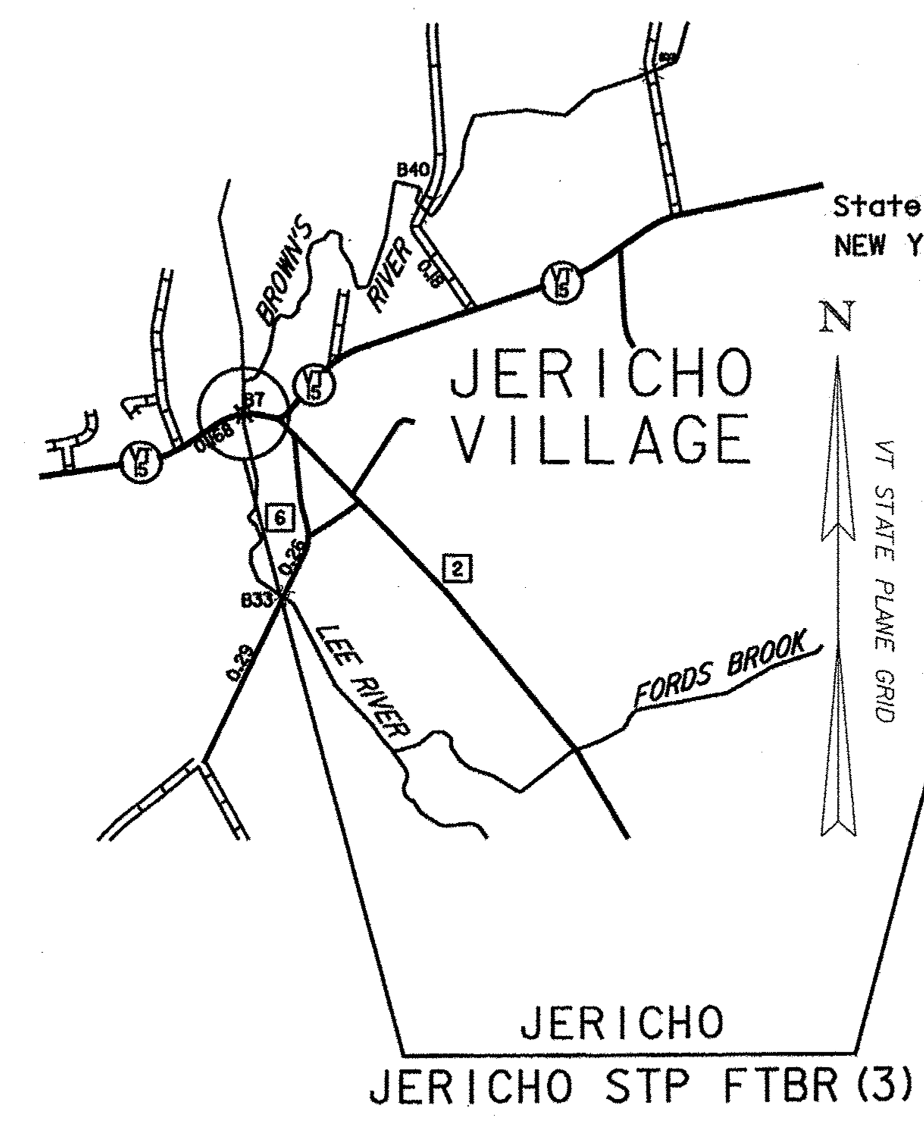
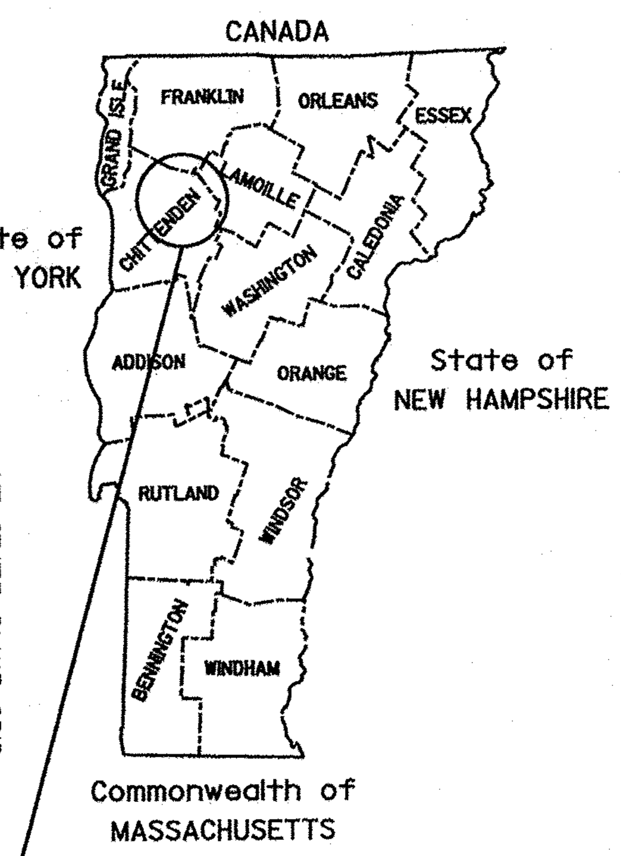
STATE OF VERMONT
AGENCY OF TRANSPORTATION





RECORD PLANS	
CONTRACTOR:	BLOW & COTE INC. - MORRISVILLE, VT
RESIDENT ENGINEER:	GREG WILCOX
CONSTRUCTION BEGAN:	JULY 25, 2014
CONSTRUCTION COMPLETE:	SEPTEMBER 25, 2015
RECORD PLANS BY:	GREG WILCOX & KEVIN KING

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Greg L. Wilcox RESIDENT ENGINEER

DATE 3/2/16

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

PROPOSED IMPROVEMENT
BRIDGE PROJECT
TOWN OF JERICHO
COUNTY OF CHITTENDEN

ROUTE NO : VT 15 (MINOR ARTERIAL) BRIDGE NO : PEDESTRIAN BRIDGE

PROJECT LOCATION: LOCATED IN THE COUNTY OF CHITTENDEN, TOWN OF JERICHO, ADJACENT TO BRIDGE NO. 7 ON VT 15 OVER BROWNS RIVER, APPROXIMATELY 0.45 MILE EAST OF THE ESSEX-JERICHO TOWN LINE.

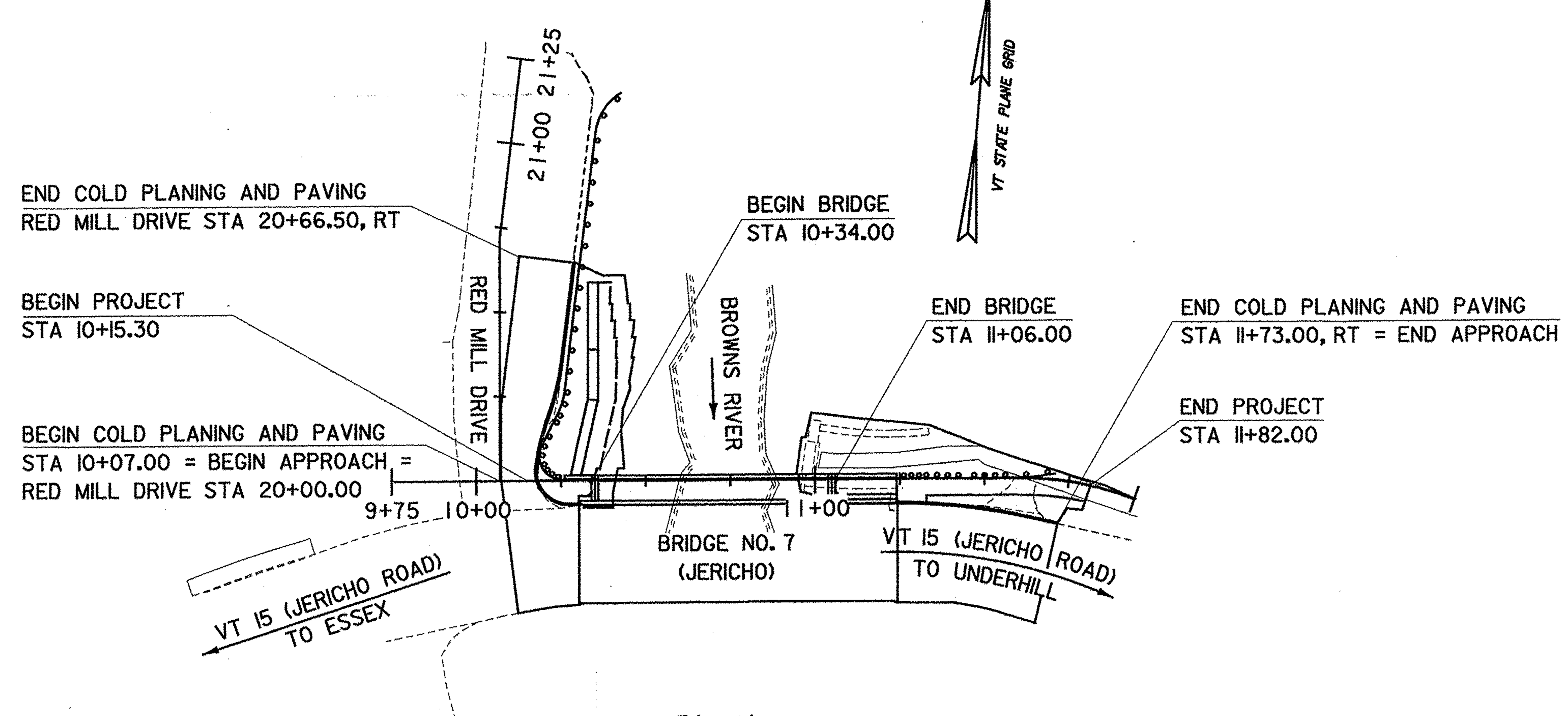
PROJECT DESCRIPTION: CONSTRUCTION OF A NEW PEDESTRIAN BRIDGE, APPROACH WALKWAYS AND ADJACENT RETAINING WALL, COLD PLANING AND PAVING OF VT 15 AND RED MILL DRIVE.

LENGTH OF STRUCTURE : 72.00 FEET
LENGTH OF ROADWAY: 94.70 FEET
LENGTH OF PROJECT : 166.70 FEET

STATE OF VERMONT
ANTHONY MARK PAPILE
No. 8004
REGISTERED PROFESSIONAL ENGINEER

PLANS PREPARED BY

CHA
III Winners Circle, PO Box 5269 • Albany, NY 12205-0269
Main: (518) 453-4500 • www.chacompanies.com



PLAN
SCALE 1" = 30'-0"
30 0 30

QUALITY ASSURANCE PROGRAM: LEVEL 2

CONVENTIONAL SYMBOLS
COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS
TOP OF CUT
TOE OF SLOPE

SURVEYED BY : L. ORVIS
SURVEYED DATE : OCTOBER 2006

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED Kevin L. Marshia DATE 4/11/14

PROJECT MANAGER: MARK SARGENT

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

SHEET 1 OF 62 SHEETS

FILE NAME = W:\Projects\ANY\X2\21113\CADD\MSTN\08F004\Consultants\z08f004title.dgn
DATE/TIME = 4/7/2014
USER = 4916

PRELIMINARY INFORMATION SHEET

INDEX OF SHEETS

LIST OF STANDARDS

B-5	06-01-94
B-11	06-01-94
C-3A	03-10-08
C-10	02-11-08
D-8	01-03-00
D-9	06-01-94
D-15	06-01-94
D-16	06-01-94
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E-121	08-08-95
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E-191	02-01-99
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T-45	08-06-12

STRUCTURES DETAIL INDEX

SD-501.00	CONCRETE DETAILS AND NOTES 02-09-12
SD-502.00	CONCRETE DETAILS AND NOTES 10-10-12
SD-601.00	STRUCTURAL STEEL DETAILS AND NOTES 06-04-10
SD-602.00	STRUCTURAL STEEL PLATE GIRDER DETAILS AND NOTES 05-02-11

NOTE:
HCL = HORIZONTAL CONTROL LINE

CHA

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: Oct. 2012

DRAINAGE AREA : 38.5 sq. mi.
CHARACTER OF TERRAIN : Hilly to mountainous, mixed land cover.
STREAM CHARACTERISTICS : Natural ledge gorge at site.
NATURE OF STREAMBED : Uneven ledge

PEAK FLOW DATA

Q 2.33 = 1800 cfs	Q 50 = 5000 cfs
Q 10 = 3400 cfs	Q 100 = 6000 cfs
Q 25 = 4300 cfs	Q 500 = 8400 cfs

DATE OF FLOOD OF RECORD : Unknown
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown

NATURAL STREAM VELOCITY : @ Q50 = N/A
ICE CONDITIONS : slight
DEBRIS: slight
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? Yes
IS ORDINARY RISE RAPID? Yes
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? Yes
IF YES, DESCRIBE: Small dam downstream backs water up through the site.

WATERSHED STORAGE: < 1% HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Previous pedestrian bridge has been removed
YEAR BUILT: N/A
CLEAR SPAN(NORMAL TO STREAM): 60'
VERTICAL CLEARANCE ABOVE STREAMBED: 27'
WATERWAY OF FULL OPENING: Approximately 1420 sq. ft.
DISPOSITION OF STRUCTURE: Previously removed
TYPE OF MATERIAL UNDER SUBSTRUCTURE: ledge

WATER SURFACE ELEVATIONS AT:

Q2.33 = N/A	VELOCITY = N/A
Q10 = 511.8'	" N/A
Q25 = N/A	" N/A
Q50 = 514.9'	" N/A
Q100 = 517.0'	" N/A

LONG TERM STREAMBED CHANGES: Ledge gorge, so minimal changes

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: Above Q500
RELIEF ELEVATION: 533.9'
DISCHARGE OVER ROAD @Q100: None

UPSTREAM STRUCTURE

TOWN:	Jericho	DISTANCE:	3500'
HIGHWAY # :	TH 17	STRUCTURE #:	40
CLEAR SPAN:	58'	CLEAR HEIGHT:	11'
YEAR BUILT:	1966	FULL WATERWAY:	N/A
STRUCTURE TYPE:	Single span steel beam bridge		

DOWNSTREAM STRUCTURE

TOWN:	Jericho	DISTANCE:	10'
HIGHWAY # :	VT 15	STRUCTURE #:	7
CLEAR SPAN:	88'	CLEAR HEIGHT:	28'
YEAR BUILT:	Built 1929, Rehab. 1972 & 1996	FULL WATERWAY:	N/A
STRUCTURE TYPE:	Single span steel beam bridge		

LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A STR.	4A STR.	5A SEMI
TONNAGE							
INVENTORY							
POSTING							
OPERATING							
COMMENTS:							

TRAFFIC DATA

YEAR	ADT	DHV	%D	%T	ADTT

20 year ESAL for flexible pavement from 2012 to 2032 :
40 year ESAL for flexible pavement from 2012 to 2052 :
Design Speed: mph

PROPOSED STRUCTURE

STRUCTURE TYPE: Single span pedestrian bridge

CLEAR SPAN(NORMAL TO STREAM): 68'
VERTICAL CLEARANCE ABOVE STREAMBED: 27'
WATERWAY OF FULL OPENING: Approximately 1470 sq. ft.

WATER SURFACE ELEVATIONS AT:

Q2.33 = N/A	VELOCITY= N/A
Q10 = 511.8'	" N/A
Q25 = N/A	" N/A
Q50 = 514.9'	" N/A
Q100 = 517.0'	" N/A

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: Above Q500
RELIEF ELEVATION: 533.9'
DISCHARGE OVER ROAD @Q100: None

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 533.0'
VERTICAL CLEARANCE: @ Q50 = 18.1'

SCOUR: N/A. Abutments are on solid ledge above the Q500.

REQUIRED CHANNEL PROTECTION: None needed

PERMIT INFORMATION

AVERAGE DAILY FLOW:	N/A	DEPTH OR ELEVATION:
ORDINARY LOW WATER:	N/A	N/A
ORDINARY HIGH WATER:	N/A	N/A

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: No temporary bridge required.
CLEAR SPAN (NORMAL TO STREAM): N/A
VERTICAL CLEARANCE ABOVE STREAMBED: N/A
WATERWAY AREA OF FULL OPENING: N/A

ADDITIONAL INFORMATION

This bridge spans a ledge gorge and is above the Q500. No hydraulic study was done for this project. Peak flow values are from a 1993 study of VT 15 Bridge 7. Reported water surface elevations are from the 1980 Jericho Flood Insurance Study.

DESIGN CRITERIA

1. DESIGN LIVE LOAD AASHTO PEDESTRIAN
2. DESIGN SPAN 70'
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL N/A
   ON LEDGE 10 TSF
4. ALLOWABLE LOAD FOR PILING N/A
   TYPE N/A
   ESTIMATED LENGTH N/A
5. STRUCTURAL STEEL AASHTO M270M/M270 GRADE 50 WEATHERING
6. REINFORCING STEEL GRADE 60
7. CONCRETE, HIGH PERFORMANCE CLASS A f'c: 4000 psi
   CONCRETE, HIGH PERFORMANCE CLASS B f'c: 3500 psi
8. DESIGN SOIL UNIT WEIGHT 140 pcf
9. DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL N/A

TRAFFIC MAINTENANCE

1. IS TRAFFIC TO BE MAINTAINED? YES
   IF YES, ON EXISTING STRUCTURE? YES, ON ADJACENT BRIDGE NO. 7
   OR ON TEMPORARY BRIDGE? N/A
   ONE OR TWO-WAY TRAVEL? N/A
2. TRAFFIC CONTROL SIGNALS REQUIRED? NO
3. ARE SIDEWALKS REQUIRED? NO
   IF SO, ON WHAT SIDE? N/A

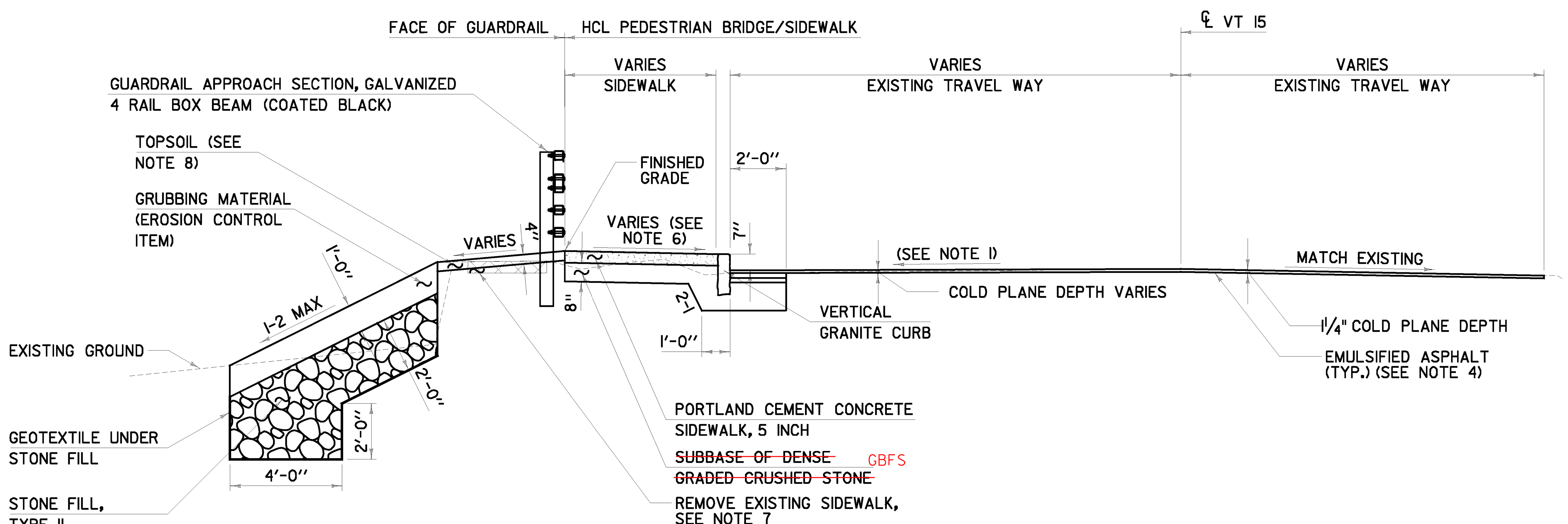
PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PLOT DATE: 4/7/2014
PROJECT LEADER: M. SARGENT DRAWN BY: D. D'AMATO
DESIGNED BY: D. D'AMATO CHECKED BY: T. PAPILE
PRELIMINARY INFORMATION SHEET

TYPICAL SECTIONS

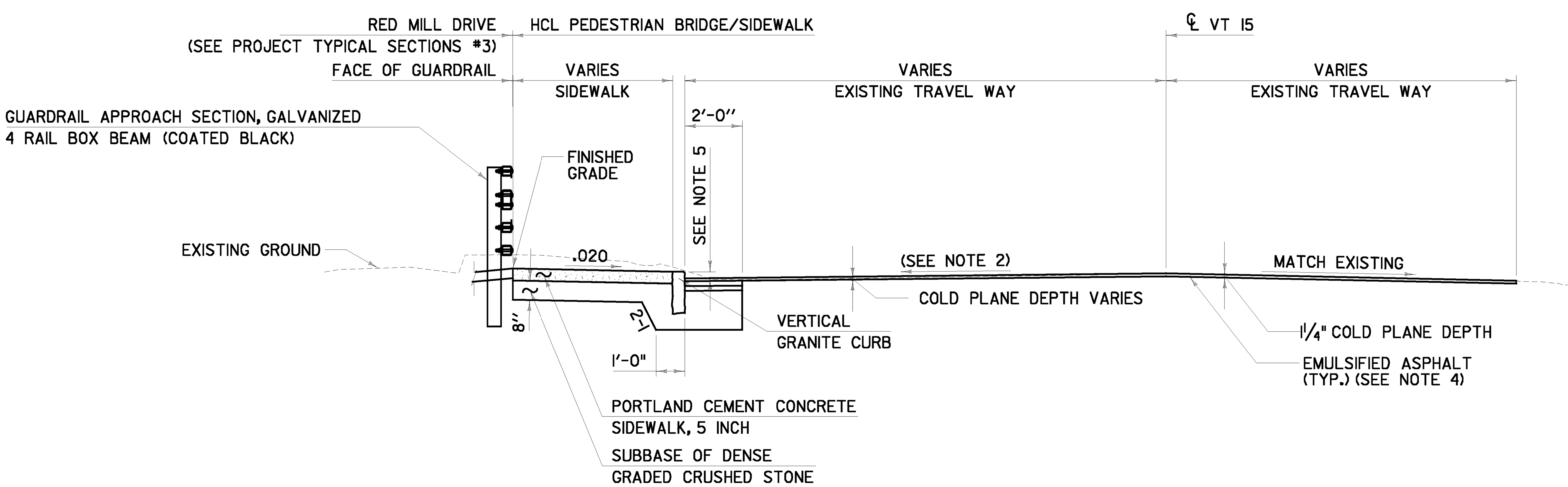
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	+1/4"
SUBBASE	+1"

1¼"	WEARING COURSE, SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY), TYPE IVS
4"	BASE COURSE, BITUMINOUS CONCRETE GUTTER AND TRAFFIC ISLAND, TYPE IIS, 2 - 2" LIFTS
12"	SUBBASE OF DENSE GRADED CRUSHED STONE



TYPICAL EAST APPROACH – SIDEWALK ADJACENT TO CURB

STA 11+20.00 TO STA 11+32.85



TYPICAL WEST APPROACH – SIDEWALK RAMP

STA 10+07.00 TO STA 10+30.00

NOTES

1. MODIFY ROADWAY CROSS SLOPE ON EAST AND WEST APPROACHES AS REQUIRED TO MATCH EXISTING GRADE AT THE VT 15 CROWN LINE AND TO ACHIEVE THE CURB REVEAL SHOWN ON CROSS SECTIONS. CURB REVEAL TRANSITION DESCRIBED IN NOTE 5.
2. MODIFY ROADWAY CROSS SLOPE ON WEST APPROACH TO ACHIEVE THE CURB REVEAL SHOWN ON CROSS SECTIONS OR AS DIRECTED BY THE ENGINEER. MATCH EXISTING PAVEMENT CROSS SLOPE AT STA 10+30.0. CURB REVEAL TRANSITION DESCRIBED IN NOTE 5.
3. FOR AREAS OF NEW CURB INSTALLATION, EXISTING PAVEMENT SHALL BE SAWCUT 2' FROM PROPOSED FACE OF NEW GRANITE CURB. SAWCUT WILL BE CONSIDERED INCIDENTAL TO ITEM 900.680 SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY).
4. COLD PLANED SURFACES SHALL HAVE A TACK COAT APPLICATION RATE OF 0.08 GAL/SQ. YD. OF CRS-1H OR RS-1H. TACK COAT APPLICATION ON ALL OTHER PAVED SURFACES SHALL BE 0.025 TO 0.040 GAL/SQ. YD. OF CRS-1H OR RS-1H. TACK COAT SHALL BE PAID FOR UNDER ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-1H OR CRS-1H).
5. TRANSITION CURB REVEAL ALONG LENGTH OF SIDEWALK RAMP FROM 1" AT STA 10+22.6 TO 7" AT STA 10+30.0. SEE CROSS SECTIONS FOR CURB ELEVATION AND REVEAL.
6. TRANSITION SIDEWALK CROSS SLOPE FROM -.020 AT STA 11+30.0 TO +.020 AT STA 11+60.0.
7. REMOVE EXISTING CONCRETE SIDEWALK FROM STA 11+00.6 TO STA 11+82.0, LT AND RT. EXCAVATION PAID UNDER ITEM 203.16 SOLID ROCK EXCAVATION. SHOULD BACKFILL MATERIAL BE REQUIRED, IT SHALL COME FROM THE PROJECT'S EARTHWORK SURPLUS, AND MEET THE MATERIAL REQUIREMENTS OF EARTH BORROW, SUBSECTION 703.02 OF THE STANDARD SPECIFICATIONS.
8. TURF SHALL BE ESTABLISHED ON TOPSOILED AREAS AS SHOWN ON THE EROSION CONTROL FINAL CONDITION PLAN SHEET, SHEET 58, AND THE EROSION CONTROL DETAILS SHEET #2, SHEET 60.

SCALE ⅜" = 1'-0"
0 1 2 3 4

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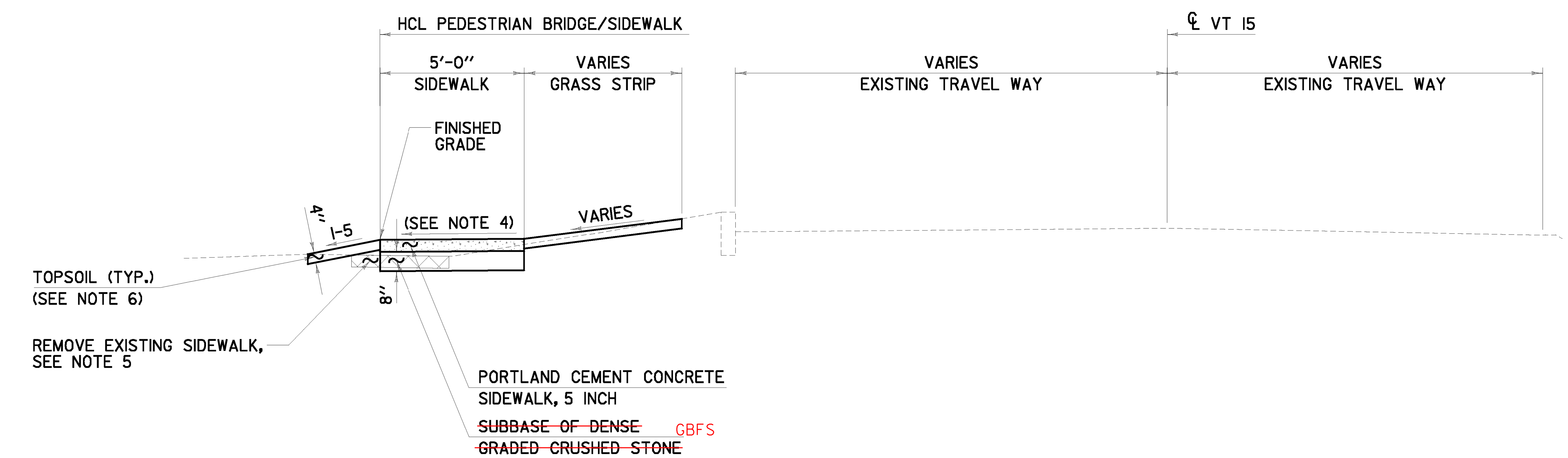
PROJECT TYPICAL SECTIONS #1	PROJECT NAME: JERICHO PROJECT NUMBER: STP FTBR (3)	
	PROJECT LEADER: M.D.S. DESIGNED BY: C.R.H. DWG. NO.: TYP-1	PLOT DATE: 4/7/2014 DRAWN BY: C.R.H. CHECKED BY: D.E.G. SHEET 3 OF 62

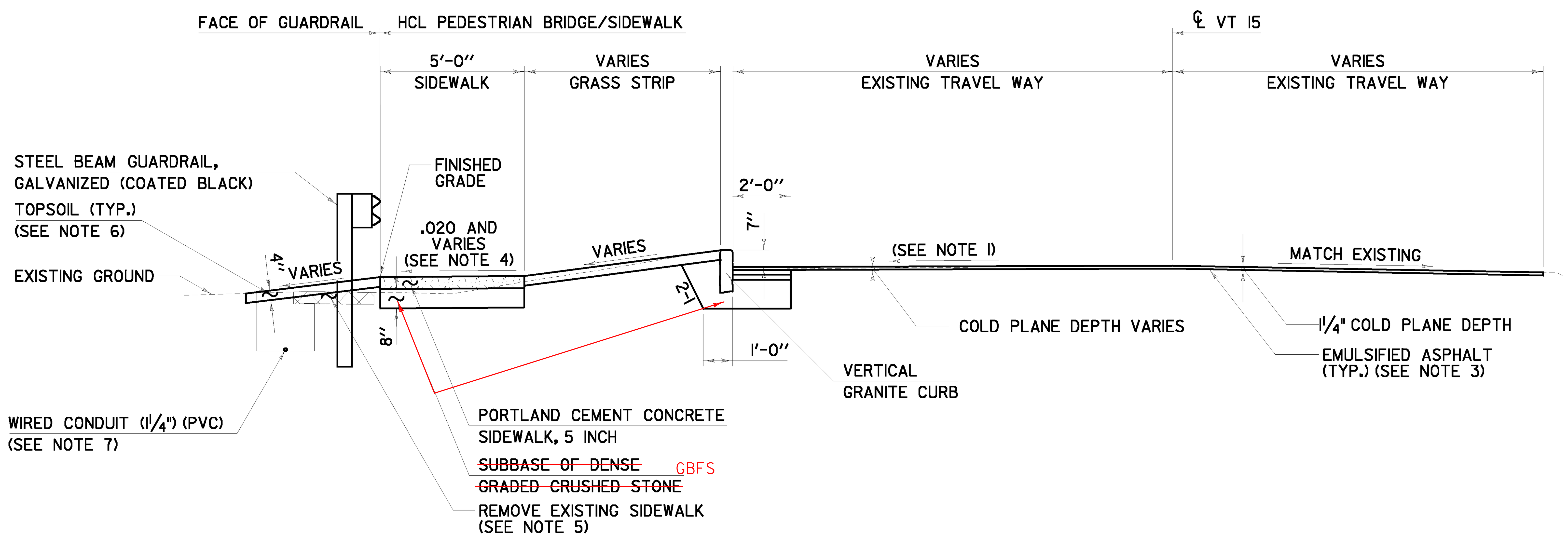
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	+1/4"
SUBBASE	+1"

TYPICAL SECTIONS

1¼"	WEARING COURSE, SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY), TYPE IVS
4"	BASE COURSE, BITUMINOUS CONCRETE GUTTER AND TRAFFIC ISLAND, TYPE IIS, 2 - 2" LIFTS
12"	SUBBASE OF DENSE GRADED CRUSHED STONE



TYPICAL EAST APPROACH - SIDEWALK WITH GRASS STRIP
STA 11+73.00 TO STA 11+82.00



TYPICAL EAST APPROACH - SIDEWALK WITH GRASS STRIP & CURB
STA 11+32.85 TO STA 11+73.00

NOTES

1. MODIFY ROADWAY CROSS SLOPE ON EAST APPROACH AS REQUIRED TO MATCH EXISTING GRADE AT THE VT 15 CROWN LINE AND TO ACHIEVE THE 7" (TYP.) CURB REVEAL. TRANSITION ROADWAY CROSS SLOPE TO MATCH EXISTING OVER FINAL 10' OF APPROACH, STA 11+63.0 TO STA 11+73.0.
2. FOR AREAS OF NEW CURB INSTALLATION, EXISTING PAVEMENT SHALL BE SAWCUT 2' FROM PROPOSED FACE OF NEW GRANITE CURB. SAWCUT WILL BE CONSIDERED INCIDENTAL TO ITEM 900.680 SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY).
3. COLD PLANED SURFACES SHALL HAVE A TACK COAT APPLICATION RATE OF 0.08 GAL/SQ. YD. OF CRS-1H OR RS-1H. TACK COAT APPLICATION ON ALL OTHER PAVED SURFACES SHALL BE 0.025 TO 0.040 GAL/SQ. YD. OF CRS-1H OR RS-1H. TACK COAT SHALL BE PAID FOR UNDER ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-1H OR CRS-1H).
4. TRANSITION SIDEWALK CROSS SLOPE FROM -.020 AT STA 11+30.0 TO +.020 AT STA 11+60.0. TRANSITION SIDEWALK CROSS SLOPE TO MATCH EXISTING CROSS SLOPE AT END PROJECT.
5. REMOVE EXISTING CONCRETE SIDEWALK FROM STA 11+00.6 LT TO STA 11+82.0 RT, PAID UNDER ITEM 203.16 SOLID ROCK EXCAVATION. SHOULD BACKFILL MATERIAL BE REQUIRED, IT SHALL COME FROM THE PROJECT'S EARTHWORK SURPLUS AND MEET THE MATERIAL REQUIREMENTS OF EARTH BORROW, SUBSECTION 703.02 OF THE STANDARD SPECIFICATIONS.
6. TURF SHALL BE ESTABLISHED ON TOPSOILED AREAS AS SHOWN ON THE EROSION CONTROL FINAL CONDITION PLAN SHEET, SHEET 58, AND THE EROSION CONTROL DETAILS SHEET #2, SHEET 60.
7. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 204, 678, AND 679 OF THE STANDARD SPECIFICATIONS FOR DETAILS ON THE CONSTRUCTION OF WIRED CONDUIT. WIRED CONDUIT SHALL BE INSTALLED FROM THE PULL BOX AT STA 11+74.0, RT, TO THE RESET LIGHT POLE AT STA 11+35.0, 4.0' LT. SEE STREET LIGHTING NOTES, SHEET 7, FOR FURTHER DETAILS.

SCALE ⅜" = 1'-0"
1 0 1 2 3 4

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PROJECT TYPICAL SECTIONS #2

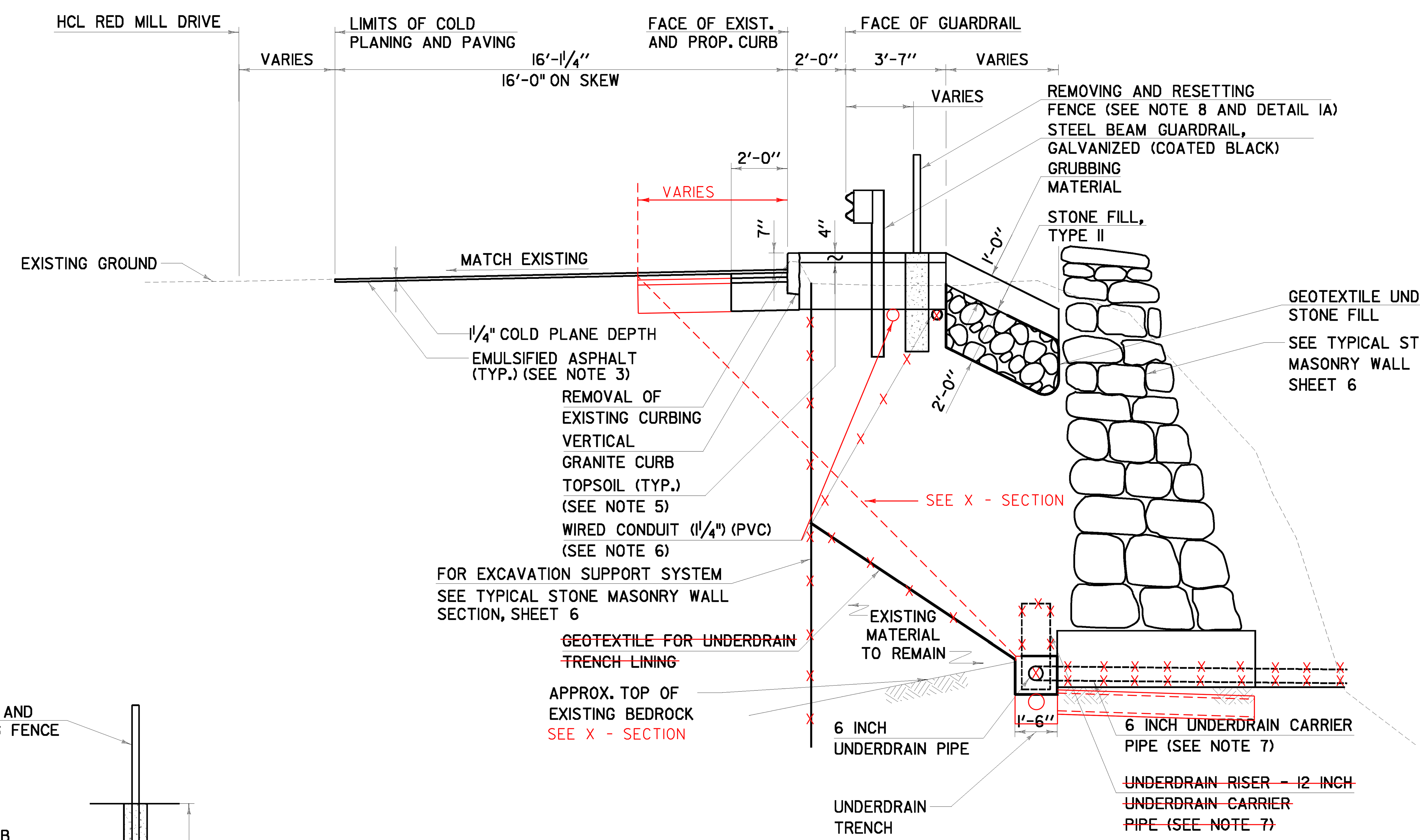
PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PLOT DATE: 4/7/2014
PROJECT LEADER: M.D.S.
DRAWN BY: C.R.H.
DESIGNED BY: C.R.H.
CHECKED BY: D.E.G.
DWG. NO.: TYP-2
SHEET 4 OF 62

TYPICAL SECTIONS

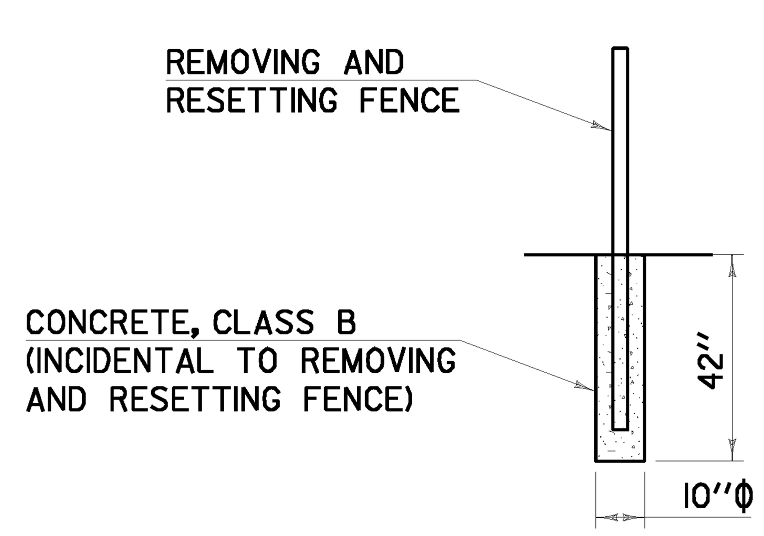
MATERIAL ITEM	**THICKNESS TOLERANCE**
PAVEMENT (TOTAL DEPTH)	+1/4"
SUBBASE	+1"

1¼"	WEARING COURSE, SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY), TYPE IVS
4"	BASE COURSE, BITUMINOUS CONCRETE ~~GUTTER AND TRAFFIC ISLAND~~, TYPE IIS, 2 - 2" LIFTS
12"	SUBBASE OF DENSE GRADED CRUSHED STONE



TYPICAL COLD PLANING AND OVERLAY - RED MILL DRIVE

STA 20+00.0 TO STA 20+66.50



DETAIL 1A

NOTES

1. RED MILL DRIVE SHALL BE COLD PLANED AND PAVED TO THE DIMENSIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

2. FOR AREAS OF NEW CURB INSTALLATION, EXISTING PAVEMENT SHALL BE SAWCUT 2' FROM PROPOSED FACE OF NEW GRANITE CURB. SAWCUT WILL BE CONSIDERED INCIDENTAL TO ITEM 900.680 SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY).

3. COLD PLANED SURFACES SHALL HAVE A TACK COAT APPLICATION RATE OF 0.08 GAL/SQ. YD. OF CRS-1H OR RS-1H. TACK COAT APPLICATION ON ALL OTHER PAVED SURFACES SHALL BE 0.025 TO 0.040 GAL/SQ. YD. OF CRS-1H OR RS-1H. TACK COAT SHALL BE PAID FOR UNDER ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-1H OR CRS-1H).

4. TRANSITION CURB REVEAL ADJACENT TO SIDEWALK RAMP FROM 1" AT STA 20+00.0 TO 7" AT STA 20+06.3. SEE RED MILL DRIVE CROSS SECTIONS FOR DETAILS.

5. TURF SHALL BE ESTABLISHED ON TOPSOILED AREAS AS SHOWN ON THE EROSION CONTROL FINAL CONDITION PLAN SHEET, SHEET 58, AND THE EROSION CONTROL DETAILS SHEET #2, SHEET 60.

6. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 204, 678, AND 679 OF THE STANDARD SPECIFICATIONS FOR DETAILS ON THE CONSTRUCTION OF WIRED CONDUIT. WIRED CONDUIT SHALL BE INSTALLED FROM THE JUNCTION BOX AT STA 20+76.0, RT, TO THE NEW LIGHT POLE AT STA 20+07.0, RT. SEE STREET LIGHTING NOTES, ON PROJECT NOTES SHEET 7, FOR FURTHER DETAILS. CONDUIT ROUTING SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

7. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 605 OF THE STANDARD SPECIFICATIONS AND VTRANS' STD. SHEETS D-16 AND D-30 FOR DETAILS ON THE CONSTRUCTION OF UNDERDRAIN. 6" UNDERDRAIN PIPE SHALL BE INSTALLED FROM STA 20+03.0 TO STA 20+59.1. THE UNDERDRAIN SHALL OUTLET THROUGH A 6 INCH UNDERDRAIN CARRIER PIPE PLACED ~~THROUGH~~ THE C.I.P. UNDER CONCRETE LEVELING PAD AT STA ~~20+14.6. UNDERDRAIN RISERS,~~ 20+27.5 ~~CONSISTING OF 12 INCH UNDERDRAIN CARRIER PIPE SHALL BE CONSTRUCTED AT LOCATIONS WHERE THE C.I.P. FOOTING CHANGES ELEVATION, AS SHOWN ON THE LAYOUT PLAN, SHEET 16, AND ON THE STONE MASONRY WALL PLAN AND DETAILS, SHEET 33. CONNECTION BETWEEN 6 INCH UNDERDRAIN AND UNDERDRAIN RISER SHALL BE IN CONFORMANCE WITH VTRANS' STD. SHEET D-16, SECTION 605 OF THE STANDARD SPECIFICATIONS AND ANY APPLICABLE MANUFACTURER SPECIFICATIONS.~~ UNDERDRAIN FLUSHING BASINS SHALL BE CONSTRUCTED AT STA'S 20+03.0 AND 20+59.1, THIS WORK SHALL BE PAID UNDER THE UNDERDRAIN FLUSHING BASIN AND 6 INCH UNDERDRAIN CARRIER PIPE ITEMS.

8. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 620 OF THE STANDARD SPECIFICATIONS FOR DETAILS ON THE REMOVING AND RESETTING OF FENCE. THE EXISTING WROUGHT IRON FENCE SHALL BE REMOVED AND RESET TO THE LOCATIONS SHOWN ON THE LAYOUT PLAN, SHEET 16, OR AS DIRECTED BY THE ENGINEER. CYLINDRICAL FOOTINGS SHALL BE CONSTRUCTED TO A DEPTH OF 42" AND WITH A DIAMETER OF 10". THIS WORK SHALL BE PAID UNDER THE REMOVING AND RESETTING FENCE ITEM. IT IS ANTICIPATED THAT THERE WILL BE AN EXCESS OF REMOVED FENCE. FENCE WHICH IS REMOVED AND NOT RESET SHALL REMAIN PROPERTY OF THE TOWN, AND BE DELIVERED TO A LOCATION SPECIFIED BY THE ENGINEER. THIS WORK SHALL BE PAID UNDER THE REMOVAL OF EXISTING FENCE ITEM.

SCALE ⅜" = 1'-0"

1 0 1 2 3 4

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PROJECT TYPICAL SECTIONS #3	PROJECT NAME: JERICHO PROJECT NUMBER: STP FTBR (3)	
	PROJECT LEADER: M.D.S. DESIGNED BY: C.R.H. DWG. NO.: TYP-3	PLOT DATE: 4/7/2014 DRAWN BY: C.R.H. CHECKED BY: D.E.G. SHEET 5 OF 62

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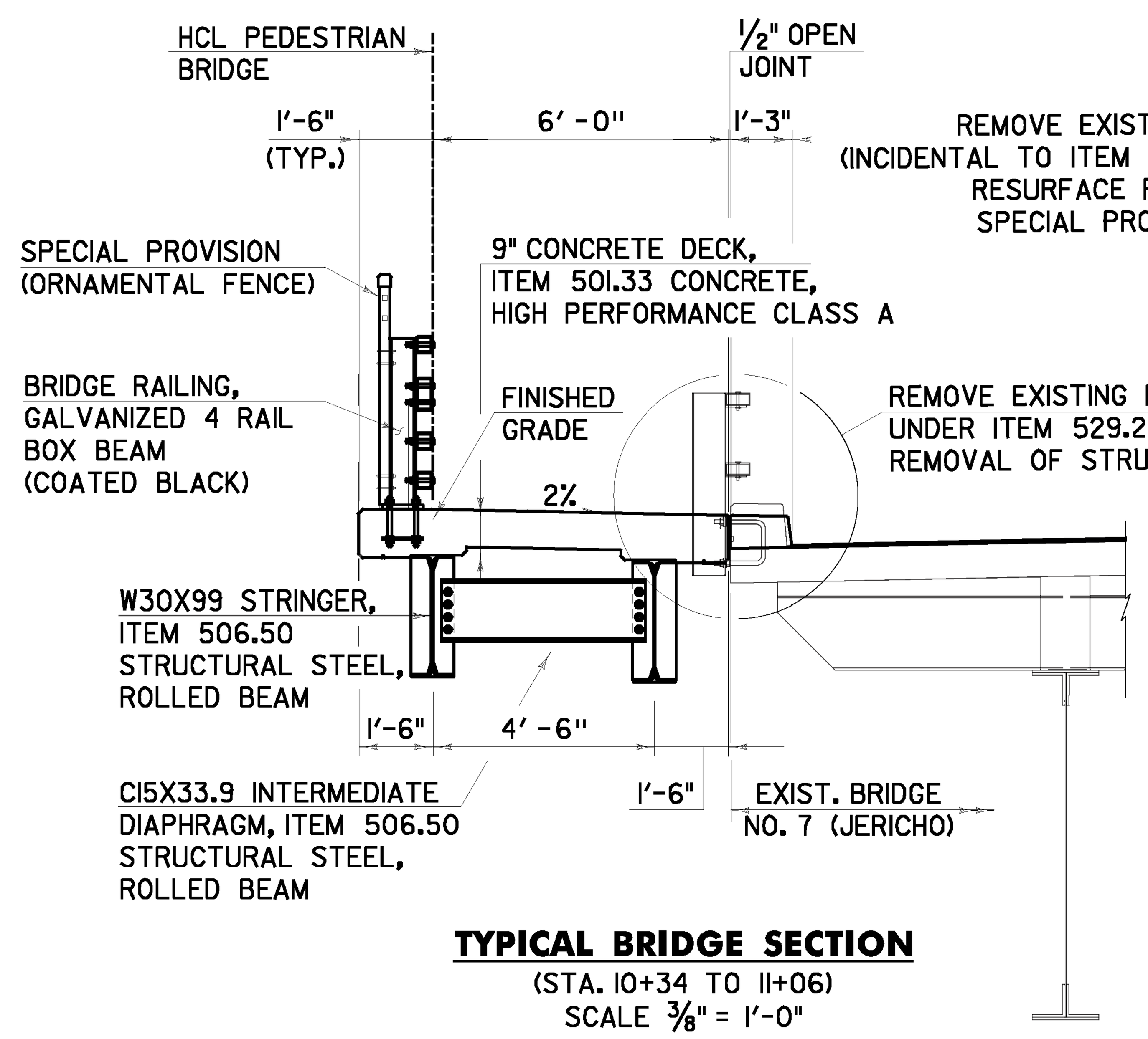
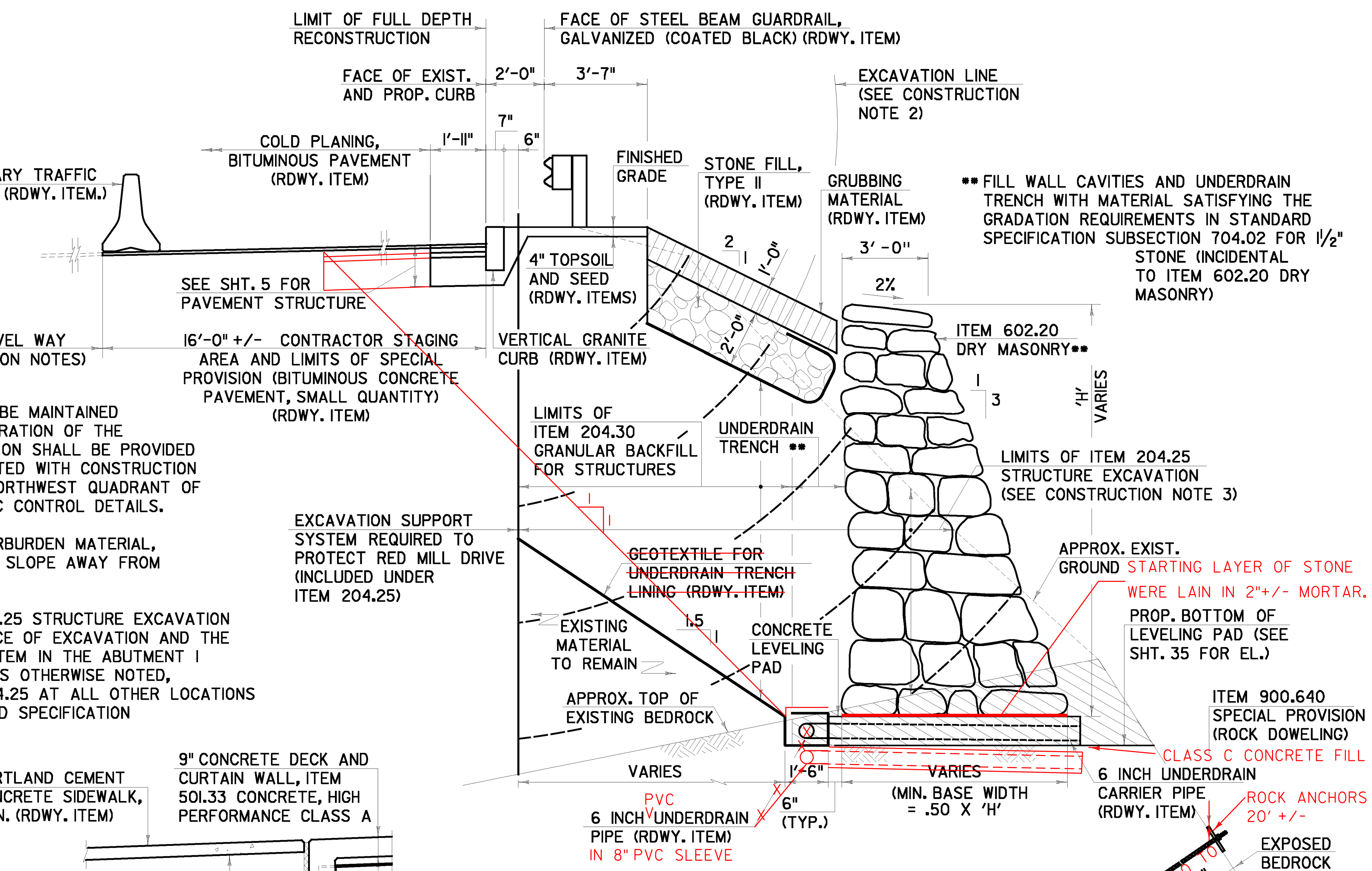
DATE/TIME = 4/7/2014
USER = 4916



TYPICAL BRIDGE SECTION

(STA. 10+34 TO 11+06)
SCALE 3/8" = 1'-0"



TYPICAL STONE MASONRY WALL SECTION

SCALE 3/8" = 1'-0"

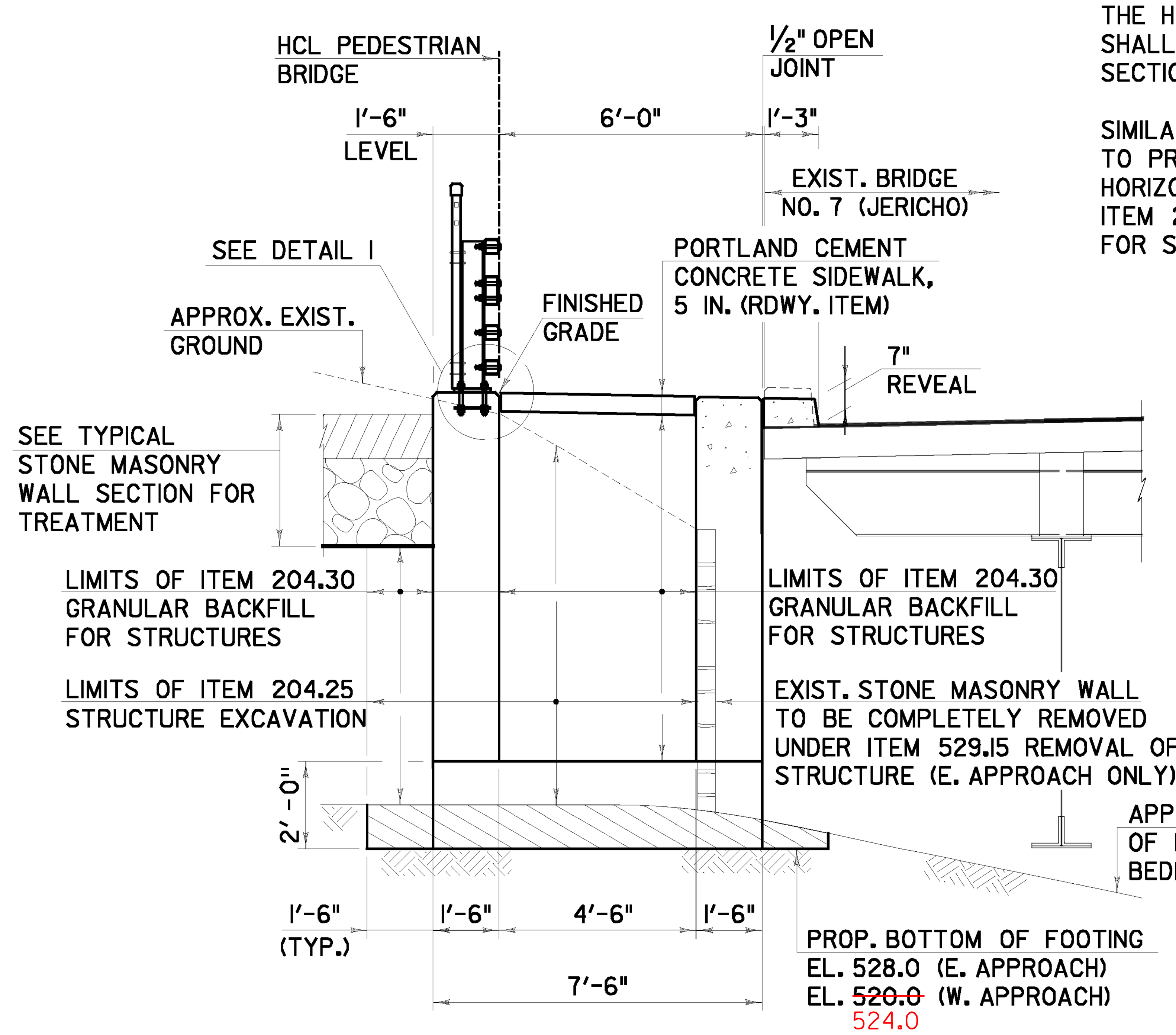
CONSTRUCTION NOTES:

1. A MINIMUM 12' PAVED TRAVELWAY SHALL BE MAINTAINED ON RED MILL DRIVE THROUGHOUT THE DURATION OF THE PROJECT. IN ADDITION, FLAGGER PROTECTION SHALL BE PROVIDED DURING EARTHWORK OPERATIONS ASSOCIATED WITH CONSTRUCTION OF THE STONE MASONRY WALL IN THE NORTHWEST QUADRANT OF THE PROJECT. SEE SHEET 18 FOR TRAFFIC CONTROL DETAILS.

2. TO MINIMIZE DISCHARGE OF EXISTING OVERBURDEN MATERIAL, THE ACTIVE FACE OF EXCAVATION SHALL SLOPE AWAY FROM BROWNS RIVER.

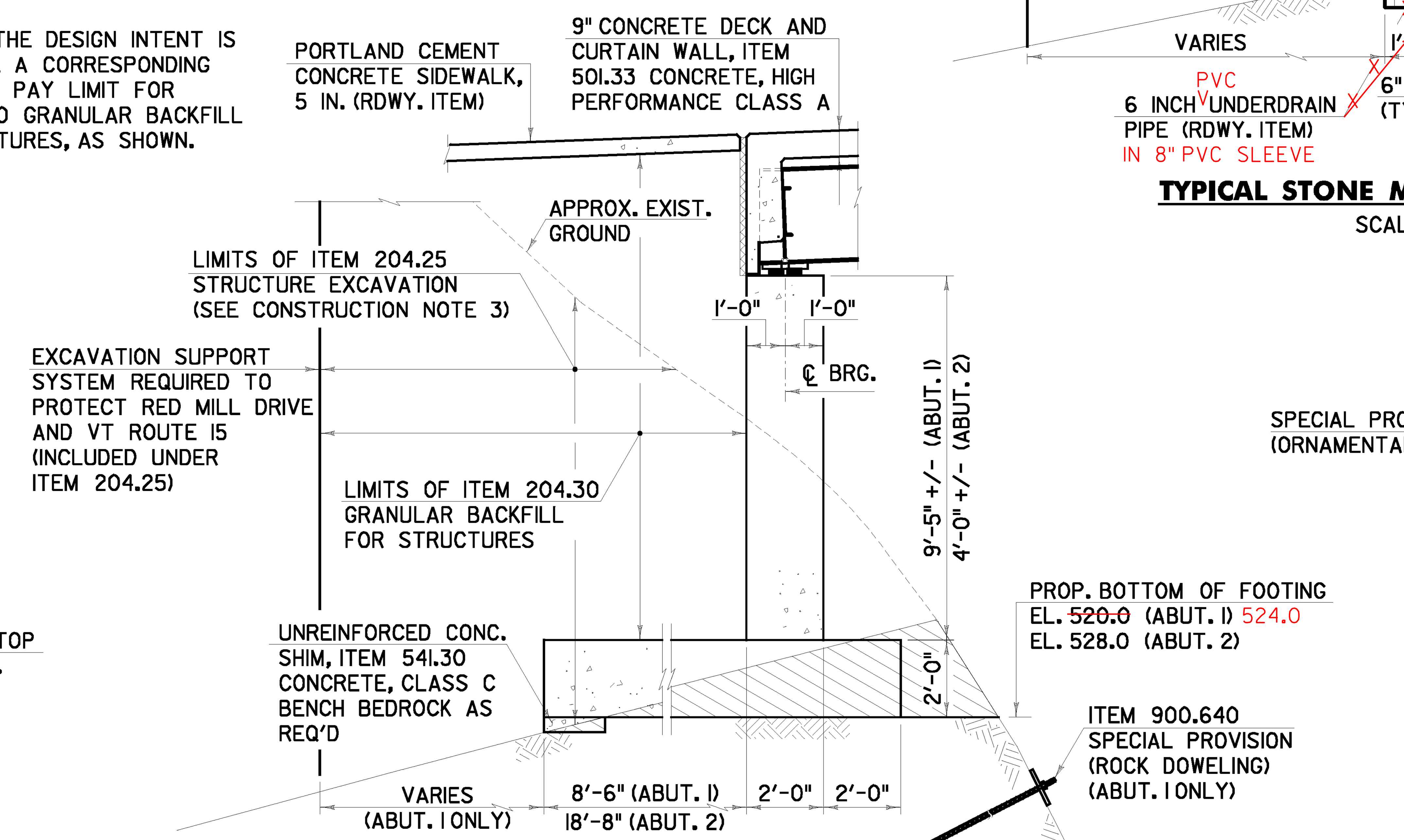
3. THE HORIZONTAL PAY LIMIT OF ITEM 204.25 STRUCTURE EXCAVATION HAS BEEN SET BETWEEN THE ACTIVE FACE OF EXCAVATION AND THE FACE OF THE EXCAVATION SUPPORT SYSTEM IN THE ABUTMENT 1 AND STONE MASONRY WALL AREA. UNLESS OTHERWISE NOTED, THE HORIZONTAL PAY LIMTS OF ITEM 204.25 AT ALL OTHER LOCATIONS SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 204.09.B.2.

   SIMILARLY, THE DESIGN INTENT IS TO PROVIDE A CORRESPONDING HORIZONTAL PAY LIMIT FOR ITEM 204.30 GRANULAR BACKFILL FOR STRUCTURES, AS SHOWN.



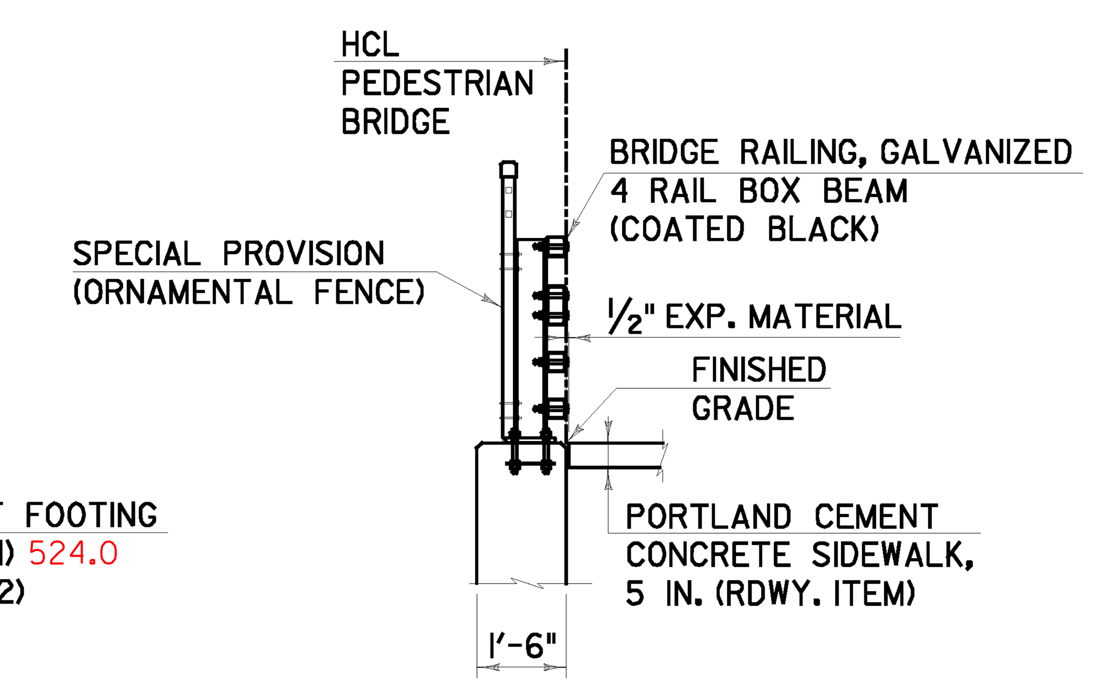
TYPICAL APPROACH SECTION

(W. APPROACH STA. 10+26 TO 10+34)
(E. APPROACH, STA. 11+06 TO STA. 11+24)
SCALE 3/8" = 1'-0"



TYPICAL ABUTMENT SECTION

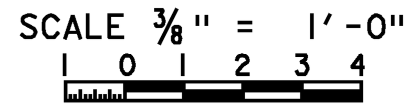
(ABUT. 1 SHOWN, ABUT. 2 SIMILAR)
SCALE 3/8" = 1'-0"



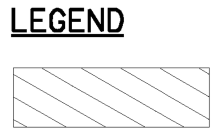
DETAIL 1

SCALE 3/8" = 1'-0"

SCALE 3/8" = 1'-0"



LEGEND



APPROXIMATE LIMIT OF ITEM 203.16 SOLID ROCK EXCAVATION. (CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION. IF ABUTMENT REQUIRES MODIFICATION, CONTRACTOR SHALL BE PAID ONLY FOR ADDITIONAL QUANTITIES AS DESCRIBED IN THE STANDARD SPECIFICATIONS.)

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PROJECT TYPICAL SECTIONS #4

PROJECT NAME: JERICHO		
PROJECT NUMBER: STP FTBR (3)		
PROJECT LEADER: M.D.S.		PLOT DATE: 4/7/2014
DESIGNED BY: D.M.D.		DRAWN BY: D.M.D.
DWG. NO.: TYP-4		CHECKED BY: P.M.P.
		SHEET 6 OF 62

GENERAL NOTES:

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SIXTH EDITION, THE AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, DATED DECEMBER 2009, AND ALL THE LATEST REVISIONS.

2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, ESPECIALLY THE DISCHARGE OF RAW CONCRETE INTO BROWNS RIVER AS DIRECTED BY THE ENGINEER AND SECTION 105 OF THE STANDARD SPECIFICATIONS.

3. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT UNLESS OTHERWISE NOTED.

4. THE CONTRACTOR SHALL CONTACT DIG SAFE SYSTEM, INC. (811 OR 1-888-344-7233) A MINIMUM OF 48 HOURS PRIOR TO ANY IN-GROUND WORK.

LEDGE NOTES:

1. NO BORINGS WERE TAKEN IN THE NORTHEAST QUADRANT OF THE PROJECT. SUBSURFACE CONDITIONS MAY VARY FROM THE CONDITIONS ASSUMED FOR DESIGN. HAND SOUNDINGS AND SURVEY DATA OF EXISTING OUTCROPPINGS WERE USED TO DETERMINE THE APPROXIMATE DEPTH OF LEDGE.

2. IF LEDGE IS ENCOUNTERED MORE THAN (2) FEET BELOW THE INDICATED BOTTOM OF FOOTING ELEVATIONS AS SHOWN ON THE PLANS, THE STRUCTURES ENGINEER SHALL BE CONTACTED. PROFILES OF THE LEDGE MAY BE REQUIRED TO ADJUST THE FOOTING ELEVATIONS AND SIZE. NO FURTHER WORK SHALL BE DONE ON THE FOOTINGS UNTIL A REPLY IS RECEIVED FROM THE STRUCTURES SECTION.

3. FOOTINGS SHALL BE PLACED ON SOUND, CLEAN LEDGE. ALL OVER BREAKAGE BELOW INDICATED BOTTOM OF FOOTING ELEVATIONS SHALL BE REPLACED WITH CONCRETE, CLASS C. A MAXIMUM OF 6" AVERAGE DEPTH SHALL BE PAID FOR AS ITEM 541.30 CONCRETE, CLASS C, ADDITIONAL CONCRETE REQUIRED TO REPLACE OVERBREAKAGE SHALL BE PLACED AT THE CONTRACTOR'S EXPENSE.

STRUCTURAL STEEL NOTES:

1. ALL STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).

2. ANY CONNECTIONS THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.

3. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF SUBSECTION 506.10.

4. ANY HOLES IN THE WEBS OF THE FASCIA STRINGER THAT ARE NOT OTHERWISE FILLED, SHALL BE FILLED WITH EITHER BUTTON HEAD OR HEX HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.

5. ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER ASTM DESIGNATION A-325 TYPE III BOLTS IN 15/16" DIAMETER HOLES.

6. CONTRACTOR IS RESPONSIBLE FOR STABILITY OF STRINGERS DURING CONSTRUCTION. CONTRACTOR SHALL USE FLEMING BRACKETS OR SIMILAR FALSE WORK AND DETERMINE THE APPROPRIATE BRACKET SPACING.

7. ENDS OF STRINGERS SHALL BE VERTICAL IN THEIR FINAL POSITION.

RAILING NOTE:

1. ALL STEEL BRIDGE RAILING, ORNAMENTAL FENCE, AND APPROACH GUARDRAIL COMPONENTS SHALL BE POWDER COATED BLACK AFTER GALVANIZING IN ACCORDANCE WITH ASTM D7803. COLOR SHALL MATCH EXISTING WROUGHT IRON FENCE ADJACENT TO THE BRIDGE ALONG RED MILL DRIVE.

CONCRETE NOTES:

1. AFTER THE SUPERSTRUCTURE HAS BEEN ERECTED, ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF THE STRINGERS, AS DIRECTED BY THE ENGINEER, FOR USE IN DETERMINING THE FINISHED GRADE.

2. NO CONCRETE IN WINGWALLS SHALL BE PLACED ABOVE THE BRIDGE SEAT ELEVATIONS UNTIL THE STRINGERS HAVE BEEN PROFILED AND THE FINISHED GRADE OF THE DECK HAS BEEN DETERMINED.

3. FOR BRIDGE DECK POURS, THE MAXIMUM TIME LIMIT FOR ANY COMBINATION OF POURS DONE IN ANY ONE DAY SHALL BE EIGHT HOURS. THERE SHALL BE A MINIMUM OF 96 HOURS BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF OTHER ADJACENT POURS. ALL INDIVIDUAL DECK POURS SHALL START FROM THE LOW END OF THE BRIDGE.

4. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT, ANY UPWARD KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.

5. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" BY 1".

6. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

7. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).

8. REINFORCING PLACEMENT TOLERANCES SHALL BE:
   SPACING +/- 1"
   CLEARANCE +/- 1/4"

9. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL, OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 1/2" PER FOOT TOWARDS MID-SPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTH STEEL TROWEL FINISHED.

10. THE HEIGHT OF FILL BEHIND ABUTMENTS WILL BE LIMITED TO THE BRIDGE SEAT ELEVATION UNTIL THE CURTAIN WALL HAS BEEN POURED AND THE CURING PERIOD IS UP.

11. NO TRAFFIC SHALL BE ALLOWED ON THE NEW DECK UNTIL THE CURE PERIOD IS UP AND THE 28 DAY DESIGN STRENGTH IS ATTAINED, AS EVIDENCED BY TEST CYLINDERS CURED UNDER FIELD CONDITIONS.

12. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE DRIP BEADS.

STREET LIGHTING NOTES:

1. EXISTING ORNAMENTAL LIGHT POLES ALONG RED MILL DRIVE AND THE SIDEWALK APPROACH TO THE REMOVED PEDESTRIAN BRIDGE SHALL BE REMOVED PRIOR TO EXCAVATION ACTIVITIES IN THESE AREAS. FOLLOWING OR IN CONJUNCTION WITH PROPOSED CONSTRUCTION, THE REMOVED LIGHT POLES SHALL BE RESET ON NEW LIGHT POLE BASES. FINAL ELECTRICAL CONNECTIONS TO THE PROPOSED WIRED CONDUIT SHALL BE INCIDENTAL TO OTHER CONTRACT ITEMS.

2. A NEW ORNAMENTAL LIGHT POLE SHALL BE ERECTED ON A NEW LIGHT POLE BASE AT STA 20+07 RT. THIS POLE SHALL MATCH THE REMOVED AND RESET POLES WITHIN THE PROJECT AREA, AND BE ORDERED FROM THE SAME MANUFACTURER TO SPECIFICATIONS TO BE PROVIDED BY THE TOWN OF JERICHO. THIS WORK SHALL BE PAID UNDER ITEM 900.620 SPECIAL PROVISION (ORNAMENTAL STREET LIGHT).

3. PROPOSED WIRED CONDUIT (1 1/4") (PVC) SHALL BE INSTALLED FROM THE PROPOSED PULL BOXES TO THE REMOVED AND RESET AND NEW LIGHT POLES. THIS WORK SHALL CONFORM TO SECTIONS 204, 678, AND 679 OF THE STANDARD SPECIFICATIONS. TRENCH EXCAVATION OF EARTH SHALL ONLY BE PAID OUTSIDE AREAS OF COMMON EXCAVATION AND STRUCTURE EXCAVATION. CONDUIT SHALL BE SCHEDULE 80 PVC AND WIRING SHALL BE WITH #6 CONDUCTORS.

4. THE CONTRACTOR SHALL COORDINATE WITH THE TOWN OF JERICHO AND THE UTILITY COMPANY REGARDING THE LOCATIONS OF THE PULL BOXES, EXISTING CONDUIT, AND FINAL ELECTRICAL WIRING.

TRAFFIC CONTROL NOTES:

1. TWO-WAY TRAFFIC SHALL BE MAINTAINED ON VT 15 THROUGHOUT CONSTRUCTION WITH THE EXCEPTION OF SHORT DURATION LANE CLOSURES UTILIZING ALTERNATING ONE-WAY TRAFFIC WITH FLAGGERS OR UNIFORMED TRAFFIC OFFICERS. ACCESS TO RED MILL DRIVE SHALL BE MAINTAINED AT ALL TIMES, AS SHOWN ON THE TRAFFIC CONTROL LAYOUT SHEET, SHEET 18, OR AS DIRECTED BY THE ENGINEER.

2. PEDESTRIAN TRAFFIC SHALL BE MAINTAINED ON THE NORTH SHOULDER OF VT 15. A 4' MARKED PATH SHALL BE PROVIDED FROM THE CONCRETE SIDEWALK RAMP IN FRONT OF THE CHAMPLAIN OIL PROPERTY TO THE EXISTING CONCRETE SIDEWALK ADJACENT TO THE D1 AT STA 11+63.0. THE CONTRACTOR SHALL MAINTAIN A ACCESSIBLE ROUTE BETWEEN SIDEWALKS AT THE DIRECTION OF THE ENGINEER. GRADING OR ANY OTHER REQUIRED WORK SHALL BE INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL.

3. TEMPORARY TRAFFIC BARRIER AND ENERGY ABSORPTION ATTENUATORS SHALL CONFORM TO SECTION 621 OF THE STANDARD SPECIFICATIONS.

4. THE CONTRACTOR SHALL COVER OR REMOVE ANY SIGNS THAT CONTRADICT TEMPORARY TRAFFIC CONTROL SIGNS. ALL SIGNS REMOVED OR COVERED BY THE CONTRACTOR SHALL BE REPLACED OR UNCOVERED BY THE CONTRACTOR WHEN THE TRAFFIC CONTROL PLAN IS DISASSEMBLED. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL. ANY DAMAGE TO EXISTING SIGNS BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR WITH NO ADDITIONAL COMPENSATION.

5. THE CONTRACTOR SHALL REMOVE EXISTING CROSSWALK MARKINGS AS SHOWN ON THE TRAFFIC CONTROL LAYOUT SHEET 18. THESE MARKINGS SHALL BE REPLACED FOLLOWING CONSTRUCTION AND OPENING OF THE PROPOSED SIDEWALK. THE CONTRACTOR SHALL REMOVE THE EXISTING CENTER LINE AND EDGE LINES OF VT 15, WITHIN THE TEMPORARY STRIPING LIMITS. REMOVAL OF MARKINGS SHALL BE PAID UNDER ITEM 646.85 REMOVAL OF EXISTING PAVEMENT MARKINGS.

6. SEE CONSTRUCTION APPROACH SIGNING SHEET, SHEET 20, FOR APPROACH SIGNING DETAILS.

7. CONSTRUCTION SIGNING, TYPE III BARRICADES AND ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH VTRANS STANDARDS AND SECTION 6 OF THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

8. CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VTRANS' STANDARDS.

9. CONSTRUCTION SIGNS SHALL BE OF THE SIZES SHOWN ON THE PLAN WITH BLACK LEGENDS ON FLUORESCENT ORANGE BACKGROUNDS. CONSTRUCTION SIGNS SHALL BE ASTM D4956 TYPE III RETROREFLECTORIZED SHEETING.

10. PAYMENT FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF ALL CONSTRUCTION SIGNING, TYPE III BARRICADES, AND ALL TEMPORARY TRAFFIC CONTROL DEVICES NOT PAID UNDER A SEPARATE CONTRACT ITEM WILL BE PAID UNDER ITEM 641.10 TRAFFIC CONTROL.

11. ALL SIGN STANDS AND POST INSTALLATIONS SHALL BE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT (NCHRP) 350 COMPLIANT.

12. PROPOSED CONSTRUCTION SIGNS SHALL NOT INTERFERE WITH SIGHT LINES. EXACT SIGN LOCATIONS SHALL BE APPROVED BY THE ENGINEER.

TRAFFIC CONTROL NOTES CONT'D:

13. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN THROUGH MOVEMENTS FROM ONE END OF THE CONSTRUCTION AREA TO THE OTHER, ON AT LEAST ONE SIDE OF THE STREET DURING CONSTRUCTION. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MUTCD, PART 6.

14. PEDESTRIAN ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROPERTIES, BUILDINGS, RESIDENCES AND COMMERCIAL PROPERTIES AT ALL TIMES. THIS MAY INCLUDE TEMPORARY WALKWAYS SPANNING THE CONSTRUCTION AREA.

15. IF SIDEWALKS ARE CLOSED, A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) SHALL BE PROVIDED ON THE SAME SIDE OF THE ROAD AS THE CLOSED SIDEWALK, IF POSSIBLE. SIGNS AND BARRICADES SHALL BE USED TO PROVIDE ADVANCED NOTICE OF THE CLOSURE AND THE ROUTE OF ANY PEDESTRIAN DETOURS. THE TPAR SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4 FEET. IF THE TPAR IS LESS THAN 5 FEET, A 5 FOOT BY 5 FOOT PASSING SPACE SHOULD BE PROVIDED AT LEAST EVERY 200 FEET. THE SURFACE OF THE TPAR SHALL BE SMOOTH AND CONTINUOUS FOR THE LENGTH OF THE TPAR. THE TPAR SHALL MAINTAIN THE SAME LEVEL OF ACCESSIBILITY AND DETECTABILITY AS THE FACILITY THAT IS BEING CLOSED. THE TPAR SHALL NOT LEAD PEDESTRIANS INTO CONFLICTS WITH VEHICLES, EQUIPMENT, OR CONSTRUCTION OPERATIONS.

16. IF THE TPAR IS ADJACENT TO MOVING TRAFFIC, CONSTRUCTION OPERATIONS/EQUIPMENT, OR DROP-OFFS, THEN CRASH WORTHY CHANNELIZING DEVICES THAT MEET THE REQUIREMENTS OF THE MUTCD SHALL BE USED.

17. THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION MATERIALS, EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.

18. THE CONTRACTOR'S OPERATIONS SHALL NOT OCCUPY SIDEWALKS EXCEPT WHERE PROPER PROTECTION AND A TPAR HAVE BEEN PROVIDED.

19. THE CONTRACTOR SHALL PROVIDE A TEMPORARY PEDESTRIAN TRAFFIC CONTROL PLAN FOR REVIEW AND WRITTEN APPROVAL A MINIMUM OF THREE WEEKS BEFORE SUCH PLAN IS IMPLEMENTED. THIS PLAN SHALL DETAIL THE CONSTRUCTION PHASING AND SCHEDULE AND THE SPECIFIC METHODS OF MAINTAINING SAFE PEDESTRIAN ACCESS THROUGHOUT THE CONSTRUCTION AREA. THIS PLAN SHALL PROVIDE THE LOCATION AND DETAILS OF TEMPORARY CONSTRUCTION SIGNING, MARKINGS, BARRICADES, CHANNELIZING DEVICES, TPARS AND METHODS TO MAINTAIN ACCESS TO ADJACENT PROPERTIES, BUSINESSES, RESIDENCES, ETC. PAYMENT FOR PROVIDING AND IMPLEMENTING THE TEMPORARY PEDESTRIAN TRAFFIC CONTROL PLAN WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 641.10.

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES

EROSION CONTROL	BRIDGE	FULL C.E.	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
			1	1	LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10	-
			120	120	CY	COMMON EXCAVATION	203.15	12
	110		10	120	CY	SOLID ROCK EXCAVATION	203.16	5
			45	45	CY	TRENCH EXCAVATION OF EARTH	204.20	2.2
			3	3	CY	TRENCH EXCAVATION OF ROCK	204.21	0.6
			1	1	CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	EST.
	640			640	CY	STRUCTURE EXCAVATION	204.25	2
	320			320	CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	8
			300	300	SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	7
			25	25	CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	2
			1	1	LU	PRICE ADJUSTMENT ASPHALT CEMENT (N.A.B.I.)	406.50	-
	20			20	CY	CONCRETE, HIGH PERFORMANCE CLASS A	501.33	1
	77		3	80	CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34	-
	15,400			15,400	LB	STRUCTURAL STEEL, ROLLED BEAM	506.50	7
	8,390		215	8,605	LB	REINFORCING STEEL, LEVEL I	507.11	9
	6,405			6,405	LB	REINFORCING STEEL, LEVEL III	507.13	2
	50			50	LF	DRILLING AND GROUTING DOWELS	507.16	3
	1			1	LS	SHEAR CONNECTORS (244 - 7/8" x 6")	508.15	-
	10			10	GAL	WATER REPELLENT, SILANE	514.10	-
	31			31	LF	JOINT SEALER, HOT POURED	524.11	0.2
	99			99	LF	BRIDGE RAILING, GALVANIZED 4 RAIL BOX BEAM (COATED BLACK)	525.34	0.5
	1			1	EACH	REMOVAL OF STRUCTURE (200 SF - EST.)	529.15	-
	1			1	EACH	PARTIAL REMOVAL OF STRUCTURE	529.20	-
	30			30	CY	REMOVAL OF CONCRETE OR MASONRY	529.25	4
	4			4	EACH	BEARING DEVICE ASSEMBLY, STEEL REINFORCED ELASTOMERIC PAD	531.17	-
	20			20	CY	CONCRETE, CLASS C	541.30	EST.
			12	12	LF	15" CPEP	601.0910	-
	200			200	CY	DRY MASONRY	602.20	7
			1	1	EACH	CAST IRON GRATE WITH FRAME, TYPE D	604.47	-
			58	58	LF	6 INCH UNDERDRAIN PIPE	605.10	2
			36	36	LF	6 INCH UNDERDRAIN CARRIER PIPE	605.20	1.8
			14	14	LF	12 INCH UNDERDRAIN CARRIER PIPE	605.23	1.7
			2	2	EACH	UNDERDRAIN FLUSHING BASIN	605.95	-
			60	60	CY	STONE FILL, TYPE II	613.11	10
			130	130	LF	VERTICAL GRANITE CURB	616.21	0.5
			55	55	LF	REMOVAL OF EXISTING CURB	616.41	0.1
			8	8	TON	BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS	616.47	1
			55	55	SY	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	618.10	2.7

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		COMMON EXCAVATION
100	CY	PEDESTRIAN BRIDGE/SIDEWALK
8	CY	RED MILL DRIVE
12	CY	ROUNDING
120	CY	TOTAL
		COLD PLANING, BITUMINOUS PAVEMENT
74	SY	PEDESTRIAN BRIDGE/SIDEWALK - WEST APPROACH
128	SY	PEDESTRIAN BRIDGE/SIDEWALK - EAST APPROACH
91	SY	RED MILL DRIVE
7	SY	ROUNDING
300	SY	TOTAL
		SUBBASE OF DENSE GRADED CRUSHED STONE
17	CY	PEDESTRIAN BRIDGE/SIDEWALK
6	CY	RED MILL DRIVE
2	CY	ROUNDING
25	CY	TOTAL
		TRENCH EXCAVATION OF EARTH
12.5	CY	DRAINAGE STRUCTURES
7.1	CY	PIPE
17.7	CY	PEDESTRIAN BRIDGE/SIDEWALK
5.5	CY	RED MILL DRIVE
2.2	CY	ROUNDING
45	CY	TOTAL

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QUANTITY SHEET #1

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: QUAN-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\z08f004quan1.dgn
DATE/TIME = 4/7/2014
USER = 4916

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES

EROSION CONTROL	BRIDGE	FULL C.E.	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
			13	13	SF	DETECTABLE WARNING SURFACE	618.30	0.5
			65	65	LF	REMOVING AND RESETTING FENCE	620.50	-
			90	90	LF	REMOVAL OF EXISTING FENCE	620.55	-
			91.5	91.5	LF	STEEL BEAM GUARDRAIL, GALVANIZED (COATED BLACK)	621.20	-
			3	3	EACH	ENERGY ABSORPTION ATTENUATOR	621.56	-
			2	2	EACH	ANCHOR FOR STEEL BEAM RAIL	621.60	-
			2	2	EACH	GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM (COATED BLACK)	621.73	-
			60	60	LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	0.4
			200	200	LF	TEMPORARY TRAFFIC BARRIER	621.90	10
			400	400	HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST.
			800	800	HR	FLAGGERS	630.15	EST.
		1		1	LS	FIELD OFFICE, ENGINEERS	631.10	-
		1		1	LS	TESTING EQUIPMENT, CONCRETE	631.16	-
		1		1	LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-
		3000		3000	DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	EST.
			1	1	LS	MOBILIZATION/DEMOBILIZATION	635.11	-
			1	1	LS	TRAFFIC CONTROL	641.10	-
			2	2	EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-
			365	365	LF	DURABLE 4 INCH WHITE LINE, THERMOPLASTIC	646.402	1
			365	365	LF	DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC	646.412	1
			70	70	LF	DURABLE CROSSWALK MARKING, THERMOPLASTIC	646.502	1
			605	605	LF	TEMPORARY 4 INCH WHITE LINE	646.600	3
			405	405	LF	TEMPORARY 4 INCH YELLOW LINE	646.610	2
			10	10	LF	TEMPORARY 24 INCH STOP BAR	646.680	-
			70	70	LF	TEMPORARY CROSSWALK MARKING	646.700	10
			900	900	SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85	40
			80	80	SY	GEOTEXTILE UNDER STONE FILL	649.31	6
			90	90	SY	GEOTEXTILE FOR UNDERDRAIN TRENCH LINING	649.41	8
45				45	SY	GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED	649.515	6
50				50	LB	SEED	651.15	EST.
400				400	LB	FERTILIZER	651.18	EST.
1				1	TON	AGRICULTURAL LIMESTONE	651.20	EST.
1				1	TON	HAY MULCH	651.25	EST.
25				25	CY	TOPSOIL	651.35	4
80				80	SY	GRUBBING MATERIAL	651.40	6
1				1	LS	EPSC PLAN	652.10	-
40				40	HR	MONITORING EPSC PLAN	652.20	EST.
1				1	LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30	-

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

QUANTITY SHEET #2

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: QUAN-2

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 10 OF 62

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\z08f004quan2.dgn
DATE/TIME = 4/7/2014
USER = 4916

QUANTITY SHEET 3

SUMMARY OF ESTIMATED QUANTITIES

EROSION CONTROL	BRIDGE	FULL C.E.	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
300				300	SY	TEMPORARY EROSION MATTING	653.20	EST.
10				10	SY	PERMANENT EROSION MATTING	653.21	1
12				12	CY	TEMPORARY STONE CHECK DAM, TYPE I	653.25	-
2				2	EACH	INLET PROTECTION DEVICE, TYPE I	653.40	-
175				175	LF	BARRIER FENCE	653.50	2
1				1	LS	TREE PROTECTION	656.85	-
			7	7	EACH	REMOVING SIGNS	675.50	-
			1	1	EACH	ERECTING SALVAGED SIGNS	675.60	-
			1	1	EACH	SETTING SALVAGED POSTS	675.61	-
			115	115	LF	WIRED CONDUIT (1 1/4") (PVC)	678.23	5.6
			2	2	EACH	PULL BOX, STANDARD	678.25	-
			5	5	EACH	LIGHT POLE BASE	679.21	-
			4	4	EACH	REMOVING AND RESETTING LIGHT POLE	679.25	-
			1	1	EACH	SPECIAL PROVISION (ORNAMENTAL STREET LIGHT)	900.620	-
			1	1	EACH	SPECIAL PROVISION (RELOCATE SIGN)	900.620	-
			100	100	LF	SPECIAL PROVISION (ORNAMENTAL FENCE)	900.640	2
			36	36	LF	SPECIAL PROVISION (REMOVAL OF TEMPORARY TRAFFIC BARRIER)	900.640	-
	220			220	LF	SPECIAL PROVISION (ROCK DOWELING)	900.640	-
	1			1	LS	SPECIAL PROVISION (ROCK DOWEL TESTING)	900.645	-
			1	1	LU	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY) (N.A.B.I.)	900.650	-
			1	1	LU	SPECIAL PROVISION (MIXTURE PAY ADJUSTMENT) (N.A.B.I.)	900.650	-
	300			300	SY	SPECIAL PROVISION (THIN POLYMER OVERLAY)	900.675	4
			22	22	TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	900.680	2
			2	2	CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-1H OR CRS-1H)	900.683	-

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

QUANTITY SHEET #3

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: QUAN-3

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 11 OF 62

ITEM DETAIL SUMMARY SHEET

LOCATION			UNDERDRAIN				CURB		SIDEWALK		GUARDRAIL				MISCELLANEOUS									REMARKS
			605.10	605.20	605.23	605.95	616.21	616.41	618.10	618.30	621.20	621.60	621.73	621.80	204.20	620.50	620.55	678.23	678.25	679.21	679.25	900.620	900.640	
BEGIN STATION	END STATION	POS.	6 IN. UND. PIPE	6 IN. UND. CAR. PIPE	12 IN. UND. CAR. PIPE	UND. FLSH. BASIN	VERT. GRAN. CRB.	REM. OF EX. CRB.	PCC SW 5 IN	DET. WARN. SURF.	(S.B. GR GALV) (COATED BLK)	ANCHOR FOR S.B. RAIL	(GR APPR. SECT, 4 RL. BX. BM.) (COATED BLK)	R&D OF GR	TRENCH EX. OF EARTH	REM. & RES. FENCE	REM. OF EX. FENCE	WIRED CONDUIT (1 1/4")(PVC)	PULL BOX, STD.	LT. POLE BASE	R&R LT. POLE	S.P. (ORN. ST. LT.)	S.P. (REM. TTB)	
			LF	LF	LF	EACH	LF	LF	SY	SF	LF	EACH	EACH	LF	CY	LF	LF	LF	EACH	EACH	EACH	EACH	LF	
PEDESTRIAN BRIDGE/ SIDEWALK																								
10+17.2	10+30.0	LT/RT					16.0																	SEE VTRANS' STD. C-10, TYPICAL SECTIONS #1, AND PEDESTRIAN BRIDGE/SIDEWALK CROSS SECTION #1 FOR INSTALLATION DETAILS.
10+17.8	10+34.0	RT							10.0	12.5														INSTALL PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH, WITH SIDEWALK RAMP TYPE I. INSTALL DETECTABLE WARNING SURFACE AS SHOWN ON VTRANS' STD. SHEET C-3A.
10+26.9	10+31.9	LT															12.0							
11+04.9	11+34.6	LT															30.0							
11+05.6	11+21.7	LT															16.0							
11+06.0	11+82.0	RT							42.3															SEE TYPICAL SECTIONS #2 AND #3 PEDESTRIAN BRIDGE/SIDEWALK AND CROSS SECTION #2 AND #3 FOR CROSS SLOPE AND WIDTH TRANSITION DETAILS.
11+08.4	11+74.0	LT/RT													17.7			42.6	1	2	2			SEE SECTIONS 204, 678, AND 679 OF THE STANDARD SPECIFICATIONS AND VTRANS' STD SHEETS E-173, E-180A AND E-180B FOR CONSTRUCTION DETAILS. EXCAVATION TO DETERMINE EXACT LOCATION OF THE PULL BOX AT STA 11+74 SHALL BE PAID UNDER THE TRENCH EXCAVATION OF EARTH, EXPLORATORY, ITEM 204.22. REMOVE CONDUIT WEST OF THIS LOCATION.
11+24.0	11+73.0	RT					47.7	14.7																SEE PEDESTRIAN BRIDGE/SIDEWALK CROSS SECTIONS #2 AND #3 FOR TOP OF CURB ELEVATIONS. REMOVE EXISTING GRANITE CURBING ADJACENT REMOVED DI. REMOVED GRANITE CURBING TO REMAIN PROPERTY OF THE TOWN.
11+24.0	11+70.3	LT									14.5	1	1	30.3										SEE VTRANS' STD. SHEETS G-1 AND G-1D FOR CONSTRUCTION DETAILS. SEE GUARDRAIL APPROACH SECTION DETAILS 2 AND 3, SHEETS 42 AND 43 FOR GUARDRAIL APPROACH SECTION DETAILS. PLACE ANCHOR AT STA 11+61.0. REMOVE EXISTING GUARDRAIL.
RED MILL DRIVE																								
20+00.0	20+64.6	RT					65.8	40.2																SEE RED MILL DRIVE CROSS SECTION #1 FOR TOP OF CURB ELEVATIONS. REMOVE EXISTING CONCRETE CURBING ALONG RED MILL DRIVE.
20+00.0	21+18.3	RT									77.0	1	1	29.3										SEE VTRANS' STD. SHEETS G-1 AND G-1D FOR CONSTRUCTION DETAILS. SEE GUARDRAIL APPROACH SECTION DETAILS 1-3, SHEETS 41-43 FOR GUARDRAIL APPROACH SECTION DETAILS. PLACE ANCHOR AT STA 21+08. REMOVE EXISTING GUARDRAIL.
20+02.0	20+64.5	RT														65.0	32.0							REMOVE AND RESET FENCE IN THE LOCATIONS SHOWN ON THE LAYOUT PLAN, SHEET 16, OR AS DIRECTED BY THE ENGINEER. REMOVED FENCE, WHICH IS NOT RESET, TO REMAIN PROPERTY OF THE TOWN. THE CONTRACTOR SHALL COORDINATE DELIVERY LOCATION THROUGH THE ENGINEER.
20+37.9	20+59.7	RT																						
20+03.0	20+59.1	RT	56.0	34.2	12.3	2																		SEE LAYOUT PLAN, SHEET 16, AND STONE MASONRY PLAN AND DETAILS, SHEET 33, FOR LAYOUT. SEE VTRANS' STD.SHEETS D-16 AND D-30 FOR CONSTRUCTION DETAILS. EXCAVATION SHALL BE PAID AS SHOWN ON PROJECT TYPICAL SECTIONS #4.
20+07.0	20+77.1	RT													5.5			66.8	1	3	2	1		SEE SECTIONS 204, 678, AND 679 OF THE STANDARD SPECIFICATIONS AND VTRANS' STD SHEETS E-173. E-180A AND E-180B FOR CONSTRUCTION DETAILS. EXCAVATION TO DETERMINE EXACT LOCATION OF THE JUNCTION BOX AT STA 20+77 SHALL BE PAID UNDER THE TRENCH EXCAVATION OF EARTH, EXPLORATORY, ITEM 204.22. REMOVE CONDUIT SOUTH OF THIS LOCATION, INCIDENTAL TO STRUCTURE EXCAVATION (BRIDGE ITEM).
20+15.1	20+43.4	RT																					36.0	SEE LAYOUT PLAN, SHEET 16 FOR LOCATION OF BARRIER TO BE REMOVED. REMOVED BARRIER TO REMAIN PROPERTY OF THE TOWN. THE CONTRACTOR SHALL COORDINATE DELIVERY LOCATION THROUGH THE ENGINEER.
SUBTOTALS:			56.0	34.2	12.3	2	129.5	54.9	52.3	12.5	91.5	2	2	59.6	23.2	65.0	90.0	109.4	2	5	4	1	36.0	
ROUNDING			2.0	1.8	1.7	-	0.5	0.1	2.7	0.5	-	-	-	0.4	-	-	-	5.6	-	-	-	-	-	
TOTALS:			58.0	36.0	14.0	2	130.0	55.0	55.0	13.0	91.5	2	2	60.0	23.2	65.0	90.0	115.0	2	5	4	1	36.0	

CHA

ITEM DETAIL SUMMARY SHEET

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: IDS-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 12 OF 62

DRAINAGE DETAIL SHEET

LOCATION			PIPE				DRAINAGE STRUCTURES						REMARKS
BEGIN STATION	END STATION	POS.	D IN	L FT	CPEP	TRENCH EX. OF EARTH CY	DEPTH DI FT	CLASS B CONC. CY	REINF. STEEL, LEV. I LB	DI GRATE TYPE	TRENCH EX. OF EARTH CY	TRENCH EX. OF ROCK CY	
PEDESTRIAN BRIDGE/ SIDEWALK													
11+63.0	11+67.6	RT	15	12	X	7.1							INSTALL NEW PIPE FROM PROPOSED DI TO CONNECT TO EXISITNG PIPE AT REMOVED DI.
11+63.0		RT									4.9	2.4	REMOVE EXISTING DI, APPROXMATE DEPTH: 4'.
11+67.6		RT					4.5	3.0	211.0	D	7.6		NEW 4X4 RCDI AT STA 11+67.6.
SUBTOTALS:				12.0		7.1		3.0	211.0		12.5	2.4	
ROUNDING				-		-		-	4.0		-	0.6	
TOTALS:				12.0		7.1		3.0	215		12.5	3.0	

CHA

DRAINAGE DETAIL SHEET

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: DDS-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 13 OF 62

GPS CONTROL POINTS

HVCTRL #1

ESSEX 15

NORTH = 731391.71
EAST = 1505689.56
ELEV. = 578.48

GENERAL DESCRIPTION, ESSEX CENTER, 1 MI (1.6 KM) EAST OF, .5 MI (0.8 KM) WEST OF JERICHO, 5 MI (8.0 KM) EAST ESSEX JUNCTION TO REACH FROM JUNCTION OF VERMONT ROUTE 15 AND VERMONT ROUTE 128 IN ESSEX CENTER PROCEED EAST ALONG ROUTE 15 FOR 2.6 MI (4.2 KM) TO THE JUNCTION WITH TOWN HIGHWAY (WEED ROAD) ON THE NORTH. THENCE PROCEED NORTHWEST ALONG TOWN HIGHWAY FOR 0.3 MI (0.5 KM) TO THE STATION ON THE RIGHT (NORTH) . THE STATION IS SET IN A LEDGE OUTCROP, 6 M (19.7 FT) NORTH AND .4 M (1.3 FT) LOWER THAN THE CENTERLINE OF TOWN HIGHWAY , 2.5 M (8.2 FT) EAST OF A WHITE BIRCH, 1 M (3.3 FT) WEST OF FIBERGLASS WITNESS POST.

HVCTRL #2

ESSEX 15 AZ

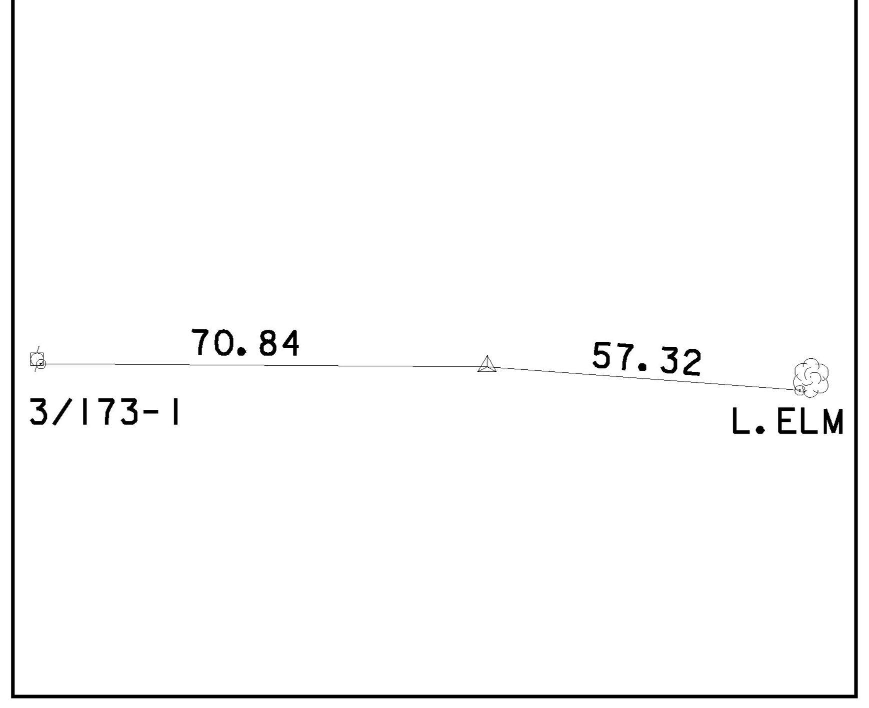
NORTH = 730696.73
EAST = 1508046.45
ELEV. = 551.41

GENERAL DESCRIPTION, ESSEX CENTER, 1 MI (1.6 KM) EAST OF, .5 MI (0.8 KM) WEST OF JERICHO, 5 MI (8.0 KM) EAST ESSEX JUNCTION TO REACH FROM JUNCTION OF VERMONT ROUTE 15 AND VERMONT ROUTE 128 IN ESSEX CENTER PROCEED EAST ALONG ROUTE 15 FOR 2.7 MI (4.3 KM) TO THE JUNCTION WITH A GRAVEL DRIVE ON THE LEFT (NORTH) . THENCE PROCEED NORTH ALONG GRAVEL DRIVE FOR 0.1 MI (0.2 KM) , THENCE PROCEED EAST ACROSS A BARB WIRE FENCE AND THROUGH A PASTURE FOR 40 M (131.2 FT) TO THE STATION. THE STATION IS SET IN A LEDGE OUTCROP, 40 M (131.2 FT) EAST OF AND 4 M (13.1 FT) HIGHER THAN THE CENTERLINE OF GRAVEL DRIVE, 12M SOUTH OF UTILITY POLE NUMBER 176-1.

TRAVERSE TIES

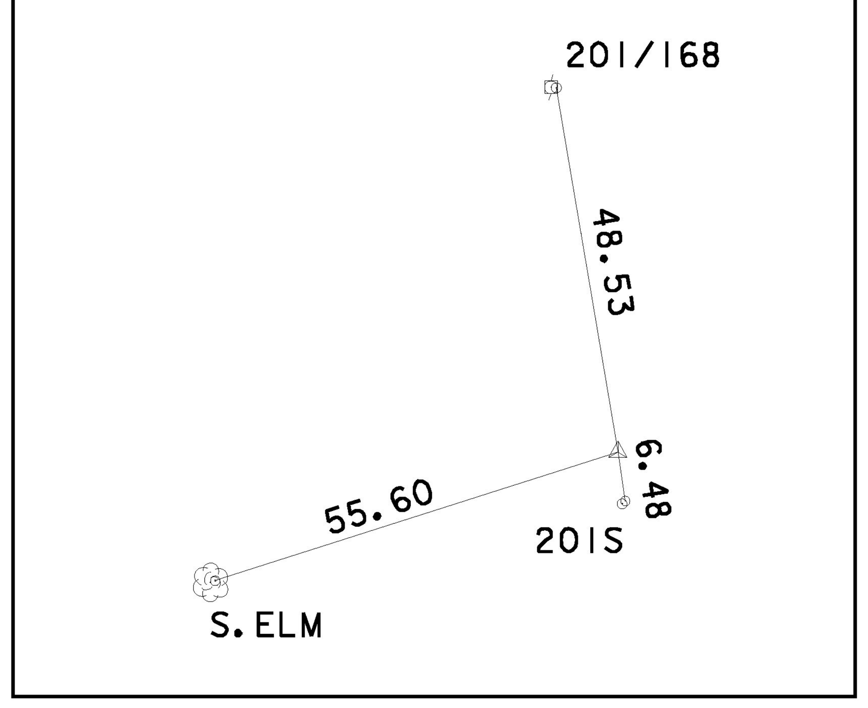
HVCTRL #3

NORTH = 730368.57
EAST = 1508316.19
ELEV. = 543.04



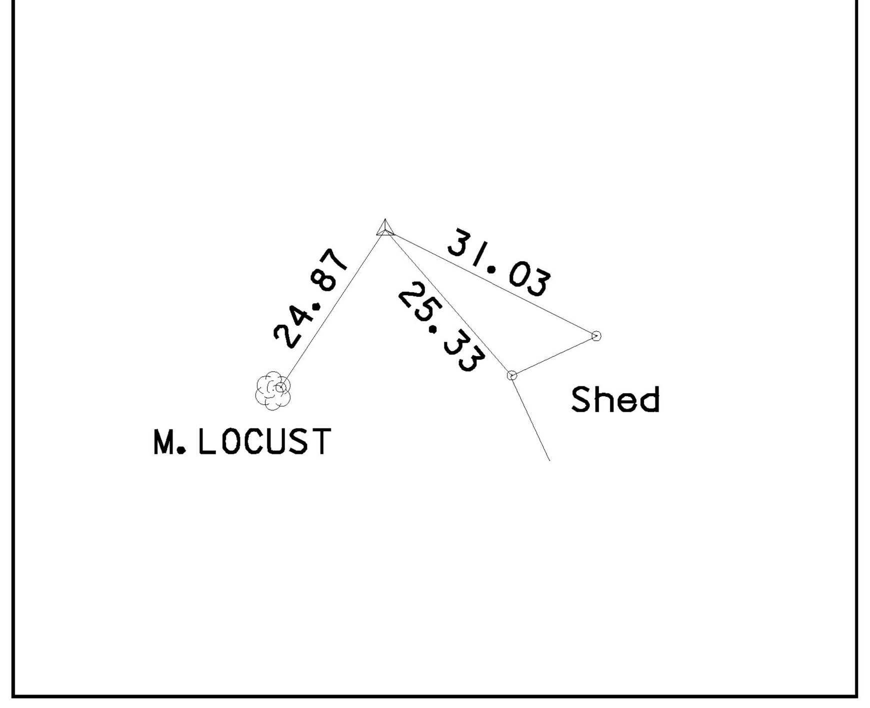
HVCTRL #4

NORTH = 730469.59
EAST = 1509138.34
ELEV. = 533.54



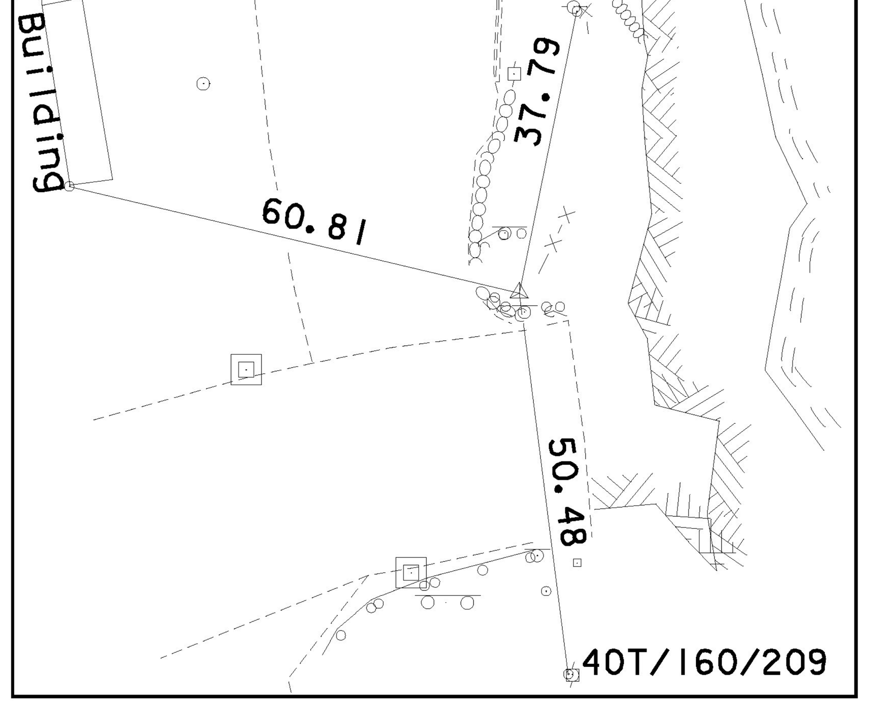
HVCTRL #5

NORTH = 730606.76
EAST = 1509646.27
ELEV. = 520.48



HVCTRL #6

NORTH = 730924.19
EAST = 1510090.03
ELEV. = 535.12



NORTH =
EAST =
ELEV. =

*MAIN TRAVERSE COMPLETED 10/02/2006 BY L.ORVIS P.C & G.HITCHCOCK

DATUM

VERTICAL NAD 88
HORIZONTAL NAVD 83(92)
ADJUSTMENT None

NOT TO SCALE

CHA

TIE SHEET

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

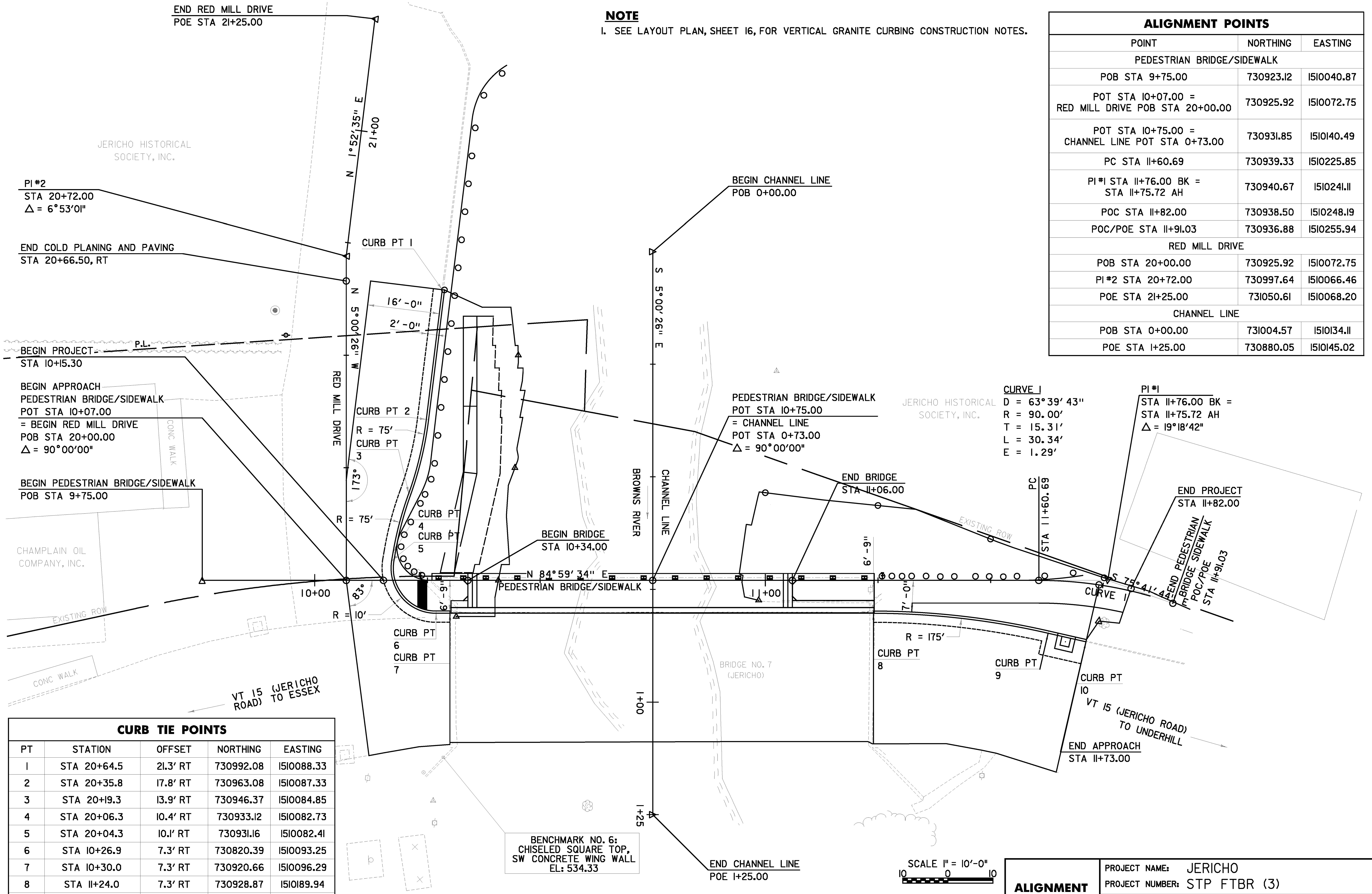
PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: TIE-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 14 OF 62

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\z08f004tie.dgn
DATE/TIME = 4/7/2014
USER = 4916

NOTE

1. SEE LAYOUT PLAN, SHEET 16, FOR VERTICAL GRANITE CURBING CONSTRUCTION NOTES.



ALIGNMENT POINTS

POINT	NORTHING	EASTING
PEDESTRIAN BRIDGE/SIDEWALK		
POB STA 9+75.00	730923.12	1510040.87
POT STA 10+07.00 = RED MILL DRIVE POB STA 20+00.00	730925.92	1510072.75
POT STA 10+75.00 = CHANNEL LINE POT STA 0+73.00	730931.85	1510140.49
PC STA 11+60.69	730939.33	1510225.85
PI #1 STA 11+76.00 BK = STA 11+75.72 AH	730940.67	1510241.11
POC STA 11+82.00	730938.50	1510248.19
POC/POE STA 11+91.03	730936.88	1510255.94
RED MILL DRIVE		
POB STA 20+00.00	730925.92	1510072.75
PI #2 STA 20+72.00	730997.64	1510066.46
POE STA 21+25.00	731050.61	1510068.20
CHANNEL LINE		
POB STA 0+00.00	731004.57	1510134.11
POE STA 1+25.00	730880.05	1510145.02

CURB TIE POINTS

PT	STATION	OFFSET	NORTHING	EASTING
1	STA 20+64.5	21.3' RT	730992.08	1510088.33
2	STA 20+35.8	17.8' RT	730963.08	1510087.33
3	STA 20+19.3	13.9' RT	730946.37	1510084.85
4	STA 20+06.3	10.4' RT	730933.12	1510082.73
5	STA 20+04.3	10.1' RT	730931.16	1510082.41
6	STA 10+26.9	7.3' RT	730820.39	1510093.25
7	STA 10+30.0	7.3' RT	730920.66	1510096.29
8	STA 11+24.0	7.3' RT	730928.87	1510189.94
9	STA 11+63.1	11.7' RT	730927.86	1510228.36
10	STA 11+73.0	12.9' RT	730926.68	1510237.48

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ALIGNMENT AND CURB TIE PLAN

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: ACTP-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 15 OF 62

601.0910 15" CPEP
STA 11+63.0 - STA ~~11+67.6~~ 12+50 RT (12.0 LF)
~~604.47 CAST IRON GRATE WITH FRAME, TYPE D~~
~~STA 11+67.6 RT (1 EACH)~~ PART OF C.O. 006
605.10 6 INCH UNDERDRAIN PIPE
STA 20+03.0 - STA 20+59.1 RT (56.0 LF)
605.20 6 INCH UNDERDRAIN CARRIER PIPE
STA 10+29.7 - STA 10+42.5 LT (12.8 LF)
STA 20+03.0 RT (12.7 LF)
STA 20+59.1 RT (8.7 LF)
~~605.23 12 INCH UNDERDRAIN CARRIER PIPE~~
~~STA 20+36.4 RT (2.1 LF)~~
~~STA 20+42.4 RT (3.1 LF)~~
~~STA 20+47.4 RT (4.1 LF)~~
~~STA 20+52.4 RT (3.0 LF)~~
605.95 UNDERDRAIN FLUSHING BASIN
STA 20+03.0 RT (1 EACH)
STA 20+59.1 RT (1 EACH)

616.21 VERTICAL GRANITE CURB
STA 10+17.2 - STA 10+30.0 RT (16.0 LF)
STA 11+24.0 - STA 11+73.0 RT ~~(47.7 LF)~~ (49.0 LF)
STA 20+00.0 - STA 20+64.55 RT (65.8 LF)
616.41 REMOVAL OF EXISTING CURB
STA 11+64.8 - STA 11+73.0 RT (14.7 LF)
STA 20+24.7 - STA 20+65.6 RT ~~(40.2 LF)~~ (50.5 LF)
618.10 PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
STA 10+17.8 - STA 10+34.0 ~~(10.0 SY)~~
STA 11+06.0 - STA ~~11+82.0~~ ~~(42.3 SY)~~ 11+90.0
618.30 DETECTABLE WARNING SURFACE
STA 10+22.8 - 10+24.8 RT ~~(12.5 SF)~~ (12.0 SF)

620.50 REMOVING AND RESETTING FENCE
STA 20+02.0 - STA ~~20+65.4~~ RT ~~(65.0 LF)~~ 20+77.0
620.55 REMOVAL OF EXISTING FENCE (76.7 LF)
STA 10+26.9 - STA 10+31.9 LT (12 LF)
STA 11+04.9 - STA 11+34.6 LT (30 LF)
STA 11+05.6 - STA 11+21.7 LT (16 LF)
STA ~~20+37.9~~ 20+26.0 - STA ~~20+59.7~~ RT ~~(32 LF)~~
621.20 STEEL BEAM GUARDRAIL, GALVANIZED (COATED BLACK)
STA 11+56.0 - STA 11+70.3 LT (14.5 LF)
STA ~~20+26.1~~ - STA ~~21+18.3~~ RT (77.0 LF) 21+03.0
621.60 ANCHOR FOR STEEL BEAM GUARDRAIL
STA 11+61.0 LT (1 EACH)
STA ~~21+08.0~~ RT (1 EACH) 20+93.0 RT
621.73 GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM (COATED BLACK)
STA 11+24.0 - STA 11+56.0 LT (1 EACH)
STA 20+00.00 - STA 20+26.1 RT (1 EACH)
621.80 REMOVAL AND DISPOSAL OF GUARDRAIL
STA 11+24.3 RT - STA 11+50.6 LT (30.3 LF)
STA 20+05 RT - PB/S STA 10+30.0 CL (29.3 LF)
900.640 SPECIAL PROVISION (REMOVAL OF TEMPORARY TRAFFIC BARRIER)
STA 20+15.1 - STA 20+43.4 RT (36.0 LF)
900.640 SPECIAL PROVISION (ORNAMENTAL FENCE)
STA 10+26.0 - STA 11+24.0 LT (98.0 LF)

NOTES

1. ~~REMOVE ALL UNDERGROUND ELECTRICAL CONDUIT BEYOND THE NEW JUNCTION BOX AT STA 11+74.0.~~ INITIAL DISCOVERY OF THE CONDUIT SHALL BE PAID UNDER ITEM 204.22 TRENCH EXCAVATION OF EARTH, EXPLORATORY. FURTHER EXCAVATION SHALL BE PAID UNDER ITEM 204.20 TRENCH EXCAVATION OF EARTH.
2. ~~REMOVE ALL UNDERGROUND ELECTRICAL CONDUIT BEYOND THE NEW JUNCTION BOX AT STA 20+76.0.~~ INITIAL DISCOVERY OF THE CONDUIT SHALL BE PAID UNDER ITEM 204.22 TRENCH EXCAVATION OF EARTH, EXPLORATORY. FURTHER EXCAVATION SHALL BE PAID UNDER ITEM 204.20 TRENCH EXCAVATION OF EARTH, UNLESS EXCAVATION FALLS WITHIN THE LIMITS OF ITEM 204.25 STRUCTURE EXCAVATION, IN WHICH CASE IT SHALL BE INCIDENTAL TO THAT ITEM.
3. REMOVE EXISTING BITUMINOUS & CONCRETE SIDEWALK FROM STA 11+00.6 TO STA ~~11+82.0~~ 11+90.0, PAID UNDER ITEM 203.16 SOLID ROCK EXCAVATION.
4. APPROXIMATELY ~~88~~ 103 FT OF FENCE IS TO BE REMOVED PER ITEM 620.55. APPROXIMATELY ~~65~~ 76 FT IS TO BE REINSTALLED IN ACCORDANCE WITH ITEM 620.50. THE REMAINDER SHALL BECOME THE PROPERTY OF THE TOWN.

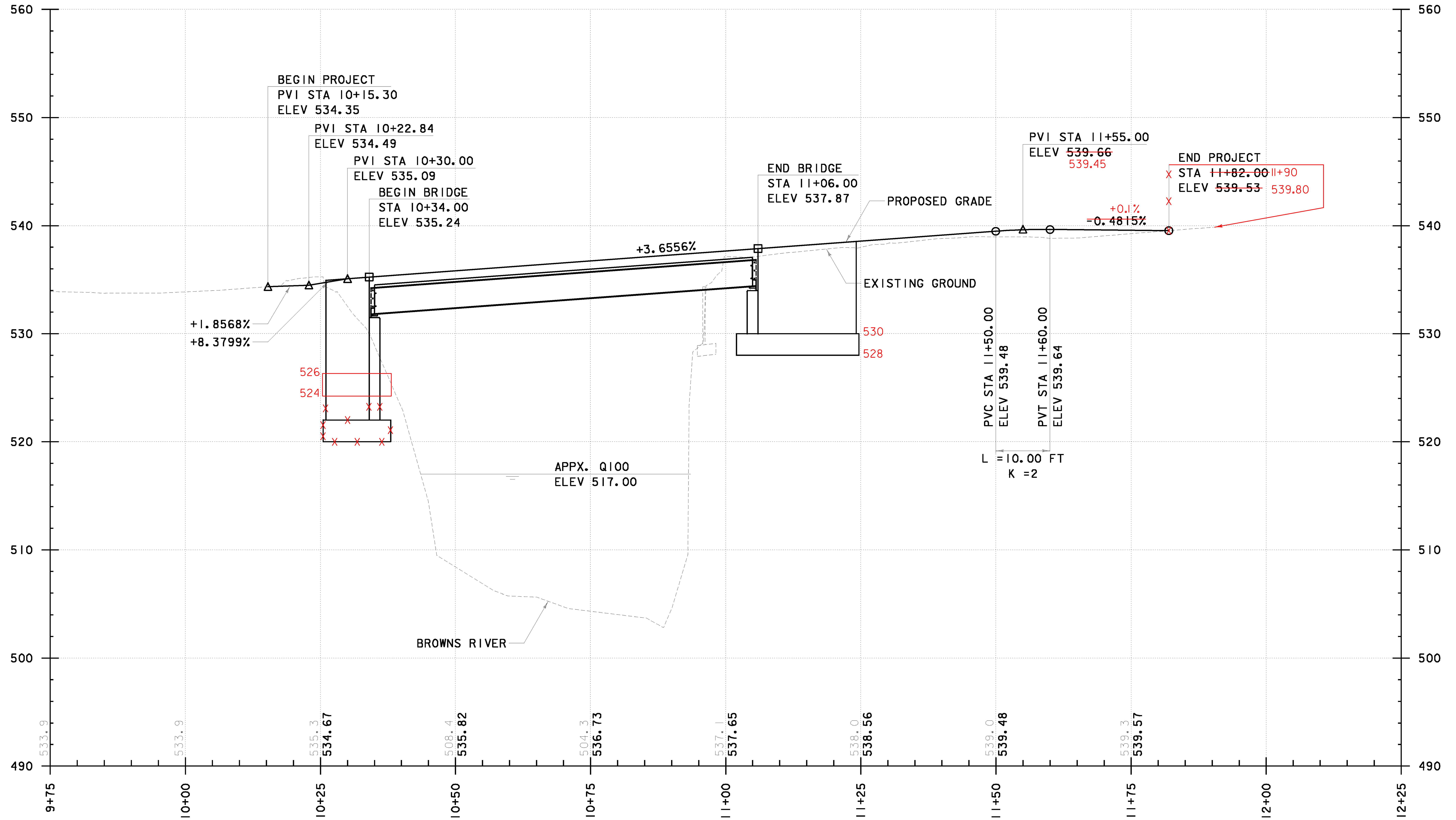
678.23 WIRED CONDUIT (1 1/4") (PVC) (68 LF)
STA ~~11+35.0~~ 11+34.0 - STA ~~11+74.0~~ 11+91.0 LT ~~(42.6 LF)~~
STA ~~20+07.0~~ 20+04.0 - STA ~~20+76.0~~ 20+82 RT ~~(66.8 LF)~~ (106 LF)
~~678.25 PULL BOX, STANDARD~~
~~STA 11+74.0 RT (1 EACH)~~ NOT INSTALLED
~~STA 20+76.0 RT (1 EACH)~~ NOT INSTALLED
679.21 LIGHT POLE BASE
STA ~~11+35.0~~ LT (1 EACH) 11+34.0
STA ~~11+60.0~~ LT (1 EACH) 11+63.0
~~STA 20+05.0 RT (1 EACH)~~
STA ~~20+35.0~~ RT (1 EACH) 10+28 LT 43'
STA ~~20+62.5 RT~~ (1 EACH) 10+35 LT 82'
679.25 REMOVING AND RESETTING LIGHT POLE
STA ~~11+35.0~~ LT (1 EACH) 11+34.0
STA ~~11+60.0~~ LT (1 EACH) 11+60.0
STA ~~20+35.0 RT~~ (1 EACH) 10+28 LT 43'
STA ~~20+62.5 RT~~ (1 EACH) 10+35 LT 82'
900.620 SPECIAL PROVISION (ORNAMENTAL STREET LIGHT)
STA ~~20+07.0 RT~~ (1 EACH) 10+28.0 LT 3.5'
STA 12+50 RT
NEW CB W/FRAME & GRATE, TYPE E

NOTE: SEE SHEET 62 OF 62 FOR R.O.W. LAYOUT SHEET. SHEET 62 IS TO BE USED FOR R.O.W. INFORMATION ONLY

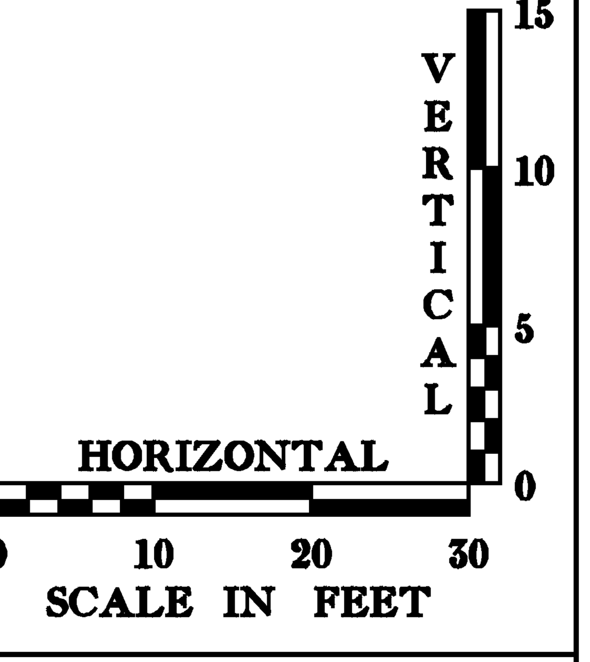
SCALE 1" = 10'-0"

CHA

LAYOUT PLAN	PROJECT NAME: JERICHO
	PROJECT NUMBER: STP FTBR (3)
	PROJECT LEADER: M.D.S. — DESIGNED BY: C.R.H. — DWG. NO.: L-01
	PLOT DATE: 4/7/2014 — DRAWN BY: C.R.H. — CHECKED BY: D.E.G. — SHEET 16 OF 62



PROFILE
PEDESTRIAN BRIDGE / SIDEWALK



NOTES:

1. GRADES SHOWN TO NEAREST TENTH REPRESENT EXISTING GROUND ELEVATIONS ALONG BACK OF SIDEWALK.
2. GRADES SHOWN TO NEAREST HUNDREDTH REPRESENT FINISHED GRADE ELEVATIONS ALONG BACK OF SIDEWALK.
3. GRADES BASED ON RESIDUAL CAMBER AFTER ALL DEAD LOADS ARE APPLIED.

CHA

PEDESTRIAN BRIDGE/ SIDEWALK PROFILE

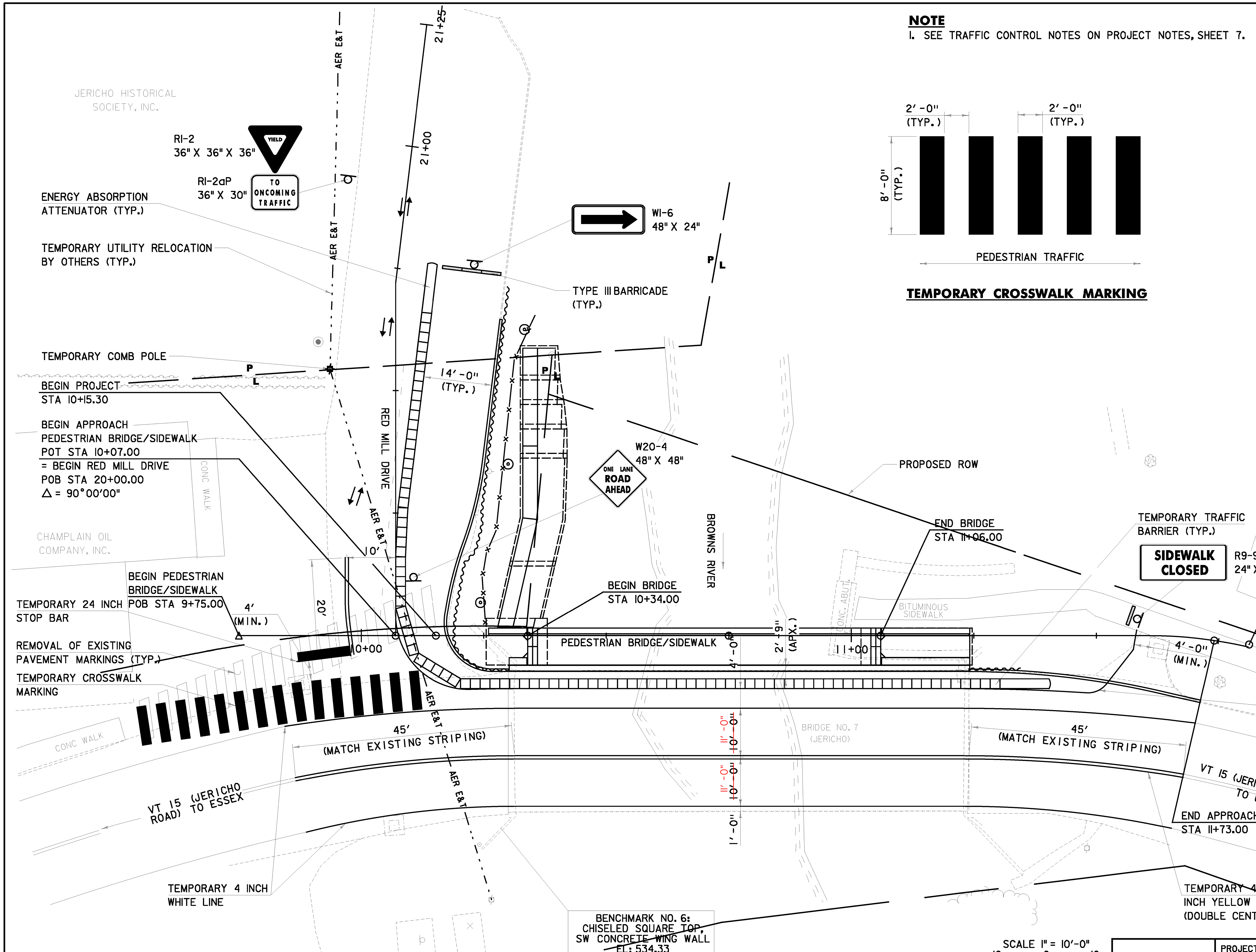
PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: PRO-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 17 OF 62

NOTE

1. SEE TRAFFIC CONTROL NOTES ON PROJECT NOTES, SHEET 7.



LEGEND

⇄	ROADWAY OPEN TO TRAFFIC
	ENERGY ABSORPTION ATTENUATOR
	TEMPORARY TRAFFIC BARRIER
	TYPE III BARRICADE
	PROPOSED CONSTRUCTION SIGN AND POST(S)

<u>621.56 ENERGY ABSORPTION ATTENUATOR</u>
STA 11+30.4 RT (1 EACH)
STA 20+66.0 RT (1 EACH)
<u>621.90 TEMPORARY TRAFFIC BARRIER</u>
STA 20+66.0 RT - STA 11+30.4 RT (190 LF)
<u>646.600 TEMPORARY 4 INCH WHITE LINE</u>
STA 9+84.5 RT - STA 11+72.5 RT (186.1 LF)
STA 9+88.8 RT - STA 11+68.9 RT (177.2 LF)
STA 20+76.7 RT - STA 11+59.2 (239.2 LF)
<u>646.610 TEMPORARY 4 INCH YELLOW LINE</u>
STA 9+86.6 RT - STA 11+71.0 RT (363.5 LF)
STA 9+98.0 RT - RMD STA 20+14.0 LT (40.0 LF)
<u>646.680 TEMPORARY 24 INCH STOP BAR</u>
STA 9+86.9 RT - STA 9+98.0 (10.0 LF)
<u>646.700 TEMPORARY CROSSWALK MARKING</u>
TEMPORARY CROSSWALK (60.0 LF)
<u>646.85 REMOVAL OF EXISTING PAVEMENT MARKINGS</u>
EXISTING CROSSWALK (560.0 SF)
STA 9+84.5 RT - STA 11+72.5 RT (62.1 SF)
STA 9+86.6 RT - STA 11+71.0 RT (60.7 SF)
STA 9+88.8 RT - STA 11+68.9 RT (177.6 SF)

SCALE 1" = 10'-0"
10 0 10

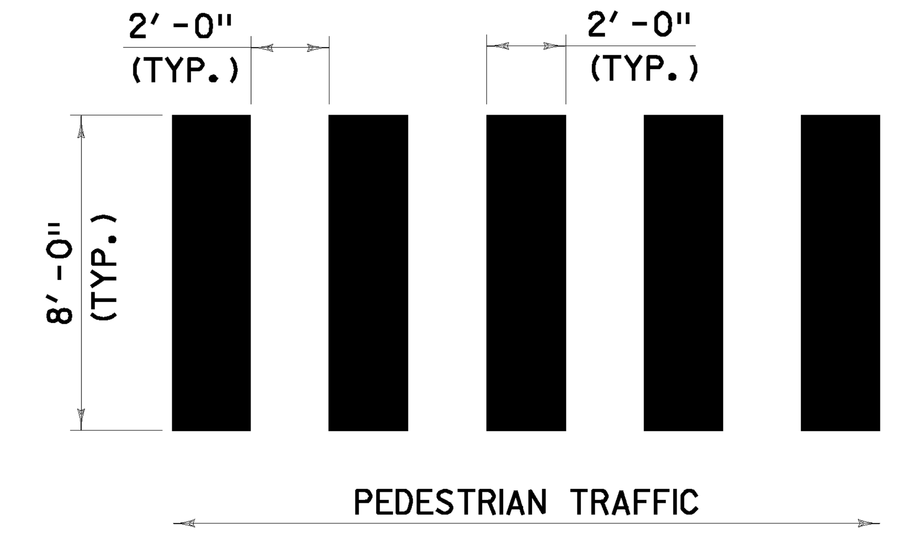
CHA

TRAFFIC CONTROL LAYOUT SHEET

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PLOT DATE: 4/7/2014
PROJECT LEADER: M.D.S.
DRAWN BY: C.R.H.
DESIGNED BY: C.R.H.
CHECKED BY: D.E.G.
DWG. NO.: TCP-1
SHEET 18 OF 62

646.402 DURABLE 4 INCH WHITE LINE, THERMOPLASTIC
STA 9+84.5 RT - STA 11+72.5 RT (186.4 LF)
STA 9+88.8 RT - STA 11+68.9 RT (177.6 LF)
646.412 DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC
(DOUBLE CENTER LINE)
STA 9+86.6 RT - STA 11+71.0 RT (364.0 LF)
646.502 DURABLE CROSSWALK MARKING, THERMOPLASTIC
(SEE DETAIL, RIGHT)
AS SHOWN (69.0 LF)
675.50 REMOVING SIGNS
AS SHOWN ~~(7 EACH)~~ (4 EACH)
675.60 ERECTING SALVAGED SIGNS
AS SHOWN (1 EACH)
675.61 SETTING SALVAGED POSTS
AS SHOWN (1 EACH)



DURABLE CROSSWALK MARKING, THERMOPLASTIC

N.T.S.

