

**Meeting of the Central Valley Flood Protection Board
September 23, 2011
Staff Report – Encroachment Permit
Buena Vista Water Storage District
Gravity Feed Water Pipeline, Kern River, Kern County**

1.0 – ITEM

Consider approval of Permit No. 18675 (See Attachment B)

2.0 – APPLICANT

Buena Vista Water Storage District
P.O. Box 756
Buttonwillow, CA 93206

3.0 – LOCATION

The project is located within the Kern River Designated Floodway at river mile 97.30 and is approximately four miles North West of Tupman, California. See Attachments A-1 thru A-10

4.0 – DESCRIPTION

To install a reinforced 78-inch diameter, approximately 1,510 foot long concrete pipeline, crossing under the Kern River Flood Control Channel, 6 feet below the surface. See Attachments C-1 thru C-4.

5.0 – PROJECT ANALYSIS

The installation of the pipeline will facilitate the transfer of water from the California Aqueduct to the West Side Canal for use by the Buena Vista Water Storage District.

5.1 – HYDRAULIC ANALYSIS

The project as proposed will not have a hydraulic impact on the Kern River Designated Floodway so therefore a hydraulic impact report is not relevant.

5.2 – GEOTECHNICAL ANALYSIS

A geotechnical and seismic analysis has been performed on data developed at the proposed site and the analysis was used in the project design. The geotechnical investigation revealed no anomalies that would necessitate variation from ASTM standards. The seismic investigation found that the project is not within an Alquist-Priolo Earthquake Fault Zone and therefore the project would fall within standard seismic design parameters.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

- There is no maintaining agency therefore an endorsement is not applicable.
- A favorable U. S. Army Corps of Engineers recommendation letter has been received for this application and has been incorporated into Attachment B as Exhibit A.

7.0 – CEQA ANALYSIS

Board staff has prepared the following CEQA findings:

The Board, as a responsible agency under CEQA, has reviewed Initial Study/Mitigated Negative Declaration (SCH Number: 2010081076, August 2010) and Mitigation Monitoring, and Reporting Program for the BV8 State Water Project Turnout prepared by the lead agency, the Buena Vista Water storage District. These documents, including project design, may be viewed or downloaded from the Central Valley Flood Protection Board website at <http://www.cvpfb.ca.gov/meetings/2011/9-23-2011.cfm> under a link for this agenda item. These documents are also available for review in hard copy at the Board and the Buena Vista Water Storage District offices.

The Buena Vista Water Storage District has determined that the project would not have a significant effect on the environment filed a Notice of Determination on October 12,

2010 with the State Clearinghouse. Board staff finds that although the proposed project could have a potentially significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. 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. These mitigation measures are included in the project proponent's Mitigation Monitoring and Reporting Program and address impacts to biological resources and cultural resources. The description of the mitigation measures are further described in the adopted Mitigation Monitoring and Reporting Program.

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 proposed project will have no adverse effects 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:

Future changes in hydrology caused by climate change could result in the need to remove and redesign the project if precipitation and water levels raise necessitating floodway boundary modifications.

9.0 – STAFF RECOMMENDATION

Staff recommends that the Board adopt the CEQA Findings, approve Permit No. 18675 and direct the Executive Officer to take the necessary actions to execute the permit and to file a Notice of Determination with the State Clearinghouse.

10.0 – LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit No. 18678 with Exhibit A
- C. Design Drawings

Design Review:	Sterling Sorenson
Environmental Review:	James Herota and Andrea Mauro
Document Review:	Mitra Emami P.E., Len Marino P.E.

