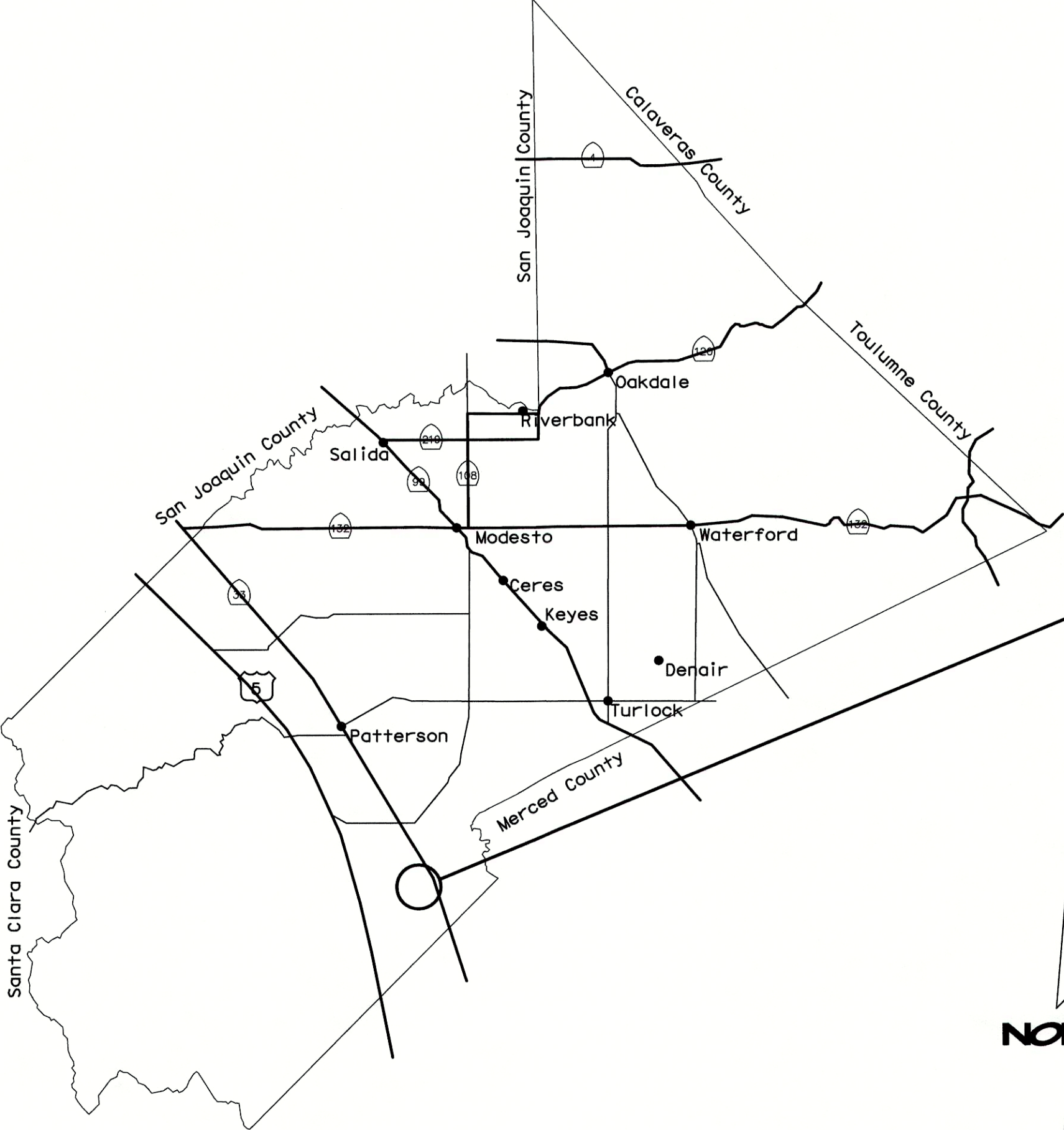


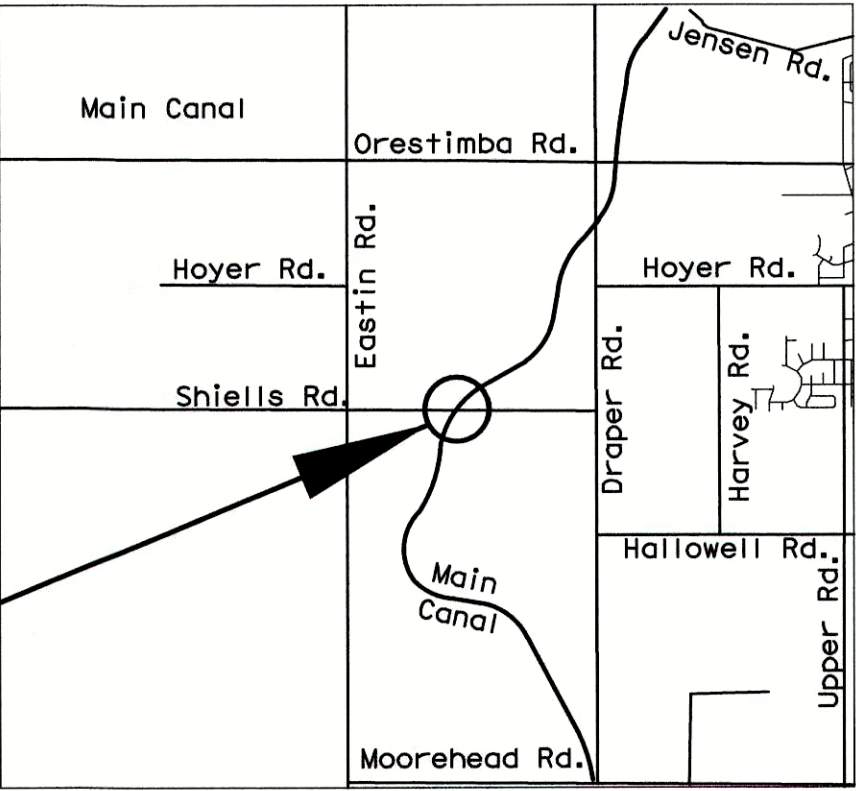
INDEX OF SHEETS		
SHEET NUMBER	SHEET TITLE	DRAWING NUMBER
1.	COVER SHEET	T-1
2.	CONSTRUCTION NOTES	C-1
3.	TYPICAL SECTIONS & DETAILS	X-1
4.	CONSTRUCTION DETAILS - 1	DT-1
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7.	CONSTRUCTION DETAILS - 4	DT-4
8.	DEMOLITION PLAN	DM-1
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12.	PAVEMENT DELINEATION & SIGNING	PD-1
13. THRU 23.	SHIELLS ROAD BRIDGE PLANS	S-1 THRU S-11

STANISLAUS COUNTY
PLANS FOR THE CONSTRUCTION OF
SHIELLS ROAD BRIDGE REPLACEMENT
AND IMPROVEMENTS PROJECT

FEDERAL PROJECT NO.
BRLO-5938 (192)
STANDARD PLANS 2010



PROJECT
LOCATION



PROJECT LOCATION
NOT TO SCALE

STANISLAUS COUNTY
NOT TO SCALE



STATE OF CALIFORNIA

COUNTY OF STANISLAUS

Chris Brady
DEPUTY DIRECTOR OF PUBLIC WORKS

2/21/18
DATE

Bradley Waldrop
BRADLEY WALDROP, PE
RCE 59724
NV5, INC.

JULY 14, 2017
DATE

CENTRAL CALIFORNIA IRRIGATION DISTRICT
1335 W. "I" ST LOS BANOS, CA 93635 (209) 826-1421

REVIEWED AND APPROVED FOR CONFORMANCE WITH THE CENTRAL CALIFORNIA IRRIGATION DISTRICT REQUIREMENTS ONLY. SINCE PLANS WERE PREPARED BY OTHERS, NO RESPONSIBILITY FOR THE ADEQUACY OF THE PLANS IS EXPRESSED.

Chris White

CENTRAL CALIFORNIA IRRIGATION DISTRICT

15 FEB. 2018
DATE

NV5
BEYOND ENGINEERING

2025 GATEWAY PLACE, SUITE 156 SAN JOSE, CA 95110
408.392.7200 TEL 408.392.0101 FAX WWW.NV5.COM



SUBMITTED:
Bradley Waldrop
JULY 14, 2017



DATE		DATE	
REVISED		APPROVED	
DESCRIPTIONS		DATE	
NO		NO	

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

SHIELLS ROAD BRIDGE REPLACEMENT
TITLE SHEET

JOB NO SAB048800
DATE 7/14/17
DR BY BW
CK BY BW
SCALE AS SHOWN

SHEET
NUMBER
T-1
1 OF 23 SHEETS

CONSTRUCTION NOTES

A. MISCELLANEOUS

1.

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 DEPARTMENT OF PUBLIC WORKS, STANISLAUS COUNTY STANDARDS AND SPECIFICATIONS 2014 EDITION. ALL IMPROVEMENTS ARE SUBJECT TO THE INSPECTION AND APPROVAL OF THE PUBLIC WORKS DEPARTMENT.
2.

PRIOR TO STARTING ANY WORK, THE CONTRACTOR SHALL OBTAIN A 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.
3.

CONTRACTOR SHALL ONLY USE EQUIPMENT PROVIDED WITH A SPARK ARRESTOR DEVICE TO REDUCE A POTENTIAL FIRE HAZARD.
4.

THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITIES. THE CONTRACTOR SHALL DO NO EXCAVATION UNTIL ALL UTILITY AGENCIES, CENTRAL CALIFORNIA IRRIGATION DISTRICT, 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.
5.

CONTRACTOR SHALL PRESERVE ALL SURROUNDING PROPERTY BY CONFINING OPERATIONS TO WITHIN THE "LIMITS OF WORK".
6.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS.
7.

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.
8.

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).
9.

CONSTRUCTION STAKING FOR STORM DRAINS, WATER LINES, FIRE HYDRANTS, ELECTROLIERS, ETC. SHALL BE DONE UNDER THE DIRECTION OF A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR.
10.

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.
11.

ALL LINES ABANDONED DURING CONSTRUCTION SHALL BE REMOVED.
12.

ALL INDEPENDENT LABORATORY INSPECTION REQUESTED BY THE COUNTY ENGINEER SHALL BE PAID FOR BY THE CONTRACTOR.
13.

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.
14.

ALL TRENCHES SHALL BE BACK FILLED IN ACCORDANCE WITH STANISLAUS COUNTY SPECIFICATIONS AND IMPROVEMENTS STANDARDS.
15.

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.
16.

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.
17.

ASBESTOS CEMENT PIPE (ACP) OR FITTINGS SHALL NOT BE USED.
18.

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.
19.

MANHOLES, VALVES, CLEAN OUTS, ETC. SHALL BE BROUGHT TO FINISH GRADE BY THE CONTRACTOR AFTER THE FINAL PAVING COURSE IS PLACED.
20.

STORM DRAIN PIPE SIZES SHALL NOT BE CHANGED WITHOUT THE APPROVAL OF STANISLAUS COUNTY.
21.

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.
22.

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.
23.

AN APPROVED SWPPP SHALL BE SUBMITTED TO THE COUNTY AND MUST BE ON-SITE DURING ALL CONSTRUCTION ACTIVITIES.
24.

CONTRACTOR'S OPERATIONS SHALL BE PERFORMED IN A MANNER WHICH WILL NOT ALLOW HARMFUL POLLUTANTS TO ENTER THE CCID MAIN CANAL. CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) AS INDICATED IN THE SPECIFICATIONS AND AS REQUIRED BY STANISLAUS COUNTY.
25.

PRIOR TO INITIATING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL NECESSARY FEDERAL, STATE, AND LOCAL PERMITS AND/OR AUTHORIZATIONS HAVE BEEN OBTAINED.
26.

THE CONTRACTOR SHALL NOTIFY THE CENTRAL CALIFORNIA IRRIGATION DISTRICT (CCID) OF WORK COMMENCEMENT A MINIMUM OF 48 HOURS PRIOR TO THE START OF MOBILIZATION.
27.

ALL WORK WITHIN THE PROPERTY OF CENTRAL CALIFORNIA IRRIGATION DISTRICT SHALL BE PERFORMED IN ACCORDANCE WITH THE CONDITIONS SET FORTH IN THE LICENSE AGREEMENT MADE BETWEEN THE COUNTY OF STANISLAUS AND CCID.

B. DEMOLITION

1.

DEBRIS GENERATED FROM DEMOLITION WORK TO BE DISPOSED OF OFF-SITE, AT AN APPROVED LOCATION, AT THE CONTRACTOR'S EXPENSE.
2.

CLEARING AND GRUBBING SHALL CONFORM TO THE PROVISIONS IN SECTION 16, "CLEARING AND GRUBBING," OF THE STANDARD SPECIFICATIONS.

C. SITE WORK

1.

EARTHWORK SHALL CONFORM TO THE PROVISIONS IN SECTION 19, "EARTHWORK," OF THE STANDARD SPECIFICATIONS. ROADWAY EXCAVATION SHALL CONFORM TO THE PROVISIONS IN SECTION 19-2, "ROADWAY EXCAVATION," OF THE STANDARD SPECIFICATIONS.
2.

SUBGRADE SHALL BE COMPACTED TO 95% RELATIVE COMPACTION AND CONFORM TO SECTION 26 OF THE STANDARD SPECIFICATIONS.
3.

HOT MIX ASPHALT SHALL BE TYPE A, 1/2" AGGREGATE CONFORMING TO SECTION 39 OF THE STANDARD SPECIFICATIONS. THE RELATIVE COMPACTION SHALL BE 95%.
4.

SAWCUT AT ALL PAVEMENT CONFORMS. PROVIDE A NEAT, CLEAN EDGE.
5.

AGGREGATE BASE SHALL BE CLASS 2, WITH DEPTH AS SPECIFIED PER PLAN AND SHALL CONFORM TO THE PROVISIONS IN SECTION 26, "AGGREGATE BASES," OF THE STANDARD SPECIFICATIONS.
6.

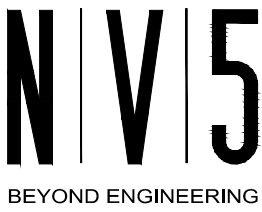
DEBRIS GENERATED BY CLEARING, GRUBBING, EXCAVATION AND DEMOLITION WORK SHALL BE DISPOSED OF OFF-SITE AT APPROVED DISPOSAL SITES AT THE CONTRACTOR'S EXPENSE.

ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
AS	AGGREGATE SUBBASE
BB	BEGIN BRIDGE
BC	BEGIN HORIZONTAL CURVE
BVC	BEGIN VERTICAL CURVE
CCID	CENTRAL CALIFORNIA IRRIGATION DISTRICT
CIP	CAST-IN-PLACE
CL	CENTER LINE
CLr	CLASS
CLr	CLEAR
Cont	CONTINUOUS
E	EAST
(E)	EXISTING
EB	END BRIDGE
EC	END HORIZONTAL CURVE
EG	EDGE OF GRADE LINE
Elev	ELEVATION
EP	EDGE OF PAVEMENT
ETW	EDGE OF TRAVEL LANE
EVC	END VERTICAL CURVE
Exp	EXPANSION
FG	FINISH GRADE
HMA	HOT MIX ASPHALT (TYPE A)
HP	HINGE POINT
Lt	LEFT
Max	MAXIMUM
Min	MINIMUM
(N)	NEW
N	NORTH
NO	NUMBER
NTS	NOT TO SCALE
Off	OFFSET
OG	ORIGINAL GRADE
(P)	PROPOSED
P/L	PROPERTY LINE
PS	PRESTRESSED
PT	POINT/POST TENSIONED
PVI	POINT OF VERTEX/INTERSECTION OF TANGENTS
R	RADIUS
Reinf	REINFORCED
Rt	RIGHT
ROW	RIGHT OF WAY
RSP	ROCK SLOPE PROTECTION
S	SOUTH
Sta	STATION
TCE	TEMPORARY CONSTRUCTION EASEMENT
Thd	THREADED
Tot	TOTAL
Typ	TYPICAL
UON	UNLESS OTHERWISE NOTED
Var	VARIES
VC	VERTICAL CURVE
W	WEST
WW	WINGWALL

LEGEND

	P/L OR ROW
	LIMIT OF WORK
	FILL LINE
	EXISTING UNDERGROUND LINE
	EXISTING OVERHEAD ELECTRICAL LINE
	PROPOSED STORM DRAIN LINE
	CUT LINE
	GRADE BREAK
	Q OF DRAINAGE SWALE



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JOB NO SAB048800
DATE 7/14/17
DR BY BW
CK BY BW
SCALE AS SHOWN

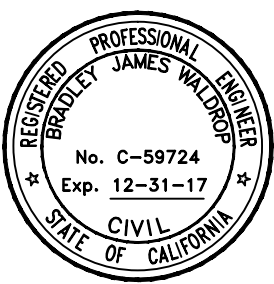
SHEET
NUMBER

C-1

2 OF 23 SHEETS

SUBMITTED:

JULY 14, 2017



PREPARED UNDER THE DIRECTION OF:

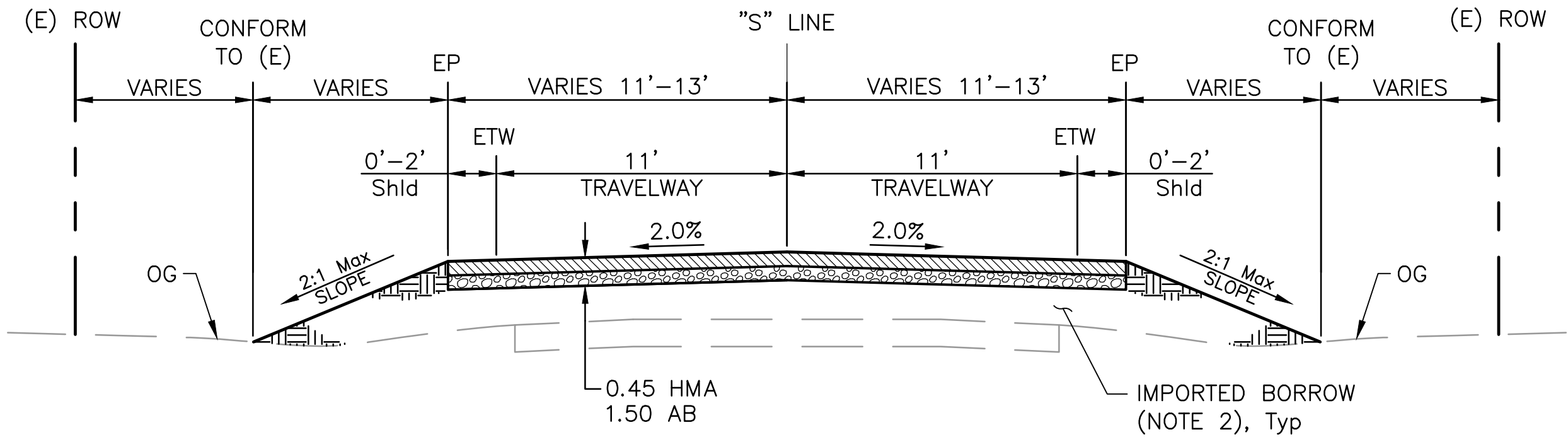
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DATE	DATE
REVISIONS	REVISIONS
NO	NO
DESCRIPTIONS	DESCRIPTIONS

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



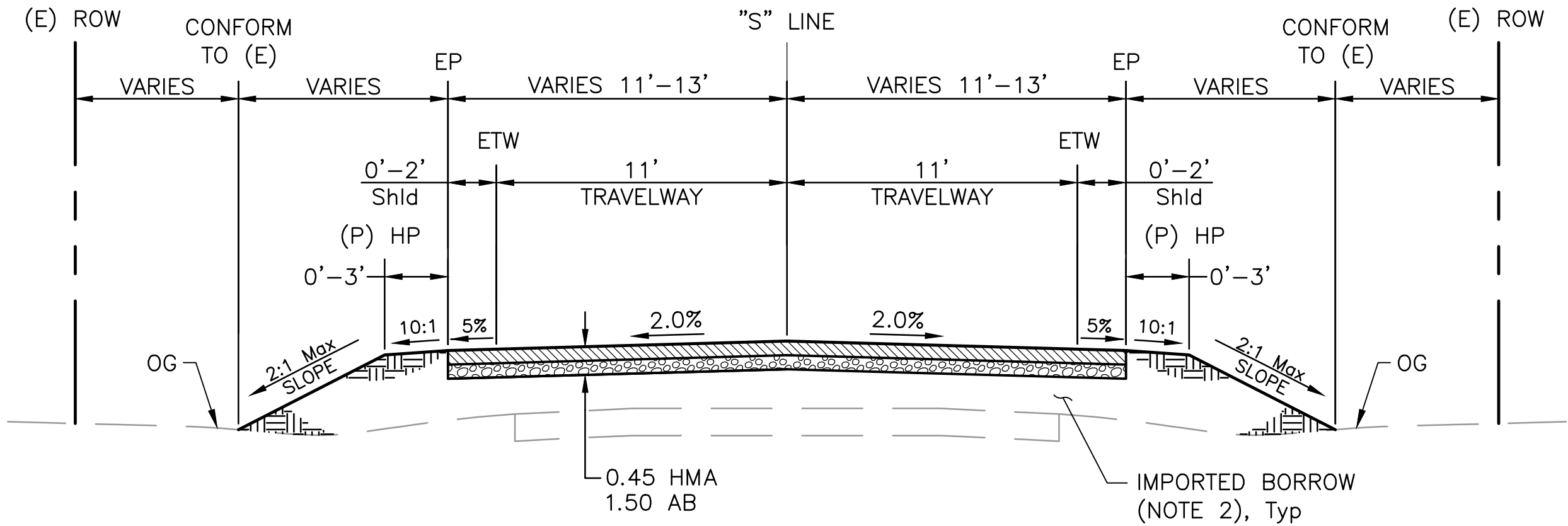
SHIELDS ROAD BRIDGE REPLACEMENT

CONSTRUCTION NOTES



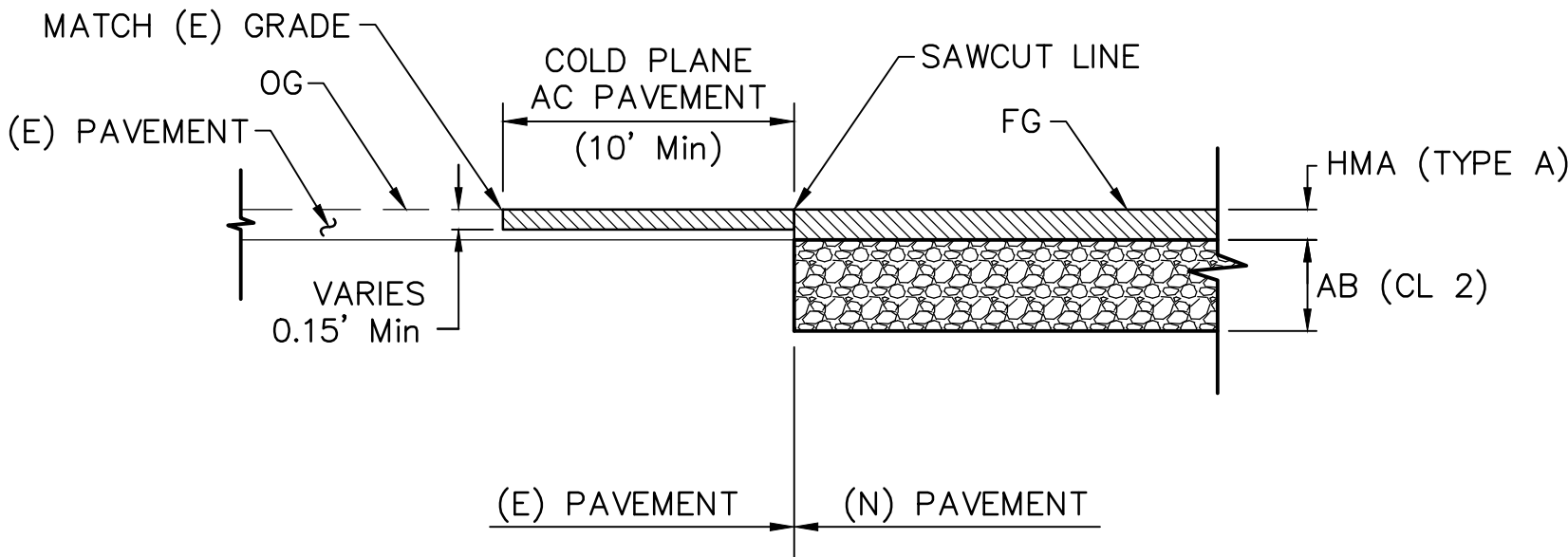
SHIELLS ROAD - TYPICAL SECTION 1

"S" STA: 2+90.00 TO 5+53.35
"S" STA: 6+88.35 TO 10+50.00
(NTS)



SHIELLS ROAD - TYPICAL SECTION 2

"S" STA: 5+53.35 TO 5+83.35
"S" STA: 6+58.35 TO 6+88.35
(NTS)



TYPICAL CONFORM DETAIL


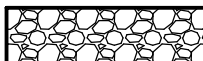

(NTS)

TI	R-VALUE	STRUCTURE PAVEMENT SECTION (ft)					
		OPTION 1		OPTION 2		OPTION 3	
		FULL-DEPTH HMA	HMA	AB	HMA	AB	AS
9	15	1.10	0.45	1.50	0.75	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

LEGEND:

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

NOTES:

- FOR GENERAL NOTES & ABBREVIATIONS, SEE SHEET C-1.
- CONTRACTOR SHALL COMPACT UPPER 0.5' OF SUBGRADE SOIL BELOW PAVEMENT SECTION TO 95% RELATIVE COMPACTION.
- 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.
- THE MATERIALS (HMA, AB AND AS) TO BE USED AND THEIR PLACEMENT AND COMPACTION SHOULD COMPLY WITH THE REQUIREMENTS OF CALTRANS STANDARD SPECIFICATIONS (2010).

