

04 - STRUCTURES INDEX OF DRAWINGS			
DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
S-01	INDEX OF DRAWINGS	S-18	PROTECTIVE FENCE DETAILS - 1
S-02	GENERAL NOTES	S-19	PROTECTIVE FENCE DETAILS - 2
S-03	GENERAL PLAN	S-20	PROTECTIVE FENCE DETAILS - 3
S-04	BORING LOGS	S-21	SURPLUS DISPOSAL LOCATION PLAN
S-05	GRADING PLAN	S-22	CTDOT BOUNDARY MARKER
S-06	STAGING AND WATER HANDLING		
S-07	LAYOUT PLAN		
S-08	INLET ELEVATIONS AND SECTIONS		
S-09	OUTLET ELEVATIONS AND SECTIONS		
S-10	HOST STRUCTURE DETAILS		
S-11	CORRUGATED STEEL STRUCTURAL PLATE LINER DETAILS		
S-12	WALL DETAILS		
S-13	REBAR DETAILS - 1		
S-14	REBAR DETAILS - 2		
S-15	REVETMENT DETAILS		
S-16	ROW IMPACT PLAN		
S-17	PERMIT PLANTING PLAN		

THE DESIGN APPEARS TO CONFORM TO APPLICABLE CRITERIA. APPROVAL IS NOT TO BE CONSTRUED TO MEAN THAT ALL ASPECTS OF THE DESIGN HAVE BEEN PERSONALLY CHECKED BY THE UNDERSIGNED.

TRANSPORTATION PRINCIPAL ENGINEER

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:	
	
DESIGNER/DRAFTER: JJS	CHECKED BY: NJM



CONNECTICUT  
DEPARTMENT OF  
TRANSPORTATION

PROJECT TITLE:
REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK

TOWN(S):
NAUGATUCK

DRAWING TITLE:
INDEX OF DRAWINGS

PROJECT NO.:
0087-0148

DRAWING NO.:
S-01
SHEET NO.:
04.01

## GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 819 (2024), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2025, AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 9TH EDITION-2020 AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE AND ROADWAY STRUCTURE DESIGN MANUAL (RELEASE 1.1).

MATERIAL STRENGTHS:

CONTROLLED LOW STRENGTH MATERIAL (CLSM):  $f'_c = 30$  TO 150 PSI @ 56 DAYS

CLASS PCC03360:  $F'_c = 3,000 \text{ PSI}$

CLASS PCC04462:  $F'_c = 4,000$  PSI

CLASS PCC04460:  $F'_c = 4,000$  PSI

SLIP-LINING GROUT  $f'_c = 300$  PSI @ 28 DAYS

REINFORCEMENT (ASTM A615 Gr60):  $F_y = 60,000$  PSI

CORRUGATED STEEL STRUCTURAL PLATE LINER: (ASTM A761)  $F_y = 28,000$  PSI

THE CONCRETE STRENGTH,  $F'_c$ , USED IN DESIGN IS NOTED ABOVE. THE COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF 6.01 - CONCRETE FOR STRUCTURES, AND M.03 - PORTLAND AND HYDRAULIC CEMENT CONCRETE.

DESIGN VEHICLE LIVE LOAD: HL-93

FUTURE PAVING ALLOWANCE: NONE

FOUNDATION PRESSURES: THE VARIOUS GROUP LOADINGS NOTED ON THE SUBSTRUCTURE PLAN SHEETS REFER TO THE GROUP LOADS AS GIVEN IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DIMENSIONS AND ELEVATIONS: ALL DIMENSIONS SHOWN ON THE PLANS ARE IN INCHES UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE GIVEN IN FEET TO THREE DECIMAL PLACES. WHEN DECIMAL DIMENSIONS/ELEVATIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.

EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR REVIEW, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

UTILITIES: THE FOLLOWING UNDERGROUND UTILITIES ARE LOCATED WITHIN THE PROJECT LIMITS AND SHALL BE MAINTAINED AND PROTECTED DURING CONSTRUCTION: CT WATER OWNED 10" CAST IRON PIPE AND EVERSOURCE OWNED 4" Ø GAS MAIN.

THE FOLLOWING UNDERGROUND UTILITIES ARE LOCATED WITHIN THE PROJECT LIMITS AND SHALL BE REMOVED IF ENCOUNTERED DURING CONSTRUCTION: CT WATER OWNED 24" Ø CAST IRON WATER MAIN AND CT WATER OWNED 20" CAST IRON WATER MAIN.

THE FOLLOWING UTILITIES ARE LOCATED WITHIN THE PROJECT LIMITS AND SHALL BE TEMPORARILY RELOCATED DURING CONSTRUCTION:

- \*THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY (DBA FRONTIER COMMUNICATIONS OF CONNECTICUT)
- \*COMCAST OF CONNECTICUT, INC
- \*LIGHTOWER FIBER NETWORKS, LLC (DBA CROWN CASTLE FIBER, LLC)
- \*THE CONNECTICUT LIGHT AND POWER COMPANY (DBA EVERSOURCE ENERGY - ELECTRIC DISTRIBUTION)

TEMPORARY RELOCATIONS OF OVERHEAD UTILITIES AT ROUTE 63 SHALL BE COMPLETED PRIOR TO INSTALLATION OF THE TEMPORARY WATER-HANDLING SYSTEM AT BRIDGE 06772. THE TEMPORARY WATER-HANDLING SYSTEM AT THE DOWNSTREAM EMBANKMENT MAY BE INSTALLED PRIOR TO COMPLETION OF OVERHEAD UTILITY RELOCATIONS AT ROUTE 63. THE CONTRACTOR SHALL COORDINATE ALL WORK RELATED TO UTILITY RELOCATION WITH THE RESPECTIVE UTILITY COMPANIES. THIS INCLUDES COORDINATING THE PROPOSED CLEARING AND GRUBBING LIMITS WITH AERIAL UTILITY COMPANIES PRIOR TO THE START OF WORK.

THE CONTRACTOR SHALL COORDINATE WITH EVERSOURCE GAS PRIOR TO TERS OR MBR POST/ANCHOR INSTALLATION AT THE OUTLET. A REPRESENTATIVE FROM EVERSOURCE GAS SHALL BE PRESENT ON-SITE DURING TERS INSTALLATION AT THE OUTLET. A REPRESENTATIVE FROM EVERSOURCE GAS SHALL ALSO BE PRESENT DURING HAND-DIGGING HOLES FOR GUIDERAIL POSTS AND ANCHORS.

BRIDGE IDENTIFICATION PLACARDS: THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW BRIDGE IDENTIFICATION SIGN AT THE LEADING TRAFFIC SIDE FACE OF THE BRIDGE HEADWALL AND ENDWALL. THE SIGNS SHALL BE FABRICATED WITH 40 GAUGE ALUMINUM SHEET METAL, THE SIGNS SHALL BE 4" X 12" WITH 3" WHITE RETRO REFLECTIVE BLOCK LETTERS ON GREEN RETRO REFLECTIVE SHEETING. EACH SIGN SHALL READ: 60772. ALL COST ASSOCIATED WITH PROVIDING AND INSTALLING THE BRIDGE SIGNS SHALL BE COVERED UNDER THE ITEM "SIGN FACE - SHEET ALUMINUM (TYPE IX RETRO REFLECTIVE SHEETING)". THE FINAL LOCATION AND ATTACHMENT METHOD FOR SIGN SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION

FEDERAL TREE CLEARING RESTRICTIONS ARE ANTICIPATED FOR PROTECTION OF ENDANGERED BATS. NO TRIMMING, CUTTING, OR REMOVAL OF TREES WITH A 3" DBH OR GREATER WILL BE ALLOWED FROM APRIL 15 TO OCTOBER 31. SCHEDULE CONSTRUCTION ACTIVITIES ACCORDINGLY.

## CONCRETE NOTES

REMAIN-IN-PLACE FORMS: THE USE OF REMAIN-IN-PLACE FORMS ON THIS STRUCTURE IS NOT ALLOWED. IN LIEU OF A TEMPORARY FORM WORK BETWEEN THE LINER AND HOST STRUCTURE TO BE USED DURING PLACEMENT OF SLIP-LINING GROUT, THE CONTRACTOR MAY MAKE USE OF A PERMANENT BULKHEAD CONSTRUCTED OF MORTAR. TEMPORARY CONTRACTOR DESIGNED BULKHEADS OR PERMANENT MORTAR BULKHEADS TO BE INCLUDED FOR PAYMENT UNDER "CORRUGATED STEEL STRUCTURAL PLATE LINER". SEE DETAILS ON DRAWING NO. S-11.

THE FOLLOWING PAY ITEMS AND CONCRETE CLASSES ARE REQUIRED FOR CAST-IN-PLACE BRIDGE COMPONENTS.

ITEM NAME	BRIDGE COMPONENTS	PCC CLASS
ABUTMENT AND WALL CONCRETE	HEADWALLS, ENDWALLS, & WINGWALLS	PCC04462
FOOTING CONCRETE	FOOTINGS	PCC04460
CLASS PCC04462	END & INTERMEDIATE CLOSURE POURS	PCC04462
PROTECTIVE FENCE (5' HIGH)	PROTECTIVE FENCE FOUNDATIONS AT BRIDGE OUTLET	PCC03360

JOINT SEAL: SEE SECTION 6.01

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" X 1" UNLESS DIMENSIONED OTHERWISE

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE 3" CLEAR COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60 AND GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE. ALL REINFORCEMENT SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS - GALVANIZED".

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER. SEQUENCE-OF-POUR JOINTS SHALL BE SUBMITTED AND APPROVED IN WRITING BY THE ENGINEER BEFORE PLACING CONCRETE.

PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER TO BE INCLUDED FOR PAYMENT UNDER THE ITEM " 1/2" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES."

SLIP-LINING GROUT: SLIP-LINING GROUT SHALL BE USED TO FILL THE VOID BETWEEN THE EXISTING CMP ARCH AND THE CORRUGATED STEEL STRUCTURAL PLATE LINER.

CONTROLLED LOW STRENGTH MATERIAL: CONTROLLED LOW STRENGTH MATERIAL SHALL BE USED TO FILL VOIDS BEHIND THE EXISTING SADDLE WALL AT OUTLET.

HYDRAULIC DATA	
DRAINAGE AREA	0.69 SQ. MILE
DESIGN FREQUENCY	50 YEAR
DESIGN DISCHARGE	220 CFS
UPSTREAM AVERAGE DAILY FLOW ELEVATION	315.4 FT
DOWNSTREAM AVERAGE DAILY FLOW ELEVATION	308.9 FT
UPSTREAM DESIGN WATER SURFACE ELEVATION	320.6 FT
DOWNSTREAM DESIGN WATER SURFACE ELEVATION	311.4 FT

\*NOTE - NO SCOUR INFORMATION FOR  
HYDRAULIC DATA TABLE AS THIS IS A CULVERT

## NOTICE TO BRIDGE INSPECTORS

THE DEPARTMENT'S BRIDGE SAFETY PROCEDURES REQUIRE THIS BRIDGE TO BE INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUALS FOR BRIDGE INSPECTION. ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS. (THE LISTING FOR COMPONENTS FOR SPECIFIC ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE IMPORTANCE OF INSPECTION OF ANY OTHER COMPONENT OF THE STRUCTURE.) THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE MANAGER OF BRIDGE SAFETY AND EVALUATION

COMPONENT OR DETAIL	BRIDGE SHEET REFERENCE
FOLLOW NORMAL INSPECTION PROCEDURES	-

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:		 <b>CONNECTICUT</b> DEPARTMENT OF TRANSPORTATION	PROJECT TITLE:	TOWN(S):	DRAWING TITLE:	PROJECT NO.:	DRAWING NO.:
 DESIGNER/DRAFTER: JJS      CHECKED BY: NJM			<b>REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK</b>	<b>NAUGATUCK</b>	<b>GENERAL NOTES</b>	<b>0087-0148</b>	<b>S-02</b> SHEET NO.: <b>04.02</b>

LASTED SAVED BY: SoltysJ FILE NAME: C:\Users\soltysj\State of Connecticut\0087-0148 - Design\Bridge\Contract\_Plans\FDP2\Structures\S-02\_General\_Notes.dgn  
PLOTTED DATE: 7/15/2025





COORDINATE GRID  
AD 83(2011)

CONNECTICUT

100+00

101+00

102+00

103+00

104+00

105+00

106+00

107+00

108+00

109+00

110+00

111+00

112+00

113+00

114+00

115+00

116+00

117+00

118+00

119+00

120+00

121+00

122+00

123+00

124+00

125+00

126+00

127+00

128+00

129+00

130+00

131+00

132+00

133+00

134+00

135+00

136+00

137+00

138+00

139+00

140+00

141+00

142+00

143+00

144+00

145+00

146+00

147+00

148+00

149+00

150+00

151+00

152+00

153+00

154+00

155+00

156+00

157+00

158+00

159+00

160+00

161+00

162+00

163+00

164+00

165+00

166+00

167+00

168+00

169+00

170+00

171+00

172+00

173+00

174+00

175+00

176+00

177+00

178+00

179+00

180+00

181+00

182+00

183+00

184+00

185+00

186+00

187+00

188+00

189+00

190+00

191+00

192+00

193+00

194+00

195+00

196+00

197+00

198+00

199+00

200+00

201+00

202+00

203+00

204+00

205+00

206+00

207+00

208+00

209+00

210+00

211+00

212+00

213+00

214+00

215+00

216+00

217+00

218+00

219+00

220+00

221+00

222+00

223+00

224+00

225+00

226+00

227+00

228+00

229+00

230+00

231+00

232+00

233+00

234+00

235+00

236+00

237+00

238+00

239+00

240+00

241+00

242+00

243+00

244+00

245+00

246+00

247+00

248+00

249+00

250+00

251+00

252+00

253+00

254+00

255+00

256+00

257+00

258+00

259+00

260+00

261+00

262+00

263+00

264+00

265+00

266+00

267+00

268+00

269+00

270+00

271+00

272+00

273+00

274+00

275+00

276+00

277+00

278+00

279+00

280+00

281+00

282+00

283+00

284+00

285+00

286+00

287+00

288+00

289+00

290+00

291+00

292+00

293+00

294+00

295+00

296+00

297+00

298+00

299+00

300+00

301+00

302+00

303+00

304+00

305+00

306+00

307+00

308+00

309+00

310+00

311+00

312+00

313+00

314+00

315+00

316+00

317+00

318+00

319+00

320+00

321+00

322+00

323+00

324+00

325+00

326+00

327+00

328+00

329+00

330+00

331+00

332+00

333+00

334+00

335+00

336+00

337+00

338+00

339+00

340+00

341+00

342+00

343+00

344+00

345+00

346+00

347+00

348+00

349+00

350+00

351+00

352+00

353+00

354+00

355+00

356+00

357+00

358+00

359+00

360+00

361+00

362+00

363+00

364+00

365+00

366+00

367+00

368+00

369+00

370+00

371+00

372+00

373+00

374+00

375+00

376+00

377+00

378+00

379+00

380+00

381+00

382+00

383+00

384+00

385+00

386+00

387+00

388+00

389+00

390+00

391+00

392+00

393+00

394+00

395+00

396+00

397+00

398+00

399+00

400+00

401+00

402+00

403+00

404+00

405+00

406+00

407+00

408+00

409+00

410+00

411+00

412+00

413+00

414+00

415+00

Driller: Jeff Donovan		Connecticut DOT Boring Report				Hole No.: B-1	
Inspector: Glenn L. Arzt		Town: Naugatuck, Connecticut				Stat./Offset: 103+81/15' Left	
Engineer: Nick Assard		Project No.: 0087-0148				Northing: 731556.9	
Start Date: 5-20-20		Route No.: 63				Easting: 924765.2	
Finish Date: 5-20-20		Bridge No.: 06772				Surface Elevation: 323.9	
Project Description: Rehabilitation of Bridge No. 06772 Route 63 over Straitsville Brook							
Casing Size/Type: 4" HFJ SPUN		Sampler Type/Size: 2"SS				Core Barrel Type: NX2	
Hammer Wt.: Fall: In.		Hammer Wt.: 140 Fall: 30In.					
Groundwater Observations: @.5' after 0 hours							
SAMPLES							
Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes
0						Pavement Structure	Top 4" pavement structure
1	S-1	15 27 28 32	24	17		Miscellaneous Fill	Bottom 13": Brown F-M GRAVEL, some c-f sand, trace silt
5	S-2	9 13 8 7	24	2			Gray F-C GRAVEL, trace silt
10	S-3	7 5 5 19	24	5			Brown F-C SAND and SILT, some c-f gravel
15	S-4	17 18 32 24	24	16		Glacial Till	Brown C-F GRAVEL, some c-f sand, trace silt
20	S-5	26 90	10	10		Boulder	Brown C-F SAND, some c-f gravel, trace silt
25	S-6	60	3	3		Glacial Till	Brown F-C SAND and SILT, trace f-c gravel
30	S-7	50	0	0		Boulder	No Recovery
35	C-1		60	62	68.3	Glacial Till	Gray medium grained, massive bedded, moderately fractured, slightly weathered Gneiss Core Times (min/ft): 1:30, 2:00, 1:30, 2:00, 1:30
40	C-2		60	60	81.6	Bedrock	Gray medium grained, thick bedded, moderately fractured, slightly weathered Gneiss Core Times (min/ft): 1:30, 1:30, 1:30, 2:00, 1:30
45							END OF BORING 40ft
50							
Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%							
Total Penetration in Earth: 30ft Core: 10ft			NOTES: Pavement structure consists of 12" bituminous concrete pavement with no discernable subbase. Roller bit through boulders from 20' to 22.5' and from 26' to 27.5'. The borehole caved to 5.25 feet upon removal of casing				Sheet 1 of 1  SM-001-M REV. 1/02

**B-1**

Driller: Jeff Donovan		Connecticut DOT Boring Report				Hole No.: B-2				
Inspector: Glenn L. Arzt		Town: Naugatuck, Connecticut				Stat./Offset: 103+38/14' Right				
Engineer: Nick Assard		Project No.: 0087-0148				Northing: 731538.6				
Start Date: 5-19-20		Route No.: 63				Easting: 924716.4				
Finish Date: 5-20-20		Bridge No.: 06772				Surface Elevation: 324.4				
Project Description: Rehabilitation of Bridge No. 06772 Route 63 over Straitsville Brook										
Casing Size/Type: 4" HFJ SPUN		Sampler Type/Size: 2"SS				Core Barrel Type: NX2				
Hammer Wt.: Fall: in.		Hammer Wt.: 140 Fall: 30in.								
Groundwater Observations: @9.5 after 0 hours										
SAMPLES										
Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches		Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)	
0							Pavement Structure			
	S-1	19	23	25	30	24	17	Miscellaneous Fill	Brown f-c SAND, some f-c gravel, trace silt	
5	S-2	90				4	1		Brown F-C SAND and SILT, some c-f gravel	320
10	S-3	16	21	30	35	24	3		Brown C-F SAND and C-F GRAVEL, little silt	315
15	S-4	18	33	50		12	5		Gray C-F SAND, some c-f gravel, little silt	310
							Glacial Till			
							Boulder			
20	S-5	17	32	37	36	24	12	Glacial Till	Brown C-F SAND and C-F GRAVEL, little silt	305
25	S-6	21	21	37	20	24	16		Brown F-C SAND and SILT, some c-f	300
							Boulder			
30	S-7	24	45	35	22	24	19		Brown C-F GRAVEL, some f-c sand, some silt	295
							Glacial Till			
35	C-1					60	58	96.6	Gray medium grained, massive bedded, slightly fractured, slightly weathered Gneiss Core Times (min/ft): 2:00, 2:30, 2:00, 2:30, 2:00	290
40	C-2					60	58	93.3	Gray medium grained, thick bedded, slightly fractured, slightly weathered Gneiss Core Times (min/ft): 3:30, 2:00, 2:30, 2:30, 3:00	285
45									END OF BORING 43ft	280
50										275
Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%										
Total Penetration in Earth: 33ft Rock: 10ft				NOTES: Pavement structure consists of 12" bituminous concrete pavement with no discernable subbase. Rollerbit through boulders from 16.5' to 18' and from 26.5' to 29.5' The borehole caved to 5.4 feet upon removal of casing					Sheet 1 of 1	
No. of Soil Samples: 7 No. of Core Runs: 2									SM-001-M REV. 1/02	

B-2

[illegible]

SIGNATURE BLOCK:		 <b>CONNECTICUT DEPARTMENT OF TRANSPORTATION</b>	PROJECT TITLE:  <b>REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK</b>	TOWN(S):  <b>NAUGATUCK</b>	DRAWING TITLE:  <b>BORING LOGS</b>	PROJECT NO.:  <b>0087-0148</b>	DRAWING NO.:  <b>S-04</b>
 DESIGNER/DRAFTER: JJS      CHECKED BY: NJM							SHEET NO.:  <b>04.04</b>

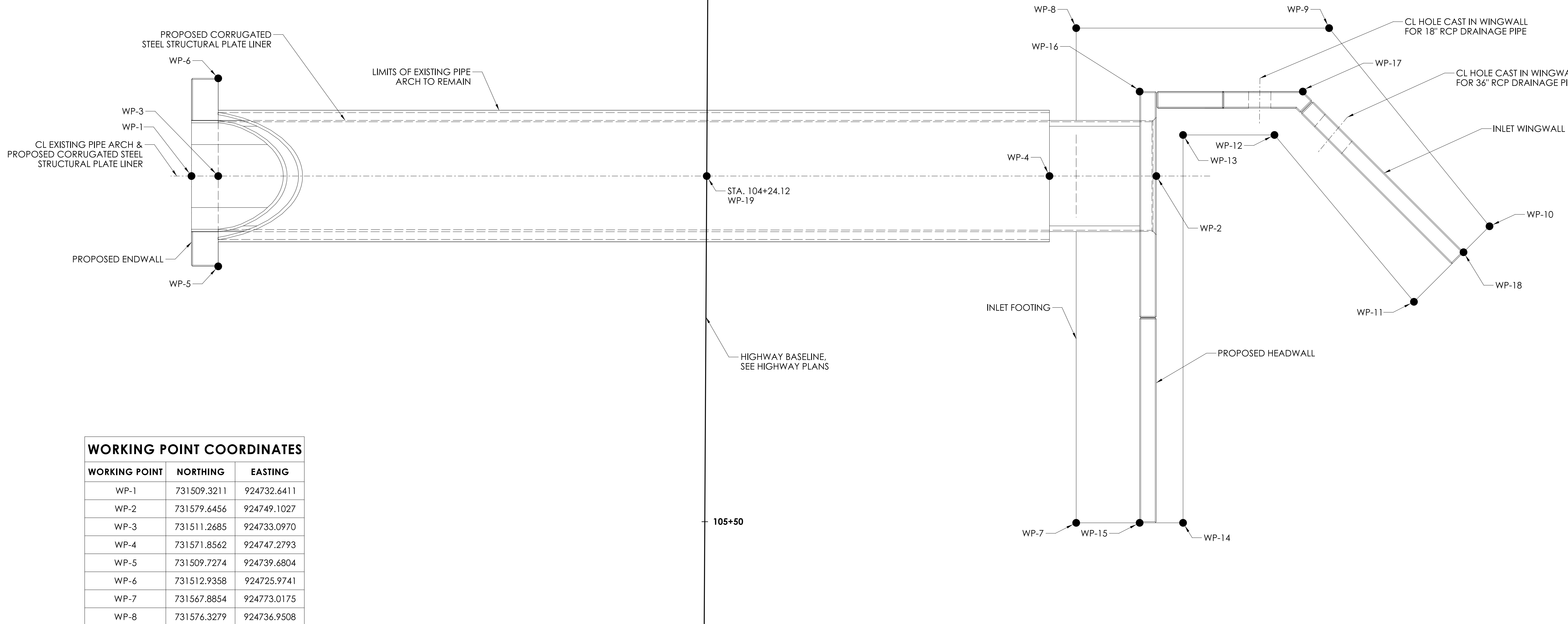
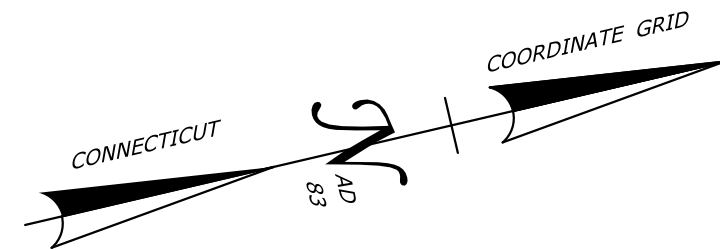










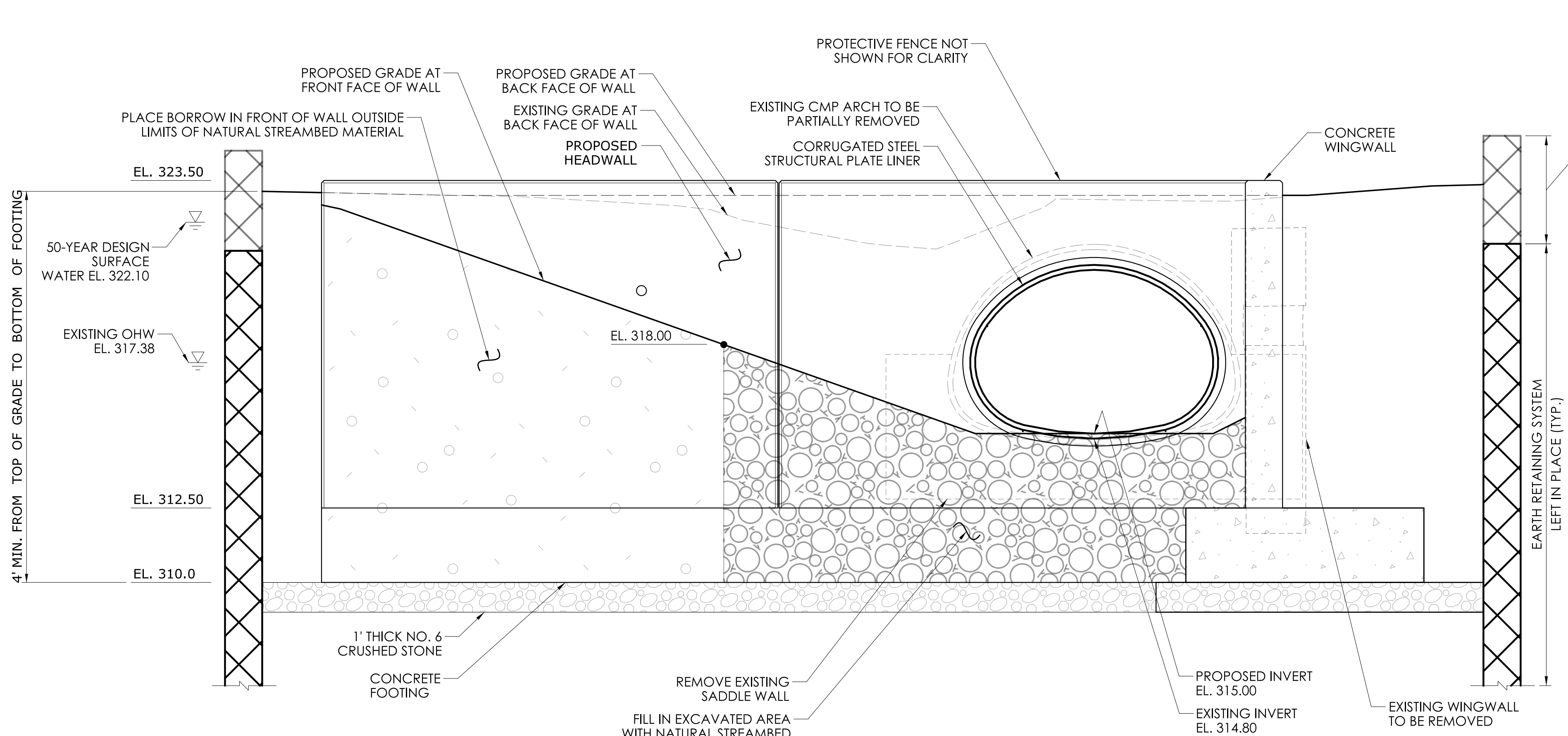


WORKING POINT COORDINATES

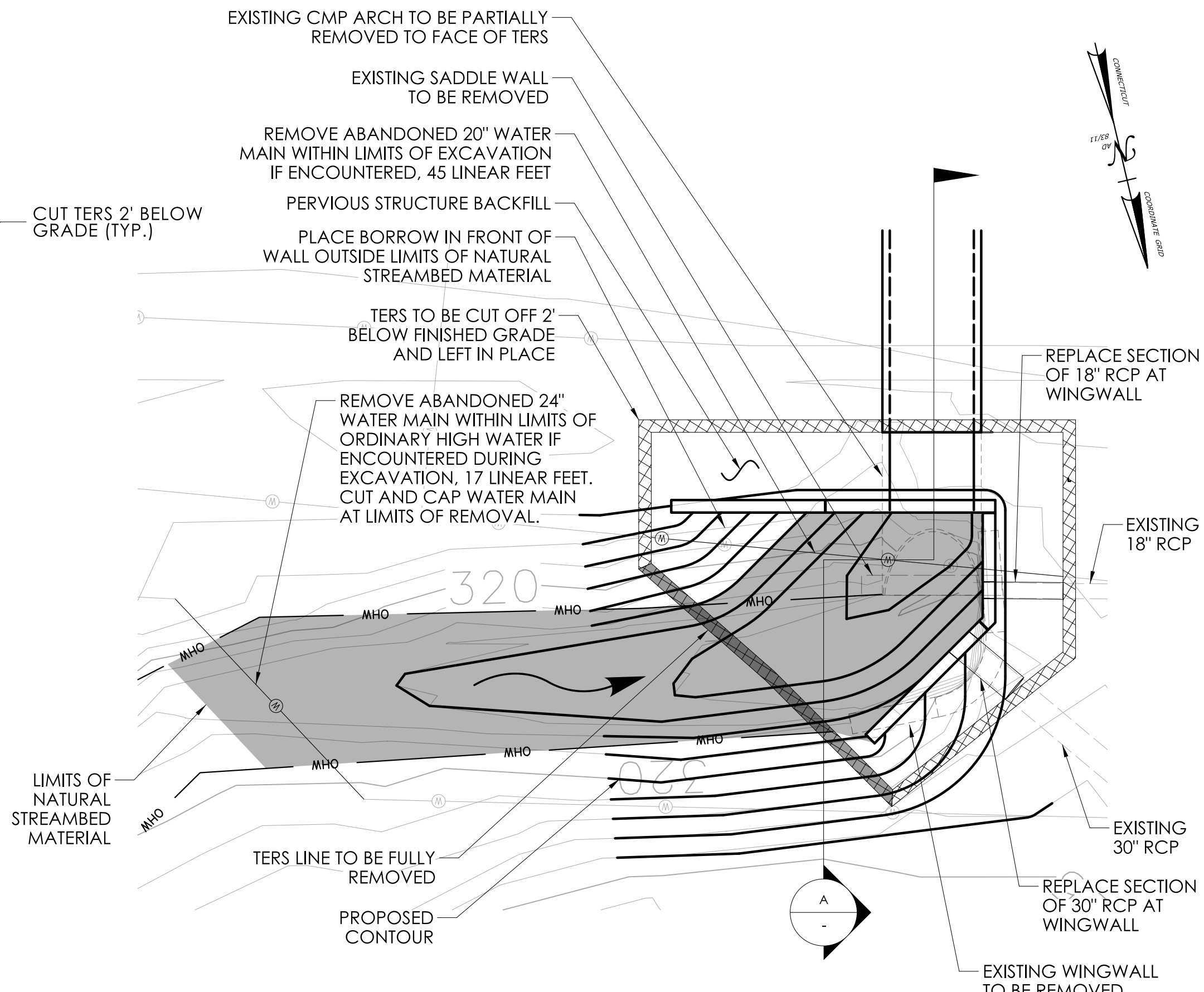
WORKING POINT	NORTHING	EASTING
WP-1	731509.3211	924732.6411
WP-2	731579.6456	924749.1027
WP-3	731511.2685	924733.0970
WP-4	731571.8562	924747.2793
WP-5	731509.7274	924739.6804
WP-6	731512.9358	924725.9741
WP-7	731567.8854	924773.0175
WP-8	731576.3279	924736.9508
WP-9	731594.7633	924741.2661
WP-10	731603.0733	924758.4481
WP-11	731596.2760	924762.6668
WP-12	731588.9576	924748.1234
WP-13	731582.2940	924746.5636
WP-14	731575.6749	924774.8409
WP-15	731572.5104	924774.1001
WP-16	731579.8703	924742.6584
WP-17	731591.7649	924745.4427
WP-18	731600.7367	924759.8983
WP-19	731546.8757	924741.4319

