

**Meeting of the Central Valley Flood Protection Board
October 28, 2011**

Staff Report – Encroachment Permit

**Kent Lang
Pipe Replacement, Yolo County**

1.0 – ITEM

Consider approval of Permit No. 4913-A (Attachment B)

2.0 – APPLICANT

Kent Lang

3.0 – LOCATION

The project is located approximately 1.25 miles north of the Sacramento Weir on the right (west) bank levee of the Sacramento River.
(Sacramento River, Yolo County, see Attachment A)

4.0 – DESCRIPTION

Applicant proposes to replace an existing 12-inch-diameter pipe through the levee. Removal of the existing pipe is proposed to be done by open excavation. No change to the existing pipe size or location is proposed except for raising the pipe to conform to current Title 23 standards.

5.0 – PROJECT ANALYSIS

The proposed project to remove and replace approximately 68-linear-feet of the existing 12-inch-diameter pipe is a project that provides assurance that the older existing piping system would not deteriorate and damage the existing levee. Construction of the new pipe will conform to all pertinent standards in Title 23, Section 123.

5.1 – Hydraulic Analysis

The project involves placing a pipe through the levee so no hydraulic analysis is required.

5.2 – Geotechnical Analysis

The scope of work for this project does not require a geotechnical analysis.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

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

- Reclamation District 537 has endorsed this project with no conditions.
- The U. S. Army Corps of Engineers 208.10 comment letter has not yet been received for this application. Upon receipt of a favorable letter and review by Board staff the letter will be incorporated into the permit as Exhibit A.

7.0 – CEQA ANALYSIS

Board staff has prepared the following CFQA determination:

Yolo County, as lead agency under CEQA, approved the project (Lang Encroachment Permit PW 2011-0116) on May 26, 2011 and determined that the project was categorically exempt under Class 2 (CEQA Guidelines Section 15302(c) covering replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity.

The Board, acting as a responsible agency under CEQA, has reviewed the Yolo County determination and has independently determined that the project is exempt from CEQA Class 2 (CEQA Guidelines Section 15302 (c) covering replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity.

8.0 – 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 the entire State Plan of Flood Control:

The placement of the pipe through will have no effect on the State Plan of Flood Control.

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

Effects to the proposed project from reasonable projected future events will be minimal. Enlarging the levee due to increased flows may require modifications to the project.

9.0 – STAFF RECOMMENDATION

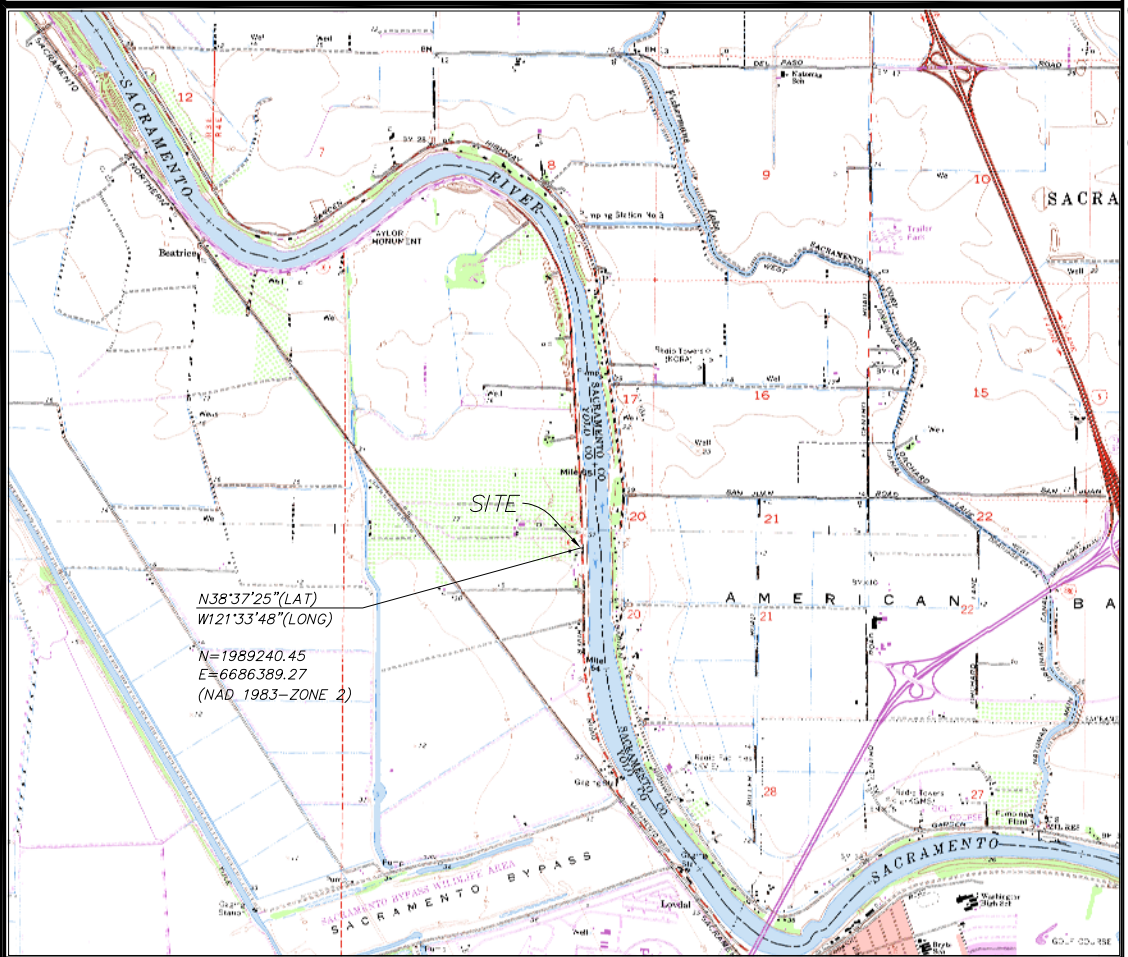
Staff recommends that the Board determine the project be exempt from CEQA, approve Permit 4913-A conditioned upon receipt of a USACE 208.10 letter of determination confirming that the Corps has no objection to the project.

