

**Addendum No. 4 to the
Environmental Impact Report on the
American River Watershed Common Features Project/
Natomas Post-authorization Change Report/
Natomas Levee Improvement Program
Phase 4b Landside Improvements Project**



Prepared for:



Sacramento Area Flood
Control Agency

May 2019

State Clearinghouse
No. 2009112025

Prepared by:



Consulting
Engineers and
Scientists

Addendum No. 4 to the Environmental
Impact Report on the
**American River Watershed
Common Features Project/
Natomas Post-authorization
Change Report/Natomas Levee
Improvement Program
Phase 4b Landside Improvements
Project**

State Clearinghouse No. 2009112025

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May 2019

Project No. 1602400

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Abbreviations and Acronyms

APN	Assessor's Parcel Number
ARCF GRR	American River Common Features General Reevaluation Report
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
I-5	Interstate Highway 5
NCC	Natomas Cross Canal
NEMDC	Natomas East Main Drainage Canal
NLIP	Natomas Levee Improvement Program
PGCC	Pleasant Grove Creek Canal
RD	Reclamation District
SAFCA	Sacramento Area Flood Control Agency
SR	State Route
USACE	U.S. Army Corps of Engineers
VELB	Valley elderberry longhorn beetle

1. Introduction

This Addendum No. 4 to the Final Environmental Impact Report (EIR) for the American River Watershed Common Features Project/Natomas Post-authorization Change Report/Natomas Levee Improvement Program (NLIP), Phase 4b Landside Improvements Project (Phase 4b Project) (State Clearinghouse No. 2009112025) (SAFCA 2010), addresses proposed minor modifications and refinements to the improvements proposed in Reach I on the American River North Levee. These proposed minor modifications and refinements involve modifications to the construction schedule, new staging areas, and increase of the area affected by 24-hour construction, as described in more detail in Section 4, below. Appendix A includes maps illustrating the location of project features.

2. Summary of Previous Environmental Review Process

The U.S. Army Corps of Engineers (USACE), Sacramento District, as lead agency under the National Environmental Policy Act (NEPA), and the Sacramento Area Flood Control Agency (SAFCA), as lead agency under the California Environmental Quality Act (CEQA),¹ prepared a joint Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) for the American River Watershed Common Features Project/Natomas Post-authorization Change Report/NLIP, Phase 4b Project, and distributed the Draft EIS/EIR on July 2, 2010 for a 45-day public review period. Four public meetings were held in Sacramento and in the Natomas Basin during the public comment period.

The public comment period on the Draft EIS/EIR ended on August 16, 2010. A Final EIS/EIR document was published by SAFCA on October 22, 2010 and certified by the SAFCA Board of Directors on November 12, 2010. The Draft and Final EIS/EIR are available at SAFCA's offices at 1007 7th Street, 7th Floor, Sacramento, CA 95814 and online at SAFCA's Web site (http://www.safca.org/Programs_Natomas.html).

Table 1 contains a summary of previous environmental documentation prepared for the NLIP and identifies specific analysis topics relevant to the project refinements and modifications analyzed in this Addendum No. 4 to the EIS/EIR for the Phase 4b Project.

¹ CEQA is found at California Public Resources Code, Sections 21000 et seq., and the State CEQA Guidelines are found at California Code of Regulations, Title 14, Section 15000 et seq.

Table 1. Natomas Levee Improvement Program Environmental Documentation

Programmatic & Phase 1 Project (SCH 2006072098)	Not related to project changes analyzed in this Addendum.
Environmental Impact Report (EIR) on Local Funding Mechanisms for Comprehensive Flood Control Improvements for the Sacramento Area (February 2007)	
Phase 2 Project (SCH 2007062016)	Not related to project changes analyzed in this Addendum.
Final EIR on the Natomas Levee Improvement Program (NLIP) [Phase 2] Landside Improvements Project (LIP) (November 2007)	
Supplement No. 1 (January 2009)	
Addendum No. 1 (June 2009)	
Addendum No. 2 (August 2009)	
Supplemental No. 2 (October 2012)	
Phase 3 Project (SCH 2008072060)	Not related to project changes analyzed in this Addendum.
Final EIR on the NLIP Phase 3 LIP (May 2009)	
Addendum No. 1 (September 2009)	
Addendum No. 2 (August 2011)	
Addendum No. 3 (July 2014)	
Addendum No. 4 (May 2017)	
Phase 4a Project (SCH 2009032097)	Not related to project changes analyzed in this Addendum.
Final EIR on the NLIP Phase 4a LIP (November 2009)	
Addendum No. 1 (February 2011)	
Addendum No. 2 (April 2012)	
Addendum No. 3 (July 2012)	
Addendum No. 4 (March 2015)	
Addendum No. 5 (November 2018)	
Phase 4b Project (SCH 2009112025)	
Environmental Impact Statement/EIR on the American River Watershed Common Features Project/Natomas Post-authorization Change Report/ NLIP, Phase 4b LIP (October 2010)	Analysis included potentially significant environmental impacts in Reach I to flatten slopes, construct cutoff walls, and borrow from the Fisherman’s Lake Borrow Area and the West Lakeside School Site.
Addendum No. 1 (April 2018)	Not related to project changes analyzed in this Addendum.
Addendum No. 2 (September 2018)	Analyzed modifications to construction schedule. Analyzed use of the Hewitt and Reach 19A sites for soil disposal activities and for construction staging.
Addendum No. 3 (December 2018)	Not related to project changes analyzed in this Addendum.
Addendum No. 4	This addendum contains analysis of additional staging areas off Azusa Street and Morell Street and 24-hour construction near Interstate Highway 5 and Garden Highway.

3. Summary of the Phase 4b Project

The Phase 4b Project addresses underseepage, stability, erosion, penetrations, and levee encroachments along approximately 3.4 miles of the Sacramento River east levee (Reach A:16–20), approximately 1.8 miles of the American River north levee (Reach I:1–4), approximately 6.8 miles of the Natomas East Main Drainage Canal (NEMDC) west levee (Reach F–G), approximately 3.3 miles of the Pleasant Grove Creek Canal (PGCC) west levee (Reach E), and the gaps left in the improvements of previous phases at levee penetrations and road crossings on the Natomas Cross Canal (NCC) south levee. Plate 1 in Appendix A illustrates the reaches and phases of the NLIP project.

