

**Meeting of the Central Valley Flood Protection Board
August 24, 2012**

**Staff Report – Encroachment Permit
Central Valley Independent Network, LLC
Fiber Optic Cable Conduit, Sutter County**

1.0 – ITEM

Consider approval of Permit No.18756 (Attachment B)

2.0 – APPLICANT

Central Valley Independent Network, LLC (CVIN)

3.0 – LOCATION

The project is located approximately four (4) miles east of Meridian across the Sutter Bypass. (Sutter Bypass, Sutter County, see Attachment A)

4.0 – DESCRIPTION

To attach a 4-inch diameter steel casing pipe to the south side of the State Highway 20 (Colusa Highway) Bridge that will contain fiber optic cable.

5.0 – PROJECT ANALYSIS

The applicant is proposing to attach a four (4) inch diameter fiber optic HDPE casing pipe to the south (downstream) side of the Sutter Bypass Bridge. Hand hole access points will be placed on the levee crown of both the left (east) and right (west) levees of the Sutter Bypass. The fiber optic cable will continue in both directions from the Sacramento River on the south side of State Highway 20. The proposed project conforms to all Title 23 standards.

5.1 – Hydraulic Analysis

A hydraulic analysis was not required as the fiber optic conduit will be attached to the side of the existing bridge and the conduit will not be any lower than the lowest point on the bridge.

5.2 – Geotechnical Analysis

A geotechnical analysis was not required as the depth of the hand hole access points in the levee crown is minimal.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

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

- Reclamation District No. 70 and the DWR Sutter Maintenance Yard have endorsed the project with no conditions.
- The U.S. Army Corps of Engineers 208.10 comment letter has not been received for this application. Staff anticipates receipt of a letter indicating that the USACE District Engineer has no objection to the project, subject to conditions. Upon receipt of the letter, staff will review to ensure conformity with the permit language and incorporate it into the permit as Exhibit A.

7.0 – CEQA ANALYSIS

The Board, as a responsible agency under CEQA, has reviewed Initial Study/Negative Declaration (IS/ND) (September 2010, SCH# 2011042097) for the Central Valley Independent Network Fiber Optic Communication Network Project prepared by the lead agency, California Public Utilities Commission (CPUC). These documents, including project design, may be viewed or downloaded from the Central Valley Flood Protection Board website at <http://www.cvfpb.ca.gov/meetings/2012/08-24-2012.cfm> under a link for this agenda item. These documents are also available for review in hard copy at the Board and CPUC offices.

CPUC determined that the project would not have a significant effect on the environment and approved the project with Resolution T-17295 on July 14, 2011 and subsequently filed a Notice of Determination with the State Clearinghouse on October 17, 2011. Board staff has independently reviewed the subject documents and finds that the proposed project will not have a potentially significant effect on the environment.

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 facilities of the State Plan of Flood Control, and consistency of the proposed project with the Central Valley Flood Protection Plan as adopted by Board Resolution 2012-25 on June 29, 2012:

The proposed project will have no adverse effect on facilities of the State Plan of Flood Control and is consistent with the Central Valley Flood Protection Plan.

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 no effects to the proposed fiber optic conduit from reasonable projected future events as the conduit will be underground.

9.0 – STAFF RECOMMENDATION

Staff recommends that the Board adopt the CEQA findings and approve the permit, conditioned upon receipt of a U.S. Army Corps of Engineers comment letter indicating that the District Engineer has no objection to the project, subject to conditions, and direct staff to file a Notice of Determination with the State Clearinghouse.

10.0 – LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit No. 18756
- C. Project drawing

Design Review: Gary W. Lemon P.E.
Environmental Review: Andrea Mauro, James Herota
Document Review: Mitra Emami P.E., Len Marino P.E.



