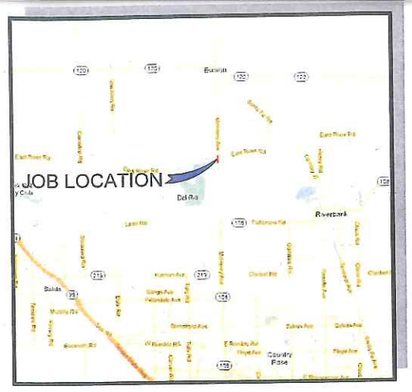
SAN JOAQUIN COUNTY PERMIT ~~PALNS~~ PLANS
CVIN SEGMENT 17
"INSTALLATION OF FIBER OPTIC CABLE"
McHenry Ave & E River Rd
Escalon CA, 95320



ESTIMATED EXCAVATION: 0'

BORE	73'	LF
ASPHALT TRENCH	0	LF
DIRT TRENCH	78'	LF
BRIDGE ATTACHMENT	426'	LF
S/W R&R	0	SF
BORE PITS (PAVEMENT)	2	
POTHOLES (PAVEMENT)	0	

GENERAL NOTES

1. ALL CONSTRUCTION FROM THESE PLANS WITHIN THE STATE'S RIGHT-OF-WAY SHALL CONFORM TO THE STATE'S 2010 STANDARD SPECIFICATIONS AND STANDARD PLANS, 2010 CALIFORNIA MUTCD, AND/OR AS DIRECTED BY THE STATE REPRESENTATIVE.
2. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR COORDINATION OF THE FOLLOWING ITEMS RELATED TO THE NEW INSTALLATION:
   A. ALL CONTROLLING FIELD DIMENSIONS, BEFORE ORDERING OR FABRICATING CONSTRUCTION MATERIAL.
   B. ALL DIMENSIONS AND CONDITIONS AT THE SITE, NOTIFYING THE ENGINEER OF ANY DISCREPANCIES WITH THE PLANS, PRIOR TO THE START OF THE CONSTRUCTION.
   C. ANY CONDITION WHICH IN THE CONTRACTOR'S OPINION MIGHT ENDANGER THE STABILITY OF ANY STRUCTURE, ADJACENT IMPROVEMENTS AND/OR PUBLIC PROPERTY.
   D. THE LOCATION AND PROTECTION OF EXISTING UTILITIES IN THE VICINITY OF THE PROJECT. THE CONTRACTOR SHALL EXAMINE THE JOB SITE TO DETERMINE WHICH UTILITIES MAY BE AFFECTED BY THIS CONSTRUCTION.
   E. THE LOCATION AND PROTECTION OF ALL CONDUITS INTERFERING WITH THE NEW INSTALLATION.
   F. THE PROPER ALIGNMENT OF THE NEW INSTALLATION.
3. THE CONTRACTOR SHALL DESIGN, OBTAIN THE REQUIRED PERMITS, FURNISH AND INSTALL ALL THE TEMPORARY SHORING, UNDERPINNING AND BRACING REQUIRED TO SAFELY EXECUTE THE WORK AND PROTECT PUBLIC PROPERTY AND EXISTING IMPROVEMENTS. THE CONTRACTOR SHALL PROVIDE AND INSTALL APPROPRIATE SIGNS AND ADEQUATE WARNING DEVICES TO ADVISE THE PUBLIC OF CONSTRUCTION HAZARDS AND SHALL REMOVE ALL SUCH SIGNS AND DEVICES UPON COMPLETION OF WORK.
4. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF THE PROJECT. THIS REQUIREMENT IS NOT LIMITED TO THE NORMAL WORKING HOURS. THE CONTRACTOR SHALL INDEMNIFY AND HOLD CALTRANS AND THE DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE CONTRACTOR'S WORK ON THIS PROJECT.
5. THE DESIGN ENGINEER DOES NOT WARRANT THE ACCURACY OF SCALED DIMENSIONS. ALL DIMENSIONS SHALL BE AS DESIGNATED ON THE PLANS.
6. BEFORE COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT INQUIRY I.D. NUMBER BY CALLING 1-800-422-4133. TWO WORKING DAYS SHALL BE ALLOWED AFTER THE I.D. NUMBER IS OBTAINED AND BEFORE THE EXCAVATION WORK IS STARTED SO THAT THE UTILITY OWNERS CAN BE NOTIFIED. THE I.D. NUMBER MUST BE REPORTED WHEN CALLING FOR INSPECTION. THE I.D. NUMBER WILL NOT BE ISSUED MORE THAN 14 DAYS PRIOR TO THE STARTING OF EXCAVATION WORK.
7. ALL CONSTRUCTION SHALL CONFORM TO THE SAFETY REQUIREMENTS OF THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY. NO TRENCHES OR EXCAVATIONS 5 FEET OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND SHALL BE CONSTRUCTED WITHOUT THE NECESSARY PERMIT FROM THE CAL/OSHA. WORK INSIDE BRIDGE CELLS SHALL BE SUBJECT TO ALL SAFETY REQUIREMENTS FROM CAL/OSHA.
8. ALL DEBRIS AND CONSTRUCTION MATERIAL SHALL BE REMOVED FROM THE SITE AT THE END OF THE WORK.
9. ALL TRAFFIC CONTROL SHALL BE IN CONFORMANCE WITH 2010 CALIFORNIA MUTCD, DATED 1/21/2010.
10. IF ANY DAMAGE IS CAUSED BY THE CONTRACTOR'S OPERATION, HE SHALL, AT HIS OWN EXPENSE, REPAIR OR REPLACE DAMAGED FACILITIES PROMPTLY AND IN ACCORDANCE WITH STATE SPECIFICATIONS AND/OR AS DIRECTED BY THE STATE REPRESENTATIVE.
11. ALL ROADWAY FEATURES (SIGNS, PAVEMENT DELINEATION, ROADWAY SURFACE, RIGHT-OF-WAY FENCE, ETC.) WITHIN THE STATE RIGHT OF WAY MUST BE PROTECTED, MAINTAINED IN A TEMPORARY CONDITION, OR RESTORED.
12. ALL TRENCHES AND EXCAVATIONS MUST BE BACK FILLED OR STEEL PLATED OUTSIDE THE WORKING HOURS TO RESTORE TRAFFIC TO NORMAL CONDITIONS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR POTHOLING AND PREPARING A BORING PROFILE FOR ALL EXISTING UTILITIES PRIOR TO CALTRANS ISSUING THE CONTRACTOR'S PORTION OF THE ENCROACHMENT PERMIT.

CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY FIELD INSPECTION AND A SEARCH OF THE AVAILABLE CITY OR COUNTY RECORDS. SINCE THE ACTUAL LOCATION AND NATURE OF THE UNDERGROUND FACILITIES MAY BE SOMEWHAT DIFFERENT FROM THAT SHOWN. THE CONTRACTOR IS REQUIRED TO VERIFY THE INFORMATION THROUGH UNDERGROUND SERVICE ALERT (USA) OR BY CONTACTING THE UTILITY COMPANIES DIRECTLY. PRIOR TO EXCAVATION.

INDEX

SHEET 01	TITLE SHEET, VICINITY MAP & INDEX
SHEET 02	TRENCHING/BACKFILL NOTES
SHEET 03-04	HANDHOLE DETAIL AND TYPICAL BORING DETAIL
SHEET 05-06	TRAFFIC CONTROL PLANS
SHEET 07-08	BRIDGE NOTES AND DETAILS

REGISTERED PROFESSIONAL ENGINEER
FREDRIC WHEARY RITTER
NO. C 047771
Exp. 12/31/13
CIVIL
STATE OF CALIFORNIA

Fredric W. Ritter

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PLAN REVISIONS

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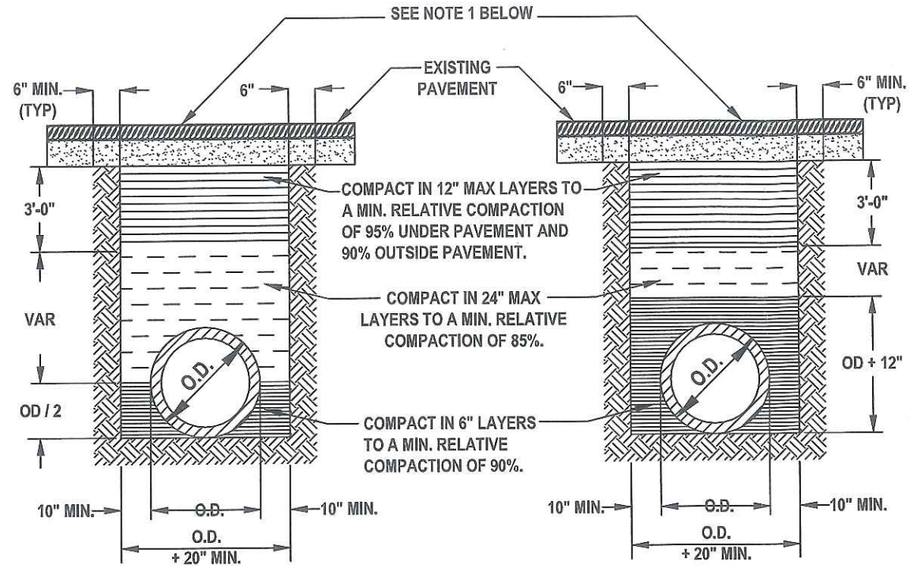
445 W. 11th St. (Suite B)
Tracy, Ca. 95376
Ph. 209-830-0162
Fax 209-830-8157

AGENCY/CITY: County of San Joaquin
REF#

APPLICANT: CVIN CENTRAL VALLEY INDEPENDENT NETWORK
855 M Street, Suite 1120, Fresno, CA 93721

LOCATION: 11/7/12
CVIN SEGMENT 17
Mchenry Ave Bridge & E. River Rd
JN#
DESIGN: DATE: 11/07/2012
FIELDER: DATE:
SHEET 01 OF 09

PS-12-02848



RIGID CONDUIT **FLEXIBLE CONDUIT**

NOTES:

