CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

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

PROJECT: **Otay Ranch Village Eight West**
Certification Number R9-2014-0104
WDID: 9 000002752

Reg. Meas. ID: 397761
Place ID: 796840
Party ID: 541834
Person ID: 555745

APPLICANT: **Otay Land Company, LLC**
1903 Wright Place, Suite 220
Carlsbad, CA 92008

ACTION:

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

PROJECT DESCRIPTION

An application dated August 12, 2014 and revised on January 29, 2015 was submitted by Otay Land Company, LLC (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (United States Code (USC) Title 33, section 1341) for the proposed Otay Ranch Village Eight West Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on August 8, 2015. The Applicant proposes to discharge dredged or fill material to waters of the United States and/or State associated with construction activity at the Project site. The Applicant has also applied for a Clean Water Act section 404 permit from the United States Army Corps of Engineers for the Project (USACE File No. SPL-2013-00495-RAG).

The Project is located south of the intersection of La Media Road and Santa Luna Street to the Otay River Valley within the City of Chula Vista, San Diego County, California. The Project center reading is located at latitude 32.60068188 and longitude -116.97696252. The Applicant has paid all required application fees for this Certification in the amount of $90,000.00. On an annual basis, the Applicant must also pay all active discharge fees and post discharge monitoring fees, as appropriate.[1] On August 7, 2012, the San Diego Water Board provided public notice of the Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the San Diego Water Board's

[1] Additional information regarding fees can be found electronically on the State Water Resources Control Board web site at the following location: http://www.waterboards.ca.gov/resources/fees/

web site and providing a period of twenty-one days for public review and comment. No comments were received.

The Applicant proposes to develop approximately 300 acres of mixed-use village core development that includes single-family and multi-family residential units, a Town Center containing commercial uses, parks, a community purpose facility site, schools, affordable housing and a transit stop. The Project will also perform construction work involving installation of a sewer line to connect to the existing Salt Creek Sewer Trunk Line, a storm drain to carry drainage to the Otay River, and a utility access road and pedestrian trail connection to the Otay Valley Regional Park trail system through an off-site facilities corridor to the south of the Project site.

The Applicant will provide on-site avoidance at two locations in the northwest and southwest corners of the Project site. The upstream end of the south branch of Wolf Canyon Creek, which includes 0.05 acre of stream channel and 0.06 acre of wetlands along 287 linear feet will be maintained as native open space within a planned community park. A 15.63-acre portion of the southwest corner of the Project site will be preserved as sensitive habitat and includes 0.05 acre (515 linear feet) of stream channel. Additionally, the Applicant is providing off-site preservation of 470.5 acres of open space, including approximately 31,410 linear feet of ephemeral stream channel, as a requirement of final environmental impact report. These lands occur on "Parcel D," northeast of the project site, within the Otay River watershed in the Jamul Mountains (see Attachment 2, Figure 1 – Regional Vicinity).

The Project will convert approximately 194 acres of pervious ground cover to impervious surfaces. Runoff leaving the developed Project area would be significantly greater in volume, velocity, peak flow rate, and duration than pre-development runoff from the same area without mitigation. Post-construction best management practices (BMPs) to manage and control the effects of these runoff increases will consist of site design and low impact development (LID) BMPs, source control BMPs, and treatment control BMPs, including two on-site bioretention basins and permeable gravel edge along the off-site utility access road. These BMPs will be designed, constructed, and maintained to meet City of Chula Vista's LID Capture Volume and hydromodification treatment requirements.

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 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 will not cause on-site or off-site downstream erosion, damage to downstream properties, or otherwise damage 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 1.22 acre (10,197 linear feet) of stream channel and 0.18 acre of 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 permanent loss of 1.22 acre of jurisdictional waters will be achieved off-site through the re-establishment of 4.44 acres of stream channel waters of the United States and/or State. All waters of the United States and/or State receiving temporary discharges of fill material will be restored upon removal of the fill. Mitigation for discharges of fill material to waters of the United States and/or State will be completed by the Applicant at the Otay River Restoration Project located in the Otay hydrologic sub-area (HSA 910.20) at a minimum compensation ratio of 3.2:1 (area mitigated:area impacted) for stream channel impacts and 3:1 for wetland impacts. The Otay River Restoration Project (Restoration Project) is located immediately downstream of Savage Dam on Lower Otay Lake. The Restoration Project will restore approximately 100 acres on an approximately 1-mile long segment of the Otay River that was previously impacted by a mining operation. The Restoration Project will completely restore the channel morphology of the river through the re-establishment of primary and secondary flow channels and 10-year, 25-year and 100-year floodplains and remove invasive species and restore native riparian vegetation in the river corridor. Once completed and established, this restoration will provide a substantial uplift in the function and services of the river. Additionally, the Restoration Project will eradicate invasive species from more than 1 mile of the existing riparian area of the Otay River between Savage Dam and the Restoration Project site. Phased implementation of the proposed Restoration Project includes:

- Phase 1 – Invasive Species Removal
- Phase 2 – Restoration of Otay River Mainstem (Permittee Responsible Mitigation for Otay Ranch Village Three Development and Otay Ranch Village 8 West Projects)
- Future Phases, restoration of the remaining parcel to provide compensatory mitigation for future projects

Detailed written specifications and work descriptions for the compensatory mitigation project including, but not limited to, the geographic boundaries of the project, timing, sequence, monitoring, maintenance, ecological success performance standards and provisions for long-term management and protection of the mitigation areas are described in the *V3/V8W HMMP Addendum to the Otay River Restoration Project Final Habitat Mitigation and Monitoring Plan* (Mitigation Plan), dated May 2016. San Diego Water Board acceptance of the 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. The Mitigation Plan is incorporated in this Certification by reference as if set forth herein. The Mitigation Plan provides for implementation of compensatory mitigation which offsets adverse water quality impacts attributed to the Project in a manner that protects and restores the abundance, types and conditions of aquatic resources and supports their beneficial uses. Implementation of the Mitigation Plan will reduce significant environmental impacts to resources within the San Diego Water Board's purview to a less than significant level. Based on all of these considerations, the Mitigation Plan will adequately compensate for the loss of beneficial uses and habitat within waters of the United States and/or State attributable to the Project.

Additional Project details are provided in Attachments 2 through 5 of this Certification.

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Attachments:

1. **Definitions**
2. **Project Location Maps**
3. **Project Site Plans**
4. **Mitigation Figures**
5. **CEQA Mitigation Monitoring and Reporting Program**

I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, 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 chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.

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 amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (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 title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

II. GENERAL CONDITIONS

A. **Term of Certification**. Water Quality Certification No. R9-2014-0104 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 USC Title 33, section1344) permit issued by the U.S. Army Corps of Engineers for this Project, or b) five (5) years from the date of issuance of this Certification, whichever occurs first.

B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance, or modification.

C. **General Waste Discharge Requirements**. The requirements of this Certification are enforceable through 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* (Water Quality Order No. 2003-0017-DWQ). This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:

http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/gowdr401regulated_projects.pdf.

D. **Project Conformance with Application.** All water quality protection measures and BMPs described in the application and supplemental information for water quality certification are incorporated by reference into this Certification as if fully stated herein. Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.

E. **Project Conformance with Water Quality Control Plans or Policies**. Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 USC section 1313). The Basin Plan is accessible at:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

F. **Project Modification**. The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water Board for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.

G. **Certification Distribution Posting**. During Project 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. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.

H. **Inspection and Entry**. 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:

1. Enter upon the Project or Compensatory Mitigation site(s) 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; and

4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.

I. **Enforcement Notification**. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.

J. **Certification Actions**. This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:

1. Violation of any term or condition of this Certification;

2. Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of the Wolf Canyon Creek, the Otay River, or their tributaries;

3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;

4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and

5. Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.

K. **Duty to Provide Information**. The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.

L. **Property Rights**. This Certification does not convey any property rights of any sort, or any exclusive privilege.

M. **Petitions**. Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

III. CONSTRUCTION BEST MANAGEMENT PRACTICES

A. **Approvals to Commence Construction**. The Applicant shall not commence Project construction until all necessary federal, State, and local approvals are obtained.

B. **Personnel Education.** 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 BMP implementation and maintenance measures.

C. **Spill Containment Materials.** 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.

D. **General Construction Storm Water Permit.** Prior to start of Project construction, the Applicant must, as applicable, 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. If Project construction activities do not require coverage 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.

E. **Waste Management.** The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state and local laws and regulations.

F. **Waste Management**. Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.

G. **Downstream Erosion.** Discharges of concentrated flow during construction or after Project completion must not cause downstream erosion or damage to properties or stream habitat.

H. **Construction Equipment**. All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment.

I. **Process Water.** 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 water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each work day or sooner if rain is predicted.

J. **Surface Water Diversion.** All surface waters, including ponded waters, must be diverted away from areas of active 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 the receiving water quality objectives. 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.

K. **Re-vegetation and Stabilization.** All areas that have 14 or more days of inactivity must be stabilized within 14 days of the last activity. The Applicant shall implement and maintain BMPs to prevent erosion of the rough graded areas. After completion of grading, all areas must be re-vegetated with native species appropriate for the area. The re-vegetation palette must not contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory, which can be accessed at http://www.cal-ipc.org/ip/inventory/.

L. **Hazardous Materials.** Except as authorized by this Certification, substances hazardous to aquatic life including, but not limited to, petroleum products, unused 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.

M. **Vegetation Removal.** Removal of vegetation must occur by hand, mechanically, or through application of United States Environmental Protection Agency (USEPA) approved herbicides deployed using applicable BMPs to minimize adverse effects to beneficial uses of waters of the United States and/or State. Discharges related to the application of aquatic pesticides within waters of the United States must be done in compliance 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.

N. **Limits of Disturbance.** The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.

O. **On-site Qualified Biologist.** The Applicant shall designate an on-site qualified biologist to monitor Project construction activities within or adjacent 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 on-site if a violation of this Certification occurs or has the potential to occur. Records and field notes of the biologist's activities shall be kept on-site and made available for review upon request by the San Diego Water Board.

P. **Beneficial Use Protection**. The Applicant must take all necessary measures to protect the beneficial uses of waters of the Wolf Canyon Creek, the Otay River and their tributaries. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately and the San Diego Water Board shall be notified in accordance with Notification Requirement VII.A of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.

IV. POST-CONSTRUCTION BEST MANAGEMENT PRACTICES

A. **Post-Construction Discharges.** The Applicant shall not allow post-construction discharges from the Project site to cause or contribute to on-site or off-site erosion or damage to properties or stream habitats.

B. **Storm Drain Inlets.** All storm drain inlet structures within the Project boundaries must be stamped or stenciled (or equivalent) with appropriate language prohibiting non-storm water discharges.

C. **Post-Construction BMP Design.** The Project must be designed to comply with the requirements for priority development projects in section E.3 of the Regional MS4 Permit Order No. R9-2013-0001, *National Pollutant Discharge Elimination Systems Permit and Waste Discharge Requirements for Discharges of Urban Runoff from the MS4s Draining the Watersheds within the San Diego Region* (Regional MS4 Permit) as well as the most current BMP Design Manual for the City of Chula Vista. Where conflict exists between the referenced documents the most stringent requirements shall apply.

D. **Post-Construction BMP Maintenance.** The post construction BMPs must be designed, constructed, and maintained in accordance with the most recent California Storm Water Quality Association (CASQA) [2] guidance. The Applicant shall:

1. No less than two times per year, assess the performance of the BMPs to ensure protection of the receiving waters and identify any necessary corrective measures;

2. Perform inspections of BMPs, at the beginning of the wet season no later than October 1 and the end of the wet season no later than April 1, for standing water, slope stability, sediment accumulation, trash and debris, and presence of burrows;

3. Regularly perform preventative maintenance of BMPs, including removal of accumulated trash and debris, as needed to ensure proper functioning of the BMPs;

4. Identify and promptly repair damage to BMPs; and

5. Maintain a log documenting all BMP inspections and maintenance activities. The log shall be made available to the San Diego Water Board upon request.

V. PROJECT IMPACTS AND COMPENSATORY MITIGATION

A. **Project Impact Avoidance and Minimization**. The Project must avoid and minimize adverse impacts to waters of the United States and/or State to the maximum extent practicable.

B. **Project Impacts and Compensatory Mitigation.** Unavoidable Project impacts to an unnamed tributary of Wolf Canyon Creek, a tributary of the Otay River, and two unnamed tributaries of the Otay River within the Otay Watershed must not exceed the type and magnitude of impacts described in the table below. At a minimum, compensatory mitigation required to offset unavoidable temporary and permanent Project impacts to waters of the United States and/or State must be achieved as described in the table below:

[2] California Storm Water Quality Association (*California Storm Water BMP Handbook, New Development and Redevelopment 2003)*, available on-line at: http://www.cabmphandbooks.org/ [Accessed on January 15, 2012]

	Impacts (acres)	Impacts (linear ft.)	Mitigation for Impacts (acres)	Mitigation Ratio (area mitigated :area impacted)	Mitigation for Impacts (linear ft.)	Mitigation Ratio (linear feet mitigated :linear feet impacted)
Permanent Impacts						
Stream Channel	1.22[1]	10,197[1]	3.90 Re-establishment[2]	3.2:1	937[3]	0.09:1[3]
Wetland	0.18[4]	NA	0.54 Re-establishment[5]	3:1	NA	NA

NA = Not Applicable

1. Permanent fill of 1.12 acre (7,169 linear feet) of waters of the U.S. and/or State and 0.10 acre (3,028 linear feet) of waters of the State only.
2. Re-establishment of 1.09 acres (937 linear feet) of the main low-flow channel of the Otay River and 2.81 acres of adjacent Otay River active floodplain (10-year event; ordinary high water mark) within Phase 2 of the Restoration Project (see Attachment 4, Figure 5, "Main Channel" and "Active Floodplain," respectively.
3. A linear feet compensation ratio of less than 1:1 is accepted for this Project for the reasons as follows. The Project's mitigation proposal is a part of a larger Restoration Project that will enhance, rehabilitate, and re-establish the physical, hydrological, and biological processes that will preserve, enhance, and restore a suite of beneficial uses (WARM, WILD, RARE, and REC-2). The Restoration Project will restore the channel morphology of the river, previously degraded by sand and gravel extraction, and the riparian corridor with native vegetation. The Restoration Project design includes upstream enhancement of approximately 2.63 acres of riparian habitat along 6,495 linear feet of the Otay River mainstem from Savage Dam to the Restoration Site (Phase 1, see Attachment 4, Figure 3) for the purpose of protecting the Restoration Project Site from re-infestation of invasive species. The Village 8W portion of Phase 2 of the Restoration Project will also provide re-establishment of 3.47 acres and enhancement of 0.88 acre of high floodplain (25-year event) and rehabilitation of 14.91 acres of upland habitat (100-year floodplain). In whole, the Restoration Project will provide a high value, large-scale restoration and enhancement of 5,338 linear feet length of the Otay River, adding an additional 7,180 linear feet of secondary, tertiary, and tributary stream channels, in a large contiguous area of an in-watershed aquatic resource, which off-sets the lack of a 1:1 linear feet mitigation ratio.
4. Permanent fill of 0.18 acre of wetland waters of the United States and/or State.
5. Re-establishment of 0.54 acre of adjacent active floodplain within Phase 2 of the Restoration project (see Attachment 4, Figure 5, "Main Channel" and "Active Floodplain," respectively.

C. **Compensatory Mitigation Plan Implementation.** The Applicant must fully and completely implement the Mitigation Plan as it pertains to this Project; any deviations from, or revisions to, the Mitigation Plan must be pre-approved by the San Diego Water Board.

D. **Performance Standards.** Compensatory mitigation required under this Certification shall be considered achieved once it has met the ecological success performance standards contained in the Mitigation Plan (Section 6.4, beginning on page 6-5) to the satisfaction of the San Diego Water Board.

E. **Compensatory Mitigation Site Design.** The compensatory mitigation site(s) shall be designed to be self-sustaining once performance standards have been achieved. This includes minimization of active engineering features (e.g., pumps) and appropriate siting to ensure that natural hydrology and landscape context support long-term sustainability in conformance with the following conditions:

1. Most of the channels through the mitigation sites shall be characterized by equilibrium conditions, with no evidence of severe aggradation or degradation;

2. As viewed along cross-sections, the channel and buffer area(s) 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 among plant zones and layers.

F. **Temporary Project Impact Areas.** 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 of pollutants to waters of the United States and/or State. Restoration must include grading of disturbed areas to pre-project contours and re-vegetation with native species. The Applicant must implement all necessary BMPs to control erosion and runoff from areas associated with the Project.

G. **Long-Term Management and Maintenance.** The compensatory mitigation site(s) must be managed, protected, and maintained, in perpetuity, in conformance with the long-term management plan and 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(s) in a manner consistent with the following requirements:

1. Any maintenance activities on the mitigation site(s) that do not contribute to the success of the mitigation site(s) and enhancement of beneficial uses and ecological functions and services are prohibited;

2. 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 compensatory mitigation project;

3. The Mitigation site(s) must be maintained, in perpetuity, free of untreated perennial exotic plant species including, but not limited to, pampas grass, giant reed, tamarisk, sweet fennel, tree tobacco, castor bean, and pepper tree. Annual exotic plant species must not occupy more than 5 percent of the mitigation site(s); and

4. If at any time a catastrophic natural event (e.g., fire, flood) causes damage(s) to the mitigation site(s) or other deficiencies in the compensatory mitigation project, the Applicant must take prompt and appropriate action to repair the damage(s) including replanting the affected area(s) and address any other deficiencies. The San Diego Water Board may require additional monitoring by the Applicant to assess how the compensatory mitigation site(s) or project is responding to a catastrophic natural event.

H. **Timing of Mitigation Site Construction.** The construction of proposed mitigation must be concurrent with project grading and completed no later than 9 months following the start of Project construction. Delays in implementing mitigation must be compensated for by an increased mitigation implementation of 10% of the cumulative compensatory mitigation for each month of delay.

I. **Mitigation Site(s) Preservation Mechanism. Within 90 days from the issuance of this Certification**, the Applicant must provide the San Diego Water Board with a draft preservation mechanism (e.g. deed restriction, conservation easement, etc.) that will protect all mitigation areas and their buffers in perpetuity. **Within 5 years of the start of Project construction**, the Applicant must submit proof of a completed final 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 properties must be adequate to demonstrate that the sites will be maintained without future development or encroachment on the sites which could otherwise reduce the functions and values of the sites for the variety of beneficial uses of waters of the United States and/ or State that it supports. The legal limitation must prohibit, without exception, all residential, commercial, industrial, institutional, and transportation development, and any other infrastructure development that would not maintain or enhance the wetland and streambed functions and values of the sites. 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.

VI. MONITORING AND REPORTING REQUIREMENTS

A. **Representative Monitoring**. Samples and measurements taken for the purpose of monitoring under this Certification shall be representative of the monitored activity.

B. **Monitoring Reports**. Monitoring results shall be reported to the San Diego Water Board at the intervals specified in section VI of this Certification.

C. **Monitoring and Reporting Revisions**. The San Diego Water Board may make revisions to the monitoring program at any time during the term of this Certification and may reduce or increase the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.

D. **Records of Monitoring Information.** Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;

2. The individual(s) who performed the sampling or measurements;

3. The date(s) analyses were performed;

4. The individual(s) who performed the analyses;

5. The analytical techniques or methods used; and

6. The results of such analyses.

E. **California Rapid Assessment Method.** California Rapid Assessment Method (CRAM)[3] monitoring must be performed to assess the current and potential ecological conditions (ecological integrity) of the impact site and proposed compensatory mitigation site(s). These conditions reflect the overall level of ecological function of an aquatic resource. Prior to initiating Project construction, the Applicant shall develop a monitoring plan to implement California Rapid Assessment Method (CRAM) monitoring. The Applicant must conduct a quantitative function-based assessment of the health of wetland/streambed habitat, using the appropriate CRAM module for each aquatic resource type, to establish pre-project baseline conditions, set CRAM success criteria, and assess the mitigation site(s) progress towards meeting the success criteria. CRAM monitoring must be conducted prior to the start of Project construction authorized under this Certification and at years 3 and 5 following construction completion for a period of 5 years. The CRAM monitoring results shall be submitted with the respective Annual Project Progress Report. An evaluation, interpretation, and tabulation of all CRAM assessment data shall be submitted with the Final Project Completion Report. Additionally, all CRAM assessment data shall be uploaded to the CRAM Wetlands website.[4]

F. **Benthic Macroinvertebrate Community Analysis.** The Applicant shall conduct bioassessment monitoring, as described in this section, to assess the success of mitigation areas, whenever applicable, using benthic macroinvertebrate community data. Bioassessment shall include: 1) the collection and reporting of benthic macroinvertebrate data; and 2) the collection and reporting of physical habitat data. Bioassessment using benthic macroinvertebrates shall be conducted in wadeable streams during the appropriate index period based on stream type:

[3] The most recent versions of the California Rapid Assessment Method (CRAM) for Wetlands and additional information regarding CRAM can be accessed at http://www.cramwetlands.org/

[4] The California Wetlands Monitoring Workgroup maintains EcoAtlas, an interactive publicly available mapping tool that provides wetland condition information. CRAM data can be entered at the following website: http://www.cramwetlands.org/dataentry.

Scenario	Typical sampling period
Nonperennial stream in a typical year	March 1 through May 1
Nonperennial stream in a dry year	February 15 through April 15
Nonperennial stream in a wet year	April 15 through July 15
Perennial stream in a typical year	May 15 through July 15
Perennial stream in a dry year	April 15 through June 15
Perennial or high-elevation stream in wet year*	June 15 through August 15

* where snow or meltwater is a concern

Wadeable streams shall be defined as streams that can be safely waded in order to be sampled for benthic invertebrates during the appropriate index period and baseflow conditions. If there in uncertainty regarding the appropriate sampling period, please contact the San Diego Water Board.

1. **Field Methods.** Bioassessment monitoring must be performed using the most recent SWAMP field methods specified in *Standard Operating Procedures for the Collection of Field Data for Bioassessment of California Wadeable Streams: Benthic Macroinvertebrates, Algae, and Physical Habitat, SOP 004, May 2016* (SOP SB-2016-0001, Ode et al. 2016)[5] or any updates of these methods. The Applicants shall conduct, concurrently with all required benthic macroinvertebrate collections, the "Full" suite of physical habitat characterization measurements as specified in the SOP.

2. **Laboratory Methods.** Benthic macroinvertebrates shall be identified using the SWAMP laboratory methods specified in *Standard Operating Procedures for Laboratory Processing and Identification of Benthic Macroinvertebrates in California* (Laboratory SOP, Woodard et al. 2012)[6] or any updates of these methods. Standard Taxonomic Effort (STE) Level II or IIa of the Southwestern Association of Freshwater Invertebrate Taxonomists (SAFIT) is required. Quality control samples are required for 10% of the samples each year and Quality Assurance samples must be analyzed by the Aquatic Bioassessment Laboratory of the California Department of Fish and Wildlife.

3. **Data Analysis.** Analysis of benthic macroinvertebrate data shall be conducted using scoring tools including but not limited to the *California Stream Condition Index* (CSCI, Mazor et. al., 2017, SWAMP-TM-2015-0004)[7].

[5] The SOP can be found electronically at the following location: https://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/docs/combined_sop_2016.pdf

[6] The Laboratory SOP can be found electronically at the following location: https://www.waterboards.ca.gov/water_issues/programs/swamp/docs/bmi_lab_sop_final.pdf

[7] Instructions for calculating scores for the *California Stream Condition Index* can be found electronically at the following location: https://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/docs/csci_scoring_instruct.pdf

4. **Data Storage.** Benthic macroinvertebrate data and physical habitat data shall be submitted to the California Environmental Data Exchange Network (CEDEN). Benthic macroinvertebrate data and physical habitat data shall be submitted to the California Environmental Data Exchange Network (CEDEN)[8] within 1 year of sample collection.

5. **Monitoring Sites.** All monitoring sites shall be approved by staff at the San Diego Water Board before sampling is initiated and must meet the following conditions:

    a. **Mitigation Sites.** At a minimum, bioassessment monitoring for mitigation areas must be performed at three sites (assessment stations) in the Otay River before Project initiation, and then in years three and five following start of Project construction, during the established "index period" for the Otay watershed. The first assessment station is the mitigation site reference station, which must be located upstream of the mitigation site(s) in a reference area; the second assessment station must be located within the mitigation site(s); and the third assessment station must be located downstream of the mitigation site(s). The reference station upstream of the mitigation site(s) must be located and sampled concurrently with the second and third assessment stations. Reference stations shall be defined as stations that show minimally disturbed conditions.

6. **Monitoring Reports.** An evaluation, interpretation and tabulation of the benthic macroinvertebrate community analysis must be submitted with the respective Annual Project Monitoring Report.

G. **Jurisdictional Delineation.** In order to demonstrate that the Project has met the compensatory mitigation required in section V.B, the Applicant shall perform a jurisdictional delineation of the Permittee Responsible Mitigation for Otay Ranch Village 8 West Project. The delineation shall be performed using the methodology set forth in the 1987 *U.S. Army Corps of Engineers Wetland Delineation Manual* and the 2008 *Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Arid West Region* and the lateral limits of non-wetland waters using the 2008 *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States Delineation Manual* by the end of year 5. Using the jurisdictional delineation, the Applicant shall demonstrate that the compensatory mitigation provides the area of each aquatic resource type, as described in section V.B, and both wetland vegetation and hydrology (Ordinary High Water Mark) are present. The jurisdictional delineation results must be submitted with the respective Annual Project Progress Report.

[8] The California Environmental Data Exchange Network can be found electronically at the following location: http://www.ceden.org/

H. **Geographic Information System Data.** The Applicant must submit Geographic Information System (GIS) shape files of the Project impact sites within 30 days of the start of project construction and GIS shape files of the Project mitigation sites within 30 days of mitigation installation. All impact and mitigation site shape files must be polygons. Two GPS readings (points) must be taken on each line of the polygon and the polygon must have a minimum of 10 points. GIS metadata must also be submitted.

I. **Annual Project Progress Reports.** The Applicant must submit annual Project progress reports describing status of BMP implementation, compensatory mitigation, 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 Annual Project Progress Reports must contain compensatory mitigation monitoring information sufficient to demonstrate how the compensatory mitigation project is progressing towards accomplishing its objectives and meeting its performance standards. Annual Project Progress Reports must be submitted even if Project construction has not begun. The monitoring period for each Annual Project Progress Report shall be January 1st through December 31st of each year. Annual Project Progress Reports must include, at a minimum, the following:

1. **Project Status and Compliance Reporting.** The Annual Project Progress Report must include the following Project status and compliance information:

   a. The names, qualifications, and affiliations of the persons contributing to the report;

   b. The status, progress, and anticipated schedule for completion of Project construction activities including the installation and operational status of best management practices project features for erosion and storm water quality treatment;

   c. A description of Project construction delays encountered or anticipated that may affect the schedule for construction completion; and

   d. A description of each incident of noncompliance during the annual monitoring period and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2. **Compensatory Mitigation Monitoring Reporting.** Mitigation monitoring information must be submitted as part of the Annual Project Progress Report for a period of <u>not less than five years</u>, sufficient to demonstrate that the compensatory mitigation project has accomplished its objectives and met ecological success performance standards contained in the Mitigation Plan. Following Project implementation the San Diego Water Board may reduce or waive compensatory mitigation monitoring requirements upon a determination that performance standards have been achieved. Conversely the San Diego Water Board may extend the monitoring period beyond five years upon a determination that the performance

standards have not been met or the compensatory mitigation project is not on track to meet them. The Annual Project Progress Report must include the following compensatory mitigation monitoring information:

a. Names, qualifications, and affiliations of the persons contributing to the report;

b. An evaluation, interpretation, and tabulation of the parameters being monitored, including the results of the Mitigation Plan monitoring program, and all quantitative and qualitative data collected in the field;

c. A description of the following mitigation site(s) characteristics:

   i. Detritus cover;
   ii. General topographic complexity;
   iii. General upstream and downstream habitat and hydrologic connectivity; and
   iv. Source of hydrology

d. Monitoring data interpretations and conclusions as to how the compensatory mitigation project(s) is progressing towards meeting performance standards and whether the performance standards have been met;

e. A description of the progress toward implementing a plan to manage the compensatory mitigation project after performance standards have been achieved to ensure the long term sustainability of the resource in perpetuity, including a discussion of long term financing mechanisms, the party responsible for long term management, and a timetable for future steps;

f. Photo documentation of the mitigation site before and after mitigation site construction and to document annual progress of site performance. Photo documentation must be conducted in accordance with guidelines posted at http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/401c/401PhotoDocRB9V713.pdf. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced;

g. The results of the California Rapid Assessment Method (CRAM) monitoring required under section VI.E of this Certification;

h. The results of the Benthic Macroinvertebrate Community Analysis monitoring required under section VI.F of this Certification;

i. Qualitative and quantitative comparisons of current mitigation conditions with pre-construction conditions and previous mitigation monitoring results. This shall include an evaluation, interpretation, and tabulation of all California Rapid Assessment Method (CRAM) and benthic macroinvertebrate community assessment data collected throughout the term of mitigation implementation in accordance with section VI.E and VI.F of this Certification.

j. The results of the jurisdictional delineation required under section VI.G of this Certification;

k. As-built drawings of the compensatory mitigation project site(s), no bigger than 11”X17”; and

l. A survey report documenting boundaries of the compensatory mitigation site(s).

J. **Final Project Completion Report.** The Applicant must submit a Final Project Completion Report to the San Diego Water Board **within 30 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. BMP installation and operational status for the Project;

4. As-built drawings of the Project, no bigger than 11”X17”;

5. Photo documentation of implemented post-construction BMPs and all areas of permanent and temporary impacts, prior to and after project construction. Photo documentation must be conducted in accordance with guidelines posted at http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/401c/401PhotoDocRB9V713.pdf. In addition, photo documentation must include Global Positioning System (GPS) coordinates for each of the photo points referenced; and

K. **Reporting Authority.** The submittal of information required 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 13385.

L. **Electronic Document Submittal.** The Applicant must submit all reports and information required under this Certification in electronic format via e-mail to SanDiego@waterboards.ca.gov. Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to:

California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification No. R9-2014-0104:796840:lhonma
2375 Northside Drive, Suite 100
San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF), and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2014-0104:796840:lhonma.

M. **Document Signatory Requirements**. All applications, reports, or information submitted to the San Diego Water Board must be signed 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.

N. **Document Certification Requirements**. All applications, reports, or information submitted to the San Diego Water Board must be 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."

VII. NOTIFICATION REQUIREMENTS

A. **Twenty Four Hour Non-Compliance Reporting.** 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 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. **Hazardous Substance Discharge**. Except as provided in Water Code section 13271(b), any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of San Diego, in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Applicant is in violation of a Basin Plan prohibition.

C. **Oil or Petroleum Product Discharge.** Except as provided in Water Code section 13272(b), any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.

D. **Anticipated Noncompliance**. The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project or the Compensatory Mitigation project which may result in noncompliance with Certification conditions or requirements.

E. **Commencement of Construction Notification.** The Applicant must notify the San Diego Water Board in writing at least 5 days prior to the start of initial Project construction ground disturbance

F. **Transfers.** 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 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.

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 responsibility for compliance with this Certification in the event that a transferee fails to comply.

VIII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

A. The City of Chula Vista is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15367, and has filed a Notice of Determination dated December 23, 2013 for the Final Environmental Impact Report (FEIR) titled Final Second Tier Environmental Impact Report for the Otay Ranch Village 8 West, Sectional Planning Area Plan and Tentative Map (State Clearing House Number 2010062093). The Lead Agency 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 is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has considered the Lead Agency's FEIR and finds that the Project as proposed will have a significant effect on resources within the San Diego Water Board's purview.

C. The San Diego Water Board has required mitigation measures as a condition of this Certification to avoid or reduce the environmental effects of the Project to resources within the Board's purview to a less than significant level.

D. The Lead Agency has adopted a mitigation monitoring and reporting program pursuant to Public Resources Code section 21081.6 and CEQA Guidelines section 15097 to ensure that mitigation measures and revisions to the Project identified in the FEIR are implemented. The Mitigation Monitoring and Reporting Program (MMRP) is included and incorporated by reference in Attachment 5 to this Certification. The Applicant shall implement the Lead Agency's MMRP described in the FEIR, as it pertains to resources within the San Diego Water Board's purview. The San Diego Water Board has imposed additional MMRP requirements as specified in sections V and VI of this Certification.

E. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Determination in accordance with CEQA Guidelines section 15096 subdivision (i).

IX. SAN DIEGO WATER BOARD CONTACT PERSON

Lisa Honma, Environmental Scientist
Telephone: 619-521-3367
Email: Lisa.Honma@waterboards.ca.gov

X. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the Otay Ranch Village 8 West Project (Certification No. R9-2014-0104) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "*Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)*," which requires

compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. R9-2014-0104 issued on October 26, 2017.

James G. Smith, AEO
for DAVID W. GIBSON
Executive Officer
San Diego Water Board

26 Oct 2017
Date

ATTACHMENT 1
DEFINITIONS

Activity - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

Buffer - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

California Rapid Assessment Method (CRAM) - is a wetland assessment method intended to provide a rapid, scientifically-defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method**.**

Compensatory Mitigation Project - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

Discharge of dredged material – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

Discharge of fill material – means the addition of fill material into waters of the United States and/or State.

Dredged material – means material that is excavated or dredged from waters of the United States and/or State.

Ecological Success Performance Standards – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

Enhancement – means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

Fill material – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

Isolated wetland – means a wetland with no surface water connection to other aquatic resources.

Mitigation Bank – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

Preservation - means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/ historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Start of Project Construction - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

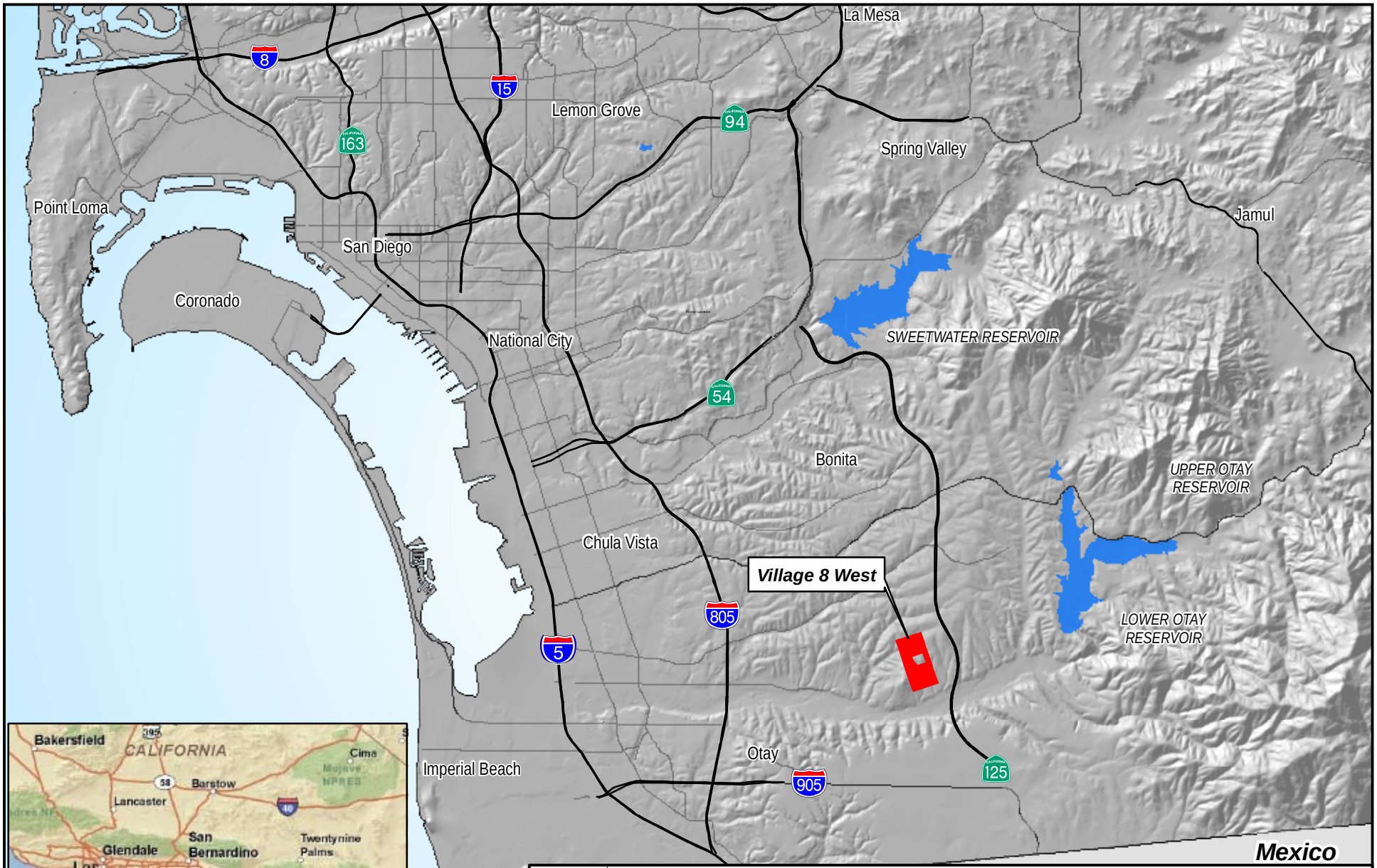
Uplands - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

Water quality objectives and other appropriate requirements of state law – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

Waters of the State – means any surface water or groundwater, including saline waters, within the boundaries of the State. [Water Code section13050, subd. (e)].

