

DRAFT

MEMORANDUM

TO: Mark Van Dyne, Burns & McDonnell Engineering Co., Inc.
FROM: Erik Ruehr, VRPA Technologies
DATE: June 26, 2020
RE: Moosa Creek Riparian Restoration Project
Transportation Analysis

This memorandum describes a transportation analysis conducted for the Moosa Creek Riparian Restoration Project (the Project). Included are a VMT Analysis and a Local Mobility Analysis conducted according to the County of San Diego Transportation Study Guidelines (May 2020 Draft). It is assumed that the relevant portions of the guidelines will be approved in the near future.

The remainder of the memo includes a description of the Project, and sections describing trip generation, VMT analysis, and local mobility analysis.

PROJECT DESCRIPTION

The applicant is proposing a Grading Permit for the restoration of riparian and upland habitats on 67 acres of land within the Bonsall Community Plan area that contains the former Moosa Creek Golf Course. The site is designated for Open Space (Recreation) and zoned for Open Space Use (S80). The proposed habitat restoration work is consistent with the existing zoning for the site. The project site is located between State Route-76 and Interstate-15, south of Camino Del Rey, and is bisected by Moosa Creek. The on-site reach of the creek flows from the eastern end of the project site westward where it exits the project site at the western end of Old River Road. From the property, Moosa Creek continues another half mile off site to the southwest before ultimately joining the San Luis Rey River.

The Moosa Creek Riparian Restoration Project would remove existing infrastructure and recontour portions of the property to be planted with native riparian and upland species. Approximately 10 acres of the project site contains existing riparian habitat along Moosa Creek, with the remainder featuring ornamental and developed areas consistent with the previous use as a golf course. Planned restoration

activities would consist of regrading the area adjacent to but outside the creek and removing 4.5 acres of existing infrastructure (tennis courts, parking lots, golf course features, etc.) to establish and enhance approximately 39 acres of riparian habitat and approximately 28 acres of native riparian-upland transitional buffers and other site improvements.

Proposed earthwork would be conducted to extend the top of bank for Moosa Creek to create a high flow terrace/floodplain. Restoration strategies planned for the site include, riparian re-establishment (consisting of a mulefat-willow dominated riparian habitat that may also include wetlands depending on conditions), floodplain re-establishment (floodplain transitional species that include riparian and upland species), coast live oak savannah re-establishment (coast live oak savannah with associated species), and riparian enhancement (control of non-native species and light seeding or planting). The project would re-establish and rehabilitate riparian habitat to benefit federally and state-listed wildlife species (e.g., least Bell's vireo and southwestern willow flycatcher). The restoration effort is being designed under the guidance of the United States Fish and Wildlife Service (USFWS) to offset corresponding riparian habitat and endangered species impacts at Marine Corps Air Station (MCAS) at Camp Pendleton.

Project implementation is anticipated to commence in winter 2021, but may need to be adjusted to account for weather or to avoid sensitive bird breeding and nesting seasons. While one construction stage is anticipated, the overall work may be broken into two distinct phases – demolition/earthwork and planting. After construction, the restoration areas would be monitored for up to five years in accordance with the proposed restoration plan, and, as necessary, invasive species removal and other vegetation management activities would be performed during the monitoring period.

The project site is located in unincorporated San Diego County, near the rural community of Bonsall on a portion of an abandoned golf course. Specifically, the project site is bounded by Camino Del Rey to the north-northeast, Calle De Las Estrellas and Old River Road to the west, and Golf Club Drive to the south. The overall project area is approximately 67 acres and is adjacent to Bonsall Elementary School and a newly developing residential neighborhood to the west, existing residential neighborhoods to the south, east and southeast, a residential condominium complex to the north, and San Luis Rey Training Center to the east. The project site is located approximately 0.4-mile east of State Route-76 (Mission Road) intersection with Camino Del Rey/Olive Mill Road. The project site contains facilities from the abandoned golf course and heavily disturbed habitats. The topography of the project site is generally level with isolated pockets of steep slopes around the perimeter. The surrounding development occurs above grade of the project site. The 100-year floodplain is mapped by the Federal Emergency Management Agency (FEMA) across the project site along Moosa Creek.

Exhibit 1 shows the project location and Exhibit 2 shows the project study area.

TRIP GENERATION

The Project will generate little or no trips on completion of the project and the transportation analysis is focused on construction trips. Project trip generation is shown in Exhibit 3 for the peak construction period which is expected to last for approximately ten days. Assumptions used in this analysis include the following:





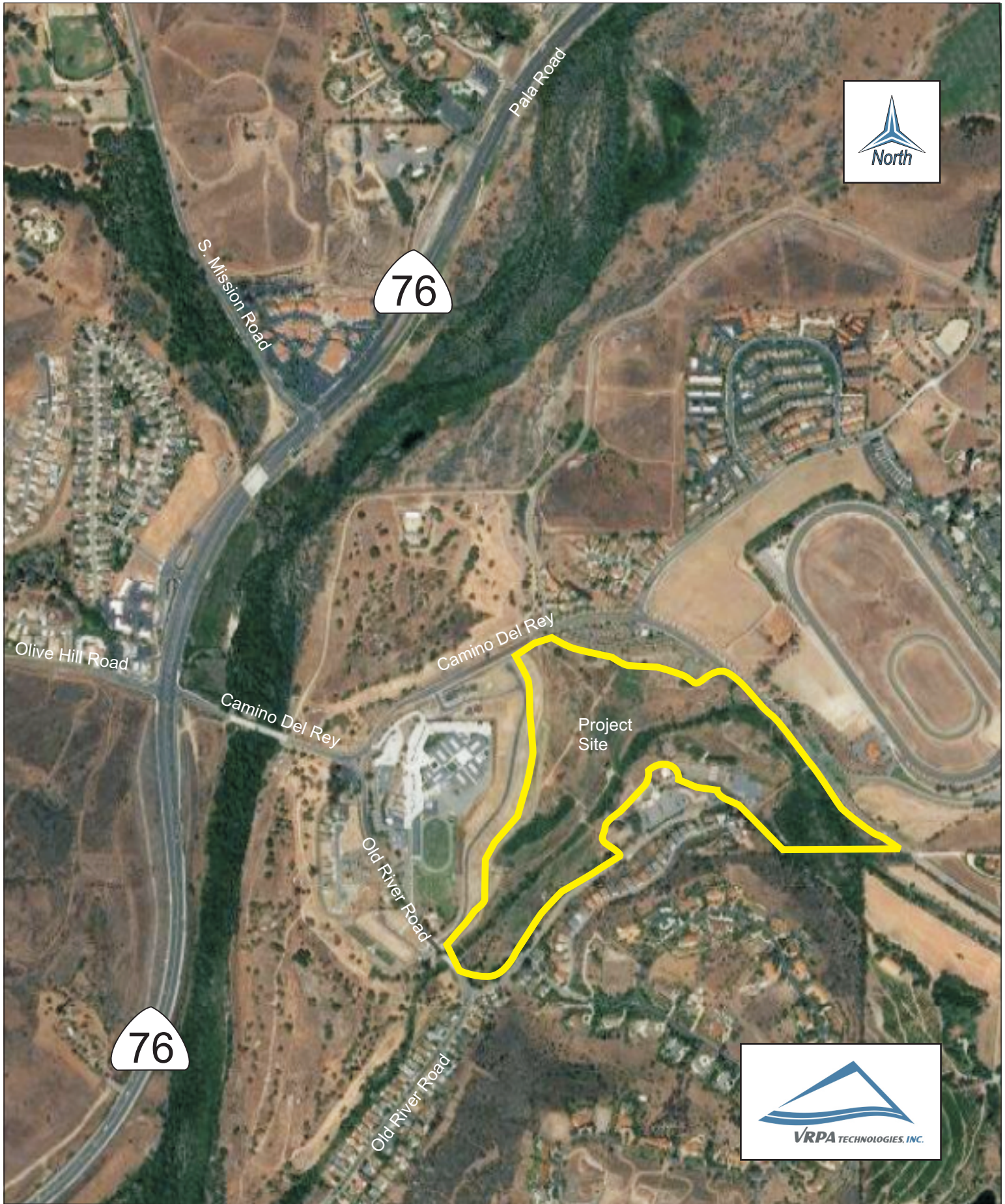


Exhibit 3
Project Trip Generation

Type of Vehicle	(ADT)	AM PEAK HOUR					PM PEAK HOUR				
	VOLUME	PERCENT AM PEAK HOUR	PERCENT INBOUND	VOLUME			PERCENT PM PEAK HOUR	PERCENT INBOUND	VOLUME		
				IN	OUT	TOTAL			IN	OUT	TOTAL
Autos	40	50%	90%	18	2	20	50%	10%	2	18	20
Trucks	16	25%	50%	2	2	4	25%	50%	2	2	4
Total Vehicles	56			20	4	24			4	20	24

- ◆ Approximately 20 employees will be on site during the peak construction. These employees were assumed to generate one inbound and one outbound trip per day focused on the AM and PM peak hours with 90% of the project trips inbound in the AM peak hour and 90% of the project trips outbound in the PM peak hour.
- ◆ Project truck trips for the peak period of construction were estimated by the applicant.

VMT ANALYSIS

The Project is expected to generate a total of 56 trips per day during the peak construction period. So long as the Project generates less than 110 trips per day, the Project is considered to be a small employment project (during its construction period only) that is screened out from requiring a VMT analysis.

LOCAL MOBILITY ANALYSIS

A Local Mobility Analysis is not considered necessary for the following reasons:

- ◆ The peak Project construction period is expected to last ten days. Traffic generated for construction that lasts less than thirty days is considered to be insignificant since does not exceed the general design guideline of designing roadway facilities for the 30th highest hour of the year.
- ◆ The Project is expected to generate less than 25 trips in the AM or PM peak hours. Therefore, Project traffic would not trigger the need for intersection analysis.

Please contact me if you have any questions. I can be reached by email at eruehr@vrpatechnologies.com or by phone at 858/361-7151.