10.0 – LIST OF ATTACHMENTS

- A. Location Maps and photos
- B. Draft Permit No. 4913-A
- C. Design Drawings

Design Review:	Steve Dawson
Environmental Review:	James Herota / Andrea Mauro
Document Review:	Gary Lemon P. E., Len Marino P. E.

VICINITY MAP



REDUCED PLOT

N38°37'25" (LAT)
 W121°33'48" (LONG)
 N=1989240.45
 E=6686389.27
 (NAD 1983-ZONE 2)

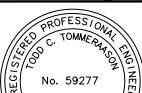


SITE

RIVER MILE 64.5±

PERMIT.

SECTIONS 17 & 18, TOWNSHIP 9 NORTH, RANGE 4 EAST, MOUNT DIABLO BASE & MERIDIAN, YOLO COUNTY, CALIFORNIA.
 APN: 042-250-006 (48.24± ACRES)



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A.P.N. 042-250-006 (48.2 ACRE PARCEL)



LOOKING TOWARDS LAND SIDE FROM TOP OF LEVEE

A.P.N. 042-250-006 (48.2 ACRE PARCEL)



LOOKING SOUTH FROM TOP OF LEVEE

DRAFT

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

PERMIT NO. 4913-A BD

This Permit is issued to:

Kent Lang
21548 Old River Road
West Sacramento, California 95691

Replace an existing 12-inch diameter pipe through the levee. Removal of the existing pipe is proposed to be done by open excavation. No change to the existing pipe size or location is proposed except for raising the pipe to conform with current Title 23 standards. Located approximately 1.25 miles north of the Sacramento Weir, on the right (west) bank of the Sacramento River (Section 17 & 18, T9N, R4E, MDB&M, Reclamation District 537, Sacramento River, Yolo County).

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. 4913-A BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications 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.

FOURTEEN: 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 Department of Water Resources, Reclamation District 537 or any other agency responsible for maintenance.

FIFTEEN: Upon receipt of a signed copy of the issued (not approved only) permit the permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

SIXTEEN: The Central Valley Flood Protection Board, Department of Water Resources, and Reclamation District No. 537 shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

SEVENTEEN: 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 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 damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

EIGHTEEN: The permittee should contact the U.S. Army Corps of Engineers, Sacramento District,

Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

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

TWENTY: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection 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 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.

TWENTY-ONE: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection 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 Central Valley Flood Protection 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.

TWENTY-TWO: 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 Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

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

TWENTY-FOUR: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1 to April 15.

TWENTY-FIVE: The pipe shall be placed in the center of an open trench 2 feet wider than the diameter of the pipe.

TWENTY-SIX: Pipe installed in the levee section and within 10 feet of the levee toes shall be new steel and at least 10 gauge. Steel pipe shall be corrosion-proofed externally with a coating of coal-tar enamel; asphalt-saturated felt wrap; cement mortar; or PVC or polyethylene tape wrapped to a thickness of 30 mils. Steel pipe shall be corrosion-proofed internally with a continuous lining of cement mortar or asphalt.