NOTES

1. PROPOSED PERMANENT STRIPING SHALL MATCH ADJACENT DOUBLE YELLOW CENTER LINE AND WHITE EDGE LINES. LANE WIDTHS SHALL BE 11 FEET.
2. UNLESS OTHERWISE NOTED, ALL EXISTING SIGNS AND PAVEMENT MARKINGS THAT ARE NOT SHOWN ON THIS PLAN SHALL BE RETAINED.
3. ORNAMENTAL CHITTENDEN MILLS SIGN SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER CONTRACT ITEM 900.620 SPECIAL PROVISION (RELOCATE SIGN).

LEGEND	
R	REMOVE
R&S	REMOVE AND SALVAGE
RET	RETAIN
S	SALVAGED
N	NEW
B-B	BACK TO BACK
EXISTING	
NEW	

SCALE 1" = 20'-0"
20 0 20

CHA

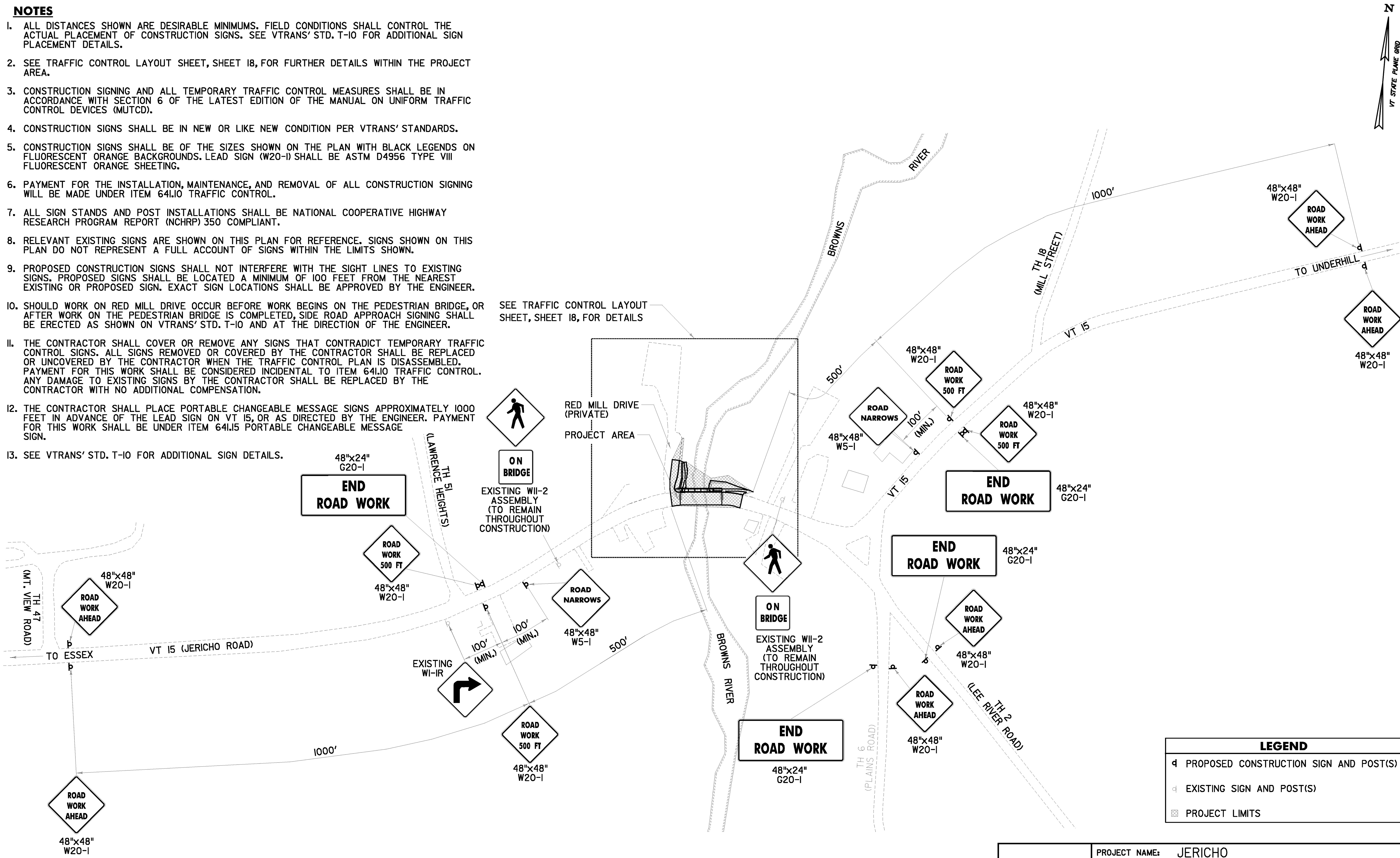
SIGNING AND PAVEMENT MARKING PLAN

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)
PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: SSP-1
PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 19 OF 62

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\z08F004ssp.dgn
DATE/TIME = 4/7/2014
USER = 4916

NOTES

1. ALL DISTANCES SHOWN ARE DESIRABLE MINIMUMS. FIELD CONDITIONS SHALL CONTROL THE ACTUAL PLACEMENT OF CONSTRUCTION SIGNS. SEE VTRANS' STD. T-10 FOR ADDITIONAL SIGN PLACEMENT DETAILS.
2. SEE TRAFFIC CONTROL LAYOUT SHEET, SHEET 18, FOR FURTHER DETAILS WITHIN THE PROJECT AREA.
3. CONSTRUCTION SIGNING AND ALL TEMPORARY TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH SECTION 6 OF THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
4. CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VTRANS' STANDARDS.
5. CONSTRUCTION SIGNS SHALL BE OF THE SIZES SHOWN ON THE PLAN WITH BLACK LEGENDS ON FLUORESCENT ORANGE BACKGROUNDS. LEAD SIGN (W20-1) SHALL BE ASTM D4956 TYPE VIII FLUORESCENT ORANGE SHEETING.
6. PAYMENT FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF ALL CONSTRUCTION SIGNING WILL BE MADE UNDER ITEM 641.10 TRAFFIC CONTROL.
7. ALL SIGN STANDS AND POST INSTALLATIONS SHALL BE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT (NCHRP) 350 COMPLIANT.
8. RELEVANT EXISTING SIGNS ARE SHOWN ON THIS PLAN FOR REFERENCE. SIGNS SHOWN ON THIS PLAN DO NOT REPRESENT A FULL ACCOUNT OF SIGNS WITHIN THE LIMITS SHOWN.
9. PROPOSED CONSTRUCTION SIGNS SHALL NOT INTERFERE WITH THE SIGHT LINES TO EXISTING SIGNS. PROPOSED SIGNS SHALL BE LOCATED A MINIMUM OF 100 FEET FROM THE NEAREST EXISTING OR PROPOSED SIGN. EXACT SIGN LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
10. SHOULD WORK ON RED MILL DRIVE OCCUR BEFORE WORK BEGINS ON THE PEDESTRIAN BRIDGE, OR AFTER WORK ON THE PEDESTRIAN BRIDGE IS COMPLETED, SIDE ROAD APPROACH SIGNING SHALL BE ERECTED AS SHOWN ON VTRANS' STD. T-10 AND AT THE DIRECTION OF THE ENGINEER.
11. THE CONTRACTOR SHALL COVER OR REMOVE ANY SIGNS THAT CONTRADICT TEMPORARY TRAFFIC CONTROL SIGNS. ALL SIGNS REMOVED OR COVERED BY THE CONTRACTOR SHALL BE REPLACED OR UNCOVERED BY THE CONTRACTOR WHEN THE TRAFFIC CONTROL PLAN IS DISASSEMBLED. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL. ANY DAMAGE TO EXISTING SIGNS BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR WITH NO ADDITIONAL COMPENSATION.
12. THE CONTRACTOR SHALL PLACE PORTABLE CHANGEABLE MESSAGE SIGNS APPROXIMATELY 1000 FEET IN ADVANCE OF THE LEAD SIGN ON VT 15, OR AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE UNDER ITEM 641.15 PORTABLE CHANGEABLE MESSAGE SIGN.
13. SEE VTRANS' STD. T-10 FOR ADDITIONAL SIGN DETAILS.



NOT TO SCALE

CHA

CONSTRUCTION APPROACH SIGNING SHEET	PROJECT NAME: JERICHO	
	PROJECT NUMBER: STP FTBR (3)	
	PROJECT LEADER: M.D.S.	PLOT DATE: 4/7/2014
	DESIGNED BY: C.R.H.	DRAWN BY: C.R.H.
	DWG. NO.: CSP-1	CHECKED BY: D.E.G.
		SHEET 20 OF 62

FILE NAME = W:\Projects\ANY\K2\21113\CADD\MSTN\08F204\Consultants\08f204csp.dgn
DATE/TIME = 4/7/2014
USER = 4916

SOIL CLASSIFICATION

AASHTO

A1	GRAVEL AND SAND
A2	SILTY OR CLAYEY GRAVEL AND SAND
A3	FINE SAND
A4	SILTY SOIL - LOW COMPRESSIBILITY
A5	SILTY SOIL - HIGHLY COMPRESSIBLE
A6	CLAYEY SOIL - LOW COMPRESSIBILITY
A7	CLAYEY SOIL - HIGHLY COMPRESSIBLE

ROCK QUALITY DESIGNATION

R.Q.D. (%)	ROCK DESCRIPTION
<25	VERY POOR
25 to 50	POOR
51 to 75	FAIR
76 to 90	GOOD
>90	EXCELLENT

SHEAR STRENGTH

UNDRAINED SHEAR STRENGTH IN P.S.F.	CONSISTENCY
<250	VERY SOFT
250-500	SOFT
500-1000	MED. STIFF
1000-2000	STIFF
2000-4000	VERY STIFF
>4000	HARD

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

DENSITY (GRANULAR SOILS)

N	DESCRIPTIVE TERM
<5	VERY LOOSE
5-10	LOOSE
11-24	MED. DENSE
25-50	DENSE
>50	VERY DENSE

CONSISTENCY (COHESIVE SOILS)

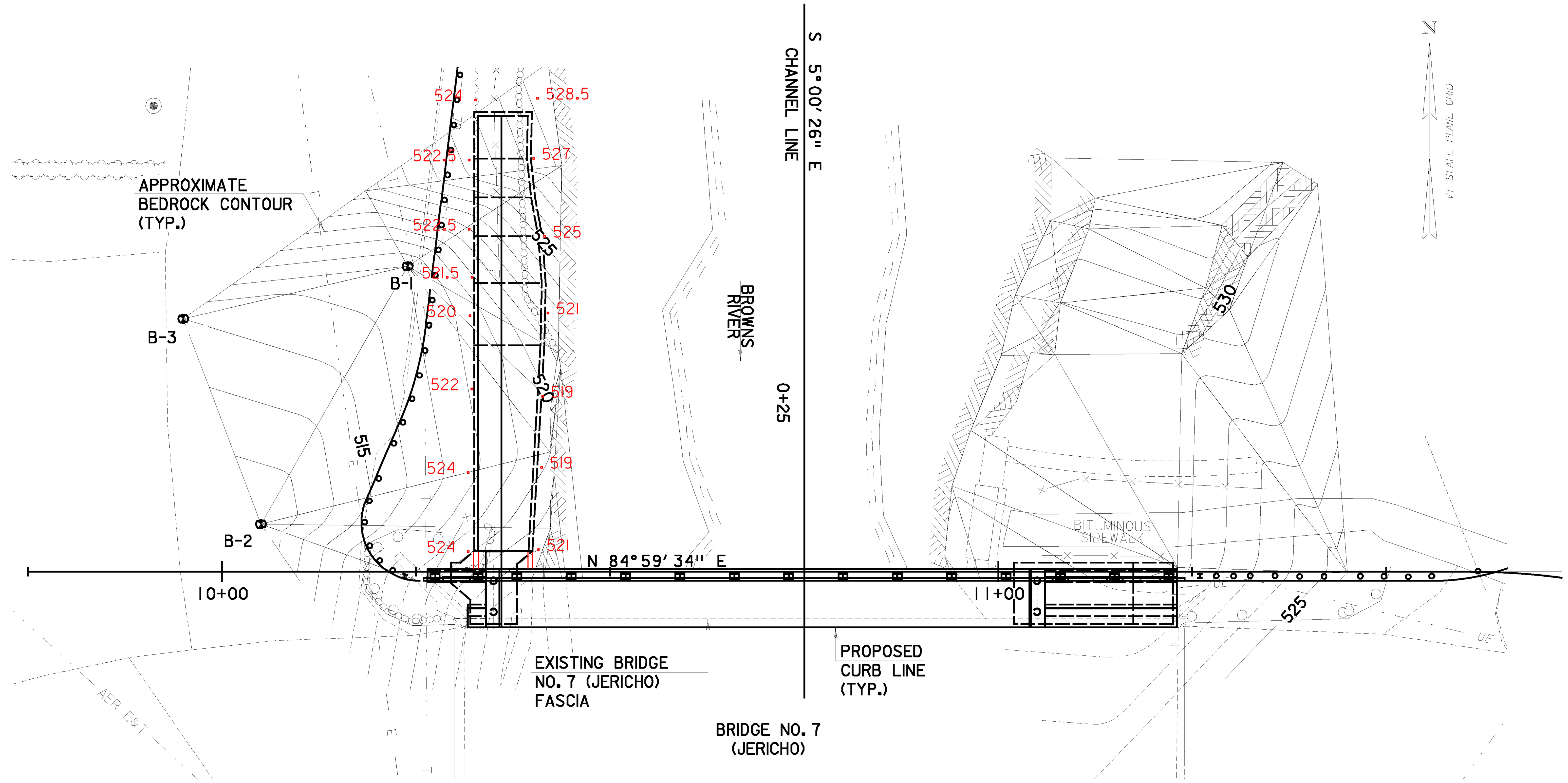
N	DESCRIPTIVE TERM
<2	VERY SOFT
2-4	SOFT
5-8	MED. STIFF
9-15	STIFF
16-30	VERY STIFF
31-60	HARD
>60	VERY HARD

COMMONLY USED SYMBOLS

▼	WATER ELEVATION
⊗	STANDARD PENETRATION BORING
⊕	AUGER BORING
⊙	ROD SOUNDING
S	SAMPLE
N	STANDARD PENETRATION TEST BLOW COUNT PER FOOT FOR: 2" O. D. SAMPLER 1 3/8 " I. D. SAMPLER HAMMER WEIGHT OF 140 LBS. HAMMER FALL OF 30"
VS	FIELD VANE SHEAR TEST
US	UNDISTURBED SOIL SAMPLE
B	BLAST
DC	DIAMOND CORE
MD	MUD DRILL
WA	WASH AHEAD
HSA	HOLLOW STEM AUGER
AX	CORE SIZE 1 1/8"
BX	CORE SIZE 1 5/8"
NX	CORE SIZE 2 1/8"
M	DOUBLE TUBE CORE BARREL USED
LL	LIQUID LIMIT
PL	PLASTIC LIMIT
PI	PLASTICITY INDEX
NP	NON PLASTIC
w	MOISTURE CONTENT (DRY WGT. BASIS)
D	DRY
M	MOIST
MTW	MOIST TO WET
W	WET
Sat	SATURATED
Bo	BOULDER
Gr	GRAVEL
Sa	SAND
Sl	SILT
Cl	CLAY
HP	HARDPAN
Le	LEDGE
NLTD	NO LEDGE TO DEPTH
CNPF	CAN NOT PENETRATE FURTHER
TLOB	TOP OF LEDGE OR BOULDER
NR	NO RECOVERY
Rec.	RECOVERY
%Rec.	PERCENT RECOVERY
RQD	ROCK QUALITY DESIGNATION
CBR	CALIFORNIA BEARING RATIO
<	LESS THAN
>	GREATER THAN
R	REFUSAL (N >100)
VTSPG	NAD83 - SEE NOTE 7

COLOR

blk	BLACK	pnk	PINK
bl	BLUE	pu	PURPLE
brn	BROWN	rd	RED
dk	DARK	tn	TAN
gry	GRAY	wh	WHITE
gn	GREEN	yel	YELLOW
lt	LIGHT	mlto	MULTICOLORED
or	ORANGE		



BORING LAYOUT

SCALE 1" = 10'-0"

BORING CHART

HOLE NO.	SURV. STATION	OFFSET	GROUND EL.	EL. TLOB
B-1	10+24	40.5 LT	536	517
B-2	10+05	7.3 LT	534	512
B-3	9+95	33.7 LT	535	515

DEFINITIONS (AASHTO)

BEDROCK (LEDGE) - ROCK IN ITS NATIVE LOCATION OF INDEFINITE THICKNESS.

BOULDER - A ROCK FRAGMENT WITH AN AVERAGE DIMENSION > 12 INCHES.

COBBLE - ROCK FRAGMENTS WITH AN AVERAGE DIMENSION BETWEEN 3 AND 12 INCHES.

GRAVEL - ROUNDED PARTICLES OF ROCK < 3" AND > 0.0787" (#10 SIEVE).

SAND - PARTICLES OF ROCK < 0.0787" (#10 SIEVE) AND > 0.0029" (#200 SIEVE).

SILT - SOIL < 0.0029" (#200 SIEVE), NON OR SLIGHTLY PLASTIC AND EXHIBITS NO STRENGTH WHEN AIR-DRIED.

CLAY - FINE GRAINED SOIL, EXHIBITS PLASTICITY WHEN MOIST AND CONSIDERABLE STRENGTH WHEN AIR-DRIED.

VARVED - ALTERNATE LAYERS OF SILT AND CLAY.

HARDPAN - EXTREMELY DENSE SOIL, CEMENTED LAYER, NOT SOFTENED WHEN WET.

MUCK - SOFT ORGANIC SOIL (CONTAINING > 10% ORGANIC MATERIAL.

MOISTURE CONTENT - WEIGHT OF WATER DIVIDED BY DRY WEIGHT OF SOIL.

FLOWING SAND - GRANULAR SOIL SO SATURATED (LOOSE) THAT IT FLOWS INTO DRILL CASING DURING EXTRACTION OF WASH ROD.

STRIKE - ANGLE FROM MAGNETIC NORTH TO LINE OF INTERSECTION OF BED WITH A HORIZONTAL PLANE.

DIP - INCLINATION OF BED WITH A HORIZONTAL PLANE.

GENERAL NOTES

1. THE SUBSURFACE EXPLORATIONS SHOWN HEREIN WERE MADE BETWEEN SEPTEMBER 6 AND SEPTEMBER 8, 2006 BY GEODESIGN, INC.
2. SOIL AND ROCK CLASSIFICATIONS, PROPERTIES AND DESCRIPTIONS ARE BASED ON ENGINEERING INTERPRETATION FROM AVAILABLE SUBSURFACE INFORMATION BY THE AGENCY AND MAY NOT NECESSARILY REFLECT ACTUAL VARIATIONS IN SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED BETWEEN INDIVIDUAL BORING OR SAMPLE LOCATIONS.
3. OBSERVED WATER LEVELS AND/OR CONDITIONS INDICATED ARE AS RECORDED AT THE TIME OF EXPLORATION AND MAY VARY ACCORDING TO THE PREVAILING RAINFALL, METHODS OF EXPLORATION AND OTHER FACTORS.
4. ENGINEERING JUDGMENT WAS EXERCISED IN PREPARING THE SUBSURFACE INFORMATION PRESENTED HEREIN. ANALYSIS AND INTERPRETATION OF SUBSURFACE DATA WAS PERFORMED AND INTERPRETED FOR AGENCY DESIGN AND ESTIMATING PURPOSES. PRESENTATION OF THE INFORMATION IN THE CONTRACT IS INTENDED TO PROVIDE THE CONTRACTOR ACCESS TO THE SAME DATA AVAILABLE TO THE AGENCY. THE SUBSURFACE INFORMATION IS PRESENTED IN GOOD FAITH AND IS NOT INTENDED AS A SUBSTITUTE FOR PERSONAL INVESTIGATION, INDEPENDENT INTERPRETATION, INDEPENDENT ANALYSIS OR JUDGMENT BY THE CONTRACTOR.
5. PICTORIAL STRUCTURE DETAILS SHOWN ON THE BORING PLAN LAYOUT OR SOILS PROFILE ARE FOR ILLUSTRATIVE PURPOSES ONLY AND MAY NOT ACCURATELY PORTRAY FINAL CONTRACT DETAILS.
6. TERMINOLOGY USED ON BORING LOGS TO DESCRIBE THE HARDNESS, DEGREE OF WEATHERING, AND SPACING OF FRACTURES, JOINTS AND OTHER DISCONTINUITIES IN THE BEDROCK IS DEFINED IN THE AASHTO MANUAL ON SUBSURFACE INVESTIGATIONS, 1988.

SCALE 1" = 10'-0"
10 0 10

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D
BORING INFORMATION SHEET

PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.
SHEET 21 OF 62

FILE NAME =V:\Projects\ANY\K2\21113\CADD\WSTN\BBF004\Consultants\z88f008boringinformation.dgn
DATE/TIME =4/7/2014
USER =4918

GEODESIGN INCORPORATED
Geotechnical | Construction | Environmental Engineers and Scientists
P.O. Box 699
Windsor, VT 05089
Phone: 802-674-2033/Fax: 802-674-5943
1233 Shelburne Rd., Suite 360
So. Burlington, VT 05403
Phone: 802-652-5140

BORING LOG

Project Name

Jericho Pedestrian Bridge
(VAOT JERICOPB-400)
Jericho, VT

Boring No.: B-1
Page No.: 1 of 2
File No.: 750-04.6
Checked By: SPK

Boring Company: M & W Soils Engineering
Foreman: Craig Fairbank
GeoDesign Rep.: Jason Gaudette
Date Started: September 6, 2006 Date Finished: September 6, 2006
N. Coordinate: E. Coordinate:
Ground Surface Elevation (feet): 536
Station: Offset: ft

	Casing:	Sampler:
Type:	H.S.A.	SS
I.D.:	4.25 in.	1.38 in.
Hammer Wt.:	NA	140 lbs
Hammer Fall:	NA	30 in.
Rig Type:	Acker Soil Max	
Hammer Type:	Safety	

Groundwater Observations

Date	Depth (ft)	Elev. (ft)	Notes
▼ 9/6/06, 9:55	11.0	525.0	Wet Sample
▼ 9/6/06, 10:20	12.8	523.2	In Augers
▼ 9/7/06, 7:30	10.5	525.5	In Open Hole
▼			

Sample Information

Depth (ft)	Casing Blows/ft	Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval 0 - 6	6 - 12	12 - 18	18 - 24	Coring Time (min./ft)	Moisture Content (%)
		S1	SS	24	10	0.5	4	7	12	13		6.6
		S3	SS	24	0	2.5	8	6	4	7		10
5		S4	SS	24	12	5	4	4	4	3		11
		S5	SS	24	14	7	2	2	3	2		6.7
10		S6	SS	24	14	10	2	1	2	1		Note 6
		S7	SS	24	18	12	WOH	2	1	1		Note 7
15		S8	SS	24	8	15	WOH	WOH	15	5		91.3
		S9	SS	17	8	17	1	5	50/5"			14
20		C1	C	60	59	19.5	[REC= 98%; RQD= 63%]				6	
											5.5	
											6.5	
											12	
											8	
25		C2	C	60	55	24.5	[REC= 92%; RQD= 69%]				5.5	
											4.5	
											5.5	
											6.5	
											11.5	
30												

Strata Description (Depth & Elevation (feet))

	Bituminous Concrete	535.8
2	Gravelly Sand (FILL)	534.0
	Silty Sand (FILL)	
10.5	Clayey Silt & Organics (FILL)	525.5
14.5	Silty Sand & Gravel	521.5
16	Possible Weathered BEDROCK	520.0
18.5	BEDROCK (Metagraywacke)	517.5

Sample Description

Classification System: Burmister

S1) Medium dense, light to dark brown fine to coarse SAND, trace to little Silt, little fine Gravel, damp. With trace pieces of asphalt.

S3) Medium dense. Top 30 cm (12 in): Light brown fine to medium SAND, little Silt, trace fine Gravel, damp. Bottom 10 cm (4 in): Similar to top except with some Silt, trace wood pieces.

S4) Loose, light brown fine to medium SAND, little Silt, trace fine Gravel, damp.

S5) Loose, similar to S4 except with 2.5 cm (1 in) layer of brown SILT, some fine Sand, damp.

S6) Very loose. Top 20 cm (8 in): Similar to S4 except with darker brown seams and trace root fibers, moist to wet. Bottom 15 cm (6 in): Light grayish brown to dark brown Clayey SILT, trace fine Sand, trace fine Gravel, with root fibers and wood, moist. Weak organic odor.

S7) Very loose, similar to bottom 15 cm (6 in) of S6 except darker brown with little to some fine Sand and more wood (estimated up to 20% by volume), moist. Strong organic odor.

S8) Medium dense. Top 10 cm (4 in): Similar to S7, wet. Bottom 10 cm (4 in): Dark grayish brown fine to medium SAND, little fine to coarse Gravel, little Silt, wet. With gray phyllitic rock pieces.

S9) Very dense/refusal. Light brownish gray fine to coarse GRAVEL, some fine to medium Sand, little Silt, wet. With slightly weathered flat/angular gray phyllitic rock pieces.

C1) Light (weathered) to dark (fresh) greenish gray, moderately hard, fresh to slightly weathered along fracture surfaces, closely to moderately jointed, fair quality METAGRAYWACKE. Overall weak foliation. Very smooth, soft, light gray sericite seam with pearly luster at 6.71 m (22 ft) deep. No reaction to diluted HCl.

C2) Similar rock type to C1 except moderately jointed with light to dark green, very fine grained, smooth, serpentine banding with glassy luster at 8.84 m (29 ft) deep. No reaction to diluted HCl.

Remarks

1) Ground surface elevation estimated by GeoDesign using a hand level from existing manhole rim (see Figure 2 in Attachment 1).
2) Borehole moved 0.61 m (2 ft) north after abandoning from loss of split-spoon tip at 0.76 m (2.5 ft) deep.
3) HSA resistance increased between 4.88 m (16 ft) and 5.64 m (18.5 ft) deep through denser soils/cobbles/possible weathered rock. Very hard resistance at 5.64 m (18.5 ft) deep.
4) HSA advanced to refusal at 5.95 m (19.5 ft) deep. Installed 10 cm (4 in) I.D. steel casing and flushed with 9.5 cm (3.75 in) roller bit prior to coring.

Notes:
1) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual.
2) Water Level Readings Have Been Made At Times And Under Conditions Stated, Fluctuations Of Groundwater May Occur Due To Other Factors Than Those Present At The Time Measurements Were Made.
A.C. = After coring; N.R. = Not Recorded.
3) Sample Type Coding: A=Auger; C=Core; D=Driven; G=Grab; PS=Piston Sampler; SS=Split Barrel (Split Spoon); ST=Shelby Tube; Geo=GeoProbe V=Vane;
WOR/H=Weight of Rod/Hammer
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%
5) Stratification lines represent approximate boundary between material types, transitions may be gradual.

Boring No.: B-1

VT BORING LOG MC 5/21/04 750-04.6.GPJ GEODESIGN STANDARD.GDT 8/9/11

GEODESIGN INCORPORATED
Geotechnical | Construction | Environmental Engineers and Scientists
P.O. Box 699
Windsor, VT 05089
Phone: 802-674-2033/Fax: 802-674-5943
1233 Shelburne Rd., Suite 360
So. Burlington, VT 05403
Phone: 802-652-5140

BORING LOG

Project Name

Jericho Pedestrian Bridge
(VAOT JERICOPB-400)
Jericho, VT

Boring No.: B-1
Page No.: 2 of 2
File No.: 750-04.6
Checked By: SPK

Boring Company: M & W Soils Engineering
Foreman: Craig Fairbank
GeoDesign Rep.: Jason Gaudette
Date Started: September 6, 2006 Date Finished: September 6, 2006
N. Coordinate: E. Coordinate:
Ground Surface Elevation (feet): 536
Station: Offset: ft

	Casing:	Sampler:
Type:	H.S.A.	SS
I.D.:	4.25 in.	1.38 in.
Hammer Wt.:	NA	140 lbs
Hammer Fall:	NA	30 in.
Rig Type:	Acker Soil Max	
Hammer Type:	Safety	

Groundwater Observations

Date	Depth (ft)	Elev. (ft)	Notes
▼ 9/6/06, 9:55	11.0	525.0	Wet Sample
▼ 9/6/06, 10:20	12.8	523.2	In Augers
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▼			

Sample Information

Depth (ft)	Casing Blows/ft	Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval 0 - 6	6 - 12	12 - 18	18 - 24	Coring Time (min./ft)	Moisture Content (%)
		C3	C	60	60	29.5	[REC= 100%; RQD= 90%]				6.5	
											7.5	
											7.5	
											11	
											8.5	
35												
40												
45												
50												
55												
60												

Strata Description (Depth & Elevation (feet))

	BEDROCK (Metagraywacke) *(Continued)*	
34.5	Bottom of Exploration at 34.5 ft	501.5

Sample Description

Classification System: Burmister

C3) Similar tock type to C1 except with moderately hard to hard, 15 cm (6 in) zone of white quartz/calcite banding at 9.91 m (32.5 ft) to 10.06 m (33 ft) deep. Quartzite/calcite banding reacts weakly to diluted HCl.

Remarks

5) Brief water loss noted at 6.77 m (22.2 ft) deep during coring through possible bedrock seam.
6) Lab moisture contents (ASTM D2216) for S6 range between 15.6% (top of sample) and 33.5% (bottom of sample).
7) Lab moisture contents (ASTM D2216) for S7 range between 53.1% (top of sample) and 87.4% (bottom of sample).

Notes:
1) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual.
2) Water Level Readings Have Been Made At Times And Under Conditions Stated, Fluctuations Of Groundwater May Occur Due To Other Factors Than Those Present At The Time Measurements Were Made.
A.C. = After coring; N.R. = Not Recorded.
3) Sample Type Coding: A=Auger; C=Core; D=Driven; G=Grab; PS=Piston Sampler; SS=Split Barrel (Split Spoon); ST=Shelby Tube; Geo=GeoProbe V=Vane;
WOR/H=Weight of Rod/Hammer
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%
5) Stratification lines represent approximate boundary between material types, transitions may be gradual.

Boring No.: B-1

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\z08f004borlog.dgn
DATE/TIME = 4/7/2014
USER = 4916

BORING LOGS #1

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.

PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.

BORING LOG

GEODESIGN INCORPORATED
Geotechnical | Construction | Environmental Engineers and Scientists
P.O. Box 699, Windsor, VT 05089, Phone: 802-674-2033/Fax: 802-674-5943
1233 Shelburne Rd., Suite 360, So. Burlington, VT 05403, Phone: 802-652-5140

Project Name: Jericho Pedestrian Bridge (VAOT JERICOPB-400) Jericho, VT

Boring No.: **B-2** | Page No.: 1 of 2 | File No.: 750-04.6 | Checked By: SPK

Boring Company: M & W Soils Engineering
Foreman: Craig Fairbank
GeoDesign Rep.: Jason Gaudette
Date Started: September 7, 2006 | Date Finished: September 7, 2006
N. Coordinate: | E. Coordinate:
Ground Surface Elevation (feet): 534
Station: | Offset: ft

	Casing:	Sampler:
Type:	H.S.A.	SS
I.D.:	4.25 in.	1.38 in.
Hammer Wt.:	NA	140 lbs
Hammer Fall:	NA	30 in.
Rig Type:	Acker Soil Max	
Hammer Type:	Safety	

Groundwater Observations

	Date	Depth (ft)	Elev. (ft)	Notes
▼	9/7/06, 9:55	10.0	524.0	Wet Sample
▼				
▼				
▼				

Sample Information

Depth (ft)	Casing Blows/ft	Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows 0-6	Blows 6-12	Blows 12-18	Blows 18-24	Coring Time (min./ft)	Moisture Content (%)
		S1	SS	24	10	0.6	1	8	8	6		4.4
		S2	SS	24	18	2.6	6	5	8	8		Note 6
5												
		S3	SS	24	14	5	10	7	4	5		8.6
		S4	SS	24	10	7	4	4	3	4		24.3
10												
		S5	SS	24	14	10	7	7	11	13		20.6
		S6	SS	24	8	12	11	15	14	15		17.7
15												
		S7	SS	24	12	18.5	17	31	26	28		12.6
20												
		S8	SS	24	14	20.5	22	12	10	11		19.5
		C1	C	60	54	22.8	[REC= 90%; RQD= 75%]				8	
25											8	
											6	
											7	
											8	
		C2	C	60	60	27.8	[REC= 100%; RQD= 70%]				5	
30											6.5	

Strata Description (Depth & Elevation (feet))

Depth	Strata	Elevation
0.6	Bituminous Concrete	533.4
3	Silty Sand (FILL)	531.0
14	Gravelly Sand (FILL)	520.0
16	Clayey Silt & Organics (FILL)	518.0
22.5	Silty Sand & Gravel	511.5
	Possible Weathered BEDROCK	511.2
	BEDROCK (Metagraywacke)	

Sample Description (Classification System: Burmister)

S1) Medium dense, light brown fine to medium SAND, trace to little Silt, trace fine Gravel, damp.

S2) Medium dense. Top 25 cm (10 in): Similar to S1. Bottom 20 cm (8 in): Dark grayish brown fine to medium SAND, little fine Gravel, little Silt, damp. With trace brick pieces.

S3) Medium dense, similar to bottom of S2 except bottom 10 cm (4 in) oxidized reddish yellow, moist.

S4) Loose, light gray to reddish brown and orange (with dark brown seams), fine to medium SAND and SILT, little fine Gravel, moist.

S5) Medium dense, light grayish brown fine to medium SAND, little Silt, trace fine Gravel, wet.

S6) Medium dense, light grayish brown fine SAND and SILT, wet.

S7) Very dense, greenish brown fine to coarse GRAVEL, some fine to medium Sand, little Silt, moist. With weathered phyllitic rock pieces.

S8) Medium dense, similar to S7 except bottom 10 cm (4 in) fine to medium SAND, layered with SILT, trace fine Sand, wet.

C1) Light (weathered) to dark (fresh) greenish gray, moderately hard to hard, fresh to slightly weathered along fracture surfaces, closely to moderately jointed, good quality METAGRAYWACKE. No reaction to diluted HCl.

C2) Similar rock type to C1 except with 15 cm (6 in) white quartz/calcite band at 9.45 m (31 ft) deep. Quartz/calcite banding reacts reacts weakly

Remarks

1) Ground surface elevation estimated by GeoDesign using a hand level from existing manhole rim (see Figure 2 in Attachment 1).
2) Higher HSA resistance noted between 4.27 m (14 ft) and 5.49 m (18 ft). SS sample attempted at 5.49 m.
3) Wood splinters observed in HSA cutting during advance to 6.10 m (20 ft) deep.
4) Driller noted HSA "walking" to the west (i.e., away from the river). Measured approximately 87 degree dip using compass.
5) HSA advanced to refusal at 7.01 m (23 ft) deep. Installed 10 cm (4 in) I.D. steel casing and flushed with 9.5 cm (3.75 in) roller bit prior to coring.

Notes:
1) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual.
2) Water Level Readings Have Been Made At Times And Under Conditions Stated. Fluctuations Of Groundwater May Occur Due To Other Factors Than Those Present At The Time Measurements Were Made.
A.C. = After coring; N.R. = Not Recorded.
3) Sample Type Coding: A=Auger; C=Core; D=Driven; G=Grab; PS=Piston Sampler; SS=Split Barrel (Split Spoon); ST=Shelby Tube; Geo=GeoProbe V=Vane; WOR/H=Weight of Rod/Hammer
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%
5) Stratification lines represent approximate boundary between material types, transitions may be gradual.

Boring No.: **B-2**

BORING LOG

GEODESIGN INCORPORATED
Geotechnical | Construction | Environmental Engineers and Scientists
P.O. Box 699, Windsor, VT 05089, Phone: 802-674-2033/Fax: 802-674-5943
1233 Shelburne Rd., Suite 360, So. Burlington, VT 05403, Phone: 802-652-5140

Project Name: Jericho Pedestrian Bridge (VAOT JERICOPB-400) Jericho, VT

Boring No.: **B-2** | Page No.: 2 of 2 | File No.: 750-04.6 | Checked By: SPK

Boring Company: M & W Soils Engineering
Foreman: Craig Fairbank
GeoDesign Rep.: Jason Gaudette
Date Started: September 7, 2006 | Date Finished: September 7, 2006
N. Coordinate: | E. Coordinate:
Ground Surface Elevation (feet): 534
Station: | Offset: ft

	Casing:	Sampler:
Type:	H.S.A.	SS
I.D.:	4.25 in.	1.38 in.
Hammer Wt.:	NA	140 lbs
Hammer Fall:	NA	30 in.
Rig Type:	Acker Soil Max	
Hammer Type:	Safety	

Groundwater Observations

	Date	Depth (ft)	Elev. (ft)	Notes
▼	9/7/06, 9:55	10.0	524.0	Wet Sample
▼				
▼				
▼				

Sample Information

Depth (ft)	Casing Blows/ft	Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows 0-6	Blows 6-12	Blows 12-18	Blows 18-24	Coring Time (min./ft)	Moisture Content (%)
											7	
											12.5	
											12	
35												
40												
45												
50												
55												
60												

Strata Description (Depth & Elevation (feet))

Depth	Strata	Elevation
	BEDROCK (Metagraywacke) *(Continued)*	
32.8	Bottom of Exploration at 32.8 ft	501.2

Sample Description (Classification System: Burmister)

to diluted HCl.

Remarks

6) Lab moisture contents (ASTM D2216) for S2 range between 4.4% (top of sample) and 8.1% (bottom of sample).

Notes:
1) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual.
2) Water Level Readings Have Been Made At Times And Under Conditions Stated. Fluctuations Of Groundwater May Occur Due To Other Factors Than Those Present At The Time Measurements Were Made.
A.C. = After coring; N.R. = Not Recorded.
3) Sample Type Coding: A=Auger; C=Core; D=Driven; G=Grab; PS=Piston Sampler; SS=Split Barrel (Split Spoon); ST=Shelby Tube; Geo=GeoProbe V=Vane; WOR/H=Weight of Rod/Hammer
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%
5) Stratification lines represent approximate boundary between material types, transitions may be gradual.

Boring No.: **B-2**

BORING LOGS #2

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)
PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.
PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.

BORING LOG

GEODESIGN INCORPORATED
Geotechnical | Construction | Environmental Engineers and Scientists
P.O. Box 699
Windsor, VT 05089
Phone: 802-674-2033/Fax: 802-674-5943
1233 Shelburne Rd., Suite 360
So. Burlington, VT 05403
Phone: 802-652-5140

Project Name: Jericho Pedestrian Bridge (VAOT JERICOPB-400) Jericho, VT

Boring No.: B-3
Page No.: 1 of 2
File No.: 750-04.6
Checked By: SPK

Boring Company: M & W Soils Engineering
Foreman: Craig Fairbank
GeoDesign Rep.: Jason Gaudette
Date Started: September 8, 2006 Date Finished: September 8, 2006
N. Coordinate: E. Coordinate:
Ground Surface Elevation (feet): 535
Station: Offset: ft

	Casing:	Sampler:
Type:	H.S.A.	SS
I.D.:	4.25 in.	1.38 in.
Hammer Wt.:	NA	140 lbs
Hammer Fall:	NA	30 in.
Rig Type:	Acker Soil Max	
Hammer Type:	Safety	

Groundwater Observations

Date	Depth (ft)	Elev. (ft)	Notes
▼ 9/8/06, 7:30	10.0	525.0	Wet Sample
▼ 9/8/06, 8:30	13.5	521.5	In Augers
▼			
▼			

Sample Information

Depth (ft)	Casing Blows/ft	Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval 0 - 6	6 - 12	12 - 18	18 - 24	Coring Time (min./ft)	Moisture Content (%)
		S1	SS	24	8	0.5	4	15	14	14		5.6
		S2	SS	24	14	2.5	13	13	11	12		Note 5
5												
		S3	SS	24	18	5	4	3	5	5		20.9
		S4	SS	24	10	7	5	5	8	8		20.7
10												
		S5	SS	24	18	10	9	13	17	23		11.1
		S6	SS	24	14	12	18	18	17	14		15.3
15												
		S7	SS	24	12	15	10	9	11	14		20.2
		S8	SS	16	9	17	20	33	50/4"			14.8
20												
		C1	C	60	60	19.9	[REC= 100%; RQD= 91%]				9	
											8	
											7	
											8	
											11.5	
25												
		C2	C	60	60	24.9	[REC= 100%; RQD= 83%]				7.5	
											8.5	
											8.5	
											6.5	
											7.5	
30												

Strata Description (Depth & Elevation (feet))

Depth	Strata	Elevation
	Bituminous Concrete	534.8
	Gravelly Sand (FILL)	
4	Silty Sand with Wood (FILL)	531.0
8	Silty Sand & Gravel	527.0
18	Possible Weathered BEDROCK	517.0
19.9	BEDROCK (Metagraywacke)	515.1
29.9	Bottom of Exploration at 29.9 ft	

Sample Description — Classification System: Burmister

S1) Medium dense, light to dark brown fine to coarse SAND and fine GRAVEL, little Silt, damp.

S2) Medium dense. Top 25 cm (10 in): Similar to S1 except with grayish seams. Bottom 10 cm (4 in): Grayish brown fine to medium SAND, some Silt, little fine Gravel, damp.

S3) Loose, dark brown fine to medium SAND, little Silt, trace fine Gravel, moist. With wood pieces and trace brick.

S4) Medium dense. Top 10 cm (4 in): Similar to S3. Bottom 15 cm (6 in): Light brown fine to medium SAND and SILT, moist. With trace wood splinters.

S5) Dense, dark greenish gray brown fine to coarse SAND and fine to coarse GRAVEL, little Silt, wet.

S6) Dense, similar to S5.

S7) Medium dense, greenish brown fine to medium SAND and SILT, with 2.5 cm (1 in) layers of fine to coarse SAND, little Gravel, moist.

S8) Very dense/refusal. Greenish brown fine to medium SAND, some fine to coarse Gravel, little Silt, wet.

C1) Light gray (weathered) to greenish gray (fresh), moderately hard to hard, fresh to slightly weathered along fracture surfaces (top 30 cm), moderately jointed, weakly foliated, excellent quality METAGRAYWACKE. Top 8 cm of core pitted along possible quartz/calcite seams.

C2) Similar rock type to C1 except good quality, with sericite/chlorite banding between 8.17 m (26.8 ft) and 8.35 m (27.4 ft). Weak reaction to diluted HCl along quartz/calcite seams near sericite banding.

Remarks:
1) Ground surface elevation estimated by GeoDesign using a hand level from existing manhole rim (see Figure 2 in Attachment 1).
2) Coarse gravel/cobbles inferred between ground surface and 0.61 m (2 ft) deep.
3) HSA resistance encountered below 5.49 m (18 ft) deep with very hard resistance at 5.79 m (19 ft) deep.
4) HSA advanced to refusal at 6.07 m (19.9 ft) deep. Installed 10 cm (4 in) I.D. steel casing and flushed with 9.5 cm (3.75 in) roller bit prior to coring.

Notes:
1) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual.
2) Water Level Readings Have Been Made At Times And Under Conditions Stated. Fluctuations Of Groundwater May Occur Due To Other Factors Than Those Present At The Time Measurements Were Made. A.C. = After coring; N.R. = Not Recorded.
3) Sample Type Coding: A=Auger; C=Core; D=Driven; G=Grab; PS=Piston Sampler; SS=Split Barrel (Split Spoon); ST=Shelby Tube; Geo=GeoProbe V=Vane; WOR/H=Weight of Rod/Hammer
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%
5) Stratification lines represent approximate boundary between material types, transitions may be gradual.

Boring No.: B-3

VT BORING LOG MC 5/21/04 750-04.6.GPJ GEODESIGN STANDARD .GDT 8/9/11

BORING LOG

GEODESIGN INCORPORATED
Geotechnical | Construction | Environmental Engineers and Scientists
P.O. Box 699
Windsor, VT 05089
Phone: 802-674-2033/Fax: 802-674-5943
1233 Shelburne Rd., Suite 360
So. Burlington, VT 05403
Phone: 802-652-5140

Project Name: Jericho Pedestrian Bridge (VAOT JERICOPB-400) Jericho, VT

Boring No.: B-3
Page No.: 2 of 2
File No.: 750-04.6
Checked By: SPK

Boring Company: M & W Soils Engineering
Foreman: Craig Fairbank
GeoDesign Rep.: Jason Gaudette
Date Started: September 8, 2006 Date Finished: September 8, 2006
N. Coordinate: E. Coordinate:
Ground Surface Elevation (feet): 535
Station: Offset: ft

	Casing:	Sampler:
Type:	H.S.A.	SS
I.D.:	4.25 in.	1.38 in.
Hammer Wt.:	NA	140 lbs
Hammer Fall:	NA	30 in.
Rig Type:	Acker Soil Max	
Hammer Type:	Safety	

Groundwater Observations

Date	Depth (ft)	Elev. (ft)	Notes
▼ 9/8/06, 7:30	10.0	525.0	Wet Sample
▼ 9/8/06, 8:30	13.5	521.5	In Augers
▼			
▼			

Sample Information

Depth (ft)	Casing Blows/ft	Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval 0 - 6	6 - 12	12 - 18	18 - 24	Coring Time (min./ft)	Moisture Content (%)
35												
40												
45												
50												
55												
60												

Strata Description (Depth & Elevation (feet)): 505.1

Sample Description — Classification System: Burmister

Remarks:
5) Lab moisture contents (ASTM D2216) for S2 range between 12.8% (top of sample) and 14.2% (bottom of sample).

Notes:
1) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual.
2) Water Level Readings Have Been Made At Times And Under Conditions Stated. Fluctuations Of Groundwater May Occur Due To Other Factors Than Those Present At The Time Measurements Were Made. A.C. = After coring; N.R. = Not Recorded.
3) Sample Type Coding: A=Auger; C=Core; D=Driven; G=Grab; PS=Piston Sampler; SS=Split Barrel (Split Spoon); ST=Shelby Tube; Geo=GeoProbe V=Vane; WOR/H=Weight of Rod/Hammer
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%
5) Stratification lines represent approximate boundary between material types, transitions may be gradual.

Boring No.: B-3

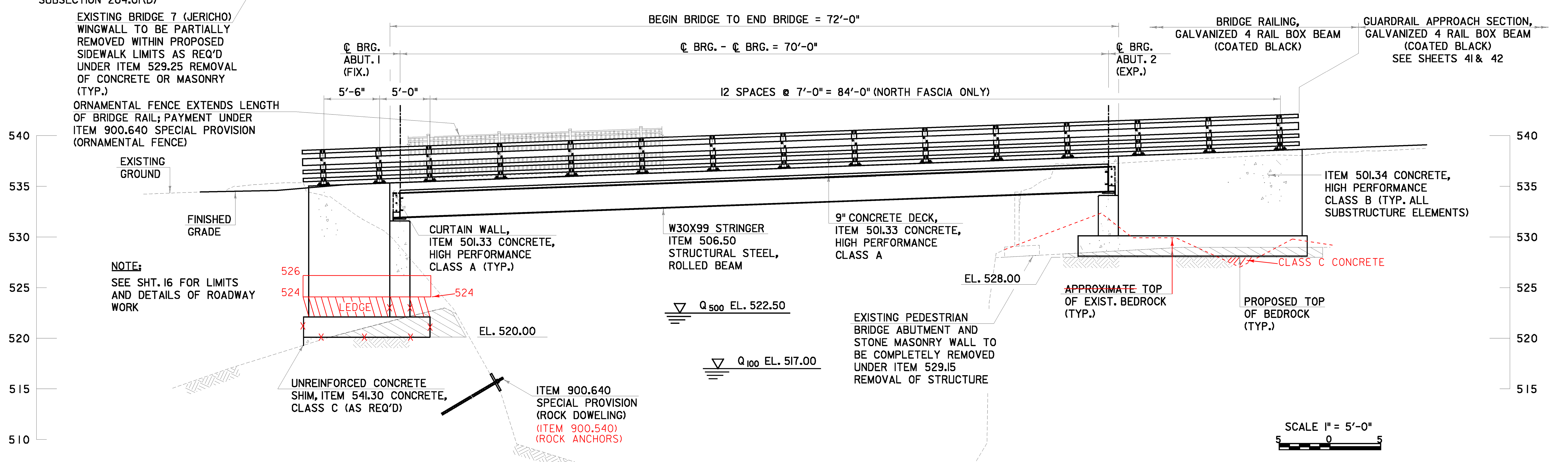
BORING LOGS #3

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)
PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.
PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.
SHEET 24 OF 62

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\z08f004borlog.dgn
DATE/TIME = 4/7/2014
USER = 4916

PLAN

SCALE 1" = 5'-0"



NOTE:

SEE SHT. 16 FOR LIMITS AND DETAILS OF ROADWAY WORK

ELEVATION (SECTION A-A)

SCALE 1" = 5'-0"

LEGEND

(hatched area)	APPROXIMATE LIMIT OF ITEM 203.16 SOLID ROCK EXCAVATION. (CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION. IF ABUTMENT REQUIRES MODIFICATION, CONTRACTOR SHALL BE PAID ONLY FOR ADDITIONAL QUANTITIES AS SPECIFIED IN THE CONTRACT DOCUMENTS.)
(wavy line)	EXCAVATION SUPPORT SYSTEM (DESIGNED BY CONTRACTOR AND INCLUDED UNDER ITEM 204.25)

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\z08f004pe.dgn
DATE/TIME = 4/7/2014
USER = 4916

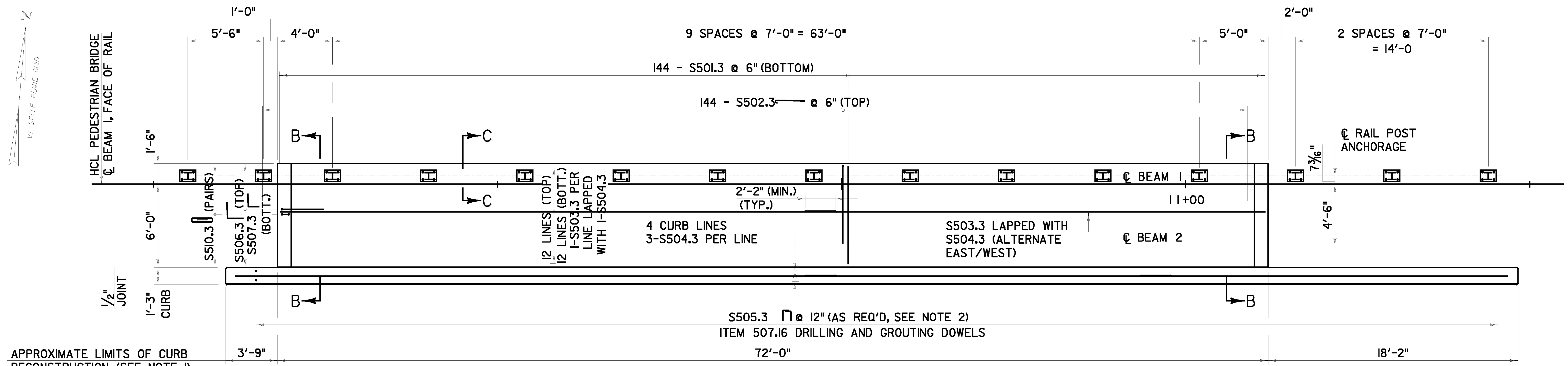
CHA

PLAN AND ELEVATION

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.

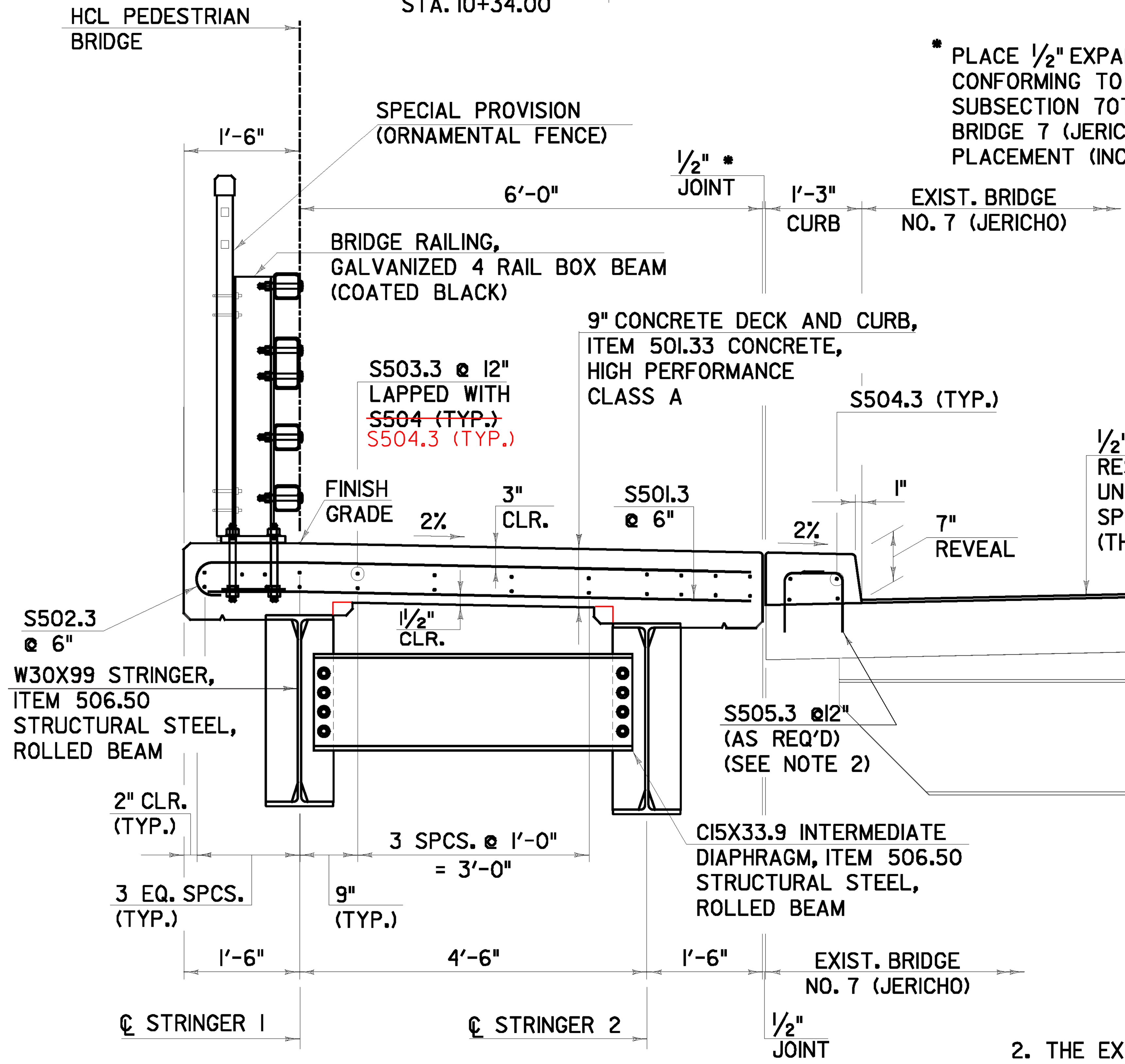
PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.



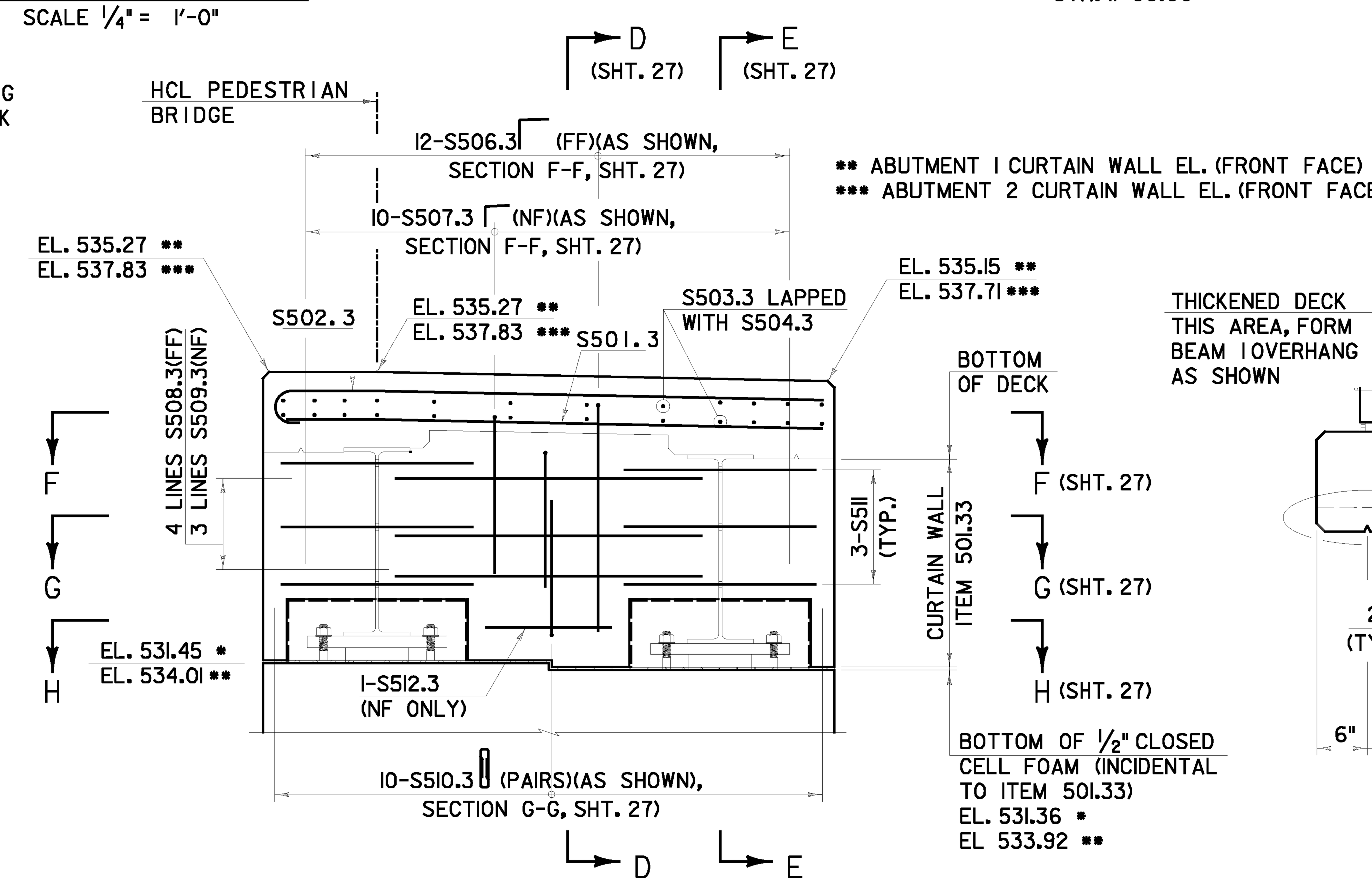
BEGIN BRIDGE
STA. 10+34.00

END BRIDGE
STA. 11+06.00

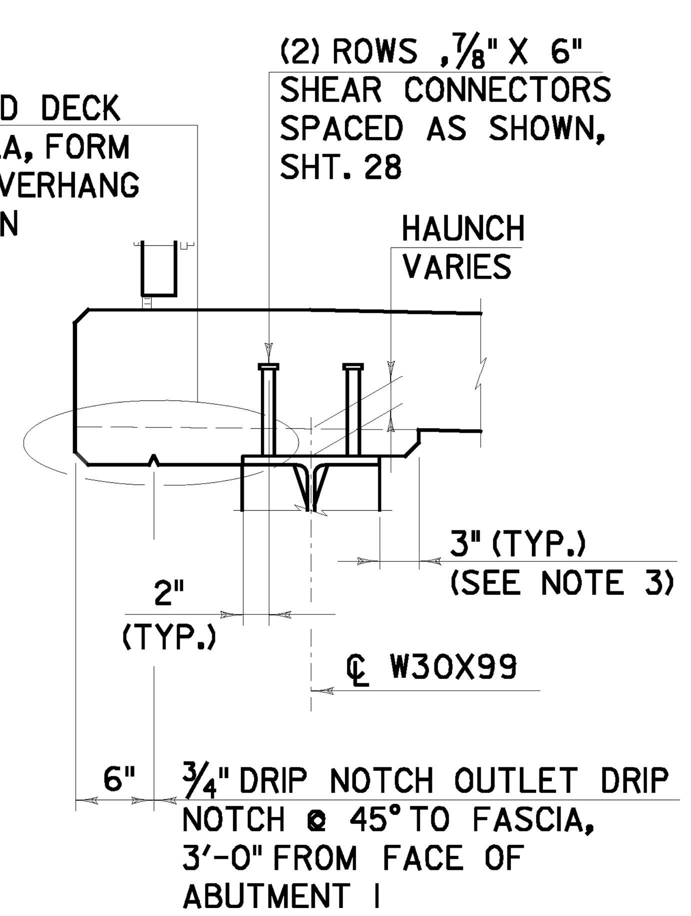
DECK REINFORCING PLAN
SCALE 1/4" = 1'-0"



TYPICAL BRIDGE SECTION
SCALE 3/4" = 1'-0"



SECTION B–B
(ABUT. 2 SHOWN, ABUT. 1 OPP. HAND)
SCALE 3/4" = 1'-0"



SECTION C–C
SCALE 1" = 1'-0"

SCALE 1/4" = 1'-0" 0 2 4 6
SCALE 3/4" = 1'-0" 0 1 2
SCALE 1" = 1'-0" 9 6 3 0 1 2

LEGEND:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
⚠ = CUT IN FIELD

NOTES:

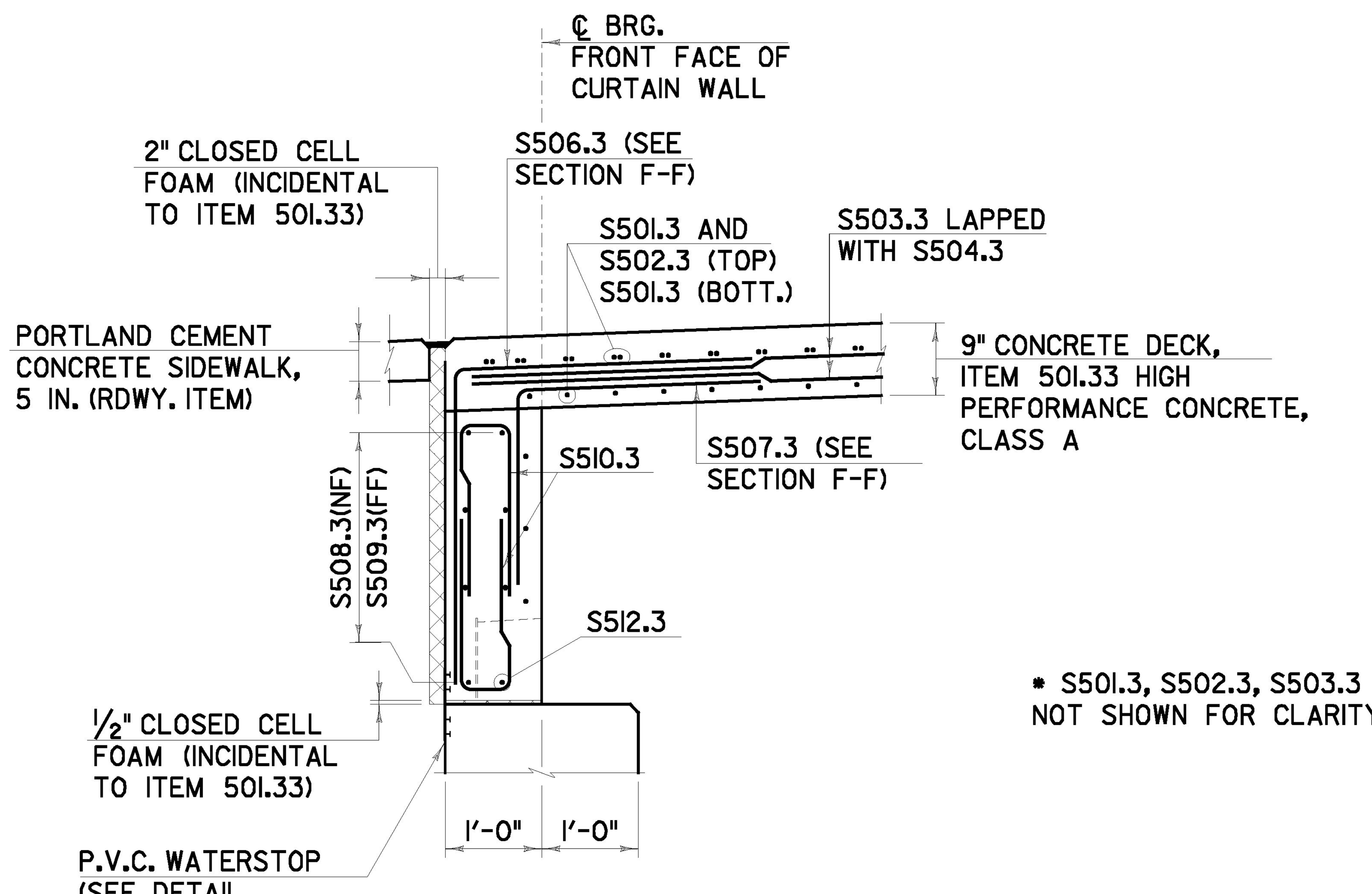
1. CURB RECONSTRUCTION LIMITS SHOWN ARE APPROXIMATE. THE INTENT IS FOR FULL LENGTH DEMOLITION AND RECONSTRUCTION OF THE EXISTING CURB WITH MODIFIED WIDTH AND REVEAL.
2. THE EXISTING CURB CONTAINS BOTH HORIZONTAL AND VERTICAL REINFORCEMENT AS SHOWN ON THE REFERENCE SHTS. MARK S513 HAS BEEN INCLUDED UNDER ITEM 507.16 DRILLING AND GROUTING DOWELS TO PROVIDE REPLACEMENT OF EXISTING VERTICAL REINFORCEMENT. ~~DAMAGED BEYOND SALVAGE DURING CURB RECONSTRUCTION.~~
3. THE 3" HAUNCH PROJECTION MAY BE ELIMINATED FOR FORMING SYSTEMS DESIGNED FOR THE CONSTRUCTION OF VERTICAL HAUNCHES. SYSTEMS SHALL BE SUBMITTED FOR APPROVAL TO THE STRUCTURES ENGINEER. ALL VOIDS SHALL BE FILLED WITH POLYURETHANE JOINT SEALER OR AN EQUIVALENT PRODUCT APPROVED BY THE VTRANS MATERIALS AND RESEARCH LABORATORY.
4. SEE SHEET 27 FOR SECTIONS D-D, E-E, F-F, G-G, AND H-H.

CHA

DECK REINFORCING PLAN AND DETAILS

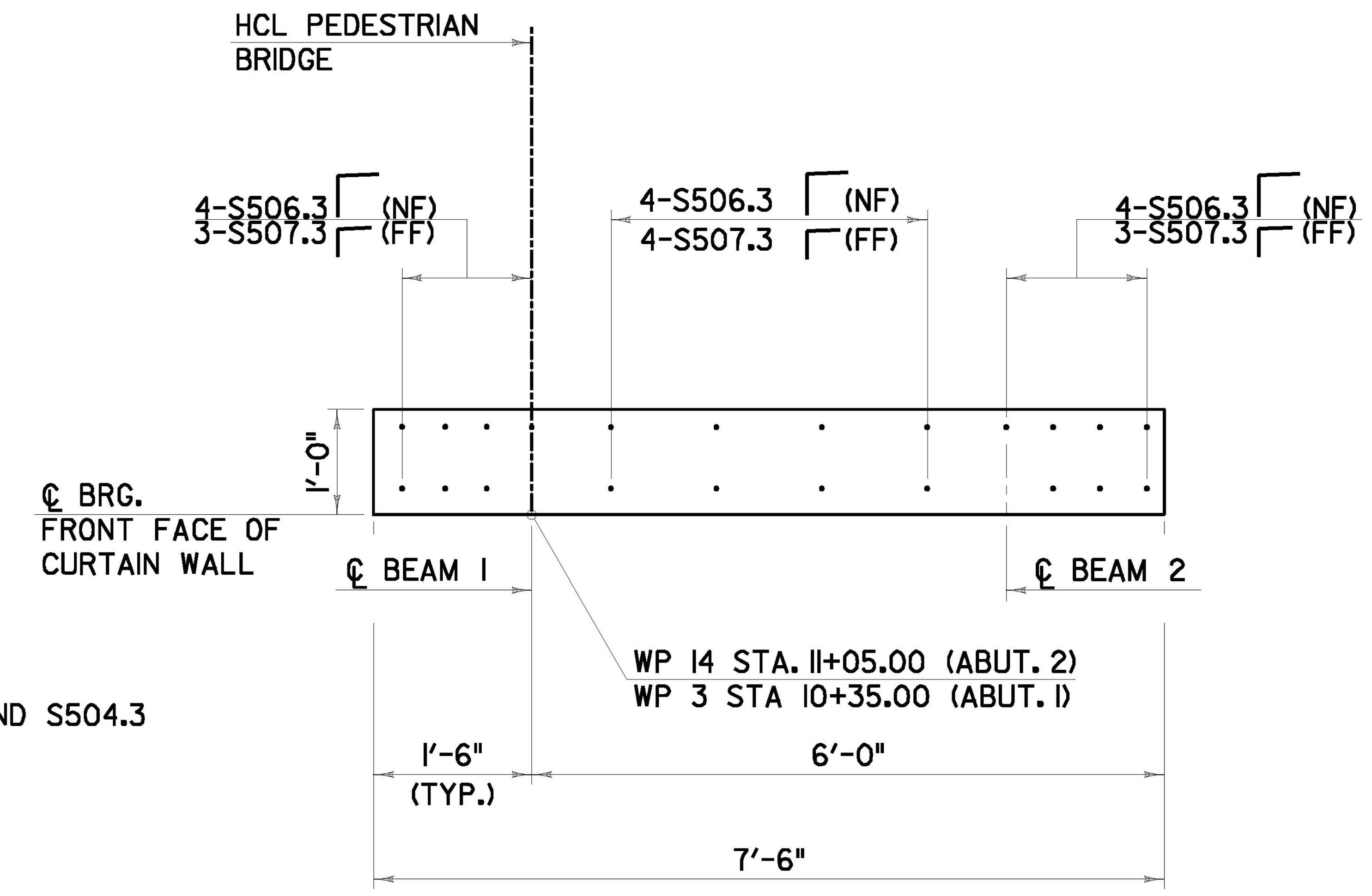
PROJECT NAME:	JERICHO
PROJECT NUMBER:	STP FTBR (3)
PROJECT LEADER:	M.D.S.
DESIGNED BY:	D.M.D.
PLOT DATE:	4/7/2014
DRAWN BY:	D.M.D.
CHECKED BY:	P.M.P.

FILE NAME = V:\Projects\ANY\V2\21113\CADD\MSTN\08F004supdetail.dgn
DATE/TIME = 4/7/2014
USER = 4916

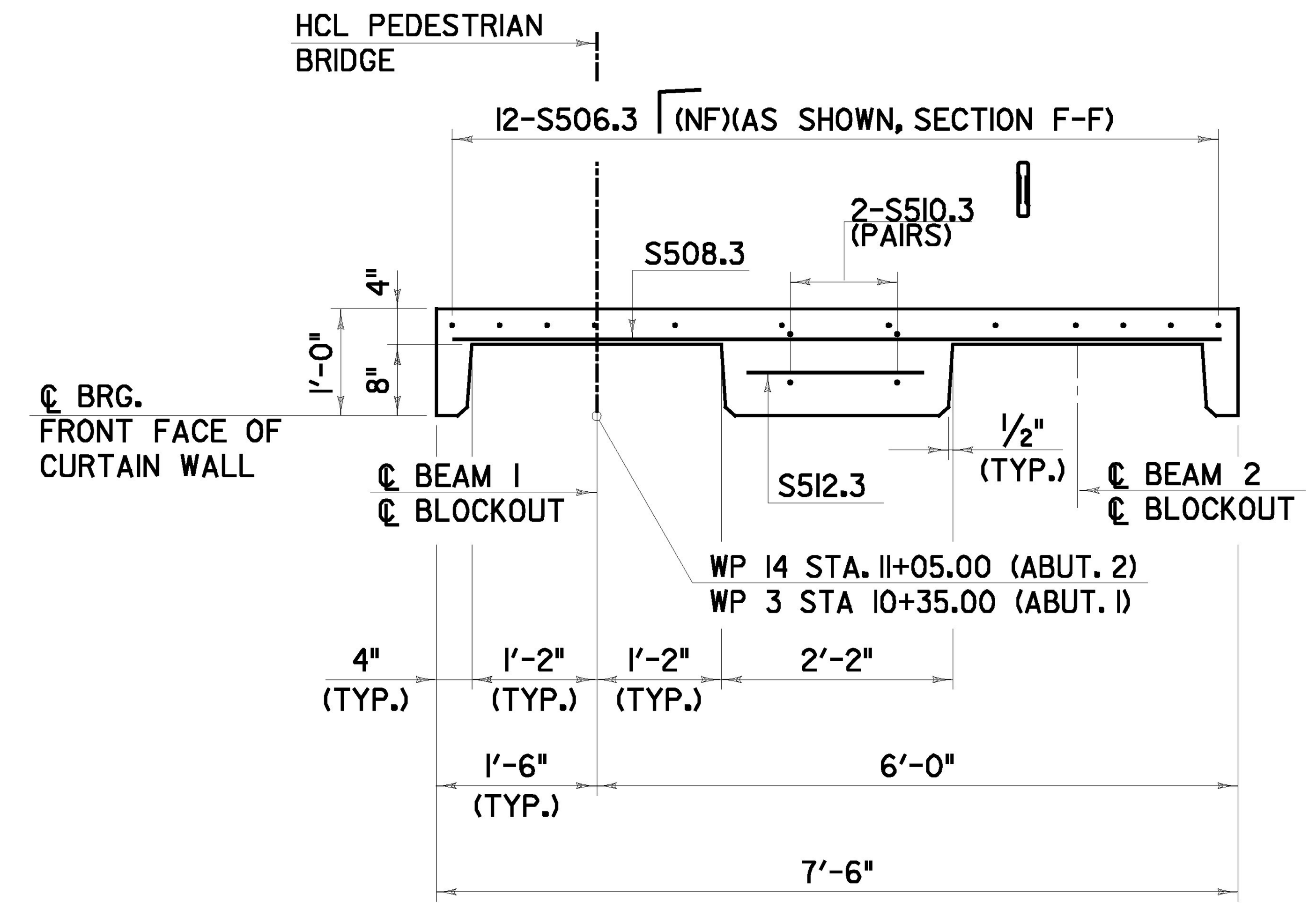


SECTION D–D
SCALE ¾" = 1'-0"

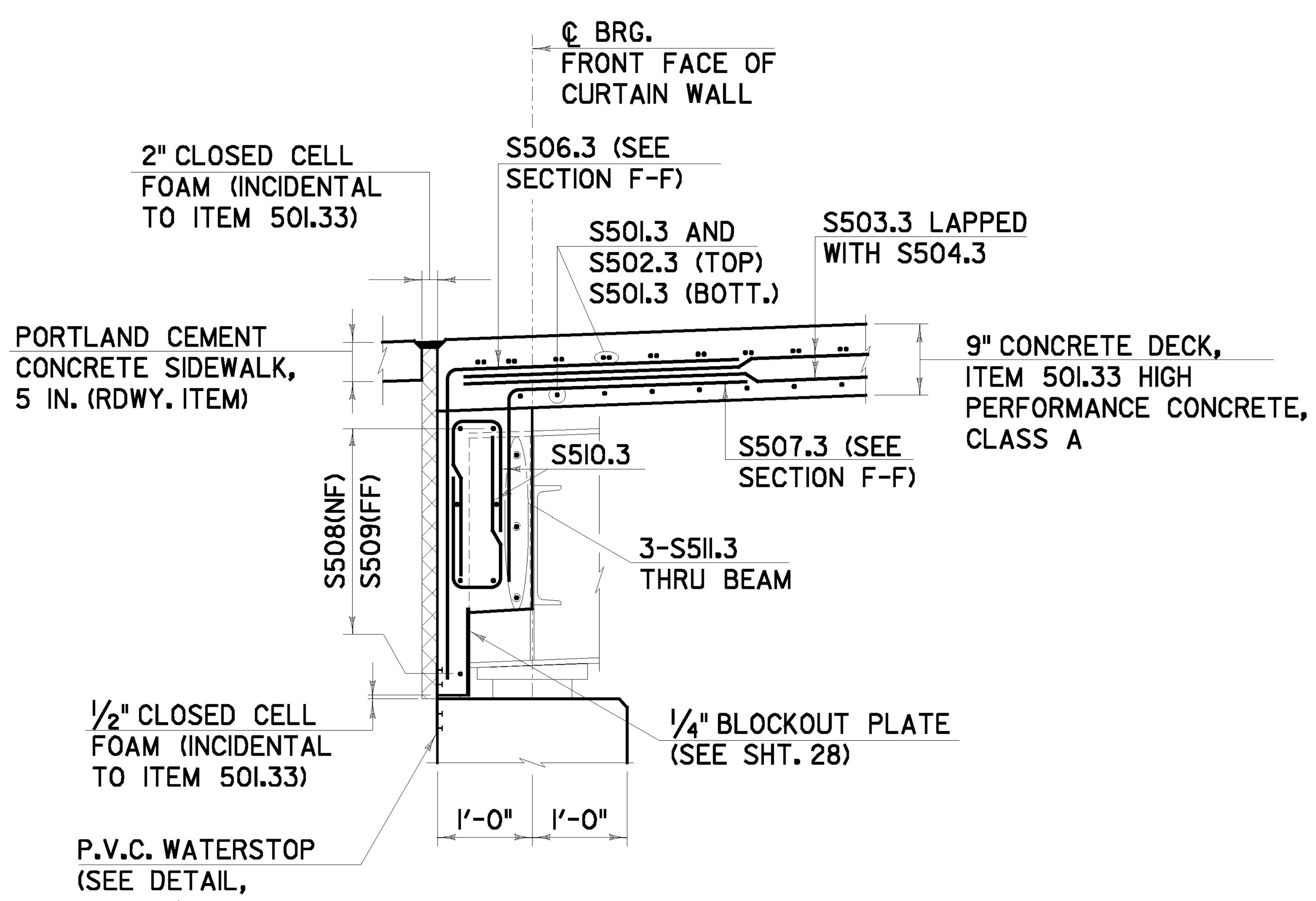
• S501.3, S502.3, S503.3 AND S504.3
NOT SHOWN FOR CLARITY



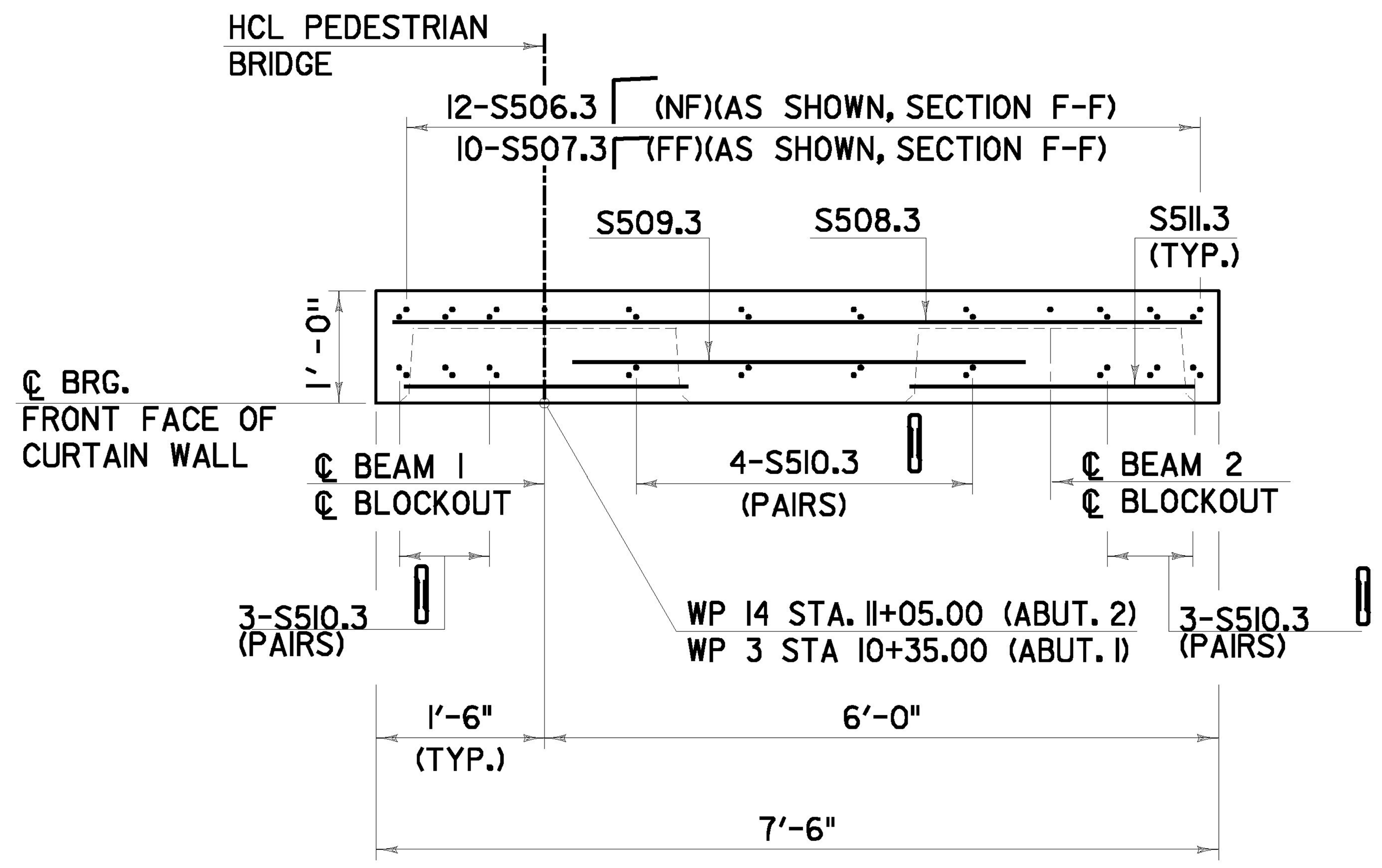
SECTION F–F
(ABUT. 2 SHOWN, ABUT. 1 OPP. HAND)
SCALE ¾" = 1'-0"



SECTION H–H
(ABUT. 2 SHOWN, ABUT. 1 OPP. HAND)
SCALE ¾" = 1'-0"



SECTION E–E
SCALE ¾" = 1'-0"



SECTION G–G
(ABUT. 2 SHOWN, ABUT. 1 OPP. HAND)
SCALE ¾" = 1'-0"

NOTES:

1. 2" CLR. IN CURTAIN WALL UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2. ALL CONCRETE IN THE DECK AND CURTAIN WALLS SHALL BE HIGH PERFORMANCE, CLASS A AND SHALL BE PAID UNDER ITEM 501.33 HIGH PERFORMANCE CONCRETE, CLASS A.
3. ALL REINFORCING STEEL IN THE DECK AND CURTAIN WALL SHALL BE SOLID STAINLESS STEEL AND SHALL BE PAID FOR UNDER ITEM 507.13 REINFORCING STEEL, LEVEL III.

SCALE ¾" = 1'-0"
0 1 2

LEGEND:

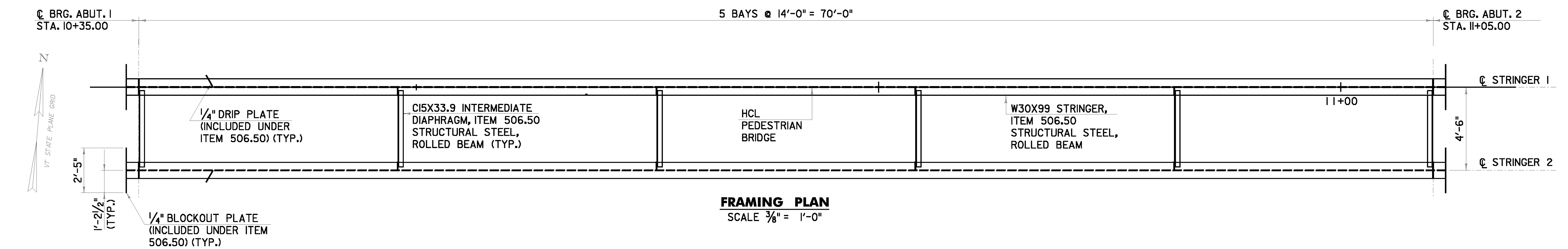
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
△ = CUT IN FIELD

CHA

DECK REINFORCING DETAILS

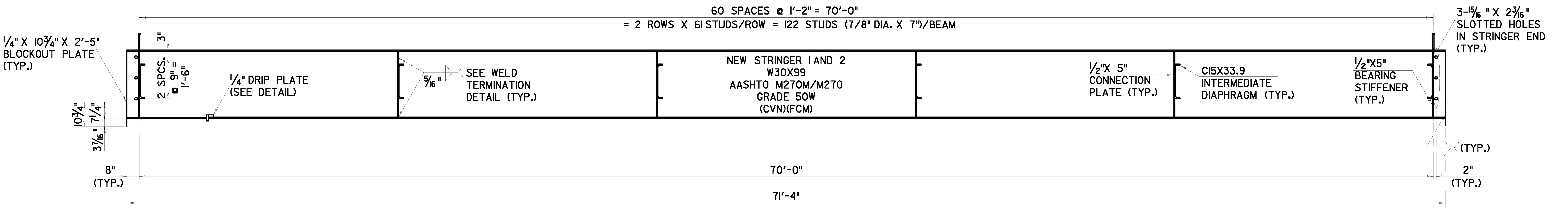
PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)
PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.
PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.
SHEET 27 OF 62

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F204\Consultants\08F204supdetail2.dgn
DATE/TIME = 4/7/2014
USER = 4916



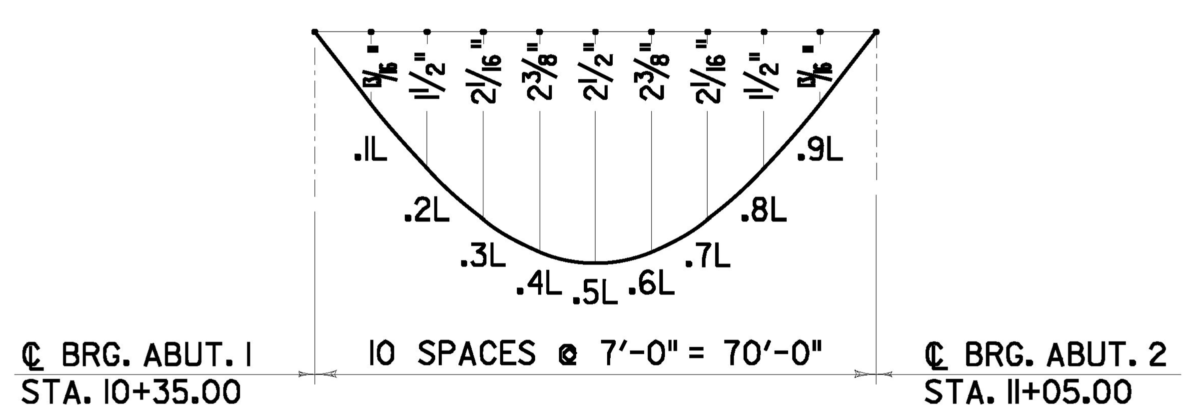
FRAMING PLAN

SCALE 3/8" = 1'-0"



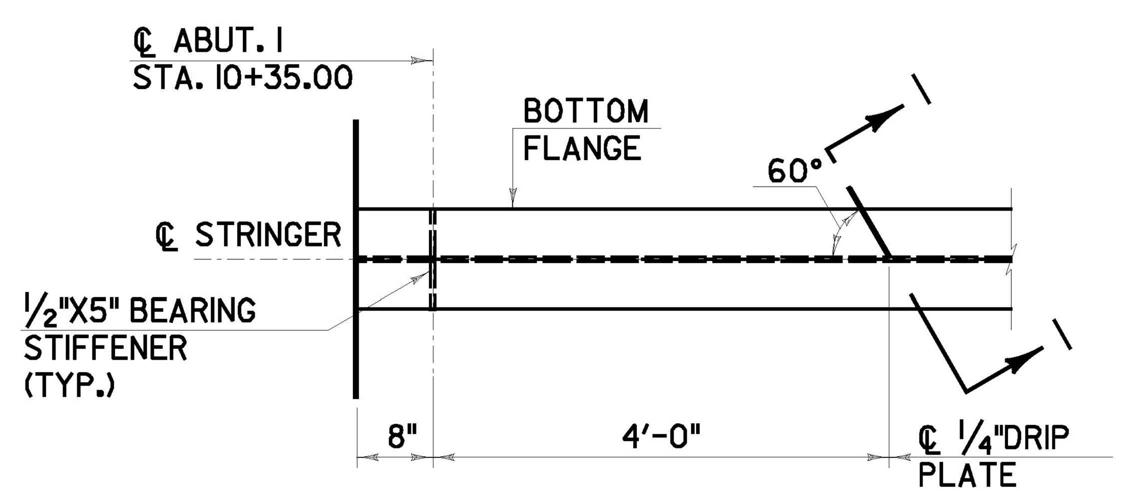
STRINGER ELEVATION

NOT TO SCALE



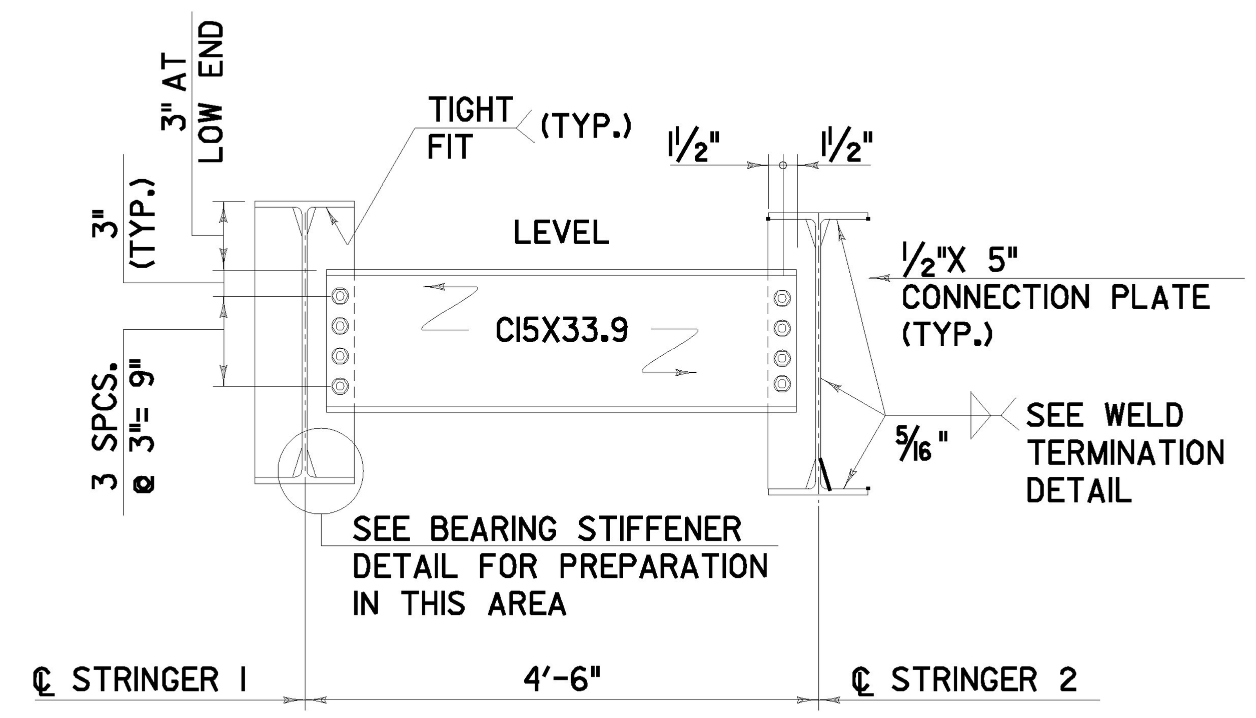
DEAD LOAD DEFLECTION DIAGRAM

(INCLUDES NON-COMPOSITE SLAB AND COMPOSITE
DEAD LOAD DEFLECTIONS FOR HAUNCH CONSTRUCTION)
NOT TO SCALE



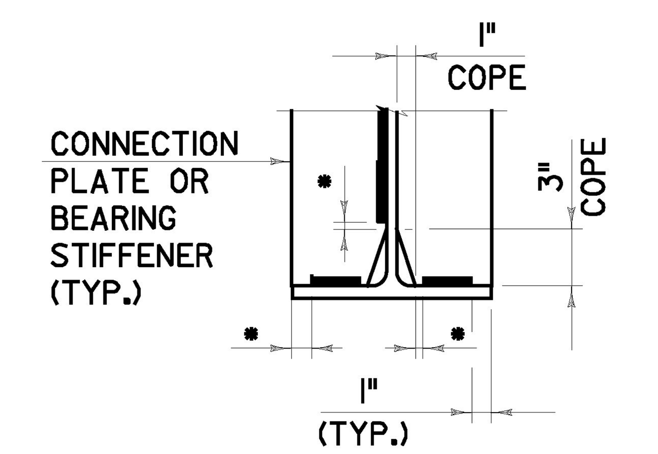
DRIP PLATE DETAIL

SCALE 3/16" = 1'-0"



INTERMEDIATE/END DIAPHRAGM DETAIL

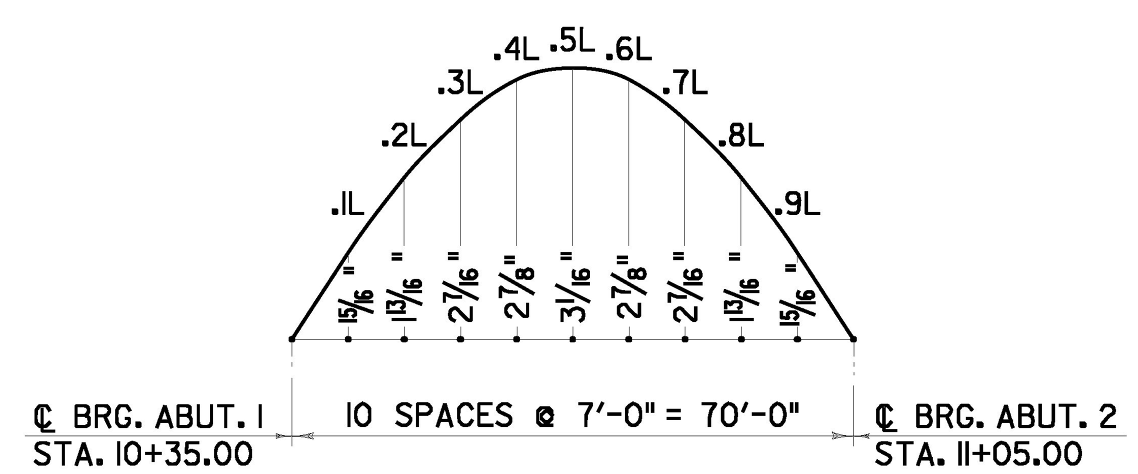
SCALE 3/16" = 1'-0"



• NO WELD FOR 3/8" MIN., 7/8" MAX
(EXCEPT MUST MAINTAIN 1" MIN. FROM
EDGE OF FLANGE)

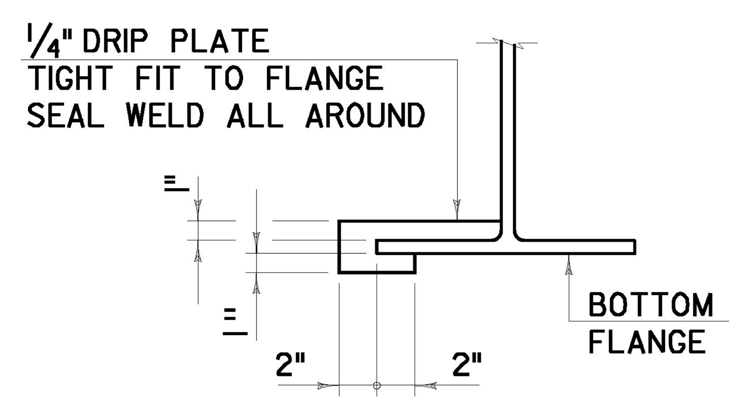
WELD TERMINATION DETAIL

SCALE 1 1/2" = 1'-0"



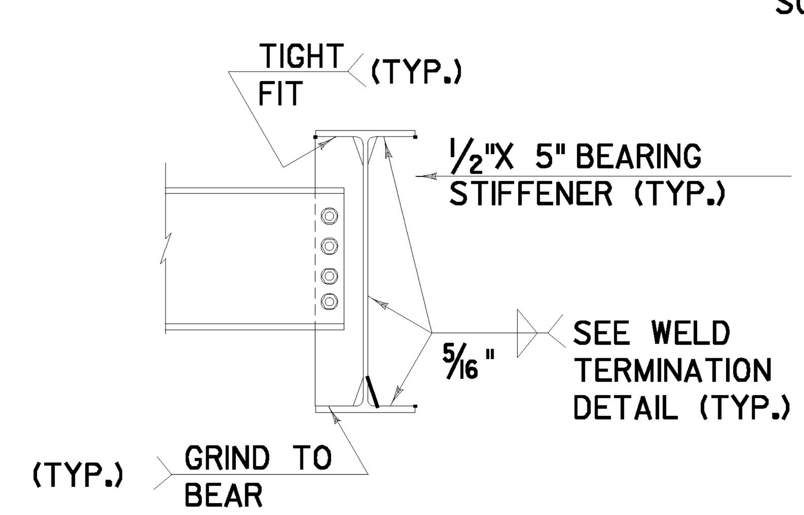
CAMBER DIAGRAM

(INCLUDES ALL NON-COMPOSITE AND COMPOSITE
DEAD LOAD DEFLECTIONS FOR STRINGER CAMBER)
NOT TO SCALE



SECTION I-I

NOT TO SCALE



BEARING STIFFENER DETAIL

SCALE 3/16" = 1'-0"

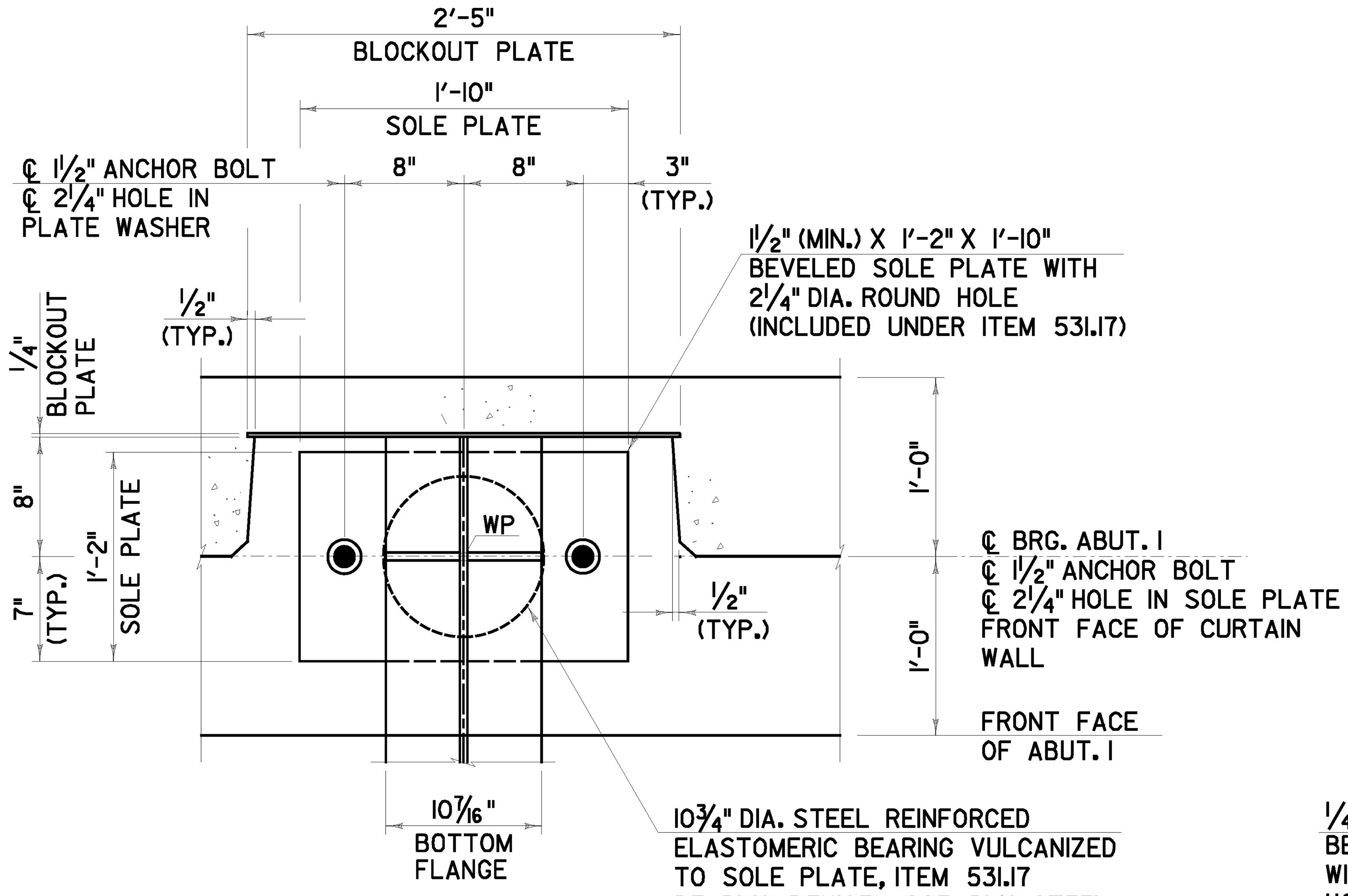
SCALE 3/16" = 1'-0"
1 0 2 4 6 8

SCALE 3/8" = 1'-0"
1 0 1 2 3 4

SCALE 1 1/2" = 1'-0"
1 9 6 3 0 1

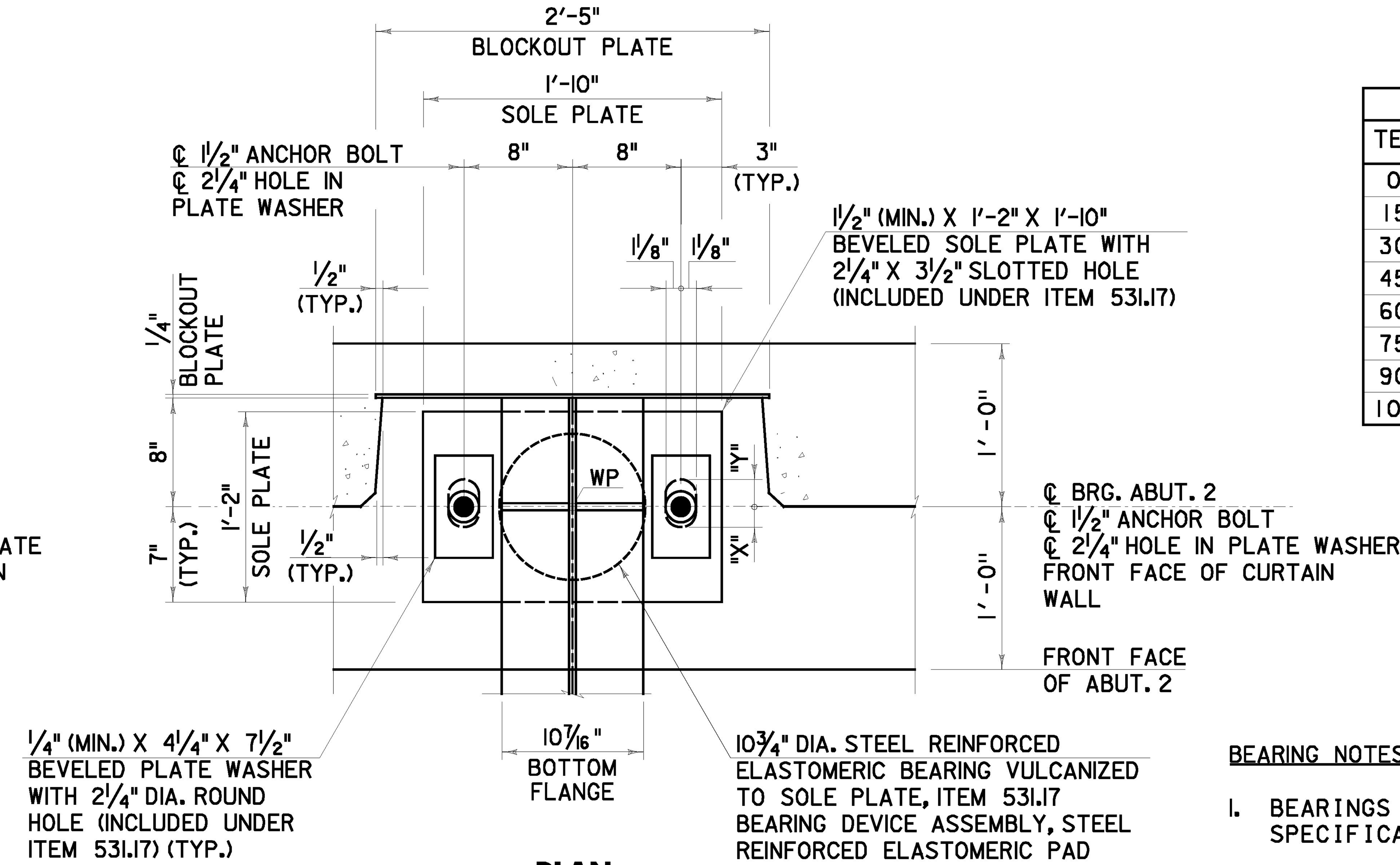
CHA

FRAMING PLAN AND STRUCTURAL STEEL DETAILS	PROJECT NAME: JERICHO PROJECT NUMBER: STP FTBR (3)	
	PROJECT LEADER: M.D.S. DESIGNED BY: D.M.D.	PLOT DATE: 4/7/2014 DRAWN BY: D.M.D. CHECKED BY: P.M.P. SHEET 28 OF 62



PLAN

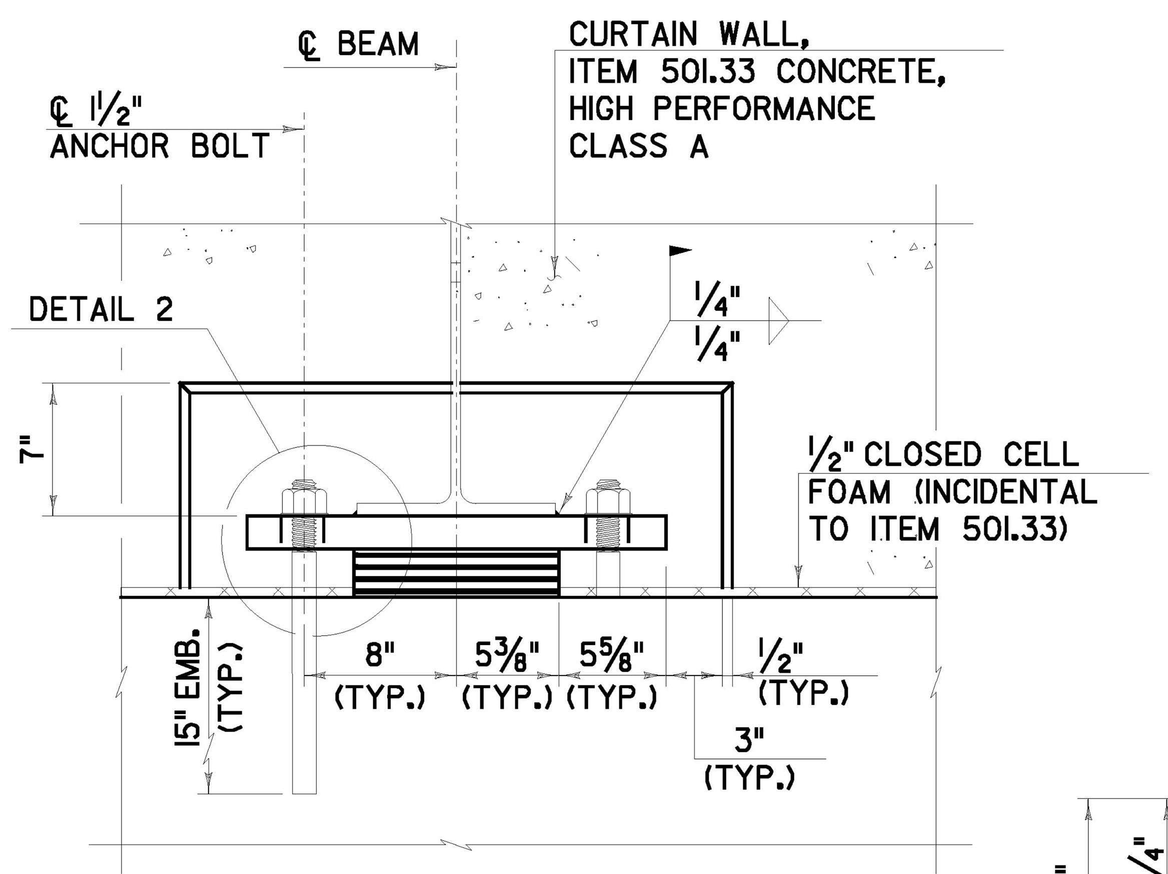
(ABUT. 1 - FIXED BEARING)
SCALE: 1½" = 1'-0"



PLAN

(ABUT. 2 - EXPANSION BEARING)
SCALE: 1½" = 1'-0"

SETTING CHART (ABUT. 2)		
TEMP.	"X" DIST.	"Y" DIST.
0° F	1⅝"	1⅞"
15° F	1¾"	1¾"
30° F	1⅞"	1⅝"
45° F	2"	1½"
60° F	2⅛"	1⅜"
75° F	2¼"	1¼"
90° F	2⅜"	1⅛"
105° F	2½"	1"



FRONT ELEVATION

(SHOWN AT FRONT FACE OF CURTAIN WALL)
(ABUT. 1 SHOWN, ABUT. 2 SIMILAR)
SCALE: 1½" = 1'-0"

BEARING DESIGN CRITERIA				
DESIGN LOADS			TOTAL ROTATION (RAD)	ONE-WAY MOVEMENT (IN)
TOTAL DL (KIPS)	TOTAL LL+I (KIPS)	HORIZONTAL (KIPS)		
25	32	4	.013	.41"

NOTE:

THE ONE WAY MOVEMENT SHOWN ON THE BEARING TABLE IS THE MAXIMUM MOVEMENT (EXPANSION OR CONTRACTION) OF THE SUPERSTRUCTURE WHEN BEARINGS AND SUPERSTRUCTURE ARE SET AT 45° F.

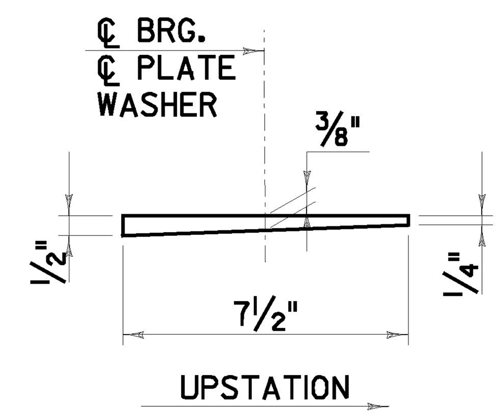
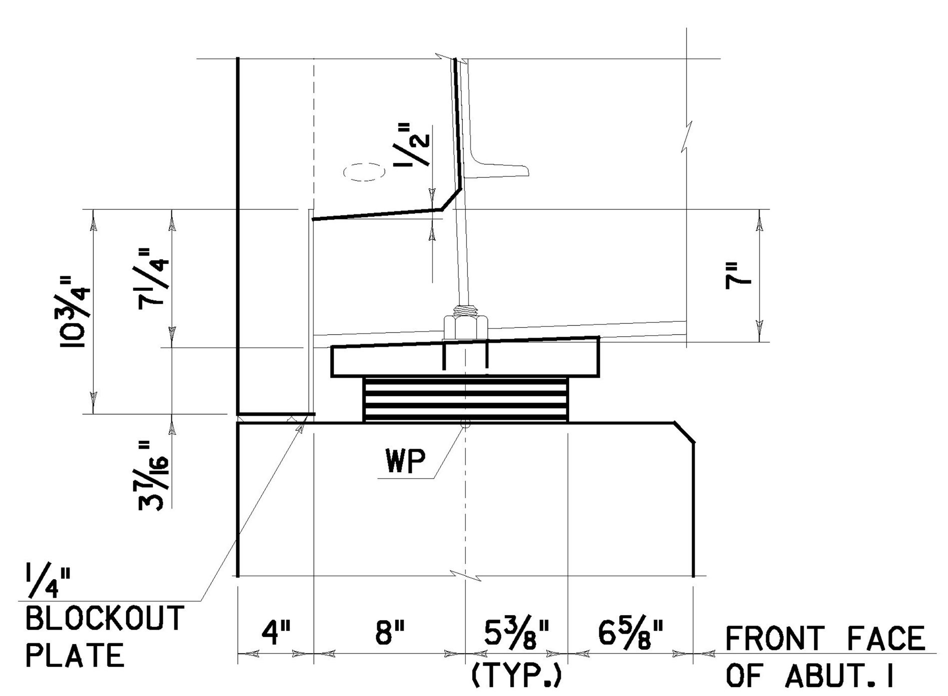


PLATE WASHER DETAIL

SCALE: 3" = 1'-0"

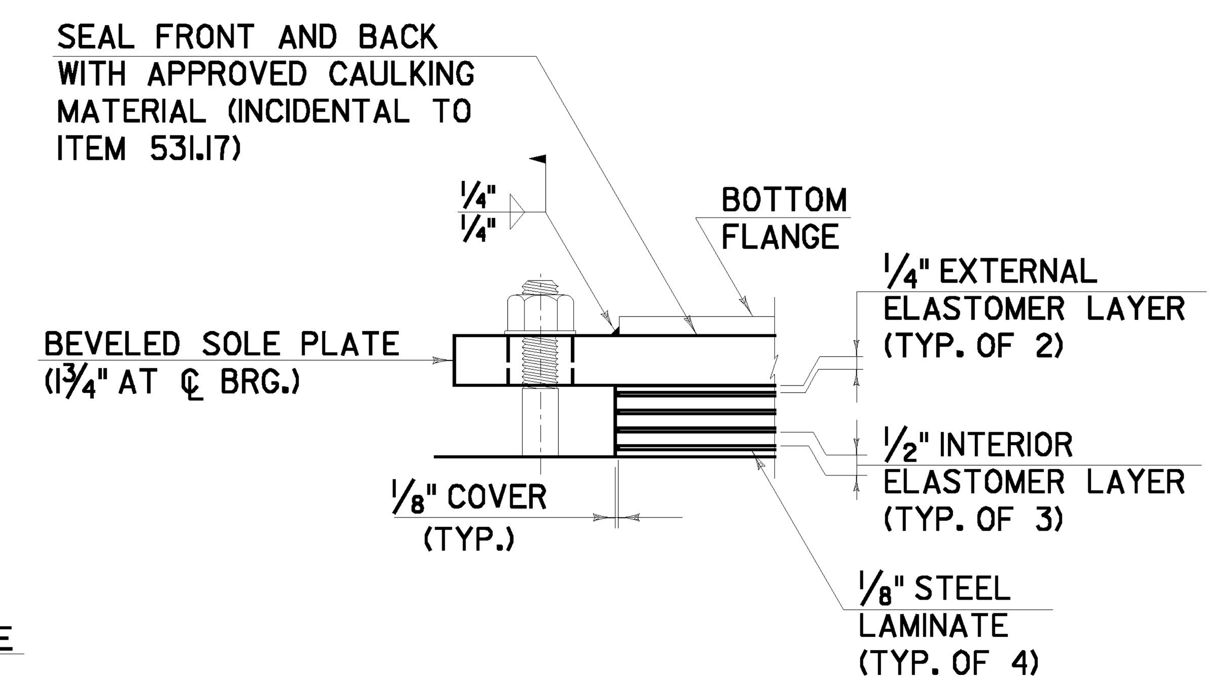
BEARING NOTES:

1. BEARINGS SHALL CONFORM TO SECTION 531 OF THE STANDARD SPECIFICATIONS.
2. BEARING DEVICE ASSEMBLIES SHALL BE PAID UNDER ITEM 531.17 BEARING DEVICE ASSEMBLY, STEEL REINFORCED ELASTOMERIC PAD. SOLE PLATES, ANCHOR BOLTS AND PLATE WASHERS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE INCLUDED UNDER ITEM 531.17.
3. SOLE PLATES, NUTS AND PLATE WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH STANDARD SPECIFICATION SUBSECTION 726.08.
4. THE CENTERLINE OF ALL BEARING COMPONENTS SHALL BE IN LINE AT 45° F.
5. THE CONTRACTOR SHALL INCLUDE THE BEARING INSTALLATION PROCEDURE WITH THE FABRICATION DRAWING PACKAGE REQUIRED UNDER STANDARD SPECIFICATION SUBSECTION 531.03. PROCEDURE SHALL INCLUDE BEARING ADJUSTMENT SETTING DEPENDING UPON TEMPERATURE AT TIME OF ERECTION.
6. ANCHOR BOLTS AT ABUTMENT 1 SHALL BE INSTALLED WITH THE NUT HAND TIGHTENED. BURR ANCHOR BOLT THREADS ABOVE THE NUT TO PREVENT REMOVAL.
7. ANCHOR BOLTS AT ABUTMENT 2 SHALL BE INSTALLED WITH AN ⅛" GAP BETWEEN THE BOTTOM OF THE NUT AND THE TOP OF THE PLATE WASHER. BURR ANCHOR BOLT THREADS ABOVE THE NUT TO PREVENT REMOVAL.



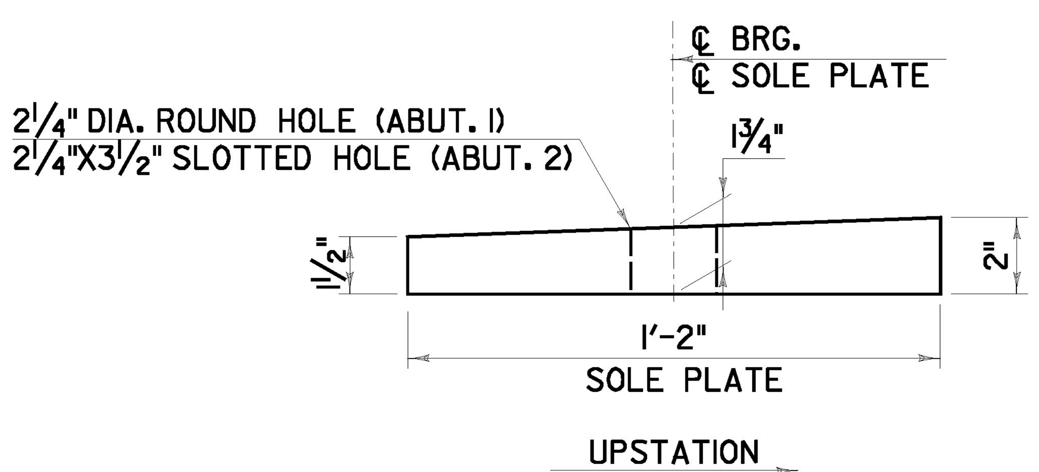
SIDE ELEVATION

(ABUT. 1 SHOWN, ABUT. 2 SIMILAR)
SCALE: 1½" = 1'-0"



DETAIL 2

(ABUT. 1 SHOWN, ABUT. 2 SIMILAR)
NOT TO SCALE



SOLE PLATE DETAIL

SCALE: 3" = 1'-0"

SCALE 1½" = 1'-0"
9 6 3 0

SCALE 3" = 1'-0"
9 6 3 0

CHA

BEARING DETAILS

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.

PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.
SHEET 29 OF 62

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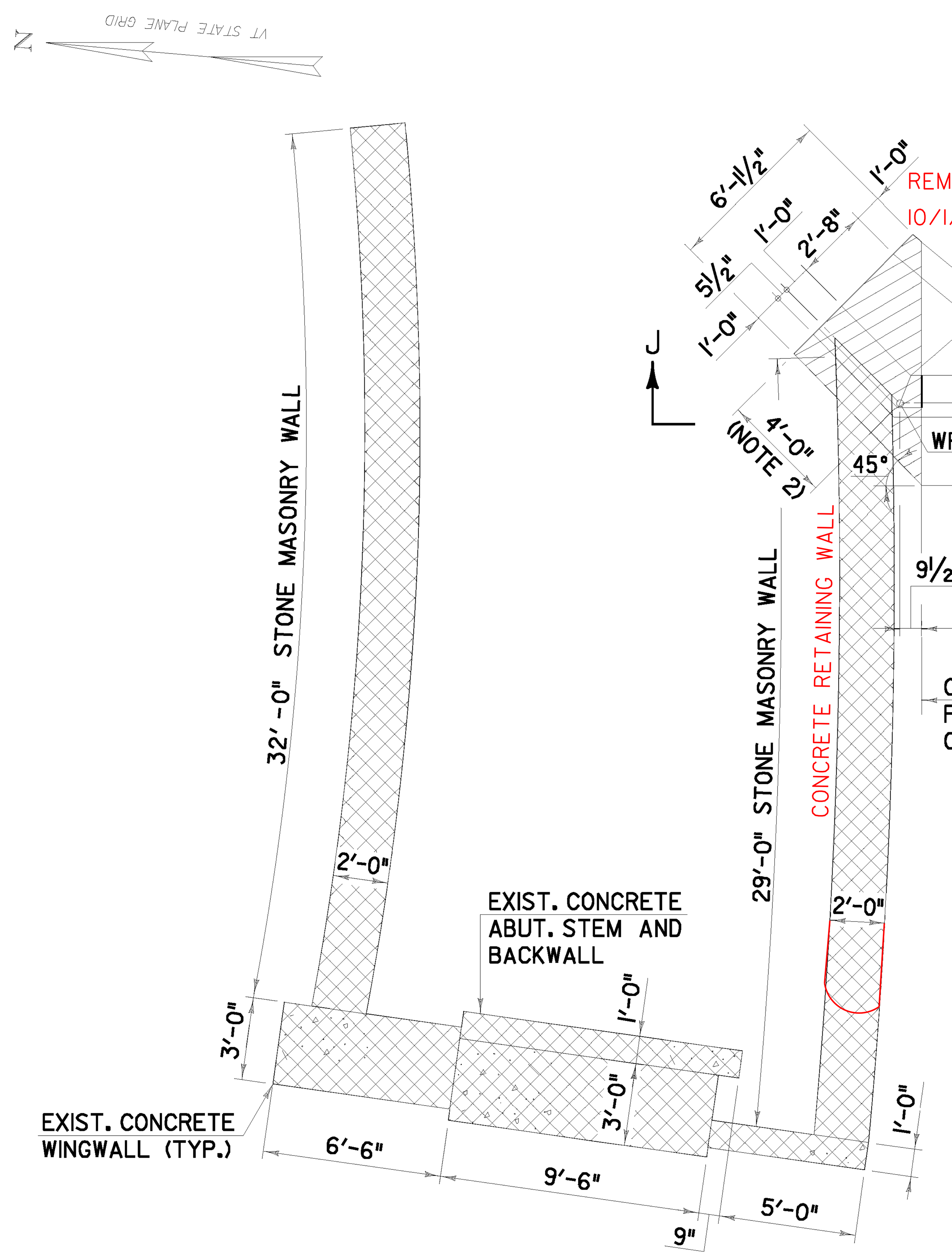
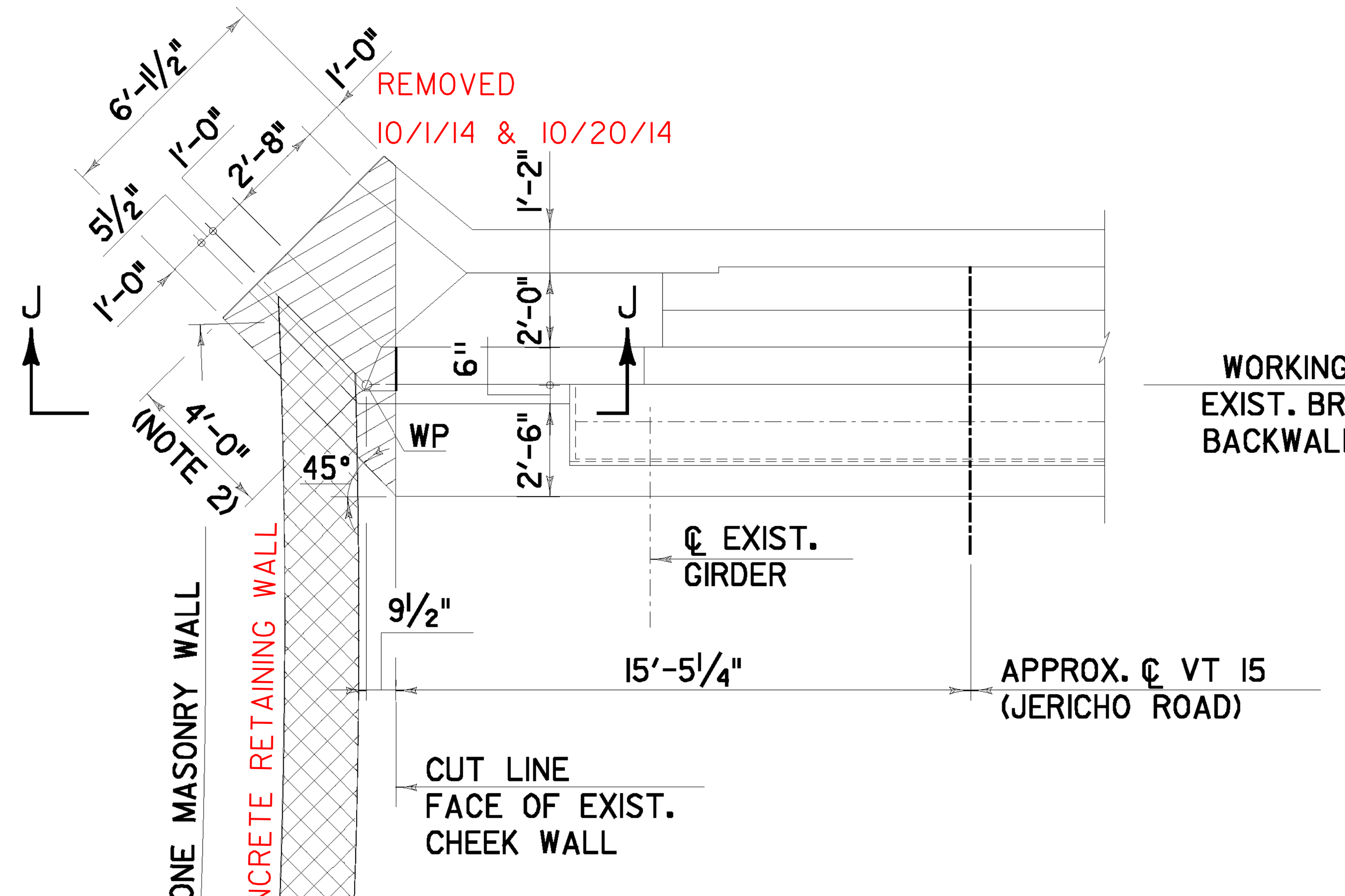
USER = 4916



EXISTING PEDESTRIAN BRIDGE ABUTMENT 2 - PLAN

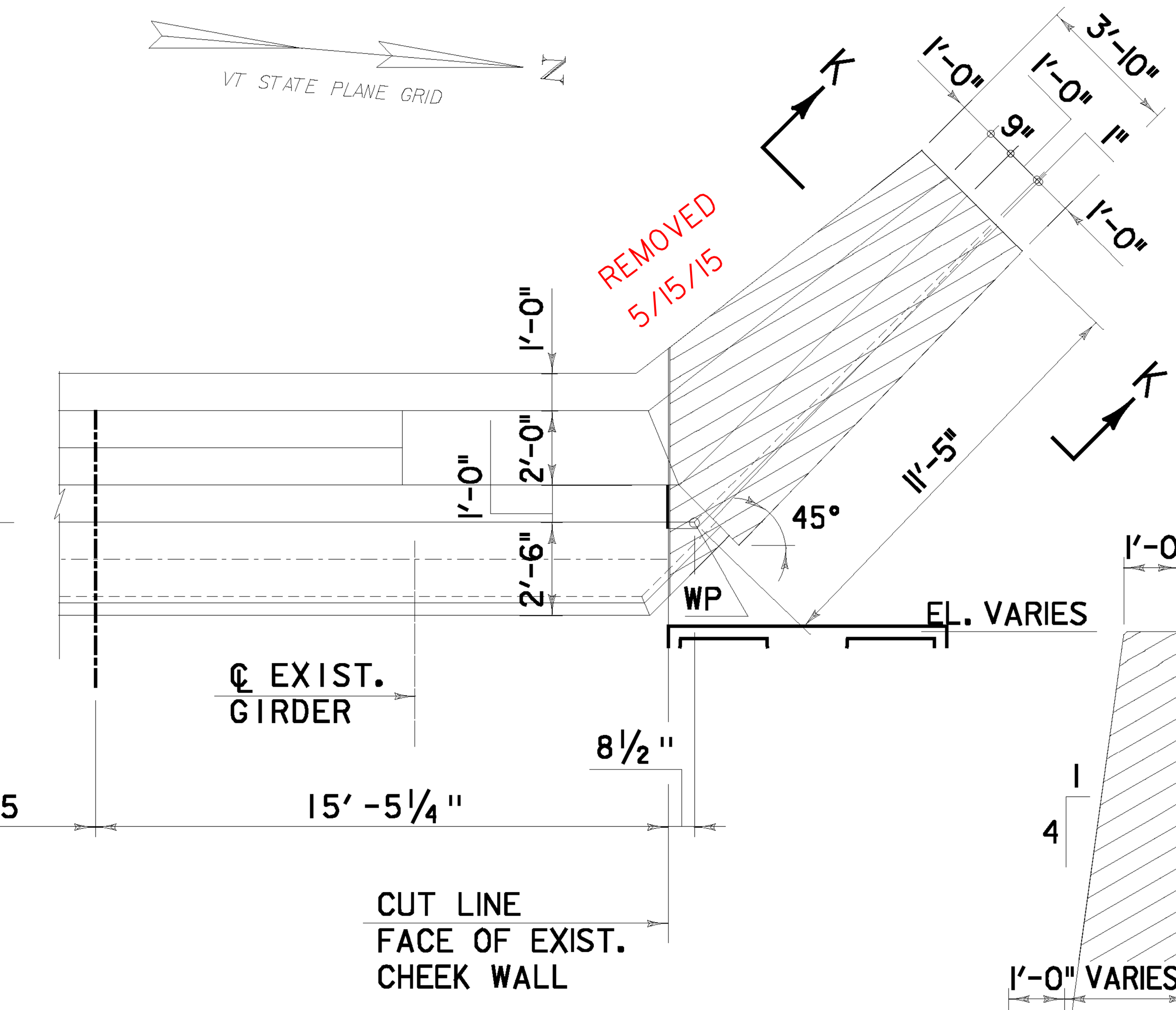
SCALE: $1/4$" = 1'-0"



EXISTING BRIDGE 7 (JERICHO) ABUTMENT 2 - PLAN

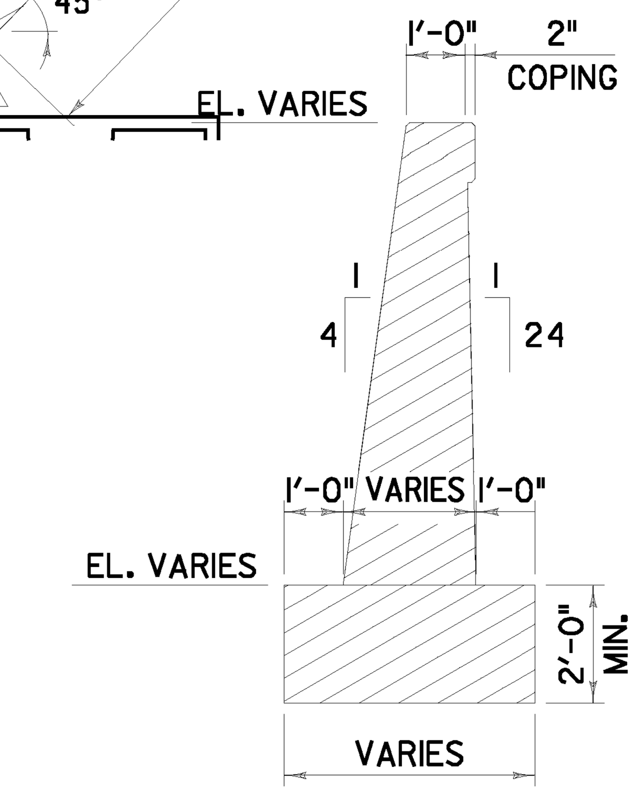
SCALE: $1/4$" = 1'-0"

WORKING LINE FACE OF EXIST. BRIDGE 7 (JERICHO) BACKWALL AND WINGWALL



EXISTING BRIDGE 7 (JERICHO) ABUTMENT 1 - PLAN

SCALE: $1/4$" = 1'-0"

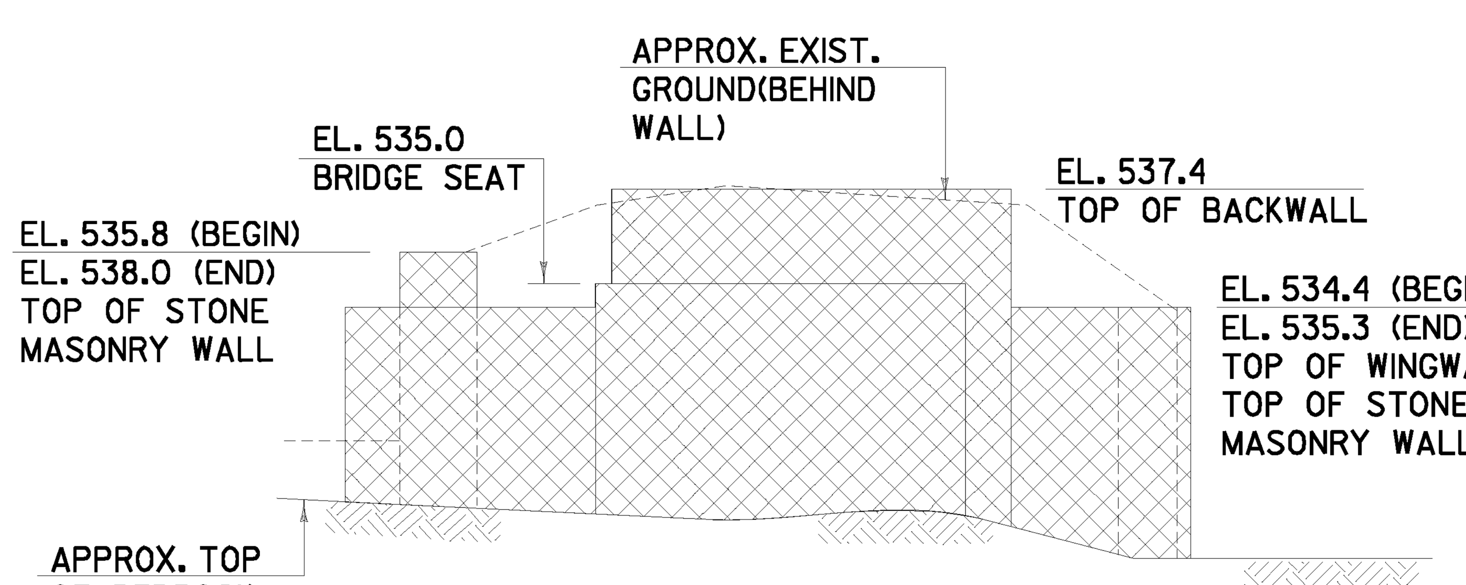


SECTION K-K

SCALE: $3/8$" = 1'-0"

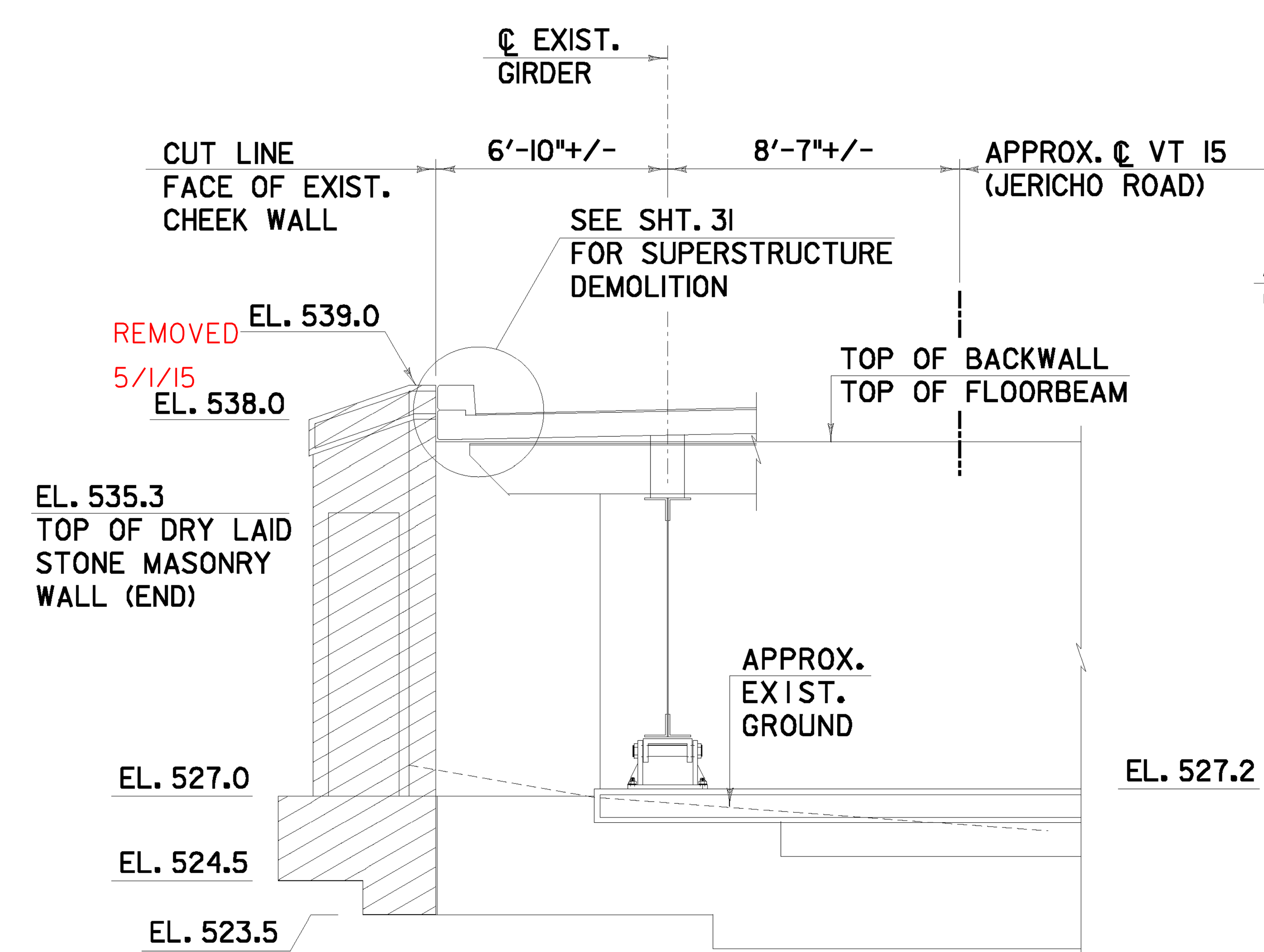
NOTES:

1. SEE REFERENCE SHTS. FOR 1929 SUBSTRUCTURE DRAWINGS. THE CONTRACTOR IS NOTIFIED THAT THE 1929 PLANS WERE PREPARED BASED ON THE VT ROUTE 15 STATIONING INCREASING FROM EAST TO WEST. AS A RESULT, EXISTING 'ABUTMENT 1' IS THE EAST ABUTMENT AND EXISTING 'ABUTMENT 2' IS THE WEST ABUTMENT.
2. ALL DIMENSIONS SHOWN WERE BASED ON THE ATTACHED REFERENCE SHTS., SUPPLEMENTED BY FIELD SURVEY DATA AND SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR IS NOTIFIED THAT THE REFERENCE SHTS. AND FIELD SURVEY DATA CONFLICT SIGNIFICANTLY AT BOTH WINGWALLS IDENTIFIED FOR REMOVAL. WHERE SIGNIFICANT CONFLICTS WERE NOTED, DIMENSIONS AND/OR ELEVATIONS WERE BASED ON FIELD SURVEY DATA. THE CONTRACTOR IS ENCOURAGED TO CONDUCT A SITE VISIT DURING BID PREPARATION TO VERIFY EXISTING CONDITIONS. NO ADDITIONAL COMPENSATION UNDER SUBSECTION 104.08 WILL BE ALLOWED FOR THE WORK TO BE PERFORMED UNDER SECTION 529 CONTRACT ITEMS.
3. SAW CUT EXISTING SUBSTRUCTURES 3" DEEP ALONG CUT LINES PRIOR TO BEGINNING CONCRETE REMOVAL OPERATIONS.



