

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

Bruce A. Van Note

February 22, 2023

Subject: Frank J. Wood Bridge

Replacement

State WIN: 022603.00

Location: Brunswick & Topsham

Amendment No. 1

Dear Sir/Ms.:

Make the following changes to the Bid documents:

In the bid book:

**CHANGE** on page 14 "NOTICE TO CONTRACTORS", the bid opening date in the first paragraph from "March 1, 2023" to read "March 8, 2023". Make this change in pen and ink.

**REMOVE** pages 73-75, SPECIAL PROVISION SECTION 105 General Scope of Work (Environmental Requirements), 3 pages dated 11/16/2022 and **REPLACE** with attached pages 73-76, SPECIAL PROVISION SECTION 105 General Scope of Work (Environmental Requirements), 4 pages dated 2/16/2023.

**REMOVE** pages 16-32, PROPOSAL SCHEDULE OF ITEMS, 17 pages dated 11/16/22 and **REPLACED** with attached pages 16-32, PROPOSAL SCHEDULE OF ITEMS, 17 pages dated 2/21/23.

In the plan set:

**REMOVE** sheet 2, ESTIMATED QUANTITIES, 1 sheet dated 10/22 and **REPLACE** with attached sheet 2A, ESTIMATED QUANTITIES, 1 sheet dated 2/16/2023.

**REMOVE** sheet 87, PIER NO. 2 SHAFT PLAN & ELEVATION, 1 sheet dated 7/21 and **REPLACE** with attached sheet 87A, PIER NO. 2 SHAFT PLAN & ELEVATION, 1 sheet dated 2/16/2023.

**REMOVE** sheet 94, RETAINING WALL NO. 1 PLAN AND ELEVATION, 1 sheet dated 2/21 and **REPLACE** with attached sheet 94A, RETAINING WALL NO. 1 PLAN AND ELEVATION, 1 sheet dated 2/16/2023.

**REMOVE** sheet 157, LIGHTING PLAN, 1 sheet dated 8/20 and **REPLACE** with attached sheet 157A, LIGHTING PLAN, 1 sheet dated 2/16/2023.

**REMOVE** sheet T-1, CONDUIT LAYOUT PLAN 1, 1 sheet dated 1-3-22 and **REPLACE** with attached sheet T-1, CONDUIT LAYOUT PLAN 1, 1 sheet dated 1-3-22.

**REMOVE** sheet E-1, CMP UTILITY SUPPORTS – CONDUIT SUPPORT FRAMING PLAN, 1 sheet dated 12/22/2021 and **REPLACE** with the attached sheet E-01, CMP UTILITY SUPPORTS – CONDUIT SUPPORT FRAMING PLAN, 1 sheet dated 2/15/2023.

The following questions have been received:

**Question:** Due to the varying water levels at the project site, portions of the riverbed below ordinary high water may be wet or dry depending on time of year, rainfall amounts, and operations at the dam. Please confirm work in the stream channel that is below ordinary high water, yet dry, does not fall under the restrictions of "in-stream work". It is understood this condition could change if a rain event took place.

**Response:** See above changes to the bid documents.

**Question:** Sheet 94 Retaining Wall Notes 1 and 14 refer to a Retaining Wall No. 4; however, there are no details for a Retaining Wall No. 4. Please confirm that there is no Retaining Wall No. 4.

**Response:** There is no Retaining Wall No. 4 in the contract. See the above changes to the bid documents.

**Question:** Drawing 160 "Pole Schedule" indicates 6 each Type B1, and 2 each Type B2 Poles/fixtures, however the lighting plan drawings 157-159 indicate 7 each Type B1 and 1 each Type B2. Please verify which is correct.

**Response:** See above changes to the bid documents.

**Question:** The General Note on page 48 of Special Provisions discusses the possibility of contaminated soils between Sta 14+35 and Sta 15+70. If contaminated soil is discovered at the location will the contractor be entitled to a change for the work associated with excavation, handling and disposal of the contaminated soils in this area?

**Response:** Refer to Standard Specification Section 105.8.4 Hazardous Materials.

**Question:** Sheet 66 depicts the limits of the Ashlar Form Liner at 4" above the top of footing. Sheet 68 Typical Abutment Section depicts the Formliner at a higher elevation. Please clarify which is correct. If the Typical Abutment Section is correct, please provide the vertical dimension for the form liner limit.

**Response:** Sheet 66 is correct. Sheet 68 is not drawn to scale.

**Question:** Is it anticipated that the girder webs will not be plumb at all locations after the deck placement?

**Response:** The girders shall be detailed for Steel Dead Load Fit. Thus, the girder webs are to be plumb at the end of the steel erection. Additional loading will result in girder webs rotating out of plumb.

**Question:** Is Brookfield aware that supports for the temporary work trestle will be placed within the tailrace channel of the powerhouse?

**Response:** Yes. The Contractor shall work within the Right of Way and Special Provision 105, General Scope of Work (Health and Safety).

**Question:** Is uplift anticipated at any bearings during erection of the structural steel, in particular at Pier 2?

**Response:** The Contractor is responsible for erection analysis for their selected erection sequence.

**Question:** "T" Drawings-Consolidated conduits. Please provide an Estimate of Quantities/ Bill of Materials similar to what is shown for the CMP and the Comcast, First Light, GWI conduits & supports.

**Response:** See the above changes to the bid documents.

**Question:** Bid item 525.75 (Granite Bench Type A Seating) has a bid quantity of 8 EA. Based on takeoff counts from the site design/amenities sheets; the bid quantity appears to be low. Brunswick side shows (4) and Topsham side shows (7) for a total of (11). Please review.

**Response:** See the above changes to the bid documents.

**Question:** Bid item 608.282 (Granite Pavers with Concrete Base) has a bid quantity of 126 SY. Based on takeoff measurements from the site design/amenities sheet 27; the bid quantity appears to be low. Please confirm that the quantity 126 SY is the correct quantity for this bid item.

**Response:** See the above changes to the bid documents.

**Question:** Drawing E-1 Estimate of Quantities/Bill of Materials-910.301 "Special Work-Utility Conduit (CMP-Approach Only) indicates 82 each 2 x 2 conduit support frames, similar to what is required for the "On-Bridge" conduits. Is this correct, or can these just be PVC base spacers with intermediates as typically utilized with concrete encased ductbanks?

**Response:** The spacers in the approaches can be typical of concrete encased duct banks. There will be no change in cost for this change.

**Question:** Drawing E-1 Estimate of Quantities/Bill of Materials-910.301 "Special Work-Utility Conduit (CMP-Bridge Only) indicates 3,422.6' of 6" Schedule 40 PVC Conduit. However Note 1 on the same drawing indicates SW Fiberglass Conduit. Please clarify which is correct.

**Response:** See the above changes to the bid documents.

**Question:** Drawings T-6, E-6. These drawings indicate the required utility support steel that will span the two Girder webs. T-6 indicates a single span of angle which will require field drilling to mount the Consolidated conduit hanger. E-6 indicates 2 pieces of channel sandwiched together allowing for the threaded rods to pass between the two lengths of channel. Is the intent that these two sets of supports be different, or should they all be similar to one another. Please clarify.

**Response:** The T drawings are for Consolidated. The E drawings are for CMP. Consolidated and CMP utility conduits are in separate bays. Sheets E-2 through E-6, remove the word "Consolidated" in all locations. Please make change in pen and ink.

**Question:** Are both the 4 Bar Aluminum Pedestrian Railings and the 2 Bar Aluminum Pedestrian Railings to be paid for under Item 507.08491-Barrier-Mounted Aluminum Pedestrian Railing? The estimated quantity of 1,565 appears to only cover the 2 Bar railing on the concrete bridge barrier, and not the 4 Bar railing located in the park areas of the Brunswick and Topsham approaches.

**Response:** No, the 4 Bar Aluminum Pedestrian Railings on the approaches is to be paid for under Item 507.08311 "Ornamental Steel Bridge Railing, 4 Bar, with Pales".

**Question:** Will the MDOT be providing heavy/bridge prevailing wage rates?

**Response:** No, those rates are not applicable.

**Question:** Due to the complexity of this project, non standard bid items, we request the bid date be pushed by 2 weeks.

**Response:** See the above changes to the bid documents.

**Question:** What is the reason for two different sets of Pier Design Criteria notes on Sheets 84 & 87?

**Response:** See the above changes to the bid documents.

**Question:** The deck pour sequence, if not placed in one continuous pour, adds significant time to the schedule. Can alternating pours be done concurrently as long as they remain plastic through the duration? Example: Pours 1 & 3 concurrent, followed by 2 & 4, etc...

**Response:** No. Pour segments may not be placed out of order, e.g., Pour 3 can not be placed prior to Pour 2 as requested above. However, successive pours may be grouped, e.g., Pours 1 & 2 concurrent, followed by Pours 3 & 4.

**Question:** The location where the new abutment #2 on the Topsham end of the bridge will be constructed appears at most times to be "in the dry", except during extreme rain events. Do the Special Provision Section 105 Environmental Requirements for In-Water Work Windows still apply for rock excavation and other construction activities if this area is in a dry condition at the time of construction?

**Response:** See above changes to bid documents.

**Question:** Please confirm the depth of existing hot mix asphalt pavement on the existing bridge. The 1985 plans show a 3 1/2" wearing surface. Have there been additional overlays?

**Response:** There have been no overlays. There existing HMA was removed and 3 ½" of Rosphalt was placed in 2006/2007, WIN 11089.00.

**Question:** Does the weight listed for item 202.19 Removing Existing Bridge on sheet 2 of 163 Estimated Quantities include the concrete deck?

**Response:** Yes. Item 202.19 Removing Existing Bridge estimated quantity includes the concrete deck.

**Question:** Drawing 160 General Note #3 indicates each light pole base to be 6'6" in length. This does not correlate to the pay item quantity of 110 LF. Please specify the quantity and length of the light pole bases.

**Response:** See the above changes to the bid documents. There are 20 light pole foundations in grade.

**Question:** Drawing 157 Lighting Plan. Wire Schedule "J". Appears to begin at SJB-11 and proceed to PB P1-B1-14. Please indicate how far circuit configuration "J" proceeds from there, as there are not any letter designations past this pole.

**Response:** Wire schedule item "J" being at SJB-11 and end at PB PR-B1-14.

**Question:** Drawings 157 Lighting Plan indicates Wire Schedule "C" to consist of #3 awg conductors. Drawing 158 and 159 indicates these are to be #2 awg conductors. Please clarify which is correct.

**Response**: Wire Schedule item "C" contains #2 awg conductors for the extents of sheets 158 and 159 until SJB-8 on Sheet 157.

**Question:** Due to the complexity of this project we respectfully request a three week bid extension from March 1, 2023 to March 22, 2023.

**Response:** See the above changes to the bid documents.

Consider these changes and information prior to submitting your bid on March 8, 2023.

