Meeting of the Central Valley Flood Protection Board January 26, 2012

Staff Report – Encroachment Permit

Randy Valenzano Irrigation Pipe Replacement, Yolo County

<u>1.0 – ITEM</u>

Consider approval of Permit No. 18461 to abandon an existing pipeline and install (trench) a steel irrigation pipeline and an electrical conduit through the right (west) bank levee of the Sacramento River in Yolo County (see Attachment B).

2.0 - APPLICANT

Randy Valenzano

3.0 - LOCATION

The project is located on the right (west) bank levee north of Clarksburg approximately 1/3 of a mile south of the Freeport Bridge at 33700 South River Road. (Sacramento River, Yolo County, see Attachment A).

4.0 – DESCRIPTION

Applicant proposes to abandon the existing pipeline and install (trench) a 10-inch-diameter (10) gauge steel irrigation pipeline and a 2-inch-diameter schedule 40 PVC electrical conduit through the right (west) bank levee of the Sacramento River.

<u>5.0 – PROJECT ANALYSIS</u>

The existing pipe is buried approximately 15-feet below the levee crown of the right (west) bank levee of the Sacramento River. A major county road, South River Road, occupies the crown of the levee at the project location. The existing pipe was in-place prior to the adoption of the Sacramento River Flood Control Project in the project location. As a result the Board issued an Automatic Board Order for the existing pipe

on May 12, 1972. The proposed project to install a new 10-inch diameter irrigation pipe above the design water surface elevation and abandon the existing pipe in-place conforms to all Title 23 standards for Sections 123 and 124.

5.1 - Hydraulic Analysis

The proposed pipe will be above the design water surface elevation therefore a hydraulic analysis was not required.

5.2 - Geotechnical Analysis

The scope of work for the proposed project did not require a geotechnical analysis.

5.3 - Background Information

The proposed project was initially scheduled to be considered by the Board on May 15, 2009. The item was pulled from the meeting agenda due a condition set forth in the Corps of Engineers recommendation letter for the proposed project that required the existing pipe to be removed from the levee embankment and right-of-way. Removal of an existing pipe requires additional CEQA compliance, therefore the CEQA analysis done by Board Staff was insufficient and the item was pulled from the meeting agenda.

The Corps requirement to have the existing pipe removed from the levee was problematic for the applicant and resulted in an impasse to the situation. Things were complicated further when the pipe failed on May 26, 2009, when the applicant attempted to use the existing pipe. A small quantity of water exited the landside of the levee through rodent holes but caused no significant damage to the levee slope. However the failure created concerns that a void may have been created inside the levee.

On September 15, 2011 Board Staff held a phone conference with representatives from the Corps of Engineers in an attempt to resolve the situation. After careful consideration it was agreed that the pipe could be abandoned in-place if it could be confirmed that the pipe failure was isolated to the landside levee slope and there was no evidence of voids in the levee. If confirmed, it was agreed that the damaged portion of the pipe would be removed from the landside levee slope and the remainder of the pipe would be grouted in-place per Title 23 standards.

On October 26, 2011, the Board's Chief Engineer issued an authorization letter to excavate the landside levee toe to alleviate levee stability concerns that were created

when the existing pipe failed. The landside levee slope was excavated on October 31, 2011. Board Staff and a representative for Reclamation District No. 307 were present for the excavation. The existing pipe was identified as drill casing pipe and the failure had occurred at a threaded pipe connection located about 6-feet landward of the levee crown; no voids were encountered during the excavation. The pipe to the landside of the failure point was removed from the levee and project right-of-way. An earlier video inspection of the existing pipe together with the field inspection during excavation confirmed that the remainder of the pipe to the waterside of the failure point was suitable for grouting. Grouting of the pipe was completed on November 4, 2011. Subsequently the Corps of Engineers has agreed to revise their previous recommendation letter by removing the condition that required that the existing pipe be removed from the levee embankment and right-of-way.

<u>6.0 – AGENCY COMMENTS AND ENDORSEMENTS</u>

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

- Reclamation District No.307 endorsed the project on February 10, 2009, with no conditions.
- The revised 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 CEQA determination:

The Board, acting as the CEQA lead agency, has determined the project is categorically exempt in accordance with CEQA under a Class 2 Categorical Exemption (CEQA Guidelines Section 15302) covering replacement or reconstruction of existing structures and Class 4 Categorical Exemption (CEQA Guidelines Section 15304) covering minor alterations to land.

