

SPECIAL PROVISIONS

WATERWAY PERMITS CONDITIONS

C-R-S: COS-16-01.40

PID: 119871

Date: April 9, 2026

1. Waterway Permits Time Restrictions:

A Section 404 Regional General Permit A - Linear Transportation (RGP A) from the United States Army Corps of Engineers (USACE) is pending for COS-16-01.40, PID 119871. Temporary and permanent fill activities in aquatic resources are not authorized until the RGP A authorization is acquired. A copy of the RGP A and USACE authorization letter will be provided after it is issued and shall be kept at the work site at all times and made available to all contractors and subcontractors.

For authorized work in aquatic resources (including streams, wetlands, jurisdictional ditches, captured streams, lakes, ponds), the Department will consider the Contractor's submission of a reauthorization to the waterway permit expiration date based on project constraints. If more than one permit is authorized for the project, then all permits become invalid once the first permit expires. In order for the request to be considered, the Contractor must submit a justification to the Engineer at least 90 days prior to the waterway permit expiration date. The Engineer will submit the request for a time extension to the Ohio Department of Transportation, Office of Environmental Services, Waterway Permits Unit (ODOT-OES-WPU) for consideration and coordination with the U.S. Army Corps of Engineers (USACE), Ohio Environmental Protection Agency (OEPA), U.S. Coast Guard (USCG), U.S. Fish and Wildlife Service (USFWS), and Ohio Department of Natural Resources (ODNR) as appropriate.

2. Deviations From Permitted Construction Activities:

Once the Section 404 and 401 authorizations are received, no deviation from the requirements for work in aquatic resources depicted in the plans, Special Provisions, and/or Working Drawings may be made unless a modification has been submitted to ODOT-OES-WPU and approved by the appropriate agencies (i.e., USACE, OEPA, USCG, ODNR, and USFWS).

NOTE: Plan sheets submitted with the Pre-Construction Notification in accordance with RGP A are included in these Special Provisions.

For emergency situations resulting in unanticipated impacts to aquatic resources, provide notification (verbal or written) to the Engineer as soon as possible following discovery of the situation. Written notification to the Engineer and notification to the ODOT-OES-WPU (614-466-2159) must be made within 24 hours.

For non-emergency situations, notify the Engineer in writing for submission to the ODOT-OES-WPU (614-466-2159) for consideration and coordination with the appropriate agencies. Notification must be made at least 90 days prior to planned, non-permitted activities. Consideration of the requested deviation is at the discretion of the Director and must be coordinated with the appropriate regulatory agencies.

3. In-Stream Work Restrictions:

Work in the following aquatic resources is further restricted as follows:

Stream Name /Description	Location	Work restriction dates (No in-stream work permitted)
UNT to the Muskingum River	SR16 - STA 76+50; T483C - STA 20+84.59	None

UNT = unnamed tributary

*Restriction dates do not apply if the stream has been dewatered prior to April 15.

In-stream work has been defined as the placement and/or removal of fill materials (temporary or permanent) below ordinary high water of a stream. Examples of “fill” include, but are not limited to: bridge piers, abutments, culverts, rock channel protection, scour protection, and temporary access fills.

Fills placed within a stream identified in the above table (outside of the work restriction dates) can continue to be worked from during the work restriction dates, but cannot be expanded, removed, or otherwise modified (below ordinary high water) until once again outside of the work restriction dates.

4. Materials:

Materials utilized in or adjacent to aquatic resources for temporary or permanent fill or bank protection shall consist of suitable material free from toxic contaminants in other than trace quantities. Asphalt products are specifically excluded for use as fill. Chromated Copper Arsenate (CCA), creosote, and other pressure treated lumber shall not be used in structures that are placed in aquatic resources.

5. Aquatic Resource Demarcation:

The table below includes detailed fill quantities proposed within the aquatic resources. Aquatic resources not pending authorization by these Special Provisions shall be demarcated in the field as per SS 832 prior to site disturbance. The fence shall remain in place and be maintained throughout the construction process. Following the completion of the project, the fence and posts shall be removed.

Resource ID	Impact Location	Temporary Impact Amount	Permanent Impact Amount	Total Impact Amount
UNT to Muskingum River	SR16: STA 76+50; T438C: STA 20+84.59	25 feet (0.002 acre)	189 (0.013 acre)	189 feet (0.013 acre)
Wetland 1 (W1)	SR16: STA 77+00; T483C: STA 21+29.86	0	0.134 acre	0.134 acre

6. Spill containment:

Provide and Maintain an Oil Spill Kit with a minimum capacity of 65 gallons. The Spill Kit shall contain:

- 6 - 3 in. X 8 ft. Oil only socks
- 4 - 18 in. X18 in. Oil only pillows
- 2 - 5 in. X 10ft. Booms
- 50 - 16in. X 20 in. Oil only pads
- 10- Disposable Bags
- 1 - 65 Gallon drum with lid
- 25 pounds of Granular Oil Absorbent

The Oil Spill Kit shall be located within 150 feet of any equipment working in a stream or wetland. The oil Spill Kit shall be maintained for the life of the contract. Any materials utilized during the project

will be replaced within 48 hours. All costs associated with furnishing and maintaining the above referenced spill containment kit is incidental to work.

7. Project Inspection:

Inspection of Work may include inspection by representatives of other government agencies or railroad corporations that pay a portion of the cost of the Work or regulate the Work through State and Federal law. Comments from the representatives of these agencies shall be directed to the Engineer who will immediately contact the ODOT-District Environmental Coordinator and ODOT-OES-WPU at 614-466-2159.

8. Temporary Access Fills:

Special Provisions Notes:

Definitions:

Normal Flow

Normal flow is the flow necessary to maintain chemical, physical, and biological integrity of the waterway. Normal flows for this type of waterway may vary during the year. It is anticipated that the Normal Flow is less than the flow producing an elevation equal to the OHWM but greater than zero. The Contractor's means and methods may vary depending on the time of year the work is active.

Temporary Access Fills (TAFs)

Include, but are not limited to, dewatering fills, causeways, cofferdams, access pads, and temporary bridges below the OHWM.

Requirements

7 calendar days prior to the initiation of any in-stream work, provide the Engineer with a written plan that includes the following:

- Plan view drawing showing the location of all TAFs proposed for use on the project.
- A description of all temporary material to be placed below the OHWM elevation.
- A description of the installation and staging of all temporary fill over the life of the contract.
- Volume of temporary fill below the OHWM elevation.
- A description of the diversion ditches, equipment, conduits or means for maintaining normal flows in the waterway.
- A description of the removal of all temporary fill and restoration of the channel and all areas impacted by the TAFs.
- A schedule outlining the timing of the placement and removal of all TAFs.

Do not begin in-stream work until the Engineer has accepted the written plan. Submit any changes to the planned TAF to the Engineer for acceptance a minimum of 7 days prior to performing any instream work.

The design of the Contractor's TAF must minimize impacts to water bodies, stream banks, stream beds, and riparian zones to the maximum extent practicable.

Fording of waterways and other aquatic resources is prohibited.

Construct TAFs in such a manner that will maintain flows, minimize upstream flooding, and avoid overtopping the TAF on a regular basis.

Installation of any temporary fill without appropriate authorization is strictly prohibited. All direct coordination with the USACE and/or OEPA will be performed through OES.

TAFs Construction and Payment

The Contractor must make every attempt to minimize disturbance to waterbodies, stream banks, stream beds and riparian zones during the construction, maintenance, and removal of the TAF. Minimize clearing, grubbing, and excavation of waterway banks, and approach sections. Construct the TAFs as to not cause erosion or allow sediment deposits in the waterway.

Prior to the installation of any work in the waterway, establish a visual monument upstream of the proposed TAF. Maintain the monument throughout the project. Provide a visual mark on the monument that identifies the elevation of the OHWM.

Construct the TAFs to a water elevation at least 1 foot (0.3 m) above the OHWM. Use TAFs to dewater sections of the waterway for accessing proposed work areas only. Provide diversion ditches, conduits, pumps or other methods to maintain normal flows to the downstream waterway. Passing normal flows through active work areas of the waterway is prohibited. Ensure that any ponding of water behind the TAFs will not damage property, flood roadways, or threaten human health and safety.