1. BACKFILL WITH MATERIALS EQUAL TO OR BETTER THAN THE EXISTING PAVEMENT AND BASE IN QUALITY. NEW PAVEMENT SHALL BE 1" THICKER THAN EXISTING PAVEMENT, MINIMUM OF 0.25 FT. NEW BASE SHALL BE 1" THICKER THAN EXISTING BASE, MIN OF 0.50 FT.
2. RELATIVE COMPACTION OF MATERIALS SHALL BE TESTED IN ACCORDANCE WITH THE STATE OF CALIFORNIA, DEPT. OF TRANSPORTATION TESTING MANUALS, TEST METHOD NO. CAIFORNIA 216 OR 231.
3. ALL EXISTING PAVEMENT SHALL BE NEATLY CUT TO LINE PRIOR TO TRENCH EXCAVATION.
4. JETTING OR PONDING WILL BE PERMITTED WITHIN THE STREET RIGHT-OF-WAY WITH A 3 YEAR BOND, WHEN APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
5. WHEN SHOWN BY SOIL COMPOSITION AND COMPACTABILITY, NINETY PERCENT (90%) COMPACTION MAY BE USED, WHEN APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
6. SPECIAL BEDDING REQUIREMENTS MAY BE SHOWN ON THE PLANS OR SPECIFIED IN SPECIAL PROVISIONS.

TYPICAL TRENCH BACKFILL

NTS

SYMBOL/LINETYPE	ABBRV.	DESCRIPTION
		CONCRETE REPLACEMENT
		ASPHALT RESURFACE
		PROPOSED TRENCH
		PROPOSED BORE
/	BP	BORE PIT DIRT / ASPHALT
	PH	POTHOLE ASPHALT
	EU	EXPOSE UTILITY
	POLE	UTILITY POLE
M	MH	MANHOLE
HH	HH	HAND HOLE
P	PED	PEDESTAL
VT	VT	VAULT
	F/H	FIRE HYDRANT
	VLV	VALVE
	TS	TRAFFIC SIGNAL
	SL	STREET LIGHT
M	MTR	METER
T		TREE
		VENT
	PL	PLACE (INSTALL NEW)
	R&R	REMOVE & REPLACE
℄	C/L	CENTER LINE
R/W	R/W	RIGHT OF WAY
EOP	EOP	EDGE OF PAVEMENT
FOC	FOC	FRONT OF CURB
CURB FACE / C&G / GUTTER LIP	C&G	CURB & GUTTER
	R/R	RAILROAD
SLC		STREET LIGHT CONDUIT
E		ELECTRIC
T		TELEPHONE
G		GAS
SD		STORM DRAIN
SS		SANITARY SEWER
W		WATER
TV		CATV
FO		FIBER OPTIC

ABBRV.	DESCRIPTION
BCF	BEHIND CURB FACE
FCF	FROM CURB FACE
CONC	CONCRETE
EXIST	EXISTING
U/G	UNDERGROUND
S/W	SIDEWALK
DW	DRIVEWAY
N	NORTH
N'LY	NORTHERLY
NE'LY	NORTHEASTERLY
NW'LY	NORTHWESTERLY
S	SOUTH
S'LY	SOUTHERLY
SE'LY	SOUTHEASTERLY
SW'LY	SOUTHWESTERLY
W	WEST
W'LY	WESTERLY
TYP	TYPICAL

CONDUIT COUNT — X x" — CONDUIT SIZE
DISTANCE — X '

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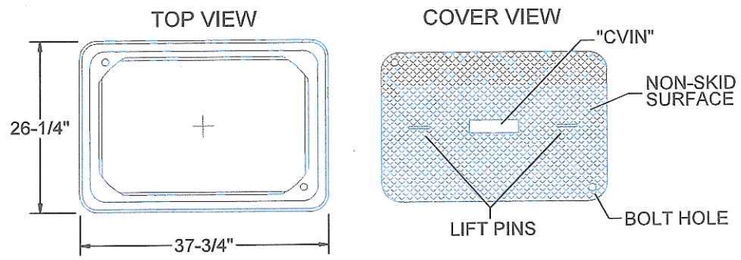
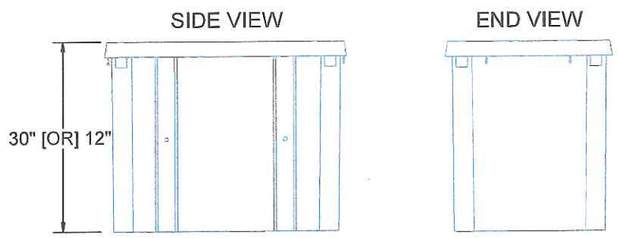
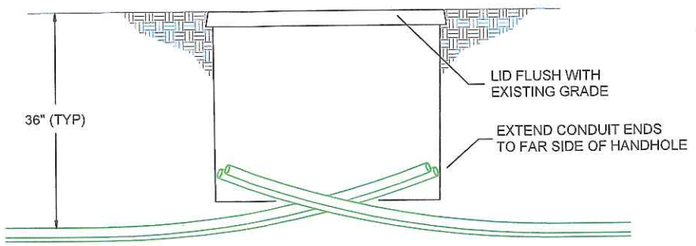
CVIN HANDHOLE DETAIL

MARTIN ENTERPRISES POLYMER
CONCRETE BOX 243630 OR EQUIVALENT
(W/ TRAFFIC RATED LID WHEN SPECIFIED)

