiving waters. Dry weather urban runoff transports illicit MS4 discharges and pollutants to coastal waters. Daily ocean upwelling transports these constituents to nearshore waters and promotes summer long Harmful Algae Blooms (HABs) and localized eutrophication presently omitted from Co-permitee monitoring maps (See attached). Essential Fish Habitats (EFH) recognized by NOAA include local kelp forests and tidepools receiving inland urban runoff plumes.

An Integrated Watershed Management Plan must fully comply with mapping and monitoring of all regulated waters including coastal receiving waters. Land Development topics lacking mapped coastal receiving waters reflect a disconnect among Co-permitees and suggest omission of the very foundation of the regional economy, i.e., a healthy ocean. Images similar to those developed by OC Sanitation District of coastal plumes can correlate with improvements or shortcomings of inland MS4 management efforts to reduce flow rates of urban runoff. Mapping is the first step in monitoring water quality impacts. Proper mapping and monitoring establishes baseline data for effective restoration projects.

Restoration of Natural Flow Rates

Orange County ROWD goals to "restore to natural flows" represent a useful shift in understanding flow rates as a key transport of inland contaminates to regulated receiving waters. Achieving zero tolerance of discharges from inland MS4 stormdrains can be achieved by mapping and posting for public education offending stormdrains and implementing Clean-up and Abatement Orders as well as fines where necessary to shift the economic incentives towards compliance. The top three offending stormdrains in each watershed are well documented in annual reports and serve as immediate target sites for abatement (See attached).

An 85% retention of stormwater flows can be achieved by segmenting into rational units. For instance, one tree on site can hypothetically retain 5% of stormwater with another 10% retained by bioswales. Rainwater harvesting might retain another 10% to achieve a total net retention of 25% on site. The remaining 60% can be achieved with local mitigation programs such as subwatershed re-forestation of public lands, parking lot stormwater cisterns, street cisterns, etc.

"The restoration of riparian forests has subsequently become a major focus of watershed initiatives to improve degraded stream ecosystems."
http://link.springer.com/article/10.1023/A:1006495805300

Aliso Canyon & Wood's Canyon Wilderness Park is a stream ecosystem degraded by centuries of careless cattle grazing and erosion flows from faulty USACOE projects and inland developments. Reforestation of grazed habitats throughout the region is likely the most cost effective long range measure available to communities. Reforestation projects, funded as mitigation to help achieve a proposed development's 85% compliance, will engage local schools and civic groups to improve public stewardship of fragile ecosystems while protecting creek and coastal receiving waters.

Geochemistry is determined in large measure by degraded riparian ecosystems. Widespread regional deforestation represents systematic ecocide destruction of critical tree and vegetation biomass. Without vegetated biomass to provide soil cover and hillside stabilization, annual stormwater flows remove the protective soil mantle to expose clay substrate...a natural water filter for groundwater recharge. There are no "bad soils", only degraded habitats.

Wise use of biomass mulch, small bioswales around trees and reforestation of native vegetation will restore the soil mantle and reduce the intensification of erosion flows during storm events. Added benefits include improved air quality from plant photosynthesis, a reduction in the urban heat sink and improved property values associated with landscaped tree areas and forested reserves. Restored forested stream ecosystems are key to fish and wildlife recovery efforts.

Stormwater Cisterns

Although some stakeholders are unfamiliar with cisterns, major developments utilize these flow rate control systems to mitigate urban runoff volumes while ensuring local water reliability. http://www.pelicanhill.com/pdf/PelicanHillGolfClub.pdf

Golf courses are known point sources of contaminates polluting regulated receiving waters. Grants and incentives to re-engineer golf courses will achieve multiple community benefits including runoff reduction, less use of fertilizers and compliment State water conservation mandates. Educating Co-Permitees and developers about a variety of stormwater capture systems can greatly facilitate a "can do" attitude to combat a prevailing "can't do" strategy by staff and developers.
http://www.conteches.com/products/stormwater-management.aspx

A thorough cost-benefit analysis of the value of stormwater capture/reuse as an untapped water resource over a 30 year time horizon will reveal substantial savings in imported water as well as regulatory compliance costs. Unsubstantiated allegations of cost prohibitions for basic watershed improvements must be accompanied by a detailed financial report to enable the public an opportunity to challenge inflated cost estimates which are often used as unscientific justification for non-compliance.

The Athens Aliso Redevelopment Project, Page 53, Figure 29 depicts a Roadway Subsurface Cistern Design Concept to offer an engineered alternative for large street cisterns capable of replenishment with local groundwater, dry weather urban runoff or hi-purity 250 tds recycled water (See attached). The City of San Francisco among others, including medieval San Gimignano in Italy, have networks of street, plaza and park cisterns. Stormwater cisterns can be recharged and managed in summer months with local recycled water to retain usefulness as irrigation water, wildfire suppression, etc.

Going Forward

There are numerous opportunities to collaborate in improving Region 9 water quality. Partnering with the South Coast Water District, the all volunteer South Laguna Civic Association motivated the City of Laguna Beach, County of Orange and surrounding golf courses to gain funds for the Aliso Creek Urban Runoff Recovery, Reuse and Conservation
Project http://www.scwd.org/projects/alisocreek.asp

As a useful template, capturing urban runoff is now a viable alternative to creek, estuary and ocean pollution. Engaging private and public innovators will break the artificial barriers manufactured by some Co-permittees and developers to block progress in restoring the region's natural stream flows. The way forward is not impossible nor difficult when considering the alternatives of doing nothing or the barest of minimums to assure compliance. Water, especially during prolonged drought conditions, can no longer be carelessly wasted as a source of regional water quality impairment.

Going forward, let's continue to promote timely workshops and encourage if not require Co-permitees and stakeholders to collaborate with knowledgeable NGOs, academics and individuals in implementing productive water quality projects. Thank you again for staff efforts by the SDRWQCB to improve the next MS4 Permit to achieve measurable, lasting improvements.

Michael Beanan
Vice President
South Laguna Civic Association

Construction Industry Coalition on Water Quality

September 14, 2015

Mr. Wayne Chiu, Senior Engineer
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, Ca 92108

Via Email: sandiego@waterboards.ca.gov

RE: Comment - Tentative Order No. R9-2015-0100, Place ID: 686088WChiu

Dear Mr. Chiu:

The Construction Industry Coalition on Water Quality (CICWQ) is submitting comments concerning Tentative Order No. R9-2015-0100 (National Pollutant Discharge Elimination System (NPDES) Permit for Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region, Order No R9-2013-0001, as amended by Order No. R9-2015-0001 (Regional MS4 Permit)). We are submitting this letter on behalf of the CICWQ membership, which is described below.

CICWQ is an advocacy, education, and research 501(c)(6) non-profit group of trade associations representing builders and trade contractors, home builders, labor unions, landowners, and project developers. CICWQ membership is comprised of members of four construction and building industry trade associations in southern California: The Associated General Contractors of California, Building Industry Association of Southern California, Engineering Contractors Association, and Southern California Contractors Association, as well as the United Contractors located in San Ramon in northern California. Collectively, members of these associations build a significant portion of the transportation, public and private infrastructure, and commercial and residential land development projects in California.

We present two main points for Regional Board consideration regarding the Draft Regional MS4 Permit:

I. The Regional Board is requiring increasingly stringent on-site stormwater retention requirements without evidence the existing, 2010 Southwest Riverside County MS4 permit water quality requirements are not working to protect water quality and maintain beneficial uses.

With the release of the Draft Regional MS4 Permit to incorporate watersheds in Southwest Riverside County within the San Diego Regional Water Quality Control Board (Regional Board) jurisdiction, the Regional Board is proposing to enact the most

stringent on-site requirements for stormwater runoff anywhere in California. Despite the demonstrable improvements in water quality runoff noted by the Riverside County permittees in their Report of Waste Discharge, Regional Board staff continues to require additional and less flexible on-site prescriptive performance measures for retaining stormwater runoff.

The program changes proposed in the Draft Regional MS4 Permit are being made without presenting any factual evidence that the existing low impact development water quality performance standards are not working, which the County of Riverside has required since the requirements became effective in 2012. We believe that because the current Southwest Riverside County Permit requirements are working well to protect water quality, presenting any evidence to the contrary is not actually possible. We note no Findings in the Draft Regional Permit that would suggest a need for any changes to program implementation and management.

II. The Regional Board is eliminating exemptions for hydromodification control, even when stormwater runoff is conveyed in the MS4 system to significantly hardened or engineered channels.

CICWQ and its membership believe that the regulations are tending, at some point, to require hydromodification control for all priority development projects regardless of receiving water susceptibility to hydromodification effects. This regulatory direction is undoubtedly driven by environmental NGO advocacy for removal of all concrete lined channels and receiving waters and complete restoration of all significantly or completely lined channels to "natural" conditions, regardless of the existing land uses and feasibility. This effort ignores the vital role flood control facilities play in urban infrastructure and the protection of life and property, and it ignores the significant public investment in these systems. Loss of hardened channel exemptions will result undoubtedly in increased costs for new and redevelopment of most public and private properties within the Regional Board's jurisdiction, and require project proponents to engage in a potentially costly and cumbersome bureaucratic process to "mitigate" for the effects (even the lack of) of hydromodification with no environmental benefit.

According to the Regional Board, hydromodification control requirements are being required to maintain geomorphic stability in receiving waters in southern California. However, it is clear that the alignment, grade and cross section of many urban streams has been irrevocably altered. A regulatory requirement to return flows to pre-development conditions will not allow stream restoration to occur. For urban areas, the Permit should support projects that enhance the functions and values of the receiving water within the constraints of the urban environment. Removing exemptions without consideration, or requiring extensive additional study to support exemptions that have been granted for years, appears to be a poor policy decision and one that is not supported technically.

Specifically, nowhere in the Draft Regional MS4 Permit is the lack of clear evidence for program changes more evident than the requirements for installing

hydromodification controls at priority development sites in Provision E.3.c.(2). In particular, we note the Regional Board is on a path to remove long-standing exemptions from hydromodification control requirements for certain projects whose discharge is conveyed to receiving waters via significantly or completely hardened and engineered channels. In the Draft Regional MS4 Permit for Southwest Riverside County, the Regional Board has provided "interim" exemptions that, while welcome in the interim, should be granted outright and without any additional study or consideration. Nor should additional updates or study be required on the part of the co-permittees to support granting exemptions, as required in the BMP Design Manual update referenced in Provision E.3.c.(2)(e).

And, as we have commented on during the adoption process for the San Diego County Regional MS4 permit in 2012 and 2013 and for the South Orange County Regional MS4 permit in 2014, new hydromodification control requirements that require a priority project to "avoid critical sediment yield areas" are unnecessarily restrictive, and do not reflect the dynamic and variable nature of the sediment supply that is delivered to stream systems in southern California. Our membership continues to report instances where priority development projects are being significantly delayed or stopped all together, because of the inability to comply with the requirement to avoid critical sediment yield areas. The most prevalent reason given is lack of engineering tools and techniques to comply with such a sweeping provision.

In summary, we have commented to the Regional Board about hydromodification control requirements in MS4 permits within its jurisdiction in a number of instances in the recent past, and many of our concerns and comments remain relevant in the current proceedings. While we note many of our suggestions have been ignored or discounted, we incorporate nonetheless those comments by reference here and cite specifically:

1) Comment Letter --Administrative Draft Regional Municipal Separate Storm Sewer System (Tentative Order No. R9-2012-0011); submitted September 14, 2012. See Item No. 3, page 6.

2) Comment Letter -- Tentative Order No.R9-2013-0001, Regional MS4 Permit, Place ID: 786088Wchiu; submitted January 13, 2013; See Items 3 and 4, pages 4-6.

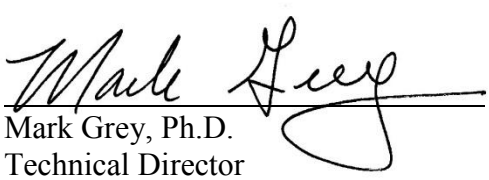
3) San Diego Regional Water Quality Control Board's Draft MS4 Permit: A case study; submitted May, 2013. See pages 3-8.

These documents are included as attachments to this comment letter.

CICWQ's membership is in the forefront of water quality regulation, providing to water quality regulators practical ideas and solutions that are implementable and that have as their goal clean water outcomes. If you have any questions or want to discuss the content of our comment letter, please feel free to contact me at (951) 781-7310, ext. 210, (909) 525-0623, cell phone, or mgrey@biasc.org.

Construction Industry Coalition on Water Quality (CICWQ)
2149 E. Garvey Avenue N., Suite A-11, West Covina, CA 91791. Phone: (626) 858-4611 Fax: (626) 858-4610
www.cicwq.com

Respectfully submitted,



Mark Grey, Ph.D.
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VIA E-MAIL

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January 11, 2013
Mr. Wayne Chiu, P.E.
San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, Ca 92123-4340

Re: Comment Letter– Tentative Order No.R9-2013-0001, Regional MS4 Permit, Place ID: 786088Wchiu."

Dear: Mr. Chiu,

On behalf of Building Industry Association of Southern California, Inc. (BIASC), Construction Industry Coalition on Water Quality (CICWQ) and the members of both, we appreciate the opportunity to provide comments on the San Diego Regional Water Quality Control Board Tentative Order No. R9-2013-0001; NPDES No. CAS0109266, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems ("MS4s") Draining the Watersheds within the San Diego Region (the "Tentative Order"). In addition, we respectfully request that our comment letter submitted to the Regional Board on September 14, 2012 be made a part of our overall comments to the Tentative Order and admitted into the formal administrative record, because the constructive suggestions for permit improvement remain relevant at this point in the Tentative Order development.

BIASC is a nonprofit trade association representing nearly 1,000 member companies, which together have nearly 100,000 employees. For decades, BIASC's members have built the majority of the new homes in Ventura, Los Angeles, Orange, Riverside, and San Bernardino Counties in southern California. CICWQ is an education, research, and advocacy water quality coalition comprised of representatives from five industry trade associations (in addition to BIASC) which are involved in the development of public and private building, infrastructure and roads throughout California (Associated General Contractors, Engineering Contractors Association, Southern California Contractors Association, Engineering and General Contractors Association, and United Contractors). All of the above trade associations, their members and the union labor work force are affected by the post-construction runoff control requirements proposed in the Tentative Order, and this letter is meant to provide the San Diego Regional Board with constructive suggestions for improvement.