ATTACHMENT 2
PROJECT LOCATION MAPS

Figure 1 – Site Vicinity Map
Figure 1 – Regional Vicinity
Figure 2 – USGS Topographic Map



SOURCES: SANDAG (Freeways, County Boundary, Lakes, Elevation 2005); SanGIS (Highways 2007); TIGER (Cities 2000).

SITE VICINITY MAP
VILLAGE 8 WEST
OTAY LAND CO.

URS

1.25 0 1.25 2.5 Miles

SCALE: 1" = 2.5 Miles (1:158400)
SCALE CORRECT WHEN PRINTED AT 8.5X11

CREATED BY PM	DATE: 10-14-10	FIG. NO: 1
PM: PM	PROJ. NO: 27654036.05000	

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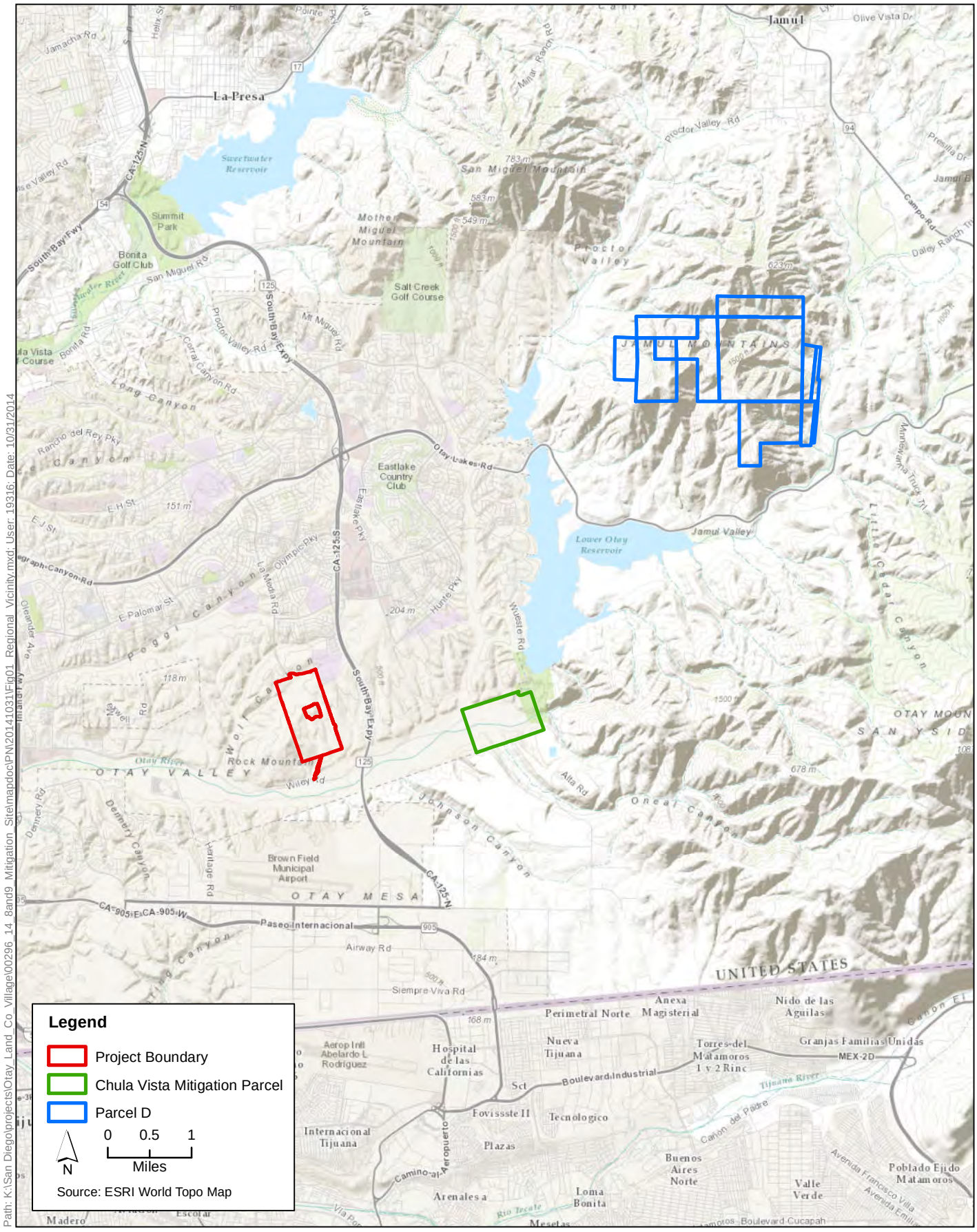

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Figure 1
Regional Vicinity
Otay Ranch Village 8 West

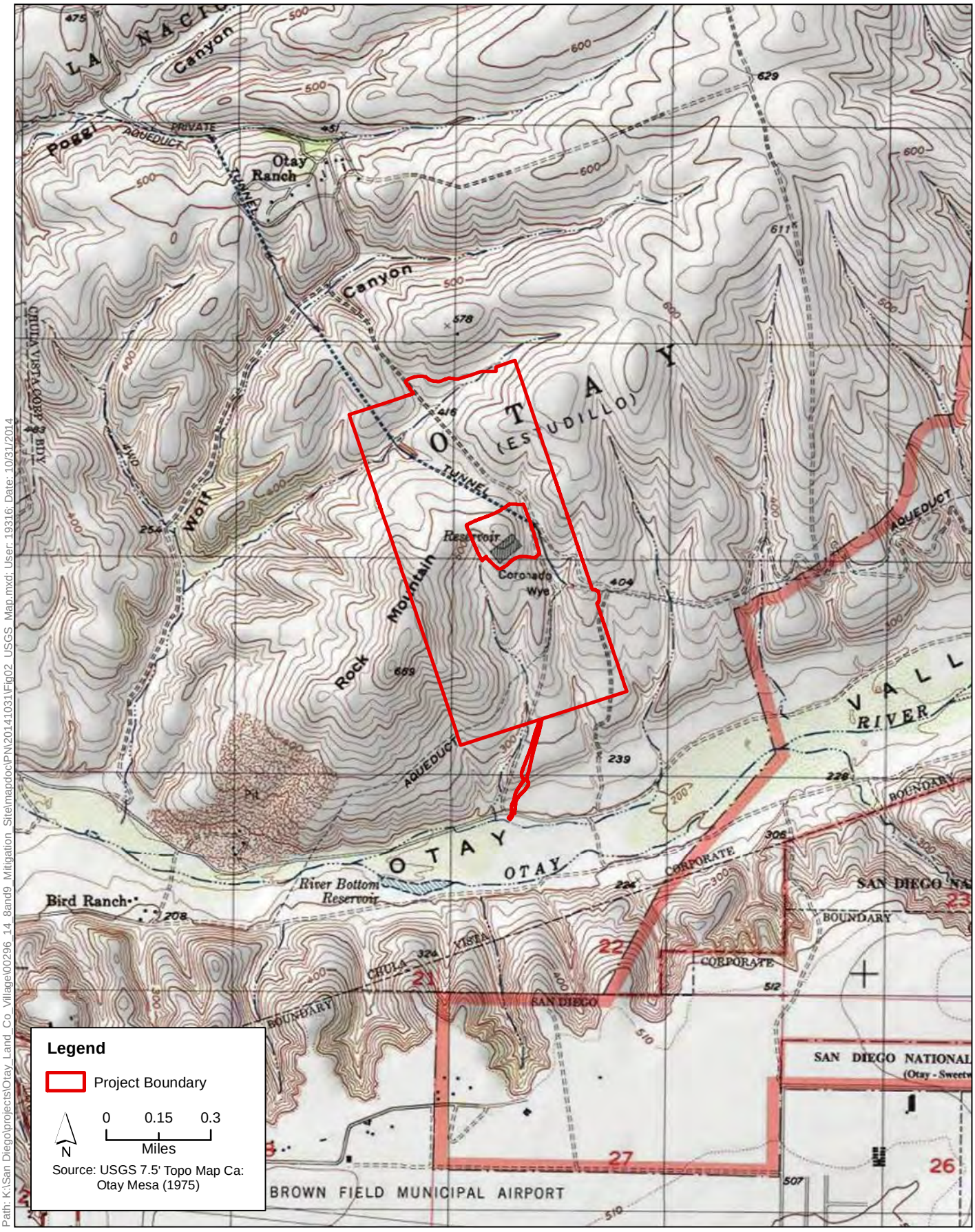

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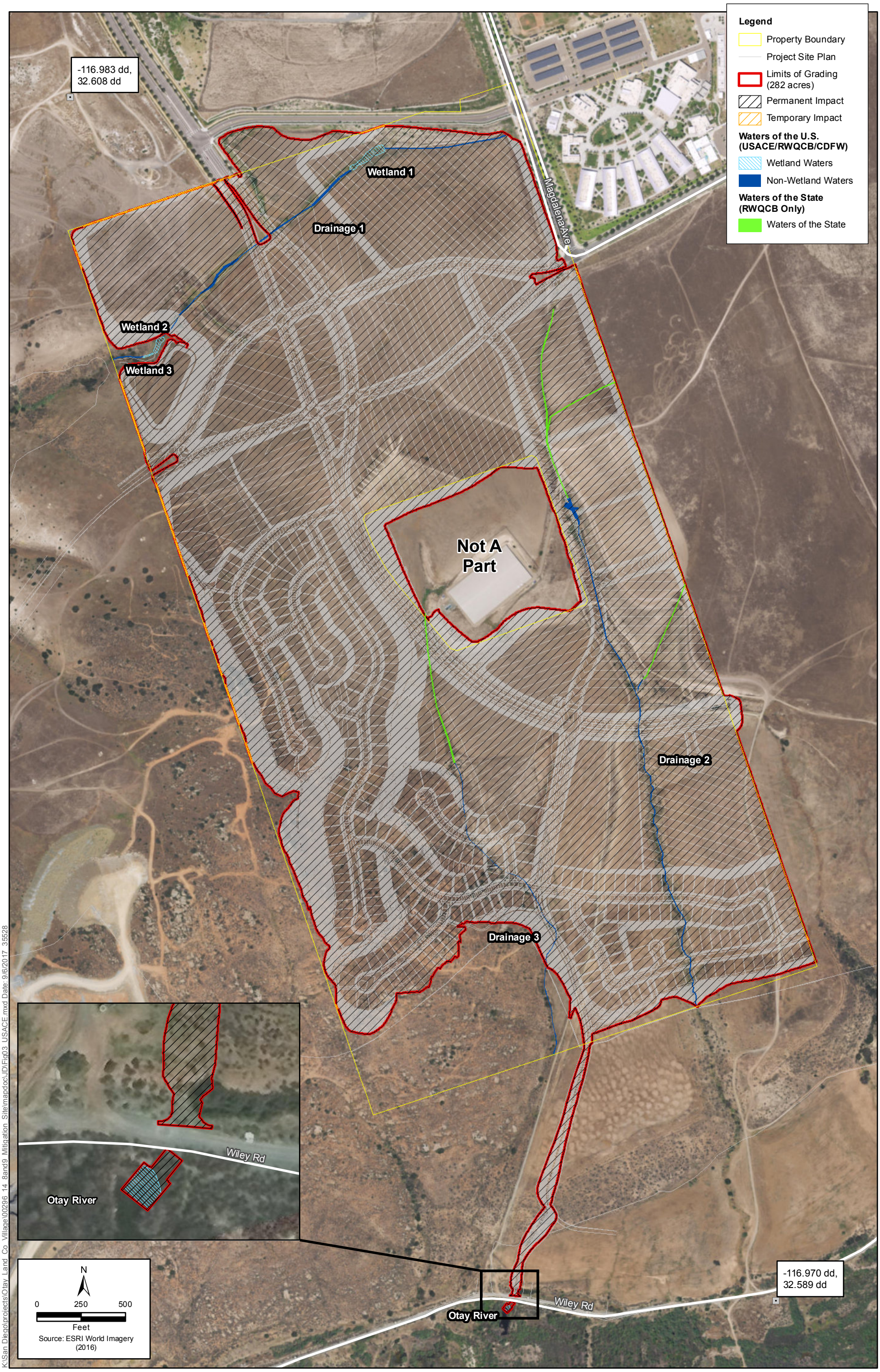
Figure 2
USGS Topographic Map
Otay Ranch Village 8 West

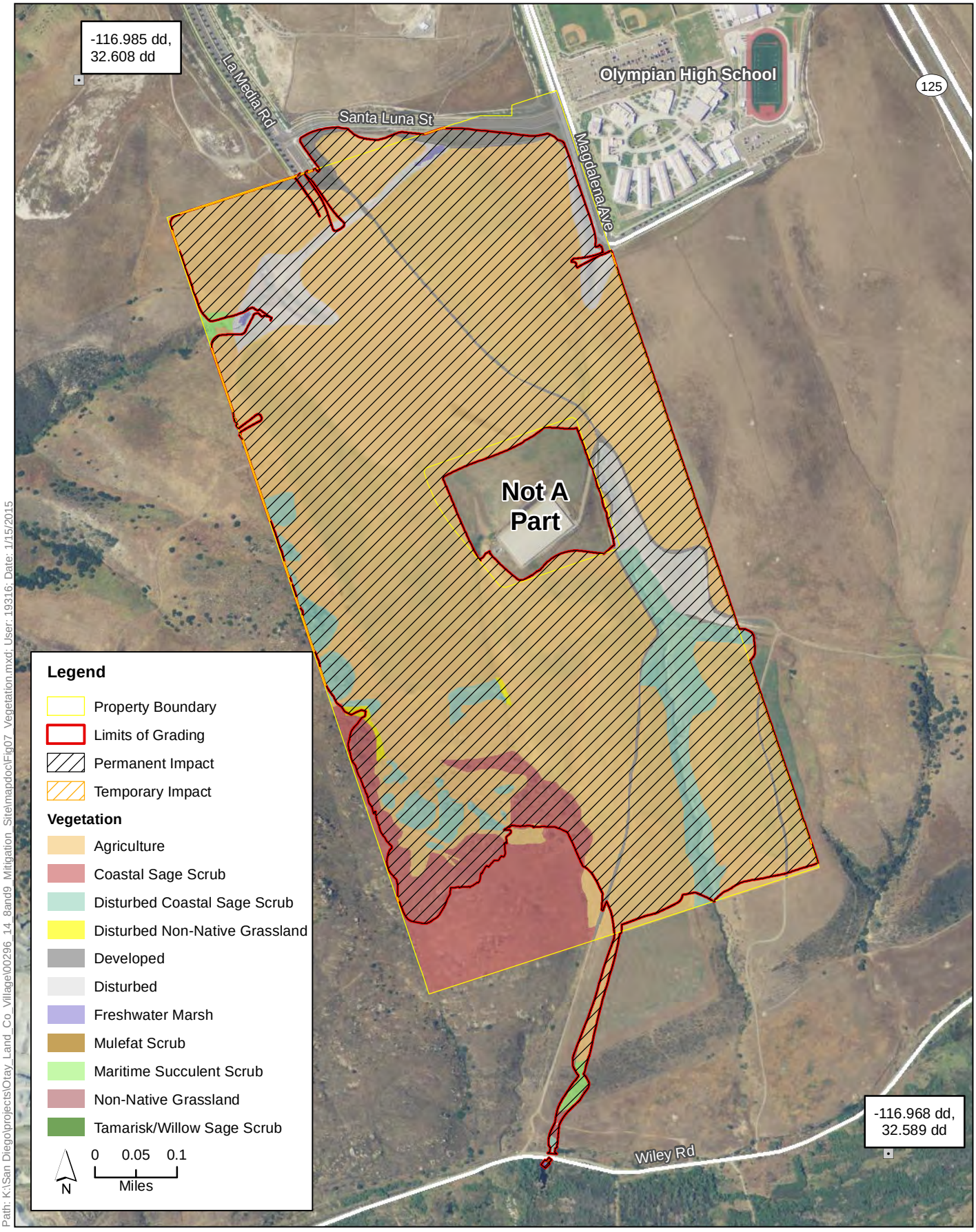
ATTACHMENT 3
PROJECT SITE PLANS

Figure 3 – USACE/RWQCB Jurisdictional Delineation and Impacts
Figure 7 – Vegetation
Figure 8 – Proposed Land Use Designations
Mass Grading Plans for Chula Vista Tract No. 09-04, Otay Ranch Village 8 West Phase 1, Drawing Nos. 14011-01 through 14011-24



K:\San Diego\projects\Otay Land Co Village\00296 14 8and9 Mitigation Site\mapdoc\JD\Fig03 USACE.mxd Date: 9/6/2017 35528

Figure 3
USACE/RWQCB Jurisdictional Delineation and Impacts
Otay Ranch Village 8 West



Path: K:\San Diego\projects\Otay_Land_Co_Village\00296_14_8and9_Mitigation_Site\mapdoc\Fig07_Vegetation.mxd; User: 19316; Date: 1/15/2015

Figure 7
Vegetation
Otay Ranch Village 8 West

K:\San Diego\projects\Otay Land Co Village\00296 14 8and9 Mitigation Site\mapdoc\PN\20150102\Fig07 proposed prict.ai SS 01-02-2015 19316

Source: Otay Land Company, 2014

Figure 8
Proposed Land Use Designations
Otay Ranch Village 8 West

MASS GRADING PLANS FOR

CHULA VISTA TRACT NO 09-04

OTAY RANCH, VILLAGE 8 WEST PHASE 1

IN THE CITY OF CHULA VISTA, CALIFORNIA

A. GRADING NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE APPROVED PLANS AND APPROVED REVISIONS. ANY CHANGES OR REVISIONS THEREFROM SHALL BE APPROVED BY THE CITY ENGINEER AND MITIGATION MONITOR PRIOR TO ANY REQUEST FOR INSPECTION.
2. ALL GRADING SHALL BE INSPECTED AND TESTED BY OR UNDER THE DIRECTION OF A QUALIFIED SOILS ENGINEER. THE SOILS ENGINEER SHALL INSPECT THE EXCAVATION, AND SHALL OBSERVE AND TEST THE PLACEMENT, AND COMPACTION OF FILL AND BACKFILL AND COMPACTION OF TRENCHES, SUBMIT GEOTECHNICAL OR SOILS REPORTS AS REQUIRED AND DETERMINE THE SUITABILITY OF ANY FILL MATERIAL UPON COMPLETION OF GRADING OPERATIONS. THE SOILS ENGINEER SHALL STATE THAT OBSERVATIONS AND TESTS WERE MADE BY, OR UNDER DIRECTION OF THE SOILS ENGINEER, AND THAT EMBANKMENTS AND EXCAVATIONS WERE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL ASPECTS OF THE APPROVED GRADING PLANS, ANY APPROVED REVISIONS THERETO, SUBJECT LAND DEVELOPMENT PERMIT AND ORDINANCE NO. 1797 AS AMENDED, AND THAT ALL EMBANKMENTS AND EXCAVATIONS ARE ACCEPTABLE FOR THEIR INTENDED USE.
3. THE CONTRACTOR SHALL PROPERLY GRADE ALL EXCAVATED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. CONTRACTOR SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISHED WORK ON THE SITE, AND SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED TO THE SATISFACTION OF THE CITY ENGINEER AND THE MITIGATION MONITOR.
4. ALL AREAS TO BE FILLED SHALL BE PREPARED PRIOR TO FILLING, AND FILL SHALL BE PLACED IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN THE SOILS REPORT. ALL VEGETABLE MATTER AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED, BY THE CONTRACTOR, FROM THE SURFACE UPON WHICH THE FILL IS TO BE PLACED. LOOSE FILL AND UNSUITABLE SOILS SHALL BE REMOVED TO SUITABLE FIRM NATURAL GROUND. THE EXPOSED SOILS SHALL BE SCARIFIED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND THEN COMPACTED TO A MINIMUM OF 90% OF ASTM-D1557. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, WATER AND COMPACT THE FILL IN STRICT ACCORDANCE WITH THE SPECIFICATIONS.
5. CUT AND FILL SLOPES SHALL BE CUT AND TRIMMED TO THE FINISHED GRADE TO PRODUCE SMOOTH SURFACES AND UNIFORM CROSS SECTIONS. THE SLOPES OF EXCAVATIONS AND EMBANKMENTS SHALL BE SHAPED, TRIMMED, AND PLANTED IN ACCORDANCE WITH THE PLANTING NOTES AND AS DIRECTED BY THE ENGINEER OF WORK, AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS AND OTHER WASTE MATERIALS EXPOSED ON THE EXCAVATION OR EMBANKMENT SLOPES WHICH ARE LIABLE TO BECOME LOOSENED, SHALL BE REMOVED AND DISPOSED OF. THE TOE AND TOP OF ALL SLOPES SHALL BE ROUNDED IN ACCORDANCE WITH ORDINANCE NO. 1797, THESE GRADING PLANS, AND THE STANDARD DRAWINGS CVD-GR02 AND CVD-GR03. SLOPE SETBACKS AND GRADES SHALL CONFORM TO CVD-GR01.
6. IF THERE ARE EROSION SCARS ON EXISTING SLOPES WHICH OTHERWISE WOULD NOT BE ELIMINATED BY THE PROPOSED GRADING, THESE SCARS ARE TO BE ELIMINATED BY TRIMMING, FINE GRADING AND PLANTING. IF THE SCARS ARE IN AREAS OF NATIVE VEGETATION, THE REPAIRS SHOULD BE PERFORMED WITH AN EFFORT TO AVOID OR MINIMIZE IMPACTS TO NATIVE VEGETATION. ALL SUCH REPAIRS IN AREAS OF NATIVE VEGETATION SHALL BE REVIEWED AND APPROVED BY THE CITY'S MITIGATION MONITORING COORDINATOR PRIOR TO THE BEGINNING OF THE REPAIR WORK.
7. ALL TREES, BRUSH, GRASS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE COLLECTED, PILED OR OTHERWISE DISPOSED OF OFF THE SITE BY THE CONTRACTOR SO AS TO LEAVE THE AREAS THAT HAVE BEEN CLEARED WITH A NEAT AND FINISHED APPEARANCE FREE FROM UNSIGHTLY DEBRIS. APPROVAL OF LOCATIONS FOR DEBRIS FILL SHALL BE OBTAINED FROM THE SOILS ENGINEER PRIOR TO THE DISPOSAL OF ANY SUCH MATERIAL.
8. SUBDRAIN LOCATIONS SHOWN ARE APPROXIMATE AND ARE RECOMMENDED FOR ALL SIGNIFICANT FILL CANYONS. THE ACTUAL LOCATION AND EXTENT OF SUBDRAINS SHALL BE DETERMINED BY THE GEOTECHNICAL CONSULTANT AT THE TIME OF CONSTRUCTION.
9. BY REFERENCE HERE, THE REPORT TITLED GEOTECHNICAL INVESTIGATION, VILLAGE 8 WEST OTAY RANCH CHULA VISTA, CA, PREPARED BY ADVANCED GEOTECHNICAL SOLUTIONS, INC. ON JUNE 30, 2014 IS INCLUDED AS PART OF THESE PLANS.
10. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES. LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND SHOWN FOR GENERAL INFORMATION ONLY.
11. WHERE GRADING DOES NOT OCCUR, ALL EXISTING PLANT MATERIAL IS TO BE PROTECTED IN PLACE. NO CONSTRUCTION EQUIPMENT WILL BE ALLOWED TO TRAVEL THROUGH AND DAMAGE ANY OF THESE AREAS. ALL AREAS TO BE RETAINED IN A NATURAL CONDITION SHALL BE FENCED UNDER THE DIRECTION OF THE PROJECT BIOLOGIST. CONTRACTOR WILL BE RESPONSIBLE TO REPAIR ANY AND ALL DAMAGE/IMPACTS TO THESE AREAS.
12. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS AND GRADING SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL IN ACCORDANCE WITH SECTION 15.04.140 OF THE CHULA VISTA MUNICIPAL CODE.
13. IN THE CASE OF CONFLICTS, THE REQUIREMENTS OF THE EARTHWORK, SPECIFICATIONS PREPARED FOR THE PROJECT BY THE SOILS ENGINEER SHALL GOVERN THE REQUIREMENTS OF THIS PLAN AND THESE NOTES AND THESE PLANS SHALL BE REVISED ACCORDINGLY.

B. DIG ALERT NOTICE

IMPORTANT NOTICE
SECTION 4215/4217 OF THE GOVERNMENT CODE REQUIRES THAT A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. PER YOUR DIG ALERT I.D. NUMBER CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 TWO WORKING DAYS BEFORE YOU DIG.

UNDERGROUND SERVICE ALERT

CALL: TOLL FREE
(800)422-4133
TWO WORKING DAYS BEFORE YOU DIG

"CAUTION": REMEMBER THAT THE USA CENTER NOTIFIES ONLY THOSE UTILITIES BELONGING TO THE CENTER. THERE COULD BE OTHER UTILITIES PRESENT AT THE WORK SITE. THE CENTER WILL INFORM YOU OF WHOM THEY WILL NOTIFY.

C. GENERAL NOTES:

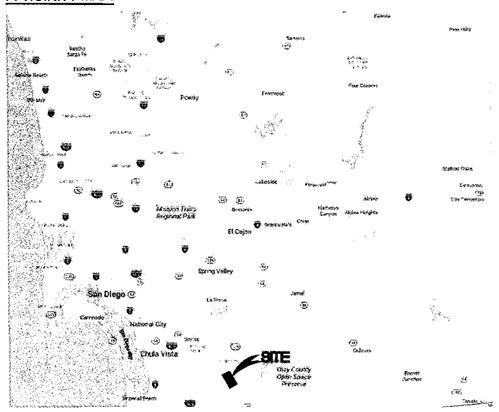
1. THE SOILS REPORT TITLED GEOTECHNICAL INVESTIGATION, VILLAGE 8 WEST OTAY RANCH, CHULA VISTA, CA., DATED JUNE 30, 2014, FROM ADVANCED GEOTECHNICAL SOLUTIONS, INC. SHALL BE CONSIDERED TO BE PART OF THIS GRADING PLAN. ALL GRADING SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN SAID REPORT.
2. STORM DRAINS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF SIZES, LOCATIONS, AND TYPE OF SEWER AND DRAINAGE FACILITIES, OR ANY SURFACE IMPROVEMENTS WITHIN FUTURE STREET RIGHTS-OF-WAY SHOWN ON THESE PLANS. SEPARATE APPROVALS AND PERMITS FOR THESE SHALL BE REQUIRED IN CONJUNCTION WITH IMPROVEMENT PLANS.
3. WRITTEN PERMISSION SHALL BE OBTAINED FOR ANY OFF-SITE GRADING
4. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES DURING GRADING OPERATIONS. ANYTHING DAMAGED OR DESTROYED SHALL BE REPLACED OR REPAIRED TO CONDITION EXISTING PRIOR TO GRADING.
5. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REVERENCE, AND/OR PRESERVE ALL HISTORICAL PROPOSED IMPROVEMENTS; AND IF DESTROYED, A LANDS SURVEYOR , OR A CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING SHALL REPLACE SUCH MONUMENTS WITH THE APPROPRIATE MONUMENTS. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE MONUMENTS. A CORNER RECORD OR RECODE OF SURVEY, AS APPROPRIATE, SHALL BE FILED AS REQUIRED BY THE PROFESSIONAL LANDS SURVEYOR ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED , THE CITY OF CHULA VISTA SURVEY SECTION MUST BE NOTIFIED , IN WRITING , AT LEAST THREE (3) DAYS PRIOR TO THE CONSTRUCTION. THE DEVELOPER/CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
6. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.
7. ALL FLOWS SHOWN ARE FOR 50 -YEAR STORM, EXCEPT AS NOTED.
8. ALL SEDIMENTATION BASINS, OUTLET PIPES AND DITCHES ARE PRIVATE UNLESS OTHERWISE NOTED AND HAVE NOT BEEN REVIEWED FOR ADEQUACY BY THE CITY ENGINEERING DEPARTMENT.
9. THE OWNER MUST OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (D.O.S.H.) FOR CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE FIVE FEET OR DEEPER INTO WHICH A PERSON IS REQUIRED TO DESCEND. SAID PERMIT IS REQUIRED PRIOR TO ISSUANCE OF A GRADING PERMIT BY THE CITY OF CHULA VISTA.
10. GRADING EQUIPMENT SHALL NOT USE OR BLOCK TRAFFIC LANES DURING GRADING ACTIVITY. TRUCK OPERATIONS IN AND OUT OF CONSTRUCTION AND STAGING AREAS SHALL BE CONTROLLED AS REQUIRED BY THE CITY. TRUCK AND EQUIPMENT ROUTES IN AND OUT OF THE SITE, SHALL BE APPROVED BY THE CITY PRIOR TO START OF WORK. AT THE END OF THE WORKING DAY, STREETS SHALL BE CLEANED OF DIRT AND CONSTRUCTION DEBRIS TO THE SATISFACTION OF THE CITY INSPECTOR AND THE MITIGATION MONITOR.
11. DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL COMPLY WITH LOCAL DUST CONTROL, ANY REQUIREMENTS OF ANY MITIGATION MONITORING PROGRAMS, AND UNIFORM BUILDING CODE (UBC) REQUIREMENTS, WHICH INCLUDE DUST CONTROL MEASURES FOR CONSTRUCTION SITES. DUST REDUCING MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, REGULAR WATERING OF GRADED SURFACES AND RESTRICTION OF ALL CONSTRUCTION VEHICLES AND EQUIPMENT TO TRAVEL ALONG ESTABLISHED AND REGULARLY WATERED ROADWAYS AT SPECIFIED SPEEDS.

D. PRECONSTRUCTION CONFERENCE:

THE CONTRACTOR SHALL NOT BEGIN ANY WORK ON THIS PROJECT UNTIL A PRECONSTRUCTION CONFERENCE IS HELD WITH THE ENGINEER OF WORK, THE SOILS ENGINEER, DEVELOPER, CONTRACTOR, OTAY WATER DISTRICT INSPECTOR, AND CITY ENGINEER.

E. SHEET INDEX:

F. VICINITY MAP:



G. OWNER'S CERTIFICATE:

IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS. IT IS FURTHER AGREED THAT THE OWNER (DEVELOPER) SHALL HAVE THE ENGINEER OF WORK MAKE SUCH CHANGES, ALTERATIONS OR ADDITIONS TO THESE PLANS WHICH THE ENGINEER OF WORK DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETION OF THE IMPROVEMENTS. ALL PLAN CHANGES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.

I FURTHER AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING CITY RIGHT-OF-WAY WITHIN 60 DAYS AFTER ISSUANCE OF THE CONSTRUCTION PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED, IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

NAME: OTAY LAND COMPANY

ADDRESS: 1903 WRIGHT PLACE, SUITE 220 CARLSBAD, CA 92008

PHONE: 760 918-8200

BY: _____ DATE: _____

H. APPLICANT'S NAME:

NAME: OTAY LAND COMPANY, LLC

ADDRESS: 1903 WRIGHT PLACE, SUITE 220, CARLSBAD, CA 92008

PHONE NUMBER: 760 918-8200

I. SOILS ENGINEER'S CERTIFICATE:

I, JEFF A. CHANEY, A REGISTERED CIVIL ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOIL MECHANICS, HEREBY VERIFY THAT A SAMPLING AND STUDY OF THE SOIL CONDITIONS PREVALENT WITHIN THIS SITE WAS MADE BY ME OR UNDER MY DIRECTION BETWEEN THE DATES OF _____ AND _____, ONE COMPLETE COPY OF THE SOILS REPORT COMPILED FROM THIS STUDY, WITH MY RECOMMENDATIONS, HAS BEE SUBMITTED TO THE OFFICE OF THE CITY ENGINEER.

THESE GRADING PLANS HAVE BEEN REVIEWED BY ME OR UNDER MY DIRECTION AND CONFORM TO THE RECOMMENDATIONS MADE IN THE SOILS REPORT MENTIONED ABOVE.

SIGNED: _____ DATE: _____

DISCIPLINE: _____ EXPIRATION DATE: _____

J. ENGINEER OF WORK:

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE IMPROVEMENTS SHOWN ON THIS SET OF PLANS (SHEET 1 THROUGH SHEET 55) HAVE BEEN INSTALLED AND CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH SAID PLANS, APPROPRIATE STANDARDS AND ANY DISCRETIONARY APPROVAL(S) FOR THE PROJECT.

SIGNED: _____ DATE: _____

PRINTED NAME: JOHN A. HAYES P.E. NO: 58003

DISCIPLINE: CIVIL ENG. MY REGISTRATION EXPIRES: 06-30-2018

J. DECLARATION OF RESPONSIBLE CHARGE:

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS. I UNDERSTAND THAT THE CHECK OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CHULA VISTA AND WATER DISTRICT IS CONFINED TO REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

(FIRM NAME & ADDRESS)

BY: _____ DATE: _____
JOHN A. HAYES RCE NO. 58003 EXP. 6/30/2018

L. LEGAL DESCRIPTION

BEING PORTIONS OF LOTS 27 AND 28 OF OTAY RANCHO, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 862, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, FEBRUARY 7, 1900.

M. ASSESSOR'S PARCEL NO.

APN 644-070-12,14
APN 644-070-13 (NOT A PART, CITY OF SAN DIEGO RESERVOIR)

N. CALIFORNIA COORDINATES

BASIS OF COORDINATES IS THE CALIFORNIA COORDINATE SYSTEM NORTH AMERICAN DATUM 1983 (NAD83)
PER THE CITY OF CHULA VISTA SURVEY CONTROL NETWORK

O. AS BUILTS

THE CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK, AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS AND GRADING SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL IN ACCORDANCE WITH SECTION 15.04.140 OF THE CHULA VISTA MUNICIPAL CODE

P. WORK TO BE DONE:

THE WORK TO BE DONE CONSISTS OF THE ITEMS INDICATED UNDER THE "LEGEND" SHOWN BELOW, AND IS TO BE DONE IN ACCORDANCE WITH THESE PLANS AND THE FOLLOWING LIST OR PRINTED MATERIALS AS CURRENTLY ADOPTED BY THE CITY OF CHULA VISTA CITY COUNCIL INCLUDING THE FOLLOWING:

1. 2012 STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("GREENBOOK") AND 2012 REGIONAL SUPPLEMENT AMENDMENTS (TO THE GREENBOOK).
2. 2012 SAN DIEGO AREA REGIONAL STANDARD DRAWINGS.
3. 2015 CITY OF CHULA VISTA STANDARD SPECIAL PROVISIONS (TO THE GREENBOOK).
4. 2002 DESIGN AND CONSTRUCTION STANDARDS OF THE CITY OF CHULA VISTA.
5. PORTION OF THE STATE STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, DATED JULY 2010 AND ALL SUBSEQUENT ADDITIONS AND REVISIONS.
6. PORTION OF THE STATE STANDARD PLANS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, DATED JULY 2010 AND ALL SUBSEQUENT ADDITIONS AND REVISIONS.
7. 2012 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ("CA-MUTCD") AND ALL SUBSEQUENT ADDITIONS AND REVISIONS.
8. WATER AGENCIES STANDARDS SPECIFICATIONS FOR WATER, RECYCLED WATER AND SEWER FACILITIES, LATEST EDITION.

