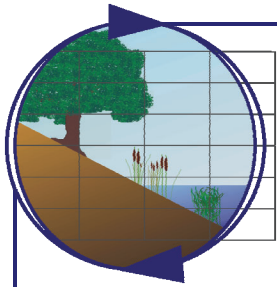


APPENDIX C-2

SLR Buffer Enhancement Proposal



Merkel & Associates, Inc.

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e-mail: associates@merkelinc.com

April 5, 2021
M&A #20-069-02

Mr. Jeb Hall
Concordia Homes
380 Stevens Avenue, Suite 307
Solana Beach, CA 92075

Concordia Homes-Cypress Point Project – San Luis Rey River Buffer Habitat Enhancement Proposal

Dear Mr. Hall:

Merkel & Associates, Inc. (M&A) has prepared this letter report regarding a proposal for habitat enhancement within the San Luis Rey (SLR) River buffer to address proposed encroachment into the City of Oceanside's draft Hardline Preserve and Wildlife Corridor Planning Zone (WCPZ) as well as potential indirect impacts from the proposed Cypress Point project, as requested by the Wildlife Agencies during the project meeting on March 11, 2021.

If you have any questions concerning this letter report, please do not hesitate to contact me at 858-560-5465 or gkrantz@merkelinc.com.

Sincerely,

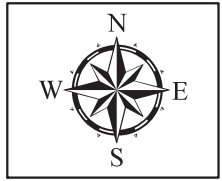
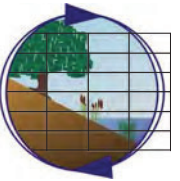
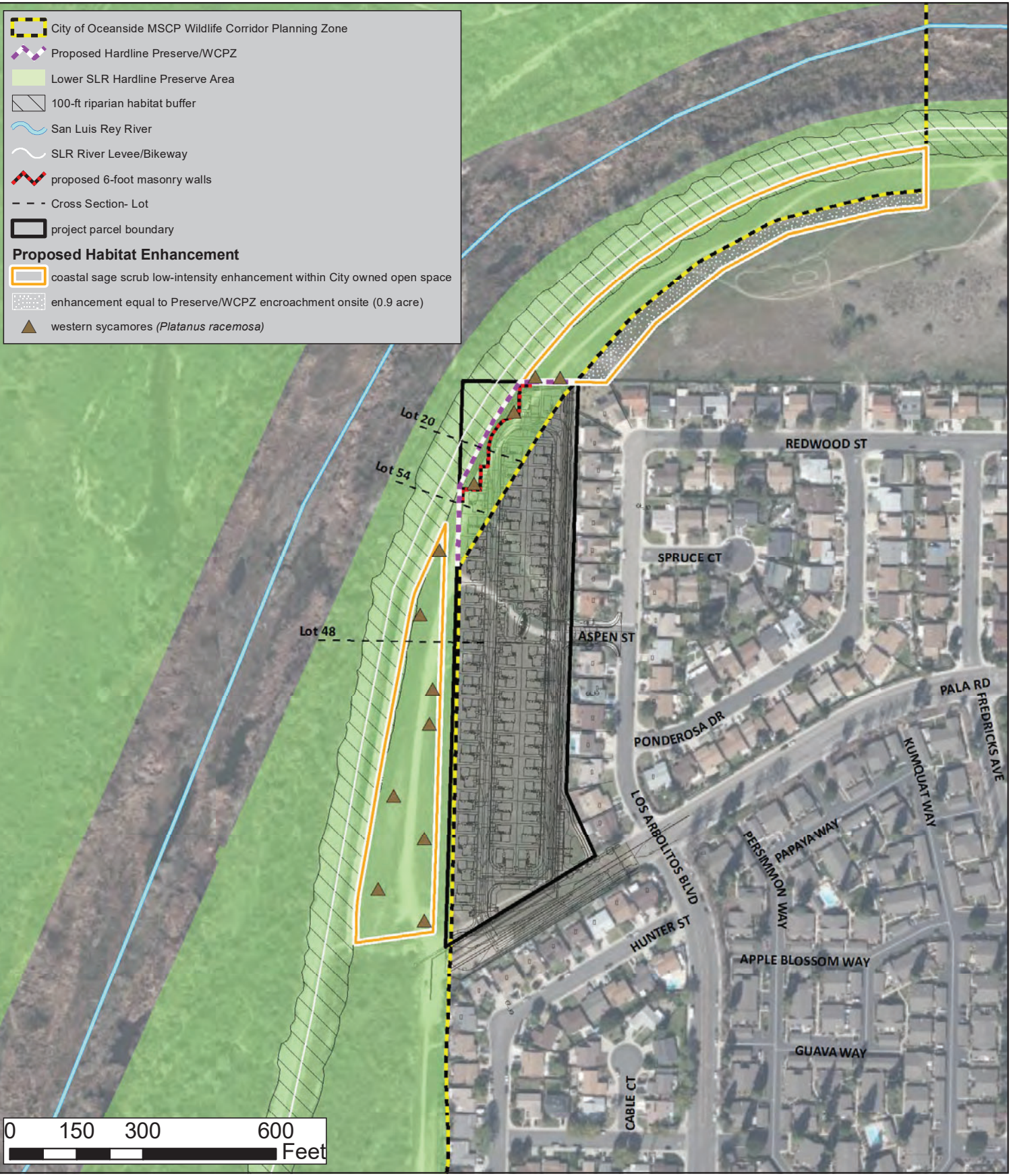
Gina Krantz
Senior Biologist/Project Manager