PLAN - BRIDGE NO. 06772

REV.	DATE	REVISION DESCRIPTION

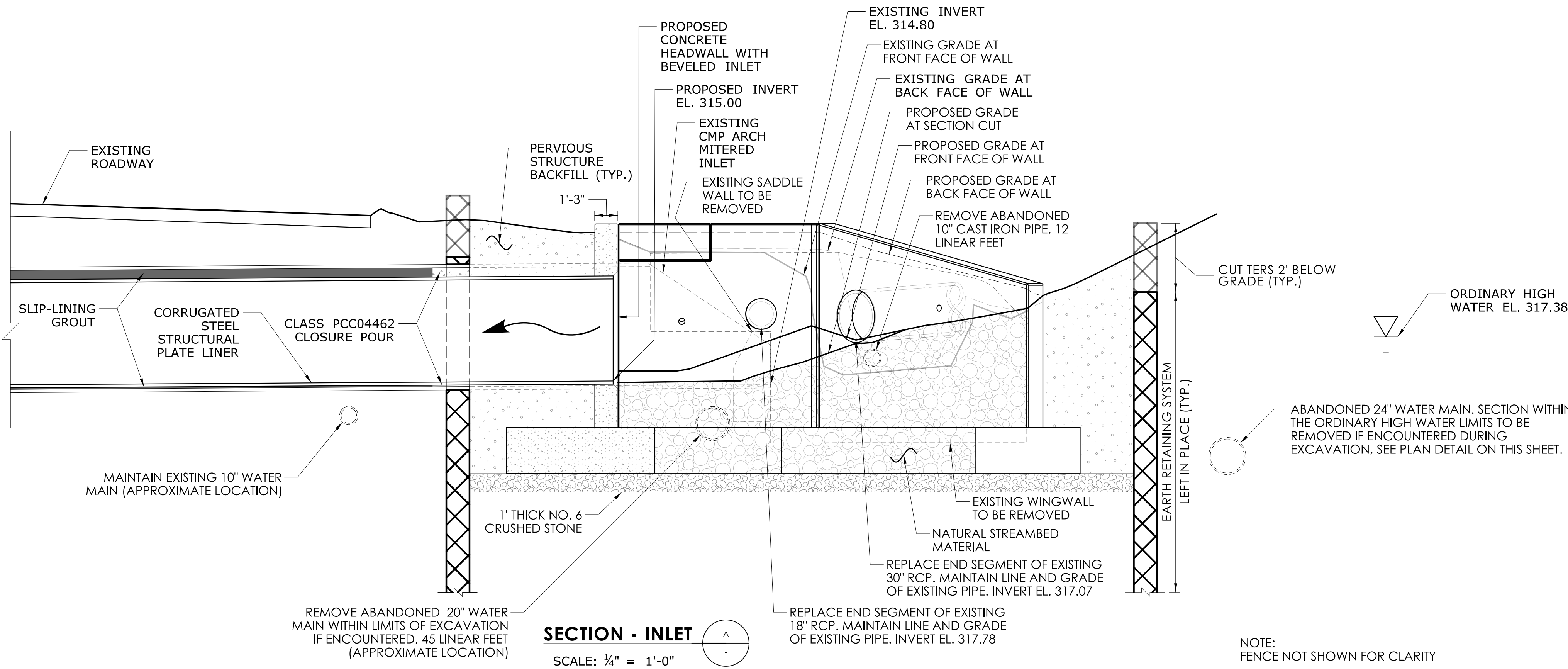


**ELEVATION - INLET**  
SCALE:  $\frac{3}{8}$ " = 1'-0"



**PLAN - INLET**  
SCALE:  $\frac{3}{32}$ " = 1'-0"

NOTE:  
INSIDE FACE OF TERS AND ERS UP TO BE  
INSTALLED AT A 2' OFFSET FROM LIMITS  
OF PROPOSED FOOTINGS



**SECTION - INLET**  
SCALE:  $\frac{1}{4}$ " = 1'-0"

NOTE:  
FENCE NOT SHOWN FOR CLARITY

### RELINING SEQUENCE

- ALL DEBRIS SHALL BE REMOVED IN THE EXISTING CULVERT. SEE DRAWING S-10.
- PRIOR TO THE INSTALLATION OF THE LINER, THE CONTRACTOR SHALL VERIFY THAT VERTICAL CLEARANCE AT ALL LOCATIONS THROUGHOUT THE HOST STRUCTURE WILL ALLOW FOR THE INSTALLATION OF CORRUGATED STEEL STRUCTURAL PLATE LINER WITH A MINIMUM OF 1" BELOW THE OUTSIDE OF LINER AND INSIDE OF HOST STRUCTURE TO ENSURE ADEQUATE CLEARANCE FOR GROUTING. IN AREAS WHERE THE VERTICAL CLEARANCE IS BELOW THE MINIMUM REQUIRED FOR LINING ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND DEVELOP A PROCEDURE TO MODIFY THE HOST STRUCTURE. ALL WORK RELATED TO HOST STRUCTURE MODIFICATION TO BE INCLUDED FOR PAYMENT UNDER "CORRUGATED STEEL STRUCTURAL PLATE LINER"
- MODIFY HOST STRUCTURE AS NECESSARY FOR PLACEMENT OF SLIP-LINING GROUT TO ENSURE ALL VOIDS BEHIND HOST STRUCTURE WALLS ARE FILLED ENTIRELY. LOCATION OF THE VOIDS SHALL BE DETERMINED BY TAPPING THE CULVERT WITH A HAMMER TO DETECT HOLLOW AREAS. THIS WORK TO BE INCLUDED FOR PAYMENT UNDER THE ITEM "CORRUGATED STEEL STRUCTURAL PLATE LINER."
- INSTALL "CORRUGATED STEEL STRUCTURAL PLATE LINER" IN THE EXISTING CMP ARCH.
- PUMP SLIP-LINING GROUT BETWEEN THE LINER AND THE HOST STRUCTURE.
- FORM BEVELED INLET IN CONCRETE CLOSURE POUR FOR HEADWALL. SEE S-11.

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:  
  
DESIGNER/DRAFTER: JJS  
CHECKED BY: NJM

SCALE AS NOTED



CONNECTICUT  
DEPARTMENT OF  
TRANSPORTATION

PROJECT TITLE:

**REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE  
63 OVER STRAITSVILLE BROOK**

TOWN(S):

**NAUGATUCK**

DRAWING TITLE:

**INLET ELEVATIONS AND  
SECTIONS**

PROJECT NO.:

**0087-0148**

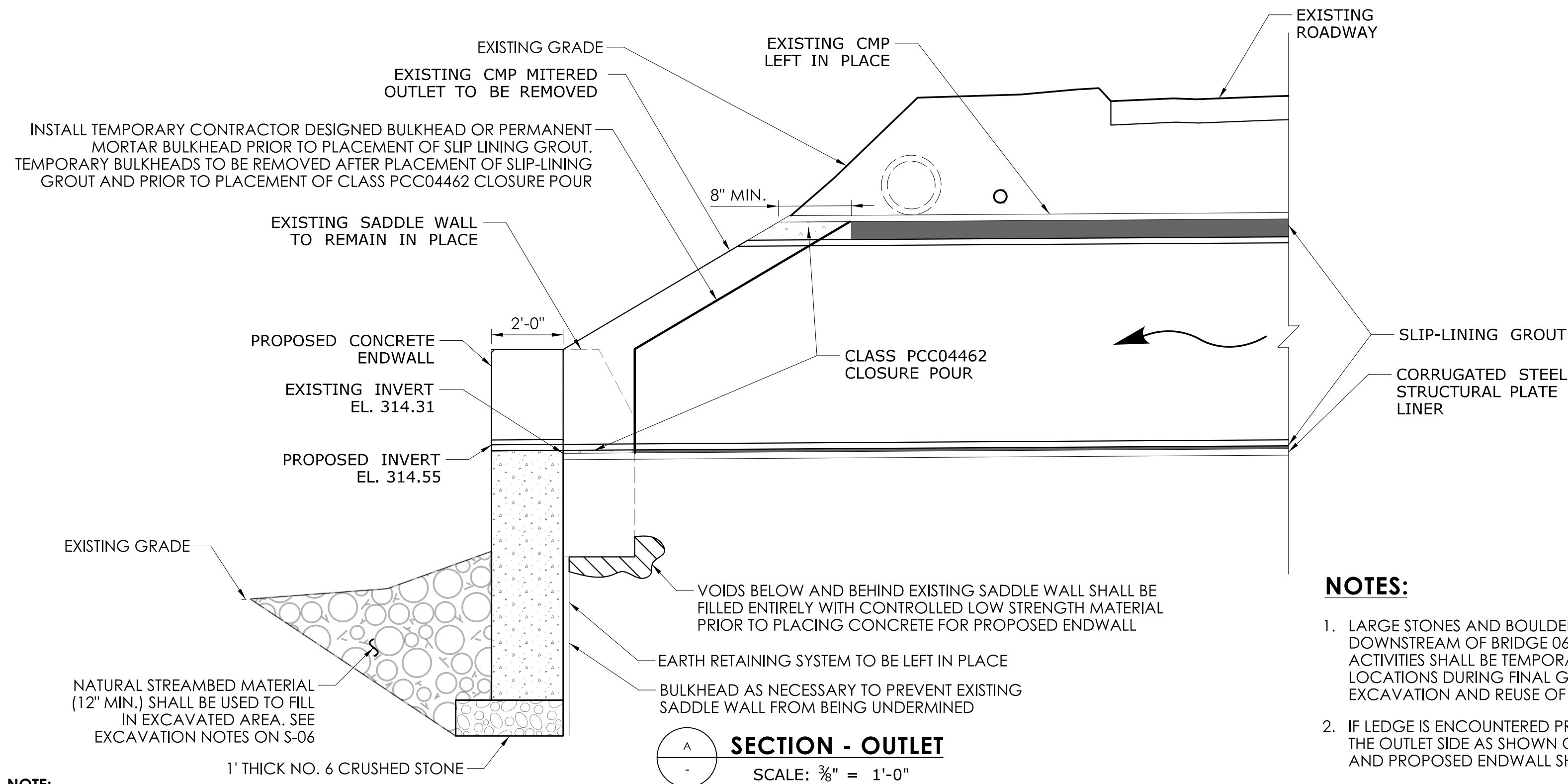
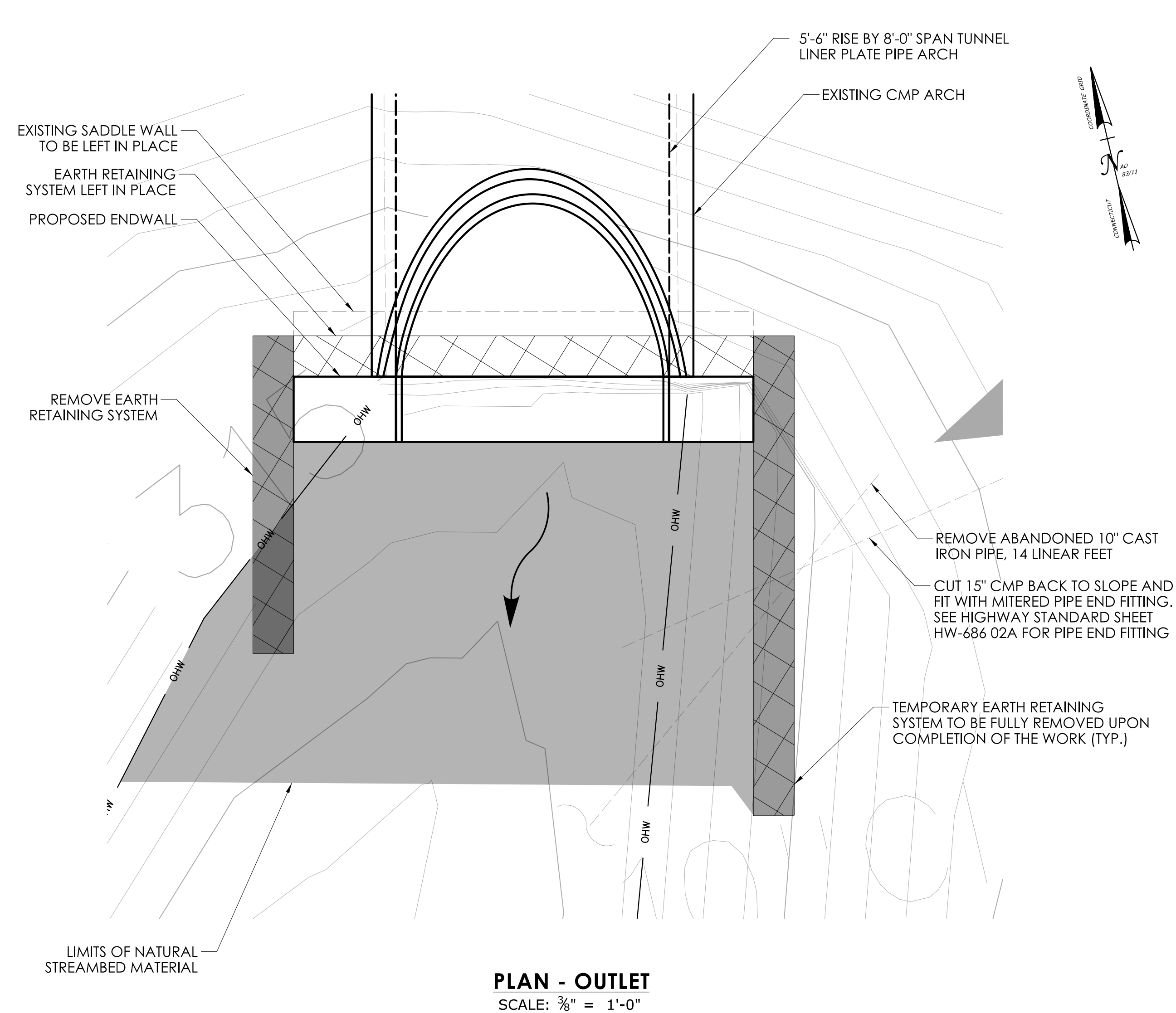
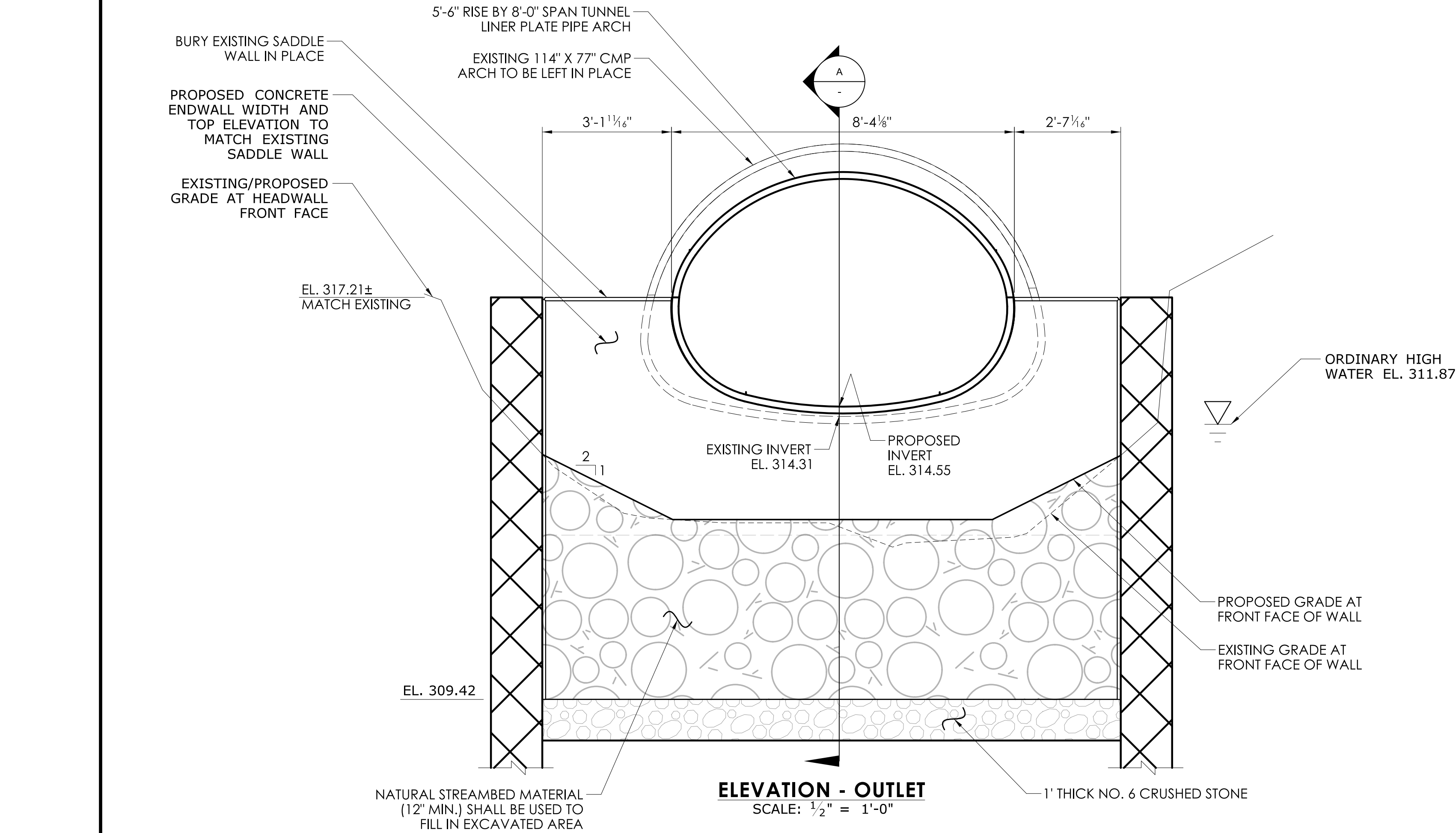
DRAWING NO.:

**S-08**

SHEET NO.:

**04.08**

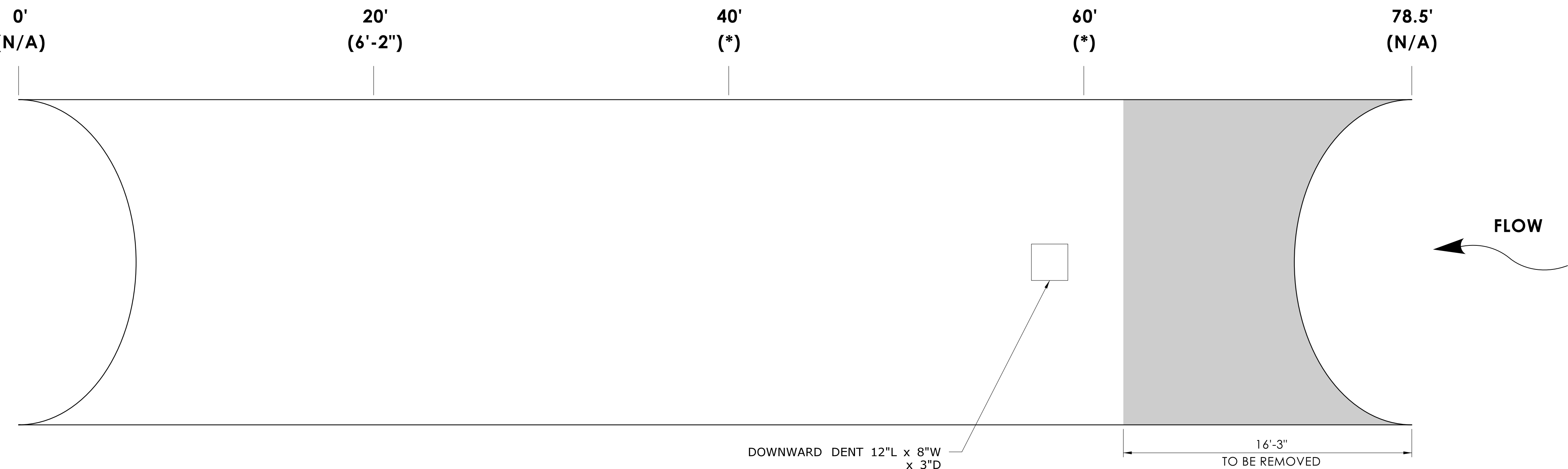




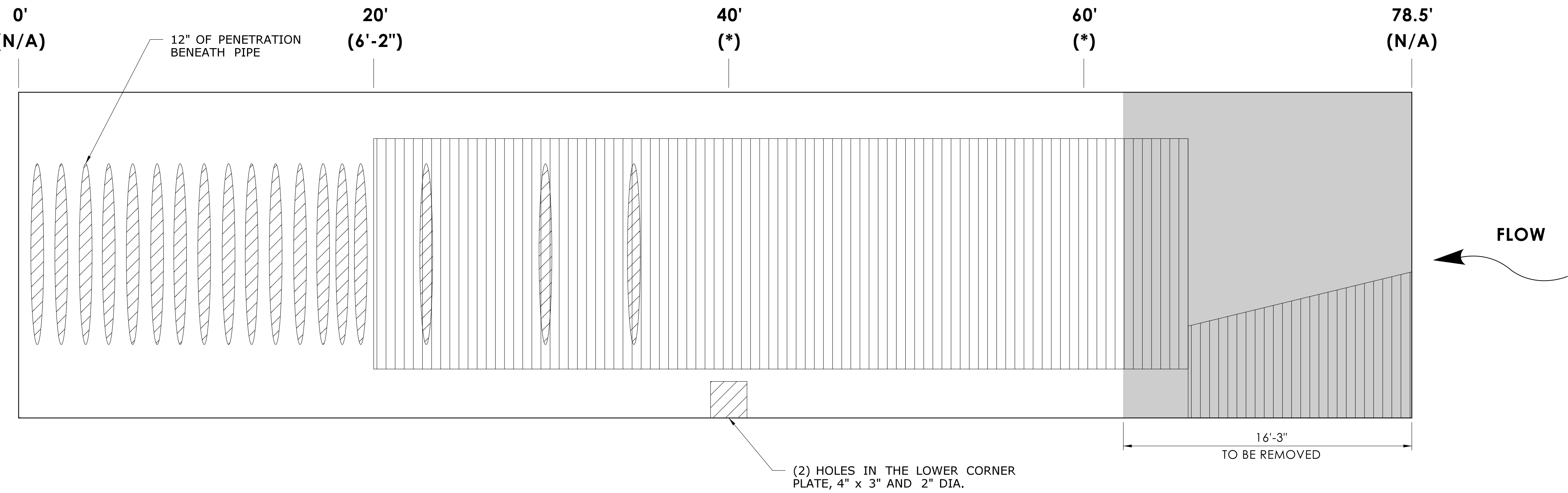
- RELINING SEQUENCE**
- ALL DEBRIS SHALL BE REMOVED IN THE EXISTING CULVERT. SEE DRAWING S-10.
  - PRIOR TO THE INSTALLATION OF THE LINER, THE CONTRACTOR SHALL VERIFY THAT VERTICAL CLEARANCE AT ALL LOCATIONS THROUGHOUT THE HOST STRUCTURE WILL ALLOW FOR THE INSTALLATION OF CORRUGATED STEEL STRUCTURAL PLATE LINER WITH A MINIMUM OF 1" BELOW THE OUTSIDE OF LINER AND INSIDE OF HOST STRUCTURE TO ENSURE ADEQUATE CLEARANCE FOR GROUTING. MINIMUM CLEARANCES MAY BE OBTAINED THROUGH THE USE OF RAILS AND/OR BLOCKING AS OUTLINED IN THE SPECIAL PROVISION FOR "CORRUGATED STEEL STRUCTURAL PLATE LINER." IN AREAS WHERE THE VERTICAL CLEARANCE IS BELOW THE MINIMUM REQUIRED FOR LINING ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND DEVELOP A PROCEDURE TO JACK THE HOST STRUCTURE. ALL WORK RELATED TO JACKING ACTIVITIES TO BE INCLUDED FOR PAYMENT UNDER "CORRUGATED STEEL STRUCTURAL PLATE LINER."
  - DRILL EXPLORATORY HOLES AT THE LOCATIONS WHERE VOIDS HAVE BEEN DETECTED. EXPLORATORY HOLES SHALL BE SUFFICIENT IN SIZE AND LOCATION TO ENSURE SLIP-LINING GROUT WILL ENTIRELY FILL ALL VOIDS BEHIND THE HOST STRUCTURE WALLS DURING THE GROUTING PROCESS. THIS IS TO BE INCLUDED FOR PAYMENT UNDER THE ITEM "CORRUGATED STEEL STRUCTURAL PLATE LINER." LOCATION OF THE VOIDS SHALL BE DETERMINED BY TAPPING THE CULVERT WITH A HAMMER TO DETECT HOLLOW AREAS.
  - INSTALL "CORRUGATED STEEL STRUCTURAL PLATE LINER" IN THE EXISTING CMP.
  - PUMP SLIP-LINING GROUT BETWEEN THE LINER AND THE HOST STRUCTURE.

REV.	DATE	REVISION DESCRIPTION	SIGNATURE BLOCK:	SCALE AS NOTED	CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE:	TOWN(S):	DRAWING TITLE:	PROJECT NO.:	DRAWING NO.:
			<i>Arthur J. Carlini</i>			REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK	NAUGATUCK	OUTLET ELEVATIONS AND SECTIONS	0087-0148	S-09
			DESIGNER/DRAFTER: JJS	CHECKED BY: NJM						SHEET NO. 04.09

LASTED SAVED BY: soltysj FILE NAME: C:\Users\soltysj\State of Connecticut\0087-0148 - Design\Bridge\Contract\_Plans\Addendum 1\Structures\S-09\_Outlet\_Elevations\_and\_Sections.dgn PLOTTED DATE: 7/9/2025



PLAN - EXISTING CMP CROWN INTRADOS



PLAN - EXISTING CMP INVERT

- GENERAL NOTES**
1. ASPHALTIC COATING MOSTLY INTACT FROM CROWN TO LOWER CORNER PLATES.
  2. HEAVY RUST, INCLUDING LAMINAR TYPE AND PITTING ALONG THE LOWER CORNER PLATES AND BOLTS AT THE INVERT CONNECTIONS.
  3. COMPLETE LOSS OF ASPHALT COATING WITH MODERATE TO HEAVY RUST AND PERFORATIONS ALONG CULVERT FLOOR.
  4. ANY EXISTING COATINGS OR MATERIALS INCLUDING LOOSE FINS, STONES, SAND, SEDIMENT, ORGANIC MATERIAL, ETC. SHALL BE REMOVED TO ENSURE AN ACCEPTABLE FIT-UP OF THE LINER.
  5. HOST STRUCTURE SHALL BE DEWATERED AND THOROUGHLY CLEANED OF ANY SEDIMENT OR DEBRIS PRIOR TO INSTALLATION OF THE LINER. TEMPORARY WATER HANDLING INCLUDING BYPASS PIPE, SHALL BE IN PLACE DURING CLEANING/GROUTING ACTIVITIES. THE CONTRACTOR SHALL TAKE THE NECESSARY MEASURES TO ENSURE THAT SEDIMENT AND DEBRIS DO NOT ENTER THE CULVERT SYSTEM DURING LINING AND GROUTING ACTIVITIES.
  6. ALL WORK RELATED TO CLEANING OF THE HOST STRUCTURE PRIOR TO INSTALLATION OF THE LINER TO BE INCLUDED FOR PAYMENT UNDER "CORRUGATED STEEL STRUCTURAL PLATE LINER." MATERIAL USED TO FILL VOIDS BEHIND HOST STRUCTURE WALLS TO BE INCLUDED FOR PAYMENT UNDER "SLIP-LINING GROUT."
  7. ANY PERFORATIONS AND VOIDS BEHIND HOST STRUCTURE WALLS SHALL BE INSPECTED AND FILLED WITH SLIP-LINING GROUT TO ENSURE FULL CONTACT OF THE HOST PIPE WITH THE SURROUNDING SOILS.
  8. THE ORIGINAL SECTION OF THE EXISTING PIPE IS ASSUMED TO BE A 6'-5" RISE WITH A 9'-6" SPAN.
- (\*) LOCATION WHERE DEBRIS (SILT, SAND & GRAVEL) INTERRUPT MEASUREMENT OF EXISTING PIPE ARCH.

