UTILITIES

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

UTILITY LIST
LIC-16-16.57
PID # 114378
OCTOBER 12, 2021

AMERICAN ELECTRIC POWER CO. (DISTRIBUTION)
777 HOPEWELL DRIVE
HEATH, OHIO 43056
ATTN: PAUL PAXTON
740-348-5322
ptpaxton@aep.com

HORIZON NETWORK PARTNERS
1123 GOODALE BOULEVARD, SUITE 550
COLUMBUS, OHIO 43212
ATTN: GARRY RAY
740-701-3337
Garry.Ray@horizonconnects.com

MARATHON PIPELINE LLC
10722 EAST COUNTY ROAD 300 NORTH
INDIANAPOLIS, IN 46234
ATTN: AUSTIN GUYER
317-473-7441
aguyer@marathonpetroleum.com

SPECTRUM CABLE
3760 INTERCHANGE RD
COLUMBUS, OHIO 43204
Attn: Brian Gilmore
614-827-7920
Cell: 614-381-7495
Brian.Gilmore1@charter.com

WINDSTREAM COMMUNICATIONS
776 HOPEWELL DR.
HEATH, OHIO 43056
ATTN: TIM LILLY
740.349.8846
timothy.lilly@windstream.com

FIELD CONDITIONS

DUE TO EROSION AND CONTINUED SLOPE MOVEMENT SUBSEQUENT TO THE TIME OF PLAN PREPARATION, DETAILS SHOWN ON THE PLAN ARE TO BE CONSIDERED APPROXIMATE AND FOR ESTIMATING PURPOSES ONLY.

CLEARING AND GRUBBING

THE DEPARTMENT HAS NOT MARKED INDIVIDUAL TREES AND STUMPS FOR REMOVAL. UNLESS SPECIFICALLY DESIGNATED AS "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING.

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.

POWER LINES

THE CONTRACTOR FOR THIS PROJECT MUST BE QUILIFIED TO WORK IN CLOSE PROXIMATY TO OVERHEAD PRIMARY ELECTRIC LINES, AND FOLLOW ALL OSHA RULES AND REQUIREMENTS TO MAINTAIN THE MINIMUM CLEARANCE DISTANCE PER SECTIONS 1407-1411 OF THE OSHA SMALL ENITITY COMPLIANCE GUIDE FOR THE FINAL RULE FOR CRANES AND DERRICKS IN CONSTRUCTION. INFORMATION NEEDED TO FULFILL THE OSHA REQUIREMENTS SHOULD BE OBTAINED FROM AMERICAN ELECTRIC POWER.
CONTACT: AMERICAN ELECTRIC POWER CO. (DISTRIBUTION)
ATTN: PAUL PAXTON
740-348-5322
ptpaxton@aep.com

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE TABLE BELOW FOR PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

MONUMENT TYPE: IPINS

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: Geoid 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
COORDINATE SYSTEM: Ohio State Plane, North Zone (3401)
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 CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

Point ID	Northing	Easting	Elevation
CP10	749215.0854	1972483.057	893.8564
CP11	749119.3326	1972702.735	893.2009
CP12	749209.3878	1972750.826	893.4761
MN01	748941.4231	1973215.441	888.0732
MN02	749274.8445	1972488.242	890.8946

GUARDRAIL

THE FOLLOWING GUARDRAIL QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY

202, GUARDRAIL REMOVED FOR REUSE 50 FT.
REMOVE AND REPLACE FROM STA. 215+48 TO STA. 215+98

POSSIBLE OBSTRUCTIONS

HISTORICAL GEOTECHNICAL EXPLORATIONS FROM ADJACENT PROJECTS INDICATE POTENTIAL FOR COBBLES AND BOULDERS WITHIN THE SUBSURFACE CONDITIONS. THESE WERE ALSO NOTED DURING THE FIELD RECONNAISSANCE WITHIN THE EXPOSED EROSIONAL FACE BELOW THE ROADWAY. THE CONTRACTOR SHOULD BE AWARE THAT OBSTRUCTIONS MAY PRESENT A CHALLENGE DURING DRIVING OF THE SHEET PILE, AND CARE SHOULD BE TAKEN NOT TO DAMAGE THE SHEETING.

