

**Draft
Supplemental Environmental Assessment**

**AMERICAN RIVER WATERSHED COMMON FEATURES
NATOMAS BASIN PROJECT
SACRAMENTO COUNTY, CALIFORNIA
Reach B, Interstate 5 Window**



July 2020



DRAFT

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ACRONYMS AND ABBREVIATIONS

ADT	Average Daily Traffic
ARCF	American River Common Features
BMP	Best Management Practices
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
Corps	US Army Corps of Engineers
CVFPB	Central Valley Flood Protection Board
dBA	decibels (A-weighted)
DWR	California Department of Water Resources
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EM	Engineering Manual
EPA	Environmental Protection Agency
FONSI	Finding of No Significant Impact
GRR	General Reevaluation Report
I-5	Interstate 5 Highway
JFP	Joint Federal Project
MIAD	Mormon Island Auxiliary Dam
NCC	Natomas Cross Canal
NEPA	National Environmental Policy Act
NLIP	Natomas Levee Improvement Program
NMFS	National Marine Fisheries Service
NRHP	National Register of Historic Places
O&M	Operations and Maintenance
OHWM	Ordinary High Water Mark
PGCC	Pleasant Grove Creek Canal
RD	Reclamation District
RM	river mile
RWQCB	Regional Water Quality Control Board
SAFCA	Sacramento Area Flood Control Agency
SEA	Supplemental Environmental Assessment
SHPO	State Historic Preservation Officer
SRBPP	Sacramento River Bank Protection Project
SREL	Sacramento River East Levee
SMAQMD	Sacramento Metropolitan Air Quality Management District
SPCCP	Spill Prevention, Control, and Countermeasure Plan
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Army Corps of Engineers
U.S.C.	United States Code

USFWS	U. S. Fish and Wildlife Service
WCM	Water Control Manual
WRDA	Water Resources Development Act
WRRDA	Water Resources Reform and Development Act
YBCU	Yellow-billed cuckoo

1.0 PURPOSE AND NEED FOR ACTION

1.1 Proposed Action

The U.S. Army Corps of Engineers (Corps) proposes to continue the construction of levee improvements and modifications along the Natomas perimeter levee system at the Interstate 5 (I-5) Window of the American River Watershed Common Features (ARCF), Natomas Basin Project. The Reach B, I-5 Window Project (I-5 Window Project) is located under the I-5 Overpass on Garden Highway on the left bank of the Sacramento River. Work for this portion of the Natomas Basin Project will be along the crest of the levee, and includes widening the levee by expanding the levee into a paved parking lot area on the waterside. The work also includes the construction of a seepage berm on the landside of the project footprint. The current intersection and ramp for North Bayou Way would be rebuilt to meet the new grade of the levee. These improvements are necessary to bring the area's levees into conformance with current Corps and Federal Emergency Management Agency (FEMA) flood risk reduction requirements.

The overall purpose of the project is to reduce the risk of loss of life and damage to property. The project design would reduce flood risk in this section of levee by meeting the requirements as defined by: (1) current design criteria used to certify levees as providing 100-year flood protection under regulations adopted by the FEMA; (2) design criteria under the Corps Engineering Manual (EM) 1110-2-1913 (03 April 2000); and (3) current authorization from Congress in Section 7002 of Water Resources Reform and Development Act (WRRDA) of 2014 (Public Law 113-121).

1.2 Location of the Project Area

The Natomas Basin Project, I-5 Window is located approximately 10 miles northwest of Sacramento, California, where I-5 crosses the Sacramento River between river miles (RM) 70 and 71 (Figure 1). The major road in the project area is Garden Highway, which is located on the levee crown. Garden Highway is used to access the Elkhorn Boat Launch Facility, Alamar Marina, Swabbie's Restaurant, and public parking which are in the immediate vicinity. North Bayou Way intersects Garden Highway in this area, and is used as an alternate route to the Sacramento International Airport (Figure 2). Garden Highway connects to I-5 via North Bayou Way and Airport Boulevard and I-80 via San Juan Road and West El Camino Avenue, and is used by commuters regularly.

1.3 Background

The Natomas Basin includes portions of Sacramento and Sutter Counties, as well as a portion of the City of Sacramento, California. The Natomas Basin is protected by 42 miles of levee, which almost completely encircles the basin. These levee protect the Natomas Basin from flooding from the Sacramento and American Rivers, the Natomas Cross Canal (NCC), the

Pleasant Grove Creek Canal (PGCC), and the Natomas East Main Drainage Canal (NEMDC). The Natomas Basin levees form a levee system and are divided into nine project reaches (Figure 1). Reaches A through C are on the Sacramento River, Reach D is on the NCC, Reach E is on the PGCC, Reaches F through H are on the NEMDC, and Reach I is on the American River. The I-5 Window site location is at the north end of Reach B and is shown in Figures 2 (page 9) and 3 (page 10).

In 1996, the Corps and the Central Valley Flood Protection Board (CVFPB) completed the Supplemental Environmental Impact Statement/Environmental Impact Report (SEIS/EIR) for the American River Watershed Investigation Feasibility Study (USACE, 1996) and the Chief of Engineers deferred a decision on a comprehensive flood control plan. However, the Chief recommended the features common to the proposed plans be authorized as a comprehensive flood control plan for the greater Sacramento area. Congress authorized these “common features” in the Water Resources Development Act (WRDA) of 1996. Additional levee improvements were authorized under Section 366 of WRDA 1999, including numerous modifications to the Common Features Project along the Lower American River and in the Natomas Basin were authorized.

The Sacramento Area Flood Control Agency (SAFCA) implemented the Natomas Levee Improvement Program (NLIP) between 2007 and 2010 to improve levees surrounding the Natomas Basin. The NLIP included multiple phases of construction along the NCC, Sacramento River, and the western edge of the Natomas Basin. Work consisted of the raising of non-compliant levees, installing cutoff walls and seepage berms, and flattening landside slopes.

The Environmental Impact Statement/Environmental Impact Report (EIS/EIR) on the American River Watershed Common Features Project/Natomas Post-authorization Change Report/Natomas Levee Improvement Program, Phase 4b Landside Improvements Project (2010 EIS/EIR) was finalized on October 22, 2010, and is incorporated by reference in this document. The 2010 EIS/EIR was used to support Congressional approval of the Corps' Common Features/Natomas Post-authorization Change Report, and evaluated potential impacts from the construction of the project under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The 2010 EIS/EIR evaluated impacts associated with the construction of Reaches A, B, E, F, G, H, and I, the windows remaining in Reaches B, C, and D, and the relocation of the Vestal Drain as part of Reach D.

The Natomas Basin Project was authorized in 2014, allowing the Corps to complete the construction of the Natomas Basin levee improvements that SAFCA initiated. The construction of Reaches D and H. Phase one of Reach I began in 2018 and is anticipated to be complete in 2020. The construction of Reach B is anticipated to begin in the spring of 2020 and continue through 2021. The construction of the I-5 Window is anticipated to begin in 2021.

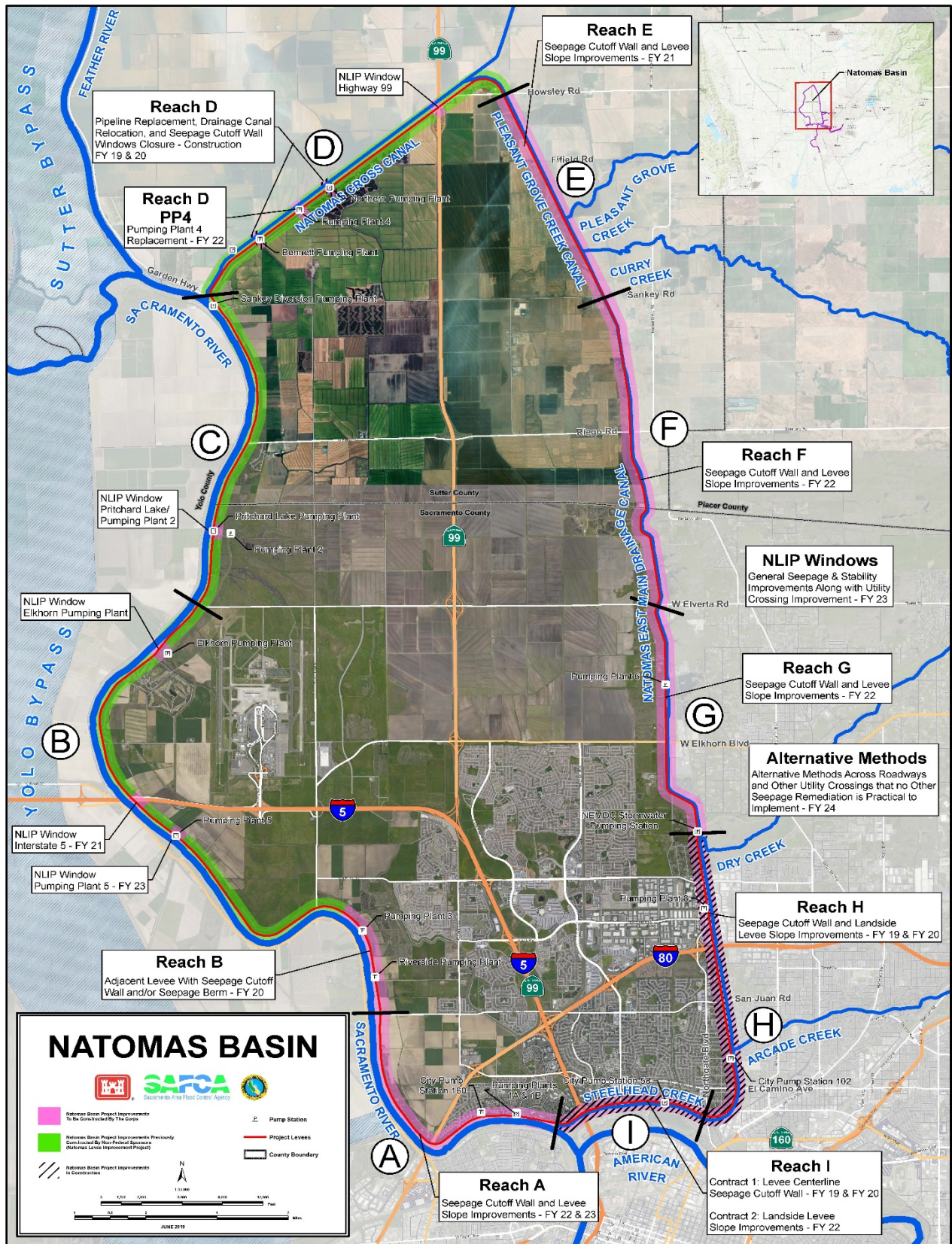


Figure 1. Natomas Basin Project Map.

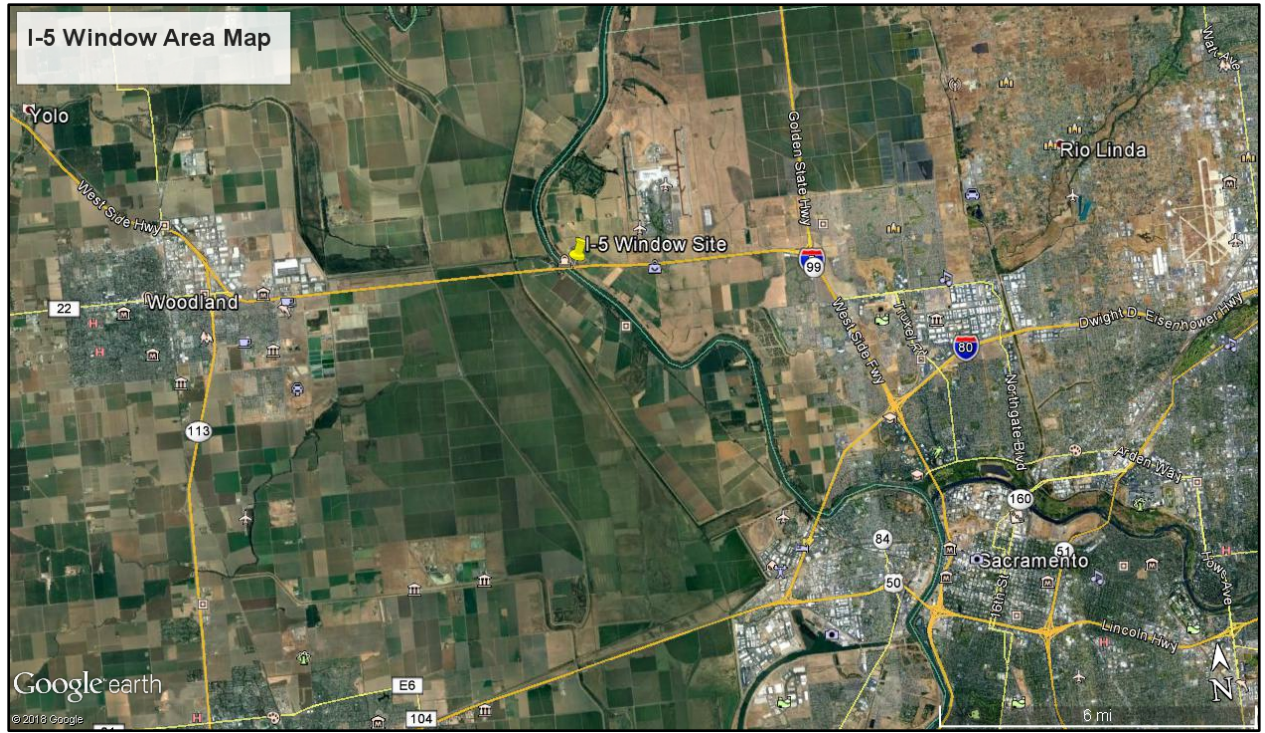


Figure 2. I-5 Window Area Map.



Figure 3. I-5 Window Site Map.

1.3.1 Authority

The proposed levee work is part of the ongoing Common Features Project. The Common Features Projects encompass several actions under two authorizations: the Water Resources Development Act (WRDA) of 1996 (PL No. 104-303, § 101[a] [1], 110 Stat. 3658, 3662-3663), and the WRDA of 1999 (PL No. 106-53, § 366, 113 Stat. 269, 319-320). Authorization for the expanded Natomas Basin Project was provided by Section 7002 of WRRDA 2014 (PL 113-121).

