

MEMORANDUM

Date: September 24, 2020

To: Mr. Tom Lagerquist
Director of Environmental Services
Parus Consulting, Inc.
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Loomis, CA 95650
Email: Tom.Lagerquist@parusconsulting.com

CC: Matt Zidar (MZidar@SJGOV.org)

From: Alexander D. Wright, PE
Project Manager, Kleinfelder

Al Bisacky
Senior Principal Professional, Kleinfelder

Kleinfelder Project: 20200336.003A

**SUBJECT: Traffic Conditions and Controls during Construction
Upper Mormon Slough Erosion Repair
Flood System Repair Project
San Joaquin County, California**



This technical memorandum discusses anticipated construction traffic routes, types, and quantities during construction of the Upper Mormon Slough Erosion Repair. This memorandum includes evaluation of the anticipated number of truck trips per day, anticipated traffic routes, and types of construction traffic.

INTRODUCTION

Kleinfelder, Inc. is providing civil design services for the subject project. Project plans are currently developed at the 75% (Issued for Permit, IFP) level. The project is being overseen by the San Joaquin County Flood Control and Water Conservation District (County).

The erosion repairs the County intends to provide will be consistent to maintenance activities as described in the Operations and Maintenance Manual for the Mormon Slough project (USACE, 2010). As discussed in the O&M Manual these activities include “dumped rock or other suitable types of protection”, and “repairs to levee embankment”. The repairs will therefore consist primarily of Rock Slope Protection (RSP). Excavation prior to placement of RSP will generally be limited to removal of loose surface debris from past slope failures, minor grading to produce relatively smooth surfaces to prepare for RSP, or as required to key the repairs into the existing slopes.

The repair on the left (south) bank will start downstream of the existing Escalon Bellota Road bridge abutment. The left (south) bank repair will extend downstream about 1,500 feet. On the right (north) bank the system begins about 200 feet downstream of the Escalon-Bellota bridge and extends downstream about 3,400 feet. The total length of the repair is about 4,900 feet. The total quantity of material anticipated is about 25,500 cubic yards (CY) of import, and about 500 CY of export.

TRAFFIC CONDITIONS AND CONTROLS

Personnel, equipment, and imported materials would reach the proposed work area primarily via State Route 26 and Escalon Bellota Road. Access to various areas of the site would be along temporary and existing access roads. The construction labor force is estimated to include workers commuting in pick-up trucks daily, over the 150-day construction period, commuting from Stockton or one of the surrounding communities (round trip distance of about 50 miles). Material is likely to be sourced locally from on-site or nearby local quarries including sources in or around Stockton. As such round trip distances for haul trucks will be similar to the distance workers commute and will likely be about 50 miles. Other equipment mobilized to the site may include backhoes or excavators, semi-trucks with transfer trailers, and/or dump trucks among other equipment. Major equipment likely to be used on this job is listed below in Table 1.

The total quantity of material for the project as previously noted is anticipated to include about 25,500 CY of import and about 500 CY of exported material. Based on this and the durations listed in Table 1 we anticipate daily truck trips on the order of 2,500 truck trips or an average of about 20 truck trips per day. We note these values are approximate and will vary day to day over the life of the project depending on various construction constraints.

Access to the site for the trucks and other vehicles is primarily along a set of specified locations (see Exhibit 1). Generally, construction traffic will be staged out of the North Staging Area and will travel via public roads to and from the work areas located along each side of the Mormon Slough. A secondary South Staging Area is located on the south side of the Slough to help reduce traffic loads and by providing temporary staging for construction equipment and traffic. Construction traffic may also access the construction areas directly via State Route 26 or Escalon Bellota Road.

The contractor is required to obtain all necessary permits and to submit a traffic control plan to the County providing details to facilitate traffic safety while constructing the project. Project Specifications require that Traffic control devices and plans are to generally conform with the requirements of the California Manual on Uniform Traffic Control Devices (California MUTCD) and to be signed and stamped by a civil engineer licensed in California. On-site, heavy construction traffic will primarily be limited to locations designated on the project plans as illustrated on the attached Exhibit 1.