8.0 - SECTION 8610.5 CONSIDERATIONS

 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 irrigation pipe was present prior to the adoption of the area into the State Plan of Flood Control. Furthermore the invert of the new pipe will be above the Design Flood Plain; therefore there will be 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:

There will be minimal effects to the pipe due to reasonable projected future events. Higher river flows could require that the invert of the pipe be raised.

9.0 – STAFF RECOMMENDATION

Staff recommends that the Board determine the project be exempt from CEQA, approve Permit No. 18698 conditioned upon receipt of a USACE 208.10 letter of determination confirming that the Corps has no objection to the project, and direct the Executive Officer to take necessary actions to execute the permit and file a Notice of Exemption with the State Clearinghouse.

<u>10.0 – LIST OF ATTACHMENTS</u>

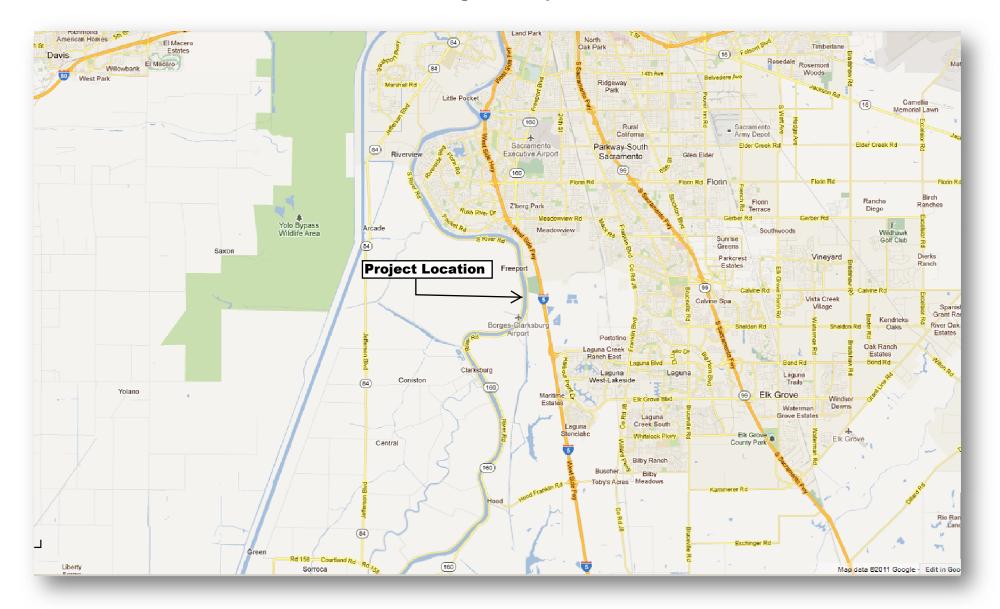
- A. Location Maps and Photos
- B. Draft Permit No. 18461
- C. Design Drawings

Design Review: Gary W. Lemon P.E.

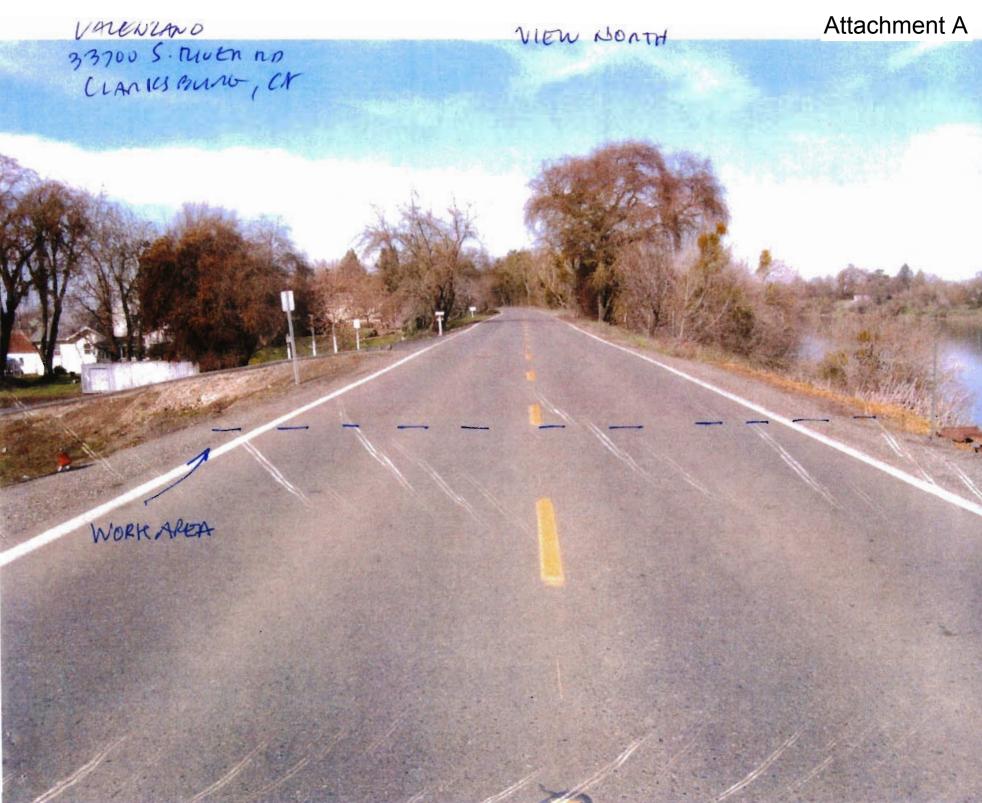
Environmental Review: James Herota / Andrea Mauro Document Review: Mitra Emami P.E., Len Marino P.E.



