



## California Regional Water Quality Control Board, San Diego Region

October 10, 2013

Mr. Ibrahim Ghattas SGM Investment and Vista Villa Development 601 West Ave. I Lancaster, CA 93534 Certified Mail – Return Receipt Requested Article Number: 7011 0470 0002 8961 6107

In reply refer to: 752136: amonji

Subject: Action on Request for 401 Water Quality Certification No. 10C-032, the Polo Club at Vista Valley, Tract 4736 Project.

Mr. Ghattas:

Enclosed find Clean Water Act Section 401 Water Quality Certification No. 10C-032 and acknowledgment of enrollment under State Water Resources Control Board Order No. 2003-017-DWQ for the **Polo Club at Vista Valley, Tract 4736 Project** (Project). A description of the Project and Project location can be found in the Certification, location map, and site maps which are included as Attachments 1 through 4 of this Certification.

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 section 3867). If no petition is received, it will be assumed that SGM Investment and Vista Villa Development has accepted and will comply with all the conditions of this Certification.

Failure to comply with all conditions of this Certification may subject SGM Investment and Vista Villa Development to enforcement actions by the California Regional Water Quality Control Board, San Diego Region, 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.

Certification No. 10C-032

In the subject line of any response, please include the reference number 752136:amonji. For questions or comments, please contact Alan Monji by phone at (619) 521-3968, or by email at <a href="mailto:amonji@waterboards.ca.gov">amonji@waterboards.ca.gov</a>.

Respectfully,

DAVID W. GIBSON,

**Executive Officer** 

Regional Water Quality Control Board

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DG:js:db:kkd:atm

## Enclosure:

Clean Water Act Section 401 Water Quality Certification No. 10C-032 for the Polo Club at Vista Valley, Tract 4736 Project

cc: Refer to Attachment 1 of Certification 10C-032 for the Distribution List.

Tech Staff Info & Use				
10C-032				
9000002064				
374031				
752136				
522321				





## California Regional Water Quality Control Board, San Diego Region

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:

Polo Club at Vista Valley, Tract 4736

**Certification Number 10C-032** 

WDID: 9000002064

APPLICANT: SGM Investment and Vista Villas Development

601 West Ave. I

Lancaster, CA 93534

Reg. Meas. ID: 374031 Place ID: 752136 Party ID: 522321 Person ID: 522322

## ACTION:

☐ Order for Low Impact Certification	☐ Order for Denial of Certification
☑ Order for Technically-conditioned Certification	☐ Waiver of Waste Discharge Requirements
☑ Enrollment in SWRCB GWDR Order No. 2003-017 DWQ	☐ Enrollment in Isolated Waters Order No. 2004-004 DWQ

## PROJECT DESCRIPTION

SGM Investments and Vista Villas Development (hereinafter Applicant) submitted an application dated April 30, 2010, for Water Quality Certification pursuant to section 401 of the Clean Water Act for the proposed Polo Club at Vista Valley Project (hereinafter Project). The Applicant proposes to discharge fill material to waters of the United States and State associated with construction activity at the Project site.

The 442-acre Project site is located in the northern portion of unincorporated San Diego County, California at latitude north: 33.26056, longitude west:-117.19667. The Project is approximately three miles west of Interstate 15 along Gopher Canyon Road. The majority of the Project site boundary is located to the north of Gopher Canyon Road with a small portion to the south of Gopher Canyon Road.

The Project will grade 156 single family residential lots and associated infrastructure on 153 acres of the 442-acre Project site. Activities proposed for the development of the site, which would result in the discharge of fill material into waters of the United States and/or State. include: (1) construction of one bridge and two Con-Arches (2) residential road crossings construction, (3) installation of graded residential pads, and (4) sewer line installation.

The Project application includes a description of the design objective, operation, and degree of treatment expected to be attained from equipment, facilities, or activities (including construction and post-construction best management practices (BMPs) to treat waste and reduce runoff or other effluents which may be discharged). Compliance with the Certification conditions will help ensure that construction and post-construction discharges from the Project do not cause onsite or offsite downstream erosion, damage to downstream properties, or otherwise damage to stream habitats in violation of water quality standards in the *Water Quality Control Plan for the San Diego Basin* (9) (Basin Plan).

Project construction will permanently impact 0.27 acre (1,586 linear feet (LF)) and temporarily impact 0.31 acre (1,338 LF) of streambed waters and wetland waters of the United States and/or State. The Applicant reports that the Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impacts to aquatic resources considering all potential practicable alternatives, such as the potential for alternate available locations, designs, reductions in size, configuration or density.

The Applicant reports that compensatory mitigation for the temporary loss of 0.31 acre and permanent loss of 0.27 acre of jurisdictional waters will be achieved through the reestablishment and restoration of waters of the United States and/or State. All waters of the United States and/or State receiving temporary discharges will be restored upon removal of the fill. Mitigation for discharges of fill to waters of the United States and/or State will be completed by the Applicant in the Bonsall hydrologic sub-area (HSA 903.12) at a minimum replacement ratio of 3:1 (area mitigated:area impacted) for permanent impacts and 2:1 for temporary impacts.

The Applicant's Habitat Mitigation and Monitoring/Revegetation Plan for the Polo Club at Vista Valley, San Diego County, California (Mitigation Plan) includes a funding mechanism for monitoring and maintenance of the mitigation sites in perpetuity. The Mitigation Plan will adequately compensate for the loss of beneficial uses and habitat within waters of the United States and/or State associated with the discharge of fill material. Project impacts and mitigation are summarized in section V of this Certification.

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## Attachments:

- 1. Distribution List
- Location Maps
   Project Site Plans
- 4. Mitigation Figures

## I. STANDARD CONDITIONS

Pursuant to section 3860 of Title 23 of the California Code of Regulations (23 CCR), the following three standard conditions apply to all water quality certification actions:

- 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 Water Code and Article 6 (commencing with section 3867 of 23 CCR).
- B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an arnendment to a FERC license unless the pertinent Certification application was filed pursuant to 23 CCR subsection 3855(b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. This Certification action is conditioned upon total payment of any fee required under chapter 28 (commencing with section 3830) of 23 CCR and owed by the applicant.

## **II. GENERAL CONDITIONS**

- A. Water Quality Certification No. 10C-032 (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, then this Certification shall expire five (5) years from the date of issuance.
- B. The Applicant 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:

  <a href="http://www.waterboards.ca.gov/water-issues/programs/cwa401/docs/generalorders/gowdr401regulated-projects.pdf">http://www.waterboards.ca.gov/water-issues/programs/cwa401/docs/generalorders/gowdr401regulated-projects.pdf</a>.
- C. The Applicant 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 herein. The conditions within this Certification must supersede conflicting provisions within such plans submitted as part of this 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 Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies.

- E. The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:
  - Enter upon the Project or Compensatory Mitigation site premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification.
  - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification.
  - 3. Inspect at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification.
  - 4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or California Water Code (Water Code), any substances or parameters at any location.
- 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 (CWA), 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 Applicant 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, or if the results of the Project have unintended impacts to water quality, the San Diego Water Board may modify the conditions of this Certification as appropriate to ensure compliance.

## III. CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMPs implementation and maintenance.
- B. The Applicant 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 Applicant must obtain coverage under, and comply with, the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity*, (General Construction Storm Water Permit) and any reissuance as applicable. If the Project construction activities are not covered under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction BMP plan) to prevent the discharge of sediment and other pollutants during construction activities.
- D. The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050.
- 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 State or placed in locations that may be subjected 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 have 14 or more days of inactivity must be stabilized within 14 days of the last activity. The Applicant is responsible for implementing and maintaining BMPs to prevent erosion of the rough graded areas. 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.

- Except as authorized by this Certification, 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. 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 United States Environmental Protection Agency (USEPA) 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, the Statewide General National Pollution Discharge Elimination System Permit for the Discharge of Aquatic Weed Control in Waters of the United States, and any subsequent reissuance as applicable.
- K. The Applicant shall visually define all areas of temporary and planned disturbance to waters of the State prior to implementing activities within those areas such that all personnel working in those areas can clearly identify the limits of disturbance. The Applicant shall staff a qualified biologist on site during project construction of any activities within or next to waters of the United States and/or State to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work onsite if a violation occurs or has the potential to occur. The Applicant must report violations to the San Diego Water Board consistent with section VII.A of this Certification. Records from the biologist's activities shall be kept on-site and made available for review by San Diego Water Board inspectors.

## IV. POST-CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. The Applicant shall not allow post-construction discharges from the Project site to cause onsite or offsite downstream erosion, and/or damage to properties or damage to stream habitats.
- 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. The Project must be designed to comply with the County of San Diego SUSMP, Standard Urban Stormwater Mitigation Plan Requirements for Development Applications, dated August 1, 2012. This document can be found at the County of San Diego's website: http://www.sdcounty.ca.gov/dpw/watersheds/susmp/susmp.html.
- D. Post-construction BMPs, including those described in the *Major Stormwater*Management Plan for Polo Club Tract 4736 (SWMP), dated June 14, 2013, must treat

100 percent of the added impervious surface and all must be sized to comply with the following numeric sizing criteria:

- 1. Volume-based BMPs must be designed to mitigate (infiltrate, filter, or treat) either:
  - a. The volume of runoff produced from a 24-hour 85<sup>th</sup> percentile storm event, as determined from the local historical rainfall record; 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 85<sup>th</sup> percentile 24-hour runoff event.
- 2. 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 85<sup>th</sup> 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 local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85<sup>th</sup> percentile hourly rainfall intensity multiplied by a factor of two.
- E. All post-construction BMPs must be implemented, installed, and functional prior to construction completion, occupancy, and/or planned use, and maintained in perpetuity. The post construction BMPs must include those described in the SWMP, or any subsequent version of the SWMP approved by the County of San Diego.
- F. The post construction BMPs must be designed, constructed, and maintained in accordance with the most recent California Storm Water Quality Association (CASQA) guidance. Maintenance activities shall include, but are not limited to:
  - Assessment of the performance of the BMPs, no less than two times per year, to ensure protection of the receiving waters and identify any necessary corrective rneasures;
  - 2. Semiannual inspection, at the beginning and end of the wet season, for standing water, slope stability, sediment accumulation, trash and debris, and presence of burrows:

<sup>&</sup>lt;sup>1</sup> California Storm Water Quality Association (California Storm Water BMP Handbook, New Development and Redevelopment 2003), available on-line at: <a href="http://www.cabmphandbooks.org/">http://www.cabmphandbooks.org/</a> [Accessed on January 15, 2012]

3. Removal of accumulated trash and debris as needed to ensure proper functioning of the BMP:

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- 4. Performance of all preventive and corrective maintenance; and
- 5. Maintenance of a log documenting all BMP inspections and maintenance activities.

## V. PROJECT IMPACTS AND COMPENSATORY MITIGATION

- A. The Project must avoid and minimize adverse impacts to the aquatic environment to the maximum extent practicable.
- B. Unavoidable Project impacts to Gopher Canyon Creek and its unnamed tributaries within the San Luis Rey Watershed not exceed the type of impacts and amounts described in the table below. At a minimum, compensatory mitigation amounts required to offset unavoidable Project impacts to waters of the United States and/or State must be achieved as described in the table below:

	Impacts (acres)	Impacts (linear ft.)	Mitigation for Impacts (acres)	Mitigation for Impacts (linear ft.)	Mitigation Ratio (area mitigated :area impacted)		
		Po	ermanent Impacts				
Streambed	0.10	1,586	0.30 acre of Establishment <sup>1</sup>	250	3:1		
Wetland	0.17	82	0.51 acre of Establishment <sup>1</sup>	375	3:1		
Streambed and Wetland			1.5 acres of Enhancement <sup>2</sup>	750 <sup>3</sup>	5.6:1		
	Temporary Impacts <sup>4,5</sup>						
Streambed and Riparian	0.07	1,180	0.07 acre of Restoration <sup>6</sup> and 0.07 acre of Establishment <sup>1</sup>	1,180	2:1		
Wetland	0.24	158	0.24 acre of Restoration <sup>6</sup> and 0.24 acre of Establishment <sup>1</sup>	158	2:1		

- 1. Wetland establishment at the Wetland Establishment Area (WEA).
- 2. Enhancement in the designated Enhancement Area (EA). Additional mitigation for the permanent impacts to 0.10 acres of Streambed and 0.17 acres of Wetland waters of the United States.
- An additional 550 linear feet of Enhancement to waters of the United States is occurring as a result of the Willow Riparian Establishment and Oak Riparian Forest Establishment to mitigate impacts to California Department of Fish and Wildlife streambed and County of San Diego regulated resources.
- 4. Over 10,000 linear feet of linear bioretention filters will be constructed along roadways within the Project site providing additional water quality and hydrologic benefit.
- 5. The Applicant must restore all areas of temporary impacts to pre-project contours and revegetation with native species
- 6. Riparian restoration at Temporary Impact Restoration Areas (TIRA).
- C. Compensatory mitigation and the long-term management of the mitigation areas are described in the Mitigation Plan, dated June 2012 (and any subsequent versions reviewed and accepted/approved by the San Diego Water Board). The Applicant must fully and completely implement the Mitigation Plan. Any deviations from, or revisions to,

must be approved by the San Diego Water Board. San Diego Water Board acceptance of the final mitigation plan applies only to the Project described in this Certification and must not be construed as approval for other current or future projects that are planning to use additional acreage at the site for mitigation.

- D. Compensatory mitigation permanent impacts to 0.27 acre (1,668 LF) of streambed and wetland waters of the United States and/or State shall be achieved in conformance with the Mitigation Plan as follows:
  - Streambed: Mitigation for permanent fill into streambed waters of the United States and/or State shall be achieved at a minimum 3:1 functional ratio. Mitigation must be achieved by the establishment of no less than 0.30 acre of streambed habitat within the bottom portion of the excavated area south of the existing pond within the WEA in Gopher Canyon Creek;
  - 2. <u>Wetland</u>: Mitigation for permanent fill into wetlands waters of the United States and/or State shall be achieved at a minimum 3:1 ratio by the establishment of no less than 0.51 acre riparian forest wetland habitat within the bottom portion of the excavated area south of the existing pond within the WEA in Gopher Canyon Creek;
  - 3. Wetland and Riparian: Mitigation for permanent fill into wetlands and riparian waters of the United States and/or State shall be achieved at a minimum 5.6:1 ratio by the enhancement of no less than 1.5 acres wetland and riparian habitat in the EA located between the WEA and Gopher Canyon Rd;
  - 4. <u>Wetland and Riparian</u>: A minimum of 7.58 acres of onsite wetland and riparian habitat must be preserved; and,
  - 5. <u>Wetland</u>: Mitigation for the temporary fill into wetlands waters of the United States and/or State includes the TIRA and an additional 0.31 acre of establishment of wetland habitat in the WEA.
- E. Compensatory mitigation required under this Certification shall be considered as achieved once it has met the ecological success performance standards contained in the Mitigation Plan.
- F. The Applicant 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 and/or State. Restoration must include grading of disturbed areas to pre-project contours and revegetation with native species. The Applicant must implement all necessary BMPs to control erosion and runoff from areas associated with the Project.
- G. 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 must be 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. Mitigation sites must be designed, constructed, and maintained, in perpetuity, in conformance with the following conditions:

- Most of the channels through the mitigation sites are characterized by equilibrium conditions, with no evidence of severe aggradation or degradation;
- As viewed along cross-sections, the channel and buffer shall have a variety of slopes, or elevations, that are characterized by different moisture gradients. Each sub-slope shall contain physical patch types or features that contribute to irregularity in height, edges, or surface and to complex topography overall; and
- 3. The mitigation sites shall have a well-developed plant community characterized by a high degree of horizontal and vertical interspersion armong plant zones and layers.
- H. The compensatory mitigation site(s) must be protected and maintained, in perpetuity, in conformance with the final ecological success performance standards identified in the Mitigation Plan. The aquatic habitats, riparian areas, buffers and uplands that comprise the mitigation site(s) must be protected in perpetuity from land-use and maintenance activities that may threaten water quality or beneficial uses within the mitigation area. 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 Applicant is responsible for repair and replanting of the damaged area(s). Mitigation sites must be maintained, in perpetuity, 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 five (5) percent of the mitigation sites.
- I. The construction of proposed mitigation must be concurrent with Project grading and completed no later than six (6) months following the initial discharge of dredge or fill material into on-site waters. Delays in implementing mitigation must be compensated by an increased mitigation implementation of 10 percent of the cumulative compensatory mitigation for each month of delay.
- J. For purposes of this Certification, establishment is defined as the creation of vegetated or unvegetated waters of the United States and/or 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. Reestablishment 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. Prior to construction initiation, the Applicant, shall develop a monitoring plan that contains the following elements for the Project mitigation sites:

## 1. Benthic Macroinvertebrate Community Analysis

Bioassessment monitoring must be performed using the professional level non-point source protocol of the California Stream Bioassessment procedure<sup>2</sup> to assess effects of the project on the biological integrity of receiving waters. At a minimum, bioassessment monitoring must be performed at three sites (assessment stations) on Gopher Canyon Creek (as flow permits) before Project initiation, and then during the same season in years three and five. The first assessment station is the reference station, which must be located upstream of the mitigation site in a reference area; the second assessment station must be located within the mitigation sites; the third assessment station must be located downstream of the mitigation site. The reference station upstream of the Project discharge must be located and sampled concurrently with the second and third assessment stations. The results of the Benthic Macroinvertebrate Community Analysis must be submitted with the respective Annual Progress Report.

## 2. Water Quality Assessment

The Applicant must perform water quality sampling and analysis, at a minimum, for pH, temperature, turbidity, dissolved oxygen, phosphorous, total nitrogen and total dissolved solids (TDS). Water quality sampling must be coordinated with the Benthic Macroinvertebrate Community Analysis (section VI.A.1 above) in the appropriate monitoring years. The results of the water quality assessment must be submitted each year with the Annual Progress Report.

Where procedures are not otherwise specified for the monitoring, sampling, and analysis, the quality assurance/quality control procedures must be conducted in accordance with the Surface Water Ambient Monitoring Program (SWAMP) Quality Assurance Program Plan (QAPP)<sup>3</sup> for the State of California's Surface Water Ambient Monitoring Program, adopted by the State Water Resources Control Board.

<sup>2</sup> Copies of the California Stream Bioassessment Procedure can be obtained at http://www.waterboards.ca.gov/water\_issues/programs/swamp/docs/phab\_sopr6.pdf. Additional Information on Stream bioassessment may be obtained at <a href="http://www.waterboards.ca.gov/rwqcb9/water\_issues/programs/bioassessment/index.shtml">http://www.waterboards.ca.gov/rwqcb9/water\_issues/programs/bioassessment/index.shtml</a>

<sup>&</sup>lt;sup>3</sup> The Quality Assurance Program Plan is available on the State Water Board's SWAMP website at http://www.waterboards.ca.gov/water\_issues/programs/swamp/docs/qapp/qaprp082209.pdf

## 3. California Rapid Assessment Method

The Applicant must conduct a quantitative function-based assessment of the health of wetland and riparian habitats to establish baseline conditions (i.e., prior to mitigation implementation and/or start of project construction), set success criteria, and assess mitigation site progress at the mitigation sites using the California Rapid Assessment Method (CRAM). <sup>4</sup> CRAM monitoring must be performed before project construction is initiated and then in years three and five at or near the same locations described in section VI.A.1 above. The CRAM results shall be reported with the applicable **Annual Progress Report**. An evaluation, interpretation, and tabulation of all CRAM assessment data shall be included in the final Project Annual Progress Report.

## B. Progress Monitoring

The Applicant must monitor compliance with this Certification, including BMP implementation, and report the monitoring results to the San Diego Water Board in accordance with the reporting requirements in section VIII of this Certification.

C. The San Diego Water Board may make revisions to the monitoring program at any time during the five-year monitoring term, and may include a reduction or increase in the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.

## VII. NOTIFICATION REQUIREMENTS

- A. The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within **24 hours** from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Applicant becomes aware of the circumstances. The written submission shall 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 recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- B. This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:
  - 1. **Transfer of Property Ownership:** The Applicant 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 Applicant has

<sup>&</sup>lt;sup>4</sup> Information on CRAM is available at the California Rapid Assessment Method homepage at http://www.cramwetlands.org/

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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 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 Applicant 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 Applicant 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. The Applicant must provide such notification to the San Diego Water Board within 10 days of the transfer of BMP maintenance responsibility.
- C. Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of this Certification in the event that a transferee fails to comply.
- D. Prior to the start of construction, the Applicant 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 issuance of this Certification, the Applicant must submit proof of a completed preservation mechanism that will protect all mitigation areas and their buffers in perpetuity. 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 and/or State that it supports. The legal limitation must prohibit 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.

E. The Applicant must notify the San Diego Water Board in writing at least 5 days prior to the actual commencement of dredge, fill, and discharge activities.

## VIII. REPORTING REQUIREMENTS

- A. **Annual Project Reports.** The Applicant must submit Annual Project Reports describing status of BMP implementation and compliance with all requirements of this Certification to the San Diego Water Board prior to **March 1** of each year following the issuance of this Certification until the project has reached completion. The report must contain a description of each incident of noncompliance and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, state the anticipated time it is expected to continue; and identify the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- B. **Final Project Completion Report.** The Applicant must submit a Final Project Completion Report to the San Diego Water Board **within 60 days of completion of the Project.** The final report must include the following information:
  - 1. Date of construction initiation;
  - 2. Date of construction completion;
  - 3. Status of BMPs for the project;
  - 4. As-built drawings no bigger than 11"X17"; and,
  - Photo documentation of implemented post-construction BMPs. Photo
    documentation must be conducted in accordance with guidelines posted at
    http://www.waterboards.ca.gov/sandiego/water\_issues/programs/401\_certification/d
    ocs/401c/401PhotoDocRB9V713.pdf. In addition, photo documentation must
    include Global Positioning System (GPS) coordinates for each of the photo points
    referenced.
- C. Annual Mitigation Monitoring Reports. The Applicant must submit compensatory mitigation monitoring reports, annually, by March 1 of each year containing sufficient information to demonstrate how the compensatory mitigation project is progressing towards meeting its performance standards. Mitigation monitoring reports must be submitted annually until the compensatory mitigation project has accomplished its objectives and met ecological success performance standards contained in the Mitigation Plan and been deemed successful. The monitoring reports must include, but not be limited to, the following information:

Certification No. 10C-032

- 1. Names, qualifications, and affiliations of the persons contributing to the report;
- 2. A description of the progress toward establishing a program to provide for maintenance in perpetuity of all mitigation areas subject to the Mitigation Plan, including a timetable for future steps;
- 3. Results of the annual mitigation monitoring program described in the Mitigation Plan;
- 4. Tables and an analysis of the raw quantitative and qualitative data collected in the field and the following information:
  - i. General topographic complexity characteristics at each mitigation site;
  - ii. General upstream and downstream habitat and hydrologic connectivity; and
  - iii. Source of hydrology to the mitigation areas;
- 5. Qualitative and quantitative comparisons of current mitigation conditions with preconstruction conditions and previous mitigation monitoring results;
- 6. An evaluation of upstream and downstream habitat and hydrologic connectivity;
- 7. Stream photo documentation, including all areas of permanent and temporary impact, prior to and after project construction, and mitigation sites, 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 <a href="http://www.waterboards.ca.gov/sandiego/water\_issues/programs/401\_certification/docs/401c/401PhotoDocRB9V713.pdf">http://www.waterboards.ca.gov/sandiego/water\_issues/programs/401\_certification/docs/401c/401PhotoDocRB9V713.pdf</a>. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced;
- 8. A qualitative comparison to adjacent preserved streambed areas; and,
- 9. A survey report documenting boundaries of mitigation areas.
- D. The Applicant must submit final grading and landscaping plans 30 days prior to initiation of construction activities.
- E. The Applicant must submit a finalized version of the Mitigation Plan prior to commencement of Project construction.
- F. The Applicant must submit a Long Term Management Plan 90 days prior to commencement of Project construction.
- G. The submittal of information under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the San

Diego Water Board for failure to submit information pursuant to Water Code sections 13268 or 13383.

- H. The Applicant must submit all reports and information required under this Certification in both hardcopy (paper) 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. All paper and electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. 10C-032:PIN 752136.
- I. 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.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements 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.

J. 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."

K. The Applicant 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 No. 10C-032:PIN 752136
2375 Northside Drive
Suite 100
San Diego, California 92108

## IX. CEQA FINDINGS

- A. The County of San Diego is the lead agency for the Project under the California Environmental Quality Act (Public Resources Code section 21000, et seq., (CEQA)). The County of San Diego approved a Final Environmental Impact Report (FEIR) for the Project and filed a Notice of Determination (NOD) on November 03, 1993 (SCH# 88111617). The County of San Diego has determined the Project will 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 Notice of Determination and also finds that the Project as proposed will have a significant effect on the environment and has conditioned mitigation measures accordingly, and therefore determines that issuance of this Certification is consistent with the Notice of Determination.

## X. PUBLIC NOTIFICATION OF PROJECT APPLICATION

On May 4, 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.

## XI. SAN DIEGO WATER BOARD CONTACT PERSON

Alan Monji
California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive
Suite 100
San Diego, California 92108
Telephone: (619) 521-3968

Email: amonji@waterboards.ca.gov

## XII. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the **Polo Club at Vista Valley** (Certification Project No. 10C-032) will cornply 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 the description in this Certification, and (b) on compliance with all applicable requirements of the Water Quality Control Plan for the San Diego Basin Region (9) (Basin Plan).

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. 10C-032 issued on October 10, 2013.