Sincerely,

Kevin Hanlon for

George M. A. Macdougall P.E. Contracts & Specifications Engineer

WIN #: 22603.00 Date: - 2/16/2023

#### SPECIAL PROVISION SECTION 105

General Scope of Work (Environmental Requirements)

Work within stream ("In Stream Work," see MaineDOT Standard Specifications 101.2 Definitions) requires special conditions to minimize impacts. The following special conditions shall apply to this project:

I. In-Stream Work applies to the following water bodies at the following station #'s: Androscoggin River at proposed bridge replacement

#### II. In-Stream Work shall be completed as follows:

Activity	Permitted InStream Work Window
Construction and removal of temporary access structures (e.g., temporary fill and/or work trestle) in-water below the ordinary high-water mark (OHWM) on the Brunswick side	September 1- March 15
Construction and removal of temporary access structures (e.g. Temporary fill and/or work trestle) on the Topsham side in the ponded/bedrock falls habitat	August 1-March 15
Blasting	November 8-March 15
Activities likely to create high levels of sedimentation or turbidity	August 1 to March 15
All bedrock leveling, underwater rock drilling, and substructure removal using hydraulic breakers, hoe rams, blasting, other methods, or any other noise generating activity that exceeds fish injury threshold (187cSEL and 206 dB re 1µPa2-s Peak).	November 8-March 15
All bedrock leveling, underwater rock drilling, and substructure removal using hydraulic breakers, hoe rams, blasting, other methods, or any other noise generating activity exceeding fish behavioral thresholds (150 dB re 1 µPa RMS).	August 1 to March 15
Cofferdam installation and removal at Brunswick abutment (inwater and above OHW portions)	September 1 to March 15
Pier Cofferdam installation and removal	August 1 to March 15
All other In StreamWork	August 1-March 15

III. The following activities shall be completed during the following work windows regardless of location, even if it is not In Stream:

Activity	Permitted Work Window
All bedrock leveling, underwater rock drilling, and substructure removal using hydraulic breakers, hoe rams, blasting, other methods, or any other noise generating activity that exceeds fish injury threshold (187cSEL and 206 dB re 1µPa2-s Peak).	November 8-March 15
All bedrock leveling, underwater rock drilling, and substructure removal using hydraulic breakers, hoe rams, blasting, other methods, or any other noise generating activity exceeding fish behavioral thresholds (150 dB re 1 µPa RMS).	August 1 to March 15
Blasting	November 8-March 15

WIN #: 22603.00 Date: - 2/16/2023

#### . IV, Additional Requirements:

- 1. Special Conditions of Army Corps of Engineers (ACOE) Permit apply (see permit and other conditions in this SP 105).
- 2. Special Conditions of Formal Endangered Species Act (Section 7) Consultation with National Marine Fisheries Service apply (summarized in this Special Provision 105 and ACOE permit).
- 3. The Contractor shall hold a pre-construction meeting with appropriate MaineDOT Environmental Office staff, other MaineDOT staff, and the Contractor(s) to review all procedures and environmental. The following individuals/agencies shall be invited: ACOE (Jana Jacobson, <u>Jana.L.Jacobson@usace.army.mil</u>; FHWA (Rachel LeVee, <u>rachel.levee@dot.gov</u>).
- 4. The Contractor shall contact Eric Ham of MaineDOT Environmental Office (207-215-7356, eric.ham@maine.gov) at least two weeks prior to installation of cofferdams to coordinate fish evacuation.
  - a. To minimize fish stranding inside the cofferdam when dewatering, the contractor shall provide access for MaineDOT environmental office staff, MaineDOT diver and/or qualified consultants to inspect the cofferdams after completion and before a seal placement for presence of endangered fish species. If salmon or sturgeon are observed within a cofferdam structure, MaineDOT will coordinate with the resources agencies to evacuate prior to proceeding with construction.
- 5. Blasting shall not occur without NMFS review and approval of the blasting plan. Plans for any project-related blasting shall be submitted to allow at least 150 days for NOAA to review. Blast activities shall be designed to remain below potential fish injury limits (206 dB Peak (2.89 PSI)). All blasting activities between November 8 and November 30 shall incorporate the following additional minimization measures to reduce potential impacts to adult Atlantic salmon which may still be present in the area:
  - a. Active acoustic monitoring of the action area for any tagged fish potentially present in the Androscoggin River.
  - b. Minimize charge sizes and the number of days of exposure to blasting.
  - c. Deploy scare charges prior to the main blast.
  - d. Conduct visual inspection of the action area post-blast to document any impacts to fish.
- 6. Bedrock leveling using hydraulic breakers or other noise generating methods exceeding fish behavior or injury thresholds listed in Section II shall occur within a cofferdam or in an area that is dry at the time of the work.
- 7. Use of hydraulic breakers or other noise generating methods (beneath or near the water line) that exceed the behavioral noise threshold listed in Section II requires a 20-minute "soft start" to allow fish an opportunity to leave the project vicinity before sound pressure increases.
- 8. All areas of temporary stream or wetland fill must be within the specified limits on the plans and shall be restored to their original contour and character upon completion of the project.
  - a. Fill placed in-water (rivers or streams) shall consist of clean stone and non-erodible materials.
  - b. Contractors shall install turbidity curtains or equivalent measures during in-water fill placement.
- 9. Demolition and debris removal and disposal shall comply with Section 202.03 of the MaineDOT's Standard Specifications. The Contractor will contain all demolition debris, including debris from wearing surface removal, saw cut slurry, dust, etc., and will not allow it to discharge to any resource. The Contractor will dispose of debris in accordance with the Maine Solid Waste Law (Title 38 M.R.S.A., Section 1301 et. seq.) and in compliance with applicable regulatory approvals. The demolition plan, containment, and disposal of demolition debris will be addressed in the Contractor's Soil Erosion and Water Pollution Control Plan (SEWPCP).
- 10. Existing pier to be removed shall be removed down to the underlying bedrock (or a foot below the natural substrate grade) and debris will be removed from the riverbed.
- 11. Fresh concrete shall be poured inside of a cofferdam (concrete seal) and shall not contact flowing water outside cofferdam.
- 12. Water pumped out of the cofferdam will be within one pH unit of background pH level of the resource (Androscoggin River) (MaineDOT standard specifications). A representative of the MaineDOT Surface

WIN #: 22603.00 Date: - 2/16/2023

Water Quality Unit will periodically evaluate pH to determine whether the water is within the allowable tolerance to be pumped directly back into the river or whether it needs to be treated prior to discharge.

- 13. No heavy construction equipment shall travel into or through any flowing streams with erodible substrate (e.g., sand, silt, and clay). Travel of heavy construction equipment into or through flowing streams and on stream substrate will only occur when the stream substrate is non-erodible (e.g., ledge, cobble) and the contractor has received approval from the MaineDOT environmental field office staff.
- 14. No equipment, materials, or machinery shall be stored, cleaned, fueled, or repaired within any wetland or stream resource.
- 15. All pumps and generators required for in-stream work shall be cleaned of external oil, grease, dirt, and mud such that turbid water does not drain to any wetland or stream. Any leaks of this equipment shall be fixed prior to entering streams or areas that drain directly to streams or wetlands. Operation shall follow the specifications of the SEWPCP.
- 16. Areas of disturbed soil adjacent to the waterways shall be stabilized and re-vegetated with a seed mix appropriate for riparian areas in Maine except where riprap has been placed.
- 17. Vessels shall travel at slow speeds, typically less than 6 knots (6.9 miles per hour), in the construction zone.
- 18. Construction crews shall visually monitor for fish in equipment and on barges and report any sightings to MaineDOT environmental staff.
- 19. To minimize the spread of noxious weeds into the riparian zone, all off-road equipment and vehicles (operating off of existing open and maintained roads) shall be cleaned prior to entering the construction site to remove all soil, seeds, vegetation, or other debris that could contain seeds or reproductive portions of plants. All equipment shall be inspected prior to offloading to ensure they are clean.
- 20. A copy of the ACOE permit shall be kept at the work site (and the project office) whenever work is being performed, and all personnel with operational control of the site shall ensure that all appropriate personnel performing work are fully aware of its terms and conditions.

#### V. Approvals:

- 1. Temporary Soil Erosion and Water Pollution Control Plan
- 2. Permitted Resource Impacts (square feet), see ACOE permit for locations:

		Permanent (SF)		Temporary (SF)			
		Fill (SF)		Fill	Excavation &	Pier	Work
			Abutments	(Access)	Cofferdams (Temporary)	Removal	(Total Pile footprint)
e d	Non-Tidal Riverine (R2RB: Riverine, Lower Perennial, Rocky Bottom)		430	2,000	960		200
Resource Type	Tidal Riverine  (R1RB: Riverine, Tidal, Rocky Bottom)	4,000	720		3,720	800	600
	Total		5,150	2,000	4,680	800	800

- VI. All activities are <u>prohibited</u> (including placement and removal of cofferdams unless otherwise permitted by Regulatory Agencies) below the normal high-water mark if outside the prescribed in-water work window (see Section II), except for the following:
  - 1. Work within a cofferdam constructed according to MaineDOT's Standard Specifications and in adherence with the contractors approved "Soil Erosion and Water Pollution Control Plan".

VII. No work is allowed that completely blocks a river, stream, or brook without providing downstream flow.

NOTE: Regulatory Review and Approval is required to modify the existing In-Water work window. Requests for work window extensions must be submitted to the MaineDOT Environmental Office. Approval of requests for work window

#### **Proposal Schedule of Items**

Page 1 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
0010	201.23 REMOVING SINGLE TREE TOP ONLY	5.000 EA	!	!
0020	201.24 REMOVING STUMP	5.000 EA		!
0030	202.15 REMOVING EXISTING MANHOLE OR CATCH BASIN	1.000 EA	<u></u>	<u> </u>
0040	202.19 REMOVING EXISTING BRIDGE	LUMP SUM	LUMPSUM	!
0050	202.202 REMOVING PAVEMENT SURFACE	400.000 SY	<u> </u>	!
0060	203.20 COMMON EXCAVATION	1,655.000 CY	!	<u> </u>
0070	203.21 ROCK EXCAVATION	100.000 CY		<u> </u>
0080	203.24 COMMON BORROW	500.000 CY	<u> </u>	!
0090	203.25 GRANULAR BORROW	2,630.000 CY	<u> </u>	!
0100	203.35 CRUSHED STONE 3/4 INCH	57.000 CY	<u> </u>	!
0110	206.082 STRUCTURAL EARTH EXCAVATION - MAJOR STRUCTURES	1,770.000 CY	<u> </u>	!
0120	206.092 STRUCTURAL ROCK EXCAVATION - MAJOR STRUCTURES	420.000 CY	!	