Regional Map











DRAFT

STATE OF CALIFORNIA THE RESOURCES AGENCY

THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18461 BD

This Permit is issued to:

Randy Valenzano 33700 S. River Road Clarksburg, California 95621

To abandon existing pipeline and install (trench) a 10-inch-diameter (10) gauge steel irrigation pipeline and a 2-inch-diameter schedule 40 PVC electrical conduit through the right (west) bank levee of the Sacramento River. The project is located north of Clarksburg approximately 1/3 of a mile south of the Freeport Bridge at 33700 S. River Road (Section 23, T7N, R4E, MDB&M, Reclamation District 307, 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.

Dated:		
	Exec	cutive Officer

GENERAL CONDITIONS:

(SEAL)

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. 18461 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 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.

FIFTEEN: 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.

SIXTEEN: 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.

SEVENTEEN: The Central Valley Flood Protection Board, Department of Water Resources, and

Reclamation District No. 307 shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

EIGHTEEN: 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.

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

TWENTY: 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.

TWENTY-ONE: 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 1st to April 15th.

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

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

TWENTY-FOUR: The invert of the pipe through the levee section shall be above the design flood plane elevation of 25.8 feet, NGV Datum.

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

TWENTY-SIX: 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-SEVEN: The pipe shall be buried at least 12 inches below the levee slopes and 24 inches below the levee crown.

TWENTY-EIGHT: Any excavations made in the levee section or within 10 feet of the levee toes shall be backfilled in 4- to 6-inch layers with 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. Backfill material shall be compacted in 4- to 6-inch layers to a minimum of 95 percent relative compaction as measured by ASTM Method D698.

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

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

THIRTY-ONE: 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-TWO: 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 No, 307 or any other agency responsible for maintenance.

THIRTY-THREE: 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.

THIRTY-FOUR: 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.

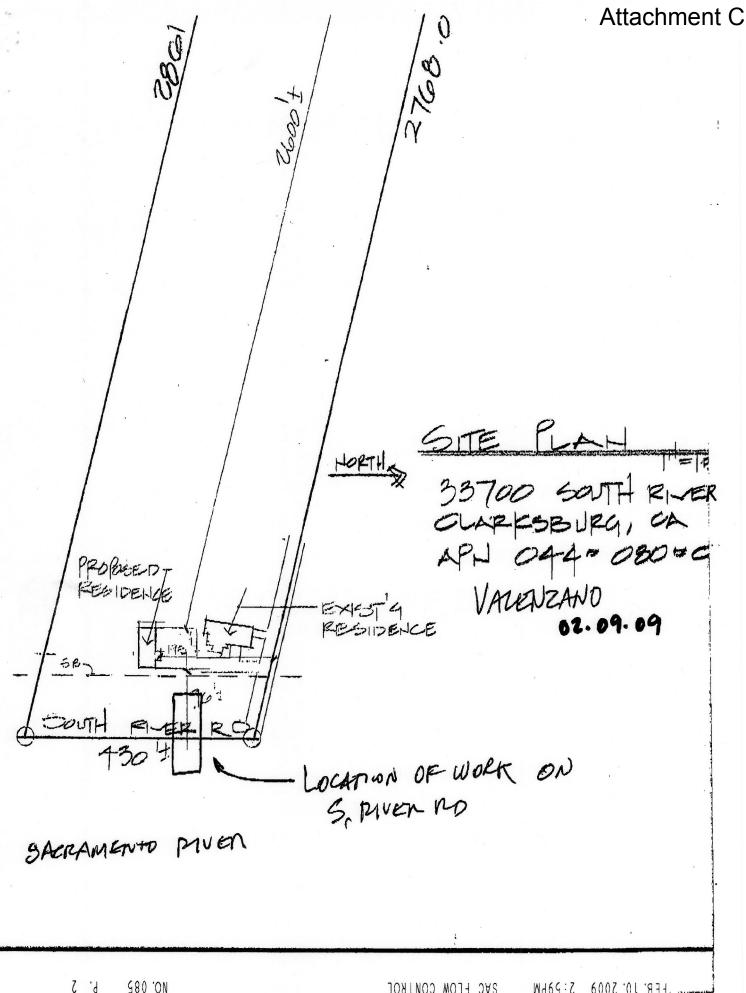
THIRTY-FIVE: In the event existing rock revetment on the channel bank or levee slope is disturbed or displaced during construction, it shall be restored to its preconstruction condition.