DAVID W. GIBSON

**Executive Officer** 

San Diego Water Board

18 October 2013

Date

## ATTACHMENT 1 DISTRIBUTION LIST

Ms. Meris Bantilan-Smith
U.S. Army Corps of Engineers
Regulatory Branch
Meris.Bantilan-Smtih@usace.army.mil

Ms. Kelly Fisher
California Department of Fish and Wildlife
Kelly.Fisher@wildlife.ca.gov

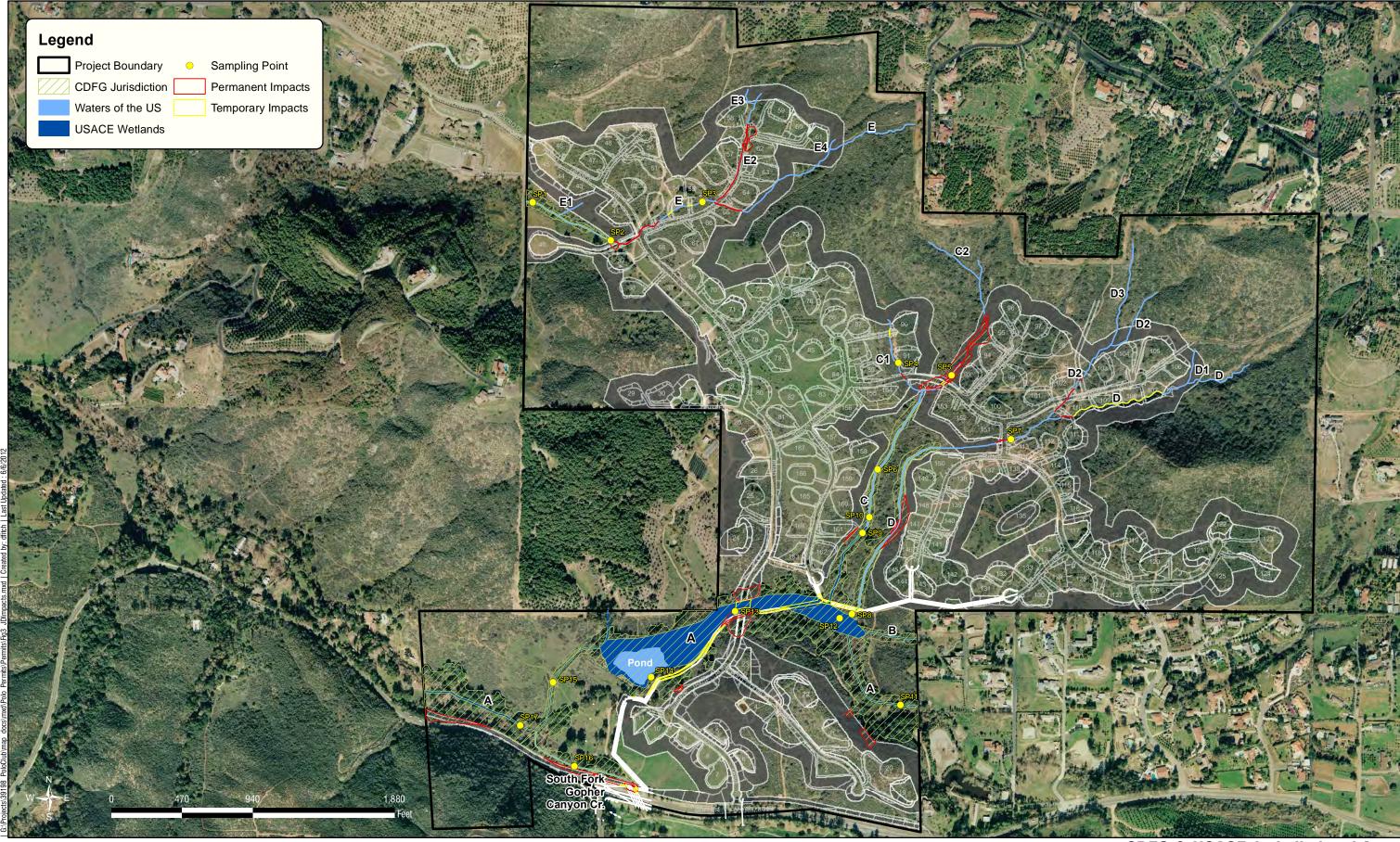
U.S. EPA, OWOW, Region 9 75 Hawthorne St., San Francisco, CA 94105 R9-WTR8-Mailbox@epa.gov

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

Ms. Ingrid Eich HDR Engineering Inc. Ingrid eich@hdrinc.com **ATTACHMENT 2** 

LOCATION MAP

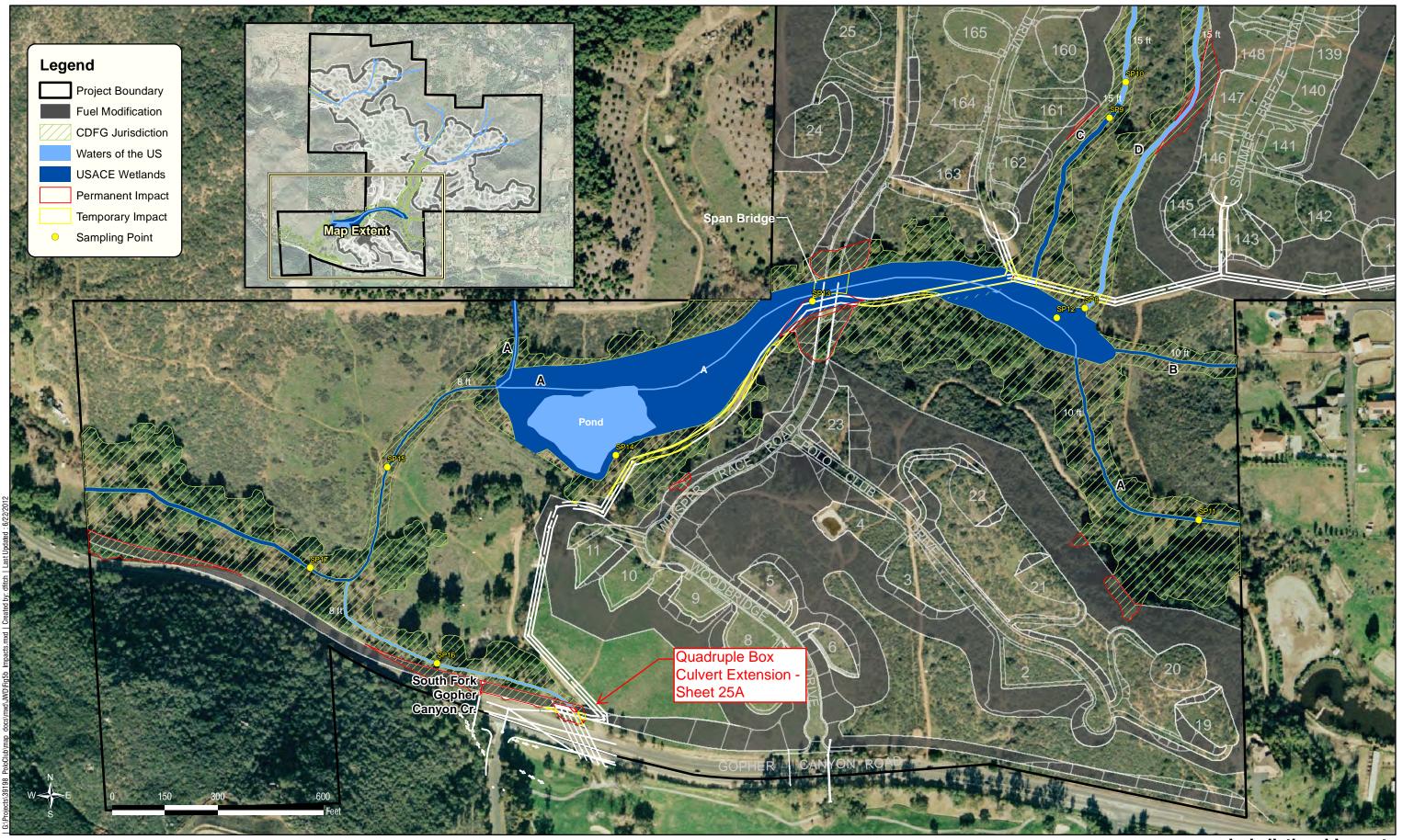
# ATTACHMENT 3 PROJECT SITE PLANS

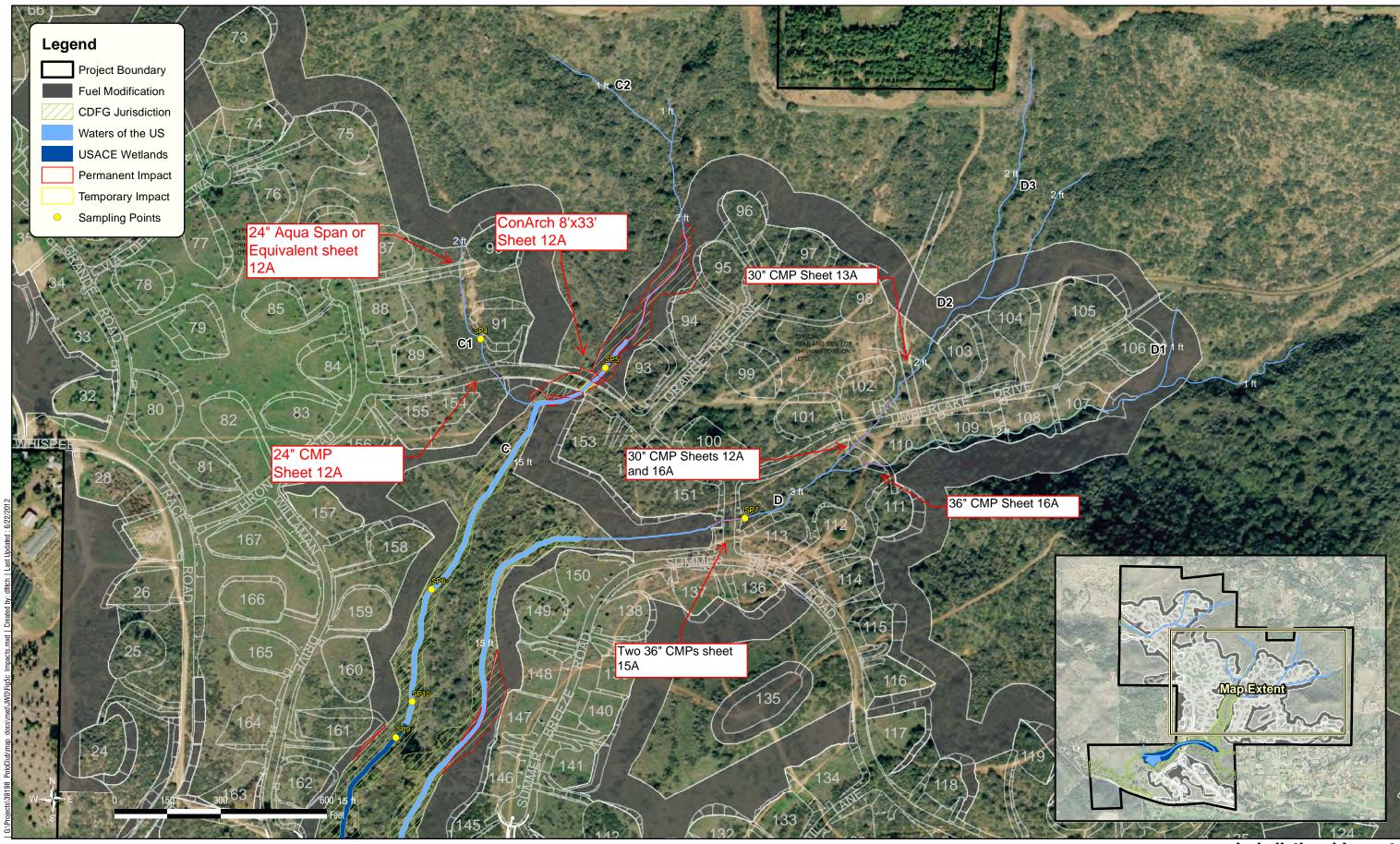


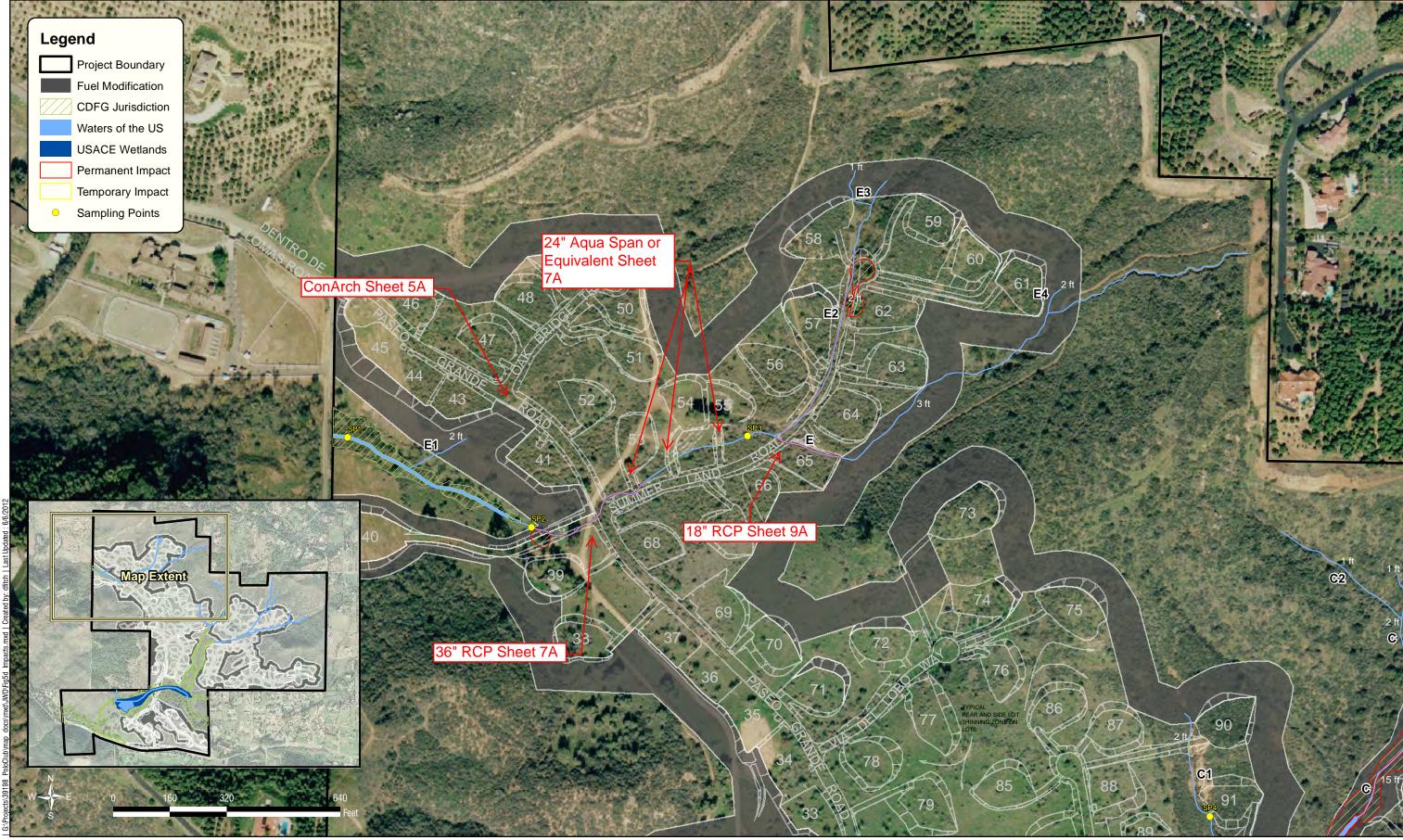
ONE COMPANY | Many Solutions = \_

**CDFG & USACE Jurisdictional Areas** 

FIGURE 3
Engineering Automotive Co. | Polo Project | HMMP/Revegetation Plan







THE GRADING AND IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE FOLLOWING DOCUMENTS, CURRENT AS OF THE TIME OF CONSTRUCTION, AS DIRECTED BY THE DIRECTOR OF PUBLIC WORKS.

- SAN DIEGO COUNTY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- 2. SAN DIEGO COUNTY REGIONAL STANDARD DRAWINGS.
- 3. SEE IMPROVEMENT PLANS TM 4736-1 FOR ALL STORM DRAIN PLANS, PROFILES AND DETAILS.

#### LEGEND:

DESCRIPTION	DRAWING NO.	SYMBOL
SUBDIVISION BOUNDARY		
100 YEAR INUNDATION LINE		
LOT LINE		
OPEN SPACE EASEMENT LINE		
EASEMENT LINE		
A.C. BERM TYPE 'A'	G-5	
P.C.C. CROSS GUTTER	G-12	
SOUND WALL BERM	DETAIL ON SHT. 2	0 0 0
EDGE OF PAVEMENT (EXIST.)		
DRIVEWAY APPROACH	DS-7	/ITTN
CUT OR FILL SLOPE		Y * Y * Y
DAYLIGHT LINE		
EXISTING CONTOUR	S-13, S-14	
PROPOSED CONTOUR	S-3	120
PROPOSED FINISHED GRADE	S-7	235.78
PROPOSED PAD ELEVATION		134
WATER MAIN (EXIST)		w
STORM DRAIN (AS NOTED)		so
TYPE 'B' OR 'B-1' CURB INLET & LO	CAL DEPRESSION D-2	
TYPE 'G' CATCH BASIN	D-8	<u> </u>
STORM DRAIN CLEANOUT TYPE 'A'	D-9	——————————————————————————————————————
HEADWALL TYBE "B"	D-32	so
RIP RAP ENERGY DISSIPATOR	D-40 & DETAIL SCHEDULE ON SHEET 3	
DOWNDRAIN PIPE	0-24	
ASPHALT CONCRETE SPILLWAY	D-22,	
INLET APRON	D-39	Ď
LINED DRAINAGE DITCH	D-75	$\Rightarrow \Rightarrow \Rightarrow \Rightarrow$
UNLINED DRAINAGE SWALE		
SUBDRAIN		
MID-BLOCK CROSS GUTTER	G-13	
GRAVEL INFILTRATION TRENCH	DETAIL ON SHEET 4B	253-254-255-254-254-25-25-25-25-25-25-25-25-25-25-25-25-25-
VEGETATIVE SWALE	BMP FACT SHEET TC-30	14.441.28441.441.441.3
VEGETATED BUFFER STRIP	BMP FACT SHEET TC-31	092260009226

#### SOILS ENGINEER'S CERTIFICATION:

DATED: FEBRUARY 20, 1991

5 FOOT CHAIN LINK FENCE

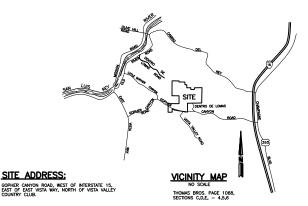
SOILS REPORT: PREPARED BY: SOUTHERN CALIFORNIA SOIL & TESTING, INC. SOUTHERN CALIFORNIA 92120 SAN DIEGO COUNTY, CALIFORNIA

DANIEL B. ADLER, R.C.E. 36037 JOHN R. HIGH, C.E.G. 1237

#### PLANS FOR THE GRADING OF

## THE POLO CLUB

T.M. NO. 4736 RPL4 COUNTY OF SAN DIEGO



#### **ENGINEER OF WORK:**

TRANSTECH ENGINEERS, INC. 624 BREA CANYON ROAD WALNUT, CA 91789 (909) 595-8599

#### ARCHAEOLOGICAL SITE CAPPING NOTE:

PRIOR TO ISSUANCE OF A BUILDING PERMIT, PREHISTORIC SITE, SDI-112912 SHALL BE PRESERVED AS NOTED ON SHEET 23.

#### **BIRD NESTING SEASON NOTE:**

FRUR TO ISSUANCE OF A GRUCON PERBIT OR CHIEF MEROPLEMENT FANS. IN THE YEAR PRIOR TO SHOUND, SUPPLYS SHALL BE CONDUCTED FROM THE WEEKS ERHERS ANALWRY 15 AND APPEL 30 TO DETERMINE THE BLACK-SHOULDED HIT OR OF HITE RESIDITIVE REPORTS (LE NORTHERN HARRIER) ARE NISTING ON THE SITE. IF A MISTING FREE (OR A GROUND MISTING LOCATION) IS IDENTIFIED, THEN CONSTRUCTION CATHOLISES INCLUDING GRADING SHALL HOT OCCUR WITHIN 50 FEET OF THE NEST LOCATION UNIT, JULY 1. THIS 500-FOOT BUFFER SHALL BE CLEARLY MARKED IN ALL DIRECTIONS WITH FLAGING AND SATISFACTION OF THE DIRECTIOR OF DULL, WHICH PROVIDE INFORMATION ON ANY SENSITIVE REPORT NESTS DETECTED ONSITE AND PROTECTION OF THESE MEST LOCATIONS UNTIL, JULY 1 FROM CONSTRUCTION

#### **DECLARATION OF RESPONSIBLE CHARGE:**

I UNDERSTAND THAT THE CHECK OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF SAN DIEGO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES.

DAVID B. RAGLAND, R.C.E. 35985 EXP. 6/30



## HLP NO. \_04-010\_

NOTES:

PRIOR TO ISSUING OF THE GRADING PERMIT, THE APPLICANT SHALL SUBMIT EVIDENCE FROM DPLU TO STATE THAT CONDITIONS C.106p.a.f.g. & h). C14b (NOISE MITIGATION MEASURE), C14 ( c & d) OF TM 4738 RPL4 AND CONDITIONS (A & B) OF 92-019W HAS BEEN SATISFIED.

PRIOR TO THE ISSUANCE OF ANY PERMIT INCLUDING GRADING PERMIT AND CONSTRUCTION PERMIT FOR IMPROVEMENT PLAN THA 4738-1, A CONDITIONAL USE 1-2753 PERMIT SHALL BE PROCESSED AND APPROVED (FOR THE R/W DEDICATION ON SHEET 8 OF 56 OF TMA738-1 WITHIN THE EXISTING OPEN SPACE EASEMENT AS SHOWN ON APN 170-272-02) TO THE SEATISFACTION OF THE DEPARTMENT OF PLANNING AND LAND USE

#### HYDROMODIFICATION:

FOR HYDROMODIFICATION MITIGATION, SEE HYDROMODIFICATION MITIGATION SUMMARY TABLE MICLUBED IN THE "HYDROMODIFICATION STUDY" PREPARED FOR THE POLO CLUB, TRACT 4736, BY TRANSTECH ENGINEERS, DATED FEBRUARY 19, 201, AND INFILITATION TRENCH DETAILS ON SHEET 48.

#### **SHEET CONTENTS:**

SHEET 1 (VOID)

SHEET	1A ŘEVISÉD	TITLE SHEET
SHEET	2	NOTES & DETAILS
SHEET	2 3 4 (VOID)	GRADING PLANS
SHEET	4 (VOID)	
SHEET	4A PEVISED	GRADING PLANS
SHEET	4B NEW SHEET	GRADING PLANS
SHEET	5 (VOID)	GRADING PLANS
SHEET	5A REVISED	GRADING PLANS
SHEET	e HENDED	GRADING PLANS
SHEET	6 7 (VOID)	GIONDING FEMAS
CHEET	7A REVISED	GRADING PLANS
SHEETS		GRADING PLANS
SHEETS	11, 12, 13, 14	(VOID)
SHEETS	11, 12, 13, 14	14A REVISED GRADING PLANS
SHEET		GRADING PLANS
	16, 17 (VOID)	
SHEETS		REVISED GRADING PLANS
	18 THRU 20	GRADING PLANS
SHEET		
SHEET	21A REVISED	GRADING PLANS
SHEETS	22, 23 (VOID)	
SHEETS	22A, 23A	REVISED GRADING PLANS
SHEET	24	GRADING PLANS
SHEET	25 (VOID)	
	25A REVISED	
	26 THRU 27	GRADING PLANS
SHEETS	28 THRU 59	IRRIGATION PLANS

#### SOLAR CERTIFICATION:

THIS IS A SOLAR SUBDIVISION AS REQUIRED BY SECTION 81.40 (n) OF THE SUBDIVISION ORDINANCE, ALL LOTS HAVE AT LEAST 100 SQUARE FEET OF UNDBSTRUCTED ACCESS TO SUNLIGHT ON THE BUILDABLE PORTION OF THE LOT.

DAVID R PAGLAND PCF 35985

SOURCE OF TOPOGRAPHY:

TOPOGRAPHY SHOWN ON THESE PLANS WAS GENERATED BY

AERIAL SURVEY
METHODS FROM INFORMATION GATHERED IN JULY 1994

BY MCELHANNEY GEOSURVEYS, INC.
TOPOGRAPHY SHOWN HEREON CONFORMS TO NATIONAL MAP
ACCURACY STANDARDS.

#### LEGAL DESCRIPTION:

PORTIONS OF SECTIONS 33 AND 34, TOWNSHIP 10 SOUTH, RANGE 3 WEST, AND PORTIONS OF SECTION 4, TOWNSHIP 11 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, ALL IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF.

#### **OWNER'S CERTIFICATE:**

IT IS FURTHER AGREED THAT THE OWNER (DEVELOPER)
SHALL HAVE A REDISTREED CIVIL ENGINEER MAKE SUCH
WHICH THE DIRECTOR OF PUBLIC WORKS DETERMINES ARE
RECESSARY AND DESIRABLE FOR THE PROPER COMPLETION
OF THE IMPROVIDENTS.

OF THE IMPROVEMENTS.

I HEREBY AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING COUNTY RIGHT—
OF—WAY WITHIN BO DAYS AFTER ISSUANCE OF THE CONSTRUCTION PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY MONAL WORKING DAY UNITL COMPLETED, RIRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

BY:\_\_\_\_\_DATE:\_\_\_\_\_DATE:\_\_\_\_

#### OWNER AND PERMITTEE:

VISTA VILLAS DEVELOPMENT, LTD. AND SGM INVESTMENT CORPORATION 43019 NORTH SIERRA HIGHWAY LANCASTER, CA 93534

#### ASSESSOR'S PARCEL NUMBERS:

STORMWATER TREATMENT CONTROL AND LID BMPs

DESCRIPTION/TYPE	SHEET	MAINTENANCE CATEGORY	REVISIONS
CATCH BASIN INSERTS	SEE IMPROVEMENT PLANS	CATEGORY II	
INFILTRATION TRENCH	5 THRU 23, 25 THRU 27	CATEGORY I	
VEGETATED SWALE	6,7,14,15,17	CATEGORY II	
VEGETATED FILTER	15,18	CATEGORY II	
CATCH BASIN INSERTS	SEE IMPROVEMENT PLANS	CATEGORY IV	
		Ĭ	

BMPs approved as part of Stormwater Management plan (SWMP) dated 4/26/2010 on file with DPW. Any changes to the above BMPs will require SWMP revision and Plan

	CIVIL OF CAL		<b>)</b>	SHEETS 60 THRU 87	LANDSCAPE & E	ROSIOI	I CONTROL PLANS Change approvals.		
0/2012		_		COUNTY OF SAN I DEPARTMENT OF PLANNING			PERMITS	PRIVAT	OF SAN DIEGO
FIRE AGENC	DES APPROVAL			Approved for compliance with review and in substantial cor	formance with	•	REZONE PERMIT NON/A		IT OF PUBLIC WORKS
CITY OF VISTA VISTA FIRE DEPARTMENT	NORTH COUNTY	OF S	N DIEGO PROTECTION DISTRICT	Tentative Map No. 4736 RPL4	and P92-019W.		SPECIAL USE PERMIT NO. P92-019W	GRADING PLANS FOR: 1	M 4736-1
				Approved By:	Date:	_	TENTATIVE MAP NO. <u>4736-RPL-4</u> N.O.I. 937C328070	THE	POLO CLUB
								-	
pproved By: Date:	Approved By:		Date:	COUNTY APPROVE	D CHANGES	•	BENCH MARK	CALIFORNIA COORDINATE	INDEX 394-1707 & 39
ATTENTION		No.		Description	Approved by	Date	DESCRIPTION: SAN DIEGO COUNTY TAG IN ROCK	Approved: MOHAMAD K. FAKHRR	DDINE ENGINEER OF WORK:
shown on this plan are based on shall be the sole responsibility of	the contractor		CHANGED TOTAL NUMBE	SHEET, REPLACES SHEET 1. OR OF SHEETS, ENGINEER OF WORK HYDROMODIFICATION AND LID NOTES			STATION NAME 0053 056 XP6 LOCATION: SEE RL53 "GOPHER CYN, SOUTH" PAGE 28	COUNTY ENGINEER BY:	DAMO B. RAGLAND, RCE

ENGINEERS # PLANNERS MUNICIPAL CONSULTANTS transtech 624 Brea Canyon Road, Walnut, CA 91789 (909)595-8599 Fax: (909)595-8863

Contractor agrees that he shall assume sole and complete responsibility for job also conditions during the course of this Project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal serioling hours; and that the Contractor shall defend, indemnify and hold in connection with the performance of work on this Project, excepting for liability arising from the sole negligence of the Owner or the Engineer.

to verify a verify all existing utilities by contacting utility agencies to avoid damaging existing utilities during excavation. FOR UNDERGROUND SERVICE ALERT CALL:

AND INFILTRATION TRENCHES

RECORD FROM: S.D. COUNTY BASEMAP & SURVEY INFO. SYS.
ELEVATION: 857.44 FT. DATUM: MSL

THE POLO CLUB CALIFORNIA COORDINATE INDEX 394-1707 & 398-1707 WANT MOHIMAD K FAKHERINDING | ENGINEER OF WORK;

101

#### **GENERAL NOTES:**

- APPROVAL OF THIS GRADING PLAN DOES NOT CONSTITUTE APPROVAL OF VERTICAL OR HORIZONTAL ALIGNMENT OF ANY PRIVATE ROAD SHOWN HEREON FOR COUNTY ROAD PURPOSES.
- FINAL APPROVAL OF THESE PLANS IS SUBJECT TO FINAL APPROVAL OF THE ASSOCIATED IMPROVEMENT PLANS WHERE APPLICABLE. FINAL CURB GRADE ELEVATIONS MAY REQUIRE CHANGES IN THESE PLANS.
- 3. IMPORT MATERIAL SHALL BE OBTAINED FROM A LEGAL SITE.
- A CONSTRUCTION, EXCAVATION OR ENCROACHMENT PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS WILL BE REQUIRED FOR ANY WORK IN THE COUNTY RIGHT-OF-WAY.
- ALL SLOPES OVER THREE FEET IN HEIGHT WILL BE PLANTED IN ACCORDANCE WITH SAN DIEGO COUNTY SPECIFICATIONS.
- THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK. NOTICE OF PROPOSED WORK SHALL BE GIVEN TO THE FOLLOWING AGENCIES:

#### TELEPHONE NUMBER

SAN DIEGO GAS & ELECTRIC PACIFIC TELEPHONE CATV SEWER WATER

(619) 438-6200 (619) 489-3441 (520) 669-2191 (760) 728-1178 (760) 728-1178

- A SOILS REPORT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
- APPROVAL OF THESE PLANS BY THE DIRECTOR OF PUBLIC WORKS DOES NOT AUTHORIZE ANY WORK OR GRADING TO BE PERFORMED UNTIL THE PROPERTY OWNER'S PERMISSIOIN HAS BEEN OBTAINED AND A VALID GRADING PERMIT HAS BEEN ISSUED.
- THE DIRECTOR OF FURILLY WORKS' APPROVIL OF THESE PLANS DOES NOT CONSTITUTE COUNTY BULLOWN OFFICIAL APPROVIL OF ANY FOUNDATION FOR STRUCTURES TO E-PLACED ON THE AREA COVERED BY THESE PLANS NO MAKER OF THE GRADING ORDINANCE REQUIREMENTS CONCERNING BY A CONCEPT OF THE STRUCTURE OF
- ALL OFERATIONS CONDUCTED ON THE PREJUSES. INCLUDIOS THE WARRING UP, PERAPA, RAPRIM, DEPARTINE OR REMINING OF TRUCKS, EARTHMONING COURPHERT, CONSTRUCTION EQUIPMENT AND ANY OTHER SECONLETE ORGANIC EQUIPMENT SHALL BE LIMITED TO THE PERROD RAPING THE PERROD CONTROL OF CONTROL OF
- ALL MAJOR SLOPES SHALL BE ROUNDED INTO EXISTING TERRAIN TO PRODUCE A CONTOURED TRANSITION FROM CUT OR FILL FACES TO NATURAL GROUND AND ABUTTING CUT OR FILL SURFACES.
- NOMINISTANDA THE MINIMUM STANDARDS SET FORTH IN THE GRADING OFFINANCE AND NOTWITISTANDING THE APPROVAL OF THESE PLANS, THE PREMITTED IS REPOSSIBLE FOR THE PREVIOURL OF THESE PLANS, THE PROPERTY. IN PERSON SHALL DICKNET HAVE NO SCI COLD FOR THE PROPERTY OF THE PROPERTY OF THE PROPERTY FOR THE PROPERTY FROM STANDARD STANDARD THE PROPERTY FROM SETTLING, CROCKING, EROSION SILTING, SOURING OR OTHER DAMAGE WHICH MIGHT RESULT FROM THE COUNTY WILL HOU, THE PREMITTE RESPONSIBLE FOR CORRECTION OF NON-DEDICATED MIRROYAGEMENT SHALL HOUR THE PREMITTE RESPONSIBLE FOR CORRECTION OF NON-DEDICATED
- 13. SLOPE RATIOS:

CUT - 1 1/2:1 FOR MINOR SLOPES; 2:1 FOR MAJOR SLOPES.