We appreciate the Regional Board's earlier release of a precursor to the Tentative Order as an Administrative Draft, and the extensive stakeholder involvement process that ensued over the summer and autumn of 2012. Unfortunately, the Tentative Order does not reflect critically important changes to the Tentative Order's Development Planning requirements which we and many other public and private stakeholders recommended, both during the focused stakeholder meetings and in comments submitted to the Regional Board. Moreover, Regional Board staff does not provide sufficient findings of fact to support the priority project water quality and hydromodification control design criteria and performance standards in the Tentative Order. The requirements proposed in the Tentative Order are vastly different from those contained in the 2010 South Orange and South Riverside County MS4 permits, and there is simply insufficient performance data to demonstrate the need for any change.

We are concerned that key water quality and hydromodification control provisions within the Development Planning section (Section C.3) are (i) unsupported by substantial evidence, (ii) very bad public policy, and (iii) not properly considered as legally required. Specifically, certain provisions: (i) lack sufficient auditing or performance data showing the need for or advisability of such requirements, (ii) lack technical or scientific basis, and (iii) depart without any justification from required and approved technical documents that have been issued by the San Diego Regional Board for priority development projects in San Diego, Orange, and Riverside Counties. In addition, the hydromodification control provisions illuminate the Regional Board's failure to consider the factors required by California Water Code section 13241 – especially subsection (b) thereof.

1. There are no findings of fact to support changes in the requirements to evaluate, design and install LID BMPs (Section E.3.c) when comparing the proposed requirements in the Tentative Order with that of the requirements in the 2010 adopted South Orange and South Riverside County MS4 permits.

The Orange and Riverside County permits have been in effect for a short period of time (<2 years); and there is no data (program audits or annual report data, for example) that we can find that would support any changes to priority development project water quality control design criteria (found in Section E.3.C of the Tentative Order). Moreover, in one particular instance concerning which we and others have repeatedly commented to Regional Board staff, there is no technical justification provided by staff for requiring biofiltration LID BMP to be sized at 1.5 times the remaining design capture volume not reliably retained on-site. Section E.3.c.(3)(b)(i)[c] requires that if biofiltration is used as an alternative compliance method the biofiltration BMP is required to be sized to 1.5 times the design capture volume, which is an increase from the existing South Orange County permit. The permit and the fact sheet provide no technical justification for the 1.5 factor and therefore this requirement should be deleted from the permit. BIASC and CICWQ comment letter submitted to the Regional Board on September

14, 2012 and attachments including suggested permit redline remains relevant in this matter. We have provided this here as Attachment1.

2. There are no findings of fact or supporting technical and scientific data indicating the need for changes in hydromodification control requirements for priority development projects.

As we have commented before, there needs to be (i) an in-stream hydromodification control performance standard using the erosion potential (EP) approach; and (ii) the permit must recognize that there are a number of different types of channel hardening that have been used for armoring in stream systems besides concrete. In Attachment 1, we again make suggestions for improving the consistency of hydromodification control standards with those identified and allowed in the South Orange County MS4 permit.

The Tentative Order provides an "on-site" option for addressing hydromodification through flow duration control. This is an important element of the hydromodification control standard. However the Tentative Order is incomplete in that it lacks an option to assess and demonstrate hydromodification control through in-stream metrics. In many cases, significant development within a watershed has already caused hydromodification impacts. Requiring project-by-project flow duration control for each new project may not address the existing issue as effectively as a regionally-coordinated approach that combines upland control with in-stream remedies. Including the EP standard—as BIASC and CICWQ urge--would enable the development of more comprehensive approaches that include both upland controls and stream modifications (i.e., restoration). This option is critical for more effectively and efficiently protecting the region's aquatic resources.

Additionally, the Tentative Order includes an unnecessarily narrow definition of hardened channels that includes only those channels lined with concrete. Other forms of artificial hardening may be comparably resistant to hydromodification impacts, such as channels that are lined with rip rap, armored with soil cement, or armored with other practices. While the co-permittees or the project proponent should be responsible for demonstrating that a specific channel material is sufficiently stable, the narrow definition currently provided by the Tentative Order does not allow the use of sound engineering judgment and does not allow for use of innovative materials.

The comment letter submitted by BIASC and CICWQ to the Regional Board on September 14, 2012 remains relevant here, as the Regional Board staff did not make any changes to the hydromodification control requirements except for minor exemption allowances for using USGB council's LEED for redevelopment program standards. Exemptions, generally, are welcome and appropriate. But, in practice, referencing a voluntary, national green building and

development certification program for use as part of a NPDES permit does not provide a viable pathway for most priority development projects that are located in already urbanized areas that are served by existing MS4 infrastructure. Exemptions identified in the adopted San Diego Hydromodification Management Plan are appropriate and should be cited and referenced in the Tentative Order, and any reference to USGB LEED standards deleted.

3. Preserve the 2010 adopted San Diego County Hydromodification Management Plan elements

The Regional Board staff has provided no technical justification for the new hydromodification provisions. The HMPs for San Diego and South Orange County are based on sound science and should be allowed time to understand if they are adequate for mitigating hydromodification impacts. The Regional Board adopted the San Diego Hydromodification Management Plan (HMP) in July 2010. Significant work, technical analysis and stakeholder input have gone into the development of the HMP and these requirements have been in effect for just 16 months. Rather than providing separate criteria, the permit should acknowledge implementation of the Regional Board approved HMP as a sufficient mechanism for meeting hydromodification requirements. Of particular note and concern is the removal of exemptions for certain priority development projects (projects in urban areas with greater than 70% existing impervious surface, for example) that discharge to an MS4 system that then discharges into a significantly hardened channel system. It is unquestionably bad public policy to require installation of controls (or payment of in-lieu fees to compensate for the inability to install controls) when there is no threat to the receiving water.

To this end--and for sake of brevity, we support and encourage the Regional Board to accept comments from Orange County Public Works which pertain to the hydromodification control requirements. Changes in permit language as indicated in the County's redline of the Tentative Order would sufficiently address our concerns about the tentative hydromodification control requirements, and we urge the Regional Board to accept these changes.

Regional Board staff has publically stated that the proposed hydromodification control requirements in the Tentative Order are consistent with the 2010 adopted HMP and that only minor adaptation is necessary. That assertion is simply not true and in fact adoption of the Tentative Order requirements will render the HMP obsolete and require a total overhaul. According to the County of San Diego and the co-permittees within the County (and private developer stakeholders), more than $1.5 million have been spent to date developing the plan and conducting required monitoring. By changing the performance standards, requiring hydromodification controls at all priority development projects, and removing standard exemptions that are found in all other 4th term MS4 permits in California, the Regional Board is sweeping away years of program development activities and turning program implementation on

its head. The Tentative Order should explicitly recognize the findings of hydromodification management plans (HMPs) that have been previously approved by this Regional Board. The South Orange County HMP and the San Diego County HMPs were both the products of rigorous technical analysis based on the state of the practice, which were reviewed in detail by Regional Board Staff. The findings of these efforts must not be jeopardized under the new terms of the Tentative Order. *S*pecifically, findings regarding exempt water bodies must be appreciated and upheld, and they should be explicitly recognized in the Tentative Order.

4. The Tentative Order's proposed hydromodification control measures betray the Regional Board's failure to take into account the considerations required by California Water Code section 13241

For years, BIASC and CICWQ have been urging the water boards when developing MS4 permit requirements to address and respect their longstanding legal obligation to take into account the six, specified, non-exclusive factors which are set forth in California Government Code section 13241. The water boards have persistently refused. Most recently (just months ago), the Los Angeles Regional Board dismissed its obligation to consider the Section 13241 factors by noting that it had, in fact, more or less considered two of them (economics and some technical considerations). If the Regional Board here were to adhere to such a position, it would act in violation of California law and without justification.

There is perhaps no greater example of a permit condition written pursuant to a failure to consider the Section 13241 factors than the hydromodification control measures in the Tentative Order – particularly those which impose heroic, expensive engineering standards on development that drains into hardened flood control channels. Section 13241, subsection (b), requires consideration of the "[e]nvironmental characteristics of the hydrological unit under consideration…." By imposing expensive hydromodification control measures even where a receiving flood control system is already firmly hardened, the Tentative Order ignores this Section 13241, subsection (b), factor (obviously so, and regrettably consistent with the Regional Board's general refusal to take into account all six Section 13241 considerations).

BIASC and CICWQ believe that the water boards' persistent refusal to take demonstrably and meaningfully into account the Section 13241 required considerations results from a mistaken view of the applicable law. Specifically, the water boards' seemingly hold to the belief that the "maximum extent practicable" standard in federal law absolves the state agencies of any obligation to apply Section 13241when issuing MS4 permits. If indeed the water boards' legal position is thus, then it reflects a mistaken view of the degree of "federalism" reflected in the Clean Water Act and its interplay with the California Water Code. Moreover, such a position would reflect a failure to apply basic "federal preemption principles," which apply any time a party claims that federal law displaces state law.

BIASC and CICWQ urge the Regional Board to reconsider and reverse its refusal to apply meaningfully all six Section 13241 considerations, and to correct the Tentative Order accordingly.

Concluding Remarks:

BIASC and CICWQ have been active participants and contributors to the creation of improved MS4 permits across southern California. We continue to believe that rational, *implementable,* and *effective* permit requirements are critical to achieving great progress concerning water quality and our environment. We hope that these comments are received in the manner in which they are intended – to create a workable permit that improves water quality to the maximum extent practicable. We remain committed to a positive dialog with the Regional Board and its staff – one that will result in an informed, balanced and effective permit.

If you have any questions or want to discuss the content of our comment letter, please feel free to contact me at (951) 781-7310, ext. 213, (909) 525-0623, cell phone, or mgrey@biasc.org.

Sincerely,



Mark Grey, Ph.D.
Director of Environmental Affairs and Technical Director
Building Industry Association of Southern California and
Construction Industry Coalition on Water Quality

Enclosures:
Attachment 1

cc. Andy Henderson, Esq., Building Industry Legal Defense Foundation

VIA E-MAIL

Building Industry Association of Southern California, Inc.

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September 14, 2012
Ms. Laurie Walsh, Senior Engineer
San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, Ca 92123-4340

Re: ADMINISTRATIVE DRAFT REGIONAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (Tentative Order No. R9-2012-0011)

Dear: Ms. Walsh

On behalf of the Building Industry Association of Southern California, Inc. (BIA/SC) and the Construction Industry Coalition on Water Quality (CICWQ) and the members of both, we appreciate the opportunity to provide comments on the Administrative Draft of the San Diego County Regional MS4 Permit (Administrative Draft Permit). We submit these comments in addition to and in support of comments made by our affiliate in San Diego County, the Building Industry Association of San Diego and its coalition partners, and comments submitted by Rancho Mission Viejo.

BIA/SC is a nonprofit trade association representing nearly 1,000 member companies, which together have nearly 100,000 employees. BIA/SC's members have, for decades, built the majority of the homes in Ventura, Los Angeles, Orange, Riverside, and San Bernardino Counties in southern California. CICWQ is a water quality coalition comprised of representatives from five industry trade associations (in addition to BIA/SC) involved in the development of public and private building, infrastructure and roads throughout California (Associated General Contractors, Engineering Contractors Association, Southern California Contractors Association, Engineering and General Contractors Association, and United Contractors). All of the above trade associations and their members and the union labor work force are affected by the post-construction runoff control requirements proposed in the Draft Permit, and this letter and supporting attachments are intended to provide the San Diego Regional Board staff with constructive suggestions for improvement.

We appreciate the Regional Board's release of the Administrative Draft Permit in April 2012, and the extensive stakeholder involvement process that ensued over the summer of 2012. The comments provided here are intended to further meet the permit's underlying objective of protecting and improving water quality within the watersheds administered by the San Diego Regional Board. Our comments, supporting attachments, and suggested redline permit language

modifications reflect years of working not only on MS4 permits issued by the San Diego Board, but other MS4 permits administered by the Los Angeles, Santa Ana, and San Francisco Bay Regional Water Quality Control Boards.

We have four primary concerns with the Administrative Draft Permit content and the following discussion summarizes those concerns and provides the technical basis for those concerns including supporting attachments:

1. **Administrative Draft Permit Provision E. 3.c.(2)(c) establishes a zero discharge standard for biofiltration-type LID BMPs that are designed with an outlet/underdrain. This type of LID BMP cannot meet the on-site design capture volume standard as it is written. Such a zero discharge standard is scientifically and technically unsound and unsupported.**

Biofiltration is an established LID BMP for use in attempting to mimic pre-development hydrology. The US EPA, in multiple guidance documents produced since 2006, have recognized the use of biofiltration-type systems such as curb contained biofilters, bioswales, rain gardens, and using landscape areas for impervious area disconnection as essential LID BMP elements to include in land development projects, a few of which are cited below. The inclusion of biofiltration BMPs in US EPA's menu is a reflection of the practical limitations to retention of stormwater – retention practices are not universally feasible or desirable. When appropriately selected and designed, biofiltration BMPs achieve high levels of pollutant removal, which may exceed pollutant removal achieved in retention BMPs, particularly in cases where retention BMPs are inappropriately applied.

The retention requirement is contrary to EPA's definition of LID because it disfavors development strategies designed to appropriately "filter" runoff, such as bioretention cells or other vegetated LID BMPs. There are five principal EPA documents regarding LID; and four of them identify the appropriate roles of biotreatment-type BMP, such as detention (i.e., slow down, treat through vegetation, and then release across property lines), filtration, and surface release of stormwater.

In a compilation of case studies by EPA, most of 17 exemplary projects included biotreatment elements, such as bioretention, swales, and wetlands. *See* U.S. EPA 841-F-07-006. Each of two case studies described in another EPA document (s*ee* Attachment 1 at pp. 1-2, EPA 841-B-00-005) included the use of underdrains, and the example in one of the two specifically fed into the MS4 system at issue. Another EPA document updated in January 2009 refers to the many practices used to adhere to LID principles of promoting a watershed's hydrologic and ecological functions, such as bioretention facilities and rain gardens. *See* Attachment 2 at p. 2, EPA-560-F-07-231 (describing "an under-drain system to release treated stormwater off site," permitting planted areas to "safely allow filtration and evapotranspiration of stormwater");

http://www.epa.gov/owow/nps/lid/ (fact sheet describing under-drains used to release treated stormwater off site and permitting planted areas to safely allow filtration of stormwater). Thus, EPA's literature and guidance clearly recognize the important and even necessary role that biofiltration/biotreatment approaches play in real-world implementation of LID principles.