THIRTY-SIX: 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.

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

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

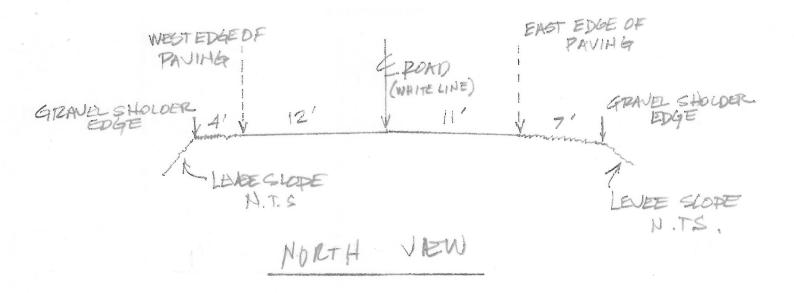
THIRTY-NINE: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated January XX, 2012, which is attached to this permit as Exhibit A and is incorporated by reference.

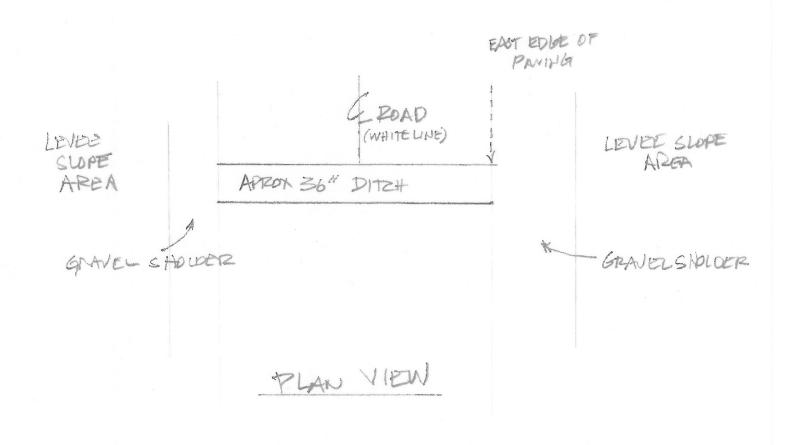


p. 2 NO. 085 SAC FLOW CONTROL

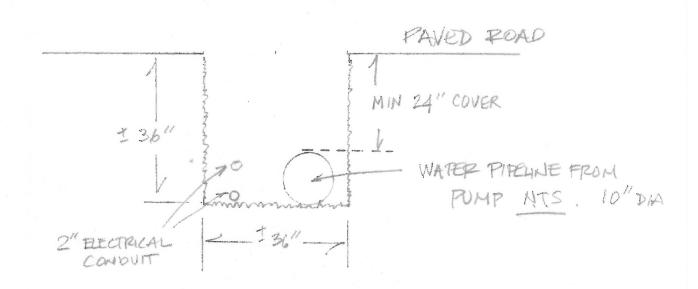
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Attachment C





VALENZANO 33700 SIRIVERIND CLARKSBURGICA, 02-09-09



HOTES)

- 1) REPAUL ROAD AS REQUIRED BY YOUR COUNTY -MATCH EXISTING PAVENENT THICKNESS
- 2) BACKFILL BELOW PAULOS TO TRENCH BOHOM TO BE A.B. COMPACTED TO 900
- ELECTRICAL CONDUTTS SCH 40 PUC PEN SEC (9)(3) OR SCH 40 BALV THREADED JOINTS (9)(1)
- 4) WATEN PIPELINE STEEL PIPE 10 GA, SCC(7)

ALENZANO 33700 S. PIVER RD CLARISSAURE, CA 95621 02-09-09