All TAFs must be constructed of suitable materials. Causeways and access fills must be encapsulated with clean, non-erodible, nontoxic Dumped Rock Fill, Type A, B, C, or D, as specified in C&MS 703.19.B.

When the work requiring TAF is complete, all portions of the TAF (including all rock and temporary diversions) will be removed in its entirety. Do not dispose of TAF material in other aquatic resources or where erosion into another aquatic resource is possible. The waterway bottom affected by the TAFs will be restored to its pre-construction elevations. The TAFs will not be paid as a separate item but will be included by the Contractor as part of the total project cost.

Unless specific TAF compensation is included in the plans, all environmental protection and control associated with the authorized activities, are incidental to the work within the boundaries of the aquatic resources.

9. Excavation Activities:

Excavated material will be placed at an upland site and disposed of in such a manner that sediment and runoff to streams and other aquatic resources is controlled and minimized. Additionally, no more than incidental fallback into jurisdictional waters of the U.S. is permitted during the excavation process. If any changes to the proposed work are deemed necessary, notify the Engineer who will immediately contact the ODOT-District Environmental Coordinator and ODOT-OES-WPU at 614-466-2159

10. Construction Completion Certification:

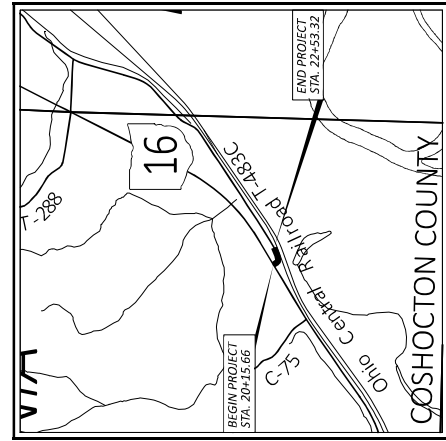
Upon completion of the work, notify the Engineer. The USACE Construction Completion Certification must be completed and signed by the Engineer then provided via US mail or email to:

Waterway Permits Program Manager
ODOT - Office of Environmental Services
1980 West Broad Street, Mail Stop 4170
Columbus, Ohio 43223
Adrienne.Earley@dot.ohio.gov

A copy of the certification will be provided once the project has been authorized by the USACE.

11. Demolition Debris:

The intentional discharge of demolition debris from any structure (including but not limited to bridges, culverts, abutments, wing walls, piers) is not authorized for this project. If any demolition debris inadvertently falls into aquatic resources, it must be removed immediately. Notify the Engineer immediately in writing of any inadvertent fill discharged into aquatic resources. The Engineer will immediately contact ODOT-OES-WPU at 614-466-2159 if any unintentional discharge occurs.



LATITUDE: N 40°10'05" LONGITUDE: W 81°54'55"

- PORTION TO BE IMPROVED
- INTERSTATE HIGHWAY
- FEDERAL ROUTES
- STATE ROUTES
- COUNTY & TOWNSHIP ROADS
- OTHER ROADS

DESIGN DESIGNATION

CURRENT ADT (2026) 8,100
 DESIGN YEAR ADT (2046) 9,300
 DESIGN HOURLY VOLUME (2046) 1,200
 DIRECTIONAL DISTRIBUTION 54%
 TRUCKS (24 HOUR 8&C) 9%
 DESIGN SPEED 60 MPH
 LEGAL SPEED 55 MPH
 DESIGN FUNCTIONAL CLASSIFICATION: RURAL PRINCIPAL ARTERIAL
 NHS PROJECT YES

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

UNDERGROUND UTILITIES

Contact two Working Days Before You Dig



OHIO811: 8-1-1 or 1-800-382-2764 (Non members must be called directly)

PLAN PREPARED BY:



277 W. NATIONWIDE BLVD., SUITE 500 COLUMBUS, OHIO 43215
(614) 464-4500

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

COS-16-1.40

VIRGINIA TOWNSHIP
COSHOCOTON COUNTY

FEDERAL PROJECT NUMBER
E250045
RAILROAD INVOLVEMENT
COLUMBUS & OHIO RIVER RAILROAD
OHIO CENTRAL RAILROAD

PROJECT DESCRIPTION

PROPOSED IMPROVEMENTS INCLUDE THE RECONSTRUCTION OF 0.05 MILES OF T-483C, THE INSTALLATION, VIA PILOT TUBE GUIDED AUGER BORING METHODS, OF THREE LARGE DIAMETER CULVERT PIPES UNDER THE TOWNSHIP ROAD AND RAILROAD FACILITIES, AND SITE REGRADING.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.8 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.0 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 0.8 ACRES

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT FOR THE SIDE ROAD AS DESCRIBED ON SHEET P.7 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Ron L. Stueben, P.E., J.D.
 District 05 Deputy Director

 Pamela Boratyn
 Director, Department of Transportation

TITLE SHEET

STANDARD CONSTRUCTION DRAWINGS			SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/19/24	TC-41.20	800	1/16/26 WATERWAY PERMIT
BP-4.1	7/19/23	TC-41.30	832	7/18/25
		TC-42.20		
DM-4.3	1/15/16			GVI UTILITY SPECIFICATIONS DATED 3/7/2013
DM-4.4	1/15/16			PILOT TUBE GUIDED AUGER BORING SPECIFICATION DATED 12/01/25
MGS-2.1	1/16/26			GEOTECHNICAL INSTRUMENTATION AND MONITORING SPECIFICATION DATED 12/01/25
MGS-4.2	7/18/25			
MGS-4.3	7/18/25			
MT-101.60	1/17/20			
MT-105.10	1/17/20			

ENGINEER'S SEAL



GENERAL

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

ELECTRIC:
AMERICAN ELECTRIC POWER CO. (DISTRIBUTION):
38831 STATE ROUTE 7
REEDSVILLE, OHIO 45772
ATTN: CLARKE SAUNDERS
740-385-3054
CUSAUNDERS@AEP.COM

TELEPHONE:
AT&T OHIO
160 NORTH SIXTH STREET
ZANESVILLE, OHIO 43701
ATTN: BARRETT TAMASOVICH
740-454-3552
BTZL28@ATT.COM

CABLE:
SPECTRUM CABLE TV
737 HOWARD ST.
ZANESVILLE, OHIO 43701
ATTN: ZACK ALLEN
614-255-2819
ZACKARY.ALLEN@CHARTER.COM

LAND ENCRAGEMENTS GROUP
PO BOX 4324
HOUSTON, TX 77210
LAND_ENCRAGEMENTS@FERROD.COM
866-901-8170

FIELD REPRESENTATIVES:
MATT CUREE
740-294-8674
CHRIS JONES
412-316-7799

VERIZON/WCI METRO
7575 COMMERCE COURT
LEWIS CENTER, OHIO 43085
ATTN: BOB DENN
VZ.WEZ.COLUMBUS@VERIZON.COM
614-381-8852

RAILROAD:
OHIO CENTRAL RAILROAD, INC.
THE COLUMBUS & OHIO RIVER RAIL ROAD COMPANY
47849 PAPERMILL RD
COSHOCOTON, OH 43812
ATTN: TIMOTHY SLUSSER
TSLUSSER@GMBB.COM
740-203-0883

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSSSECTIONS, EVEN THOUGH OTHERWISE SHOWN.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET P.2 FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.
USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:
PROJECT CONTROL
POSITIONING METHOD: CONTROL HELD FROM PID95464 / RTK/ ROBOTIC TOTAL STATION
MONUMENT TYPE: TYPE B
VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID 18

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
COMBINED SCALE FACTOR: 1.00002015
ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CIMS 62.3.

UNITS ARE IN U.S. SURVEY FEET.

