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: **Spruce Street Drainage Improvement Project**
Certification Number R9-2016-0160
WDID: 9000003070

Reg. Meas. ID: 407159
Place ID: 825767
Party ID: 525283
Person ID: 557357

APPLICANT: **City of Escondido**
201 North Broadway
Escondido, CA 92025

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 June 27, 2016 was submitted by the City of Escondido (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 Spruce Street Drainage Improvement Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on December 7, 2016. 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-2016-00498-WSZ).

The Project is located within the City of Escondido, San Diego County, California from West 3rd Avenue to Escondido Creek. The Project is located at latitude 33.117376 and longitude -117.091357 and latitude 33.1168585 and longitude -117.09073. The Applicant has paid all required application fees for this Certification in the amount of $6,634.00. On an annual basis, the Applicant must also pay all active discharge fees and post discharge monitoring fees, as appropriate[1]. On December 7, 2016, the San Diego Water Board provided public notice of the

[1] The Applicant shall pay an annual active discharge fee each fiscal year or portion of a fiscal year during which discharges occur until the regional water board or the State Water Resources Control Board (State Water Board) issues a Notice of Completion of Discharges Letter to the discharger. Dischargers shall pay an annual post-discharge monitoring fee each fiscal year or portion of a fiscal year commencing with the first fiscal year following the fiscal year in which the regional water board or State Water Board issued a Notice of Completion of Discharges Letter to the discharger, but continued water quality

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

The Applicant proposes to improve the flow of a half mile of existing channel for flooding and vector issues. The channel contains both a concrete drainage and an earthen drainage. In the concrete lined section, the sediment and vegetation will be removed and the channel will be dredged to its original counters. The concrete channel enters a boxed culvert and the sediment from the boxed culvert will be removed and four 36 inch manholes installed to improve access during dredging and future maintenance. Within the concrete channel a concrete fillet will be installed to facilitate hydraulics which is a priority in the City of Escondido's Water Quality Improvement Program.

Within the earthen channel, activities will include vegetation removal, dredging of sediment, and grading of slopes to accommodate the 100-year storm. Rip rap, a new reinforced-concrete box, pier nose, wingwall structure, and a pedestrian bridge will be installed. Ecological improvements of the earthen channel will include the removal of a pedestrian walkway, removal of invasive species, and planting of native plants. As part of the ecological uplift, 0.24 acre of the channel will be treated for invasive species and seeded and planted with native wetland vegetation and 0.18 acre of upland will be converted to wetland as described in the City of Escondido Revelation Plan Spruce Street Drainage Improvements dated February 23, 2018.

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 parts of both the concrete and earthen portions of the channel. Within the concrete channel, 0.06 acre (177 linear feet) of wetland waters of the United States and/or State and 0.13 acre (464) of non-wetland waters will be impacted. Within the earthen channel 0.41 acre (1220 linear feet) of wetland waters of the United States and/or State and 0.04 (174 linear feet) of non-wetland waters will be permanently impacted. Of the 0.45 acres impacted within the earthen channel, 0.09 acres (947 linear feet) will be permanently impacted through the addition of impervious surfaces such as concrete or riprap. The remaining impacts within the earthen channel will occur as outlined in the Revegetation Plan, which includes realigning the channel, changing the grade of the channel, removing invasive species, and planting natives that will provide an ecological uplift. The Applicant reports that the Project purpose cannot be practically accomplished in a manner which would

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monitoring or compensatory mitigation monitoring is required. Dischargers shall pay the annual post-discharge monitoring fee each fiscal year until the regional water board or the State Water Board issues a Notice of Project Complete Letter to the discharger. Additional information regarding Water Quality Fees, Waste Discharge Requirement Fees, and Water Quality Certification Dredge and Fill Application Fee Calculator can be found electronically at the following location: http://www.waterboards.ca.gov/resources/fees/water_quality/#wqfees.

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 0.09 acre of jurisdictional waters through the addition of concrete and other imprevious surfaces to the earthen channel will be achieved through the re-establishment of 0.09 acres of 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 Kit Carson Park located in the Del Dios hydrologic sub-area (HSA 905.21) at a minimum compensation ratio of 1:1 (area mitigated:area impacted).

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 *Updated Final Wetland/Riparian Mitigation and Monitoring Plan for the City of Escondido Sewer Outfall Project Operation and Maintenance Activities Project* (Mitigation Plan), dated August 2013. 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 1 through 4 of this Certification.

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Attachments:

1. **Definitions**
2. **Project Location Maps**
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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. R9-2016-0160 (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 unnamed tributary to Escondido Creek or its 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 unnamed tributary to Escondido Creek. 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.

Q. **Groundwater Dewatering.** If groundwater dewatering is required for the Project, the Applicant shall enroll in and comply with the requirements of San Diego Water Board Order No. R9-2015-0013 NPDES No. CAG919003, *General Waste Discharge Requirements For Groundwater Extraction Discharges to Surface Waters within the San Diego Region* or its successor permit.

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 meet all the Post-Construction requirements of the San Diego Water Board Order No. R9-2013-0001, *National Pollutant Discharge Elimination Systems Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4)* Draining the Watersheds within the San Diego Region (Regional MS4 Permit) as well the most current BMP Design Manual for the City of Escondido. Where conflict exists between 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 the unnamed tributary to Escondido Creek and Escondido Creek within the Carlsbad 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:

	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	0.13	464	N/A[1]	1:1	N/A	N/A

[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]

(concrete portion)						
Wetland (concrete portion)	0.06	177	N/A[1]	1:1	N/A	N/A
Wetland (earthern portion)	0.09	273	0.09[2]	1:1	N/A	N/A
Wetland (earthen portion)	0.32	947	N/A[3]	1:1[3]	N/A	N/A
Stream Channel (earthen portion)	0.04	174	N/A[3]	N/A	N/A	N/A

1. Routine maintenance in the concrete channel is authorized under the City of Escondido's Water Quality Certification R9-2013-0072 and no additional mitigation is needed.
2. Impacts from new concrete and/or riprap: Re-establishment of 0.09 acre will occur at Kit Carson Park as described in the *Updated Final Wetland/Riparian Mitigation and Monitoring Plan for the City of Escondido Sewer Outfall Project Operation and Maintenance Activities Project.* The project is in its fifth year of monitoring.
3. Within the earthen channel (excluding the 0.09 acre of impacts from the addition of concrete and rip rap) the rest of the impacts within the earthen channel will provide an ecological uplift. As described in the Revegetation Plan, this portion of the stream will be earthen and realigned as part of a new stream design.

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

B. **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, page 37) to the satisfaction of the San Diego Water Board.

C. **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.

D. **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.

E. **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 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.

F. **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.

G. **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 90 days 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 streambed habitat 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 y following construction completion for Years 1, 3, and 5. The annual CRAM monitoring results shall be submitted with the Annual Project Progress Report. An evaluation, interpretation, and tabulation of all CRAM assessment data shall be submitted with the Final Project Completion Report.

F. **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.

G. **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;

[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/

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 not less than five years, 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. Qualitative and quantitative comparisons of current mitigation conditions with pre-construction conditions and previous mitigation monitoring results;

g. Stream photo documentation, including all areas of permanent and temporary impact, prior to and after mitigation site 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 Geographic Positioning System (GPS) coordinates for each of the photo points referenced;

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

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

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

H. **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

6. An evaluation, interpretation, and tabulation of all California Rapid Assessment Method (CRAM) data collected throughout the term of Project construction in accordance with section VI.E and VII.E of this Certification.

I. **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.

J. **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. R9-2016-0160:825767:ngergans
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. R9-2016-0160:825767:ngergans.

K. **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.

L. **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 Escondido 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 January 9, 2018 for the Mitigated Negative Decelaration (MND) titled Final Mitigated Negative Declaration and Addendum to the MND dated December 20, 2017 (State Clearing House Number 2015121103). 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 MND 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 MND 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

Staff Name, Nicole Gergans
Telephone: 619-521-3969
Email: nicole.gergans@waterboards.ca.gov

X. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the **Spruce Street Drainage Improvement Project** (Certification No. R9-2016-0160) 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. R9-2016-0160 issued on March 6, 2018.

David W. Gibson

DAVID W. GIBSON
Executive Officer
San Diego Water Board

6 March 2018
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.

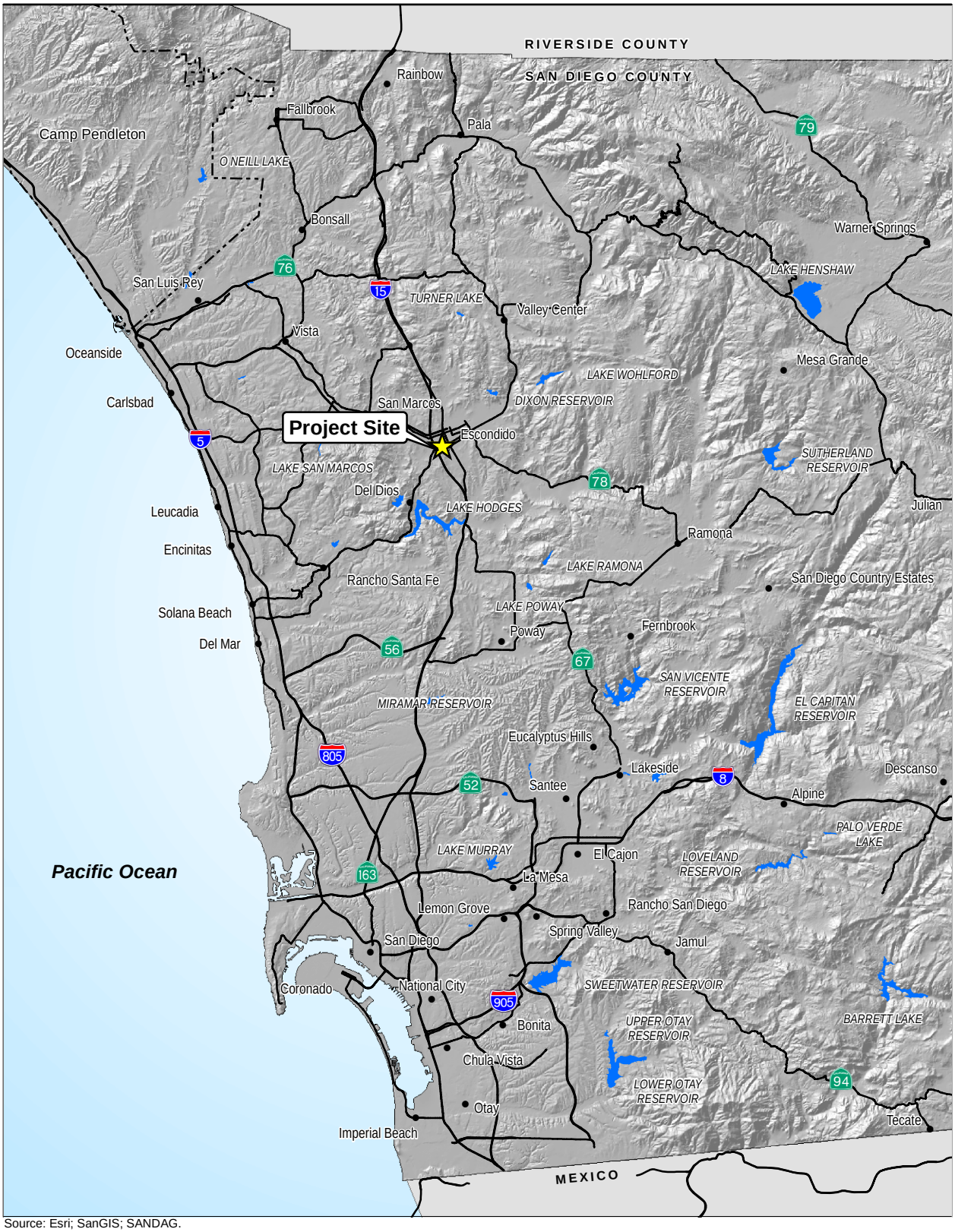
Uplands - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and 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

1) **Figure 1 – Regional Map**
2) **Figure 2 - Proposed Project Location**
3) **Figure 3 – Jurisdictional Waters Overview**
4) **Figure 5a – Detailed Jurisdictional Waters Map 1**
5) **Figure 5b – Detailed Jurisdictional Waters Map 2**
6) **Figure 5c – Detailed Jurisdictional Waters Map 3**
7) **Figure 5d – Detailed Jurisdictional Waters Map 4**



Source: Esri; SanGIS; SANDAG.

8 4 0 8 Miles

Scale: 1:506,880; 1 inch = 8 miles

Figure 1
Regional Map

Path: P:\2014\60313771_Esc_MissionP\900-CAD-GIS\920 GIS\922_Maps\SpruceStreet_Restoration\Regional_Map.mxd, 2/18/2016, Daniel_Arellano

Source: SanGIS 2014; City of Escondido 2010.

350 175 0 350 Feet

Scale: 1:4,200; 1 inch = 350 feet

Figure 2
Proposed Project Location

Path: P:\2014\60313771_Esc_MissionP\900-CAD-GIS\920 GIS\922_Maps\SpruceStreet_Restoration\Project_Location.mxd, 2/18/2016, Daniel_Arellano

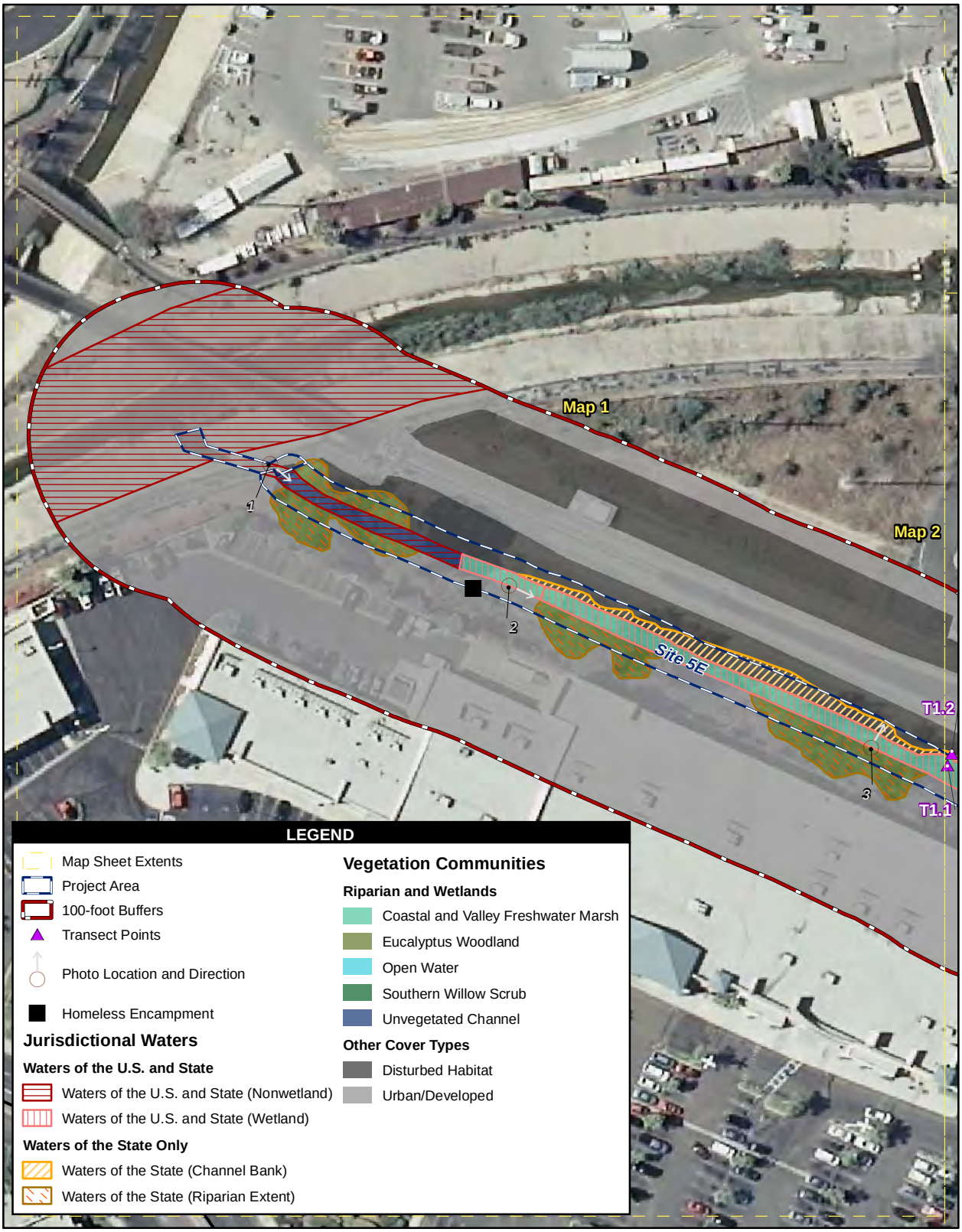
Source: SanGIS 2012, 2014; City of Escondido 2010

350 175 0 350 Feet

Scale - 1:4,200 1 inch = 350 feet

Figure 3
Jurisdictional Waters Overview Map

Path: P:\2014\60313771_Esc_MissionP\900-CAD-GIS\920 GIS\922_Maps\SpruceStreet_Restoration\Veg_Wetland_JD_overview.mxd, 2/22/2016, Daniel_Arellano



Source: SanGIS 2012, 2014; City of Escondido 2010

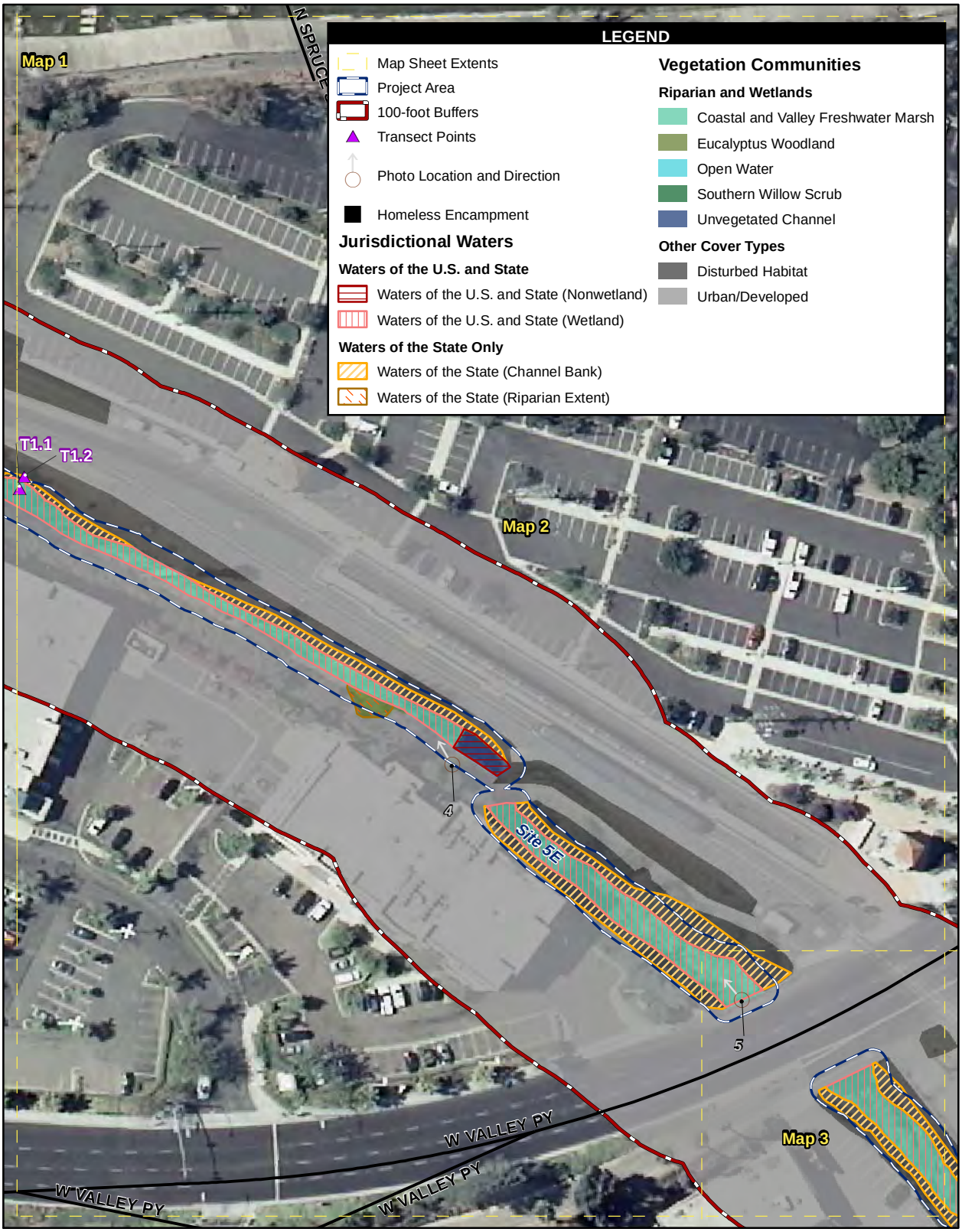
0 50 100 Feet

Scale - 1:1,200; 1 inch = 100 feet

Figure 5a
Detailed Jurisdictional Waters

Map 1

Path: P:\2014\60313771_Esc_MissionP\900-CAD-GIS\920 GIS\922_Maps\SpruceStreet_IS_MND\Veg_Wetland_JD_series.mxd, 8/10/2015, Daniel_Arellano