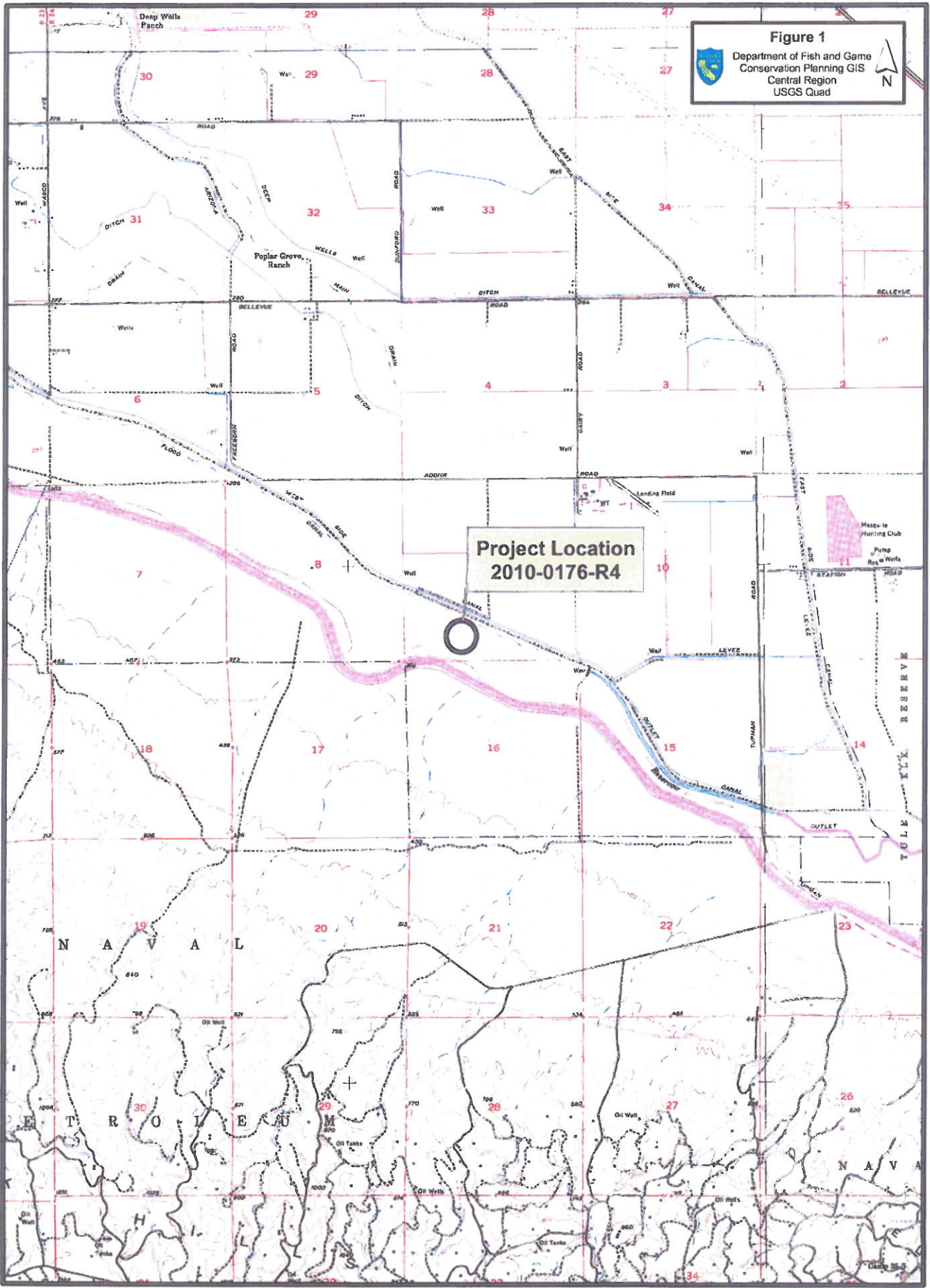
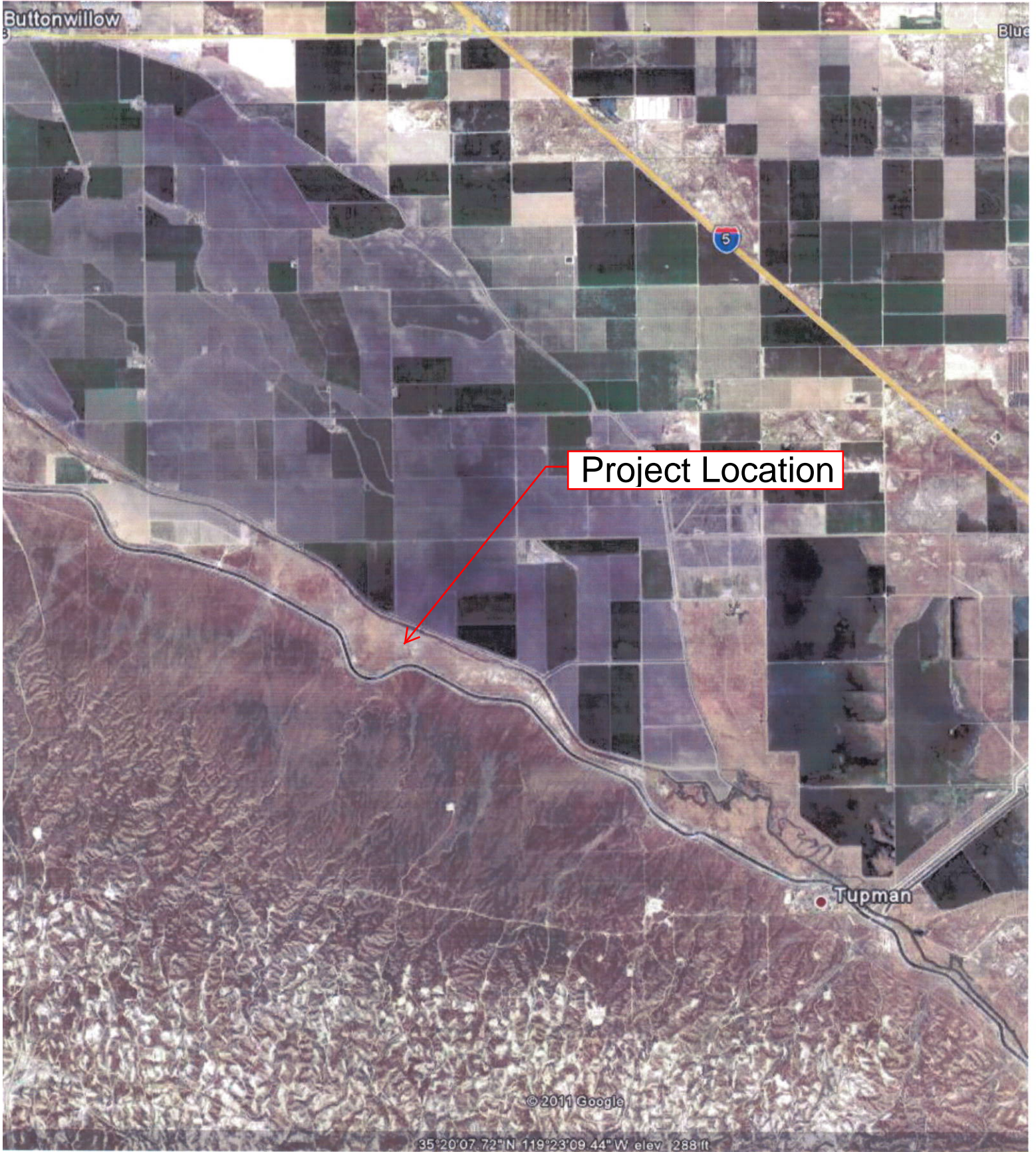


Figure 1
Department of Fish and Game
Conservation Planning GIS
Central Region
USGS Quad

