ESTIMATED BRIDGE QUANTITIES

CALCULATED: VDT DATE: 6/11/15
CHECKED: SNH DATE: 6/12/15

ITEM	ITEM EXT.	TOTAL QUANTITY (05/NHS/10)	UNIT	DESCRIPTION	PHASE A & B				PHASE C & D				GENERAL	APP SHEET NO.
					REAR	PIER	FWD	SUPER	REAR	PIER	FWD	SUPER		
202	11003	LUMP	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN									LUMP	3/57
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (PHASE A, REAR ABUTMENT)									LUMP	8/286
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (PHASE A, PIER)									LUMP	8/286
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (PHASE A, FORWARD ABUTMENT)									LUMP	8/286
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (PHASE C, REAR ABUTMENT)									LUMP	8/286
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (PHASE C, PIER)									LUMP	8/286
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (PHASE C, FORWARD ABUTMENT)									LUMP	8/286
503	21301	LUMP	LS	UNCLASSIFIED EXCAVATION, AS PER PLAN									LUMP	8/286
505	11100	LUMP	LS	PILE DRIVING EQUIPMENT MOBILIZATION									LUMP	
507	00400	1,500	FT	STEEL PILES, MISC.: SOLDIER PILES	450		376		297		377			3/57
507	00601	10,950	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN	2,880		2,550		2,970		2,550			9/286
507	00651	11,615	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN	3,040		2,720		3,135		2,720			9/286
507	00701	2,800	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN		1,400				1,400				9/286
507	00751	3,000	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN		1,500				1,500				9/286
509	10000	158,802	LB	EPOXY COATED REINFORCING STEEL	11,105	19,716	11,351	36,706	10,827	19,107	10,863	39,127		
511	34447	345	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN				161				184		9/286
511	34451	22	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN				11				11		9/286
511	40513	233	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS, AS PER PLAN		115				118				9/286
511	44113	94	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT, NOT INCLUDING FOOTING, AS PER PLAN	24		23		26		21			9/286
511	46013	21	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN	6		4		7		4			9/286
511	46511	643	CY	CLASS QC1 CONCRETE, FOOTING, AS PER PLAN	95	115	104		107	115	107			9/286
511	71200	4,144	SF	CONCRETE, MISC.: FACING OF CANTILEVER WALLS	1,192		1,023		839		1090			9/286
512	10001	1,237	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN	245	169	226		194	173	230			10/286
512	10100	1,411	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	245	169	226	87	194	173	230	87		
512	44451	1,086	SY	TYPE E WATERPROOFING, AS PER PLAN				500				586		10/286
SPECIAL	51256100	97	SY	SPECIAL - BUTYL RUBBER MEMBRANE WATERPROOFING				97						3/57
SPECIAL	51256202	1,086	SY	SPECIAL - ASPHALTIC PANEL				500				586		10/286
SPECIAL	51267400	1,241	SF	SPECIAL - WATERPROOFING, MISC.: DAMPPROOFING OF RAILROAD STRUCTURES	312		321		312		296			9/286
513	10221	59,300	LB	STRUCTURAL STEEL MEMBERS, LEVEL 1, AS PER PLAN				27,420				31,880		10/286
513	10321	1,441,405	LB	STRUCTURAL STEEL MEMBERS, LEVEL 6, AS PER PLAN				682,735				758,670		10/286
513	20000	11,248	EACH	WELDED STUD SHEAR CONNECTORS				5,328				5,920		
514	80020	39,225	SF	SHOP PAINTING AND FIELD TOUCH-UP OF STRUCTURAL STEEL				18,395				20,830		10/286
516	12201	208	FT	STRUCTURAL STEEL EXPANSION JOINT, AS PER PLAN				96				112		10/286
516	13600	48	SF	1" PREFORMED EXPANSION JOINT FILLER			12		18		18			
516	43201	38	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (14"x20"x2.948" BEARING WITH LOAD PLATE), AS PER PLAN				18				20		47/57
516	43301	38	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (16"x18"x3.772" BEARING WITH LOAD PLATE), AS PER PLAN				18				20		47/57
517	73101	356	FT	TEMPORARY BRIDGE RAILING, AS PER PLAN				356						5/57
517	75001	70	FT	RAILING, ALUMINUM, AS PER PLAN	18		19		15		18			14/286
517	76300	292	FT	RAILING, MISC.: NSRR ALUMINUM HANDRAIL WITH VANDAL PROTECTION FENCE				146				146		15/286
518	20000	463	SY	PREFABRICATED GEOCOMPOSITE DRAIN	133		114		94		122			
518	21200	93	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	23		24		24		22			
518	40012	375	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE	110		95		75		95			
518	42201	245	FT	8" PERFORATED CORRUGATED STEEL PIPE, 707.01, AS PER PLAN	55		60		70		60			10/286
518	42301	210	FT	8" NON-PERFORATED CORRUGATED STEEL PIPE, INCLUDING SPECIALS, 707.01, AS PER PLAN	70		40		45		55			10/286
518	63300	LUMP	LS	STRUCTURE DRAINAGE, MISC.: SUPERSTRUCTURE DRAINAGE SYSTEM				LUMP				LUMP		10/286
523	20000	12	EACH	DYNAMIC LOAD TESTING	2	2	2		2	2	2			
523	20500	12	EACH	RESTRIKE	2	2	2		2	2	2			
524	94603	1,460	FT	DRILLED SHAFTS, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN	438		366		289		367			3/57
SPECIAL	53000200	LUMP	LS	SPECIAL - STRUCTURES: SURVEY AND MONITORING OF TRACK AND TEMPORARY SHORING									LUMP	12/286
SPECIAL	53000200	LUMP	LS	SPECIAL - STRUCTURES: PRECONSTRUCTION CONDITION SURVEY									LUMP	12/286
SPECIAL	53013000	3,325	SF	SPECIAL - FORM LINER	671		1,023		541		1,090			10/286
SPECIAL	53014000	LUMP	LS	SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION									LUMP	13/286
SPECIAL	53051020	4,144	SF	SPECIAL - RETAINING WALL, TIMBER LAGGING	1,192		1,023		839		1,090			3/57
625	25605	308	FT	CONDUIT, 4", 725.051, AS PER PLAN				154				154		19/286

DESIGN AGENCY
Gannett Fleming
ENGINEERS & ARCHITECTS, P.C.
2500 CORPORATE EXCHANGE DRIVE, SUITE 230
COLUMBUS, OHIO 43231

DATE 12-19-23
REVIEWED CTV ODOT SFN: 3113818
NSRR BR#: BR0018448
DRAWN VDT REVISED
DESIGNED VDT CHECKED SNH

ESTIMATED BRIDGE QUANTITIES
BRIDGE NO. HAM-562-0026 (NSRR BRIDGE CT-1.41: CINCINNATI, OH)
NORFOLK SOUTHERN RAILROAD OVER S.R. 562

HAM-75-7.85
PID No. 77889

HAM-075-0834 SPECIFIC NOTES

STANDARD RAILROAD BRIDGE NOTES AND DETAILS

THE NOTES ON THIS SHEET ARE SPECIFIC TO THE SUBJECT BRIDGE STRUCTURE. FOR STANDARD NOTES AND DETAILS APPLICABLE TO ALL RAILROAD BRIDGE STRUCTURES ON THIS PROJECT, INCLUDING THIS STRUCTURE, SEE THE FOLLOWING SHEETS: 8/286 THROUGH 20/286

ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING IN-SERVICE BRIDGE CARRYING NSRR OVER I.R. 75.

THE REMOVAL OF THE EXISTING IN-SERVICE BRIDGE INCLUDES THE REMOVAL OF ALL SUPERSTRUCTURE ELEMENTS AND ALL SUBSTRUCTURE ELEMENTS TO THE TOP OF EXISTING MEDIAN BARRIER.

THE CONTRACTOR MUST REVIEW THE EXISTING STRUCTURE WHEN PREPARING THEIR BID. EXISTING PLANS ARE AVAILABLE FOR THE SUBJECT BRIDGE.