Source: SanGIS 2012, 2014; City of Escondido 2010

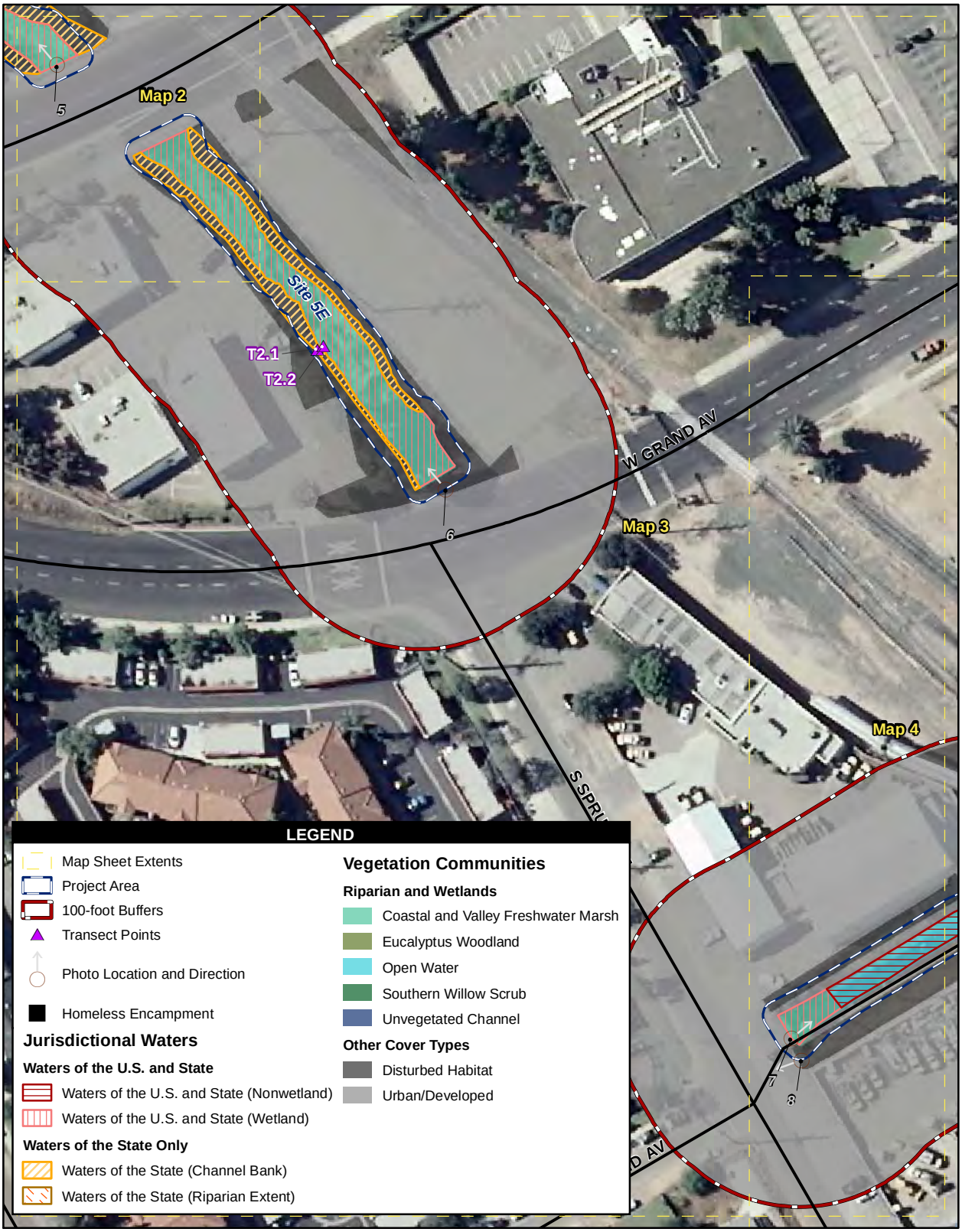
0 50 100 Feet

Scale - 1:1,200; 1 inch = 100 feet

Figure 5b
Detailed Jurisdictional Waters

Map 2

Path: P:\2014\60313771_Esc_MissionP\900-CAD-GIS\920 GIS\922_Maps\SpruceStreet_IS_MND\Veg_Wetland_JD_series.mxd, 8/10/2015, Daniel_Arellano



Source: SanGIS 2012, 2014; City of Escondido 2010

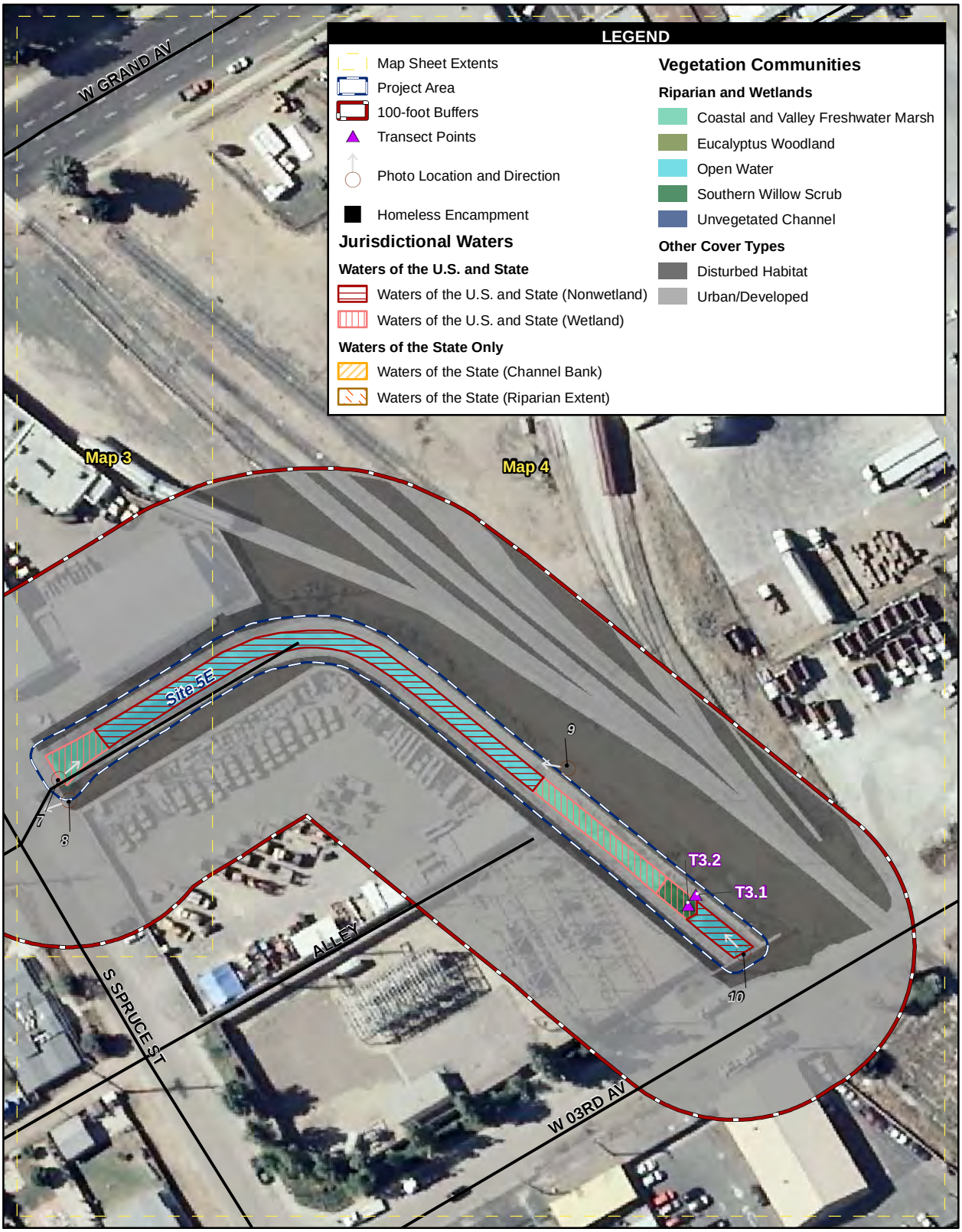
0 50 100 Feet

Scale - 1:1,200; 1 inch = 100 feet

Figure 5c
Detailed Jurisdictional Waters

Map 3

Path: P:\2014\60313771_Esc_MissionP\900-CAD-GIS\920 GIS\922_Maps\SpruceStreet_IS_MND\Veg_Wetland_JD_series.mxd, 8/10/2015, Daniel_Arellano



Source: SanGIS 2012, 2014; City of Escondido 2010

0 50 100 Feet

Scale - 1:1,200; 1 inch = 100 feet

Figure 5d
Detailed Jurisdictional Waters

Map 4

Path: P:\2014\60313771_Esc_MissionP\900-CAD-GIS\920 GIS\922_Maps\SpruceStreet_IS_MND\Veg_Wetland_JD_series.mxd, 8/10/2015, Daniel_Arellano

ATTACHMENT 3
PROJECT SITE PLANS

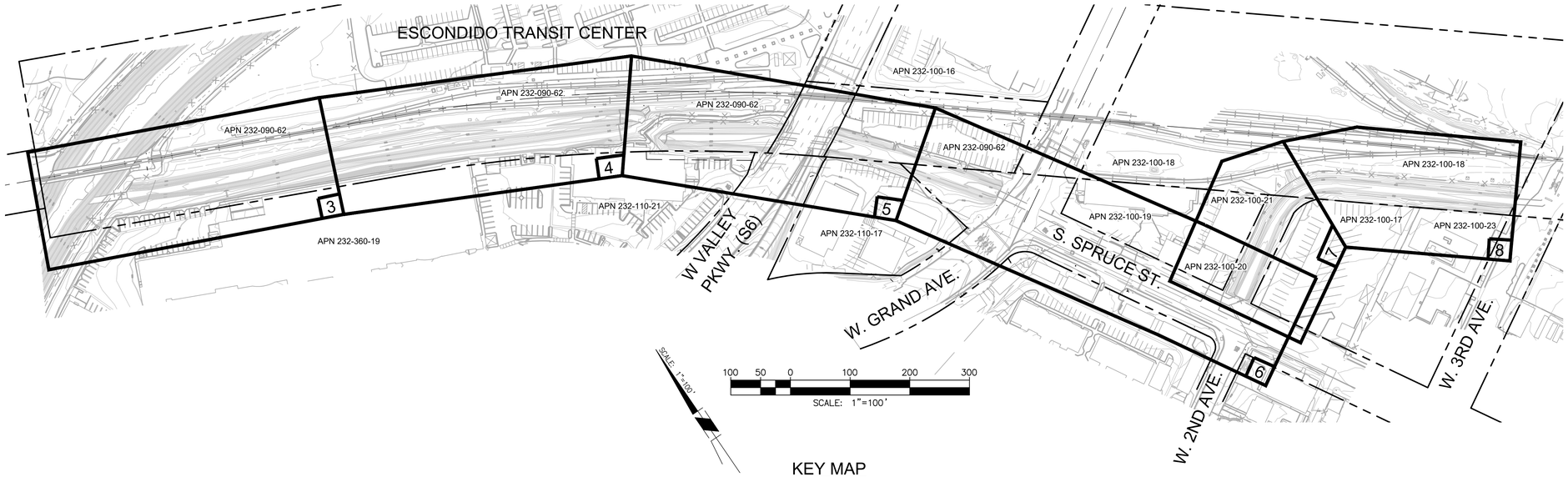
1) **60% Construction Plans for Spruce Street Channel Improvement Project**
2) **Figure 4 – Jurisdictional Waters and Planting Area**

60% CONSTRUCTION PLANS

FOR

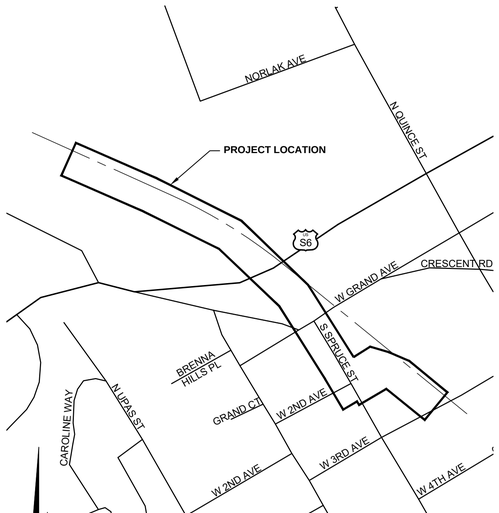
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT

PROJECT NO. xxxx



KEY MAP

SCALE 1" = 100'



LOCATION MAP

NO SCALE

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 PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF ESCONDIDO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

RICHARD LUCERA — DATE
R.C.E. # 58089
EXP DATE: JUNE 30, 2018

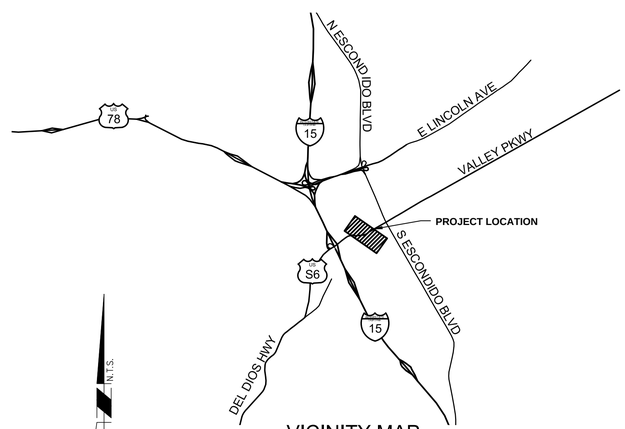
OWNER / PERMITEE

OWNER/DEVELOPER NAME: CITY OF ESCONDIDO
ADDRESS: 201 NORTH BROADWAY, ESCONDIDO, CA 92025
TEL NO: (760) 839-4651
FAX NO: (760) 869-4597

ENGINEER

MICHAEL BAKER INTERNATIONAL
5050 AVENIDA ENCINAS, STE. 260
CARLSBAD, CA 92009
TEL NO: (760) 476-9193
FAX NO: (760) 476-9198

SHEET INDEX



VICINITY MAP

NO SCALE

REGISTERED PROFESSIONAL ENGINEER — RICHARD A. LUCERA — No. C058089 — Exp. 6-30-18 — CIVIL — STATE OF CALIFORNIA

ESCONDIDO City of Choice

60% SUBMITTAL 6/27/17

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE: Horizontal / Vertical

Office / Filmed / Traffic

Designed By | Drawn By | Checked By

Plans Prepared Under Supervision Of
RICHARD LUCERA — Date — R.C.E. No. 58089

Submitted — By — Asst. City Engineer of Public Works

Approved — By — Director of Public Works

CITY OF ESCONDIDO — DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
TITLE PAGE

Drawing No. XX-XX

Sheet 1 of 22

DWG: H:\PDATA\156036_spruce street channel\CADD\Dlr\156036-001-TS.dwg

GENERAL NOTES:

1. ALL WORK TO BE DONE IN ACCORDANCE WITH THE "GREEN BOOK" STANDARD SPECIFICATIONS 2012 EDITION, 2012 REGIONAL SUPPLEMENTS, SPECIAL PROVISIONS OF THE CITY OF ESCONDIDO'S DESIGN STANDARDS AND STANDARD DRAWINGS EFFECTIVE MAY 6, 2009, SAN DIEGO REGIONAL STANDARD DRAWINGS, 2012 EDITION AND CALTRANS STANDARD SPECIFICATIONS AND STANDARD PLANS, 2006 EDITION, ALONG WITH ANY REGIONAL SUPPLEMENTAL AMENDMENTS THERETO.

2. ALL CONTRACTORS WORKING IN THE PUBLIC RIGHTS-OF-WAY SHALL OBTAIN A NO - FEE ENCROACHMENT PERMIT FROM THE ENGINEERING FIELD OFFICE. INSPECTION OF ALL WORK IS REQUIRED. CONTACT THE ENGINEERING FIELD OFFICE (839-4664) TO ARRANGE FOR ENCROACHMENT PERMITS AND INSPECTION. TWENTY-FOUR HOUR ADVANCE NOTICE IS REQUIRED FOR INSPECTION. NO WORK SHALL BE PERFORMED IN THE PUBLIC RIGHT-OF-WAY ON SATURDAYS, SUNDAYS OR LEGAL HOLIDAYS WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SUBSTRUCTURES, BY POTHOLING, PRIOR TO THE START OF ANY UNDERGROUND UTILITY INSTALLATION, WHETHER SHOWN HEREON OR NOT, AND PROTECT THEM FROM DAMAGE. THE EXPENSE OF REPAIR OR REPLACEMENT OF SAID SUBSTRUCTURES SHALL BE BORNE BY THE CONTRACTOR.

4. NEITHER THE OWNER NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE THEREFOR.

5. LOCATION AND ELEVATION OF ALL EXISTING IMPROVEMENTS WITHIN THE AREA OF WORK SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE EFFECTIVE REMOVAL OF ALL MARK-OUT PAINT, PLACED BY OTHERS, USED TO LOCATE SUBSTRUCTURES BEFORE THE FINAL INSPECTION OF THE PROJECT. CLEAN UP SHALL INCLUDE REMOVAL OF ALL UTILITY MARK-OUT PAINT PLACED ON THE JOB SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ALL MARK-OUT PAINT IN A MANNER THAT WILL NOT DAMAGE OR DEGRADE ANY SURFACE FROM WHICH PAINT IS REMOVED. "BLACKING OUT" OR PAINTING OVER MARK-OUTS IS NOT ACCEPTABLE.

STREET NOTES:

1. ALL STATIONING REFERS TO THE CENTERLINE OF THE STREET.
2. ALL CURB DATA REFER TO THE FACE OF THE CURB.
3. STRUCTURAL SECTION TO BE CONFIRMED AFTER ROUGH GRADING IS COMPLETED, ACCORDING TO FIGURE 3 OF THE CITY OF ESCONDIDO DESIGN STANDARDS.

TRAFFIC CONTROL NOTES:

1. THE CITY ENGINEER OR HIS REPRESENTATIVE HAS THE AUTHORITY TO REVOKE THE PERMIT SHOULD THE PERMITTEE FAIL TO ENSURE PUBLIC SAFETY.

2. ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM VIEW WHEN NOT IN USE.

3. WORK HOURS SHALL BE RESTRICTED TO BETWEEN 8:30 A.M. TO 3:30 P.M. UNLESS APPROVED OTHERWISE.

4. TRAFFIC CONTROL DEVICES ARE TO BE PLACED BY A PERSON TRAINED IN TRAFFIC CONTROL AND ARE TO BE CHECKED, AND MAINTAINED AS NECESSARY, PERIODICALLY THROUGHOUT THE DAY. FAILURE TO MAINTAIN TRAFFIC CONTROL DEVICES MAY RESULT IN ENCROACHMENT PERMIT REVOCATION.

5. PEDESTRIAN CONTROLS SHALL BE PROVIDED AS SHOWN ON THE PLANS.

6. TEMPORARY "NO PARKING" SIGNS WILL BE POSTED 72 HOURS PRIOR TO COMMENCING WORK WHICH INDICATE THE DAY(S) OF THE WEEK AND HOURS OF THE DAY THAT THE WORK IS TO BE PERFORMED.

7. ACCESS TO DRIVEWAYS WILL BE MAINTAINED AT ALL TIMES UNLESS OTHER ARRANGEMENTS ARE MADE AND PREVIOUSLY APPROVED BY A CITY ENGINEER OR HIS REPRESENTATIVE.

8. THE CONTRACTOR SHALL REPLACE, WITHIN 72 HOURS, ALL TRAFFIC SIGNAL LOOP DETECTORS DAMAGED DURING CONSTRUCTION.

9. ALL STRIPING REMOVED OR DAMAGED WILL BE REPLACED BY THE CONTRACTOR WITHIN 24 HOURS (OR REPLACED WITH TEMPORARY TAPE).

10. ALL WORKERS SHALL BE EQUIPPED WITH A REFLECTIVE SAFETY VEST. ALL FLAGGERS SHALL ALSO BE EQUIPPED WITH A HARD HAT, C28 "STOP/SLOW" PADDLE AND SHALL BE TRAINED IN THE PROPER FUNDAMENTALS OF FLAGGING TRAFFIC.

11. ANY WORK THAT DISTURBS NORMAL TRAFFIC SIGNAL OPERATIONS SHALL BE COORDINATED WITH THE CITY 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.

12. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC CONTROL DEVICES 24 HOURS PER DAY AND 7 DAYS PER WEEK.

13. A MINIMUM OF TWELVE (12) FOOT TRAVEL LANES MUST BE MAINTAINED UNLESS OTHERWISE APPROVED BY THE CITY.

14. ALL NIGHT WORK WILL REQUIRE WRITTEN APPROVAL FROM THE CITY MANAGER. LANE CLOSURES, ROAD DETOURS, ROAD CLOSURES, AND TRAFFIC SIGNAL MODIFICATIONS ASSOCIATED WITH OVERNIGHT CONSTRUCTION ACTIVITIES WILL REQUIRE WARNING SIGNS TO BE PLACED AT LEAST ONE WEEK IN ADVANCE OF STARTING CONSTRUCTION.

15. A FLASHING ARROW BOARD SHALL BE REQUIRED ON ALL ARTERIAL STREET LANE CLOSURES.

16. DEVIATIONS IN THE ACTUAL PLACEMENT OF TRAFFIC CONTROL DEVICES RELATIVE TO THE APPROVED TRAFFIC CONTROL PLAN ARE PROHIBITED. CHANGES MUST BE SUBMITTED, IN WRITING, TO THE CITY IN THE REQUIRED PLAN FORMAT BY THE PERMITTEE AND APPROVED PRIOR TO IMPLEMENTATION. ALL TRAFFIC CONTROL PLANS MUST BE SIGNED BY A PROFESSIONAL TRAFFIC ENGINEER LICENSED IN CALIFORNIA, UNLESS OTHERWISE REQUESTED BY THE CITY.

UTILITY NOTES:

1. ALL TEMPORARY PAVING PLACED BY ANY CONTRACTOR, SUBCONTRACTOR OR UTILITY COMPANY SHALL REMAIN IN THE PUBLIC RIGHT OF WAY FOR NOT MORE THAN 30 CALENDAR DAYS ON RESIDENTIAL STREETS AND 72 HOURS ON ARTERIALS, MAJOR ROADS, COLLECTORS AND LOCAL RESIDENTIAL STREETS AND 72 HOURS ON ARTERIALS, MAJOR ROADS, COLLECTORS AND LOCAL COLLECTORS, PRIOR TO PLACEMENT OF PERMANENT PAVEMENT. ALL TEMPORARY PAVING PLACED IN THE PUBLIC RIGHT OF WAY SHALL BE MAINTAINED CONTINUOUSLY IN ACCORDANCE WITH CITY OF ESCONDIDO STANDARD DRAWING NO. G-3-E.

2. ALL UNDERGROUND UTILITIES TO BE INSTALLED BEFORE CONSTRUCTION OF CURBS, GUTTERS, SIDEWALKS OR SURFACING OF STREETS.

3. A FEE IS CHARGED FOR SHUTTING DOWN OR TAPPING A LIVE WATERLINE. CONTACT THE FIELD ENGINEERING INSPECTOR AT (760) 839-4664 FOR A DETERMINATION OF THE FEE AMOUNT. SCHEDULE ALL SHUTDOWNS THROUGH A FIELD ENGINEERING INSPECTOR. THIS IS ONLY APPLICABLE TO THE CITY OF ESCONDIDO WATERLINES.

4. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES PRIOR TO STARTING WORK NEAR COMPANY FACILITIES AND COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONTACT THE UTILITY COMPANIES, ADVISE THEM OF THE PROPOSED IMPROVEMENTS AND BEAR THE COST OF RELOCATIONS, IF NEEDED. SEE OWNER'S LETTER REGARDING UTILITY COORDINATION DATED _____ .

5. PAVED ACCESS TO THE SITE SHALL BE MAINTAINED FOR THE USE OF HEAVY FIRE FIGHTING EQUIPMENT.

WORK TO BE DONE:

IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS, CITY OF ESCONDIDO'S DESIGN STANDARDS AND STANDARD DRAWINGS DATED MAY 6, 2009, THE SAN DIEGO REGIONAL STANDARD DRAWINGS, 2012 EDITION AND CALTRANS STANDARD SPECIFICATIONS AND STANDARD PLANS, 2006 EDITION, ALONG WITH ANY REGIONAL SUPPLEMENTAL AMENDMENTS THERETO, "GREEN BOOK" STANDARD SPECIFICATIONS 2012 EDITION, 2012 REGIONAL SUPPLEMENTS, SPECIAL PROVISIONS OF THE CITY OF ESCONDIDO'S DESIGN STANDARDS AND STANDARD DRAWINGS EFFECTIVE MAY 6, 2009.