DRAFT

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

PERMIT NO. 18756 BD

This Permit is issued to:

Central Valley Independent Network, LLC (CVIN)
9479 N. Fort Washington
Suite 105
Fresno, California 93730

To attach a 4-inch diameter steel casing pipe to the south side of the State Highway 20 (Colusa Highway) Bridge that will contain fiber optic cable. The project is located approximately four (4) miles east of Meridian across the Sutter Bypass. (Section 14 & 15, T15N, R1E, MDB&M, Reclamation District 70 and Sutter Maintenance Yard, Sutter Bypass, Sutter 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. 18756 BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications dated March 23, 2012, 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 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.

FIFTEEN: 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.

SIXTEEN: The Central Valley Flood Protection Board, Department of Water Resources shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

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

EIGHTEEN: Upon receipt of a signed copy of the issued 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.

NINETEEN: 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.

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

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

TWENTY-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 or any other agency responsible for maintenance.

TWENTY-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.

TWENTY-FOUR: 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 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-FIVE: 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-SIX: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated August xx, 2012, which is attached to this permit as Exhibit A and is incorporated by reference.

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

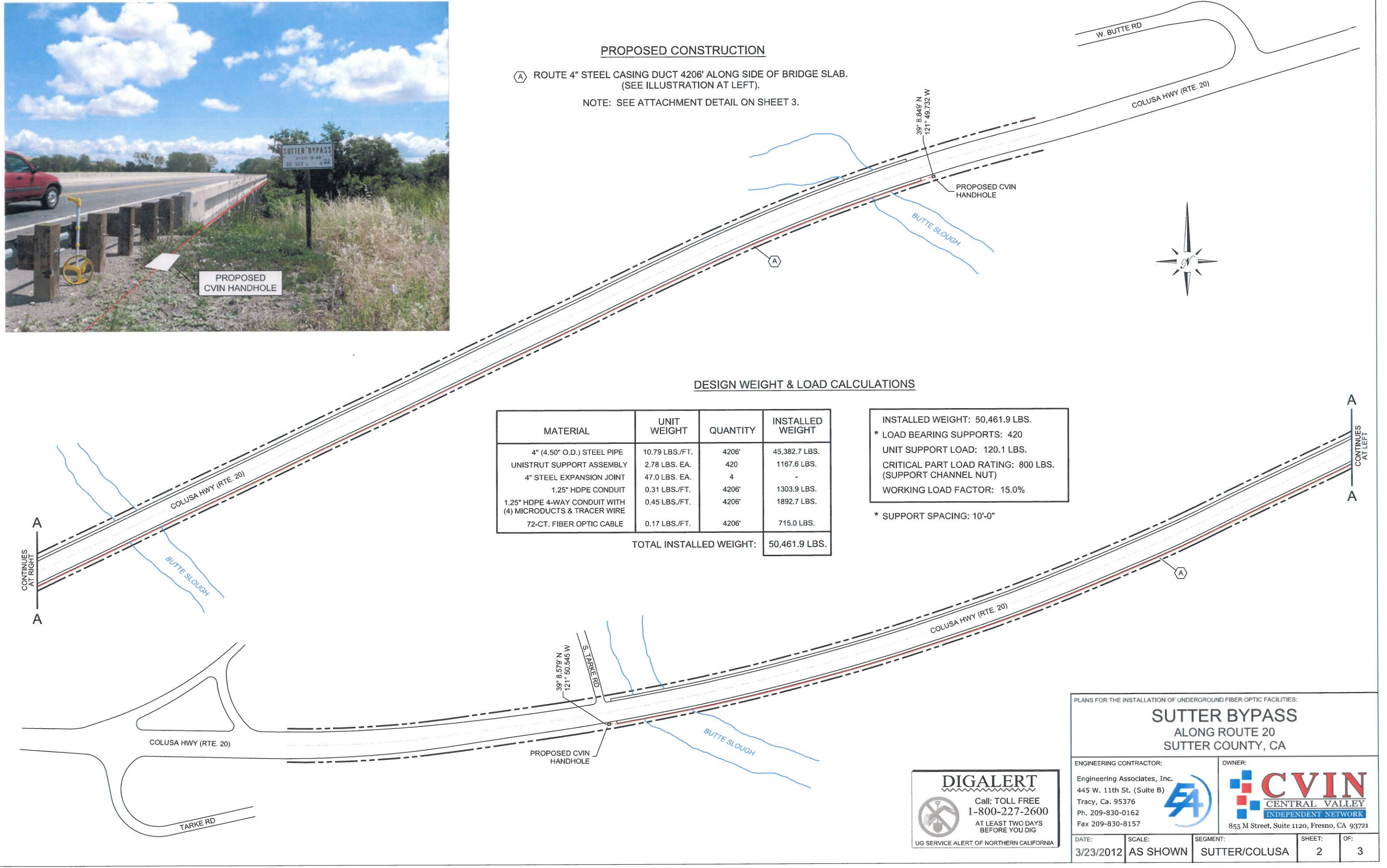
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PROPOSED CONSTRUCTION