ALL REFERENCES ARE TO BE MADE PART OF THESE PLANS. ANY CHANGES OR REVISIONS THEREFROM, SHALL BE APPROVED BY THE CITY ENGINEER, OR HIS DESIGNEE, PRIOR TO ANY REQUEST FOR INSPECTION.

Q. LEGEND:

DESCRIPTION	REF. DWG.	SYMBOL
LOT NUMBERS		(1)
PAD ELEVATION		P=500.0
SUBDIVISION BOUNDARY		
PROPOSED LOT LINE		
PROPOSED CURB LINE		
MSCP LIMIT LINE		
PROPOSED ROAD EASEMENT		
EXISTING FENCE		
EXISTING CONTOUR		1200
PROPOSED CONTOUR		1900
EXISITING FINISH SURFACE ELEVATIONS		FS (100.0)
FINISH SURFACE ELEVATIONS		FS 100.00
FLOW LINE ELEVATION		FL 100.00
TOP OF CURB		TC 100.00
FINISH GRADE ELEVATION		FG 100.00
PROPOSED CUT SLOPE (2:1 MAX.)	CVDS- GR01, GR02	
PROPOSED FILL SLOPE (2:1 MAX.)	CVDS- GR01, GR02	
CUT/FILL LINE		C / F
PROPOSED DAYLIGHT LINE		
PROPOSED GRADE		1.0%
PROPOSED ROCK LINED DRAINAGE DITCH	PER DETAIL SHEET 6	
PROPOSED PCC BROW DITCH	SDRSD D-75	
PROPOSED STORM DRAIN	SDRSD D-60, D-61 (AGGREGATE TO SPRINGLINE)	
PROPOSED TYPE 'F' CATCH BASIN	SDRSD D-7	
PROPOSED TYPE 'B' CURB INLET	SDRSD D-2, D-11, D-12	
PROPOSED TYPE 'B-1' CURB INLET	SDRSD D-2, D-11, D-12	
PROPOSED TYPE 'A' STORM CLEANOUT	SDRSD D-9, D-11	
PROPOSED WING HEADWALL	SDRSD D-34, D-35	
PROPOSED L TYPE HEADWALL	SDRSD D-36	
CONCRETE ANCHOR	SDS-114	
PROPOSED RIP RAP ENERGY DISSIPATOR	SDRSD D-40	
PROPOSED RETAINING WALL	CVCS 30-40	

AS BUILT

_____ DATE _____
SIGNATURE

_____ P.E. No. _____
Printed Name
My Registration Expires_____ Discipline _____

UTILITY NOTE

ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

"ENGINEER OF WORK CERTIFICATE"

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE IMPROVEMENTS SHOWN ON THIS SET OF PLANS (SHEET 1 THROUGH SHEETS 55) HAVE BEEN INSTALLED AND CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE SAID PLANS, ALL APPROPRIATE STANDARDS AND ANY DISCRETIONARY APPROVAL(S) FOR THE PROJECT.

SIGNED: _____ DATE: _____

PRINTED NAME: JOHN A. HAYES P.E. No. 58003

DISCIPLINE: CIVIL ENG. MY REGISTRATION EXPIRES: 6-30-2018

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICE DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By: _____ _____
For the City Engineer Date

TOTAL NUMBER OF SHEETS 58

HALE

6/28/2017

H.E. JOB NO. 12036

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CCV. DWG. NO. 09090 W.O. OR-651-1				
INSPECTOR:	CCV. DWG. NO. 04090 CIP SW-219				
DATE COMPLETED:	CCV. DWG. NO. 04091				
	CCV. DWG. NO. 04098				
	CCV. DWG. NO. 04099				
	CCV. DWG. NO. 02025				

DATUM	SCALE	Designed By:	Drawn By:	Checked By:
CITY OF CHULA VISTA BENCH MARK NO. 6072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841	HORIZONTAL 1"=2000'	JAH	M.E.	JAH
	VERTICAL NO SCALE	Plans Prepared Under Supervision Of: JOHN A. HAYES R.C.E. No. 58003		Date:

Submitted: _____
By: _____
Planning: Landscape:

Approved: _____
By: _____
For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-01
W.O. No. OR-651G

R. TOPOGRAPHICAL SOURCE:

SANLO AERIAL SURVEY DATED MARCH 1997
MISSION AERIAL PHOTO DATED SEPTEMBER 19, 2000 AND NOVEMBER 13, 2000

S. EARTHWORK QUANTITIES:

CUT: 2,163,042 C.Y. FILL: 2,234,950 C.Y.

IMPORT: 71,908 C.Y.

AREA TO BE GRADED: 173.0 ACRES

IMPORT:
GRADING QUANTITIES ARE ESTIMATED FOR BONDING PURPOSES ONLY AND ARE NOT BE USED FOR FINAL PAYMENT QUANTITIES

NOTES:
THE ABOVE QUANTITIES ARE FOR REFERENCE AND BOND PURPOSES ONLY. THESE QUANTITIES DO NOT INCLUDE SHRINKAGE OR BULKING FACTORS. SINCE THE ENGINEER CANNOT CONTROL THE EXACT METHOD OR MEANS USED BY THE CONTRACTOR DURING GRADING OPERATIONS, NOR CAN THE ENGINEER GUARANTEE THE EXACT SOIL CONDITION OVER THE ENTIRE SITE, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FINAL EARTHWORK QUANTITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING HIS OWN EARTHWORK QUANTITIES FOR BIDDING, CONTRACT, AND CONSTRUCTION PURPOSES.

THE AREA THAT CAN BE CLEARED OR GRADED AND LEFT EXPOSED AT ONE TIME IS LIMITED TO 100 ACRES. GRADING SHALL BE PHASED AT LARGER SITES AND IT MAY BE NECESSARY TO DEPLOY EROSION AND SEDIMENT CONTROL BMPS IN AREAS THAT ARE NOT COMPLETED BUT ARE NOT ACTIVELY BEING WORKED BEFORE ADDITIONAL GRADING IS DONE, ALL TO THE SATISFACTION OF THE PUBLIC WORKS INSPECTOR.

T. NOTIFICATIONS:

1. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORD, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN HEREON, HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UNDERGROUND SERVICE ALERT (PHONE 1-800-422-4133) TWO (2) WORKING DAYS IN ADVANCE OF ANY EXCAVATION FOR THE MARK OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.

FOR ANY QUESTIONS REGARDING THE MARK OUT OF UNDERGROUND UTILITIES, THE CONTRACTOR SHOULD CONTACT THE RESPECTIVE UTILITY COMPANY:

STREET LIGHT OR SIGNAL LIGHT CONDUIT CITY OF CHULA VISTA (619) 397-6163
SEWER OR STORM DRAIN CITY OF CHULA VISTA
VERIFICATION (619) 691-5024
NOTIFICATION (619) 397-6000
GAS & ELECTRIC SAN DIEGO GAS & ELECTRIC CO. 1-800-227-2600
(619) 230-7800

WATER OTAY WATER DISTRICT (619) 670-2222
SWEETWATER AUTHORITY (619) 420-1413
TELEPHONE PACIFIC BELL (619) 266-4693
TELEVISION COX CABLE OF SAN DIEGO/CHULA VISTA CABL.E(619) 263-9251
(619) 476-0177
ULTRONICS & WORLDWIDE SATELLITE (619) 422-0776

U. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STATEMENT:

DEVELOPMENT OF THIS PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF STATE WATER RESOURCES CONTROL BOARD (SWRCB) (NPDES GENERAL PERMIT NO. _____ WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY, IN ACCORDANCE WITH SAID PERMIT, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND A MONITORING PROGRAM PLAN SHALL BE DEVELOPED AND IMPLEMENTED CONCURRENT WITH THE COMMENCEMENT OF GRADING ACTIVITIES. THE SWPPP SHALL SPECIFY BOTH CONSTRUCTION AND POST-CONSTRUCTION STRUCTURAL AND NON-STRUCTURAL POLLUTION PREVENTION MEASURES. THE SWPPP SHALL ALSO ADDRESS OPERATION AND MAINTENANCE OF POST-CONSTRUCTION POLLUTION PREVENTIONS MEASURES. INCLUDING SHORT-TERM AND LONG-TERM FUNDING SOURCES AND THE PARTY OR PARTIES THAT WILL BE RESPONSIBLE FOR THE IMPLEMENTATION OF SAID MEASURES.

A COMPLETE AND ACCURATE NOTICE-OF-INTENT (NOI) WILL BE FILLED WITH THE SWRCB. A COPY OF THE ACKNOWLEDGMENT FROM THE SWRCB THAT A NOI HAS BEEN RECEIVED FOR THIS PROJECT SHALL BE FILED WITH THE CITY OF CHULA VISTA WHEN RECEIVED; FURTHER, A COPY OF THE COMPLETED NOI FROM THE SWRCB SHOWING THE PERMIT NUMBER FOR THIS PROJECT BE FILED WITH THE CITY OF CHULA VISTA WHEN RECEIVED.

IN ADDITION, THE UNDERSIGNED AND SUBSEQUENT OWNER(S) OF ANY PORTION OF THE PROPERTY COVERED BY THIS GRADING PERMIT NO. _____ SHALL COMPLY WITH SPECIAL PROVISIONS REGARDING THE REVOCATION OR CANCELLATION OF NPDES GENERAL PERMIT COVERAGE, AS SET FORTH IN SWRCB ORDER NO. CAS000002, AND ANY SUBSEQUENT AMENDMENTS THERETO AND REISSUANCES THEREOF.

OWNER OF LAND:

_____
SIGNATURE OF LAND OWNER, CORPORATE OFFICE, GENERAL PARTNER OR PROPRIETOR:

DATE: _____

V. LANDSCAPE NOTES:

1. ALL SLOPES SHALL BE PLANTED AND IRRIGATED IN ACCORDANCE WITH PLANS APPROVED BY THE CITY OF CHULA VISTA DIRECTOR OF PARKS AND RECREATION AND CITY ENGINEER. PLANS SHALL CONFORM TO THE CITY OF CHULA VISTA LANDSCAPE MANUAL AND ORDINANCE NO. 1797, BOTH AS AMENDED.
2. FINISH GRADING AND PLANTING SHALL BE ACCOMPLISHED ON ALL SLOPES PRIOR TO OCTOBER 1 OR IMMEDIATELY UPON COMPLETION OF ANY SLOPES GRADED BETWEEN OCTOBER 1 AND APRIL 1. PADS OR OTHER RELATIVELY LEVEL AREAS SHALL BE PLANTED AS DIRECTED BY THE CITY'S DIRECTOR OF DEVELOPMENT SERVICES.
3. PRIOR TO GRADING, CONTRACTOR SHALL FIELD VERIFY EXISTING IRRIGATION SYSTEMS TO DETERMINE WHICH ARE OPERABLE. UNLESS OTHERWISE NOTED ON THESE PLANS, ALL EXISTING IRRIGATION SYSTEMS ARE TO BE PROTECTED IN PLACE AND REMAIN OPERABLE. CONTACT THE PLANNING AND BUILDING DEPARTMENT AND/OR OFFICE OF BUILDING AND PARK CONSTRUCTION (LANDSCAPING COORDINATION NAME AND PHONE NO., PER SEC. 5-300).

W. RCP STORM DRAIN BEVELING NOTES:

1. WHERE RADIUS=90 FEET TO 45 FEET, USE 8-FOOT LENGTH OF PIPE BEVELED ONE END.
2. WHERE RADIUS CURVE= 45 FEET TO 22 ½ FEET, USE 8- FOOT LENGTH OF PIPE BEVELED BOTH ENDS.
3. WHERE RADIUS CURVE=22 ½ FEET, USE 4-FOOT LENGTH OF PIPE BEVELED BOTH ENDS.
4. CONTRACTOR SHALL PROVIDE LAYOUT SHEET OF BEVELED PIPE PRIOR TO BEGINNING INSTALLATION.

X. HDPE & HP STORM DRAIN INSTALLATION NOTES:

1. REFERENCE MANUFACTURER INSTALLATION GUIDE AND SPECIFICATIONS FOR MAXIMUM JOINT DEFLECTION.
2. CURVILINER INSTALLATIONS SPECIFIED PER THIS PLAN ARE BASED ON CHAPTER 5 (INSTALLATION) OF THE ADS, INC. DRAINAGE HANDBOOK, AND ASSUME THE USE OF "N-12 WT IP" AND/OR "HP STORM" GASKETED WATERTIGHT COUPLERS, FOR RADII LESS THAN THAT ACHIEVABLE WITH STANDARD JOINT DEFLECTION A SERIES OF PREFABRICATED BENDS SHALL BE UTILIZED.
3. ALL CONCRETE STRUCTURES USED WITH HDPE PIPE MUST BE WATERTIGHT.
4. TRENCH BACKFILL FOR HDPE N-12 PER SDRSD SP-02 WITH FILTER FABRIC FULLY SURROUNDING ROCK ZONE.
5. TRENCH BACKFILL FOR HP PER SDRSD SP-02 WITH ROCK TO PIPE CROWN AND FILTER FABRIC ROCK ZONE.

Y. SPECIAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE QUANTITIES SHOWN HEREON AND BALANCING THE EARTHWORK ONSITE. IF DISCREPANCIES ARISE, THE ENGINEER OF WORK SHALL PROVIDE AREAS OF ADJUSTMENT TO THE CONTRACTOR. WHERE TRENCHES ARE WITHIN EASEMENTS, STREETS, OR 10' OF ANY BUILDING, SOILS REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF WORK BY A QUALIFIED SOILS ENGINEER WHICH INDICATE THAT THE TRENCH BACKFILL WAS COMPACTED UNDER THE OBSERVATION OF THE SOILS ENGINEER AND IN ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE OT INSURE THAT ALL SLOPES ARE BUILT IN ACCORDANCE WITH THESE PLANS. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER AT (858) 715-1420.
3. THE PALEONTOLOGICAL MONITOR SHALL BE PRESENT DURING THE GRAND OF THE PLIOCENE SAN DIEGO FORMATION (TSD) ON THE SITE. THE MONITOR SHALL HAVE THE AUTHORITY TO TEMPORARY DIRECT, DIVERT, OR HALT GRADING TO ALLOW RECOVERY OF FOSSIL REMAINS.
4. THE CONTRACTOR SHALL UNCOVER ALL UTILITIES THAT MAYBE JOINED, CROSSED, OR PARALLELED TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATION PRIOR TO ANY CONSTRUCTION. ANY CONFLICT OR DISCREPANCY SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION, OTHERWISE THE CONTRACTOR ACCEPTS FULL RESPONSIBILITY FOR ANY ADDITIONAL CONSTRUCTION OR RELOCATION COSTS.
5. ALL FILL AREAS, WHICH ARE FENCED, SHALL REMAIN FENCED. TEMPORARY AND/OR FINAL FENCING SHALL BE PROVIDED AS SHOWN ON THE PLANS.
6. ALL APPROVED GEOTEXTILE ENGINEERING FABRIC SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.
7. A 6" MINIMUM THICKNESS BEDDING BLANKET UNDERDRAIN BY A LAYER OF GEOTEXTILE (MIRAFI 700X OR EQUIVALENT) SHALL BE CONSTRUCTED BENEATH ALL RIP RAP. THE BEDDING BLANKET SHALL MEET THE FOLLOWING SPECIFICATIONS:

   a) FRACTION PASSING THE NO. 3/8 IN. STANDARD SIEVE SHALL BE 100% BY WEIGHT.

   b) ANY SOURCE OF ON-SITE MATERIAL DEEMED SUITABLE BY THE SOILS ENGINEER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING, RELOCATING, AND OR REMOVAL OF EXISTING UTILITIES.
9. THE CONTRACTOR SHALL BE REPLACE ALL DESTROYED OR DAMAGED SURFACE IMPROVEMENTS WITH IMPROVEMENTS EQUAL OR SUPERIOR.
10. ALL CONTOURS AND ELEVATIONS SHOW HEREON REPRESENT FINISH GRADE. CONTRACTOR SHALL
11. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS AND THE CITY OF CHULA VISTA.

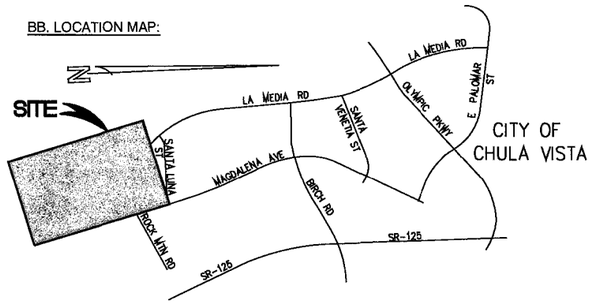
Z. EROSION CONTROL NOTES:

1. THE EROSION CONTROL CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION AND MODIFICATION OF THE EROSION CONTROL DEVICES DURING THE RAINY SEASON. THE CONTRACTOR, PERMITTEE OR OWNER SHALL BE RESPONSIBLE FOR THE CONTINUAL MAINTENANCE OF THE EROSION CONTROL DEVICES DURING THE RAINY SEASON. IN THE EVENT OF FAILURE OR REFUSAL TO PROPERLY MAINTAIN SAID DEVICES, THE CITY ENGINEER OR MITIGATION MONITOR MAY CAUSE EMERGENCY MAINTENANCE WORK TO BE DONE TO PROTECT ADJACENT PRIVATE AND PUBLIC PROPERTY, THE COST (INCLUDING AN INITIAL MOBILIZATION AMOUNT) OF WHICH SHALL BE CHARGED TO THE OWNER.
2. SEDIMENTATION BASINS MAY NOT BE REMOVED OR MADE INOPERATIVE WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND MITIGATION MONITOR.
3. TEMPORARY EROSION CONTROL DEVICES, WHICH INTERFERE WITH THE WORK, SHALL BE RELOCATED OR MODIFIED AS THE WORK PROGRESSES, AS RECOMMENDED BY THE ENGINEER OF WORK AND AS APPROVED BY THE CITY ENGINEER AND MITIGATION MONITOR.
4. ALL REMOVABLE PROTECTION DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT. AFTER EACH RAINSTORM EXCEEDING 1/4 INCH IN A 12-HOUR PERIOD, SILT AND DEBRIS SHALL BE REMOVED FROM CHECK DAMS AND DESILTING BASINS AND BASINS SHALL BE PUMPED DRY AS DEEMED NECESSARY BY THE CITY ENGINEER AND MITIGATION MONITOR.
5. EFFECTIVE PLANTING SHALL BE INSTALLED, FULLY GERMINATED, AND SHALL EFFECTIVELY COVER THE REQUIRED SLOPES PRIOR TO FINAL APPROVAL. THE PLANTING MIX SHALL BE APPROVED, BY THE DIRECTOR OF PARKS AND RECREATION, PRIOR TO INSTALLATION. SPRINKLER SYSTEMS ARE REQUIRED ON ALL SLOPES OVER FIVE FEET IN HEIGHT.
6. A 12 INCH HIGH BY 3 FEET WIDE BERM SHALL BE MAINTAINED ALONG THE TOP OF THE SLOPE OF THOSE FILLS ON WHICH GRADING IS NOT IN PROGRESS, CONCENTRATED WATER SHALL NOT BE CARRIED CLOSER THAN 10 FEET FROM THE TOP OF SLOPES.
7. SILT BASINS, TRAPS,, OR SANDBAGS SHALL BE PROVIDED AT EVERY STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM.
8. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPE, THE CONTRACTOR SHALL INSURE THAT WATER DRAINING TO THE SUMPS IS DIRECTED INTO THE INLET, AND THAT A MINIMUM OF 1.00' FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. SANDBAGS OR DIKES.
9. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY.
10. THE CONTRACTOR SHALL CHECK AND MAINTAIN LINED AND UNLINED DITCHES AFTER EACH RAINFALL.

AA. MITIGATION MONITORING AND REPORTING PROGRAM NOTES:

SEE SHEETS 54 AND 55 FOR PROJECT MITIGATION MEASURES.

BB. LOCATION MAP:



CC. KEY MAP:

SEE SHEETS 3 AND 4 FOR PROJECT KEY MAP.

PAVEMENT NOTES:

THE OFFICE OF THE CITY ENGINEER SHALL DESIGN ALL STRUCTURAL STREET SECTIONS BASED ON THE "R" VALUE METHOD SPECIFIED BY THE CITY ENGINEER. THE SOIL TEST SHALL BE PERFORMED BY A REGISTERED CIVIL ENGINEER WHOSE PRIMARY PROFESSIONAL ACTIVITY IS PERFORMING SUCH TESTS. TEST RESULTS SHALL BE PROVIDED TO THE CITY BY THE SUBDIVIDER IN THE NUMBER AND AT SUCH LOCATIONS AND TIMES AS DETERMINED BY THE CITY ENGINEER. WHERE HEAVY GRADING IS PROPOSED, GATHERING OF SAMPLES SHALL BE DELAYED UNTIL ROUGH SUBGRADE IS MADE. MINIMUM BASE THICKNESS ON ALL STREET CLASSIFICATIONS SHALL BE PER SECTION 3-405.3 OF THE SUBDIVISION MANUAL. BASE MATERIAL SHALL CONFORM TO CRUSHED AGGREGATE BASE, 3/4 INCH MAXIMUM, OR APPROVED ALTERNATIVE AS SET FORTH IN THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 200-2.2 LATEST EDITION. ALL ASPHALT CONCRETE SURFACES SHALL BE SEAL COATED IN ACCORDANCE WITH SECTION 302-5.10 OF THE CITY OF CHULA VISTA STANDARD SPECIAL PROVISIONS.

(FOR ALLEYS AND ALLEY APPROACHES ONLY) WHERE R VALUE TESTS ARE NOT PROVIDED OR RESULTS ARE NOT ADEQUATE FOR 5.5-INCH (14 CM) THICK CONCRETE, ALLEYS AND ALLEY TYPE DRIVEWAY APPROACHES SHALL BE CONSTRUCTED OF 6-INCH (20 CM) THICK CONCRETE REINFORCED WITH 6-INCH BY 6-INCH (15CM X 15 CM) 4/4 WOVEN WIRE MESH OR EQUIVALENT.

INSTALL 30 AMP CIRCUIT BREAKER FOR UNMETERED SAFETY LIGHTING.

BLASTING NOTES

IN THE EVENT THAT BLASTING WITH EXPLOSIVES SHOULD BE NECESSARY FOR GRADING, THE APPLICANT SHALL OBTAIN WRITTEN PERMISSION FROM THE FIRE CHIEF BEFORE BLASTING CAN OCCUR. ALL BLASTING APPROVED BY THE FIRE CHIEF, IF NECESSARY, SHALL BE CONDUCTED BETWEEN 9:00 A.M. AND 3:00 P.M. MONDAY THROUGH FRIDAY. A BLASTING PLAN FOR CONSTRUCTION MUST BE PREPARED AND FOLLOWED THAT INCLUDES THE FOLLOWING:

1. THE BLASTING PLAN MUST MEET THE APPROVAL OF THE CITY OF CHULA VISTA FIRE DEPARTMENT. THEY HAVE JURISDICTION OVER BLASTING WITHIN CITY LIMITS.
2. PRIMARY COMPONENTS OF THE BLASTING PLAN SHALL INCLUDE:

   A. IDENTIFICATION OF BLAST OFFICER;

   B. SCALED DRAWINGS OF BLAST LOCATIONS, AND NEIGHBORING BUILDINGS, STREETS, OR OTHER LOCATIONS WHICH COULD BE INHABITED;

   C. BLASTING NOTIFICATION PROCEDURES, LEAD TIMES, AND LIST OF THOSE NOTIFIED. PUBLIC NOTIFICATION TO POTENTIALLY AFFECTED VIBRATION RECEPTORS DESCRIBING THE EXPECTED EXTENT AND DURATION OF THE BLASTING;

   D. DESCRIPTION OF MEANS FOR TRANSPORTATION AND ON-SITE STORAGE AND SECURITY OF EXPLOSIVES IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS; E. MINIMUM ACCEPTABLE WEATHER CONDITIONS FOR BLASTING AND SAFETY

   F. TRAFFIC CONTROL STANDARDS AND TRAFFIC SAFETY MEASURES (IF APPLICABLE);

   G. REQUIRE PERSONAL PROTECTIVE EQUIPMENT;

   H. MINIMUM STANDOFF DISTANCES AND DESCRIPTION OF BLAST IMPACT ZONES AND PROCEDURES FOR CLEARING AND CONTROLLING ACCESS TO BLAST DANGER;

   I. PROCEDURES FOR HANDLING, SETTING, WIRING, AND FIRING EXPLOSIVES. ALSO PROCEDURES FOR HANDLING MISFIRES PER FEDERAL CODE;

   J. TYPE AND QUANTITY OF EXPLOSIVES AND DESCRIPTION OF DETONATION DEVICE. SEQUENCE AND SCHEDULE OF BLASTING ROUNDS, INCLUDING GENERAL METHOD OF EXCAVATION; LIFT HEIGHTS, ETC.;

   K. METHODS OF MATTING OR COVERING OF BLAST AREA TO PREVENT FLYROCK AND EXCESSIVE AIR BLAST PRESSURE,

   L. DESCRIPTION OF BLAST VIBRATION AND AIR BLAST MONITORING PROGRAM

   M. DUST CONTROL MEASURES IN COMPLIANCE WITH APPLICABLE AIR POLLUTION CONTROL REGULATIONS (TO INTERFACE WITH GENERAL CONSTRUCTION DUST CONTROL PLAN);

   N. EMERGENCY ACTION PLAN TO PROVIDE EMERGENCY TELEPHONE NUMBERS AND DIRECTIONS TO MEDICAL FACILITIES. PROCEDURES FOR ACTION IN THE EVENT OF INJURY;

   O. MATERIAL SAFETY DATA SHEETS FOR EACH EXPLOSIVE OR OTHER HAZARDOUS MATERIALS TO BE USED;

   P. EVIDENCE OF LICENSING, EXPERIENCE, AND QUALIFICATIONS OF BLASTERS; AND

   Q. DESCRIPTION OF INSURANCE FOR THE BLASTING WORK.
3. A BLAST SURVEY WORK PLAN SHALL BE PREPARED BY THE BLASTER. THE PLAN SHALL ESTABLISH VIBRATION LIMITS IN ORDER TO PROTECT STRUCTURES FROM BLASTING ACTIVITIES AND IDENTIFY SPECIFIC MONITORING POINTS. AT A MINIMUM, A PRE-BLAST SURVEY SHALL BE CONDUCTED OF ANY POTENTIALLY AFFECTED STRUCTURES AND UNDERGROUND UTILITIES WITHIN 500 FEET OF A BLAST AREA, AS WELL AS THE NEAREST COMMERCIAL OR RESIDENTIAL STRUCTURE, PRIOR TO BLASTING.
4. THE SURVEY SHALL INCLUDE VISUAL INSPECTION OF THE STRUCTURES, DOCUMENTATION OF STRUCTURES BY MEANS OF PHOTOGRAPHS, VIDEO, AND A LEVEL SURVEY OF THE GROUND FLOOR OF STRUCTURES OR THE CROWN OF MAJOR AND CRITICAL UTILITY LINES, AND THESE SHALL BE SUBMITTED TO THE CITY. THIS DOCUMENTATION SHALL BE REVIEWED WITH THE INDIVIDUAL OWNERS PRIOR TO ANY BLASTING OPERATIONS. THE CITY AND IMPACTED PROPERTY OWNERS WILL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE VISUAL INSPECTIONS.
5. VIBRATION AND SETTLETMENT THRESHOLD CRITERIA (FOR EXAMPLE PEAK PARTICLE VELOCITY OF 0.5 INCHES PER SECOND) SHALL BE SUBMITTED BY THE BLASTER TO THE CITY FOR REVIEW AND APPROVAL DURING THE DESIGN PROCESS. IF THE SETTLEMENT OR VIBRATION CRITERIA ARE EXCEEDED AT ANY TIME OR IF DAMAGE IS OBSERVED AT ANY OF THE STRUCTURES OR UTILITIES, THEN BLASTING SHALL IMMEDIATELY CEASE AND THE CITY IMMEDIATELY NOTIFIED. THE STABILITY OF SEGMENTAL RETAINING WALLS, EXISTING SLOPES, CREEK, CANALS, ETC. SHALL BE MONITOREDAND ANY EVIDENCE OF INSTABILITY DUE TO BLASTING OPERATIONS SHALL RESULT IN IMMEDIATE TERMINATION OF BLASTING. THE BLASTER SHALL MODIFY THE BLASTING PROCEDURES OR USE ALTERNATIVE MEANS OF EXCAVATING IN ORDER TO REDUCE THE VIBRATIONS TO BELOW THE THRESHOLD VALUES, PREVENT FURTHER SETTLEMENT, SLOPE INSTABILITY, AND PREVENT FURTHER DAMAGE.
6. AIR BLAST OVERPRESSURE LIMITS AND MONITORING SHALL BE CONDUCTED AT THE PROPERTY LINE CLOSEST TO THE BLAST AND AT OTHER ABOVE GROUND STRUCTURES IDENTIFIED IN THE PLAN FOR VIBRATION MONITORING. AIR BLAST OVERPRESSURE LIMITS SHALL BE IN ACCORDANCE WITH APPLICABLE LAW AND SHALL BE ESTABLISHED TO PREVENT DAMAGE TO ADJACENT PROPERTIES, NEW CONSTRUCTION, AND TO PREVENT INJURIES TO PERSONS ON-SITE AND OFF-SITE.
7. PRIOR TO FULL-SCALE PRODUCTION BLASTING, THE BLASTER SHALL CONDUCT A SERIES OF TEST BLASTS AT THE SITES WHERE BLASTING IS TO OCCUR. THE TESTS SHALL START WITH REDUCED CHARGE WEIGHTS AND SHALL INCREASE INCREMENTALLY TO THAT OF A FULL-SCALE PRODUCTION ROUND, MONITORING SHALL BE CONDUCTED AS DESCRIBED IN THE PLAN.
8. POST-CONSTRUCTION MONITORING OF STRUCTURES TO IDENTIFY (AND REPAIR IF NECESSARY) ALL DAMAGE, IF ANY, FROM BLASTING VIBRATIONS. ANY DAMAGE SHALL DOCUMENT BY PHOTOGRAPH, VIDEO, ETC. THIS DOCUMENTATION SHALL BE REVIEW WITH THE INDIVIDUAL PROPERTY OWNERS.
9. REPORTS OF THE RESULTS OF THE BLAST MONITORING SHALL BE PROVIDED TO THE CITY, AND THE CITY OF CHULA VISTA COUNTY FIRE DEPARTMENT, AND OWNERS OF ANY BURIED UTILITIES ON OR ADJACENT TO THE SITE WITHIN 24 HOURS FOLLOWING BLASTING. REPORTS DOCUMENTING DAMAGE, EXCESSIVE VIBRATIONS, ETC. SHALL BE PROVIDED TO THE CITY AND IMPACTED PROPERTY OWNERS. ROCK CRUSHING OPERATIONS SHOULD BE KEPT AT LEAST 100 FEET FROM THE MSCP BOUNDARY.
10. PROJECT SHALL BE IN COMPLIANCE WITH CHAPTER 58 OF THE CALIFORNIA FIRE CODE.