LEGEND:

SYMBOLS DESCRIPTION (PROPOSED)	STD. DWG OR DETAIL
TYPE "G" CURB AND GUTTER (H= 8") TYPE "G" CURB AND GUTTER	G-2 (MODIFIED) G-2
6" TYPE "G" CURB TYPE "B-1" CURB (H= 8")	G-1 G-6 (MODIFIED)
RETAINING WALL	C-11A
CONCRETE DRIVEWAY	G-14A
CONCRETE SIDEWALK	G-7
STREET SURVEY MONUMENT	M-10
ROCK SLOPE PROTECTION	
DECOMPOSED GRANITE PATHWAY	CSP A77C3, A77C5, A77C6, A77C7, A77F1 TYPE 12B, A77F3, A77J1, A77J4, A77K1
LANDSCAPING (SEE PLANTING PLANS)	
METAL BEAM GUARDRAIL	
TEMPORARY FENCE (TYPE ESA)	
DAYLIGHT LINE	
INFILTRATION SWALE	
STORM DRAIN CLEANOUT, TYPE A	D-9
STORM DRAIN INLET, TYPE B	D-2
STORM DRAIN INLET, TYPE B-1	D-2
STORM DRAIN INLET, TYPE B-2	D-2
CATCH BASIN, TYPE F	D-7
STORM DRAIN PIPE	
STRAIGHT HEADWALL	D-30
RIP RAP ENERGY DISSIPATER	D-40
STREET LIGHT	E-1
IRRIGATION SLEEVES, TRENCH DETAIL PER	I-25
GUARD POST AND BARRICADE	M-9
SAWCUT AND REMOVE EXISTING PAVEMENT AND BASE SECTION	
COLD PLANE AND AC OVERLAY	
CUT AND FILL SLOPES, SLOPE BENCHING	DS-10
690 PROPOSED MAJOR CONTOUR	
PROPOSED MINOR CONTOUR	
RIGHT OF WAY	
LOT LINE	
EASEMENT LINE	
(620.0) EXISTING ELEVATION	
620.0 FL PROPOSED FLOW LINE	

LEGEND:

SYMBOLS	DESCRIPTION (EXISTING FEATURES)
E	ELECTRIC
OH	OVERHEAD ELECTRIC
G	GAS
RW	RECLAIMED WATER
S	SEWER
SD	STORM DRAIN
T	TELEPHONE
W	WATER
	BLOW-OFF
	WATER VALVE
	POWER POLE
495	CONTOUR

ABBREVIATIONS:

AC	ASPHALT CONCRETE
APE	AREA OF POTENTIAL EFFECT
BC	BEGIN CURVE
BRG	BEARING
BO	BLOWOFF
BVC	BEGIN VERTICAL CURVE
CAB	CRUSHED AGGREGATE BASE
CATV PED	CABLE TV PEDESTAL
CDS	COUNTY DESIGN STANDARDS
CIDH	CAST-IN-DRILLED-HOLE
CL	CENTER LINE
CONC	CONCRETE
CSP	CALTRANS STANDARD PLANS
Dia	DIAMETER
DG	DISINTEGRATED GRANITE
DR	DRIVE
DWY	DRIVEWAY
E	EASTING/ELECTRIC
EC	END CURVE
ELEC VLT	ELECTRIC VAULT
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
ETW	EDGE OF TRAVELED WAY
EVC	END VERTICAL CURVE
EXIST/EX	EXISTING
FES	FLARED END SECTION
FH	FIRE HYDRANT
FL	FLOW LINE
FO	FIBER OPTIC
GAS V	GAS VALVE
GAS VLT	GAS VAULT
HGL	HYDRAULIC GRADE LINE
HARRF	HALE AVENUE RESOURCE RECOVERY FACILITY
HMA	HOT MIX ASHPALT
HMP	HYDRO MODIFICATION PLAN
HORIZ	HORIZONTAL
HP	HIGH POINT
HWL	HIGH WATER LEVEL
ICV	IRRIGATION CONTROL VALVE
IE	INVERT ELEVATION
L	LENGTH
LN	LANE
LOL	LAYOUT LINE
LP	LOW POINT
LT	LEFT
MB	MAILBOX
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTHING
NB	NORTH BOUND
OC	ON CENTER
OH	OVERHEAD ELECTRIC
OS	OFFSET
OT	OVERHEAD TELEPHONE
PB	PULLBOX
PCC	PORTLAND CEMENT CONCRETE/POINT OF COMPOUND CURVE
PCR	POINT OF CURB RETURN
PRC	POINT OF REVERSING CURVE
PED	PEDESTRIAN/PEDESTAL
PL	PROPERTY LINE
PP	POWER POLE
PRC	POINT OF REVERSE CURVE
PT	POINT OF TANGENCY
PVI	POINT OF VERTICAL INTERSECTION
PVT	PRIVATE
Q	FLOW RATE
RC	RELATIVE COMPACTION
R/W	RIGHT OF WAY
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RSP	ROCK SLOPE PROTECTION
RD	ROAD
RL	RELOCATE
RM	REMOVE
RS	ROAD SURVEY
RT	RIGHT
RW	RECYCLED WATER/RETAINING WALL
R/W	RIGHT OF WAY
S	SEWER
SB	SOUTH BOUND
SDRSD	SAN DIEGO REGIONAL STANDARD DRAWINGS
SF	SQUARE FEET
SHT	SHEET
SDMH	STORM DRAIN MANHOLE
SMH	SEWER MANHOLE
SP	SIGN POST
ST	STREET
STA	STATION
ST LT	STREET LIGHT
ST LT PB	STREET LIGHT PULLBOX
T	TELEPHONE
TB	TOP OF BERM
TEL CAB	TELEPHONE CABINET
TEMP	TEMPORARY
TS	TRAFFIC SIGNAL
TS PB	TRAFFIC SIGNAL PULLBOX
TYP	TYPICAL
V	VELOCITY
VC	VERTICAL CURVE
VERT	VERTICAL
W/	WITH
W	WIDTH/WATER
WV	WATER VALVE
WW	WINGWALL

60% SUBMITTAL 6/27/17

REGISTERED PROFESSIONAL ENGINEER — RICHARD A. LUCERA — R.C.E. No. C058089 — Exp. 6-30-18 — CIVIL — STATE OF CALIFORNIA

ESCONDIDO — City of Choice

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Submitted	Approved	CITY OF ESCONDIDO — DEPARTMENT OF PUBLIC WORKS	Drawing No.
Contractor								Horizontal	Filmed				By	By	Improvement Plans for: SPRUCE STREET CHANNEL IMPROVEMENT PROJECT	XX-XX
Inspector								Vertical	Traffic	Plans Prepared Under Supervision Of RICHARD LUCERA	Date	R.C.E. No. 58089	Asst. City Engineer of Public Works	Director of Public Works	NOTES	Sheet 2 of 22
Date Completed							ELEV. DATUM: .									

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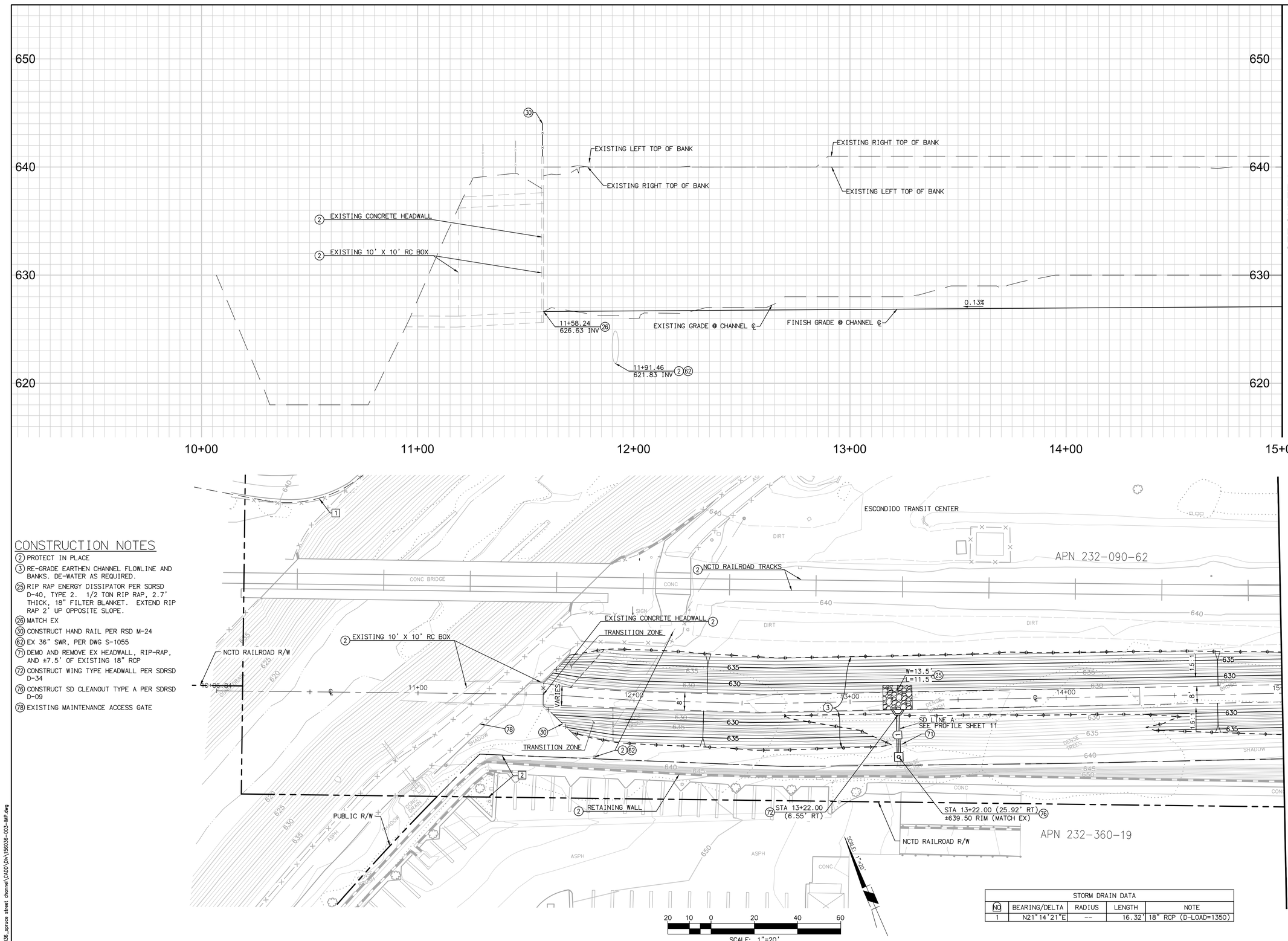

CONSTRUCTION NOTES

(2) PROTECT IN PLACE
(3) RE-GRADE EARTHEN CHANNEL FLOWLINE AND BANKS. DE-WATER AS REQUIRED.
(25) RIP RAP ENERGY DISSIPATOR PER SDRSD D-40, TYPE 2. 1/2 TON RIP RAP, 2.7' THICK, 18" FILTER BLANKET. EXTEND RIP RAP 2' UP OPPOSITE SLOPE.
(26) MATCH EX
(30) CONSTRUCT HAND RAIL PER RSD M-24
(62) EX 36" SWR, PER DWG S-1055
(71) DEMO AND REMOVE EX HEADWALL, RIP-RAP, AND ±7.5' OF EXISTING 18" RCP
(72) CONSTRUCT WING TYPE HEADWALL PER SDRSD D-34
(76) CONSTRUCT SD CLEANOUT TYPE A PER SDRSD D-09
(78) EXISTING MAINTENANCE ACCESS GATE

EASEMENTS

1 RAIL TRAIL EASEMENT REC. 2/09/2009 AS DOC. NO. 2009-0061204 O.R.
2 PARKING AND ACCESS EASEMENT REC.1/23/2002 AS DOC. NO. 2002-0055981 O.R.

STORM DRAIN DATA				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N21°14'21"E	--	16.32'	18" RCP (D-LOAD=1350)

SCALE: 1"=20'

REGISTERED PROFESSIONAL ENGINEER RICHARD A. LUCERA No. C058089 Exp. 6-30-18 CIVIL STATE OF CALIFORNIA

ESCONDIDO City of Choice

60% SUBMITTAL 6/27/17

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE			
Horizontal	Office	Designed By	Drawn By	Checked By
1"=20'	Filmed			
Vertical	Traffic	Plans Prepared Under Supervision Of		
1"=4'		RICHARD LUCERA	Date	
			R.C.E. No. 58089	

Submitted _____ Approved _____
By _____ By _____
Asst. City Engineer of Public Works Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
PLAN AND PROFILE STA 10+00 TO STA 15+00

Drawing No. XX-XX
Sheet 3 of 22

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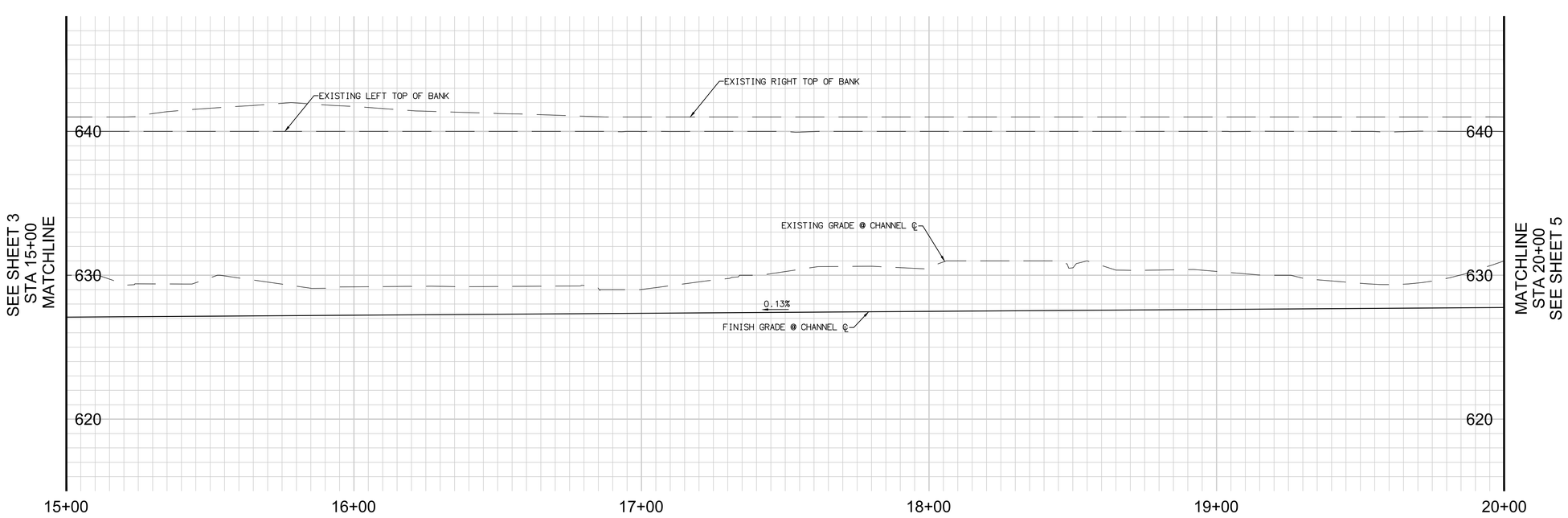

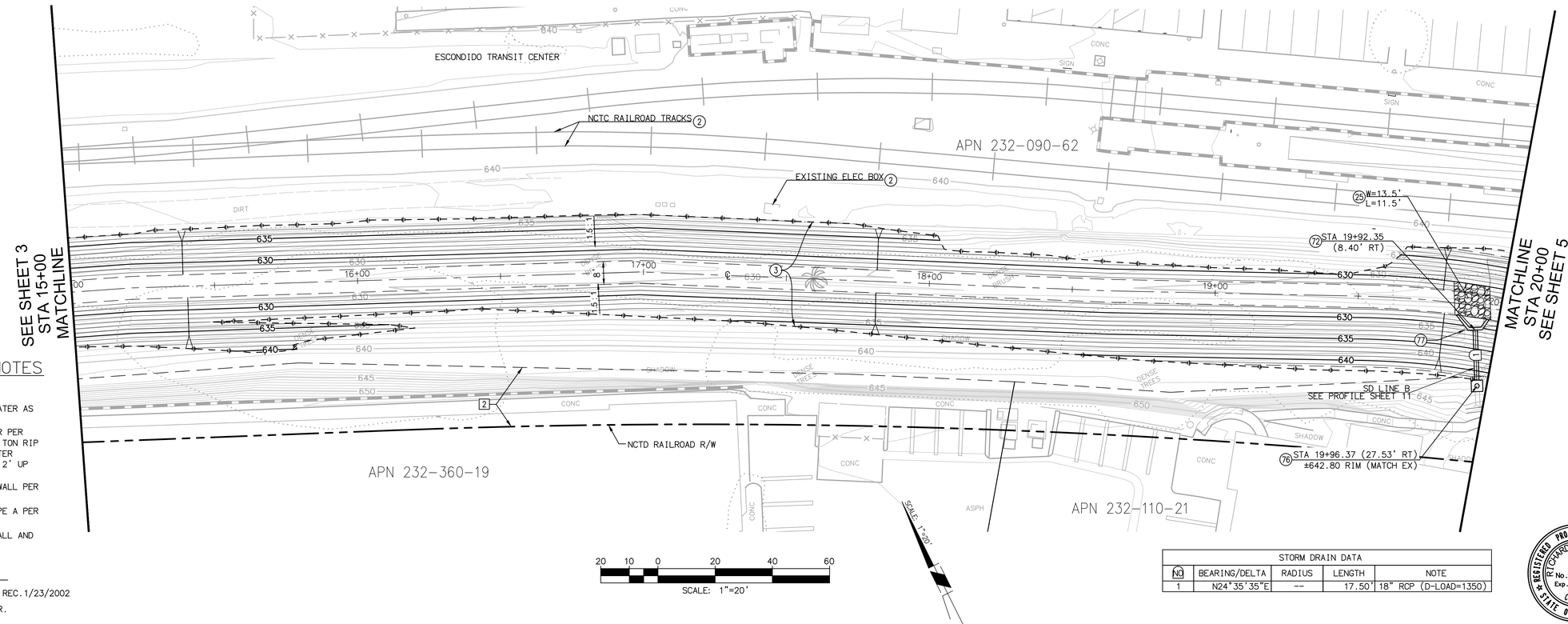

CONSTRUCTION NOTES

(2) PROTECT IN PLACE

(3) RE-GRADE EARTHEN CHANNEL FLOWLINE AND BANKS. DE-WATER AS REQUIRED.

(25) RIP RAP ENERGY DISSIPATOR PER SDRSD D-40, TYPE 2. 1/2 TON RIP RAP, 2.7' THICK, 18" FILTER BLANKET. EXTEND RIP RAP 2' UP OPPOSITE SLOPE.

(72) CONSTRUCT WING TYPE HEADWALL PER SDRSD D-34

(76) CONSTRUCT SD CLEANOUT TYPE A PER SDRSD D-09

(77) DEMO AND REMOVE EX HEADWALL AND RIP-RAP

EASEMENTS

(2) PARKING AND ACCESS EASEMENT REC.1/23/2002 AS DOC. NO. 2002-0055981 O.R.

STORM DRAIN DATA				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N24°35'35"E	--	17.50'	18" RCP (D-LOAD=1350)

REGISTERED PROFESSIONAL ENGINEER
RICHARD A. LUCERA
No. C058089
Exp. 6-30-18
CIVIL
STATE OF CALIFORNIA

ESCONDIDO
City of Choice

60% SUBMITTAL 6/27/17

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE	
Horizontal	1"=20'
Vertical	1"=4'

Office ____ Filmed ____ Traffic ____

Designed By	Drawn By	Checked By

Plans Prepared Under Supervision Of
RICHARD LUCERA Date ____
R.C.E. No. 58089

Submitted ____ Approved ____
By ____ By ____
Asst. City Engineer of Public Works Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
PLAN AND PROFILE STA 15+00 TO STA 20+00

Drawing No. XX-XX
Sheet 4 of 22

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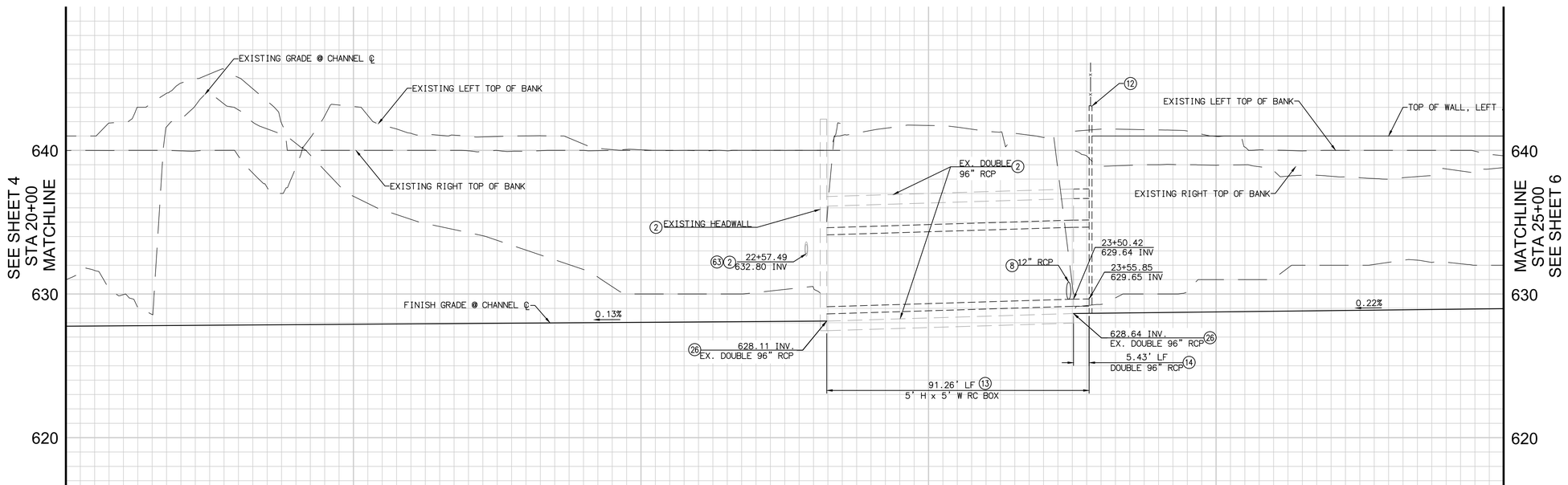
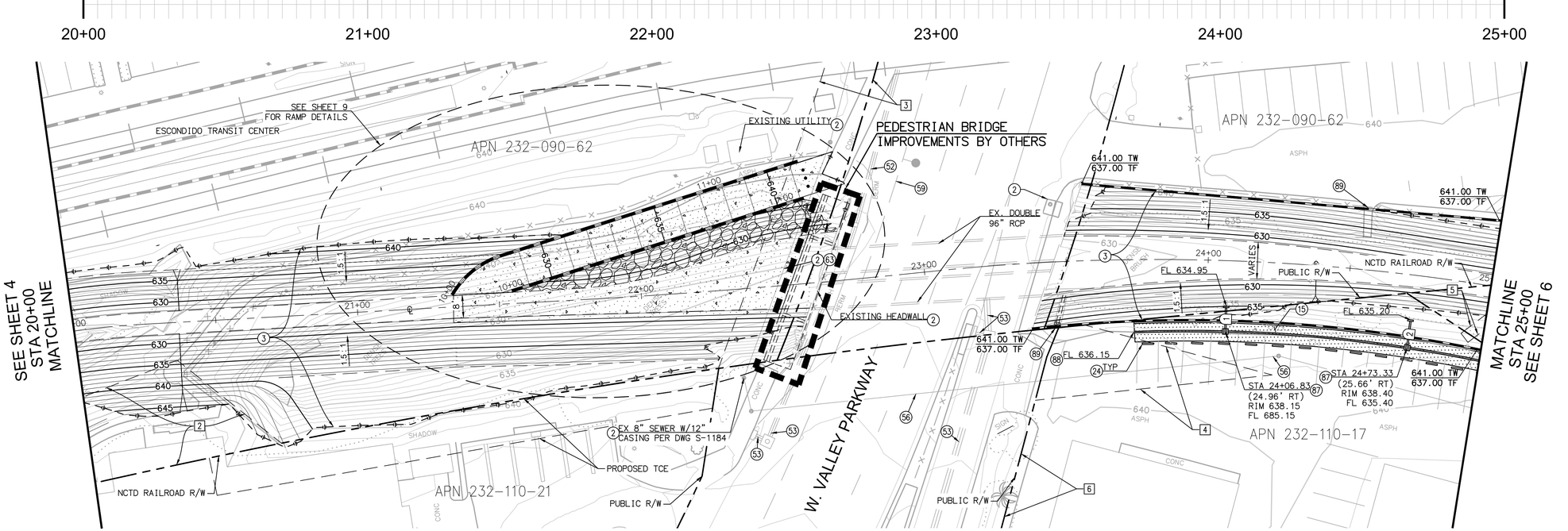




CONSTRUCTION NOTES

(2) PROTECT IN PLACE
(3) RE-GRADE EARTHEN CHANNEL FLOWLINE AND BANKS. DE-WATER AS REQUIRED.
(15) CONSTRUCT ROCK SWALE PER DETAIL 5, SHEET 10
(24) 6" WHEEL STOP PER DETAIL D, SHEET 10
(26) MATCH EX
(52) EX 18" SD, PER DWG P-1056
(53) EX 18" SD, PER DWG P-2355
(56) EX 8" SWR, PER DWG 3383-2
(59) EX 14" WTR, PER DWG W-1492
(63) EX 8" SWR W/ 12" CASING, PER DWG S-1184
(87) 24"x24" GRATED BROOKS BOX (OR CITY APPROVED EQUAL)
(88) 4" PERFORATED UNDERDRAIN PER ROCK INFILTRATION DETAIL ON SHEET 10.
(89) WALL OPENING FOR DRAINAGE. SEE DETAIL XX, SHEET XX.