The Phase 4b project includes the following actions to address underseepage, stability, erosion, penetrations, and encroachments:

- Constructing an adjacent levee along the Sacramento River east levee Reach A:16–20 and installing cutoff walls, seepage berms, and relief wells where required for this levee (Reach A).
- Installing a cutoff wall in the American River north levee east of Gateway Oaks Drive to Northgate Boulevard and landside slope flattening (Reach I).
- Raising the NEMDC west levee in place or widening the levee from just south of Elkhorn Boulevard to Sankey Road, as well as landside slope flattening and seepage remediation as necessary (Reaches F and G).
- Constructing waterside erosion protection in locations along the PGCC and NEMDC (south of Elkhorn Boulevard) (Reaches E, G and H).
- Upgrading or removing culverts located beneath the PGCC and providing replacement flood storage as needed (Reach E).
- Installing seepage remediation at the State Route (SR) 99 crossing of the NCC and constructing a moveable barrier system to prevent overflow from reaching the landside of the NCC south levee (Reach D).
- Realigning the western portion of the West Drainage Canal to the south and improving the remaining portion of the existing canal to reduce bank erosion and sloughing, decrease aquatic weed infiltration, improve Reclamation District (RD) 1000 maintenance access, and enhance giant garter snake habitat connectivity.
- Relocating irrigation canals and ditches, either to make room for expanded levee sections or to reduce underseepage potential.
- Raising discharge pipes for RD 1000 pumping plants and City of Sacramento sump pumps to cross the levee above design flood water surface elevation.
- Excavating and reclaiming parcels in the South Fisherman’s Lake and Triangle Properties Borrow Areas and at the West Lakeside School Site as agricultural land.

- Establishing woodland groves to compensate for impacts along the Sacramento River east levee Reach A:16–20, American River north levee Reach I:1-4, and NEMDC.
- Acquiring right-of-way to construct, operate, and maintain the improvements.

4. Modifications and Refinements to the Project

4.1 Minor Project Refinements with No Environmental Impacts Not Evaluated in Detail

The minor project refinements listed below would result in no new environmental impacts and would not increase the severity of impacts previously evaluated in the prior EIR, and therefore are not evaluated further in this Addendum.

4.1.1 Construction Schedule Changes

The construction schedule described in the EIS/EIR for the Phase 4b Project stated that cutoff wall and landside improvements would be constructed during a 1-year period in late 2012 and 2013. The 2nd Addendum to the EIS/EIR for the Phase 4b Project addressed modifications to this schedule to include construction in 2018 and/or 2019. This Addendum addresses further modifications to the schedule to include construction between mid-April and November 2019, with revegetation and restoration work would be completed in the spring of 2020. Use of traffic controls, and the duration of road closures, including partial closures, would be consistent with the 6-month total closure of the Garden Highway in Reach I described in the EIS/EIR for the Phase 4b Project and the additional partial closures described in the 2nd Addendum to the EIS/EIR for the Phase 4b Project. Because the proposed changes do not increase the overall duration of the construction period, no further evaluation is required.

4.2 Minor Project Refinements Evaluated in Detail

4.2.1 New Staging Areas

The proposed modifications and refinements include new staging areas. No ground disturbance or tree removal would occur at any of the new staging areas. Attachment A contains plates illustrating the location of new staging areas.

New areas being considered for staging are on privately-owned parcels along Azusa Street (Assessor's Parcel Numbers [APNs] 274-0092-019 [1.0 acre], 274-0101-004 [1.0 acre], and 274-0101-005 [0.5 acre], Plate 3 in Attachment A) and an area just east of Morell Street (APN 274-0670-022 [0.33 acre], Plate 4 in Attachment A) owned by SAFCA. The proposed staging area on APNs 274-0101-004 and 274-0101-005 along Azusa Street was previously cleared of vegetation by the landowner in a separate and unrelated action; the landowner vegetation clearing is not a component of this project. One portion of the privately-owned parcel located along Azusa Street contains an elderberry shrub with one stem

greater than 5 inches and several stems greater than 1 inch. Several holes that could indicate presence of the Valley elderberry longhorn beetle (VELB) are visible on one of the stems. USACE has instructed the construction contractor to provide a 100-foot buffer around this shrub in order to avoid any potential impacts to the shrub or the beetle.

The area located just east of Morell Street is adjacent to a Sacramento Municipal Utility District (SMUD) and Western Area Power Administration (WAPA) electric powerline easement on land owned by the City of Sacramento. These areas may be used for batch plants (onsite mixing of the cement-bentonite slurry for cutoff walls) and temporary material storage during construction of the cutoff wall between Northgate Boulevard and Truxel Road.

Alternate staging areas, as identified by Addendum No.2, could include the Reach 19A (Plate 5 in Attachment A) or Hewitt disposal areas (Plate 6 in Attachment A). The top of the levee and Garden Highway could also be used for staging areas and batch plant operations during full road closure, as identified in the Phase 4b EIS/EIR.

4.2.2 24-Hour Construction

Due to changes in the construction schedule and sequencing, up to 13 weeks of 24-hour construction in the vicinity of Garden Highway and the Interstate Highway 5 (I-5) bridges would occur. This construction would extend from west of the I-5 bridge to an overhead power line to the east of the on-ramp to I-5 northbound from Garden Highway westbound (approximately Station 15+00 to Station 30+00 on Plate 2-9 in Attachment A). An apartment complex recently opened at the northwest corner of Garden Highway and Natomas Park Drive, and portions of this complex are within 500 feet of the work areas where 24-hour construction is proposed. Although the majority of the work area where 24-hour construction would occur is more than 500 feet from the nearest building in this complex, nighttime work, and access for nighttime work, could occur within 500 feet of future residents.

5. Standard for Preparation of an Addendum

If, after adoption of an EIR, altered conditions or changes or additions to a project are proposed, the State CEQA Guidelines provide three ways to address these changes: a Subsequent EIR (Section 15162), a Supplemental EIR (Section 15163), or an Addendum (Section 15164).

State CEQA Guidelines Section 15162² describe the conditions when preparing a Subsequent EIR is required.³ A Subsequent EIR is appropriate if the lead agency determines, on the basis of substantial evidence in light of the whole record, that one or more of the following conditions is met:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified, shows any of the following:
 - The project will have one or more significant effects not discussed in the previous EIR;
 - Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

State CEQA Guidelines Section 15164 states that a lead agency may prepare an Addendum to a certified EIR if some changes or additions are necessary, but none of the conditions described above in Sections 15162 or 15163 calling for the preparation of a Subsequent or Supplemental EIR have occurred.

