



California Regional Water Quality Control Board San Diego Region



Matthew Rodriquez
*Secretary for
Environmental Protection*

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from U.S. EPA

Edmund G. Brown Jr.
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4353
(858) 467-2952 • Fax (858) 571-6972
<http://www.waterboards.ca.gov/sandiego>

November 21, 2011

In reply refer to:
758620: cloflen

Tayfun Saglam
Riverside County Transportation Department
3525 14th Street
Riverside, CA 92501

Dear Mr. Johnson:

**SUBJECT: ACTION ON REQUEST FOR CLEAN WATER ACT SECTION 401
WATER QUALITY CERTIFICATION APPLICATION NO. 10C-103; I-15/CLINTON
KEITH PROJECT**

Enclosed find Clean Water Act Section 401 Water Quality Certification for discharges to Waters of the U.S. and acknowledgment of enrollment under State Water Resources Control Board Order No. 2003-017-DWQ for the **Interstate 15 and Clinton Keith Road Interchange Improvement Project** (Project). A description of the project and project location can be found in the project information sheet, location map, and site maps which are included as Attachments 1 through 5.

Any petition for reconsideration of this Certification must be filed with the State Water Resources Control Board within 30 days of certification action (23 CCR § 3867). If no petition is received, it will be assumed that you have accepted and will comply with all the conditions of this Certification.

Failure to comply with all conditions of this Certification may subject you to enforcement actions by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), including administrative enforcement orders requiring you to cease and desist from violations, or to clean up waste and abate existing or threatened conditions of pollution or nuisance; administrative civil liability in amounts of up to \$10,000 per day per violation; referral to the State Attorney General for injunctive relief; and, referral to the District Attorney for criminal prosecution.

California Environmental Protection Agency

In the subject line of any response, please include the requested "In reply refer to:" information located in the heading of this letter. For questions pertaining to the subject matter, please contact Chad Loflen at (858) 467-2727 or cloflen@waterboards.ca.gov.

Respectfully,



DAVID W. GIBSON
Executive Officer

Enclosures:

Clean Water Act Section 401 Water Quality Certification No. 10C-103 for the **Interstate 15 and Clinton Keith Road Interchange Improvement Project**, with 5 attachments

cc: Refer to Attachment 2 of Certification 10C-103 for Distribution List.

| Tech Staff Info & Use | |
|-----------------------|------------|
| File No. | 10C-103 |
| WDID | 9000002175 |
| Reg. Measure ID | 376623 |
| Place ID | 758620 |
| Party ID | 525117 |
| Person ID | 525118 |



California Regional Water Quality Control Board

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[http:// www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

Action on Request for Clean Water Act Section 401 Water Quality Certification and Waste Discharge Requirements for Discharge of Dredged and/or Fill Materials

PROJECT: Interstate 15 and Clinton Keith Road
Interchange Improvement Project,
Certification Number (10C-103),
WDID: 9 000002175

APPLICANT: Tayfun Saglam
Riverside County Transportation
Department
3525 14th Street
Riverside, CA 92501

| |
|--|
| CIWQS Reg. Meas. ID: 376623 Place ID: 758620 Party ID: 525117 |
|--|

ACTION:

| | |
|---|---|
| <input type="checkbox"/> Order for Low Impact Certification | <input type="checkbox"/> Order for Denial of Certification |
| <input checked="" type="checkbox"/> Order for Technically-conditioned Certification | <input type="checkbox"/> Waiver of Waste Discharge Requirements |
| <input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017 DWQ | <input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004 DWQ |

PROJECT DESCRIPTION:

The proposed project is located in the City of Murrieta and consists of the redevelopment of the Interstate 15 and Clinton Keith Road interchange to improve traffic flow and safety. The proposed project would permanently impact 131 linear feet (0.03 acres) of an unnamed jurisdictional streambed (waters of the United States) through the expansion of an existing culvert that traverses I-15 south of Clinton Keith Road. Mitigation includes the off-site establishment of 0.03 acres or restoration of 0.25 acres (either no less than 131 linear feet) of waters of the U.S. at a Western Riverside County Regional Conservation Authority (RCA) parcel located adjacent to an unnamed tributary to Warm Springs Creek. This RCA parcel is under a conservation agreement and is also being utilized for mitigation for other Riverside County Transportation Department 401 Certifications. The on-site post-construction BMPs include bioswales and biostrips, which are sized to treat 100 percent of new impervious surfaces associated with the project (approximately 6 acres).

California Environmental Protection Agency

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at <http://www.swrcb.ca.gov>.

Recycled Paper



The post-construction BMPs are also sized to provide retrofit treatment to approximately 9 acres of existing untreated impervious surfaces associated with the interchange.

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I. STANDARD CONDITIONS:

The following three standard conditions apply to all Certification actions, except as noted under Condition 3 for denials.

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the California Water Code and section 3867 of Title 23 of the California Code of Regulations (23 CCR).
- B. This Certification action is not intended and must not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to 23 CCR subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. The validity of any non-denial Certification action must be conditioned upon total payment of the full fee required under 23 CCR section 3833, unless otherwise stated in writing by the certifying agency.

II. ADDITIONAL CONDITIONS: GENERAL

- A. Water Quality Certification No. 10C-103 (Certification) is only valid if the project begins no later than 5 (five) years from the date of issuance. If the project has not begun within 5 years from the date of issuance, this Certification expires.
- B. The Riverside County Transportation Department must comply with the requirements of State Water Resources Control Board Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material That Have Received State Water Quality Certification*. These General Waste Discharge Requirements are accessible at:
http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/go_wdr401regulated_projects.pdf.
- C. The Riverside County Transportation Department must, at all times, fully comply with the engineering plans, specifications and technical reports submitted to the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), to support this Certification and all subsequent submittals required as part of this Certification and as described in Attachment 1. The conditions within this Certification must

- supersede conflicting provisions within such plans submitted prior to the Certification action. Any modifications thereto, would require notification to the San Diego Water Board and reevaluation for individual Waste Discharge Requirements and/or Certification amendment.
- D. During construction, the Riverside County Transportation Department must maintain a copy of this Certification at the Project site so as to be available at all times to site personnel and agencies.
- E. The Riverside County Transportation Department must permit the San Diego Water Board or its authorized representative at all times, upon presentation of credentials:
1. Entry onto Project premises, including all areas on which wetland fill or wetland mitigation is located or in which records are kept.
 2. Access to copy any records required to be kept under the terms and conditions of this Certification.
 3. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Certification.
 4. Sampling of any discharge or surface water covered by this Order.
- F. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation must be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
- G. In response to a suspected violation of any condition of this Certification, the San Diego Water Board may pursuant to Water Code sections 13267 and 13383, require the holder of any permit or license subject to this Certification to investigate, monitor and report information on the violation. The only restriction is that the burden, including costs, of preparing the reports must bear a reasonable relationship to the need for and the benefits to be obtained from the reports.
- H. In response to any violation of the conditions of this Certification, the San Diego Water Board may modify the conditions of this Certification as appropriate to ensure compliance.

III. ADDITIONAL CONDITIONS: CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. Prior to the start of the project, and annually thereafter, the Riverside County Transportation Department must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response, and Best Management Practice (BMP) implementation and maintenance.
- B. The Riverside County Transportation Department must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.
- C. The Riverside County Transportation Department must enroll in and comply with the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, NPDES No. CAS000002, *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*.
- D. The treatment, storage, and disposal of wastewater during the life of the project must be done in accordance with waste discharge requirements established by the San Diego Water Board pursuant to CWC § 13260.
- E. Discharges of concentrated flow during construction or after completion must not cause downstream erosion or damage to properties or stream habitat.
- F. Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or the State or placed in locations that may be subject to storm flows. Pollutants discharged to areas within a stream diversion area must be removed at the end of each work day or sooner if rain is predicted.
- G. All surface waters, including ponded waters, must be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. Diversion activities must not result in the degradation of beneficial uses or exceedance of water quality objectives of the receiving waters. Any temporary dam or other artificial obstruction constructed must only be built from materials such as clean gravel which will cause little or no siltation. Normal flows must be restored to the affected stream immediately upon completion of work at that location.

- H. All areas that will be left in a rough graded state must be stabilized no later than two weeks after completion of grading. The Riverside County Transportation Department and subsequent owners, are responsible for implementing and maintaining BMPs to prevent erosion of the rough graded areas to prevent flow from this area from causing adverse effects to beneficial uses. After completion of grading, all areas must be revegetated with native species appropriate for the area. The revegetation palette must not contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory, which can be found online at: <http://www.cal-ipc.org/ip/inventory/weedlist.php>.
- I. Substances hazardous to aquatic life including, but not limited to, petroleum products, raw cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State except as were authorized by this Certification. BMPs must be implemented to prevent such discharges during each project activity involving hazardous materials.
- J. Removal of vegetation must occur by hand, mechanically, or using EPA approved herbicides deployed using applicable BMPs to prevent impacts to beneficial uses of waters of the State. Use of aquatic pesticides must be done in accordance with State Water Resources Control Board Water Quality Order No. 2004-0009-DWQ, and any subsequent reissuance as applicable. Removal of vegetation must occur outside of the avian nesting season (March 15- August 31) unless supervised by a biologist following proper notification, with San Diego Water Board concurrence, to the California Department of Fish and Game.