Ⓐ ROUTE 4" STEEL CASING DUCT 4206' ALONG SIDE OF BRIDGE SLAB.
(SEE ILLUSTRATION AT LEFT).

NOTE: SEE ATTACHMENT DETAIL ON SHEET 3.



DESIGN WEIGHT & LOAD CALCULATIONS

MATERIAL	UNIT WEIGHT	QUANTITY	INSTALLED WEIGHT
4" (4.50" O.D.) STEEL PIPE	10.79 LBS./FT.	4206'	45,382.7 LBS.
UNISTRUT SUPPORT ASSEMBLY	2.78 LBS. EA.	420	1167.6 LBS.
4" STEEL EXPANSION JOINT	47.0 LBS. EA.	4	-
1.25" HDPE CONDUIT	0.31 LBS./FT.	4206'	1303.9 LBS.
1.25" HDPE 4-WAY CONDUIT WITH (4) MICRODUCTS & TRACER WIRE	0.45 LBS./FT.	4206'	1892.7 LBS.
72-CT. FIBER OPTIC CABLE	0.17 LBS./FT.	4206'	715.0 LBS.
TOTAL INSTALLED WEIGHT:			50,461.9 LBS.

INSTALLED WEIGHT: 50,461.9 LBS.
 * LOAD BEARING SUPPORTS: 420
 UNIT SUPPORT LOAD: 120.1 LBS.
 CRITICAL PART LOAD RATING: 800 LBS.
 (SUPPORT CHANNEL NUT)
 WORKING LOAD FACTOR: 15.0%

* SUPPORT SPACING: 10'-0"