1.3.2 Need for Continued Action

The need for continued action is to reduce the flood risk to the Natomas Basin. While previous projects have reduced flood risk for the area, the Natomas Basin remains vulnerable to flooding in a less than 200-year flood event. Currently, the levees in the Natomas area suffer from:

- Embankment instability
- Inadequate levee height
- Through- and under-seepage with excessive hydraulic gradients
- Susceptibility to riverbank erosion and scour.

1.3.3 Purpose of this Supplemental Environmental Assessment

This Supplemental Environmental Assessment (SEA) includes information that meets the requirements of the NEPA and other state and federal environmental laws and regulations. This SEA is being prepared in order to describe updates, changes, and details to the project that differ from what was originally discussed in the 2010 EIS/EIR. Currently, the design still includes a cutoff wall for most of Reach B, but now expands the seepage berm within the I-5 Window Project Footprint and includes a deeper excavation for the complete removal and reconstruction of the Garden Highway levee under the I-5 bridges. Instead of the floodwall that was previously proposed under I-5 to meet levee height requirements, the reconstructed levee embankment will now be raised. Additionally, construction is anticipated to begin in 2021 rather than 2012 as originally stated in the 2010 EIS/EIR. The remainder of the project design is largely the same as was originally described.

This SEA will evaluate the potential environmental impacts associated with the extension of the construction timeframe as it may affect (but is not limited to) air quality, noise/light pollution, traffic, and water quality. The American and Sacramento Rivers and their levees are a part of a once extensive riparian corridor that has been significantly altered due to anthropogenic activities, and it is necessary to understand potential effects of resulting from the levee repairs. This will determine if the mitigation measures proposed are sufficient to substantially lessen potential significant effects. Based on the SEA, the Corps District Engineer must decide whether the proposed levee improvement project qualifies for a Finding of No Significant Impact (FONSI) under NEPA, or whether construction or operation of the project is likely to cause potentially significant environmental impacts that would need to be addressed through preparation of a supplemental environmental impact statement. The non-federal sponsors, SAFCA and the Central Valley Flood Protection Board, will utilize the SEA for their evaluation as to whether the proposed actions require preparation of a supplemental environmental impact report under CEQA.

1.4 Previous Documentation Relevant to the I-5 Window Project

The repairs to the levees in the Natomas Basins are necessary to bring the levees up to the standard of the 200-year flood event. This SEA describes the existing environmental conditions in the proposed I-5 Window Project area, evaluates the expected environmental effects of the alternatives proposed, including a No Action Alternative, and identifies the preferred alternative through a systematic screening process. This SEA has been prepared in accordance with the requirements of the NEPA (7 CFR § 2201.16 (c)).

2.0 ALTERNATIVES

2.1 No Action

To act as a baseline to judge proposed project alternative actions by the National Environmental Policy Act requires that the lead federal agency, the Corps, present a no action alternative that establishes the baseline conditions against which the action alternatives are compared. The no action alternative is used to analyze beneficial and adverse effects, measure the level of impact significance, and enables the Corps to make informed and reasoned decisions. Under the no action alternative, the Corps would not repair or upgrade the damaged levees, leaving non-federal parties responsible for operations and maintenance as they could fund repairs.

The I-5 Window Project, as part of the levee system within the Natomas Basin, does not currently meet the 200 year flood event standard creating a significant risk for flooding. Without upgrades and repairs to the Natomas perimeter levee system, existing residential and commercial developments, as well as industrial areas in the Natomas Basin would remain subject to a significant risk of flooding. Uncontrolled flooding in the Natomas Basin could result in billions of dollars of damage to existing structures, as well as major transportation infrastructure including I-5, I-80, and the Sacramento International Airport. Flooding could also release toxic and hazardous materials, contaminate groundwater, and damage the metropolitan power grids. Possible delays or “no action” (not upgrading or repairing the erosion damage) would allow the levees to be at a high risk of failure during elevated river stages. Inaction will in time result in the failure of the levees due to continued erosion or a high water event event.

2.2 Alternatives Considered but not Chosen for Construction

All alternatives were discussed in detail in Section 2, Alternatives, of the final 2010 EIS/EIR on the American River Watershed Common Features Project/Natomas Post-Authorization Change Report/Natomas Levee Improvement Program, Phase 4B Landside Improvements Project.

2.3 Proposed Action

The Corps has inspected the damage to the levee along the Sacramento River and has determined the levee in this area requires redesign and construction of new flood risk reduction features. Within the I-5 Window Project area, this would include tying into a cutoff wall, an adjacent levee, and seepage berms constructed by SAFCA under the NLIP. On the water side of the levee, a short section of the reconstructed levee would have work done in an area that is well above the ordinary high water mark (OHWM). This short section of adjacent levee is intended to realign the levee away from the landside footings of the I-5 Bridge. Additional work would involve the installation of a cutoff wall, an additional adjacent levee, and a seepage berms on the land side of the levee. Details about these flood risk reduction features were discussed in detail in Section 2, Alternatives, of the 2010 EIS/EIR.

2.3.1 Site Preparation

Before levee improvement and repair work can begin the following steps would be completed:

- Trees that require removal would be removed prior to the start of construction. Any tree removal would be performed outside of nesting season for birds protected under the Migratory Bird Treaty Act. Trees that remain within the project footprint are to be protected in place. This could be done with but not limited to with high-visibility fencing in order to protect them from damage.
- Temporary construction access and staging areas would be set up in designated locations on or near the site.
- During the preparation period, care would be taken to avoid damaging existing features such as (but not limited to) roads (either public or private), access ramps, sensitive habitats, and gates.
- As part of the preconstruction weed control, herbicides would be used to kill existing plants and deplete the weed seed bank. Any application of pesticides will be performed by a person with all Federal, State, and County licensing whenever applicable. The herbicides would be non-generic and would be used judiciously to reduce adverse effects on native woodland plantings and the germination of native seeds already growing on the site.
- For erosion control and spill control measures, a Stormwater Pollution Protection Plan (SWPPP) and Stormwater Pollution Control Plan would be completed by the Contractor prior to project construction.
- The contractor would be responsible for clearing the site of all trimmings, trash, debris, and recycling or otherwise disposing of materials in accordance with Federal, State, and local regulations.

2.3.2 Site Access

The I-5 Window Project footprint is assessable from several directions. This includes North Bayou Way and the Garden Highway approaching from the north and south. A possible staging area is at the end of I-5 Window Project using a parking lot. Traffic may be diverted during construction and access restricted to the general public except for those that live or work in the immediate area. Access to the overflow parking lot under the I-5 Bridges may be blocked during certain stages of the construction. The restaurants located on the waterside of the levee just north of the North Bayou Way intersection with Garden Highway and the waterside boat launch parking lot will remain open during the construction and temporary parallel parking along the northern detour route created.

2.3.3 Construction Workers and Schedule

All workers would access the site by regional and local roadways. Construction hours would comply with Sacramento County's noise ordinance construction exemption 6.68.090, limiting construction activities to Monday through Friday from 6:00 a.m. to 8:00 p.m., Saturday and Sunday from 7:00 a.m. to 8:00 p.m. unless given special dispensation from the County of Sacramento. No work or hauling would take place on holidays without permission given by the County of Sacramento. Construction is expected to begin in 2021 and continue through 2022 with consideration to stoppages for materials and weather.

2.3.4 Restoration and Cleanup

Upon completion of construction, the original, pre-existing contour and condition would be restored to any staging area unless changes were meant to be permanent. To avoid ground surface erosion, any staging area not a roadway would be hydro seeded with a native mix to prevent encroachment of invasive species unless other requirements are in place for a location. Any roads or other access areas damaged would be repaired and restored to pre-construction condition. All trash, excess construction materials, and construction equipment would be removed.

2.3.5 Operation and Maintenance

After construction is completed, the non-Federal sponsors, CVFPB and SAFCA, would be responsible for Operations and Maintenance (O&M), including repair, rehabilitation, and replacement of all project features. CVFPB and SAFCA would transfer these responsibilities to Reclamation District (RD) No. 1000 to operate and maintain the levee, similar to the existing O&M responsibilities. Regular maintenance activities include mowing and herbicide treatments for aggressive invasive species on the levee slopes, controlling rodents, clearing the maintenance road, and inspecting the levee. All O&M activities would remain consistent with Corps guidance and the existing O&M manuals that may be updated as a result of this or a future project.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the environmental resources in the project work area and potential environmental impacts of the proposed alternative. The purpose of this SEA is to consider potential impacts not previously considered in the 2010 EIS/EIR.

3.1 Resources Not Evaluated In Detail by This SEA

Some resources were eliminated from further analysis in this SEA because the effects were estimated to be negligible or to have not been changed from the detailed analysis provided in the 2010 EIS/EIR. These resources would either be unaffected, or the changes to the originally evaluated design would not change the potential impacts already disclosed in the 2010 EIS/EIR. For context, they are listed in the subsections below.

3.1.1 Aesthetics

Aesthetics was discussed in detail in both Section 3.14 and 4.14, Visual Resources of the 2010 EIS/EIR. As the work to improve the levees that surround the Natomas Basin moves forward, tree removal, adjacent levees, seepage berms, and some structure removal are required in order to reach current flood risk reduction standards. Due to the project construction, there would be a change to the Aesthetics of the I-5 Window Project area; however, these elements will not be changed by the current work timeframe or the design evolution beyond those considered in the 2010 EIS/EIR. Therefore, there is no change in significance and aesthetics will not be discussed further in this document.

3.1.2 Air Quality

Air Quality was discussed in detail in both Sections 3.11 and 4.11 of the 2010 EIS/EIR Air Quality Section. As the work to improve the levees that surround the Natomas Basin moves forward, construction would require heavy equipment usage, material hauling, and the transportation of crews to construct cutoff walls, adjacent levees, and seepage berms to reach current flood risk reduction standards. These activities would cause an increase of emissions and air pollutants; however, the type and intensity of impacts would not be changed from what was considered in the 2010 EIS/EIR. Although some design features for the I-5 Window construction have been modified, it is anticipated that similar equipment and timing would be used. Therefore, there would be no change to the significance of the impacts already disclosed in the 2010 EIS/EIR, and air quality will not be discussed further in this document.

3.1.3 Environmental Justice

Environmental justice is, as defined by the Environmental Protection Agency (EPA)'s Office of Environmental Justice, "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." Fair treatment means that "no group of people, including racial, ethnic, or socioeconomic group, shall bear a disproportionate share of negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, state, local, and tribal programs and policies." Environmental Justice was discussed in detail in Sections 3.17 and 4.17 of the 2010 EIS/EIR Environmental Justice section.

While there have been design changes to I-5 Window Project from those discussed in the 2010 EIS/EIR, human populations involved have remained the same. Additionally, the I-5 Window is a relatively small portion of a project designed to reduce flood risk for the entire Natomas Basin, which encompasses a highly diverse population of many nationalities and income levels. The potential to have disproportionately high and adverse environmental impacts on any one specific minority or low-income populations is negligible to none. Since there will be no disproportionate impact to any group of people or income level, Environmental Justice will not be discussed further in this document.

3.1.4 Fisheries

Fisheries effects were discussed in detail in Section 3.7 and 4.7, Biological Resources, of the 2010 EIS/EIR. While the I-5 Window Project borders the Sacramento River, the majority of the work is on the landside of the levee. Work to be performed on the waterside of the levee is small, localized, well above the ordinary high water mark, and in an existing parking lot. No in-water work is anticipated, and a Storm Water Pollution Prevention Plan (SWPPP) would in place in order to prevent any sedimentation from leaving the project site. Since there will be no impacts to Fisheries from this portion of the Natomas project, there is no change to the significance of the impacts already disclosed in the 2010 EIS/EIR. Therefore, fisheries will not be discussed further in this document.

3.1.5 Hazardous Wastes and Materials

The I-5 Window Project includes a major roadway and an area of agricultural industry both of which are subject to normal oil leaks, debris, pest reduction processes, and litter production. Hazardous Wastes and Materials was discussed in detail in Section 3.16 and 4.16, Hazards and Hazardous Materials, of the 2010 EIS/EIR. These elements will not be changed by a new extended work timeframe or design changes. As required by Section 311(j) (1) (C) of the Clean Water Act, 33 U. S. Code 1251 the contractor would still develop a Spill Prevention, Control, and Countermeasure (SPCC) Plan. The contractor's SPCC Plan would describe the procedures and equipment necessary to minimize spills, leaks, or releases of oil or hazardous materials. In addition, the plan would address the reporting and response procedures in the event of an incident. Best Management Practices (BMP) would be followed to avoid spillage, contamination of the nearby Sacramento River and ground water.

3.1.6 Land Use

The I-5 Window Project area contains a mix of recreational areas, agriculture industry, businesses, and single family homes. Roadways in the area include Garden Highway and North Bayou Way, which have consistent usage due to their vicinity to the Sacramento International Airport. For this project area, Land Use was discussed in detail in Section 3.3 and 4.3, Land Use, Socioeconomics, and Population and Housing, of the 2010 EIS/EIR. Although the construction of the I-5 Window Project does involve some changes to the land use structure in the form of seepage berms and a small adjacent levee in the parking lot of the Elkhorn Boat

Launch Facility, there will be no changes to existing land use. Upon completion of construction, all areas would be returned to their existing usage. There are no changes to the significance of impacts to land use due to the design changes and new extended work timeframe; therefore, Land Use will not be discussed further in this document.

3.1.7 Noise

The work timeframe for the I-5 Window Project construction is likely to extend longer than originally expected but the type and intensity of the noise disturbances would not be different than what has already been addressed. These changes and their potential to have negative impacts to the environment as it relates to noise disturbance do not currently equate to an undiscussed impact. Noise was discussed in detail originally in Section 3.12 and 4.12, Noise, of the 2010 EIS/EIR. The Sacramento County noise ordinance states that a standard of 55 A-weighted decibels (dBA) is applied during the hours from 7:00 a.m. to 10:00 p.m., and a standard of 50 dBA is applied during the hours from 10:00 p.m. to 7:00 a.m. for residential and agricultural uses. The noise ordinance also states that construction noise is exempt during the hours from 6:00 a.m. to 8:00 p.m. Monday through Friday and from 7:00 a.m. to 8:00 p.m. on Saturdays and Sundays (Chapter 6.68, Noise Control, Sacramento County Code).

These elements will not be changed further than already discussed in the 2010 EIS/EIR and will not be discussed further in this document unless a new type of noise disturbance is added or the intensity of the impacts increases, in which case supplemental environmental documentation and analysis would be provided.