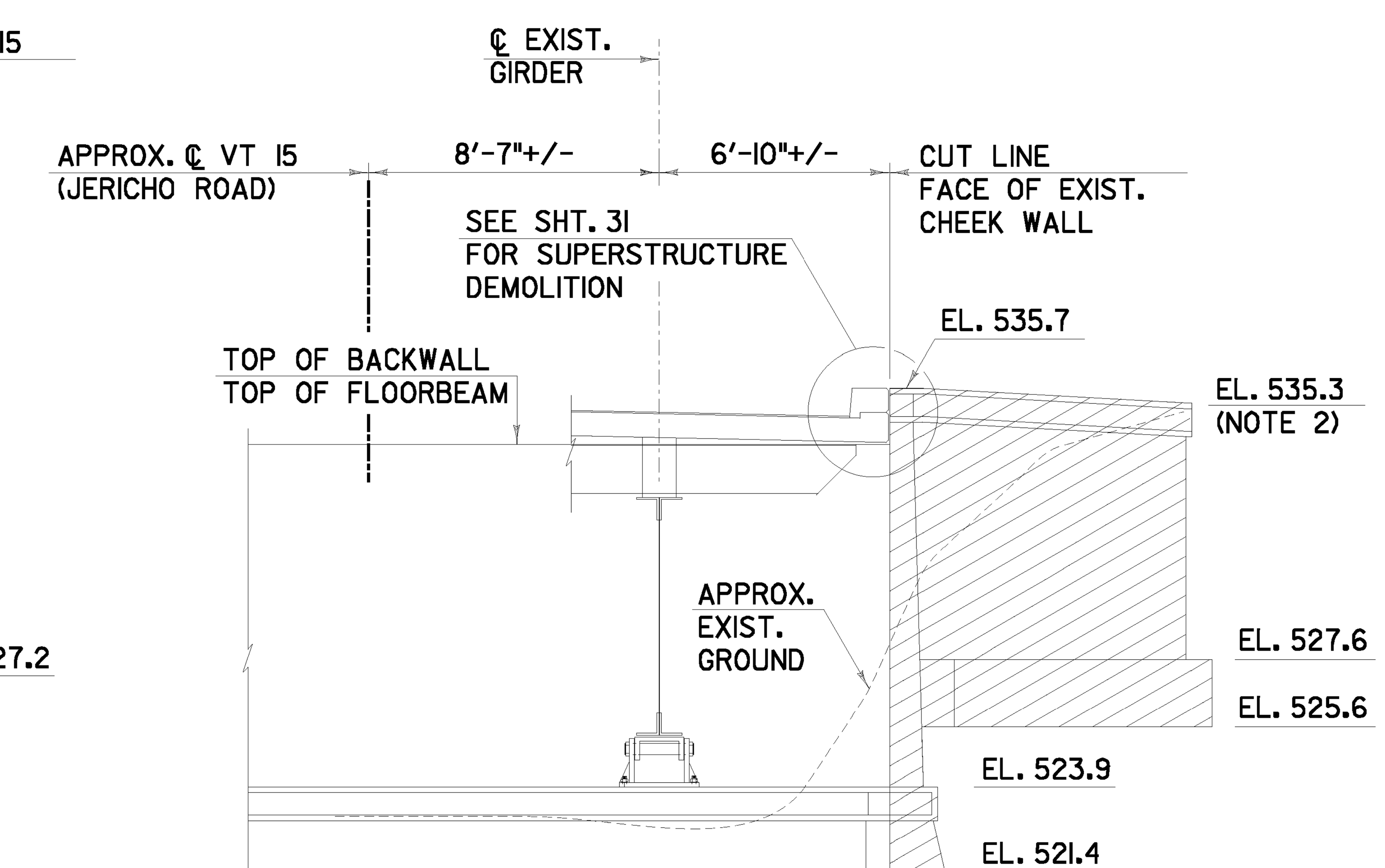
EXISTING PEDESTRIAN BRIDGE ABUTMENT 2 - ELEVATION

SCALE: $1/4$" = 1'-0"



EXISTING BRIDGE 7 (JERICHO) ABUTMENT 2 ELEVATION (SECTION J-J)

SCALE: $1/4$" = 1'-0"



EXISTING BRIDGE 7 (JERICHO) ABUTMENT 1 - ELEVATION

SCALE: $1/4$" = 1'-0"

LEGEND

EXISTING STRUCTURE TO BE COMPLETELY REMOVED UNDER ITEM 529.15 REMOVAL OF STRUCTURE AS SHOWN ON THE PLANS

EXISTING CONCRETE TO BE COMPLETELY REMOVED UNDER ITEM 529.25 REMOVAL OF CONCRETE OR MASONRY AS SHOWN ON THE PLANS.

SCALE $1/4$" = 1'-0" 0 2 4 6

SCALE $3/8$" = 1'-0" 0 1 2 3 4

CHA

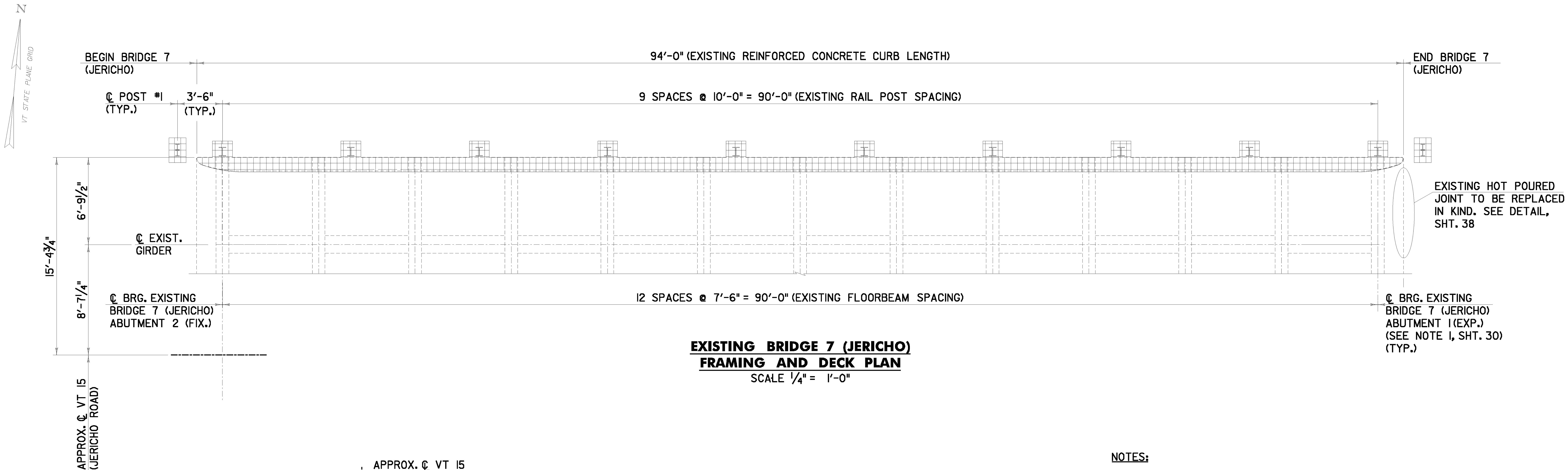
SUBSTRUCTURE REMOVAL DETAILS

PROJECT NAME: JERICHO

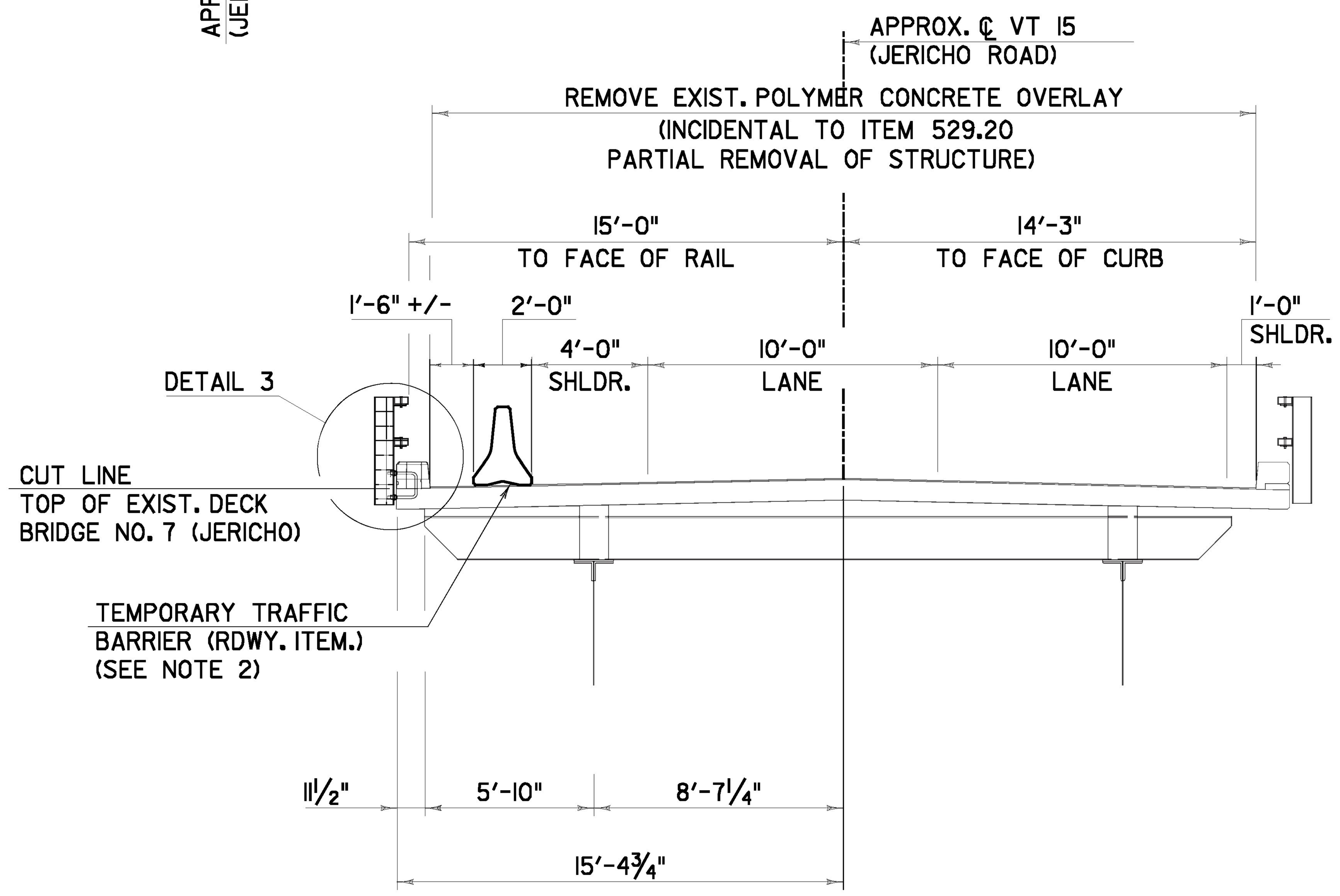
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.

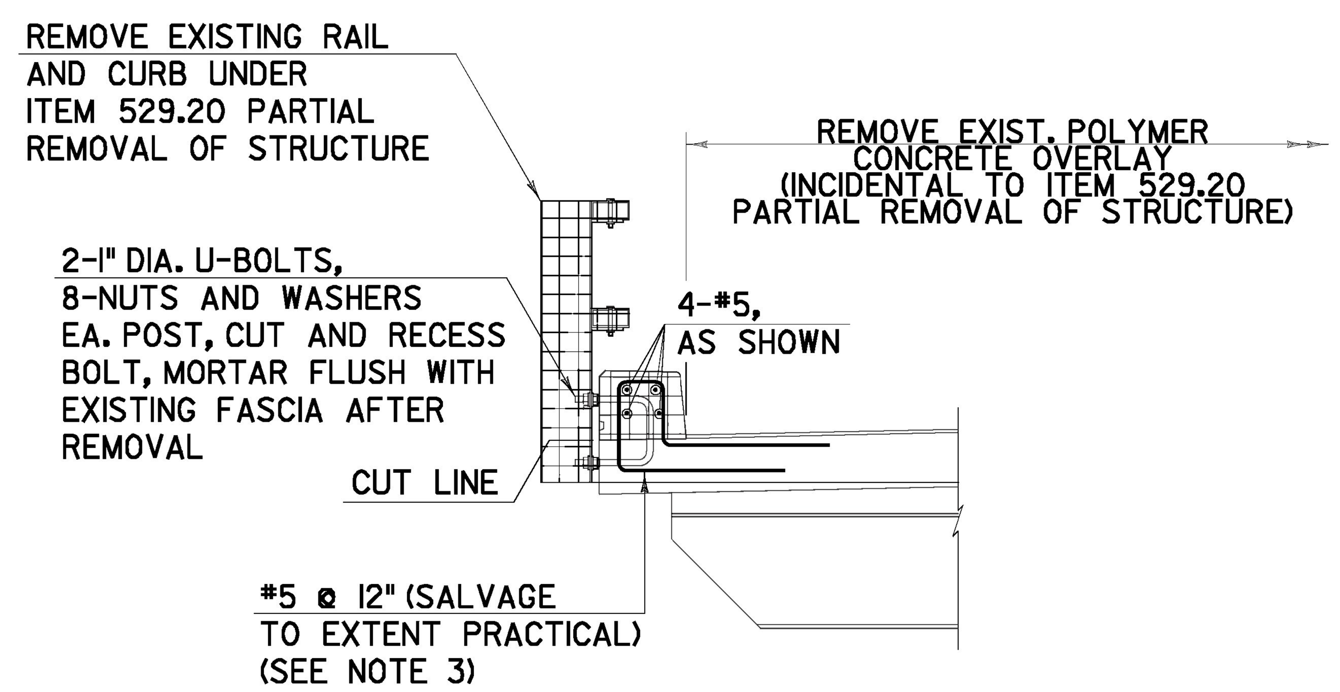
PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.



EXISTING BRIDGE 7 (JERICHO)
FRAMING AND DECK PLAN
SCALE ¼" = 1'-0"



EXISTING BRIDGE 7 (JERICHO)
TYPICAL SECTION
SCALE ¼" = 1'-0"



DETAIL 3
SCALE ½" = 1'-0"

NOTES:

1. SEE REFERENCE SHTS. FOR RELEVANT 1995 DECK REPLACEMENT DRAWINGS.
2. MINIMUM LANE AND SHOULDER WIDTHS SHOWN ARE TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. SEE SHT. 18 FOR TRAFFIC CONTROL DETAILS.
3. THE EXISTING CURB CONTAINS BOTH HORIZONTAL AND VERTICAL REINFORCEMENT AS SHOWN ON THE REFERENCE SHTS. MARK ES513, AS DETAILED ON SHT. 26, HAS BEEN INCLUDED UNDER ITEM 507.16 DRILLING AND GROUTING OF DOWELS TO PROVIDE REPLACEMENT OF EXISTING VERTICAL REINFORCEMENT DAMAGED BEYOND SALVAGE DURING CURB RECONSTRUCTION.

SCALE ¼" = 1'-0" 0 2 4 6

SCALE ½" = 1'-0" 1 0 1 2

LEGEND

EXISTING STRUCTURE TO BE PARTIALLY REMOVED UNDER ITEM 529.20 PARTIAL REMOVAL OF STRUCTURE AS SHOWN ON THE PLANS.

CHA

DEMOLITION PLAN AND DETAILS	PROJECT NAME: JERICHO PROJECT NUMBER: STP FTBR (3)	
	PROJECT LEADER: M.D.S. DESIGNED BY: D.M.D.	PLOT DATE: 4/7/2014 DRAWN BY: D.M.D. CHECKED BY: P.M.P. SHEET 31 OF 62

Civil & Structural Engineers
DeWolfe Engineering Associates Incorporated
317 RIVER STREET
P.O. BOX 1576
MONTPELIER, VT 05601-1576
802.223.4727 Fax 802.223.4740

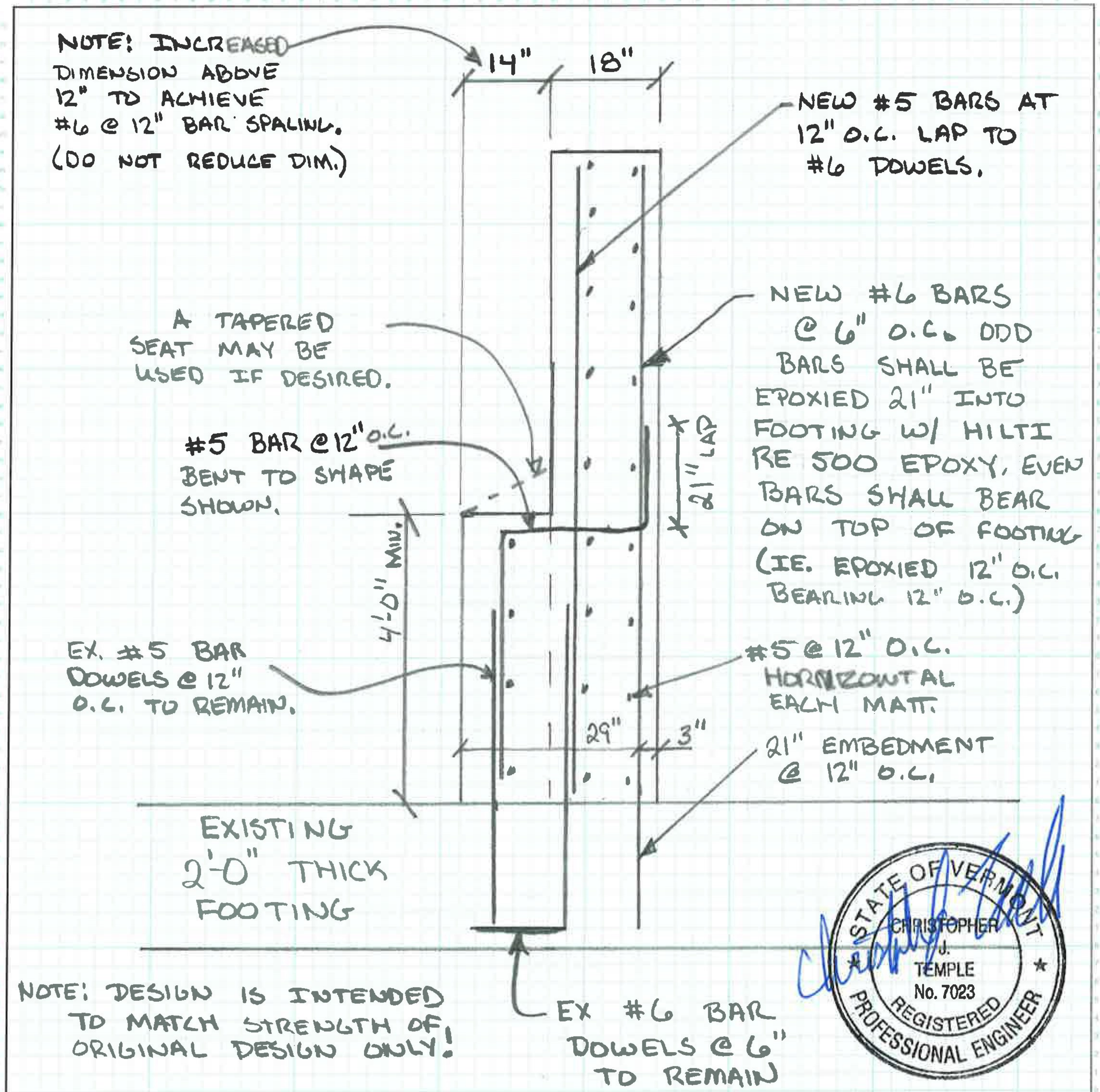
JOB Jericho STP ATBR (3)

SHEET NO. ______ OF ______

CALCULATED BY CJT DATE 6/3/2015

CHECKED BY ______ DATE ______

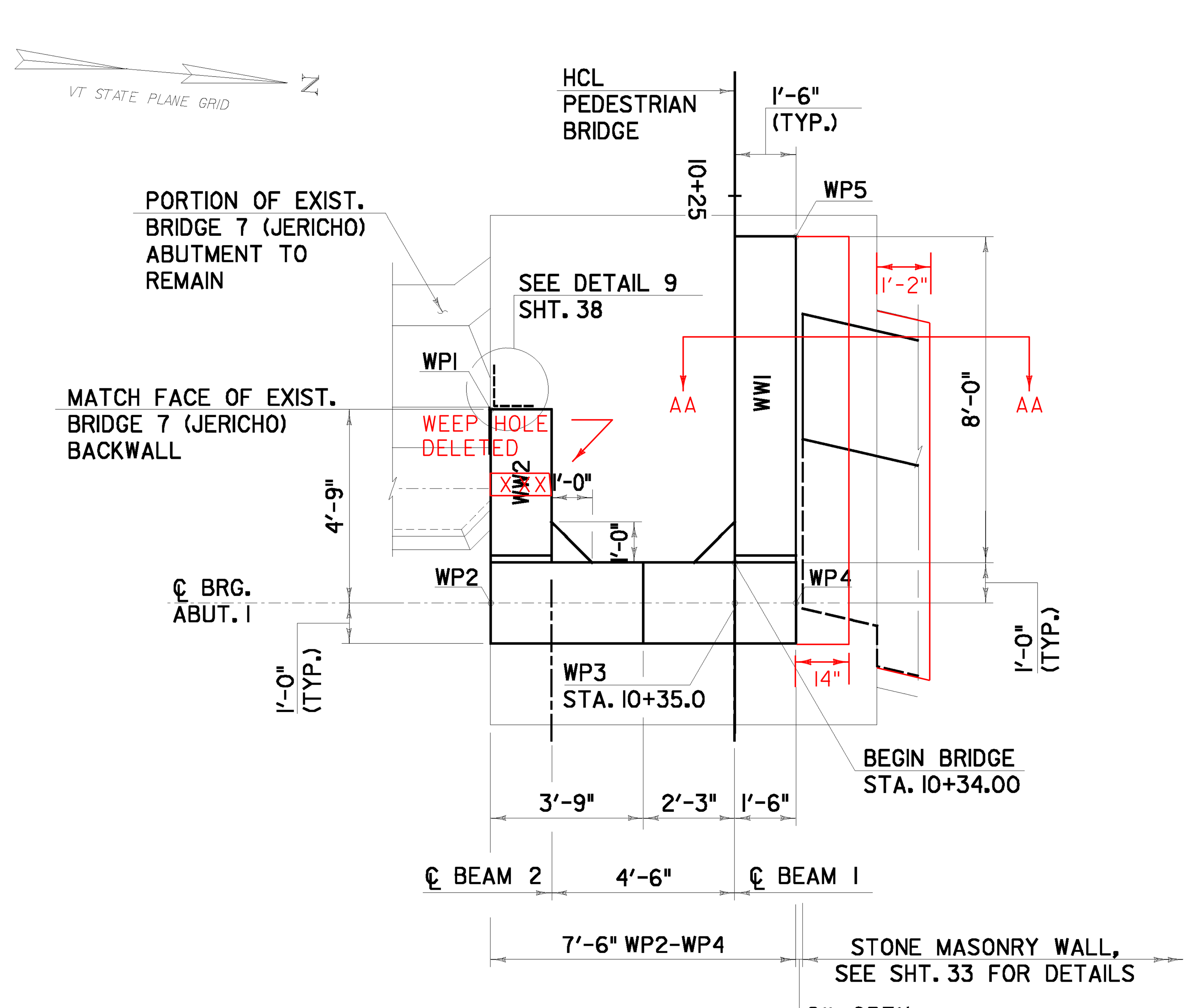
SCALE ______



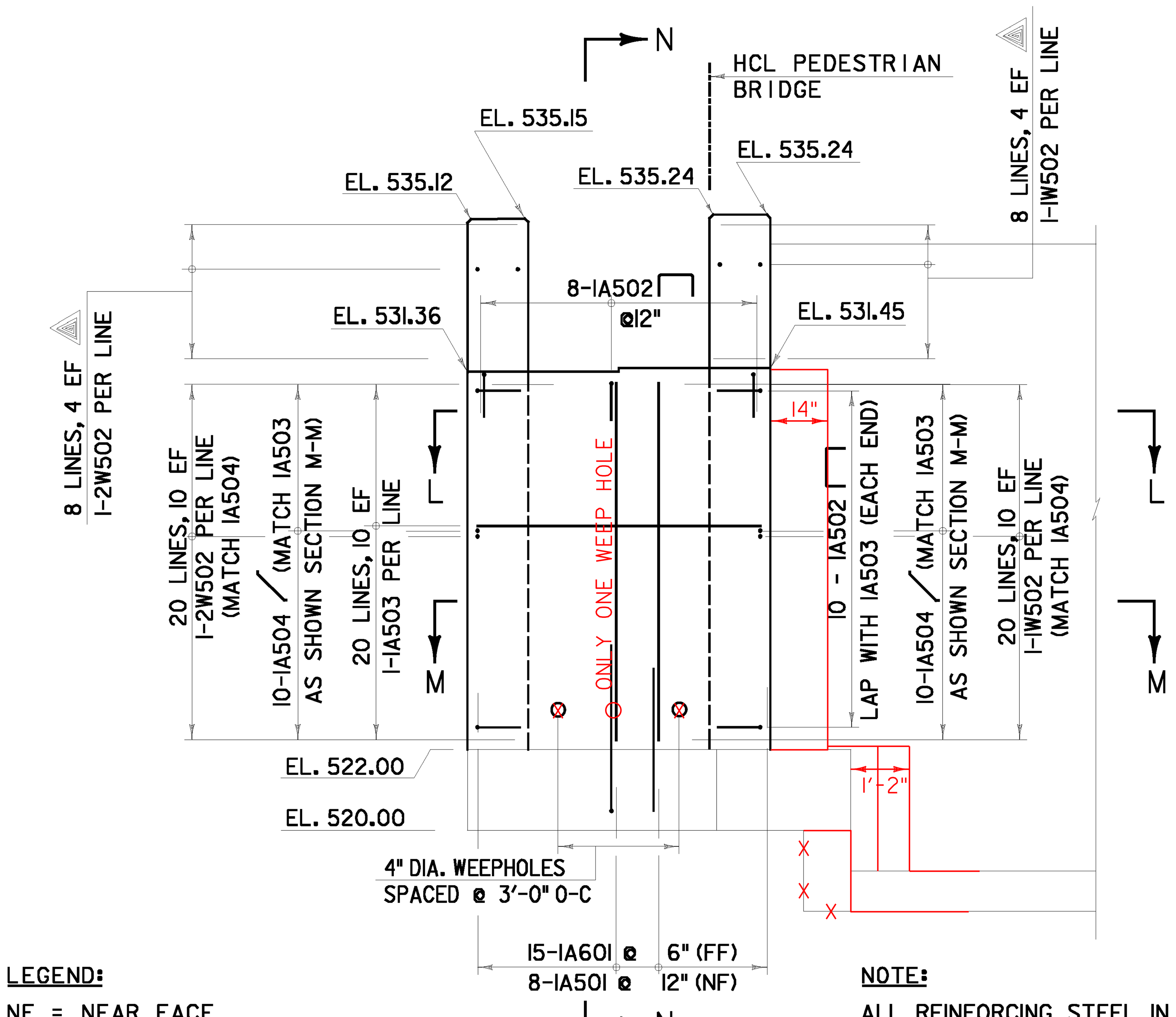
NOTE: DESIGN IS INTENDED TO MATCH STRENGTH OF ORIGINAL DESIGN ONLY!

REINFORCEMENT LOCATION REPAIR

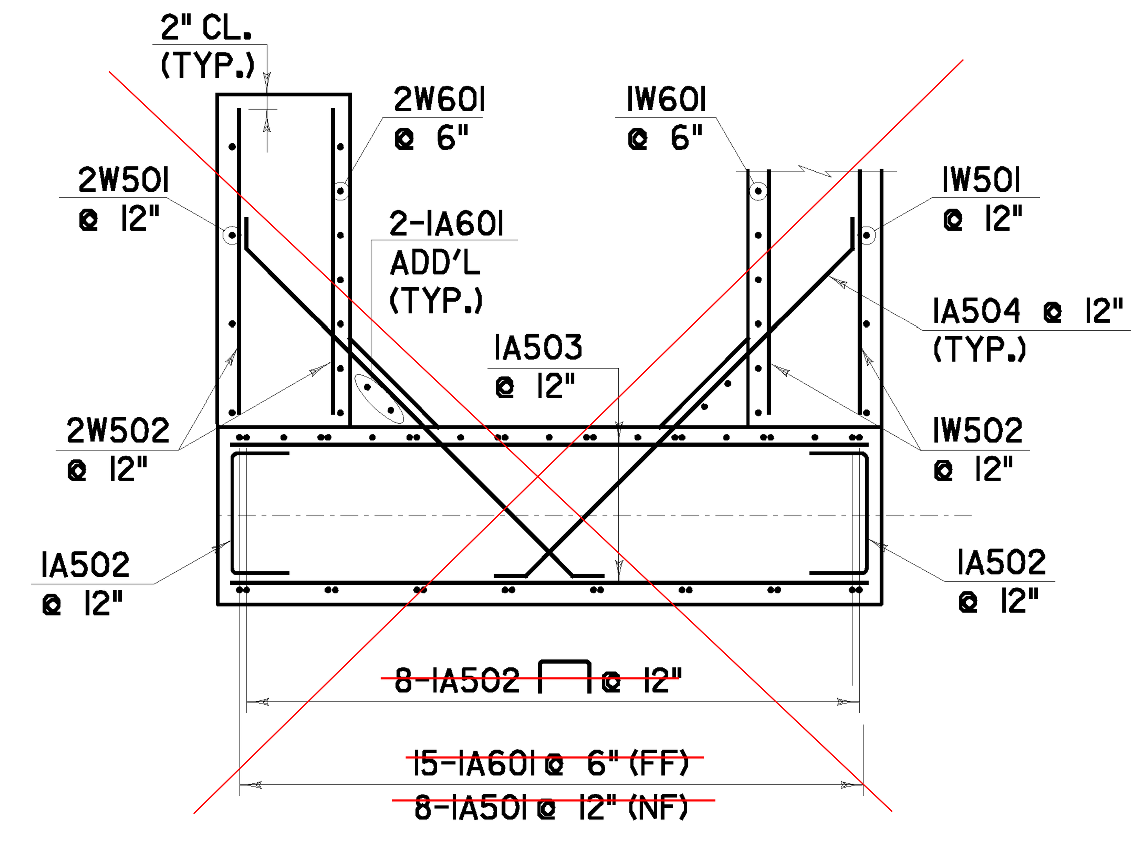
SSK-1



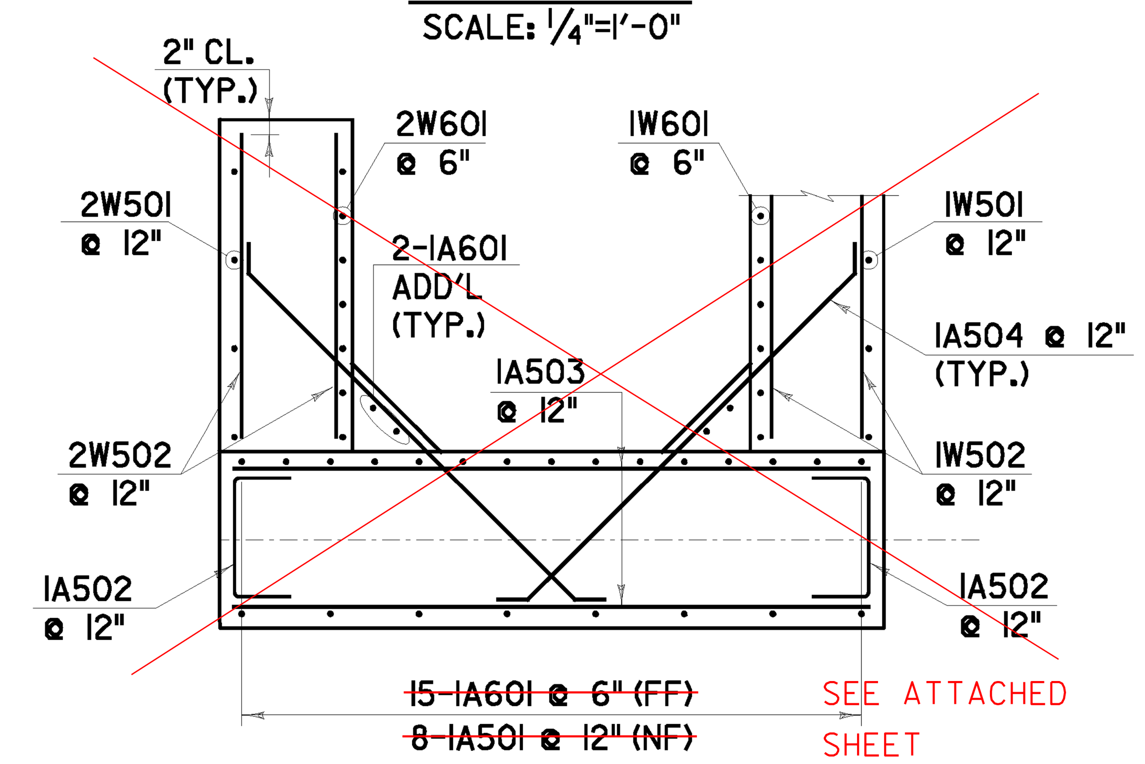
PLAN
SCALE: 3/8" = 1'-0"



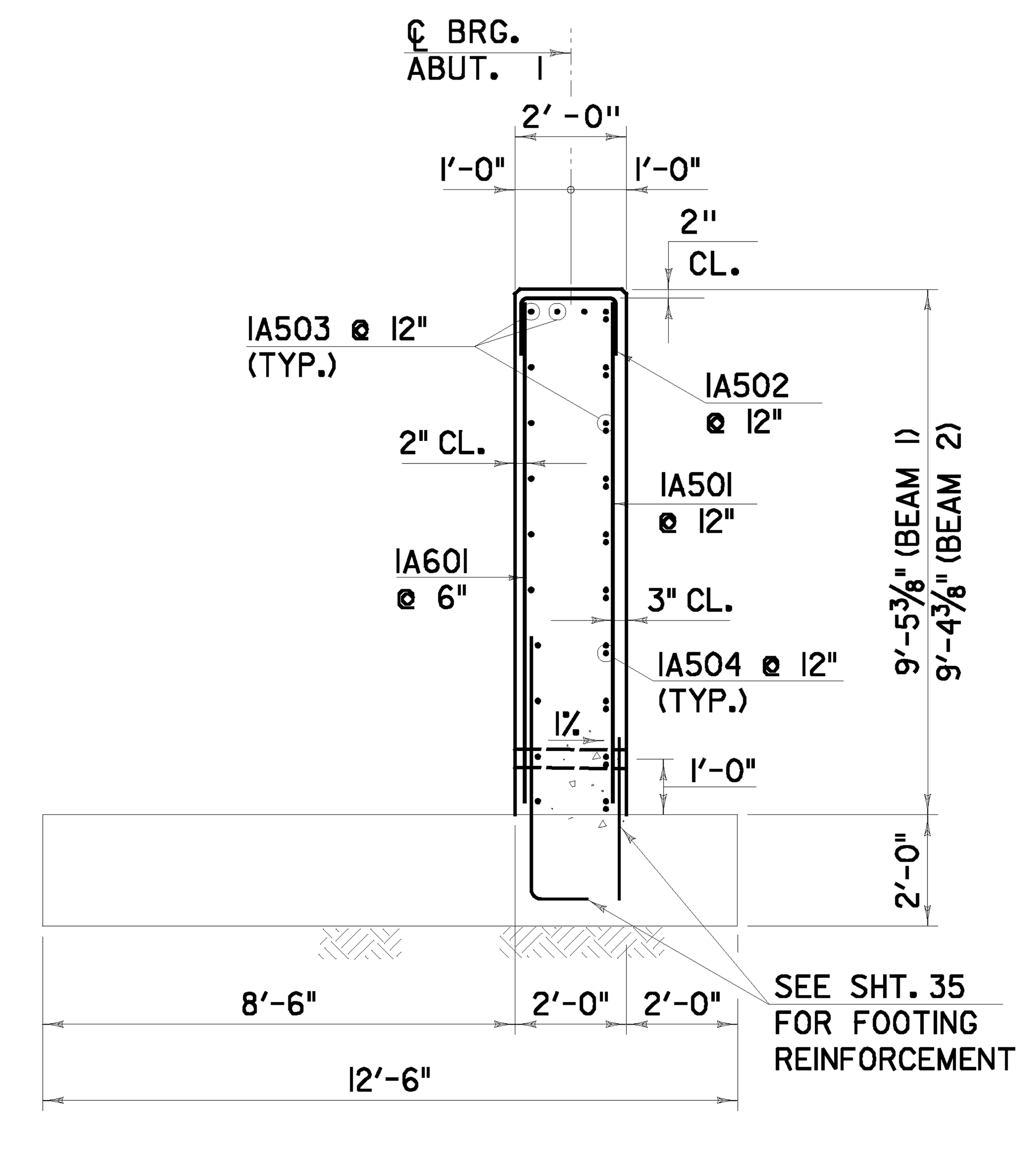
ELEVATION
SCALE: 3/8" = 1'-0"



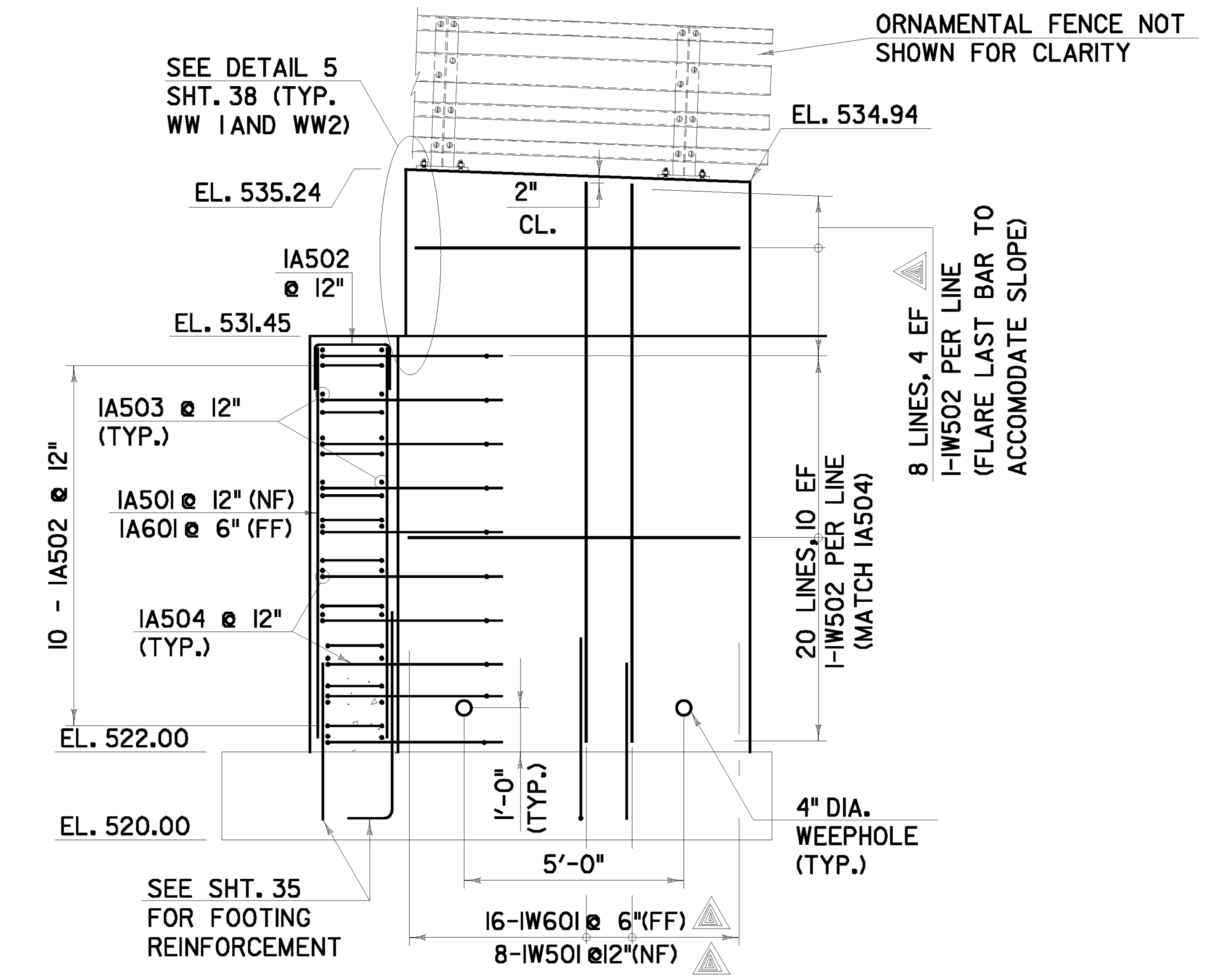
SECTION L–L
SCALE: 1/4"=1'-0"



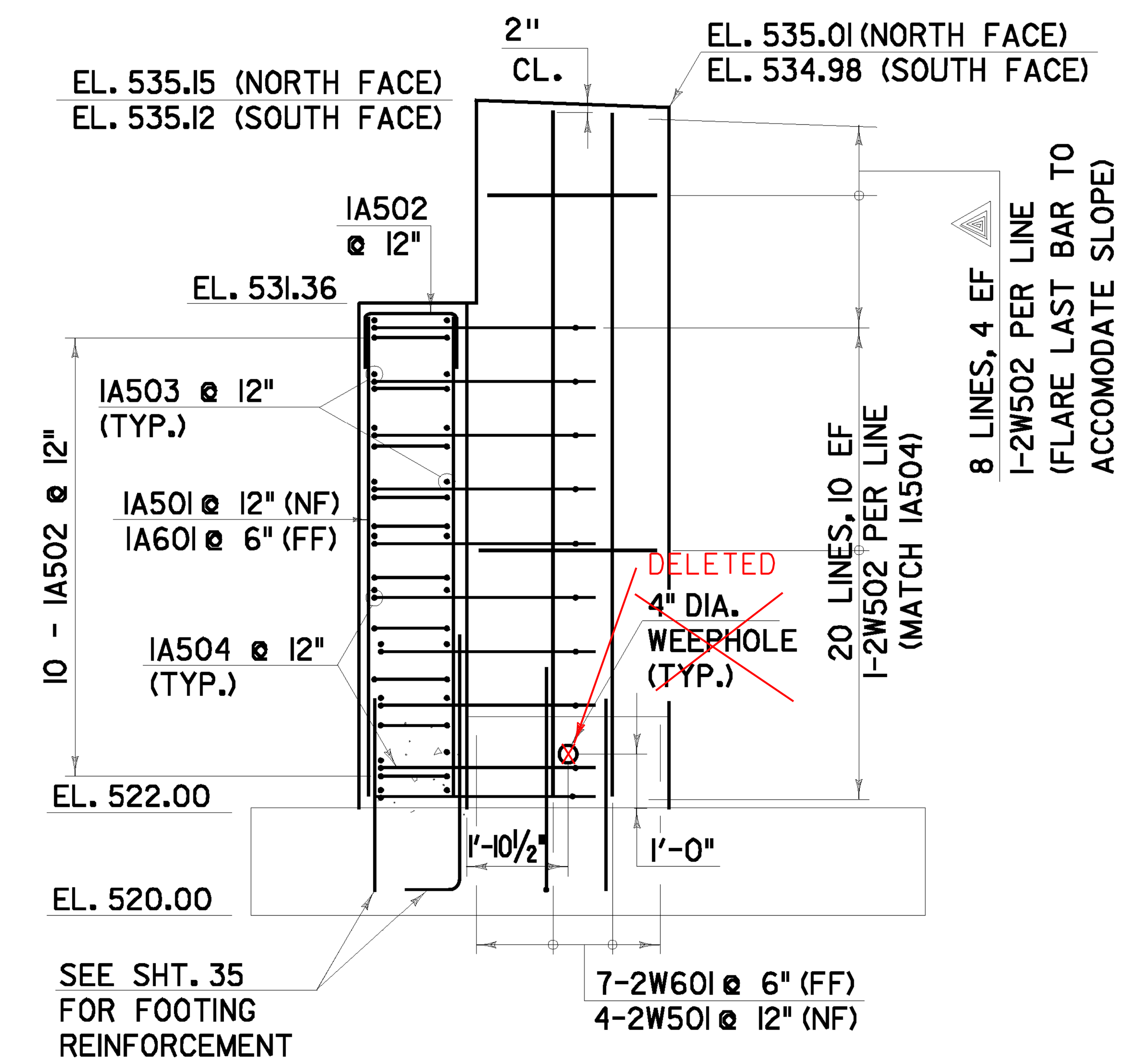
SECTION M–M
SCALE: 1/4" = 1'-0"



SECTION N–N
SCALE: 3/8" = 1'-0"



WINGWALL 1 ELEVATION
(LOOKING SOUTH)
SCALE: 3/8"=1'-0"



WINGWALL 2 ELEVATION
(LOOKING NORTH)
SCALE: 3/8" = 1'-0"

SCALE 1/4" = 1'-0"
0 2 4 6

SCALE 3/8" = 1'-0"
0 1 2 3 4

LEGEND:
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
△ = CUT IN FIELD

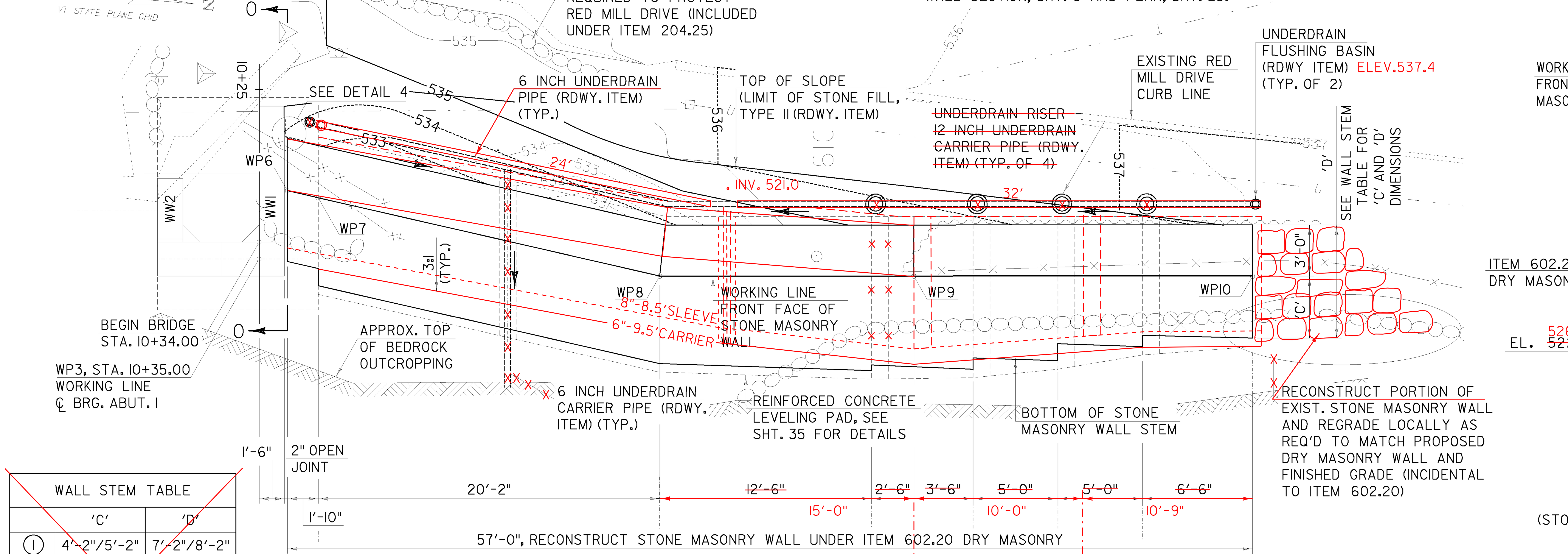
NOTE:
ALL REINFORCING STEEL IN THE ABUTMENT AND WINGWALL STEMS SHALL BE PLAIN REINFORCING STEEL AND SHALL BE PAID FOR UNDER ITEM 507.11 REINFORCING STEEL, LEVEL I

CHA

ABUTMENT 1 PLAN AND DETAILS

PROJECT NAME:	JERICHO
PROJECT NUMBER:	STP FTBR (3)
PROJECT LEADER: M.D.S.	PLOT DATE: 4/7/2014
DESIGNED BY: D.M.D.	DRAWN BY: D.M.D.
	CHECKED BY: P.M.P.
	SHEET 32 OF 62

NOTE: WORK THIS SHT. WITH TYPICAL STONE MASONRY WALL SECTION, SHT. 6 AND PLAN, SHT. 25.



~~WALL STEM TABLE~~

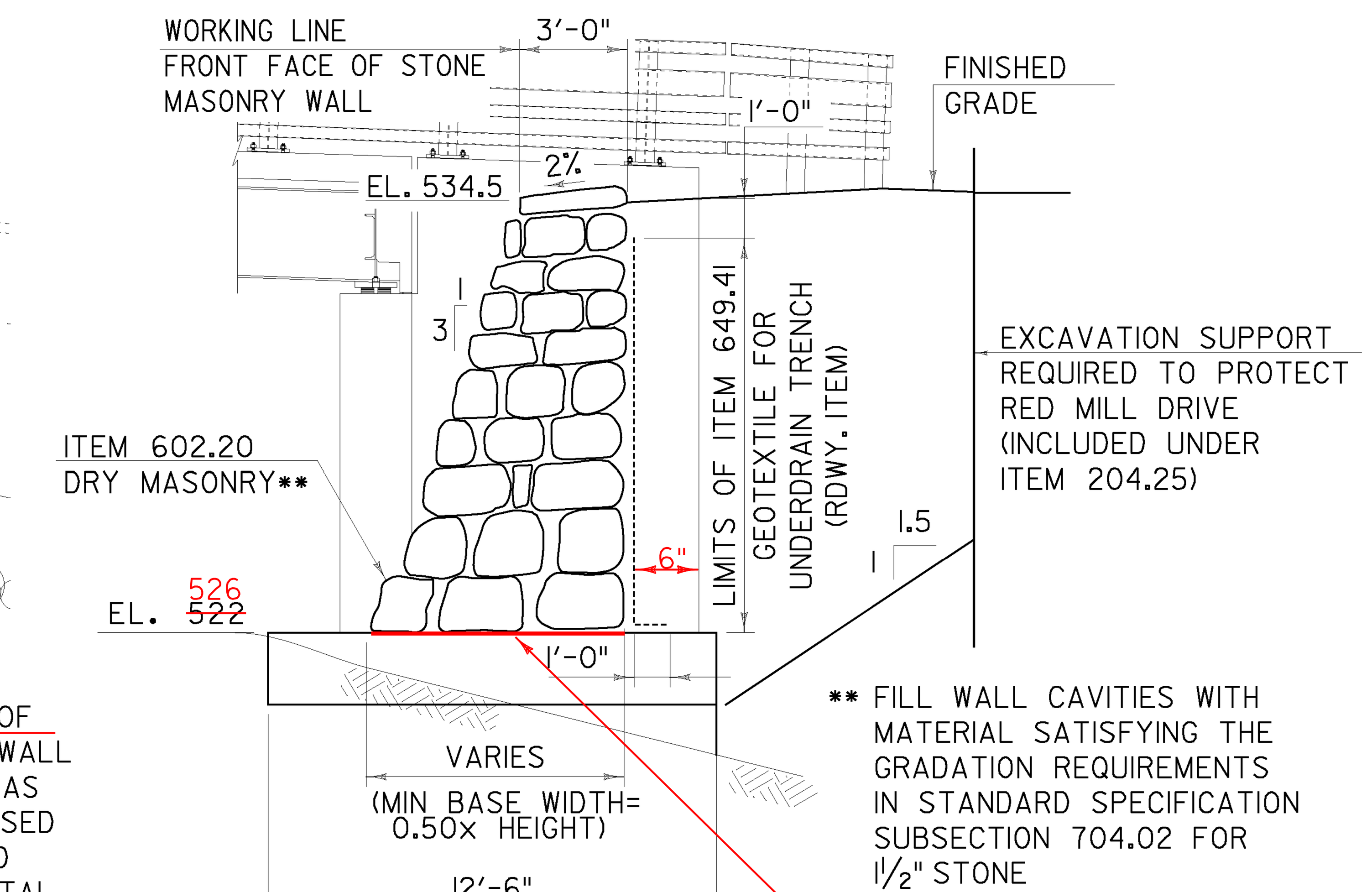
	'C'	'D'
~~1~~	~~4'-2"/5'-2"~~	~~7'-2"/8'-2"~~
~~2~~	~~5'-2"~~	~~8'-2"~~
~~3~~	~~5'-7"/5'-3"~~	~~8'-7"/8'-3"~~
~~4~~	~~5'-6"/4'-10"~~	~~8'-6"/7'-10"~~
~~5~~	~~5'-0"/4'-0"~~	~~8'-0"/7'-0"~~
~~6~~	~~4'-2"/3'-6"~~	~~7'-2"/6'-6"~~
~~7~~	~~3'-8"~~	~~6'-8"~~

SEE NEW TABLE

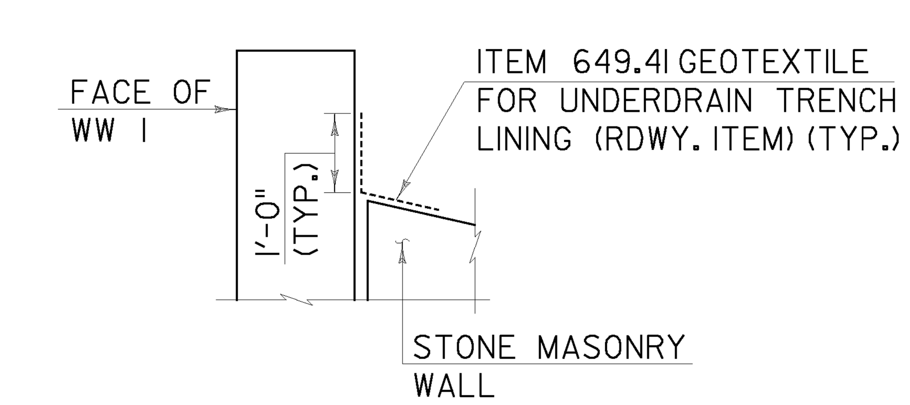
WALL STEM TABLE

	'C'	'D'
1	2.85'/3.85'	5.85'/6.85'
2	3.85'	6.85'
3	4.36'/3.35'	7.35'/6.35
4	3.65'/3.02'	6.68'/6.02'
5	3.35'	6.35'

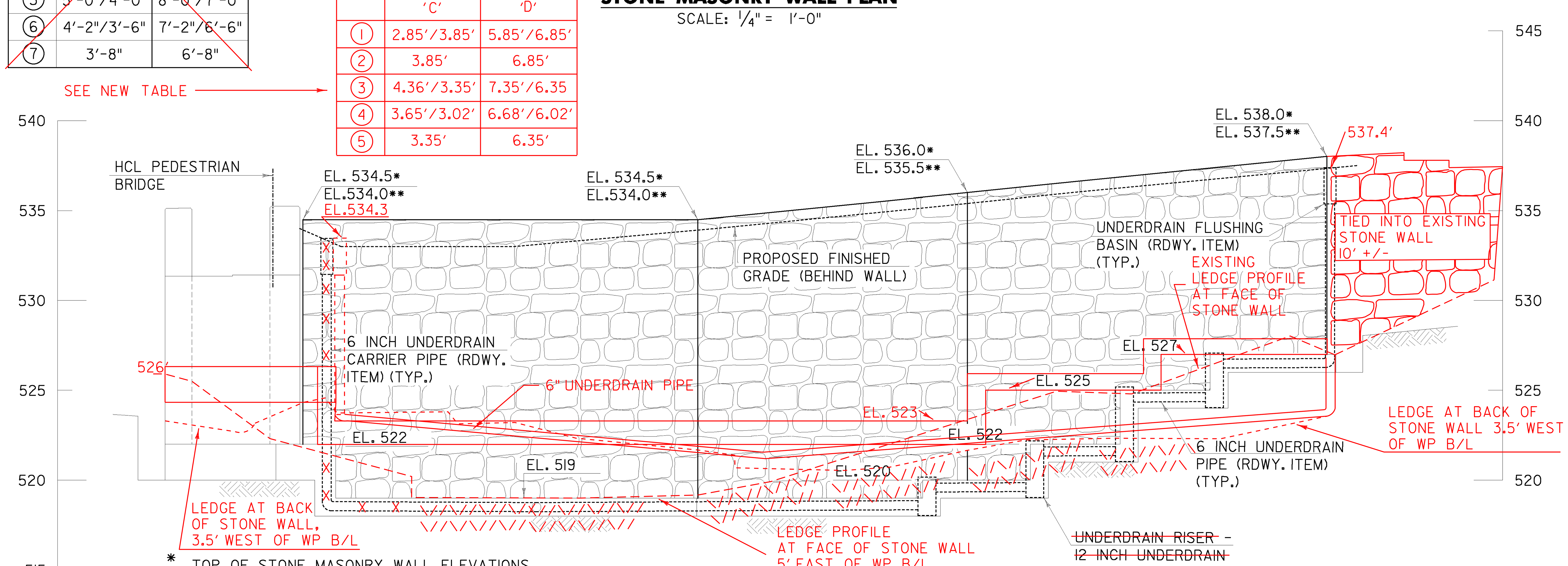
STONE MASONRY WALL PLAN
SCALE: 1/4" = 1'-0"



SECTION O-O
(STONE MASONRY WALL/ABUT. I INTERFACE)
SCALE: 1/4" = 1'-0"



DETAIL 4
SCALE: 1/4" = 1'-0"



* TOP OF STONE MASONRY WALL ELEVATIONS REPORTED ALONG WORKING LINE

** PROPOSED FINISHED GRADE ELEVATIONS REPORTED BEHIND WALL (ALONG WEST FACE)

STONE MASONRY WALL ELEVATION
SCALE: 1/4" = 1'-0"

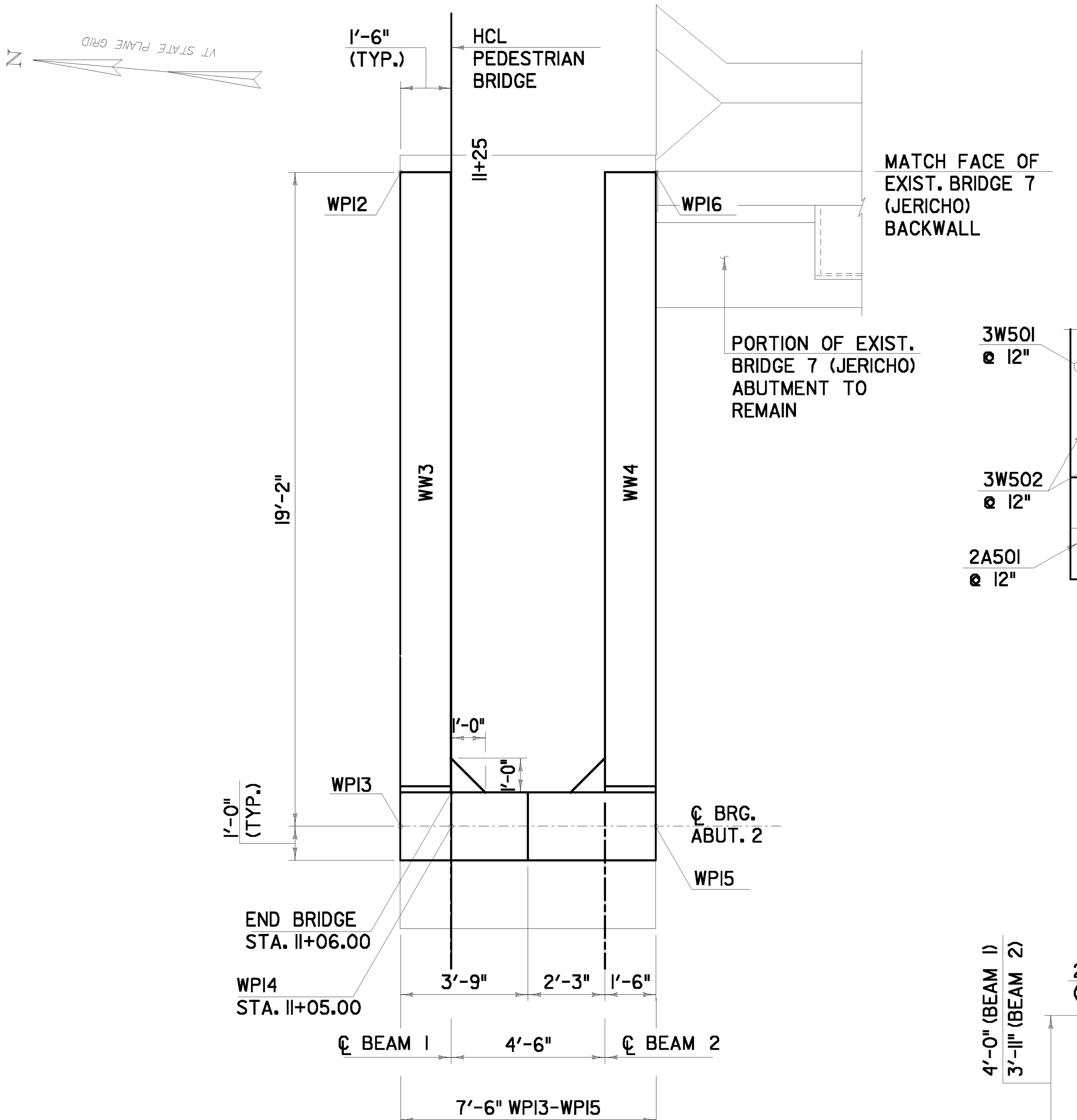
NOTES:

1. STONE MASONRY WALL LEVELING PAD ELEVATIONS ARE BASED ON AN APPROXIMATION OF THE EXISTING BEDROCK PROFILE. THE DESIGN HEIGHT OF THE STONE MASONRY WALL SEGMENTS WERE DETERMINED BASED ON THE ELEVATIONS SHOWN. THE INTENT IS FOR THE CONTRACTOR TO PROVIDE THE PROPOSED FINISHED GRADE (BEHIND WALL) AS SHOWN IN THE STONE MASONRY WALL PLAN AND ELEVATION.
2. FOR BIDDING PURPOSES, QUANTITIES OF 36 LF AND 14 LF HAVE BEEN INCLUDED UNDER ITEMS 605.20, 6 INCH UNDERDRAIN CARRIER PIPE AND ITEM 605.23, 12 INCH UNDERDRAIN CARRIER PIPE, RESPECTIVELY. IT SHOULD BE NOTED THAT TO SUIT ACTUAL FIELD CONDITIONS, THESE QUANTITIES MAY REQUIRE ADJUSTMENT.
3. FOR ADDITIONAL UNDERDRAIN DETAILS, SEE SHTS. 5 AND 16.

SCALE 1/4" = 1'-0"
0 2 4 6

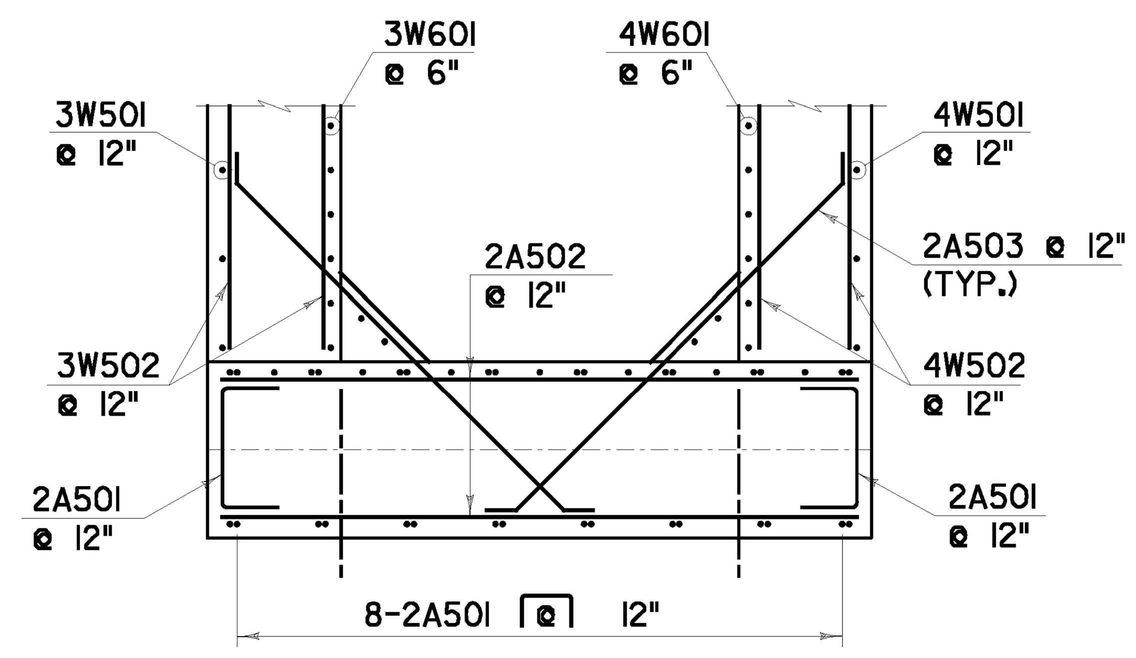
STONE MASONRY WALL PLAN AND DETAILS

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)
PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.
PLOT DATE: 4/8/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.
SHEET 33 OF 62



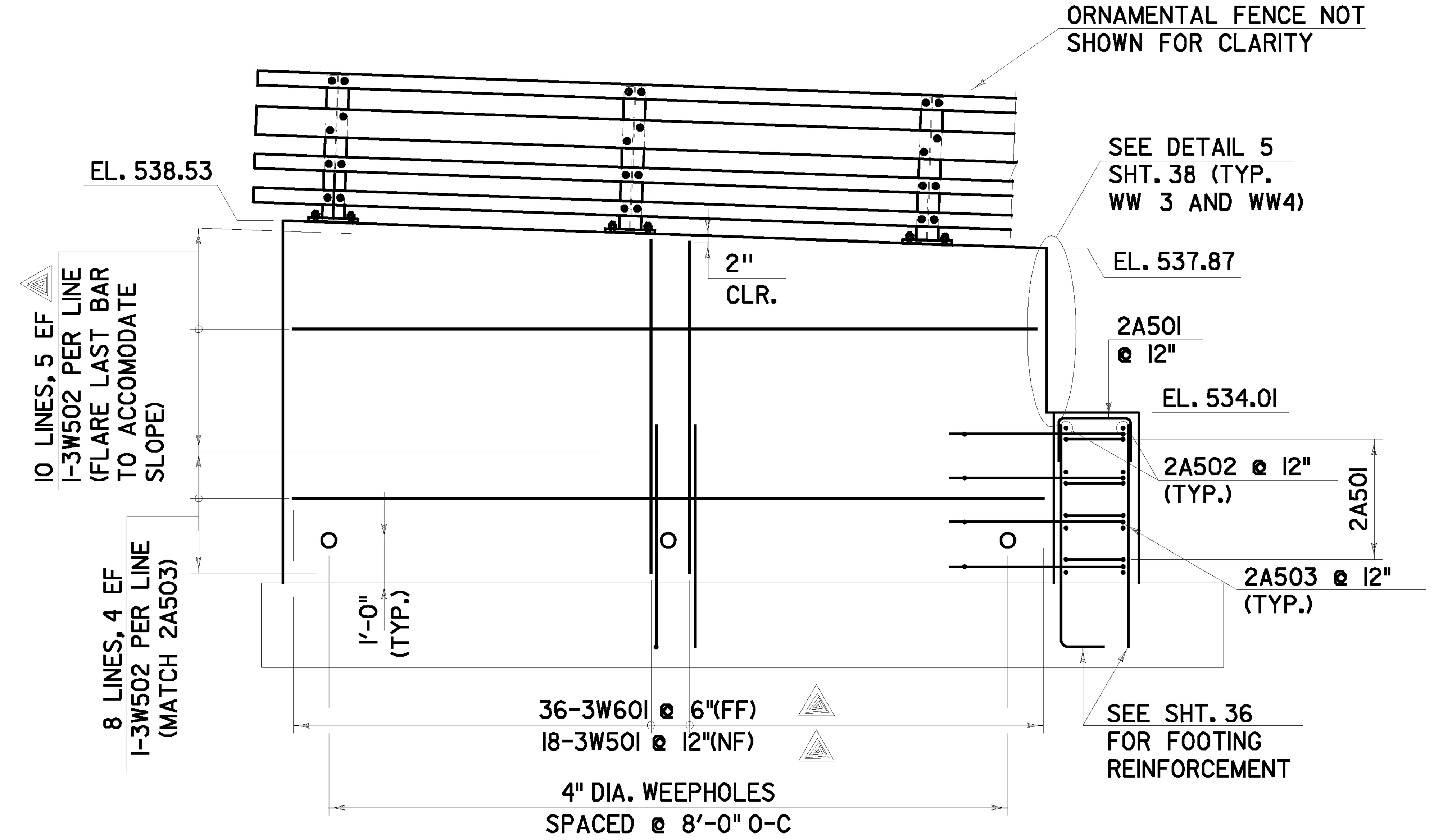
PLAN

SCALE: 3/8" = 1'-0"



SECTION P-P

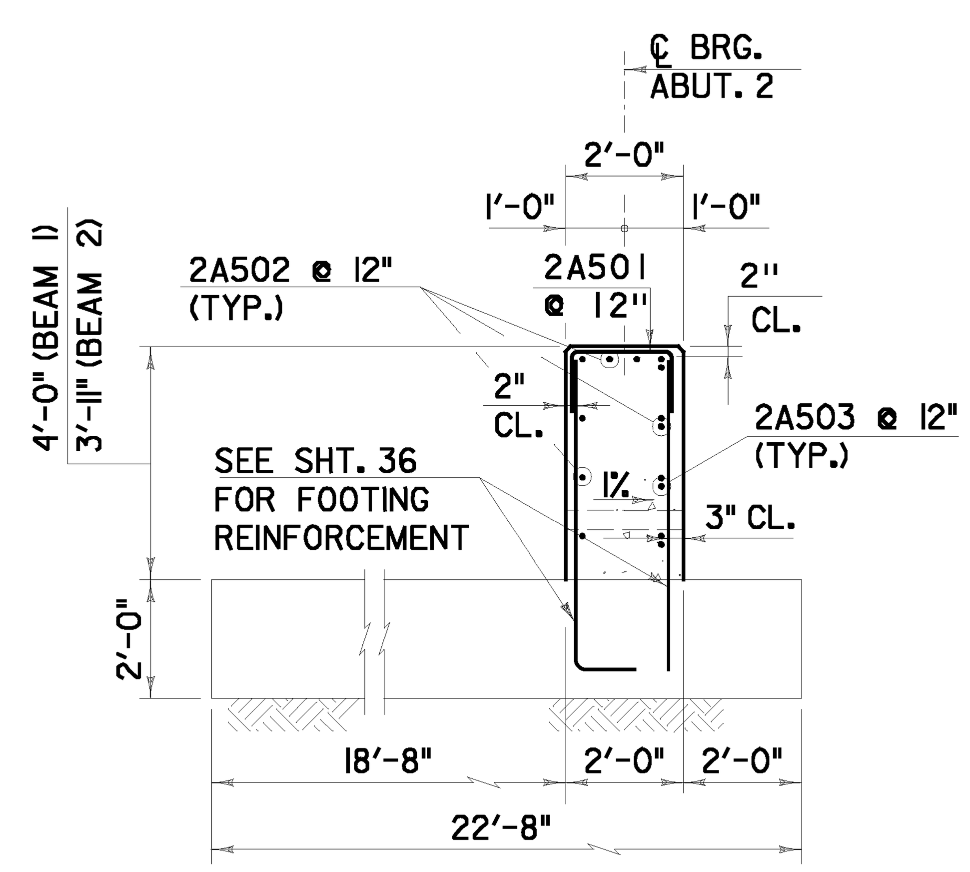
SCALE: 1/4" = 1'-0"



WINGWALL 3 ELEVATION

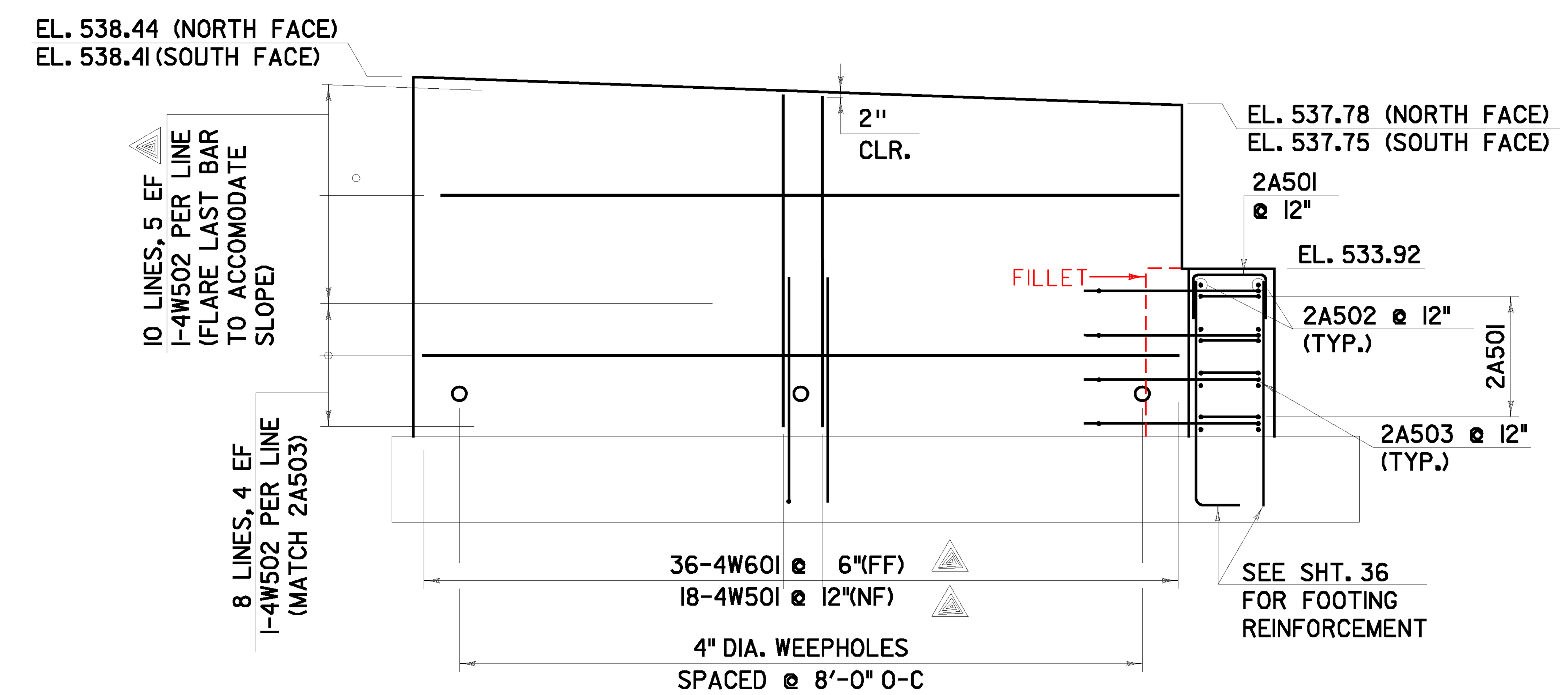
(LOOKING SOUTH)

SCALE: 3/8" = 1'-0"



SECTION Q-Q

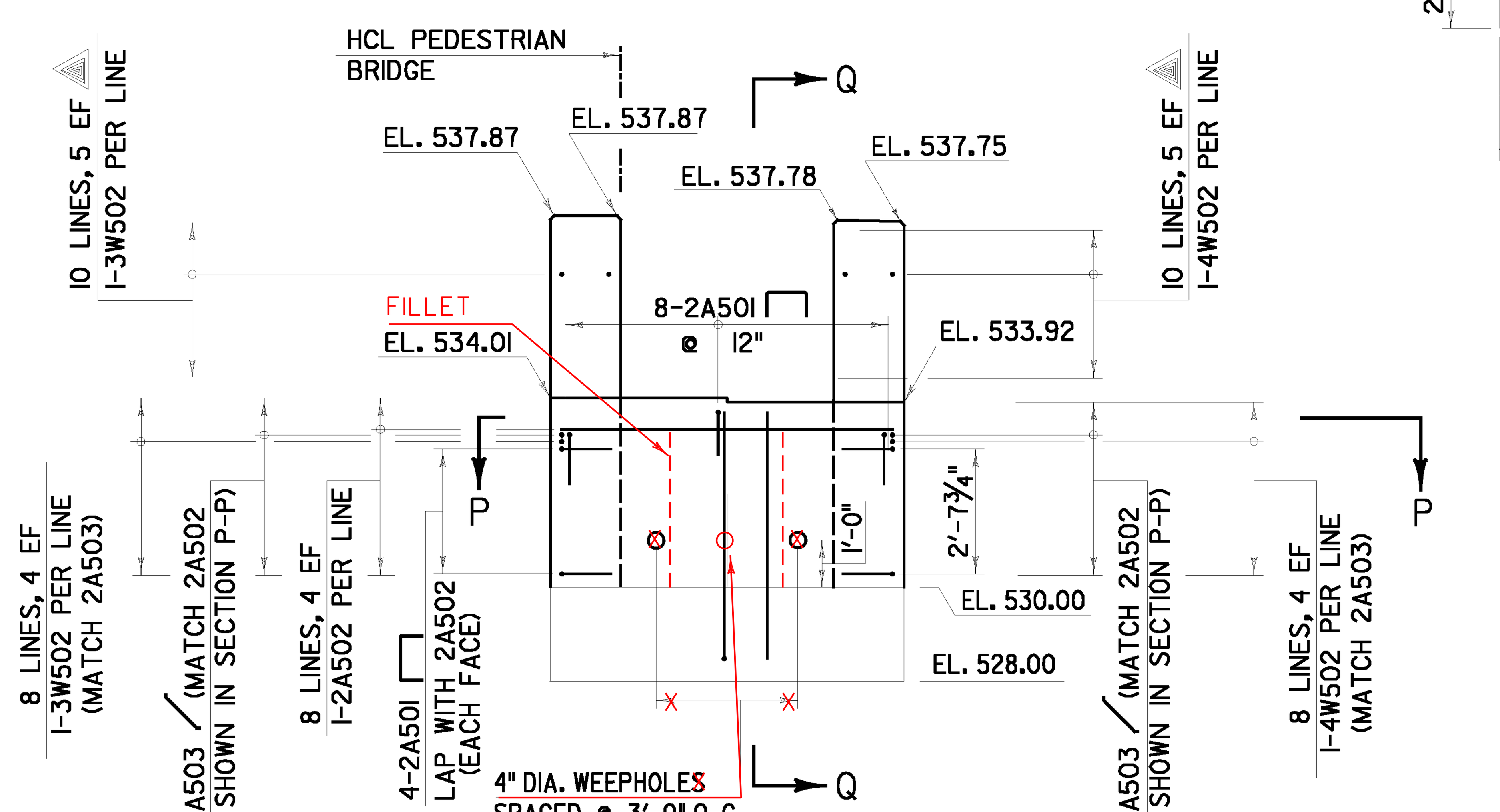
SCALE: 3/8" = 1'-0"



WINGWALL 4 ELEVATION

(LOOKING NORTH)

SCALE: 3/8" = 1'-0"



ELEVATION

SCALE: 3/8" = 1'-0"

NOTE:

ALL REINFORCING STEEL IN THE ABUTMENT AND WINGWALL STEMS SHALL BE PLAIN REINFORCING STEEL AND SHALL BE PAID FOR UNDER ITEM 507.11 REINFORCING STEEL, LEVEL I

SCALE 1/4" = 1'-0" 0 2 4 6

SCALE 3/8" = 1'-0" 1 0 1 2 3 4

LEGEND:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
△ = CUT IN FIELD

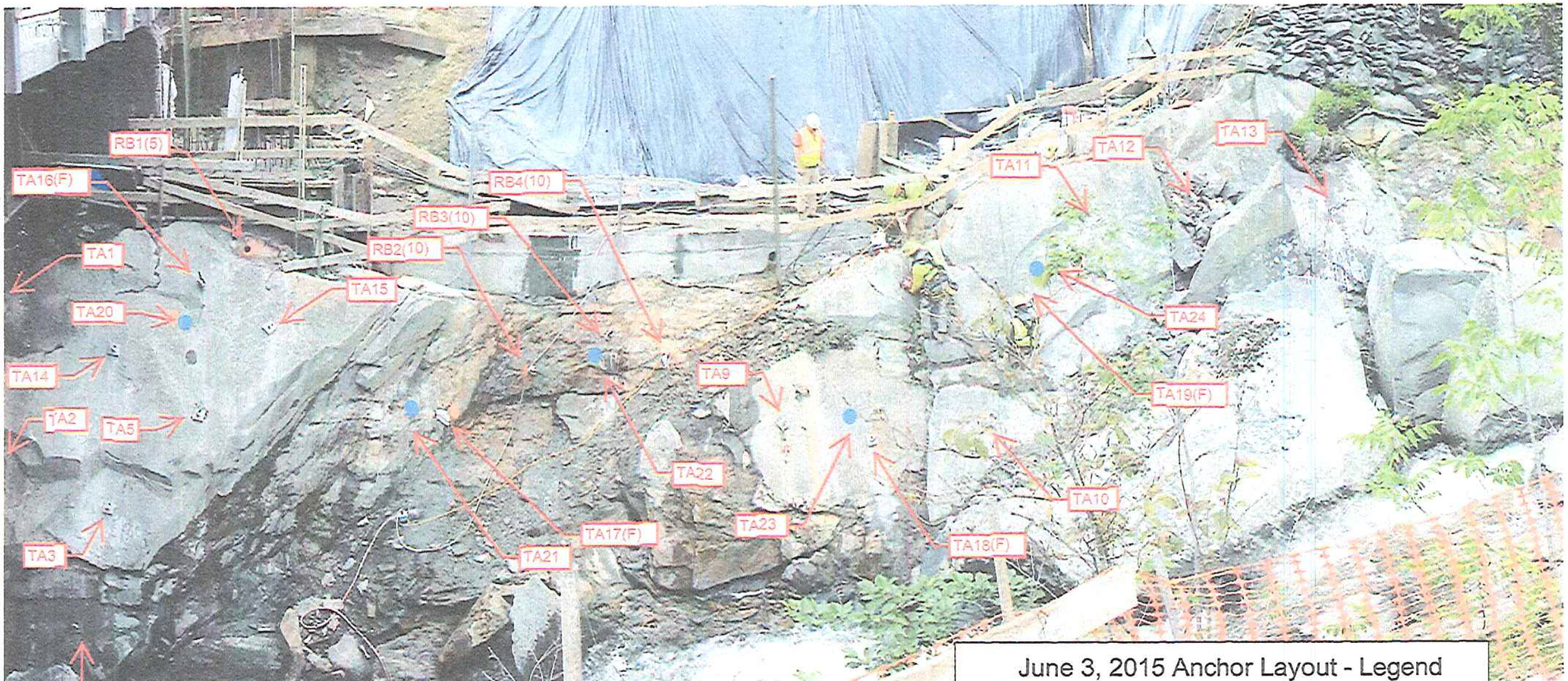
CHA

ABUTMENT 2 PLAN AND DETAILS

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.

PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.



TA4

Notes: 1) Photo Taken ~3PM Tuesday 6/2/15
2) TA 6,7,8 never installed

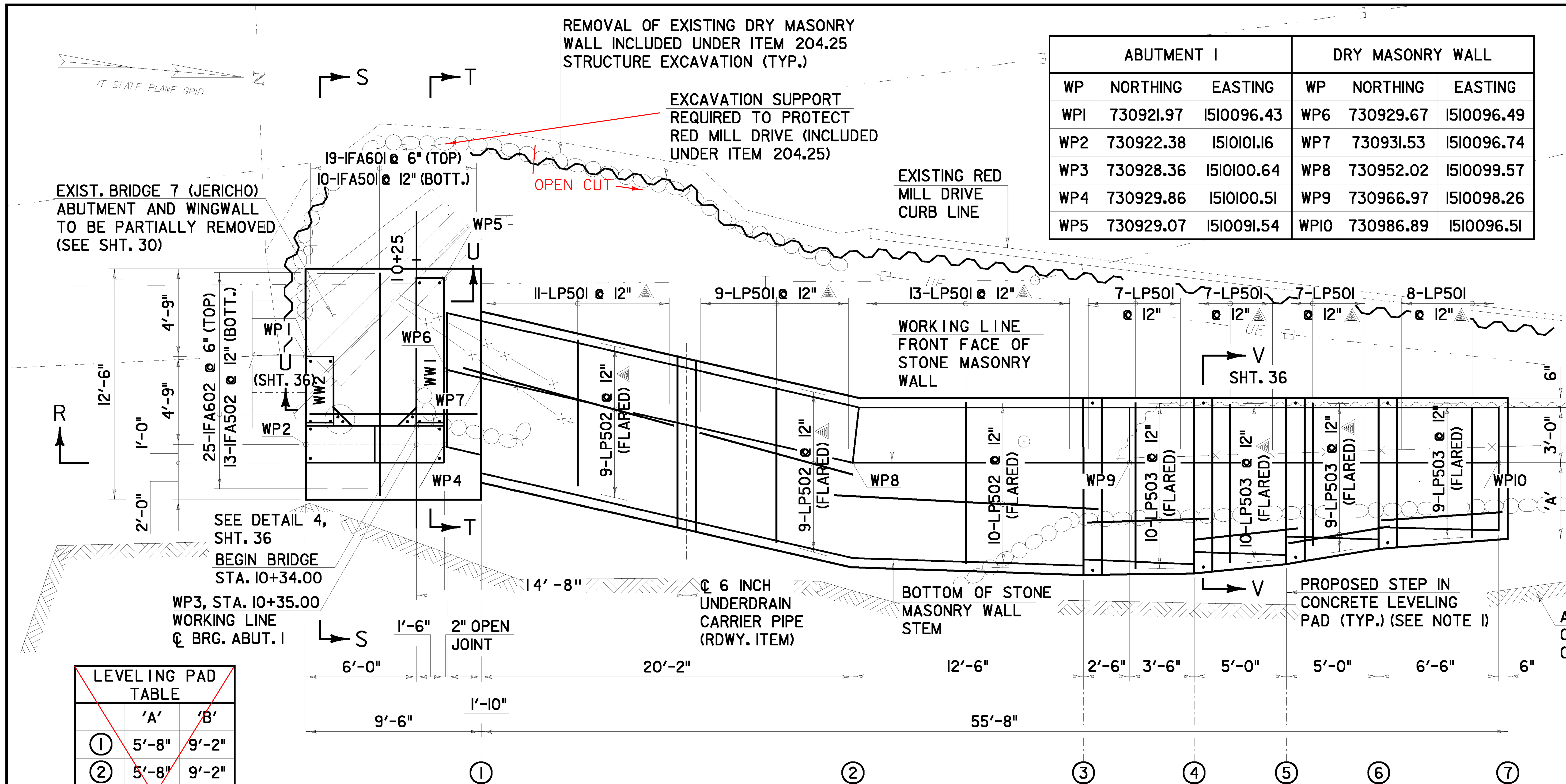
June 3, 2015 Anchor Layout - Legend

TA1	2014 Anchor (all passed)
TA16(F)	2015 Anchor - failed proof test
● TA20	2015 Anchor - proposed remedial INSTALLED
RB1(5)	2015 Rock Bolt (feet drilled)

ABUTMENT I			DRY MASONRY WALL		
WP	NORTHING	EASTING	WP	NORTHING	EASTING
WP1	730921.97	1510096.43	WP6	730929.67	1510096.49
WP2	730922.38	1510101.16	WP7	730931.53	1510096.74
WP3	730928.36	1510100.64	WP8	730952.02	1510099.57
WP4	730929.86	1510100.51	WP9	730966.97	1510098.26
WP5	730929.07	1510091.54	WP10	730986.89	1510096.51

NOTES:

1. STONE MASONRY WALL LEVELING PAD AND ABUTMENT I FOOTING ELEVATIONS ARE BASED ON APPROXIMATION OF THE EXISTING BEDROCK PROFILE. THE DESIGN HEIGHT OF THE SUBSTRUCTURE ELEMENTS WERE DETERMINED BASED ON THE ELEVATIONS SHOWN. TO SUIT ACTUAL FIELD CONDITIONS, THE CONTRACTOR MAY PROPOSE ALTERNATE LEVELING PAD, FOOTING ELEVATIONS AND STEP LOCATIONS TO THE STRUCTURES ENGINEER FOR APPROVAL.
2. FOR BIDDING PURPOSES, A QUANTITY OF 20 CY HAS BEEN INCLUDED UNDER ITEM 541.30 CONCRETE, CLASS C FOR CONSTRUCTION OF THE UNREINFORCED CONCRETE SHIM, AS REQUIRED FOR LEVELING.
3. FOR BIDDING PURPOSES, A QUANTITY OF 220 LF HAS BEEN INCLUDED UNDER ITEM 900.640 SPECIAL PROVISION (ROCK DOWELING). THE FINAL LAYOUT AND QUANTITY OF ITEM 900.640 SPECIAL PROVISION (ROCK DOWELING) SHALL BE DETERMINED IN THE FIELD BY THE GEOTECHNICAL DESIGN CONSULTANT. THE CONTRACTOR SHALL STRIP LEDGE AND NOTIFY THE ENGINEER THAT THE AREA IS READY FOR INSPECTION.
4. THE GEOTECHNICAL DESIGN CONSULTANT FOR THIS PROJECT, GEODESIGN, INCORPORATED, PERFORMED DESIGN FOR WORK SHOWN ON SHEETS 21-24, 33 & 37, WITH DRAFTING AND DETAIL ASSISTANCE FROM CHA.
5. 3" CLR. UNLESS OTHERWISE SPECIFIED ON PLANS.
6. ALL REINFORCING STEEL IN THE FOOTING AND LEVELING PAD SHALL BE PLAIN REINFORCING STEEL AND SHALL BE PAID FOR UNDER ITEM 507.11 REINFORCING STEEL, LEVEL I.

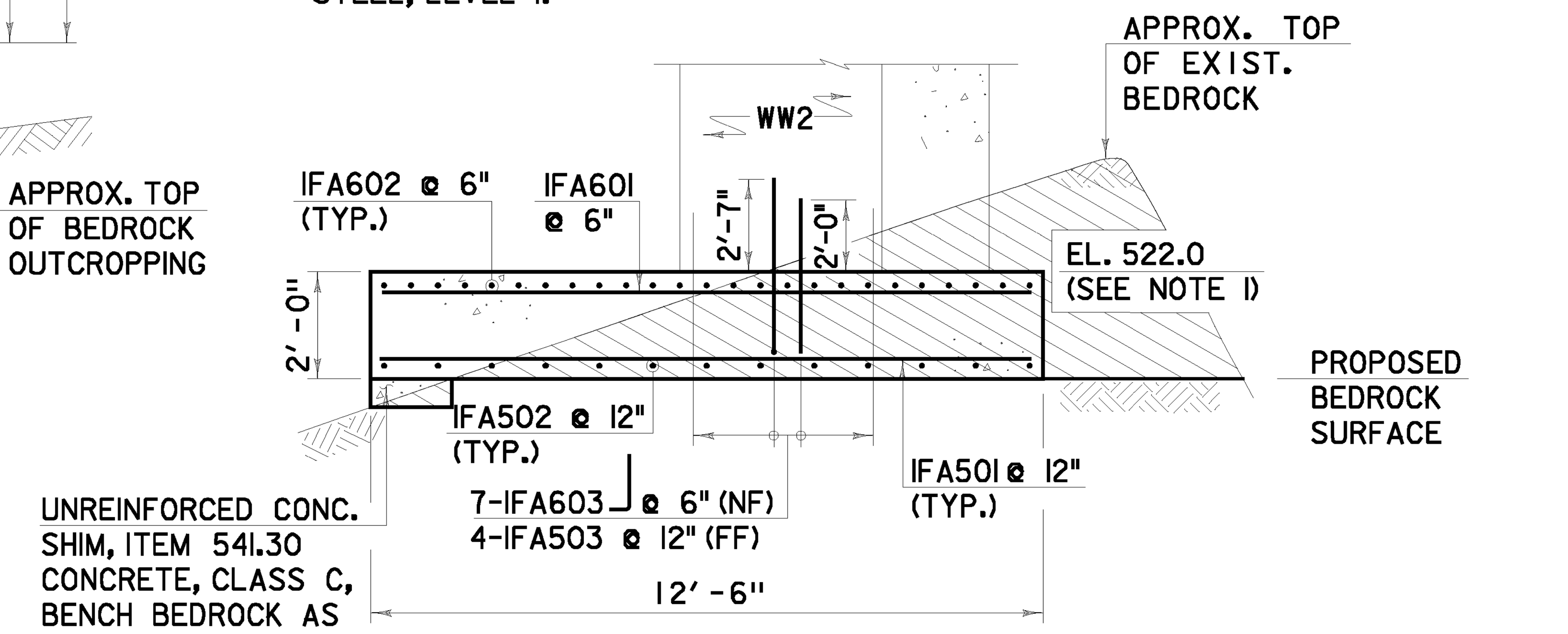


ABUTMENT 1 FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

LEVELING PAD TABLE

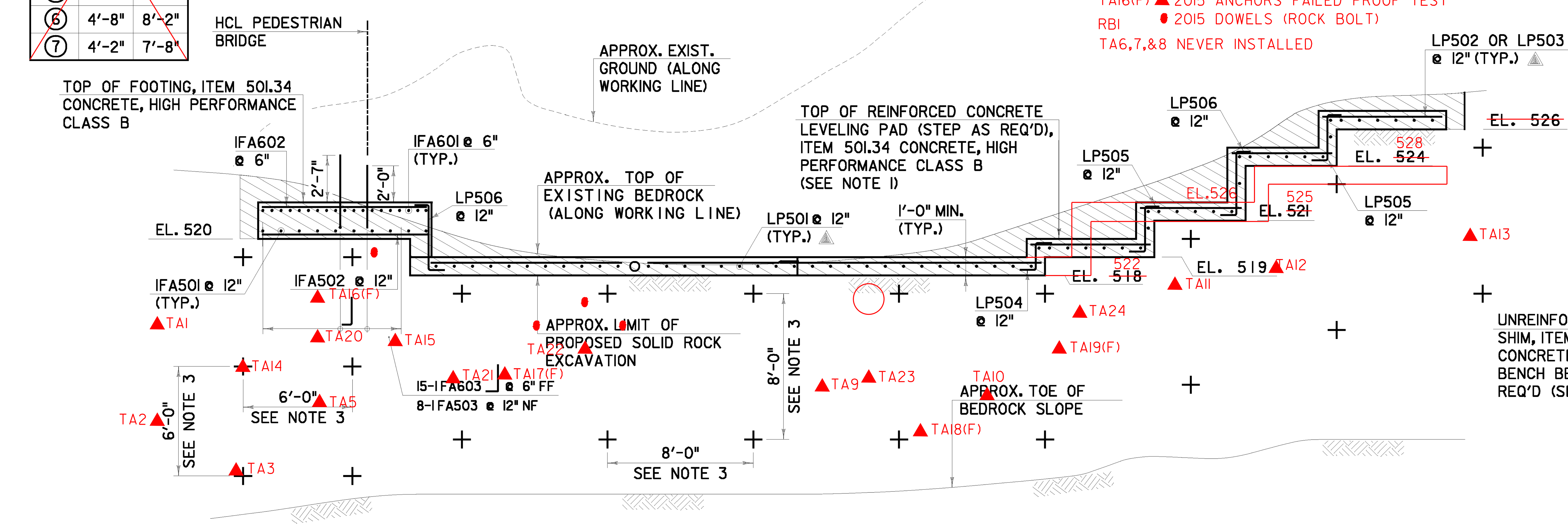
	'A'	'B'
1	5'-8"	9'-2"
2	5'-8"	9'-2"
3	6'-1"	9'-7"
4	6'-0"	9'-6"
5	5'-6"	9'-0"
6	4'-8"	8'-2"
7	4'-2"	7'-8"



SECTION S-S

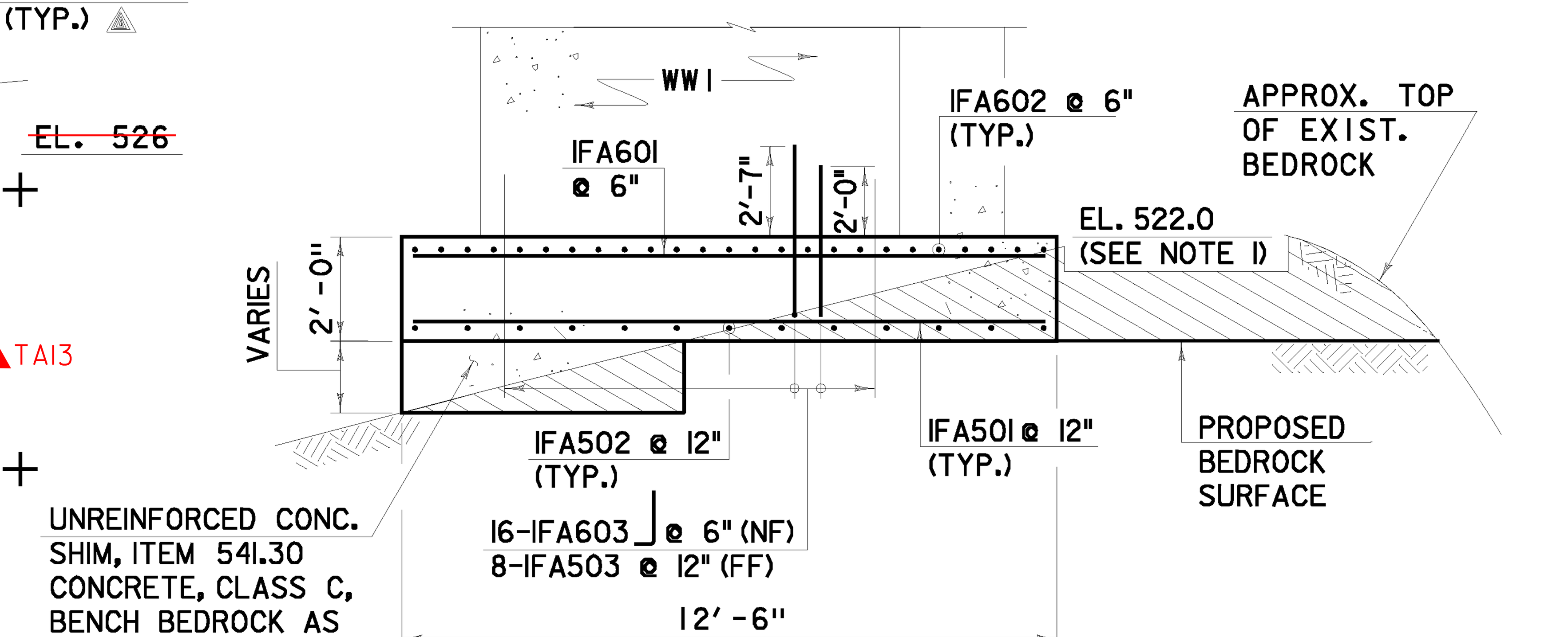
SCALE: 3/8" = 1'-0"

TA1 (2014) ANCHORS ALL PASSED (2015)
TA16(F) 2015 ANCHORS FAILED PROOF TEST
RB1 2015 DOWELS (ROCK BOLT)
TA6,7,&8 NEVER INSTALLED



SECTION R-R

SCALE: 1/4" = 1'-0"



SECTION T-T

SCALE: 3/8" = 1'-0"

SCALE: 1/4" = 1'-0" (0 2 4 6)

SCALE: 3/8" = 1'-0" (0 1 2 3 4)

LEGEND 1

APPROXIMATE LIMIT OF ITEM 203.16 SOLID ROCK EXCAVATION (SEE NOTE 1)

+ APPROXIMATE LOCATION OF ITEM 900.640 SPECIAL PROVISION (ROCK DOWELING) (SEE NOTE 3 AND DETAILS SHT. 37)

LEGEND 2

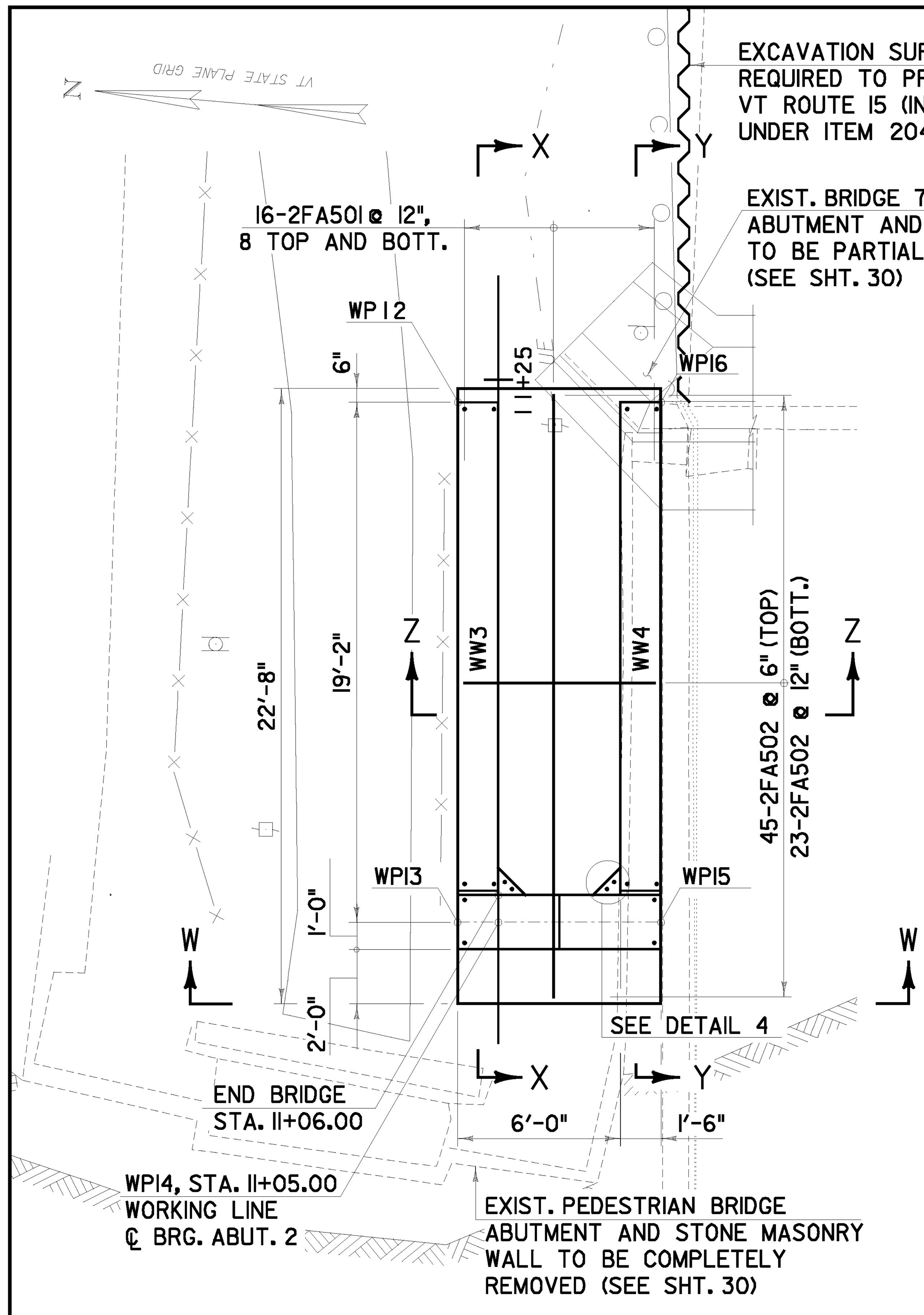
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
= CUT IN FIELD

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\08F004foundationplan1.dgn
DATE/TIME = 4/7/2014
USER = 4916

CHA

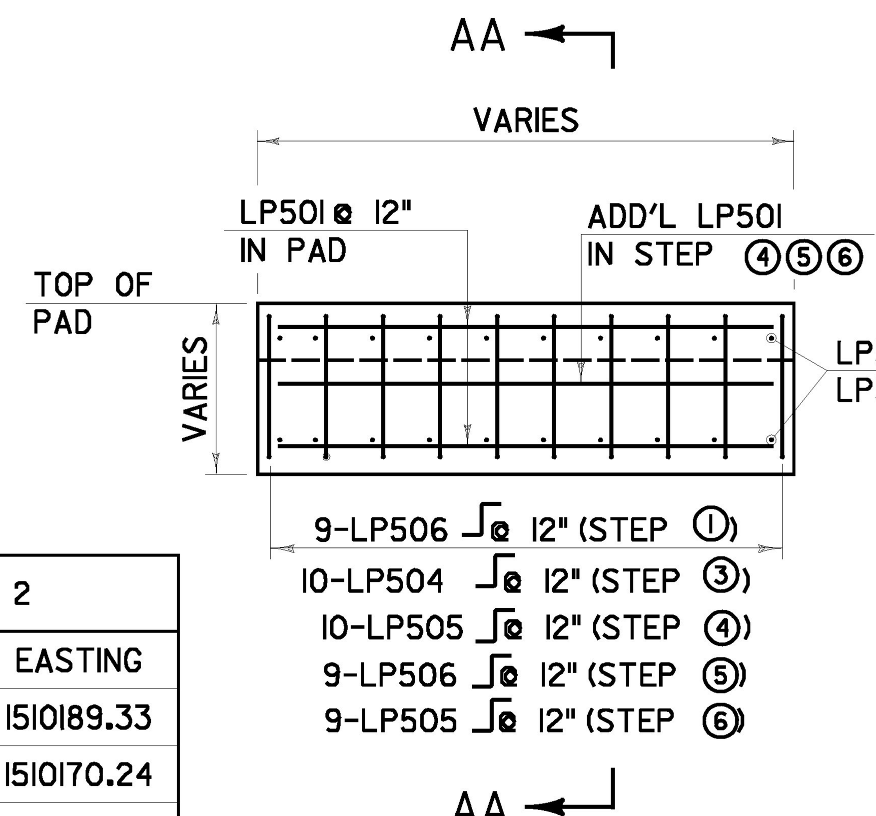
ABUTMENT 1 FOUNDATION PLAN

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)
PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.
PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.

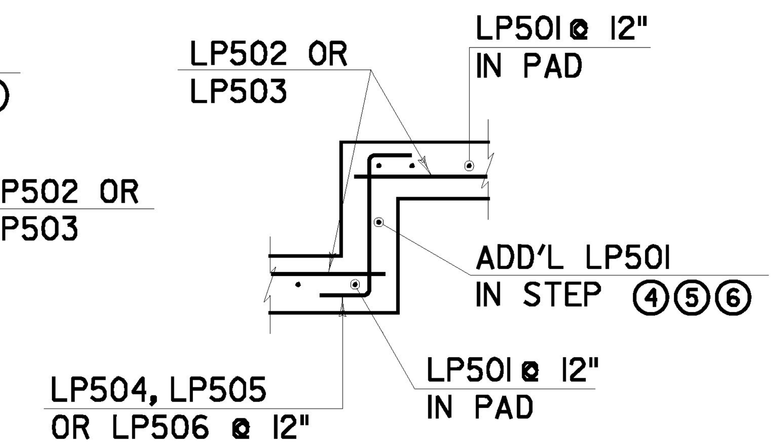


ABUTMENT 2 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

ABUTMENT 2		
WP	NORTHING	EASTING
WP12	730937.64	1510189.33
WP13	730935.97	1510170.24
WP14	730934.47	1510170.37
WP15	730928.49	1510170.89
WP16	730930.17	1510189.99



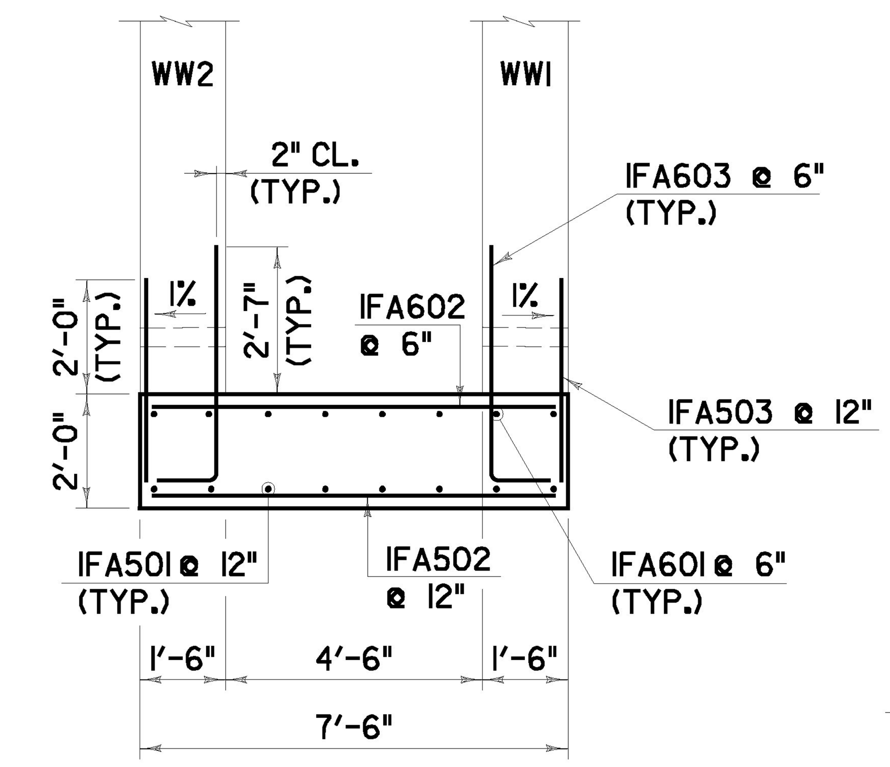
SECTION V-V
SCALE: 1/4" = 1'-0"



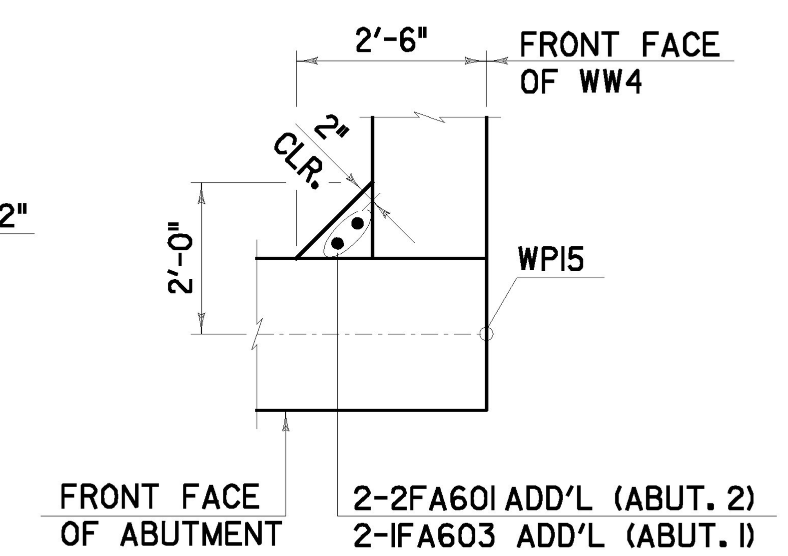
SECTION AA-AA
SCALE: 1/4" = 1'-0"

NOTES:

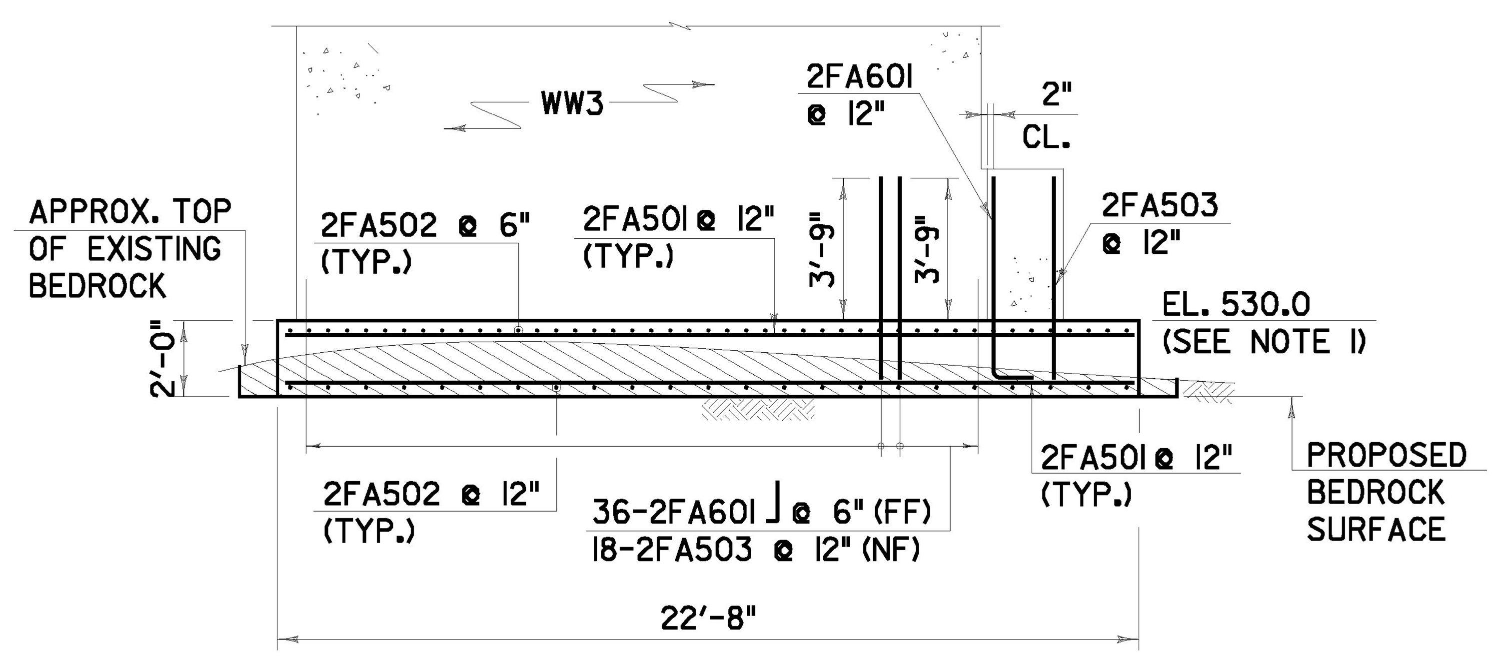
1. ABUTMENT 2 FOOTING ELEVATIONS ARE BASED ON APPROXIMATION OF THE EXISTING BEDROCK PROFILE. THE DESIGN HEIGHT OF THE SUBSTRUCTURE ELEMENTS WERE DETERMINED BASED ON THE ELEVATIONS SHOWN. TO SUIT ACTUAL FIELD CONDITIONS, THE CONTRACTOR MAY PROPOSE ALTERNATE FOOTING ELEVATIONS TO THE STRUCTURES ENGINEEER FOR APPROVAL.
2. 3" CLR. UNLESS OTHERWISE SPECIFIED ON PLANS.
3. ALL REINFORCING STEEL IN THE FOOTING AND LEVELING PAD SHALL BE PLAIN REINFORCING STEEL AND SHALL BE PAID FOR UNDER ITEM 507.11 REINFORCING STEEL, LEVEL 1.