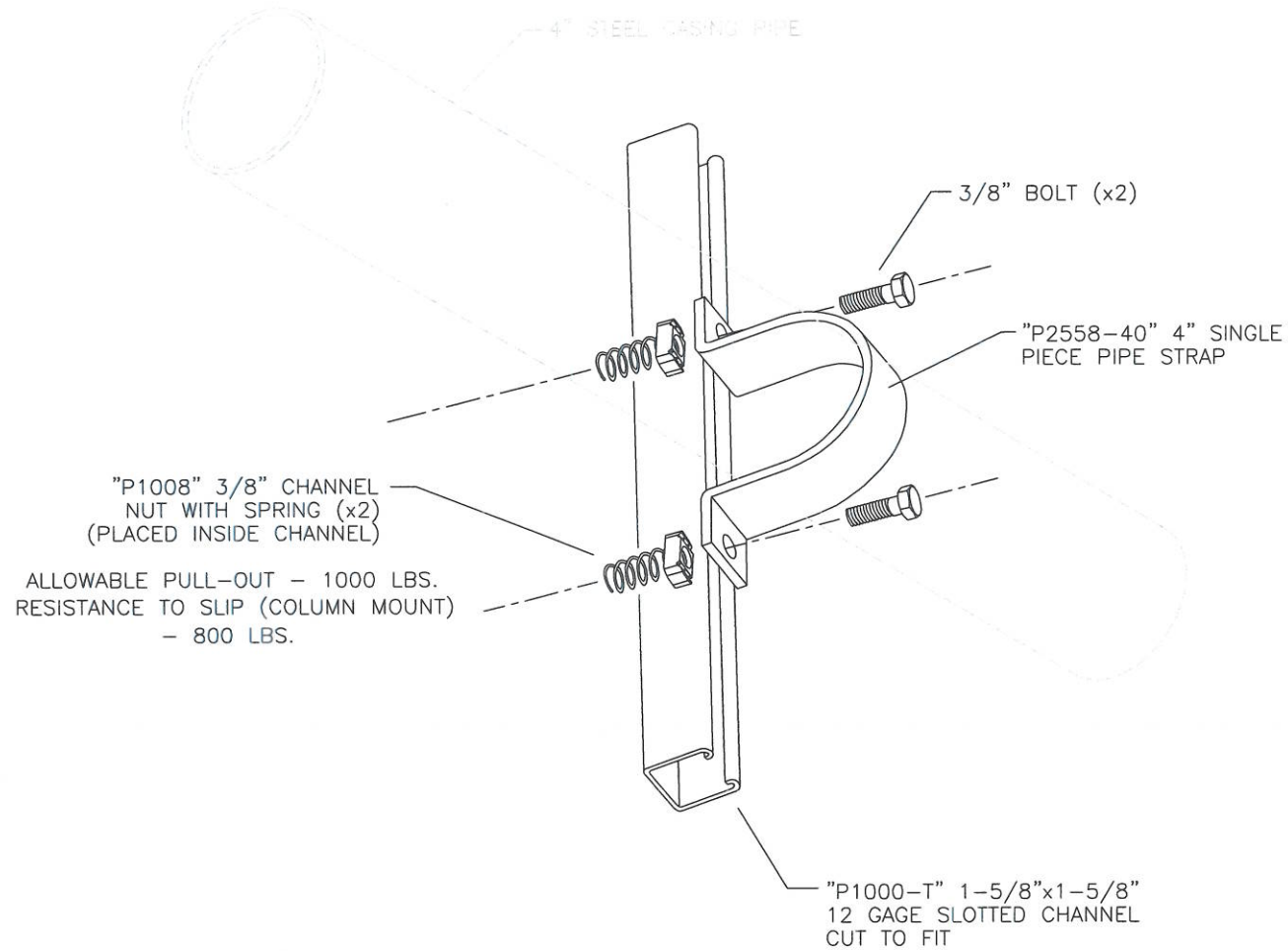
PLANS FOR THE INSTALLATION OF UNDERGROUND FIBER OPTIC FACILITIES:

SUTTER BYPASS
ALONG ROUTE 20
SUTTER COUNTY, CA

ENGINEERING CONTRACTOR: Engineering Associates, Inc. 445 W. 11th St. (Suite B) Tracy, Ca. 95376 Ph. 209-830-0162 Fax 209-830-8157	OWNER: CVIN CENTRAL VALLEY INDEPENDENT NETWORK 855 M Street, Suite 1120, Fresno, CA 93721			
DATE: 3/23/2012	SCALE: AS SHOWN	SEGMENT: SUTTER/COLUSA	SHEET: 2	OF: 3

DIGALERT
Call: TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS
BEFORE YOU DIG
UG SERVICE ALERT OF NORTHERN CALIFORNIA