LOT GRADING CONDITION CUT, FILL, TRANSITION	
MAP NO XXXX	
LOT NO.	CONDITION
1	FILL
2	TRANSITION
3	TRANSITION
4	FILL
5	TRANSITION
6	CUT
7	TRANSITION
8	CUT
9	TRANSITION
11	TRANSITION
12	TRANSITION
13	FILL
14	TRANSITION
A	TRANSITION

LOT GRADING CONDITION CUT, FILL, TRANSITION	
MAP NO. XXXX	
LOT NO.	CONDITION
1	FILL
2	FILL
3	TRANSITION
4	CUT
5	CUT
6	CUT
7	CUT
8	CUT
9	CUT
10	CUT
11	CUT
12	CUT
13	CUT
14	CUT
15	CUT
16	CUT
17	CUT
18	CUT
19	CUT
20	CUT
21	CUT
22	CUT
23	CUT
24	CUT
25	CUT
26	TRANSITION
27	FILL
28	FILL
29	TRANSITION
30	TRANSITION
31	TRANSITION
32	TRANSITION
33	CUT
34	CUT
35	CUT
36	CUT
37	CUT
38	CUT
39	CUT
40	TRANSITION
41	TRANSITION
42	TRANSITION
43	TRANSITION
44	TRANSITION
45	FILL
46	FILL
47	FILL
48	FILL
49	TRANSITION
50	CUT
51	CUT
52	CUT
53	CUT
54	CUT
55	CUT
56	TRANSITION
57	TRANSITION
58	TRANSITION

LOT GRADING CONDITION CUT, FILL, TRANSITION	
MAP NO. XXXX	
LOT NO.	CONDITION
59	TRANSITION
60	TRANSITION
61	TRANSITION
62	TRANSITION
63	CUT
64	CUT
65	CUT
66	CUT
67	CUT
68	TRANSITION
69	TRANSITION
70	TRANSITION
71	TRANSITION
72	CUT
73	CUT
74	CUT
75	CUT
76	CUT
77	CUT
78	CUT
79	CUT
80	CUT
81	CUT
82	CUT
83	CUT
84	CUT
85	CUT
86	CUT
87	CUT
88	CUT
89	TRANSITION
90	TRANSITION
91	TRANSITION
92	TRANSITION
93	TRANSITION
94	FILL
95	FILL
96	FILL
97	FILL
98	FILL
99	FILL
100	FILL
101	FILL
102	TRANSITION
103	TRANSITION
104	CUT
105	CUT
106	CUT
107	CUT
108	CUT
109	CUT
110	CUT
111	CUT
112	CUT
113	CUT
114	CUT
115	CUT
116	CUT
117	CUT

AS BUILT

_____ DATE _____
SIGNATURE

_____ P.E. No. _____
Printed Name
My Registration Expires_____ Discipline_____

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CCV. DWG NO. 09040 WO OR-651-1				
INSPECTOR:	CCV. DWG NO. 09017 CP SW-219				
DATE COMPLETED:	CCV. DWG NO. 04091				
	CCV. DWG NO. 04092				
	CCV. DWG NO. 04078				
	CCV. DWG NO. 04026				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE	Designed By:	Drawn By:	Checked By:
HORIZONTAL	JAH	MJL	JAH
NO SCALE	Plans Prepared Under Supervision Of:		Date:
VERTICAL	JOHN A. HAYES	R.C.E. No. 58003	
NO SCALE			

Submitted: _____
By: _____
Planning: Landscape:

Approved: _____
By: _____
For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-02
W.O. No. OR-651G

HALE
H.E. JOB NO. 12036
6/26/2017

SEE SHEET 4

KEY MAP

SCALE 1" =200'

LEGEND

DESCRIPTION	SYMBOL
SHEET NUMBER	1
SHEET OUTLINE	
PROPOSED LOT NUMBER MAP NO XXXX	1
PROPOSED PARK LOT NUMBER MAP NO XXXX	A
TM 09-04 LOT PER FUTURE PHASE GRADING	LOT X
SUBDIVISION BOUNDARY	
LIMITS OF PHASE 1 GRADING	
PROPOSED RIGHT OF WAY	
PROPOSED LOT LINE	
FUTURE LOT LINE/RIGHT OF WAY PER TM 09-04	
MSCP LIMIT LINE	
PROPOSED CURB LINE	
CITY OF SAN DIEGO WATER LINE	
EXISTING WATER LINE	
PROP. TEMPORARY FENCE	

200 0 200 400 600

SCALE 1" = 200'

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICE DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By: _____ For the City Engineer _____ Date

AS BUILT

_____ SIGNATURE DATE _____

_____ Printed Name P.E. No. _____

My Registration Expires_____ Discipline_____

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CITY OF CHULA VISTA W.O. OR-651-1				
INSPECTOR:	CITY OF SAN DIEGO OP SM-219				
DATE COMPLETED:	CITY OF SAN DIEGO 04080				
	CITY OF SAN DIEGO 04081				
	CITY OF SAN DIEGO 04058				
	CITY OF SAN DIEGO 04059				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE	Designed By:	Drawn By:	Checked By:
HORIZONTAL 1"=200'	JAH	MJL	JAH
VERTICAL NO SCALE	Plans Prepared Under Supervision Of: JOHN A. HAYES	Date:	R.C.E. No. 58003

Submitted: _____ By: _____ Planning: _____ Landscape: _____

Approved: _____ By: _____ For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

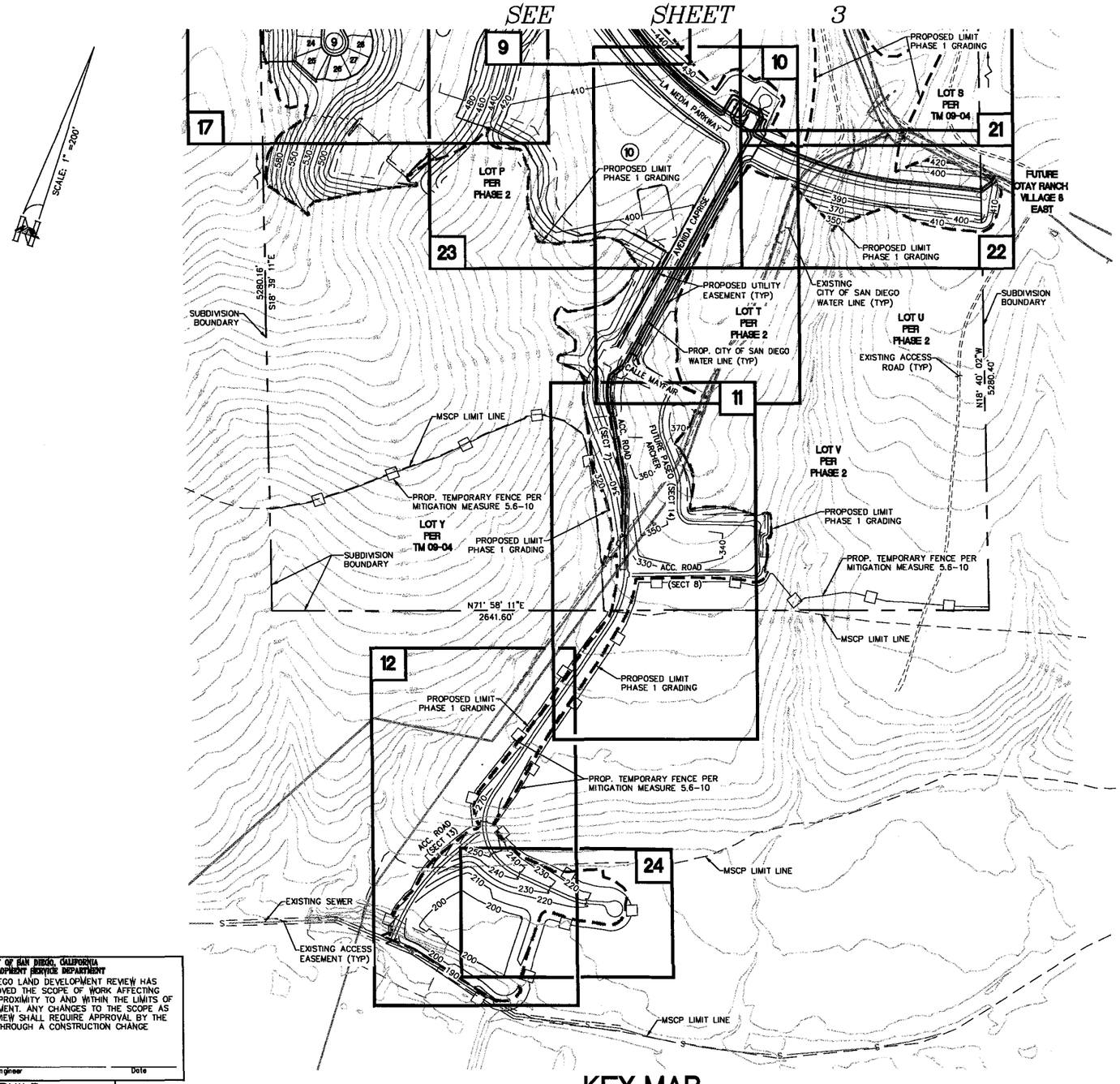
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-03

W.O. No. OR-651G

H.E. JOB NO. 12036

6/29/2017



KEY MAP

SCALE 1" =200'

LEGEND

DESCRIPTION	SYMBOL
SHEET NUMBER	1
SHEET OUTLINE	
PROPOSED LOT NUMBER MAP NO XXXX	(1)
PROPOSED LOT NUMBER MAP NO XXXX	1
TM 09-04 LOT PER FUTURE PHASE GRADING	LOT X
SUBDIVISION BOUNDARY	
LIMITS OF PHASE 1 GRADING	
PROPOSED RIGHT OF WAY	
PROPOSED LOT LINE	
FUTURE LOT LINE/RIGHT OF WAY PER TM 09-04	
MSCP LIMIT LINE	
PROPOSED CURB LINE	
CITY OF SAN DIEFO WATER LINE	
EXISTING WATER LINE	
PROP. TEMPORARY FENCE PER MITIGATION MEASURE 5.6-10	

NOTE

PER MITIGATION MEASURE 5.6-10, A TEMPORARY FENCE SHALL BE ERECTED ALONG AREAS ADJACENT TO THE PRESERVE AND FOR ALL OFF-SITE FACILITIES CONSTRUCTED WITHIN THE PRESERVE.

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By: _____ Date _____
For the City Engineer

AS BUILT

SIGNATURE _____ DATE _____

Printed Name _____ P.E. No. _____

My Registration Expires _____ Discipline _____

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CCV, DWG, NO. 05040 W.O. OR-551-1				
INSPECTOR:	CCV, DWG, NO. 05017 CIP SW-219				
DATE COMPLETED:	CCV, DWG, NO. 04980				
	CCV, DWG, NO. 04981				
	CCV, DWG, NO. 04988				
	CCV, DWG, NO. 04978				
	CCV, DWG, NO. 04982				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE: HORIZONTAL 1"=200' VERTICAL NO SCALE

Designed By: JAH | Drawn By: MJL | Checked By: JAH

Plans Prepared Under Supervision Of: JOHN A. HAYES Date: _____ R.C.E. No. 58003

Submitted: _____ By: _____ Planning: _____ Landscape: _____

Approved: _____ By: _____ For the City Engineer

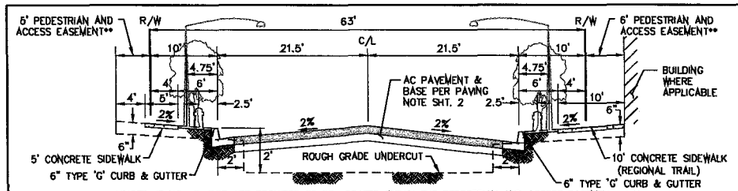
200 0 200 400 600
SCALE 1" = 200'

HALE

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-04
W.O. No. OR-551G

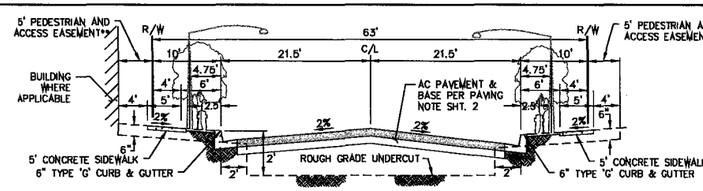
H.E. JOB NO. 12036 6/26/2017



**NOTE: IF NO UTILITIES ARE REQUIRED TO BE LOCATED WITHIN THE PEDESTRIAN AND ACCESS EASEMENT, THE PEDESTRIAN AND ACCESS EASEMENT WILL BE REDUCED TO THE BACK OF SIDEWALK.

1 TYPICAL SECTION - ONE WAY LA MEDIA COUPLET SOUTH

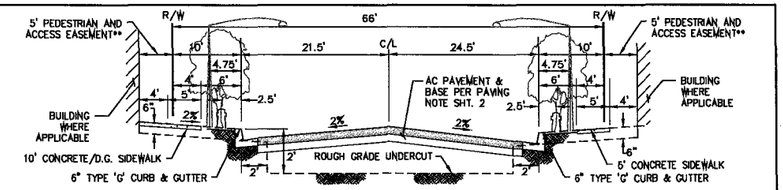
S.B. 143+50 - 152+00
NO SCALE



**NOTE: IF NO UTILITIES ARE REQUIRED TO BE LOCATED WITHIN THE PEDESTRIAN AND ACCESS EASEMENT, THE PEDESTRIAN AND ACCESS EASEMENT WILL BE REDUCED TO THE BACK OF SIDEWALK.

2 TYPICAL SECTION - ONE WAY LA MEDIA COUPLET NORTH

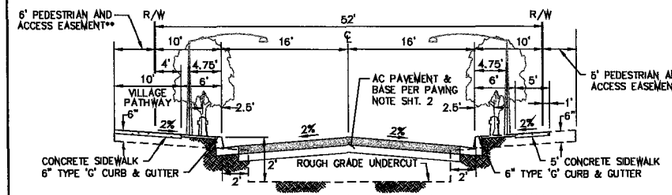
N.B. 13+50 - 27+50
NO SCALE



**NOTE: IF NO UTILITIES ARE REQUIRED TO BE LOCATED WITHIN THE PEDESTRIAN AND ACCESS EASEMENT, THE PEDESTRIAN AND ACCESS EASEMENT WILL BE REDUCED TO THE BACK OF SIDEWALK.

3 TYPICAL SECTION - ONE WAY MAIN COUPLET WEST AND LA MEDIA COUPLET SOUTH

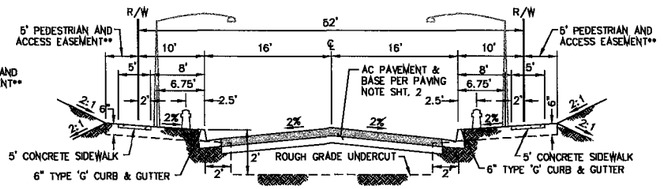
W.B. 12+50 - 36+50, S.B. 136+00 - 143+50
NO SCALE



**NOTE: IF NO UTILITIES ARE REQUIRED TO BE LOCATED WITHIN THE PEDESTRIAN AND ACCESS EASEMENT, THE PEDESTRIAN AND ACCESS EASEMENT WILL BE REDUCED TO THE BACK OF SIDEWALK.

4 TYPICAL SECTION - STREET A - SLY

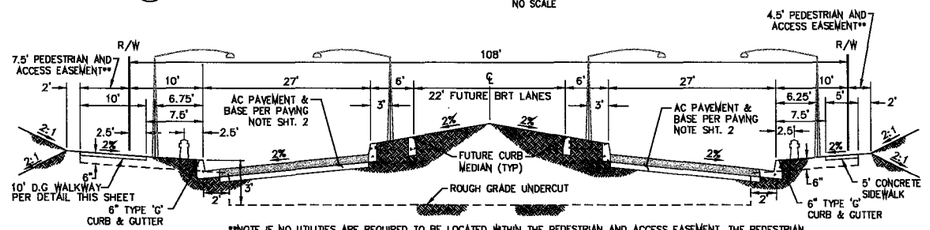
BETWEEN EAST AND WEST BOUND MAIN
NO SCALE



**NOTE: IF NO UTILITIES ARE REQUIRED TO BE LOCATED WITHIN THE PEDESTRIAN AND ACCESS EASEMENT, THE PEDESTRIAN AND ACCESS EASEMENT WILL BE REDUCED TO THE BACK OF SIDEWALK.

5 TYPICAL SECTION - PARKWAY RESIDENTIAL

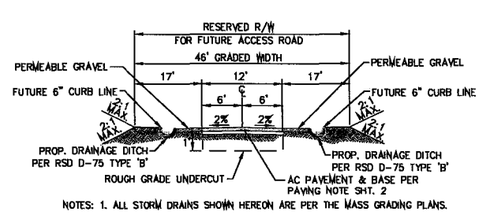
NO SCALE



**NOTE IF NO UTILITIES ARE REQUIRED TO BE LOCATED WITHIN THE PEDESTRIAN AND ACCESS EASEMENT, THE PEDESTRIAN AND ACCESS EASEMENT WILL BE REDUCED TO THE BACK OF SIDEWALK/ D.G. WALKWAY.
CVGT (CHULA VISTA GREENBELT TRAIL) WEST OF STREET 'A'

6 TYPICAL SECTION - LA MEDIA ROAD LOOKING WEST

NO SCALE

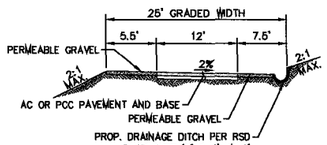


NOTES: 1. ALL STORM DRAINS SHOWN HEREON ARE PER THE MASS GRADING PLANS.

2. SERVICE ROAD SERVES AS BOTH A UTILITY ACCESS ROAD AND A MULTI-PURPOSE TRAIL EASEMENT.

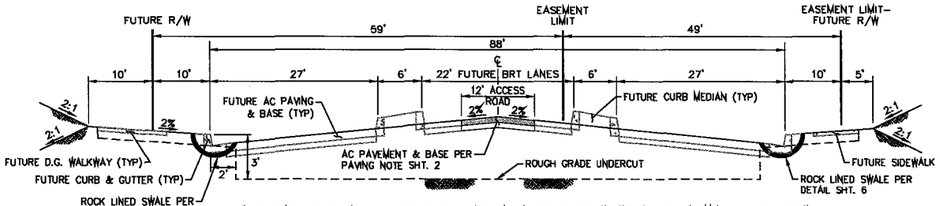
7 ROAD / MULTI RECREATIONAL TRAIL UTILITY ACCESS

NO SCALE



8 UTILITY ACCESS ROAD

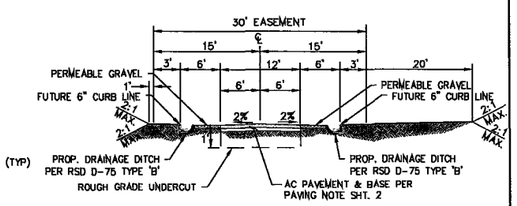
NO SCALE



**NOTE IF NO UTILITIES ARE REQUIRED TO BE LOCATED WITHIN THE PEDESTRIAN AND ACCESS EASEMENT, THE PEDESTRIAN AND ACCESS EASEMENT WILL BE REDUCED TO THE BACK OF SIDEWALK/ D.G. WALKWAY.
CVGT (CHULA VISTA GREENBELT TRAIL) EAST OF STREET 'A'

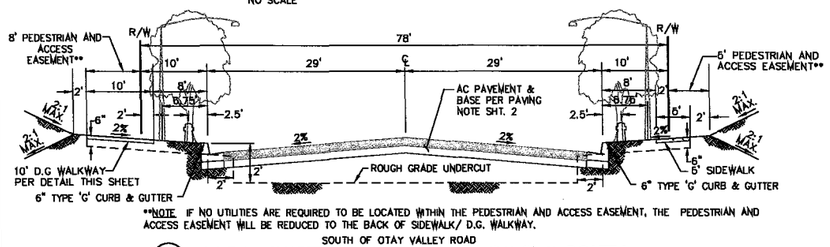
9 TYPICAL SECTION - LA MEDIA ROAD LOOKING WEST

NO SCALE



10 ACCESS ROAD / MULTI RECREATIONAL TRAIL 30' EASEMENT AND UTILITY

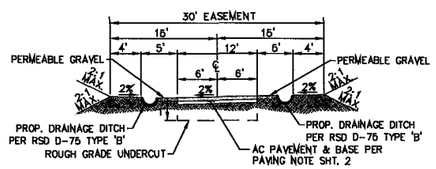
NO SCALE



**NOTE IF NO UTILITIES ARE REQUIRED TO BE LOCATED WITHIN THE PEDESTRIAN AND ACCESS EASEMENT, THE PEDESTRIAN AND ACCESS EASEMENT WILL BE REDUCED TO THE BACK OF SIDEWALK/ D.G. WALKWAY.
SOUTH OF OTAY VALLEY ROAD

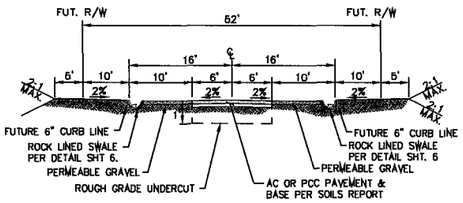
11 TYPICAL SECTION - STREET 'A' LOOKING SOUTH

NO SCALE



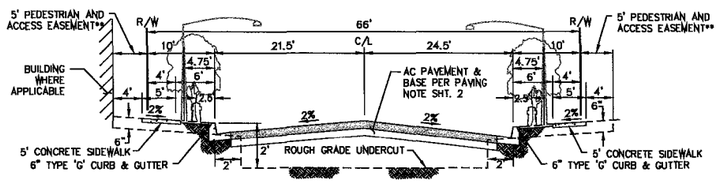
12 ACCESS ROAD / MULTI RECREATIONAL TRAIL

NO SCALE



13 ACCESS ROAD / FUTURE STREETS 'E' + 'L'

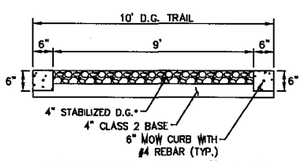
NO SCALE



**NOTE: IF NO UTILITIES ARE REQUIRED TO BE LOCATED WITHIN THE PEDESTRIAN AND ACCESS EASEMENT, THE PEDESTRIAN AND ACCESS EASEMENT WILL BE REDUCED TO THE BACK OF SIDEWALK.

14 TYPICAL SECTION - ONE WAY MAIN COUPLET EAST

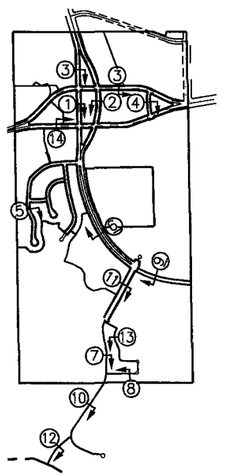
E.B. 17+50 - 38+50
NO SCALE



* STABILIZED D.G. SHALL BE PSYLLIUM HUSK BINDER FOR GRADES 0% TO 5% AND FOR GRADES OVER 5% USE WAX BINDER OR EQUAL.

D.G. TRAIL DETAIL

NO SCALE



KEY MAP

NO SCALE

AS BUILT

SIGNATURE _____ DATE _____

Printed Name _____ P.E. No. _____

My Registration Expires _____ Discipline _____

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CITY DWG. NO. 09089 W.O. OR-651-1				
INSPECTOR:	CITY DWG. NO. 09217 DEP SM-219				
DATE COMPLETED:	CITY DWG. NO. 04080				
	CITY DWG. NO. 04081				
	CITY DWG. NO. 04082				
	CITY DWG. NO. 04083				
	CITY DWG. NO. 04084				
	CITY DWG. NO. 04085				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

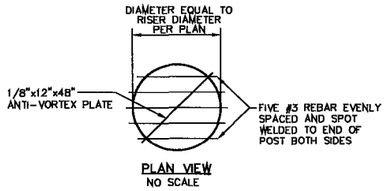
SCALE	Designed By:	Drawn By:	Checked By:
HORIZONTAL: NO SCALE	JAH	MJL	JAH
VERTICAL: NO SCALE	Plans Prepared Under Supervision Of: JOHN A. HAYES	Date:	R.C.E. No. 58003

Submitted: _____ By: _____ Planning: _____ Landscape: _____

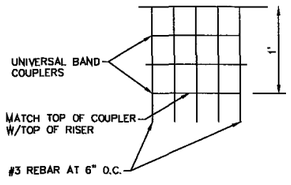
Approved: _____ By: _____ For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-05
W.O. No. OR-651G
H.E. JOB NO. 12036
6/26/2017



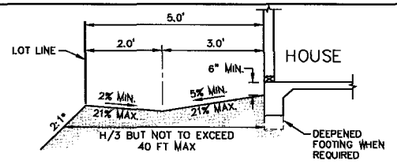
PLAN VIEW
NO SCALE



PROFILE VIEW
NO SCALE

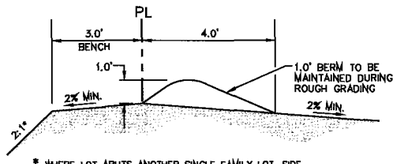
NOTE
CMP RISER SHALL BE HOT-DIPPED FULLY COATED GALVANIZED 12 GAUGE 2-2/3" x1/2"CORRUGATIONS. TRASH RACK CAGE SHALL BE HOT-DIPPED GALVANIZED

TRASH RACK
NO SCALE



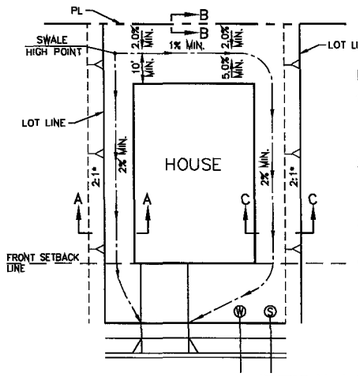
* SIDE SLOPE RATIO VARIES. 4' AND UNDER ARE 1.5:1 AND OVER 4' ARE 2:1.

SECTION A-A
NO SCALE



* WHERE LOT ABUTS ANOTHER SINGLE FAMILY LOT, SIDE SLOPE RATIOS OF 4' AND UNDER ARE 1.5:1 AND OVER 4' ARE 2:1.

SECTION B-B
NO SCALE

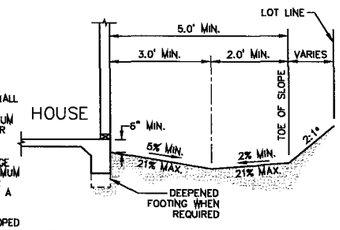


NOTES:

1. 1803 UBC GRADING WAIVER. (LOTS SHALL DRAIN MIN. 6" @ 10' (5%) FROM THE BUILDING FINISH FLOOR AND 1% MINIMUM TOWARDS THE FRONT OF THE LOT PER CITY STANDARD).
2. WHERE 10' IS NOT POSSIBLE, DRAINAGE FROM THE BUILDING SHALL BE A MINIMUM OF 5% TO A SWALE DIVERTING WATER TOWARDS THE FRONT OF THE LOT AT A MINIMUM GRADE OF 2%.
3. IMPERVIOUS SURFACES SHALL BE SLOPED A MINIMUM OF 2% AWAY FROM THE BUILDING.

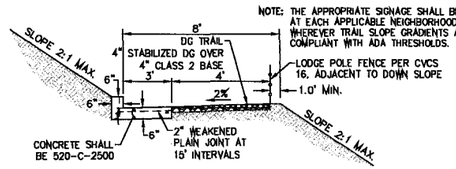
* SIDE SLOPE RATIO VARIES. 4' AND UNDER ARE 1.5:1 AND OVER 4' ARE 2:1.

TYPICAL LOT DRAINAGE - PLAN
NO SCALE

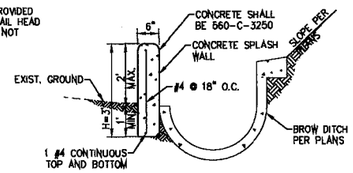


* SIDE SLOPE RATIO VARIES. 4' AND UNDER ARE 1.5:1 AND OVER 4' ARE 2:1.

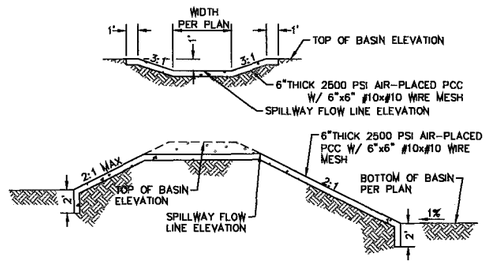
SECTION C-C
NO SCALE



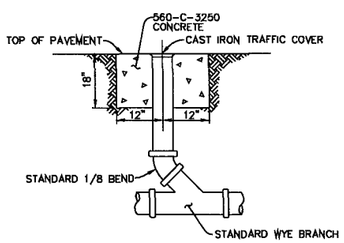
PEDESTRIAN TRAIL DETAIL
NO SCALE



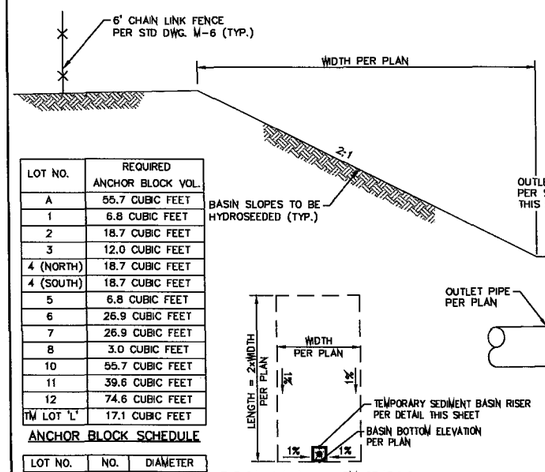
SPLASH WALL DETAIL
NO SCALE



TEMPORARY SEDIMENT BASIN SPILLWAY
NO SCALE



STORM DRAIN CLEANOUT DETAIL
NO SCALE



LOT NO.	REQUIRED ANCHOR BLOCK VOL.
A	55.7 CUBIC FEET
1	6.8 CUBIC FEET
2	18.7 CUBIC FEET
3	12.0 CUBIC FEET
4 (NORTH)	18.7 CUBIC FEET
4 (SOUTH)	18.7 CUBIC FEET
5	6.8 CUBIC FEET
6	26.9 CUBIC FEET
7	26.9 CUBIC FEET
8	3.0 CUBIC FEET
10	55.7 CUBIC FEET
11	39.6 CUBIC FEET
12	74.6 CUBIC FEET
TM LOT 'L'	17.1 CUBIC FEET

ANCHOR BLOCK SCHEDULE

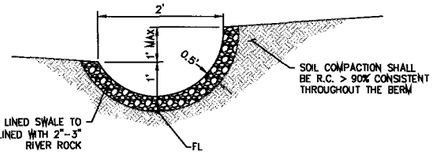
LOT NO.	NO.	DIAMETER
A	10	4.25 INCH
1	5	2.0 INCH
2	4	4.0 INCH
3	2	4.0 INCH
4 (NORTH)	4	3.5 INCH
4 (SOUTH)	6	3.0 INCH
5	2	3.0 INCH
6	5	4.0 INCH
7	6	3.5 INCH
8	2	2.0 INCH
10	6	5.5 INCH
11	8	4.0 INCH
12	10	5.5 INCH
TM LOT 'L'	4	4.0 INCH

OUTLET ORIFICE SCHEDULE

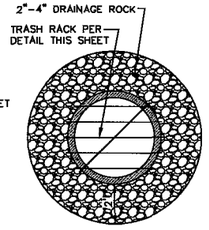
TYPICAL BASIN BOTTOM GRADING

MAINTENANCE
SEDIMENT SHALL BE REMOVED WHENEVER STORAGE CAPACITY AT THE PAINT STRIPE HAS BEEN ACHIEVED. SEDIMENT SHALL BE DISPOSED OF SUCH THAT IT WILL RETURN TO NEITHER THE BASIN NOR DOWNSTREAM AREAS DURING SUBSEQUENT RAIN EVENTS. THE TEMPORARY SEDIMENT BASINS ARE PRIVATE FACILITIES; THE CITY SHALL NOT BE HELD RESPONSIBLE FOR NECESSARY MAINTENANCE.

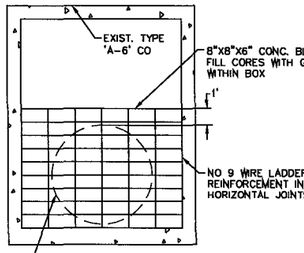
TEMPORARY SEDIMENT BASIN
NO SCALE



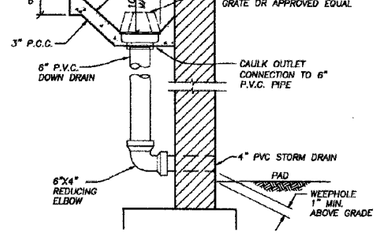
ROCK LINED SWALE DETAIL
NO SCALE



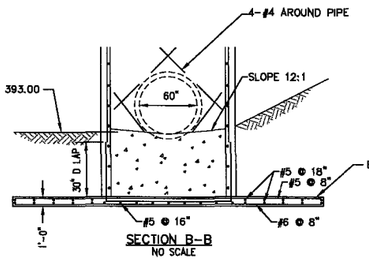
TEMPORARY SEDIMENT BASIN RISER
NO SCALE



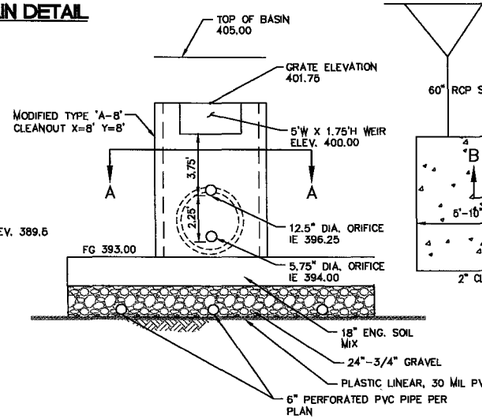
STORM DRAIN PLUG
NO SCALE



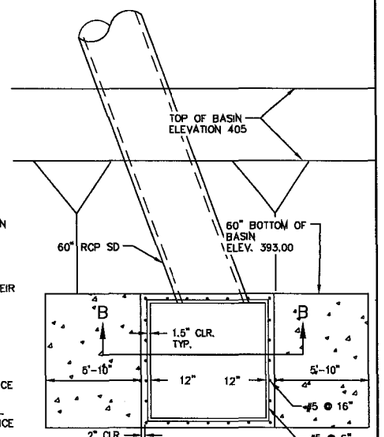
RETAINING WALL DOWN DRAIN DETAIL
NO SCALE



SECTION B-B
NO SCALE



DETENTION BASIN RISER
NO SCALE



SECTION A-A
NO SCALE

AS BUILT

SIGNATURE DATE

Printed Name P.E. No.

My Registration Expires Discipline

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CITY OF CHULA VISTA STD. DWG. NO. M-861-1 OF SH-219				
INSPECTOR:	CITY OF CHULA VISTA STD. DWG. NO. M-6				
DATE COMPLETED:	CITY OF CHULA VISTA STD. DWG. NO. M-8				
	CITY OF CHULA VISTA STD. DWG. NO. M-8				
	CITY OF CHULA VISTA STD. DWG. NO. M-8				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL. INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE	Designed By:	Drawn By:	Checked By:
HORIZONTAL	JAH	MJL	JAH
NO SCALE	Plans Prepared Under Supervision Of:	Date:	
VERTICAL	JOHN A. HAYES	R.C.E. No. 58003	
NO SCALE			

Submitted: By: Planning: Landscape:

Approved: By: For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-06

W.O. No. OR-651C

H.E. JOB NO. 12036

6/26/2017

HALE

SEE SHEET 18

SEE SHEET 19

NOTE:
FINAL GRADING FOR MIXED-USE, MULTI-FAMILY AND PARK LOTS WILL BE PROVIDED AT THE FINAL SITE DESIGN/PRECISE GRADING PLAN LEVEL. FINAL DESIGN AND LOCATION OF PEDESTRIAN AND DRIVEWAY ACCESS IS SUBJECT TO REVIEW OF DISCRETIONARY PERMITS SUCH AS THE MASTER PRECISE PLAN IN THE TOWN CENTER, AND DESIGN REVIEW PERMITS.