EXCAVATION: 573,800 C.Y. FILL: 574,100 C.Y. IMPORT: 300 CY

QUANTITIES SHOWN ARE FOR ESTIMATING PURPOSES ONLY, AND ARE NOT TO BE USED FOR PAY QUANTITIES. (NOTE: A SEPARATE VALID PERMIT MUST EXIST FOR EITHER WASTE OR IMPORT AREAS)

- 14. SPECAL CONDITION: IF ANY ARCHEOLOGICAL RESOURCES ARE DISCOVERED ON THE SITE OF THIS GRADING DURING THE GRADING OPERATIONS, SUCH OPERATION SUBJECT WINESS OF THE DISCOVERY. GRADING OPERATIONS WILL NOT RECOMMENCE UNIT. THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE DIRECTOR OF PUBLIC WORKS TO DO SO.
- 15. ALL GROUNDS DETAINED WILL BE IN ACCORDANCE WITH SAN DIEGO COUNTY STANDARD DAY.

  15. ALL GROUNDS DESAIL OF 1 DE
- 16. ALL MANUFACTURED SUPPES GRADED STEEPER THAN 2-1 ON LOT A AND LOTS 19 AND 20 SHALL UTILIZE STEPPED SUPPES OR ROOK SCULPTURING CONCEPTS TO CREATE PLANTING POOKETS ON THE SLOPES PURSUANT TO CALITRANS STANDARDS SHOWN ON THE DETAILS HERCON.
- 17. MANUFACTURED SLOPES SHALL BE CONTOUR GRADED TO BLEND WITH NATURAL SLOPES. ACCESSORY STRUCTURES SUCH AS DECKS, POOLS AND GAZEBOS, SHALL BE ALLOWED WITHIN THE INDIVIDUAL RESIDENTIAL LOTS PROVIDED;
- (1) NO STRUCTURES ARE LOCATED WITHIN THE OPEN SPACE EASEMENTS.
  (1) ASSOCIATED UTO FELL SLOPES ARE NO ORGATER HAN THE FEET N KENTICAL HEIGHT.
  (1) ASSOCIATED UTO FERNATE ROAD EASEMENT THROUGH PIECE FEET N KENTICAL HEIGHT.
  (10) ASSOCIATED UTO FERNATE ROAD EASEMENT THROUGH OPEN SPACE EASEMENT AND LOTS 100
  (10) LOCATION OF PRIVATE ROAD EASEMENT HANDLONG OPEN SPACE EASEMENT AND LOTS 100
  (10) AND 105 WHICH WILL CONNECT IMBERILANCE DRIVE TO THE ADJACENT NORTHERN
  PROPERTY, ASSESSOR PARCED. NO 127-142-13.

#### SPECIFIC CONDITIONS:

GRADING PLANS SHALL INCLUDE THE REQUIREMENT THAT MY OPEN SPACE EXBERIES SHOWN ON THE TRINITINE MAY WHICH PRECLUDE GRADING, OR BRUSHING, OR CLEARING, SHALL HAVE TEMPORARY FENCES FACED ACQUIRED HAW. SUPERIORS SHALL BE RESTALLED PROPORTO TO CREATE AND ADDRESS OF THE TEMPORARY FENCES FACED FROM THE SHALL PROPORTO TO CREATE AND ADDRESS OF THE SHALL PROPORTO TO CREATE AND ADDRESS OF THE SHALL PROPORTO TO CREATE AND ADDRESS OF THE SHALL PROPORTO THE OFFICE AND ADDRESS OF THE SHALL PROPORTO THE OFFICE AND ADDRESS OF THE SHALL PROPORTO THE OFFICE AND ADDRESS OF THE SHALL PROPORTOR OF THE SHALL PROPO

#### CONDITIONS OF THE GRADING PERMIT:

- EXISTING TOPSOILS, FILL, YOUNGER ALLUVIUM, LOOSE OR POROUS, OLDER ALLUVIUM AND COMPRESSIBLE SUBSOILS UNDERLYING PROPOSED SETTLEMENT SENSITIVE IMPROVEMENTS SHALL BE EXCAVATED TO FIRM GROUND.
- ALL IMPORTED FILL SHALL BE APPROVED BY THE GEOTECHNICAL CONSULTANT FOR COMPOSITION PRIOR TO USE.
- ALL FLUCED AT THE STE SHALL BE COMPACTED TO A MINIMAL LISE, OF 50 PERCENT BASED, ON ASTAL MERIODATOR TEST DESIGNATION 18575, "A GETHOD A RC ), PERCENTED INCHESTOR SHOULD BE COMPACTED TO STREAM OF THE COMPACTED TO STREAM OF THE COMPACTED TO STREAM OF THE STREAM OF THE COMPACTED TO STREAM OF THE COMPACTED BY THE PROJECT'S GEOTECHNICAL CONSULTANT).
- OVERSIZE ROCK MATERIALS BETWEEN SIX INCHES AND TWO FEET IN MAXIMUM DIMENSION SHALL ONLY BE USED IN STRUCTURAL FILL UPON THE DIRECTION OF THE GEOTECHNICAL CONSULTANT. ALL MATERIALS LARGER THAN TWO FEET IN MAXIMUM DIMENSION SHALL BE DISPOSED OF AS DIRECTED BY THE GEOTECHNICAL CONSULTANT.
- THE CUT PORTION OF TRANSITION (I.E. CUT/FILL) LOTS SHALL BE UNDERCUT TO A DEPTH OF THREE FEET BELOW EXISTING GRADE OR AS DIRECTED BY THE GEOTECHNICAL CONSULTANT. THE RESULTING EXCAVATION SHOULD BE BACKFILLED WITH PROPERLY COMPACTED NONDETRIMENTALLY EXPANSIVE FILL.
- EXPANSIVE, COMPRESSIVE, REACTIVE, OR ERODIBLE SOILS SHALL BE OVEREXCAVATED AND REPLACED WITH PROPERLY COMPACTED FILL. EXPANSIVE SOILS SHOULD NOT BE PLACED WITHIN 15 FEET FROM THE FACE OF SLOPES OR WITHIN A DISTANCE OF 2/3 TIMES THE SLOPE HEIGHT, WHICHEVER IS GREATER.
- A SURVEY OF THE SITE SHALL IDENTIFY, AND MARK EACH ROCK WHICH MAY PRESENT A ROCK FALL HAZARD AND SPECIFIC MITIGATION MEASURES IMPLEMENTED.
- THE EXISTING ON-SITE CONTAINMENT STRUCTURE SHALL BE REINFORCED OR REPLACED DUE TO IMPROPERTY COMPACTED FULL PRESENT IN THE CONTAINMENT STRUCTURE. DEWATERING OF THE EXISTING POND SHALL BE CONDUCTED TO BYPASS AREAS PROPOSED FOR GRADING TO AVOID SATURATING ASSOCIATED SURFICIAL DEPOSITS.
- THE LOCATION AND DESIGN OF ALL SURFACE DRAINAGE FEATURES, SUBDRAINS, FOUNDATIONS, RETAINING WALLS, UTILITY LINES, SLOPE STABILIZATION FEATURES, SLASS, FOOTINGS, AND EROSION CONTROL DEVICES SHALL CONFORM TO THE DIRECTION OF THE GEOTECHNICAL CONSULTANT AND THE GRADING ORDINANCE.
- PROJECT-RELATED STRUCTURES SHALL CONFORM TO ALL APPROPRIATE GUIDELINES REGARDING SEISMIC SAFETY, INCLUDING THE UNIFORM BUILDING CODE, AND DESIGN AND INSPECTION REQUIREMENTS OF THE CALIFORNIA DIVISION OF DAM SAFETY.
- ALL APPROPRIATE COMPACTED AREAS SMALL BE SCARFIED TO A DEPTH OF SIX INCHES (AS DIRECTED BY THE GEOTECHNOL CONDUCTATION TO MOUNTAIN OF DISTRIBUTION AND INSTITUTION OF PROTRIBUTION OF DISTRIBUTION OF DISTRIBUTION OF PROTRIBUTION OF DISTRIBUTION OF DISTRIBUTION OF DISTRIBUTION OF PROTRIBUTION OF PROTRIBUTION OF DISTRIBUTION OF DISTRIBU
- 12 SLOPE BUTTRESSING, ROCK ANCHORS OR SLOPE FLATTERING SHALL BE USED FOR FRACTURED METASEDIMENTARY ROCKS AS DIRECTED BY THE PROJECT GEOTECHNICAL CONSULTANT.
- THE USE OF EXPLOSIVES FOR EXCAVATION ACTIVITIES SHALL CONFORM TO ALL APPROPRIATE STATE AND LOCAL CUIDELINES RELATED TO STORAGE, HANDLING AND USE.
- DISPOSAL OF GROUNDWATER FROM DEWATERING OPERATIONS SHALL BE COORDINATED WITH THE APPROPRIATE REGIONAL WATER QUALITY CONTROL BOARD OFFICE.
- ALL PROPOSED DEVELOPMENT ACTIVITIES ON SLOPES EXCEEDING 25% SHALL BE INVESTIGATED FOR POTENTIAL EROSIONAL HAZARDS BY A QUILIFIED GEOTECHNICAL ENGINEER.
- GRADING DIDGATED ON THE FINAL GRADING PLANS SHALL BE IN SUBSTAINTAL CONFERMANCE WITH THAT SHOWN ON THE APPROVED TREATMEN BAD ADITED ALGOST TO. 1922. AND CONTROL THE TENTATION HAVE DEPOSITED FOR IN EXESS OF THE PERCENT OF THE TOTAL GRADING COLUMNITIES AND ANY DOWNTON IN WINNIAM SLOPE HORISTS FROM THE APPROVED TREATMEN MAY IN EXCESS OF THREE FEET MY ALSO REQUIRE ADDITIONAL ENLINE AND THE NEED FOR FURTHER ENVIRONMENTAL REVIEW WILL BE DETERMINED DURING THE GRADING/HIPPOCHEMENT FUND. (CEEC PROCESS.)
- D.1 THE STORM DRAIN SYSTEM FOR THIS PROJECT SHALL BE PRIVATELY MAINTAINED BY A HOMEOWNERS ASSOCIATION
- EROSION CONTROL MEASURES DESCRIBED IN THE PROJECT DESIGN SHALL BE INSPECTED AFTER EMPLACEMENT BY A QUALIFIED ENGINEERING OR HYROLOGICAL CONSULTANT TO INSURE PROPER WORKING CONDITION.
- TO REDUCE POTENTIAL EROSION IMPACTS. GRADING AND OTHER SURFACE DISTURBING ACTIVITIES SHALL NOT BE CONDUCTED DURING PERIODS OF RAINFALL HEAVY ENDUGH TO PRODUCE RUNOFF CAPABLE OF ERODING THE GROUND SURFACE AND CARRYING SEDIMENT DOWNSTREAM.
- ALL FACILITES SUBJECT OT FLOODING DAMAGE SHALL BE LOCATED OUTSIDE OF THE MAPPED 100-YEAR FLOODPLAIN OR OTHERWISE PROTECTED PER DIRECTION OF THE PROJECT ENGINEERING, GEOTECHNICAL AND HYDROLOGICAL CONSULTANTS.
- PROR TO ANY DEWLTRING, A SITE-SPECIFIC ANALYSIS OF ON AND OFF-SITE DEWLTRING IMPACTS MUST BE COMPLETED TO ASSESS SHORT DEWLTRING, SITE AND PROPOSE ADEQUATE INTROGROM, THE SITE-SPECIFIC DEWLTRING ANALYSIS TO ASSESS SHORT DEWLTRING SHOWN AND STATE OF THE ASSESSMENT OF THE STATE O
- PRIOR TO DEWATERING OF THE EXISTING ON-SITE STORAGE POND, THE RESULTS OF THE WATER QUALITY ANALYSIS SHALL BE SUBMITTED TO TH REGIONAL WATER QUALITY CONTROL BOARD ALONG WITH A DESCRIPTION OF THE PROPOSED DISCHARGE ACTIVITIES. THE REQUIREMENTS AND RECOMMENDATIONS PROVIDED BY THE BOARD SHALL BE INCORPORATED INTO THE FINAL PROJECT DESION.
- E. UPON COMPLETION OF THE INSTALLATION OF THE REVEGETATION PLAN, THE APPLICANT SHALL, TO THE SATISFACTION OF THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND LAND USE, INSTALL PERMANENT FENDION AND SIGNAGE AROUND BIOLOGICAL OPEN SPACE EASEMENTS AS SHOWN IN FIGURE #~2 (ON FILE WITH DIPLL ENVIRONMENTIA, FILE) THE SIGNAGE TO BE ASSOCIATED WITH THE PERMANENT FENDING SHALL BE FOR THE PURPOSE OF EDUCATION AND TO DISCOURAGE UNAUTHORIZED ENTRY.

ALL C.M.P. STORM DRAIN PIPES MUST HAVE SOIL ACID TEST PRIOR TO INSTALLATION TO DETERMINE THICKNESS GAUGE OF THE PIPE. MINIMUM 60 YEAR THICKNESS.

HOPE PIPE MAY BE USED AS A SUBSTITUTE FOR C.M.P. AND R.C.P. FOR THE PRIVATE STORM DRAIN SYSTEM. THE USE OF HOPE PIPE SHALL CONFORM TO THE REQUIREMENTS OF THE SAN DIEGO COUNTY DRAINAGE MANUAL APPENDIX B.

## ENGINEERS # PLANNERS MUNICIPAL CONSULTANTS 624 Brea Canyon Road, Walnut, CA 91789 (909)595-8599 Fax: (909)595-8863

ATTENTION All utilities shown on this plan are based on available ecords. It shall be the sole responsibility of the cor o verify all existing utilities by contacting utility agr and to avoid damaging existing utilities during excav

#### CONTRUCTION NOTES:

1. ALL GRADING AND DRAINAGE IMPROVEMENTS SHALL BE COMPLETED IN ACCORDANCE WITH THE COUNTY'S CURRENT GRADING ORDINANCE, THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION WITH SUPPLEMENTS (AP WAS SPECIFICATIONS), AND THE "SAN DECO AREA REGIONAL STANDARD DRAWNINGS", AS AMENDED BY THE COUNTY SUPPLEMENTS, AND THE EARTHHOMEN SPECIFICATIONS ATTACHED TO THE "PRELIMINARY SOLIS REPORT."

2. THE DEVELOPES SHALL BE REPORTS.

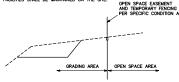
2. THE DEVELOPES SHALL BE REPORDISE FOR INDOCEMBE FOR SLOPE STREUZATION OF ALL EMBANGERS ONE 3 FEET IN HEIGHT, WITHIN 45 DAYS OF COMPLETION OF PRELIMANT, GROUNG, PERMANTER REPORTION STREAMS SHALL BE RESTALLED FOR ALL DISTANCES OF THE COMPLETE FOR THE STREAMS SHALL BE REPORTED FOR THE COUNTY DEVELOPER SHALL BE APPROVED BY THE COUNTY DEVELOPER FOR OF ISSUANCE OF THE GORDING FERRIT. THE DEVELOPER SHALL BE GROUND BOND OR UNTIL NOMINAL LOTS (OR LIMING UNITS) CLOSE ESCROW, WHICHEVER OF THE COUNTY DEVELOPED SHALL BE APPROVED BY SHALL BY THE COUNTY DEVELOPED SHALL BE APPROVED BY THE COUNTY DEVELOPED. THE COUNTY DEVELOPED SHALL BE APPROVED BY THE COUNTY DEVELOPED THE COUNTY DEVELOPED SHALL BE APPROVED BY THE COUNTY DEVELOPED THE

3. NEITHER THE OWNER NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.

4. ALL CUT SLOPES SHALL BE INSPECTED BOTH DURING AND AFTER GRADING BY AN ENGINEERING GEOLOGIST TO DETERMINE IF ANY SLOPE STRABILTY PROBLEM DOSTS. SHOULD EXCANATION DESCORES ANY GEOLOGICAL HAZARDS OF POTENTIAL GEOLOGICAL HAZARDS. THE ENGINEERING GEOLOGIST SHALL RECOMMEND NECESSARY TREATMENT TO THE COUNTY ENGINEER TO A PROVINCIA.

EL SHALL BE COMMATED THROUGHOUT TO BOX JODISTY AS DETERMINED BY U.B.C. STANDARD TO CO-VER AUDIO RESPONDED TO THE GOAL STREETS ARRANGE RECEIVE FILL SHALL BE PROPERTY PREPARED AND APPROVED BY THE ELICIMETERS OF GOLOGIST AND SOLS ENRINGER PROPER TO PLACING FILL. FILLS SHALL BE BENCHED INTO COMPETENT MATERIAL AS PER DETAIL ON PLAIN. ALL EXISTING FILLS SHALL BE APPROVED BY THE COUNTY ENORGER OR REMOVED BEFORE ANY ADDITIONAL FILLS ARE AUDIO.

- 6. DUST SHALL BE CONTROLLED BY WATERING.



## TEMPORARY FENCING DETAIL - OG -

~10° vc EXCAVATION **EMBANKMENT** 

SLOPE ROUNDING

0.75 0.75 1.5° ± 0.2° STEPPED SLOPE N.T.S.

NOTE: STEPPED SLOPE SHALL BE USED ON THE NORTHERLY SIDE OR GOPHER CANYON (NOT THE SOUTHERLY SIDE) AND ANYWHERE THAT THE SLOPE EXCEEDS 1.5 TO 1.

#### **OPEN SPACE EASEMENT:**

WITHIN THE BOUNDARY OF SAID EASEMENT, NO BUILDING, STRUCTURES, OR ANY OTHER TIMES WHATSCEVER SHALL BE CONSTRUCTED, PERCEID, PLACED OR REMOVAL OR DISTURBANCE OF SOIL OR VESETATION, UNLESS BY WRITTEN GODER OF THE FIRE MARSHALL FOR THE EXPRESS PURPOSE TO CONTROL AN IDENTIFIED PRIE HAZARO OF PURSUANT TO THE PRIE MANAGEMENT PLAN INCLUDED IN THE DRAFT ER ALLOWING FOR A MANIMUM OF 100 FEET OF CLEARED AREA FROM ALL BUILDINGS SCHRAFTED INTO THE FOLLOWING ZONE.

- (A) ZONE I 20 FOOT WIDE STRIP FROM ALL BUILDINGS CONSISTING OF IRRIGATED LAWN OR DECORATIVE PLANT MATERIALS;
- (B) ZONE II 30 FOOT WIDE STRIP FROM ZONE I CONSISTING OF FULL IRRIGATED AND LANDSCAPED LOW GROWING, FIRE RETARDANT GROUNDCOVER AND SOME TALLER LOW FUEL VOLUME PLANTS; AND
- (C) ZONE III 50 FOOT WIDE STRIP FROM ZONE II CONSISTING OF NATIVE VEGETATION WHICH IS TRIMMED TO A LOW HEIGHT. DEAD WOOD AND BUILD-UP OF FLAMMABLE FOLIAGE OR BRANCHES WILL BE REMOVED ON A REGULAR BASIS. NO EXOTIC PLANTINGS OR IRRIGATION WILL DE ALLOWED IN THIS ZONE.

GRADING AND DISTURBANCE TO SOIL AND VEGETATION MAY OCCUR IN THE AFOREMENTIONED COPE PACE ONLY TO ALLOW MITIGATION REVECTATION DESCRIBED IN THE FINAL ACCEPTED REVECTATION PLAN, BASED ON THE CONCEPTUAL REVECTATION PLAN DESCRIBED IN THE DRAFT TECHNICAL PARENINGES FOR THE ERROR THAN AND THE ARCHITECTURE OF THE PROPERTY OF COMMENTS SECTION OF THE FINAL EIR.

GRANT AN OPEN SPACE EASEMENT FOR THE PRESERVATION OF A SIGNIFICANT PREHISTORIC ARCHAEOLOGICAL SITE (SDI-1129) AS SHOWN ON EXHIBIT "A" DATED SEPTEMBER 23, 1992, ON FILE WITH THE DEPARTMENT OF PLANNING AND LAND USE, ENVIRONMENTAL FILE.

NITHIN THE GOUNDAY OF THE ARCHAEOLOGUL OPEN SPACE EASEBUT WHICH PROTICES SENTED AN BRIBDING, STRUCTURE, OR ANY OTHER THINK WHATSEVER SHALL BE CONSTRUCTED, CRECITED, PLACED OR MAINTAINED IN SAID OPEN SPACE EASEBUTH TRUCIND ANY ORABING OF THE ADDITION OR REMOVAL OF SOIL OR OF THE ADDITION OF REMOVAL OF SOIL OR OF THE ADDITION OF THE ADDITION OF REMOVAL OF OR OR OF THE FORE MARSHALL FOR THE EXPRESS PURPOSE OF REMOVAL OF AND IDENTIFIED FIRE MARSHALL FOR THE EXPRESS PURPOSE OF REMOVAL.

\* NOISE PROTECTION EASEMENT OVER ALL OF LOT 2 THROUGH 17 AND 19 THROUGH 24 IS GRANTED TO THE COUNTY OF SAN DIEGO IN PERPETUATY OVER, UPON, AND ACROSS SAID LOTS.

#### STORMWATER PROTECTION NOTES

- 1. DURING THE RAINY SEASON THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED BY THE PROPERTY OWNER IN THE EVENT OF A RAINSTORM. EXZS OF ALL SUPPLIES RECEDE FOR BUT MEASURES SHALL BE RETAINED ON THE JOB SITE IN A MANURE THAT ALLOWS FULL DEPLOYMENT AND COMPLET INSTALLATION IN 49 HOURS OR LESS OF A FORECAST OF RAIN.
- 2. NO MEA, BEND DETURED SHALL EXCED SO ARESE AT MY GUES THE WHIGHT DEDUCKMENHAND TO HE SAN DEGO COUNTY D'UN DESCRICTOS SATISFACTION TO DEDUCKMENT SOUTH OF THE SAN THE
- INDUSTRY CONTROL OF THE PROPERTY OWNER IS OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STROWARDS REQULATIONS AT ALL THISS. THE BMP'S (IRSY MANAGEDIST PRACTICES) MAINTAINED TO FETCHILLY PREVIOUS THE POTENTIALY REGARD WARDS OF THIS PROJECTS CONSTRUCTION ACTIVITIES OF STOWNARDS QUALITY. THE MAINTAINANCE OF MAINTAIN THE BMP'S MAY REQULAT THE PROPERCIENT FORTOR SY THE CONTROL OF THE OWNER OF THE PROPERCIENT FORTOR SY THE CONTROL OF THE OWNER OF THE PROPERCIENT FORTOR SY THE CONTROL OF THE OWNER OF THE OWNER OF THE PROPERCIENT FOR AS STOWN AS SETT TO TO SO.
- 4. ON PROJECTS OF GREATER THAN 5 ACRES ADD THE FOLLOWING NOTE:

A NOTICE OF INTERPRET MORE ASSOCIATED FOR ALL SEFERO WHITE PRESURCES CONTROL BOARD (SAFET) AND THAT A STORMAR PERSURCES CONTROL BOARD (SAFET) AND THAT A STORMAR PERSURCES CONTROL BOARD (SAFET) AND THAT A STORMAR PERSURCES ASSOCIATED WITH CONSTRUCTION ACTIVITY (PERSUR NO. CASCODADE) FOR ALL OPPRATIONS ASSOCIATED CONSTRUCTION ACTIVITY (PERSUR NO. CASCODADE) FOR ALL OPPRATIONS ASSOCIATED CONTROL TO ACTIVITY (PERSUR NO. CASCODADE) FOR ALL OPPRATIONS ASSOCIATED CONTROL TO ACTIVITY (PERSUR) ALL TREATMENT OF A COPY OF ALL SEPROMED SEFORE A PERMIT IS ISSUED). THE PERMITTE SHALL KEEP A COPY OF THE SWPPP ON SITE AND ANALASE OF REVENUE YER ACCOUNT.

A FOSSIL FILTER SYSTEM SHALL BE INSTALLED AT EACH CATCH BASIN INDICATED ON THE PLANS IN ACCORDANCE w/ THE (SUSMP) FOR THE PROJECT.