The National Research Council, in their 2008 Report to Congress titled "Urban Stormwater Management in the United States" cite the use of biofiltration and bioretention systems in improving water quality and in attempting to mimic predevelopment hydrology at many different site contexts and locations across the United States. The 2008 NRC report contains and cites numerous examples of using biofiltration type systems to reduce runoff volume and pollutant loads. The 2008 NRC Report clearly recognizes the role that biofiltration systems play in the LID BMP feasibility and selection process, and in achieving runoff management goals. The report states "In some situations ARCD (Aquatic Resources Conservation Design) practices will not be feasible, at least not entirely, and the SCMs [stormwater control measures] conventionally used now and in the recent past (e.g., retention/detention basins, biofiltration without soil enhancement, and sand filters) should be integrated into the overall system to realize the highest management potential." Note that the NRC report definition of ARCD includes both retention and biofiltration elements.

From a management perspective, a review of 4th Term Phase I MS4 permits within California (San Francisco Bay Area, Sacramento Area, North and South Orange County, Western and Southern Riverside County, and San Bernardino County) shows that the use of biofiltration to meet water quality volume and flow control performance standards is clearly allowed (See matrices submitted by BIA/SC_CICWQ at the August 22, 2012 Stakeholder Meeting and provided to the Regional Board by Mark Grey on August 24, 2012). These Regional Boards in California recognize that biofilter-type LID BMPs are an integral component of applying site design principles which seek to mimic pre-development hydrology. Furthermore, these permits implement a clear LID BMP feasibility and selection process, one that first requires examination of on-site retention systems (infiltration, harvest and use, and evapotranspiration), before moving to the evaluation and potential selection of bioinfiltration (some infiltration achieved) and biofiltration systems. This feasibility evaluation hierarchy, which is clearly explained in the South Orange County and South Riverside County MS4 permits adopted by the San Diego Regional Board in 2009 and 2010, respectively, must be preserved and included in the next version of the Administrative Draft Permit.

In summary, the zero discharge standard established by the Administrative Draft Permit significantly narrows the definition of LID, which is contrary to US EPA guidance, the 2008 NRC Report, and the standards established in recently-adopted Permits by the San Diego Regional Board and other Regional Boards. In essence, the proposed provisions would establish a standard that (i) will be impracticable in a relatively large proportion of sites, and (ii) has not

been demonstrated to be necessary to protect receiving water quality. We provide in Attachment 3 suggested permit language to address the continued use of biofiltration.

2. **A mitigation requirement is established when using flow-thru biofiltration-type LID BMPs to manage that portion of the SWQDv that is not retained on-site. This requirement is inconsistent with all other adopted Phase I MS4 permits in California and nationally. Biofiltration and bioretention BMPs are established LID practices; requiring accompanying mitigation of SWQDv that has already been biofiltered penalizes and dis-incentivizes use of these controls.**

Equally problematic, because it does not allow biofiltration type LID BMPs to meet the on-site storm water quality design volume (SWQDv) standard, is the current requirement in Administrative Draft Permit Provision E. 3.c.(2)(c) to "perform mitigation for the portion of the pollutant load that is not retained on-site." In other words, the draft provisions would require that, if a project proponent cannot retain 100 percent of the SWQDv on-site, and must therefore use biofiltration LID BMPs (with a treated discharge), then the use and installation of these systems will trigger an off-site mitigation or in-lieu fee program participation requirement. This provision in the Administrative Draft Permit is technically unjustified, disfavors the use of all types of recognized biofiltration LID BMPs, and could theoretically require a project proponent to not only pay for the installation and O&M of a biofiltration LID BMP, but also require mitigation or fee payment for that portion of runoff managed by it.

Biofiltration BMPs including natural treatment systems such as those that are part of the Irvine Ranch Water District's Natural Treatment System in Orange County (a regional example) can remove vast quantities of pollutant load, and provide other benefits such as habitat, flood control, and aesthetic, recreational and educational value. To relegate multi-benefit biofiltration or biotreatment BMPs applied at a site scale to a status inferior to on-site retention BMPs is not justified on a water quality basis, and is poor public policy, essentially depriving the region of an extremely important and effective approach to managing water quality.

While we agree that project proponents should be required to retain stormwater where technically and economically feasible, there are numerous conditions beyond a project's control that make retention infeasible, undesirable and/or ineffective. For example, in achieving a zero discharge standard, it is necessary to either maintain pre-project ET (which is generally impracticable) or increase the volume of stormwater that is infiltrated (which is the common result). Over-infiltrating rainwater can have adverse consequences such as altering the natural flow regime of the receiving waters such that riparian habitat changes, mobilizing pre-existing contamination in shallow groundwater, increasing inflow and infiltration to sanitary sewers, causing damage from rising groundwater, and other potential effects. By discouraging the use of biofiltration LID BMPs where there are more appropriate than retention, the Administrative

Draft Permit irresponsibly encourages the use of retention where it may have adverse consequences.

Retention BMPs are not necessarily more effective than biofiltration BMPs as the Administrative Draft Permit implies, especially considering the back-to-back-to-back nature of storm systems that arrive in southern California during winter months and deliver the majority of total rainfall volume. The Administrative Draft Permit establishes a SWQDv that must be retained, but does not specify the time over which this volume must be drawn down (i.e., drained) in order to have capacity for the volume from subsequent storms. The rate at which the SWQDv can be drained is a function of the infiltration rates of soils and the demand for harvested water. Where soils are not sufficiently permeable and/or where harvested water demands are moderate to low, the drawdown time of retention BMPs can be in the range of several days to several weeks.

In comparison, biofiltration BMPs are designed with engineered soils that can generally drain the SWQDv much more quickly, on the order of several hours. In cases where retention opportunities are limited, this results in a higher level of capture and treatment by biofiltration BMPs than retention BMPs, which can more than offset the lower "treatment efficiency" afforded by biofiltration compared to full retention. For example, based on rigorous technical analysis contained in the Orange County Technical Guidance Document (Figure III.2, Page III-11), a hypothetical biofiltration BMP draining in 12 hours would achieve approximately 25 percent greater treatment of average annual stormwater runoff volume than an equivalently sized retention BMP that drains in 72 hours and approximately 60 percent greater treatment than a retention BMP that drains in 10 days.

Because drawdown time is an important factor in (i) assessing BMP effectiveness and (ii) evaluating the site-specific determination of whether retention or biofiltration are preferable, we strongly recommend (in addition to allowing the use of biofiltration or biotreatment systems to meet the retention standard) including a secondary performance metric of managing 80 percent of annual runoff volume using continuous simulation modeling. This provides a means of accounting for the performance of strictly on-site retention BMPs versus the addition of biofiltration or biotreatment BMPs which can be designed to manage a greater volume of average annual runoff volume than retention BMPs of the same size. The total amount of water captured and treated and associated pollutant load reduction should be a primary deciding factor in whether retention or biofiltration BMPs are selected for a given project. As written, the Administrative Draft Permit strongly discourages an entire group of effective practices which have the potential to provide better protection of water quality, when compared to retention, in a wide range of cases. Attachment 3 provides suggestions for permit language which corrects these deficiencies.

3. Hydromodification control measures should allow use of the EP method to meet in stream standards; recognize multiple types of channel hardening when evaluating applications for hydromodification control exemptions

In Attachment 3, we also make suggestions for improving the consistency of hydromodification control standards with those identified and allowed in the South Orange County MS4 permit. Specifically, we recommend providing for an in-stream hydromodification control performance standard using the erosion potential (EP) approach and recognizing that there are a number of different types of channel hardening that have been used for armoring in stream systems besides concrete.

The Administrative Draft Permit provides an "on-site" option for addressing hydromodification through flow duration control. This is an important element of the hydromodification control standard. However the Administrative Draft Permit is incomplete without an option to assess and demonstrate hydromodification control through in-stream metrics. In many cases, significant development within a watershed has already caused hydromodification impacts. Requiring project-by-project flow duration control for each new project may not address the existing issue as effectively as a regionally-coordinated approach that combines upland control with in-stream remedies. Including the EP standard enables the development of more comprehensive approaches that include both upland controls and stream modifications (i.e., restoration). This option is critical for more effectively and efficiently protecting the region's aquatic resources.

Additionally, the Administrative Draft Permit includes an unnecessarily narrow definition of hardened channels that includes only those channels lined with concrete. Other forms of artificial hardening may be comparably resistant to hydromodification impacts, such as channels that are lined with rip rap, armored with soil cement, or armored with other practices. While the Permittees or the project proponent should be responsible for demonstrating that a specific channel material is sufficiently stable, the narrow definition currently provided by the Administrative Draft Permit does not allow the use of sound engineering judgment and does not allow for use of innovative materials.

Finally, the Administrative Draft Permit should explicitly recognize the findings of hydromodification management plans (HMPs) that have been previously approved by this Board. The South Orange County HMP and the San Diego County HMPs were both the products of rigorous technical analysis based on the state of the practice, which were reviewed in detail by Board Staff. The findings of these efforts must not be jeopardized under the new terms of the Administrative Draft Permit. Specifically, findings regarding exempt water bodies must be appreciated and upheld, and they should be explicitly recognized in the Administrative Draft Permit per our suggested redline.

4. The Permit must preserve important provisions for watershed level design and implementation of LID BMPs.

The proposed development project criteria and requirements in the Administrative Draft Permit do not include the language in the current South Orange County Permit that provides for Alternative Compliance for Watershed-Based Planning (See page 40-41 of the 2009 Permit). We ask that the Regional Board continue to recognize the protections to water quality and enhancements to water bodies which are achieved through watershed-based projects such as the Rancho Mission Viejo Ranch Plan, as it has in the current South County MS4 permit, and define Watershed Planning as an alternative and co-equal approach to the project-specific requirements. Attachment 3 to this submittal contains suggested redline language for addition to the Administrative Draft Permit.

Concluding Remarks:

BIA/SC and CICWQ have been active participants and contributors to the creation of improved MS4 permits across southern California. We continue to believe that rational, *implementable,* and *effective* permit requirements are critical to achieving great progress concerning water quality and our environment. We hope that these comments are received in the manner in which they are intended – to continue the discussion of how we can create a workable permit that improves water quality to the maximum extent practicable. We remain committed to a positive dialog with the Board and its staff – one that will result in an informed, balanced and effective permit.

If you have any questions or want to discuss the content of our comment letter, please feel free to contact me at (951) 781-7310, ext. 213, (909) 525-0623, cell phone, or mgrey@biasc.org.

Sincerely,



Mark Grey, Ph.D.
Director of Environmental Affairs and Technical Director
Building Industry Association of Southern California and
Construction Industry Coalition on Water Quality

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD DRAFT MS4 PERMIT: A CASE STUDY

Dennis Bowling, PE, MS; Mark Grey, Ph.D; Luis Parra, Ph.D, PE, MS, CPSWQ, ToR, D.WRE; Tory Walker, PE, CFM; Shawn Foy Weeden, GE, PE

On March 27, 2013, the San Diego Regional Water Quality Control Board (Region 9) ("RWQCB") released its Revised Tentative Order No. R9-2013-0001 (National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region) (hereafter, "Revised Draft Permit"). This article analyzes four components of the Revised Draft Permit, and identifies concerns with the Revised Draft Permit's treatment of those components based on the evidence that was before the RWQCB during its crafting of the Revised Draft Permit. The four components of the Revised Draft Permit are: hydromodification BMP requirements, the identification of a "pre-development" condition, Low Impact Development and the removal of pollutants in lieu of retaining stormwater onsite, and sediment transport requirements.

I. Hydromodification BMP Requirements

The Revised Draft Permit's Requirements

The Revised Draft Permit mandates that Copermittees require Priority Development Projects[1] to implement onsite Best Management Practices[2] ("BMPs") to manage hydromodification that may be caused by storm water runoff discharged from a project such that post-project runoff conditions must not exceed pre-development runoff conditions by more than 10 percent (for the range of flows that result in increased potential for erosion, or degraded instream habitat downstream of Priority Development Projects). (Revised Draft Permit, Provision E.3.c.(2)(a).)

[1] Priority Development Projects include: new development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site), or redevelopment projects that create or replace 5,000 square feet or more of impervious surface (collectively over the entire project site); new projects that create 5,000 square feet or more of impervious surface (collectively over the entire project site), and support restaurant, hillside development project, parking lot, or street, road, highway, freeway and driveway uses; new or redevelopment projects that create or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharge directly to an Environmentally Sensitive Area; new development projects that support use of an automotive repair shop or retail gasoline outlet, and new or redevelopment projects that result in the disturbance of one or more acre of land and are expected to generate pollutants post construction. (Revised Draft Permit, Provision E.3.b.(1))

[2] The Revised Draft Permit defines Best Management Practices as "Defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage." (Revised Draft Permit, Attachment C, p. C-2.)

Copermittees have the discretion to exempt a Priority Development Project from Provision E.3.c.(2)(a)'s hydromodification management BMP performance requirements in three limited circumstances: where the project discharges storm water runoff to existing underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean; where the project discharges stormwater runoff to conveyance channels whose bed and bank are concrete lined all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific ocean; where the project discharges storm water runoff to an area identified by the Copermitee as appropriate for an exemption by the Watershed Management Area Analysis incorporated into the Water Quality Improvement Plan pursuant to Provision B.3.b.(4). (Revised Draft Permit, Provision E.3.c.(2)(d).) The Fact Sheet in support of the Revised Draft Permit ("Fact Sheet') states that, other than the projects exempted through the Watershed Management Area Analysis, the exemptions are considered appropriative because there is no threat of erosion to downstream receiving waters. (Fact Sheet, page F-102.)

