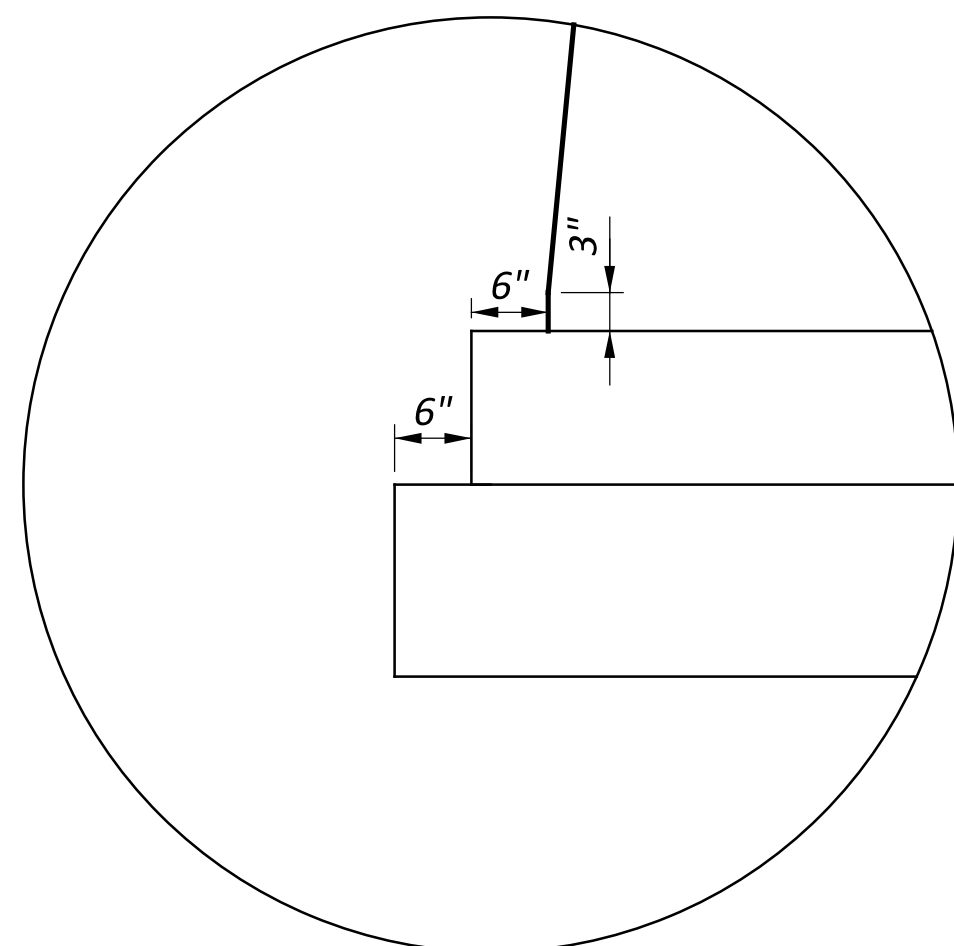
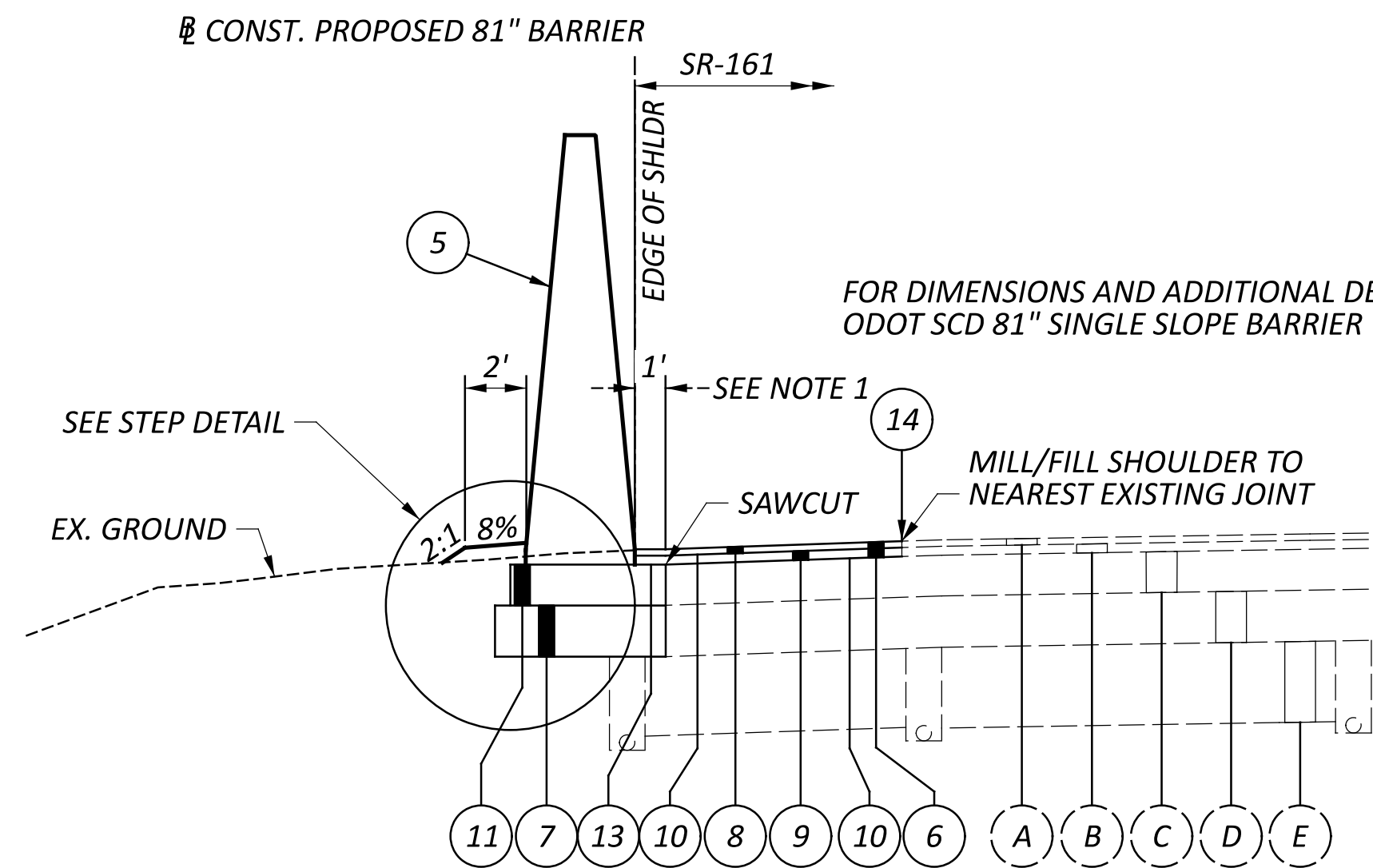