As explained in the analysis in Section 6, “Environmental Analysis,” the proposed minor modifications and refinements to the project would not:

- result in any new significant or potentially significant environmental effects, or
- result in a substantial increase in the severity of previously identified significant or potentially significant effects.

In addition, no new information of substantial importance has arisen that shows that:

² See State CEQA Guidelines, Section 15162(a)(1)-(3).

³ A Supplemental EIR is required if any of the conditions described in Section 15162 would require preparation of a Subsequent EIR, but only minor additions or changes would be necessary to make the previous EIR adequate. State CEQA Guidelines, Section 15163(a)(1)-(2).

- the project would have new significant or potentially significant effects,
- the project would have substantially more intense or severe effects,
- mitigation measures previously found to be infeasible would in fact be feasible, or
- mitigation measures that are considerably different from those analyzed in the EIR would substantially reduce one or more significant or potentially significant effects on the physical environment.

Because none of the conditions described in Section 15162 of the State CEQA Guidelines calling for preparation of a Subsequent EIR have occurred, an Addendum to the EIR, consistent with Section 15164 of the State CEQA Guidelines, is the appropriate CEQA document to evaluate the proposed modifications and refinements to the project and substantiate that none of the conditions described in Section 15162 have occurred.

6. Environmental Analysis

This section of the Addendum analyzes the potential effects on the physical environment from implementing the proposed minor modifications and refinements to the project. This analysis has been prepared to determine whether any of the conditions in State CEQA Guidelines Section 15162 (described in Section 5) would occur as a result of the proposed modifications and refinements.

The proposed project modifications and refinements described in in Section 4 would not cause any new significant or potentially significant impacts or a substantial increase in the severity of the impacts analyzed and disclosed in the prior EIR for the following topic areas, because the activities associated with the proposed modifications and refinements would result in negligible additional impacts that would not substantially increase the impact magnitude identified in the prior EIR:

- Agricultural Resources
- Land Use, Socioeconomics, and Population and Housing
- Geology, Soils, and Mineral Resources
- Hydrology and Hydraulics
- Water Quality
- Cultural Resources
- Paleontological Resources
- Transportation and Circulation
- Air Quality
- Recreation
- Utilities and Service Systems
- Hazards and Hazardous Materials
- Environmental Justice

The following topic areas may be affected by the proposed modifications and refinements to the project and, therefore, are analyzed below:

- Biological Resources
- Noise
- Visual Resources

6.1 Biological Resources

No vegetation clearing is proposed at the potential new staging areas identified in Section 4.2 and illustrated in Attachment A.

One portion of the privately-owned parcel located along Azusa Street contains an elderberry shrub with one stem greater than 5 inches and several stems greater than 1 inch. Several holes that could indicate presence of the Valley elderberry longhorn beetle (VELB) are visible on one of the stems. USACE has instructed the construction contractor to provide a 100-foot buffer around this shrub in order to avoid any potential impacts to the shrub or the beetle, and no impacts are anticipated.

The EIS/EIR for the Phase 4b project identified a potentially significant impact related to potential loss of or direct impact to elderberry shrubs and/or potential loss of VELB. Previously adopted Mitigation Measure 4.7-g (Conduct Focused Surveys for Elderberry Shrubs as Needed, Implement All Woodland Habitat Improvements and All Management Agreements, Ensure Adequate Compensation for Loss of Shrubs, and Obtain Incidental Take Authorization) requires exclusionary fencing for all elderberry shrubs that are within 100-feet of the construction footprint. Implementing a 100-foot buffer around the elderberry shrub at the Azusa Street parcel, as required by USACE, would be consistent with Mitigation Measure 4.7-g requirements, and the proposed project modifications and refinements would not result in new or substantially more severe impacts to biological resources beyond those described and disclosed in the EIS/EIR for the Phase 4b project.

6.2 Noise

The relocation of an existing water line would require full closure of Garden Highway under the I-5 Bridges, and relocation of a water line would be conducted under a 24-hour per day work schedule, resulting in nighttime noise at a new location. The construction work area where 24-hour per day work would occur extends eastward to an overhead power line at approximately the western property boundary of a recently-opened apartment complex which is located at the northwest corner of the Natomas Park Drive and Garden Highway intersection. Portions of the complex are within 500 feet of an area proposed to be subject to 24-hour construction that was not identified in the EIS/EIR for the Phase 4b Project. USACE is currently coordinating with the property owner and will coordinate with residents. No other sensitive receptors are near the water line relocation area. As discussed below, pursuant to previously adopted Mitigation Measure 4.12-a, if residents are present when construction occurs, mitigation will include offers to residents of temporary relocation reimbursement in accordance with Mitigation Measure 4.12-a.

The EIS/EIR for the Phase 4b Project, in the discussion of Impact 4.12-a, identified a significant and unavoidable impact, with mitigation, related to two to three months of 24-hour construction due to the potential presence of noise-sensitive land uses (residences) within 500 feet of 24-hour construction areas. The discussion in the EIS/EIR identified 24-hour construction in rural areas only, with no 24-hour construction identified in Reach I. As disclosed in the EIR, Mitigation Measure 4.12-a (Implement

Noise-Reducing Construction Practices, Prepare and Implement a Noise Control Plan, and Monitor and Record Construction Noise Near Sensitive Receptors), which was adopted and incorporated into the project, would reduce this impact, but not to a less-than-significant level. This mitigation measure includes providing reasonable reimbursement for hotel or short-term rental stays to impacted residents for the duration of nighttime construction within 500 feet of their residence.

The proposed modifications and refinements include construction in an area not previously identified for 24-hour construction. The proposed modifications and refinements include up to 13 weeks of 24-hour construction, with potential exposure by future residents in one apartment complex. Only approximately one-third of the new night time work area is located within 500 feet of apartment residents, however, and the duration of noise exposure for any individual resident would likely be less than 13 weeks. Mitigation Measure 4.12-a would be implemented to reduce impacts consistent with the EIS/EIR for the Phase 4b Project. The proposed modifications and refinements would not result in new or substantially more severe noise impacts beyond those described and disclosed in the EIS/EIR for the Phase 4b Project, which would remain significant and unavoidable, because they would be approximately the same duration and the previously adopted mitigation measure would continue to apply.