**Project Location
2010-0176-R4**

18675 Project Location
Photo A-3



18675 Project Location
Photo A-4



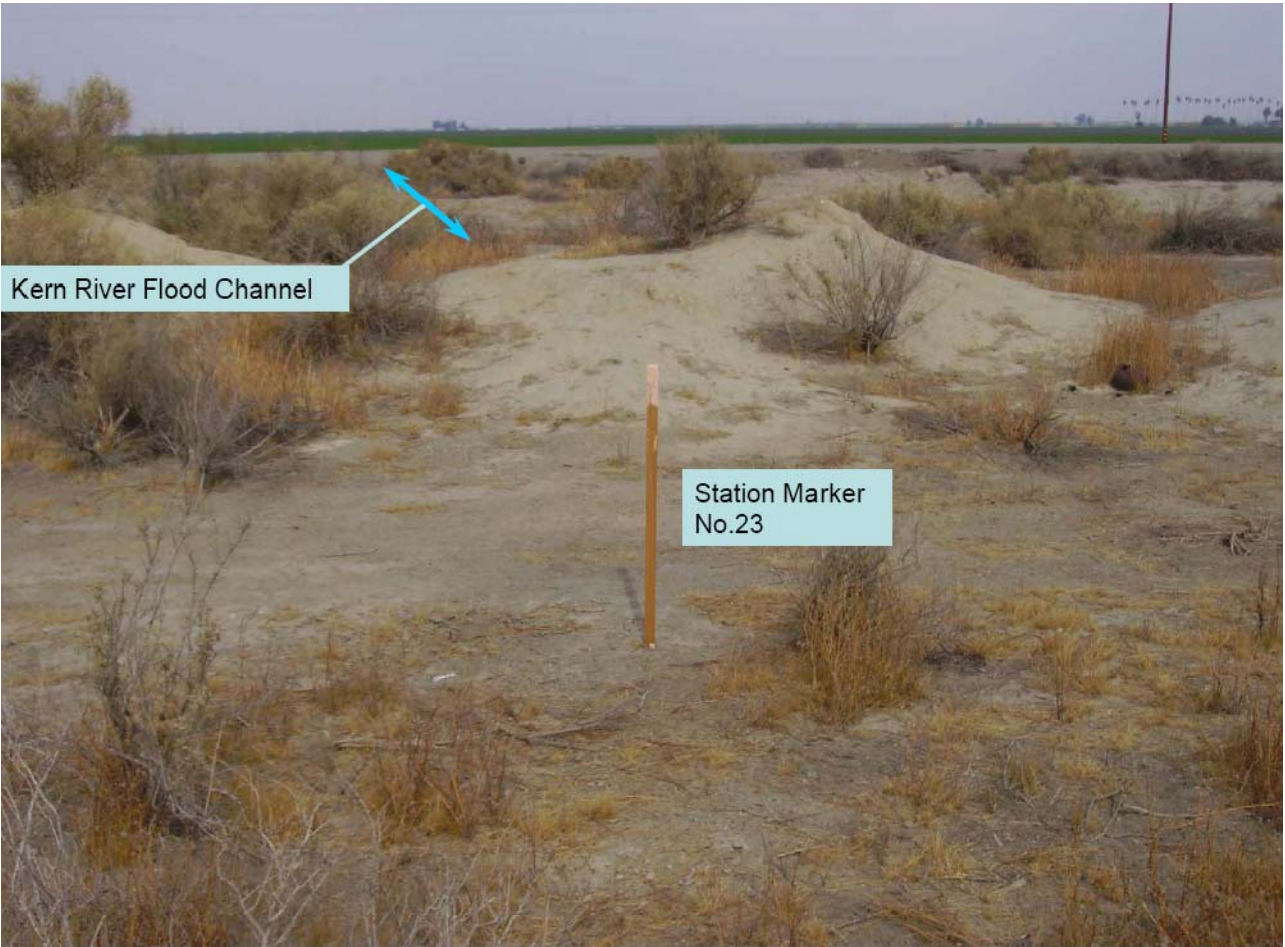
