

SUBMITTED:

Jack R. Walker

JANUARY 17, 2018



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STANISLAUS COUNTY

PLANS FOR THE CONSTRUCTION OF

TEGNER ROAD BRIDGE REPLACEMENT

AND IMPROVEMENTS PROJECT

FEDERAL PROJECT NO.
BRLO-5938 (196)
STANDARD PLANS 2010



STATE OF CALIFORNIA

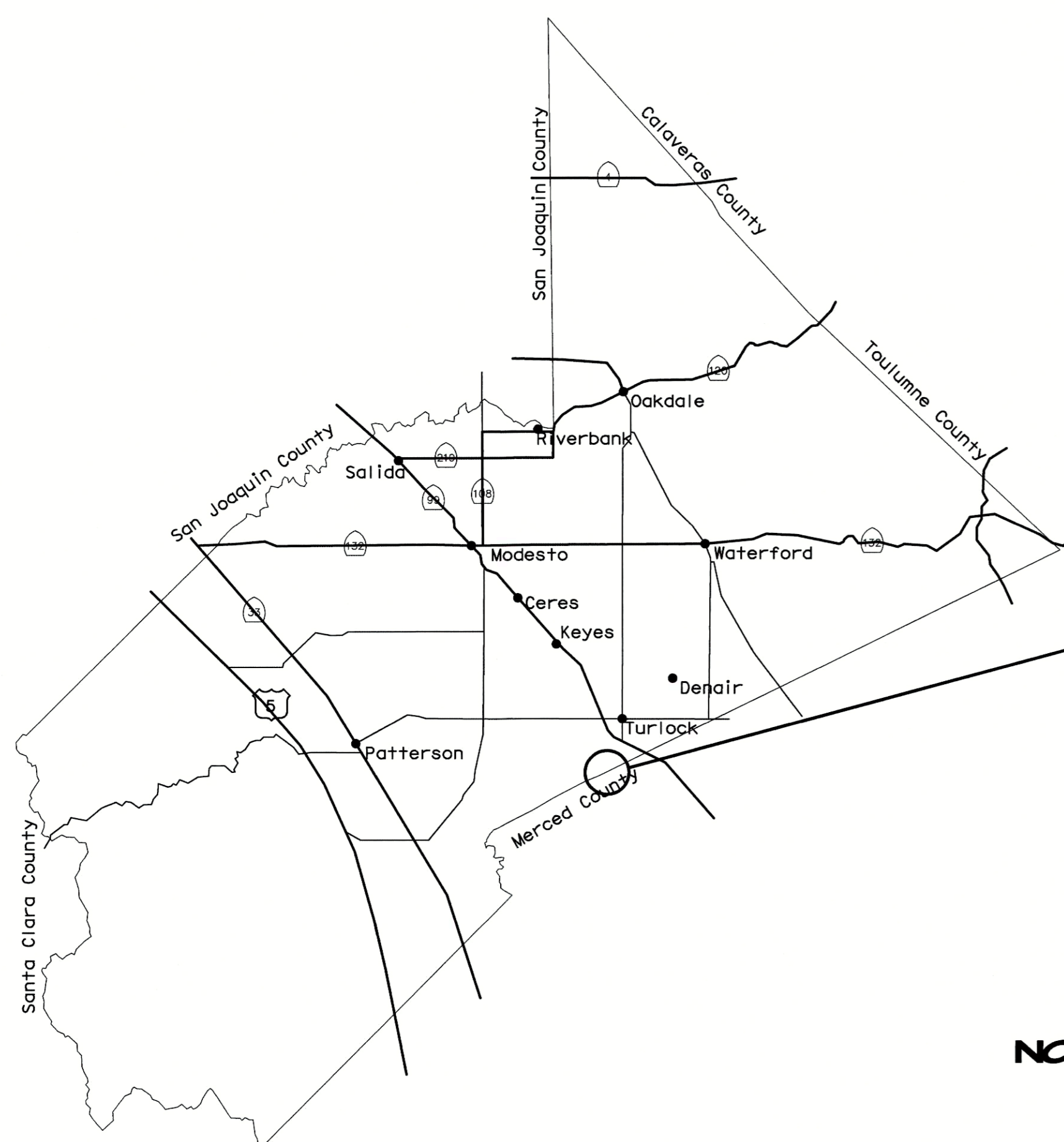
COUNTY OF STANISLAUS

APPROVED BY TURLOCK IRRIGATION DISTRICT
FOR IRRIGATION FACILITIES ONLY

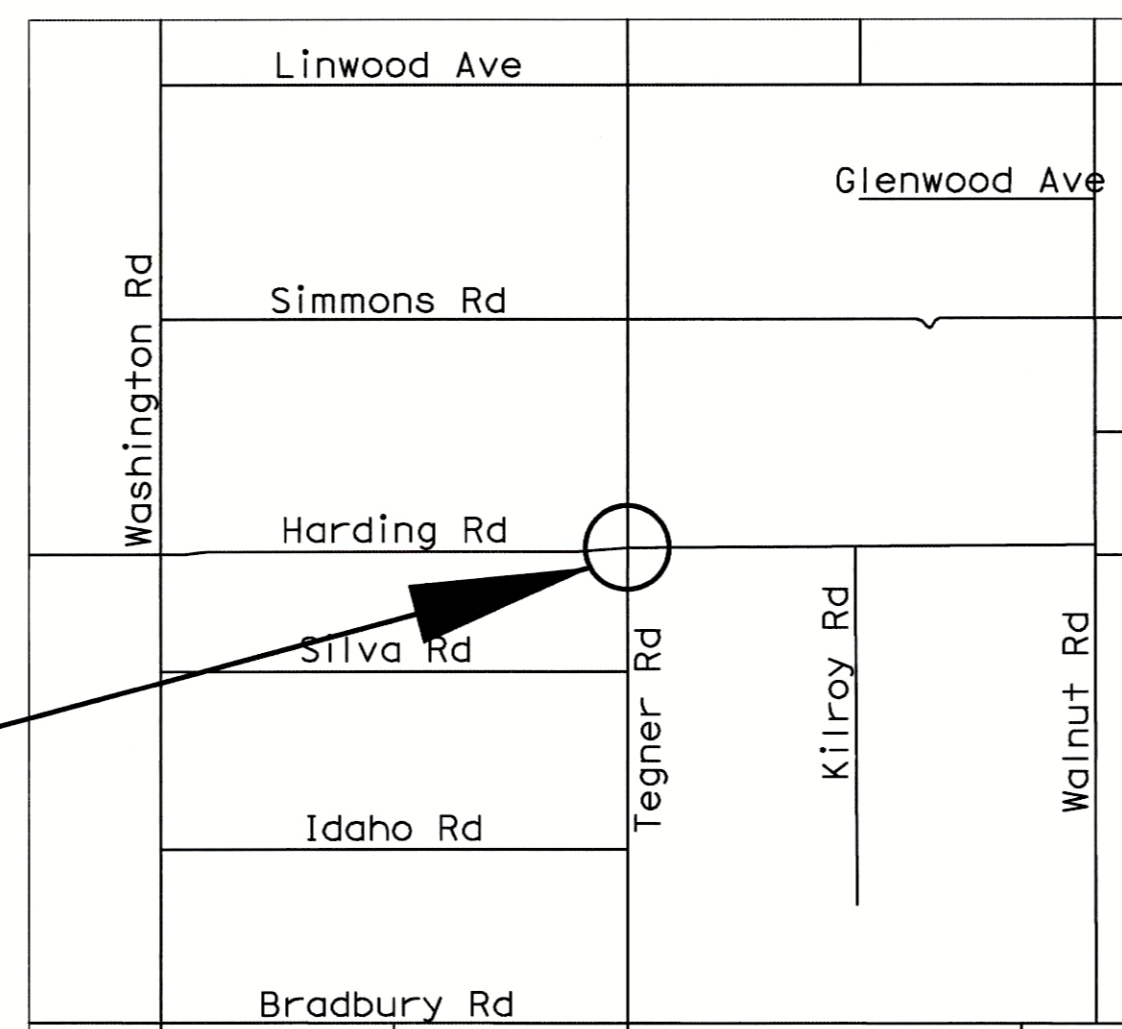
Phil Green 1/19/18
CIVIL ENGINEERING DEPT. MGR. DATE

Chris Brody 1/29/18
DEPUTY DIRECTOR OF PUBLIC WORKS DATE

Jack R. Walker 01/17/2018
JACK WALKER, PE
RCE 45003
NV5, INC. DATE



STANISLAUS COUNTY
NOT TO SCALE



PROJECT LOCATION
NOT TO SCALE

NO	DESCRIPTIONS	DATE	
		REVISIONS	APPROVED

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95338



TEGNER ROAD BRIDGE REPLACEMENT

TITLE SHEET

JOB NO. SAB047700
DATE 1/17/18
DR BY RAM
CK BY JRW
SCALE AS SHOWN

SHEET NUMBER
T-1
1 OF 23 SHEETS



2025 GATEWAY PLACE, SUITE 158 SAN JOSE, CA 95110
408.392.7200 TEL 408.392.0101 FAX WWW.NV5.COM



CONSTRUCTION NOTES

A. MISCELLANEOUS

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2010 EDITION OF STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, REFERRED TO AS "STANDARD SPECIFICATIONS" AND WITH STANISLAUS COUNTY SPECIFICATIONS AND IMPROVEMENT STANDARDS. ALL IMPROVEMENTS ARE SUBJECT TO THE INSPECTION AND APPROVAL OF THE PUBLIC WORKS DEPARTMENT.
- PRIOR TO STARTING ANY WORK, THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM THE STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS. 48 HOUR ADVANCED NOTICE SHALL BE PROVIDED TO ENCROACHMENT INSPECTOR PRIOR TO STARTING ANY WORK. WORK THAT MAY AFFECT THE FLOW OF WATER IN THE T.I.D. CANAL CAN ONLY BE DONE DURING THE NON-IRRIGATION SEASON, TYPICALLY NOV. 1ST TO MARCH 1ST, BUT CAN VARY. CONTRACTOR MUST OBTAIN CANAL OUTAGE FROM T.I.D. PRIOR TO WORKING ON CANAL FACILITIES. T.I.D. CONTACT: TODD TROGLIN (209) 883-8367.
- CONTRACTOR SHALL ONLY USE EQUIPMENT PROVIDED WITH A SPARK ARRESTOR DEVICE TO REDUCE A POTENTIAL FIRE HAZARD.
- THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITIES. THE CONTRACTOR SHALL DO NO EXCAVATION UNTIL ALL UTILITY AGENCIES AND THE STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS HAVE BEEN NOTIFIED AND HAVE BEEN GIVEN THE OPPORTUNITY TO MARK THEIR FACILITIES IN THE FIELD. THE CONTRACTOR SHALL CALL U.S.A. AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO DOING ANY EXCAVATING.
- CONTRACTOR SHALL PRESERVE ALL SURROUNDING PROPERTY BY CONFINING OPERATIONS TO WITHIN THE "LIMITS OF WORK".
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS.
- THESE PLANS HAVE BEEN CHECKED BY THE STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS AND/OR AUTHORIZED REPRESENTATIVE, BUT SUCH CHECKING AND/OR APPROVAL DOES NOT RELIEVE THE CONTRACTOR FROM HIS/HER RESPONSIBILITY TO CORRECT ERRORS, OMISSIONS OR MAKE CHANGES REQUIRED BY CONDITIONS DISCOVERED IN THE FIELD DURING COURSE OF CONSTRUCTION.
- THE CONTRACTOR SHALL CONTROL DUST AT ALL TIMES. DUST CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IMPLEMENTED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL GUIDELINES (INCLUDING, BUT NOT LIMITED TO THE SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT).
- CONSTRUCTION STAKING FOR STORM DRAINS, WATER LINES, FIRE HYDRANTS, ELECTROLIERS, ETC. SHALL BE DONE UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR.
- UNLESS OTHERWISE APPROVED, HOUSE SERVICES, FIRE HYDRANT LATERALS, GAS AND TELEPHONE LINES, AND ALL OTHER UNDERGROUND UTILITIES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND ROAD PAVING.
- ALL LINES ABANDONED DURING CONSTRUCTION SHALL BE REMOVED.
- ALL INDEPENDENT LABORATORY INSPECTION REQUESTED BY THE COUNTY ENGINEER SHALL BE PAID FOR BY THE CONTRACTOR.
- STREET STRIPING SHALL INCLUDE STOP BARS, CENTERLINE STRIPING, AND LANE LINE MARKERS AND ALL OTHER MARKINGS REQUIRED BY THE ENGINEER. STRIPING SHALL BE DONE WITH THERMOPLASTIC AND REFLECTIVE MARKERS.
- ALL TRENCHES SHALL BE BACK FILLED IN ACCORDANCE WITH STANISLAUS COUNTY SPECIFICATIONS AND IMPROVEMENTS STANDARDS.
- WHEN WIDENING THE PAVEMENT ON AN EXISTING ROAD, THE EXISTING PAVEMENT SHALL BE CUT (SAW) TO A NEAT LINE AND REMOVED BACK TO AN EXISTING ADEQUATE STRUCTURAL SECTION, OR TO THE ORIGINAL ROAD SECTION. AN EXPLORATORY TRENCH, OR POT-HOLING, MAY BE REQUIRED TO DETERMINE THE LIMITS OF PAVEMENT REMOVAL.
- EXISTING ROADSIDE FACILITIES WITHIN THE PROJECT LIMITS THAT ARE DAMAGED OR DISPLACED, EVEN THOUGH THEY WERE NOT TO BE REMOVED, SHALL BE REPAIRED OR REPLACED PER STANISLAUS COUNTY STANDARDS.
- ASBESTOS CEMENT PIPE (ACP) OR FITTINGS SHALL NOT BE USED.
- PRIOR TO TRENCHING FOR STORM DRAIN PIPE, THE CONTRACTOR SHALL VERIFY, IN THE FIELD, THE SIZE AND LOCATION OF EXISTING PIPE AT THE POINT OF CONNECTION. ANY DEVIATION FROM THE PLANS SHALL BE RESOLVED BY THE DESIGN ENGINEER AND APPROVED BY THE COUNTY PRIOR TO TRENCHING.
- MANHOLES, VALVES, CLEAN OUTS, ETC. SHALL BE BROUGHT TO FINISH GRADE BY THE CONTRACTOR AFTER THE FINAL PAVING COURSE IS PLACED.
- STORM DRAIN PIPE SIZES SHALL NOT BE CHANGED WITHOUT THE APPROVAL OF STANISLAUS COUNTY.
- ALL TREES TO REMAIN SHALL BE PRESERVED AND PROTECTED BY ERECTING A 48" HIGH ORANGE CONSTRUCTION FENCE AROUND THE TREE TRUNK PRIOR TO STARTING WORK ON THE SITE.
- ALL CONSTRUCTION SITE ACTIVITIES SHALL CONFORM TO THE STATE WATER RESOURCES CONTROL BOARD, NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY.
- AN APPROVED SWPPP SHALL BE SUBMITTED TO THE COUNTY AND MUST BE ON-SITE DURING ALL CONSTRUCTION ACTIVITIES.
- CONTRACTOR'S OPERATIONS SHALL BE PERFORMED IN A MANNER WHICH WILL NOT ALLOW HARMFUL POLLUTANTS TO ENTER T.I.D. LATERAL NO. 5. CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) AS INDICATED IN THE SPECIFICATIONS AND AS REQUIRED BY STANISLAUS COUNTY.
- ALL CONSTRUCTION SITE ACTIVITIES SHALL COMPLY WITH ALL CONDITIONS OF APPROVAL, DEVELOPMENT STANDARDS, AND/OR MITIGATION MEASURES ADOPTED BY THE PLANNING COMMISSION AND/OR BOARD OF SUPERVISORS FOR THE SPECIFIC PROJECT.
- PRIOR TO INITIATING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL NECESSARY FEDERAL, STATE, AND LOCAL PERMITS AND/OR AUTHORIZATIONS HAVE BEEN OBTAINED.



B. DEMOLITION

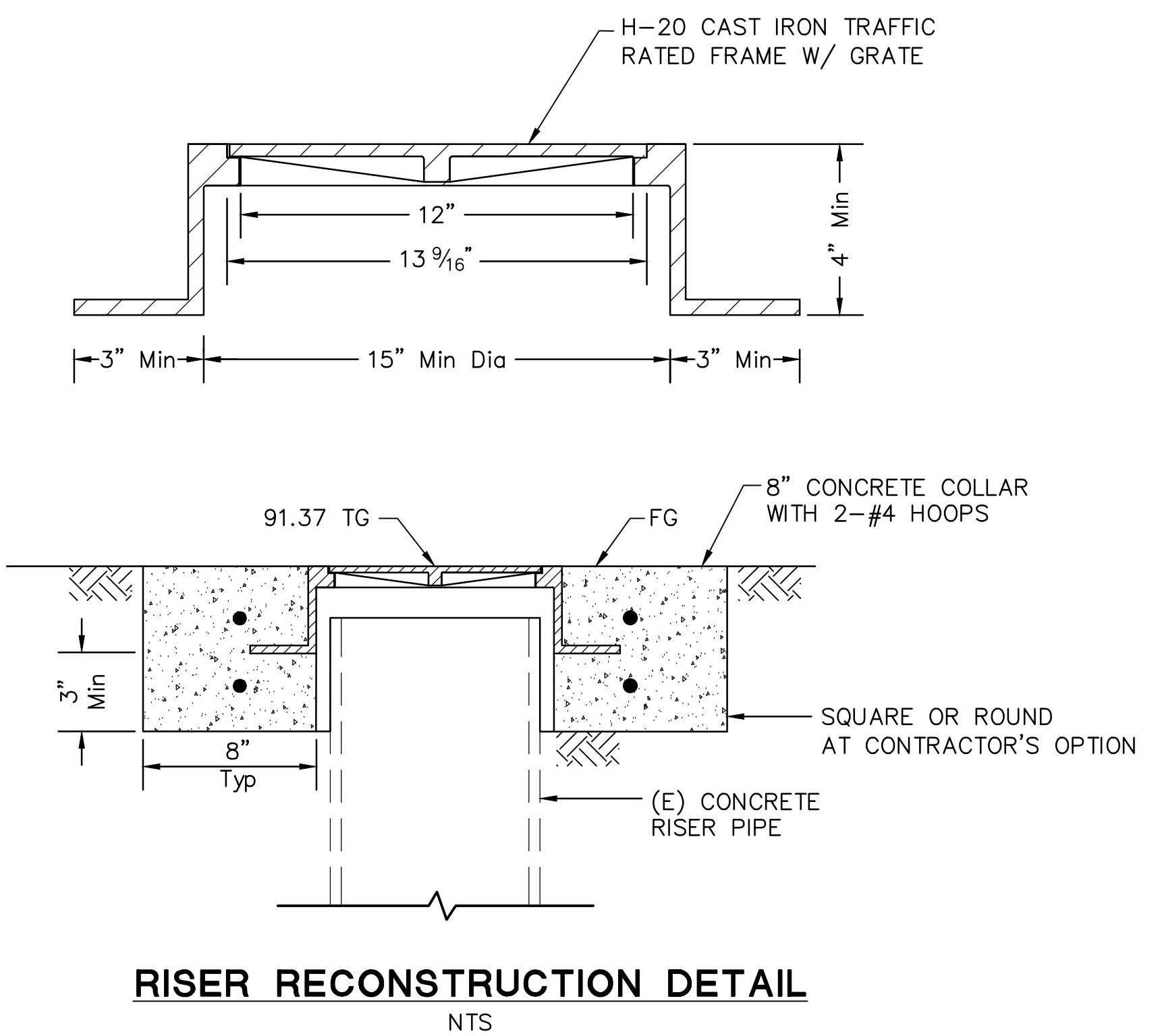
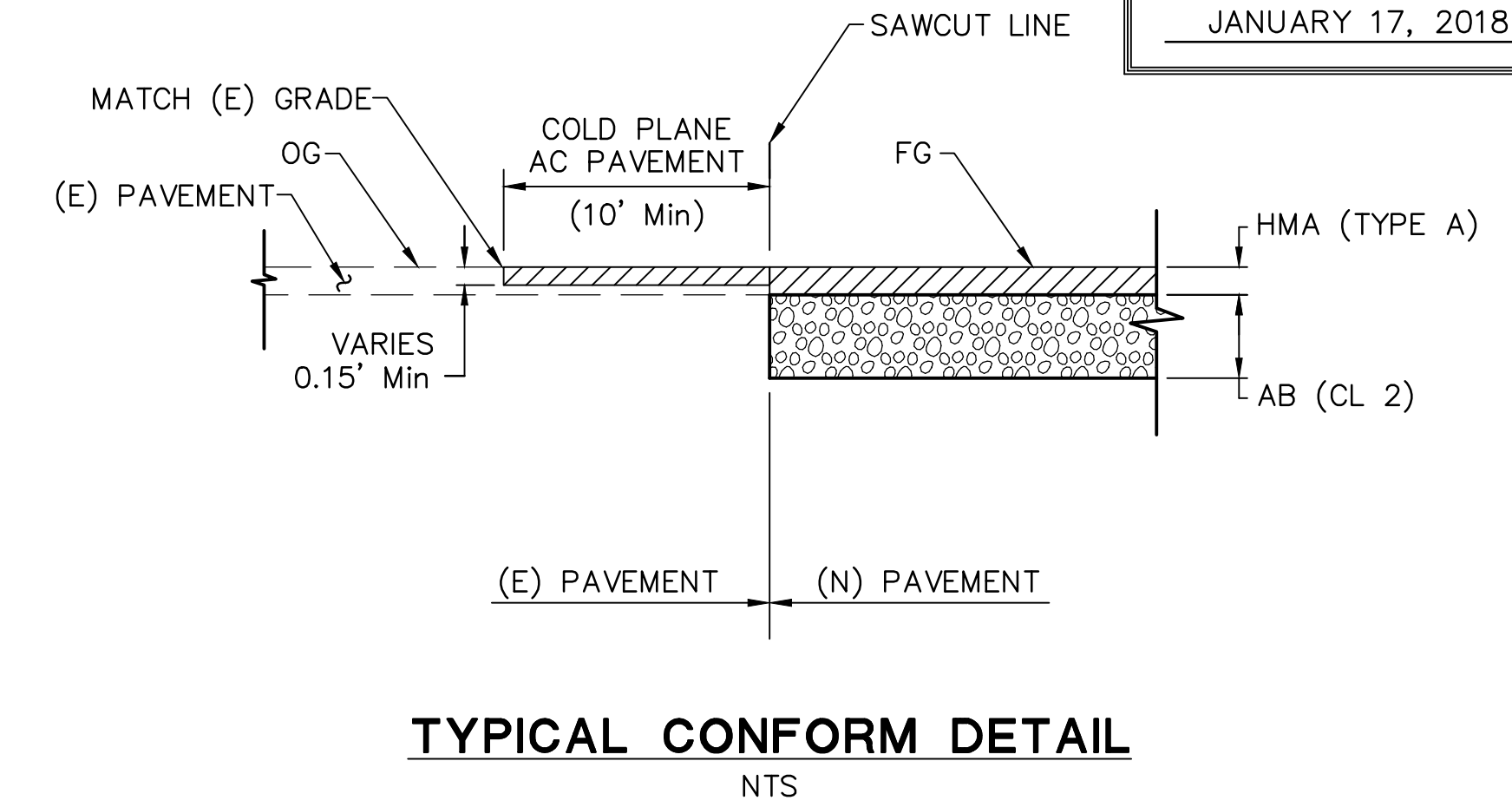
- DEBRIS GENERATED FROM DEMOLITION WORK TO BE DISPOSED OF OFF-SITE, AT AN APPROVED LOCATION, AT THE CONTRACTOR'S EXPENSE.
- CLEARING AND GRUBBING SHALL CONFORM TO THE PROVISIONS IN SECTION 16, "CLEARING AND GRUBBING," OF THE STANDARD SPECIFICATIONS.

ABBREVIATIONS

AB	AGGREGATE BASE	LOL	LAYOUT LINE
Abut	ABUTMENT	LF	LINEAR FOOT
AC	ASPHALT CONCRETE	Lt	LEFT
AP	ANGLE POINT	Max	MAXIMUM
Approx	APPROXIMATE	MGS	MIDWEST GUARDRAIL SYSTEM
AS	AGGREGATE SUBBASE	MBGR	METAL BEAM GUARD RAIL (MIDWEST GUARDRAIL SYSTEM)
Ave	AVENUE	MGS	MIDWEST GUARDRAIL SYSTEM
BB	BEGIN BRIDGE	Min	MINIMUM
BC	BEGIN HORIZONTAL CURVE	Mon	MONUMENT
Bot	BOTTOM	(N)	NEW
BVC	BEGIN VERTICAL CURVE	N	NORTHING, NORTH
Cl	CENTER LINE	NTS	NOT TO SCALE
CIP	CAST-IN-PLACE	OG	ORIGINAL GRADE
CL	CLASS	(P)	PROPOSED
"CL"	CROWS LANDING CONTROL LINE	Pvmt	PAVEMENT
Clr	CLEAR	PG	PROFILE GRADE
CMP	CORRUGATED METAL PIPE	P/L	PROPERTY LINE
Conc	CONCRETE	PT	POINT
Const	CONSTRUCTION	PVI	POINT OF VERTEX/INTERSECTION OF TANGENTS
Cont	CONTINUOUS	R	RADIUS
CTRL	CONTROL	R/C	RATE OF CHANGE
Dbl	DOUBLE	Rd	ROAD
E	EASTING, EAST	Reinf	REINFORCEMENT
(E)	EXISTING	RSP	REVISED STANDARD PLAN
EB	END BRIDGE	Rt	RIGHT
EC	END HORIZONTAL CURVE	ROW	RIGHT OF WAY
Elev	ELEVATION	S	SOUTH
EP	EDGE OF PAVEMENT	Shld	SHOULDER
ES	EDGE OF SHOULDER	Sta	STATION
ETW	EDGE OF TRAVELED WAY	Std	STANDARD
EVC	END VERTICAL CURVE	TBD	TO BE DETERMINED
Exist	EXISTING	TCE	TEMPORARY CONSTRUCTION EASEMENT
Exp	EXPANSION	TE	TEGNER ROAD
FES	FLARED END SECTION	TG	TOP OF GRADE
FG	FINISHED GRADE	TID	TURLOCK IRRIGATION DISTRICT
GB	GRADE BREAK	Tot	TOTAL
HA	HARDING ROAD	TW	TRAVELED WAY
HDPE	HIGH DENSITY POLYETHYLENE	Typ	TYPICAL
HMA	HOT MIX ASPHALT (TYPE A)	UON	UNLESS OTHERWISE NOTED
HP	HINGE POINT	Var	VARIES
Irr	IRRIGATION	VC	VERTICAL CURVE
Jt	JOINT	W	WEST

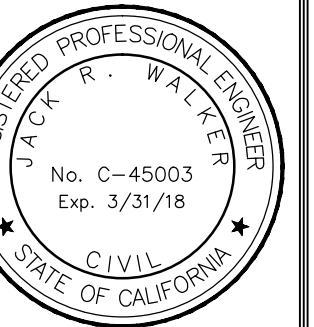
LEGEND

---	P/L OR ROW
---	LIMIT OF WORK
---C---C---C---	CUT LINE
---F---F---	FILL LINE
-----	GRADE BREAK
--- OH TEL ---	EXISTING OVERHEAD TELEPHONE LINE
--- OH ---	EXISTING OVERHEAD LINE
--- T --- T ---	UNDERGROUND TELEPHONE LINE
	AB (CLASS 2)
	HMA (TYPE A)



SUBMITTED:

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JANUARY 17, 2018

DATE:	APPROVED:
REVISIONS:	DATE:
DESCRIPTIONS:	
NO:	

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



TEGNER ROAD BRIDGE REPLACEMENT
CONSTRUCTION NOTES & DETAILS

JOB NO. SAB047700
DATE 1/17/18
DR BY RAM
CK BY JRW
SCALE AS SHOWN

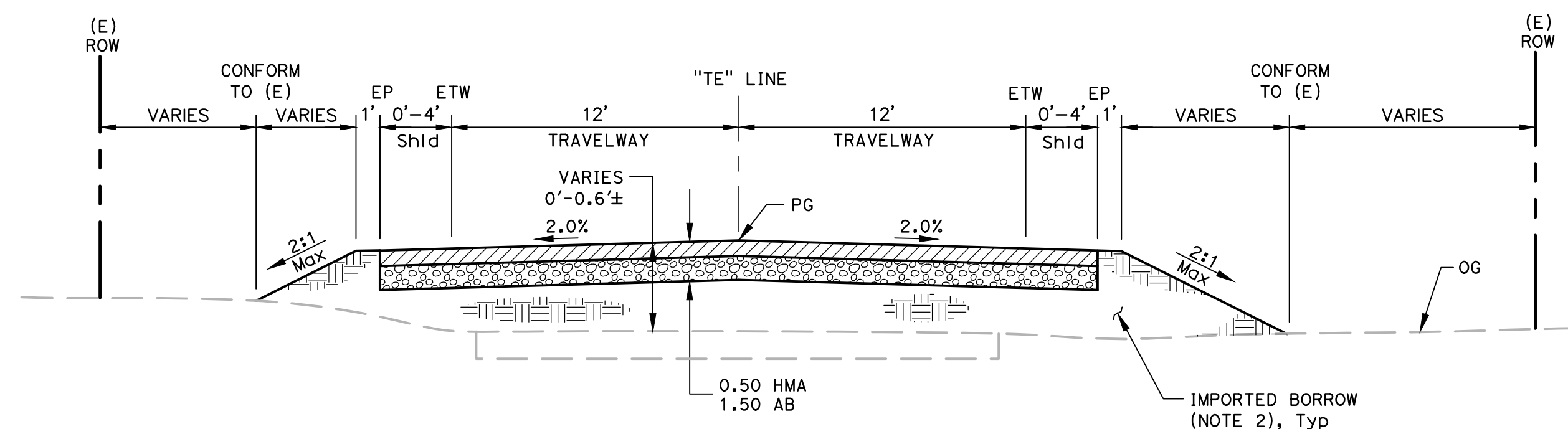
SHEET NUMBER
C-1
2 OF 23 SHEETS

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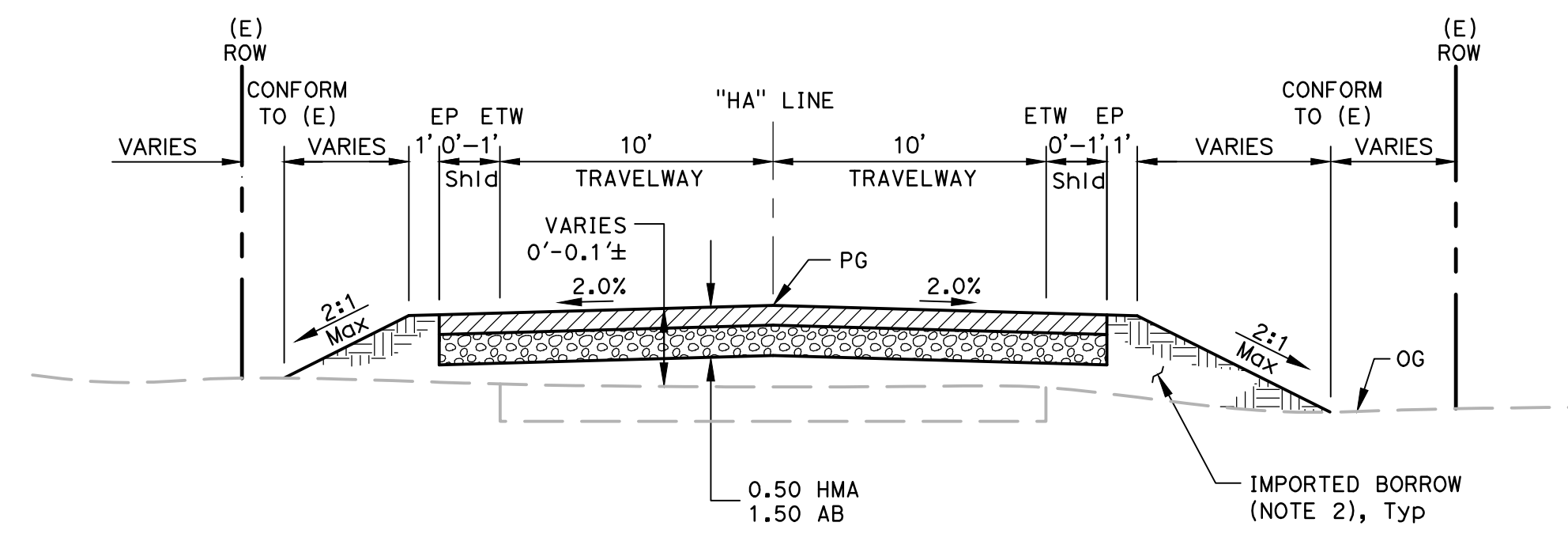
Jack R. Walker

AUGUST 29, 2017



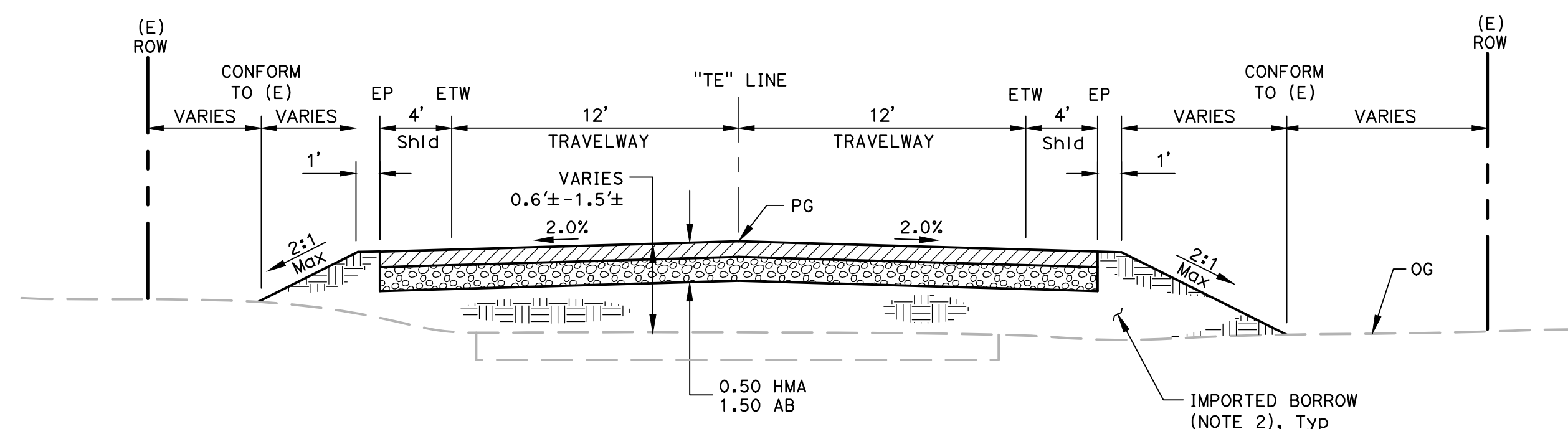
SOUTH TEGNER ROAD - TYPICAL SECTION

"TE" Sta: 2+50.00 TO 3+60.00
 "TE" Sta: 9+00.00 TO 10+10.00
 (NTS)



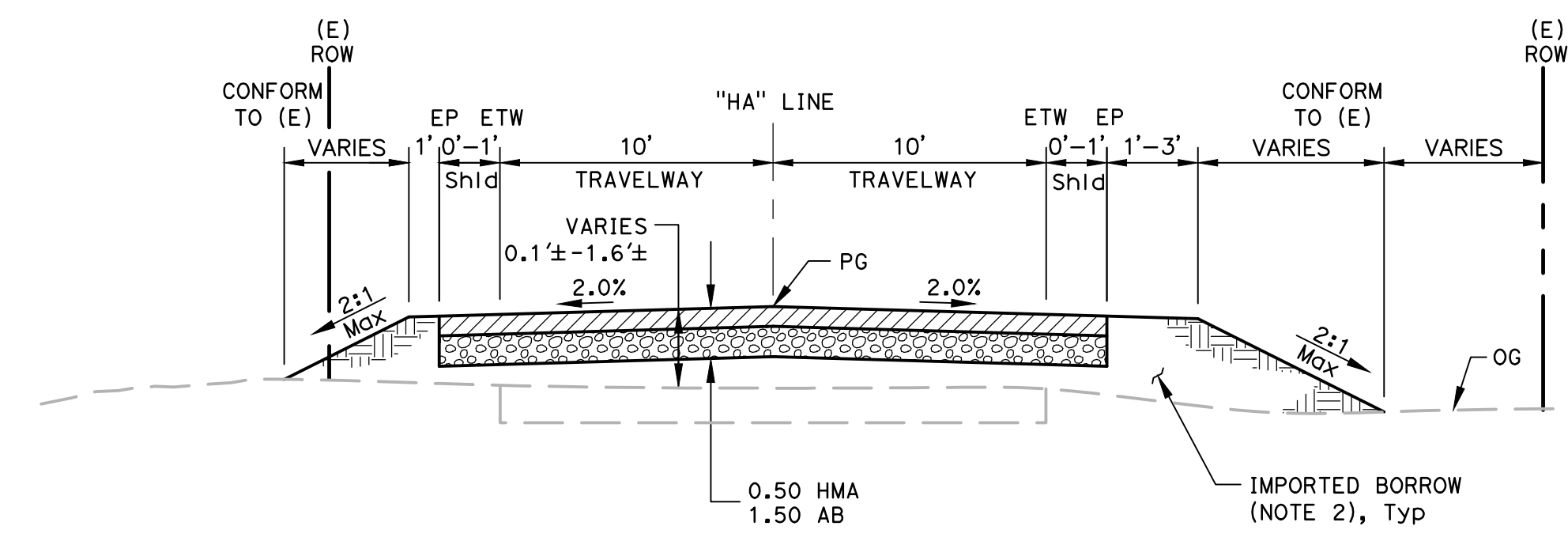
WEST HARDING ROAD - TYPICAL SECTION

"HA" Sta: 3+30.00 TO 3+60.00
 "HA" Sta: 7+00.00 TO 7+30.00
 (NTS)



SOUTH TEGNER ROAD - TYPICAL SECTION

"TE" Sta: 3+60.00 TO 5+73.35
 "TE" Sta: 5+73.35 TO 6+56.10 (SEE NOTE 5)
 "TE" Sta: 6+56.10 TO 9+00.00
 (NTS)



WEST HARDING ROAD - TYPICAL SECTION

"HA" Sta: 3+60.00 TO 4+91.89
 "HA" Sta: 4+91.89 TO 5+75.28 (SEE NOTE 6)
 "HA" Sta: 5+75.28 TO 7+00.00
 (NTS)

LEGEND:

- HOT MIX ASPHALT (TYPE A)
- AGGREGATE BASE (CL2)
- IMPORTED BORROW

NOTES:

1. FOR GENERAL NOTES & ABBREVIATIONS, SEE SHEET C-1.
2. CONTRACTOR SHALL COMPACT UPPER 0.5' OF SUBGRADE SOIL BELOW PAVEMENT SECTION TO 95% RELATIVE COMPACTION.
3. SINCE THE IMPORT FILL MATERIAL WILL BE BROUGHT IN FOR APPROACH EMBANKMENT, IT IS RECOMMENDED TO USE AN R-VALUE OF 15 FOR PAVEMENT DESIGN. THE IMPORT FILL SHOULD HAVE A MINIMUM R-VALUE OF 15.
4. THE MATERIALS (HMA, AB AND AS) TO BE USED AND THEIR PLACEMENT AND COMPACTION SHOULD COMPLY WITH THE REQUIREMENTS OF CALTRANS STANDARD SPECIFICATIONS (2010).
5. FOR BRIDGE TYPICAL SECTION, SEE BRIDGE GENERAL PLAN SHEET S-1.
6. FOR GRADING ELEVATIONS BETWEEN THE INDICATED STATIONS, SEE SHEET PP-3.