CONSTRUCTION NOTIFICATION AND FLAGGING REQUEST
JARED RISHEL
AVP ENGINEERING NORTHERN REGION
4349 EASTON WAY, SUITE 110
COLUMBUS, OH 43219
1814-249-3040
EMAIL: jrishel@gwrr.com

RIGHT-OF-ENTRY AGREEMENT/INSURANCE POLICIES
DONNA KILLINGSWORTH, MBA
REAL ESTATE MANAGER
GENESE & WYOMING RAILROAD SERVICES, INC.
13901 SUTTON PARK DRIVE SOUTH, SUITE 160
JACKSONVILLE, FL 32224
1904-900-6286
EMAIL: jwpposest@gwrr.com

CRYSTAL GALBREATH
MANAGER - REAL ESTATE
GENESE & WYOMING RAILROAD SERVICES, INC.
13901 SUTTON PARK DRIVE SOUTH, SUITE 270
JACKSONVILLE, FL 32224
1904-596-7782
EMAIL: crystal.galbreath@gwrr.com

ROADWAY

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING.

A LARGE PORTION OF THE CONSTRUCTION SEASON FOR THIS PROJECT FALLS WITHIN THE BAT TREE CUTTING RESTRICTION DATES (APRIL 1, 2026 THROUGH SEPTEMBER 30, 2026). DUE TO THESE CUTTING RESTRICTIONS, ALL THE TREES WITHIN THE CONSTRUCTION LIMITS FOR THIS PROJECT WERE CUT DOWN PRIOR TO THE SALE OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL STUMPS, TREES, LIMBS, BRUSH, ETC. THAT REMAIN WITHIN THE LIMITS OF THE PROJECT INCLUDING STOCKPILED TIMBER LEFT WITHIN THE PROJECT LIMITS FROM TREES REMOVED JUST PRIOR TO MARCH 31ST CUTOFF DATE NOTED IN THE "ENDANGERED BAT HABITAT REMOVAL" NOTE.

ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING
CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.

2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2.5, A-3, A-1.5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 69) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).

IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.

3. COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.

4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSUITABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSUITABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.

5. EXCAVATE UNSUITABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.

6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.

7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSUITABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204, EXCAVATION OF SUBGRADE

THE FOLLOWING ITEMS HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO STABILIZE THE SUBGRADE.

ITEM 204 - EXCAVATION OF SUBGRADE 50 CY

ITEM 204 - GRANULAR MATERIAL, TYPE B 50 CY

ITEM 204 - GEOTEXTILE FABRIC 75 SY

ITEM 623 CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN
IN ADDITION TO THE REQUIREMENTS OF ITEM 623 CONSTRUCTION LAYOUT STAKES AND SURVEYING, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION TO THE DEPARTMENT:

THE CONTRACTOR SHALL PROVIDE AS-BUILT DATA FOR THE SPECIFIED COMPLETED CONSTRUCTION ITEMS IN OHIO STATE PLANE COORDINATES (GRID). THE CONSTRUCTION ITEMS SHALL BE LOCATED AS PER THE SURVEY FEATURE CODE LIST FOUND ON THE OHIO DEPARTMENT OF TRANSPORTATION OFFICE OF CADD & MAPPING SERVICES WEBSITE. AN EMAIL CONTAINING A COMMA DELIMITED ASCII FILE AND A SURVEYOR'S CERTIFICATION SHALL BE DELIVERED TO THE PROJECT ENGINEER AND TO Cody.Greifhorst@dot.ohio.gov. AFTER ALL INFORMATION HAS BEEN COLLECTED, THE ASCII FILE SHALL INCLUDE A HEADER CONTAINING NAME OF SURVEYOR, DATE(S) OF COLLECTION, HORIZONTAL DATUM (I.E. NAD83 (2011)), OHIO STATE PLANE COORDINATE SYSTEM (NORTH OR SOUTH), VERTICAL DATUM (I.E. NAVD 88, GEOID12A) AND METHOD OF COLLECTION (I.E. OHIO VRS, GPS RTK, TOTAL STATION, ETC.), AND BE IN A TABLE FORMAT AS FOLLOWS:

POINT NUMBER, NORTHING, EASTING, ELEVATION, FEATURE CODE, DESCRIPTION.

BELOW IS A LIST OF THE ITEMS THE CONTRACTOR IS REQUIRED TO PROVIDE FOR THE PROJECT:

- GUARDRAIL
- CULVERT INLET AND OUTLET LOCATION AND ELEVATION (TAKEN AT THE CL AND CROWN OF THE CULVERT)

THE ABOVE ITEMS SHALL BE COLLECTED USING SURVEY GRADE EQUIPMENT MEETING THE REQUIREMENTS OF SECTION 400 IN THE OHIO DEPARTMENT OF TRANSPORTATION SURVEY & MAPPING SPECIFICATIONS MANUAL.

ALL COST ASSOCIATED WITH OBTAINING THE INFORMATION LISTED ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 623 CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL
WHEN IT IS NECESSARY TO SPlice PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN ASHTO M 180-12. EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAVEMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

EROSION CONTROL

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659, SEEDING AND MULCHING, CLASS 2 (INCLUDING 20% CONTINGENCY FOR OTHER DISTURBED AREAS 3:1 OR FLATTER) = 1690 SY

ITEM 659, SEEDING AND MULCHING, CLASS 3B = 828 SY

ITEM 659, REPAIR SEEDING AND MULCHING 2525 SY X (0.05) = 126 SY

ITEM 659, COMMERCIAL FERTILIZER 2525 SY X (1 TON PER 7410 SY) = 0.35 TONS

ITEM 659, LIME 2525 SY X (4840 SY PER ACRE) = 0.52 ACRES

ITEM 659, WATER (15 M. GAL) 2525 SY X (0.0054 M GAL PER SY) = 14 M GAL

APPLY SEEDING AND MULCHINGS TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ITEM 832 - EROSION CONTROL

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR EROSION CONTROL IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT SUPPLEMENTAL SPECIFICATION 832 AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 832, EROSION CONTROL 45,000 EACH

ENVIRONMENTAL

ENDANGERED BAT HABITAT REMOVAL

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET. THE CONTRACTOR SHALL REMOVE ONLY THE TREES NECESSARY TO CONSTRUCT THE PROJECT.

DRAINAGE

REVIEW OF DRAINAGE FACILITIES

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAVEMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

CONDUIT END TREATMENT

IMMEDIATELY AFTER THE PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS AS REQUIRED BY THE PLANS.

ITEM 611 - 72" CONDUIT, TYPE A, AS PER PLAN, 748.06

THE CONTRACTOR SHALL PERFORM THIS ITEM FOLLOWING THE INSTALLATION OF THE CONDUIT BY THE PILOT TUBE GUIDED AUGER BORING METHOD. THE CONTRACTOR SHALL USE OPEN CUT EXCAVATION FOR THE LENGTH SPECIFIED FOR ITEM 611 - 72" CONDUIT, TYPE A, AS PER PLAN, 748.06.

THE STEEL CASING PIPE SHALL FOLLOW THE REQUIREMENTS OF ODOT CMS 748.06. IN ADDITION TO THE REQUIREMENTS OF ODOT CMS 748.06, THE MINIMUM WALL THICKNESS OF THE STEEL CONDUIT SHALL BE 1.00 INCHES.

ALL PIPE JOINTS MUST BE WELDED IN ACCORDANCE WITH AISC SPECIFICATIONS. SECTION 1-7.2. ALL JOINT WELDS MUST BE FULL PENETRATION, INCLUDING THE CONNECTION TO THE CASING PIPE INSTALLED THROUGH THE SPECIFIED BORING METHOD.

ITEM 611 - CONDUIT, MISC.: GEOTECHNICAL INSTRUMENTATION AND MONITORING

FOR DETAILED REQUIREMENTS FOR ITEM 611E97300 - CONDUIT, MISC.: GEOTECHNICAL INSTRUMENTATION AND MONITORING, SEE THE SUPPLEMENTAL SPECIFICATION WITH THE SAME TITLE IN THE CONTRACT DOCUMENTS.

ITEM 611 - CONDUIT, MISC.: PILOT TUBE GUIDED AUGER BORING, 72" CONDUIT, TYPE A, 748.06

FOR DETAILED REQUIREMENTS FOR ITEM 611E97400 - CONDUIT, MISC.: PILOT TUBE GUIDED AUGER BORING, 72" CONDUIT, TYPE A, 748.06, SEE THE SUPPLEMENTAL SPECIFICATION WITH THE SAME TITLE IN THE CONTRACT DOCUMENTS.