3.1.8 Public Utilities

The I-5 Window Project has Utilities and Service Systems that run overhead and within the prism of the levee itself. Changes to these items were covered in Section 3.15 and 4.15, Utilities and Service Systems, of the 2010 EIS/EIR. The Public Utilities will not be changed further than already expected in the 2010 EIS/EIR. Planned changes would not extend type or intensity of impacts and will not be discussed further in this document.

3.2 Resources to be discussed in detail due to design and potential impact changes

Construction of the I-5 Window Project located on the Sacramento River East Levee could cause temporary adverse effects to certain resource areas. As a result, these resources likely to be affected are discussed in detail below taking into effect environmental regulation, listed species, and the design changes that have occurred since the 2010 EIS/EIR was originally approved and adopted.

3.2.1 Cultural Resources

Cultural resources include buildings, structures, objects, sites, districts, and archeological resources associated with historic or prehistoric human activity. The cultural value of these resources may be of national, state, or local significance. On the Federal level, cultural resources that are listed in, or eligible for listing in, the National Register of Historic Places (NRHP) are known as historic properties.

For a cultural resource to be determined eligible for listing in the NRHP, it must meet certain criteria. The resource has to be at least 50 years old or exhibit exceptional importance and meet one or more of the following criteria as defined in 36 CFR 60.4. It must (1) be associated with events that have made a significant contribution to the broad patterns of our history; (2) be associated with the lives of persons significant in our past; (3) embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or (4) have yielded, or be likely to yield, information important in prehistory or history.

Affected Environment

Cultural Context

Prehistoric and Ethnographic Setting

The Natomas Basin is situated within the lands traditionally occupied by the Nisenan, or Southern Maidu. The language of the Nisenan, which includes several dialects, is classified within the Maidu family of the Penutian linguistic stock (Kroeber 1925). The western boundary of Nisenan territory was the western bank of the Sacramento River and the area between present-day Sacramento and Marysville. In the Sacramento Valley, the tribelet, consisting of a primary village and a few satellite villages, served as the basic political unit (Moratto 1984). Valley Nisenan territory was divided into three tribelet areas, each populated with several large villages (Wilson and Towne 1978), generally located on low, natural rises along streams and rivers or on slopes with a southern exposure. One important village, Pusune, near Discovery Park, appears to have been recorded as CA-Sac- 26. Other villages, Wollok, Leuchi, Wishuna, Totola, and Nawrean—were located east of the confluence of the Feather and Sacramento Rivers, near the northwestern portion of the Natomas Basin.

Euro-American contact with the Nisenan began with infrequent excursions by Spanish explorers and Hudson Bay Company trappers traveling through the Sacramento and San Joaquin Valleys in the early 1800s. In general, Nisenan lifeways remained stable for centuries until the early to middle decades of the 19th century. With the coming of Russian trappers and Spanish missionaries, cultural patterns began to be disrupted as social structures were stressed. An estimated 75% of the Valley Nisenan population died in the malaria epidemic of 1833 (Wilson and Towne 1978). With the influx of Europeans during the Gold Rush era, the population was further reduced by disease and violent relations with the miners. However, today the Maidu are

reinvesting in their traditional culture and, through newfound political, economic, and social influence, now constitute a growing and thriving native community in California.

Historic Setting

In what is now known as the Sacramento and Sutter County region, agriculture and ranching were the primary industries during the historic period. Regional ranching originated on the New Helvetia rancho in the early 1840s. The Gold Rush precipitated growth in agriculture and ranching in the 1850s and 1860s, as ranchers and farmers realized handsome returns from supplying food and other goods to miners.

In 1911, the California Legislature established The Reclamation Board (now the CVFPB) to exercise jurisdiction over reclamation districts and levee plans. Subsequently, the state authorized the Sacramento River Flood Control Project (SRFCP). The ambitious project included the construction of levees, weirs, and bypasses along the river to channel floodwaters away from population centers. Under the SRFCP, new reclamation districts were created, including RD 1000, consisting of approximately 55,000 acres in the Natomas Basin. RD 1000 was largely controlled by the Natomas Company, which had access to more money than any individual landowner. The infrastructure of RD 1000 was completed in the 1920s. It includes levees, drainage canals, pumps, irrigation systems, agricultural fields, roads, and remnant natural features. The originally constructed features included levees and exterior drainage canals, an interior drainage canal system, nine pumping plants, a series of levee and interior roads, and unpaved rights-of-way between the farm fields.

RD 1000 has been previously evaluated as a Rural Historic Landscape District on behalf of USACE and was found eligible for NRHP and CRHR listing (Dames & Moore 1994). Dames & Moore determined that RD 1000 appears to be eligible for listing as a Rural Historic Landscape District at the state level of significance for the period from 1911 to 1939 under Criterion A of the NRHP. The area of significance is reclamation and the historical context is flood damage reduction and reclamation of the Sacramento River basin within the SRFCP as an important part of the history of reclamation and flood damage reduction.

Cultural Resource Investigations

A records and literature search was conducted at the North Central Information Center at California State University, Sacramento in December 2018, for the I-5 window area of potential effects (APE) and a surrounding ¼-mile buffer. The cultural resources APE is defined as the geographic area or areas within which a federal undertaking may directly or indirectly cause alternations in the character or use of historic properties, if such properties exist (36 CFR § 800.16(d)). The records and literature search results indicate that only six previous cultural resources investigations have occurred within the APE. Previously recorded cultural resources identified through the records search include two resources located in the APE and two resources located within the ¼ mile search area. The previously recorded resources are listed in Table 3-1 and summarized below.

Resource Number	Trinomial	Name	NRHP Status	Within APE
P-34-000042	CA-SAC-15/H	Cahill, S-15	Eligible	No
P-34-002214	CA-SAC-1114H	NLIP-24, 6050 Garden Hwy	No	No
P-34-003857	CA-SAC-1138/H	NLIP-17, Bell Farm	No	Yes
P-34-003903	CA-SAC-1143/H	NLIP-14	No	Yes

Figure 4. Record Search Results for Cultural Resources

Site CA-SAC-15/H consists of a prehistoric midden mound with a dense concentration of lithic and faunal remains. The historic component of the site consists of a bunkhouse, tank house, and a shed. The prehistoric component of site CA-Sac-15/H was first noted by Heizer in 1934, who described it as a small (45 yards or 41 meters in diameter) mound near the Sacramento River (Heizer 1934). The site area was visited in 1990 by Far Western Anthropological Research Group as part of a levee improvement project (Bouey 1990). In 1993, Dames and Moore recorded the site again and expanded the site boundaries, noting that it was 80 meters (87 yards) in diameter and consisted of dark midden soil with freshwater shell and cultural materials throughout the deposit. Surface observations led Dames and Moore to indicate that CA-Sac-15/H is an occupation locus dating to the late Middle Horizon and Phase I of the Late Horizon (Dames and Moore 1994). In a letter to the SHPO dated February 22, 2010, the Corps recommended that Loci 1 and 3 of the prehistoric component were eligible for the NRHP under criterion D. The Corps also recommended that Locus 2 of the prehistoric component and the historic-era component (Kubo Property) not eligible for the NRHP. The SHPO concurred with the Corps recommendation in a letter dated February 23, 2010.

Site CA-SAC-1114H consists of a residence, a barn/garage, and two sheds within an agricultural setting. In a letter to the SHPO dated November 2, 2008, the Corps recommended the site not eligible for the NRHP. The SHPO concurred with the Corps recommendation in a letter dated November 10, 2008.

Site CA-SAC-1138/H consists of a residence, a small office building, a shop/garage and carport within an orchard setting at the toe of an RD 1000 levee in Sacramento County. The buildings are oriented in a north/south direction. A prehistoric component was also recorded, consisting of burned and unburned faunal bone, freshwater mussel shell, two basalt flakes, some charcoal flecking, a piece of baked clay with an impression, and other small baked clay inclusions. In a letter to the SHPO dated November 2, 2008, the Corps recommended the site not eligible for the NRHP. The SHPO concurred with the Corps recommendation in a letter dated November 10, 2008.

Site CA-SAC-1143/H consists of a single basalt flake, fired earth nodules, faunal tooth, and historic debris. In a letter to the SHPO dated February 22, 2010, the Corps recommended the site not eligible for the NRHP. The SHPO concurred with the Corps recommendation in a letter dated February 23, 2010.

On April 8, 2019, through April 15, 2019, Gulf South Research Corporation archaeologists conducted an intensive pedestrian survey of the APE. The total area surveyed in the Reach B-I-5 APE included 29.1 acres. Surface visibility across the area during survey was poor. The survey also determined that the structures associated with CA-SAC-001138/H were no longer standing and no other cultural resources were identified during the current survey.

Significance Criteria

Title 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA), requires Federal agencies to take into account the effects of their undertakings on historic properties. Undertakings are projects, activities, or programs funded in whole or in part under the direct or indirect jurisdiction of a Federal agency (54 U.S.C. § 300320). The process for implementing Section 106 of the NHPA is described at 36 CFR Part 800. The Section 106 process involves identifying historic properties in the APE for an undertaking and resolving any adverse effects on such properties through a consultative process involving the lead Federal agency, the State Historic Preservation Officer (SHPO), Indian tribes, and other consulting parties. Implementation of an action alternative that would cause an adverse effect on historic properties also would constitute a significant cultural resources impact under NEPA. An adverse effect would result if the action alternative would alter any of the characteristics of a historic property that qualify it for inclusion in the NRHP in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (36 CFR §800.5). Examples of adverse effects include:

- Physical destruction, damage, or alteration of all or part of the historic property;
- Alteration of the property in a way inconsistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR Part 68);
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within the property's setting that contribute to its significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;

Environmental Consequences

No known historic properties would be affected by the design changes and extended work timeframe.

Mitigation

If adverse effects to any historic properties are found during construction, those effects would be mitigated as stipulated in the Programmatic Agreement between the U.S. Army Corps of Engineers and the California State Historic Preservation Officer regarding the American River Common Features Project, executed September 10, 2015.

3.2.2 Recreation

There are recreational activities available near the I-5 Window Project to include Teal Bend Golf Club to the north of the site but not located within the project footprint, cycling along Garden Highway, Elkhorn boat ramp and Marina, Alamar Marina, and Swabbies Restaurant. The impacts were already covered in Section 3.13 and 4.13, Recreation, of the 2010 EIS/EIR. To be considered an impact for this resource the project would need to affect one or more of the following:

- Eliminate or substantially restrict or reduce the availability, access, or quality of existing recreational sites or opportunities in the project area;
- Cause substantial long-term disruption in the use of an existing recreation facility or activity;
- Result in inconsistencies or non-compliance with regional planning documents; or
- Require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

The I-5 Window Project will temporarily close a portion of Garden Highway. There would also be a temporary closure of the Elkhorn Boat Launch overflow parking lot as well as a portion of the parking lot on the waterside of the levee. These temporary road closures and detours are further discussed in Section 3.2.3, Traffic. Without mitigation this would be a significant and unavoidable impact.

The parking lots near and adjacent to the Elkhorn Boat Launch Facility are used for recreationists utilizing both the Elkhorn Boat Launch Facility as well as Swabbies Restaurant, particularly on weekends in the summer when Swabbies Restaurant hosts live music. Closing or restricting access to these parking lots may increase congestion in the area, and may encourage the public to park along the shoulder of Garden Highway in a potentially unsafe manner. In order to reduce these impacts, mitigation measures include two detours on the north and south sides of the project area too North Bayou Way to enable the public continue use of Garden Highway to access the unique recreational activities of this particular area. Both detour routes will be paved and able to handle the traffic volume necessary for these road ways. The northern detour also during construction would include parallel roadside parking to mitigate the temporary loss of parking at the overflow parking lot. Information regarding closures and detours would be announced on public media reducing chances of events being planned during peak construction periods. Upon completion of construction, the parking areas would be restored; however, the construction of the raised levee would expand the footprint of the waterside levee slope, which may reduce available parking by a few spots. In order to reduce this impact, the parking areas would be evaluated to determine appropriate restriping in a manner that would safely enable the highest number of parking spots. With appropriate detours, public information via letters to businesses and those that live in the impacted area, and appropriate restriping of the parking lots, impacts to Recreation in the localized area would be moderate and the term of the construction.

3.2.3 Special Status Species

The Natomas Basin is home to several endangered and threatened species. Work being performed within the I-5 Window Project could have the possibility of having an effect on one or more of these species. A complete list of these species is located in Appendix A of this document. The impacts to Special Status Species were discussed in detail in Section 3.7 and 4.7, Biological Resources, of the 2010 EIS/EIR. However, after the 2010 EIS/EIR was finalized, the Western Yellow-billed cuckoo (*Coccyzus americanus occidentalis*) (YBCU) was federally listed as threatened. To ensure that there would be no significant impact to this newly listed species, the cuckoo will be discussed in this section. To be considered an impact for this resource the project would need to affect one or more of the following:

- Substantial direct or indirect reduction in growth, survival, or reproductive success of species listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act.
- Substantial direct mortality, long-term habitat loss, or lowered reproductive success of Federal or State-listed threatened or endangered animal or plant species or candidates for Federal listing.
- Direct or indirect reduction in the growth, survival, or reproductive success of substantial populations of Federal species of concern; endangered species, threatened species, or species of special concern.
- Have an adverse effect on a species' designated critical habitat.

The Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) was Federally listed as threatened October 3, 2014 (USFWS 2014). Nesting Western yellow-billed cuckoos no longer occur on the Sacramento River south of Colusa as the river has been channelized and riprapped from that point into the Sacramento-San Joaquin River Delta. However, nesting YBCU do occur south and north of the Sacramento area, so there is some potential for migratory birds to use the riparian habitats as they move between nesting habitat areas. As a result, this species has the potential to occur in the action area; however, the area in and around the I-5 Window Project is generally considered low quality habitat due to actively used manmade structures as well as constant noise disturbance from traffic along Garden Highway and I-5.

Considering that the I-5 Window Project is relatively small and encompasses an area that is highly disturbed, construction is unlikely to have an impact on the YBCU. In the unlikely event that a nesting pair of YBCU is identified in or near the construction footprint, measures to minimize impacts on YBCU would follow protocols set forth by the USFWS and the California Department of Fish and Wildlife (CDFW). Impacts to the YBCU are unlikely; therefore, there would be no change in significance to the impacts to Special Status Species as previously described in the 2010 EIS/EIR.