6. STENCIL: "DRAINS TO OCEAN" ON STORM DRAIN INLETS.

COUNTY OF SAN DIEGO DEPARTMENT OF PLANNING AND LAND USE PERMITS REZONE PERMIT NO. N/A SPECIAL USE PERMIT NO. P92-019W TENTATIVE MAP NO. 4736-RPL-4 COUNTY APPROVED CHANGES BENCH MARK DESCRIPTION: SAN DIEGO COUNTY TAG IN ROCK ADD SHEET, REPLACES SHEET 2 STATION NAME 0053 056 XP6
LOCATION: SEE RL53 "GOPHER CANYON SOUTH" PAGE 28

RECORD FROM; S.D. COUNTY BASEMAP & SURVEY INFO SYS.
ELEVATION: 857.44 FT. DATUM: MSL

THE POLO CLUB NOTES AND DETAILS

CALIFORNIA COORDINATE INDEX 394-1707 & 398-1707 Approved: DOUGLAS M. ISBELL ENGINEER OF WORK: R.C.E. 35965

PRIVATE CONTRACT

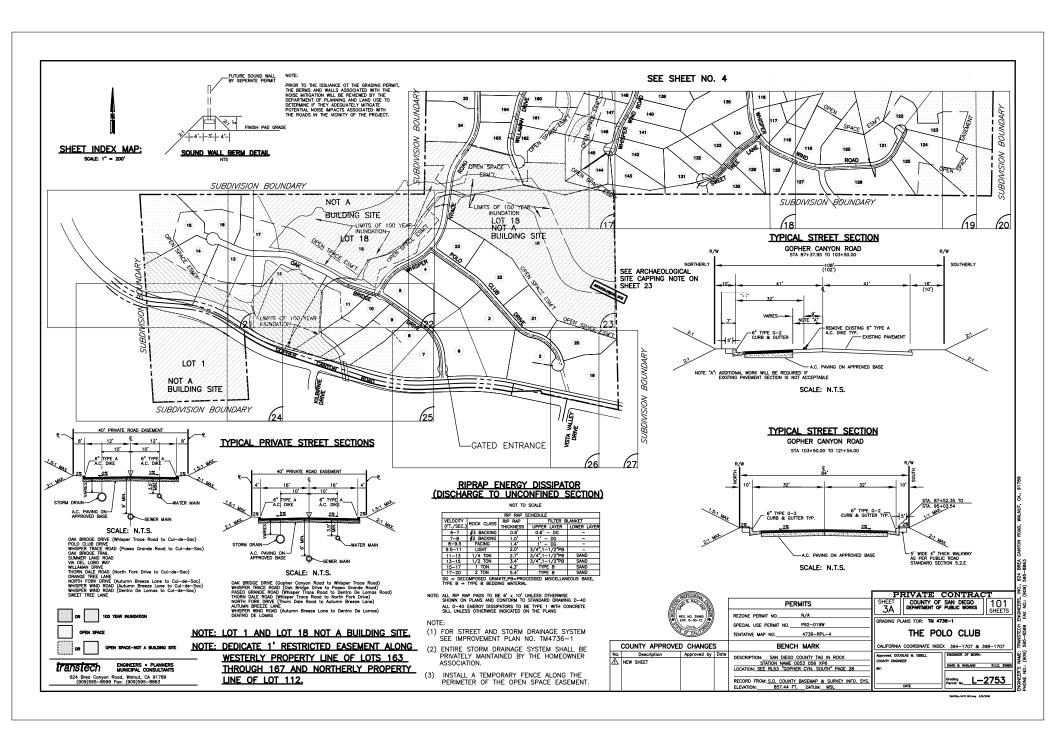
SHEET COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS SHEETS SHEETS

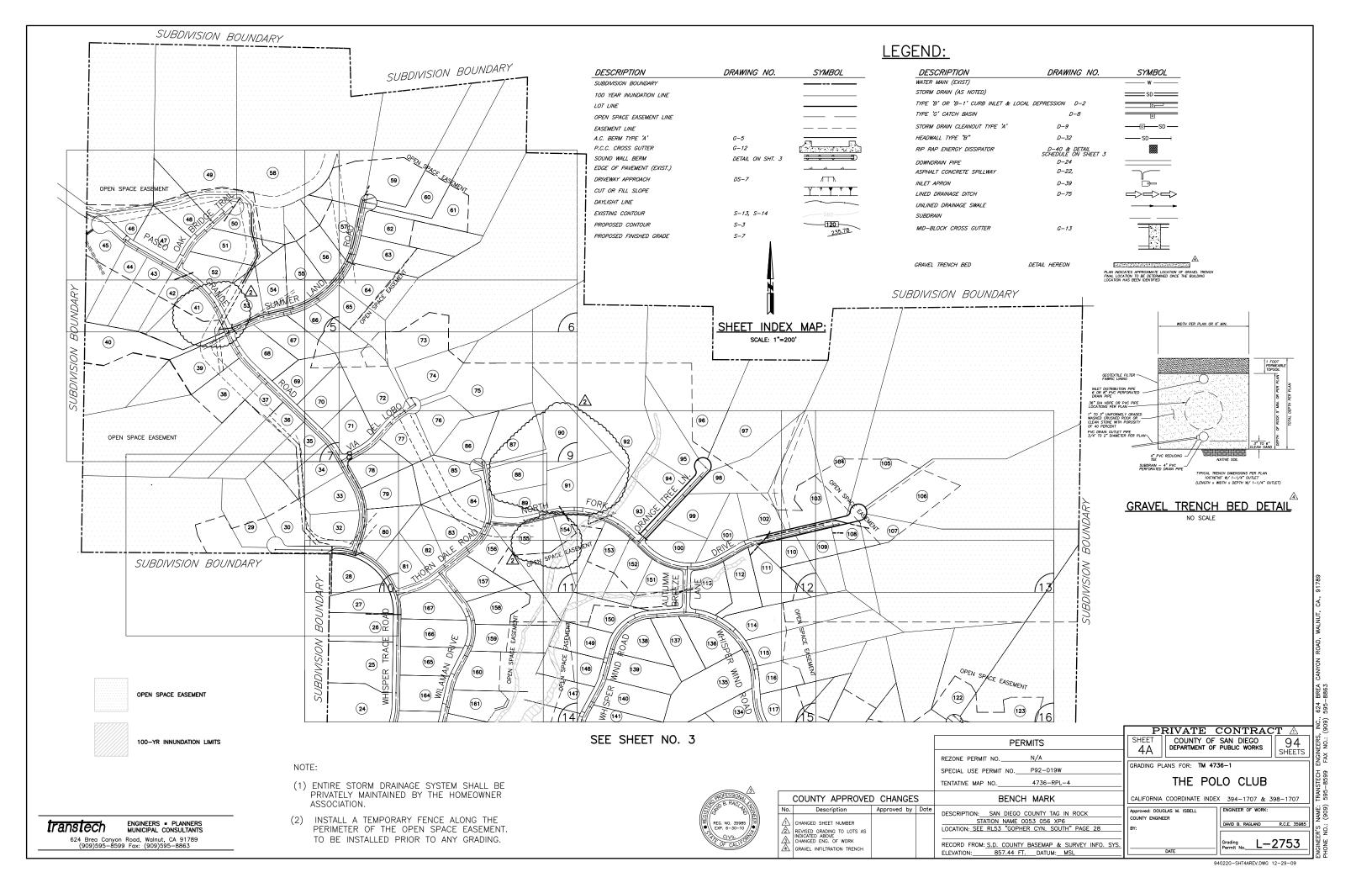
transtech

Controctor agrees that he shall assume sole and complete responsibility for job relationations during the course of this Project, including softly of oil persons and property; that this requirement shall apply continuously and not be limited to normal softling hours, and that the Contractor shall defend, indemnify and hold in connection with the performance of work on this Project, excepting for liability arising from the sole negligence of the Owner or the Engineer.

FOR UNDERGROUND SERVICE ALERT CALL:

REG. NO. 35985 EXP. 6-30-12





#### GRAVEL INFILTRATION TRENCH TABLE

120 121 122		
122	-	NONE NONE
	-	NONE GRAVEL TRENCH-90'x2'x2.5' W/ 4" DRAIN AND 2" CUTLET PIPE GRAVEL TRENCH-90'x2'x2.5' W/ 4" DRAIN AND 2" CUTLET PIPE GRAVEL TRENCH-90'x2'x2.5' W/ 4" DRAIN AND 2" CUTLET PIPE UNDER UNDER
123	_1	GRAVEL TRENCH-90'x2'x2.5' W/ 4" DRAIN AND 2" OUTLET PIPE
124	1	GRAVEL TRENCH-90'x2'x2.5' W/ 4" DRAIN AND 2" OUTLET PIPE
125 126	1	GRAVEL TRENCH-90'x2'x2.5' W/ 4" DRAIN AND 2" OUTLET PIPE
126	1	NONE
115	2	GRAVEL TRENCH-100'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE
116	2	GRAVEL TRENCH-100 X5 X6 W / 4 DRAIN AND 1-1/4 COTTET PIPE
117		GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE   GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE   GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE   GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE
	2	GRAVEL TRENCH-100'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE
118	2	GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE
119	2	GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE
127	2	GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE
128	2	GRAVEL TRENCH—120 x5 x6 W / 4 DRAIN AND 1-1/4 OUTLET PIPE  GRAVEL TRENCH—120 x5 x6 W / 4 DRAIN AND 1-1/4 OUTLET PIPE  GRAVEL TRENCH—120 x5 x6 W / 4 DRAIN AND 1-1/4 OUTLET PIPE
129	2	
130		GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE
131	2	GRAVEL TRENCH-120 x5 x6 W/ 4 DRAIN AND 1-1/4 OUTLET FIRE
132	2	CONTRACTOR AND
133	2	GRAVEL TRENCH-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE GRAVEL TRENCH-120'x5'x6' W/4" DRAIN AND 1-1/4 OUTLET PIPE
		JORNACE INCHORT 120 XD X0 W/4 UKAIN AND 1-1/4 UUILEI PIPE
134	2	(2) GRAVEL TRENCHES-120'x5'x6' W/ 4" DRAIN AND 1-1/4" OUTLET PIPE
102	3	ORMEL TRENCH-80'22'-4" M/ 4" ORMA MAD 2" OUTLET PPE GRAVEL TRENCH-100'42'-4" M/ 4" DAWN AND 2" OUTLET PPE
103	3	GRAVEL TRENCH-100'x2'x4' W/ 4" DRAIN AND 2" OUTLET PIPE
104	3	GRAVEL TRENCH-100'x2'x4' W/ 4" DRAIN AND 2" OUTLET PIPE
105	-3	GRAVEL TRENCH-100'x2'x4' W/ 4" DRAIN AND 2" OUTLET PIPE
	3	GRAVEL TRENCH-100'x2'x4' W/ 4" DRAIN AND 2" OUTLET PIPE  GRAVEL TRENCH-100'x2'x4' W/ 4" DRAIN AND 2" OUTLET PIPE
106	3	GRAVEL TRENCH-100'x2'x4' W/ 4" DRAIN AND 2" OUTLET PIPE
107	3	
108	3	GRAVEL TRENCH-100'x2'x4' W/ 4" DRAIN AND 2" OUTLET PIPE
109	3	GRAVEL TRENCH-100'x2'x4' W/ 4" DRAIN AND 2" OUTLET PIPE
110	3	GRAVEL TRENCH-100'x2'x4' W / 4' DRAIN AND 2" OUTLET PIPE GRAVEL TRENCH-100'x2'x4' W / 4" DRAIN AND 2" OUTLET PIPE
111	3	NONE
87	4	CRAVEL TRENCH_100"v6"v6" W/ A" DRAIN AND 1" OUTLET DID"
88	4	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE
		ORNEL INCHON-100 XO XO W/ * UTOWN AND I COLLET FIFE
89	4	GRAVEL INENUM-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE
90	4	GRAME, TRENCH-100 x x x y x y x x pan x n x 0 1 CUTET PIPE GRAME, TRENCH-100 x x x y x pan
91	4	(2) GRAVEL TRENCHES-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE
92	4	OPEN SPACE LOT
93	4	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE
94	4	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPF
95	4	CRAVEL TRENCH-100'v6'v6' W/ 4" DRAIN AND 1" OUTLET PIPE
96	4	CDAVE TECHNOL CO. C. W. 4" ODAM AND 1" OUTLET DIDE
		GRAVEL TRENCH-50'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE GRAVEL TRENCH-50'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE
97	4	GRAVEL IKENUH-DU'X6'X6' W/ 4" DRAIN AND 1" OUTLET PIPE
98	4	
98	4	GRAVEL TRENCH-50'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE
99	4	GRAVEL TRENCH-50'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE
100	4	CRAVEL TREMON_100"-6"-6" W/ 4" DRAIN AND 1" OUTLET DID"
	4	GRAVEL TRENCH-1003/6/6/ 4/ DRAN AND 1° OUTLET PIPE GRAVEL TRENCH-1003/6/6/ 4/ DRAN AND 1° OUTLET PIPE GRAVEL TRENCH-1003/6/6/ 4/ DRAN AND 1° OUTLET PIPE GRAVEL TRENCH-1003/6/6/ 4/ 4' DRAN AND 1° OUTLET PIPE GRAVEL TRENCH-1003/6/6/ 4/ 4' DRAN AND 1° OUTLET PIPE LIOT DELETED B/C 08-0047
101		GRAVEL IRENUM-100 X6 X6 W/ 4 DRAIN AND 1 OUILEI MME
155	4	GRAVEL INENUH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE
154	4	LOI DELETED B/C 08-0047
112	5	GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE
113	5	GRAVEL TRENCH-50"x3"x4" W/ 4" DRAIN AND 3/4" OUTLET PIPE
114		GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPF
135	5	GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE
	5	
	5	ODANEL TREMON BOOKS W/ A" DRAIN AND 3/A" OUTLET DIDE
136		GRAYEL IRENUT-DU X3 X4 W/ 4 DRAIN AND 3/4 OUTLET MPE
137	5	
137 138		GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE
137 138 139	5	GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE
137 138 139	5	NONE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  MONE
137 138 139 140 141	5	NONE
137 138 139	5 5 5	NONE
137 138 139 140 141	5	NUNE. NONE GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE CRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE CRAVEL TRENCH SO'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE
137 138 139 140 141 142 143	5 5 5	NUNE. NONE GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE CRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE CRAVEL TRENCH SO'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE
137 138 139 140 141 142 143 144	5 5 5 5	NONE  NONE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE
137 138 139 140 141 142 143 144 145	5 5 5 5 5	NONE  NONE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE
137 138 139 140 141 142 143 144 145 145	5 5 5 5 5 5	NONE  NONE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE
137 138 139 140 141 142 143 144 145 145 146	5 5 5 5 5 5 5	NONE  NONE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-50'x3'x4' W/ 4" DRAIN AND 3/4" OUTLET PIPE
137 138 139 140 141 142 143 144 145 145	5 5 5 5 5 5 5 5	SWEET TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-10'64'46' 9/ 4" DRAN AND 3/4" OUTLET PIPE
137 138 139 140 141 142 143 144 145 145 146	5 5 5 5 5 5 5 5	SWEET TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-50'45'44' 9/ 4" DRAN AND 3/4" OUTLET PIPE  GWAET, TROCK-10'64'46' 9/ 4" DRAN AND 3/4" OUTLET PIPE
137 138 139 140 141 142 143 144 145 145 146 147	5 5 5 5 5 5 5 5 5	SORE
137 138 139 140 141 142 143 144 145 145 146 147 148	5 5 5 5 5 5 5 5 5 5	SORE
137 138 139 140 141 142 143 144 145 145 146 147 148 149 150	5 5 5 5 5 5 5 5 5 5 5	SORE
137 138 139 140 141 142 143 144 145 145 146 147 148 149 150	5 5 5 5 5 5 5 5 5 5 5 5 5	SORE
137 138 139 140 141 142 143 144 145 145 146 147 148 149 150 151	5 5 5 5 5 5 5 5 5 5 5 5 5	STORE   SOLIT   SOLI
137 138 139 140 141 142 143 144 145 145 146 147 148 149 150	5 5 5 5 5 5 5 5 5 5 5 5 5	SORE
137 138 139 140 141 142 143 144 145 145 146 147 148 149 150 151 152 153	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	STORE
137 138 139 140 141 142 143 144 145 145 146 147 148 149 150 151 152 153	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SORVE TRONGH-50'33'4" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'33'4" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'33'4" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'33'4" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'33'4" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'33'4" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'4" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE GRAVEL TRONGH-50'54" W/ 4" DRAN AND 3/4" OUTLET PIPE
137 138 139 140 141 142 143 144 145 145 146 147 148 149 150 151 152 153	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SINGE GWARE, IRBORH-50',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' GRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' GRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',5's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',5's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE
137 138 139 140 141 142 143 144 145 145 146 147 148 149 150 151 152 153 81 82	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SINGE GWARE, IRBORH-50',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' GRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' GRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',5's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',5's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE
137 138 139 140 141 142 143 144 145 145 146 147 148 150 151 152 153 81 82 83	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SINGE GWARE, IRBORH-50',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' GRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' GRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-50',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',6's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',5's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',5's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE GRAVE, IRBORH-100',3's' W, 4' DRAIN AND 3/4' OUTLET PIPE
137 138 139 140 141 142 143 144 145 145 146 147 150 151 152 153 81 82 83 84	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SORNE   TRONGH-50'33'4'   W 4' DRAN AND 3/4' OUTLET PIPE
137 138 139 140 141 142 143 144 145 145 146 147 148 149 150 151 151 152 153 81 82 83 84 85	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SORWEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-100'.6" W 4" W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-100'.6" W 4" W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-100'.6" W 4" W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.33'.4"   W 4" DRAIN AND 3/4" OUTLET PIPE   GRAVEL IRBOHH-50'.53'.4"   W 4" DRAIN AND 1'S OUTLET PIPE   GRAVEL IRBOHH-50'.53'.4"   W 4" DRAIN AND 1'S OUTLET PIPE   GRAVEL IRBOHH-50'.53'.4"   W 4" DRAIN AND 1'S OUTLET PIPE   GRAVEL IRBOHH-50'.53'.4"   W 4" DRAIN AND 1'S OUTLET PIPE   GRAVEL IRBOHH-50'.65'.6"   W 4" DRAIN AND 1'S OUTLET PIPE   GRAVEL IRBOHH-50'.66'.6"   W 4" DRAIN AND 1'S OUTLET PIPE
137 138 139 140 141 142 143 144 145 146 147 148 150 151 152 153 81 82 83 84 85 86	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SOME   TRONGH-50'.3'.4"   W   4" DRAN AND 3/4" OUTLET PIPE
137 138 139 140 141 142 143 144 145 146 147 148 150 151 152 153 81 82 83 84 85 86	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GRAVE, IRBOH-50',3's' W, 4' DRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' DRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' GRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' GRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' GRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-10',3's' W, 4' DRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE
137 138 139 140 141 142 143 144 145 145 146 147 150 151 152 153 81 82 83 84 85 86 156	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GRAVE, IRBOH-50',3's' W, 4' DRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' DRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' GRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' GRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' GRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-10',3's' W, 4' DRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE
137 138 139 140 141 142 143 144 145 146 147 150 151 152 153 81 82 82 83 84 85 86 156	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GRAVE, IRBOH-50',3's' W, 4' DRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' DRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' GRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' GRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-50',3's' W, 4' GRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-10',3's' W, 4' DRAN AND 3/4' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE GRAVE, IRBOH-10',0's' W, 4' DRAN AND 1' OUTLET PIPE
137 138 139 140 141 141 142 143 144 145 145 146 147 148 149 150 151 152 153 81 82 83 84 85 86 86 156 157 158	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	STATE
137 138 139 140 141 142 143 144 145 146 147 148 150 151 152 153 81 82 83 84 85 86 156 157 158	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	STATE
137 138 140 141 141 142 143 144 145 145 145 151 152 153 81 82 82 86 86 157 158 159 159	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GRAVE, IRROH-1-50'-3''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-3''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-3''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-3''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 1'-0''-1'-1'-1'-1'-1'-1'-1'-1'-1'-1'-1'-1'-1
137 138 140 141 141 142 143 144 145 145 145 151 152 153 81 82 82 86 86 157 158 159 159	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GRAVE, IRROH-1-50'-3''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-3''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-3''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-3''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 3/4" OUTLET PIPE  GRAVE, IRROH-1-50'-6''-4" V A" DRAN AND 1'-0''-1'-1'-1'-1'-1'-1'-1'-1'-1'-1'-1'-1'-1
137 138 140 141 141 142 143 144 145 146 147 150 151 152 153 81 82 83 84 85 86 86 156 157 158 159 160	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	STATE
137 138 140 141 142 143 144 145 146 147 148 150 151 152 153 83 84 85 86 156 157 158 159 160 161	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	STATE
137 138 140 141 141 143 144 145 145 146 147 150 152 153 81 82 83 84 85 86 157 158 159 160 161 161 162 162	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GRAVE, IRBOH-50',3''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-50',3''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-50',3''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-50',3''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-50',3''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-50',3''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-100',6''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-100',6''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-100',6''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-100',6''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-100',6''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-100',6''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-100',6''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-100',6''s", W, 4" DRAN AND 3/4" OUTLET PIPE GRAVE, IRBOH-100',6''s", W, 4" DRAN AND 1'OUTLET PIPE
137 138 139 140 141 142 143 144 145 145 146 147 148 149 151 152 153 81 82 83 84 85 86 156 157 158 160 161 161 162 163	55 55 55 55 55 55 55 55 55 55 55 55 56 66 6	STATE
137 138 149 140 141 142 143 144 145 145 146 150 151 152 153 81 82 83 84 85 86 156 157 160 161 162 163 164 166 164 165	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	STATE
137 138 139 140 141 142 143 144 145 145 146 147 148 149 151 152 153 81 82 83 84 85 86 156 157 158 160 161 161 162 163	55 55 55 55 55 55 55 55 55 55 56 66 66 6	STATE

MITIGATION ON LOT

LOT BASIN NO. NO.

ON	IKE	NCH TABLE
LOT	BASIN	MITIGATION ON LOT
NO.	NO.	
19	7 7	CAMEL TRENCH-1001-55.56 W J 36" HOPE, 4" DRAIN AND 3/4" OURLET PIPE CAMEL TRENCH-1001-55.56 W J 36" HOPE, 4" DRAIN AND 3/4" OURLET PIPE CAMEL TRENCH-1001-55.56 W J 36" HOPE, 4" DRAIN AND 3/4" OURLET PIPE CAMEL TRENCH-1001-55.56 W J 36" HOPE, 4" DRAIN AND 3/4" OURLET PIPE CAMEL TRENCH-1001-55.56 W J 36" HOPE, 4" DRAIN AND 3/4" OUTLET PIPE CAMEL TRENCH-1001-55.56 W J 36" HOPE, 4" DRAIN AND 3/4" OUTLET PIPE CAMEL TRENCH-1001-55.56 W J 36" HOPE, 4" DRAIN AND 3/4" OUTLET PIPE
19	7	GRAVEL TRENCH-100 X3.5 X0 W/ 36 HDPE, 4 DRAIN AND 3/4 OUTLET PIPE
20	7	GRAVEL TRENCH-100'x5.5'x6' W/ 36" HDPE, 4" DRAIN AND 3/4" OUTLET PIPE
20	7	GRAVEL TRENCH-70'x5.5'x6' W/ 36" HDPE, 4" DRAIN AND 3/4" OUTLET PIPE  GRAVEL TRENCH-100'v5.5'v6' W/ 36" HDPE 4" DRAIN AND 3/4" OUTLET PIPE
21	7	GRAVEL TRENCH-50'x5.5'x6' W/ 36" HDPE, 4" DRAIN AND 3/4" OUTLET PIPE
5	8	GRAVEL TRENCH-100'x2.5'x3.5' W/ 4" DRAIN AND 3/4" OUTLET PIPE
ě	8	I NONE
7 8	8	GRAVEL TRENCH-100°x2.5°x3.5° W/ 4" DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-100°x2.5°x3.5° W/ 4" DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-100°x2.5°x3.5° W/ 4" DRAIN AND 3/4" OUTLET PIPE
9	8	GRAVEL TRENCH-100'x2.5'x3.5' W/ 4' DRAIN AND 3/4' OUTLET PIPE
10	8	
11	8	GRAVEL TRENCH-100 X2.5 x3.5 W/ 4" DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-150 x2.5 x3.5" W/ 4" DRAIN AND 3/4" OUTLET PIPE
3	9	GRAVEL TRENCH-100'x6'x5.5' W/ 4" DRAIN AND 3/4" OUTLET PIPE
22	9	GRAVEL TRENCH-100'x6'x5.5' W / 4 DRAIN AND 3/4" OUTLET PIPE GRAVEL TRENCH-100'x6'x5.5' W / 4" DRAIN AND 3/4" OUTLET PIPE
23	9	GRAVEL TRENCH-100 x6 x5.5 W/ 4" DRAIN AND 3/4" OUTLET PIPE
WHIS	PER	
ROAD		GRAVEL TRENCH-75'x6'x5.5' W/ 4" DRAIN AND 3/4" OUTLET PIPE
27	10	
	10	GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
28 29	10	NONE
30 31	10	NONE GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
32	10	GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
33	10	
35	10	GRAVEL IRENOH-1003 SS W/ 4" DRAW AND 1" OULET PIPE OUTLET IPPE GRAVEL IRENOH-1003 SS SS W/ 4" DRAW AND 1" OUTLET PIPE OUTLET IPPE GRAVEL IRENOH-1003 SS SS W/ 4" DRAW AND 1" OUTLET PIPE OUTLET IPPE GRAVEL IRENOH-1003 SS SS W/ 4" DRAW AND 1" OUTLET PIPE OUTLET IPPE GRAVEL IRENOH-1003 SS SS W/ 4" DRAW AND 1" OUTLET PIPE OUTLET IPPE
71 72	10	GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
72	10	NONE GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
74	10	NONE
75 76	10	NONE GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
77	10	GRAVEL TRENCH-100'x5'x5' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
78	10	
79 80	10	GRAVEL TRENCH—100°x5°x5° W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH—100°x5°x5° W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
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36	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
38	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
39 40	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
41	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
42	11	GRANGLI TRENCH-1007-85-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  LOT POLETTO PER LOT UNE ADJUSTMENT BC CO-00-008  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE  GRANGLI TRENCH-1007-105-8" W, 4" DRAIN AND 1" COULET PIPE COULET PIPE
43	11	GRAVEL TRENCH-100'x10'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
45	11	GRAVEL TRENCH-100'x10'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
46	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
47	11	GRAVEL TRENCH-100 x12 x6 W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
49		NONE
50 51	11	GRAWEL TRENCH-50% % 8' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAWEL TRENCH-100% 12' % 6" W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAWEL TRENCH-100% 6" W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAWEL TRENCH-100% 6" W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
52		GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
53 54	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
55	111	GRAVEL IRROR-1-00 % 6 % W 4 * DRAIN AND 1" QUILET PIPE QUILET PIPE GRAVEL IRROR-1-00 % 6 % W 4 * DRAIN AND 1" QUILET PIPE QUILET PIPE GRAVEL IRROR-1-00 % 6 % W 4 * DRAIN AND 1" QUILET PIPE QUILET PIPE GRAVEL IRROR-1-00 % 6 % W 4 * DRAIN AND 1" QUILET PIPE QUILET PIPE GRAVEL IRROR-1-00 % 6 % W 4 * DRAIN AND 1" QUILET PIPE QUILET PIPE GRAVEL IRROR-1-00 % 6 % W 4 * DRAIN AND 1" QUILET PIPE
56	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
57 58	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE  GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
59	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
60		
62	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-80'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-80'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
63	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
64 65	11	GRAVEL INENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
66	11	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
67 68	11	GRAVEL TRENCH-100'x12'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
69	111	GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
70	11	GRAVEL TRENCH-100'x12'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x12'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100'x6'x6' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
24	NA.	
25	NA.	GRAVEL TRENCH-100"x4"x4" W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE GRAVEL TRENCH-100"x4"x4" W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
26	NA	GRAVEL TRENCH-70'x4'x4' W/ 4" DRAIN AND 1" OUTLET PIPE OUTLET PIPE
1		OPEN SPACE LOT OPEN SPACE LOT
12 13	-	
14		OPEN SPACE LOT OPEN SPACE LOT OPEN SPACE LOT OPEN SPACE LOT
15 16		OPEN SPACE LOT
17		OPEN SPACE LOT OPEN SPACE LOT
_ 10	_	OFER SPRICE COI

TABLE TAKEN FROM "HYDROMODIFICATION STUDY FOR THE POLO CLUB" DATED FEBRUARY 19, 2010 ON FILE WITH DPW.