SEE SHEET 5 | 41 FOR PLAN LIMITS OF ITEM 202.

PROPOSED SEQUENCE OF CONSTRUCTION

FOR ROADWAY MAINTENANCE OF TRAFFIC DETAILS,

SEE DBT PLANS.

PROPOSED SEQUENCE OF CONSTRUCTION:

THE FOLLOWING MAY BE COMPLETED PRIOR TO ROADWAY MAINTENANCE TRAFFIC
1) INSTALL PRELOAD EMBANKMENT
2) INSTALL SOUTHEAST & SOUTHWEST CAISSON WALLS

THE FOLLOWING IS LIKELY TO BE COMPLETED DURING INITIAL ROADWAY MAINTENANCE OF TRAFFIC PHASES (DESIGN BUILD TEAM TO DETAIL)
3) INSTALL TEMPORARY ROADWAY SHORING AS REQUIRED TO EXCAVATE ABUTMENT AND PIER FOUNDATIONS
4) INSTALL ABUTMENT AND PIER PILES
5) CONSTRUCT PROPOSED SUBSTRUCTURES
6) REMOVE TEMPORARY SHEET PILE SHORING
7) ERECT AND CONSTRUCT SUPERSTRUCTURE
8) SHIFT NSRR ONTO PROPOSED ALIGNMENT
9) REMOVE EXISTING SUPERSTRUCTURE
10) REMOVE EXISTING FORWARD (WEST) ABUTMENT AND WINGWALLS
11) CONSTRUCT FACING OF SOUTHWEST CAISSON WALL
12) GRADE WEST EMBANKMENT TO PROPOSED ELEVATIONS
13) REMOVE EXISTING PIER

THE FOLLOWING MAY BE COMPLETED AFTER ROADWAY MAINTENANCE TRAFFIC (DESIGN BUILD TEAM TO DETAIL)
14) REMOVE EXISTING REAR (EAST) ABUTMENT AND WINGWALLS
15) CONSTRUCT FACING OF SOUTHEAST CAISSON WALL
16) GRADE EAST EMBANKMENT TO PROPOSED ELEVATIONS

ITEM 203 - EMBANKMENT, AS PER PLAN

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT FROM STATION 154+00 TO STATION 157+50. THE APPROACH EMBANKMENT SHALL BE FURNISHED AND PAID FOR AS PART OF THIS ITEM.

THE EMBANKMENT SHALL BE PLACED FOR THE PURPOSES OF PRE-LOADING THE BRIDGE SITE PRIOR TO SHORING, FOUNDATION AND SUBSTRUCTURE CONSTRUCTION. THE EMBANKMENT SHALL BE PLACED IN COORDINATION WITH THE SETTLEMENT PLATFORMS AND PROJECT PILE DRIVING CONSTRAINTS.

THE EMBANKMENT SHALL BE PLACED TO ITS REQUIRED FINAL ELEVATION AND SLOPED DOWN (1:1 MAX SLOPE) TO THE EXISTING IR-75 EDGE OF PAVEMENT. FILL SHOULD HAVE A MAXIMUM DRY DENSITY OF AT LEAST 110 PCF.

AFTER CONSTRUCTION OF THE APPROACH EMBANKMENT, A MINIMUM WAITING TIME OF 30 DAYS IS REQUIRED PRIOR TO BEGINNING DRILLED SHAFT OR FOUNDATION EXCAVATION AND CONSTRUCTION. THE WAIT TIME SHALL EXTEND UNTIL THE REQUIREMENTS OF THE SETTLEMENT PLATFORMS HAVE BEEN MEET.

SEE SHEET 5 | 41 FOR SCHEMATIC LIMITS OF EMBANKMENT AND EXCAVATION QUANTITIES.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES (CY) AT THE CONTRACT BID PRICE.

ITEM 507 - CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN

FOR STANDARD NOTES FOR THIS ITEM, SEE SHEET: 9/286

FOR FURNISHED PILE NOTES, SEE SHEET: 9/286

PILE DESIGN LOADS (ULTIMATE BEARING VALUE): THE ULTIMATE BEARING VALUE IS 406 KIPS PER PILE FOR THE REAR ABUTMENT PILES AND 372 KIPS PER PILE FOR THE FORWARD ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 288 KIPS PER PILE FOR THE REAR WINGWALL PILES AND 284 KIPS PER PILE FOR THE FORWARD WINGWALL PILES. THE ULTIMATE BEARING VALUE IS 224 TONS PER PILE FOR THE PIER PILES.

ABUTMENT PILES:
14" CIP REAR ABUTMENT PILES 85 FEET LONG, ORDER LENGTH
14" CIP FORWARD ABUTMENT PILES 70 FEET LONG, ORDER LENGTH
4 DYNAMIC LOAD TESTING ITEMS (2 PER ABUTMENT)

WINGWALL PILES:
12" CIP REAR ABUTMENT WINGWALL PILES 85 FEET LONG, ORDER LENGTH
12" CIP FORWARD ABUTMENT WINGWALL PILES 70 FEET LONG, ORDER LENGTH
4 DYNAMIC LOAD TESTING ITEMS (2 PER WALL)

PIER PILES:
12" CIP PILES 55 FEET LONG, ORDER LENGTH
2 DYNAMIC LOAD TESTING ITEMS

SEE FOUNDATION PLAN SHEETS 9 | 35 THROUGH 11 | 35 FOR ORDER LENGTHS, TIP ELEVATION, AND CUTOFF ELEVATION DETAILS FOR SPECIFIC PILES.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES (FT) AT THE CONTRACT BID PRICE.

ITEM 524 - DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK, AS PER PLAN

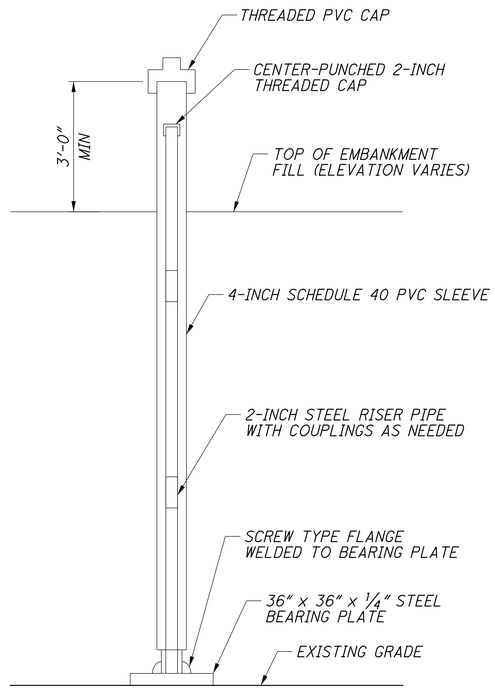
FOR STANDARD NOTES FOR THIS ITEM, SEE SHEET: 11/286

ALTERNATING SHAFT CONSTRUCTION SHALL BE USED PER ODOT GEOTECHNICAL BULLETIN GB-7. THE IN-BETWEEN SHAFTS MAY BE SHIFTED UP TO 3" FROM THEIR PLAN LOCATION TO ALLOW FOR PROPER FITUP. IF SHAFT FITUP REQUIRES AN IN-BETWEEN SHAFT TO BE SHIFTED GREATER THAN 3" THE CAP SHALL BE WIDENED TO ACCOMODATE. ANY RESULTING EXTRA CONCRETE FOR THE CAP SHALL NOT BE REIMBURSED BY THE DEPARTMENT. IF, AFTER EXCAVATION, IT IS DEEMEED BY ODOT OR NSRR THAT THE GAP BETWEEN SHAFTS ALLOWS EXCESSIVE SOIL LOSS, THE GAP BETWEEN SHAFTS SHALL BE GROUTED TO ELIMINATE THE SOIL LOSS. THE GROUTING SHALL BE TO THE SATISFACTION OF NSRR AND SHALL BE AT NO ADDITIONAL COST THE DEPARTMENT.

