

**Meeting of the Central Valley Flood Protection Board
October 28, 2016**

Permit Staff Report

**Teichert Materials
Culvert Replacement, Sacramento County**

1.0 – ITEM

Consider approval of Permit No. 19118 BD. (Attachment B)

2.0 – APPLICANT

Teichert Materials.

3.0 – PROJECT LOCATION

The project is located at the intersection of Elder Creek and Elder Creek Road.
(Elder Creek, Sacramento County, see Attachment A)

4.0 – PROJECT DESCRIPTION

Applicant proposes to replace three existing 36-inch diameter culverts with four (4) 8-foot x 5-foot pre-cast concrete box culverts with culvert wing walls.

5.0 – AUTHORITY OF THE BOARD

California Water Code § 8534, 8590 – 8610.5, and 8700 – 8710

California Code of Regulations (CCR), Title 23 (Title 23):

- § 6, Need for a Permit
- § 13, Evidentiary Hearings
- § 112, Streams Regulated and Nonpermissible Work Periods

- § 120, Levees
- § 123, Pipelines, Conduits and Utility Lines
- § 125, Retaining Walls

6.0 – PROJECT ANALYSIS

Teichert Materials is requesting approval to replace three existing culverts with four new box culverts at Elder Creek where it crosses Elder Creek Road. The increase in size and number of culverts will account for larger flood events and will prevent overtopping onto Elder Creek Road. The new culverts will be longer than required to accommodate the County's future expansion plans to widen Elder Creek Road. The proposed culverts will be pre-cast concrete box culverts with dimensions of 8-feet wide by 5-feet tall. To provide 3-feet of freeboard along the west side of the culverts, 3-foot high berms will be constructed adjacent to the culvert wing walls (see Attachment C). Approximately 600 cubic yards of soil will be excavated to provide a stable soil base for the culverts and berm. After installation, approximately 6-inches of soil will be placed within the culverts to maintain an earthen bottom for the streambed channel. The flowline of the creek is not anticipated to change.

6.1 – Hydraulic Analysis

A one-dimensional (1D) hydraulic model of Elder Creek was developed using the USACE Hydrologic Engineering Center's River Analysis System (HEC-RAS). Proposed conditions were simulated for the both the 100 and the 200 year flood events. The analysis shows there will be no rise in water surface elevation greater than 0.03' for the 100-year event and 0.05' for the 200-year event. Based on Board staff's review, the proposed project is expected to have no significant adverse hydraulic impacts to Elder Creek.

6.2 – Geotechnical Analysis

A geotechnical analysis was not required for this project since there are no levees involved. However, a berm detail was provided for the project and the berm around the culverts will be designed per CCR Title 23 compaction standards.

7.0 – AGENCY COMMENTS AND ENDORSEMENTS

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- The U.S. Army Corps of Engineers 33 U.S.C. 408 decision letter has been received for this application. The USACE Sacramento District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project. The letter is incorporated into the permit as Exhibit A.

8.0 – CEQA ANALYSIS

Board staff has prepared the following California Environmental Quality Act (CEQA) findings:

The Board, acting as a responsible agency under CEQA, has independently reviewed the Draft Environmental Impact Report (DEIR, SCH No. 2015022062, May 2016), Final Environmental Impact Report (FEIR, SCH No. 2015022062, August 2016), Statement of Overriding Considerations and the Mitigation Monitoring and Reporting Plan (MMRP) for the Aspen VIII and IX Mining Use Permit Project prepared by the lead agency, Sacramento County (incorporated herein by reference). These documents, including project design, may be viewed or downloaded from the Board website at <http://cvfpb.ca.gov/event/october-2016-board-meeting/> under a link for this agenda item, and are also available for review in hard copy at the Board and Sacramento County offices.

Sacramento County, as the lead agency, determined that the project described in the FEIR would have a significant effect on the environment on September 27, 2016 and filed a Notice of Determination with the Sacramento County Clerk on September 30, 2016.