TI	R-VALUE	STRUCTURE PAVEMENT SECTION (ft)					
		OPTION 1		OPTION 2		OPTION 3	
		FULL-DEPTH HMA	HMA	AB	HMA	AB	AS
9	15	1.15	0.50	1.50	0.50	0.75	0.80

- NOTE: 1. IF IMPORT MATERIAL R-VALUE IS HIGHER, THE STRUCTURAL SECTION MAY BE ADJUSTED UPON WRITTEN APPROVAL FROM COUNTY ENGINEER.
2. CONTRACTOR SHALL USE THE PREFERRED PAVEMENT SECTION OPTION 2, AS REPRESENTED IN PLANS AND ESTIMATE. HOWEVER, IF CONTRACTOR PREFERS TO USE A DIFFERENT OPTION, WRITTEN APPROVAL MUST BE FIRST OBTAIN BY THE ENGINEER.

- HMA: HOT MIX ASPHALT (TYPE A)
 AB: AGGREGATE BASE (CLASS 2) WITH R-VALUE EQUAL TO 78
 AS: AGGREGATE SUB-BASE (CLASS 2) WITH R-VALUE EQUAL TO 50

NO.	REVISIONS	DATE	APPROVED

STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358

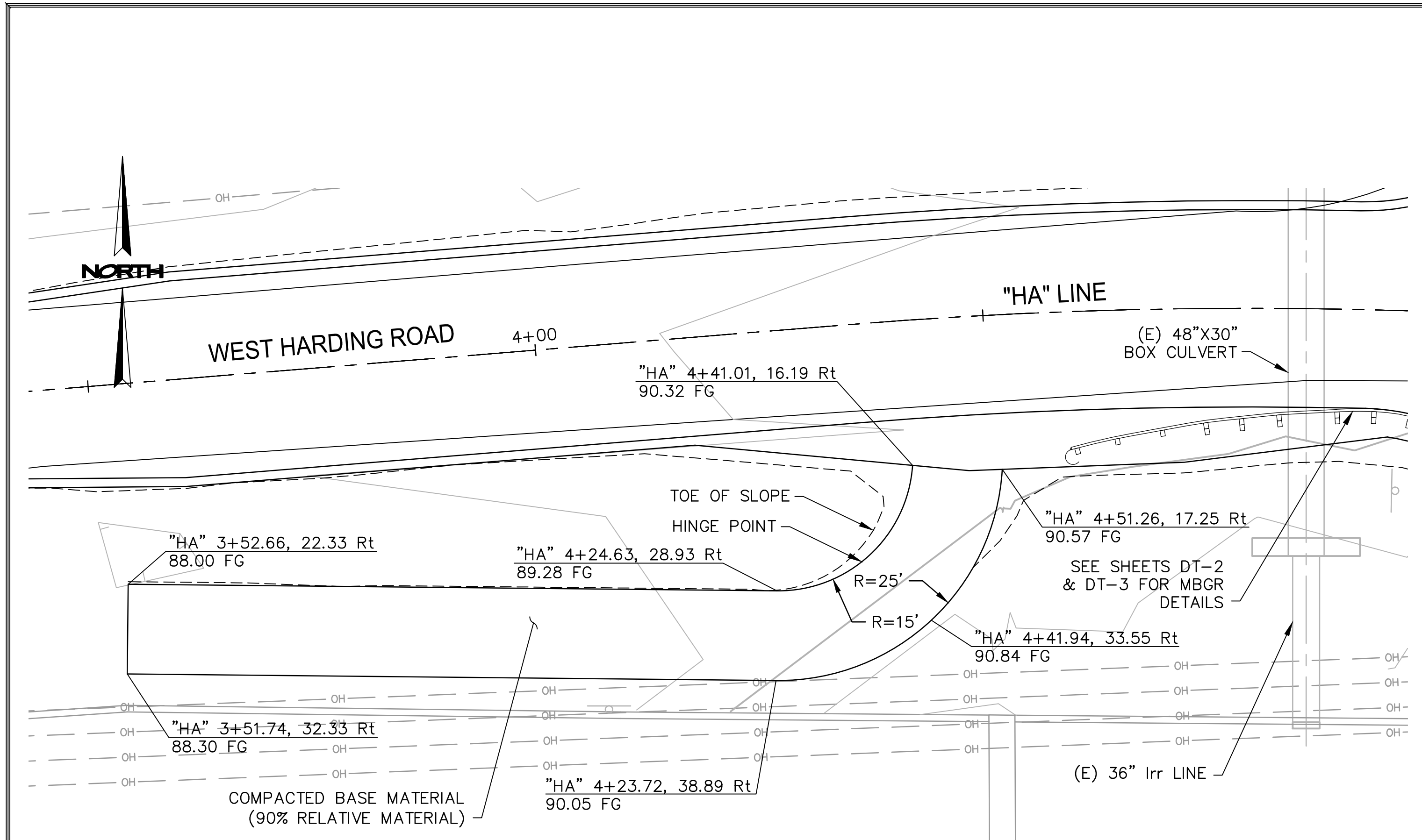


TEGNER ROAD BRIDGE REPLACEMENT
 TYPICAL SECTIONS

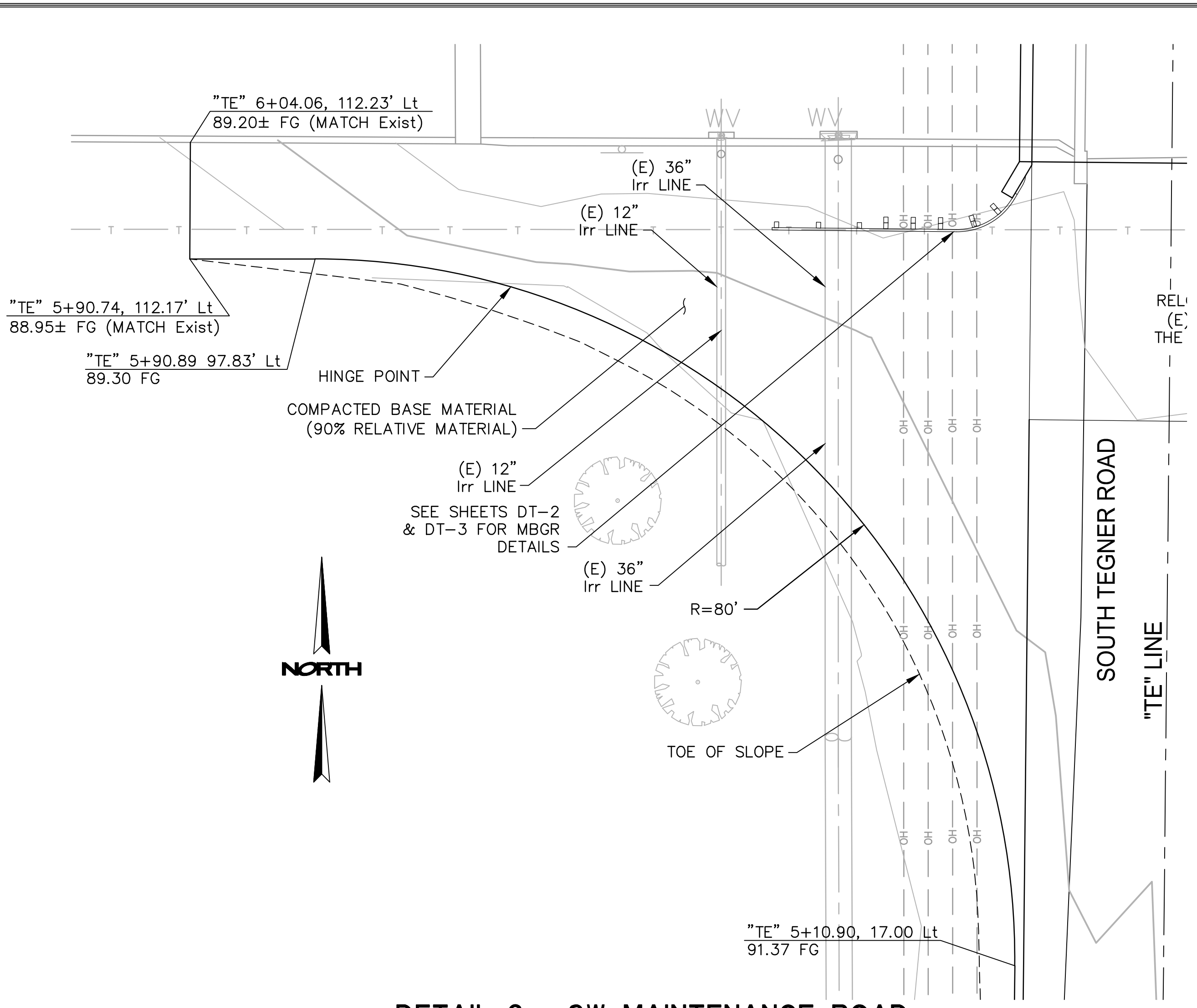
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 DR BY RAM
 CK BY JRW
 SCALE AS SHOWN

SHEET NUMBER
X-1
 3 OF 23 SHEETS

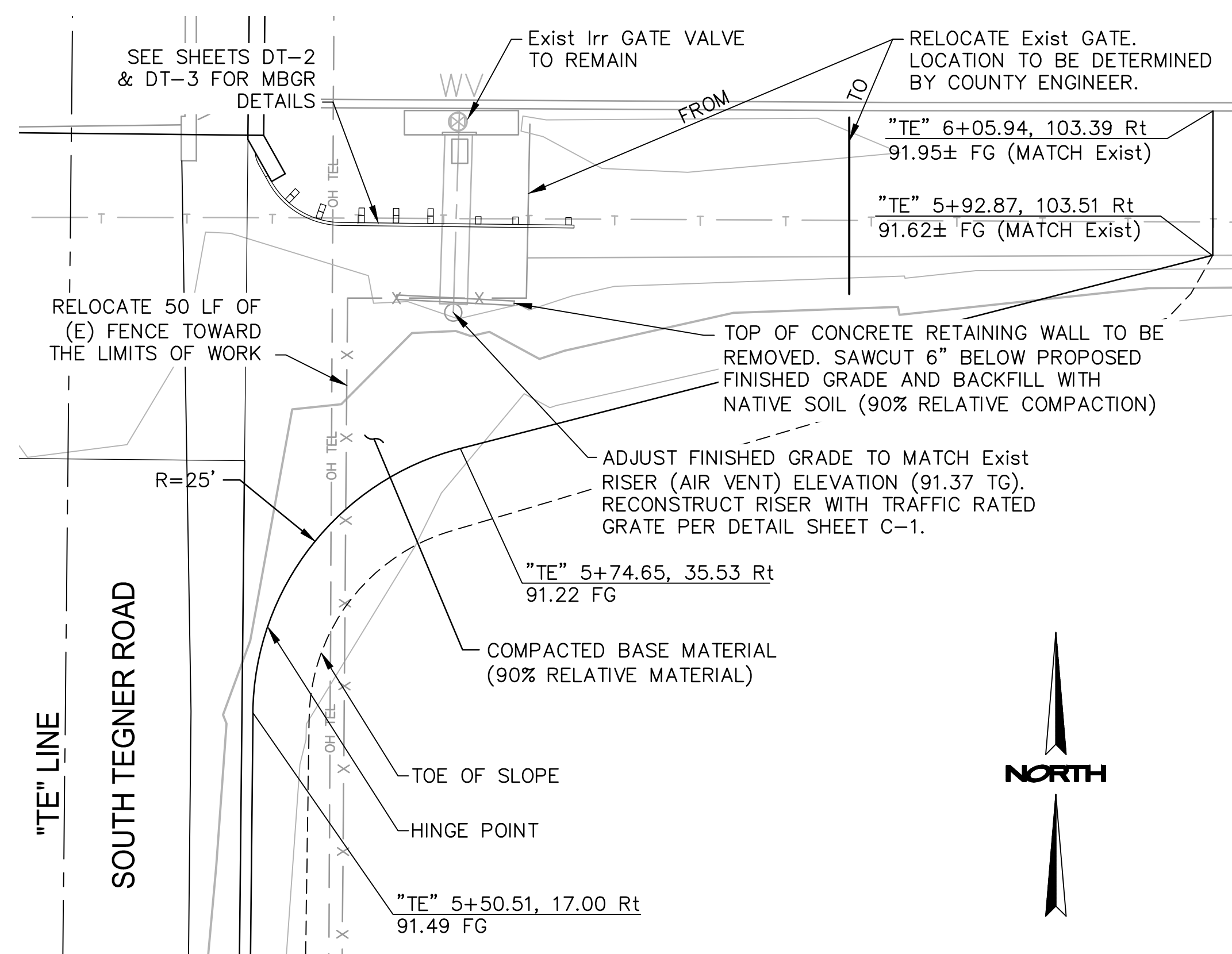




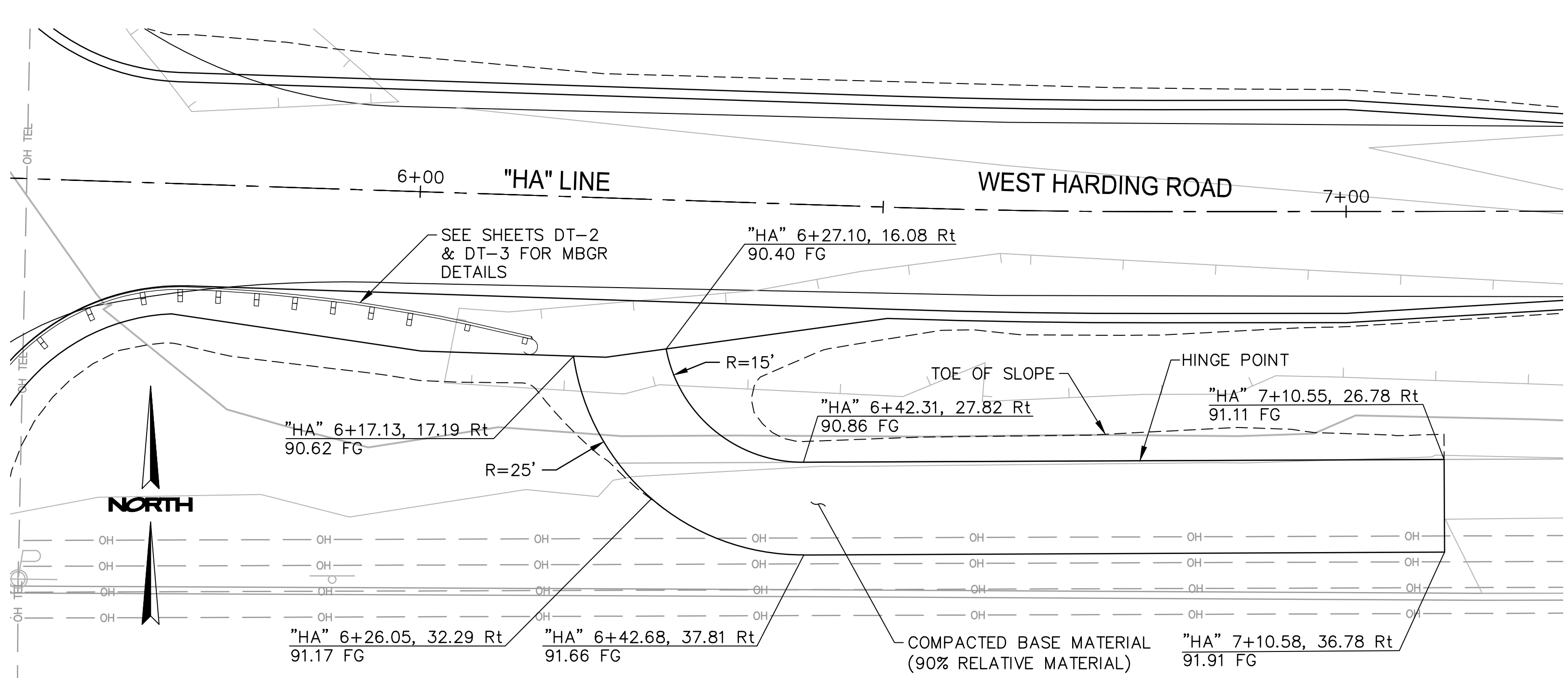
DETAIL 1 - NW MAINTENANCE ROAD
 SCALE: 1"=10'



DETAIL 2 - SW MAINTENANCE ROAD
 SCALE: 1"=10'



DETAIL 3 - SE MAINTENANCE ROAD
 SCALE: 1"=10'

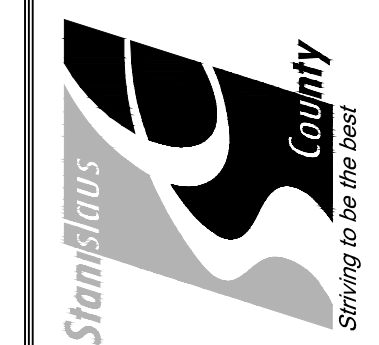


DETAIL 4 - NE MAINTENANCE ROAD
 SCALE: 1"=10'

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NO	REVISIONS	DATE	APPROVED

STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
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 1716 MORGAN ROAD - MODESTO, CA 95358



TEGNER ROAD BRIDGE REPLACEMENT
 CONSTRUCTION DETAILS - 1

JOB NO. SAB047700
 DATE 8/28/17
 DR BY RAM
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SHEET NUMBER
DT-1
 4 OF 23 SHEETS

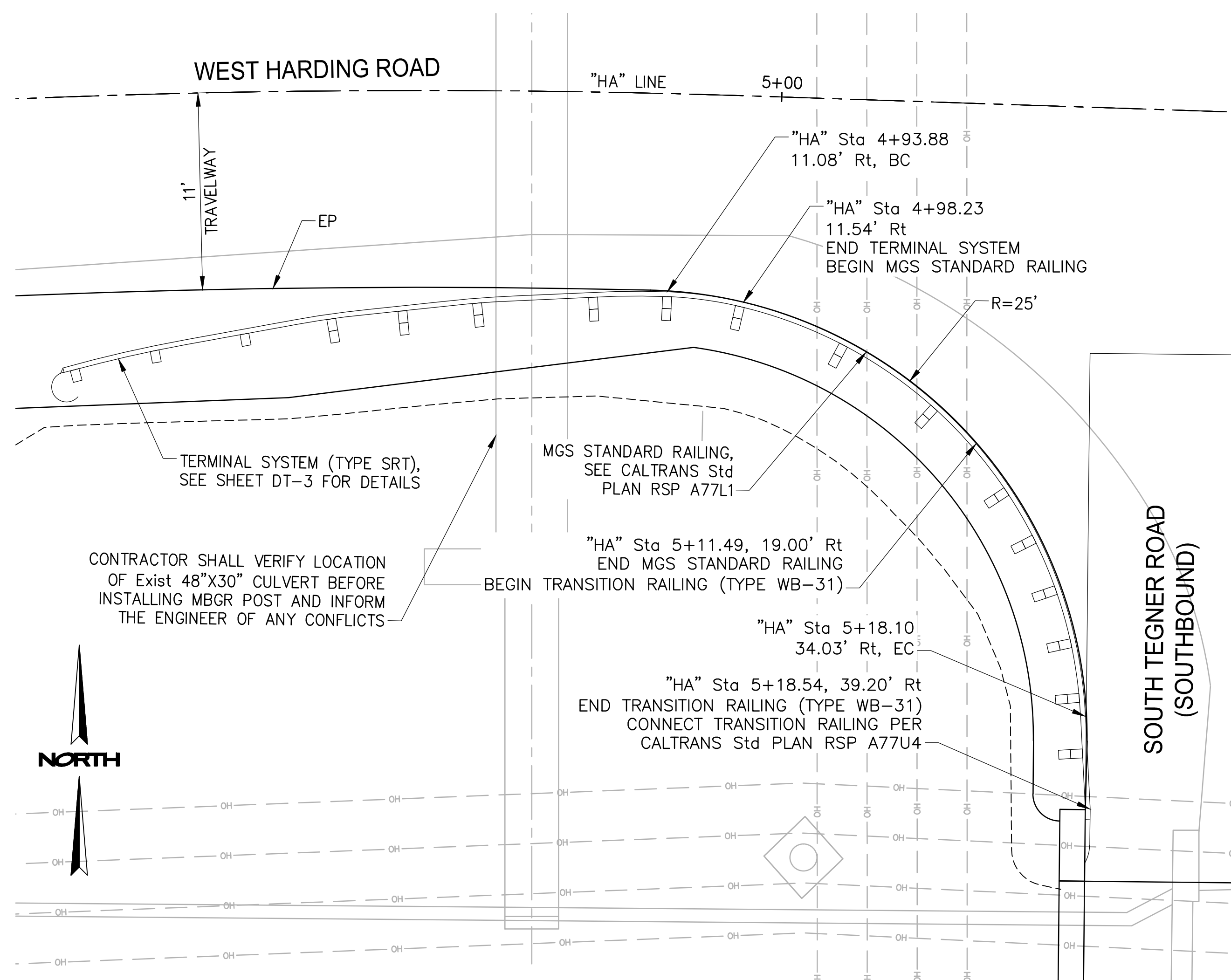
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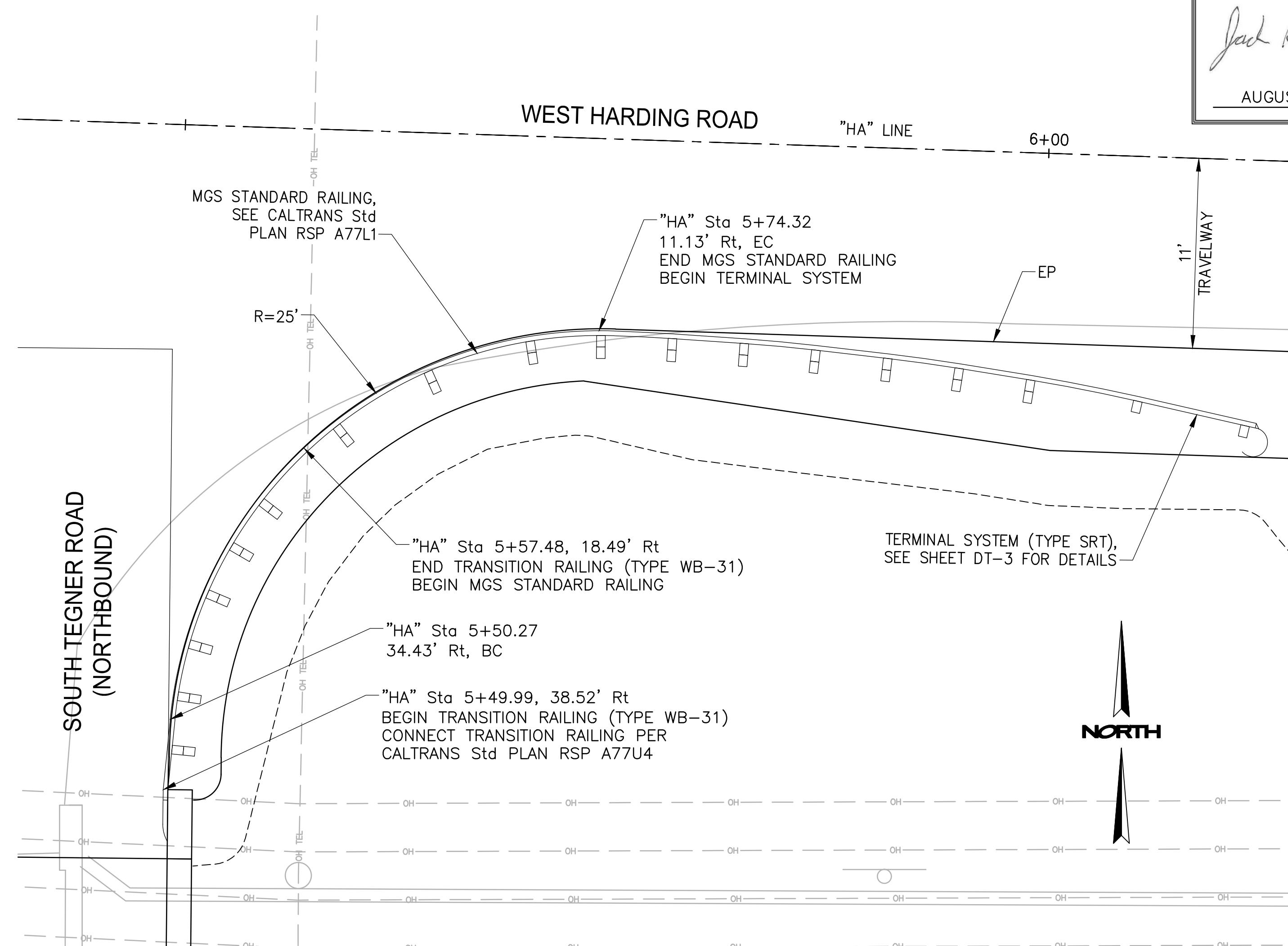
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AUGUST 29, 2017



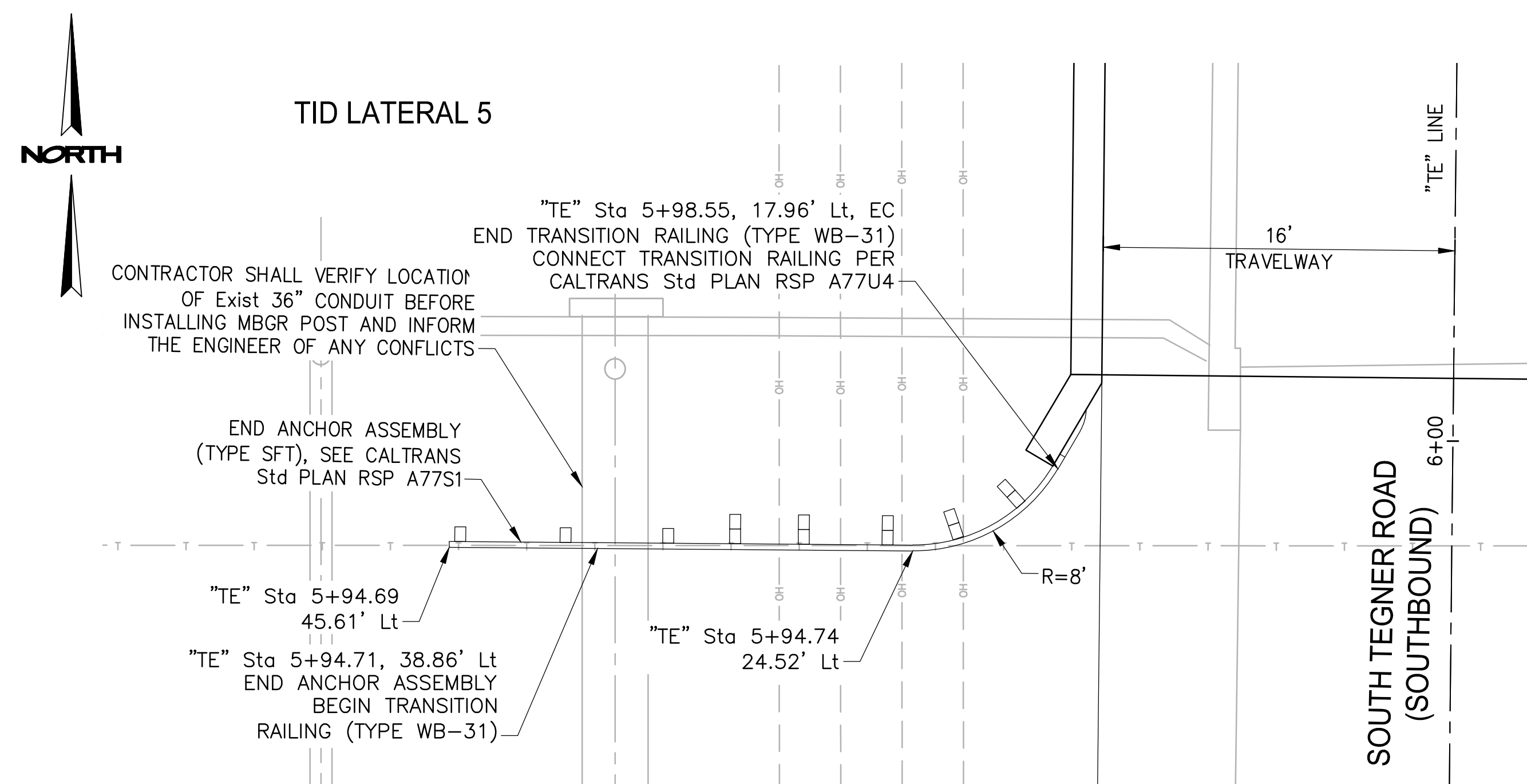
MBGR DETAIL 1 - NORTHWEST CORNER

SCALE: 1"=5'



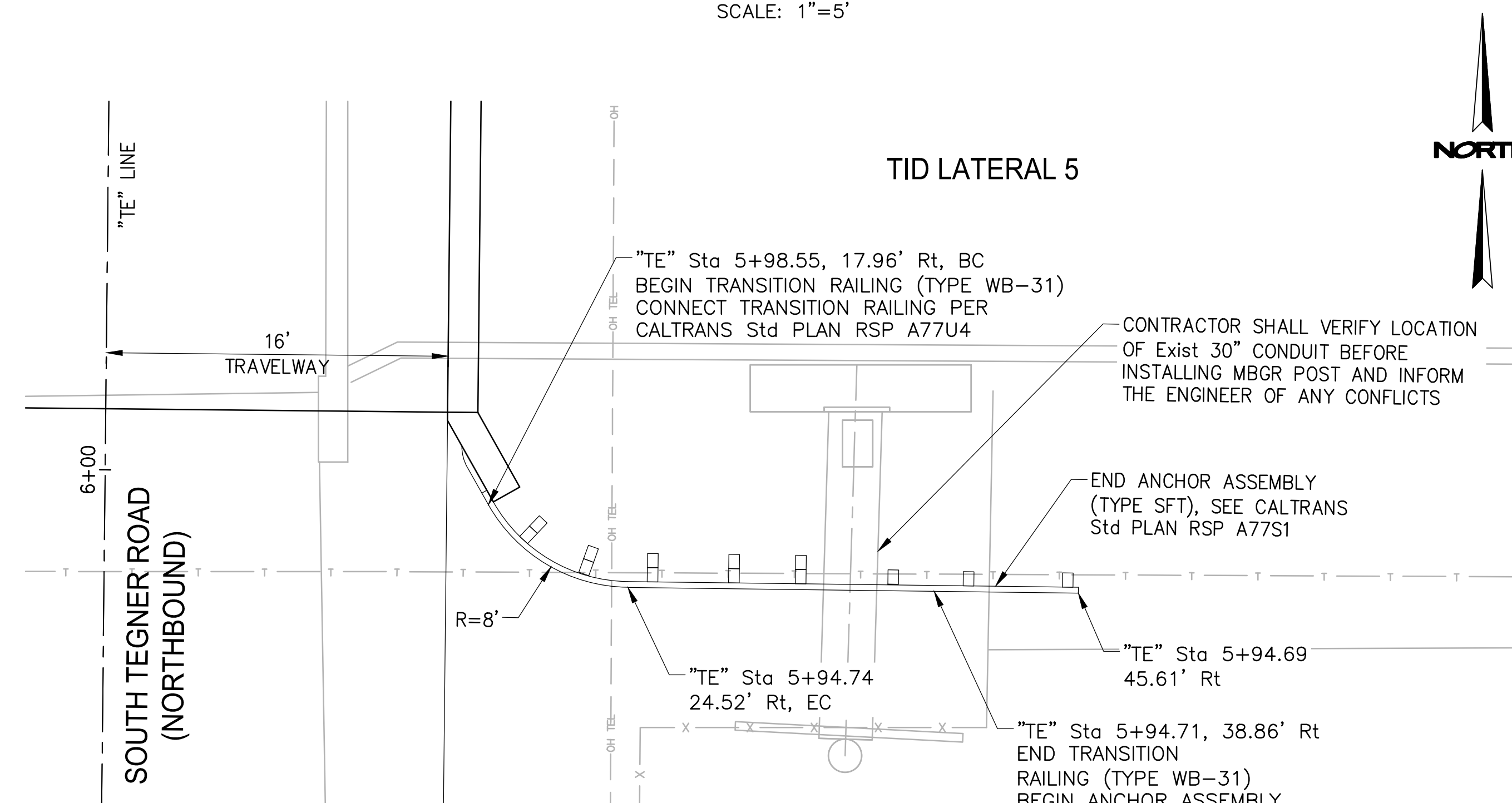
MBGR DETAIL 2 - NORTHEAST CORNER

SCALE: 1"=5'



MBGR DETAIL 3 - SOUTHWEST CORNER

SCALE: 1"=5'



MBGR DETAIL 4 - SOUTHEAST CORNER

SCALE: 1"=5'

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 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358

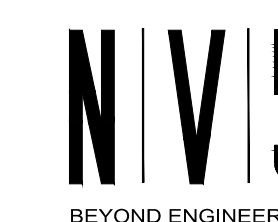
TEGNER ROAD BRIDGE REPLACEMENT

CONSTRUCTION DETAILS - 2

JOB NO. SAB047700
 DATE 8/28/17
 DR BY RAM
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 SCALE AS SHOWN

SHEET NUMBER
DT-2

5 OF 23 SHEETS



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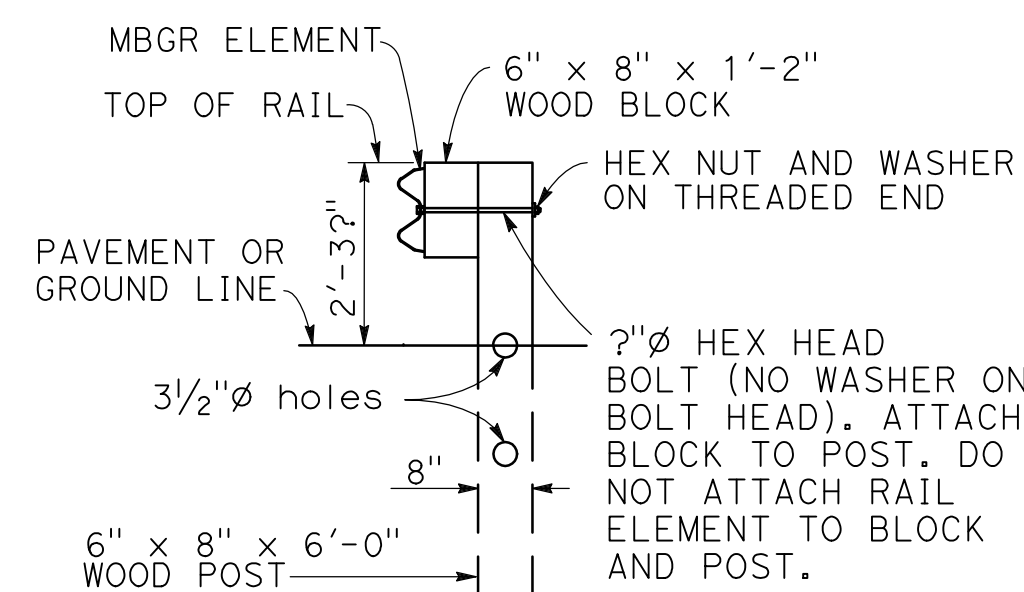
AUGUST 29, 2017



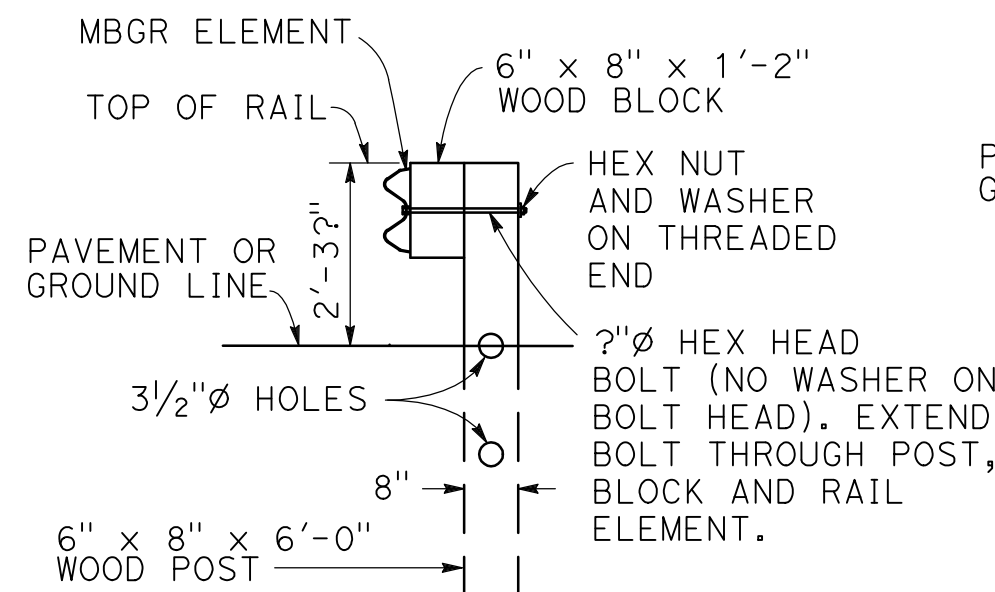
TABLE A
POST OFFSET DIMENSIONS

POST NO.	3'-0" SYSTEM END OFFSET	3'-6" SYSTEM END OFFSET
1	36"	42"
2	22"	27"
3	11"	16"
4	6"	10"
5	3"	6"
6	2"	2"
7	0"	2"
8	0"	0"