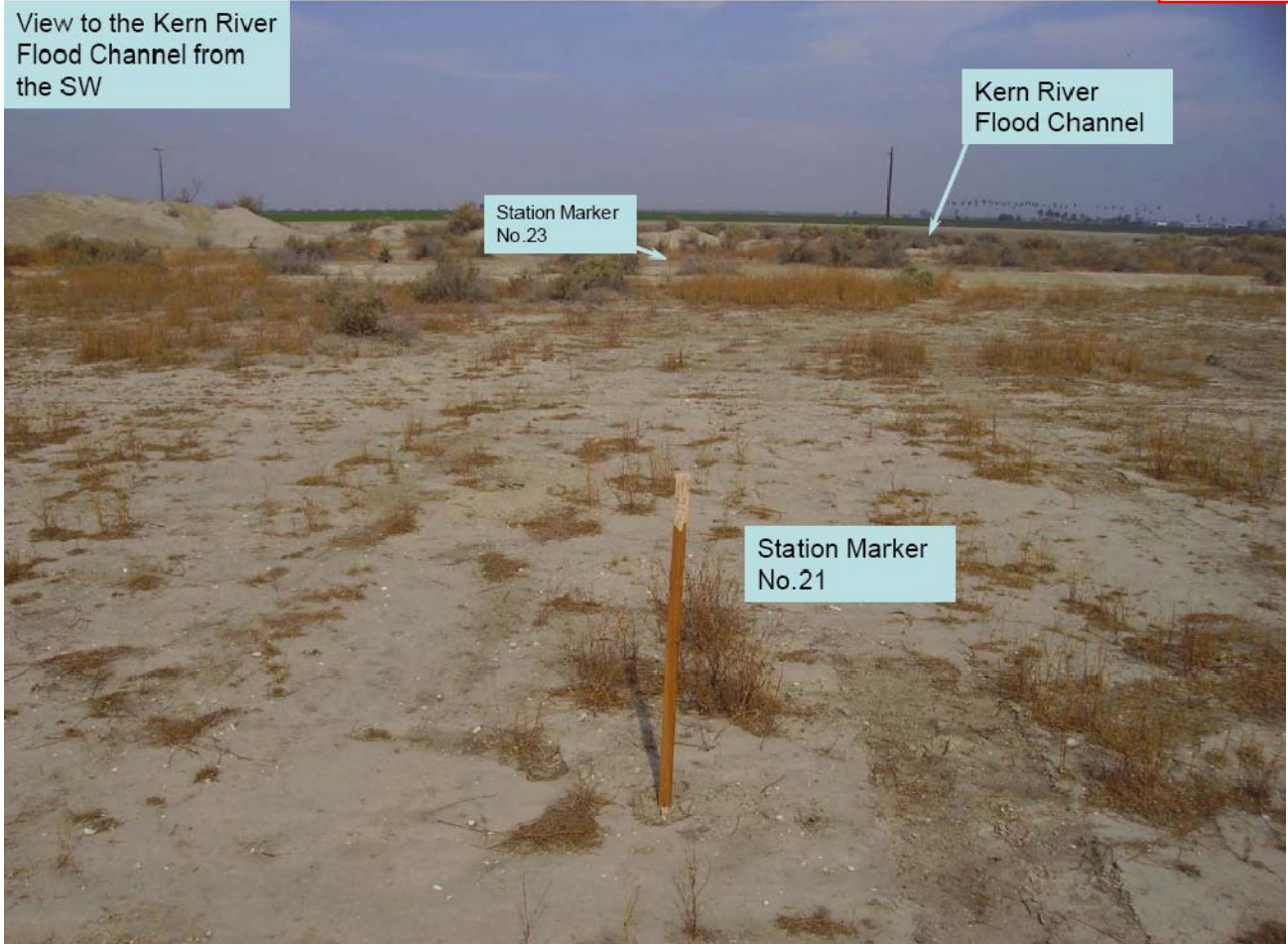
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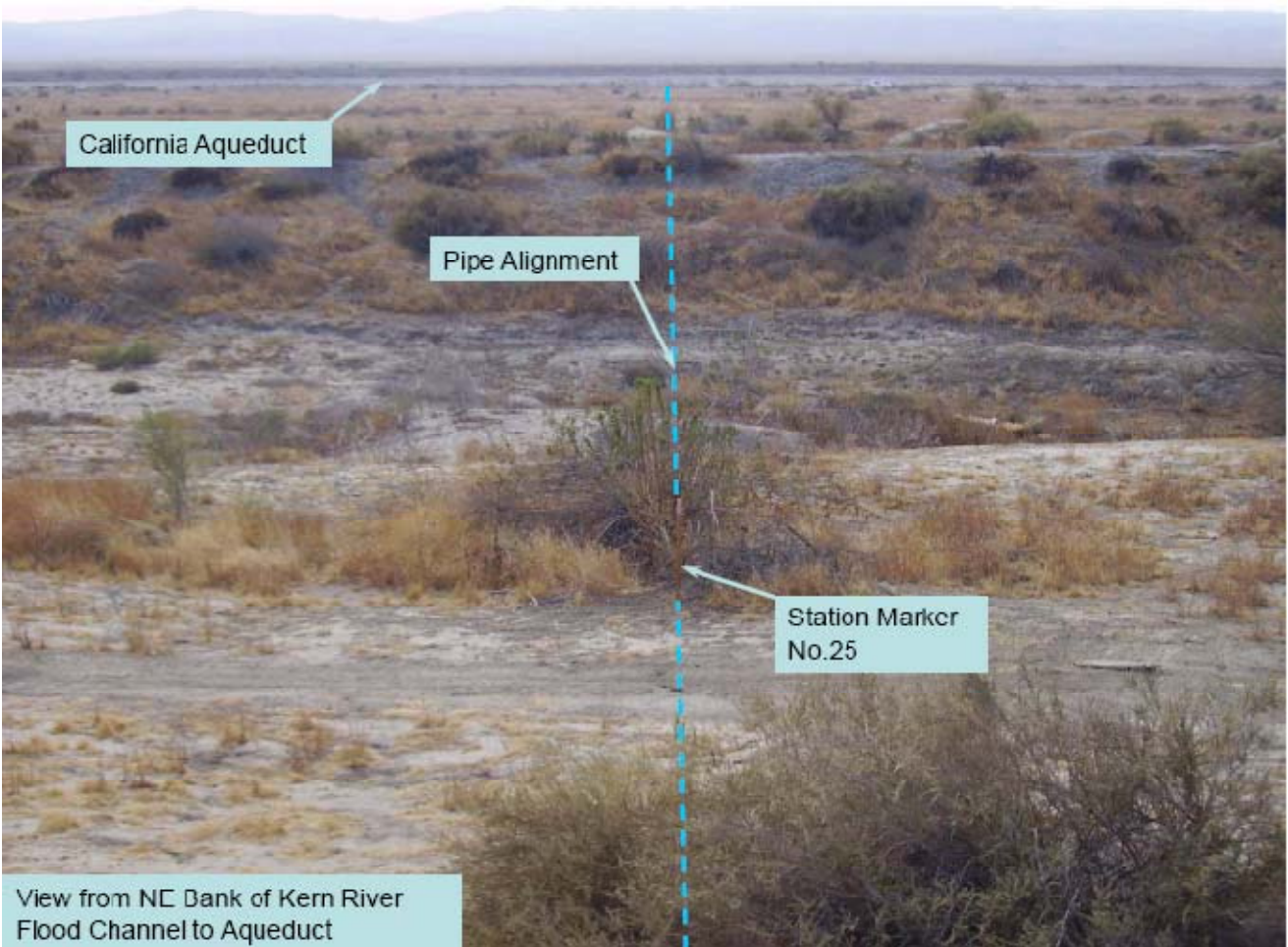
Project Location