Based on its independent review of the FEIR, the Board finds that although the proposed project could have a potentially significant effect on the environment, revisions have been made to the project and/or agreed to by the project proponent that reduce the environmental impacts to less than significant. The Board finds that there are no direct or indirect environmental effects of the culvert work on Elder Creek which have not been previously addressed by the DEIR or FEIR. Sacramento County found that significant and unavoidable impacts to air quality and aesthetics related to the irreversible change of the landform within the project area; however these impacts are

not related to the proposed culvert installation as described above. Pursuant to CEQA, the Board as a responsible agency is responsible for mitigating and avoiding only the direct and indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve [CEQA Guidelines Section 15096(g); Public Resources Code § 21002.1(d)].

The project proponent has incorporated mandatory mitigation measures into the project plans to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. Moreover, such changes or alterations are within the responsibility and jurisdictions of another public agency, Sacramento County, and such changes have been adopted by that agency. These mitigation measures are included in the project proponent's FEIR and address impacts to agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous material, hydrology and water quality, noise, and public services. The description of the mitigation measures are further described in the certified FEIR.

The documents and other materials which constitute the record of the Board's proceedings in this matter are in the custody of the Executive Officer, Central Valley Flood Protection Board, 3310 El Camino Ave., Ste. 170, Sacramento, California 95821.

9.0 – CALIFORNIA WATER CODE SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on facilities of the State Plan of Flood Control (SPFC), and consistency of the proposed project with the Central Valley Flood Protection Plan (CVFPP) as adopted by Board Resolution 2012-25 on June 29, 2012:

This project has no adverse effects on facilities of the SPFC and is consistent with the CVFPP since there are no federal project levees within 5 miles of this project. The proposed culvert replacements are expected to result in no adverse hydraulic or geotechnical impacts and are consistent with current Title 23 standards.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

There are no anticipated negative effects as a result of the proposed project to reasonable projected future events since the project consists of oversized culverts designed to accommodate a 200-year flood event.

10.0 – STAFF RECOMMENDATION

Staff Recommends that the Board:

Adopt:

- The CEQA findings:

Approve:

- Encroachment Permit No. 19118 BD in substantially the form provided; and

Direct:

- The Executive Officer to take the necessary actions to execute the permit and file a Notice of Determination pursuant to CEQA with the State Clearinghouse.

11.0 – LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit No. 19118 BD
- C. Plans

Design Review:	Remy Gill
Environmental Review:	Andrea Buckley, Environmental Program Manager
Document Review:	Gary Lemon, PE, Permitting Section Chief
	Michael Wright, PE, Acting Operations Branch Chief
	Mitra Emami, PE, Acting Chief Engineer
Legal Review:	Kanwarjit Dua, Board Counsel

Attachment A



Elder Creek Rd

Teichert Culvert Replacement

Excelsior Rd

5

Rd

Teichert Aspen VIII and IX – Elder Creek Culvert Improvements
Central Valley Flood Protection Board Encroachment Permit Application
Site Photos
Page 1 of 4



Looking South at Elder Creek where it crosses Elder Creek Road.

Photo Date: 09 April 2014

Teichert Aspen VIII and IX – Elder Creek Culvert Improvements
Central Valley Flood Protection Board Encroachment Permit Application
Site Photos
Page 2 of 4



Looking Northwest at Elder Creek where it crosses Elder Creek Road.

Photo Date: 09 April 2014

Teichert Aspen VIII and IX – Elder Creek Culvert Improvements
Central Valley Flood Protection Board Encroachment Permit Application
Site Photos
Page 3 of 4



Looking North at Elder Creek where it crosses Elder Creek Road of the existing three 36" Corrugated Metal Pipe (CMP) culverts.