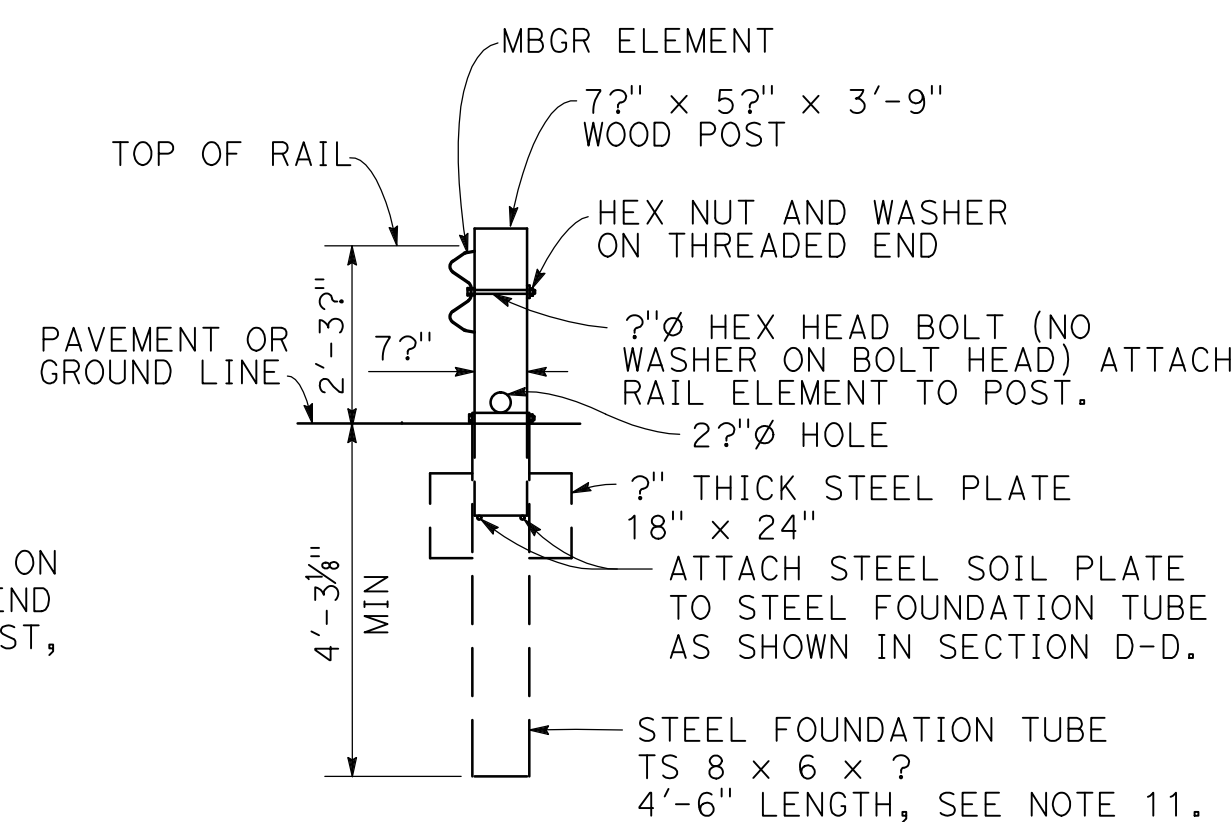
SEE NOTE 12



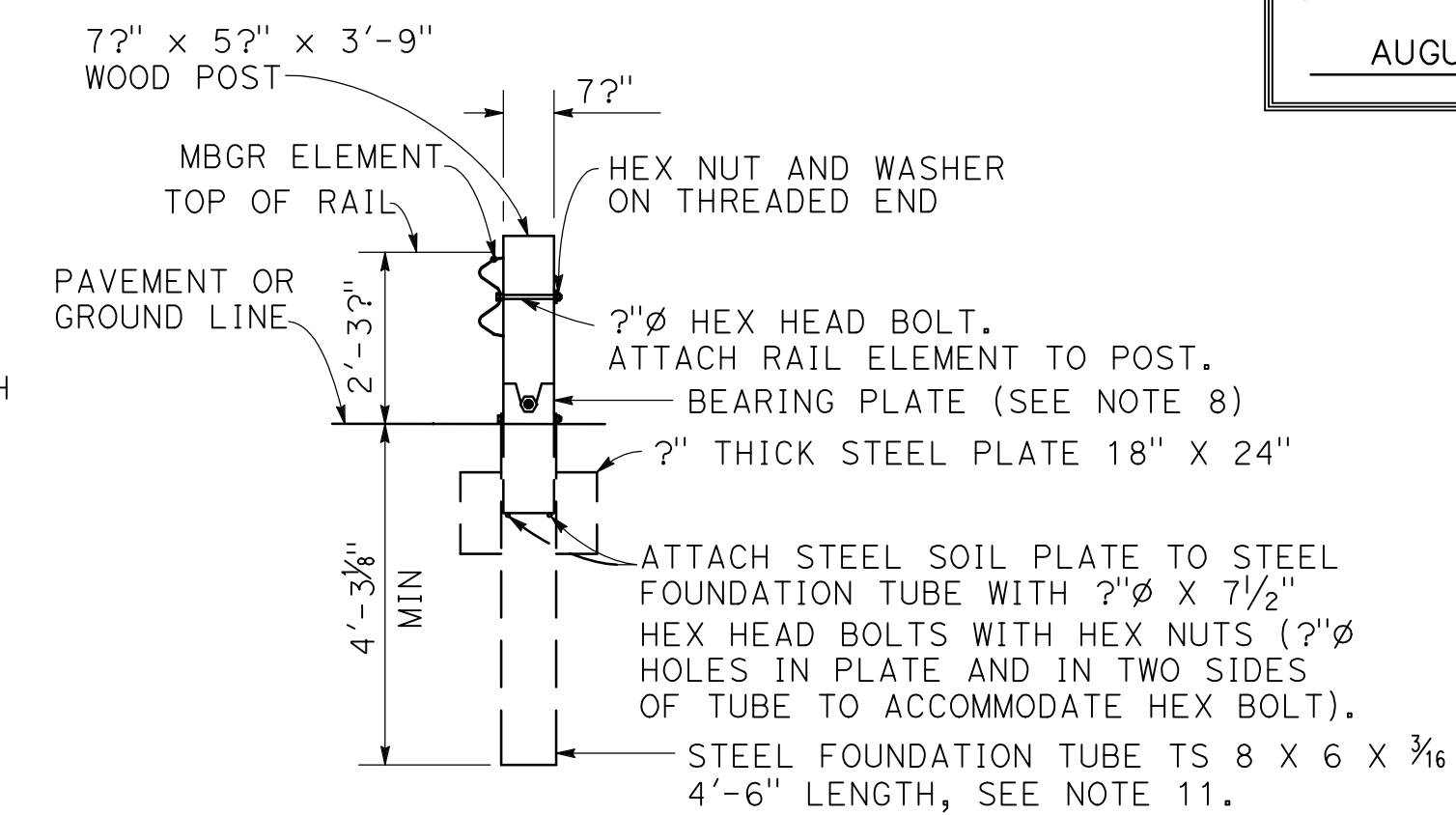
SECTION A-A



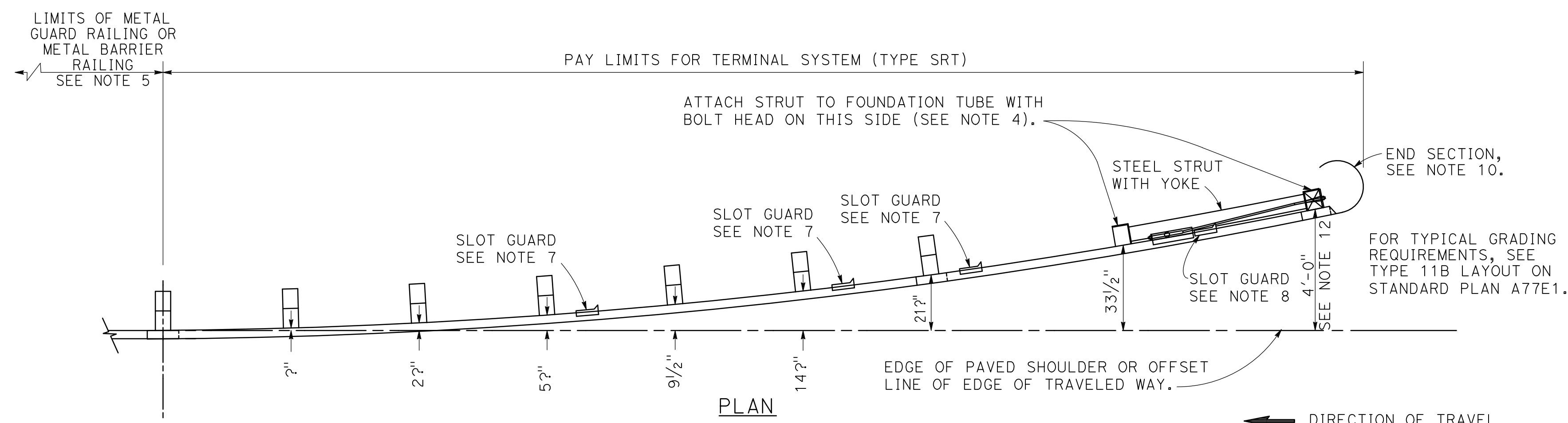
SECTION B-B



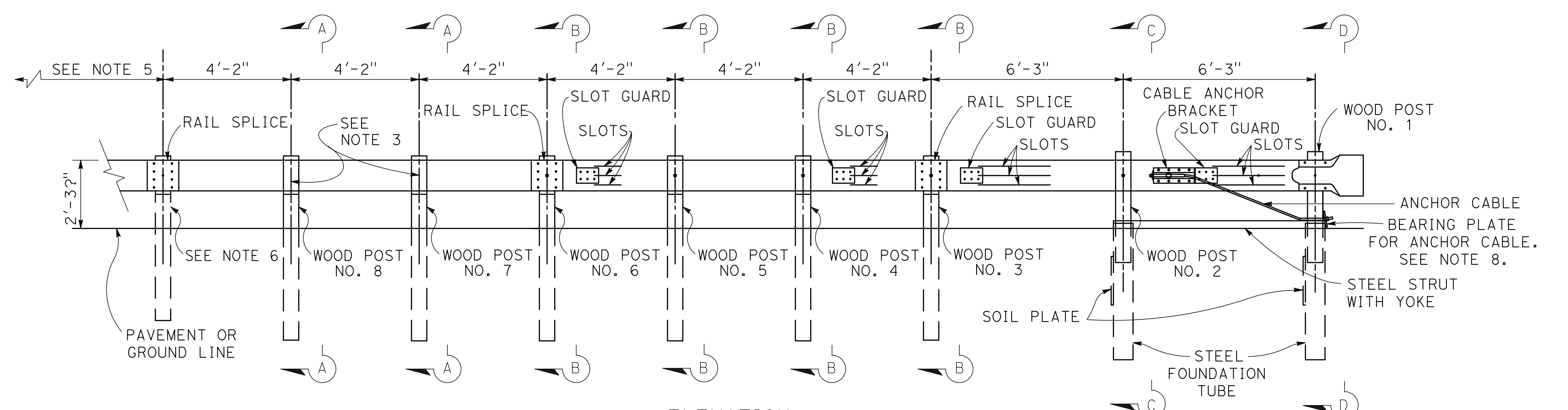
SECTION C-C



SECTION D-D
(TERMINAL SECTION NOT SHOWN)



PLAN



ELEVATION

TERMINAL SYSTEM (TYPE SRT)

(8 POST SYSTEM)
SEE NOTE 9
NO SCALE

NOTES:

- FOR ADDITIONAL DETAILS OF TERMINAL SYSTEM (TYPE SRT), REFER TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- THE POST OFFSET DIMENSIONS ARE GIVEN TO THE CENTER OF THE TRAFFIC FACE OF THE BLOCK, EXCEPT AT THE FIRST TWO POSTS, WHERE THE DIMENSION IS TO THE CENTER OF THE TRAFFIC FACE OF THE POST. OFFSET POINTS ARE TO BE LOCATED BY CHORD MEASUREMENTS AT THE BACK OF THE RAIL EQUAL TO THE NOMINAL POST SPACING SHOWN. POSTS ARE TO BE SET APPROXIMATELY RADIAL TO THE RAILING AT EACH POST LOCATIONS.
- DO NOT ATTACH RAIL ELEMENTS TO POSTS 7 AND 8.
- ATTACH STRUT TO POST NOS. 1 AND 2 FOUNDATION TUBES WITH "Ø" HEX HEAD BOLTS, WASHERS AND HEX NUTS. BOLTS EXTEND THROUGH THE STRUT, STEEL FOUNDATION TUBE, AND WOOD POSTS.
- FOR THE LENGTH AND TYPE OF METAL BEAM GUARD RAILING OR METAL BARRIER RAILING THE TERMINAL SYSTEM IS ATTACHED TO, SEE THE PROJECT PLANS.
- ATTACH RAIL ELEMENT TO THIS POST AND BLOCK. PAYMENT FOR THIS POST, BLOCK AND HARDWARE IS INCLUDED IN PAYMENT FOR THE TYPE OF RAILING OR BARRIER THE TERMINAL SYSTEM IS ATTACHED TO, NOT PART OF PAYMENT FOR TERMINAL SYSTEM (TYPE SRT).
-
- THE DEFLECTOR ANGLE OF THE SLOT GUARD IS TO BE POSITIONED IMMEDIATELY DOWNSTREAM OF THE SLOTS.
- FOR BEARING PLATE ORIENTATION, REFER TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- FOR TYPICAL USE OF THIS TERMINAL SYSTEM WITH GUARD RAILING, SEE THE RSP A77P, RSP A77Q AND RSP A77R SERIES OF REVISED STANDARD PLANS. SEE REVISED STANDARD PLAN RSP A78E1 FOR TYPICAL USE OF THIS TERMINAL SYSTEM WITH SINGLE THRIE BEAM BARRIER.
- A COMPLETE WRAP AROUND END SECTION MAY CONTINUED TO BE USED IN EXISTING INSTALLATIONS. NEW INSTALLATIONS SHALL BE CONSTRUCTED WITH THE WRAP END SECTION SHOWN.
- A 6'-0" LENGTH STEEL FOUNDATION TUBE, TS 8 X 6 X WITHOUT A SOIL PLATE, MAY BE FURNISHED AND INSTALLED IN PLACE OF THE 4'-6" LENGTH STEEL FOUNDATION TUBE AND SOIL PLATE SHOWN. MINIMUM EMBEDMENT OF THE 6'-0" LENGTH TUBE SHALL BE 5'-9". A "Ø" HEX HEAD BOLT AND NUT SHALL BE INSTALLED IN THE HOLE IN 6'-0" LENGTH TUBE TO KEEP THE WOOD POST FROM DROPPING INTO THE TUBE.
- WHERE SITE CONDITIONS WILL NOT ACCOMMODATE USE OF THE STANDARD 4'-0" SYSTEM END OFFSET, 3'-6" OR 3'-0" SYSTEM END OFFSETS, AS APPLICABLE, MAY BE USED. SEE TABLE A FOR POST OFFSET DIMENSIONS FOR 3'-6" AND 3'-0" SYSTEM END OFFSETS.

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NO.	DATE	APPROVED	REVISIONS	DESCRIPTIONS

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DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



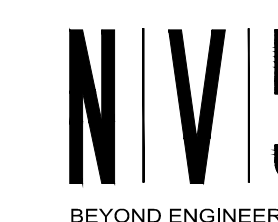
TEGNER ROAD BRIDGE REPLACEMENT

CONSTRUCTION DETAILS - 3

JOB NO. SAB047700
DATE 8/28/17
DR BY RAM
CK BY JRW
SCALE AS SHOWN

SHEET NUMBER
DT-3

6 OF 23 SHEETS



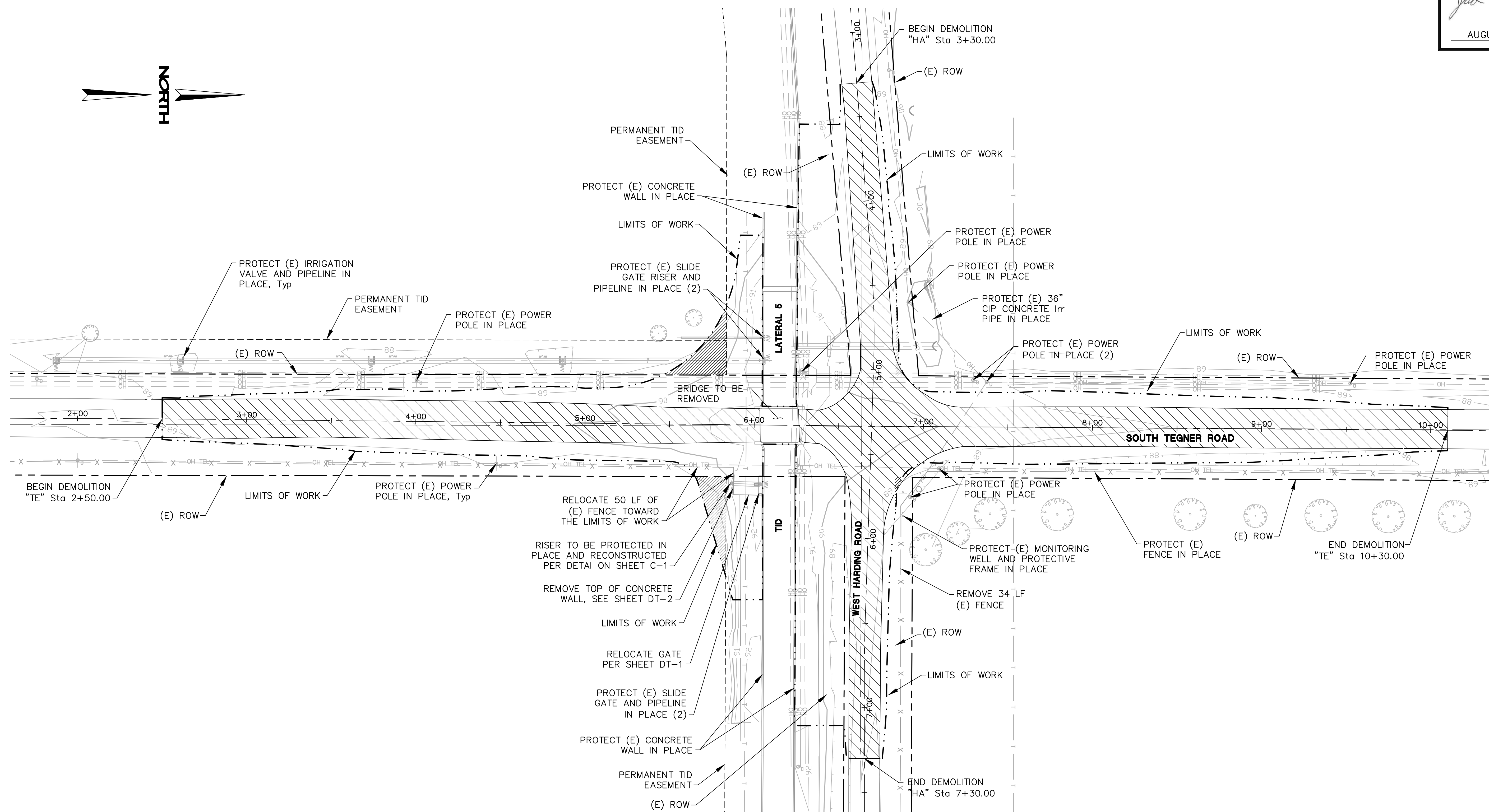
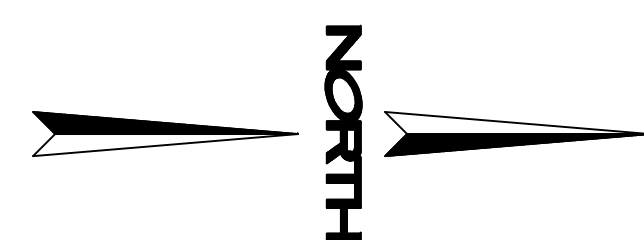
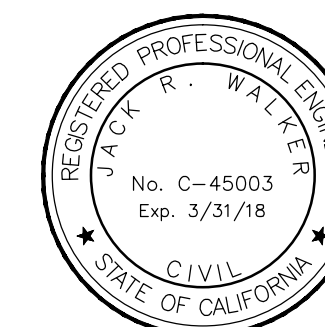
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SUBMITTED:

Jack R. Walker

AUGUST 29, 2017



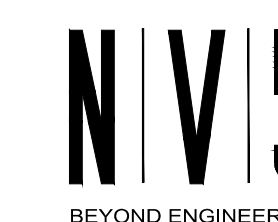
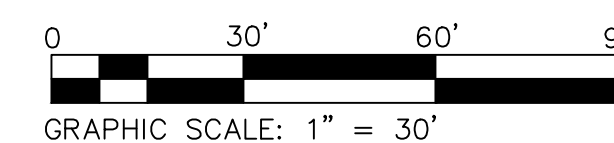
PLAN
SCALE: 1"=30'

LEGEND:

- REMOVE AC PAVEMENT
- AREA OF ACQUIRED ROW

NOTES:

- SEE SHEET C-1 FOR ABBREVIATIONS AND DEMOLITION NOTES.
- SEE DEMOLITION SHEET IN BRIDGE PLANS FOR LINING DEMOLITION.



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1716 MORGAN ROAD - MODESTO, CA 95358



TEGNER ROAD BRIDGE REPLACEMENT

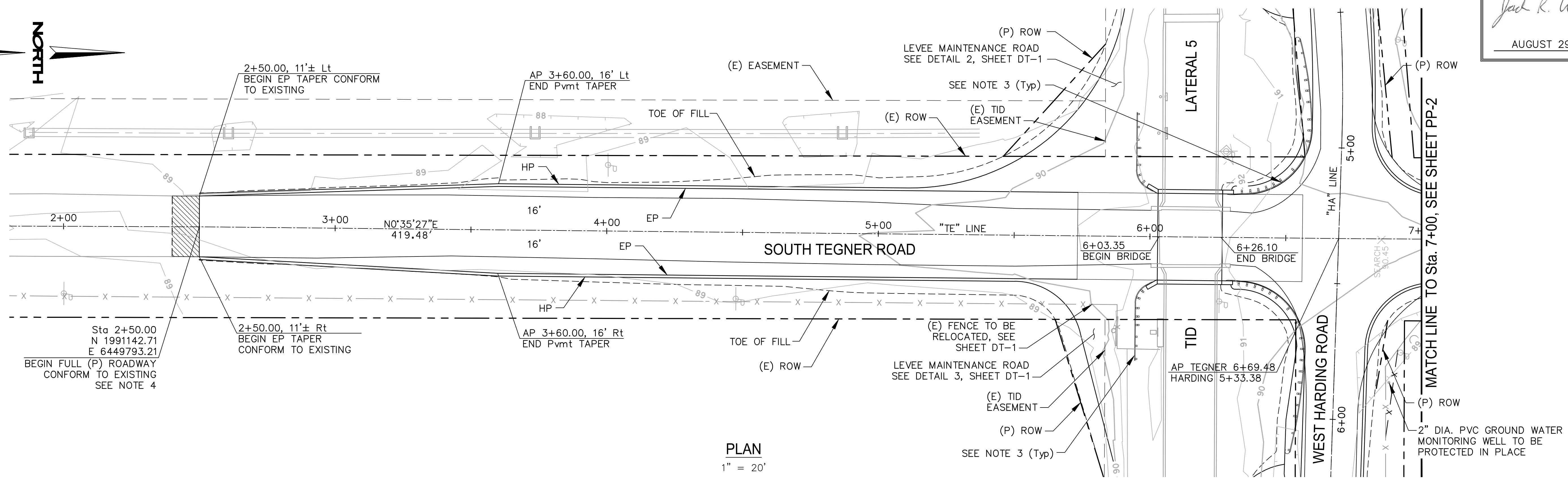
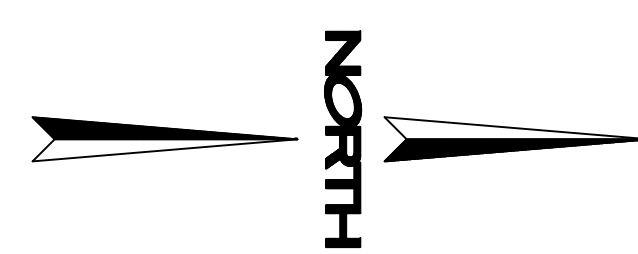
DEMOLITION PLAN

JOB NO. SAB047700
DATE 8/28/17
DR BY RAM
CK BY JRW
SCALE AS SHOWN

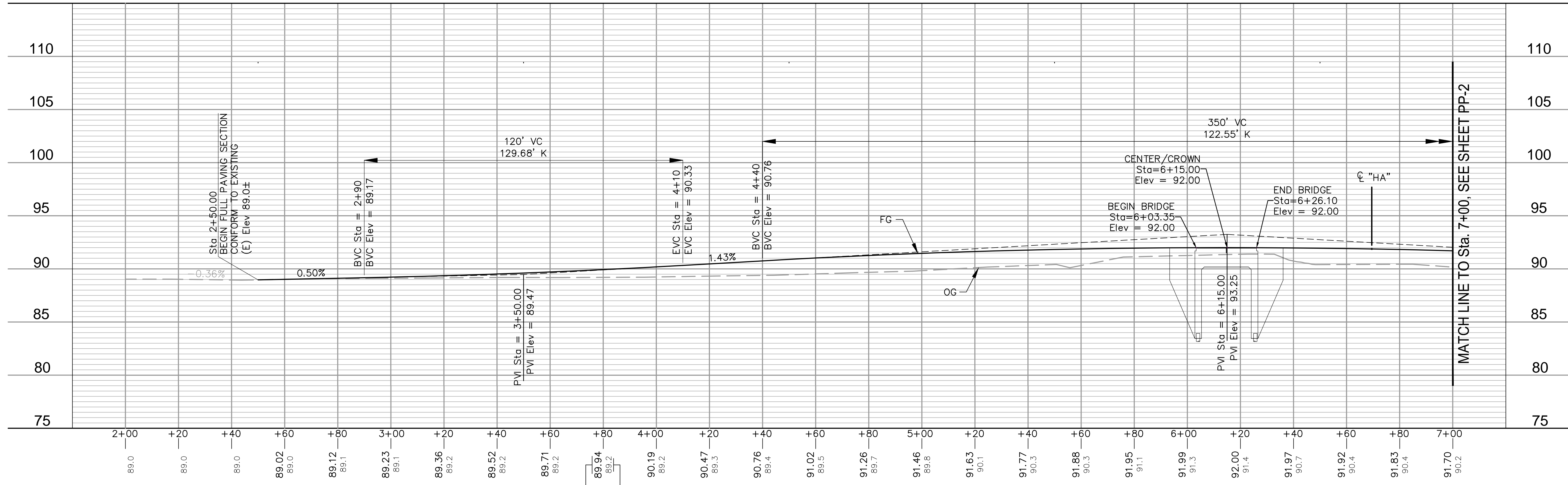
SHEET NUMBER

DM-1

7 OF 23 SHEETS

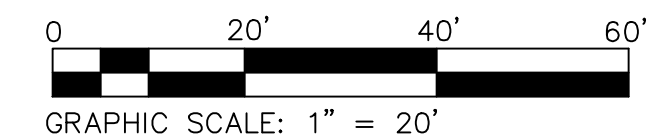


PLAN
 1" = 20'



PROFILE - "TE" LINE

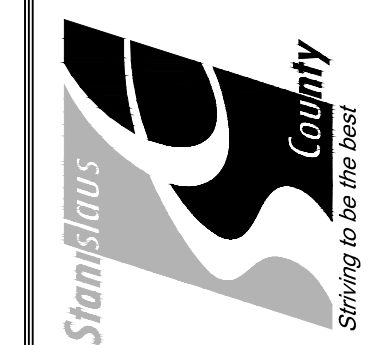
H: 1" = 20'
 V: 1" = 5'



- NOTES:**
- FOR LEGEND AND LIST AND ABBREVIATIONS, SEE SHEET C-1.
 - FOR WEST HARDING IMPROVEMENTS, SEE SHEET PP-3.
 - FOR TERMINAL SYSTEM DETAILS, MGS TRANSITION RAILING (TYPE WB-31) DETAILS AND BRIDGE CONNECTION DETAILS, SEE SHEET DT-3.
 - CONFORM NEW ROAD TO EXISTING PER TYPICAL CONFORM DETAIL, SEE SHEET C-1.
 - FOR PAVEMENT DELINEATION PLANS, SEE SHEET PD-1.
 - FOR DEMOLITION PLANS, SEE SHEET DM-1.
 - ALL STATION AND OFFSET CALLOUTS ARE BASED ON THE "TE" LINE, UNLESS OTHERWISE NOTED.

NO.	REVISIONS	DATE	APPROVED

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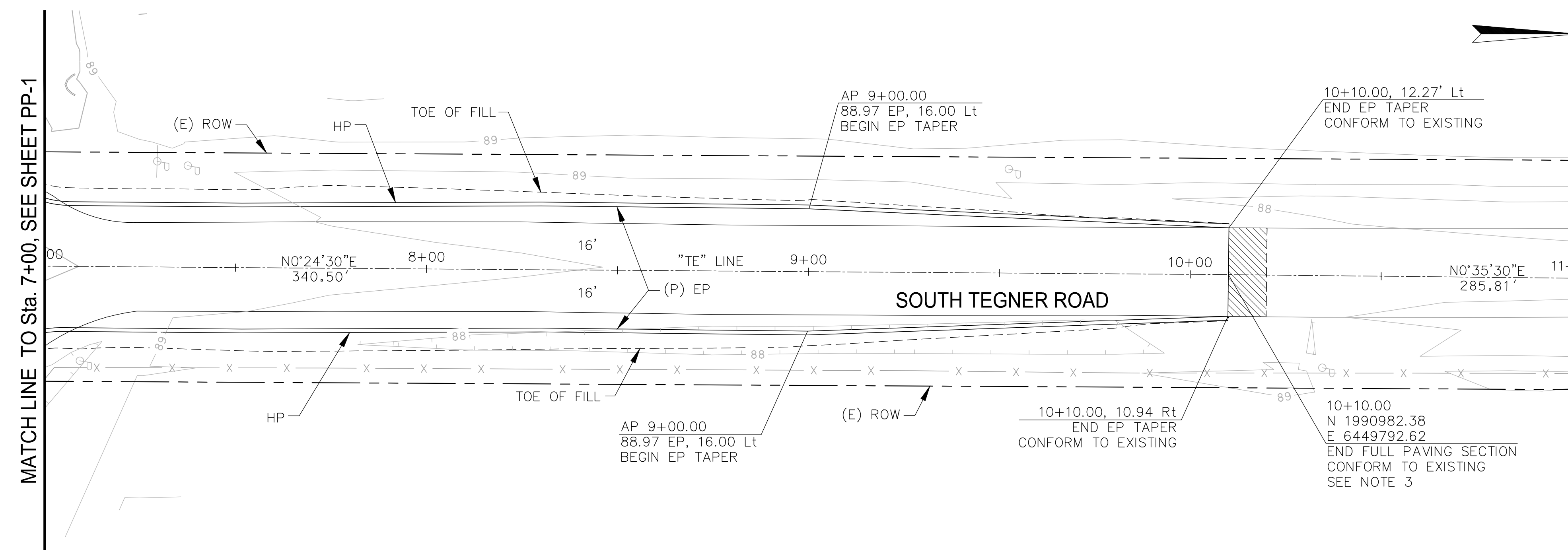
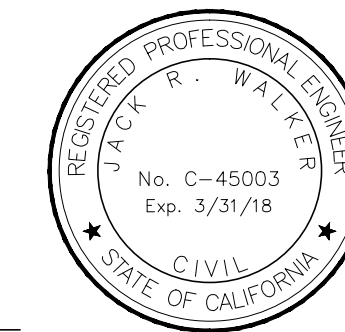
TEGNER ROAD BRIDGE REPLACEMENT
 PLAN & PROFILE - 1

JOB NO. SAB047700
 DATE 8/28/17
 DR BY RAM
 CK BY JRW
 SCALE AS SHOWN

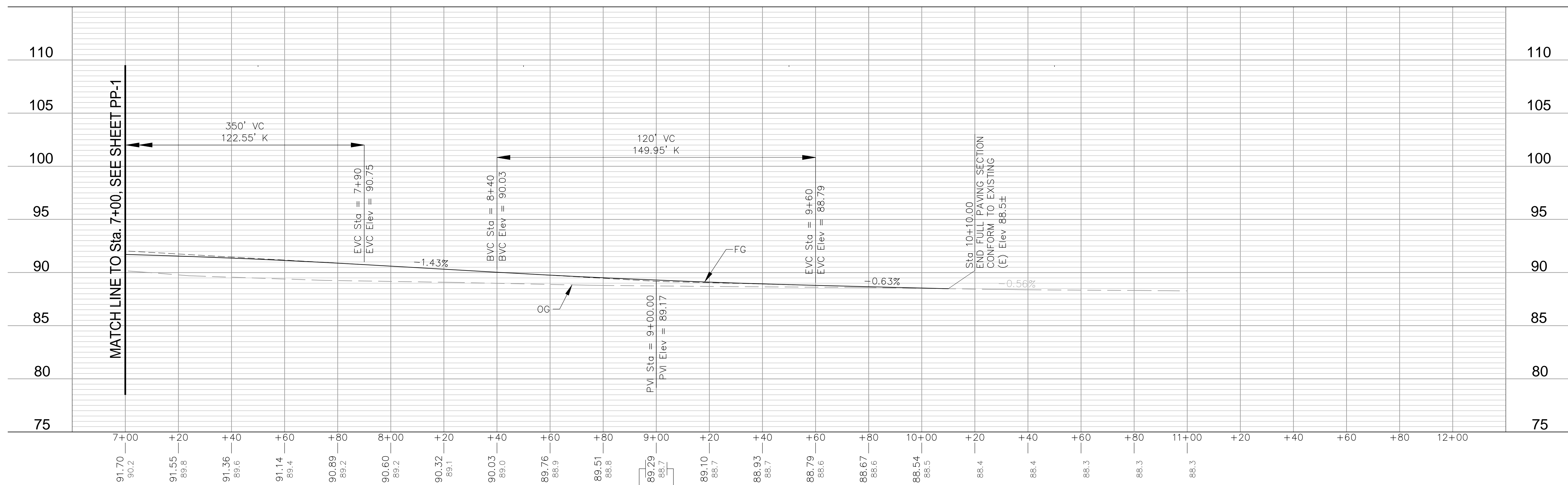
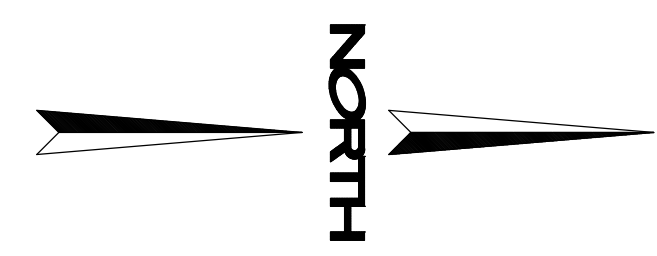
SHEET NUMBER
PP-1
 8 OF 23 SHEETS

N|V|5
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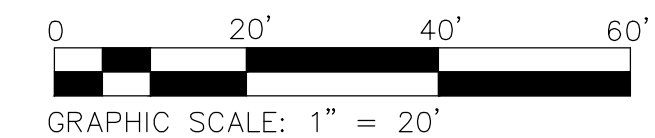


PLAN
 1" = 20'



PROFILE - "TE" LINE
 H: 1" = 20'
 V: 1" = 5'

- NOTES:**
- FOR LEGEND AND LIST AND ABBREVIATIONS, SEE SHEET C-1.
 - FOR WEST HARDING IMPROVEMENTS, SEE SHEET PP-3.
 - CONFORM NEW ROAD TO EXISTING PER TYPICAL CONFORM DETAIL, SEE SHEET C-1.
 - FOR PAVEMENT DELINEATION PLANS, SEE SHEET PD-1.
 - FOR DEMOLITION PLANS, SEE SHEET DM-1.
 - ALL STATION AND OFFSET CALLOUTS ARE BASED ON THE "TE" LINE, UNLESS OTHERWISE NOTED.