ITEM SPECIAL - SETTLEMENT PLATFORMS

DESCRIPTION: THIS WORK SHALL CONSIST OF THE FABRICATION, INSTALLATION, PROTECTION, AND MAINTENANCE OF SETTLEMENT PLATFORMS AND OBTAINING SETTLEMENT READINGS IN ACCORDANCE WITH THESE PLANS AND AS DIRECTED BY THE ENGINEER. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS APPROVED BY THE ENGINEER. THE SETTLEMENT PLATFORM SHALL BE INSTALLED PRIOR TO BACKFILLING BEHIND THE PROPOSED ABUTMENTS.

MATERIALS: THE SETTLEMENT PLATFORM SHALL BE CONSTRUCTED OF A STEEL BEARING PLATE, STEEL RISER PIPE, PVC SLEEVE, FITTINGS AND ANY INCIDENTALS MEETING THE APPROVAL OF THE ENGINEER, AND SHALL BE SECURELY FASTENED TOGETHER AS DETAILED IN THE PLANS. ALL STEEL PIPE AND FITTINGS SHALL BE GALVANIZED AND FABRICATED FROM STANDARD WEIGHT STOCK OF THE SIZE SHOWN IN THE PLANS. MATERIALS WILL BE ACCEPTED ON THE BASIS OF CERTIFICATION AND A VISUAL INSPECTION.



SETTLEMENT PLATFORM (TYPICAL)

NOT TO SCALE

INSTALLATION: THE SETTLEMENT PLATFORMS SHALL BE INSTALLED BEFORE ANY FILL MATERIAL IS PLACED AT THE LOCATIONS SPECIFIED IN THE PLANS. THE BEARING PLATE SHALL BE PLACED ON COMPACTED EXISTING GROUND AND THE PLATE SHALL BE PLACED LEVEL. THE BEARING PLATE WITH ATTACHED RISER PIPE SHALL BE PLACED ON THE PREPARED SUBGRADE AND THE FIRST SECTION OF THE SLEEVE SHALL BE SLIPPED OVER THE RISER PIPE AND CENTERED ABOUT IT.

BEFORE CONSTRUCTION OF THE EMBANKMENT, THE INITIAL ELEVATION OF THE TOP OF THE BEARING PLATE SHALL BE DETERMINED AND RECORDED BY THE CONTRACTOR. WITH THE RISER PIPE CENTERED IN THE PVC SLEEVE AND MAINTAINED IN A VERTICAL POSITION, THE EMBANKMENT MATERIAL SHALL BE PLACED IN LAYERS AND THOROUGHLY COMPACTED.

COMPACTION OF EMBANKMENT MATERIAL AROUND THE SETTLEMENT PLATES SHALL CONFORM TO OTHER EARTHWORK SPECIFICATIONS; HOWEVER, THE EMBANKMENT MATERIAL SHALL BE PLACED BY HAND USING LIGHT-WEIGHT WALK BEHIND COMPACTION EQUIPMENT IN ORDER NOT TO DISTURB SETTLEMENT PLATES AND SLEEVES. WHEN THE INSTALLATION DESCRIBED ABOVE IS COMPLETE. THE CONTRACTOR SHALL DETERMINE THE ELEVATION OF THE TOP OF THE RISER PIPE AT THIS TIME. NO ADDITIONAL EMBANKMENT SHALL BE PLACED UNTIL THIS ELEVATION HAS BEEN DETERMINED.

WHEN THE ELEVATION OF THE TOP SURFACE OF THE EMBANKMENT FILL REACHES A LEVEL APPROXIMATELY 3 FEET BELOW THE TOP OF THE SLEEVE, THE CONTRACTOR SHALL INSTALL THE NEXT SECTION OF THE SLEEVE AND RISER PIPE. ADDED SECTIONS SHOULD NOT BE GREATER THAN 5 FEET IN LENGTH. AS EACH ADDITIONAL LENGTH OF PIPE IS ADDED, THE PIPE CAP ON THE SLEEVE SHALL BE IMMEDIATELY TRANSFERRED TO THE NEW SECTION, AND THE NEW SECTION WRENCH TIGHTENED SO AS TO PREVENT FILL MATERIAL FROM ENTERING THE SLEEVE. AT OTHER TIMES, THE CAP SHALL ONLY BE REMOVED TO CHECK SETTLEMENT. AS THE HEIGHT OF THE EMBANKMENT FILL INCREASES, THE PROCEDURE SHALL BE REPEATED UNTIL THE EMBANKMENT FILL IS COMPLETED.

THE CONTRACTOR SHALL TAKE ALL SETTLEMENT PLATE READINGS. ALL SETTLEMENT PLATE READINGS SHALL BE OBTAINED TO AN ACCURACY OF 0.01 FEET AND BE PART OF A CLOSED CIRCUIT LEVEL RUN. THE CONTRACTOR SHALL TAKE ELEVATION READINGS OF THE BEARING PLATES AND EXTENSIONS AS FOLLOWS:

- UPON INSTALLATION OF THE SETTLEMENT PLATE, THE TOP OF THE BASE PLATE AND THE TOP OF THE FIRST PIPE EXTENSION.
- AS EACH EXTENSION IS ADDED. THE TOP OF THE PREVIOUS EXTENSION AND THE TOP OF THE NEW EXTENSION.
- DAILY READINGS DURING THE PLACEMENT OF THE FILL, INCLUDING THE HEIGHT OF THE FILL.
- DURING THE ENTIRE TIME OF CONSTRUCTION UP TO THE END OF THE WAITING PERIOD, AT INTERVALS NOT TO EXCEED 7 DAYS.

WAITING PERIOD: THE WAITING PERIOD SHALL BE NO LESS THAN 30 DAYS, WITH THE TOTAL DURATION ANTICIPATED TO BE BETWEEN 30 AND 60 DAYS. THE WAITING PERIOD SHALL BE CONSIDERED COMPLETE WHEN THE SETTLEMENT IS MEASURED AT LESS THAN 0.12" EVERY 7 DAYS FOR TWO CONSECTUTIVE READINGS.

REPORTING: THE READINGS SHALL BE PLOTTED ON GRAPH PAPER PRESENTING DEFORMATION (ON THE NEGATIVE Y-AXIS) AND FILL HEIGHT (ON THE POSITIVE Y-AXIS) VERSUS TIME (ON THE X-AXIS). IN ORDER TO CREATE THE GRAPH, USE THE SETTLEMENT PLATFORM SPREADSHEET LOCATED AT http://www.dot.state.oh.us/Divisions/Engineering/Geotechnical/Geotechnical_Documents/Blank_Settlement_Reading_Plots-English.xls
A COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO THE OFFICE OF GEOTECHNICAL ENGINEERING (ATTENTION: GEOTECHNICAL DESIGN COORDINATOR) AND NSRR, AFTER EACH SETTLEMENT READING IS RECORDED.

BASED UPON INTERPRETATION OF SETTLEMENT MONITORING DATA, THE ENGINEER AND NSRR WILL PROVIDE APPROVAL FOR THE ACTUAL DURATION OF THE WAITING PERIOD. UPON COMPLETION OF THE WAITING PERIOD, THE CONTRACTOR SHALL REMOVE OR CUT OFF THE PIPE EXTENSIONS TO A DEPTH TWO FEET BELOW THE FINISHED SUBGRADE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SETTLEMENT OF PLATFORMS IN WORKING ORDER DURING THE PERIOD OF HIS CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL OPERATE HIS EQUIPMENT IN A MANNER TO ENSURE THAT THE SETTLEMENT PLATFORMS ARE NOT DAMAGED OR DISPLACED LATERALLY. EACH ASSEMBLY SHALL BE CLEARLY MARKED AND FLAGGED WITH GUARD STAKES AND PROTECTIVE BARRICADES. ALL SETTLEMENT PLATFORMS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR WITHIN SEVEN 171 DAYS AFTER BEING DAMAGED. NO ADDITIONAL FILL SHALL BE PLACED IN THE AREA UNTIL THE PLATFORMS ARE REPAIRED.