IN ADDITION TO THE REQUIREMENTS OF ODOT CMS ITEM 748.06, THE STEEL CONDUIT SHALL BE NON-COATED AND SHALL HAVE A MINIMUM WALL THICKNESS OF 1.00 INCHES AS SHOWN IN THE GWI UTILITY SPECIFICATION SPECIAL PROVISION.

THE CONTRACTOR WILL BE REQUIRED TO SUBMIT AN UNDERGROUND PIPELINE APPLICATION ALONG WITH A BORING PLAN TO THE RR. SAMPLE BORING PLANS AND THE APPLICATION CAN BE ACCESSED FROM GENESEE & WYOMING RAILROAD WEBSITE: <https://www.gwrr.com/real-estate/utility-occupancies/>.

BELOW ARE SOME REQUIREMENTS FOR THE BORE PLAN THAT NEED NOTED:

- ONCE THE BORE ENTERS THE RAILROAD PROPERTY, THE WORK WILL BE CONTINUOUS UNTIL THE DRILLING IS COMPLETE AND THE PIPE IS PULLED INTO PLACE.

- THE BORE WILL BE TRACKED CONSTANTLY, WITH THE LOCATION AND DEPTH MARKED EVERY 10 FEET.

- THE MAXIMUM SIZE OF THE BORE HOLE CANNOT EXCEED 1.3 X OUTSIDE DIAMETER OF THE CONDUIT.

- THE LAUNCHING AND RECEIVING PITS MUST BE SITUATED AT MINIMUM OUTSIDE OF THE RAILROAD RIGHT-OF-WAY (ROW).

ALL CONSTRUCTION EQUIPMENT, MATERIALS, RR APPLICATION FEES, BORING PLAN PREPARATION, AND INCIDENTAL COSTS TO THE PILOT TUBE GUIDED AUGER RECEIVING PIT AND PILOT TUBE GUIDED AUGER BORING PIT WILL BE INCLUDED UNDER THE COST OF ITEM CONDUIT MISC.: PILOT TUBE GUIDED AUGER BORING, 72", TYPE A, 748.06.

PAVEMENT

ITEM 407 - NON-TRACKING TACK COAT

THE RATE OF APPLICATION OF ITEM 407, NON-TRACKING TACK COAT SHALL BE PER CMS TABLE 407.06-1 AND SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.08 GAL/SY FOR TACK COAT UNDER THE INTERMEDIATE COURSE AND AN AVERAGE APPLICATION RATE OF 0.05 GAL/SY FOR TACK COAT UNDER THE SURFACE COURSE, (FOR ESTIMATING PURPOSES ONLY).

TRAFFIC CONTROL

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN

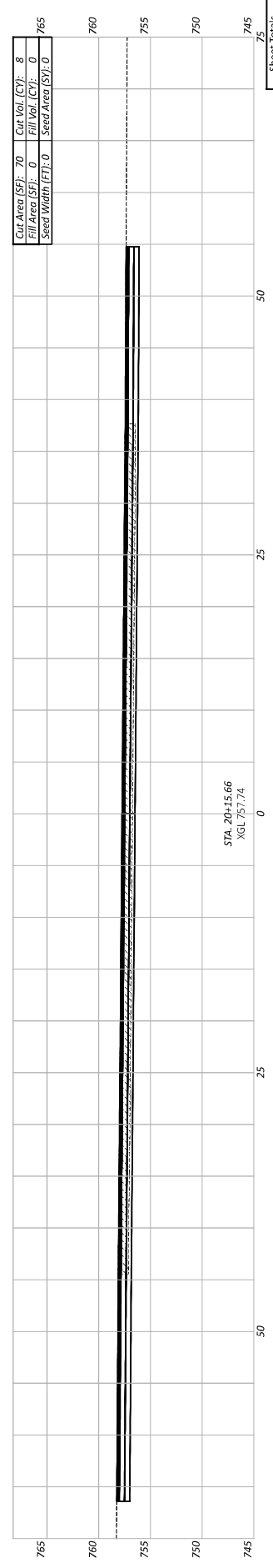
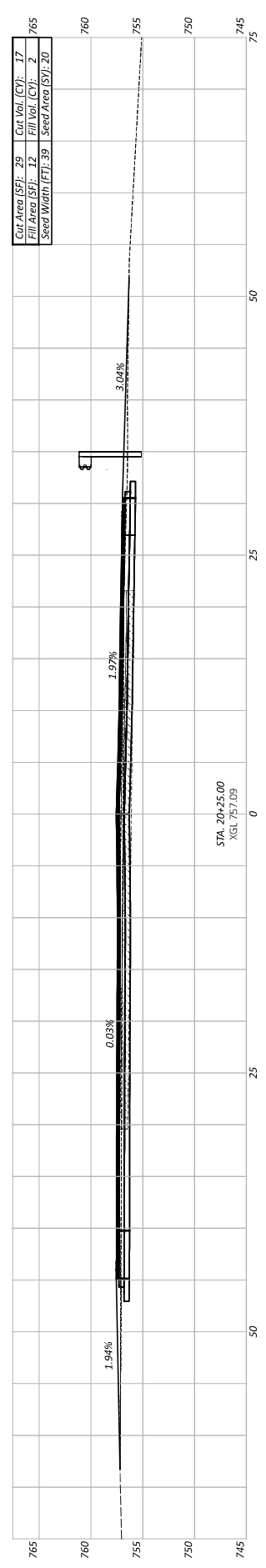
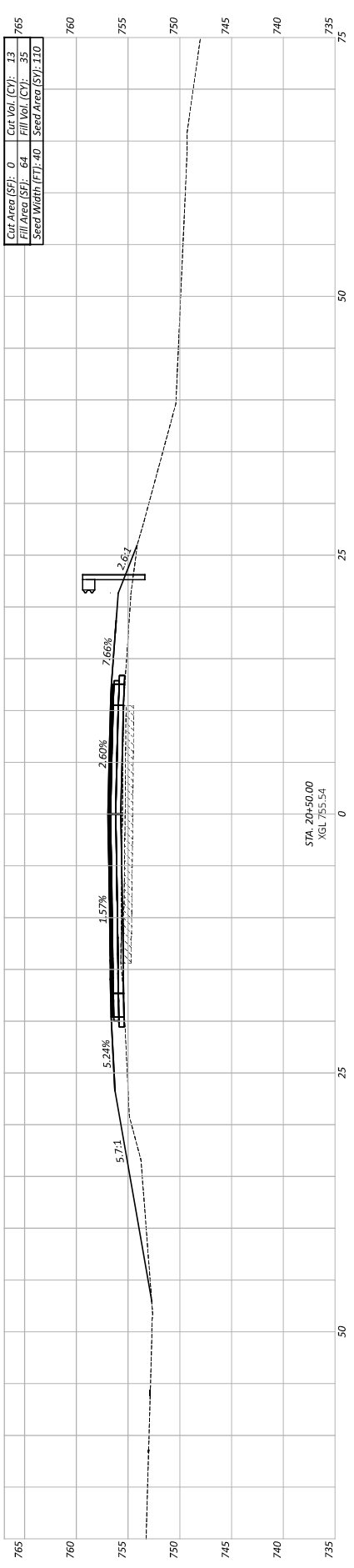
SIGN POST SUPPORTS SHALL CONFORM TO STD TC-41.20, EXCEPT ONLY THE TYPE S POSTS SHALL BE FURNISHED FOR THIS PROJECT ALONG WITH AN ANCHOR BASE. THE TYPE P AND TYPE F POSTS WILL NOT BE ACCEPTED.



EXISTING PAVEMENT (TO BE REMOVED)

NOTES:

SEEDING QUANTITIES CARRIED TO SHEET P.5.
EXCAVATION AND EMBANKMENT QUANTITIES CARRIED TO SHEET P.10.