IV. ADDITIONAL CONDITIONS: POST-CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. The Riverside County Transportation Department is prohibited from allowing post-construction discharges to cause onsite or offsite downstream erosion, damage to properties or damage to stream habitats in the receiving waters that will receive post-construction discharges from project site.
- B. All storm drain inlet structures within the project boundaries must be stamped and/or stenciled (or equivalent) with appropriate language prohibiting non-storm water discharges.
- C. All post-construction BMPs, including the bioswales and biostrips described in the *Storm Water Data Report I-15/Clinton Keith Road Interchange Improvement*, prepared by Caltrans and dated February 4, 2010, must be sized to comply with the following numeric sizing criteria:

1. Volume

Volume-based BMPs must be designed to mitigate (infiltrate, filter, or treat) either:

- a. The volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record (0.8 inch approximate average for the Riverside County area); or
- b. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event; or

2. Flow

Flow-based BMPs must be designed to mitigate (infiltrate, filter, or treat) either:

- a. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or
- b. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or
- c. The maximum flow rate of runoff, as determined from the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

- D. Post-construction BMPs must be installed and functional prior to completion of project construction.
- E. All post-construction BMPs, including the bioswales and biostrips described in the *Storm Water Data Report I-15/Clinton Keith Road Interchange Improvement*, prepared by Caltrans and dated February 4, 2010; and storm water discharge points must:
1. Be regularly inspected and maintained for the life of the project per manufactures' specifications and industry standards;
 2. No less than one time per year be assessed for performance of the systems in regards to protection of receiving waters and identify any necessary corrective measures;
 3. Have all preventive and corrective maintenance performed;

4. Be inspected no less than one time per year, immediately prior to the commencement of the rainy season (October 1) and after every storm event exceeding 0.5 inches of precipitation; and
5. Maintain a log documenting all BMP inspections and maintenance activities.

V. ADDITIONAL CONDITIONS: COMPENSATORY MITIGATION

- A. Mitigation for permanent (0.03 acres, 131 linear feet) and temporary (0.05 acres, 131 linear feet) discharges to non-wetland waters of the United States must be achieved in accordance with the *State Route 79 Widening Project: Thompson road to Domenigoni Parkway Habitat Mitigation and Monitoring Plan*, prepared by ICF International and dated June, 2011. **A draft Supplemental HMMP addressing the specific mitigation below must be submitted to the San Diego Water Board 60 days prior to on-site project jurisdictional impacts.** The below mitigation must be added as an addendum to the plan and conducted by the Riverside County Transportation Department:
 1. Off-site establishment of 0.03 acres of waters of the United States (no less than 131 linear feet), OR
 2. Off-site restoration of 0.25 acres (no less than 131 linear feet) of waters of the United States.
- B. The construction of off-site mitigation must be completed no later than 9 months following the initial discharge of dredge or fill material into on-site waters. Delays in implementing mitigation must be compensated for by an increased mitigation implementation of 10 percent of the cumulative compensatory mitigation for each month of delay.
- C. The Riverside County Transportation Department must restore all areas of temporary impacts and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the United States/State. Restoration must include grading of disturbed areas to pre-project contours and revegetation with native species. The Riverside County Transportation Department must implement all necessary BMPs to control erosion and runoff from areas associated with this project.
- D. The Riverside County Transportation Department must salvage leaf litter, coarse woody debris, and upper soil horizons from impacted jurisdictional water sites that are relatively free of invasive exotic species for use in on-site mitigation areas.

- E. The Riverside County Transportation Department must also salvage large cuttings from appropriate tree species if they exist at the impact site and use them as pole plantings at the mitigation site.
- F. The mitigation site must be designed, constructed, and maintained in perpetuity to meet the following conditions:
 - 1. Most of the channel through the mitigation site is characterized by equilibrium conditions, with no evidence of severe aggradation or degradation;
 - 2. As viewed along cross-sections, the channel and buffer have a variety of slopes, or elevations, that are characterized by different moisture gradients. Each sub-slope contains physical patch types or features that contribute to irregularity in height, edges, or surface and to complex topography overall; and
 - 3. The mitigation site has a well-developed plant community characterized by a high degree of horizontal and vertical interspersion among plant zones and layers.
- G. Mitigation shall be considered acceptable once it has met the pre-determined success criteria for that site, and shall be maintained, in perpetuity, in a manner that consistently meets the final success criteria identified.
- H. Throughout the mitigation monitoring program mitigation areas must be maintained free of perennial exotic plant species including, but not limited to, pampas grass, giant reed, tamarisk, sweet fennel, tree tobacco, castor bean, and pepper tree. Annual exotic plant species must not occupy more than 5 percent of the on-site or off-site mitigation areas.
- I. The San Diego Water Board acceptance of the final mitigation plan must not be construed as approval of the mitigation site or plan for use by other current or future projects that are planning to use additional acreage at the site for mitigation.
- J. Any maintenance activities that do not contribute to the success of the mitigation site and enhancement of beneficial uses and ecological functions and services are prohibited. Maintenance activities are limited to the removal of trash and debris, removal of exotic plant species, replacement of dead native plant species and remedial measures deemed necessary for the success of the restoration program.

- K. If at any time during the implementation and establishment of the mitigation area(s), and prior to verification of meeting success criteria, a catastrophic natural event (e.g., fire, flood) occurs and impacts the mitigation area, the Riverside County Transportation Department is responsible for repair and replanting of the damaged area(s).
- L. For purposes of this Certification, establishment is defined as the creation of vegetated or unvegetated waters of the United States/State where the resource has never previously existed (e.g. conversion of nonnative grassland to a freshwater marsh). Restoration is divided into two activities, re-establishment and rehabilitation. Re-establishment is defined as the return of natural/historic functions to a site where vegetated or unvegetated waters of the United States/State previously existed (e.g., removal of fill material to restore a drainage). Rehabilitation is defined as the improvement of the general suite of functions of degraded vegetated or unvegetated waters of the United States/State (e.g., removal of a heavy infestation or monoculture of exotic plant species from jurisdictional areas and replacing with native species). Enhancement is defined as the improvement to one or two functions of existing vegetated or unvegetated waters of the United States/State (e.g., removal of small patches of exotic plant species from an area containing predominantly natural plant species). Preservation is defined as the acquisition and legal protection from future impacts in perpetuity of existing vegetated or unvegetated waters of the United States/State (e.g., conservation easement).

VI. MONITORING REQUIREMENTS:

- A. Monitoring of the mitigation site must utilize a quantitative function-based assessment to establish baseline conditions at impact and mitigation sites (i.e. conditions prior to project impacts), set success criteria, and assess mitigation site progress. The California Rapid Assessment Method (CRAM) must be utilized and CRAM data must be uploaded into eCRAM (<http://www.cramwetlands.org>). The quantitative assessment conducted may be done in conjunction with the Highway 79 Certification (No. 11C-007).

VII. NOTIFICATION REQUIREMENTS:

- A. The Riverside County Transportation Department must report to the San Diego Water Board any noncompliance which may endanger human health or the environment. Any information shall be provided orally **within 24 hours** from the time the Riverside County Transportation Department becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Riverside County

Transportation Department becomes aware of the circumstances. The written submission shall contain a written description of the incident and its cause, the period of the 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. The San Diego Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours.

- B. This Certification is not transferable in its entirety or in part to any person except after notice to the San Diego Water Board in accordance with the following terms:
1. **Transfer of Property Ownership:** The Riverside County Transportation Department must notify the San Diego Water Board of any change in ownership of the project area. Notification of change in ownership must include, but not be limited to, a statement that the Riverside County Transportation Department has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the Executive Officer of the San Diego Water Board **within 10 days of the transfer of ownership.**
 2. **Transfer of Mitigation Responsibility:** Any notification of transfer of responsibilities to satisfy the mitigation requirements set forth in this Certification must include a signed statement from an authorized representative of the new party (transferee) demonstrating acceptance and understanding of the responsibility to comply with and fully satisfy the mitigation conditions and agreement that failure to comply with the mitigation conditions and associated requirements may subject the transferee to enforcement by the San Diego Water Board under Water Code section 13385, subdivision (a). Notification of transfer of responsibilities meeting the above conditions must be provided to the San Diego Water Board **within 10 days of the transfer date.**
 3. **Transfer of Post-Construction BMP Maintenance Responsibility:** The Riverside County Transportation Department assumes responsibility for the inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to another entity. At the time maintenance responsibility for post-construction BMPs is legally transferred the Riverside County Transportation Department must submit to the San Diego Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer

specifications. Notification of transfer of responsibilities meeting the above conditions must be provided to the San Diego Water Board **within 10 days of the transfer date.**

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Riverside County Transportation Department will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Riverside County Transportation Department of this Certification in the event that a transferee fails to comply.

- C. The Riverside County Transportation Department must notify the San Diego Water Board in writing **at least 5 days prior to** the actual commencement of dredge, fill, and discharge activities.
- D. **Prior to construction**, the Riverside County Transportation Department must provide the San Diego Water Board a draft preservation mechanism (e.g. deed restriction, conservation easement, etc.) that will protect all mitigation areas and their buffers in perpetuity. Within one year of the start of construction, the Riverside County Transportation Department must submit proof of a completed preservation mechanism that will protect all mitigation areas and their buffers in perpetuity. Construction of the site must not be initiated until a completed preservation mechanism is received. The conservation easement, deed restriction, or other legal limitation on the mitigation property must be adequate to demonstrate that the site will be maintained without future development or encroachment on the site which could otherwise reduce the functions and values of the site for the variety of beneficial uses of waters of the United States that it supports. The legal limitation must prohibit, without exception, all residential, commercial, industrial, institutional, and transportation development, and any other infrastructure development that would not maintain or enhance the wetland and streambed functions and values of the site. The preservation mechanism must clearly prohibit activities that would result in soil disturbance or vegetation removal, other than the removal of non-native vegetation. Other infrastructure development to be prohibited includes, but is not limited to, additional utility lines, maintenance roads, and areas of maintained landscaping for recreation.