3.2.3 Traffic

The I-5 Window Project contains a consistently trafficked portion of Garden Highway that involves a major transportation hub, Sacramento International Airport, and traffic arriving at the project area to use the recreational facilities. The airport can be accessed via North Bayou Way, and public access to the Sacramento River is available at the Elkhorn Boat Launch Facility. Parking for the boat launch is available on both the water and landside of Garden Highway. North of the I-5 Window Project area are the Alamar Restaurant and Marina as well as Swabbies Restaurant and Bar. Additionally, several single family homes are located in the area, as well as those who live on their boat at the nearby marina. Traffic was discussed originally in detail in Section 3.10 and 4.10, Transportation and Circulation, of the 2010 EIS/EIR. To be considered a significant effect related to traffic the project would need to affect one or more of the following:

- Substantially increases traffic in relation to existing traffic load and capacity of the roadway system;
- Substantially disrupts the flow of traffic;
- Exposes people to significant public safety hazards resulting from construction activities on or near the public road system;
- Reduces the supply of parking spaces sufficiently to increase demand above supply;
- Causes substantial deterioration of the physical condition of nearby roadways;
- Results in inadequate emergency access; or
- Disrupts railroad services for a significant amount of time.

Construction would involve approximately a yearlong temporary closure of Garden Highway from approximately 0.25 miles south of the I-5 Bridge to north of the entrance to Swabbies restaurant. Additionally, degrading and re-contouring the portion of North Bayou Way from where it intersects Garden Highway east toward Schoolhouse Road (a private non-paved road) would require full closure of that portion of the road. During construction, truck traffic along Garden Highway and smaller country roads would increase as material is brought into the site for the construction of the levee. This partial closure and detour would have a short term impact on local traffic that would last as long as project construction. Currently, construction is anticipated to be completed in one year, but may last two construction seasons from 2021 through 2022 if there are construction complications. There may be a need to guide heavy equipment on to the site from the staging and parking areas, requiring flaggers and ground guides, which may briefly slow local traffic. If this assistance is necessary, signage would be posted to both directions of traffic in advance of the work being done. Signage would warn of slowdown and potential stops ahead, which would alleviate the disruption of the traffic flow. Without avoidance and minimization measures this would be a significant impact.

To begin reducing the impacts to traffic as a result of the work being performed by the I-5 Window Project the contractor would implement BMPs to minimize the effect of project construction to local traffic. BMPs would include, but are not limited to:

- Placement of construction warning equipment posted in accordance with local standards or set forth in the Manual on Uniform Traffic Control Devices (Federal Highway Administration, 2000) in advance of the construction area.
- A flagger wearing bright orange, red, or yellow vests and using “slow/stop” paddles to direct traffic when a lane is closed creating a bi-directional lane.
- Signage would be used to direct traffic when lanes are shifted/narrowed. A traffic control plan would be developed by the construction contractor and approved by the Corps prior to initiation of any construction activities.

Additional avoidance and minimization measures are discussed below.

Avoidance and Minimization Measures

In order to reduce potential traffic effects, the following measures would be implemented during construction:

- The construction contractor would notify and consult with emergency service providers to maintain emergency access and facilitate the passage of emergency vehicles on nearby roads.
- Emergency vehicle access would be maintained at all times. Coordination with local emergency responders by the contractor to inform them of the construction activities would be required by the contractor.
- The construction contractor would assess any damage to roadways caused by construction and would repair all potholes, fractures, or other damages.
- The construction contractor would provide adequate parking for construction trucks, equipment, and construction workers within on-site designated staging areas throughout the construction period. If inadequate space for personnel parking or equipment is available at a given work site, the construction contractor would provide an off-site staging area in a location that would not cause traffic congestion and, as needed, coordinate the daily transport of construction vehicles, equipment, and personnel to and from the work site.
- If construction vehicles and equipment cause damage to local roads, the contractor would be required to restore roadways to preconstruction conditions at the completion of construction

The foot print of the site would be managed in a way that not the entirety of the foot print would cause road shut downs all at once but would handle it in stages. This is shown in Appendix B of this document. Two detours around the project site would be constructed and

maintained for the duration of the construction (see figure 4 below). Both the northern and southern detour would allow for traffic to flow north and south to North Bayou Way where they can travel normally along Garden Highway, to I-5, or the Sacramento International Airport. Traffic control or detours would be required, as well as pre-planned construction traffic routes.

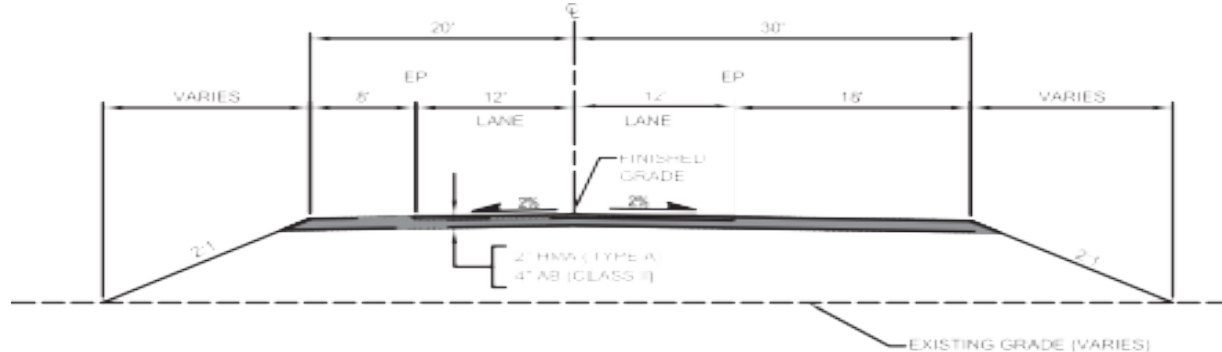


Figure 5. Detour Road Cross Section (sample drawing)

Emergency vehicle access to area roads could be impacted by the closure and removal of Garden Highway under the I-5 Bridges. The detour routes that are to be constructed would allow for consistent flow of traffic while construction in the I-5 Window Project is taking place. Considering that the detour routes are two lanes and the low flow of normal traffic in this area impacts would be moderate and last to the timeframe of this particular project. There are no railroad lines near the project; therefore, railroads will not be impacted and will not be considered further. Once the project is completed, roads would be reopened and local traffic would return to preconstruction conditions. The implementation of detours, public outreach, and other mitigation measures to reduce effects to traffic make the overall impacts to be considered less than significant.

3.2.4 Vegetation and Wildlife

The I-5 Window Project area is bordered by mature trees on both sides of the levee as well as the agricultural areas east of and along the Garden Highway, residences spread out throughout I-5 Window Project, and several businesses in the areas. These trees could provide habitat for protected species but due to consistent disturbance from traffic on the Garden Highway, the I-5 Bridges, and the human population that may be present along the Sacramento River. The likelihood of a species that would be sensitive to construction being present is unlikely. Species that would be likely to be near the construction site are less than likely to exhibit abandonment behavior or not be present to begin with. The overall site would at best be considered low quality habitat as due to the high disturbance to the presence of the I-5 Bridges, an airport less than a mile away, two parking lots, and two roadways. The original impacts of this project were discussed detail in Section 3.7 and 4.7, Biological Resources, of the 2010 EIS/EIR. To be considered an impact for this resource the project would need to affect one or more of the following:

- Substantial loss, degradation, or fragmentation of any natural communities or wildlife habitat;
- Substantially affect a sensitive natural community, including Federally protected wetlands and other waters of the U.S., as defined by Section 404 or the Clean Water Act;
- Substantially reduce in the quality or quantity of important habitat, or access to such habitat for fish or terrestrial wildlife species;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Substantial adverse effects on any riparian habitat or any other sensitive natural community;
- Conflict with any local policies or ordinances protection biological resources, such as tree preservation policies or ordinance;
- Conflict with approved Habitat Conservation Plans or Natural Community Conservation Plans, or any other approved local, regional, or state habitat conservation plan; or
- The construction contractor would identify potential staging areas prior to construction and Corps biologists must approve the area prior to initiation of any construction activities.

While impacts to Vegetation and Wildlife within the I-5 Window Project construction footprint would still be present as they had been discussed in detail in the 2010 EIS/EIR, and the changes in design would not change the intensity or types of the impact within this project's footprint on the water side of the road; however, it is possible that there would be additional trees removed or trimmed from the water side of the levee. Changes to designs on the land side may require more or less vegetation removal than originally discussed in the 2010 EIS/EIR but impacts would remain similar. The construction on the waterside of the levee would not remove mature riparian trees or shrubs, as the work would be in a parking lot under the I-5 overpass with no vegetation habitat. Shaded riverine habitat would not be affected, as any trees removed from the project footprint they are far enough away from the water's edge that the trees do not provide aquatic shade. Avoidance and minimization measures are listed below to minimize impacts, and to manage the difference in conditions with the removal of vegetation are from the 2010 EIS/EIR.

Best management Practices:

- Trees to be removed will be performed prior to the traditional start of Migratory bird nesting season.
- All tree removal will be performed or supervised in person by a certified arborist to reduce the opportunity to damage nearby trees that will not be removed.
- All trees that are to remain and are within the project footprint may still require trimming to avoid being further damaged by passing construction vehicles and regular traffic. This trimming will be kept to a minimum and performed or supervised in person

by a certified arborist. Also, the trunks of these trees will be further protected by wrapping them with a material to minimize abrasions or impacts from vehicles.

- Trees near project work areas will have exclusionary fencing put in place at the drip line to reduce the possibility to encroach on the limbs and root system.

Impacts that could not be avoided or minimized would still be mitigated by the purchase of mitigation credits. The land side net impacts to Vegetation and Wildlife within the I-5 Window Project were considered in the 2010 EIS/EIR. Appendix C shows the trees that are planned for removal under the current design. The trees planned for removal in the current design would have been removed under the design considered in the 2010 EIS/EIR. Water side work for this project as designed would not require the removal of water side trees. As this would not be a new affect in terms of overall habitat loss and would be considered similar to what was discussed for mitigation in the EIS/EIR, resulting a permanent major impact by the removal of woody vegetation in the localized area. In the case of the I-5 Window Project the effects to habitat were needed to be reconsidered in an SEA as the design change changed the shape of the project footprint and created the opportunity for new impacts to develop. This SEA and the corresponding FONSI show that there are no new impacts that would take us outside the EIS/EIR coverage.

3.2.5 Water Quality

A portion of the work in the I-5 Window Project footprint is anticipated to occur on the water side of the levee. This differs from what was discussed originally in Section 3.6 and 4.6, Water Quality, of the 2010 EIS/EIR. To be considered an impact for this resource the project would need to affect one or more of the following:

- Violate water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with ground water recharge;
- Substantially alter the existing drainage pattern of the site or area, including through the alternative of the course of a stream or river, in a manner which would result in substantial erosion, siltation, or sedimentation on-or-off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or
- Otherwise substantially degrade water quality.

The original proposal considered by the 2010 EIS/EIR did not include any water side work at the I-5 Window Project area. Work included the complete removal of the portion of the Garden Highway levee under the I-5 Bridges to its foundation level, installation of a cutoff wall and reconstruction of the levee within its existing footprint, followed by construction of a top of levee floodwall to meet levee height and seepage deficiencies. Now, however, the need to

prevent increased pressure on the bridge landside footings for the I-5 Bridges necessitated the change in design. The design change includes excavation of the levee to below its foundation level, no cutoff wall and reconstruction of the levee to a higher crest elevation. This results in a wider waterside footprint. The construction on the waterside of the levee would not involve any in-water work, and would take place well above the OHWM in the parking lot for the Elkhorn Boat Launch Facility. The inclusion of a Stormwater Pollution Prevention Plan (SWPPP) to prevent runoff in to the Sacramento River would reduce the potential for an increase in turbidity, sedimentation, or contaminants. The SWPPP would include the following:

- Water pollution prevention measures for erosion and sediment control, such as but not limited to straw waddles and silt fences, and to show how non-stormwater discharges and hazardous spills would be controlled;
- Demonstration of compliances with all applicable Central Valley Regional Water Quality Control Board (RWQCB) standards and other applicable water quality standards;
- Demonstration of compliance with regional and local standards for erosion and sediment control;
- Identification of responsible parties;
- Detailed construction timelines; and
- A BMP monitoring and maintenance schedule.

BMP's shall be applied to meet the "maximum extent practicable" and "best conventional technology/best available technology" requirements and to address compliance with water quality standards. A monitoring program would be implemented during and after construction to ensure that the project is in compliance with all applicable standards and that the BMPs are effective. BMPs would include the following:

- Conduct all work according to site-specific construction plans that identify areas for clearing, grading, and re-vegetation so that ground disturbances is minimized;
- Install silt fences near riparian areas or streams to control erosion and trap sediment, and reseed cleared areas with native vegetation;
- Stabilize disturbed soils of the new or raised levees, existing levee removal areas, and borrow sites before the onset of the winter rainfall season; and
- Stabilize and protect stockpiles from exposure to rain and potential erosion.

The SWPPP would also specify appropriate hazardous materials handling, storage, and spill response practices to reduce the possibility of adverse impacts from use, accidental spills, or the releases of contaminants. Specific measure applicable to the project include, but are not limited to, the following:

- Develop and implement strict on-site handling rules to keep potentially contaminating construction and maintenance materials out of drainages and other waterways;
- Conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel, and collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility;
- Maintain controlled construction staging and fueling areas that are at least 100 feet away from channels or wetlands to minimize accidental spills and runoff of contaminants in stormwater;
- Prevent substances that could be hazardous to aquatic life from contaminating the soil or entering a watercourse;
- Maintain spill cleanup equipment in proper working condition. Clean up spills immediately according to the spill prevention and response plan;
- Develop a slurry spill contingency plan to respond to a potential for bentonite slurry spill and prevent slurry from entering the Sacramento River; and
- Immediately notify the CDFW and the Central Valley RWQCB of any spills that the cleanup procedures used.

With the SWPPP and other avoidance and minimization measures in place, the potential impacts to Water Quality are short-term and minor.

4.0 CUMULATIVE EFFECTS

NEPA requires the consideration of cumulative effects of the proposed action, combined with the effects of other projects. NEPA defines a cumulative effect as “an effect on the environment that results from the incremental effect of an action when combined with other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 C.F.R. § 1508.7).” The scope of the cumulative effects analysis in this SEA considers past projects that may continue to affect the project area in the summer/fall of 2021 and the spring/summer of 2022, projects that are under construction in the summer/fall of 2021 and the spring/summer of 20202 and reasonably foreseeable future projects that would impact the area included within the I-5 Window Project.

