

**Application for New License**  
**Major Project – Existing Dam**

**Exhibit C**  
**Construction History and**  
**Proposed Construction Schedule**

**Security Level: Public**

Camp Far West Hydroelectric Project  
FERC Project No. 2997



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None.

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**EXHIBIT C**

# **CONSTRUCTION HISTORY AND PROPOSED CONSTRUCTION SCHEDULE**

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## **1.0 Introduction**

The South Sutter Water District (SSWD or Licensee) has prepared this Exhibit C, Construction History and Proposed Construction Schedule, as part of its Application for a New License Major Project – Existing Dam (Application for New License) from the Federal Energy Regulatory Commission (FERC) for the Camp Far West Hydroelectric Project, FERC Project Number 2997 (Project). This exhibit is prepared in conformance with Title 18 of the Code of Federal Regulations (C.F.R.), Subchapter B (Regulations under the Federal Power Act), Part 4 (traditional process). In particular, this exhibit conforms to the regulations in 18 C.F.R. Section (§) 5.18(a)(5)(iii), which require in part that the application include an Exhibit C, Construction History and Proposed Construction Schedule, in conformance with 18 C.F.R. Section 4.51(d). This Exhibit C describes, in detail, SSWD’s proposed construction. As a reference, 18 C.F.R. Section 4.51(d) states:

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Exhibit C is a construction history and proposed construction schedule for the Project. The construction history and schedules must contain:

- (1) If the application is for an initial license, a tabulated chronology of construction for the existing projects structures and facilities described under paragraph (b) of this section (Exhibit A), specifying for each structure or facility, to the extent possible, the actual or approximate dates (approximate dates must be identified as such) of:
  - (i) Commencement and completion of construction or installation;
  - (ii) Commencement of commercial operation, and
  - (iii) Any additions or modifications other than routine maintenance; and
- (2) If any new development is proposed, a proposed schedule describing the necessary work and specifying the intervals following issuance of a license when the work would be commenced and completed.

Besides introductory material, this exhibit includes two sections. Section 2.0 provides a history of Project construction. Section 3.0 describes SSWD’s proposed construction schedule for proposed improvements to the Project under the new license.

See Exhibit A for a description of Project Facilities and features, Exhibit B for a description of Project operations, Exhibit D for costs and financing information, and Exhibit E for a discussion of potential environmental effects and SSWD’s proposed resource management measures. Project design drawings and maps are included in Exhibits F and G, respectively. Exhibit H contains a detailed description of the need for the electricity provided by the Project, the availability of electrical energy alternatives, and other miscellaneous information.

All elevation data in this exhibit is in United States Department of Commerce (USDOC), National Oceanic and Atmospheric Association (NOAA), National Geodetic Survey Vertical Datum of 1929 (NGVD 29), unless otherwise stated.

## **2.0 Construction History of Existing Structures and Facilities**

SSWD applies to FERC for a new license, not an initial license, for the Project. Therefore, the requirement of 18 C.F.R. Section 4.51(d)(1) regarding a tabulated chronology of construction of existing structures and facilities does not apply.

## **3.0 Construction Schedule for Proposed New Facilities**

SSWD proposes three general change to existing Project facilities: 1) raising the normal maximum water surface elevation (NMWSE) of Camp Far West Reservoir by 5 feet (ft) from an elevation of 300 ft to an elevation of 305 ft;<sup>1</sup> 2) modifications to Project recreation facilities at Camp Far West Reservoir; and, 3) addition of an existing Road to the Project as a Project facility. In addition, SSWD proposes a slight modification to the existing FERC Project Boundary. This Exhibit C describes SSWD's construction methods and schedule for the Pool Raise, including recreation facilities that would be inundated by the Pool Raise. The existing road that SSWD proposes be added to the Project as a Primary Project Road is on SSWD-owned land within the proposed (and existing) FERC Project Boundary, and extends approximately 0.25 miles from a SSWD locked gate at Camp Far West Road to the Camp Far West Powerhouse and Switchyard. The road, which is not open to the public for safety reasons, is used and maintained solely by SSWD to access the Camp Far West Powerhouse and Switchyard and has an asphalt-paved surface approximately 20 feet wide and shoulder width of approximately 2 feet. The addition of the road to the Project will not include any construction since it is an existing road and does not require any upgrade. The construction schedules for recreation facilities are described in SSWD's Proposed Condition RR1, Implement Recreation Facilities Plan, which is included in Appendix E2 of Exhibit E. Modification to the Project Boundary are described in Exhibits A and G, and do not entail any construction.