VIII. REPORTING REQUIREMENTS:

- A. The Riverside County Transportation Department must submit annual progress reports describing status of compliance with all requirements of this Certification to the San Diego Water Board prior to **August 1** of each year following the issuance of this Certification until the project has

reached completion. The Riverside County Transportation Department must submit a Final Project Annual Report to the San Diego Water Board **prior to August 1 following completion of the project.** The reports must include the following:

1. Date of construction initiation.
 2. Projected date of construction completion.
 3. Status of BMPs for the project.
 4. Final Project Report: As-built drawings no bigger than 11”X17” and GIS locations of post-construction treatment BMPs.
- B. Mitigation monitoring reports must be submitted annually until mitigation has been deemed successful. Mitigation monitoring reports may be combined with the Highway 79 (No. 11C-007) Mitigation and Monitoring Reports. Annual monitoring reports must be submitted **prior to December 1 of each year.** Monitoring reports must include, but not be limited to, the following:
1. Names, qualifications, and affiliations of the persons contributing to the report;
 2. Date of initiation of mitigation installation and date mitigation installation was completed.
 3. Mitigation as-builts, including topography maps and planting locations.
 4. Tables presenting the raw data collected in the field as well as analyses of the physical and biological data;
 5. Topographic complexity characteristics at each mitigation site;
 6. Upstream and downstream habitat and hydrologic connectivity;
 7. Source of hydrology, including any quantitative and qualitative changes in groundwater levels;
 8. Width of native vegetation buffer around the entire mitigation site;
 9. Qualitative and quantitative comparisons of current mitigation conditions with on-site and mitigation site pre-construction conditions and previous mitigation monitoring results. CRAM must be utilized, and CRAM data must be uploaded into eCRAM (<http://www.cramwetlands.org>).

10. Stream Photodocumentation, including all areas of permanent and temporary impact, prior to and after project construction, and mitigation areas, including all areas of permanent and temporary impact, prior to and after project construction. Photo documentation must be conducted in accordance with guidelines posted at http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/StreamPhotoDocSOP.pdf. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced.
 11. A Survey report documenting boundaries of mitigation area, including Geographic Information System (GIS) shape files (polygons) of the impact and mitigation areas (Two GPS readings (points) must be taken on each line of the polygon and the polygon must have a minimum of 10 points). GIS metadata must also be submitted.
- C. The submittal of information under this Certification is required pursuant to California Water Code (CWC) sections 13267 and 13283. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit required information pursuant to CWC section 13268 or 13385.
- D. All reports and information submitted to the San Diego Water Board must be submitted in both hardcopy and electronic format. The preferred electronic format for each report submission is one file in PDF format that is also Optical Character Recognition (OCR) capable.
- E. All applications, reports, or information submitted to the San Diego Water Board must be signed and certified as follows:
1. For a corporation, by a responsible corporate officer of at least the level of vice president.
 2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
 3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
 4. A duly authorized representative may sign applications, reports, or information if:
 - a. The authorization is made in writing by a person described above.
 - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.

- c. The written authorization is submitted to the San Diego Water Board Executive Officer.
- F. All applications, reports, or information submitted to the San Diego Water Board must be signed and certified as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

- G. The Riverside County Transportation Department must submit reports required under this Certification, or other information required by the San Diego Water Board, to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification; Project No. 10C-103
9174 Sky Park Court, Suite 100
San Diego, California 92123

VIII. CEQA FINDINGS:

- A. The California Department of Transportation is the lead agency under the California Environmental Quality Act (Public Resources Code section 21000, et seq., (CEQA)), and filed a Notice of Determination on December 15, 2009, for a Mitigated Negative Declaration under CEQA Guidelines Title 14, California Code of Regulations. The California Department of Transportation has determined the project will not have a significant effect on the environment and mitigation measures were made a condition of the project.
- B. The San Diego Water Board has reviewed the lead agency's Mitigated Negative Declaration and also finds that the project as proposed will not have a significant effect on the environment with conditioned mitigation measures and therefore determines that issuance of this Certification is consistent with the Mitigated Negative Declaration.

IX. PUBLIC NOTIFICATION OF PROJECT APPLICATION:

- A. On November 18, 2010, receipt of the project application was posted on the San Diego Water Board web site to serve as appropriate notification to the public. No public comments were received.

X. SAN DIEGO WATER BOARD CONTACT PERSON:

Chad Loflen
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123
858-467-2727
cloflen@waterboards.ca.gov

XI. WATER QUALITY CERTIFICATION:

I hereby certify that the proposed discharge from **Interstate 15 and Clinton Keith Road Interchange Improvement Project** (Project No. 10C-103) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "*Statewide General Waste Discharge Requirements for Dredged or Fill Discharges That Have Received State Water Quality Certification (General WDRs)*," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' project description and/or on the attached Project Information Sheet, and (b) on compliance with all applicable requirements of the Water Quality Control Plan for the San Diego Basin Region (9) (Basin Plan).

 DAVID W. GIBSON
 Executive Officer
 Regional Water Quality Control Board

11-21-2011

 Date

- Attachments:
1. Project Information
 2. Distribution List
 3. Location and Site Maps
 4. Post-construction BMP Maps
 5. Mitigation Maps

**ATTACHMENT 1
PROJECT INFORMATION**

Applicant: Riverside County Transportation Department
Attention: Tayfun Saglam
3525 14th Street
Riverside, CA 92501
Telephone: 951-955-2817
Facsimile:
Email: tsaglam@rctlma.orf

Applicant
Representatives: Noreas
Attention: Lenny Malo
16501 Scientific Way
Irvine, CA 92618
Telephone: 949-467-9103
Facsimile: 949-398-8758
Email: lenny.malo@noreasinc.com

Project Name: Interstate 15 and Clinton Keith Road Interchange
Improvement Project

Project Location: Latitude: 33.575950 N
Longitude: 117.245039 W

Type of Project: Transportation

Need for Project: According to the application:
"To alleviate congestion and improve traffic operations in the
interchange area, the County, in association with Caltrans, is
proposing the Project."

Project Description: The proposed project is located in the City of Murrieta and
consists of the redevelopment of the Interstate 15 and Clinton
Keith Road interchange to improve traffic flow and safety.
The proposed project would permanently impact 131 linear
feet (0.03 acres) of an unnamed jurisdictional streambed
(waters of the United States) through the expansion of an
existing culvert that traverses I-15 south of Clinton Keith
Road. Mitigation includes the off-site establishment of 0.03
acres *or* restoration of 0.25 acres (either no less than 131
linear feet) of waters of the U.S. at a Western Riverside
County Regional Conservation Authority (RCA) parcel located
adjacent to an unnamed tributary to Warm Springs Creek.
This RCA parcel is under a conservation agreement and is
also being utilized for mitigation for other Riverside County

Transportation Department 401 Certifications. The on-site post-construction BMPs include bioswales and biostrips, which are sized to treat 100 percent of new impervious surfaces associated with the project (approximately 6 acres).

The post-construction BMPs are also sized to provide retrofit treatment to approximately 9 acres of existing untreated impervious surfaces associated with the interchange.

Federal
Agency/Permit:

U.S. Army Corps of Engineers NWP 14, Crystel Doyle

Other Required
Regulatory Approvals:

California Department of Fish and Game Streambed
Alteration Agreement, Anna Ewing

California
Environmental Quality
Act (CEQA)
Compliance:

Mitigated Negative Declaration, NOD: December 15, 2009,
SCH# 2009071020, Lead Agency: Caltrans

Receiving Water:

Unnamed tributary to Murrieta Creek, Santa Margarita HU,
Murrieta HA, Wildomar HSA

Affected Waters of the
United States:

Permanent:
Unvegetated Streambed: 0.03 acres, 131 linear feet
Temporary:
Unvegetated Streambed: 0.05 acres, 131 linear feet

Dredge Volume:

None

Related Projects
Implemented/to be
Implemented by the
Applicant(s):

None

Compensatory
Mitigation:

Off-Site (in the Santa Margarita Hydrologic Unit)
Wetland/Riparian: 0.25 acres of restoration or 0.03 acres of
establishment within a Western Riverside County Multiple
Species Habitat Conservation Plan (MSHCP) Conserved
Land parcel (APN 388-270-015) which contains an unnamed
tributary to Warm Springs Creek within the northern extent of
the Santa Margarita Watershed.

Supplemental HMMP to be submitted as an addendum to the
State Route 79 Widening Project: Thompson road to

Domenigoni Parkway Habitat Mitigation and Monitoring Plan,
prepared by ICF International and dated June, 2011.