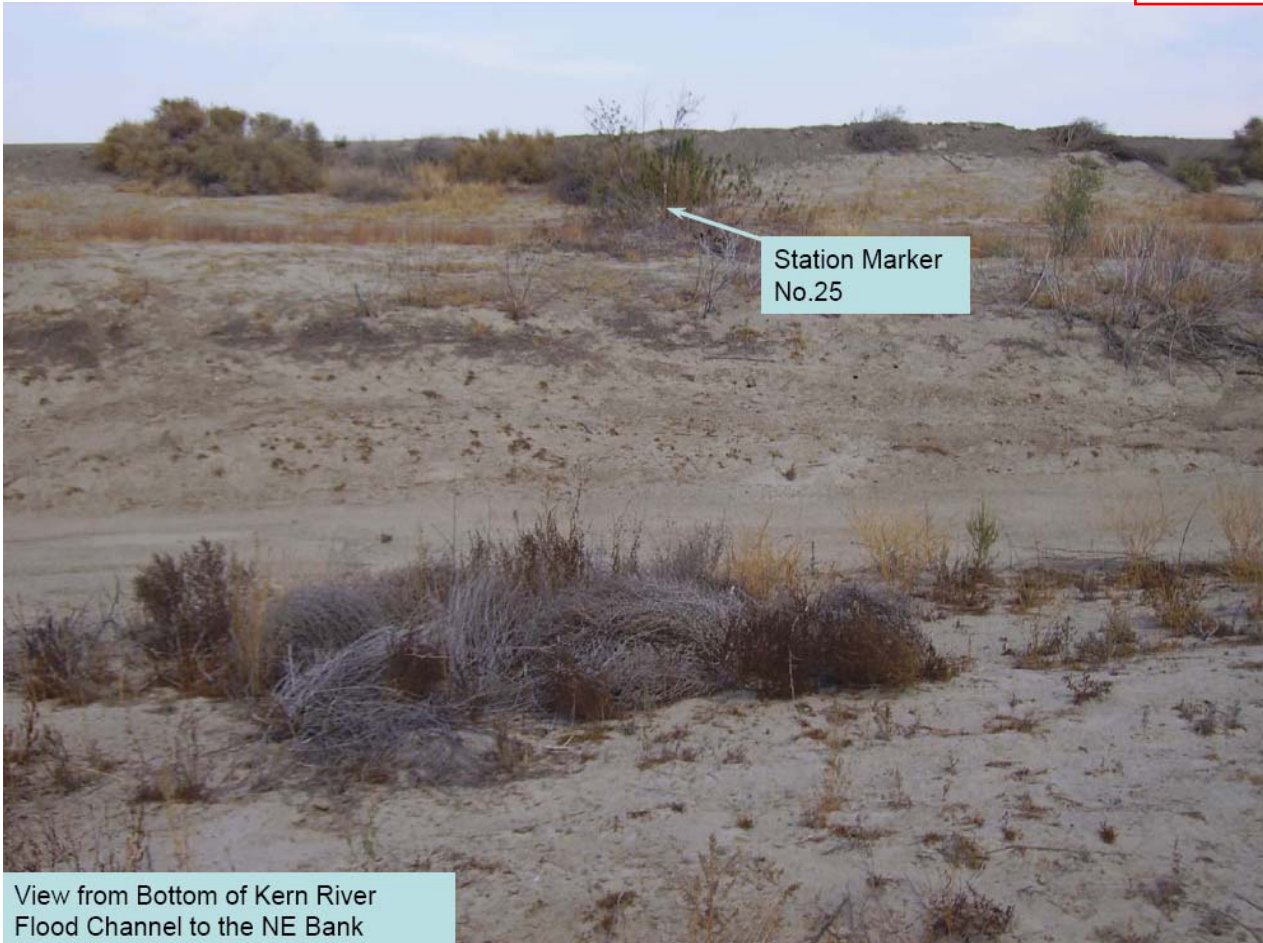
© 2011 Google

35°19'43.26" N 119°24'13.40" W elev 290 ft

View to the Kern River Flood Channel from the SW



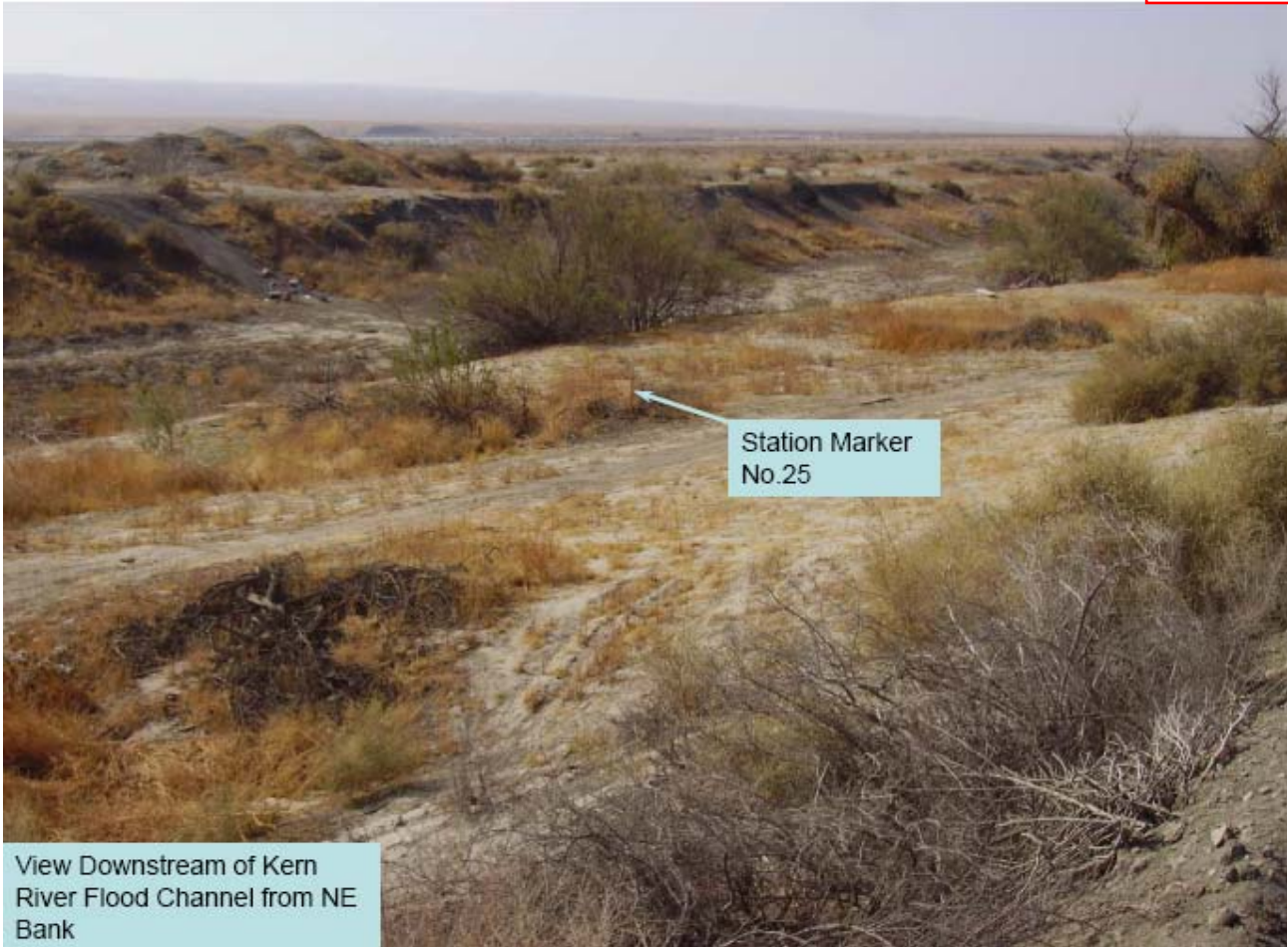




View from Bottom of Kern River
Flood Channel to the NE Bank



View of West Side Canal from West
Access Rd.



Station Marker No.25

View Downstream of Kern River Flood Channel from NE Bank



View Downstream of Kern River Flood Channel



View to Upstream of Kern
River Flood Channel



View to Upstream of Kern
River Flood Channel

DRAFT

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

PERMIT NO. 18675 BD

This Permit is issued to:

Buena Vista Water Storage District
P.O. Box 756
Buttonwillow, California 93206

To install a reinforced 78-inch diameter, approximately 1,510 foot long concrete pipeline, crossing under the Kern River Flood Control Channel, 6 feet below the surface. Located approximately 3.75 miles northwest of Tupman, CA, along the alignment of the California Aqueduct, in between the Aqueduct and the Kern River Flood Control Canal (Section 9, T30S, R24E, MDB&M, Kern River Flood Control Canal, Kern 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. 18675 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 written approval of the Central Valley Flood Protection Board.

FOURTEEN: The permittee is responsible for all liability associated with all construction, operation and maintenance activities associated with the herein permitted project 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 assignees (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.

FIFTEEN: 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: No construction work of any kind shall be done during the flood season from November 1st to July 15th without prior written approval of the Central Valley Flood Protection Board.

SEVENTEEN: Cleared trees or 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 1st to July 15th.

EIGHTEEN: No construction equipment and/or material(s) shall remain in the Kern River Designated Floodway during the flood season from November 1st to July 15th.

NINETEEN: No excavation shall be made or remain in the Kern River Designated floodway during the flood season from November 1st to July 15th without prior written approval of the Central Valley Flood Protection Board.

TWENTY: The herein permitted pipeline installed below the low-water channel shall be buried with a minimum of 5 feet of cover.

TWENTY-ONE: Backfill material for excavations shall be placed in 4- to 6-inch layers and compacted to at least the density of the adjacent, firm, undisturbed material.

TWENTY-TWO: Density tests by a certified materials laboratory will be required to verify compaction of backfill within the Kern River Designated Floodway.

TWENTY-THREE: In the event the herein permitted pipe becomes exposed due to erosion and/or scour, the permittee shall repair the eroded/scour area and propose measures, to be approved by the Central Valley Flood Protection Board, to prevent further erosion.

TWENTY-FOUR: All debris generated by this project shall be properly disposed of outside the Kern River Designated Floodway.

TWENTY-FIVE: The work area shall be restored to the condition that existed prior to start of work.

TWENTY-SIX: The herein permitted encroachment(s) shall not interfere with the functionality of the Kern River Designated Floodway. If the permitted encroachment(s) do interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

TWENTY-SEVEN: The Central Valley Flood Protection Board and/or the California Department of Water Resources shall not be held liable for damage(s) to the herein permitted encroachment(s) resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

TWENTY-EIGHT: 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.

TWENTY-NINE: 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.

THIRTY: The letter from the Department of the Army dated August 18, 2011 and which is attached to this permit as Exhibit A, is hereby incorporated by reference.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Flood Protection and Navigation Section (18675)

AUG 18 2011

Mr. Jay Punia, Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, California 95821

Dear Mr. Punia:

We have reviewed a permit application by Buena Vista Water Storage District (application number 18675). This project includes installing a reinforced 78 inch diameter, approximately 1,510 feet long concrete pipeline crossing 6 feet under the surface of the Kern River Flood Control Canal. The project is located 3.75 miles northwest of Tupman, CA, along the alignment of the California Aqueduct, in between the Aqueduct and the Kern River Flood Control Canal at 35.3263°N 119.4071°W NAD83, Kern County, California.