#### **Proposal Schedule of Items**

Page 2 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Line Item ID Approximate		Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
0130	304.10 AGGREGATE SUBBASE COURSE - GRAVEL	1,740.000 CY		!
0140	304.14 AGGREGATE BASE COURSE - TYPE A	22.000 CY	!	
0150	403.207 HOT MIX ASPHALT 19.0 MM HMA	200.000 T	!	
0160	403.208 HOT MIX ASPHALT 12.5 MM HMA SURFACE	200.000 T	!	!
0170	403.2081 12.5 MM POLYMER MODIFIED HOT MIX ASPHALT	470.000 T	!	!
0180	403.209 HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS)	110.000 T	<u>!</u>	!
0190	403.213 HOT MIX ASPHALT 12.5 MM BASE	400.000 T		
0200	403.2131 12.5 MM POLYMER MODIFIED HMA BASE	470.000 T	!	!
0210	409.15 BITUMINOUS TACK COAT - APPLIED	350.000 G		!
0220	461.131 TEMPORARY PAVEMENT	100.000 T	!	!
0230	501.25 STEEL CASING 30 INCH GALV	40.000 LF		
0240	502.21 STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS	730.000 CY	!	

#### **Proposal Schedule of Items**

Page 3 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and ption Units	Dollars Cents	Dollars Cents
0250	502.219 STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS	LUMP SUM	LUMP SUM	!
0260	502.2356 MISCELLANEOUS CONCRETE THICKENED SLAB	56.000 CY	<u> </u>	!
0270	502.239 STRUCTURAL CONCRETE PIERS	LUMP SUM	LUMPSUM	
0280	502.24 STRUCTURAL CONCRETE PIERS (PLACED UNDER WATER)	480.000 CY	!	!
0290	502.26 STRUCTURAL CONCRETE ROADWAY AND SIDEWALK SLABS ON STEEL BRIDGES	LUMP SUM	LUMP SUM	!
0300	502.31 STRUCTURAL CONCRETE APPROACH SLABS	LUMP SUM	LUMP SUM	!
0310	502.49 STRUCTURAL CONCRETE CURBS AND SIDEWALKS	LUMP SUM	LUMP SUM	!
0320	502.565 CONCRETE FILL	410.000 CY		
0330	502.703 FRP DOWNSPOUT	3.000 EA		!
0340	502.77 FIBER REINFORCED POLYMER BRIDGE DRAIN - TYPE: B	24.000 EA	<u>!</u>	!
0350	503.12 REINFORCING STEEL, FABRICATED AND DELIVERED	199,800.000 LB	!	

#### **Proposal Schedule of Items**

Page 4 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID	Approximate	Unit Price	Bid Amount
	Description	Quantity and Units	Dollars Cents	Dollars Cents
0360	503.13 REINFORCING STEEL, PLACING	199,800.000 LB		!
0370	503.19 LOW-CARBON, CHROMIUM REINFORCEMENT - FABRICATED & DELIVERED	78,900.000 LB	<u></u>	
0380	503.20 LOW-CARBON, CHROMIUM REINFORCEMENT - PLACING	78,900.000 LB	<u> </u>	!
0390	504.702 STRUCTURAL STEEL FABRICATED AND DELIVERED, WELDED	LUMP SUM	LUMP SUM	!
0400	504.71 STRUCTURAL STEEL ERECTION	LUMP SUM	LUMP <sup> </sup> SUM	<u></u>
0410	505.08 SHEAR CONNECTORS	LUMP SUM	LUMP <sup> </sup> SUM	
0420	506.9104 THERMAL SPRAY COATING - SHOP APPLIED	LUMP SUM	LUMP SUM	!
0430	507.08311 ORNAMENTAL STEEL BRIDGE RAILING, 4 BAR WITH PALES	LUMP SUM	LUMP SUM	
0440	507.0843 ALUMINUM PIPE HAND RAILING	LUMP SUM	LUMP SUM	
0450	507.08491 BARRIER-MOUNTED ALUMINUM PEDESTRIAN RAILING	LUMP SUM	LUMP	!
0460	508.14 HIGH PERFORMANCE WATERPROOFING MEMBRANE	LUMP SUM	LUMP SUM	!

#### **Proposal Schedule of Items**

Page 5 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

SECTION: 1

INITIAL GROUP

Alt Set ID:

Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
0470	510.11 SPECIAL DETOUR, PEDESTRIAN TRAFFIC ONLY	LUMP SUM	LUMP	!
0480	511.07 COFFERDAM: ABUT NO.1	LUMP SUM	LUMP SUM	!
0490	511.07 COFFERDAM: ABUT NO.2	LUMP SUM	LUMP SUM	<u></u>
0500	511.07 COFFERDAM: PIER NO.1	LUMP SUM	LUMP SUM	!
0510	511.07 COFFERDAM: PIER NO.2	LUMP SUM	LUMP SUM	<u>!</u>
0520	511.07 COFFERDAM: PIER NO.3	LUMP SUM	LUMP SUM	<u></u>
0530	512.081 FRENCH DRAINS	LUMP SUM	LUMP SUM	<u>!</u>
0540	515.21 PROTECTIVE COATING FOR CONCRETE SURFACES	LUMP SUM	LUMP SUM	!
0550	518.60 REPAIR OF VERTICAL SURFACES < 8 IN.	200.000 SF	!	!
0560	521.23 EXPANSION DEVICE FINGER JOINT	2.000 EA		!
0570	521.32 FABRIC TROUGH FOR FINGER JOINT	2.000 EA		<u></u> !
0580	523.52 BEARING INSTALLATION	25.000 EA		<u> </u>

#### **Proposal Schedule of Items**

Page 6 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION:** 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
0590	523.5551 POT OR DISC BEARINGS, FIXED	5.000 EA	!	!
0600	523.5552 POT OR DISC BEARINGS, EXPANSION	20.000 EA	!	!
0610	524.301 TEMPORARY STRUCTURAL SUPPORT	LUMP SUM	LUMP SUM	!
0620	525.75 GRANITE BENCH TYPE A SEATING	11.000 EA	<u> </u>	!
0630	525.75 GRANITE BENCH TYPE B	23.000 EA	<u> </u>	!
0640	525.75 GRANITE BENCH TYPE B1	2.000 EA	!	!
0650	525.75 GRANITE BENCH TYPE C, AMPHITHEATER	26.000 EA	<u></u> !	!
0660	526.301 PORTABLE CONCRETE BARRIER TYPE I	LUMP SUM	LUMP SUM	!
0670	526.341 PERMANENT CONCRETE BARRIER (1640 LF)	LUMP SUM	LUMP SUM	!
0680	530.30 GFRP, REINFORCEMENT BARS, FABRICATED & DELIVERED	365,400.000 LF	<u>!</u>	!
0690	530.31 GFRP, REINFORCEMENT BARS, PLACING	365,400.000 LF	<u>!</u>	
0700	603.159 12 INCH CULVERT PIPE OPTION III	227.000 LF		!

#### **Proposal Schedule of Items**

Page 7 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
0710	603.169 15 INCH CULVERT PIPE OPTION III	24.000 LF		!
0720	603.179 18 INCH CULVERT PIPE OPTION III	27.000 LF	!	
0730	603.199 24 INCH CULVERT PIPE OPTION III	27.000 LF	!	
0740	604.072 CATCH BASIN TYPE A1-C	3.000 EA	!	!
0750	604.15 MANHOLE	2.000 EA	!	
0760	604.158 UTILITY VAULT CMP	1.000 EA	!	!
0770	604.158 UTILITY VAULT GWI, COMCAST & FIRSTLIGHT	2.000 EA	!	!
0780	604.164 REBUILDING CATCH BASIN	6.000 EA	!	!
0790	604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	4.000 EA	<u></u> !	
0800	604.244 CATCH BASIN TYPE F4	4.000 EA	<u> </u>	!
0810	604.246 CATCH BASIN TYPE F5	1.000 EA	!	
0820	604.248 CATCH BASIN TYPE F6	2.000 EA		!
0830	604.74 SPECIAL DRAIN	1.000 EA	!	

#### **Proposal Schedule of Items**

Page 8 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
0840	605.09 6 INCH UNDERDRAIN TYPE B	1,250.000 LF		
0850	606.353 REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	2.000 EA	!	!
0860	606.356 UNDERDRAIN DELINEATOR POST	2.000 EA	!	!
0870	606.365 GUARDRAIL REMOVE, MODIFY, AND RESET	200.000 LF	<u> </u>	!
0880	607.19 CHAIN LINK FENCE - 8 FOOT	46.000 LF		<u>!</u>
0890	607.2323 CHAIN FENCE GATE 6 FOOT X 8 FOOT OPENING	1.000 EA	!	!
0900	607.243 REMOVE CHAIN LINK FENCE	150.000 LF	!	!
0910	607.39 PEDESTRIAN FENCE	280.000 LF		<u> </u>
0920	608.08 REINFORCED CONCRETE SIDEWALK	840.000 SY	!	
0930	608.15 BRICK SIDEWALK WITH BITUMINOUS BASE	130.000 SY	!	!
0940	608.26 CURB RAMP DETECTABLE WARNING FIELD	85.000 SF	!	!
0950	608.282 GRANITE PAVERS WITH CONCRETE BASE	250.000 SY	!	

#### **Proposal Schedule of Items**

Page 9 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
0960	609.11 VERTICAL CURB TYPE 1	1,200.000 LF	<u> </u>	<u></u>
0970	609.12 VERTICAL CURB TYPE 1 - CIRCULAR	95.000 LF	!	!
0980	609.13 VERTICAL BRIDGE CURB TYPE 1	1,635.000 LF	!	
0990	609.221 TERMINAL CURB TYPE 1	94.000 LF	!	!
1000	609.222 TERMINAL CURB TYPE 1 - CIRCULAR	20.000 LF	!	!
1010	609.441 CURBING REMOVED AND STACKED	1,250.000 LF	!	!
1020	610.08 PLAIN RIPRAP	130.000 CY	!	!
1030	610.16 HEAVY RIPRAP	340.000 CY	!	!
1040	610.18 STONE DITCH PROTECTION	2.000 CY	!	!
1050	610.21 RIVER STONES 2 INCH - 3 INCH	6.000 CY	!	!
1060	610.35 AMPHITHEATRE STONE PAVING	301.000 SF	<u> </u>	<u></u>
1070	610.61 NATURAL BOULDER	26.000 EA		
1080	613.319 EROSION CONTROL BLANKET	220.000 SY	!	

#### **Proposal Schedule of Items**

Page 10 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION:** 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
1090	615.07 LOAM	460.000 CY	!	
1100	616.08 SODDING	480.000 SY	!	
1110	618.13 SEEDING METHOD NUMBER 1	3.000 UN	<u>!</u>	<u></u>
1120	619.12 MULCH	3.000 UN	<u>!</u>	<u></u>
1130	619.13 BARK MULCH	65.000 CY	!	!
1140	619.14 EROSION CONTROL MIX	10.000 CY	!	!
1150	620.58 EROSION CONTROL GEOTEXTILE	585.000 SY		!
1160	621.129 SM DECID TR (6' - 8') MULTI STEM CLUMP GROUP A	10.000 EA	<u> </u>	!
1170	621.269 LARGE DECIDUOUS TREE (1.75 INCH - 2 INCH CALIPER) GROUP C	6.000 EA	<u> </u>	!
1180	621.285 LARGE DECIDUOUS TREE (3 INCH - 3.50 INCH CALIPER) GROUP A	9.000 EA	<u></u>	!
1190	621.389 EVERGREENS (15 INCH - 18 INCH) GROUP A	203.000 EA	<u> </u>	!
1200	621.395 EVERGREENS (18 INCH - 24 INCH) GROUP A	129.000 EA	!	!