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TEGNER ROAD BRIDGE REPLACEMENT
 PLAN & PROFILE - 2

JOB NO. SAB047700
 DATE 8/28/17
 DR BY RAM
 CK BY JRW
 SCALE AS SHOWN

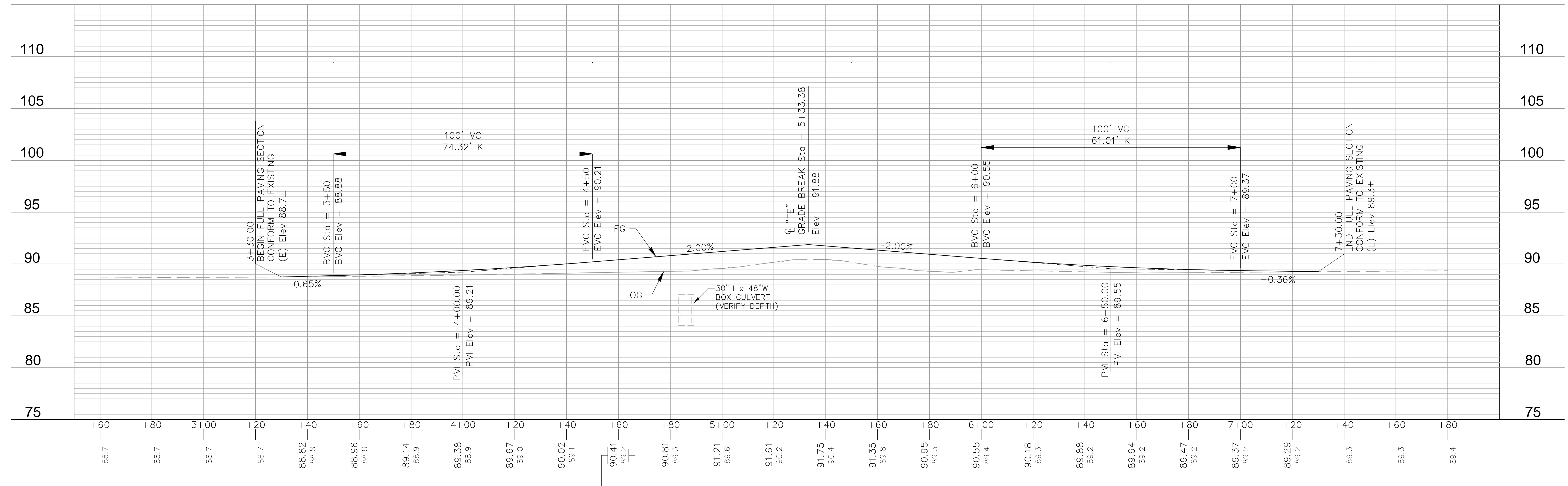
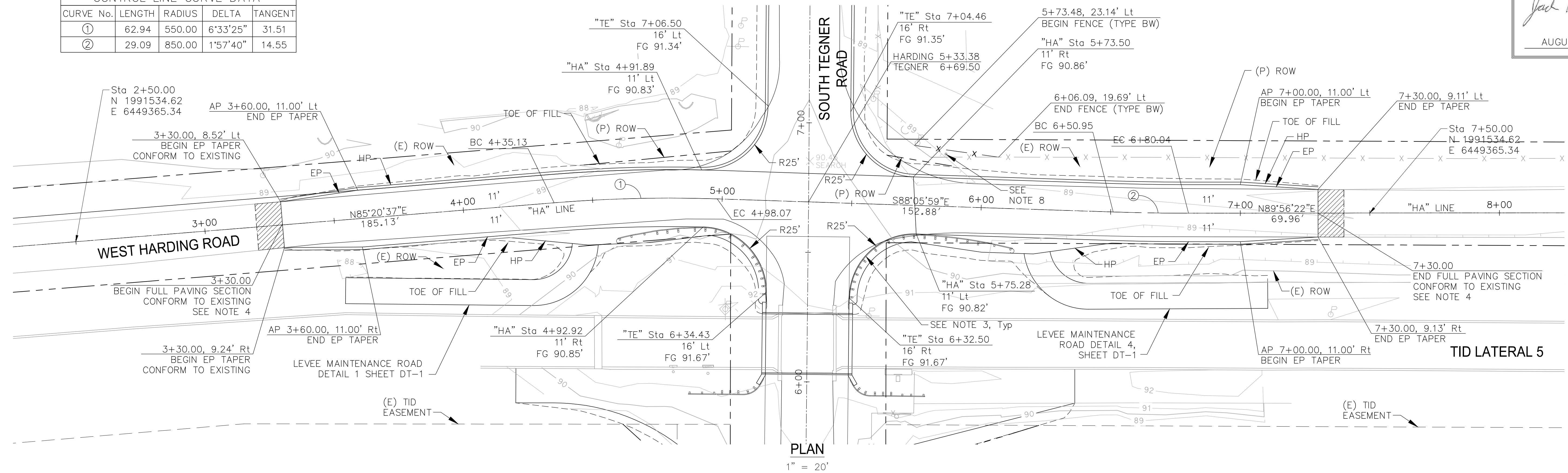
SHEET NUMBER
PP-2
 9 OF 23 SHEETS

N|V|5
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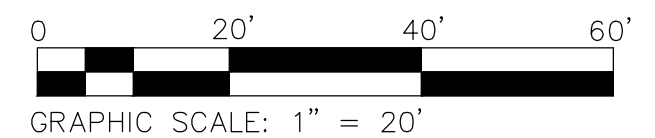


CURVE No.	LENGTH	RADIUS	DELTA	TANGENT
①	62.94	550.00	6°33'25"	31.51
②	29.09	850.00	1°57'40"	14.55



- NOTES:**
- FOR LEGEND AND LIST AND ABBREVIATIONS, SEE SHEET C-1.
 - FOR SOUTH TEGNER IMPROVEMENTS, SEE SHEETS PP-1 AND PP-2.
 - FOR TERMINAL SYSTEM DETAILS, MGS TRANSITION RAILING (TYPE WB-31) DETAILS AND BRIDGE CONNECTION DETAILS, SEE SHEETS DT-2 AND DT-3.
 - CONFORM NEW ROAD TO EXISTING PER TYPICAL CONFORM DETAIL, SEE SHEET C-1.
 - FOR PAVEMENT DELINEATION PLANS, SEE SHEET PD-1.
 - FOR DEMOLITION PLANS, SEE SHEET DM-1.
 - ALL STATION AND OFFSET CALLOUTS ARE BASED ON THE "HA" LINE, UNLESS OTHERWISE NOTED.
 - 2" DIAMETER PVC GROUND MONITORING WELL TO BE PROTECTED IN PLACE.

PROFILE - "HA" LINE
 H: 1" = 20'
 V: 1" = 5'



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TEGNER ROAD BRIDGE REPLACEMENT
PLAN & PROFILE - 3

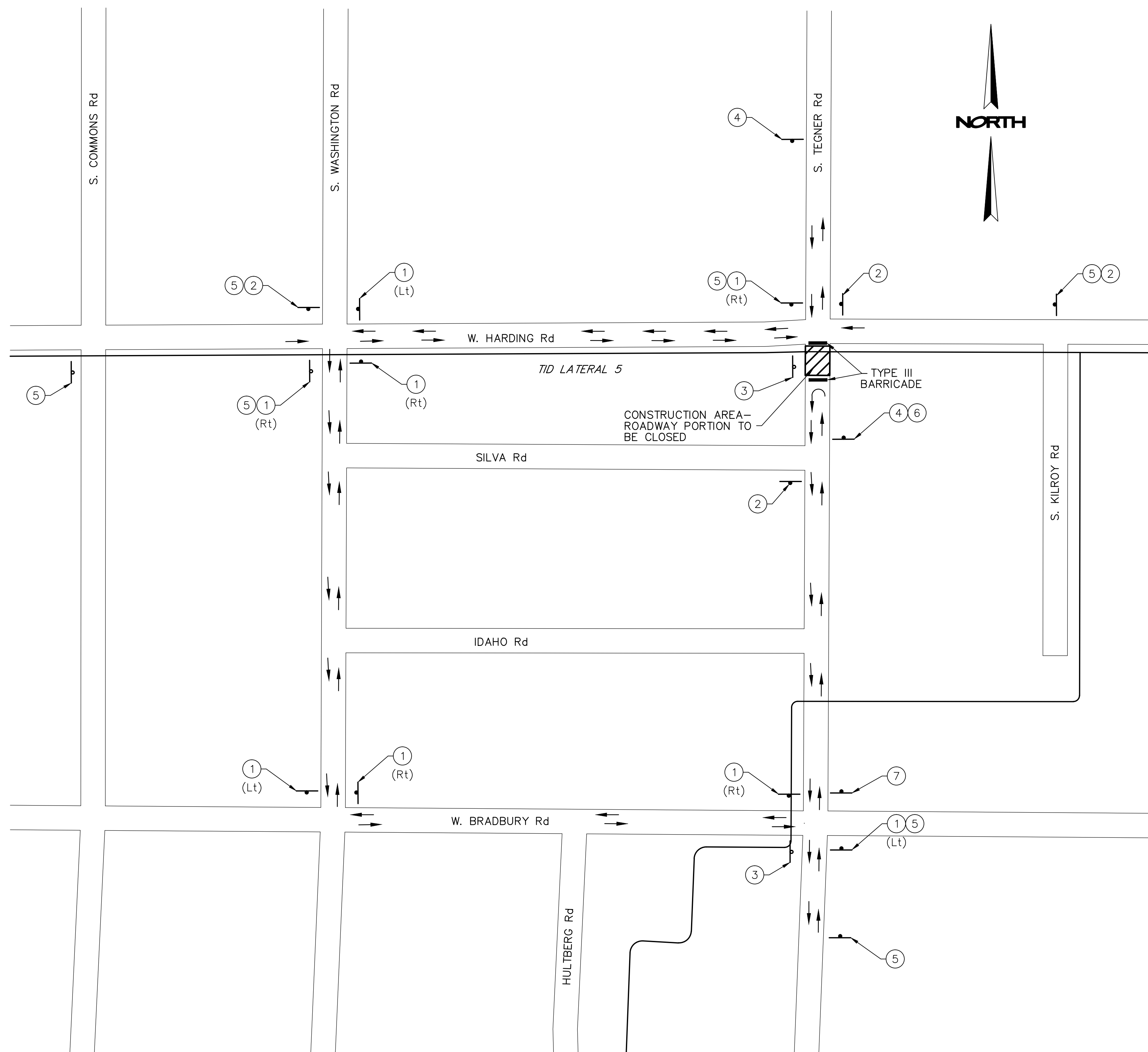
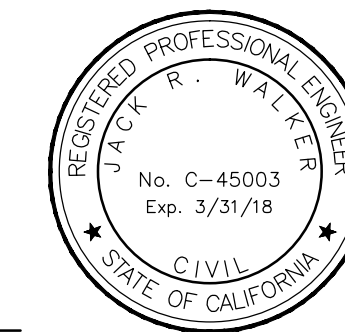
JOB NO. SAB047700
 DATE 8/28/17
 DR BY RAM
 CK BY JRW
 SCALE AS SHOWN

SHEET NUMBER
PP-3
 10 OF 23 SHEETS

N|V|5
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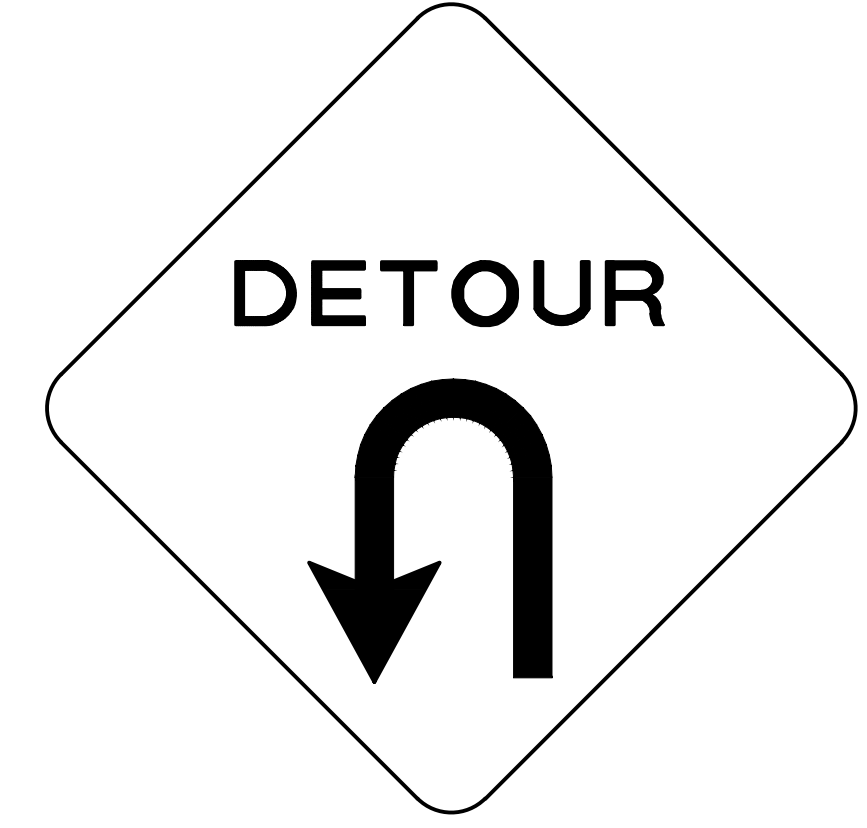
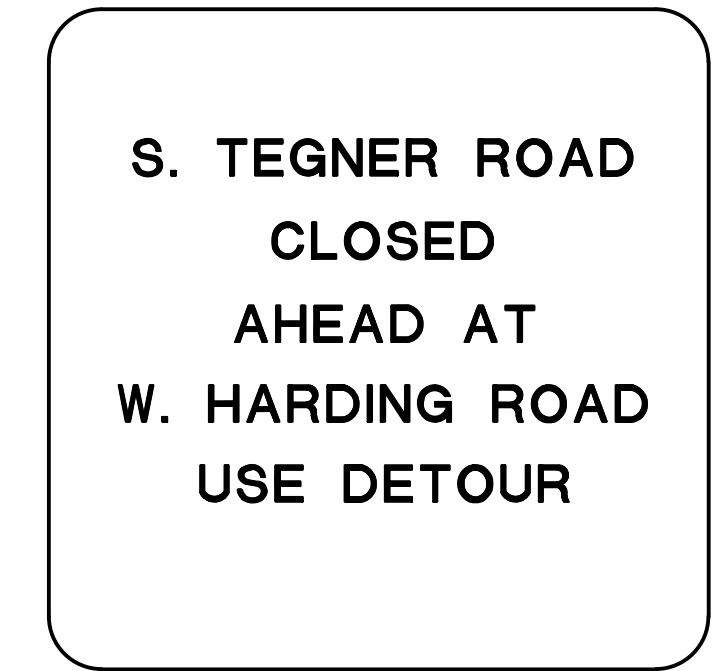
SUBMITTED:
Jack R. Walker
 AUGUST 29, 2017



PLAN
 NTS

DETOUR SIGNS					
LOCATION NUMBER	SIGN CODE	PANEL SIZE	No. OF POSTS & SIZE	No. OF SIGNS	SIGN MESSAGE
①	M4-10	48"x18"	2-4"x4"	8	DETOUR IN ARROW
②	SC3 (CA)	48"x18"	2-4"x4"	4	DETOUR WITH ARROW AHEAD
③	M4-8a	24"x18"	1-4"x4"	2	END DETOUR
④	W20-3	48"x48"	1-4"x4"	2	ROAD CLOSED AHEAD
⑤	SPECIAL "A"	48"x48"	1-4"x4"	7	S. TEGNER ROAD CLOSED AHEAD AT W. HARDING ROAD - USE DETOUR
⑥	SPECIAL "B"	48"x48"	1-4"x4"	1	DETOUR WITH U-TURN ARROW
⑦	SPECIAL "C"	60"x30"	2-4"x4"	1	ROAD CLOSED TO THRU TRAFFIC, LOCAL TRAFFIC ONLY

- NOTES:**
- DURING CONSTRUCTION OF S. TEGNER ROAD, VEHICULAR TRAFFIC SHALL BE DIRECTED TO THE DETOUR AS SHOWN ON THE PLAN FOR THE DURATION OF THE PROJECT.
 - SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
 - FOR TYPE III BARRICADE DETAILS, SEE CALTRANS STANDARD PLAN A73C.



SPECIAL "A"
 (BLACK LETTERS ON ORANGE BACKGROUND)

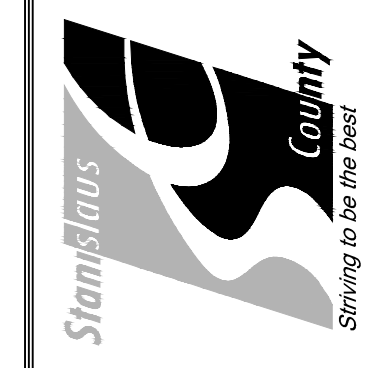
SPECIAL "B"
 (BLACK LETTERS ON ORANGE BACKGROUND)



SPECIAL "C"
 (BLACK LETTERS ON ORANGE BACKGROUND)

NO.	DATE	APPROVED

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 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



TEGNER ROAD BRIDGE REPLACEMENT
 DETOUR PLAN

JOB NO. SAB047700
 DATE 8/28/17
 DR BY RAM
 CK BY JRW
 SCALE AS SHOWN

SHEET NUMBER
DE-1
 11 OF 23 SHEETS

N|V|5
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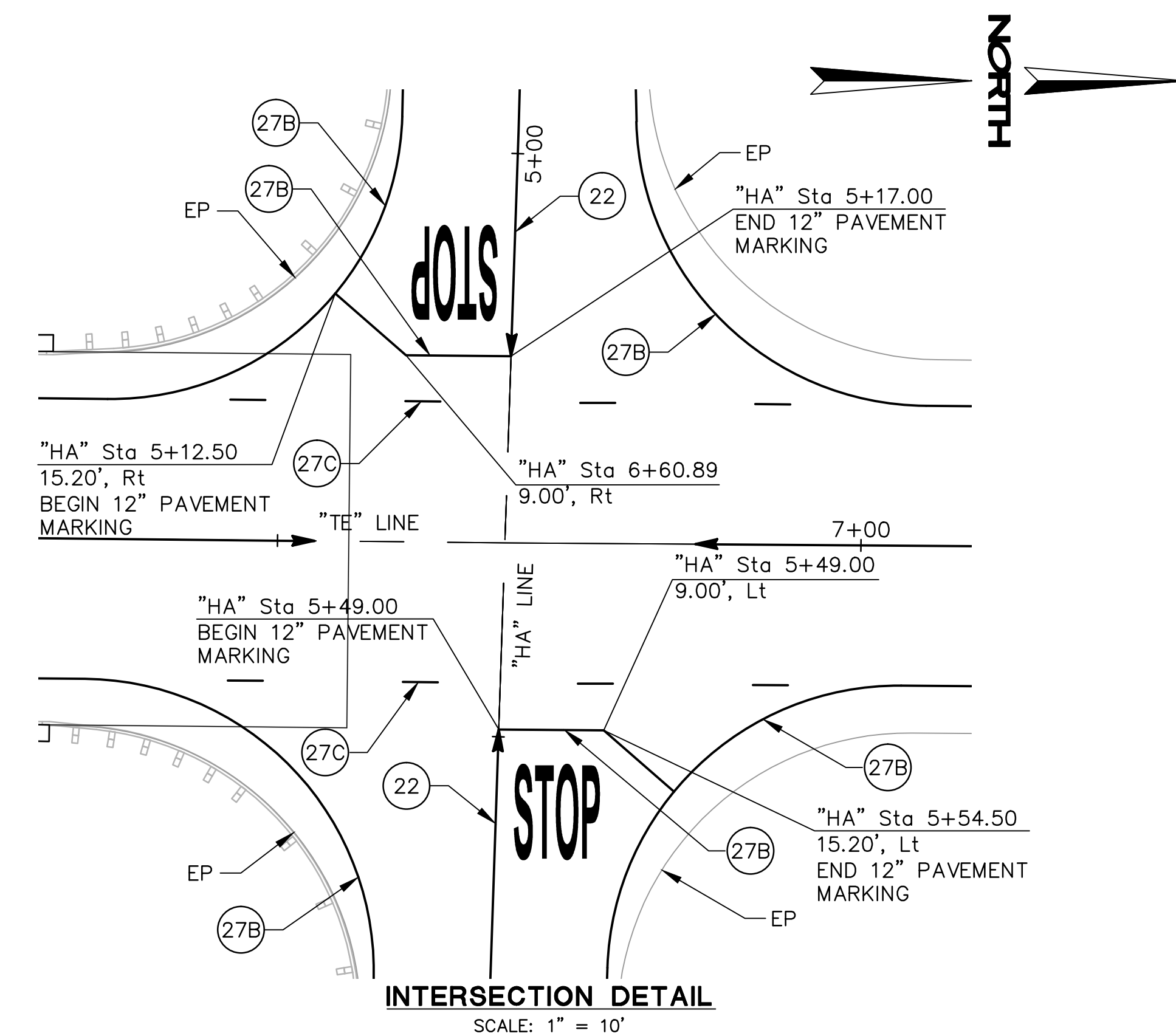
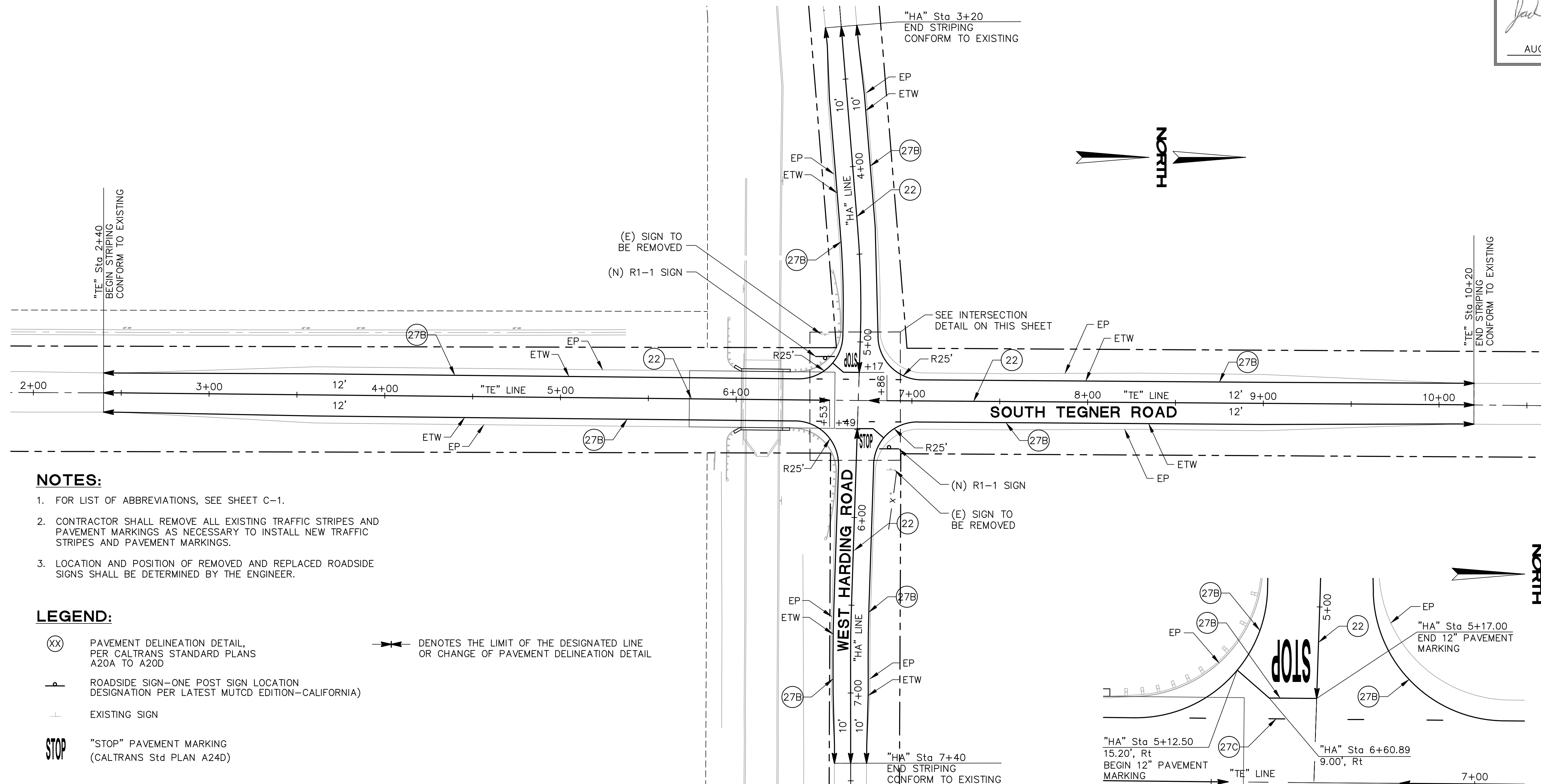
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 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



TEGNER ROAD BRIDGE REPLACEMENT
 PAVEMENT DELINEATION & SIGNAGE

JOB NO. SAB047700
 DATE 8/28/17
 DR BY RAM
 CK BY JRW
 SCALE AS SHOWN

SHEET NUMBER
PD-1
 12 OF 23 SHEETS



NOTES:

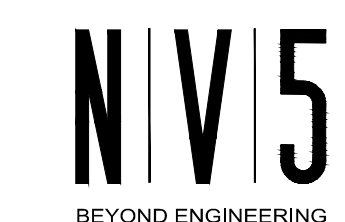
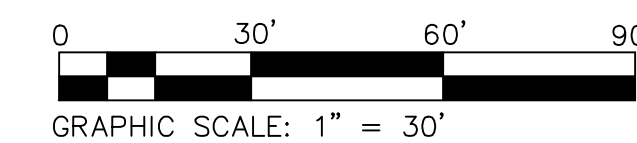
- FOR LIST OF ABBREVIATIONS, SEE SHEET C-1.
- CONTRACTOR SHALL REMOVE ALL EXISTING TRAFFIC STRIPES AND PAVEMENT MARKINGS AS NECESSARY TO INSTALL NEW TRAFFIC STRIPES AND PAVEMENT MARKINGS.
- LOCATION AND POSITION OF REMOVED AND REPLACED ROADSIDE SIGNS SHALL BE DETERMINED BY THE ENGINEER.

LEGEND:

- (XX) PAVEMENT DELINEATION DETAIL, PER CALTRANS STANDARD PLANS A20A TO A20D
- ⊥ ROADSIDE SIGN—ONE POST SIGN LOCATION DESIGNATION PER LATEST MUTCD EDITION—CALIFORNIA)
- ⊥ EXISTING SIGN
- STOP "STOP" PAVEMENT MARKING (CALTRANS Std PLAN A24D)
- ⚡ DENOTES THE LIMIT OF THE DESIGNATED LINE OR CHANGE OF PAVEMENT DELINEATION DETAIL

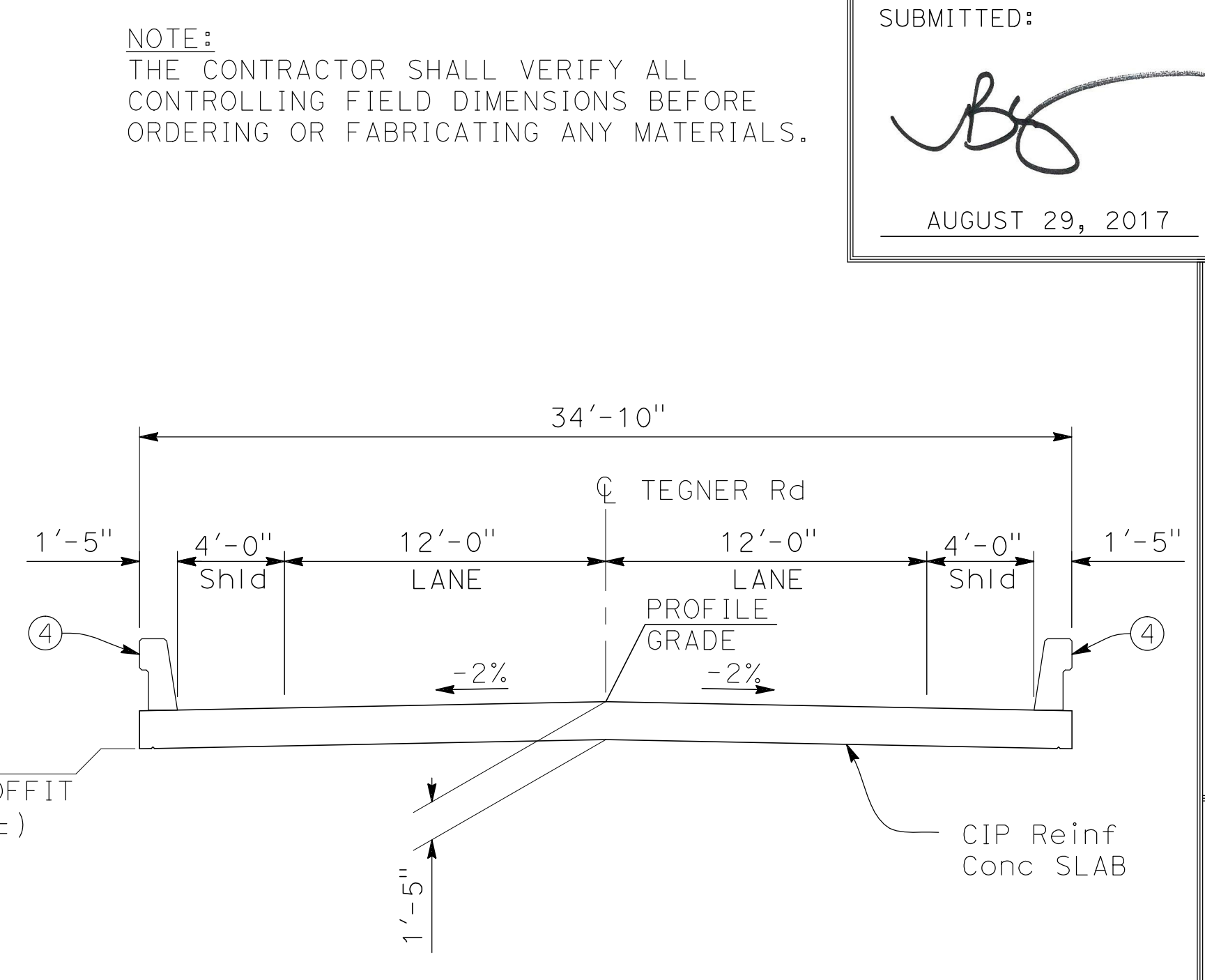
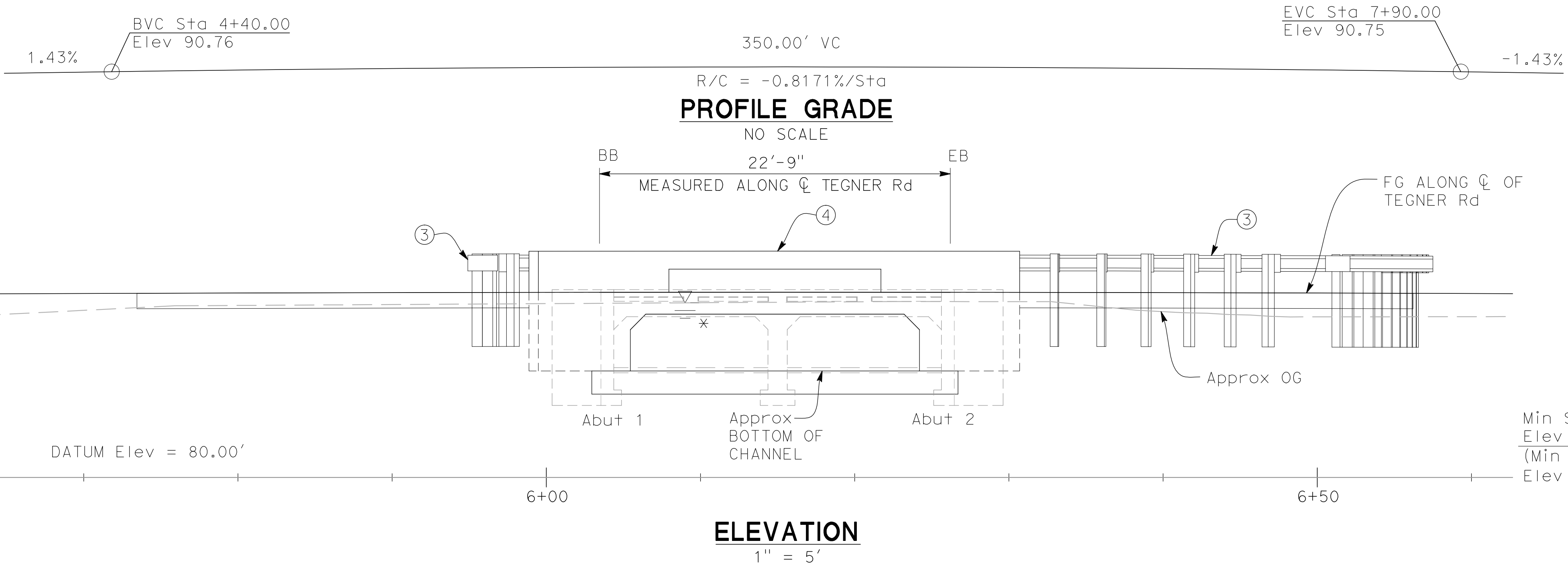
PAVEMENT DELINEATION SUMMARY

SHEET No.	ROUTE	ALIGNMENT	LOCATION		DETAIL No.	THERMOPLASTIC			
			FROM STATION	TO STATION		4" Dbl YELLOW (ft)	4" WHITE (ft)	4" SKIP WHITE (ft)	PAVEMENT MARKING (sf)
PD-1		"TE"	2+40	6+53	22	413			
PD-1		"TE"	6+86	10+20	22	334			
PD-1		"HA"	3+20	5+17	22	197			
PD-1		"HA"	5+49	7+40	22	191			
PD-1		"TE"	2+40 Lt & Rt	6+60 Lt & Rt	27B		868		
PD-1		"TE"	6+80 Lt & Rt	10+20 Lt & Rt	27B		706		
PD-1		"HA"	3+20 Lt & Rt	4+97 Lt & Rt	27B		354		
PD-1		"HA"	5+70 Lt & Rt	7+40 Lt & Rt	27B		340		
PD-1		"HA"	5+12.50 Rt	5+17 Rt	27B		51		
PD-1		"HA"	5+49 Lt	5+54.50 Lt	27B		51		
PD-1		"TE"	6+35 Lt & Rt	7+05 Lt & Rt	27C			140	
PD-1		"HA"	5+06 Rt	5+14 Rt					22
PD-1		"HA"	5+52 Lt	5+60 Lt					22
TOTALS						1135	2370	140	44

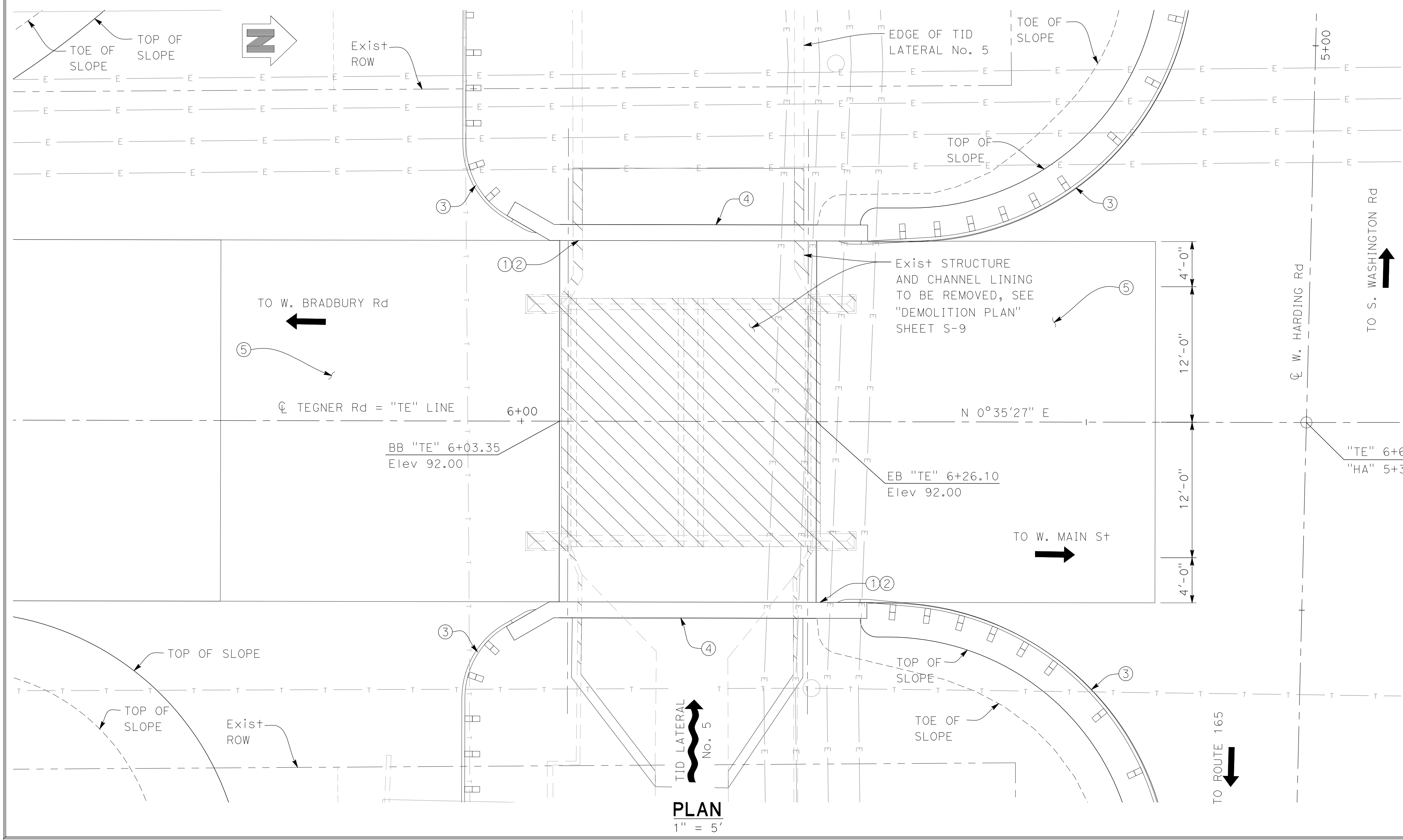


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**CAST-IN-PLACE REINFORCED SLAB
TYPICAL SECTION**
1" = 5'



PLAN
1" = 5'

- LEGEND:**
- ① PAINT "Br No. 38C-0302"
 - ② PAINT "TEGNER ROAD BRIDGE"
 - ③ MBGR, SEE SHEETS DT-2 & DT-3
 - ④ CONCRETE BARRIER TYPE 732 Mod
 - ⑤ STRUCTURAL APPROACH TYPE N(300)
 - ~ DENOTES DIRECTION OF FLOW
 - ▨ EXISTING BRIDGE TO BE REMOVED
 - * FOR HYDROLOGIC SUMMARY, SEE "FOUNDATION PLAN" SHEET, S-3
 - PROPOSED STRUCTURE
 - - - EXISTING STRUCTURE
 - ➔ INDICATES DIRECTION OF TRAFFIC

NOTE:
1. FOR GENERAL NOTES, SEE "DECK CONTOURS" SHEET, S-2.