6.3 Visual Resources

The proposed new area of 24-hour construction would require proper lighting to facilitate construction and ensure worker safety.

The EIS/EIR for the Phase 4b Project, in the discussion of Impact 4.14-b, identified a significant impact related to new sources of light and glare that adversely affect views and identified Mitigation Measure 4.14-b (Direct Lighting Away from Adjacent Properties), which was adopted and incorporated into the project, to reduce this impact, but not to a less-than-significant level. This mitigation measure requires that nearby residents be notified in advance of any nighttime construction activities, and that construction and security lighting be shielded and directed downward to minimize the spill of light onto adjacent properties.

The portion of Garden Highway where 24-hour construction would occur is relatively dark, and lights would be required for nighttime work. The I-5 Bridges would block most of the light from shining onto I-5, and implementing Mitigation Measure 4.14-b would require that lighting be directed away from nearby residents of the apartment complex. The proposed modifications and refinements would not result in new or substantially more severe visual impacts beyond those described and disclosed in the EIS/EIR for the Phase 4b project, which would remain significant and unavoidable, because they would be approximately the same duration and the previously adopted mitigation measure would continue to apply.

7. Conclusions

As described in the preceding sections, the proposed minor modifications and refinements to the project do not require any revisions to the prior EIR because no new or substantially more severe significant

environmental impacts or potentially significant environmental impacts would result from the proposed modifications and refinements to the project. Section 15162 thresholds would not be triggered.

Based on the analysis in Section 6, “Environmental Analysis,” the proposed modifications and refinements to the project as described in this Addendum would not result in any of the conditions described in Section 15162 of the State CEQA Guidelines calling for preparation of a Subsequent EIR or Supplemental EIR. In summary, the proposed modifications and refinements to the project would not

- result in any new significant or potentially significant environmental effects,
- substantially increase the severity of previously identified effects,
- result in mitigation measures or alternatives previously found to be infeasible becoming feasible, or
- result in availability/implementation of mitigation measures or alternatives that are considerably different from those analyzed in the prior EIR that would substantially reduce one or more significant or potentially significant effects on the physical environment.

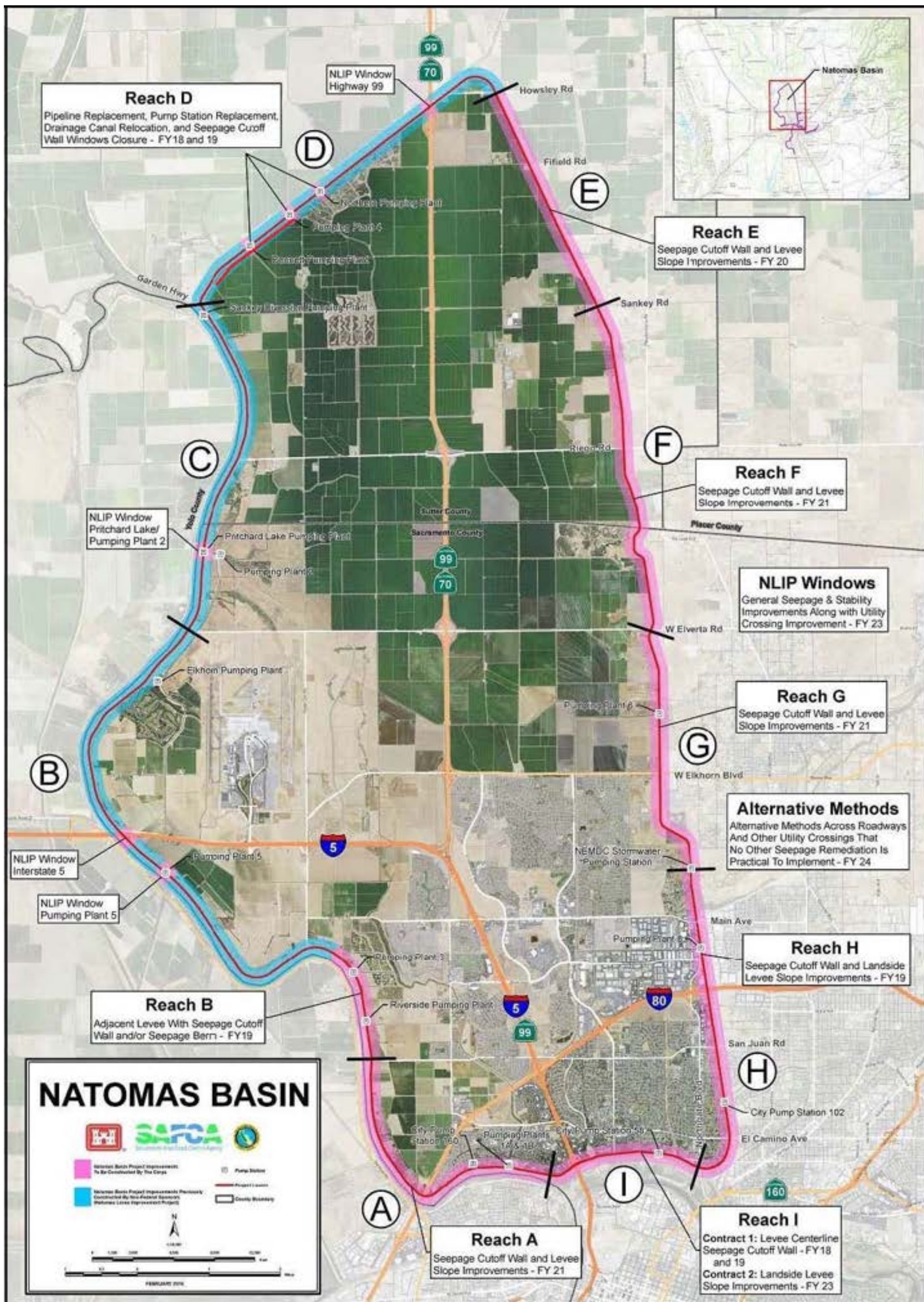
These conclusions confirm that a Subsequent or Supplemental EIR is not warranted, and this Addendum No. 4 to the prior EIR pursuant to State CEQA Guidelines Section 15164 is the appropriate CEQA document to evaluate and document the modifications and refinements (i.e., modifications to construction schedule, modifications to staging areas, and addition of a 24-hour urban construction period) to the project, and resulting impacts thereof. No changes are needed to the certified EIR or the adopted Mitigation Monitoring and Reporting Program for the project.