4.1 Past, Present, and Reasonably Foreseeable Future Projects

The list below includes past, present, and reasonably foreseeable future projects within the narrower geographic and temporal scope of the I-5 Window Project.

4.1.1 American River Common Features WRDA 2016 Project

The greater ARCF 2016 project is scheduled for construction from 2019 through 2024. The project would involve construction of levee improvements along the American and Sacramento River levees as well as proposed improvements to the Natomas East Main Drainage Canal (NEMDC) east levee and the Magpie Creek Diversion Channel. The levee improvements scheduled for implementation include the construction of cutoff walls, erosion protection, seepage and stability berms, relief wells, levee raises, and improvement of levee prisms. In addition, the Corps would widen the Sacramento Weir and Bypass. The project would also involve construction of a number of mitigation sites in the area.

The Corps, SAFCA, and the CVFPB propose, as the first action associated with the ACRF 2016 Project, has constructed SREL Reach D Contract 1 which included an approximately 400 foot long stability berm against the landside slope of the Sacramento River east levee along Front Street near downtown Sacramento. The following projects are in development and are to be constructed in the near future: Sacramento River East Levee Contract 1: April - October 2020, Sacramento River East Levee Contract 2: April - October 2021, Sacramento River East Levee Contract 3: April - October 2022, North Area Streams Contract 1: July - October 2021 (though possibly 2022), Sacramento Weir: April 2022 – October 2024, Sacramento River East Levee Erosion Site RM 55.2L: April – October 2021, Lower American River Erosion Contract 1: April – October 2021, Lower American River Contract 2: April 2022 to October 2023, and Lower American River Contract 3: April 2023 to October 2025.

4.1.2 American River Common Features, Natomas Basin Projects

In 2007, the Natomas Levee Improvement Program was authorized as an early-implementation project initiated by SAFCA in order to provide flood protection to the Natomas Basin as quickly as possible. These projects consist of improvements to the perimeter levee system of the Natomas Basin in Sutter and Sacramento Counties, as well as associated landscape and irrigation/drainage infrastructure modifications. SAFCA, DWR, CVFPB, and the Corps have initiated this effort with the aim of incorporating the Landside Improvements Project and the Natomas Levee Improvement Program into the Federally-authorized American River Common Features Project. Construction of this early implementation project was completed in 2013. In 2014, the Natomas Basin Project was authorized by Section 7002 of Water Resources Reform and Development Act (WRRDA) of 2014 (Public Law 113-121). Construction for Reach D, Reach H, and Reach I began in 2018 and are anticipated to be completed in 2020. Reach B is anticipated to begin construction in 2020 and is anticipated to be completed in 2021. Reaches A, E, F, and G, and are still in conception or design; however, Reaches A and E are anticipated to begin as soon as 2022.

4.1.3 Sacramento River Bank Protection Project

The Sacramento River Bank Protection Project (SRBPP) was authorized to protect the existing levees and flood control facilities of the Sacramento River Flood Control Project. The SRBPP was instituted in 1960 to be constructed in phases. Bank protection has generally been

constructed on an annual basis. Phase I was constructed from 1963 to 1975, and consisted of 436,397 linear feet of bank protection. Phase II was authorized in 1974 for 405,000 linear feet of bank protection. The SRBPP directs the Corps to provide bank protection along the Sacramento River and its tributaries, including that portion of the lower American River bordered by federal flood control project levees. Beginning in 1965, erosion control projects at twelve sites covering 16,141 linear feet of the south and north banks of the lower American River have been implemented. This is an ongoing project and additional sites requiring maintenance would continue to be identified indefinitely until the remaining authority of 4,966 linear feet is exhausted over the next 3 years. WRDA 2007 authorized an additional 80,000 linear feet of bank protection to Phase II.

4.1.4 West Sacramento General Reevaluation Report

The West Sacramento Project General Reevaluation Report (GRR) report determined the Federal interest in reducing the flood risk within the West Sacramento project area. The purpose of the West Sacramento GRR is to bring the 50- miles of perimeter levees surrounding West Sacramento into compliance with applicable Federal and State standards for levees protecting urban areas. Proposed levee improvements would address: (1) seepage; (2) stability; (3) overtopping; and (4) erosion concerns along the West Sacramento levee system. Potential measures to address these concerns would include: (1) seepage cutoff walls; (2) stability berms; (3) seepage berms; (4) levee raises; (5) flood walls; (6) relief wells; (7) sheet pile walls; (8) jet grouting; and (9) bank protection. The West Sacramento GRR was authorized in WRDA 2016, and in the Fiscal Year 2019 work plan received initial funding to begin preconstruction design. However, under the West Sacramento Area Flood Control Agency Early Implementation Program, three levee segments have already been completed: a small segment along the Sacramento River adjacent to the I Street Bridge, a stretch along the Sacramento River in the northern portion of the city near the neighborhood of Bryte, and the south levee of the Sacramento Bypass. One levee segment, the Southport setback levee, is currently under construction as part of the local effort, which includes all of the proposed levee improvements under the study to the Sacramento River on the West Sacramento south basin.

4.1.5 Folsom Dam Safety and Flood Damage Reduction Project

The Folsom Dam Safety and Flood Damage Reduction Project, referred to as the Joint Federal Project (JFP), addressed the dam safety hydrologic risk at Folsom Dam and improved flood protection to the Sacramento area. Several activities associated the project included: the Folsom Dam Auxiliary Spillway, static upgrades to Dike 4, Mormon Island Auxiliary Dam (MIAD) modifications, and seismic upgrades (piers and tendons) to the Main Concrete Dam. The Folsom JFP was completed in fall 2017.

4.1.6 Folsom Dam Water Control Manual Update

The Folsom Dam Water Control Manual (WCM) has been updated to reflect authorized changes to the flood management and dam safety operations at Folsom Dam to reduce flood risk in the Sacramento area. The WCM Update utilizes existing and authorized physical features of the dam and reservoir, specifically the recently completed auxiliary spillway. Along with evaluating operational changes to utilize the additional capabilities created by the auxiliary spillway, the WCM Update assesses the use of available technologies to enhance the flood risk management performance of Folsom Dam to include a refinement of the basin wetness parameters and the use of real time forecasting.

4.1.7 Folsom Dam Raise

The Folsom Dam Raise project includes raising the right and left wing dams, MIAD, and Dikes 1-8 around Folsom Reservoir by 3.5 feet. The Dam Raise project also includes the three emergency spillway gates and three ecosystem restoration projects (automation of the temperature control shutters at Folsom Dam and restoration of the Bushy and Woodlake sites downstream in the American River). Similar to the ARCF 2016 Project, the Folsom Dam Raise Project was fully funded by the Bipartisan Budget Act of 2018. Construction is scheduled to begin in 2019 with Dike 8 construction, followed by Dike 7 in 2020; MIAD, the Left and Right wing of Folsom Dam, and Dikes 1-3 are scheduled to begin in 2021, and Dikes 4-6 in 2022. The ecosystem restoration projects are not scheduled at this time.

4.1.8 P.L. 84-99

The Public Law (P.L.) 84-99 program handles urgent repairs to the levees that were damaged during high water events. These repairs include both landside and water side repairs and are meant to return the levee to the original design strength. There are five sites scheduled for the 2020 calendar year in the Colusa Basin Drainage Canal, Feather River, and the Sacramento River. In 2021 there are three final repair sites planned for construction: 0412-28 (near Davis along Yolo Bypass; canal relocation and levee repairs; 0561-32/33 (Sac River west levee, N of Meridian, landside 80-ft seepage berm, no effects) and 1151-21 (San Joaquin River east of Tracy, landside 150-ft seepage berm, no effects).

4.2 Cumulative Effects Analysis

4.2.1 Aesthetics

While the local aesthetics of the I-5 Window Project would remain the same as was previously analyzed in the 2010 EIS/EIR, other portions of the overall American River Common Features, Natomas Basin Projects would be removing enough vegetation on the land side of the levee that there would be an overall change in the aesthetics. Reaches A, B, and I all include tree

removal that would change the overall appearance of their respective project areas. While levee improvements are designed to avoid or minimize effects where practicable, environmental issues areas like aesthetics do not have a quantification. Additionally, the work of the overall Natomas Basin Projects would have similar significant impacts regardless of actions taken to reduce flood risk in the area. The substantial removal of landside vegetation could result in significant and unavoidable effects that were described in detail in the 2010 EIS/EIR in Section 3.14 and 4.14, Visual Resources.

4.2.2 Air Quality

Air emissions from the I-5 Window Project would combine with other American River Common Features and Natomas Basin Projects scheduled for construction between 2021 through 2022 to create a cumulative effect. Taken together, the American River Common Features and Natomas Basin Projects would contribute to air pollutant emissions in Yolo, Sutter and Sacramento Counties, and to the nonattainment status of the Feather River Air Quality Management District (FRAQMD) and the Sacramento Metropolitan Air Quality Management District (SMAQMD) for NO_x and PM₁₀. As these projects take place in both FRAQMD and the SMAQMD, any needed permits would be required from both and regulations for each district would be followed in their own respective areas of control. While individual sites within the Natomas Basin Projects would not have excess emissions of any particulate or dust, when taken as a whole the Natomas Basin Projects incremental addition of each of these actions occurring simultaneously could contribute to emissions of pollutants that could exceed local and federal threshold levels. Adherence to BMPs that avoid and minimize discharges to the maximum extent practicable would be required in all cases. Additionally, the overall Natomas Basin Projects would be required to implement mitigation to reduce its emissions. Exceedance of any threshold would be required to purchase offset credits to mitigate for the impacts to air quality. The contribution to these effects from the I-5 Window Project would be minimal do to the size of the project but still considered a part of the overall effect. These effects were discussed in the EIS/EIR and is known to have the possibility to be a significant and unavoidable effect. In a situation where a design change creates a need to reevaluate if an impact type has changed or the intensity of the impact has been increased. In the case of The I-5 Window Project Air Quality impacts they fall within what was previously described in the EIS/EIR, allowing the Corps to state within a FONSI that there are no new effects.

4.2.3 Cultural Resources

Although no impacts to historic properties will occur during construction, adverse impacts, particularly on prehistoric cultural resources discovered during construction may still occur. Losses of cultural resources would add to a historical trend in the loss of these resources as artifacts of cultural significance and as objects of research importance. Based on current and previous investigations in the APE, there is a low probability that unknown cultural resources

would be located during construction. As, such, it is unlikely that that the design changes and extended work timeframe would result in a cumulatively significant impact on cultural resources.

4.2.4 Environmental Justice

While the I-5 Window Project would not result in the acquisition of any residences or deny an ethnic group access to a culturally significant site, the overall Natomas Basin Project will result in homes being removed along Reaches A and B to enable the construction and maintenance of local levees. The acquisition of these homes is based on relative placement in relationship to the existing levees, and do not occur in areas of traditionally recognized ethnic groups or minority populations. These impacts of the Natomas Basin Project are not intentionally focused on any particular group, and are necessary to reduce the flood risk for the overall Natomas Basin. Best efforts have been made to and continue to be made to avoid the acquisition of homes and impacts on businesses. As a specific social, ethnic, or religious group has not been unfairly been impacted the impacts would be considered less that significant.

4.2.5 Fisheries

Currently, all waterside work within the Natomas Basin is planned to be well above the OHWM with the exception of work at pumping plants. Construction at pumping plants generally involves the removal and replacement of existing pipes up and over the levee prism, as well as improvements to outfall structures. Construction work that would take place below the OHWM at pumping plants are generally in highly disturbed areas that are less than a tenth of an acre. To prevent further disturbance to the fisheries, best management practices, stormwater pollution prevention plans, spill containment plans, and the national pollutant discharge elimination system permit conditions would be implemented. Additionally, construction work windows that minimize impacts to special status fish species, construction operational controls, and a fish rescue plan would minimize potential impacts to fish associated with cofferdam construction and dewatering. With the implementation of these avoidance and minimization measures, any potential impacts due to the water side work of the I-5 Window Project and in-water work from pumping plants around the Natomas Basin would be considered less that significant.

4.2.6 Hazardous Wastes

The land uses near the Natomas Basin Projects are mainly either agricultural or residential. There is the possibility that pre-project hazardous wastes may have resulted in a release of hazardous materials onto the Natomas Basin Project sites; however, the projects themselves would not be introducing new sources of hazardous wastes when SWPPP and BMP's are taken into consideration. Implementing mitigation measures that were discussed in the 2010 EIS/EIR would reduce the potentially significant impacts from possible human exposure to unknown hazardous materials at the project sites to a less than significant level under the proposed actions.

4.2.7 Land Use

Natomas Basin Projects are mainly in areas of agricultural or residential land use. The flood damage reduction improvements would not modify intended land uses within those areas, nor would they include components such as the creation of additional water features that could attract waterfowl, thereby introducing hazards into the Airport Critical Zone (Perimeter B). The improvements also would not conflict with implementation of the adopted Airport master plan, Airport land use compatibility plan, or Airport wildlife hazard management plans.

As project designs have become more precise and changed to use the best available knowledge, the Natomas Basin Projects would require a number of property acquisitions, some of which are in established communities and others of which may not be (due to widely scattered residences in mostly rural areas). Regardless of the extent to which these communities are “established,” the project’s removal of residences and businesses would disrupt, but would not physically divide, these communities. This impact would be significant, but not change the overall land usage as discussed in the 2010 EIS/EIR.

4.2.7 Noise

The Natomas Basin Projects as a whole would have a significant and unavoidable project-level impact on noise levels experienced by the occupants of residences that are near sites of construction activity or haul routes for construction traffic. This impact would be further exacerbated by the potential overlap in construction of the Natomas Basin Projects. These impacts were discussed in the 2010 EIS/EIR, and while there have been extensions of work for several of the projects the type of impact and severity have not increased. The necessity of the project dictates that work be performed in spite of the significant and unavoidable impact. The Natomas Basin Projects would be subject to Sacramento County or City sound ordinances.

The closest project to the I-5 Window Project is the Natomas Basins Project, Reach B. As Reach B terminates approximately where the I-5 Window Project begins, there is the possibility of construction for both projects going on next to each other at the same time; however, as they are separated by a distance of over three miles Cumulative noise impacts would be expected to attenuate over that large distance and have no additive effect.