NO	REVISIONS	DATE	APPROVED

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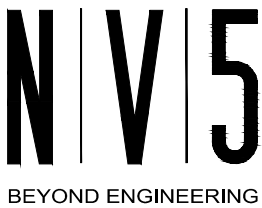

Serving to do the best

SHIELLS ROAD BRIDGE REPLACEMENT

TYPICAL SECTIONS & DETAILS

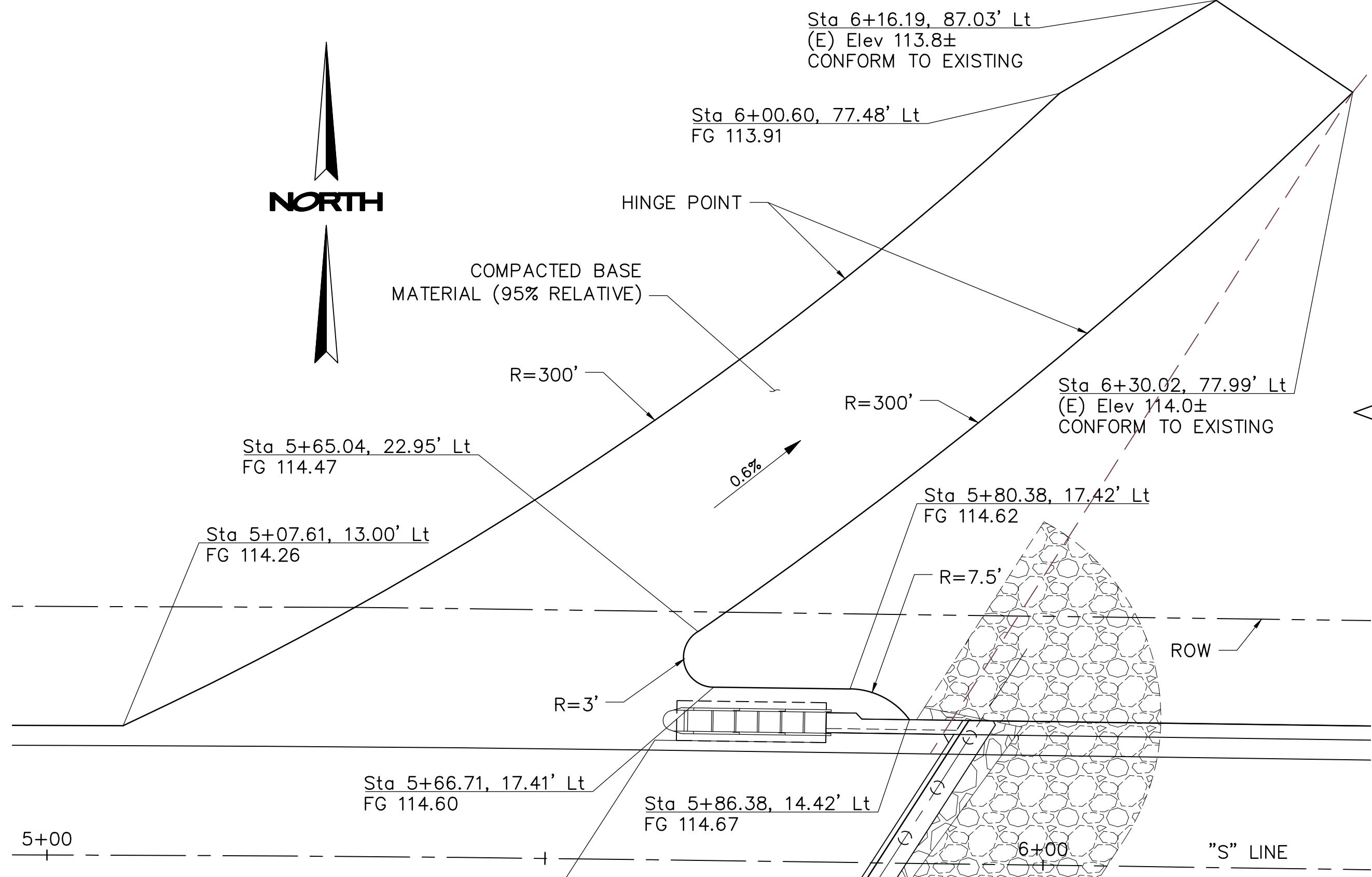
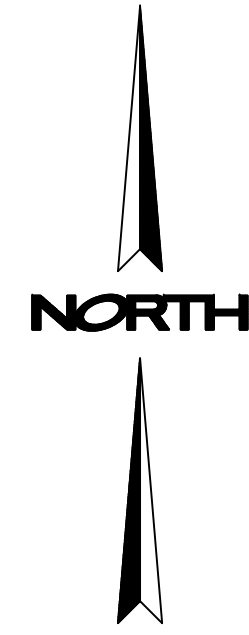
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DATE 2/15/17
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SHEET NUMBER
X-1
3 OF 23 SHEETS

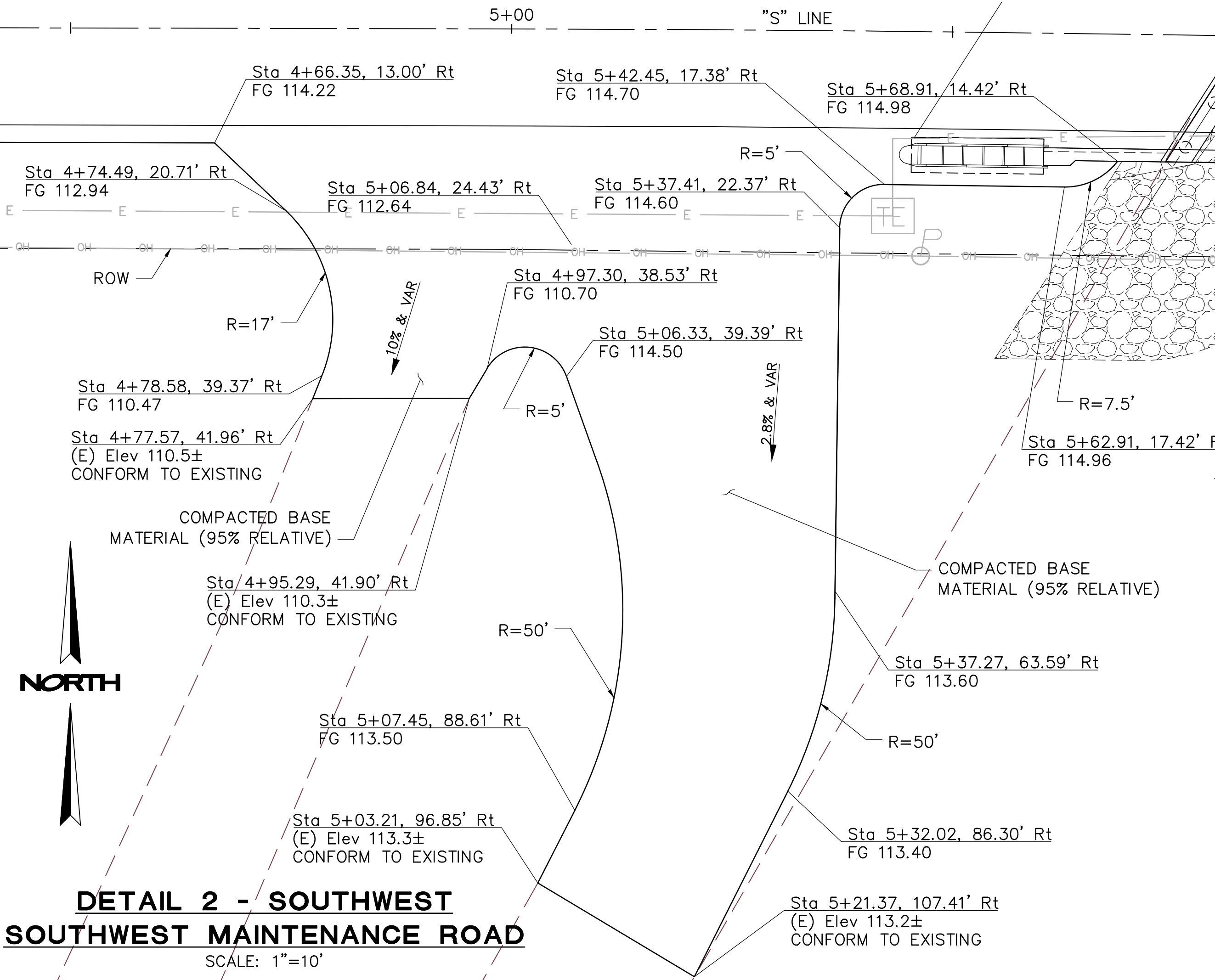


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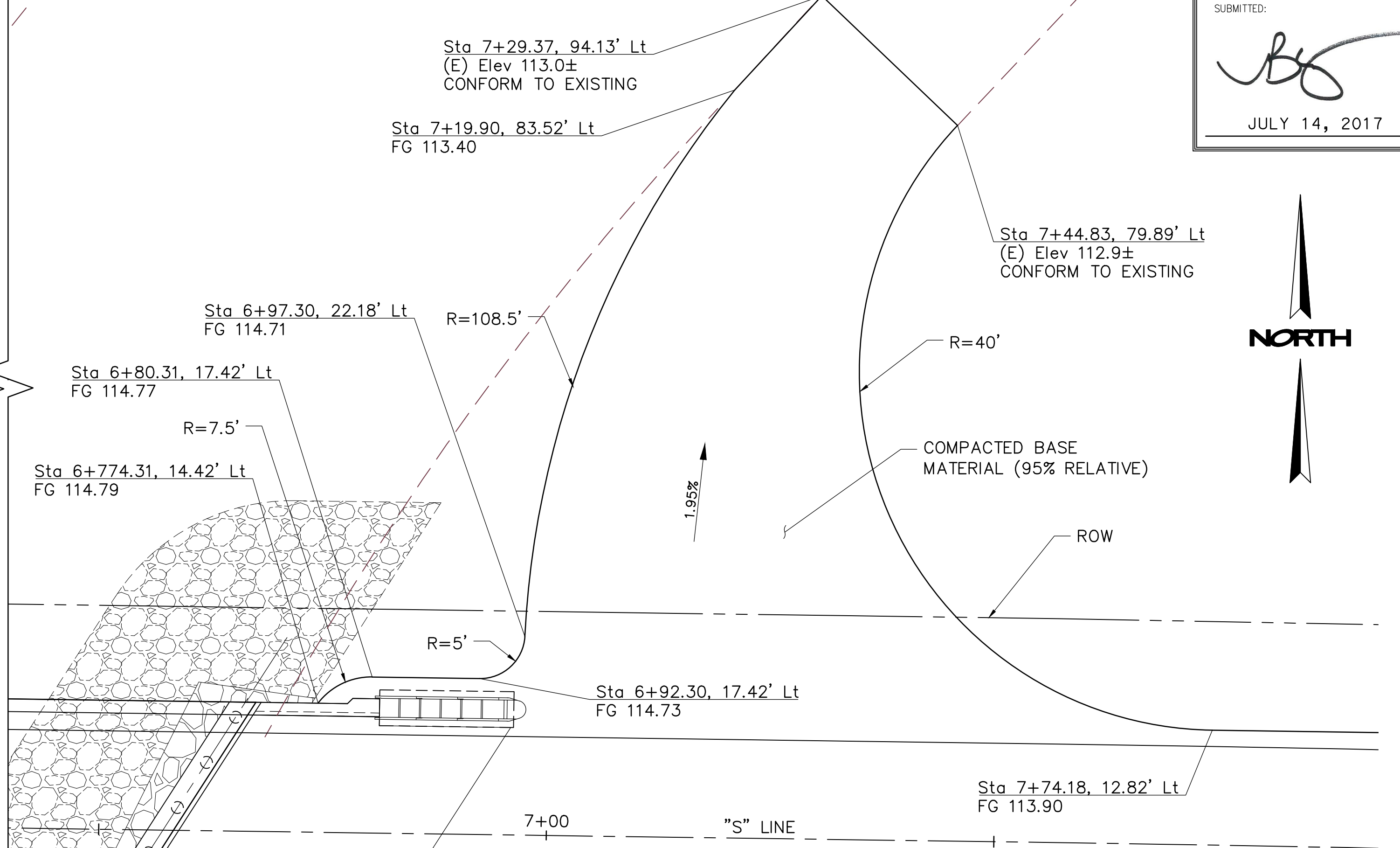




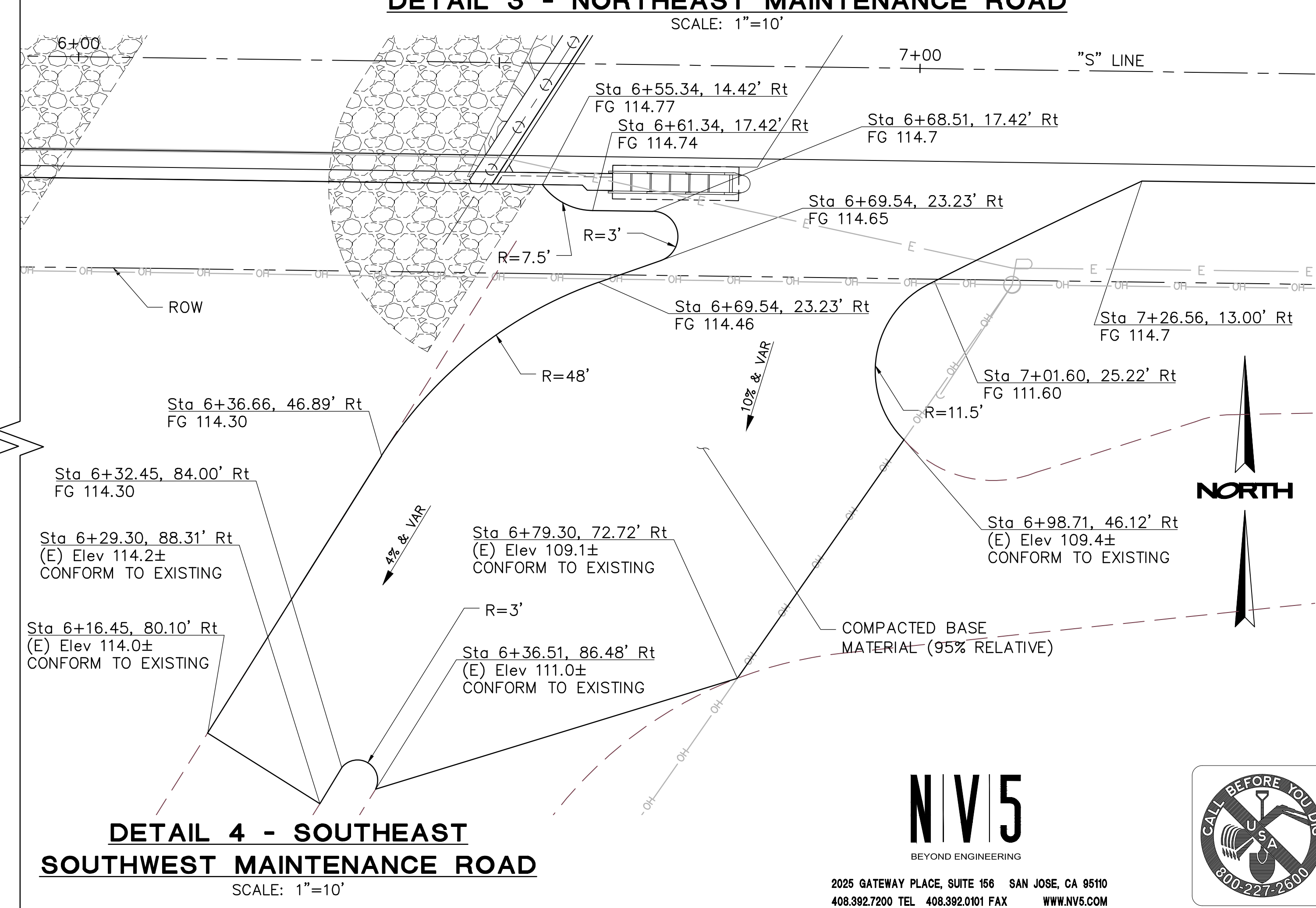
DETAIL 1 - NORTHWEST MAINTENANCE ROAD
SCALE: 1"=10'



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



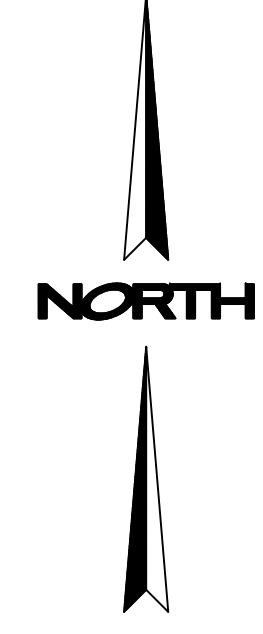
DETAIL 3 - NORTHEAST MAINTENANCE ROAD
SCALE: 1"=10'



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

SUBMITTED: 
JULY 14, 2017

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



DATE	APPROVED
DATE	DATE
NO	NO

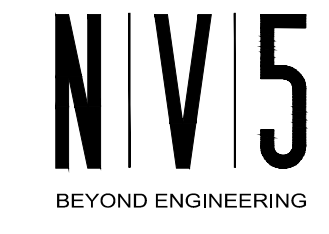
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SHIELDS ROAD BRIDGE REPLACEMENT
CONSTRUCTION DETAILS - 1

JOB NO SAB048800
DATE 7/17/17
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DT-1
4 OF 23 SHEETS



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SHIELDS ROAD BRIDGE REPLACEMENT

CONSTRUCTION DETAILS - 2

DATE 7/14/17

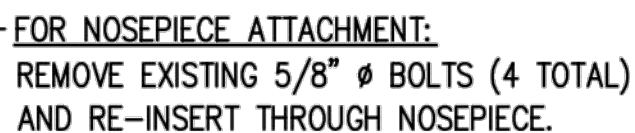
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DT 2

D1-2

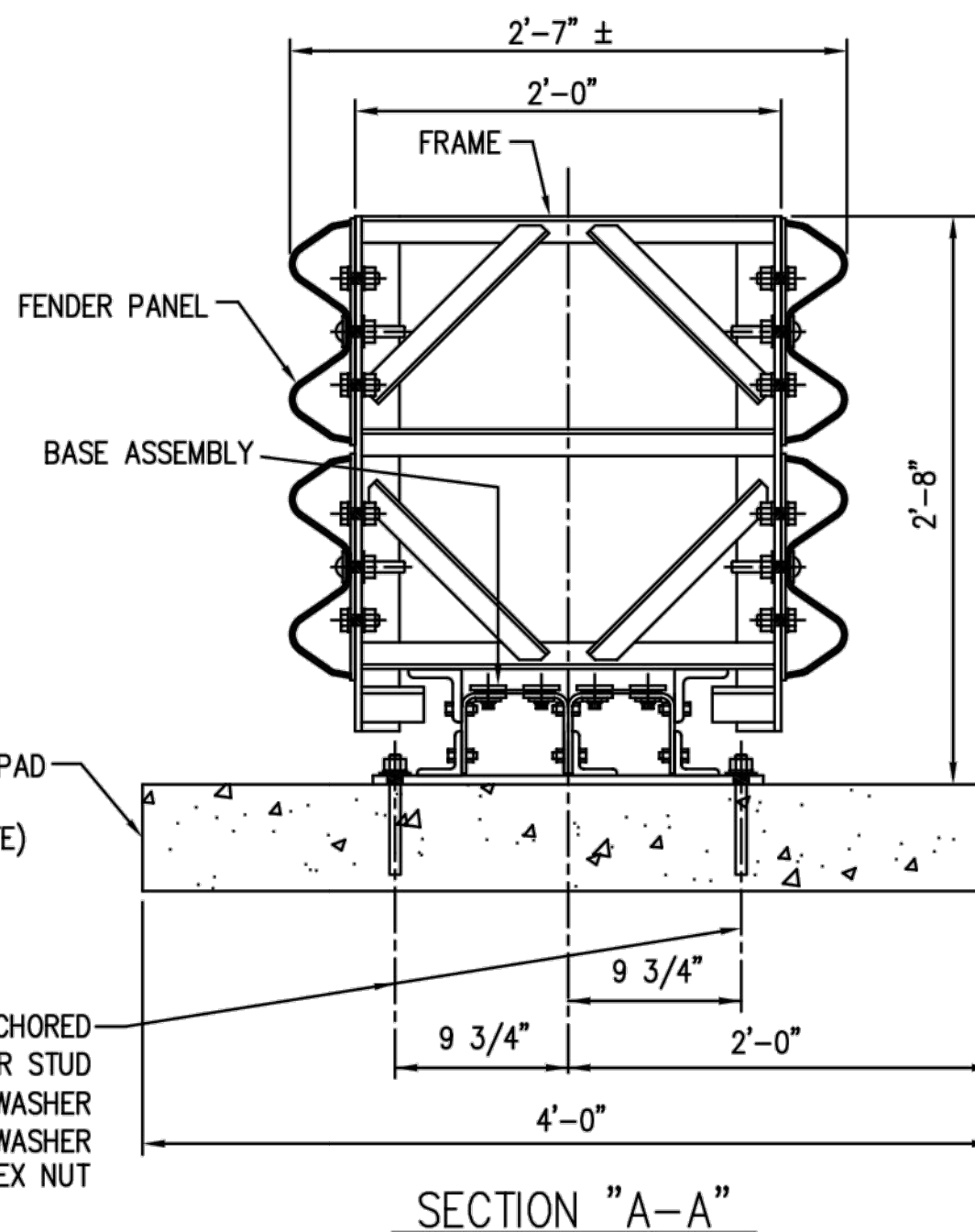
5 OF 23 SHEETS



EACH TRACC UNIT SHIPS 100 % ASSEMBLED
(PLASTIC NOSE INSTALLED AFTER PLACEMENT)

REINFORCED CONCRETE PAD
4'-0" x 6" THICK
(SEE FOUNDATION NOTE)

ADHESIVE ANCHORED-
5/8" Ø x 7 1/16" LG ANCHOR STUD
5/8" FLAT WASHER
5/8" LOCKWASHER
5/8" HEX NUT



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- a) 8" THICK MINIMUM UNREINFORCED CONCRETE
- b) 8" MINIMUM THICK ASPHALT
- c) 3" THICK (MIN) ASPHALT OVER 3" (MIN) CONCRETE
- d) 6" THICK ASPHALT OVER 6" COMPACTED SUBBASE.

[illegible]

N | V | 5
BEYOND ENGINEERING

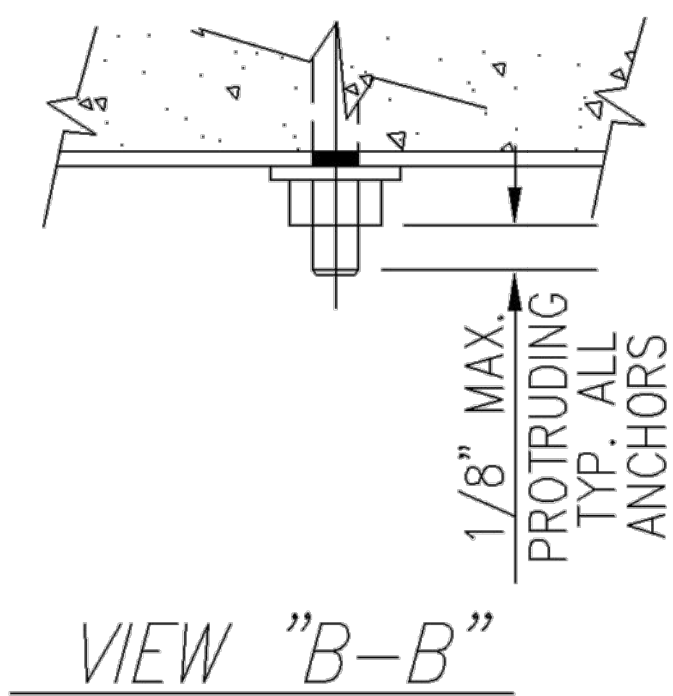
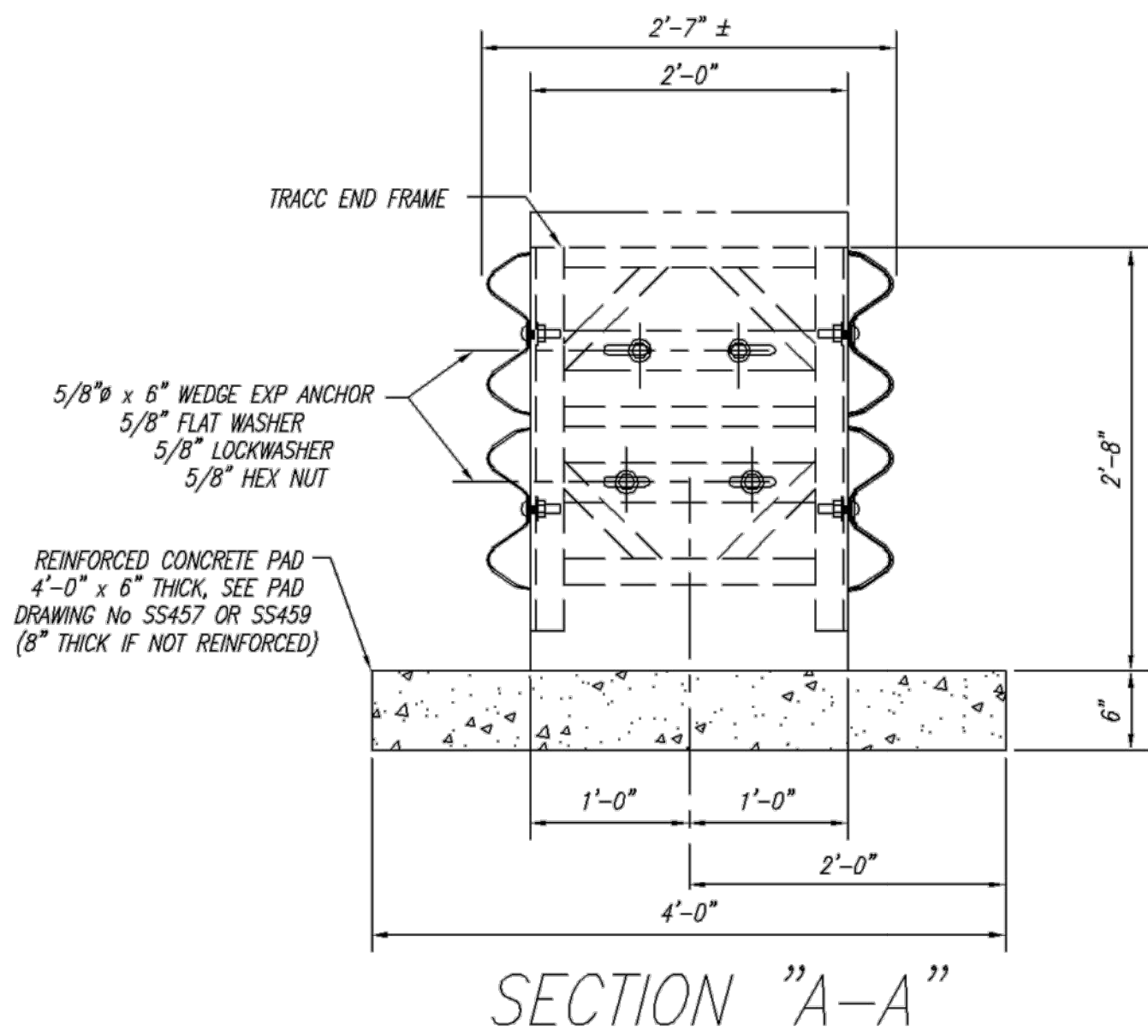
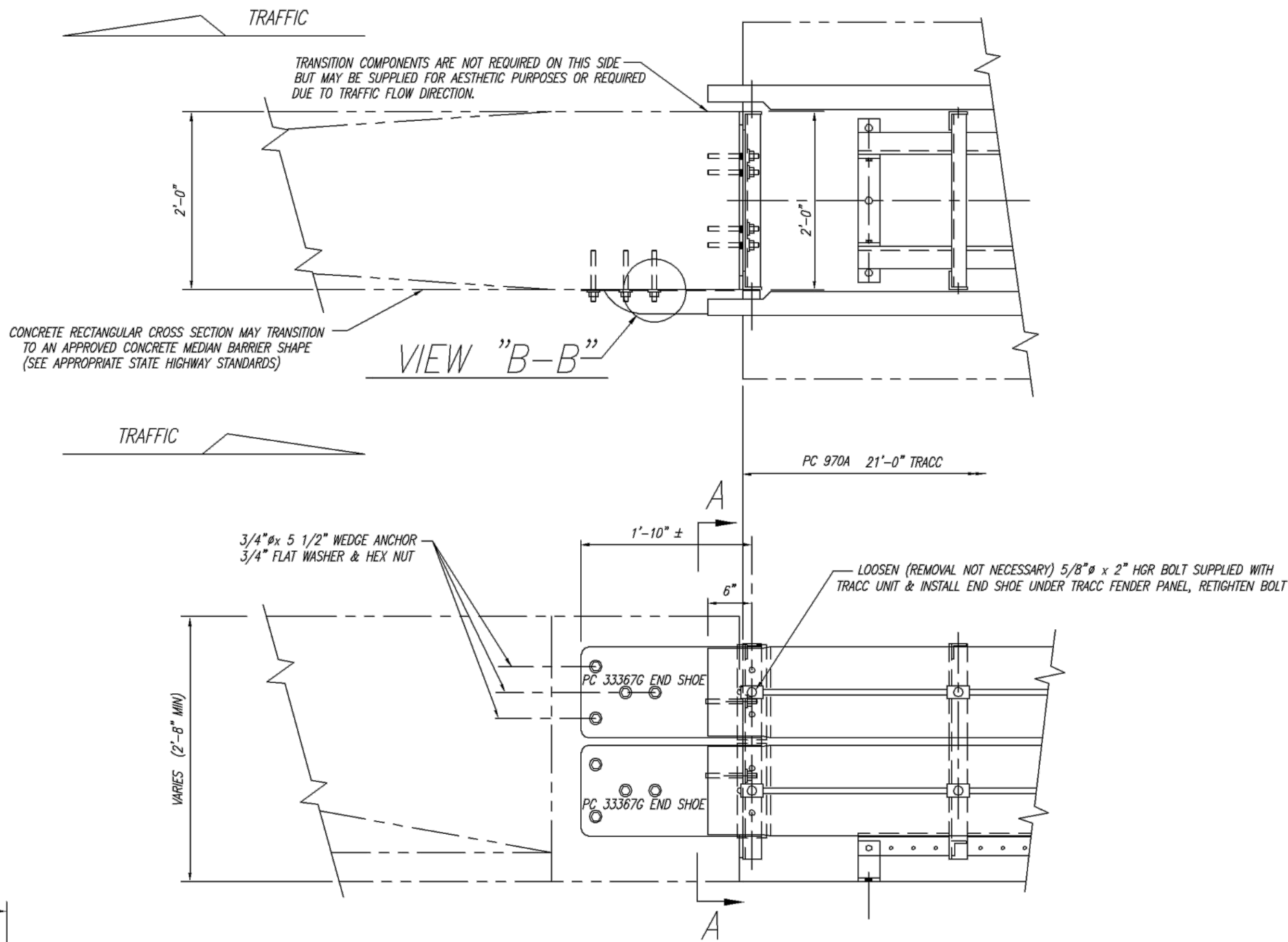
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PLOT DATE: July 14, 2017

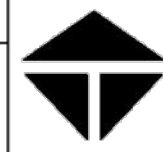
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TRACC TRANSITION BILL OF MATERIAL		
PRODUCT CODE	QTY	DESCRIPTION
33367G	2	TRACC 10GA END SHOE
HARDWARE		
3310G	4	5/8" LOCKWASHER
4451G	4	5/8" x 6" WEDGE EXP ANCHOR
4688G	8	3/4" x 5 1/2" WEDGE EXP ANCHOR



1	B.T.	L.H.	11/19/03	ADDED EXPANSION BOLT VIEW B-B
REV.	CHK'D	BY	DATE	REMARKS
				
TRACC TRANSITION TO VERTICAL CONCRETE WALL, PIER, PARAPET OR BARRIER PLAN, ELEVATION & SECTIONS				DRAWN B.T.
				CHECKED
				APPROVED
				DATE 9-7-00
				ENG. FILE # SS456-01E
				SHT.No. E1 OF 1
				DRAWING NO. SS 456
				REV. 1