### **3.1 Camp Far West Reservoir Pool Raise**

As described in Section 5.1 of Exhibit A, SSWD will accomplish the pool raise by raising the Camp Far West Dam main spillway crest from its existing elevation of 300 feet (ft) to an elevation of 305 ft. SSWD's conceptual level planning for construction of the main spillway modification is described below.

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<sup>1</sup> For the purpose of this exhibit, this is referred to as the "Pool Raise."

### **3.1.1 General**

The existing spillway crest modifications to facilitate the pool raise would involve demolition of the existing concrete cap, the addition of 1,730 cubic yards (cy) of concrete to raise the spillway crest from an elevation of 300 ft to an elevation 305 ft, and anchoring of the new concrete with steel dowels. The spillway design would not change from its existing reinforced concrete, ungated, ogee-type weir and the existing 300-ft crest length will not change.

### **3.1.2 Construction Laydown and Staging Areas**

A contractor staging area would be located south of Blackford Road, immediately adjacent to the auxiliary spillway. Activities at the staging area would include parking for concrete trucks and other construction vehicles, temporary storing of material (e.g., rebar for new concrete crest and demolished concrete), and meetings. At this time, SSWD anticipates the staging area will encompass 3.71 acres (ac) (Figure 3.1-1).



**Figure 3.1-1. Anticipated construction laydown area and staging area for the Pool Raise.**



### **3.1.3 Construction Borrow and Disposal Areas**

Concrete would be brought from offsite (within 100 miles) thus there will be no on-site borrow areas associated with the Pool Raise. Steel needed for Pool Raise would be transported from Sacramento, CA. The approximately 550 cy of demolished concrete, rebar, and any other material from the spillway cap removal would be disposed of at an approved off-site facility that accepts construction waste, such as at the Western Regional Sanitary Landfill in Placer County, CA, which is permitted to receive construction waste in the quantities anticipated and is located within 50 miles of the Project (WPWMA 2018). Location and disposal of hazardous waste materials is not expected to occur for the Pool Raise.

### **3.1.4 Construction Roads and Traffic Considerations**

Construction-related traffic would be spread over the duration of the Pool Raise work. During this period, the existing bridge over the spillway would likely be closed to through-traffic and detours around the dam may be required. During construction and the bridge closure, local residents would use McCourtney Road and then Riosa Road to access Highway 65 for north-south travel to Wheatland and the Sacramento areas (Figure 3.1-2). Closures and detours would be coordinated with Yuba County. The bridge would be permanently reopened following completion of the Pool Raise. There would be no work within the reservoir or the construction of any additional haul routes for the existing spillway modifications for the Pool Raise.