The RWQCB describes its position regarding its ability to include the hydromodification management requirements in the Revised Draft Permit in its Response to Comments on Tentative Order No. R9-2013-0001 ("Response to Comments"). Specifically, the Board states that federal law mandates that MS4 permits require management practices that will result in reducing pollutants to the maximum extent possible. The RWQCB states that the Revised Draft Permit's requirement that Copermittees require Priority Development Projects to control post-project runoff flow rates and durations so that they do not exceed pre-development runoff flow rates and durations by more than ten percent is appropriate and necessary to reduce erosion and the discharge of pollutants into receiving waters. (Response to Comments, pages 43-45.) In response to concerns regarding the potential requirement of hydromodification management BMPs in instances where hydromodification would not take place, the RWQCB included in the Revised Draft Permit the exemption described above for projects that discharge to conveyance channels whose bed and bank are concrete lined all the way from the point of discharge to the receiving waters. (*Id*.) The RWQCB, however, did not identify the extent to which such channels exist and would be a practical response to the challenge presented by complying with the hydromodification requirements in various venues.

In response to comments regarding the RWQCB's ability to regulate storm flow through hydromodification management requirements, the RWQCB states that the hydromodification management BMP requirements are for the control of pollutants in storm water discharges from the MS4. (Response to Comments, pages. 58-60.) While storm flow itself may be regulated as a result of the regulation of the pollutants within those flows, the RWQCB states that the hydromodification management BMP requirements are necessary to control the discharge of pollutants generated by new development and significant redevelopment projects in storm water discharges from the MS4 to the MEP. (*Id*.)

The Revised Draft Permit's Requirements are Unsupported

Both the Fact Sheet in support of the Revised Draft Permit and the RWQCB's Response to Comments cite to certain evidence that the RWQCB claims supports the hydromodification BMP requirements included in the Revised Draft Permit. However, as described below, this evidence

does not support the manner in which the RWQCB has incorporated hydromodification BMP requirements, particularly in regard to the Revised Draft Permit's failure to categorically exempt from compliance with the Hydromodification BMP requirements those projects that will discharge to a hardened channel that is not lined with concrete.

The Fact Sheet cites Assessing the Health of Southern California Streams, Stormwater Monitoring Coalition, Fact Sheet (Fact Sheet page F-89, Footnote 29[3]) ("SWMC Fact Sheet") in support of its claim that hydromodification is largely responsible for stream system degradation in San Diego County and that steam stressors including percent sands and fines present, channel alteration, and riparian disturbance are related to physical habitat changes caused by hydromodification. In the preparation of the SWMC Fact Sheet, more than 120 sites were sampled to provide data to make this determination, and the Southern California index of biotic integrity used to differentiate stream biological condition. The determination of relative degradation of stream (as compared to minimally disturbed reference sites) was made using a statistical method known as relative risk analysis. However, the SWMC Fact Sheet contains no discussion or presentation of the stream channel conditions found at the more than 120 sites used for the risk analysis.

Further, the SWMC Fact Sheet does not provide any data or support for modifying the existing hydromodification control requirements for significantly hardened channels defined in the 2007 version of the San Diego County MS4 Permit, or the process for obtaining a waiver from onsite compliance per the 2009 approved San Diego Hydromodification Management Program. The SWMC Fact Sheet describes an on-going study of Southern California streams and their biological characteristics relative to changes potentially caused by hydromodification. However, the SWMC Fact Sheet makes no distinction in stream susceptibility to hydromodification for those systems that are already significantly hardened. Accordingly, the SWMC Fact Sheet does not support any conclusions regarding the specific effects of or susceptibility to hydromodification on creeks, streams and associated habitats in San Diego County, or limiting the Draft Revised Permit's hydromodification exemption to only concrete lined channels.

The Fact Sheet cites Schueler and Holland, 2000, Storm Water Strategies for Arid and Semi-Arid Watersheds (article 66) The Practice of Watershed Protection (Fact Sheet page F-90, Footnote 30) to support its finding that increases in watershed imperviousness of 9-22% can result in increased peak flow rates and that these increased flow rates have an effect on channel morphology. This article describes climatalogical and hydrological variables that influence stormwater runoff generation in the arid west, in general, and provides recommendations for managing stormwater runoff using best practices to control pollutants in runoff and protect receiving waters from geomorphological changes. It does not include or address any issue related to already hardened channels systems or their susceptibility to the effects of hydromodification as a result of urban development.

[3] All references to footnotes within the Fact Sheet are in reference to the footnotes as they appear in the March 27, 2013 strikeout version of the Fact Sheet, recognizing that footnote references may change in the final version of the Fact Sheet.

The Fact Sheet cites Stein, E. and Zaleski S., 2005. Technical Report 475. Managing Runoff to Protect Natural Streams: The Latest Developments on Investigation and Management of Hydromodification in California. December 30, 2005. (Fact Sheet page F-90, Footnote 31) for the proposition that increases in uncontrolled imperviousness of as little as 3-10% can result in physical degradation of intermittent and ephemeral streams, and that stream systems in California are more susceptible to morphological changes than other areas in the US. However, the technical paper itself contains qualifying findings, not addressed by RWQCB in the Fact Sheet, concerning management of hydromodification effects. Specifically, Stein and Zaleski conclude that "not all streams will respond in the same manner [to the effects of hydromodification]" and that "Certain management strategies need to account for differences in stream type, stage of channel adjustment, current and expected amount of basin impervious cover, and existing or planned BMPs." (*Stein & Zaleski*, at page 15.)

Further, from a planning perspective, the authors of the technical report recommend that hydromodification should be addressed in both General and Specific Plans in terms of the location and design of new development, as site-by-site or project-specific approaches tend to be less effective and more costly to implement. (*Id.*, pages 11-12.) The authors go on to recommend that streams be surveyed and classified in order to identify areas with the greatest risk of impact from hydromodification. (*Id.*, page 15.) Taken collectively, these statements support recognition of the nature of channel condition in establishing the need for protection from hydromodification effects, which the Draft Revised Permit does not do. To rely on this article for support, the RWQCB would need to defer the proposed hydromodification provision to watershed specific implementation under each WQIP rather than the broad implementation proposed in the Draft Revised Permit.

The Fact Sheet further cites the USEPA, Reducing Stormwater Costs through Low Impact Development Strategies and Practices, December 2007 (Fact Sheet, page F-90 Footnote 32) to support the use of water quality and hydromodification control approaches using Low Impact Development ("LID") type controls, applied at a site scale regardless of receiving water or watershed condition. This USEPA study includes conclusions drawn from case studies done throughout the United States. The Fact Sheet cites the study to support and justify the development of hydromodification control requirements for all projects in San Diego County, yet the document does not include citation to specific evidence as to the need for or effectiveness of controls or whether they would be effective in the San Diego region as opposed to the specific case studies. The study highlights seventeen case studies of the implementation of LID principles into urban stormwater runoff management, with an emphasis on comparing the cost of installing LID BMPs to traditional or conventional stormwater management controls. However, there is no data or analysis presented concerning hydromodification; rather, LID principles are emphasized generally.

The Fact Sheet cites the website www.lowimpactdevelopment.org (Fact Sheet, page F-92 Footnote 34) in support of the Revised Draft Permit's use of the definition of Low Impact Development as crafted by the Low Impact Development Center, located in Maryland. However, this general citation offers no specific evidence or support other than to bolster the RWQCB's emphasis on LID BMPs applied at the site scale as a minimum compliance measure with MS4 permit conditions.

The Fact Sheet cites Managing Wet Weather with Green Infrastructure – Municipal Handbook: Green Streets (USEPA 2008) (Fact Sheet, page F-95 Footnote 38) to support the use of USEPA Green Streets Guidance to design and construct new roadways or significant roadway re-construction, which, if followed, allows project proponents to be exempted from Priority Development Project status. (Fact Sheet, pages F-94-F-95.) It is also cited in support of granting exemptions for construction of new or retrofit paved sidewalks, bicycle lanes, or trails that are designed to direct runoff to vegetated pervious areas (biofiltration systems, for example). According to the Fact Sheet, the exemptions are provided to "encourage these types of projects because they provide multiple environmental benefits such as promoting walking rather than driving, which will in turn improve air quality." (Fact Sheet, page F-94.)

However, the data in the publication do not address any specific requirement related to hydromodification control, but highlight the necessary consideration of the nature of the existing built environment encountered when building in urban areas. The publication's intent is clearly stated in its introduction: "This paper will evaluate programs and policies that have been used to successfully integrate green infrastructure into roads and right-of-ways." Integration of runoff controls into the context of the existing built environment is an essential consideration.

In fact, the logic cited by the RWQCB in the Fact Sheet in allowing exemptions for projects in dense urban areas that use green infrastructure techniques to the maximum extent practicable must be considered and extended to exemptions for hydromodification control when the ultimate receiving waters are significantly hardened using concrete or other armoring techniques. The Fact Sheet finds that by retrofitting the urban landscape with roadways using green infrastructure, it "recognizes that there are spatial constraints associated with these projects, and implementation of structural BMPs are not always feasible." (Fact Sheet, page F-95.) This recognition must be made equally with the need to consider or install hydromodification controls, especially when there is no threat to receiving water channel stability, and/or space constraints may preclude installation of large structural controls.

Housing, retail, and commercial development are now regulated to occur primarily in existing urban areas in order to concentrate population and employment in already dense or increasingly dense urban areas. *See* SANDAG 2050 Regional Transportation Plan, p.3-3 ["[The San Diego] region will meet or exceed [the SB 375] targets by, among other means, using land in ways that make developments more compact, conserving open space, and investing in a transportation network…"]; California Gov't Code § 65584.04(d)(2)(B) [California's metropolitan planning organizations are directed by SB 375 to consider the "availability of land suitable for urban development" -- including "opportunities for infill development and increased residential densities."]; California: A Primer on AB 32 and SB 375, Partnership for Sustainable Communities [an "[I]ncreasing the number of people living in cities and compact suburbs where transit and amenities are already in place may have a bigger impact on regional emissions, because those people will tend to walk to stores and take transit to work.".) Projects located in urban areas must comply with water quality LID treatment control requirements to the MEP, which will provide multiple environmental benefits, including improving receiving water quality for those runoff events up to the 85th percentile 24-hour storm. As urban areas are already served by hardened storm drain systems and flood control channels, there will be no effect on beneficial

uses in the receiving water from runoff greater than the water quality design capture volume. In fact, water quality would be expected to improve through the implementation of LID BMPs, and other benefits will be realized including decreases in traffic and associated pollutant load production, improved air quality through a reduction in vehicle traffic, and an overall increase in urban vegetation through the introduction of vegetated bioretention devices and urban street vegetation plantings as recommended in the Green Streets Guidance document.

Both the Fact Sheet and the Response to Comments cite E.D. Stein, F. Federico, D.B. Booth, B.P. Bledsoe, C. Bowles, Z. Rubin, G.M. Kondolf, A. Sengupta. Technical Report 667. Southern California Coastal Water Research Project. Costa Mesa, CA (2012) (Fact Sheet page F-101 Footnote 41; Response to Comments, pages 171, 183-184). The Fact Sheet cites Technical Report 667 in support of the development and use of an Alternative Compliance Program for those Priority Development Projects that cannot manage the applicable hydromodification control volume onsite, and instead require an off-site location in order to provide equivalent control or in-lieu payments to a fund providing resources to upstream or across watershed boundary projects. (Fact Sheet, page 101.) In addition, the RWQCB's Response to Comments cites the Technical Report in response to stakeholder comments in support of the very limited granting of exemptions to Priority Development Projects for installing onsite hydromodification control.

An Alternative Compliance Program is an established element of fourth term Phase I MS4 permits in California. However, with respect to considering and granting limited hydromodification control exemptions as described in the Response to Comments, at pages 171, 183-184, and 190, the RWQCB misinterprets the Technical Report's findings and the findings of an underlying scientific study cited in the report, and it does not consider other important findings and statements made in the report to support consideration of such exemptions.

In responding to comments regarding Hydromodification BMP requirements, the RWQCB cites two of the Technical Report's findings to support the statement that it "disagrees conceptually that blanket exemptions should be granted to all redevelopment projects that discharge to hardened channels." (Response to Comments, pages 183-184). First, the Regional Board incorrectly cites the Technical Report's finding that "the exemption of many small projects from hydromodification controls can result in cumulative impacts to downstream waterbodies...." (Technical Report 667, page 26; see Response to Comments, pages 183 and 190) This finding was made relative to receiving waters that are known to be susceptible to the additive effects of hydromodification, not with specific respect to receiving waters that are already concrete lined or otherwise significantly hardened. Moreover, the quotation's placement in the report is (i) found within a discussion of watershed scale hydromodification management concepts (especially as it applies to known or potentially susceptible receiving waters), not with specific respect to receiving waters that are already significantly hardened, and (ii) within a specific discussion of how current management strategies in municipal stormwater permits apply hydromodification standards; the author's note that requiring LID at all projects is positive measure for hydromodification, but the RWQCB's citation to Technical Report 667 does not appear to acknowledge this point.

The RWQCB cites the Technical Report work done by Booth and Jackson (1997) in King County, Washington to support its position that blanket exemptions not be granted to Priority Development Projects. This peer reviewed article described work done in an area undergoing rapid urbanization in east King County, Washington, where stream hydromodification sensitivity to land development was being recognized and measured. The empirical underpinning of the article was the changes noted in watershed imperviousness as a result of land development and corresponding changes in receiving water geomorphology as a result of development induced hydromodification. The watersheds and streams draining those watersheds were predominately under forest cover (see Booth and Jackson (1997) Table 1), which is unlike any receiving water system in San Diego County, and the specific stream systems were "natural" in channel condition. The article did not mention or address watersheds containing hardened receiving water channels. The conditions described by Booth and Jackson (1997) are much different and not representative of the conditions experienced by projects being developed within urban areas served by already hardened channel systems, and therefore do not support the RWQCB's position.

Technical Report 667 addresses the fact that stormwater permits may offer exemptions "for projects discharging to hardened channels or waterbodies," and cautions that "these exemptions may not be supportive of future stream restoration possibilities." Yet, its authors hedge such statements by stating that "a further limitation of the current permit structure is that there is no consideration of project characteristics such as position within the watershed and sensitivity of the receiving water reach....." (Technical Report 667, page 26.)

Second, the RWQCB repeatedly quotes Technical Report 667's finding that "an effective management program will likely include combinations of onsite measures (e.g., low-impact development techniques), in-stream measures (e.g., stream habitat restoration), and off-site measures. Off-site measures may include compensatory mitigation measures at upstream locations that are designed to help restore and manage flow and sediment yield in the watershed." (Technical Report 667, Page 26; see Response to Comments, pages 171, 184, 190; Fact Sheet, Page F-101).