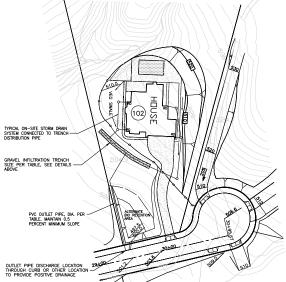
(1) ENTIRE PRIVATE STORM DRAINAGE SYSTEM SHALL BE PRIVATELY MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.

ENGINEERS # PLANNERS MUNICIPAL CONSULTANTS transtech 624 Brea Canyon Road, Walnut, CA 91789 (909)595-8599 Fax: (909)595-8863

WIDTH PER PLAN OR 6' MIN. WIDTH PER PLAN OR 6" MIN. 1 FOOT PERMEABLE TOPSOIL 1 FOOT PERMEABLE TOPSOIL GEOTEXTILE FILTER FABRIC LINING GEOTEXTILE FILTER FABRIC LINING 36" DIA. (PERFORATED) HOPE OR PVC PIPE INSTALLED AT LOCATIONS PER PLAN-AND TRABLE ON THIS SHEET. THE PIPE WILL EXTEND THE LENGTH OF THE TRENCH TO WITHIN ONE FOOT OF THE END OF TRENCH. CAP PLOS TO PREVENT GRAVEL FROM ENTERING PIPE. 1" TO 3" UNIFORMELY GRADED WASHED CRUSHED ROCK OR CLEAN STONE WITH POROSITY OF 40 PERCENT 1" TO 3" UNIFORMELY GRADED -WASHED CRUSHED ROCK OR CLEAN STONE WITH POROSITY OF 40 PERCENT PVC DRAIN OUTLET PIPE 3/4" TO 2" DIAMETER PER PLAN -4" PVC REDUCING PVC DRAIN OUTLET PIPE 3/4" TO 2" DIAMETER PER PLAN-4" PVC REDUCING TYPICAL TRENCH DIMENSIONS PER PLAN 100'X6'X6' W/ 1-1/4" OUTLET (LENGTH x WIDTH x DEPTH W/ 1-1/4" OUTLET) TYPICAL TRENCH DIMENSIONS PER PLAN 100'X6'X6' W/ 1-1/4" OUTLET (LENGTH x WIDTH x DEPTH W/ 1-1/4" OUTLET)

#### GRAVEL TRENCH DETAIL NO SCALE

#### GRAVEL TRENCH DETAIL WITH INTERNAL PIPE NO SCALE



#### CONSTRUCTION NOTE:

PRIOR TO CONSTRUCTION/INSTALL/FIGN OF THE SOME, IMPLIBATION TREBUSES, TESTING OF INFILITATION AND INCIDENT OF GROUNDARFE WILL NEED TO BE FREFORMED AT EACH OF THE INITIATION SITES DURING CONSTRUCTION AND A REPORT PREPARED AT EACH OF THE SURSTAINT OF THE DIRECTION OF PRIBLIC MORES, AUGUSTERN'S TO THE SURSTAINT OF THE DIRECTION AUGUSTESS. AUGUSTESS OF THE SURSTAINT OF THE DIRECTION AUGUSTESS AUGUSTESS OF THE SURSTAINT OF SURSTAINT OF

TYPICAL LOT TRENCH AND DRAINAGE DETAIL

COUNTY APPROVED CHANGES Approved by Dat

PERMITS 4B REZONE PERMIT NO.\_ SPECIAL USE PERMIT NO. P92-019W 4736-RPL-4 BENCH MARK DESCRIPTION: SAN DIEGO COUNTY TAG IN ROCK
STATION NAME 0053 056 XP6
LOCATION: SEE RL53 "GOPHER CYN. SOUTH" PAGE 28

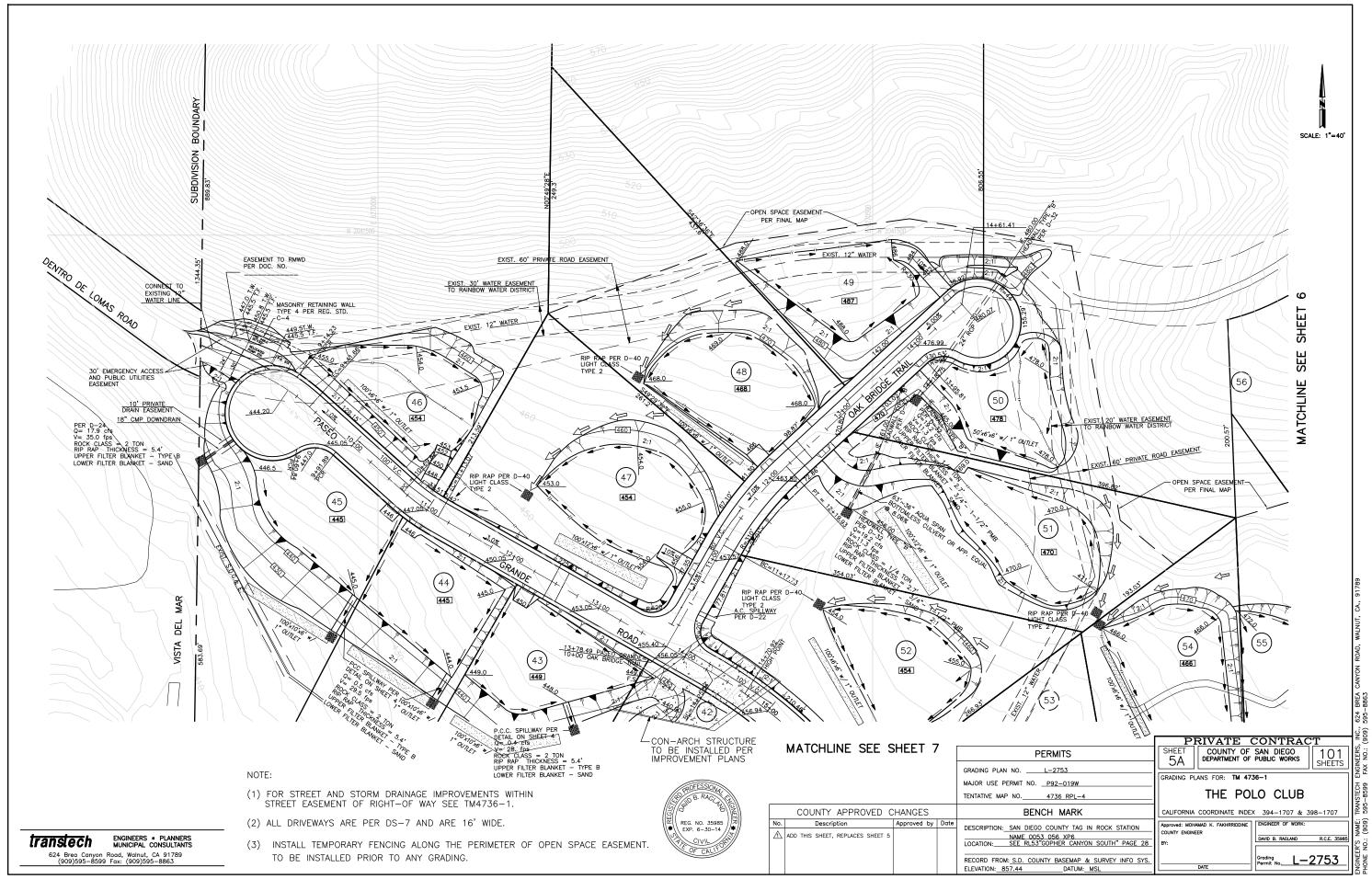
RECORD FROM: S.D. COUNTY BASEMAP & SURVEY INFO. SYS ELEVATION: 857.44 FT. DATUM: MSL

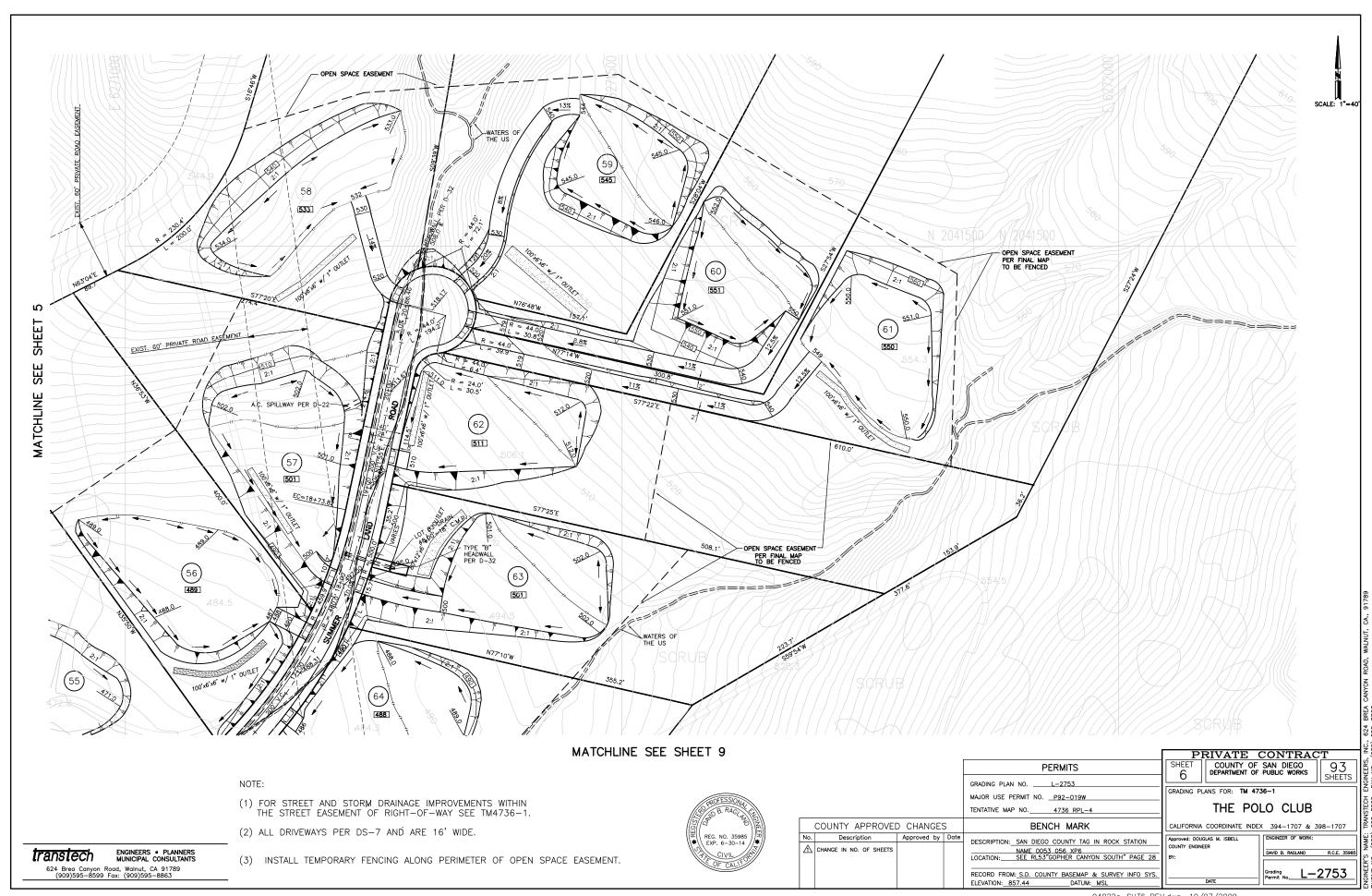
THE POLO CLUB CALIFORNIA COORDINATE INDEX 394-1707 & 398-1707

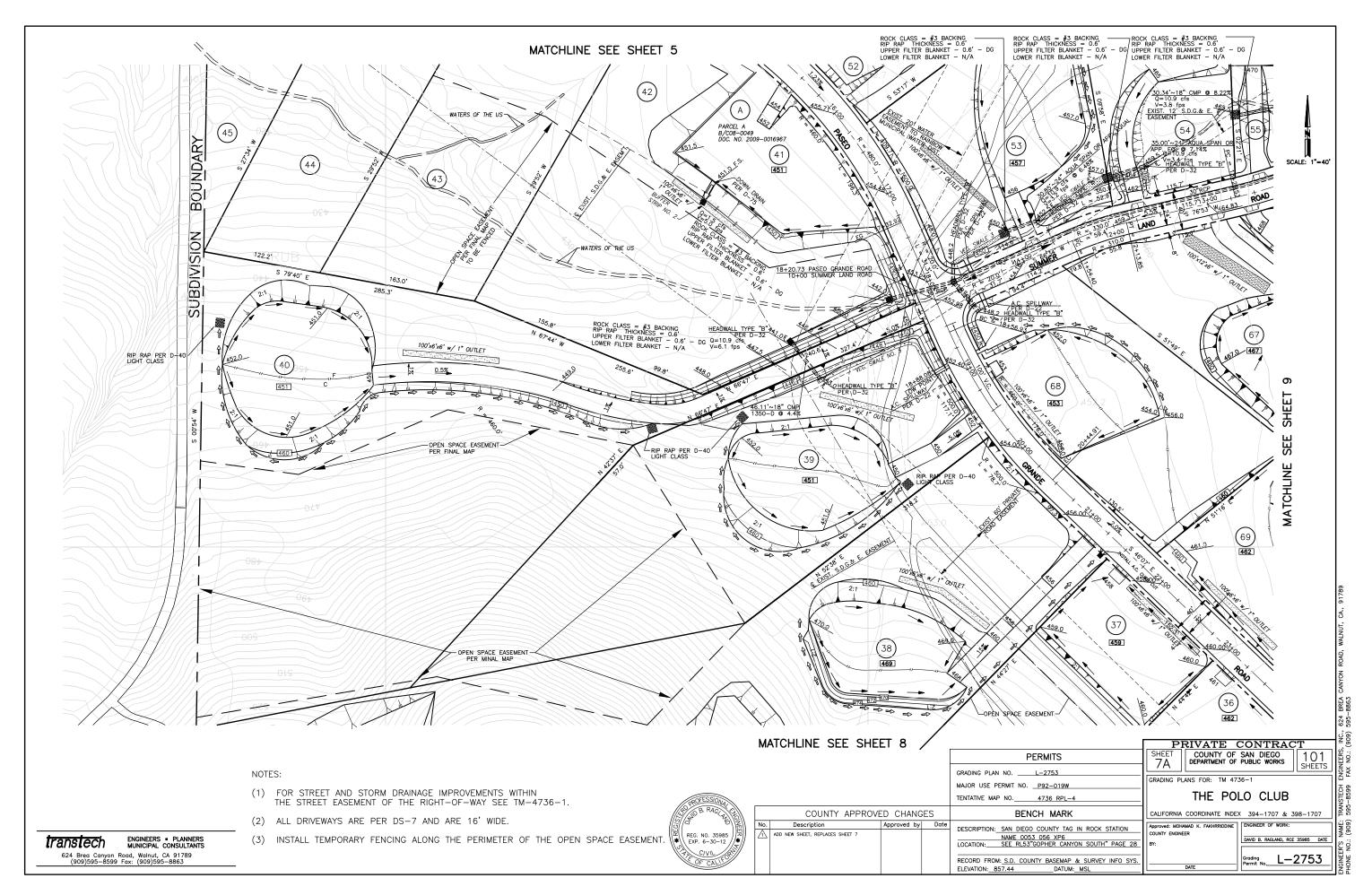
PRIVATE CONTRAC

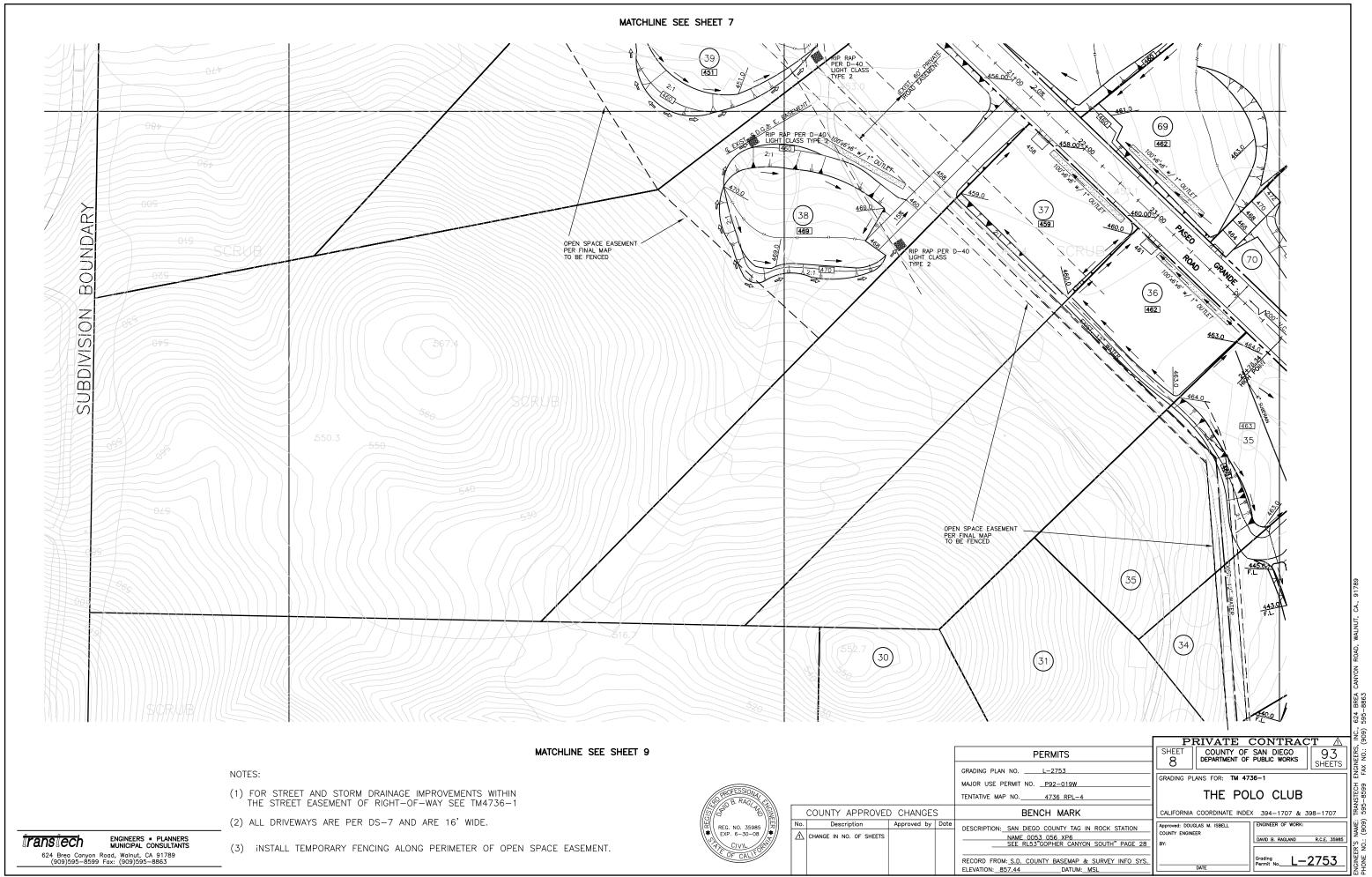
COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS

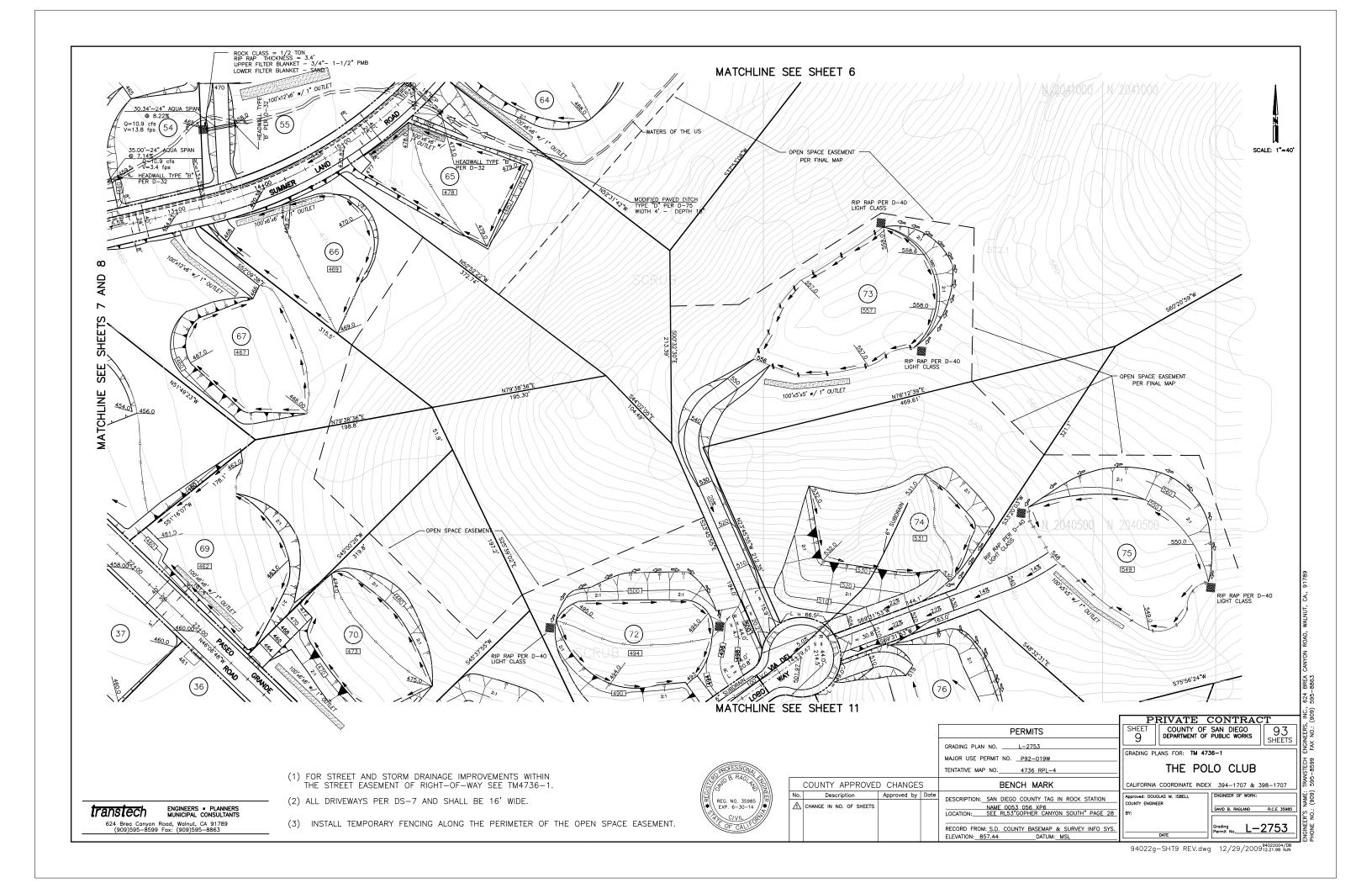
101 SHEETS

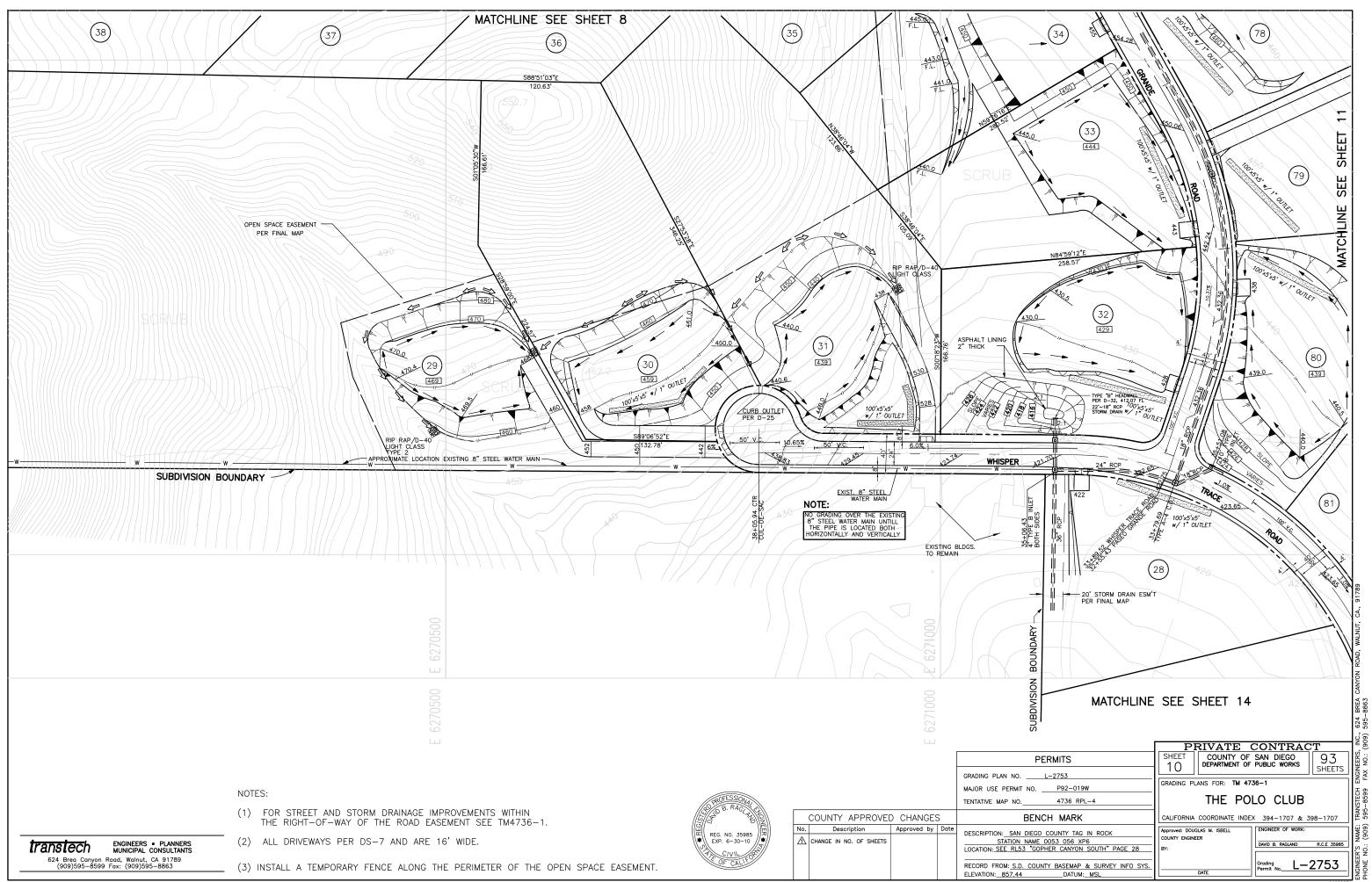


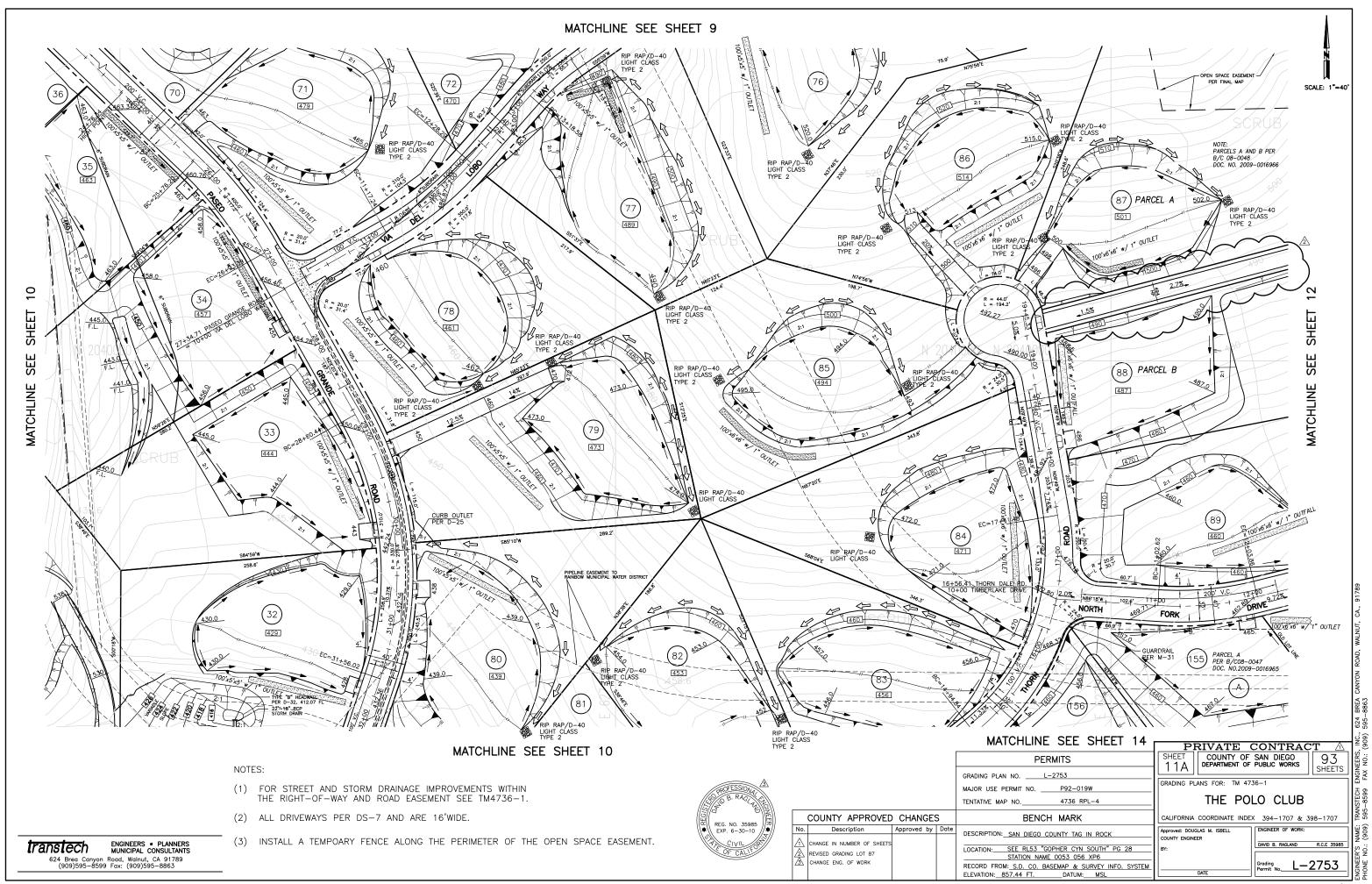


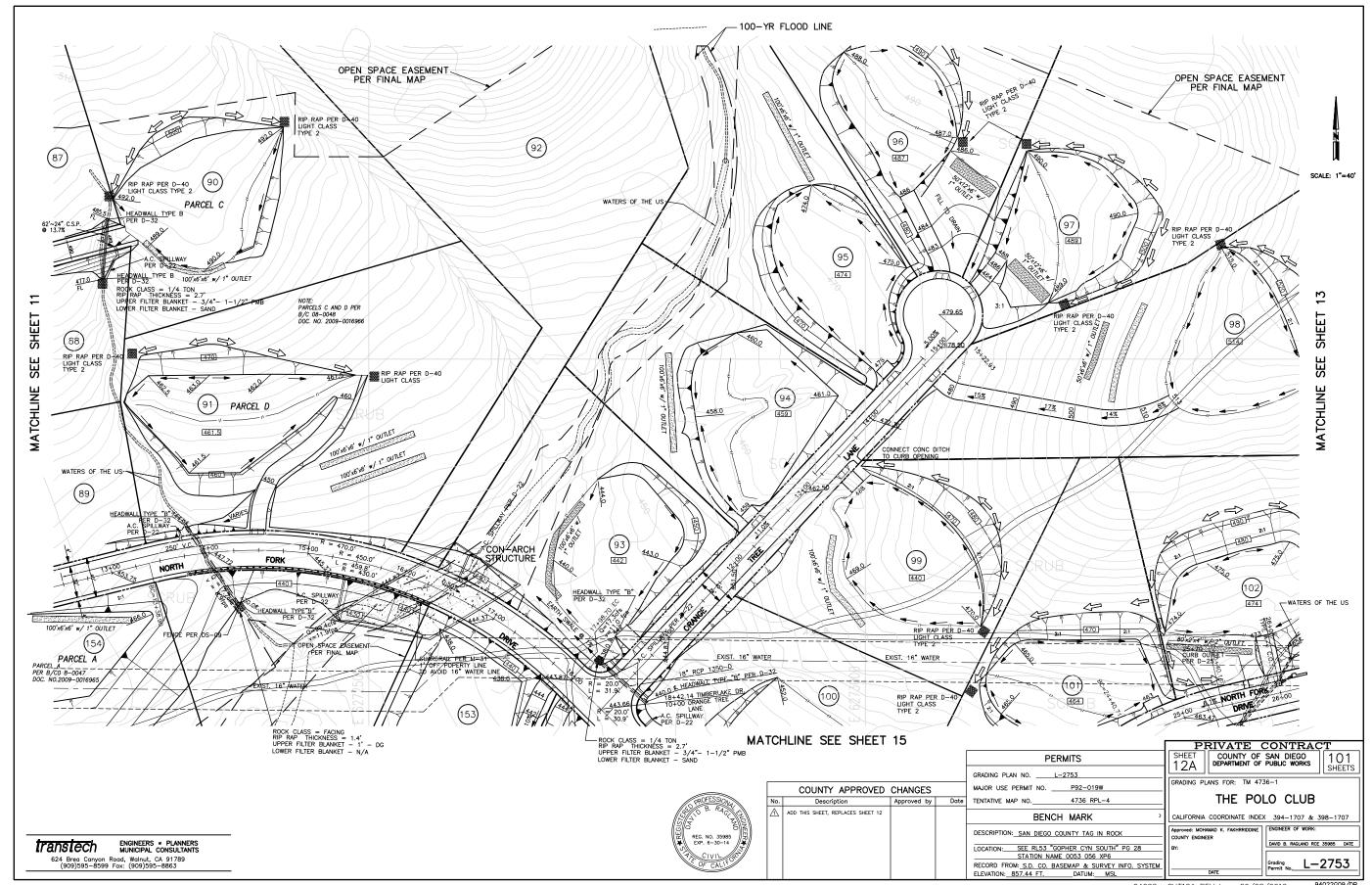


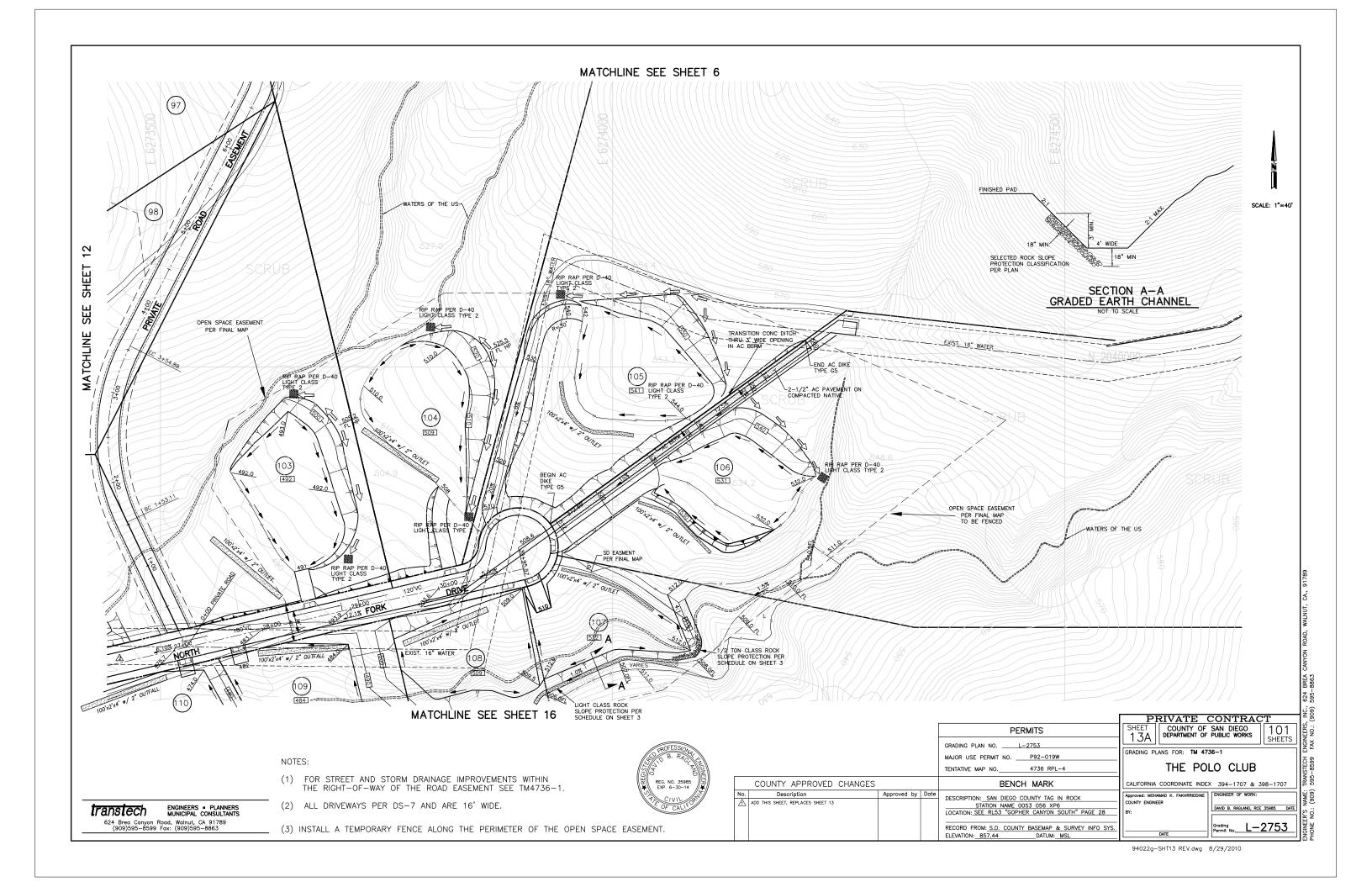


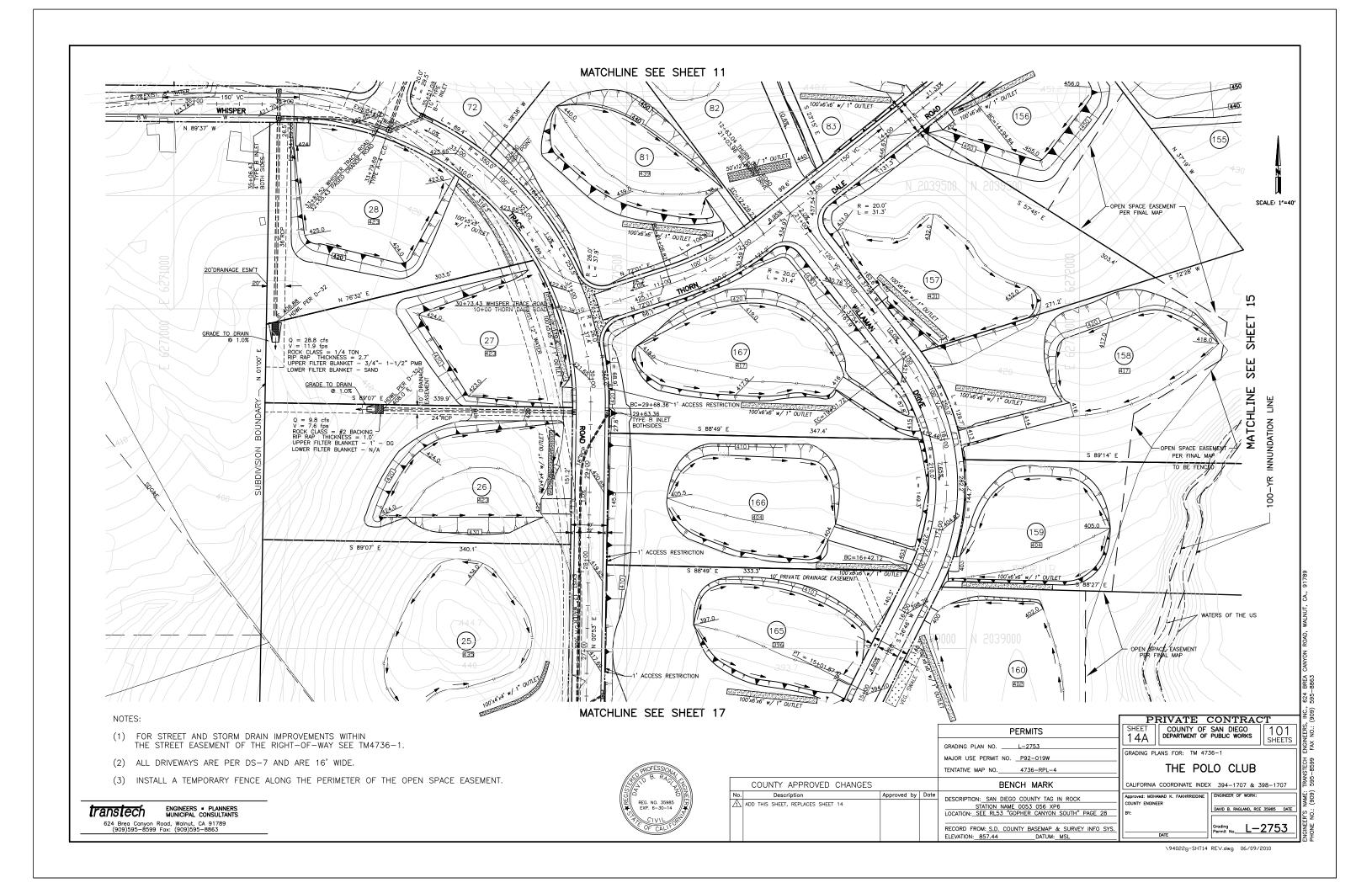


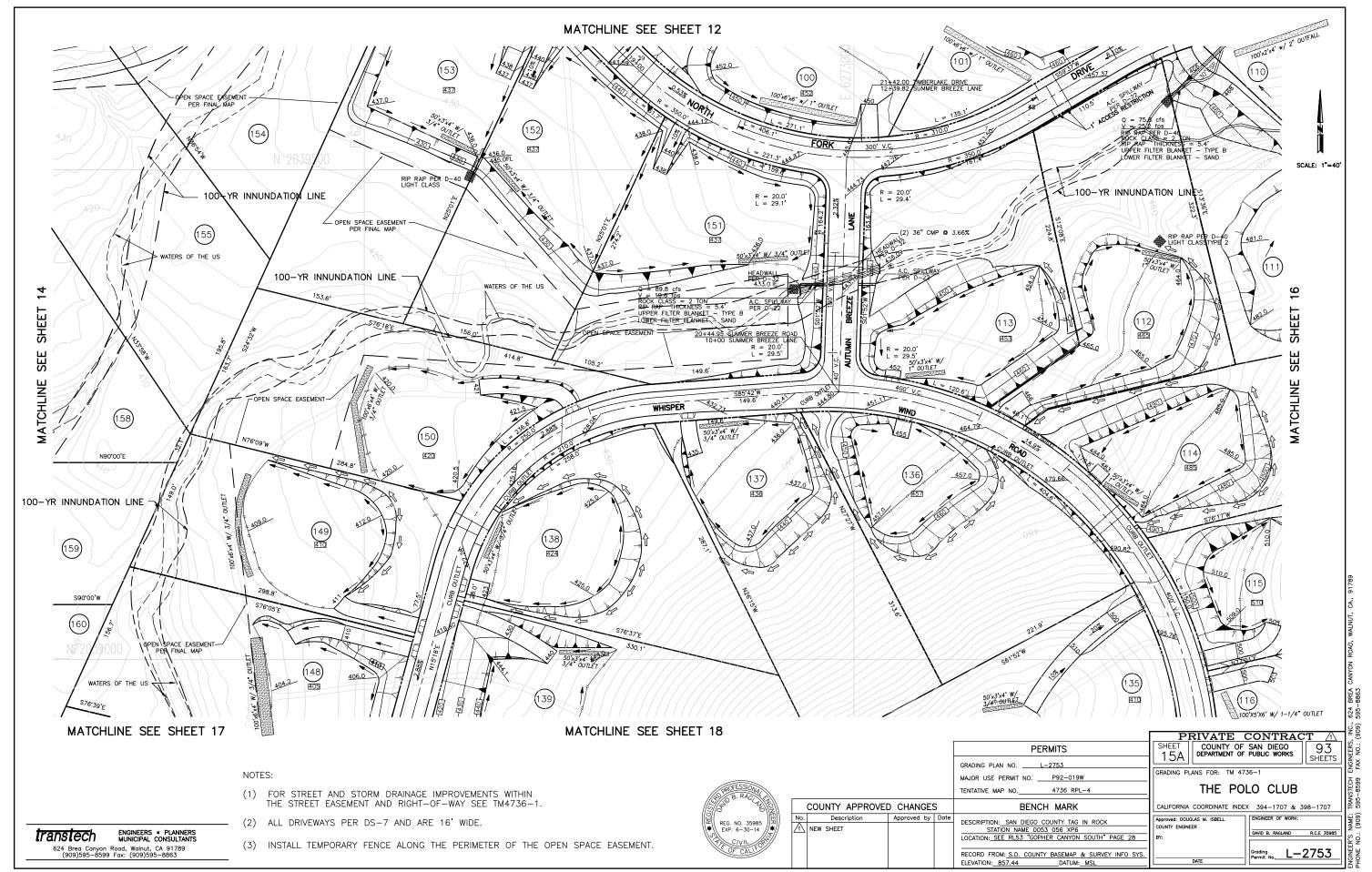


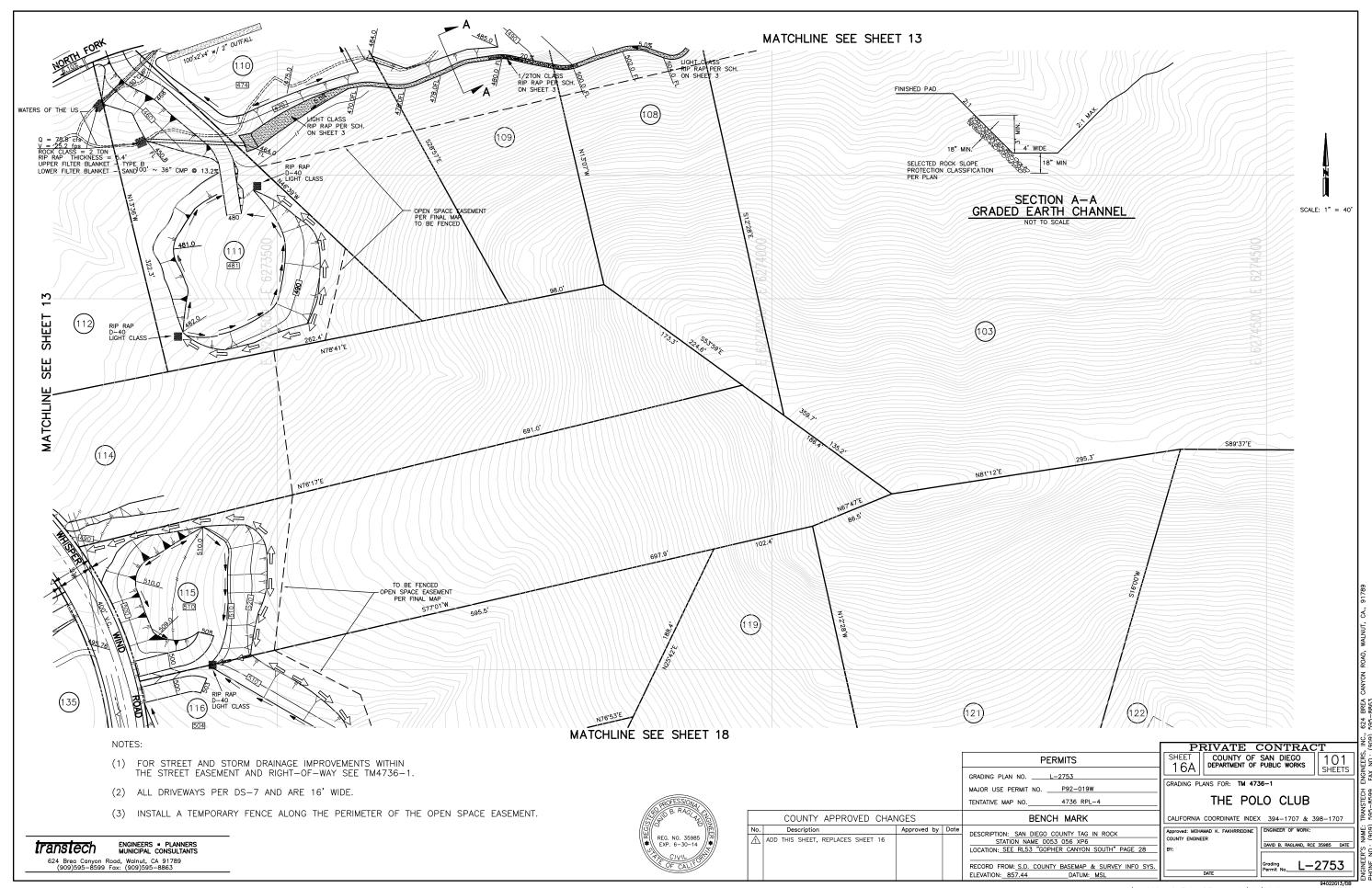


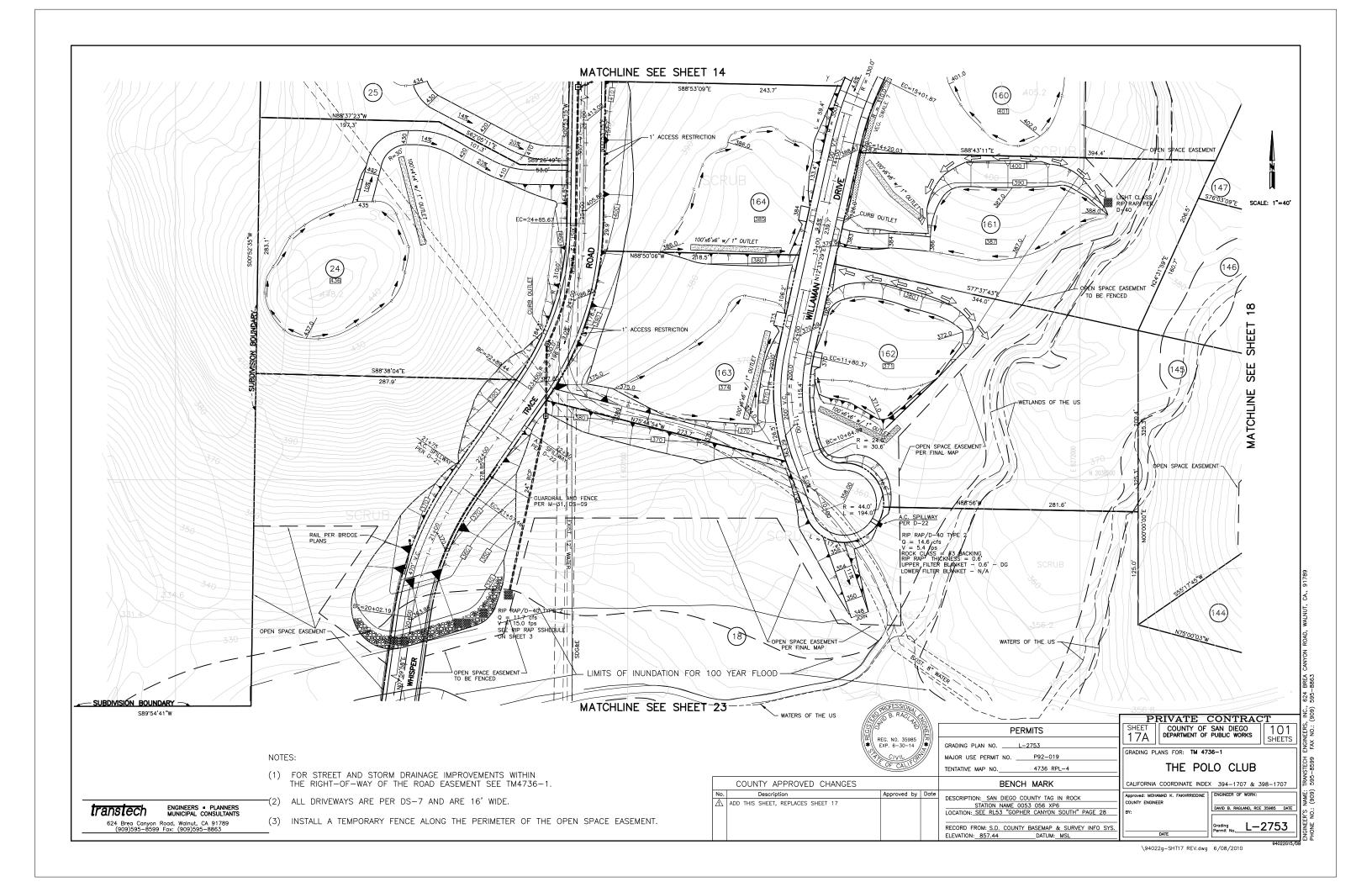


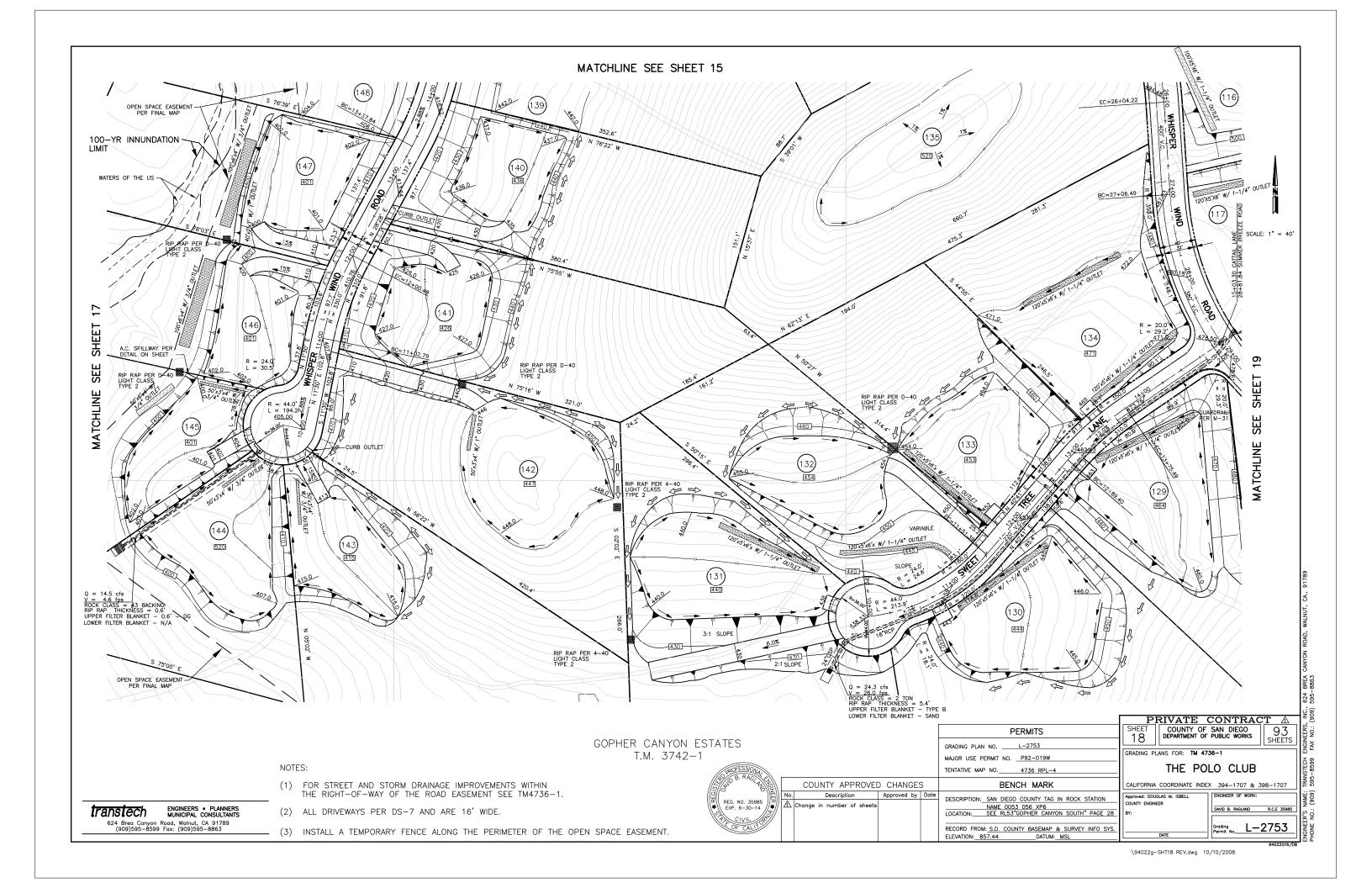


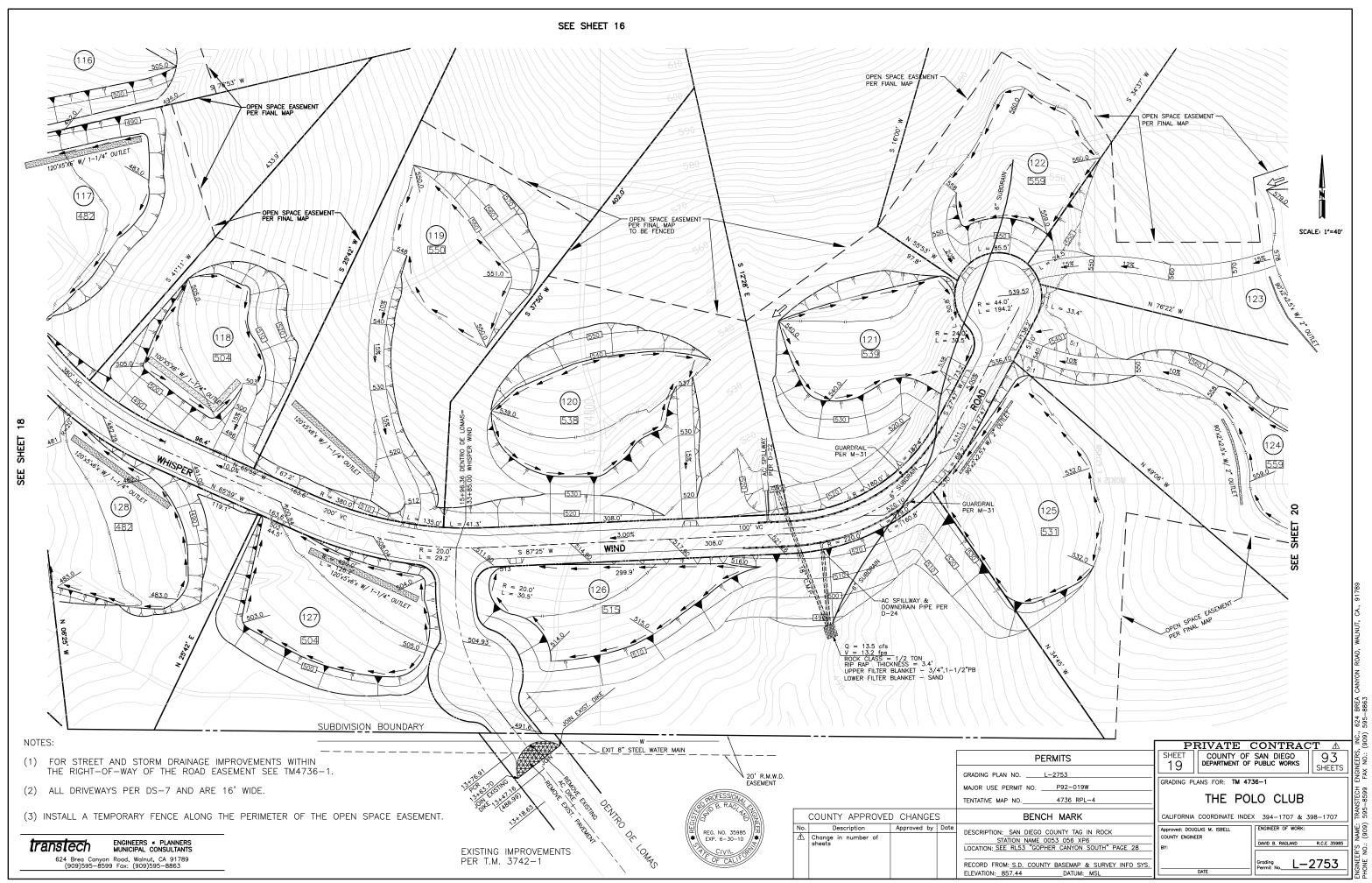












THE GRADING AND IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE FOLLOWING DOCUMENTS, CURRENT AS OF THE TIME OF CONSTRUCTION, AS DIRECTED BY THE DIRECTOR OF PUBLIC WORKS.

- SAN DIEGO COUNTY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- 2. SAN DIEGO COUNTY REGIONAL STANDARD DRAWINGS.
- 3. SEE IMPROVEMENT PLANS TM 4736-1 FOR ALL STORM DRAIN PLANS, PROFILES AND DETAILS.

#### LEGEND:

DESCRIPTION	DRAWING NO.	SYMBOL
SUBDIVISION BOUNDARY		
100 YEAR INUNDATION LINE		
LOT LINE		
OPEN SPACE EASEMENT LINE		
EASEMENT LINE		
A.C. BERM TYPE 'A'	G-5	
P.C.C. CROSS GUTTER	G-12	
SOUND WALL BERM	DETAIL ON SHT. 2	0 0 0
EDGE OF PAVEMENT (EXIST.)		
DRIVEWAY APPROACH	DS-7	/ITTN
CUT OR FILL SLOPE		Y * Y * Y
DAYLIGHT LINE		
EXISTING CONTOUR	S-13, S-14	
PROPOSED CONTOUR	S-3	120
PROPOSED FINISHED GRADE	S-7	235.78
PROPOSED PAD ELEVATION		134
WATER MAIN (EXIST)		w
STORM DRAIN (AS NOTED)		so
TYPE 'B' OR 'B-1' CURB INLET & LO	CAL DEPRESSION D-2	10,
TYPE 'G' CATCH BASIN	D-8	<u> </u>
STORM DRAIN CLEANOUT TYPE 'A'	D-9	——————————————————————————————————————
HEADWALL TYBE "B"	D-32	so
RIP RAP ENERGY DISSIPATOR	D-40 & DETAIL SCHEDULE ON SHEET 3	
DOWNDRAIN PIPE	0-24	
ASPHALT CONCRETE SPILLWAY	D-22,	
INLET APRON	D-39	Ď
LINED DRAINAGE DITCH	D-75	$\Rightarrow \Rightarrow \Rightarrow \Rightarrow$
UNLINED DRAINAGE SWALE		
SUBDRAIN		
MID-BLOCK CROSS GUTTER	G-13	
GRAVEL INFILTRATION TRENCH	DETAIL ON SHEET 4B	234-24-25-25-24-25-25-25-25-25-25-25-25-25-25-25-25-25-
VEGETATIVE SWALE	BMP FACT SHEET TC-30	14.441.28441.441.441.3
VEGETATED BUFFER STRIP	BMP FACT SHEET TC-31	002250000250

#### SOILS ENGINEER'S CERTIFICATION:

DATED: FEBRUARY 20, 1991

5 FOOT CHAIN LINK FENCE

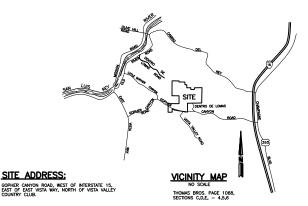
SOILS REPORT: GEOTECHNICAL INVESTIGATION GEOTECHNICAL INVESTIGATION SOIL 4736 GOPHER CANTON ROAD GOPHER CANTON ROAD SOIL GEORGE STREET SAN DIEGO COUNTY, CALIFORNIA SOIL & TESTING, INC. SAN DIEGO COUNTY, CALIFORNIA 92120

DANIEL B. ADLER, R.C.E. 36037 JOHN R. HIGH, C.E.G. 1237

#### PLANS FOR THE GRADING OF

## THE POLO CLUB

T.M. NO. 4736 RPL4 COUNTY OF SAN DIEGO



#### **ENGINEER OF WORK:**

TRANSTECH ENGINEERS, INC. 624 BREA CANYON ROAD WALNUT, CA 91789 (909) 595-8599

#### ARCHAEOLOGICAL SITE CAPPING NOTE:

PRIOR TO ISSUANCE OF A BUILDING PERMIT, PREHISTORIC SITE, SDI-112912 SHALL BE PRESERVED AS NOTED ON SHEET 23.

#### **BIRD NESTING SEASON NOTE:**

FRURE TO ISSUANCE OF A GRAINING PERMIT OR OTHER MERKOCHEMY PLANE, IN THE YEAR PROOF TO ORDINOR, SUMPRIS SHALL BE CONDUCTED LERGY THIN WERES BETWEEN JANUARY 15 AND APPL, 30 TO DETERMINE THE BLACK-SHOULDED MITE OR OTHER SENSITIE APPLIES (LE NOTHERN HARBER) ARE INSTINCE ON THE SITE. IF A NISTING FREE (OR A GROUND INSTING (LE NOTHERN) HARBER) ARE INSTINCE ON THE SITE. IF A NISTING FREE OR A GROUND INSTING (LE NOTHERD, THEN INSTINCE OF A DESTRUCTION OF THE SITE OF A NISTING ON THE SITE. IT AND THE SOUTH OF THE SITE OF A SITE OF THE S

#### **DECLARATION OF RESPONSIBLE CHARGE:**

I UNDERSTAND THAT THE CHECK OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF SAN DIEGO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES.

DAVID B. RAGLAND, R.C.E. 35985 EXP. 6/30/



### HLP NO. \_04-010\_

NOTES:

PRIOR TO ISSUING OF THE GRADING PERMIT, THE APPLICANT SHALL SUBMIT EVIDENCE FROM DPLU TO STATE THAT CONDITIONS C.106p.a.f.g. & h). C14b (NOISE MITIGATION MEASURE), C14 ( c & d) OF TM 4738 RPL4 AND CONDITIONS (A & B) OF 92—019W HAS BEEN SATISFIED.

PRIOR TO THE ISSUANCE OF ANY PERMIT INCLUDING GRADING PERMIT AND CONSTRUCTION PERMIT FOR IMPROVEMENT PLAN THA 4738-1, A CONDITIONAL USE 1-2753 PERMIT SHALL BE PROCESSED AND APPROVED (FOR THE R/W DEDICATION ON SHEET 8 OF 56 OF TMA738-1 WITHIN THE EXISTING OPEN SPACE EASEMENT AS SHOWN ON APN 170-272-02) TO THE SEATISFACTION OF THE DEPARTMENT OF PLANNING AND LAND USE

#### **HYDROMODIFICATION:**

FOR HYDROMODIFICATION MITIGATION, SEE HYDROMODIFICATION MITIGATION SUMMARY TABLE MICLUBED IN THE "HYDROMODIFICATION STUDY" PREPARED FOR THE POLO CLUB, TRACT 4736, BY TRANSTECH ENGINEERS, DATED FEBRUARY 19, 201, AND INFILITATION TRENCH DETAILS ON SHEET 48.

#### **SHEET CONTENTS:**

SHEET 1 (VOID)

SHEET	1A REVISED	TITLE SHEET
SHEET	2	NOTES & DETAILS
SHEET	2 3 4 (VOID)	GRADING PLANS
SHEET	4 (VOID)	
SHEET	44 PFVISED	GRADING PLANS
SHEET	4B NEW SHEET	GRADING PLANS
SHFFT	5 (VOID)	GRADING PLANS
SHEET	5A REVISED	GRADING PLANS
SHEET	e KLYIOLD	GRADING PLANS
SHEET	6 7 (VOID)	Old-Dillo 1 D415
CHEET	7A REVISED	GRADING PLANS
SHEETS		GRADING PLANS
CHEETE	11, 12, 13, 14	(VOID)
SHEETS	11A, 12A, 13A,	14A REVISED GRADING PLANS
SHEET		GRADING PLANS
	16, 17 (VOID)	
SHEETS		REVISED GRADING PLANS
		GRADING PLANS
	18 THRU 20	GRADING PLANS
SHEET		
SHEET	21A REVISED	GRADING PLANS
SHEETS	22, 23 (VOID)	
SHEETS	22A, 23A	REVISED GRADING PLANS