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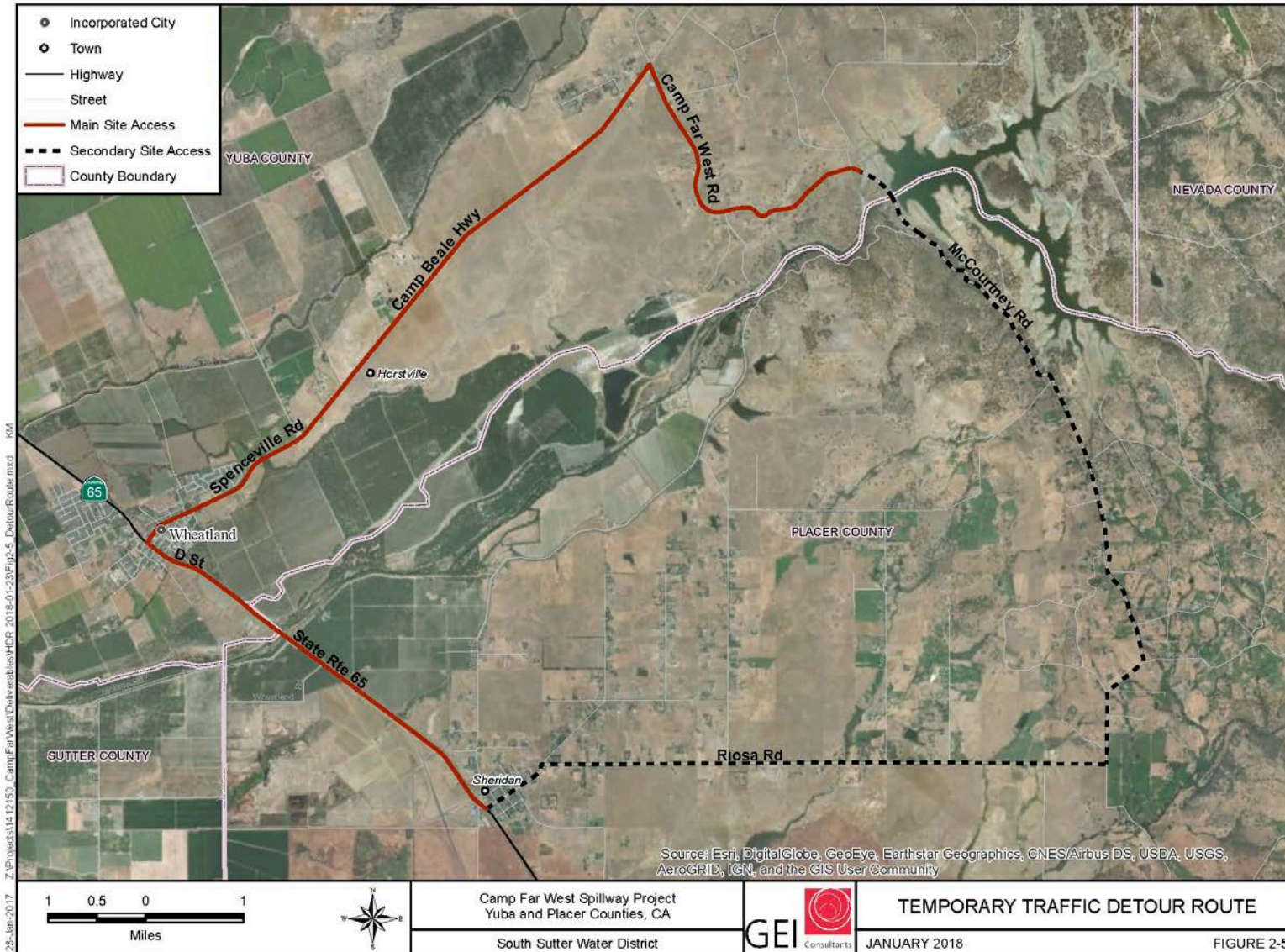


Figure 3.1-2. Anticipated traffic detour route during construction of the Pool Raise.