**LEGEND**

||||| ACCUMULATION OF DEBRIS UP TO 8' DEEP

/// PERFORATION (RANGE FROM 6" x 1" to 31" x 2")

■ APPROXIMATE LIMITS OF EXISTING STRUCTURE TO BE REMOVED

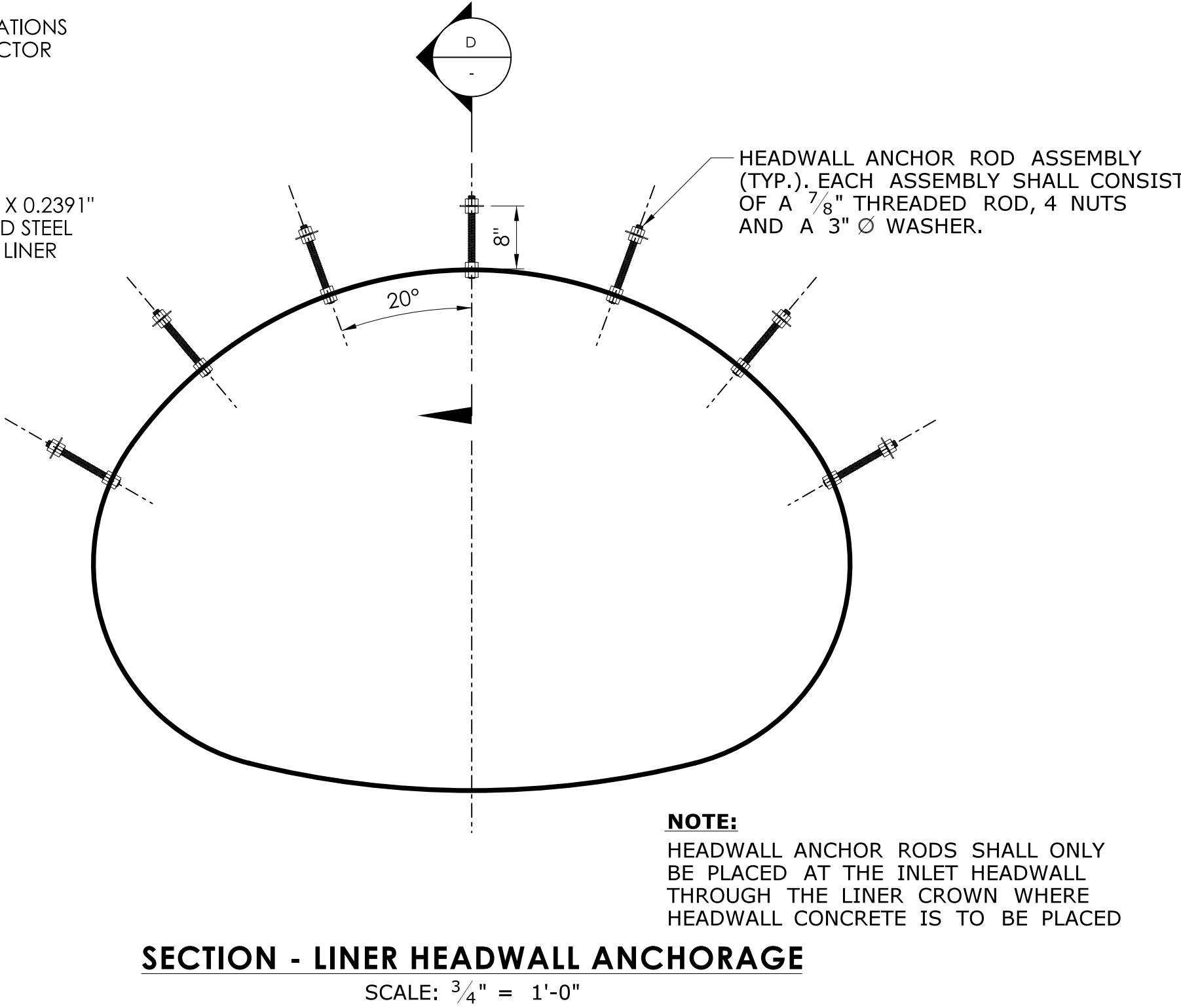
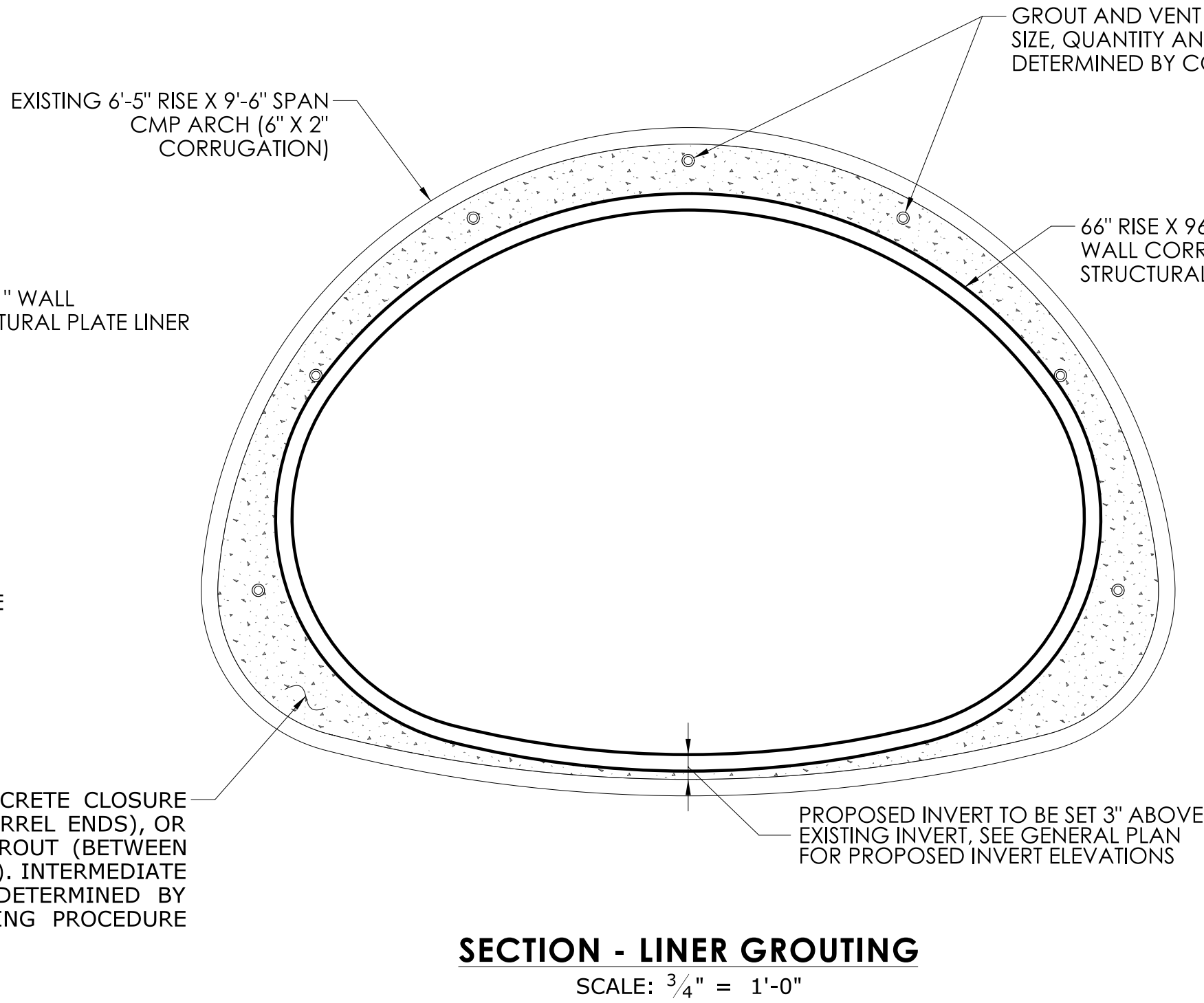
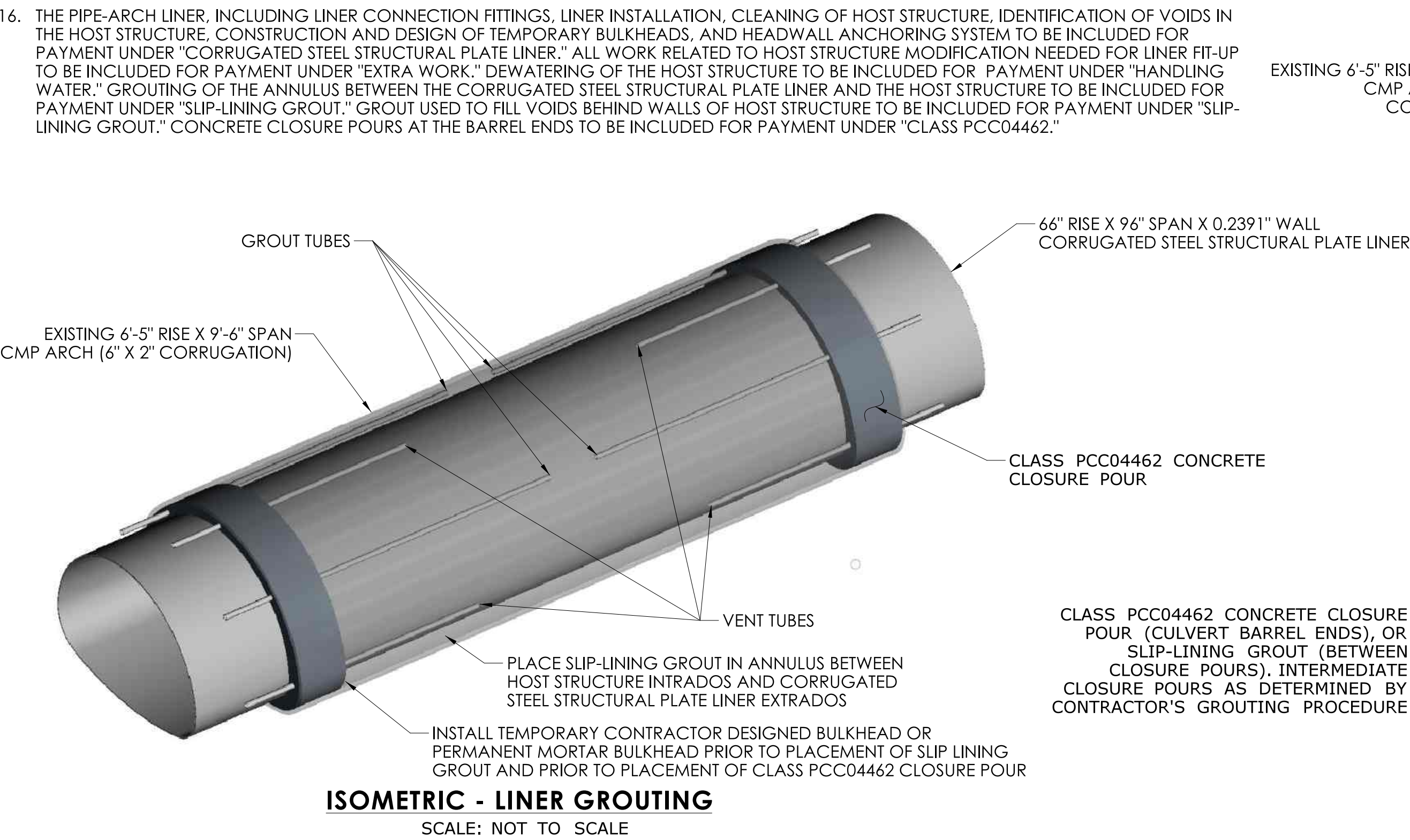
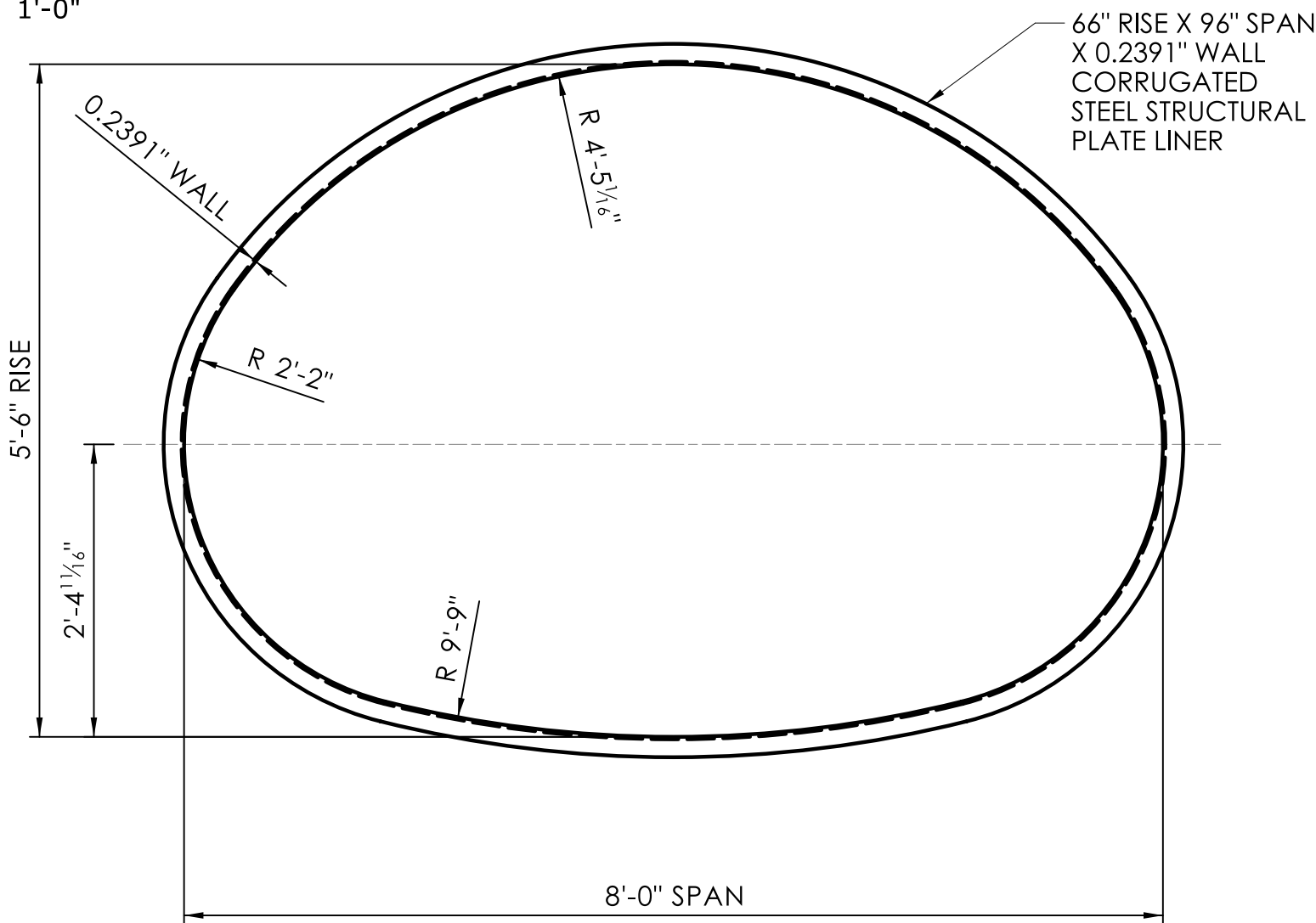
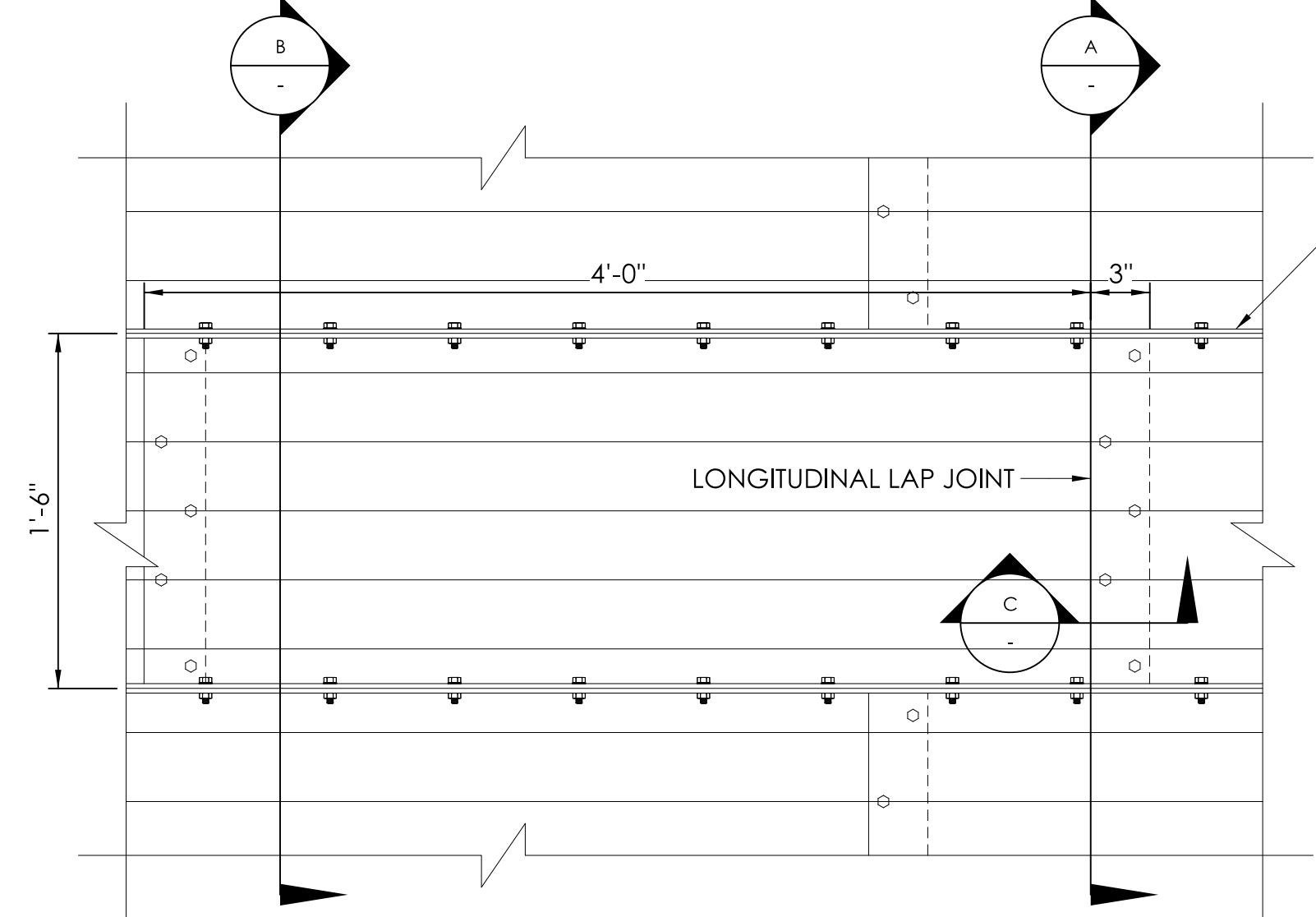
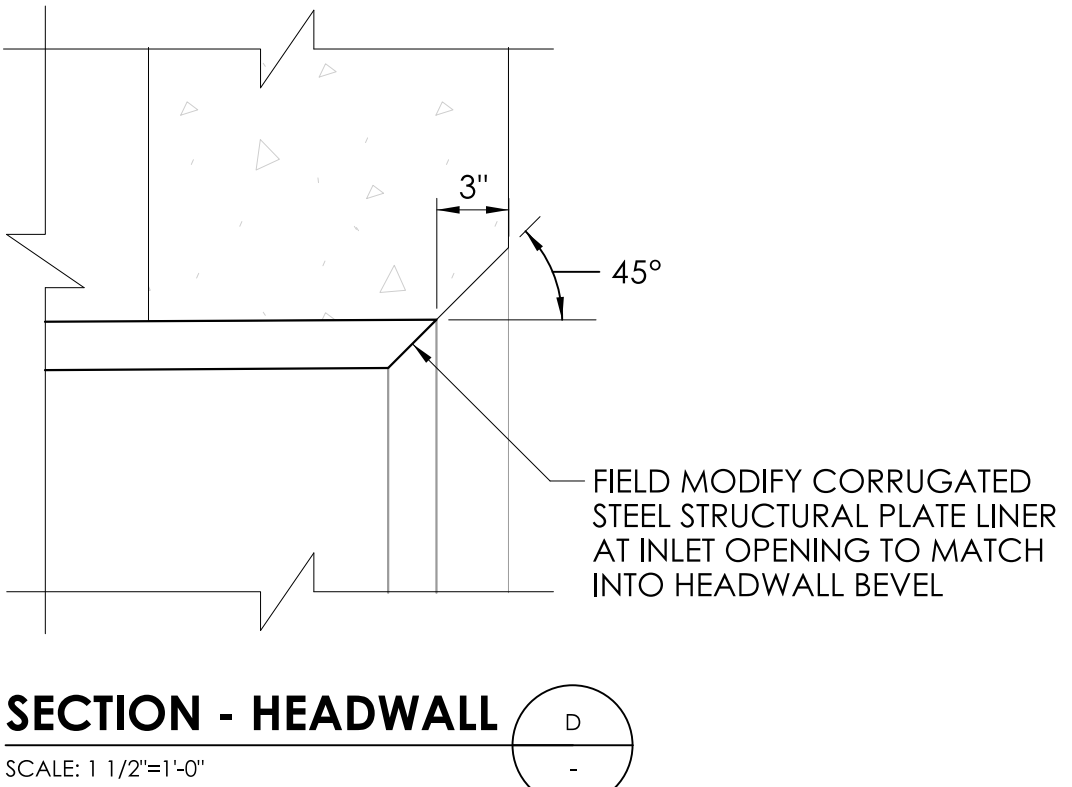
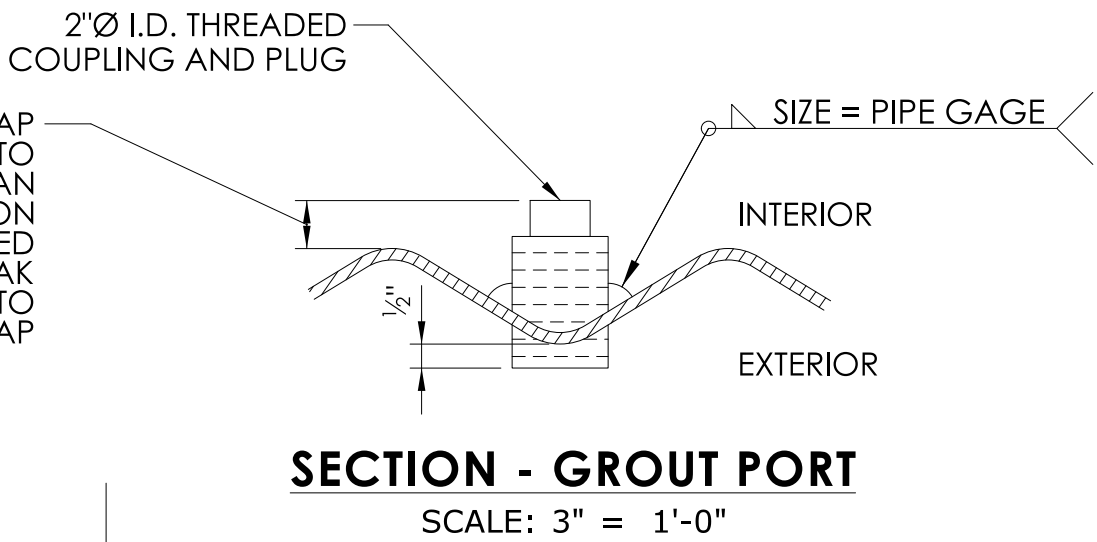
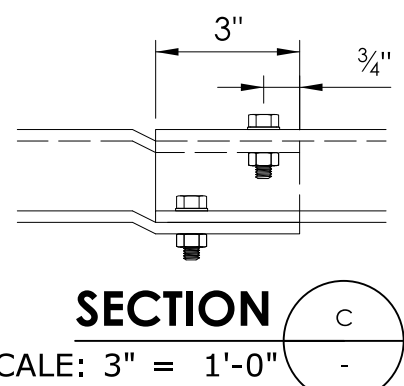
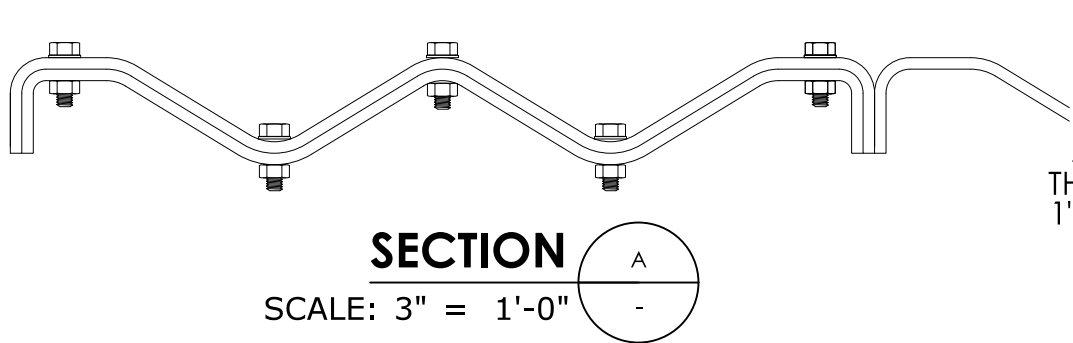
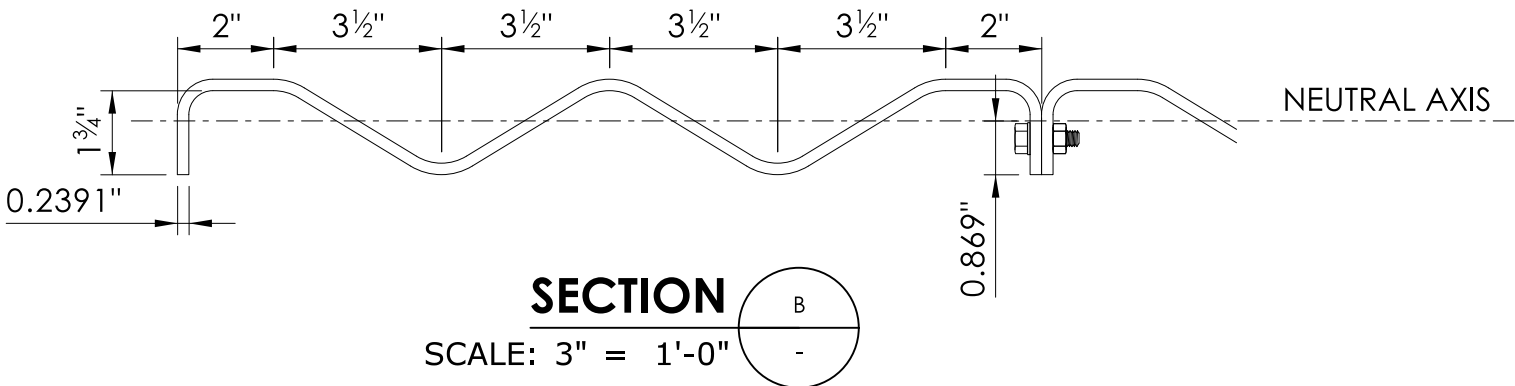
###' DISTANCE FROM OUTLET

(#'-#") MEASURED RISE OF EXISTING CMP, AS OF FEBRUARY 2025 INSPECTION



GENERAL NOTES:

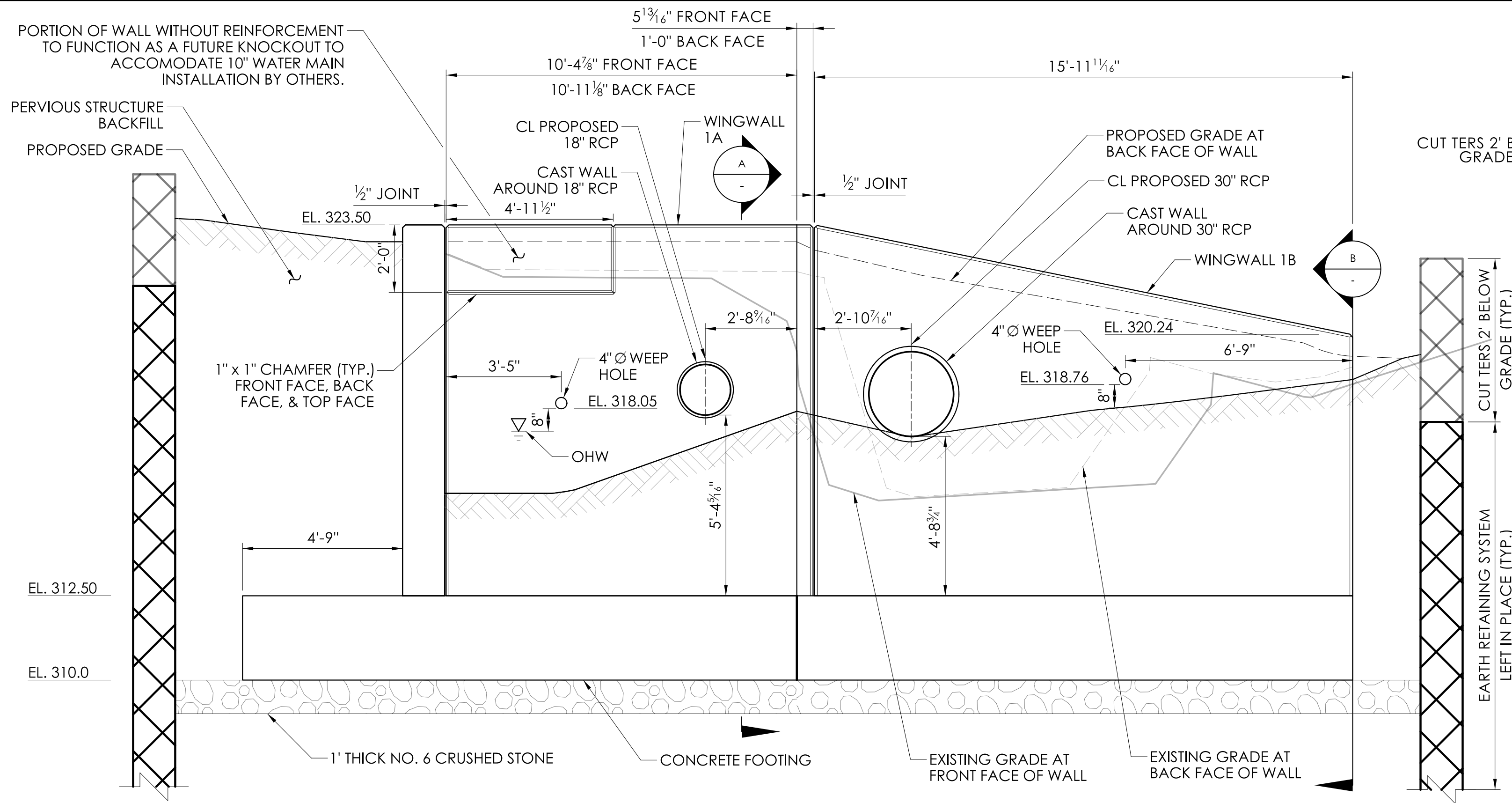
1. LINER SHALL BE FABRICATED FROM BLACK STEEL PLATES CONFORMING TO ASTM SPECIFICATION A1011. PLATES SHALL BE 3 GAGE AND SHALL BE CURVED TO SUIT THE CORRUGATED STEEL STRUCTURAL PLATE LINER CROSS SECTION SHOWN. PLATES SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A761 SECTION 8.2, OR ASTM 123 EXCEPT THAT THE ZINC SHALL BE APPLIED AT A RATE OF 3.0 OUNCES PER SQUARE FOOT TOTAL FOR BOTH SIDES.
2. ALL PLATES SHALL BE PUNCHED FOR BOLTING ON BOTH LONGITUDINAL AND CIRCUMFERENTIAL CONNECTIONS AND SHALL BE FABRICATED TO ALLOW FOR CONNECTION OF COMPLETE RINGS FROM THE INSIDE OF THE HOST STRUCTURE. THE LONGITUDINAL CONNECTION SHALL BE OF THE LAPPED TYPE, WITH OFFSET EQUAL TO THE GAGE OF METAL FOR THE FULL WIDTH OF PLATE TO ALLOW THE CROSS SECTION OF THE PLATE TO BE CONTINUOUS THROUGH THE CONNECTION.
3. BOLTS AND NUTS SHALL BE 5/8" IN DIAMETER. LENGTH SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
4. ASSEMBLY BOLTS USED AT STAGGERED LONGITUDINAL LAP CONNECTIONS SHALL BE ASTM A449 TYPE 1 AND SHALL BE FABRICATED WITH ROUNDED OR SPHERICAL THROATS FOR FITTING EITHER WITHIN THE CREST OR VALLEY OF THE CORRUGATIONS TO PROVIDE MAXIMUM BEARING CONTACT AREA WITH THE PLATES WITHOUT THE USE OF WASHERS. THE SPECIALLY FABRICATED NUTS USED AT LONGITUDINAL LAP CONNECTIONS SHALL BE INSTALLED SUCH THAT THE ROUNDED PORTION IS IN CONTACT WITH THE PLATES.
5. BOLTS USED AT CIRCUMFERENTIAL FLANGED CONNECTIONS SHALL BE ASTM A449 TYPE 1. CIRCUMFERENTIAL FLANGED CONNECTION BOLTS AND NUTS SHALL NOT BE FABRICATED WITH ROUNDED OR SPHERICAL THROATS.
6. NUTS SHALL CONFORM TO ASTM A563, GRADE DH.
7. THE USE OF WASHERS WILL NOT BE PERMITTED AT EITHER THE LONGITUDINAL OR CIRCUMFERENTIAL SEAMS.
8. ALL BOLTS AND NUTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.
9. LINER PLATE SHALL BE ASSEMBLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. LONGITUDINAL LAP CONNECTIONS SHALL BE STAGGERED BETWEEN RINGS. VOIDS OCCURRING BETWEEN LINER PLATE AND EXISTING STRUCTURE OR GROUND SHALL BE FILLED WITH SLIP-LINING GROUT UNTIL COMPLETELY FILLED. GROUT MATERIAL AND METHOD OF GROUTING SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
10. THE HOST STRUCTURE SHALL BE COMPLETELY DEWATERED PRIOR TO, AND FOR THE DURATION OF ALL CLEANING, HOST STRUCTURE MODIFICATION, AND GROUTING ACTIVITIES. HOST STRUCTURE CLEANING ACTIVITIES SHALL INCLUDE THE REMOVAL OF ANY FOREIGN OR LOOSE MATERIAL FROM WITHIN THE HOST STRUCTURE BARREL. MODIFICATION OF THE HOST STRUCTURE SHALL INCLUDE REMOVAL OR MODIFICATION OF ALL EXISTING HOST STRUCTURE DEFORMATIONS THAT MAY AFFECT THE INSTALLATION OF THE CORRUGATED STEEL STRUCTURAL PLATE LINER. ALL VOIDS BEHIND THE HOST STRUCTURE WALLS SHALL BE IDENTIFIED AND HOST STRUCTURE SHALL BE MODIFIED AS NECESSARY TO ENSURE ALL VOIDS WILL BE FILLED WITH SLIP-LINING GROUT DURING THE GROUTING PROCESS PRIOR TO INSTALLATION OF THE LINER.
11. AFTER ALL VOIDS BEHIND THE HOST STRUCTURE WALLS HAVE BEEN IDENTIFIED AND HOST STRUCTURE MODIFIED AS APPLICABLE, THE CONTRACTOR MAY INSTALL AN UNDERDRAIN AT THE INVERT OF THE HOST STRUCTURE TO HELP ENSURE GROUND WATER CONTINUES TO EXIT THE SYSTEM AND DOES NOT CONFLICT WITH THE PLACEMENT OF SLIP-LINING GROUT. UNDERDRAINS, IF USED, SHALL BE FILLED WITH A NEAT CEMENT GROUT IN THE FINAL CONDITION. UNDERDRAINS SHALL BE CUT BACK TO THE FACE OF THE CURED SLIP-LINING GROUT AFTER THE TEMPORARY CONTRACTOR-DESIGNED BULKHEADS ARE REMOVED AND PRIOR TO THE PLACEMENT OF THE PCC04462 CLOSURE POURS. UNDERDRAINS SHALL NOT BE VISIBLE IN THE FINAL CONDITION. PAYMENT FOR UNDERDRAINS, IF INCLUDED, IS COVERED UNDER THE ITEM "SLIP-LINING GROUT." SEE SPECIAL PROVISION FOR "SLIP-LINING GROUT" FOR MORE INFORMATION.
12. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF THE HOST STRUCTURE PRIOR TO FABRICATION OF THE CORRUGATED STEEL STRUCTURAL PLATE LINER AND SHALL SUBMIT TO THE ENGINEER FOR REVIEW MEASUREMENTS OF ALL CONFLICT LOCATIONS AND PROPOSED HOST STRUCTURE MODIFICATION PROCEDURES.
13. HEADWALL ANCHOR RODS SHALL BE STAINLESS STEEL AND SHALL MEET THE REQUIREMENTS OF ASTM F593, GROUP 5. STAINLESS STEEL PLATE WASHERS FOR USE AT HEADWALL ANCHOR RODS SHALL HAVE AN OUTER DIAMETER OF 3" AND SHALL MEET THE REQUIREMENTS OF ASTM A240, TYPE 410. STAINLESS STEEL NUTS FOR USE AT HEADWALL ANCHOR RODS SHALL MEET THE REQUIREMENTS OF ASTM A594, GROUP 5.
14. GROUT AND VENT TUBES SHALL BE PVC. GROUT AND VENT TUBE SIZES AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR. ALL GROUT AND VENT TUBES SHALL BE FILLED WITH A NEAT CEMENT GROUT AFTER ALL SLIP LINING GROUT HAS BEEN PLACED. GROUT AND VENT TUBES SHALL BE CUT BACK TO THE FACE OF THE CURED SLIP-LINING GROUT AFTER THE TEMPORARY CONTRACTOR-DESIGNED BULKHEADS ARE REMOVED AND PRIOR TO THE PLACEMENT OF THE PCC04462 CLOSURE POURS. GROUT AND VENT TUBES SHALL NOT BE VISIBLE IN THE FINAL CONDITION AFTER HEADWALLS HAVE BEEN CONSTRUCTED AND BACKFILL PLACED. GROUT AND VENT PORTS THROUGH THE WALLS OF THE LINER, IF REQUIRED, SHALL BE DESIGNED BY THE CONTRACTOR AND SHALL BE LOCATED WITHIN THE LIMITS OF THE CROWN PLATE ONLY. GROUT AND VENT PORTS SHALL NOT BE PLACED AT THE INVERT OR CORNERS OF THE LINER.
15. AT THE INLET, A 3" MINIMUM BEVEL SHALL BE FORMED IN THE RECONSTRUCTED HEADWALL.
16. THE PIPE-ARCH LINER, INCLUDING LINER CONNECTION FITTINGS, LINER INSTALLATION, CLEANING OF HOST STRUCTURE, IDENTIFICATION OF VOIDS IN THE HOST STRUCTURE, CONSTRUCTION AND DESIGN OF TEMPORARY BULKHEADS, AND HEADWALL ANCHORING SYSTEM TO BE INCLUDED FOR PAYMENT UNDER "CORRUGATED STEEL STRUCTURAL PLATE LINER." ALL WORK RELATED TO HOST STRUCTURE MODIFICATION NEEDED FOR LINER FIT-UP TO BE INCLUDED FOR PAYMENT UNDER "EXTRA WORK." DEWATERING OF THE HOST STRUCTURE TO BE INCLUDED FOR PAYMENT UNDER "HANDLING WATER." GROUTING OF THE ANNULUS BETWEEN THE CORRUGATED STEEL STRUCTURAL PLATE LINER AND THE HOST STRUCTURE TO BE INCLUDED FOR PAYMENT UNDER "SLIP-LINING GROUT." GROUT USED TO FILL VOIDS BEHIND WALLS OF HOST STRUCTURE TO BE INCLUDED FOR PAYMENT UNDER "SLIP-LINING GROUT." CONCRETE CLOSURE POURS AT THE BARREL ENDS TO BE INCLUDED FOR PAYMENT UNDER "CLASS PCC04462."