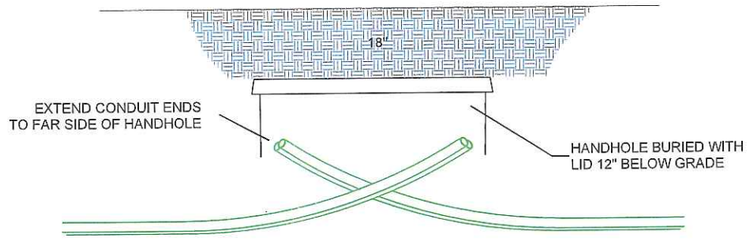




30" HANDHOLE INSTALLATION



12" HANDHOLE INSTALLATION



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CONDUIT COUNT → X x" ← CONDUIT SIZE
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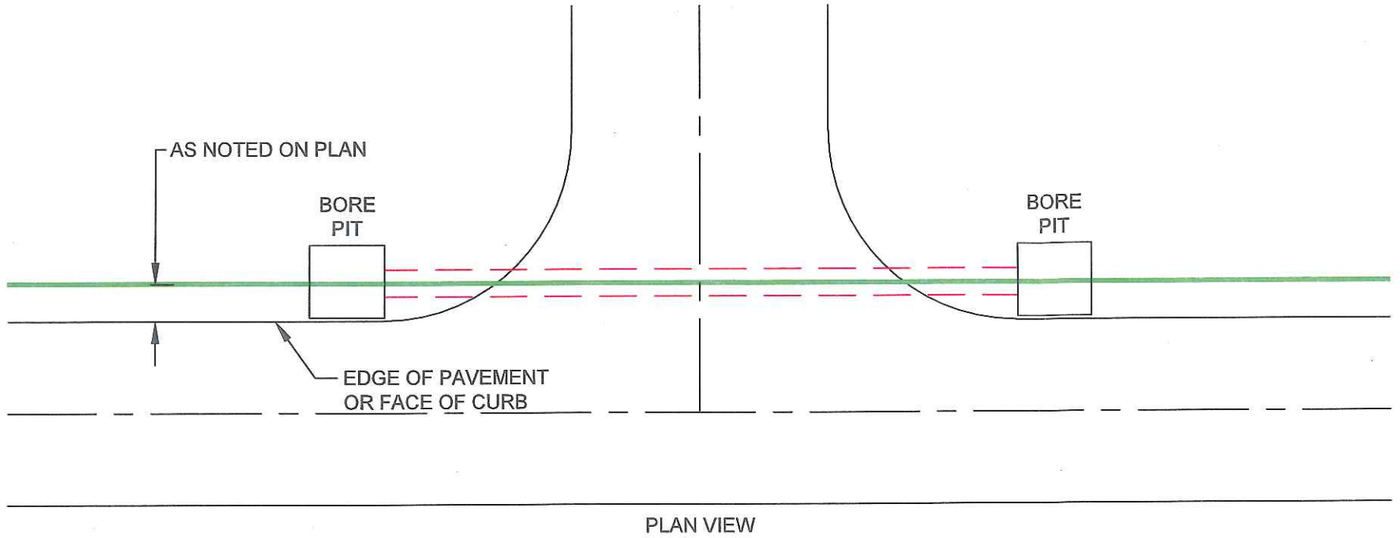
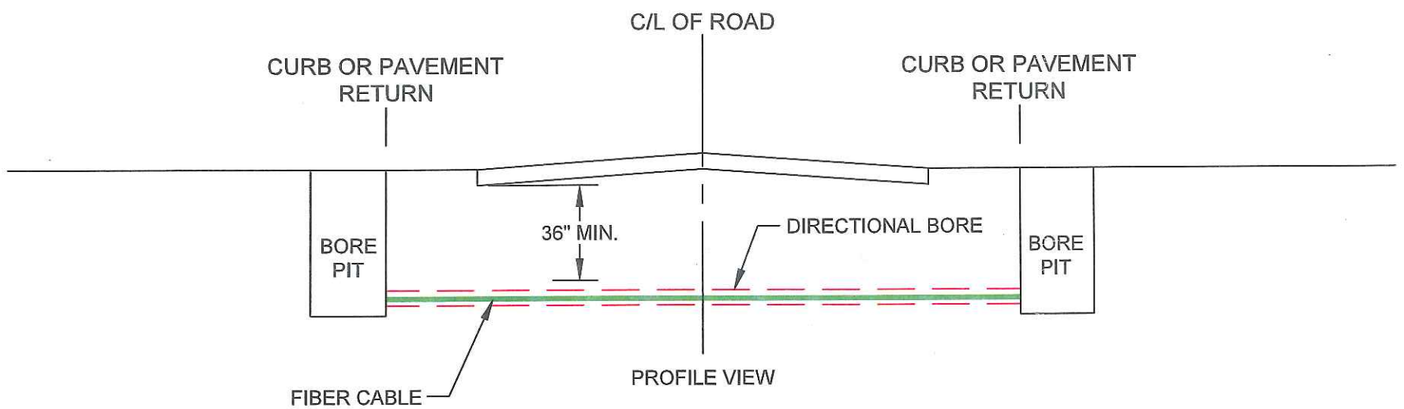