4.2.8 Public Utilities

Public utilities within the I-5 Window Project footprint, consisting of SMUD and AT&T facilities, were previously relocated under the Natomas Levee Improvement Program. Minor adjustments of these prior relocations will be needed because of the seepage berm construction. Several other reaches of the Natomas Basin Projects would also require public utilities to be relocated as was discussed in the 2010 EIS/EIR. Public utilities would need to be moved either out of the current and/or future designed levee prism. Additionally, some utilities may not be able to be in or near the prism of the levee to allow for maintenance of the utilities. Relocated public utilities would remain in function and at current capacity after construction is completed. Therefore no new or increased impacts would occur.

4.2.9 Recreation

There will be both long and short term impact to Recreation in the Sacramento area. Short term impacts include reduced access to recreational facilities, reduced parking in or near recreational facilities, bicycles rerouted onto street routes, and trails detoured or blocked by construction. As stated in the 2010 EIS/EIR, overall changes in recreational opportunities during construction would be temporary but cumulatively significant. Mitigation measures such as detours and temporarily alternatives available access to amenities would reduce impacts to where they are short-term and moderate.

Long term effects may include minimal, but permanent loss of space at parks and lost amenities due to the expansion of the levee footprint. Any loss in facilities would be compensated; however, compensation of open space may not be in areas accessible to the public. Overall, the loss of open space and amenities would be minimal in comparison to the amount of recreational opportunities remaining in the Natomas Basin and the greater Sacramento area.

4.2.10 Special Status Species

The YBCU is the only special status species of concern that has been federally listed as an endangered species since the adoption of the 2010 EIS/EIR. All other federally listed species that could be effected by the Natomas Basin Projects were considered and impacts discussed within the 2010 EIS/ EIR.

Any cumulative effects generated by the Natomas Basin Projects would not be considered to have a significant impact on nesting behavior as YBCU require large swaths of undisturbed riparian habitat, roughly 50 contiguous acres minimum. The Natomas Basin Project area does have riparian habitat, but most if not all is either near some form of human disturbance or is too small to be considered quality habitat. The Sacramento Valley is a migration corridor for many migratory birds, and the work being performed does not deny YBCU the ability to migrate through the project areas. No action would be taken that would prevent any migratory bird from being able to move away from disturbances. All sites would follow BMPs to the maximum extent practicable. Tree removal would be scheduled to take place in the late fall and early winter, when nesting birds are not present. If tree removal must take place during migration and/or nesting season, biological surveys would be conducted in order to identify the presence/absence of nesting birds. If nesting birds are identified during these surveys, trees with active nests would not be removed until after the young have fledged. These and other mitigation measures would reduce impacts to less than significant.

4.2.11 Traffic

The Average Daily Traffic (ADT) of the I-5 Window Project is small when compared to the areas of Garden highway that are closer to the City of Sacramento. Any impacts to traffic flow from this construction area would be negligible when the multiple detour possibilities are

taken into account. However Reaches A, B, and I already have or are expected to create significant and unavoidable negative impacts to traffic. These impacts were discussed in the 2010 EIS/EIR; however, the duration of Reach I's closure of Garden Highway has gone past the expected time frame. Additional impacts to traffic due to extended closures are being evaluated. Although the I-5 Window Project is in close proximity to the Reach B construction area, the ADT of Reach B would not be cumulatively impacted by concurrent construction of the I-5 Window Project as any detour away from the I-5 Window Project could allow for the avoidance of Reach B. Currently, Reach A is not anticipated to be in construction during the planned construction of Reach B or the I-5 Window Project; however, if Reach A and Reach B are constructed concurrently additional traffic impacts may occur. Reaches H and Reach I contract 1 are anticipated to be completed before the I-5 Window Project begins construction. In a situation where a design change creates a need to reevaluate if an impact type has changed or the intensity of the impact has been increased. In the case of The I-5 Window Project, Traffic impacts they fall within what was previously described in the 2010 EIS/EIR allowing the Corps to state within a FONSI that there are no new effects.

4.2.12 Vegetation and Wildlife

The Natomas Basin Projects include several reaches that require the removal of many acres of landside vegetation, and may disrupt or cause the loss of existing wildlife corridors. In the short term, this is Significant and Unavoidable; however, mitigation measures as discussed in Section 4.7 of the 2010 EIS/EIR would recreate new habitat within mitigation sites, which are off the project site, at a ratio that creates more habitat than what was lost. There would still be a temporal loss of habitat, but once the newly planted vegetation is established at a mitigation bank or on site mitigation area these particular types of impacts to vegetation removal that are required for the completion of the Natomas Basin Projects would be less than significant.

4.2.13 Water Quality

Currently, all waterside work within the Natomas Basin is planned to be well above the OHWM with the exception of pumping plants and limited erosion repair sites. Construction at pumping plants generally involves the removal and replacement of existing pipes up and over the levee prism, as well as improvements to outfall structures. Construction work that would take place below the OHWM are generally less than a tenth of an acre in areas that are already highly disturbed. Work would be scheduled to occur during periods of low water in order to prevent risk of damage to the levee without reducing the flood protection provided by the pumping stations. Coordination with local landowners and drainage infrastructure operators, preparation of drainage studies as needed, implementation of stormwater pollution prevention plans, implementation of spill containment plans, compliance with national pollutant discharge elimination system permit conditions, and proper project design would reduce overall impacts to the water quality as a result of the Natomas Basin Projects to less than significant.

5.0 Compliance with Laws and Regulations

5.1 Federal

Clean Air Act of 1972, as amended, 42 U.S.C. 7401, et seq. *Compliance.* The proposed action is not expected to violate any Federal air quality standards, exceed the EPA's general conformity *de minimis* threshold, or hinder the attainment of air quality objectives in the local air basin. Implementation of BMPs and adopted SMAQMD measures would reduce NO_x emissions. Thus, the Corps has determined that the proposed project would have no significant effects on the future air quality of the area.

Clean Water Act of 1972, as amended, 33 U.S.C. 1251, et seq. *Compliance.* The Clean Water Act (CWA) is the primary Federal law governing avoidance or minimization of water pollution. It established the basic structure for regulating discharges of pollutants into waters of the U.S. and gives the U.S. EPA the authority to implement pollution control programs, such as setting wastewater standards for industries (EPA 2002). In some states, such as California, the EPA has delegated authority to regulate the CWA to state agencies.

The proposed action is not expected to adversely affect surface or ground water quality or deplete ground water supplies. Best management practices would be implemented to avoid movement of soils or accidental spills into the river. No discharge or dredge or fill materials into navigable waters or adjacent wetlands would occur under the project. The Corps has determined that the proposed project would have no significant effects on the future water quality of the area.

The contractor would be required to obtain coverage under the NPDES General and Caltrans Stormwater permits from the California RWQCB, Central Valley Region, since the project would disturb 1 or more acres of land and involve possible storm water discharges to surface waters. As part of the permit, the contractor would be required to prepare a SWPPP identifying BMPs to be used to avoid or minimize any adverse effects of construction on surface waters.

Endangered Species Act of 1973, as amended, 16 U.S.C. 1531, et seq. *In progress.* In accordance with Section 7(c), the Corps obtained a list from USFWS of Federally listed and proposed species likely to occur in the project area on February 19, 2020 via the USFWS website Information for Planning and Consultation (IPAC 2020). The Federally threatened GGS and the threatened VELB were already evaluated in the 2010 EIS/EIR, and the federally threatened Western yellow-billed cuckoo was evaluated in this SEA. This project is not likely to adversely affect these species.

The Federally threatened Central Valley spring-run Chinook salmon, the Federally threatened Central Valley steelhead, the Federally threatened Southern DPS Green Sturgeon may occur in the Sacramento river near the project area. However, I-5 Window Project construction

work is to be above the OHWM in a parking lot on the water side of the levee. There are no anticipated impacts but those that could occur would include unauthorized use of equipment in water either intentionally or by accident. Therefore there are no anticipated effects to special status fish.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. *Compliance.* This order directs all Federal agencies to identify and address adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Any impacts caused by construction activities would not disproportionately affect minority or low-income populations.

Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. *Compliance.* This order directs all Federal agencies to identify and assess environmental health and safety risks that may disproportionately affect children. There are no schools or other similar facilities near the project area. The project would not have adverse or disproportionate impacts on children.

Farmland Protection Policy Act (7 U.S.C. 4201, et seq). *Compliance.* All land use in the area around the I-5 Window Project would be returned to existing usage upon completion of the project. No additional farmlands would be converted to non-farmable land under this project.

Fish and Wildlife Coordination Act of 1958, as amended, 16 U.S.C. 661, et seq. *Compliance.* The Fish and Wildlife Coordination Act (FWCA) ensures that fish and wildlife receive consideration equal to that of other project features from projects that are constructed, licensed, or permitted by Federal agencies. The FWCA requires federal agencies that construct water resource development projects to consult with USFWS, NMFS, and the applicable state fish and wildlife agency (in this case the CDFW) regarding the project's impacts on fish and wildlife and measures to mitigate those impacts. The USFWS, NMFS, and CDFW have participated in evaluating the proposed project, and all documents are included in the 2010 EIS/EIR.

Migratory Bird Treaty Act (15 U.S.C 701-18h). *Ongoing.* Any tree removal will be performed before the beginning of nesting season for trees that are to be removed within the project footprint. An on-site biologist experienced with raptors and other migratory birds behavior would monitor active nests, if they are present, while construction related activities are taking place. If the nesting birds exhibit agitated behavior in response to these construction related activities, the biological monitor would have the authority to stop work and then would consult with CDFW and USFWS to determine the best course of action necessary to avoid nest abandonment or take of individuals.

National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4321, et seq. *Ongoing.* Comments received during the public review period on this SEA will be incorporated

into the final SEA, as appropriate, and a comments and responses appendix will be prepared. The final SEA will be accompanied by a final FONSI if determined appropriate by the District Engineer after consideration of public comments.

National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470 et seq.

Ongoing. Section 106 of the NHPA of 1966, as amended, requires a Federal agency to consider the effects of Federal undertakings on historical and archaeological resources. A PA for the American River Common Features Project was executed September 10, 2015; the 2015 PA includes the Natomas Basin Project. Completion of the stipulations required by the PA would assure compliance with Section 106 of the NHPA. The stipulations of the PA include identification and evaluation of potential historic properties within the APE for the undertaking, determination of effects to historic properties, resolution of adverse effects to historic properties, as necessary, and consultation with the SHPO, Native American tribes, and interested parties. Based on the potential sensitivity of the areas identified in consultation with Native American tribes, the Corps had determined an archeological monitor meeting the qualifications described in Stipulation VII.C of the Project PA will be present for all ground disturbing activities. Tribal monitors may also be on site during project construction. The Sacramento District archaeologist would coordinate closely with Tribal monitors to assess data found during construction in order to determine if action is required for compliance with Section 106. Construction may be halted until consultation with the SHPO, Native American tribes, and interested parties until a determination of whether action is required for compliance with Section 106 is made. Compliance with these stipulations would ensure compliance with Section 106.

Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.). *Compliance.* This act was enacted to preserve selected rivers or sections of rivers in their free-flowing condition in order to protect the quality of river waters and to fulfill other national conservation purposes. The Sacramento River is not considered a Wild or Scenic River, and none of the internal water features of the project are tributaries to the lower American River. Therefore, the Natomas Reach B, I-5 Window Project would have no effect on Wild and Scenic Rivers.

5.2 State

California Clean Air Act of 1988. *Compliance.* The SMAQMD determines whether project emission sources and emission levels significantly affect air quality in its jurisdiction based on Federal standards established by the EPA and State standards set by the CARB. The project is in compliance with all provisions of the Federal and State Clean Air Acts.

California Endangered Species Act (CESA) of 1984. *Compliance.* The California Department of Fish and Wildlife administers this State law providing protection of fish and wildlife resources. This act requires the non-Federal lead agencies to prepare biological assessments if a project may adversely affect one or more State-listed endangered species. Mitigation measures as described in this document to monitor special-status state-listed species

would provide compliance coverage for the non-federal sponsor to meet the requirement of the CESA.

California Environmental Quality Act, California Public Resources Code, Section 21000 et seq. *Ongoing.* SAFCA, the Non-Federal Sponsor serving as the Lead Agency for CEQA, will determine the appropriate CEQA environmental document needed for the Reach B, I-5 Window Project work discussed in this SEA. SAFCA and CVFPB, as the Non-Federal Sponsors, will ensure full compliance with the requirements of this act.

6.0 COORDINATION AND REVIEW OF THE DRAFT SUPPLEMENTAL EA

The draft SEA will be circulated for 30 days to agencies, organizations, the general public that may live in the vicinity, and individuals known to have a special interest in the project. Copies of the draft SEA will be made available for viewing at www.natomaslevees.com, local public libraries, and provided by mail upon request. Coordination with all the appropriate Federal, State, and local government agencies is ongoing and will be complete upon finalization of this document.

7.0 FINDINGS

This SEA evaluated the environmental effects of the proposed continued work for the I-5 Window Project. Potential adverse effects to the following resources were evaluated in detail either within this document or via reference from the 2010 EIS/EIR: air quality, cultural resources, land use, noise, special status species, traffic, vegetation and wildlife, water quality, and cumulative effects.

The conclusions of this SEA, based on field research, and coordination with other agencies, indicate that the proposed project would have no significant long-term adverse effects on environmental resources. Short-term effects during construction would be minor to moderate before BMPs, avoidance, and minimization measures reduce these impacts to less than significant.

Based on this evaluation, the proposed project meets the definition of a FONSI as described in 40 CFR 1508.13. A FONSI may be prepared when an action would not have a significant effect on the human environment and therefore a Supplemental EIS is unnecessary. A draft FONSI has been prepared and accompanies this SEA.

8.0 LIST OF PREPARERS

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9.0 References

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- U. S. Fish and Wildlife Service (USFWS), October 2010. Phase 4b Section 7 Appendage to the Programmatic Biological Opinion for the Natomas Levee Improvement Program, Landside Improvements Project, Sacramento and Sutter Counties, California. 81420-2010-F-0949-1.
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Appendix A
Federal and State-listed
Species Lists

Federally Listed Fish and Wildlife Species That May Occur at the I-5 Window Project.