REV.	DATE	REVISION DESCRIPTION

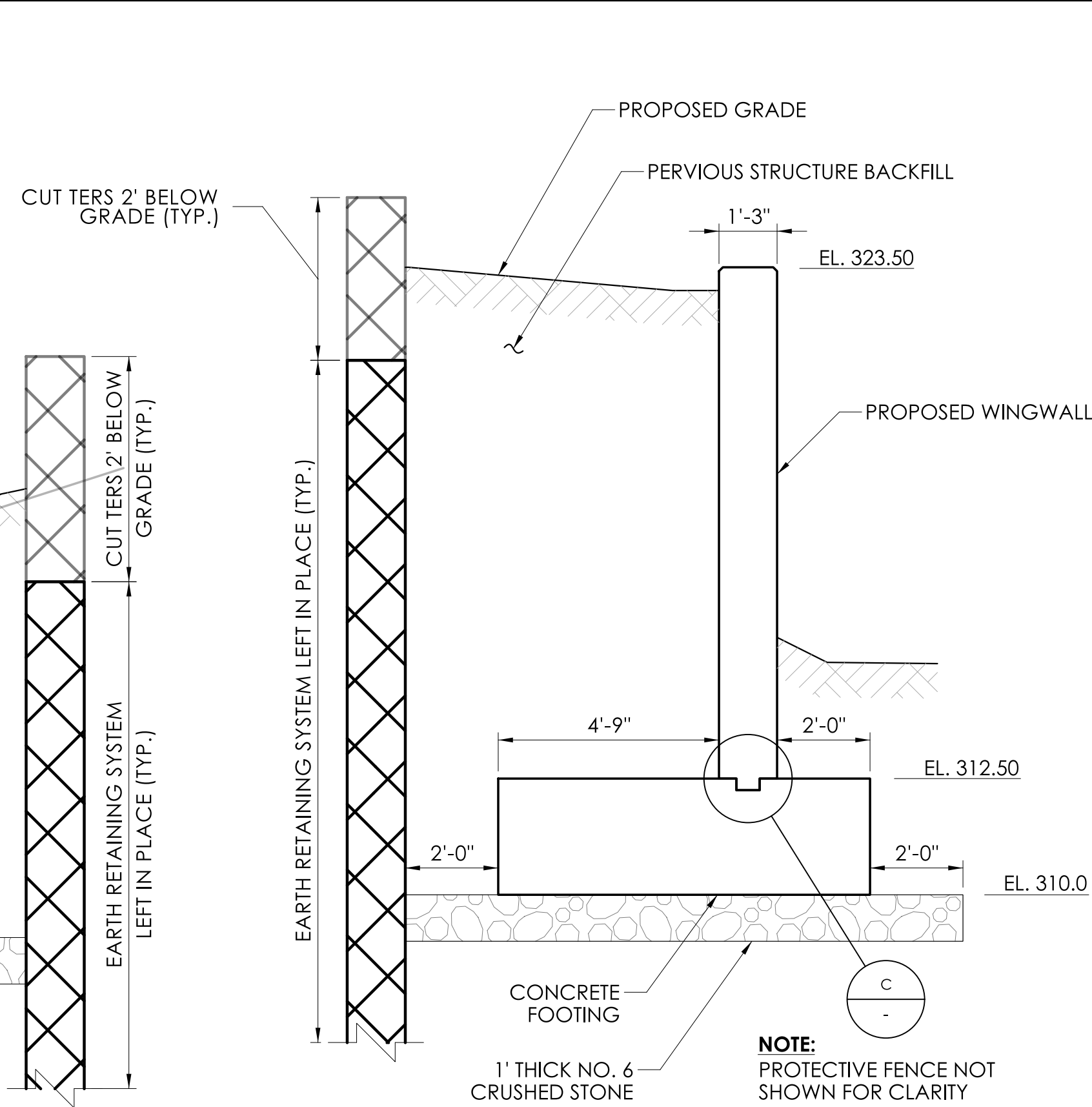
SIGNATURE BLOCK:		SCALE AS NOTED	PROJECT TITLE:	TOWN(S):	DRAWING TITLE:	PROJECT NO.:	DRAWING NO.:
DESIGNER/DRAFTER: JJS	CHECKED BY: NJM						





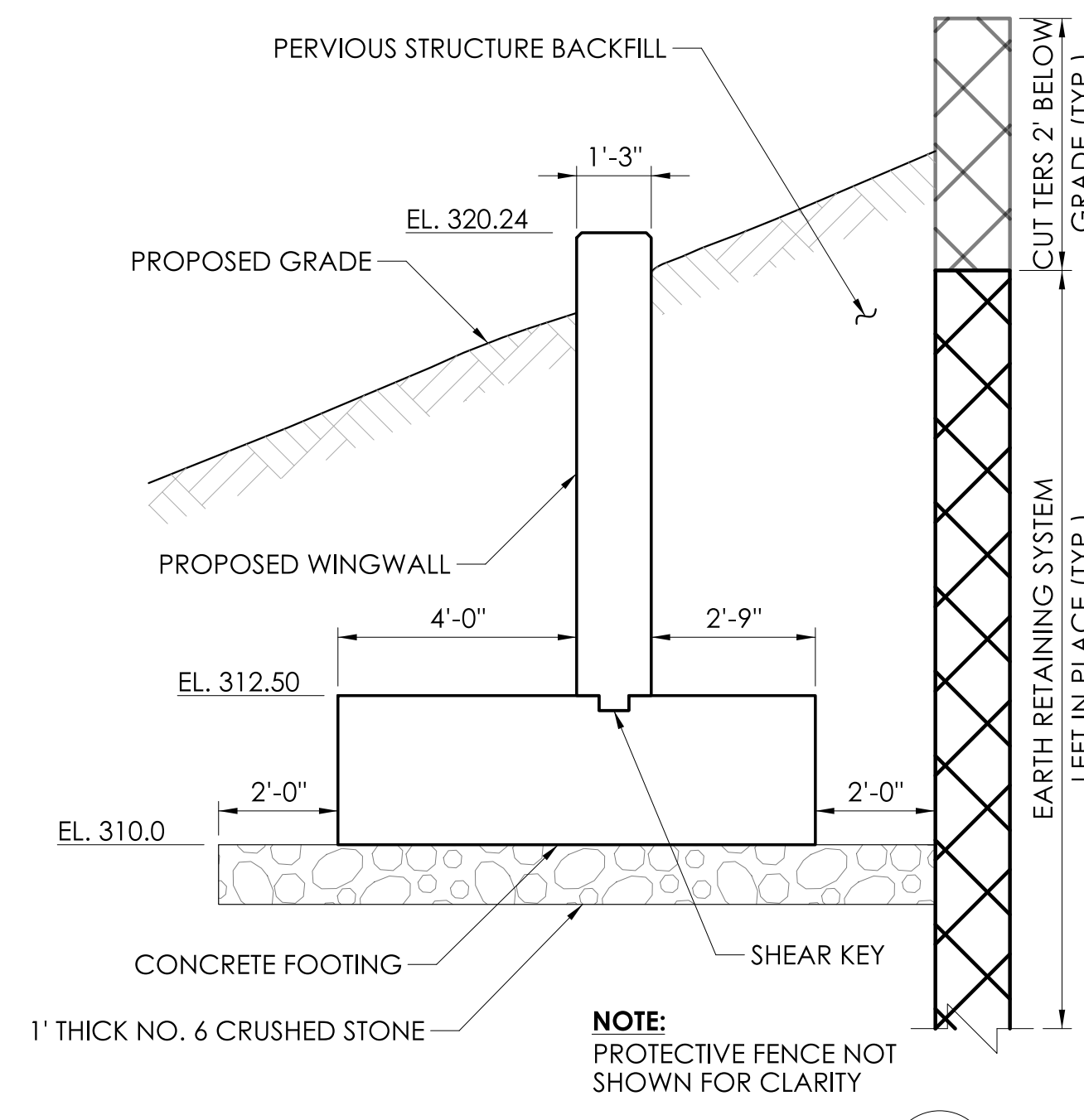
NOTE:  
PROTECTIVE FENCE NOT SHOWN FOR CLARITY

**DEVELOPED ELEVATION - WINGWALL**  
SCALE: NOT TO SCALE



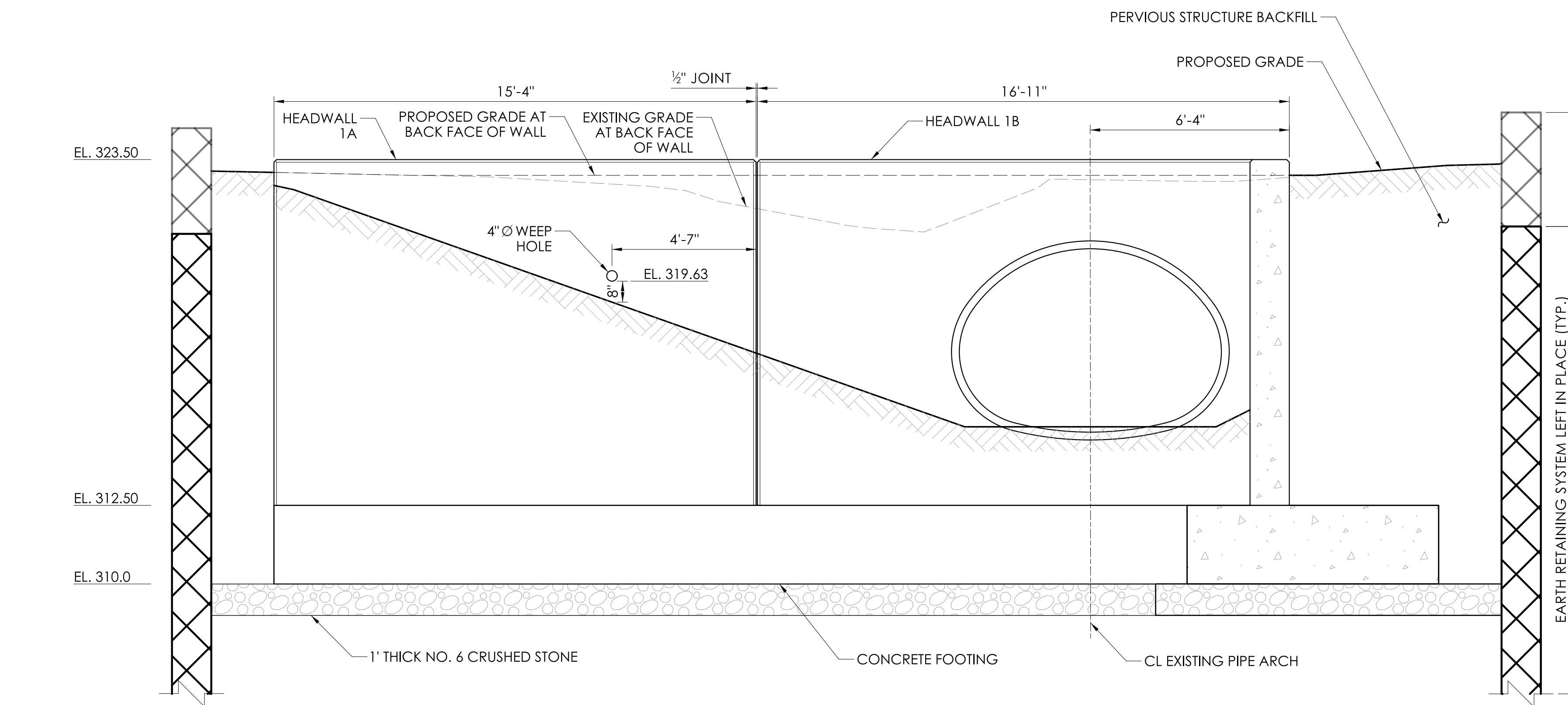
NOTE:  
PROTECTIVE FENCE NOT SHOWN FOR CLARITY

**SECTION - WINGWALL 1A**  
SCALE: 3/8" = 1'-0"



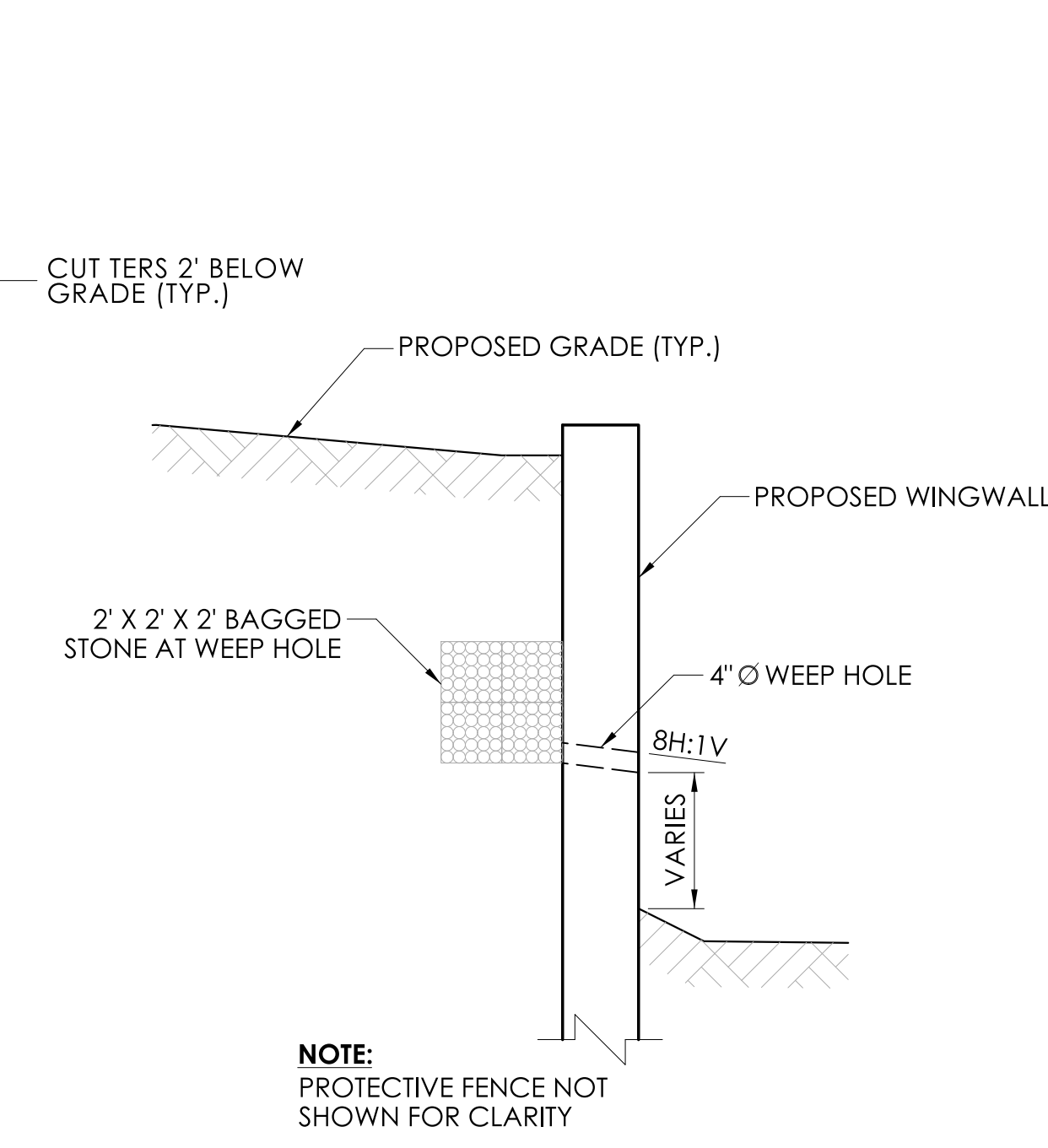
NOTE:  
PROTECTIVE FENCE NOT SHOWN FOR CLARITY

**SECTION - WINGWALL 1B END**  
SCALE: 3/8" = 1'-0"



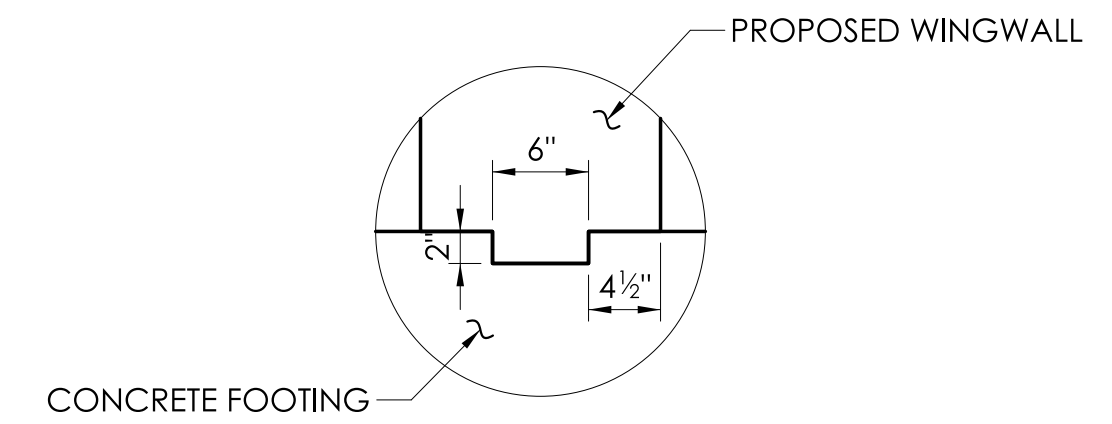
NOTE:  
PROTECTIVE FENCE NOT SHOWN FOR CLARITY

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

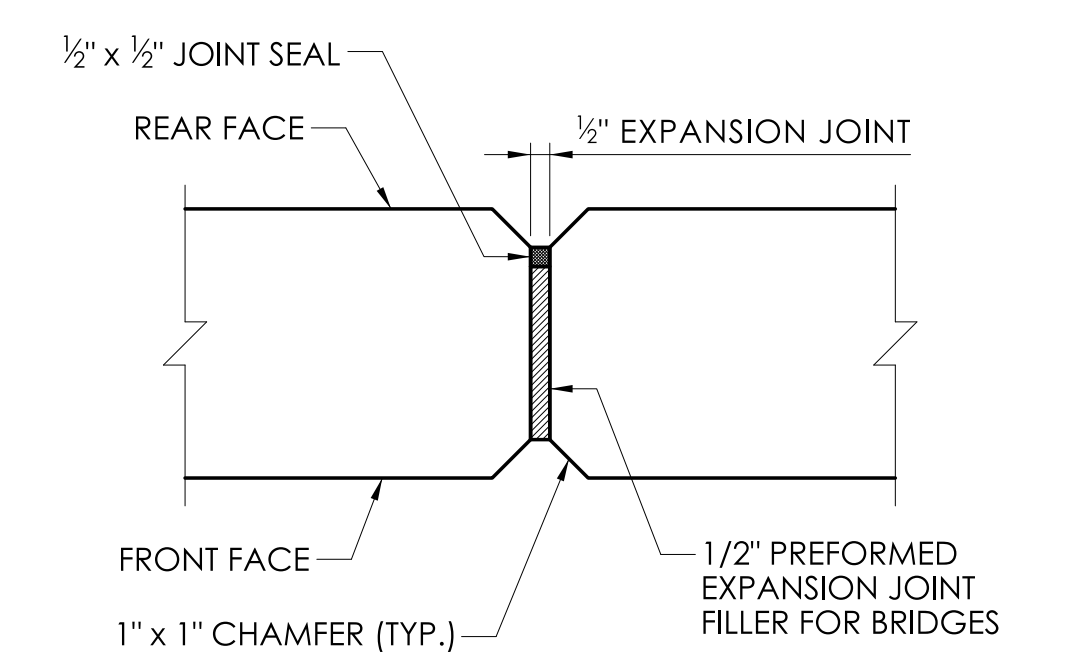


NOTE:  
PROTECTIVE FENCE NOT SHOWN FOR CLARITY

**TYPICAL WEEP HOLE SECTION**  
SCALE: 3/8" = 1'-0"



**SECTION - TYPICAL WALL SHEAR KEY**  
SCALE: 1" = 1'-0"



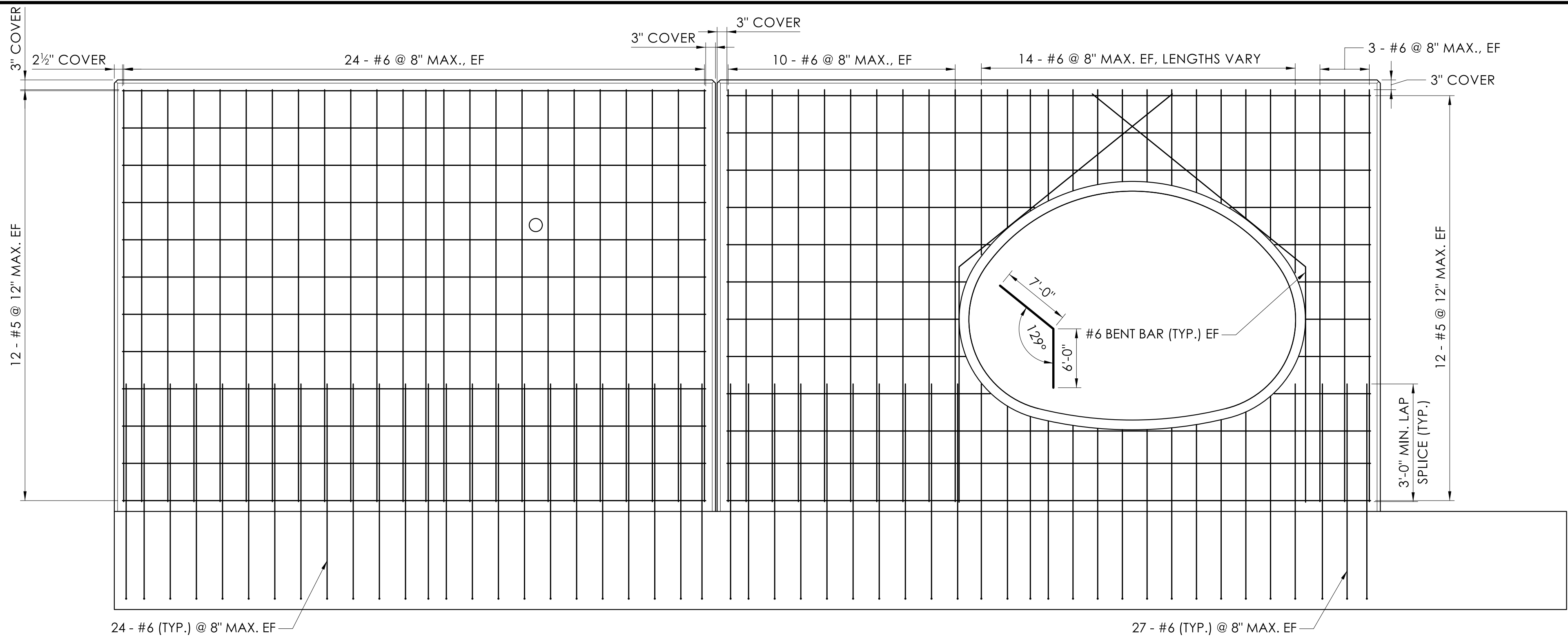
**PLAN - TYPICAL WALL STEM JOINT DETAIL**  
SCALE: NOT TO SCALE

HEADWALL AND WINGWALL MAXIMUM DESIGN FOUNDATION PRESSURES	
STRENGTH LIMIT STATE	SERVICE LIMIT STATE
3.38 KSF	2.15 KSF

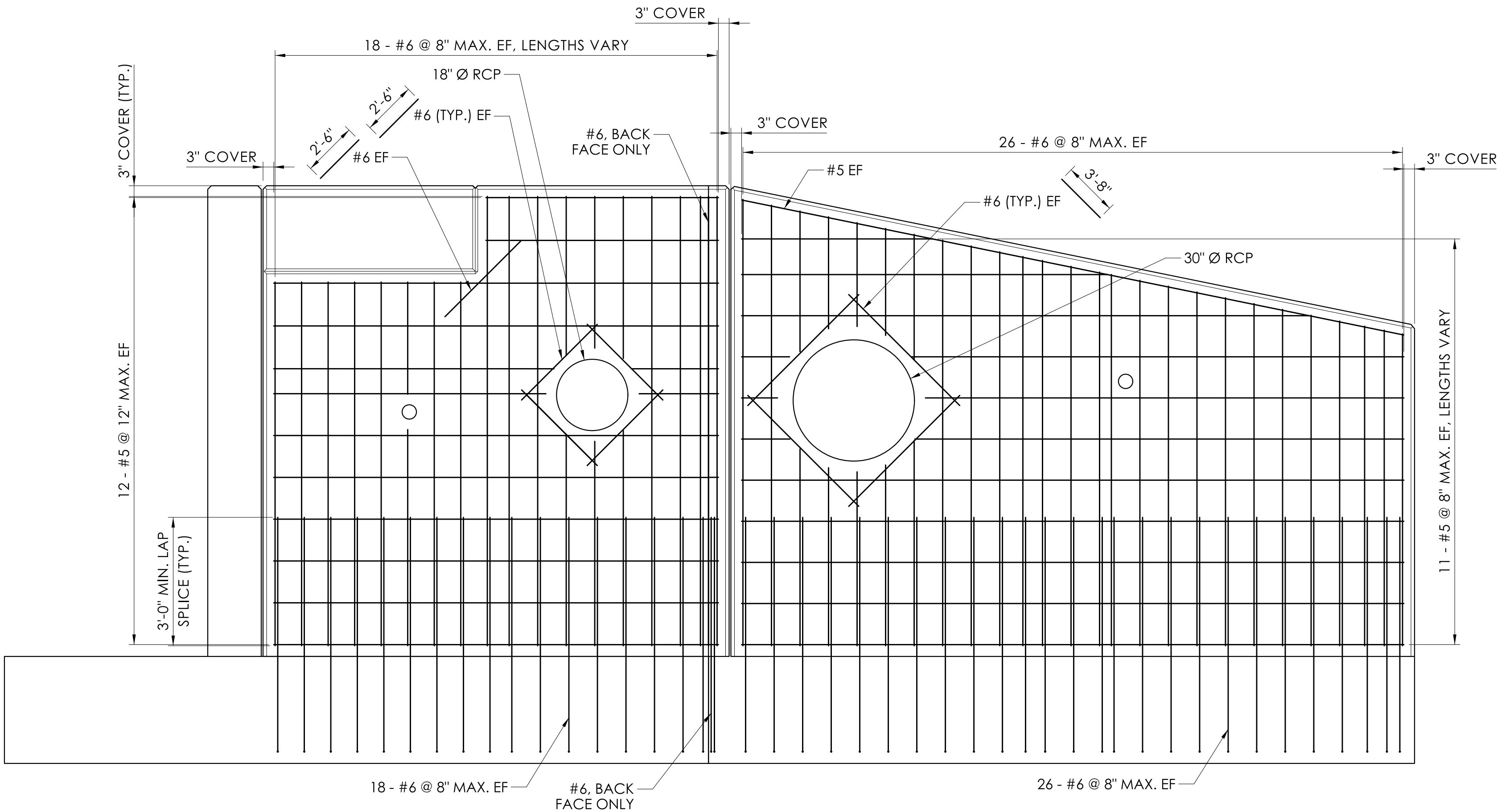
REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: 		SCALE AS NOTED	 <b>CONNECTICUT DEPARTMENT OF TRANSPORTATION</b>	PROJECT TITLE: <b>REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK</b>	TOWN(S): <b>NAUGATUCK</b>	DRAWING TITLE: <b>WALL DETAILS</b>	PROJECT NO.: <b>0087-0148</b>	DRAWING NO.: <b>S-12</b>
DESIGNER/DRAFTER: JJS	CHECKED BY: NJM							SHEET NO.: <b>04.12</b>