TWENTY-SEVEN: The pipeline shall be tested and confirmed free of leaks by X-ray, pressure tests, or other approved methods during construction or anytime after construction upon request by the Central Valley Flood Protection Board.

TWENTY-EIGHT: The invert of the pipe through the levee section shall be above the design flood

plane elevation of 32.2 feet, NGV Datum.

TWENTY-NINE: All pipe joints within the levee section shall be butt welded.

THIRTY: The pipe shall be installed through the levee section at a right angle to the centerline of the levee.

THIRTY-ONE: The pipe shall be buried at least 12 inches below the levee slopes and 24 inches below the levee crown.

THIRTY-TWO: Backfill material for excavations within the levee section and within 10 feet of the levee toes shall be placed in 4- to 6-inch layers, moisture conditioned above optimum moisture content, and compacted to a minimum of 90 percent relative compaction as measured by ASTM Method D1557-91.

THIRTY-THREE: Density tests by a certified materials laboratory will be required to verify compaction of backfill within the levee section and within 10 feet of both levee toes.

THIRTY-FOUR: Backfill material for excavations within the levee section shall be free of stones or lumps that exceed 3 inches in greatest dimension, organic matter, or other unsatisfactory material and shall be compacted to at least 90 percent relative compaction as measured by ASTM Method D1557-91.

THIRTY-FIVE: A positive-closure device that is readily accessible during periods of high water shall be installed on the waterward side of the levee.

THIRTY-SIX: A suitable siphon breaker and protective housing shall be installed on the apex of the pipe and shall be located off the levee patrol road.

THIRTY-SEVEN: The project site shall be restored to at least the condition that existed prior to commencement of work.

THIRTY-EIGHT: The permittee shall replant or reseed the levee slopes to restore sod, grass, or other non-woody ground covers if damaged during project work.