ITEM 601, ROCK CHANNEL PROTECTION, MISC.:TYPE B AND TYPE C ROCK AND # 1 STONE MIX

THIS ITEM CONSISTS OF 50% TYPE B ROCK AND 40% TYPE C ROCK WITH TOP SIZES (85% PORTION) ONLY WITH REMAINING 10% NO. 1 STONE TO REPLACE THE FINE SIZES (15% PORTION) OF THE TYPE B AND C ROCK.

PREPARE FOUNDATION SURFACE BY REMOVING LOOSE MATERIAL.

PLACE LARGER PIECES AT THE BOTTOM AND ON THE OUTSIDE FACE.

COMPLETE EACH LAYER BY FILLING THE VOIDS
RCP SHALL BE PLACED BY A METHOD THAT DOES NOT CAUSE SEGREGATION OF ROCK SIZES.
ALL OTHER REQUIREMENT OF CMS APPLY.

ITEM 690, SPECIAL - MISC.: ROADWAY PRESERVATION

PRESERVE THE EXISTING S.R. 16 EASTBOUND PAVEMENT AND GUARDRAIL. SUBMIT PROTECTION PLAN FOR THE PROJECT ENGINEER'S FILES. PROTECT THE PAVEMENT AND GUARDRAIL ALONG S.R. 16 WITH A METHOD APPROVED BY THE PROJECT ENGINEER.

REPAIR ANY DAMAGE TO THE ROADWAY AND GUARDRAIL DURING CONSTRUCTION AT NO ADDITIONAL COSTS TO THE STATE. UNLESS ITEMIZED SEPARATELY, INCLUDE ALL LABOR, MATERIALS, AND TOOLS NECESSARY FOR PROTECTION OF EXISTING ROADWAY PAVEMENT.

ITEM 690 SPECIAL, ROADWAY PRESERVATION, LUMP

SEEDING AND MULCHING

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

ITEM 659, SEEDING AND MULCHING, CLASS 2 1010 SY
(FROM SHEET 15)

ITEM 659, COMMERCIAL FERTILIZER 0.14 TON
1 TON PER 7,410 SQ. YD. OF THE SEEDED AREA
1010 ÷ 7,410 = 0.14 TON

ITEM 659, LIME 0.21 ACRE
1010 ÷ 4,840 = 0.21 ACRE

ITEM 659, WATER 6.00 MGAL
0.0054 M. GAL PER SQ. YD. OF SEEDED AREA
1010 x 0.0054 = 5.46 MGAL ROUND TO 6.00 MGAL

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS BETWEEN THE OUTSIDE EDGE OF PAVED SHOULDER AND THE TOE OF THE FINISHED ROCK CUT SLOPE AS WELL AS UPPER AREA INCLUDING TEMPORARY R/W.

WALL NOTES:

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2021.

DESIGN DATA

STRUCTURAL STEEL - ASTM A572 GRADE 50
YIELD STRENGTH - 50 KSI

ITEM 504 - SHEET PILING LEFT IN PLACE, AS PER PLAN

FURNISH AZ, NZ, PZ, OR PZC STEEL SHEET PILING WHICH MEETS THE FOLLOWING MINIMUM REQUIREMENTS:

GRADE OF STEEL - 50 KSI

ELASTIC SECTION MODULUS - 48.50 $IN.^3/FT$

PLASTIC SECTION MODULUS - 57.01 $IN.^3/FT$

MOMENT OF INERTIA - 419.90 $IN.^4/FT$

SHEET PILING SHALL BE DRIVEN IN SUCH A MANNER AS TO ENSURE INTERLOCKING THROUGHOUT THE ENTIRE LENGTH OF EACH SHEET PILE. THE SHEET PILES SHALL BE HELD IN PROPER ALIGNMENT DURING DRIVING BY MEANS OF ASSEMBLING FRAMES OR OTHER SUITABLE TEMPORARY GUIDE STRUCTURES. TEMPORARY GUIDE STRUCTURES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR PURPOSE.