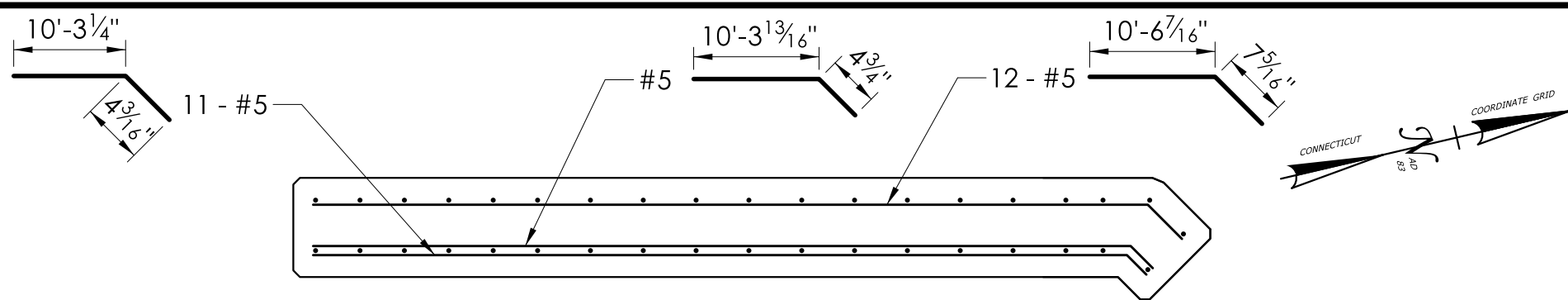




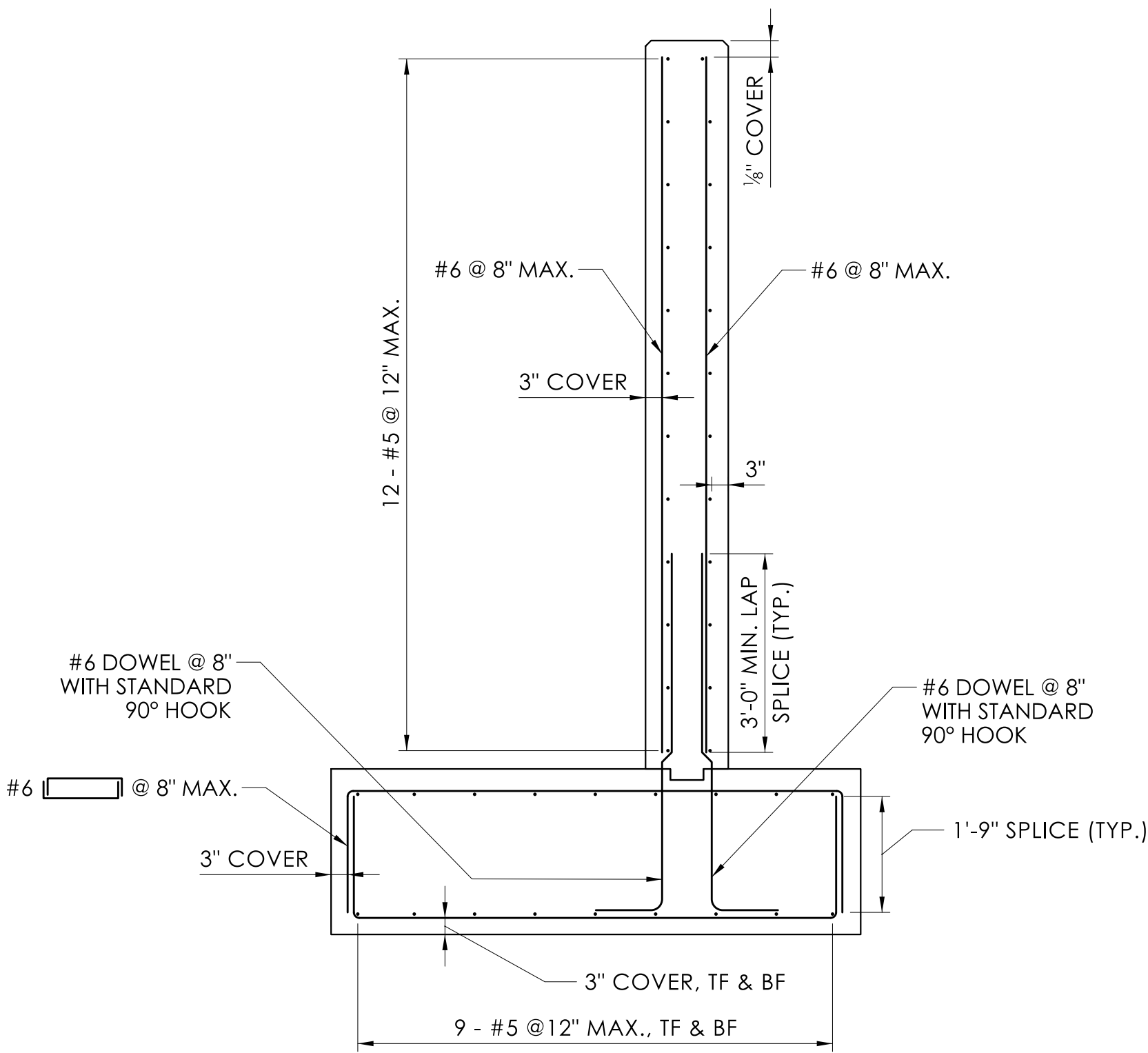
ELEVATION - HEADWALL 1 REINFORCEMENT  
SCALE: 1/2" = 1'-0"



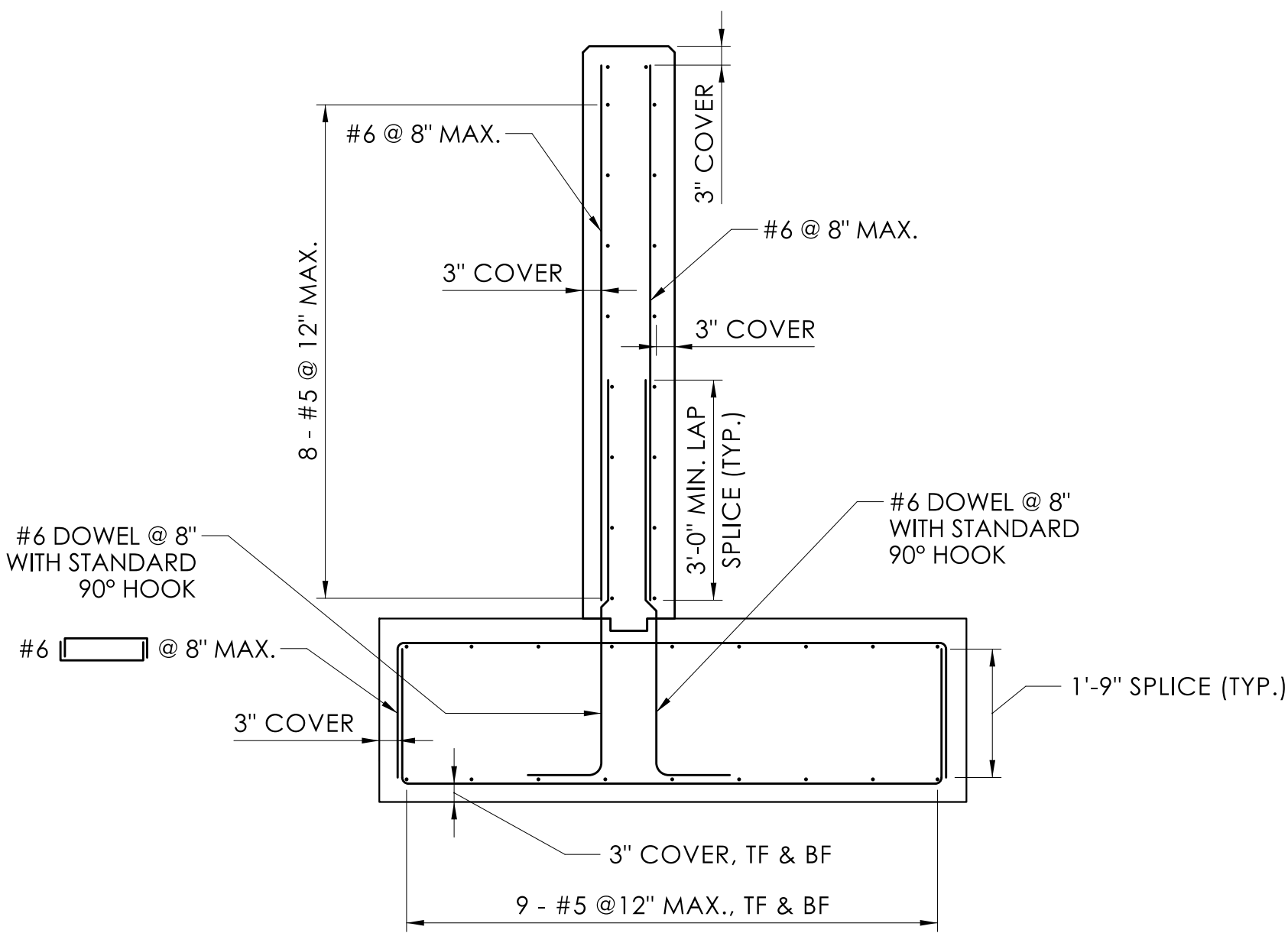
DEVELOPED ELEVATION - WINGWALL 1 REINFORCEMENT  
SCALE: NOT TO SCALE



PLAN - WINGWALL 1A REINFORCEMENT  
SCALE: 1/2" = 1'-0"



SECTION - WINGWALL 1A & HEADWALL 1 REINFORCEMENT  
SCALE: 1/2" = 1'-0"



SECTION - WINGWALL 1B END REINFORCEMENT  
SCALE: 1/2" = 1'-0"

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:  
*Andrew J. Carlini*  
DESIGNER/DRAFTER: JJS  
CHECKED BY: NJM

SCALE AS NOTED



CONNECTICUT  
DEPARTMENT OF  
TRANSPORTATION

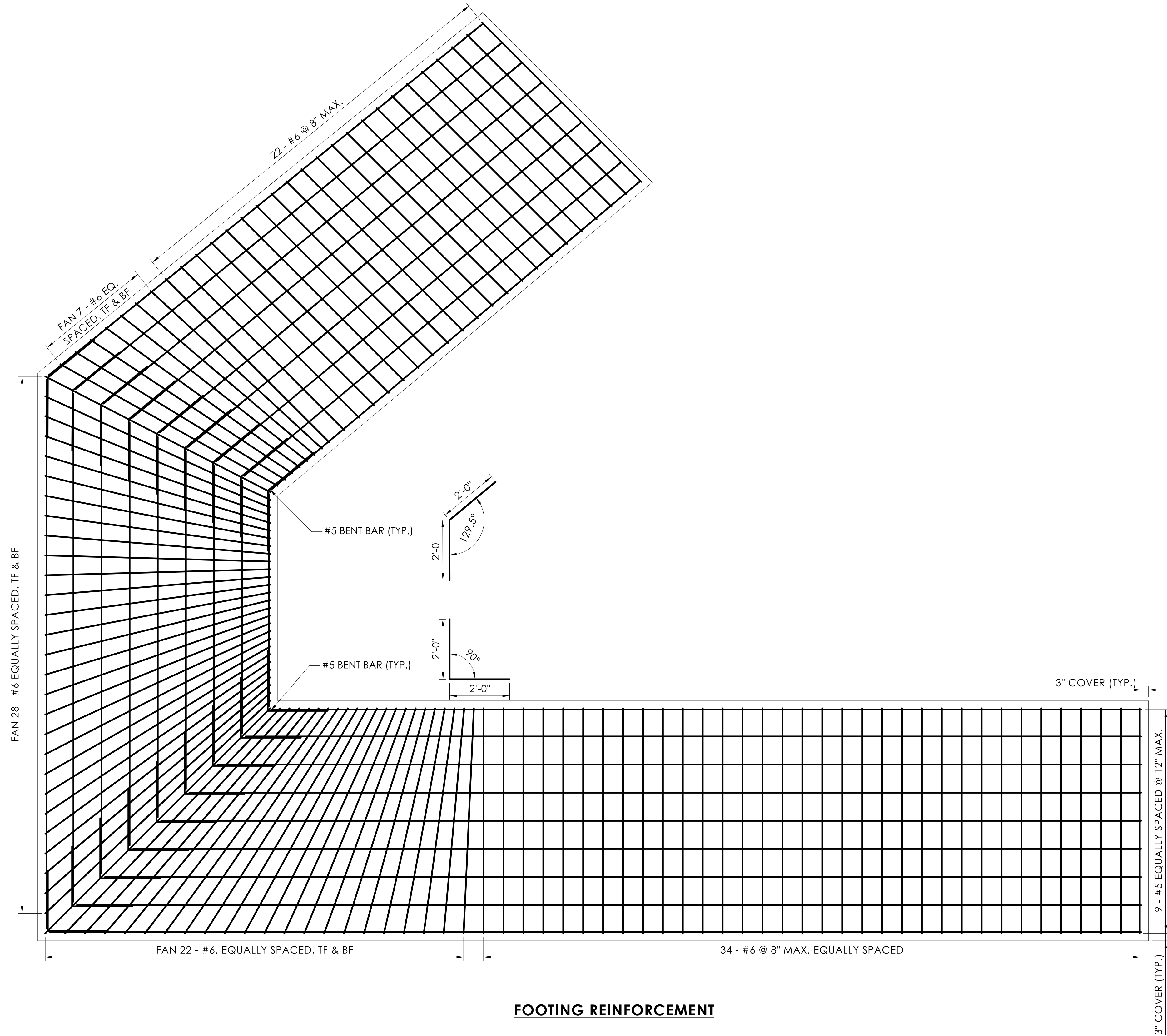
PROJECT TITLE:  
REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE  
63 OVER STRAITSVILLE BROOK

TOWN(S):  
NAUGATUCK

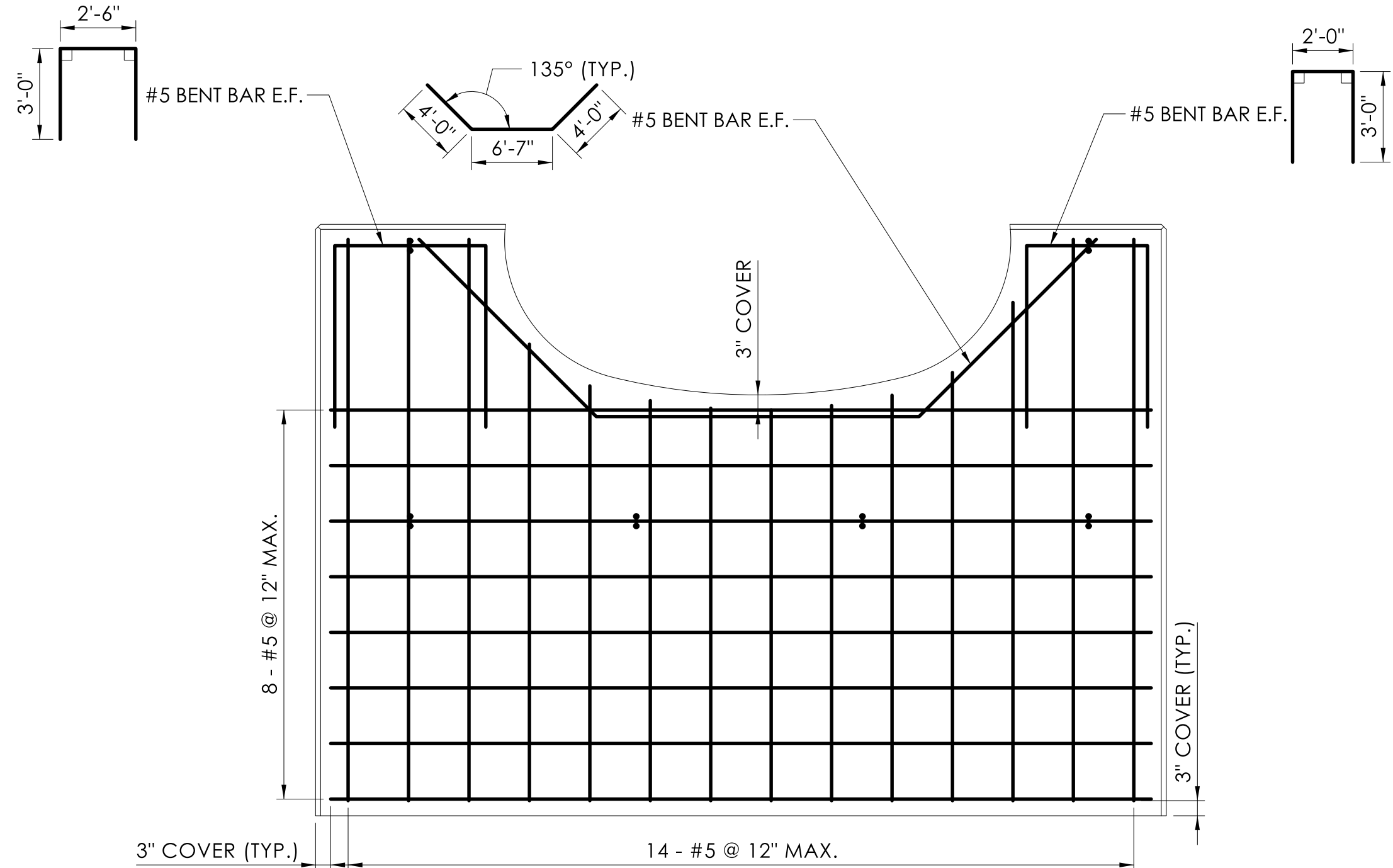
DRAWING TITLE:  
REBAR DETAILS - 1

PROJECT NO.:  
0087-0148

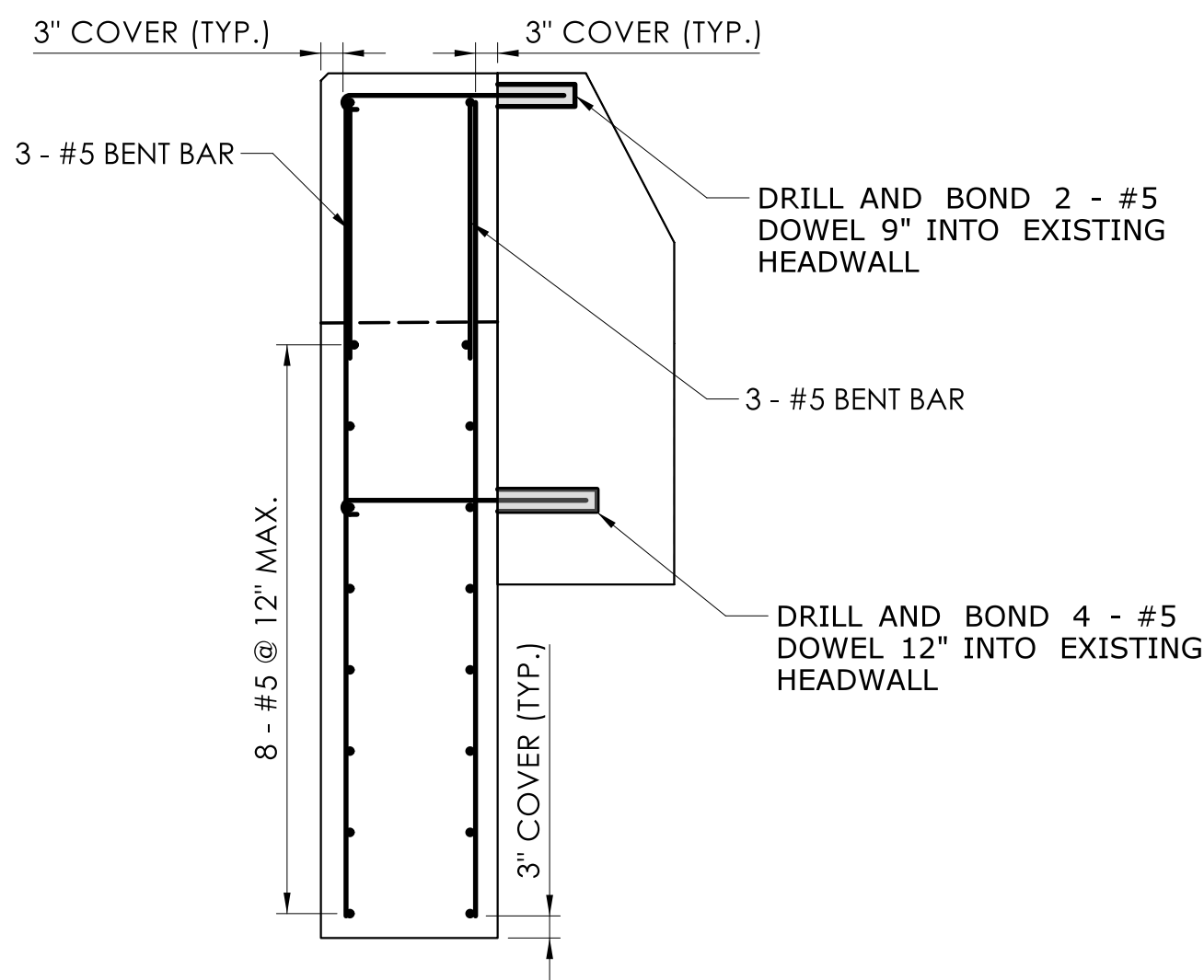
DRAWING NO.:  
S-13  
SHEET NO.:  
04.13



FOOTING REINFORCEMENT



ELEVATION - ENDWALL REINFORCEMENT



SECTION - ENDWALL REINFORCEMENT

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:  
*Arthur J. Carlini*  
DESIGNER/DRAFTER: JJS  
CHECKED BY: NJM

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



CONNECTICUT  
DEPARTMENT OF  
TRANSPORTATION

PROJECT TITLE:  
**REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE  
63 OVER STRAITSVILLE BROOK**

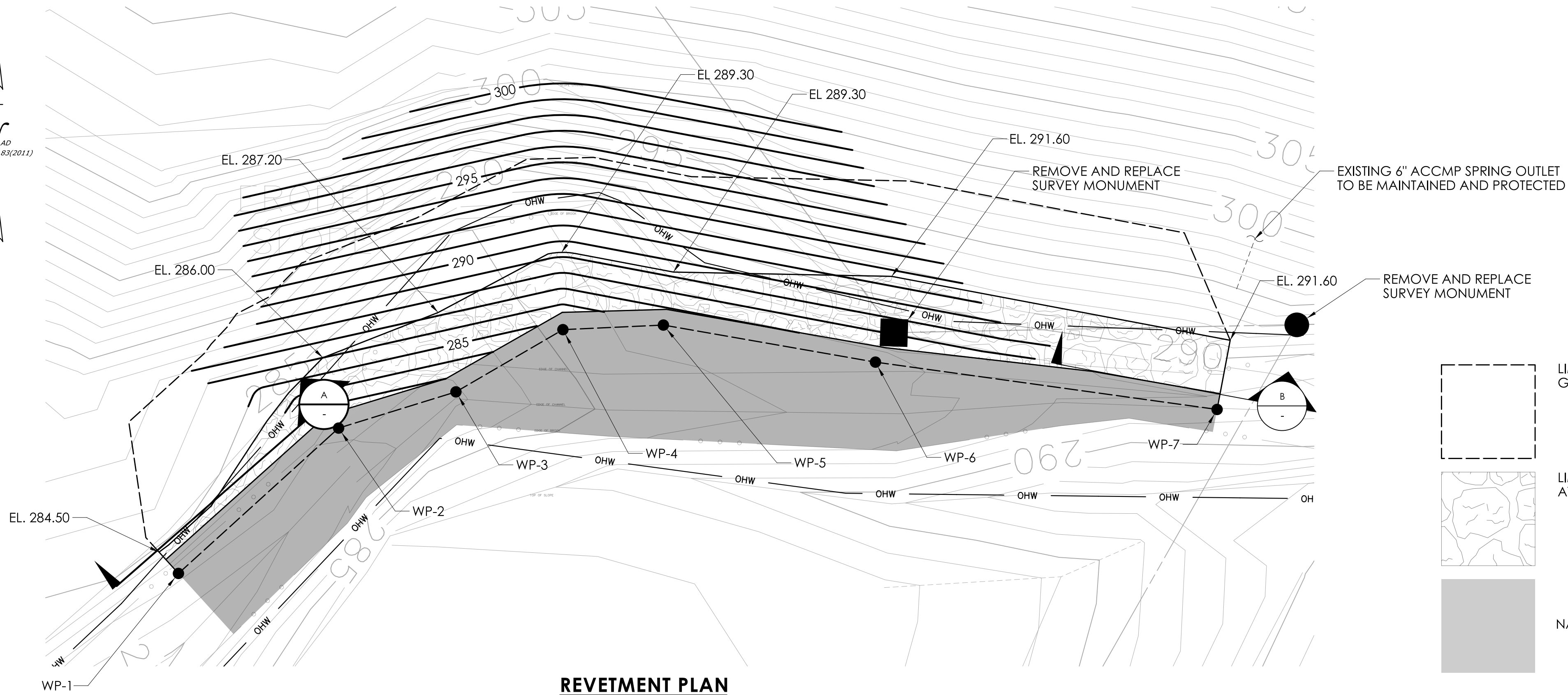
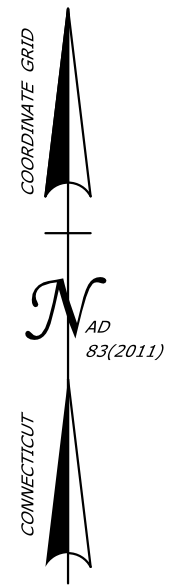
TOWN(S):  
**NAUGATUCK**

DRAWING TITLE:  
**REBAR DETAILS - 2**

PROJECT NO.:  
**0087-0148**

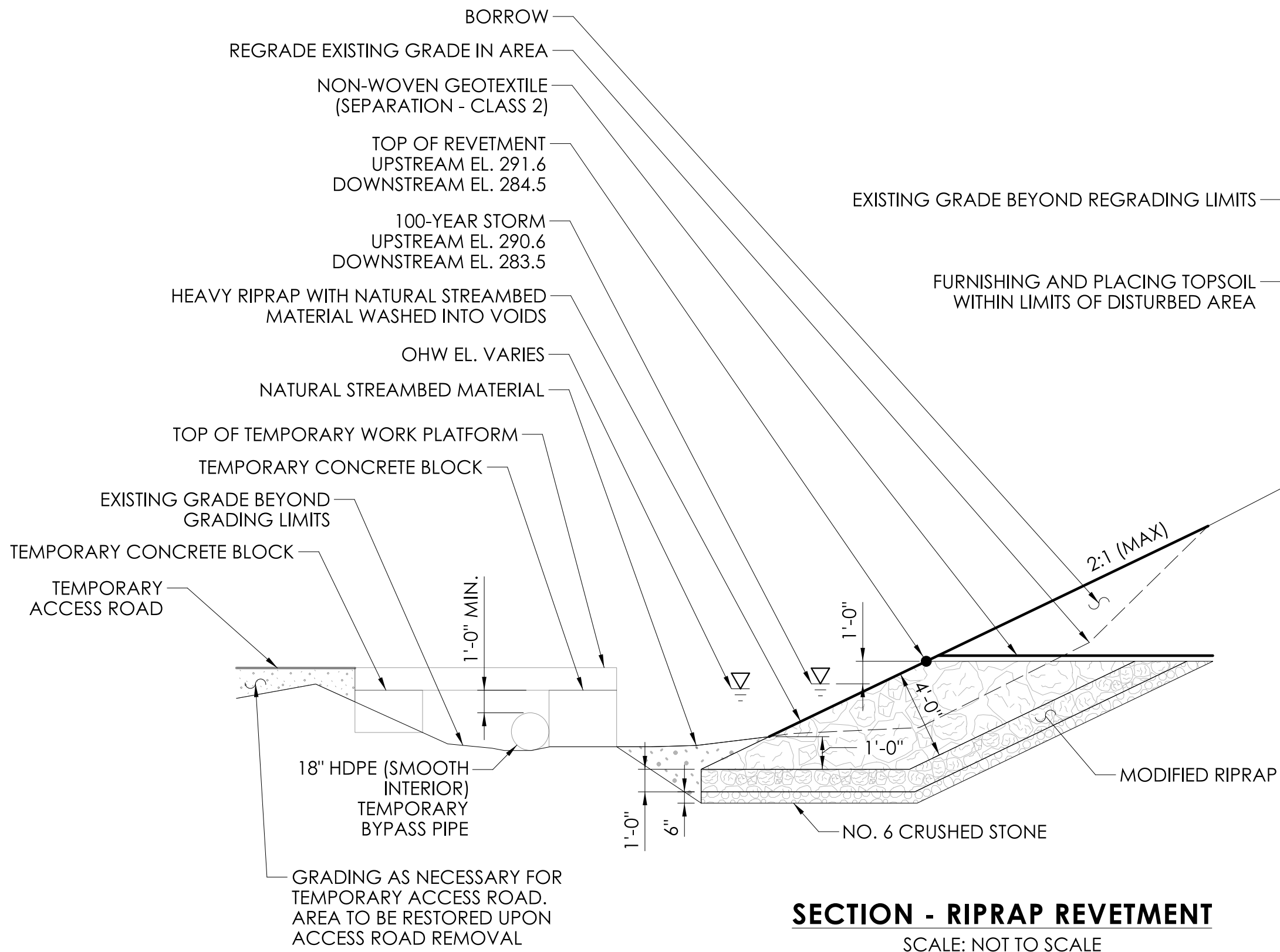
DRAWING NO.:  
**S-14**  
SHEET NO.:  
**04.14**

WORKING POINT COORDINATES		
WORKING POINT	NORTHING	EASTING
WP-1	731469.3993	924401.4787
WP-2	731487.8145	924421.7620
WP-3	731492.4044	924436.6184
WP-4	731500.2897	924450.1659
WP-5	731500.8697	924462.8921
WP-6	731496.1744	924489.7450
WP-7	731490.1768	924533.0093

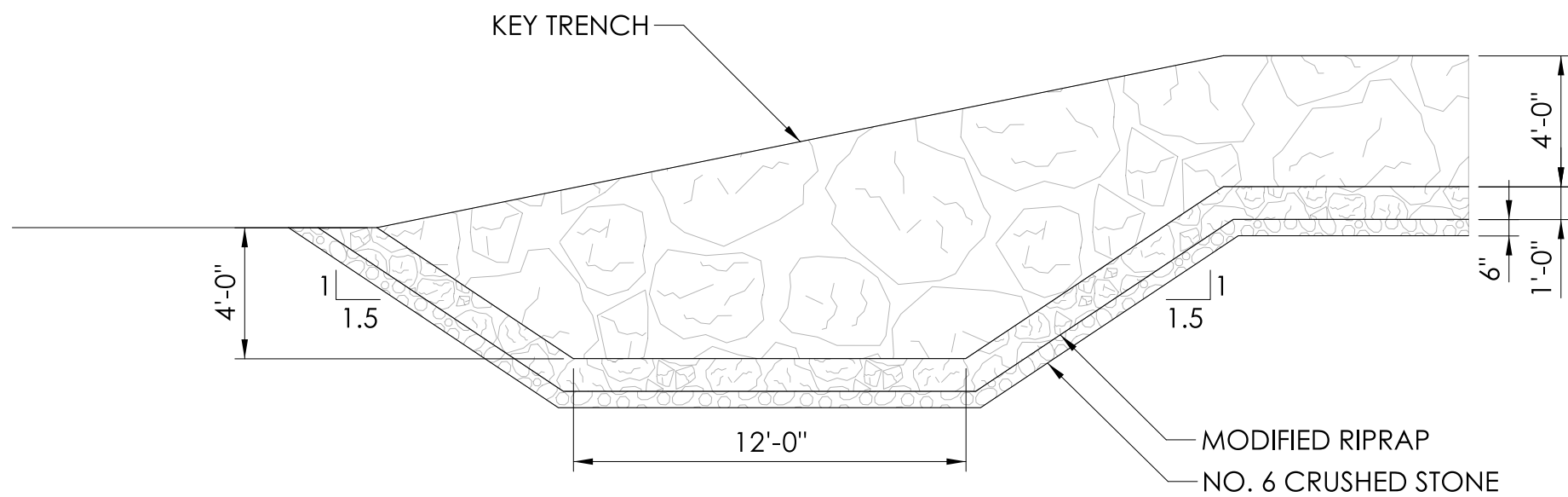


- LIMITS OF RIPRAP REVETMENT BELOW GRADE COMPRISED OF:  
-4' HEAVY RIPRAP  
-1' MODIFIED RIPRAP  
-6" NO. 6 CRUSHED STONE  
-NATURAL STREAMBED MATERIAL WASHED INTO RIPRAP
- LIMITS OF RIPRAP REVETMENT EXPOSED AT SURFACE COMPRISED OF:  
-4' HEAVY RIPRAP  
-1' MODIFIED RIPRAP  
-6" NO. 6 CRUSHED STONE  
-NATURAL STREAMBED MATERIAL WASHED INTO RIPRAP
- NATURAL STREAMBED MATERIAL