The RWQCB cites to this quote to (i) support inclusion of the Alternative Compliance Program (Response to Comments, page 171), and (ii) support granting limited exemptions to Priority Development Projects for hydromodification control (Response to Comments, pages 184 and 190). While it is true that alternative compliance options should exist for those projects that drain to receiving waters known or believed to be susceptible to hydromodification effects, it is inappropriate to consider such options for projects that drain to already hardened channel systems because there is no threat, now or in the future, to downstream beneficial uses as a result of redevelopment. There is no scientific or technical nexus between the impact on the receiving water and the need for control. At worst case, any redevelopment project qualifying as a Priority Development Projects will contribute at least the same amount of runoff to the receiving water and likely much less if LID BMPs are feasible for implementation.

In the same section of comprehensive approaches to hydromodification management described in Technical Report 667 from where the quotation is derived, Technical Report 667's authors state that "the variety of types and conditions of receiving waters should result in a range of

requirements. This also means that objectives, and the management strategies employed to reach them, will need to acknowledge pre-existing impacts associated with historical land uses." The RWQCB must also consider this type of information in establishing appropriate exemptions for already hardened channel systems in urban areas within its jurisdiction.

The Revised Draft Permit's treatment of hydromodification management BMPs represents a significant change from the Final Hydromodification Plan for San Diego County, dated March 2011 ("San Diego HMP"). For redevelopment projects, these performance requirements are more stringent than the performance requirements of the San Diego HMP because they require evaluation of pre-development runoff conditions rather than pre-project runoff conditions.[4] Pre-development runoff conditions are defined as approximate flow rates and durations that exist or existed onsite before land development occurs. (Revised Draft Permit, Attachment C, page C-9.) For redevelopment projects, this equates to runoff conditions from the project footprint assuming infiltration characteristics of the underlying soil, and existing grade (i.e., using the parameters of a pervious area rather than an impervious area).

For many redevelopment projects, the difference between pre-development conditions and pre-project conditions is significant. This would require redevelopment projects on sites that are fully built to size hydromodification management BMPs as large as they would have been sized for a new development based on an estimate of the pre-project condition, yet they must be fit within the constraints of an already developed site. Furthermore, the change from a pre-project condition to pre-development condition requirement effectively invalidates some of the potential exemptions that certain redevelopment projects could have applied for under the approved San Diego HMP. Those approved exemptions could have facilitated the redevelopment process, encouraging redevelopment over new development. The exemptions are reasonable and are supported by extensive science and evidence. For example, under the San Diego HMP, projects that reduce impervious areas and reduce 2-year and 10-year peak flows to all outlets would be exempt. This exemption was a simple way to encourage redevelopment by removing the significant burden of hydromodification management BMPs, while achieving a net improvement to the watershed. Under the Revised Draft Permit, if adopted, this exemption would be effectively invalidated by the requirement to consider pre-development condition instead of pre-project condition because no project can reduce imperviousness below a pre-development condition. (Brown and Caldwell, Final Hydromodification Management Plan, prepared for County of San Diego, California, January 13, 2011.)

The other San Diego HMP exemption that may be invalidated or made more difficult to achieve by the Revised Draft Permit requirement to consider pre-development condition is its urban infill exemption. In the case of the urban infill exemption, a considerable effort was expended by the Copermittees, the San Diego HMP consultant, and the Technical Advisory Committee to prepare a cumulative impacts analysis to determine the thresholds and criteria for this exemption, and it was approved by the RWQCB as part of the San Diego HMP.

[4] The State Water Resources Control Board recently concluded that determining pre-development conditions and using them as the baseline was not feasible at this time. (See e.g. SWRCB California Department of Transportation Municipal Separate Storm Sewer System (MS4) Permit Comment Response Report (April 27, 2012), at page 4.).

The Revised Draft Permit also presents a list of criteria for exemptions from hydromodification management BMP performance requirements. (Provision E.3.c.(2)(d)) This list of criteria omits certain exemptions that were included in the RWQCB's 2007 MS4 permit, pursuant to Order No. R9-2007-0001. Exemptions available under R9-2007-0001 that are not included in the Revised Draft Permit are: channels that are "significantly hardened (e.g., with rip-rap, sackcrete, etc.)" (note this means channels hardened with materials other than concrete – channels that are concrete lined to the Ocean will still be exempt), and projects where "the sub-watersheds below the projects' discharge points are highly impervious (e.g., >70%) and the potential for single-project and/or cumulative impacts is minimal." The list also does not include exempt river reaches that were approved as part of the Final HMP dated March 2011 (portions of Otay River, San Diego River, San Dieguito River, San Luis Rey River, and Sweetwater River). These exemptions were based on extensive studies. (*See* Brown and Caldwell, Final Hydromodification Management Plan, prepared for County of San Diego, California, January 13, 2011.) While the Revised Draft Permit does not preclude these previously exempt channels, rivers, or highly impervious watershed areas from being exempt under a Water Quality Improvement Plan (WQIP), it requires a complete new analysis ("Watershed Management Area Analysis" defined in Provision B.3.b.(4)(a)), and vetting through the public review and approval process of the WQIP in order to re-establish the exemptions through the WQIP. Copermittees, the San Diego HMP consultant, and the Technical Advisory Committee have already expended considerable efforts to identify criteria for exempt river reaches. The Revised Draft Permit does not identify any evidence that supports this change. Copermittees should not have to prepare a new study to maintain these exemptions, as they have already been reviewed and approved during the development of the San Diego HMP.

Finally, pursuant to Provision E.3.(d) of the Revised Draft Permit, the updated performance requirements for hydromodification management BMPs must be incorporated into the BMP Design Manual (formerly Standard Urban Stormwater Mitigation Plan). Based on Provision F.2.b, this will be due three months following approval of the WQIPs. Pursuant to Provision E.3.d, until a Copermittee has updated its BMP Design Manual, the Copermittee must continue implementing its current BMP Design Manual. On this basis, until the BMP Design Manual is updated and implemented, a pre-project condition rather than pre-development condition will be the standard for curve-matching to meet the San Diego HMP criteria, and all exemptions currently available in the approved San Diego HMP will remain available. New HMP exemptions may be created where appropriate through the WQIP process.

II. **Hydromodification Baseline: Pre-Development Runoff Conditions**

The Revised Draft Permit's Requirements

The Revised Draft Order requires that post-project runoff conditions mimic "pre-*development* runoff conditions", as opposed to pre-*project* runoff conditions. (Revised Draft Order, Provision E.3.c.(2)(a); Fact Sheet, p. F-99.) The Revised Draft Order defines Pre-Development Runoff Conditions as "Approximate flow rates and durations that exist or existed onsite before land development occurs. For new development projects, this equates to runoff conditions immediately before project construction. For redevelopment projects, this equates to runoff conditions from the project footprint assuming infiltration characteristics of the underlying soil,

and existing grade. Runoff coefficients of concrete or asphalt must not be used. A redevelopment Priority Development Project must use available information pertaining to existing underlying soil type and onsite existing grade to estimate pre-development runoff conditions." (Revised Draft Permit, p. C-8.)

The RWQCB stated, without evidence, that using a hydrology baseline that approximates that of an undeveloped, natural watershed is the only way to facilitate the return of more natural hydrological conditions to already built-out watersheds, and ultimately improved stream health, and that using pre-*project* hydrology as a baseline for redevelopment projects would result in propagating the unnatural hydrology of urbanized areas, which would not support conditions for restoring degraded or channelized stream segments. Furthermore, reducing the volume of storm water runoff associated with the urbanized flow regime will also result in reducing the discharge of pollutants into receiving waters, since storm water runoff from impervious surfaces contains untreated pollutants. (Fact Sheet, page F-99.)

The Revised Draft Permit indicates that the RWQCB understands that approximating the pre-development runoff condition associated with a redevelopment site is not straightforward because factors such as natural grade and native vegetation for the site cannot be precisely known. (Fact Sheet, page F-99) For this reason, the RWQCB expects project designers and the Copermittees to approximate pre-development runoff conditions using existing onsite grade and assuming the infiltration characteristics of the underlying soil. (Fact Sheet, pages F-99 – F-100). Redevelopment projects are to use available information pertaining to existing underlying soil types (such as soil maps published by the National Resource Conservation Service), onsite existing grade, and any other readily available pertinent information to estimate pre-development runoff conditions. (*Id*.) The RWQCB asserts that an area's pre-development hydrology can only be roughly estimated and cannot be precisely known, but that using the hydrology of a natural condition, even if not precisely known, will provide significant benefit to receiving waters over using the hydrology associated with developed surfaces. The RWQCB finds that in order to achieve the goals of the Clean Water Act to "restore and maintain the chemical, physical, and biological integrity of the nation's waters [emphasis added]," the most appropriate standard to use for hydromodification management is the standard associated with the pre-development condition. (Fact Sheet, pages F-99-F-100.)

The Revised Draft Permit's Requirements are Unsupported

The RWQCB's findings in support of these hydromodification requirements are contradicted, however, by the California State Water Resources Control Board's ("SWRCB") statements as part of the 2012 renewal of the California Department of Transportation's multiple separate storm sewer system permit. In its April 27, 2012 response to comments regarding hydromodification, the SWRCB stated that the use of a "pre-development" standard for hydromodification is not feasible at this time. (See SWRCB California Department of Transportation Municipal Separate Storm Sewer System (MS4) Permit Comment Response Report (April 27, 2012), at page 4.) Specifically, the Board stated:

> It is not possible to develop a mutually agreed-upon standard for pre-development hydrology without a lengthy stakeholder process.

> One of the biggest complicating factors is that our hydrology has been significantly altered by the addition of dry weather flows, sometimes in volumes that are 3-5 times the volume of stormwater flows. Biocriteria need to be developed for the state and the ecological limits of flow alteration that can be tolerated and still have some favorable biological outcome need to be determined. This is still 5-10 years away. The pre-project standard is appropriate at this time.

The RWQCB should not take action to implement an approach that the SWRCB has determined to be infeasible. (See United States v. California (SWRCB) (1986) 182 Cal.App.3d 82, 109.)

III. LID and Onsite Retention of Stormwater

The Revised Draft Permit's Requirements

The Revised Draft Permit modifies its prior provisions relating to structural BMP performance requirements for Priority Development Projects, requiring that those projects implement onsite structural BMPs to control pollutants in storm water that may be discharged from a project. Specifically, under Provision E.3.c.(1)(a) of the Revised Draft Permit, Priority Development Projects are required to implement Low Impact Development (LID) BMPs that are designed to retain onsite 100 percent of the pollutants contained in the volume of storm water runoff produced from a 24-hour 85th percentile storm event.[5] (Revised Draft Permit, p. 93.)

The Fact Sheet for the Revised Draft Permit indicates that the 85th percentile storm event is the design capture volume that has been used for treatment control BMPs previously, and that it is the MEP standard recognized by the RWQCB and is consistent with the Fourth Term MS4 permits for Los Angeles, Orange, Riverside and Ventura Counties. (Fact Sheet, page F-96.)

Under Provision E.3.c.(1)(a)'s onsite retention requirements, the designer of a Priority Development Project would select a system of BMPs that would retain onsite – through interception, storage, infiltration or evaporation – 100 percent of the pollutants in the 85th percentile storm event design capture volume. (See Fact Sheet, page F-97.) The Fact Sheet for the Revised Draft Permit states that such retention BMPs are necessary to capture and retain the pollutants generated from a Priority Development Project. (*Id*.) Pursuant to Provision E.3.c.(1)(b), in the event a Priority Development Project determines that onsite retention is not

[5] The Revised Draft Permit describes a 24-hour 85th percentile storm event as follows: "This volume is not a single volume to be applied to all areas covered by this Order. The size of the 85th percentile storm event is different for various parts of the San Diego Region. The Copermittees are encouraged to calculate the 85th percentile storm event for each of its jurisdictions using local rain data pertinent to its particular jurisdiction. In addition, isopluvial maps may be used to extrapolate rainfall data to areas where insufficient data exists in order to determine the volume of the local 85th percentile storm event in such areas. Where the Copermittees will use isopluvial maps to determine the 85th percentile storm event in areas lacking rain data, the Copermittees must describe their method for using isopluvial maps in its BMP Design Manuals." (Revised Draft Permit, page. 93, former Footnote 27.)

feasible, it may utilize flow-through treatment control BMPs to achieve the equivalent pollutant load removal that would have been achieved if the design capture volume were fully retained onsite. However, "In any event, no matter what types of BMPs (or combination of BMPs) are chosen, 100 percent of the pollutants contained in the design capture volume must not be allowed to be discharged from the Priority Development Project." (*Id*.)

Finally, if onsite retention is found to be cost prohibitive or not to provide the water quality benefit to the watershed as would implementing BMPs elsewhere in the watershed, Provision E.3.c.(1)(c) allows for the use of a combination of onsite retention BMPs, and the implementation of an Alternative Compliance Program described in Provision E.3.c.(3).

The Revised Draft Permit's Requirements are Infeasible within the Region

As described below, the requirement is infeasible and not supported by evidence cited to in the Revised Draft Permit, the Fact Sheet that supports it, the RWQCB's Response to Comment, or elsewhere.

Infiltration is Largely Infeasible in Region 9

The soil types in Region 9, and particularly San Diego County, are likely infeasible for infiltration where stormwater could eventually reach the underground aquifer. More than 70 percent of the soil types found in San Diego County possess a Soil Hydrologic Group classification of C and D (USDA, 1973). A large majority of the land area possesses a classification of C or D (SANDAG, 2007) and soft/hard rock (CGS, 2007). Using infiltration as a preferred method of stormwater remediation county-wide, therefore, is unsupported. Clearly stated, in the appropriate soil type, infiltration is a preferred alternative. In the wrong soil type the results could be catastrophic. (See photos 1 & 2).