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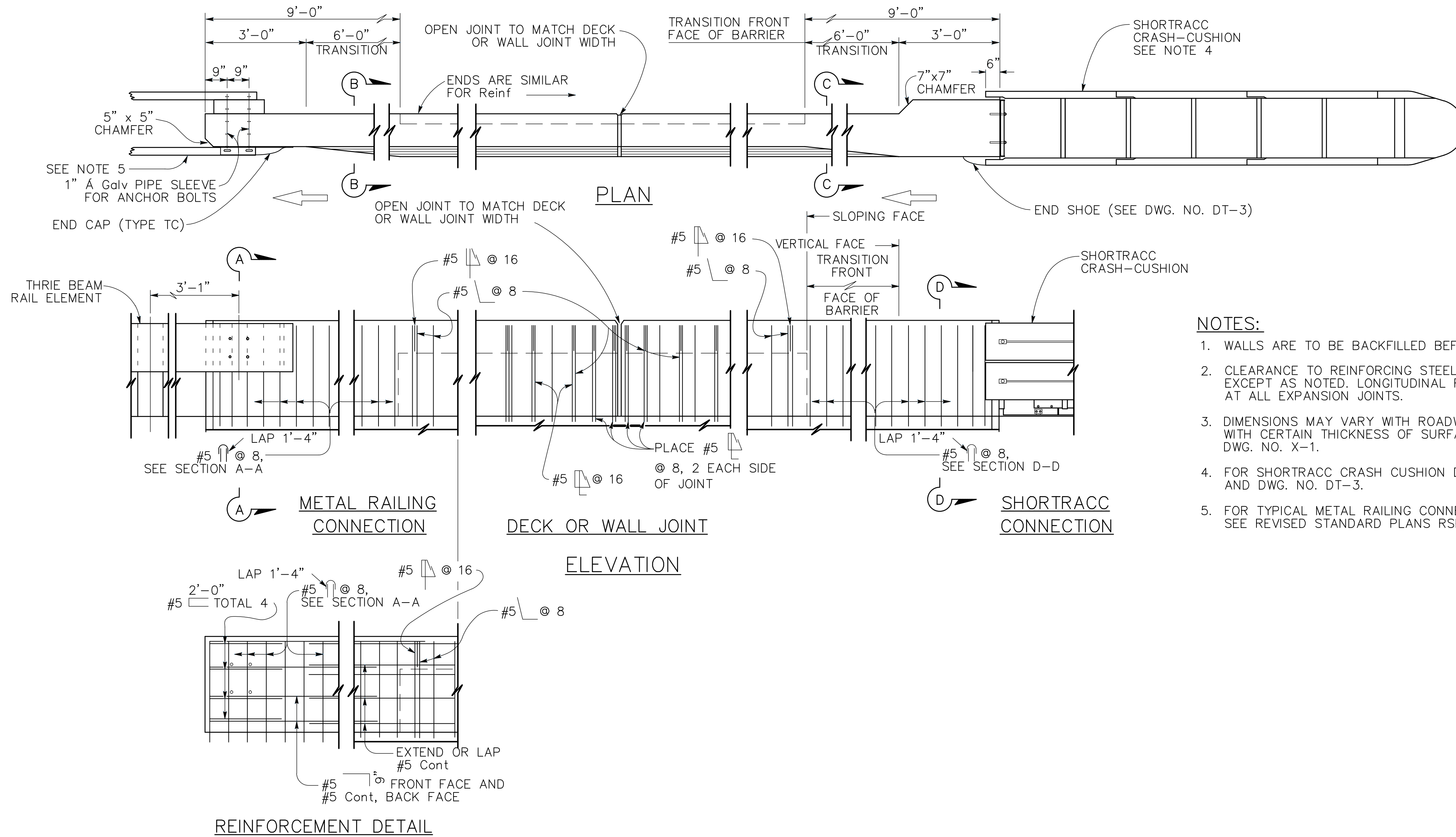
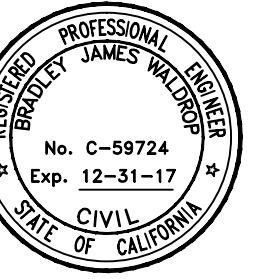
 **TRINITY INDUSTRIES, INC.**
HIGHWAY SAFETY PRODUCTS
2525 STEMMONS FREEWAY, DALLAS, TX 75356

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NO	REVISIONS	DATE	APPROVED
	DESCRIPTIONS		



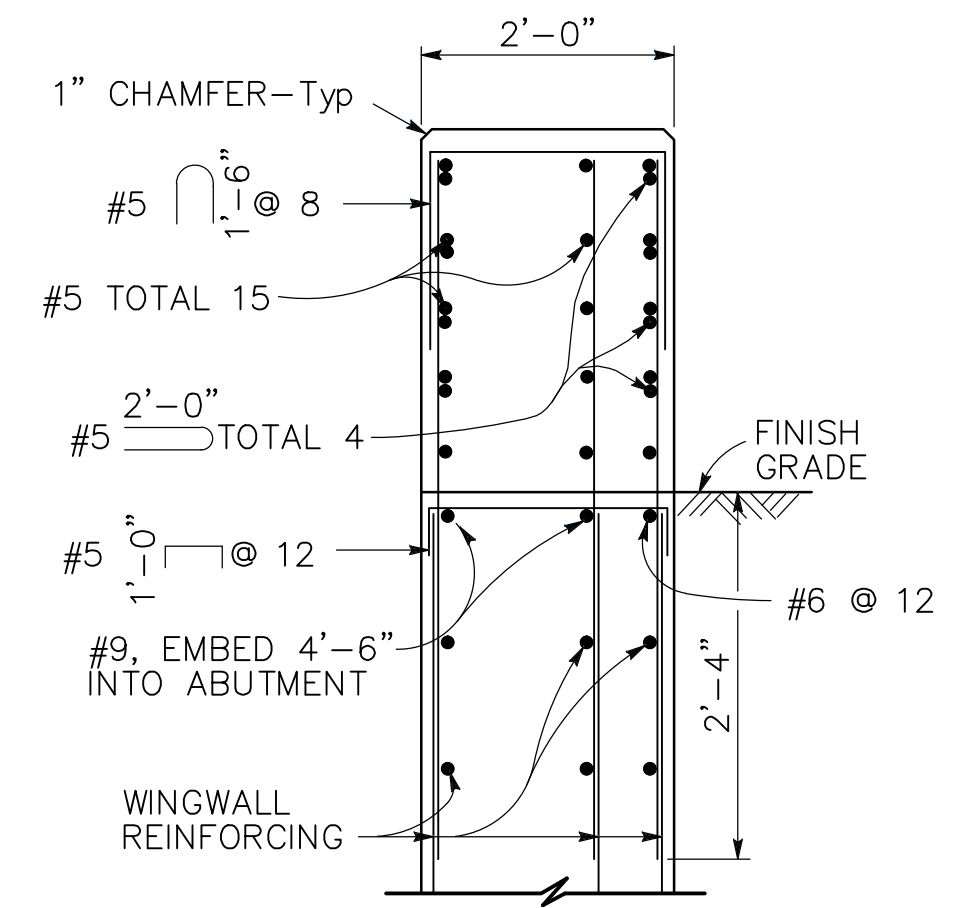
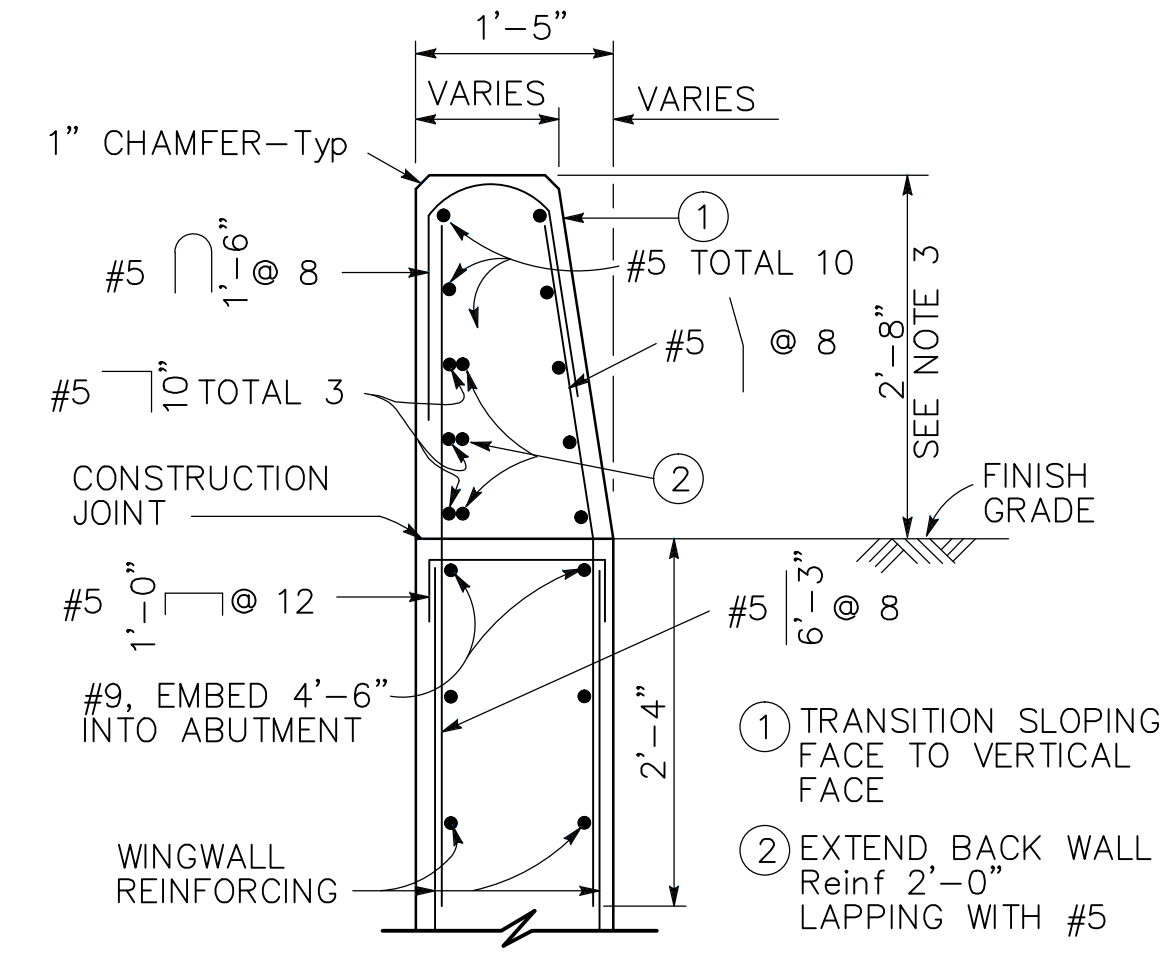
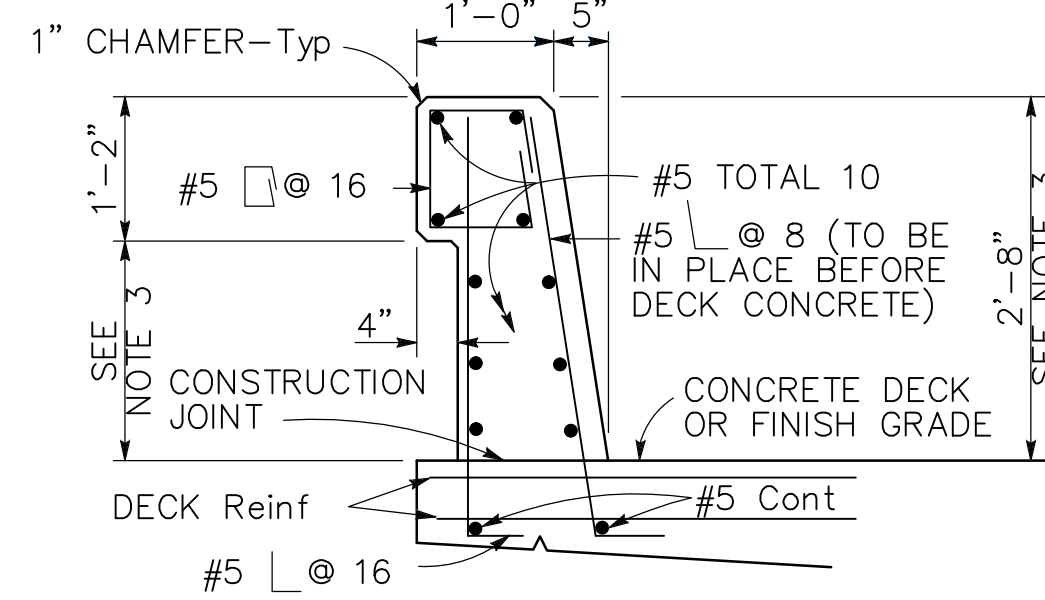
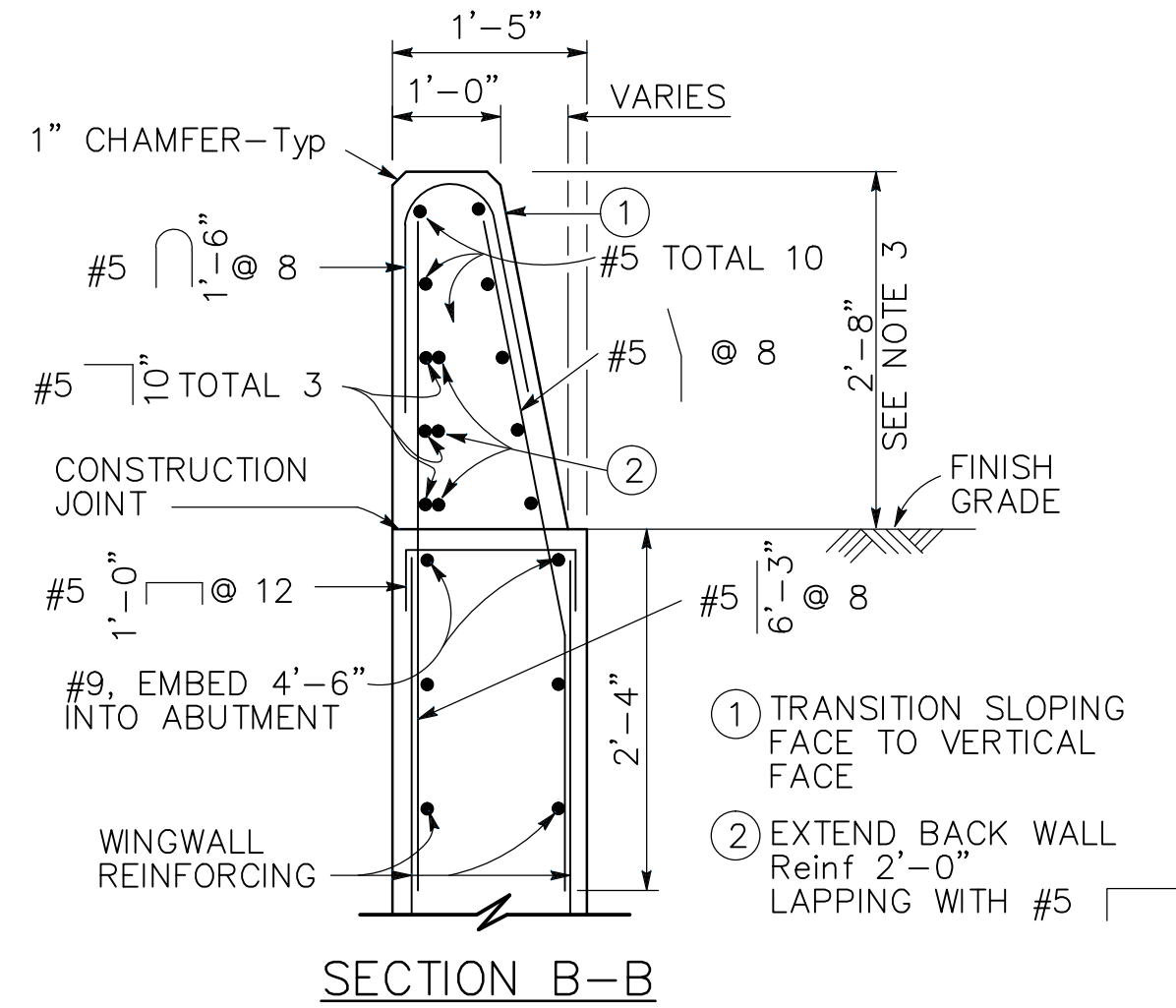
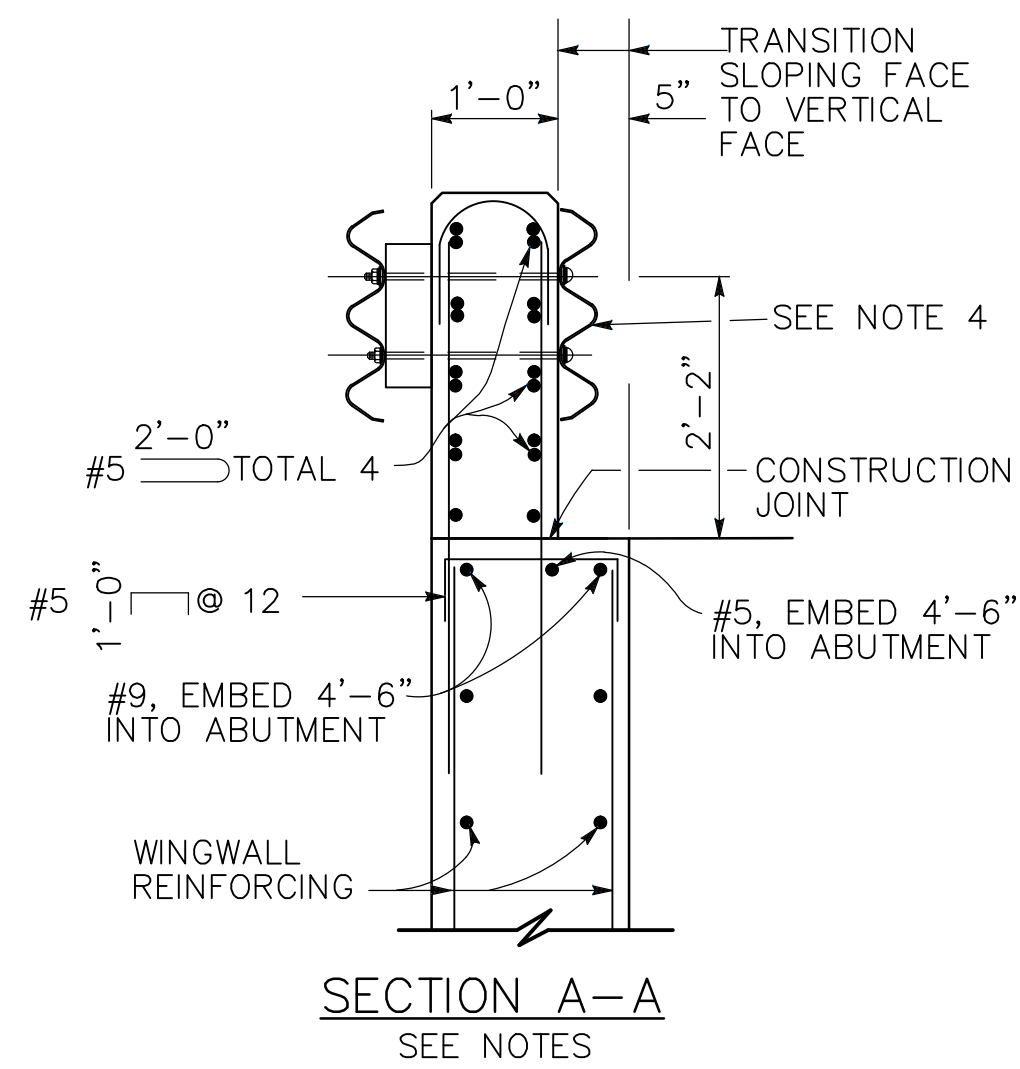
SUBMITTED:

JULY 14, 2017



NOTES:

1. WALLS ARE TO BE BACKFILLED BEFORE BARRIER IS PLACED.
2. CLEARANCE TO REINFORCING STEEL IN BARRIER TO BE 1", EXCEPT AS NOTED. LONGITUDINAL REINFORCEMENT TO STOP AT ALL EXPANSION JOINTS.
3. DIMENSIONS MAY VARY WITH ROADWAY CROSS SLOPE AND WITH CERTAIN THICKNESS OF SURFACING. SEE TYPICAL SECTIONS DWG. NO. X-1.
4. FOR SHORTRACC CRASH CUSHION DETAILS, SEE DWG. NO. DT-2 AND DWG. NO. DT-3.
5. FOR TYPICAL METAL RAILING CONNECTION DETAILS NOT SHOWN, SEE REVISED STANDARD PLANS RSP A77U1 AND RSP A77U2.



CONCRETE BARRIER TYPE 732 MOD - DETAIL

NTS

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SHIELDS ROAD BRIDGE REPLACEMENT

CONSTRUCTION DETAILS - 4

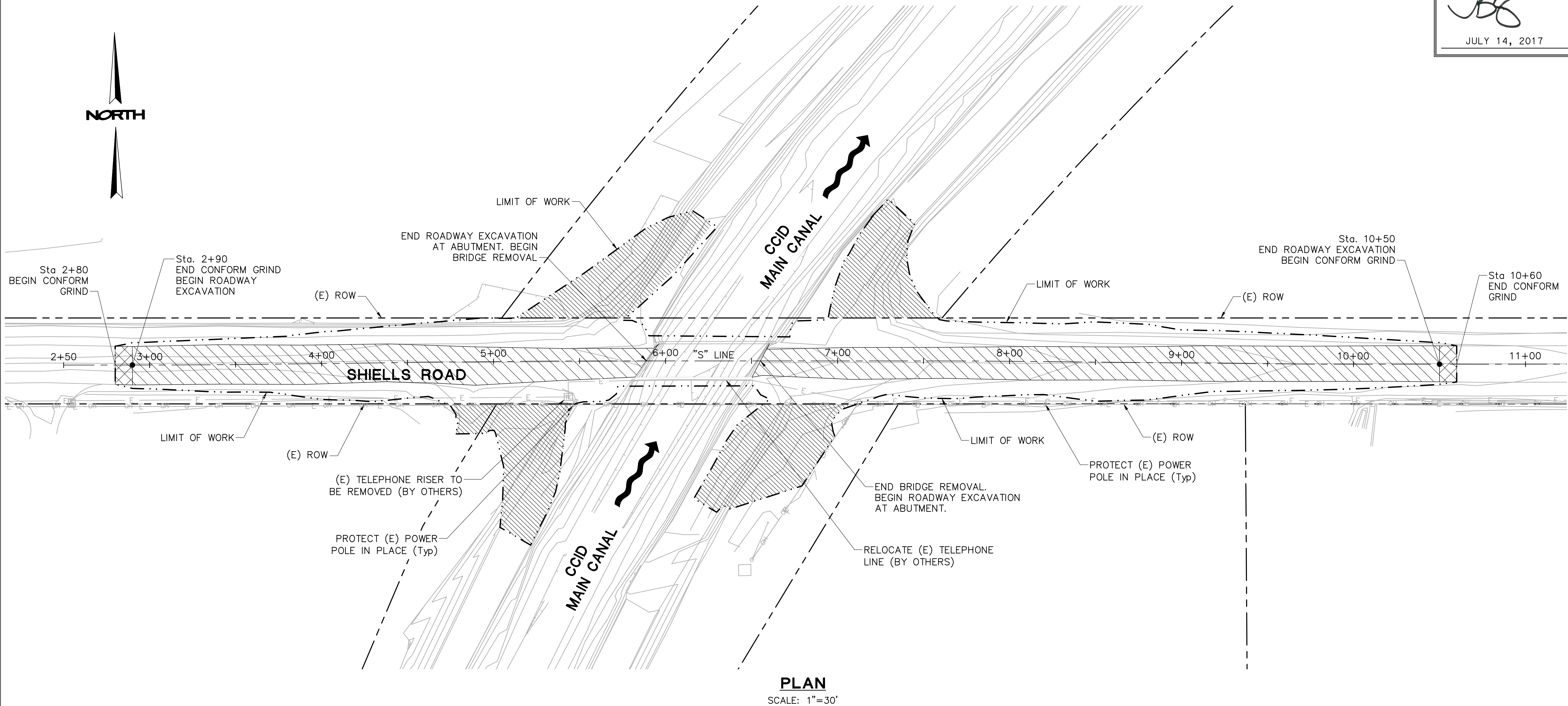
JOB NO SAB048800
DATE 7/14/17
DR BY BW
CK BY BW
SCALE AS SHOWN

SHEET
NUMBER
DT-4

7 OF 23 SHEETS

PLOT DATE: July 14, 2017

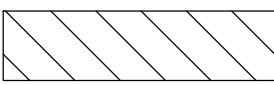
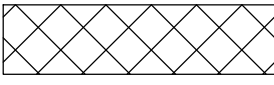


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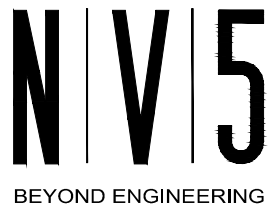
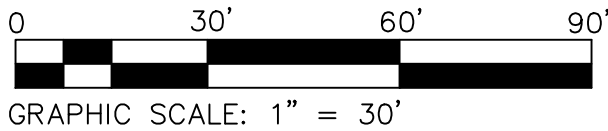


NOTES:

1. FOR ABBREVIATIONS AND DEMOLITION NOTES, SEE SHEET C-1.
2. ALL STATIONING AND OFFSET CALLOUTS ARE BASED OF THE "S" LINE UNLESS NOTED OTHERWISE.