EASEMENTS

[2] PARKING AND ACCESS EASEMENT REC.1/23/2002 AS DOC. NO. 2002-0055981 O.R.
[3] SEWER EASEMENT AGREEMENT REC. 1/15/2002 AS INST. NO. 2002-0033967 O.R.
[4] SEWER LINE EASEMENT REC. 2/07/1961 AS INST. NO.21914 O.R.
[5] GUY POLE AND ANCHOR EASEMENT REC. 11/1979 AT FILE/PAGE NO. 79-518951 O.R.
[6] BLANKET EASEMENT FOR PUBLIC UTILITIES REC. 9/10/1980 AT FILE/PAGE NO. 80-292104 O.R.

STORM DRAIN DATA				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N46°42'03"E	--	8.16'	6"PVC
2	N51°47'15"E	--	9.14'	6"PVC

SCALE: 1"=20'
20 10 0 20 40 60
SCALE: 1"=20'

60% SUBMITTAL 6/27/17

DWG: H:\PDATA\156036_spruce street channel\CADD\Div\156036-005-MP.dwg

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

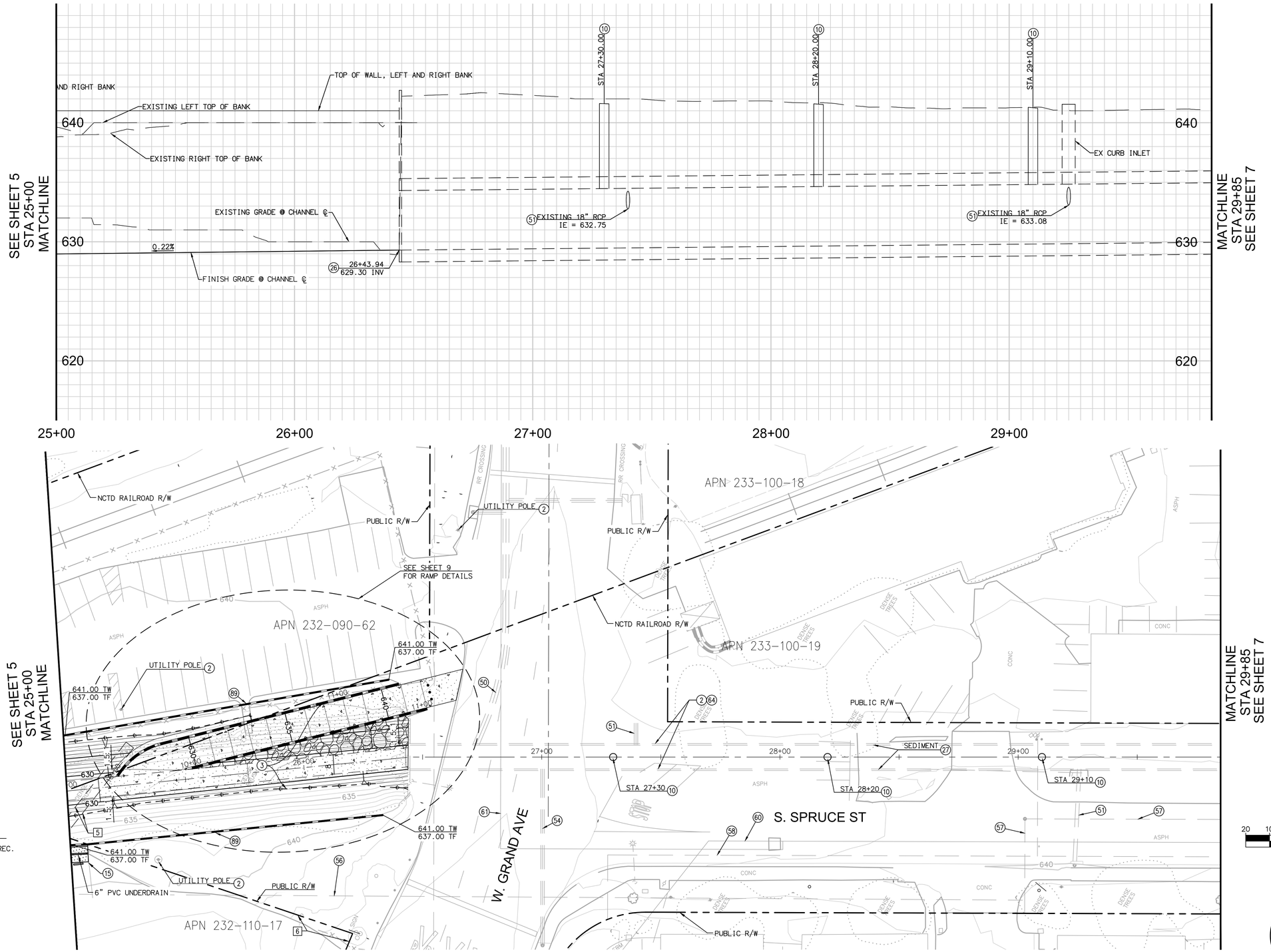
SCALE: Horizontal 1"=20', Vertical 1"=4'
Office ____ Filmed ____ Traffic ____
Designed By ____ Drawn By ____ Checked By ____
Plans Prepared Under Supervision Of RICHARD LUCERA Date ____ R.C.E. No. 58089
Submitted ____ By ____ Asst. City Engineer of Public Works
Approved ____ By ____ Director of Public Works

CITY OF ESCONDIDO — DEPARTMENT OF PUBLIC WORKS
Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
PLAN AND PROFILE STA 20+00 TO STA 25+00

Drawing No. XX-XX
Sheet 5 of 22

REGISTERED PROFESSIONAL ENGINEER — RICHARD A. LUCERA — No. C058089 — Exp. 6-30-18 — CIVIL — STATE OF CALIFORNIA

ESCONDIDO City of Choice



CONSTRUCTION NOTES

(2) PROTECT IN PLACE
(3) RE-GRADE EARTHEN CHANNEL FLOWLINE AND BANKS. DE-WATER AS REQUIRED.
(10) CONSTRUCT ACCESS SHAFT PER SPPWC STD PLAN 327-2
(15) CONSTRUCT ROCK SWALE PER DETAIL 5, SHEET 10
(26) MATCH EX
(27) CONTRACTOR TO REMOVE AND HAUL ACCUMULATED SEDIMENT WITHIN BOX CULVERT. DE-WATER AS REQUIRED.
(50) EX 30" SD, PER DWG P-1106
(51) EX 18" SD, PER DWG 1011-3
(54) EX 18" SD, PER DWG P-1106
(56) EX 8" SWR, PER DWG 3383-2
(57) EX 8" SWR, PER DWG S-1164
(58) EX 6" WTR, PER DWG 3383-3
(60) EX 3" HPG, PER DWG 3383-3
(61) EX 6" HPG, PER DWG 3383-3
(64) EX 10' x 5' RCB, PER DWG 1011-3
(89) WALL OPENING FOR DRAINAGE. SEE DETAIL XX, SHEET XX.

EASEMENTS

[5] GUY POLE AND ANCHOR EASEMENT REC. 12/11/1979 AT FILE/PAGE NO. 79-518951 O.R.

[6] BLANKET EASEMENT FOR PUBLIC UTILITIES REC. 9/10/1980 AT FILE/PAGE NO. 80-292104 O.R.

20 10 0 20 40 60
SCALE: 1"=20'

SCALE: 1"=20'

REGISTERED PROFESSIONAL ENGINEER
RICHARD A. LUCERA
No. C058089
Exp. 6-30-18
CIVIL
STATE OF CALIFORNIA

ESCONDIDO
City of Choice

60% SUBMITTAL 6/27/17

DWG: H:\PDATA\156036_spruce street channel\CADD\Dsh\156036-006-IMP.dwg

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE	Office
Horizontal 1"=20'	Filmed
Vertical 1"=4'	Traffic

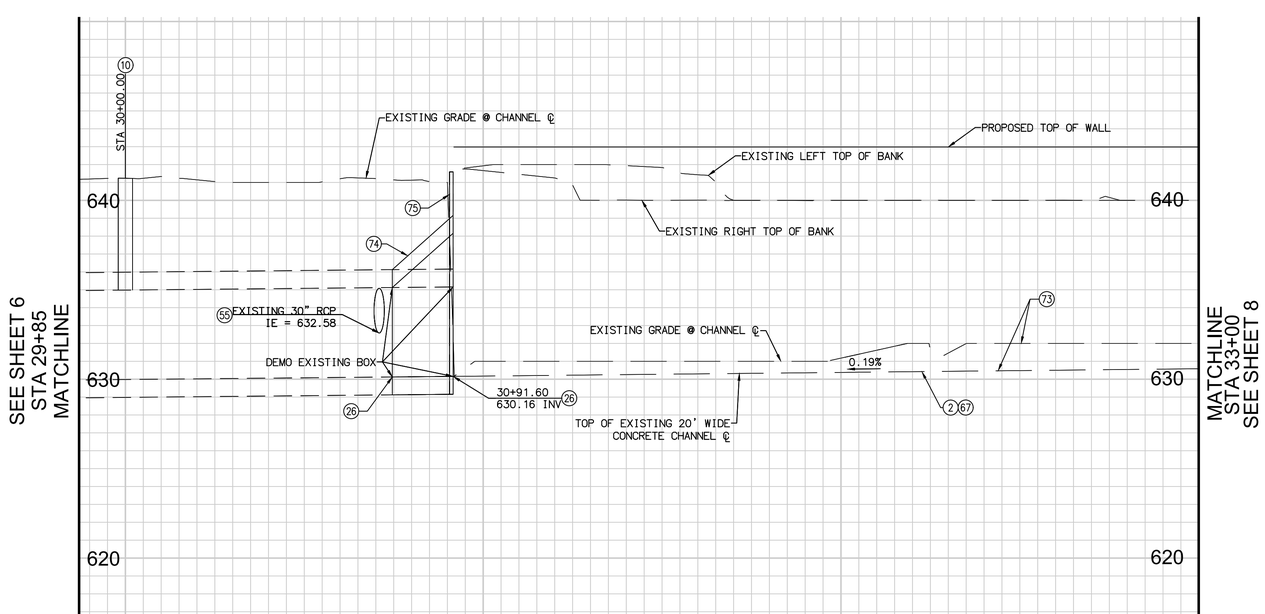
Designed By	Drawn By	Checked By

Plans Prepared Under Supervision Of
RICHARD LUCERA
Date
R.C.E. No. 58089

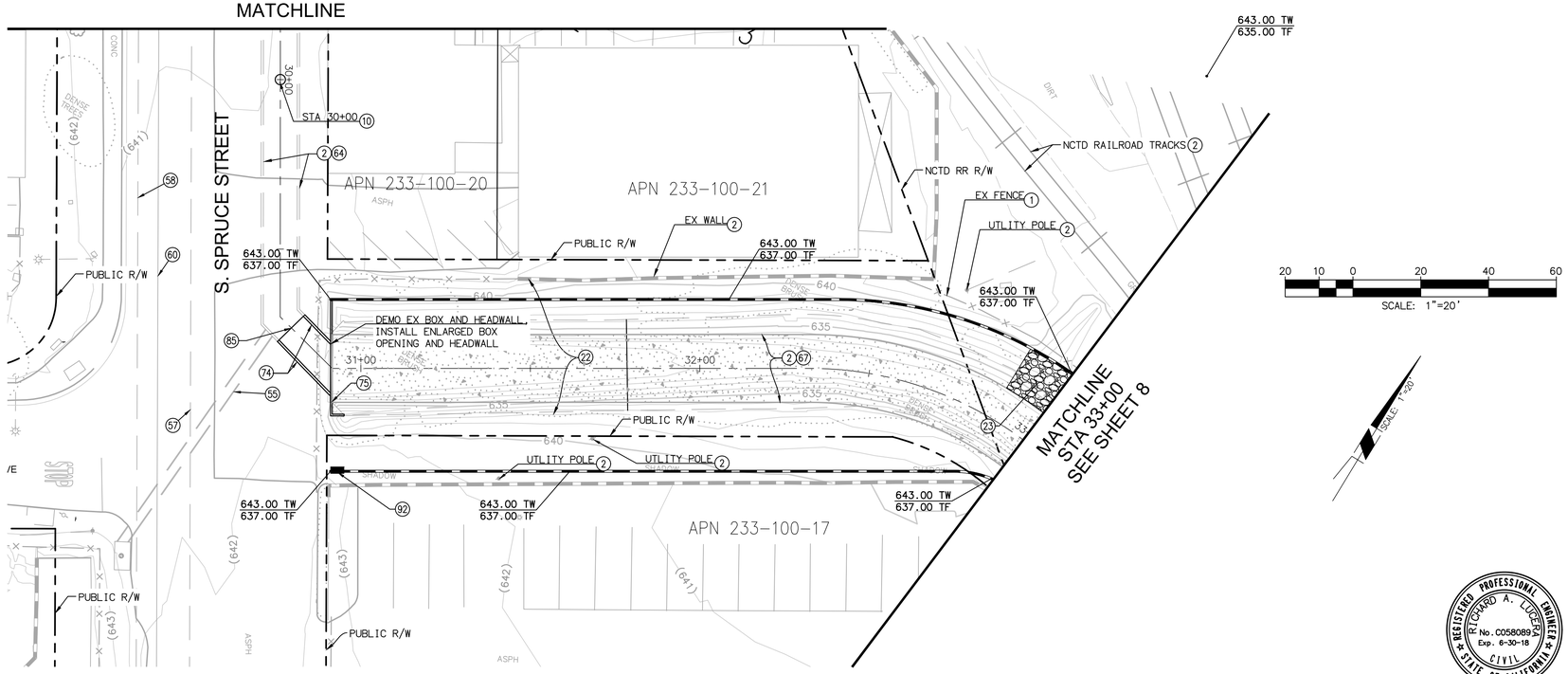
Submitted _____ Approved _____
By _____ By _____
Asst. City Engineer of Public Works Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS
Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
PLAN AND PROFILE STA 25+00 TO STA 29+85

Drawing No. XX-XX
Sheet 6 of 22



SEE SHEET 6
STA 29+85
MATCHLINE



CONSTRUCTION NOTES

1. REMOVE
2. PROTECT IN PLACE
10. CONSTRUCT ACCESS SHAFT PER SPPWC STD PLAN 327-2
22. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT AND VEGETATION ALONG NATURAL BANKS OF CHANNEL.
23. ROCK SLOPE PROTECTION PER DETAIL C, SHEET 10
26. MATCH EX
55. EX 30" SD, PER DWG 1011-22
57. EX 8" SWR, PER DWG S-1164
58. EX 6" WTR, PER DWG 3383-3
60. EX 3" HPG, PER DWG 3383-3
64. EX 10' x 5' RCB, PER DWG 1011-3
67. EX 20' WIDE CONCRETE CHANNEL PER DWG 1011
73. REMOVE EXCESS SEDIMENT AND EXPOSE THE ORIGINAL CONCRETE SURFACE
74. CONSTRUCT ENLARGED BOX OPENING PER CALTRANS STANDARD PLAN D80 (10' W X 8' H SCHEDULE) AND TRANSITION PER SPPWC STD PLAN 341-2.
75. CONSTRUCT CONCRETE HEADWALL PER CALTRANS STANDARD PLAN D84
85. CONNECT PROPOSED RCB TO EXISTING RCB PER DETAIL 6 ON SHEET 14
92. FLOOD BREAK SWING GATE

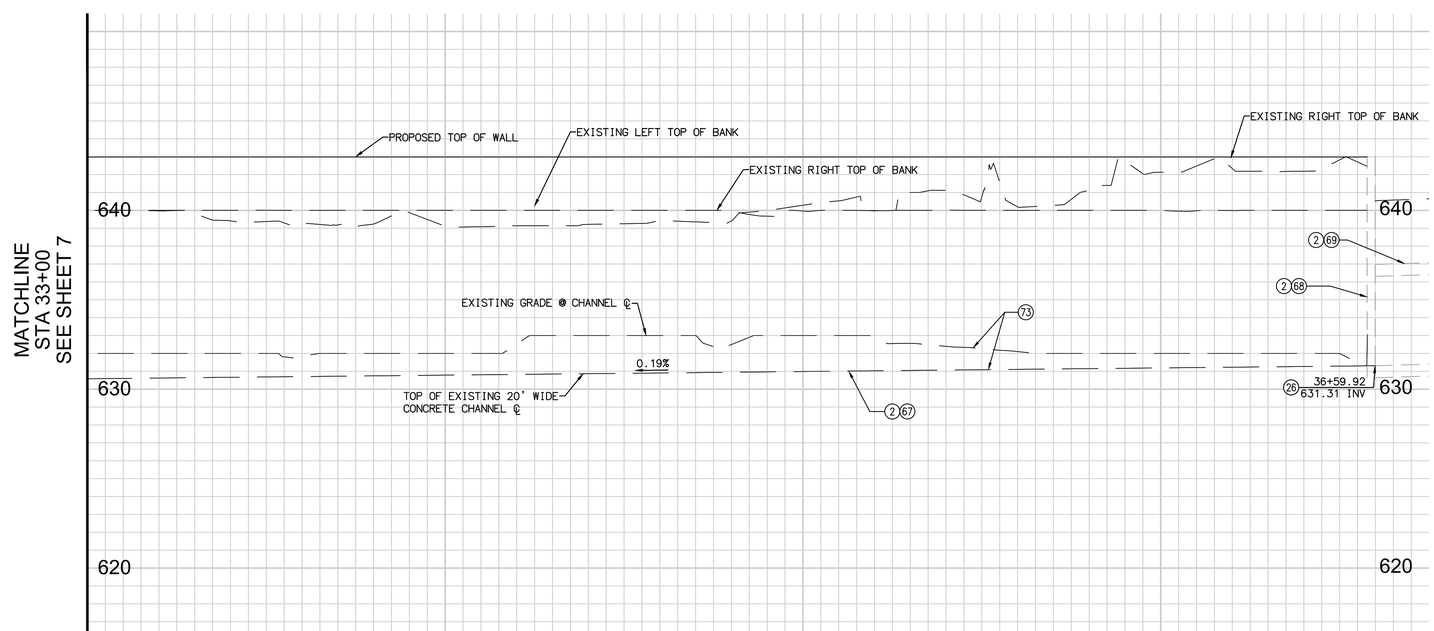
60% SUBMITTAL 6/27/17

DWG: H:\PDATA\156036_spruce street channel\CADD\Div\156036-007-MP.dwg

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Submitted	Approved	CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS	Drawing No.
Contractor								Horizontal 1"=20'	Filmed				By	By	Improvement Plans for:	XX-XX
Inspector								Vertical 1"=4'	Traffic	Plans Prepared Under Supervision Of					SPRUCE STREET CHANNEL IMPROVEMENT PROJECT	
Date Completed							ELEV. DATUM: .			RICHARD LUCERA	Date		Asst. City Engineer of Public Works	Director of Public Works	---- STA 29+85 TO STA 33+00	Sheet 7 of 22
											R.C.E. No. 58089					

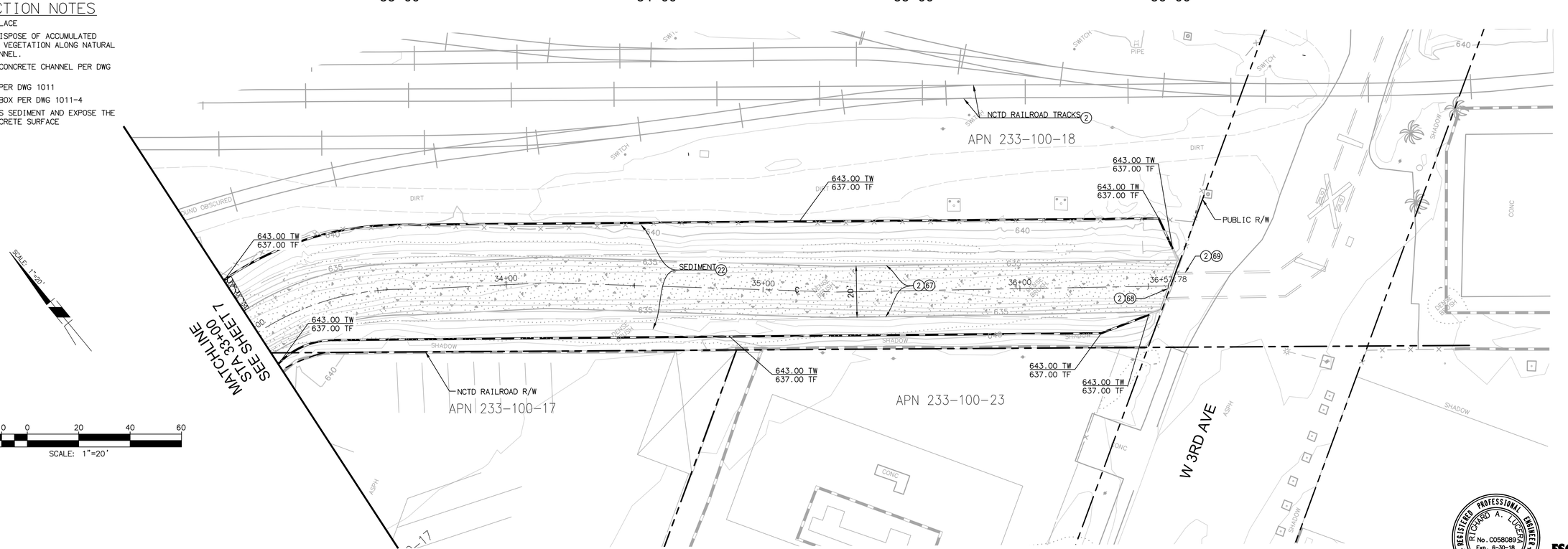
REGISTERED PROFESSIONAL ENGINEER
RICHARD A. LUCERA
No. C058089
Exp. 6-30-18
CIVIL
STATE OF CALIFORNIA