### 3.1.5 Construction Sequences and Schedule

At this time, SSWD anticipates that planning, design, and construction would take approximately 2 years to complete. The typical construction sequence for this type of work would include:

- Complete Pool Raise design
- Complete geotechnical investigations
- Consult agencies regarding engineering evaluations
- Obtain all necessary permits and approvals
- Notify adjacent landowners of upcoming pool raise
- On site kick off meeting to discuss logistics, work sequence and safety; Prepare site for demolition, including traffic control
- Demolition of existing weir, and removal of waste
- Prepare foundation for new concrete
- Construct forms for new concrete
- Install rebar and pour new concrete
- Relocate campsites
- Clean-up and site restoration

A draft preliminary schedule is shown in Table 3.1-3. A brief narrative description of the major tasks listed in Table 3.1-3 is presented below.

**Table 3.1-1. Draft preliminary schedule for construction of the Pool Raise.**

Task #	Task Name	Duration
<b>1</b>	<b>Complete Pool Raise Design</b>	<b>585 Days</b>
1.1	Seismological Investigation	45 days
1.2	Geotechnical Investigation	90 days
1.3	Geotechnical Data Evaluation	45 days
1.4	Agency Consultation on Engineering Evaluation	60 days
1.5	Preliminary (30%) Design & Specifications	120 days
1.6	Draft 60% Design & Specifications	90 days
1.7	Draft 90% Design & Specifications	90 days
1.8	Final (100%) Design & Specifications	45 days
<b>2</b>	<b>Complete Environmental Permitting and Obtain Regulatory Approvals</b>	<b>150 days</b>
2.1	Notify adjacent landowners of upcoming pool raise	1 day
<b>3</b>	<b>Onsite Kickoff Meeting</b>	<b>1 Day</b>
<b>4</b>	<b>Site Preparation</b>	<b>126 days</b>
4.1	Pre-Construction Meeting	2 days
4.2	Prepare Site for Demolition and Set Traffic Control	3 days
4.3	Demolishing and Removal of Waste	7 days
4.4	Prepare Foundation for New Concrete	5 days
4.5	Construct Forms for New Concrete	7 days
4.6	Install Rebar and Pour New Concrete	97 days
4.7	Relocate Inundated Recreation Facilities	90 days <sup>1</sup>

**Table 3.1-1. (continued)**

Task #	Task Name	Duration
5	Site Cleanup and Restoration	1 day
5.1	Site Cleanup and Restoration	1 day
<b>Total</b>		<b>863 days</b>

<sup>1</sup> All work related to the recreation facilities relocation and described below in Section 3.1.5.9 will take 90 days overall. However, the work will occur in phases throughout 1 full calendar year to minimize any impacts to the recreation area visitors and experiences -- mostly outside the peak recreation season (i.e., Memorial Day through Labor Day holiday weekends). Refer to Section 3.3.6.2.1 in Exhibit E of this Application for New License for additional details.

### 3.1.5.1 Complete Pool Raise Design

#### 3.1.5.1.1 Geotechnical Survey and Investigation

Subsurface investigations would be performed prior to the final design for the Pool Raise. Review of available historic information and construction drawings found explorations were previously conducted within the footprint of the existing spillway, and in the areas to the west of the proposed Pool Raise. SSWD would complete investigations needed to support the design of the existing spillway. This would include design-level investigation within the footprint of the existing spillway, which includes areas upstream and downstream of the concrete structure where excavation of overburden material is anticipated. The survey and investigation would include the following tasks:

- Seismological Investigation
- Geotechnical Investigation
- Basis of Design Report

#### **Seismological Investigation**

Seismological data would be to provide estimates on strong ground motion and seismic design parameters for the existing spillway. A review of surface-fault rupture hazard would be performed using existing California Geological Survey and USGS reports on active faults in the vicinity of the planned structure. SSWD would develop a database of historical and recent seismicity in the region to assess the controlling seismic source(s) for deterministic ground motion assessment. The evaluation of site seismicity would include the following critical parameters:

- The distance to the closest seismic source
- The specific geometry of the seismic source in the project area
- The maximum expected earthquake magnitude
- Deterministic and probabilistic response spectra

SSWD would prepare a detailed Subsurface Exploration Work Plan for geotechnical investigations. The investigations would focus on exploring the thickness of overburden, depth to competent bedrock, and engineering characteristics of the soil and rock beneath the existing spillway and bridge abutments. The work plan would describe locations of geotechnical explorations, samplings details, and other field exploration activities. A laboratory testing plan would be included in the work plan detailing the types and numbers of laboratory tests to be performed during subsurface investigations. The work plan would include any permits or access approvals needed to conduct the investigations, and methods for restoration of all areas disturbed by the field investigation.