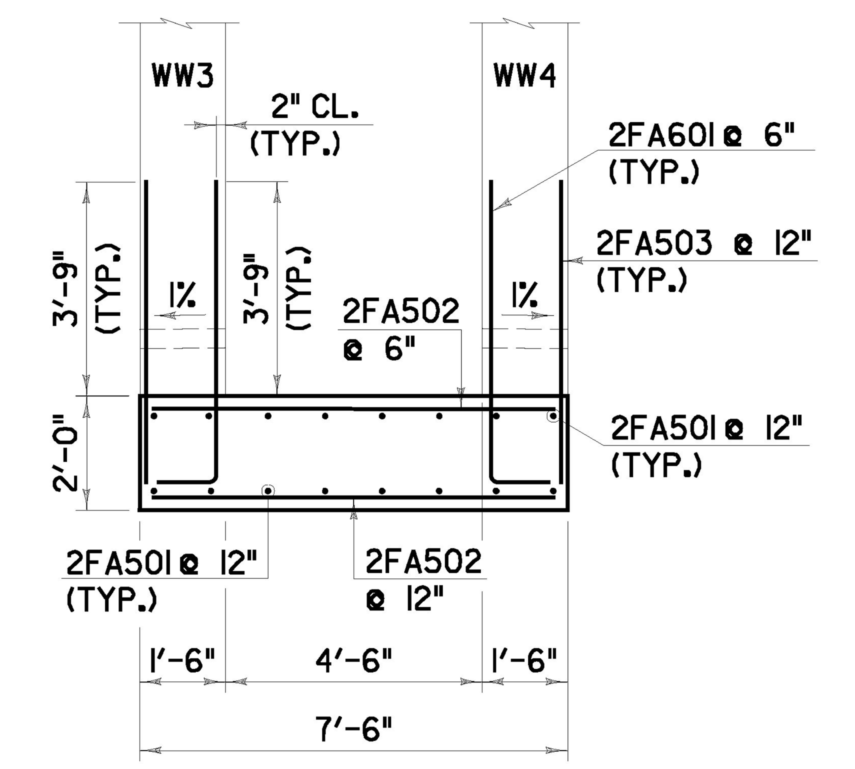
SECTION U-U
SCALE: 3/8" = 1'-0"



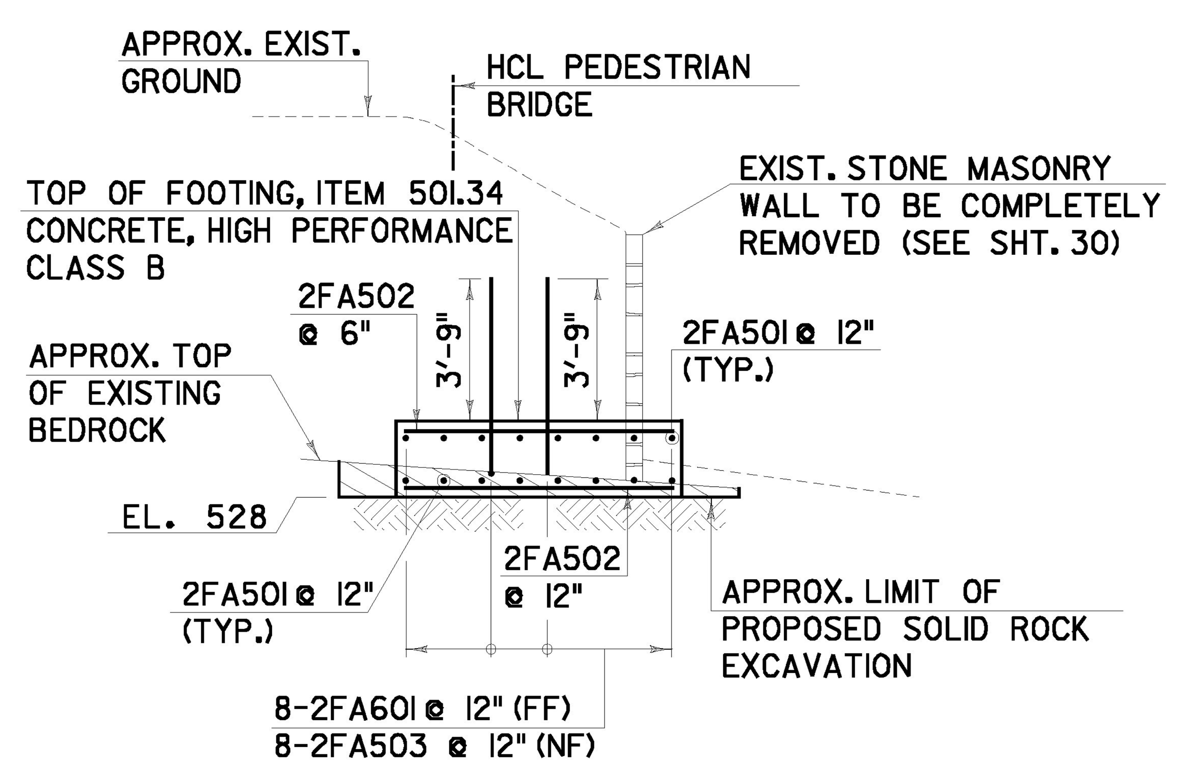
DETAIL 4
(ABUT. 2, SOUTH CHAMFER SHOWN, OTHER LOCATIONS SIMILAR)
SCALE: 1/2" = 1'-0"



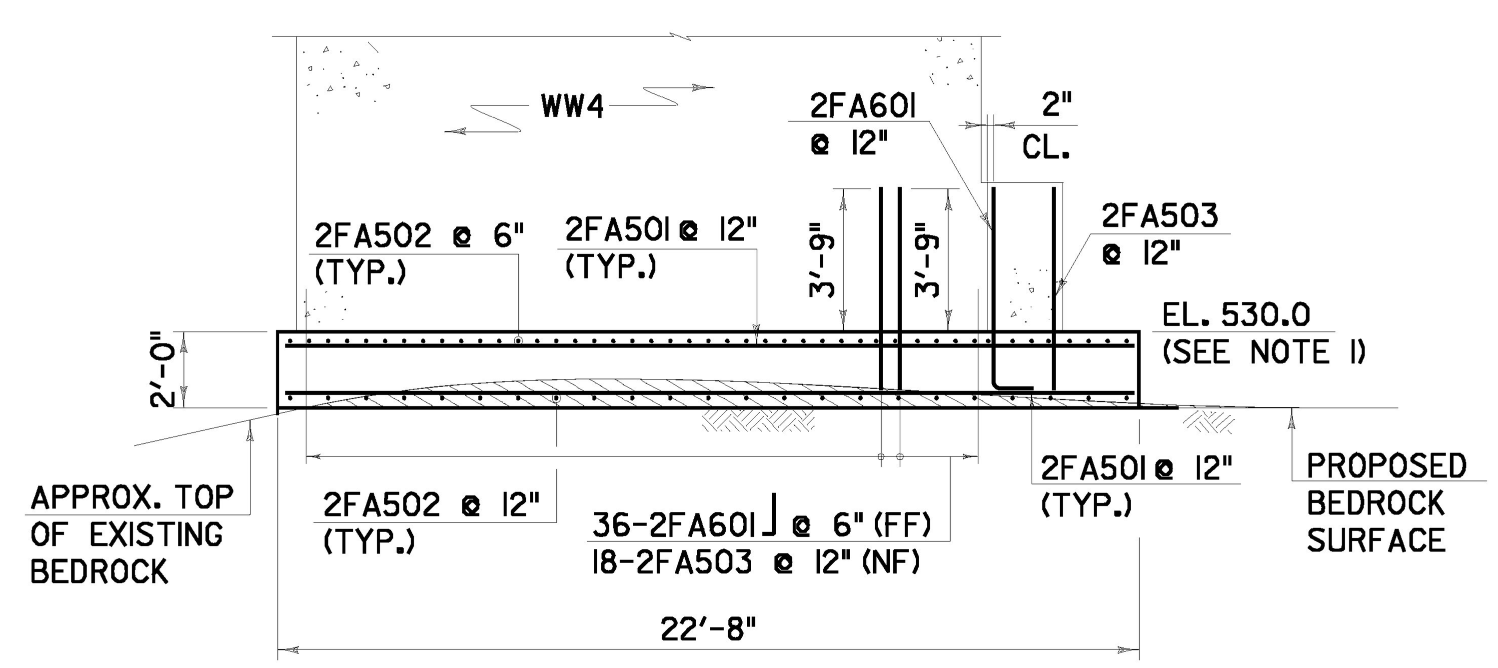
SECTION X-X
SCALE: 1/4" = 1'-0"



SECTION Z-Z
SCALE: 3/8" = 1'-0"



SECTION W-W
SCALE: 1/4" = 1'-0"



SECTION Y-Y
SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'-0" (0 2 4 6)
SCALE: 3/8" = 1'-0" (0 1 2 3 4)

LEGEND 1

APPROXIMATE LIMIT OF ITEM 203.16 SOLID ROCK EXCAVATION (SEE NOTE 1)

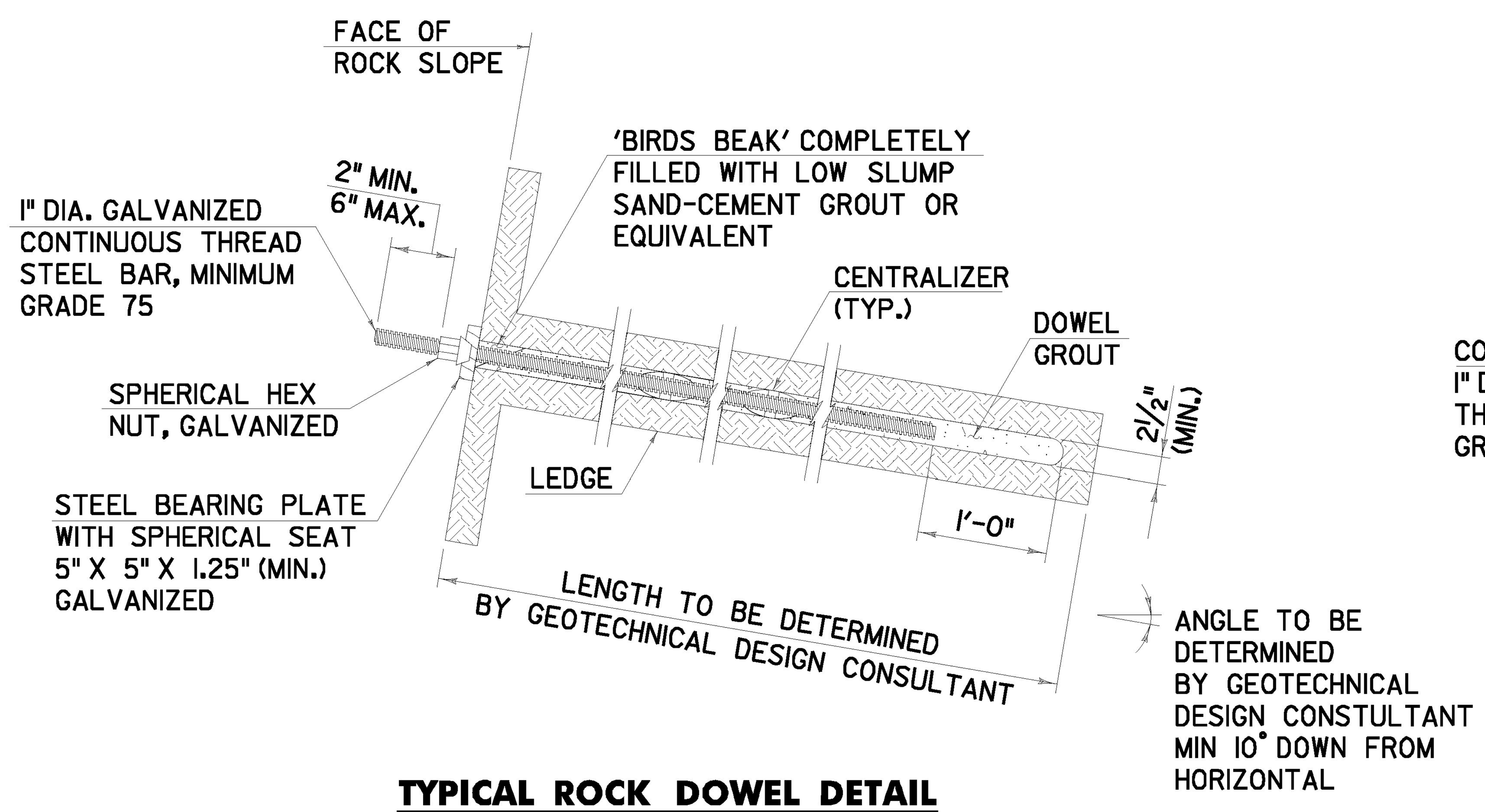
LEGEND 2

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT IN FIELD

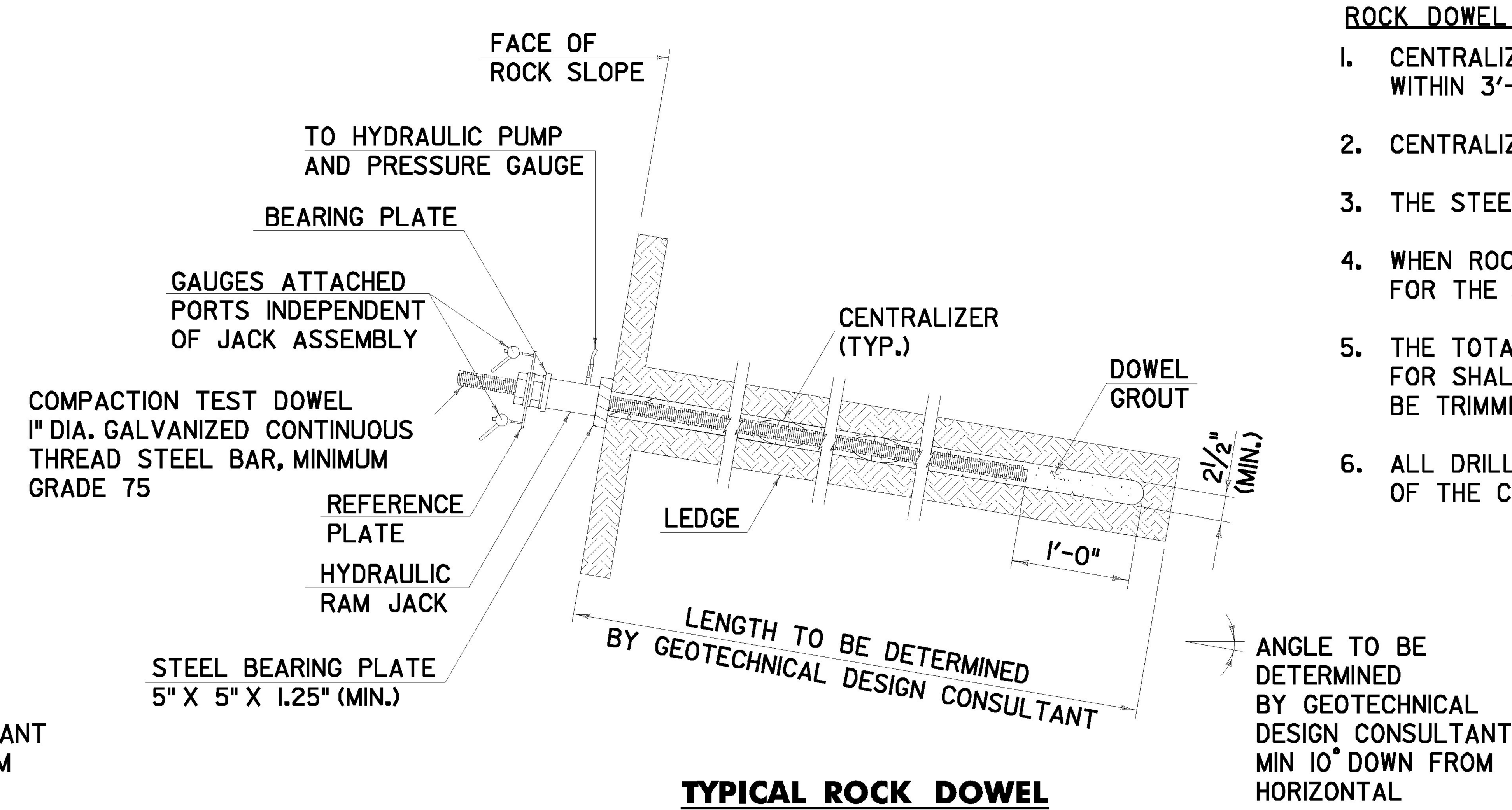
CHA

ABUTMENT 2 FOUNDATION PLAN

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)
PROJECT LEADER: M.D.S.
DESIGNED BY: D.M.D.
PLOT DATE: 4/7/2014
DRAWN BY: D.M.D.
CHECKED BY: P.M.P.
SHEET 36 OF 62



TYPICAL ROCK DOWEL DETAIL
NOT TO SCALE

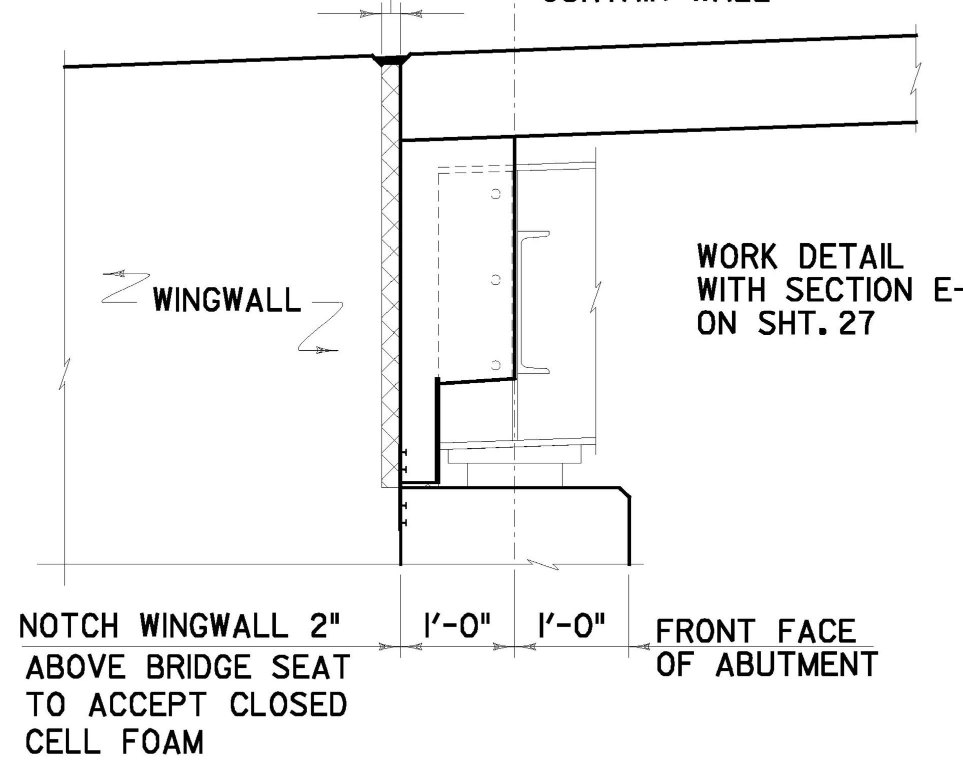


TYPICAL ROCK DOWEL PULL-OUT TEST DETAIL
NOT TO SCALE

ROCK DOWEL NOTES:

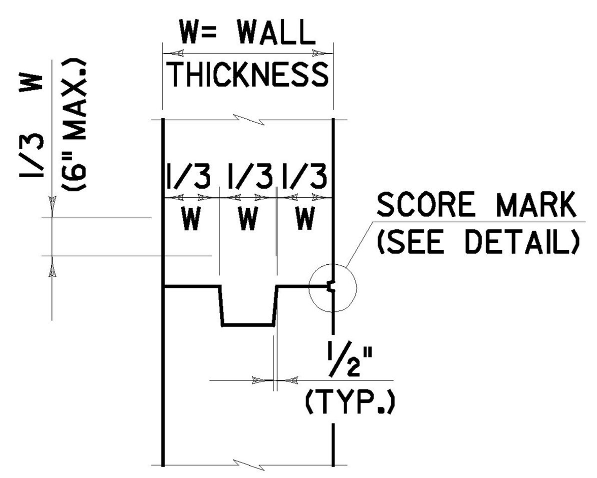
1. CENTRALIZERS TO BE PLACED AT A MAXIMUM OF 7'-0" ON CENTER AND WITHIN 3'-0" FROM THE TOP AND BOTTOM OF DRILL HOLE ON CENTER.
2. CENTRALIZERS SHALL BE MADE OF PVC.
3. THE STEEL BEARING PLATE SHALL COVER THE DRILL HOLE COMPLETELY.
4. WHEN ROCK AROUND THE DRILL HOLE OPENING HAS BROKEN, A CEMENT PAD FOR THE STEEL BEARING PLATE SHALL BE INSTALLED AS REQUIRED.
5. THE TOTAL LENGTH OF THE CONTINUOUS THREAD STEEL BAR TO BE PAID FOR SHALL BE EQUAL TO THE LENGTH OF THE DRILL HOLE. THE BAR MAY BE TRIMMED AFTER INSTALLATION.
6. ALL DRILL HOLES SHALL BE OVERDRILLED BY 1'-0" BETWEEN THE END OF THE CONTINUOUS THREAD STEEL BAR AND BOTTOM OF DRILL HOLE.

ROCK DOWEL DETAILS	PROJECT NAME: JERICHO PROJECT NUMBER: STP FTBR (3)	
	PROJECT LEADER: M.D.S. DESIGNED BY: D.M.D.	PLOT DATE: 4/7/2014 DRAWN BY: D.M.D. CHECKED BY: P.M.P. SHEET 37 OF 62



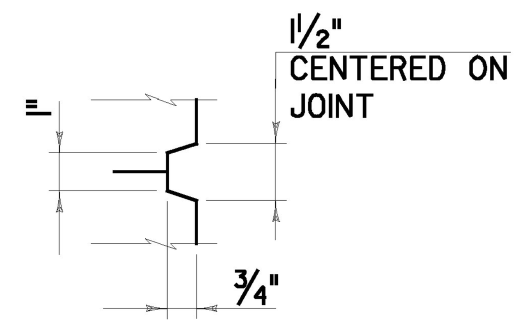
DETAIL 5

SCALE ¾" = 1'-0"



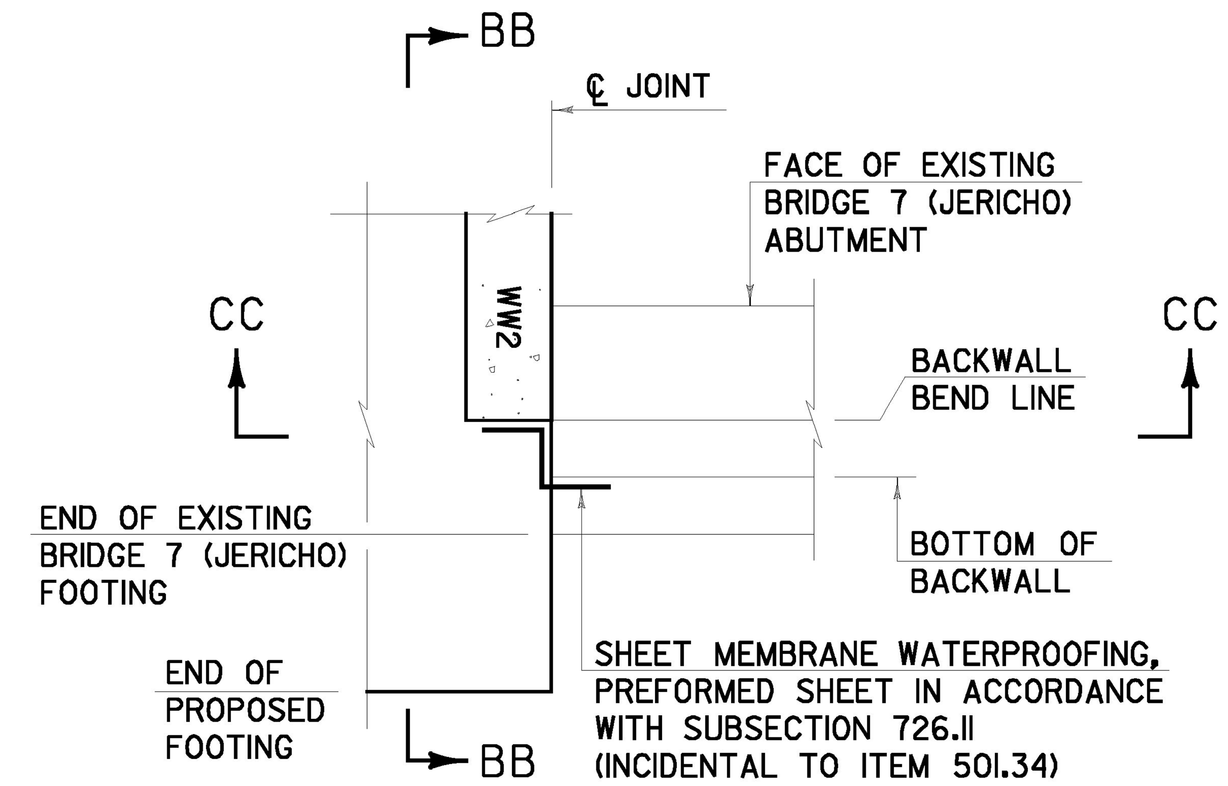
DETAIL 6

SCALE ½" = 1'-0"



SCORE MARK DETAIL

NOT TO SCALE



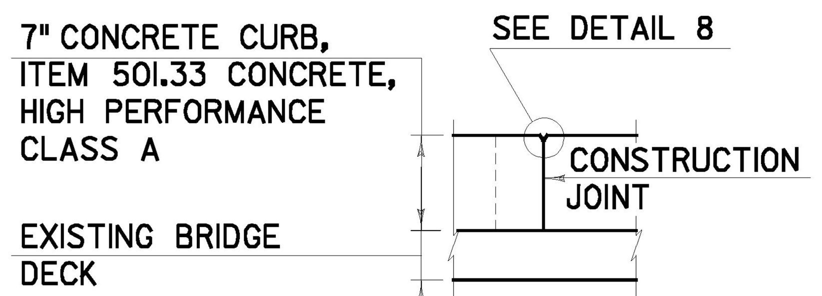
DETAIL 9

(ABUT. 1 SHOWN, ABUT. 2 SIMILAR)

SCALE ⅜" = 1'-0"

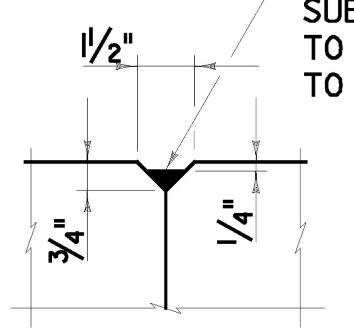
NOTES:

1. CONSTRUCTION JOINTS THROUGH CONCRETE CURBS SHALL BE SPACED AT A MAXIMUM OF 15'-0" CENTER TO CENTER. CONCRETE SHALL BE PLACED IN ALTERNATING SECTIONS WITH A MINIMUM OF 48 HOURS BETWEEN ADJACENT POURS. THE CONTRACTOR HAS THE OPTION TO ELIMINATE THE CURB JOINTS AND MAKE THE CURB PLACEMENT USING A SHRINKAGE ADMIXTURE APPROVED BY THE VTRANS MATERIALS AND RESEARCH LABORATORY. THE COST OF ANY SUCH ADMIXTURE SHALL BE INCIDENTAL TO ITEM 501.33.
2. LONGITUDINAL REINFORCING SHALL PASS THROUGH CONCRETE CURB CONSTRUCTION JOINTS.
3. WATERSTOP MATERIAL SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SUBSECTION 707.10. THE SELECTED WATERSTOP SYSTEM SHALL BE APPROVED BY THE VTRANS MATERIALS AND RESEARCH LABORATORY. THE COST FOR P.V.C. WATERSTOP SHALL BE INCIDENTAL TO ITEM 501.33.



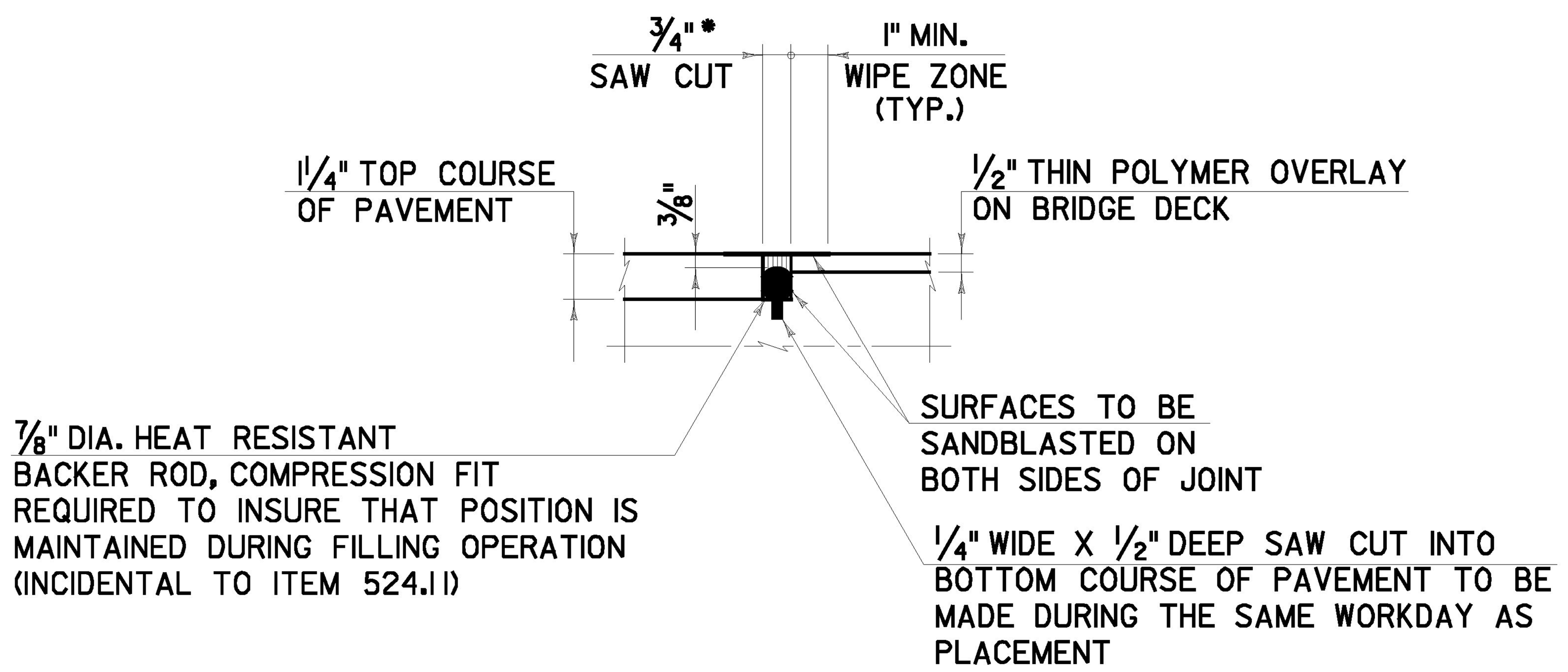
DETAIL 7

SCALE ¾" = 1'-0"



DETAIL 8

NOT TO SCALE

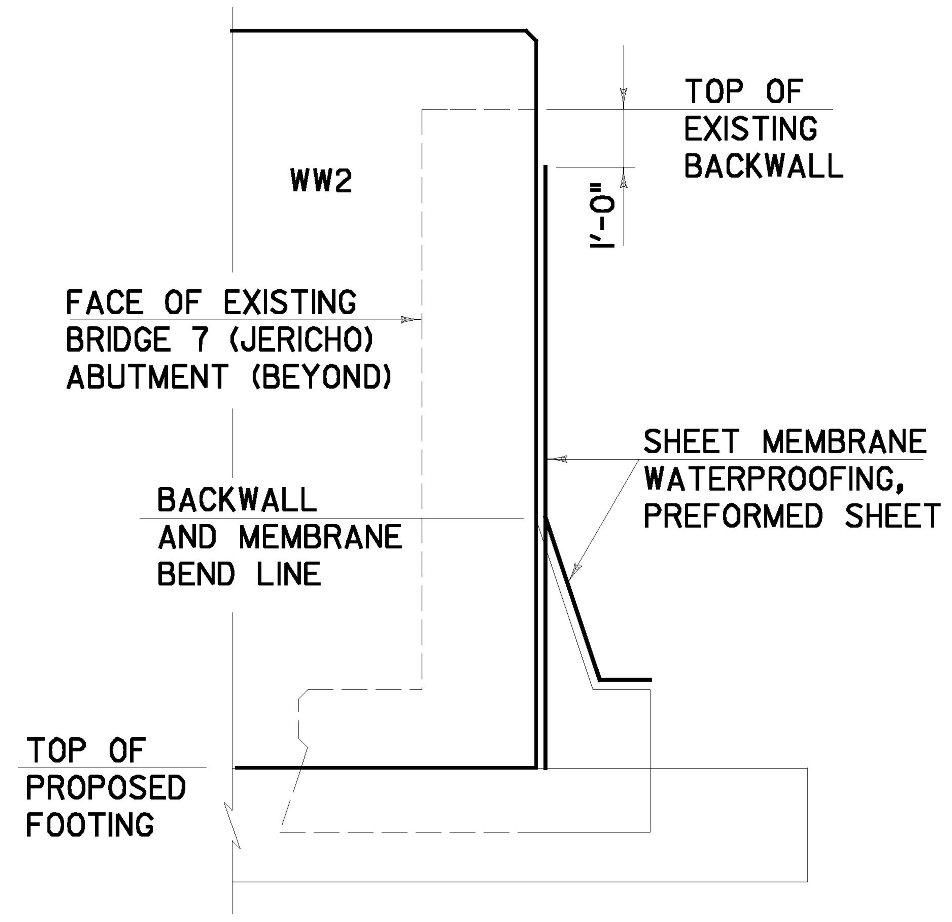


* JOINT IS TO BE LOCATED ACCURATELY BY STRING LINING, OR OTHER MEANS, PRIOR TO PAVING, SO THAT THE SAW CUTS WILL BE MADE DIRECTLY OVER THE END OF THE CONCRETE DECK. JOINT SHALL BE CUT DRY IN A SINGLE PASS AND BE SEALED WITHIN 24 HOURS OR PRIOR TO EXPOSURE TO TRAFFIC. JOINT SHALL BE CLEANED PRIOR TO APPLYING THE JOINT SEALER.

HOT POURED JOINT SHALL BE PAID FOR UNDER ITEM 524.11 JOINT SEALER, HOT POURED.

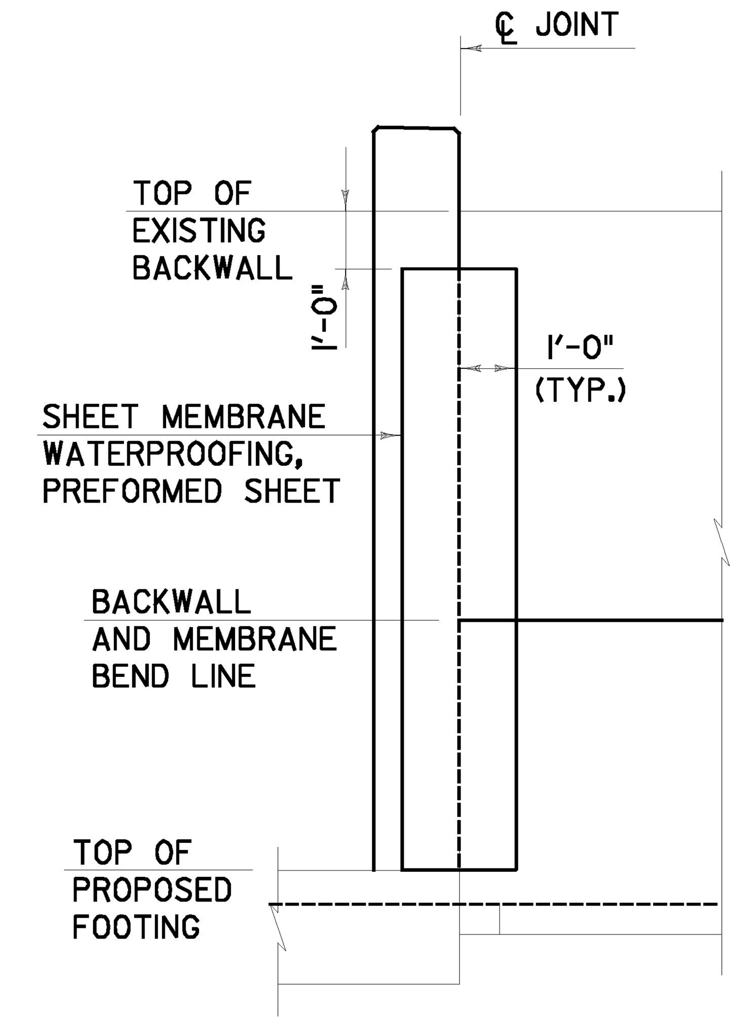
HOT POURED JOINT DETAIL

NOT TO SCALE



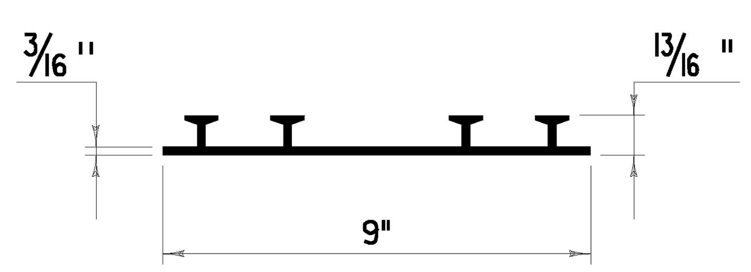
SECTION BB-BB

SCALE ⅜" = 1'-0"



SECTION CC-CC

SCALE ⅜" = 1'-0"



P.V.C. WATERSTOP

NOT TO SCALE

SCALE ½" = 1'-0" 1 0 1 2

SCALE ¾" = 1'-0" 1 0 1 2

MISCELLANEOUS DETAILS	PROJECT NAME: JERICHO PROJECT NUMBER: STP FTBR (3)	
	PROJECT LEADER: M.D.S. DESIGNED BY: D.M.D.	PLOT DATE: 4/7/2014 DRAWN BY: D.M.D. CHECKED BY: P.M.P. SHEET 38 OF 62

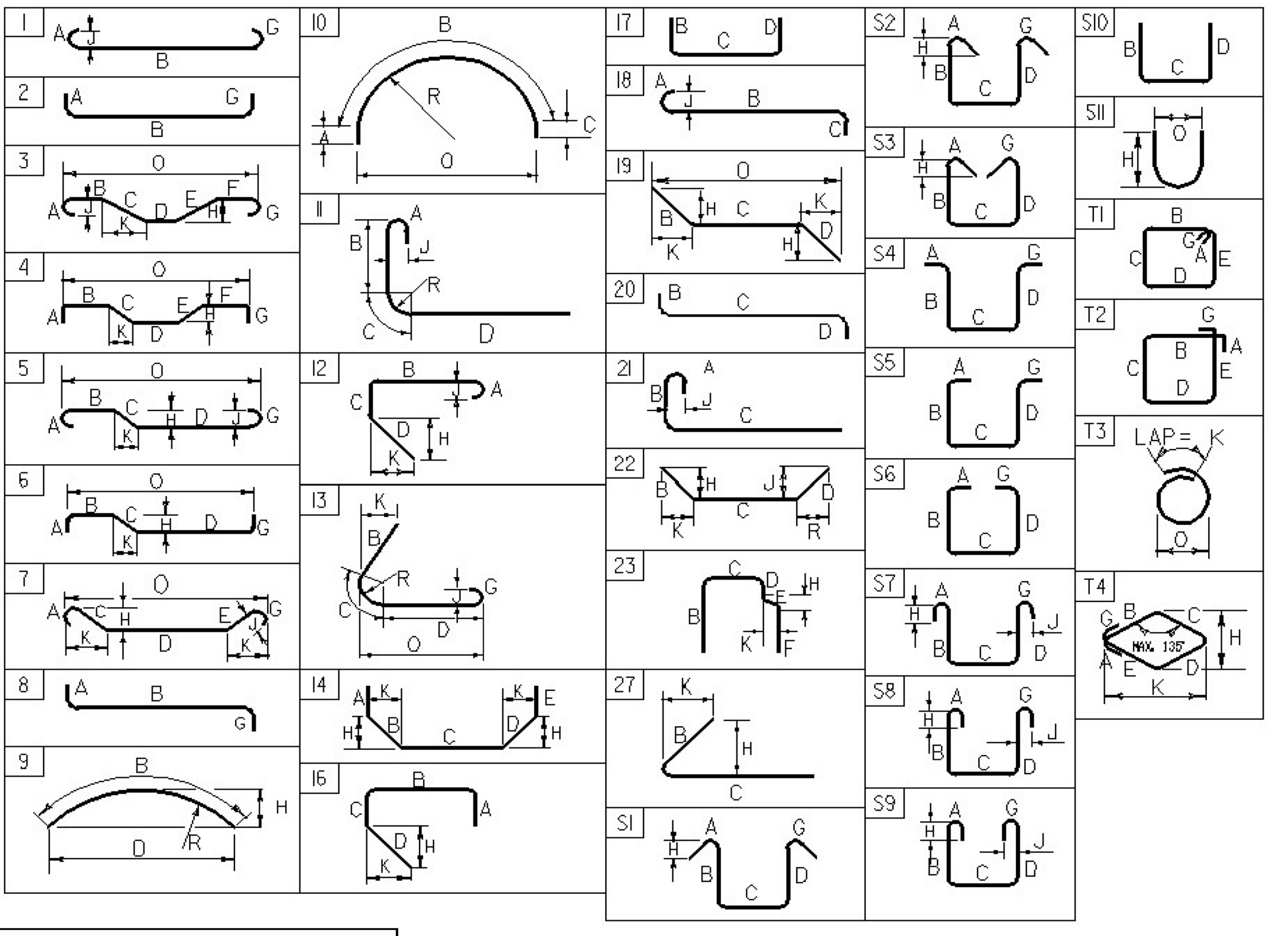
STATE OF VERMONT
AGENCY OF TRANSPORTATION

REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
DECK																	
✳	145	5	7'- 2"	S501.3	STR												
	144	7	8'- 0"	S502.3	1	10"	7'- 2"					0"		7"			
	24	5	40'- 0"	S503.3	STR												
	36	5	34'- 0"	S504.3	STR												
	189 ~~94~~	5	1'- 6"	S505.3	17		8"	10"	0"								
	24	5	6'- 3"	S506.3	27			3'- 3"					3'- 0"		1 3/8"		
	20	5	4'- 6"	S507.3	27		3'- 0"	2'- 0"					2'- 6"		1 1/8"		
	8	5	7'- 0"	S508.3	STR												
	6	5	3'- 9"	S509.3	STR												
	40	5	4'- 1"	S510.3	17		1'- 9"	7"	1'- 9"								
	12	5	2'- 8"	S511.3	STR												
	2	5	1'- 9"	S512.3	STR												
LEVELING PAD (STONE MASONRY WALL)																	
▲	62	5	9'- 0"	LP501	STR												
▲	28	5	14'- 3"	LP502	STR												
▲	28	5	6'- 6"	LP503	STR												
	10	5	2'- 6"	LP504	20		6"	1'- 6"	6"								
	19	5	3'- 6"	LP505	20		6"	2'- 6"	6"								
	18	5	4'- 6"	LP506	20		6"	3'- 6"	6"								
ABUTMENT 1 FOOTING																	
	10	5	12'- 0"	1FA501	STR												
	13	5	9'- 0"	1FA502	STR												
	20	5	3'- 9"	1FA503	STR												
✳	20	6	12'- 0"	1FA601	STR												
	25	6	9'- 0"	1FA602	STR												
	42	6	5'- 4"	1FA603	17		1'- 0"	4'- 4"	0"								
ABUTMENT 2 FOOTING																	
	16	5	22'- 2"	2FA501	STR												
✳	69	5	7'- 0"	2FA502	STR												
	44	5	5'- 5"	2FA503	STR												
	84	6	6'- 5"	2FA601	17		1'- 0"	5'- 5"	0"								
ABUTMENT 1 STEM																	
	19	6	9'- 0"	1A601	STR												
	8	5	9'- 0"	1A501	STR												
	28	5	3'- 7"	1A502	17		1'- 0"	1'- 7"	1'- 0"								
	22	5	7'- 0"	1A503	STR												
	20	5	7'- 0"	1A504	22		1'- 0"	5'- 0"	1'- 0"				8 1/2"	8 1/2"	8 1/2"	8 1/2"	
ABUTMENT 2 STEM																	
	16	5	3'- 7"	2A501	17		1'- 0"	1'- 7"	1'- 0"								
	10	5	7'- 0"	2A502	STR												
	8	5	7'- 0"	2A503	22		1'- 0"	5'- 0"	1'- 0"				8 1/2"	8 1/2"	8 1/2"	8 1/2"	
WINGWALL 1																	
▲	16	6	13'- 0"	1W601	STR												
▲	8	5	13'- 0"	1W501	STR												
▲	28	5	7'- 6"	1W502	STR												
WINGWALL 2																	
	7	6	12'- 10"	2W601	STR												
	4	5	12'- 9"	2W501	STR												
▲	28	5	3'- 3"	2W502	STR												
WINGWALL 3																	
▲	36	6	8'- 4"	3W601	STR												
▲	18	5	8'- 4"	3W501	STR												
▲	18	5	17'- 8"	3W502	STR												
WINGWALL 4																	
▲	36	6	8'- 3"	4W601	STR												
▲	18	5	8'- 3"	4W501	STR												
▲	18	5	17'- 8"	4W502	STR												
	LEVELING PAD STONE MASONRY WALL																
	CLASS C CONCRETE PER GEODESIGN																
									#/FT								
	1	5	20'-0"		STR			20.0'	1.043		21#						
	3	5	25'-0"		STR			75.0'	1.043		79#						
	32	8	8'-0"		STR			256.0'	2.67		684#						
					STR						784#						

~ NOTES ~

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. ✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.

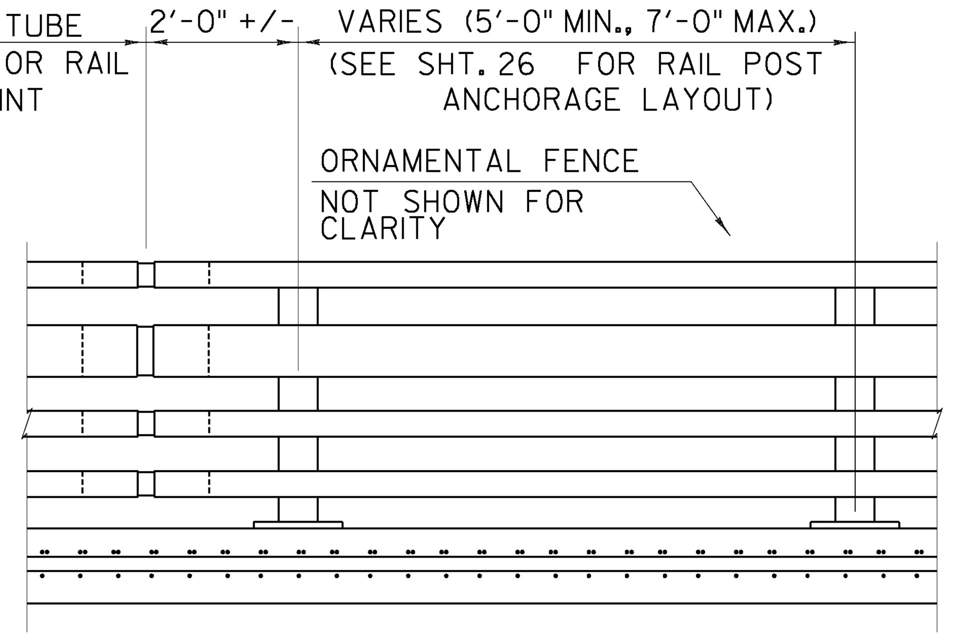


ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION: DIAMETER INCHES	AREA INCHES ^{2}	PERIMETER INCHES
#3	0.376	0.375	0.11	1.178
#4	0.668	0.500	0.20	1.571
#5	1.043	0.625	0.31	1.963
#6	1.502	0.750	0.44	2.356
#7	2.044	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.142
#9	3.400	1.128	1.00	3.544
#10	4.303	1.270	1.27	3.990
#11	5.313	1.410	1.56	4.430
#14	7.65	1.693	2.25	5.32
#18	13.60	2.257	4.00	7.09

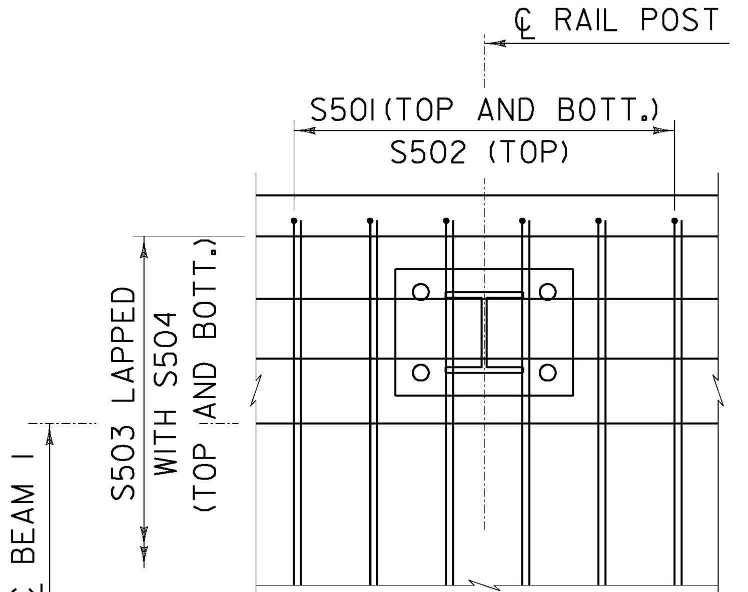
CLOUGH HARBOUR & ASSOCIATES LLP

PROJECT NAME:	JERICHO		
PROJECT NUMBER:	STP FTBR (3)		
FILE NAME:	z08f004rebarschedule	PLOT DATE:	04/08/2014
PROJECT MANAGER:	D.E.G.	DRAWN BY:	D.M.D.
DESIGNED BY:	D.M.D	CHECKED BY:	P.M.P.
REINFORCING STEEL SCHEDULE		SHEET 39	OF 62

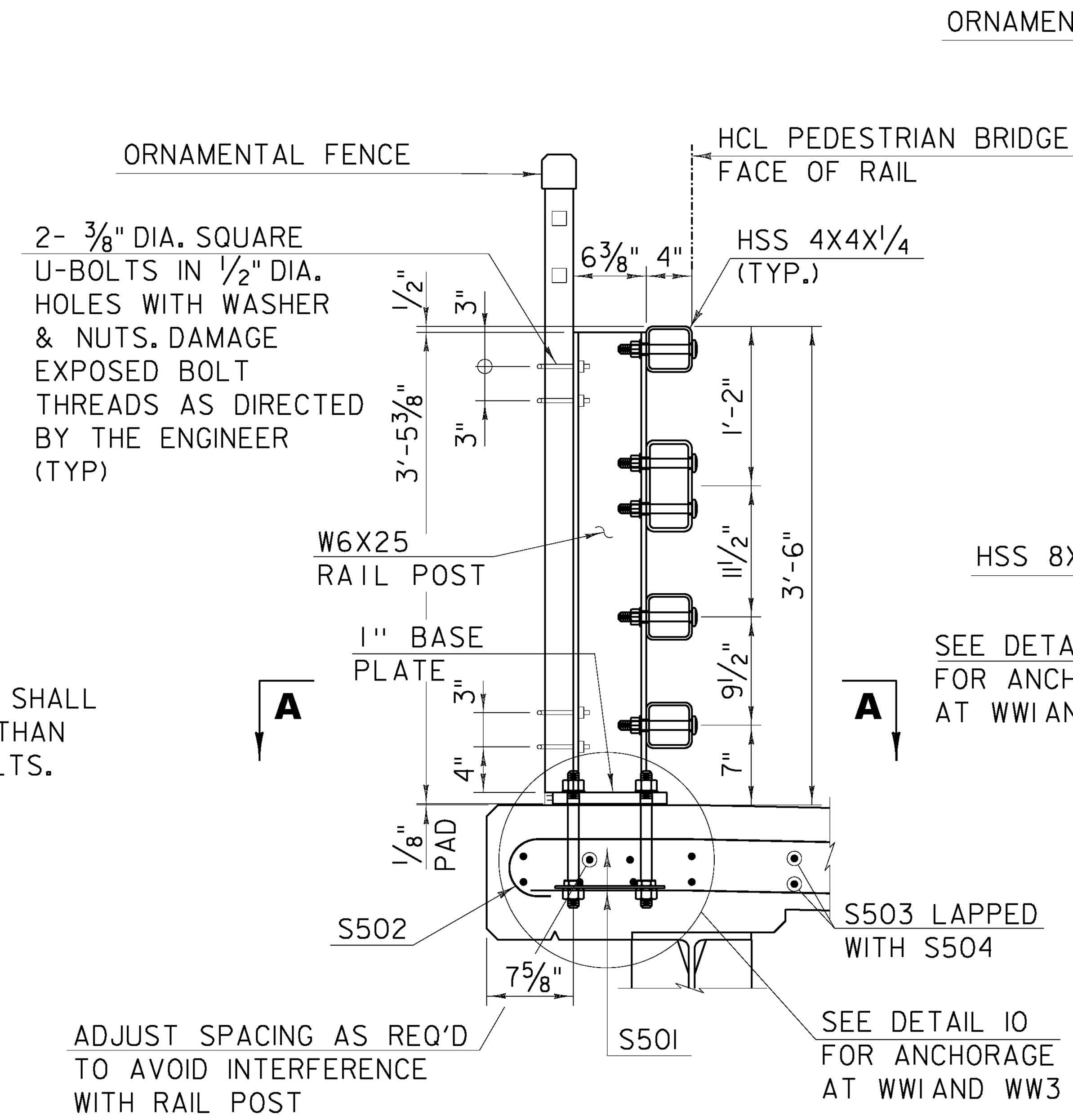


BRIDGE RAILING ELEVATION
SCALE: 1/2" = 1'-0"

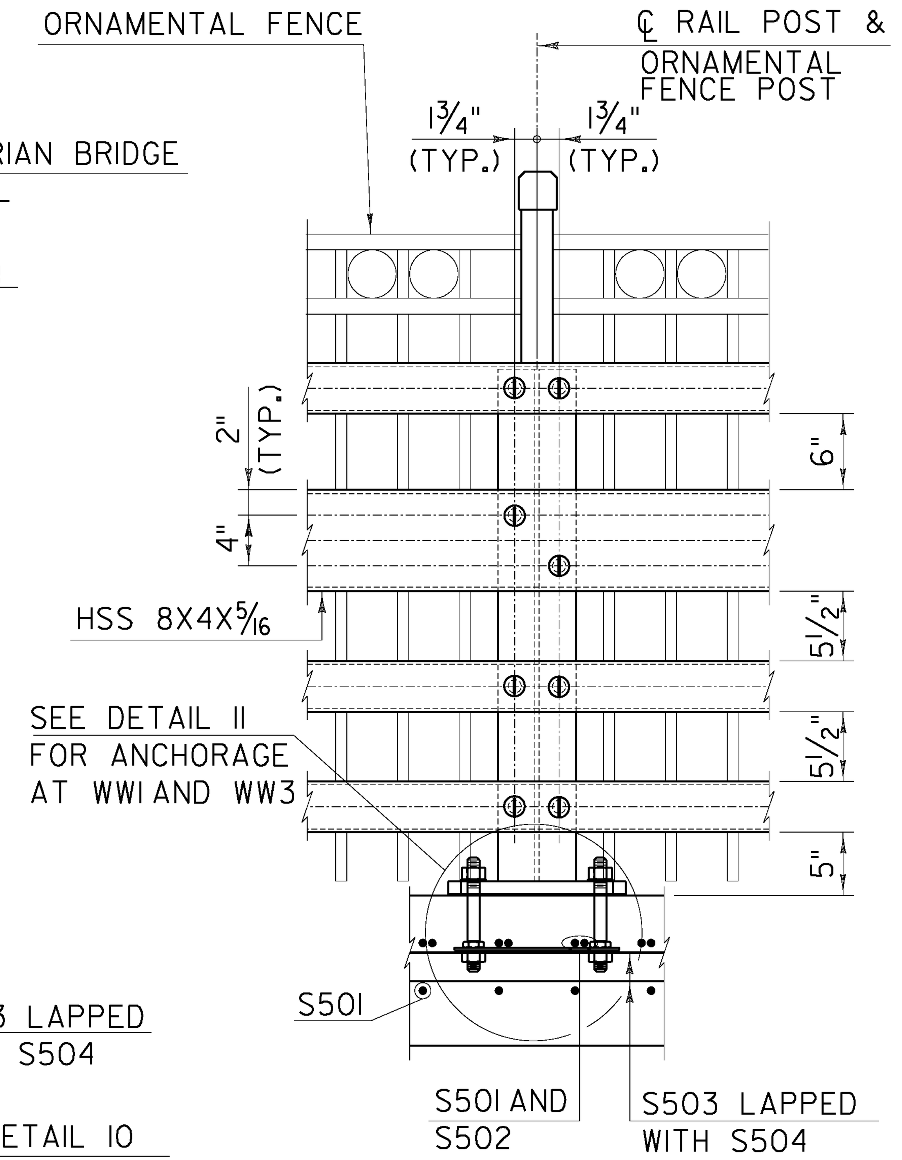
NOTE:
HOLES IN RAILS SHALL BE 1/8" LARGER THAN CONNECTION BOLTS.



REINFORCING PLAN AT RAIL POST ANCHORAGE
SCALE: 1" = 1'-0"



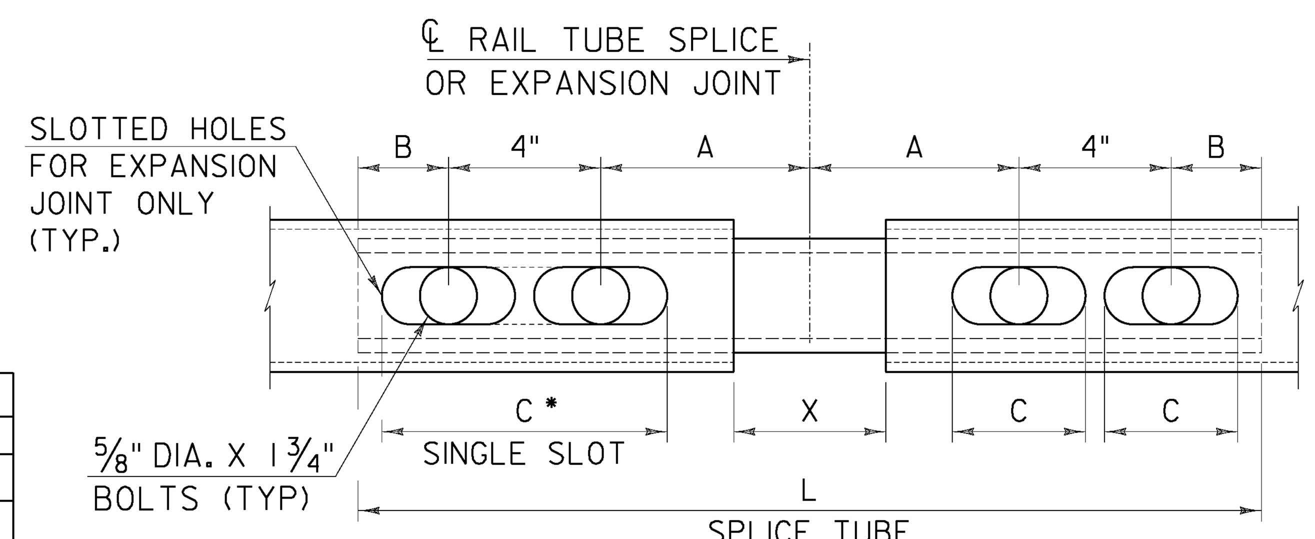
TYPICAL SECTION
SCALE: 1" = 1'-0"



ELEVATION
SCALE: 1" = 1'-0"

NOTES:

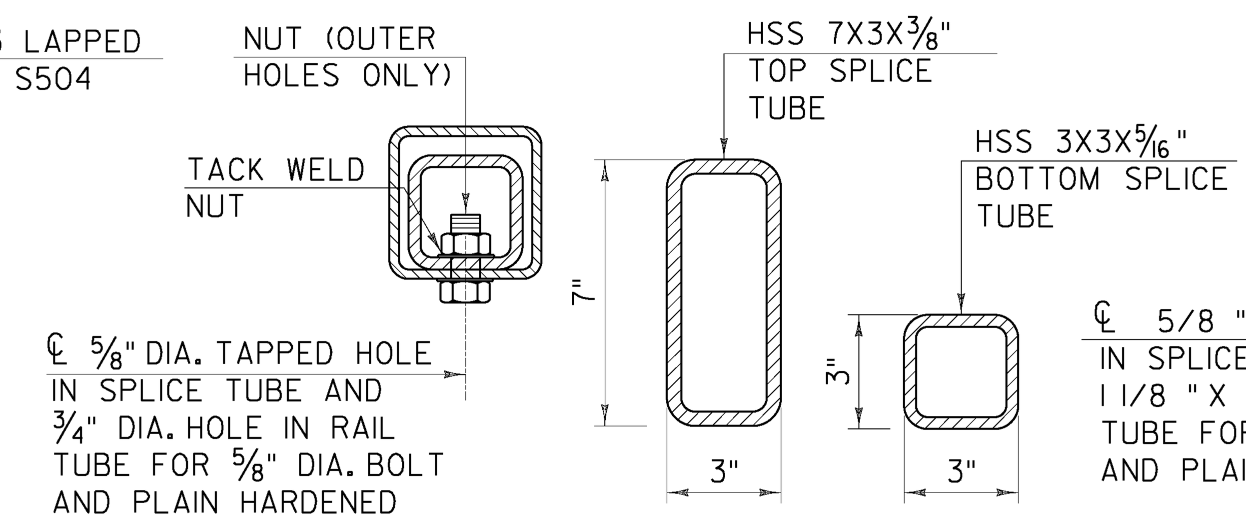
1. ALL WORK AND MATERIALS SHALL CONFORM TO STANDARD SPECIFICATION SECTION 525.
2. ALL EXPOSED CUT OR SHEARED EDGES SHALL BE ROUNDED TO A 1/16 " RADIUS AND BE FREE OF BURRS.
3. RAIL POSTS SHALL BE SET NORMAL TO GRADE.
4. SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO (2) RAIL POSTS AND PREFERABLY TO AT LEAST FOUR (4) POSTS.
5. RAIL TUBE EXPANSION JOINTS SHALL BE PROVIDED IN ANY RAIL BAY SPANNING A SUPERSTRUCTURE EXPANSION JOINT. EXPANSION JOINT WIDTH SHALL BE "X" AT 45° F AND WILL BE ADJUSTED IN THE FIELD BY THE ENGINEER FOR OTHER TEMPERATURES.
6. RAIL POSTS ANCHORING NUTS SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ONE-EIGHTH TURN.
7. RAIL TUBES SHALL BE ATTACHED USING 3/4 " FULL DIAMETER BODY ROUND HEAD BOLTS INSERTED THROUGH THE FACE OF THE TUBE. HOLES IN POSTS SHALL BE 1/16 " LARGER THAN THE BOLT SIZE.
8. HOLES IN RAILS FOR RAIL TUBE ATTACHMENT MAY BE FIELD-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO ERECTION.
9. ANY BENDING OF RAIL SHALL BE BY SHOP PROCEDURE ONLY.
10. THE FABRICATOR SHALL SUBMIT FABRICATION DRAWINGS INCLUDING WELDING PROCEDURES TO THE STRUCTURES ENGINEER FOR APPROVAL. ALL WELDING SHALL CONFORM WITH SUBSECTION 506.10.
11. FOR MORE INFORMATION AND REQUIREMENTS REGARDING ORNAMENTAL FENCE, SEE THE SPECIAL PROVISIONS.



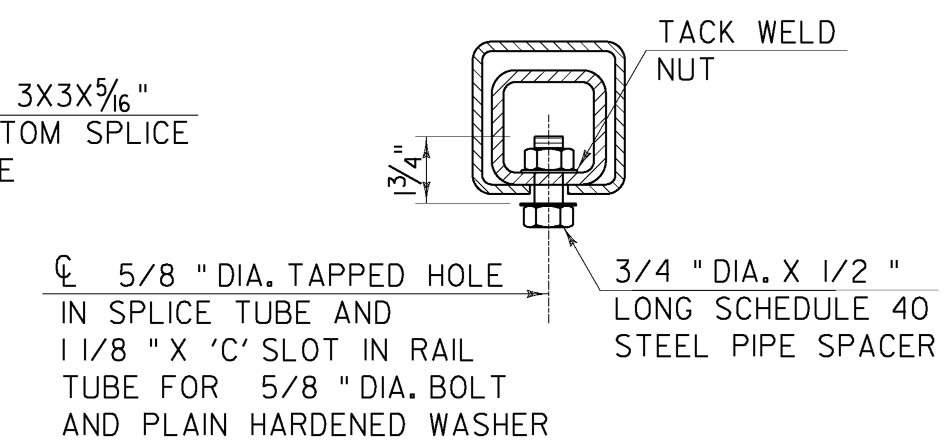
SPLICE TABLE					
T	A	B	C	L	X
N/A	4"	2"	--	20"	3/4"
EXPANSION JOINT TABLE					
≤4"	4"	2"	2 1/2"	20"	2 1/2"
>4" ≤6 1/2"	5 1/2"	2 3/8"	3 1/2"	23 3/4"	4"
>6 1/2" ≤9"	6 1/2"	3 3/8"	9"*	27 3/4"	5"
>9" ≤13"	8 1/2"	4 3/8"	11"*	33 3/4"	7"

T = TOTAL MOVEMENT BETWEEN BRIDGE EXP. JOINTS (SEE NOTE 5).
* = SINGLE SLOT

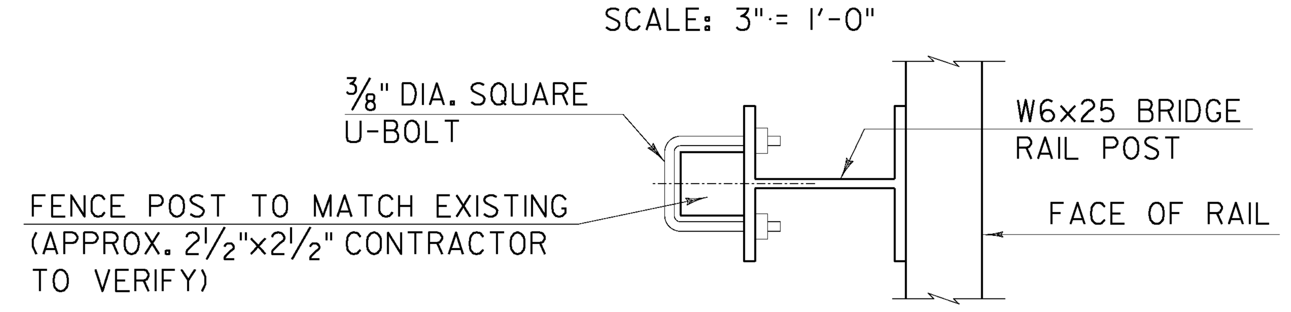
RAIL TUBE SPLICE AND RAIL EXPANSION JOINT DETAIL
(BOTTOM VIEW)
SCALE: 3" = 1'-0"



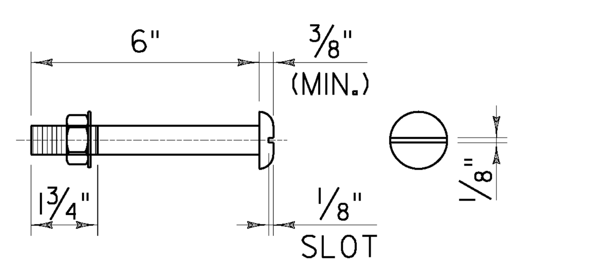
RAIL TUBE SPLICE SECTION
SCALE: 3" = 1'-0"



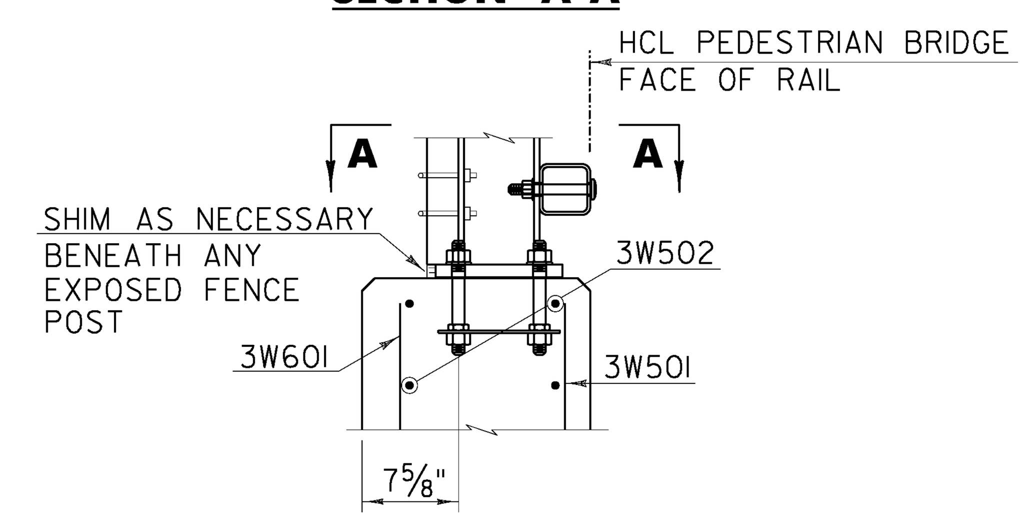
EXPANSION JOINT SECTION
FOR DETAILS NOT SHOWN, SEE "RAIL TUBE SPLICE SECTION."
SCALE: 3" = 1'-0"



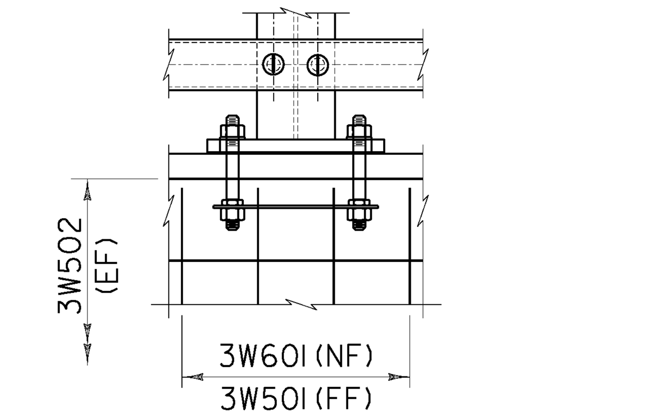
SECTION A–A



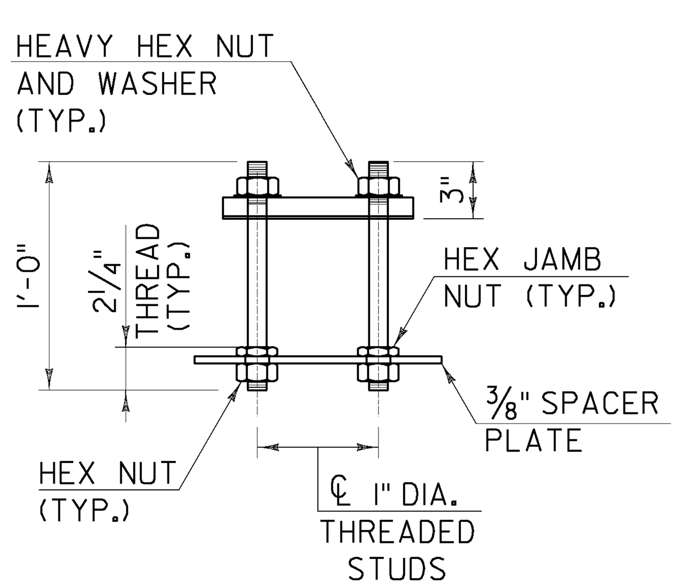
3/4" DIA. ROUND HEAD BOLT
(WITH WASHER AND PREVAILING TORQUE TYPE LOCK NUT) (SEE NOTE 7) ONLY FULL DIAMETER BODY BOLTS WILL BE ALLOWED.



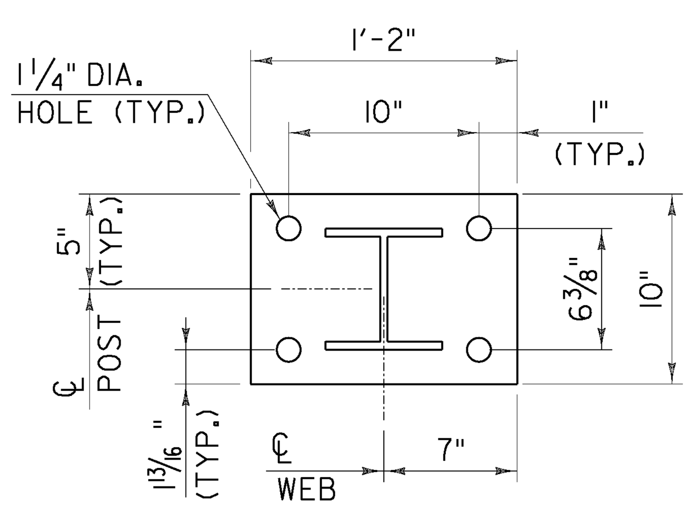
DETAIL 10
(WW 3 SHOWN, WW4 SIMILAR)
SCALE: 1" = 1'-0"



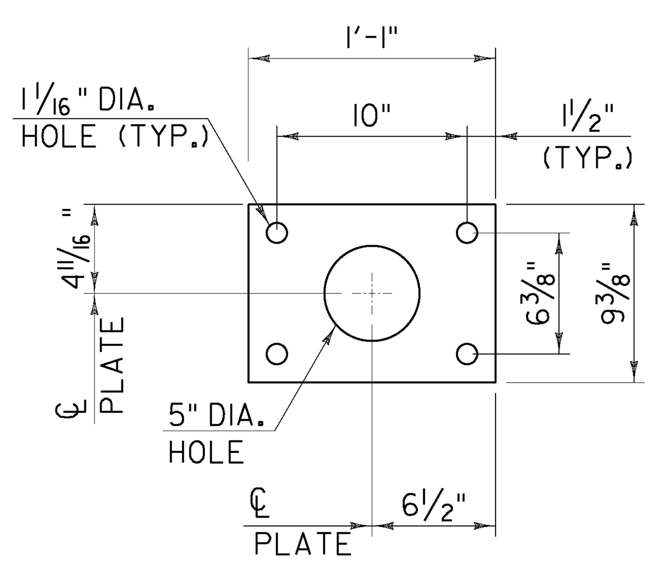
DETAIL 11
(WW 3 SHOWN, WW4 SIMILAR)
SCALE: 1" = 1'-0"



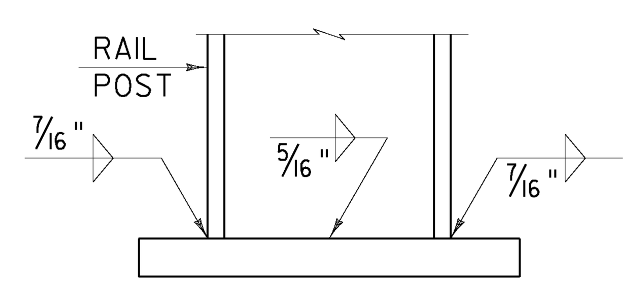
RAIL POST ANCHORAGE
SCALE: 1 1/2" = 1'-0"



POST AND BASE PLATE
SCALE: 1 1/2" = 1'-0"



SPACER PLATE
SCALE: 1 1/2" = 1'-0"

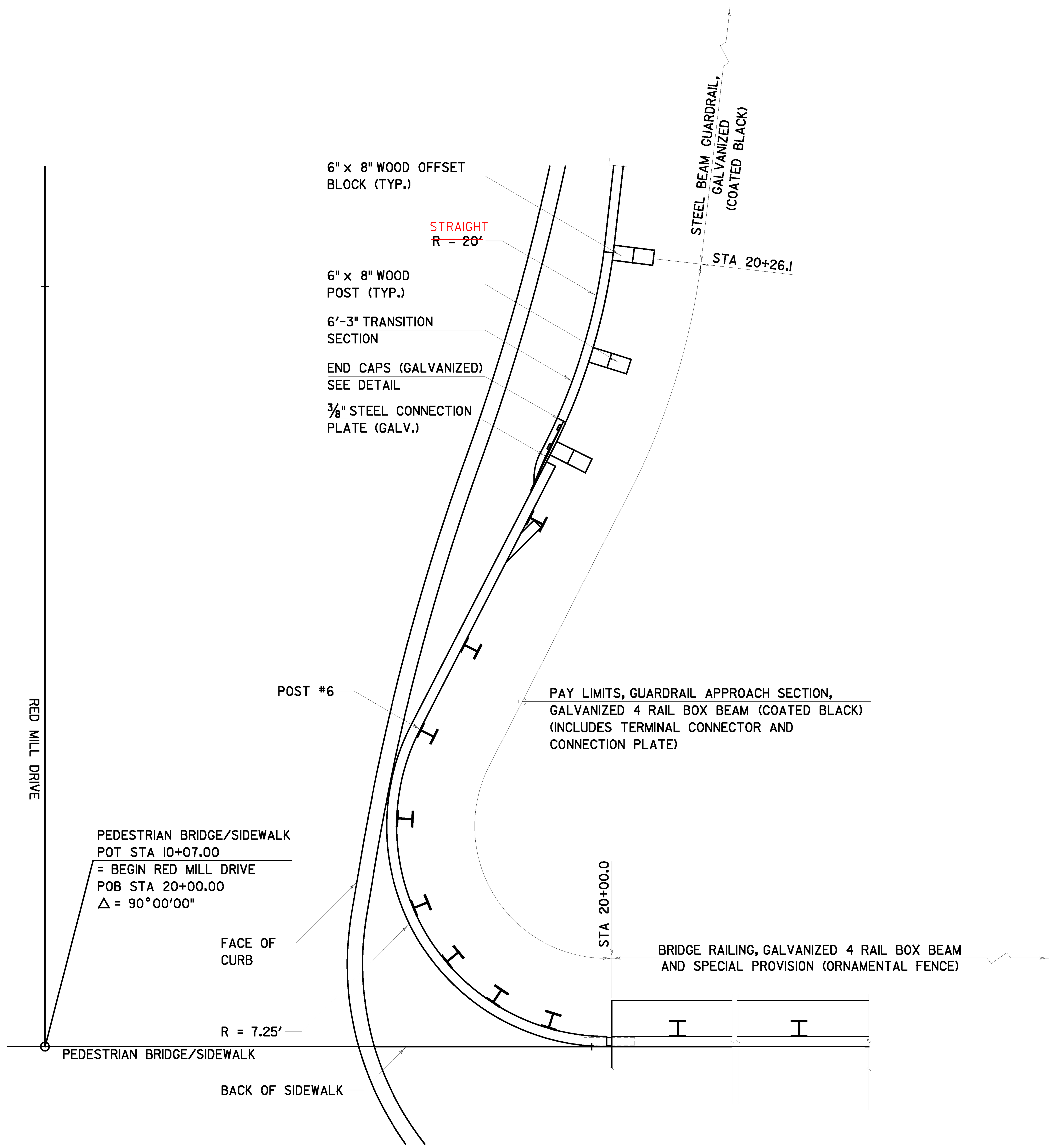


BASE WELD DETAIL
SCALE: 3" = 1'-0"

SCALE 3" = 1'-0"
SCALE 1/2" = 1'-0"
SCALE 1" = 1'-0"
SCALE 1 1/2" = 1'-0"

BRIDGE RAILING DETAILS	PROJECT NAME: JERICHO PROJECT NUMBER: STP FTBR (3)	
CHA	PROJECT LEADER: M.D.S. DESIGNED BY: D.M.D.	PLOT DATE: 5/2/2014 DRAWN BY: D.M.D. CHECKED BY: P.M.P. SHEET 40 OF 62

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\28F004 Contract Documents & Current CADD files\Consultants\28F004bridgerail.dgn
DATE/TIME = 5/2/2014
USER = 4161



PLAN VIEW – GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM

STA 20+00.0 - STA 20+26.1

NOTES

1. SEE SHEET 42 FOR ELEVATION VIEW, ALL DIMENSIONS SHALL BE MEASURED ALONG THE FACE OF RAIL. SEE SHEETS 40, 42 AND 43 FOR ADDITIONAL DETAILS, NOTES, AND SPECIFICATIONS.
2. PAYMENT FOR GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM (COATED BLACK) SHALL INCLUDE THE TERMINAL CONNECTOR, THE CONNECTION PLATE, RAIL, POSTS, BLOCKS AND ATTACHMENT HARDWARE.
3. ALL APPROACH RAIL SPLICES SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW.
4. ALL BRIDGE APPROACH RAIL MATERIALS, DIMENSION SIZES AND NOTES SHALL BE THE SAME AS THOSE OF THE BRIDGE RAIL, UNLESS OTHERWISE NOTED.
5. CARRIAGE BOLTS SHALL BE AASHTO M164 AND NUTS SHALL BE ASTM A563 GRADE A OR BETTER (GALVANIZED).
6. WELD SPLICE BARS TO FIT BEND. USE COMPLETE PENETRATION WELD (B-U2).
7. FROM THE END SPLICE AT THE LIMITS OF BRIDGE RAIL TO POST #6, THE RAILS SHALL BE SHOP BENT TO A RADIUS OF 7.25'.
8. ~~THE 6'-3" TRANSITION SECTION SHALL BE FIELD BENT TO A RADIUS OF 20'.~~
9. SEE THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS FOR ORNAMENTAL FENCE.

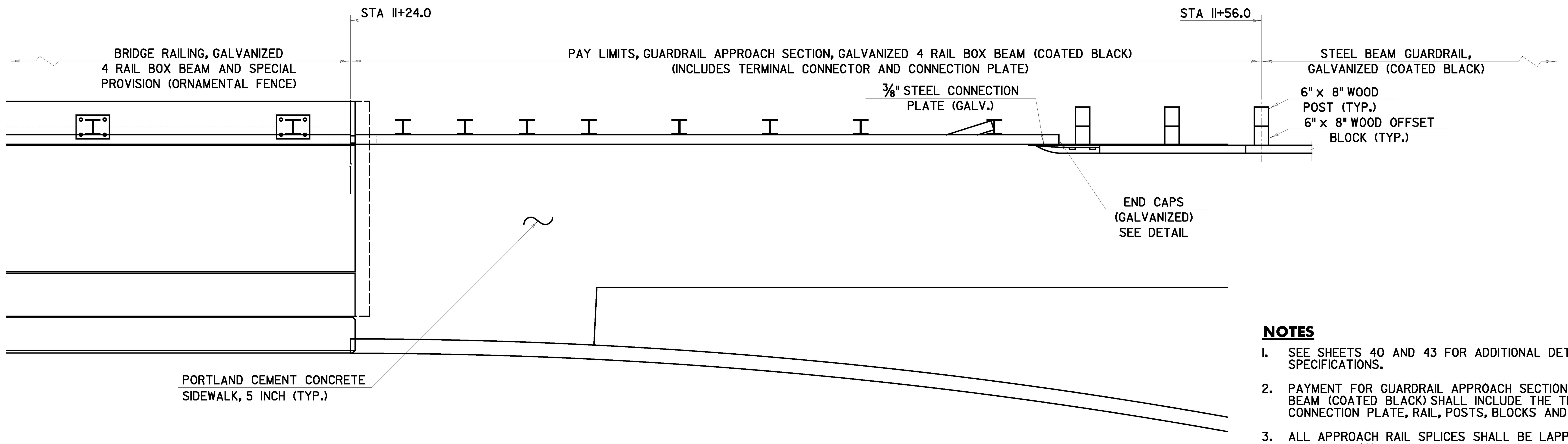
SCALE 1/2" = 1'-0"
1 0 1 2

CHA

GUARDRAIL APPROACH SECTION DETAILS #1

PROJECT NAME: JERICHO	
PROJECT NUMBER: STP FTBR (3)	
PROJECT LEADER: M.D.S.	PLOT DATE: 4/7/2014
DESIGNED BY: C.R.H.	DRAWN BY: C.R.H.
DWG. NO.: GRAPP-1	CHECKED BY: D.E.G.
	SHEET 41 OF 62

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\z08f004details15.dgn
DATE/TIME = 4/7/2014
USER = 4916

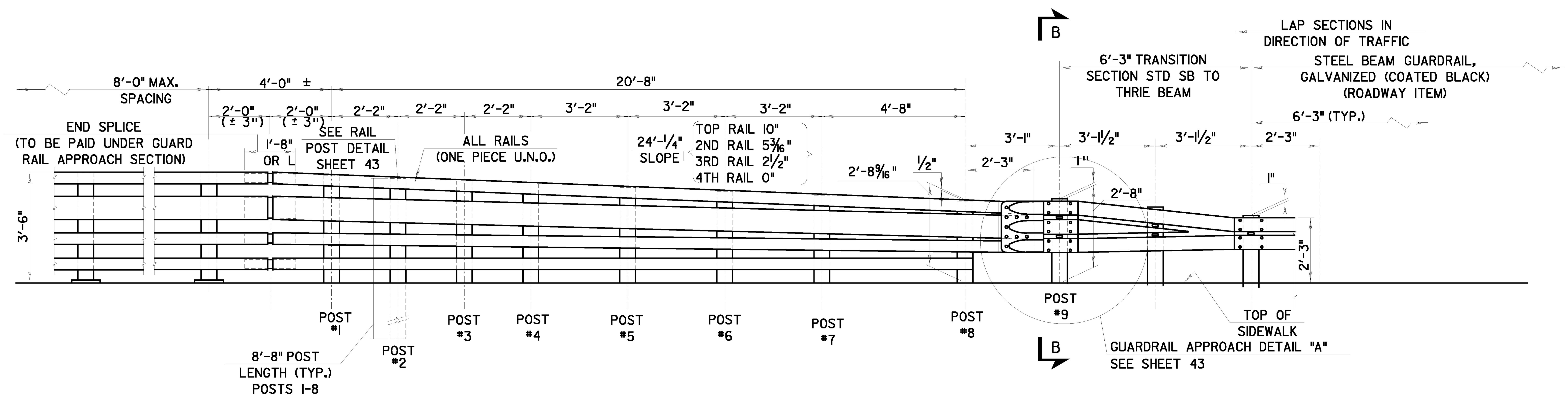


PLAN VIEW - GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM (COATED BLACK)

STA 11+24.0 - STA 11+56.0

NOTES

1. SEE SHEETS 40 AND 43 FOR ADDITIONAL DETAILS, NOTES, AND SPECIFICATIONS.
2. PAYMENT FOR GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM (COATED BLACK) SHALL INCLUDE THE TERMINAL CONNECTOR, THE CONNECTION PLATE, RAIL, POSTS, BLOCKS AND ATTACHMENT HARDWARE.
3. ALL APPROACH RAIL SPLICES SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW.
4. ALL BRIDGE APPROACH RAIL MATERIALS, DIMENSION SIZES AND NOTES SHALL BE THE SAME AS THOSE OF THE BRIDGE RAIL, UNLESS OTHERWISE NOTED.
5. CARRIAGE BOLTS SHALL BE AASHTO M164 AND NUTS SHALL BE ASTM A563 GRADE A OR BETTER (GALVANIZED).
6. WELD SPLICE BARS TO FIT BEND. USE COMPLETE PENETRATION WELD (B-U2).
7. SEE SHEET 43 FOR SECTION B-B.



TYPICAL ELEVATION -
GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM (COATED BLACK)

SCALE 1/2" = 1'-0"
0 1 2

CHA

GUARDRAIL APPROACH SECTION DETAILS #2

PROJECT NAME: JERICHO	
PROJECT NUMBER: STP FTBR (3)	
PROJECT LEADER: M.D.S.	PLOT DATE: 4/7/2014
DESIGNED BY: C.R.H.	DRAWN BY: C.R.H.
DWG. NO.: GRAPP-2	CHECKED BY: D.E.G.
	SHEET 42 OF 62

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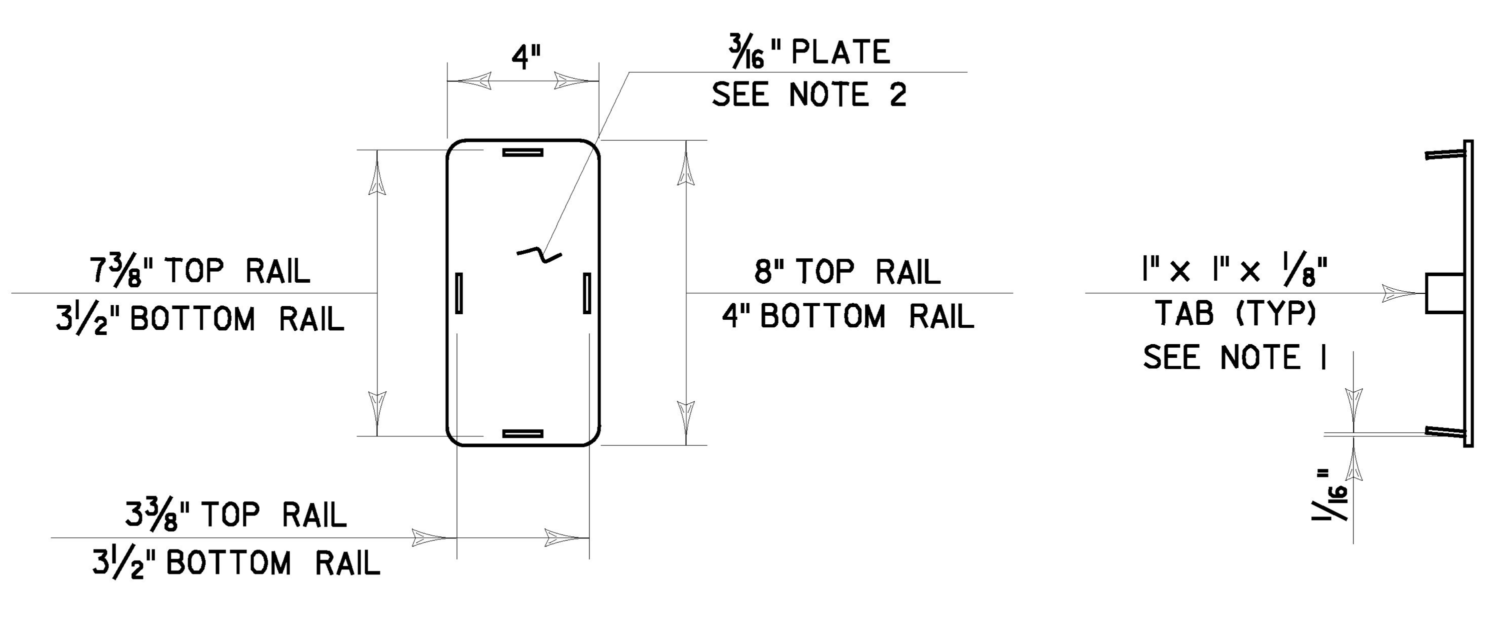
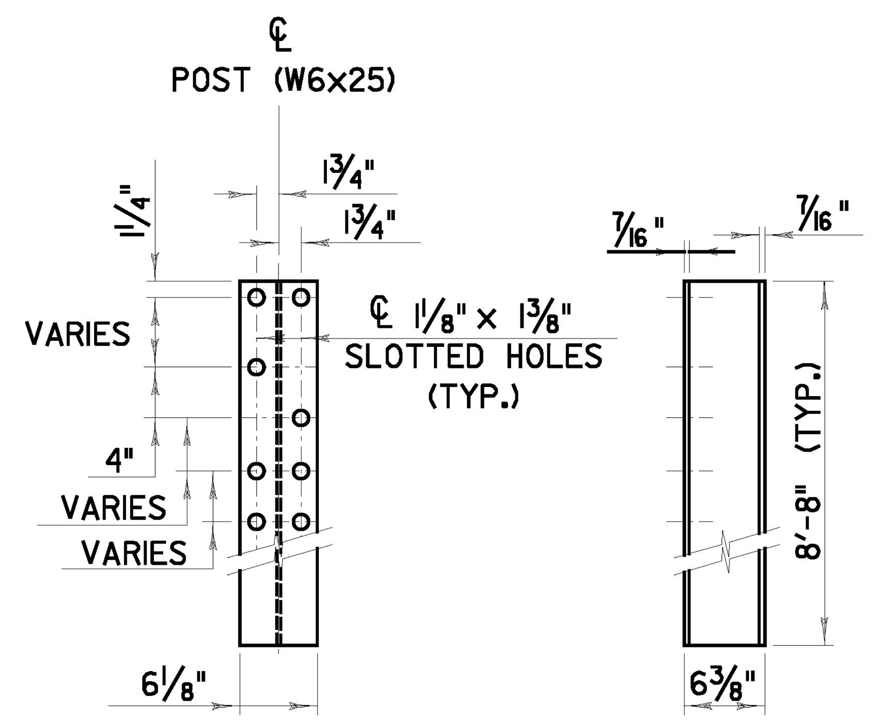
DATE/TIME = 4/7/2014
USER = 4916



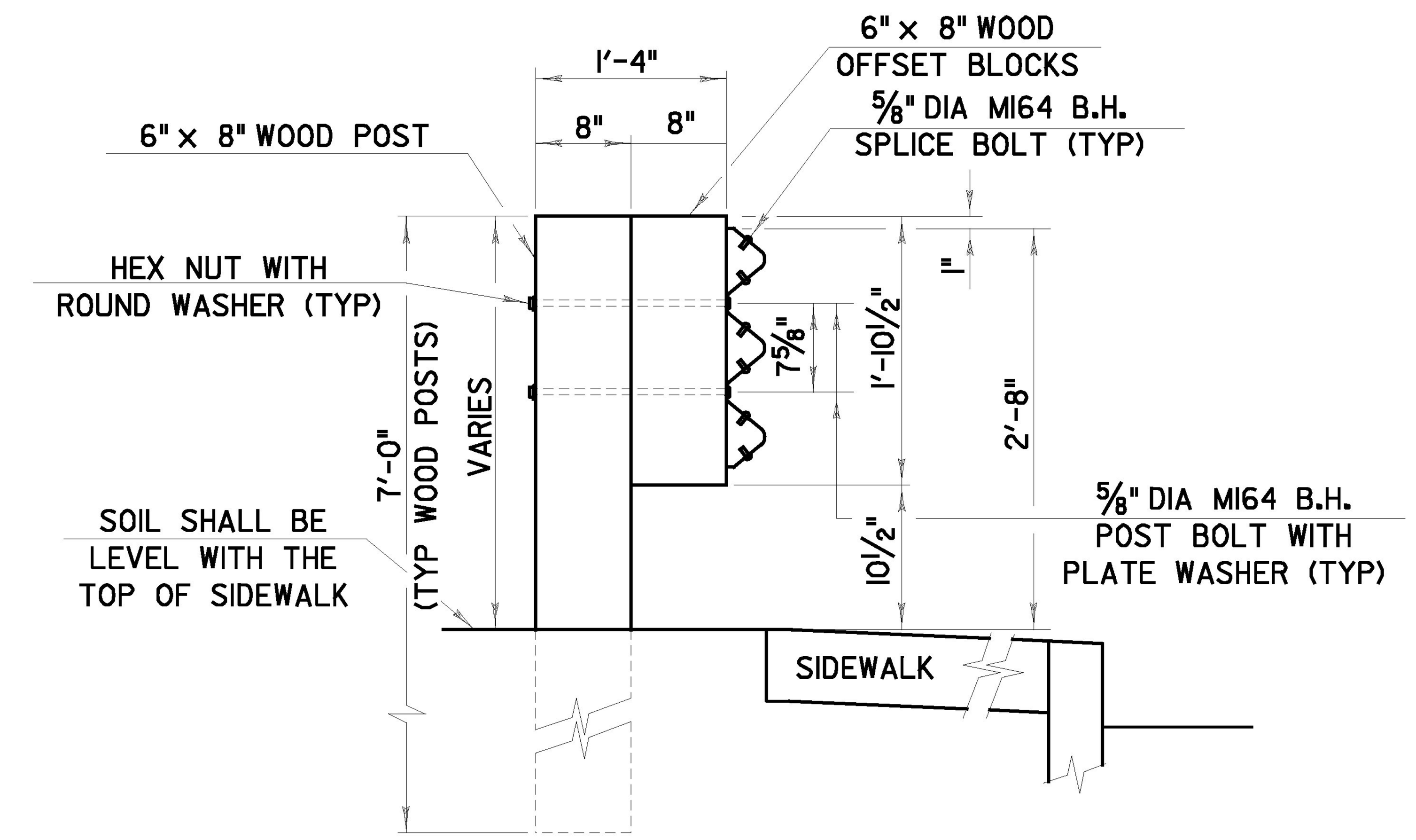
END CAP DETAIL

END CAP NOTES

1. WELD TABS TO END CAP PLATE IN TAPERED POSITION SO CAP CAN BE JAMMED INTO END OF RAIL TUBE.
2. ROUND CORNERS 1/2" RADIUS (TYP)

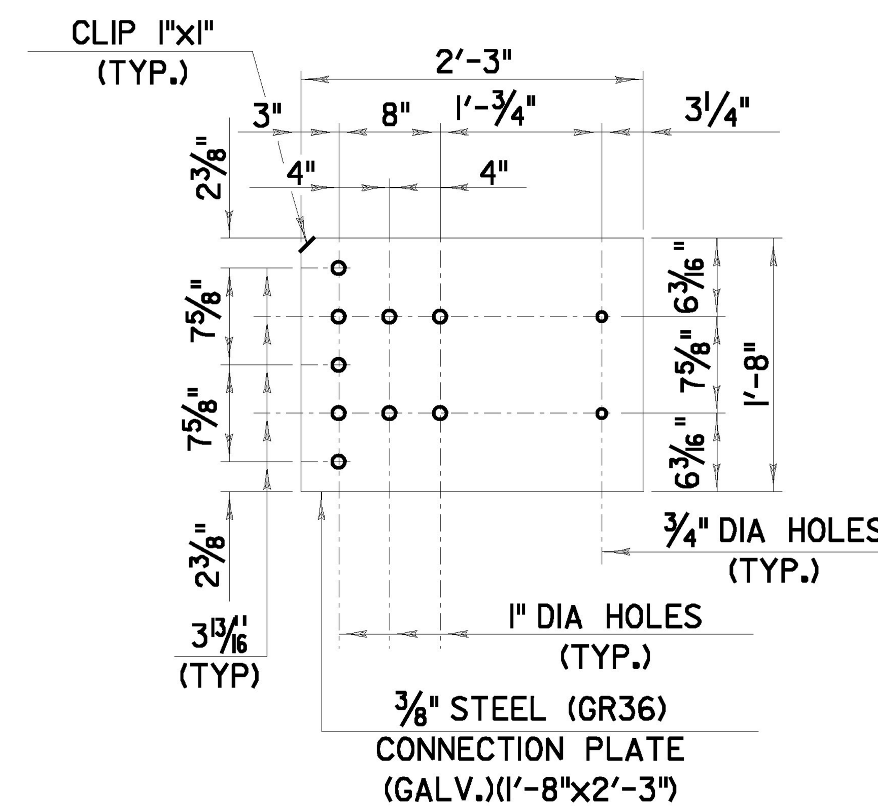


RAIL POST

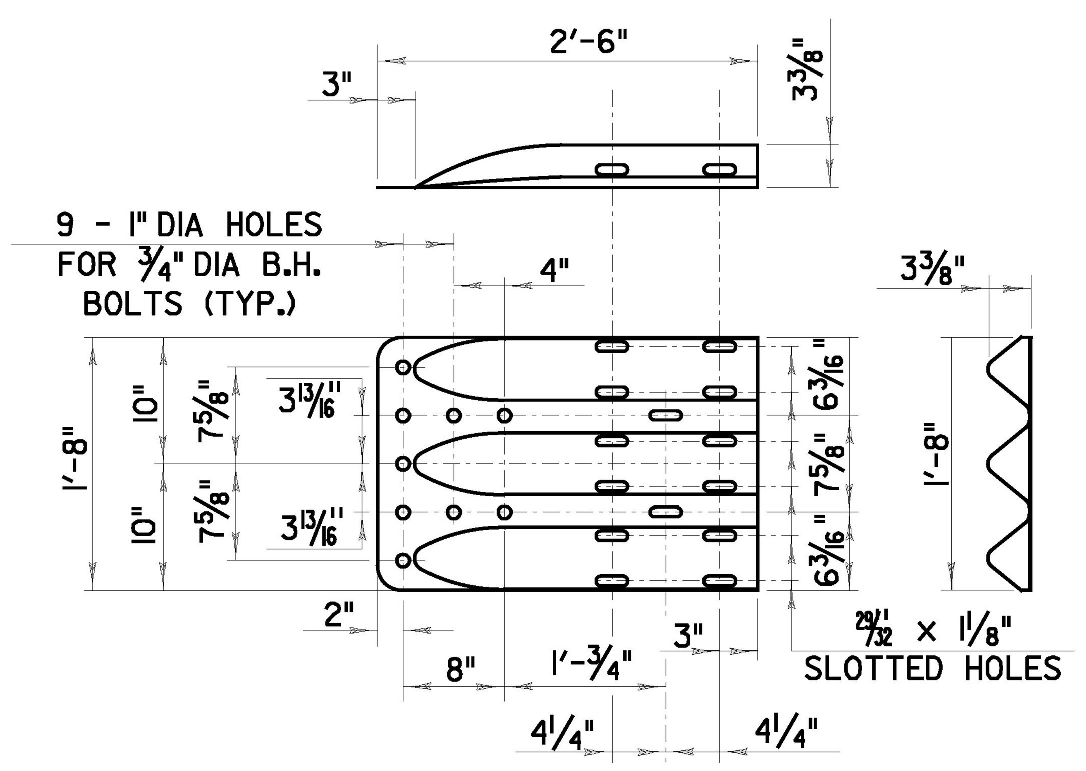


SECTION B–B (POST RAIL ASSEMBLY)

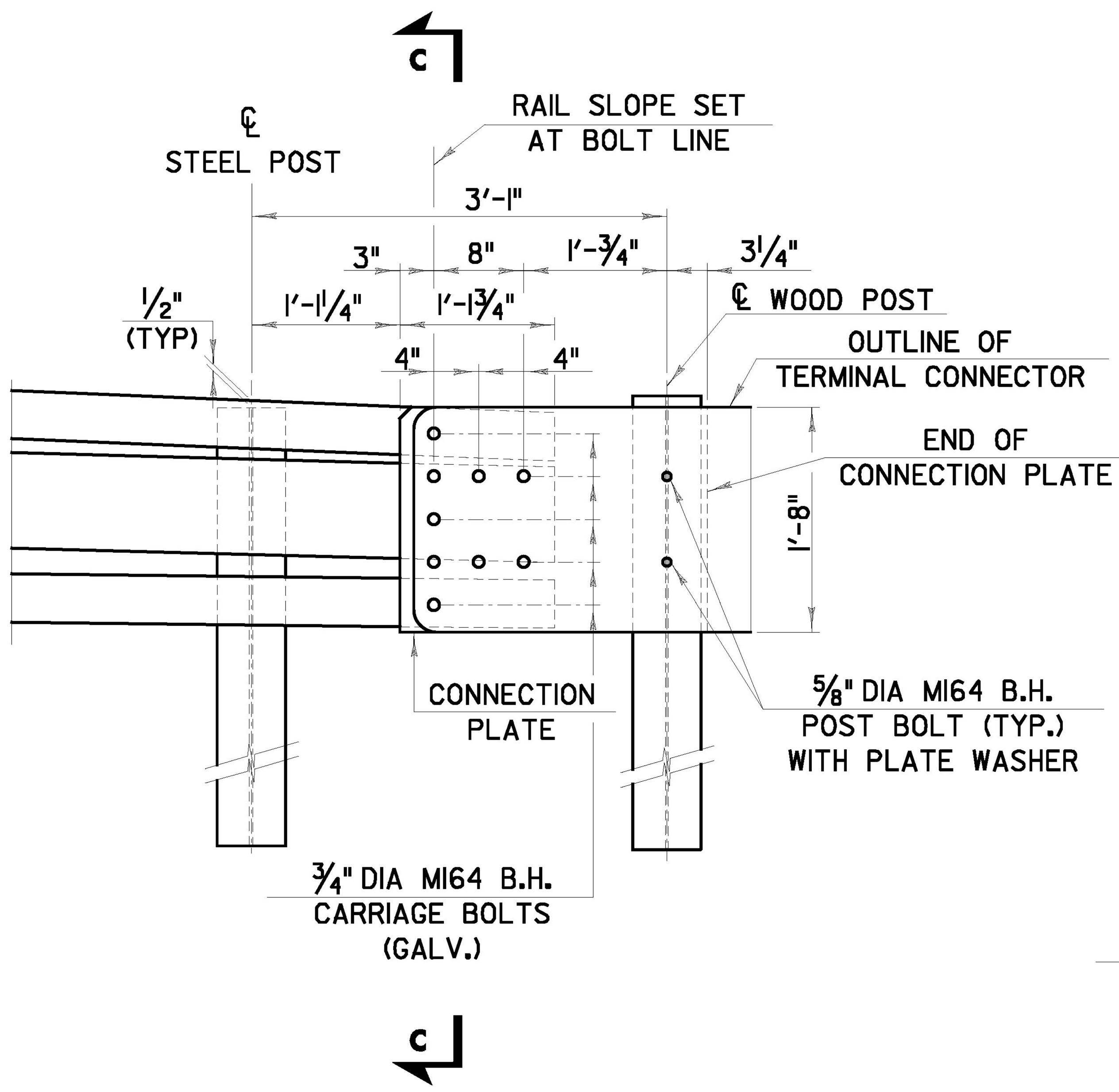
SEE SHEET 42 FOR SECTION B-B LOCATION



CONNECTION PLATE

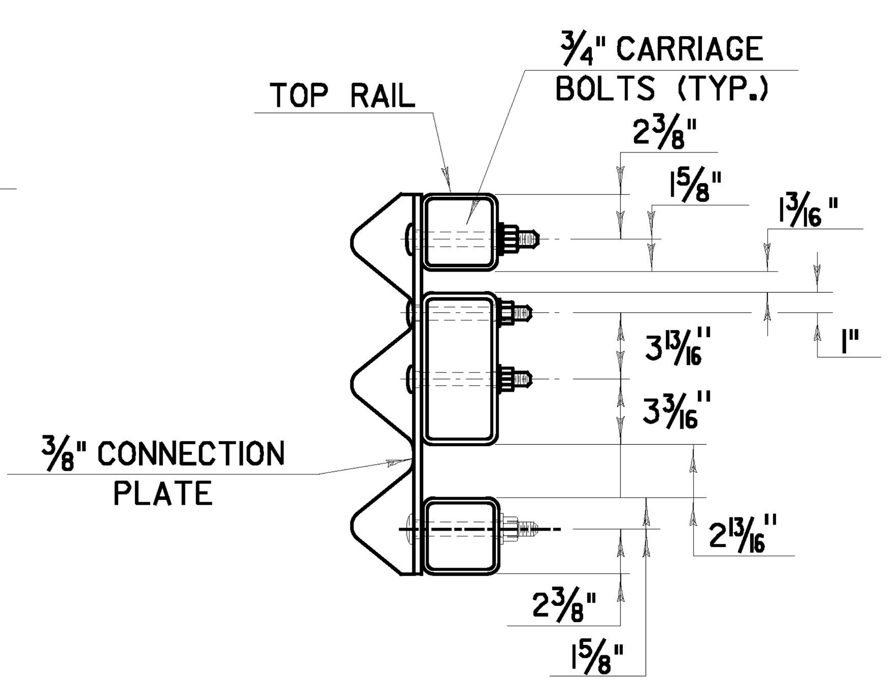


THRIE-BEAM TERMINAL CONNECTOR

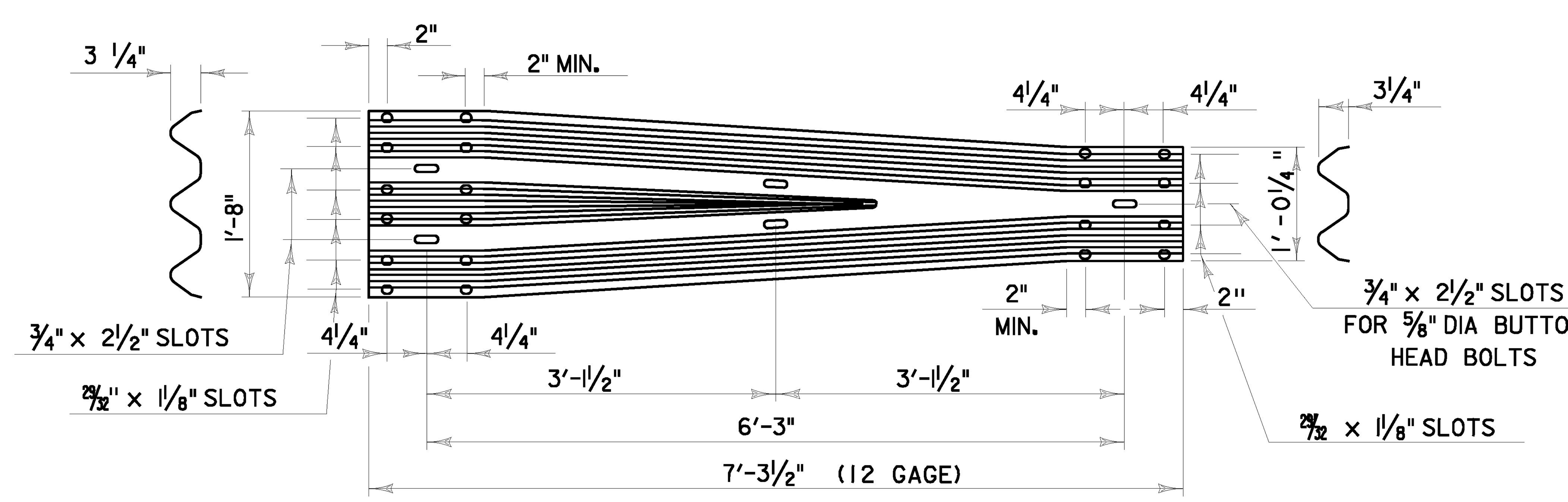


GUARDRAIL APPROACH DETAIL A

SEE SHEET 42 FOR GUARDRAIL APPROACH DETAIL A LOCATION



SECTION C–C (CONNECTION PLATE)

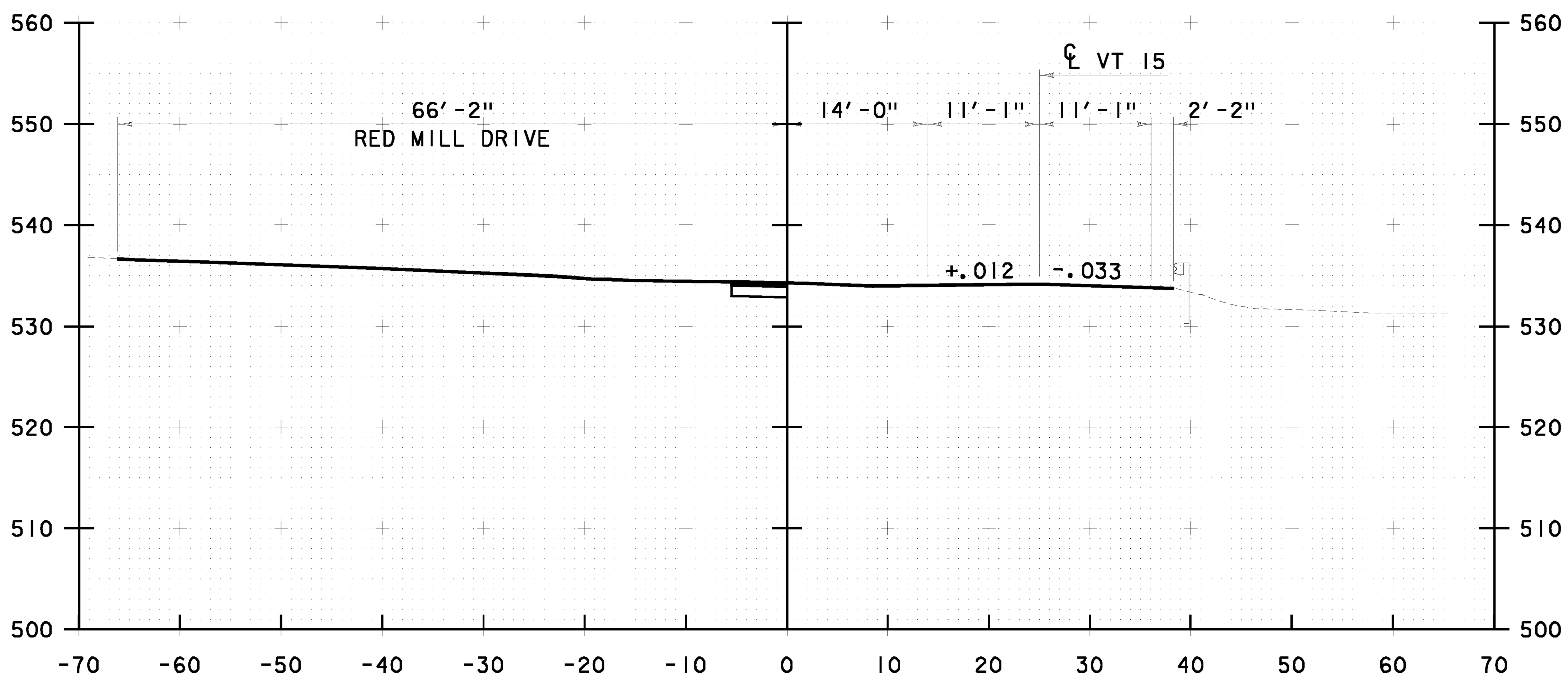


THRIE-BEAM TO STD SB TRANSITION SECTION

NOT TO SCALE

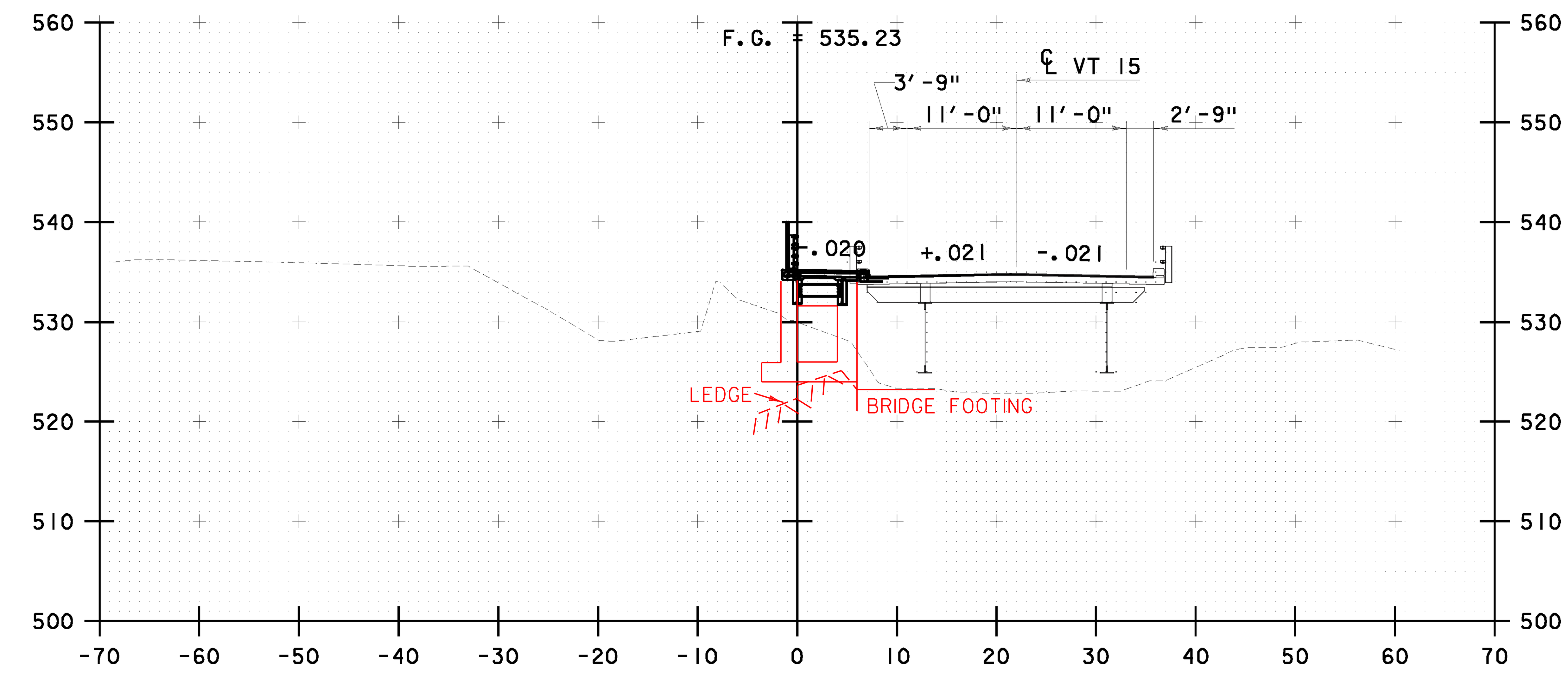
CHA

GUARDRAIL APPROACH SECTION DETAILS #3	PROJECT NAME: JERICHO	
	PROJECT NUMBER: STP FTBR (3)	
	PROJECT LEADER: M.D.S.	PLOT DATE: 4/7/2014
	DESIGNED BY: C.R.H.	DRAWN BY: C.R.H.
	DWG. NO.: GRAPP-3	CHECKED BY: D.E.G.
		SHEET 43 OF 62



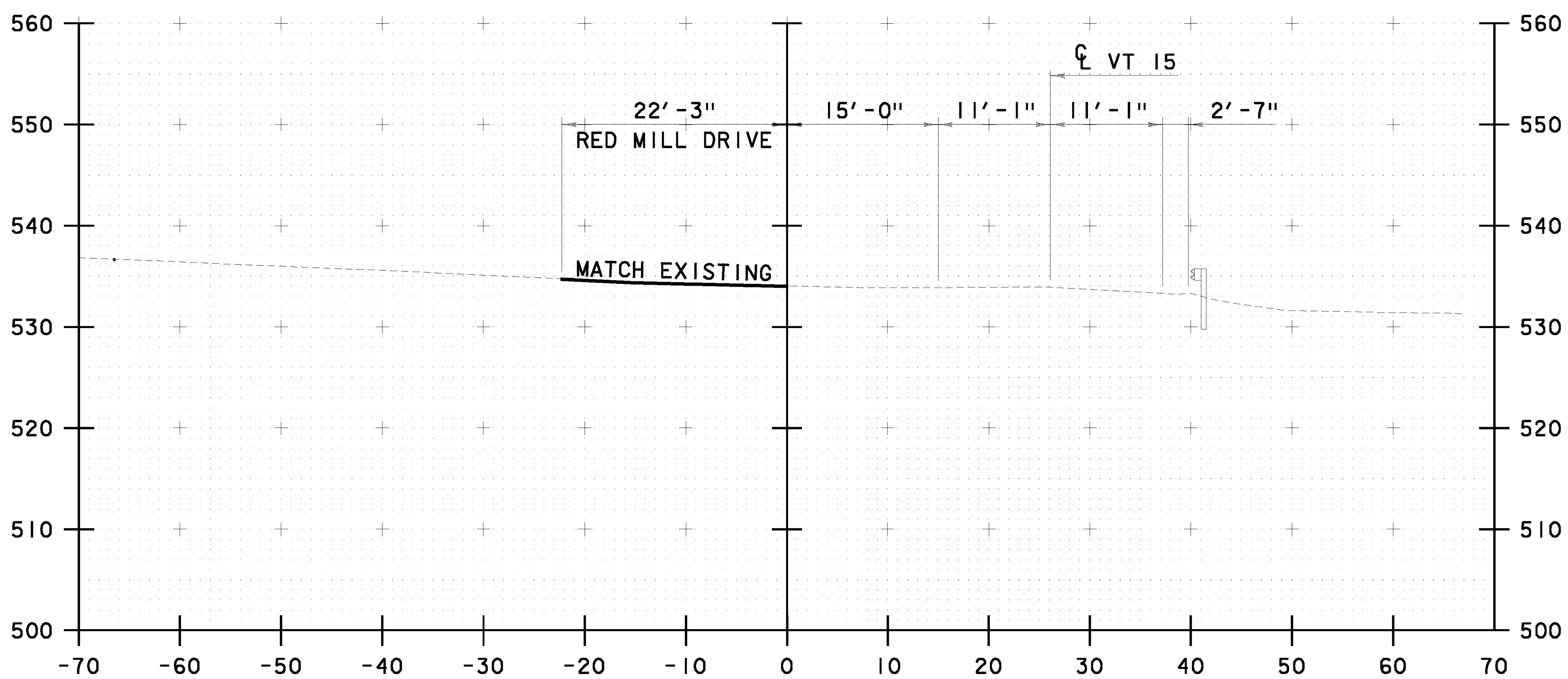
10+15.30

BEGIN PROJECT 10+15.30



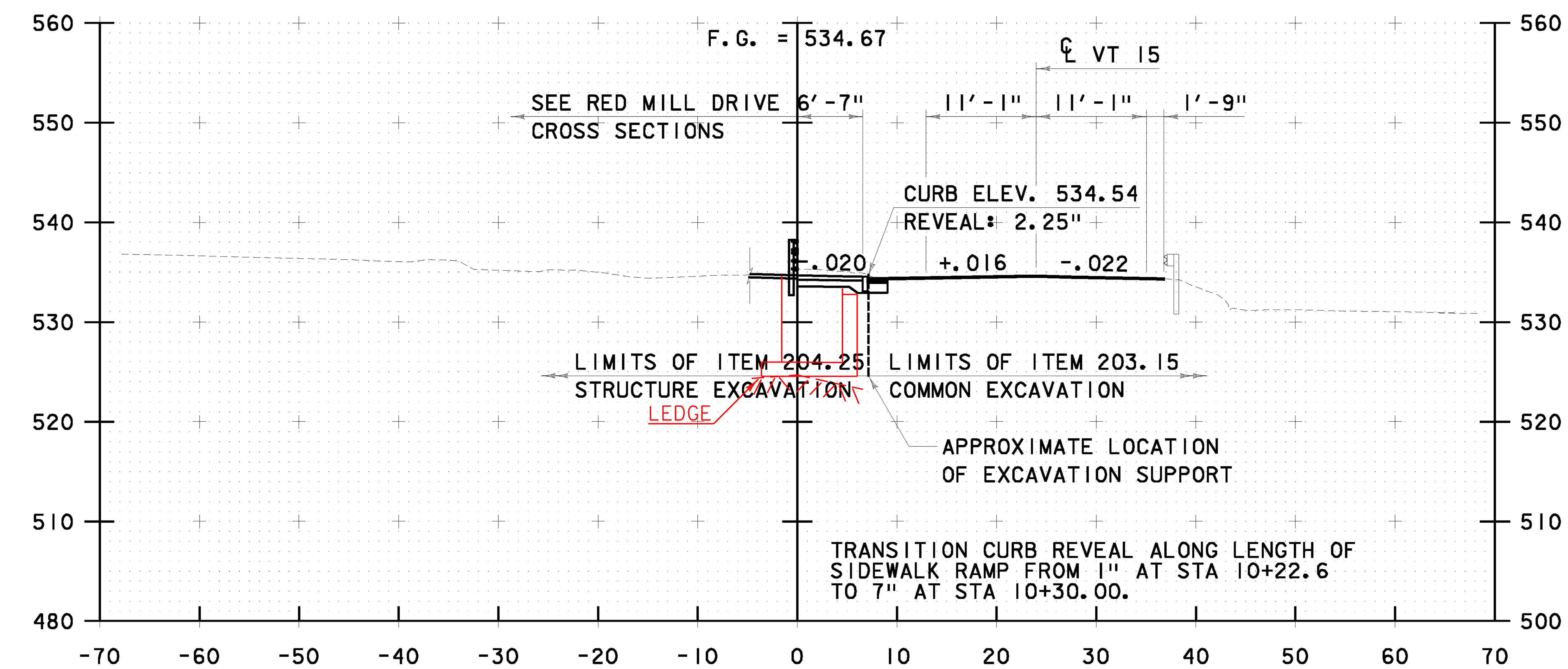
10+34

BEGIN BRIDGE 10+34.00



10+07

BEGIN APPROACH 10+07.00



10+25

STA 10+07 TO STA 10+34

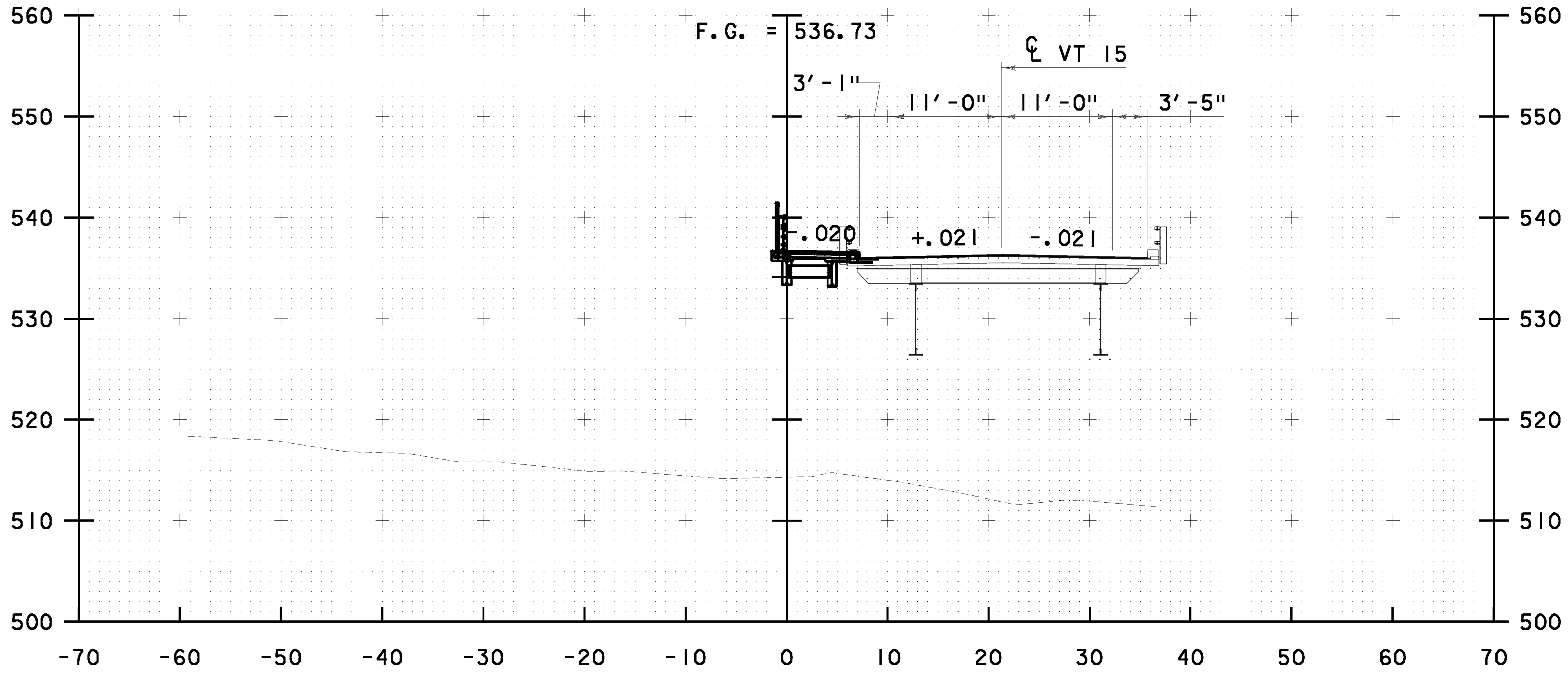
SCALE 1" = 10'-0"

10 0 10

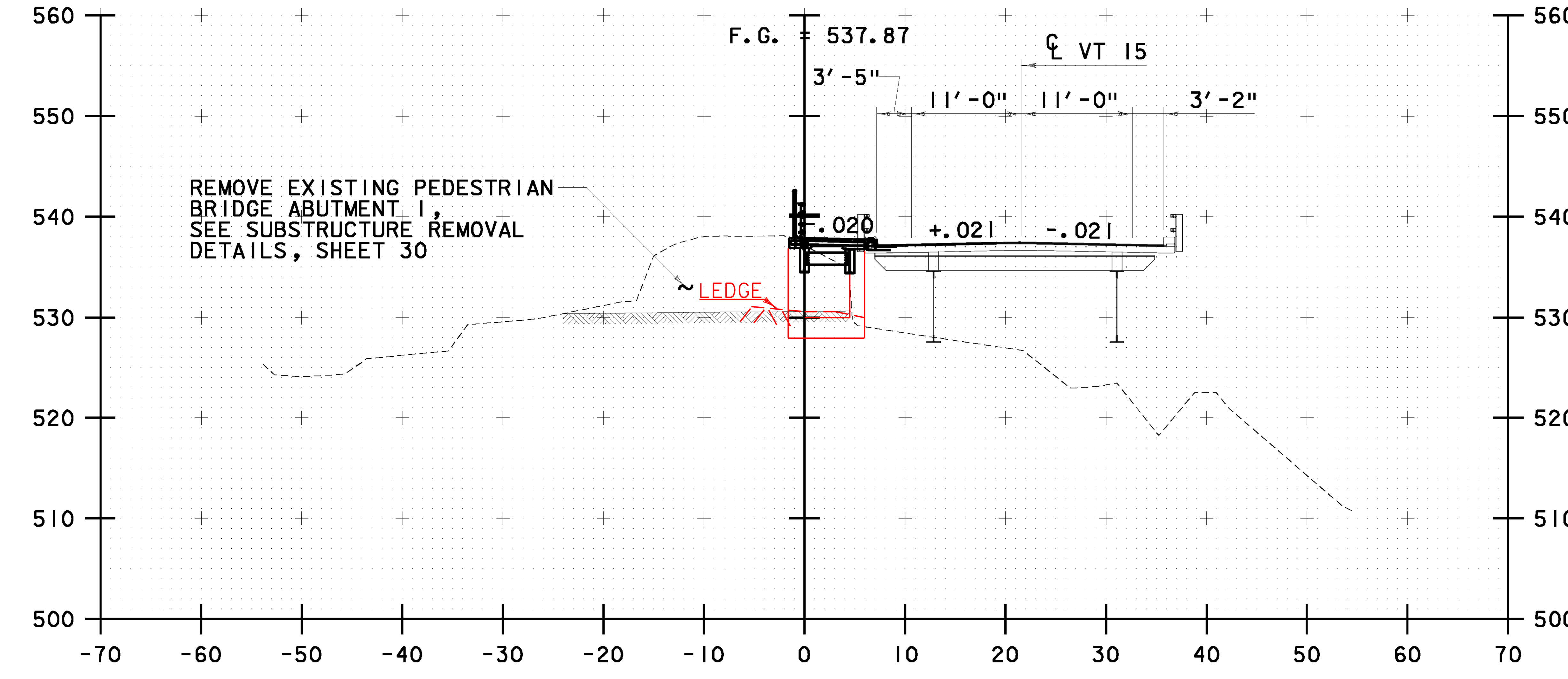
CHA

PEDESTRIAN BRIDGE/ SIDEWALK CROSS SECTIONS #1

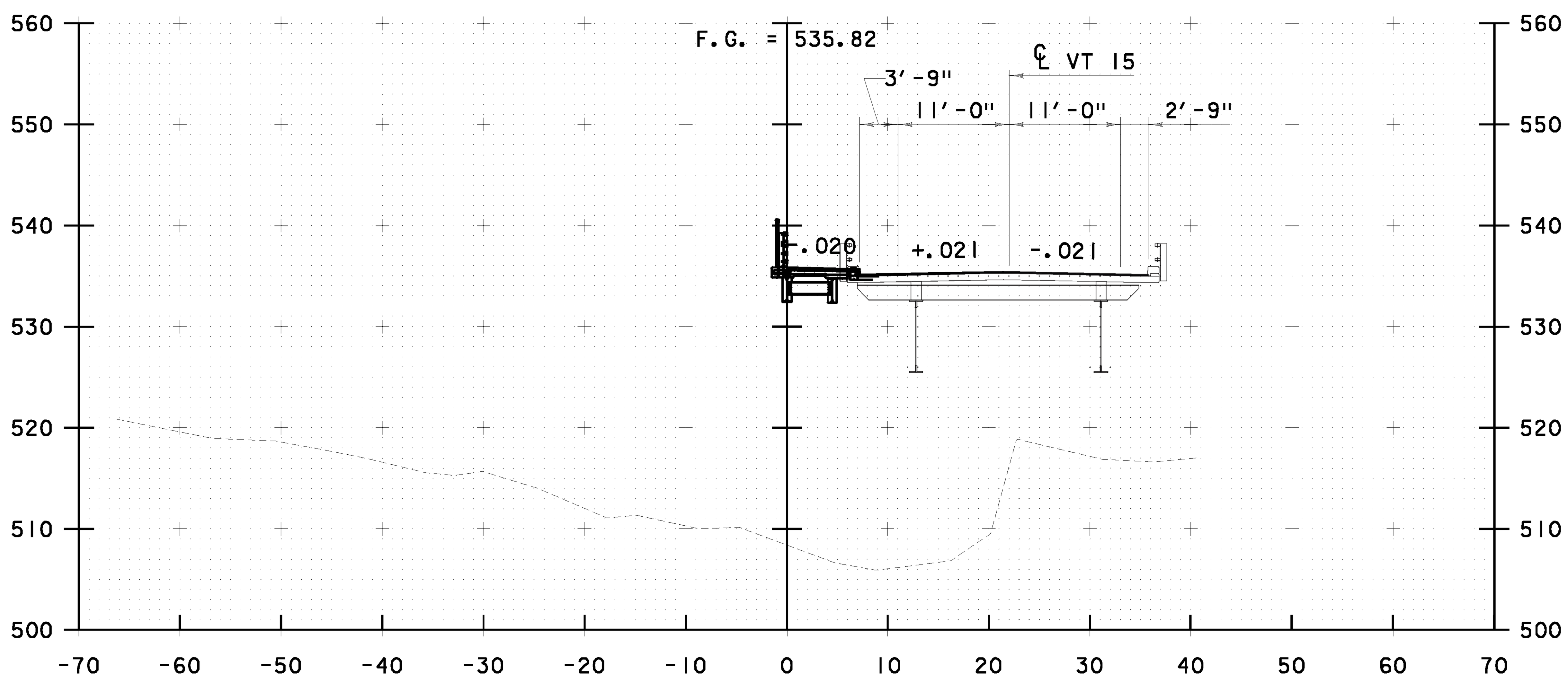
PROJECT NAME: JERICHO	
PROJECT NUMBER: STP FTBR (3)	
PROJECT LEADER: M.D.S.	PLOT DATE: 4/7/2014
DESIGNED BY: C.R.H.	DRAWN BY: C.R.H.
DWG. NO.: PBXS-1	CHECKED BY: D.E.G.
	SHEET 44 OF 62



10+75



11+06
END BRIDGE 11+06.00



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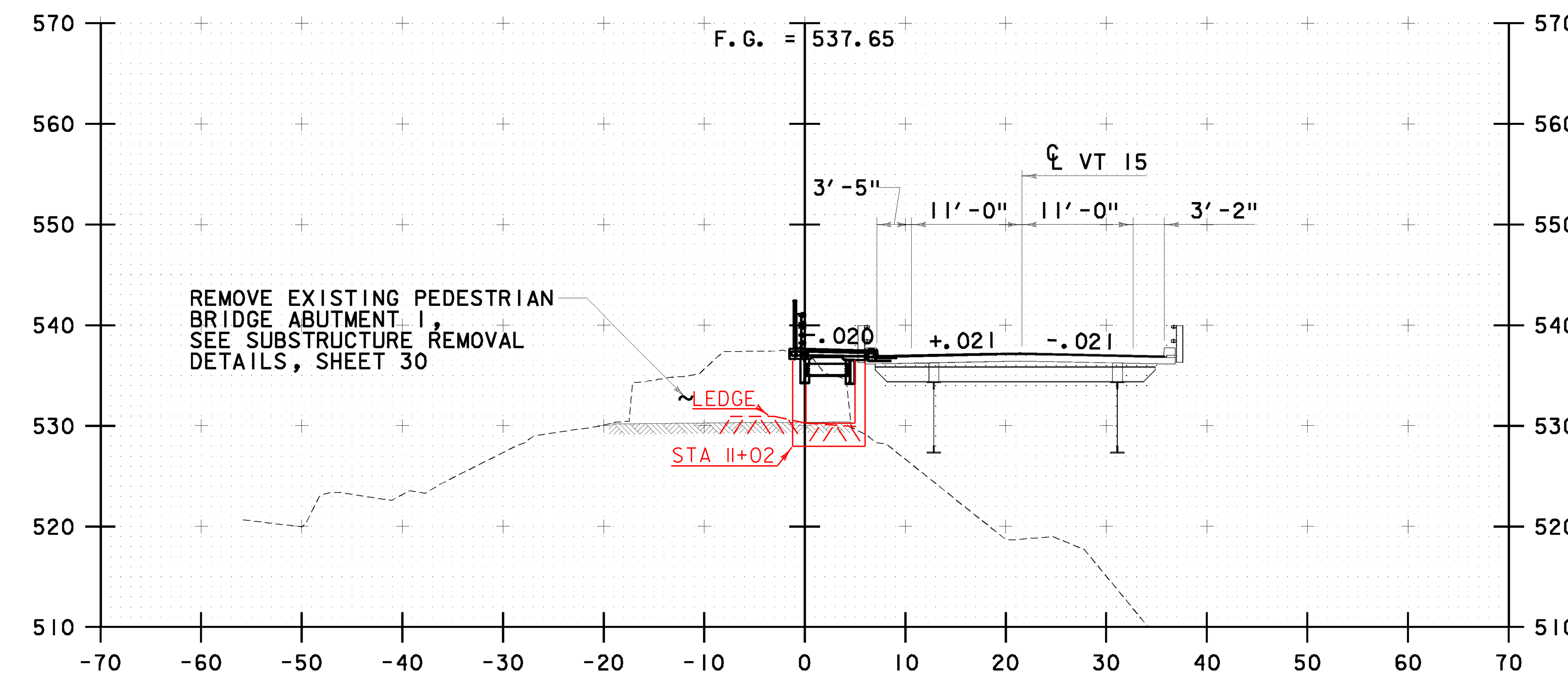


11+00

STA 10+50 TO STA 11+06

SCALE 1" = 10'-0"
10 0 10

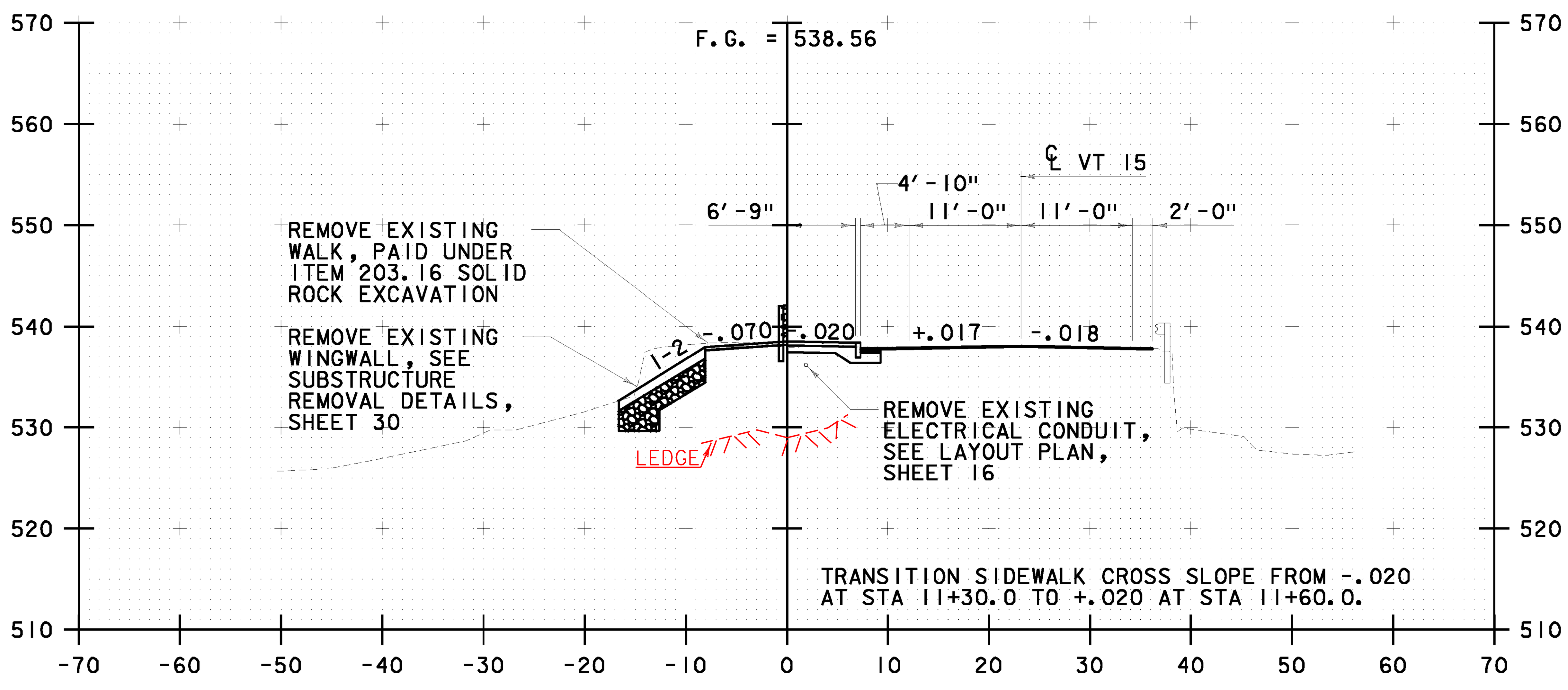
CHA

PEDESTRIAN BRIDGE/ SIDEWALK CROSS SECTIONS #2

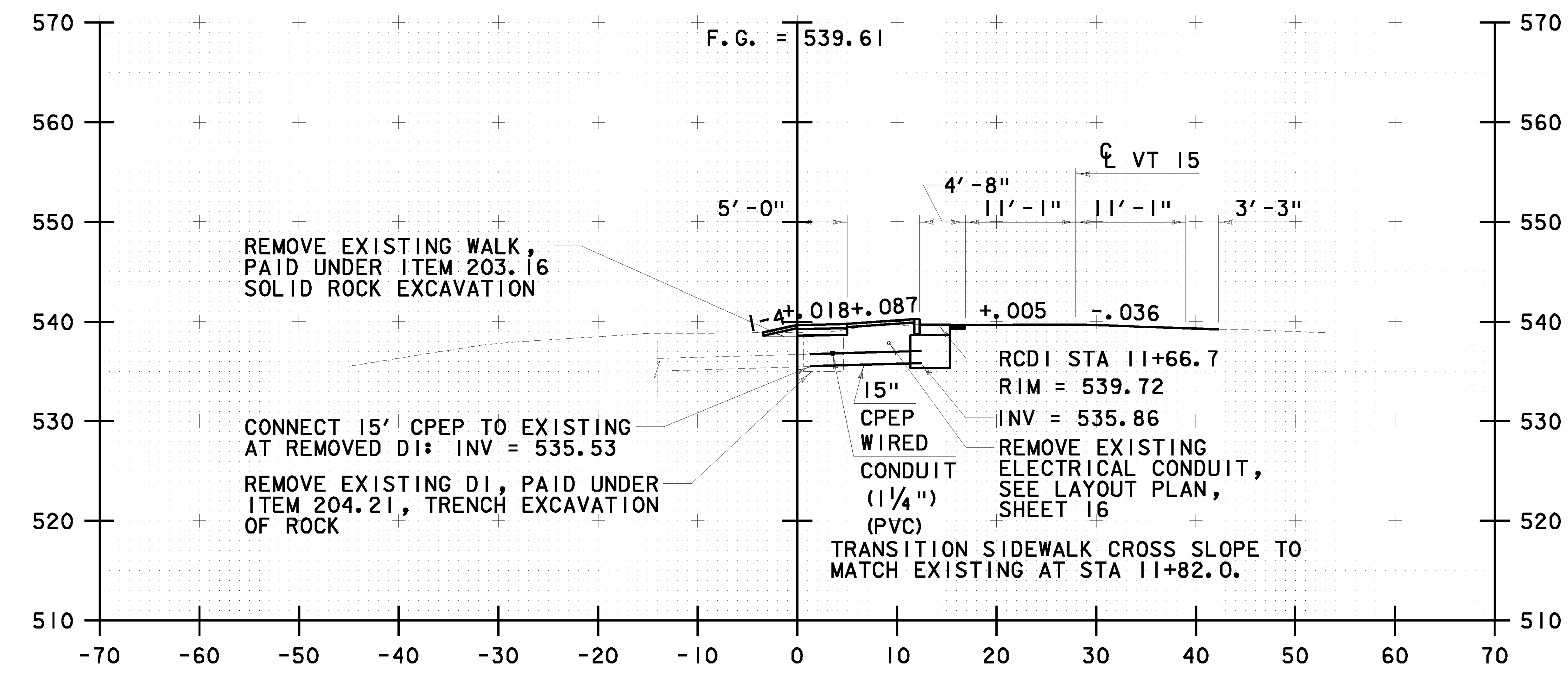
PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: PBXS-2