SHEET	24	GRADING PLANS
SHEET	25 (VOID)	
	25A REVISED	
	26 THRU 27	GRADING PLANS
SHEETS	28 THRU 59	IRRIGATION PLANS

#### SOLAR CERTIFICATION:

THIS IS A SOLAR SUBDIVISION AS REQUIRED BY SECTION 81.40 (n) OF THE SUBDIVISION ORDINANCE, ALL LOTS HAVE AT LEAST 100 SQUARE FEET OF UNOBSTRUCTED ACCESS TO SUNLIGHT ON THE BUILDABLE PORTION OF THE LOT.

DAVID R PAGLAND PCF 35985

SOURCE OF TOPOGRAPHY:

TOPOGRAPHY SHOWN ON THESE PLANS WAS GENERATED BY

AERIAL SURVEY
METHODS FROM INFORMATION GATHERED IN JULY 1994

BY MCELHANNEY GEOSURVEYS, INC.
TOPOGRAPHY SHOWN HEREON CONFORMS TO NATIONAL MAP
ACCURACY STANDARDS.

#### LEGAL DESCRIPTION:

PORTIONS OF SECTIONS 33 AND 34, TOWNSHIP 10 SOUTH, RANGE 3 WEST, AND PORTIONS OF SECTION 4, TOWNSHIP 11 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, ALL IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF.

#### **OWNER'S CERTIFICATE:**

IT IS FURTHER AGREED THAT THE OWNER (DEVELOPER)
SHALL HAVE A REDISTREED CIVIL ENGINEER MAKE SUCH
WHICH THE DIRECTOR OF PUBLIC WORKS DETERMINES ARE
RECESSARY AND DESIRABLE FOR THE PROPER COMPLETION
OF THE IMPROVIDENTS.

OF THE IMPROVEMENTS.

I HEREBY AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING COUNTY RIGHT—
OF—WAY WITHIN BO DAYS AFTER ISSUANCE OF THE CONSTRUCTION PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY MONAL WORKING DAY UNITL COMPLETED, RIRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

BY:\_\_\_\_\_DATE:\_\_\_\_\_DATE:\_\_\_\_

#### OWNER AND PERMITTEE:

VISTA VILLAS DEVELOPMENT, LTD. AND SGM INVESTMENT CORPORATION 43019 NORTH SIERRA HIGHWAY LANCASTER, CA 93534

#### ASSESSOR'S PARCEL NUMBERS:

STORMWATER TREATMENT CONTROL AND LID BMPs

DESCRIPTION/TYPE	SHEET	MAINTENANCE CATEGORY	REVISIONS			
CATCH BASIN INSERTS	SEE IMPROVEMENT PLANS	CATEGORY II				
INFILTRATION TRENCH	5 THRU 23, 25 THRU 27	CATEGORY I				
VEGETATED SWALE	6,7,14,15,17	CATEGORY II				
VEGETATED FILTER	15,18	CATEGORY II				
CATCH BASIN INSERTS	SEE IMPROVEMENT PLANS	CATEGORY IV				
The second secon						

BMPs approved as part of Stormwater Management plan (SWMP) dated 4/26/2010 on file with DPW. Any changes to the above BMPs will require SWMP revision and Plan

/2012	C/VIL OF CALL			ANDSCAPE & EROSIO		above similar require similar revision and risk
/2012			COUNTY OF SAN D DEPARTMENT OF PLANNING		PERMITS	PRIVATE CONTRACT
FIRE AGENCIES APPROVAL		Approved for compliance with the environmental review and in substantial conformance with		REZONE PERMIT NON/A	1A DEPARTMENT OF PUBLIC WORKS	
CITY OF VISTA VISTA FIRE DEPARTMENT	NORTH COUNTY FIR	F SAN DIEGO RE PROTECTION DISTRICT	Tentative Map No. 4736 RPL4 and P92-019W.		SPECIAL USE PERMIT NO. P92-019W	GRADING PLANS FOR: TM 4736-1
			Approved By:	Date:	TENTATIVE MAP NO. <u>4736-RPL-4</u> N.O.I. 937C328070	THE POLO CLUB
			-''-			-
proved By: Date:	Approved By:	Date:	COUNTY APPROVED	D CHANGES	BENCH MARK	CALIFORNIA COORDINATE INDEX 394-1707 & 39
ATTENTION	F-			Approved by Date	DESCRIPTION: SAN DIEGO COUNTY TAG IN ROCK	Approved: MOHAMAD K. FAKHRRIDDINE ENGINEER OF WORK:
shall be the sale responsibility of the contractor CHANGED TOTAL NUMBER		SHEET, REPLACES SHEET 1. R OF SHEETS, ENGINEER OF WORK		STATION NAME 0053 056 XP6	COUNTY ENGINEER  DAVID B. RAGLAND, RCE :	
existing utilities by contacting utility grancies W/IN TRANSTECH, ADD I		HYDROMODIFICATION AND LID NOTES	1 1	LOCATION: SEE RL53 "GOPHER CYN, SOUTH" PAGE 28	BY:	

ENGINEERS # PLANNERS MUNICIPAL CONSULTANTS transtech 624 Brea Canyon Road, Walnut, CA 91789 (909)595-8599 Fax: (909)595-8863

Contractor agrees that he shall assume sole and complete responsibility for job also conditions during the course of this Project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal seriority hours; and that the Contractor shall defend, indemnify and hold in connection with the performance of work on this Project, excepting for liability arising from the sole negligence of the Owner or the Engineer.

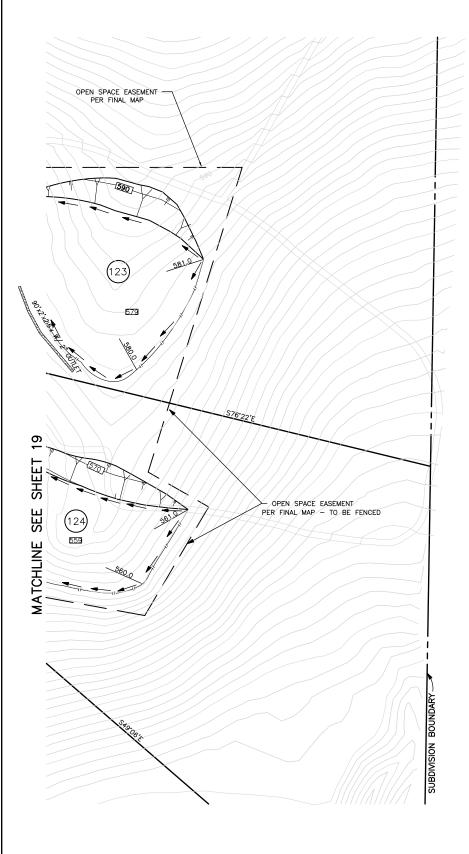
to verify al to avoid damaging existing utilities during excavation
FOR UNDERGROUND SERVICE ALERT CALL:

RECORD FROM: S.D. COUNTY BASEMAP & SURVEY INFO. SYS.
ELEVATION: 857.44 FT. DATUM: MSL

THE POLO CLUB CALIFORNIA COORDINATE INDEX 394-1707 & 398-1707

pproved: MCHAMAD K. FAKHRRIDDINE | ENGINEER OF WORK:

101



ENGINEERS - PLANNERS MUNICIPAL CONSULTANTS

624 Brea Canyon Road, Walnut, CA 91789 (909)595—8599 Fax: (909)595—8863

**transtec**h

REG. NO. 35985 RXP. 6-30-10

NOTES:

(1) FOR STREET AND STORM DRAINAGE IMPROVEMENTS WITHIN THE RIGHT-OF-WAY OF THE ROAD EASEMENT SEE TM4736-1.

(2) ALL DRIVEWAYS PER DS-7 AND ARE 16' WIDE.

(3) INSTALL A TEMPORARY FENCE ALONG THE PERIMETER OF THE OPEN SPACE EASEMENT.

SCALE: 1" = 40'

GRADING PLAN NO. \_\_\_\_\_L-2753 MAJOR USE PERMIT NO. P92-019W TENTATIVE MAP NO. 4736 RPL-4 BENCH MARK

COUNTY APPROVED CHANGES Description Approved by Date DESCRIPTION: SAN DIEGO COUNTY TAG IN ROCK
STATION NAME 0053 056 XP6
LOCATION: SEE RL53 "GOPHER CANYON SOUTH" PAGE 28 ⚠ Changed number of sheets RECORD FROM: S.D. COUNTY BASEMAP & SURVEY INFO SYS.

ELEVATION: 857.44 DATUM: MSL

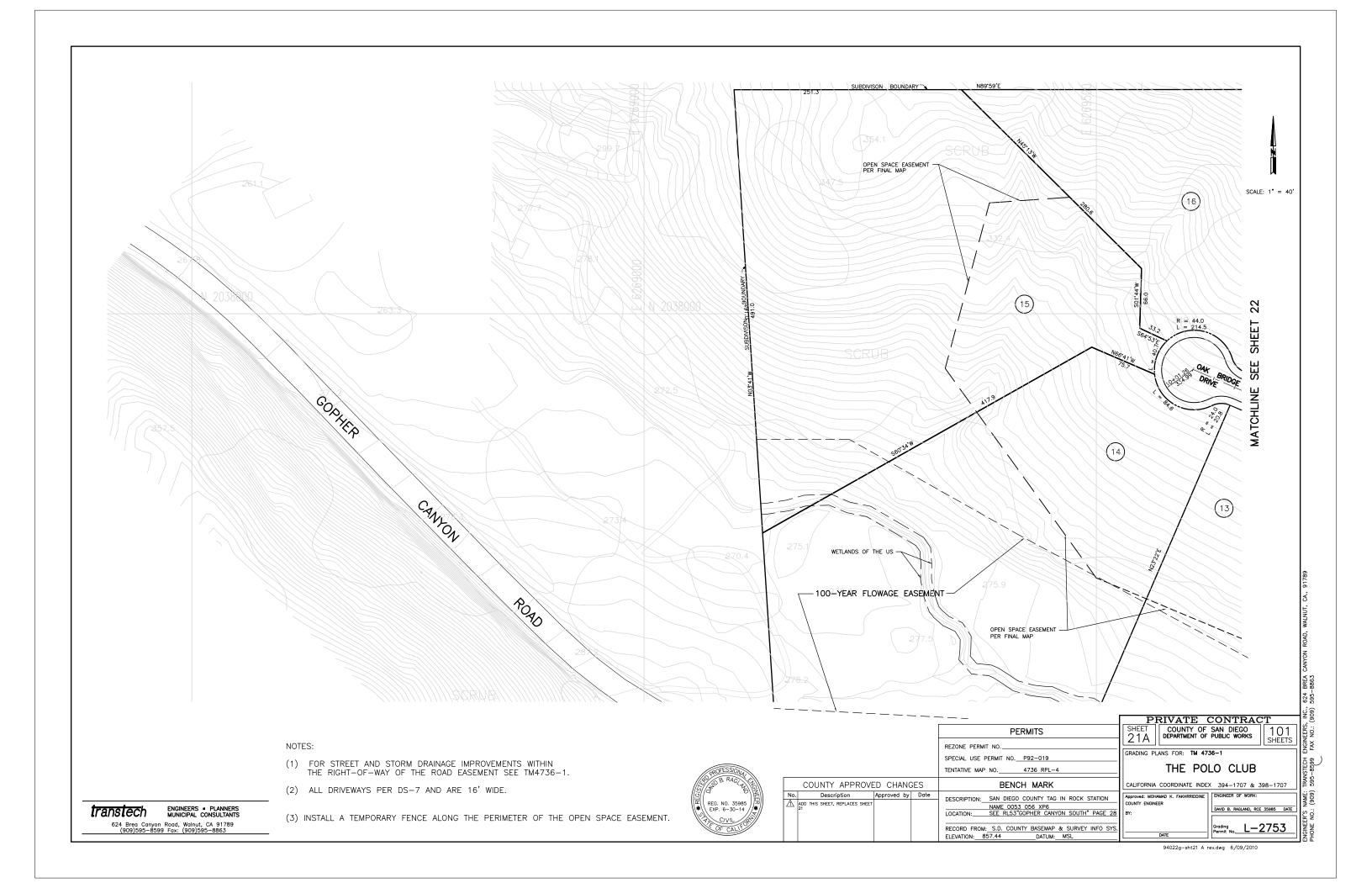
PRIVATE CONTRACT A
COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
SHEFT GRADING PLANS FOR: TM 4736-1