Keith W. Merkel
Principal Consultant

The proposed Cypress Point project property's smaller size and narrow configuration is constrained by the encroachment of the SLR River levee/brow ditch into the northwestern corner onsite, sewer main along the western boundary as well as an existing residential development directly to the east. The project proposes to avoid the northwestern corner of the site to accommodate the SLR River levee and brow ditch as well as the SLR River 100-foot riparian habitat buffer but would encroach approximately 75-100 feet into the City of Oceanside's draft Hardline Preserve and WCPZ totaling 0.9 acre that consists of disturbed habitat and non-native grassland that is regularly utilized by dogs and their owners.

To account for the proposed 0.9 acre of Preserve/WCPZ encroachment, the project proposes the following:

- Coastal sage scrub low-intensity enhancement of 0.9 acre on City of Oceanside land located northeast of project site and outside but contiguous with the existing Preserve/WCPZ in the project vicinity (*see figure*). The proposed CSS enhancement in the 0.9-acre area would be a part of the larger habitat enhancement effort within the SLR River buffer as described below.
- Coastal sage scrub low-intensity enhancement of approximately 3.5 acres on City of Oceanside land north and west of project site with the existing Preserve/WCPZ in the project vicinity (*see figure*), as follows:
 - Based on existing site constraints and the overall goal to enhance the SLR River buffer and not necessarily to support breeding gnatcatcher, the project proposes low-intensity coastal sage scrub enhancement that consists of minor site preparation, coastal sage scrub hydroseeding, and minor maintenance. Low-intensity enhancement is defined in Subarea Plan Section 7.2.3 as an appropriate restoration goal within the WCPZ to "improve wintering foraging habitat or dispersal habitat for gnatcatchers in areas not expected to support breeding gnatcatchers (e.g., narrow, linear strips). In such limited cases, enhancement may consist of hydroseeding with sage scrub species, with little or no site preparation or maintenance."
 - The proposed habitat enhancement is located on City owned land designated as open space, and predominately in the Hardline Preserve that would be protected in perpetuity;
 - A proposed CSS low-intensity enhancement plan would be prepared by a qualified restoration biologist that is consistent with the guidelines in the *MHCP Section 6* as well as the City's *Subarea Plan Section 5.3.1 WCPZ and Section 7.2.3 Habitat Restoration*, or as approved by the City and Wildlife Agencies. In addition, several western sycamore (*Platanus racemosa*) trees are proposed to be planted to minimize potential indirect impacts as discussed further below. Based on the guidance from the MHCP and the City's Subarea Plan, the proposed CSS low-intensity enhancement plan and the western sycamore tree planting plan contents and success criteria may include the following information and conditions:



Proposed Habitat Enhancement
 Concordia Homes - Cypress Point

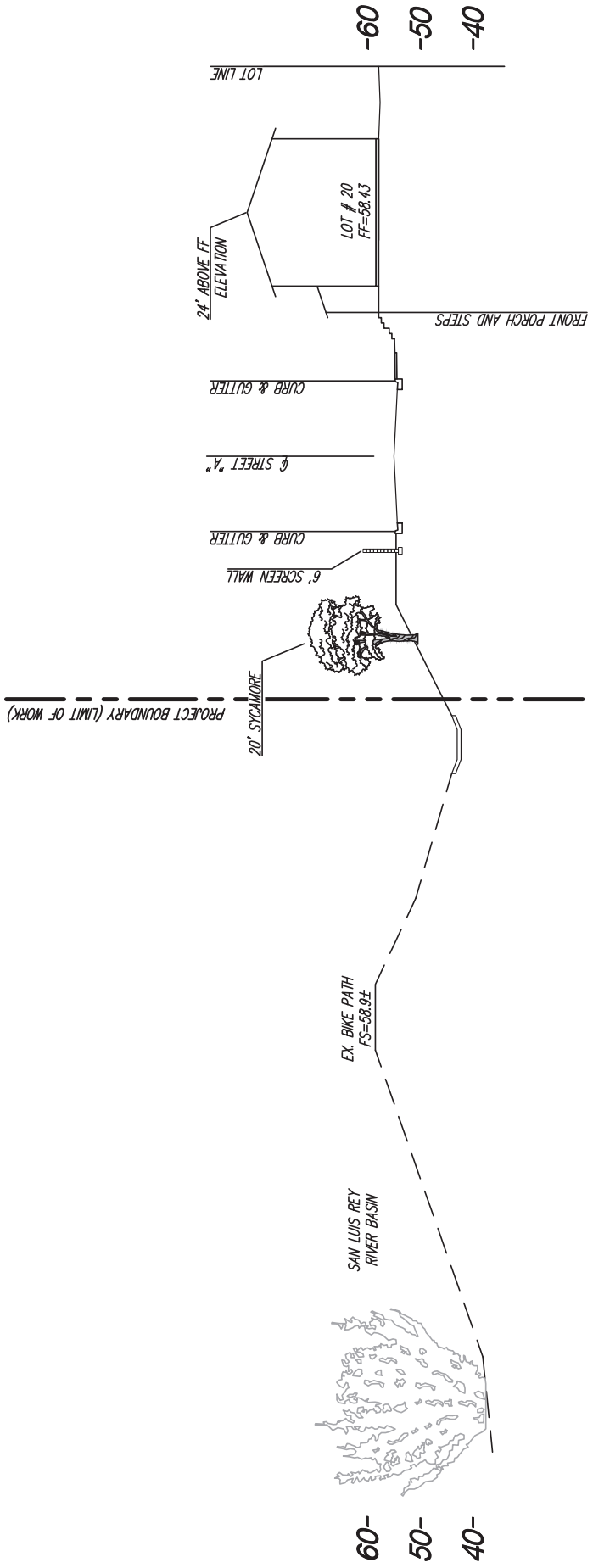
Aerial Source: Bing 2020 Created on March 23, 2021

1. **Final specifications and topographic-based site preparation, hydroseeding/planting and irrigation plans**, including 10-foot contours and typical cross-sections for upland enhancement sites. All enhancement areas shall be prepared for hydroseeding/planting by decompacting the topsoil in a way that mimics natural upland habitat topsoil to the maximum extent practicable while maintaining slope stability. All tree plantings shall be installed in a way that mimics natural plant distribution, and not in rows;
2. **Coastal sage scrub hydroseed palette/Western sycamore planting** (native seed mix [plant species and pounds pure live seed/acre] and western sycamore trees [size and number/acre]). The western sycamore container plants and coastal sage scrub hydroseed palette proposed in the enhancement plan shall include native species specifically associated with Diegan coastal sage scrub and consistent with Table 7-1 of Subarea Plan. The source and proof of locality of all plant material and seed shall be provided;
3. **Container tree plant survival** shall be 80 percent of the initial plantings for the first 3 years. At the first and second anniversary of tree installation, all dead trees shall be replaced unless their function has been replaced by natural recruitment;
4. **A final implementation schedule** for project construction impacts, as well as enhancement site preparation, planting and irrigation implementation. Necessary site preparation and planting shall be completed during the concurrent or next planting/rainy season (i.e., late fall to early spring);
5. **Three years of maintenance and success criteria** for habitat enhancement areas. A temporary irrigation above grade system would be installed and maintained within the enhancement areas; temporary irrigation will be gradually reduced and eventually turned off prior to the end of the third year unless success criteria is met before that time frame. Habitat maintenance would consist of non-native invasive plant species control through the use of mechanical and/or chemical control by an approved applicator. Success criteria would consist of ensuring the absence of Cal-IPC's "Invasive Plant Inventory" species, and no more than 10 percent coverage for other exotic/weed species;
6. **Three years of qualitative monitoring** of enhancement areas. Qualitative vegetation monitoring would consist of regular site visits by a qualified restoration biologist to assess the overall quality of the habitat and site conditions and threats. The plan would provide a tentative schedule and assessment criteria qualitative monitoring including photo documentation at established photo points within the enhancement site;
7. **Contingency measures** in the event of enhancement failure; and
8. **Annual maintenance and monitoring brief summary reports** shall be submitted to the City and Wildlife Agencies no later than December 1 of each year for their review and records.