INDEX TO PLANS

SHEET NO.	TITLE
S-1	GENERAL PLAN
S-2	DECK CONTOURS
S-3	FOUNDATION PLAN
S-4	ABUTMENT LAYOUT
S-5	ABUTMENT DETAILS
S-6	DECK DETAILS
S-7	FOUNDATION DETAILS
S-8	CHANNEL DETAILS
S-9	DEMOLITION PLAN
S-10	STRUCTURE APPROACH TYPE N(300)
S-11	LOG OF TEST BORINGS

N|V|5
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SACRAMENTO, CA 95833
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CALL BEFORE YOU DIG
800-227-2600

SUBMITTED:

REGISTERED PROFESSIONAL ENGINEER
No. C-59724
Exp. 12-31-17
CIVIL
STATE OF CALIFORNIA

AUGUST 29, 2017

PREPARED UNDER THE DIRECTION OF:

NO.	REVISIONS	DATE	APPROVED

STANISLAUS COUNTY
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ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358

TEGNER ROAD BRIDGE REPLACEMENT

GENERAL PLAN

JOB NO SAB047700
DATE 8/28/17
DR BY LLK
CK BY BW
SCALE AS SHOWN

SHEET NUMBER
S-1

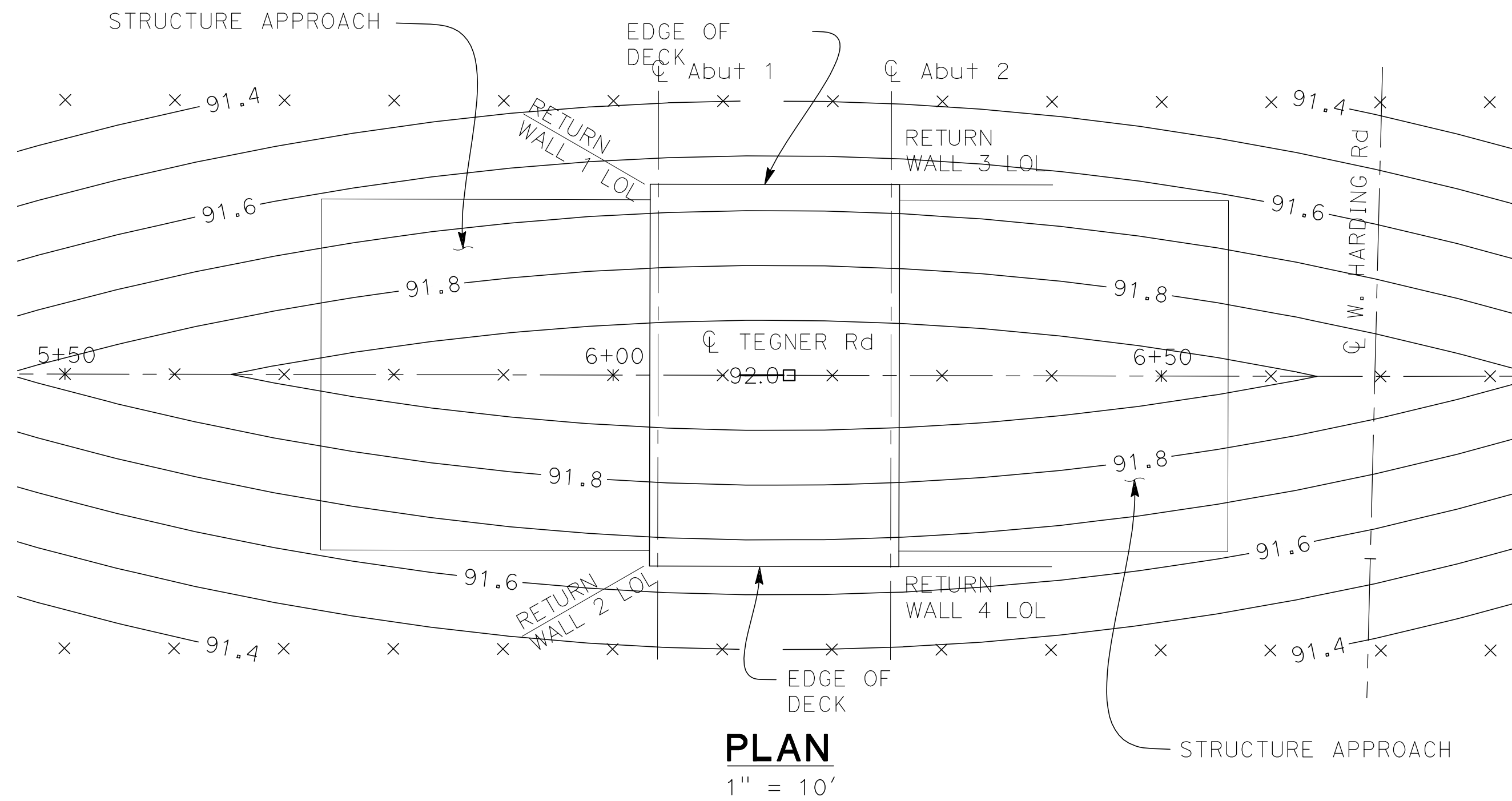
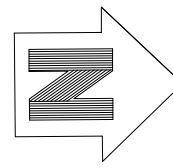
13 OF 23 SHEETS

LEGEND:

- INDICATES WHOLE FOOT CONTOURS.
- × INDICATES 10' INCREMENT ALONG STATION LINE.

NOTES:

1. CONTOURS INDICATE TOP OF DECK ELEVATION.
2. CONTOURS DO NOT INCLUDE CAMBER OR FALSEWORK SETTLEMENT.
3. CONTOUR INTERVAL IS 0.10'.



**GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN**

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION AND THE CALIFORNIA AMENDMENTS V6.0, DATED JANUARY 2014; EXCEPT DETAILS TAKEN FROM STANDARD PLANS 2010 AND STANDARD BRIDGE DETAILS XS-SHEETS ARE DESIGNED USING BRIDGE DESIGN SPECIFICATIONS ('96 AASHTO WITH REVISIONS BY CALTRANS)

SEISMIC DESIGN: CALTRANS SEISMIC DESIGN CRITERIA (SDC) VERSION 1.7, DATED APRIL 2013

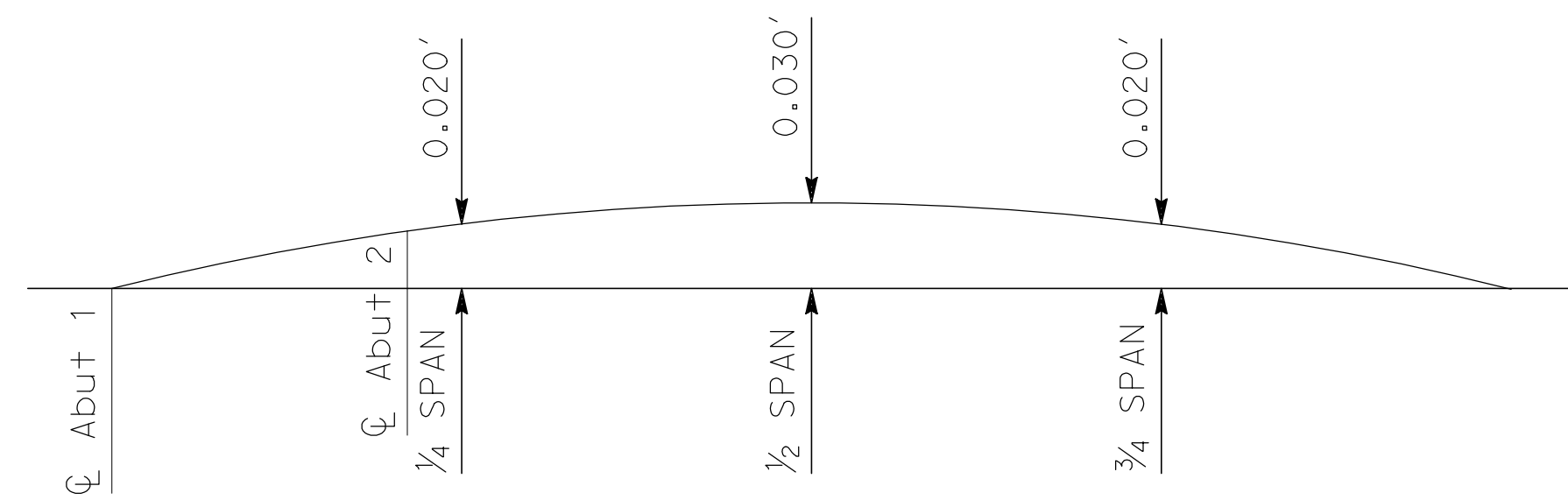
DEAD LOAD: INCLUDES 35 PSF FOR FUTURE WEARING SURFACE

LIVE LOADING: HL93 W/ "LOW BOY" AND PERMIT DESIGN LOAD

SEISMIC LOADING: SOIL PROFILE: $V_{s30} = 250$ m/s
MOMENT MAGNITUDE: $M_{MAX} = 6.6 \pm 0.25$
PEAK GROUND ACCELERATION = 0.33G
SEE 'ARS DESIGN CURVE'

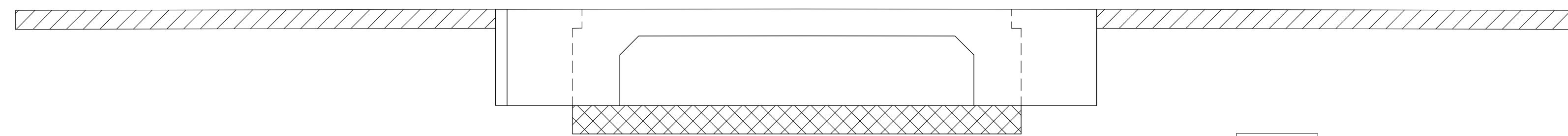
CONCRETE: $F_y = 60$ KSI
 $F'_c = 4$ KSI (UNLESS OTHERWISE SHOWN OR SPECIFIED)
 $N = 8.0$

ENGINEER'S ESTIMATE OF BRIDGE QUANTITIES		
DESCRIPTION	UNIT	TOTAL QUANTITY
BRIDGE REMOVAL	LS	1
STRUCTURE EXCAVATION	CY	285
STRUCTURE BACKFILL	CY	34
LEAN CONCRETE BACKFILL	CY	71
IMPORTED BARROW	CY	1,078
STRUCTURAL CONCRETE (BRIDGE FOOTING)	CY	46
STRUCTURAL CONCRETE (BRIDGE)	CY	74
STRUCTURAL CONCRETE (APPROACH SLAB)	CY	72
JOINT SEAL (MR 1/2")	LF	70
BAR REINFORCING STEEL	LB	24,300
CONCRETE BARRIER (TYPE 732 MODIFIED)	LF	65



NOTE: DOES NOT INCLUDE ALLOWANCE FOR FALSEWORK SETTLEMENT

**CAMBER DIAGRAM
NO SCALE**



- STRUCTURAL CONCRETE, BRIDGE ($F'_c = 4.0$ KSI @ 28 DAYS)
- STRUCTURAL CONCRETE, BRIDGE FOOTING ($F'_c = 4.0$ KSI @ 28 DAYS)
- STRUCTURAL CONCRETE, APPROACH SLAB TYPE N(30D)

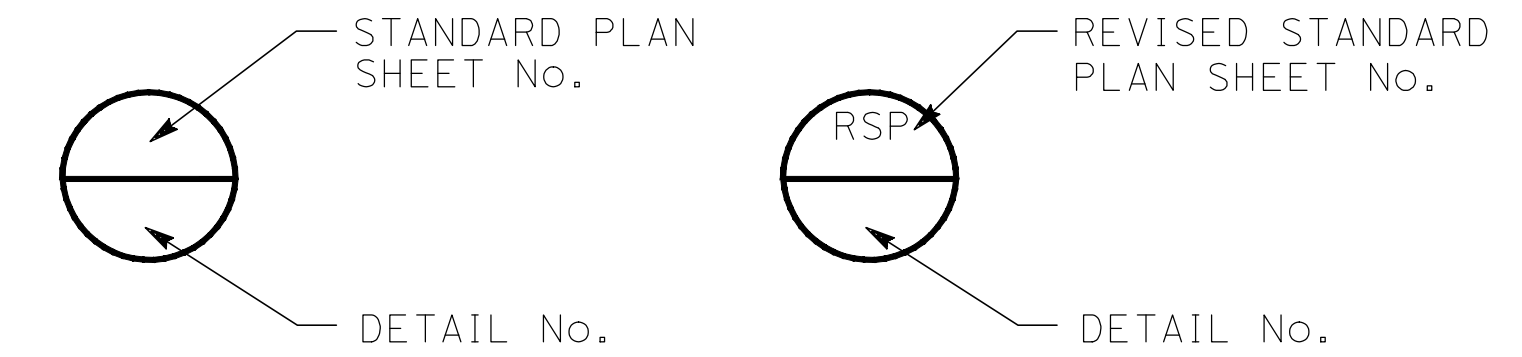
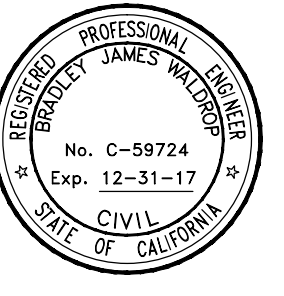
**CONCRETE STRENGTH AND TYPE LIMITS
NO SCALE**

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

SUBMITTED:

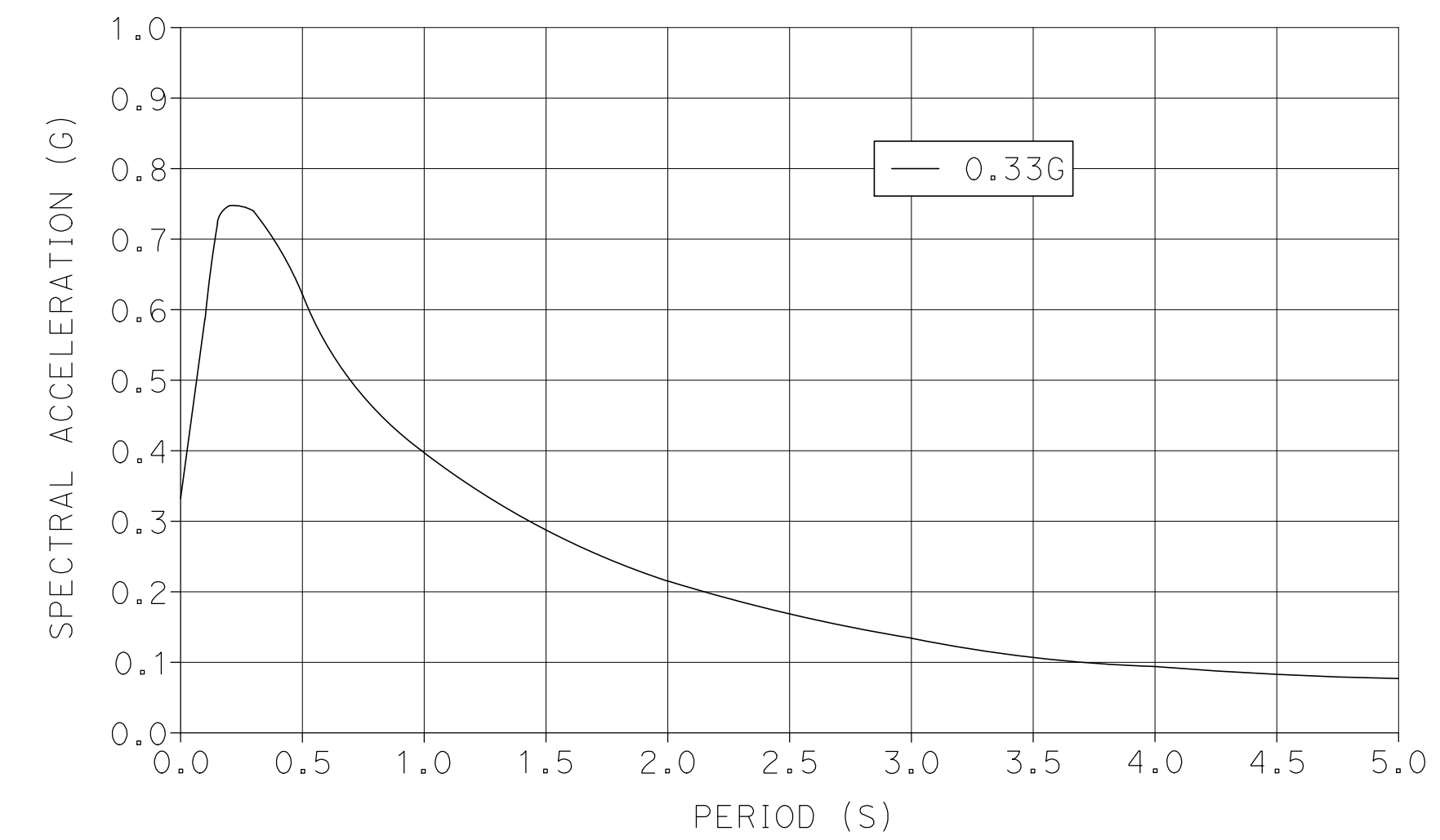
[Signature]

AUGUST 29, 2017



STANDARD PLANS 2010

SHEET NO.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A62B	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE SURCHARGE AND WALL
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE
RSP A77U1	MIDWEST GUARDRAIL SYSTEM CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS NO. 1
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
RSP B11-55	CONCRETE BARRIER TYPE 732



**ACCELERATION RESPONSE SPECTRA (5% DAMPING)
NO SCALE**

NO.	REVISIONS	DATE	APPROVED

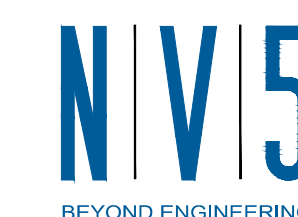
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358

TEGNER ROAD BRIDGE REPLACEMENT
DECK CONTOURS

JOB NO SAB047700
DATE 8/28/17
DR BY LLK
CK BY BW
SCALE AS SHOWN

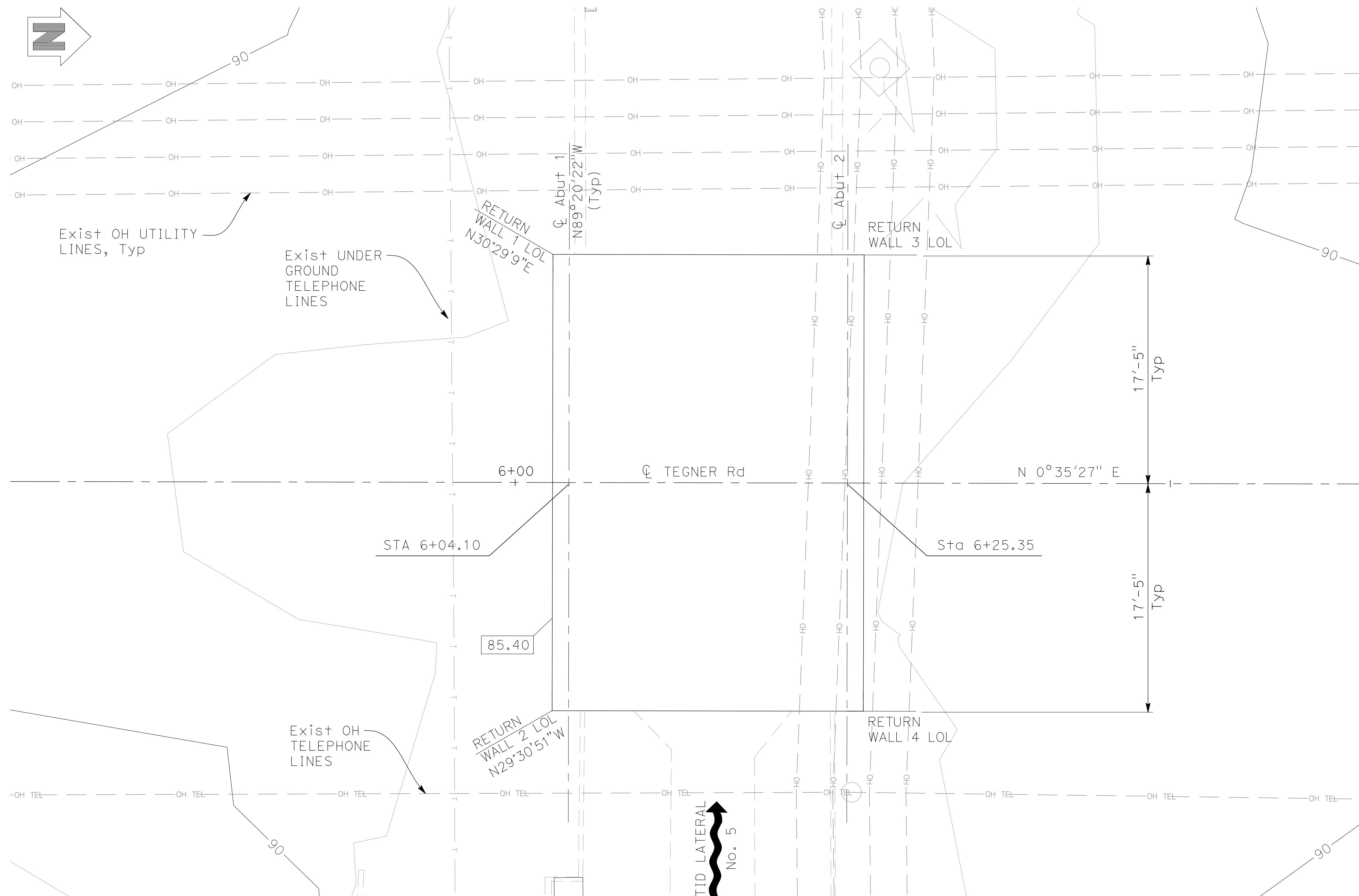
SHEET NUMBER
S-2

14 OF 23 SHEETS



2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM





NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

SUBMITTED:

[Signature]

AUGUST 29, 2017



LEGEND:

- DENOTES BOTTOM OF FOOTING ELEVATION
- DENOTES DIRECTION OF FLOW

NOTES:

1. GROUND WATER ANTICIPATED BELOW Elev 74.0.

PLAN
1" = 5'

BASIS OF BEARING

- THE HORIZONTAL DATUM IS BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (NAD 83, ZONE 3, EPOCH 2002.00). THE VERTICAL DATUM IS BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88) COMPUTED USING GEOID09. IT IS BASED ON GLOBAL POSITIONING SYSTEM (GPS) TECHNIQUES AND DERIVED FROM THE FOLLOWING NGS (NATIONAL GEODETIC SURVEY) CONTROL BASE STATIONS:

PID	DESIGNATION
AA4252	HPGND CA 10 FK
DE6246	CMOD MODESTO COOP CORS ARP
DK6399	P305 PLANADA CN2005 CORS ARP
AF9702	MHCB MT HAMILTON BARD CORS ARP

SPREAD FOOTING DATA TABLE

SUPPORT LOCATION	WORKING STRSS DESIGN (WSD)	
	PERMISSIBLE GROSS CONTRACT STRESS (SETTLEMENT) (KSF)	ALLOWABLE GROSS BEARING CAPACITY (KSF)
FOOTING	1.15	2.00

HYDROLOGIC SUMMARY

	DRAINAGE AREA: NA			
	DESIGN FLOOD	BASE FLOOD	IRRIGATION OPERATION	STORMWATER OPERATION
FREQUENCY (YEARS)	50	100		
DISCHARGE (CUBIC FEET PER SECOND)	NA	NA	100	165
WATER SURFACE (ELEVATION AT BRIDGE)	NA	NA	91.29 FT	91.32 FT

FLOOD PLAIN DATA IS BASED UPON INFORMATION AVAILABLE WHEN THE PLANS WERE PREPARED AND ARE SHOWN TO MEET FEDERAL REQUIREMENTS. THE ACCURACY OF SAID INFORMATION IS NOT WARRANTED BY THE COUNTY OF STANISLAUS OR NV5 AND INTERESTED OR AFFECTED PARTIES SHOULD MAKE THEIR OWN INVESTIGATION.

PREPARED UNDER THE DIRECTION OF:

NO	REVISIONS DESCRIPTIONS	DATE	APPROVED

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358

TEGNER ROAD BRIDGE REPLACEMENT
FOUNDATION PLAN

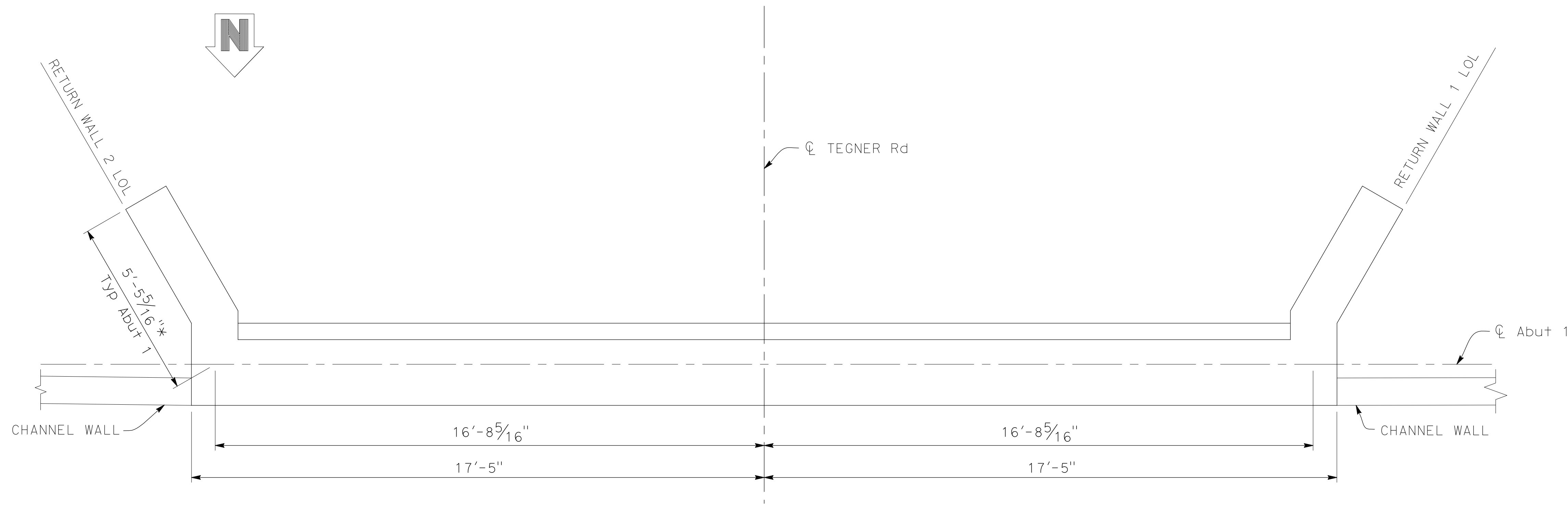
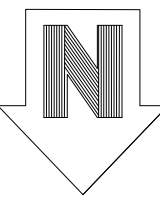
JOB NO SAB047700
DATE 8/28/17
DR BY LLK
CK BY BW
SCALE AS SHOWN

SHEET NUMBER
S-3
15 OF 23 SHEETS



2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM





NOTES:

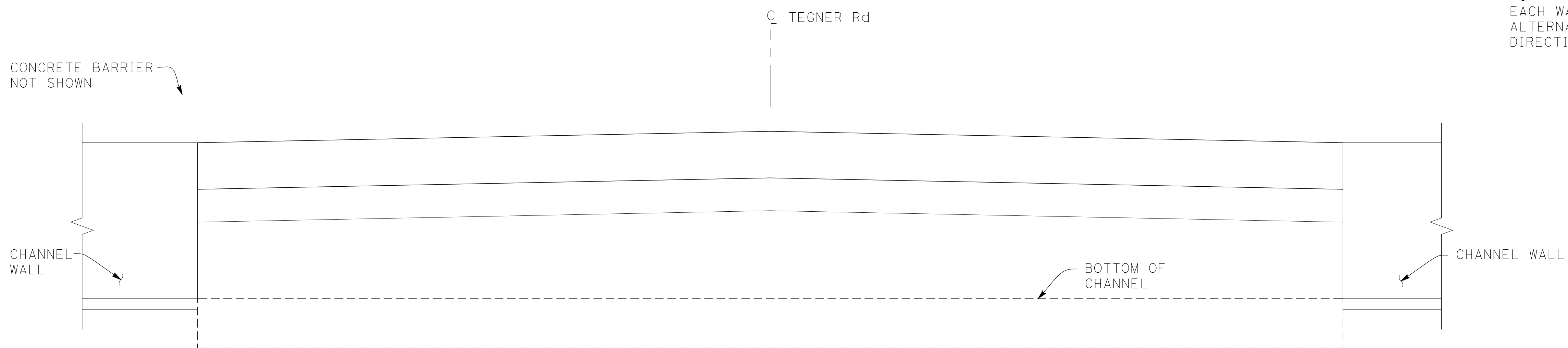
- * MEASURED ALONG RETURN WALL LOL.
- ABUTMENT 1 SHOWN, ABUTMENT 2 SIMILAR. SEE "ABUTMENT DETAILS" SHEET, S-5, FOR DIFFERENT RETURN WALL LAYOUTS AT Abut 1 AND Abut 2.

PLAN
1/2" = 1'-0"

NOTES:

- FOR TYPICAL DECK REINFORCEMENT, SEE "DECK DETAILS" SHEET, S-6.
- FOR RETURN WALL DETAILS, SEE "ABUTMENT DETAILS" SHEET, S-5.
- FOR TYPICAL FOUNDATION REINFORCEMENT, SEE "FOUNDATION DETAILS" SHEET, S-7.
- FOR CHANNEL WALL DETAILS, SEE "CHANNEL DETAILS" SHEET, S-8.

CONCRETE BARRIER NOT SHOWN

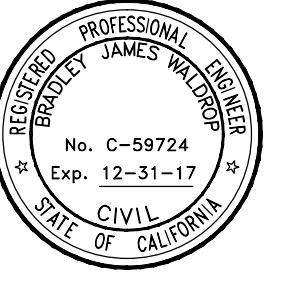


ELEVATION
1/2" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

SUBMITTED:

AUGUST 29, 2017



NO	REVISIONS DESCRIPTIONS	DATE	APPROVED

PREPARED UNDER THE DIRECTION OF:

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



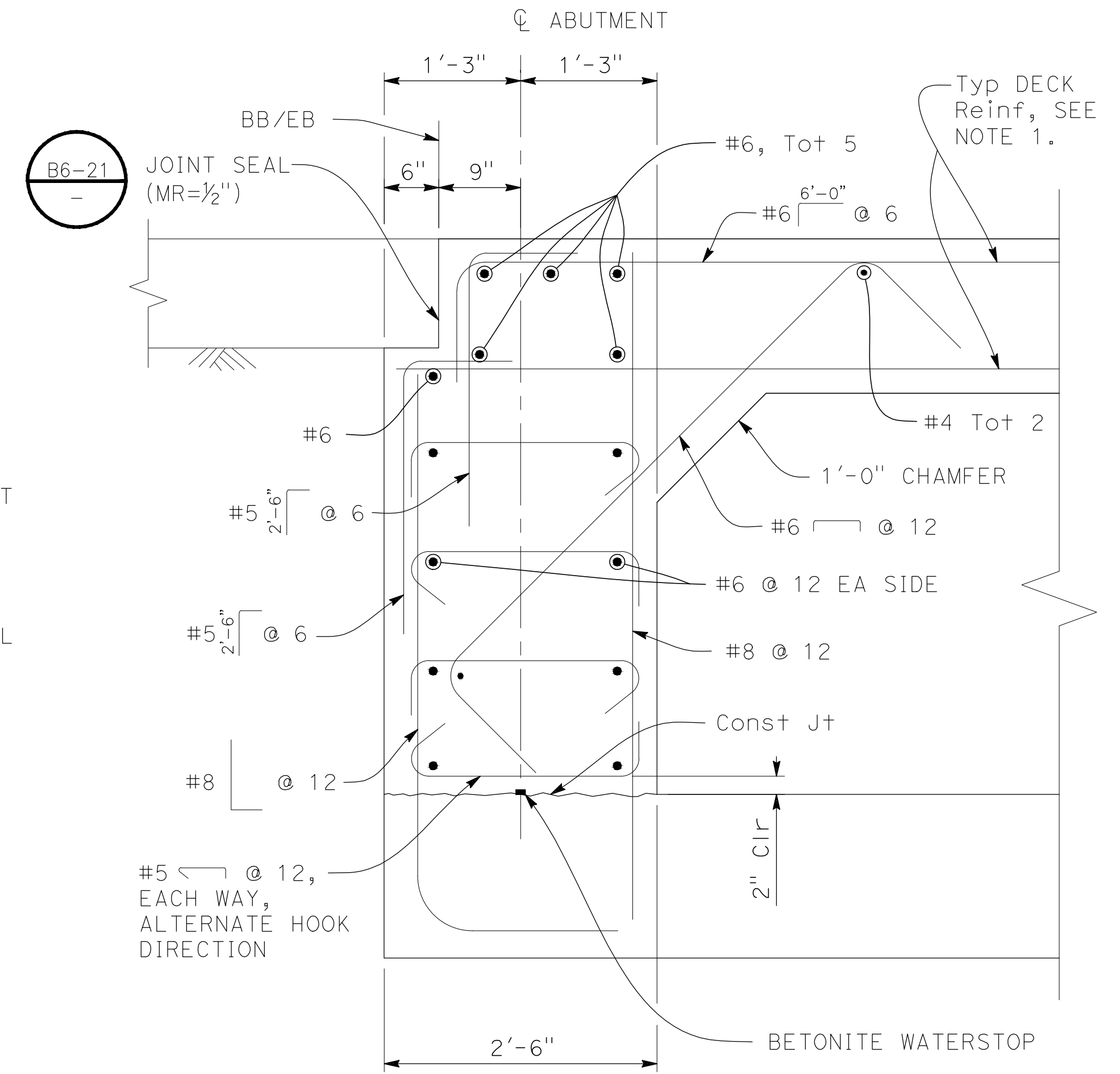
TEGNER ROAD BRIDGE REPLACEMENT

ABUTMENT LAYOUT

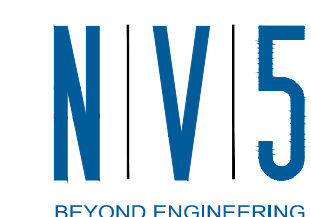
JOB NO SAB047700
DATE 8/28/17
DR BY LLK
CK BY BW
SCALE AS SHOWN

SHEET NUMBER
S-4

16 OF 23 SHEETS



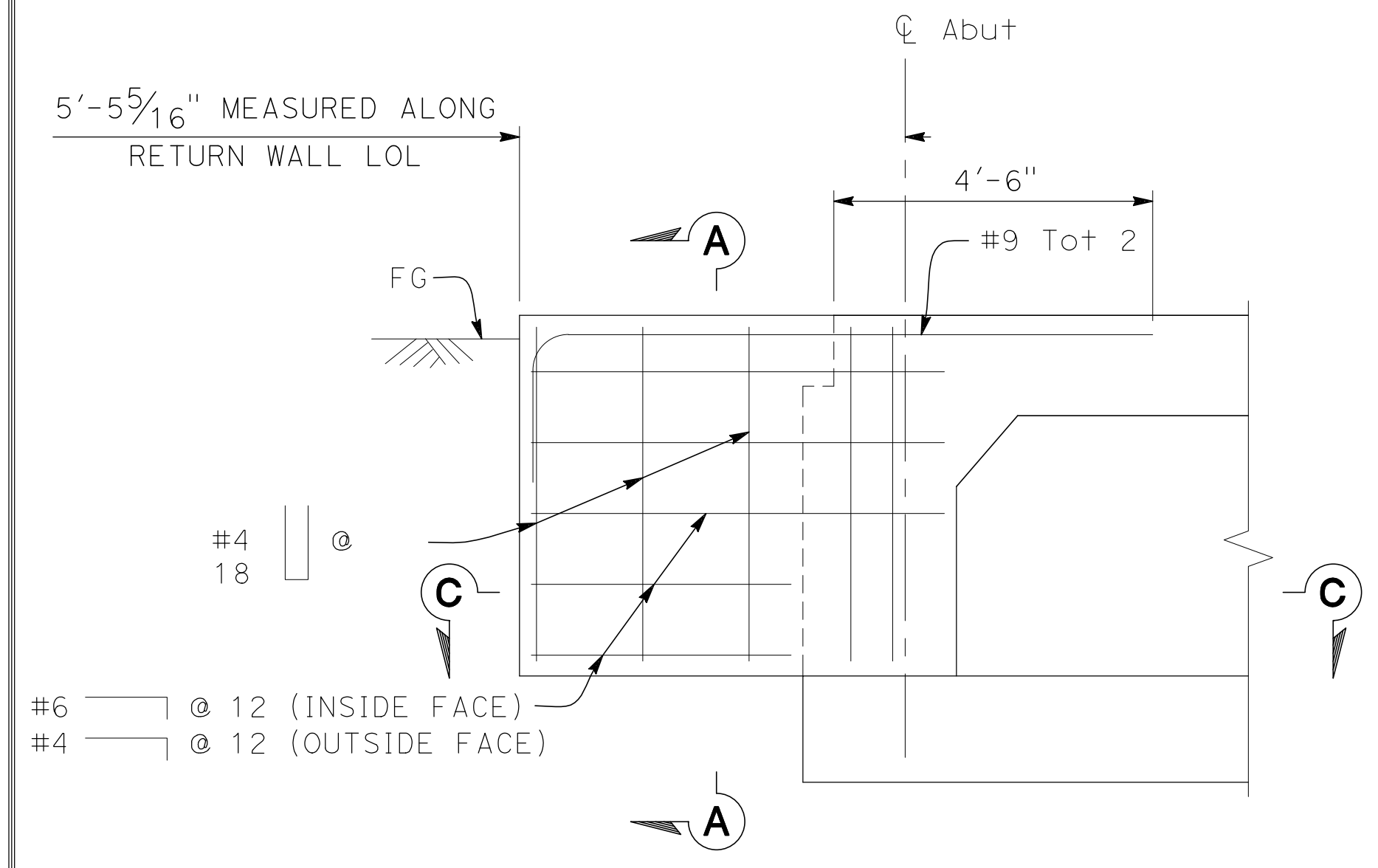
TYPICAL SECTION
1" = 1'