MEASUREMENT AND PAYMENT: EACH SETTLEMENT PLATFORM ASSEMBLY ACCEPTABLY INSTALLED AND MAINTAINED IN A SATISFACTORY OPERATING CONDITION UNTIL THE AREA IS RELEASED FOR FURTHER CONSTRUCTION, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "ITEM SPECIAL - SETTLEMENT PLATFORM." PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIAL, LABOR AND EQUIPMENT FOR PROPER INSTALLATION OF THE SETTLEMENT PLATFORM, FOR PROTECTING SETTLEMENT PLATFORMS, FOR REPAIR AND REPLACING DAMAGED SETTLEMENT PLATFORMS, FOR MONITORING SETTLEMENT PLATFORMS, AND FOR ALL OTHER WORK AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED HEREIN, SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER.

DESIGN AGENCY
Gannett Fleming
ENGINEERS & ARCHITECTS, P.C.
2500 CORPORATE EXCHANGE DRIVE, SUITE 230
COLUMBUS, OHIO 43231

DESIGNED	DRAWN	REVIEWED	DATE
EFD	EFD/SNH	CTV	12-19-23
CHECKED	REVISED	ODOT SFN: 3110142	
CTM		NSRR BR#: BR0018445	

BRIDGE SPECIFIC NOTES
BRIDGE NO. HAM-75-0834 (NSRR BRIDGE CT-0.95: CINCINNATI, OH)
NORFOLK SOUTHERN RAILROAD OVER I.R. 75

HAM-75-7.85
PID No. 77889

℄ EX NSRR

EX REAR (EAST) ABUTMENT TO BE REMOVED IN MOT PHASE DETAILED BY DBT. REMOVED TO ELEV 525.5

EX REAR (EAST) WINGWALLS TO BE REMOVED IIN MOT PHASE DETAILED BY DBT. REMOVED TO 3'-6" (MIN) BELOW FINAL GRADE

EXISTING THROUGH-GIRDER SUPERSTRUCTURE AND WALKWAYS TO BE REMOVED (SEE DESIGN BUILD TEAM MOT PLANS)

42'-0"± EX WINGWALL (TBR)

23'-3"± EX ABUT (TBR)

18'-0"± EX PIER (TBR)

22'-7"± EX ABUT (TBR)

42'-0"± EX WINGWALL (TBR)

EX FORWARD (WEST) WINGWALLS TO BE REMOVED IN MOT PHASE DETAILED BY DBT. REMOVED TO 3'-6" (MIN) BELOW FINAL GRADE

EX FORWARD (WEST) ABUTMENT TO BE REMOVED IN MOT PHASE DETAILED BY DBT. REMOVED TO ELEV 525.5

℄ EX NSRR

42'-0"± EX WINGWALL (TBR)

EX PIER TO BE REMOVED IN MOT PHASE DETAILED BY DBT. REMOVED TO THE TOP OF MEDIAN CONCRETE BARRIER

PROPOSED SOUTHEAST CAISSON WALL

PROPOSED SOUTHWEST CAISSON WALL

NEAR FACE OF PROPOSED REAR ABUTMENT

PROPOSED SPAN 1 DECK

PROPOSED PIER

PROPOSED SPAN 2 DECK

℄ CONST NSRR

LIMITS OF ITEM 203 (EMBANKMENT, AS PER PLAN)

NEAR FACE OF PROPOSED FORWARD ABUTMENT

SETTEMENT MONITORING PLATFORM SP-1 STA 154+30 OFFSET 16'-0" RT APPROXIMATE PLATFORM EL 535.00

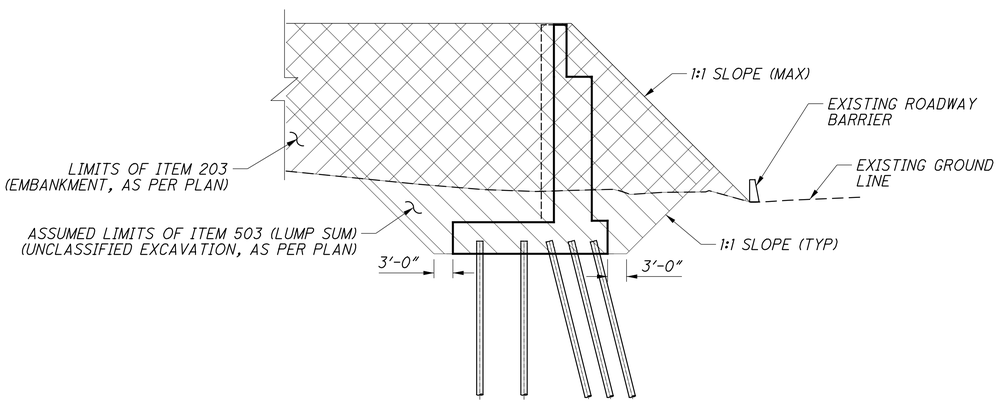
SETTEMENT MONITORING PLATFORM SP-2 STA 157+30 OFFSET 16'-0" RT APPROXIMATE PLATFORM EL 546.00

LIMITS OF ITEM 203 (EMBANKMENT, AS PER PLAN)

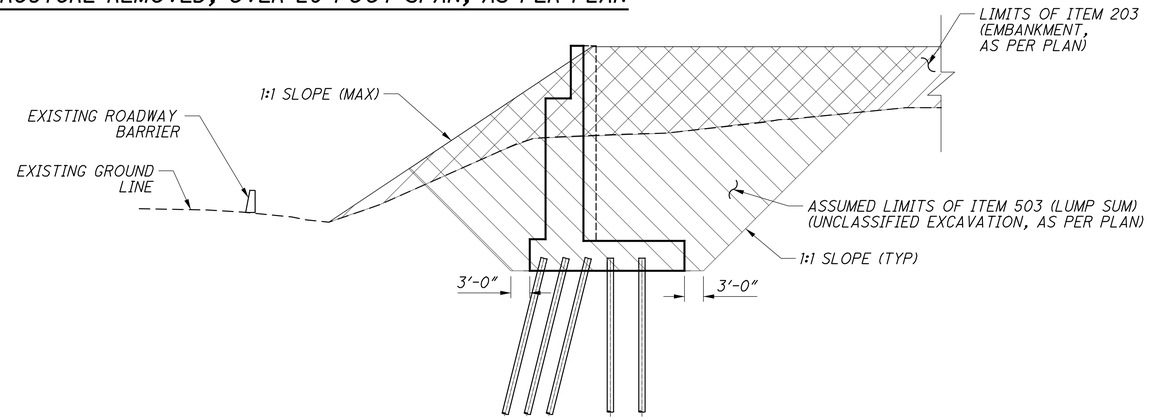
ITEM 503E21301 - UNCLASSIFIED EXCAVATION, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 503, THIS ITEM INCLUDES EXCAVATION AND BACKFILL FOR THE STRUCTURE FOLLOWING PLACEMENT AND SUBSEQUENT WAITING PERIOD OF THE ITEM 503 EMBANKMENT, AS PER PLAN FOR THE SURCHARGE LOADING. BACKFILL BEHIND THE ABUTMENTS SHALL BE IN ACCORDANCE WITH ITEM 503 UTILIZING ITEM 304, CRUSHED CARBONATE STONE AS THE BACKFILL MATERIAL. CONVENTIONAL ITEM 203 EMBANKMENT PER 203.02.R IS PERMITTED IN FRONT OF THE ABUTMENTS. PLACE ALL BACKFILL IN 6 INCH LIFTS AND COMPACT TO THE REQUIREMENTS OF ITEMS 203 AND 304 AS APPROPRIATE FOR THE MATERIAL TYPE.