Photo Date: 09 April 2014

Teichert Aspen VIII and IX – Elder Creek Culvert Improvements
Central Valley Flood Protection Board Encroachment Permit Application
Site Photos
Page 4 of 4



Looking North at Elder Creek where it crosses Elder Creek Road.

Photo Date: 09 April 2014

DRAFT

STATE OF CALIFORNIA
THE RESOURCES AGENCY
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 19118 BD

This Permit is issued to:

Teichert Materials
3500 American River Drive
Sacramento, California 95864

To replace three existing 36-inch diameter culverts with four (4) 8-foot x 5-foot pre-cast concrete box culverts with culvert wing walls.

The project is located where Elder Creek intersects Elder Creek Road in Sacramento, at 38.51085°N -121.31450°W, Elder Creek, Sacramento County, CA.

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: _____

Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15

days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 19118 BD

LIABILITY AND INDEMNIFICATION

THIRTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board (Board) and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

FOURTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Board and the State, safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

FIFTEEN: The Board and Department of Water Resources shall not be held liable for any damages to the permitted encroachment(s) resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

AGENCY CONDITIONS

SIXTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications dated May 26, 2016, except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

SEVENTEEN: Permittee shall pay to the Board, an inspection fee(s) to cover inspection cost(s), including staff and/or consultant time and expenses, for any inspections before, during, post-construction, and regularly thereafter as deemed necessary by the Board.

EIGHTEEN: The permittee shall be responsible for the repair of any damages to the project levee, channel, banks, floodway, or other flood control facilities due to construction, operation, or maintenance of the proposed project.

NINETEEN: A letter received from the Department of the Army (U.S. Army Corps of Engineers, Sacramento District) dated October 4, 2016, is attached to this permit as Exhibit A in reference to this project.

TWENTY: The Board reserves the right to add additional, or modify existing, conditions when there is a change in ownership and/or maintenance responsibility of the work authorized under this permit.

PRE-CONSTRUCTION

TWENTY-ONE: Upon receipt of a signed copy of the issued permit the permittee shall contact the Board by telephone at (916) 574-0609, and submit the enclosed postcard, to schedule a preconstruction conference with the inspector that is assigned to your project. Failure to do so at least 10 working days prior to start of work may result in a delay of the project.

CONSTRUCTION

TWENTY-TWO: No construction work of any kind shall be done during the flood season from November 1 to April 15 without prior approval of the Board.

TWENTY-THREE: All fill material shall be imported impervious material with 20 percent or more passing the No. 200 sieve, a plasticity index of 8 or more, and a liquid limit of less than 50 and free of lumps or stones exceeding 3 inches in greatest dimension, vegetative matter, or other unsatisfactory material. Fill material shall be compacted in 4- to 6-inch layers to a minimum of 90 percent relative compaction as measured by the current ASTM D1557 standard.

POST-CONSTRUCTION

TWENTY-FOUR: All debris generated by this project shall be properly disposed of outside the Elder Creek Channel.

TWENTY-FIVE: Elder Creek shall be restored to at least the condition that existed prior to commencement of work.

TWENTY-SIX: Upon completion of the project, the permittee shall submit as-constructed drawings to the Board and to: Department of Water Resources, Flood Project Inspection Section, 3310 El Camino Avenue, Suite 256, Sacramento, California 95821.

OPERATIONS AND MAINTENANCE

TWENTY-SEVEN: After each period of high water, debris that accumulates at the site shall be completely removed from the floodway.

TWENTY-EIGHT: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Central Valley Flood Protection Board, the Department of Water Resources, or any other agency responsible for maintenance and shall, at all times, allow officials from these agencies to access the levee, levee slope, and any adjacent areas as necessary for flood control.

TWENTY-NINE: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Board or Department of Water Resources. If the permittee does not comply, the Board may modify or remove the encroachment(s) at the permittee's expense.

THIRTY: If erosion occurs adjacent to the permitted encroachment(s), the permittee shall repair the eroded areas and place adequate revetment on the affected areas to prevent further erosion.