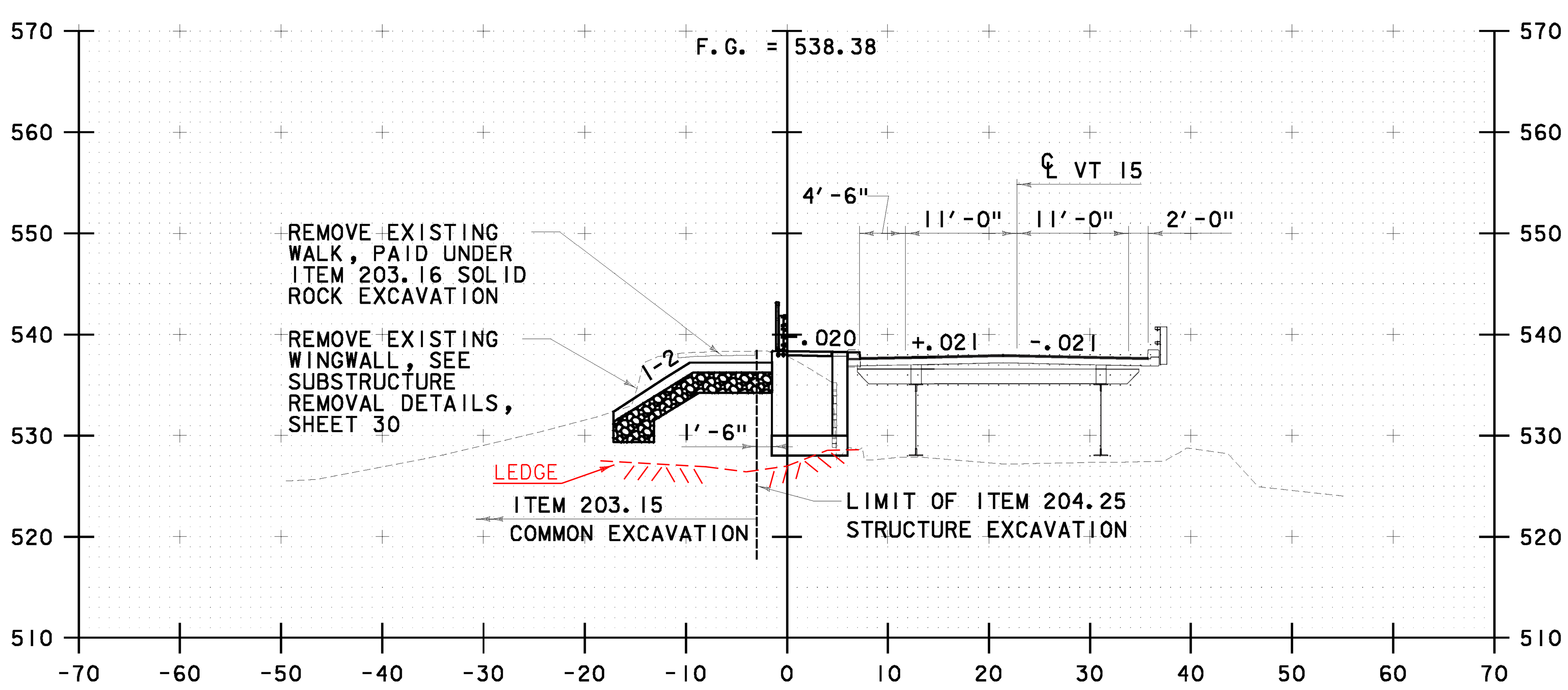
PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 45 OF 62



11+25



11+66.70



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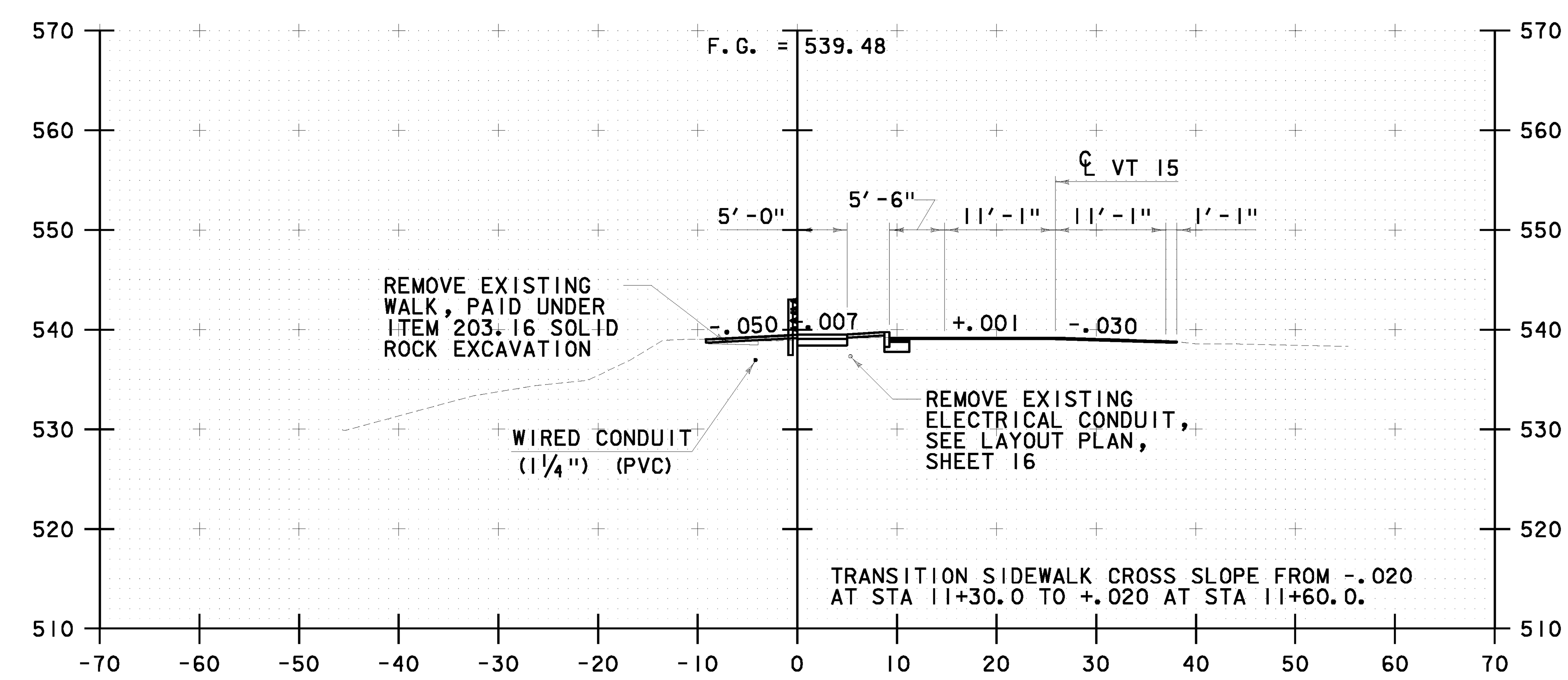


11+50

STA 11+20 TO STA 11+66.70

SCALE 1" = 10'-0"

10 0 10

CHA

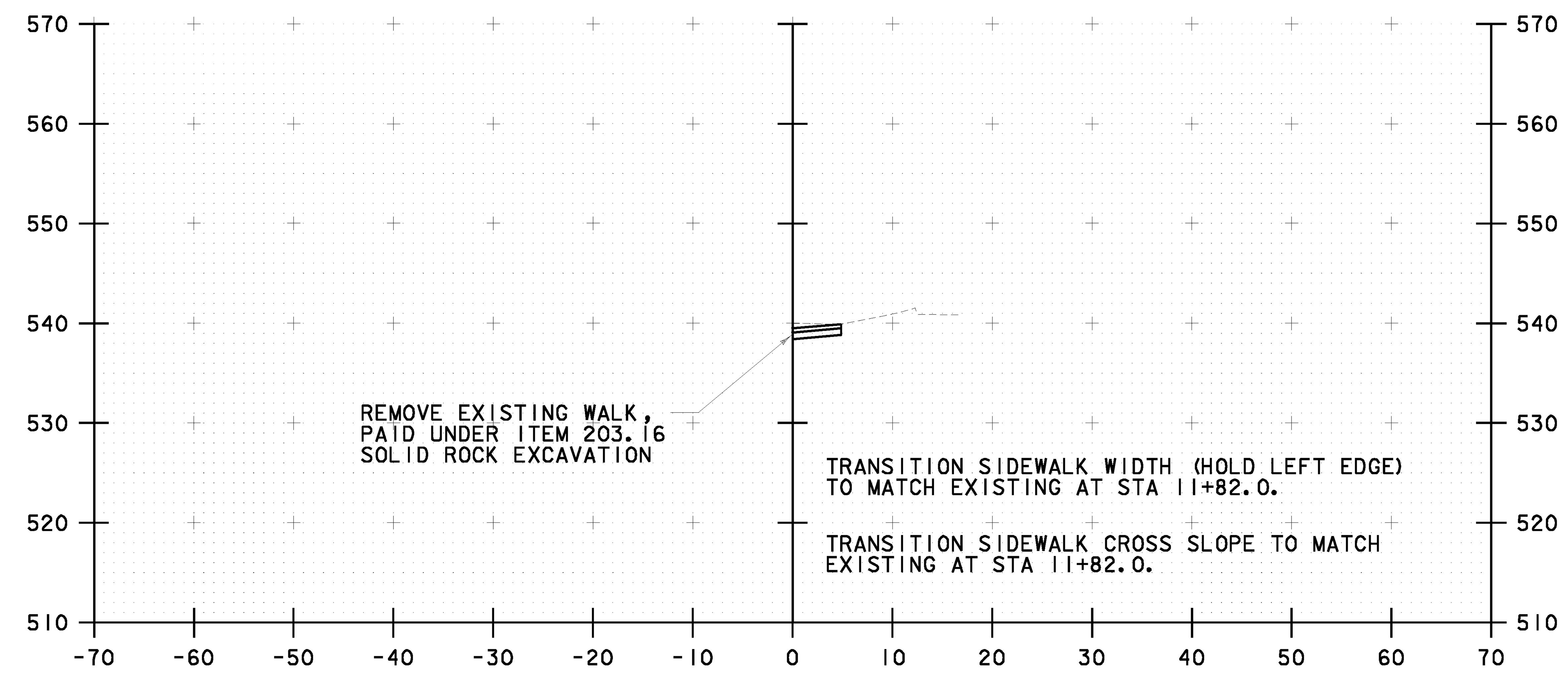
PEDESTRIAN BRIDGE/ SIDEWALK CROSS SECTIONS #3

PROJECT NAME: JERICHO

PROJECT NUMBER: STP FTBR (3)

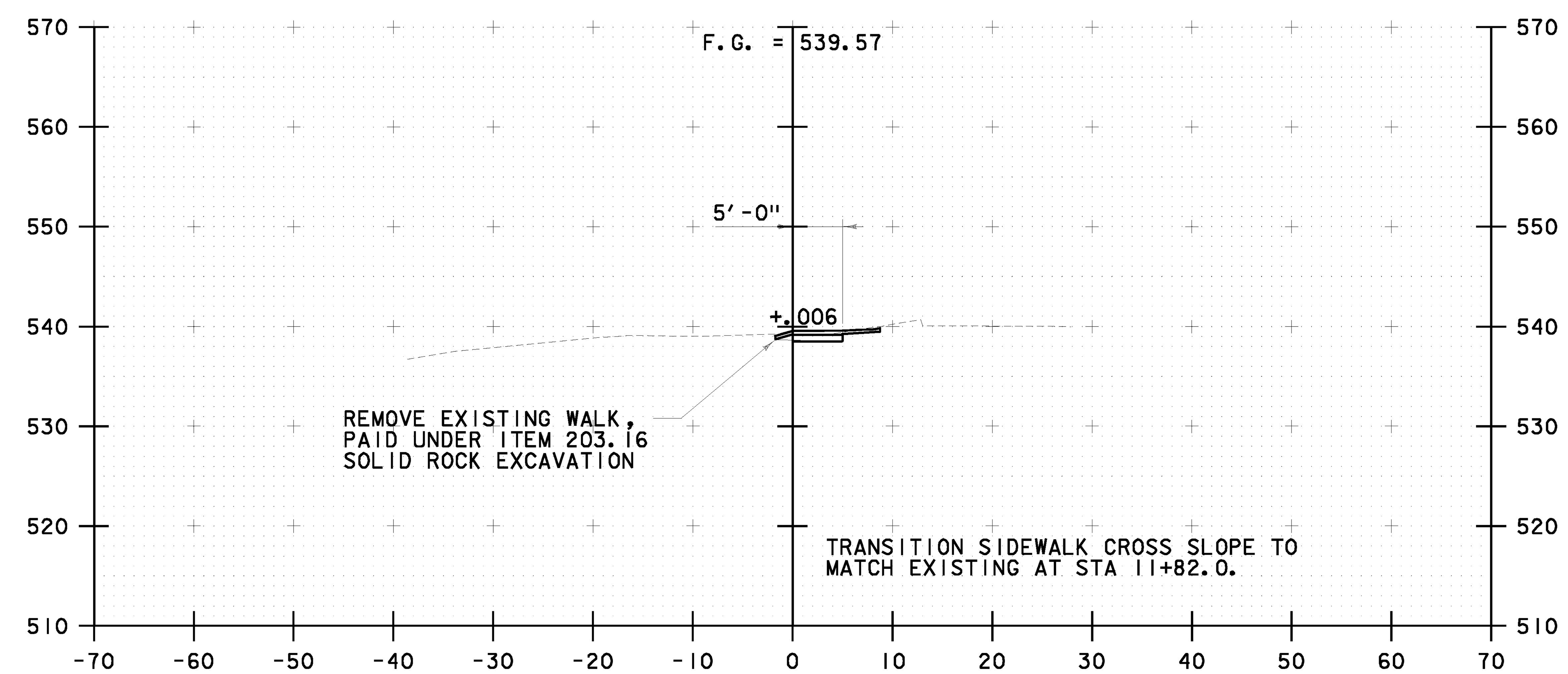
PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: PBXS-3

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 46 OF 62



11+82

END PROJECT STA 11+82.00



11+75

END APPROACH STA 11+73.00

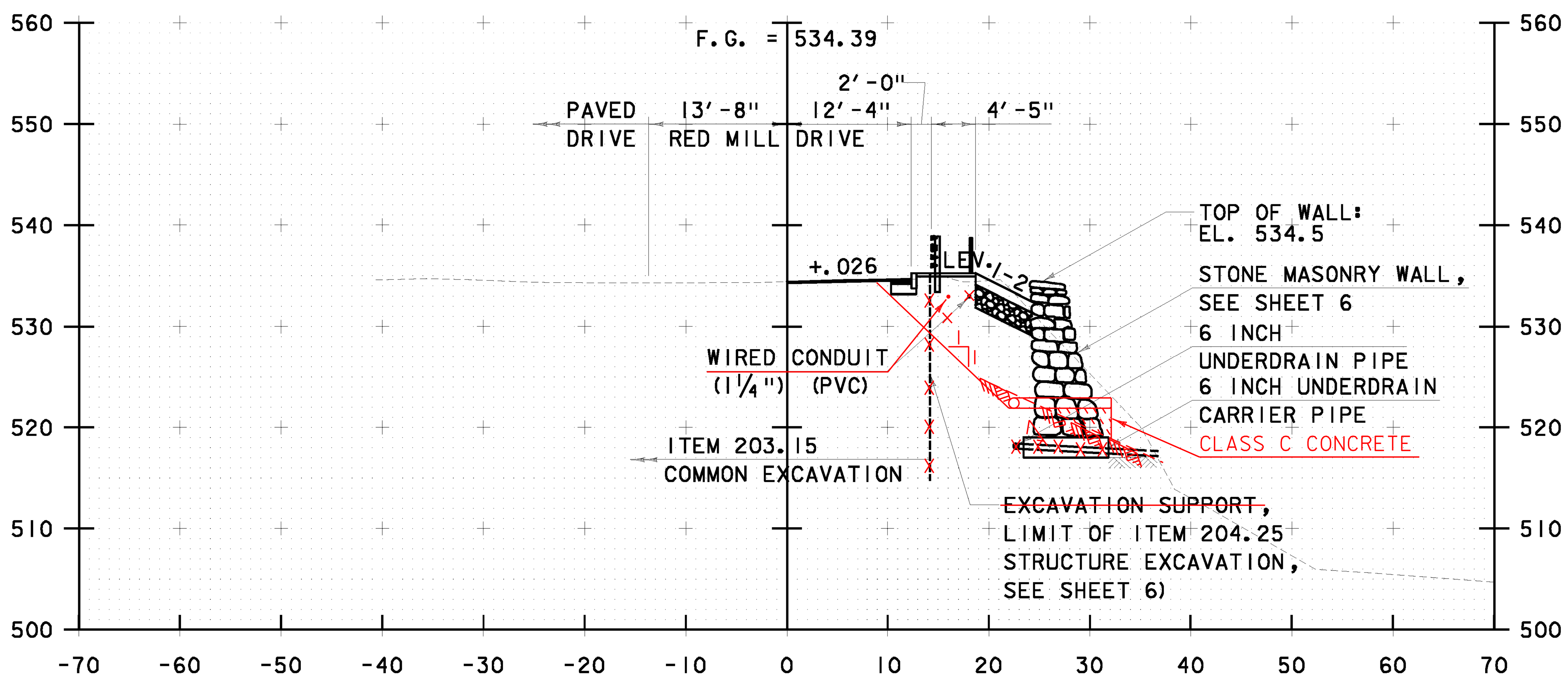
STA 11+75 TO STA 11+82

SCALE 1" = 10'-0"
10 0 10

CHA

PEDESTRIAN BRIDGE/ SIDEWALK CROSS SECTIONS #4

PROJECT NAME: JERICHO	
PROJECT NUMBER: STP FTBR (3)	
	PLOT DATE: 4/7/2014
PROJECT LEADER: M.D.S.	DRAWN BY: C.R.H.
DESIGNED BY: C.R.H.	CHECKED BY: D.E.G.
DWG. NO.: PBXS-4	SHEET 47 OF 62



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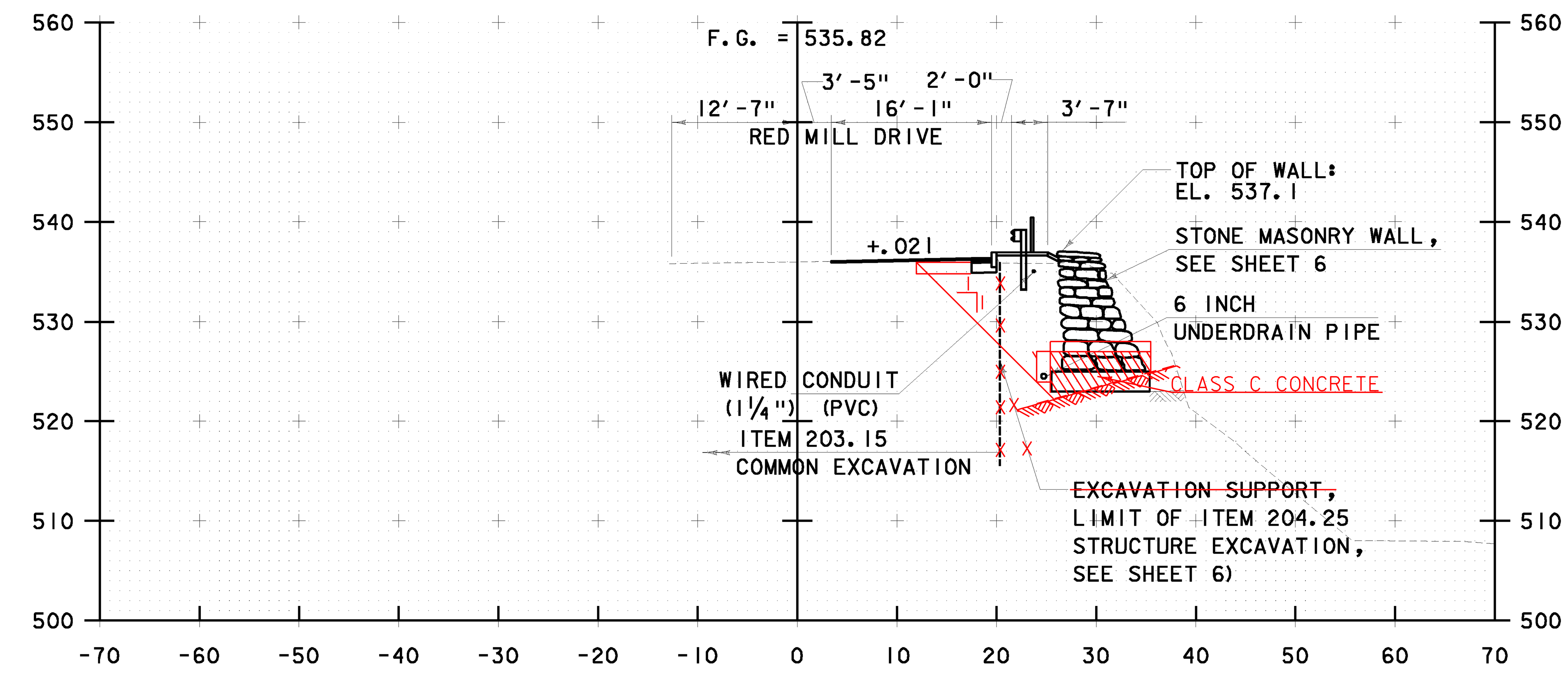
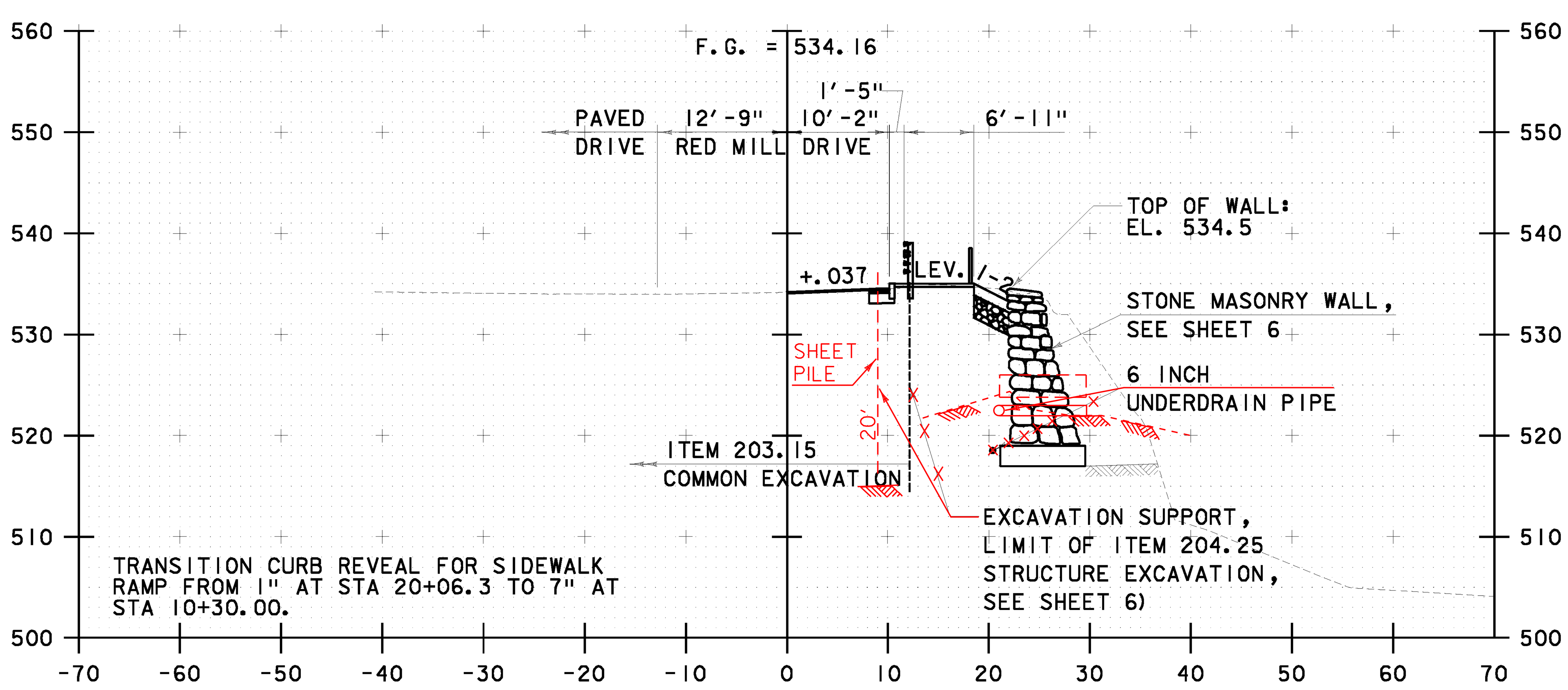
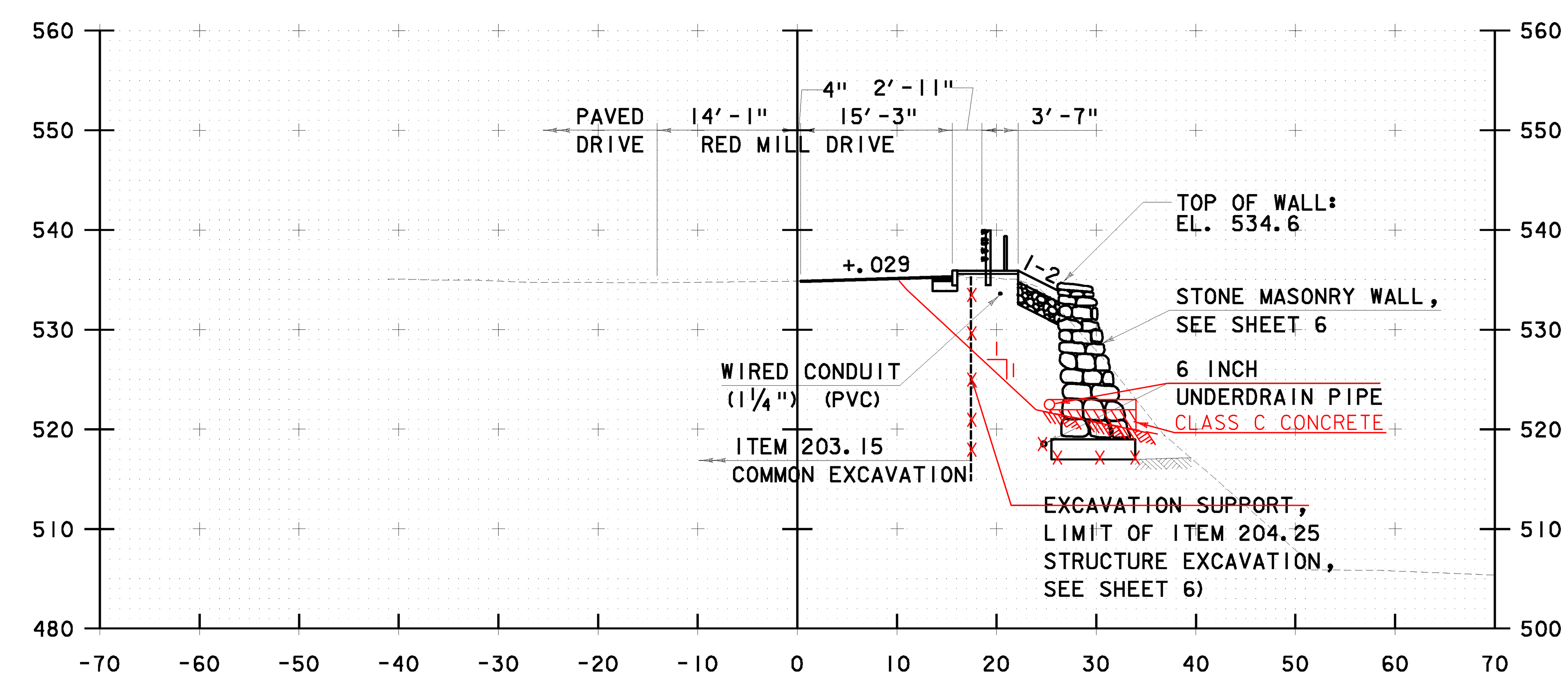


20+50



20+05

BEGIN RED MILL DRIVE STA 20+00
BEGIN COLD PLANE AND OVERLAY STA 20+00



20+25

STA 20+05 TO STA 20+50

SCALE 1" = 10'-0"

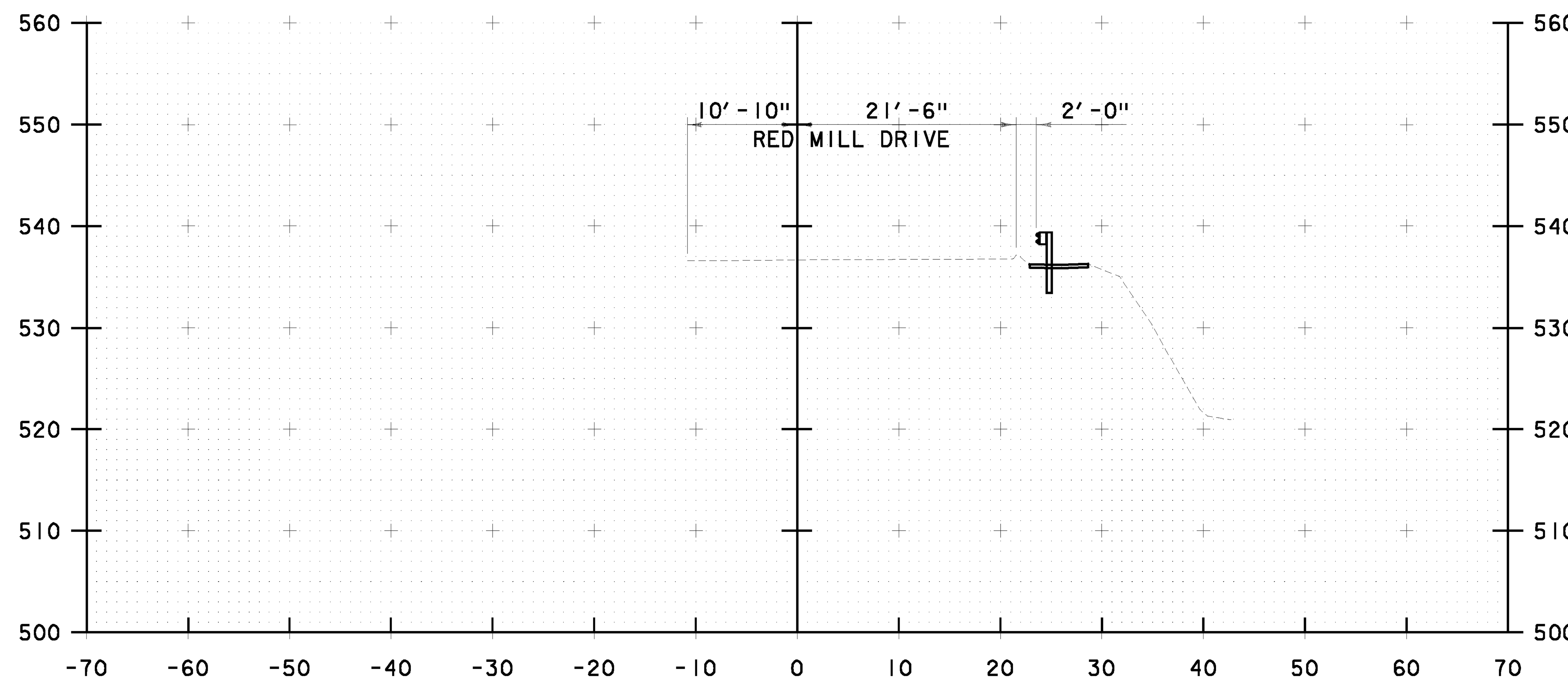
CHA

RED MILL DRIVE CROSS SECTIONS #1

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

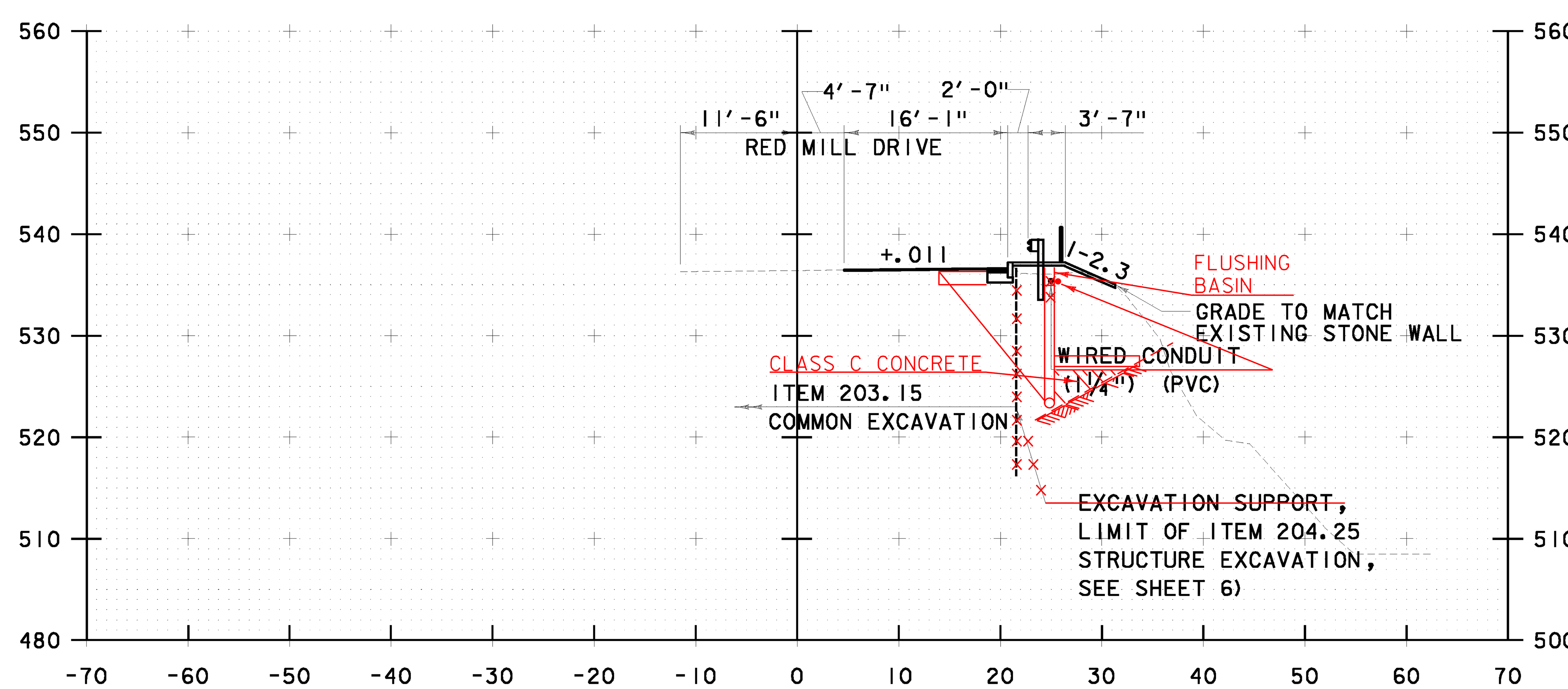
PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: RDXS-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 48 OF 62



20+66.50

END COLD PLANING AND PAVING
STA 20+66.50



20+60

STA 20+60 TO STA 20+66.50

SCALE 1" = 10'-0"
10 0 10

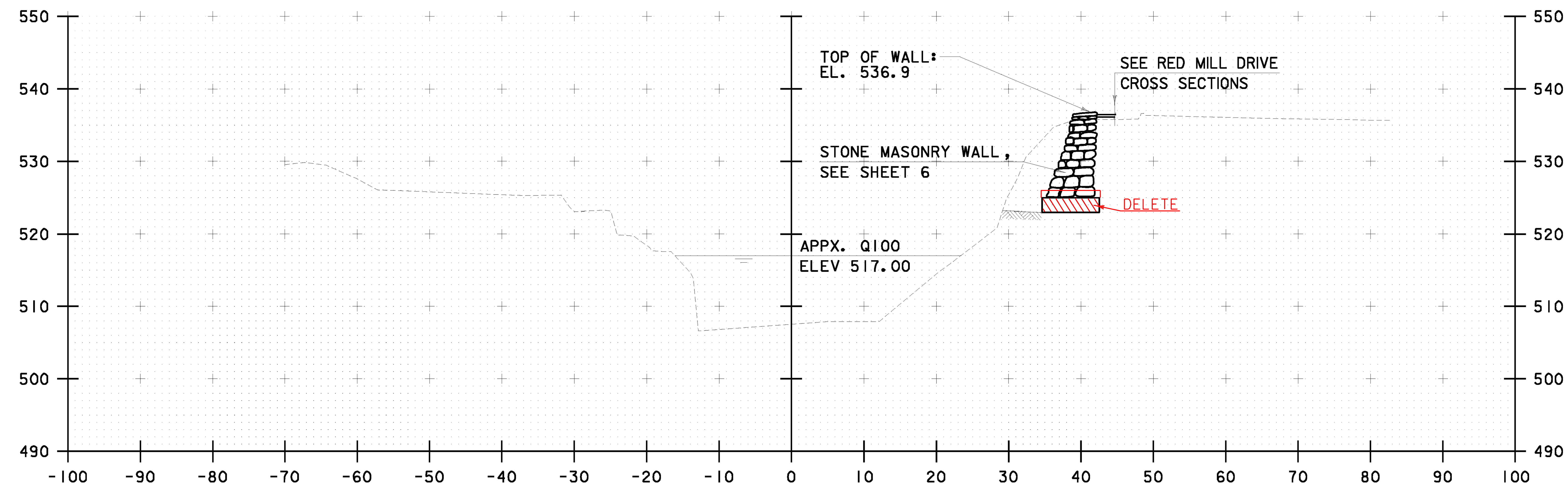
CHA

RED MILL DRIVE CROSS SECTIONS #2

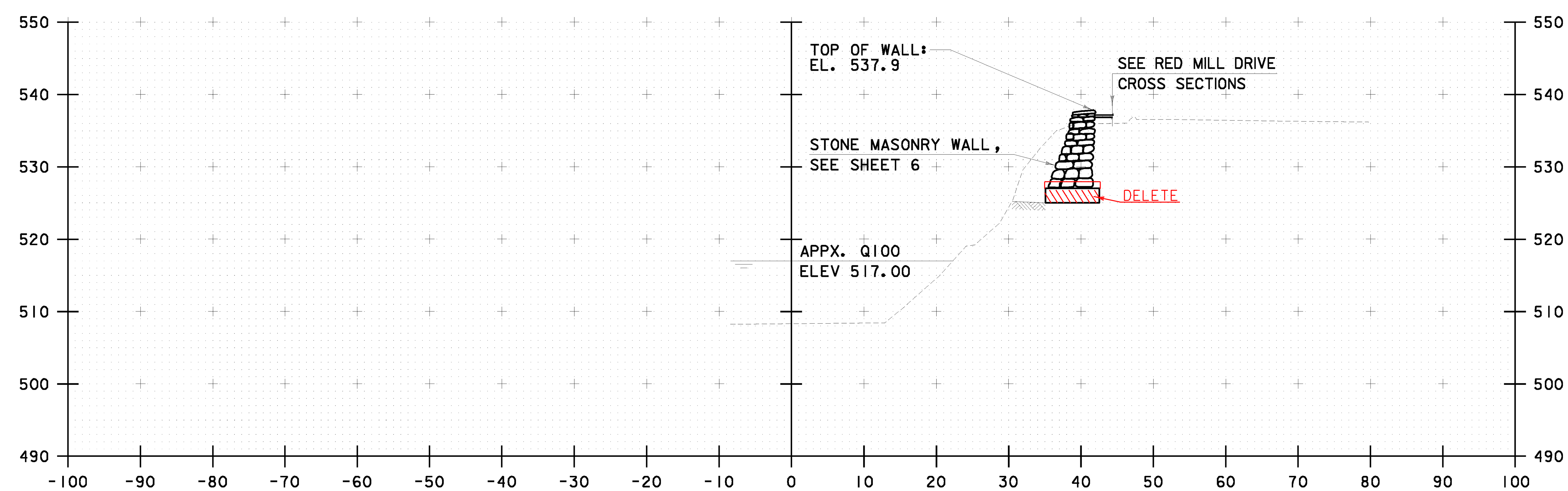
PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: RMXS-2

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 49 OF 62



0+25



0+15

STA 0+15 TO STA 0+25

SCALE 1" = 10'-0"
10 0 10

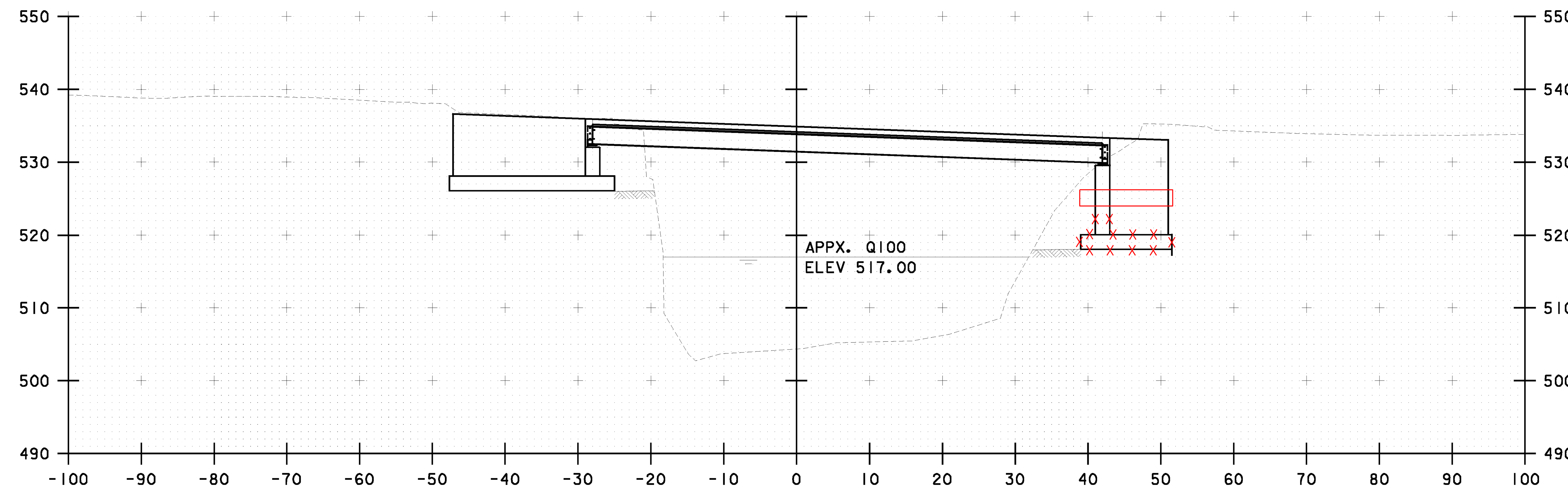
CHA

CHANNEL CROSS SECTIONS #1

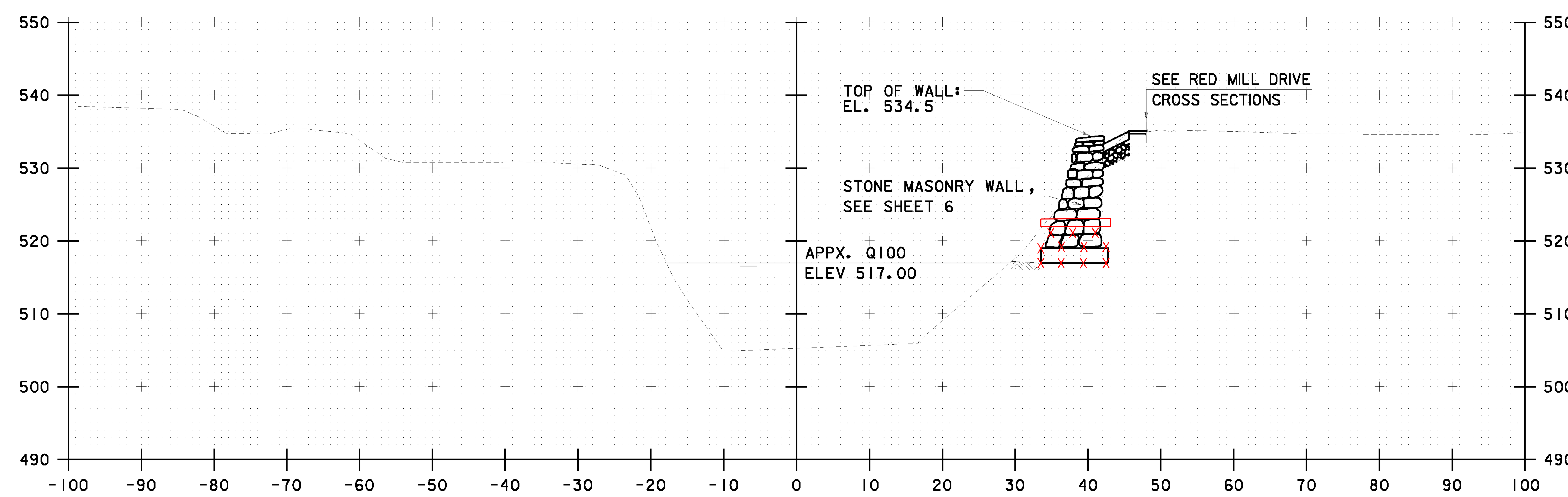
PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: CHANXS-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 50 OF 62



0+75



0+50

STA 0+50 TO STA 0+75

SCALE 1" = 10'-0"
10 0 10

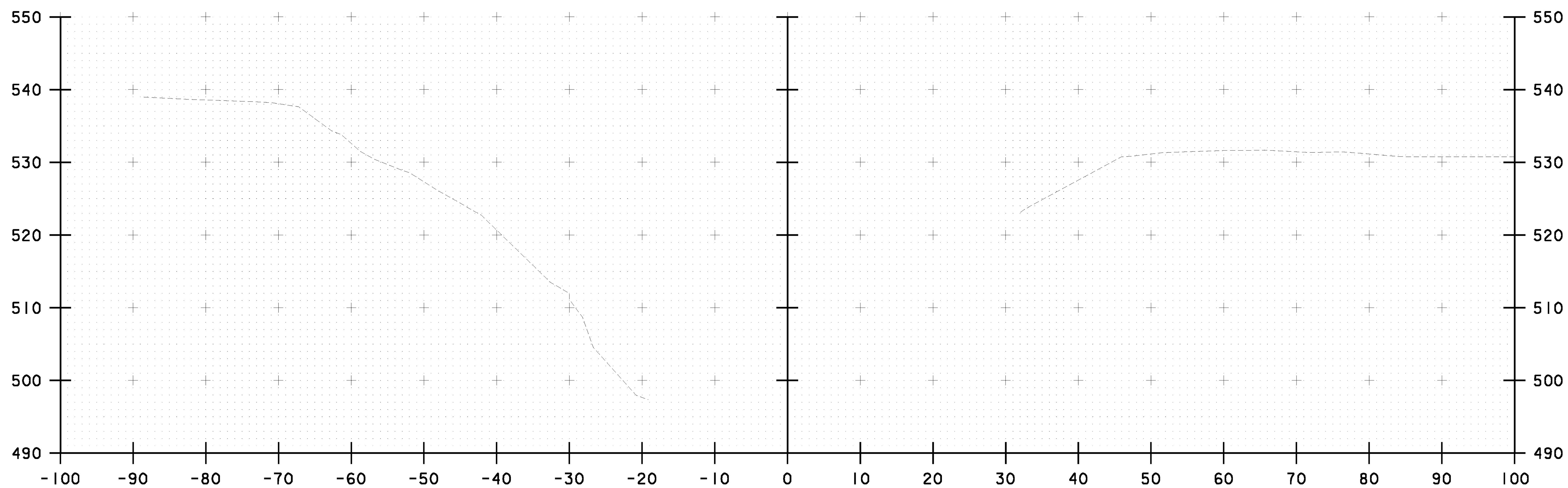
CHA

CHANNEL CROSS SECTIONS #2

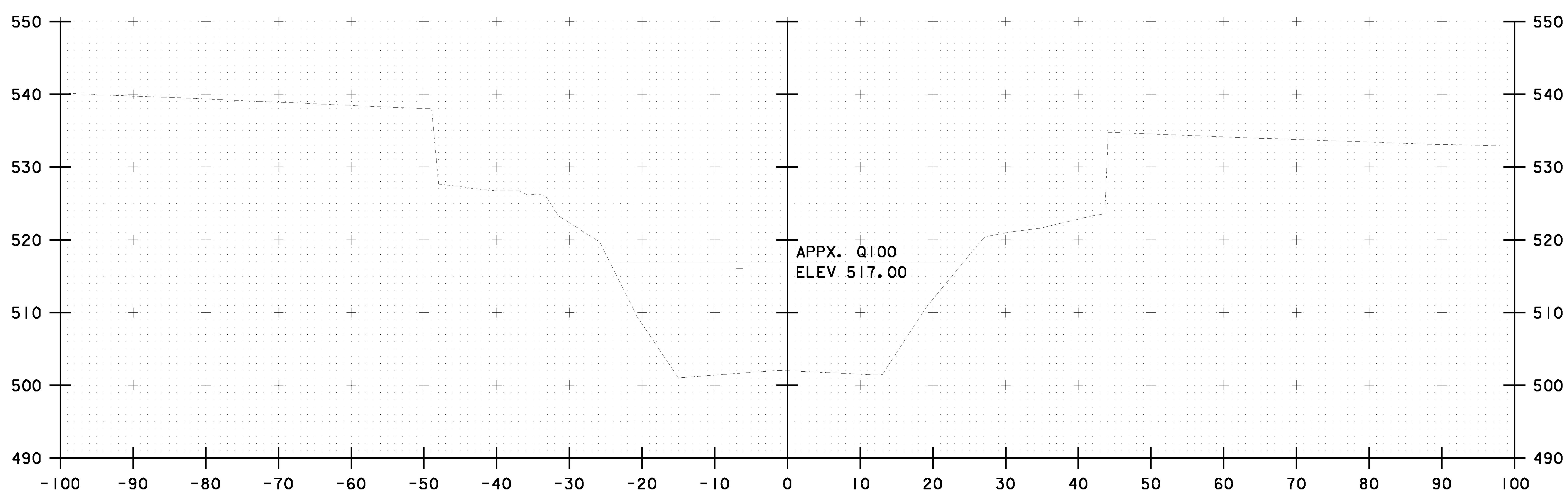
PROJECT NAME:	JERICHO
PROJECT NUMBER:	STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: CHANXS-2

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 51 OF 62



1+25



1+00

STA 1+00 TO STA 1+25

SCALE 1" = 10'-0"

10 0 10

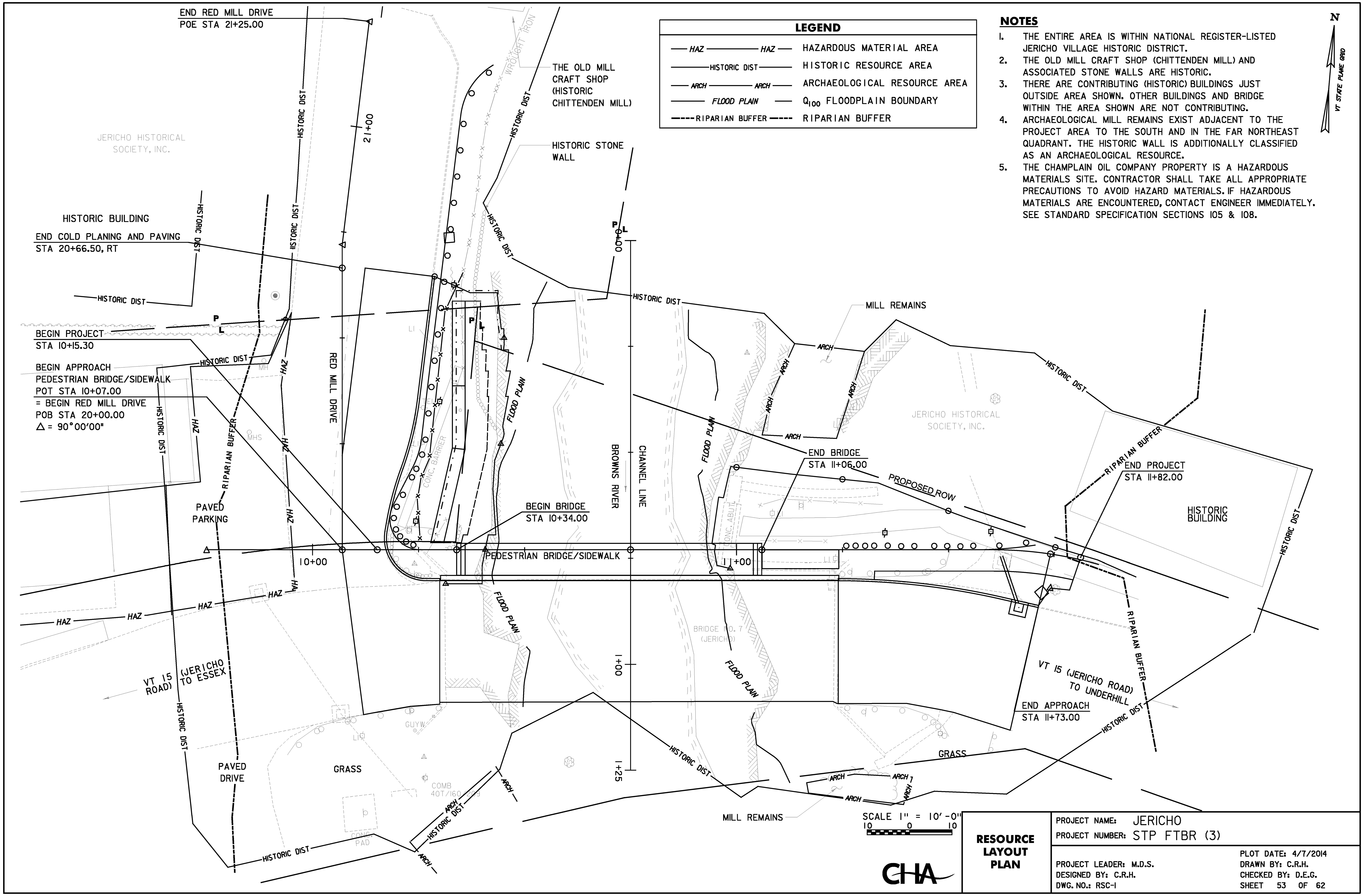
CHA

CHANNEL CROSS SECTIONS #3

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: CHANXS-3

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 52 OF 62



LEGEND

— HAZ — HAZ —	HAZARDOUS MATERIAL AREA
— HISTORIC DIST —	HISTORIC RESOURCE AREA
— ARCH — ARCH —	ARCHAEOLOGICAL RESOURCE AREA
— FLOOD PLAIN —	Q_{100} FLOODPLAIN BOUNDARY
- - - RIPARIAN BUFFER - - -	RIPARIAN BUFFER

NOTES

1. THE ENTIRE AREA IS WITHIN NATIONAL REGISTER-LISTED JERICHO VILLAGE HISTORIC DISTRICT.
2. THE OLD MILL CRAFT SHOP (CHITTENDEN MILL) AND ASSOCIATED STONE WALLS ARE HISTORIC.
3. THERE ARE CONTRIBUTING (HISTORIC) BUILDINGS JUST OUTSIDE AREA SHOWN. OTHER BUILDINGS AND BRIDGE WITHIN THE AREA SHOWN ARE NOT CONTRIBUTING.
4. ARCHAEOLOGICAL MILL REMAINS EXIST ADJACENT TO THE PROJECT AREA TO THE SOUTH AND IN THE FAR NORTHEAST QUADRANT. THE HISTORIC WALL IS ADDITIONALLY CLASSIFIED AS AN ARCHAEOLOGICAL RESOURCE.
5. THE CHAMPLAIN OIL COMPANY PROPERTY IS A HAZARDOUS MATERIALS SITE. CONTRACTOR SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO AVOID HAZARD MATERIALS. IF HAZARDOUS MATERIALS ARE ENCOUNTERED, CONTACT ENGINEER IMMEDIATELY. SEE STANDARD SPECIFICATION SECTIONS 105 & 108.

CHA

RESOURCE LAYOUT PLAN

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: RSC-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 53 OF 62

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\DBF204\Consultants\28f204resource.dgn
DATE/TIME = 4/7/2014
USER = 4916

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INCLUDES THE CONSTRUCTION OF A NEW PEDESTRIAN BRIDGE, ADJACENT TO THE VERMONT ROUTE 15 ROADWAY BRIDGE, NEW APPROACH WALKWAYS, AND A NEW RETAINING WALL. THE PROJECT BEGINS AT THE INTERSECTION OF RED MILL DRIVE AND VERMONT ROUTE 15 AND ENDS APPROXIMATELY 250 FEET TO THE EAST. THE PROJECT OCCURS AT APPROXIMATELY MILE 18.6 OF THE BROWNS RIVER. THE PROJECT ALSO INCLUDES APPROXIMATELY 70 FEET OF WORK ON RED MILL DRIVE INCLUDING INSTALLATION OF NEW CURB, GUARDRAIL AND GRADING. THE PROPOSED PEDESTRIAN BRIDGE WILL BE A ROLLED STEEL BEAM STRUCTURE SPANNING 72 FEET OVER THE BROWNS RIVER. THE BRIDGE WILL BE ADJACENT TO AND CANTILEVERED OVER THE NORTH SIDE OF THE EXISTING VERMONT ROUTE 15 ROADWAY BRIDGE. THE SUBJECT BRIDGE IS LOCATED IN THE TOWN OF JERICHO ON VERMONT ROUTE 15 APPROXIMATELY AT THE INTERSECTION OF VERMONT ROUTE 15 AND RED MILL DRIVE. VEHICULAR TRAFFIC IS TO BE MAINTAINED DURING CONSTRUCTION. PEDESTRIAN ACCESS WILL BE MAINTAINED DURING CONSTRUCTION.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLANS IS APPROXIMATELY 0.08 ACRE.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS FAIRLY FLAT, BUT IT IS CUT BY THE GORGE OF THE BROWNS RIVER. THE GORGE IS CHARACTERIZED BY A VEGETATED BUFFER INTERMIXED WITH BROKEN ROCK ABOVE THE LEDGE LINE. BELOW THE LEDGE LINE, THE GORGE WALL IS A ROCK FACE WITH MINIMAL VEGETATION. OUTSIDE THE AREAS IMMEDIATELY ADJACENT TO GORGE, THERE IS LITTLE VEGETATION WITHIN THE PROJECT AREA WITH LARGE PAVED AREAS CONSISTING OF VERMONT ROUTE 15, RED MILL DRIVE, AND A GAS STATION PARKING LOT.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

DRAINAGE THROUGH THE PROJECT AREA INCLUDES TWO DROP INLETS ON THE WEST SIDE OF BROWNS RIVER WHICH OUTLET TO THE RIVER SOUTH OF THE EXISTING VERMONT ROUTE 15 ROADWAY BRIDGE. A DROP INLET ON THE EAST SIDE OF THE BROWNS RIVER OUTLETS ONTO THE SLOPE NORTH OF THE PROJECT AREA. VERMONT ROUTE 15 HAS OPEN DRAINAGE ON ITS SOUTHERN EDGE WITH WATER DRAINING TO BROWNS RIVER. THIS INCLUDES A PAVED GUTTER ON THE EAST SIDE OF THE BRIDGE.

THE BROWNS RIVER IS A PERENNIAL RELATIVELY PERMANENT WATER AND A TRIBUTARY OF THE LAMOILLE RIVER THAT FLOWS SOUTH THROUGH THE PROJECT AREA. THE STREAM BED APPEARS TO CONSIST OF LARGE BOULDERS AND ROCKS. THE 100-YEAR FLOODPLAIN IS ENTIRELY CONTAINED WITHIN THE GORGE. THE HYDRAULIC CAPACITY OF BROWNS RIVER WILL NOT BE LIMITED BY THIS PROJECT. THE BROWNS RIVER HAS NOT BEEN DESIGNATED AS AN OUTSTANDING RESOURCE WATER.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF SHRUBS AND GROUND COVER WITH SOME SMALL TREES ON THE EAST SIDE OF THE BROWNS RIVER. UPON PROJECT COMPLETION, STEEP SLOPES (1-2 OR STEEPER) WILL BE PROTECTED WITH TYPE II STONE FILL AND COVERED WITH GRUBBING MATERIAL. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES WITH PERMANENT EROSION CONTROL MATTING PROVIDED IN AREAS WHERE THE SLOPE IS BETWEEN 1-2 AND 1-3. SLOPES FLATTER THAN 1-3 WILL BE TOPSOILED AND SEEDED.

1.2.4 SOILS

BORINGS WERE TAKEN AT THREE LOCATIONS, AS SHOWN ON THE BORING INFORMATION SHEET, SHEET 21. GENERALLY SANDY FILL MATERIALS WERE FOUND ABOVE SHALLOW BEDROCK LYING BETWEEN 18.5 AND 22.5 FEET. SEE BORING LOGS, SHEETS 22-24.

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF CHITTENDEN, VERMONT. SEE THE BELOW TABLE FOR SOIL TYPES LOCATED WITHIN THE PROJECT AREA.

MAP UNIT TYPE	DESCRIPTION	SLOPES (%)	ERODIBILITY	ERODIBILITY FACTOR (K)
HID	HARTLAND VERY FINE SANDY LOAM	12-25	MODERATELY ERODIBLE	.17
BIC	BELGRADE AND ELDRIDGE SOILS	8-15	SLIGHTLY ERODIBLE	.49
CsD	COLTON AND STETSON SOILS	20-30	MODERATELY ERODIBLE	.15
W	WATER	-	-	-

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
0.0-0.23 = LOW EROSION POTENTIAL
0.24-0.36 = MODERATE EROSION POTENTIAL
0.37 AND HIGHER = HIGH EROSION POTENTIAL

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NONE
HISTORICAL OR ARCHAEOLOGICAL AREAS: THE ENTIRE AREA IS WITHIN THE NATIONAL REGISTER-LISTED JERICHO VILLAGE HISTORIC DISTRICT. CHITTENDEN MILL (AND ASSOCIATED STONE WALLS, ETC.) IS HISTORIC. ARCHAEOLOGICAL REMAINS EXIST IN THE SOUTH AND NORTHEAST OF THE PROJECT AREA.
HAZARDOUS MATERIALS: HAZARDOUS MATERIALS HAVE BEEN DETECTED ON THE PROPERTY OF CHAMPLAIN OIL COMPANY, INC. CONTRACTOR SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO AVOID HAZARDOUS MATERIALS. IF HAZARDOUS MATERIALS ARE ENCOUNTERED, CONTACT ENGINEER IMMEDIATELY. SEE STANDARD SPECIFICATION SECTIONS 105 & 108.
PRIME AGRICULTURAL LAND: NONE
THREATENED AND ENDANGERED SPECIES: NONE
WATER RESOURCE: BROWNS RIVER
WETLANDS: NONE

1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORM WATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL (EPSC)

THE EPSC PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD- UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED. BARRIER FENCE SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES, DUE TO THE PROJECT'S PROXIMITY TO A WATER RESOURCE AND SENSITIVE AREAS.

1.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY, THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS, OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION PREVENTION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS.

IT IS NOT ANTICIPATED THAT STABILIZED CONSTRUCTION ENTRANCES WILL BE REQUIRED TO CONSTRUCT THE PROPOSED PROJECT DUE TO ITS LIMITED SIZE AND LOCATION.

1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

DUE TO THE PROJECT'S PROXIMITY TO A WATER RESOURCE, ALL SILT FENCE SHALL BE WOVEN WIRE REINFORCED. SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

DUE TO THE ROCK FACE BENEATH THE FOOTING OF THE PROPOSED STONE MASONRY WALL, THERE IS NO SEDIMENT BARRIER PROPOSED IN THIS AREA. SEE TYPICAL STONE MASONRY WALL SECTION, SHEET 6, FOR DETAILS OF THE EXCAVATION OF THE EXISTING OVERBURDEN SOIL. SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE EROSION CONTROL CONSTRUCTION SITE PLAN, SHEET 57, ON THE UP-SLOPE SIDE OF THE PROPOSED FOOTING UPON REMOVAL OF THE OVERBURDEN UNTIL BACKFILLING OPERATIONS BEGIN.

STONE AND BLOCK DROP INLET PROTECTION SHALL BE USED TO FILTER SEDIMENT FROM INCOMING STORMWATER FOR PROPOSED DROP INLETS WITHIN THE PROJECT AREA.

1.4.5 DIVERT UPLAND RUNOFF

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AREA AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

IT IS NOT ANTICIPATED THAT TEMPORARY PROTECTION MEASURES WILL BE REQUIRED TO DIVERT UPLAND RUNOFF. HOWEVER, IF SITE CONDITIONS CHANGE, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY DIVERSION DIKES OR SWALES PER THE LOW RISK SITE HANDBOOK AS DIRECTED BY THE ON-SITE PLAN COORDINATOR. ANY WORK REQUIRED SHALL BE INCIDENTAL TO THE PROJECT.

EPSC PLAN NARRATIVE (CON'T.)

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

CHECK DAMS SHALL BE UTILIZED AS PROPOSED ON THE EPSC PLANS.

1.4.7 CONSTRUCT PERMANENT CONTROLS

NO PERMANENT STORMWATER TREATMENT DEVICES ARE PROPOSED.

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1-3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE. IT IS NOT ANTICIPATED THAT THIS PROJECT SHALL REQUIRE ANY WINTER STABILIZATION MEASURES.

1.4.10 STABILIZE SOIL AT FINAL GRADE

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER, LIME, AND TOPSOIL SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1-3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH. FOR SLOPES 1-2 OR STEEPER, 24" OF TYPE II STONE FILL SHALL BE USED AND COVERED WITH 12" OF GRUBBING MATERIAL.

1.4.11 DE-WATERING ACTIVITIES

DISCHARGE FROM DE-WATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

IT IS NOT ANTICIPATED THAT ANY DE-WATERING MEASURES WILL BE REQUIRED FOR THIS PROJECT.

1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

1.5.1 CONSTRUCTION SEQUENCE

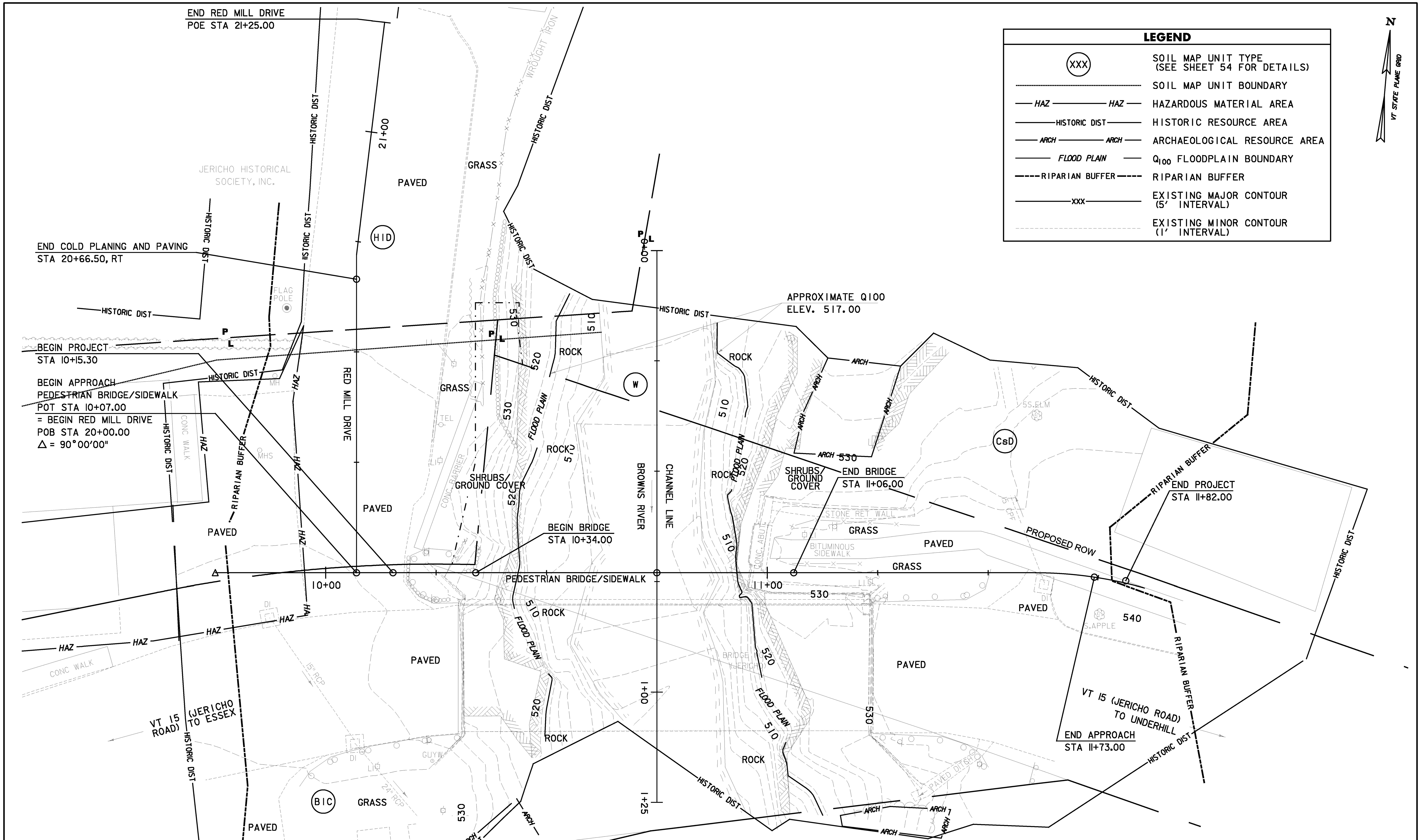
1.5.2 OFF-SITE ACTIVITIES

IN ADDITION TO THE CONTRACTOR CHECKLIST, ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

CHA

EROSION PREVENTION AND SEDIMENT CONTROL NOTES #2	PROJECT NAME: JERICHO PROJECT NUMBER: STP FTBR (3)	
	PROJECT LEADER: M.D.S. DESIGNED BY: C.R.H. DWG. NO.: ERONAR-2	PLOT DATE: 4/7/2014 DRAWN BY: C.R.H. CHECKED BY: D.E.G. SHEET 55 OF 62

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\z08f004epscnarrative2.dgn
DATE/TIME = 4/7/2014
USER = 4916



LEGEND

XXX	SOIL MAP UNIT TYPE (SEE SHEET 54 FOR DETAILS)
	SOIL MAP UNIT BOUNDARY
HAZ ——— HAZ	HAZARDOUS MATERIAL AREA
HISTORIC DIST	HISTORIC RESOURCE AREA
ARCH ——— ARCH	ARCHAEOLOGICAL RESOURCE AREA
FLOOD PLAIN	Q_{100} FLOODPLAIN BOUNDARY
----RIPARIAN BUFFER----	RIPARIAN BUFFER
——xxx——	EXISTING MAJOR CONTOUR (5' INTERVAL)
	EXISTING MINOR CONTOUR (1' INTERVAL)

SCALE 1" = 10'-0"
10 0 10

CHA

EROSION CONTROL EXISTING CONDITION SHEET

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: EROEX-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 56 OF 62

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\DBF2014\Consultants\28f2014epscexisting.dgn
DATE/TIME = 4/7/2014
USER = 4916

649.515 GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED
STA 10+94.6 RT - STA 10+99.4 LT (9.1SY)
STA 11+00.8 - STA 11+24.8 LT LF (8.0 SY)
STA 11+35.8 - STA 11+43.5 LT (2.8 SY)
STA 20+03.3 - STA 20+59.3 LT (18.8 SY)

653.25 TEMPORARY STONE CHECK DAM, TYPE I
STA 11+10.0 LT (4.0 CY)
STA 11+31.0 LT (4.0 CY)
STA 11+35.0 LT (4.0 CY)

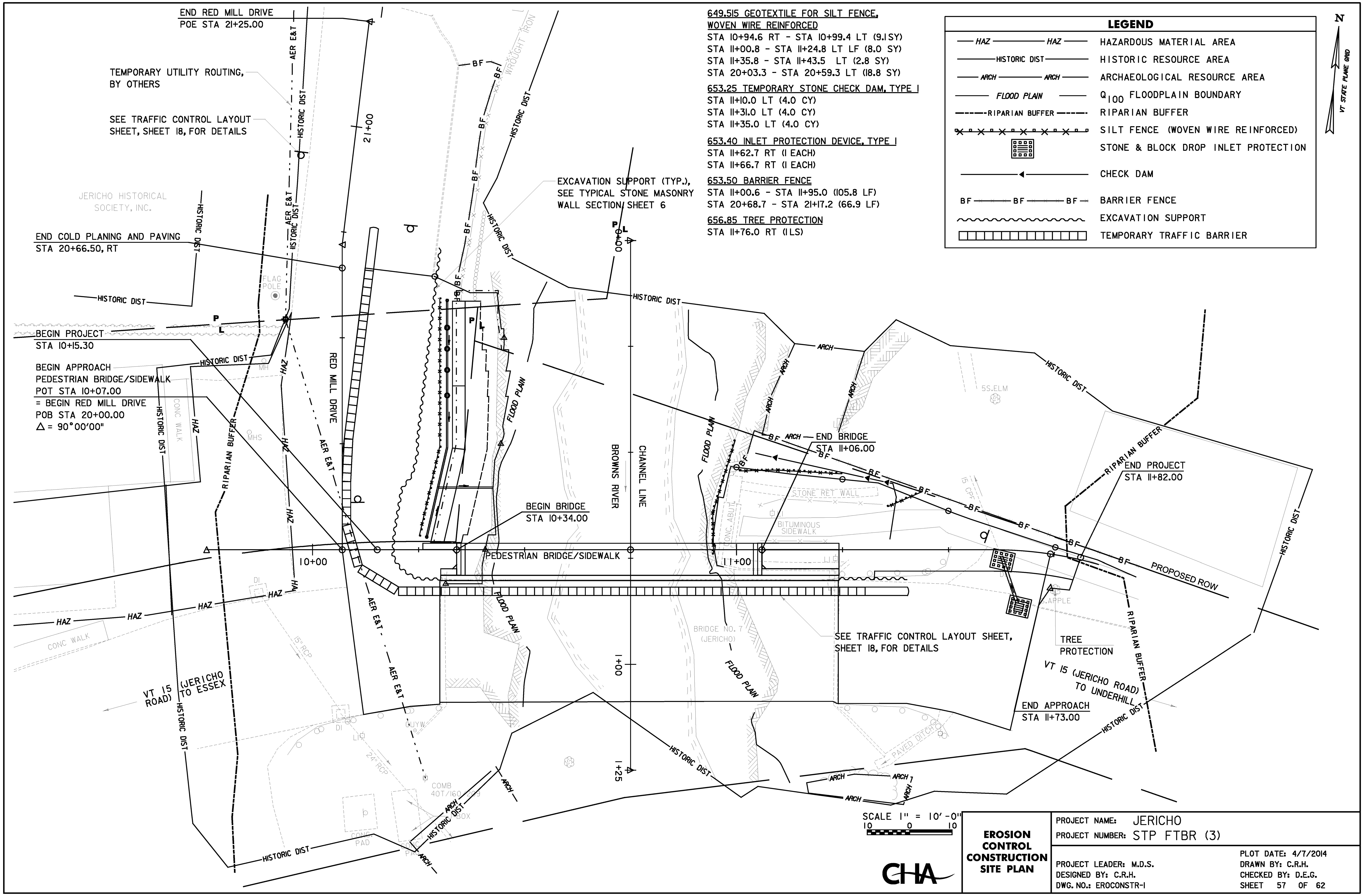
653.40 INLET PROTECTION DEVICE, TYPE I
STA 11+62.7 RT (1 EACH)
STA 11+66.7 RT (1 EACH)

653.50 BARRIER FENCE
STA 11+00.6 - STA 11+95.0 (105.8 LF)
STA 20+68.7 - STA 21+17.2 (66.9 LF)

656.85 TREE PROTECTION
STA 11+76.0 RT (1LS)

LEGEND

HAZ —— HAZ	HAZARDOUS MATERIAL AREA
—— HISTORIC DIST ——	HISTORIC RESOURCE AREA
ARCH —— ARCH	ARCHAEOLOGICAL RESOURCE AREA
—— FLOOD PLAIN ——	Q_{100} FLOODPLAIN BOUNDARY
---- RIPARIAN BUFFER ----	RIPARIAN BUFFER
	SILT FENCE (WOVEN WIRE REINFORCED)
	STONE & BLOCK DROP INLET PROTECTION
	CHECK DAM
BF —— BF —— BF	BARRIER FENCE
	EXCAVATION SUPPORT
	TEMPORARY TRAFFIC BARRIER



SCALE 1" = 10'-0"

EROSION CONTROL CONSTRUCTION SITE PLAN

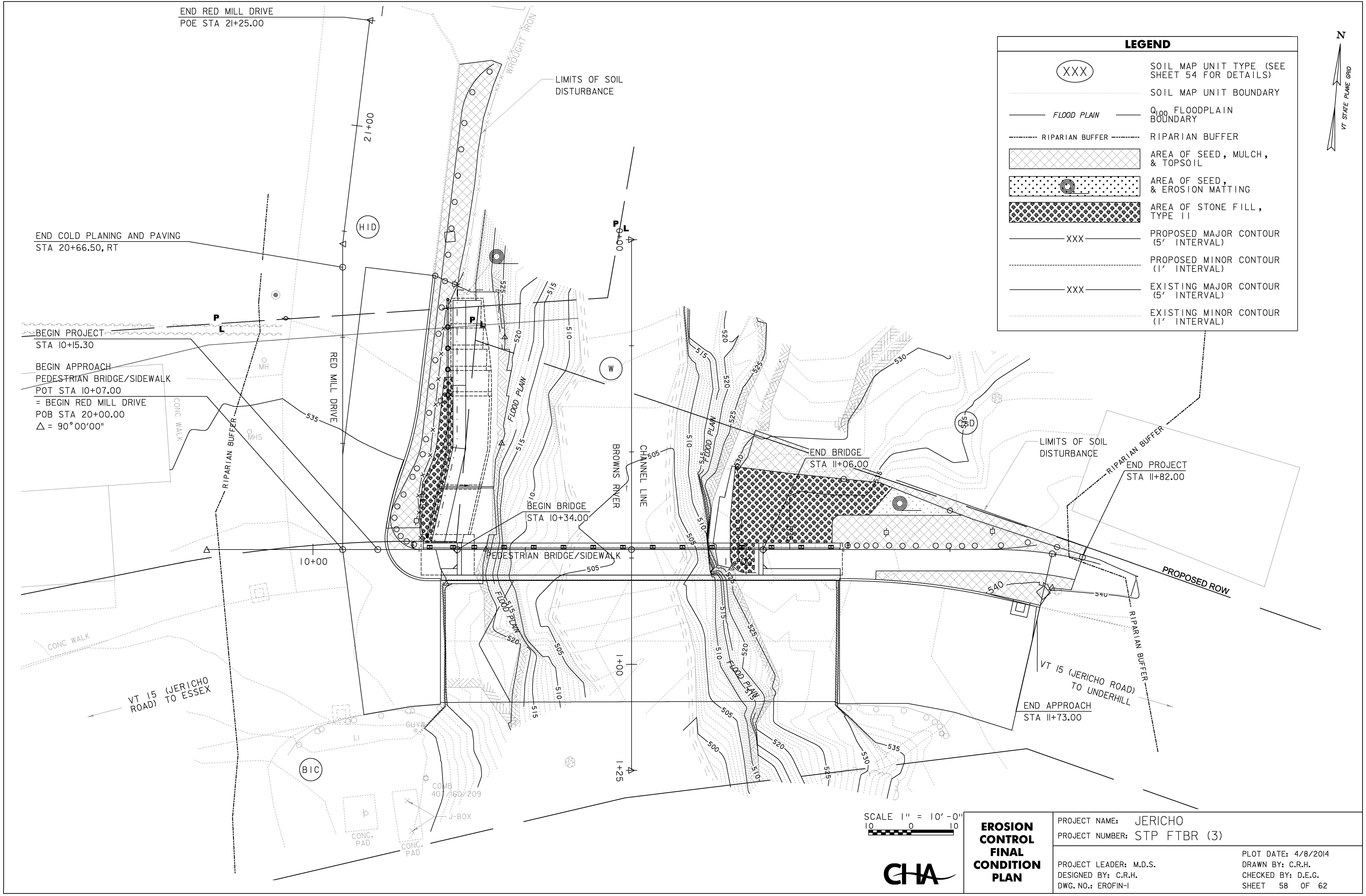
PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: EROCONSTR-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 57 OF 62

CHA

FILE NAME = V:\Projects\ANY\K2\21113\CADD\MSTN\08F204\Consultants\z08f204ero.dgn
DATE/TIME = 4/7/2014
USER = 4916



LEGEND

XXX	SOIL MAP UNIT TYPE (SEE SHEET 54 FOR DETAILS)
	SOIL MAP UNIT BOUNDARY
FLOOD PLAIN	Q_{100} FLOODPLAIN BOUNDARY
RIPARIAN BUFFER	RIPARIAN BUFFER
	AREA OF SEED, MULCH, & TOPSOIL
	AREA OF SEED, & EROSION MATTING
	AREA OF STONE FILL, TYPE II
XXX	PROPOSED MAJOR CONTOUR (5' INTERVAL)
	PROPOSED MINOR CONTOUR (1' INTERVAL)
XXX	EXISTING MAJOR CONTOUR (5' INTERVAL)
	EXISTING MINOR CONTOUR (1' INTERVAL)

N
VT STATE PLANE GRID

SCALE 1" = 10'-0"
10 0 10

CHA

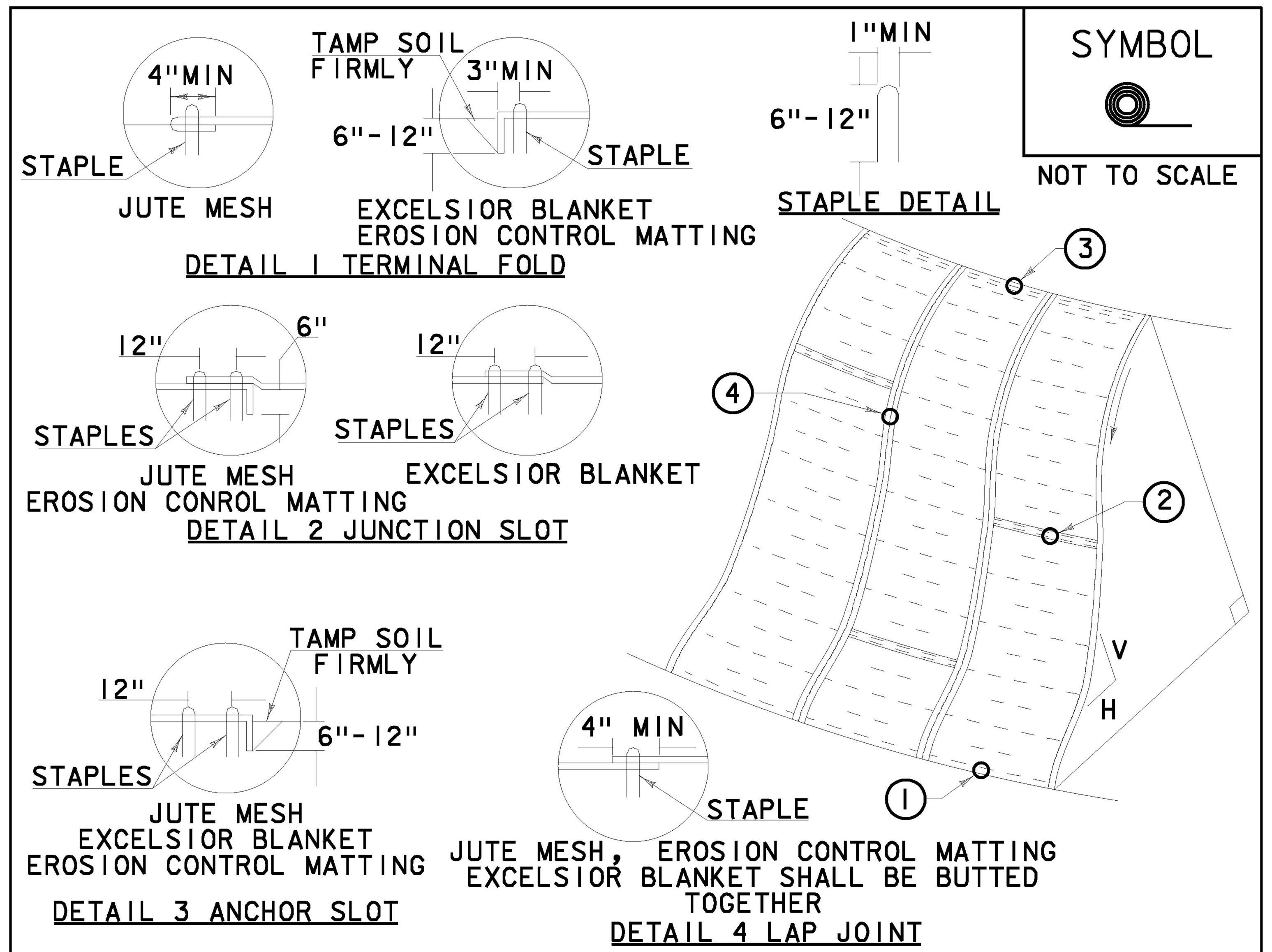
EROSION CONTROL FINAL CONDITION PLAN

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: EROFIN-1

PLOT DATE: 4/8/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 58 OF 62

FILE NAME = W:\Projects\ANY\K2\21113\CADD\MSTN\08F004\Consultants\08f004epscfinal.dgn
DATE/TIME = 4/8/2014
USER = 4079



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

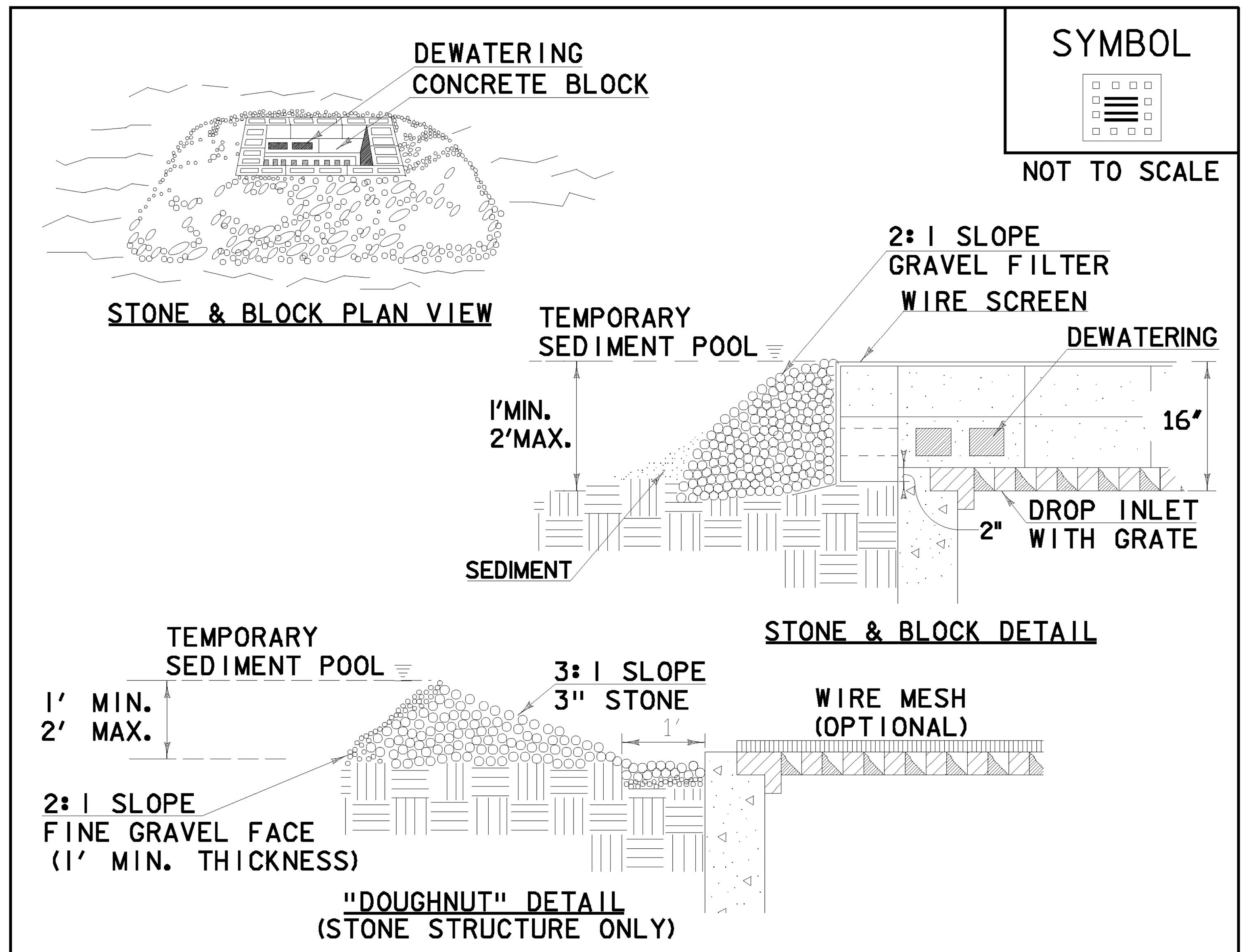
1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2" MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR ½" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL ½"- ¾" IN DIAMETER PLACED 2" BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1' THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3" STONE AS SHOWN ON THE DRAWINGS.
5. MAXIMUM DRAINAGE AREA 1 ACRE

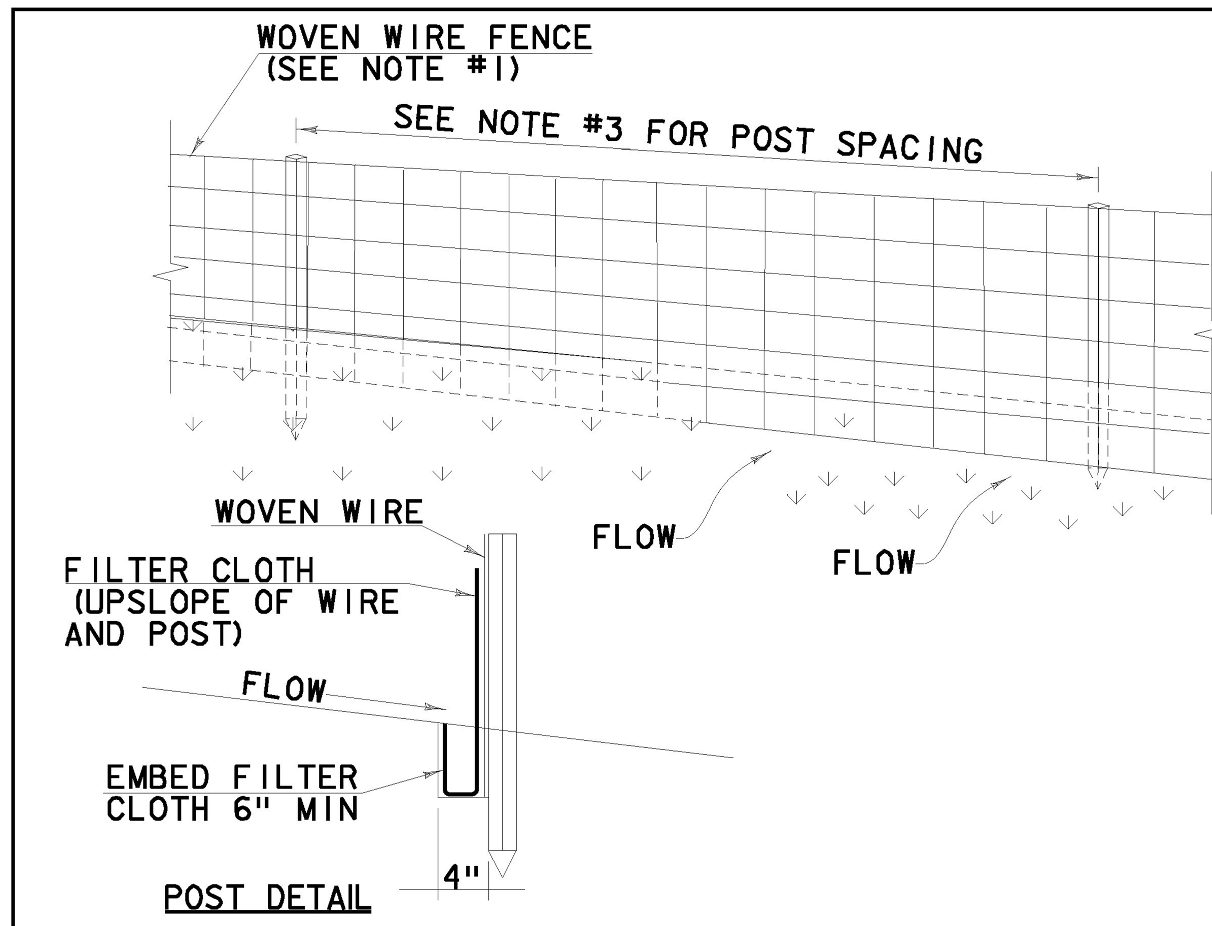
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STONE & BLOCK DROP INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

NOT TO SCALE

FILTER CLOTH 16" MIN

EMBED 6"MIN

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR ~~GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR~~ GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF

CHA

EROSION CONTROL DETAILS SHEET #1

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

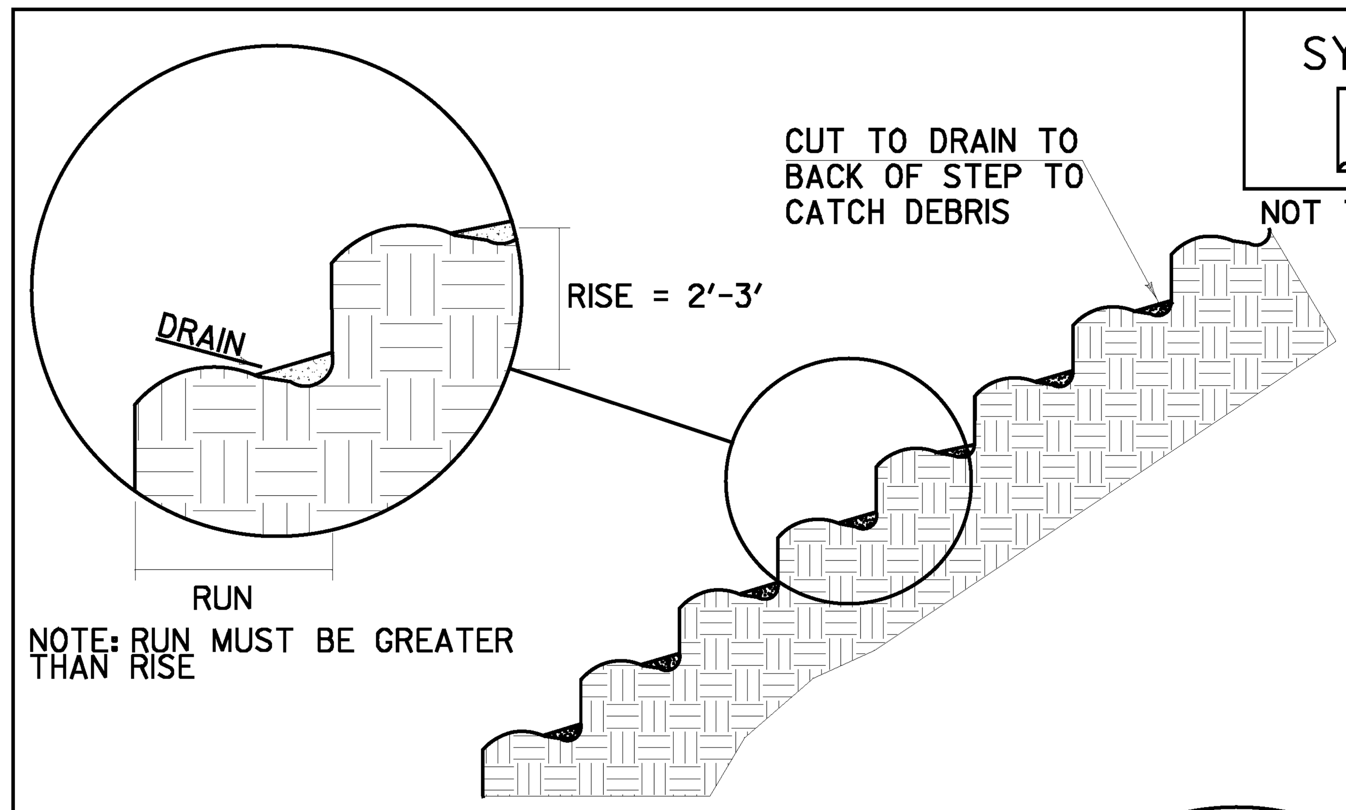
PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: ERODET-1

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.

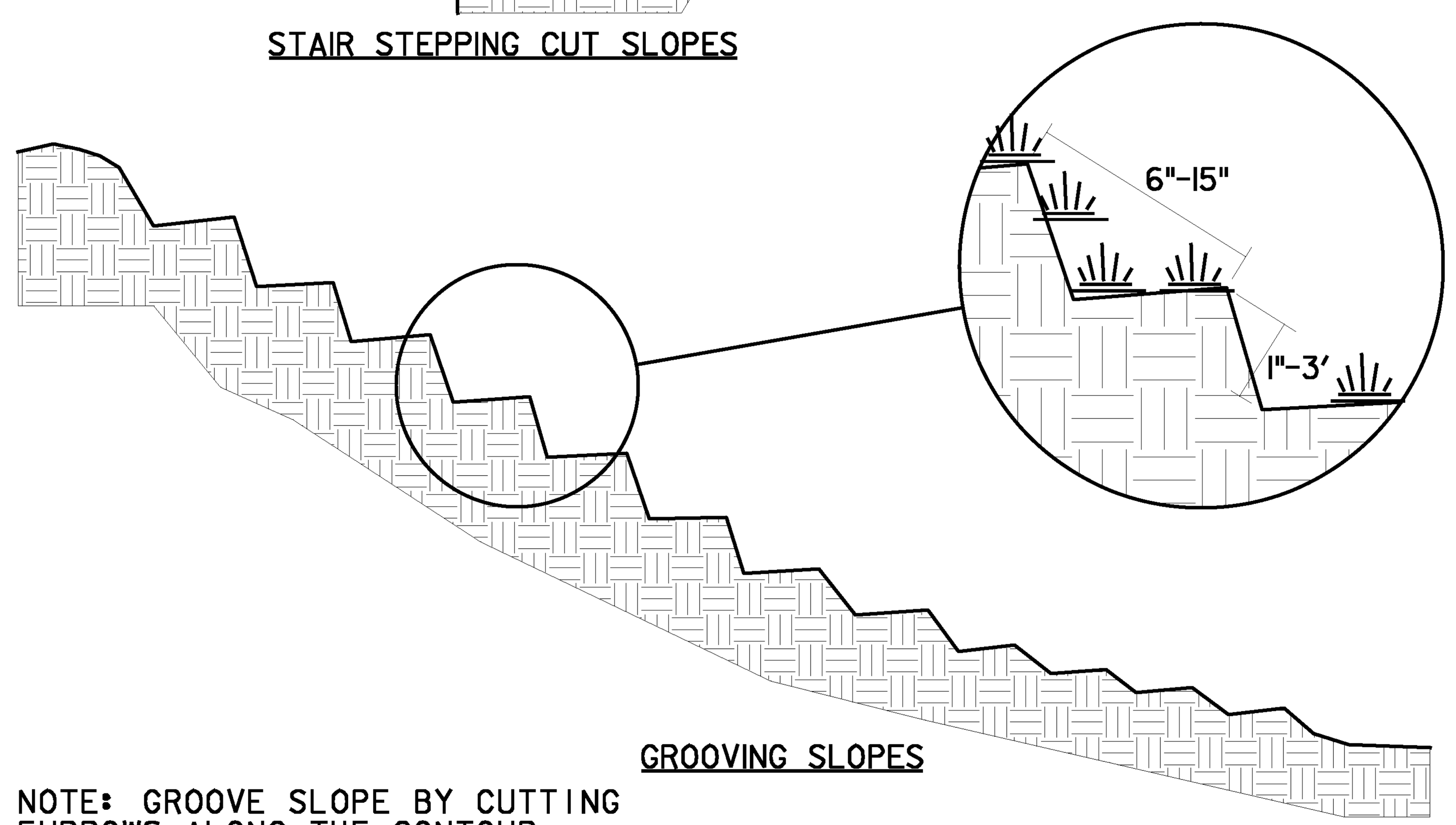
SURFACE ROUGHENING

SYMBOL

NOT TO SCALE



STAIR STEPPING CUT SLOPES



GROOVING SLOPES

NOTE: GROOVE SLOPE BY CUTTING FURROWS ALONG THE CONTOUR. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND RETAIN LIME, FERTILIZER AND SEED.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SURFACE ROUGHENING

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

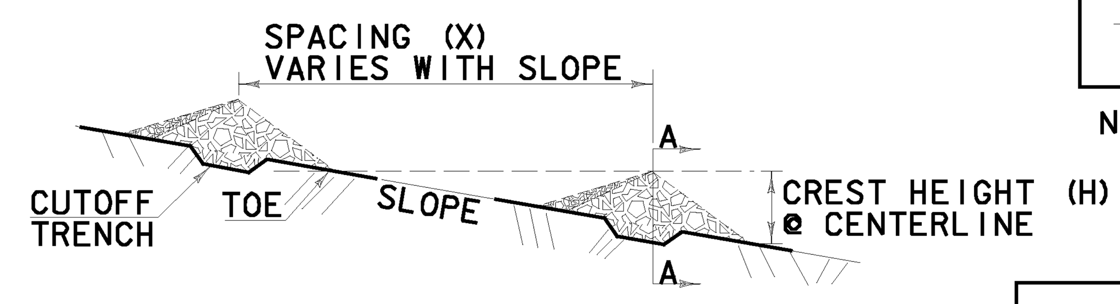
THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF

CHECK DAM

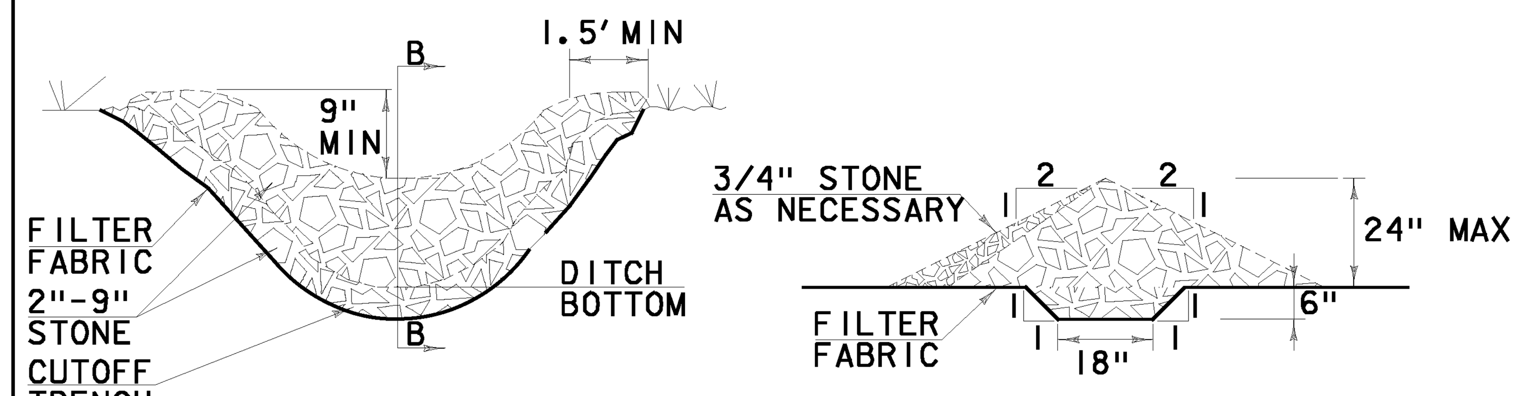
SYMBOL

NOT TO SCALE



PROFILE

$$X = \frac{H\,(ft)}{SLOPE\,(ft/ft)}$$



SECTION A-A SECTION B-B

CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OFTHE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. 3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
4. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
5. PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
7. MAXIMUM DRAINAGE AREA 2 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CHECK DAM

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR TEMPORARY STONE CHECK DAM, TYPE I(PAY ITEM 653.25)

REVISIONS	
MARCH 21, 2008	WHF
JANUARY 8, 2009	WHF

TURF ESTABLISHMENT

VAOT RURAL AREA MIX

	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
37.5%	22.5	45	CREEPING RED FESCUE	85%	98%
37.5%	22.5	45	TALL FESCUE	90%	95%
5.0%	3	6	RED TOP	90%	95%
15.0%	9	18	BIRDSFOOT TREFOIL	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	85%	95%
100%	60	120			

VAOT URBAN AREA MIX

	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
42.5%	34	68	CREEPING RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

SOIL AMENDMENT GUIDANCE

FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	*FOLLOW*	PELLETIZED	*FOLLOW*
500 LBS/AC	*MANUFACTURER*	2 TONS/AC	*MANUFACTURER*

CONSTRUCTION GUIDANCE

1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

REVISIONS	
JUNE 23, 2009	WHF
JANUARY 15, 2010	WHF
FEBRUARY 16, 2011	WHF

CHA

EROSION CONTROL DETAILS SHEET #2

PROJECT NAME: JERICHO
PROJECT NUMBER: STP FTBR (3)

PROJECT LEADER: M.D.S.
DESIGNED BY: C.R.H.
DWG. NO.: ERODET-2

PLOT DATE: 4/7/2014
DRAWN BY: C.R.H.
CHECKED BY: D.E.G.
SHEET 60 OF 62

STATE OF VERMONT
AGENCY OF TRANSPORTATION

RIGHT - OF - WAY DETAIL SHEET

PB = PEDESTRIAN BRIDGE   RMD = RED MILL DRIVE

TABLE OF PROPERTY ACQUISITION

PARCEL NO.	PROPERTY OWNER	ROW LAYOUT NO.	BEGINNING STATION	ENDING STATION	TAKE AREA±	REMAINDER AREA±	RIGHT TYPE	RIGHT T / P	RIGHT AREA ±	RECORDING DATA TITLE TAKEN	DATE	TOWN / CITY	BOOK	PAGE	REMARKS
1	CHAMPLAIN OIL COMPANY, INC., LESSOR	1	PB 9+87 RT	RMD 20+55 RT			ACCESS	T	1,000 SF			JERICHO			INCL. PAVEMENT MARKINGS
	RAY ELY d/b/a CHITTENDEN MILLS, LLC,		RMD 20+01 RT	RMD 20+56 RT			RECONSTRUCT	T	1,380 SF						PORTION OF RED MILL DRIVE AND AREA EAST OF AND
	LESSEE														ADJACENT TO RED MILL DRIVE; INCL. REMOVAL AND
															INSTALLATION OF PAVEMENT, CURB, GUARDRAIL, LIGHT
															POLES, CONDUITS, FENCE, LANDSCAPING AND TRAFFIC
															BARRIERS
			RMD 20+01 RT	RMD 20+53 LT			INSTALL	T							AERIAL E&T WIRES
			RMD 20+03 RT	RMD 20+56 RT			I & M	P	200 SF						DRAINAGE PIPES & CONCRETE WALL
			RMD 20+56 RT				REMOVE & REPLACE	T							IRON PIPE
2	JERICHO HISTORICAL SOCIETY, INC.	1	RMD 20+53 LT	RMD 21+56 LT			INSTALL	T				JERICHO			TEMP. UTILITY POLE & AERIAL E&T WIRES
			RMD 20+55 RT	RMD 20+67 RT			RECONSTRUCT	T	260 SF						PORTION OF RED MILL DRIVE AND AREA EAST OF AND
															ADJACENT TO RED MILL DRIVE; INCL. REMOVAL AND
															INSTALLATION OF PAVEMENT, CURB, GUARDRAIL, LIGHT
															POLES, CONDUITS, FENCE, LANDSCAPING AND TRAFFIC
															BARRIERS
			RMD 20+56 RT	RMD 20+59 RT			I & M	P	40 SF						DRAINAGE PIPES & CONCRETE WALL; INCL. REMOVAL OF
															STONE WALL.
			RMD 20+56 RT				REMOVE & REPLACE	T							IRON PIPE
			RMD 20+62 RT	RMD 21+20 RT			INSTALL	T	590 SF						TRAFFIC BARRIERS, SIGN, GUARDRAIL & BF
			RMD 20+92 LT				INSTALL	T							SIGN
3	KOZLOWSKI, JAMES S.;	1	RMD 20+45 RT	RMD 20+57 RT			SR	T	43 SF	WDOE	10/16/13	JERICHO	317	84-86	
	KOZLOWSKI, ADAM J.;		RMD 20+46 RT	RMD 20+56 RT			I & M	P	50 SF						CONCRETE WALL; INCL. REMOVAL OF STONE WALL
	KOZLOWSKI, TONYA L.L.		RMD 20+56 RT				REMOVE & REPLACE	T							IRON PIPE
			PB 11+03 LT	PB 11+95 LT			INSTALL	T	230 SF						BF, EC & TEMP. CHECK DAMS
			PB 11+31 LT	PB 11+45 LT			SR	T	5 SF						
4	GREEN MOUNTAIN POWER CORPORATION	1	PB 9+87 RT	PB 11+95 LT											UTILITY EASEMENTS
5	COMCAST OF CONNECTICUT, GEORGIA,	1	PB 9+87 RT	PB 11+95 LT											UTILITY EASEMENTS
	MASSACHUSETTS, NEW HAMPSHIRE,														
	NEW YORK, NORTH CAROLINA,														
	VERMONT LLC														
6	VERMONT GAS SYSTEMS, INC.	1	PB 9+87 RT	PB 11+95 LT											UTILITY EASEMENTS
7	TELEPHONE OPERATING COMPANY OF														
	VERMONT LLC														
8	CHAMPLAIN WATER DISTRICT	1	PB 9+87 RT	PB 11+95 LT											UTILITY EASEMENTS

TABLE OF REVISIONS

REVISION NO.	ROW SET SHEET #	DESCRIPTION	DATE
1	3, 4	PARCEL 1, CHAMPLAIN CO., INC. - ADD	09/19/13
		RAY ELY d/b/a CHITTENDEN MILLS, LLC,	
		LESSEE	
		COMPL. BY: MT C.O. 9823 APPR. BY: RC	
2	3, 4	PARCEL 3, KOZLOWSKI - ADD TONYA L.L.	09/19/13
		KOZLOWSKI	
		COMPL. BY: MT C.O. 9824 APPR. BY: RC	

APPROVED: HARRY PETROVS DATE: 05-23-13
CHIEF, PLANS & TITLES

PROJECT NAME:	JERICHO		
PROJECT NUMBER:	STP FTBR (3)		
FILE NAME:	r08f004Detail.xls	PLOT DATE:	14-NOV-2013
PROJECT LEADER:	M. SARGENT	DRAWN BY:	M. TROTTIER
DESIGNED BY:	CHA	CHECKED BY:	E. PIERCE
R.O.W. DETAIL SHEET #1		SHEET 61 OF 62	

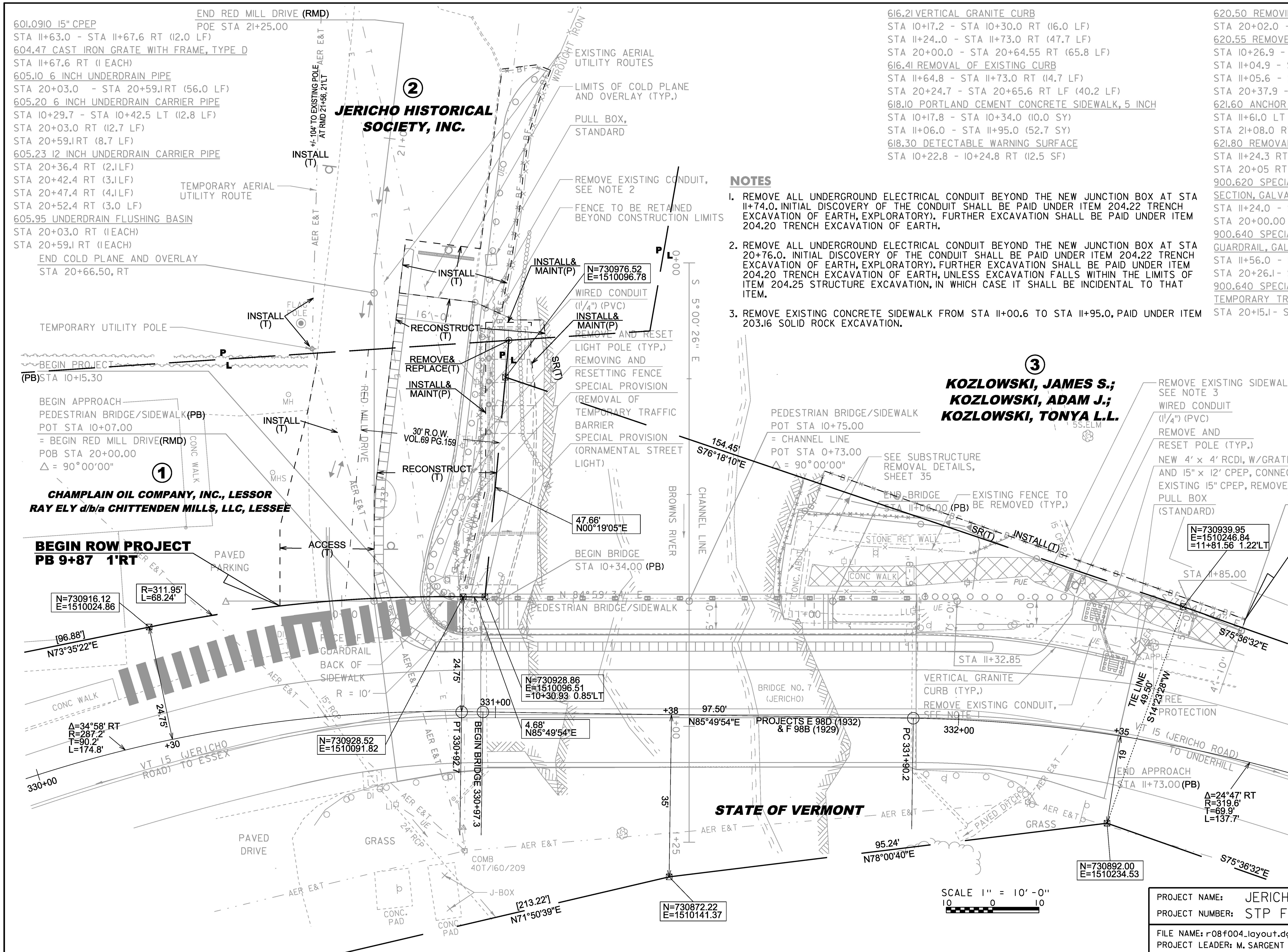
601.0910 15" CPEP
STA 11+63.0 - STA 11+67.6 RT (12.0 LF)
604.47 CAST IRON GRATE WITH FRAME, TYPE D
STA 11+67.6 RT (1 EACH)
605.10 6 INCH UNDERDRAIN PIPE
STA 20+03.0 - STA 20+59.1RT (56.0 LF)
605.20 6 INCH UNDERDRAIN CARRIER PIPE
STA 10+29.7 - STA 10+42.5 LT (12.8 LF)
STA 20+03.0 RT (12.7 LF)
STA 20+59.1RT (8.7 LF)
605.23 12 INCH UNDERDRAIN CARRIER PIPE
STA 20+36.4 RT (2.1LF)
STA 20+42.4 RT (3.1LF)
STA 20+47.4 RT (4.1LF)
STA 20+52.4 RT (3.0 LF)
605.95 UNDERDRAIN FLUSHING BASIN
STA 20+03.0 RT (1EACH)
STA 20+59.1 RT (1EACH)

616.21 VERTICAL GRANITE CURB
STA 10+17.2 - STA 10+30.0 RT (16.0 LF)
STA 11+24.0 - STA 11+73.0 RT (47.7 LF)
STA 20+00.0 - STA 20+64.55 RT (65.8 LF)
616.41 REMOVAL OF EXISTING CURB
STA 11+64.8 - STA 11+73.0 RT (14.7 LF)
STA 20+24.7 - STA 20+65.6 RT LF (40.2 LF)
618.10 PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
STA 10+17.8 - STA 10+34.0 (10.0 SY)
STA 11+06.0 - STA 11+95.0 (52.7 SY)
618.30 DETECTABLE WARNING SURFACE
STA 10+22.8 - 10+24.8 RT (12.5 SF)

620.50 REMOVING AND RESETTING FENCE
STA 20+02.0 - STA 20+65.4 RT (65.0 LF)
620.55 REMOVE EXISTING FENCE
STA 10+26.9 - STA 10+31.9 LT (-)
STA 11+04.9 - STA 11+34.6 LT (-)
STA 11+05.6 - STA 11+21.7 LT (-)
STA 20+37.9 - STA 20+59.7 RT (12.9)
621.60 ANCHOR FOR STEEL BEAM GUARDRAIL
STA 11+61.0 LT (1EACH)
STA 21+08.0 RT (1 EACH)
621.80 REMOVAL AND DISPOSAL OF GUARDRAIL
STA 11+24.3 RT - STA 11+50.6 LT (30.3 LF)
STA 20+05 RT - PB/S STA 10+30.0 CL (29.3 LF)
900.620 SPECIAL PROVISION (GUARDRAIL APPROACH SECTION, GALVANIZED/PAINTED 4 RAIL BOX BEAM
STA 11+24.0 - STA 11+56.0 LT (1EACH)
STA 20+00.00 - STA 20+26.1RT (1 EACH)
900.640 SPECIAL PROVISION (STEEL BEAM GUARDRAIL, GALVANIZED/PAINTED)
STA 11+56.0 - STA 11+70.3 LT (14.5 LF)
STA 20+26.1 - STA 21+18.3 RT (77.0 LF)
900.640 SPECIAL PROVISION (REMOVAL OF TEMPORARY TRAFFIC BARRIER)
STA 20+15.1 - STA 20+43.4 RT (40.0 LF)

NOTES

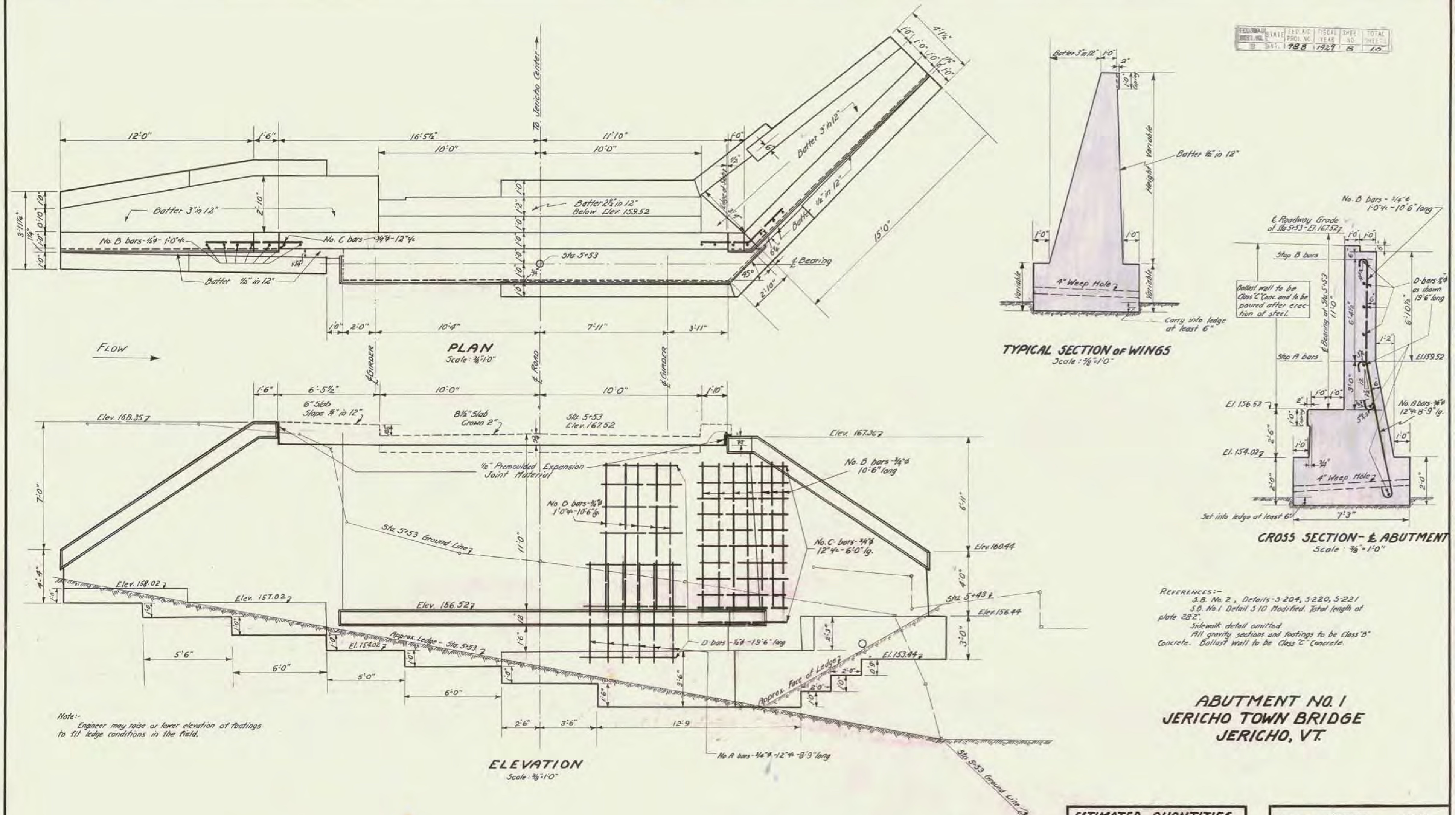
1. REMOVE ALL UNDERGROUND ELECTRICAL CONDUIT BEYOND THE NEW JUNCTION BOX AT STA 11+74.0. INITIAL DISCOVERY OF THE CONDUIT SHALL BE PAID UNDER ITEM 204.22 TRENCH EXCAVATION OF EARTH, EXPLORATORY). FURTHER EXCAVATION SHALL BE PAID UNDER ITEM 204.20 TRENCH EXCAVATION OF EARTH.
2. REMOVE ALL UNDERGROUND ELECTRICAL CONDUIT BEYOND THE NEW JUNCTION BOX AT STA 20+76.0. INITIAL DISCOVERY OF THE CONDUIT SHALL BE PAID UNDER ITEM 204.22 TRENCH EXCAVATION OF EARTH, EXPLORATORY). FURTHER EXCAVATION SHALL BE PAID UNDER ITEM 204.20 TRENCH EXCAVATION OF EARTH, UNLESS EXCAVATION FALLS WITHIN THE LIMITS OF ITEM 204.25 STRUCTURE EXCAVATION, IN WHICH CASE IT SHALL BE INCIDENTAL TO THAT ITEM.
3. REMOVE EXISTING CONCRETE SIDEWALK FROM STA 11+00.6 TO STA 11+95.0, PAID UNDER ITEM 203.16 SOLID ROCK EXCAVATION.



678.23 WIRED CONDUIT (1 1/4") (PVC)
STA 11+35.0 - STA 11+74.0 LT (42.6 LF)
STA 20+07.0 RT - STA 20+76.0 RT (66.8 LF)
678.25 PULL BOX, STANDARD
STA 11+74.0 LT (1EACH)
STA 20+76.0 RT (1EACH)
679.21 LIGHT POLE BASE
STA 11+35.0 LT (1 EACH)
STA 11+60.0 LT (1 EACH)
STA 20+05.0 RT (1 EACH)
STA 20+35.0 RT (1 EACH)
STA 20+62.5 RT (1EACH)
679.25 REMOVING AND RESETTING LIGHT POLE
STA 11+35.0 LT (1 EACH)
STA 11+60.0 LT (1 EACH)
STA 20+35.0 RT (1 EACH)
STA 20+62.5 RT (1EACH)
900.620 SPECIAL PROVISION (ORNAMENTAL STREET LIGHT)
STA 20+07.0 RT (1 EACH)

PROJECT NAME:	JERICHO
PROJECT NUMBER:	STP FTBR (3)

FILE NAME: r08f004_layout.dgn	PLOT DATE: 14-NOV-2013
PROJECT LEADER: M. SARGENT	DRAWN BY: E. PIERCE
DESIGNED BY: C.R.H.	CHECKED BY: E. PIERCE
ROW LAYOUT SHEET 1 OF 1	SHEET 62 OF 62



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	VT.	98B	1929	8	10

REFERENCES:-
S.B. No. 2, Details - S-204, S-220, S-221
S.B. No. 1 Detail S-10 Modified. Total length of plate 28'-2".
Sidewalk detail omitted.
All gravity sections and footings to be Class "B" Concrete. Ballast wall to be Class "C" Concrete.

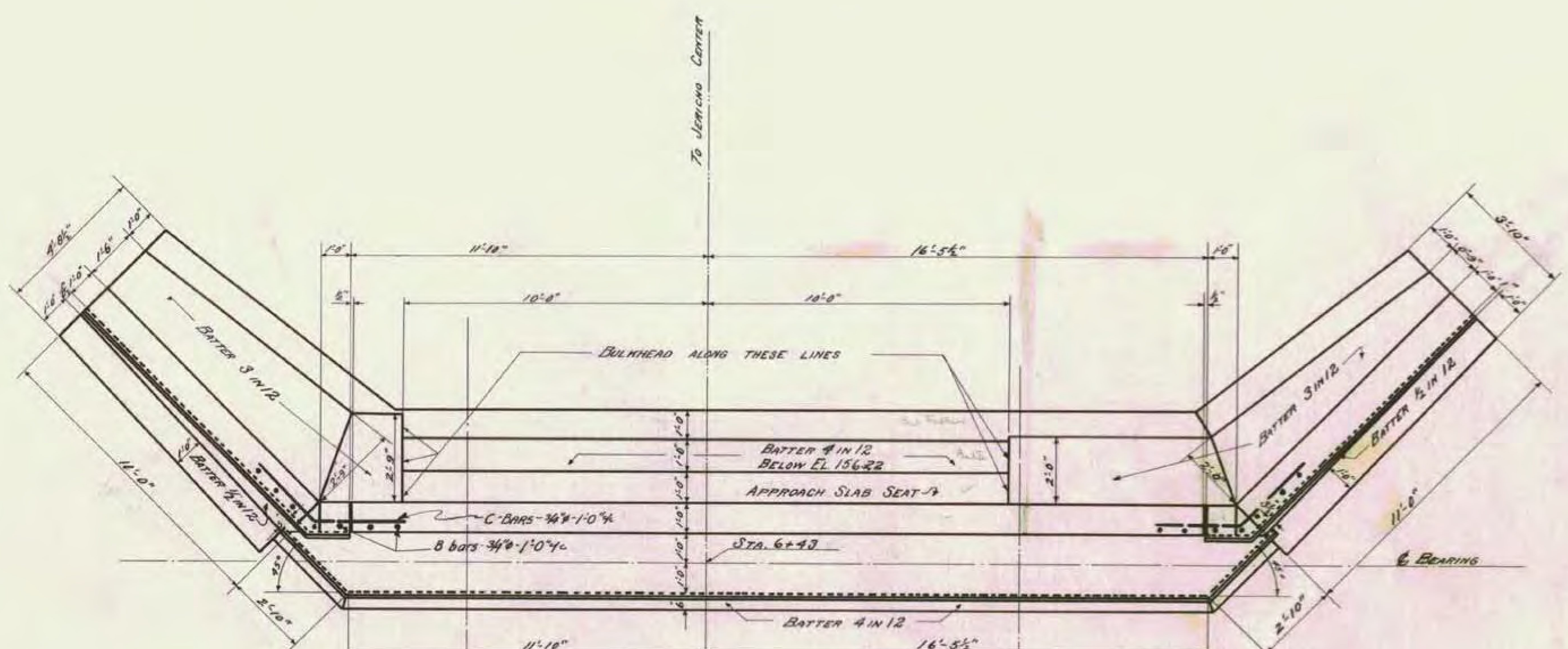
Note:- Engineer may raise or lower elevation of footings to fit ledge conditions in the field.

ABUTMENT NO. 1
JERICHO TOWN BRIDGE
JERICHO, VT.

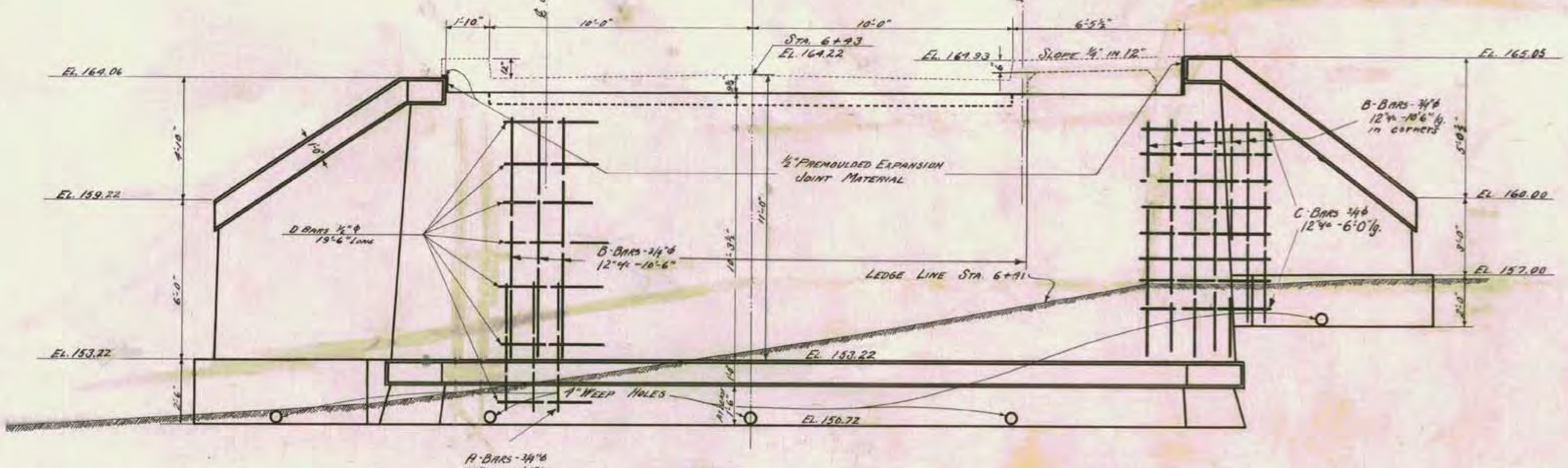
ESTIMATED QUANTITIES		
Structure Excavation	270	Cu. Yds.
Class "B" Concrete (1:2½:5)	68	" "
Class "C" " (1:2:4)	16	" "
Reinforcing Steel	1120	Lbs.