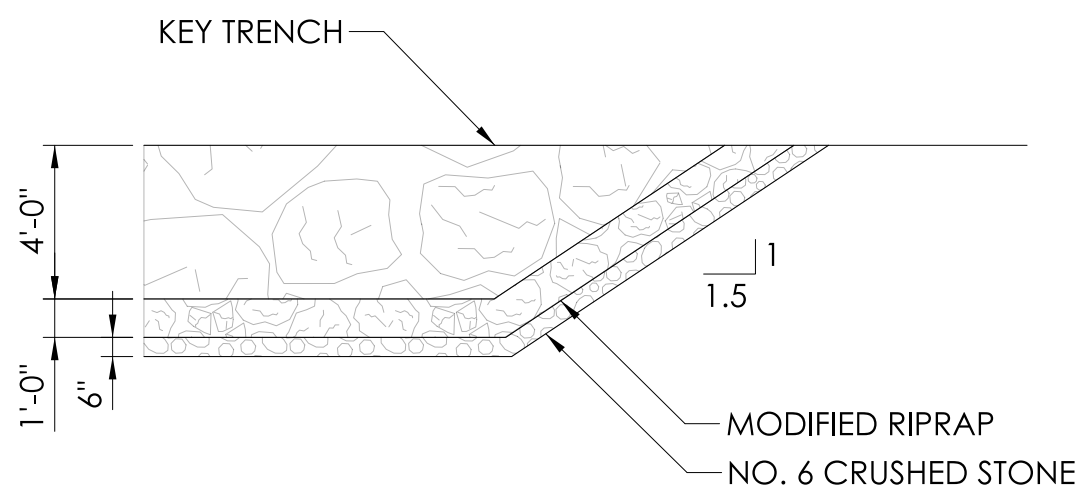
REVETMENT PLAN  
SCALE: 1" = 10'



SECTION - RIPRAP REVETMENT  
SCALE: NOT TO SCALE



SECTION - REVETMENT KEY-IN DOWNSTREAM  
SCALE: 1"=5'

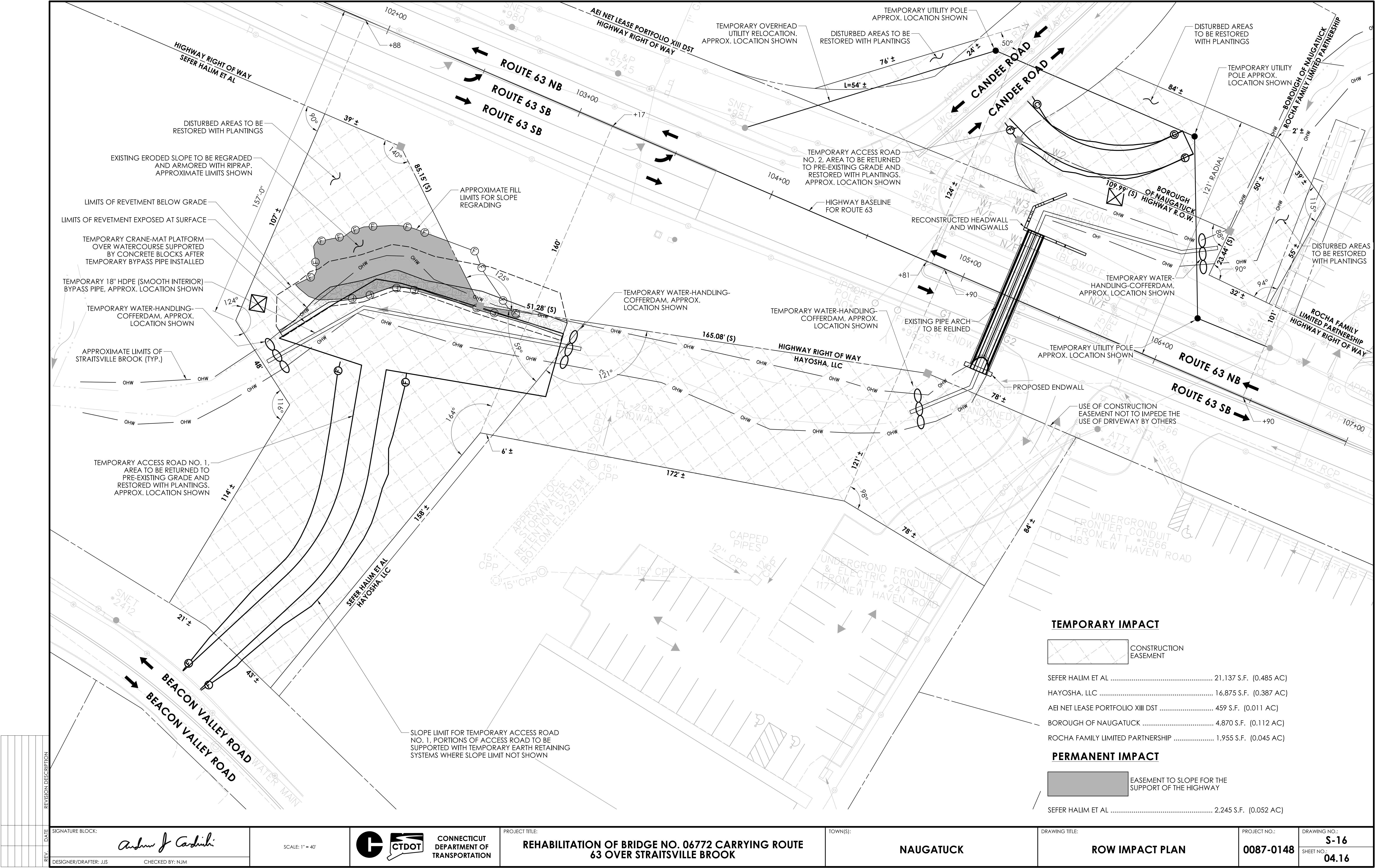


SECTION - REVETMENT KEY-IN UPSTREAM  
SCALE: 1"=5'

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:		SCALE AS NOTED	 CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE:  REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK	TOWN(S):  NAUGATUCK	DRAWING TITLE:  REVETMENT DETAILS	PROJECT NO.:  0087-0148	DRAWING NO.: S-15
DESIGNER/DRAFTER: JJS CHECKED BY: NJM								SHEET NO.: 04.15





REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:

DESIGNER/DRAFTER: JJS CHECKED BY: NJM

SCALE: 1" = 40'



PROJECT TITLE:

**REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK**

TOWN(S):

**NAUGATUCK**

DRAWING TITLE:

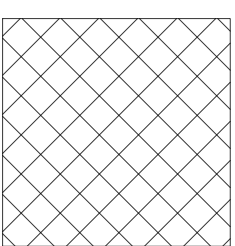
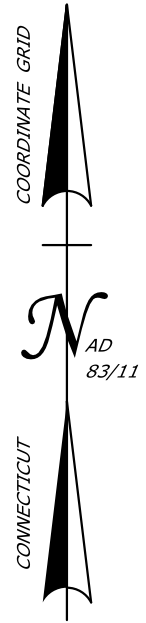
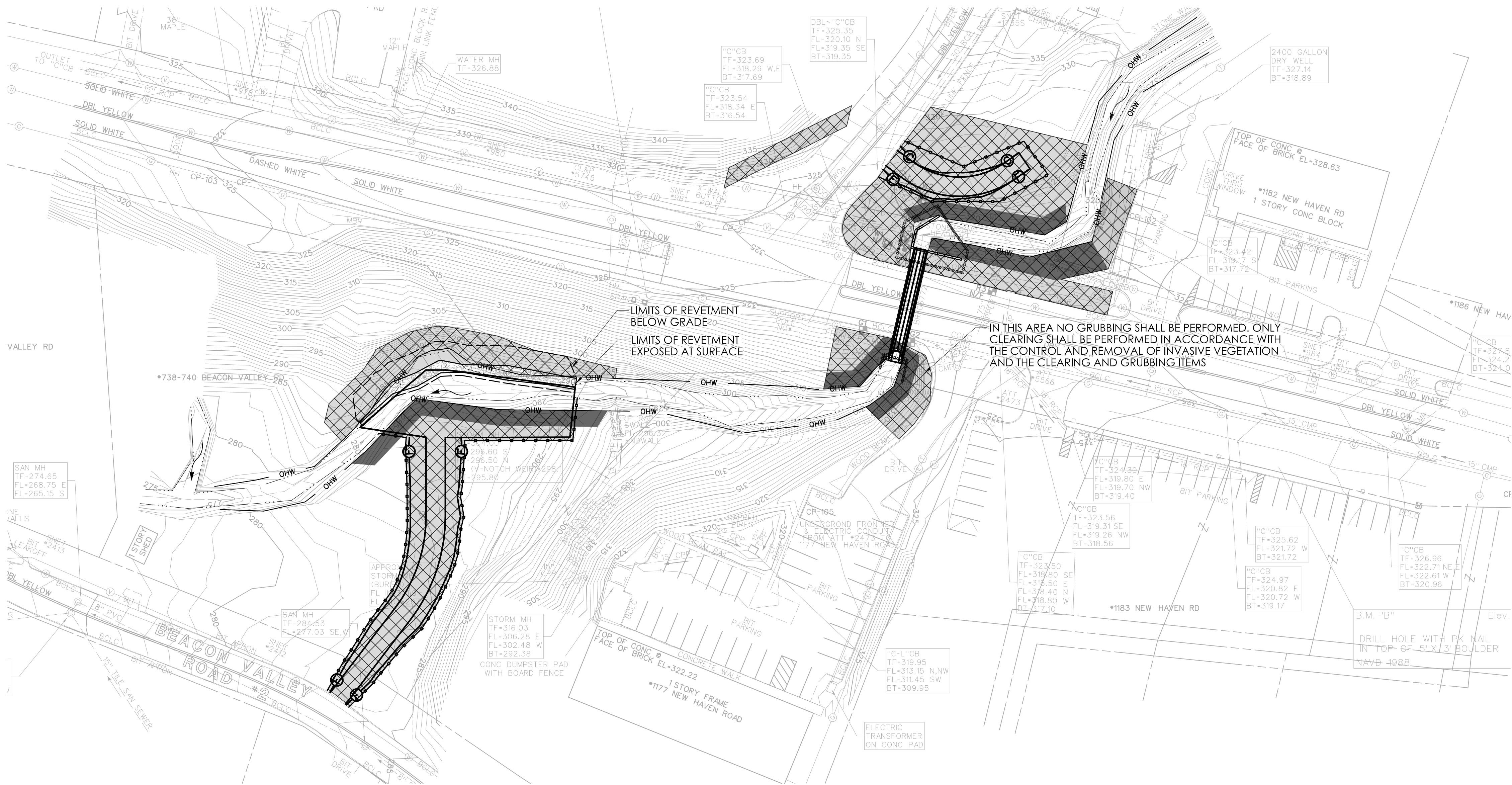
**ROW IMPACT PLAN**

PROJECT NO.: **0087-0148**

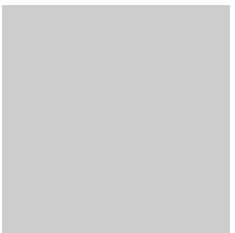
DRAWING NO.: **S-16**

SHEET NO.: **04.16**

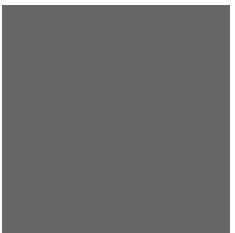




CONTROL AND REMOVAL OF INVASIVE VEGETATION  
SEE NOTE 7



LANDSCAPE PLANTINGS  
**TOTAL PLANTS = 566**  
**TOTAL PLANTING AREA = 22135 S.F.**

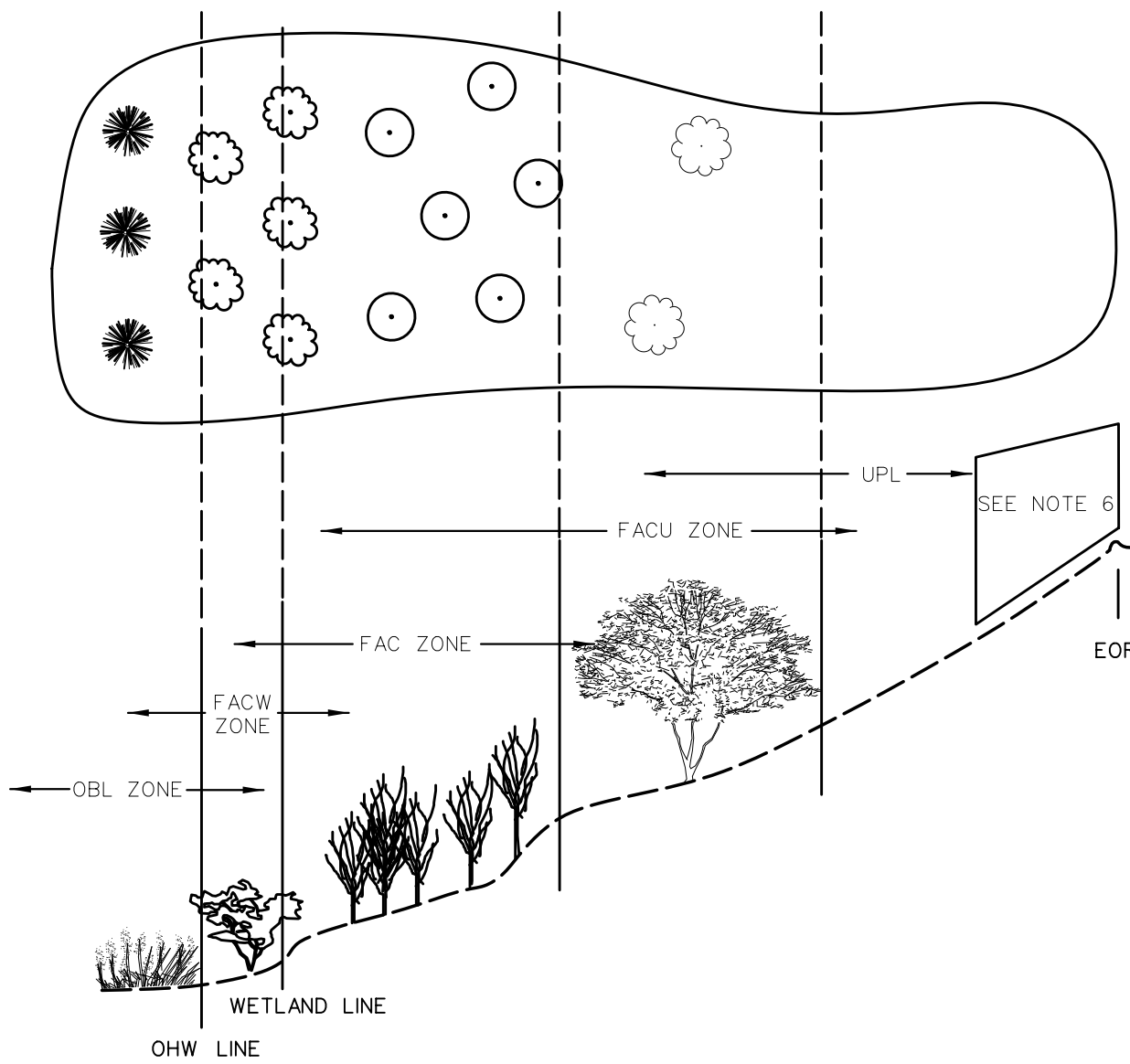


AREA TO BE RESTORED WITH PERMIT PLANTINGS  
**TOTAL PLANTS = 238**  
**TOTAL PLANTING AREA = 5060 S.F.**

**PERMIT PLANTING PLAN**  
SCALE: 1" = 40'

**NOTES**

1. PLANTINGS ON THIS SHEET ARE FOR ENVIRONMENTAL PERMITTING. ANY SUBSTITUTIONS TO THE PERMIT PLANTINGS SHALL BE COORDINATED WITH THE DEPARTMENT'S OFFICE OF ENVIRONMENTAL PLANNING (OEP).
2. PROPOSED PLANTINGS TO BE FIELD LOCATED BY CTDOT OEP OR THEIR DESIGNATED REPRESENTATIVE.
3. WOOD CHIP MULCH SHALL NOT BE PLACED IN THE WETLAND AREA.
4. DISTURBED AREAS BELOW THE WETLAND LIMIT SHALL BE SEEDED WITH WETLAND GRASS ESTABLISHMENT. DISTURBED AREAS ABOVE THE WETLAND LIMIT SHALL BE SEEDED WITH CONSERVATION SEEDING FOR SLOPES, OR OTHER SEED MIX AS SPECIFIED. ALL AREAS SHALL BE RESTORED.
5. ALL PLANT MATERIAL SHALL BE NURSERY GRADE STRAIGHT SPECIES, CONFORMING TO SECTION 3 OF THE AMERICAN STANDARDS FOR NURSERY STOCK. CTDOT OEP WILL REVIEW AND APPROVE PROPOSED PLANTINGS.
6. NO PLANTINGS SHALL BE PLACED IN MOW AREA.
7. AREA TO BE TREATED FOR INVASIVES AND PROPERLY PREPARED FOR FINAL PLANTING, SEEDING, AND RESTORATION.
8. ALL PERMIT AND LANDSCAPE PLANTING AREAS SHALL BE FURNISHED WITH TOPSOIL. THIS WORK TO BE PAID FOR UNDER FURNISHING AND PLACING TOPSOIL.



**SCHEMATIC PLANTING**  
SCALE: NOT TO SCALE

**PERMIT PLANT LIST**

BOTANICAL NAME	COMMON NAME AND SIZE	QTY.	SPACING	WETLAND INDICATOR
ACER RUBRUM	RED MAPLE 2"-2 1/2" CAL. BB	8	FIELD LOCATE	FAC
ACER RUBRUM	RED MAPLE 3'-4' HT 1 GAL. CONT.	20	FIELD LOCATE	FAC
ACER RUBRUM	RED MAPLE 6'-8' HT 3 GAL. CONT.	20	FIELD LOCATE	FAC
LINDERA BENZOIN	COMMON SPICEBUSH 2'-3' HT BB	50	5'	FACW
CLETHRA ALNIFOLIA	SWEET PEPPERBUSH 3'-4' HT BB	50	5'	FAC
CORNUS RACEMOSA	GRAY DOGWOOD 3'-4' HT BB	50	5'	FAC
ALNUS INCANA	SPECKLED ALDER 4'-5' HT BB	40	5'	FACW
ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED 1 GALLON CONTAINER	40	1'-6" ON CENTER	NI
CONSERVATION SEEDING				
CONTROL AND REMOVAL OF INVASIVE VEGETATION		26631 SF	SEE HATCHING AND NOTE 7	

NOTE: ACER RUBRUM 3'-4' HT 1 GAL. CONT. AND ACER RUBRUM 6'-8' HT 3 GAL. CONT. TO BE PAID FOR UNDER ITEM #0949875A - WETLAND PLANTINGS  
NOTE: LANDSCAPE ITEMS FOR SLOPE STABILIZATION PLANTINGS TO BE FIELD LOCATED BY DOT LANDSCAPE DESIGN. PLEASE SEE 05 - LANDSCAPE FOR LANDSCAPE PLANTING PLAN.

**ENVIRONMENTAL PERMIT PLANS**

REV.	DATE	REVISION DESCRIPTION	SIGNATURE BLOCK: 	SCALE AS NOTED	 CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: <b>REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK</b>	TOWN(S): <b>NAUGATUCK</b>	DRAWING TITLE: <b>PERMIT PLANTING PLAN</b>	PROJECT NO.: <b>0087-0148</b>	DRAWING NO.: <b>S-17</b>
DESIGNER/DRAFTER: JJS	CHECKED BY: NJM									SHEET NO.: <b>04.17</b>

GENERAL PROTECTIVE FENCE NOTES:

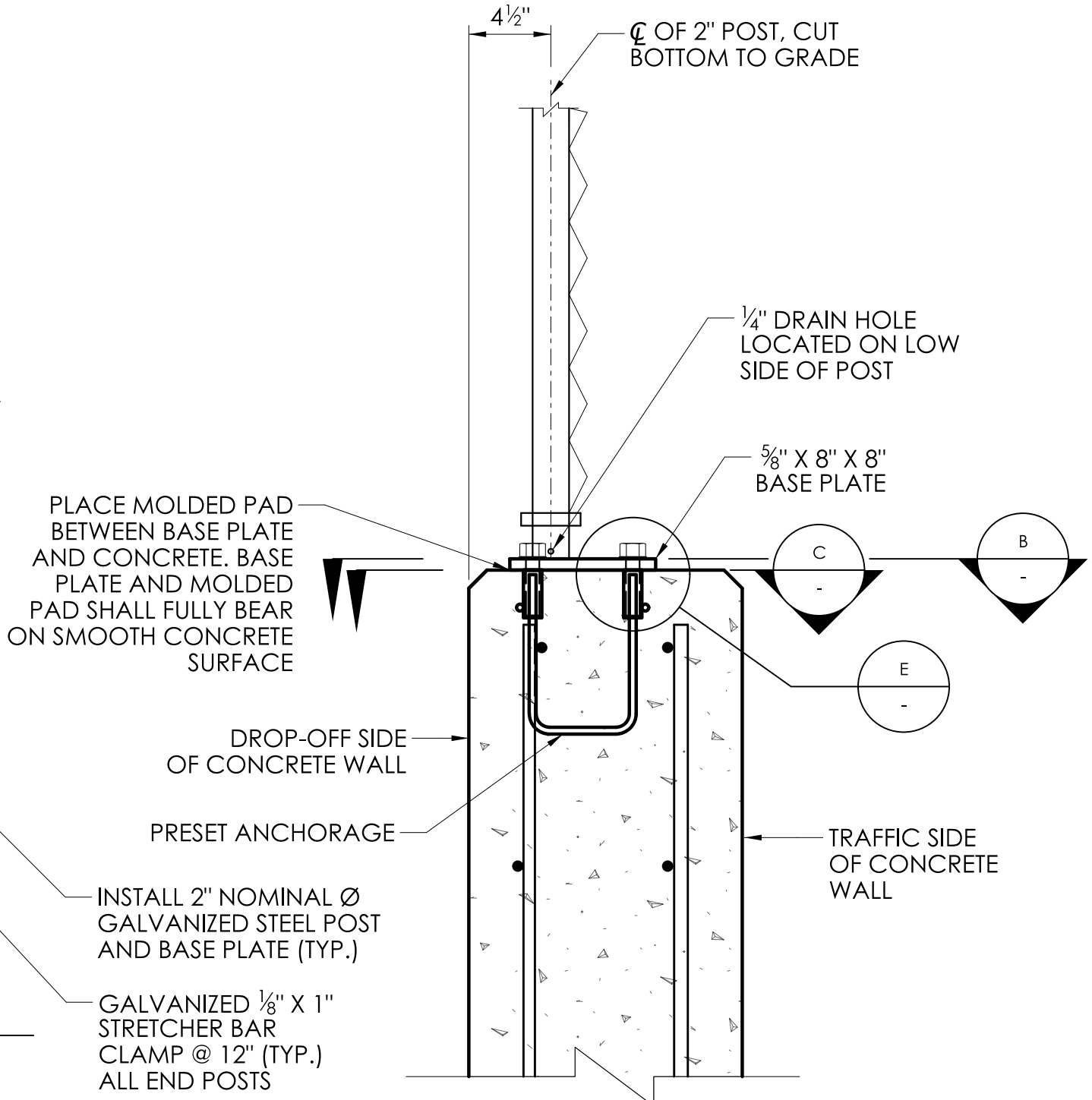
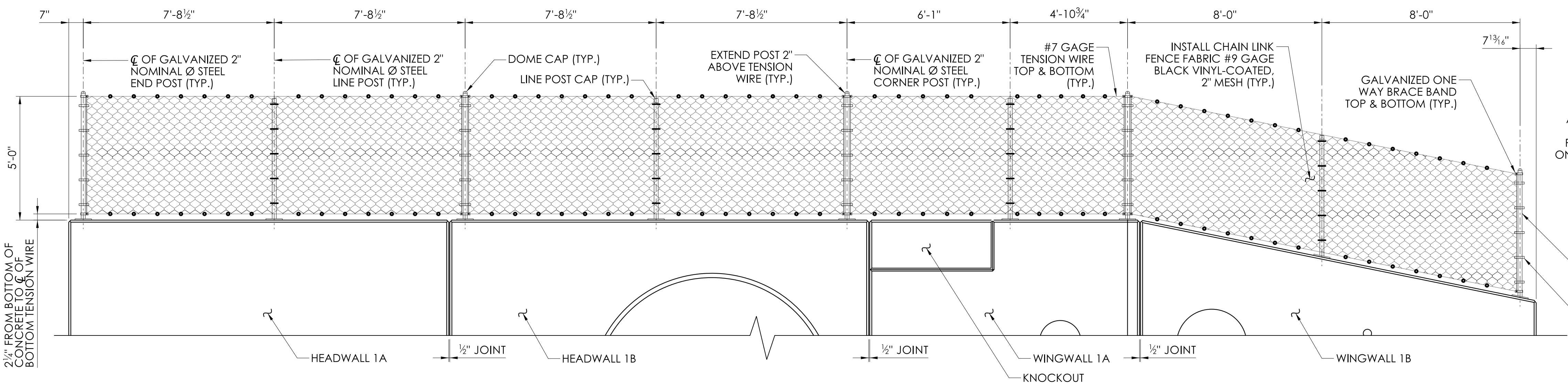
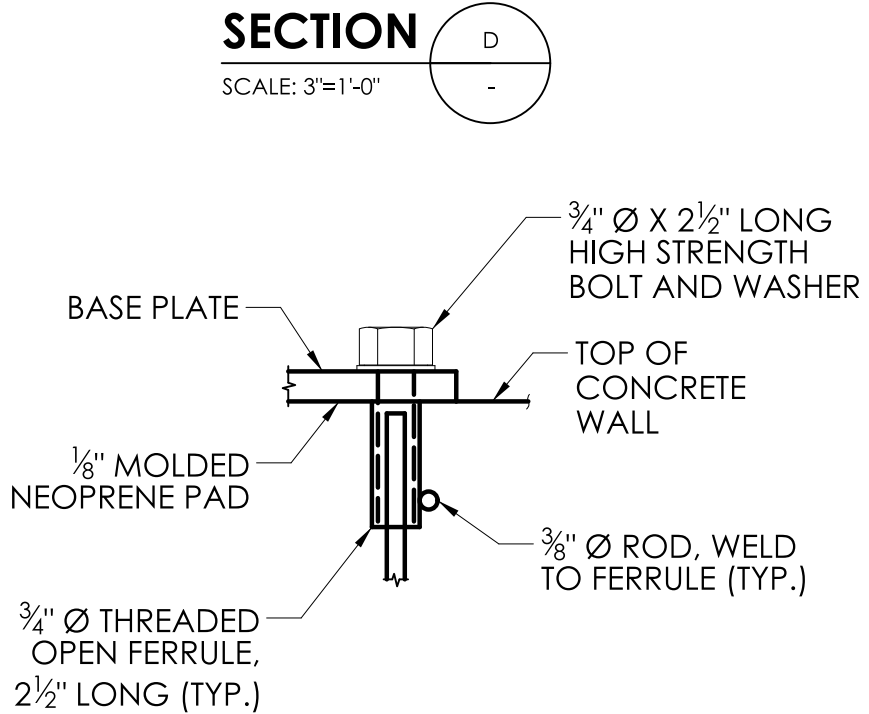
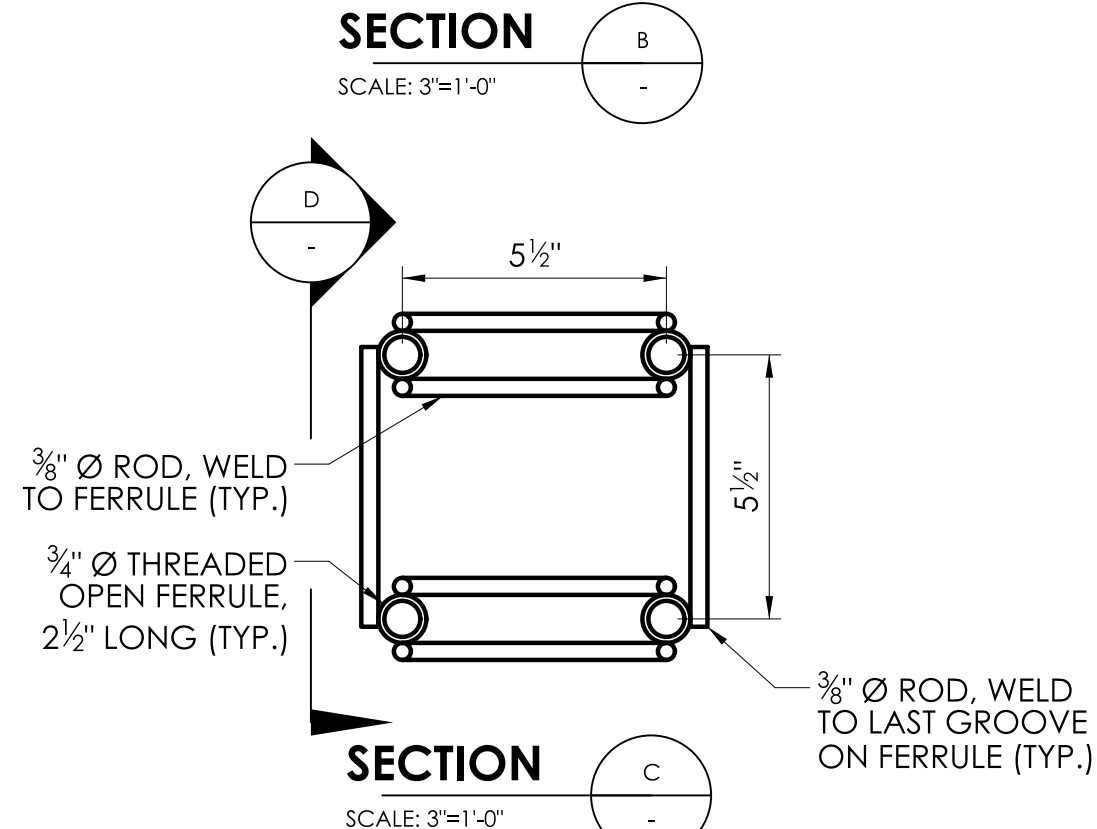
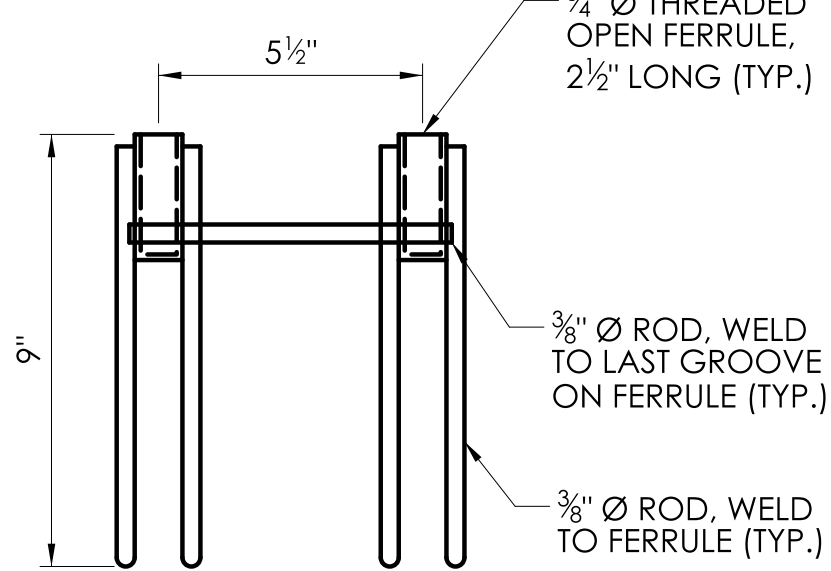
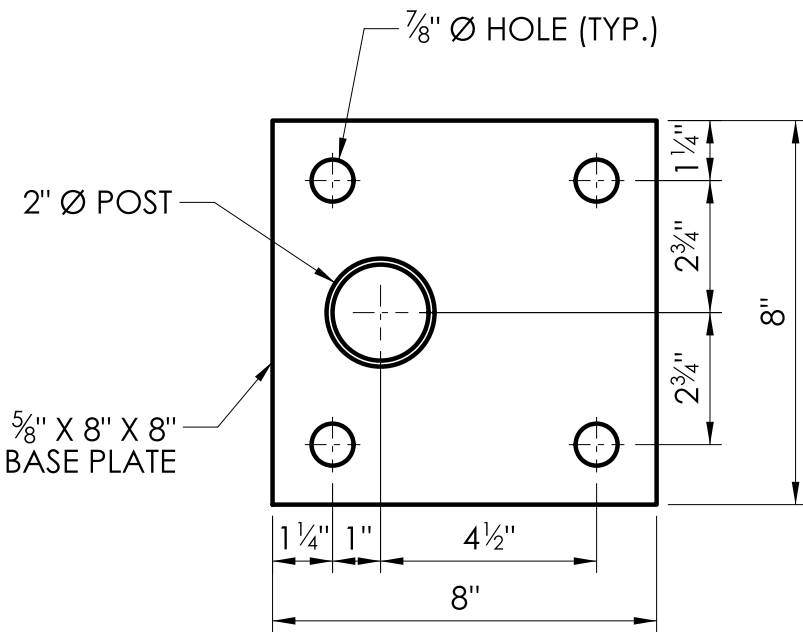
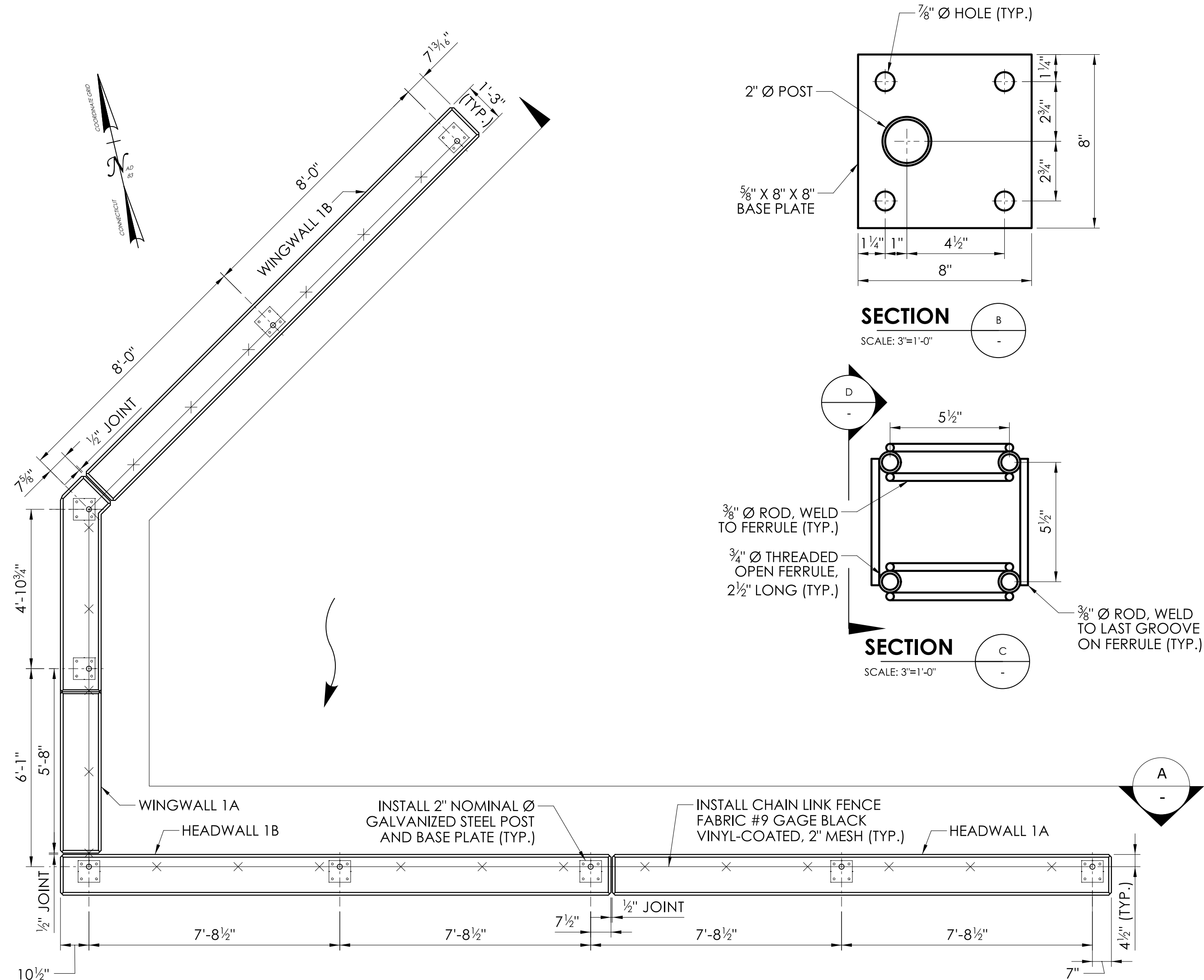
1. THE CHAIN LINK FABRIC SHALL BE MADE OF BLACK POLYVINYL CHLORIDE (PVC)-COATED STEEL CHAIN LINK TYPE, CONFORMING TO THE SPECIFICATIONS OF ASTM F668 CLASS 2B. #9 GAGE CORE WIRE SHALL BE GALVANIZED PRIOR TO PVC COATING. FENCE FABRIC SHALL HAVE A 2" MESH, KNUCKLED AT BOTH TOP & BOTTOM.
2. THE FENCE POSTS SHALL BE STANDARD 2" DIAMETER (SCHEDULE 40) STEEL PIPE CONFORMING TO THE REQUIREMENTS OF ASTM A53, TYPE E OR S, GRADE B. THE POST DIAMETERS ARE NOMINAL.
3. FENCE HARDWARE IS DEFINED AS ALL HARDWARE EXCEPT FOR THAT USED TO ANCHOR THE POST BASEPLATES TO THE PRESET ANCHORAGE AT THE BRIDGE 06772 INLET HEADWALLS AND WINGWALLS. ALL BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A307, GRADE A. NUTS SHALL CONFORM TO THE REQUIREMENT OF ASTM A563, GRADE A. THE WASHERS SHALL BE STANDARD, CIRCULAR PLATE WASHERS CONFORMING TO THE REQUIREMENTS OF ASTM F844. BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM F2329.
4. FENCE COMPONENTS, INCLUDING THE POST-BASE ASSEMBLY, FITTINGS AND ANCHORAGES SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
5. ALL POSTS SHALL BE INSTALLED VERTICALLY. ALL TENSION WIRES SHALL BE INSTALLED PARALLEL TO THE TOP OF THE WALL, OR FINISHED GRADE AS APPLICABLE.
6. THE FABRICATION AND INSTALLATION OF PROTECTIVE FENCE, INCLUDING ALL POSTS, FITTINGS, FENCE HARDWARE, ANCHORAGE HARDWARE, PRESET ANCHORAGE, BASEPLATES, MOLDED PADS, CHAIN LINK MESH, TENSION WIRES, TIE WIRES, HOG RINGS, STRETCHER BARS, CAPS, DRILLING OF HOLES FOR FOUNDATIONS, CONCRETE FOR FOUNDATIONS FOR GROUND-MOUNTED FENCE AND DISPOSAL OF SURPLUS MATERIAL TO BE INCLUDED FOR PAYMENT UNDER "PROTECTIVE FENCE (5' HIGH)."