ESCONDIDO
City of Choice



CONSTRUCTION NOTES

(2) PROTECT IN PLACE
(22) REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT AND VEGETATION ALONG NATURAL BANKS OF CHANNEL.
(67) EX 20' WIDE CONCRETE CHANNEL PER DWG 1011
(68) EX HEADWALL PER DWG 1011
(69) EX 5'X9' RC BOX PER DWG 1011-4
(73) REMOVE EXCESS SEDIMENT AND EXPOSE THE ORIGINAL CONCRETE SURFACE



60% SUBMITTAL 6/27/17

DWG: H:\PDATA\156036_spruce street channel\CADD\Div\156036-008-MAP.dwg

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE
Horizontal 1"=20'
Vertical 1"=4'

Office
Filmed
Traffic

Designed By	Drawn By	Checked By

Plans Prepared Under Supervision Of
RICHARD LUCERA Date
R.C.E. No. 58089

Submitted By
Asst. City Engineer of Public Works
Approved By
Director of Public Works

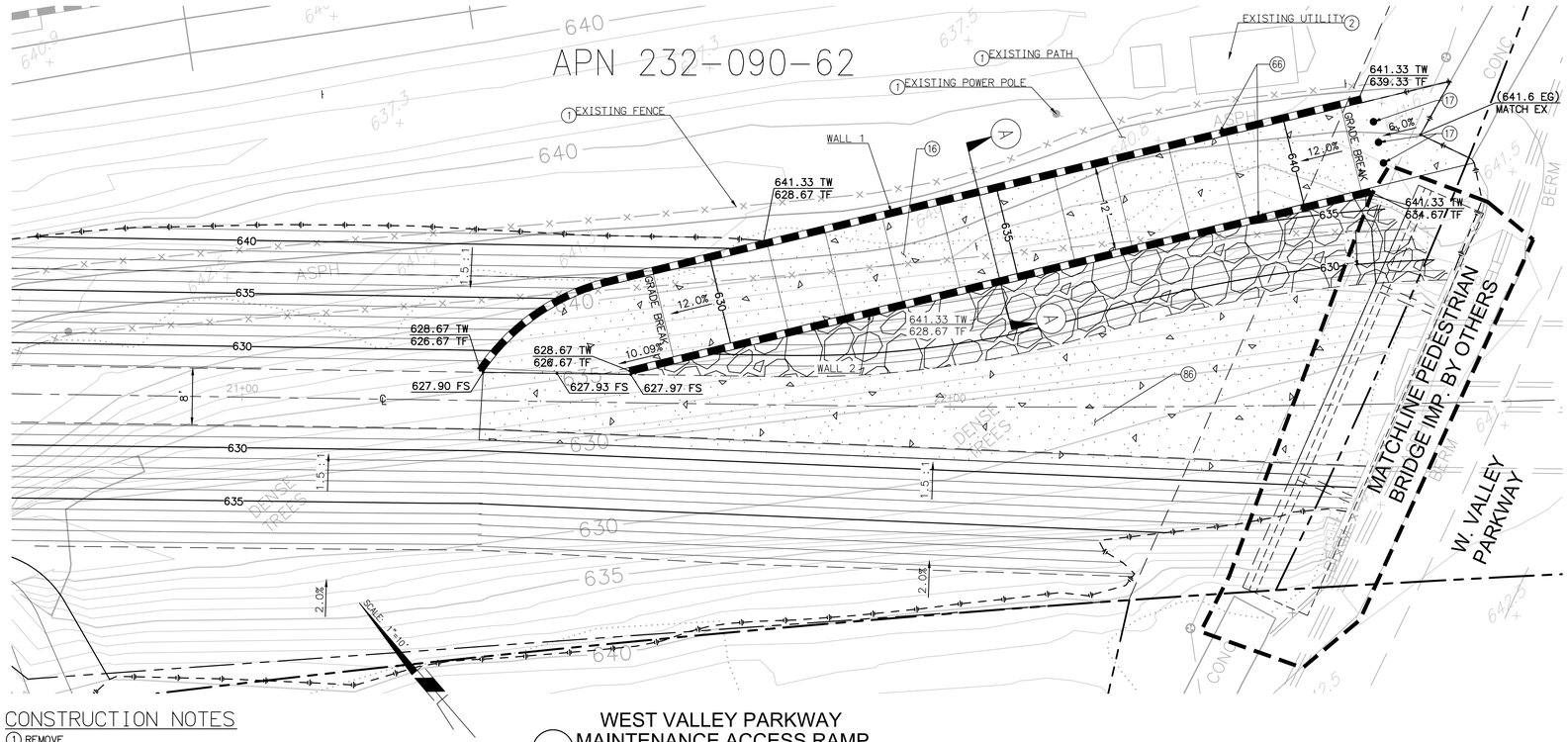
CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
PLAN AND PROFILE STA 33+00 TO STA 36+65

Drawing No. XX-XX
Sheet 8 of 22

REGISTERED PROFESSIONAL ENGINEER RICHARD A. LUCERA No. C058089 Exp. 6-30-18 CIVIL STATE OF CALIFORNIA

ESCONDIDO City of Choice



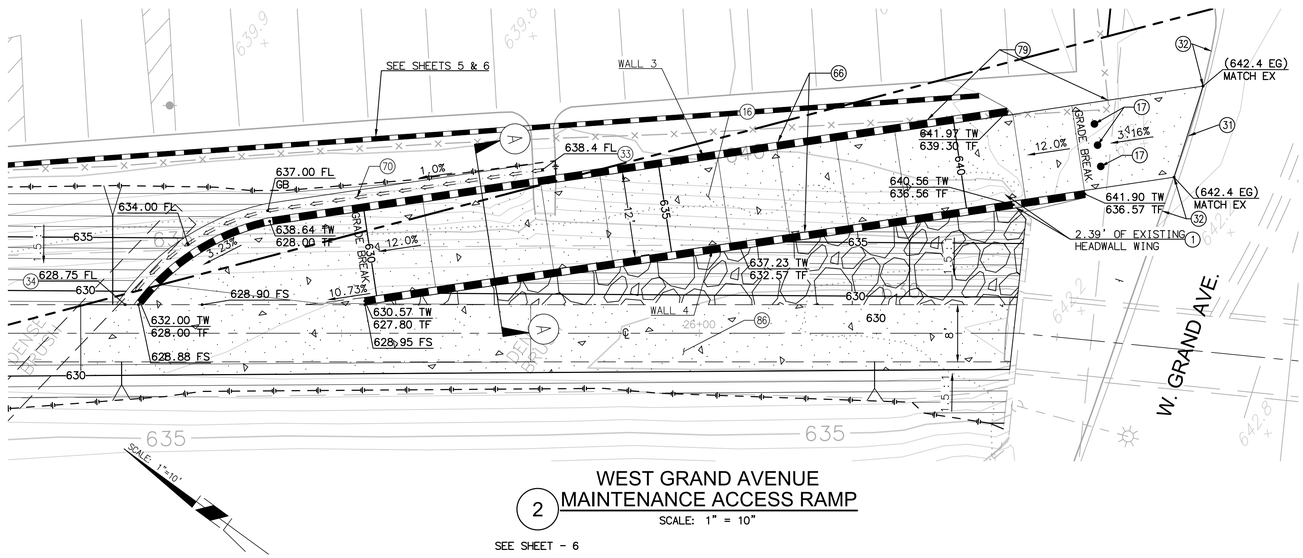
1 WEST VALLEY PARKWAY MAINTENANCE ACCESS RAMP

SCALE: 1" = 10"

SEE SHEET - 5

CONSTRUCTION NOTES

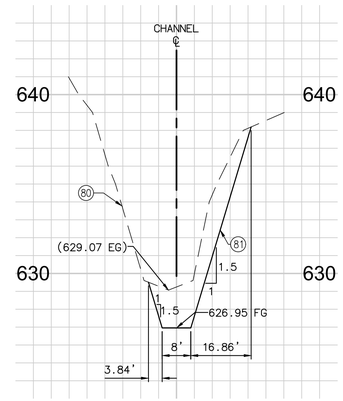
(1) REMOVE
(2) PROTECT IN PLACE
(16) CONSTRUCT ACCESS RAMP. 5 1/2" THICK CONCRETE PER SDRSD G-18.
(17) CONSTRUCT DEMOUNTABLE POST PER SDRSD M-16
(31) CONSTRUCT 6" ROLLED CURB AND GUTTER TYPE A PER SDRSD G-04A
(32) CONSTRUCT 6" CURB AND GUTTER TO ROLLED CURB 5' TRANSISTION TYPE A PER SDRSD G-04B
(33) TRANSITION OVERSIDE DRAIN TO BROW DITCH
(34) TRANSITION BROW DITCH TO CHANNEL BOTTOM
(66) RETAINING WALL PER DETAIL X ON SHEET X
(70) CONSTRUCT DRAINAGE DITCH PER SDRSD D-75
(79) RELOCATE EXISTING FENCE
(80) EX GROUND
(81) FINISH GROUND
(82) EX 20' WIDE CONCRETE CHANNEL PER DWG 1011-30
(86) CONSTRUCT 5 1/2" THICK CONCRETE PAVEMENT PER SDRSD G-18.



2 WEST GRAND AVENUE MAINTENANCE ACCESS RAMP

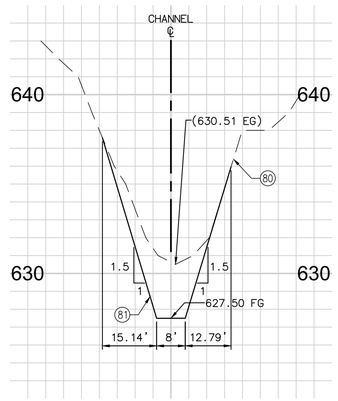
SCALE: 1" = 10"

SEE SHEET - 6



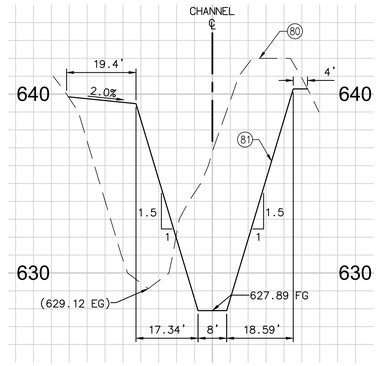
STA 14+00
(LOOKING DOWNSTREAM)

SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'



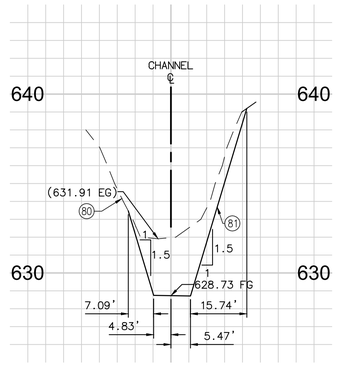
STA 18+00
(LOOKING DOWNSTREAM)

SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'



STA 21+00
(LOOKING DOWNSTREAM)

SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'



STA 24+50
(LOOKING DOWNSTREAM)

SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

60% SUBMITTAL 6/27/17

REGISTERED PROFESSIONAL ENGINEER — RICHARD A. LUCERA — No. C058089 Exp. 6-30-18 — CIVIL — STATE OF CALIFORNIA

ESCONDIDO City of Choice

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Submitted	Approved	CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS	Drawing No.
Contractor								Horizontal 1"=20'	Filmed	Plans Prepared Under Supervision Of			By	By	Improvement Plans for: SPRUCE STREET CHANNEL IMPROVEMENT PROJECT	XX-XX
Inspector								Vertical 1"=4'	Traffic	RICHARD LUCERA Date		R.C.E. No. 58089	Asst. City Engineer of Public Works	Director of Public Works	DETAILS AND CROSS SECTIONS	Sheet 9 of 22
Date Completed							ELEV. DATUM: .									

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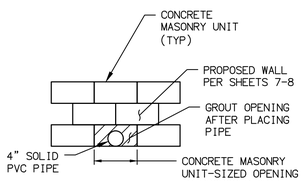
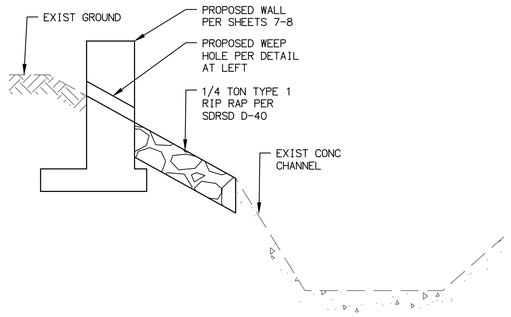
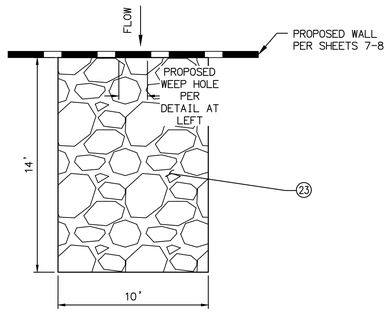


WEEP HOLE



SECTION

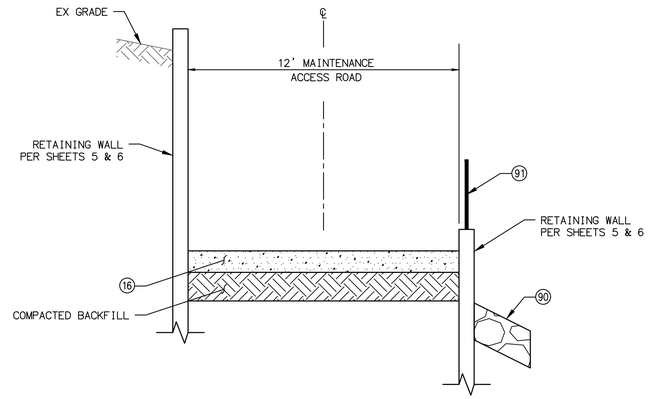


PLAN

3 ROCK SLOPE PROTECTION

N.T.S.

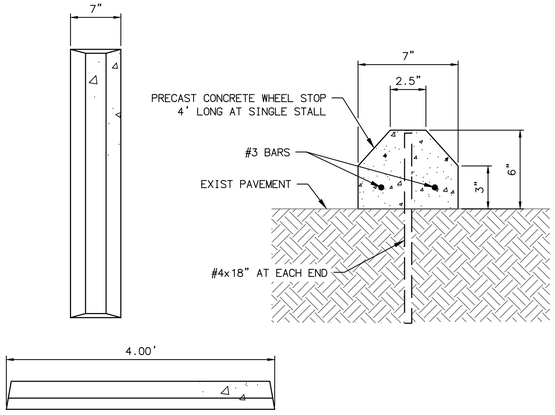
SEE SHEET - 7



A TYPICAL MAINTENANCE ACCESS ROAD

N.T.S.

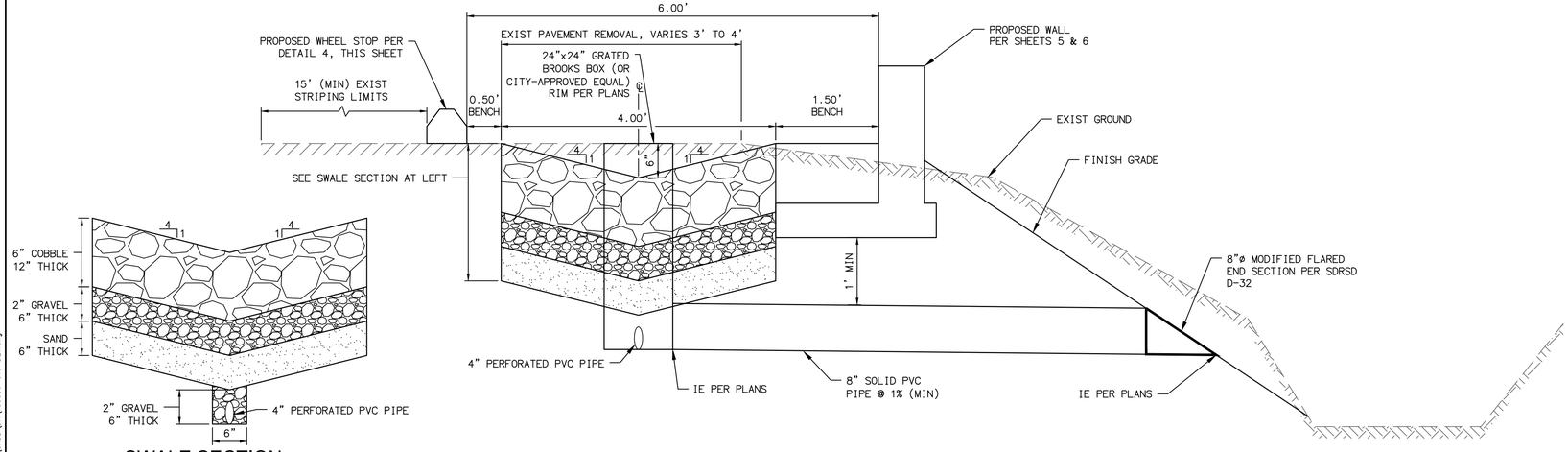
SEE SHEET - 5, 6



4 6" WHEEL STOP

N.T.S.

SEE SHEET - 5



SWALE SECTION

N.T.S.

5 ROCK SWALE

N.T.S.

SEE SHEET - 5, 6

CONSTRUCTION NOTES

(16) CONSTRUCT ACCESS RAMP. 5 1/2" THICK CONCRETE PER SDRSD G-18.
(23) ROCK SLOPE PROTECTION PER DETAIL C, SHEET 10
(90) 1/2 TON GROUTED RIP RAP. 2.7' THICK, 18" FILTER BLANKET
(91) RAILING PER SDRSD M-24

60% SUBMITTAL 6/27/17

ESCONDIDO
City of Choice

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE			
Horizontal 1"=20'	Office	Designed By	Drawn By	Checked By
Vertical 1"=4'	Filmed	Plans Prepared Under Supervision Of RICHARD LUCERA	Date R.C.E. No. 58089
	Traffic		

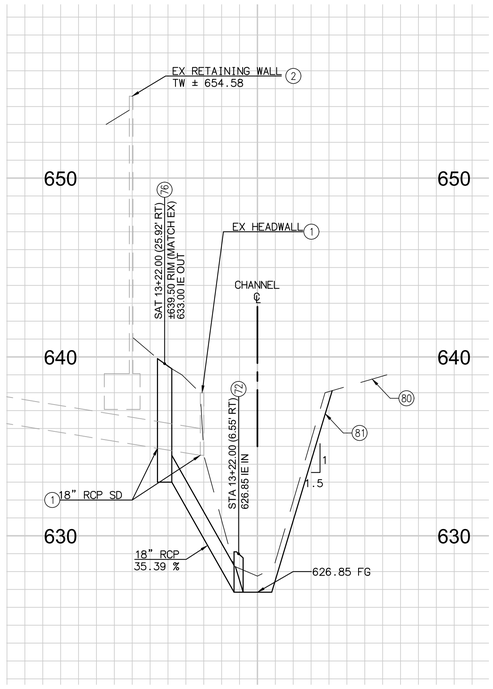
Submitted _____ By _____ Asst. City Engineer of Public Works
Approved _____ By _____ Director of Public Works

CITY OF ESCONDIDO — DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
DETAILS AND CROSS SECTIONS

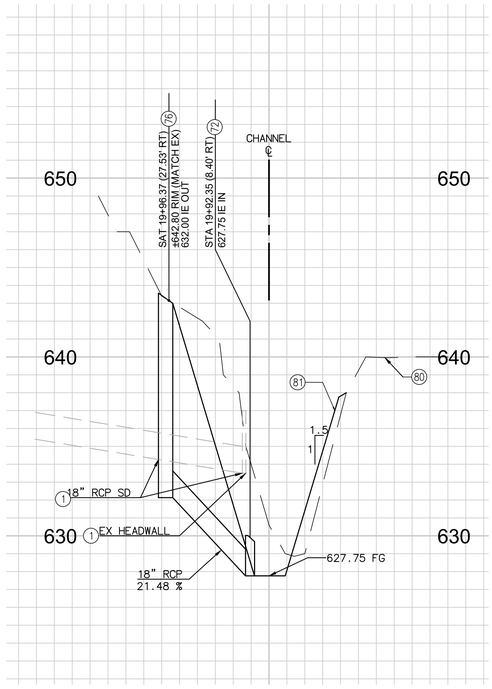
Drawing No. XX-XX
Sheet 10 of 22

DWG: H:\PDATA\156036_spruce street channel\CADD\DWG\156036-010-DET.dwg



STORM DRAIN LINE A
(LOOKING DOWNSTREAM)

SCALE: HORIZ. 1" = 20'
VERT: 1" = 8'



STORM DRAIN LINE B
(LOOKING DOWNSTREAM)

SCALE: HORIZ. 1" = 20'
VERT: 1" = 8'

CONSTRUCTION NOTES

(1) REMOVE
(2) PROTECT IN PLACE
(72) CONSTRUCT WING TYPE HEADWALL PER SDRSD D-34
(76) CONSTRUCT SD CLEANOUT TYPE A PER SDRSD D-09
(80) EX GROUND
(81) FINISH GROUND

60% SUBMITTAL 6/27/17

REGISTERED PROFESSIONAL ENGINEER
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No. C058089
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City of Choice

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE			
Horizontal	Office		
1"=20'	Filmed		
Vertical	Traffic		
1"=4'			

Designed By	Drawn By	Checked By

Plans Prepared Under Supervision Of
RICHARD LUCERA Date
R.C.E. No. 58089

Submitted _____ Approved _____
By _____ By _____
Asst. City Engineer of Public Works Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
STORM DRAIN PROFILES