Photo 1 – La Jolla Landslide (Ardath Shale Formation, Claystone, Hydrologic Group D)

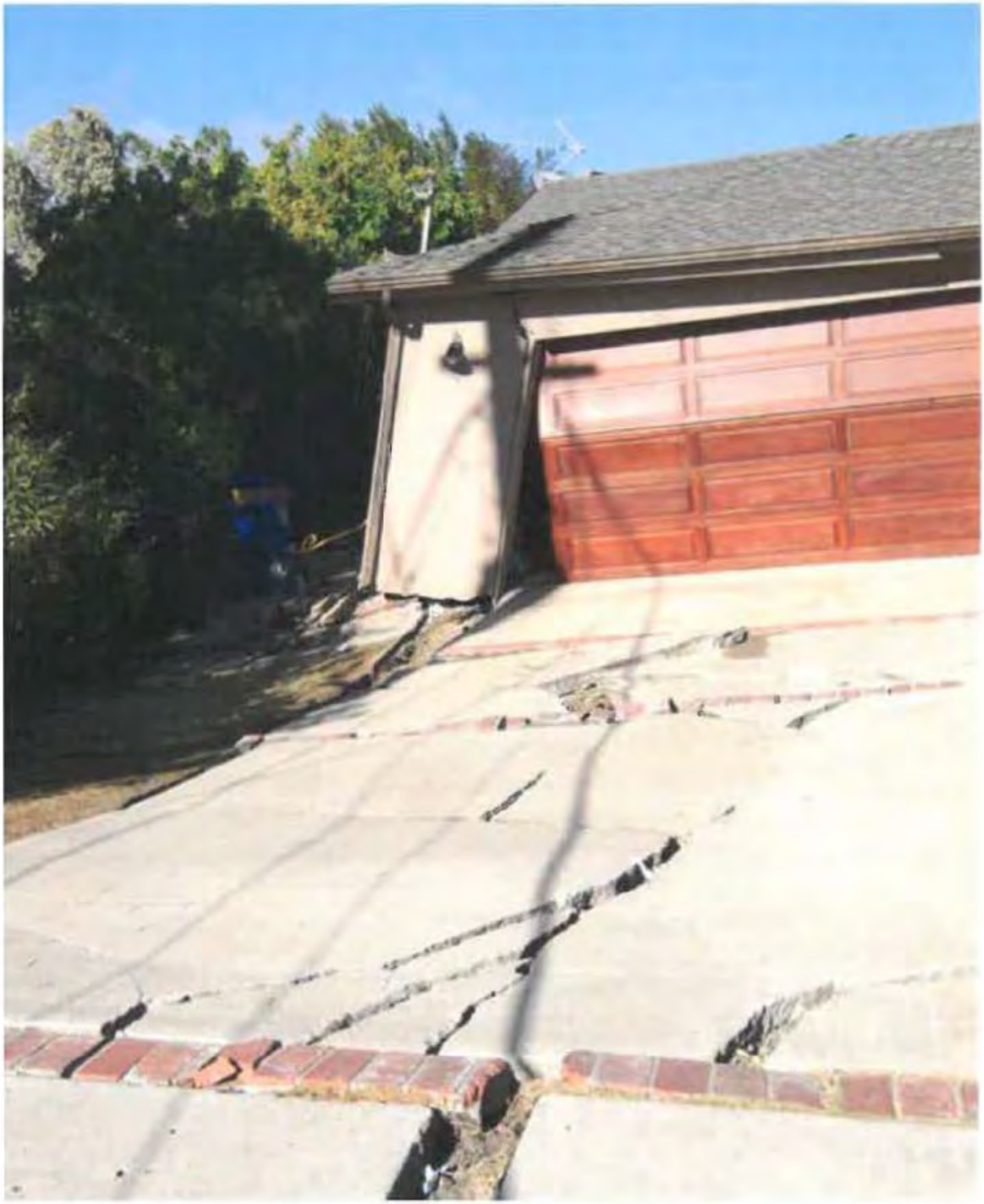


Photo 2 – La Jolla landslide (Ardath Shale Formation, Claystone, Hydrologic D)

For 70 years or more, both geotechnical engineers and civil engineers have designed projects to minimize water infiltration into the soils around and adjacent to buildings. A majority of geotechnical construction litigation is water intrusion related. (See Das, Braja M., Principles of

Geotechnical Engineering, 1994.) Water in clay based soils causes heaving, settling and failure of pavement, retaining walls and buildings. In extreme cases, these soils are prone to slippage, sinkholes or landslides. Additionally, when water enters these soil types it can travel laterally until it finds a utility trench, water or sewer line and then can undermine those systems. (Living with Expansive Soils, Marshall Addison, PhD. http://milliondollarstudent.com/ramjack/PDF/Living_with_Expansive_Soils.pdf; Low Impact Development Handbook, Stormwater Management Strategies, December 31, 2007, Page 39.) The water in these soils cannot infiltrate deep into the ground but moves as it can find voids and areas of better permeability. (Low Impact Development Handbook, Stormwater Management Strategies, December 31, 2007, Page 39.) (See photo 3, below.)



Photo 3 – Perched water visible on lower half of hillside (water migration)

Additionally, there are areas of the County where the soils are hard rock and infiltration cannot occur because water does not easily infiltrate into rock. (United States Department of Agriculture (USDA), Soil Survey, San Diego Area, California, December, 1973; SANDAG, County of San Diego Hydrology Manual Soil Hydrologic Group Map, 2007. California Geologic Survey (CGS), Preliminary Surface Geologic Materials Map, 2007.)

Since much of the construction within San Diego County is slab on grade construction, retaining water onsite through infiltration can even cause minor health and safety problems. Cured

concrete is still a porous material. If water is present in the soil, the slab can wick up water into the building (photos 4, 5 & 6). As buildings are well insulated and energy efficient, this water can lead to mold growth and damage anything placed on the slab (floor coverings, cabinets, furnishings). (Uniform Building Code, Title 24[6].) Water in a warm environment, without sufficient airflow exchange (because of better insulation, windows, etc.) provides the ideal conditions that lead to mold growth. This could create a major construction defect litigation problem for a builder or developer. Again, the geotechnical engineers and civil engineers have stressed the importance of moving water away from building as efficiently and quickly as possible for just this reason. (Building Code Requirements for Structural Concrete (ACI 318-08) and Commentary, American Concrete Institute [requires water barriers below slabs].) While ACI requires this, typically the entire footing doesn't receive a water barrier. Additionally, during construction the water barrier often may be punctured or moved and may not be as effective as called for in the ACI standard.



Photo 4- water migration through slab into cabinetry

[6] This section of the Uniform Building Code includes energy conservation measures, including requirements for better windows, improved weatherstripping, and additional insulation, which all lead to "tighter" and more energy efficient buildings. This is contrasted with older buildings, which "breathe" meaning that they have sufficient air flow to evaporate water wicking up through the slab before it becomes a problem. In newer buildings, water cannot evaporate and problem, such as mold, result.



Photo 5 – water migration through slab (mold under vinyl flooring)



Photo 6 – water migration through slab (white coating is efflorescence)

Retention and Re-use Requirements Raise Additional Concerns

Where onsite infiltration is not feasible, the next option is the capture and storage of stormwater for re-use. If a project will capture water in order to store it, a storage container must be constructed. Since an 85th percentile, 24 hour duration rain event can produce between ½" to ¾" of rainfall in a given area of San Diego (and up to 1-½" in mountainous areas, according to the 85th Percentile Precipitation Isopluvial Map of the San Diego County Hydrology Manual; see also http://www.projectcleanwater.org/html/wg_susmp.html), the amount of water to be stored could be considerable.

The Revised Draft Permit does not effectively address what happens with the retained water or how quickly it needs to be used, since the storage capacity would need to be utilized again for future rain events. Rain barrels are often mentioned as a solution, but care must be taken with regard to water breeding insects. Additionally, most commercially available rain barrels are made of plastic which degrades in the UV from sunlight. After a few years they become brittle and are prone to failure, putting water into the surrounding soils next to the building. Additionally, utilizing the optimum number of rain barrels is impractical, as it is too large to have a significant impact on water usage due to the erratic and clustered nature of the precipitation in San Diego County. According to a continuous simulation study prepared with hourly precipitation data of Lindbergh Airport in San Diego (the best precipitation data set in the County), the optimum rain barrel volume for retention purposes is about 12 – 50 gallon barrels for every 1,000 sq-ft of roof, using the theory of Diminishing Returns. (Parra, StormCon 2010.) Cisterns are another option mentioned as a potentially viable solution. Burying a tank in the ground may not be feasible for infill and redevelopment projects due to various Building Code issues.

Unintended Consequences

Both California AB 32 and SB 375 are landmark environmental laws addressing climate change and land use adaptation to reduce production of greenhouse gases. The intent of this legislation is to:

1. Use the regional transportation planning process to achieve reductions in greenhouse gas emissions consistent with AB 32's goals;
2. Offer California Environmental Quality Act incentives to encourage projects that are consistent with a regional plan that achieves greenhouse gas emission reductions; and
3. Coordinate the regional housing needs allocation process with the regional transportation process while maintaining local authority over land use decisions

The result is to encourage growth to occur inwards into the existing urban footprint. This is defined as "in-fill" development. An unintended consequence of the Revised Draft Permit is that its requirements actually make it more attractive and cost effective to build away from the existing urban footprint because of the land necessary to comply with the new requirements in the Revised Draft Permit. The 100% pollutant capture requirement and the removal of

hydromodification exemptions on infill development render these projects both technically and financially infeasible. (Refer to photograph 7.)

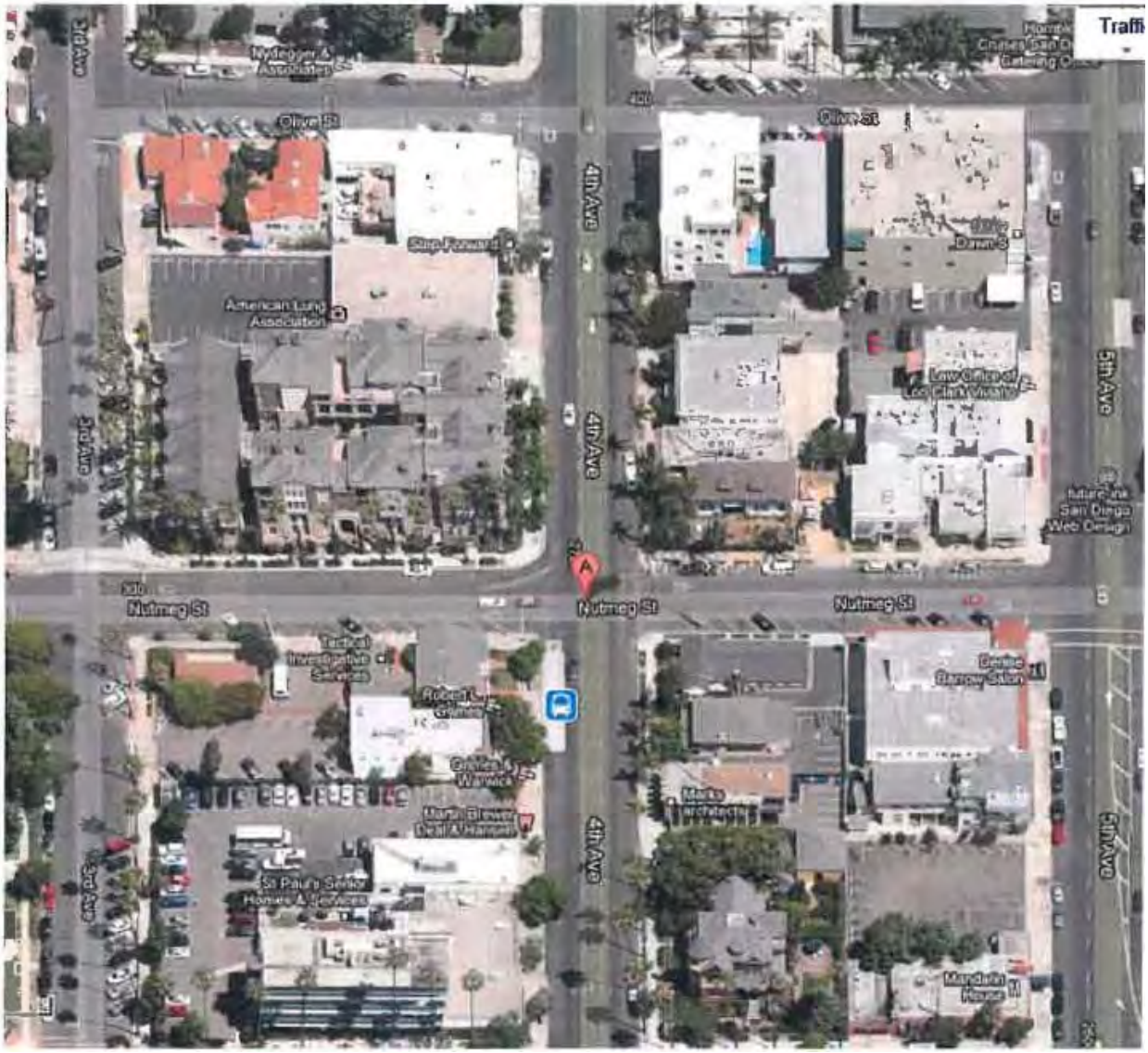


Photo 7 mid-rise condo project at the NW corner of 4th and Nutmeg, San Diego

Photo 7 shows a smart growth project on the northwest corner of 4th & Nutmeg in San Diego's highly urbanized Banker's Hill neighborhood: transit friendly (transit oriented development, TOD); walkable neighborhood; near parks, shopping and recreation (2 blocks from Balboa Park); near San Diego's airport; near Downtown/Hillcrest/Mission Valley work environments; and within the Smart Car (car 2 go) user footprint. Under the Revised Draft Permit, this project would become infeasible because of the 100% pollutant capture (infiltration/reuse) requirement and the loss of the hydromodification exemption previously included in the HMP.

The soil type at this location will not allow for infiltration. Additionally, to achieve the requisite density there is not enough land available to allow for supersizing of BMPs. There is no place to put a retention tank except under the building's parking structure. It may be infeasible to place a

tank under a building for a number of reasons: the difficulty or repairing a tank located below a building; the cost to integrate the tank into the building's foundation; if the tank were to leak, the entire building is subject to settlement issues, or failure, based on the water leaking into the surrounding soils; the added cost to operate and maintain the tank in perpetuity.

Photo 8 (street level) shows the building and that parking is located underneath the building. This is "podium" type construction and next to high-rise development, the most expensive type of construction for "smart growth" infill development. Complying with the Revised Draft Permit means this type of project becomes infeasible, both technically and financially. The Revised Draft Permit is silent on this issue and has not addressed this concern. The current language, whether intended or not, seems to eliminate this type of development project which is mandated and encouraged under SB 375.