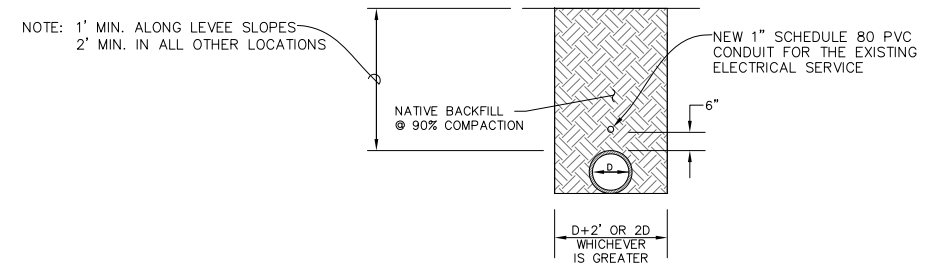
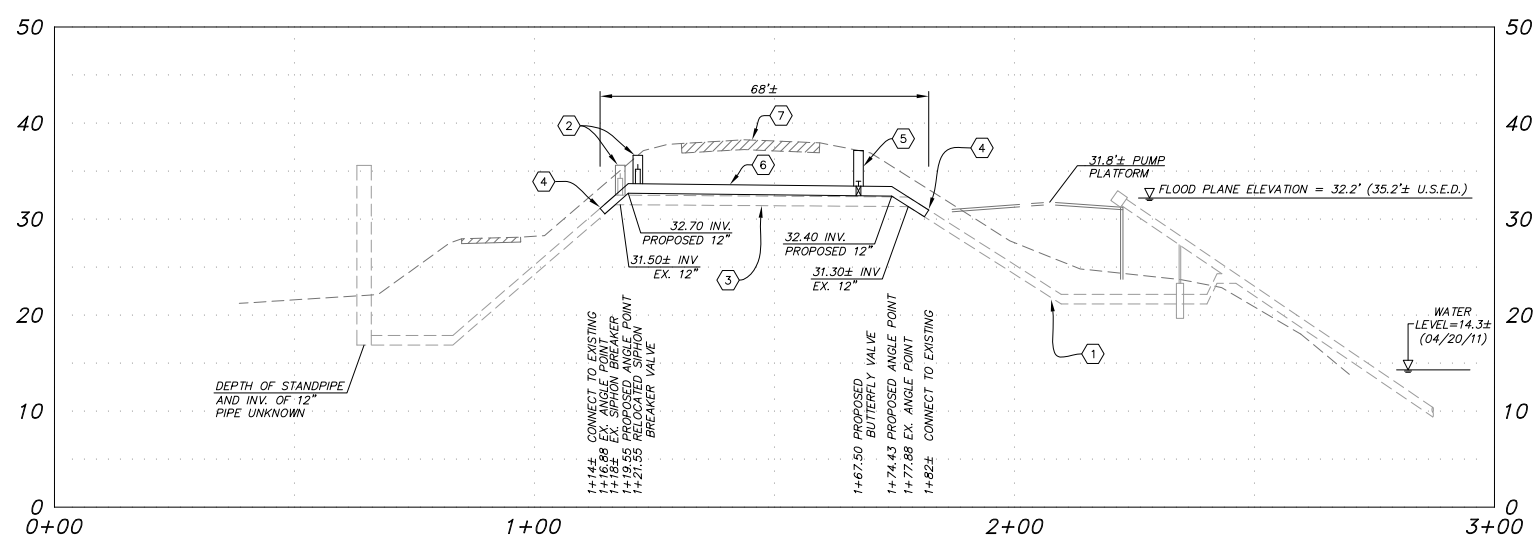
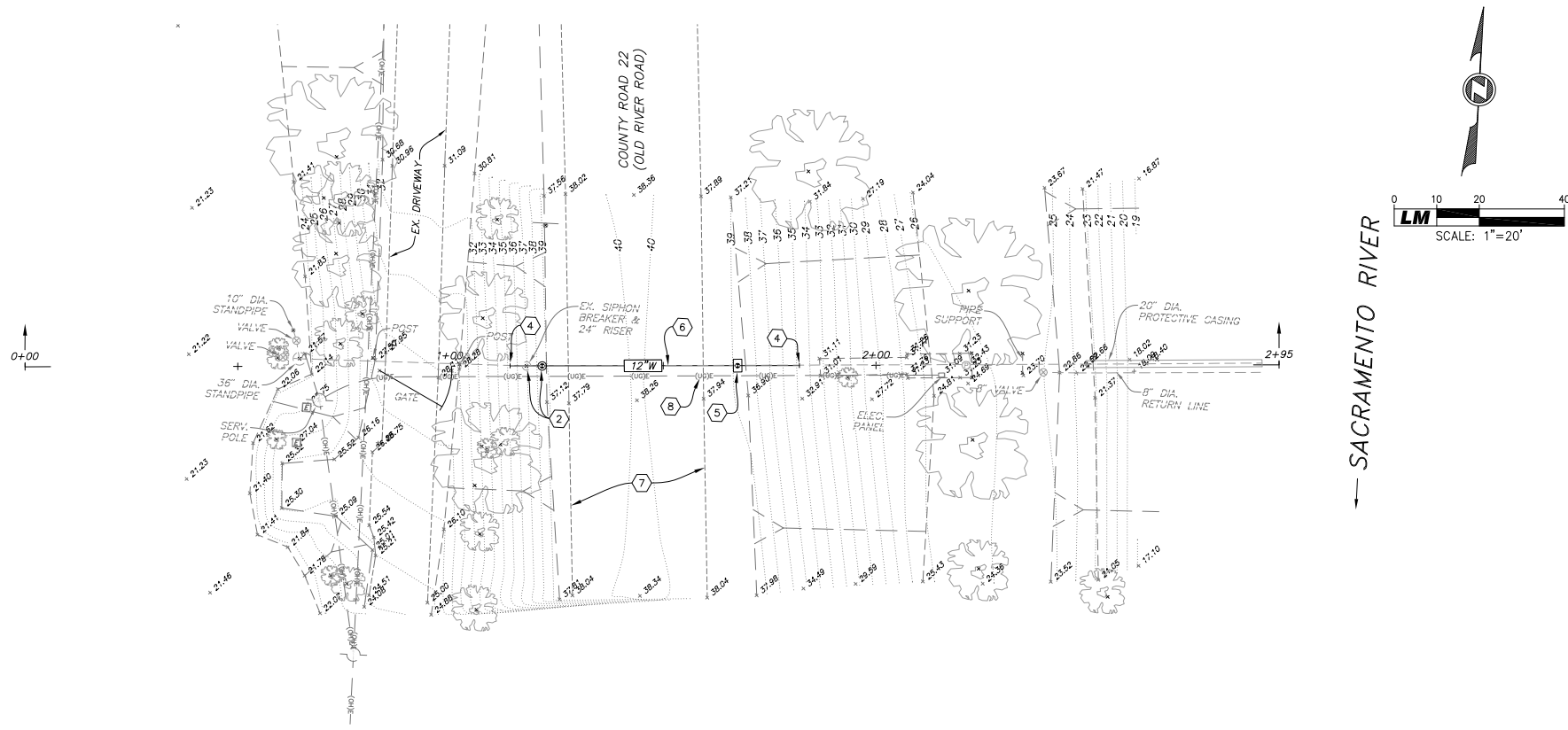
THIRTY-NINE: All debris generated by this project shall be disposed of outside the flodway and off the levee section.