LEGEND:

-  ROADWAY EXCAVATION
-  CONFORM GRIND
-  TEMPORARY CONSTRUCTION EASEMENT (T.C.E.)
-  DIRECTION OF FLOW



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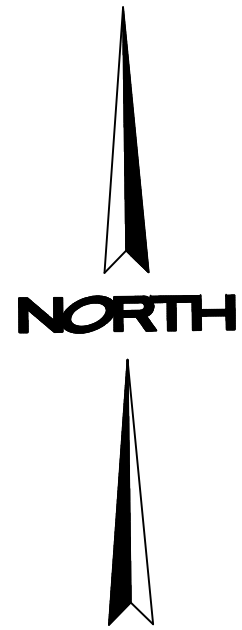


SHIELDS ROAD BRIDGE REPLACEMENT

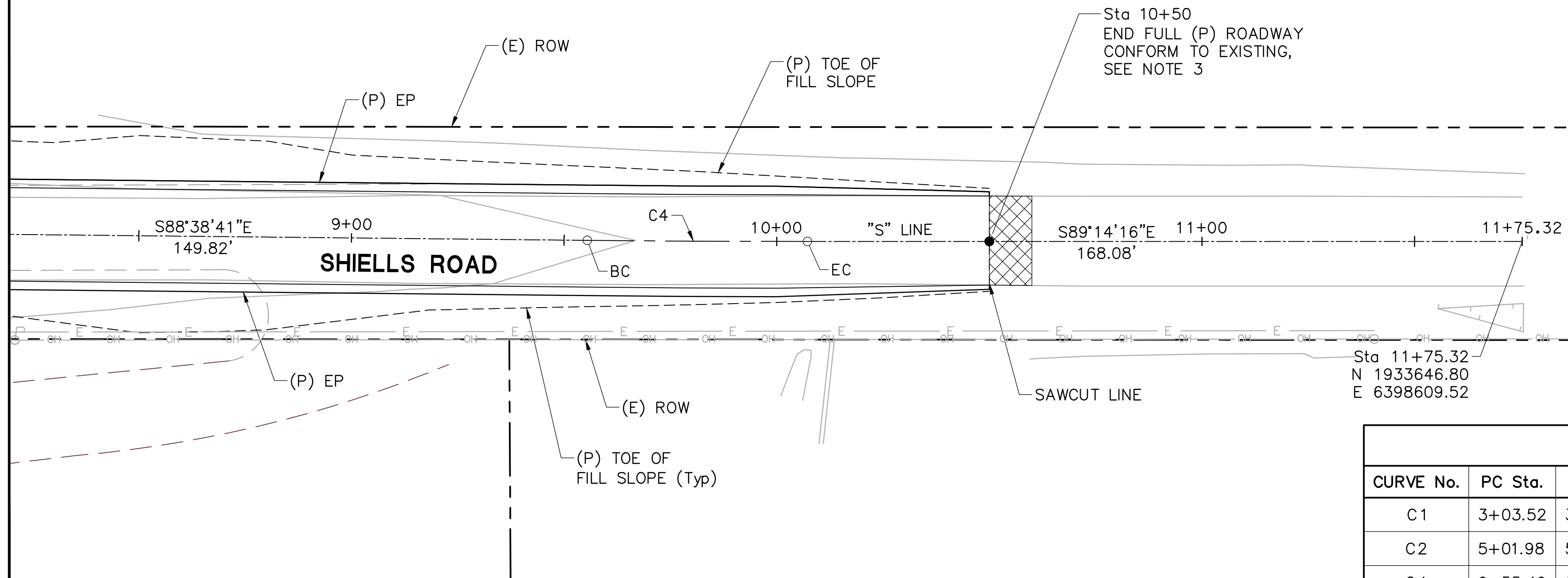
DEMOLITION PLAN

JOB NO SAB048800
DATE 3/27/17
DR BY BW
CK BY BW
SCALE AS SHOWN

SHEET NUMBER
DM-1
8 OF 23 SHEETS



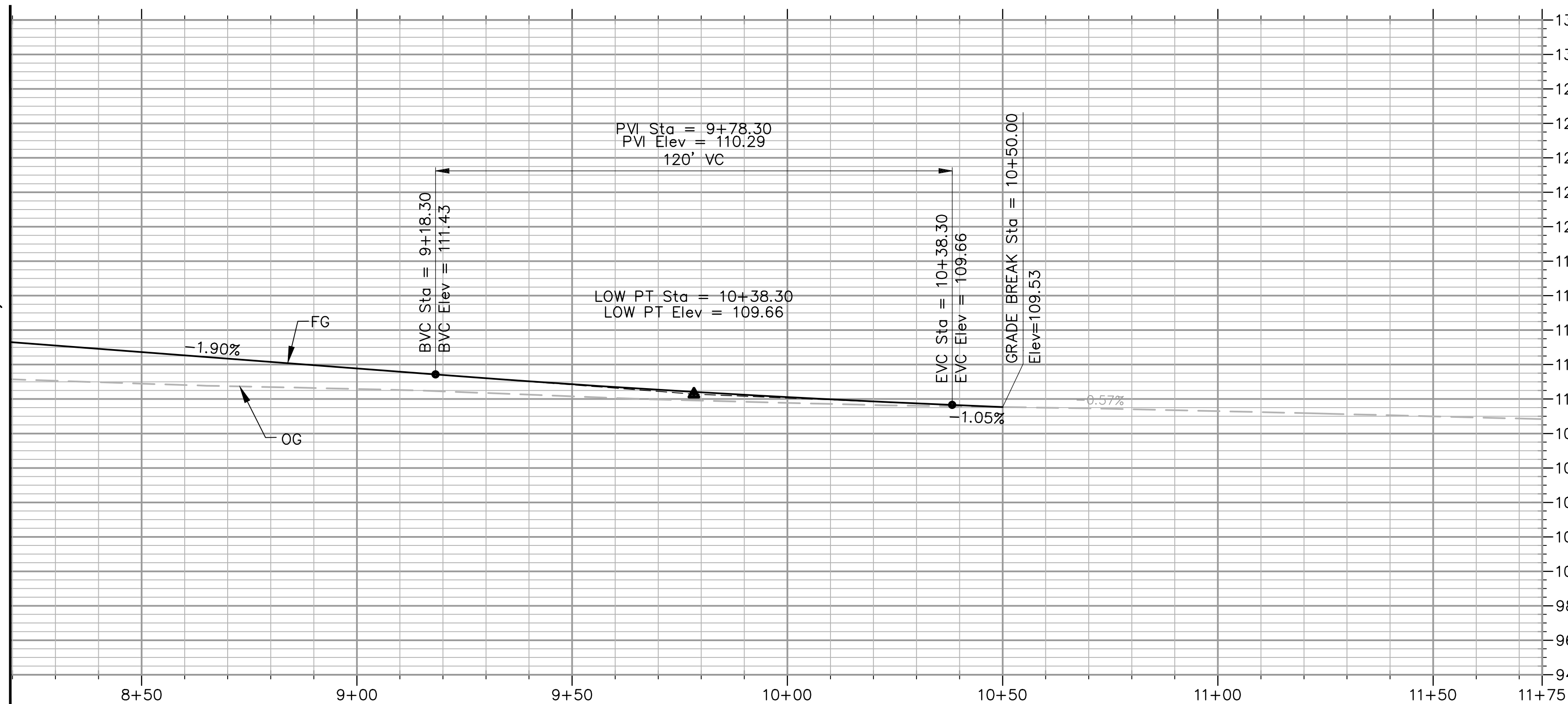
MATCH LINE TO Sta. 8+20, SEE SHEET PP-1



PLAN
1"=20'

"S" CURVE TABLE						
CURVE No.	PC Sta.	PT Sta.	RADIUS	LENGTH	TANGENT	DELTA ANGLE
C1	3+03.52	3+59.16	5000.00'	55.64'	27.82'	0°38'15"
C2	5+01.98	5+60.73	5000.00'	58.76'	29.38'	0°40'24"
C4	9+55.49	10+07.24	5000.00'	51.75'	25.87'	0°35'35"

MATCH LINE TO Sta. 8+20, SEE SHEET PP-1



PROFILE - "S" LINE

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

NOTES:

- FOR LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET C-1.
- CONFORM NEW ROAD TO EXISTING PER TYPICAL CONFORM DETAIL, SHEET X-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 "S" LINE.

SUBMITTED:

[Signature]

JULY 14, 2017



PREPARED UNDER THE DIRECTION OF:		DATE:	
NO	REVISIONS	DATE	APPROVED
	DESCRIPTIONS		

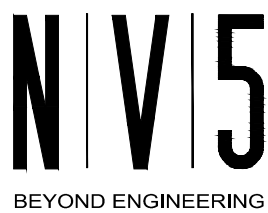
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358

SHIELLS ROAD BRIDGE REPLACEMENT

PLAN & PROFILE - 2

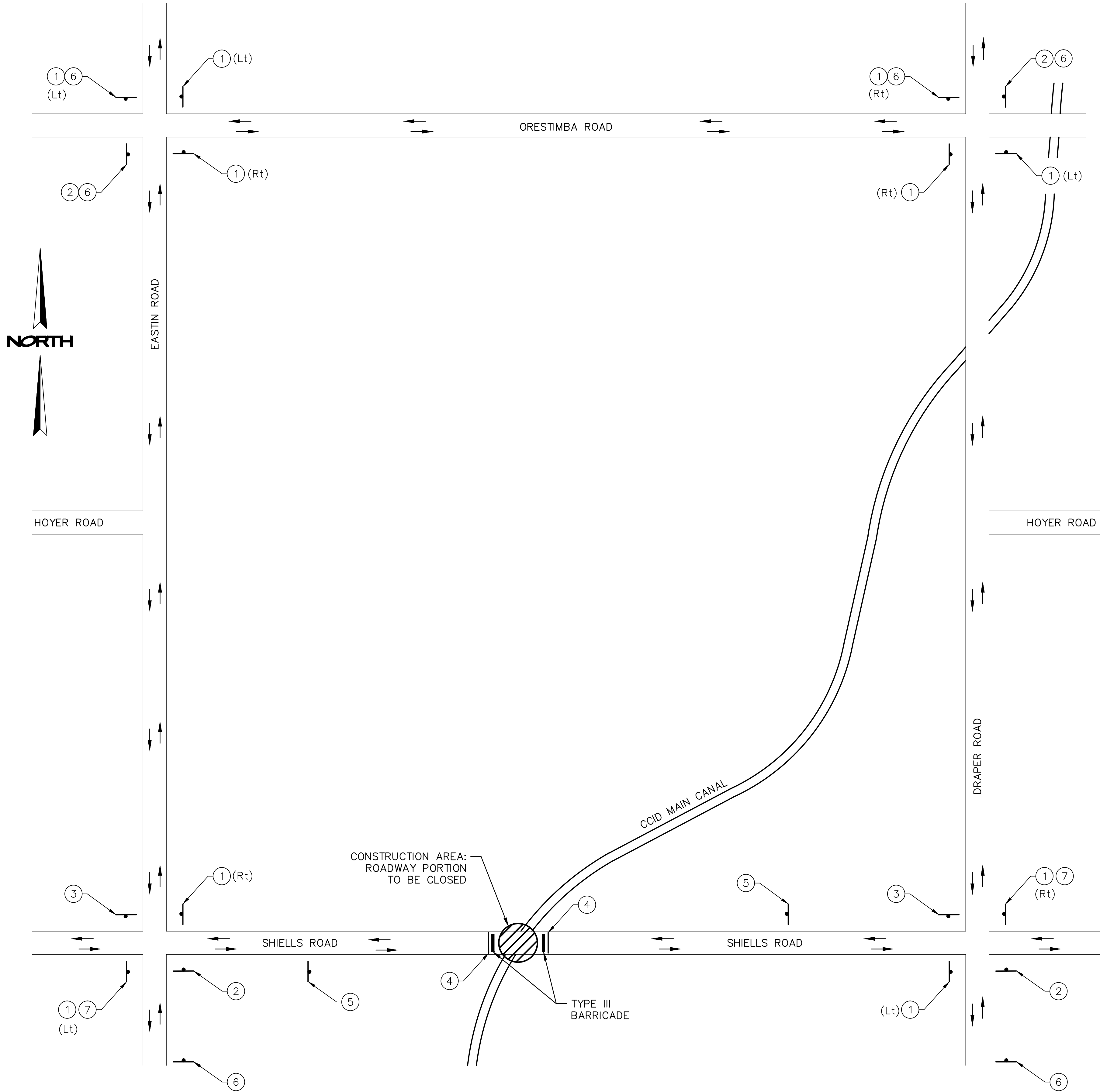
JOB NO SAB048800
DATE 7/14/17
DR BY BW
CK BY BW
SCALE AS SHOWN

SHEET
NUMBER
PP-2
10 OF 23 SHEETS



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PLAN
NOT TO SCALE

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"	10	DETOUR ARROW
②	SC3 (CA)	48"x18"	2-4"x4"	4	DETOUR WITH ARROW
③	M4-8a	24"x18"	1-4"x4"	2	END DETOUR
④	R11-2	48"x30"	--	2	ROAD CLOSED
⑤	W20-3	48"x48"	1-4"x4"	2	ROAD CLOSED AHEAD
⑥	SPECIAL "A"	48"x48"	1-4"x4"	6	SHIELLS ROAD CLOSED BETWEEN EASTIN ROAD AND DRAPER ROAD USE DETOUR
⑦	SPECIAL "B"	60"x30"	2-4"x4"	2	ROAD CLOSED 1/2 MILE AHEAD LOCAL TRAFFIC ONLY

NOTES:

1. DURING CONSTRUCTION OF BRIDGE, VEHICULAR TRAFFIC SHALL BE DIRECTED TO THE DETOUR AS SHOWN ON THE PLAN FOR THE DURATION OF THE PROJECT.
2. SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
3. FOR TYPE III BARRICADE DETAILS, SEE CALTRANS STANDARD PLAN A73C.

SHIELLS ROAD
CLOSED
BETWEEN EASTIN
ROAD AND
DRAPER ROAD
USE DETOUR

SPECIAL "A"
(BLACK LETTERS ON ORANGE BACKGROUND)

ROAD CLOSED
1/2 MILE AHEAD
LOCAL TRAFFIC ONLY

SPECIAL "B"
(BLACK LETTERS ON ORANGE BACKGROUND)

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SUBMITTED:

JULY 14, 2017

DATE: _____	
REVISIONS	DATE
DESCRIPTIONS	APPROVED
NO	

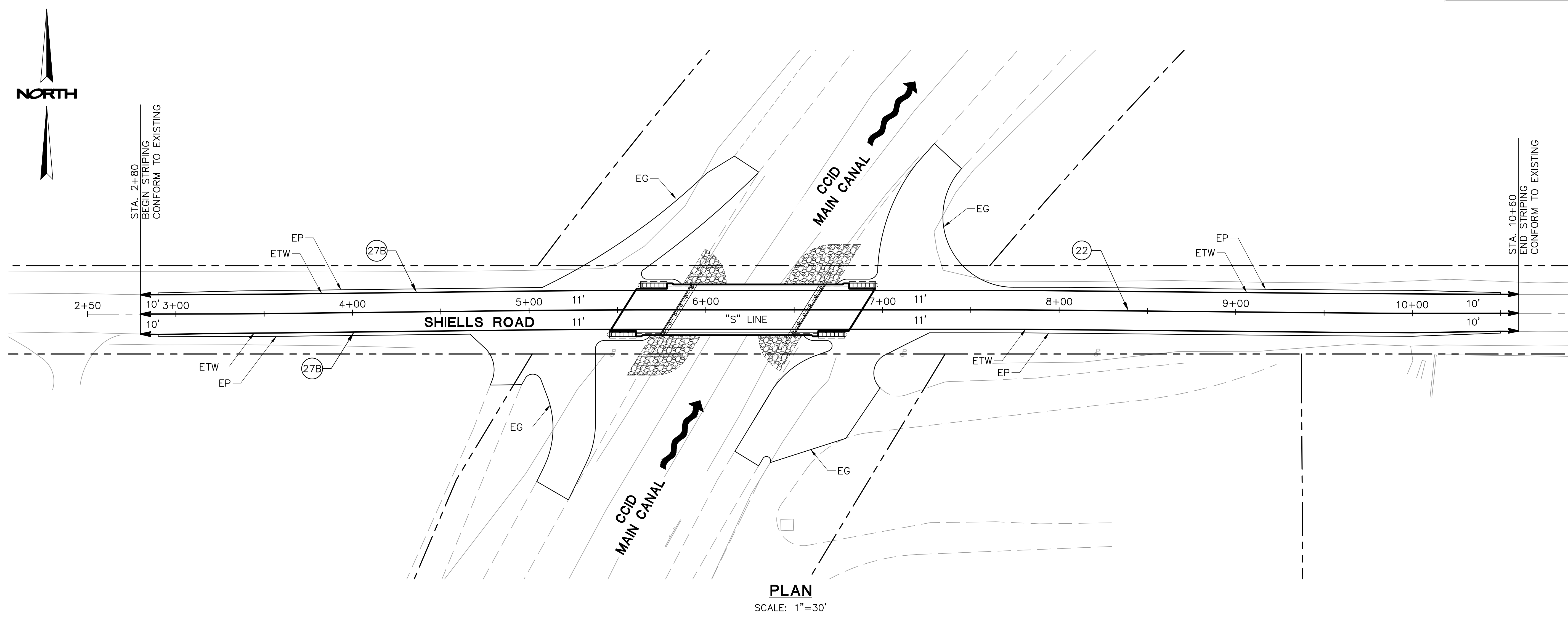
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



SHIELLS ROAD BRIDGE REPLACEMENT
DETOUR PLAN

JOB NO SAB048800
DATE 7/14/17
DR BY BW
CK BY BW
SCALE AS SHOWN

SHEET
NUMBER
DE-1
11 OF 23 SHEETS

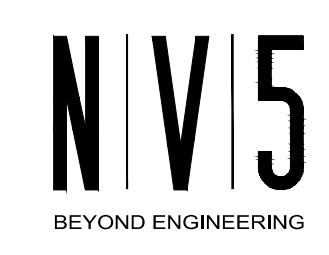
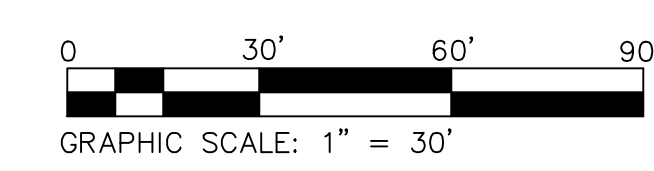


NOTES:

- FOR LIST OF ABBREVIATIONS, SEE SHEET C-1.
- PAVEMENT MARKINGS TO BE THERMOPLASTIC. ALL STRIPING TO BE V.O.C. COMPLIANT PAINT.

LEGEND:

- (XX) PAVEMENT DELINEATION DETAIL, PER CALTRANS STANDARD PLANS A20A TO A20D
- X—X— DENOTES THE LIMIT OF THE DESIGNATED LINE OR CHANGE OF PAVEMENT DELINEATION DETAIL



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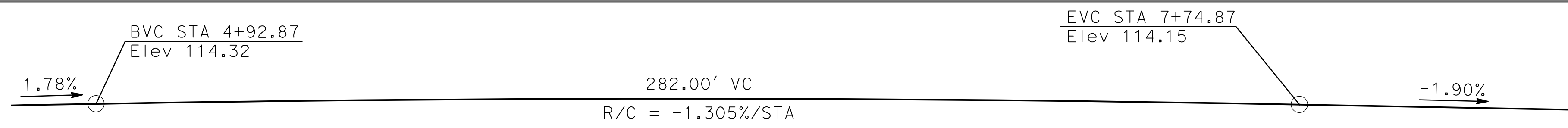

Striving to do the best

SHIELLS ROAD BRIDGE REPLACEMENT

PAVEMENT DELINEATION

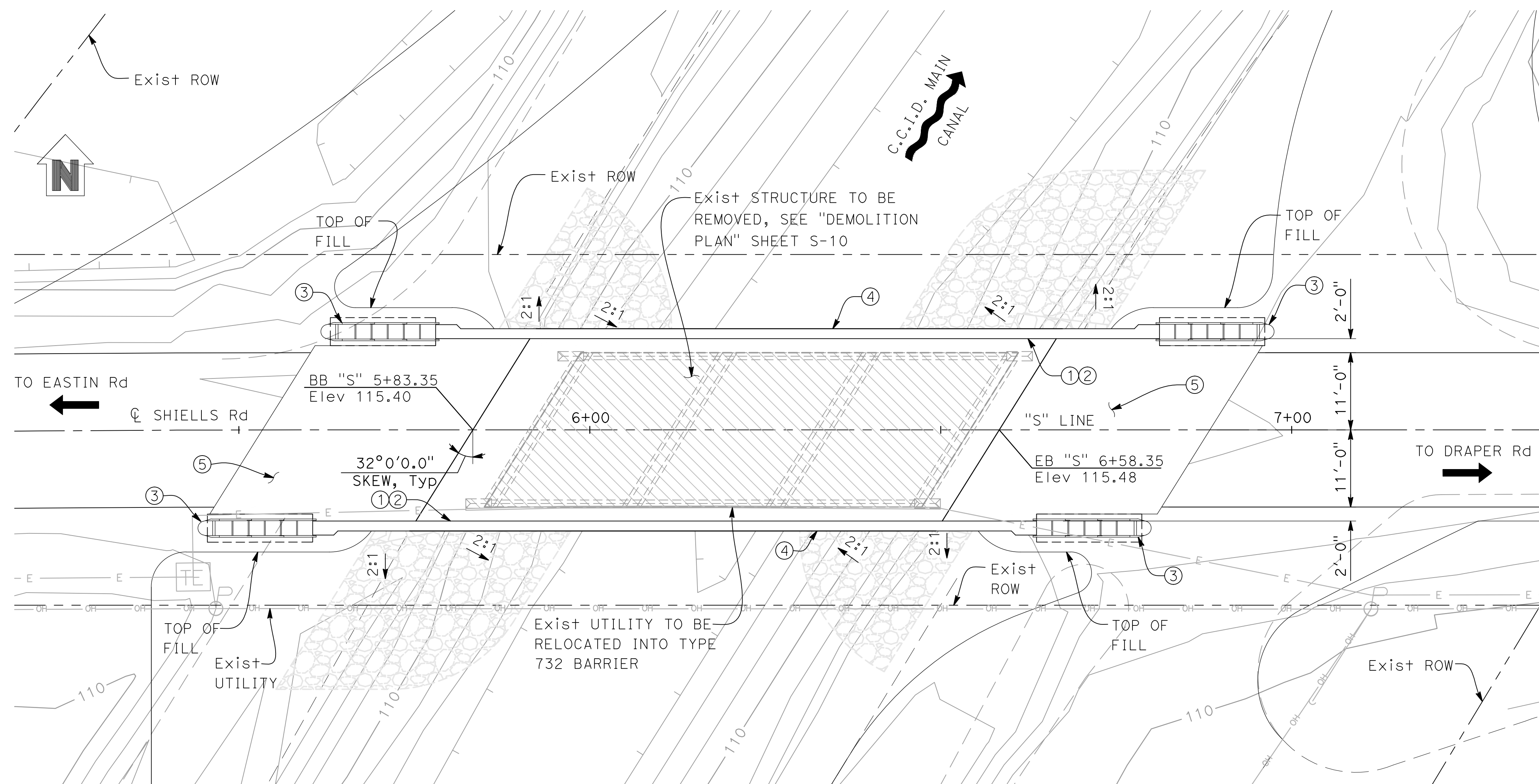
JOB NO SAB048800
DATE 3/10/16
DR BY BW
CK BY BW
SCALE AS SHOWN

SHEET NUMBER
PD-1
12 OF 23 SHEETS



PROFILE GRADE
NO SCALE

ELEVATION
1" = 10'



PLAN
1" = 10'

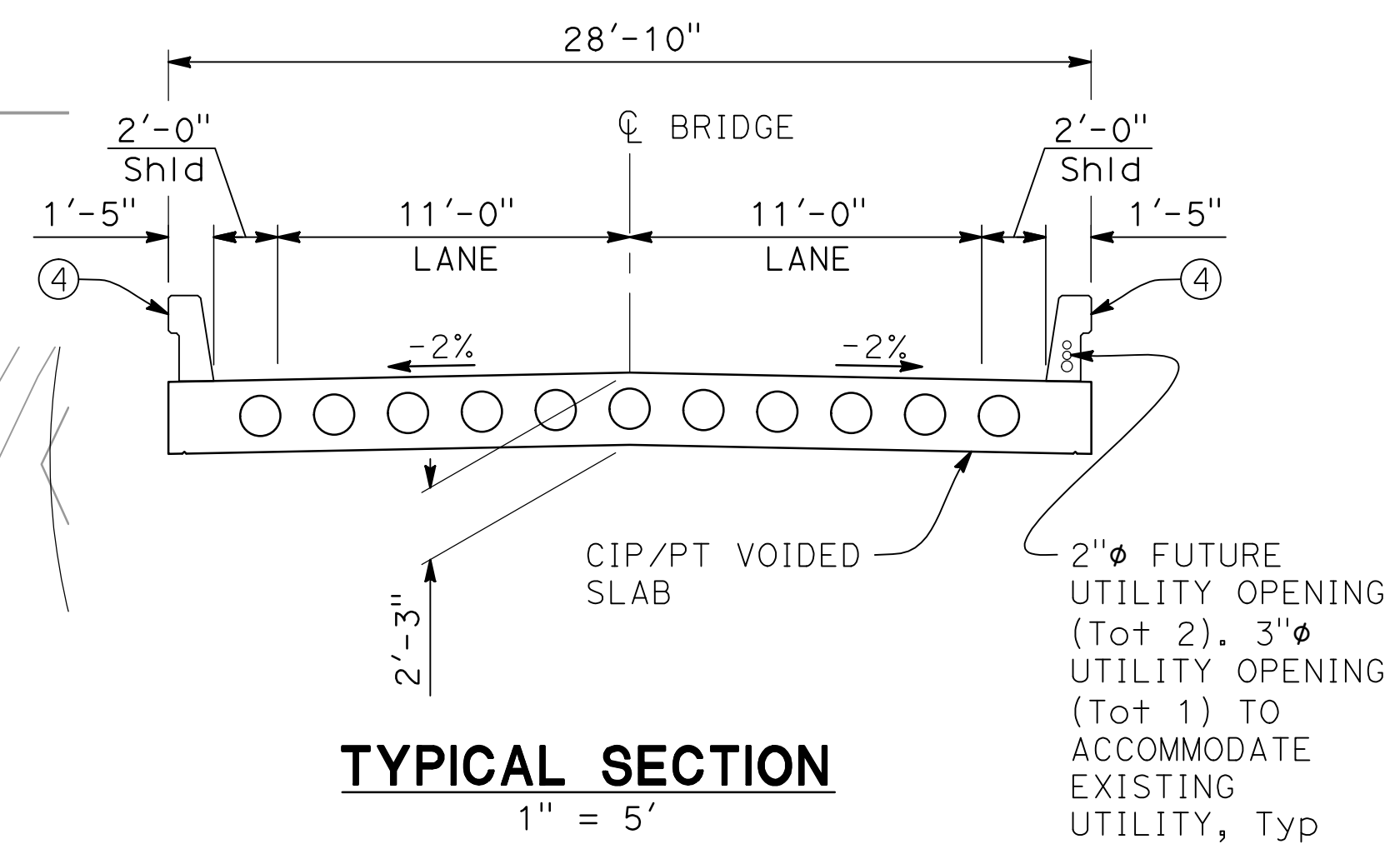
NOTE:
THE CONTRACTOR SHALL VERIFY ALL
CONTROLLING FIELD DIMENSIONS BEFORE
ORDERING OR FABRICATING ANY MATERIALS.

SUBMITTED:

JULY 14, 2017
REGISTERED PROFESSIONAL ENGINEER
No. C-59724
Exp. 12-31-17
CIVIL
STATE OF CALIFORNIA

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	TYPICAL SECTION
S-7	SLAB DETAILS
S-8	ROCK SLOPE PROTECTION
S-9	STRUCTURE APPROACH TYPE N(30D)
S-10	DEMOLITION PLAN
S-11	LOG OF TEST BORINGS



TYPICAL SECTION
1" = 5'

LEGEND:

- ① PAINT "Br No. 38C-0180"
- ② PAINT "SHIELDS ROAD BRIDGE"
- ③ SHORTRACC CRASH CUSHION SYSTEM, SEE "CONSTRUCTION DETAILS" SHEETS DT-1 & DT-2
- ④ CONCRETE BARRIER TYPE 732 (Mod)
- ⑤ STRUCTURAL APPROACH TYPE N(30D)
- EXISTING BRIDGE TO BE REMOVED
- INDICATES DIRECTION OF FLOW
- FOR HYDROLOGIC SUMMARY, SEE "FOUNDATION PLAN" SHEET S-3
- PROPOSED STRUCTURE
- EXISTING STRUCTURE
- INDICATES DIRECTION OF TRAFFIC

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

SHIELDS ROAD BRIDGE REPLACEMENT

GENERAL PLAN

JOB NO SAB048800
DATE 7/14/17
DR BY LLK
CK BY BW
SCALE AS SHOWN

SHEET
NUMBER
S-1

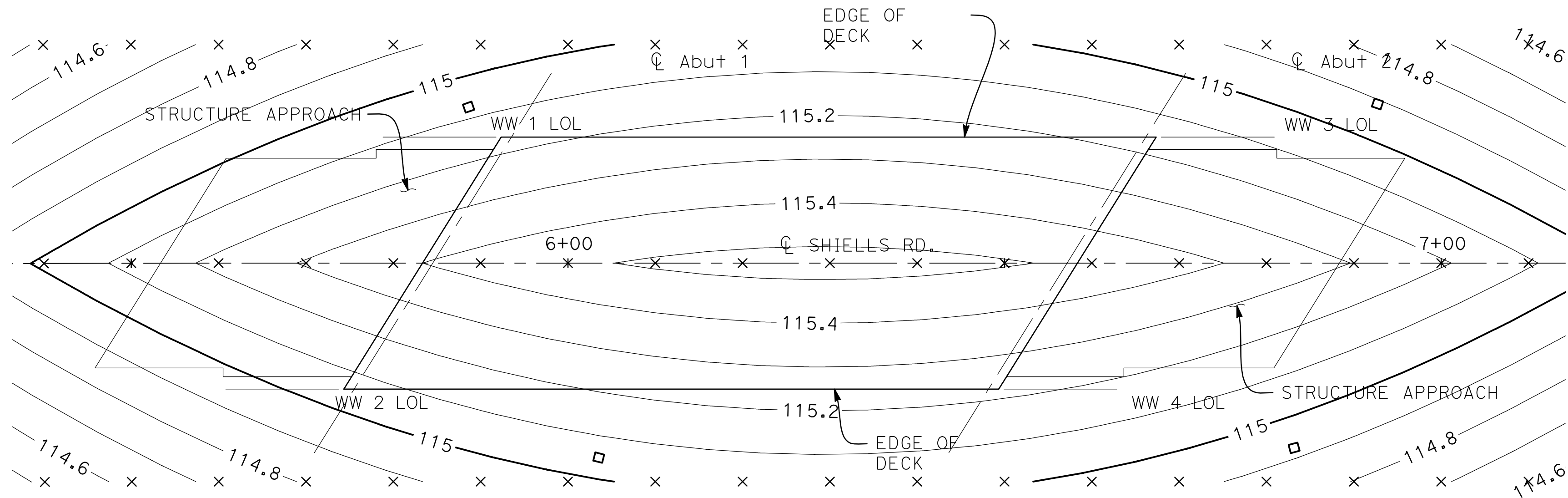
13 OF 23 SHEETS

LEGEND:

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

NOTES:

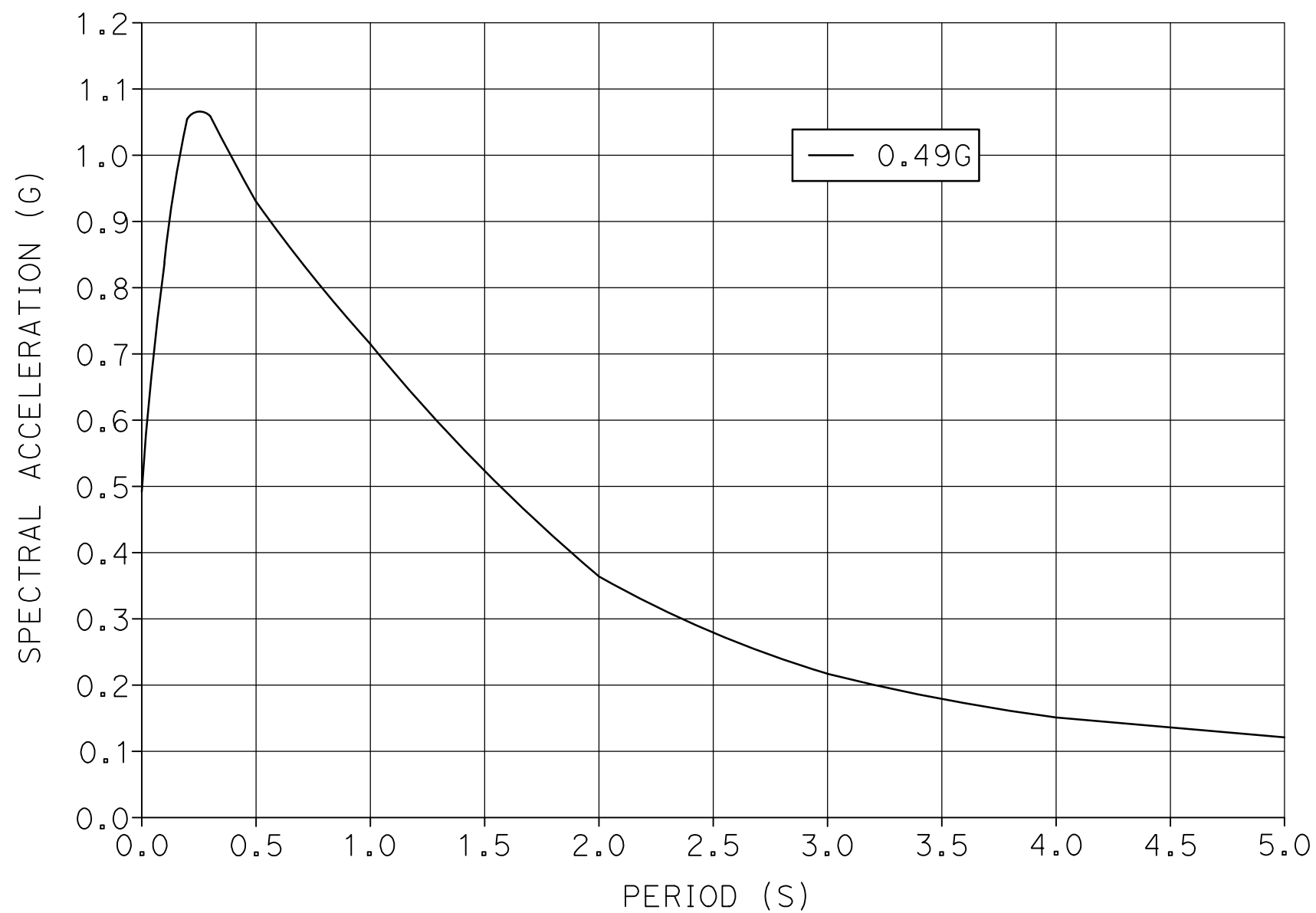
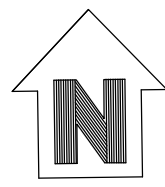
1. CONTOURS INDICATE TOP OF DECK ELEVATION.
2. CONTOURS DO NOT INCLUDE CAMBER OR FALSEWORK SETTLEMENT.
3. CONTOUR INTERVAL IS 0.10'.