PROJECT ABANDONMENT / CHANGE IN PLAN OF FLOOD CONTROL

THIRTY-ONE: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Board at the permittee's or successor's cost and expense.

THIRTY-TWO: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if in the discretion of the Board the removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if the project is not maintained or is damaged by any cause. If the permittee does not comply, or in the event of an emergency, the Board may remove the encroachment(s) at the permittee's expense.

END OF CONDITIONS



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

OCT 04 2016

Flood Protection and Navigation Section (19118)

Ms. Leslie M. Gallagher
Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, CA 95821

Dear Ms. Gallagher:

We have reviewed permit application number 19118 submitted by Teichert Materials. This project includes replacing three existing 36 inch culverts with four (4) 8 foot x 5 foot pre-cast concrete box culverts with culvert wing walls at Elder Creek. The project is located where Elder Creek intersects Elder Creek Road in Sacramento, at 38.510848°N 121.314499°W NAD83, Sacramento County, CA.

The District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project.

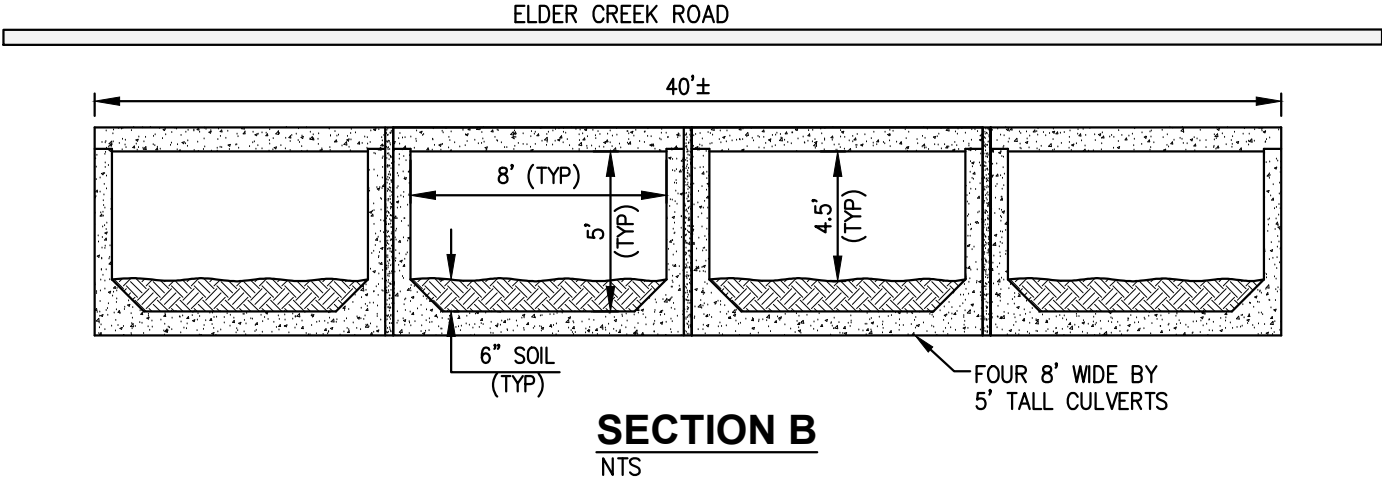
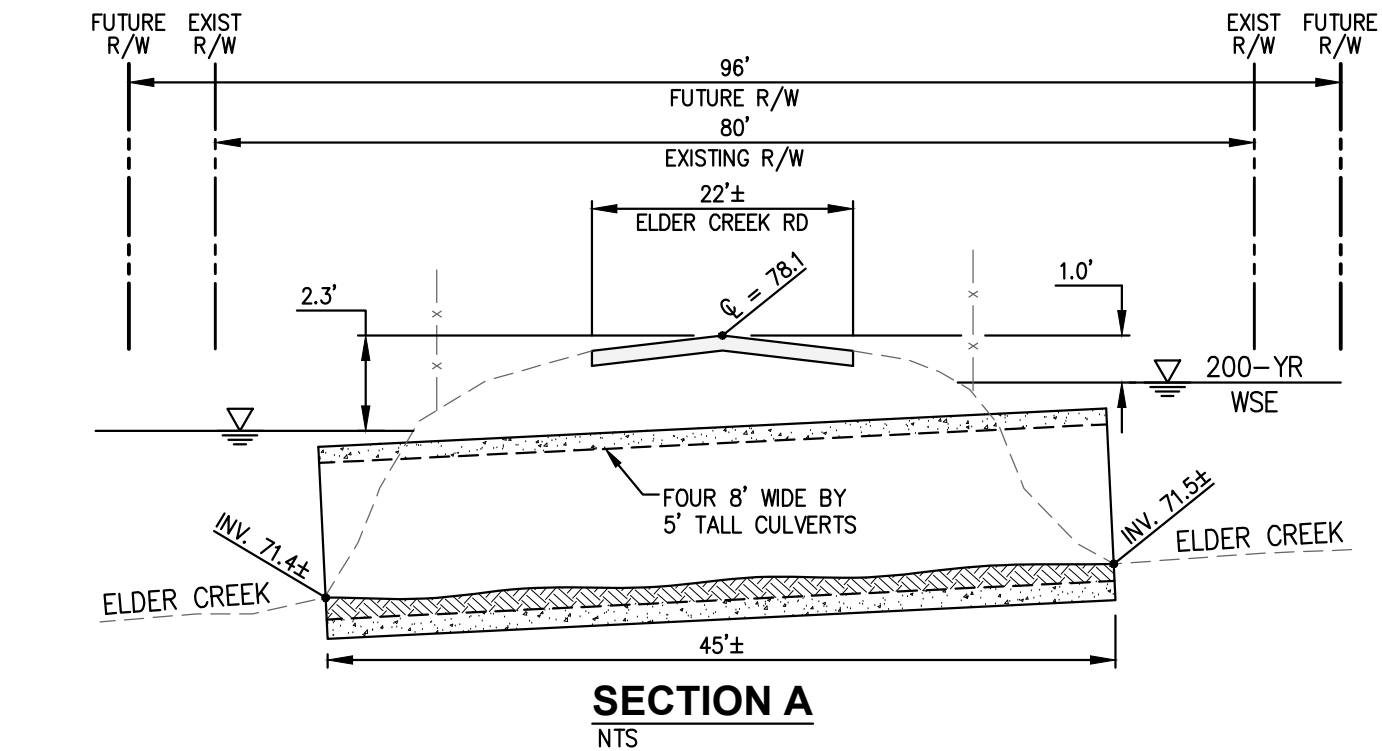
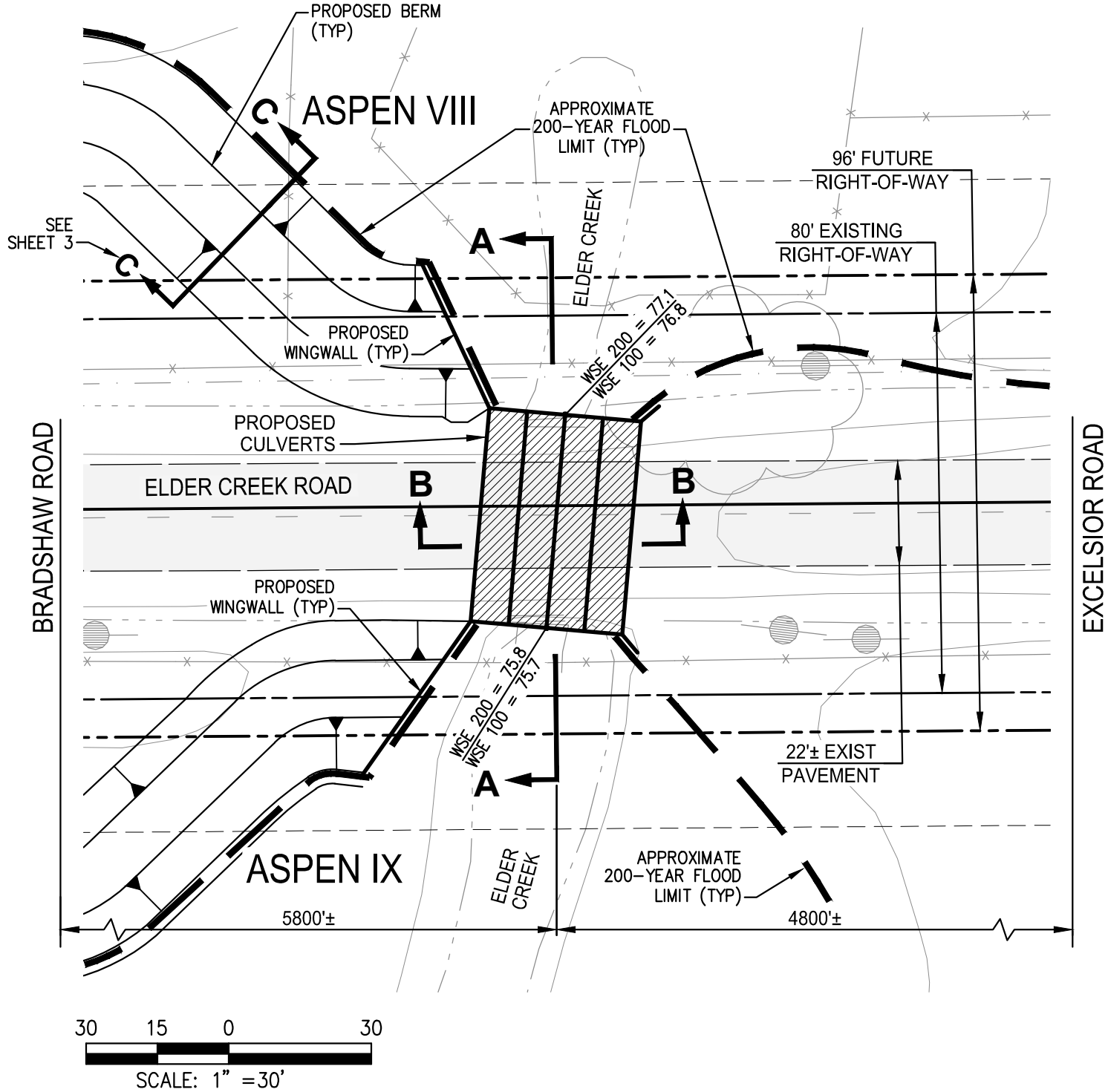
A Section 10 and/or Section 404 permit application (2008-909) is in process for this work.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite 200, Sacramento, CA 95821.

Sincerely,

Ryan M. Larson
for

Ryan Larson, P.E.
Chief, Flood Protection and Navigation Section



NOTE: INFORMATION SHOWN IS PRELIMINARY AND
SUBJECT TO CHANGE PENDING FINAL DESIGN

DESIGNED BY: _____
DRAWN BY: NC/LE
CHECKED BY: _____
SCALE
AS SHOWN



CECWEST.COM
Project Planning ■ Civil Engineering ■ Landscape Architecture
■ Sacramento Office ■ Davis Office
2120 20th Street, Suite Three 2940 Spafford Street, Suite 200
Sacramento, CA 95818 Davis, CA 95818
(916) 455-2026 (530) 758-2026



SACRAMENTO COUNTY

ASPEN VIII & IX ELDER CREEK CULVERT EXHIBIT

CALIFORNIA



SHEET
2
OF
3
DATE: 5/26/2016
JOB NO: 1390.06