Photo 8 – Street view: 4th and Nutmeg, San Diego (notice living units at ground level)

Whether or not water is infiltrated or stored onsite for reuse, the Revised Draft Permit includes no consideration of the fate of the pollutants existent in that water. In a storage tank or cistern, like a septic tank, gravity will cause most of the pollutants to fall to the bottom of the tank where they will remain and build up. Over time, the tank would gather year's worth of pollutants. If the tank owner is drawing the water for re-use, the water typically in any tank is drawn from the bottom, so the pollutants could be redistributed onsite. This raises questions of whether compliance with the Revised Draft Permit requirements would cause a health and safety concern to the person re-using the water, how often such a tank or cistern be emptied for cleaning, whether the mass of pollutants at the bottom of the tank would be considered a regulated waste,

and how and where a property owner could dispose of such a waste. An infiltration trench or basin would have the same pollutant disposal issues. The media (soil, sand gravel, etc.) in the trench or basin would need to be excavated and disposed of.

Another major concern with the new permit standard (infiltration or retention) is that it will deprive watersheds of the water that feeds riparian ecosystems. As the Revised Draft Permit offers creek and stream restoration or rehabilitation as an alternative compliance option to onsite hydromodification management, this raises the question of how can one restore those watercourses without the water that supplies them. (33 U.S.C. §1251(a) [the Clean Water Act was enacted "to restore and maintain the chemical, physical, and biological integrity of Nation's waters"].)

The Revised Draft Permit Includes no Support for the Ability to Comply with its Requirements

As described above, the phrase "retain onsite 100% of the pollutants" was recently added to the water quality management performance standard contained in the Revised Draft Permit (San Diego Regional MS4 permit Section E.3.c.(1)(a)). Unless a Priority Development Project can infiltrate the entire design capture volume, or reliably use the runoff collected in a harvest and use cistern system, retention of 100% of pollutants is impossible, and this is especially true for several pollutants of concern including bacteria or nutrients such as nitrogen or phosphorus.

The Revised Draft Permit offers no technical support for such a standard, including studies or data cited in the Fact Sheet, Response to Comments, or otherwise, that demonstrate 100% of pollutant can be prevented from being discharged from Priority Development Projects into the MS4 and into receiving waters. On the surface, such a requirement is conceptually feasible: no discharge equals no pollutants. However, the selection and application of retention type LID BMPs, principally soil infiltration systems and rainfall harvest and use systems, are subject to a myriad of technical infeasibility constraints, of which the RWQCB and others have identified (See for example, Orange County Model WQMP requirements and supporting Technical Guidance Document--TGD). In the absence of feasible application of infiltration or harvest and use, such a standard is unachievable. Rather, Regional Boards in California use water quality treatment design criteria that require project proponents to demonstrate that it cannot reliably retain 100% of the storm water quality design volume onsite before allowing the proponent to use biofiltration or biotreatment type LID BMPs. Only until the feasibility of these systems is exhausted may the proponent be allowed to use other types of management practices.

In the discussion in the Staff Report regarding justification for using the runoff created by the 24-hr 85th percentile rainfall event as the basis for a project's design capture volume, the RWQCB cites a Southern California Coastal Water Research Project ("SCCWRP") report prepared in 2007. This report includes findings that show the majority of pollutants from urban locations in the Los Angeles area of southern California arrive in receiving waters during the "early" part of storm events, and that the "highest constituent loading was observed early in the storm season, with inter-annual variability driven more by antecedent dry period that amount of rainfall."

The SCCWRP 2007 report also found that the "first flush" effect at land use sites was a function of watershed size. In other words, the smaller the watershed, the more pronounced the first flush

effect. Therefore, the author's note that "capturing constituent loads should focus on more than just the initial portion of the storm at moderate to large catchments". This statement, therefore, supports using the entire suite of LID type BMPs to manage urban runoff, including biofiltration systems, and supports using a secondary metric of sizing LID BMPs for retaining and treating 80% of the annual runoff volume in addition to capturing and treating individual rainfall events. In no case or instance cited in the SCCWRP 2007 report is there a recommendation or finding that supports a retention standard that achieves 100% pollutant containment. The aforementioned Orange County Model WQMP and TGD describe the LID BMP selection process and sizing criteria in detail (using both the 24-hr 85th percentile design storm and 80% annual runoff volume as sizing metrics), and provide several case study examples for support.

Such a restrictive and narrow definition of allowable LID BMPs is inconsistent with U.S. EPA guidance which promotes biofiltration and biotreatment as part of LID. Of five U.S. EPA sources regarding LID, four included biotreatment-type terms, such as detention (i.e., slow down, treat, then release), filtration, and surface release of storm water. In a compilation of case studies by U.S. EPA, most of 17 exemplary projects included biotreatment elements, such as bioretention, swales, wetlands, and green roofs. *See* U.S. EPA 841-F-07-006, discussed in a 2009 submittal from Mr. Eric Strecker, Geosyntec Consultants for the Construction Industry Coalition on Water Quality. In Mr. Strecker's analysis, each of two case studies described in another EPA document, s*ee* EPA 841-B-00-005, included the use of under-drains, and one of them specifically fed into the main storm drain system. A U.S. EPA document updated in January 2009 references additional resources, one of which refers to the many practices used to adhere to LID principles of promoting a watershed's hydrologic and ecological functions, such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. *See* EPA-560-F-07-231. A fact sheet used in conjunction with that document describes under-drains used to release treated storm water off site, permitting planted areas to safely allow filtration of storm water.

The State Water Resources Control Board (SWRCB) identifies LID as a sustainable practice that benefits water supply and contributes to water quality protection, stating that, "The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall" (emphasis added). SWRCB also states that, "LID practices include; bioretention facilities or rain gardens, grass swales and channels, vegetated rooftops, rain barrels, cisterns, vegetated filter strips, and permeable pavements" (emphasis added). As can be seen, SWRCB defines LID as including filtration, detention, and bioretention, and other practices, each of which produce runoff and would not be part of the LID standard under the tentative order and instead moves a project into "Alternative Compliance". In addition, SWRCB characterizes mimicking pre-development hydrology as a "goal," not an enforceable standard. *Found at*: http://www.waterboards.ca.gov/water_issues/programs/low_impact_development/.

The language in the current tentative Order, while clearly specifying a volume capture approach to sizing LID BMPs, introduces an incorrect definition of LID through restrictive application of BMPs to only those that infiltrate, harvest and use rainwater, and/or evapotranspire all of the captured water. In other words, permit language now requires that projects would be limited to zero discharge of a design storm volume with no runoff whatsoever allowed.

The US EPA defines LID as follows:

> *A comprehensive stormwater management and site-design technique. Within the LID framework, the goal of any construction project is* ***to design a hydrologically functional site that mimics predevelopment conditions.*** *This is achieved by using design techniques that infiltrate,* **filter***, evaporate, and store runoff close to its source.* (emphasis added)

http://cfpub1.epa.gov/npdes/greeninfrastructure/information.cfm#glossary .

Mandating the complete onsite retention of any sizable storm volume (i.e. runoff that never leaves as surface flows) is not a reasonable approach and the tentative Order attempts in places to redefine the allowable site design elements necessary to implement this concept. The tentative Order may implement LID in a way that is contrary to the EPA definition of LID by restricting BMPs to those that only achieve zero discharge—not allowing any BMPs that appropriately "filter" runoff, such as bioretention cells or other vegetated LID BMPs. Total, 100-percent retention remains impractical and unwise in most circumstances, and is not a goal that can be achieved for most projects within reasonable costs, despite best efforts. Moreover, such a mandate abandons the goal to mimic predevelopment conditions to the extent practicable, as EPA encourages.

The retention BMPs of infiltration, harvesting, and evapotranspiration ("ET") may be described as a first tier of LID BMPs, but they should not be universally mandated to the exclusion of all other options. As the EPA definition of LID indicates, biofiltration, bioretention, filter strips, and other BMPs based on using vegetation to promote stormwater treatment via filtration are fundamental to LID implementation. These BMPs may be specified as second tier options (although they best mimic pre-development conditions), but project proponents should have considerable discretion to use these BMPs, and should not be required to apply for a feasibility exception to do so.

The use of conventional BMPs (structural treatment installations) as the principal approach for stormwater management should be a last resort, available only when objective infeasibility criteria are satisfied, and when off-site opportunities are not readily available. When LID BMPs are infeasible, and nearby off-site options are not available, the use of conventional BMPs that have been demonstrated to be effective on the pollutants of concern should be a compliance option.

IV. Sediment Transport Requirements

The Revised Draft Permit's Requirements

The Revised Draft Permit requires Priority Development Projects to avoid known critical sediment yield areas or implement measures that allow coarse sediment to be discharged to receiving waters, such that the sediment supply is unaffected by the project. (Revised Draft Permit, Provision E.3.c.(2)(b).) The Revised Draft Permit does not define "coarse sediment"[7] as

[7] According to the technical literature, the beginning of sediment motion is not defined by the term "coarse sediment" but by more specific terms such as (1) Nearly Uniform Cohesionless

it is used in this section. The Fact Sheet supporting the Revised Draft Permit states that the requirement is necessary because coarse sediment supply is as much an issue for causing erosive conditions to receiving streams as are accelerated flows.[8] (Fact Sheet, page F-100.)

All development involves some loss of sediment. The Revised Draft Permit requires that "critical sediment yield areas" will be identified by studying the watersheds (through the Watershed Management Area Analyses[9]). These analyses would then be incorporated into the Water Quality Improvement Plans for each watershed. Thus, a new category of "Environmentally Sensitive Areas" will be identified and protected. This would be incompatible with development on that property. To understand why introducing a new category of sensitive area into the development planning process is such a concern requires an explanation of hydromodification basics and impacts on receiving waters.

Hydromodification Basics regarding Sediment Transport

Hydromodification is primarily understood within the context of impacts, potential or realized; that is, the effects of changes within a watershed on downstream fluvial systems (i.e., canyons, creeks, streams, rivers, lakes, lagoons, etc.). A change, or a number of changes, can cause or contribute to an imbalance within a fluvial system that has been in a state of dynamic equilibrium (relative stability within a range of erosivity/degradation and sedimentation/aggradation). Related secondary impacts (secondary as a consequence, not necessarily in importance) include habitat degradation, slope failures, infrastructure failures, and increased flooding risks, among others. (ADWR, 1996, 1998; USACOE, 1994).

The most common example of hydromodification is the covering of land with impervious surfaces, which deprives the waterways of naturally occurring sediment yield, while increasing runoff volumes, durations and peaks in those same waterways. Another example is the presence of a flood control dam upstream, which tends to trap sediment but also reduces damaging peak flows and volumes. (Aspen Environmental, 2006.) For the purposes of this paper, hydromodification will be understood as a direct consequence of urbanization, the covering over of land with impervious surfaces.

Sediment (Shields, 1936; Maidment, 1992), (2) Incipient Motion on Ripple and Dune Beds (Chabery et al, 1963; Mantz, 1977) ; Mixture of Nonuniform Cohesionless Sediment Sizes (Egiazoroff, Little and Meyer, Hayashi et al, among many others), and Cohesive Sediment (Mehta, (3 studies, 1986, 1989 and 1989)).

[8] This statement oversimplifies a complex issue, as in some watersheds, fine sands, dunes and ripples, and cohesive sediments can be an important geomorphic factor. (*See* Lane and Carson; Shen and Liu; Task Committee; previous studies).

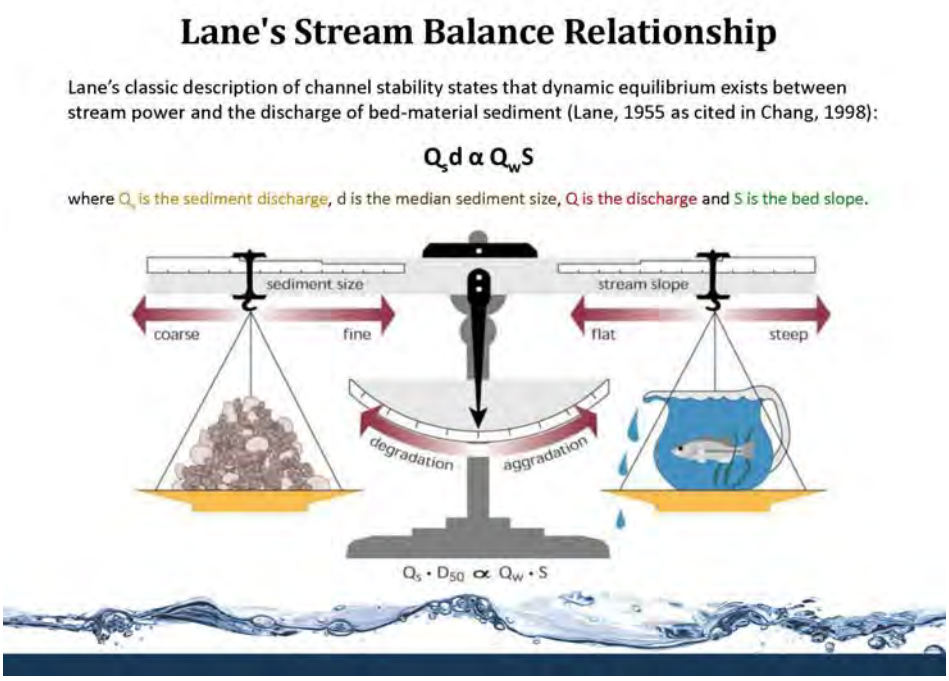
[9] The Revised Draft Permit is silent as to the method to determine such critical yield areas, which could conceivably be established based upon the USLE equation (Wischmeier et al, 1971), by sediment-delivery ratio equations (Roehl, 1962), by sediment yield empirical formulas based on real measurements (Dendy and Bolton, 1976), or by more complex mathematical formulations (Ponce, 1989).

Understanding Fluvial Processes

Lane's Stream Balance Relationship states that dynamic equilibrium exists between stream power and the discharge of bed material sediment. (Lane, 1947.) It is usually stated as:

$$Q_s * D_{50} \alpha Q_w * S$$

Where Q_s is the sediment discharge, D_{50} is the sediment size, Q_w is the (water) discharge, and S is the bed slope. This proportional relationship is often graphically illustrated with a balance, as shown below, and it is not intended to be used as an equation. Some attempts to convert this relationship into an equation have been carried out. (Ponce, 1999.) The Lane relationship shows that where adjustments or modifications occur in the watershed or in the channel (in terms of Q_w, for example), another adjustment will begin to occur to preserve the equilibrium (in terms of S or Qs, for example).