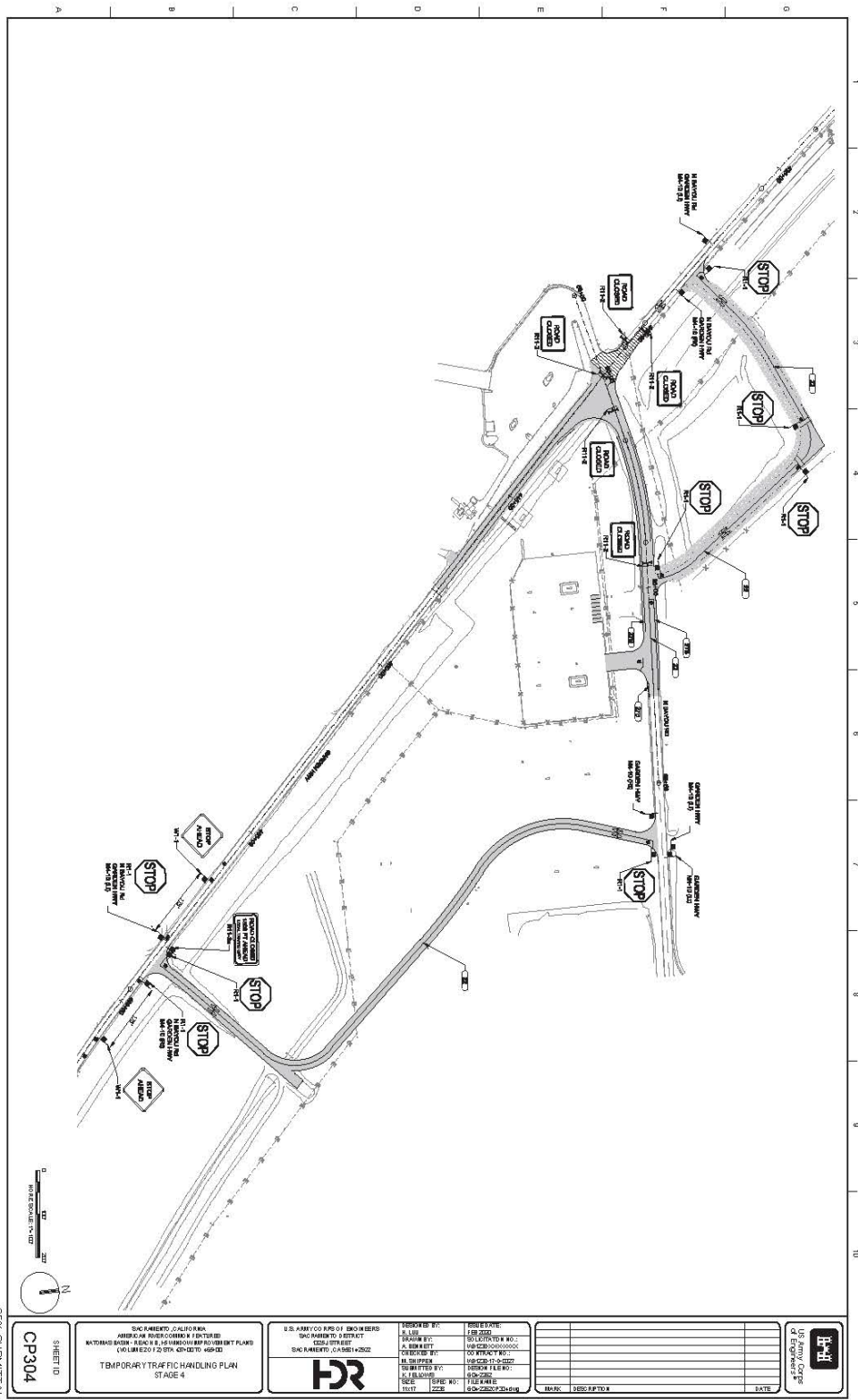
Species	Status	Habitat	Potential to Occur on Site
Crustaceans			
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i>	Threatened	Inhabits vernal pools and swales	No Potential to occur. No suitable habitat is present in the action area.
Vernal Pool Fairy Shrimp <i>Lepidurus packardi</i>	Endangered	Inhabits vernal pools and swales	No Potential to occur. No suitable habitat is present in the action area.
Fish			
Delta Smelt <i>Hypomesus transpacificus</i>	Endangered	Spawns in tidally influenced freshwater wetlands and seasonally submerged uplands; rears seasonally in inundated floodplains, tidal marsh, and the Delta. Critical habitat is listed for this site.	No Potential to occur. This project area is outside the recognized habitat.
Central Valley Spring-run Chinook Salmon <i>Oncorhynchus tshawytscha</i>	Endangered	Spending the majority of its life in the colder water of the northern Pacific this species returns to the Sacramento River to reproduce.	While there is an opportunity for the species to occur in this area of the Sacramento River all work is either landside or well above the OHWM. No impacts to species.
Central Valley Winter-run Chinook Salmon <i>Oncorhynchus tshawytscha</i>	Endangered	Spending the majority of its life in the colder water of the northern Pacific this species returns to the Sacramento River to reproduce.	While there is an opportunity for the species to occur in this area of the Sacramento River all work is either landside or well above the OHWM. No impacts to species.
Central Valley Steelhead <i>Oncorhynchus mykiss</i>	Endangered	Spawning in the gravel bottomed fresh water rivers this population migrates to the ocean where they grow larger than their freshwater counterparts. They would return to the rivers they spawned in to reproduce.	While there is an opportunity for the species to occur in this area of the Sacramento River all work is either landside or well above the OHWM. No impacts to species.

Species	Status	Habitat	Potential to Occur on Site
<p>Green sturgeon <i>Acipenser medirostris</i></p>	<p>Endangered</p>	<p>Spawning in the gravel bottomed fresh water rivers this population migrates to the ocean where they grow larger than their freshwater counterparts. They would return to the rivers they spawned in to reproduce.</p>	<p>While there is an opportunity for the species to occur in this area of the Sacramento River all work is either landside or well above the OHWM. No cover impacts to species.</p>
Amphibians			
<p>California Red-legged Frog <i>Rana draytonii</i></p>	<p>Threatened</p>	<p>Prefers semi-permanent and permanent stream pools, ponds and creeks with emergent riparian vegetation and typically without predatory fish. Requires adequate hibernacula, such as small-mammal burrows and moist leaf litter.</p>	<p>No potential to occur. Work is being performed in non-wetlands and highly disturbed area.</p>
<p>California Tiger Salamander <i>Ambystoma californiense</i></p>	<p>Endangered</p>	<p>Prefers grasslands and low foothills, ponds and creeks with emergent riparian vegetation and typically without predatory fish. Requires adequate hibernacula, such as small-mammal burrows and moist leaf litter.</p>	<p>No potential to occur. Work is being performed in non-wetlands and highly disturbed area.</p>
Reptiles			

Species	Status	Habitat	Potential to Occur on Site
Giant Garter Snake <i>Thamnophis gigas</i>	Threatened	Streams, sloughs, ponds and irrigation/drainage ditches; also requires upland refugia not subject to flooding during the snake's inactive season.	No potential to occur. Work is in a highly disturbed area that lacks needed cover from predators.
Insects			
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i>	Threatened	Inhabits elderberry shrubs, primary in riparian woodland and scrub habitat.	No elderberry shrubs are present in the project area. If found on site, host bushes would be protected in place.
Birds			
Yellow Billed Cuckoo <i>Coccyzus americanus</i>	Threatened	Inhabits Riparian woodlands that are large enough to buffer from disturbances (50 acres minimum) consisting of oaks, cottonwoods, mesquite, and willow forests.	While this area may be used as a migration corridor it would not be used for nesting as it does not provide enough shelter and is highly disturbed. Impacts are not likely to adversely effect species.

Appendix B

Road Closures and Detours



BS&S SUBMITTAL

SHEET ID
CP304

SACRAMENTO, CALIFORNIA
AMERICAN RIVER COMMON FERTILIZER
WATERWAYS BRIDGE REPAIR & DEMOLITION PROJECT PLAN
(SCHEDULE 2) STAGE 4 (SHEET 4 OF 4)

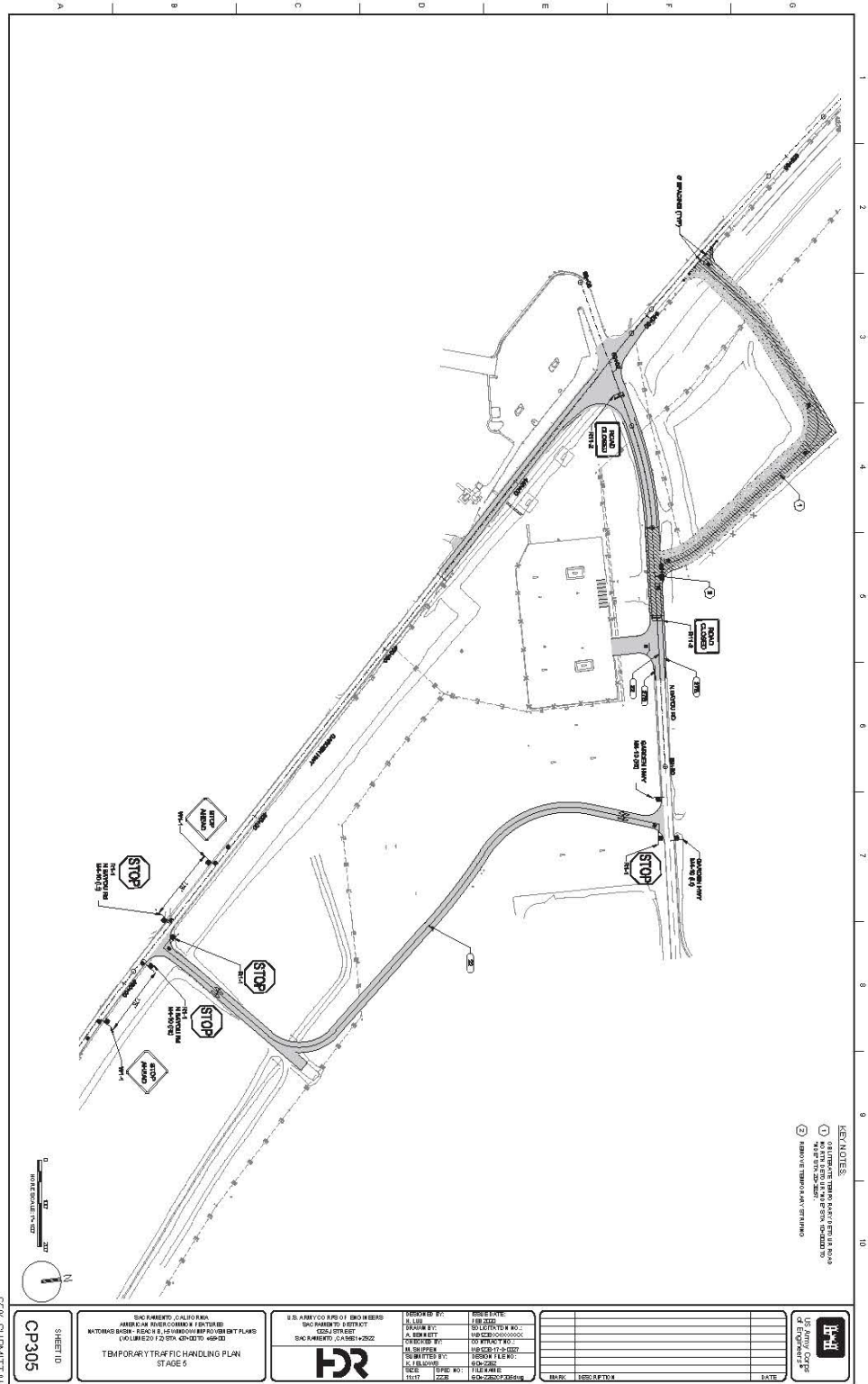
TEMPORARY TRAFFIC HANDLING PLAN
STAGE 4

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT
CONTRACT
SACRAMENTO, CALIFORNIA

DESIGNED BY:	DATE:
DRAWN BY:	SCALE:
CHECKED BY:	PROJECT NO.:
IN CHARGE:	CONTRACT NO.:
DATE:	ISSUED TO:
BY:	PROJECT TITLE:
DATE:	FILE NO.:
BY:	DATE:

NO.	DESCRIPTION	DATE

U.S. Army Corps of Engineers
Engineer



KEY NOTES:
 ① DELIMIT THE TEMPORARY TRAFFIC HANDLING STAGES WITH CONE AND FLAG ARRANGEMENTS.
 ② REMOVE TEMPORARY STAGING.

65% PRELIMINARY

SHEET NO.
CP305

SACRAMENTO, CALIFORNIA
 METRO AREA REGIONAL CENTER (MARC) PROJECT
 AUTOMATIC BAY - REAL TIME MONITORING AND CONTROL PLAN
 (RAMP) FOR I-505 TO I-580
 TEMPORARY TRAFFIC HANDLING PLAN
 STAGE 5

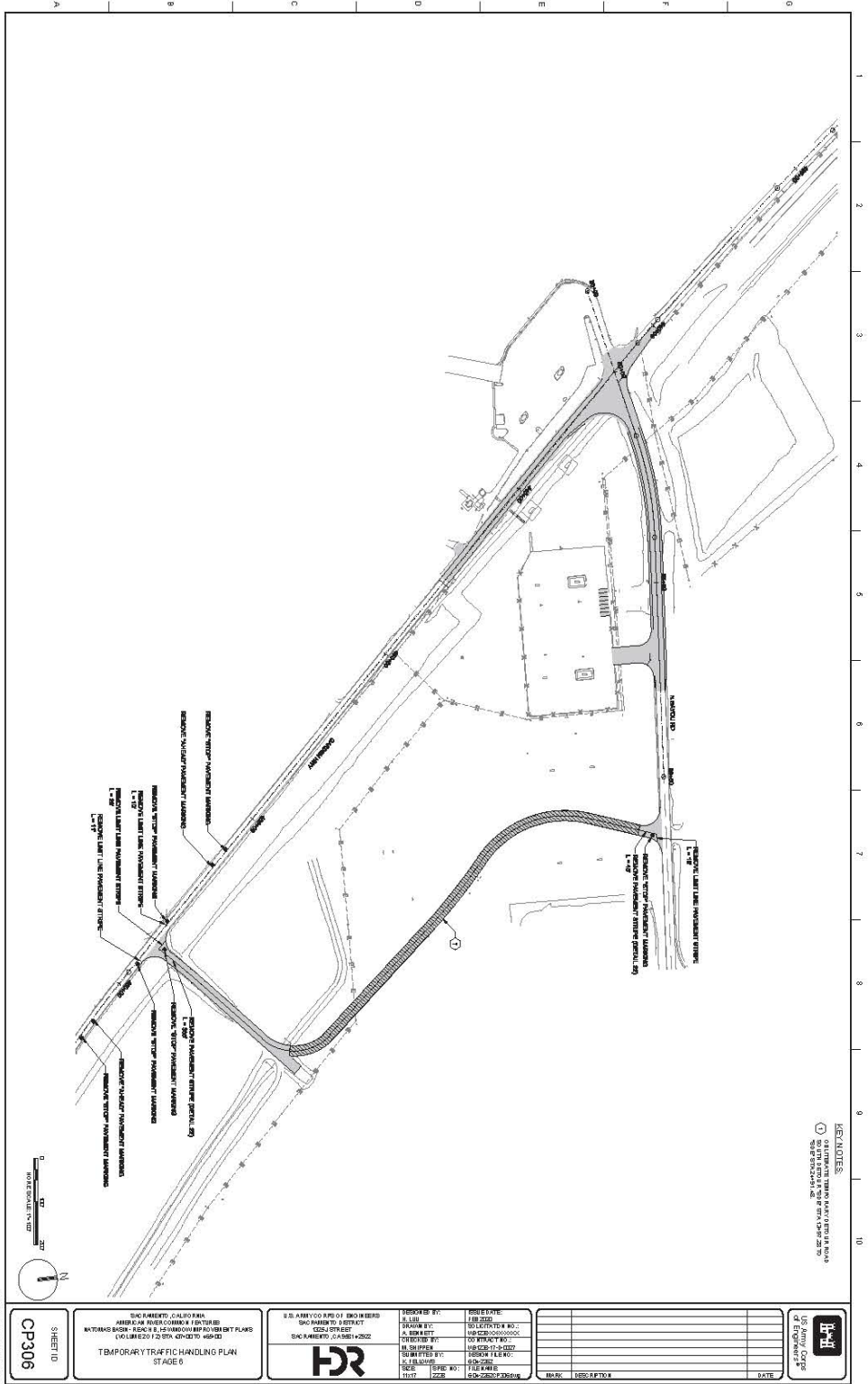
U.S. ARMY CORPS OF ENGINEERS
 CIVIL ENGINEERING CENTER
 2215 R STREET
 SACRAMENTO, CALIFORNIA 95833