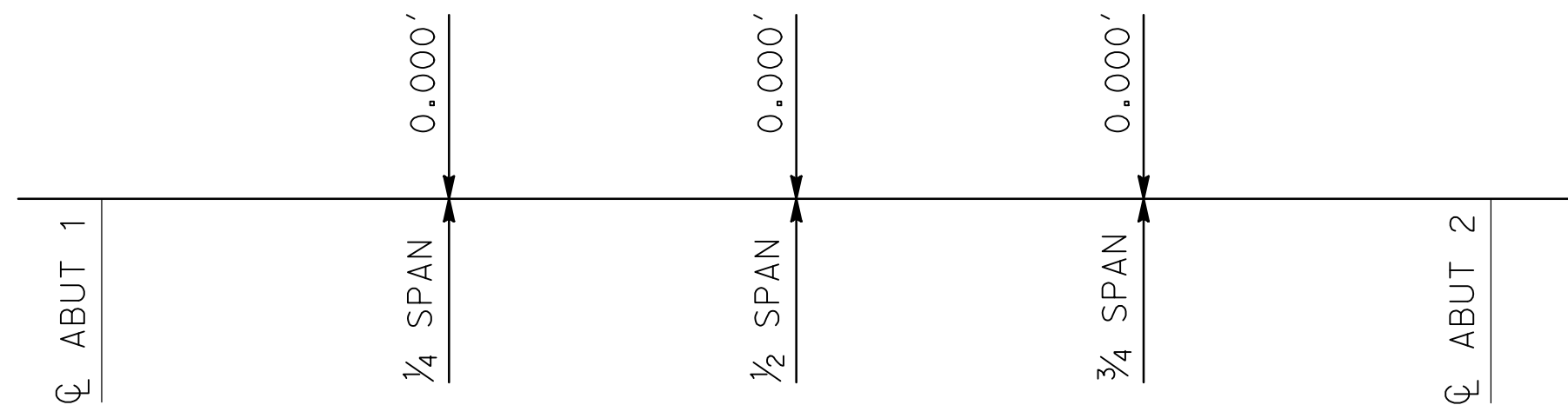
GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

- DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION AND THE CALIFORNIA AMENDMENTS V4.0, DATED DECEMBER 2008, SEPTEMBER 2010 & DECEMBER 2011; 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: $V_{S30} = 245$ m/s
MOMENT MAGNITUDE: $M_{MAX} = 6.6 \pm 0.25$
PEAK GROUND ACCELERATION = 0.49G
SEE 'ACCELERATION RESPONSE SPECTRA (5% DAMPING)'
- CONCRETE: $F_y = 60$ KSI
 $F'_c = 5.0$ KSI (UNLESS OTHERWISE SHOWN OR SPECIFIED)
 $N = 7$
SEE "PRESTRESSING NOTES" ON "SLAB DETAILS" SHEET

PLAN
1" = 10'

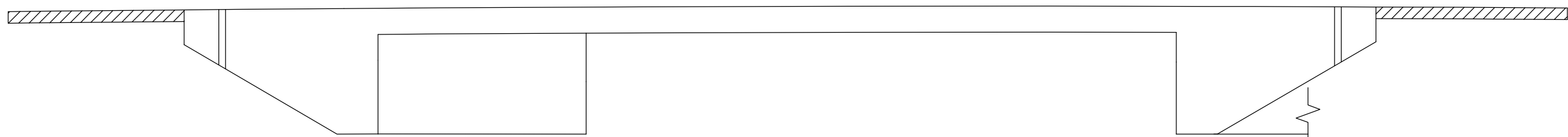


ACCELERATION RESPONSE SPECTRA (5% DAMPING)
NO SCALE



NOTE: DOES NOT INCLUDE ALLOWANCE FOR FALSEWORK SETTLEMENT

CAMBER DIAGRAM
NO SCALE



CONCRETE STRENGTH AND TYPE LIMITS
NO SCALE

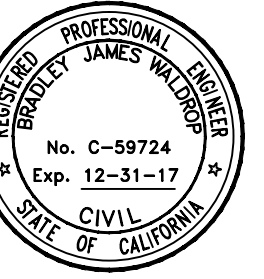
- STRUCTURAL CONCRETE, BRIDGE ($F'_c = 5.0$ KSI @ 28 DAYS)
- ▨ STRUCTURAL CONCRETE, APPROACH SLAB TYPE N(30D)

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

SUBMITTED:

[Signature]

JULY 14, 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)
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE
BO-1	BRIDGE DETAILS
BO-3	BRIDGE DETAILS
B2-8	PILE DETAILS CLASS 200
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
RSP B8-5	CAST-IN-PLACE POST-TENSIONED GIRDER DETAILS
RSP B11-55	CONCRETE BARRIER TYPE 732
B14-3	COMMUNICATION AND SPRINKLER CONTROL CONDUITS (CONDUITS LESS THAN 4")
RSP ES-9A	ELECTRICAL SYSTEMS (STRUCTURE PULL BOX INSTALLATIONS)
RSP ES-9B	ELECTRICAL SYSTEMS (CONDUIT RISER AND EXPANSION FITTING, STRUCTURE INSTALLATION)

ENGINEER'S ESTIMATE OF BRIDGE QUANTITIES

DESCRIPTION	UNIT	TOTAL QUANTITY
BRIDGE REMOVAL	LS	1
STRUCTURE EXCAVATION	CY	101
STRUCTURE BACKFILL	CY	42
FURNISH PILING (CLASS 200) (ALTERNATIVE 200)	LF	764
DRIVE PILE (CLASS 200) (ALTERNATIVE 200)	EA	12
PRESTRESSING CAST-IN-PLACE CONCRETE	LS	1
STRUCTURAL CONCRETE (BRIDGE)	CY	248
STRUCTURAL CONCRETE (APPROACH SLAB)	CY	58
JOINT SEAL (MR 1/2")	LF	68
BAR REINFORCING STEEL	LB	50,772
ROCK SLOPE PROTECTION (NO. 3, METHOD B)	CY	189
CONCRETE BARRIER (TYPE 732 MODIFIED)	LF	207



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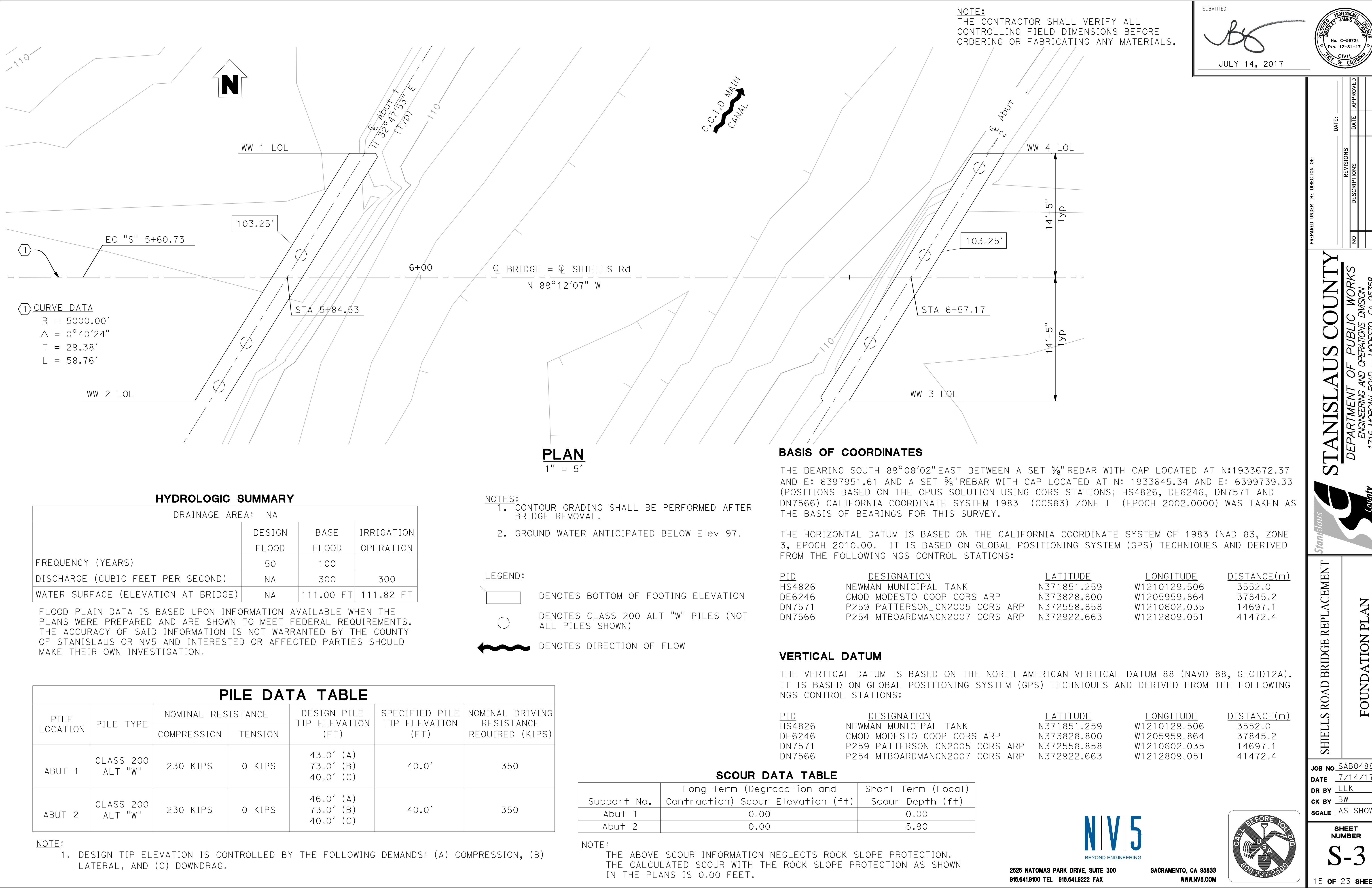
SHIELDS ROAD BRIDGE REPLACEMENT

DECK CONTOURS


JOB NO. SAB048800
DATE 7/14/17
DR BY LLLK
CK BY BW
SCALE AS SHOWN

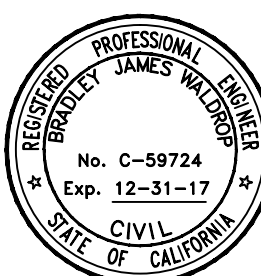
SHEET
NUMBER
S-2

14 OF 23 SHEETS



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

SUBMITTED:

JULY 14, 2017



PREPARED UNDER THE DIRECTION OF:		DATE:	
REVISIONS	NO	DATE	APPROVED
DESCRIPTIONS			

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



SHIELDS ROAD BRIDGE REPLACEMENT
FOUNDATION PLAN

JOB NO. SAB048800
DATE 7/14/17
DR BY LLK
CK BY BW
SCALE AS SHOWN

SHEET NUMBER
S-3
15 OF 23 SHEETS

HYDROLOGIC SUMMARY

DRAINAGE AREA: NA			
	DESIGN FLOOD	BASE FLOOD	IRRIGATION OPERATION
FREQUENCY (YEARS)	50	100	
DISCHARGE (CUBIC FEET PER SECOND)	NA	300	300
WATER SURFACE (ELEVATION AT BRIDGE)	NA	111.00 FT	111.82 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.

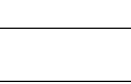
PILE DATA TABLE


PILE LOCATION	PILE TYPE	NOMINAL RESISTANCE		DESIGN PILE TIP ELEVATION (FT)	SPECIFIED PILE TIP ELEVATION (FT)	NOMINAL DRIVING RESISTANCE REQUIRED (KIPS)
		COMPRESSION	TENSION			
ABUT 1	CLASS 200 ALT "W"	230 KIPS	0 KIPS	43.0' (A) 73.0' (B) 40.0' (C)	40.0'	350
ABUT 2	CLASS 200 ALT "W"	230 KIPS	0 KIPS	46.0' (A) 73.0' (B) 40.0' (C)	40.0'	350


NOTE:
1. DESIGN TIP ELEVATION IS CONTROLLED BY THE FOLLOWING DEMANDS: (A) COMPRESSION, (B) LATERAL, AND (C) DOWNDRAG.

- NOTES:
1. CONTOUR GRADING SHALL BE PERFORMED AFTER BRIDGE REMOVAL.
 2. GROUND WATER ANTICIPATED BELOW Elev 97.

LEGEND:

 DENOTES BOTTOM OF FOOTING ELEVATION

 DENOTES CLASS 200 ALT "W" PILES (NOT ALL PILES SHOWN)

 DENOTES DIRECTION OF FLOW

BASIS OF COORDINATES

THE BEARING SOUTH 89°08'02" EAST BETWEEN A SET 5/8" REBAR WITH CAP LOCATED AT N:1933672.37 AND E: 6397951.61 AND A SET 5/8" REBAR WITH CAP LOCATED AT N: 1933645.34 AND E: 6399739.33 (POSITIONS BASED ON THE OPUS SOLUTION USING CORS STATIONS; HS4826, DE6246, DN7571 AND DN7566) CALIFORNIA COORDINATE SYSTEM 1983 (CCS83) ZONE 1 (EPOCH 2002.0000) WAS TAKEN AS THE BASIS OF BEARINGS FOR THIS SURVEY.

THE HORIZONTAL DATUM IS BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (NAD 83, ZONE 3, EPOCH 2010.00. IT IS BASED ON GLOBAL POSITIONING SYSTEM (GPS) TECHNIQUES AND DERIVED FROM THE FOLLOWING NGS CONTROL STATIONS:

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
HS4826	NEWMAN MUNICIPAL TANK	N371851.259	W1210129.506	3552.0
DE6246	CMOD MODESTO COOP CORS ARP	N373828.800	W1205959.864	37845.2
DN7571	P259 PATTERSON_CN2005 CORS ARP	N372558.858	W1210602.035	14697.1
DN7566	P254 MTBOARDMANCN2007 CORS ARP	N372922.663	W1212809.051	41472.4

VERTICAL DATUM

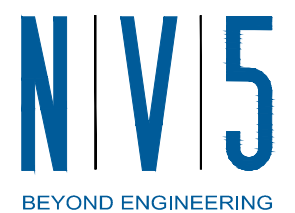
THE VERTICAL DATUM IS BASED ON THE NORTH AMERICAN VERTICAL DATUM 88 (NAVD 88, GEOID12A). IT IS BASED ON GLOBAL POSITIONING SYSTEM (GPS) TECHNIQUES AND DERIVED FROM THE FOLLOWING NGS CONTROL STATIONS:

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
HS4826	NEWMAN MUNICIPAL TANK	N371851.259	W1210129.506	3552.0
DE6246	CMOD MODESTO COOP CORS ARP	N373828.800	W1205959.864	37845.2
DN7571	P259 PATTERSON_CN2005 CORS ARP	N372558.858	W1210602.035	14697.1
DN7566	P254 MTBOARDMANCN2007 CORS ARP	N372922.663	W1212809.051	41472.4

SCOUR DATA TABLE

Support No.	Long term (Degradation and Contraction) Scour Elevation (ft)	Short Term (Local) Scour Depth (ft)
Abut 1	0.00	0.00
Abut 2	0.00	5.90


NOTE:
THE ABOVE SCOUR INFORMATION NEGLECTS ROCK SLOPE PROTECTION. THE CALCULATED SCOUR WITH THE ROCK SLOPE PROTECTION AS SHOWN IN THE PLANS IS 0.00 FEET.

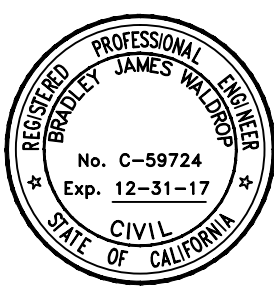


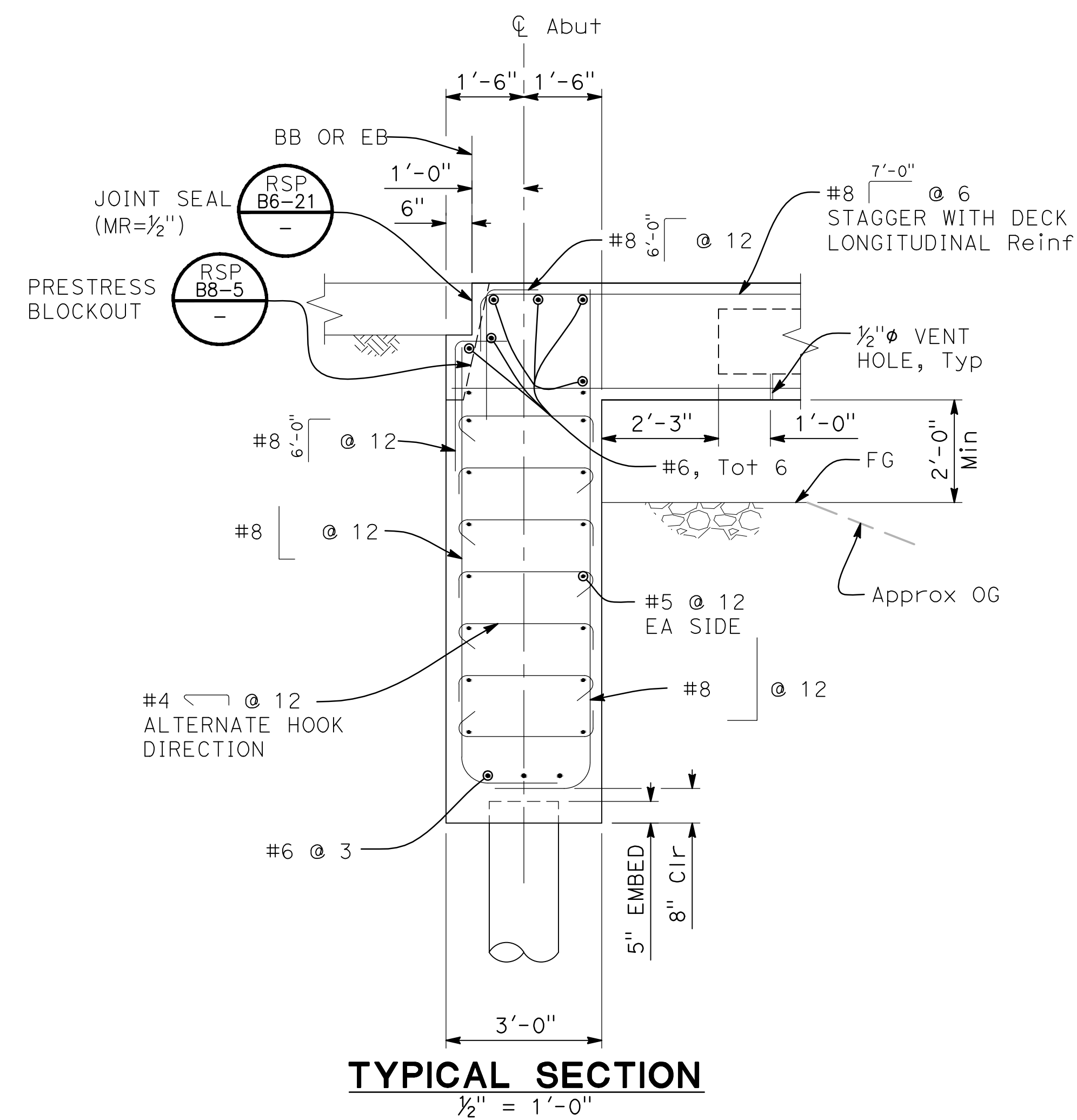
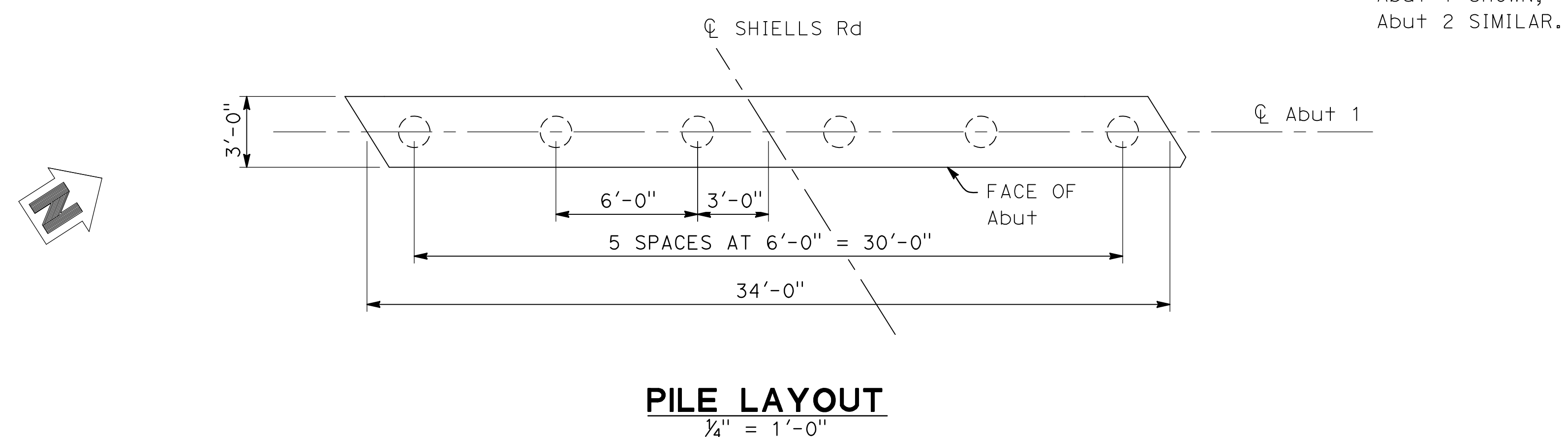
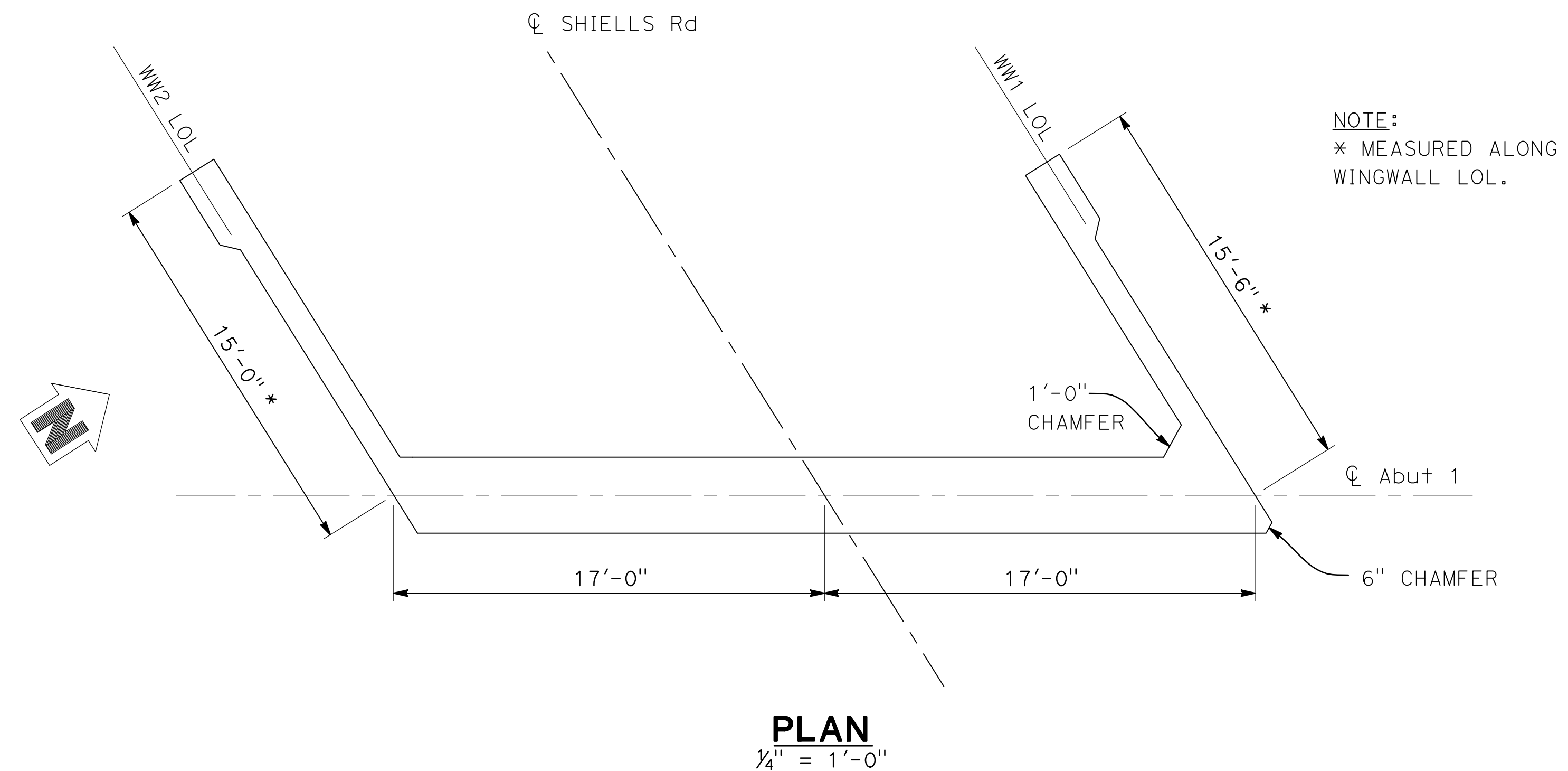
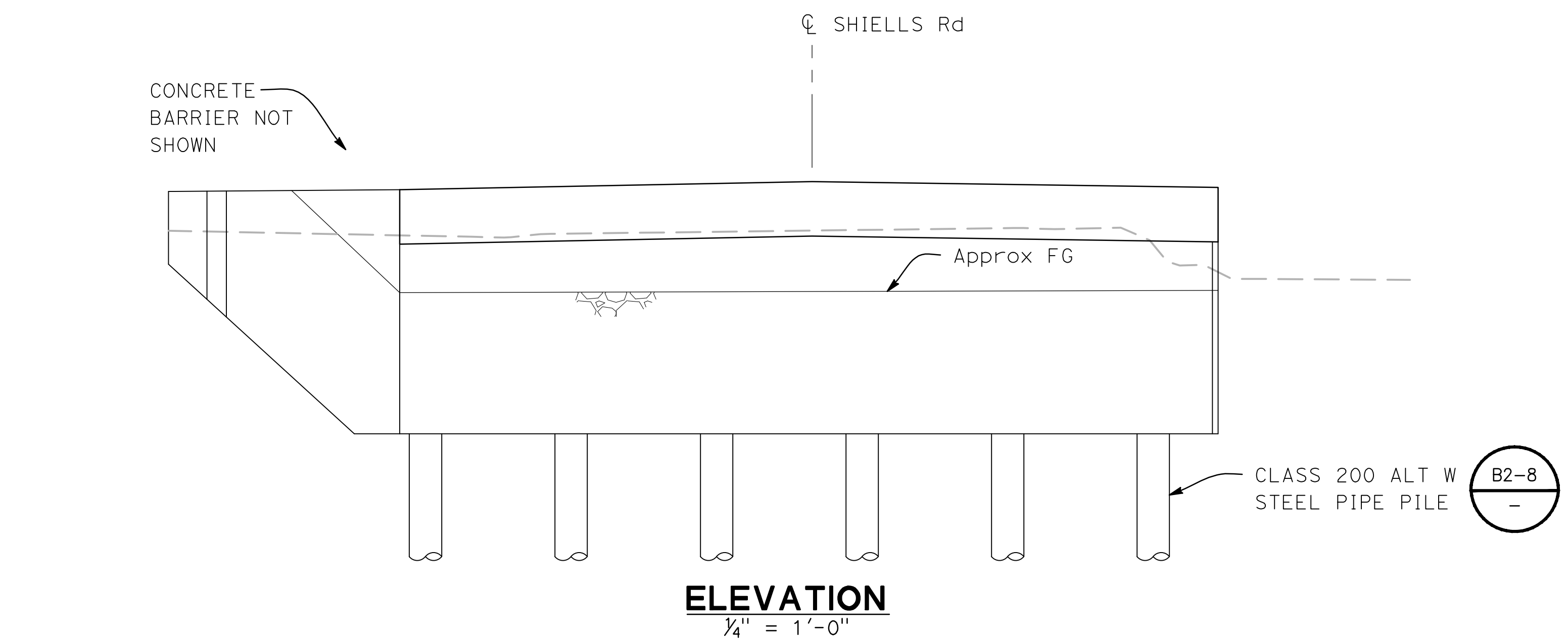
2525 NATOMAS PARK DRIVE, SUITE 300
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SACRAMENTO, CA 95833
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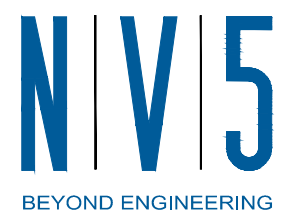
NOTE:
THE CONTRACTOR SHALL VERIFY ALL
CONTROLLING FIELD DIMENSIONS BEFORE
ORDERING OR FABRICATING ANY MATERIALS.