Three Local Examples

Hydromodification impacts vary, sometimes by orders of magnitude. (Hastings, 2005; Hecht, 2000.) The following three examples of fluvial systems within our region illustrate this well. Each is different, and each only represents one reach of the creek. As one travels upstream or downstream each of these creeks, impacts will vary widely.

<u>Oso Creek</u>

The photo below shows a portion of Oso Creek, approximately 1 kilometer (0.7 miles) downstream of a hardened channel. The severe degradation evident in this photo has occurred

within the past 20 years, due to development of a master planned community upstream. The composition of the bed and banks is primarily loose alluvium, so erosion has not been halted. The sediment from this reach is deposited in downstream reaches and has resulted in slope failures, biological degradation and flooding impacts downstream.



Oso Creek, approximately 1 kilometer (0.7 miles) downstream of a hardened channel

Escondido Creek

By contrast, the photo below indicates a creek in dynamic equilibrium 0.7 kilometers downstream of a hardened channel. The City of Escondido, incorporated in 1888, has certainly experienced its share of development, with most of the city draining to this natural channel for more than 100 years. This photo is typical of Escondido Creek for the remaining 23 kilometers (14 miles) to the ocean. That is not to say this creek is not subject to any degradation, only that over the decades the creek has mostly adjusted to a new state of dynamic equilibrium.



Escondido Creek in dynamic equilibrium 0.7 kilometers downstream of a hardened channel

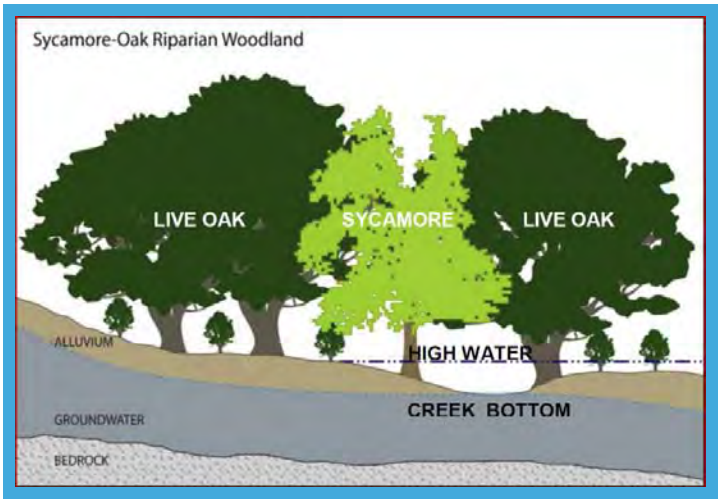
Agua Hedionda Creek

The Agua Hedionda Creek watershed is in portions of several north San Diego jurisdictions. A 2008 Watershed Management Plan (TetraTech, 2008) identified a reach of the creek as a high priority project; Tory R. Walker Engineering, Inc. assembled a multi-disciplined team, which prepared a Preliminary Design Report for the rehabilitation of that reach. (Tory R. Walker Engineering, 2010.) The photo below illustrates the typical impacts of hydromodification within the reach, where an established Oak woodland is threatened.



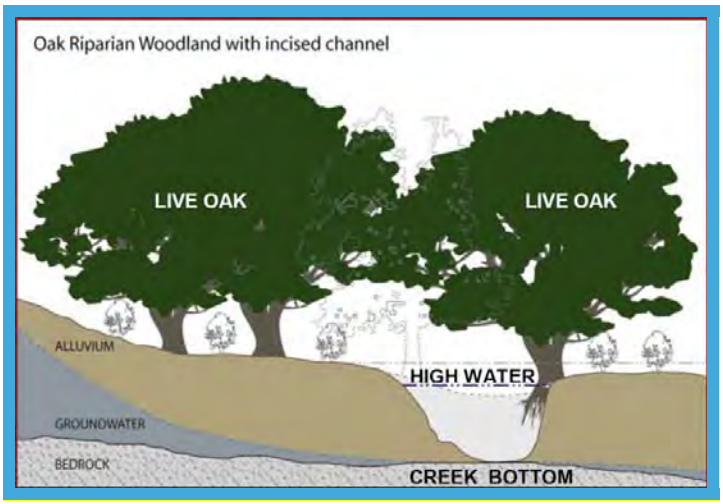
Agua Hedionda Creek in Buena Vista Park near Melrose Avenue

The figures below illustrate the effects of hydromodification over time on hypothetical stream systems. (TRWE, 2010.)



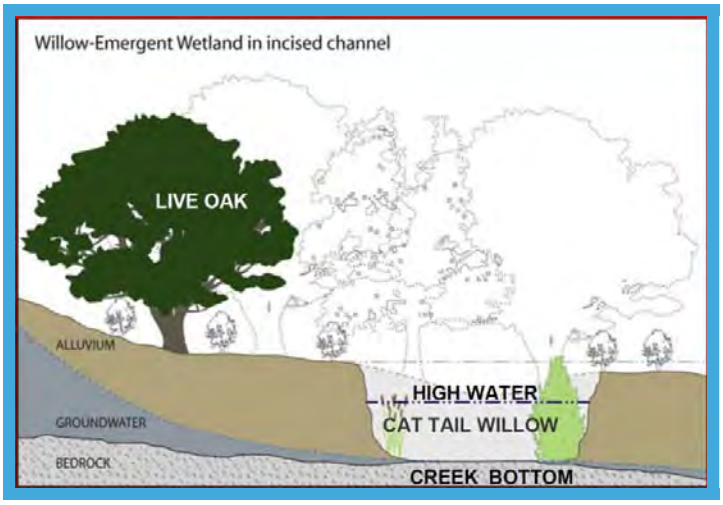
Stable System (circa 1900)

- High Groundwater Recharge
- Equilibrium Sediment Transport
- High Floodplain Function
- Low Discharge Velocities
- Dynamic and Broad Riparian Zone
- Diverse Riparian Habitat
- Sustainable Vegetation Mosaic
- Cool Seasonal Aquatic System



Early Incised System (Present)

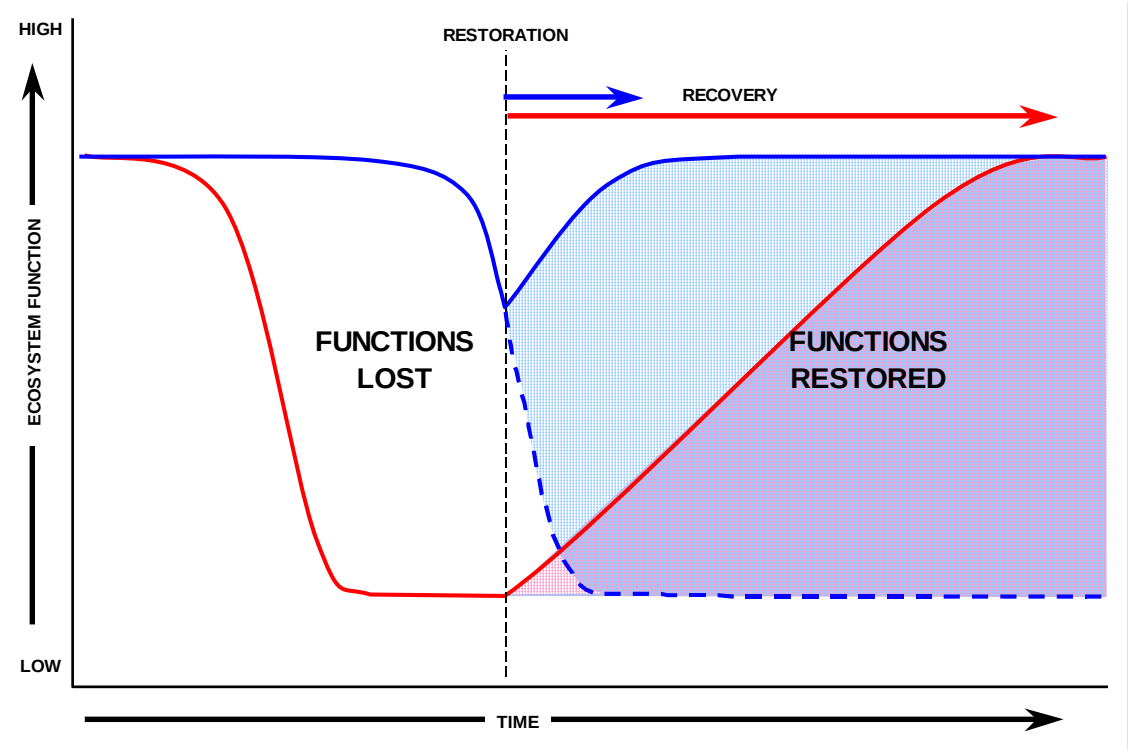
- Depressed Groundwater Table
- High Groundwater Export
- Low Groundwater Recharge
- High Channel Bank Erosion
- Confined Low Floodplain Function
- High Discharge Velocities
- Diminishing Riparian Zone Width
- Low Diversity Riparian Habitat
- Poor Riparian Plant Recruitment
- Cool Seasonal/Perennial Aquatic System



Mature Incised System (circa 2040)

- Groundwater Conditions Same as Now
- High Channel Bank Erosion
- Confined Low Floodplain Function
- High Discharge Velocities
- Diminishing Riparian Zone Width
- Low Diversity, Narrow Riparian Habitat
- High Scour Plant Loss
- Opportunistic Exotic Plant Recruitment
- Warm Seasonal/Perennial Aquatic System

Restoration of ecosystem functions that have been lost due to hydromodification may be accomplished through different mechanisms. The figure below illustrates two paths to the restoration of ecosystem functions over time – with and without human intervention to restore the lost functions. The shorter length of the "blue path" demonstrates the value of restoration/rehabilitation in a creek, whereas the length of the "red path" shows how a much longer period of time is needed for recovery of ecosystem functions when no human restorative action is taken. In the case of Agua Hedionda Creek, those ecosystem functions would be different.



Effects of Ecosystem Trajectory on Restoration Values (TRWE, 2010.)

Stabilization

Stabilization of fluvial systems has generally been considered the typical "fix" to hydromodification. (USACOE, 1994.) Stabilization can be understood very broadly to include everything from concrete lining and piping underground to streambed or bank stabilization utilizing bioengineering techniques exclusively. Between these two "ends of the spectrum" are quite a number of techniques and types of materials, used in combination or separately, to "stabilize" these dynamic systems. Common techniques include grading of new "stable" channels, creating "benches" beside channels (thus increasing flood capacity and stability), constructing drop structures to flatten the longitudinal slopes, or meandering the stream channel to lengthen it. In addition to concrete lining, materials have typically included rock riprap, natural stone, concrete block systems, turf reinforcement mats, vegetation, imported sediment and/or cobbles of a certain gradation, gabion baskets, logs, and root wads. (NRCS, 2002; WSAHGP, 2003.)

Restoration and Rehabilitation

"Restoration" usually refers to attempts to restore a system back to a previous condition, while "rehabilitation" usually refers to attempts to improve a system while accounting for mostly irreversible changes (like a hydromodified watershed). This should not be understood as "giving up" on all efforts to lessen impacts within a watershed; rather, it should be understood within the context of the graph above. Time marches on, as the saying goes, so intervention requires an understanding of where a fluvial system is currently, along with an understanding of the current and future conditions of the watershed. For this reason, most work within fluvial systems is no longer described as "restoration," but rather "rehabilitation."

Onsite Approach Presented in Draft Permit

Attempts to address sediment balance through a directive within a permit will almost always fail; the complexity of the issue defies such an approach. The desire to compensate for the loss of course sediment due to development (even LID), or to avoid sediment yield areas altogether (both of which have been put forth in revisions of the Revised Draft Permit) shows a misunderstanding and a wrong focus on the issue by attempting to address it at the source. The currently proposed language in Section E.3.c.(2)(b) introduces a further complication, in that its implementation must necessarily prohibit the use of land for any compatible use other than allowing erosion to occur so that the downstream system has a supply of coarse sediment. This then becomes a land use decision.

Natural areas have produced sediment as part of a natural cycle of random precipitation events, vegetative cover and burns for millennia. Urbanization introduces a sudden and sometimes dramatic change to an equilibrium that has existed for a very long time (as in Oso Creek). In almost all cases throughout the San Diego Region, the effects of urbanization have already done most of the "work" on the downstream systems, so an onsite approach to the problem is much like closing the barn door after the horse has escaped. With that consideration, attempting to identify critical sediment yield areas within most of the watersheds will be an exercise in futility, as such areas would not typically be able to provide even a fraction of the amount of course sediment required to balance sediment through downstream reaches.

Another unintended consequence of the Revised Draft Permit Provision E.3.c.(2)(b) is that it will create a new land use restriction. The way this will likely proceed is that "critical sediment yield areas" will be identified by studying the watersheds (through the Watershed Management Area Analyses). Specifically, Copermittees will be required to prepare sediment yield studies of watersheds based on watershed-wide models and criteria that will approximately identify these critical sediment yield areas. These analyses would then be incorporated into the Water Quality Improvement Plans for each watershed. Thus, a new category of "Environmentally Sensitive Areas" will be identified and protected. After all, there is no other compatible use of such property, not even roads, so such property will become open space.

Sediment Balance Summary

In summary, sediment balance is very complicated and requires careful study of each watershed and fluvial system to understand how best to approach the issue. Fluvial systems, to transport the same amount of incoming sediment to downstream reaches, and eventually to the ocean, must often be modified. Many such systems are already modified, either as part of a natural process (degradation) or as the result of man-made modification. Attempts to address sediment balance through a directive within a permit will almost always fail; the complexity of the issue defies such an approach. The desire to compensate for the loss of coarse sediment due to development (even LID), or to avoid sediment yield areas altogether (both of which have been put forth in revisions of the Revised Draft Permit) shows a misunderstanding and a wrong focus on the issue by attempting to address it at the source. The currently proposed language in Section E.3.c.(2)(b) of the Revised Draft Permit introduces a further complication, in that its implementation must necessarily prohibit the use of land for any compatible use other than allowing erosion to occur so that the downstream system has a supply of coarse sediment. This

then becomes a land use decision. The best focus for this issue remains the water bodies themselves on a watershed by watershed and reach by reach basis.

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