PLAN VIEW



PROFILE VIEW

TYPICAL BORE DETAIL AT STREET INTERSECTION

NOT TO SCALE

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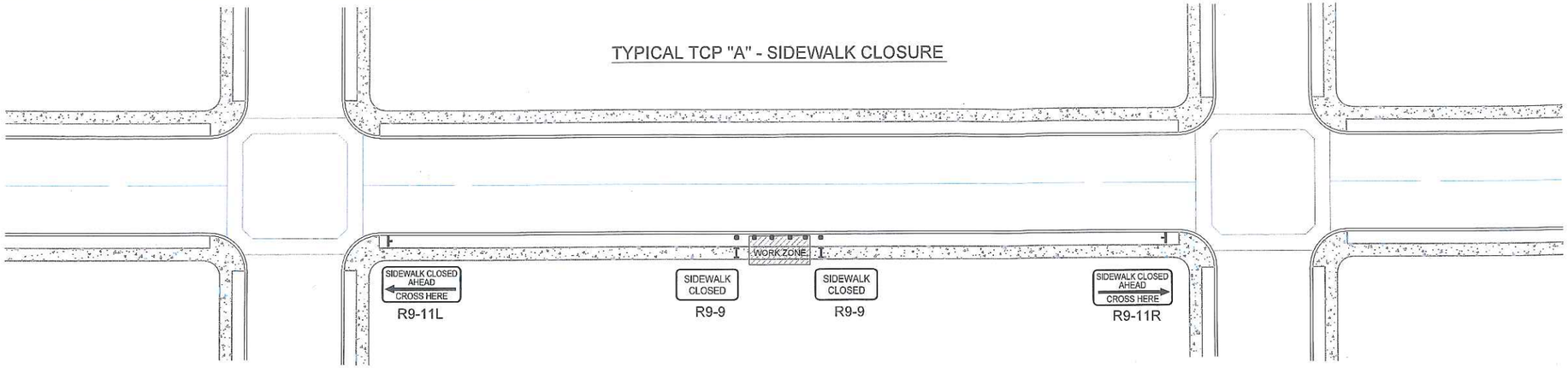
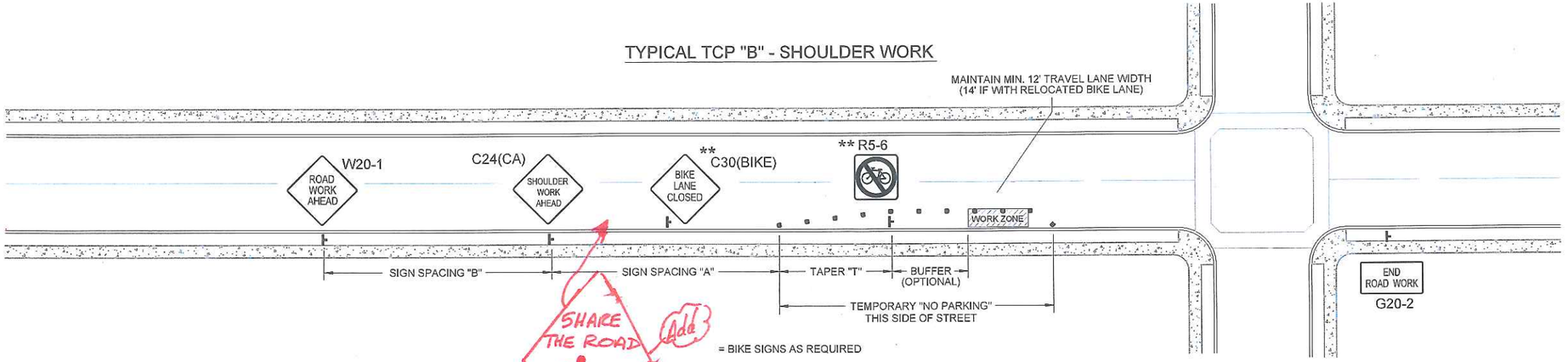
TYPICAL TCP "A" - SIDEWALK CLOSURE



TRAFFIC CONTROL PLAN TYPICALS
EDGE OF ROAD WORK ZONE

TYPICAL TCP "B" - SHOULDER WORK



LEGEND

- TRAFFIC CONE
- FLASHING ARROW SIGN (FAS)
- BARRICADE
- WORK ZONE
- EXISTING TURN ONLY LANE
- EXISTING NO TURN LANE
- TRAFFIC SIGNAL
- FLAGGER
- SIGN (WITH CALTRANS CODE)
- HIGH LEVEL WARNING DEVICE (WITH CALTRANS & MUTCD CODE)
- TRAFFIC FLOW DIRECTION

SIGN SPACING CHART *		
POSTED SPEED	"A"	"B"
40MPH OR LESS	100'	100'
45MPH AND OVER	350'	350'

TAPER CHART *	
POSTED SPEED	"T"
25MPH	30'
30MPH	40'
35MPH	55'
40MPH	70'
45MPH	90'
50MPH +	110'