#### **Proposal Schedule of Items**

Page 11 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION:** 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
1210	621.546 DECIDUOUS SHRUBS (2 FOOT - 3 FOOT) GROUP A	98.000 EA	<u></u> j	!
1220	621.552 DECIDUOUS SHRUBS (3 FOOT - 4 FOOT) GROUP A	33.000 EA	<u> </u>	!
1230	621.71 HERBACEOUS PERENNIALS GROUP A	756.000 EA	<u> </u>	!
1240	621.80 ESTABLISHMENT PERIOD	LUMP SUM	LUMP SUM	!
1250	621.98 METAL LANDSCAPE EDGING	34.000 LF	!	!
1260	626.11 PRECAST CONCRETE JUNCTION BOX	1.000 EA	<u> </u>	!
1270	626.22 NON-METALLIC CONDUIT	3,250.000 LF	!	
1280	626.221 NON-METALLIC CONDUIT CONCRETE ENCASED	320.000 LF	!	!
1290	626.411 18 INCH DIAMETER FOUNDATION	130.000 LF	!	!
1300	627.733 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	4,550.000 LF		!
1310	627.75 WHITE OR YELLOW PAVEMENT & CURB MARKING	410.000 SF	<u>!</u>	

#### **Proposal Schedule of Items**

Page 12 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
1320	627.752 TEMPORARY WHITE OR YELLOW PAVEMENT & CURB MARKING	210.000 SF	!	!
1330	627.77 REMOVING PAVEMENT MARKINGS	260.000 SF		!
1340	627.78 TEMPORARY 4 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	16,200.000 LF	<u></u>	!
1350	629.05 HAND LABOR, STRAIGHT TIME	108.000 HR	<u> </u>	 
1360	631.10 AIR COMPRESSOR (INCLUDING OPERATOR)	40.000 HR	!	!
1370	631.11 AIR TOOL (INCLUDING OPERATOR)	40.000 HR		
1380	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	60.000 HR	<u> </u>	!
1390	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	60.000 HR	<u>!</u>	!
1400	631.18 CHAIN SAW RENTAL (INCLUDING OPERATOR)	40.000 HR	<u>!</u>	!
1410	631.20 STUMP CHIPPER (INCLUDING OPERATOR)	40.000 HR	<u>!</u>	
1420	631.21 ROAD BROOM (INCLUDING OPERATORS AND HAULER)	40.000 HR		!

#### **Proposal Schedule of Items**

Page 13 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION:** 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
1430	631.22 FRONT END LOADER (INCLUDING OPERATOR)	60.000 HR	<u> </u>	!
1440	631.32 CULVERT CLEANER (INCLUDING OPERATOR)	60.000 HR	<u> </u>	!
1450	633.01 SEAT WALLS	116.000 LF		
1460	634.160 HIGHWAY LIGHTING	LUMP SUM	LUMP SUM	
1470	634.162 PARK LIGHTING SYSTEM BRUNSWICK	LUMP SUM	LUMP SUM	!
1480	634.162 PARK LIGHTING SYSTEM TOPSHAM	LUMP SUM	LUMP SUM	
1490	634.2101 TYPE A LIGHT STANDARD	33.000 EA		
1500	634.2102 TYPE B LIGHT STANDARD	12.000 EA		
1510	639.18 FIELD OFFICE TYPE A	1.000 EA		
1520	642.17 CAST-IN-PLACE CONCRETE STEPS W GRANITE TREADS	19.000 CY	<u></u> !	!
1530	642.183 GRANITE STEP AMPHITHEATER	LUMP SUM	LUMP SUM	
1540	643.62 RECTANGULAR RAPID FLASHING BEACON	4.000 EA	!	!

#### **Proposal Schedule of Items**

Page 14 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
1550	643.72 TEMPORARY TRAFFIC SIGNAL BRUNSWICK APPROACH	LUMP SUM	LUMP SUM	
1560	645.306 FLEXIBLE REFLECTORIZED DELINEATOR	2.000 EA	<u></u> !	!
1570	645.51 SPECIAL SIGNING	LUMP SUM	LUMP SUM	!
1580	652.312 TYPE III BARRICADE	6.000 EA		!
1590	652.33 DRUM	25.000 EA		!
1600	652.34 CONE	75.000 EA		!
1610	652.35 CONSTRUCTION SIGNS	860.000 SF		!
1620	652.361 MAINTENANCE OF TRAFFIC CONTROL DEVICES	LUMP SUM	LUMP SUM	!
1630	652.38 FLAGGER	11,044.000 HR		!
1640	652.41 PORTABLE CHANGEABLE MESSAGE SIGN	9.000 EA	<u>!</u>	!
1650	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP SUM	LUMP SUM	!
1660	658.20 ACRYLIC LATEX COLOR FINISH, GREEN	1,550.000 SY	!	!

#### **Proposal Schedule of Items**

Page 15 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
1670	659.10 MOBILIZATION	LUMP SUM	LUMP SUM	!
1680	660.21 ON-THE-JOB TRAINING (BID)	2,000.000 HR	!	!
1690	801.03 TEST PITS	2.000 EA	!	!
1700	802.10 12 INCH DUCTILE IRON WATERMAIN	20.000 LF	!	!
1710	822.322 6 INCH DUCTILE IRON PIPE	130.000 LF	!	!
1720	822.34 8 INCH CLASS 52 DUCTILE IRON PIPE	20.000 LF	!	!
1730	822.3701 16" DUCTILE IRON WATER MAIN	800.000 LF	!	!
1740	823.3105 12" INSERTION VALVE AND VALVE BOX	1.000 EA	<u> </u>	!
1750	823.3112 16" GATE VALVE WITH BOX	2.000 EA	!	!
1760	823.33 6 INCH GATE VALVE WITH BOX	1.000 EA	!	!
1770	824.30 FIRE HYDRANT	1.000 EA		!
1780	825.322 2" CURB STOP	1.000 EA	!	!
1790	825.3221 2" CORP STOP	1.000 EA	!	

#### **Proposal Schedule of Items**

Page 16 of 17

**Proposal ID:** 022603.00 **Project(s):** 022603.00

**SECTION**: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Proposal Line	ine Item ID Approximate		Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
1800	825.333 1" AIR RELEASE VALVE MANUAL	1.000 EA	<u> </u>	
1810	825.4221 2" POLYETHYLENE SERVICE	40.000 LF	!	
1820	825.5411 TEMPORARY WATER MAIN 6 INCH	LUMP SUM	LUMP SUM	!
1830	827.33 TRENCH INSULATION	40.000 LF	!	!
1840	830.104 WATER MAIN BRIDGE CROSSING 16 INCH PREINSULATED	900.000 LF	<u>!</u>	!
1850	841.48 BOLLARDS	3.000 EA	!	!
1860	841.481 REMOVABLE BOLLARD	3.000 EA	!	
1870	845.10 STRUCTURAL STEEL UTILITY SUPPORT ELEC AND COMMS	LUMP SUM	LUMP	!
1880	910.301 SPECIAL WORK UTILITY CONDUIT CMP APPR ONLY	LUMP SUM	LUMP SUM	!
1890	910.301 SPECIAL WORK UTILITY CONDUIT CMP BRIDGE ONLY	LUMP SUM	LUMP SUM	!
1900	910.301 SPECIAL WORK UTILITY CONDUIT CONSOLIDATED COMM. APPR	LUMP SUM	LUMP SUM	!
1910	910.301 SPECIAL WORK UTILITY CONDUIT CONSOLIDATED COMM. BR ONLY	LUMP SUM	LUMP SUM	

#### Proposal Schedule of Items Page 17 of 17

<b>Proposal ID:</b> 022603.00		Project(s): 022603.00	
SECTION: 1	INITIAL GROUP		
Alt Set ID:	Alt Mbr ID:		
Contractor:			

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
1920	910.301 SPECIAL WORK UTILITY CONDUIT GWI, COMCAST & FIRSTLIGHT - APPROACHES ONLY	LUMP SUM	LUMP SUM	<u> </u>
1930	910.301 SPECIAL WORK UTILITY CONDUIT GWI, COMCAST & FIRSTLIGHT - BR ONLY	LUMP SUM	LUMP	<u> </u>
	Section: 1		Total:	<u></u> !
			Total Bid	

WIN #: 22603.00 Date: - 2/16/2023

extensions is not guaranteed and may result in delays in construction schedule that are the sole responsibility of the

contractor.