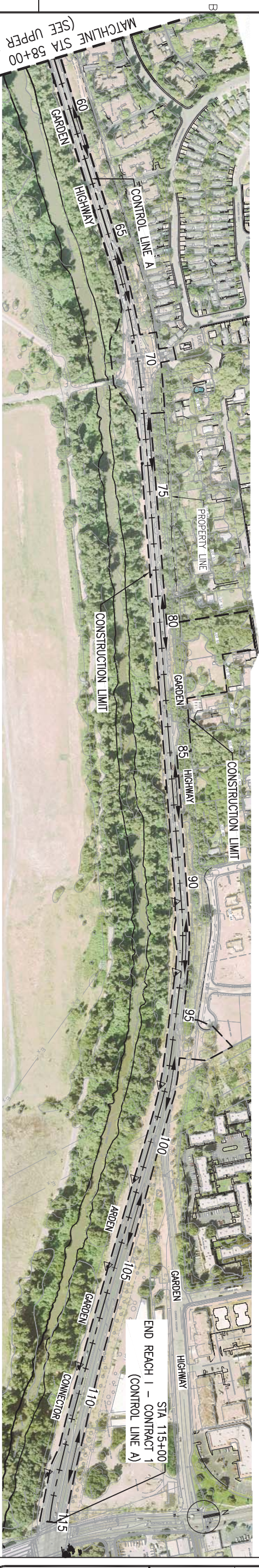
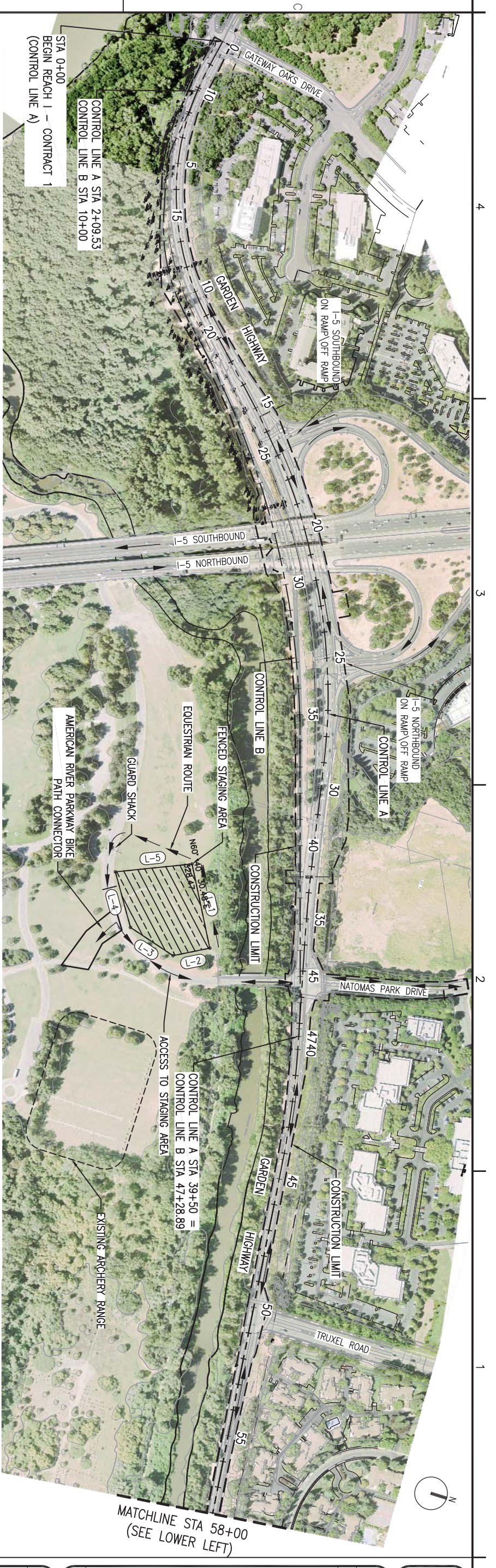
8. References

United States Army Corps of Engineers, Sacramento District. 2019a (January) *Memorandum for Record: American River Common Features Natomas Basin Project, Reach I Construction Schedule Updates*. Sacramento, CA.

United States Army Corps of Engineers, Sacramento District. 2019b (April) *Draft Memorandum for Record: American River Common Features Natomas Basin Project, Reach I Staging Areas and Construction Schedule Updates*. Sacramento, CA.

Attachment A: Plates

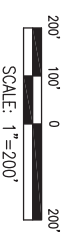




STAGING AREA 1 BOUNDARY DATA

LINE CURVE	LINE/CHORD BEARING	DISTANCE	CHORD DISTANCE	RADIUS	POINT	NORTHING	EASTING
L-1	N60°40'30"E	328.47'	NA	NA	0+00.00	1982933.99	6703874.11
L-2	S28°57'19"E	143.41'	NA	NA	3+28.47	1983094.86	6703943.53
L-3	S16°10'34"W	194.86'	NA	NA	4+71.88	1982969.37	6703889.25
L-4	S57°21'46"W	219.91'	NA	NA	6+66.73	1982782.23	6703704.07
L-5	N23°16'56"W	294.32'	NA	NA	8+86.64	1982663.63	6703587.73

- GENERAL NOTES:**
1. THE CONTRACTOR SHALL LIMIT ACTIVITIES TO WITHIN THE CONSTRUCTION LIMIT AND STAGING AREA FOR THE WORK REQUIRED PER THIS CONTRACT.
 2. SEE SHEET G-103 AND G-104 FOR CONSTRUCTION LIMIT INFORMATION.
 3. STAGING AREA SHALL BE LIMITED TO TRAILERS AND STORAGE OF EQUIPMENT AND CONSTRUCTION MATERIAL ONLY. THE BATCH PLANT SHALL BE LOCATED ON TOP OF THE EXISTING LEVEE AS NOTED ON C-101 THROUGH C-113. PROVIDE PROTECTIVE FENCING AND PROJECT ALL TREES IN STAGING AREA.