Drawing No.
XX-XX
Sheet 11 of 22

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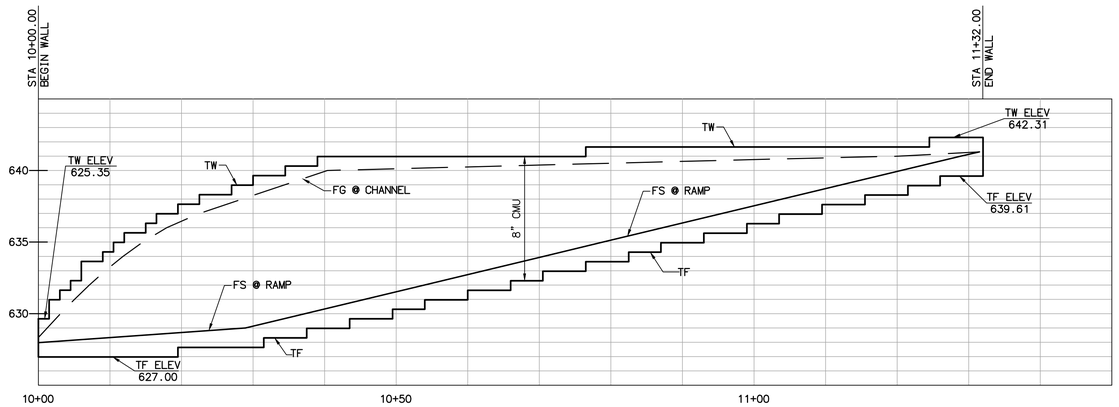
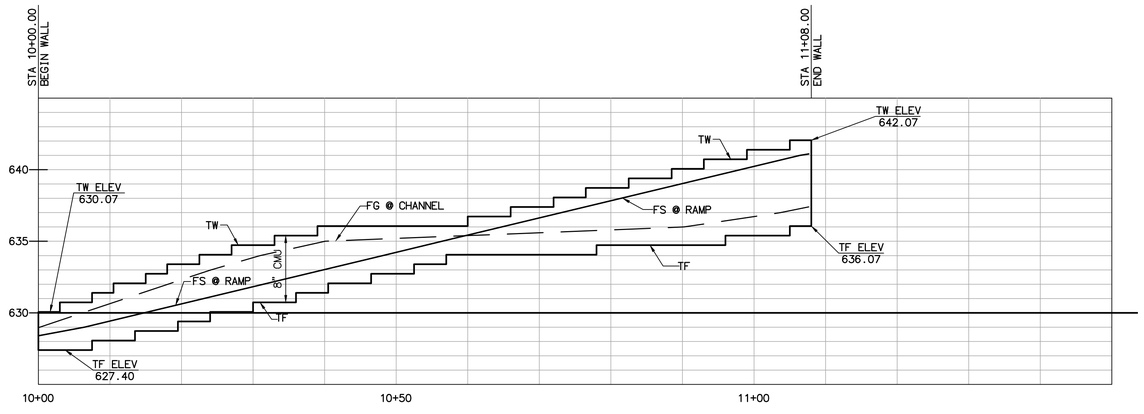


WALL 1 - PROFILE

VERTICAL SCALE: 1"=20'
HORIZONTAL SCALE: 1"=10'



WALL 2 - PROFILE

VERTICAL SCALE: 1"=20'
HORIZONTAL SCALE: 1"=10'

60% SUBMITTAL 6/27/17

REGISTERED PROFESSIONAL ENGINEER
RICHARD A. LUCERA
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STATE OF CALIFORNIA

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Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE			
Horizontal	1"=20'	Office	
Vertical	1"=4'	Filmed	
		Traffic	

Designed By	Drawn By	Checked By

Plans Prepared Under Supervision Of
RICHARD LUCERA
Date
R.C.E. No. 58089

Submitted _____ By _____
Asst. City Engineer of Public Works

Approved _____ By _____
Director of Public Works

CITY OF ESCONDIDO — DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
WALL PROFILES

Drawing No.
XX-XX
Sheet 12 of 22

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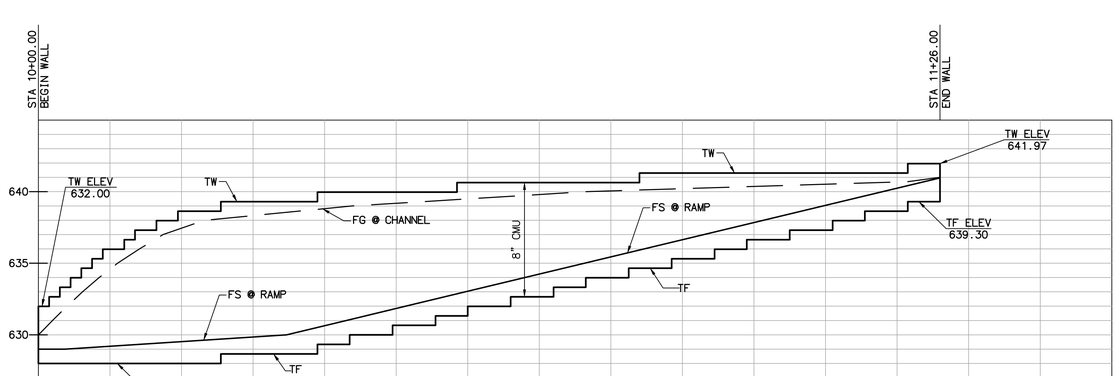
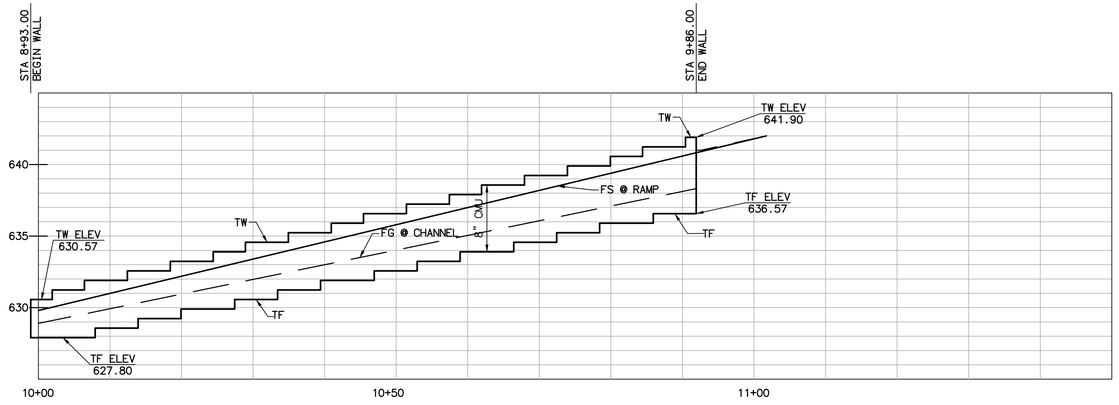


WALL 3 - PROFILE

VERTICAL SCALE: 1"=20'
HORIZONTAL SCALE: 1"=10'



WALL 4 - PROFILE

VERTICAL SCALE: 1"=20'
HORIZONTAL SCALE: 1"=10'

60% SUBMITTAL 6/27/17

DWG: H:\PDATA\156036_spruce street channel\CADD\Div\156036-013-WALL.dwg

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE	
Horizontal	1"=20'
Vertical	1"=4'

Office
Filmed
Traffic

Designed By	Drawn By	Checked By

Plans Prepared Under Supervision Of
RICHARD LUCERA Date
R.C.E. No. 58089

Submitted Approved
By By
Asst. City Engineer of Public Works Director of Public Works

REGISTERED PROFESSIONAL ENGINEER
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STATE OF CALIFORNIA

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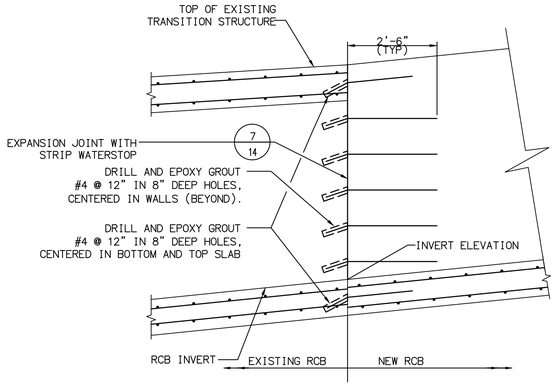
CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
WALL PROFILES

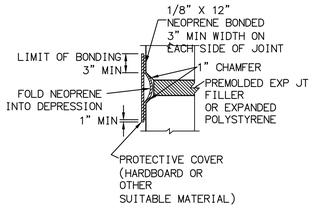
Drawing No.
XX-XX
Sheet 13 of 22



6 NEW TO EXISTING CONNECTION

N.T.S.

SEE SHEET - 7



EXPANSION JOINT WITH
STRIP WATERSTOP

NOTES:

WATERSTOP MATERIAL SHALL BE POLYVINYL CHLORIDE. REFER TO SPECIFICATIONS.

7 WATERSTOP DETAIL

N.T.S.

THIS SHEET

60% SUBMITTAL 6/27/17

DWG: H:\PDATA\156036_spruce street channel\CADD\DIV\156036-014-STR.dwg

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE	
Horizontal	1"=20'
Vertical	1"=4'

Office _____
Filmed _____
Traffic _____

Designed By	Drawn By	Checked By

Plans Prepared Under Supervision Of
RICHARD LUCERA
Date _____
R.C.E. No. 58089

Submitted _____ Approved _____
By _____ By _____
Asst. City Engineer of Public Works Director of Public Works

REGISTERED PROFESSIONAL ENGINEER
RICHARD A. LUCERA
No. C058089
Exp. 6-30-18
CIVIL
STATE OF CALIFORNIA

ESCONDIDO
City of Choice

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
STRUCTURAL DETAILS

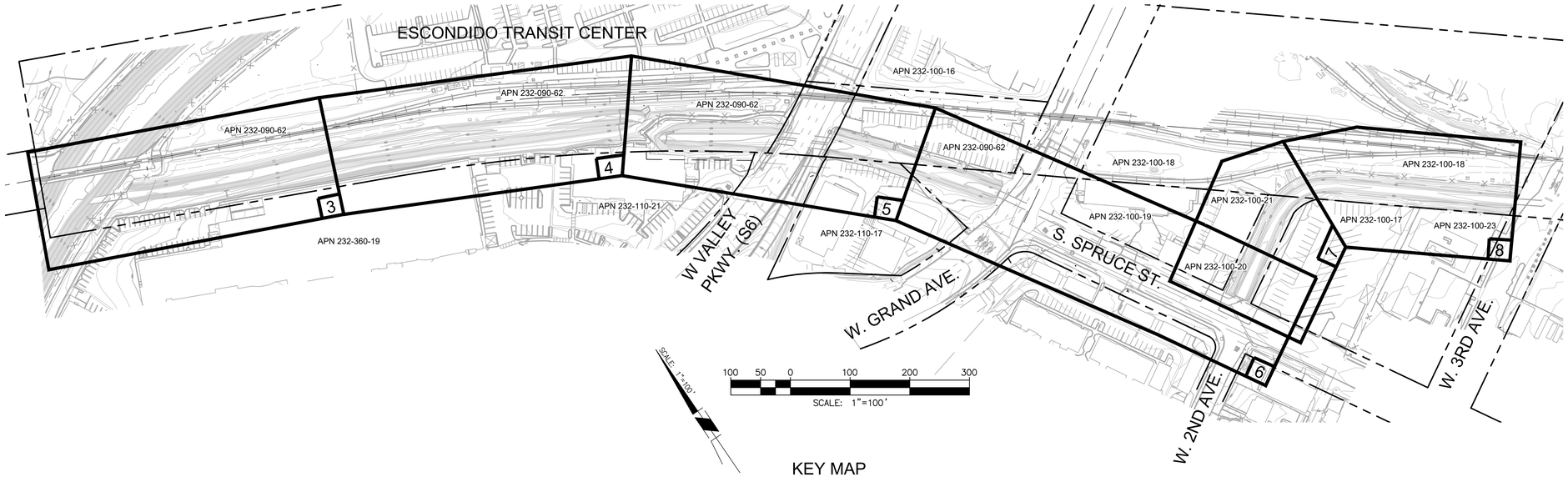
Drawing No.
XX-XX
Sheet 14 of 22

60% CONSTRUCTION PLANS

FOR

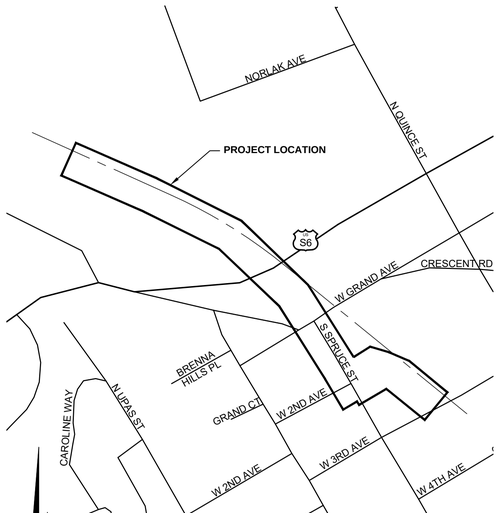
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT

PROJECT NO. xxxx



KEY MAP

SCALE 1" = 100'



LOCATION MAP

NO SCALE

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 PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF ESCONDIDO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

RICHARD LUCERA — DATE
R.C.E. # 58089
EXP DATE: JUNE 30, 2018

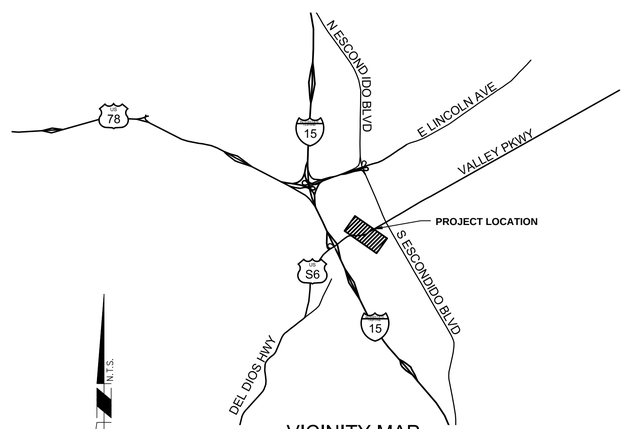
OWNER / PERMITEE

OWNER/DEVELOPER NAME: CITY OF ESCONDIDO
ADDRESS: 201 NORTH BROADWAY, ESCONDIDO, CA 92025
TEL NO: (760) 839-4651
FAX NO: (760) 869-4597

ENGINEER

MICHAEL BAKER INTERNATIONAL
5050 AVENIDA ENCINAS, STE. 260
CARLSBAD, CA 92009
TEL NO: (760) 476-9193
FAX NO: (760) 476-9198

SHEET INDEX



VICINITY MAP

NO SCALE

REGISTERED PROFESSIONAL ENGINEER — RICHARD A. LUCERA — No. C058089 — Exp. 6-30-18 — CIVIL — STATE OF CALIFORNIA

ESCONDIDO City of Choice

60% SUBMITTAL 6/27/17

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE: Horizontal / Vertical

Office / Filmed / Traffic

Designed By | Drawn By | Checked By

Plans Prepared Under Supervision Of
RICHARD LUCERA — Date — R.C.E. No. 58089

Submitted — By — Asst. City Engineer of Public Works

Approved — By — Director of Public Works

CITY OF ESCONDIDO — DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
TITLE PAGE

Drawing No. XX-XX

Sheet 1 of 22

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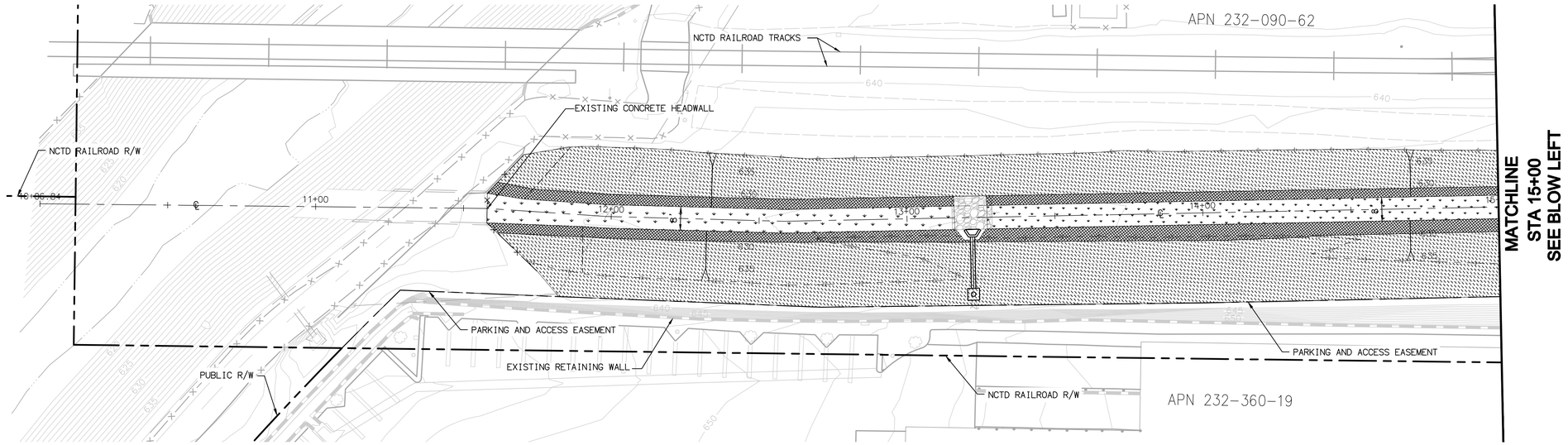

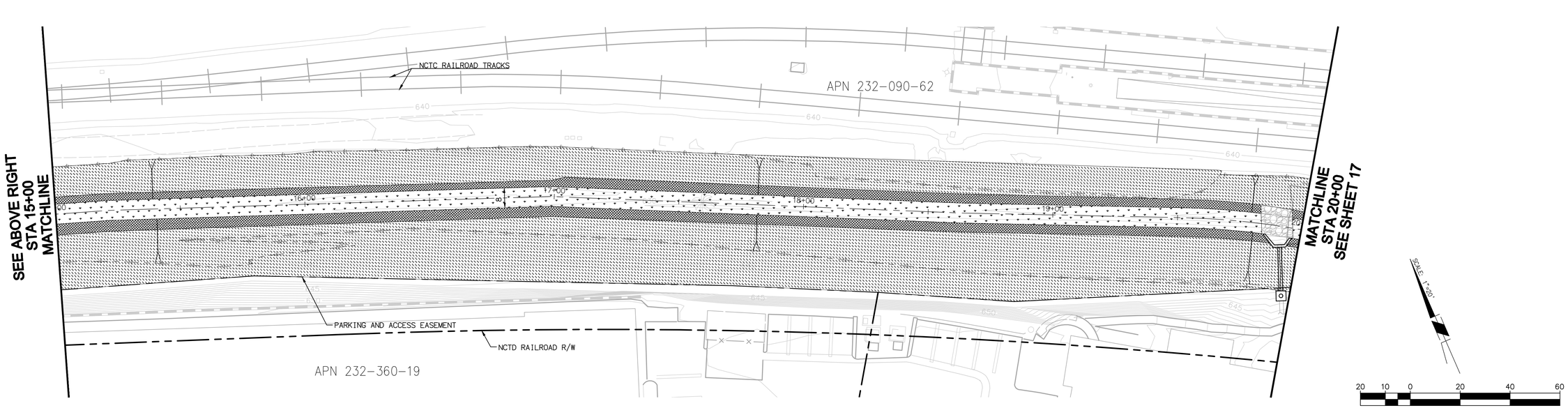

REGISTERED LANDSCAPE ARCHITECT
JEREMY FRANZINI LIC. NO. 4514
SIGNATURE
JUNE 30, 2019
RENEWAL DATE
DATE
STATE OF CALIFORNIA

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Contractor							
Inspector							
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Horizontal	Filmed	Plans Prepared Under Supervision Of		
Vertical	Traffic	JEREMY FRANZINI	Date	R.C.E. No. 4514

Submitted _____ Approved _____
By _____ By _____
Asst. City Engineer of Public Works Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
PLANTING PLAN STA 10+00 TO STA 20+00

Drawing No. XX-XX
Sheet 16 of 22

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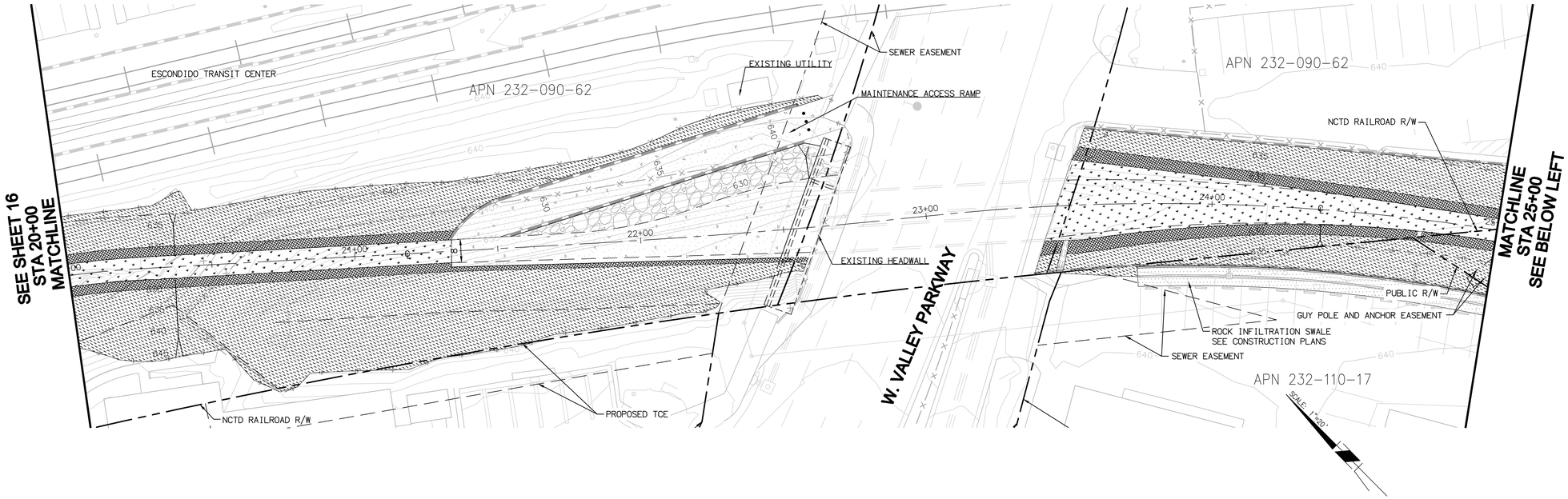

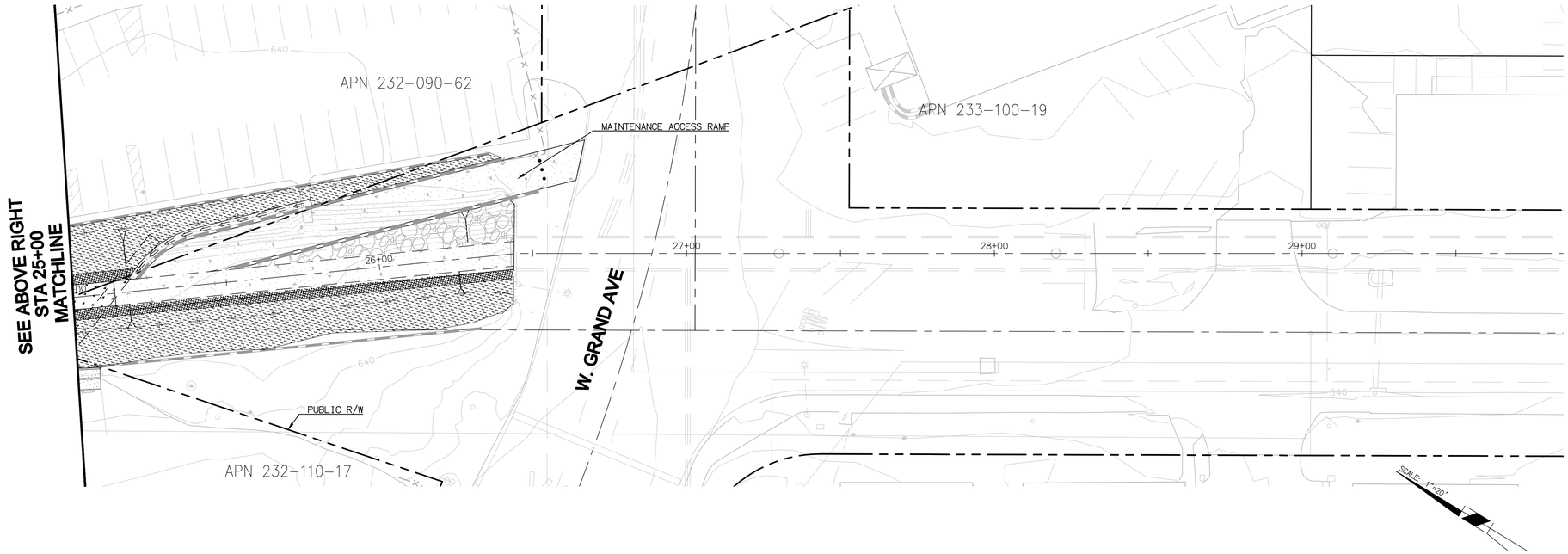

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SCALE: 1"=20'

REGISTERED LANDSCAPE ARCHITECT
JEREMY FRANZINI L.I.C. NO. 4514
SIGNATURE
JUNE 30, 2019
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CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE	Office	Designed By	Drawn By	Checked By
Horizontal	Filmed	Plans Prepared Under Supervision Of		
Vertical	Traffic	JEREMY FRANZINI	Date	R.C.E. No. 4514

Submitted _____ Approved _____

By _____ By _____

Asst. City Engineer of Public Works Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

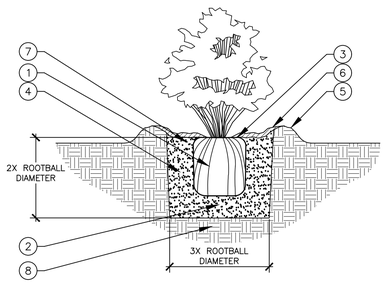
Improvement Plans for:

SPRUCE STREET CHANNEL IMPROVEMENT PROJECT

PLANTING PLAN STA 20+00 TO STA 29+85

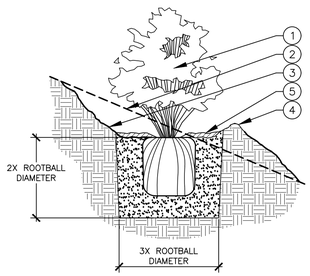
Drawing No. XX-XX

Sheet 17 of 22



1. SHRUB ROOTBALL.
2. DIG PLANTING HOLE THREE TIMES THE DIAMETER AND TWO TIMES THE DEPTH OF THE ROOTBALL. SCARIFY SIDES OF PLANT PIT.
3. SET THE ROOTBALL IN THE PLANTING PIT SO THAT ROOT CROWN IS 1" ABOVE FINISH GRADE.
4. BACKFILL THE HOLE WITH NATIVE SOIL, TAMPING AND SETTLING AROUND ROOTBALL.
5. CREATE PLANTING BASIN BERM, ABOUT 2 FEET DIAMETER AROUND THE PLANT.
6. 1" TO 2" LAYER OF ORGANIC MULCH PER THE SPECIFICATIONS. INSTALL 3" AWAY FROM PLANT CENTER.
7. WATER THOROUGHLY TO ALLOW BASIN TO DRAIN.
8. EXISTING SUBGRADE.