IMDM NO	ESTIMATED QUANTITIES	O LI A NIMIMA	IINIIM
ITEM NO. 201.23	DESCRIPTION  Removing Single Tree Top Only	QUANTITY 5	UNIT EA
201.24	Removing Stump	5	EA
202.15 202.19	Removing Existing Manhole or Catch Basin  Removing Existing Bridge (3,350,000 LB, 1,550 CY)	<i>                                     </i>	EA LS
202.202	Removing Pavement Surface	400	SY
203.20	Common Excavation	1,655	CY
203 <b>.</b> 24 203 <b>.</b> 25	Common Borrow Granular Borrow	500 2,630	CY CY
203.35	Crushed Stone 3/4-inch	57	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	1,770	CY
206.092	Structural Rock Excavation - Major Structures	420	CY
304.10	Aggregate Subbase Course - Gravel	1,740	CY
304.14	Aggregate Base Course - Type A	22	CY
403.2081	Hot Mix Asphalt - 12.5 mm (Polymer Modified)	470	TON
403.209	Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)	110	TON
403 <b>.</b> 213	Hot Mix Asphalt - 12.5 mm (base and intermediate course)  Hot Mix Asphalt - 12.5 mm (base and intermediate course Polymer Modified)	400 470	TON TON
409.15	Bituminous Tack Coat, Applied	350	G
502 <b>.</b> 21	Structural Concrete, Abutments and Retaining Walls	730	CY
502 <b>.</b> 21	Structural Concrete, Abutments and Retaining Walls (480 CY)	1 1	LS
502.2356	Miscellaneous Concrete: Thickened Slab	56	CY
502.239	Structural Concrete Piers (480 CY)	1	LS
502.24 502.26	Structural Concrete Piers (placed under water)  Structural Concrete Roadway and Sidewalk Slab on Steel Bridges (1,080 CY)	480	CY LS
502.26 502.31	Structural Concrete Approach Slabs (24 CY)	/	LS
502.49	Structural Concrete Curbs And Sidewalks (510 CY)	1	LS
502.565	Concrete Fill	410	CY
502.703 502.77	FRP Downspout FRP Bridge Drain - Type "B"	3 24	EA EA
503.12	Reinforcing Steel, Fabricated and Delivered	199,800	LB
503.13	Reinforcing Steel, Placing	199,800	LB
503.19	Low-Carbon Chromium Reinforcement, Fabricated and Delivered	78,900	LB
503.20	Low-Carbon Chromium Reinforcement, Placing  Structural Steel Entricated, and Delivered Wolded  (2.420.000 LB)	78,900	LB
504.702 504.71	Structural Steel Fabricated and Delivered, Welded (2,420,000 LB)  Structural Steel Erection (2,420,000 LB)	/	LS LS
505.08	Shear Connectors (7,433 EA)	,	LS
506.9104	Thermal Spray Coating (Shop Applied)	1	LS
507.08311	Ornamental Steel Bridge Railing, 4 Bar, with Pales (637 LF)	/	LS
507.0843 507.08491	Aluminum Pipe Hand Railing (58 LF)  Barrier-Mounted Aluminum Pedestrian Railing (1,565 LF)	/	LS LS
508.14	High Performance Waterproofing Membrane (2,900 SY)	1	LS
510.11	Special Detour, Pedestrian Traffic Only	1	LS
511.07	Cofferdam: Abutment I	/	LS
<i>511.07 511.07</i>	Cofferdam: Abutment 2 Cofferdam: Pier I	/	LS LS
511.07	Cofferdam: Pier 2	,	LS
5/1.07	Cofferdam: Pier 3	1	LS
512 <b>.</b> 081 515 <b>.</b> 21	French Drains (580 LF) Protective Coating For Concrete Structures (3,510 SY)	/	LS LS
5/8 <b>.</b> 60	Repair of Vertical Surfaces < 8 inches	200	SF
521.23	Expansion Device - Finger Joint	2	ΕA
521.32	Fabric Trough for Finger Joint	2	EA
523 <b>.</b> 52	Bearing Installation Pot or Disc Bearings, Fixed	25 5	EA EA
523 <b>.</b> 5552	Pot or Disc Bearings, Expansion	20	EA
524 <b>.</b> 301	Temporary Structural Support	1	LS
525.75	Granite Bench (Type A seating)	<u> </u>	EA
<i>525.75 525.75</i>	Granite Bench (Type B) Granite Bench (Type BI)	25	EA EA
525.75	Granite Bench (Type BI)  Granite Bench (Type C - Amphitheater)	26	EA
526 <b>.</b> 301	Portable Concrete Barier, Type I (910 LF)	1	LS
526.341	Permanent Concrete Barrier, Special (1,640 LF)	1	LS
530 <b>.</b> 30	GFRP, Reinforcement Bars, Fabricated & Delivered  GFRP, Reinforcement Bars, Placing	365,400 365,400	LF LF
603.159 603.169	12 inch Culvert Pipe Option III 15 inch Culvert Pipe Option III	227 24	LF LF
603.179	18 inch Culvert Pipe Option III	27	LF
603.199	24 inch Culvert Pipe Option III	27	LF
604.072	Catch Basin Type AI-C	3	EA
604.15 604.164	Manhole Rebuilding Catch Basin	2 6	EA EA
604.18	Ad justing Manhole or Catch Basin To Grade	1	EA
604.244 604.246	Catch Basin Type F4 Catch Basin Type F5	1	EA EA
604.248	Catch Basin Type F6	2	EA
604.74	Special Drain	1	EA
605.09	6 inch Underdrain Type B	1 <b>,</b> 250	LF .
606 <b>.</b> 353	Reflectorized Flexible Guardrail Marker  Underdrain Delineator Post	2	EA EA
606.365	Guardrail, Remove, Modify, and Reset (Type 3B to 3C)	200	EA
	Chain Link Fence - 8 Foot	46	LF

	ESTIMATED QUANTITIES CONTINUED		
ITEM NO. <i>607<b>.</b>2323</i>	DESCRIPTION  Chain Fence Gate 6'X8' Opening	QUANTITY /	UNIT EA
607.243	Remove Chain Link Fence	150	LF
607.39	Pedestrian Fence	280	LF
608.08	Reinforced Concrete Sidewalk	840	SY
608 <b>.</b> 15 608 <b>.</b> 26	Brick Sidewalk with Bituminous Base  Curb Ramp Detectable Warning Field	130 85	SY SF
608.282	Granite Pavers with Concrete Base	<u>(250)</u>	SY
609.11	Vertical Curb Type I	1,200	LF
609.12	Vertical Curb Type I - Circular	95	LF
609.13	Vertical Bridge Curb Type	1,635	LF
609 <b>.</b> 221 609 <b>.</b> 222	Terminal Curb Type I Terminal Curb Type I - Circular	94	LF LF
609 <b>.</b> 222 609 <b>.</b> 441	Curbing Removed And Stacked	1,250	LF LF
610.08	Plain Riprap	130	CY
610.16	Heavy Riprap	340	CY
610.18	Stone Ditch Protection	2	CY
610.21	River Stone (2"-3" Dia.)	6	CY
610 <b>.</b> 35 610 <b>.</b> 61	Amphitheater Stone Paving  Natural Boulders	30 <i>l</i> 26	SF EA
613 <b>.</b> 319	Erosion Control Blanket	220	SY
615 <b>.</b> 07	Loam	460	CY
616.08	Sodding	480	SY
618.13	Seeding Method Number I	3	Unit
619.12	Mulch	3	Unit
619.13	Bark Mulch	65	CY
619 <b>.</b> 14 620 <b>.</b> 58	Erosion Control Mix Erosion Control Geotextile	<i>10</i> 585	CY SY
621.129	Small Deciduous Trees 6'-8' Multistem Group A	10	EA
621 <b>.</b> 269	Large Decid. Trees I 3/4"-2" cal. IO'-I2' Group C B&B Multi Stem	6	EA
	min 3 stem Clump Select		
621 <b>.</b> 285	Large Deciduous Trees 3"-3 1/2" Group A B&B	9	EA
621.389	Evergreen Shrubs 15"-18" Container Group A	203	EA
621 <b>.</b> 395 621 <b>.</b> 546	Evergreen Shrubs 18"-24" Container Group A  Deciduous Shrubs 2'-3' Container Group A		EA EA
621 <b>.</b> 552	Deciduous Shrubs 3'-4' Container Group A  Deciduous Shrubs 3'-4' Container Group A	33	EA
621 <b>.</b> 71	Herbaceous Perennials I Gal Container Group A	756	EA
621 <b>.</b> 80	Two-Year Establishment Period Warrantee Bond	1	LS
621 <b>.</b> 98	Metal Landscape Edging	34	LF
626.//	Precast Concrete Junction Box	1	EA
626,22	Non-metallic Conduit	3,250	LF
626 <b>.</b> 221 626 <b>.</b> 411	Non-metallic Conduit, Concrete Encased  18-inch Diameter Foundation	320	LF LF
627 <b>.</b> 733	4" White or Yellow Painted Pavement Marking Line	4,550	LF
627 <b>.</b> 75	White or Yellow Pavement & Curb Marking	410	SF
627.752	Temporary White or Yellow Pavement & Curb Marking	210	SF
627.77	Removing Pavement Markings	260	SF
627.78	Temporary 4" Painted Pavement Marking Line, White or Yellow	16,200	LF
629.05	Hand Labor, Straight Time	100	HR
631 <b>.</b> 10 631 <b>.</b> 11	Air Compressor (including operator)  Air Tool (including operator)	40	HR HR
631.12	All Purpose Excavator (including operator)	60	HR
631 <b>.</b> 172	Truck - large (including operator)	60	HR
631 <b>.</b> 18	Chain Saw Rental (including operator)	40	HR
631 <b>.</b> 20	Stump Chipper Rental (including operator)	40	HR
631 <b>.</b> 21	Road Broom Rental (including operator & hauler)	40	HR
631 <b>.</b> 22 631 <b>.</b> 32	Front End Loader (including operator)  Culvert Cleaner (including operators)	60 60	HR HR
633.01	Culvert Cleaner (including operators)  Seat Walls	116	LF
634 <b>.</b> 160	Highway Lighting	1	LS
634.162	Park Lighting System (Brunswick)		LS
634.162	Park Lighting System (Topsham)	1	LS
634 <b>.</b> 2101	Type A Lighting Standard	33	EA
634.2102 639.18	Type B Lighting Standard Field Office Type A	12	EA EA
539.18 542.17	Field Office, Type A  Cast-in-place Concrete Steps: with Granite Treads	19	CY CY
542 <b>.</b> 183	Granite Step: Amphitheater	1	LS
643.62	Rectangular Rapid Flashing Beacon	4	EA
643.72	Temporary Traffic Signal: Brunswick Approach	1	LS
645.306	Flexible Reflectorized Delineator	2	EA
545 <b>.</b> 51	Special Signing Type III Barricades	6	LS EA
552.312 552.33	Type III Barricades Drum	25	EA EA
552 <b>.</b> 34	Cone	75	EA
552 <b>.</b> 35	Construction Signs	860	SF
552 <b>.</b> 361	Maintenance of Traffic Control Devices	1	LS
652 <b>.</b> 38	Flaggers	10,500	HR
652 <b>.</b> 41	Portable Changeable Message Signs	9	EA
656 <b>.</b> 75 658 <b>.</b> 20	Temporary Soil Erosion And Water Pollution Control Acrylic Latex Finish, Green	/ /,550	LS SY
ノンひ・とひ	Mobilization	1,550	LS
559. <i>I</i> 0		2,000	HR
659 <b>.</b> 10 660 <b>.</b> 21	On The Job Training	<u>~,</u> 000	
	On The Job Training	2,000	
	On The Job Training  Bollards  Removable Bollard	3 3	EA EA

I	ESTIMATED QUANTITIES: BRUNSWICK & TOPSHAM WATER	DISTRICT	
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.21	Rock Excavation	100	CY
403.207	Hot Mix Asphalt - 19 mm	200	TON
403.208	Hot Mix Asphalt - 12.5 mm	200	TON
461.131	Temporary Pavement	100	TON
<i>501.25</i>	Steel Casing - 30" Galvanized	40	LF
652.361	Maintenance of Traffic Control Devices	1	LS
652.38	Flaggers	200	HR
801.03	Test Pits	2	EΑ
802.10	12" Ductile Iron Watermain	20	LF
822.322	6-Inch Ductile Iron Pipe	130	LF
822.34	8" Class 52 Ductile Iron Pipe	20	LF
822.3701	16" Ductile Iron Water Main	800	LF
823.3105	12" Insertion Valve And Valve Box	1	EΑ
823.3112	16" Gate Valve With Box	2	EΑ
823.33	6" Gate Valve With Box	1	EΑ
824.30	Fire Hydrant	1	EΑ
825.322	2" Curb Stop	1	EΑ
825.3221	2" Corporation Stop	1	EΑ
825.333	I" Air Release Valve, Manual	1	EΑ
825.4221	2" Polyethylene Service	40	LF
<i>825.54</i> 11	Temporary Watermain, 6"	1	LS
827.33	Trench Insulation	40	LF
830.104	Watermain Bridge Crossing, 16" Preinsulated	900	LF