The investigation program would consist of borings and test pits. Exploration locations and depths may be adjusted based on conditions encountered during the subsurface investigations. Access constraints and logistics would be further evaluated during preparation of the work plan. Site terrain may require track-mounted drilling equipment. The work plan would include the use of drilling and sampling equipment suitable for the site constraints, thus minimizing the need for access improvements.

All soil and rock samples collected from the borings and test pits would be carefully logged, labeled, and photographed. Exploratory borings would be continuously logged, describing the types and characteristics of the material encountered. Soils would be described in accordance with American Society for Testing and Materials (ASTM) D2487 Classification of Soils for Engineering Purposes and ASTM D2488 Description and Identification of Soils. Rock core samples would be identified and described based on standards developed by the International Society of Rock Mechanics (ISRM, 1981) and Bureau of Reclamation (2001). The borehole logs would include complete descriptions of materials encountered, including the frequency and orientation of fractures and joints, as well as additional relevant field information, such as fluid loss or penetration rates. Additionally, Core Recovery (REC) Rock Quality Designation (RQD) would be recorded and presented on boring logs based on procedures described in Deere and Deere (1989). The remaining samples and cores would be stored until completion of construction. Field logs would be prepared by the field logger, which would be reviewed by a senior geologist and input into a gINT log format for finalization.

Drill cuttings and fluid from the borings would be collected in 55-gallon drums or roll-away bins for testing and disposal. The cuttings would be hauled off-site for disposal after completion of laboratory testing. It is assumed that the cuttings would not contain hazardous or toxic material. All drilling and sampling activities would be performed at the direction of a qualified geologist licensed in the State of California. A field engineer or geologist would supervise all drilling and sampling and will log the soil and rock in accordance with ASTM standards.

The laboratory testing program would be finalized during implementation of the subsurface exploration program. It is assumed that index testing would include sieve analysis, Atterberg Limits, specific gravity, and bulk density to be performed on samples collected from the site. Additionally, unconfined compression tests would be performed on bedrock samples collected from within the preliminary footprint of the concrete spillway and bridge abutments.



## **Geotechnical Investigation**

A geotechnical evaluation would be prepared to support the Pool Raise design. The evaluation would cover the methods and results of the necessary work needed to perform for the investigation, provide key graphics, and summarize the findings, conclusions, and recommendations. The evaluation would include the following:

- Detailed site map showing all investigations
- Boring logs, test pit logs, and laboratory results
- Updated site geologic map and two preliminary geologic cross sections oriented normal and parallel to the spillway alignment.
- Evaluation of design parameters

## **Work Plans, Reports, and Design Review**

The following items will be submitted to FERC and DSOD for review and approval:

- Hydraulic Design Report and 30 percent design package
  - Expected submittal to agencies within 1 year of License issuance
  - Typical review period is approximately 30-45 days
- Geotechnical Design Recommendations Report and 60 percent design package
  - Expected submittal to agencies within 1.5 years of License issuance
  - Typical review period is approximately 30-45 days
- 90 percent and Final design package
  - Expected submittal to agencies within 2 years of License issuance
  - Typical review period is approximately 30 days

## **Design Review Coordination and Contractor Selection**

SSWD would coordinate with FERC and DSOD at the 30 percent, 60 percent, 90 percent and final design milestones, as described above. Under a typical review schedule, SSWD could expect the final Pool Raise spillway design to be approved within 2 years of License issuance. If requested by FERC, a Board of Consultants will be put in place after the 30 percent design is available for review.