100%
NOT FOR CONSTRUCTION



Symbol	Description	Date	Approved

Prepared by: Blake A. Brown, P.E.	Date: 07/2016	Rev.
Dwn by: RD	Spec No.: 1793	Design file no: 1-04-0570
Reviewed by: Peter Hradelik, P.E.	Submitted by: Wesley Jacobs, P.E.	Drawing Code: -
File name: G-106.DWG	Plot date:	Dwg scale: AS_NOTED

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

HDR WZA
2365 IRON POINT ROAD, SUITE 300
FOLSOM, CA 95360

SACRAMENTO COUNTY CALIFORNIA
AMERICAN RIVER COMMON FEATURES PROJECT
NATOMAS BASIN
REACH 1 - CONTRACT 1 STA 0+00 TO STA 115+00

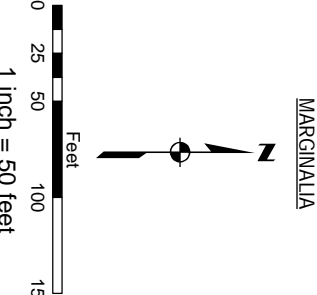
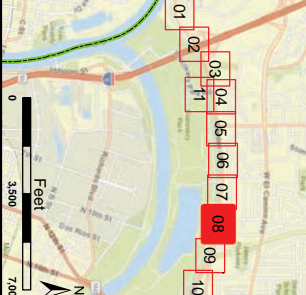
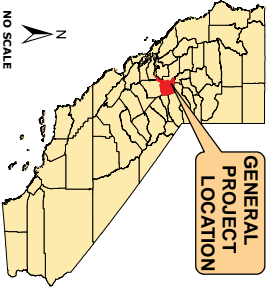
HAUL ROUTES AND STAGING AREAS

Sheet reference number:
G-106
Sheet 12 of 133

Path: G:\GIS_PROJECTS\CIVIL_WORKS\ARCF\GRR\Natomas_GRR\Natomas_90%_2016\Project\Reach_1\20190312_Nat90_Reach_1_Ph1_1.mxd



Special notes:
 1) This information is NOT intended as a substitute for a field survey by a licensed professional, or an application that requires legal or engineering accuracy.
 2) This information is not a representation of ground features projected on to the Earth's surface by computer programs from raw data obtained from local government agencies and is not necessarily in whole, or in part, based upon any specific survey or other professional information or otherwise, of the covered properties.



ACQUISITION AUTHORIZATION
 Estates created using Eng. Division Civil Design drawing: 1-04-0570C-CG01XX.dwg, 06/05/16
 MJD 1983 2011, 6/5/2011, 11:00:00 AM, 11:00:00 AM
 Projection: NAD 1983 2011
 Datum: NAD 1983 2011
 Units: Feet US

PROJECT MAP
 As Applicable
 DEPARTMENT OF THE ARMY
 USING SERVICE U.S. ARMY
 LOCATION OF PROJECT
 STATE CALIFORNIA
 COUNTY SACRAMENTO
 DIVISION SOUTH PACIFIC DIVISION (SPD)
 DISTRICT SACRAMENTO (SPK)
 ARMY AREA 6TH ARMY
 20 Miles S.W. OF ROSEVILLE

TRANSPORTATION FACILITIES
 STATE ROADS US HWY 5 & 80
 FEDERAL ROADS STATE HWY 80
 AIRPORTS SACRAMENTO INT. AIR. (SMF)

ACQUISITION
 TOTAL ACRES ACQUIRED NO AREA
 FEE WITHDRAWN
 PUBLIC DOMAIN USE PERMIT
 USE PERMIT (Other than PD)
 TRANSFER WITHDRAWN
 LEASE USE PERMIT
 EASEMENT RESERVED
 IN FEE DISPOSAL
 LESSOR INTERESTS EASEMENT
 LICENSE

DISPOSAL
 TOTAL ACRES DISPOSED NO AREA
 SOLD
 PUBLIC DOMAIN (WITHDRAWN)
 USE PERMIT (USE PERMIT)
 USE PERMIT (Other than PD)
 TRANSFERRED (FEE)
 LEASES TERMINATED
 LESSOR INTERESTS TERM
 REASSIGNED
 ACRES TO

LEGEND
 EXCEPT FOR SPECIAL SYMBOLS SHOWN BELOW, MAP SYMBOLS ARE STANDARD IN U.S. ARMY FIELD MANUAL, FM 21-31, TOPOGRAPHIC SYMBOLS, DEC. 1968

- PARCEL
- F.P.L.E.
- T.W.A.E. - Constr
- T.W.A.E. - Staging
- Pipeline Easement

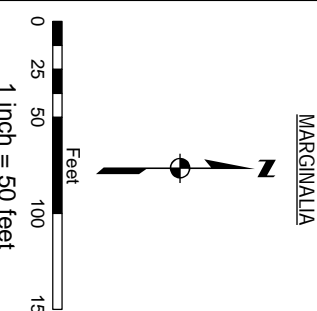
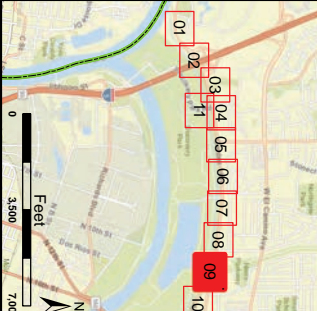
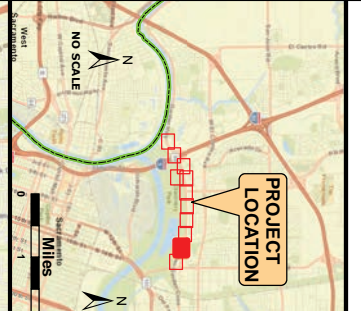
REAL ESTATE OWNERSHIP/ESTATE MAP
 DEPARTMENT OF THE ARMY
 OFFICE OF THE SACRAMENTO DISTRICT ENGINEER
 SOUTH PACIFIC DIVISION

REAL ESTATE DIVISION
 SACRAMENTO COUNTY
 CARTOGRAPHER J. HENKSEL
 CHECKED BY Leo Castrol Group
 SUBMITTED BY Jim Harrison
 RECOMMENDED BY James Oliver
 CHIEF, REAL ESTATE DIVISION
 APPROVED BY Adam Olson
 CHIEF, REAL ESTATE DIVISION
 OFFICE CHIEF OF ENGINEERS, WASHINGTON 25, D.C.
 REMIS CODE: 08
 REMIS UNIQUE ID: 12
 INSTALLATION OR PROJECT #
 SHEET 08 OF 12 DRAWING NO.