629.05 Hand Labor, Straight Time 8 HR 652.38 Flaggers 144 HR	ESTIMATED QUANTITIES: CONSOLIDATED COMMUNICATIONS				
629.05 Hand Labor, Straight Time 8 HR 652.38 Flaggers 144 HR	ITEM NO.	TEM NO. DESCRIPTION QUA			
652.38 Flaggers 144 HR	604.18	2	EΑ		
	629.05	8	HR		
QIO 301 Special Work - Utility Conduit (CC - Approaches Coly)	652.38	552.38 Flaggers			
310.501   Special Work - Offing Conduit (CC - Approaches Offig)	910.301 Special Work - Utility Conduit (CC - Approaches Only)		1	LS	
910.301 Special Work - Utility Conduit (CC - Bridge Only) I LS	910.301	Special Work - Utility Conduit (CC - Bridge Only)	1	LS	

	ESTIMATED QUANTITIES: CENTRAL MAINE POWE	₹	
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
604.158	Utility Vault (CMP)	1	EΑ
604.18	Ad just Manhole or Catch Basin To Grade	1	EΑ
652.38	Flaggers	100	HR
845.10	Structural Steel Utility Support (Elec. & Comms.)	0.5	LS
910.301	Special Work - Utility Conduit (CMP - Bridge Only)	1	LS
910.301	Special Work - Utility Conduit (CMP - Approach Only)	1	LS
3.0.00	Tippi oddi. Ciniy	•	

ESTIMATED QUANTITIES: GWI, COMCAST, & FIRSTLIGHT				
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	
<i>604.158</i>	Utility Vault (GWI, Comcast & FirstLight)	2	EΑ	
652.38	Flaggers	100	HR	
845.10	Structural Steel Utility Support (Elec. & Comms.)	<b>0.</b> 5	LS	
910.301	Special Work - Utility Conduit (GWI, Comcast & FirstLight - Bridge Only)	1	LS	
910.301	Special Work - Utility Conduit (GWI, Comcast & FirstLight - Approaches Only)	1	LS	

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DATE	10/22				2/2023 P		] <u>-</u>	<u> </u>	
ВУ	D.Myers	D.Bryant			Quantities				

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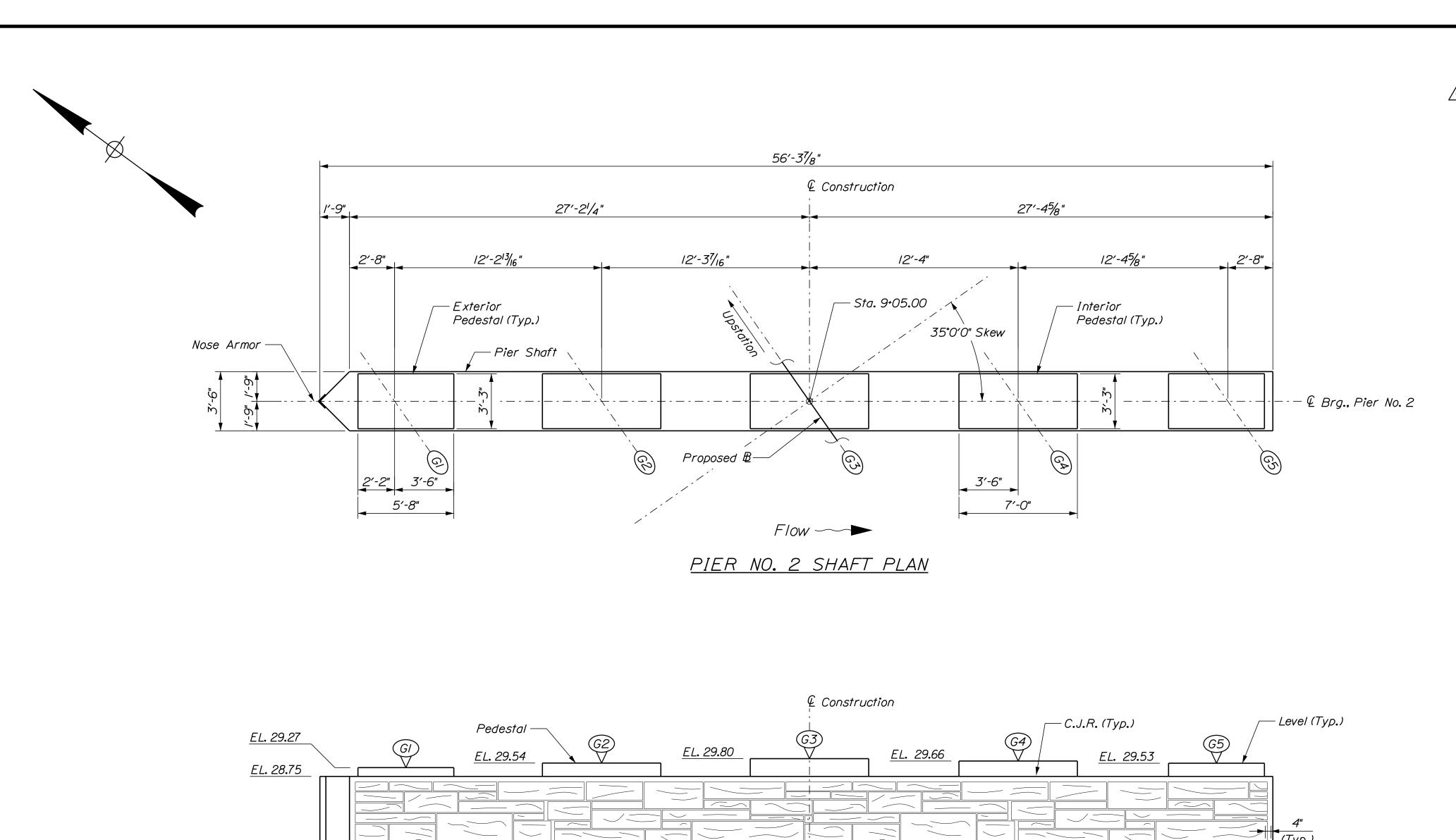
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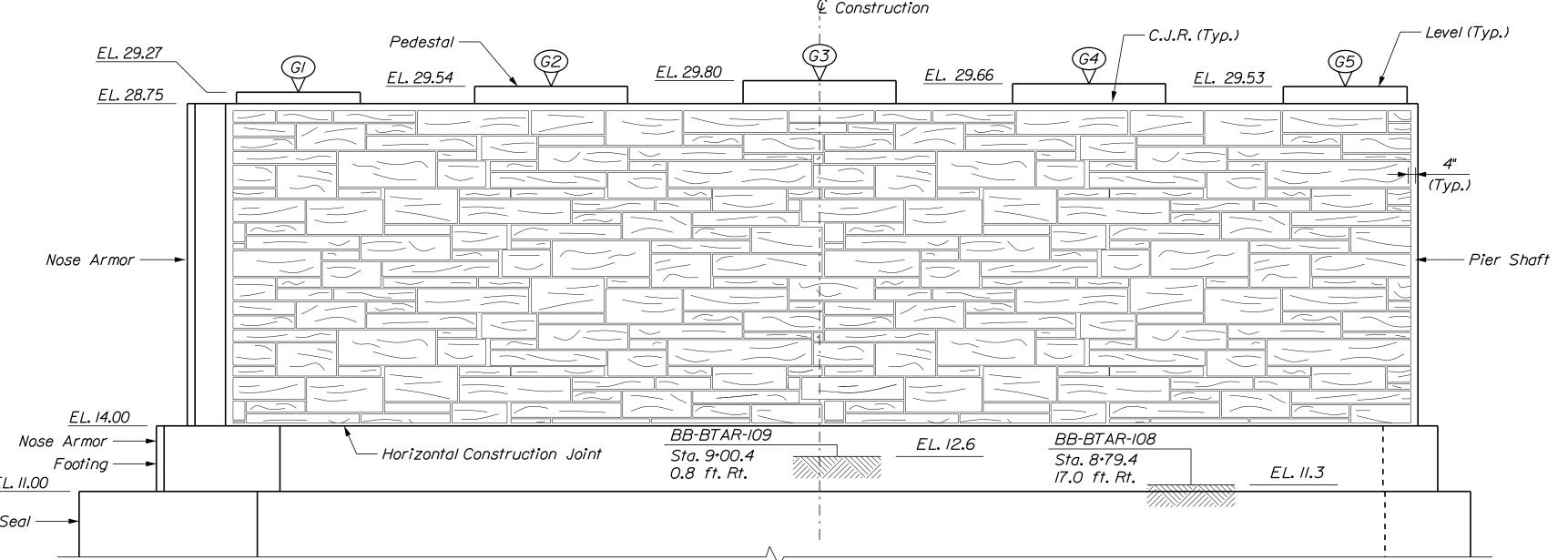
BRIDGE RIVER CUMBERLAND

FRANK J. WOOD ANDROSCOGGIN BRUNSWICK-TOPSHAM

QUANTITIES

ESTIMATED





PIER NO. 2 ELEVATION

PIER DESIGN CRITERIA 1. Critical AASHTO Load Combination: Pier I - Extreme Event II Limit State Pier 2 Extreme Event II Limit State Pier 3 Strength I Limit State 2. Buoyancy: Water level assumed at Pier I - EL. 20.1 (Q50) Pier I EL. 23.4 (Q50) Pier I EL. 28.0 (050) <del>3. Stream flow:</del>

Pier I Velocity of 9 ft/sec Skewed at 30 degrees (Q50). Pier 2 Velocity of 23.4 ft/sec Skewed at 30 degrees (Q50). Pier I Velocity of I6.0 ft/sec Skewed at 5 degrees (Q50).

4. Wind: 115 mph or 0.04 ksf, Strength III Limit State

Strength Limit State Thickness 2 feet, pressure 200 psi at EL H.O (QI.I) and pressure IOO psi at EL 20.1 (Q50), applied at 30 degree skew to the pier.

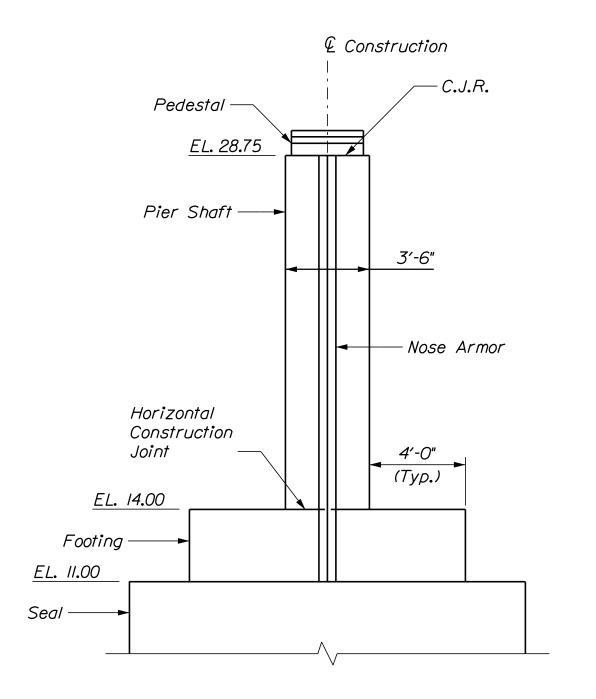
Extreme Limit State Thickness 3 feet, pressure 200 psi at EL H.O (QI.I) and pressure IOO psi at EL 20.I (Q50), applied at 30 degree skew to the pier. Pier 2:

Strength Limit State Thickness 2 feet, pressure 200 psi at EL 18.0 (QI.I) and pressure 100 psi at EL 23.4 (Q50), applied at 45 degree skew to the pier.