SEE LETTER OF PERMISSION TO GRADE OFFSITE
FROM_____
DATE_____
BY_____

EXIST. SANTA LUNA STREET DWG NO 05041

SUBDIVISION BOUNDARY

PROPOSED LIMIT PHASE 1 GRADING

PORTION OF EXISTING STORM DRAIN TO BE ABANDONED AND 2 SACK CEMENT/SAND SLURRED

EXIST HEAD WALL AND PORTION OF STORM DRAIN TO BE REMOVED

EXIST 15' SD EASEMENT

EXIST SD PLUG TO BE REMOVED

EXIST BROW DITCH & RIP-RAP TO BE REMOVED

EXIST 60" RCP SD

EXIST. MOD TYPE 'A-7' CO (X=6') PER DWG NO. 05017

EXIST TYPE 'B' BROW DITCH

LA MEDIA PARKWAY

LOT 12
FL 489.9

LOT 11

LOT 1

LOT A

TYPE 'B' BROW DITCH D=1', W=2'

PROPOSED CANYON SUB-DRAIN PER GEOTECHNICAL PLANS (TYP)

BASIN 11
42" CMP RISER
BOT. LENGHT=254'
BOT. WIDTH=127'
BOT. ELEV.=456.8

BASIN 1
18" CMP RISER
BOT. LENGHT=48'
BOT. WIDTH=24'
BOT. ELEV.=448.3

BASIN 4 NORTH
30" CMP RISER
BOT. LENGHT=86'
BOT. WIDTH=43'
BOT. ELEV.=468.5

EMERGENCY SPILLWAY W=15', D=1.0' PER DETAIL SHT. 6

EMERGENCY SPILLWAY W=3.0', D=1.0' PER DETAIL SHT. 6

13+91.32 LA MEDIA PARKWAY N.B.
TYPE 'A-4' CO

13+90.48 LA MEDIA PARKWAY N.B.
TYPE 'A-4' CO

15+83.65 LA MEDIA PARKWAY N.B.
TYPE 'B-2' CURB INLET L=11'

15+83.66 LA MEDIA PARKWAY N.B.
TYPE 'A-4' CO

15+83.66 LA MEDIA PARKWAY N.B.
TYPE 'B-1' CURB INLET L=6'

18+73.63 LA MEDIA PARKWAY N.B. = 24+79.43 MAIN WEST
TYPE 'A-5' CO

25+80.54 MAIN WEST
TYPE 'A-5' CO

25+63.95 MAIN WEST
TYPE 'B-1' CURB INLET L=13'

25+63.95 MAIN WEST
TYPE 'A-5' CO

22+81.53 MAIN WEST
TYPE 'A-5' CO

22+81.53 MAIN WEST
TYPE 'B-1' CURB INLET L=10'

22+99.14 MAIN WEST
TYPE 'A-5' CO

142+78.61LA MEDIA PARKWAY S.B.
TYPE 'B-1' CURB INLET L=7'

142+66.61 LA MEDIA PARKWAY S.B.
TYPE 'A-7' CO

142+78.61 LA MEDIA PARKWAY S.B.
TYPE 'A-7' CO

142+78.61 LA MEDIA PARKWAY S.B.
TYPE 'B-2' CURB INLET L=11'

139+49.79 LA MEDIA COUP. S
TYPE 'A-7' CO

136+60.68 LA MEDIA COUP. S
TYPE 'A-6' CO

135+08.18 LA MEDIA COUP. S = 131+46.70 EXIST. LA MEDIA RD
TYPE 'A-6' CO. REMOVE END CAP & CONNECT TO EXIST. 60" SD PER C.V. DWG. NO 05017

143+70.87 LA MEDIA PARKWAY S.B.
22+14.62 MAIN WEST
MOD TYPE 'A-8' CO
X=8', Y=7'

21+57.30 MAIN WEST
TYPE 'A-8' CO

S D LINE 'A-1' SEE SHEET 45 FOR PROFILE
S D LINE 'A-2' SEE SHEET 45 FOR PROFILE
S D LINE 'A-3' SEE SHEET 46 FOR PROFILE
S D LINE 'A-4' SEE SHEET 45 FOR PROFILE
S D LINE 'A-5' SEE SHEET 45 FOR PROFILE
S D LINE 'A-6' SEE SHEET 45 FOR PROFILE
S D LINE 'A-7' SEE SHEET 45 FOR PROFILE
S D LINE 'A-8' SEE SHEET 45 FOR PROFILE
S D LINE 'B-1' SEE SHEET 46 FOR PROFILE
S D LINE 'B-2' SEE SHEET 46 FOR PROFILE
S D LINE 'B-3' SEE SHEET 46 FOR PROFILE
S D LINE 'B-4' SEE SHEET 46 FOR PROFILE
S D LINE 'B-5' SEE SHEET 46 FOR PROFILE
S D LINE 'B-6' SEE SHEET 46 FOR PROFILE
S D LINE 'B-7' SEE SHEET 46 FOR PROFILE
S D LINE 'B-16' SEE SHEET 51 FOR PROFILE
S D LINE 'B-17' SEE SHEET 51 FOR PROFILE
S D LINE 'B-18' SEE SHEET 51 FOR PROFILE
S D LINE 'OFF-SITE' SEE SHEET 48 FOR PROFILE

CITY OF SAN DIEGO WATER LINES PER CITY OF SAN DIEGO IMPROVEMENT PLAN 37708-D

PROPOSED CANYON SUBDRAIN PER GEOTECHNICAL PLANS (TYP)

CONNECT TO EXIST. BROW DITCH

SCALE: 1" =40'

SEE SHEET 13

SEE SHEET 14

SEE SHEET 8

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	15° 59' 33"	526.00'	146.82'	60" RCP*	SHT. 48
C2	29° 08' 04"	156.00'	79.32'	36" RCP*	SHT. 45
L1	S34° 40' 03"E	--	148.50'	60" RCP*	SHT. 48
L2	S18° 40' 39"E	--	141.78'	60" RCP*	SHT. 48
L3	S42° 11' 26"W	--	12.22'	36" RCP*	SHT. 45
L4	S42° 12' 51"W	--	51.27'	24" RCP*	SHT. 45
L5	S71° 16' 53"W	--	13.86'	36" RCP*	SHT. 45
L6	S52° 44' 45"E	--	3.17'	18" RCP*	SHT. 45
L7	N50° 09' 51"E	--	11.67'	18" RCP	SHT. 45

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C3	7° 16' 45"	481.00'	61.11'	18" RCP*	SHT. 45
C4	5° 42' 45"	1240.50'	123.68'	18" RCP*	SHT. 45
L8	N50° 09' 28"E	--	27.67'	18" RCP	SHT. 45
L9	S18° 40' 34"E	--	312.82'	66" RCP*	SHT. 45
L10	N71° 18' 52"E	--	56.71'	18" RCP*	SHT. 45
L11	S18° 40' 30"E	--	8.00'	66" RCP*	SHT. 45
L12	N71° 15' 33"E	--	9.17'	18" RCP	SHT. 45
L13	N71° 18' 18"E	--	30.17'	18" RCP	SHT. 45
L14	S18° 40' 30"E	--	86.26'	66" RCP*	SHT. 45

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
L15	S18° 40' 30"E	--	61.43'	24" RCP*	SHT. 45
L16	N71° 19' 30"E	--	28.67'	18" RCP	SHT. 45
L17	N71° 19' 30"E	--	10.67'	18" RCP	SHT. 45
L18	S71° 04' 37"W	--	61.41'	42" RCP*	SHT. 46
L19	S18° 03' 36"E	--	29.67'	18" RCP*	SHT. 46
L20	S18° 03' 36"E	--	11.67'	18" RCP*	SHT. 46
L21	S71° 56' 24"W	--	13.62'	42" RCP*	SHT. 46
L22	S18° 03' 36"E	--	64.04'	18" RCP*	SHT. 51
L23	S71° 56' 24"W	--	176.29'	42" RCP*	SHT. 46

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C5	6° 53' 27"	520.02'	62.54'	72" RCP	SHT. 46
L24	S71° 56' 24"W	--	80.52'	42" RCP*	SHT. 46
L25	S18° 03' 36"E	--	18.67'	18" RCP	SHT. 46
L26	S18° 03' 36"E	--	11.67'	18" RCP	SHT. 46
L27	S71° 56' 24"W	--	12.59'	42" RCP*	SHT. 46
L28	S18° 03' 36"E	--	90.05'	18" RCP	SHT. 51
L29	S24° 33' 06"E	--	57.25'	24" RCP	SHT. 46
L30	S71° 56' 26"W	--	51.83'	72" RCP*	SHT. 46
L31	S42° 11' 26"W	--	23.00'	24" RCP	SHT. 45

* WATER TIGHT JOINTS TO BE USED

40 0 40 80 120
SCALE 1" = 40'

NOTE:
- STORM DRAIN LINES 'A-1', 'A-2', 'A-6', 'A-7' & 'A-8' STATION IS FROM LA MEDIA PARKWAY SOUTH ONE WAY.
- STORM DRAIN LINES 'A-3', 'A-5', 'B-6' & 'B-7' STATION IS FROM LA MEDIA PARKWAY NORTH ONE WAY.
- STORM DRAIN LINES 'B-1' THROUGH 'B-4', 'B-16' & 'B-17' STATION IS FROM MAIN WEST ONE WAY.
- STORM DRAIN LINE 'A-4' STATION IS FROM LA MEDIA PARKWAY NORTH & SOUTH ONE WAY.

STORM DRAIN NOTE:
THE RADIUS OF PIPES IN CURVES SHALL BE BASED ON STANDARD OF SINGLE BEVEL OR DOUBLE BEVEL PIPE WITHOUT BREAKING JOINTS AND SHALL COMPLY WITH CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL, TABLE 1-1103.7A.

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICE DEPARTMENT
"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By:_____ Date
For the City Engineer

AS BUILT
SIGNATURE DATE
P.E. No.
Printed Name
My Registration Expires Discipline

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CCSV DWG NO 05040 W.O. OR-651-1				
INSPECTOR:	CCSV DWG NO 05017 OF SR-219				
DATE COMPLETED:	CCSV DWG NO 04091				
	CCSV DWG NO 04092				
	CCSV DWG NO 04093				
	CCSV DWG NO 04095				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88
DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE	
HORIZONTAL	1"=40'
VERTICAL	NO SCALE

Designed By: JAH | Drawn By: MJL | Checked By: JAH
Plans Prepared Under Supervision Of: JOHN A. HAYES Date: R.C.E. No. 58003

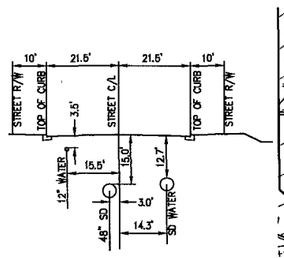
Submitted: By: Planning: Landscape:

Approved: By: For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-07
W.O. No. OR-651G

H.E. JOB NO. 12036 6/26/2017



SECTION A–A
1"=20'

NOTES:

-STORM DRAIN LINES 'C-1', 'C-3' THRU 'C-6', 'C-16', 'C-20' & 'C-21' STATIONING CORRESPONDS TO MAIN COUPLET EAST ONE WAY.

-STORM DRAIN LINES 'A-6', 'C-2' & 'C-7 STATIONING CORRESPONDS TO LA MEDIA COUPLET SOUTH ONE WAY.

-STORM DRAIN LINES 'B-7', 'C-11' & 'C-12' STATIONING CORRESPONDS TO LA MEDIA COUPLET NORTH ONE WAY.

-FINAL GRADING FOR MIXED-USE, MULTI-FAMILY AND PARK LOTS WILL BE PROVIDED AT THE FINAL SITE DESIGN/PRECISE GRADING PLAN LEVEL. FINAL DESIGN AND LOCATION OF PEDESTRIAN AND DRIVEWAY ACCESS IS SUBJECT TO REVIEW OF DISCRETIONARY PERMITS SUCH AS THE MASTER PRECISE PLAN IN THE TOWN CENTER, AND DESIGN REVIEW PERMITS.

STORM DRAIN NOTE:

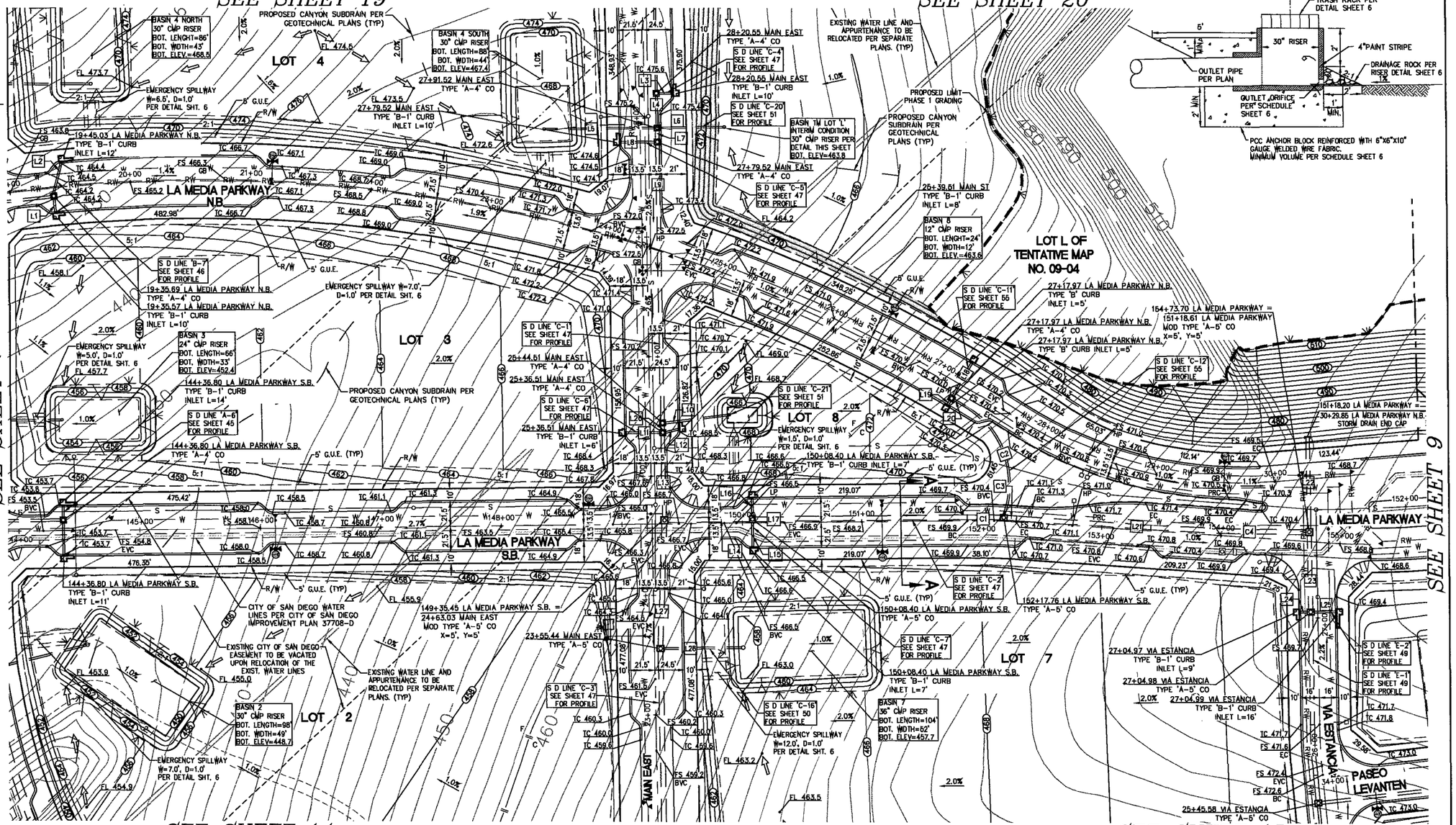
THE RADIUS OF PIPES IN CURVES SHALL BE BASED ON STANDARD OR SINGLE BEVEL OR DOUBLE BEVEL PIPE WITHOUT BREAKING JOINTS AND SHALL COMPLY WITH CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL, TABLE 1-1103.7A.

SEE SHEET 19

SEE SHEET 20

SEE SHEET 7

SEE SHEET 9



SEE SHEET 14

SEE SHEET 15

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
L1	N67° 01' 41"E	--	12.69'	18" RCP	SHT. 46
L2	N86° 03' 12"E	--	28.28'	18" RCP	SHT. 46
L3	S18° 40' 30"E	--	12.43'	18" RCP	SHT. 47
L4	S71° 19' 30"W	--	25.03'	18" RCP	SHT. 47
L5	S18° 40' 30"E	--	91.83'	18" RCP	SHT. 51
L6	S18° 40' 30"E	--	53.56'	18" RCP	SHT. 51
L7	S71° 19' 30"W	--	8.00'	36" RCP	SHT. 47
L8	S18° 40' 30"E	--	29.92'	18" RCP	SHT. 47
L9	S71° 19' 30"W	--	231.01'	36" RCP	SHT. 47

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	3° 09' 17"	511.50'	28.16'	48" RCP*	SHT. 47
L10	S25° 07' 31"E	--	54.09'	18" RCP	SHT. 51
L11	S18° 40' 30"E	--	29.92'	18" RCP	SHT. 47
L12	S32° 15' 17"E	--	12.78'	18" RCP	SHT. 47
L13	S71° 19' 30"W	--	68.99'	36" RCP*	SHT. 47
L14	N18° 40' 30"W	--	68.45'	48" RCP*	SHT. 47
L15	S71° 19' 30"W	--	22.17'	18" RCP	SHT. 47
L16	S71° 19' 30"W	--	16.17'	18" RCP	SHT. 47
L17	N18° 40' 30"W	--	177.37'	48" RCP*	SHT. 47

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C2	80° 36' 00"	75.00'	105.51'	18" RCP*	SHT. 48
C3	0° 58' 26"	1769.00'	8.69'	48" RCP*	SHT. 47
C4	4° 12' 58"	1769.00'	130.17'	48" RCP*	SHT. 47
L18	S77° 47' 41"E	--	33.72'	18" RCP	SHT. 48
L19	S77° 46' 33"E	--	5.62'	18" RCP	SHT. 48
L20	S12° 11' 56"W	--	10.02'	18" RCP	SHT. 48
L21	N14° 05' 54"W	--	112.76'	48" RCP*	SHT. 47
L22	N71° 19' 30"E	--	77.95'	36" RCP*	SHT. 49
L23	N71° 24' 53"E	--	62.44'	42" RCP*	SHT. 49

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
L24	S18° 36' 45"E	--	7.67'	18" RCP*	SHT. 49
L25	S18° 35' 23"E	--	19.67'	18" RCP*	SHT. 49
L26	S71° 19' 30"W	--	4.00'	36" RCP	SHT. 47
L27	S74° 14' 26"W	--	103.22'	48" RCP*	SHT. 47
L28	S18° 36' 02"E	--	66.00'	18" RCP*	SHT. 50

* WATER TIGHT JOINTS TO BE USED

SCALE: 1" =40'

40 0 40 80 120

SCALE 1" = 40'

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By: _____ Date _____
For the City Engineer

AS BUILT

_____ DATE _____
SIGNATURE

_____ P.E. No. _____
Printed Name

My Registration Expires _____ Discipline _____

CONSTRUCTION RECORD	REFERENCES
CONTRACTOR:	CITY DWG. NO. DRAWN WITH OR-661-1
INSPECTOR:	CITY DWG. NO. 09017 OR SM-219
DATE COMPLETED:	CITY DWG. NO. 04061
	CITY DWG. NO. 04062
	CITY DWG. NO. 04098
	CITY DWG. NO. 02025

By	REVISIONS	Date	App'd

DATUM
CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88
DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE
HORIZONTAL
1"=40'
VERTICAL
NO SCALE

Designed By:	Drawn By:	Checked By:
JAH	MJL	JAH

Plans Prepared Under Supervision Of: JOHN A. HAYES Date: _____ R.C.E. No. 58003

Submitted: _____ By: _____
Planning: Landscape:

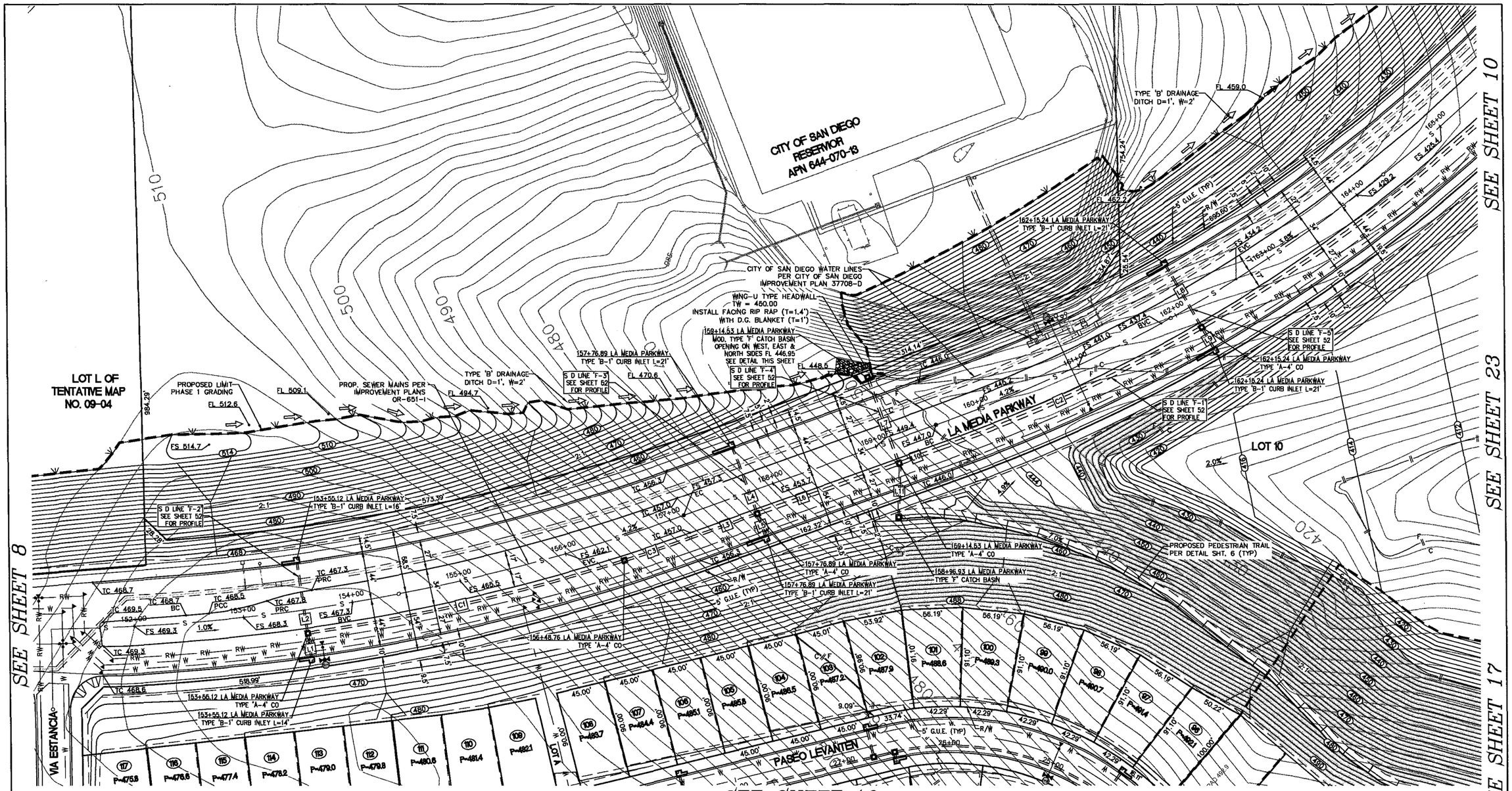
Approved: _____ By: _____
For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-08
W.O. No. OR-661G
H.E. JOB NO. 12036
6/26/2017

HALE



CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By: _____ Date _____
For the City Engineer

AS BUILT

SIGNATURE _____ DATE _____

Printed Name _____ P.E. No. _____

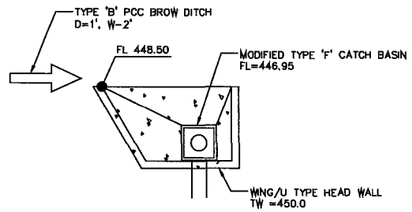
M/y Registration Expires _____ Discipline _____

STORM DRAIN DATA (1500-D)

	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	9° 29' 04"	1771.50'	293.24'	24" RCP	SHT. 52
C2	10° 04' 06"	1471.50'	258.58'	36" RCP	SHT. 52
L1	N63° 50' 30"E	--	20.67'	18" RCP	SHT. 52
L2	N63° 51' 16"E	--	63.67'	18" RCP	SHT. 52
L3	S37° 51' 51"E	--	61.65'	24" RCP	SHT. 52
L4	N52° 08' 09"E	--	63.67'	18" RCP	SHT. 52
L5	N52° 08' 09"E	--	20.67'	18" RCP	SHT. 52

STORM DRAIN DATA (1500-D)

	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C3	2° 02' 49"	1771.50'	63.28'	24" RCP	SHT. 52
L6	S37° 51' 51"E	--	133.64'	36" RCP	SHT. 52
L7	N52° 08' 09"E	--	79.69'	24" RCP	SHT. 52
L8	N41° 59' 22"E	--	63.67'	18" RCP	SHT. 52
L9	N41° 59' 22"E	--	20.67'	18" RCP	SHT. 52
L10	S37° 51' 51"E	--	41.94'	36" RCP	SHT. 52
L11	N73° 41' 20"E	--	45.93'	18" RCP	SHT. 52



TYPE 'F' CATCH BASIN DETAIL
NOT TO SCALE

SCALE: 1" =40'

40 0 40 80 120
SCALE 1" = 40'

6/28/2017

CONSTRUCTION RECORD	REFERENCES
CONTRACTOR:	CITY DWG. NO. 37708-D (W.O. OR-651-1 CITY DWG. NO. 27017-D OF SM-219
INSPECTOR:	CITY DWG. NO. 04060
DATE COMPLETED:	CITY DWG. NO. 04061
	CITY DWG. NO. 04068
	CITY DWG. NO. 04078
	CITY DWG. NO. 02026

By	REVISIONS	Date	App'd

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 6072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE	Designed By:	Drawn By:	Checked By:
HORIZONTAL 1"=40'	JAH	MJL	JAH
VERTICAL NO SCALE	Plans Prepared Under Supervision Of: JOHN A. HAYES	Date:	R.C.E. No. 58003

Submitted: _____ By: _____ Planning: _____ Landscape: _____

Approved: _____ By: _____ For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-09
W.O. No. OR-651G

H.E. JOB NO. 12036

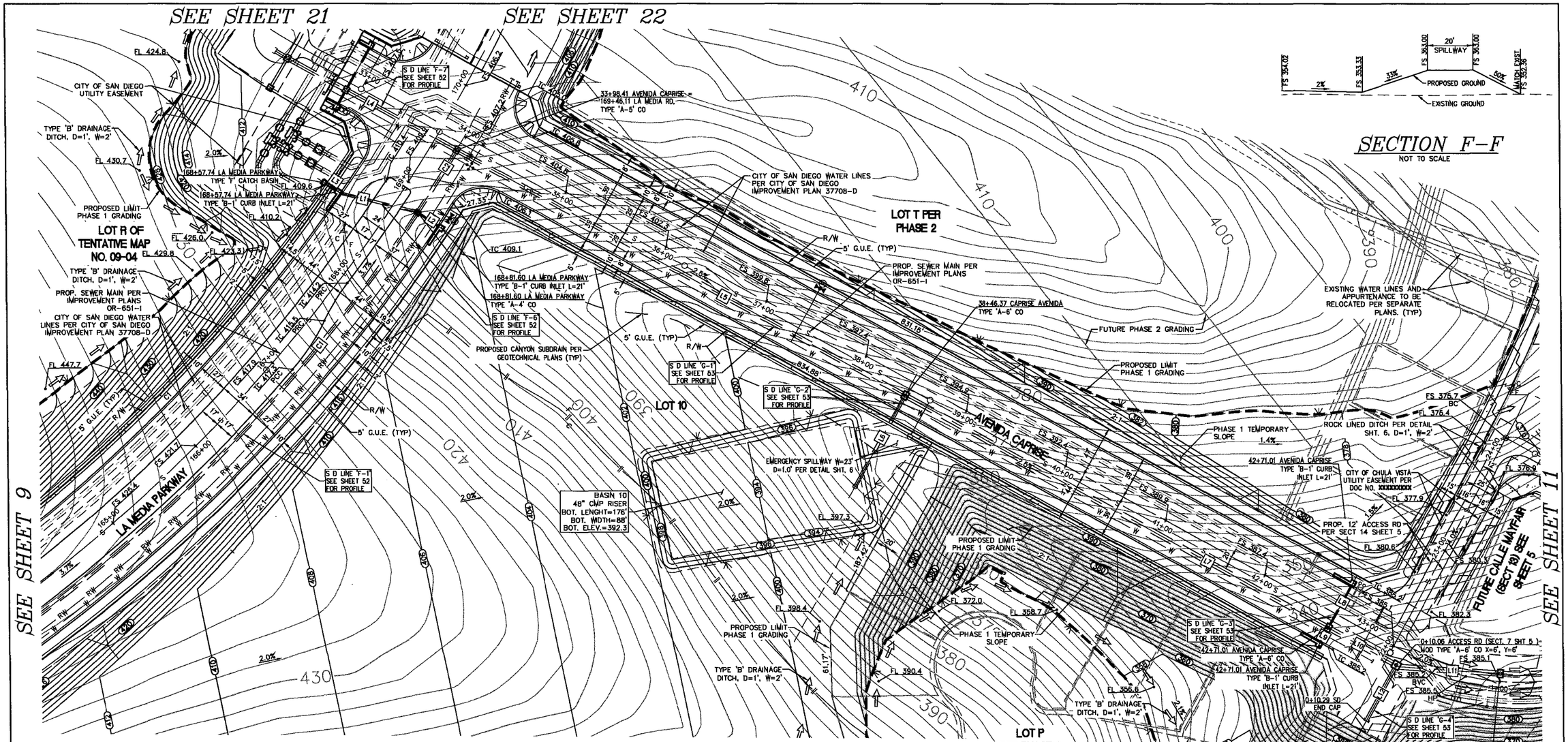
SEE SHEET 9

SEE SHEET 21

SEE SHEET 22

SEE SHEET 11

SEE SHEET 23



NOTE:
FINAL GRADING FOR MIXED-USE, MULTI-FAMILY AND PARK LOTS WILL BE PROVIDED AT THE FINAL SITE DESIGN/PRECISE GRADING PLAN LEVEL. FINAL DESIGN AND LOCATION OF PEDESTRIAN AND DRIVEWAY ACCESS IS SUBJECT TO REVIEW OF DISCRETIONARY PERMITS SUCH AS THE MASTER PRECISE PLAN IN THE TOWN CENTER, AND DESIGN REVIEW PERMITS.

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICE DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By:_____ _____
For the City Engineer — Date

AS BUILT

_____ DATE _____
SIGNATURE

_____ P.E. No. _____
Printed Name

My Registration Expires_____ Discipline_____

SCALE: 1" = 40'

40 0 40 80 120
SCALE 1" = 40'

STORM DRAIN DATA (1500-D)

	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	26° 10' 29"	1471.50'	672.23'	36" RCP*	SHT. 52
C2	2° 22' 26"	1471.50'	60.97'	36" RCP*	SHT. 52
L1	N4° 15' 04"W	--	67.92'	24" RCP	SHT. 52
L2	N16° 39' 32"E	--	20.67'	18" RCP	SHT. 52
L3	N16° 35' 06"E	--	10.75'	24" RCP	SHT. 52
L4	N10° 56' 24"E	--	106.64'	48" RCP	SHT. 52
L5	S10° 55' 59"W	--	443.96'	48" RCP	SHT. 53

STORM DRAIN DATA (1500-D)

	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
L6	S79° 03' 36"E	--	89.13'	30" RCP	SHT. 53
L7	S10° 56' 24"W	--	420.64'	54" RCP*	SHT. 53
L8	S79° 03' 36"E	--	40.17'	18" RCP	SHT. 53
L9	S79° 03' 36"E	--	12.17'	18" RCP	SHT. 53
L10	S10° 56' 24"W	--	63.31'	54" RCP*	SHT. 53
L11	S14° 09' 37"E	--	87.86'	54" RCP	SHT. 53
L12	S79° 18' 02"E	--	53.04'	36" RCP	SHT. 53

* WATER TIGHT JOINTS TO BE USED

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CITY DWG NO. 26060 NO. OR-651-1				
INSPECTOR:	CITY DWG NO. 26077 DP SW-219				
DATE COMPLETED:	CITY DWG NO. 04060				
	CITY DWG NO. 04061				
	CITY DWG NO. 04068				
	CITY DWG NO. 04069				
	CITY DWG NO. 04025				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE: HORIZONTAL 1"=40' VERTICAL NO SCALE

Designed By: JAH | Drawn By: MJL | Checked By: JAH

Plans Prepared Under Supervision Of: JOHN A. HAYES R.C.E. No. 58003 Date:

Submitted: _____ By: _____ For the City Engineer

Planning: Landscape:

Approved: _____ By: _____ For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-10
W.O. No. OR-651G

H.E. JOB NO. 12036
6/28/2017

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	12° 31' 44"	193.00'	42.20'	54" RCP	SHT. 53
C2	9° 44' 43"	207.00'	35.21'	54" RCP	SHT. 53
C3	2° 22' 31"	422.00'	17.50'	54" RCP	SHT. 53
C4	35° 21' 56"	360.00'	222.21'	54" RCP	SHT. 54
L1	S27° 04' 19"E	--	305.69'	54" RCP	SHT. 53
L2	S16° 13' 10"E	--	264.21'	54" RCP	SHT. 53
L3	N73° 46' 50"E	--	2.17'	18" RCP	SHT. 55
L4	N73° 46' 50"E	--	16.17'	18" RCP	SHT. 55
L5	S16° 13' 10"E	--	10.02'	54" RCP	SHT. 53
L6	N71° 14' 38"E	--	233.46'	48" RCP	SHT. 54
L7	N71° 14' 38"E	--	232.95'	48" RCP	SHT. 54
L8	S16° 26' 21"W	--	124.30'	54" RCP	SHT. 54
L9	S16° 44' 58"W	--	135.79'	54" RCP	SHT. 54
L10	N17° 04' 24"W	--	187.71'	48" RCP	SHT. 54
L11	N73° 00' 06"E	--	8.00'	48" RCP	SHT. 54
L12	N72° 57' 51"E	--	27.61'	30" RCP	SHT. 54
L13	S17° 03' 24"E	--	24.17'	18" RCP	SHT. 54
L14	S16° 53' 56"E	--	4.17'	18" RCP	SHT. 54
L15	N72° 59' 10"E	--	8.00'	24" RCP	SHT. 54

STORM DRAIN NOTE:

THE RADIUS OF PIPES IN CURVES SHALL BE BASED ON STANDARD OR SINGLE BEVEL OR DOUBLE BEVEL PIPE WITHOUT BREAKING JOINTS AND SHALL COMPLY WITH CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL, TABLE 1-1103.7A.

SEE SHEET 10

SEE SHEET 12

AS BUILT

SIGNATURE DATE

Printed Name P.E. No.

My Registration Expires Discipline

SCALE: 1" =40'

40 0 40 80 120

SCALE 1" = 40'

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd	DATUM	SCALE
CONTRACTOR:	CCSV DWG No. 00000 MAP OR-651-1					CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841	HORIZONTAL 1"=40'
INSPECTOR:	CCSV DWG No. 00017 OF SM-219						VERTICAL NO SCALE
DATE COMPLETED:	CCSV DWG No. 04090						
	CCSV DWG No. 04091						
	CCSV DWG No. 04068						
	CCSV DWG No. 04078						
	CCSV DWG No. 03025						

Designed By:	Drawn By:	Checked By:
JAH	WJL	JAH

Plans Prepared Under Supervision Of: Date:

JOHN A. HAYES R.C.E. No. 58003

Submitted: By: Planning: Landscape:

Approved: By: For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

MASS GRADING PLANS FOR

CHULA VISTA TRACT NO. 09-04 PHASE 1

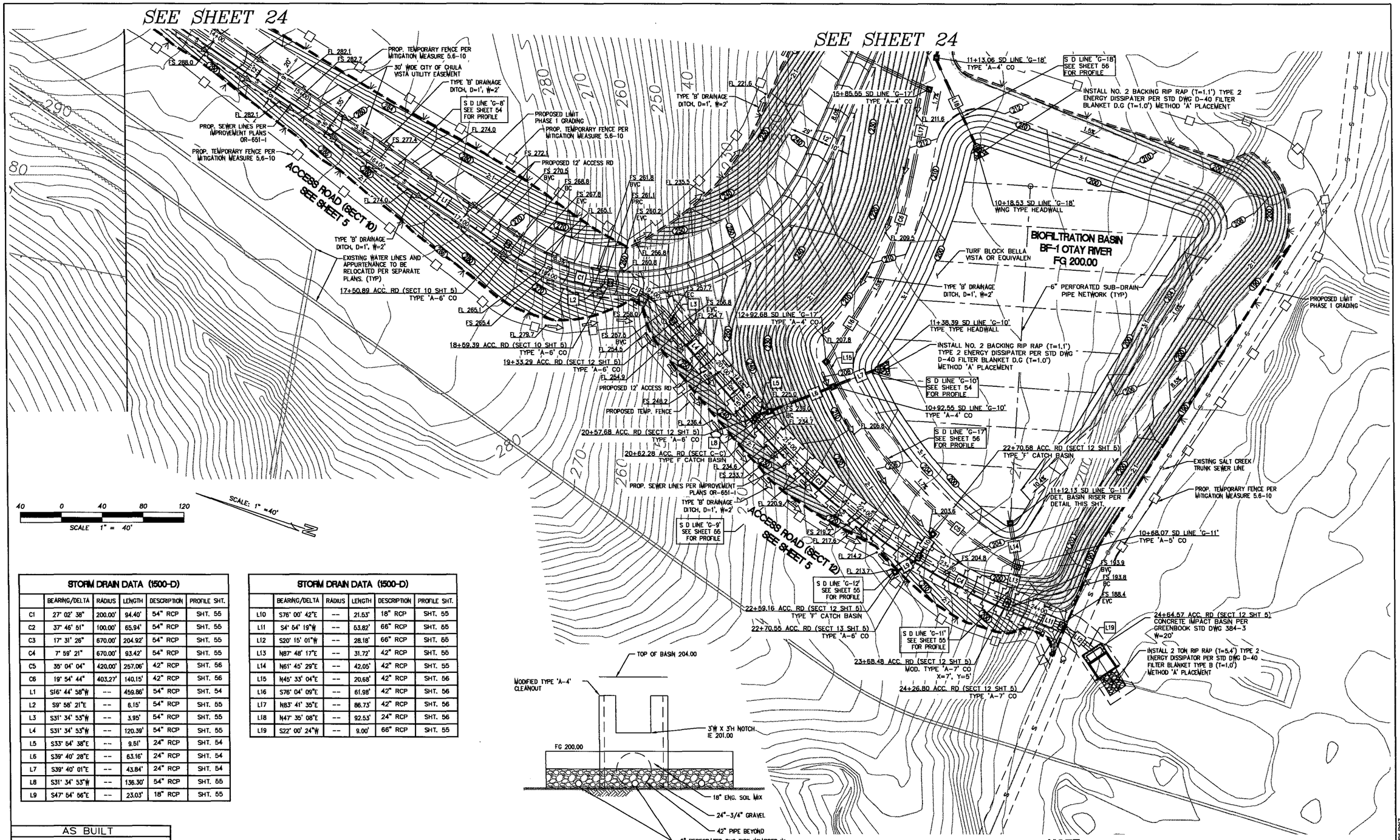
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-11

W.O. No. OR-651G

H.E. JOB NO. 12036

6/26/2017



STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	27° 02' 38"	200.00'	94.40'	54" RCP	SHT. 55
C2	37° 46' 51"	100.00'	65.94'	54" RCP	SHT. 55
C3	17° 31' 26"	670.00'	204.92'	54" RCP	SHT. 55
C4	7° 59' 21"	670.00'	93.42'	54" RCP	SHT. 55
C5	35° 04' 04"	420.00'	257.06'	42" RCP	SHT. 56
C6	19° 54' 44"	403.27'	140.15'	42" RCP	SHT. 56
L1	S16° 44' 58"W	--	459.86'	54" RCP	SHT. 54
L2	S9° 58' 21"E	--	6.15'	54" RCP	SHT. 55
L3	S31° 34' 53"W	--	3.95'	54" RCP	SHT. 55
L4	S31° 34' 53"W	--	120.39'	54" RCP	SHT. 55
L5	S33° 54' 38"E	--	9.51'	24" RCP	SHT. 54
L6	S39° 40' 28"E	--	63.16'	24" RCP	SHT. 54
L7	S39° 40' 01"E	--	43.84'	24" RCP	SHT. 54
L8	S31° 34' 53"W	--	136.30'	54" RCP	SHT. 55
L9	S47° 54' 56"E	--	23.03'	18" RCP	SHT. 55

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
L10	S76° 00' 42"E	--	21.53'	18" RCP	SHT. 55
L11	S4° 54' 19"W	--	53.82'	66" RCP	SHT. 55
L12	S20° 15' 01"W	--	28.18'	66" RCP	SHT. 55
L13	N87° 48' 17"E	--	31.72'	42" RCP	SHT. 55
L14	N61° 45' 29"E	--	42.05'	42" RCP	SHT. 55
L15	N45° 33' 04"E	--	20.68'	42" RCP	SHT. 56
L16	S76° 04' 09"E	--	61.98'	42" RCP	SHT. 56
L17	N83° 41' 35"E	--	86.73'	42" RCP	SHT. 56
L18	N47° 35' 08"E	--	92.53'	24" RCP	SHT. 56
L19	S22° 00' 24"W	--	9.00'	66" RCP	SHT. 55

BASIN OUTLET DETAIL
NO SCALE

STORM DRAIN NOTE:
THE RADIUS OF PIPES IN CURVES SHALL BE BASED ON STANDARD OR SINGLE BEVEL OR DOUBLE BEVEL PIPE WITHOUT BREAKING JOINTS AND SHALL COMPLY WITH CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL, TABLE 1-1103.7A.