2625 NATOMAS PARK DRIVE, SUITE 300
916.641.9100 TEL. 916.641.9222 FAX

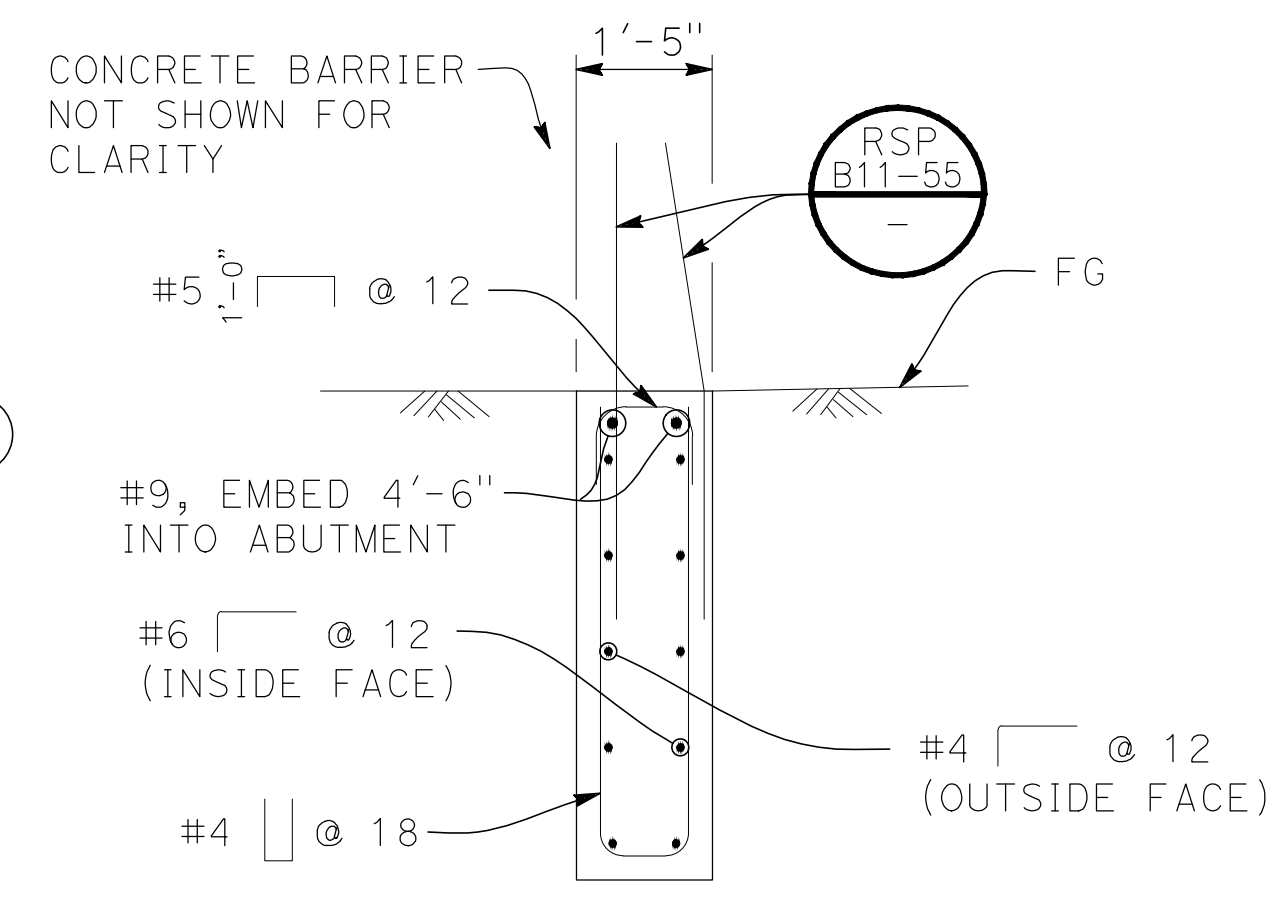
SACRAMENTO, CA 95833
WWW.NV5.COM



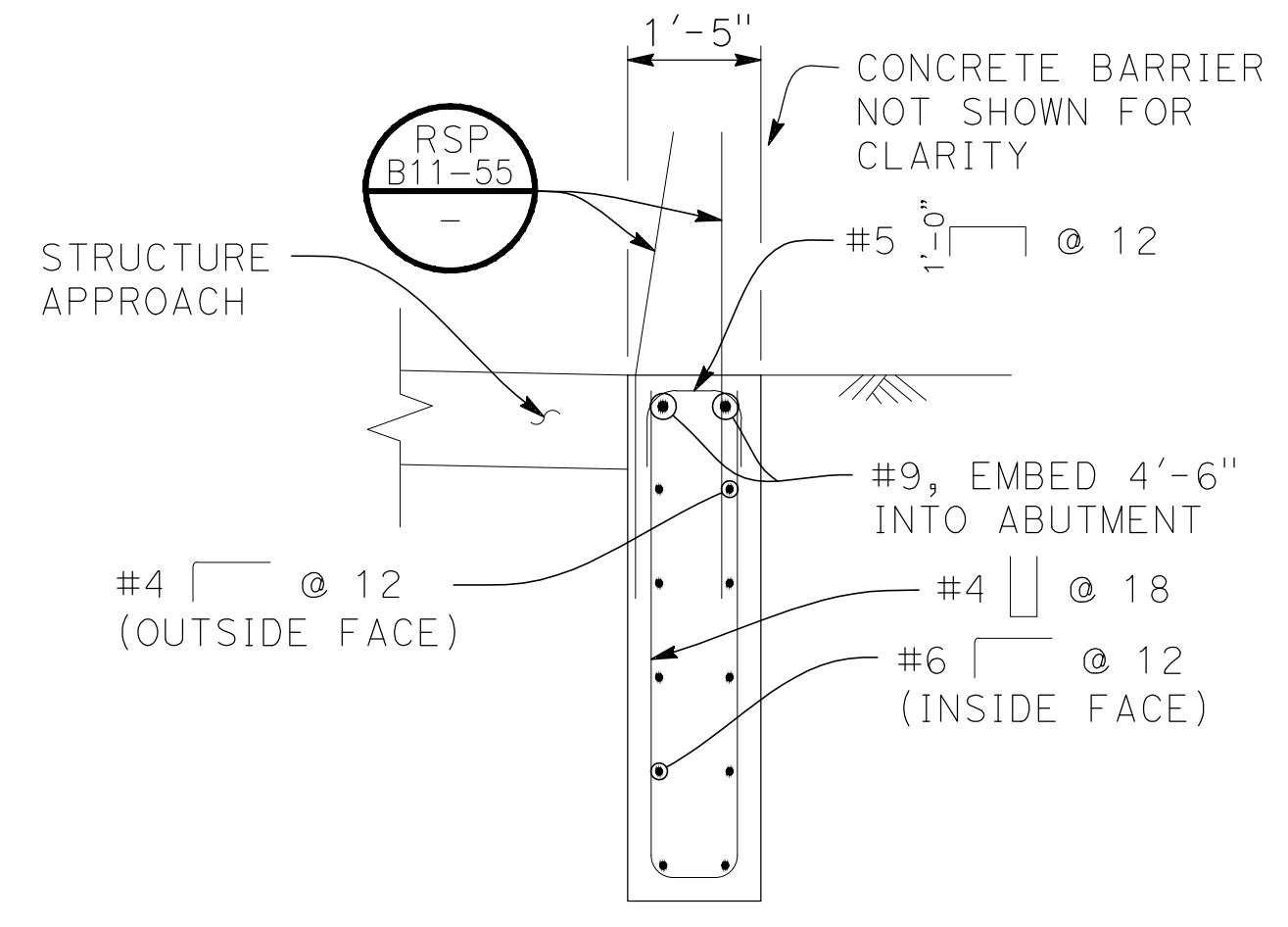


NOTE:
 1. BARRIER NOT SHOWN FOR CLARITY. SEE FOR BARRIER DETAILS.

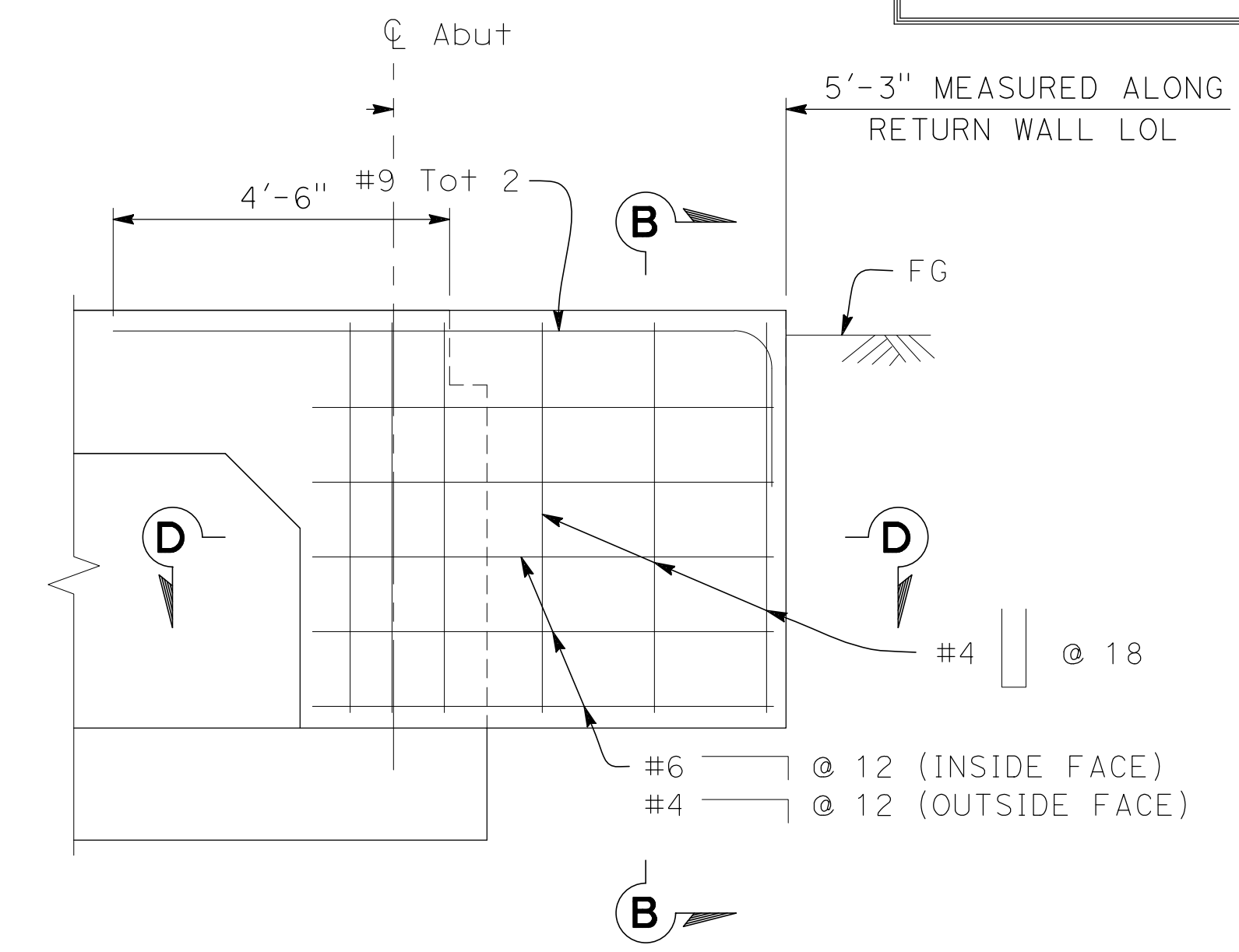
RW1 & RW2 ELEVATION
 $\frac{1}{2}''=1'-0''$



SECTION A-A
 $\frac{1}{2}''=1'-0''$

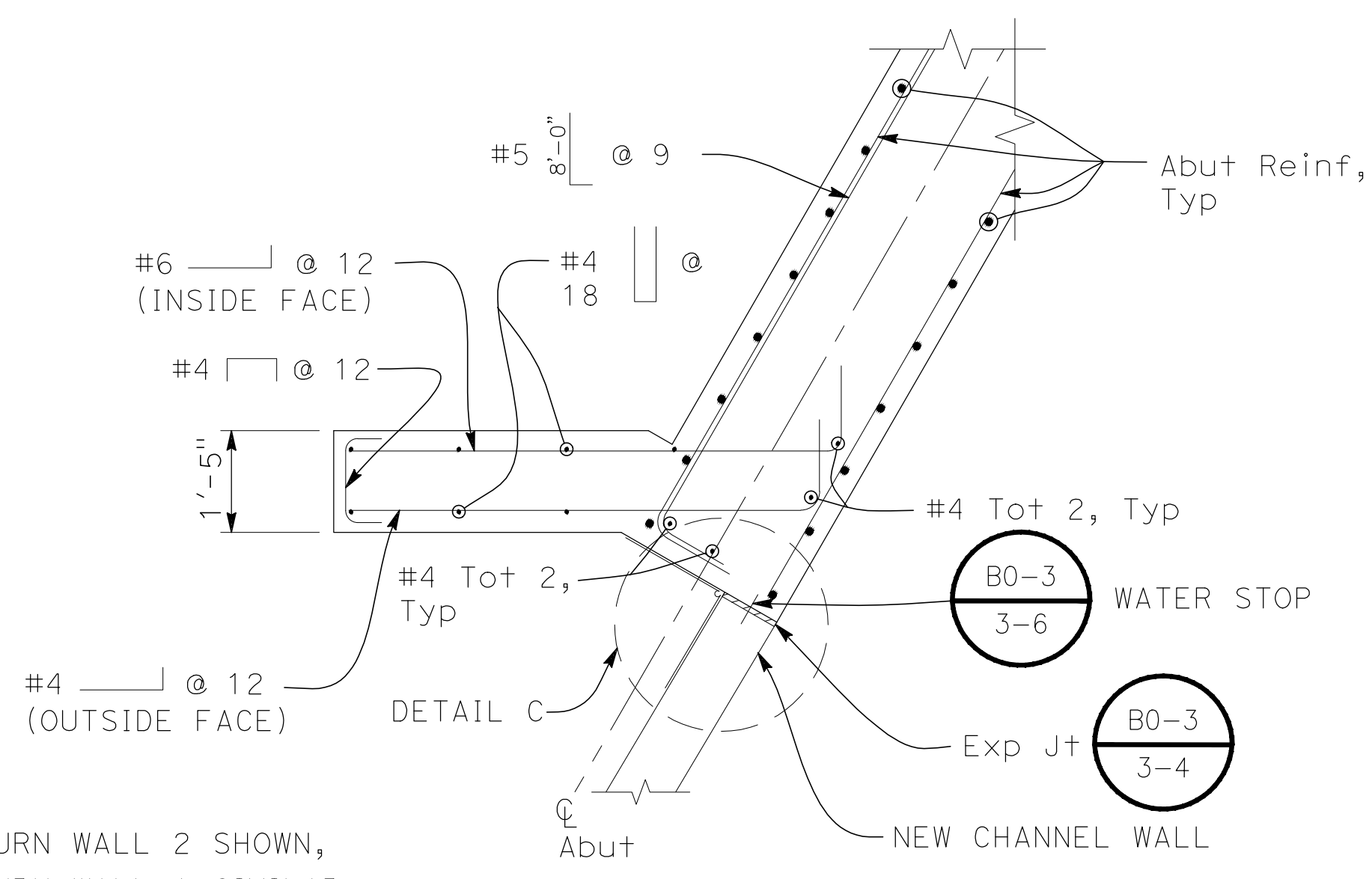


SECTION B-B
 $\frac{1}{2}''=1'-0''$



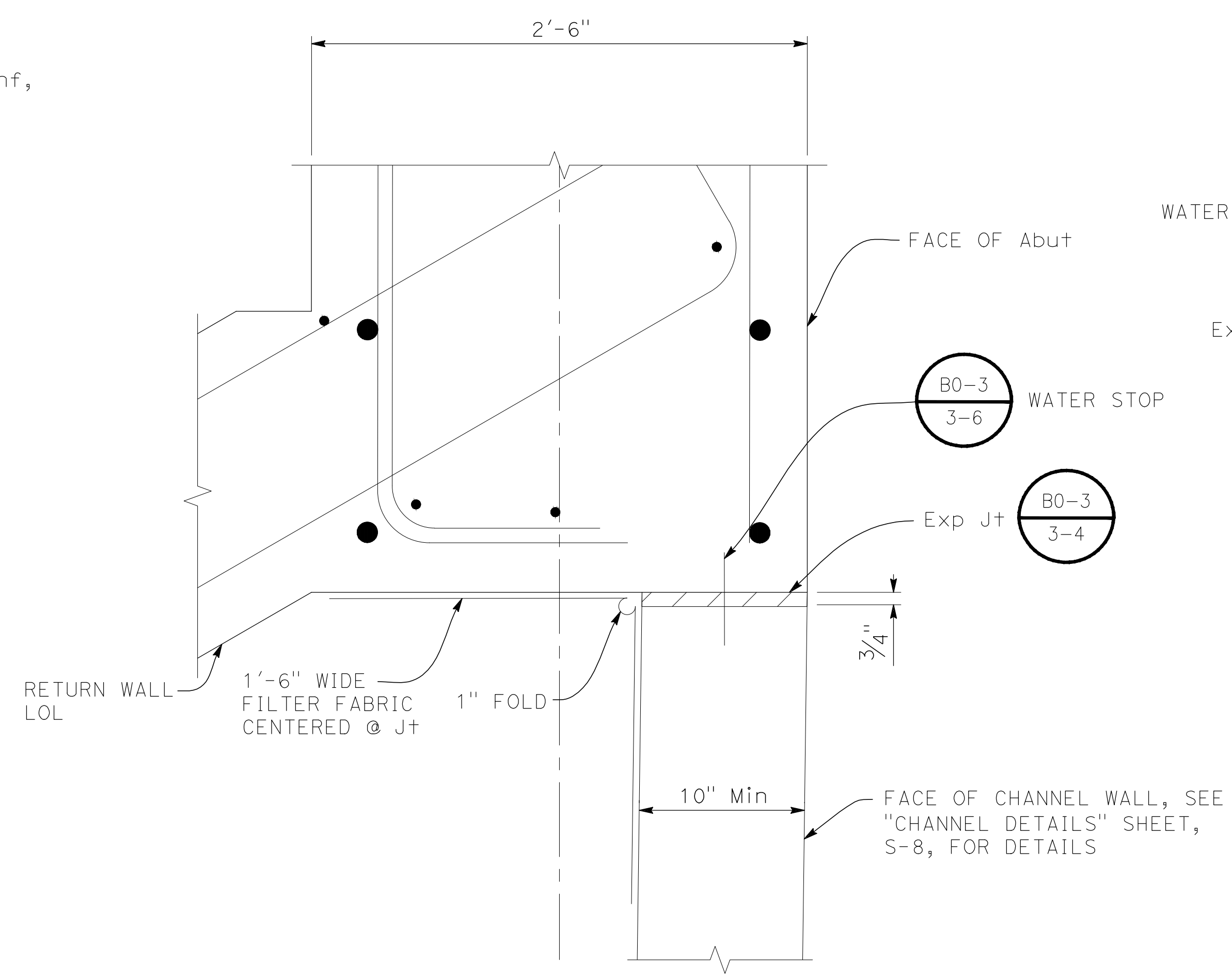
RW3 & RW4 ELEVATION
 $\frac{1}{2}''=1'-0''$

NOTE:
 1. FOR ADDITIONAL DETAILS AT NEW CHANNEL WALL CONNECTIONS, SEE "CHANNEL DETAILS" SHEET, S-8.

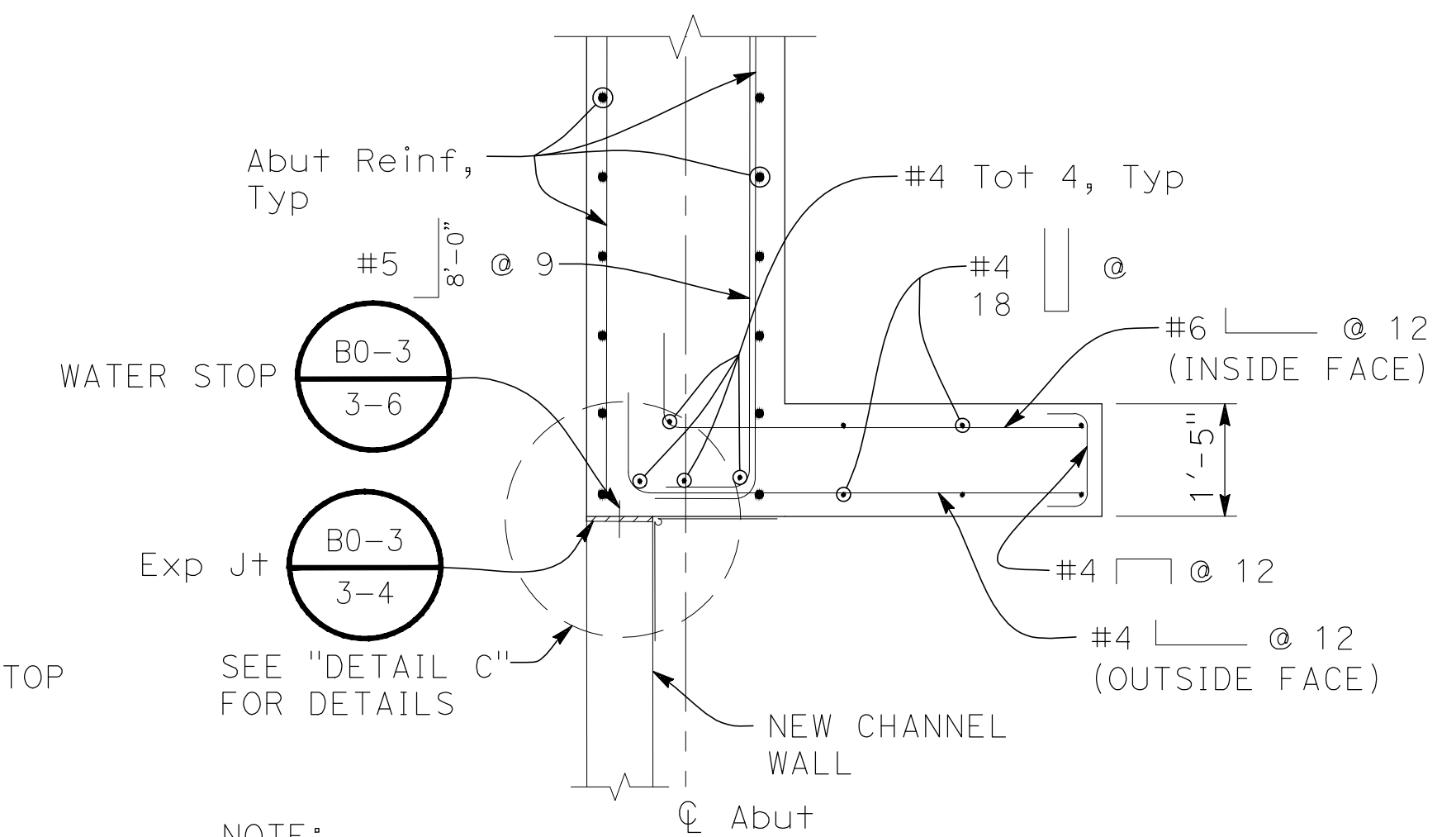


SECTION C-C
 $\frac{1}{2}''=1'-0''$

NOTE:
 1. RETURN WALL 2 SHOWN, RETURN WALL 1 SIMILAR.



DETAIL C
 $2''=1'$



SECTION D-D
 $\frac{1}{2}''=1'-0''$

NOTE:
 1. RETURN WALL 4 SHOWN, RETURN WALL 3 SIMILAR.

PREPARED UNDER THE DIRECTION OF:

NO.	REVISIONS	DATE	APPROVED

STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



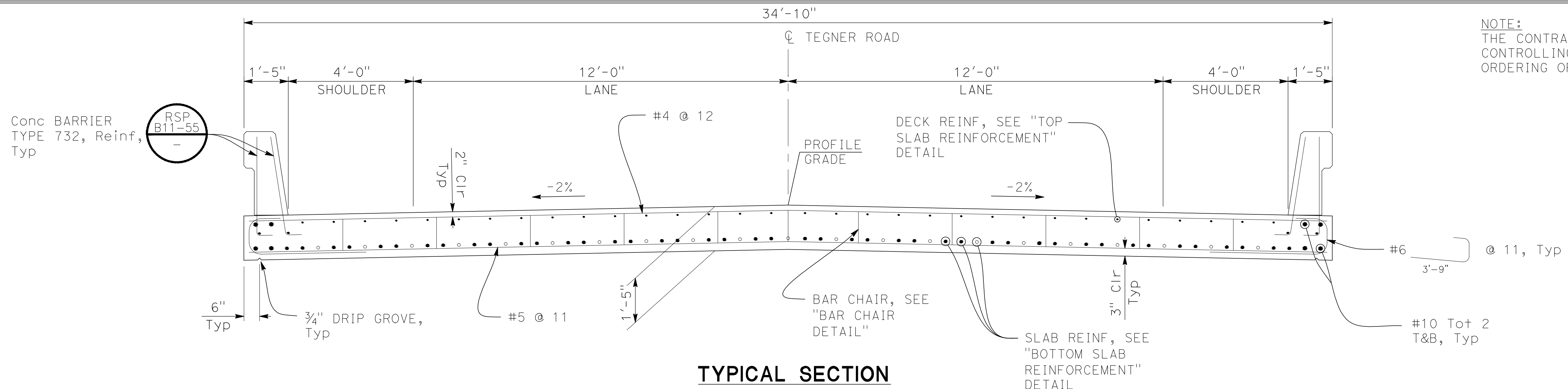
TEGNER ROAD BRIDGE REPLACEMENT

ABUTMENT DETAILS

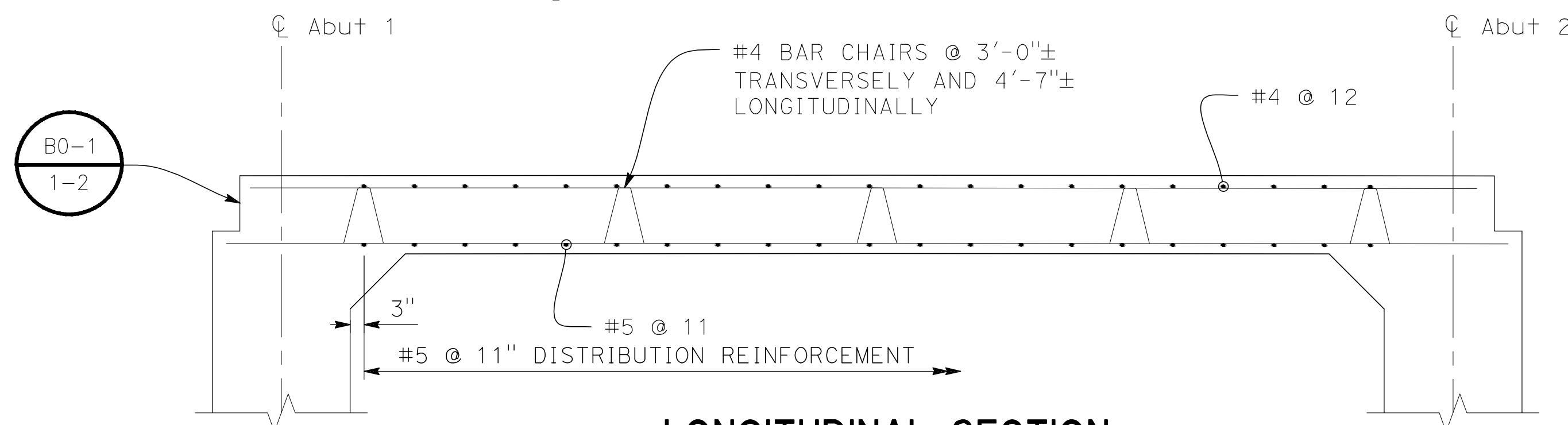
JOB NO: SAB047700
 DATE: 8/28/17
 DR BY: LLK
 CK BY: BW
 SCALE: AS SHOWN

SHEET NUMBER
S-5
 17 OF 23 SHEETS

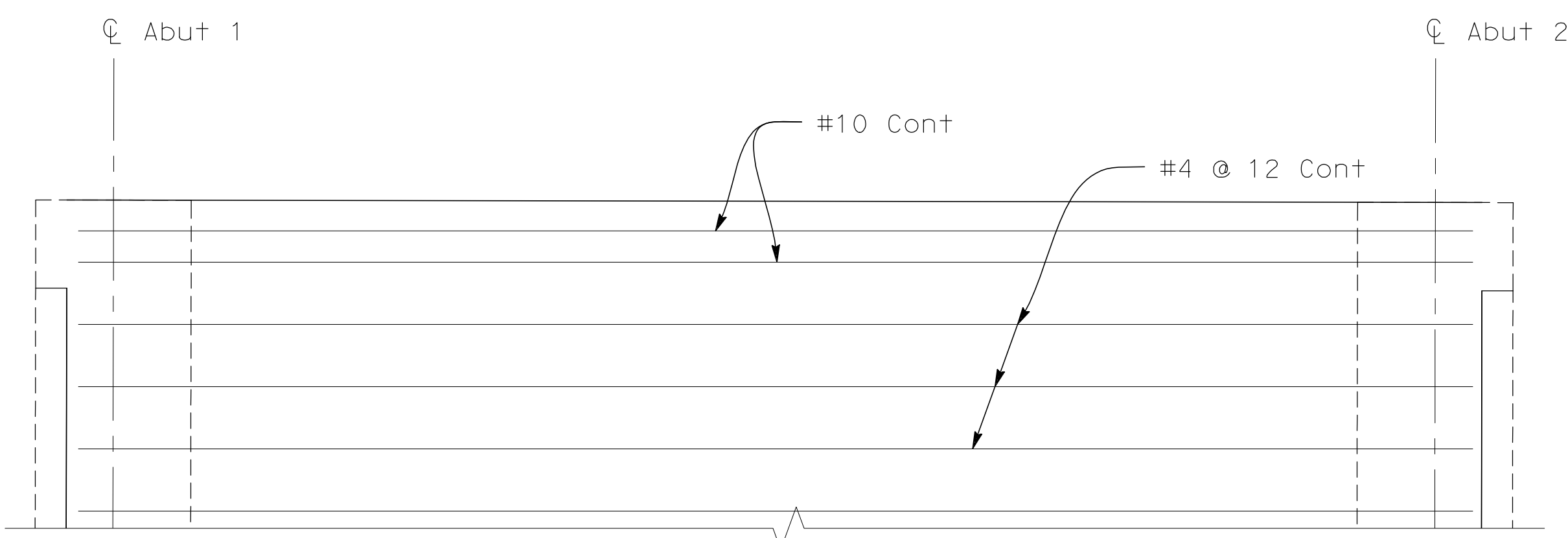




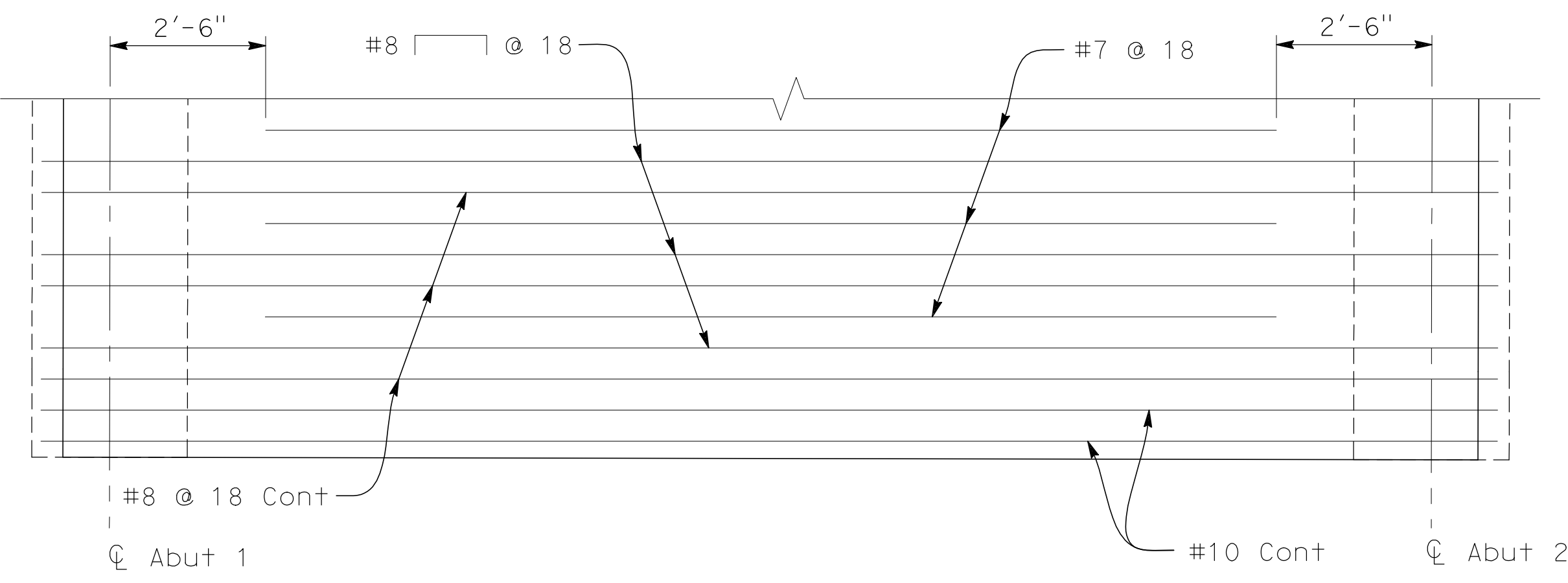
TYPICAL SECTION
1/2" = 1'-0"



LONGITUDINAL SECTION
1/2" = 1'-0"



TOP SLAB REINFORCEMENT
1/2" = 1'-0"

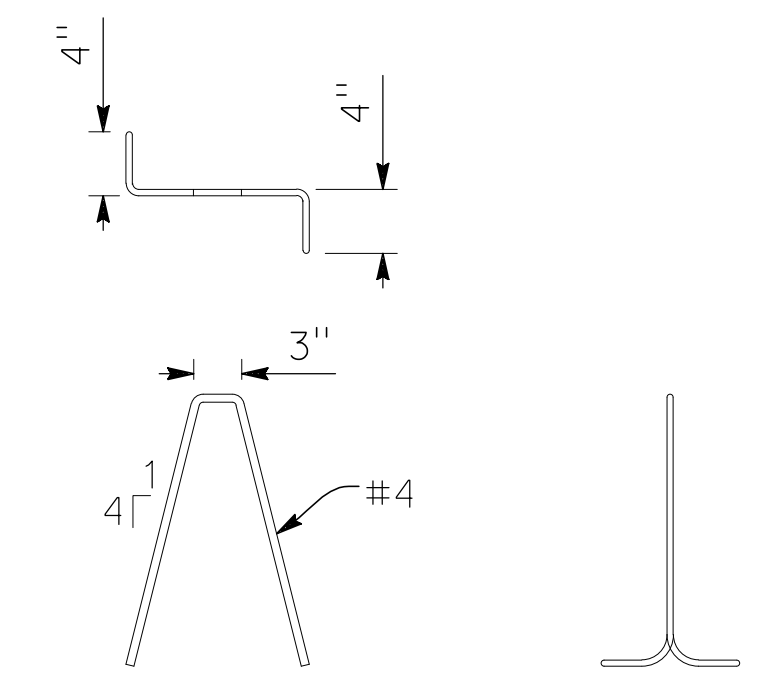


BOTTOM SLAB REINFORCEMENT
1/2" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

SUBMITTED:

August 29, 2017



BAR CHAIR DETAIL
NO SCALE

- NOTES:
1. SPACING OF ALL TRANSVERSE REINFORCEMENT MEASURED ALONG ϕ OF ROADWAY.
 2. PLACE TRANSVERSE REINFORCEMENT PERPENDICULAR TO ϕ OF BRIDGE.
 3. LONGITUDINAL REINFORCEMENT SHOWN IS SYMMETRICAL ABOUT ϕ OF BRIDGE.

PREPARED UNDER THE DIRECTION OF:

NO	REVISIONS	DATE	APPROVED

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358

TEGNER ROAD BRIDGE REPLACEMENT

DECK DETAILS

JOB NO	SAB047700
DATE	8/28/17
DR BY	LLK
CK BY	BW
SCALE	AS SHOWN

SHEET NUMBER

S-6


18 OF 23 SHEETS

2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
816.641.9100 TEL. 816.641.9222 FAX WWW.NV5.COM

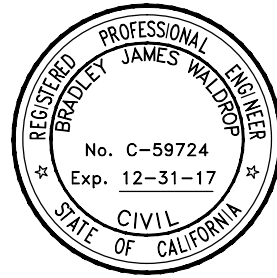
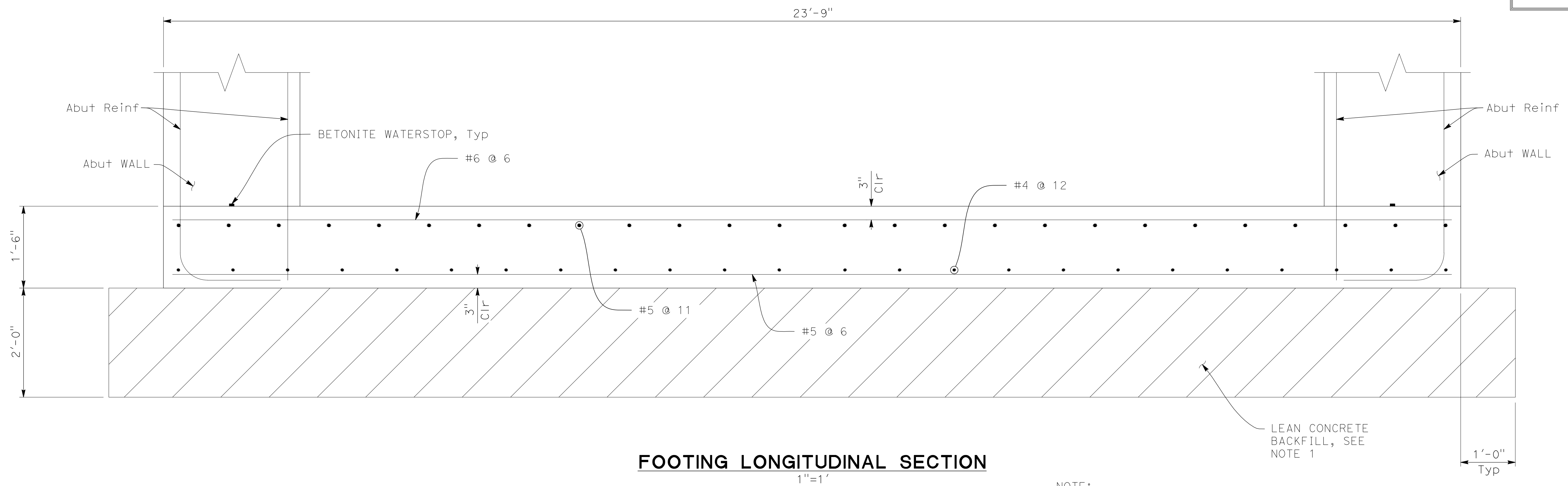


NOTE:
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CONTROLLING FIELD DIMENSIONS BEFORE
ORDERING OR FABRICATING ANY MATERIALS.