Extreme Limit State - Thickness 3 feet, pressure 200 psi at EL 18.0 (QI.I) and pressure 100 psi at EL 23.4 (Q50), applied at 45 degree skew to the pier. Pier 3:

Strength Limit State Thickness 2 feet, pressure 200 psi at EL 21.0 (Q1.1) and pressure 100 psi at EL 28.0 (Q50), 30% of nose force applied transverse to pier.

Extreme Limit State Thickness 3 feet, pressure 200 psi at EL 21.0 (Q1.1) and pressure 100 psi at EL 28.0 (Q50), 30% of nose force applied transverse to pier.



PIER NO. 2 END ELEVATION

Upstream End Shown

LEGEND:

C.J. = Construction Joint C.J.R. = Construction Joint, Roughen

Surface 1/4" profile Min. (Typ.)
W.P. = Working Point

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EL. 11.00 Seal -

AND

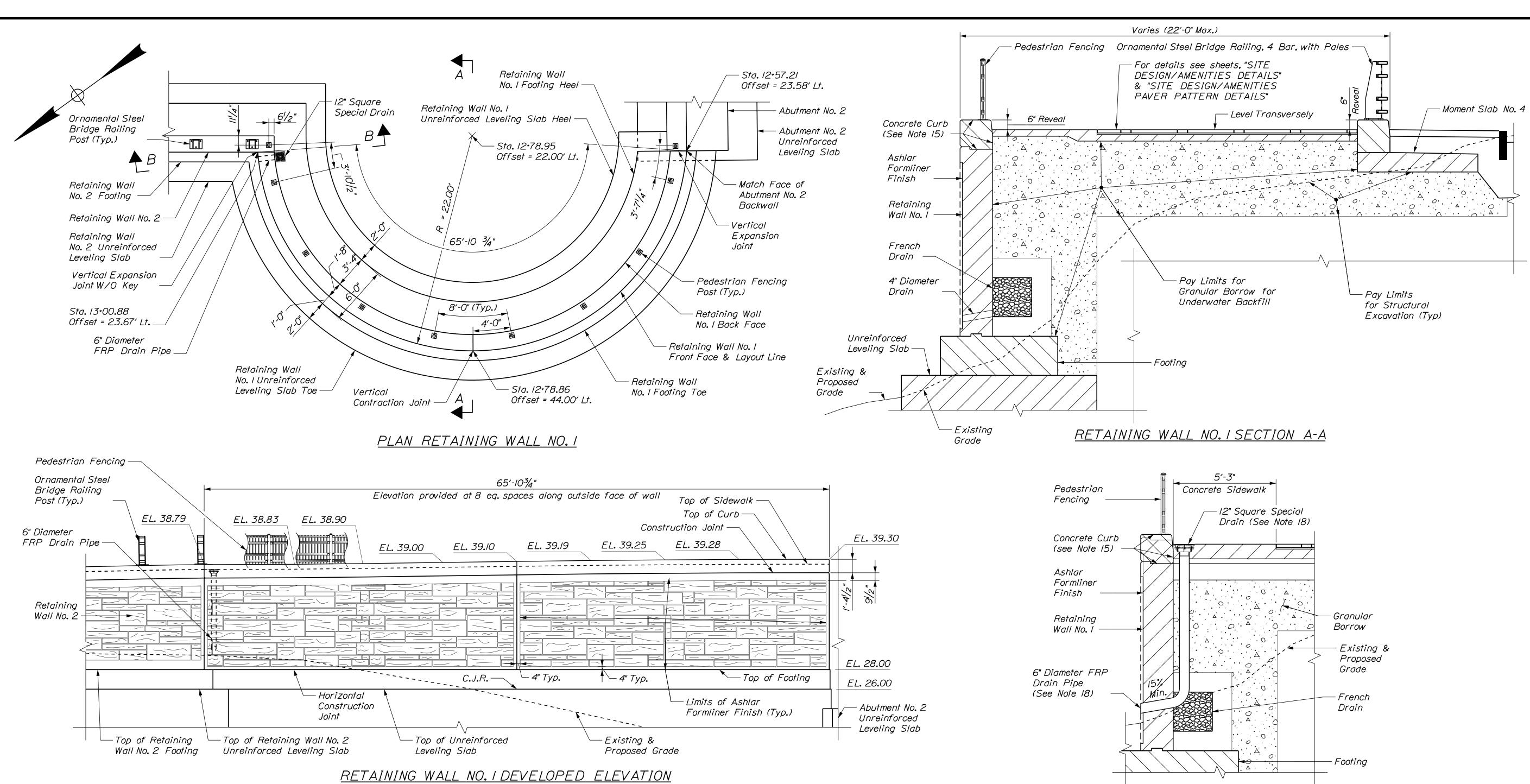
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-TOPSH

SHEET NUMBER

OF 163



(DEVELOPED ALONG FACE OF RETAINING WALL NO. I)

### RETAINING WALL NOTES:

- I. The maximum factored applied footing pressure for: Retaining Wall No. 1 is 6.3 ksf at the Strength I Limit State. Retaining Wall No. 2 is 3.5 ksf at the Strength I Limit State. Retaining Wall No. 3 is 2.6 ksf at the Strength I Limit State. Retaining Wall No. 4 is 1.9 ksf at the Strength I Limit State.
- Reinforcing steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches in the footings unless otherwise noted. Minimum concrete cover shall be measured from the deepest point of any form liner used.
- 3. Place 4-in. dia. drains in retaining walls at IO-ft maximum spacing. The exact location will be determined by the Resident.
- 4. Cover joints where waterstops are not required in accordance with Standard Details Section 502.
- 5. Construct French Drains behind the walls in accordance with Standard Specifications Section 512, French Drains.
- 6. Retaining walls and their footings shall be backfilled with Granular Borrow. Pay limits will be the structural excavation limits in cut areas and a vertical plane located I'-6" behind the footing heel in fill areas, unless otherwise noted.
- 7. When bedrock protrudes above the bottom of footing, the footing may be raised and the vertical reinforcing may be cut in the field with the approval of the Resident. The minimum footing elevations are shown on the Plans and shall not be lowered without prior approval of the Engineer of Record. Payment for adjusting the footing elevations and reinforcing steel will be considered incidental to the related Contract Items. No separate payment will be
- At the option of the Resident, bedrock which protrudes above a horizontal plane 12 inches below the proposed bottom of footing elevation may be removed. Payment for bedrock removal shall be made under Item No. 206.092 Structural Rock Excavation - Major Structures.

Concrete shall be placed on bedrock cleaned of all weathered rock, loose fractured rock, and soil. The bedrock subgrade shall be confirmed to be relatively level. Where the bedrock slope exceeds 4H:IV, the bedrock surface shall be benched to create level steps or made completely level. The Resident shall approve the bedrock subgrade prior to the placement of the retaining wall concrete.

RETAINING WALL NO. I SECTION B-B

- 10. Prior to placing retaining wall concrete, the bedrock subgrade shall be washed with high-pressure water and air.
- II. All measurements are along exposed face of wall unless noted otherwise.
- 12. Pattern retaining walls as shown on the plans with concrete patterning in accordance with Special Provision 502 Concrete Form Liners.
- Concrete in Retaining Wall No. I will be paid under Item 502.219, "Structural Concrete, Abutments and Retaining Walls".
- 14. Concrete in Retaining Wall No. 2,  $3(\frac{8}{8},\frac{4}{4})$  will be paid under Item 502.21, "Structural Concrete, Abutments and Retaining Walls".
- 15. Concrete Curb portion of Retaining Walls will be paid for under Item 502.49 "Structural Concrete Curbs and Sidewalks", and shall be Class "LP"
- 16. Unreinforced Leveling Slabs for Retaining Walls will be paid under Item 502.565, "Concrete Fill" and shall be Class "A" concrete.
- 17. Portions of Unreinforced Leveling Slabs above ground level shall have a smooth regular surface.
- 18. 12" Special Drain, including 6" diameter FRP pipe, will be paid under item 604.74 "Special Drain".