To address the potential indirect project impacts such as increased artificial night lighting and elevated noise, human disturbance, and the invasion of non-native plant species from the project to the SLR River Hardline Preserve and WCPZ, the project proposes the following project features. Where applicable these features are exhibited in the included figure as well as in Appendix 1 that includes cross-sections of three representative proposed lots in relation to the SLR River levee and riparian habitat. Further, Appendix 2 includes existing photos to aid in providing context to the location of the proposed lots in relation to the adjacent existing levee and the SLR riparian habitat as well as to help demonstrate how the levee and the project features would act to shield and minimize indirect impacts (e.g., night light spill) into the adjacent SLR riparian habitat.

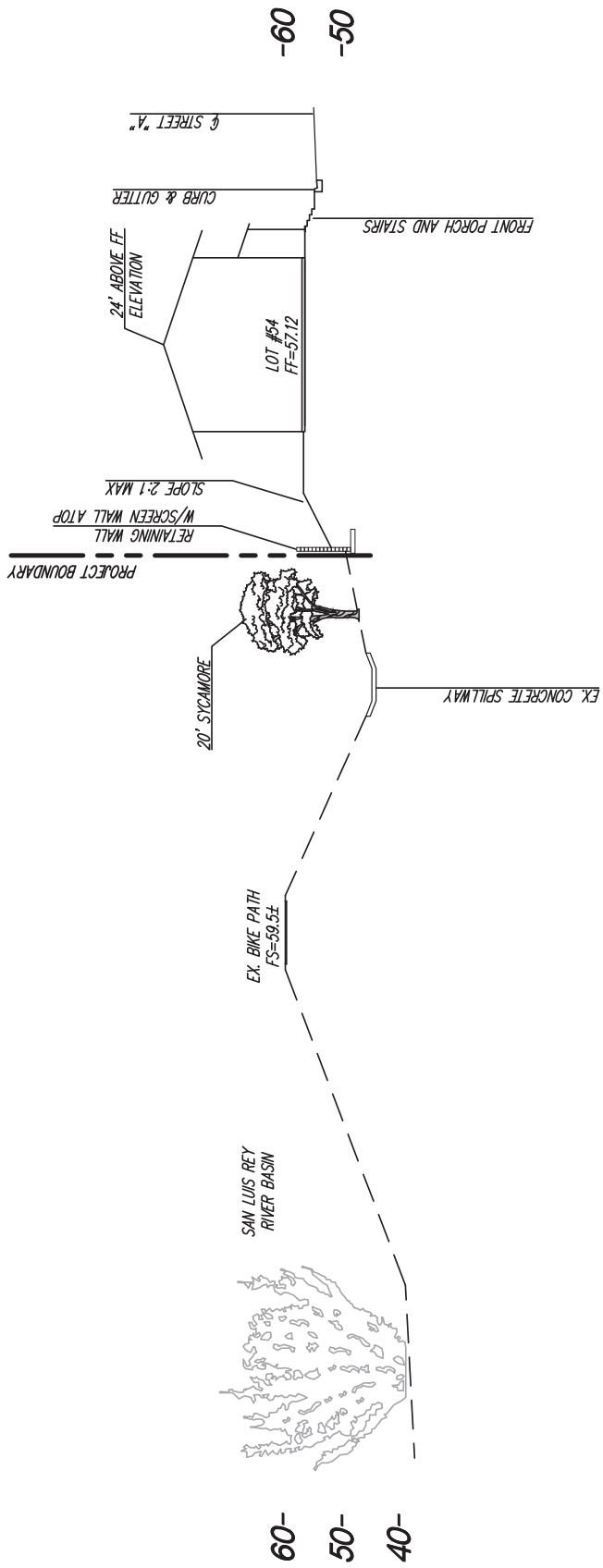
- Placement of 6-foot-high masonry walls at the top of slope along the project perimeter in the northwest corner to minimize potential lighting and noise impacts and avoid human access to the SLR River buffer;
- Planting, maintenance, and monitoring of several western sycamore trees along the northern and western project property boundaries (outside and setback from the existing SLR River levee and sewer mains in proximity) to minimize potential lighting and noise impacts; placement of 6-foot-high fencing along remainder of proposed project northern and western boundaries to avoid or minimize human access to the SLR River buffer;
- No streetlights are required throughout the interior project streets and therefore none are proposed (one exception along Pala Road where one streetlight is proposed for safety reasons);
- Proposed lighting on homes would be directed downward and shielded to avoid light spill into the adjacent Preserve/WCPZ. Further, proposed lighting on homes would use the lowest intensity lighting appropriate for the task and use lights with little to no blue wavelengths and warmer color temperatures (e.g., low-pressure sodium lights) where feasible.
- Preparation and submittal of a project Landscape Plan with a proposed plant palette that shall prohibit invasive non-native plant species on the California Exotic Pest Plant Council List of Exotic Pest Plants of Greatest Ecological Concern in California and Subarea Plan Table 5-5 that could spread into the adjacent Preserve. Due to the project size and proximity to the Preserve (within 500 feet), all proposed project landscaping shall consist of native plant species appropriate for the project area and consistent with Subarea Plan Table 5-4. Further, the Landscape Plan shall include an irrigation plan that shall demonstrate how the proposed project irrigation shall be contained to the project development and shall not drain or overspray resulting in potential spread of invasive plant species, erosion, and/or non-native species such as Argentine ants.