Surveyed by	PUTNAM	3-6-29
Designed by	M.W.D.	4-13-29
Drawn by	M.W.D.	4-13-29
Traced by	A.G.	4-16-29
Checked by	P.M.S.	5-3-29
Series F	No. 98B	Filed
	Sheet 8 of 15 Sheets	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	VT.	98B	1929	9	15

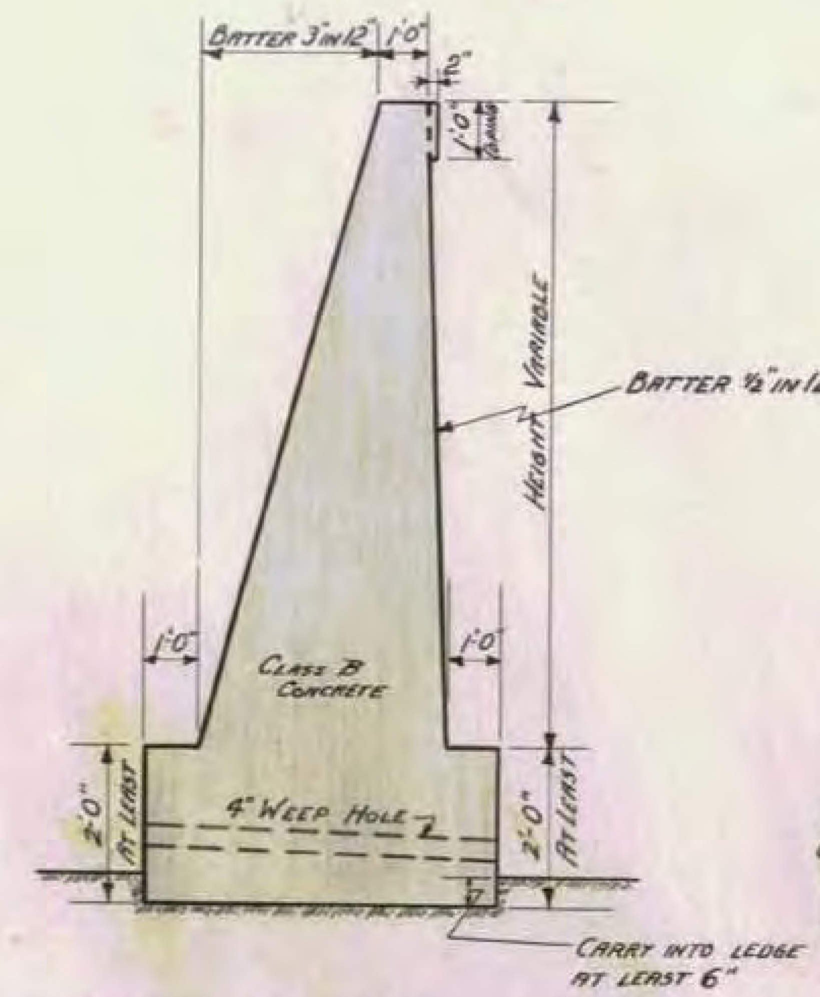


PLAN

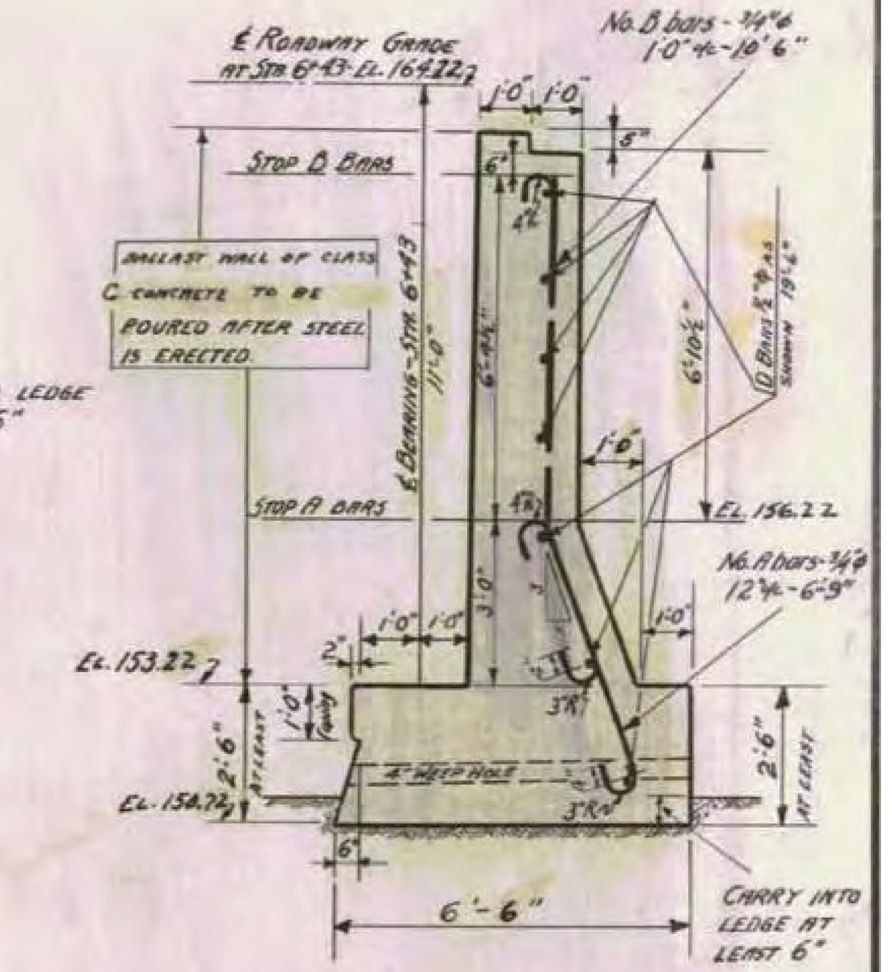


NOTE:-
ENGINEER MAY RAISE OR LOWER ELEVATION OF FOOTINGS TO FIT LEDGE CONDITIONS FOUND IN FIELD.

ELEVATION



TYPICAL SECTION of WINGS



CROSS SECTION-℄ ABUTMENT

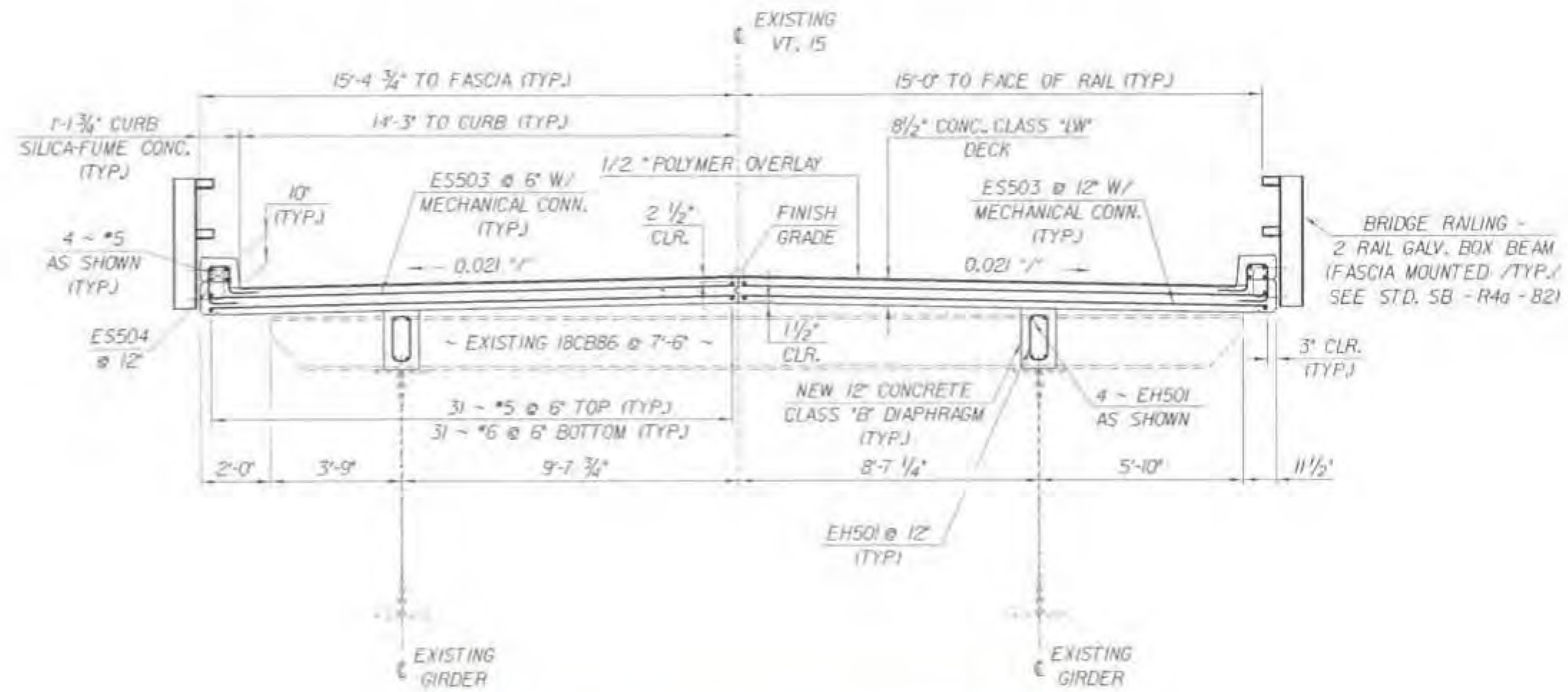
REFERENCES:-
S.B. No. 2, Details 5-204, 5-220, 5-221.
S.B. No. 1, Details 510 (Modified)
TOTAL LENGTH PLATE 28'-2", SIDEWALK DETAIL OMITTED.
ALL GRAVITY SECTIONS AND FOOTINGS TO BE CLASS B CONCRETE. BALLAST WALL TO BE CLASS C CONCRETE.

ABUTMENT NO. 2
JERICHO TOWN BRIDGE
JERICHO, VT.

SCALE: 3/8"=1'-0"

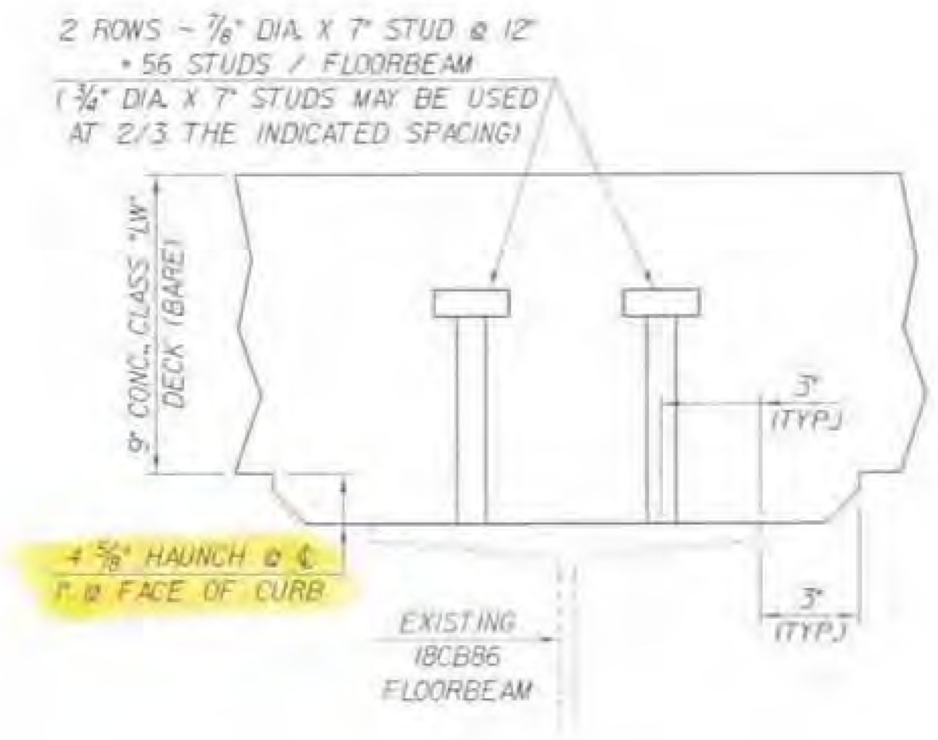
ESTIMATED QUANTITIES	
Structure Excavation	53 Cu. Yds.
Concrete Class "B" (1:2½:5)	43 Cu. Yds.
Concrete Class "C" (1:2:4)	16 Cu. Yds.
Reinforcing Steel	1000 Lbs.

Surveyed by PUTNAM 3-6-29
Designed by M.W.D. 4-13-29
Drawn by M.W.D. 4-13-29
Traced by W.G.B. 4-15-29
Checked by P.M.S. 5-3-29
Series F No. 98B Filed
Sheet 9 of 15 Sheets



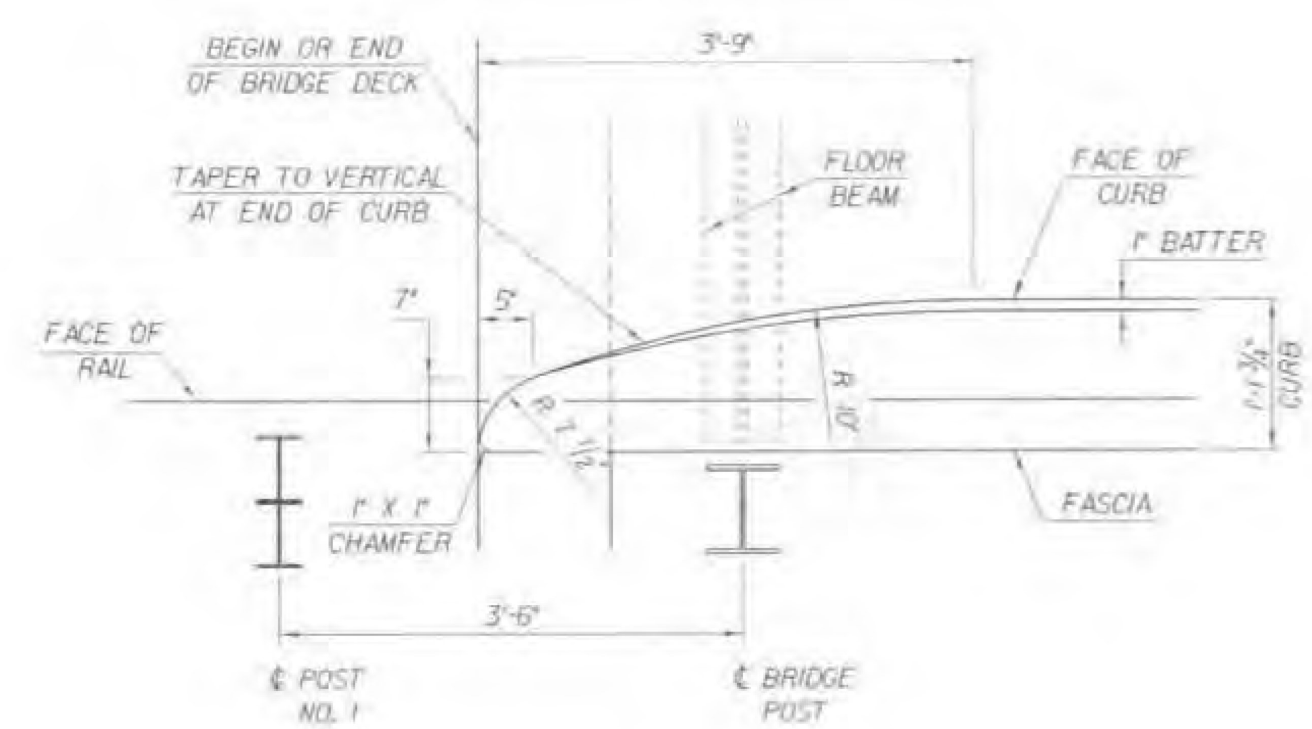
NEW BRIDGE TYPICAL ~ ALTERNATE C

SCALE: 3/8" = 1'-0"



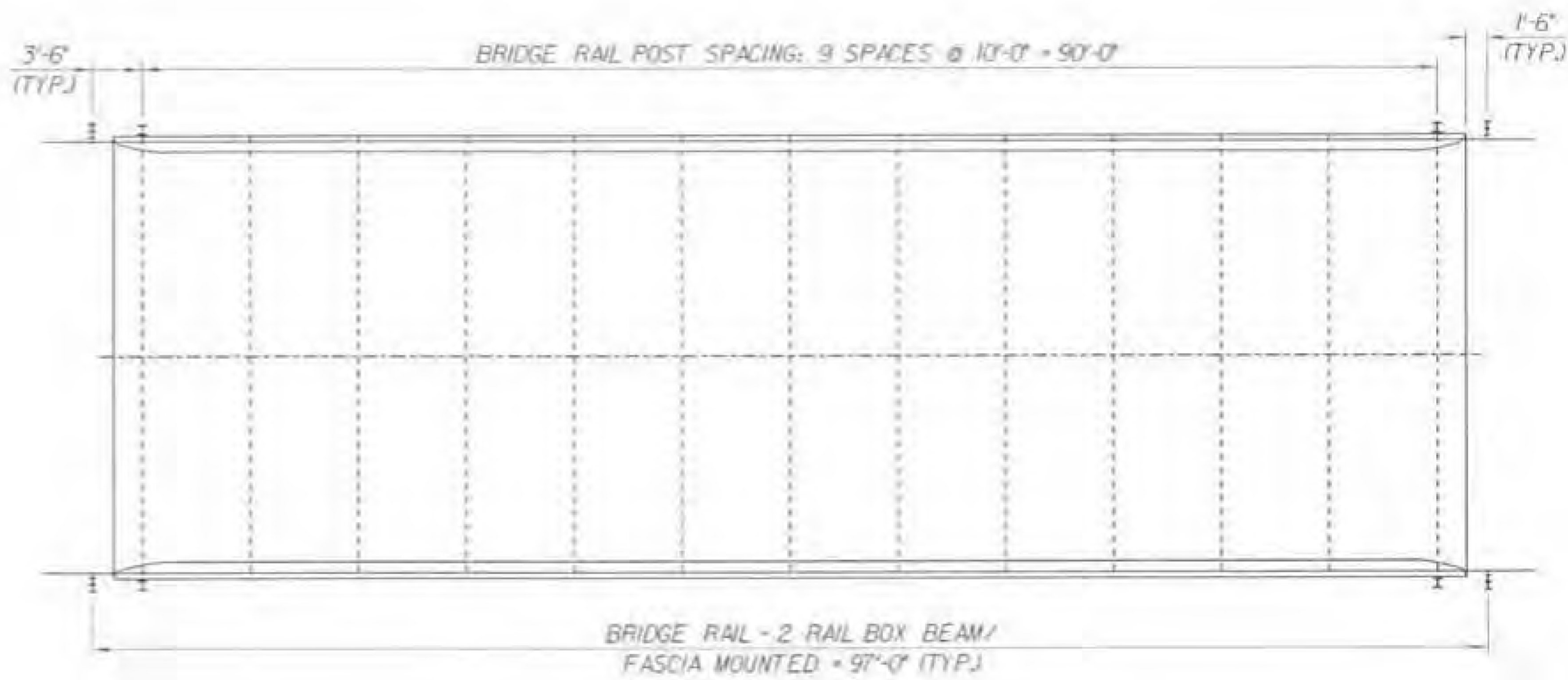
SHEAR CONNECTOR DETAIL

SCALE: 3" = 1'-0"



CURB TAPER DETAIL

SCALE: 1" = 1'-0"



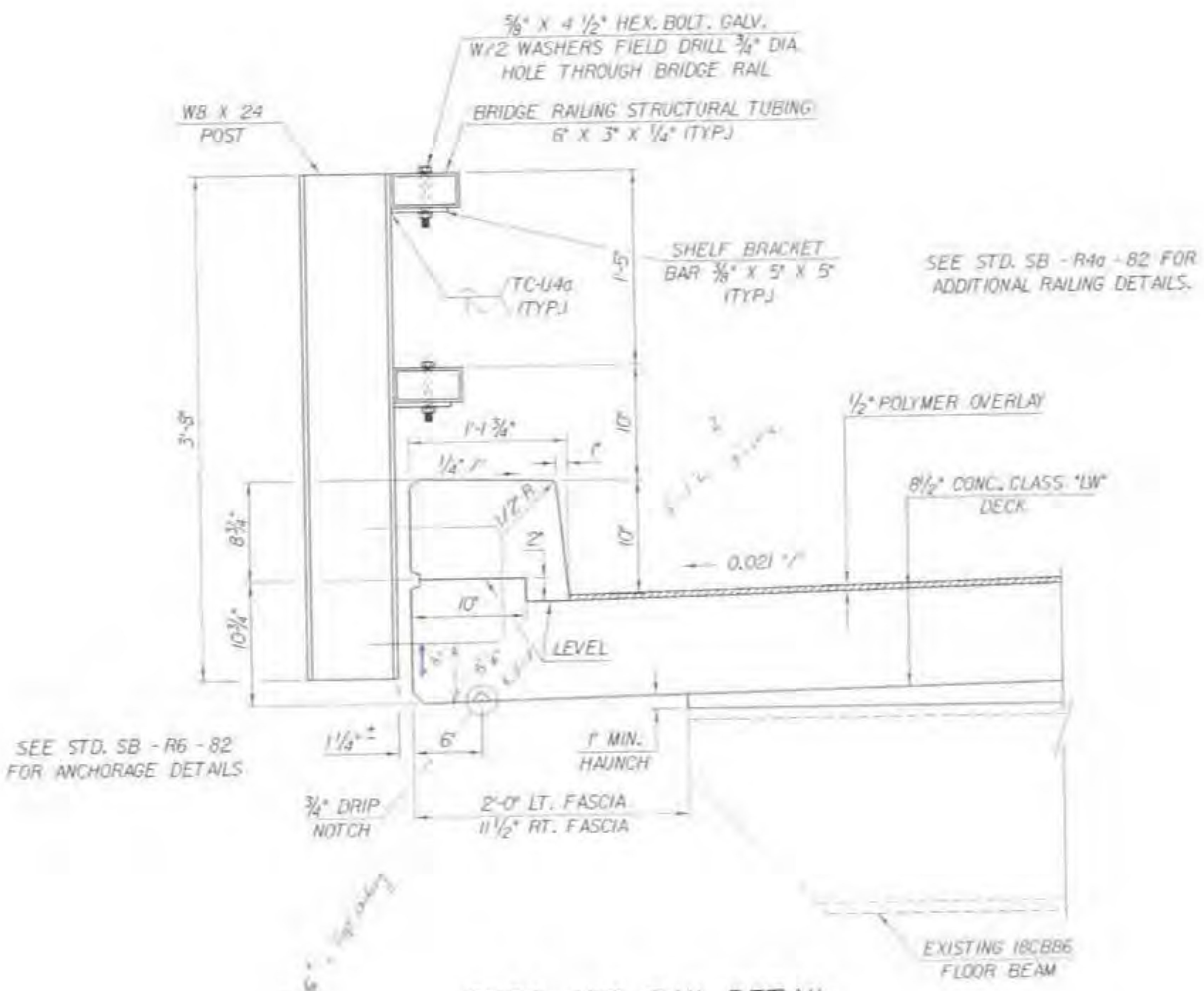
BRIDGE RAIL LAYOUT

SCALE: 1/8" = 1'-0"

BUILT AS DESIGNED

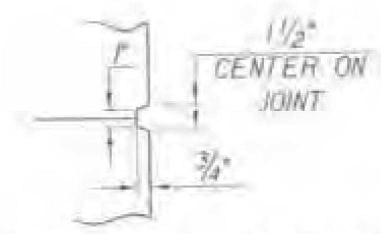
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	JERICHO	Bridge No.	7
		Log Sta.	20 + 44
Highway No.	VT. 15	Surv. Sta.	5 + 98.30
VT. 15 OVER THE BROWNS RIVER			
NEW BRIDGE TYPICAL ALTERNATE C			
Designed By D. HOYNE		Drawn By G. ROY	
Checked By D. HOYNE	Date 4/95	Bridge Design Supervisor J.H. WEAVER	Date 4/95
PROJECT	JERICHO	PROJECT NO.	STP DECK (35)
Bridge Sheet No.		Sheet 23 of 36	



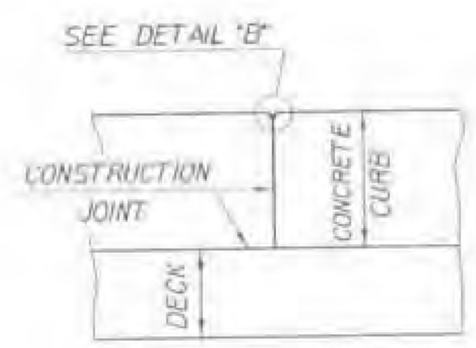
CURB AND RAIL DETAIL

SCALE: 1 1/2" = 1'-0"



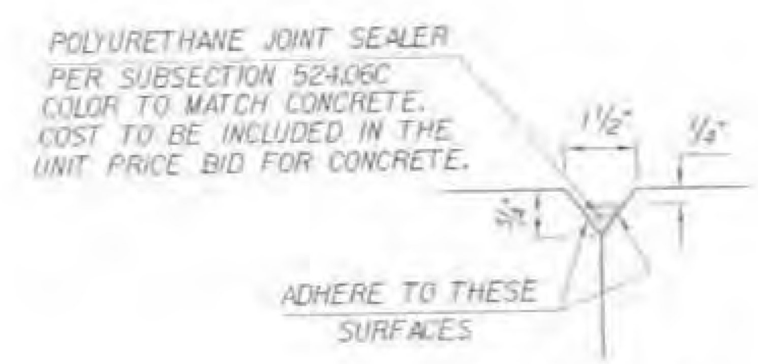
SCORE MARK DETAIL

NTS



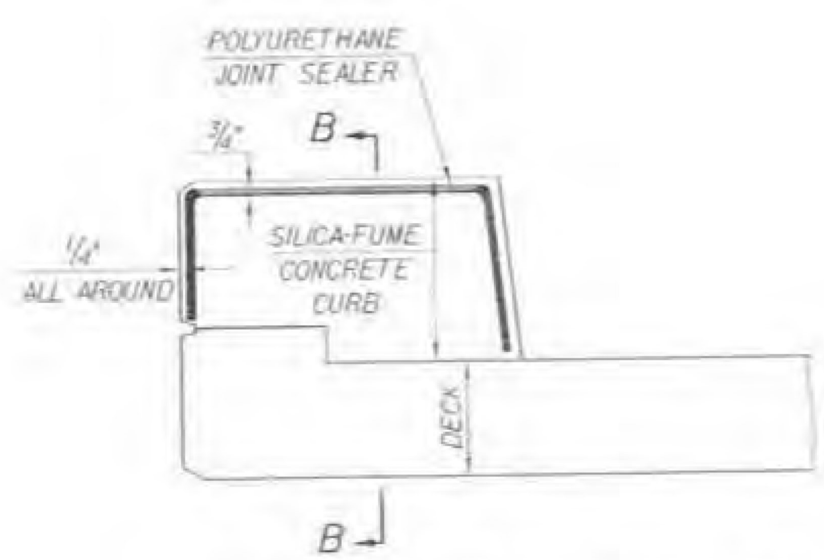
SECTION B - B

NTS



DETAIL "B"

NTS



TYPICAL SECTION THROUGH CONCRETE CURB CONSTRUCTION JOINT

NTS

NOTES:

1. CONSTRUCTION JOINTS THROUGH CONCRETE CURBS SHALL BE SPACED MAXIMUM 15'-0" CENTER TO CENTER AND SHALL BE 1'-6" MINIMUM FROM THE CENTER OF THE NEAREST BRIDGE RAIL POST. CONCRETE SHALL BE PLACED IN ALTERNATING SECTIONS WITH A MINIMUM OF 48 HOURS DELAY BETWEEN ADJACENT POURS.
2. LONGITUDINAL REINFORCING SHALL PASS THROUGH CONCRETE CURB CONSTRUCTION JOINTS.
3. CONSTRUCTION JOINTS THROUGH SIDEWALKS SHALL BE SIMILAR TO CONCRETE CURB CONSTRUCTION JOINTS.

BUILT AS DESIGNED

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	JERICHO	Bridge No.	7
		Log Sta.	20 + 44
Highway No.	VT. 15	Surv. Sta.	5 + 98.38

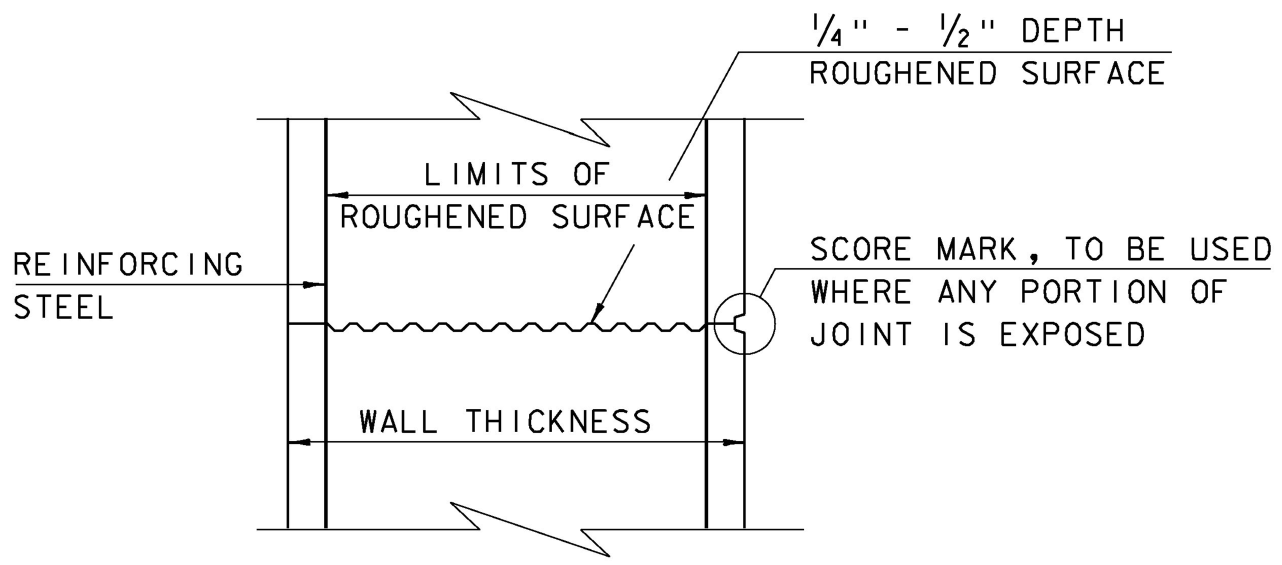
VT. 15 OVER THE BROWNS RIVER

CURB AND RAIL DETAILS ALTERNATE C

Designed By D. HOYNE		Drawn By G. ROY
Checked By D. HOYNE	Date 4/95	Bridge Design Supervisor J. H. WEAVER Date 4/95
PROJECT JERICHO		PROJECT NO. STP DECK (35)
I.G.C. Info. /dr3/94b36/sb36cdgn		sb36c023
Bridge Sheet No.		Sheet 24 of 36

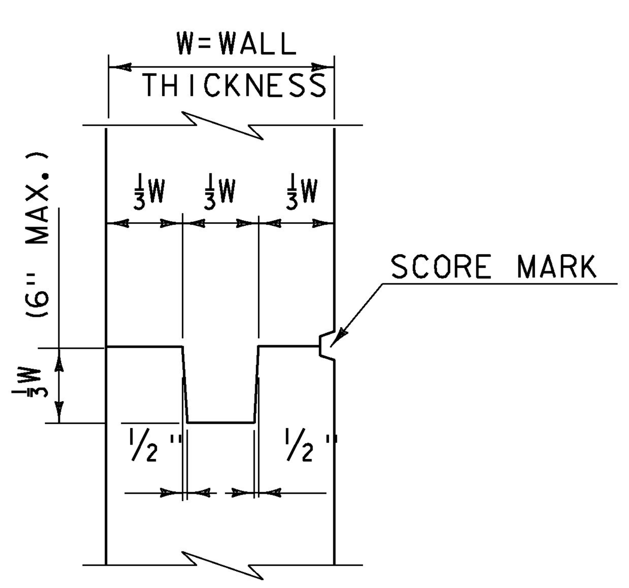
CONCRETE GENERAL NOTES

1. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" × 1"
2. REINFORCING STEEL SIZE AND SPACING SHOWN IN THE PLANS IS BASED ON 60 KSI STEEL, UNLESS NOTED OTHERWISE. WITH THE ENGINEER'S PERMISSION, BAR SIZE AND SPACING MAY BE MODIFIED ACCORDING TO THE LATEST AASHTO LRFD BRIDGE DESIGN SPECIFICATION AND STRUCTURES DESIGN MANUAL WHEN USING HIGHER STRENGTH STEEL.

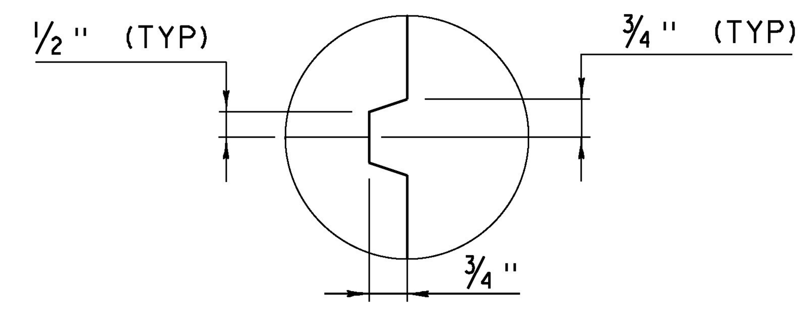


TYPICAL HORIZONTAL CONSTRUCTION JOINT
(NOT TO SCALE)

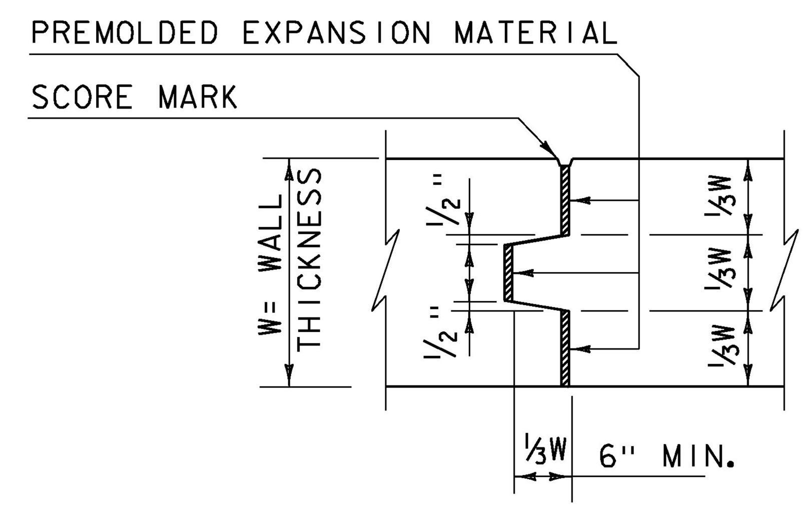
1. THE SURFACE OF THE CONCRETE CONSTRUCTION JOINTS SHALL BE CLEANED AND FREE OF LAITANCE.
2. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, ALL CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED.



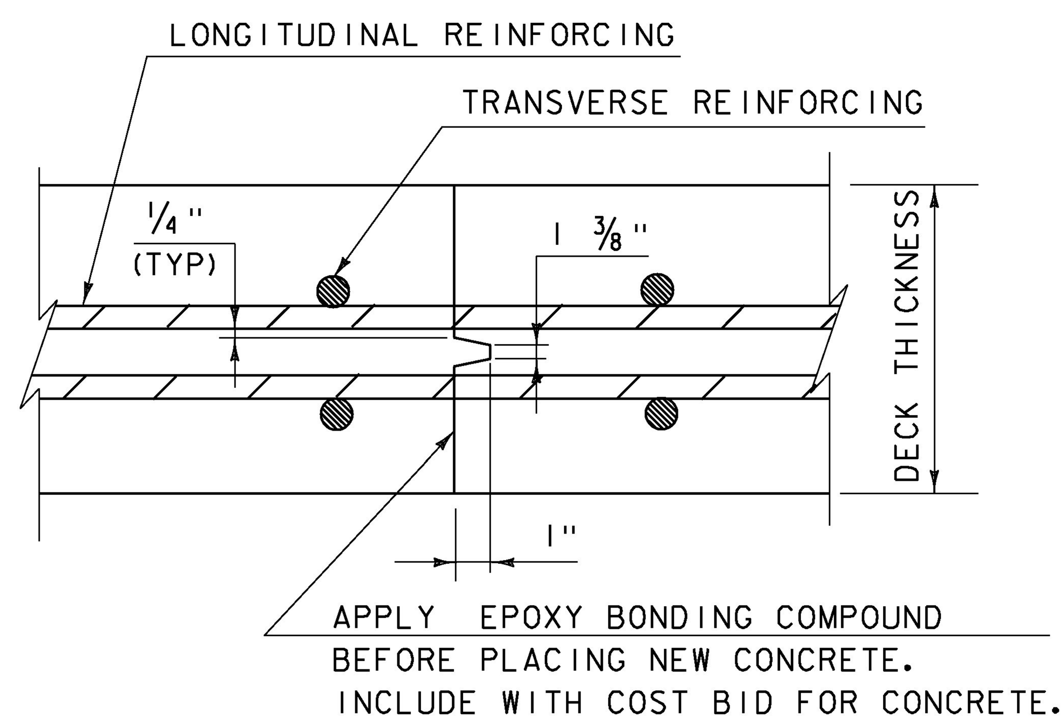
TYPICAL CONCRETE CONSTRUCTION JOINT
(NOT TO SCALE)



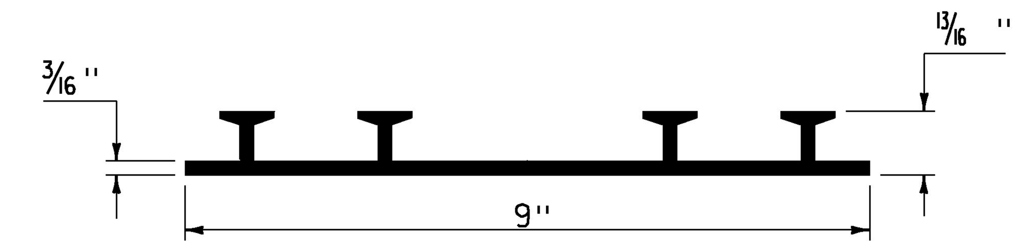
SCORE MARK DETAIL
(NOT TO SCALE)



TYPICAL CONCRETE EXPANSION JOINT
(NOT TO SCALE)



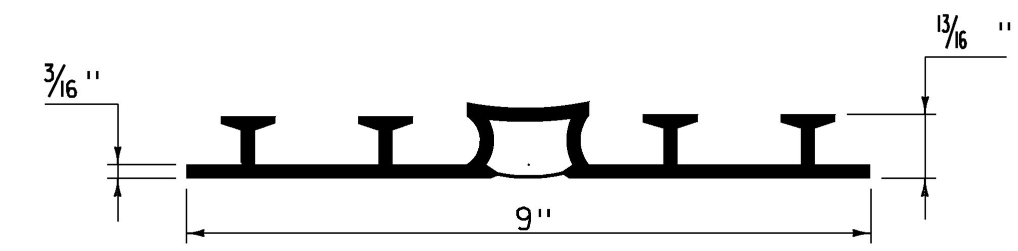
TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT DETAILS
(NOT TO SCALE)



P.V.C. WATERSTOP FOR CONSTRUCTION JOINTS
(NOT TO SCALE)

PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

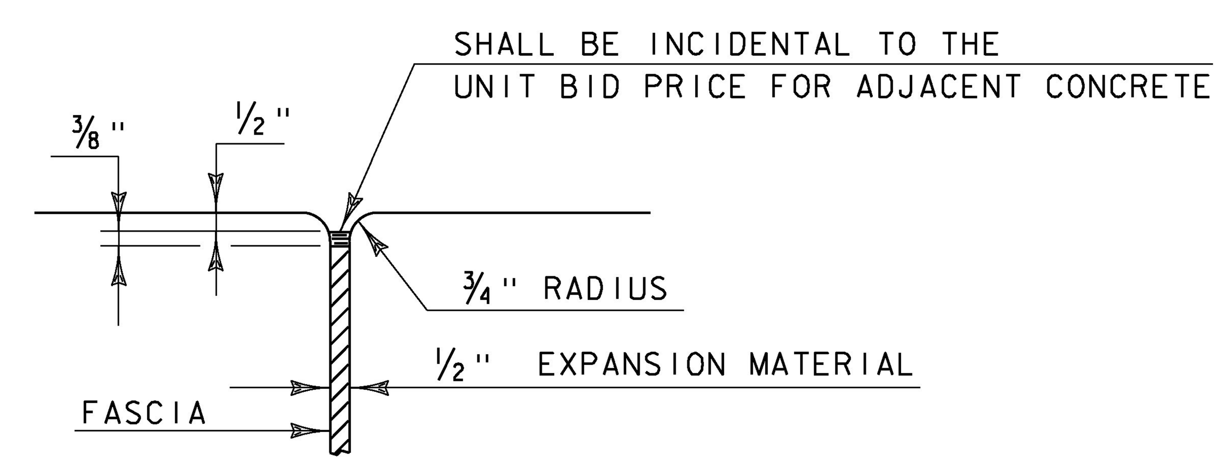
OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.



P.V.C. WATERSTOP FOR EXPANSION JOINTS
(NOT TO SCALE)

PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.



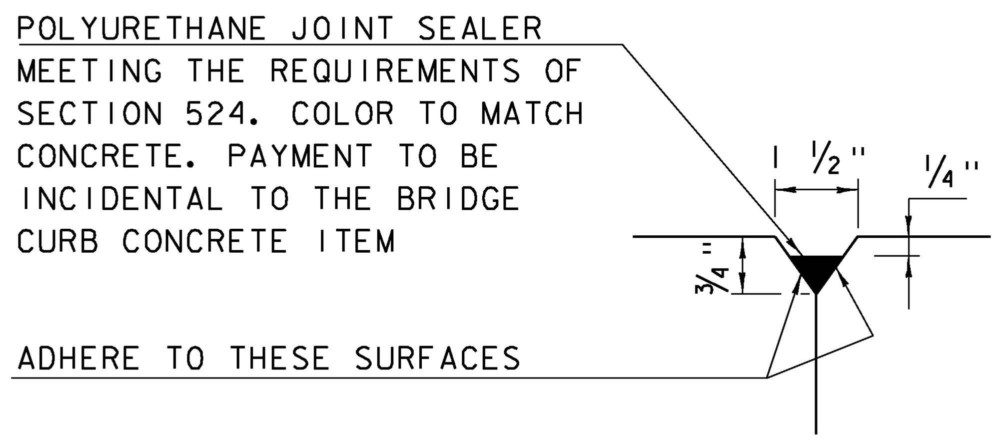
JOINT BETWEEN FASCIA AND WINGWALL
(NOT TO SCALE)

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
FEBRUARY 9, 2012	REBAR SUBSTITUTION ALLOWANCE ADDED TO CONCRETE GENERAL NOTES.

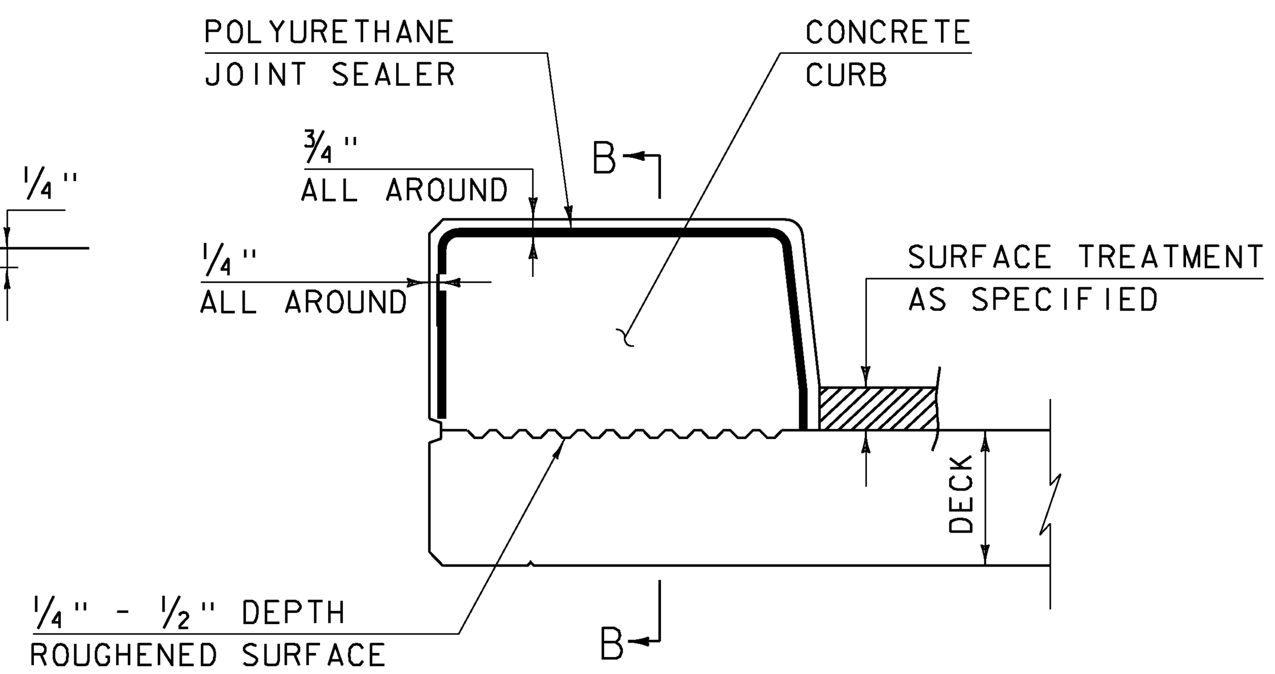
CONCRETE DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION · STRUCTURES · SECTION

STRUCTURES DETAIL
SD-501.00

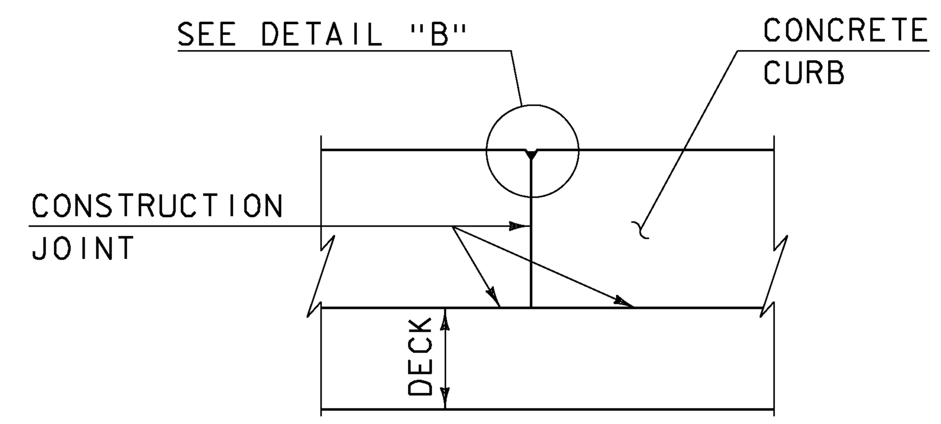


DETAIL "B"
(NOT TO SCALE)

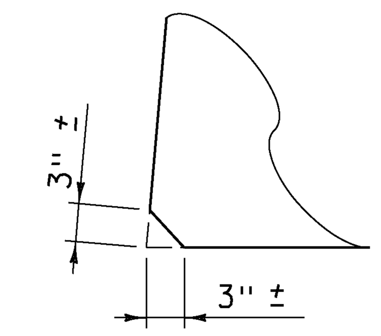


CONCRETE CURB JOINT SECTION
(NOT TO SCALE)

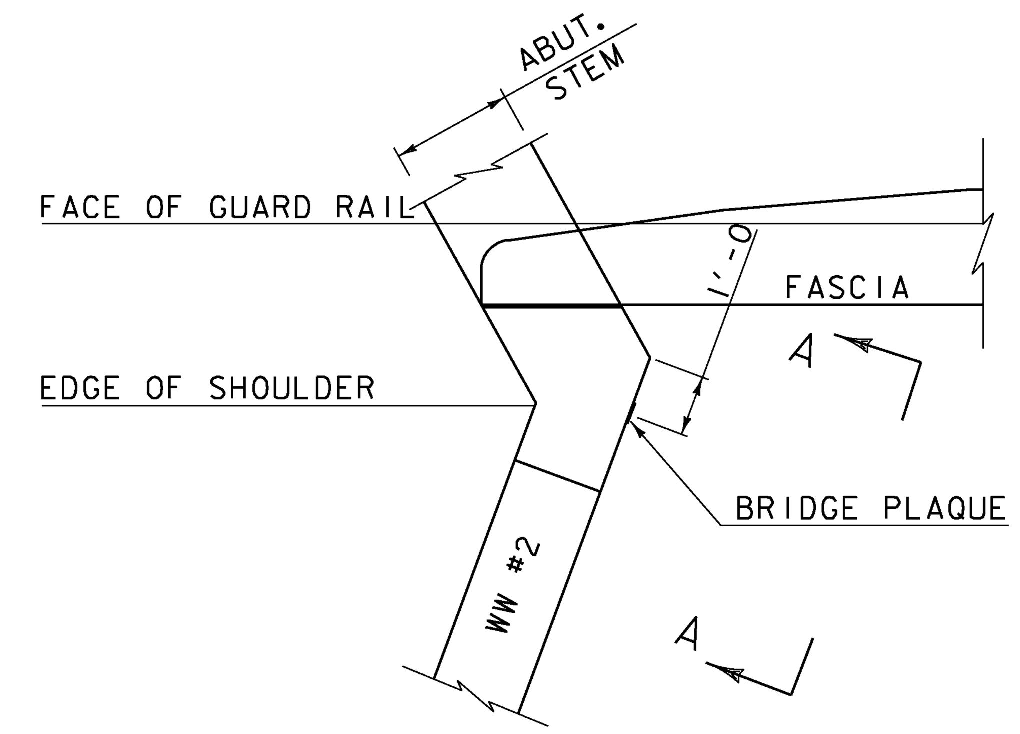
1. SEE TYPICAL HORIZONTAL CONSTRUCTION JOINT DETAIL FOR ADDITIONAL INFORMATION



SECTION B - B
(NOT TO SCALE)



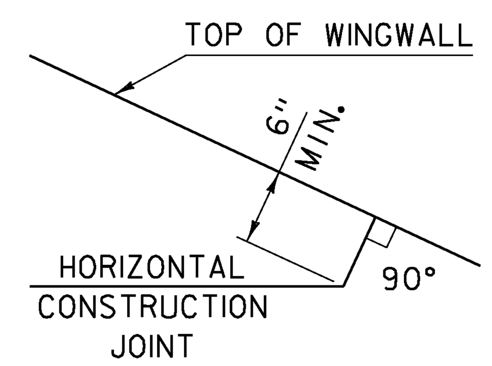
ACUTE ANGLE
CLIP DETAIL
(NOT TO SCALE)



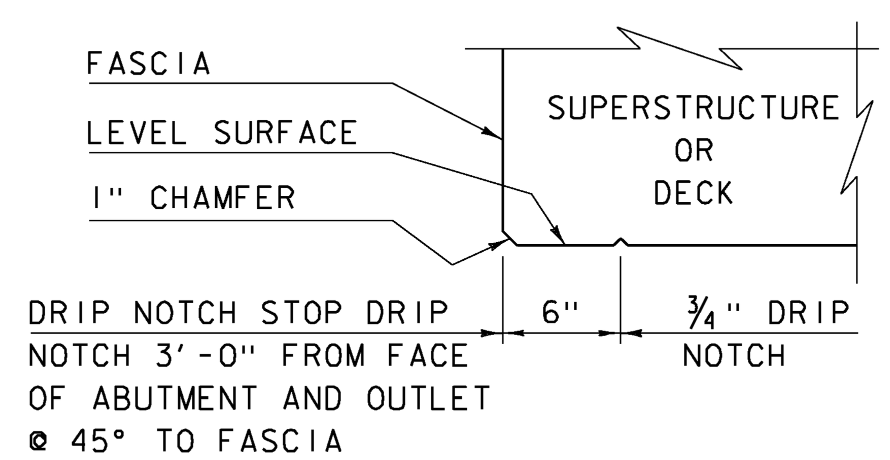
PLAN

CONCRETE CURB JOINT NOTES

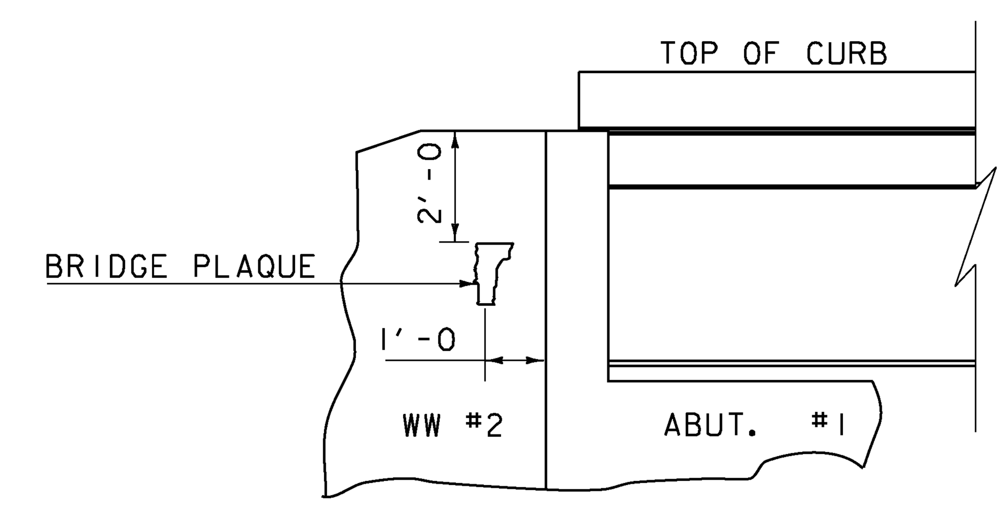
1. CONCRETE CURBS MAY BE PLACED IN ONE CONTINUOUS OPERATION IF AN APPROVED SHRINKAGE REDUCING ADMIXTURE LISTED IN THE SPECIAL PROVISIONS IS USED WITH THE CONCRETE MIX DESIGN. PAYMENT FOR THE SHRINKAGE REDUCING ADMIXTURE WILL BE INCIDENTAL TO THE BRIDGE CURB CONCRETE ITEM.
2. IF THE CONTRACTOR CHOOSES NOT TO USE AN APPROVED SHRINKAGE REDUCING ADMIXTURE, THE CURBS SHALL BE CONSTRUCTED WITH CONSTRUCTION JOINTS SPACED AT A MAXIMUM OF 15'-0" CENTER TO CENTER AND 2'-0" MINIMUM FROM THE CENTER OF NEAREST BRIDGE RAILING POST.
3. ON MULTI-SPAN CONTINUOUS SUPERSTRUCTURES, REGARDLESS OF WHETHER APPROVED SHRINKAGE REDUCING ADMIXTURE IS USED, CURB JOINTS SHALL BE LOCATED OVER THE CENTERLINE OF PIERS AND 7'-0" EACH SIDE OF THE CENTERLINE OF EACH PIER.
4. WHEN CURB JOINTS ARE USED THE CURBS SHALL BE PLACED IN ALTERNATE SECTIONS WITH A MINIMUM OF 48 HOUR DELAY BETWEEN ADJACENT PLACEMENTS.
5. LONGITUDINAL REINFORCING SHALL BE CONTINUOUS THROUGH CURB CONSTRUCTION JOINTS. CURB STIRRUP BARS SHALL BE TURNED AS NECESSARY TO MAINTAIN COVER IN THE FLARED CURB ENDS.
6. THE JOINT SPACING AND DETAILS SHOWN SHALL APPLY TO SIDEWALKS WHEN SHOWN IN THE PLANS.



HORIZONTAL WINGWALL
CONSTRUCTION JOINT
(NOT TO SCALE)



DRIP NOTCH DETAIL
(NOT TO SCALE)



VIEW "A - A"

BRIDGE PLAQUE
(NOT TO SCALE)

THE BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT #1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.

PAYMENT FOR INSTALLATION OF THE BRIDGE PLAQUE SHALL BE INCIDENTAL TO THE ADJACENT CONCRETE.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
JUNE 4, 2010	MODIFIED AND ADDED TWO DETAILS
OCTOBER 10, 2012	MODIFIED HORZ. JOINT WINGWALL ADD 6" MIN. DIMENSION

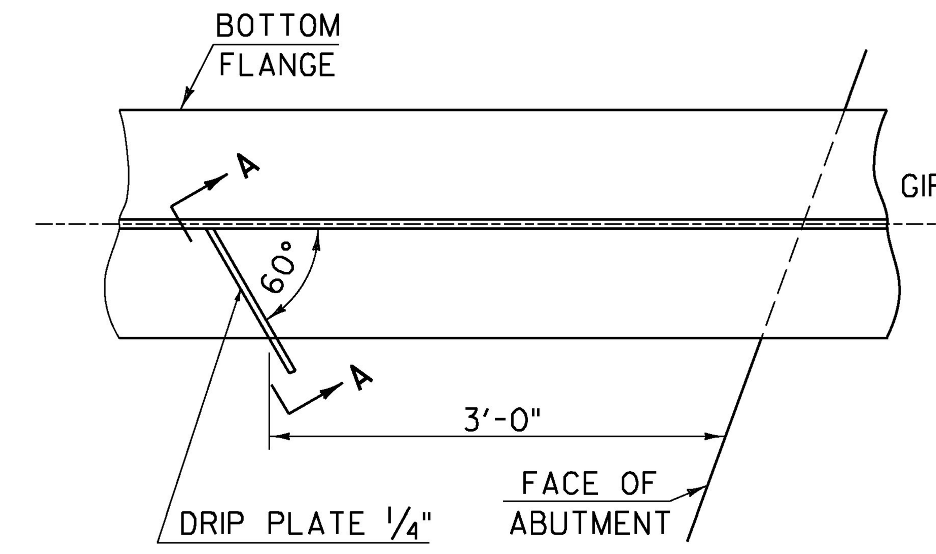
CONCRETE DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES SECTION

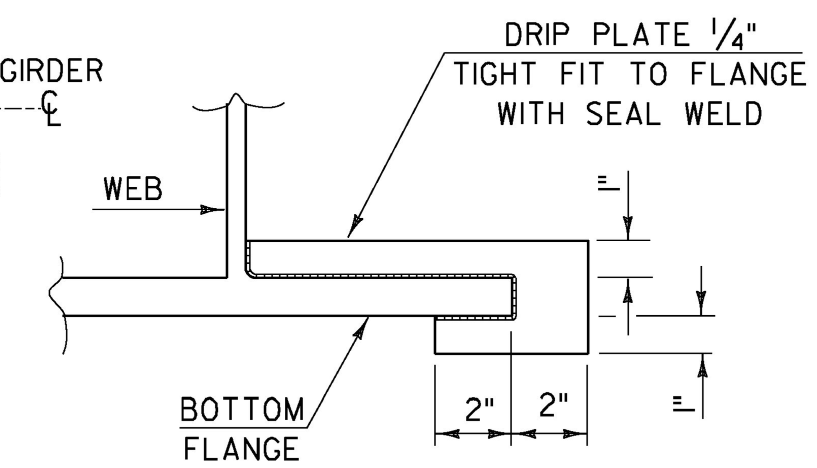
STRUCTURES DETAIL
SD-502.00

STRUCTURAL STEEL GENERAL NOTES:

1. ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH-STRENGTH BOLTS IN 15/16" DIAMETER HOLES, PER SUBSECTION 506.19, UNLESS OTHERWISE SPECIFIED.
2. ALL HOLES IN THE WEBS OF THE FASCIA GIRDERS THAT ARE NOT OTHERWISE FILLED, SHALL BE FILLED WITH EITHER BUTTON HEAD OR HEX HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.
3. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF SUBSECTION 506.10.
4. ANY CONNECTIONS THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
5. STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.
6. ENDS OF GIRDERS ARE TO BE VERTICAL IN THEIR FINAL POSITION.
7. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE GIRDERS SHALL BE TAKEN AS DIRECTED BY THE RESIDENT ENGINEER FOR USE IN DETERMINING FINISHED GRADES.

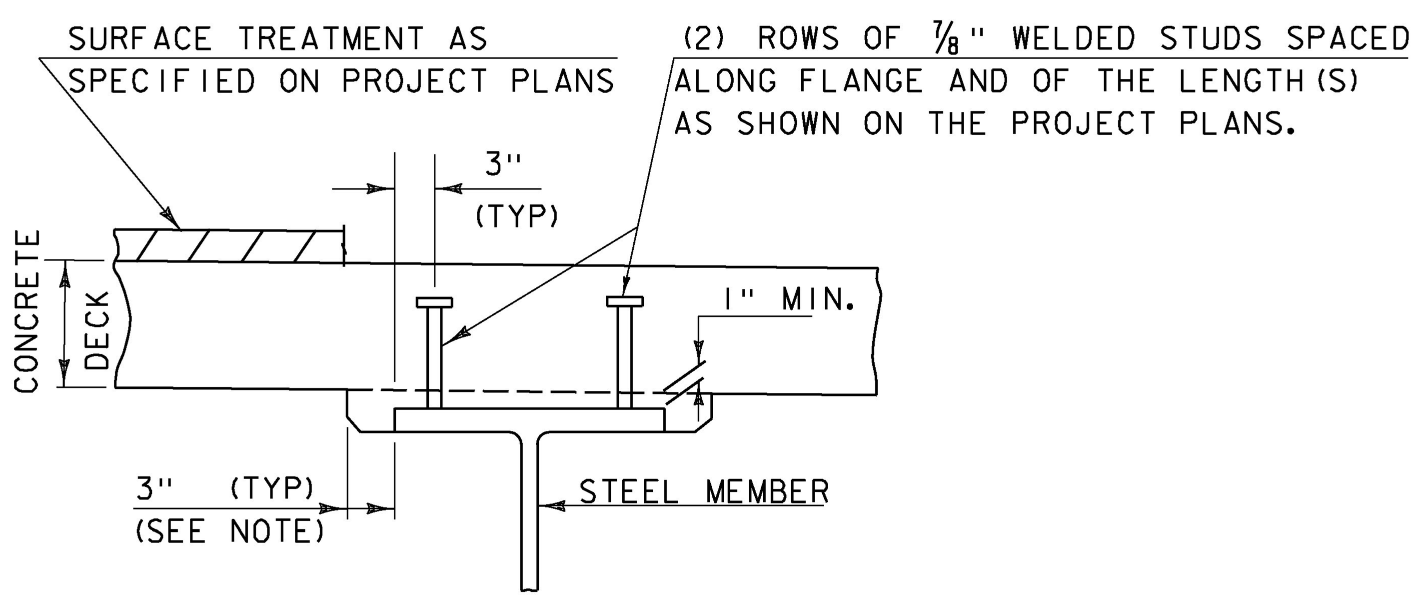


PLAN DRIP PLATE



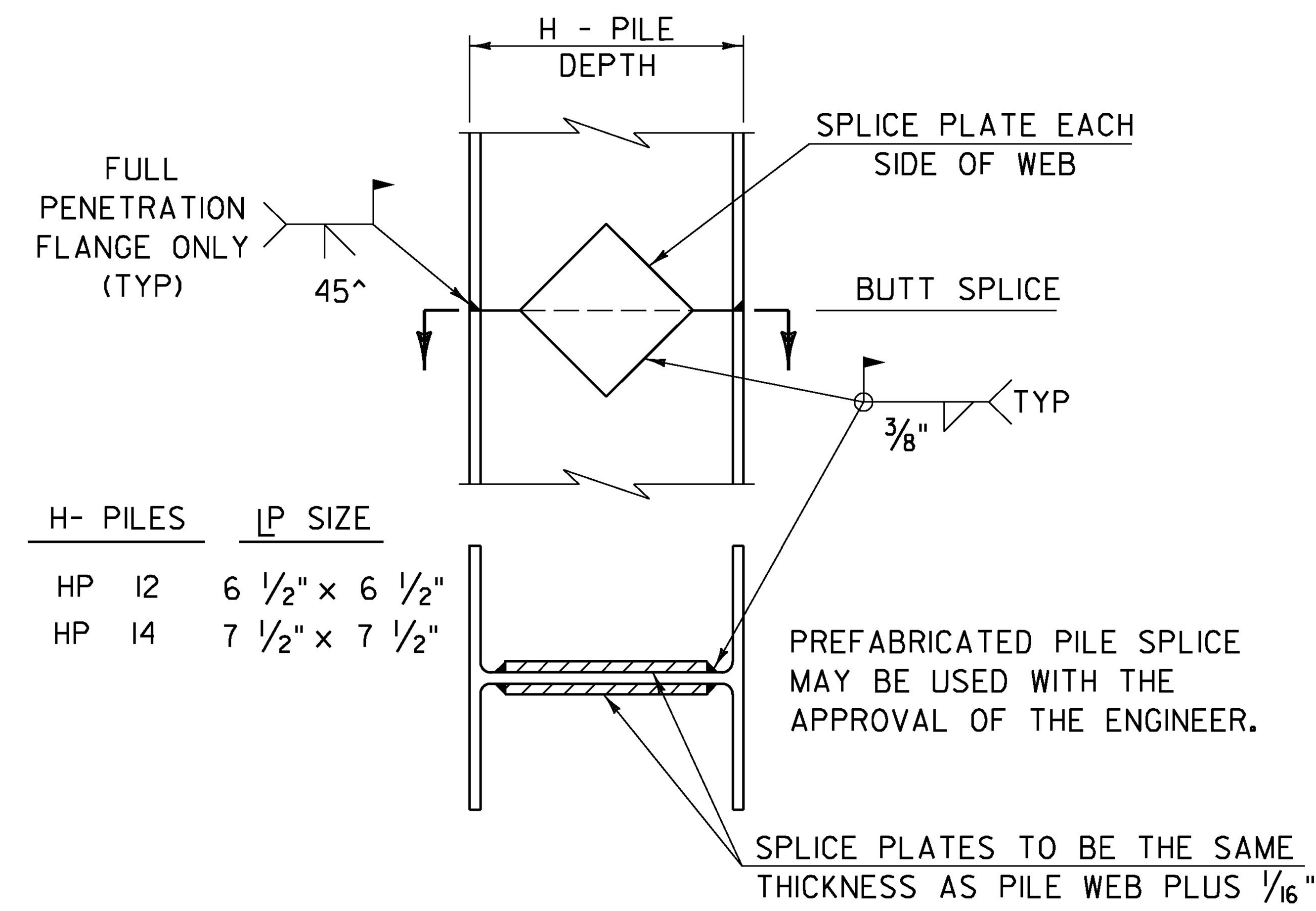
SECTION A - A

NOTE: DRIP PLATES SHALL BE PLACED ON OUTSIDE EDGE OF FASCIA GIRDERS ON THE HIGH SIDE OF ALL PIERS AND ABUTMENTS OR AS INDICATED ON PROJECT PLANS.



NOTE:
THE 3" HORIZONTAL SECTION MAY BE ELIMINATED FOR FORMING SYSTEMS DESIGNED FOR THE CONSTRUCTION OF VERTICAL HAUNCHES. ANY VOIDS RESULTING FROM FORMING SYSTEM ELEMENTS SHALL BE FILLED WITH JOINT SEALER, POLYURETHANE MEETING THE REQUIREMENTS OF SECTION 524. THE COST OF THE JOINT SEALER, POLYURETHANE SHALL BE INCIDENTAL TO THE ADJACENT CONCRETE.

HAUNCH AND SHEAR CONNECTOR DETAIL



H- PILES	ℙ SIZE
HP 12	6 1/2" x 6 1/2"
HP 14	7 1/2" x 7 1/2"

DETAIL OF PILE SPLICE

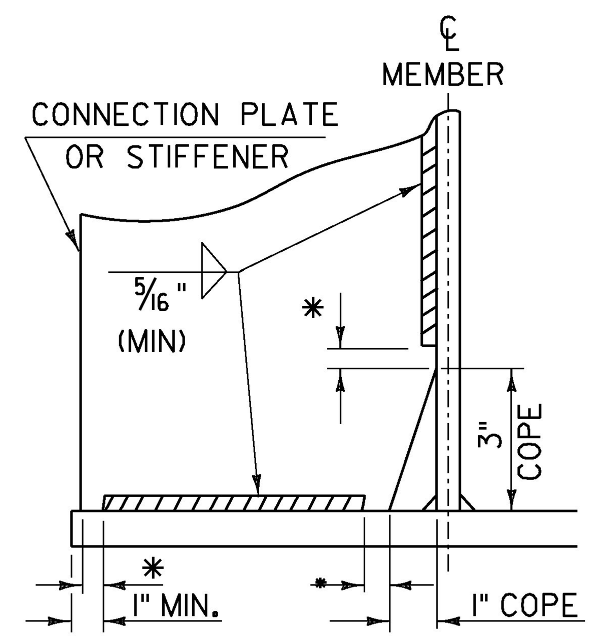
DETAILS ON THIS SHEET ARE "NOT TO SCALE" UNLESS NOTED OTHERWISE.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
JUNE 4, 2010	MODIFIED NOTES

STRUCTURAL STEEL DETAILS & NOTES

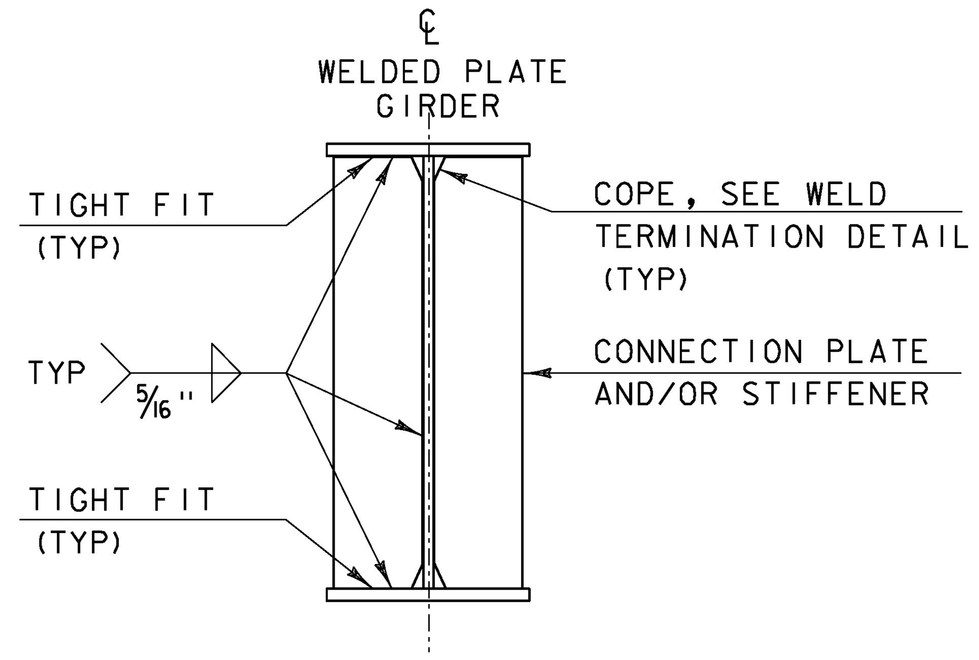
VERMONT AGENCY OF TRANSPORTATION STRUCTURES SECTION

STRUCTURES DETAIL SD-601.00



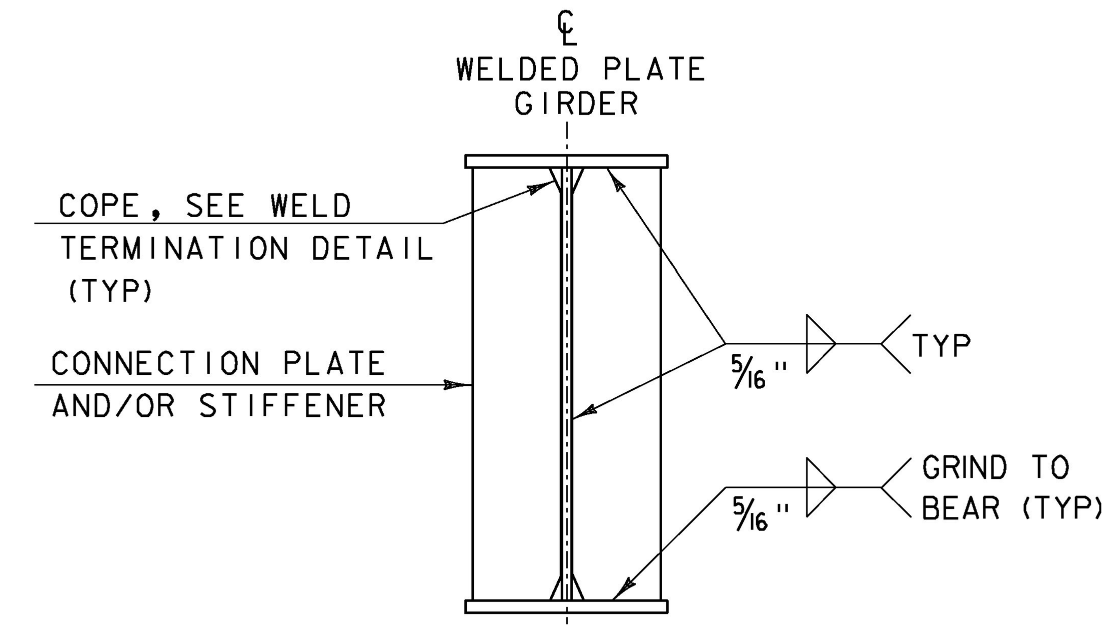
WELD TERMINATION AND COPING DETAILS FOR STEEL MEMBERS

*NO WELD FOR 3/8" MIN. 7/8" MAX. (EXCEPT MUST MAINTAIN 1" MINIMUM FROM EDGE OF FLANGE)

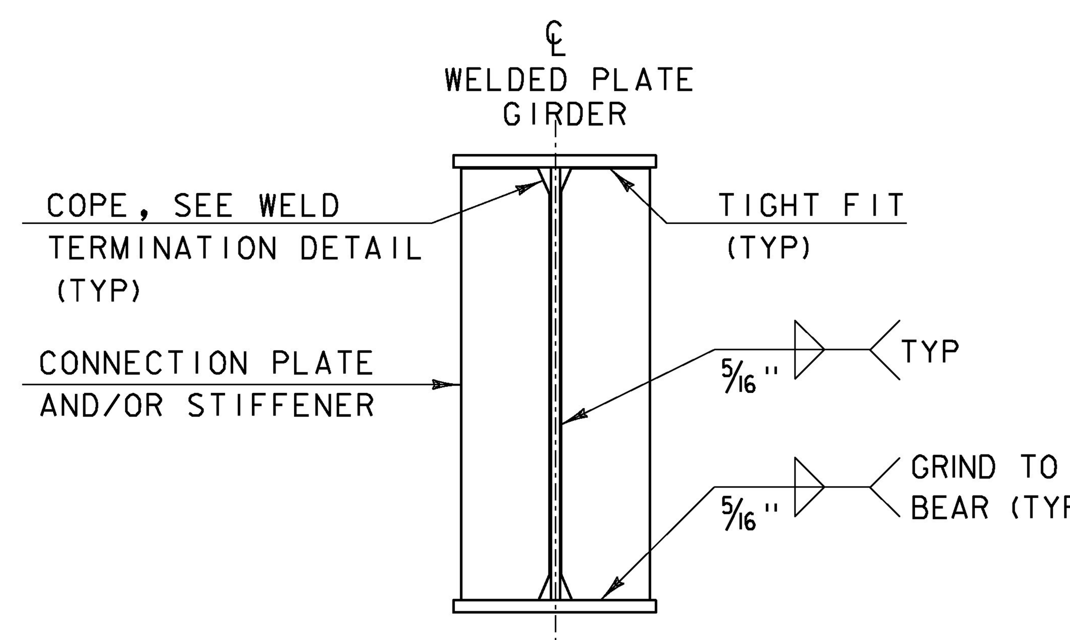


INTERMEDIATE CONNECTION PLATES AND/OR STIFFENERS FOR WELDED PLATE GIRDERS

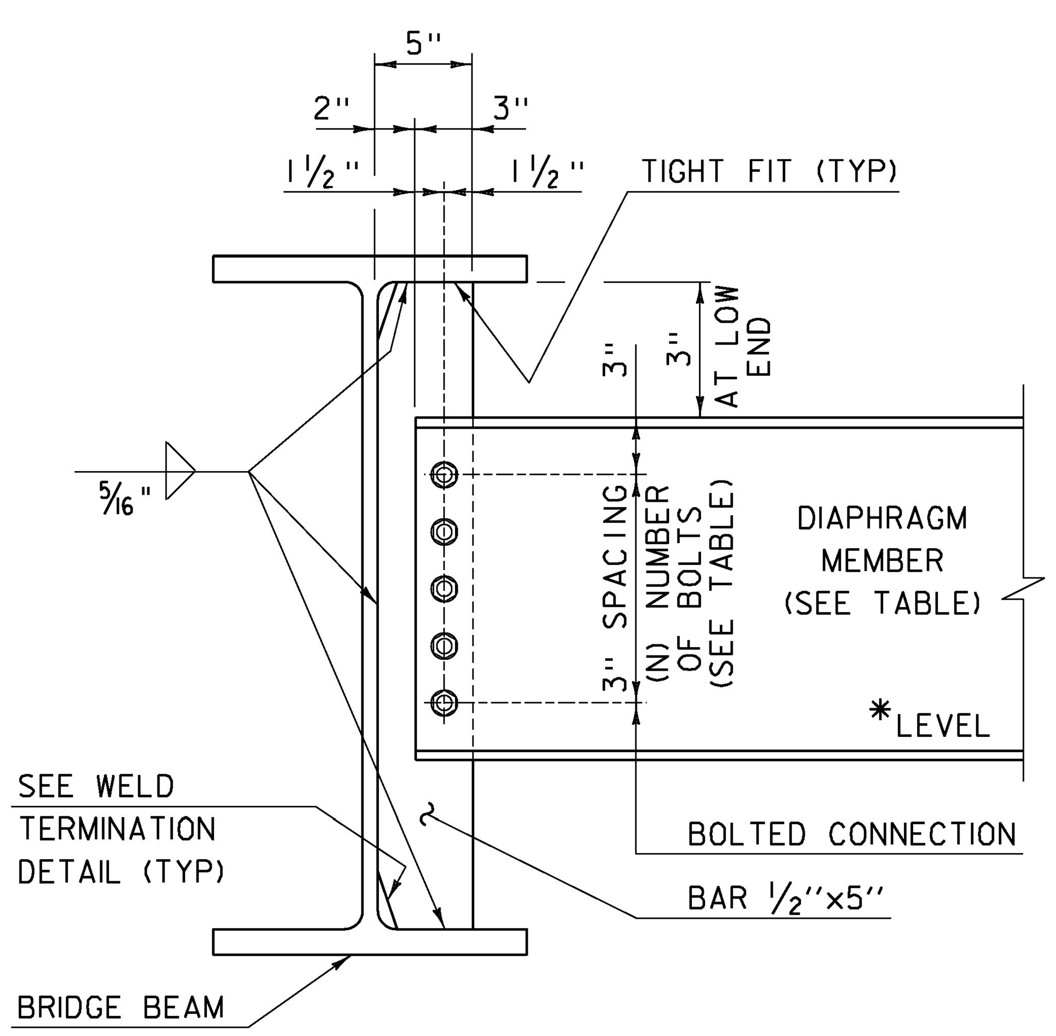
INTERMEDIATE DETAIL IS ONLY USED WHEN PLATE DOES NOT OCCUR AT AN ABUTMENT OR PIER.



ABUTMENT BEARING STIFFENERS AND/OR CONNECTION PLATES FOR WELDED PLATE GIRDERS



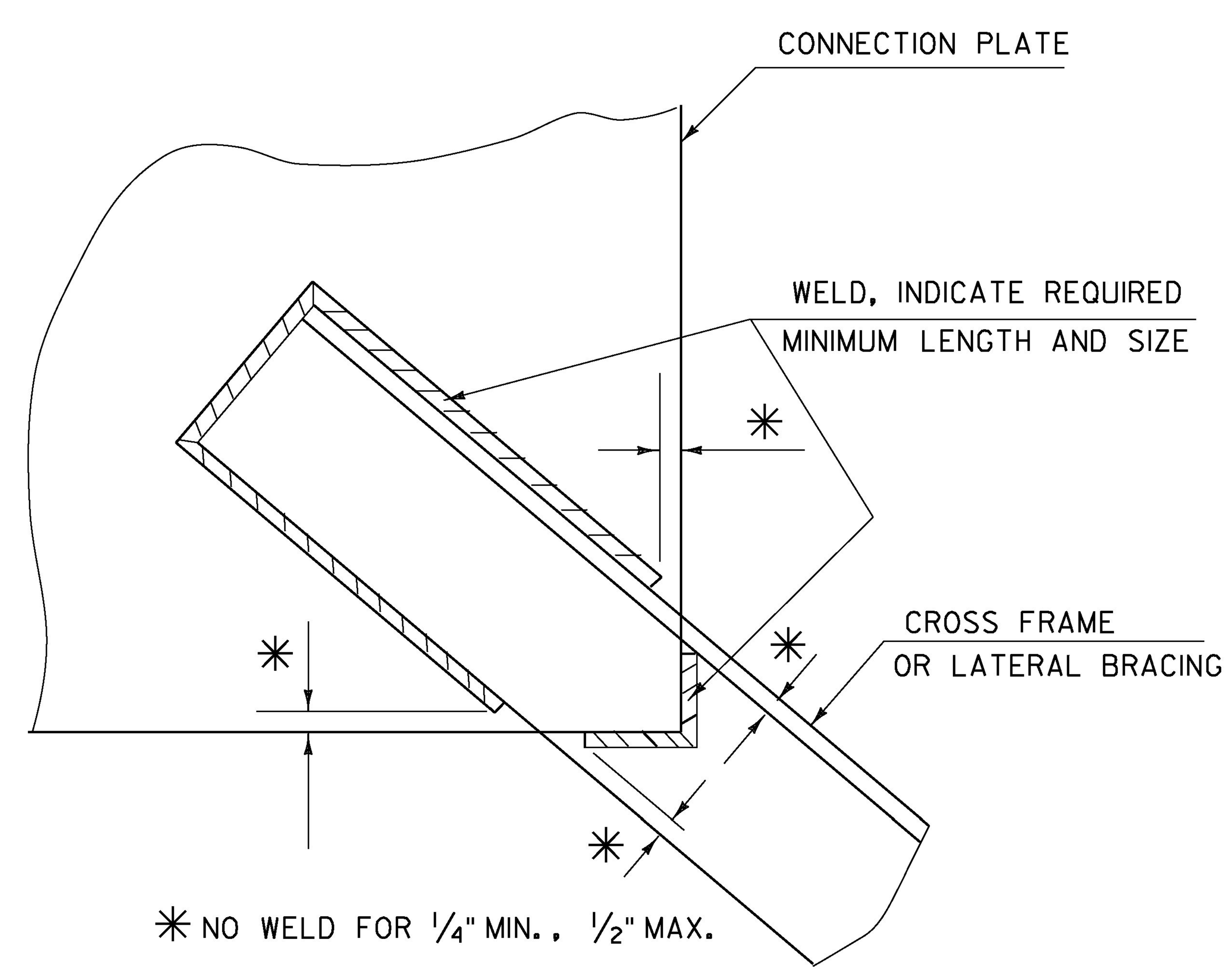
PIER BEARING STIFFENERS AND/OR CONNECTION PLATES FOR WELDED PLATE GIRDERS



	DEPTH	DIAPHRAGM MEMBER	(N) BOLTS
ROLLED BEAM	24"–30"	C15x33.9	4
ROLLED BEAM	31"–36"	MC18x42.7	5
ROLLED BEAM	37"–42"	W21x44	6
PLATE GIRDER WEB	31"–36"	W27x84	7
PLATE GIRDER WEB	37"–42"	W33x118	9
PLATE GIRDER WEB	43"–48"	W36x135	10

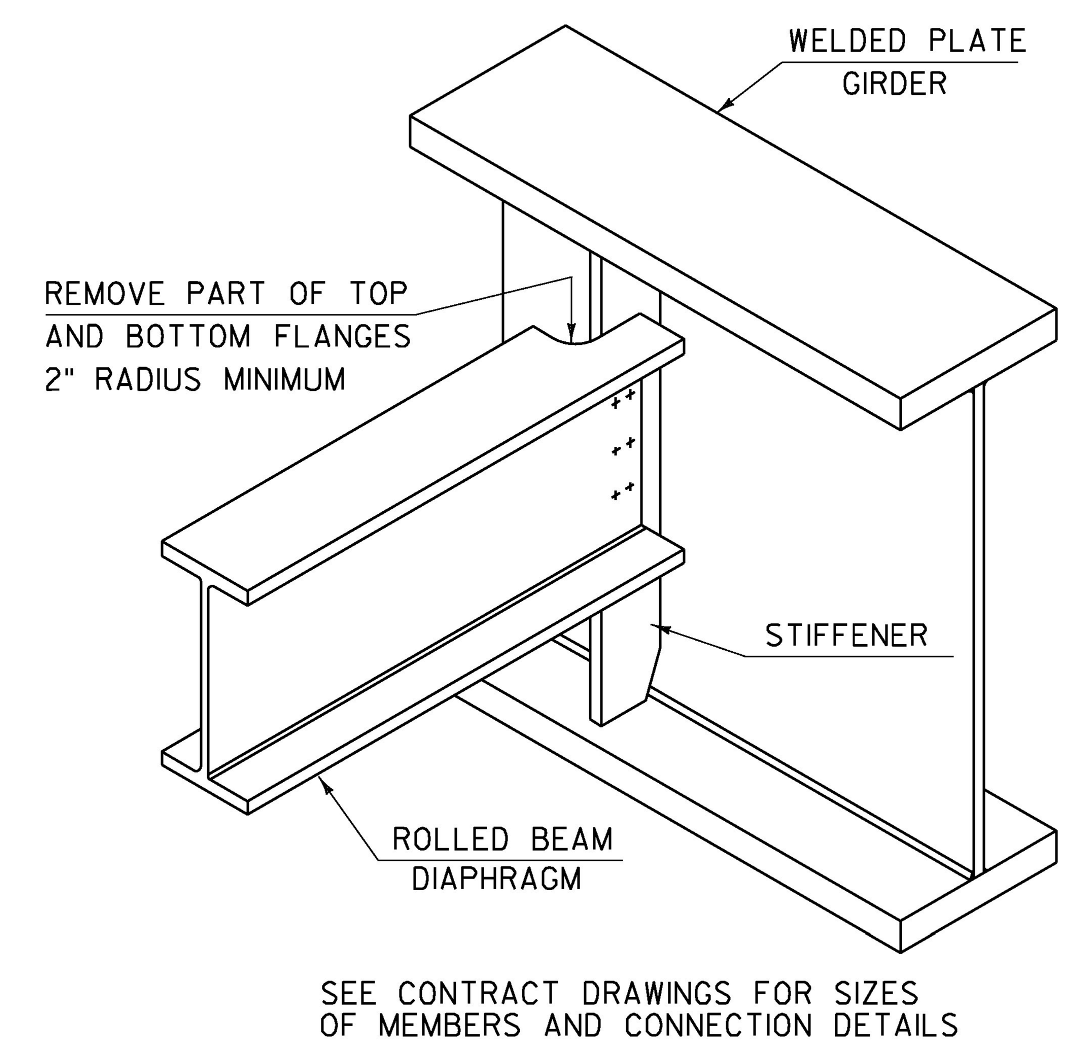
INTERMEDIATE DIAPHRAGMS FOR 24" TO 48" BRIDGE BEAMS

* IF CLEARANCE CANNOT BE MET, DIAPHRAGM MAY BE SLOPED.



* NO WELD FOR 1/4" MIN., 1/2" MAX.

WELD LOCATION DETAIL AT CROSS FRAMES AND LATERAL BRACING



SEE CONTRACT DRAWINGS FOR SIZES OF MEMBERS AND CONNECTION DETAILS

ROLLED BEAM USED AS DIAPHRAGM

DETAILS ON THIS SHEET ARE "NOT TO SCALE" UNLESS NOTED OTHERWISE.

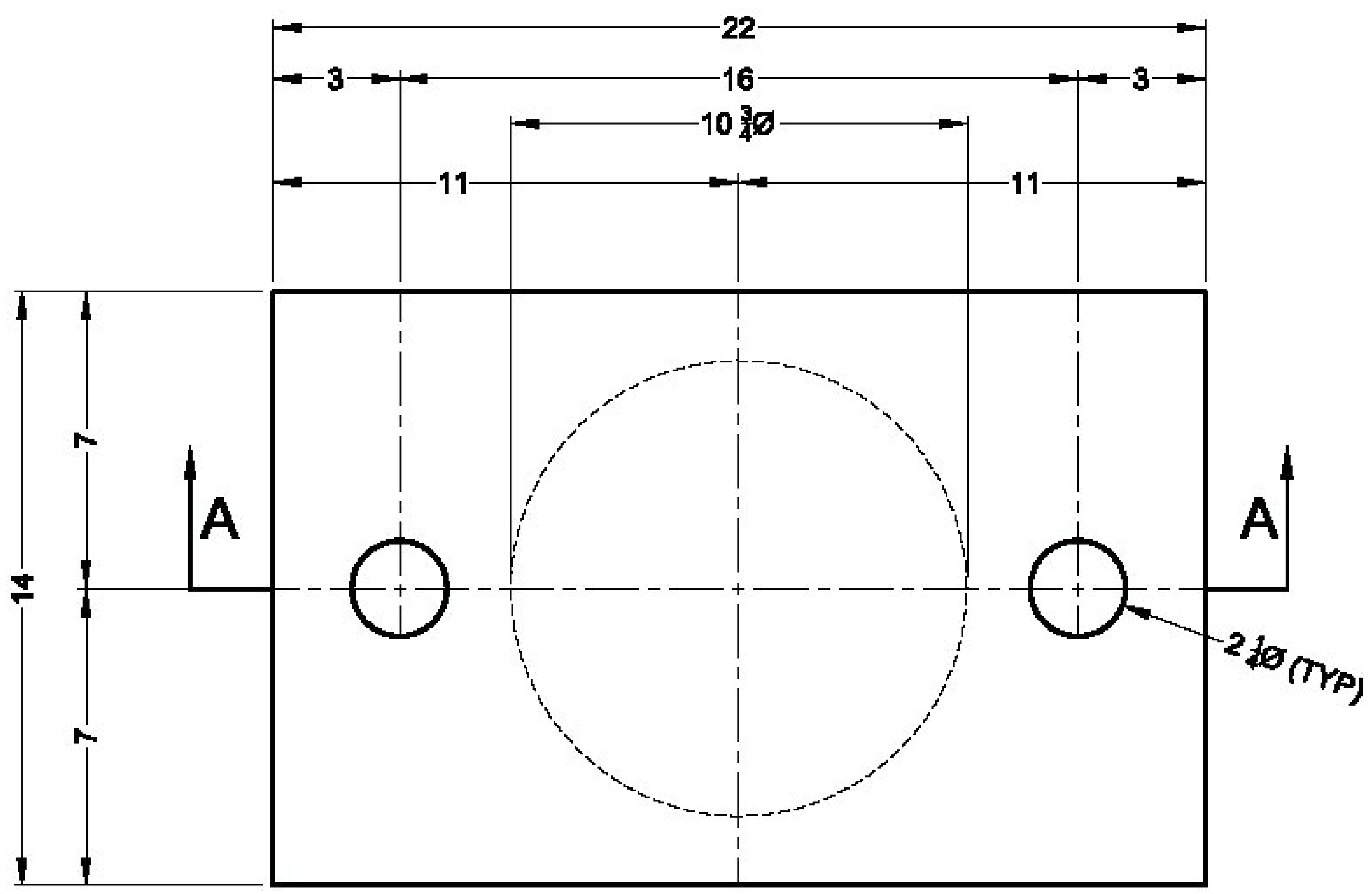
REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
MAY 2, 2011	ADD INTERMEDIATE DIAPHRAGMS DETAIL & ADD NOT TO SCALE NOTE

STRUCTURAL STEEL PLATE GIRDER DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION · STRUCTURES · SECTION

STRUCTURES DETAIL
SD-602.00

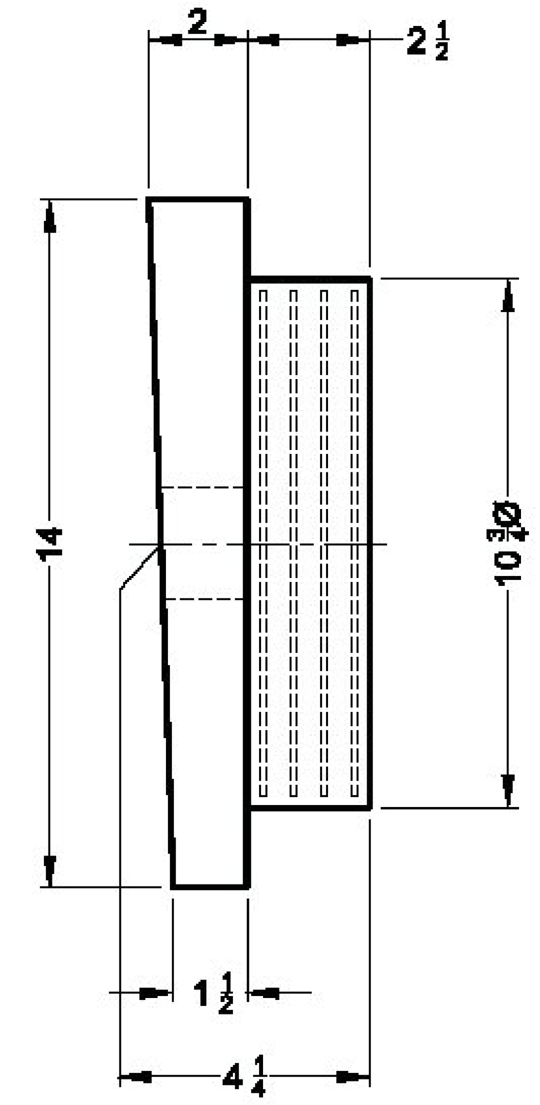
ZONE	REV	DESCRIPTION	REVISED BY	DATE	APPROVED



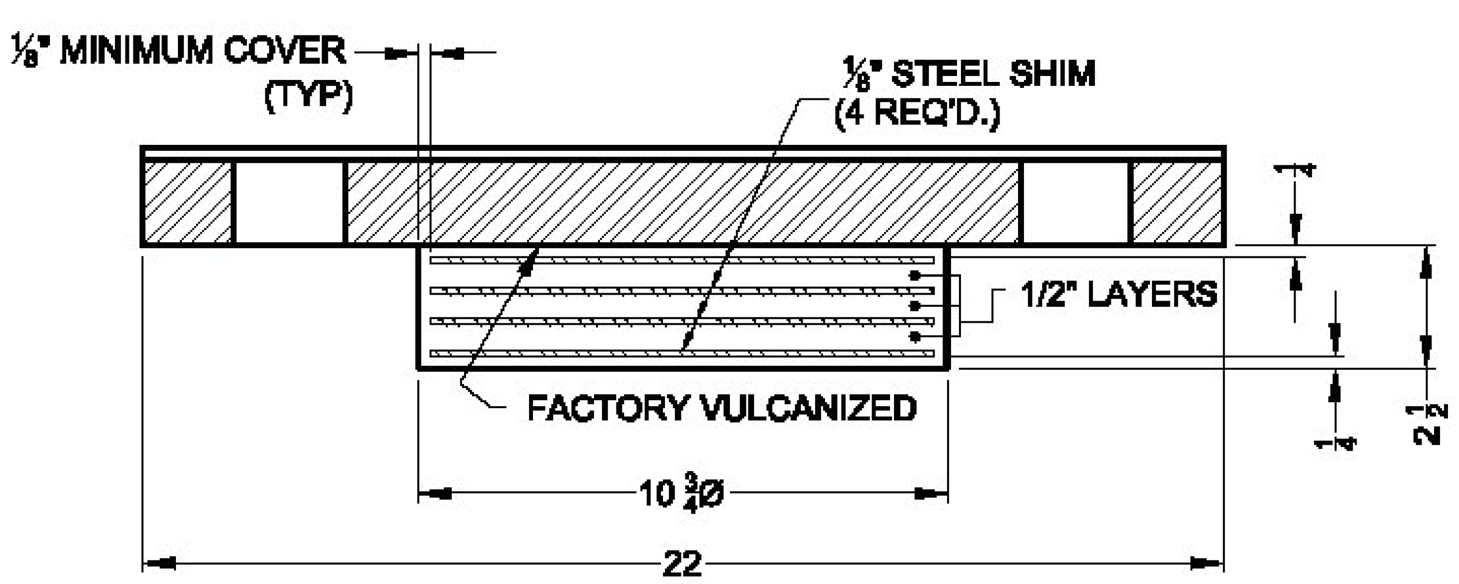
PLAN VIEW

QTY. REQ'D. = 2 ASSY.

ITEM NO. 531.17
@ ABUTMENT 1



SIDE VIEW



SECTION A-A

NOTES:

1. MANUFACTURING FACILITY LOCATION:
   AMSCOT STRUCTURAL PRODUCTS CORP.
   241 E. BLACKWELL STREET
   DOVER, N.J. 07801
   CONTACT- PETER SOMOGYI
   PH: 973-989-8800
   FAX: 973-989-5851

2. ALL BEARING PADS TO BE MANUFACTURED IN ACCORDANCE WITH AASHTO SECTION 18. THE ELASTOMER SHALL BE GRADE 3 NATURAL RUBBER WITH A DUROMETER HARDNESS OF 60 ± 5. THE STEEL REINFORCING PLATES SHALL CONFORM TO ASTM A36.

3. THE BEARINGS ARE DESIGNED SO THE SUPERSTRUCTURE MAY BE ERECTED WHEN THE AMBIENT AIR TEMPERATURE IS WITHIN THE RANGE OF 40° F. TO 60° F.

4. ALL STEEL TO BE FACTORY VULCANIZED TO THE ELASTOMER DURING THE PRIMARY MOLDING PROCESS.

5. ALL EXTERNAL STEEL TO BE ASTM A709 GR. 36 GALVANIZED PER THE STANDARD SPECIFICATION.

6. ALL DIMENSIONS ARE IN INCHES , UNLESS OTHERWISE NOTED.

7. TOLERANCES: THICKNESS -0 +1/8
   PLAN -0 +1/8

8. THE TEMPERATURE OF THE STEEL ADJACENT TO THE ELASTOMER SHALL NOT EXCEED 200° F. TEMPERATURE SHALL BE CONTROLLED BY THE USE OF TEMPERATURE INDICATING CRAYONS OR OTHER DEVICES APPROVED BY THE ENGINEERS.

☑ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

CHA

DATE 8/5/2014 BY N. Bennett

BEARING DESIGN CRITERIA				
TOTAL DL (Kips)	TOTAL LL + I (Kips)	HORIZONTAL (Kips)	TOTAL ROTATION (Rad)	ONE WAY MOVEMENT (IN)
25	32	4	.013	0.41"

Inspection Block

Initial Dim. Check
Sign:_______ Date:_______

In Process Dim. Chk.
Sign:_______ Date:_______

100% Visual Weld Insp.
Sign:_______ Date:_______

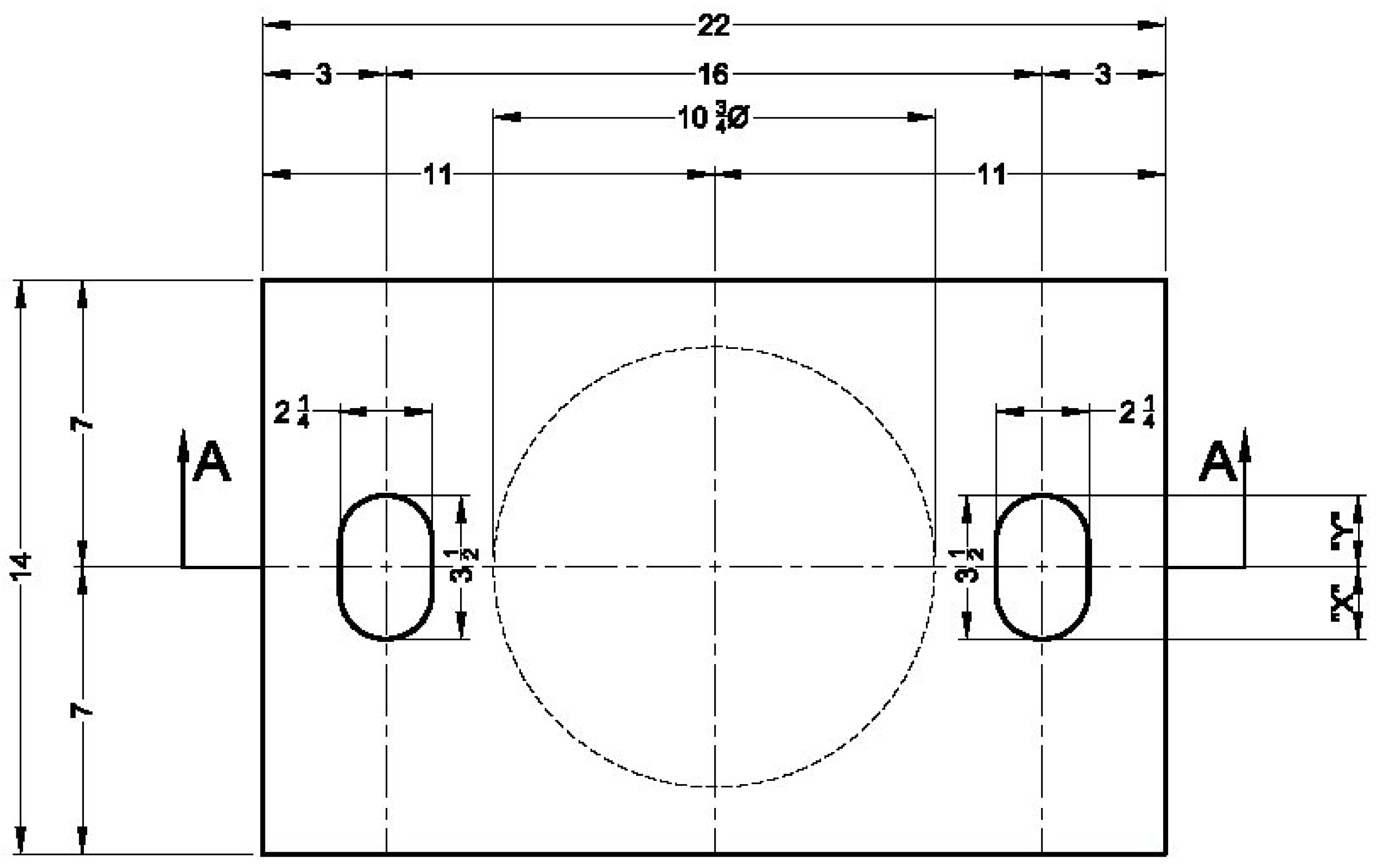
Paint Insp.(see form)
Sign:_______ Date:_______

Final Inspection
Sign:_______ Date:_______

SEE SHEET 2 OF 2 FOR ANCHOR BOLT DETAILS

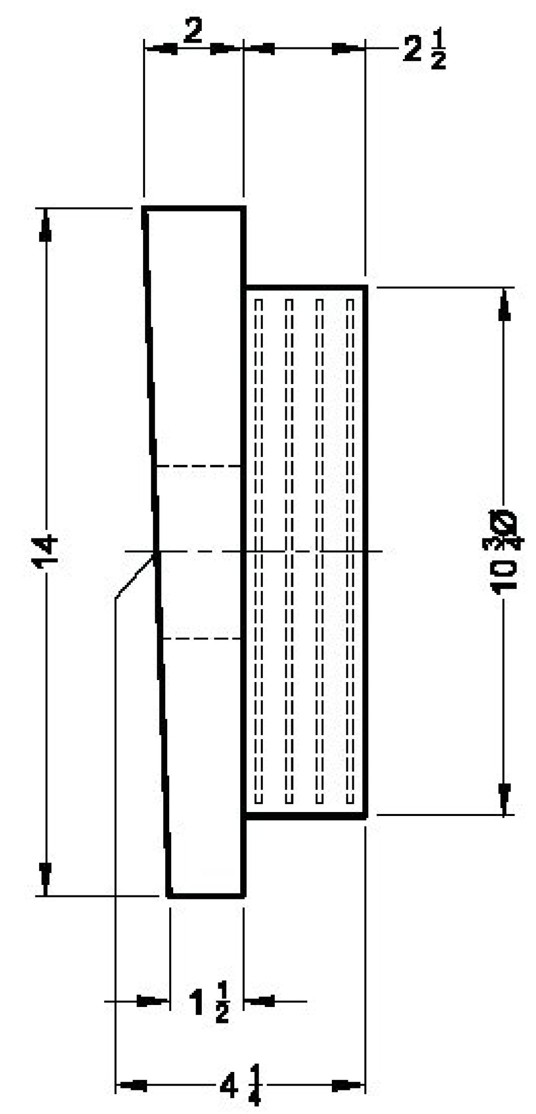
JERICHO STP FTBR (3)		
FIXED TYPE ELASTOMERIC CIRCULAR LAMINATED PAD DETAILS		
AMSCOT STRUCTURAL PRODUCTS CORP.		
SCALE: N.T.S.	APPRV'D:	DRAWN BY: E.J.G.
DATE: 8/4/14	BF	REVISION: 0
FOR: BLOW & COTE		
DWG NO: BC14A1RO		SHEET 1 OF 2

REVISIONS					
ZONE	REV	DESCRIPTION	REVISED BY	DATE	APPROVED

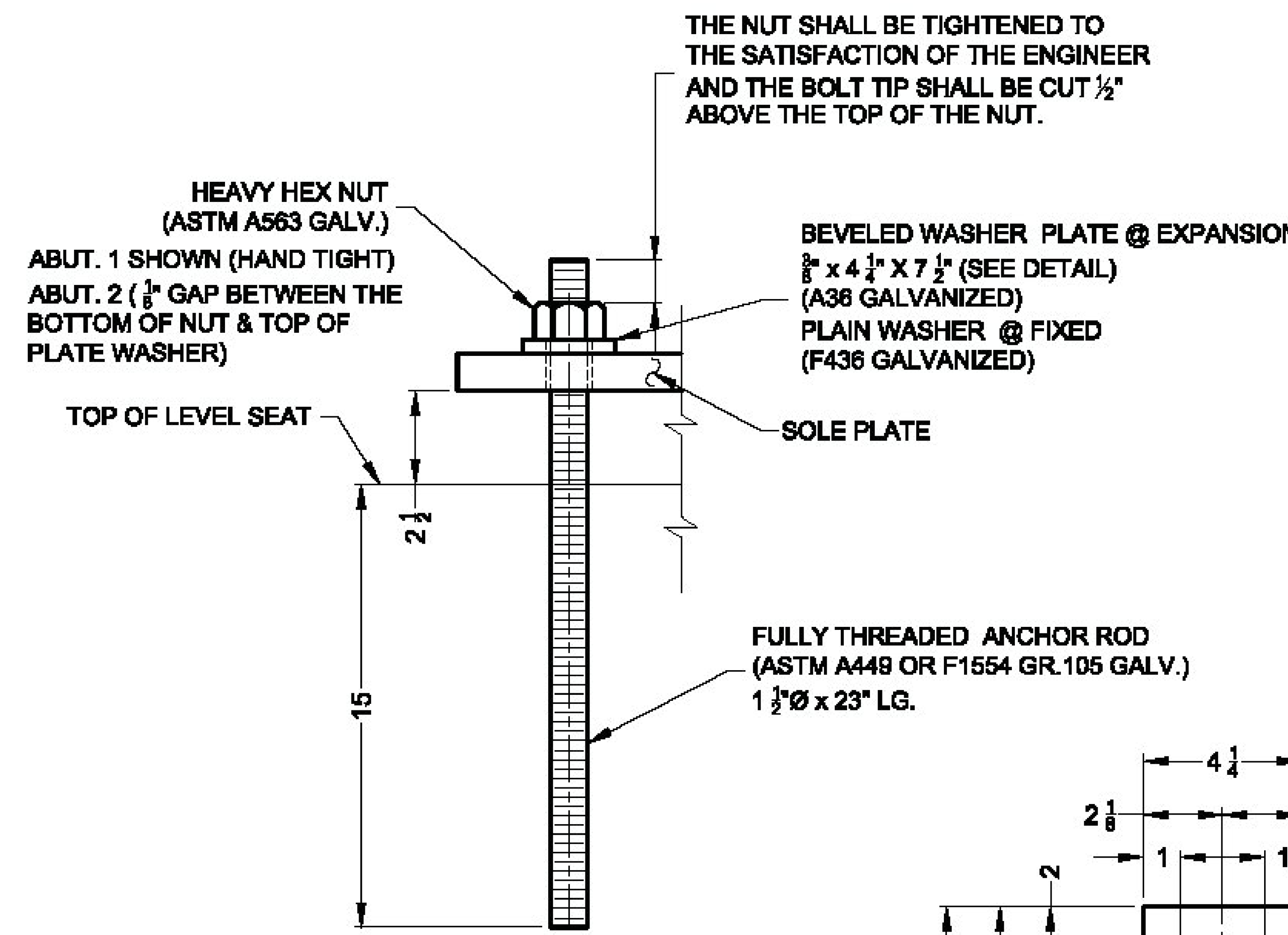


PLAN VIEW

QTY. REQ'D. = 2 ASSY.
ITEM NO. 531.17
@ ABUTMENT 2

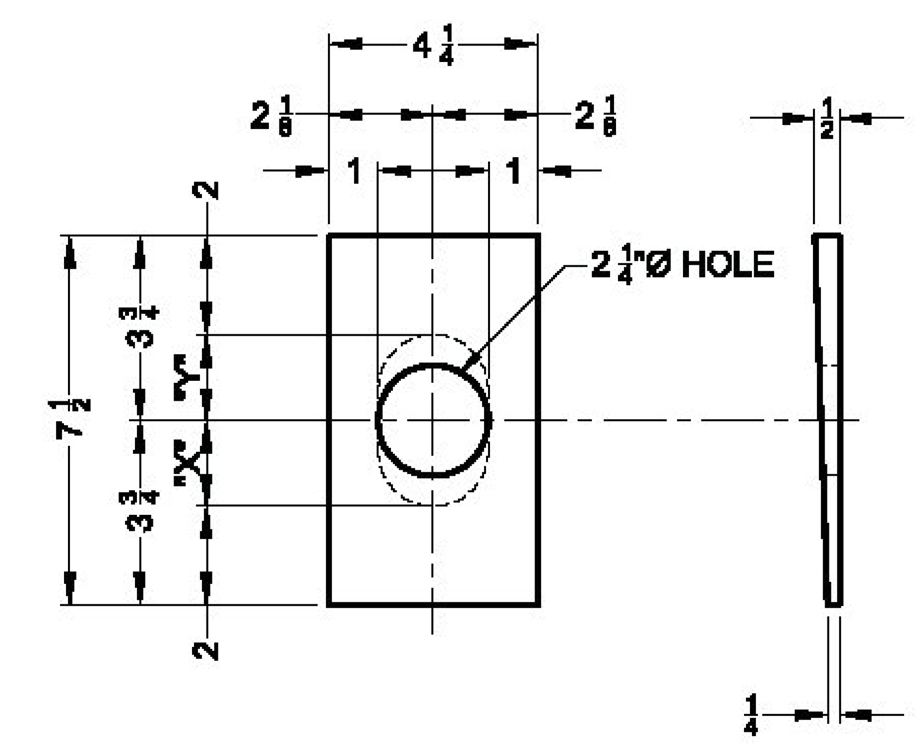


SIDE VIEW



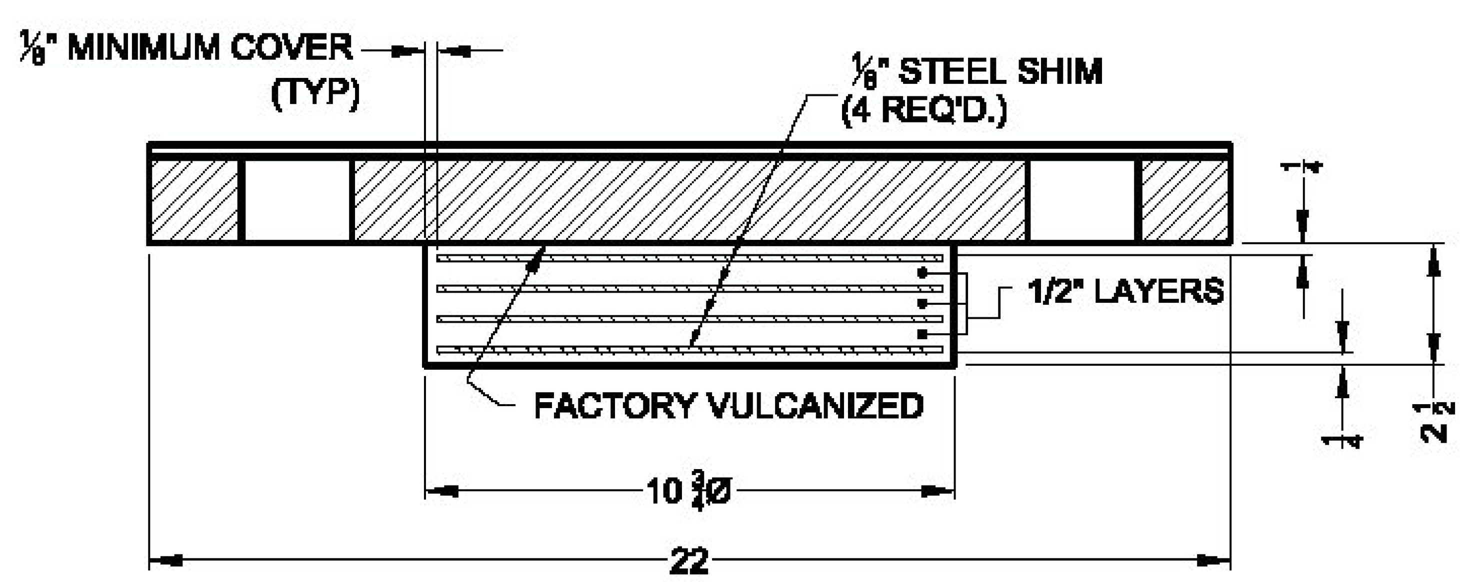
ANCHOR BOLT DETAIL

QTY. REQ'D. = 8



BEVELED WASHER PLATE DETAIL

QTY. REQ'D. = 4



SECTION A-A

SETTING CHART (ABUT. 2)		
TEMP.	"X" DIST.	"Y" DIST.
0°	1 ⅝	1 ⅞
15°	1 ¾	1 ¾
30°	1 ⅞	1 ⅝
45°	2	1 ½
60°	2 ⅛	1 ⅜
75°	2 ¼	1 ¼
90°	2 ⅜	1 ⅛
105°	2 ½	1

BEARING DESIGN CRITERIA				
TOTAL DL (Kips)	TOTAL LL + I (Kips)	HORIZONTAL (Kips)	TOTAL ROTATION (Rad)	ONE WAY MOVEMENT (IN)
25	32	4	.013	0.41"

SEE SHEET 1 OF 2 FOR NOTES

☑ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

CHA

DATE 8/5/2014 BY N. Bennett

Inspection Block

Initial Dim. Check
Sign:________ Date:________

In Process Dim. Chk.
Sign:________ Date:________

100% Visual Weld Insp.
Sign:________ Date:________

Paint Insp.(see form)
Sign:________ Date:________

Final Inspection
Sign:________ Date:________

JERICHO
STP FTBR (3)

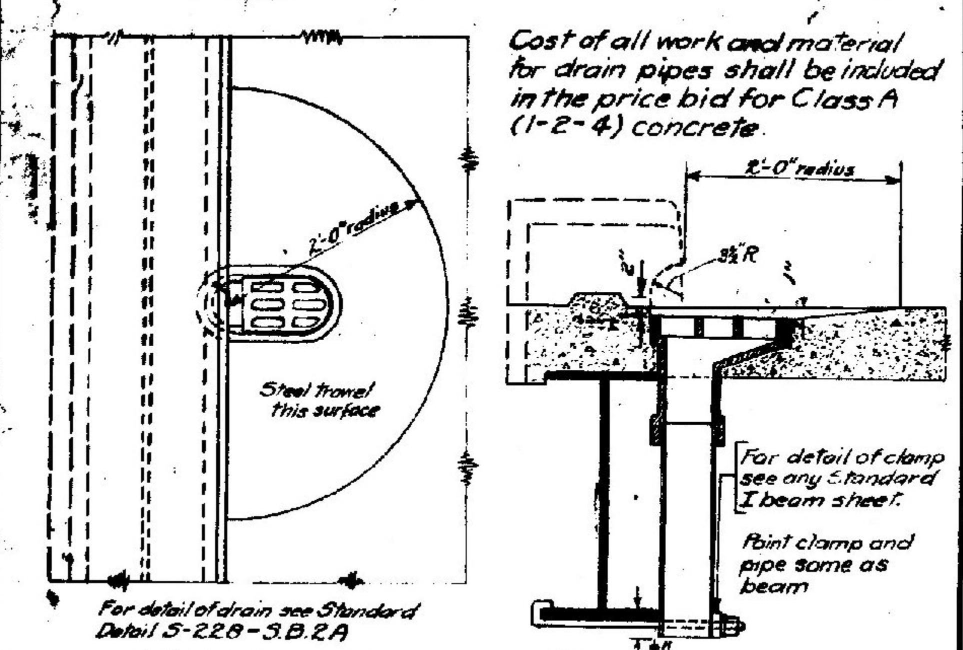
EXPANSION TYPE ELASTOMERIC CIRCULAR LAMINATED PAD DETAILS

AMSCOT
STRUCTURAL PRODUCTS CORP.

SCALE: N.T.S.	APPRV'D:	DRAWN BY: E.J.G.
DATE: 8/4/14	BF	REVISION: 0

FOR: BLOW & COTE

DWG NO: BC14A2RO | SHEET 2 OF 2

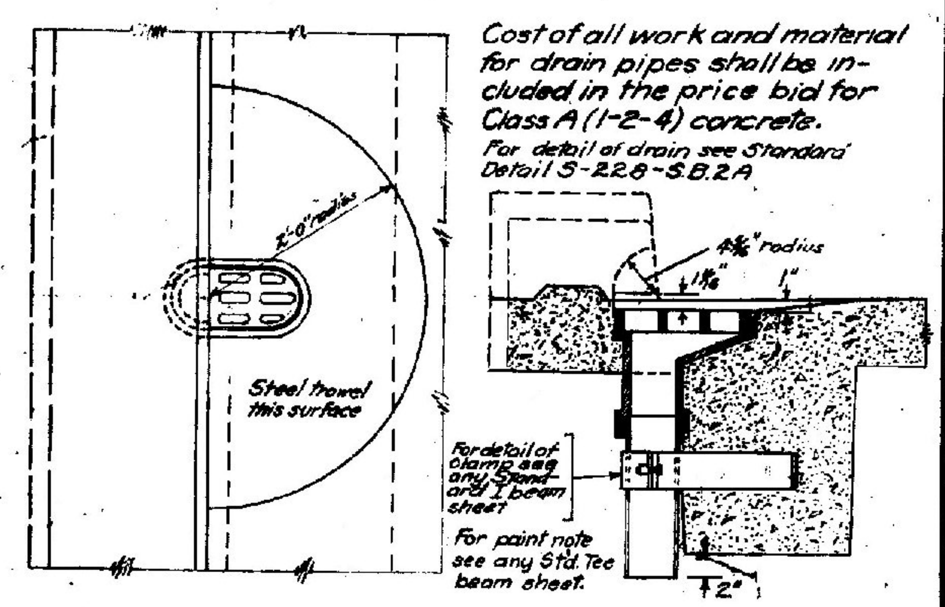


Cost of all work and material for drain pipes shall be included in the price bid for Class A (1-2-4) concrete.

For detail of drain see Standard Detail S-228-S.B.2A

DRAIN DETAIL FOR I-BEAM BRIDGES

STANDARD DETAIL-S201

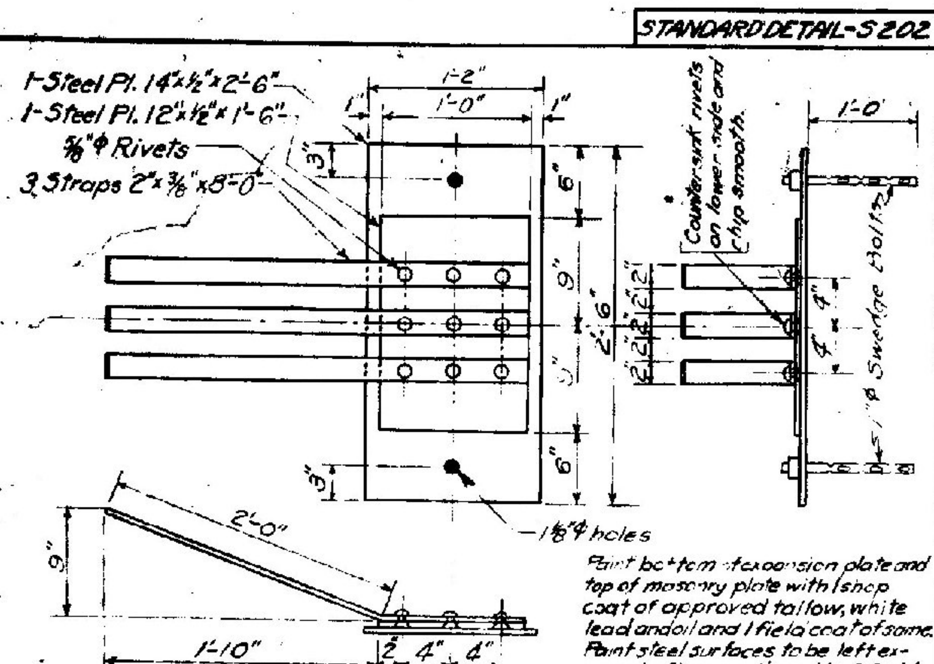


Cost of all work and material for drain pipes shall be included in the price bid for Class A (1-2-4) concrete.

For detail of drain see Standard Detail S-228-S.B.2A

DRAIN DETAIL FOR TEE BEAM BRIDGES

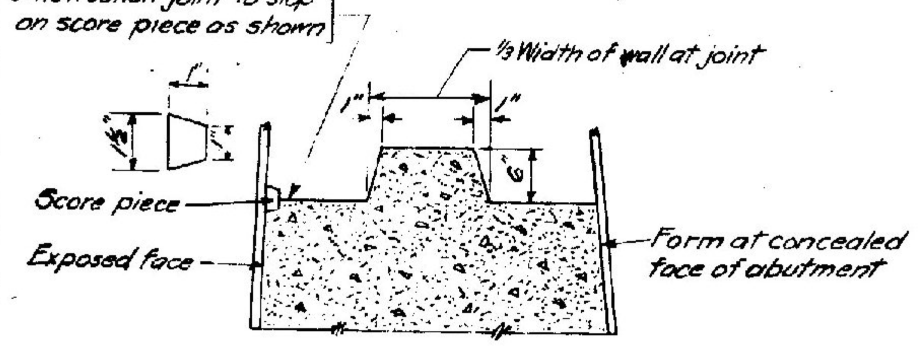
STANDARD DETAIL-S202



Paint bottom of expansion plate and top of masonry plate with 1 shop coat of approved tallow, white lead and oil and 1 field coat of same. Paint steel surfaces to be left exposed after erection with 2 field coats of red lead and oil and 1 field coat of approved graphite paint.

SLIDING PLATE EXPANSION DEVICE FOR 35' & 40' SPAN TEE BEAMS

STANDARD DETAIL-S203

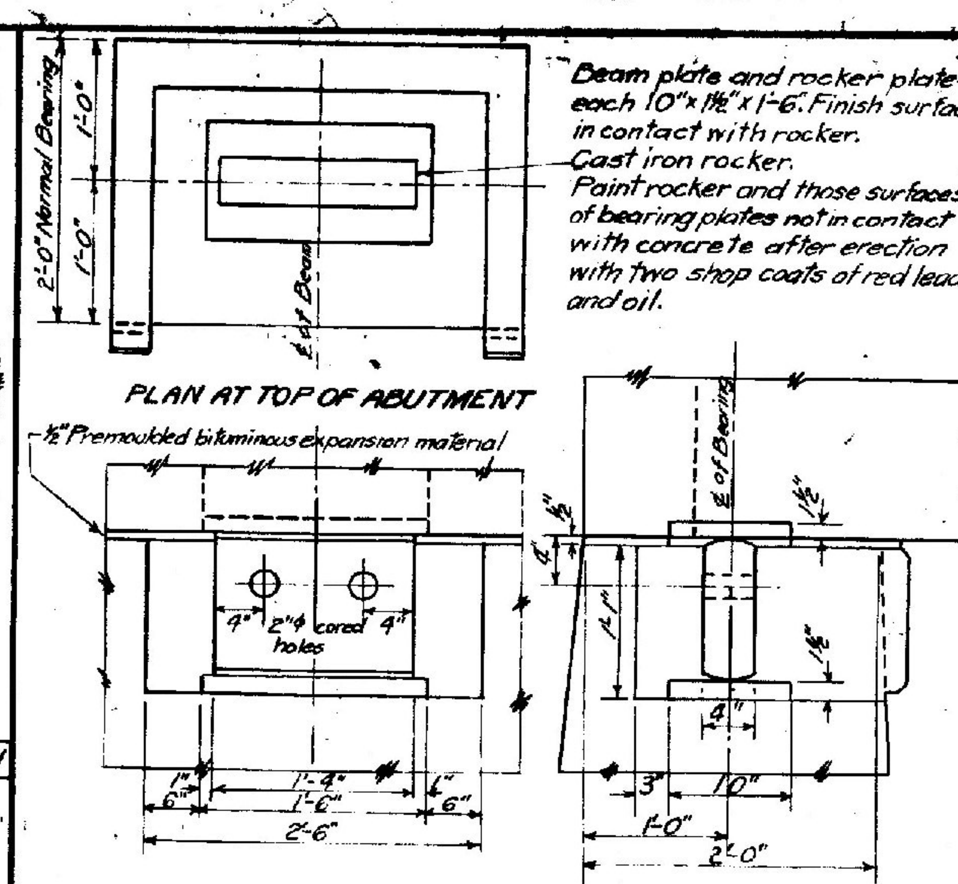


DETAILS-SCORE MARKS & CONSTRUCTION JOINTS FOR PIERS & ABUTMENTS

Unless otherwise directed by the Engineer, score pieces shall be equally spaced vertically at about 1'-9" for abutments up to 20' in height and 2'-6" for abutments above 20' in height; shall stop at underside of copings and shall be carried around ends of walls or piers where they may be exposed to view. Score marks shall line horizontally and shall be at same levels in all piers and abutments on the job. Construction joint may be made at any score mark.

Note: This detail is identical with S16-sheet S.B-1

STANDARD DETAIL-S204



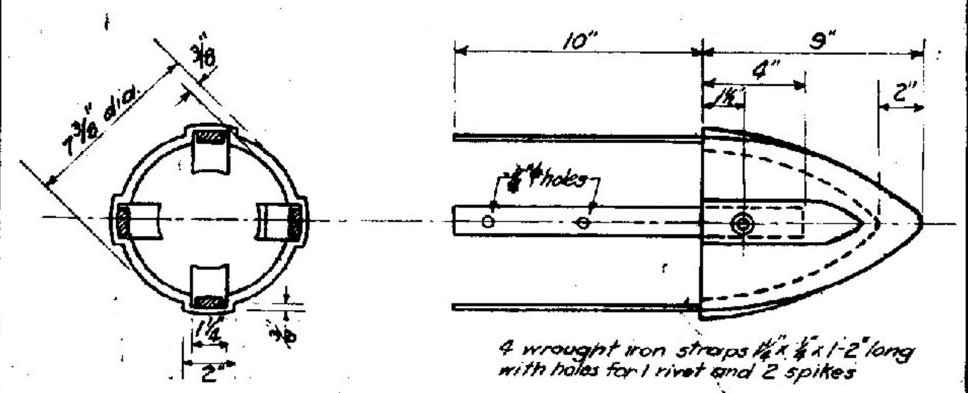
Beam plate and rocker plate each 10" x 1¾" x 1'-6". Finish surface in contact with rocker.
Cast iron rocker.
Paint rocker and those surfaces of bearing plates not in contact with concrete after erection with two shop coats of red lead and oil.

PLAN AT TOP OF ABUTMENT

SECTIONAL ELEVATION — SECTIONAL EDGE OF BEAM

ROCKER EXPANSION DEVICE AND POCKET FOR TEE BEAM SPANS OF 45' AND OVER

STANDARD DETAIL-S205

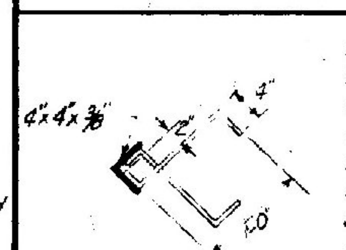


4 wrought iron straps 1¼" x ¼" x 1'-2" long with holes for 1 rivet and 2 spikes

CAST STEEL PILE SHOE FOR 6" TO 8" TIPS

If jetting is necessary, two water jets should be used with a water pressure of at least 150# per sq.in. Pump to be of piston type with a 6" diam. intake pipe and a 4" diameter outlet pipe. The jet pipe shall be about 2" dia., nozzle to be circular in section and ½" to ¾" in diameter.
Unit price bid for piles shall include jetting if necessary, and furnishing and setting pile shoes.
Pile shoes as per sketch to be used as directed by the Engineer.

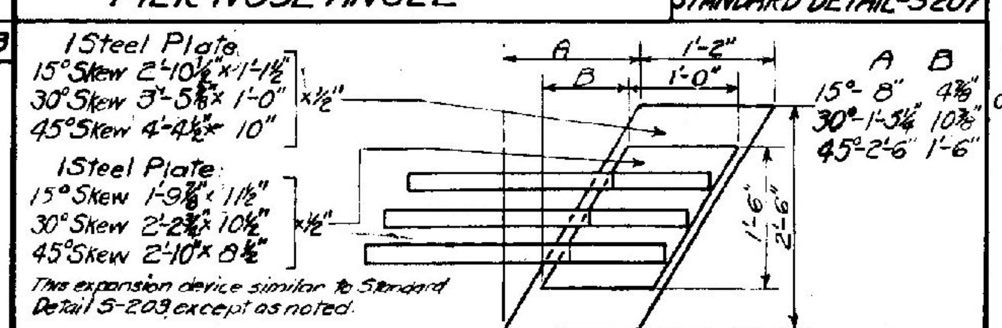
STANDARD DETAIL-S206



Nose angle to extend from under side of pier coping to top of footing on upstream end only of each pier. 2"x¼" straps 2'-0" ℅, alternated. Straps may be welded or rivetted. If rivetted, exposed rivet heads must be countersunk and chipped.
All structural steel nose guards shall be given one shop coat of red lead and oil and two field coats of standard white guard rail paint for exposed face only.
All work and materials required for furnishing and placing nose guards will be paid for at unit price bid for reinforcing steel.

PIER NOSE ANGLE

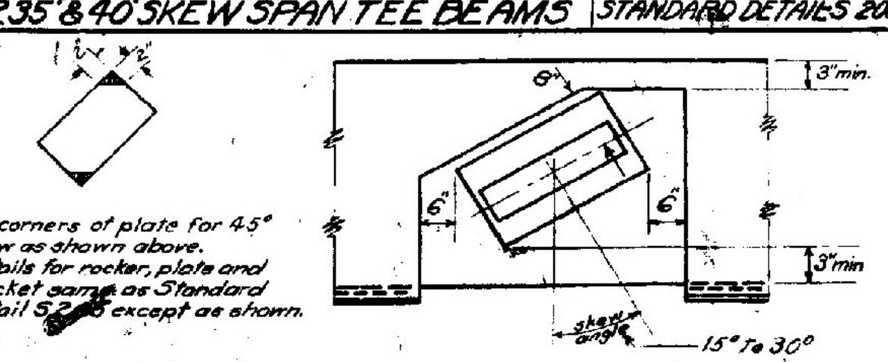
STANDARD DETAIL-S207



This expansion device similar to Standard Detail S-203 except as noted.

SLIDING PLATE EXPANSION DEVICE FOR 35' & 40' SKEW SPAN TEE BEAMS

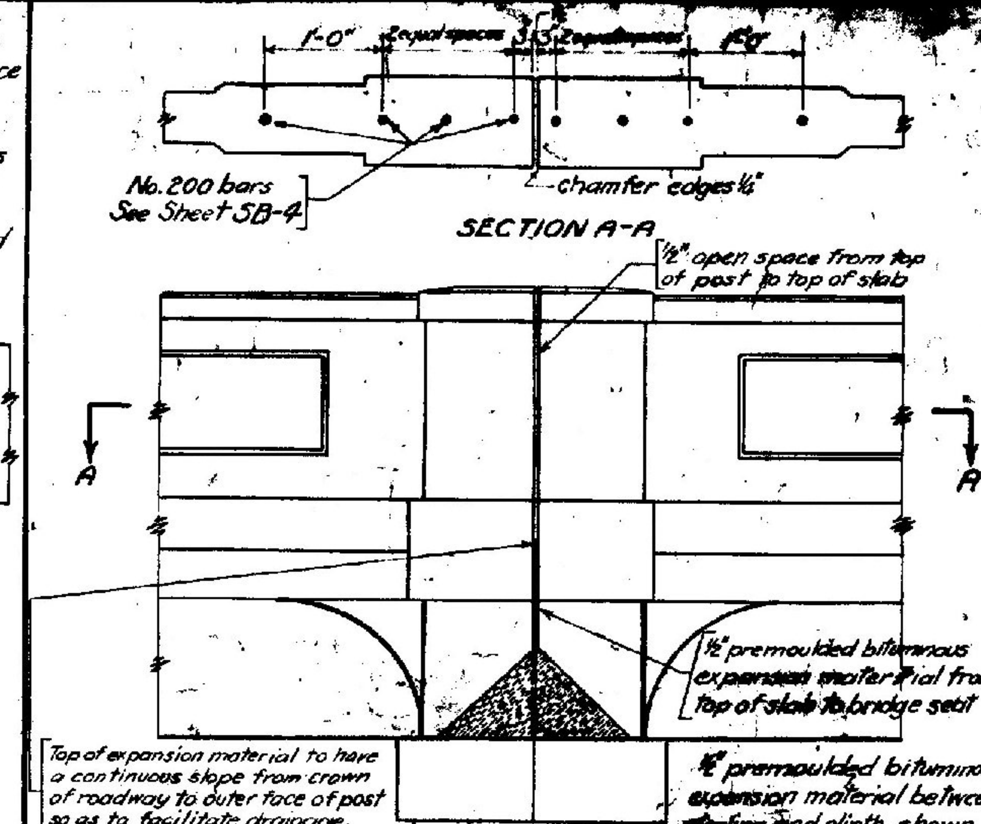
STANDARD DETAILS 208



Cut corners of plate for 45° skew as shown above.
Details for rocker, plate and pocket same as Standard Detail S205 except as shown.

ROCKER EXPANSION DEVICE AND POCKET FOR TEE & I BEAM SKEW SPANS OF 45' AND OVER

STANDARD DETAIL-S209



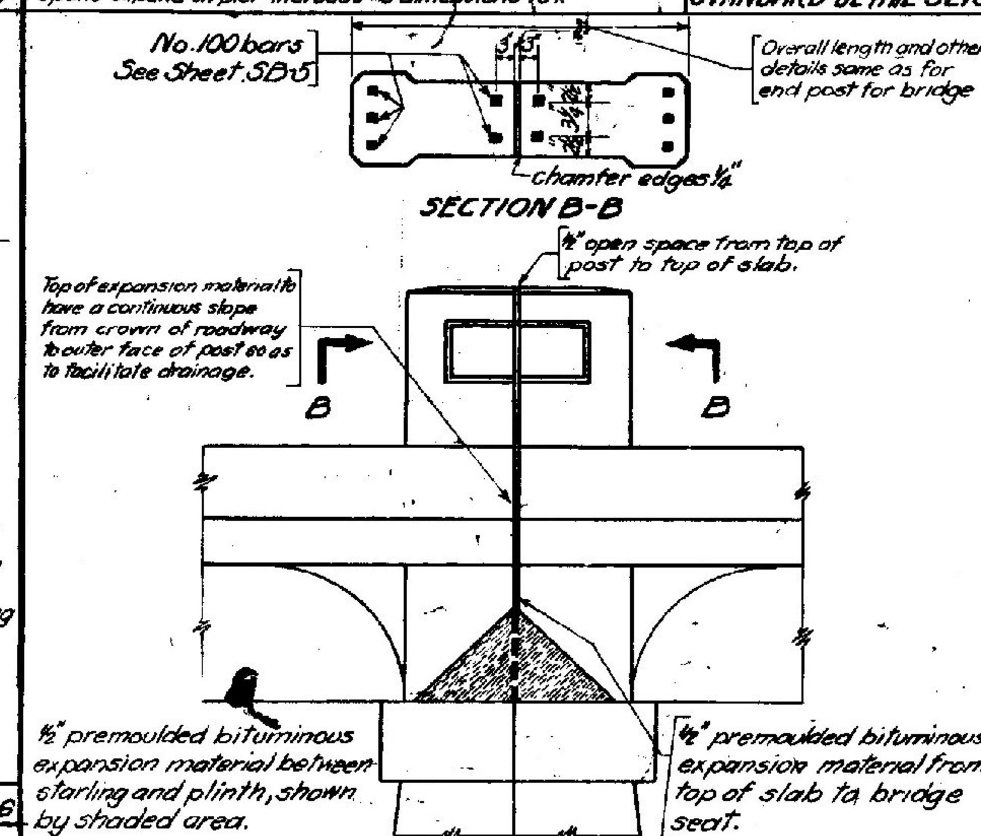
SECTION A-A

Top of expansion material to have a continuous slope from crown of roadway to outer face of post so as to facilitate drainage.