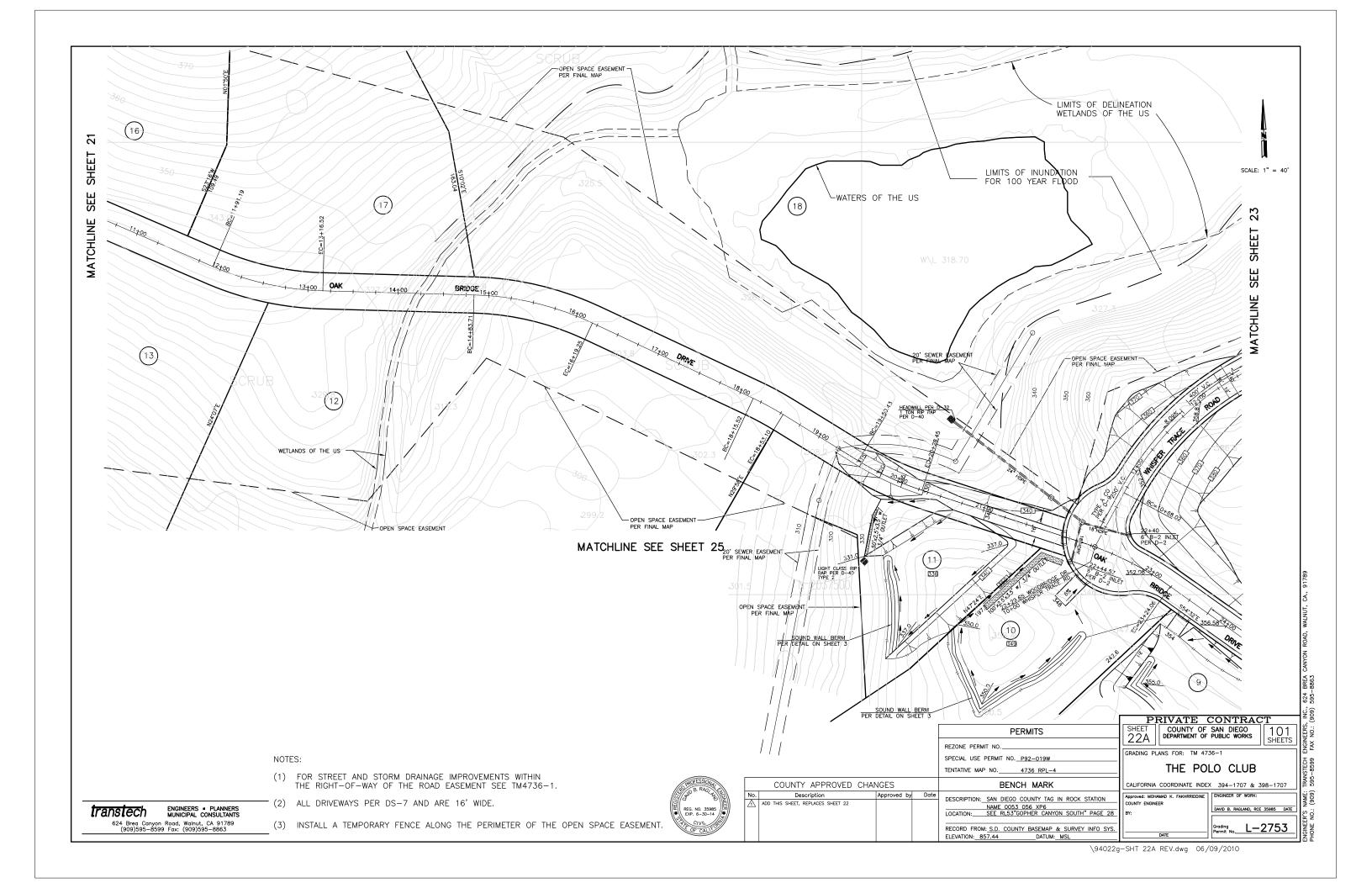
THE POLO CLUB

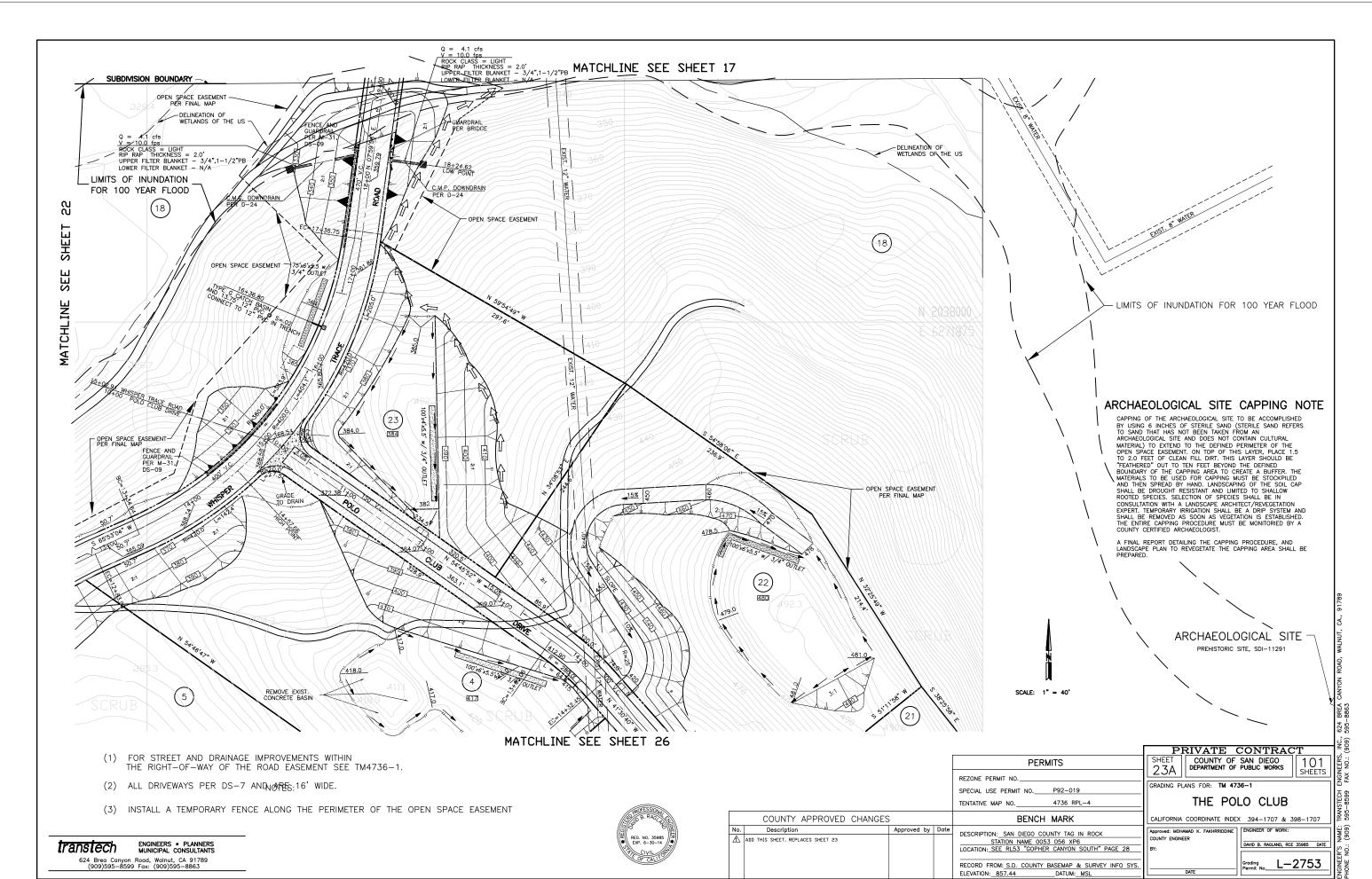
CALIFORNIA COORDINATE INDEX 394-1707 & 398-1707

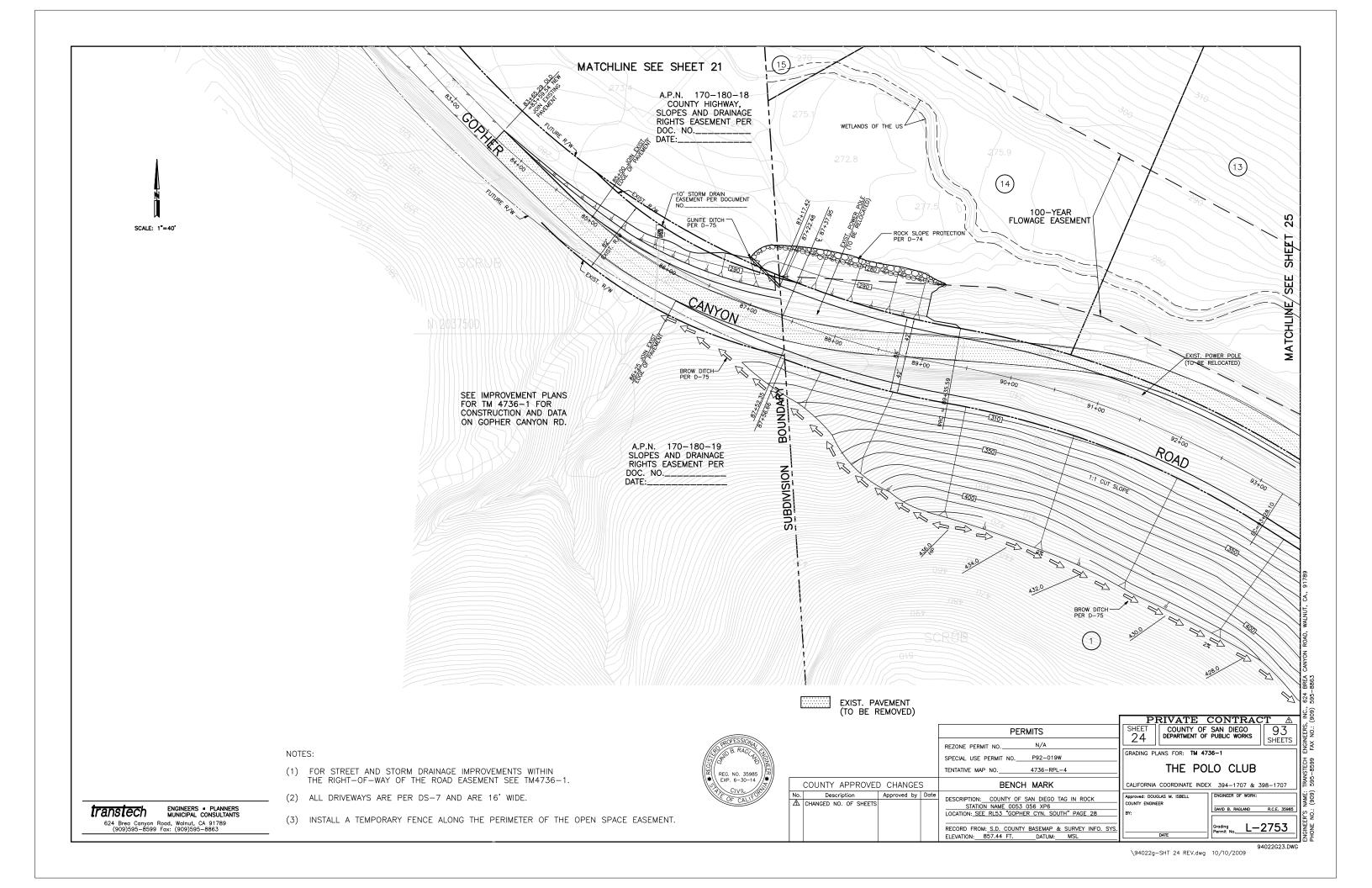
Approved: DOUGLAS M. ISBELL COUNTY ENGINEER ENGINEER OF WORK: DAVID B. RAGLAND R.C.E 35985 Grading L-2753

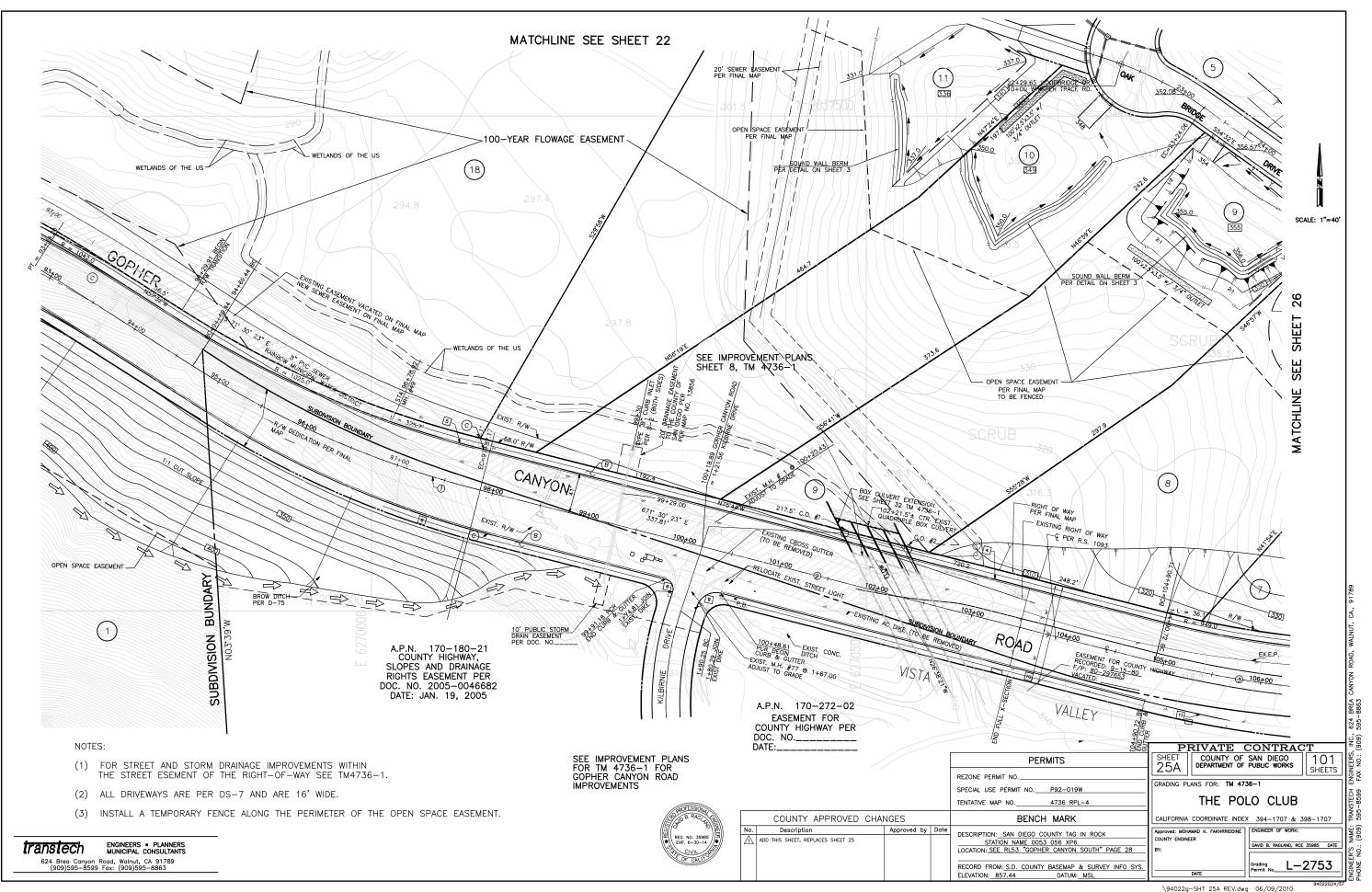
93 SHEETS

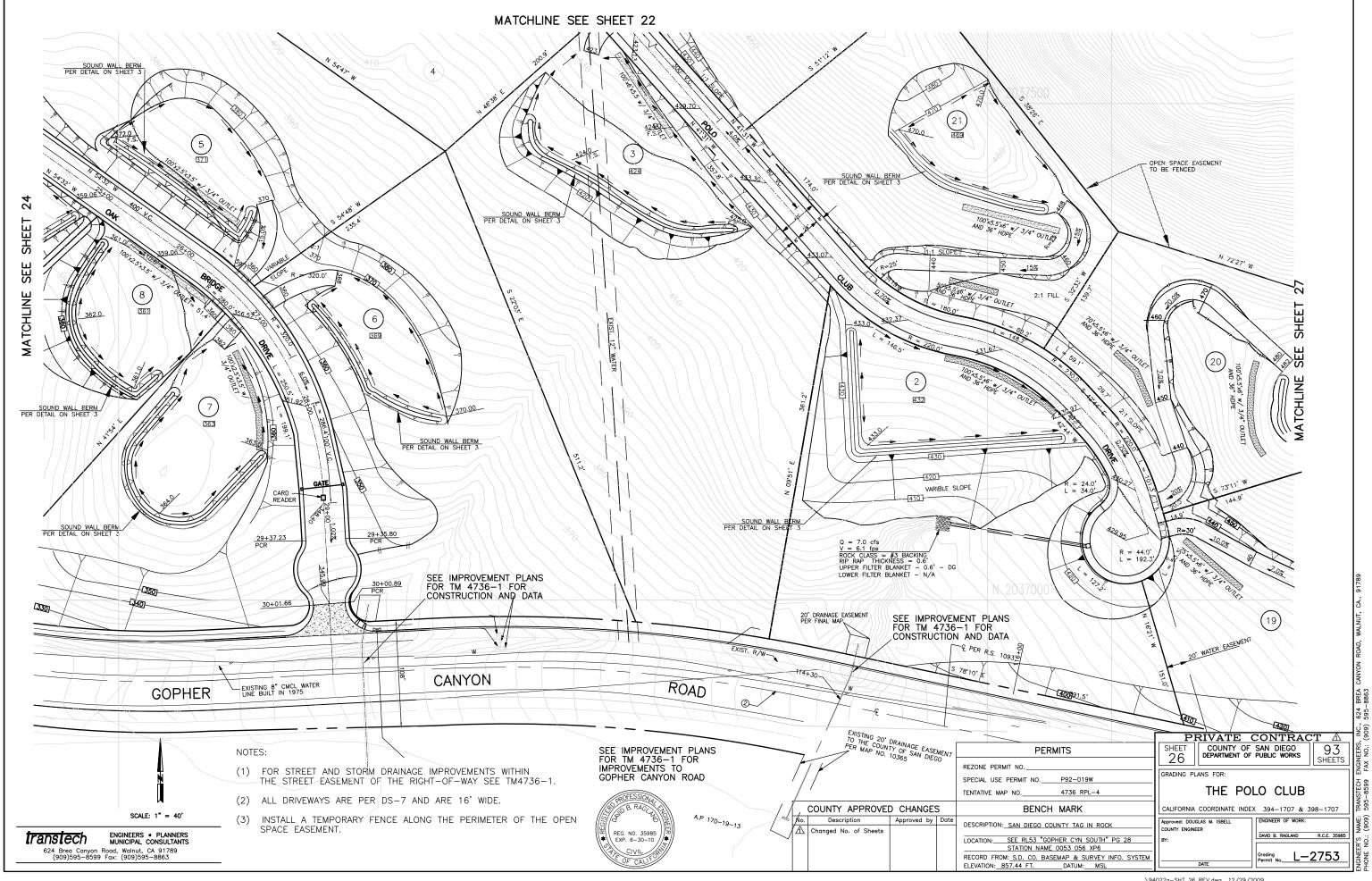


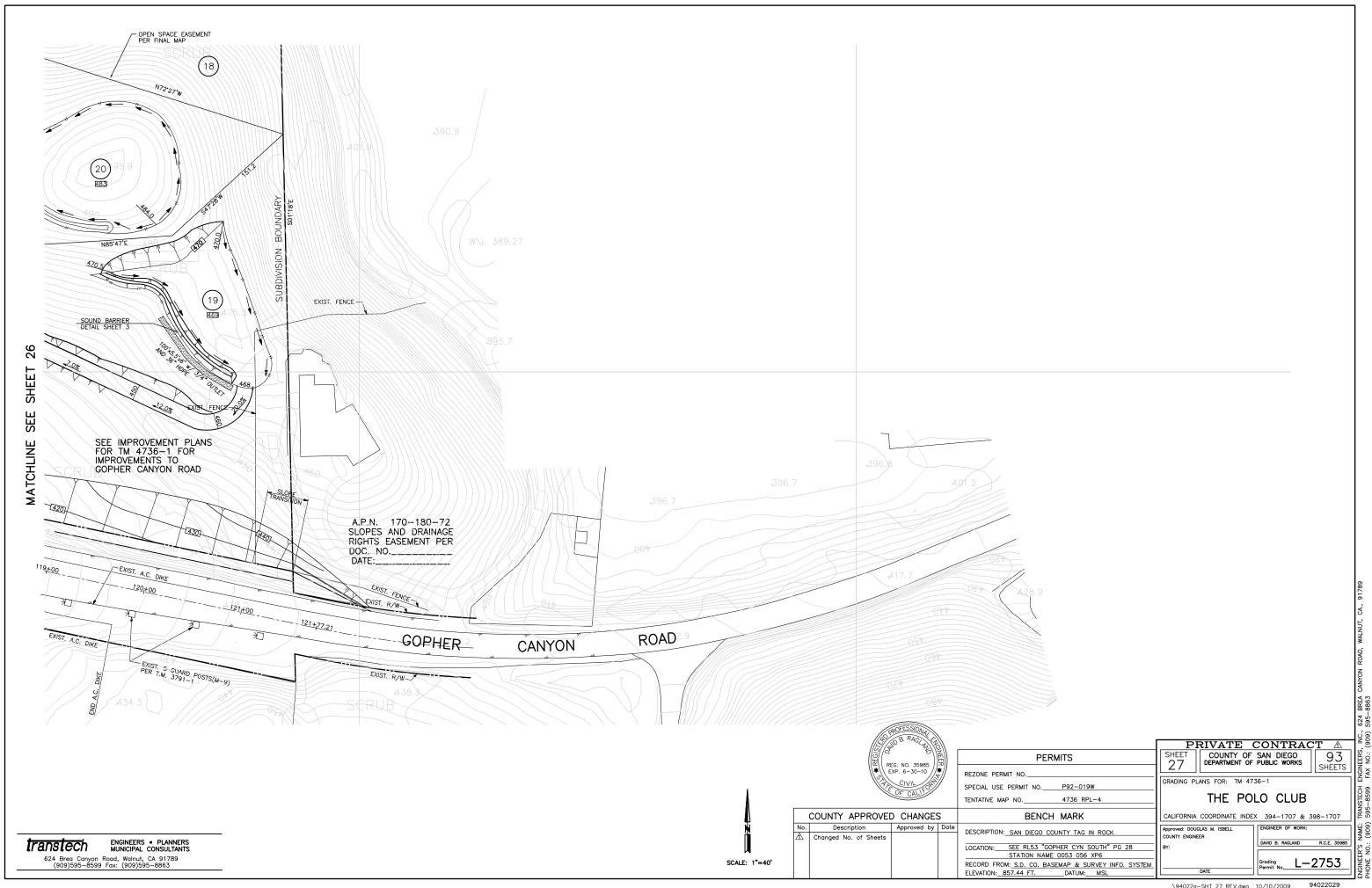




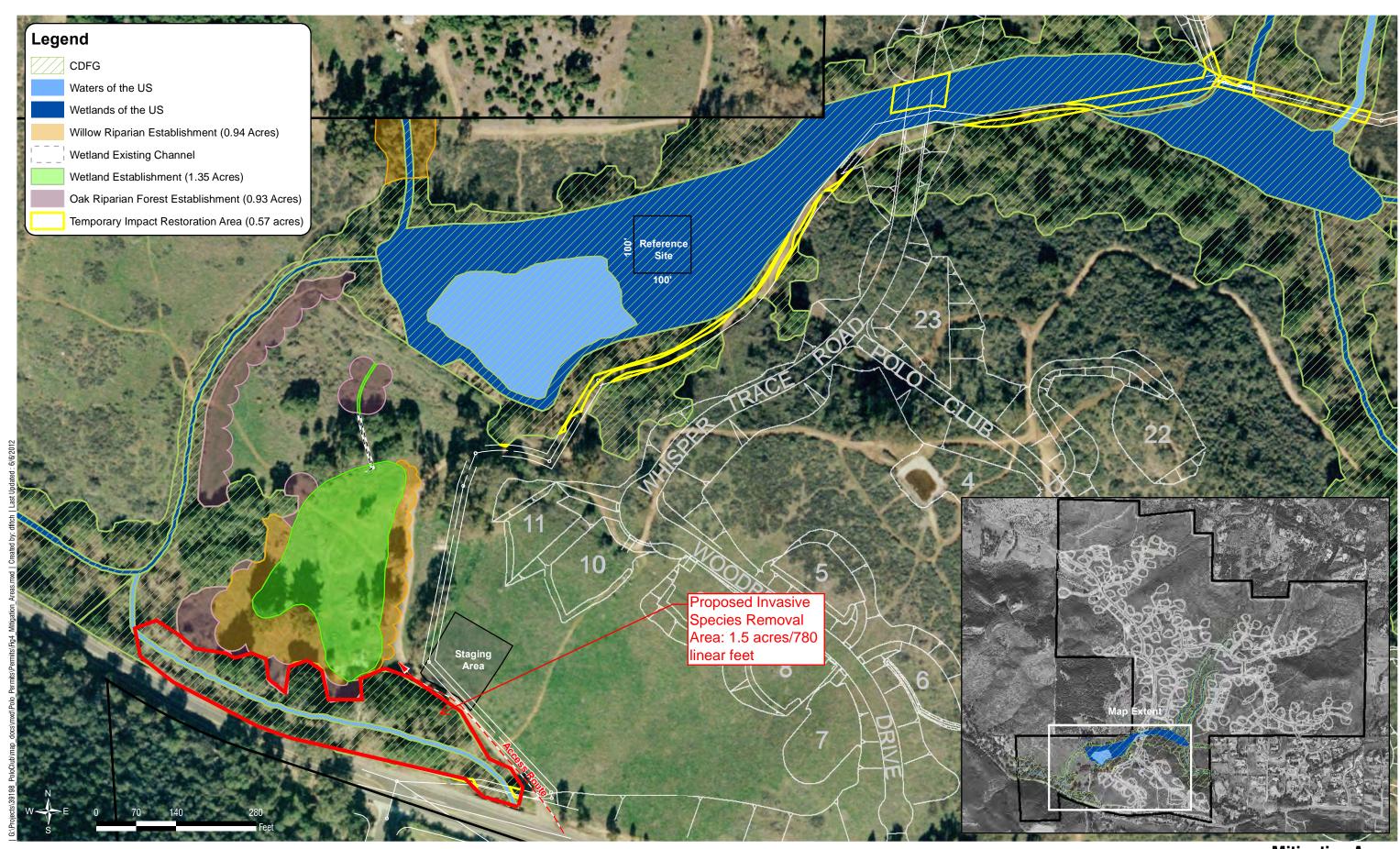


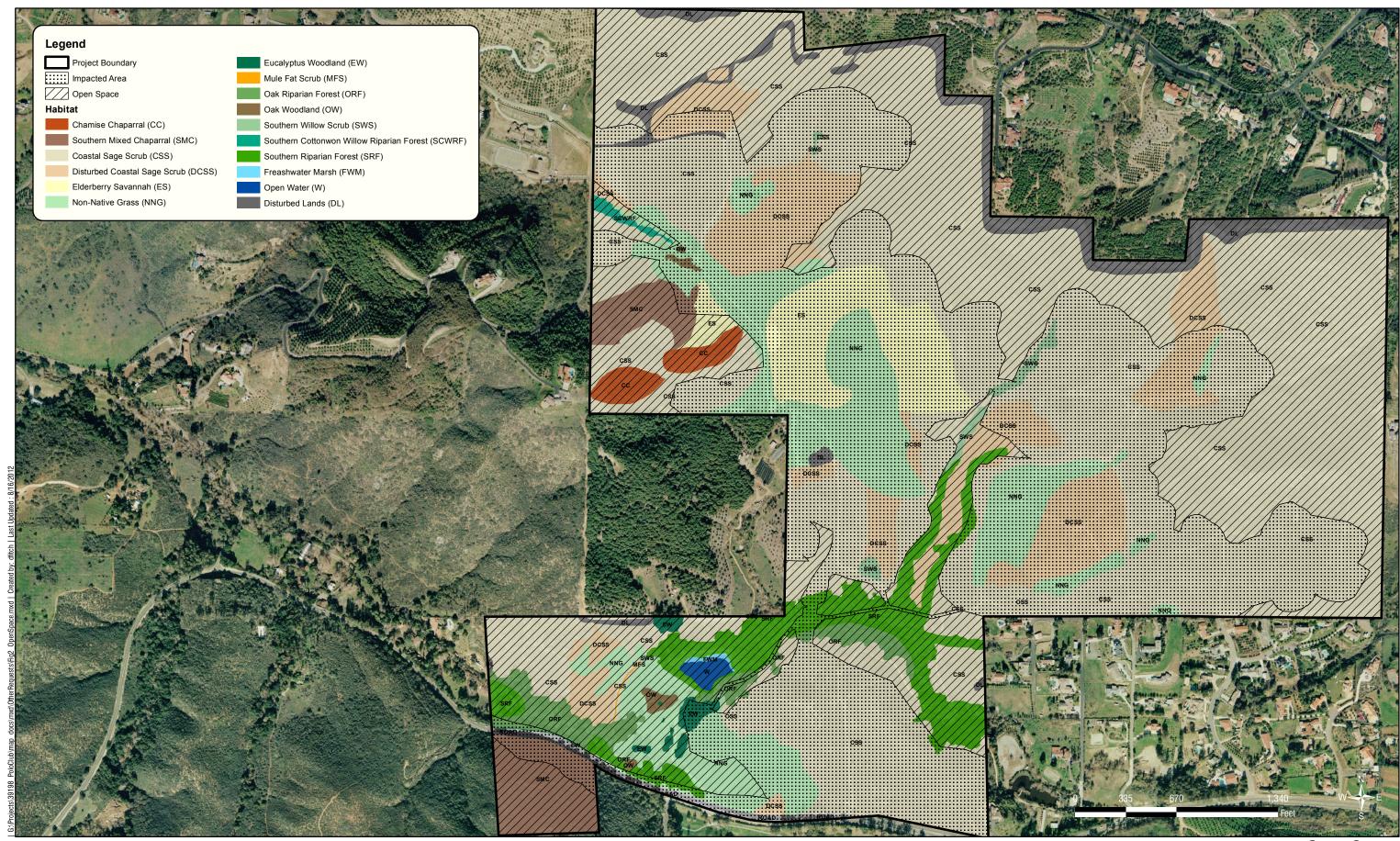






# ATTACHMENT 4 MITIGATION DESIGN PLANS





Open Space
FIGURE 2
Engineering Automotive Co. | Polo Project | BO