Mitigation Location:

Off-site

Best Management
Practices (BMPs):

100% of on-site new impervious surfaces (6 acres) and 9
acres of existing impervious surfaces will be treated via on-
site bioswales and biostrips, and in accordance with:

*Storm Water Data Report I-15/Clinton Keith Road Interchange
Improvement*, prepared by Caltrans and dated February 4,
2010

Public Notice:

November 18, 2010 (no comments received)

Inspection:

n/a

Fees:

Total Due: \$2,317

Paid: \$640 (check No. 0502120089)

Paid: \$1677 (check No. 13485)

CIWQS:

Regulatory Measure ID: 376623

Place ID: 758620

Party ID: 525117

**ATTACHMENT 2
E-MAIL DISTRIBUTION LIST**

Crstel Doyle
U.S. Army Corps of Engineers, Regulatory Branch
Prado Field Office
Crstel.L.Doyle@usace.army.mil

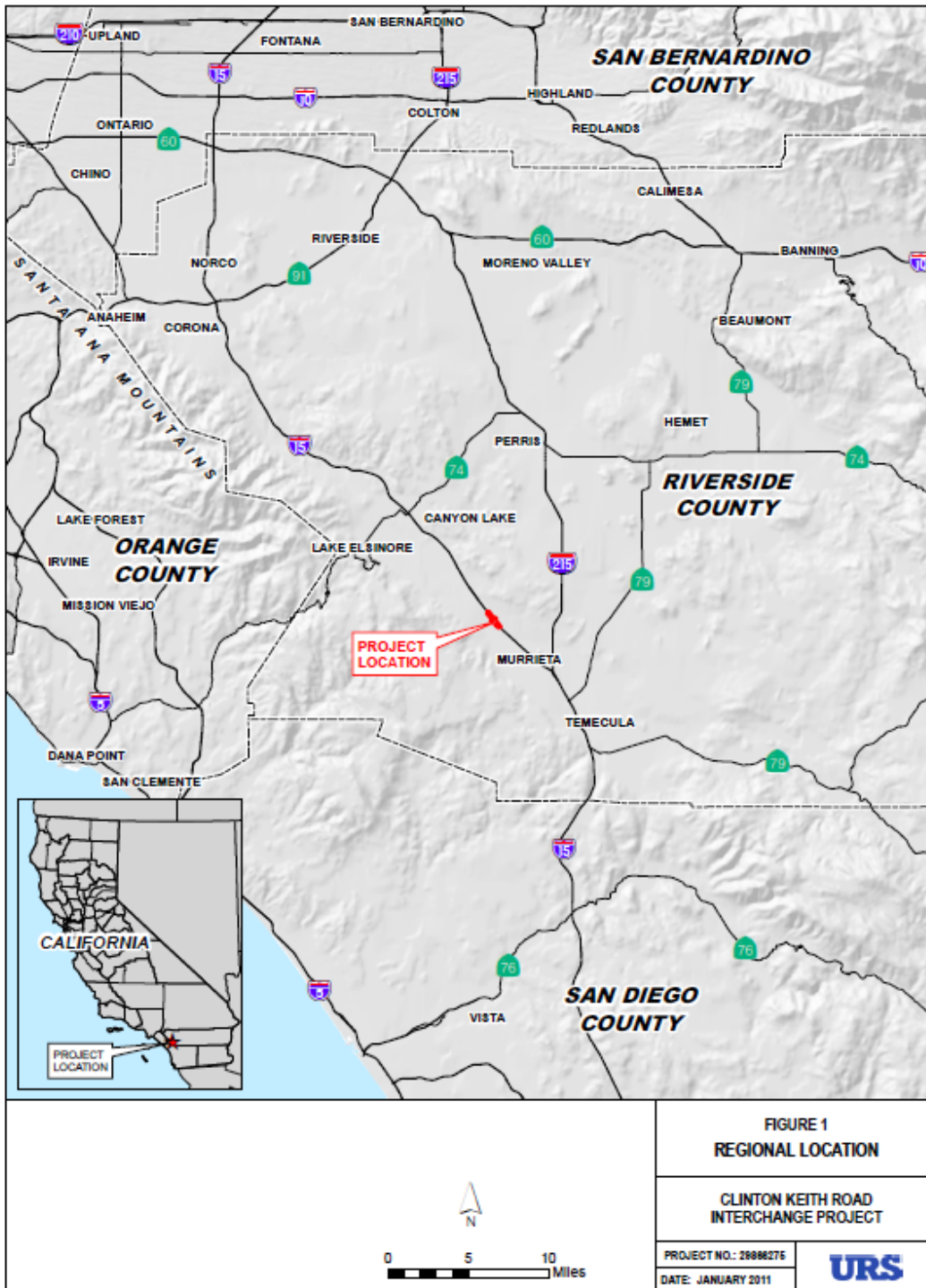
Anna Ewing
California Department of Fish and Game
Inland Deserts Region
aewing@dfg.ca.gov

U.S. EPA, OWOW, Region 9
75 Hawthorne St.,
San Francisco, CA 94105
R9-WTR8-Mailbox@epa.gov

State Water Resources Control Board, Division of Water Quality
401 Water Quality Certification and Wetlands Unit
P.O. Box 100
Sacramento, CA 95812-0100
Stateboard401@waterboards.ca.gov

Lenny Malo
Noreas
lenny.malo@noreasinc.com

ATTACHMENT 3 LOCATION AND SITE MAPS







URS Corporation
3500 Porsche Way, Suite 300
Ontario, CA 91764

JOB: EA 0F5801
CALCULATED BY: BP
DATE: 1-22-10

BIOSWALE CALCULATION

| LEGEND | |
|--|---|
| I_{25} = 25-Year Rainfall Intensity | A_c = Swale Cross-Sectional Area |
| I_{WQF} = Water Quality Flow Rainfall Intensity | R = Swale Hydraulic Radius |
| C_p = Runoff Coefficient for Paved Areas | D_{Q25} = Swale 25-Year Depth |
| C_u = Runoff Coefficient for Unpaved Areas | V_{Q25} = Swale 25-Year Velocity |
| n_{Q25} = 25-Year Manning's Coefficient | Q_{WQFT} = Total Water Quality Flow Rate |
| n_{WQF} = Water Quality Flow Manning's Coefficient | D_{WQF} = Swale Water Quality Flow Depth |
| S_L = Swale Longitudinal Slope | V_{WQF} = Swale Water Quality Flow Velocity |
| z = Swale Side Slope Factor | H_e = Energy head |
| b = Swale Base Width | F_r = Froude Number |
| T = Swale Top Width | F_b = Freeboard |
| Q_{25T} = Total 25-Year Peak Flow Rate | |

| EQUATIONS |
|--|
| $Q = (1.486AR^{2/3}S^{1/2})/n$ |
| $Q = VA$ |
| $A_c = (b+zD)D$ |
| $T = b + 2Dz$ |
| $R = [(b+zD)D] / [b + 2D(1+z^2)^{0.5}]$ |
| Trial and Error Used to Find D in: |
| $AR^{2/3} = nQ / 1.486S^{1/2}$ |
| $H_e = D + (V^2/2g)$ |
| $F_r = V / (gA_c/T)^{0.5}$ |
| $F_b = 0.2H_e$ for Subcritical Flow (HDM 866.2) |
| $F_b = 0.25D$ for Supercritical Flow (HDM 866.2) |
| Min. Depth = $D + F_b$ |

I_{25} = 4.00 in/hr
 I_{WQF} = 0.20 in/hr
 C_p = 1.00
 C_u = 0.70
 n_{Q25} = 0.05
 n_{WQF} = 0.24

| Swale No. | Hydrology Subarea | S_L (ft/ft) | z (H:V) | b (ft) | Open Channel Calculation for Q_{25} | | | | | | | | | | | Open Channel Calculation for Q_{WQF} | | | | | | Hydraulic Residence Time | | | | | | |
|-----------|-------------------|---------------|-----------|----------|---------------------------------------|------------------------------|--------------|----------------|------------------|-----------------------|------------|-------|-----------|-------------|-----------------|--|--------------------------------|--------------|----------------|-----------------------|------------------|--------------------------|----------|-----------|------------|--|----|--------|
| | | | | | Q_{25T} (cfs) | $n_{25}Q_{25T}/1.486S^{1/2}$ | $A_cR^{2/3}$ | D_{Q25} (ft) | V_{Q25} (ft/s) | $V_{Q25} \leq 4$ ft/s | H_e (ft) | F_r | Flow Type | F_b (ft) | Min. Depth (ft) | Q_{WQFT} (cfs) | $n_{WQF}Q_{WQFT}/1.486S^{1/2}$ | $A_cR^{2/3}$ | D_{WQF} (ft) | $D_{WQF} \leq 0.5$ ft | V_{WQF} (ft/s) | $V_{WQF} \leq 1$ ft/s | L (ft) | HRT (min) | HRT > 5min | $[HRT / (D_{WQF} * V_{WQF})] \geq 21.66$ | | |
| 1-b | 1-A | 0.009 | 4 | 4 | 8.47 | 3.00 | = | 3.00 | 0.71 | 1.76 | OK | 0.75 | 0.44 | Subcritical | 0.15 | 0.86 | 0.42 | 0.72 | = | 0.72 | 0.33 | OK | 0.24 | OK | 346 | 23.96 | OK | 301.31 |
| 4-b | 3, 4 | 0.010 | 4 | 4 | 7.73 | 2.60 | = | 2.60 | 0.66 | 1.78 | OK | 0.71 | 0.46 | Subcritical | 0.14 | 0.80 | 0.39 | 0.62 | = | 0.62 | 0.30 | OK | 0.24 | OK | 300 | 20.55 | OK | 277.35 |
| 8-b | 7, 8 | 0.009 | 4 | 4 | 9.18 | 3.26 | = | 3.26 | 0.74 | 1.79 | OK | 0.79 | 0.44 | Subcritical | 0.16 | 0.89 | 0.46 | 0.78 | = | 0.78 | 0.35 | OK | 0.25 | OK | 200 | 13.51 | OK | 158.46 |
| 14-b | 14AB, 15 | 0.005 | 4 | 4 | 7.58 | 3.61 | = | 3.61 | 0.78 | 1.38 | OK | 0.81 | 0.33 | Subcritical | 0.16 | 0.94 | 0.38 | 0.87 | = | 0.87 | 0.37 | OK | 0.19 | OK | 102 | 9.00 | OK | 129.83 |
| 14-c | 14C, 22 | 0.005 | 4 | 4 | 7.95 | 3.78 | = | 3.78 | 0.79 | 1.40 | OK | 0.82 | 0.33 | Subcritical | 0.16 | 0.96 | 0.40 | 0.91 | = | 0.91 | 0.38 | OK | 0.19 | OK | 102 | 8.85 | OK | 122.60 |
| 16A-b | 16AB | 0.005 | 4 | 4 | 3.35 | 1.59 | = | 1.59 | 0.51 | 1.09 | OK | 0.53 | 0.31 | Subcritical | 0.11 | 0.61 | 0.17 | 0.38 | = | 0.38 | 0.23 | OK | 0.15 | OK | 150 | 17.00 | OK | 499.91 |
| 16A-c | 16CD, 19 | 0.005 | 4 | 4 | 6.42 | 3.05 | = | 3.05 | 0.71 | 1.32 | OK | 0.74 | 0.33 | Subcritical | 0.15 | 0.86 | 0.32 | 0.73 | = | 0.73 | 0.33 | OK | 0.18 | OK | 150 | 13.84 | OK | 229.88 |
| 21-d | 20, 21, 28 | 0.010 | 4 | 4 | 13.28 | 4.47 | = | 4.47 | 0.86 | 2.06 | OK | 0.93 | 0.47 | Subcritical | 0.19 | 1.05 | 0.66 | 1.07 | = | 1.07 | 0.41 | OK | 0.29 | OK | 200 | 11.63 | OK | 98.88 |
| 24-c | 23, 24 | 0.009 | 4 | 4 | 7.81 | 2.79 | = | 2.79 | 0.68 | 1.71 | OK | 0.73 | 0.43 | Subcritical | 0.15 | 0.83 | 0.39 | 0.67 | = | 0.67 | 0.32 | OK | 0.23 | OK | 200 | 14.30 | OK | 193.04 |
| 30-b | 30 | 0.005 | 4 | 4 | 5.27 | 2.51 | = | 2.51 | 0.64 | 1.24 | OK | 0.67 | 0.32 | Subcritical | 0.13 | 0.78 | 0.26 | 0.60 | = | 0.60 | 0.30 | OK | 0.17 | OK | 86 | 8.45 | OK | 166.54 |
| 34-b | 34 | 0.010 | 4 | 4 | 9.90 | 3.38 | = | 3.38 | 0.75 | 1.88 | OK | 0.81 | 0.46 | Subcritical | 0.16 | 0.91 | 0.50 | 0.81 | = | 0.81 | 0.35 | OK | 0.26 | OK | 130 | 8.36 | OK | 91.36 |
| 35-a | 35 | 0.008 | 4 | 4 | 13.60 | 5.12 | = | 5.12 | 0.92 | 1.91 | OK | 0.98 | 0.43 | Subcritical | 0.20 | 1.12 | 0.68 | 1.23 | = | 1.23 | 0.44 | OK | 0.27 | OK | 218 | 13.65 | OK | 115.87 |