A SHRUB PLANTING N.T.S.



1. SHRUB PLANTING PER DETAIL 'A' THIS SHEET.
2. ORIGINAL SLOPE.
3. CUT SLOPE FACE AS NECESSARY TO CREATE PLANTING PIT.
4. CREATE PLANTING BASIN BERM, ABOUT 2 FEET DIAMETER AROUND THE PLANT.
5. 1" TO 2" LAYER OF ORGANIC MULCH PER THE SPECIFICATIONS. INSTALL 3" AWAY FROM PLANT CENTER.

B SHRUB PLANTING ON SLOPE N.T.S.

CHANNEL BED PALETTE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	SPACING	DETAIL / SHEET
10,116 S.F. 0.23 ACRE	SHRUBS					
	ANEMOPSIS CALIFORNICA	YERBA MANSA	1 GAL	22	8' O.C.	DETAILS 'A' & 'B' SHEET 14
	ELEOCHARIS MACROSTACHYA	PALE SPIKE-SEDGE	1 GAL	18	3' O.C.	DETAILS 'A' & 'B' SHEET 14
	IVA HAYESIANA	SAN DIEGO MARSH ELDER	1 GAL	9	15' O.C.	DETAILS 'A' & 'B' SHEET 14
	JUNCUS MEXICANUS	MEXICAN RUSH	1 GAL	22	4' O.C.	DETAILS 'A' & 'B' SHEET 14

BOTANICAL NAME	COMMON NAME	LBS/ACRE	MIN. PERCENT PURITY/ GERMINATION	POUNDS OF PURE LIVE SEED PER ACRE
SEED MIX				
ANEMOPSIS CALIFORNICA	YERBA MANSA	4.0	55/80	1.76
ELEOCHARIS MACROSTACHYA	PALE SPIKE-SEDGE	2.0	70/70	0.98
IVA HAYESIANA	SAN DIEGO MARSH ELDER	3.0	30/30	0.27
JUNCUS MEXICANUS	MEXICAN RUSH	3.0	80/30	0.72
	TOTAL	12.0		3.73

INSTREAM (FRESHWATER MARSH) PALETTE

1'- 4' ABOVE CHANNEL BED

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	SPACING	DETAIL / SHEET
8,622 S.F. 0.20 ACRE	SHRUBS					
	ANEMOPSIS CALIFORNICA	YERBA MANSA	1 GAL	18	8' O.C.	DETAILS 'A' & 'B' SHEET 14
	CAREX SPISSA	SAN DIEGO SEDGE	1 GAL	9	8' O.C.	DETAILS 'A' & 'B' SHEET 14
	ELEOCHARIS MACROSTACHYA	PALE SPIKE-SEDGE	1 GAL	15	3' O.C.	DETAILS 'A' & 'B' SHEET 14
	IVA HAYESIANA	SAN DIEGO MARSH ELDER	1 GAL	7	15' O.C.	DETAILS 'A' & 'B' SHEET 14
	JUNCUS ACUTUS SUBSP. LEOPOLDII	SOUTHWESTERN SPINY RUSH	1 GAL	3	50' O.C.	DETAILS 'A' & 'B' SHEET 14
	JUNCUS MEXICANUS	MEXICAN RUSH	1 GAL	18	4' O.C.	DETAILS 'A' & 'B' SHEET 14
	PLUCHEA SERICEA	ARROW WEED	1 GAL	4	25' O.C.	DETAILS 'A' & 'B' SHEET 14
	TRIGLOCHIN CONCINNA	ARROWGRASS	1 GAL	15	4' O.C.	DETAILS 'A' & 'B' SHEET 14

BOTANICAL NAME	COMMON NAME	LBS/ACRE	MIN. PERCENT PURITY/ GERMINATION	POUNDS OF PURE LIVE SEED PER ACRE
SEED MIX				
ANEMOPSIS CALIFORNICA	YERBA MANSA	4.0	55/80	1.76
CAREX SPISSA	SAN DIEGO SEDGE	3.0	95/65	1.85
ELEOCHARIS MACROSTACHYA	PALE SPIKE-SEDGE	2.0	70/70	0.98
IVA HAYESIANA	SAN DIEGO MARSH ELDER	3.0	30/30	0.27
JUNCUS MEXICANUS	MEXICAN RUSH	3.0	80/30	0.72
PLUCHEA SERICEA	ARROW WEED	3.0	7/20	0.04
TRIGLOCHIN CONCINNA	ARROWGRASS	2.0	TBD	TBD
	TOTAL	20.0		5.62

MID-TERRACE AND UPLAND PALETTE

4' ABOVE THE CHANNEL BED

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	SPACING	DETAIL / SHEET
50,426 S.F. 1.16 ACRE	SHRUBS					
	PLUCHEA SERICEA	ARROW WEED	1 GAL	41	30' O.C.	DETAILS 'A' & 'B' SHEET 14
	ROSA CALIFORNICA	CALIFORNIA ROSE	1 GAL	82	6' O.C.	DETAILS 'A' & 'B' SHEET 14
	MUHLENBERGIA RIGENS	DEERGRASS	1 GAL	77	8' O.C.	DETAILS 'A' & 'B' SHEET 14
	NASSELLA PULCHRA	PURPLE NEEDLEGRASS	1 GAL	93	6' O.C.	DETAILS 'A' & 'B' SHEET 14

BOTANICAL NAME	COMMON NAME	LBS/ACRE	MIN. PERCENT PURITY/ GERMINATION	POUNDS OF PURE LIVE SEED PER ACRE
SEED MIX				
ERIOGONUM FASCICULATUM	CALIFORNIA BUCKWHEAT	4.0	55/20	0.44
PLUCHEA SERICEA	ARROW WEED	2.0	95/80	1.52
ROSA CALIFORNICA	CALIFORNIA ROSE	2.0	55/20	0.90
ARTEMISIA CALIFORNICA	CALIFORNIA SAGEBRUSH	3.0	30/60	0.54
NASSELLA PULCHRA	PURPLE NEEDLEGRASS	3.0	90/75	2.03
	TOTAL	14.0		5.43

PLANTING NOTES

1. ALL LANDSCAPE IMPROVEMENTS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY OF ESCONDIDO CONCEPTUAL RESTORATION AND MONITORING PLAN SPRUCE STREET DRAINAGE IMPROVEMENTS CITY FILE NO. ENV 15-0010.
2. THE RESTORATION ECOLOGIST SHALL LAYOUT THE SPECIES AND SHALL PROVIDE APPROPRIATE COMPOSITION LAYOUTS WITHIN DIFFERENT ECOLOGICAL SETTINGS.
3. PLANTS SHALL BE PROPAGATED FROM MATERIAL FROM THE SAME WATERSHED OR WITHIN 20 MILES OF THE RESTORATION SITE. PLANTS THAT CANNOT BE PROVIDED FROM THE IMMEDIATE VICINITY SHALL BE PROVIDED FROM THE CLOSEST COMMERCIALLY AVAILABLE SOURCES.
4. PLANTS SHALL BE CERTIFIED AS FREE OF EXOTIC PESTS (E.G., ARGENTINE ANTS) PRIOR TO DELIVERY ON-SITE.
5. ANY POTENTIAL SUBSTITUTIONS MUST BE APPROVED BY THE RESTORATION ECOLOGIST.
6. SEED SHALL BE APPLIED BY HAND AND RAKED INTO THE SOIL.
7. SEEDS SHALL BE COLLECTED WITHIN THE SAME WATERSHED OR WITHIN 20 MILES OF THE SITE. SEEDS THAT CANNOT BE COLLECTED FROM THE IMMEDIATE VICINITY SHALL BE PROVIDED FROM THE CLOSEST COMMERCIALLY AVAILABLE SOURCES.

REGISTERED LANDSCAPE ARCHITECT — JEREMY FRANZINI L.I.C. NO. 4514 — SIGNATURE — JUNE 30, 2019 RENEWAL DATE — DATE — STATE OF CALIFORNIA

ESCONDIDO City of Choice

60% SUBMITTAL 6/27/17

CONSTRUCTION RECORD	REFERENCES	Date	By	REVISIONS	App'd	Date	BENCH MARK
Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE: Horizontal / Vertical

Office ____ Filmed ____ Traffic ____

Designed By | Drawn By | Checked By

Plans Prepared Under Supervision Of JEREMY FRANZINI Date ____ R.C.E. No. 4514

Submitted ____ By ____ Asst. City Engineer of Public Works

Approved ____ By ____ Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:

SPRUCE STREET CHANNEL IMPROVEMENT PROJECT

PLANT LEGEND, NOTES AND DETAILS

Drawing No. XX-XX

Sheet 18 of 22

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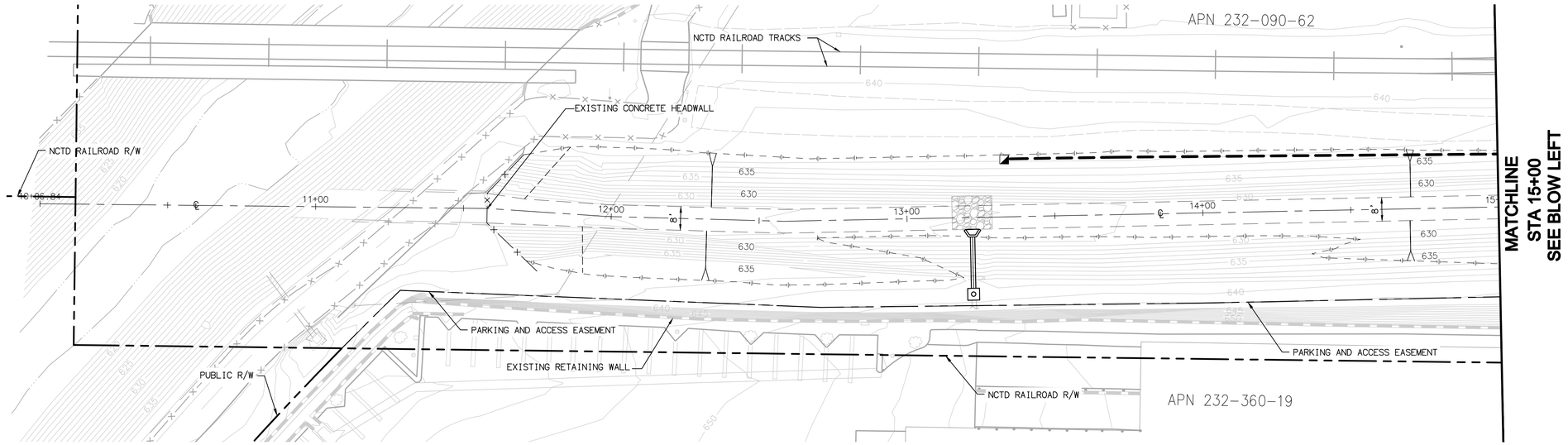

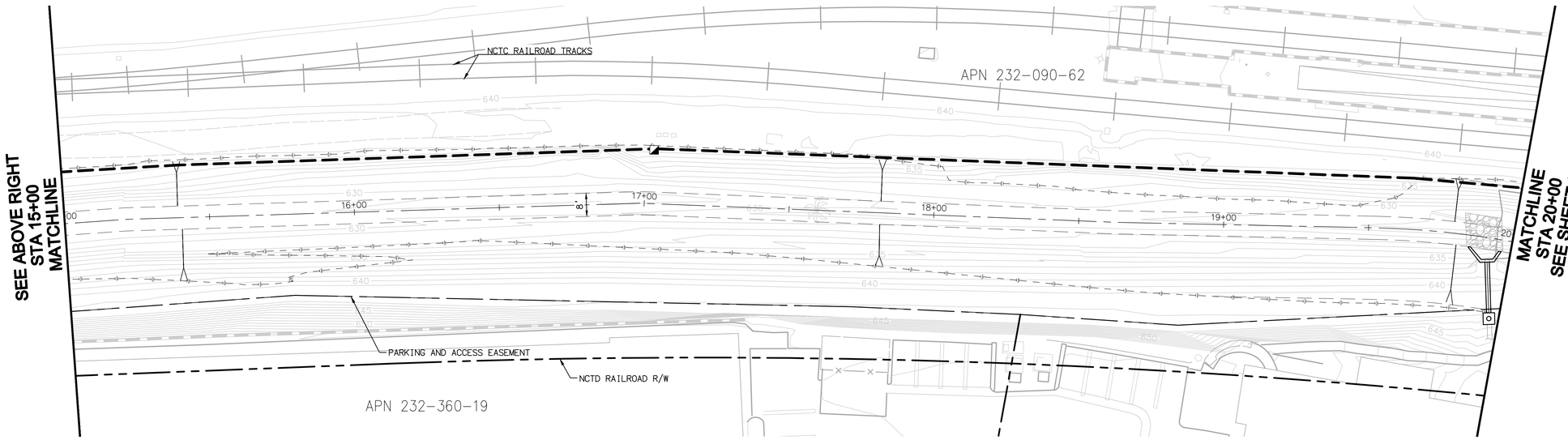

SCALE: 1"=20'

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SCALE: 1"=20'

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Contractor							
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Date Completed							ELEV. DATUM: .

SCALE	Office	Designed By	Drawn By	Checked By
Horizontal	Filmed	Plans Prepared Under Supervision Of		
Vertical	Traffic	JEREMY FRANZINI	Date	R.C.E. No. 4514

Submitted _____ Approved _____

By _____ By _____

Asst. City Engineer of Public Works Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:

SPRUCE STREET CHANNEL IMPROVEMENT PROJECT

IRRIGATION PLAN STA 10+00 TO STA 20+00

Drawing No. XX-XX

Sheet 19 of 22

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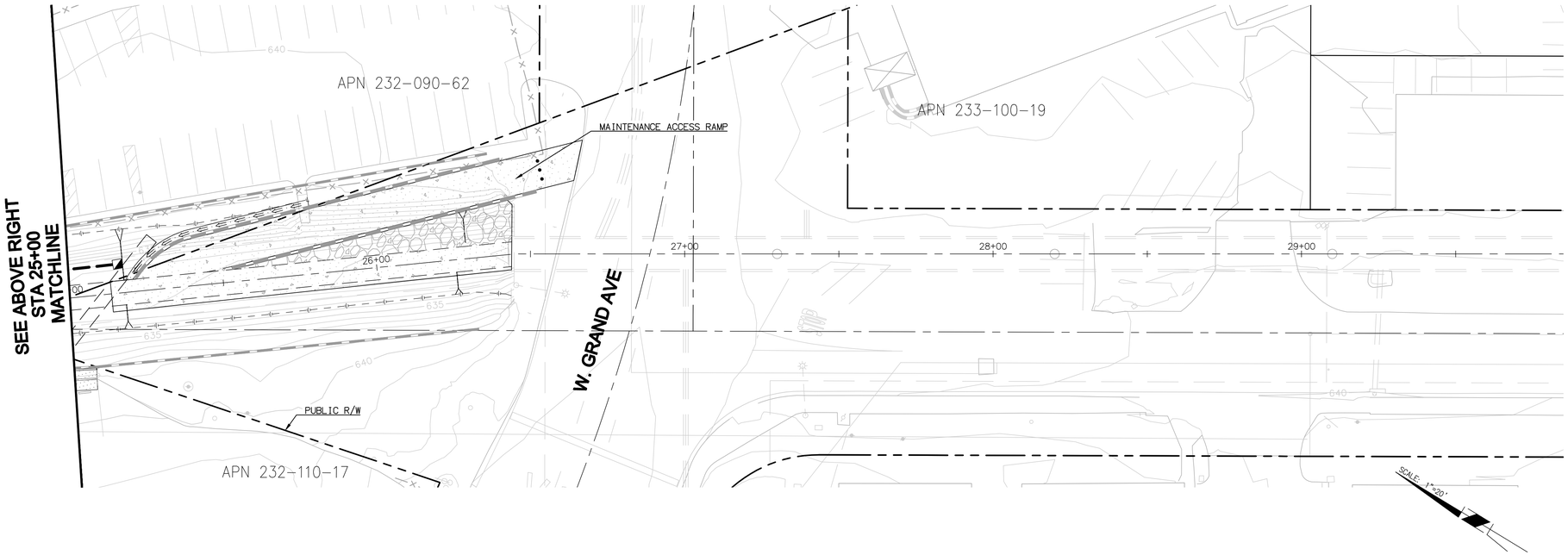

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JEREMY FRANZINI L.I.C. NO. 4514
SIGNATURE
JUNE 30, 2019
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Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE	Office	Designed By	Drawn By	Checked By
Horizontal	Filmed	Plans Prepared Under Supervision Of JEREMY FRANZINI		
Vertical	Traffic	Date R.C.E. No. 4514		

Submitted _____ Approved _____

By _____ By _____

Asst. City Engineer of Public Works Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:

SPRUCE STREET CHANNEL IMPROVEMENT PROJECT

IRRIGATION PLAN STA 20+00 TO STA 29+85

Drawing No. XX-XX

Sheet 20 of 22

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
◪	RAIN BIRD 44LRC QUICK COUPLER VALVE WITH LOCKING COVER
▬▬▬▬	1 1/2" IRRIGATION MAINLINE: PVC SCHEDULE 40
═══	PIPE SLEEVE: PVC SCHEDULE 40 PIPE SLEEVE SIZE SHALL BE TWICE THE SIZE OF THE PIPE IT CARRIES AND SHALL ALLOW FOR IRRIGATION PIPING AND RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.
⋈	MATCO-NORCA BALL VALVE - LINE SIZE
⧓	3/4" FEBCO 825Y REDUCED PRESSURE BACKFLOW PREVENTER, WITH GUARDSHACK ENCLOSURE
[W]	3/4" WATER METER PER CIVIL PLANS

IRRIGATION NOTES

1. ALL LANDSCAPE IMPROVEMENTS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY OF ESCONDIDO CONCEPTUAL RESTORATION AND MONITORING PLAN SPRUCE STREET DRAINAGE IMPROVEMENTS CITY FILE NO. ENV 15-0010.

60% SUBMITTAL 6/27/17

REGISTERED LANDSCAPE ARCHITECT
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Contractor							
Inspector							
Date Completed							ELEV. DATUM: .

SCALE
Horizontal
Vertical

Office
Filmed
Traffic

Designed By | Drawn By | Checked By

Plans Prepared Under Supervision Of
JEREMY FRANZINI
Date
R.C.E. No. 4514

Submitted
By
Asst. City Engineer of Public Works

Approved
By
Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
IRRIGATION LEGEND, NOTES AND DETAILS

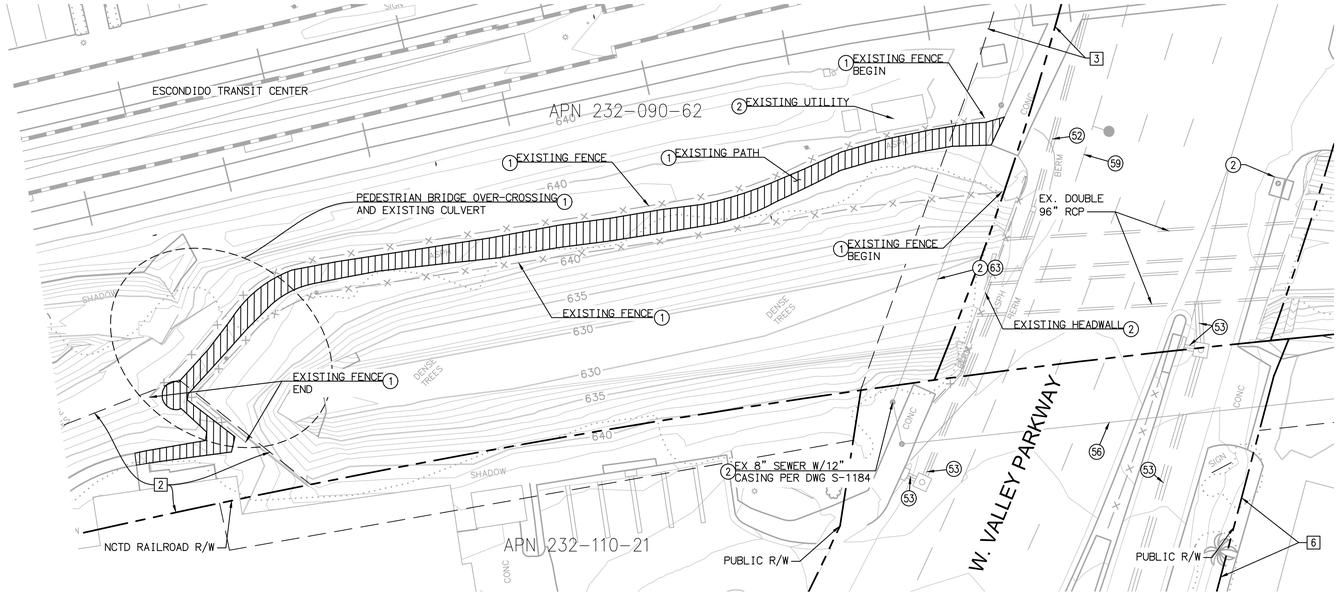
Drawing No.
XX-XX
Sheet 21 of 22

DWG: H:\Update\156036_Spruce Street Channel\CADD\Larch\Dbk\156036-I21-IR.dwg

60% SUBMITTAL 6/27/17

CONSTRUCTION NOTES

(1) REMOVE
(2) PROTECT IN PLACE
(52) EX 18" SD, PER DWG P-1056
(53) EX 18" SD, PER DWG P-2355
(56) EX 8" SWR, PER DWG 3383-2
(59) EX 14" WTR, PER DWG W-1492
(63) EX 8" SWR W/ 12" CASING, PER DWG S-1184



EASEMENTS

[2] PARKING AND ACCESS EASEMENT REC.1/23/2002 AS DOC. NO. 2002-0055981 O.R.