**T483C CROSS SECTIONS
BEGINNING TO STA. 20+50**

DESIGN AGENCY
AECOM

DESIGNER
HKP

REVIEWER
AM 11-26-25

PROJECT ID
119871

SHEET TOTAL
P.13 31

Sheet Totals	Cut	Fill	Total
Seeding	38	37	75



T483C CROSS SECTIONS
STA. 20+75.00 TO STA. 21+25.00

DESIGN AGENCY: **AECOM**

DESIGNER: HRP

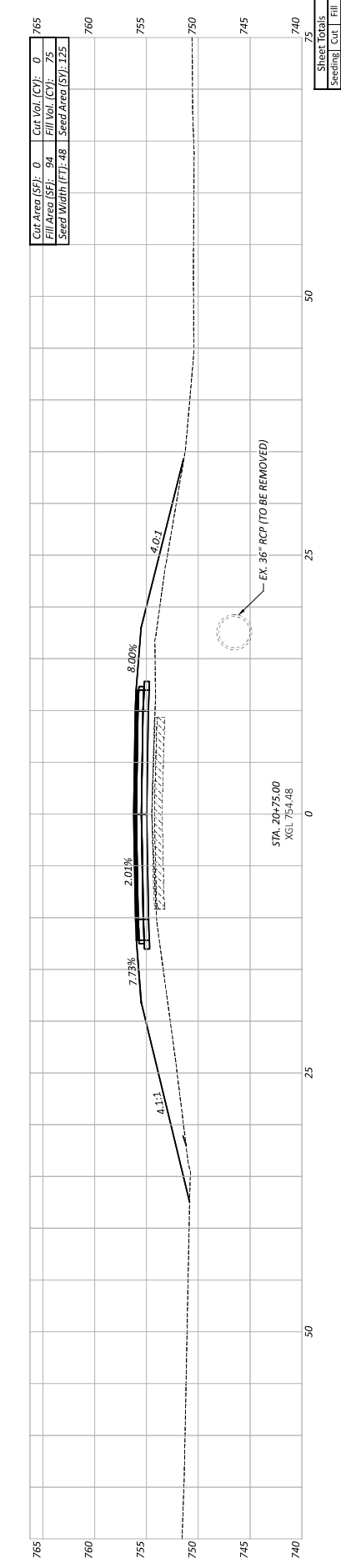
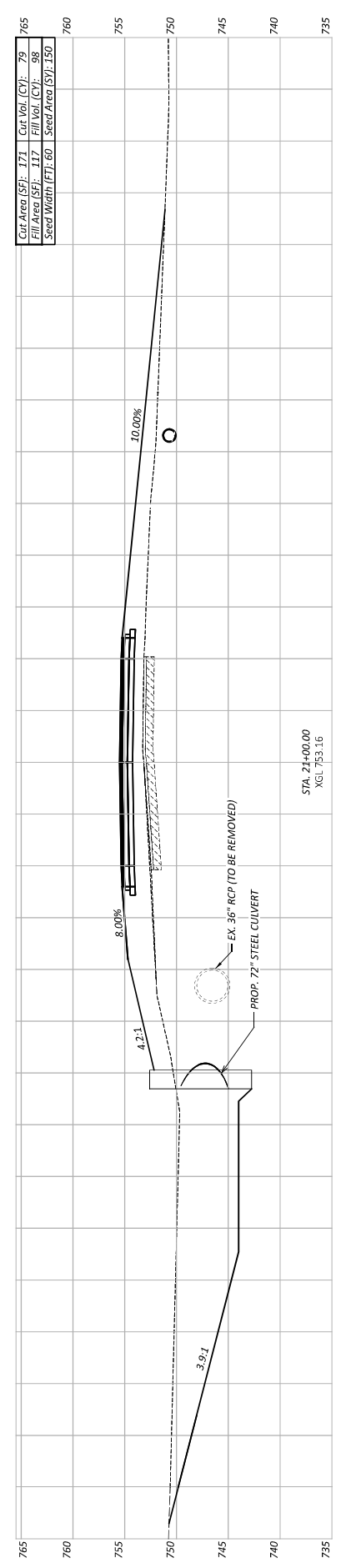
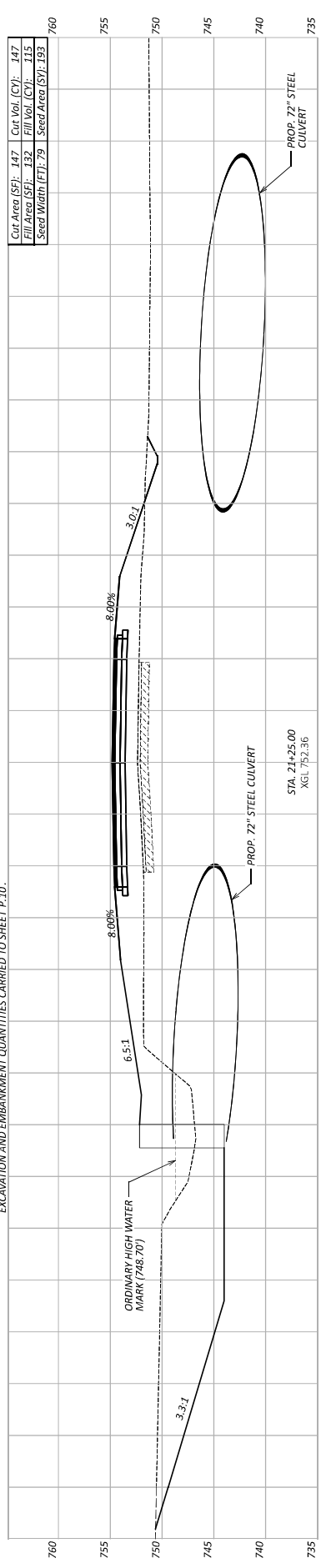
REVIEWER: AM 11-26-25

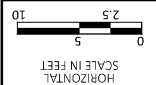
PROJECT ID: 119871

SHEET TOTAL: P.14 31

Sheet Totals: Seeding 468, Cut 226, Fill 288

NOTES:
SEEDING QUANTITIES CARRIED TO SHEET P.5.
EXCAVATION AND EMBANKMENT QUANTITIES CARRIED TO SHEET P.10.