NOTE:
 3 FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,
 SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

ATTACHMENT 4: POST CONSTRUCTION BMPS

| | | | | | |
|------|--------|-------|---------------|-----------|--------------|
| Dist | COUNTY | ROUTE | TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
| 08 | Riv | 15 | 1001103 | | |

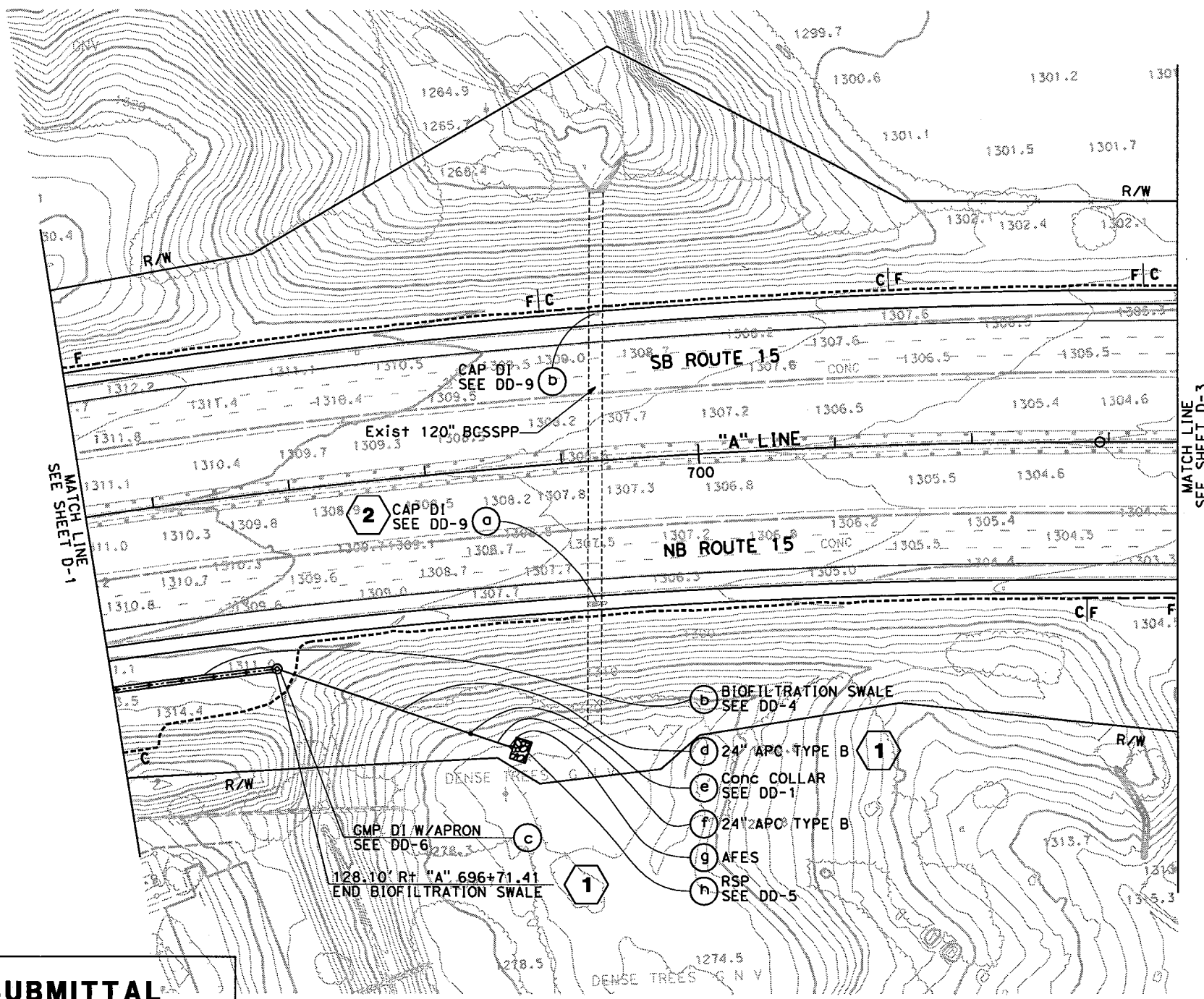
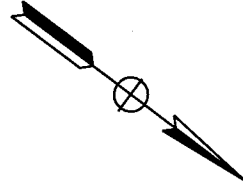
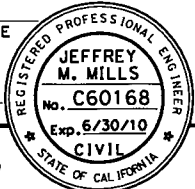
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

URS CORPORATION
 2020 EAST FIRST STREET,
 SUITE 400
 SANTA ANA, CA 92705

COUNTY OF RIVERSIDE
 TRANSPORTATION DEPARTMENT
 3525 14th STREET
 RIVERSIDE, CA 92501



MATCH LINE
 SEE SHEET D-1

MATCH LINE
 SEE SHEET D-3

95% SUBMITTAL

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 JANUARY 25, 2010

ATTACHMENT 4: POST CONSTRUCTION BMPS

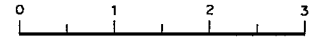
DRAINAGE PLAN

SCALE 1" = 50'

D-2

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY

| | | | | | |
|--|----------------------------------|------------------|-----------------|-----------------|------|
| STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | CONSULTANT FUNCTIONAL SUPERVISOR | CHECKED BY | DESIGNED BY | REVISOR | DATE |
| Caltrans | JEFFREY G. CHAPMAN | JEFFREY M. MILLS | BRIAN PATSCHULL | BRIAN PATSCHULL | |



NOTE:
 FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,
 SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

ATTACHMENT 4: POST CONSTRUCTION BMPS

| | | | | | |
|------|--------|-------|---------------|-----------|--------------|
| Dist | COUNTY | ROUTE | TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
| 08 | Riv | 15 | 1001103 | 1403 | |