* = MUTCD RECOMMENDED DISTANCES

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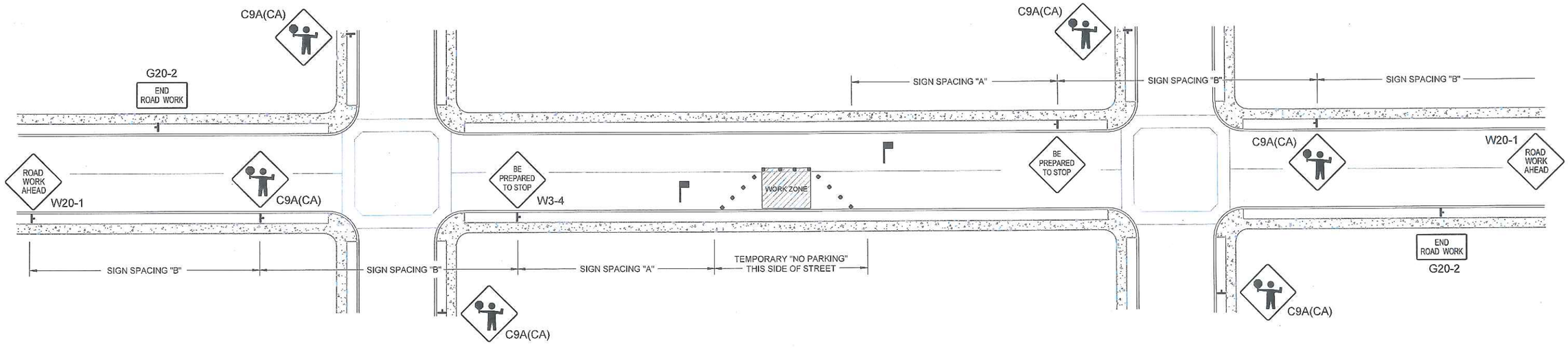
TRAFFIC CONTROL PLAN TYPICALS
RESIDENTIAL ROAD - FLAGMEN



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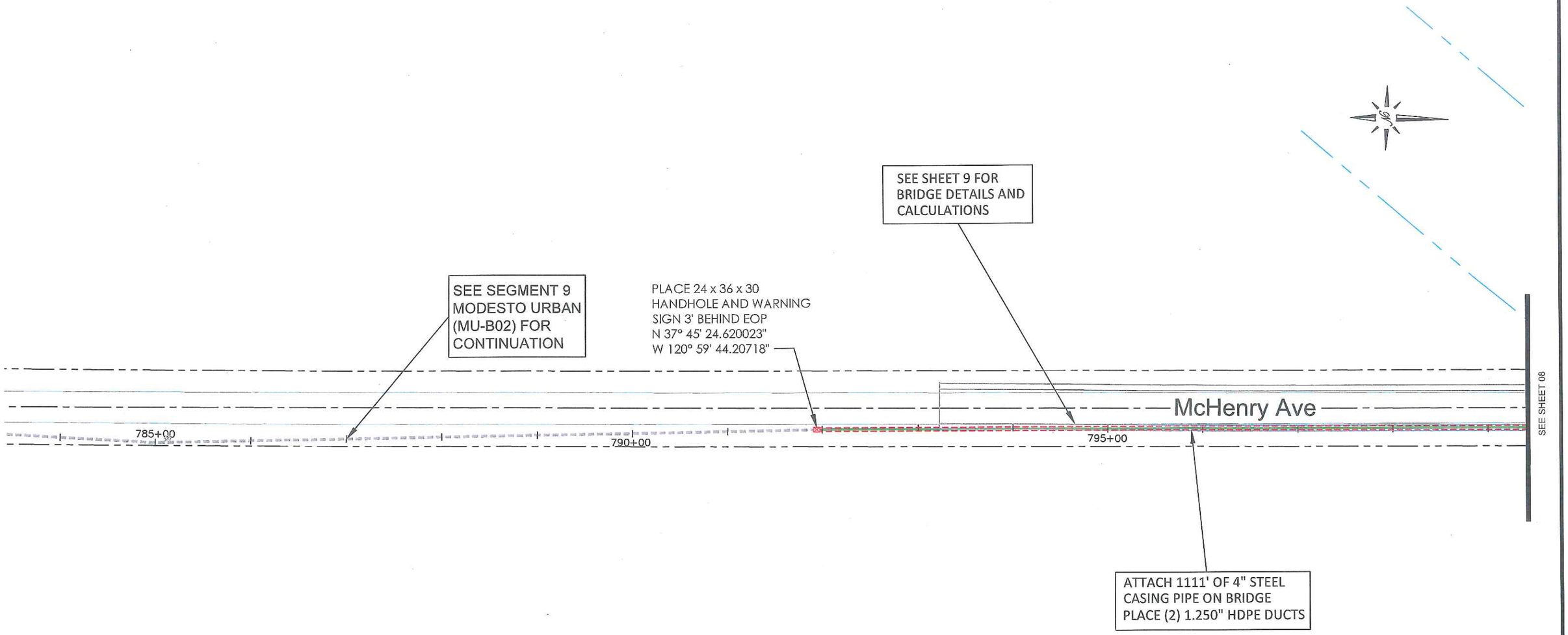