NOTE:
- THE LOCATION OF FENCING AND ACCESS GATES IN ASSOCIATION WITH THE BIOFILTRATION BASIN SHALL ALLOW FOR A 10' WIDE LANDSCAPE BUFFER TO HELP SCREEN THE VIEW OF THE BASIN FROM THE ADJACENT LOTS AND STREET RIGHT-OF-WAYS. SEE THE APPROVED LANDSCAPE PLANS FOR FENCE TYPE AND MATERIAL.

AS BUILT

SIGNATURE _____ DATE _____

Printed Name _____ P.E. No. _____

My Registration Expires _____ Discipline _____

CONSTRUCTION RECORD
CONTRACTOR:
INSPECTOR:
DATE COMPLETED:

REFERENCES
CITY DWG NO. 09DRD WDL OR-651-1
CITY DWG NO. 09017 DEP SM-219
CITY DWG NO. 04DRD
CITY DWG NO. 04DRB
CITY DWG NO. 04DRB
CITY DWG NO. 04DRB

By	REVISIONS	Date	App'd

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE: HORIZONTAL 1"=40' VERTICAL NO SCALE

Designed By: JAH Drawn By: MJL Checked By: JAH

Plans Prepared Under Supervision Of: JOHN A. HAYES Date: R.C.E. No. 58003

Submitted: By: Planning: Landscape:

Approved: By: For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

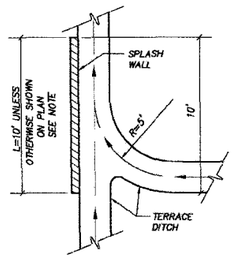
MASS GRADING PLANS FOR CHULA VISTA TRACT NO. 09-04 PHASE 1 OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-12

W.O. No. OR-651G

H.E. JOB NO. 12036

6/26/2017



TYPICAL PLAN AT 'TEE'

BROW DITCH JUNCTION DETAIL

NOT TO SCALE

NOTE:

FINAL GRADING FOR MIXED-USE, MULTI-FAMILY AND PARK LOTS WILL BE PROVIDED AT THE FINAL SITE DESIGN/PRECISE GRADING PLAN LEVEL. FINAL DESIGN AND LOCATION OF PEDESTRIAN AND DRIVEWAY ACCESS IS SUBJECT TO REVIEW OF DISCRETIONARY PERMITS SUCH AS THE MASTER PRECISE PLAN IN THE TOWN CENTER, AND DESIGN REVIEW PERMITS.

SUBDIVISION BOUNDARY

N71° 57' 53"E

1891.54'

5280.16'

N18° 39' 11"W

SUBDIVISION BOUNDARY

PROPOSED LIMIT PHASE 1 GRADING

EXISTING WATER LINE AND APPURTENANCE TO BE RELOCATED PER SEPARATE PLANS. (TYP)

EXISTING CITY OF SAN DIEGO EASEMENT TO BE VACATED UPON RELOCATION OF THE EXIST. WATER LINES

LOT A PER TM 09-04

S D LINE 'OFF-SITE SEE SHEET 48 FOR PROFILE

PROPOSED CANYON SUBDRAIN PER GEOTECHNICAL PLANS (TYP)

TYPE 'B' BROW DITCH, D=1', W=2'

CITY OF SAN DIEGO WATER LINES PER CITY OF SAN DIEGO IMPROVEMENT PLAN 37705-D

BASIN A
48" CMP RISER
BOT. LENGTH=178'
BOT. WIDTH=89'
BOT. ELEV=445.4

LA MEDIA COURT-LET SOUTH

1.38+00
1.39+00
1.40+00
1.41+00
1.42+00
1.43+00

SEE SHEET 7

SCALE 1" =40'

SEE SHEET 14

SCALE 1" = 40'

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By:_____ For the City Engineer _____ Date

AS BUILT

_____ DATE _____
SIGNATURE

_____ P.E. No. _____
Printed Name

My Registration Expires_____ Discipline_____

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:					
INSPECTOR:					
DATE COMPLETED:					

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE	Designed By:	Drawn By:	Checked By:
HORIZONTAL 1"=40'	JAH	MJL	JAH
VERTICAL NO SCALE	Plans Prepared Under Supervision Of: JOHN A. HAYES	Date: R.C.E. No. 58003	

Submitted: _____ By: _____ Planning: _____ Landscape: _____

Approved: _____ By: _____ For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

MASS GRADING PLANS FOR

CHULA VISTA TRACT NO. 09-04 PHASE 1

OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-13

W.O. No. OR-851G

H.E. JOB NO. 12036

6/26/2017

SEE SHEET 13

SEE SHEET 7

SEE SHEET 8

SEE SHEET 15

STORM DRAIN DATA (1500-D)

	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	38° 31' 03"	520.36'	349.82'	72" RCP	SHT. 46
C2	7° 19' 02"	492.49'	62.90'	24" RCP	SHT. 48
C3	6° 33' 56"	551.35'	63.56'	18" RCP	SHT. 48
C4	10° 02' 13"	273.43'	47.90'	48" RCP	SHT. 48
C5	2° 01' 06"	1996.50'	70.33'	48" RCP	SHT. 48
C6	3° 54' 28"	1996.50'	136.17'	48" RCP	SHT. 48
C7	1° 46' 49"	1996.50'	62.04'	48" RCP	SHT. 48
L1	S25° 24' 20"E	--	88.63'	30" RCP	SHT. 55
L2	S32° 06' 28"E	--	79.34'	18" RCP	SHT. 55
L3	S64° 24' 14"E	--	29.17'	18" RCP	SHT. 48
L4	S64° 27' 28"E	--	9.17'	18" RCP	SHT. 48
L5	S25° 37' 20"W	--	304.07'	72" RCP	SHT. 46
L6	S42° 15' 49"E	--	31.73'	18" RCP	SHT. 48
L7	S50° 41' 37"E	--	10.96'	18" RCP	SHT. 48
L8	S43° 15' 04"E	--	48.44'	48" RCP	SHT. 48
L9	S19° 18' 19"E	--	90.42'	48" RCP	SHT. 48
L10	S19° 02' 54"E	--	24.34'	48" RCP	SHT. 48
L11	N52° 44' 08"E	--	77.92'	18" RCP	SHT. 48
L12	S0° 38' 02"W	--	71.41'	18" RCP	SHT. 48
L13	S37° 15' 52"E	--	19.17'	18" RCP	SHT. 48
L14	S26° 21' 06"E	--	24.91'	48" RCP	SHT. 48
L15	S23° 49' 43"E	--	24.15'	18" RCP	SHT. 48
L16	S24° 32' 44"E	--	17.17'	18" RCP	SHT. 48
L17	N20° 30' 46"W	--	32.00'	18" RCP	SHT. 50
L18	N20° 30' 46"W	--	49.50'	18" RCP	SHT. 50
L19	S71° 19' 30"W	--	111.05'	48" RCP	SHT. 47
L20	S18° 40' 30"E	--	17.17'	18" RCP	SHT. 50
L21	S71° 19' 30"W	--	298.94'	48" RCP	SHT. 47
L22	S0° 49' 25"E	--	63.75'	60" RCP	SHT. 48
L23	S83° 47' 59"E	--	30.36'	60" RCP	SHT. 48
L26	S16° 34' 40"E	--	84.07'	6" PVC	SHT. 48
L27	N64° 22' 51"W	--	128.86'	72" RCP	SHT. 48
L28	N64° 23' 54"W	--	16.65'	72" PVC	SHT. 55

NOTE:

- STORM DRAIN LINES 'B-1', 'B-11', PORTION OF 'B-12', 'B-14', 'B-15', 'B-16', 'B-21' & 'D-1' STATION IS FROM MAIN COUPLET WEST ONE WAY.
- STORM DRAIN LINES 'B-13', PORTION OF 'B-12', 'B-15', 'B-22', 'C-3', 'C-14' & 'C-15' STATION IS FROM MAIN COUPLET EAST ONE WAY.
- THE LOCATION OF FENCING AND ACCESS GATES IN ASSOCIATION WITH THE BIOFILTRATION BASIN SHALL ALLOW FOR A 10' WIDE LANDSCAPE BUFFER TO HELP SCREEN THE VIEW OF THE BASIN FROM THE ADJACENT LOTS AND STREET RIGHT-OF-WAYS. SEE THE APPROVED LANDSCAPE PLANS FOR FENCE TYPE AND MATERIAL.

STORM DRAIN NOTE:

THE RADIUS OF PIPES IN CURVES SHALL BE BASED ON STANDARD OR SINGLE BEVEL OR DOUBLE BEVEL PIPE WITHOUT BREAKING JOINTS AND SHALL COMPLY WITH CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL, TABLE 1-1103.7A.

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By:_____ Date
For the City Engineer

AS BUILT

_____ DATE _____
SIGNATURE

_____ P.E. No. _____
Printed Name

My Registration Expires_____ Discipline_____

SEE LETTER OF PERMISSION TO GRADE AND DRAIN OFFSITE
FROM_____
DATE_____
BY_____

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CCSV, DWG NO. 0600T, (SP SW-219				
INSPECTOR:	CCSV, DWG NO. 0600U				
DATE COMPLETED:	CCSV, DWG NO. 0600V				
	CCSV, DWG NO. 0600W				
	CCSV, DWG NO. 0600X				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE: HORIZONTAL 1"=40' VERTICAL NO SCALE

Designed By: JAH | Drawn By: MJL | Checked By: JAH

Plans Prepared Under Supervision Of: JOHN A. HAYES R.C.E. No. 58003 Date:

Submitted: By: Planning: Landscape:

Approved: By: For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-14
W.O. No. OR-551G
H.E. JOB NO. 12036
6/26/2017

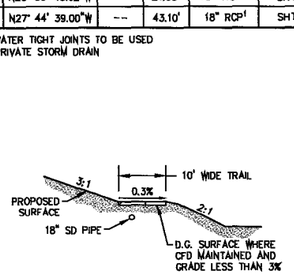
SCALE 1" = 40'

HALE

SEE SHEET 14

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	4° 49' 03"	506.00'	42.54'	42" RCP*	SHT. 49
C2	36° 51' 14"	445.99'	286.87'	24" RCP*	SHT. 49
C3	1° 37' 03"	446.00'	12.59'	24" RCP	SHT. 49
C4	1° 56' 52"	206.00'	7.00'	24" RCP'	SHT. 49
C5	38° 12' 52"	206.00'	137.40'	18" RCP	SHT. 49
C6	7° 34' 43"	230.00'	30.42'	24" RCP*	SHT. 50
C7	29° 04' 25"	230.00'	116.71'	18" RCP*	SHT. 50
L1	N71° 24' 37.70"E	--	92.07'	42" RCP*	SHT. 49
L2	N66° 35' 34.77"E	--	21.29'	42" RCP*	SHT. 49
L3	N66° 35' 35.03"E	--	111.14'	24" RCP*	SHT. 49
L4	S23° 27' 38.23"E	--	20.18'	18" RCP	SHT. 50
L5	N66° 35' 34.77"E	--	4.94'	24" RCP	SHT. 49
L6	S60° 31' 00.95"E	--	8.17'	18" RCP	SHT. 49
L7	S60° 30' 53.63"E	--	20.17'	18" RCP	SHT. 49
L8	N27° 36' 29.40"E	--	101.41'	24" RCP	SHT. 49
L9	S24° 28' 17.30"E	--	181.38'	30" RCP'	SHT. 49
L10	N65° 32' 04.93"E	--	24.17'	18" RCP'	SHT. 49
L11	N65° 31' 31.51"E	--	4.18'	18" RCP*	SHT. 49
L12	S24° 28' 06.75"E	--	60.34'	30" RCP	SHT. 49
L13	N65° 31' 53.25"E	--	75.63'	24" RCP	SHT. 50
L14	S32° 32' 40.53"E	--	24.17'	18" RCP*	SHT. 50
L15	S32° 32' 40.53"E	--	4.17'	18" RCP	SHT. 50
L16	N20° 30' 45.92"W	--	21.63'	18" RCP*	SHT. 50
L17	N27° 44' 39.00"W	--	43.10'	18" RCP'	SHT. 50

* WATER TIGHT JOINTS TO BE USED
' PRIVATE STORM DRAIN



TYPICAL SECTION A-A

BETWEEN RESIDENTIAL LOTS 4-5
NO SCALE

STORM DRAIN NOTE:

THE RADIUS OF PIPES IN CURVES SHALL BE BASED ON STANDARD OR SINGLE BEVEL OR DOUBLE BEVEL PIPE WITHOUT BREAKING JOINTS AND SHALL COMPLY WITH CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL, TABLE 1-1103.7A.

STORM DRAIN LINES C4, L8 AND L9 ARE PRIVATE.

40 0 40 80 120
SCALE 1" = 40'

SCALE: 1" =40'

AS BUILT

SIGNATURE DATE

Printed Name P.E. No.

My Registration Expires Discipline

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	C.O.V. DWG NO. 19090 W.O. OR-551-1				
INSPECTOR:	C.O.V. DWG NO. 04090 OR SW-219				
DATE COMPLETED:	C.O.V. DWG NO. 04091				
	C.O.V. DWG NO. 04092				
	C.O.V. DWG NO. 04093				
	C.O.V. DWG NO. 04094				
	C.O.V. DWG NO. 04095				
	C.O.V. DWG NO. 04096				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14641

SCALE	Designed By:	Drawn By:	Checked By:
HORIZONTAL 1"=40'	JAH	MJL	JAH
VERTICAL NO SCALE	Plans Prepared Under Supervision Of: JOHN A. HAYES R.C.E. No. 58003		Date:

Submitted: By: Planning: Landscape:

Approved: By: For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-15
W.O. No. OR-551G

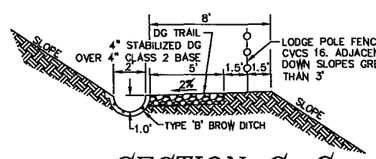
HALE
6/26/2017
H.E. JOB NO. 12036

STORM DRAIN DATA (1500-D)					
	BEARING/ DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	19° 35' 37"	306.00'	104.64'	18" RCP*	SHT. 51
C2	8° 44' 44"	306.00'	46.71'	18" RCP*	SHT. 51
C3	28° 53' 22"	194.00'	97.82'	18" RCP*	SHT. 51
C4	0° 33' 34"	2006.00'	19.58'	18" RCP	SHT. 51
C5	29° 28' 03"	230.00'	118.29'	18" RCP	SHT. 50
C6	26° 06' 08"	230.00'	104.71'	18" RCP*	SHT. 50
C7	0° 18' 59"	1040.00'	5.74'	24" RCP*	SHT. 49
C8	6° 53' 03"	1040.00'	124.96'	24" RCP*	SHT. 49
C9	1° 01' 05"	240.00'	4.26'	18" RCP*	SHT. 49
C10	47° 15' 36"	240.00'	197.96'	18" RCP	SHT. 49
L1	N13° 40' 00"W	--	51.38'	18" RC*	SHT. 49
L2	N76° 20' 00"E	--	8.18'	18" RCP	SHT. 50
L3	N76° 20' 00"E	--	20.17'	18" RCP	SHT. 50
L4	N13° 40' 00"W	--	204.68'	18" RCP	SHT. 49
L5	N13° 40' 00"W	--	8.00'	18" RCP*	SHT. 51
L6	N56° 22' 18"E	--	8.19'	18" RCP	SHT. 51
L7	N56° 21' 52"E	--	20.19'	18" RCP	SHT. 51
L8	N42° 46' 18"W	--	82.23'	18" RCP*	SHT. 51
L9	N42° 45' 18"W	--	8.00'	18" RCP*	SHT. 51
L10	N13° 52' 37"W	--	68.25'	18" RCP*	SHT. 51
L11	N76° 51' 48"E	--	20.16'	18" RCP	SHT. 51
L12	N75° 11' 23"E	--	8.17'	18" RCP	SHT. 51
L13	S62° 36' 41"E	--	4.18'	18" RCP	SHT. 50
L14	N86° 55' 46"E	--	4.18'	18" RCP	SHT. 50
L15	N86° 55' 46"E	--	24.18'	18" RCP	SHT. 50
L16	N29° 39' 07"W	--	13.71'	18" RCP*	SHT. 50
L17	N60° 28' 21"E	--	44.41'	18" RCP	SHT. 51
L18	S28° 24' 57"E	--	24.17'	18" RCP	SHT. 51
L19	S28° 22' 10"E	--	4.17'	18" RCP	SHT. 51
L20	N29° 39' 07"W	--	124.52'	18" RCP	SHT. 51
L21	N60° 20' 53"E	--	4.17'	18" RCP	SHT. 51
L22	N60° 20' 54"E	--	24.40'	18" RCP	SHT. 51
L23	S24° 28' 07"E	--	105.39'	24" RCP*	SHT. 49
L24	N65° 06' 18"E	--	4.17'	18" RCP	SHT. 50
L26	N66° 51' 10"E	--	24.18'	18" RCP	SHT. 50
L26	S31° 53' 21"E	--	89.73'	24" RCP*	SHT. 49
L27	N58° 06' 39"E	--	24.17'	18" RCP	SHT. 50
L28	S31° 53' 21"E	--	11.68'	24" RCP	SHT. 49
L29	N58° 06' 39"E	--	4.17'	18" RCP	SHT. 50
L30	S31° 53' 21"E	--	156.35'	18" RCP	SHT. 49
L31	N58° 06' 39"E	--	24.17'	18" RCP	SHT. 51
L32	S31° 53' 21"E	--	11.56'	18" RCP*	SHT. 49
L33	N59° 36' 23"E	--	4.17'	18" RCP	SHT. 51
L34	S72° 10' 43"E	--	4.17'	18" RCP	SHT. 51
L35	S72° 10' 43"E	--	24.17'	18" RCP	SHT. 51

* WATER TIGHT JOINTS TO BE USED

STORM DRAIN NOTE:

THE RADIUS OF PIPES IN CURVES SHALL BE BASED ON STANDARD OR SINGLE BEVEL OR DOUBLE BEVEL PIPE WITHOUT BREAKING JOINTS AND SHALL COMPLY WITH CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL, TABLE 1-1103.7A.



SECTION G-G

NOT TO SCALE

SEE SHEET 15

SEE SHEET 17

SCALE: 1" = 40'

RETAINING WALL NOTES:

(A) ——— RETAINING WALL PER CV2L-14 TO CV2L-60. (B) ——— RETAINING WALL PER CV220-14 TO CV220-40.

AS BUILT

SIGNATURE _____ DATE _____

Printed Name _____ P.E. No. _____

My Registration Expires _____ Discipline _____

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CCV DWG NO. 05040 WO. OR-651-1				
INSPECTOR:	CCV DWG NO. 05017 CIP SH-219				
DATE COMPLETED:	CCV DWG NO. 05018				
	CCV DWG NO. 05019				
	CCV DWG NO. 05020				
	CCV DWG NO. 05021				
	CCV DWG NO. 05022				
	CCV DWG NO. 05023				
	CCV DWG NO. 05024				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE: HORIZONTAL 1"=40' VERTICAL NO SCALE

Designed By: JAH Drawn By: MJL Checked By: JAH

Plans Prepared Under Supervision Of: JOHN A. HAYES Date: R.C.E. No. 58005

Submitted: By: Planning: Landscape:

Approved: By: For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

MASS GRADING PLANS FOR

CHULA VISTA TRACT NO. 09-04 PHASE 1

OTAY RANCH, VILLAGE 8 WEST

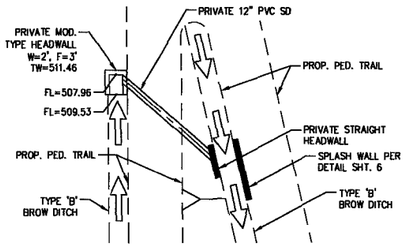
DRAWING NO. 14011-16

W.O. No. OR-651G

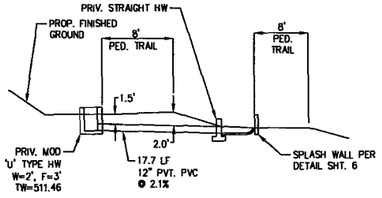
H.E. JOB NO. 12036

6/26/2017

HALE



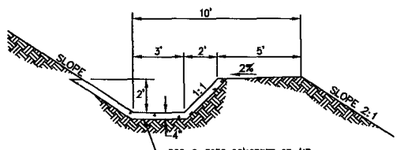
PLAN VIEW
NOT TO SCALE



PROFILE VIEW
NOT TO SCALE

PRIVATE BROW DITCH TO PIPE CONNECTION DETAIL

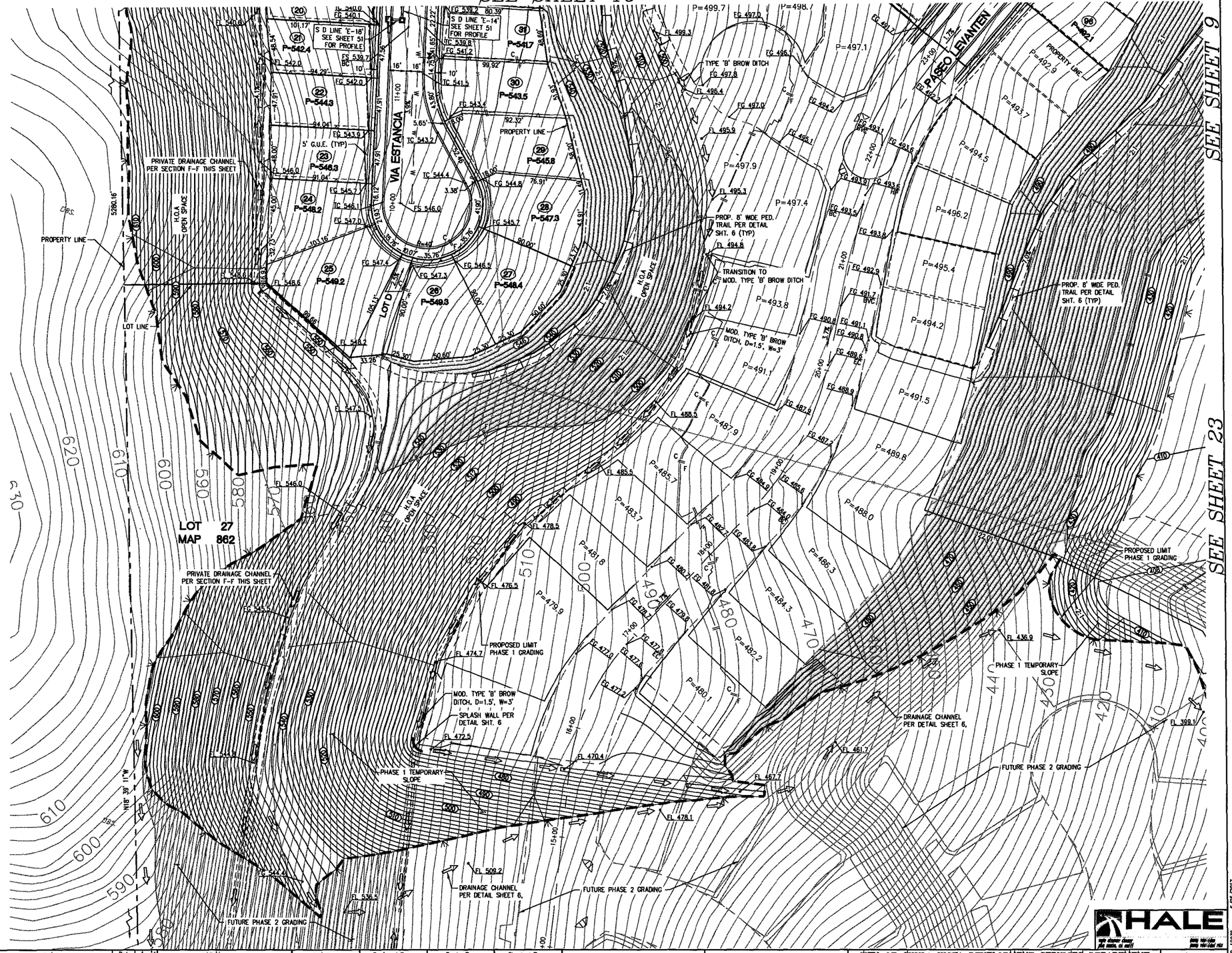
LOCATED AT REAR OF LOTS 67-68 SHEET 16
NOT TO SCALE



NOTES
1. LONGITUDINAL SLOPE OF LINED DITCH SHALL BE 2% MINIMUM.
2. OVER SLOPE DOWN DITCHES SHALL EMPLOY 6" THICKENED EDGE SECTION AT BOTH SIDES OF DITCH.
3. ALL MODIFIED MINOR DRAINAGE CHANNEL SHOWN HEREON WILL BE THE SIZE PER THIS DETAIL.

MODIFIED MINOR DRAINAGE CHANNEL

SECTION F-F
NOT TO SCALE



AS BUILT

SIGNATURE _____ DATE _____

Printed Name _____ P.E. No. _____

My Registration Expires _____ Discipline _____

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CCSV DWG NO. 06060 WDR OR-601-1				
INSPECTOR:	CCSV DWG NO. 06017 DP SW-219				
DATE COMPLETED:	CCSV DWG NO. 04080				
	CCSV DWG NO. 04081				
	CCSV DWG NO. 04088				
	CCSV DWG NO. 04089				
	CCSV DWG NO. 04092				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE	
HORIZONTAL	1"=40'
VERTICAL	NO SCALE

Designed By:	Drawn By:	Checked By:
JAH	MJL	JAH

Plans Prepared Under Supervision Of: JOHN A. HAYES Date: _____ R.C.E. No. 58003

Submitted: _____ By: _____ Planning: Landscape:

Approved: _____ By: _____ For the City Engineer

HALE

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

MASS GRADING PLANS FOR

CHULA VISTA TRACT NO. 09-04 PHASE 1

OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-17

W.O. No. OR-651G

H.E. JOB NO. 12036

6/26/2017

SEE SHEET 7

PROPOSED LIMIT PHASE 1 GRADING

SUBDIVISION BOUNDARY

EXIST SD PLUG TO BE REMOVED

PORTION OF EXISTING STORM DRAIN TO BE ABANDONED AND 2 SACK CEMENT/SAND SLURRED

N71° 57' 53"E 1891.54'

S89° 36' 53"E 204.71'

N71° 57' 53"E 303.72'

N0° 23' 07"E 68.18'

EXIST. SANTA LUNA STREET C.V. DWG NO 05041

EXIST. ENERGY DISSIPATER & RIP-RAP PER C.V. DWG. NO. 04081 TO BE REMOVED

PORTION OF EXIST. 54" SD PER C.V. DWG. NO. 04081 TO BE REMOVED

PROPOSED CANYON SUBDRAIN PER GEOTECHNICAL PLANS (TYP)

FL 489.9

FL 489.5

FL 489.1

TYPE 'B' BROW DITCH D=1', W=2'

LOT 12

BASIN 12
60" CMP RISER
BOT. LENGTH=260'
BOT. WIDTH=104'
BOT. ELEV=480.6

FL 488.7

EXIST. MAGDALENA AVE. C.V. DWG. NO. 04078

SUBDIVISION BOUNDARY

N18° 40' 02.40"W 1147.895'

SCALE 1" = 40'

SEE SHEET 19

AS BUILT

DATE

SIGNATURE

P.E. No.

Printed Name

My Registration Expires Discipline

NOTE:
FINAL GRADING FOR MIXED-USE, MULTI-FAMILY AND PARK LOTS WILL BE PROVIDED AT THE FINAL SITE DESIGN/PRECISE GRADING PLAN LEVEL. FINAL DESIGN AND LOCATION OF PEDESTRIAN AND DRIVEWAY ACCESS IS SUBJECT TO REVIEW OF DISCRETIONARY PERMITS SUCH AS THE MASTER PRECISE PLAN IN THE TOWN CENTER, AND DESIGN REVIEW PERMITS.

40 0 40 80 120
SCALE 1" = 40'

HALE

6/26/2017

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CCV. MAG. 55 04040 W.O. OR-651-1				
INSPECTOR:	CCV. MAG. 55 05017 DP SW-219				
DATE COMPLETED:	CCV. MAG. 55 04080				
	CCV. MAG. 55 04081				
	CCV. MAG. 55 04088				
	CCV. MAG. 55 04085				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE	Designed By:	Drawn By:	Checked By:
HORIZONTAL	JAH	WJL	JAH
1"=40'	Plans Prepared Under Supervision Of: JOHN A. HAYES	Date:	R.C.E. No. 58003
VERTICAL			
NO SCALE			

Submitted: By: Planning: Landscape:

Approved: By: For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-18
W.O. No. OR-651G
H.E. JOB NO. 12036

SEE SHEET 18

SEE SHEET 7

SEE SHEET 8

LOT 11

LOT 12

LOT 4

LOT 5

LOT M OF TENTATIVE MAP NO. 09-04

EMERGENCY SPILLWAY W=31' D=1.0' PER DETAIL SHT. 6

29+91.50 MAIN WEST TYPE 'B-1' CURB INLET L=20'

S D LINE 'B-6' SEE SHEET 46 FOR PROFILE

29+04.50 MAIN WEST TYPE 'A-4' CO

S D LINE 'B-10' SEE SHEET 46 FOR PROFILE

TYPE 'B' DRAINAGE DITCH, D=1', W=2'

10+07.60 AVENIDA CAPRISE = 52+86.60 MAIN WEST TYPE 'A-4' CO

33+59.47 MAIN WEST TYPE 'A-4' CO

33+71.47 MAIN WEST TYPE 'B-1' CURB INLET L=17'

S D LINE 'B-8' SEE SHEET 46 FOR PROFILE

33+71.47 MAIN WEST TYPE 'A-4' CO

33+71.47 MAIN WEST TYPE 'B-1' CURB INLET L=10'

SUBDIVISION BOUNDARY

PROPOSED LIMIT PHASE 1 GRADING

38+92.14 MAIN WEST EXIST. TYPE 'A-5' CO

EXIST. ROCK MOUNTAIN RD C.V. DWG. NO. 04080

EXIST. MAGDALENA AVE. C.V. DWG. NO. 04078

29+04.50 MAIN WEST MOD. TYPE 'A-5' CO X=5', Y=5'

S D LINE 'B-2' SEE SHEET 46 FOR PROFILE

29+91.50 MAIN WEST TYPE 'A-4' CO

29+91.50 MAIN WEST TYPE 'B-1' CURB INLET L=11'

5' G.U.E. (TYP)

R/W

S D LINE 'B-20' SEE SHEET 55 FOR PROFILE

10+52.35 AVENIDA CAPRISE TYPE 'B' CURB INLET L=5'

10+62.49 AVENIDA CAPRISE TYPE 'A-4' CO

S D LINE 'B-9' SEE SHEET 48 FOR PROFILE

10+65.75 AVENIDA CAPRISE TYPE 'B' CURB INLET L=5'

AVENIDA CAPRISE

S D LINE 'B-19' SEE SHEET 51 FOR PROFILE

EMERGENCY SPILLWAY W=9', D=0.6' PER DETAIL SHT. 6

BASIN 5
18" CMP RISER
BOT. LENGHT=46'
BOT. WIDTH=23'
BOT. ELEV.=490.3

39+52.07 MAIN EAST TYPE 'A-4' CO

S D LINE 'C-9' SEE SHEET 47 FOR PROFILE

35+42.61 MAIN EAST END CAP AND MORTAR FL 498.3

MAIN EAST

PROP. SD PLUG PER DETAIL SHEET 6, INTERIM CONDITION

EXISTING DRAINAGE CHANNEL PER C.V. DWG. NO. 04068

40+87.57 MAIN EAST OFFSET

42" Ø 21.4' L CONN TO EXIST 36" STORM DRAIN PER C.V. DWG. NO. 04068 REMOVE EXIST. WING-TYPE HEADWALL & RIP RAP

40+35.99 MAIN EAST TYPE 'A-4' CO

S D LINE 'C-13' SEE SHEET 55 FOR PROFILE

40+15.27 MAIN EAST WING TYPE HW

INSTALL 1/2 TON RIP RAP (T=3.4') TYPE 2 ENERGY DISSIPATER PER STD DWG D-40 FILTER BLANKET 3/4"-1½" P.B. (T=1.0') METHOD 'A' PLACEMENT TO EXISTING DRAINAGE CHANNEL.

SEE LETTER OF PERMISSION TO GRADE OFFSITE
FROM_____
DATE_____
BY_____

PROPOSED CANYON SUBDRAIN PER GEOTECHNICAL PLANS (TYP)

MAIN WEST

SEE SHEET 20

STORM DRAIN NOTE:

THE RADIUS OF PIPES IN CURVES SHALL BE BASED ON STANDARD OR SINGLE BEVEL OR DOUBLE BEVEL PIPE WITHOUT BREAKING JOINTS AND SHALL COMPLY WITH CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL, TABLE 1-1103.7A.

NOTE:

STORM DRAIN LINES 'B-2', 'B-5', 'B-8' & 'B-10' STATION IS FROM MAIN COUP. WEST ONE WAY.
STORM DRAIN LINES 'C-9' & 'C-13' STATION IS FROM MAIN COUP. EAST ONE WAY.