Following approval of the 60 percent design, SSWD would advertise the work for bid and contractor selection.

### 3.1.5.2 Obtain Permits and Approvals

SSWD would consult with FERC, federal, state and local agencies to discuss the Pool Raise’s permitting/approval needs, including any necessary ground-disturbing investigations. Table 3.1-1 list permits and approvals that may be required.

**Table 3.1-2. Anticipated permits and approvals that may be needed for the Pool Raise.**

Permit/Approval	Issuing Body
Approval for inclusion in the License	FERC, including SWRCB’s issuance of Clean Water Act Section 401 Water Quality Certification for FERC’s issuance of the new license. Compliance with both NEPA and CEQA would be required. It is assumed d SSWD would be the lead agency for CEQA compliance.
Clean Water Act Section 404 Permit	U.S. Army Corps of Engineers – Nationwide Permit (NWP) #3 [Maintenance] and #7 [Outfall Structures & Associated Intake Structures]
Clean Water Act Section 401 Water Quality Certification for Construction	Central Valley Regional Water Quality Control Board or State Water Quality Control Board
Section 1600 Streambed Alteration Agreement	California Department of Fish and Wildlife
Endangered Species Act – Section 7 Consultation	U.S. Fish and Wildlife Service. FERC or the USACE would be the lead agency for consultation. A biological opinion may be needed.
Endangered Species Act Incidental Take Permit	California Department of Fish and Wildlife
National Historic Preservation Act, Section 106	State Historic Preservation Office and Native Americans. FERC or the USACE would be the lead agency for consultation.
Endangered Species Act Incidental Take Permit	California Department of Fish and Wildlife
Grading permits	Counties of Sutter, Yuba and Nevada
Clean Water Act Section 402 (National Pollution Discharge Elimination System)	Central Valley Regional Water Quality Control Board
Stormwater Pollution Prevention Plan	Central Valley Regional Water Quality Control Board
Other Approvals	California Division of Safety of Dams, FERC

### 3.1.5.3 On-Site Kick-Off Meeting to Discuss Logistics, Work Sequence and Safety

A pre-construction meeting will be held with the construction contractor to discuss construction related activities including schedule, work sequencing, environmental requirements, temporary facilities, staging areas, parking, site access, traffic control, and various other items.

### 3.1.5.4 Prepare Site for Demolition, including Traffic Control

The following activities are expected to be performed to prepare for demolition work required for the existing weir:

- Set-up project notification and warning signs in accordance with Caltrans Unified Traffic Control Devices Manual Devices (MUTCD) and Yuba County standards at locations along the east and west approaches of Blackford Road to notify on-coming traffic of construction being conducted at the site.
- Provide traffic control as needed for deliveries and hauling of materials to and from the site.
- Set-up staging areas, including staging area near southeast side of existing bridge on Blackford Road.

- Set-up all environmental and safety controls.
- Construct access ramps to existing spillway.
- Move demolition tools and equipment to the existing weir area and set-up.

#### 3.1.5.5 Demolition of Existing Weir, and Removal of Waste

The following activities are expected to be performed for the removal of the existing weir:

- Sawcut a minimum of 12” existing weir at elevation 295 on the vertical upstream face of the weir at elevation 295.71 on sloped downstream face of the weir. Sawcuts shall be perpendicular to the face of the weir.
- Stop sawcuts a minimum of 6-inches from longitudinal joints. Chip out concrete around waterstop and protect and preserve a minimum of 6-inches of the waterstop in the joints.
- The remaining concrete on the weir may be removed by hydroblasting or hydrodemolition. Removing concrete by hammering or percussion means shall not be allowed.
- All concrete removal by hydrodemolition and water used shall be contained and disposed of off-site.