- NOTES:**
- 1.) AT LOCATIONS OF BARRIER INLETS, 81" SSB, THE FULL DEPTH WIDTH WILL BE 4 FT. REFER TO SHEET P.226 FOR LIMITS OF 4 FT. DEPRESSED APRON.
 - 2.) FOOTER FOR 81" BARRIER WILL BE POURED SEPARATE FROM 81" BARRIER. PROVIDE DOWELS PER DOWELING DETAIL OF RM-4.3.
 - 3.) DO NOT DISTURB EXISTING UNDERDRAINS AND ENSURE FLOW IS MAINTAINED TO THE EXISTING UNDERDRAINS.



STEP DETAIL
 81" BARRIERS 8, 10, 12

NOISE BARRIER REFLECTIVE (LEFT SIDE)
 NOISE WALL 3 - STA. 300+00.00 TO STA. 305+76.00
 NOISE WALL 6 - STA. 600+00.00 TO STA. 605+28.00
 NOISE WALL 9 - STA. 900+00.00 TO STA. 912+70.00



BARRIER, MISC.: 81" SINGLE SLOPE BARRIER (LEFT SIDE)
 81" BARRIER 3 - STA. 3000+00.00 TO STA. 3006+99.96

1 9-05-2024 - UPDATED ASPHALT DENSITY ACCEPTANCE

LEGEND

- | | | | | |
|--|---|--|---|--|
| 1 ITEM 606 - SPECIAL - NOISE BARRIER (REFLECTIVE) | 6 ITEM 254 - 3" PAVEMENT PLANING, ASPHALT CONCRETE | 11 ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P | 16 ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS | (D) 10"± EX. AGGREGATE BASE |
| 2 ITEM 524 - DRILLED SHAFTS (TO BE PAID WITH ITEM 606 - SPECIAL - NOISE BARRIER) | 7 ITEM 304 - 10" AGGREGATE BASE | 12 ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P | 17 ITEM 606 - GUARDRAIL, TYPE MGS | (E) EX. SUBBASE (DEPTH VARIES) |
| 3 ITEM 659 - SEEDING AND MULCHING | 8 ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG70-22M | 13 ITEM 407 - TACK COAT (RATE AS PER C&MS TABLE 407.06-1) | (A) 1.5"± EX. ASPHALT CONCRETE SURFACE COURSE | (F) 3" ASPHALT ON 9" CONCRETE BASE ON 10" STONE BASE |
| 4 ITEM 605 - 6" UNCLASSIFIED UNDERDRAIN AND GRANULAR MATERIAL PER CMS 605.02 (GRANULAR MATERIAL INCLUDED WITH NOISE BARRIER FOR PAYMENT) | 9 ITEM 442 - 1.5" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449) | 14 ITEM 872 - VOID REDUCING ASPHALT MEMBRANE (AT ALLOWABLE COLD JOINT) | (B) 1.75"± EX. ASPHALT CONCRETE INTERMEDIATE COURSE | (G) 3" ASPHALT ON 8" CONCRETE BASE ON 10" AGGREGATE BASE WITH 9" LIME SOIL STABILIZED SUBGRADE |
| 5 ITEM 622 - BARRIER, MISC.: 81" SINGLE SLOPE BARRIER | 10 ITEM 407 - NON-TRACKING TACK COAT (RATE AS PER C&MS TABLE 407.06-1) | 15 ITEM 304 - 7" AGGREGATE BASE | (C) 7.5"± EX. ASPHALT CONCRETE BASE | |

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UTILITIES

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

GAS
COLUMBIA GAS OF OHIO
3550 JOHNNY APPELSEED COURT
COLUMBUS, OH 43231
ATTN: ROB CALDWELL
OFFICE: 614-818-2104
CELL: 614-370-1906
CUSTOMER SERVICE: 1-800-344-4077
DAMAGE PREVENTION: 1-866-632-6243
COLUMBIAGAS_COLUMBUSENG@NISOURCE.COM
RCALDWELL@NISOURCE.COM

WATER
CITY OF COLUMBUS DIV. OF WATER
910 DUBLIN RD.
COLUMBUS, OH 43215
PHONE: 614-645-7788

AQUA OHIO - WATER
5481 BUENOS AIRES BLVD.
WESTERVILLE, OH 43081
ATTN: JAKE LOGAN
PHONE: 614-882-6586 X50559
JELOGAN@AQUAAMERICA.COM