REGISTERED CIVIL ENGINEER DATE

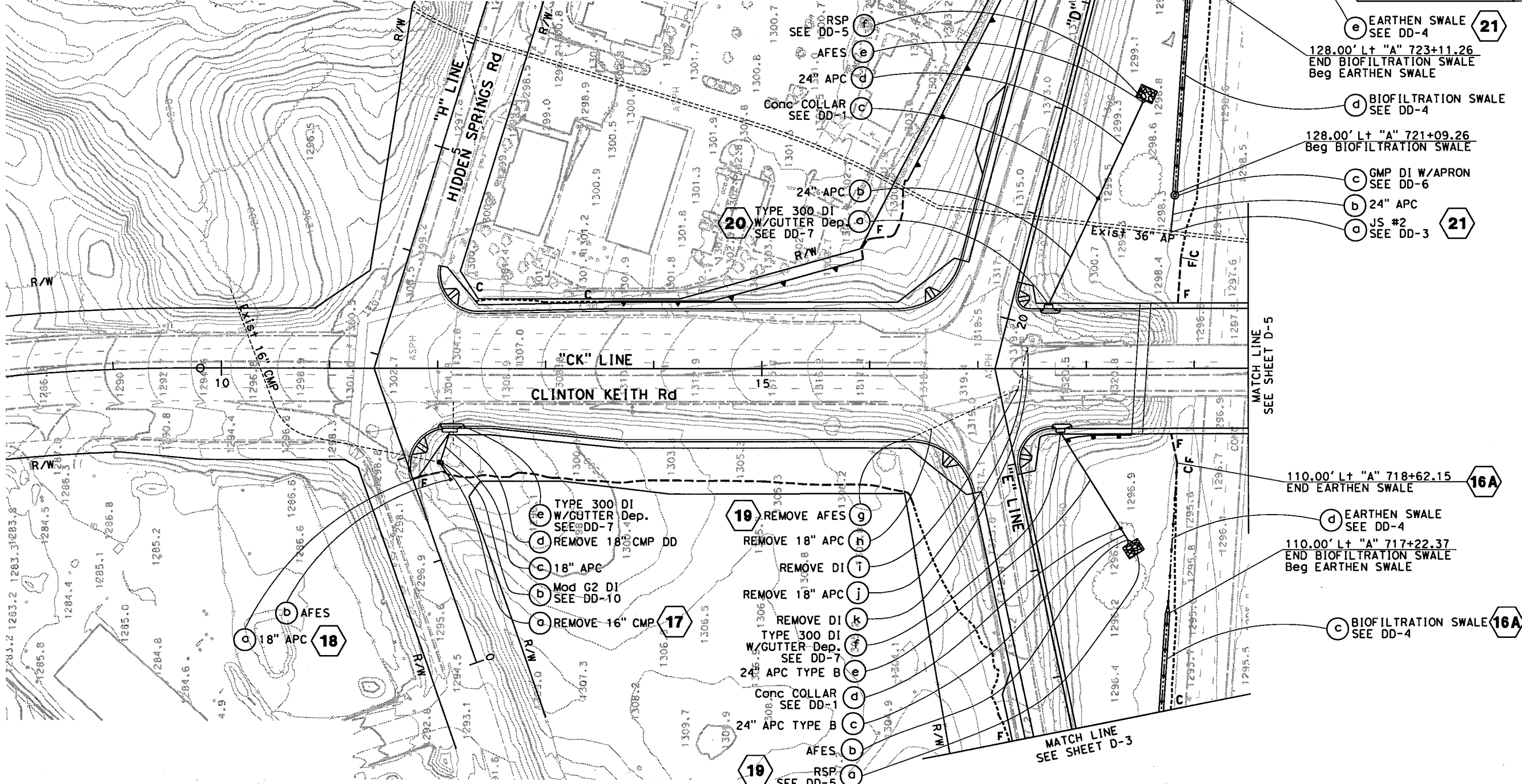
PLANS APPROVAL DATE

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URS CORPORATION
 2020 EAST FIRST STREET,
 SUITE 400
 SANTA ANA, CA 92705

COUNTY OF RIVERSIDE
 TRANSPORTATION DEPARTMENT
 3525 14th STREET
 RIVERSIDE, CA 92501

REGISTERED PROFESSIONAL ENGINEER
JEFFREY M. MILLS
 No. C60168
 Exp. 6/30/10
 CIVIL
 STATE OF CALIFORNIA



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 JANUARY 25, 2010

ATTACHMENT 4: POST CONSTRUCTION BMPS

DRAINAGE PLAN

SCALE 1" = 50'
D-4

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: JEFFREY G. CHAPMAN
 CHECKED BY: JEFFREY M. MILLS
 DESIGNED BY: BRIAN PATSCHULL
 REVISIONS: (Table with columns for REVISED BY, DATE, and REVISIONS)

DATE PLOTTED => 1/28/2010
 TIME PLOTTED => 10:42:40 AM

NOTE:
 FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,
 SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

ATTACHMENT 4. POST CONSTRUCTION BMPS

| | | | | | |
|------|--------|-------|------------|-----------|--------------|
| Dist | COUNTY | ROUTE | POST MILES | SHEET NO. | TOTAL SHEETS |
| 08 | Riv | 15 | 100.1103 | | |

REGISTERED CIVIL ENGINEER DATE _____
JEFFREY M. MILLS
 No. C60168
 Exp. 6/30/10
 CIVIL
 STATE OF CALIFORNIA

PLANS APPROVAL DATE _____

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URS CORPORATION
 2020 EAST FIRST STREET,
 SUITE 400
 SANTA ANA, CA 92705

COUNTY OF RIVERSIDE
 TRANSPORTATION DEPARTMENT
 3525 14th STREET
 RIVERSIDE, CA 92501

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: **JEFFREY G. CHAPMAN**
 CHECKED BY: _____
 CALCULATED-DRAWN BY: _____
 DESIGNED BY: _____
 REVISIONS BY: **BRIAN PATSCHULL**
 DATE REVISIONS: **JEFFREY M. MILLS**

EARTHEN SWALE SEE DD-4 (d)
 128.00' Rt "A" 723+21.36
 END BIOFILTRATION SWALE
 Beg EARTHEN SWALE

BIOFILTRATION SWALE (c)
 SEE DD-4
 128.00' Rt "A" 721+21.36
 Beg BIOFILTRATION SWALE

GMP DI (b)
 24" APC TYPE A (a) (24)

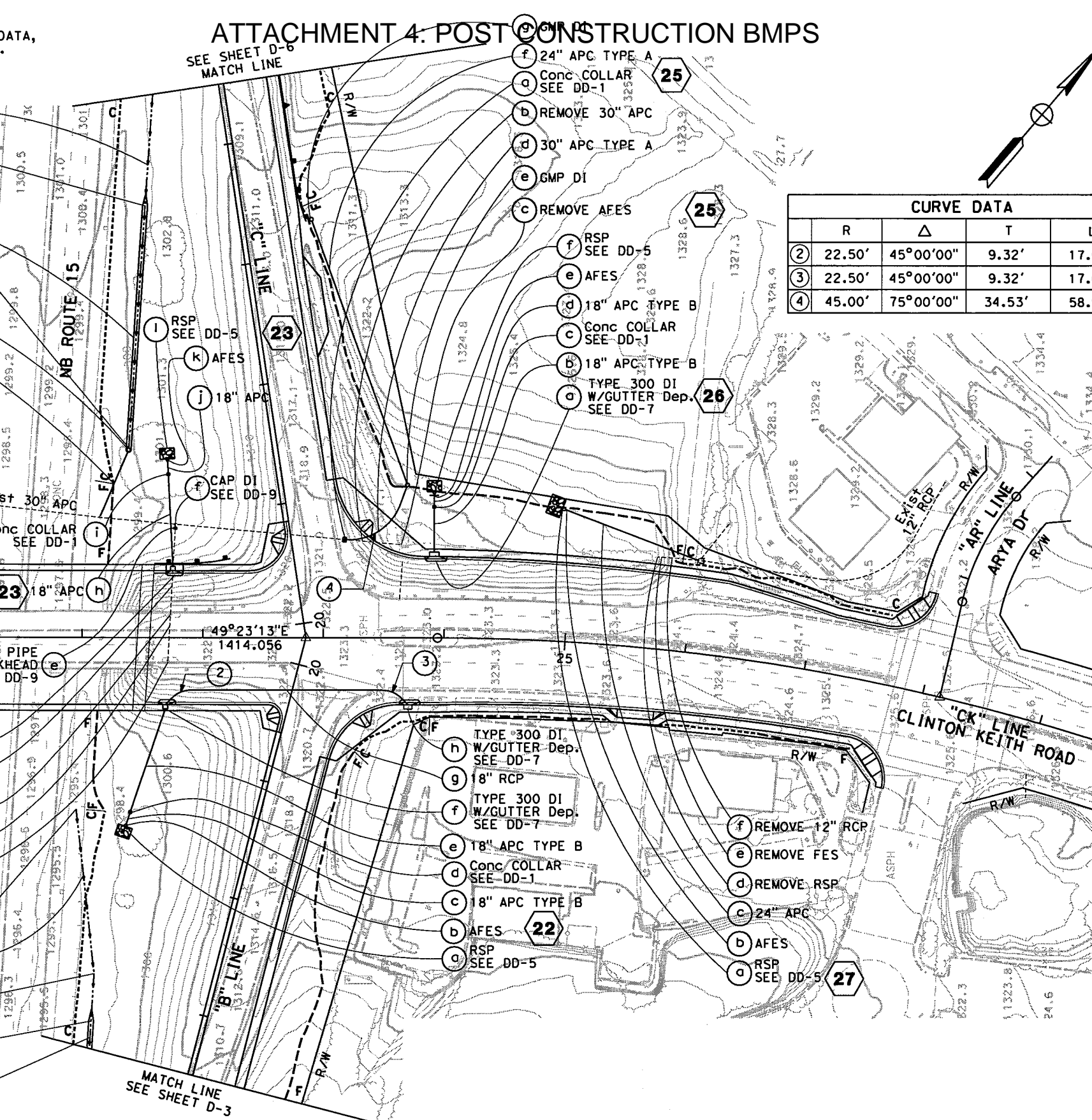
SEE SHEET D-4 MATCH LINE

104.30' Rt "A" 718+21.52
 END EARTHEN SWALE

EARTHEN SWALE SEE DD-4 (d)
 128.00 Rt "A" 716+87.09

128.00 Rt "A" 716+48.22
 END BIOFILTRATION SWALE
 Beg EARTHEN SWALE

BIOFILTRATION SWALE (c)
 SEE DD-4 (14)