The proposed work does not affect a Federally constructed project, however, according to the Kern River Intertie Operation and Maintenance Manual, page 15, section 2, the capacity of the channels that existed prior to the construction of the Intertie Project is required for the Intertie project to function effectively. The channel capacity of the Kern River Flood Control Canal (Buena Vista Flood Channel in the O&M manual) is estimated at 3,000 cfs as shown in Table 1, Estimated Channel Capacities. This proposed project shall not affect the ability of the channel to pass the 3,000 cfs flow.

A Section 10 and/or Section 404 permit application (200901551) 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 LL30, Sacramento, CA 95821.

Sincerely,

A handwritten signature in black ink that reads "Meegan G. Nagy".

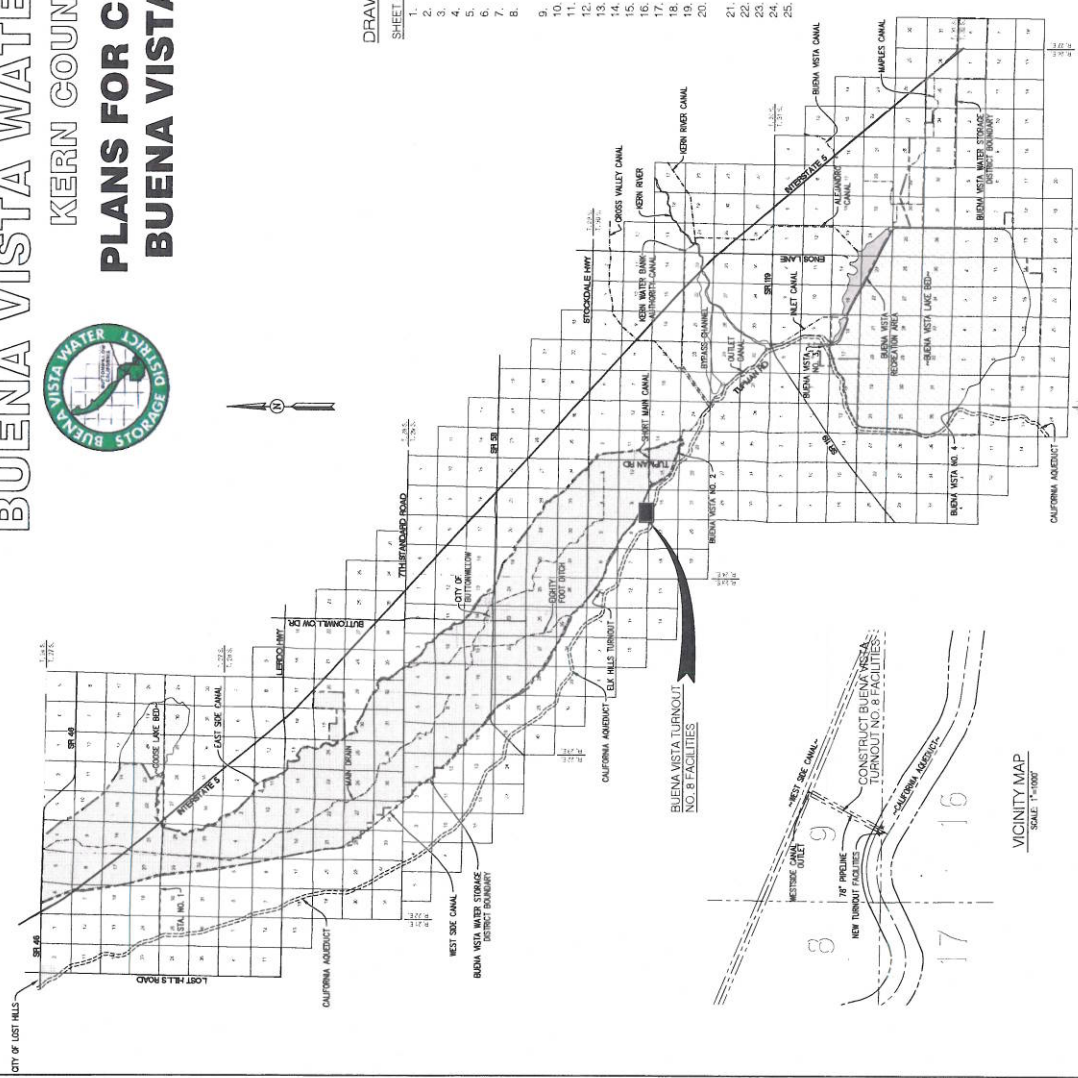
Meegan G. Nagy, P.E.
Chief, Flood Protection and Navigation Section

BUENA VISTA WATER STORAGE DISTRICT

KERN COUNTY, CALIFORNIA



PLANS FOR CONSTRUCTION OF BUENA VISTA TURNOUT NO. 8



DRAWING INDEX

SHEET NO.	SHEET TITLE
1	PLAN PROFILE STA. 10+ TO 21-
2	PIPELINE LAYOUT
3	AQUEDUCT TURNOUT STRUCTURE
4	TURNOUT SLUICE GATE AND STAIRWELL DETAILS
5	TURNOUT BAR GRATING AND REMOVABLE HANDRAIL DETAILS
6	TURNOUT BAY SCREEN DETAILS
7	TURNOUT TURNOUT CAGE
8	TURNOUT TURNOUT CAGE
9	METER METERING VAULT AND FACILITIES
10	METER VAULT DETAILS
11	METER VAULT CATWALK
12	DRAINAGE SYSTEM
13	PIPING AND VALVE BOX DETAILS
14	WESTSIDE CANAL OUTLET STRUCTURE
15	OUTLET STRUCTURE REINFORCING DETAILS
16	HANDRAIL GUARD POST, VAULT AIR VALVE & PIPE ELECTRICAL PLAN
17	EARTHWORK PAVKLINES
18	FLOOD CHANNEL DISTURBANCE REQUIREMENTS
19	COFFER DAM DETAILS
20	COFFER DAM DETAILS
21	COFFER DAM DETAILS
22	COFFER DAM DETAILS
23	COFFER DAM DETAILS
24	COFFER DAM DETAILS
25	COFFER DAM DETAILS