COLUMBIA GAS OF OHIO
TRANSMISSION
1600 EASTGATE PKWY
GAHANNA, OH 43230
ATTN: ROBERT REED
PHONE: 740-279-0870
ROBERT1_REED@TCENERGY.COM

CITY OF NEW ALBANY
PUBLIC SERVICE
7800 BEVELHYMER ROAD
NEW ALBANY, OH 43054
PHONE: 614-855-0076
PUBLICSERVICE@NEWALBANYOHIO.ORG

TELEPHONE/CABLE/FIBER
AMERICAN ELECTRIC POWER (TELECOM)
777 HOPEWELL DRIVE
HEATH, OHIO 43056
ATTN: UNA BLANUSA
AEP SOLUTION CENTER: 800-277-2177
OHPFIBERRELOCATE@AEP.COM

ELECTRIC
AMERICAN ELECTRIC POWER (DISTRIBUTION)
777 HOPEWELL DRIVE
HEATH, OHIO 43056
ATTN: PAUL PAXTON
PHONE: 740-348-5322
AEP SOLUTION CENTER: 800-277-2177
PTPAXTON@AEP.COM

AT&T - OHIO
111 N. 4TH STREET
COLUMBUS, OH 43215
ATTN: DONALD G. MARSHALL, JR.
CELL: 614-216-2396
AT&T REPAIR SERVICE: 888-611-4466
DAMAGE PREVENTION: 937-296-3929
G01553@ATT.COM

AMERICAN ELECTRIC POWER (TRANSMISSION)
8600 SMITHS MILL ROAD
NEW ALBANY, OH 43054
ATTN: MICHAEL CARR
PHONE: 380-205-5072
TL_PUBLICPROJECTS@AEP.COM

AT&T (TRANSMISSION)
METROPOLITAN COMM. GROUP OHIO (MCG)
155 COMMERCE PARK DRIVE, SUITE 1
WESTERVILLE, OH 43082
ATTN: JAMES SCHNEIDER (PROJECT MANAGER)
CELL: 440-525-4322
JAMES.SCHNEIDER@MCGFIBER.COM
ATTN: WILLIAM TAGGART (FIELD ENGINEER)
CELL: 614-370-5414

CITY OF COLUMBUS
DIVISION OF POWER
3500 INDIANOLA AVE.
COLUMBUS, OH 43214
ATTN: CHARLES HORNER
PHONE: 614-645-7569
DISPATCH CENTER: 614-645-7627
CRHORNER@COLUMBUS.GOV

CHARTER COMMUNICATIONS / SPECTRUM
3760 INTERCHANGE ROAD
COLUMBUS, OH 43204
DL-MOH-CONSTRUCTION-FRELO-TEAM@CHARTER.COM

SANITARY & STORMWATER:
CITY OF COLUMBUS DPU
DIVISION OF SEWERAGE & DRAINAGE
1250 FAIRWOOD AVENUE
COLUMBUS, OH 43206
PHONE: 614-645-7102

COLUMBUS FIBERNET
1600 WALCUTT ROAD
COLUMBUS, OH 43228
PHONE: 614-921-8524
ATTN: MATT BLACKSTONE
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CFNINFO@COLUMBUSFIBER.NET

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5481 BUENOS AIRES BLVD.
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JELOGAN@AQUAAMERICA.COM

LUMEN
250 W. OLD WILSON BRIDGE, SUITE 130
WORTHINGTON, OH 43085
ATTN: HALEY WOOD
RELOCATIONS@LUMEN.COM
RELOCATIONS@BRIGHTSPEED.COM
HALEY.WOOD@LUMEN.COM

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7800 BEVELHYMER ROAD
NEW ALBANY, OH 43054
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PUBLICSERVICE@NEWALBANYOHIO.ORG

CROWN CASTLE FIBER
2 EASTON OVAL, SUITE 425
COLUMBUS, OH 43219
ATTN: JON TARNOWSKI
OFFICE: 585-445-5813
CELL: 614-940-2462
JON.TARNOWSKI@CROWNCastle.COM

ITS/CTSS/TRAFFIC
ODOT CENTRAL OFFICE ITS
929 EASTWIND DRIVE
SUITE 201
WESTERVILLE, OH 43081
ATTN: EVAN KRAUS
PHONE: 614-948-0537
EVAN.KRAUS@SAM.BIZ

VERIZON BUSINESS (AKA MCI/XO)
757 COMMERCE CT.
LEWIS CENTER, OH 43035
CELL: 614-593-6685 (MAURICE JONES)
CELL: 614-816-0361 (BOB DILLOW)
VZ.NET.COLUMBUS@VERIZON.COM
BRIAN.ANSEL@VERIZON.COM
TERRY.SHUMATE@VERIZONWIRELESS.COM
JOHN.CORNELL@VERIZONWIRELESS.COM
MICHAEL.HENNON@VERIZONWIRELESS.COM
MICHAEL.BONDY@VERIZONWIRELESS.COM
SVEN.CHRISTIANSON@VERIZONWIRELESS.COM

CITY OF COLUMBUS
TRAFFIC SIGNALS
1820 E. 17TH AVENUE
COLUMBUS, OH 43219
ATTN: BRAD HEGWOOD
PHONE: 614-560-0839
BDHEGWOOD@COLUMBUS.GOV

CITY OF COLUMBUS
DEPARTMENT OF TECHNOLOGY
1355 MCKINLEY AVE. BLDG C
COLUMBUS, OH 43222
PHONE: 614-645-1776
DARRYL H. JOYCE, DHOJYCE@COLUMBUS.GOV
BRIAN C. MICKLEY, BCMICKLEY@COLUMBUS.GOV

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7800 BEVELHYMER ROAD
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PHONE: 614-855-0076
PUBLICSERVICE@NEWALBANYOHIO.ORG

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET P.2 - P.5 OF THE PLANS 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: ODOT VRS
MONUMENT TYPE: CLASS A

VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID 18

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: FRANKLIN COUNTY LDP
COMBINED FACTOR SCALE: 1.00000000
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 INTERNATIONAL FT (ft).