[3] SEWER EASEMENT AGREEMENT REC. 1/15/2002 AS INST. NO. 2002-0033967 O.R.

[4] SEWER LINE EASEMENT REC. 2/07/1961 AS INST. NO.21914 O.R.

[5] GUY POLE AND ANCHOR EASEMENT REC. 12/11/1979 AT FILE/PAGE NO. 79-518951 O.R.

[6] BLANKET EASEMENT FOR PUBLIC UTILITIES REC. 9/10/1980 AT FILE/PAGE NO. 80-292104 O.R.

SCALE: 1"=20'

20 10 0 20 40 60
SCALE: 1"=20'

REGISTERED PROFESSIONAL ENGINEER
RICHARD A. LUCERA
No. C058089
Exp. 6-30-18
CIVIL
STATE OF CALIFORNIA

ESCONDIDO
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SCALE			
Horizontal	Office	Designed By	Drawn By	Checked By
1"=20'	Filmed	Plans Prepared Under Supervision Of		
Vertical	Traffic	RICHARD LUCERA	Date	
1"=4'			R.C.E. No. 58089

Submitted _____ Approved _____
By _____ By _____
Asst. City Engineer of Public Works Director of Public Works

CITY OF ESCONDIDO DEPARTMENT OF PUBLIC WORKS

Improvement Plans for:
SPRUCE STREET CHANNEL IMPROVEMENT PROJECT
DEMOLITION PLAN

Drawing No. XX-XX
Sheet 22 of 22

DWG: H:\PDATA\156036_spruce street channel\CADD\Dsh\156036-022-DEMO.dwg

Source: SanGIS 2017; SANDAG 2014; City of Escondido 2010; AECOM 2017.

100 50 0 100 Feet

Scale: 1:1,200; 1 inch = 100 feet

Figure 4
Jurisdictional Waters and Planting Areas

Path: P:\2014\60313771_Esc_MissionP\900-CAD-GIS\920 GIS\922_Maps\HMMP_RevegPlan\Fig4_ReVegArea_JD_USandState.mxd, 2/23/2018, daniel.arellano

ATTACHMENT 4
MITIGATION FIGURES

1) **Figure 1 – Escondido Sewer Outfall Project Regional Location of Proposed Wetland/Riparian Mitigation Site**
2) **Figure 2 – Escondido Sewer Outfall Project Vicinity of Proposed Wetland/Riparian Mitigation Site**
3) **NTCD – Escondido Sewer Outfall Project Proposed Wetland/Riparian Mitigation Site**

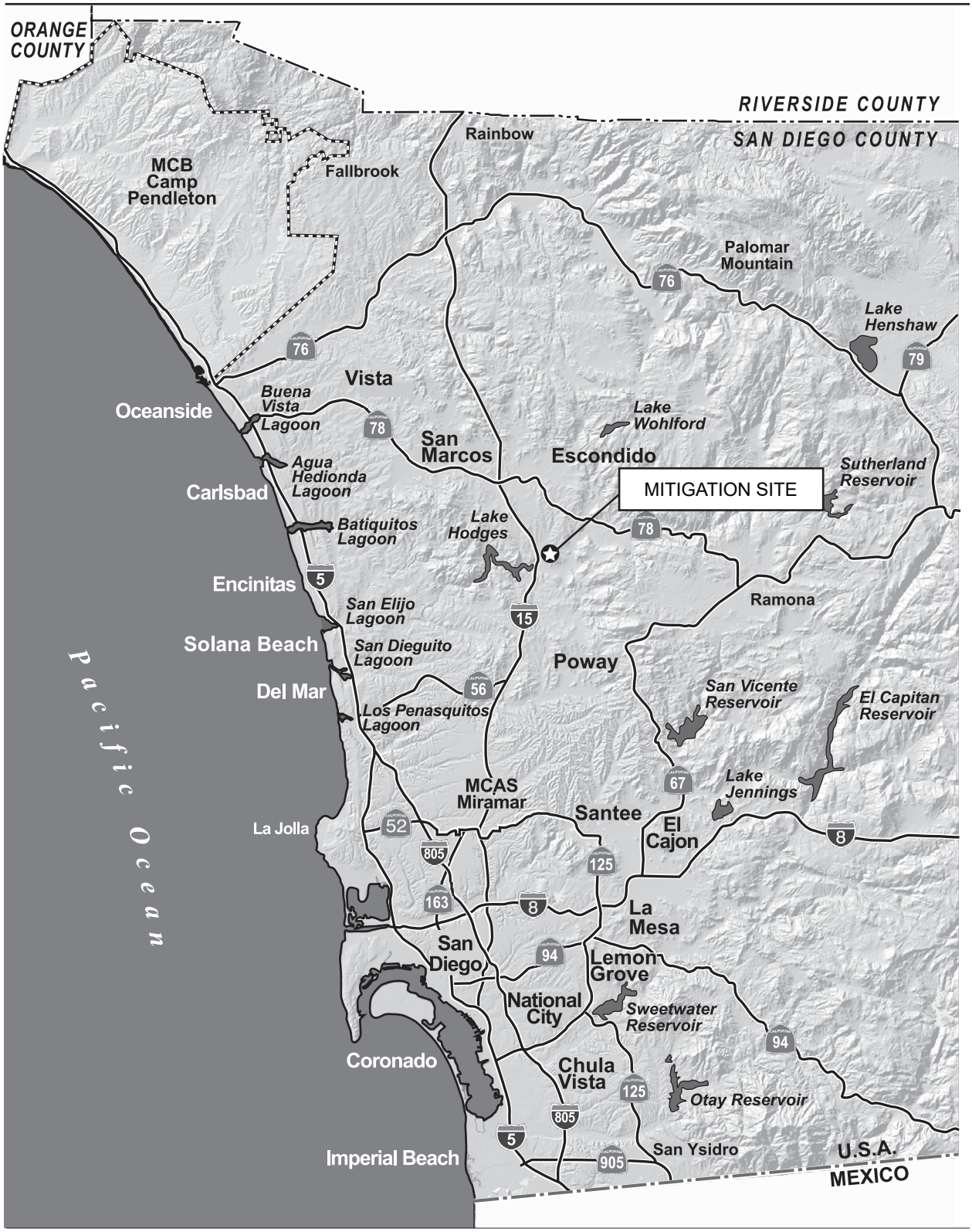

Figure 1
Escondido Sewer Outfall Project
Regional Location of Proposed Wetland/Riparian Mitigation Site

EXHIBIT "B"
TO CITY COUNCIL RESOLUTION NO. 2017-164
MMRP

Mitigation Monitoring and Reporting Program (MMRP)

Spruce Street Drainage Improvement Project

PROJECT NAME: Mitigated Negative Declaration for Spruce Street Drainage Improvement Project (SCH #2015121103)

PROJECT DESCRIPTION: The City of Escondido owns and operates a Municipal Separate Storm Sewer System (MS4) infrastructure that includes various stormwater facilities associated with flood control and drainage in throughout Escondido. The earthern and concrete-lined channel along Spruce Street has a long history of being chronically wet with standing water resulting in impacts to flood control, public health and safety and water quality. The proposed project includes drainage improvement activities to reduce standing water and sedimentation, and to allow increased flow along the approximately 1/2-mile section of earthen and concrete-lined drainage channel adjacent to Spruce Street. A Mitigated Negative Declaration (MND) has been prepared pursuant to CEQA and provides an analysis of potential impacts from the proposed project.

PROJECT LOCATION: City of Escondido, CA. The project area begins north of the intersection of South Spruce Street and West 3rd Avenue as a concrete-lined channel and conveys drainage west (downstream) before going underground at South Spruce Street. The channel daylights west of the intersection of West Grand Avenue and South Spruce Street as an earthen channel and flows west through a short culvert under West Valley Parkway, and then continues as an earthen channel until it drains into Escondido Creek (concrete-lined flood-control channel).

APPLICANT/CONTACT PERSON: Jay Paul, Planning Dept.

PHONE NUMBER/Email: (760) 839-4537 jpaul@escondido.org

ASSOCIATED CASE NO.: ENV 15-0010

APPROVAL BODY/DATE: City Council, February 10, 2016 and December 20, 2017

PROJECT MANAGER: Alicia Appeal-Utilities/Environmental Programs (760) 839-6315 aappeal@escondido.org

Phase at which the Mitigation Measures are to be implemented

Prior to issuance of grading permit/site grading

Mitigation Measure	Description	Identification No. Location in Doc.	Responsibility for Implementation	Certified Initials/Date	Comments
Biological Resources					
BIO-1 Nesting Season Avoidance	Vegetation clearing shall occur outside of the typical breeding season for raptors and migratory birds (February 15 through September 15). However, if this is not possible, then a qualified biologist will conduct a raptor nesting survey prior to construction to determine the presence or absence of nests in the riparian habitat,	BIO-1 Page 30 of MND	City of Escondido, Biologist, Project Manager		

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Mitigation Measure	Description	Identification No. Location in Doc.	Responsibility for Implementation	Certified Initials/Date	Comments
	and the potential need for additional project mitigation measures.				
BIO-2 Nest Buffers	To the greatest extent feasible, vegetation clearing, dredging, and other mechanized activities within 500 feet of undeveloped vegetation communities will be conducted outside the breeding season for federally protected migratory and listed bird species. In situations where these types of maintenance activities will occur adjacent to undeveloped vegetation communities during the breeding season (February 15 through September 15), the following measures will be implemented: 1. A preconstruction survey for migratory birds shall be performed by a qualified biologist within 3 days prior to any removal of trees, shrubs, or structures on the project site. If no active nests are found, then no further action will be warranted. 2. If an active nest is detected on or within 300 feet of the project site (500 feet for raptors), no work shall be conducted within a 300-foot radius (500 feet for raptors) of the detected nest until a biological monitor determines the nest is no longer active.	BIO-2 Page 30 of MND	City of Escondido, Biologist, Project Manger		
BIO-3 Wetland Habitat/Jurisdictional Waters Protection	Impacts to wetland/upland habitat shall be mitigated with up to approximately 0.10 acres of qualifying wetland/upland habitat. Mitigation shall be provided by either 1) preservation of equivalent or better habitat at an off-site location via a covenant of easement or other method approved by the City to preserve the habitat in perpetuity, or 2) acquire, purchase or utilization of wetland or equivalent habitat credits at an approved mitigation band, to the satisfaction of the City. The final amount of mitigation required will be determined by the permitting agencies upon review of the project. The mitigation site shall be developed with a qualified restoration ecologist that would be responsible for preparing that site's revegetation and monitoring plan.	BIO-3 Page 30 of MND and 3 of Addendum	City of Escondido; Biologist/ Restoration Ecologist, Project Manager		

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Mitigation Measure	Description	Identification No. Location in Doc.	Responsibility for Implementation	Certified Initials/Date	Comments
	The plan shall include details of site preparation and implementation, planting specifications, and 5-year maintenance and monitoring procedures. The plan shall outline yearly success criteria and remedial measures should the mitigation effort fall short of the success criteria				
BIO-4 Mature Tree Protection	All tree replacement would be in accordance with the City's Tree Preservation and Grading Ordinance requirements for mature and any protected trees (Oaks). It is anticipated that any mature and any protected trees (Oaks) would be planted on-site or within adjacent City owned property. Tree replacement plan to be included as part of the revegetation plan noted in Bio 3.	BIO-4 Page 30 and 32 of MND	City of Escondido, Project Biologist/ Restoration Ecologist; Project Manager		
Cultural Resources					
CR-1 Avoidance of Archaeological Resources	If an unanticipated archaeological resource is discovered the contractor shall temporarily divert construction activities in the area of cultural resource and immediately notify the resident engineer, as appropriate, and the PI (Principle Investigator) (unless Monitor is the PI). The PI shall immediately notify appropriate City staff by phone of the incident, and shall also submit written documentation to City staff within 24 hours by fax or email with photos of the resource in context. The PI will assess the potential significance of the find and report to City staff. If feasible the unanticipated archaeological will be avoided. If an unanticipated discovery is significant and cannot be avoided see CR-2 below.	CR-1 Page 37 of MND	City of Escondido, Project Engineer, Project Manager, Archaeologist/ Principal Investigator		
CR-2 Testing of Archaeological Resources	If an unanticipated archaeological discovery is potentially significant and cannot be avoided, an evaluation plan that identifies research topics and procedures for evaluation of the resource will be prepared. The evaluation plan will be a standalone document and will be implemented prior to additional ground-disturbing maintenance activities.	CR-2 Page 37 of MND	City of Escondido, Project Engineer, Project Manager, Archaeologist		

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Mitigation Measure	Description	Identification No. Location in Doc.	Responsibility for Implementation	Certified Initials/Date	Comments
CR-3 Data Recovery of Archaeological Resources	If an unanticipated archaeological discovery is significant and cannot be avoided, a treatment plan will outline the procedures for conducting data recovery. The treatment plan will be a stand-alone document and will be implemented prior to any additional ground-disturbing maintenance activities.	CR-3 Page 37 of MND	City of Escondido, Project Engineer, Project Manager, Archaeologist		
CR-4 Treatment of Human Remains	If human remains are inadvertently discovered, they shall be treated according to appropriate state regulations(Public Resources Code Sections 5097.98, 5097.99, 5097.991, 7050.5, and 8010–8011 and Assembly Bill 2641); or on federal land Native American Graves Protection and Repatriation Act provisions, as outlined in the monitoring and discovery plan.	CR-4 Page 37 of MND	City of Escondido, Project Engineer, Project Manager, Archaeologist/ Principal Investigator		

CODE COMPLIANCE

Ongoing monitoring to ensure compliance with all mitigation measures, operational requirements, standards, codes and regulations.	City of Escondido Utilities-Environmental Programs City of Escondido Public Work Department

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Exhibit B
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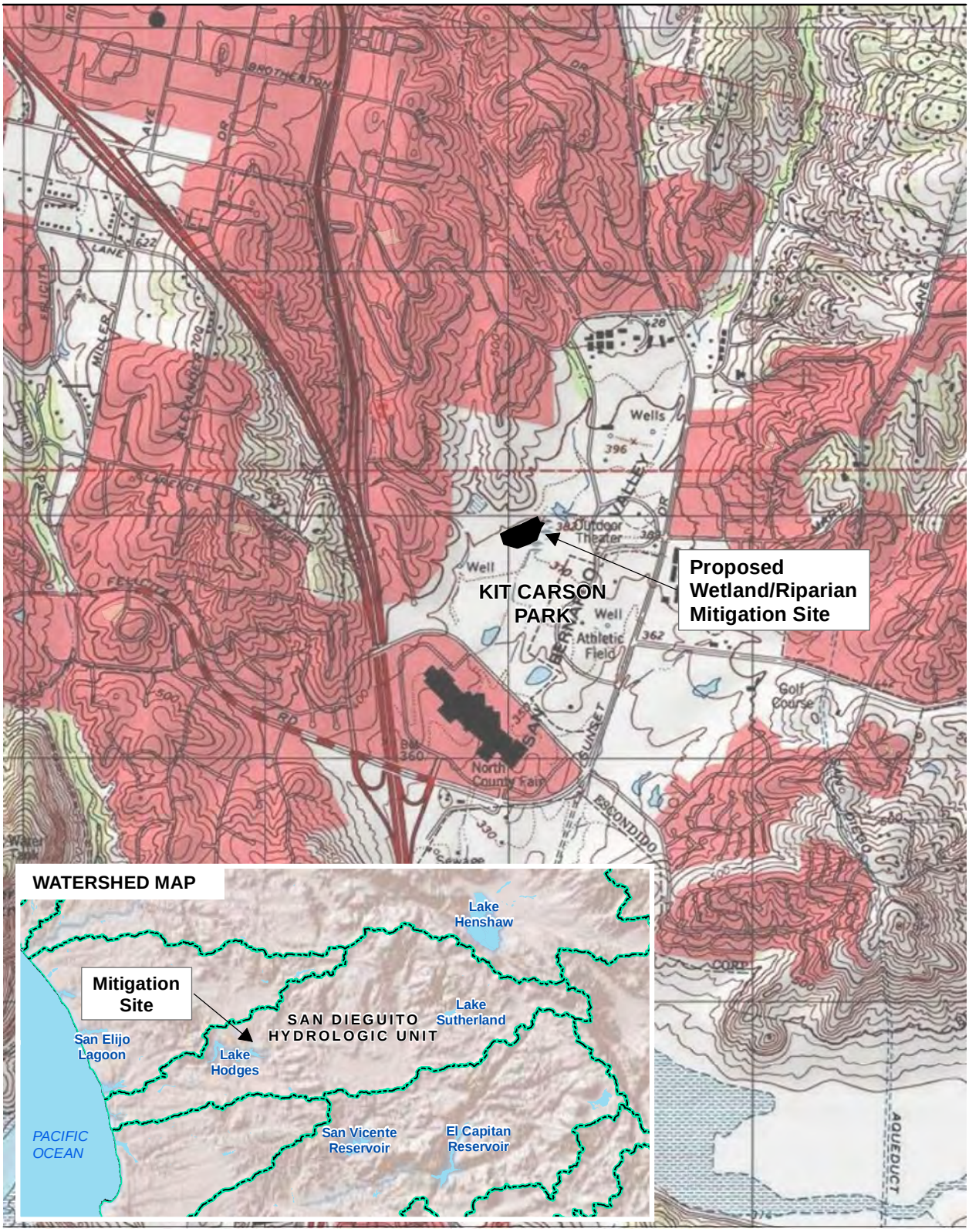
ATTACHMENT 5
CEQA MITIGATION MONITORING AND REPORTING PROGRAM



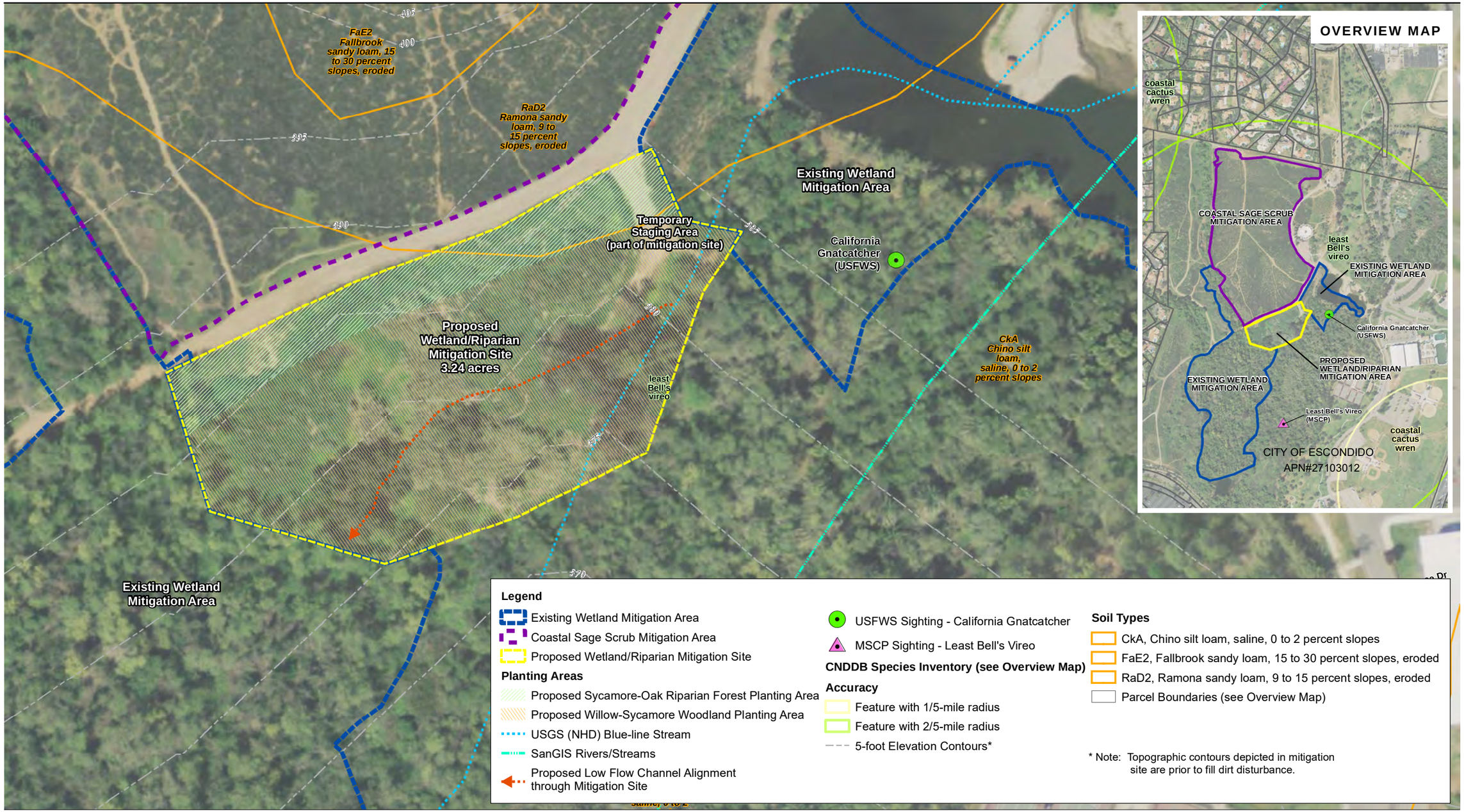
Source: USGS 7.5' Topo Quad Escondido 1975

2,000 1,000 0 2,000 Feet

Scale: 1 = 923,129; 1 inch = 76,927 feet

Figure 2
Escondido Sewer Outfall Project
Vicinity Location of
Proposed Wetland/Riparian Mitigation Site

Path: P:\2003\3K103 Escondido RGP\5GIS\mxd\fig2_vicinity_map.mxd, 07/22/09, LeeJ



Source: DigitalGlobe 2008; EDAW 2009; USFWS 2008; DFG 1989, 2000; SSURGO 2006; MSCP 2007; National Hydrology Dataset 2006; SanGIS 2009

100 50 0 100 Feet

Scale 1:1,200; 1 inch = 100 feet

Figure 3
Escondido Sewer Outfall Project
Proposed Wetland/Riparian Mitigation Site

Path: P:\2012\60242810\06GIS\6.3_Layout\MitigationPLan\fig3_mitigation_map.mxd, 8/6/2013, sorensenj