DRIVE SHEET PILES WITH A VARIATION OF ¼ INCH OR LESS PER FOOT FROM VERTICAL. DO NOT DAMAGE SHEET PILING WHILE ATTEMPTING TO CORRECT FOR MISALIGNMENT.

CUT OFF THE TOP OF SHEET PILING IN A CLEAN, STRAIGHT LINE AT THE ELEVATIONS SPECIFIED IN THE PLANS, AS APPROVED BY THE ENGINEER. THE LENGTH OF THE PILE CUT OFF SHALL BE SUFFICIENT TO PERMIT THE REMOVAL OF ALL DAMAGED MATERIAL. ANY IRREGULARITIES SHALL BE STRAIGHTENED OR CUT OFF BY GRINDING. DISPOSE OF CUT-OFFS NOT INCORPORATED INTO THE WORK PROPERLY.

REMOVE AND REPLACE, OR OTHERWISE CORRECT, SHEET PILES THAT THE ENGINEER DEEMS UNACCEPTABLE. SUBMIT DETAILS OF PLANNED CORRECTIONS TO THE ENGINEER FOR REVIEW AND APPROVAL BEFORE INITIATING ANY CORRECTIVE ACTION. ANY SHEET PILING RUPTURED IN THE INTERLOCK OR OTHERWISE DAMAGED DURING DRIVING SHALL BE PULLED AND REPLACED.

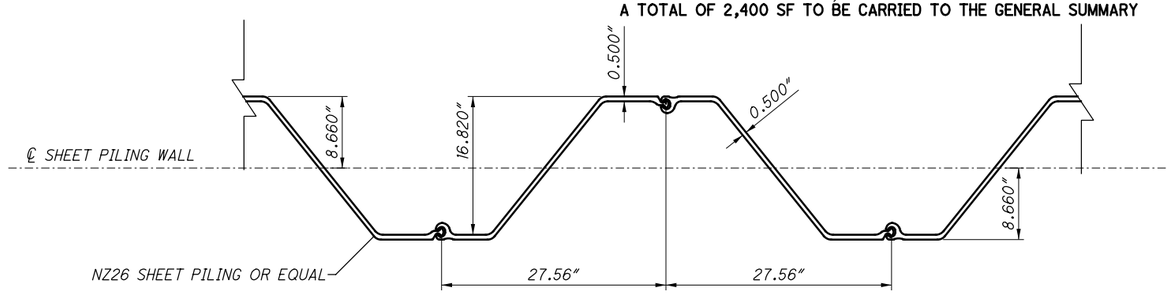
FINAL GRADING

THE CONTRACTOR SHALL GRADE AS NECESSARY IN FRONT OF THE SHEET PILING WALL TO ENSURE POSITIVE DRAINAGE AWAY FROM THE FACE OF THE WALL. NO DEPRESSIONS WHICH MAY HOLD WATER SHALL BE PERMITTED TO REMAIN.

ALL FINAL GRADING, EXCAVATION AND EMBANKMENT, UNLESS OTHERWISE NOTED IN THE PLANS, SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 504 - SHEET PILING LEFT IN PLACE, AS PER PLAN.

CALCULATIONS:
ITEM 504 - SHEET PILING LEFT IN PLACE, AS PER PLAN

WALL LIMITS - STA. 215+90 TO STA. 216+50:
(60 FT (L) * 40 FT (H) = 2,400 SF
A TOTAL OF 2,400 SF TO BE CARRIED TO THE GENERAL SUMMARY



CALCULATED AJC
CHECKED NK

GENERAL NOTES

LIC-16-16.57