Path: G:\GIS_PROJECTS\CIVIL_WORKS\ARCF\GRR\Natomas_GRR\Natomas_90%_2016\Project\Reach_1\20190312_Nat90_Reach_1_Phs_1.mxd



Special notes:
 1) This information is NOT intended as a substitute for a field survey by a licensed professional, or an application that requires legal or engineering accuracy.
 2) Features protected on to the Earth's surface by computer programs from raw data obtained from local government agencies and is not necessarily in whole, or in part, based upon otherwise, of the covered properties.



Coordinate System: 1
 NAD 1983 2011 Geoid
 Projection: UTM
 Datum: NAD 1983 2011
 Units: Foot US

ACQUISITION AUTHORIZATION
 Estates created using Eng.
 Division Civil Design drawing:
 1-04-0570C-CG01XX.dwg, 06/05/16

PROJECT MAP
 As Applicable
FINAL

DEPARTMENT OF THE ARMY
 USING SERVICE U.S. ARMY

LOCATION OF PROJECT
 STATE CALIFORNIA
 COUNTY SACRAMENTO
 DIVISION SOUTH PACIFIC DIVISION (SPD)
 DISTRICT SACRAMENTO (SPK)
 ARMY AREA 6TH ARMY
 20 Miles S.W. OF ROSEVILLE

TRANSPORTATION FACILITIES
 STATE ROADS US HWY 5 & 80
 FEDERAL ROADS STATE HWY 80
 AIRPORTS SACRAMENTO INT. AIR. (SMF)

ACQUISITION
 TOTAL ACRES ACQUIRED NO AREA
 FEE

PUBLIC DOMAIN (WITHDRAWN)
 USE PERMIT (Other than PD)
 TRANSFER (WITHDRAWN)
 LEASE (USE PERMIT)
 EASEMENT RESERVED
 IN FEE DISPOSAL (EASEMENT)
 LESSOR INTERESTS (PERMIT)
 LICENSE

DISPOSAL
 TOTAL ACRES DISPOSED NO AREA

SOLD
 PUBLIC DOMAIN (WITHDRAWN)
 USE PERMIT (Other than PD)
 TRANSFERRED (FEE)
 LEASES TERMINATED
 LESSOR INTERESTS TERM
 REASSIGNED
 ACRES TO

LEGEND
 EXCEPT FOR SPECIAL SYMBOLS SHOWN BELOW, MAP SYMBOLS ARE STANDARD IN U.S. ARMY FIELD MANUAL, FM 21-31, TOPOGRAPHIC SYMBOLS, DEC. 1968

PARCEL
 F.P.L.E.
 T.W.A.E. - Constr
 T.W.A.E. - Staging
 Pipeline Easement

REAL ESTATE OWNERSHIP/ESTATE MAP

DEPARTMENT OF THE ARMY
 OFFICE OF THE SACRAMENTO DISTRICT ENGINEER
 SOUTH PACIFIC DIVISION

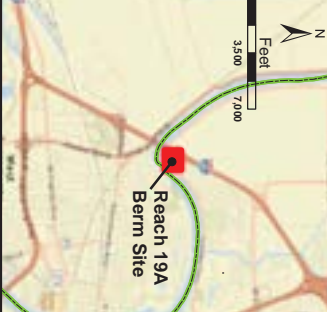
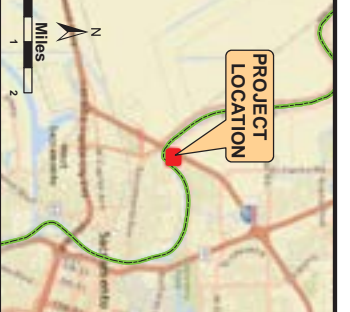
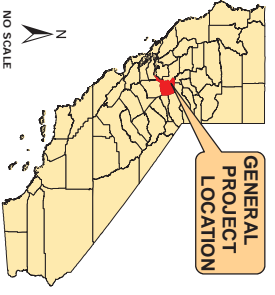
SACRAMENTO COUNTY
 REAL ESTATE DIVISION
 ARCF Project, REACH I
 Contract 1 - Natomas Basin

CARTOGRAPHER: J. HENKSEL
 CHECKED BY: Jim Harrison
 SUBMITTED BY: LEAO CASARAL GROUP
 RECOMMENDED BY: Adam Olson
 APPROVED BY: CHEF, REAL ESTATE DIVISION
 OFFICE CHIEF OF ENGINEERS, WASHINGTON 25, DC.
 REMIS CODE: DATE Saved: 3/12/2019 8:48:05 AM
 REMIS UNIQUE ID: THE SHIRT ORIGINALLY FORMATTED TO ANSI D 27734
 SHEET 09 OF 12 DRAWING NO.

Path: G:\CIVIL_WORKS\ARCFC\RR\Natomas_GRR\Natomas_90%_2016\Project\Reach_1\20160901_Nat90_Reach_1_Contr_1_Berm.mxd



Special notes:
 1) This information is NOT intended as a substitute for a field survey by a licensed professional, or an application that requires legal or engineering accuracy.
 2) This information is only a representation of ground features projected on to the Earth's surface by computer programs from raw data obtained from local government agencies and is not necessarily in whole, or in part, based upon otherwise, of the covered properties.