INLET PROTECTIVE FENCE NOTES:

1. STEEL BASE PLATES FOR THE FENCE POSTS MOUNTED TO THE BRIDGE 06772 INLET HEADWALL AND WINGWALLS SHALL CONFORM TO ASTM A709, GRADE 36. BASE PLATES SHALL BE WELDED TO THE POST BASES AT THE ANGLE NECESSARY TO FOLLOW THE SLOPE OF THE WALL WHILE ALLOWING THE POSTS TO BE INSTALLED PLUMB.
2. ANCHORAGE HARDWARE IS DEFINED AS THE BOLTS AND WASHERS THAT ANCHOR BASEPLATES FOR THE FENCE POSTS MOUNTED TO THE BRIDGE 06772 INLET HEADWALL AND WINGWALLS TO THE PRESET ANCHORAGE. ANCHORAGE BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F3125, GRADE A325, TYPE 1. WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F436, TYPE 1. BOLTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.
3. THE PRESET ANCHORAGE WIRE STRUTS INSTALLED AT THE BRIDGE 06772 INLET HEADWALL AND WINGWALLS SHALL CONFORM TO ASTM A510, GRADE 1030. FERRULES SHALL CONFORM TO ASTM A108, GRADE 12L14.
4. THE ANCHORAGE ASSEMBLIES FOR THE FENCE POSTS MOUNTED TO THE BRIDGE 06772 INLET HEADWALL AND WINGWALLS SHALL BE INSTALLED PERPENDICULAR TO THE TOP SLOPE OF THE WALLS. THE ANCHORAGES SHALL BE FIRMLY AND ACCURATELY HELD IN POSITION PRIOR TO AND DURING THE PLACING OF CONCRETE.

OUTLET PROTECTIVE FENCE NOTES:

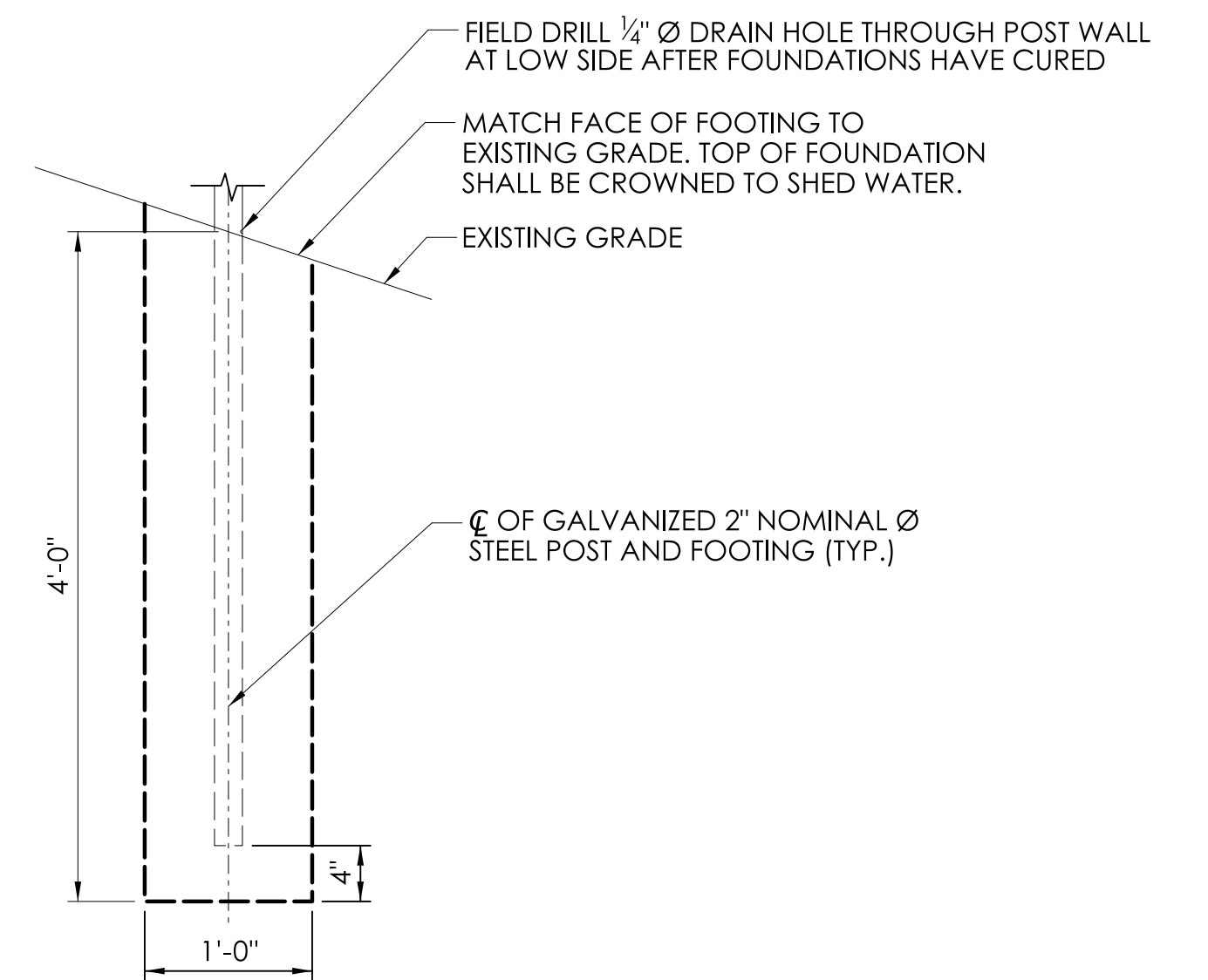
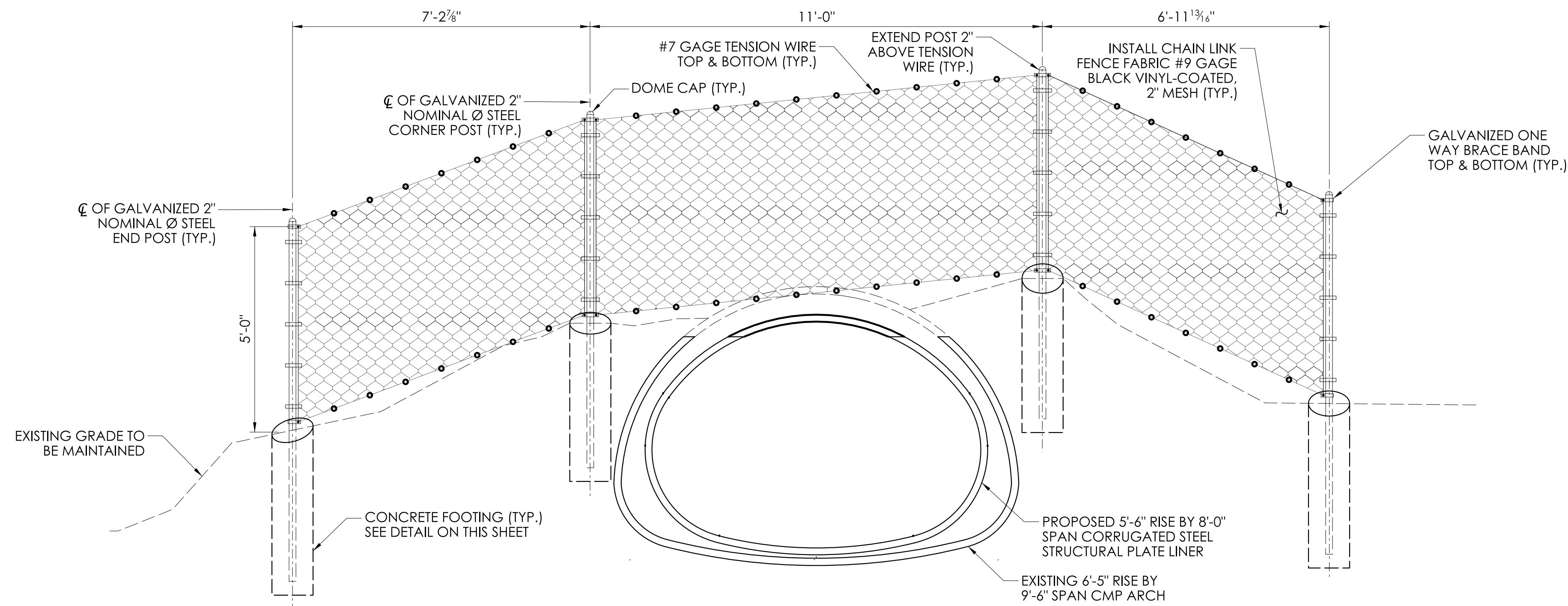
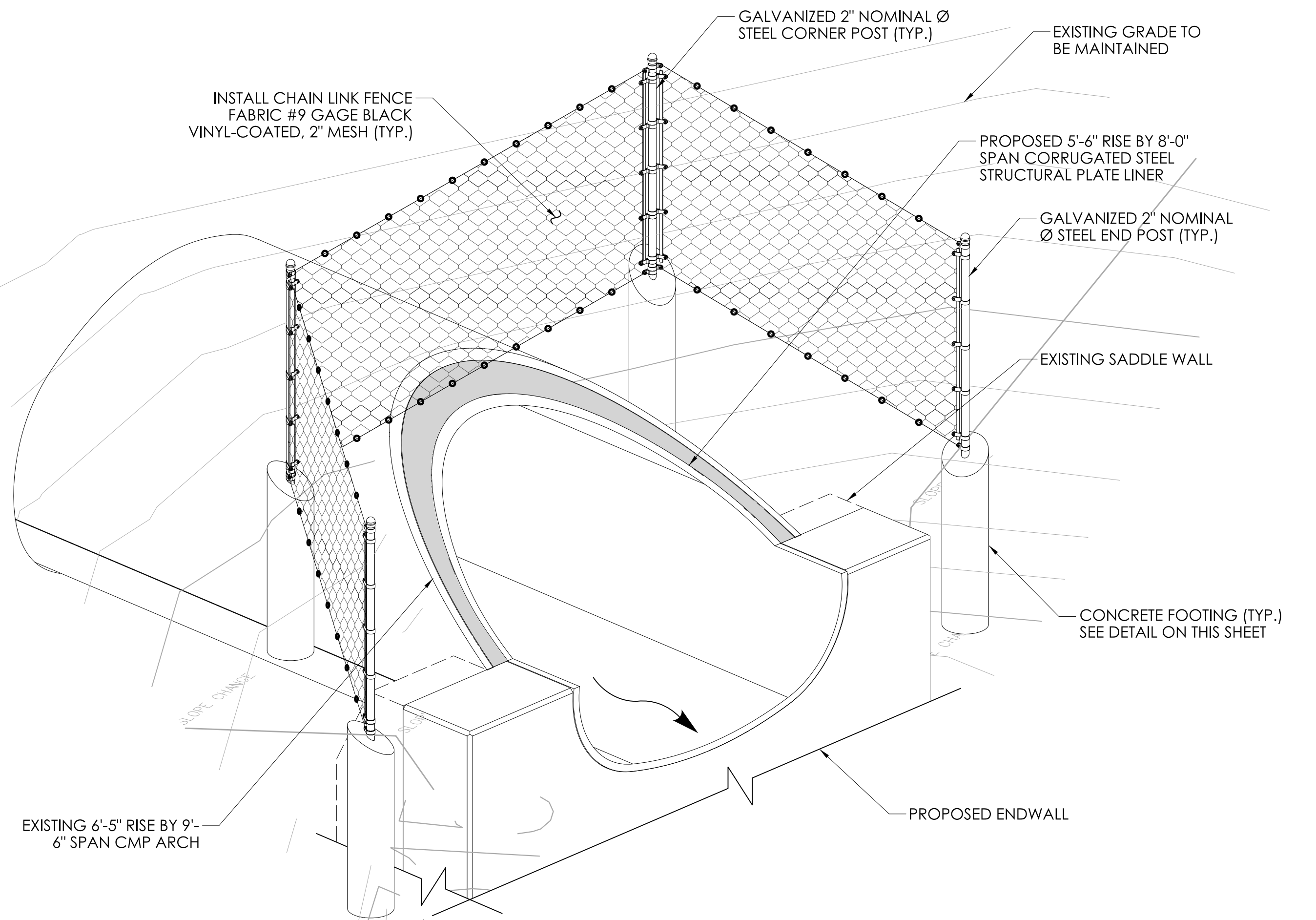
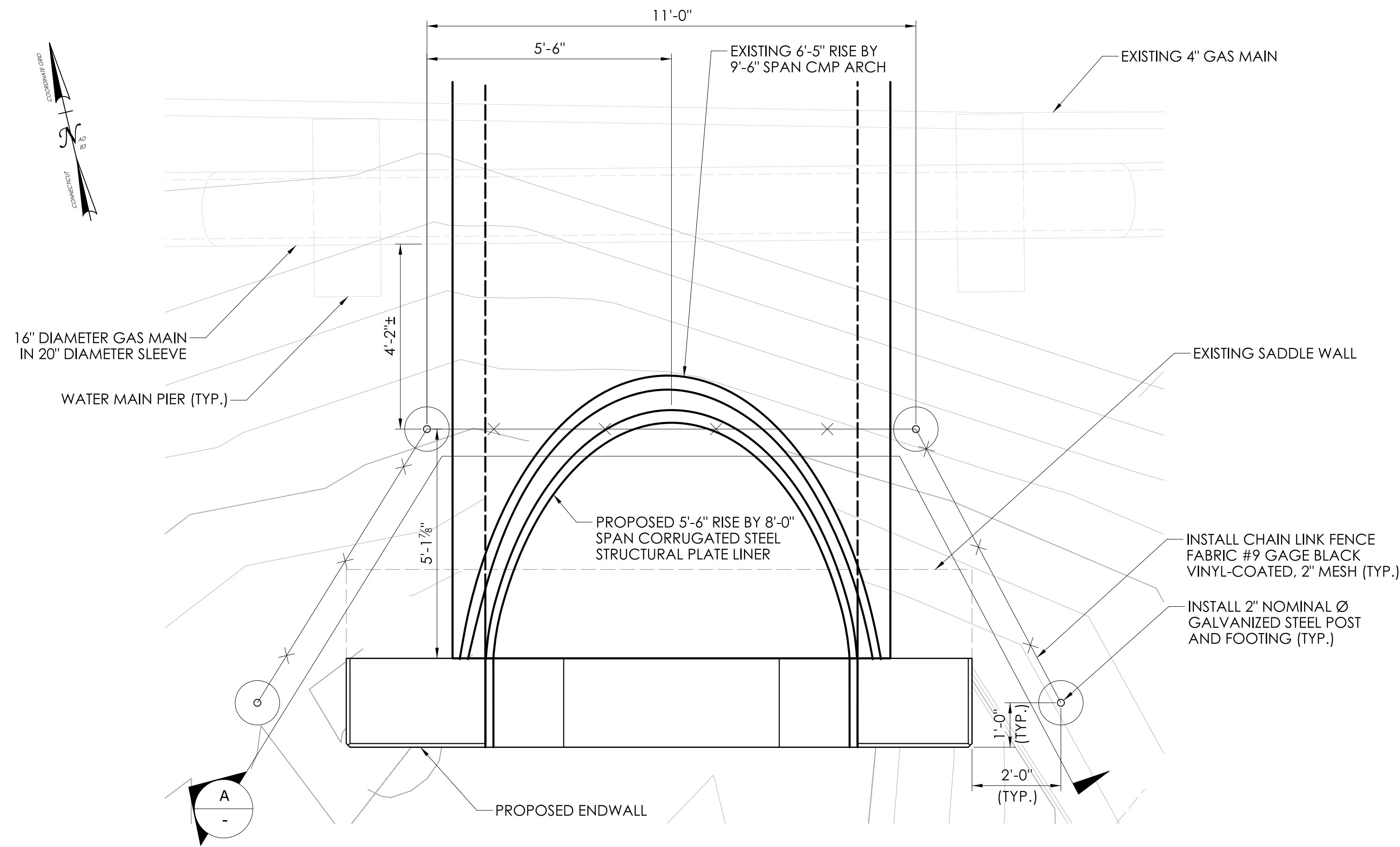
1. THE FENCE POSTS AT THE BRIDGE 06772 OUTLET EMBANKMENT SHALL BE MOUNTED IN CONCRETE FOUNDATIONS.
2. CONCRETE FOR FOUNDATIONS AT THE BRIDGE 06772 OUTLET EMBANKMENT SHALL CONFORM TO THE REQUIREMENTS OF PCC03360 AS DEFINED IN M.03.02.
3. HOLES FOR FENCE POST FOUNDATIONS AT THE BRIDGE 06772 OUTLET EMBANKMENT SHALL BE AUGERED WITHOUT DISTURBING THE SURROUNDING EMBANKMENT. CONCRETE FOR FOUNDATIONS SHALL BE CAST AGAINST UNDISTURBED EARTH.
4. FENCE POST FOUNDATIONS AT THE BRIDGE 06772 OUTLET EMBANKMENT SHALL BE 12 INCHES IN DIAMETER AND EXTEND A MINIMUM OF 4 FEET BELOW GRADE. FENCE POST EMBEDMENT IN FOUNDATIONS SHALL ALLOW FOR 4 INCHES OF CONCRETE COVER BEYOND THE POST AT THE BOTTOM OF THE FENCE POSTS. FENCE POSTS SHALL BE CENTERED IN THE CONCRETE FOUNDATIONS.



REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:	SCALE AS NOTED	PROJECT TITLE:	TOWN(S):	DRAWING TITLE:	PROJECT NO.:	DRAWING NO.:
		REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK	NAUGATUCK	PROTECTIVE FENCE DETAILS - 1	0087-0148	S-18
DESIGNER/DRAFTER: JJS	CHECKED BY: NJM					SHEET NO. 04.18





REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:  
DESIGNER/DRAFTER: JJS  
CHECKED BY: NJM

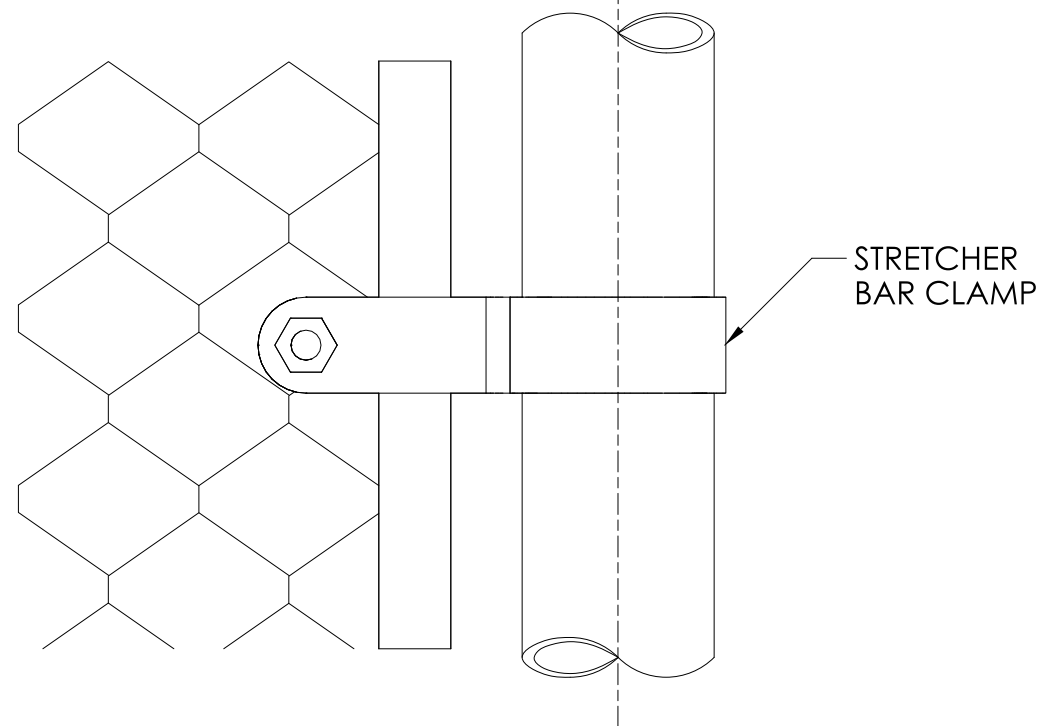
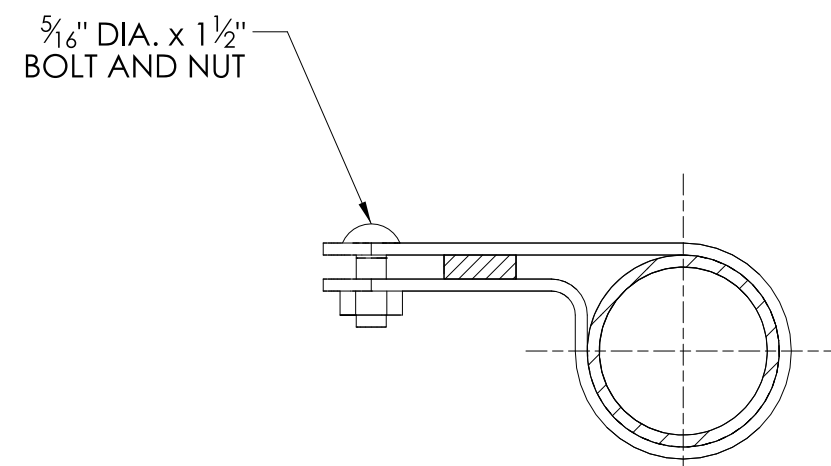


PROJECT TITLE:  
REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK

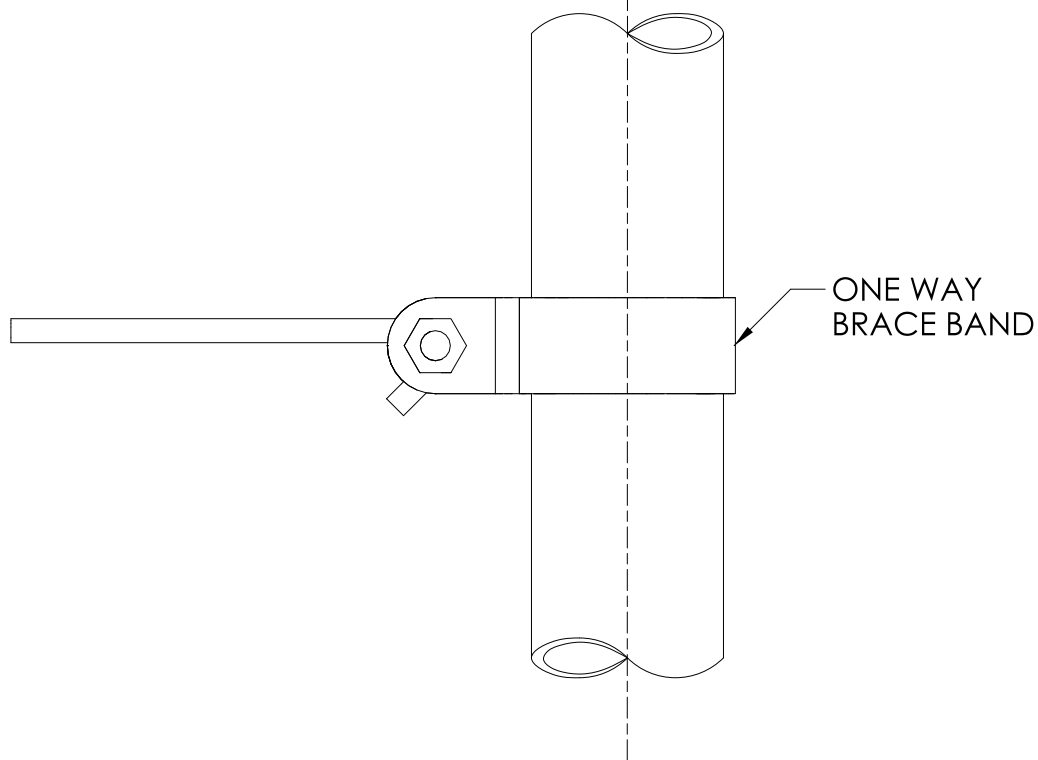
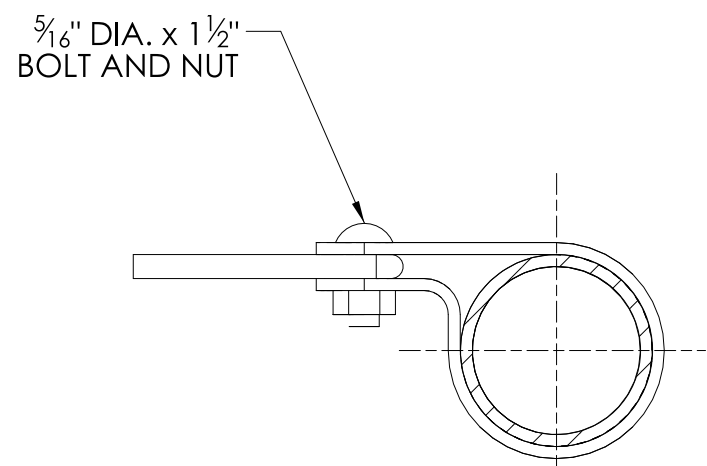
TOWN(S):  
NAUGATUCK