AS BUILT

SIGNATURE _____ DATE _____

Printed Name _____ P.E. No. _____

My Registration Expires_____ Discipline _____

STORM DRAIN DATA (1500-D)

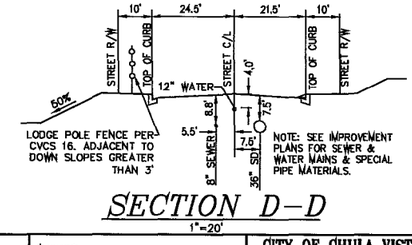
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	22° 17' 32"	521.00'	202.71'	18" RCP	SHT. 46
C2	2° 22' 08"	521.00'	21.54'	18" RCP	SHT. 46
L1	S71° 56' 24"W	--	319.46'	42" RCP	SHT. 48
L2	S18° 03' 36"E	--	44.50'	24" RCP	SHT. 48
L3	S71° 56' 24"W	--	82.50'	18" RCP	SHT. 46
L4	S18° 03' 36"E	--	30.17'	18" RCP	SHT. 46
L5	S18° 03' 36"E	--	12.17'	18" RCP	SHT. 46
L6	S71° 56' 24"W	--	85.46'	18" RCP	SHT. 46

STORM DRAIN DATA (1500-D)

	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C3	39° 14' 15"	50.00'	34.24'	36" RCP	SHT. 47
L7	S86° 56' 05"W	--	8.67'	18" RCP	SHT. 48
L8	N62° 39' 23"W	--	23.48'	18" RCP	SHT. 48
L9	S3° 53' 55"E	--	42.24'	18" RCP	SHT. 48
L10	N82° 57' 32"W	--	46.98'	18" RCP	SHT. 46
L11	S7° 02' 28"W	--	12.17'	18" RCP	SHT. 46
L12	S7° 02' 28"W	--	30.17'	18" RCP	SHT. 46
L13	N82° 57' 32"W	--	8.00'	18" RCP	SHT. 46

STORM DRAIN DATA (1500-D)

	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
L14	S7° 02' 28"W	--	61.38'	18" RCP	SHT. 51
L15	S22° 36' 05"W	--	23.38'	36" RCP	SHT. 47
L16	S8° 37' 21"E	--	62.95'	36" RCP	SHT. 48
L17	S62° 26' 00"W	--	79.72'	36" RCP	SHT. 47
L18	S51° 34' 18"W	--	294.51'	36" RCP	SHT. 47
L19	S34° 01' 01"W	--	38.28'	24" RCP	SHT. 48



SECTION D-D
1"=20'

SCALE: 1" = 40'

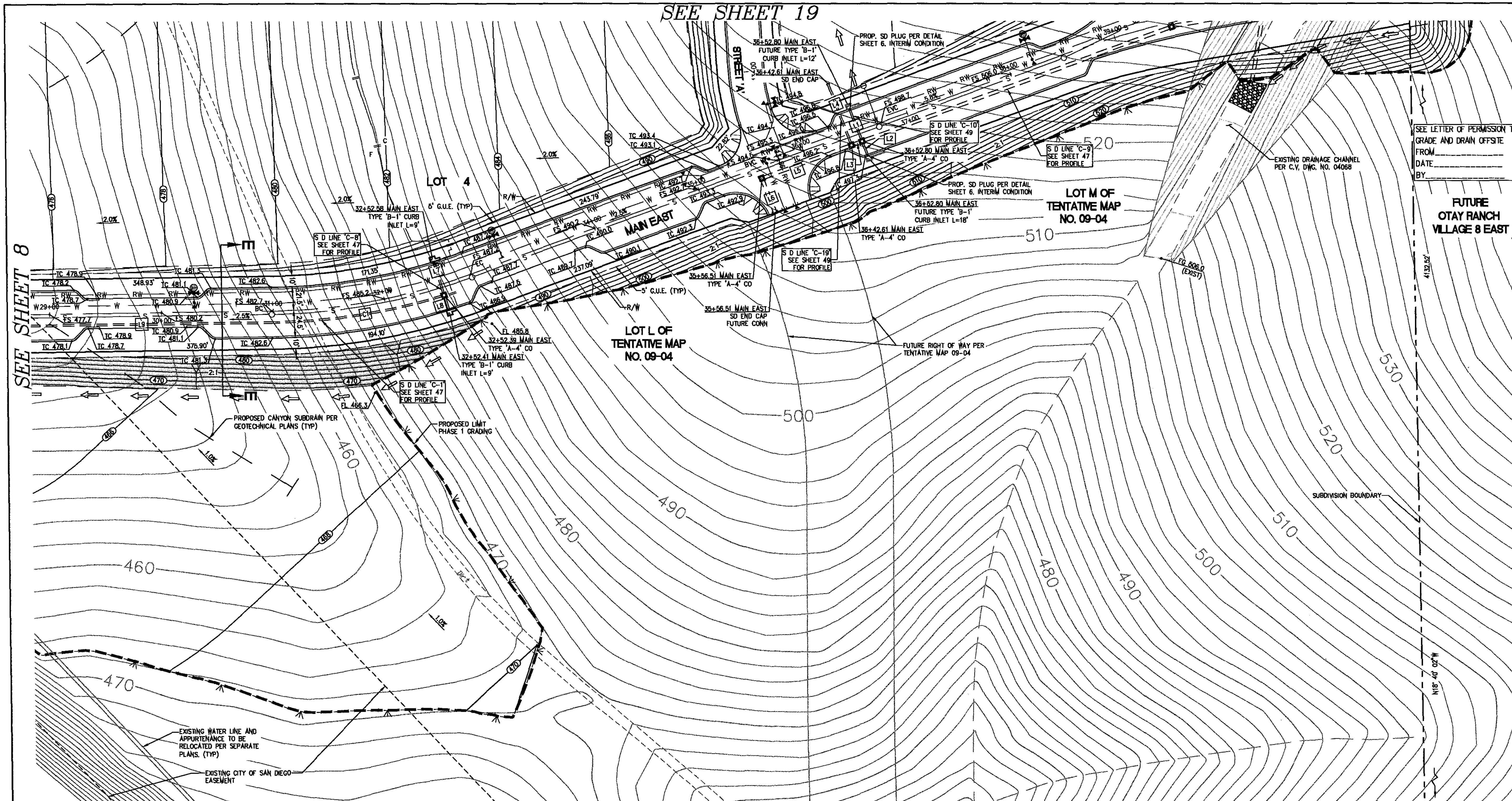
SCALE 1" = 40'

NOTE:
FINAL GRADING FOR MIXED-USE, MULTI-FAMILY AND PARK LOTS WILL BE PROVIDED AT THE FINAL SITE DESIGN/PRECISE GRADING PLAN LEVEL. FINAL DESIGN AND LOCATION OF PEDESTRIAN AND DRIVEWAY ACCESS IS SUBJECT TO REVIEW OF DISCRETIONARY PERMITS SUCH AS THE MASTER PRECISE PLAN IN THE TOWN CENTER, AND DESIGN REVIEW PERMITS.

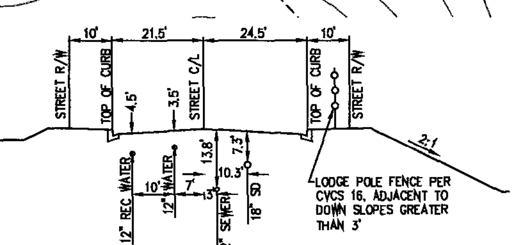
HALE

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd	DATUM	SCALE	Designed By:	Drawn By:	Checked By:	Submitted:	Approved:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
CONTRACTOR:	C.V. DWG. NO. 00040 W.O. OR-351-1					CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841	HORIZONTAL 1"=40' VERTICAL NO SCALE	JAH	MJL	JAH	By:	By: For the City Engineer	MASS GRADING PLANS FOR CHULA VISTA TRACT NO. 09-04 PHASE 1 OTAY RANCH, VILLAGE 8 WEST	14011-19
INSPECTOR:	C.V. DWG. NO. 00017 OP SW-219							Plans Prepared Under Supervision Of: JOHN A. HAYES R.C.E. No. 58003		Date:	Planning:	Landscape:		W.O. No. OR-651G
DATE COMPLETED:	C.V. DWG. NO. 04069, 04081, 04088, 04078, 04080, 04068													H.E. JOB NO. 12036

6/26/2017



NOTE:
FINAL GRADING FOR MIXED-USE, MULTI-FAMILY AND PARK LOTS WILL BE PROVIDED AT THE FINAL SITE DESIGN/PRECISE GRADING PLAN LEVEL. FINAL DESIGN AND LOCATION OF PEDESTRIAN AND DRIVEWAY ACCESS IS SUBJECT TO REVIEW OF DISCRETIONARY PERMITS SUCH AS THE MASTER PRECISE PLAN IN THE TOWN CENTER, AND DESIGN REVIEW PERMITS.



SECTION E–E
1"=20'

STORM DRAIN DATA (1500–D)

	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
L1	S38° 25' 44"E	--	29.92'	18" RCP	SHT. 49
L2	S38° 25' 42"E	--	12.42'	18" RCP	SHT. 49
L3	S51° 34' 18"W	--	6.19'	36" RCP	SHT. 47
L4	S38° 25' 42"E	--	57.93'	18" RCP	SHT. 49
L5	S51° 34' 18"W	--	82.10'	36" RCP	SHT. 47
L6	S38° 25' 44"E	--	31.34'	36" RCP	SHT. 47

STORM DRAIN DATA (1500–D)

	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	S63° 06' 21.09"W	538.75'	154.57'	18" RCP	SHT. 47
L7	S34° 58' 18"E	--	29.94'	18" RCP	SHT. 47
L8	S35° 19' 34"E	--	12.40'	18" RCP	SHT. 47
L9	S71° 19' 30"W	--	276.26'	18" RCP	SHT. 47

SCALE 1" = 40'

AS BUILT
SIGNATURE ______ DATE ______
Printed Name ______ P.E. No. ______
My Registration Expires ______ Discipline ______

CONSTRUCTION RECORD
CONTRACTOR:
INSPECTOR:
DATE COMPLETED:

REFERENCES
C.C.V. DWG. NO. 05040 W.O. OR-651-1
C.C.V. DWG. NO. 05017 CIP SW-219
C.C.V. DWG. NO. 04080
C.C.V. DWG. NO. 04081
C.C.V. DWG. NO. 04068
C.C.V. DWG. NO. 04078
C.C.V. DWG. NO. 02025

By | REVISIONS | Date | App'd

DATUM
CITY OF CHULA VISTA BENCH MARK NO. 5072
ELEVATION 446.361 NAVD 88
DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE
HORIZONTAL 1"=40'
VERTICAL NO SCALE

Designed By: JAH | Drawn By: MJL | Checked By: JAH
Plans Prepared Under Supervision Of: JOHN A. HAYES Date: ______ R.C.E. No. 58003

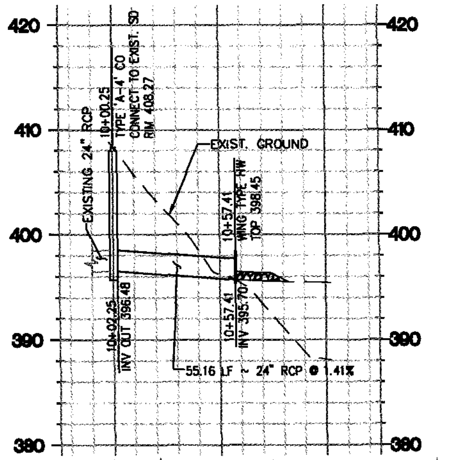
Submitted: ______
By: ______
Planning: ______ Landscape: ______

Approved: ______
By: ______ For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

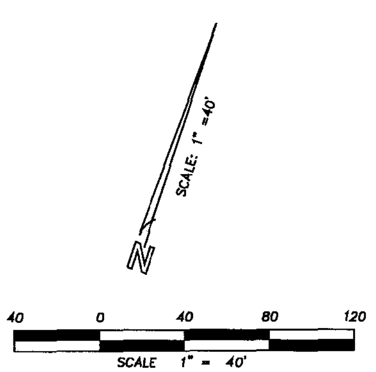
HALE

DRAWING NO. 14011-20
W.O. No. OR-651G
H.E. JOB NO. 12036
6/26/2017



PROFILE: STORM DRAIN RESERVOIR OVERFLOW
1" = 40' HORZ. 1" = 8' VERT.

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
C1	0° 52' 01"	530.04'	8.02'	48" RCP	SHT. 52
L1	S79° 03' 36"E	--	12.67'	18" RCP	SHT. 52
L2	S79° 03' 36"E	--	40.67'	18" RCP	SHT. 52
L3	N10° 56' 24"E	--	46.22'	48" RCP	SHT. 52
L4	S77° 49' 21"E	--	28.00'	24" RCP	SHT. 54
L5	S77° 51' 23"E	--	56.09'	36" RCP	SHT. 54
L6	N88° 36' 40"E	--	129.80'	36" RCP	SHT. 54



460
450
440
430
420
410
400
390
380
370
FL 396.21
FL 396.00
POR. EXISTING 24" RESERVOIR OVERFLOW PIPE TO BE REMOVED
CONNECT TO EXISTING 24" RCP STORM DRAIN
24" RCP (1500-D) SD 55.16 LF N81°23'36"W
STORM DRAIN RESERVOIR OVERFLOW SEE PROFILE THIS SHEET
10+57.41 WING TYPE HW
INSTALL 1/4 TON RIP RAP (T=2.7') TYPE 2 ENERGY DISSIPATER PER STD DWG D-40 FILTER BLANKET 3/4"-1½" P.B. (T=1.0') METHOD 'A' PLACEMENT
EXISTING 36" STORM DRAIN AND APPURTENANCE TO BE REMOVED.
FL 394.90
PROPOSED LIMIT PHASE 1 GRADING
FL 397.11
PROPOSED CANYON SUBDRAIN PER GEOTECHNICAL PLANS (TYP)
FL 394.39
FUTURE RIGHT OF WAY PER TENTATIVE MAP NO. 09-04
EXISTING WATER LINES AND APPURTENANCE TO BE RELOCATED PER CITY OF SAN DIEGO IMPROVEMENT PLAN 37708-D
SUBDIVISION BOUNDARY
LOT R OF TENTATIVE MAP NO. 09-04
FL 394.00
FL 424.8
S D LINE 'F-8' SEE SHEET 52 FOR PROFILE
TYPE 'B' BROW DITCH, D=1', W=2' (TYP)
FL 415.6
105 L.F. OF EXISTING STORM DRAIN AND APPURTENANCE TO BE REMOVED.
S D LINE 'F-9' SEE SHEET 54 FOR PROFILE
FL 413.8
FL 393.00
LOT S OF TENTATIVE MAP NO. 09-04
FL 412.7
11+94.89 WING TYPE HW
FL 393.29
S D LINE 'F-7' SEE SHEET 52 FOR PROFILE
FL 408.0
SPLASH WALL PER DETAIL SHT. 6
INSTALL NO. 2 BACKING RIP RAP (T=1.1') TYPE 2 ENERGY DISSIPATOR PER STD DWG D-40 FILTER BLANKET D.G (T=1.0') METHOD 'A' PLACEMENT
FL 394.00
FL 394.66
FL 403.6
FL 398.1
EXISTING STORM DRAIN AND APPURTENANCE TO BE REMOVED.
N18° 40' 02"W
4132.52'
LA MEDIA ROAD

SEE SHEET 10

SEE SHEET 22

STREET 'A'

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICE DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By: ______ For the City Engineer ______ Date

AS BUILT

______ DATE ______
SIGNATURE

______ P.E. No. ______
Printed Name
My Registration Expires______ Discipline______

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd	DATUM	SCALE
CONTRACTOR:	C.C.V. DWG. NO. 06040 W.O. OR-651-1					CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841	HORIZONTAL
INSPECTOR:	C.C.V. DWG. NO. 05017 CIP SW-219						1"=40'
DATE COMPLETED:	C.C.V. DWG. NO. 04080						VERTICAL
	C.C.V. DWG. NO. 04081						NO SCALE
	C.C.V. DWG. NO. 04068						
	C.C.V. DWG. NO. 04078						
	C.C.V. DWG. NO. 02026						

Designed By:	Drawn By:	Checked By:
JAH	MJL	JAH

Plans Prepared Under Supervision Of: Date:______
JOHN A. HAYES R.C.E. No. 58003

Submitted: ______
By: ______
Planning: Landscape:

Approved: ______
By: ______
For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

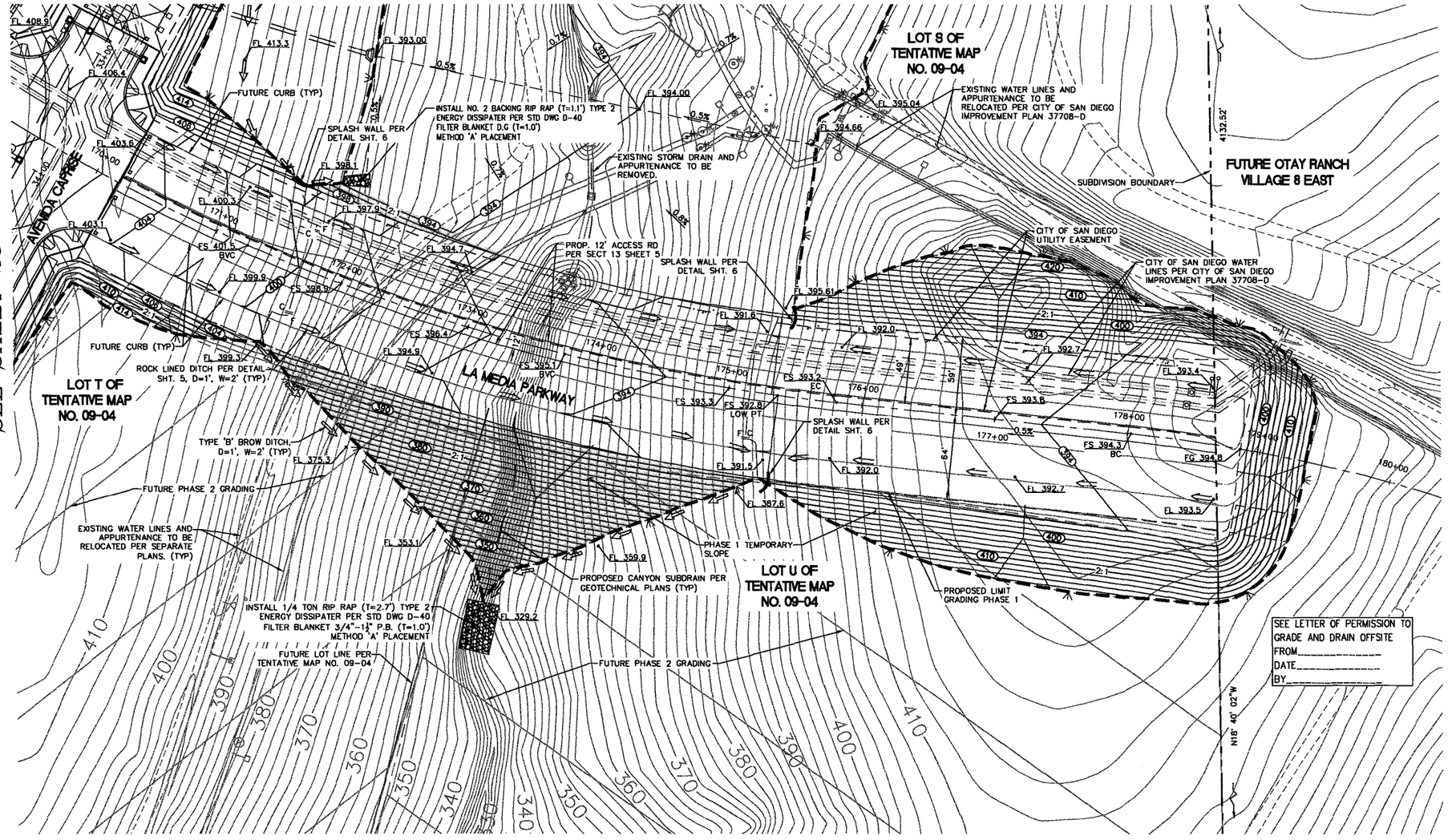
DRAWING NO. 14011-21
W.O. No. OR-651G

HALE

H.E. JOB NO. 12036 6/26/2017

SEE SHEET 21

SEE SHEET 23



CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By:_____ Date_____
For the City Engineer

AS BUILT

_____ DATE _____
SIGNATURE

_____ P.E. No. _____
Printed Name

My Registration Expires_____ Discipline_____

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd	DATUM	SCALE	Designed By:	Drawn By:	Checked By:	Submitted:	Approved:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
CONTRACTOR:	(1) DWG. NO. 05010 W.O. OR-651-1 (2) DWG. NO. 05017 OR SW-219					CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88	HORIZONTAL 1"=40'	JAH	WJL	JAH	By:	By:	MASS GRADING PLANS FOR	14011-22
INSPECTOR:	(3) DWG. NO. 04080 (4) DWG. NO. 04081					DESCRIPTION: 3" BRASS DISK (LS4324) WELL IGN @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841	VERTICAL NO SCALE	Plans Prepared Under Supervision Of: JOHN A. HAYES		Date: R.C.E. No. 58003	Planning:	Landscape:	For the City Engineer	CHULA VISTA TRACT NO. 09-04 PHASE 1 OTAY RANCH, VILLAGE 8 WEST	W.O. No. OR-651G
DATE COMPLETED:	(5) DWG. NO. 04082 (6) DWG. NO. 04083 (7) DWG. NO. 04084 (8) DWG. NO. 04085 (9) DWG. NO. 04086 (10) DWG. NO. 04088													

HALE

6/26/2017

H.E. JOB NO. 12038

SEE SHEET 22

SEE SHEET 10

SEE SHEET 9

SEE SHEET 17

NOTE:
FINAL GRADING FOR MIXED-USE, MULTI-FAMILY AND PARK LOTS WILL BE PROVIDED AT THE FINAL SITE DESIGN/PRECISE GRADING PLAN LEVEL. FINAL DESIGN AND LOCATION OF PEDESTRIAN AND DRIVEWAY ACCESS IS SUBJECT TO REVIEW OF DISCRETIONARY PERMITS SUCH AS THE MASTER PRECISE PLAN IN THE TOWN CENTER, AND DESIGN REVIEW PERMITS.

LOT R OF TENTATIVE MAP NO. 09-04

LOT T OF TENTATIVE MAP NO. 09-04

LOT 10

LOT P PER PHASE 2

LA MEDIA ROAD

AVENIDA CAPRISE

CITY OF SAN DIEGO WATER LINES PER CITY OF SAN DIEGO IMPROVEMENT PLAN 37708-D

PROP. SEWER MAIN PER IMPROVEMENT PLANS OR-651-1

TYPE 'B' DRAINAGE DITCH, D=1', W=2'

PROPOSED CANYON SUBDRAIN PER GEOTECHNICAL PLANS (TYP)

EMERGENCY SPILLWAY W=23' D=1.0' PER DETAIL SHT. 6

BASIN 11
48" CMP RISER
BOT. LENGHT=176'
BOT. WIDTH=88'
BOT. ELEV.=392.3

PHASE 1 TEMPORARY SLOPE

FUTURE PHASE 2 GRADING

PROPOSED LIMIT PHASE 1 GRADING

DRAINAGE CHANNEL PER DETAIL SHEET 6,

INSTALL 1/2 TON RIP RAP (T=3.4') TYPE 2 ENERGY DISSIPATER PER STD DWG D-40 FILTER BLANKET 3/4"-1½" P.B. (T=1.0') METHOD 'A' PLACEMENT

SCALE: 1" =40'

40 0 40 80 120
SCALE 1" = 40'

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICE DEPARTMENT

"THE CITY OF SAN DIEGO LAND DEVELOPMENT REVIEW HAS REVIEWED AND APPROVED THE SCOPE OF WORK AFFECTING THE AREA IN CLOSE PROXIMITY TO AND WITHIN THE LIMITS OF THE WATERLINE EASEMENT. ANY CHANGES TO THE SCOPE AS COVERED BY THE REVIEW SHALL REQUIRE APPROVAL BY THE CITY OF SAN DIEGO THROUGH A CONSTRUCTION CHANGE REVIEW."

By: _____ Date _____
For the City Engineer

AS BUILT

SIGNATURE _____ DATE _____

Printed Name _____ P.E. No. _____

My Registration Expires _____ Discipline _____

CONSTRUCTION RECORD	REFERENCES
CONTRACTOR:	CITY DWG. NO. 00000 W.O. OR-651-1
INSPECTOR:	CITY DWG. NO. 00017 DEP SM-219
DATE COMPLETED:	CITY DWG. NO. 00051
	CITY DWG. NO. 00060
	CITY DWG. NO. 00061
	CITY DWG. NO. 00062
	CITY DWG. NO. 00063
	CITY DWG. NO. 00064

By	REVISIONS	Date	App'd

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE	
HORIZONTAL	1"=40'
VERTICAL	NO SCALE

Designed By:	Drawn By:	Checked By:
JAH	MJL	JAH

Plans Prepared Under Supervision Of: JOHN A. HAYES Date: _____ R.C.E. No. 58003

Submitted: _____ By: _____ Planning: _____ Landscape: _____

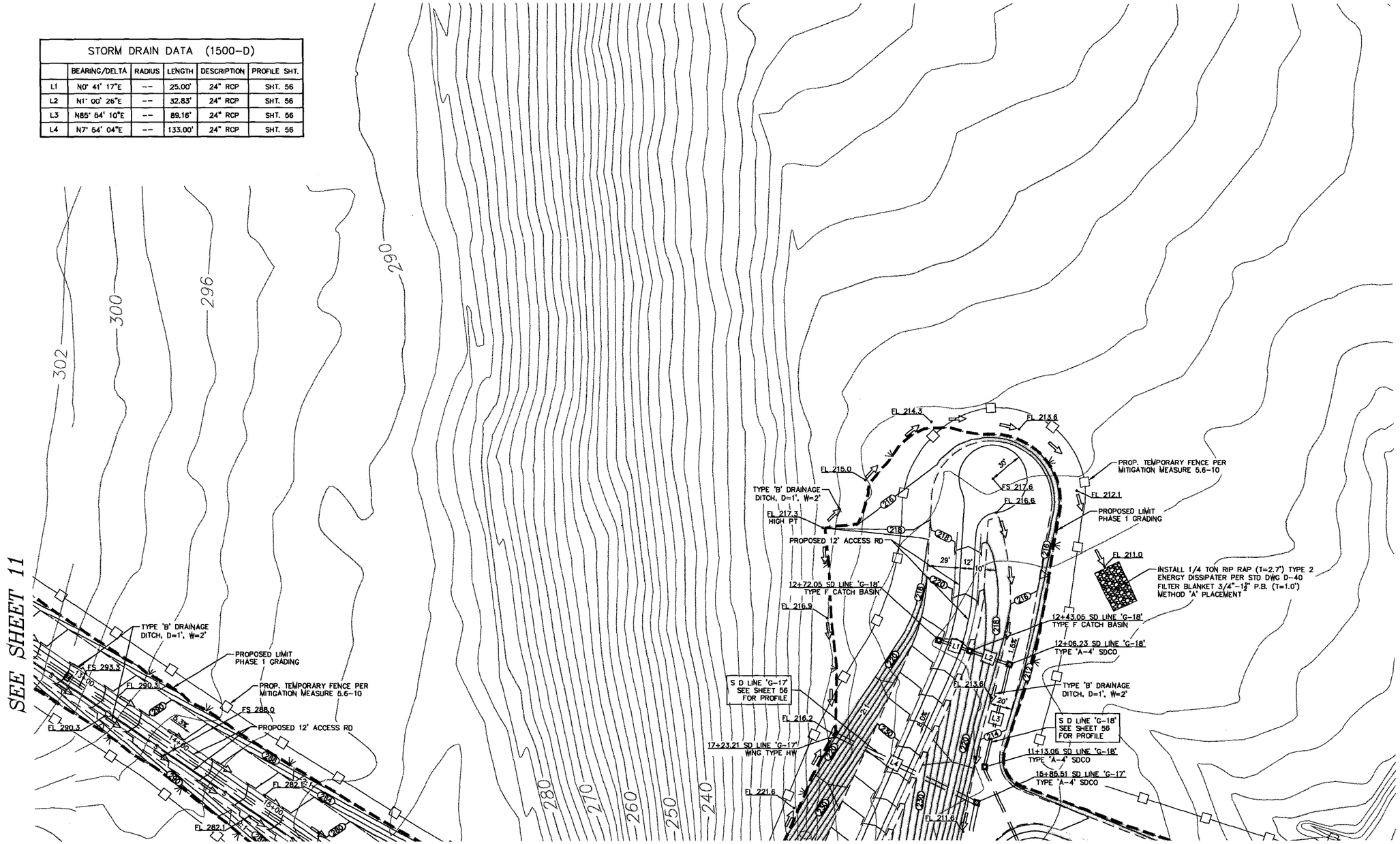
Approved: _____ By: _____ For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
MASS GRADING PLANS FOR
CHULA VISTA TRACT NO. 09-04 PHASE 1
OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-23
W.O. No. OR-651G
H.E. JOB NO. 12036
6/26/2017

HALE

STORM DRAIN DATA (1500-D)					
	BEARING/DELTA	RADIUS	LENGTH	DESCRIPTION	PROFILE SHT.
L1	N0° 41' 17"E	--	25.00'	24" RCP	SHT. 56
L2	N1° 00' 26"E	--	32.83'	24" RCP	SHT. 56
L3	N85° 54' 10"E	--	89.16'	24" RCP	SHT. 56
L4	N7° 54' 04"E	--	133.00'	24" RCP	SHT. 56



SCALE: 1" = 40'

40 0 40 80 120
SCALE 1" = 40'

AS BUILT

SIGNATURE DATE

Printed Name P.E. No.

My Registration Expires Discipline

STORM DRAIN NOTE:

THE RADIUS OF PIPES IN CURVES SHALL BE BASED ON STANDARD OR SINGLE BEVEL OR DOUBLE BEVEL PIPE WITHOUT BREAKING JOINTS AND SHALL COMPLY WITH CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL, TABLE 1-1103.7A.

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR:	CCV. DWG. NO. D6090 W.O. OR-851-1 CCV. DWG. NO. D6017 DP SW-219				
INSPECTOR:	CCV. DWG. NO. D6090				
DATE COMPLETED:	CCV. DWG. NO. D6091				
	CCV. DWG. NO. D6068				
	CCV. DWG. NO. D6070				
	CCV. DWG. NO. D6069				

DATUM: CITY OF CHULA VISTA BENCH MARK NO. 5072 ELEVATION 446.361 NAVD 88 DESCRIPTION: 3" BRASS DISK (LS4324) WELL MON @ CL INT. RUTGERS & OTAY LAKES. PT. NO. 5072 PER ROS 14841

SCALE	
HORIZONTAL	1"=40'
VERTICAL	NO SCALE

Designed By: JAH | Drawn By: MJL | Checked By: JAH

Plans Prepared Under Supervision Of: JOHN A. HAYES Date: R.C.E. No. 58003

Submitted: By: Planning: Landscape:

Approved: By: For the City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

MASS GRADING PLANS FOR

CHULA VISTA TRACT NO. 09-04 PHASE 1

OTAY RANCH, VILLAGE 8 WEST

DRAWING NO. 14011-24

W.O. No. OR-651G

H.E. JOB NO. 12036

6/26/2017

ATTACHMENT 4
MITIGATION FIGURES

Figure 1 – Regional Vicinity
Figure 2 – Jurisdictional Delineation
Figure 3 – Mitigation Plan
Figure 5 – Phase 2 Detail
Figure 9 – Monitoring for Phase 2