ACQUISITION AUTHORIZATION
 Estates created using Eng. Division Civil Design drawing: C-203.dwg, 08/29/16

ACQUISITION
 TOTAL ACRES ACQUIRED NO AREA

TRANSPORTATION FACILITIES
 STATE ROADS US HWY 5 & 80
 FEDERAL ROADS STATE HWY 80
 AIRPORTS SACRAMENTO INT. AIR. (SME)

ACQUISITION
 TOTAL ACRES ACQUIRED NO AREA

DISPOSAL
 TOTAL ACRES DISPOSED NO AREA

LEGEND
 EXCEPT FOR THE SYMBOLS SHOWN BELOW, MAP SYMBOLS ARE STANDARD IN U.S. ARMY FIELD MANUAL, FM 21-31, TOPOGRAPHIC SYMBOLS, DEC. 1968

- Parcel
- FPLE (Reach 19A Berm)
- Haul Route

REAL ESTATE OWNERSHIP/ESTATE MAP

DEPARTMENT OF THE ARMY
 OFFICE OF THE SACRAMENTO DISTRICT ENGINEER
 SOUTH PACIFIC DIVISION

CARTOGRAPHER: J. HENKSEL
 CHECKED BY: STEVE J. CAREY
 SUBMITTED BY: LEAO CADASTRAL GROUP

RECOMMENDED BY: LISA M. NG
 DEPUTY CHIEF, REAL ESTATE DIVISION

APPROVED BY: DAWN M. SIMPSON
 CHIEF, REAL ESTATE DIVISION

DATE: _____

OFFICE CHIEF OF ENGINEERS, WASHINGTON 25, D.C.
 CONTRACT: 1 - Reach 19A Berm Site
 REMIS UNIQUE ID: _____

INSTALLATION OR PROJECT #: _____

DEPARTMENT OF THE ARMY
 OFFICE OF THE SACRAMENTO DISTRICT ENGINEER
 SOUTH PACIFIC DIVISION

CALIFORNIA

REAL ESTATE DIVISION
 ARCFC Project, REACH I
 Contract 1 - Reach 19A Berm Site
 - Natomas Basin

Date Saved: 9/1/2016 8:21:10 AM
 This sheet originally formatted to ANSI D 27.5x34"

SHEET 01 OF 01 DRAWING NO. _____

FINAL
 As Applicable

PROJECT MAP

DEPARTMENT OF THE ARMY
 USING SERVICE U.S. ARMY

LOCATION OF PROJECT

STATE CALIFORNIA
 COUNTY SACRAMENTO
 DIVISION SOUTH PACIFIC DIVISION (SPD)
 DISTRICT SACRAMENTO (SPK)
 ARMY AREA 6TH ARMY
 2.9 Miles W.A.W. OF SACRAMENTO
 OF _____

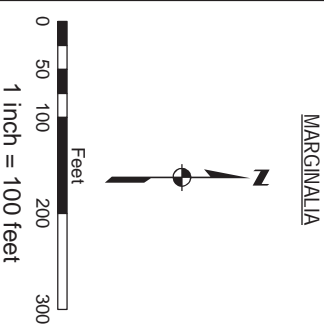
TRANSPORTATION FACILITIES
 STATE ROADS US HWY 5 & 80
 FEDERAL ROADS STATE HWY 80
 AIRPORTS SACRAMENTO INT. AIR. (SME)

ACQUISITION
 TOTAL ACRES ACQUIRED NO AREA

DISPOSAL
 TOTAL ACRES DISPOSED NO AREA

LEGEND
 EXCEPT FOR THE SYMBOLS SHOWN BELOW, MAP SYMBOLS ARE STANDARD IN U.S. ARMY FIELD MANUAL, FM 21-31, TOPOGRAPHIC SYMBOLS, DEC. 1968

- Parcel
- FPLE (Reach 19A Berm)
- Haul Route



Coordinate System: NAD 1983 2011 StatePlane California North Central FIPS 5002 Feet US
 Datum: NAD 1983 2011
 Units: Feet US

ACQUISITION AUTHORIZATION
 Estates created using Eng. Division Civil Design drawing: 1-04-0570C-SPXX12.dwg, 08/29/16

PROJECT MAP
 As Applicable
FINAL

DEPARTMENT OF THE ARMY
 USING SERVICE U.S. ARMY

LOCATION OF PROJECT
 STATE CALIFORNIA
 COUNTY SACRAMENTO
 DIVISION SOUTH PACIFIC DIVISION (SPD)
 DISTRICT SACRAMENTO (SPK)
 ARMY AREA 6TH ARMY
 7.5 Miles N.W. OF SACRAMENTO

TRANSPORTATION FACILITIES
 STATE ROADS US HWY 5 & 80
 FEDERAL ROADS STATE HWY 80
 AIRPORTS SACRAMENTO INT. AIR. (SMF)

ACQUISITION
 TOTAL ACRES ACQUIRED NO AREA
 FEE WITHDRAWN
 PUBLIC DOMAIN USE PERMIT
 USE PERMIT (Other than PD) WITHDRAWN
 TRANSFER USE PERMIT

LEASE EASEMENT RESERVED
 EASEMENT RESERVED IN FEE DISPOSAL
 LESSOR INTERESTS PERMIT LICENSE
 DISPOSAL
 TOTAL ACRES DISPOSED NO AREA
 SOLD WITHDRAWN
 PUBLIC DOMAIN USE PERMIT
 USE PERMIT (Other than PD) WITHDRAWN
 TRANSFERRED FEE
 LEASES TERMINATED
 LESSOR INTERESTS TERM REASSIGNED
 ACRES TO

LEGEND
 EXCEPT FOR SYMBOLS SHOWN BELOW, MAP SYMBOLS ARE STANDARD IN U.S. ARMY FIELD MANUAL, FM 21-31, TOPOGRAPHIC SYMBOLS, DEC. 1968

Parcel
 Hewitt Disp Site
 Haul Route

REAL ESTATE OWNERSHIP/ESTATE MAP

DEPARTMENT OF THE ARMY
 OFFICE OF THE SACRAMENTO DISTRICT ENGINEER
 SOUTH PACIFIC DIVISION

CALIFORNIA

REAL ESTATE DIVISION

CARTOGRAPHER: J. HENKSEL
 CHECKED BY: STEVE J. CAREY
 SUBMITTED BY: LISA M. NG
 DEPUTY CHIEF, REAL ESTATE DIVISION

APPROVED BY: DIANE M. SIMPSON
 CHIEF, REAL ESTATE DIVISION

DATE: _____

OFFICE CHIEF OF ENGINEERS, WASHINGTON 25, D.C.
 REMIS CODE: _____
 REMIS UNIQUE ID: _____

INSTALLATION OR PROJECT # _____

SHEET 01 OF 01 DRAWING NO. _____



Source: Proposed 4b Pumping Plant Footprints – Mead & Hunt September 2009; Existing Pumping Plant Locations – Mead & Hunt September 2009; Phase 4b American River Footprints – EDAW (now AECOM) September / October 2009

Proposed Phase 4b Project Features – American River North Levee Reach I:1–4