PLAN LIMITS OF ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN



A SECTION
REAR ABUTMENT EMBANKMENT DETAILS



B SECTION
FORWARD ABUTMENT EMBANKMENT DETAILS

DESIGN AGENCY
Gannett Fleming
ENGINEERS & ARCHITECTS, P.C.
2500 CORPORATE EXCHANGE DRIVE, SUITE 230
COLUMBUS, OHIO 43231

DESIGNED	DRAWN	REVIEWED	DATE
EFD	EFD	CTV	12-19-23
CHECKED	REVISED	ODOT SFN: 3110142	
CTM		NSRR BR#: BR0018445	

BRIDGE SPECIFIC NOTES
BRIDGE NO. HAM-75-0834 (NSRR BRIDGE CT-0.95: NORFOLK SOUTHERN RAILROAD OVER I.R. 75

HAM-75-7.85
PID No. 77889

ESTIMATED BRIDGE QUANTITIES

CALCULATED: VDT DATE: 6/11/15
CHECKED: SNH DATE: 6/12/15

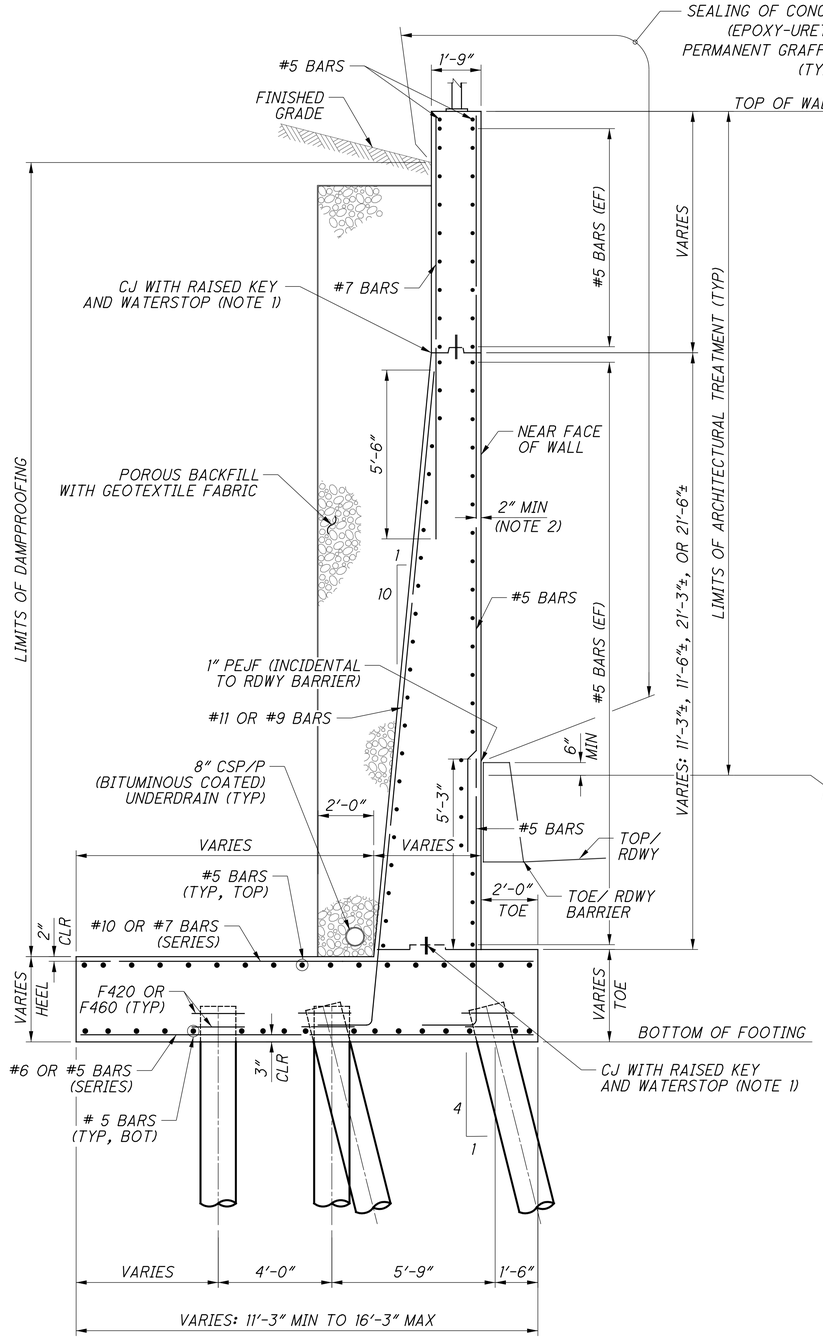
ITEM	ITEM EXT.	TOTAL QUANTITY (03/IMS/10)	UNIT	DESCRIPTION	REAR	PIER	FWD	SUPER	GENERAL	APP SHEET NO.
202	11003	LUMP	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					LUMP	4/41
203	20001	6,074	CY	EMBANKMENT, AS PER PLAN	4,010		2,064			225/286
SPECIAL	20365000	2	EACH	SPECIAL - SETTLEMENT PLATFORM					2	4/41
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (PIER)					LUMP	8/286
503	21301	LUMP	LS	UNCLASSIFIED EXCAVATION, AS PER PLAN					LUMP	8/286
505	11100	LUMP	LS	PILE DRIVING EQUIPMENT MOBILIZATION					LUMP	
507	00501	7,975	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN	3,360	2,600	2,015			4/41
507	00551	8,600	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN	3,570	2,860	2,170			9/286
507	00601	8,085	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN	4,640		3,445			4/41
507	00651	8,640	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN	4,930		3,710			9/286
509	10000	204,278	LB	EPOXY COATED REINFORCING STEEL	72,086	6,891	59,649	65,652		
511	34447	264	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN				264		9/286
511	34451	32	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN				32		9/286
511	40513	132	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS, AS PER PLAN		132				9/286
511	44113	85	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT, NOT INCLUDING FOOTING, AS PER PLAN	47		38			9/286
511	45603	480	CY	CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA, AS PER PLAN	257		223			9/286
511	46013	224	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN	123		101			9/286
511	46513	312	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING, AS PER PLAN	137	75	100			9/286
511	53016	433	CY	CLASS QC4 CONCRETE, MISC.: FOOTING MASS CONCRETE WITH QC/QA	233		200			9/286
511	71200	822	SF	CONCRETE, MISC.: FACING OF CANTILEVER WALLS	437		385			9/286
512	10001	821	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN	371	138	312			10/286
512	10100	1,089	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	371	138	312	268		
512	44451	738	SY	TYPE E WATERPROOFING, AS PER PLAN				738		10/286
SPECIAL	51256202	738	SY	SPECIAL - ASPHALTIC PANEL				738		10/286
SPECIAL	51267400	5,373	SF	SPECIAL - WATERPROOFING, MISC.: DAMPPROOFING OF RAILROAD STRUCTURES	2,925		2,448			9/286
513	10221	94,050	LB	STRUCTURAL STEEL MEMBERS, LEVEL 1, AS PER PLAN				94,050		10/286
513	10321	1,001,135	LB	STRUCTURAL STEEL MEMBERS, LEVEL 6, AS PER PLAN				1,001,135		10/286
513	20000	4,824	EACH	WELDED STUD SHEAR CONNECTORS				4,824		
514	80020	40,550	SF	SPECIAL - SHOP PAINTING AND FIELD TOUCH-UP OF STRUCTURAL STEEL				40,550		10/286
516	12201	99	FT	STRUCTURAL STEEL EXPANSION JOINT, AS PER PLAN				99		10/286
516	13600	294	SF	1" PREFORMED EXPANSION JOINT FILLER	148		146			
516	46201	16	EACH	BEARING DEVICE, ROCKER, AS PER PLAN				16		34/41
516	46900	16	EACH	BEARING DEVICE, MISC.: SELF-LUBRICATING CYLINDRICAL BEARING (EXP)				16		33/41
517	75001	260	FT	RAILING, ALUMINUM, AS PER PLAN	143		117			14/286
517	76300	429	FT	RAILING, MISC.: NSRR ALUMINUM HANDRAIL WITH VANDAL PROTECTION FENCE				429		15/286
518	21200	549	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	296		253			
518	42201	320	FT	8" PERFORATED CORRUGATED STEEL PIPE, 707.01, AS PER PLAN	175		145			10/286
518	42301	35	FT	8" NON-PERFORATED CORRUGATED STEEL PIPE, INCLUDING SPECIALS, 707.01, AS PER PLAN	15		20			10/286
518	63300	LUMP	LS	STRUCTURE DRAINAGE, MISC.: SUPERSTRUCTURE DRAINAGE SYSTEM					LUMP	10/286
523	20000	6	EACH	DYNAMIC LOAD TESTING	2	2	2			
523	20500	6	EACH	RESTRIKE	2	2	2			
524	94803	1,092	FT	DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK, AS PER PLAN	585		507			11/286
524	95100	15	EACH	DRILLED SHAFTS, MISC.: CSL TESTING	8		7			11/286
SPECIAL	53000200	LUMP	LS	SPECIAL - STRUCTURES: SURVEY AND MONITORING OF TRACK AND TEMPORARY SHORING					LUMP	12/286
SPECIAL	53000200	LUMP	LS	SPECIAL - STRUCTURES: PRECONSTRUCTION CONDITION SURVEY					LUMP	12/286
SPECIAL	53013000	4,824	SF	SPECIAL - FORM LINER	2,621		2,203			10/286
SPECIAL	53014000	LUMP	LS	SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION					LUMP	13/286
625	25604	443	FT	CONDUIT, 4", 725.051				443		