EXPANSION POST AT PIER FOR SOLID RAILS AS SHOWN ON SHEET SB-4

Condition shown is for one span expanding on pier. If two spans expand on pier increase ½" dimensions to 1".

STANDARD DETAIL-S210



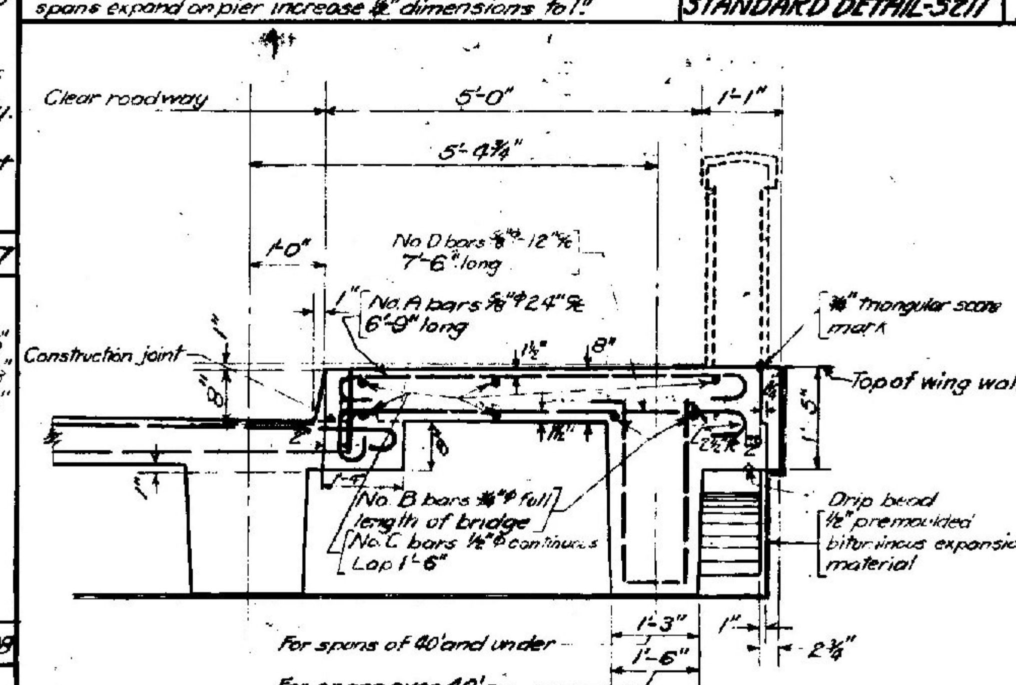
SECTION B-B

Top of expansion material to have a continuous slope from crown of roadway to outer face of post so as to facilitate drainage.

EXPANSION POST AT PIER FOR CABLE RAILS AS SHOWN ON SHEET SB-5

Condition shown is for one span expanding on pier. If two spans expand on pier increase ½" dimensions to 1".

STANDARD DETAIL-S211



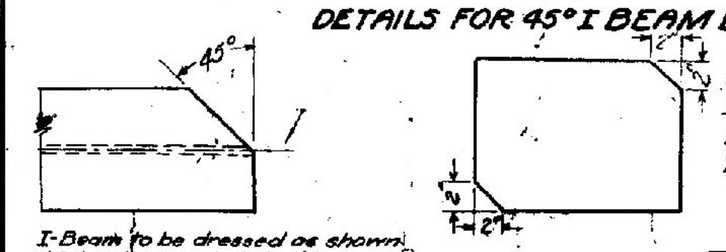
SIDEWALK DETAIL FOR STANDARD TEE BEAM BRIDGES

Span	Reinforcing steel in beam. Bending details same as for Std bridge beams. Reqd.	Bar Mark	½"φ Stirrups W	H	Total Lgth	Spacing from each end of beam, No. spaces at 6"	12"	18"	24"	30"	No. Reqd.	D bars No. Reqd.	Estimated quantities for one sidewalk and one beam. Concrete	Steel
25	2 1	No 1 No 2	11"	2'-4	6'-6"	4	2	2	2	1	23	28	6.3	984
30	2 1	No 1 No 2	11"	2'-7	7'-0"	4	2	2	2	2	25	33	7.8	1265
35	3 1	No 1 No 2	11"	2'-7	7'-0"	4	2	2	2	3	27	38	9.0	1704
40	3 2	No 1 No 2	11"	2'-10	7'-6"	4	2	2	2	4	29	43	10.7	2122
45	4 2 1	No 1 No 2 No 3	1'-2"	3'-7	9'-3"	5	3	3	2	4	35	49	16.5	2621
50	4 2 1	No 1 No 2 No 3	1'-2"	3'-10	9'-9"	5	3	3	2	5	37	54	17.8	3281
55	4 4	No 1 No 3	1'-2"	4'-1"	10'-3"	5	4	4	2	5	41	59	20.3	3849

½ number of A bars required as there are D bars.
Estimated quantities to be added to quantities already given on Standard Bridge sheets.
Sidewalk beam reinforcement placed similiar to Standard Bridge beam reinforcement.

SIDEWALK BEAM REINFORCEMENT FOR STANDARD TEE BEAM BRIDGES

STANDARD DETAIL-S212

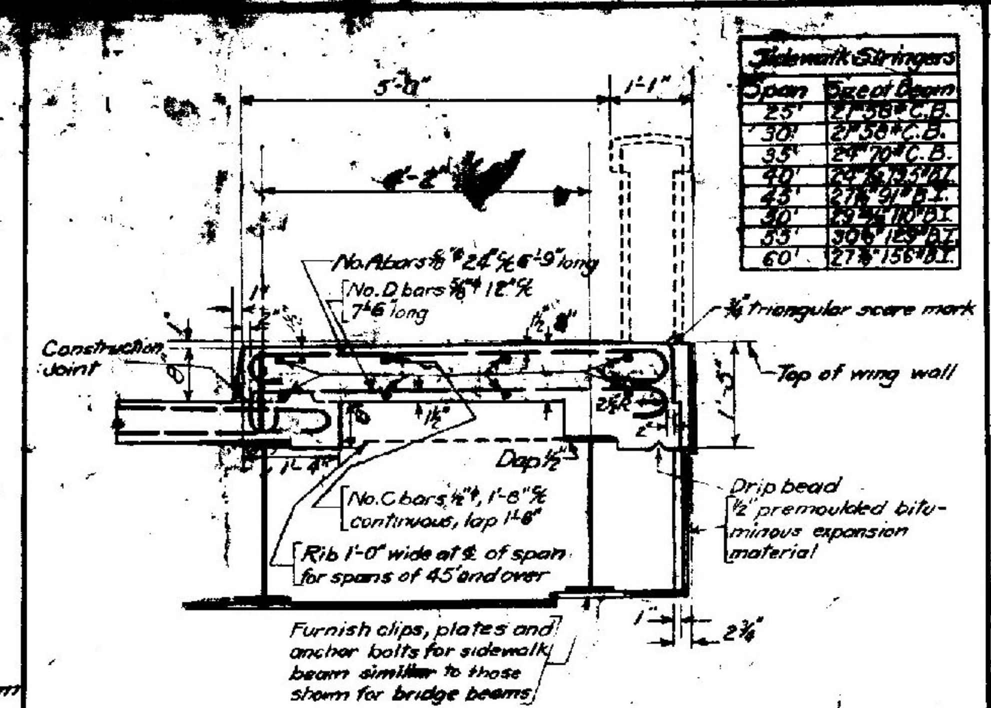


Plates under I-Beams must be cut as shown to fit.

I-Beam to be dressed as shown. Make other end opposite hand.

DETAILS FOR 45° I BEAM BRIDGE

STANDARD DETAIL-S215



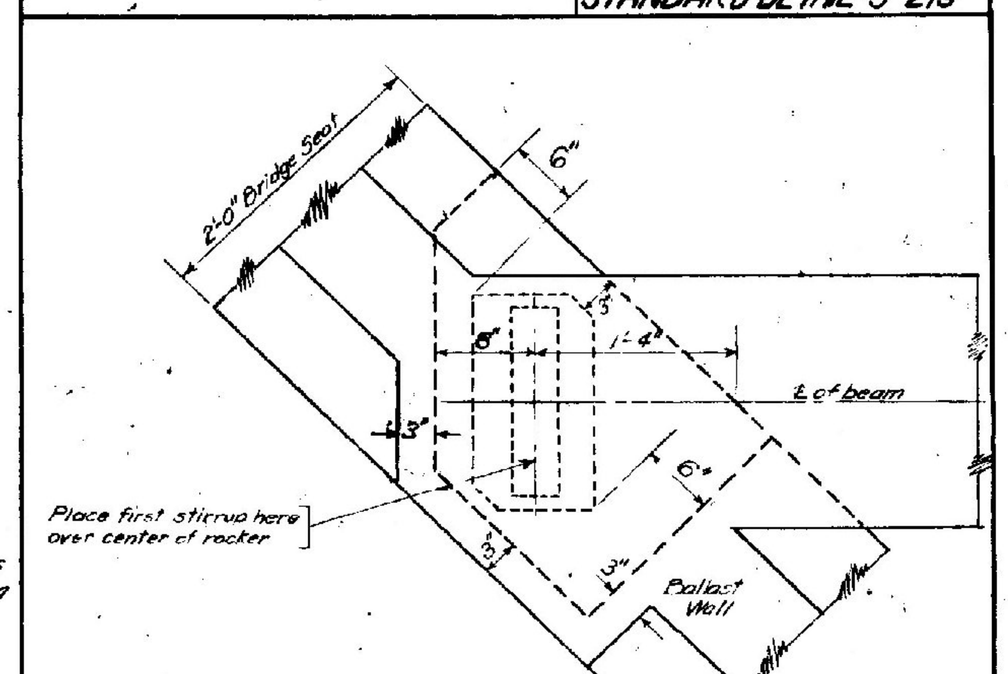
Furnish clips, plates and anchor bolts for sidewalk beam similiar to those shown for bridge beams.

SIDEWALK DETAIL FOR STANDARD I BEAM BRIDGES

For detail of D bars see S212.

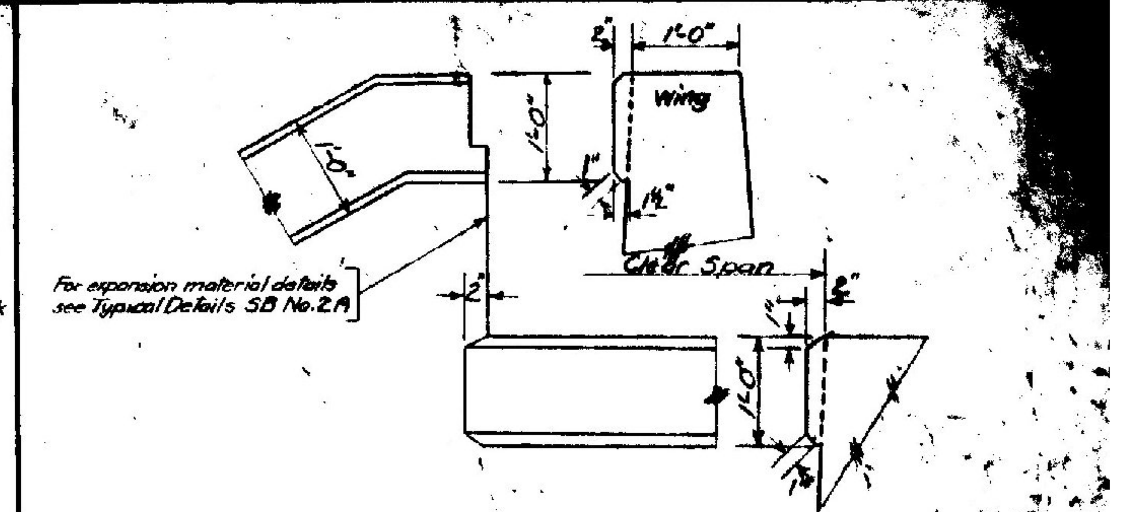
QUANTITIES TO BE ADDED PER SIDEWALK TO ROADWAY QUANTITIES			
Span	Conc. Class A	Rein. Steel	Struc. Steel
25	4.2	428	1600
30	5.0	508	1885
35	5.7	587	2615
40	6.5	667	3380
45	7.4	769	4410
50	8.1	832	5890
55	8.9	913	7540
60	9.7	993	9900

STANDARD DETAIL-S 213



ROCKER EXPANSION DEVICE AND POCKET FOR 45° SKEW

STANDARD DETAIL-S 214



For expansion material details see Typical Details SB No. 2A

TYPICAL COPINGS

STANDARD DETAIL-S220

GENERAL NOTES

The following notes shall govern the structures and details to which they apply.

All work and materials shall conform to the Standard Road and Bridge Specifications of the Vermont Highway Department, 1929.

Any suitable structure excavation used by the contractor for any purpose other than for backfill or approach fill shall be replaced by an equivalent quantity of borrow by the contractor as his expense unless same is ordered wasted by the Engineer.

Piles shall be provided where foundation cannot be obtained within a reasonable depth. They shall be spaced not closer than 2'-6" ℅ except as noted on plans or as directed by the Engineer. Where jetting is necessary, use Standard Detail S206.

Foundations on ledge should preferably be sloped toward the back of the footing about 1" per foot and footings shown on plans for other conditions may be revised at the direction of the Engineer.

All concrete for piers and gravity abutments shall be class B (1-2½-5) concrete unless otherwise noted or directed.

All concrete for reinforced abutments shall be class C (1-2-4) concrete unless otherwise noted or directed.

All concrete for Tee, I beam and Slab bridges, curbs and rails shall be class A (1-2-4) concrete and shall be paid for at the unit price for class A concrete.

All reinforcing steel for bridges and abutments shall be deformed bars, except as noted, and shall conform to the Standard Specification for Billet Steel Concrete Reinforcement Bars, Structural or Intermediate Grade, of the American Society for Testing Materials, Serial Designation A15-14.

4" weep holes shall be provided in main abutment and wings spaced not further apart than 10'-0" ℅ symmetrically about the ℄ of abutment pitched 1" per foot upward from front to back. The lower end of the weep hole shall be 2'-6" above footing. The cost of work and materials for weep holes shall be included in the unit price bid for concrete.

The premoulded bituminous expansion material between superstructure and substructure at expansion and fixed end, shall be included and paid for in price bid for class A (1-2-4) concrete.

All work and materials for expansion device to be included in and paid for at the unit price bid for reinforcing steel for Tee beam bridges.

Concrete chairs for supporting reinforcing steel shall be made to the dimensions shown on the Standard Chair sheet.

Structural steel for I beam bridges shall be painted as specified under Item 36 A-B, Phamphlet I of the Specifications unless otherwise directed.

All exposed edges shall be chamfered. The face dimension of chamfer to be 1".

Where pipes, existing or required, pass through abutments, they shall be of the materials and in the locations as directed by the Engineer. The cost of all work and materials for such work shall be included in and paid for under the unit bid for abutment concrete. Where pipes are to be carried by the superstructure, they shall be supported as and where directed by the Engineer and the cost of all work and materials shall be paid for at the unit price for superstructure reinforcing steel.

In case lighting is required for superstructure, special details will be furnished. Cost of work and materials for such lighting shall be paid for under a separate lump sum bid, unless otherwise provided for.

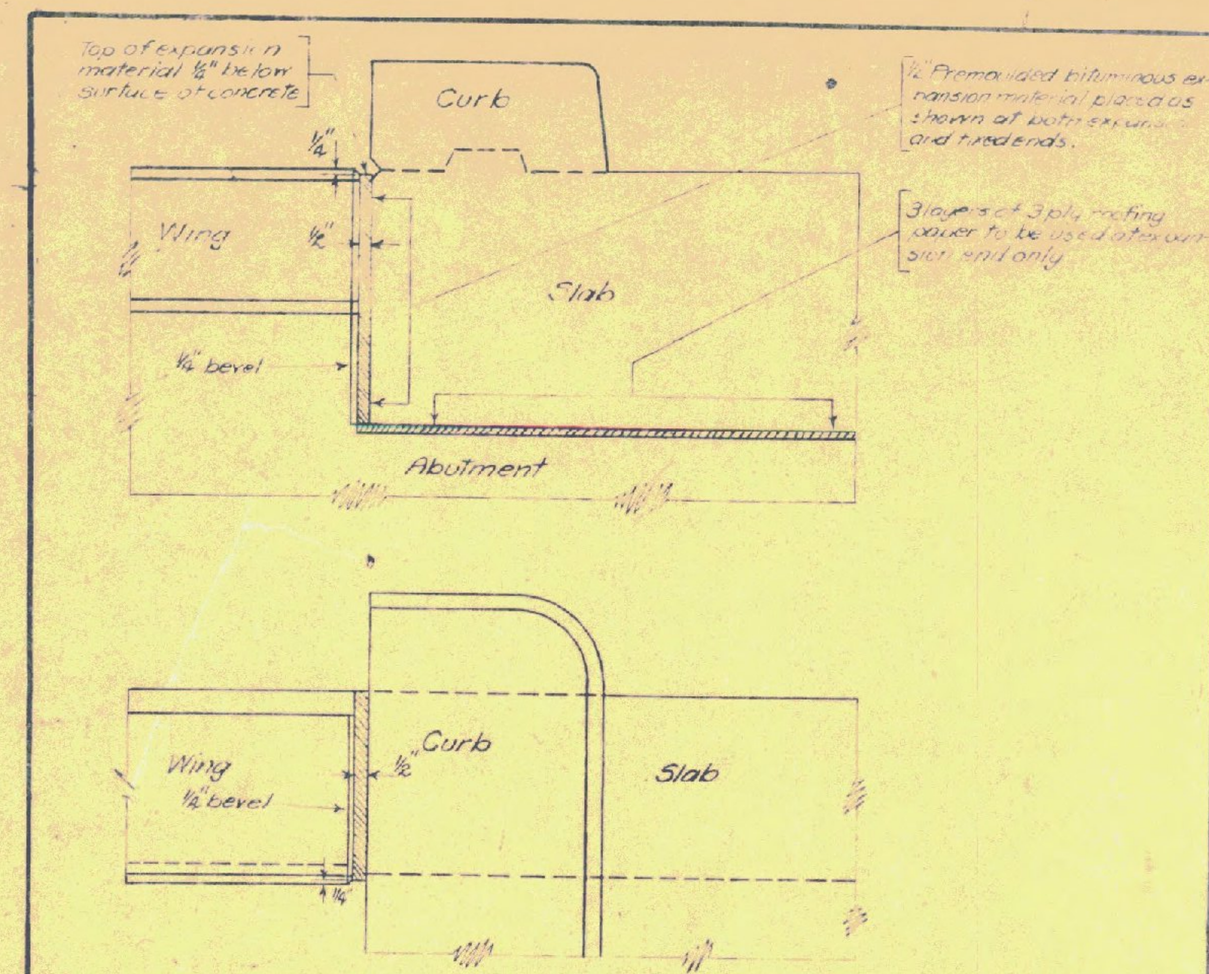
STANDARD DETAIL-S221

TYPICAL DETAILS
TEE AND I BEAM BRIDGES AND ABUTMENTS
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

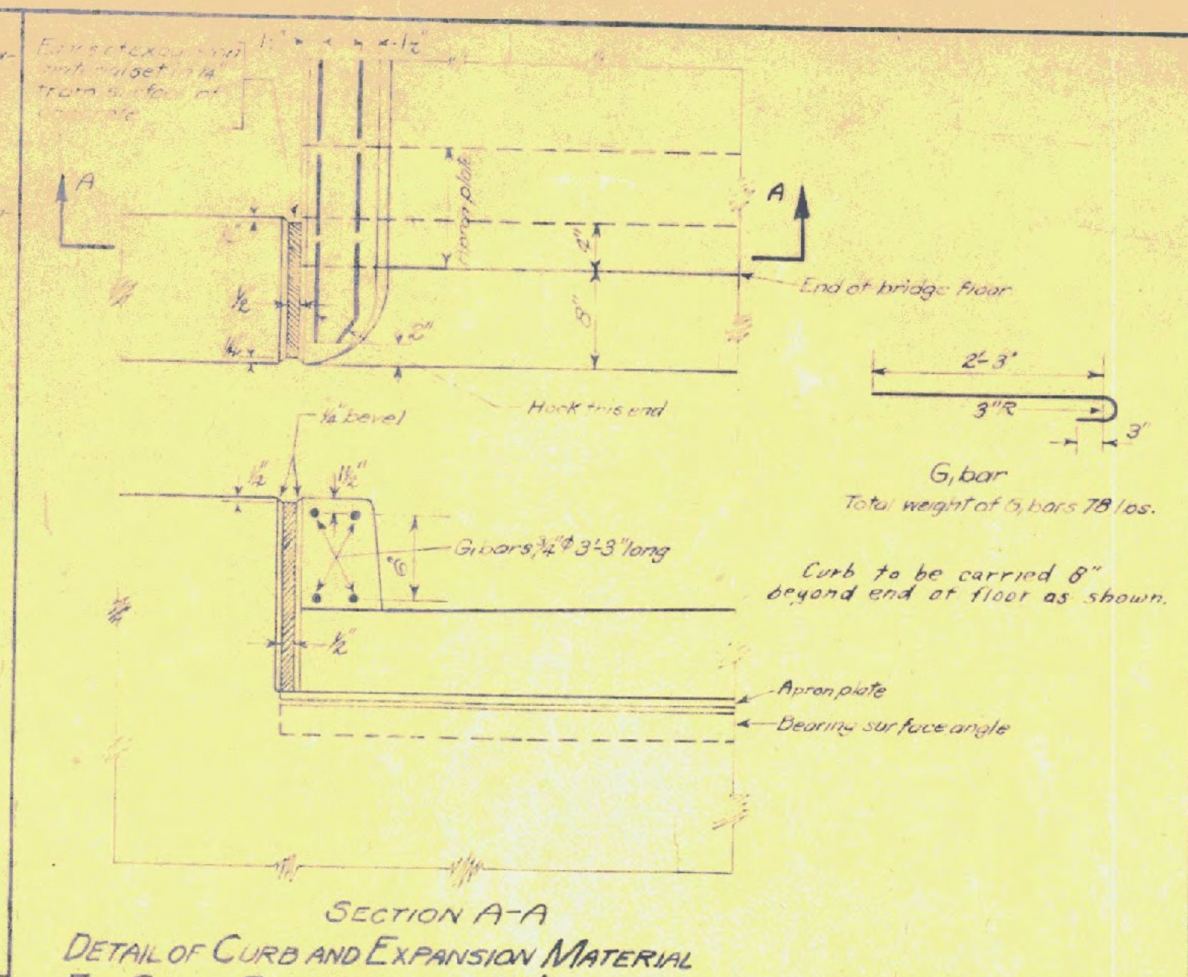
CORRECT: A. D. Bishop.
BRIDGE ENGINEER

Corrected to March 1, 1929.

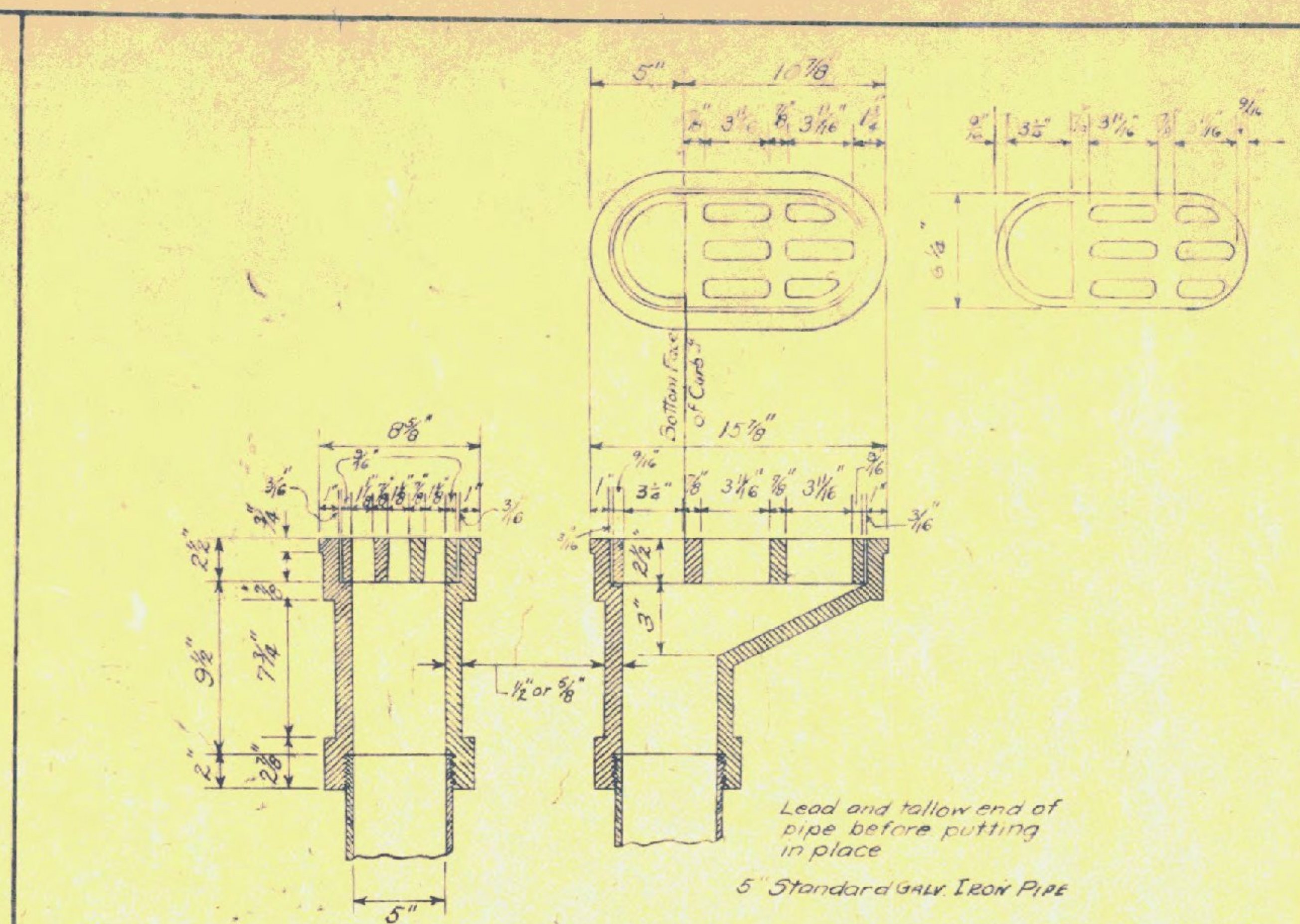
Surveyed by
Designed by
Drawn by M.L.W. & R.F.T. & C.A.
Traced by C.D.Lord
Checked by
Sheet S.B. No. 2



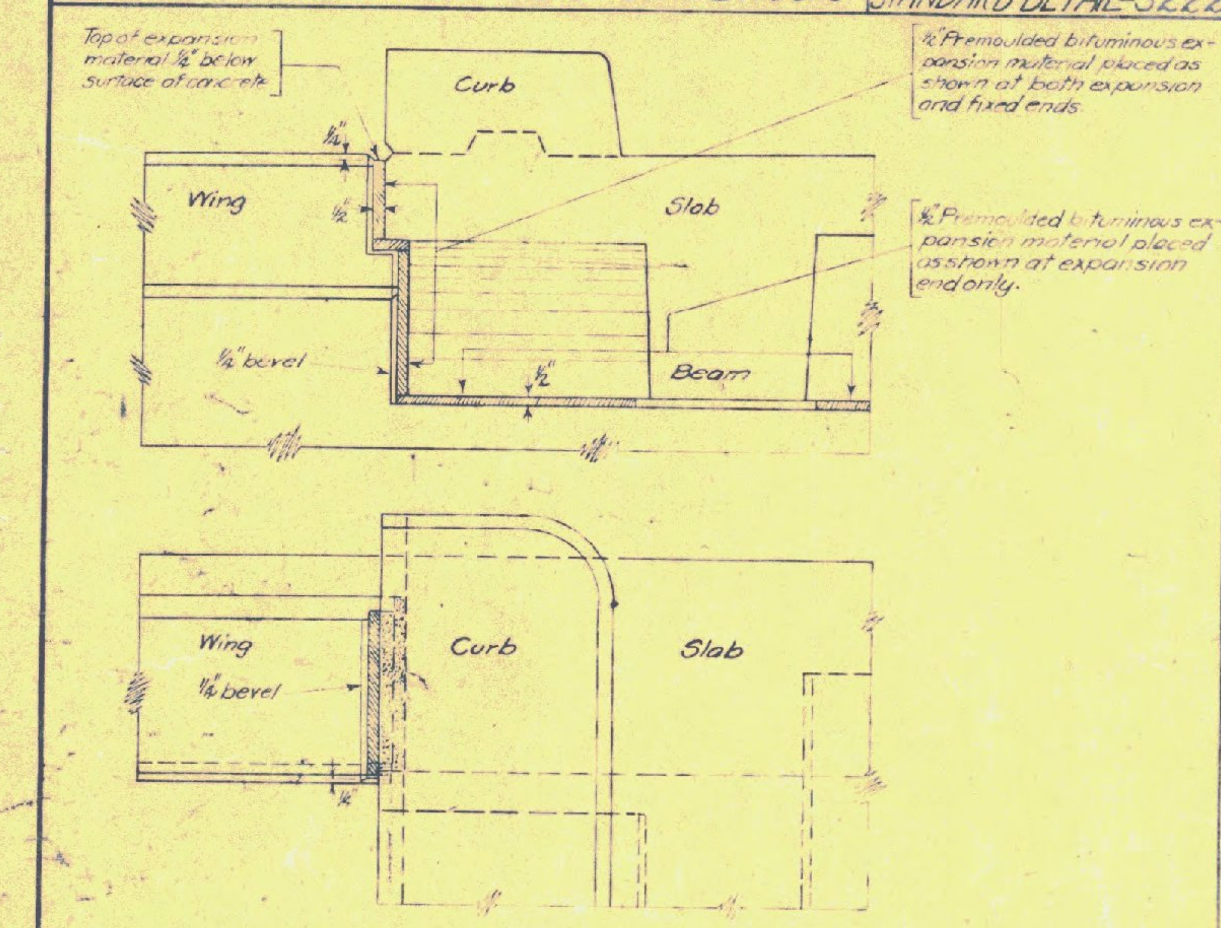
DETAIL OF EXPANSION MATERIAL FOR SLAB BRIDGES — STANDARD DETAIL–S222



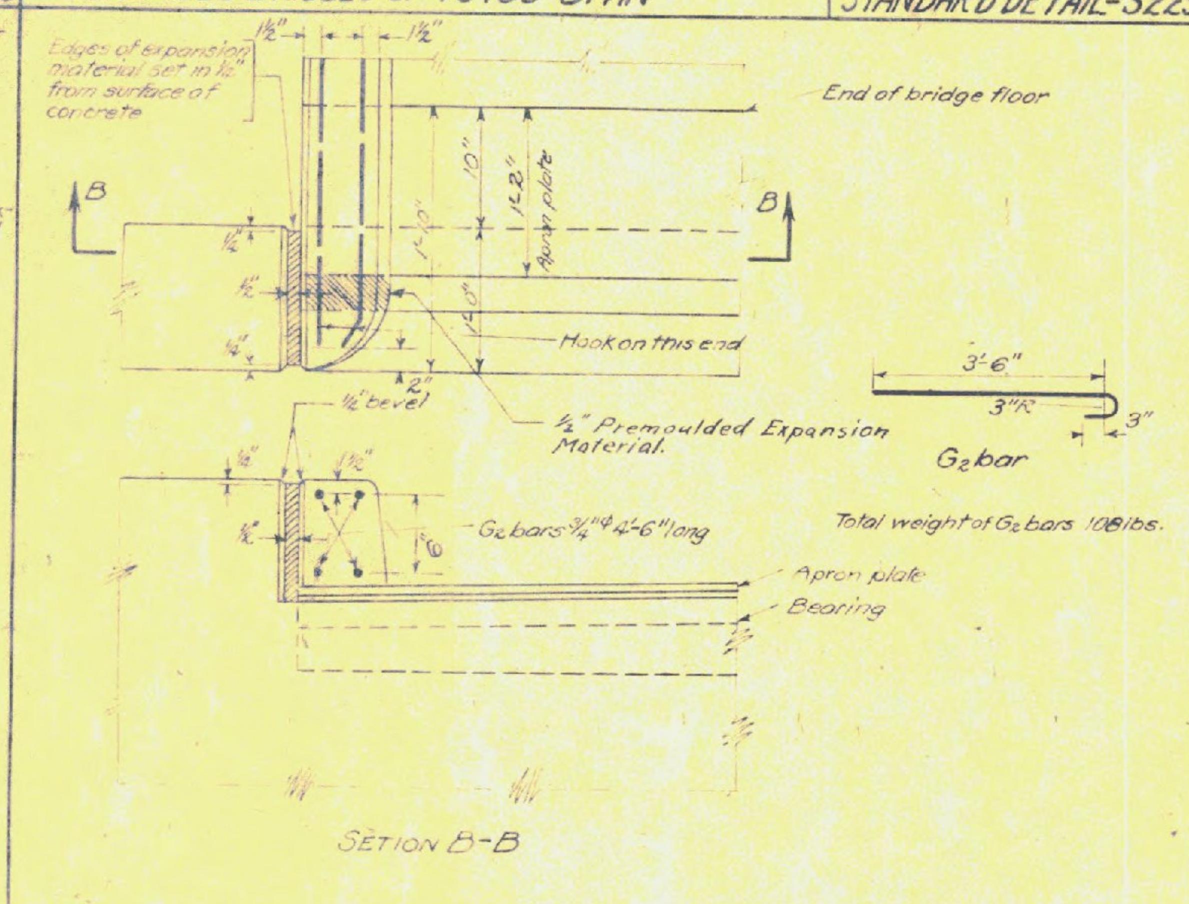
DETAIL OF CURB AND EXPANSION MATERIAL FOR STEEL BRIDGES UP TO 150' SPAN — STANDARD DETAIL–S225



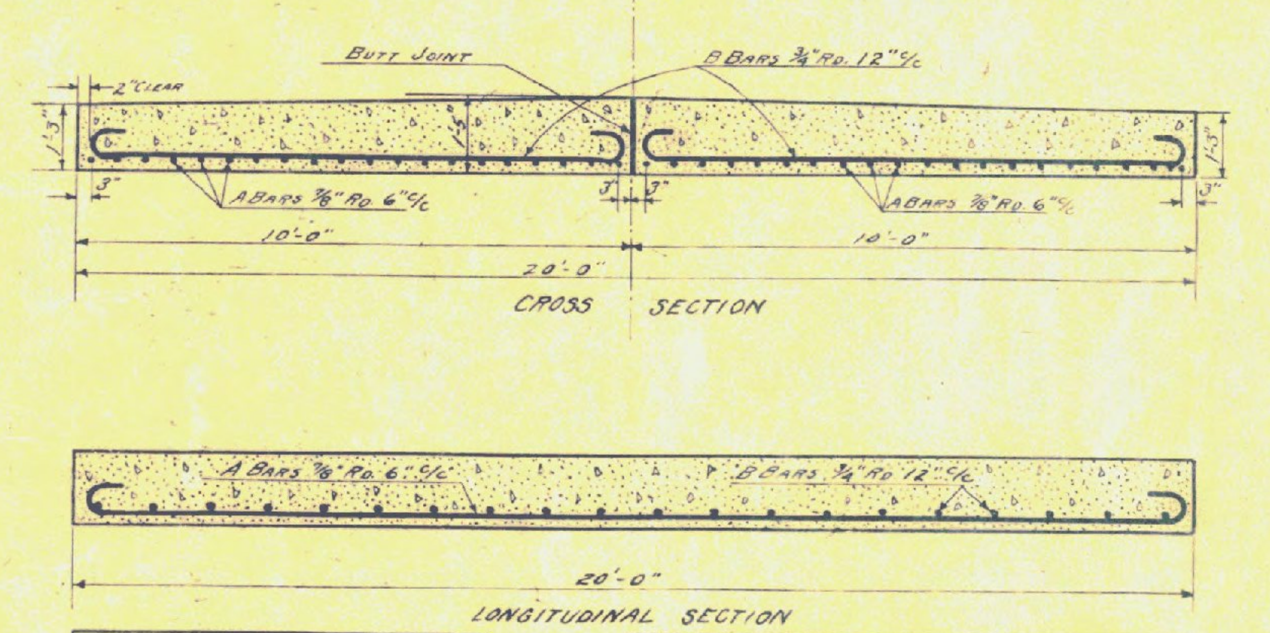
DETAIL OF DRAIN PIPE — STANDARD DETAIL–S228



DETAIL OF EXPANSION MATERIAL FOR TEE BEAM BRIDGES — STANDARD DETAIL–S223



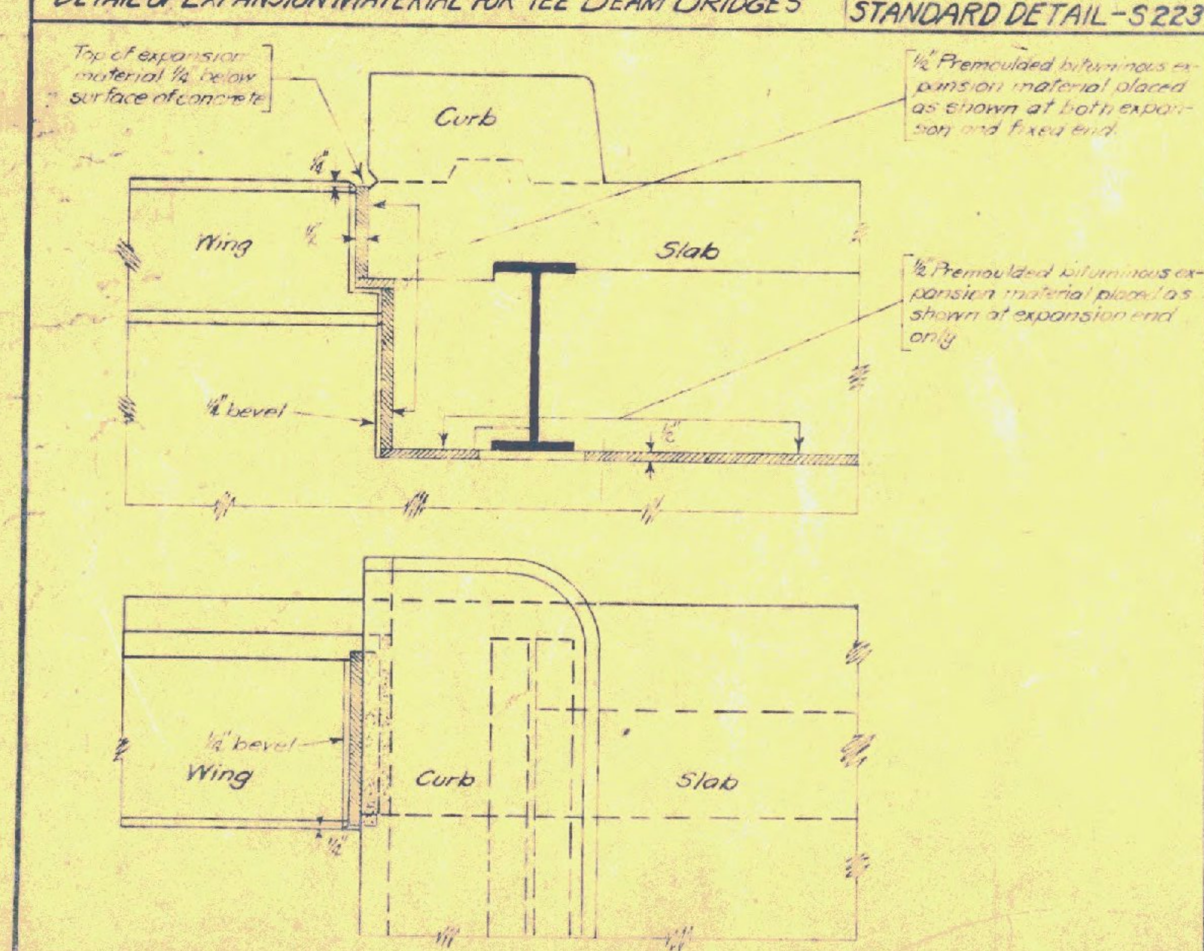
DETAIL OF CURB AND EXPANSION MATERIAL FOR STEEL BRIDGES OVER 150' SPAN — STANDARD DETAIL–S226



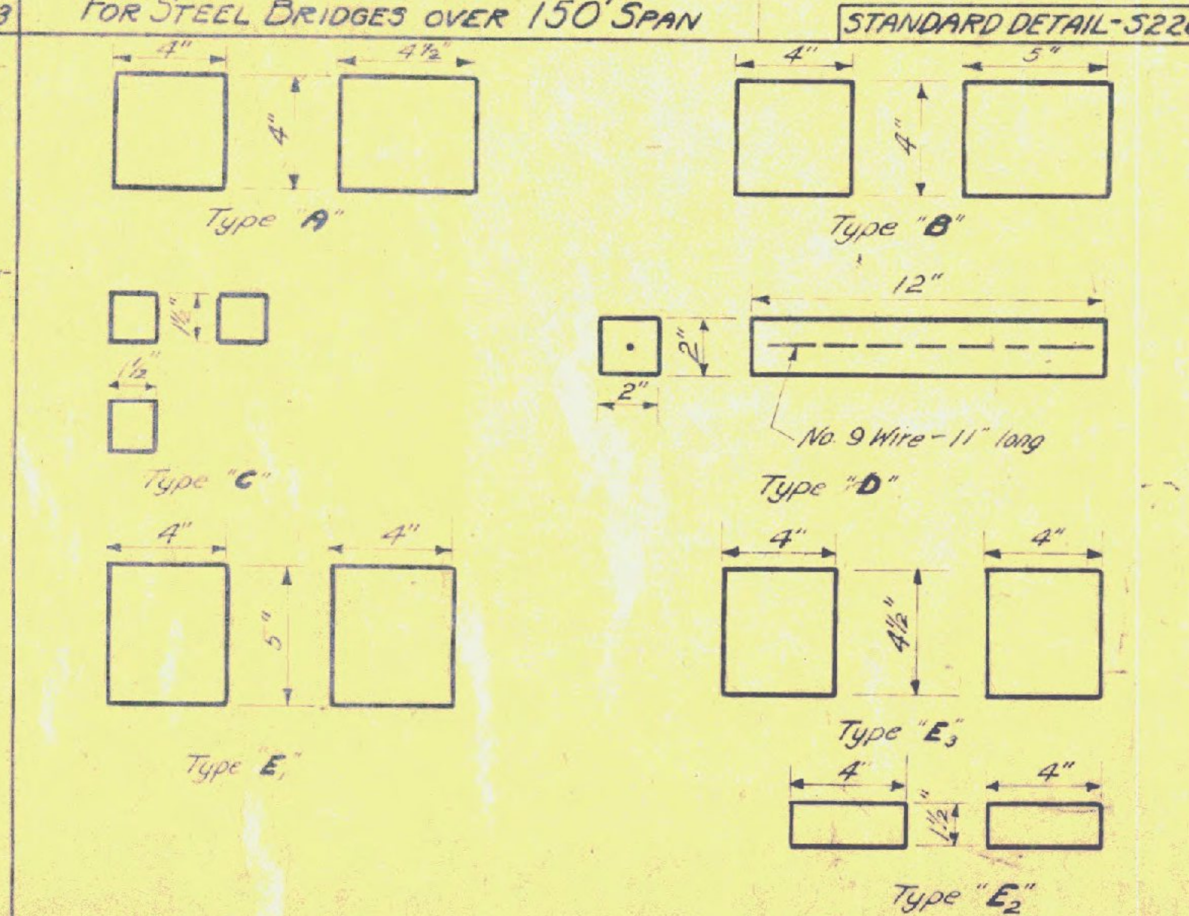
BAR NO.	SIZE	REQ'D.	T.L.
A	⅞" RD.	40	21'-3"
B	¾" RD.	20	11'-3"

QUANTITIES—
CONCRETE CLASS A (1:2:4) — 19.7 CU. YDS.
REINFORCING STEEL — 2410 LBS.

DETAIL OF APPROACH SLAB — STANDARD DETAIL–S229



DETAIL OF EXPANSION MATERIAL FOR I BEAM BRIDGES — STANDARD DETAIL–S224



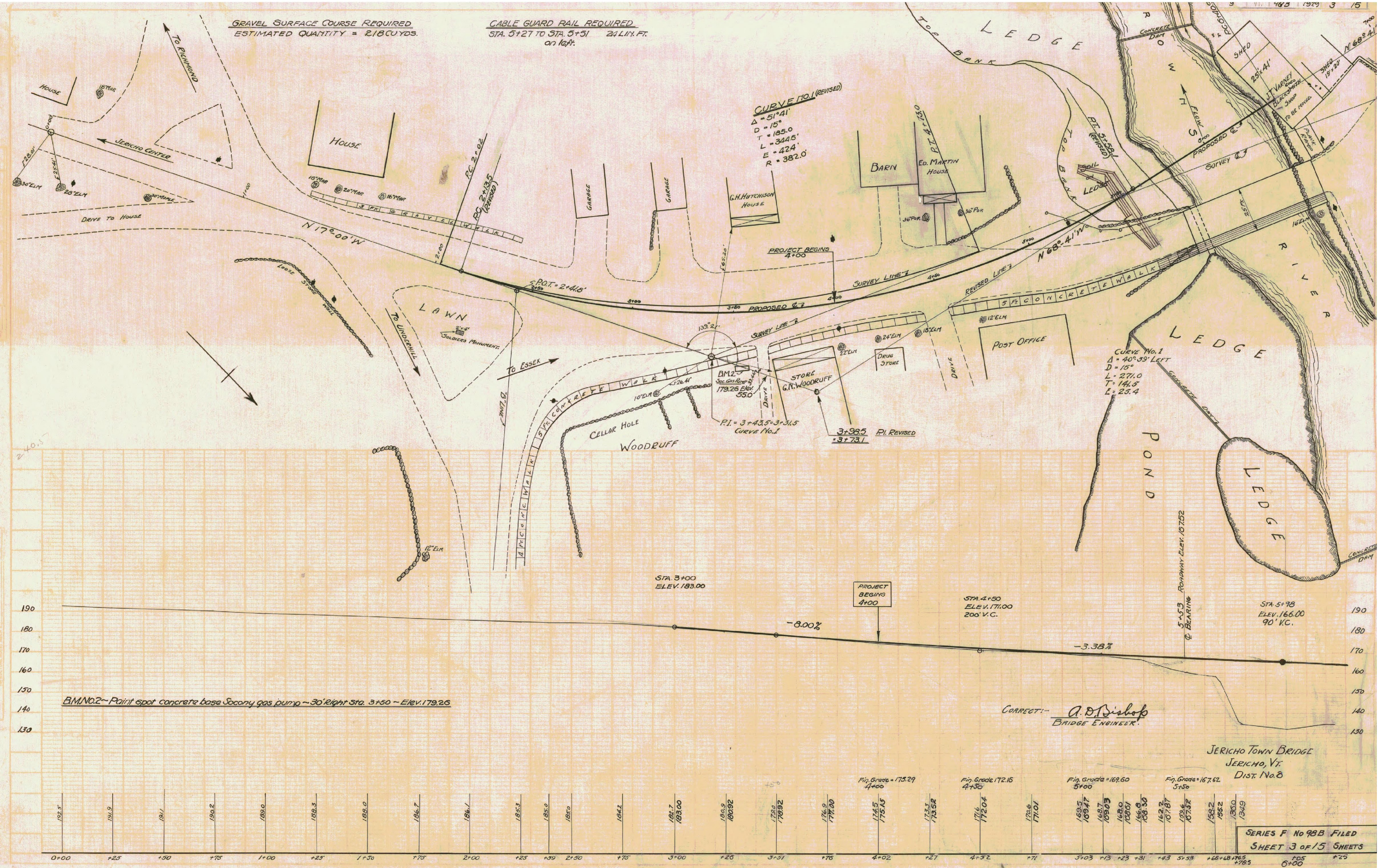
DETAIL OF STANDARD CHAIRS FOR TEE BEAM, I BEAM AND STEEL BRIDGES — STANDARD DETAIL–S227

TYPICAL DETAILS
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

Corrected to March 1, 1929

CORRECT: A. D. Bishop
BRIDGE ENGINEER

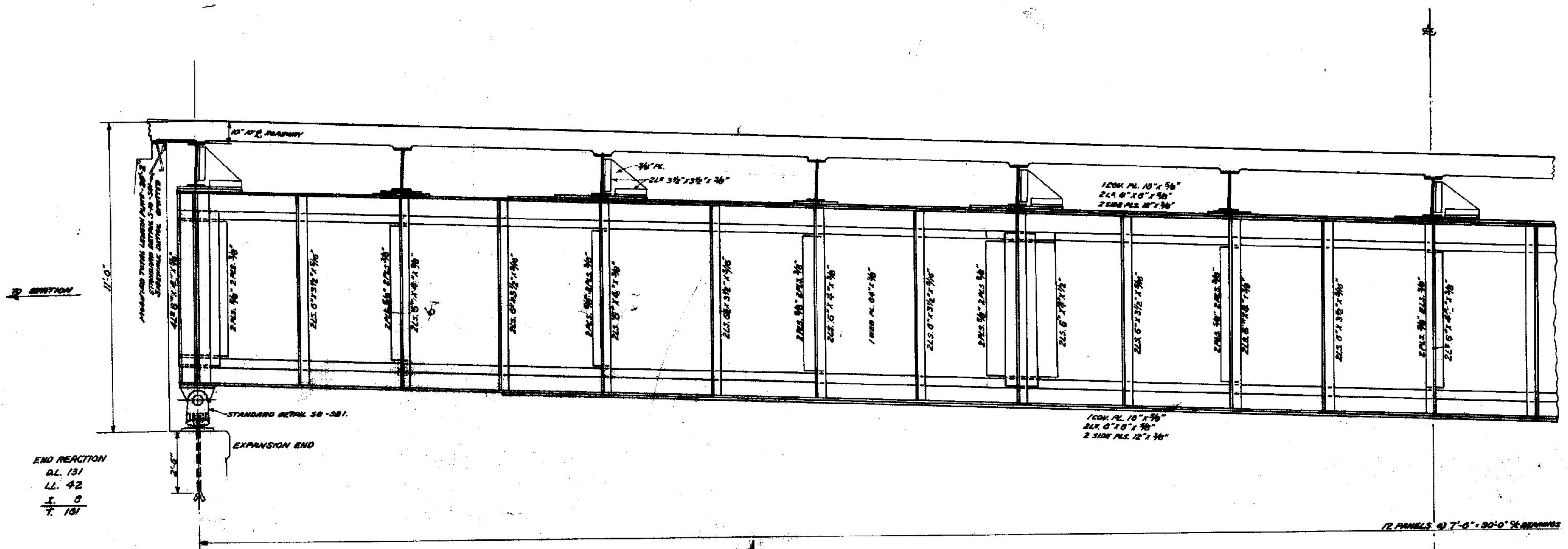
Surveyed by
Designed by
Drawn by C.D. Lord
Traced by C.D. Lord
Checked by M. W. D.
Series SB No 2A

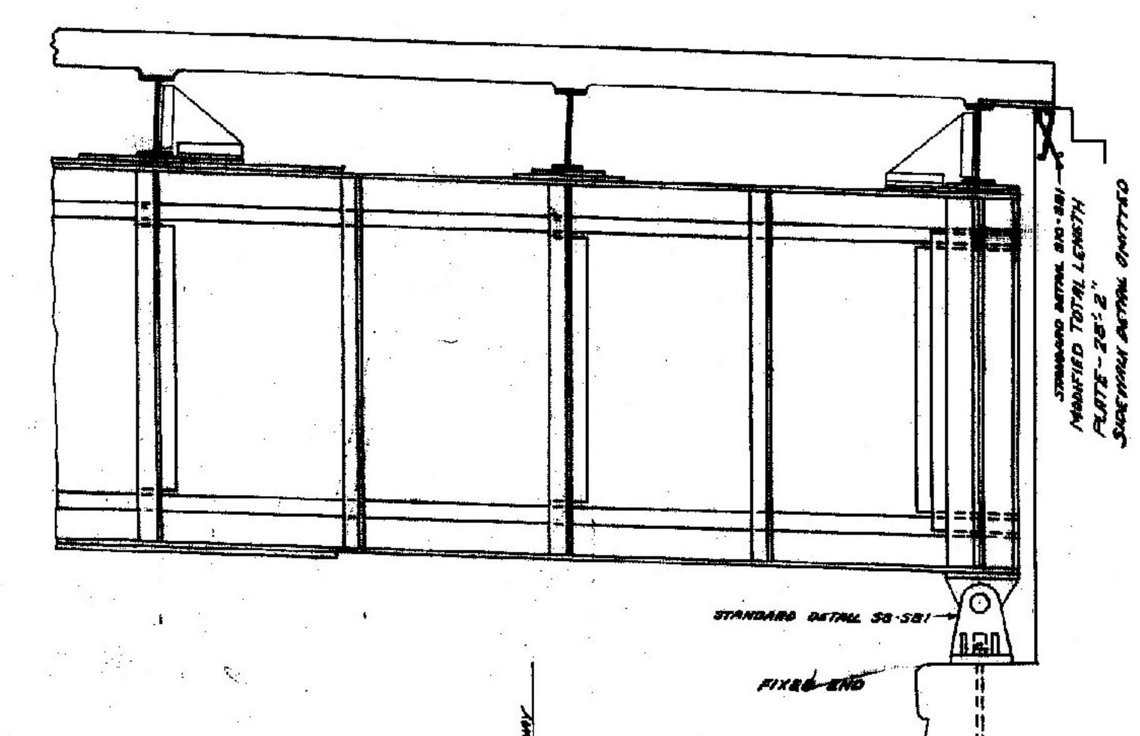

GRAVEL SURFACE COURSE REQUIRED
ESTIMATED QUANTITY = 218 CU.YDS.
CABLE GUARD RAIL REQUIRED
STA. 5+27 TO STA. 5+51 24 LIN. FT. on left.
TO RICHMOND
JERICHO CENTER
HOUSE
DRIVE TO HOUSE
N 17°00' W
P.C. 2+02
P.C. 2+13.5 (REVISED)
GARAGE
GARAGE
G.H. HUTCHINSON HOUSE
CURVE No. 1 (REVISED)
Δ = 51°41'
D = 15°
T = 185.0
L = 344.5'
E = 42.4'
R = 382.0'
BARN
ED. MARTIN HOUSE
P.T. 4+13.0
PROJECT BEGINS 4+00
SURVEY LINE
PROPOSED ℄
REVISED LINE
N 68° 41' W
5 Ft. CONCRETE WALK
P.O.T. = 2+41.6'
LAWN
SOLDIERS MONUMENT
TO UNDERHILL
TO ESSEX
SURVEY LINE 2
BM.2
179.26
DRIVE
STORE G.K. WOODRUFF
DRUG STORE
POST OFFICE
DRIVE
P.I. = 3+43.5 = 3+31.5 CURVE No. 1
3+98.5 P.I. REVISED
3+73.1
CELLAR HOLE
WOODRUFF
4 Ft. CONCRETE WALK
CURVE No. 1
Δ = 40° 33' LEFT
D = 15°
L = 271.0
T = 14.5
E = 25.4
LEDGE
LEDGE
LEDGE
LEDGE
POND
RIVER
TOP BANK
TOP BANK
SHED
SHED
CONCRETE DAM
P.T. 5+58.1 (REVISED)
PROPOSED ℄
SURVEY ℄
25°41'
STA. 3+00
ELEV. 183.00
PROJECT BEGINS 4+00
-6.00%
STA. 4+50
ELEV. 171.00
200' V.C.
-3.38%
5+53 ℄ BEARING
ROADWAY ELEV. 167.82
STA. 5+98
ELEV. 166.00
90' V.C.
B.M. No. 2 ~ Paint spot concrete base Socony gas pump ~ 30' Right Sta. 3+50 ~ Elev. 179.26
CORRECT:- A. D. Bishop
BRIDGE ENGINEER.
JERICHO TOWN BRIDGE
JERICHO, VT.
DIST. No. 8
SERIES F No 98B FILED
SHEET 3 of 15 SHEETS
Fin. Grade = 175.29 4+00
Fin. Grade 172.16 4+50
Fin. Grade = 169.60 5+00
Fin. Grade = 167.62 5+50
PUTNAM McAVOY PERKINS

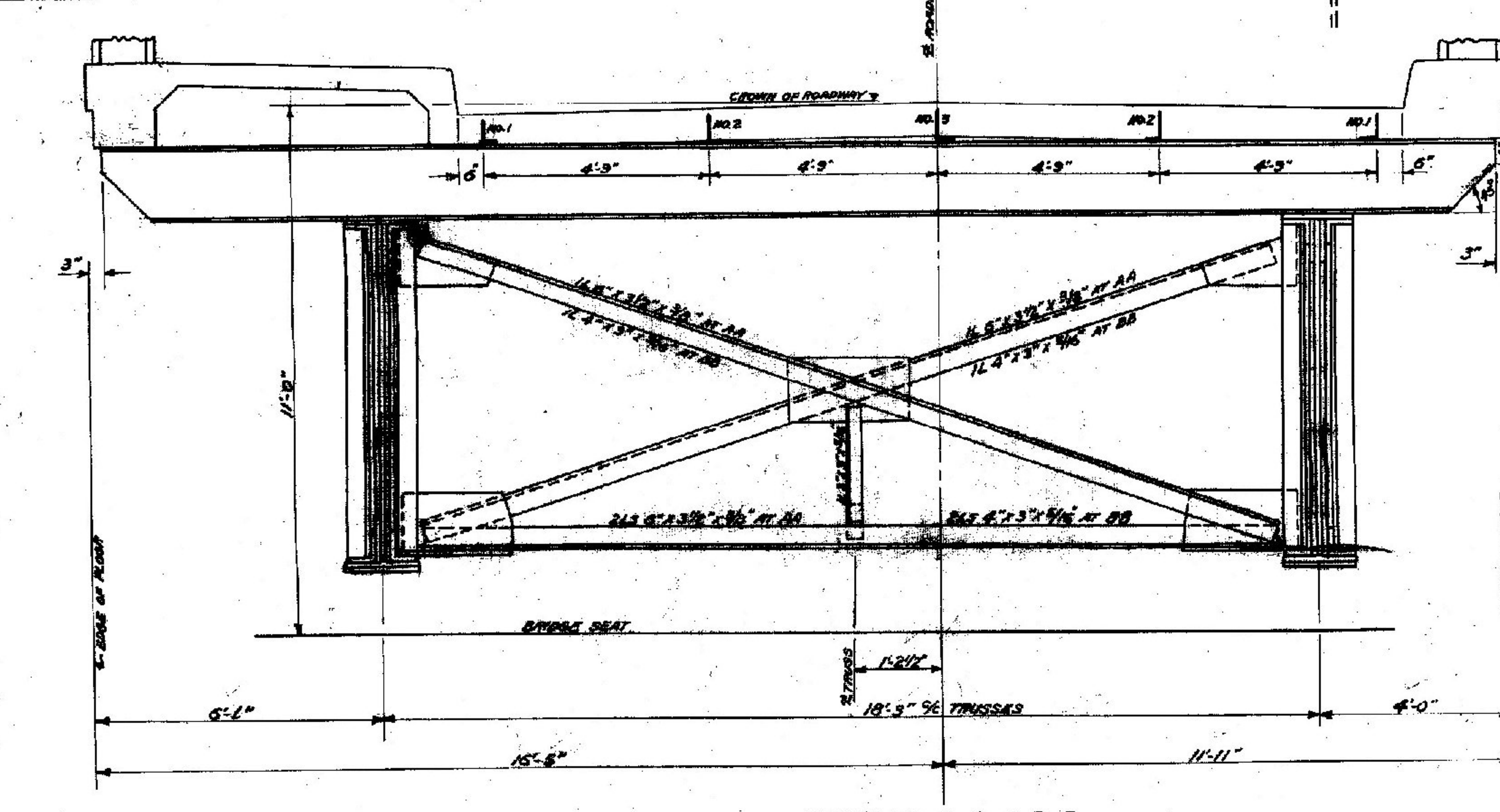
CABLE GUARD RAIL REQUIRED
STA. 6+45 TO STA 7+73 128 LIN. FT.
988 1929 3 15
CURVE NO. 2 (REVISED)
Δ = 31°30'
D = 15°
T = 107.7'
L = 210.0'
E = 14.9'
R = 382.0'
N 68° 41' W
LEDGE
FLOW
MILL
SHED
H. DINSMORE STONE SHED
DRIVE TO SHED
DRIVE TO HOUSE
BANK DOWN
PROPOSED ℄
P.I. 6+99.7 = 6+94.7
P.I. 7+48.6 (REVISED) = 7+43.2
P.I. 11+63.7
S 79° 49' W
TO ESSEX
TOE SLOPE
B.M. 3 STUMP 24" MAP. ELEV. 163.55
B.M. 4 24" ELM ELEV. 152.44
PROJECT ENDS STA. 8+50
Curve No. 2
Δ = 43° 42' LEFT
D = 46°
L = 95.0'
T = 50.0'
E = 9.6'
STA. 5+98 ELEV. 166.00 90' V.C.
-3.38%
-3.96%
STA. 8+00 ELEV. 158.00 200' V.C.
8+50.9 = 8+00.4 EQUATION -9.5'
COMMON POINT
-2.07%
STA. 8+50 ELEV. 157.07
PROJECT ENDS STA. 8+50
SOLID LEDGE FOUNDATION
SOLID LEDGE FOUNDATION
Approximate Line of ledge
5+53 ℄ BEARING ROADWAY ELEV. 167.52
6+43 ℄ BEARING ROADWAY ELEV. 164.22
B.M. No. 3 ~ Spike in stump 19' Right Sta. 7+38 ~ Elev. 163.55
B.M. No. 4 ~ Spike in 24" Elm · 23' Left Sta. 10+25 ~ Elev. 152.44
JERICHO TOWN BRIDGE
JERICHO, VT.
DIST. NO. 8.
SERIES F NO 98B FILED
SHEET 4 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	VT.	98B	1929	5	15

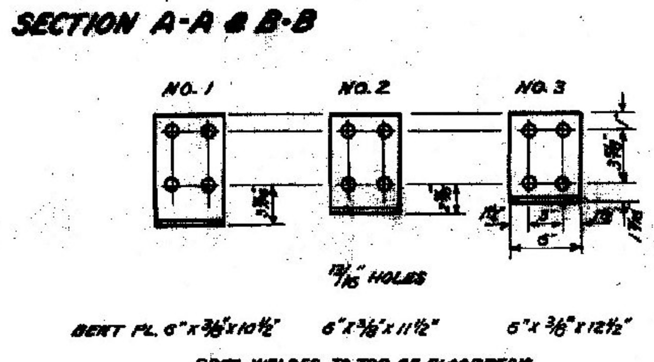
FLOORBEAMS	GIRDER
D.L. 72 FT. LBS.	2940 FT. LBS.
L.L. 105	928
I. 31	186
T. 208	4054
@ $\frac{12}{16}$ = 155"³	@ $\frac{12}{16}$ = 3040"³ NET
USE 18" C.B. @ 86# = 168.2	USE 1 WEB PL. 84" x 3/8"; 4 SIDE PLS. 12" x 3/8"; 4 L^S 8" x 8" x 5/8"; 2 COV. PLS. 18" x 3/8" — 3350"³ GROSS, 3100"³ NET
OR 18" B.G. @ 88# = 167.1	
MOMENTS IN KIPS	

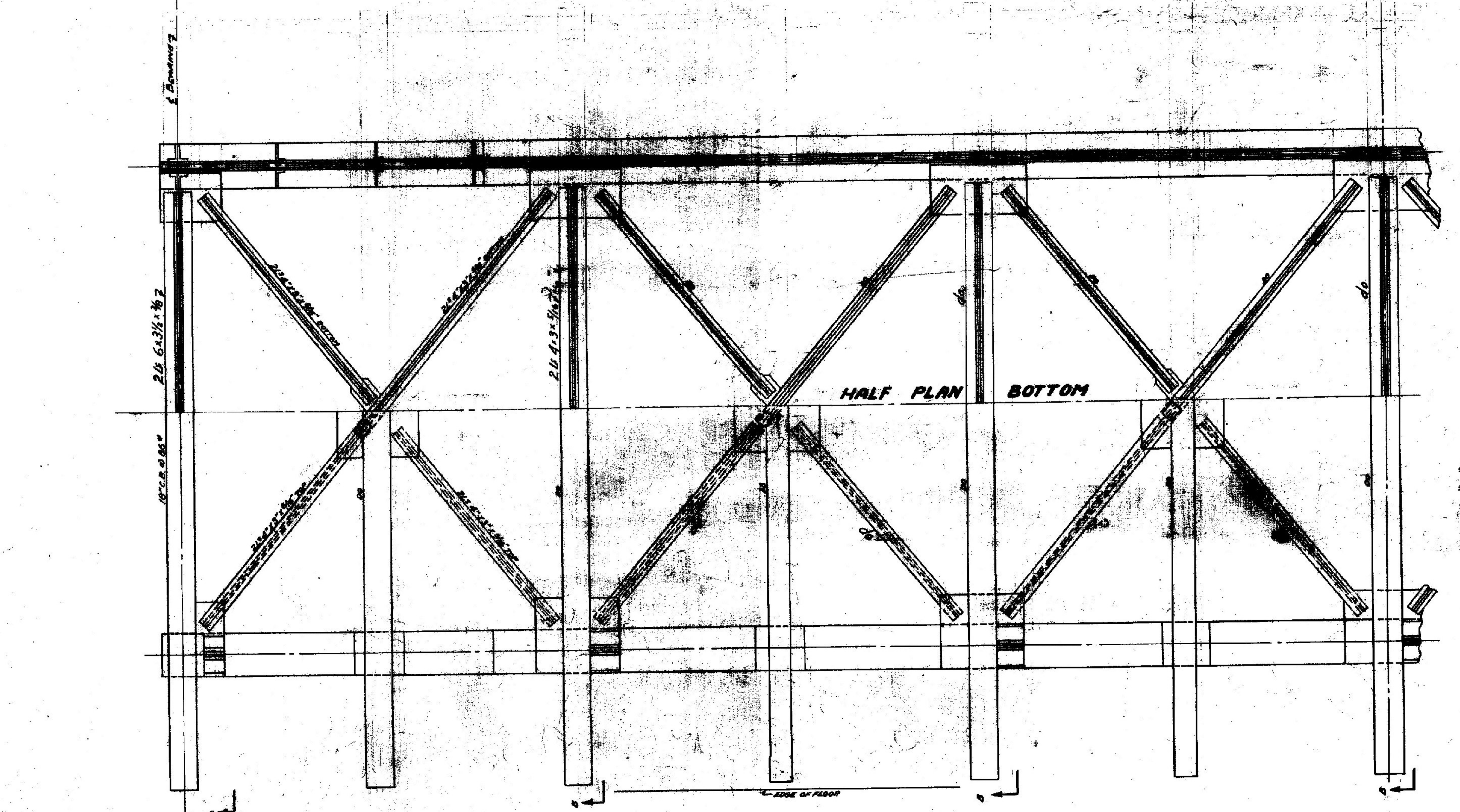






SECTION A-A & B-B





HALF PLAN BOTTOM

HALF PLAN TOP

GIRDER DESIGNED FOR:

DEAD LOAD + 20# PAVING ALLOWANCE

LIVE LOAD TRAFFIC LANE LOADING H15, A.A.S.H.O. SPECIFICATIONS 1926.

IMPACT 20% OF LIVE LOAD.

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE STATE OF VERMONT DEPARTMENT OF HIGHWAYS.

RIVETS: 7/8"

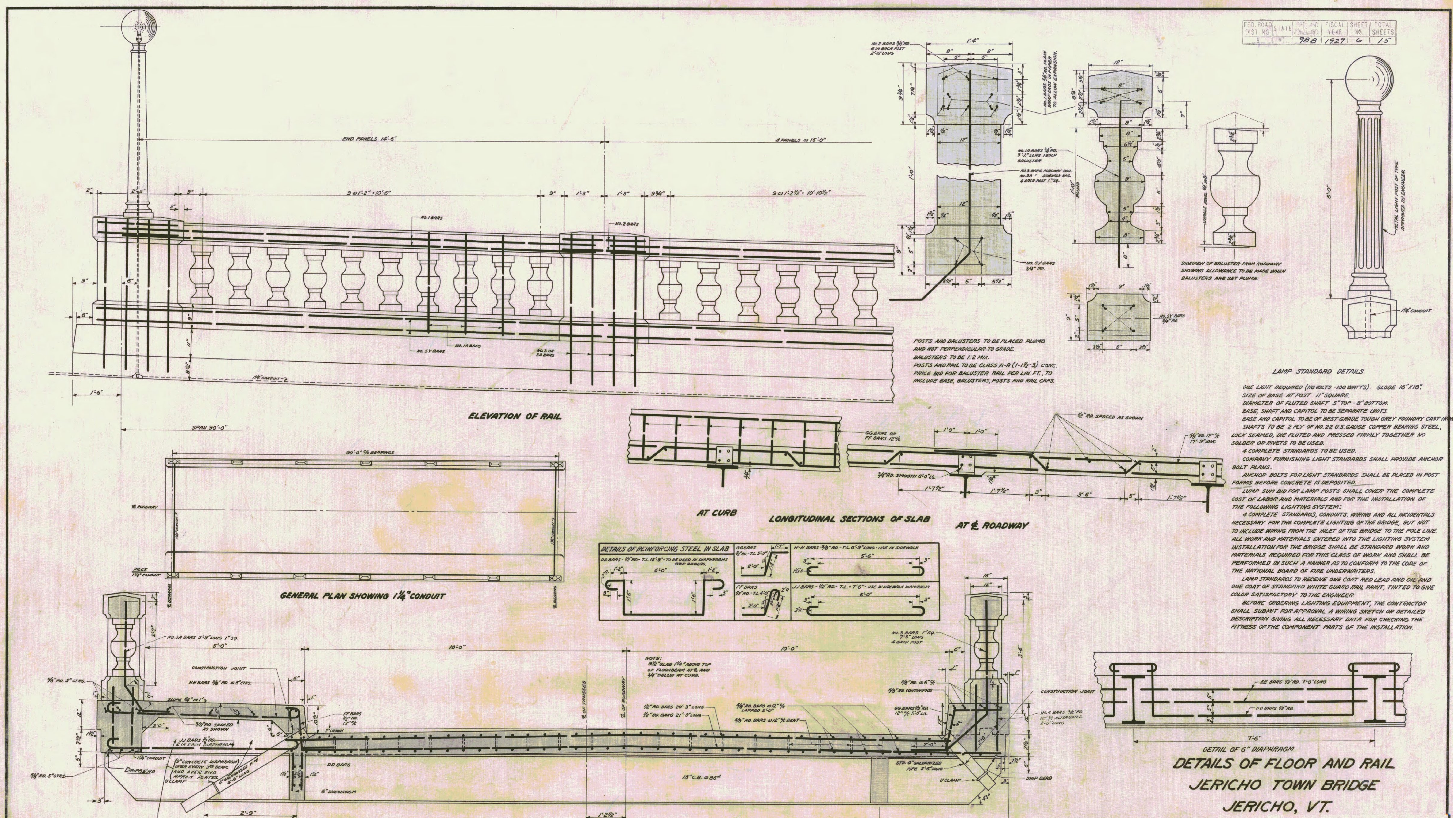
GUSSETS: 3/8"

CAMBER: 3/4" AFTER DEAD LOAD IS APPLIED.

STEEL SUPERSTRUCTURE
JERICHO TOWN BRIDGE
JERICHO, VT.

ESTIMATED WEIGHT STRUCTURAL STEEL 190,000#

Surveyed by
Designed by A.B. BISHOP
Drawn by
Traced by LARSEN
Checked by Bishop
Series F No. 98B Filed
Sheet 5 of 15 Sheets



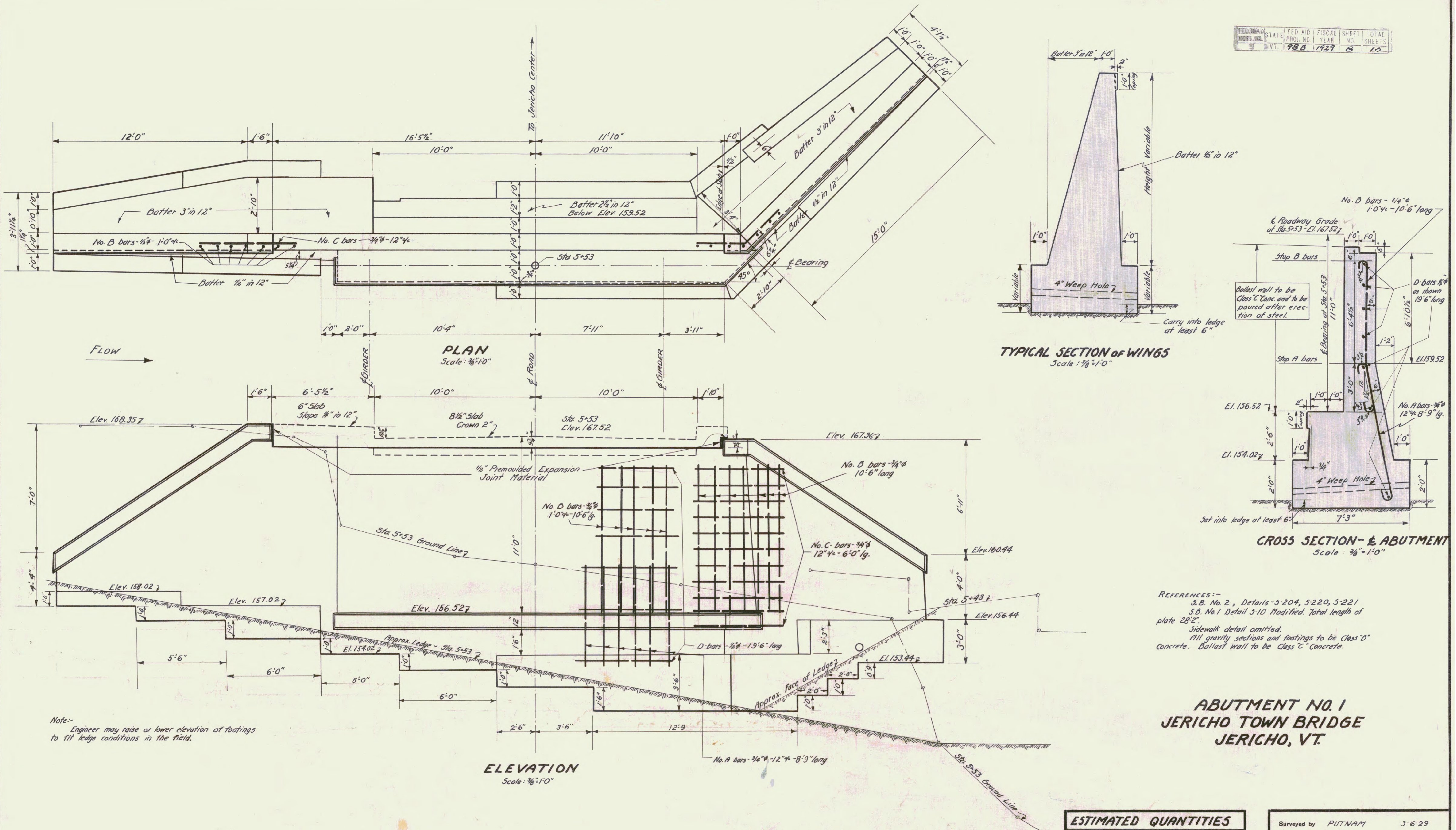
DETAILS OF FLOOR AND RAIL
JERICHO TOWN BRIDGE
JERICHO, VT.

ESTIMATED QUANTITIES

FLOOR	
CLASS "A" (1-2-4) CONCRETE	85 CU. YDS.
REINFORCING STEEL (FLOOR AND RAILS)	16625 LBS.
RAIL	
BALUSTRADE RAIL	183 LIN. FT.
1 LIGHTING SYSTEM COMPLETE	LUMP SUM.

Surveyed by
Designed by H.P. RADIGAN
Drawn by C.D. SMITH
Traced by LARSEN
Checked by M.W.D.
Series F No. 98 B Filed
Sheet 6 of 15 Sheets

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
[illegible]	VT.	98 B	1929	8	15



Note:- Engineer may raise or lower elevation of footings to fit ledge conditions in the field.

REFERENCES:-
S.B. No. 2, Details - 5·204, 5·220, 5·221
S.B. No. 1 Detail 5·10 Modified. Total length of plate 28'2".
Sidewalk detail omitted.
All gravity sections and footings to be Class "B" Concrete. Ballast wall to be Class "C" Concrete.

ABUTMENT NO. 1
JERICHO TOWN BRIDGE
JERICHO, VT.

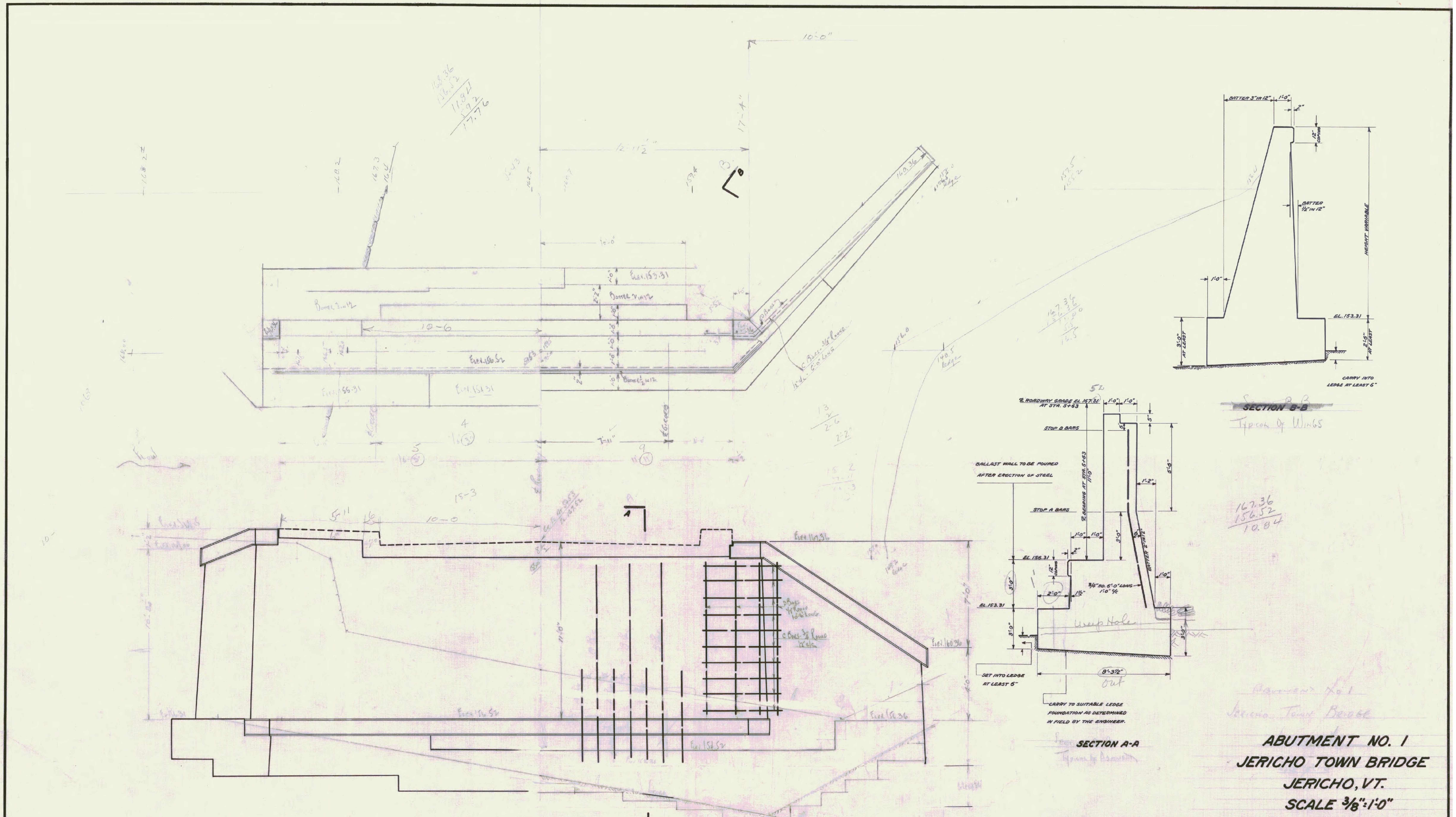
ESTIMATED QUANTITIES

Structure Excavation	270	Cu. Yds.
Class "B" Concrete (1:2½:5)	68	" "
Class "C" " (1:2:4)	16	" "
Reinforcing Steel	1120	Lbs.

Surveyed by	PUTNAM	3·6·29
Designed by	M.W.D.	4-13-29
Drawn by	M.W.D.	4-13-29
Traced by	A.G.	4-16-29
Checked by	P.M.S.	5-3-29

Series F No. 98 B Filed

Sheet 8 of 15 Sheets



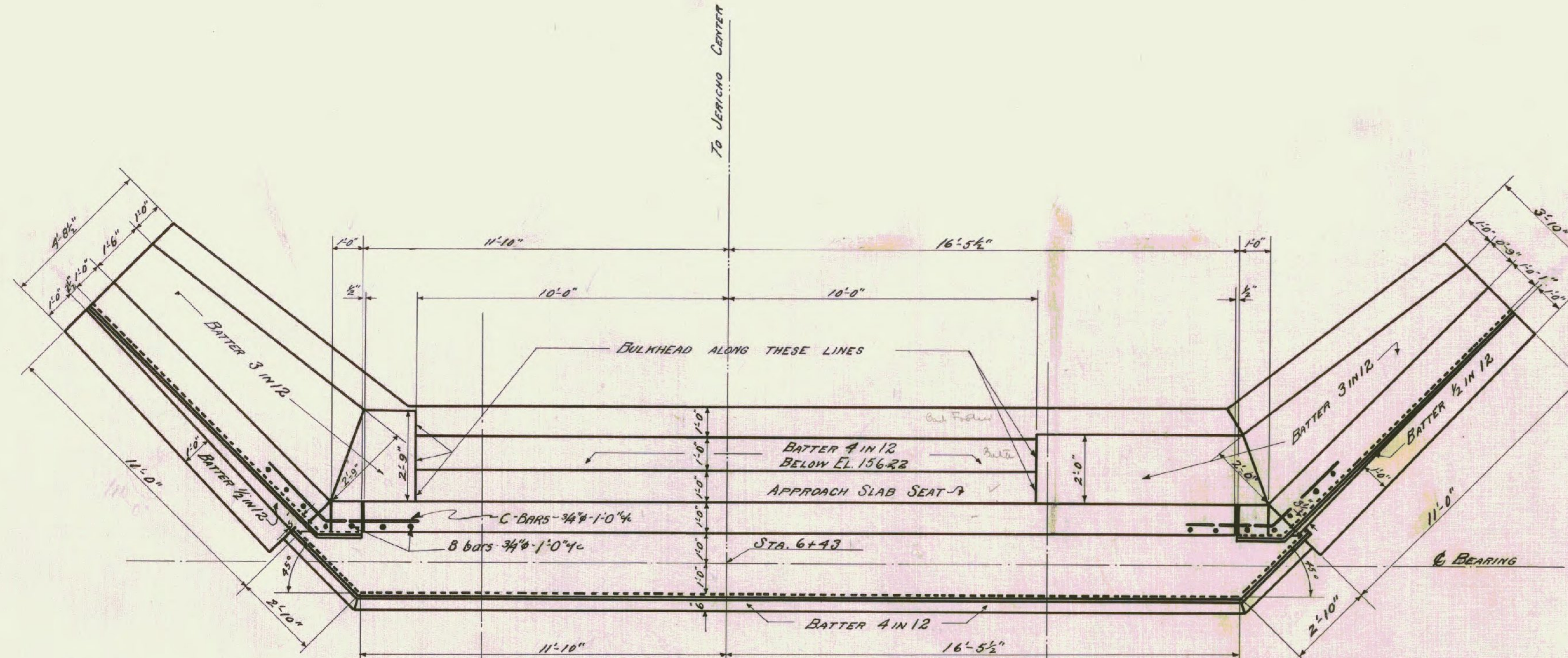
ABUTMENT NO. 1
JERICHO TOWN BRIDGE
JERICHO, VT.
SCALE 3/8":1'-0"

ESTIMATED QUANTITIES

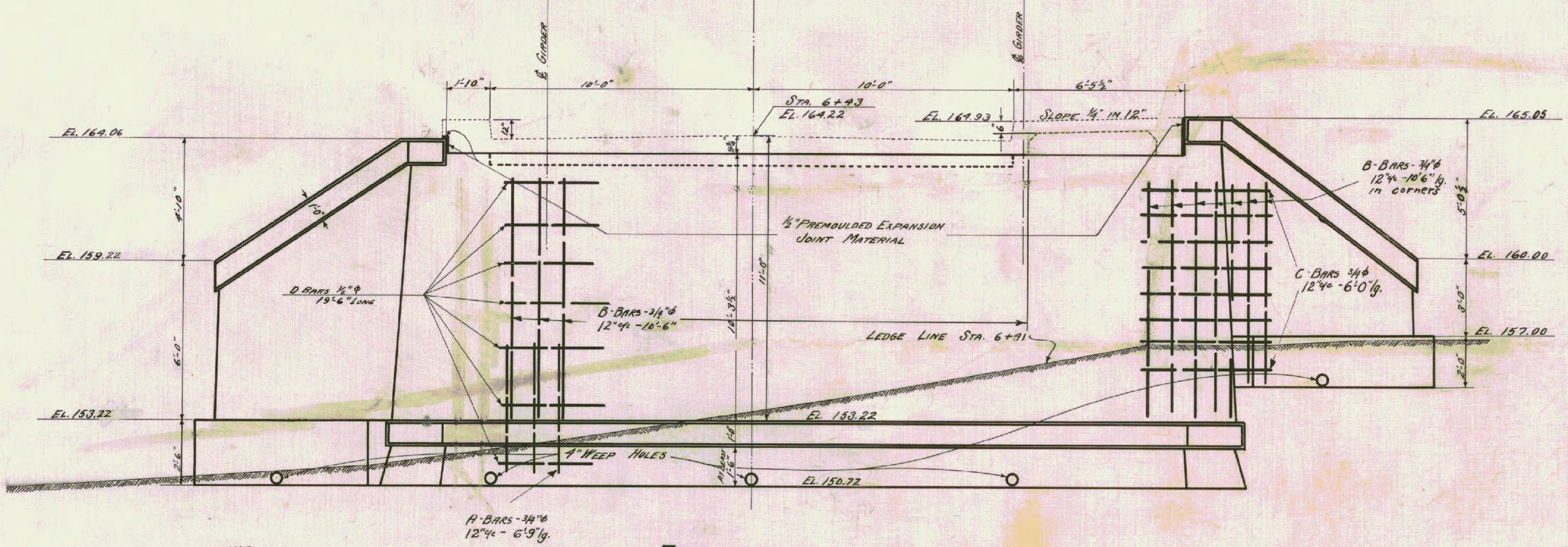
Structure Excavation	Cu. Yds
Class B Concrete	Cu. Yds
Reinforcement Steel	Lbs

Surveyed by PUTNAM
Designed by RADIGAN
Drawn by RADIGAN
Traced by LARSEN
Checked by
Series No. Filed
Sheet of Sheets

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT.	98B	1929	9	15

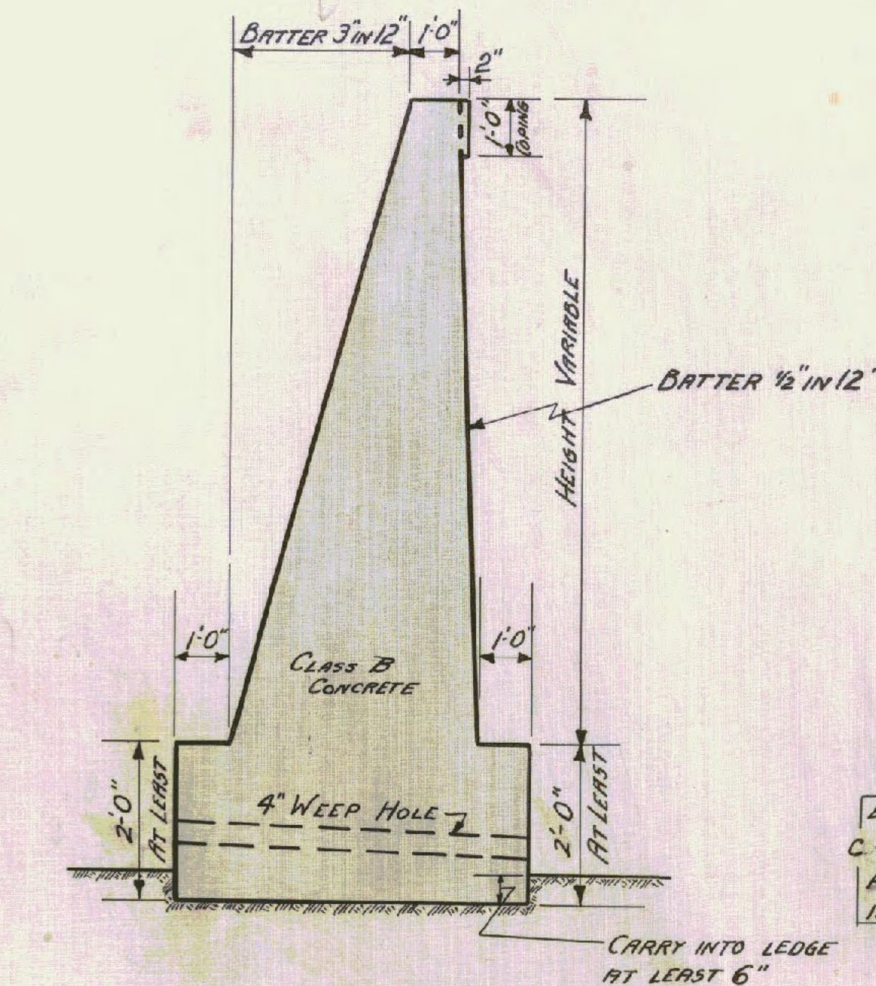


PLAN

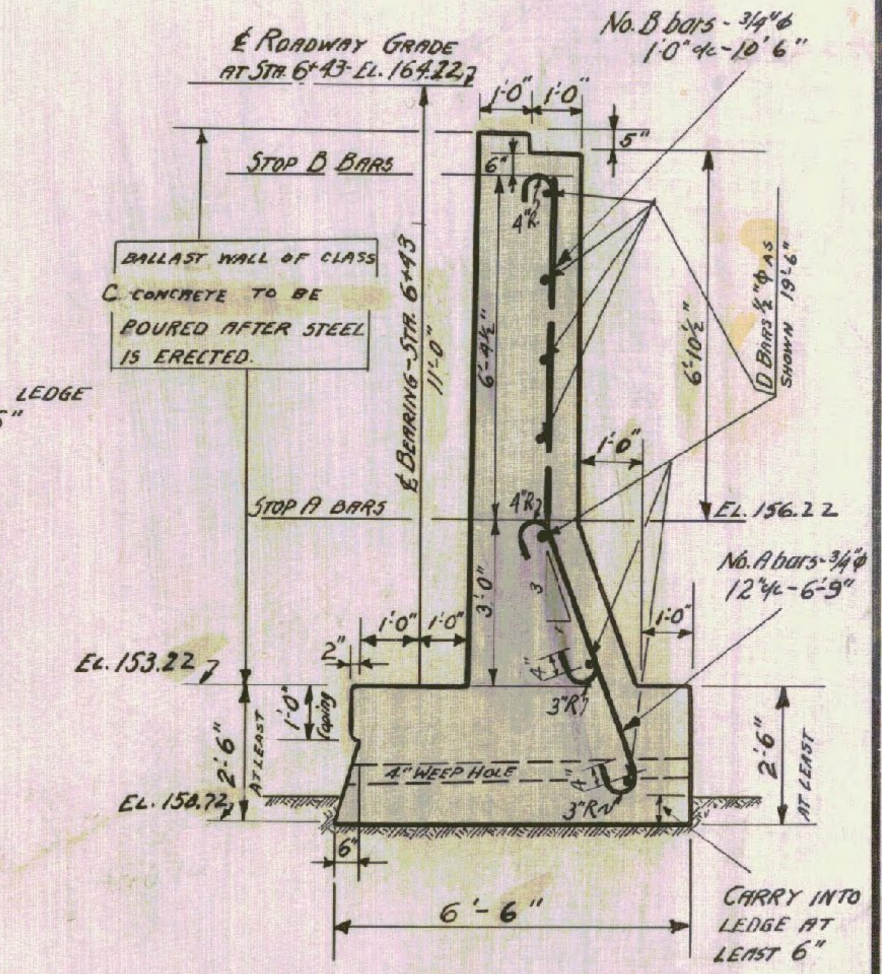


ELEVATION

NOTE:-
ENGINEER MAY RAISE OR LOWER ELEVATION OF FOOTINGS TO FIT LEDGE CONDITIONS FOUND IN FIELD.



TYPICAL SECTION OF WINGS



CROSS SECTION - ℄ ABUTMENT

REFERENCES:-
S.B. No. 2, Details 5-204, 5-220, 5-221.
S.B. No. 1, Details S10 (Modified)
TOTAL LENGTH PLATE 28'-2". SIDEWALK DETAIL OMITTED.
ALL GRAVITY SECTIONS AND FOOTINGS TO BE CLASS B CONCRETE. BALLAST WALL TO BE CLASS C CONCRETE.

ABUTMENT NO. 2
JERICHO TOWN BRIDGE
JERICHO, VT.

SCALE: 3/8" = 1'-0"

ESTIMATED QUANTITIES	
Structure Excavation	53 Cu. Yds.
Concrete Class "B" (1:2½:5)	43 Cu. Yds.
Concrete Class "C" (1:2:4)	16 Cu. Yds.
Reinforcing Steel	1000 Lbs.

Surveyed by PUTNAM 3-6-29
Designed by M.W.D. 4-13-29
Drawn by M.W.D. 4-13-29
Traced by W.G.B. 4-15-29
Checked by P.M.S. 5-3-29
Series F No. 98B Filed
Sheet 9 of 15 Sheets

29 x 3/8" Pl: 2-6½" Mark "TP1"
18 x 3/8 Lateral Pl 2-6½ Mark BP1
21½ x 3/8 Lateral Pl 2-5" Mark - TP2
Wanted
10 Lateral Pls Mark TP1
10 " " " BP1
4 " " " TP2
C.O. 168A.
12 Panels @ 7-6" = 90-0" (on Horizontal Line)
To Jericho
To Essex Junction
Stand. Phoenix Name Plate.
G1L
G1R
Plan of Top
ERECTION PLAN.
Expansion END.
Canvass as required in the Specifications should be furnished for setting all castings on masonry.
90-0" c. to c. Pins
FIXED END.
End View
Plan showing Bottom Lat'l Bracing
List of Drawings
Draw No 1 Girders
" " 2 Bearings; Floorbeams & Bracing
" " 3 Gusset Plates & Erection Diagram
GENERAL NOTES
SPECIFICATIONS: A. S. T. M. SERIAL DESIGNATION
MATERIAL: O. H. STRUCTURL STEEL
RIVETS: 7-8" RIVET STEEL
RIVET AND OPEN HOLES PUNCHED FULL SIZE 15-
SHOP PAINT: ONE COAT RED LEAD & OIL.
ALL EDGE DISTANCES NOT GIVEN: 1½"
Revised as per letter ref. 6/2

Vermont F.A.P. 98B
2-Cast Steel Pedestals FP1 (Fix.)
4-4" Turn Pins 2'-1" "P" each with 2 Stand. Pin Nuts P2 fast.
Bored for 4" Turn Pin
2 Holes Cored 1½"
One Rough Cut
2 Cast Steel Pedestals EP2 (Exp.)
2-Cored Holes
Length of holes at Bott.
Finish
4-Cast Steel Saddles "BS1"
Rib to bear on Pin
Bored for 4" Turn Pin
Planed
4 Holes drilled for 1⅛ Turnbolts to match holes in Gir's.
8-1⅛ Turn Bolts 4¾ u.h. "TB1"
4 - " " 5" TB2
4 - " " 5¼ TB3
2-Cast Steel Pedestals EP1
Cored 1½"
4-1¼" Anchor Bolts 3'-4¾ "AB1"
4-1¼" Anchor bolts 3'-1½ "AB2"
Stand. Hex Nut
All Steel Castings to be annealed.
Machined surfaces to be coated with White Lead & Tallow.
Bearings ect. to the Left of this Line C.O. 168 C
Lugs are Spot Welded To Top Flange
Omit all holes in Web View in "F2"
Omit these 8 Holes in "F2"
6-18" Beth. G. 86 - 27'-10½ Mk. "F2"
5- " " 27'-10½ " F3
C.O. 168B
"a", "b" & "c" are spot welded to Top Fl.
1-18" Beth. G 86" - 27'-10½ Mk F1R as shown
1- " " - 27'-10½ " F1L opp. hand
2 Apron Plates 18" x ½" - 28'-2" " A1
C.O. 168B
7-anchors "f" 2" x ¼ - 1'-3½ bent
8-anchors "e" 2" x ¼ flat 1'-3½ bent
to be spot welded to "d"
2-Dam L's Mark "A2" C.O. 168B
Bracket FB
Make: 14 Brackets "FB" C.O. 168B
6-Top Lat'ls TL1
12 " TL2
12-Bott Lat'ls "BL1"
C.O. 168A
Make: 1 End Cross Frame "EC" C.O. 168A
Make: 1 End Cross Frame "EC1"
Make: 5 Interm. Cross Frames "IC" C.O. 168A
View A-A
End View.
65-⅞" bolts 2¾ u.h. Mark ① C.O. 168C.
Bend Line
GENERAL NOTES
SPECIFICATIONS: A. S. T. M. SERIAL DESIGNATION A7-3
MATERIAL: O. H. STRUCTURAL STEEL
RIVETS: ⅞" RIVET STEEL
RIVET AND OPEN HOLES PUNCHED FULL SIZE 15-16" UNLE
SHOP PAINT: ONE COAT RED LEAD & OIL
ALL EDGE DISTANCES NOT GIVEN 1½
LAST ASSEM


MARK THIS END "TO JERICHO"
Web Pl b
Note: All Stiffeners Vertical
Outside Elevation of Girder G1R
Web Pl a
Note: Rivets in Web Leg of Top & Bottom are at Right Angles
91:4½ Over all
60:6⅞ From end of Girder to Line X
Rivets in Bott Flge
90:0 c to c of Bearings
Rivet spacing same as Top Flange
These 4 holes drilled for 1⅛ Bolt to fit Casting B51
Rivets in Bott Flange
30:10⅛ From end of Girder to Line X
Web Pl c
MARK THIS END TO ESSEX JUNCTION
Rivet spacing same as Top Flange
These 4 holes drilled for 1⅛ Bolts to fit Casting B51
Camber Diagram
Section A.A
Section B.B
Section CC
DD
EE
Material Req'd for 1-Girder G1R
1 a 84 × ⅜ Web Pl 30:2⅝ T
1 b " " " 30:11½ "
1 c " " " 30:11½ "
2 dL 8 × 8 × ⅝ L 91:5 "
2 eLx " 91:5 "
2 f 17½ × ⅝ Pls 2:4½
4 ⅞ S Bolts. 2¼
2 g 12 × ⅜ Side Pls 91:4 15/16 T
2 h " " " " 91:4 15/16 "
1 k 18 × ⅝ Cov Pl 67:0
1 m " " " " 67:0
4 p 18 × ⅜ Pls 1:6
2 be 18 × ⅜ Fills. 5:0½ T
2 f 15 × ⅝ Fills 5:8¾ "
2 u 17½ × ⅜ Pls 1:9
2 v 17½ × ⅝ Pls. 1:6
2 w 13 × ⅝ Sp Pls 5:8¾ T
2 x 25 × ⅜ " " 5:0⅝ "
2 aa 18 × ⅜ Pls 1:11½ "
1-ab 1-bf 17¼ × 1⅛ Sole Pls. 1:3½ Planed To Bevel.
4 acR 6 × 4 × ⅝ Ls 6:11⅜ T F2E
2-adR " 6:11⅜ " "
2-afR "
24-agL 6 × 3½ × 5/16 Ls
24 ah 3½ × ⅝ Fills
24 ak 3½ × ⅜ "
9-amR 6-amL 6 × 4 × ⅜ Ls
8 an 7 × ⅜ Fills
18 ap 4 × ⅝ Fills
Note angles mark ba + av alike
1-bat 6 × 4 × ⅜ Ls 6:11⅜ T F2E
2-afR 6 × 4 × ½ L 6:11⅜ " "
1-auR " 6:11⅜ " "
1-awR " 6:11⅜ " "
alike
2 bb 18 × ⅜ Pls 5:0½ "
2 bc 15 × ⅝ Pls 5:8¾ "
2 bd 25 × ⅜ Pls 5:0⅝ "
2 ax 13 × ⅝ Pls 5:8¾ "
10 ay 7 × ⅜ Pls 5:0 "
2-avR 6 × 4 × ⅜ L 6:11⅜ " F2E
Name Plate
Outside left end of G1R
" Right " " G1L
Wanted
1-Girder G1R as shown and noted with Name and Date Pl
1 " G1L oppo hand " " " "
GENERAL NOTES
SPECIFICATIONS: A. S. T. M. SERIAL DESIGNAT
MATERIAL: O. H. STRUCTURL STEEL
RIVETS: 7-8" RIVET STEEL
RIVET AND OPEN HOLES PUNCHED FULL SIZE
SHOP PAINT: ONE COAT RED LEAD & OIL
ALL EDGE DISTANCES NOT GIVEN: 1½

SHOP DRAWING TRANSMITTAL

DATE RETURNED: 3/20/2015 | DATE SENT: 3/17/2015 | PAGE 1 of 1

TO/FROM: TEL. # 518-453-4797

CHA
3 WINNERS CIRCLE,
ALBANY, NY 12205
ATTN: RYAN HENDERSON

TO/FROM: TEL. # ( )
MARK SARGENT
1 NATIONAL LIFE DRIVE
MONTPELIER, VT 05633

CHA PROJECT NO.28410
CONTRACT NO.
TITLE: JERICHO STP FTBR(3)

SHOP DRAWING DATA: (TO BE FILLED IN BY CONTRACTOR)

TOPIC: LIGHT POLE BASE

SPECIFICATION: 679.21

DO NOT MIX SUBMISSIONS FROM DIFFERENT SPEC DIVISIONS ON THIS FORM. FILL OUT NEW FORM EACH TIME!

FOR CHA'S RECEIVED STAMP.

THE ABOVE NAMED CONTRACTOR HAS EVALUATED EACH ITEM IDENTIFIED IN THIS TRANSMITTAL & CERTIFIES IT TO BE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.

THIS SUBMITTAL IS NOT BEING PRESENTED AS A SUBSTITUTION

CERTIFIED BY: ____________ TITLE: ____________ DATE: ____________

ID NUMBER	QUANTITY		DESCRIPTION OF ITEM(S) BEING SUBMITTED (Reference specification section and/or drawing number for each item being submitted)	ENGINEER'S REVIEW STATUS
	SENT	RETURN		
679.21-02			Light Pole Base	NET

NET = NO EXCEPTIONS TAKEN MCN = MAKE CORRECTIONS NOTED R&R = REVISE AND RESUBMIT
REJ = REJECTED SSI = SUBMIT SPECIFIED ITEM NR = NOT REVIEWED
*RESUBMIT REQUIRED IF REVIEW STATUS IS R&R, REJ, SSI

CONTRACTOR'S COMMENTS:

Engineer's Comments: Resubmission is satisfactory.

(FOR ENGINEER's INTERNAL USE ONLY)

Forwarded To: N. BENNETT
DUE BACK TO CONTRACTOR:
Reviewed By: N. BENNETT, J. NAJDOWSKI
DATE SENT: 3/17/2015
Returned to Contractor By: J. NAJDOWSKI
DATE RETURNED: 3/20/2015
(ENTER DATE ABOVE)

Round Light Pole Base (Order Form)

Customer: Blow & Cote Inc

Job Name: VAOT STP FTBR(3) Jericho

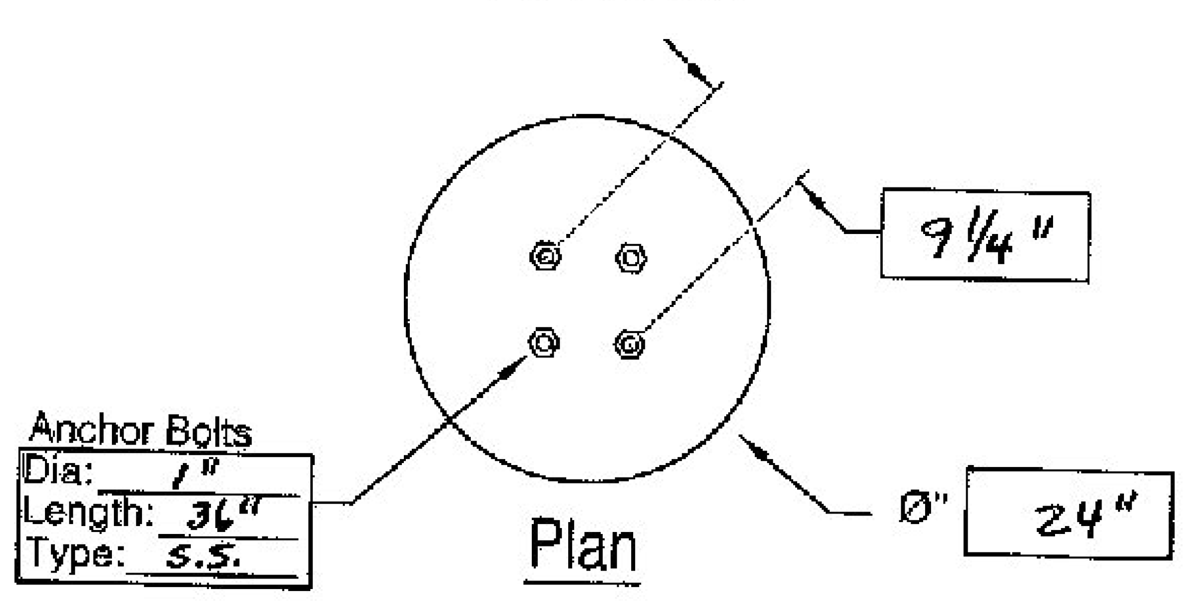
Job # : 019-15

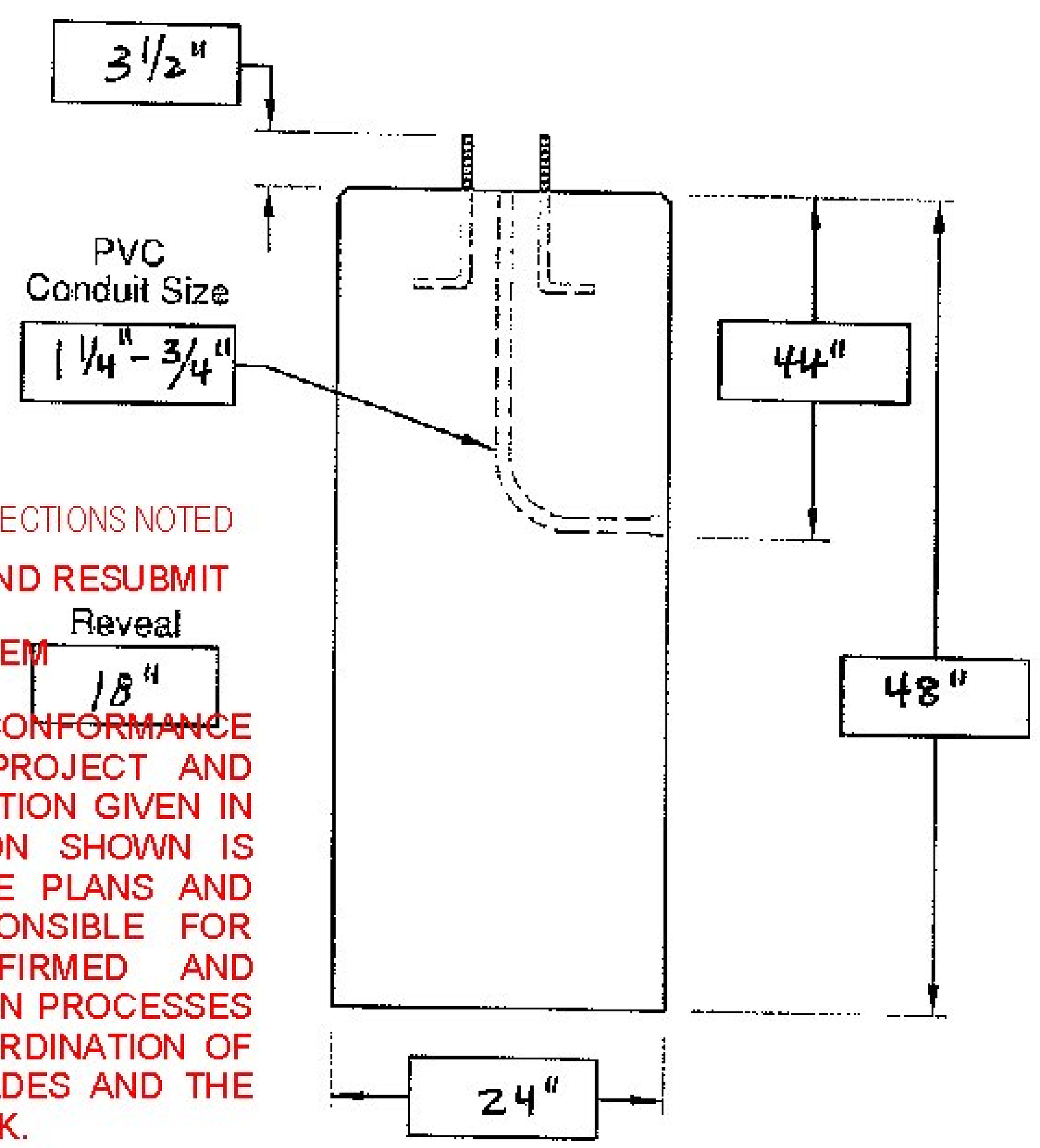
LPB#: #1

Date: 2/6/15

Notes: * VT AOT PROJECT
* REINFORCING PER ATTACHED
* STANDARD E-180 B

Bolt Pattern





Conduit Pattern
(Plan View)

3/4"

1 1/4"

[X] NO EXCEPTION TAKEN
[ ] MAKE CORRECTIONS NOTED
[ ] REJECTED
[ ] REVISE AND RESUBMIT
[ ] SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR THE GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

CHA

DATE 3/19/2015 BY N.Bennett

IMPORTANT INFORMATION

Please be advised that all boxes must be completed in order for us to proceed with production of the Light Pole Base

PRECAST CONCRETE PRODUCTS
79 PRECAST ROAD MILTON, VT 05468 •802.893.2401
TOLL FREE 1.888.295.2401 FAX 802.893.1542

Round Light Pole Base (Order Form)

Customer: Blow & Cote Inc

Job Name: VAOT Jericho STP FTBR(3)

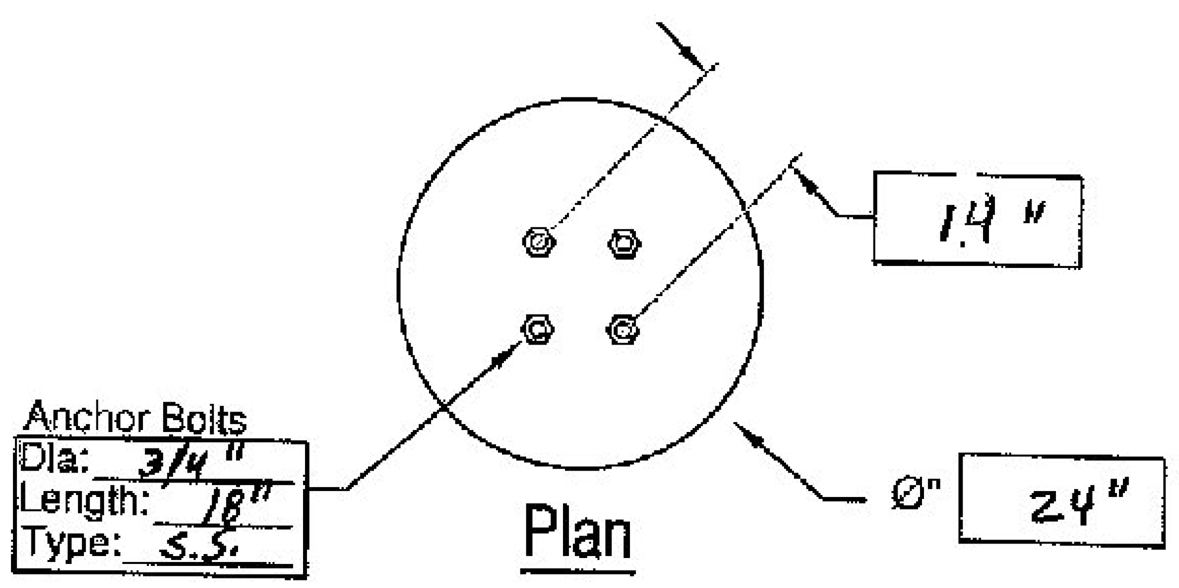
Job # : 019-15

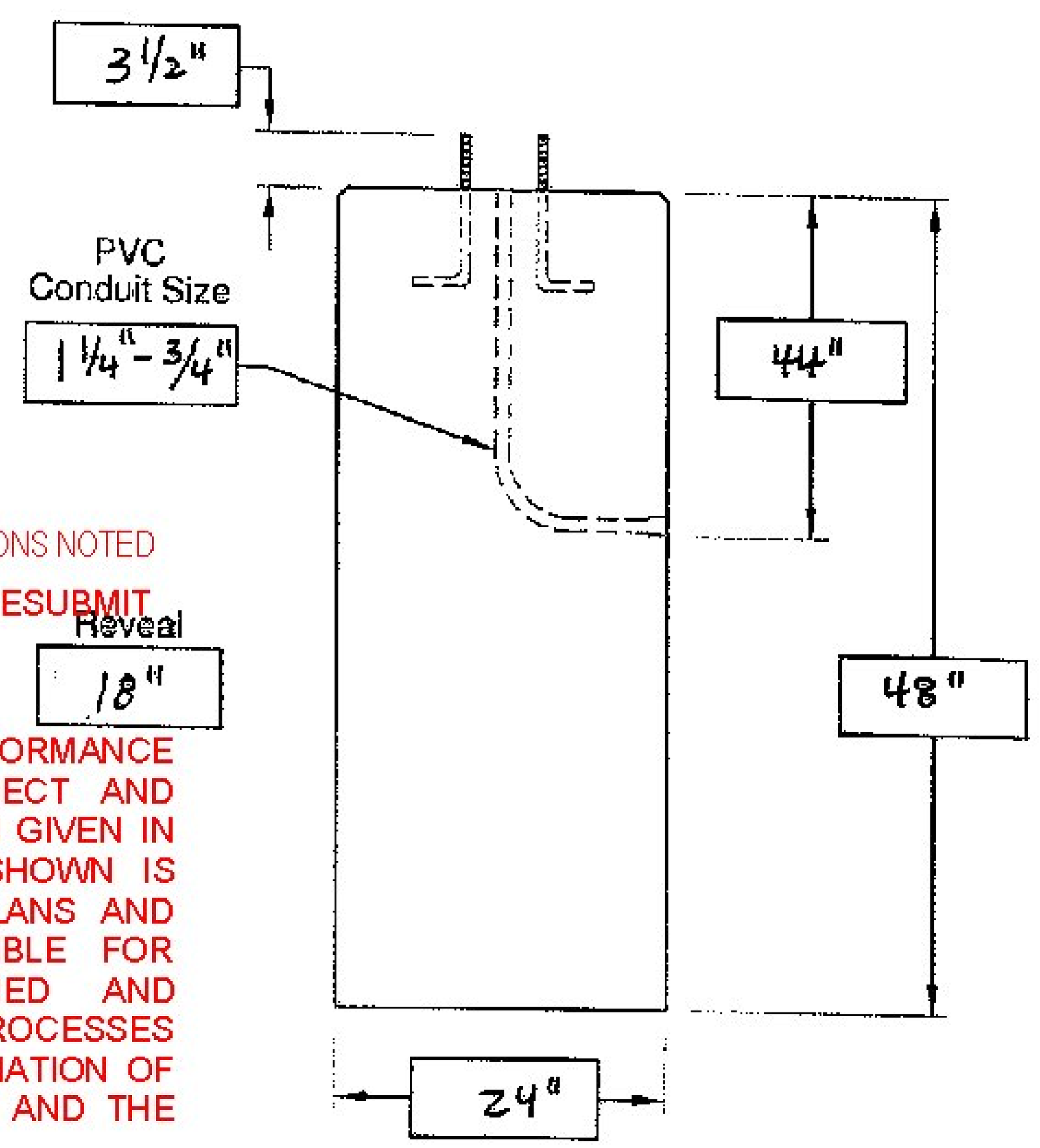
LPB#: #2

Date: 2/6/15

Notes: * VT AOT PROJECT
* REINFORCING PER ATTACHED
* STANDARD E-180 B

Bolt Pattern





Conduit Pattern
(Plan View)

☒ NO EXCEPTION TAKEN
☐ MAKE CORRECTIONS NOTED
☐ REJECTED
☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

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CHA

DATE 3/19/2015 BY N.Bennett

IMPORTANT INFORMATION

Please be advised that all boxes must be completed in order for us to proceed with production of the Light Pole Base

CAMP
PRECAST CONCRETE PRODUCTS
78 PRECAST ROAD MILTON, VT 05468 -802.893.2401
TOLL FREE 1.888.289.2401 FAX 802.893.1542

Round Light Pole Base (Order Form)

Customer: *Blow & Cote Inc*

Job Name: *VAOT Jericho STP FTBR(3)*

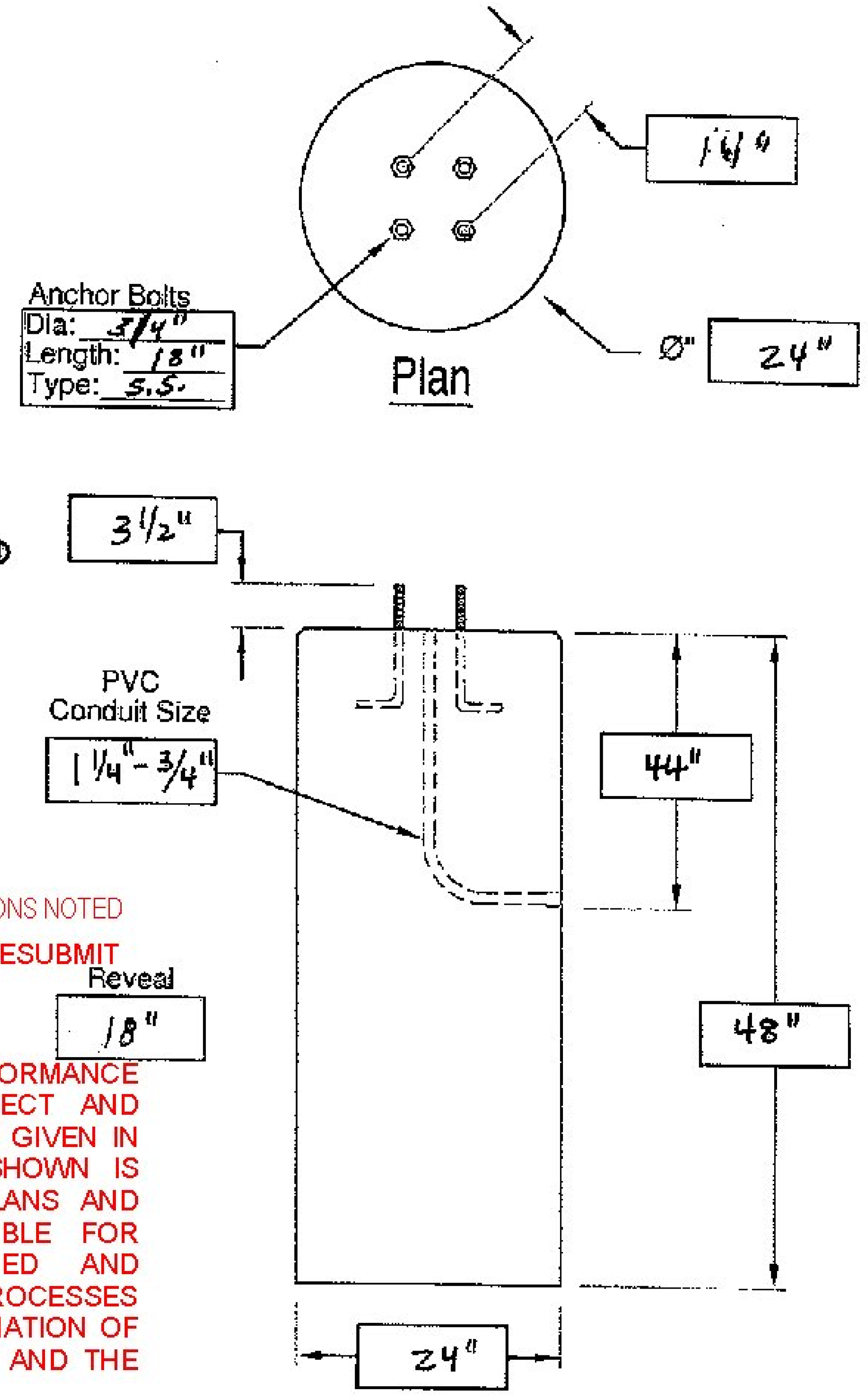
Job # : *019-15*

LPB#: *#3*

Date: *2/6/15*

Notes: ** VT AOT PROJECT*
** REINFORCING PER ATTACHED*
** STANDARD E-180 B*

Bolt Pattern



Section

Conduit Pattern
(Plan View)

[X] NO EXCEPTION TAKEN
[ ] MAKE CORRECTIONS NOTED
[ ] REJECTED
[ ] REVISE AND RESUBMIT
[ ] SUBMIT SPECIFIED ITEM

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CHA

DATE 3/19/2015 BY N.Bennett

IMPORTANT INFORMATION

Please be advised that all boxes must be completed in order for us to proceed with production of the Light Pole Base

CAMP
PRECAST CONCRETE PRODUCTS
73 PRECAST ROAD MILTON, VT 05468 ·802.893.2401
TOLL FREE 1.888.295.2401 FAX 802.893.1542

Round Light Pole Base (Order Form)

Customer: BLOW & COTE INC

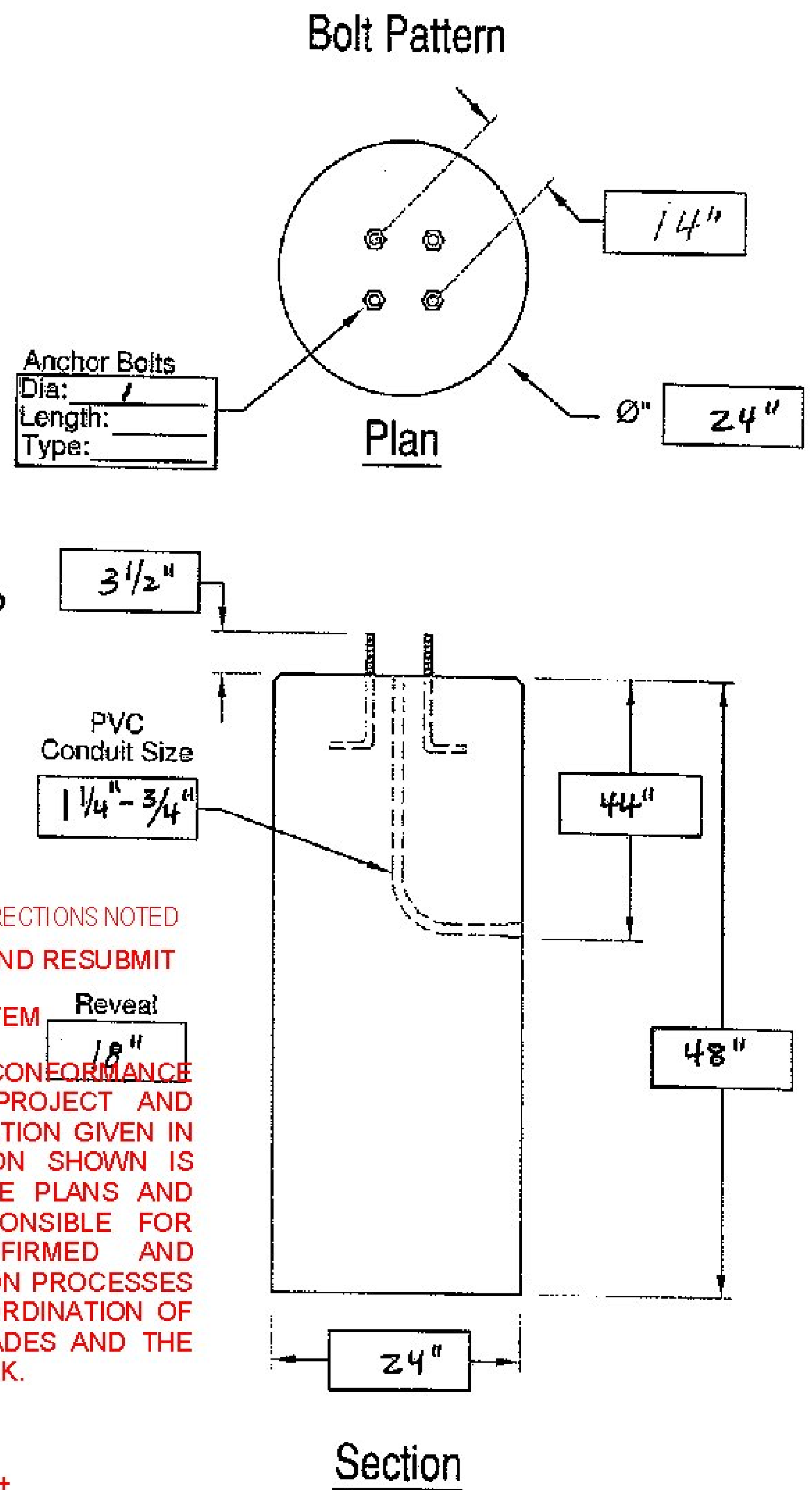
Job Name: VAOT STP FTBR(3) JERICHO

Job # : 019-15

LPB#: #4

Date: 2/6/15

Notes: * VT AOT PROJECT
* REINFORCING PER ATTACHED
* STANDARD E-180 B



Conduit Pattern
(Plan View)

3/4"
1 1/4"

- [x] NO EXCEPTION TAKEN
- [ ] MAKE CORRECTIONS NOTED
- [ ] REJECTED
- [ ] REVISE AND RESUBMIT
- [ ] SUBMIT SPECIFIED ITEM

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CHA

DATE 3/19/2015 BY N.Bennett

IMPORTANT INFORMATION

Please be advised that all boxes must be completed in order for us to proceed with production of the Light Pole Base

CAMP
PRECAST CONCRETE PRODUCTS
79 PRECAST ROAD MILTON, VT 05468 802.893.2401
TOLL FREE 1.888.893.2401 FAX 802.893.1542

Round Light Pole Base (Order Form)

Customer: Blow & Cote Inc

Job Name: VAOT Jericho STP FTBR(3)

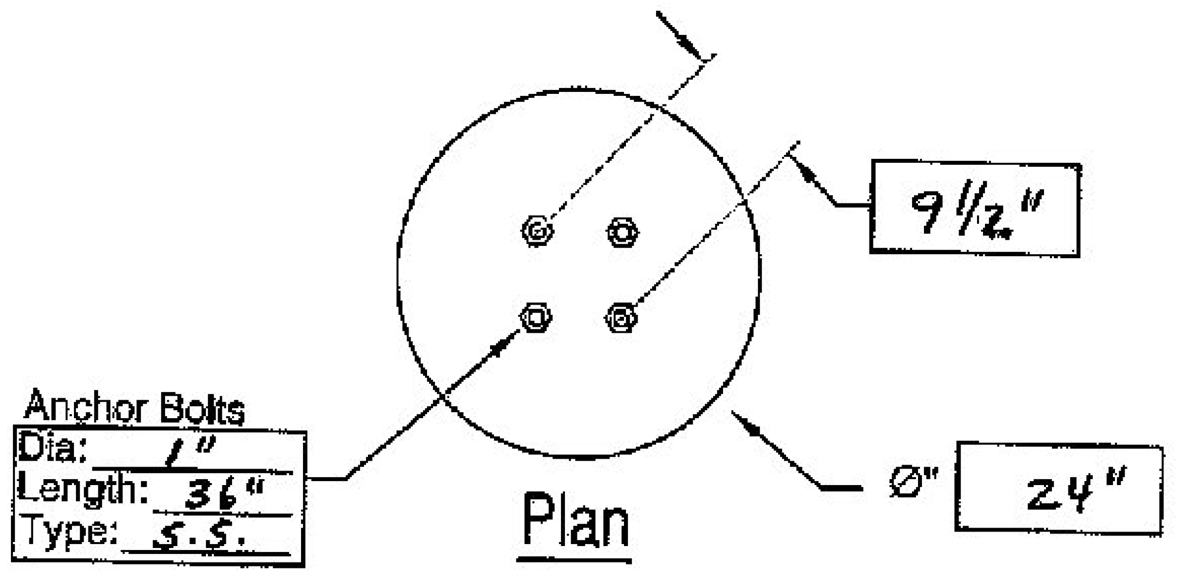
Job # : 019-15

LPB#: #5

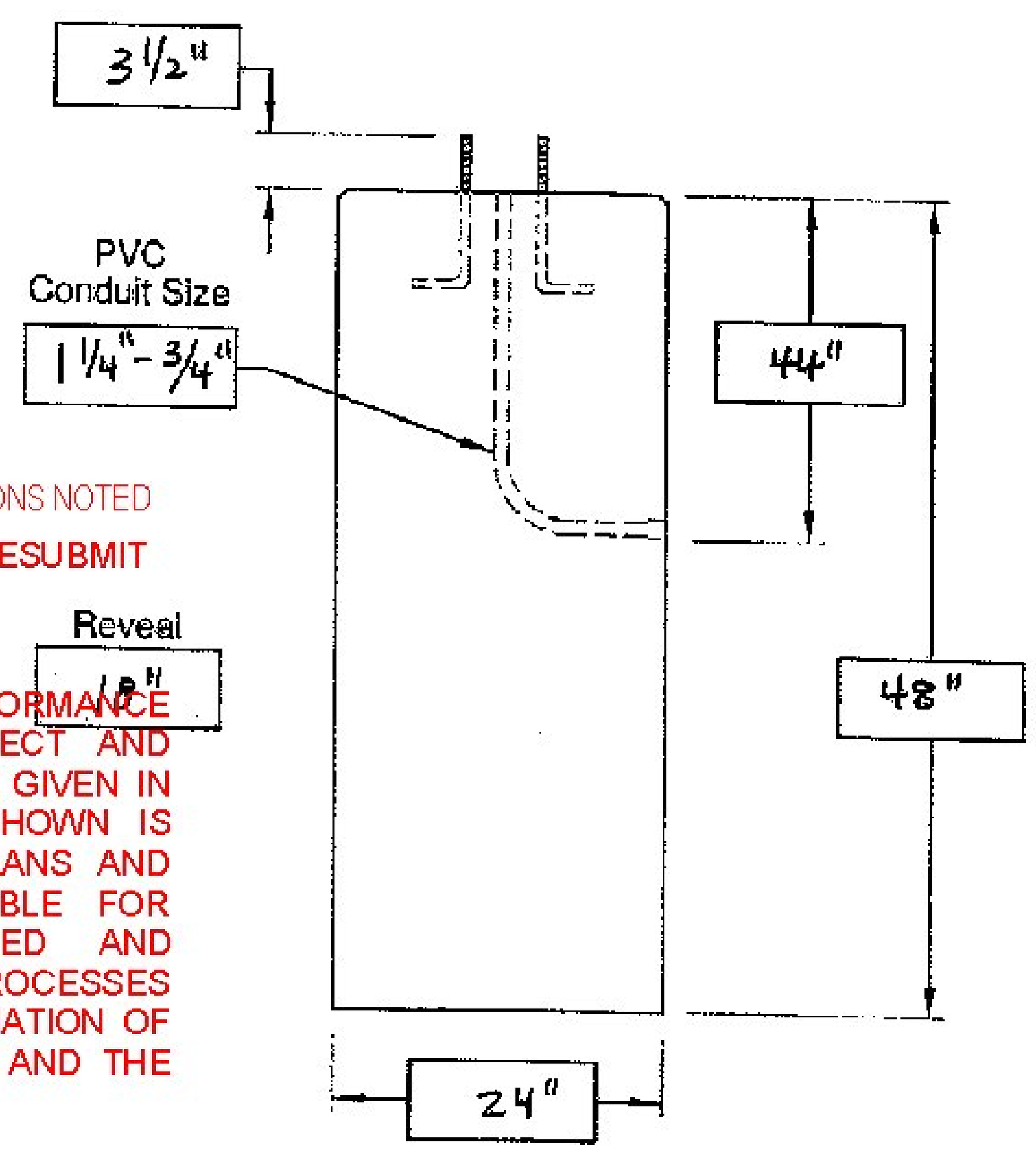
Date: 2/6/15

Notes: * VT AOT PROJECT
* REINFORCING PER ATTACHED
* STANDARD E-180 B

Bolt Pattern



Plan



Section

Conduit Pattern
(Plan View)

3/4

1 1/4"

☒ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

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CHA

DATE 3/19/2015 BY N.Bennett

IMPORTANT INFORMATION

Please be advised that all boxes must be completed in order for us to proceed with production of the Light Pole Base

CAMP
PRECAST CONCRETE PRODUCTS
76 PRECAST ROAD MILTON, VT 05468 802.893.2401
TOLL FREE 1.888.299.2401 FAX 802.893.1542

SHOP DRAWING TRANSMITTAL

DATE RETURNED:	8/7/2014	DATE SENT:	7/28/2014	PAGE 1 of 1

TO/FROM: TEL. #

CHA
III WINNERS CIRCLE
ALBANY, NY 12205
ATTN: R. HENDERSON

TO/FROM: TEL. # ( )
MARK SARGENT
PROJECT MANAGER - STRUCTURES
1 NATIONAL LIFE DRIVE
MONTPELIER, VT 05633-5001

CHA PROJECT NO.21113
CONTRACT NO. STP FTBR (3)
TITLE: TOWN OF JERICHO PEDESTRIAN BRIDGE

SHOP DRAWING DATA: (TO BE FILLED IN BY CONTRACTOR)

TOPIC: STRUCTURAL STEEL
SPECIFICATION: 506.50

***DO NOT** MIX SUBMISSIONS FROM DIFFERENT SPEC DIVISIONS ON THIS FORM. FILL OUT NEW FORM EACH TIME!*

FOR CHA'S RECEIVED STAMP.