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Fredric W. Ritter 11/7/12

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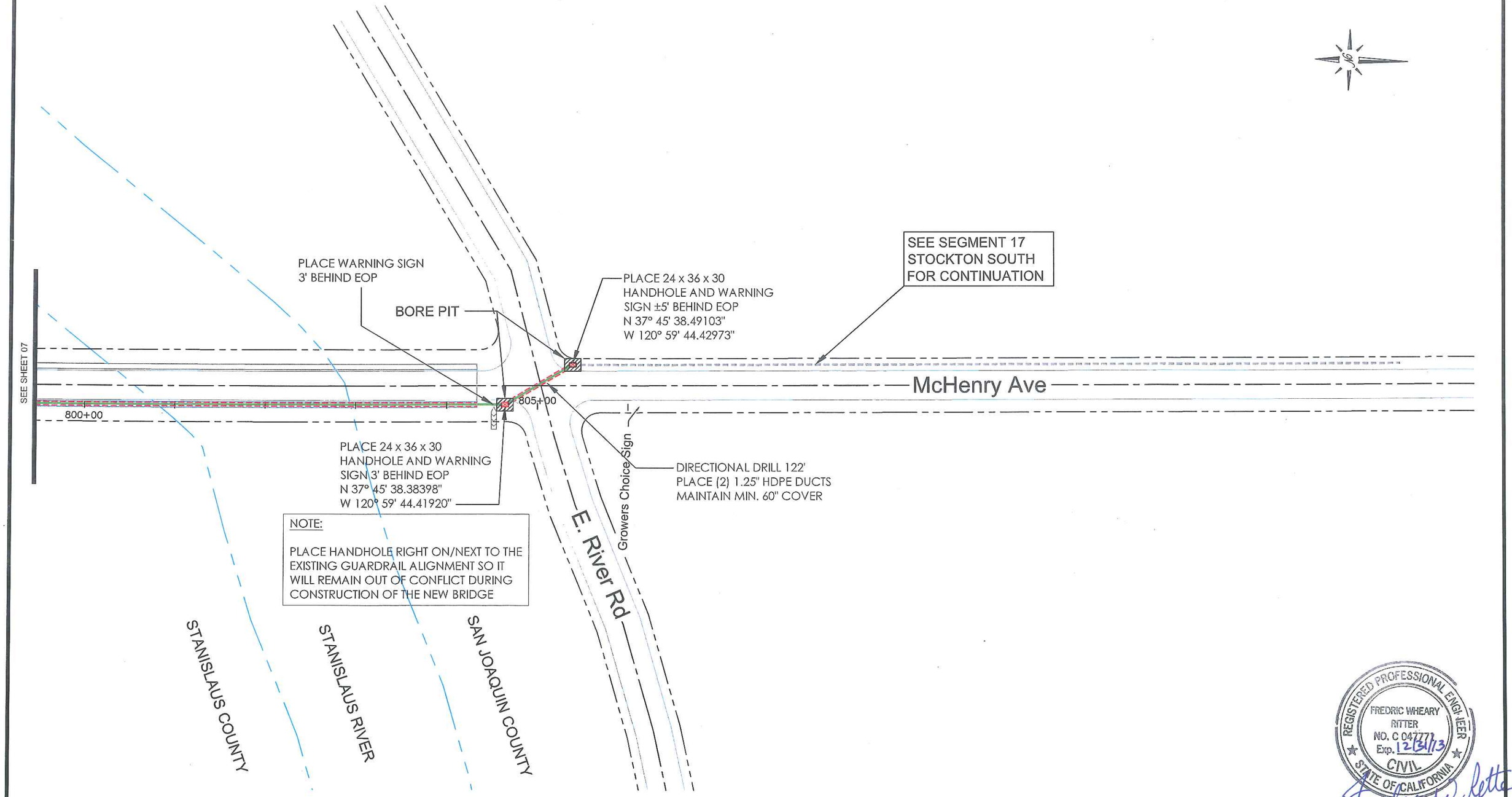

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PLAN REVISIONS

REV.	DATE	DESCRIPTION	BY

Engineering Associates, Inc.
445 W. 11th St. (Suite B)
Tracy, Ca. 95376
Ph. 209-830-0162
Fax 209-830-8157

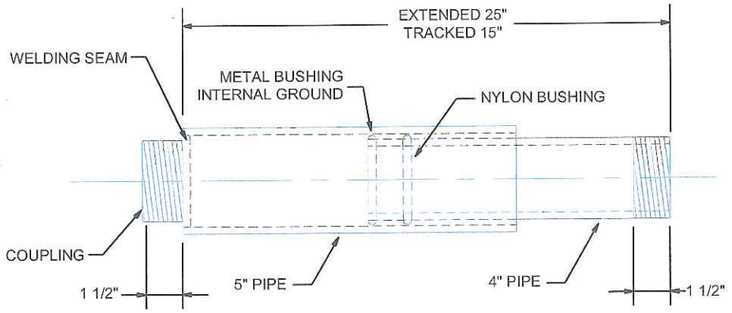
AGENCY/CITY:
County of San Joaquin
REF#

APPLICANT:
CVIN
CENTRAL VALLEY INDEPENDENT NETWORK
855 M Street, Suite 1120, Fresno, CA 93721

LOCATION:
CVIN SEGMENT 17
Mchenry Ave Bridge & E. River Rd

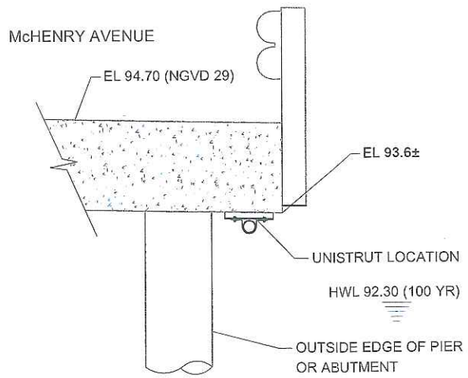
JN#
DESIGN: DATE: 11/07/2012
FIELDER: DATE:
SHEET 08 OF 09