Appendix 1. Cross Sections



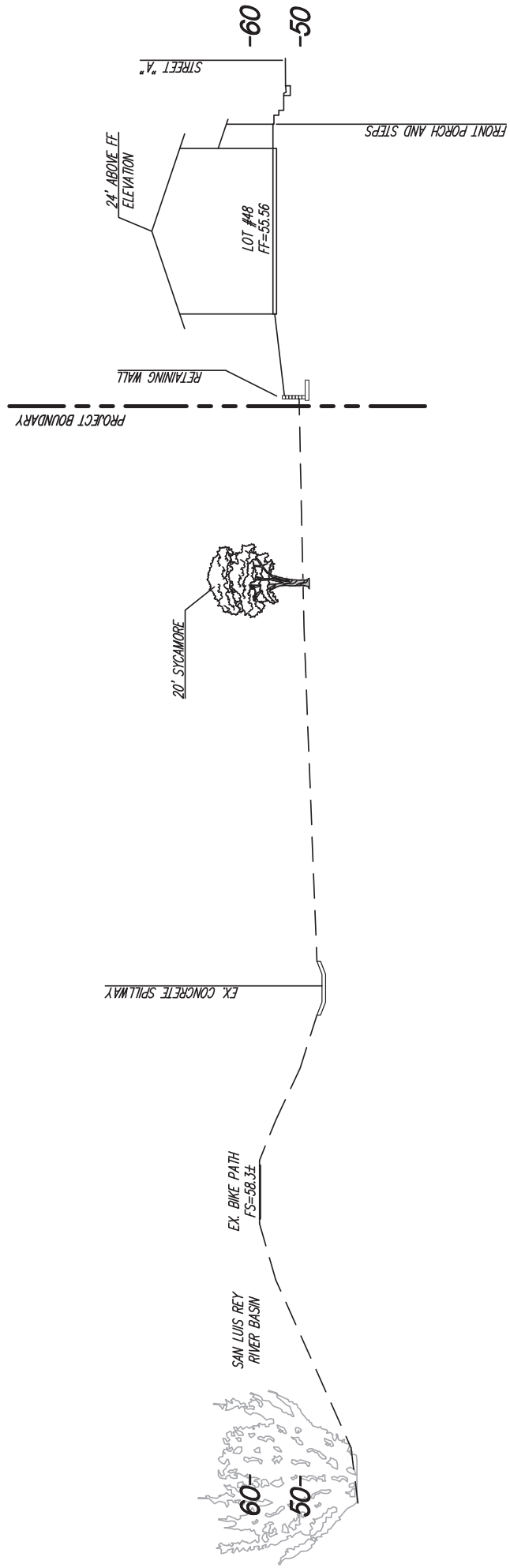
SITE SECTION THROUGH LOT # 20
(PREPARED FOR MERKEL)

SCALE: 1"=20' HORZ. 1"=20' VERT.



SITE SECTION THROUGH LOT # 54
(PREPARED FOR MERKEL)

SCALE: 1"=20' HORZ. 1"=20' VERT.



SITE SECTION THROUGH LOT # 48
(PREPARED FOR MERKEL)

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

Appendix 2. Photo Pages



Photo Point 1. Photo taken March 29, 2021 facing northwest from approximate location near proposed Lot 20 toward existing levee and San Luis Rey River habitat (partially visible).



Photo Point 2. Photo taken March 29, 2021 facing west from approximate location near proposed Lot 48 toward existing levee and San Luis Rey River habitat (partially visible).