#### 3.1.5.6 Prepare Foundation for New Concrete

The following activities are expected to be performed for the preparation of the foundation for the new concrete:

- Surfaces of all existing concrete against which new concrete will be placed shall be roughened to a minimum of 0.25 inch amplitude.
- Within 48 hours prior to placement of new concrete, use low-pressure water jetting to remove all loose materials and rust at existing reinforcement.
- Protect exposed existing waterstops from sun exposure and damage during reinforcement installation procedures.
- Protect reinforcement after removal of existing concrete to preclude rust forming on the ends of exposed reinforcement.

#### 3.1.5.7 Construct Forms for New Concrete

- Formwork shall be designed by an engineer licensed in the state of California and shall support all concrete placement loads.



- Formwork may consist of wood or steel; aluminum formwork or accessories shall not be allowed.
- Formwork shall be designed for placement of concrete in 2 lifts.

### 3.1.5.8 Install Rebar and Pour New Concrete

The following activities are expected to be performed for the installation of the new rebar and concrete:

- All reinforcement shall consist of 60 ksi reinforcement.
- Vertical anchor dowels shall consist of #10 bars and shall be placed in 2-inch diameter grouted holes with a minimum embedment as shown on the drawings and shall be located at 6-feet on-center each way in each section of the crest.
- Edge distance from joint to vertical anchors shall be a minimum of 6-inches and shall not exceed 12-inches.
- Vertical anchor dowels may be mechanically coupled above the surface of the concrete removal and above the existing apron with Engineer approved mechanical couplers.
- Anchor dowels shall have a 135-degree hook that connects with the reinforcement mat to be placed at the surface of the new structure.
- Dowels placed between new and existing concrete shall consist of #5 bars and shall be placed in 1-1/2-inch diameter holes with a minimum embedment of 8-inches and shall be located at 12-inches on center each-way in each structure.
- Place #5 dowels as shown to match existing longitudinal reinforcement.
- Edge distance from joint to dowels shall be a minimum of 6-inches and shall not exceed 12-inches.
- Roughen hole surfaces by means of a wire brush and remove loose materials prior to grouting all dowels.
- Place 9-inch waterstops per manufacturer's requirements at each contraction joint to match existing waterstops. Weld new waterstops to existing waterstops per manufacturer recommendations.
- Place new #5 vertical longitudinal bars in first concrete lift to elevation 295 and allow for Type A lap with vertical bars from second and final lift in accordance with ACI 318.
- Horizontal #4 bars at 12-inches on-center shall be lapped as needed in crest sections and shall not extend through contraction joints.
- Minimum cover for all reinforcement shall be a minimum of 3-inches.
- Concrete shall be placed in 2 lifts the first lift to elevation 295 and the second lift to complete crest structure.

- Concrete mix design:
  - Minimum 28-day strength of 4,000 psi
  - Shall have a maximum aggregate size of 0.75
  - All aggregate shall be proven to conform to ASTM C1567 for alkali reactivity
  - Type II/V low alkali cement shall be used
  - Class F Fly Ash may be used up to a 20 percent replacement of cementitious materials to reduce heat of hydration in concrete
  - Air entrainment shall be a minimum of 6 percent
  - Maximum water/cement ratio of 0.45
  - All admixtures shall be compatible and shall not contain any chlorides
  - Maximum slump of concrete shall not exceed 3-inches.
- Roughen surface of first lift to be in contact with second lift to a 0.25 inch amplitude and remove all laitance and loose materials prior to placement of final concrete lift.
- All concrete placement work shall conform to ACI 305R and 306R hot and cold weather placements of concrete.
- Both lifts are categorized as mass concrete placements and shall be placed in accordance with ACI 207.1 to prevent thermal cracking.