ITEM 524 - DRILLED SHAFTS
FOLLOW STANDARD DRAWING NBS-1-09 AND THE DETAILS OF THESE PLANS.

PAYMENT FOR THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 606 - SPECIAL - NOISE BARRIER (REFLECTIVE) UNLESS OTHERWISE NOTED, AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 606 - SPECIAL - NOISE BARRIER (REFLECTIVE)
THIS ITEM WILL BE USED TO INSTALL REFLECTIVE FIBERGLASS NOISE PANELS. SEE SHEET P.217 FOR COLOR, TEXTURE, AND LOCATION OF INSTALLATION.

NOISE WALL CONSTRUCTION SHALL ADHERE TO NBS-1-09.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 606 - SPECIAL - NOISE BARRIER (REFLECTIVE) UNLESS OTHERWISE NOTED, AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 607 - FENCE, MISC.: TEMPORARY FENCE
INSTALL TEMPORARY FENCE WHEN THE TIME BETWEEN THE REMOVAL OF THE EXISTING FENCE AND INSTALLATION OF THE PROPOSED FENCE OR NOISE BARRIER WILL EXCEED ONE DAY. INSTALL THIS FENCE IMMEDIATELY AFTER THE EXISTING FENCE IS REMOVED. THE TEMPORARY FENCE SHALL BE A WOOD SNOW FENCE, PLASTIC NYLON CONSTRUCTION FENCE OR EXISTING FENCE FABRIC MOUNTED ON DRIVEN POSTS. FOR EACH NOISE BARRIER SECTION, DO NOT REMOVE THE EXISTING FENCE EARLIER THAN 3 MONTHS PRIOR TO THE COMPLETED INSTALLATION OF THE NOISE BARRIER PANELS.

THE DEPARTMENT WILL PAY FOR FURNISHING, ERECTING, MAINTAINING, AND REMOVING TEMPORARY FENCE UNDER ITEM 607 - FENCE, MISC.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
ITEM 607 - FENCE, MISC.: TEMPORARY FENCE 4,202 FT

ITEM SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1) IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL:

- A. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
- B. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
- C. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

2) IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL:

- A. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
- B. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDED IN THE PLAN.
- C. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

A LUMP SUM QUANTITY FOR ITEM SPECIAL - SURVEY CONTROL VERIFICATION HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK DESCRIBED ABOVE.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES
WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

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.

1 7-08-2024 - ADDED	2 8-12-2024 - ADDED TEMPORARY	3 9-5-2024 -
UTILITY COMPANY	FENCE NOTE AND REMOVED	REMOVED
AND GENERAL NOTE	SEEDING/MULCHING	CONSTRUCTION
	FROM NOISE BARRIER NOTE	NOISE NOTE

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.

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

BENCHING OF FOUNDATION SLOPES
ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

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

659, SOIL ANALYSIS TEST	1 EACH
659, TOPSOIL	887 CU. YD.
659, SEEDING AND MULCHING	7985 SQ. YD.
659, REPAIR SEEDING AND MULCHING	400 SQ. YD.
659, INTER-SEEDING	400 SQ. YD.
659, COMMERCIAL FERTILIZER	1.08 TON
659, LIME	1.65 ACRES
659, WATER	45 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED 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 AND HAVE BEEN DETERMINED USING CAD GENERATED AREAS. FOR AREAS ADJACENT TO A RESIDENTIAL PROPERTY, USE CMS 659 LAWN MIXTURE.

CLEARING AND GRUBBING, AS PER PLAN
THIS LUMP SUM ITEM SHALL BE USED TO CLEAR BRUSH AND THE NEAT TRIMMING AND/OR REMOVAL OF TREES IN CONFLICT WITH THE PROPOSED NOISE WALL LOCATIONS. TREES SCHEDULED TO BE TRIMMED OR REMOVED SHALL BE MARKED AND APPROVED BY THE PROJECT ENGINEER PRIOR TO THE WORK BEING PERFORMED.

ON THE FREEWAY SIDE OF THE NOISE WALL, THE CONTRACTOR SHALL PERFORM CLEARING AND GRUBBING IN THE AREA BETWEEN THE FACE OF THE NOISE WALL AND THE EDGE OF SHOULDER OF SR-161. THIS WORK AREA SHALL BE USED BY THE CONTRACTOR'S EQUIPMENT TO PERFORM WORK NECESSARY TO INSTALL THE NOISE WALL.

FOR CLARIFICATION, TREES SHALL BE INTERPRETED AS ANY GROWTH WITH A TRUNK DIAMETER OF AT LEAST THREE (3) INCHES.

IN THE AREA BETWEEN THE BACK OF THE NOISE WALL AND EXISTING FENCE, WHERE THE FENCE IS TO BE REMOVED, AND THE ADJOINING PROPERTY IS RESIDENTIAL, THE AREA SHALL BE RESTORED TO A STATE COMPARABLE TO THE ADJOINING PROPERTY.

AS-BUILT DRAWINGS
PROVIDE AS-BUILT DRAWINGS FOR UNDERDRAIN OUTLETS AND VEGETATED FILTER STRIPS THAT INCLUDE S.R. 161 STATION AND OFFSET AND LATITUDE AND LONGITUDE.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 203, 611, 659, AND 670 ITEMS.