DESIGN AGENCY
Gannett Fleming
ENGINEERS & ARCHITECTS, P.C.
2500 CORPORATE EXCHANGE DRIVE, SUITE 230
COLUMBUS, OHIO 43231

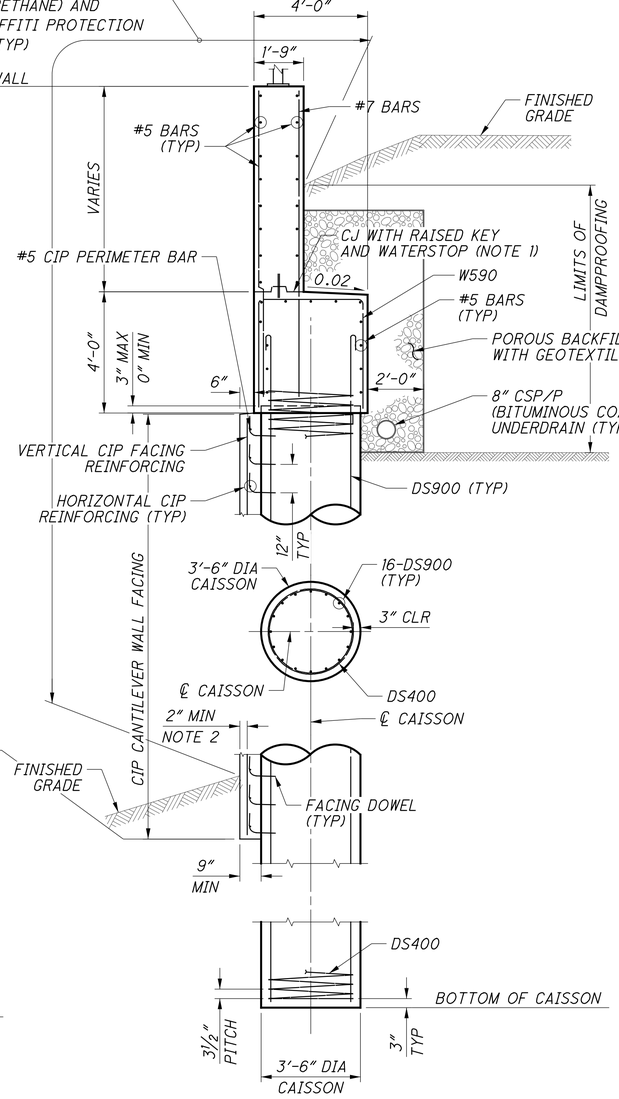
DESIGNED VDT | DRAWN VDT | REVIEWED CTV | DATE 12-19-23
CHECKED SNH | REVISED | ODOT SFN: 3110142 | NSRR BR#: BR0018445

BRIDGE ESTIMATED QUANTITIES
BRIDGE NO. HAM-75-0834 (NSRR BRIDGE CT-0.95: CINCINNATI, OH)
NORFOLK SOUTHERN RAILROAD OVER I.R. 75

HAM-75-7.85
PID No. 77889



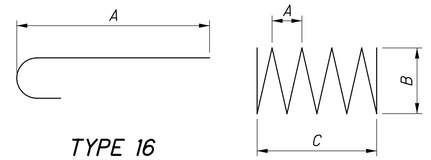
TYPICAL BATTERED WINGWALL

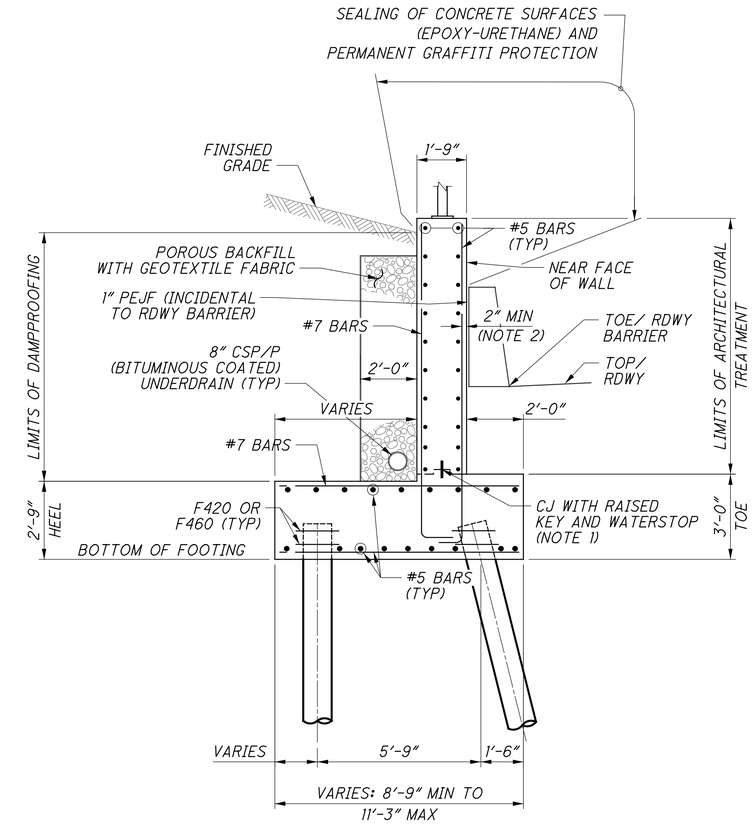


SECTION C-C
TYPICAL CAISSON WINGWALL

MARK	NUMBER PER SHAFT	NUMBER # OF SHAFTS	NUMBER TOTAL	LENGTH	TYPE	DIMENSIONS A	B	C	INC
REAR CAISSONS									
DS900*	16	15	240	41'-7"	16	41'-0"			
DS400	1	68	68	38'-6"	27	3½"	3'-0"	38'-6"	
FORWARD CAISSONS									
DS900*	16	15	240	41'-7"	16	41'-0"			
DS400	1	68	68	38'-6"	27	3½"	3'-0"	38'-6"	

* VERTICAL BARS SHOWN AS ONE BAR FOR FULL LENGTH. CONTRACTOR TO DETERMINE MEANS AND METHODS FOR SPLICING BARS AS NEEDED.





TYPICAL UNBATTERED WINGWALL

NOTES:

1. WATERSTOPS SHALL BE 6"x⅜" PVC AND SHALL BE CONTINUOUS ACROSS JOINT. FOR RAISED KEYWAY DETAIL, SEE TYPICAL STRUCTURAL DETAILS SHEET 19/286.
2. ADJUST CLEAR DISTANCE TO PLAN DIMENSION TO ACCOUNT FOR FORMLINER RELIEF AS PER FORMLINER GENERAL NOTE.