SUBMITTED:

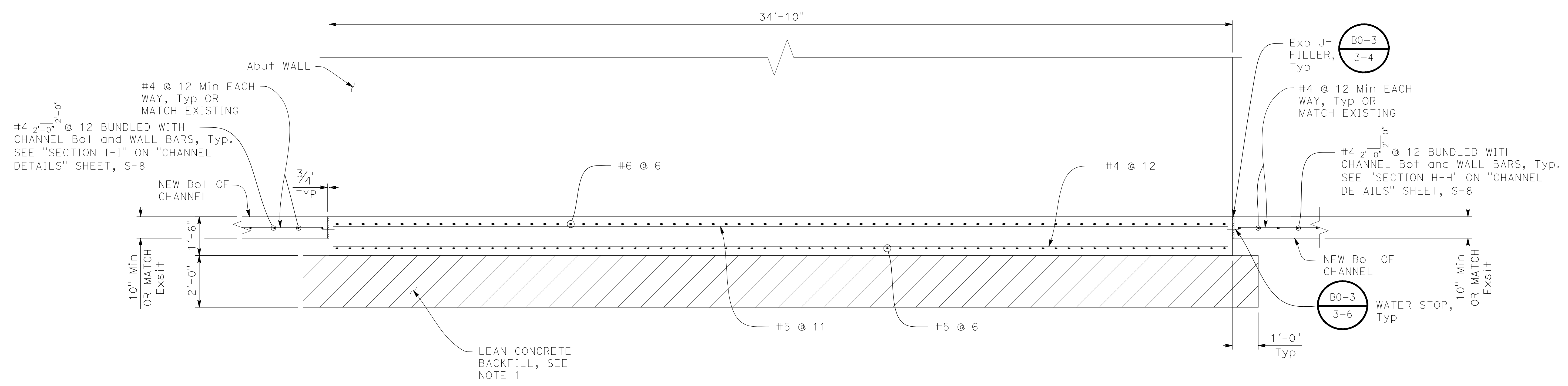


AUGUST 29, 2017

FOOTING LONGITUDINAL SECTION
1"=1'

NOTE:
FOUNDATION TO BE OVER-EXCAVATED
BY 2'-0" AND BACKFILLED WITH
LEAN CONCRETE.




FOOTING TRANSVERSE SECTION
1/2"=1'-0"

NOTE:
FOR CHANNEL DETAILS, SEE
"CHANNEL DETAILS" SHEET, S-8.

PREPARED UNDER THE DIRECTION OF:

NO.	REVISIONS	DATE	APPROVED

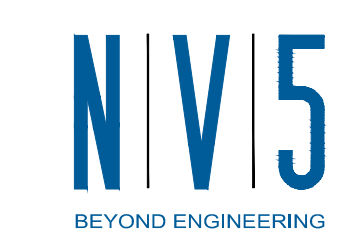
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



TEGNER ROAD BRIDGE REPLACEMENT
FOUNDATION DETAILS

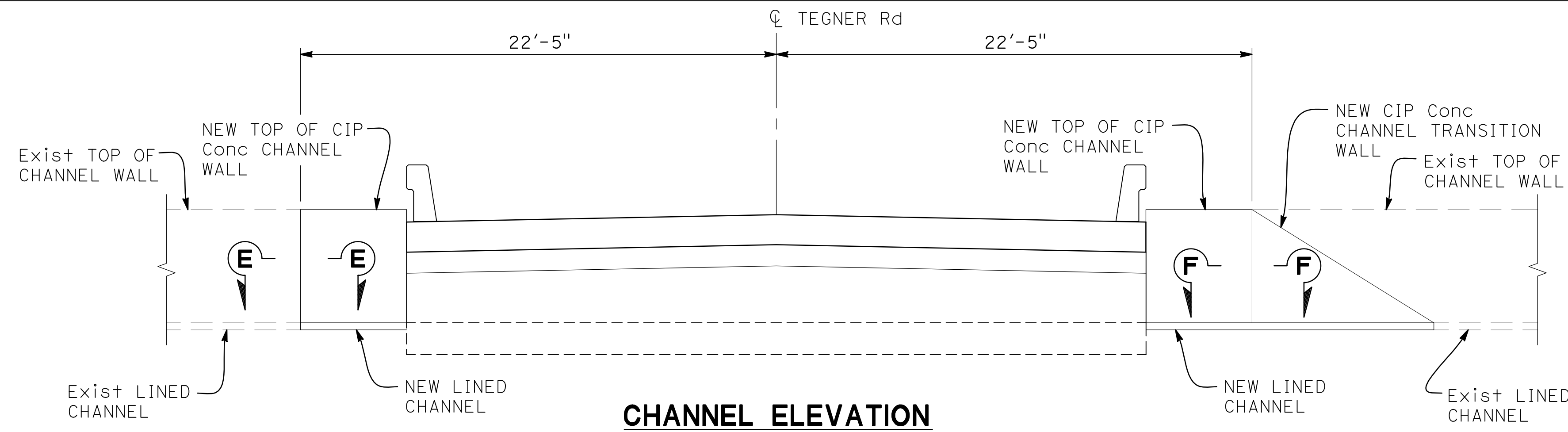
JOB NO. SAB047700
DATE 8/28/17
DR BY LLK
CK BY BW
SCALE AS SHOWN

SHEET NUMBER
S-7
19 OF 23 SHEETS

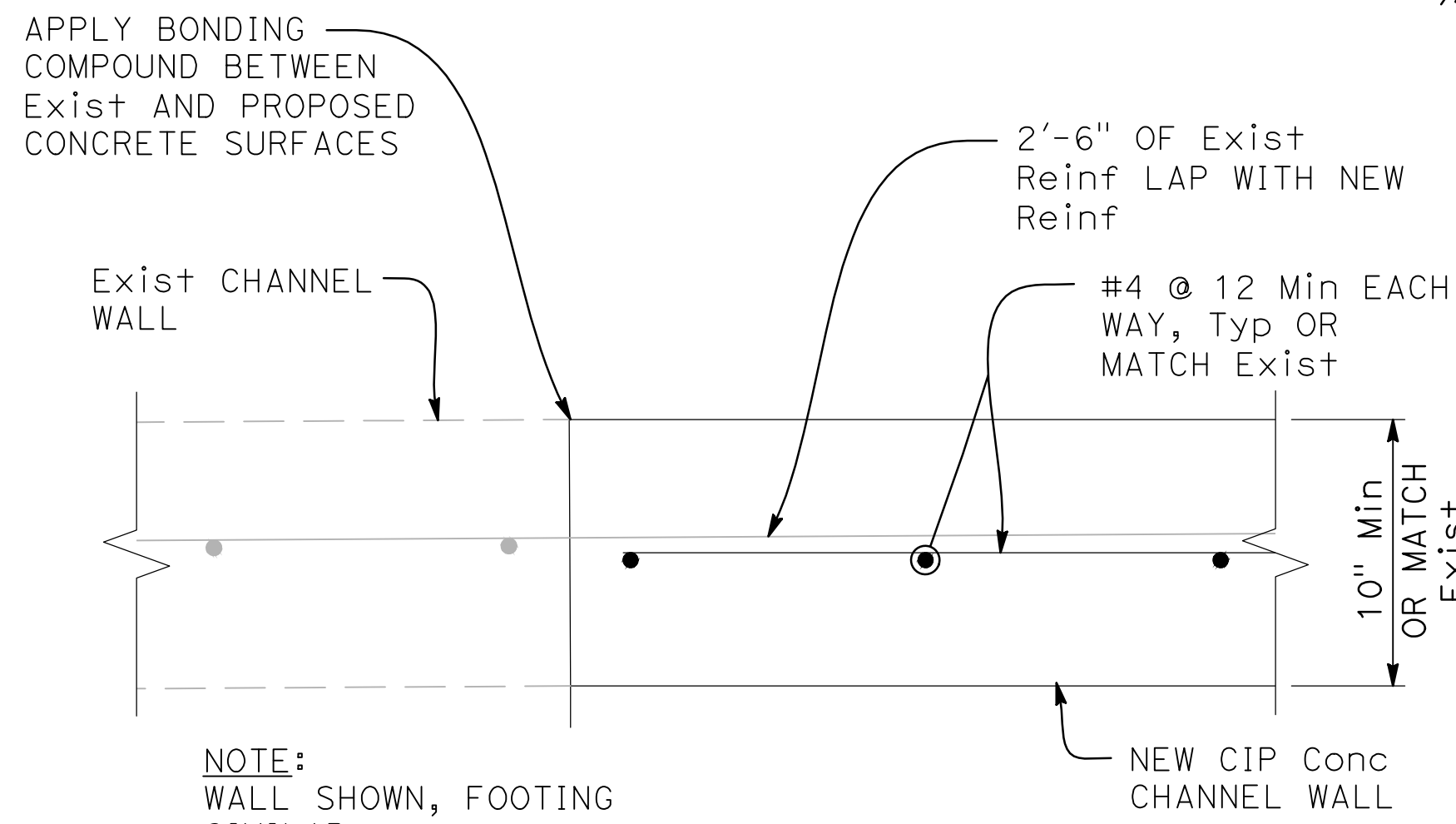


2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM

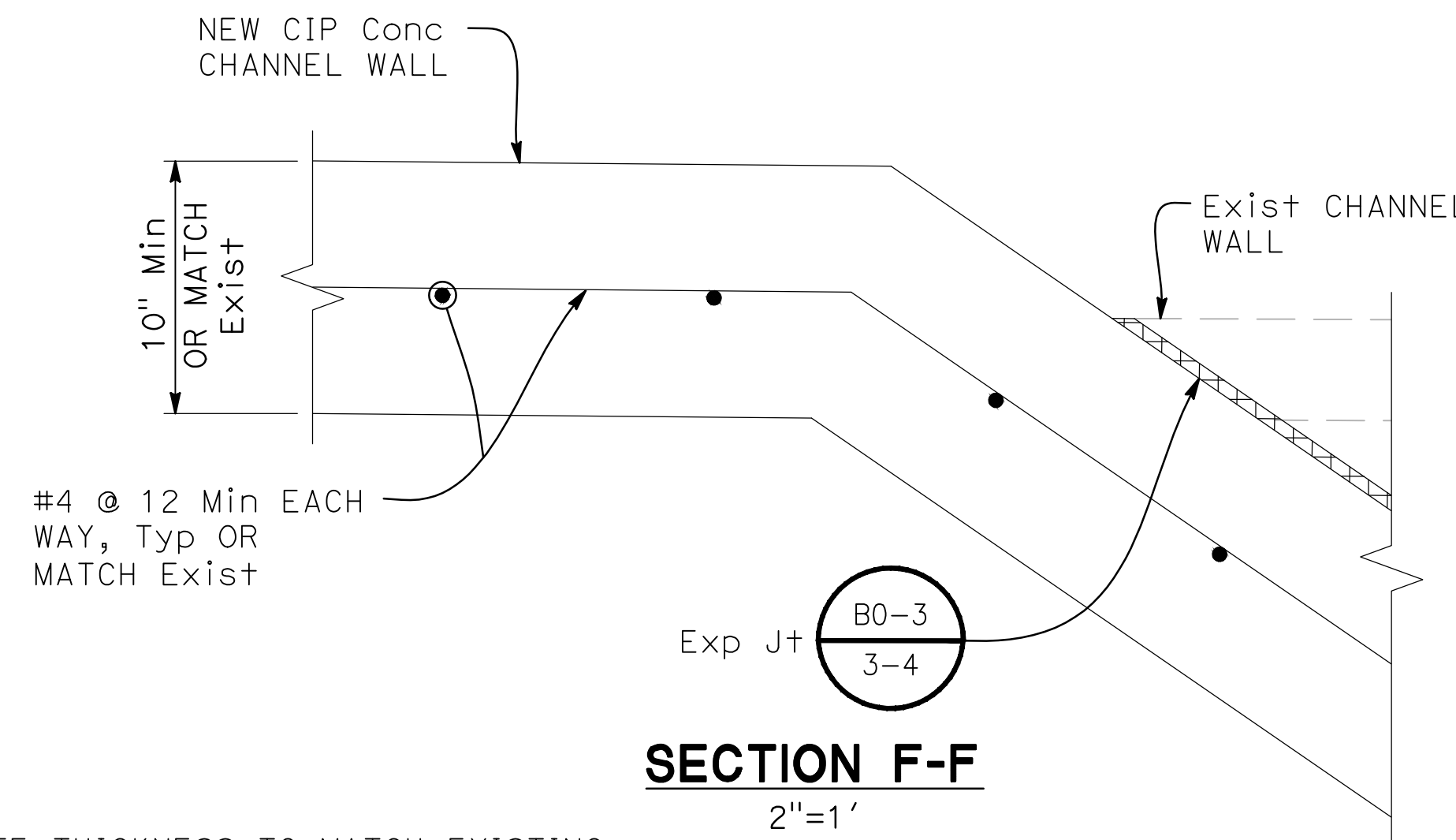




CHANNEL ELEVATION
1/4"=1'-0"

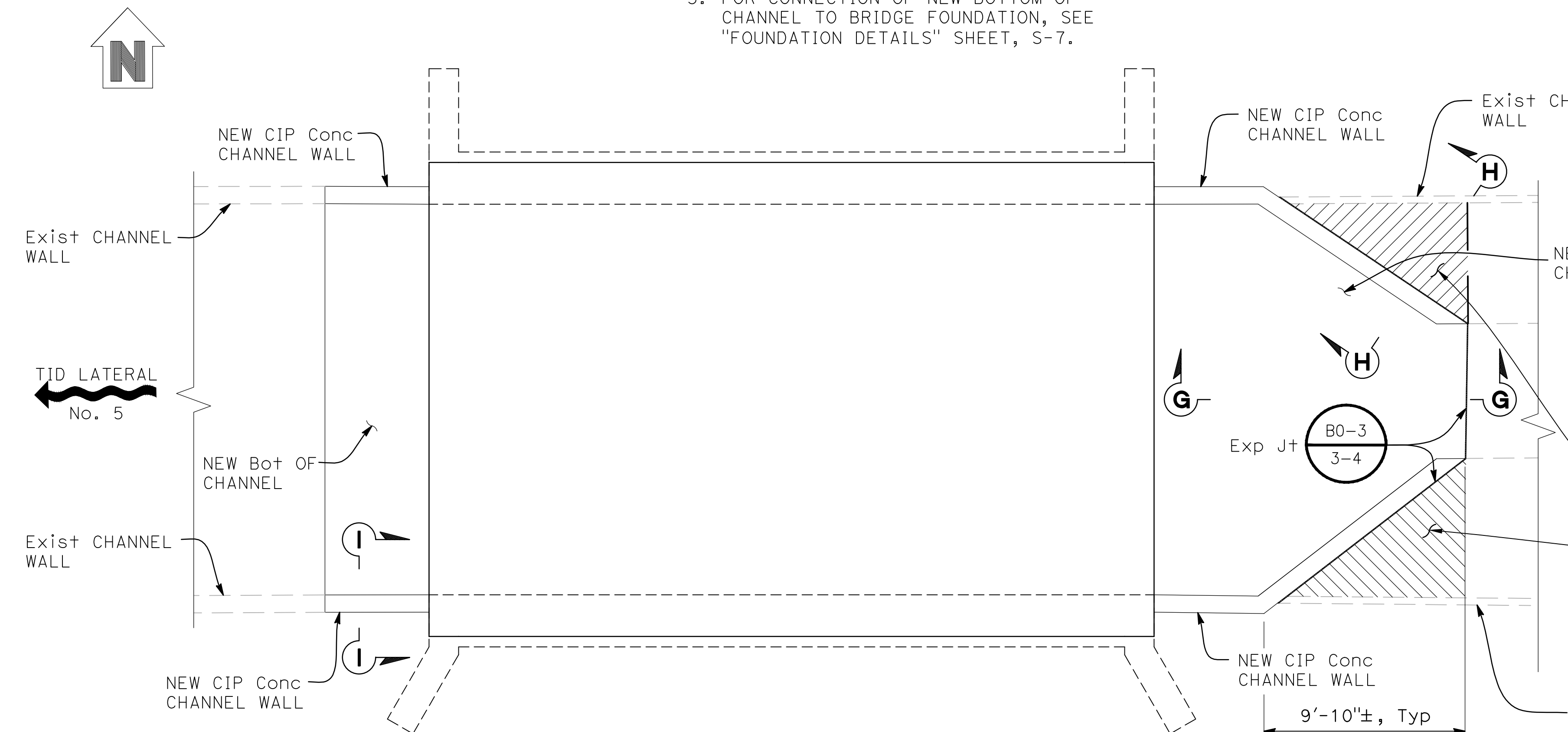


SECTION E-E
2"=1'

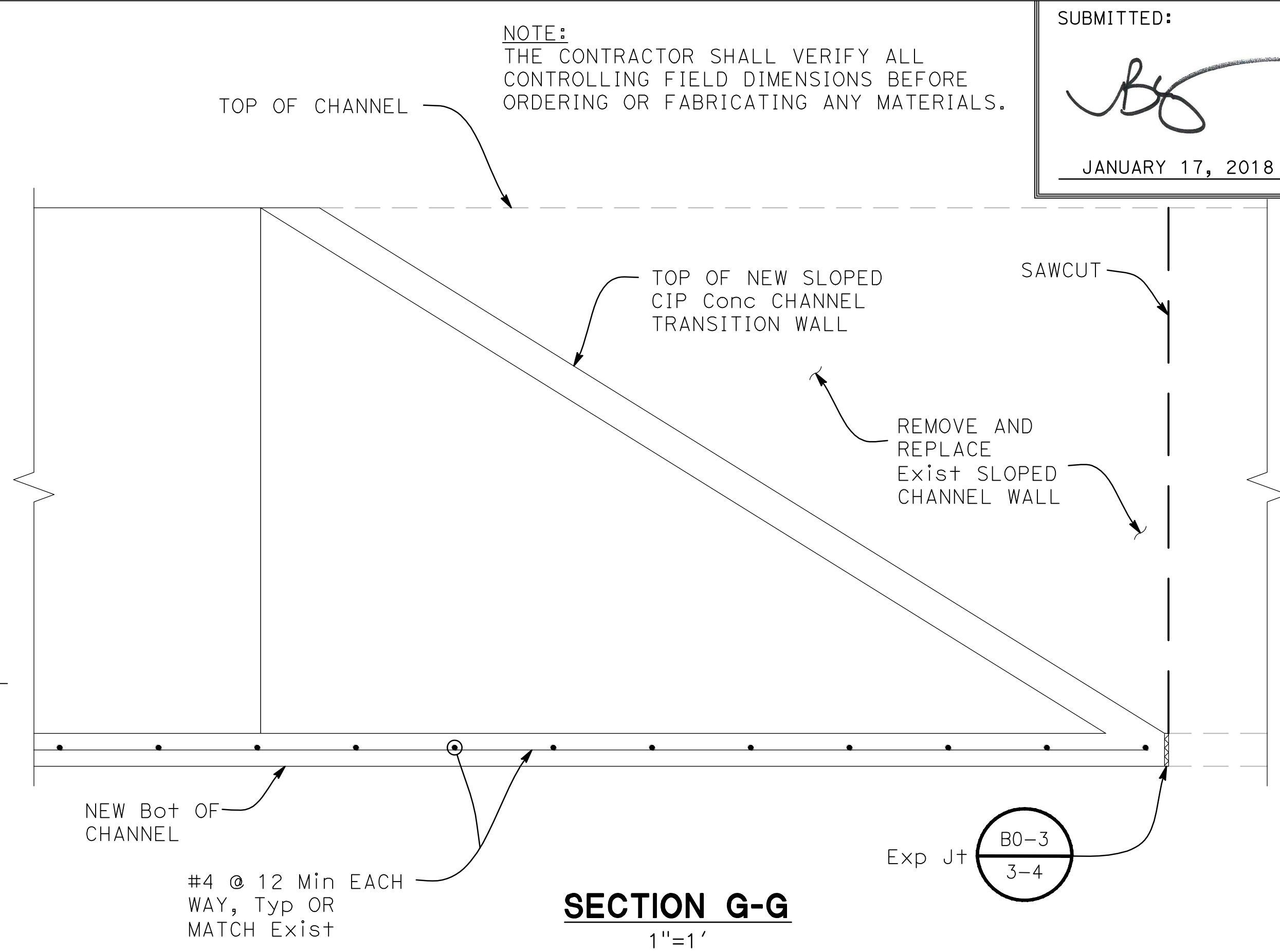


SECTION F-F
2"=1'

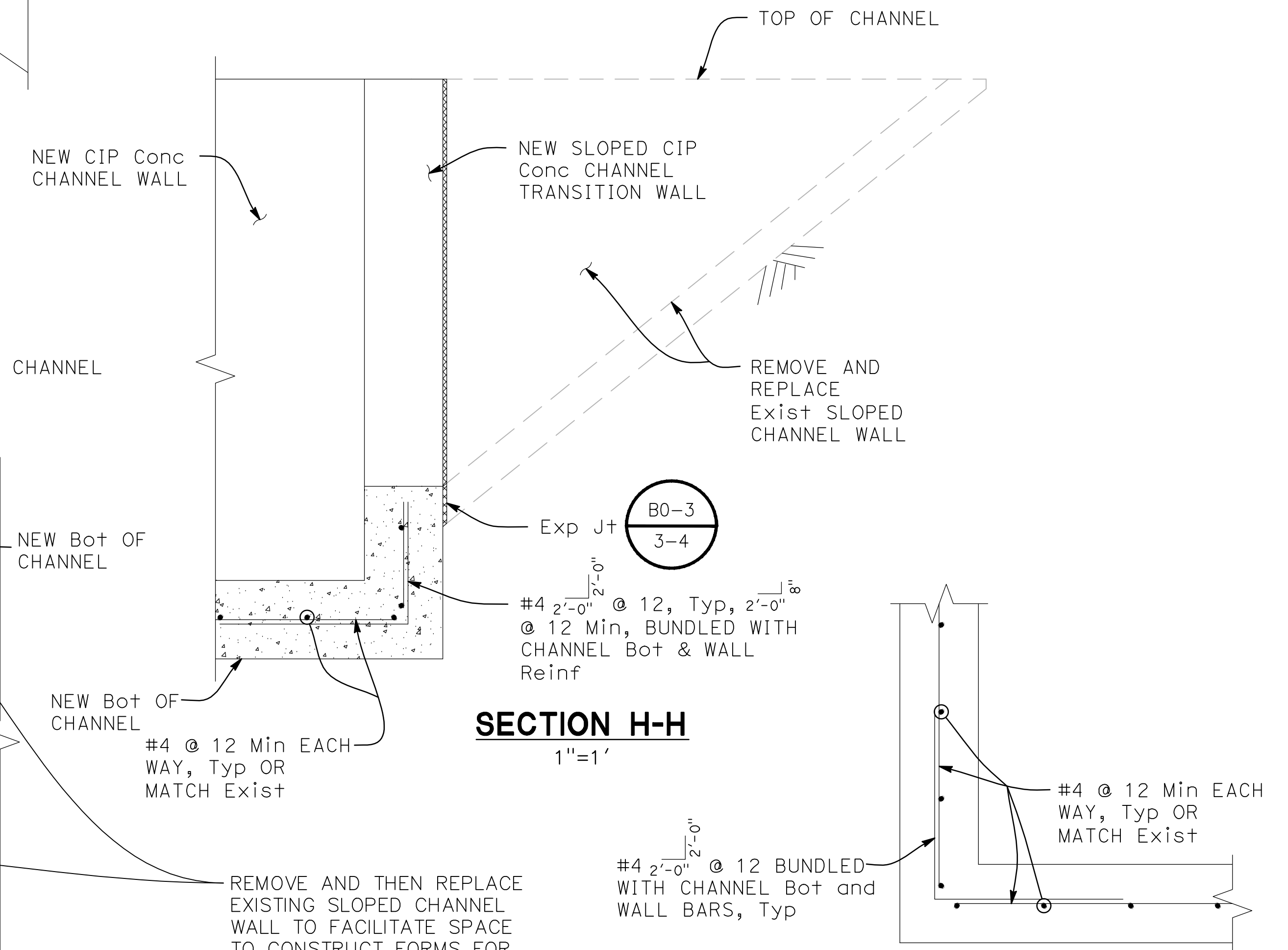
- NOTE:**
1. CONCRETE THICKNESS TO MATCH EXISTING CONCRETE THICKNESS.
 2. FOR CONNECTION OF NEW CHANNEL WALLS TO ABUTMENT, SEE "DETAIL C", ON "ABUTMENT DETAILS" SHEET, S-5.
 3. FOR CONNECTION OF NEW BOTTOM OF CHANNEL TO BRIDGE FOUNDATION, SEE "FOUNDATION DETAILS" SHEET, S-7.



CHANNEL PLAN
1/4"=1'-0"



SECTION G-G
1"=1'



SECTION H-H
1"=1'



SECTION I-I
1"=1'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

SUBMITTED: 
JANUARY 17, 2018

REGISTERED PROFESSIONAL ENGINEER
No. C-59724
Exp. 12-31-17
STATE OF CALIFORNIA

NO.	DATE	APPROVED	REVISIONS	DESCRIPTIONS

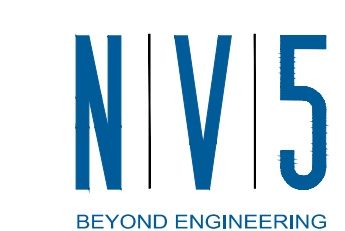
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358

Stanislaus County
Striving to be the best

TEGNER ROAD BRIDGE REPLACEMENT
CHANNEL DETAILS

JOB NO: SAB047700
DATE: 1/17/18
DR BY: LLK
CK BY: BW
SCALE: AS SHOWN

SHEET NUMBER
S-8
20 OF 23 SHEETS



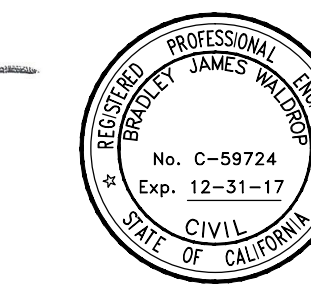
2625 NATOMAS PARK DRIVE, SUITE 300
916.641.9100 TEL 916.641.9222 FAX
SACRAMENTO, CA 95833
WWW.NV5.COM



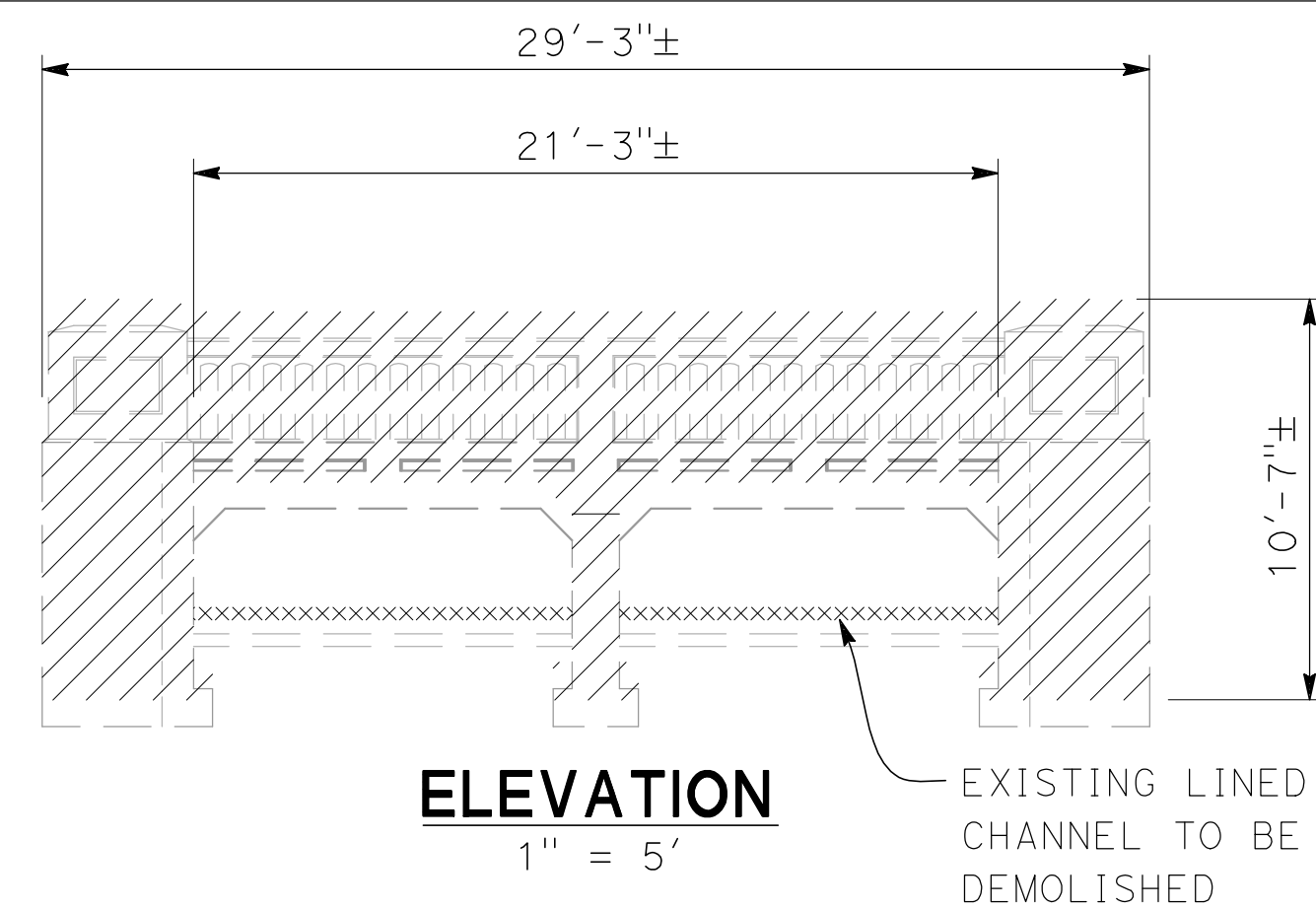
SUBMITTED:

[Signature]

AUGUST 29, 2017



NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

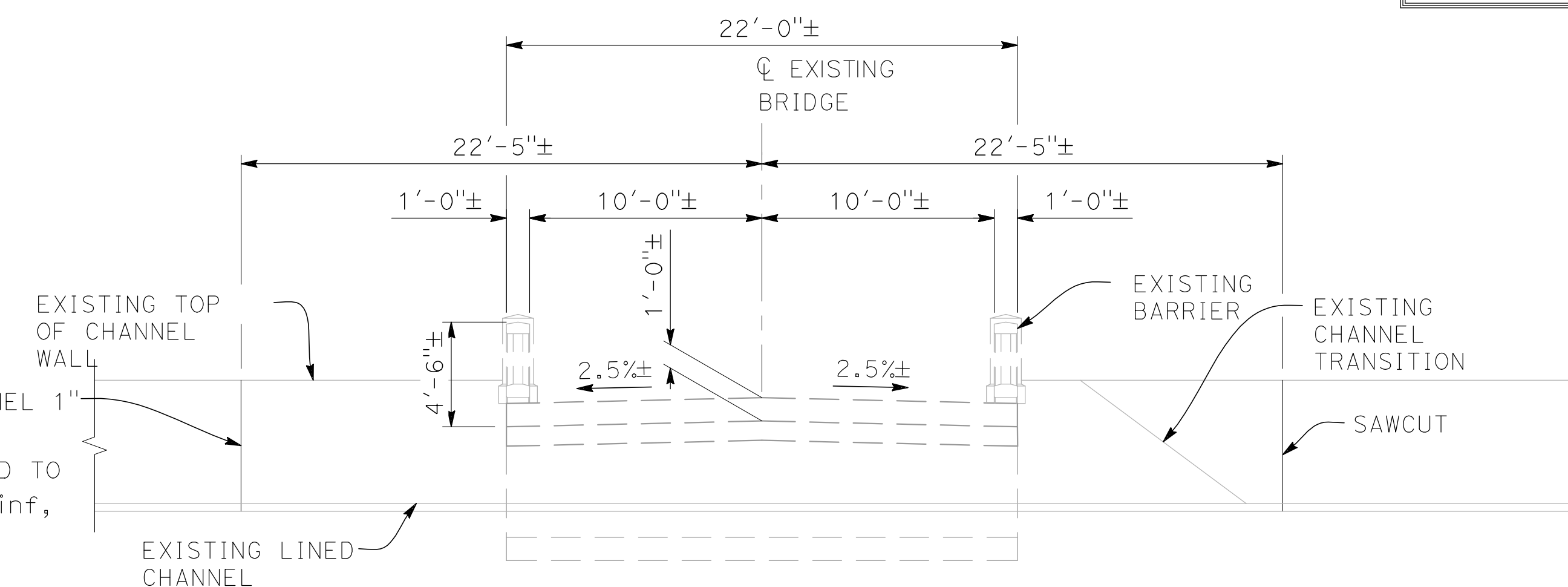


ELEVATION

1" = 5'

EXISTING LINED CHANNEL TO BE DEMOLISHED

SAWCUT EXISTING LINED CHANNEL 1" PRIOR TO DEMOLITION. LEAVE 2'-6" OF Exist Reinf EXPOSED TO BE LAPPED WITH PROPOSED Reinf, Typ CHANNEL Bot AND WALLS

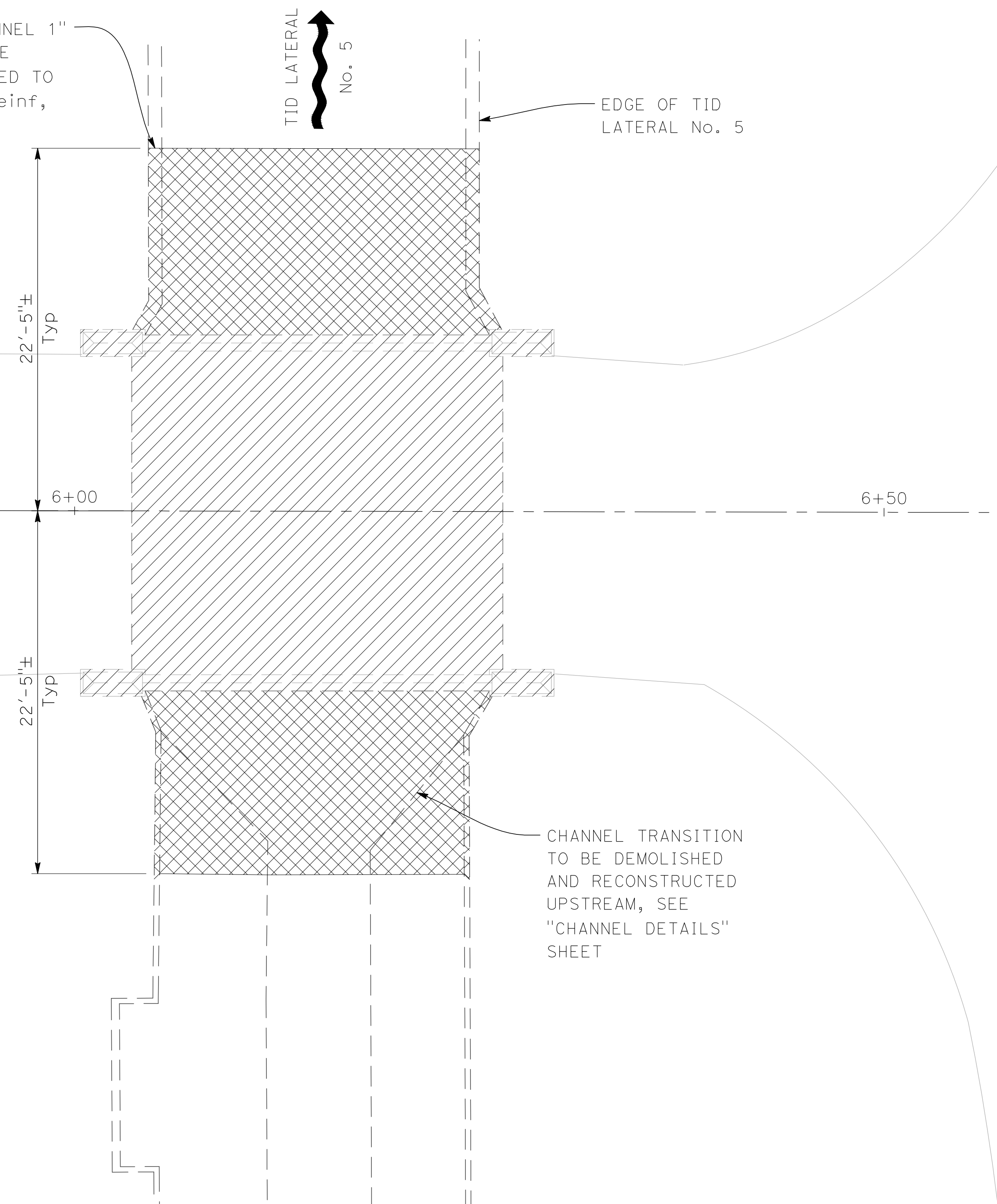
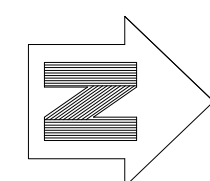


EXISTING TYPICAL SECTION

1" = 5'

- BRIDGE REMOVAL
- REMOVE CONCRETE (CHANNEL)

SAWCUT EXISTING LINED CHANNEL 1" PRIOR TO DEMOLITION. LEAVE 2'-6" OF Exist Reinf EXPOSED TO BE LAPPED WITH PROPOSED Reinf, Typ WALLS AND FOUNDATION



PLAN

1" = 5'

CHANNEL TRANSITION TO BE DEMOLISHED AND RECONSTRUCTED UPSTREAM, SEE "CHANNEL DETAILS" SHEET

PREPARED UNDER THE DIRECTION OF:

STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358

TEGNER ROAD BRIDGE REPLACEMENT

DEMOLITION PLAN

JOB NO SAB047700
 DATE 8/28/17
 DR BY LLK
 CK BY BW
 SCALE AS SHOWN

SHEET NUMBER
S-9

21 OF 23 SHEETS

NOTES:

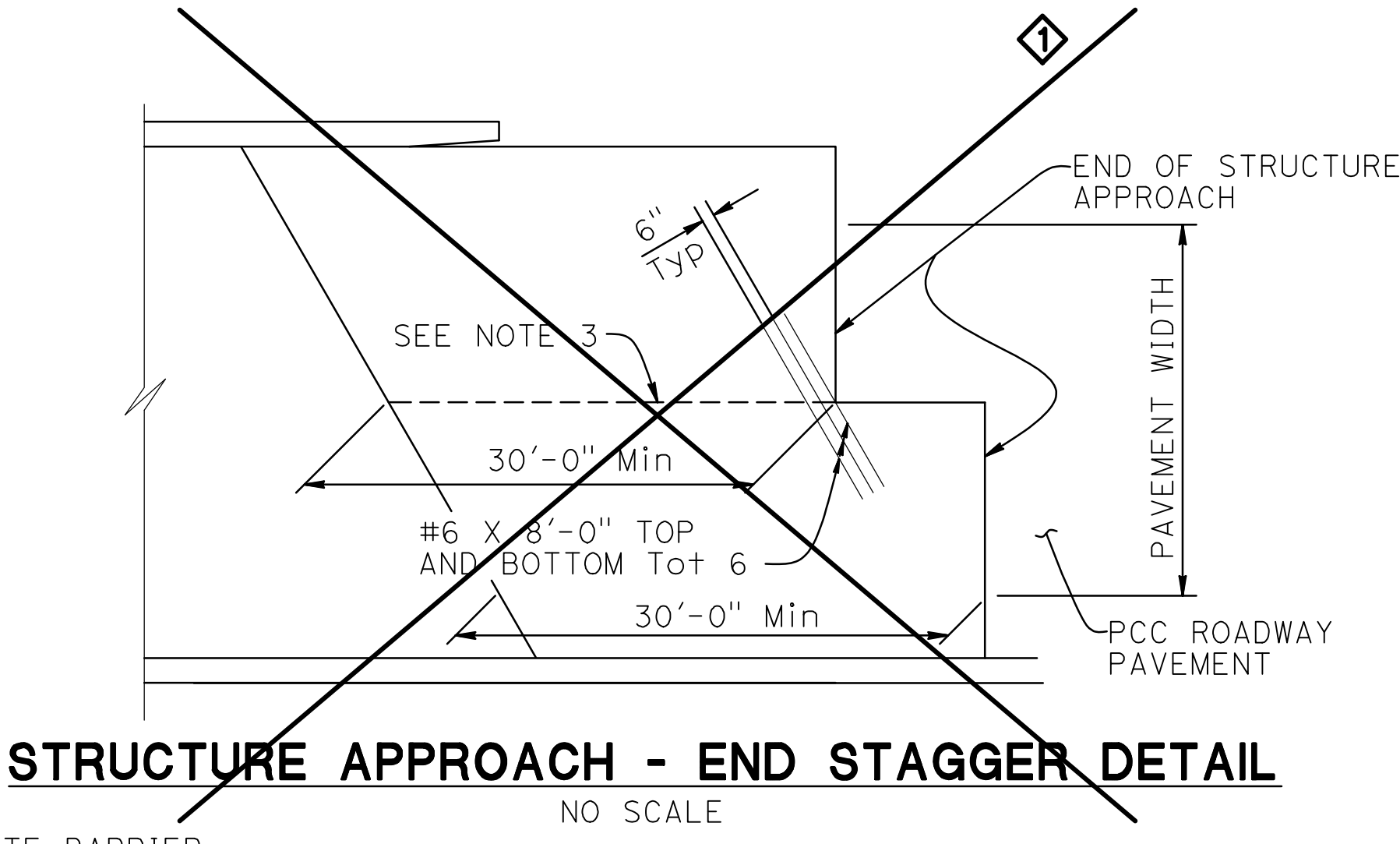
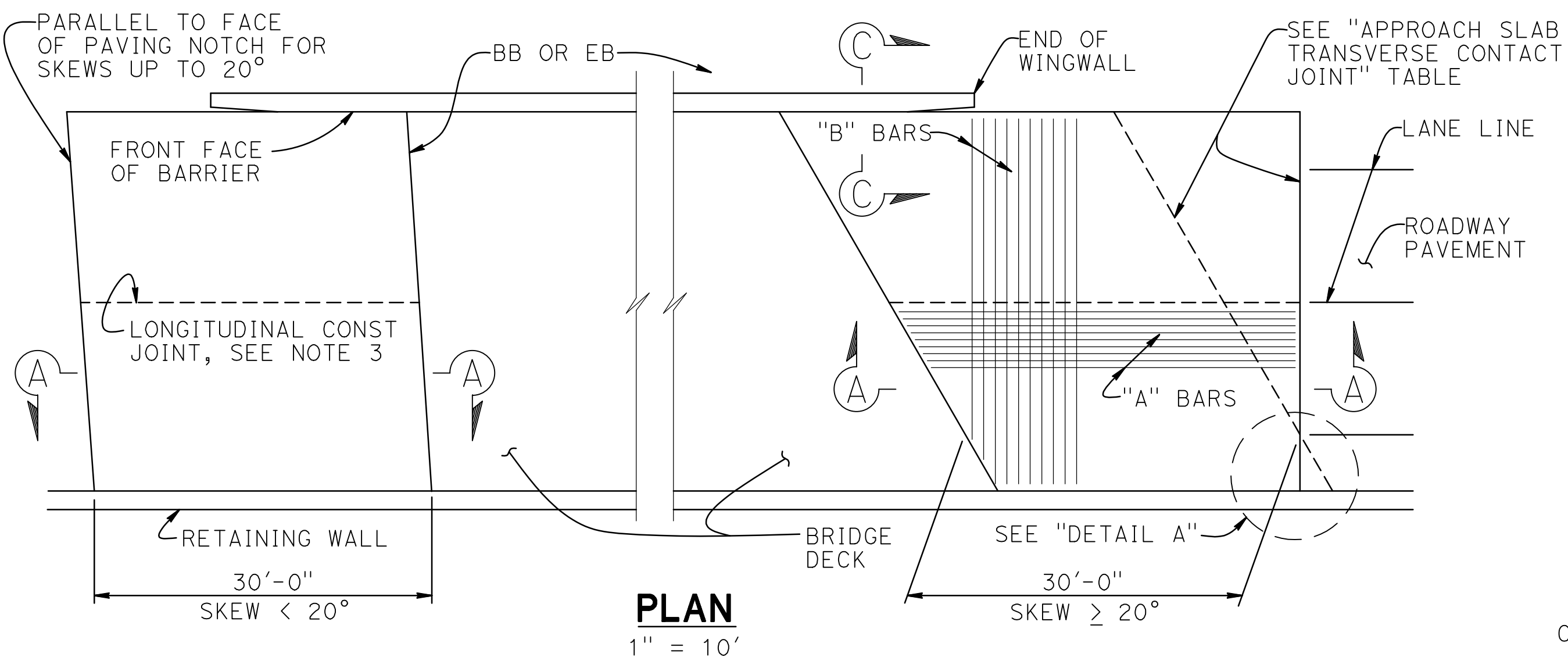
1. EXISTING BRIDGE INFORMATION IS BASED ON FIELD DIMENSIONS. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO REMOVAL.
2. THE CONTRACTOR SHALL REMOVE ALL COMPONENTS OF THE EXISTING BRIDGE INCLUDING THE SUPERSTRUCTURE, ABUTMENTS, PIER, WINGWALLS, BARRIERS AND ALL FOUNDATIONS.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY DISPOSE OF ALL DEMOLITION MATERIALS IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND THE CONTRACT REQUIREMENTS.



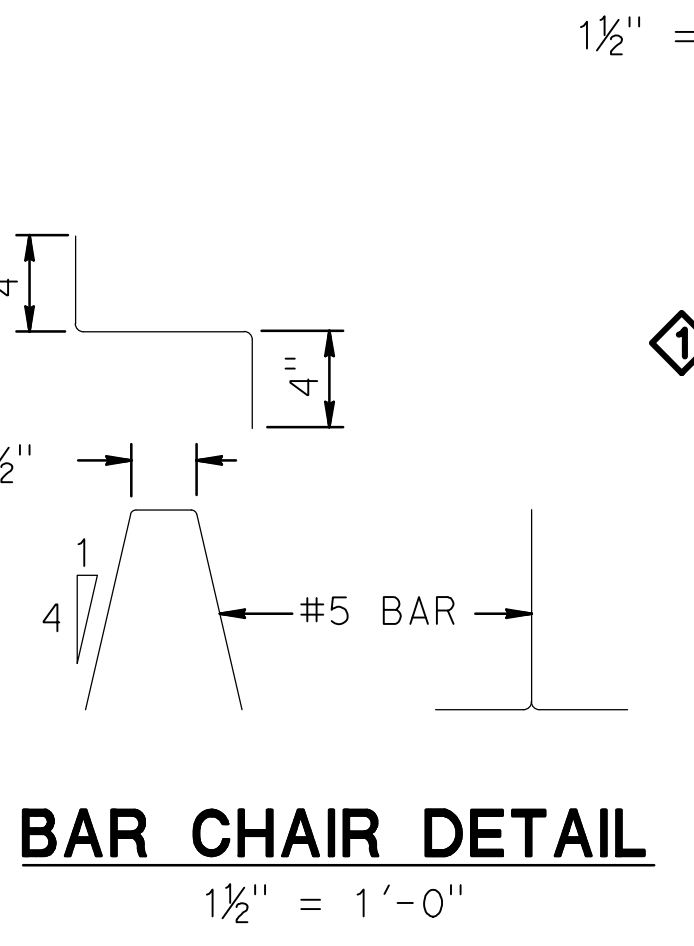
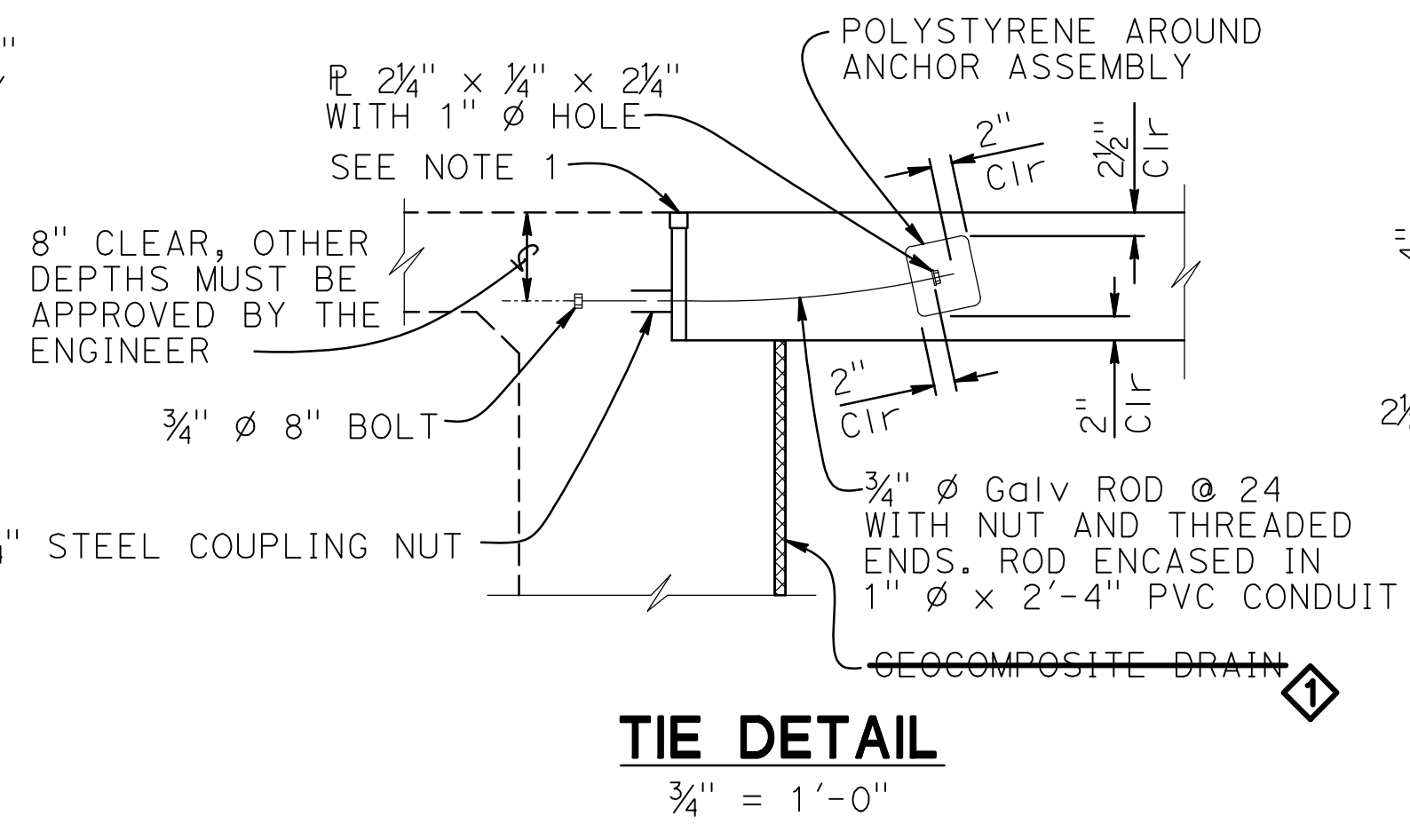
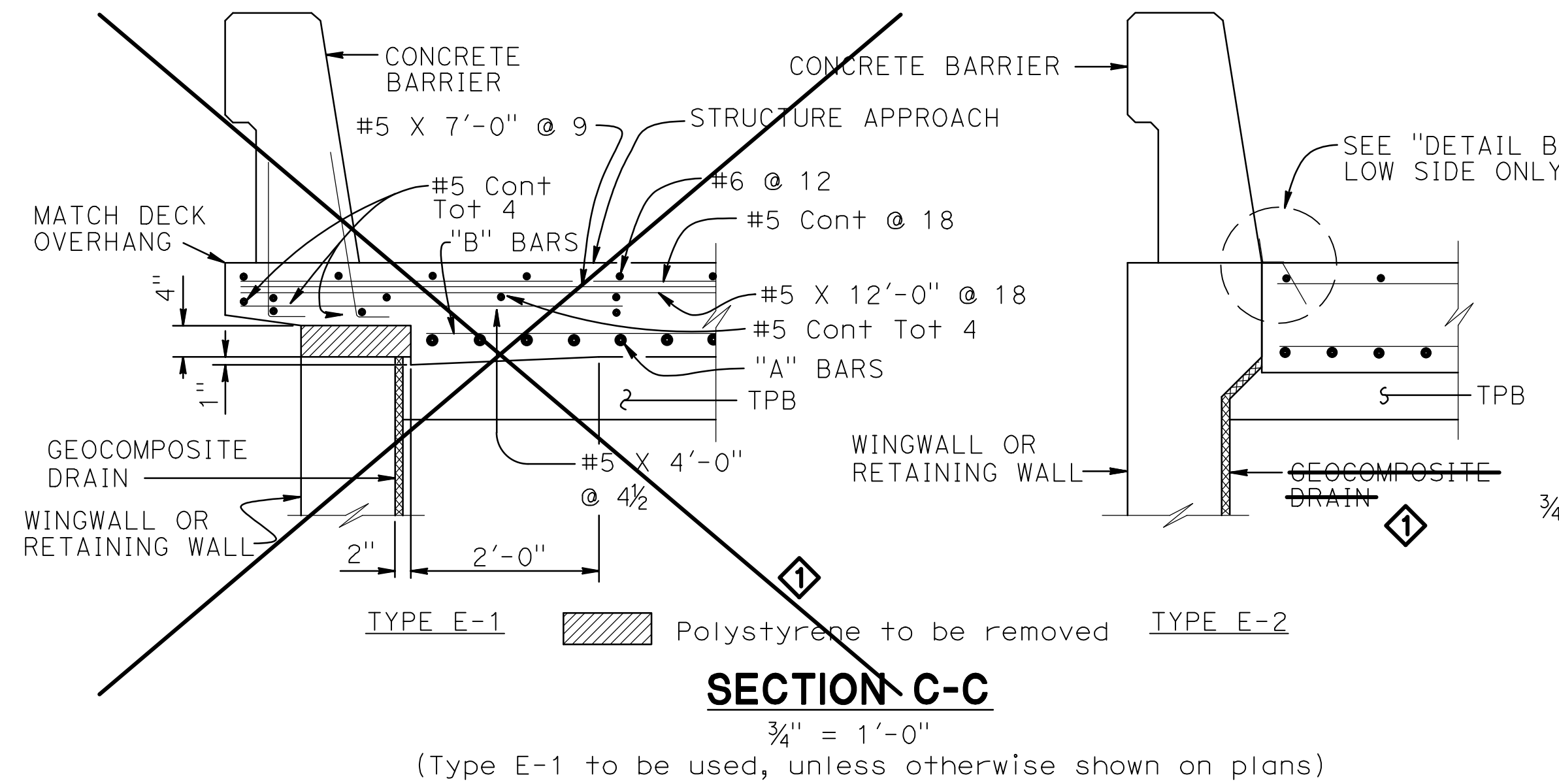
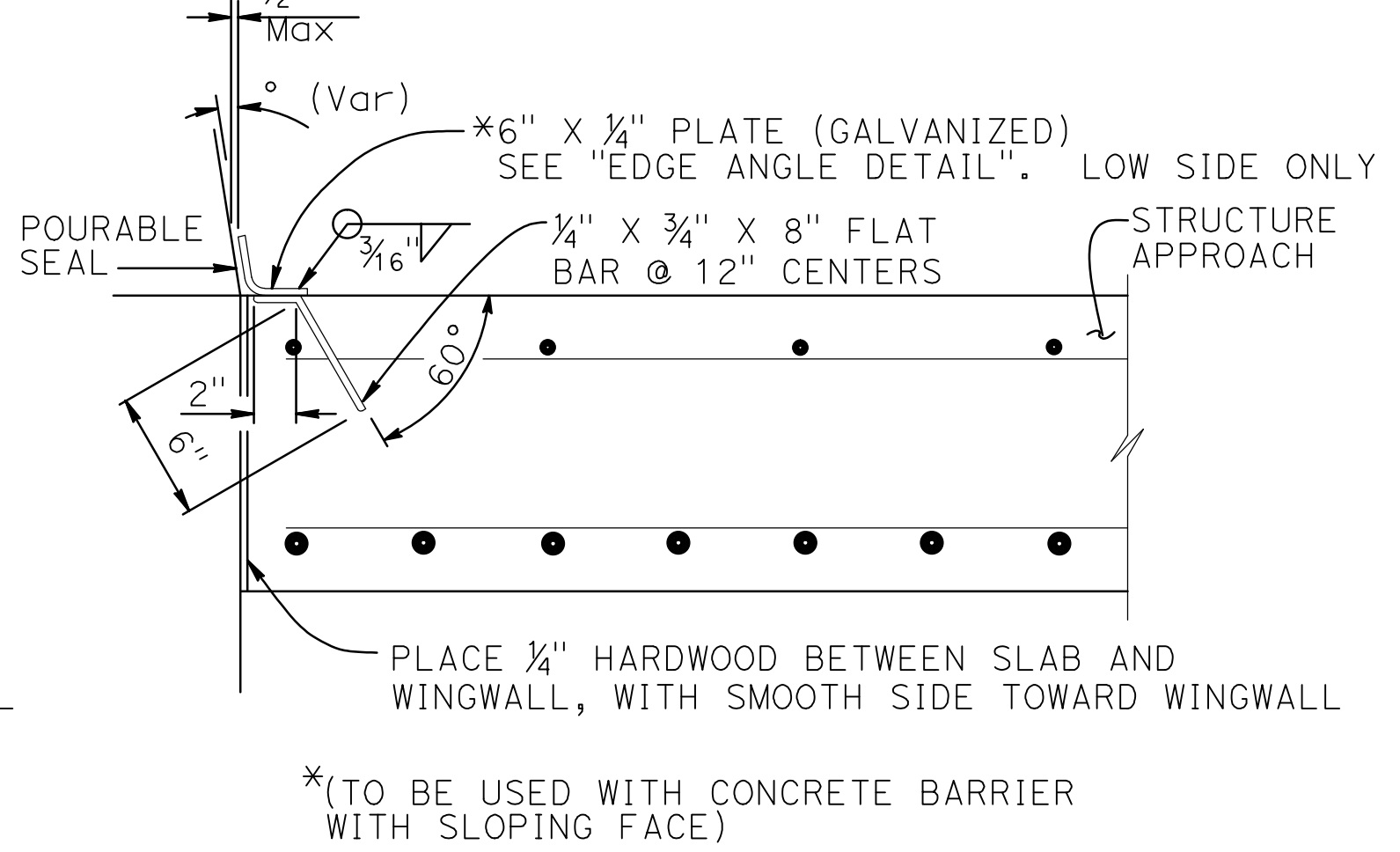
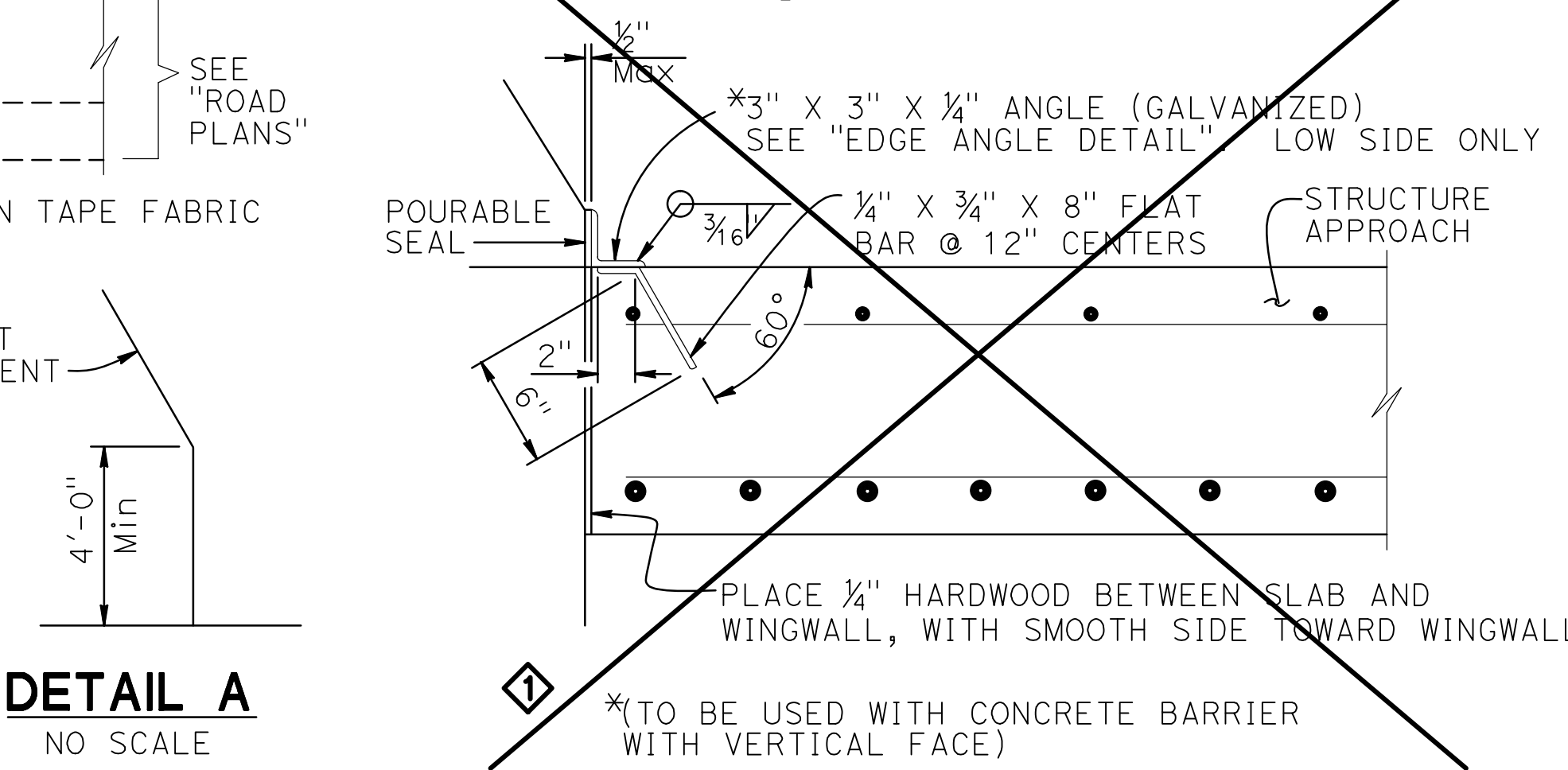
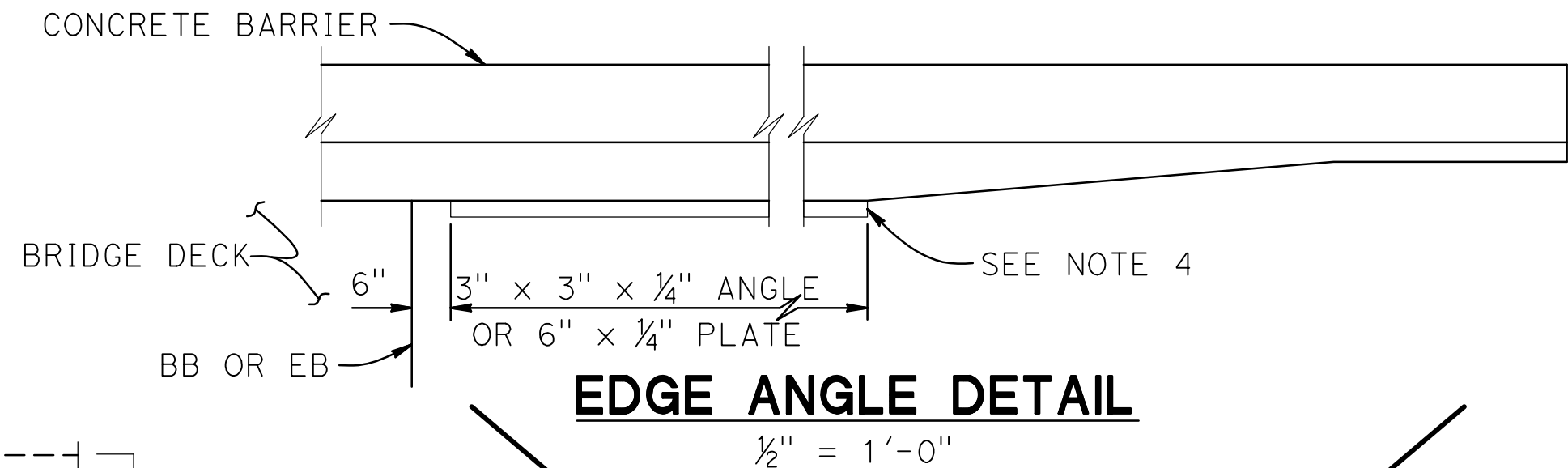
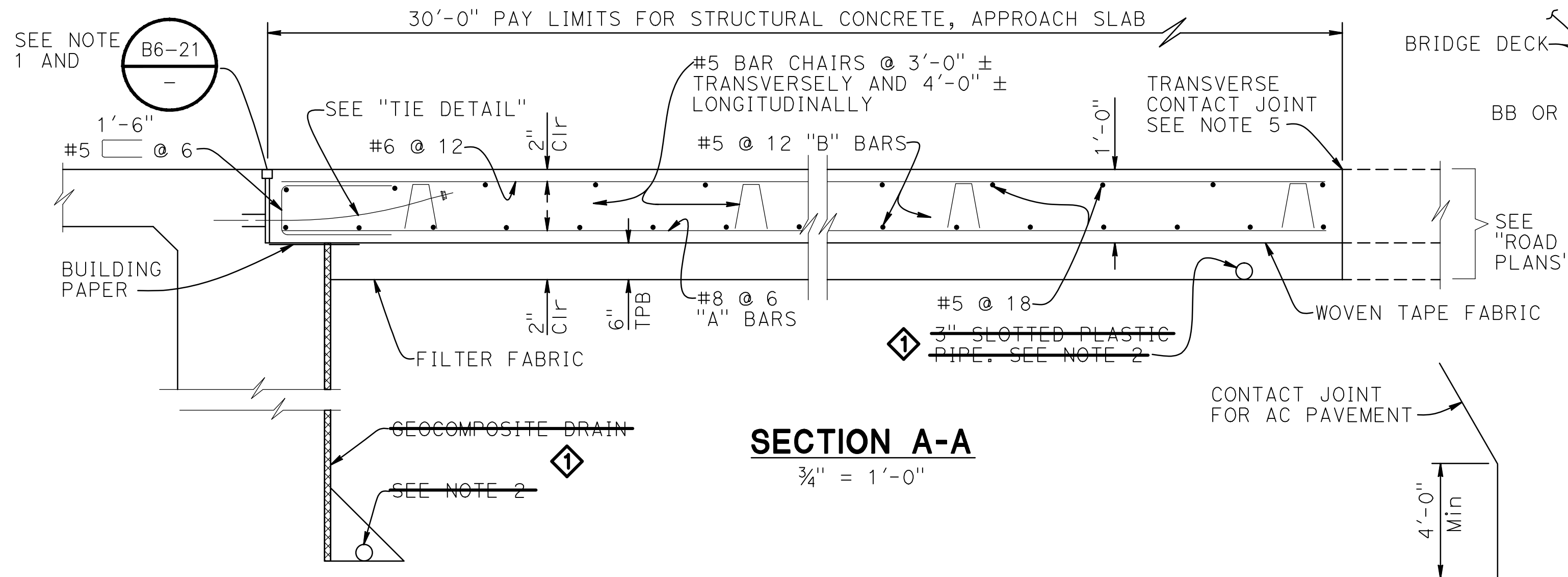
2625 NATOMAS PARK DRIVE, SUITE 300
916.641.9100 TEL. 916.641.9222 FAX

SACRAMENTO, CA 95833
WWW.NV5.COM





APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 20°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PN
20° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE



- NOTES:
- For details not noted or shown, see Structure Plans
 - For drainage details, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach, as applicable
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - At the contractor's option, approach slab transverse reinforcement may be placed parallel to paving notch. Spacing of transverse reinforcement is measured along ϕ roadway

SPECIAL DETAILS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	Sta			23	23

GEOTECHNICAL PROFESSIONAL DATE

PLANS APPROVAL DATE

The County of Stanislaus or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

GARY PARIKH
 No. G.E. 666
 Exp 12/31/13
 GEOTECHNICAL
 STATE OF CALIFORNIA

NOLTE VERTICAL FIVE
 2495 NATOMAS PARK DRIVE, 4TH FLOOR
 SACRAMENTO, CA 95833

PARIKH CONSULTANTS, INC.
 2360 QUINE DRIVE, SUITE A
 SAN JOSE, CA 95131

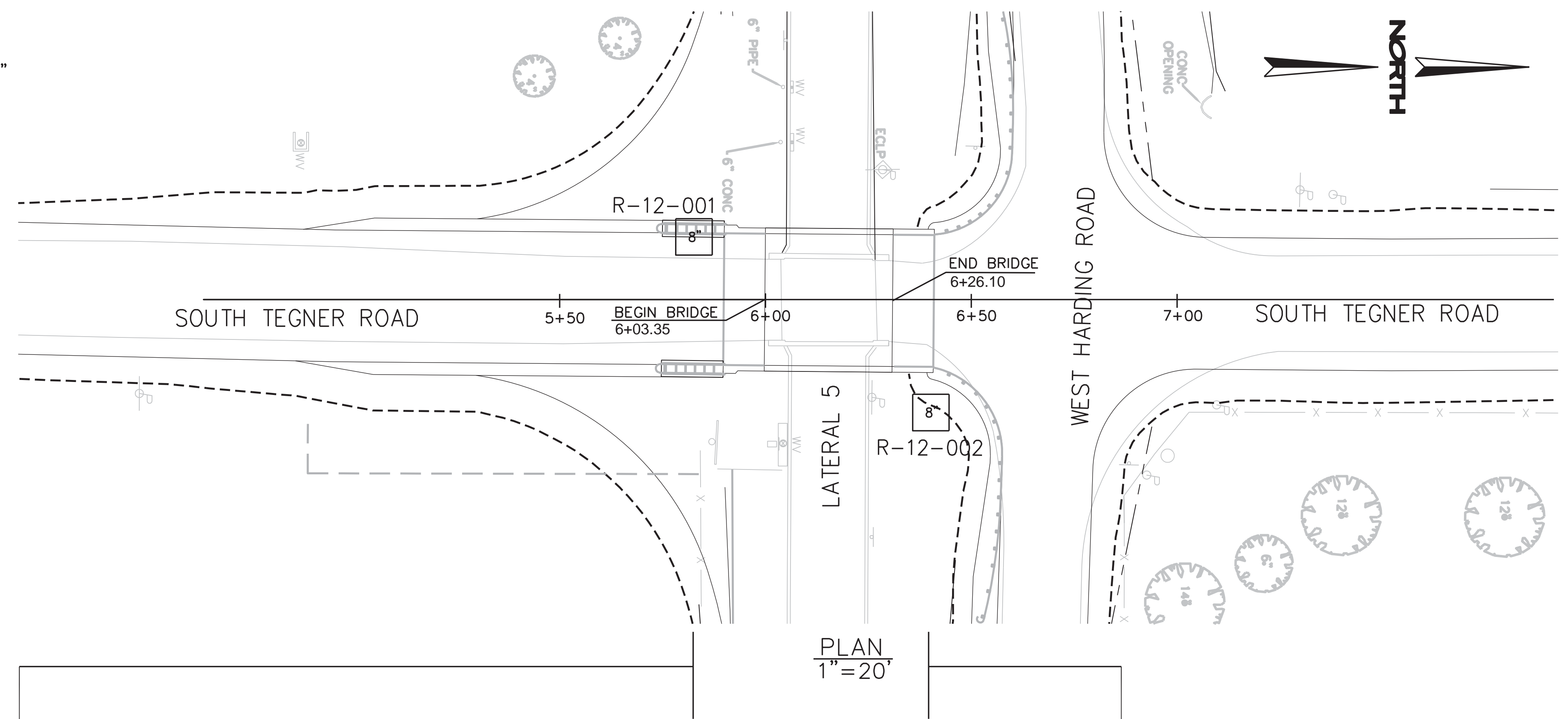
Notes:
 Standard Penetration Test Sampler: I.D. = 1.4"; O.D. = 2"
 Modified California Sampler: I.D. = 2.5"; O.D. = 3"
 Hammer Assembly: A 140 lb hammer with a 30" drop (Automatic Hammer)

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock, Logging, Classification, and Presentation Manual (2010)

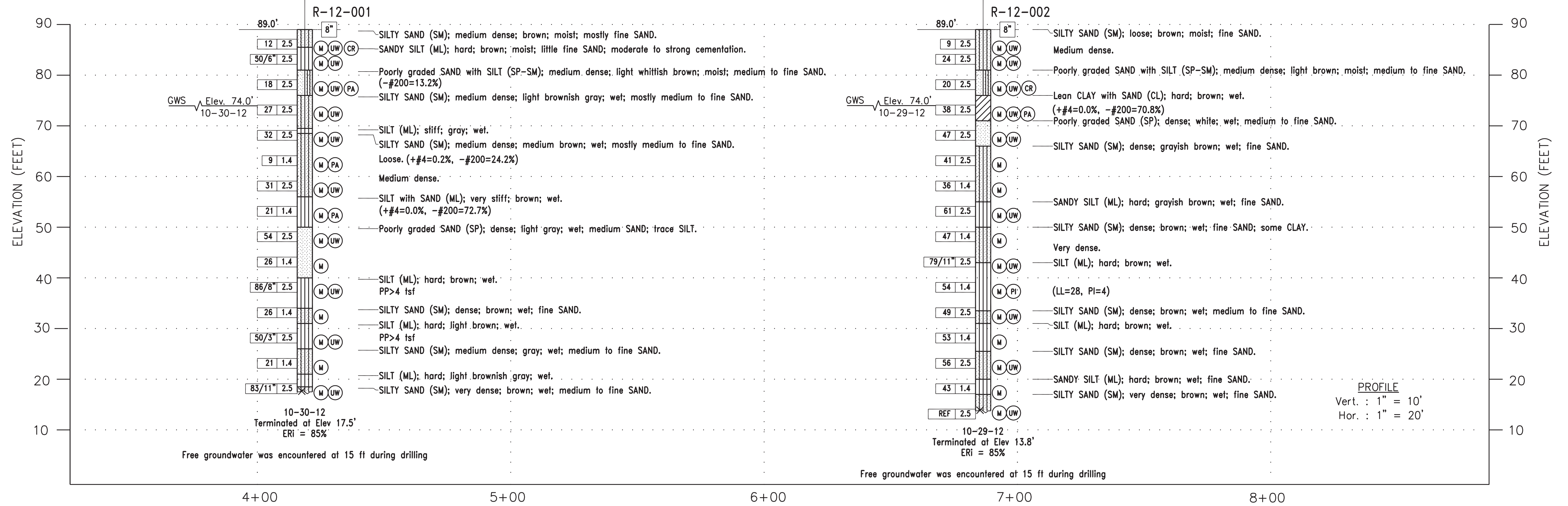
See Caltrans 2010 Standard Plans A10F, A10G and A10H for Soil and Rock Legends.

All dimensions are in feet unless otherwise shown

Base map was provided by NOLTE VERTICAL FIVE.



PLAN
1" = 20'



PROFILE
 Vert. : 1" = 10'
 Hor. : 1" = 20'

Aug 07, 2013 - 4:04pm S:\CAD\2012-121-BRC\Tegner Rd Bridge Replacement_LOTB.dwg

DESIGN OVERSIGHT	DRAWN BY O. GOUTHIER	L.S. BHANGOO & A. BAKANE FIELD INVESTIGATION BY:	BRIDGE NO. 38C0302	TEGNER ROAD BRIDGE REPLACEMENT	
SIGN OFF DATE	CHECKED BY P. WEI	DATE: OCTOBER 2012	POST MILES X	LOG OF TEST BORINGS	
GS GEOTECHNICAL LOG OF TEST BORINGS SHEET (ENGLISH) (REV. 7/16/10)			UNIT: X PROJECT NUMBER & PHASE: X		REVISION DATES
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			DISREGARD PRINTS BEARING EARLIER REVISION DATES		SHEET OF S-11 23
FILE => \$REQUEST			CONTRACT NO.: X		PROJECT ID: X

DATE PLOTTED => \$DATE
 TIME PLOTTED => \$TIME
 USERNAME => \$USER