T483C CROSS SECTIONS
STA. 21+50.00 TO STA. 22+00.00

DESIGN AGENCY: **AECOM**

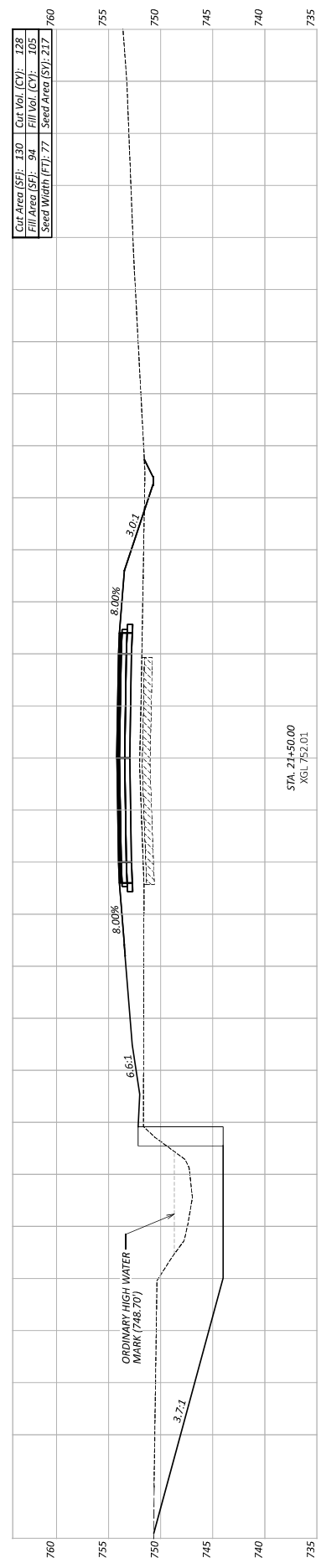
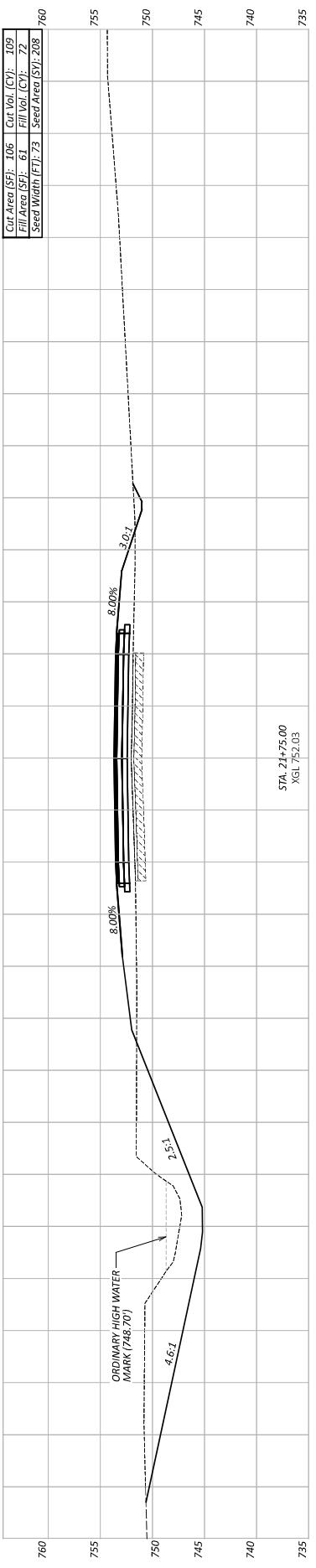
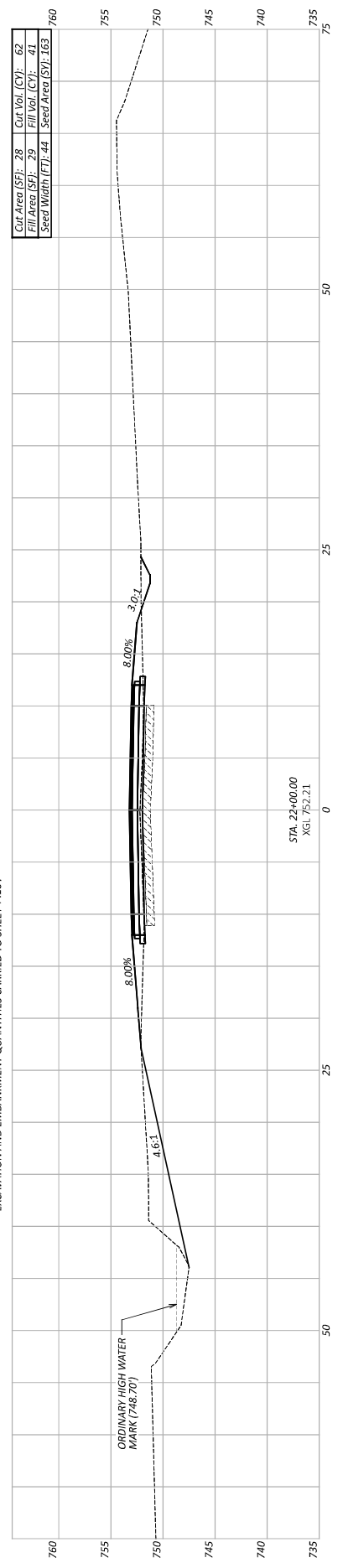
DESIGNER: HRP

REVIEWER: AM 11-26-25

PROJECT ID: 118871

SHEET TOTAL: P-15 31

NOTES:
SEEDING QUANTITIES CARRIED TO SHEET P.5.
EXCAVATION AND EMBANKMENT QUANTITIES CARRIED TO SHEET P.10.



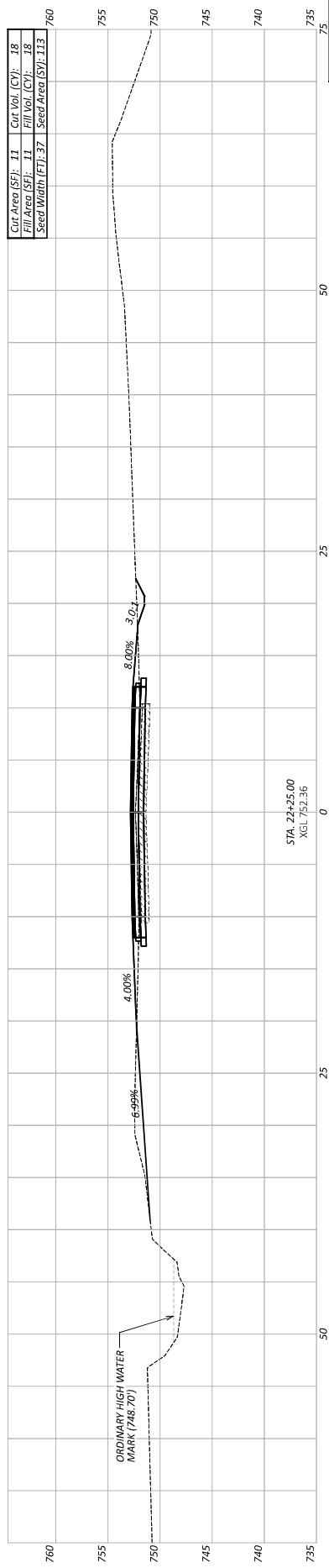
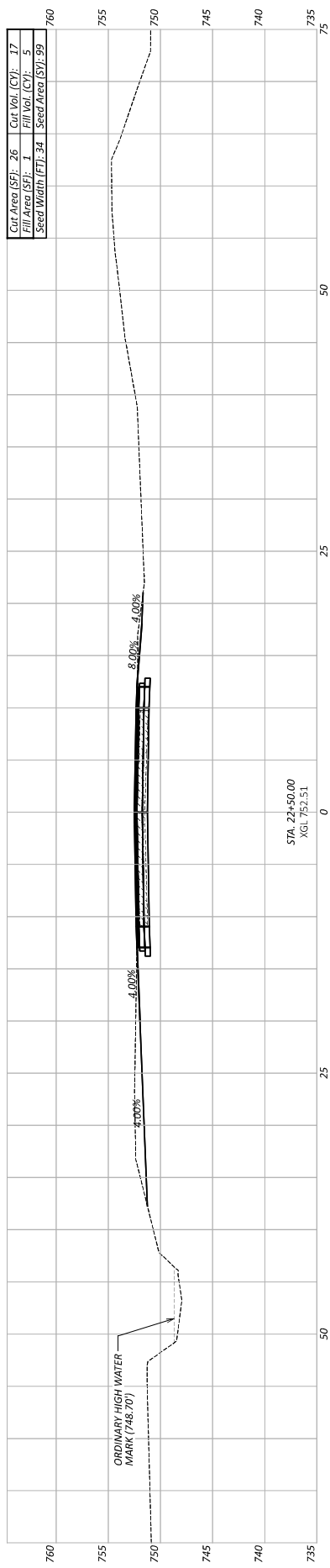
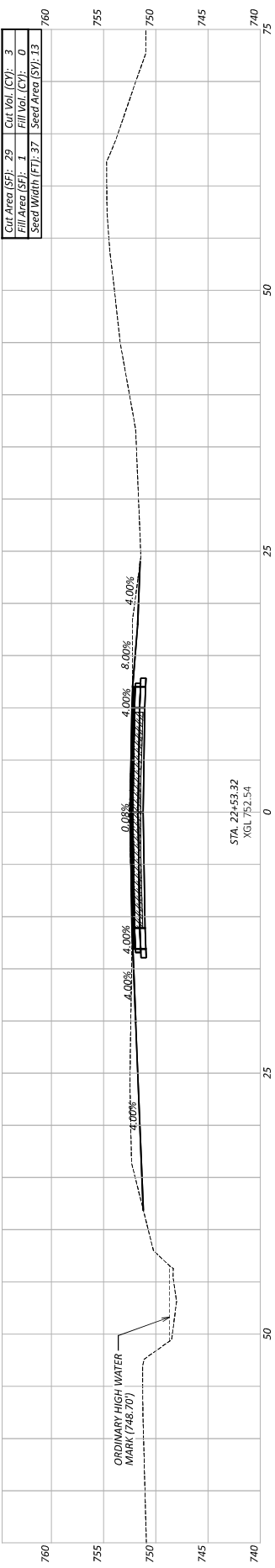
Sheet Totals	Cut	Fill	TOTAL
Seeding	588	299	218



EXISTING PAVEMENT (TO BE REMOVED)

NOTES:

SEEDING QUANTITIES CARRIED TO SHEET P.5.
EXCAVATION AND EMBANKMENT QUANTITIES CARRIED TO SHEET P.10.