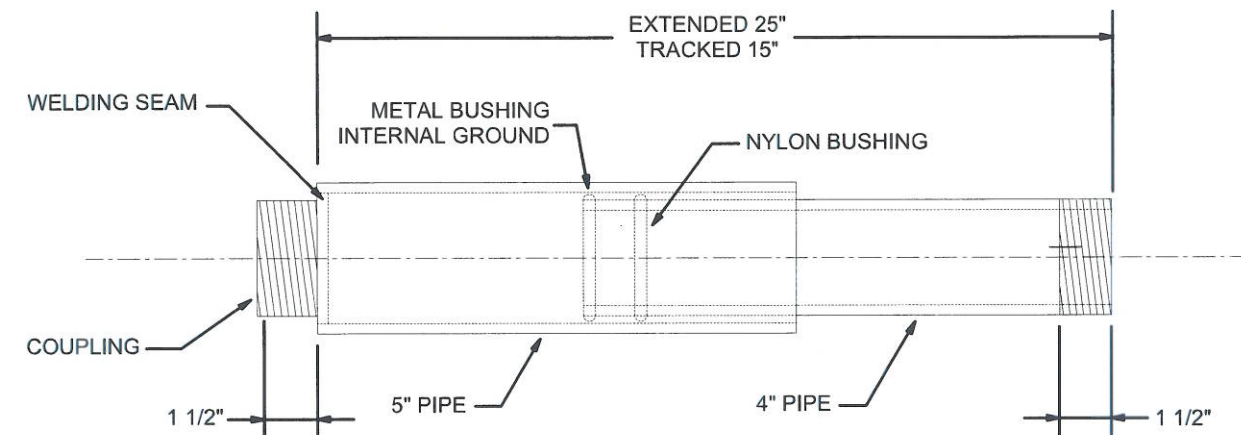
UNISTRUT CONCRETE BRIDGE ATTACHMENT DETAIL
N.T.S.



NOTES:

1. SLOTTED CHANNEL SHALL BE ATTACHED TO CONCRETE BRIDGE SECTION WITH (2) 3/8" STAINLESS STEEL DROP-IN ANCHORS, MINIMUM EMBED - 1-9/16" (DETAIL AT RIGHT).
2. PIPE SUPPORT ASSEMBLY SPACING WILL BE NOTED ON EACH BRIDGE ATTACHMENT DETAIL SHEET.

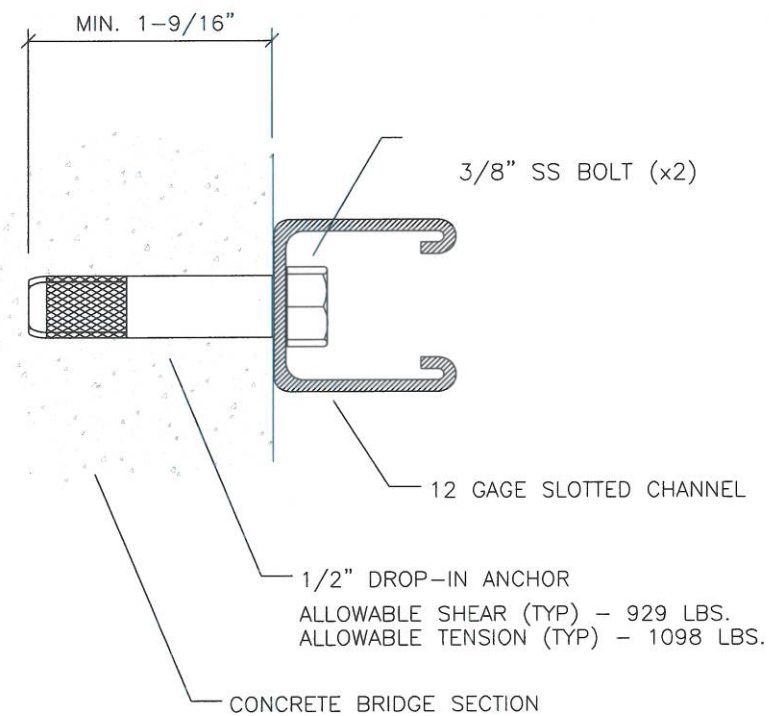
TYPICAL STEEL EXPANSION JOINT
N.T.S.



NOTES:

1. EXPANSION JOINT INSTALLATION WILL BE NOTED AS REQUIRED ON BRIDGE ATTACHMENT DETAIL SHEETS.
2. JOINT MATERIALS TO BE HOT DIP GALVANIZED STEEL.

ANCHOR DETAIL
N.T.S.



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