CURVE DATA

| | R | Δ | T | L |
|---|--------|-----------|--------|--------|
| ② | 22.50' | 45°00'00" | 9.32' | 17.67' |
| ③ | 22.50' | 45°00'00" | 9.32' | 17.67' |
| ④ | 45.00' | 75°00'00" | 34.53' | 58.90' |

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 NOT FOR CONSTRUCTION
 JANUARY 25, 2010

ATTACHMENT 4: POST CONSTRUCTION BMPS

DRAINAGE PLAN
 SCALE 1" = 50'

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY

D-5

NOTE:
 FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,
 SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

ATTACHMENT 4: POST CONSTRUCTION BMPS

| | | | | | |
|------|--------|-------|---------|-------|--------------|
| Dist | COUNTY | ROUTE | PROJECT | SHEET | TOTAL SHEETS |
| 08 | Riv | 15 | 100-103 | | |

REGISTERED CIVIL ENGINEER DATE

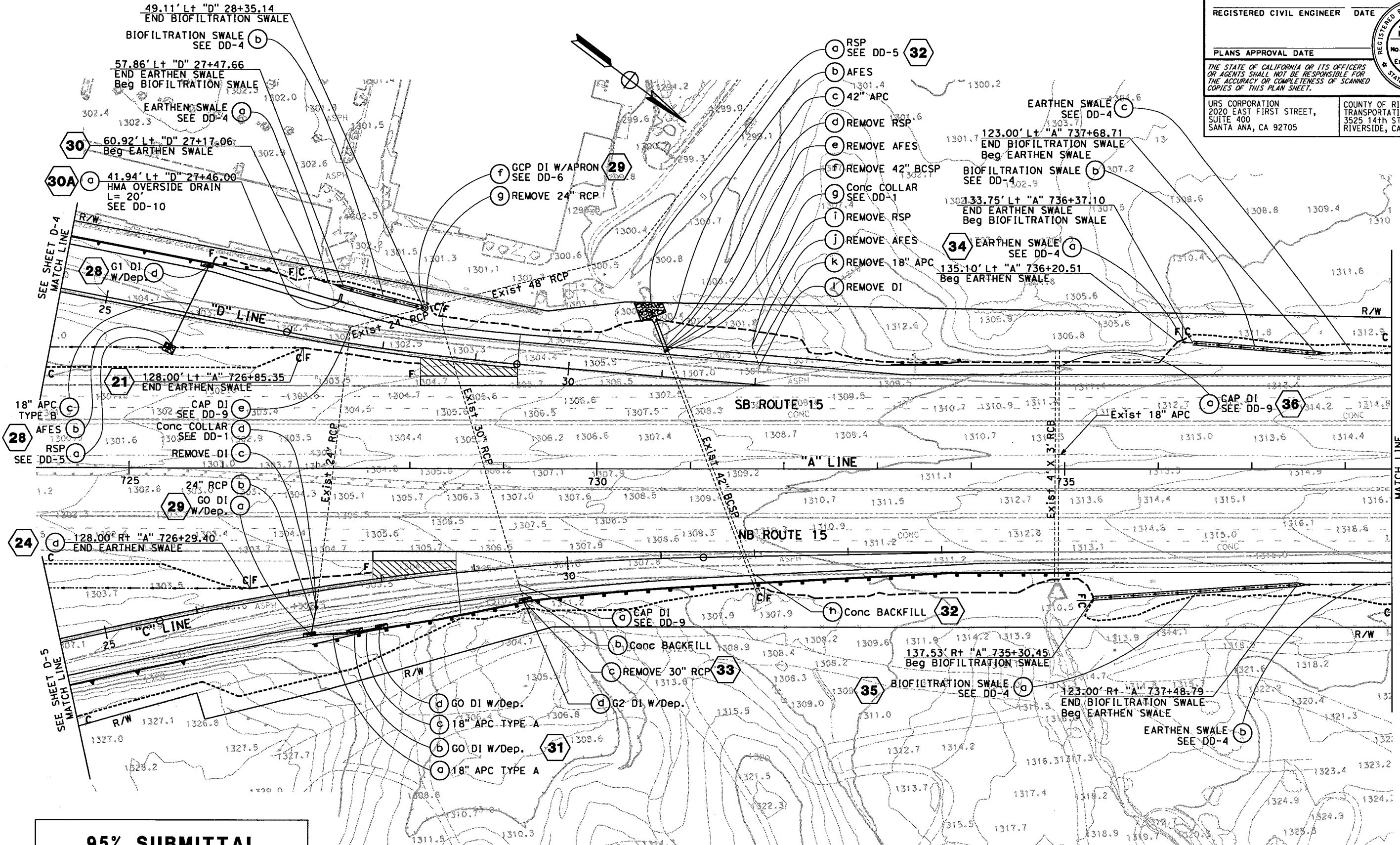
JEFFREY M. MILLS
 No. C60168
 Exp. 6/30/10
 CIVIL

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

URS CORPORATION
 2020 EAST FIRST STREET,
 SUITE 400
 SANTA ANA, CA 92705

COUNTY OF RIVERSIDE
 TRANSPORTATION DEPARTMENT
 3525 14th STREET
 RIVERSIDE, CA 92501



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NOT FOR CONSTRUCTION
 JANUARY 25, 2010

ATTACHMENT 4: POST CONSTRUCTION BMPS

DRAINAGE PLAN

SCALE 1" = 50'
D-6

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 CONSULTANT FUNCTIONAL SUPERVISOR
 CHECKED BY
 DESIGNED BY
 CALCULATED BY
 REVISIONS
 REVISOR
 DATE

MATCH LINE
 SEE SHEET D-7

LAST REVISION DATE PLOTTED => 1/28/2010
 00-00-00 TIME PLOTTED => 10:42:41 AM

NOTE:
 8 FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,
 SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

ATTACHMENT 4: POST CONSTRUCTION BMPS

| | | | | | |
|------|--------|-------|---------------|-----------|--------------|
| Dist | COUNTY | ROUTE | TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
| 08 | Riv | 15 | 100-103 | | |

REGISTERED CIVIL ENGINEER DATE _____

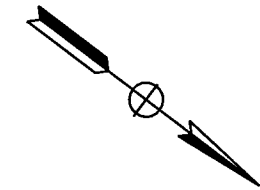
PLANS APPROVAL DATE _____

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

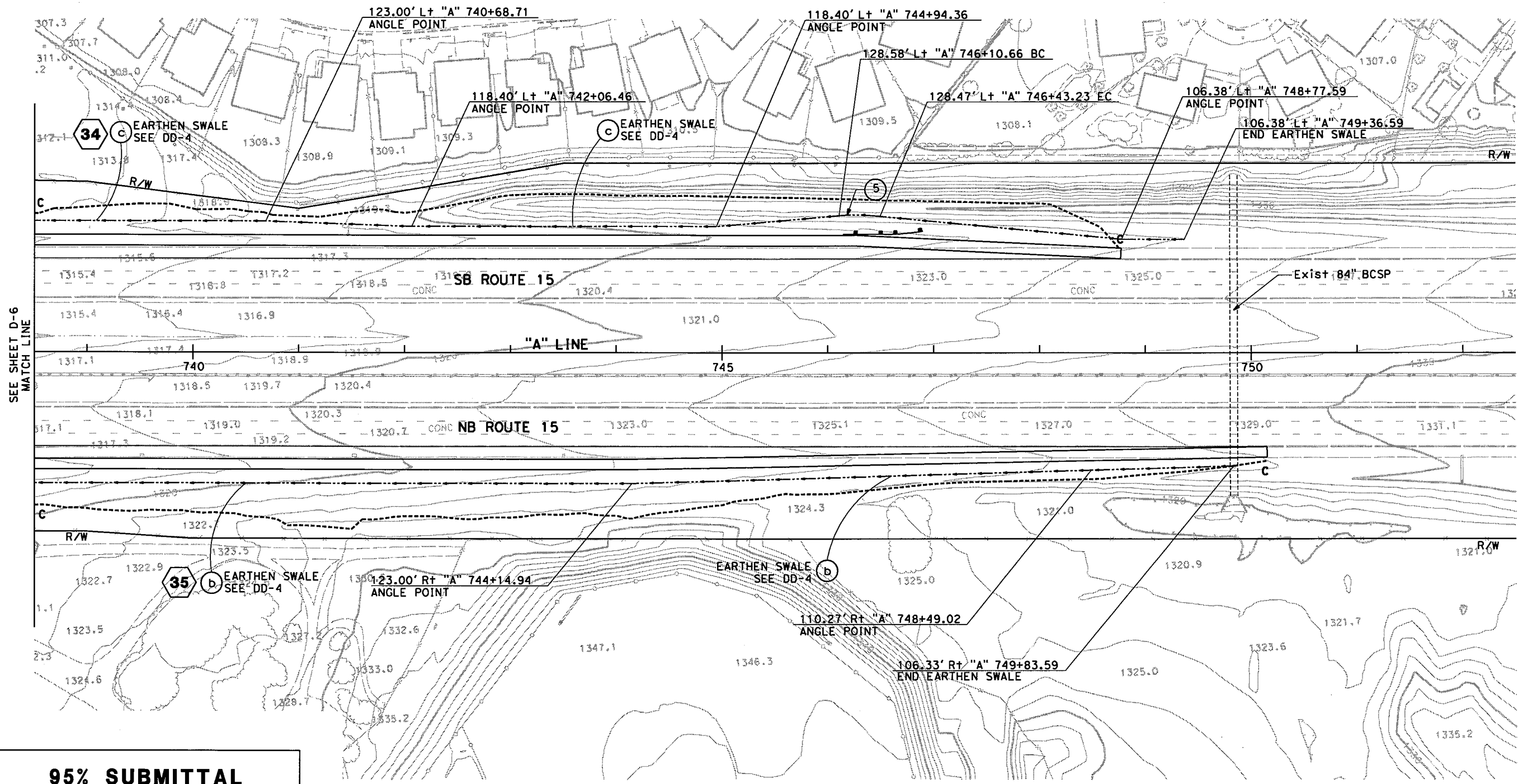
URS CORPORATION
 2020 EAST FIRST STREET,
 SUITE 400
 SANTA ANA, CA 92705