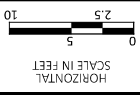
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Seeding	225	38	23

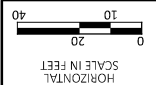
PROJECT ID	119871
REVIEWER	AM 11-26-25
DESIGNER	HKP

AECOM

DESIGN AGENCY

T483C CROSS SECTIONS
STA. 22+25.00 TO ENDING





CULVERT DETAIL
STA. 21+29.86

DESIGN AGENCY	AECOM
DESIGNER	HKP
REVIEWER	AM 11-26-25
PROJECT NO.	118871
SHEET TOTAL	P.19 OF 31

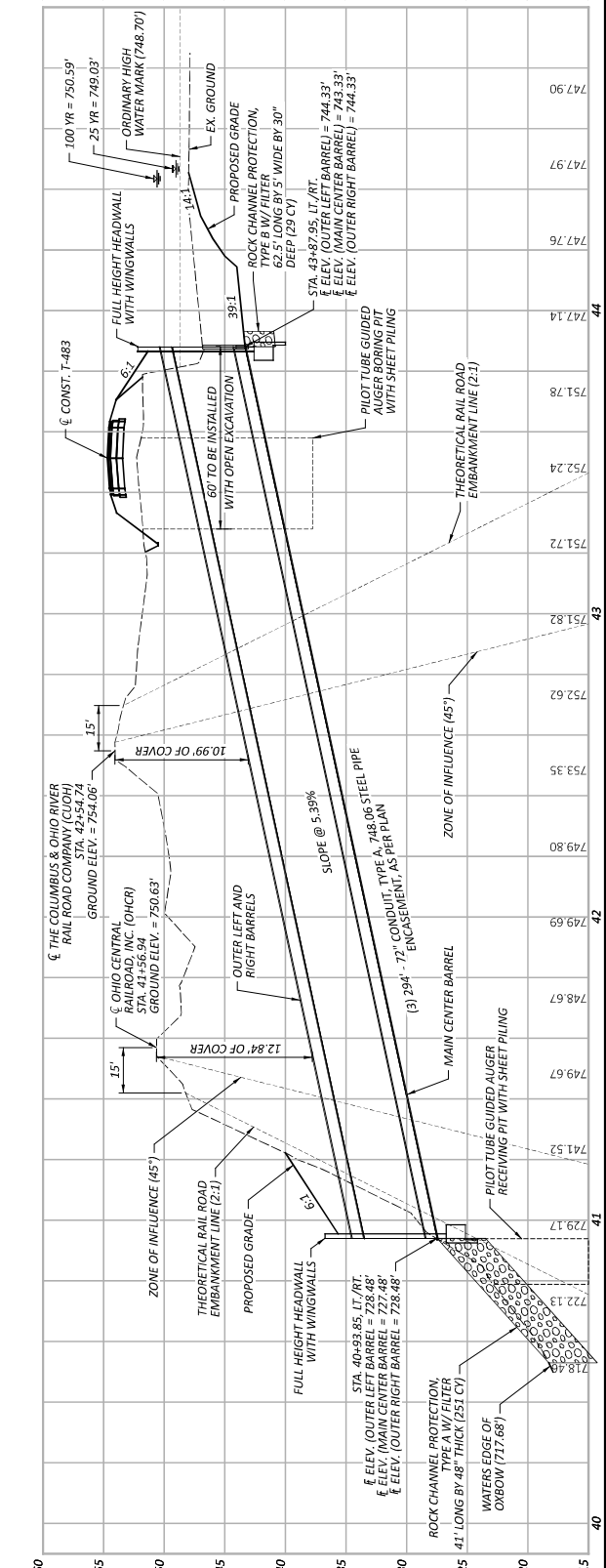
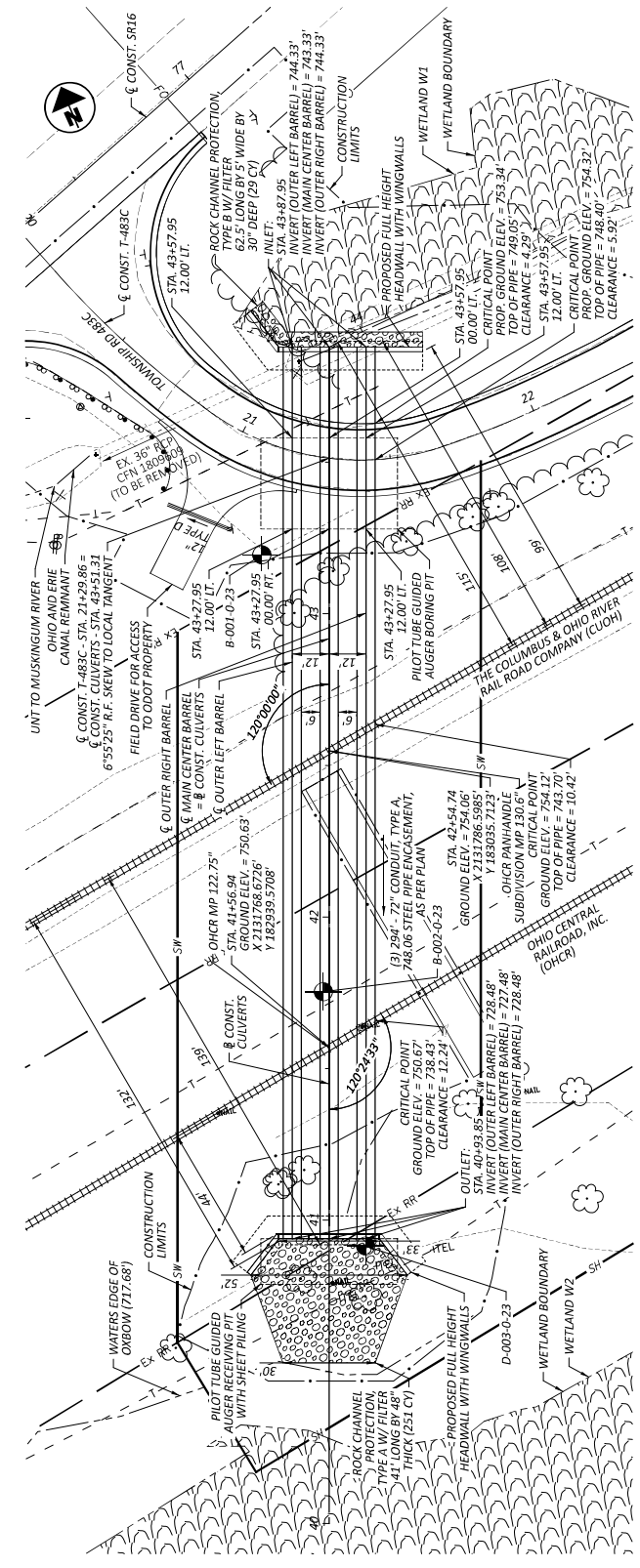
ITEM	QUANTITY	UNIT	DESCRIPTION
601	251	CY	ROCK CHANNEL PROTECTION TYPE A WITH FILTER
601	29	CY	ROCK CHANNEL PROTECTION TYPE B WITH FILTER
611	180	FT	72" CONDUIT, TYPE A, AS PER PLAN, 748.06
611	702	FT	PILOT TUBE GUIDED AUGER BORING, 72", TYPE A, 748.06

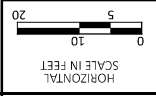
HYDRAULIC DATA
 DRAINAGE AREA = 1,070.73 ACRES
 Q (25) = 678.35 CFS V (25) = 12.39 FPS
 Q (100) = 1,011.41 CFS V (100) = 15.62 FPS
 ORDINARY HIGH WATER MARK: 748.70
 DESIGN SERVICE LIFE: 75 YEARS
 PH: 7.3
 ABRASION LEVEL: LEVEL 2