FORTY: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated October XX, 2011, which is attached to this permit as Exhibit A and is incorporated by reference.

REDUCED PLO

CONSTRUCTION NOTES

1. CONTRACTOR TO VERIFY EXISTING PIPE SIZE PRIOR TO ORDERING MATERIALS.
2. RELOCATE EXISTING SIPHON BREAKER VALVE TO THE NEW HIGH POINT. RELOCATE EXISTING 24" DIA. PROTECTIVE RISER OR REPLACE IN KIND, CONTRACTOR TO COORDINATE WITH OWNER AFTER THE RISER IS EXPOSED AND CAN BE INSPECTED.
3. REMOVE EXISTING 12" PIPE FROM STATION 1+14± TO STATION 1+82± (68± LF).
4. CUT EXISTING PIPE AND BUTT WELD NEW PIPE TO THE EXISTING PIPE, OR ALTERNATIVE APPROVED BY THE ENGINEER AND DWR INSPECTOR.
5. INSTALL POSITIVE CLOSURE DEVICE, CLOW VALVE COMPANY 4500 SERIES FLANGED BUTTERFLY VALVE WITH HANDWHEEL OPERATOR OR EQUIVALENT. INSTALL VALVE IN A CHRISTY B 24"x36" BOX WITH 2 PIECE STEEL CHECKER PLATE LID (H=20 LOADING), OR EQUIVALENT. CONTRACTOR SHALL INSTALL 3/4" CLASS 2 AB BACKFILL AT 95% MRC AS NEEDED TO PROVIDE A SMOOTH TRANSITION FROM THE BOX TO THE LEVEE SLOPE. COORDINATE WITH ENGINEER AND DWR INSPECTOR. BOX SHALL NOT IMPEDE DRAINAGE FROM THE COUNTY ROAD.
6. INSTALL 68± LF OF 12" DIAMETER 3/8" WALL WELDED STEEL PIPE, SEE NOTE 11, SHEET 1.
7. EXISTING COUNTY ROAD IS TO BE REPAIRED/REPLACED BY COUNTY. THIS WORK WILL TAKE PLACE DURING THE ROAD CLOSURE BUT PRIOR TO THE PULVERIZATION OF THE EXISTING ROAD. AN ENCROACHMENT PERMIT WILL BE OBTAINED FROM THE COUNTY PRIOR TO BEGINNING WORK, EVEN THOUGH THE REPAIR OF THE ROAD SURFACE WILL NOT BE REQUIRED. COORDINATE PIPE BACKFILL, INCLUDING PLACING THE EXISTING ROAD BASE AND PAVING ON THE SURFACE, WITH CONTRACTOR WHO WILL BE PULVERIZING THE ROAD.
8. REPLACE 68± LF OF EXISTING ELECTRICAL CONDUIT PER DETAIL A, THIS SHEET.



- NOTES:
- A. BACKFILL SHALL BE MECHANICALLY COMPACTED IN 6" LIFTS WITH NO JETTING
 - B. THE CONTRACTOR SHALL COORDINATE COMPACTION TESTING WITH THE PROJECT GEOTECHNICAL ENGINEER.

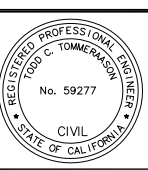
(A) TRENCH BACKFILL
NTS

THE PLAN AND PROFILE VIEWS HAVE BEEN CONVERTED TO NGVD 29 DATUM

DESIGNED BY	NUB				
DRAWN BY	NUB				
CHECKED BY	TCT				
REV.	DATE	DESCRIPTION	BY	APP'D.	

LM LAUGENOUR AND MEIKLE
 CIVIL ENGINEERING · LAND SURVEYING · PLANNING
 808 COURT STREET, WOODLAND, CALIFORNIA 95695 · PHONE: (530) 662-1755
 P.O. BOX 828, WOODLAND, CALIFORNIA 95776 · FAX: (530) 662-4602

BY: TODD C. TOMMERAASON
 DATE: P.E. 59277



PIPE REPLACEMENT FOR
LANG - 12" DIA. PIPE REPLACEMENT @ CR 22 STA. 62+75±
 YOLO COUNTY CALIFORNIA

SCALE
 HORIZ.: 1"=20'
 VERT.: 1"=10'

SHEET
2
 OF
2

CAD FILE: 567-9-1_C02
 DATE: 05-18-11
 JOB NO. 567-9-1

CROSS SECTION

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