DRAWING TITLE:  
PROTECTIVE FENCE DETAILS - 2

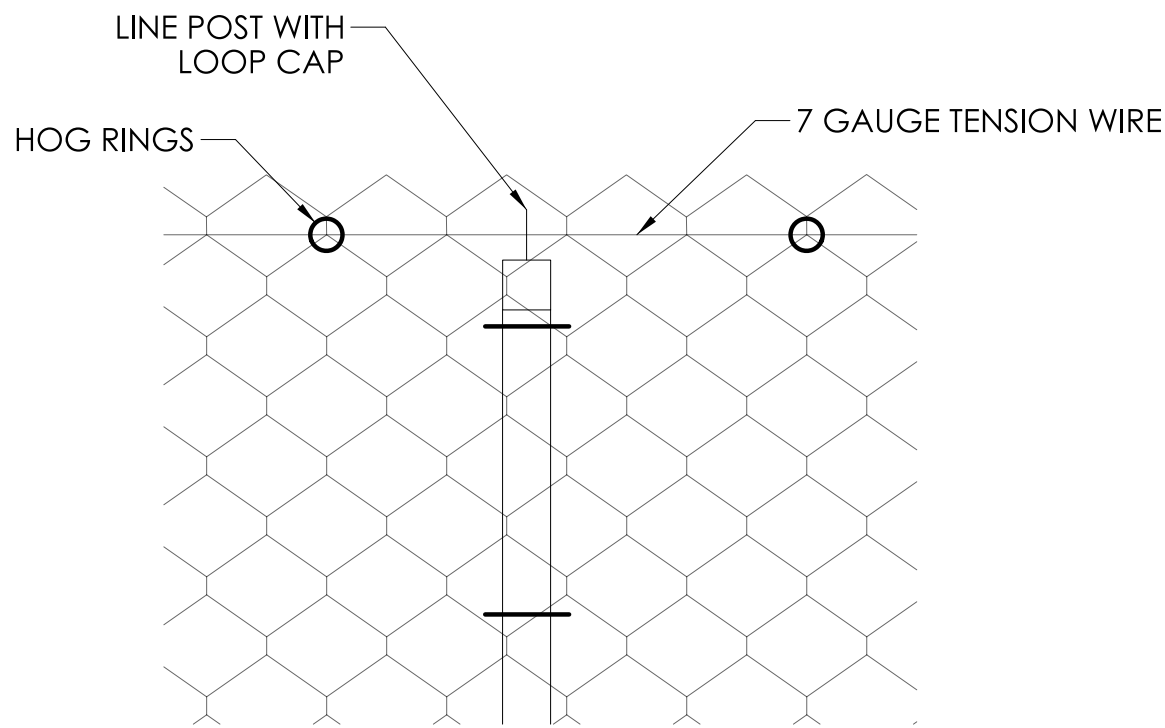
PROJECT NO.:  
0087-0148  
DRAWING NO.:  
S-19  
SHEET NO.:  
04.19



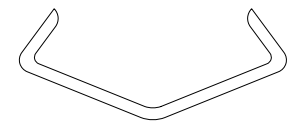
TENSION BAR



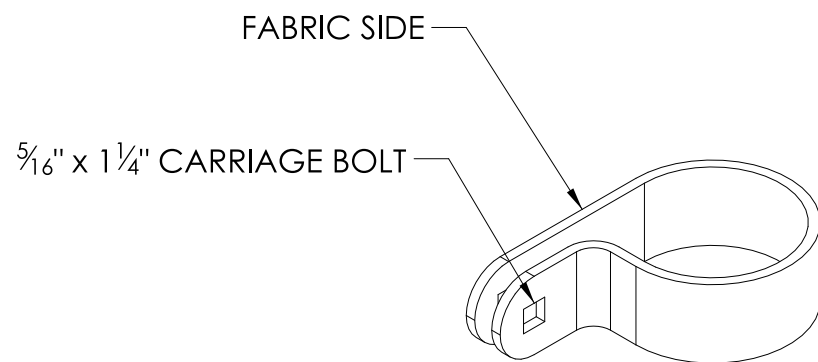
TENSION WIRE



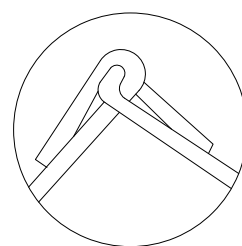
TENSION WIRE



HOG RING

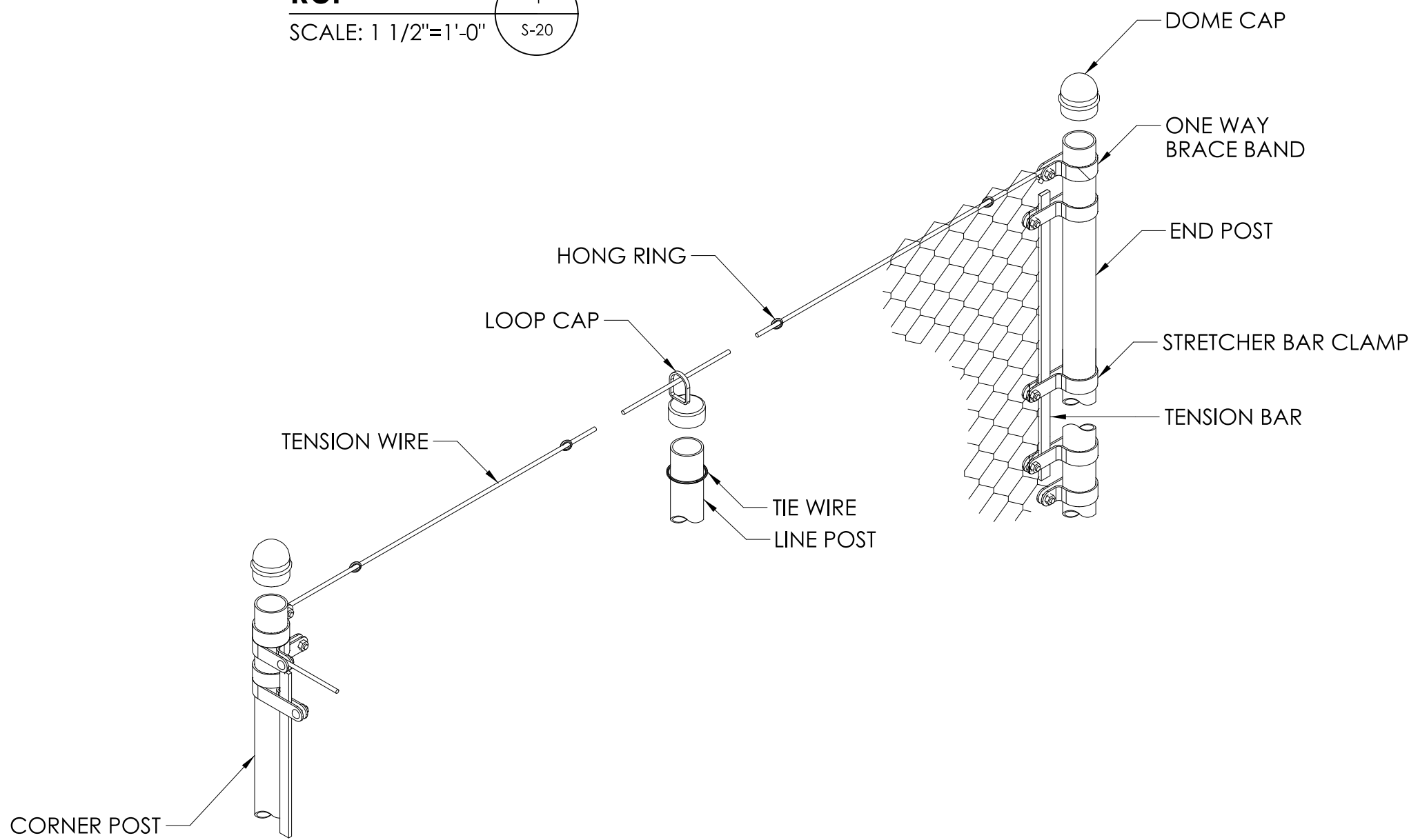


1/8" x 1" BRACE BAND

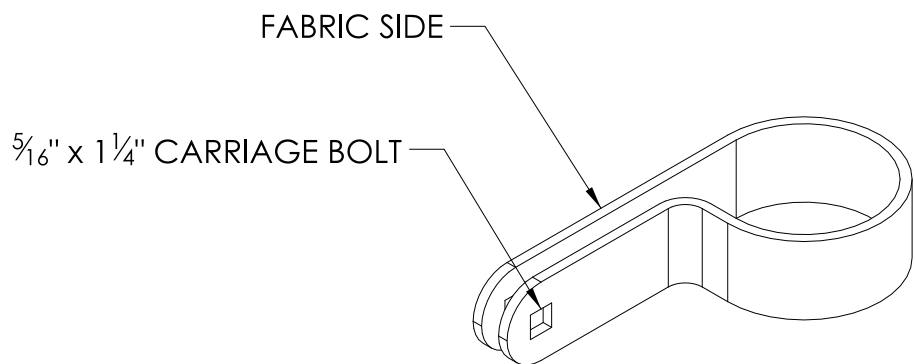


KNUCKLE SELVAGE

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



TOP RAIL / TRUSSED BRACE RAIL WITH BOTTOM TENSION WIRE



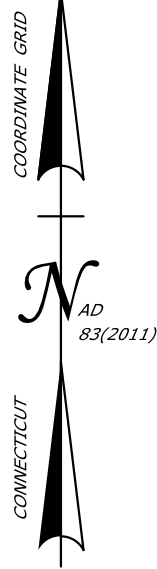
1/8" x 1" BRACE BAND

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: 		NOT TO SCALE	 CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: <b>REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK</b>	TOWN(S): <b>NAUGATUCK</b>	DRAWING TITLE: <b>PROTECTIVE FENCE DETAILS - 3</b>	PROJECT NO.: <b>0087-0148</b>	DRAWING NO.: <b>S-20</b>
DESIGNER/DRAFTER: JJS CHECKED BY: NJM								SHEET NO.: <b>04.20</b>

LASTED SAVED BY: soltysj FILE NAME: C:\Users\soltysj\State of Connecticut\0087-0148 - Design\Bridge\Contract\_Plans\Addendum 1\Structures\S-20\_Protective\_Fence\_Details-3.dgn  
PLOTTED DATE: 7/9/2025





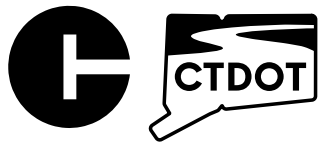
**NOTES:**

1. EXCESS SOIL FILL CONSTRUCTION MATERIAL SHALL BE RELOCATED AND DISPERSED AMONGST THE AREA NOTED AS "SURPLUS DISPOSAL LOCATION" AND AS DIRECTED BY THE ENGINEER. FILL LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE MODIFIED BASED ON EXISTING CONDITIONS AND WITH THE REVIEW OF THE ENGINEER.
2. CONTRACTOR SHALL ASSUME MATERIAL TO BE SPREAD TO A MAX. OF 2' ± THICK LAYER AMONG THE AREAS NOTED. EDGES OF FILL AREAS SHALL HAVE A MAX. 3:1 SLOPE.
3. COST OF RELOCATING AND DISPERSING MATERIAL SHALL BE INCLUDED IN ITEMS FOR "EARTH EXCAVATION" AND "STRUCTURE EXCAVATION - EARTH (COMPLETE)."
4. EXCESS ROADWAY STRUCTURE MATERIAL SHALL NOT BE DISPOSED OF AT FILL LOCATIONS, BUT SHALL BECOME PROPERTY OF THE CONTRACTOR.
5. CONTRACTOR SHALL NOT IMPACT ANY REGULATED AREAS AND SHALL MINIMIZE IMPACTS TO EXISTING TREES AND SHRUBS AS DIRECTED BY THE ENGINEER.
6. ALL DISTURBED INFELD AREAS SHALL BE TREATED WITH TOPSOIL AND RESEEDED WITH LOW GROWTH TURF MIX.
7. DISTURBED INFELD AREAS SHALL BE ENCLOSED WITH SEDIMENTATION CONTROL SYSTEMS UNTIL LOW GROWTH TURF ESTABLISHMENT HAS TAKEN PLACE OR AS DIRECTED BY THE ENGINEER.
8. ANTI-TRACKING PAD SHALL BE INSTALLED AT INGRESS AND EGRESS POINT AS DIRECTED BY THE ENGINEER.

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:  
*Arthur J. Carlini*  
DESIGNER/DRAFTER: JJS CHECKED BY: NJM

SCALE: 1" = 40'



CONNECTICUT  
DEPARTMENT OF  
TRANSPORTATION

PROJECT TITLE:  
**REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE  
63 OVER STRAITSVILLE BROOK**

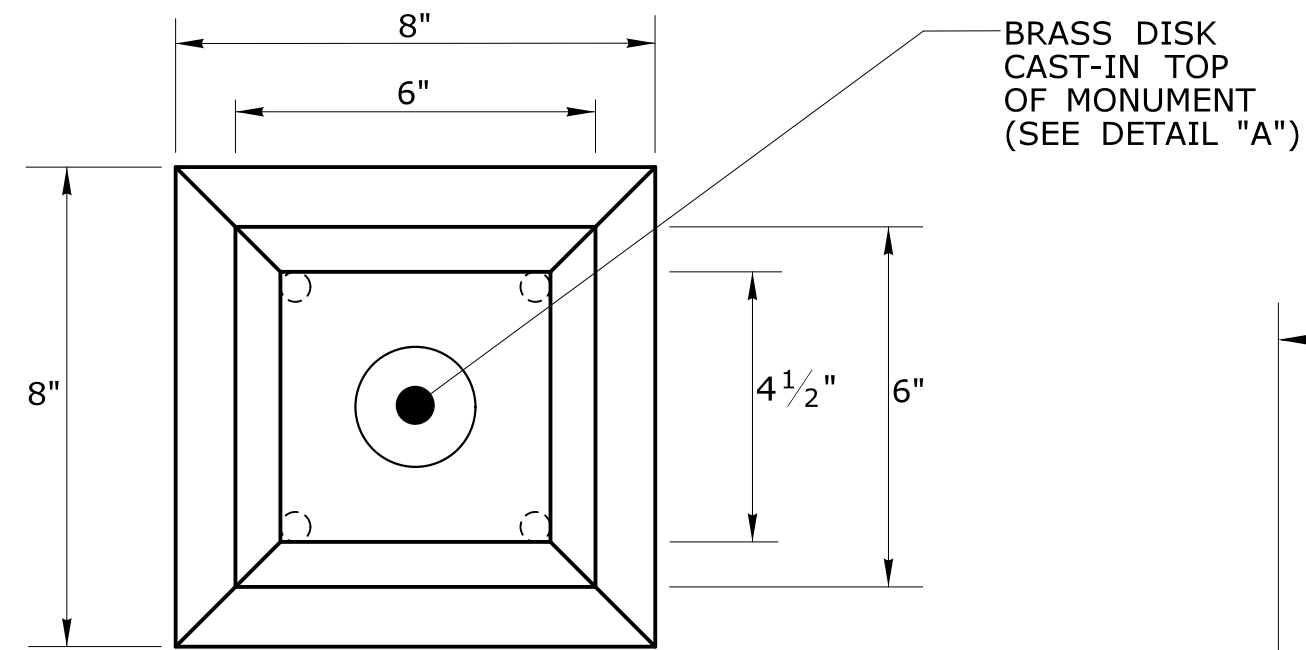
TOWN(S):  
**NAUGATUCK**

DRAWING TITLE:  
**SURPLUS DISPOSAL  
LOCATION PLAN**

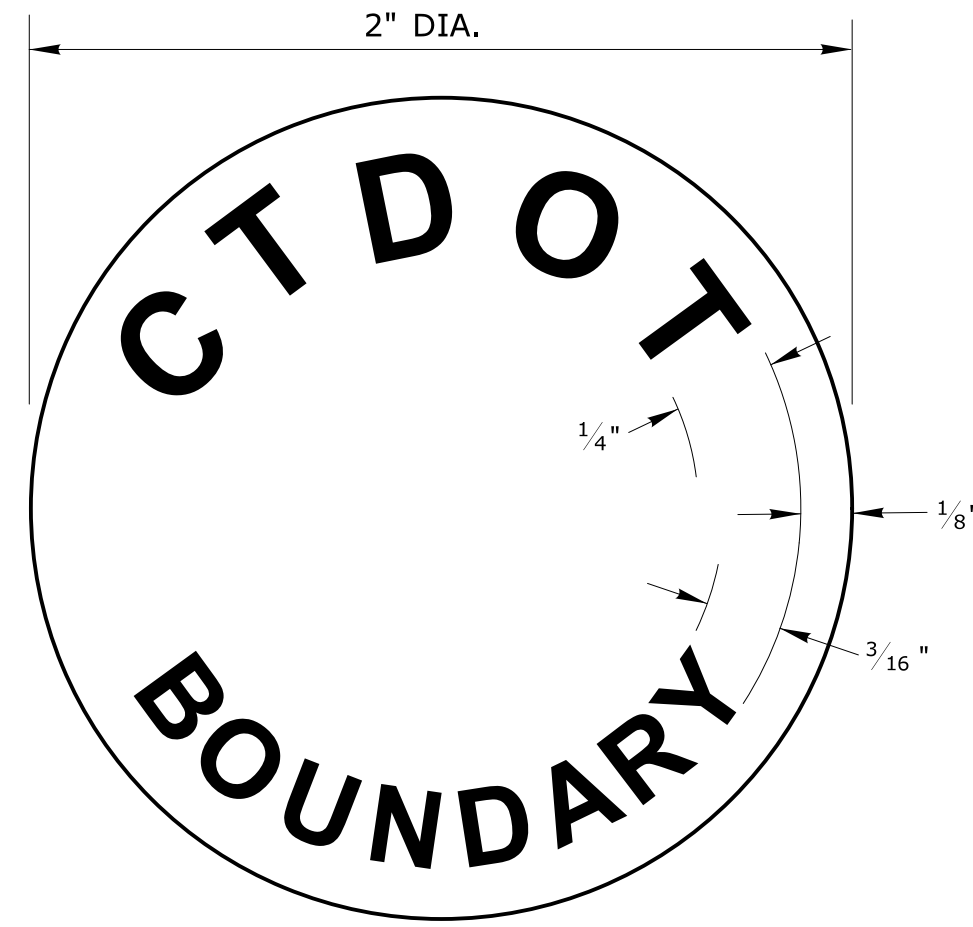
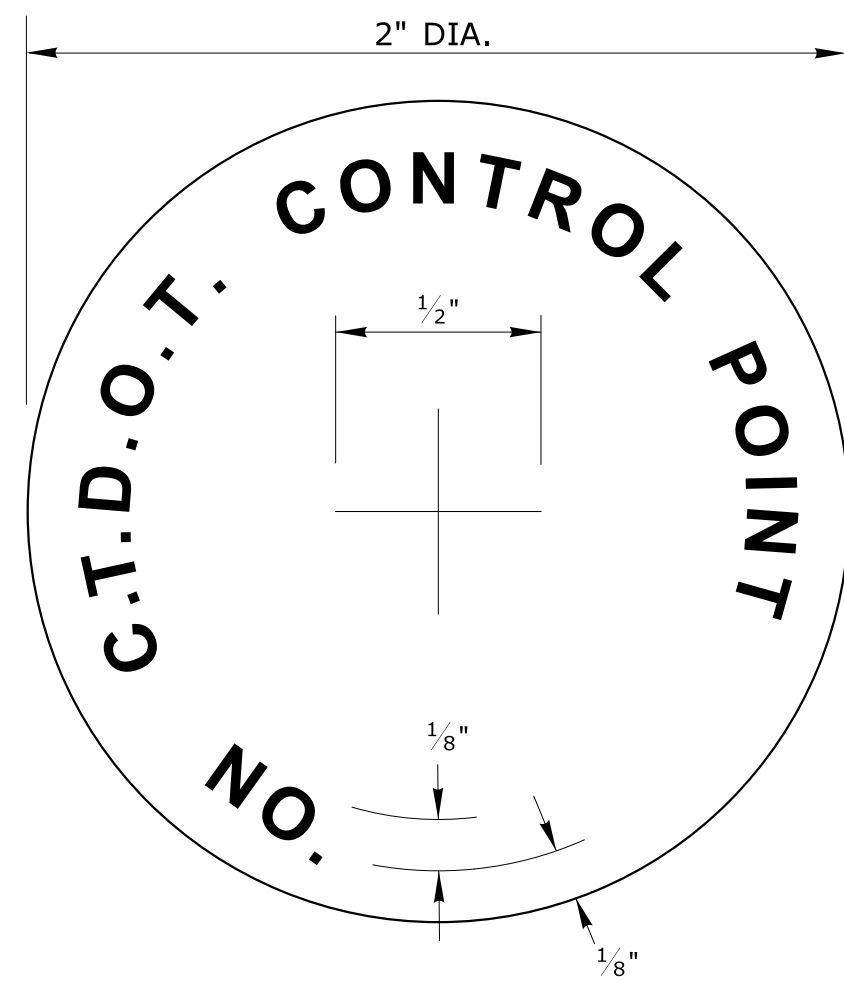
PROJECT NO.:  
**0087-0148**

DRAWING NO.:  
**S-21**  
SHEET NO.:  
**04.21**

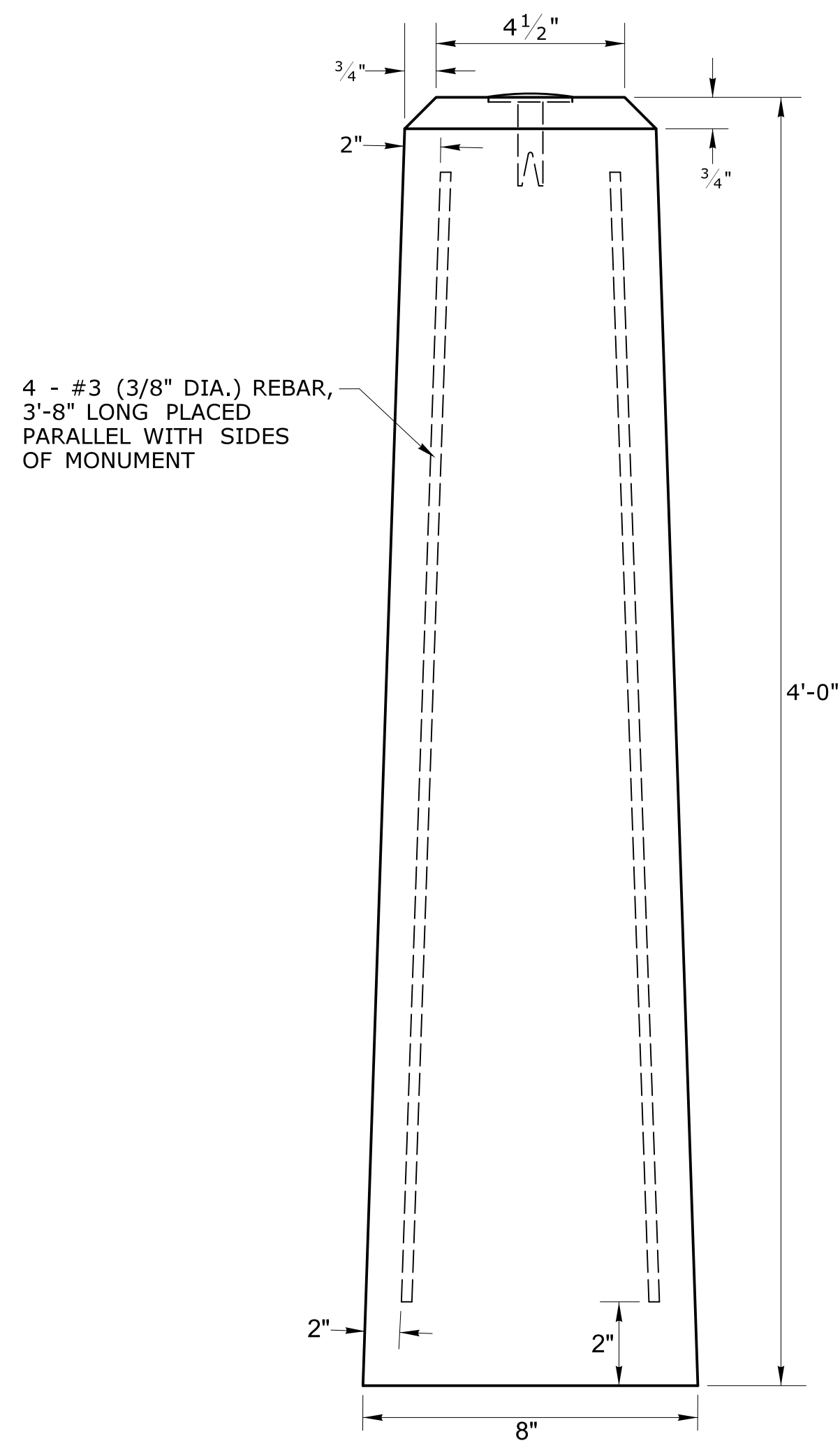
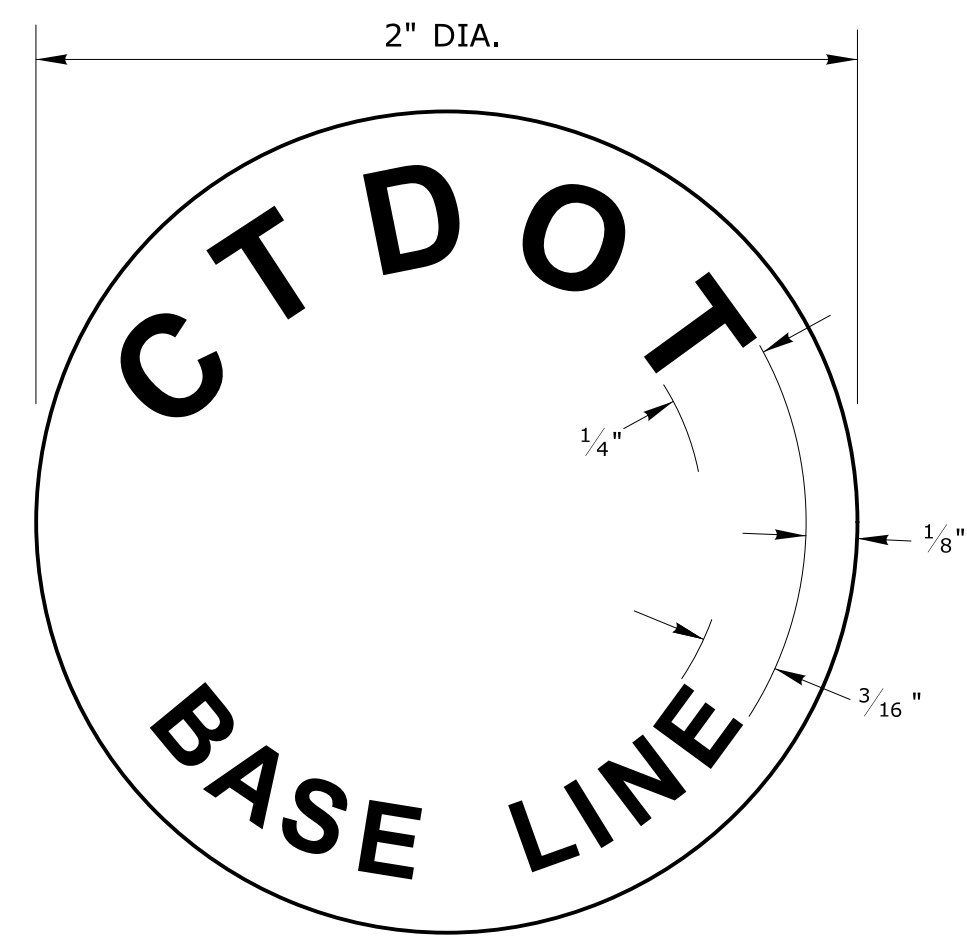




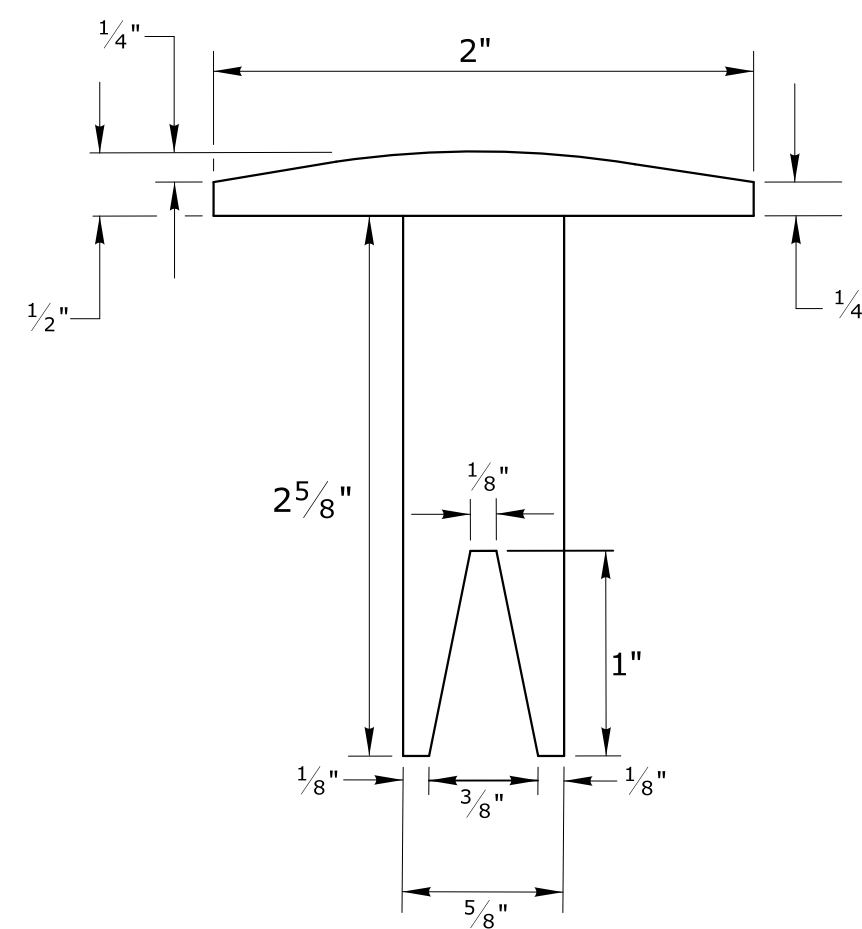
PLAN



PLAN



ELEVATION



ELEVATION  
DETAIL "A"

GENERAL NOTES:

1. REINFORCING STEEL DEFORMED BARS SHALL CONFORM TO LATEST ASTM SPECIFICATION A615, GRADE 60 MIN. COVER 2".
2. USE CLASS PCC 04460 CONCRETE. CONCRETE COMPRESSIVE STRENGTH 4,000 PSI AT 28 DAYS SELF COMPACTING CONCRETE MIX.
3. MANUFACTURER IS TO CONTACT DOT DISTRICT SURVEY - BOUNDARY RIGHT-OF-WAY SURVEY FOR SURVEY DISK.
4. A #6 ( 3/4" DIA.) REINFORCING BAR WITH ALUMINUM CAP (PROVIDED BY DOT) 3' LONG MAY BE USED AS DIRECTED BY THE SURVEYOR.

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:		NOT TO SCALE	CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: <b>REHABILITATION OF BRIDGE NO. 06772 CARRYING ROUTE 63 OVER STRAITSVILLE BROOK</b>	TOWN(S): <b>NAUGATUCK</b>	DRAWING TITLE: <b>CTDOT BOUNDARY MARKER</b>	PROJECT NO.: <b>0087-0148</b>	DRAWING NO.: <b>S-22</b>
DESIGNER/DRAFTER: JJS	CHECKED BY: NJM							SHEET NO.: <b>04.22</b>