DESIGN AGENCY	ARCADIS
DESIGNER	JMK
REVIEWER	JDH
PROJECT ID	117607
SHEET	P.9
TOTAL	P.297

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 601, TIED CONCRETE BLOCK MAT, TYPE 1	10 SQ. YD.
ITEM 605, AGGREGATE DRAINS	50 FT.
ITEM 611, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	25 FT.
ITEM 611, PRECAST REINFORCED CONCRETE OUTLET	5 EACH
ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS	50 FT.

SPECIFIC SERVICE AND TOURIST-ORIENTED DIRECTIONAL SIGNS REMOVAL AND RELOCATION

PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT KEVIN MCDERMOTT AT OHIO LOGOS, INC. AT (800) 860-5646 TO COORDINATE THE REMOVAL AND RELOCATION OF THE SPECIFIC SERVICE SIGNS (LOGO) AND TOURIST-ORIENTED DIRECTIONAL SIGNS (TODS) LOCATED NEAR STA. 2238+00, AS SHOWN ON PLAN SHEET P.48 . OHIO LOGOS, INC. WILL RELOCATE THE SIGN UPON COMPLETION OF CONSTRUCTION.

ITEM 203 - ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL
 TEMPORARY OVER-STEEPENED FILL WILL BE NEEDED TO CONSTRUCT PROPOSED BENCHING IN CERTAIN AREAS, AS SHOWN ON THE CROSS SECTIONS. TEMPORARY OVER-STEEPENED FILL SHALL BE CONSTRUCTED AS SET FORTH IN THE GEOTECHNICAL DESIGN MANUAL AND SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 203, ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL.

ITEM 606 - IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE TYPE 2 IMPACT ATTENUATORS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE (REFER TO THE POSTED SHOP DRAWINGS FOR THE MOST CURRENT APPROVED PRODUCT MODELS). WHEN BI-DIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL), EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS/BACKSTOPS, TRANSITIONS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

ITEM 630 - OVERHEAD SIGN SUPPORT, INSTALLATION ONLY, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE INSTALLATION OF A SIGN SUPPORT, S-4, ON A NEW FOUNDATION. THE CONTRACTOR SHALL PICK UP FROM ODOT'S MAINTENANCE FACILITY AT 4730 E. DUBLIN GRANVILLE ROAD WESTERVILLE OHIO 43081 THE PROPOSED OVERHEAD SIGN SUPPORT TO BE INSTALLED AT THE LOCATION SHOWN IN THE PLANS. THE SIGN SUPPORT (TYPE TC-12.31, DESIGN 10) SHALL BE INSTALLED ON A NEW SIGN SUPPORT FOUNDATION. THE SIZE OF THE PROPOSED BOLT CIRCLE ON THE SIGN SUPPORT SHALL BE VERIFIED FOR COMPATABILITY PRIOR TO INSTALLATION ON THE SIGN FOUNDATION. THIS ITEM ALSO INCLUDES PICK UP AND INSTALLATION OF THE OVERHEAD SIGN ONTO THE SUPPORT.

PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR ITEM 630, OVERHEAD SIGN SUPPORT, INSTALLATION ONLY, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO INSTALL THE ITEM.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016), EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 633 - CONTROLLER WORK PAD, AS PER PLAN

IF NECESSARY, THE CONTRACTOR SHALL REPAIR THE CONCRETE WORK PAD LOCATED AT SR-161 STA. 2219+37.32, OFFSET 90.38' LT / NOISE WALL 9 STA. 900+76.32, OFFSET 12.62' RT (SHEET P.44) IF DAMAGED DURING THE INSTALLATION OF THE NOISE WALL AND DRILLED SHAFTS. IF NECESSARY, THE CONTRACTOR SHALL GRADE THE SURROUNDING AREA SLIGHTLY IN ORDER TO INSTALL A LEVEL WORK PAD AND RESTORE SITE CONDITIONS AS APPROVED BY THE PROJECT ENGINEER. PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR ITEM 633, CONTROLLER WORK PAD, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT THE ITEM.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY: ITEM 633, CONTROLLER WORK PAD, AS PER PLAN 1 EACH

ITEM 690 - SPECIAL - UTILITY TEST HOLE (COLUMBIA GAS)

THE CONTRACTOR SHALL BE REQUIRED TO CONFIRM (SUE LEVEL QUALITY A) THE FOLLOWING EXISTING UTILITY LOCATIONS:

1. WALL 8 AT APPROXIMATE STA. 817+88 (SEE SHEET P.43)
2. WALL 15 AT APPROXIMATE STA. 1501+78 (SEE SHEET P.58)

THE FOLLOWING PROVISIONS MUST BE FOLLOWED:

1. THE SUE COMPANY UTILIZED BY THE CONTRACTOR SHALL BE REQUIRED TO BE PRE-QUALIFIED WITH THE ODOT.
2. THE SUE LOCATES SHALL BE PERFORMED PRIOR TO ORDERING WALL PANELS BETWEEN DRILLED SHAFT 75 TO 79 (WALL 8) AND DRILLED SHAFT 8 TO 13 (WALL 15).
3. THE SUE LOCATE CONFIRMATION DATA SHALL BE PROVIDED TO ODOT 21 DAYS PRIOR TO ORDERING MATERIALS AND COMMENCING WORK.
4. ALL REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY AND THE OHIO UTILITY PROTECTION SERVICES MUST BE FOLLOWED DURING THE LOCATION PROCESS.
5. REFER TO THE PROJECT UTILITY NOTE FOR PRELIMINARY LOCATE INFORMATION AT THESE LOCATIONS.