SUBMITTED:

JULY 14, 2017





- NOTES:
- FOR TYPICAL DECK REINFORCEMENT, SEE "DECK SLAB" SHEET S-7.
 - FOR WINGWALL DETAILS, SEE "ABUTMENT DETAILS" SHEET S-5.




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REVISIONS		DATE	
DESCRIPTIONS		DATE	
NO		DATE	

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



SHIELDS ROAD BRIDGE REPLACEMENT

ABUTMENT LAYOUT

JOB NO SAB048800
DATE 7/14/17
DR BY LLK
CK BY BW
SCALE AS SHOWN

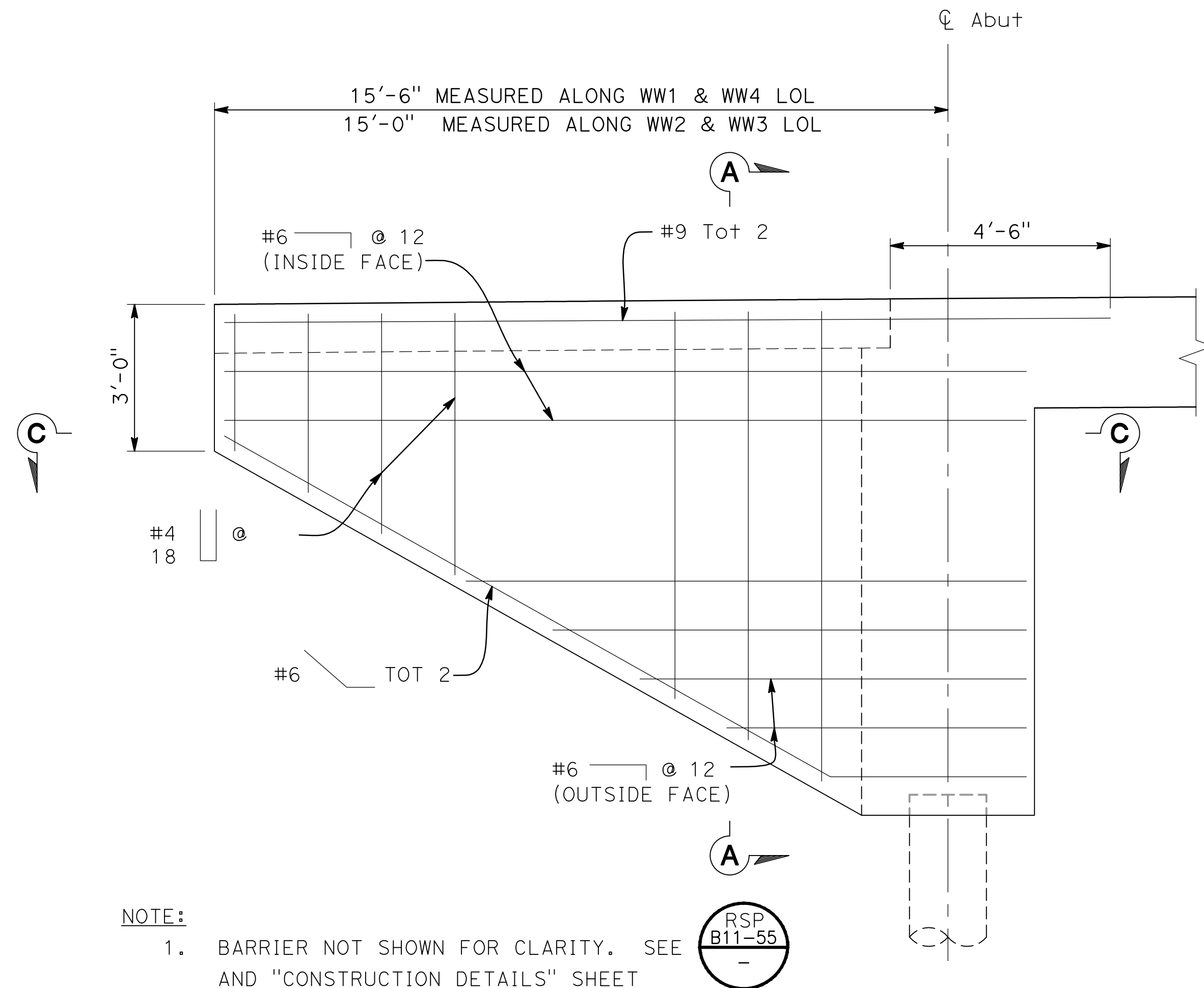
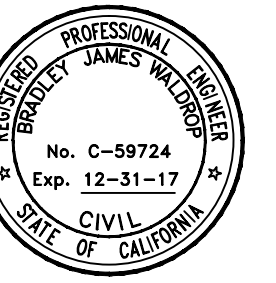
SHEET NUMBER
S-4
16 OF 23 SHEETS

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

SUBMITTED:

[Signature]

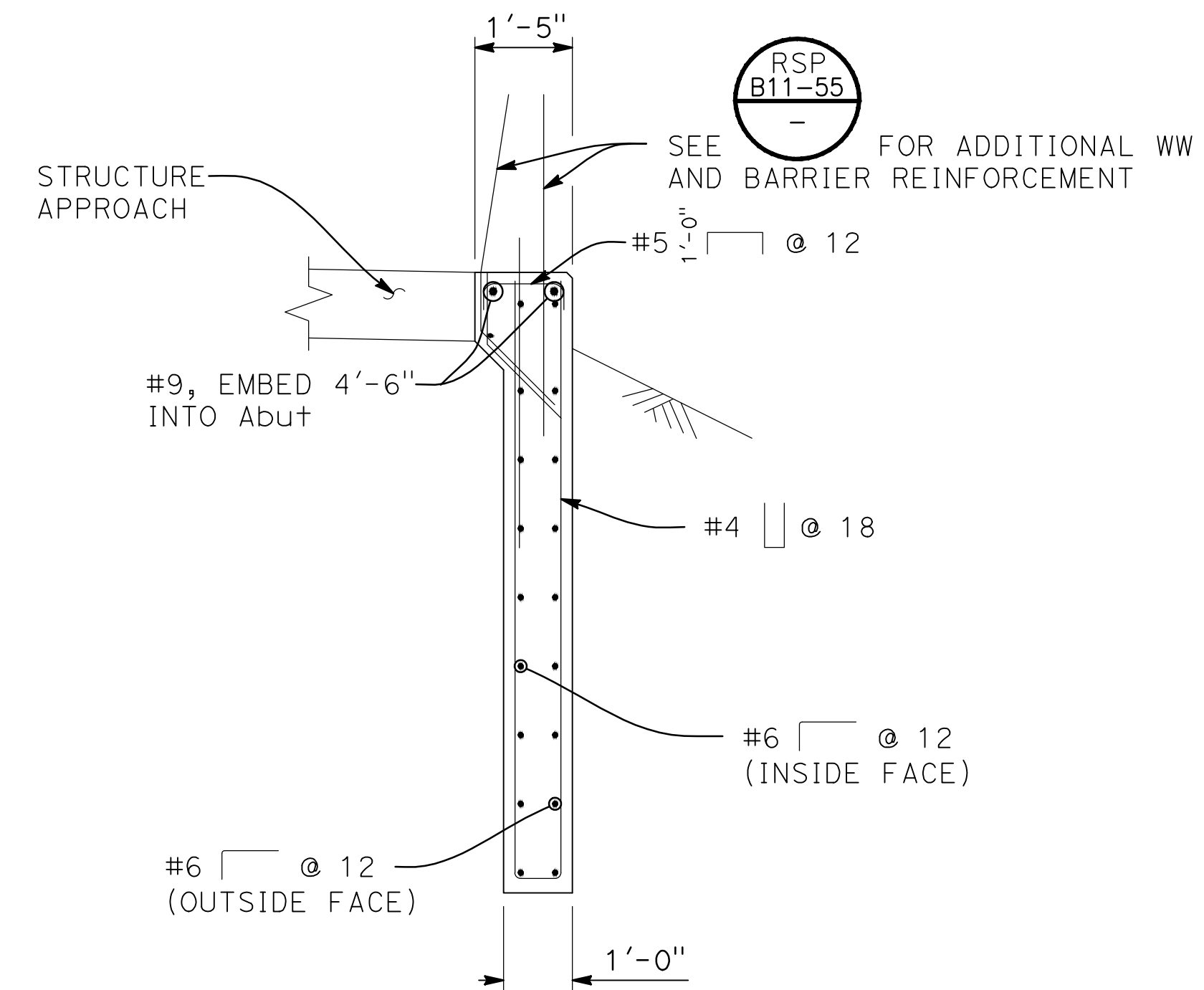
JULY 14, 2017



NOTE:
1. BARRIER NOT SHOWN FOR CLARITY. SEE
AND "CONSTRUCTION DETAILS" SHEET
DT-4 FOR BARRIER DETAILS.

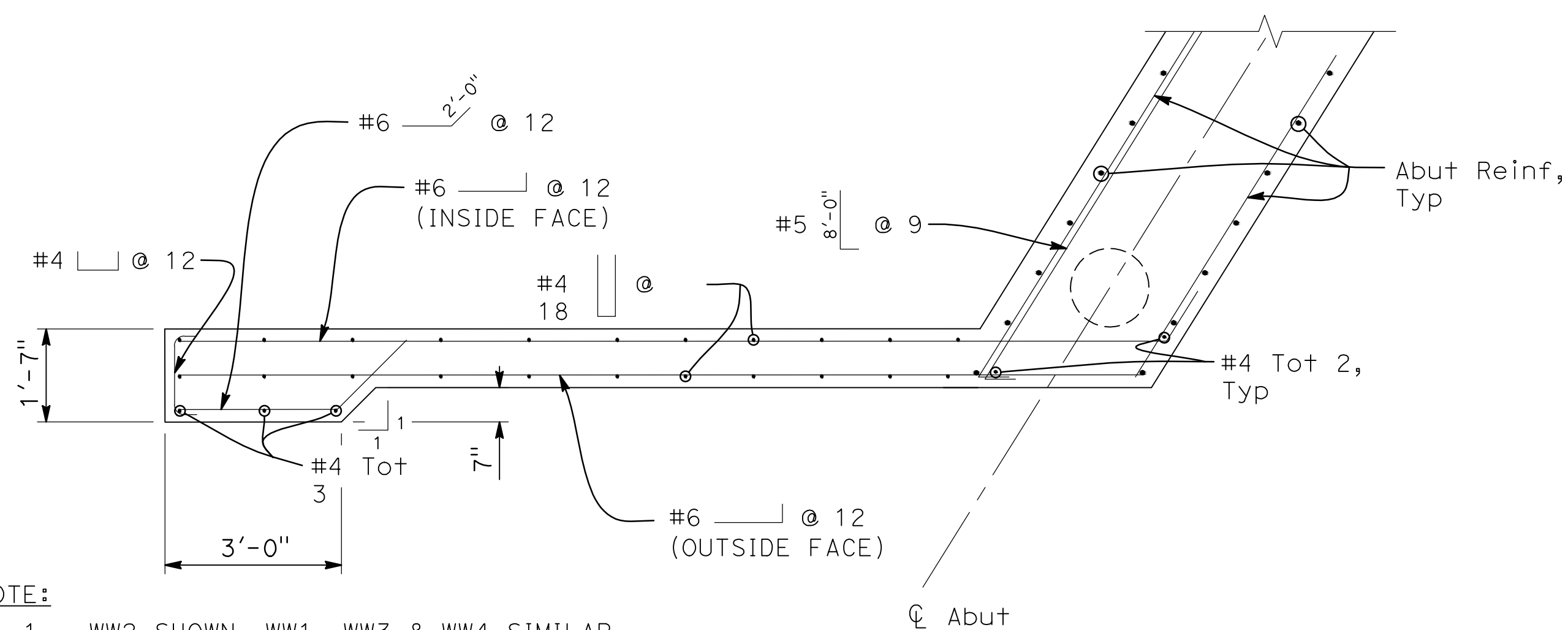
WINGWALL TYPICAL SECTION

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



SECTION A-A

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



NOTE:
1. WW2 SHOWN, WW1, WW3 & WW4 SIMILAR.

SECTION C-C

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

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



SHIELDS ROAD BRIDGE REPLACEMENT

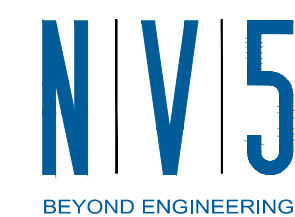
ABUTMENT DETAILS

JOB NO. SAB048800
DATE 7/17/17
DR BY LLLK
CK BY BW
SCALE AS SHOWN

SHEET
NUMBER

S-5

17 OF 23 SHEETS



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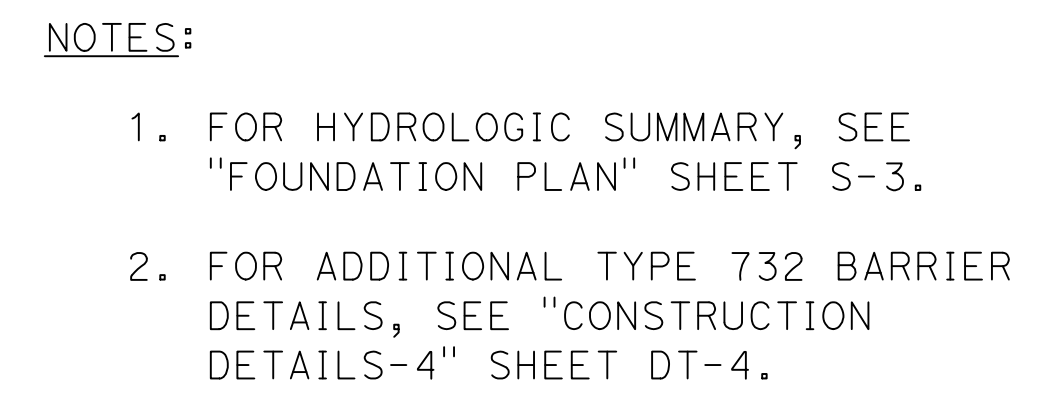


SUBMITTED:



JULY 14, 2017





Conc BARRIER
TYPE 732
Reinf, Typ

RSP
B11-55
-

#5 $\left[\begin{array}{c} 4'-0" \\ @ 12 \end{array} \right]$ TO BE
STAGGERED WITH
MAIN TRANSVERSE
Reinf, Typ

#6 @ 12

#4 Tot 2 @
EA STIRRUP

#6 @ 12

#6 @ 10

#6 $\left[\begin{array}{c} 3'-9" \\ @ 10, \text{Typ} \end{array} \right]$

#10 Tot 5,
Typ

#6 Tot 2 @
EA STIRRUP

#6 $\left[\begin{array}{c} 1/2" \\ @ 12 \end{array} \right]$

#9 $\left[\begin{array}{c} 1/2" \\ @ 12 \end{array} \right]$

N | V | 5
BEYOND ENGINEERING

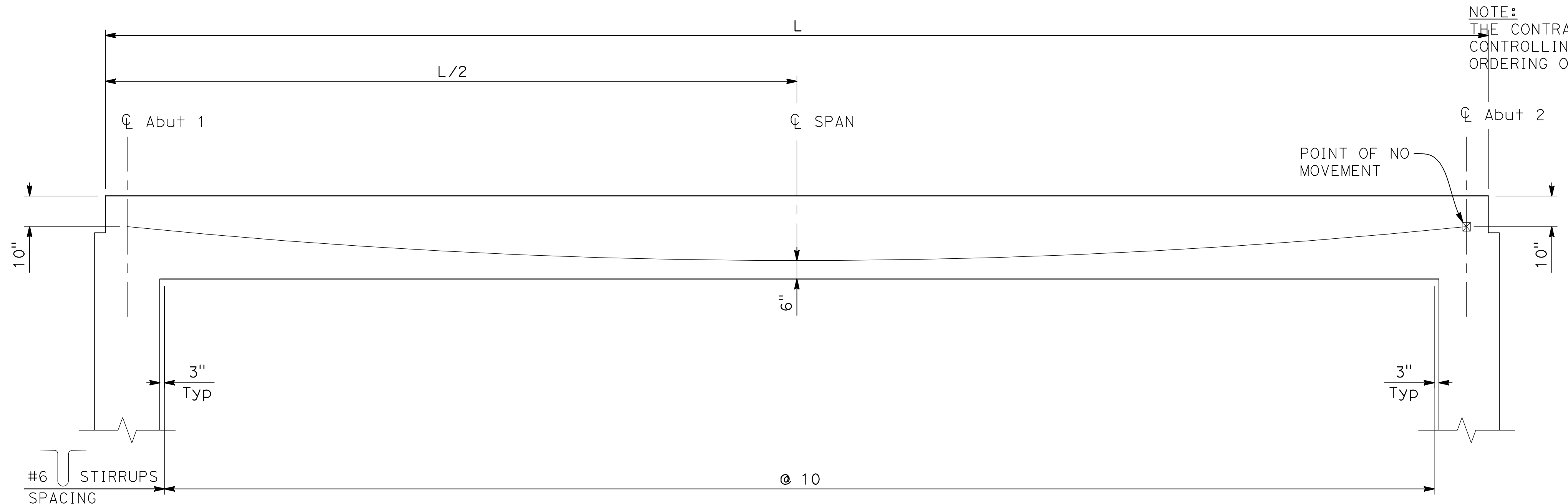
SHIELDS ROAD BRIDGE REPLACEMENT

TYPICAL SECTION

JOB NO SAB048800
DATE 7/14/17
DR BY LLK
CK BY BW
SCALE AS SHOWN

**SHEET
NUMBER**
S-6

8 OF 23 SHEETS



LONGITUDINAL SECTION
NO SCALE

PRESTRESSING NOTES

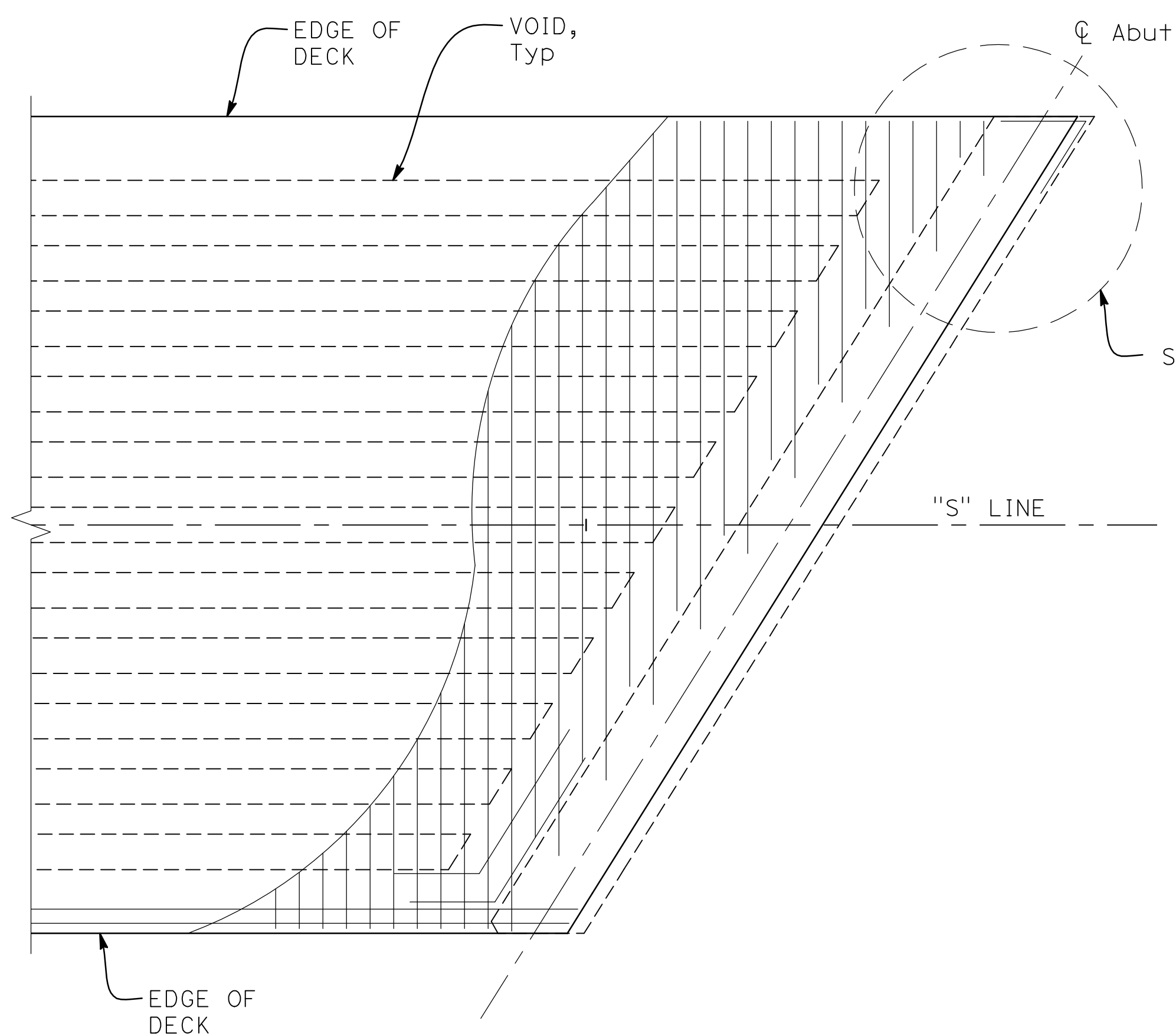
270 KSI LOW RELAXATION STRANDS:

PJACK = 8200 KIPS
ANCHOR SET = 0.375 INCHES
FRICTION CURVATURE COEFFICIENT, M = 0.15 (1/RAD)
FRICTION WOBBLE COEFFICIENT, K = 0.0002 (1/FT)
TOTAL NUMBER OF CABLE PATHS = 10

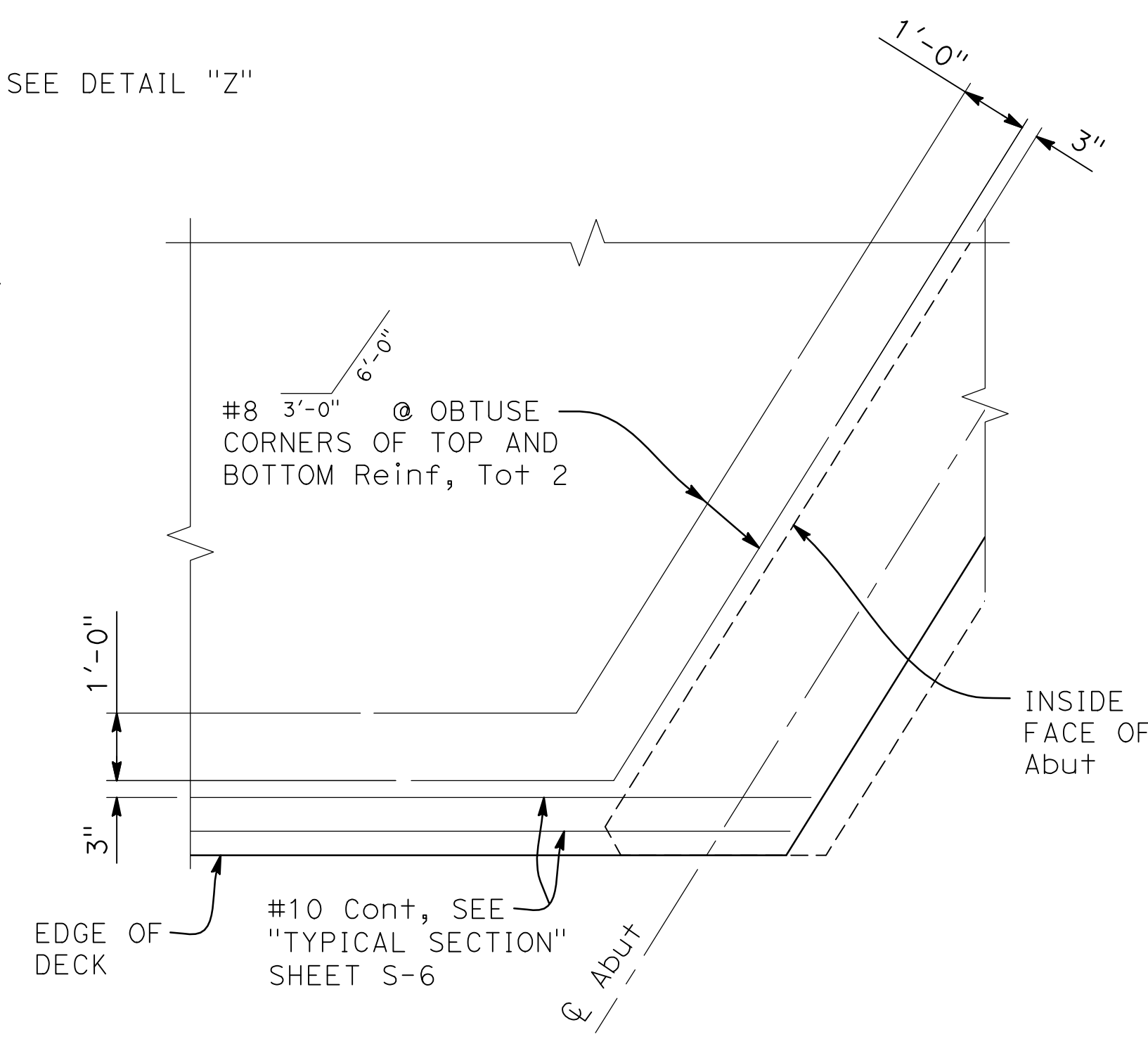
CONCRETE: F'_c = 5000 PSI @ 28 DAYS
 F'_{ci} = 3500 PSI @ TIME OF STRESSING

CONTRACTOR SHALL SUBMIT ELONGATION CALCULATIONS BASED ON INITIAL STRESS AT $\epsilon = 0.9397$ TIMES JACKING STRESS.