DESIGN AGENCY
Gannett Fleming
ENGINEERS & ARCHITECTS, P.C.
2500 CORPORATE EXCHANGE DRIVE, SUITE 230
COLUMBUS, OHIO 43231

DESIGNED	DRAWN	CHECKED
VDK	VDK	CTM

REVIEWED	DATE
CTV	12-19-23

ODOT SFN: 3110142
NSRR BR#: BR0018445

REVISED

WINGWALL TYPICAL SECTION
BRIDGE NO. HAM-75-0834 (NSRR BRIDGE CT-0.95: CINCINNATI, OH)
NORFOLK SOUTHERN RAILROAD OVER I.R. 75

HAM-75-7.85
PID No. 77889

23 / 41

100/286

ESTIMATED BRIDGE QUANTITIES

CALCULATED: VDT DATE: 6/11/15
CHECKED: SNH DATE: 6/12/15

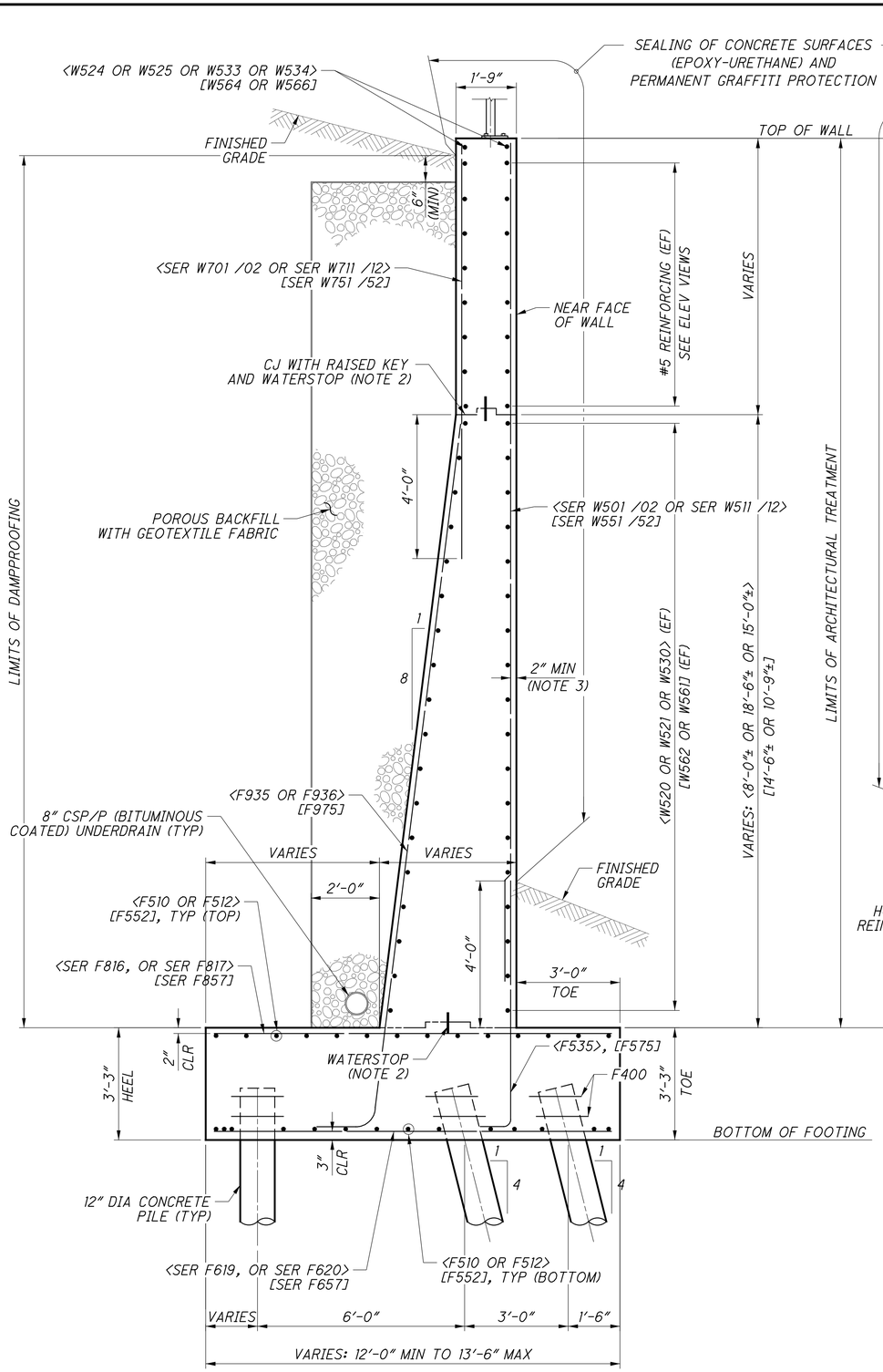
ITEM	ITEM EXT.	TOTAL QUANTITY (06/BRF/13)	UNIT	DESCRIPTION	REAR		FWD	SUPER	GENERAL	APP SHEET NO.
202	11003	LUMP	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					LUMP	2/35
202	23000	250	SY	PAVEMENT REMOVED			250			
202	75000	60	FT	FENCE REMOVED			60			
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (REAR ABUTMENT)					LUMP	8/286
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (SOUTHEAST WINGWALL)					LUMP	8/286
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (FORWARD ABUTMENT)					LUMP	8/286
503	11101	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (SOUTHWEST WINGWALL)					LUMP	8/286
503	21301	LUMP	LS	UNCLASSIFIED EXCAVATION, AS PER PLAN					LUMP	8/286
505	11100	LUMP	LS	PILE DRIVING EQUIPMENT MOBILIZATION					LUMP	
507	00501	11,025	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN	6,700		4,325			2/35
507	00551	11,860	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN	7,220		4,640			9/286
509	10000	97,065	LB	EPOXY COATED REINFORCING STEEL	50,644		33,108	13,313		
511	34447	58	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN				58		9/286
511	34451	11	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN				11		9/286
511	44113	32	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT, NOT INCLUDING FOOTING, AS PER PLAN	18		14			9/286
511	45603	285	CY	CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA, AS PER PLAN	159		126			9/286
511	46013	215	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN	153		62			9/286
511	46511	165	CY	CLASS QC1 CONCRETE, FOOTING, AS PER PLAN	104		61			9/286
511	53016	344	CY	CLASS QC4 CONCRETE, MISC.: FOOTING MASS CONCRETE WITH QC/QA	188		156			9/286
511	71200	193	SF	CONCRETE, MISC.: FACING OF CANTILEVER WALLS			193			9/286
512	10001	478	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN	262		216			10/286
512	10100	562	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	262		216	84		
512	44451	177	SY	TYPE E WATERPROOFING, AS PER PLAN				177		10/286
SPECIAL	51256202	177	SY	SPECIAL - ASPHALTIC PANEL				177		10/286
SPECIAL	51267400	4,534	SF	SPECIAL - WATERPROOFING, MISC.: DAMPPROOFING OF RAILROAD STRUCTURES	2,500		2,034			9/286
513	10221	10,585	LB	STRUCTURAL STEEL MEMBERS, LEVEL 1, AS PER PLAN				10,585		10/286
513	10321	166,810	LB	STRUCTURAL STEEL MEMBERS, LEVEL 6, AS PER PLAN				166,810		10/286
513	20000	1,656	EACH	WELDED STUD SHEAR CONNECTORS				1,656		
514	80020	5,340	SF	SHOP PAINTING AND FIELD TOUCH-UP OF STRUCTURAL STEEL				5,340		10/286
516	12201	46	FT	STRUCTURAL STEEL EXPANSION JOINT, AS PER PLAN				46		10/286
516	13600	259	SF	1" PREFORMED EXPANSION JOINT FILLER	149		110			
516	46201	6	EACH	BEARING DEVICE, ROCKER, AS PER PLAN				6		29/35
516	46900	6	EACH	BEARING DEVICE, MISC.: SELF-LUBRICATING CYLINDRICAL BEARING (EXP)				6		28/35
517	75001	161	FT	RAILING, ALUMINUM, AS PER PLAN	87		74			14/286
517	76300	136	FT	RAILING, MISC.: NSRR ALUMINUM HANDRAIL WITH VANDAL PROTECTION FENCE				136		15/286
518	21200	309	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	179		130			
518	42201	225	FT	8" PERFORATED CORRUGATED STEEL PIPE, 707.01, AS PER PLAN	115		110			10/286
518	42301	145	FT	8" NON-PERFORATED CORRUGATED STEEL PIPE, INCLUDING SPECIALS, 707.01, AS PER PLAN	60		85			10/286
518	63300	LUMP	LS	STRUCTURE DRAINAGE, MISC.: SUPERSTRUCTURE DRAINAGE SYSTEM					LUMP	10/286
523	20000	4	EACH	DYNAMIC LOAD TESTING	2		2			
523	20500	4	EACH	RESTRIKE	2		2			
524	94803	410	FT	DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK, AS PER PLAN			410			11/286
524	95100	5	EACH	DRILLED SHAFTS, MISC.: CSL TESTING			5			11/286
SPECIAL	53000200	LUMP	LS	SPECIAL - STRUCTURES: SURVEY AND MONITORING OF TRACK AND TEMPORARY SHORING					LUMP	12/286
SPECIAL	53000200	LUMP	LS	SPECIAL - STRUCTURES: PRECONSTRUCTION CONDITION SURVEY					LUMP	12/286
SPECIAL	53013000	4,828	SF	SPECIAL - FORM LINER	2,734		2,094			10/286
SPECIAL	53014000	LUMP	LS	SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION					LUMP	13/286
625	25604	148	FT	CONDUIT, 4", 725.051				148		