ALL LABOR, MATERIAL, AND INCIDENTALS FOR THE ABOVE WORK SHALL BE PAID FOR EACH LOCATE BY ITEM 690 SPECIAL, UTILITY TEST HOLE (COLUMBIA GAS). A TOTAL OF 2 LOCATES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIPS FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 - SODDING OR ITEM 659 - SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670 - SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS. UNLESS DISTURBED DURING CONSTRUCTION, AREAS OUTSIDE OF THE CONSTRUCTION LIMITS DO NOT REQUIRE PLACEMENT OF ITEM 660 OR 659/670. TREATMENT WILL BE CLAIMED USING THE ESTABLISHED EXISTING VEGETATION.

FOR THE CITY OF COLUMBUS DIVISION OF POWER

THE DIVISION OF POWER (DOP) MAY HAVE UNDERGROUND OR OVERHEAD PRIMARY POWER, SECONDARY POWER, CONDUIT SYSTEMS AND STREET LIGHTING AT THIS WORK LOCATION. THE CONTRACTOR IS HEREBY REQUIRED TO CONTACT OUPS AT 811 OR 1-800-362-2764 FORTY EIGHT HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE CONSTRUCTION AREA.

ANY REQUIRED RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S ELECTRICAL FACILITIES IN THE CONSTRUCTION AREA IS TO BE PERFORMED BY THE CONTRACTOR UNDER THE DIRECTION OF DOP PERSONNEL AND AT THE EXPENSE OF THE PROJECT. DOP SHALL MAKE ALL FINAL CONNECTIONS TO DOP'S EXISTING ELECTRICAL SYSTEM AT THE EXPENSE OF THE PROJECT. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMSC). ANY NEW OR RE-INSTALLED UNDERGROUND STREETLIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1001.18 OF THE CMSC MANUAL. THE CONTRACTOR SHALL CONFORM TO DOP'S EXISTING STREET LIGHTING LOCKOUT/TAGOUT (LOTO) PROCEDURE, MIS-01, COPIES OF WHICH ARE AVAILABLE AT: <https://www.columbus.gov/WorkArea/DownloadAsset.aspx?id=2147503200>

IF ANY ELECTRIC FACILITY BELONGING TO DOP IS DAMAGED IN ANY MANNER BY THE CONTRACTOR, ITS AGENTS, SERVANTS, OR EMPLOYEES, AND REQUIRES EMERGENCY REPAIRS, THE DOP DISPATCH OFFICE SHOULD BE CONTACTED IMMEDIATELY AT (614) 645-7627. DOP SHALL MAKE ALL NECESSARY REPAIRS, AND THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHALL BE PAID BY THE CONTRACTOR TO THE DIVISION OF POWER, CITY OF COLUMBUS, OHIO.

ITEM 690 SPECIAL, UTILITY TEST HOLE (CITY OF COLUMBUS DIVISION OF WATER)

THE CONTRACTOR SHALL BE REQUIRED TO CONFIRM (SUE LEVEL QUALITY A) THE FOLLOWING EXISTING UTILITY LOCATION:

1. WALL 15 AT APPROXIMATE STA. 1502+12 (SEE SHEET P.58).

THE FOLLOWING PROVISIONS MUST BE FOLLOWED:

1. THE SUE COMPANY UTILIZED BY THE CONTRACTOR SHALL BE REQUIRED TO BE PRE-QUALIFIED WITH THE ODOT.
2. THE SUE LOCATES SHALL BE PERFORMED PRIOR TO ORDERING WALL PANELS BETWEEN DRILLED SHAFT 8 TO 13 (WALL 15).
3. THE SUE LOCATE CONFIRMATION DATA SHALL BE PROVIDED TO ODOT 21 DAYS PRIOR TO ORDERING MATERIALS AND COMMENCING WORK.
4. ALL REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY AND THE OHIO UTILITY PROTECTION SERVICES MUST BE FOLLOWED DURING THE LOCATION PROCESS.
5. REFER TO THE PROJECT UTILITY NOTE FOR PRELIMINARY LOCATE INFORMATION AT THIS LOCATION.

ALL LABOR, MATERIAL, AND INCIDENTALS TO COMPLETE THE ABOVE WORK SHALL BE PAID FOR EACH LOCATE BY ITEM 690 SPECIAL, UTILITY TEST HOLE (CITY OF COLUMBUS DIVISION OF WATER). A TOTAL OF 1 LOCATE HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG70-22M

LOCATE LOGITUDINAL JOINTS IN THE SURFACE COURSE SUBJECT TO THE FOLLOWING REQUIREMENTS:

FOR PAVEMENT SECTIONS WITH 2 LANES IN A SINGLE DIRECTION, PLACE A SINGLE COLD LOGITUDINAL JOINT BETWEEN THE 2 LANES.

FOR PAVEMENT SECTIONS WITH 3 OR 4 LANES IN A SINGLE DIRECTION, (PG 70-22M ONLY) PLACE A SINGLE COLD LOGITUDINAL JOINT BETWEEN THE SECOND AND THIRD LANE FROM THE MEDIAN.

FOR PAVEMENT SECTIONS WITH 5 OR 6 LANES IN A SINGLE DIRECTION, (PG 70-22M ONLY) PLACE 2 COLD LOGITUDINAL JOINTS. THE FIRST WILL BE PLACED BETWEEN THE SECOND AND THIRD LANE FROM THE MEDIAN. THE SECOND WILL BE PLACED BETWEEN THE FOURTH AND FIFTH LANE FROM THE MEDIAN.

WHEN LANES BECOME IN CONTACT WITH THE STRIPED GORE, THEY ARE CONSIDERED TO BE ON THE RAMP AND COUNTED SEPARATELY FROM THE MAINLINE.