THE ABOVE NAMED CONTRACTOR HAS EVALUATED EACH ITEM IDENTIFIED IN THIS TRANSMITTAL & CERTIFIES IT TO BE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.

THIS SUBMITTAL IS NOT BEING PRESENTED AS A SUBSTITUTION

CERTIFIED BY: RYAN HENDERSON TITLE: DESIGN MANAGER DATE: 8/5/14

ID NUMBER	QUANTITY		DESCRIPTION OF ITEM(S) BEING SUBMITTED (Reference specification section and/or drawing number for each item being submitted)	ENGINEER'S REVIEW STATUS
	SENT	RETURN		
506.50	1	1	Structural Steel Fabrication Shop Drawings	MCN
	1	1	Welding Procedure Specifications	NR

NET = NO EXCEPTIONS TAKEN **MCN** = MAKE CORRECTIONS NOTED **R&R** = REVISE AND RESUBMIT
REJ = REJECTED **SSI** = SUBMIT SPECIFIED ITEM **NR** = NOT REVIEWED
*RESUBMIT REQUIRED IF REVIEW STATUS IS R&R, REJ, SSI

CONTRACTOR'S COMMENTS:

**Engineer's Comments: Structural Steel Fabrication Shop Drawings: Make corrections noted on sheets marked.
Welding Procedure Specifications: Not Reviewed. However, we noticed that the maximum heat input in the prequalified welding specs. are > 50 kJ/in. Section 506.04 specifies a maximum heat input no greater than 50 kJ/in for material over 3/4 in thick. Also, WPS package should be numbered consecutively.**

(FOR ENGINEER's INTERNAL USE ONLY)

Forwarded To: DUE BACK TO CONTRACTOR:
Reviewed By: I. JACKSON / R. HENDERSON DATE SENT: 7/24/2014
Returned to Contractor By: R. HENDERSON DATE RETURNED: 8/6/2014
(ENTER DATE ABOVE)

GENERAL FABRICATION NOTES

1. WORKMANSHIP:

WORKMANSHIP SHALL BE IN ACCORDANCE WITH LATEST EDITION OF AREMA SPECIFICATIONS, VTDOT SPECIFICATIONS AND AWS D1.5 BRIDGE WELDING CODE

2. MATERIAL:

STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270-GR.50W U.N.O.

STRINGERS No. 1 AND 2 REQUIRE ZONE 2 CVN TESTING.

STRINGERS No. 1 AND 2 ARE FRACTURE CRITICAL MEMBERS (FCM), SHALL MEET THE REQUIREMENTS SPECIFIED IN THE CURRENT EDITION OF THE AASHTO / AWS BRIDGE WELDING CODE, SECTION 12

3. FASTENERS AND ANCHOR BOLTS:

BOLTS SHALL BE $\frac{7}{8}$"ø ASTM A325 TYPE 3 WITH ONE NUT AND ONE WASHER EA U.N.O.

HEAVY HEX NUTS-ASTM A563 - DH3

WASHERS-ASTM F436 - 3

4. WELDING:

WELDING SHALL BE IN ACCORDANCE WITH AWS D1.5 BRIDGE WELDING CODE. STIFFENER TO MAIN MEMBER FILLET WELDS NEED TO BE MT TESTED.

5. SURFACE PREPARATION:

N/A — FINAL SURFACE PREPARATION GRADE SSPC-SP10 PER 506.14

6. PAINTING:

N/A

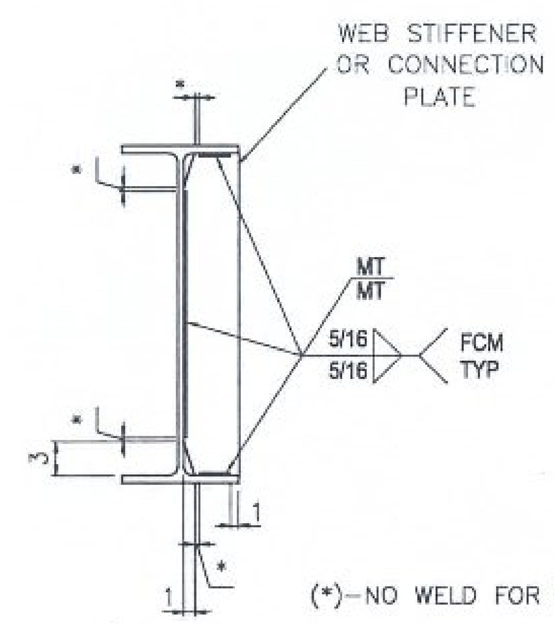
7. GALVANIZING:

N/A

8. INSPECTION NOTE:

INSPECTION TO BE PERFORMED BY VTDOT OR DESIGNATED REPRESENTATIVE

DRAWING INDEX	
DWG:	DESCRIPTION:
GN1	GENERAL NOTES
E1	ISOMETRIC VIEW
E2	FRAMING PLAN
E3	ERECTION DETAILS
WS1	CALCULATION PLAN
X1	JOB STANDARDS
C2	CAMBER DIAGRAM
3	FABRICATION DETAILS-DIAPHRAGMS
4	FABRICATION DETAILS-STRINGER No. 1
5	FABRICATION DETAILS-STRINGER No. 2



(*)-NO WELD FOR $\frac{3}{8}$" MIN AND $\frac{7}{8}$" MAX.

MUST MAINTAIN 1" MIN FROM EDGE OF FLANGE

DETAIL 'WS1'
TYPICAL CLIP AND WELD TERMINATION DETAIL

PAY ITEMS:

506.50-STRUCTURAL STEEL-ROLLED BEAM-UNPAINTED

☐ NO EXCEPTION TAKEN ☑ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

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DATE 08/07/2014 BY CHA IJ

REV:	DATE:	REVISION NOTE:	By
0	7/22/2014	ISSUED FOR APPROVAL	

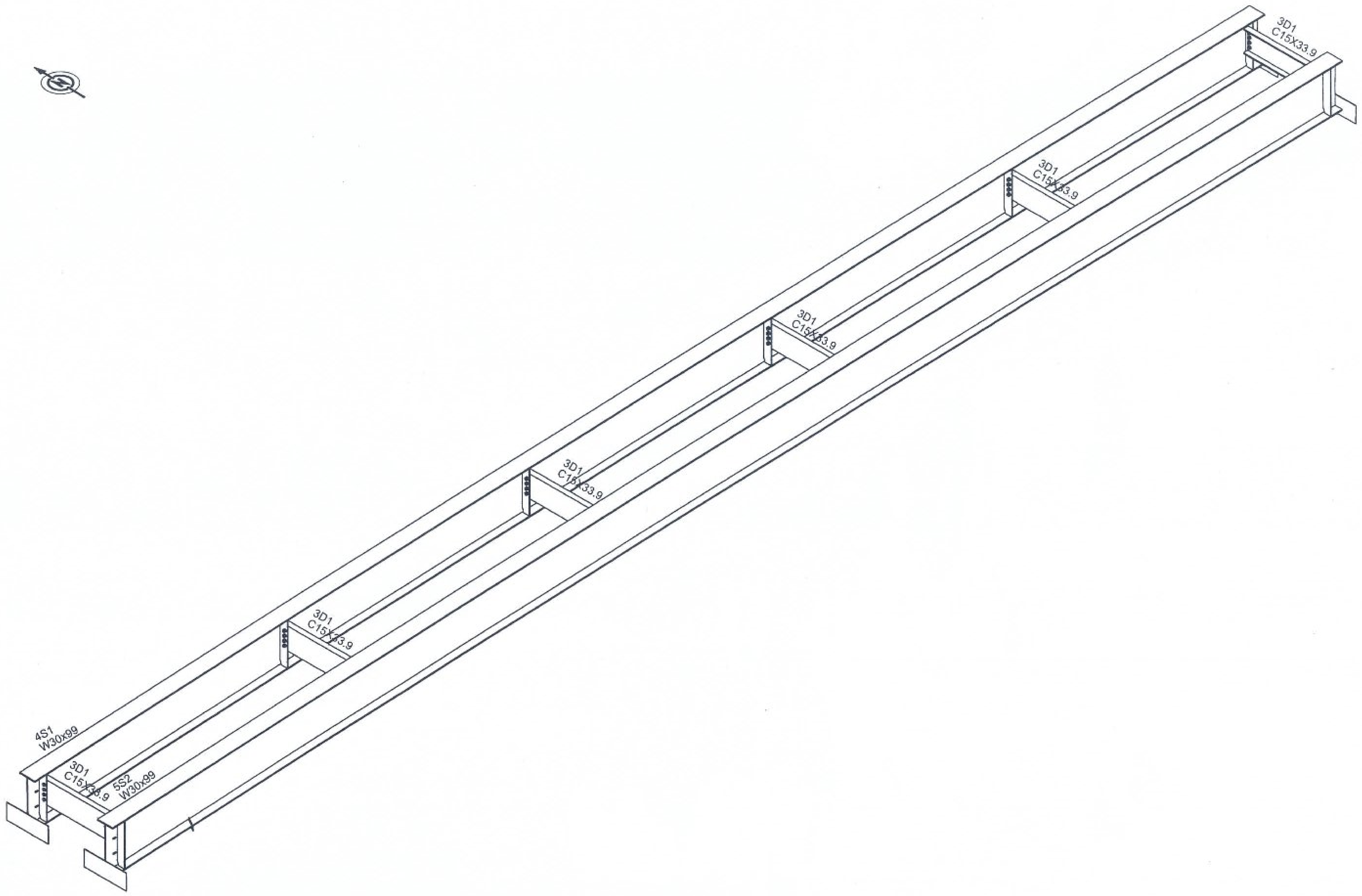
MATERIAL:	SURFACE PREP. AND PAINT:	HOLES:	SHOP BOLTS:
AASHTO M270-GR.50W U.N.O.	N/A	$\frac{15}{16}$"ø U.N.O.	$\frac{7}{8}$"ø U.N.O.

DESCRIPTION: GENERAL NOTES

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX: (207) 780-6726

STRUCTURE:	DRAWN: ID	DATE: 07/22/14
VERMONT ROUTE 15 OVER BROWNS RIVER	CHECKED: AD	DATE: 07/22/14
LOCATION: TOWN OF JERICHO, VT	JOB NO.	DWG NO.
PROJECT NO. STP FTBR (3)	576	GN1
CUSTOMER: Blow & Cote, INC.		REV. 0

ACBS
Structural Steel Detailing



JERICHO-STP FTBR (3)
ISOMETRIC VIEW

☑ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

CHA

DATE 08/07/2014 BY IJJ

REV:	DATE:	REVISION NOTE:	By
0	7/22/2014	ISSUED FOR APPROVAL	

MATERIAL:	SURFACE PREP. AND PAINT:	HOLES:	SHOP BOLTS:
AASHTO M270-GR.50W U.N.O.	N/A	$\frac{15}{16}$"ø U.N.O.	$\frac{7}{8}$"ø U.N.O.

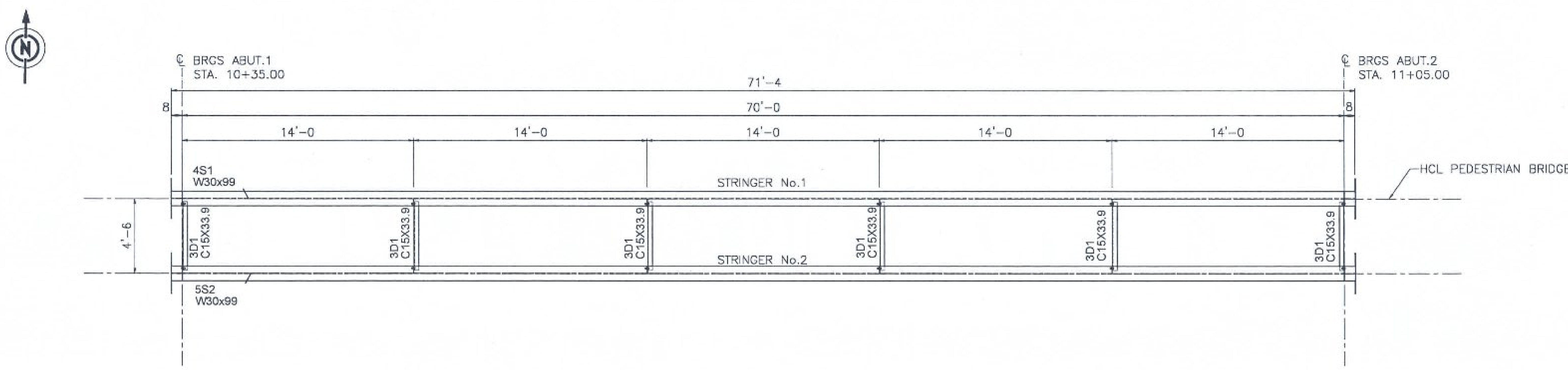
DESCRIPTION: ISOMETRIC VIEW

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX: (207) 780-6726

STRUCTURE: VERMONT ROUTE 15 OVER BROWNS RIVER		DRAWN: ID	DATE: 07/22/14
		CHECKED: AD	DATE: 07/22/14
LOCATION:	TOWN OF JERICHO, VT	JOB NO.	DWG NO.
PROJECT NO.	STP FTBR (3)	576	E1
CUSTOMER:	Blow & Cote, INC.		REV. 0

ACBS
Structural Steel Detailing
53 Main St Ste 5, Braintree, MA 02184
Tel: 781-848-3426 Fax: 781-848-3444
E-mail : acbsdesign@outlook.com
www.advancedcadforsteel.com

SHIPPING LIST						
MARK:	Q'TY:	DESCRIPTION:	LENGTH:	REMARK:	WGT:	TOTAL:
3D1	6	C15X33.9	4'-1 1/2"		139	831
4S1	1	W30x99	71'-5 11/16"	CVN, FCM	7,271	7,271
5S2	1	W30x99	71'-5 11/16"	CVN, FCM	7,271	7,271
	8				TOTAL:	15,373



JERICHO-STP FTBR (3)
FRAMING PLAN

T.O.S. CALCULATION TABLE (FEET)						
ABUTMENT	STRINGER No.	T.O. CONCRETE SEAT	T.O. ELASTOMERIC PAD	T.O. SOLE PLATE AT ℄ BRG	BEAM DEPTH	T.O.S.
ABUT. 1	1	531.45	531.658000	531.8040	2.475	534.2790
ABUT. 1	2	531.36	531.568000	531.7140	2.475	534.1890
ABUT. 2	1	534.01	534.218000	534.3640	2.475	536.8390
ABUT. 2	2	533.92	534.128000	534.2740	2.475	536.7490

TOP OF BEAM

☐ NO EXCEPTION TAKEN ☑ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

CHA

DATE 08/07/2014 BY IJ

0	7/22/2014	ISSUED FOR APPROVAL	
REV:	DATE:	REVISION NOTE:	By

MATERIAL:	SURFACE PREP. AND PAINT:	HOLES:	SHOP BOLTS:
AASHTO M270-GR.50W U.N.O.	N/A	$\frac{15}{16}$"ø U.N.O.	$\frac{7}{8}$"ø U.N.O.

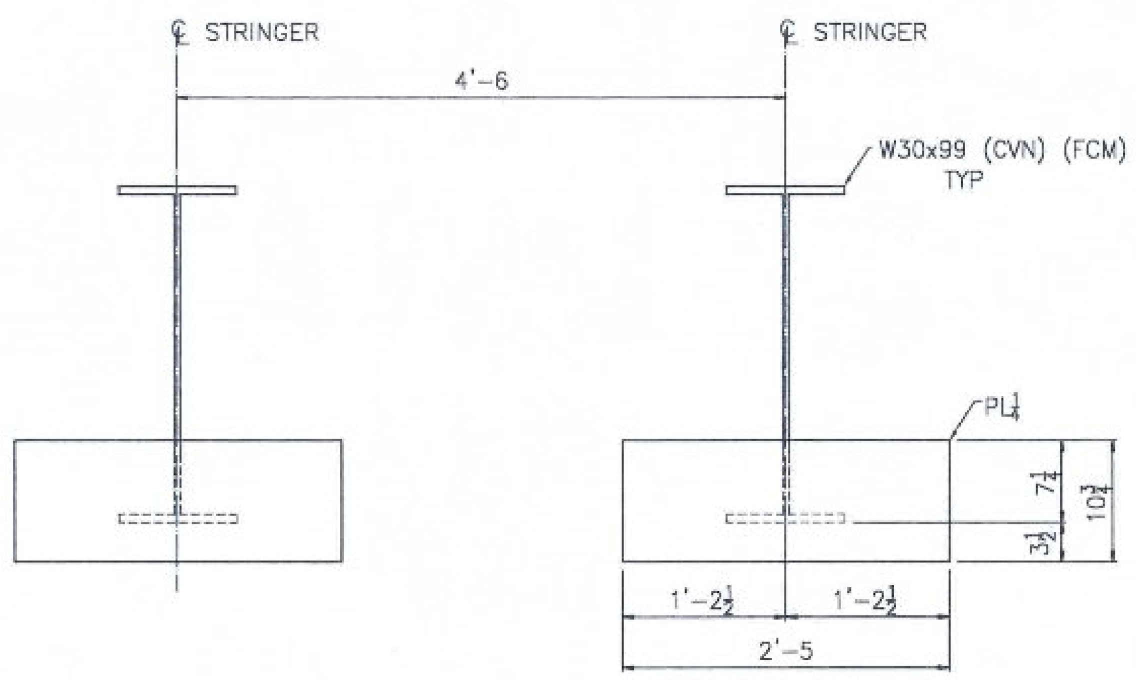
DESCRIPTION: FRAMING PLAN

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX: (207) 780-6726

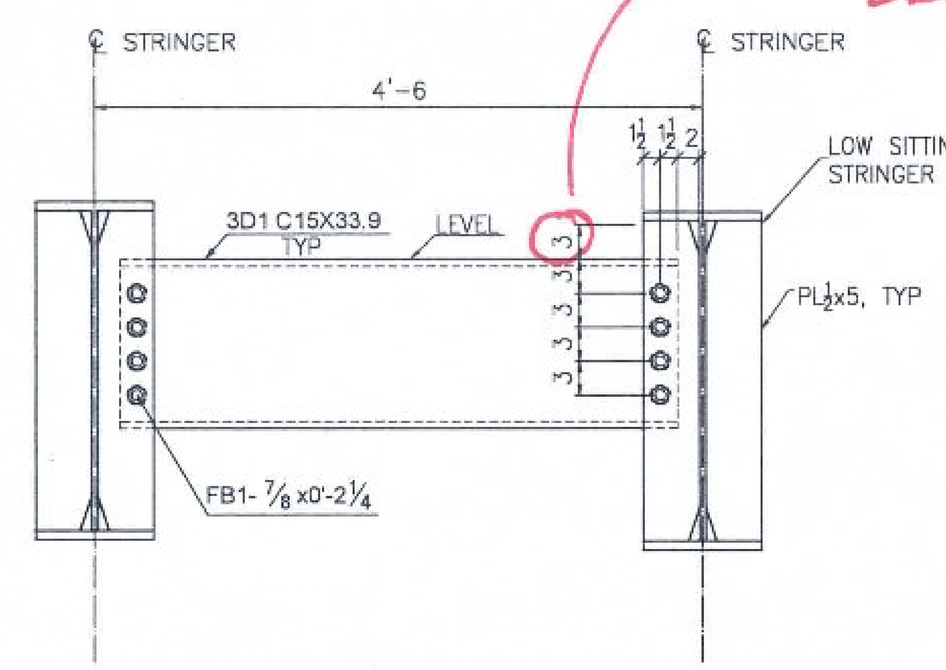
STRUCTURE:	DRAWN:	DATE:
VERMONT ROUTE 15 OVER BROWNS RIVER	ID	07/22/14
	CHECKED: AD	DATE: 07/22/14
LOCATION: TOWN OF JERICHO, VT	JOB NO.	DWG NO.
PROJECT NO. STP FTBR (3)	576	E2
CUSTOMER: Blow & Cote, INC.		REV. 0

ACBS

VERIFY. DOES NOT MATCH DIMENSIONS ON DRAWINGS X1, 4&5



JERICHO-STP FTBR (3)
TYP ELEVATION AT BLOCKOUT PLATES



JERICHO-STP FTBR (3)
TYP ELEVATION AT END DIAPHRAGMS
(INTERMEDIATE DIAPHRAGMS–SIM)

FIELD BOLTS – EXACT QUANTITIES												
MARK:	QUANTITY:	DIAMETER:	LENGTH:	BOLTS PER CONNECTION:	No. OF CONNECTIONS:	GRIP:	PLY 1:	PLY 2:	PLY 3:	PLY 4:	PLY 5:	REMARK:
FB1	48	⅞"	2¼"	4	12	⅞	⅜	½				A325 TYPE 3, AT DIAPHRAGMS
HEX NUT	48	⅞"										A563–DH3
FLAT WASHER	48	⅞"										F436–3

☐ NO EXCEPTION TAKEN ☑ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

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CHA

DATE 08/07/2014 BY IIJ

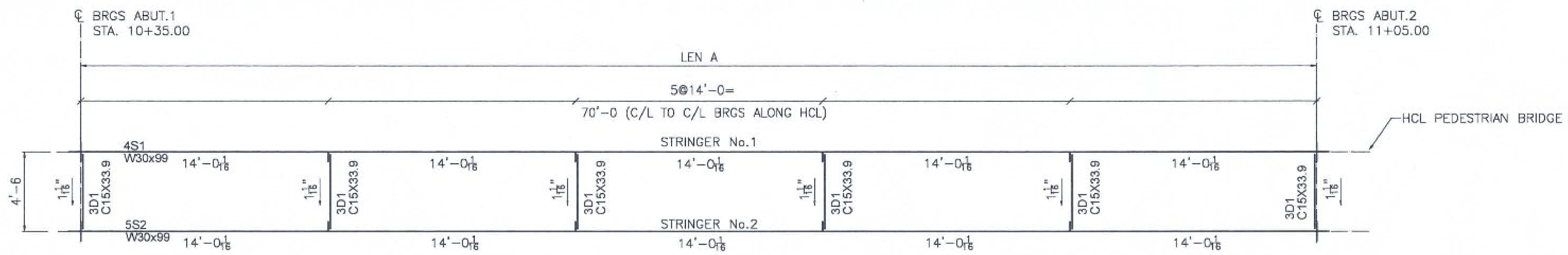
REV:	DATE:	REVISION NOTE:	By
0	7/22/2014	ISSUED FOR APPROVAL	

MATERIAL:	SURFACE PREP. AND PAINT:	HOLES:	SHOP BOLTS:
AASHTO M270–GR.50W U.N.O.	N/A	$^{15}/_{16}$"ø U.N.O.	⅞"ø U.N.O.

DESCRIPTION: ERECTION DETAILS, FIELD BOLTS

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX: (207) 780-6726

STRUCTURE:	DRAWN:	DATE:
VERMONT ROUTE 15 OVER BROWNS RIVER	ID	07/22/14
	CHECKED: AD	DATE: 07/22/14
LOCATION: TOWN OF JERICHO, VT	JOB NO.	DWG NO.
PROJECT NO. STP FTBR (3)	576	E3
CUSTOMER: Blow & Cote, INC.		REV. 0



JERICHO-STP FTBR (3)

CALCULATION PLAN

DEVELOPED LENGTHS ALONG BOTTOM FLANGE		GRADE TAN	
STRINGER No.	LEN A	ABUTMENT No.1	ABUTMENT No.2
1	70'-0 5/16"	0.0638	0.0638
2	70'-0 5/16"	0.0638	0.0638

☑ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

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CHA

DATE 08/07/2014 BY IJ

NOTES:

1. THIS DRAWINGS IS SUBMITTED FOR INFORMATION ONLY, AND IT IS NOT FOR FABRICATION
2. ARROW POINTS TOWARDS LOW END OF MEMBER
3. TRANSVERSE DIMENSIONS ARE IN HORIZONTAL PLANE U.N.O.
4. LONGITUDINAL LENGTHS ARE DEVELOPED
5. INTERMEDIATE STIFFENERS ARE NORMAL TO GRADE
6. ENDS OF STRINGERS ARE VERTICAL AFTER DL ROTATION

REV:	DATE:	REVISION NOTE:	By
0	7/22/2014	ISSUED FOR APPROVAL	

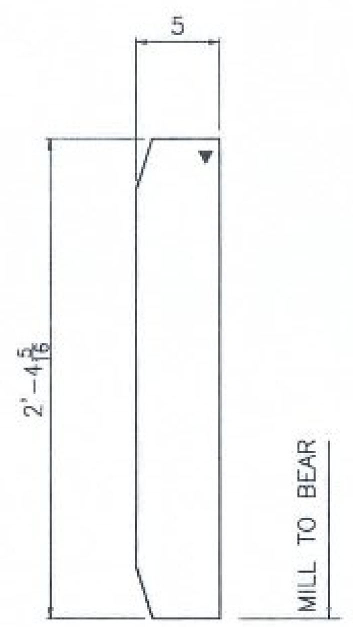
MATERIAL:	SURFACE PREP. AND PAINT:	HOLES:	SHOP BOLTS:
AASHTO M270-GR.50W U.N.O.	N/A	15/16"ø U.N.O.	7/8"ø U.N.O.

DESCRIPTION: CALCULATION PLAN

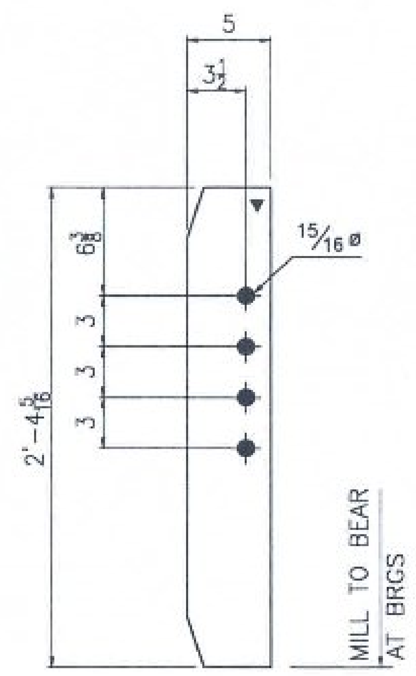
CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE.
SOUTH PORTLAND, ME 04106
PHONE (207) 780-6722
FAX: (207) 780-6726

STRUCTURE: VERMONT ROUTE 15 OVER BROWNS RIVER		DRAWN: ID	DATE: 07/22/14
		CHECKED: AD	DATE: 07/22/14
LOCATION:	TOWN OF JERICHO, VT	JOB NO.	DWG NO.
PROJECT NO.	STP FTBR (3)	576	WS1
CUSTOMER:	Blow & Cote, INC.		REV. 0

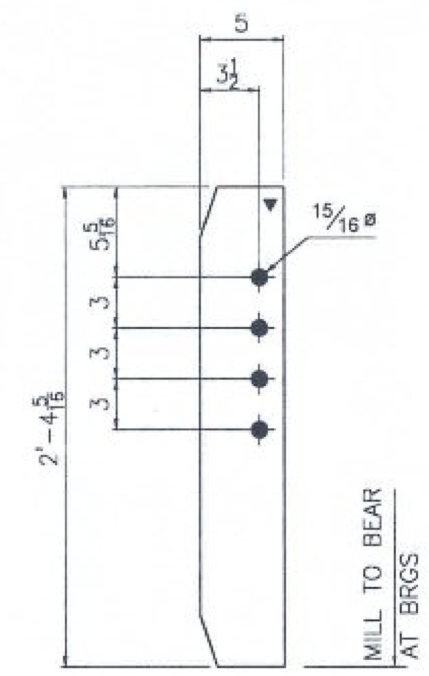
ACBS Structural Steel Detailing



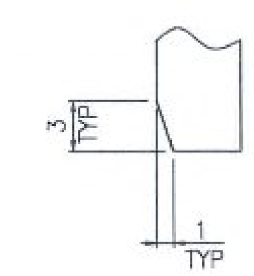
4 - x1a PL 1/2x5 x 2'-4 5/16 -M270-50W



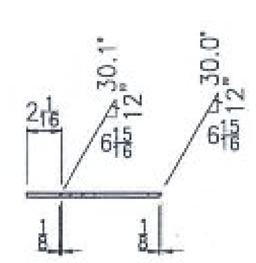
6 - x1b PL 1/2x5 x 2'-4 5/16 -M270-50W



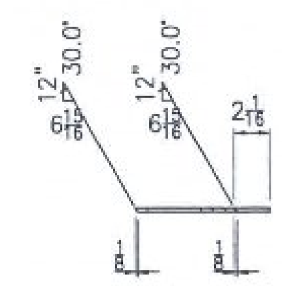
6 - x1c PL 1/2x5 x 2'-4 5/16 -M270-50W



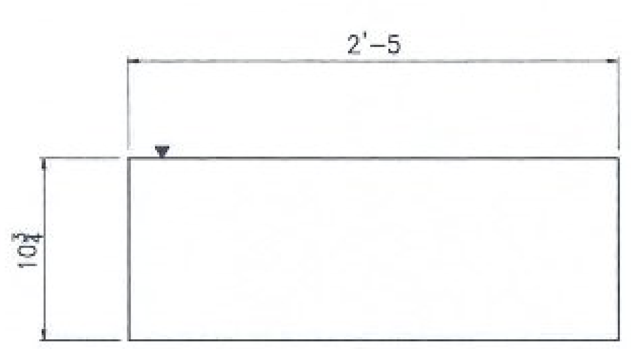
TYPICAL CLIP DETAIL
SCALE: 1-1/2" = 1'-0"



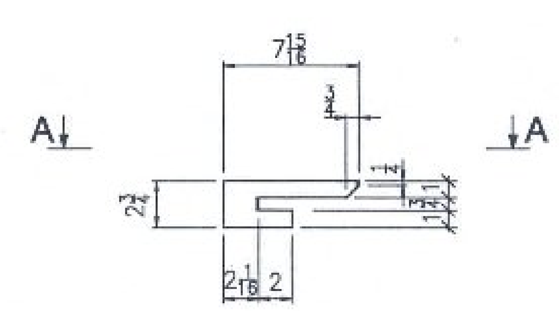
SECTION A - A



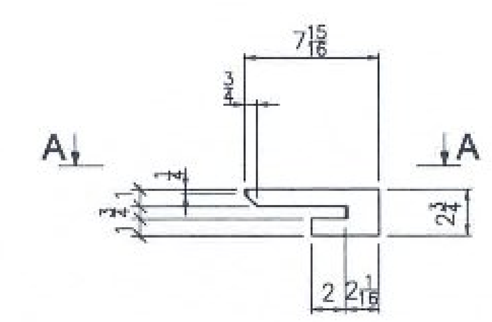
SECTION A - A



4 - x1d PL 1/4x10 3/4 x 2'-5-M270-50W



1 - x1e PL 1/4x2 3/4 x 0'-7 15/16 -M270-50W
DRIP BAR



1 - x1f PL 1/4x2 3/4 x 0'-7 15/16 -M270-50W
DRIP BAR

☑ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

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CHA

DATE 08/07/2014 BY IIJ

MARK:	QUANTITY:	IN ASSEMBLY:
x1a	2	4S1
x1a	2	5S2
x1b	6	4S1
x1c	6	5S2
x1d	2	4S1
x1d	2	5S2
x1e	1	4S1
x1f	1	5S2
	22	

ACBS
Structural Steel Detailing

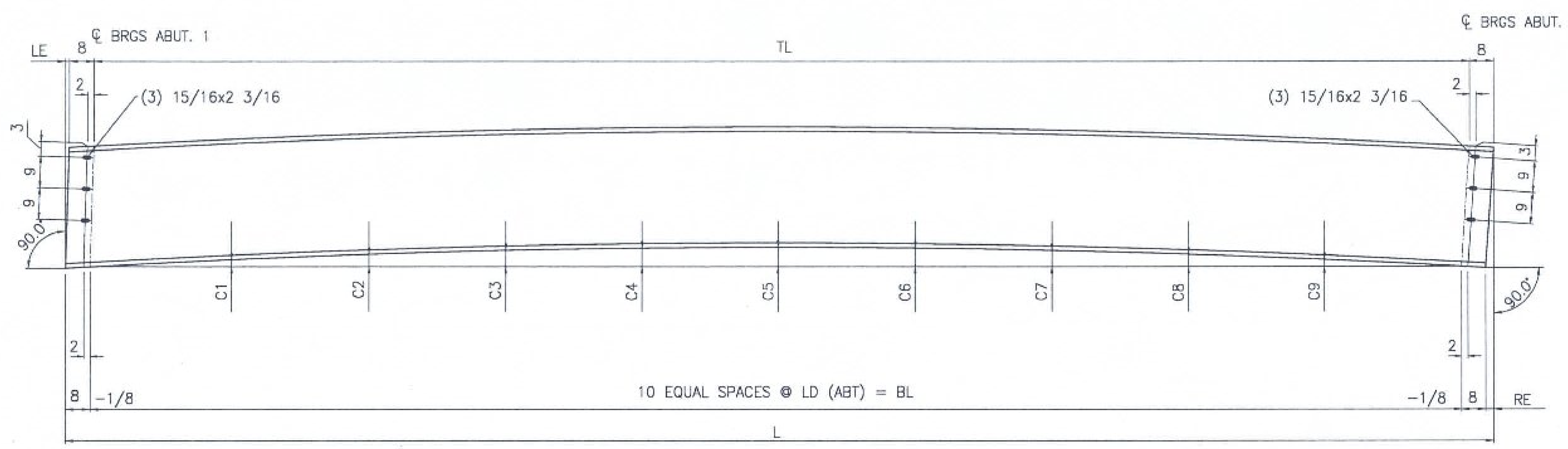
REV:	DATE:	REVISION NOTE:	By
0	7/22/2014	ISSUED FOR APPROVAL	

MATERIAL:	SURFACE PREP. AND PAINT:	HOLES:	SHOP BOLTS:
AASHTO M270-GR.50W U.N.O.	N/A	15/16"ø U.N.O.	7/8"ø U.N.O.

DESCRIPTION: JOB STANDARDS

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE.
SOUTH PORTLAND, ME 04106
PHONE (207) 780-6722
FAX: (207) 780-6726

STRUCTURE: VERMONT ROUTE 15 OVER BROWNS RIVER	DRAWN: ID	DATE: 07/22/14
	CHECKED: AD	DATE: 07/22/14
LOCATION: TOWN OF JERICHO, VT	JOB NO.	DWG NO.
PROJECT NO. STP FTBR (3)	576	X1
CUSTOMER: Blow & Cote, INC.		REV. 0



CAMBER DIAGRAM

STRINGER No.	MARK:	SIZE	L	TL	LD	BL	LE	RE	C1	C2	C3	C4	C5	C6	C7	C8	C9
1	4S1	W30x99	71'-5 11/16"	70'-0 13/16"	7'-0 1/16"±	70'-0 5/16"	7/8"	1 3/8"	15/16"	1 13/16"	2 7/16"	2 7/8"	3 1/16"	2 7/8"	2 7/16"	1 13/16"	15/16"
2	5S2	W30x99	71'-5 11/16"	70'-0 13/16"	7'-0 1/16"±	70'-0 5/16"	7/8"	1 3/8"	15/16"	1 13/16"	2 7/16"	2 7/8"	3 1/16"	2 7/8"	2 7/16"	1 13/16"	15/16"

☑ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

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CHA

DATE 08/07/2014 BY IJJ

REV:	DATE:	REVISION NOTE:	By
0	7/22/2014	ISSUED FOR APPROVAL	

MATERIAL:	SURFACE PREP. AND PAINT:	HOLES:	SHOP BOLTS:
AASHTO M270-GR.50W U.N.O.	N/A	15/16"ø U.N.O.	7/8"ø U.N.O.

DESCRIPTION: CAMBER DIAGRAM

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX: (207) 780-6726

STRUCTURE: VERMONT ROUTE 15 OVER BROWNS RIVER

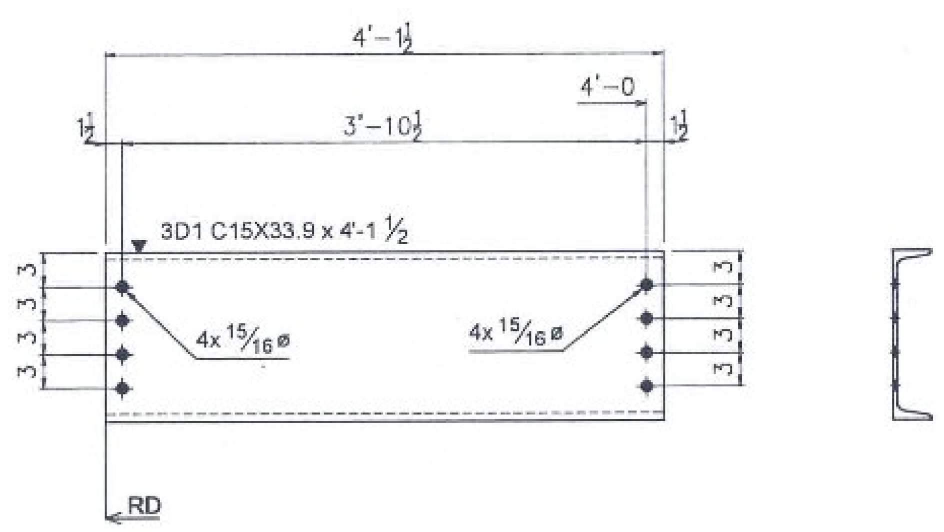
DRAWN: ID DATE: 07/22/14
CHECKED: AD DATE: 07/22/14

LOCATION: TOWN OF JERICHO, VT
PROJECT NO. STP FTBR (3)
CUSTOMER: Blow & Cote, INC.

JOB NO. 576
DWG NO. C2
REV. 0

ACBS Structural Steel Detailing

ABM INFO	SHIP	BILL OF MATERIAL				JOB NO.		DWG NO.		REV:
						576		3		0
LINE:	MARK:	Q'TY:	DESCRIPTION:	LENGTH:	GRADE:	NOTE:	WGT:	TOTAL:		
	3D1	6	C15X33.9							
1	3D1	6	C15X33.9	4'-1 1/2"	M270-50W		139	831		
		6					139	831		
		6	TOTAL WEIGHT THIS DRAWING:					831		



6 - 3D1 C15X33.9 x 4'-1 ½

d=1'-3 | b=3 3/8 | t= 5/8 | w= 3/8 | k=1 5/16

☑ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

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CHA

DATE 08/07/2014 BY IIJ

0	7/22/2014	ISSUED FOR APPROVAL	
REV:	DATE:	REVISION NOTE:	By

MATERIAL: AASHTO M270-GR.50W U.N.O.	SURFACE PREP. AND PAINT: N/A	HOLES: 15/16"ø U.N.O.	SHOP BOLTS: 7/8"ø U.N.O.

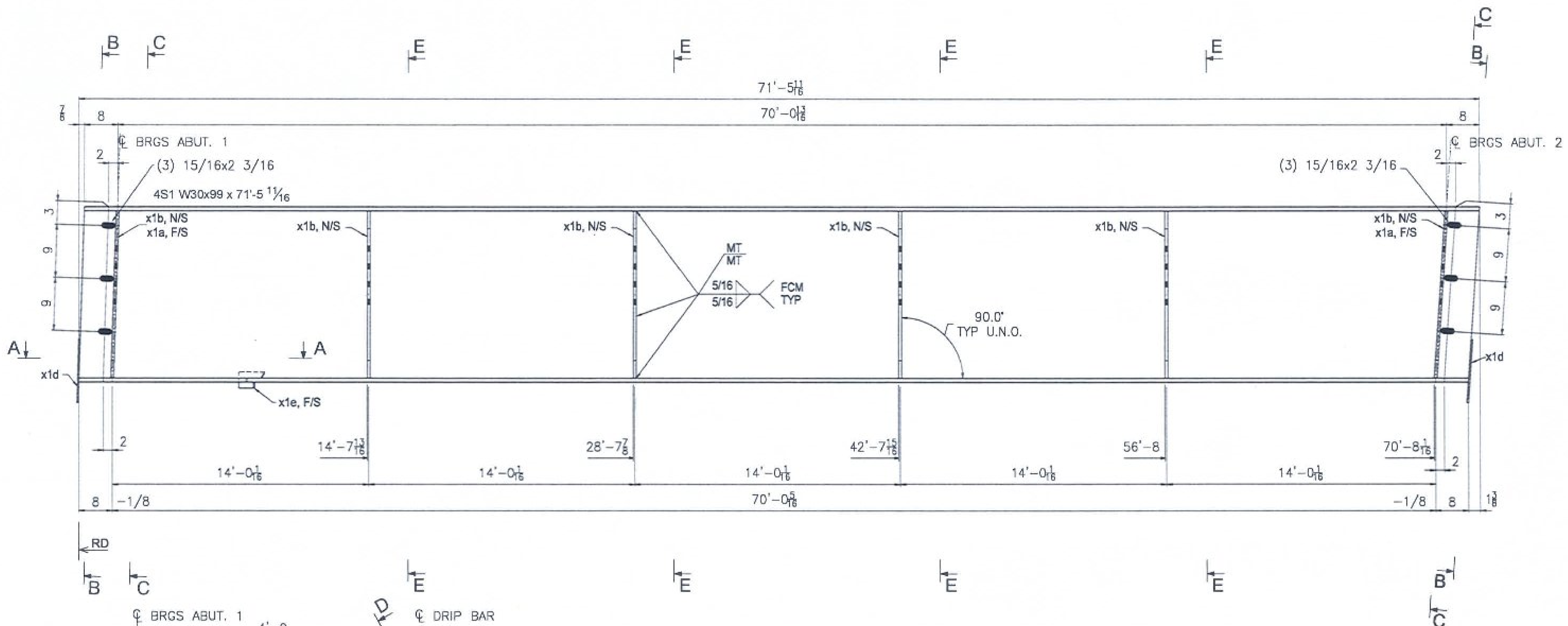
DESCRIPTION: FABRICATION DETAILS-DIAPHRAGMS

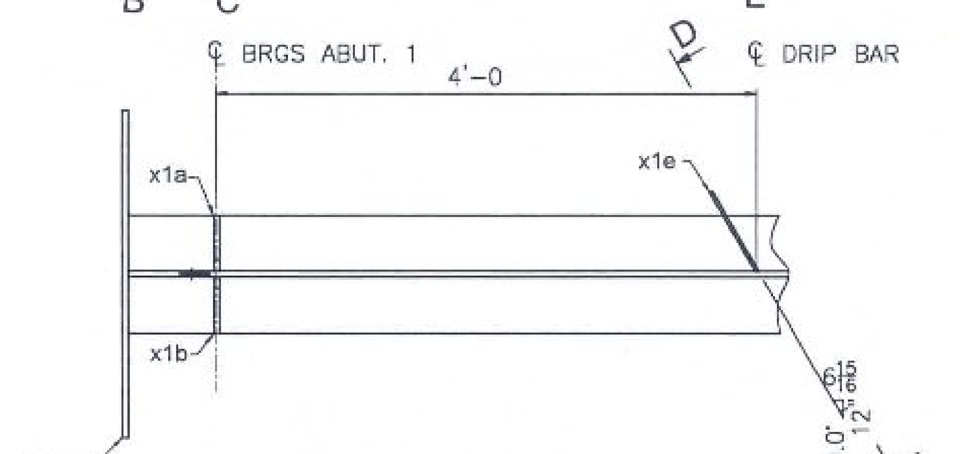
CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE.
SOUTH PORTLAND, ME 04106
PHONE (207) 780-6722
FAX: (207) 780-6726

STRUCTURE: VERMONT ROUTE 15 OVER BROWNS RIVER	DRAWN: ID	DATE: 07/22/14
	CHECKED: AD	DATE: 07/22/14
LOCATION: TOWN OF JERICHO, VT	JOB NO.	DWG NO.
PROJECT NO. STP FTBR (3)	576	3
CUSTOMER: Blow & Cote, INC.		REV. 0

ACBS Structural Steel Detailing

ABM INFO	SHIP	BILL OF MATERIAL				JOB NO.	DWG NO.		REV:
						576	4		0
LINE:	MARK:	Q'TY:	DESCRIPTION:		LENGTH:	GRADE:	NOTE:	WGT:	TOTAL:
	4S1	1	W30x99						
2	4S1	1	W30x99		71'-5 11/16"	M270-50WF2	CVN, FCM	7,065	7,065
5	x1a	2	PL 1/2x5		2'-4 5/16"	M270-50W	M1E	20	40
4	x1b	6	PL 1/2x5		2'-4 5/16"	M270-50W	M1E AT BRG	20	121
6	x1d	2	PL 1/4x10 3/4		2'-5"	M270-50W		22	44
7	x1e	1	PL 1/4x2 3/4		0'-7 15/16"	M270-50W	DRIP BAR	2	2
		12						7,271	7,271
		12				TOTAL WEIGHT THIS DRAWING:		7,271	





SECTION A - A

1 - 4S1 W30x99 x 71'-5 11/16

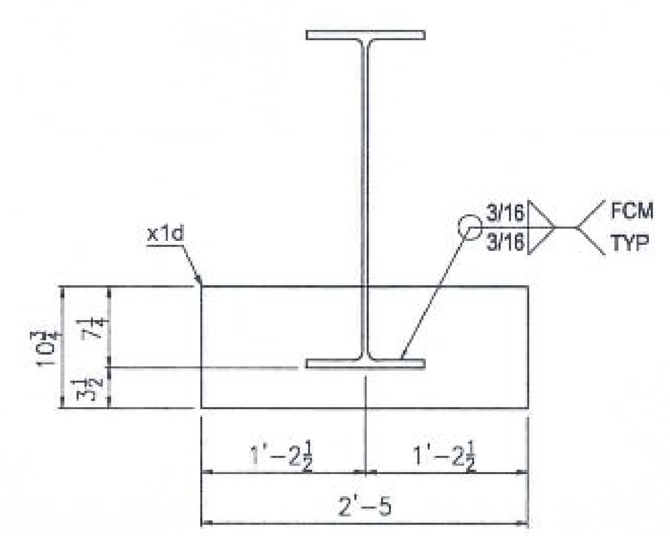
d=2'-5 11/16	b=10 1/2	t= 11/16	w= 1/2	k=1 9/16

(CVN), (FCM)

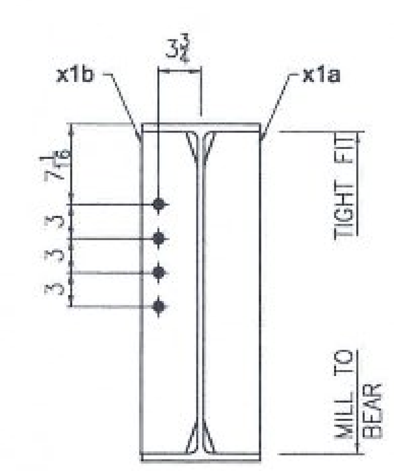
STRINGER No.1

NOTES:

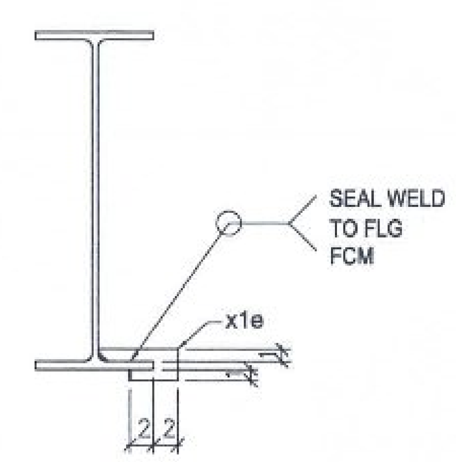
1. STIFFENER / CONNECTION PLATES ARE NORMAL TO FLANGES EXCEPT AT BEARINGS
2. FOR CAMBER DIAGRAM SEE DWG C2
3. FOR GENERAL NOTES SEE DWG GN1
4. FOR WELD TERMINATION DETAILS SEE DWG GN1



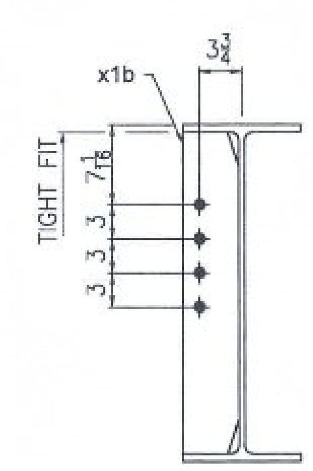
SECTION B - B



SECTION C - C



SECTION D - D



SECTION E - E

☑ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

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CHA

DATE 08/07/2014 BY IJ

REV:	DATE:	REVISION NOTE:	By
0	7/22/2014	ISSUED FOR APPROVAL	

MATERIAL:	SURFACE PREP. AND PAINT:	HOLES:	SHOP BOLTS:
AASHTO M270-GR.50W U.N.O.	N/A	15/16"ø U.N.O.	7/8"ø U.N.O.

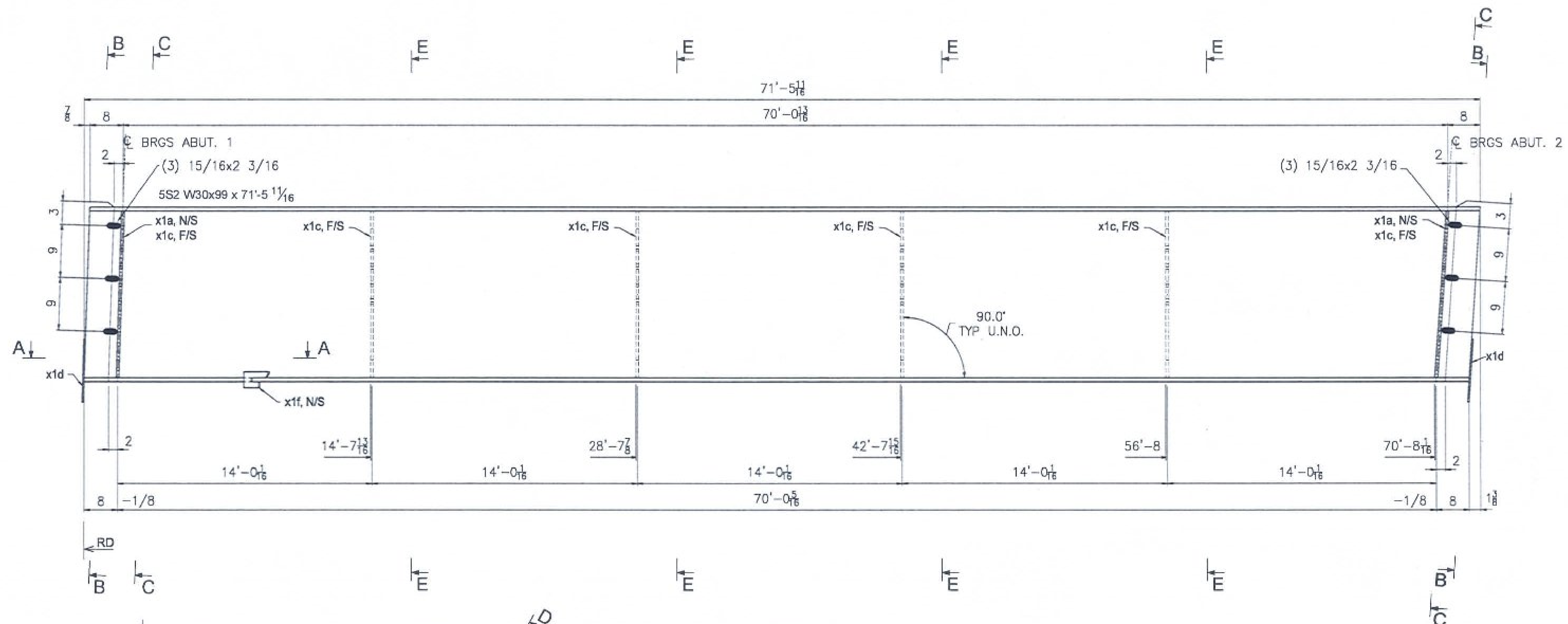
DESCRIPTION: FABRICATION DETAILS STRINGER No.1

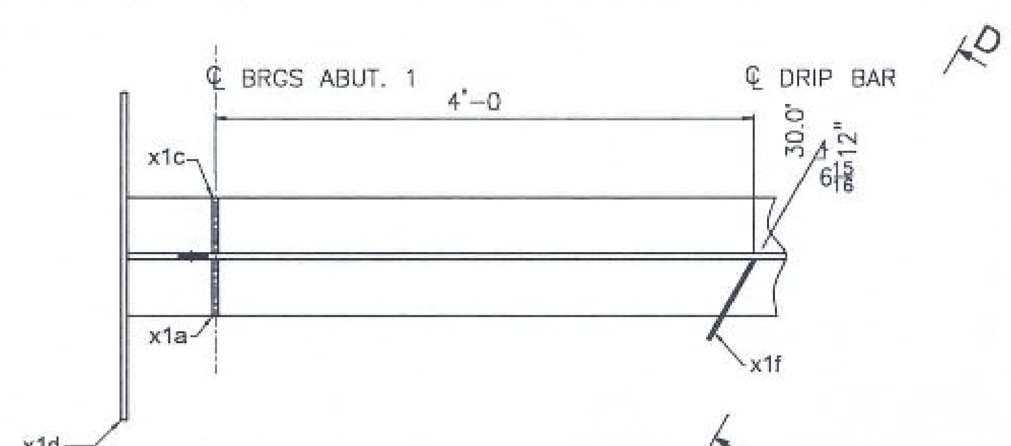
CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX: (207) 780-6726

STRUCTURE:	DRAWN:	DATE:
VERMONT ROUTE 15 OVER BROWNS RIVER	ID	07/22/14
	CHECKED: AD	DATE: 07/22/14
LOCATION: TOWN OF JERICHO, VT	JOB NO.	DWG NO.
PROJECT NO. STP FTBR (3)	576	4
CUSTOMER: Blow & Cote, INC.		REV. 0

ACBS

ABM INFO	SHIP	BILL OF MATERIAL			JOB NO.	DWG NO.		REV:
					576	5		0
LINE:	MARK:	Q'TY:	DESCRIPTION:	LENGTH:	GRADE:	NOTE:	WGT:	TOTAL:
	5S2	1	W30x99					
2	5S2	1	W30x99	71'-5 11/16"	M270-50WF2	CVN, FCM	7,065	7,065
5	x1a	2	PL 1/2x5	2'-4 5/16"	M270-50W	M1E	20	40
3	x1c	5	PL 1/2x5	2'-4 5/16"	M270-50W	M1E AT BRG	20	121
6	x1d	2	PL 1/4x10 3/4	2'-5"	M270-50W		22	44
7	x1f	1	PL 1/4x2 3/4	0'-7 15/16"	M270-50W	DRIP BAR	2	2
		12					7,271	7,271
		12			TOTAL WEIGHT THIS DRAWING:			7,271





SECTION A - A

1 - 5S2 W30x99 x 71'-5 11/16

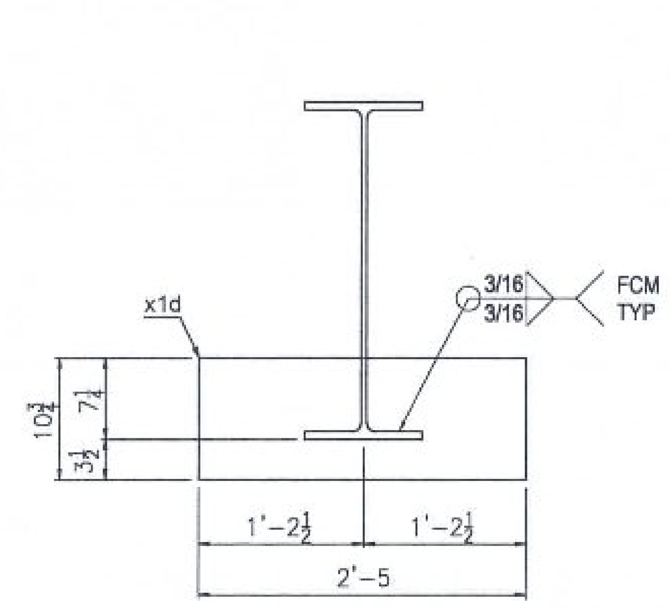
d=2'-5 11/16 | b=10 1/2 | t=11/16 | w=1/2 | k=1 9/16

(CVN), (FCM)

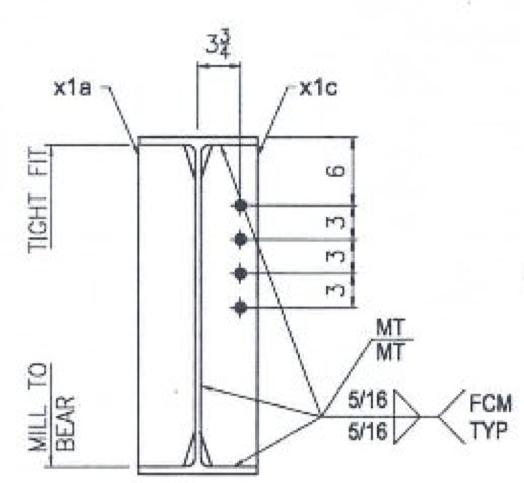
STRINGER No.2

NOTES:

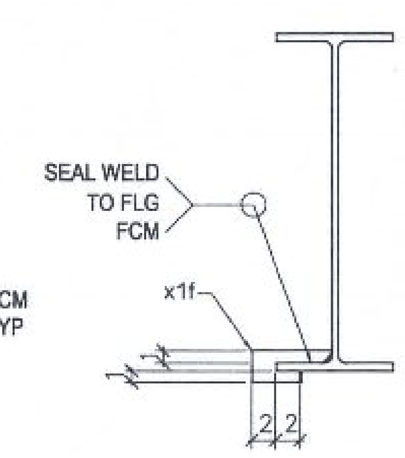
1. STIFFENER / CONNECTION PLATES ARE NORMAL TO FLANGES EXCEPT AT BEARINGS
2. FOR CAMBER DIAGRAM SEE DWG C2
3. FOR GENERAL NOTES SEE DWG GN1
4. FOR WELD TERMINATION DETAILS SEE DWG GN1



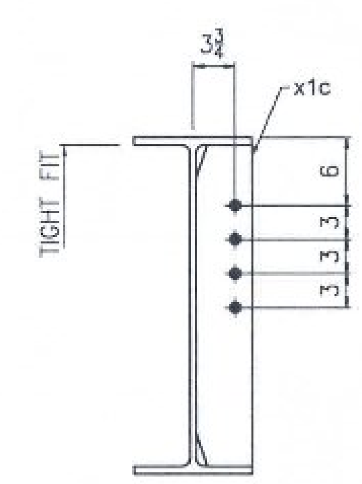
SECTION B - B



SECTION C - C



SECTION D - D



SECTION E - E

☑ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

CHA

DATE 08/07/2014 BY IN

REV:	DATE:	REVISION NOTE:	By
0	7/22/2014	ISSUED FOR APPROVAL	

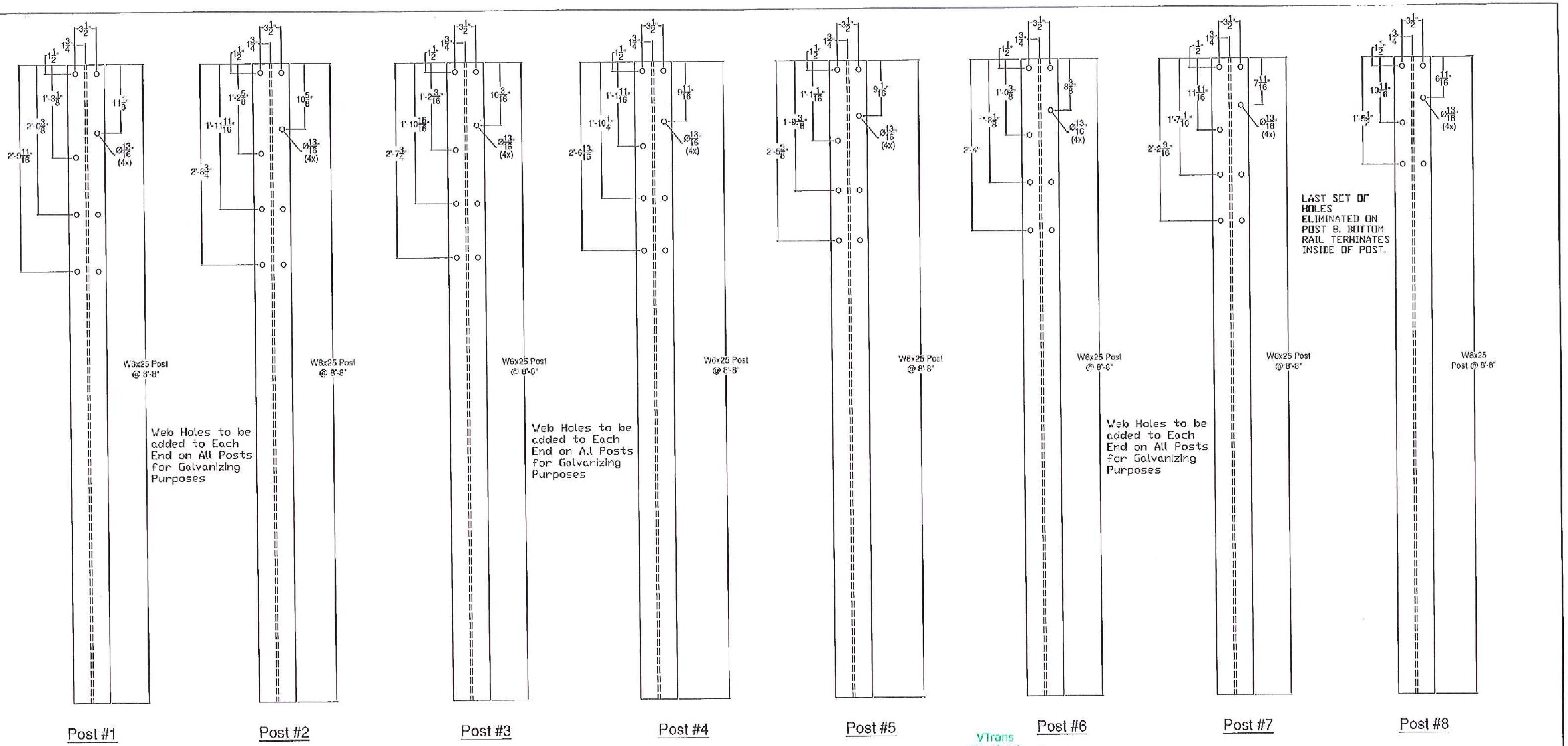
MATERIAL:	SURFACE PREP. AND PAINT:	HOLES:	SHOP BOLTS:
AASHTO M270-GR.50W U.N.O.	N/A	15/16"ø U.N.O.	7/8"ø U.N.O.

DESCRIPTION: FABRICATION DETAILS STRINGER No. 5

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE.
SOUTH PORTLAND, ME 04106
PHONE (207) 780-6722
FAX: (207) 780-6726

STRUCTURE:	DRAWN:	DATE:
VERMONT ROUTE 15 OVER BROWNS RIVER	ID	07/22/14
	CHECKED:	DATE:
	AD	07/22/14
LOCATION: TOWN OF JERICHO, VT	JOB NO.	DWG NO.
PROJECT NO. STP FTBR (3)	576	5
CUSTOMER: Blow & Cote, INC.		REV. 0

ACBS

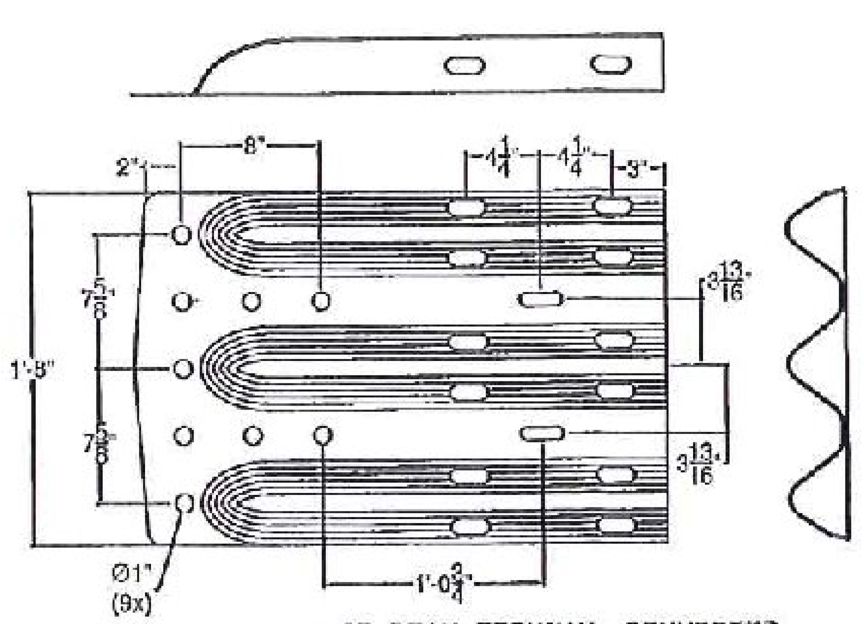


VTrans Received

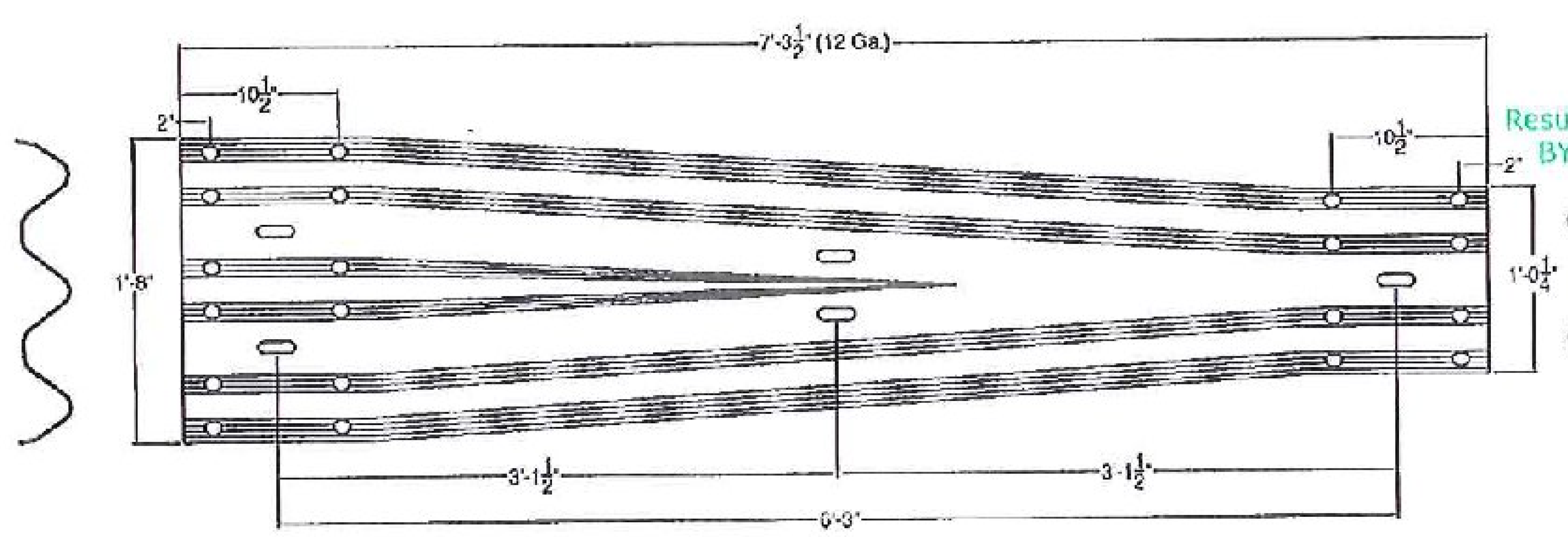
CK'D ________ OK'd BY JWC

AUG 06 2014

POWDER COATED BLACK AFTER GALV. PER ASTM D7803



THRIE-BEAM TERMINAL CONNECTOR



THRIE-BEAM TO STD. SB TRANSITION SECTION

Resubmit ________ APPROVED ✓
BY ________ DATE 8/12/14

ITEM #: 621.73

GEN CONTR: F.R. LAFAYETTE, P.O. 29045

SHEET 3 OF 3

APPROVED BY:

BRIDGE RAIL DETAILS SHEET

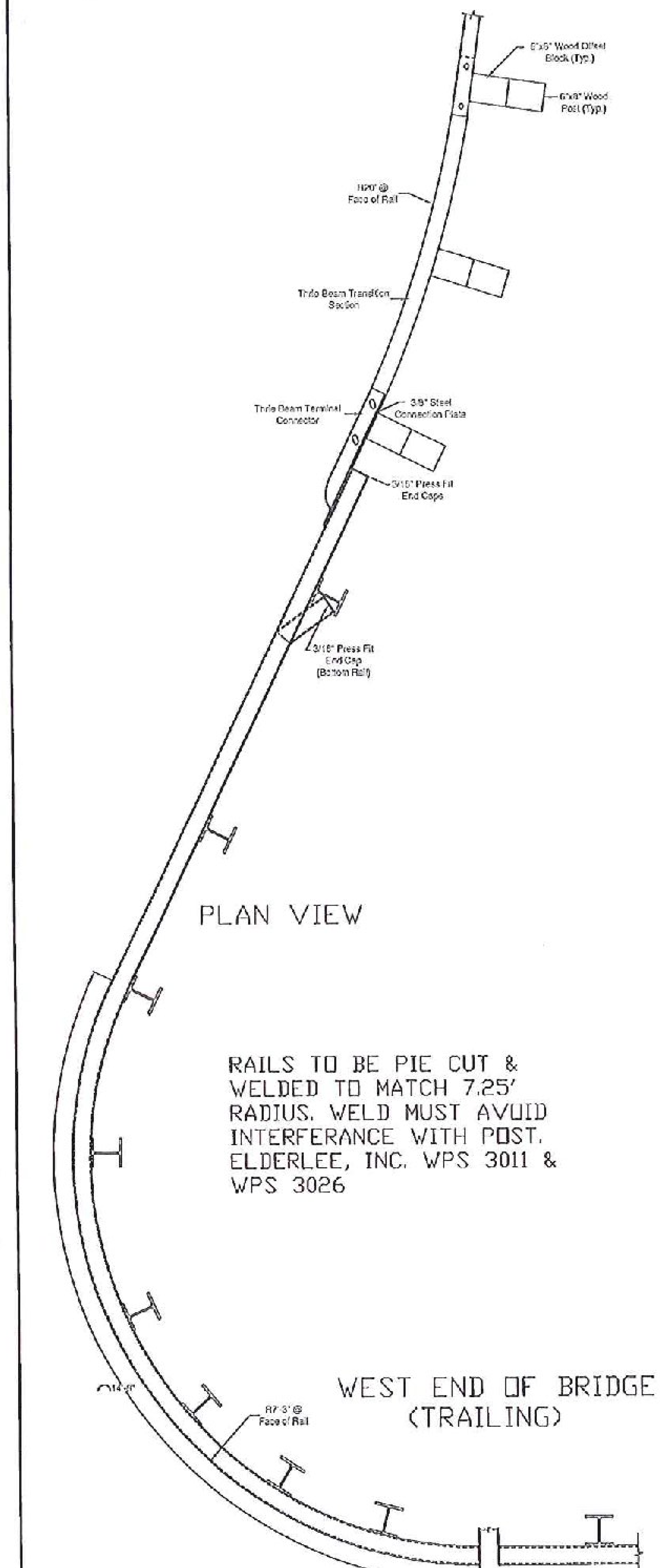
PROJECT: TOWN OF JERICHO COUNTY OF CHITTENDEN VT. 15 (MINOR ARTERIAL) PEDESTRIAN BRIDGE JERICHO FIBR (3)

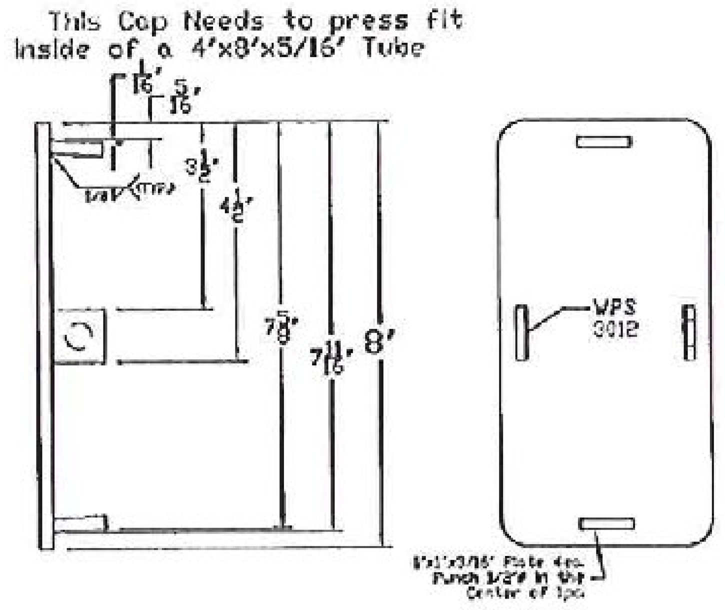
REV	NO.	DATE	DESCRIPTION	BY	REV	NO.	DATE	DESCRIPTION	BY

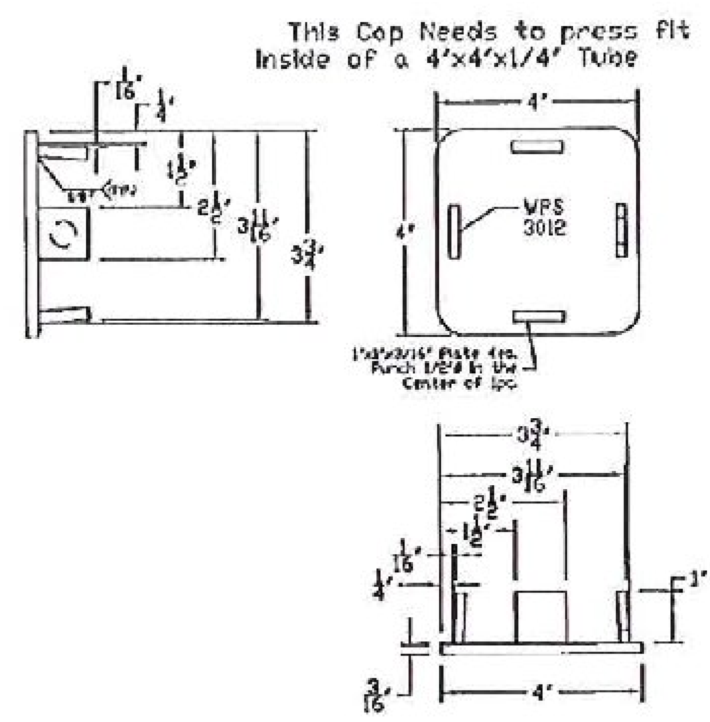
ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail: dlong@elderlee.com
Tel: 315-789-6670 Fax: 315-789-6615

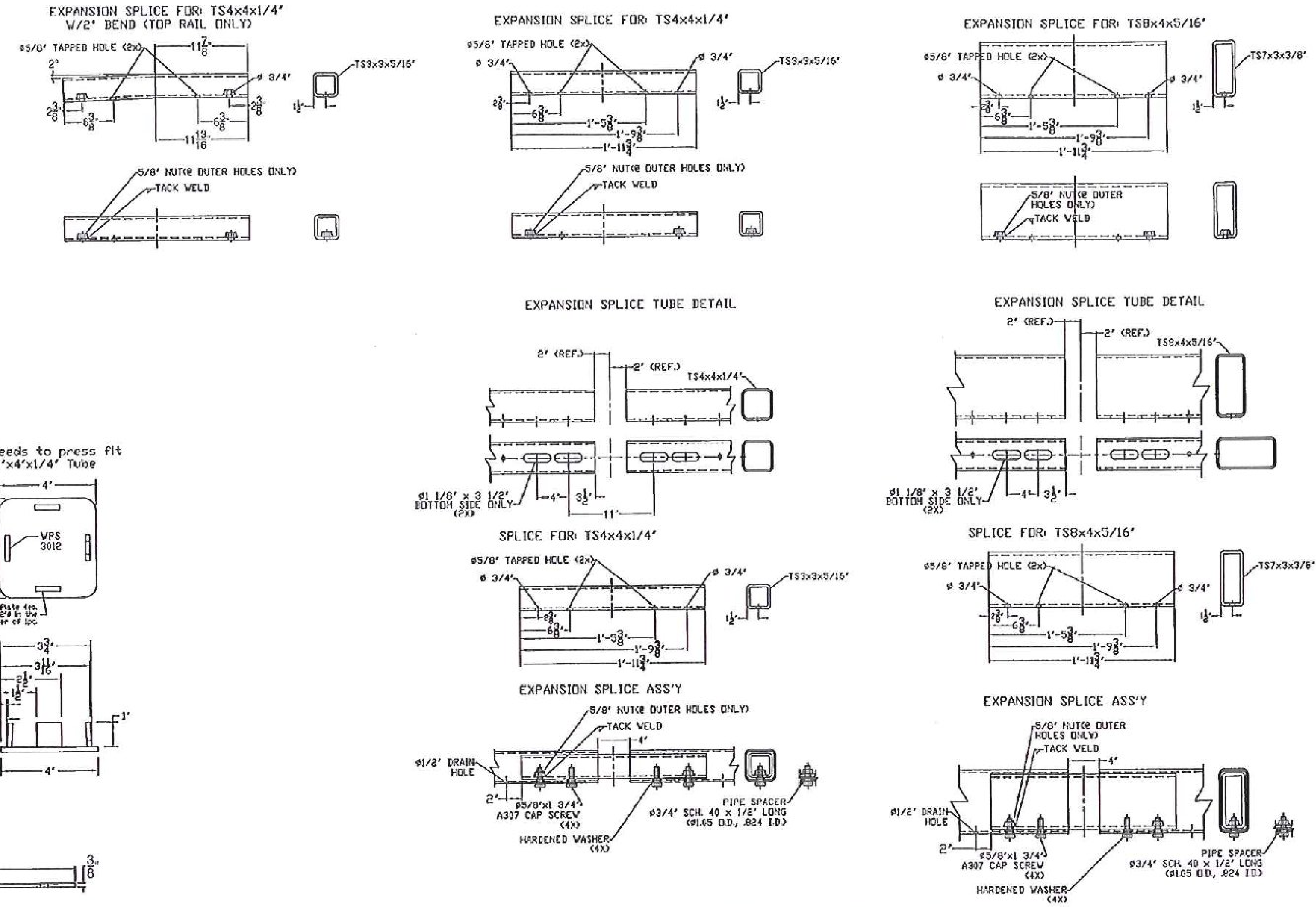
CERTIFIED FABRICATOR

DRAWN	D.L.	7/23/2014
CHECKED	E.P.	7/23/2014
APPROVED		
SCALE	SCHEMATIC	
DRAWING NO.	F.R.L. JERICHO 29045 GRAS	

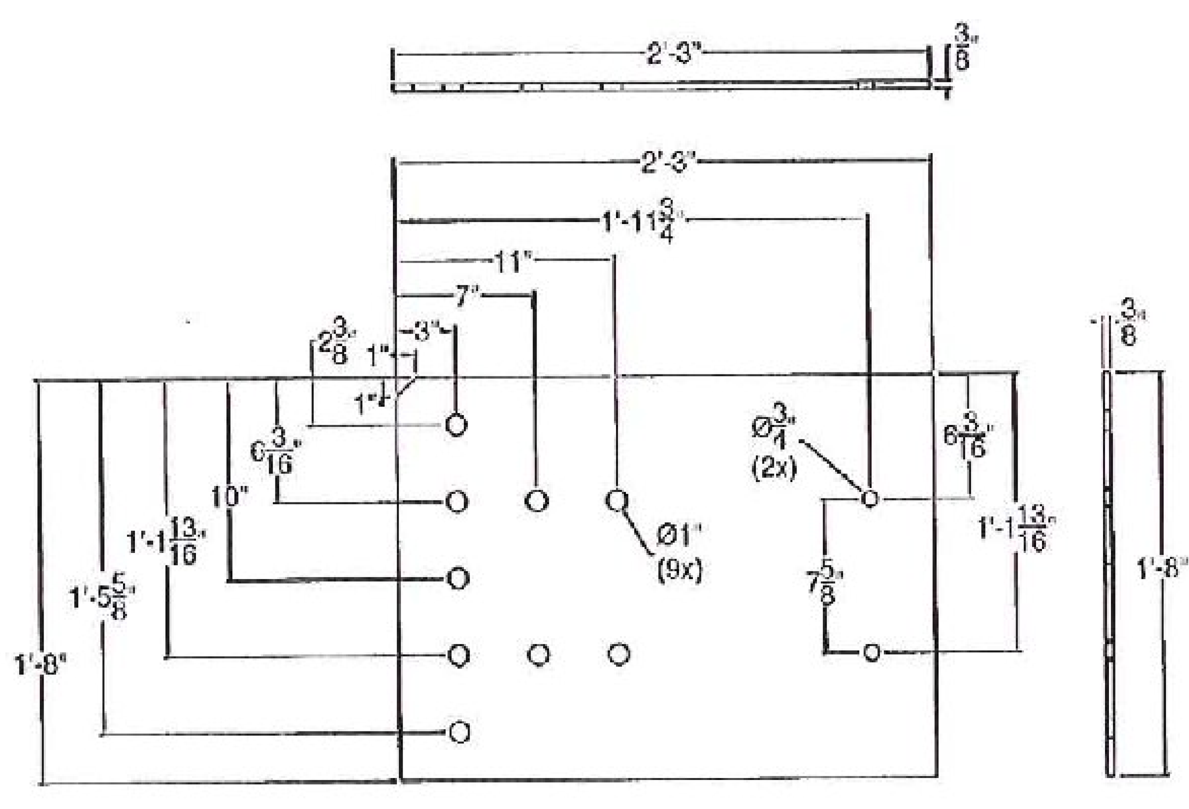




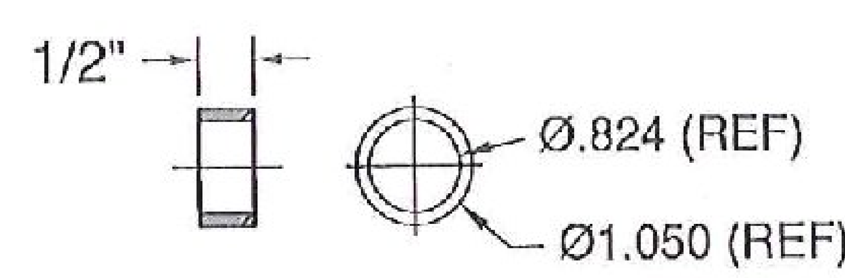




EXPANSION SPLICE - (4) BOLTS, (4) WASHERS, (4) PIPE SPACERS



CONNECTION PLATE



3/4" SCH. 40 PIPE SPACER

POWDER COATED BLACK AFTER
GALV. PER ASTM D7803

VTrans Received
CK'D ______ OK'd BY JWC

AUG 0 6 2014

Resubmit BY ______ APPROVED DATE 8/12/14

ITEM #: 621.73 GEN CONTR: F.R. LAFAYETTE, P.O. 29045

SHEET 2 OF 3

APPROVED BY:

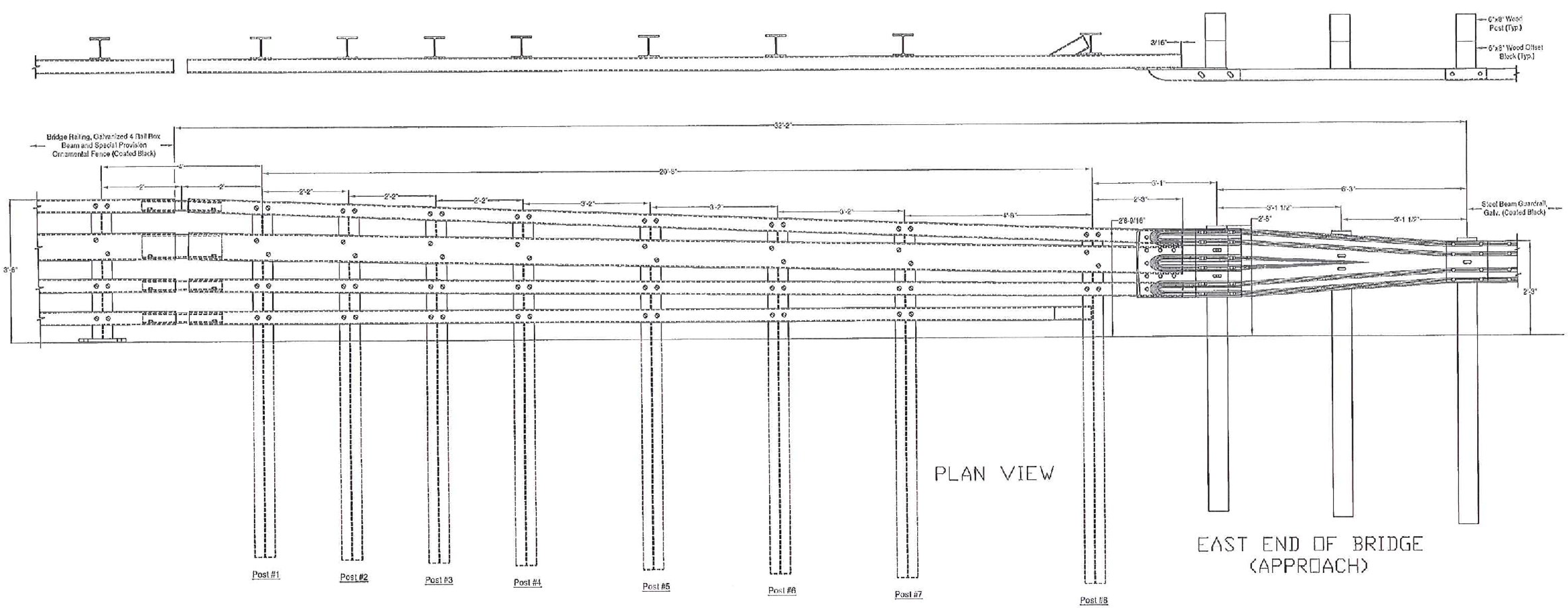
BRIDGE RAIL DETAILS SHEET

PROJECT: TOWN OF JERICHO COUNTY OF CHITTENDEN VT. 15 (MINOR ARTERIAL) PEDESTRIAN BRIDGE
JERICHO FTBR (3)

REV	NO.	DATE	DESCRIPTION	BY	REV	NO.	DATE	DESCRIPTION	BY

ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail: dlong@elderlee.com
Tel: 315-789-6670 Fax: 315-789-6616

DRAWN	D.L.	7/23/2014
CHECKED	E.P.	7/23/2014
APPROVED		
SCALE	SCHEMATIC	
DRAWING NO.	F.R.L JERICHO 29045 GRAS	



NOTES
1. ALL DIMENSIONS SHALL BE MEASURED ALONG THE FACE OF RAIL.
2. PAYMENT FOR GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM (COATED BLACK) SHALL INCLUDE THE TERMINAL CONNECTOR, THE CONNECTION PLATE, RAIL, POSTS, BLOCKS AND ATTACHMENT HARDWARE.
3. ALL APPROACH RAIL SPLICES SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW.
4. ALL BRIDGE APPROACH RAIL MATERIALS, DIMENSION SIZES AND NOTES SHALL BE THE SAME AS THOSE OF THE BRIDGE RAIL, UNLESS OTHERWISE NOTED.
5. CARRIAGE BOLTS SHALL BE AASHTO M164 (ASTM A) AND NUTS SHALL BE ASTM A563 GRADE A OR BETTER (GALVANIZED).
6. WELD SPLICE BARS TO FIT BEND. USE COMPLETE PENETRATION WELD. (SEE WPS)
7. FROM THE END SPLICE AT THE LIMITS OF BRIDGE RAIL TO POST #6, THE RAILS SHALL BE SHOP BENT TO A RADIUS OF 7.25'.
8. THE 6'-3" TRANSITION SECTION SHALL BE FIELD BENT TO A RADIUS OF 20'.
9. ALL STELL BRIDGE RAILING, ORNAMENTAL FENCE, AND APPROACH GUARDRAIL COMPONENTS SHALL BE POWDERED COATED BLACK AFTER GALVANIZING IN ACCORDANCE WITH ASTM D7803. COLOR SHALL MATCH EXISTING WROUGHT IRON FENCE ADJACENT TO THE BRIDGE ALONG RED MILL DRIVE.

POWDER COATED BLACK AFTER GALV. PER ASTM D7803

BILL OF MATERIAL

QTY	PART #	DESCRIPTION	ASTM DESIGNATION
15	0033.90361	W6X25 POST # 1 - #8 @ 8'-8' (VARIOUS PUNCHING)	A572 Gr. 50
2	0033.91166	4' X 4' X 1/4' RAIL @ 24'9' W/WELDED END CAP	A500 Gr. B
2	0033.91167	4' X 4' X 1/4' RAIL @ 24'9' W/WELDED END CAP W/7'-3' RADIUS	A500 Gr. B
1	0033.90068	4' X 4' X 1/4' RAIL @ 21'6-3/8' W/KICKBACK & WELDED END CAP	A500 Gr. B
1	0033.90069	4' X 4' X 1/4' RAIL @ 21'6-3/8' W/KICKBACK & WELDED END CAP W/PARTIAL. 7'-3' RADIUS	A500 Gr. B
1	0033.91170	4' X 8' X 5/16' RAIL @ 24'-9' W/WELDED END CAP	A500 Gr. B
1	0033.91171	4' X 8' X 5/16' RAIL @ 24'-9' W/WELDED END CAP W/PARTIAL 7'-3' RADIUS	A500 Gr. B
4	0033.91352	3' X 3' X 5/16' EXP. SPL. TUBE @ 1'11-3/4'	A500 Gr. B
2	0033.90362	3' X 3' X 5/16' EXP. SPL. TUBE @ 1'11-3/4' W/2' BEND	A500 Gr. B
2	0033.90353	3' X 7' X 3/8' EXP. SPL. TUBE @ 1'11-3/4'	A500 Gr. B
2	0033.90363	3/8' CONNECTION PLATE @ 2'-8' X 2'-3'	A36
6	0033.90057	PRESS FIT END CAP FOR 4'X4'X1/4' RAIL	A36
2	0033.90056	PRESS FIT END CAP FOR 8'X4'X5/16' RAIL	A36
2	5029.90056	SPECIAL THRIE BEAM TERMINAL CONNECTOR (10 GA.)	AASHTO M180
2		6'-3' TRANSITION THRIE TO PANEL W/3'1-1/2' CC (12 GA.)	AASHTO M180
2		6'-3' TRANSITION THRIE TO PANEL W/3'1-1/2' CC (12 GA.) w/20' RAD. (FIELD BENT)	AASHTO M180
10	0080.15913	3/16' SPECIAL WASHER @ 1-3/4' X 3'	A36
10	0080.15703	ø 5/8' X 1'-6' POST BOLT	A307
10	0080.15901	ø 5/8' HEX NUT.	A307
10	0080.15911	ø 5/8' FLAT WASHER	A307
32	0080.05045	ø 5/8' X 1 3/4' HEX BOLT & F.W.	A307
40	0080.15013	ø 5/8' X 1 1/4' SPLICE BOLT	A307
40	0080.15905	ø 5/8' RECESSED NUT	A307
128	0080.06290	ø 3/4' X 6' BUTTON HEAD BOLT w/SLOTTED HEAD	A449
128	0080.16911	ø 3/4' FLAT WASHER	F436
128	0080.16901	ø 3/4' DH HEAVY ANCO LOCK NUT	A563
64	0080.05045	ø 5/8' X 1 3/4' HEX BOLT & F.W.	A307
32	0033.90053	3/4' ø SCHD. 40 PIPE SPACER @ 1/2'	A53
6	0009.00070	6'X8' WOOD POST @ 7'-0'	
6		6'X8' WOOD OFFSET @ 1'10-1/2'	

VTrans Received
CK'D ______ OK'd BY JWC

AUG 06 2014

Resubmit BY ______ APPROVED DATE 8/12/14

ITEM #: 621.73   GEN CONTR: F.R. LAFAYETTE, P.O. 29045   SHEET 1 OF 3

APPROVED BY:

BRIDGE RAIL DETAILS SHEET

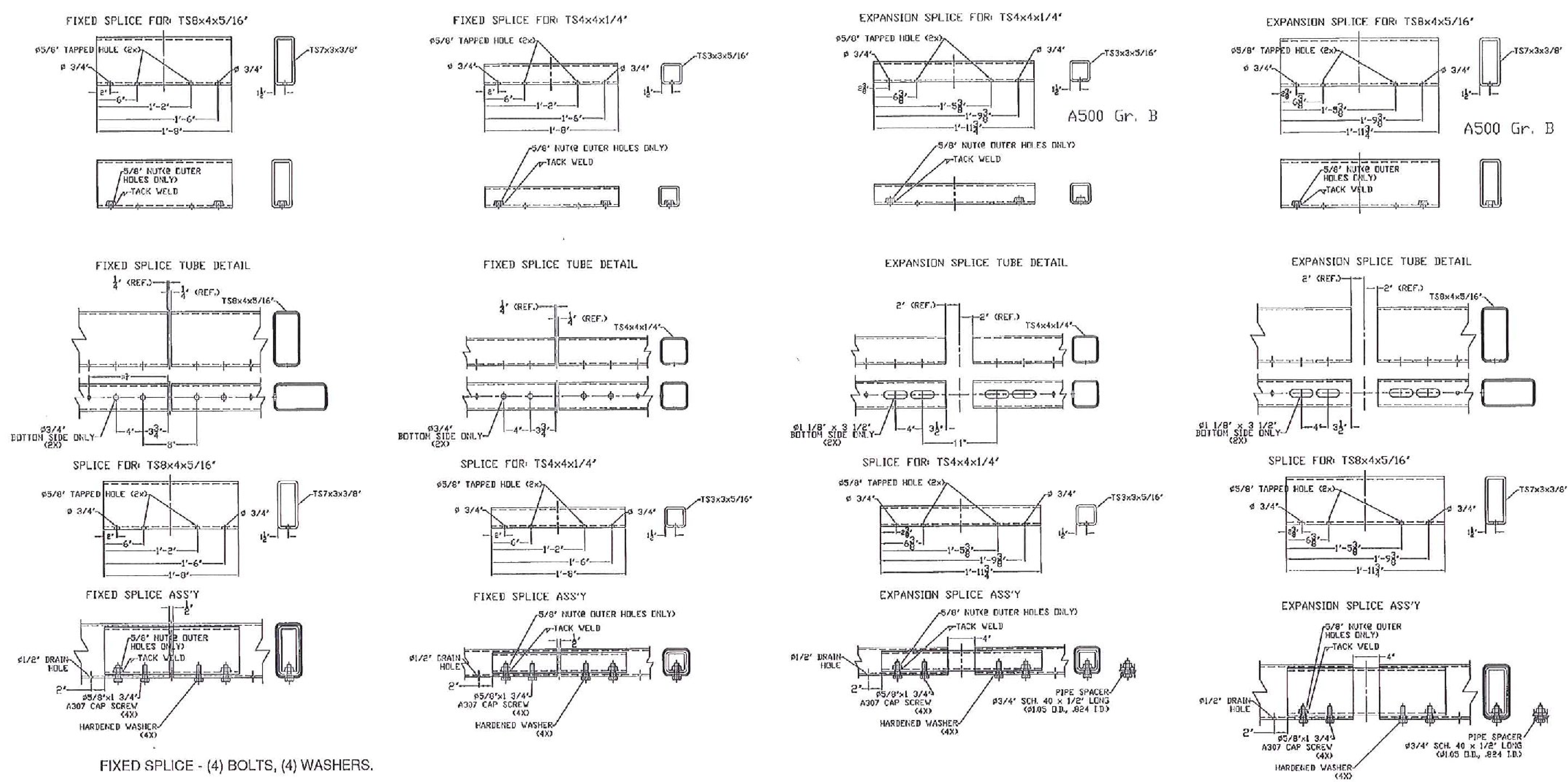
PROJECT: TOWN OF JERICHO COUNTY OF CHITTENDEN VT. 15 (MINOR ARTERIAL) PEDESTRIAN BRIDGE JERICHO FTBR (3)

REV NO.	DATE	DESCRIPTION	BY	REV NO.	DATE	DESCRIPTION	BY

ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail: dlong@elderlee.com
Tel: 315-789-6670 Fax: 315-789-6615

CERTIFIED FABRICATOR

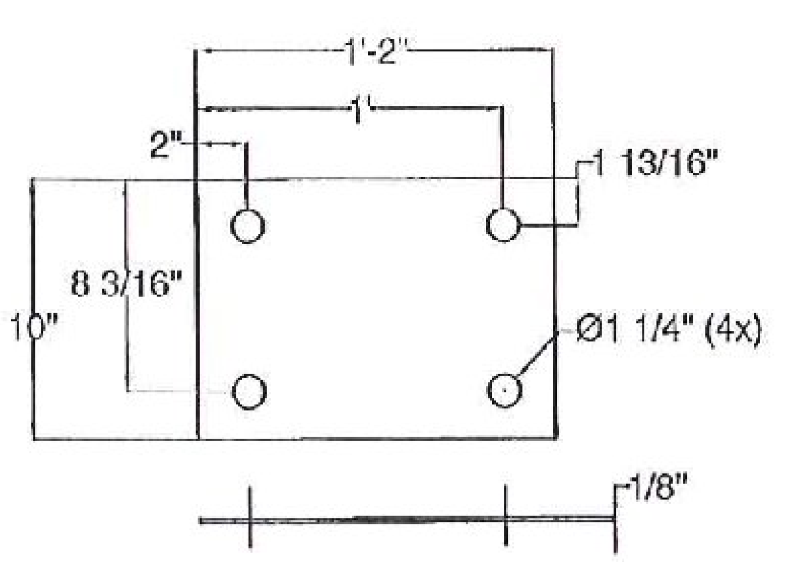
DRAWN	D.I.	7/23/2014
CHECKED	E.P.	7/23/2014
APPROVED	.	.
SCALE	SCHEMATIC	
DRAWING NO.	F.R.L. JERICHO 29045 GRAS	



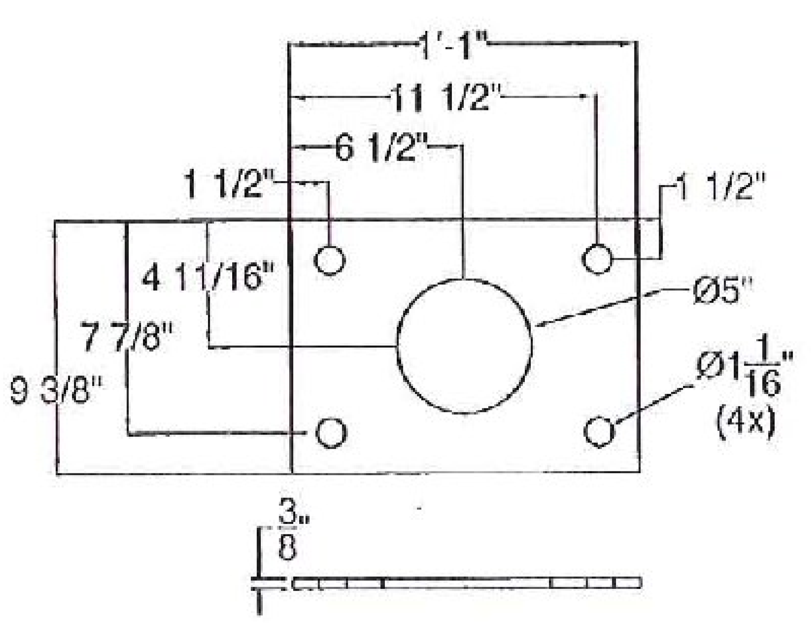
FIXED SPLICE - (4) BOLTS, (4) WASHERS.

EXPANSION SPLICE - (4) BOLTS, (4) WASHERS, (4) PIPE SPACERS

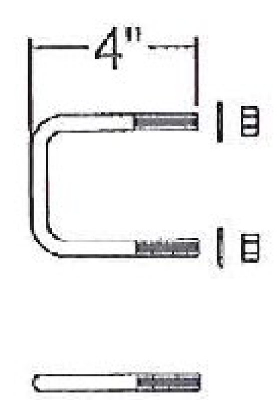
POWDER COATED BLACK AFTER
GALV. PER ASTM D7803



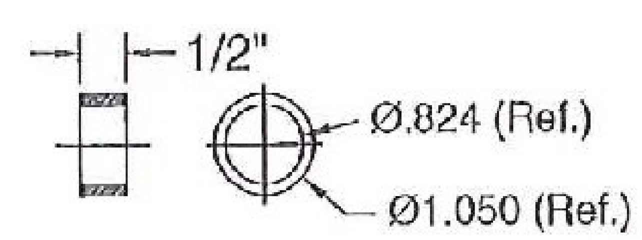
1/8" PREFORMED BEARING PAD



ANCHOR PLATE
SECTION B-B



2 - 3/8" Dia. Square
U-Bolts Flat Washer
& Nut. Damage
Exposed Bolt
Threads as Directed
by the Engineer (Typ.)



3/4" SCH. 40 PIPE SPACER

ITEM #: 525.34

GEN CONTR: F.R. LAFAYETTE, P.O. 29045

SHEET 2 OF 2

BRIDGE RAIL DETAILS SHEET

PROJECT: TOWN OF JERICHO COUNTY OF CHITTENDEN VT. 15 (MINOR ARTERIAL) PEDESTRIAN BRIDGE JERICHO FTBR (9)

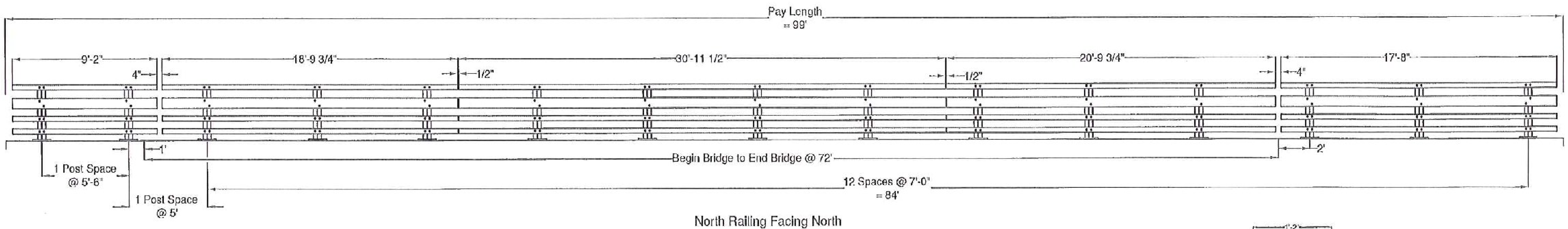
Trans Received
CK'D ______ OK'd BY ______
APPROVED BY: JWC
AUG 06 2014
Resubmit BY ______ APPROVED ✓ DATE 8/12/14

R E V	NO.	DATE	DESCRIPTION	BY	R E V	NO.	DATE	DESCRIPTION	BY

ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail: dlong@elderlee.com
Tel: 315-789-6670 Fax: 315-789-6615

CERTIFIED FABRICATOR

DRAWN	D.L.	7/23/2014
CHECKED	E.P.	7/23/2014
APPROVED	.	.
SCALE	SCHEMATIC	
DRAWING NO.	F.R.L. JERICHO 29045	



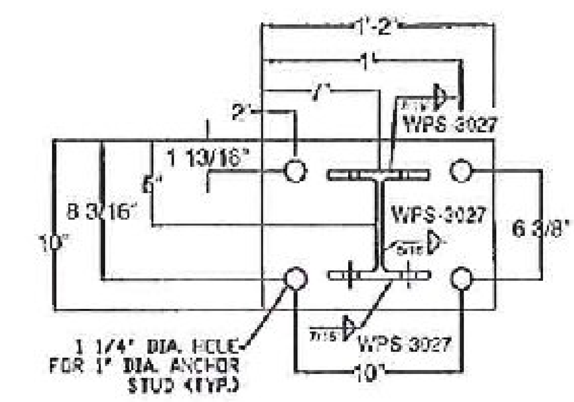
North Railing Facing North

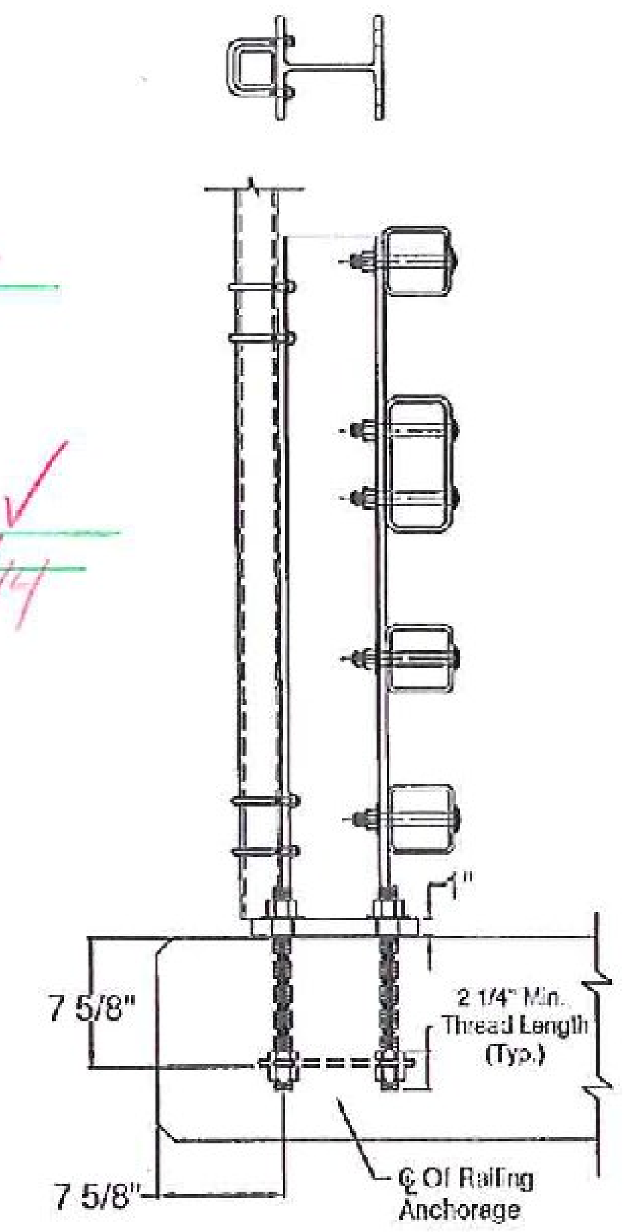
NOTES
1. ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
2. ALL EXPOSED CUT OR SHEARED EDGES SHALL BE ROUNDED TO A $\frac{1}{16}$" RADIUS AND BE FREE OF BURRS.
3. RAIL POSTS SHALL BE SET NORMAL TO GRADE.
4. SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO (2)RAIL POSTS AND PREFERABLY TO AT LEAST FOUR (4) POSTS.
5. RAIL TUBE EXPANSION JOINTS SHALL PROVIDED IN ANY RAIL BAY SPANNING A SUPERSTRUCTURE EXPANSION JOINT. EXPANSION JOINT WIDTH SHALL BE 4" AT 45° F AND WILL BE ADJUSTED IN THE FIELD BY THE ENGINEER FOR OTHER TEMPERATURES.
6. RAIL POSTS ANCHORING NUTS SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ONE-EIGHTH TURN.
7. RAIL TUBES SHALL BE ATTACHED USING 3/4" FULL DIAMETER BODY ROUND HEAD BOLTS INSERTED THROUGH THE RACE OF THE TUBE. HOLES IN POSTS SHALL BE 1/16" LARGER THAN THE BOLT SIZE.
8. HOLES IN RAILS FOR RAIL TUBE ATTACHMENT MAY BE FIELD-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO ERECTION.
9. ANY BENDING OF RAIL SHALL BE BY SHOP PROCEDURE ONLY.
10. THE FABRICATOR SHALL SUBMIT FABRICATION DRAWINGS INCLUDING WELDING PROCEDURES TO THE STRUCTURES ENGINEER FOR APPROVAL. ALL WELDING SHALL CONFORM WITH SUBSECTION 506.10.
11. FOR MORE INFORMATION AND REQUIREMENTS REGARDING ORNAMENTAL FENCE, SEE THE SPECIAL PROVISIONS.
12. ALL STELL BRIDGE RAILING, ORNAMENTAL FENCE, AND APPROACH GUARDRAIL COMPONENTS SHALL BE POWDERED COATED BLACK AFTER GALVANIZING IN ACCORDANCE WITH ASTM D7803. COLOR SHALL MATCH EXISTING WROUGHT IRON FENCE ADJACENT TO THE BRIDGE ALONG RED MILL DRIVE.

VTrans
Received
CK'D______ OK'd BY Jux
AUG 06 2014
Resubmit BY______ APPROVED DATE 8/12/14

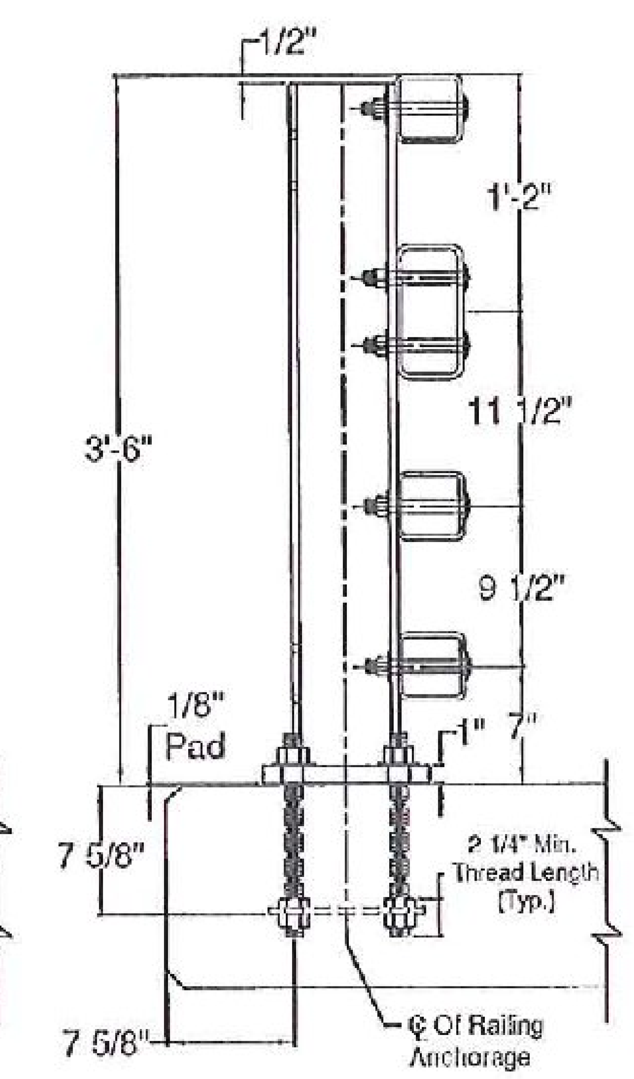
BILL OF MATERIAL

QTY	PART #	DESCRIPTION	ASTM DESIGNATION
15	0033.90359	FOUR RAIL POST @ 3'5-3/8' O.A. w/HOLES FOR FPC	A572 Gr. 50
3	0033.91155	4' X 4' X 1/4' RAIL @ 9'-2'	A500 Gr. B
3	0033.91156	4' X 4' X 1/4' RAIL @ 18'9-3/4'	A500 Gr. B
3	0033.91157	4' X 4' X 1/4' RAIL @ 30'11-1/2'	A500 Gr. B
3	0033.91158	4' X 4' X 1/4' RAIL @ 20'9-3/4'	A500 Gr. B
3	0033.91159	4' X 4' X 1/4' RAIL @ 17'-8'	A500 Gr. B
1	0033.91160	4' X 8' X 5/16' RAIL @ 9'-2'	A500 Gr. B
1	0033.91161	4' X 8' X 5/16' RAIL @ 18'9-3/4'	A500 Gr. B
1	0033.91162	4' X 8' X 5/16' RAIL @ 30'11-1/2'	A500 Gr. B
1	0033.91163	4' X 8' X 5/16' RAIL @ 20'9-3/4'	A500 Gr. B
1	0033.91164	4' X 8' X 5/16' RAIL @ 17'-8'	A500 Gr. B
6	0033.90052	3' X 3' X 5/16' FIX. SPL. TUBE @ 1'-8'	A500 Gr. B
2	0033.90033	3' X 7' X 3/8' FIX. SPL. TUBE @ 1'-8'	A500 Gr. B
6	0033.90352	3' X 3' X 5/16' EXP. SPL. TUBE @ 1'11-3/4'	A500 Gr. B
2	0033.90353	3' X 7' X 3/8' EXP. SPL. TUBE @ 1'11-3/4'	A500 Gr. B
15	0033.00299	3/8' X 9 3/8' X 13' ANCHOR PLATE	A36
15	0033.00052	1/8' FIBER PAD @ 10' X 14'	AASHTO M251
60	0042.21012	ø 1' X 12' ANCHOR STUD W/ 2 1/4' w/MINIMUM THREAD	A449 Gr. 1
120	0080.18901	ø 1' HEAVY HEX NUT	A563
60	0080.18905	ø 1' HEX JAM NUT	A325
60	0080.18911	ø 1' FLAT WASHER	F436
120	0080.06290	ø 3/4' X 6' BUTTON HEAD BOLT w/SLOTTED HEAD	A449
120	0080.16911	ø 3/4' FLAT WASHER	F436
120	0080.16901	ø 3/4' DH HEAVY ANCO LOCK NUT	A563
64	0080.05045	ø 5/8' X 1 3/4' HEX BOLT & F.W.	A307
32	0033.90053	3/4' ø SCHD. 40 PIPE SPACER @ 1/2'	ASTM A500 or A53 Gr. B
60	00	ø 3/8 X 2-5/8' X 4-1/8' SQUARE 'U' BOLT (1-1/2' THREAD)	A36
120	0080.05045	ø 3/8' HEX NUT	A307
120	0080.13910	ø 3/8' FLAT WASHER	A307
120	00	ø 3/8' SPLIT LOCK WASHER	ASME B18.21.1

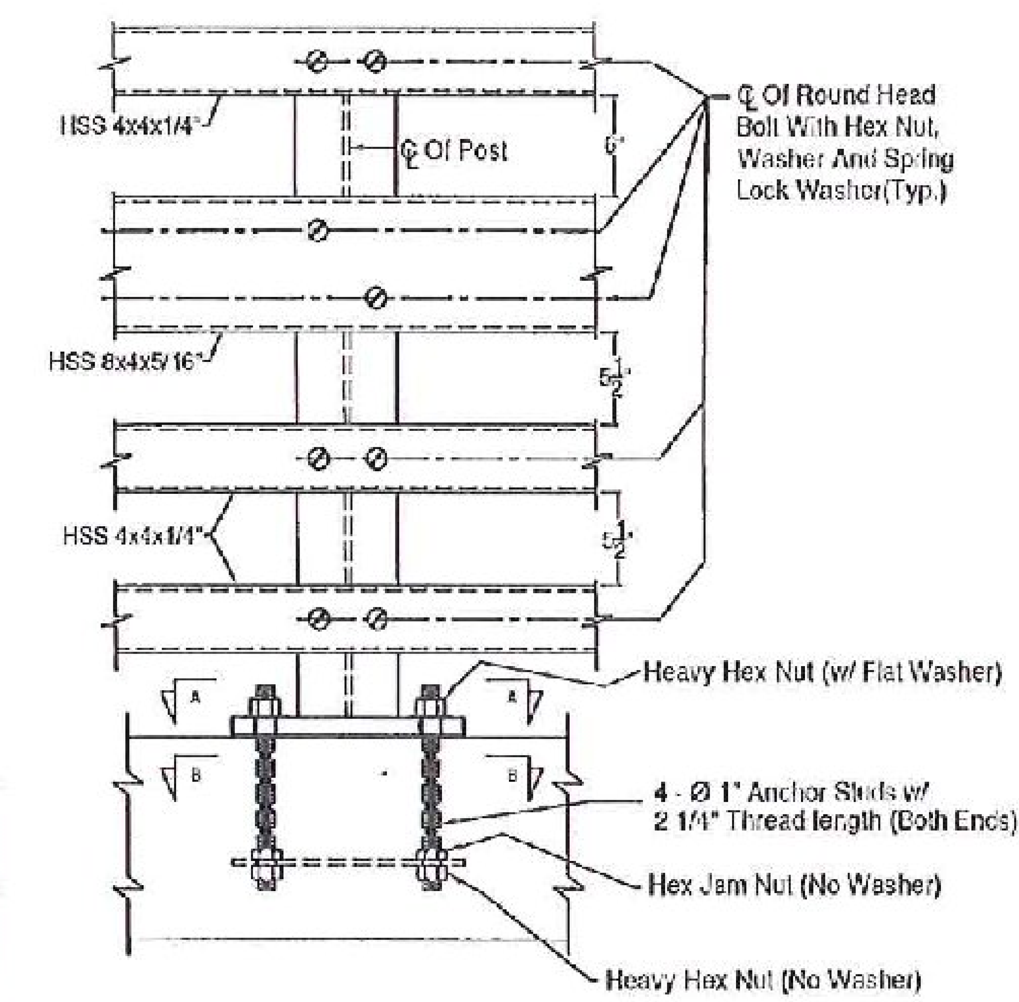




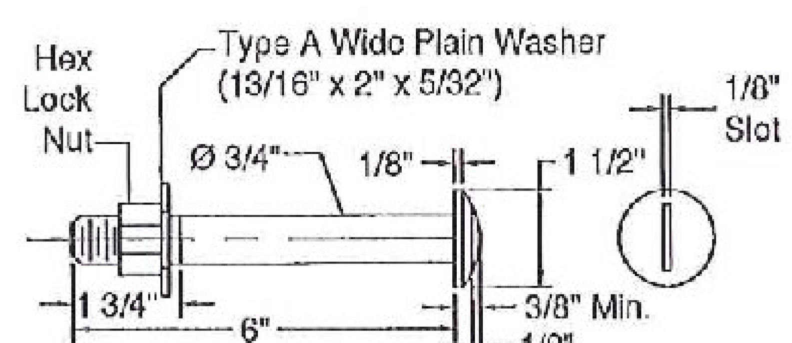
Typical Post Section



Typical Post Section
Fencing not Shown for Clarity



Typical Post Elevation



A 449 (TYPE 1)
ROUND HEAD BOLT

POWDER COATED BLACK AFTER
GALV. PER ASTM D7803

ITEM #: 525.34 GEN CONTR: F.R. LAFAYETTE, P.O. 29045

SHEET 1 OF 2

APPROVED BY:

BRIDGE RAIL DETAILS SHEET

PROJECT: TOWN OF JERICHO COUNTY OF CHITTENDEN VT. 15 (MINOR ARTERIAL) PEDESTRIAN BRIDGE JERICHO FTBR (3)

REV	NO.	DATE	DESCRIPTION	BY	REV	NO.	DATE	DESCRIPTION	BY

ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail: dlong@elderlee.com
Tel: 315-789-6670 Fax: 315-789-6615

AISC CERTIFIED FABRICATOR

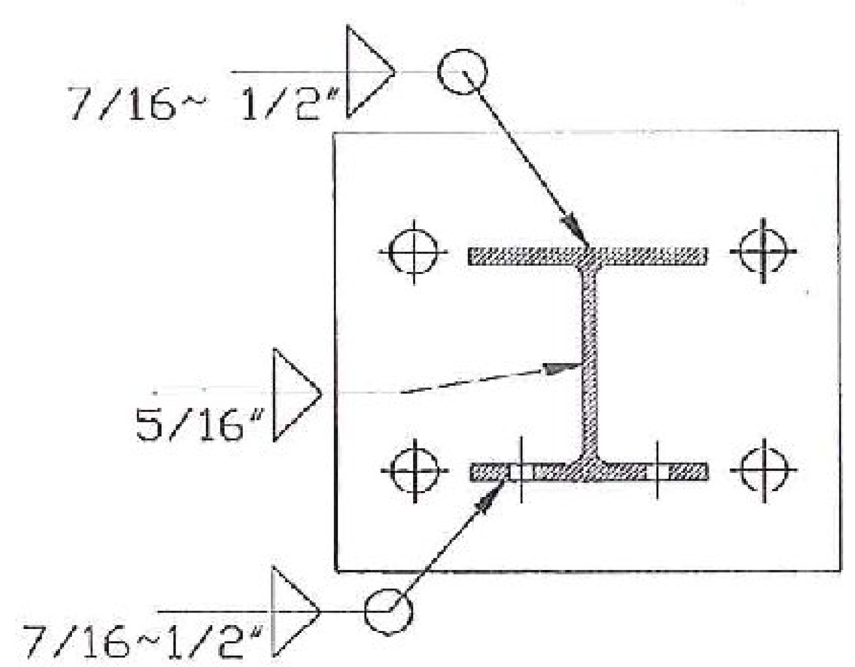
DRAWN	D.L.	7/23/2014
CHECKED	E.P.	7/23/2014
APPROVED	.	.
SCALE	SCHEMATIC	
DRAWING NO.	F.R.L. JERICHO 29045	

WELDING PROCEDURE SPECIFICATION

PQR ELDERLEE#1

Material Specification	A572 GRD. 50 /A992-06a
Welding Process	FCAW
Manual or Machine	SEMAUTOMATIC
Position of Welding	FLAT/HORIZONTAL
Filler Metal Specification	A5.20
Filler Metal Classification	E70 LINCOLN OUTERSHEILD
Flux	N/A
Shielding Gas	CO 2 Dew Point -40DEG F Flow Rate 50 CFM (45 TO 63 CFM)
Single or Multiple Pass	SINGLE
Single or Multiple Arc	N/A
Welding Current	DC
Polarity	DCEP
Welding Progression	STRINGER
Root Treatment	PER D1.5
Preheat and Interpass Temperature	PER D1.5
Postheat Temperature	NONE
Heat Input	Min Max

WELDING PROCEDURE.

Pass no.	Electrode size	Welding Current		Travel speed	Joint detail
		Amperes	Volts		
1	3/32	390	27	12	
Variable	LIMITS	351 TO 429	25 TO 29	11 TO 13	

V-Trans Received CK'D ____ CK'd BY JWC

AUG 06 2014

Resubmit BY ____ APPROVED DATE 8/12/14

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in Section 5.

Procedure No. 3027

Revision No.

Contractor Elderlee, Inc.

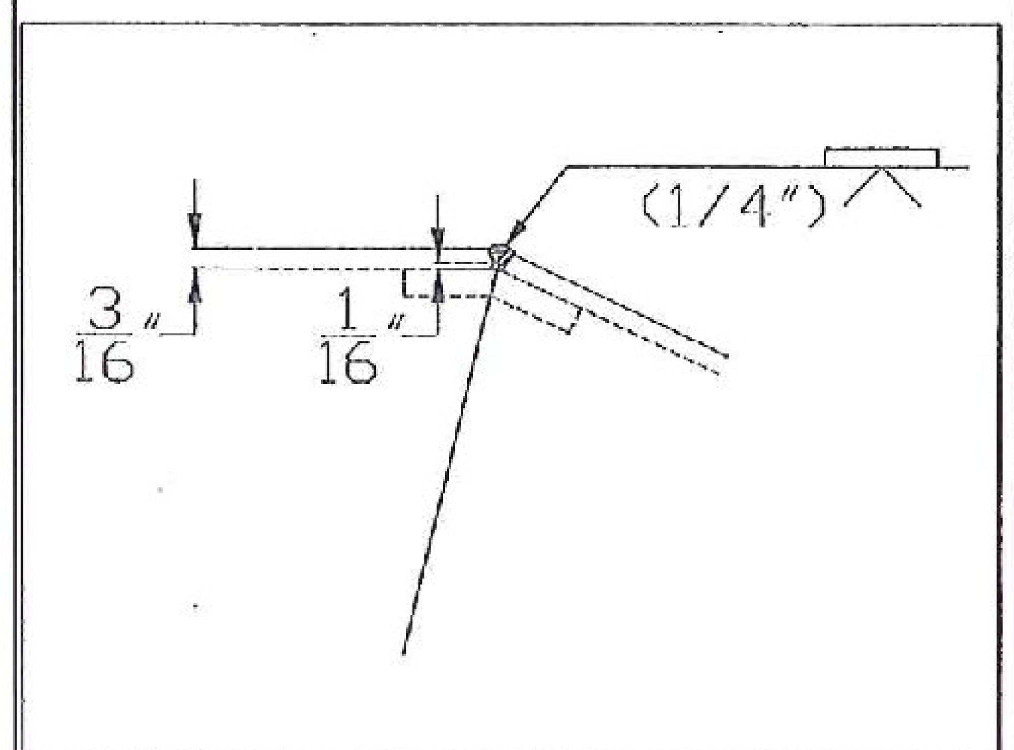
Authorized By RANDY SCOTT

Date 4/4/2014

WELDING PROCEDURE SPECIFICATION

Material Specification	ASTM A500 GRD. B A36
Welding Process	FCAW
Manual or Machine	SEMIAUTOMATIC
Position of Welding	FLAT
Filler Metal Specification	A5.20
Filler Metal Classification	E70 LINCOLN OUTERSHEILD
Flux	N/A
Shielding Gas	CO 2 Dew Point -40DEG F Flow Rate 50 CFM (45 TO 63 CFM)
Single or Multiple Pass	SINGLE
Single or Multiple Arc	N/A
Welding Current	DC
Polarity	DCEP
Welding Progression	STRINGER
Root Treatment	PER D1.5
Preheat and Interpass Temperature	PER DI.5
Postheat Temperature	NONE
Heat Input	Min Max

WELDING PROCEDURE

Pass no.	Electrode size	Welding Current Amperes	Welding Current Volts	Travel speed	Joint detail
1	3/32	390	27	12	
Variable	LIMITS	351 TO 429	25 TO 29	11 TO 13	

VTrans Received CK'D ____ OK'd BY JWC
AUG 06 2014
Resubmit ____ BY ____ APPROVED DATE ✓ 8/12/14

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in Section 5.

Procedure No. 3011
Revision No.

Contractor Elderlee, Inc.
Authorized By RANDY SCOTT
Date 5/7/2012

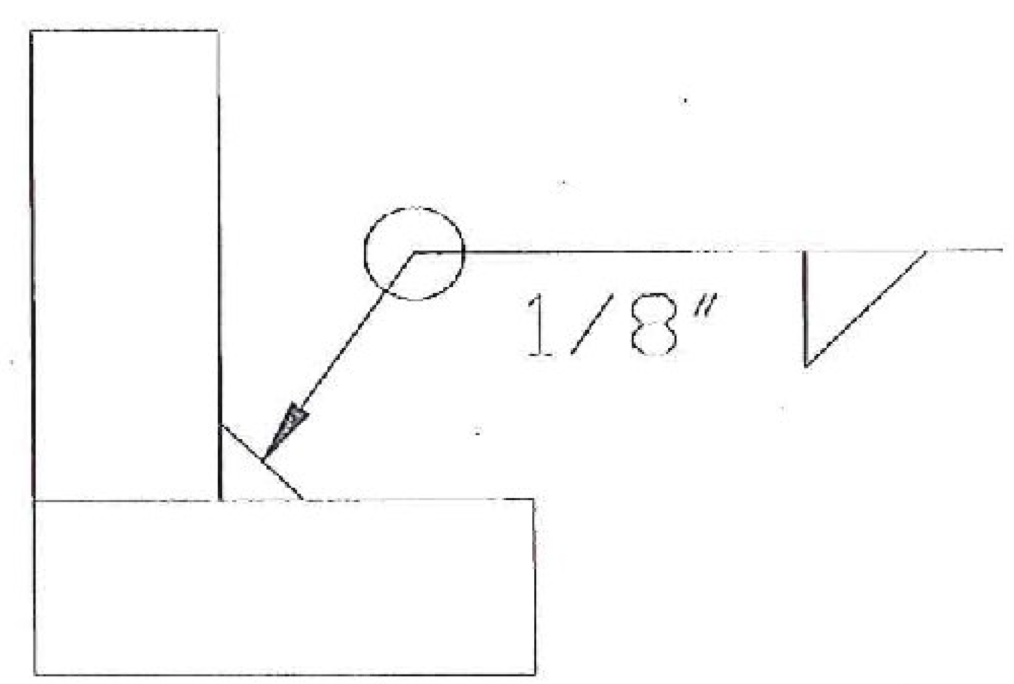
WELDING PROCEDURE SPECIFICATION

PQR ELDERLEE #3

Material Specification	ASTM-A500-A53-GRADE B TO A36
Welding Process	FCAW-G
Manual or Machine	SEMAUTOMATIC
Position of Welding	FLAT/HORIZONTAL
Filler Metal Specification	A5.29
Filler Metal Classification	E81T1-NI1C-JH4
Flux	N/A
Shielding Gas	CO 2 Dew Point -40DEG F FLOW RATE 50 CFH
Single or Multiple Pass	SINGLE
Single or Multiple Arc	SINGLE
Welding Current	DC
Polarity	REVERSE ELECTRODE POSITIVE
Welding Progression	STRINGER
Root Treatment	PER D1.5
Preheat and Interpass Temperature	PER. D1.5
Postheat Temperature	NONE
Heat Input	Min Max

WELDING PROCEDURE

Pass no.	Electrode size	Welding Current Amperes	Welding Current Volts	Travel speed	Joint detail
1	1/16	310	25	11	
Variable	LIMITS	341 TO 269	27 TO 23	12 TO 10	



CK'D ✓Trans Received OK'd BY JWC

AUG 06 2014

Resubmit BY APPROVED ✓ DATE 8/12/14

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in Section 5.

Procedure No. 3012

Revision No.

Contractor Elderlee, Inc.

Authorized By RANDY SCOTT

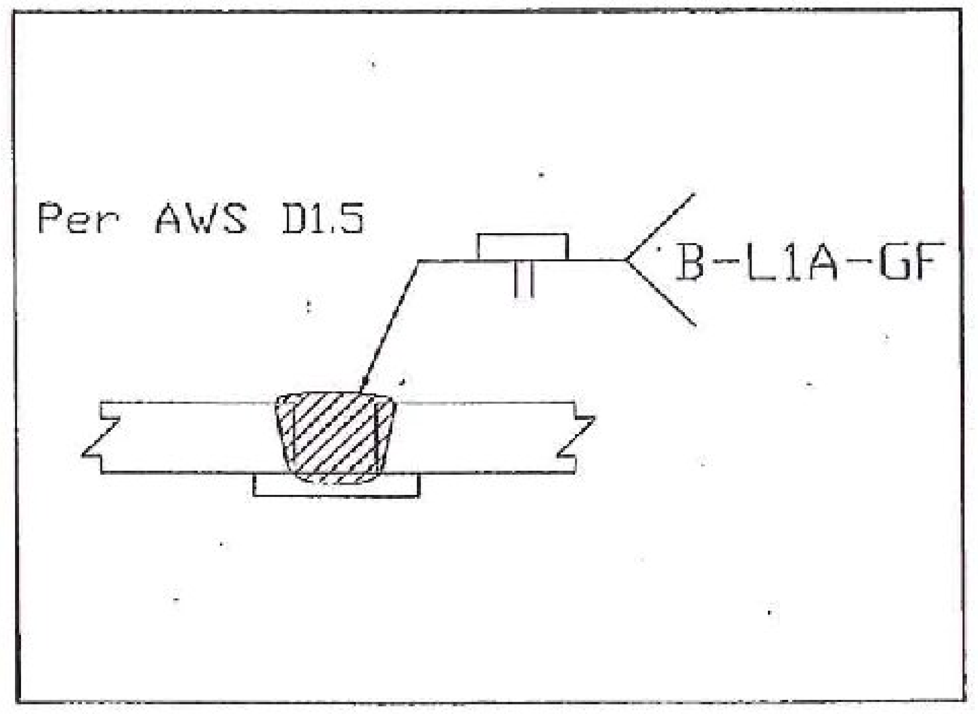
Date 3/20/2014

WELDING PROCEDURE SPECIFICATION

PQR ELDERLEE #3

Material Specification	A500 TO A36
Welding Process	FCAW-G
Manual or Machine	SEMAUTOMATIC
Position of Welding	FLAT/HORIZONTAL
Filler Metal Specification	A5.29
Filler Metal Classification	E81T1-NI1C-JH4
Flux	N/A
Shielding Gas	CO 2 Dew Point -40DEG F Flow Rate 50CFH
Single or Multiple Pass	SINGLE
Single or Multiple Arc	SINGLE
Welding Current	DC
Polarity	REVERSE
Welding Progression	STRINGER
Root Treatment	CLEAN PER D1.5
Preheat and Interpass Temperature	PER D1.5
Postheat Temperature	NONE
Heat Input	Min ______ Max ______

WELDING PROCEDURE

Pass no.	Electrode size	Welding Current Amperes	Welding Current Volts	Travel speed	Joint detail
	1/16	310	25	11	
Variable	LIMITS	341 TO 269	27 TO 23	12 TO 10	

VTrans Received
CK'D ______ OK'd BY Jwc
AUG 06 2014
Resubmit ______ BY ______
APPROVED DATE 8/12/14

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in Section 5.

Procedure No.	3026	Contractor	Elderlee, Inc.
Revision No.		Authorized By	RANDY SCOTT
		Date	3/24/2014