DESIGNED BY: M. LEE	REVISIONS: 1. REVISION
DRAWN BY: A. BARNETT	SCALE/ITERATION NO.: AS SHOWN/00-000000
CHECKED BY: M. SHAPIRO	CONTRACT NO.: HSC-12-0002
SUBMITTED BY: M. SHAPIRO	ISSUE FILE NO.: HSC-12-0002
DATE: 11/07/12	PROJECT NO.: HSC-12-0002

NO.	DESCRIPTION	DATE

DATE
 11/07/12



REVISIONS:
 1. 08/11/2010: INITIAL DESIGN
 2. 09/15/2010: REVISED DESIGN
 3. 10/20/2010: REVISED DESIGN

65% SUBMITTAL

SHEET 10
 CP306

ENCINADO, CALIFORNIA
 NATIONAL BLVD. RECONSTRUCTION PROJECT
 TEMPORARY TRAFFIC HANDLING PLAN
 STAGE 6

U.S. ARMY CORPS OF ENGINEERS
 ENCINADO DISTRICT
 4251 STREET
 ENCINADO, CALIFORNIA 94022



DESIGNED BY: JLS/SLP
 CHECKED BY: JLS/SLP
 DRAWN BY: JLS/SLP
 SUBMITTED BY: JLS/SLP
 DATE: 10/20/10
 SCALE: AS SHOWN

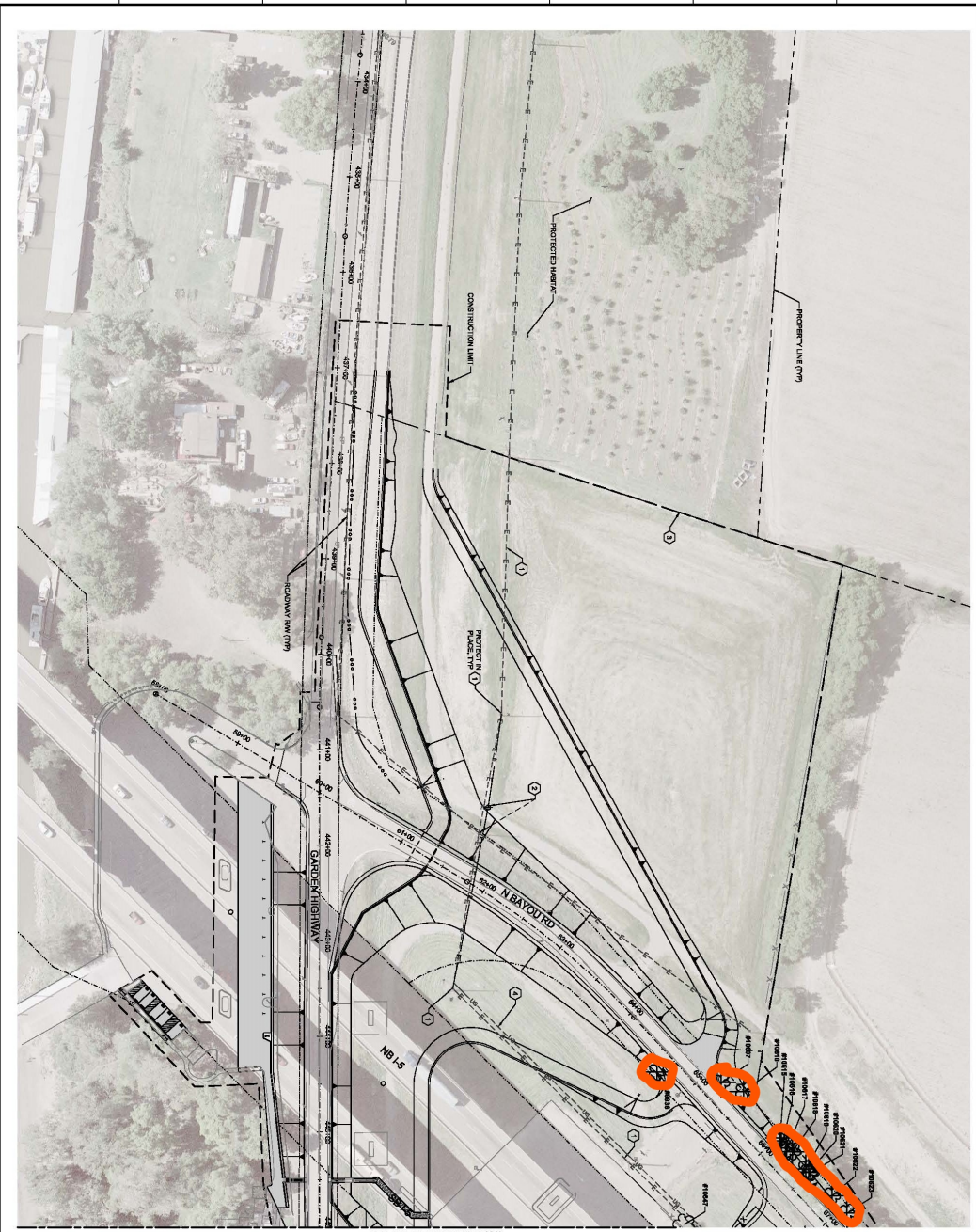
PROJECT NO.: 04-2000-0000
 DRAWING NO.: 04-2000-0000
 SHEET NO.: 04-2000-0000
 DATE: 10/20/10

NO.	DATE	DESCRIPTION	BY	CHKD BY

Appendix C

Tree Removal

(Trees to be removed are circled in orange)



MATCH LINE STA 446+00 (SEE DWG V-102)

NOTES:

1. SEE SHEET C-001 FOR CONTROL, LINE PLANS AND TYPICALS.
2. SEE SHEET C-002 FOR PROTECTIVE FENCE, AND/OR SIGNAGE.
3. SEE SHEET C-003 FOR SIGNAGE, AND/OR SIGNAGE TYPICALS.
4. PROTECT TREES IN PLACE WITH APPROVED PROTECTIVE FENCE AT DIRECTION.
5. SEE SHEET C-004 FOR CONTROL, POINT INFORMATION, AND/OR SIGNAGE.
6. REMOVED TREE.

UTILITY NOTES:

1. EXISTING OVERHEAD POWER LINE, TELEPHONE LINE, AND UTILITY.
2. APPROXIMATE SITUATION OF OVERHEAD POWER LINE, TELEPHONE LINE, AND UTILITY TO BE LOCATED BY FIELD SURVEY.
3. PROTECT MAINTAIN WITH HIGH PERMANENT FENCE.
4. UTILITY APPROXIMATE LOCATION OF UNIDENTIFIED AND NOT TYPED.



68% SUBMITTAL

SHEET ID
V-101

SACRAMENTO, CALIFORNIA
AMERICAN RIVER COMMON FUTURE USE
NATOMAS BASIN - HEAD IS 15 WINDOW IMPROVEMENT PLANS
(VOLUME 2 OF 2) STA 437+00 TO 448+00
AERIAL PHOTO AND TREE REMOVAL
STA: 434+00 TO 448+00

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95834-3922

DESIGNED BY: J. F. FELLOWS
DRAWN BY: J. F. FELLOWS
CHECKED BY: J. F. FELLOWS
SUBMITTED BY: J. F. FELLOWS
DATE: 8/26/2009
TIME: 10:00

ISSUE DATE: 8/26/2009
SOLICITATION NO.: WY000A-00-00000
CONTRACT NO.: WY000A-00-00000
DESIGN FILE NO.: 00000-00-00000
SCALE: AS SHOWN
FILE NAME: 8-26-2009-10:00

MARK	DESCRIPTION	DATE



- NOTES**
1. SEE SHEET C-01 FOR CONTROL LINE POOL AND TRAILS.
 2. SEE SHEET C-02 FOR CONSTRUCTION LIMIT AND TRAILS.
 3. SEE SHEET C-03 FOR STUMP AND/OR ROOTBALL REMOVAL.
 4. PROTECT TREES IN PLACE WITH HIGH DENSITY POLYETHYLENE (HDPE) DIRTLINE.
 5. SEE SHEET D-01 FOR CONTROL LINE AND DIRTLINE.
 6. SEE SHEET D-02 FOR TRAILS TO BE REMOVED TABLE.

- OVERHEAD ELECTRIC NOTES:**
1. EXISTING OVERHEAD POWER LINE, TELEPHONE LINE, AND UTILITY.
 2. APPROXIMATE RELOCATION OF OVERHEAD POWER IN LINE TO BE RELOCATED BY THE CONTRACTOR WITH 50% SUBMITTAL ANTICIPATED.
 3. PROTECT HABITAT WITH HIGH VISIBILITY PROTECTIVE FENCE AT RELOCATION.



SHEET ID V-102	SACRAMENTO, CALIFORNIA AMERICAN RIVER COMMON FEATURES NATOMAS BASIN - REACH 8.15 WIDENING IMPROVEMENT PLANS (VOLUME 2 OF 2) STA. 446+00 TO 458+00 AERIAL PHOTO AND TREE REMOVAL STA. 446+00 TO 458+00	U.S. ARMY CORPS OF ENGINEERS SACRAMENTO DISTRICT 1321 J STREET SACRAMENTO, CA 95814-2822 	DESIGNED BY: D. FELLOWS	ISSUE DATE: FEB 2009	<table border="1"> <thead> <tr> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	MARK	DESCRIPTION	DATE												
			MARK	DESCRIPTION		DATE														
DRAWN BY: A. HENNETT	SOLICITATION NO.: WY07M01A00000000	CHECKED BY: L. WITTEKAMP	CONTRACT NO.: WY07M01A00000000																	
SUBMITTED BY: D. FELLOWS	DESIGN FILE NO.: 6-06-2007	SIZE: 11x17	SHEET NO.: 1278																	

69% SUBMITTAL



TREES TO BE REMOVED				
ITEM NUMBER	TAG NUMBER	SPECIES	BEST HEIGHT (FT)	DIAMETER (IN)
1	10000	OAK	9	7 AND 10
2	10000	OAK	9	7 AND 10
3	10000	OAK	9	7 AND 10
4	10000	OAK	9	7 AND 10
5	10000	OAK	9	7 AND 10
6	10000	OAK	9	7 AND 10
7	10000	OAK	9	7 AND 10
8	10000	OAK	9	7 AND 10
9	10000	OAK	9	7 AND 10
10	10000	OAK	9	7 AND 10
11	10000	OAK	9	7 AND 10
12	10000	OAK	9	7 AND 10
13	10000	OAK	9	7 AND 10
14	10000	OAK	9	7 AND 10
15	10000	OAK	9	7 AND 10
16	10000	OAK	9	7 AND 10
17	10000	OAK	9	7 AND 10
18	10000	OAK	9	7 AND 10
19	10000	OAK	9	7 AND 10
20	10000	OAK	9	7 AND 10
21	10000	OAK	9	7 AND 10
22	10000	OAK	9	7 AND 10
23	10000	OAK	9	7 AND 10
24	10000	OAK	9	7 AND 10

- NOTES:
- SEE SHEET C-001 FOR CONTROL LINE FROM AND INLET.
 - SEE SHEET C-002 FOR CONSTRUCTION LIMIT AND INLET.
 - SEE SHEET C-003 FOR STUMP AND/OR ROOTBALL REMOVAL.

OVERHEAD ELECTRIC NOTES:
 1. REMOVE OVERHEAD POWER LINE FROM THE INDUSTRY FACILITY.

SHEET ID V-103	SACRAMENTO, CALIFORNIA AMERICAN RIVER COMMON FEATURES NATOMAS BASIN - REACH 8.1-5 WINDOW IMPROVEMENT PLANS (VOLUME 2 OF 2) STA. 458+00 TO 465+00 AERIAL PHOTO AND TREE REMOVAL STA. 458+00 TO 465+00 AND TREE INVENTORY	U.S. ARMY CORPS OF ENGINEERS SACRAMENTO DISTRICT 1325 J STREET SACRAMENTO, CA 95814-3022 	DESIGNED BY: K. FELLOWS DRAWN BY: S. BENNETT CHECKED BY: J. HETTLER SUBMITTED BY: K. FELLOWS DATE: 11/17/2020 SIZE: 11x17	ISSUE DATE: FEB 2020 SOLICITATION NO.: WAF03A-SK-2000X CONTRACT NO.: WAF03A-FI-2-0027 DESIGN FILE NO.: B-06-0205 FILE NAME: B-06-0205-020.dwg	MARK DESCRIPTION DATE	U.S. Army Corps of Engineers
	65% SUBMITTAL					