A COLD LOGITUDINAL JOINT IS PERMITTED BETWEEN THE MAINLINE AND SHOULDER FOR THIS PROJECT. THIS INCLUDES ONE JOINT ALONG ONE OF THE TWO LINES THAT MAKE UP THE STRIPED GORE. ITEM 872 VRAM QUANTITIES DO NOT INCLUDE THE STRIPED GORE LOCATIONS AND IS NOT TO BE PLACED THERE.

CITY OF COLUMBUS DIVISION OF WATER GENERAL NOTES

THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2018 EDITION AND ALL REVISIONS, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN, UNLESS OTHERWISE NOTED.

ALL WATER MAIN MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER. ALL CITY OF COLUMBUS, DIVISION OF WATER STANDARD DRAWINGS SHALL APPLY TO THE PROJECT, UNLESS OTHERWISE NOTED.

FOR ANY EMERGENCIES INVOLVING THE WATER DISTRIBUTION SYSTEM, PLEASE CONTACT THE DIVISION OF WATER DISTRIBUTION MAINTENANCE OFFICE AT 614-645-7788.

ALL BRASS FITTINGS ASSOCIATED WITH WATER WORK, INCLUDING REPAIRS TO THE EXISTING SYSTEM, SHALL CONFORM TO THE REVISED ALLOWABLE LEAD EXTRACTION LIMIT PER THE UPDATED NSF/ANSI 61 STANDARD. THE DIVISION OF WATER'S APPROVED MATERIALS LIST HAS BEEN UPDATED TO REFLECT THIS REQUIREMENT.

IT SHALL BE UNLAWFUL FOR ANY PERSON TO PERFORM ANY WORK ON CITY OF COLUMBUS WATER MAIN SYSTEMS WITHOUT FIRST SECURING LICENSE TO ENGAGE IN SUCH WORK, AS INDICATED IN COLUMBUS CITY CODE SECTION 1103.02 AND 1103.06. THIS WORK INCLUDES ANY ATTACHMENTS, ADDITIONS TO OR ALTERATIONS IN ANY CITY SERVICE PIPE OR APPURTENANCES (INCLUDING WATER SERVICE LINES AND TAPS). THIS REQUIREMENT MAY BE MET BY UTILIZATION OF A SUBCONTRACTOR WHO HOLDS A CITY OF COLUMBUS WATER CONTRACTOR LICENSE OR A COMBINED WATER/SEWER CONTRACTOR LICENSE TO PERFORM THIS WORK. UTILIZATION OF A SUBCONTRACTOR MUST MEET THE LICENSING REQUIREMENTS OF CITY OF COLUMBUS BUILDING CODE, IN PARTICULAR SECTION 4114.119 AND 4114.529.

NO PERSON SHALL BEGIN CONSTRUCTION OR INSTALLATION OF A PUBLIC WATER MAIN UNTIL PLANS HAVE BEEN APPROVED BY THE STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA).

THE CONTRACTOR SHALL OBTAIN THE PROPER HYDRANT PERMIT(S), AND PAY ANY APPLICABLE FEES, FOR ANY APPROVED HYDRANT USAGE DEEMED NECESSARY FOR WORK UNDER THIS IMPROVEMENT. PERMITS MAY BE OBTAINED THROUGH THE DIVISION OF WATER PERMIT OFFICE (645-7330). THE CONTRACTOR SHALL ADHERE TO ALL RULES & REGULATIONS GOVERNING SAID PERMIT AND MUST HAVE THE ORIGINAL PERMIT ON SITE ANYTIME IN WHICH THE HYDRANT IS IN USE. PERMITS MAY BE OBTAINED BY ACCESSING [HTTP://PORTAL.COLUMBUS.GOV/PERMITS/](http://portal.columbus.gov/permits/). COST TO BE INCLUDED IN THE VARIOUS BID ITEMS.

WHERE NEW CONDUIT IS PROPOSED TO CROSS AN EXISTING OR PROPOSED WATER MAIN OR WATER TAP/SERVICE LINE, A MINIMUM OF 12-INCHES OF VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE CONDUIT AND THE WATER MAIN OR TAP/SERVICE LINE. A MINIMUM OF 3-FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) IS REQUIRED AT LOCATIONS WHERE THE CONDUIT IS PARALLEL TO THE WATER MAIN AND AT LOCATIONS OF WATER MAIN THRUST BLOCKS.

A MINIMUM OF 3 FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) SHALL BE MAINTAINED BETWEEN ALL EXISTING WATER MAINS AND FOUNDATIONS FOR POLES, PULL BOXES, PUSH BUTTON PEDESTALS, AND ANY OTHER MISCELLANEOUS ELECTRICAL STRUCTURE.

CITY OF COLUMBUS DEPARTMENT OF TECHNOLOGY FIBER WORK
 IF THE PROJECT INCLUDES ANY FIBER OPTIC CABLE INSTALLATION - OR MAINTENANCE - THE FIBER WORK MUST ADHERE TO THE DEPARTMENT OF TECHNOLOGY FIBER SPECIFICATIONS DOCUMENT. (LATEST EDITION)

ITEM 607 - FENCE, MISC.: WHITE SPLIT RAIL FENCE

THE CONTRACTOR SHALL BE REQUIRED TO INSTALL PROPOSED FENCE THAT MATCHES THE EXISTING SPLIT RAIL FENCE STYLE, MATERIAL, AND COLOR THAT CURRENTLY EXISTS ON THE PROJECT SITE.

7-08-2024 - ADDED GENERAL NOTE

9-05-2024 - UPDATED ASPHALT DENSITY ACCEPTANCE

DESIGN AGENCY



DESIGNER

JMK

REVIEWER

JDH 05-22-24

PROJECT ID

117607

SHEET TOTAL

P.10 P.297

MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION

CONSTRUCT FOUNDATIONS, GRADING, PAVEMENT WIDENING, AND 81 INCH BARRIER 3 USING SHOULDER CLOSURES WITH PORTABLE BARRIER PER MT-95.45. RIGHT LANE WIDTH MAY BE REDUCED TO 11 FT MINIMUM.