APPROVED BY: _____ DATE: _____
STATE DESIGN ENGINEER

ACCEPTED BY: _____ DATE: _____
DISTRICT MANAGER

RECOMMENDED BY: _____ DATE: _____
DISTRICT ENGINEER

SUBMITTED BY: _____ DATE: _____
RICHARD MEYER, PCE 28104

90% SUBMITTAL


M. Meyer
 Civil Engineering, Inc.
 1000 N. G Street, Suite 100
 Buena Vista, California 93422
 (559) 833-8888

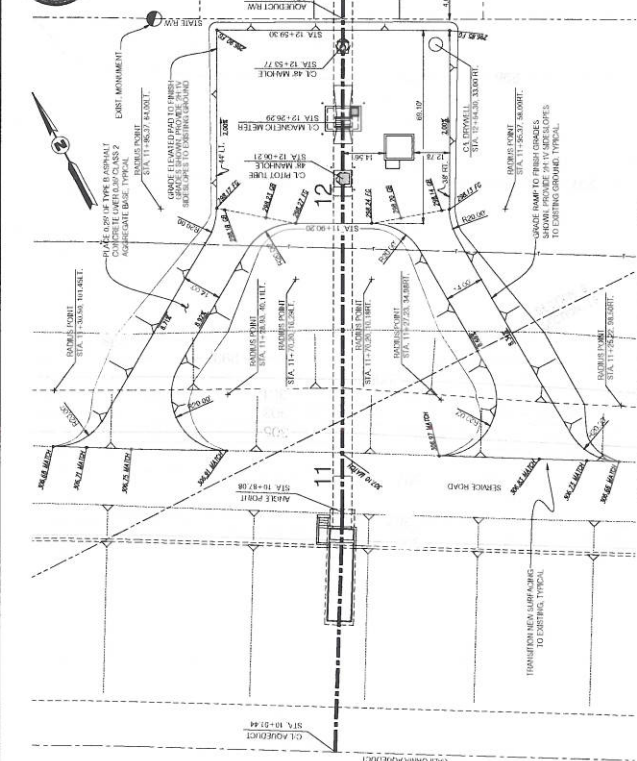
BUENA VISTA WATER STORAGE DIST.
CONSTRUCTION PLANS FOR
BUENA VISTA TURNOUT NO. 8

No. 1
 of
25
 SHEETS

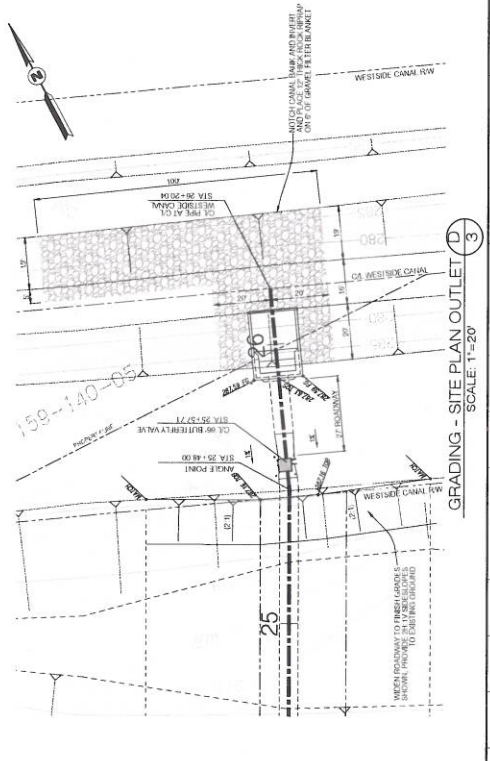
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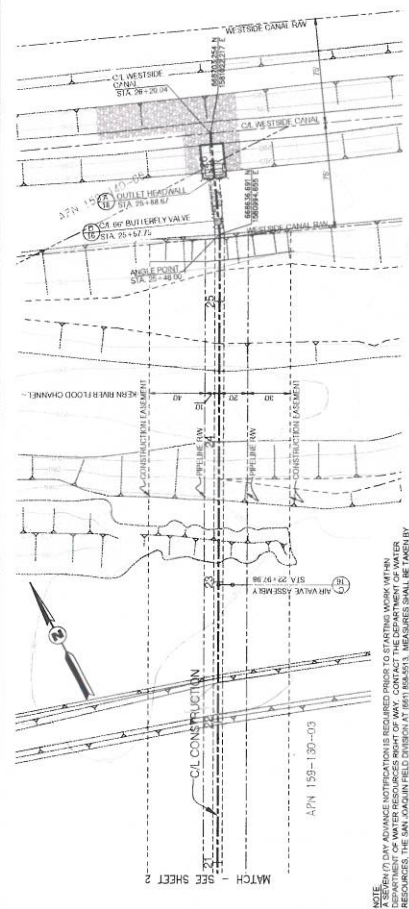
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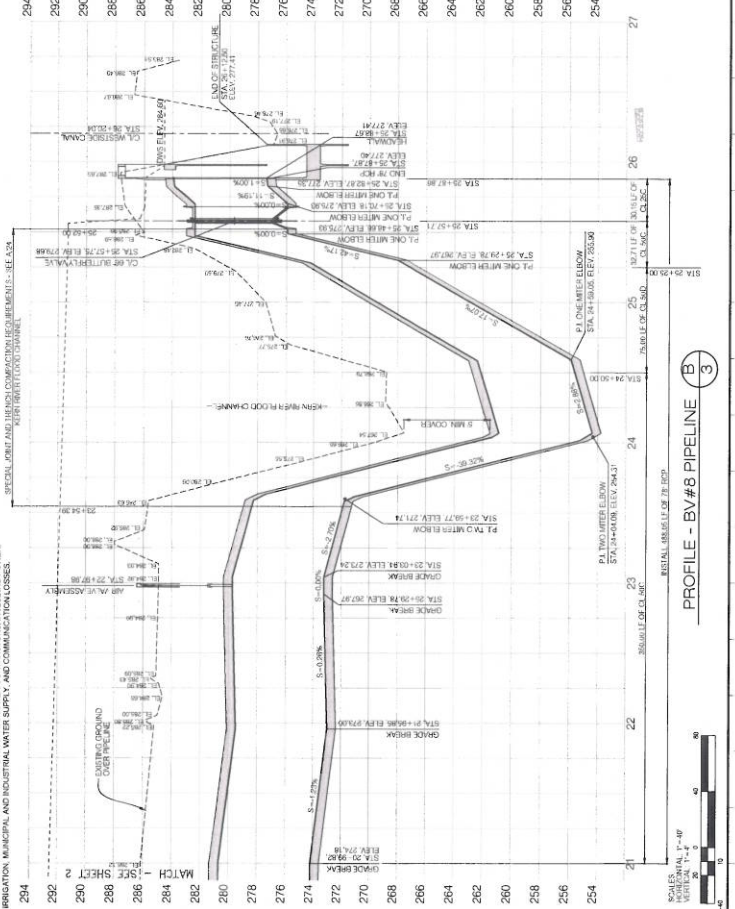
3
 GRADING - SITE PLAN TURNOUT
 SCALE: 1"=20'



3
 GRADING - SITE PLAN OUTLET
 SCALE: 1"=20'



3
 PLAN - BV#8 PIPELINE



3
 PROFILE - BV#8 PIPELINE

NOTICE: BEFORE ANY ADVANCE NOTIFICATION IS REQUIRED PRIOR TO STARTING WORK WITHIN THE DEPARTMENT OF WATER RESOURCES RIGHT OF WAY, CONTACT THE DEPARTMENT OF WATER RESOURCES AT (916) 439-5200. THE CONTRACTOR TO PROJECT IN PLACE ALL SWP FACILITIES AND APPURTENANCES INCLUDING BUT NOT LIMITED TO: WATER METER, CONTROL VALVES AND APPURTENANCES INCLUDING FACILITIES AND APPURTENANCES AS A RESULT OF THE CONSTRUCTION, AND FOR ANY OTHER FACILITIES, MATERIALS, AND INDUSTRIAL WATER SUPPLY, AND COMMUNICATIONS LOSSES.