COUNTY OF RIVERSIDE
 TRANSPORTATION DEPARTMENT
 3525 14th STREET
 RIVERSIDE, CA 92501

| CURVE DATA | | | | |
|------------|---------|-----------|--------|--------|
| | R | Δ | T | L |
| ⑤ | 180.00' | 10°23'02" | 16.36' | 32.62' |



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT FUNCTIONAL SUPERVISOR: JEFFREY G. CHAPMAN
 CALCULATED/DESIGNED BY: JEFFREY M. MILLS
 CHECKED BY: JEFFREY M. MILLS
 REVISIONS:
 1. REVISION: DATE PLOTTED => 1/28/2010
 00-00-00 TIME PLOTTED => 10:42:44 AM



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 NOT FOR CONSTRUCTION
 JANUARY 25, 2010

ATTACHMENT 4: POST CONSTRUCTION BMPS

DRAINAGE PLAN
 SCALE 1" = 50'
D-7

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY

ATTACHMENT 5 MITIGATION MAPS

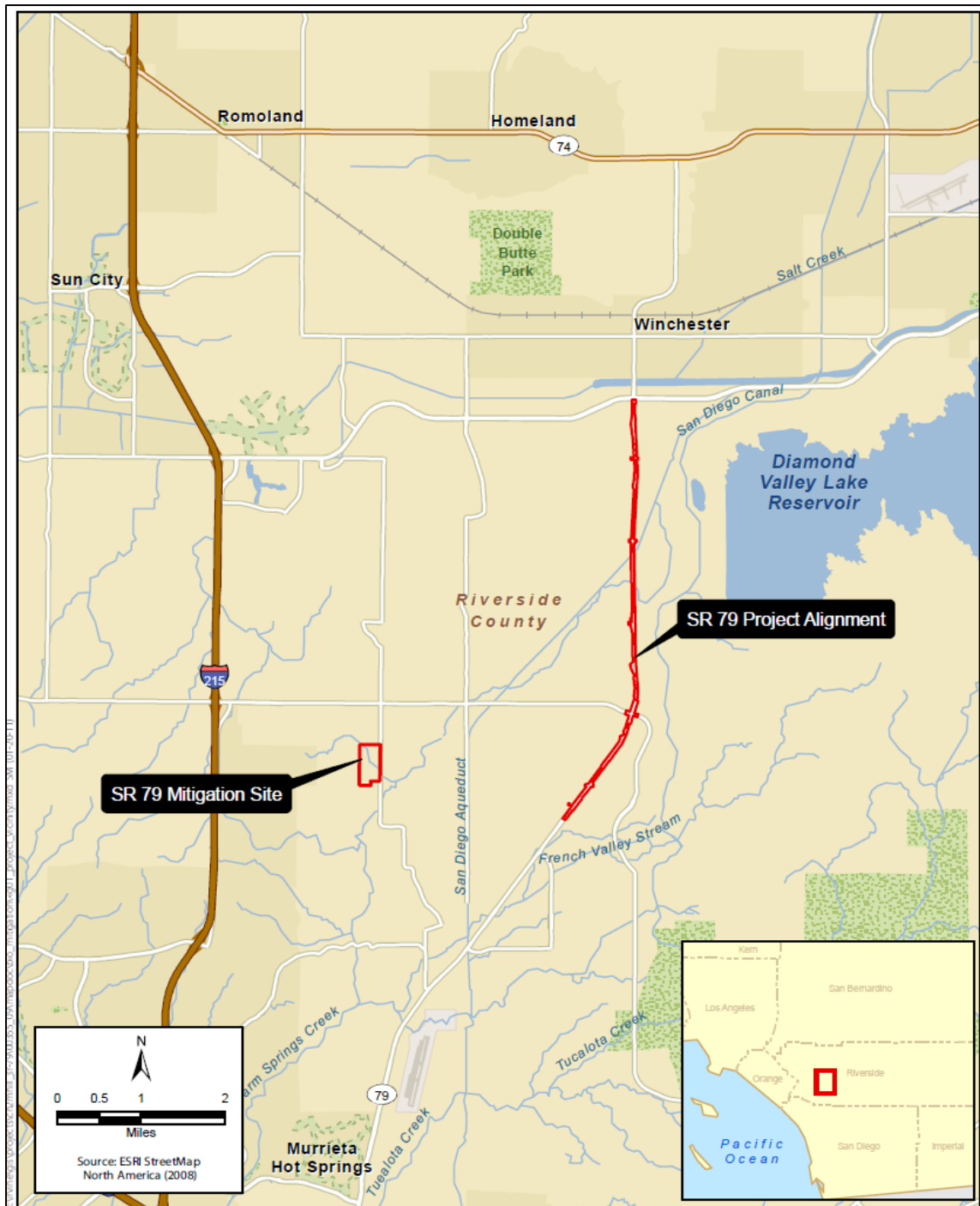
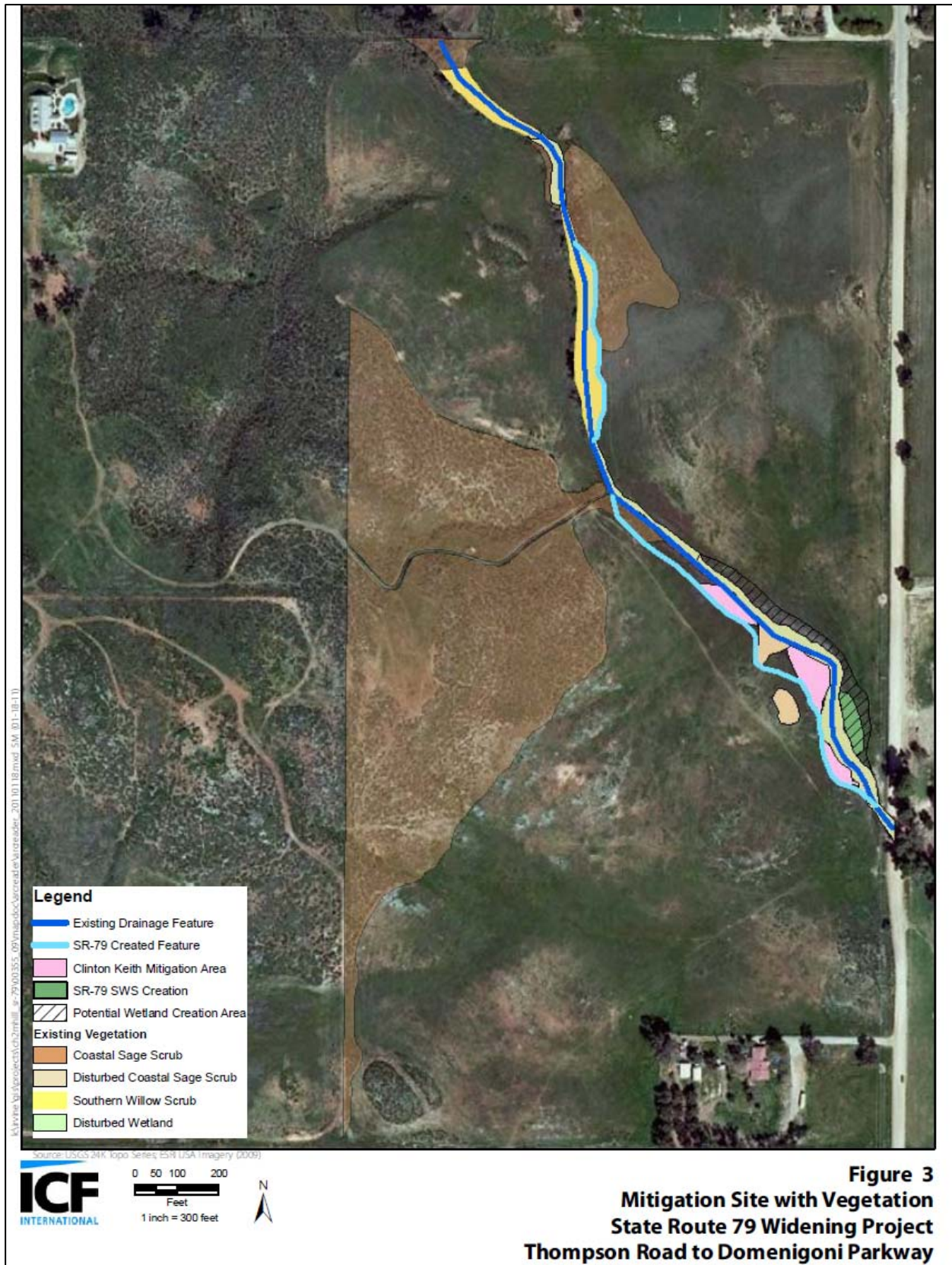


Figure 1
Project Vicinity Map
State Route 79 Widening Project
Thompson Road to Domenigoni Parkway

*Note: Project mitigation will occur within the same RCA parcel (SR 79 Mitigation Site) as mitigation conducted for the State Route 79 Widening Project



*Note: Specific mitigation location within the site to be determined prior to project construction