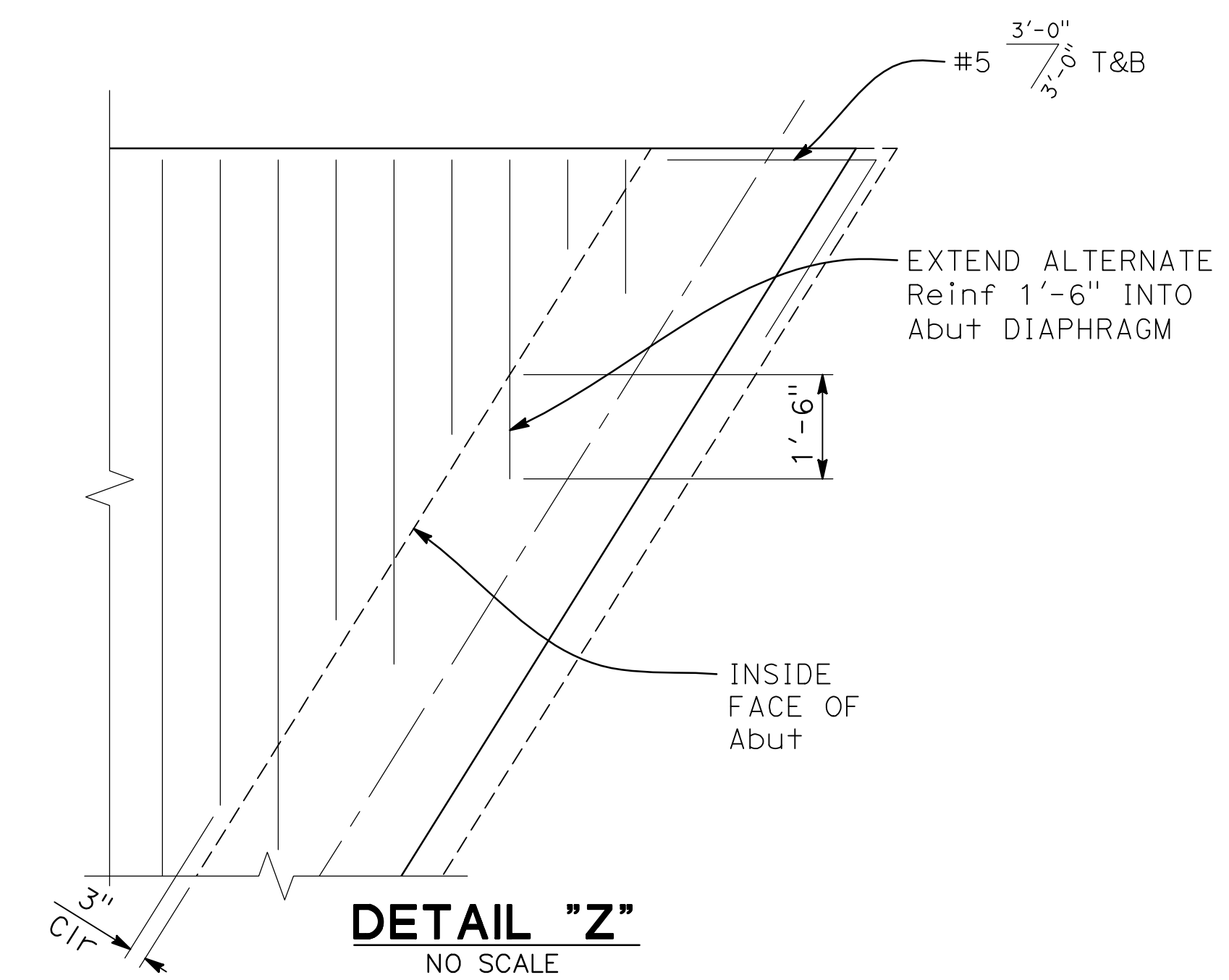
ONE END STRESSING SHALL BE PERFORMED FROM ABUTMENT 1 ONLY.



TRANSVERSE REINFORCEMENT
NO SCALE



OBTUSE CORNER DETAIL
NO SCALE



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SUBMITTED: 
JULY 14, 2017

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

DATE:	
REVISIONS	DATE
DESCRIPTIONS	DATE
NO	DATE

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

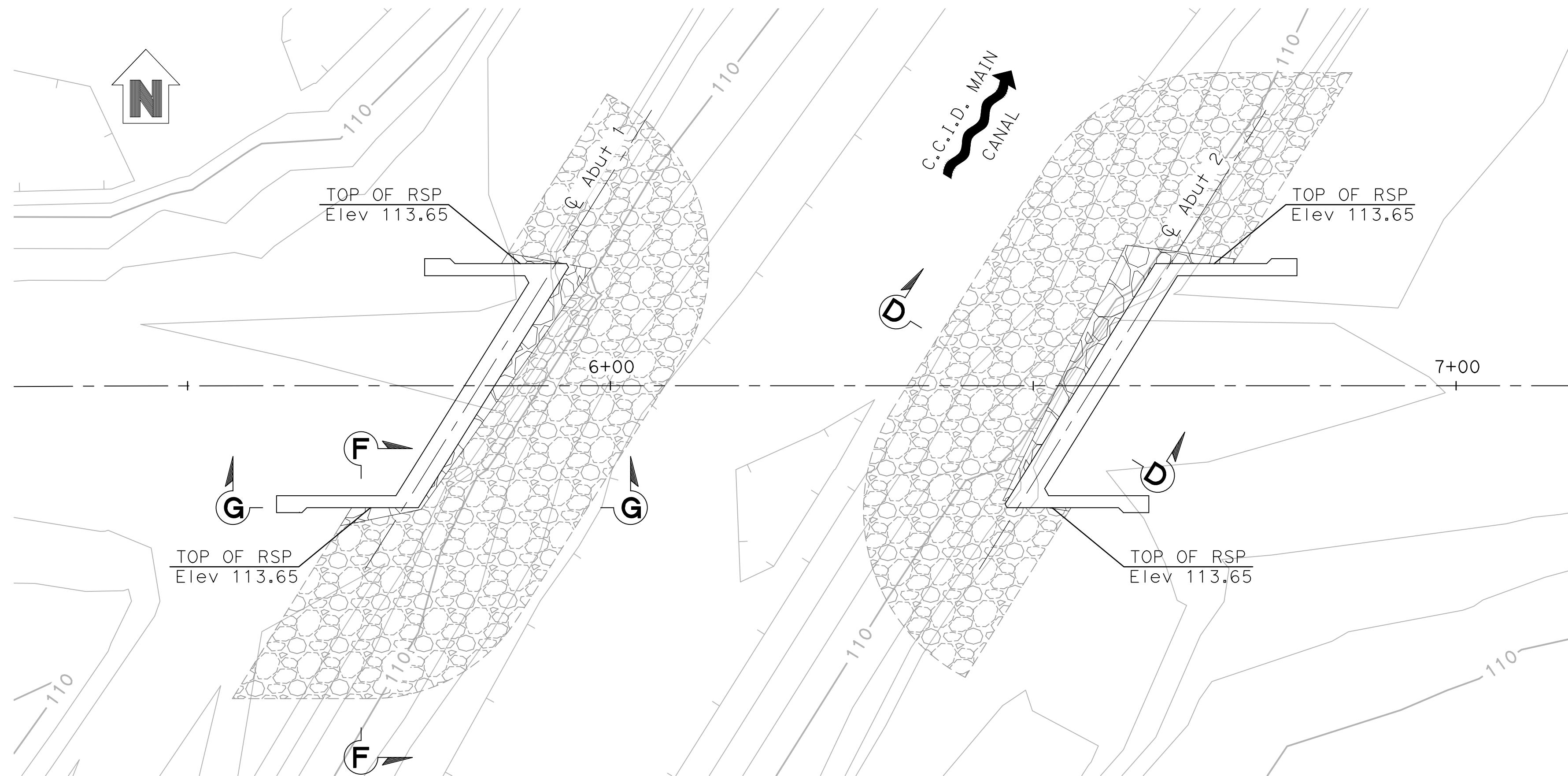


SHIELDS ROAD BRIDGE REPLACEMENT

SLAB DETAILS

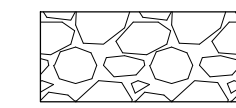
JOB NO. SAB048800
DATE 7/14/17
DR BY LLK
CK BY BW
SCALE AS SHOWN

SHEET NUMBER
S-7
19 OF 23 SHEETS

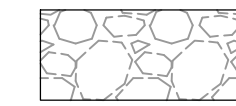


PLAN
1"=10'

LEGEND:



RSP ABOVE FG



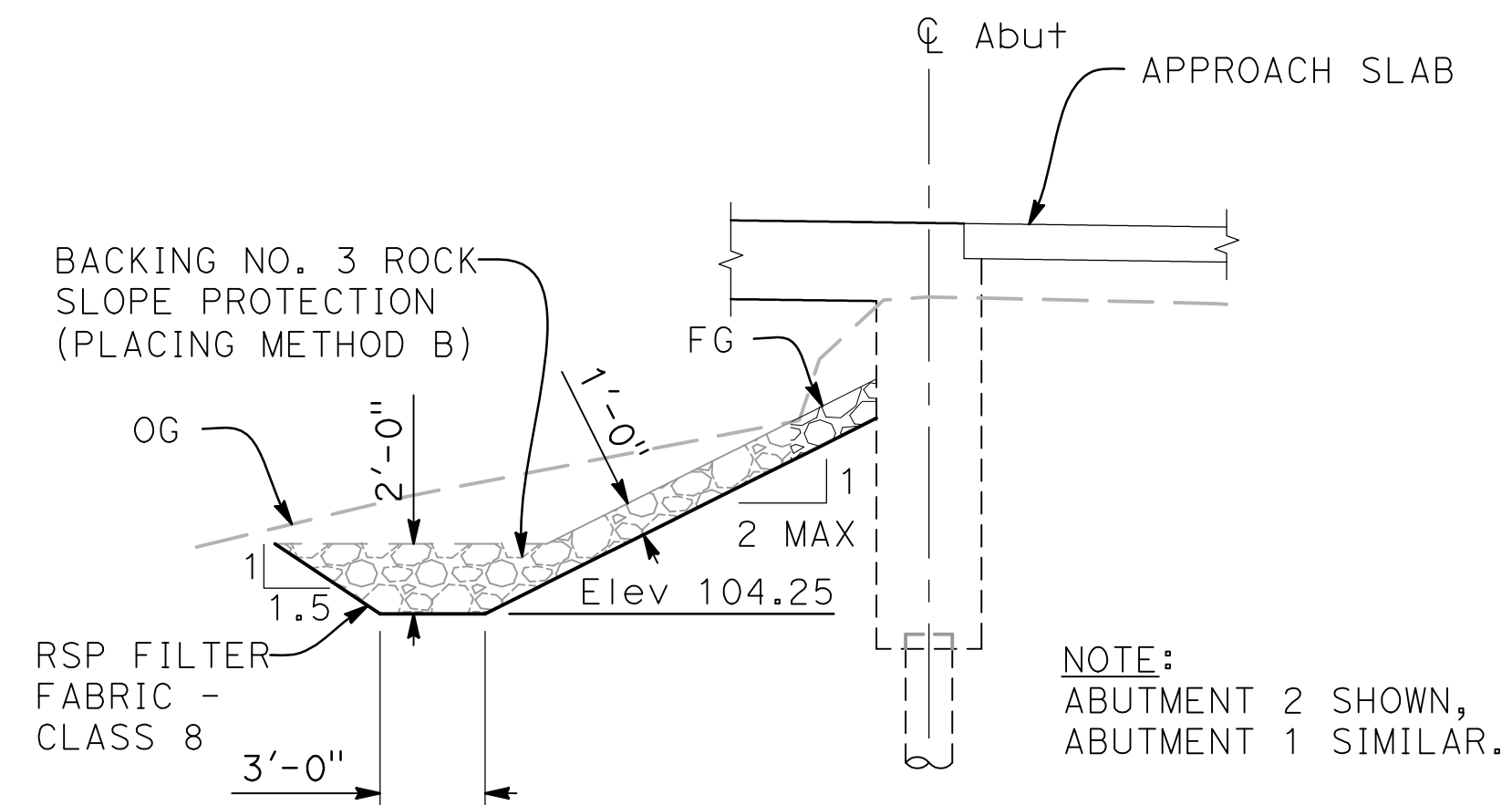
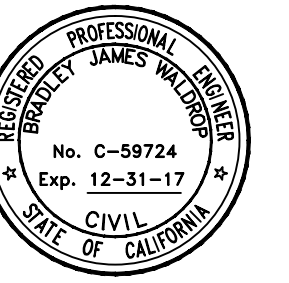
RSP BELOW FG

NOTE:
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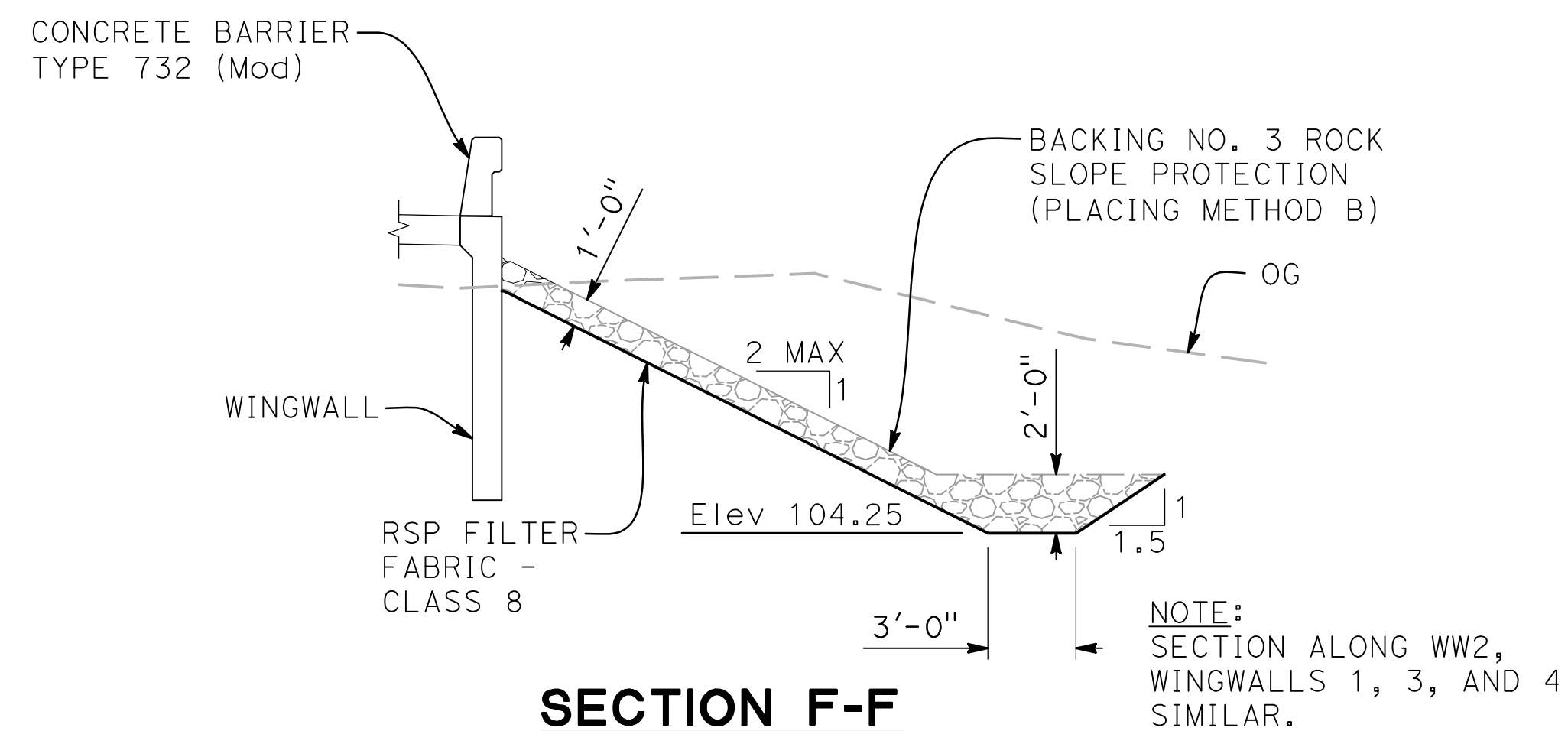
SUBMITTED:

[Signature]

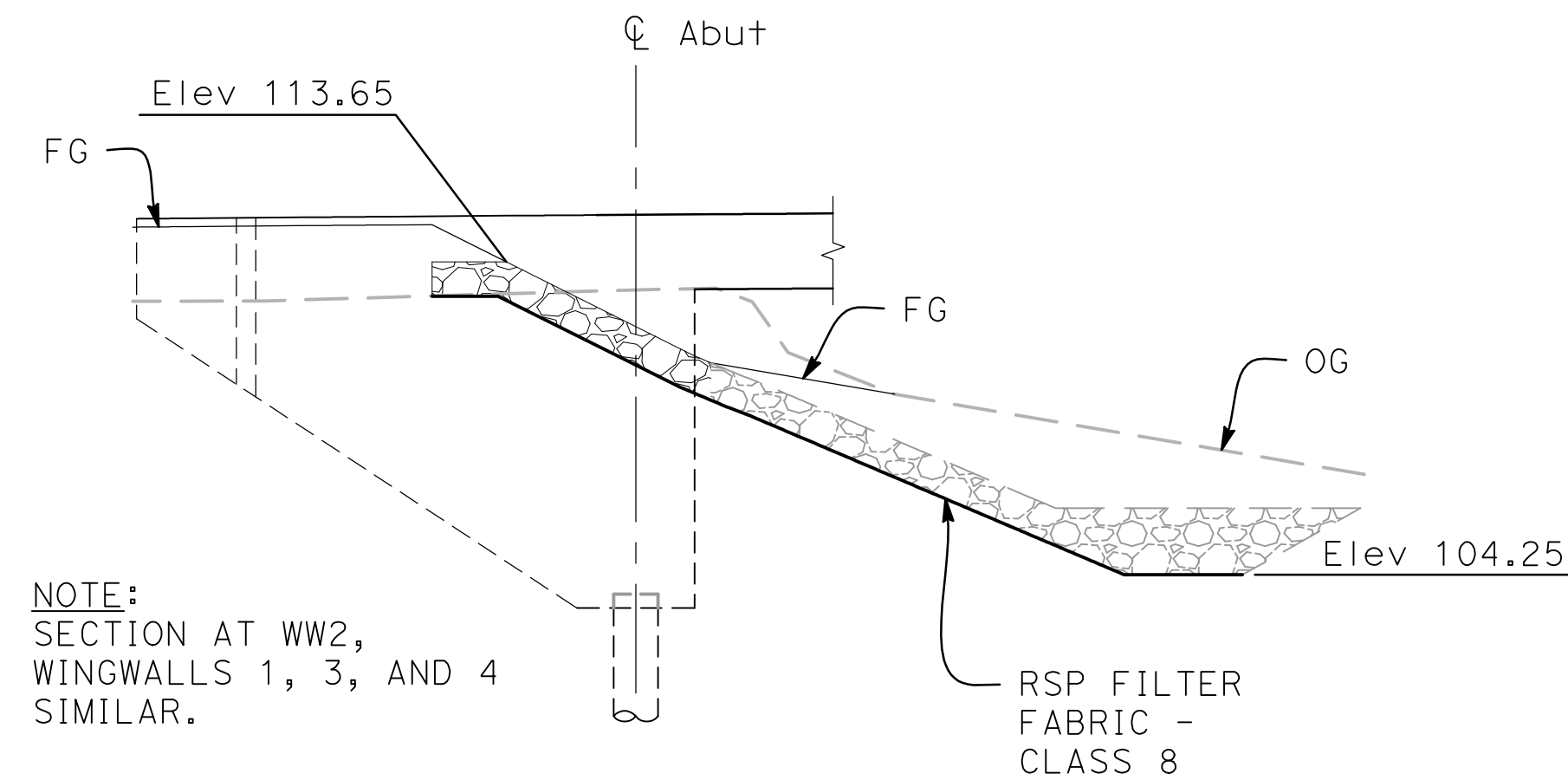
JULY 14, 2017



SECTION D-D
1"=5'



SECTION F-F
1"=5'



SECTION G-G
1"=5'

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

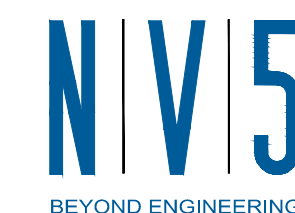


SHIELDS ROAD BRIDGE REPLACEMENT
ROCK SLOPE PROTECTION

JOB NO. SAB048800
DATE 7/14/17
DR BY LLL
CK BY BW
SCALE AS SHOWN

SHEET NUMBER
S-8

20 OF 23 SHEETS



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DIST

COUNTY

ROUTE

POST MILES
TOTAL PROJECT

SHEET
No.

TOTAL
SHEETS

10

STA

S-9

23

REGISTERED CIVIL ENGINEER

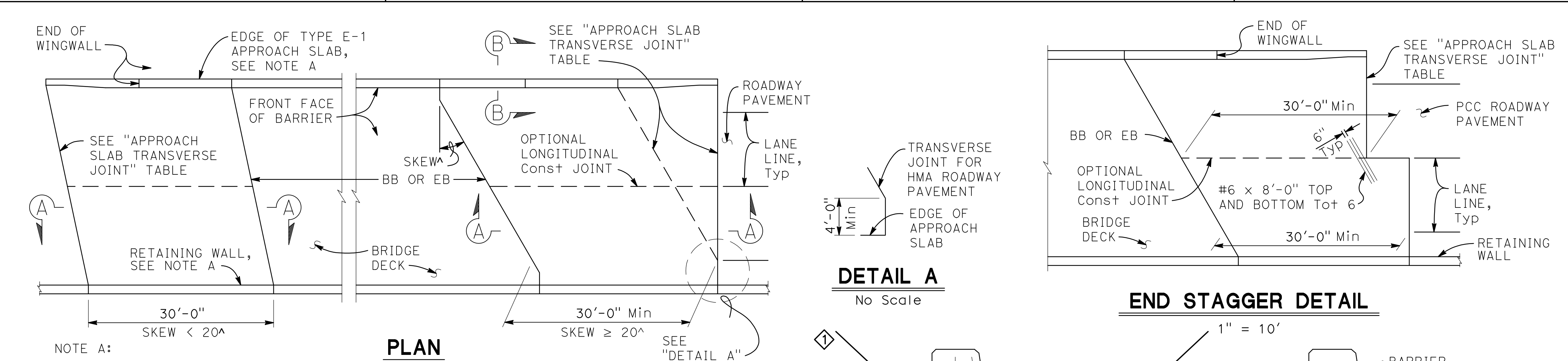
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DATE