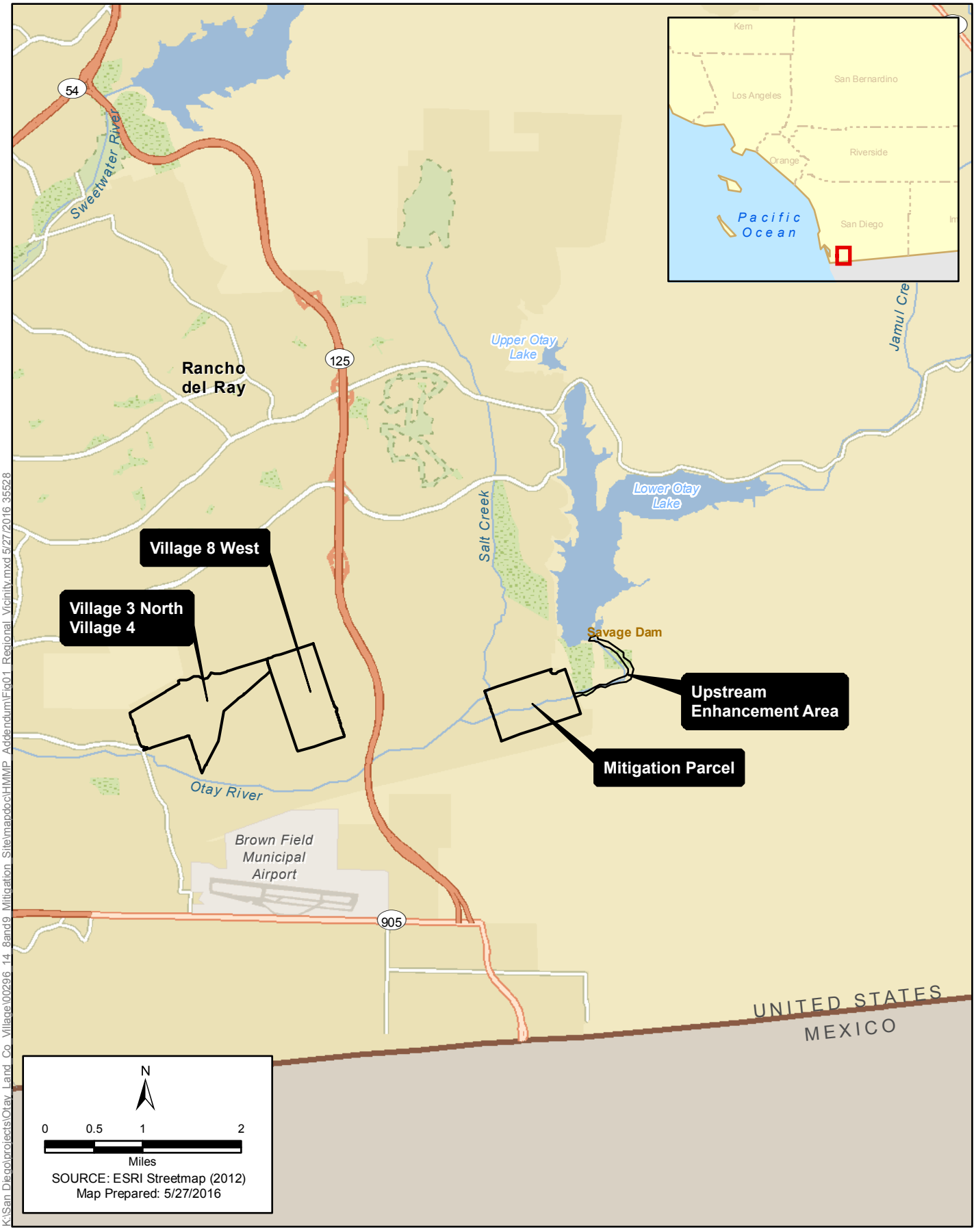


Figure 1
Regional Vicinity
Otay River Restoration Project

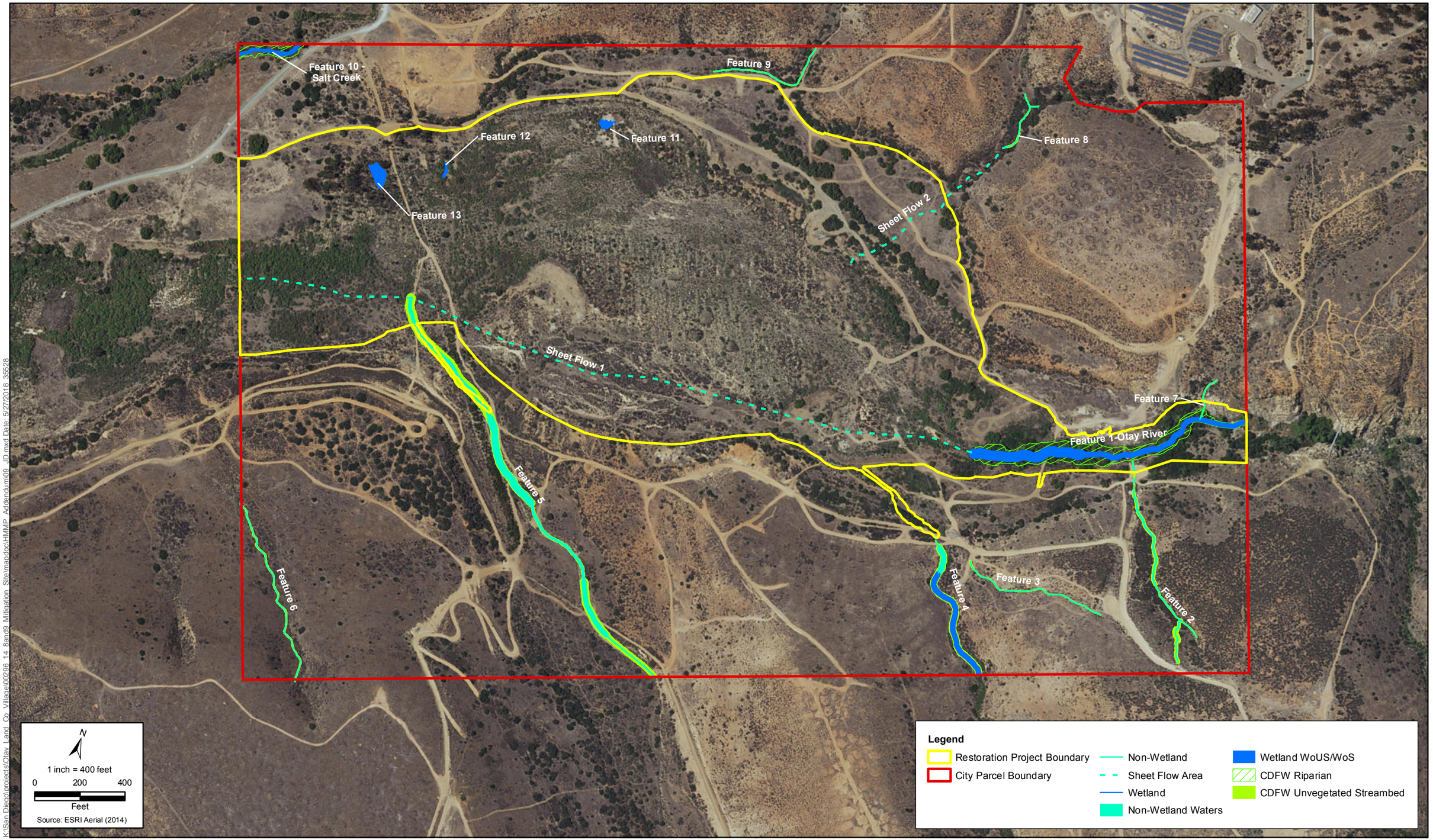


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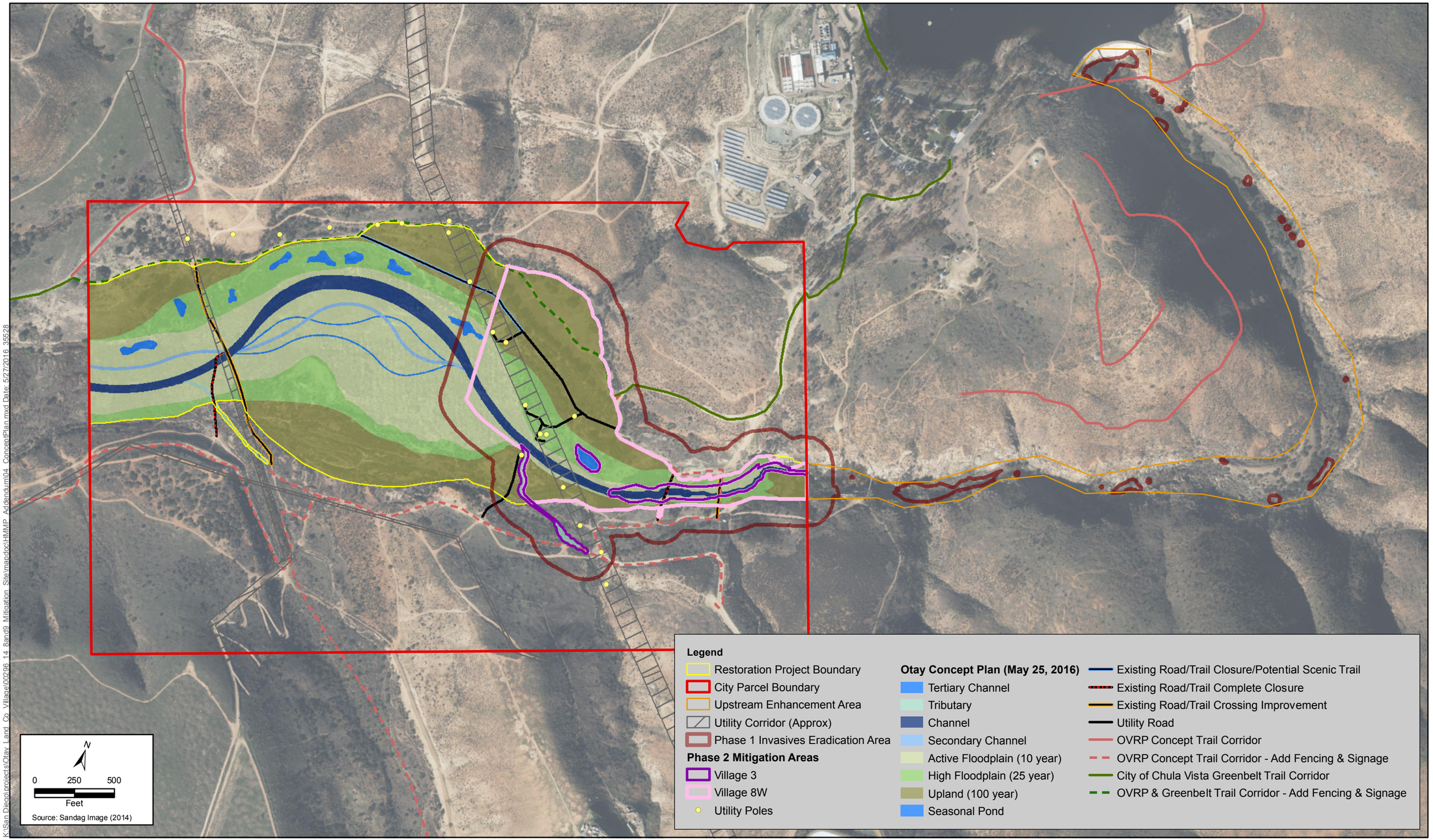
Figure 2
Jurisdictional Delineation
Otay River Restoration Project



K:\San Diego\projects\Otay Land Co. Village\00296.14 Sand9 Mitigation Site\mapdocs\HMMP Addendum\04 ConceptPlan.mxd Date: 5/27/2016, 365528

Figure 3
Mitigation Plan
Otay River Restoration Project

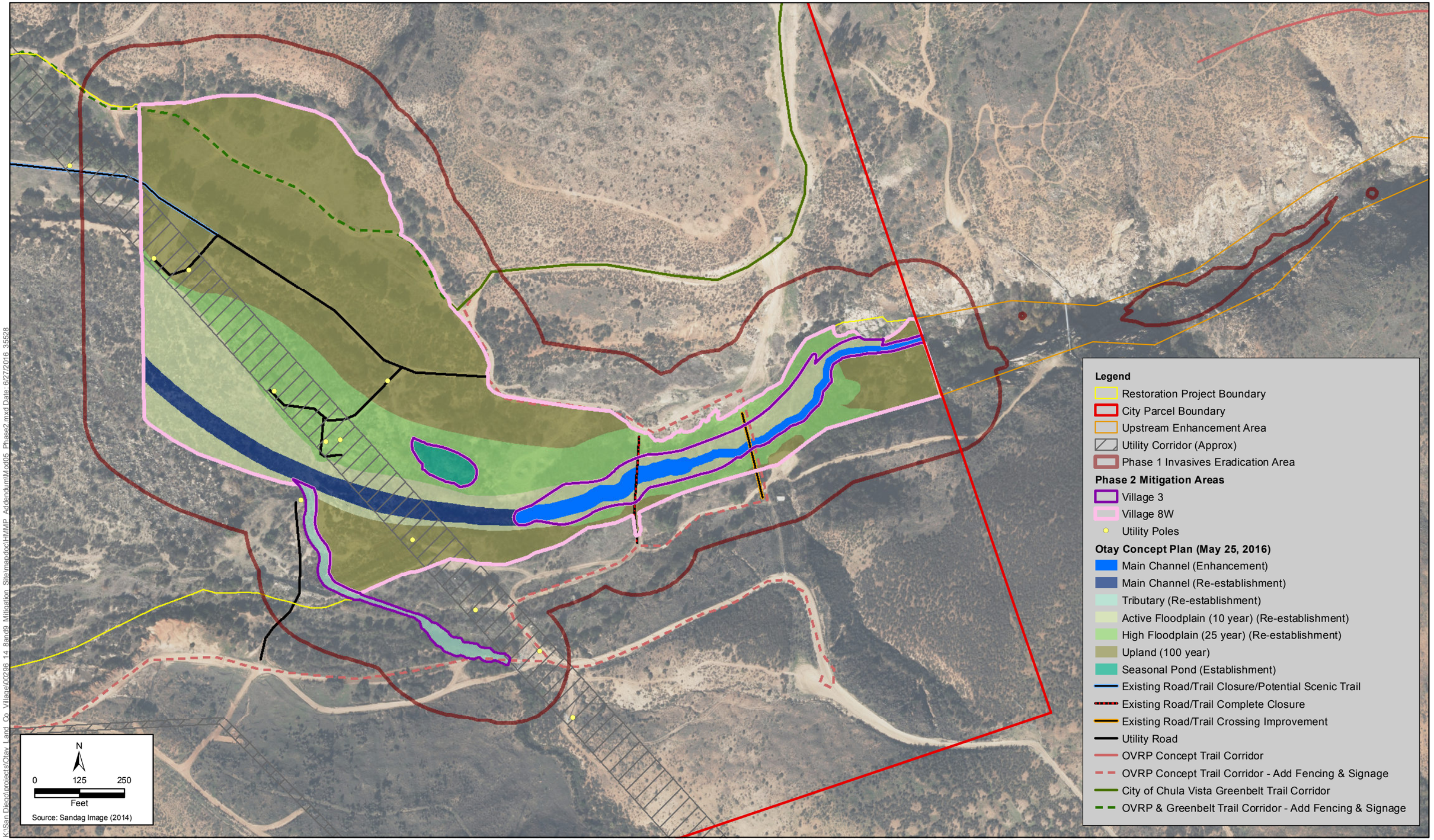


Figure 5
Phase 2 Detail
Otay River Restoration Project

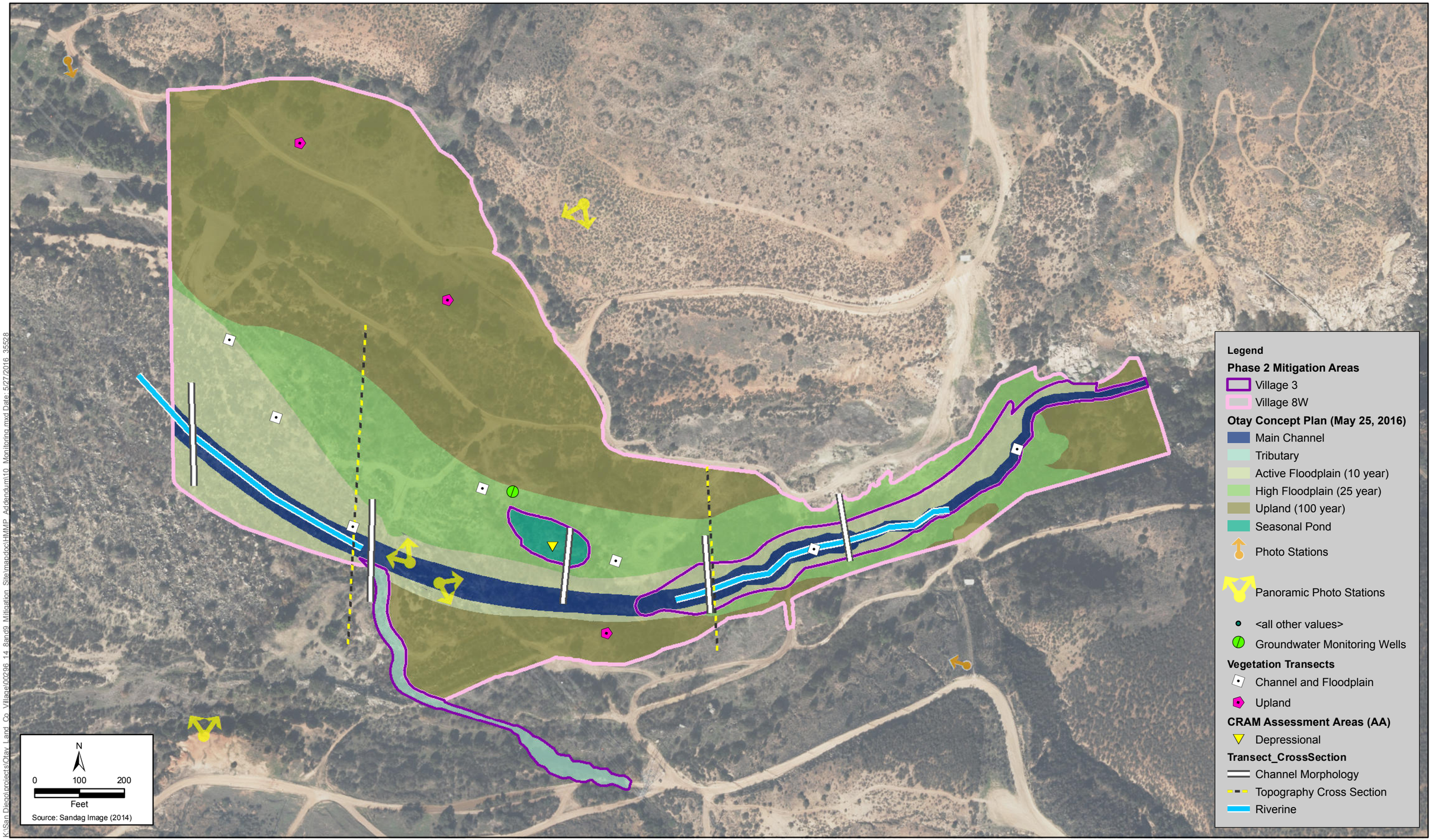


Figure 9
Monitoring for Phase 2
Otay River Restoration Project

ATTACHMENT 5
CEQA MITIGATION MONITORING AND REPORTING PROGRAM

Final Environmental Impact Report for Otay Ranch Village 8 West and Sectional Planning Area Plan and Tentative Map, Mitigation Monitoring and Reporting Program, dated November 2013 - Biological Resources & Water Quality and Hydrology

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation and Responsible Party[1]				Monitoring Reporting Agency[2]	Verification Frequency Time Frame to		Date of Completion	Date of Verification
		SPA/ TM	Pre Const.	During Const.	Post Const.		Monitor	Report		
BIOLOGICAL RESOURCES										
Implementation of the project would result in significant direct and indirect impacts to several sensitive species, including coast barrel cactus, Otay tarplant, San Diego marsh elder, California gnatcatcher, least Bell's vireo, cactus wren, rufous-crown sparrow, orange-throated whiptail, burrowing owl, raptors and breeding migratory birds. The project would result in significant direct impact to coastal sage scrub, disturbed coastal sage scrub, maritime succulent scrub, non-native grasslands, mule fat scrub, and freshwater marsh habitat.	**5.6-1 Maritime Succulent Scrub Restoration Plan.** Prior to the issuance of any land development permits (including clearing and grubbing or grading permits) the applicant shall prepare a restoration plan to restore impacted maritime succulent scrub at 1:1 ratio, pursuant to the Otay Ranch Resource Management Plan. A total of 1.05 acres of maritime succulent scrub will require restoration. The restoration plan shall include, at a minimum, an implementation strategy; species salvage and relocation, appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The maritime succulent scrub restoration shall be prepared by a city-approved biologist pursuant to the Otay Ranch Resource Management Plan restoration requirements. The applicant shall also be required to implement the revegetation plan subject to the oversight and approval of the Development Services Director (or their designee).	ALL	ALL			CCV				
Army Corps of Engineers regulated jurisdictional waters and California Department of Fish and Wildlife jurisdictional channels would be significantly impacted by development of the project.	**5.6-2 Resource Salvage Plan.** Prior to issuance of land development permits, including clearing or grubbing and grading permits, the applicant shall prepare a resource salvage plan for areas with salvageable resources, including, but not limited to, Otay tarplant, a Chula Vista narrow endemic species, Plantago erecta (Quino checkerspot butterfly larval host plant), coast barrel cactus, and San Diego sunflower. The resource salvage plan shall, at a minimum, evaluate options for plant salvage and relocation, including native plant mulching, selective soil salvaging, application of plant materials on manufactured slopes, and application/relocation of resources within the Preserve. Relocation efforts may include seed collection and/or transplantation to a suitable receptor site and will	ALL	ALL			CCV				

[1] **SPA** - Section Planning Area Plan; **TM -** Tentative Map; **Pre Const** - Pre-construction; **During Const** - During Construction; **Post Const** - Post-construction; **OLC** - Otay Land Company
[2] **CCV** - City of Chula Vista

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation and Responsible Party[1]				Monitoring Reporting Agency[2]	Verification Frequency Time Frame to		Date of Completion	Date of Verification
		SPA/ TM	Pre Const.	During Const.	Post Const.		Monitor	Report		
	be based on the most reliable methods of successful relocation. The program shall contain a recommendation for method of salvage and relocation/application based on feasibility of implementation and likelihood of success. The program shall include, at a minimum, an implementation plan, maintenance and monitoring program, estimated completion time, and any relevant contingency measures. The resource salvage plan shall be prepared by a city-approved biologist. The applicant shall also be required to implement the resource salvage plan subject to the oversight of the Development Services Director (or their designee).									
	5.6-3 Coastal California Gnatcatcher, Coastal Cactus Wren, and Least Bell's Vireo Pre-Construction Survey. For any work proposed between February 15 and September 15 (March 15 and September 15 for least Bell's vireo), a pre-construction survey for the coastal California gnatcatcher, coastal cactus wren, and least Bell's vireo shall be performed in order to reaffirm the presence and extent of occupied habitat. The pre-construction survey area for the species shall encompass all potentially suitable habitat within the project work zone, as well as a 300-foot survey buffer. The pre-construction survey shall be performed to the satisfaction of the Development Services Director (or their designee) by a qualified biologist familiar with the Chula Vista Multiple Species Conservation Program Subarea Plan.		ALL			CCV				
	The results of the pre-construction survey must be submitted in a report to the Development Services Director (or their designee) for review and approval prior to the issuance of any land development permits and prior to initiating any construction activities. If California gnatcatcher, cactus wren or least Bell's vireo is detected, a minimum 300-foot buffer delineated by orange biological		ALL	ALL		CCV				

[1] **SPA** - Section Planning Area Plan; **TM -** Tentative Map; **Pre Const** - Pre-construction; **During Const** - During Construction; **Post Const** - Post-construction; **OLC** - Otay Land Company
[2] **CCV** - City of Chula Vista

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation and Responsible Party[1]				Monitoring Reporting Agency[2]	Verification Frequency Time Frame to		Date of Completion	Date of Verification
		SPA/ TM	Pre Const.	During Const.	Post Const.		Monitor	Report		
	fencing shall be established around the detected species to ensure that no work shall occur within occupied habitat from February 15 through August 15 for Coastal California gnatcatcher and cactus wren, and March 15 through September 15 for least Bell's vireo. On-site noise reduction techniques shall be implemented to ensure that construction noise levels not exceed 60 dBA Leq at the location of any occupied sensitive habitat areas. The Development Services Director (or their designee) shall have the discretion to modify the buffer width depending on site-specific conditions. If the results of the pre-construction survey determine that the survey area is unoccupied, the work may commence at the discretion of the Development Services Director (or their designee) following the review and approval of the pre-construction report.									
	5.6-4 Burrowing Owl Pre-Construction Survey. Prior to issuance of any land development permits (including clearing and grubbing or grading permits), the applicant shall retain a city-approved biologist to conduct focused pre-construction surveys for burrowing owls. The surveys shall be performed no earlier than 30 days prior to the commencement of any clearing, grubbing, or grading activities. If occupied burrows are detected, the city-approved biologist shall prepare a passive relocation mitigation plan subject to the review and approval by the wildlife agencies and city including any subsequent burrowing owl relocation plans to avoid impacts from construction-related activities.		ALL			CCV				
	5.6-5 Revegetation Plan. Prior to issuance of land development permits, including clearing, grubbing, grading and construction permits, the applicant shall provide a revegetation plan to restore 0.7 acre of temporary impacts associated with off-site planned and future facilities. The revegetation plan must be prepared by a qualified city-	ALL	ALL		ALL	CCV				

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	approved biologist familiar with the Chula Vista Multiple Species Conservation Program Subarea Plan and must include, but not be limited to, an implementation plan; appropriate seed mixtures and planting method; irrigation method; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The applicant shall be required to prepare and implement the revegetation plan subject to the oversight and approval of the Development Services Director (or their designee).									
	5.6-6 Biological Construction Monitoring. Prior to issuance of land development permits, including clearing or grubbing and grading and/or construction permits for any areas adjacent to the Preserve and the off-site facilities located within the Preserve, the applicant shall provide written confirmation that a city-approved biological monitor has been retained and shall be on site during clearing, grubbing, and/or grading activities. The biological monitor shall attend all pre-construction meetings and be present during the removal of any vegetation to ensure that the approved limits of disturbance are not exceeded and provide periodic monitoring of the impact area including, but not limited to, trenches, stockpiles, storage areas and protective fencing. The biological monitor shall be authorized to halt all associated project activities that may be in violation of the Chula Vista Multiple Species Conservation Program Subarea Plan and/or permits issued by any other agencies having jurisdictional authority over the project.		ALL	ALL		CCV				
	5.6-7 Pre-Construction Education. Before construction activities occur in areas adjacent to and/or containing sensitive biological resources, all workers shall be educated by a city-approved biologist to recognize and avoid those areas that have been marked as sensitive biological resources.		ALL	ALL		CCV				

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	5.6-8 Migratory Bird Treaty Act Compliance. To avoid any direct impacts to raptors and/or any migratory birds protected under the Migratory Bird Treaty Act, removal of habitat that supports active nests on the proposed area of disturbance should occur outside of the breeding season for these species (January 15 to August 31). If removal of habitat on the proposed area of disturbance must occur during the breeding season, the applicant shall retain a city-approved biologist to conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, the results of which must be submitted to the city for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan as deemed appropriate by the city, shall be prepared and include proposed measures to be implemented to ensure that disturbance of breeding activities are avoided. The report or mitigation plan shall be submitted to the city for review and approval and implemented to the satisfaction of the city. The city-approved mitigation monitor shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.		ALL	ALL		CCV				
	5.6-9 Northern Harrier Pre-Construction Survey. Prior to issuance of any land development permits, including clearing and grubbing or grading permits, the applicant shall retain a city-approved biologist to conduct focused surveys for northern harrier to determine the presence or absence of this species within 900 feet of the construction area. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction.		ALL	ALL		CCV				

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	The results of the survey must be submitted to the city for review and approval. If active nests are detected by the city-approved biologist, a biological monitor shall be on site during construction to minimize construction impacts and ensure that no nests are be removed or disturbed until all young have fledged.									
	5.6-10 Construction Fencing and Signage. Prior to issuance of land development permits, including clearing or grubbing and grading and/or construction permits, the applicant shall install fencing in accordance with Chula Vista Municipal Code Section 17.35.030. Prominently colored, well-installed fencing and signage shall be in place wherever the limits of grading are adjacent to sensitive vegetation communities or other biological resources, as identified by the qualified monitoring biologist. Fencing shall remain in place during all construction activities. All temporary fencing shall be shown on grading plans for areas adjacent to the Preserve and for all off-site facilities constructed within the Preserve. Prior to release of grading and/or improvement bonds, a qualified biologist shall provide evidence that work was conducted as authorized under the approved land development permit and associated plans.	ALL	ALL	ALL		CCV				
	5.6-11 Indirect Impact Avoidance. In accordance with the Chula Vista Adjacency Management Guidelines and the Otay Ranch Village 8 West Edge Plan, and in addition to mitigation measure 5.11-1, Storm Water Pollution Prevention Plan, the following measures shall be implemented to further reduce indirect impacts (from lighting, noise, invasive, toxic substances, and public access) to sensitive biological resources located in the adjacent Otay Ranch Preserve areas:		ALL			CCV				

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	i. Prior to issuance of a building permit, a lighting plan and photometric analysis shall be submitted to the satisfaction of the Development Services Director (or their designee) to ensure lighting of all developed areas adjacent to the Preserve has been directed away from the Preserve, wherever feasible and consistent with public safety. The lighting plan shall illustrate the location of the proposed lighting standards and, if applicable, type of shielding measures required to minimize light spillage into the Preserve. Where necessary, development shall provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the Preserve and sensitive species from night lighting. Consideration shall be given to the use of low-pressure sodium lighting.	ALL			ALL	CCV				
	ii. Construction-related noise shall be limited within and adjacent to the Preserve during the typical breeding season of January 15 to September 15. Construction activity within and adjacent to any occupied sensitive habitat areas must not exceed 60 dBA Leq, or ambient noise levels if higher than 60 dBA Leq, during the breeding season. Prior to issuance of land development permits, including clearing or grubbing and grading and/or construction permits for areas within or adjacent to the Preserve, the applicant shall prepare and submit to the satisfaction of the Development Services Director (or their designee), an acoustical analysis to demonstrate that the 60 dBA Leq noise level is not exceeded at the location of any occupied sensitive habitat areas as determined based on the results the required biological pre-construction surveys. The acoustical analysis shall describe the methods by which construction noise shall not exceed			ALL		CCV				

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	60 dBA Leq. Noise abatement methods may include, but are not limited to, reoperation of specific construction activities, installation of noise abatement at the source, and/or installation of noise abatement at the receiving areas.									
	5.6-12 Retain Existing Vegetation. Existing vegetation shall be retained where possible during construction activities and grading activities shall be limited to the immediate area required for construction.			OLC		CCV				
	5.6-13 Landscape Plan. Prior to issuance of land development permits, including clearing or grubbing and grading and/or construction permits for areas within the 100-foot Preserve edge, the applicant shall prepare and submit to the satisfaction of the Development Services Director (or their designee), landscape plans to ensure that the proposed plant palette is consistent with the plant list contained in Attachment A of the Otay Ranch Village 8 West Preserve Edge Plan. The landscape plan shall also incorporate a manual weeding program for areas adjacent to the Preserve. The manual weeding program shall describe at a minimum, the entity responsible for controlling invasive species, the maintenance activities and methods required to control invasives, and a maintenance/monitoring schedule.	ALL			ALL	CCV				
	5.6-14 MCSP Preserve Boundary Delineation. Prior to issuance of land development permits, including clearing or grubbing and grading and/or construction permits for the project, the applicant shall submit wall and fence plans depicting appropriate barriers to prevent unauthorized access into the Otay Ranch Preserve. The wall and fence plans shall, at a minimum, illustrate the locations and cross-sections of proposed walls, fences, informational and directional signage, access controls, and/or boundary	ALL			ALL	CCV				

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	markers along the Preserve boundary and any off-site pedestrian trails as conceptually described in the Otay Ranch Village 8 West Edge Plan. The required wall and fence plan shall be subject to the approval the Development Services Director (or their designee).									
	5.6-15 Wetlands Mitigation and Monitoring Plan. Prior to issuance of land development permits, including clearing or grubbing and grading permits that impact jurisdictional waters, the applicant shall prepare a wetlands mitigation and monitoring plan. This plan shall include, at a minimum, an implementation plan, maintenance and monitoring program, estimated completion time, and any relevant contingency measures. Areas under the jurisdictional authority of Army Corps of Engineers and the California Department of Fish and Wildlife shall be delineated on all grading plans. Creation areas shall occur within the Otay River watershed in accordance with the wetlands mitigation and monitoring plan to the satisfaction of the Development Services Director (or their designee), Army Corps of Engineers, and California Department of Fish and Wildlife. The applicant shall also be required to implement the wetlands mitigation and monitoring plan subject to the oversight of the Development Services Director (or their designee), Army Corps of Engineers, and California Department of Fish and Wildlife.	ALL	ALL	ALL		CCV, Army Corps of Engineers, and California Department of Fish and Wildlife				
	5.6-16 Regulatory Permits. Prior to issuance of land development permits, including clearing or grubbing and grading permits for areas that impact jurisdictional waters, the applicant shall provide evidence that all required regulatory permits, such as those required under Sections 404 and 401 of the federal Clean Water Act, Section 1600 of the California Fish and Game Code, and the Porter Cologne Water Quality Act, have been obtained.	OLC	OLC			CCV, Army Corps of Engineers, and California Department of Fish and Wildlife				

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The project would have the potential to result in impacts to sensitive species that would conflict with Chula Vista Multiple Species Conservation Program Subarea Plan. Additionally, the project would have significant impacts related to biological resources management unless the Otay Ranch regional open space is preserved proportionally and concurrently with development, in accordance with the provisions of the Chula Vista Multiple Species Conservation Program Subarea Plan and the Otay Ranch Resource Management Plan.	**5.6-17 Annexation into Otay Ranch Preserve Community Facilities District No. 97-2.** Prior to the approval of the first final map for the SPA Plan, the applicant shall coordinate with the City Engineer and annex the project area within the Otay Ranch Preserve Community Facilities District No. 97-2.	ALL	ALL			CCV				
	5.6-18 Otay Ranch Preserve Land Conveyance. Prior to recordation of each final map the applicant shall convey land within the Otay Ranch Preserve to the Otay Ranch Preserve Owner Manager or its designee at a ratio of 1.188 acres for each acre of development area, as defined in the Otay Ranch Resource Management Plan. Access for maintenance purposes shall also be conveyed to the satisfaction of the Preserve Owner Manager, and each tentative map shall be subject to a condition that the applicant shall execute a maintenance agreement with the Preserve Owner Manager stating that it is the responsibility of the applicant to maintain the conveyed parcel until the Otay Ranch Preserve Community Facilities District No. 97-2 has generated sufficient revenues to enable the Preserve Owner Manager to assume maintenance responsibilities. The applicant shall maintain and manage the offered conveyance property consistent with the Otay Ranch Resource Management Plan Phase 2 until the Otay Ranch Preserve Community Facilities District No. 97-2 has generated sufficient revenues to enable the Preserve Owner Manager to assume maintenance and management responsibilities.	ALL	ALL			CCV				
	5.6-19 Area-Specific Management Directives. Prior to the Preserve Owner Manager's acceptance of the conveyed land in fee title, the applicant shall prepare, to the satisfaction of the Preserve Owner Manager, area specific management directives for the associated conveyance areas, which shall incorporate the guidelines and specific	ALL	ALL		ALL	CCV				

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	requirements of the Otay Ranch Resource Management Plan, management requirements of Table 3-5 of the Multiple Species Conservation Program Subarea Plan and information and recommendations from any relevant special studies. Guidelines and requirements from these documents shall be evaluated in relationship to the Preserve configuration and specific habitats and species found within the associated conveyance areas and incorporated into the area specific management directives to the satisfaction of the Preserve Owner Manager.									
CULTURAL AND PALEONTOLOGICAL RESOURCES										
Construction activities associated with the project could inadvertently result in significant impacts to presently unknown archaeological resources that may be uncovered during clearing and grading. It is not anticipated that construction would extend beyond the defined area of potential effect. However, a mitigation measure is include below, consistent with the recommendations of the cultural resources report (Appendix F1), to avoid a potentially significant impact that could occur if construction activities inadvertently extended in the proximity of site CA-SDI-12809.	**5.7-1 Protective Fencing**. Prior to the issuance of any land development permits for the SPA Plan and associated off-site facilities, including clearing, grubbing, and grading, the applicant shall install protective fencing (i.e., orange snow fence or similar) along the area of potential effect in the area of CA-SDI-12809 as directed by a qualified archaeologist. A qualified archaeologist shall monitor the site throughout the construction of the off-site facilities (including clearing, grubbing, grading, and installation) to ensure that unanticipated finds are handled in an appropriate and professional manner and that required fencing remains intact and project related construction activities do not extend beyond the approved limits of work.		OLC	OLC		CCV				
	5.7-2 Archaeological Monitor. Prior to issuance of land development permits, including clearing or grubbing and grading permits, the applicant shall provide written confirmation and incorporate into grading plans, to the satisfaction of the Development Services Director (or their designee), that a principal investigator as listed by the Secretary of the Interior (Code of Federal Regulations Title 36, Section 61) has been retained in an oversight capacity to ensure than an archeological monitor(s) will be present		OLC	OLC		CCV				

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HYDROLOGY AND WATER QUALITY										
The potential exists for the project to violate water quality standards or waste discharge requirements, alter existing drainage pattern of the site resulting in erosion/siltation or increase the rate or amount of surface runoff), create or contribute runoff water, or otherwise substantially degrade water quality. However, the project includes features and would implement best management practices to reduce hydrology and water quality impacts to a less than significant level. These features are prescribed as mitigation measures to assure implementation and facilitate monitoring through buildout of the project.	**5.11-1 Storm Water Pollution Prevention Plan**. Prior to issuance of each grading permit for the Village 8 West SPA Plan area or any land development permit, including clearing and grading, the project applicant shall submit a notice of intent and obtain coverage under the National Pollutant Discharge Elimination System permit for construction activity from the State Water Resources Control Board. Adherence to all conditions of the General Permit for Construction Activity is required. The applicant shall be required under the State Water Resources Control Board General Construction Permit to develop a Storm Water Pollution Prevention Plan and monitoring plan that shall be submitted to the City Engineer and the Director of Public Works. The Storm Water Pollution Prevention Plan shall be incorporated into the grading and drainage plans and shall specify both construction and post-construction structural and non-structural best management practices on site to reduce the amount of sediments and pollutants in construction and post-construction surface runoff before it is discharged into off-site storm water facilities. Section 7 of the City's Storm Water Manual outlines construction site best management practices requirements. The Storm Water Pollution Prevention Plan shall also address operation and maintenance of post-construction pollution prevention measures, including short-term and long-term funding sources and the party or parties that will be responsible for said measures. The Storm Water Pollution Prevention Plan shall incorporate construction and post-construction best management practices as outlined in the Village 8 West Edge Plan. The grading plans shall note the condition requiring a Storm Water Pollution Prevention Plan and monitoring plans.	ALL	ALL	ALL		CCV, State Water Resources Control Board				

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	5.11-2 Supplemental Water Quality Report. Prior to issuance of each grading permit, the applicant shall submit a supplemental report to the Preliminary Water Quality Technical Report for Village 8 West prepared by Hale Engineering dated December 8, 2011 that identifies which on-site storm water management measures from the Water Quality Technical Report have been incorporated into the project, to the satisfaction of the City Engineer. If a storm water management option is chosen by the parcel owner that is not shown in the water quality technical report, a project-specific water quality technical report shall be prepared for the planning area, referencing the Preliminary Water Quality Technical Report for Village 8 West for information relevant to regional design concepts (e.g., downstream conditions of concern) to the satisfaction of the City Engineer.	ALL	ALL		ALL	CCV				
	5.11-3 Post-Construction/Permanent Best Management Practices. Prior to issuance of each grading permit, the City Engineer shall verify that parcel owners have incorporated and will implement post-construction best management practices in accordance with current regulations. In particular, applicants are required to comply with the requirements of Section 2c of the Chula Vista Standard Urban Storm Water Management Plan, the Chula Vista Development Storm Water Manual, and the Preliminary Water Quality Technical Report for Village 8 West or any supplements thereto to the satisfaction of the City Engineer. Specifically, the applicant shall implement low impact development best management practices in the preparation of all site plans and, the applicant shall incorporate structural on-site design features into the project design to address site design and treatment control best management practices as well as requirements of the hydromodification management plan.		ALL		ALL	CCV				

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	The applicant shall monitor and mitigate any erosion in downstream locations that may occur because of on-site development.									
	5.11-4 Limitation of Grading. The project applicant shall comply with the Chula Vista Development Storm Water Manual limitation of grading requirements, which limit disturbed soil area to 100 acres, unless expansion of a disturbed area is specifically approved by the Director of Public Works. With any phasing resulting from this limitation, if required, the project applicant shall provide, to the satisfaction of the City Engineer, erosion and sediment control best management practices in areas that may not be completed, before grading of additional area begins.			ALL		CCV				
	5.11-5 Hydromodification Criteria. The project applicant shall comply, to the satisfaction of the City Engineer, with city hydromodification criteria or the hydrograph modification management plan, as applicable, addressed regionally at the SPA Plan level concurrent with grading and improvement plans for the project.	ALL	ALL	ALL	ALL	CCV				

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