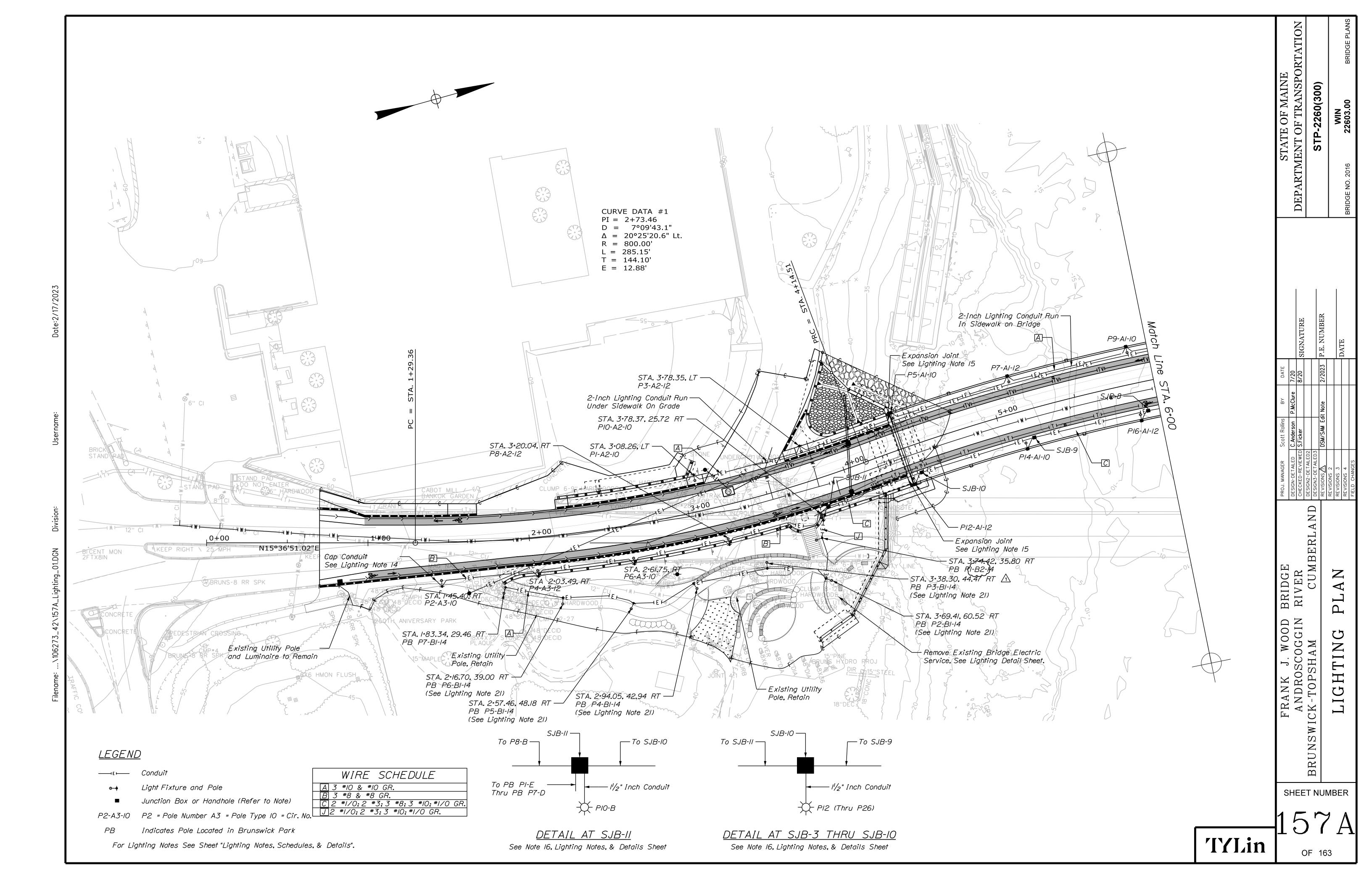
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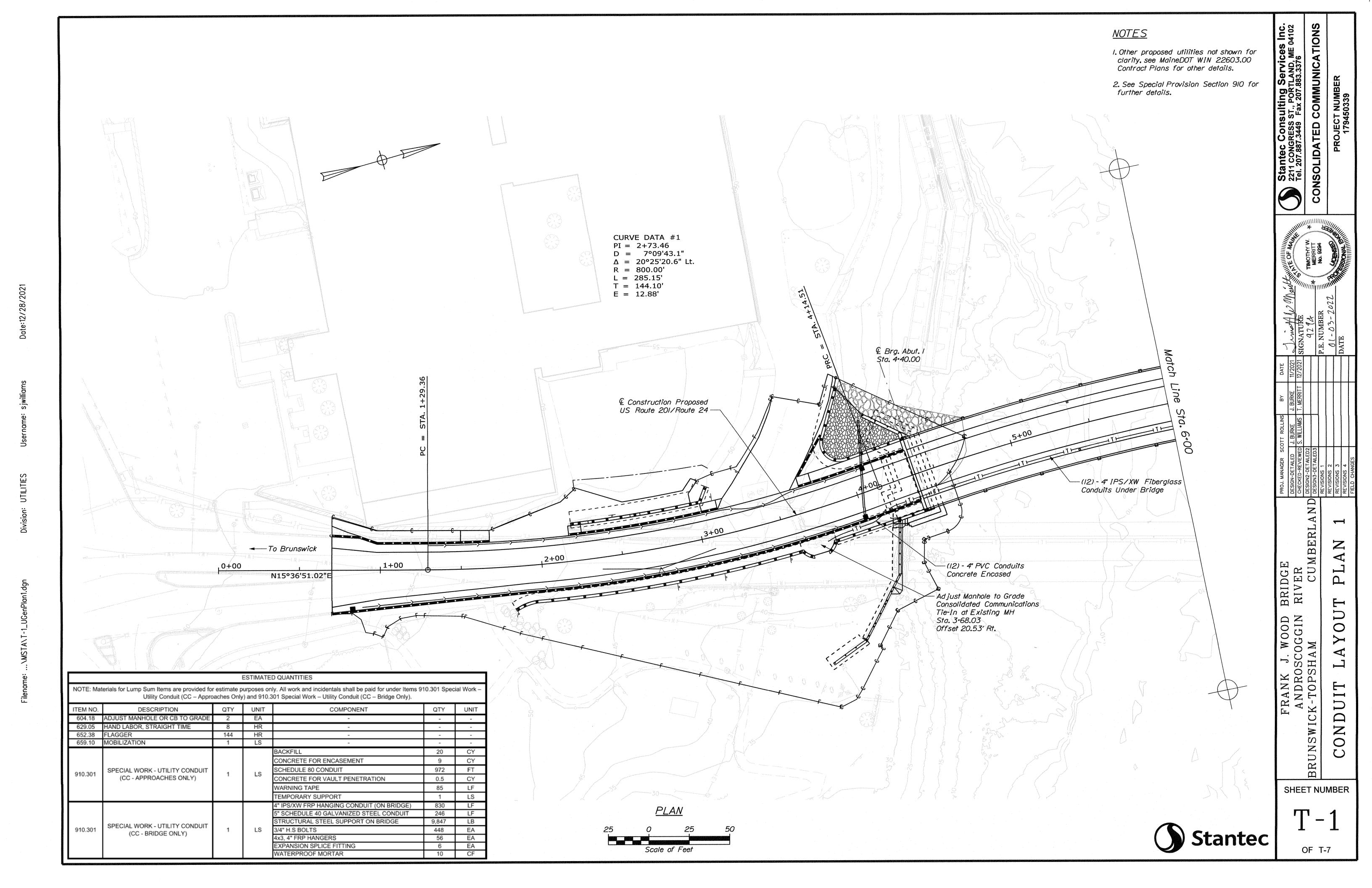
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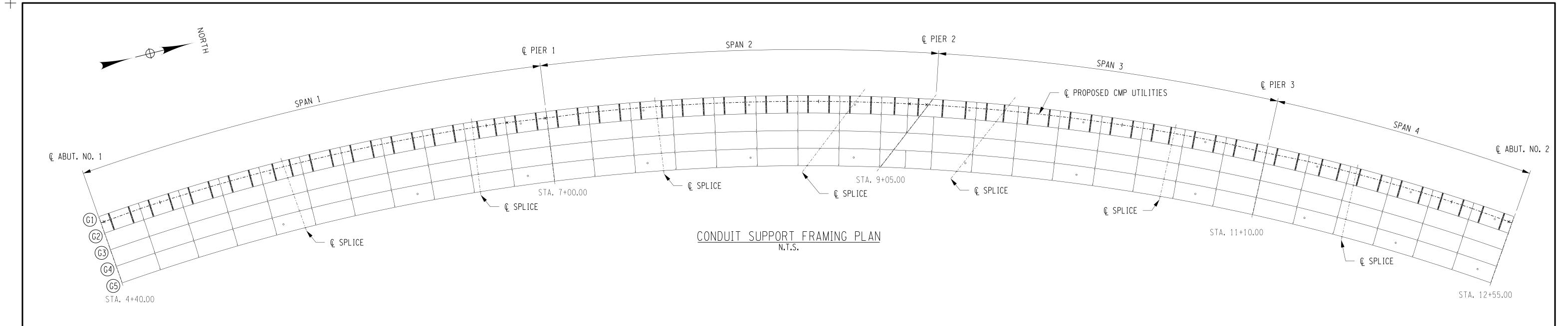
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## <u>∧ NOTES</u>:

1. ALL CONDUIT UNDER THE BRIDGE AND 5'-O" BEYOND THE APPROACH SLABS SHALL BE 6" DIAMETER, ID, SW FIBERGLASS CONDUIT.

2. ALL CONDUIT COUPLINGS, DUCT SUPPORTS, STEEL PIPE SLEEVES, BRACING, WATERPROOF MORTAR AND OTHER MISCELLANEOUS HARDWARE ON THE BRIDGE SHALL BE INCLUDED IN THE LUMP SUM COST OF THE BRIDGE CONDUIT.

3. THESE DRAWINGS ARE BASED ON AVAILABLE BRIDGE DESIGN DRAWINGS. CONTRACTOR SHALL VERIFY DIMENSIONS BEFORE INSTALLATION OF CONDUITS AND SUPPORTS.

4. ALL CONDUIT ON APPROACHES SHALL BE SCH. 40 PVC.

5. ALL CONNECTIONS BETWEEN DUCT SECTIONS, EXPANSION JOINTS, ADAPTERS AND COUPLINGS ARE TO BE BONDED. REFER TO MANUFACTURER'S INSTRUCTIONS FOR BONDING PROCEDURES.

6. CAP THE ENDS OF THE DUCTS IF UNDERGROUND PORTION OF WORK IS NOT DONE AT THE SAME TIME AS THE BRIDGE PORTION.

ITEM NO DESCRIPTION	UNIT	ITEM QTY.	COMPONENT	NO.	LENGTH	QUANTIT
604.18 - ADJUST MANHOLE OR CATCH BASIN TO GRADE	LS	1	VAULT FRAME & COVER ADJUSTMENT	1	-	1
604.158 - UTILITY VAULT (CMP)	LS	1	6'X12'X7' PRECAST VAULT	1	-	1
			4/0 BARE COPPER GROUND WIRE	1	45	45.0
			GROUNDING CLAMP	3	-	-
			5/8" X 8' GROUND ROD	3	-	-
845.10 - STRUCTURAL STEEL UTILITY SUPPORT	LS	0.5	C6x10.5 (H.D.G.)	136	9'-8 1/4"	13,834
(ELEC. & COMM.)			C7x9.8 (H.D.G.)	272	4"	889 LI
			WT 6x26.5 (H.D.G.)	136	8"	2,403 L
			SPACER PLATES (H.D.G.) (7"x4"x3/8")	272	-	810 LI
			GALV. A325 BOLTS - 7/8" DIA.	816	VARIES	-
			GALV. STEEL PIPE SLEEVE (8")	8	22'-3"	178'
910.301 - SPECIAL WORK - UTILITY CONDUIT	LS	1	6" SW FIBERGLASS CONDUIT	4	855.65'	3,422
(CMP - BRIDGE ONLY)			CONDUIT SUPPORT FRAME 2 VERT. x 2 HORIZ.	68	-	-
			EXPANSION JOINTS	20	-	_
			WOBBLE COUPLINGS (6")	24	-	-
			1" GASKETS (ID=6",OD=8)	16	-	
			WATERPROOF MORTAR	10 CF	-	-
910.301 - SPECIAL WORK - UTILITY CONDUIT	LS	1	6" SCH. 40 PVC CONDUIT	4	111.3	445.2
(CMP - APPROACH ONLY)			6" SCH. 40 PVC CONDUIT	4	87.8	351.2
			6" SCH. 40 PVC CONDUIT	2	19.9	39.8
			6" SCH. 40 PVC CONDUIT	2	188.6	377.
			CONDUIT SUPPORT FRAME	82	_	_
			2 VERT. x 2 HORIZ.	20		
			FILL CLASS CONCRETE	30	407	407
			ELECTRIC WARNING TAPE GRAVEL BORROW BACKFILL	110 CY	407	407.0

DRAWING CONTENTS
E-01 - CONDUIT SUPPORT FRAMING PLAN
E-02 - SPAN 1 CONDUIT SUPPORTS
E-03 - SPAN 2 CONDUIT SUPPORTS
E-04 - SPAN 3 CONDUIT SUPPORTS
E-05 - SPAN 4 CONDUIT SUPPORTS
E-06 - CONDUIT SUPPORT DETAILS
E-07 - ABUTMENT PENATRATION DETAILS
E-08 - CONDUIT PROFILE
E-09 - SOUTH APPROACH DUCT BANK
E-10 - NORTH APPROACH DUCT BANK
E-11 - DUCT BANK CONSTRUCTION DETAILS