### 3.1.5.9 Recreation Facilities Relocation

As a result of the Pool Raise, 104 recreational facilities or site features would be impacted along the shoreline at the NSRA and SSRA. Most of the impacted features (i.e., 59%) would be directly impacted by the pool raise by either partially or fully inundating the features. In these instances, the inundated features would be relocated, re-routed or re-aligned to avoid inundation. The remaining impacted features (i.e., 41%) would be indirectly impacted, whereby the Pool Raise would not inundate the feature, but would closely abut the feature likely resulting in flooding and/or erosion impacts to the features due to wind, wave or high flow events. In a few instances, a feature would be indirectly impacted and require relocation because an inundated segment of a circulation road would likely be re-aligned through these features. The construction work to relocate, re-route or realign the impacted features would be completed in one calendar year. Overall, the majority of the construction would occur outside the peak recreation season (i.e., Memorial Day through Labor Day holiday weekends). In instances where construction would be necessary during the peak season, the work would be restricted to select areas and conducted during low-use periods (i.e., weekdays) to minimize any impacts to the recreation facilities and visitor experiences.

At NSRA, 57 site features would be impacted, including 21 campsite living spaces (i.e., table and/or grill area), 19 campsite vehicle spurs, 13 circulation road segments (i.e., 2,410 ft of dirt roads and 480 ft of paved roads), 2 boat ramp and parking area segments, 1 picnic site, and 1

water hydrant. The majority of the impacted recreational site features at NSRA would be at the family campground (i.e., 43 impacted features) followed by the dispersed use areas (i.e., 6 impacted features – all dirt roads), group campground (i.e., 4 impacted features), and the day use area and boat launch facilities (i.e., each with 2 impacted features). At the family campground, most of the impacted features would be campsite living spaces and vehicle spurs (i.e., each with 19 impacted sites) with a five impacted road (dirt surface) segments. At the group campground, one of the two group campsites would be fully inundated. At the dispersed use areas, all of the impacted features would be the dirt roads (i.e., 1,410 ft) that provide shoreline access. Overall, most of the impacted features at NSRA (i.e., 61%) would be directly impacted by the pool raise and the remaining impacted features would be indirectly impacted (i.e., features abutting the 305 ft NMWSE).

At SSRA, 47 site features would be impacted, including 15 circulation road segments (i.e., 3,720 ft of dirt roads and 1,140 ft of paved roads), 11 campsite living spaces (i.e., table and/or grill area), 9 picnic sites, 7 campsite vehicle spurs, 1 boat ramp turnaround area, 1 parking area, 1 swim beach, 1 water hydrant, and 1 stage. The majority of the impacted recreational site features at SSRA would be at the family campground (i.e., 22 impacted features) followed by the day use area (i.e., 14 impacted features), dispersed use areas (i.e., 9 impacted features – all dirt road segments), the swim beach (i.e., 2 impacted features), and the boat launch (i.e., 1 impacted feature). At the family campground, most of the impacted features would be campsite living spaces (i.e., 11 sites), vehicle spurs (i.e., 7 sites) and road segments (i.e., 3 segments). At the dispersed use areas, all of the impacted features would be the dirt roads (i.e., 2,710 ft) that provide shoreline access. The entire swim beach would be inundated. Overall, most of the impacted features at SSRA (i.e., 55%) would be directly impacted by the Pool Raise and the remaining impacted features would be indirectly impacted (i.e., features abutting the 305 ft NMWSE). Notably, at five campsites in the family campground, the campsite living space and vehicle spurs would be indirectly impacted and require relocation because an inundated segment of the campground circulation road would likely be re-aligned through these campsites.

#### 3.1.5.10 Clean-Up and Site Restoration

During construction daily clean-up activities will take place to keep construction and staging areas clean. After construction is completed the disturbed areas, including areas where temporary access or staging has taken place, will be restored to similar conditions prior to construction. Equipment, material, temporary facilities, temporary controls, etc. will be removed from the site. A final clean-up and walk-thru will be conducted to make sure site clean-up and restoration has been completed.

## 4.0 List of Attachments

None.

## **5.0            References Cited**

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