Table 1
Anticipated Equipment Types and Durations

Equipment	Use	Duration
Pickup Trucks	Transport crew and small equipment to the work site	150 days
	Trim and cut down trees for removal	20 days
Hand and Walk Behind Compactors	Ramps	10 days
Ride-on Compactors (Rollers)	Ramps, grading	5 days
Dozers	Clearing, grubbing, temporary access construction, spreading launch rock and RSP	125 days
Backhoes or Excavators	Clearing, grubbing, temporary access construction, spreading launch rock and RSP	125 days
Pavers	Repair of existing access roads	10 days
Semi-trucks with transfer trailers	Transfer of fill materials including rock, soil, and disposal of debris	125 days
Haul (Dump) Trucks	Transfer of fill materials including rock, soil, and disposal of debris	125 days
Hydroseeding Equipment	Erosion control	10 days
Chippers	Tree removal	20 days
ATV's	On site access and travel	125 days
Skidders	Tree removal	20 days
Cranes	Equipment and material access	20 days
Water Truck and/or Water Pump	Obtain, transport, and distribute water	150 days

LIMITATIONS

We have prepared this technical memorandum in substantial accordance with the generally accepted engineering practices as they exist in the site area at the time of our study. No warranty either express or implied is made. This memorandum documents anticipated conditions at the time of construction, however, actual conditions in the field at the time of construction may vary significantly from those documented in this memorandum due to changes in the plans during final design or differing means and methods. This memorandum is intended for use by Parus Consulting, Inc. only, as background to their environmental evaluations and permit application only. This memorandum may not be applicable to other applications and is only valid if used for the purposes stated and within a reasonable time from its issuance.

Attachment:

Exhibit A – Traffic Circulation Plan, dated 09/18/2020

LEGEND

LIMITS OF REPAIR

PROPOSED STAGING / LAYDOWN AREAS

ACCESS POINT

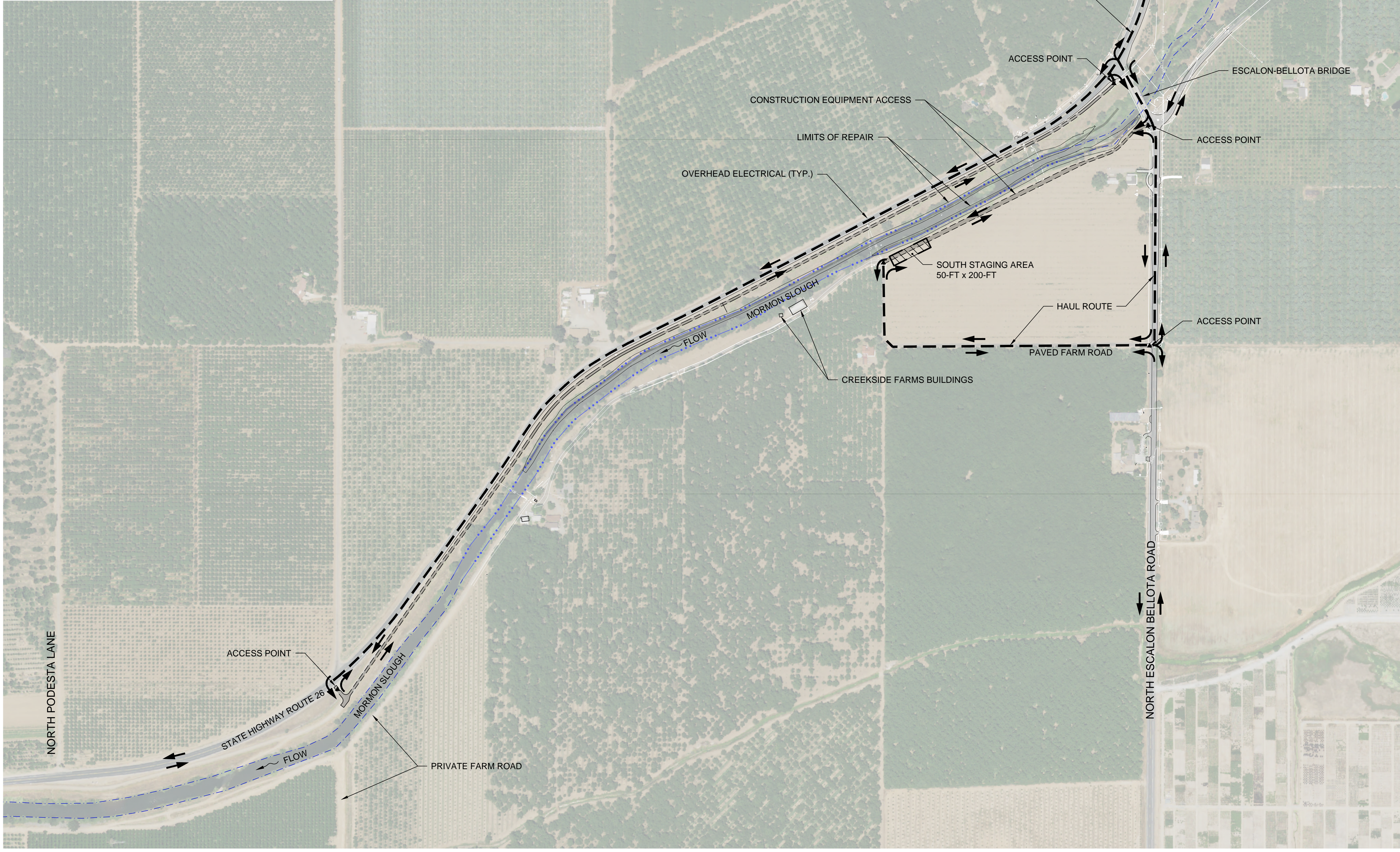
HAUL ROUTE

CONSTRUCTION EQUIPMENT ACCESS

EDGE OF WATER (SURVEYED MAY 2017)

EDGE OF WATER (APPROX AND VISUAL)

TRAFFIC FLOW DIRECTION



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Stockton, CA 95206
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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

DRAFT
NOT FOR
CONSTRUCTION

SCALE VERIFICATION
THIS BAR IS 1 INCH IN LENGTH
ON ORIGINAL DRAWING
0 1"
IF IT'S NOT 1 INCH ON THIS
SHEET ADJUST YOUR
SCALES ACCORDINGLY

0 250 500
SCALE: 1" = 250' SCALE IN FEET
ORIGINAL DRAWING SIZE IS 22 x 34

PRELIMINARY PLANS
UPPER MORMON SLOUGH EROSION REPAIR
FLOOD SYSTEM REPAIR PROJECT
SAN JOAQUIN COUNTY, CALIFORNIA

SAN JOAQUIN COUNTY
FLOOD CONTROL & WATER
CONSERVATION DISTRICT
P. O. BOX 1810
1810 EAST HAZELTON AVENUE
STOCKTON, CALIFORNIA 95201
TELEPHONE (209) 468-3000
FAX (209) 468-3999

SAN JOAQUIN COUNTY
FLOOD CONTROL & WATER CONSERVATION DISTRICT
1810 EAST HAZELTON AVENUE
STOCKTON, CALIFORNIA 95201

TRAFFIC CIRCULATION

PROJECT NO.	20200336.001A	EXHIBIT A
ISSUE DATE	09/24/2020	
CURRENT REVISION	A	
DESIGNED BY	K.VIOLETTE	
DRAWN BY	K.VIOLETTE	
CHECKED BY	A.WRIGHT	SHEET 01 of 01
APPROVED BY	A.BISACKY	

CAD FILE: C:\pwworking\kleinfelder\p01\kleviolette\0194456\EXH-200336_Traffic Plan.dwg PLOTTED: 9/24/2020 4:33 PM BY: kurt.violette LAYOUT: EXH-01