EXISTING STRUCTURE
 TYPE: 36" REINFORCED CONCRETE PIPE
 SKEW: 28° L.F.
 ALIGNMENT: CURVE
 CFN: 18098609

PROPOSED STRUCTURE
 TYPE: 72" CONDUIT, TYPE A, 748.06
 STEEL PIPE ENCASMENT, AS PER PLAN
 SKEW: 6°55'25" R.F.
 ALIGNMENT: CURVE
 WORKING FROM LEFT TO RIGHT WITH RESPECT TO SHEET
 CDS-16-1-452-CFN 15984943
 CDS-16-1-453-CFN 15984944
 CDS-16-1-454-CFN 15984945

NOTES:
 FOR DETAILED REQUIREMENTS FOR ITEM 611/619/640 - CONDUIT, MISC.: PILOT TUBE GUIDED AUGER BORING, 72", TYPE A, 748.06, SEE THE DRAWING WITH THE SPECIFICATION WITH THE SAME TITLE IN THE CONTRACT DOCUMENTS.
 FOR ADDITIONAL DETAILS ON THE PILOT TUBE GUIDED AUGER BORING PITS AND TEMPORARY SHEETING, SEE THE INSTRUMENTATION LAYOUT SHEET P.25.





GRADING PLAN
CULVERT INLET AND OUTLET

DESIGN AGENCY
AECOM

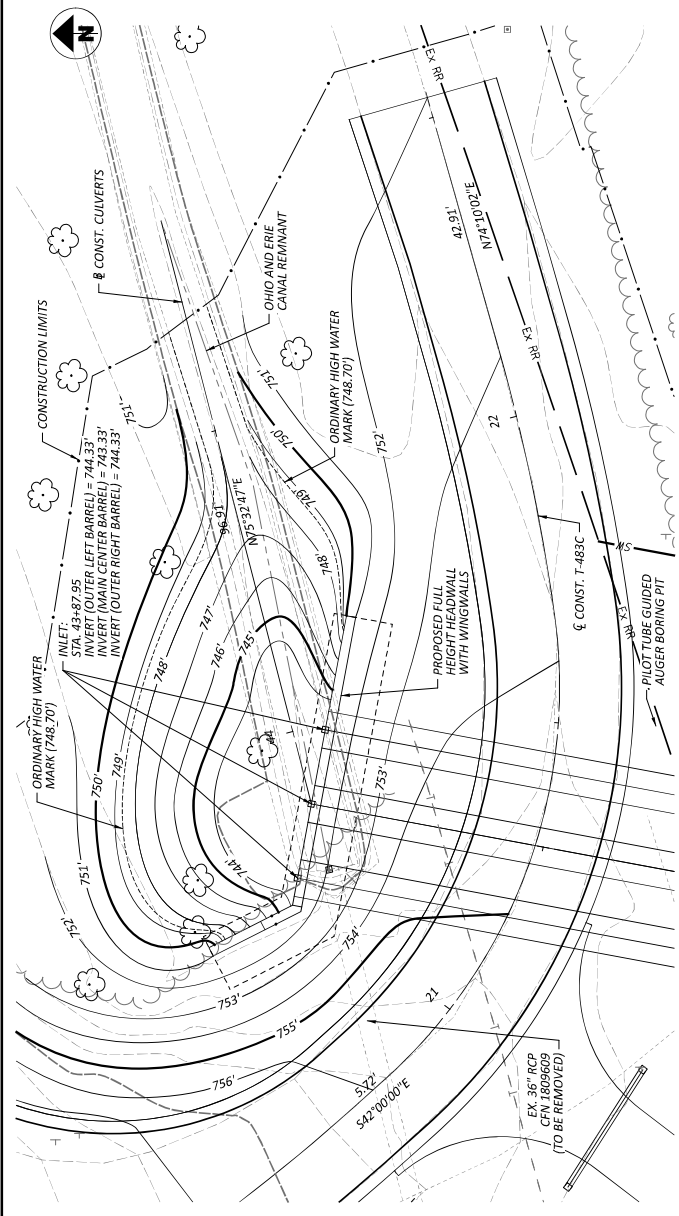
DESIGNER
HKP

REVIEWER
AM 11-26-25

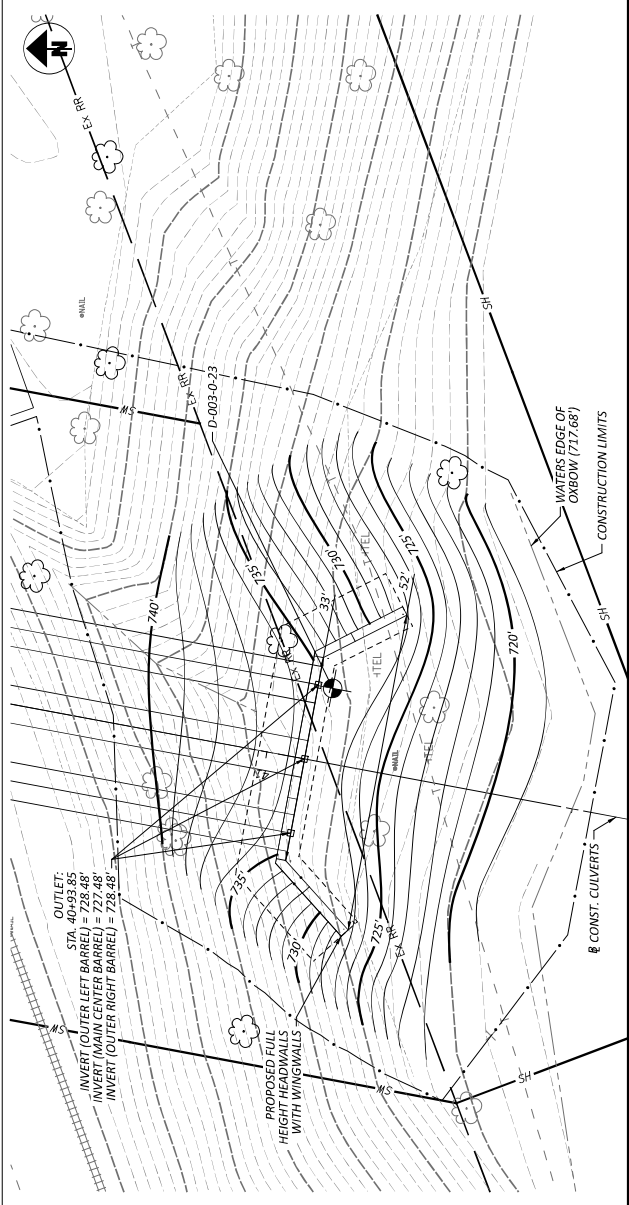
PROJECT ID
118871

SHEET TOTAL
P.25 31

- LEGEND**
- EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - PROPOSED MAJOR CONTOUR
 - PROPOSED MINOR CONTOUR
 - CONSTRUCTION LIMITS

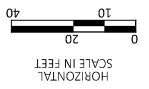


CULVERT INLET



CULVERT OUTLET

ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION
203	10000	2	CY	EXCAVATION
203	20000	419	CY	EMBANKMENT



SOIL PROFILE CULVERT DETAIL

DESIGN AGENCY	AECOM
DESIGNER	HKP
REVIEWER	AM 11-26-25
PROJECT ID	118871
SHEET	P-27
TOTAL	31

- NOTES:**
1. SHEET PILE SUPPORT OF EXCAVATION IS ONLY PRESENTED FOR GENERAL INFORMATION. THE ACTUAL CONTRACTOR SUPPORT MATERIALS AND METHODS ARE TO BE DESIGNED BY THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT A DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OHIO FOR THE SUPPORT OF EXCAVATION.
 2. SOIL AND GROUNDWATER CONDITIONS TO BE USED FOR DESIGN OF EXCAVATION SHALL BE BASED ON THE GEOTECHNICAL DATA.
 3. THE CONTRACTOR SHALL DETERMINE THE SIZE OF EXCAVATION REQUIRED FOR THEIR MEANS AND METHODS.