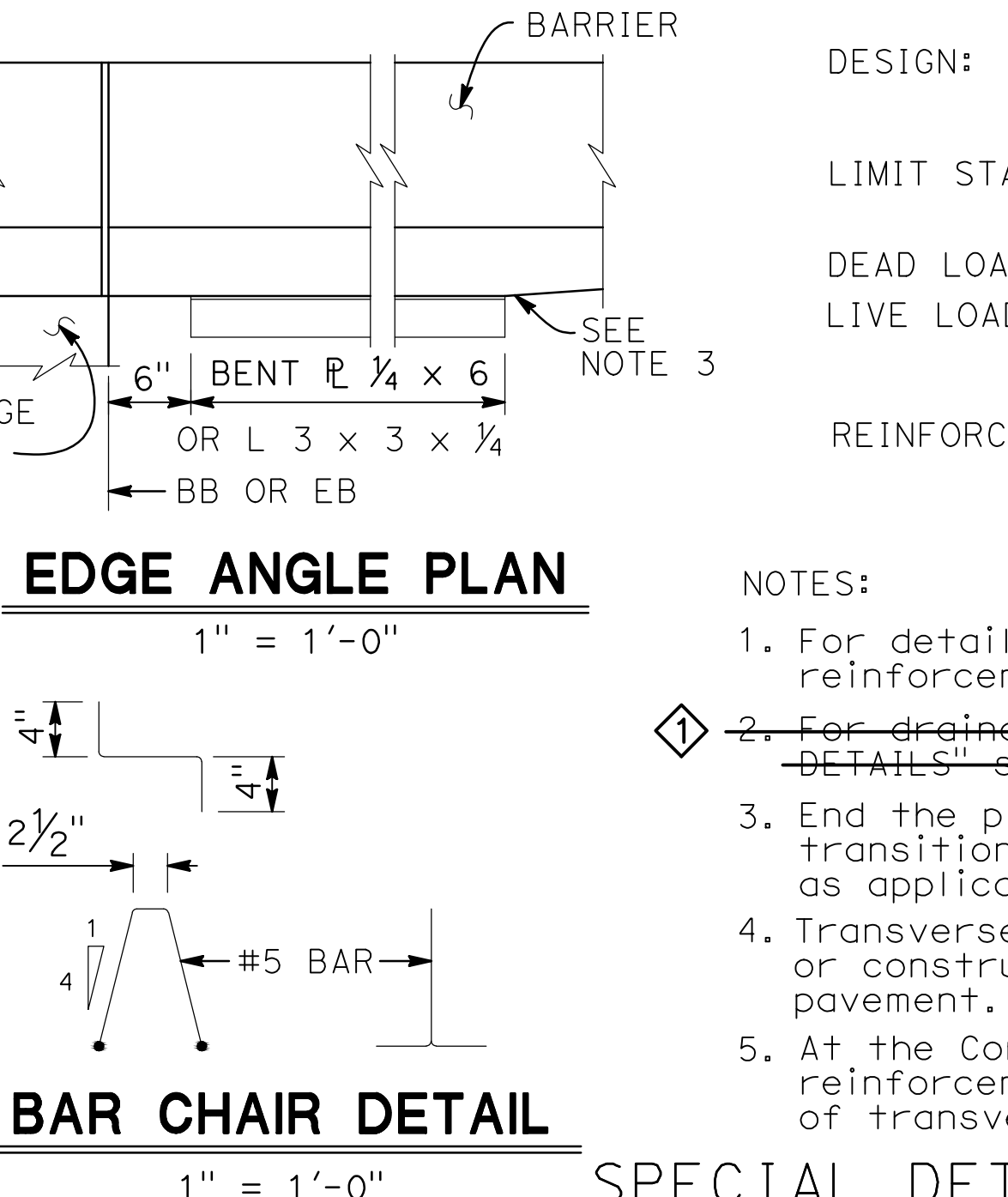
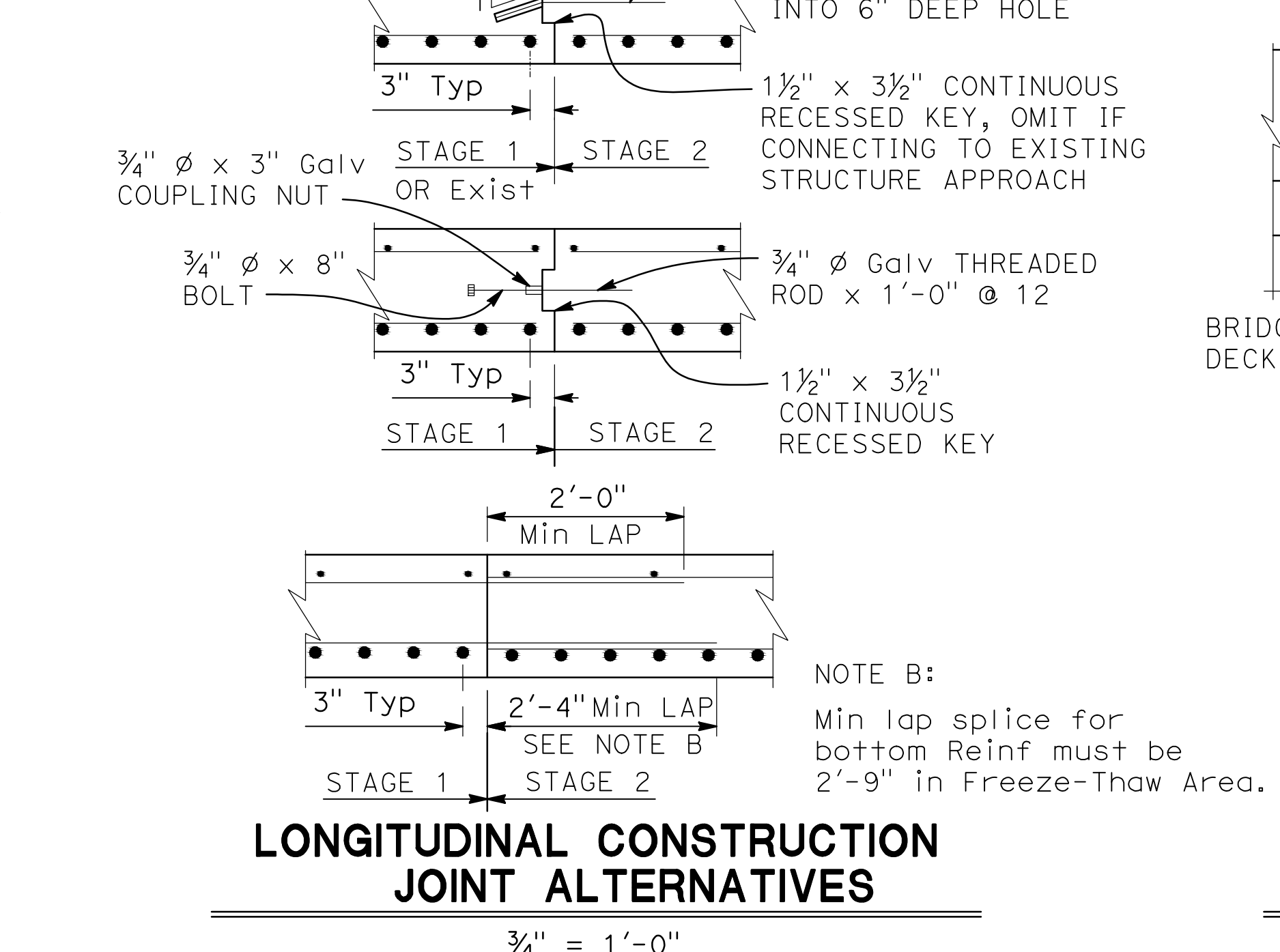
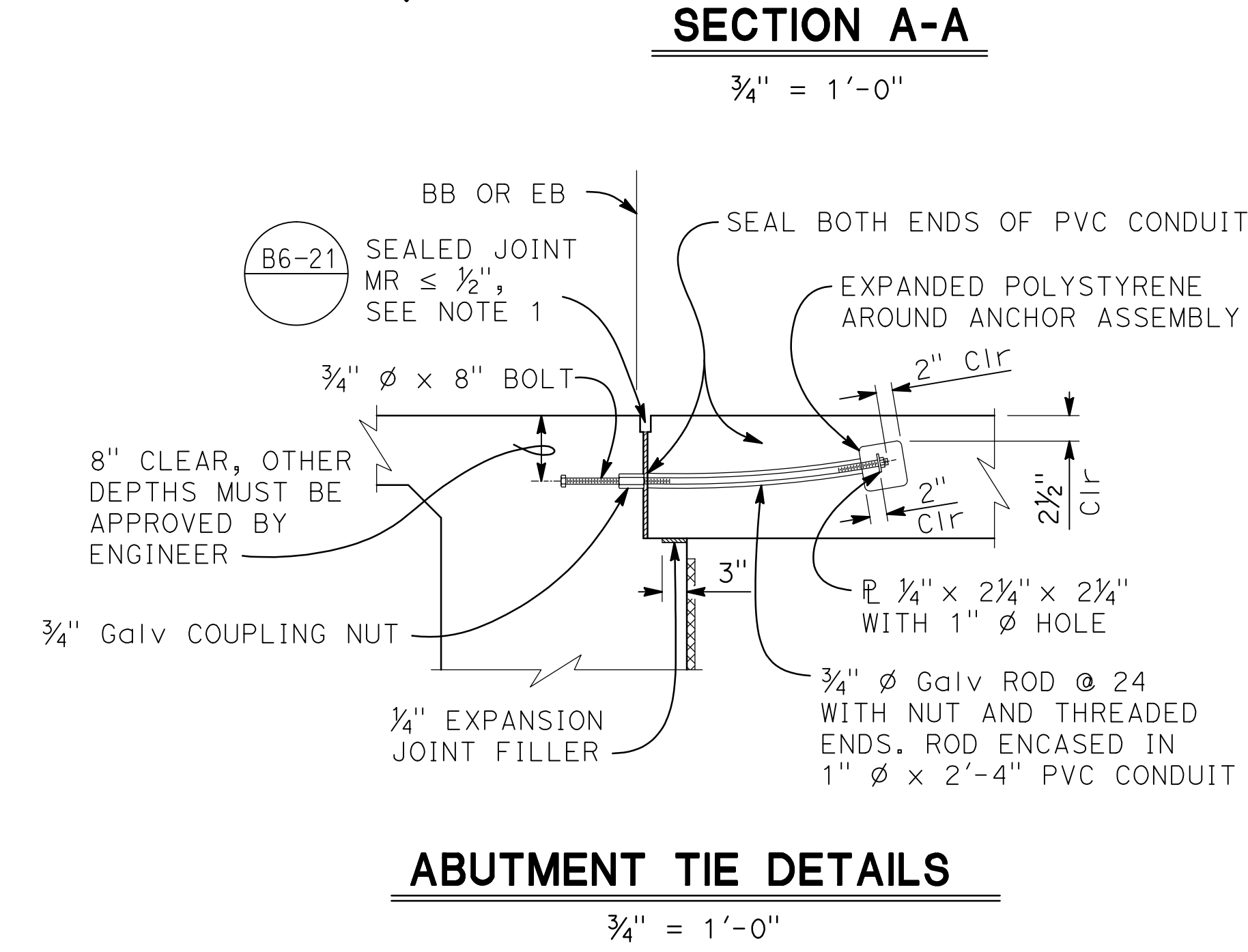
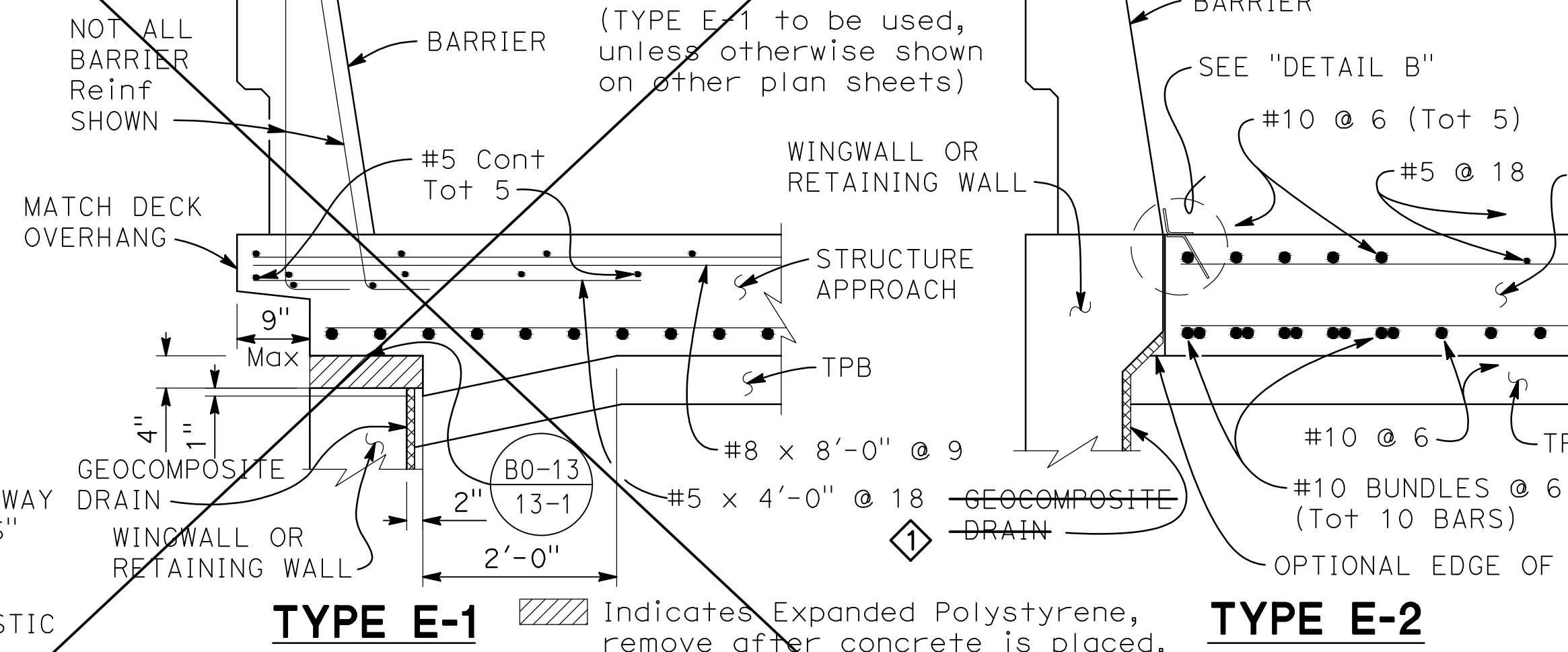
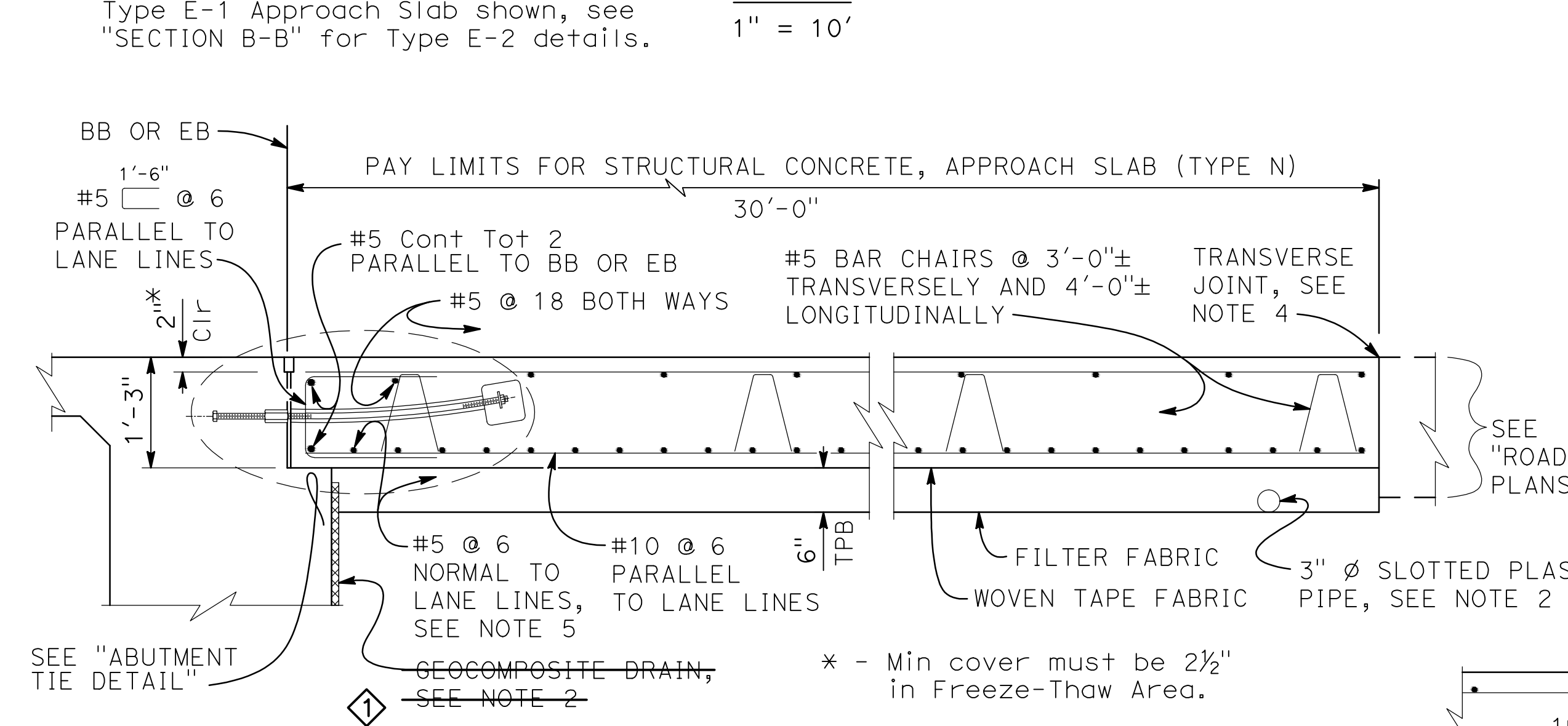
PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER
LEVY LESTER KIMBROW
No. 75876
Exp. 6-30-16
CIVIL
STATE OF CALIFORNIA



APPROACH SLAB TRANSVERSE JOINT		
APPROACH SKEW	WITH HMA ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 20°	PARALLEL TO BB OR EB	PARALLEL TO BB OR EB
20° - 45°	PARALLEL TO BB OR EB USE "DETAIL A"	STAGGER AT LANE LINES 24' TO 36' APART, SEE "END STAGGER DETAIL"
> 45°	PARALLEL TO BB OR EB USE "DETAIL A"	STAGGER AT EACH LANE LINE, SEE "END STAGGER DETAIL"



DESIGN:

AASHTO LRFD Bridge Design Specifications, 2012 Edition with Caltrans Amendments, preface dated January 2014

LIMIT STATES:

Service I, Strength I & II , Extreme II and Fatigue I (γ_{FAT} = 1.0)

DEAD LOAD:

Includes 35 psf for future wearing surface

LIVE LOAD:

HL93 and permit design load
Equivalent strip width method: W₁ = 12 ft
Slab span: L₁ = 24.5 ft

REINFORCED CONCRETE:

f_y = 60 ksi
f'c = 3.6 ksi
n = 8

NOTES:

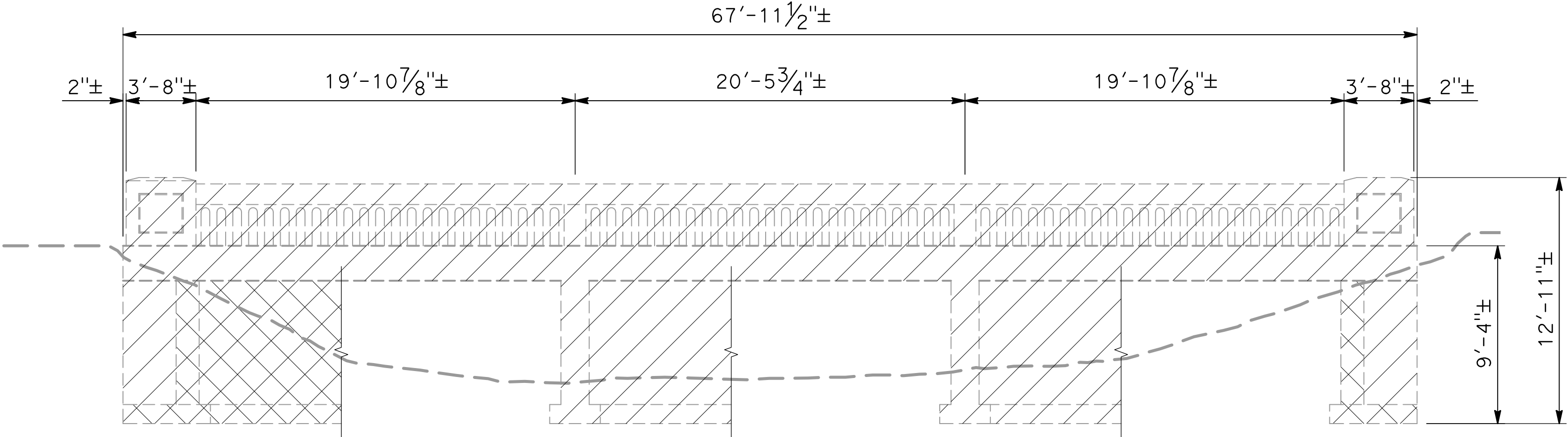
1. For details not shown, see other plan sheets. Adjust reinforcement to clear sawcut for sealed joint.
2. For drainage details, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
3. End the plate or edge angle at beginning of barrier transition, end of wingwall, or end of structure approach as applicable.
4. Transverse Joint must be a minimum of 5'-0" from an existing or constructed weakened plane joint in approach PCC roadway pavement. Refer to Standard Plans P10 and P14.
5. At the Contractor's option, approach slab transverse reinforcement may be placed parallel to BB or EB. Spacing of transverse reinforcement is measured along & roadway.

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

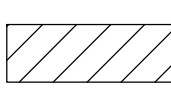
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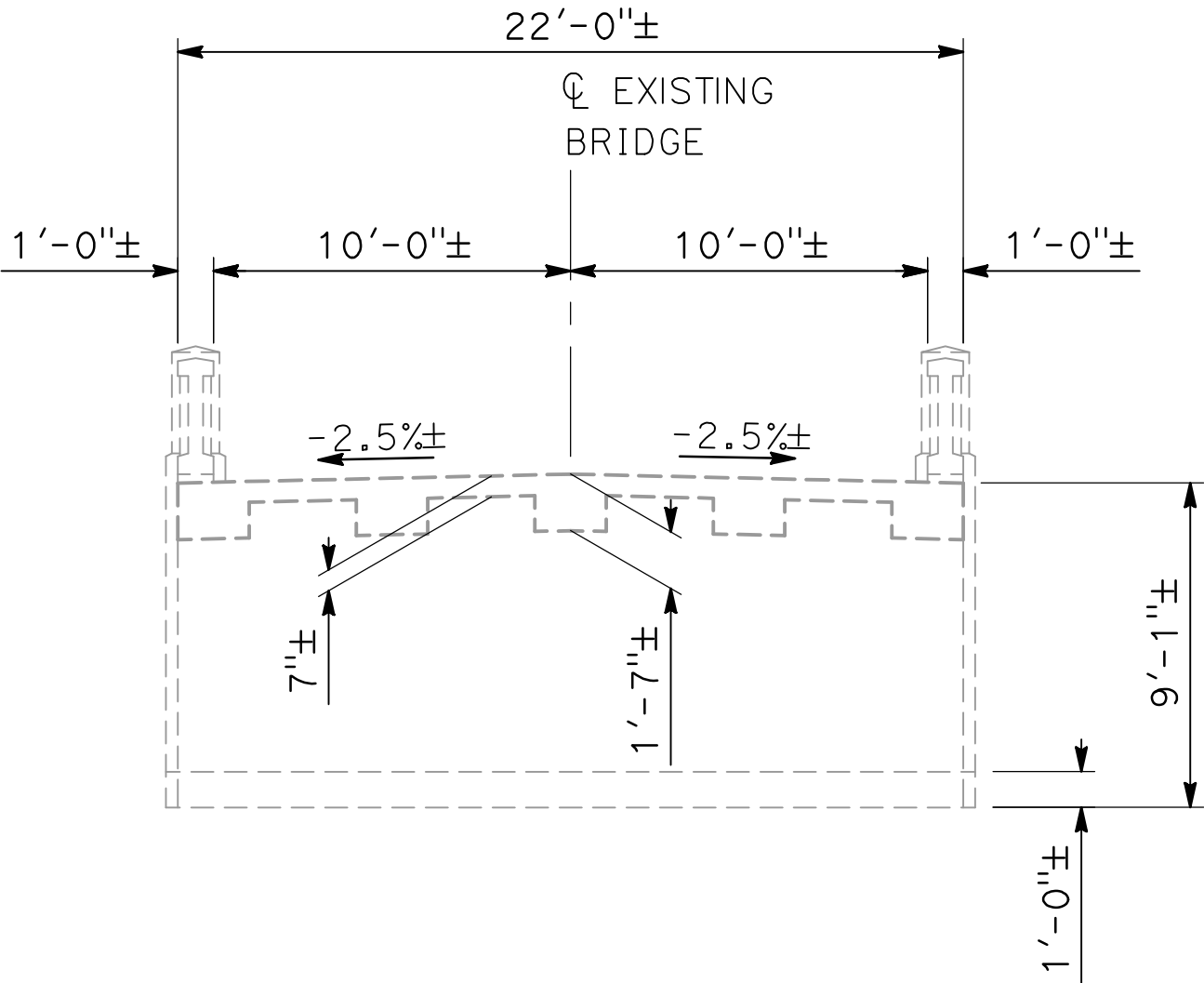
JULY 14, 2017





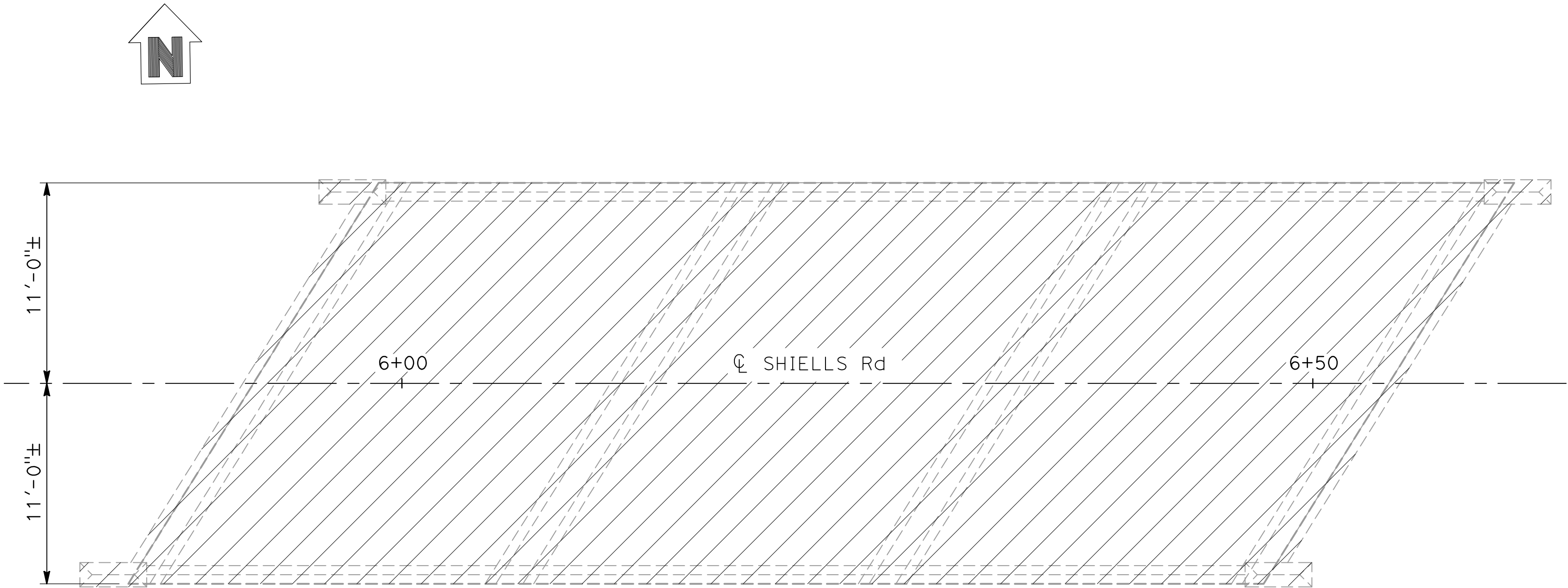
ELEVATION
1" = 5'

- 
- BRIDGE REMOVAL (SUPERSTRUCTURE, PIERS, WINGWALLS, BARRIERS
-
- AND PIER FOUNDATIONS)



EXISTING TYPICAL SECTION
1" = 5'

- NOTES:**
- EXISTING BRIDGE INFORMATION IS BASED ON FIELD DIMENSIONS. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO REMOVAL.
 - THE CONTRACTOR SHALL REMOVE THE EXISTING BRIDGE SUPERSTRUCTURE, PIER WALL, PIER FOUNDATIONS, WINGWALLS AND BARRIERS PRIOR TO STARTING BRIDGE CONSTRUCTION.
 - AFTER THE NEW ABUTMENTS HAVE BEEN CONSTRUCTED, THE EXISTING ABUTMENTS AND ABUTMENT FOUNDATIONS CAN BE DEMOLISHED.
 - IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY DISPOSE OF ALL DEMOLITION MATERIALS IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND THE CONTRACT REQUIREMENTS.



PLAN
1" = 5'

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

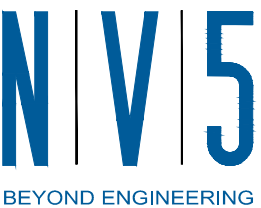


SHIELLS ROAD BRIDGE REPLACEMENT

DEMOLITION PLAN

JOB NO. SAB048800
DATE 1/25/16
DR BY LLK
CK BY BW
SCALE AS SHOWN

SHEET
NUMBER
9
22 OF 23 SHEETS



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SACRAMENTO, CA 95833
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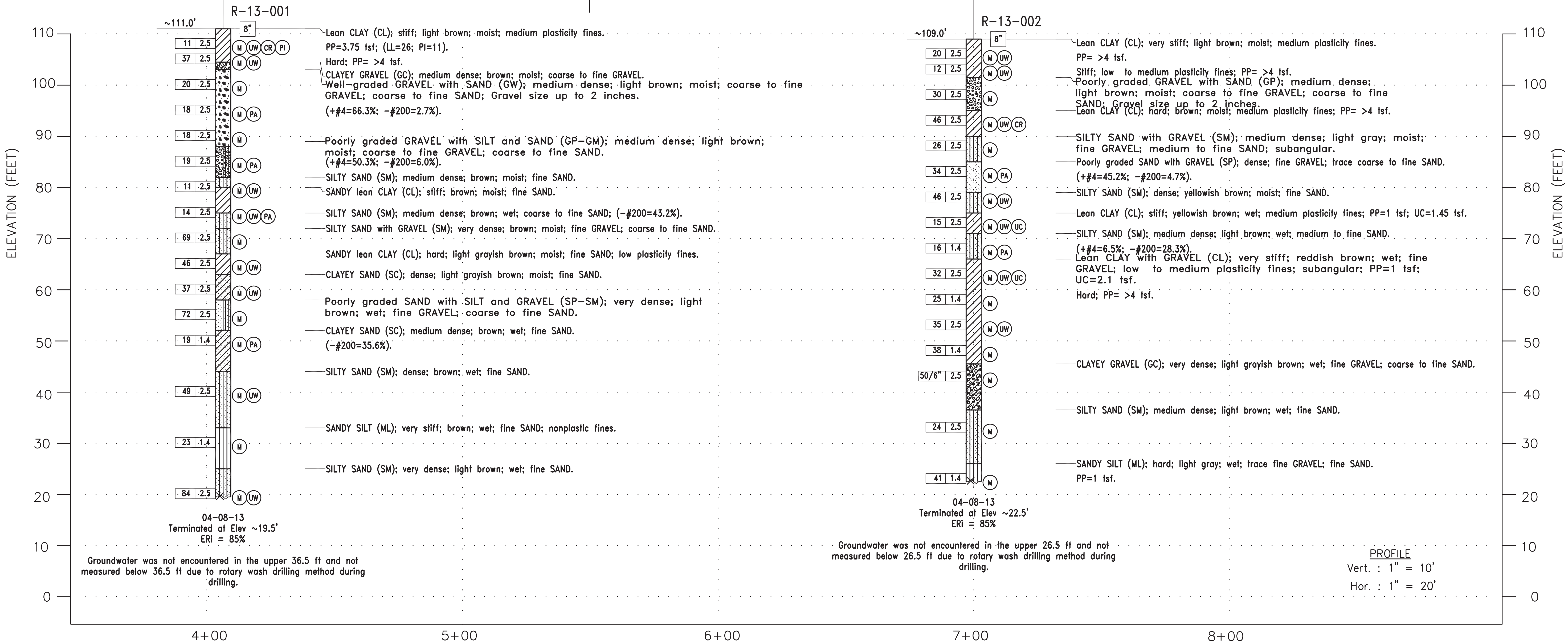
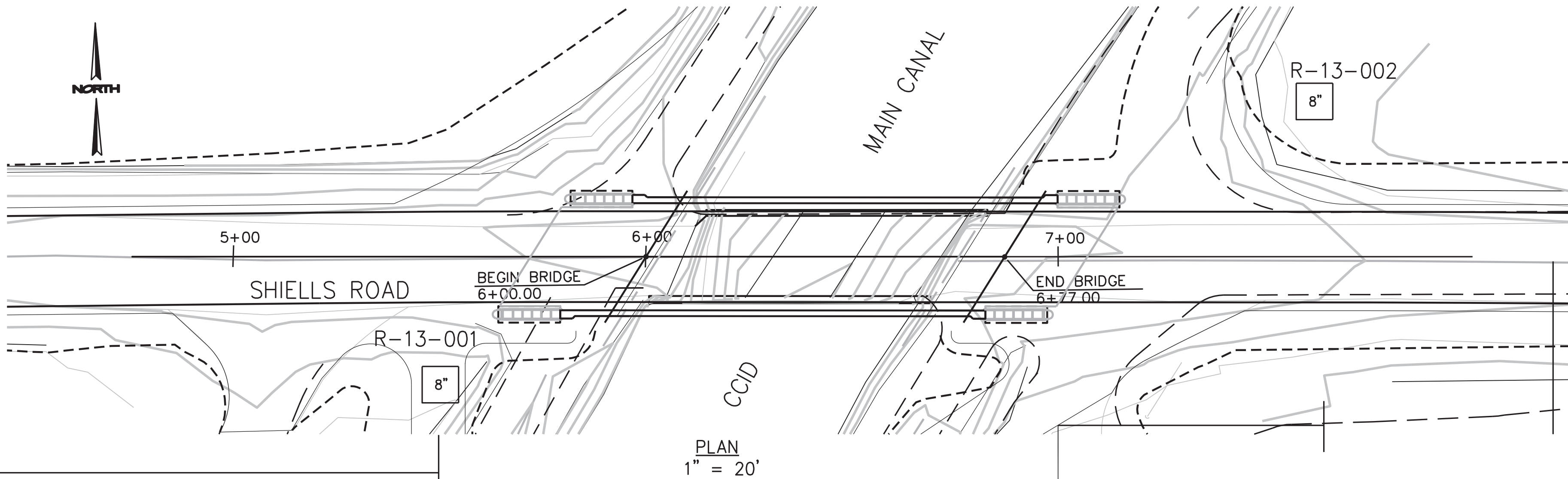
Notes:
Standard Penetration Test Sampler: I.D. = 1.4"; O.D. = 2"
Modified California Sampler: I.D. = 2.5"; O.D. = 3"
Hammer Assembly: A 140 lb hammer with a 30" drop
(Automatic Hammer)

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 NV5 (2015)



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	Sta			S-11	23
12/15/15			DATE		
GEOLOGICAL PROFESSIONAL			DATE		
PLANS APPROVAL DATE			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.			DATE OF CALIFORNIA		
NV5			2525 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833		
PARIKH CONSULTANTS, INC.			2360 QUME DRIVE, SUITE A SAN JOSE, CA 95131		

DESIGN OVERSIGHT	DRAWN BY O. GOUTHIER	A. BAKANE FIELD INVESTIGATION BY:	BRIDGE NO. 38C0180	SHIELLS ROAD BRIDGE REPLACEMENT	
SIGN OFF DATE	CHECKED BY P. WEI	DATE: APRIL 2013	POST MILES X	LOG OF TEST BORINGS	
G5 GEOTECHNICAL LOG OF TEST BORINGS SHEET (ENGLISH) (REV. 7/16/10)			UNIT: PROJECT NUMBER & PHASE: X	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 23
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			FILE => \$REQUEST	CONTRACT NO.: X	OF 23