PS-12-02848



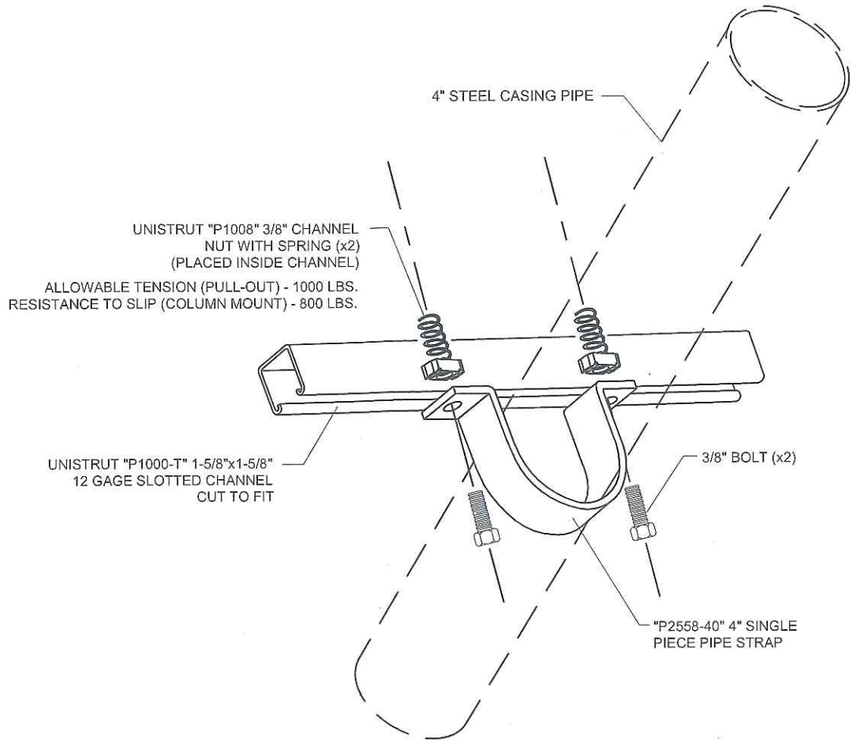
NOTES:
1. TWO EXPANSION JOINTS TO BE INSTALLED AND SPACED EVENLY.
2. JOINT MATERIALS SHALL BE HOT DIP GALVANIZED STEEL.

TYPICAL EXPANSION JOINT
NOT TO SCALE



"SOUTH END OF BRIDGE - LOOKING NORTH"

PROPOSED ATTACHMENT LOCATION
NOT TO SCALE



NOTES:

1. SLOTTED CHANNEL SHALL BE ATTACHED TO CONCRETE BRIDGE SECTION WITH (2) 1/2" DROP-IN ANCHORS, MINIMUM EMBED - 1-5/8" (DETAIL THIS SHEET) WITH 3/8" BOLTS
2. PIPE SUPPORT ASSEMBLY SPACING SHALL BE 10'-0" O.C.

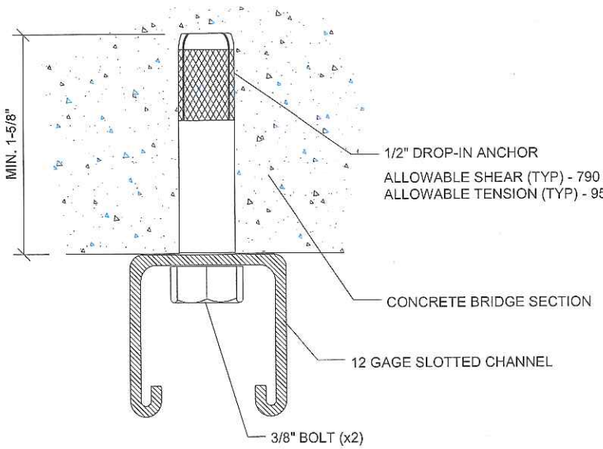
UNISTRUT CONCRETE BRIDGE ATTACHMENT DETAIL
NOT TO SCALE

DESIGN WEIGHT & LOAD CALCULATIONS

MATERIAL	UNIT WEIGHT	QTY.	INSTALLED WEIGHT
4" (4.50" O.D.) STEEL PIPE	10.79 LBS./FT.	1111	11987.7
UNISTRUT SUPPORT ASSEMBLY	2.78 LBS. EA.	111	308.6
4" STEEL EXPANSION JOINT	47.0 LBS. EA.	2	94.0
1.25" HDPE CONDUIT	0.31 LBS./FT.	1111	344.4
1.25" HDPE 4-WAY CONDUIT WITH (4) MICRODUCTS & TRACER WIRE	0.45 LBS./FT.	1111	500.0
72-CT. FIBER OPTIC CABLE	0.17 LBS./FT.	1111	188.9
TOTAL INSTALLED WEIGHT (LBS):			13423.5

INSTALLED WEIGHT:	13423.5 LBS.
* LOAD BEARING SUPPORTS:	111.0
UNIT SUPPORT LOAD:	120.9
CRITICAL PART LOAD RATING: (TENSION ON ANCHOR BOLT)	950 LBS.
WORKING LOAD FACTOR:	12.7% (7.85/1)

* SUPPORT SPACING: 10'-0"



ANCHOR DETAIL
NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER
FREDRIC WHEARY RITTER
NO. C 047771
Exp. 12/31/13
CIVIL
STATE OF CALIFORNIA
11/7/12

DIGALERT
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
(811)
Know what's below.
Call before you dig.

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