DESIGN AGENCY
Gannett Fleming
ENGINEERS & ARCHITECTS, P.C.
2500 CORPORATE EXCHANGE DRIVE, SUITE 230
COLUMBUS, OHIO 43231

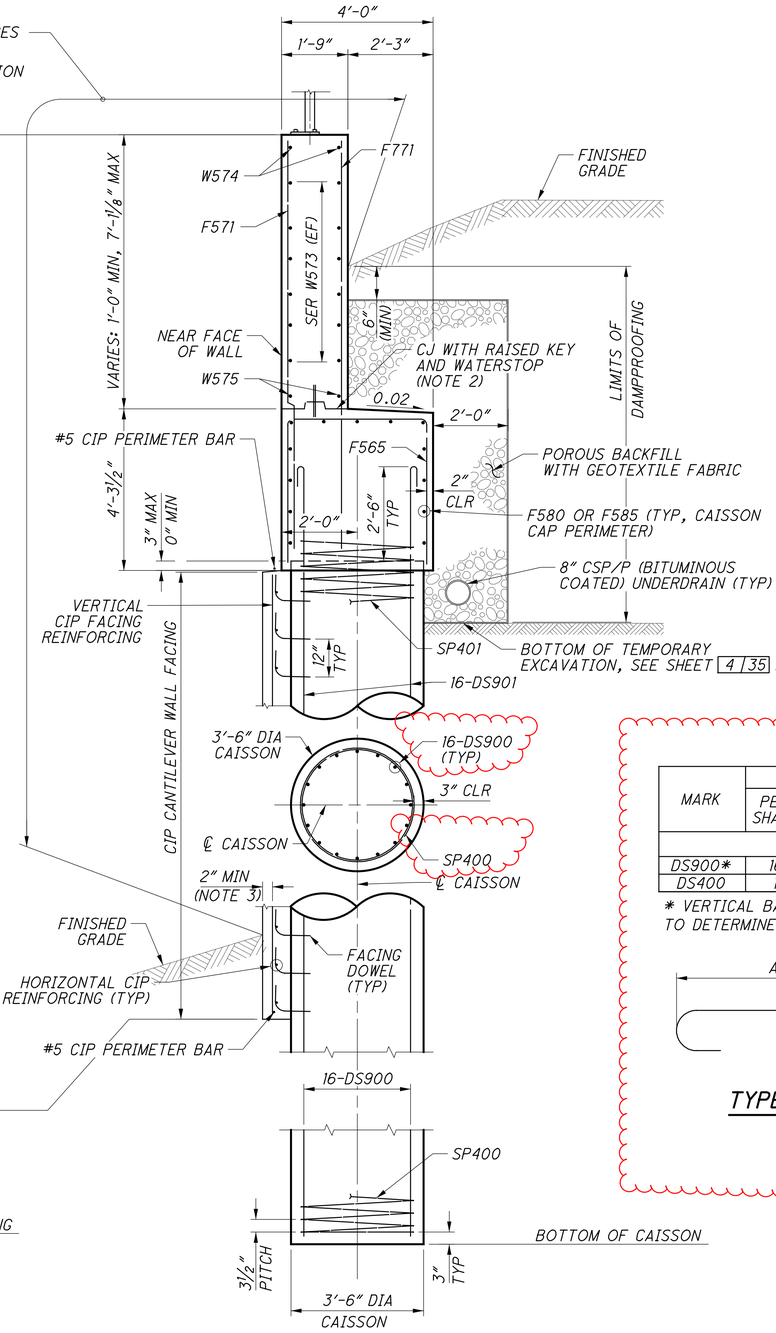
DESIGNED	DRAWN	REVIEWED	DATE
VDT	VDT	CTV	12-19-23
CHECKED	REVISED	ODOT SFN: 3160007	
SNH		NSRR BR#: BR0018444	

ESTIMATED BRIDGE QUANTITIES
BRIDGE NO. HAM-75-PROSSER (NSRR CT-0.89: CINCINNATI, OH)
NORFOLK SOUTHERN RAILROAD OVER PROSSER AVENUE

HAM-75-7.85
PID No. 77889



TYPICAL SECTION: WINGWALL



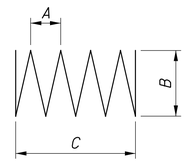
TYPICAL SECTION: CAISSON WALL

C 19 | 35

MARK	NUMBER PER SHAFT	NUMBER # OF SHAFTS	NUMBER TOTAL	LENGTH	TYPE	DIMENSIONS A	B	C	INC
CAISSONS									
DS900*	16	15	240	48'-7"	16	48'-0"			
DS400	1	68	68	44'-9"	27	3½"	3'-0"	44'-9"	

* VERTICAL BARS SHOWN AS ONE BAR FOR FULL LENGTH. CONTRACTOR TO DETERMINE MEANS AND METHODS FOR SPLICING BARS AS NEEDED.

TYPE 16



TYPE 27

NOTES:

1. DIMENSIONS AND CALLOUTS IN <DIM> REFERENCE THE REAR WINGWALLS
   DIMENSIONS AND CALLOUTS IN [DIM] REFERENCE THE FORWARD WINGWALLS
   DIMENSIONS AND CALLOUTS NOT IN BRACKETS ARE APPLICABLE TO BOTH WINGWALLS
2. WATERSTOPS SHALL BE 6"x⅜" PVC AND SHALL BE CONTINUOUS ACROSS JOINT. FOR RAISED KEYWAY DETAIL, SEE TYPICAL STRUCTURAL DETAILS SHEET 19 | 286 .
3. ADJUST CLEAR DISTANCE TO PLAN DIMENSION TO ACCOUNT FOR FORMLINER RELIEF AS PER FORMLINER GENERAL NOTE.

DESIGN AGENCY
Gannett Fleming
ENGINEERS & ARCHITECTS, P.C.
2500 CORPORATE EXCHANGE DRIVE, SUITE 230
COLUMBUS, OHIO 43231

DESIGNED	DRAWN	REVIEWED	DATE
VDK	CAN	CTV	12-19-23
CHECKED	REVISED	ODOT SFN: 3160007	
EFD		NSRR BR#: BR0018444	

TYPICAL WINGWALL DETAILS
BRIDGE NO. HAM-75-PROSSER (NSRR CT-0.89: CINCINNATI, OH)
NORFOLK SOUTHERN RAILROAD OVER PROSSER AVENUE

HAM-75-7.85
PID No. 77889

22 | 35

140 | 286