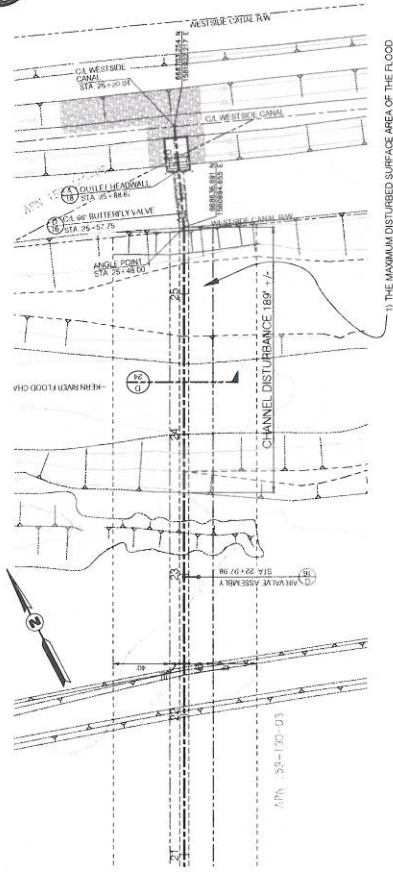


Meyer
 Civil Engineering, Inc.
 110 S. Monterey St., Ste. 104, Burbank, CA 91502
 Phone: 661-838-8534 Fax: 661-838-8167

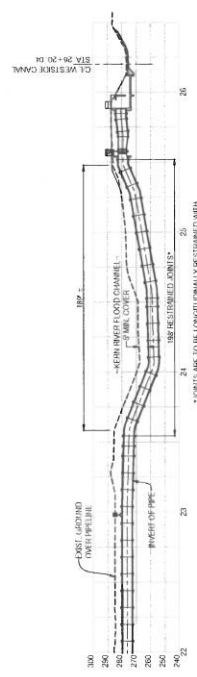
NO.	DATE	DESCRIPTION
1	11/11/24	ISSUED FOR PERMIT
2	08/08/24	REVISED PER COMMENTS
3	08/08/24	REVISED PER COMMENTS
4	08/08/24	REVISED PER COMMENTS
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BUENA VISTA WATER STORAGE DISTRICT
 BUENA VISTA TURNOUT #8
 FLOOD CHANNEL DISTURBANCE REQUIREMENTS

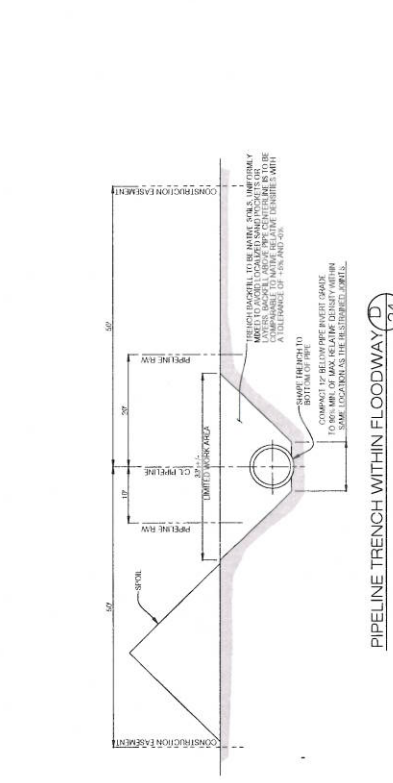
SHEET NO. **24**
 OF 25



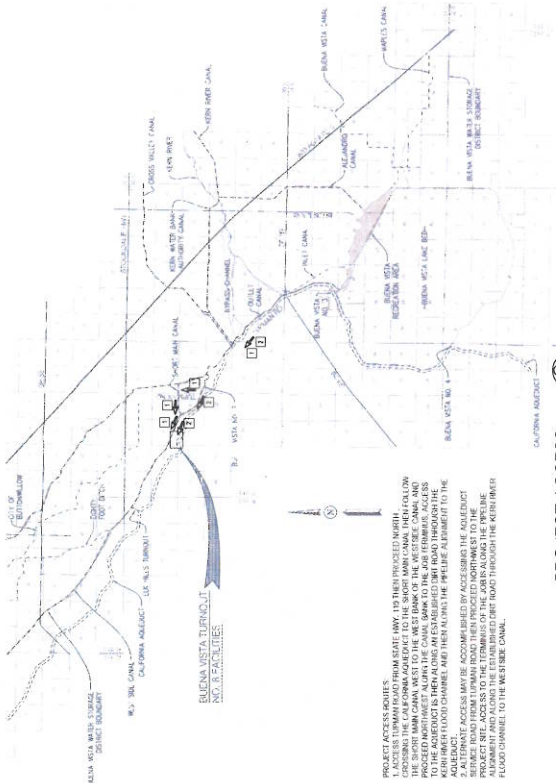
PLAN - KERN RIVER FLOOD CHANNEL XING



PROFILE - KERN RIVER FLOOD CHANNEL XING



PIPELINE TRENCH WITHIN FLOODWAY



PROJECT ACCESS

- 1) THE MAXIMUM DISTURBED SURFACE AREA OF THE FLOOD CHANNEL DUE TO TRENCHING IS 0.14 ACRES.
- 2) ALL EQUIPMENT STAKING TO OCCUR WITHIN THE FLOOD CHANNEL SHALL BE PROTECTED BY RUBBER TRACKS.
- 3) EXCESS SOIL SHALL BE DISPOSED OF IN AN UPLAND LOCATION.
- 4) ALL EQUIPMENT REQUIRE RUBBER TRACKS OR RUBBER TRACKS IN THE UPLAND AREAS OF THE CHANNEL.

PROJECT ACCESS ROUTES:

1. ACCESS TURNPIKE FROM STATE HWY 119 THEN PROCEED NORTH ON TURNPIKE TO THE WEST BANK OF THE KERN RIVER. PROCEED NORTHWEST ALONG THE CANAL BANK TO THE JOB ENTRANCE ACCESS POINT. ACCESS POINT IS LOCATED AT THE WEST BANK OF THE KERN RIVER FLOOD CHANNEL AND THE FACILITY IS THE PIPELINE ALIGNMENT TO THE TURNOUT.
2. ACCESS ROUTE MAY BE ACCOMMODATED BY ACCESSING THE SUBEXISTING TURNOUT FROM TURNPIKE ROAD THEN PROCEED NORTHWEST TO THE FACILITY. ACCESS POINT IS LOCATED AT THE WEST BANK OF THE KERN RIVER FLOOD CHANNEL AND THE FACILITY IS THE PIPELINE ALIGNMENT TO THE WESTLAKE CANAL.