CONSTRUCT 81 INCH BARRIERS 6, 8, 10, AND 12 USING SINGLE LANE CLOSURES WITH PORTABLE BARRIER PER MT-95.40. LANE AND RAMP CLOSURES SHALL BE LIMITED TO HOURS LISTED IN THE LANE VALUE CONTRACT TABLE.

CONSTRUCT NOISE WALLS USING SHOULDER CLOSURES WITH DRUMS. ALL LANES ALONG SR-161 EASTBOUND AND WESTBOUND WILL BE MAINTAINED.

ITEM 614, MAINTAINING TRAFFIC

ALL EXISTING LANES ON SR-161 SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR SHORT TERM SINGLE LANE CLOSURES DURING ALLOWABLE PERIODS PER THE LANE VALUE CONTRACT TABLE. A MINIMUM OF ONE LANE OF TRAFFIC SHALL BE MAINTAINED ON RAMPS AT ALL TIMES EXCEPT THE NEW ALBANY RD TO SR-161 WB RAMP MAY BE CLOSED DURING ALLOWABLE PERIODS PER THE LANE VALUE CONTRACT TABLE.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

NEW YEAR'S (OBSERVED) GENERAL/REGULAR ELECTION DAY (NOV)
 MEMORIAL DAY THANKSGIVING
 FOURTH OF JULY (OBSERVED) CHRISTMAS (OBSERVED)
 LABOR DAY

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00 N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00 N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00 N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY (GEN./REG. ELECTION)	5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY	12:00 N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00 N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00 N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00 N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

1 THE CONTRACTOR MAY CLOSE AN ALLOWABLE LANE FOR A MAXIMUM OF 2 MILES FOR A DURATION DURING NORMAL WORKING HOURS UNLESS APPROVED BY THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP & ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

1 9-05-2024 - UPDATED ITEM 614, MAINTAINING TRAFFIC NOTE

COORDINATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COORDINATE WORK WITH ODOT AND THE CONTRACTORS ON THE ADJACENT PROJECTS. COORDINATION SHALL BE MADE TO PREVENT CONFLICTING ADVANCE WARNING SIGNS, CONFLICTING DETOUR ROUTES, OVERLAPPING/CONFLICTING LANE CLOSURES, AND TO ENSURE THAT A MINIMUM DISTANCE OF 2 MILES BETWEEN ADJACENT LANE CLOSURES IS MAINTAINED. THIS IS NOT AN EXHAUSTIVE LIST OF COORDINATION ITEMS THAT MAY NEED TO BE RESOLVED BETWEEN PROJECTS. THE DEPARTMENT RESERVES THE RIGHT TO DECIDE WHICH PROJECT'S ACTIVITIES TAKE PRECEDENCE. PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WILL CONSIDER THIS AN EXCUSABLE, NON-COMPENSABLE DELAY PER 108.06.B. ON PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WHERE THE CONTRACTOR FAILED TO MEET THE NOTIFICATION REQUIREMENTS, THE DELAYS SHALL NOT BE CONSIDERED EXCUSABLE OR COMPENSABLE.

ATTENDANCE AT DEPARTMENT ORDERED TRAFFIC COORDINATION MEETINGS BETWEEN ADJACENT PROJECTS SHALL BE CONSIDERED MANDATORY FOR EACH PROJECT'S SUPERINTENDENT, AND INCIDENTAL TO THE LUMP SUM MAINTENANCE OF TRAFFIC PAYMENT ITEM.

THE FOLLOWING PROJECTS MAY HAVE CONFLICTS:
 FRA-161-15.80, PID 116322
 D05/D06-ITS EXPANSION-FY23, PID 117546

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 50 M. GAL.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

DELINEATION OF PORTABLE AND PERMANENT BARRIER AS PER PLAN

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL AND ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND CONCRETE PERMANENT BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, INCREASED BARRIER DELINEATION 5,735 FEET

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

LANE AND RAMP CLOSURE TABLES

1 NO ADJACENT RAMP CLOSURES SHALL OCCUR CONCURRENTLY.

LANE VALUE CONTRACT TABLE						
FRA-161						
SECTION (SLM)	EXISTING NUMBER OF LANES PER DIRECTION	LANE CLOSURES NOT PERMITTED				DISINCENTIVE PER MINUTE PER LANE
		LANE REDUCTION	MON TO FRI	SAT	SUN	
LITTLE TURTLE WAY (17.31) TO HAMILTON ROAD (18.60)	4	4 TO 3	6 AM - 9 AM 3 PM - 6 PM	NO RESTRICTION	NO RESTRICTION	\$180
		4 TO 2	5 AM - 9 AM 2 PM - 7 PM	9 AM - 6 PM	10 AM - 5 PM	
		4 TO 1	5 AM - 9 PM	6 AM - 7 PM	8 AM - 7 PM	
HAMILTON ROAD (18.60) TO KITZMILLER ROAD (22.40)	3	3 TO 2	6 AM - 9 AM 3 PM - 6 PM	NO RESTRICTION	NO RESTRICTION	\$250
		3 TO 1	5 AM - 7 PM	8 AM - 7 PM	8 AM - 7 PM	
SHORT TERM SHOULDER CLOSURES ARE NOT PERMITTED 6 AM - 9 PM & 3 PM - 6 PM MONDAY - FRIDAY						

RAMP CLOSURE RESTRICTIONS					
SR-161					
SECONDARY ROUTE: NEW ALBANY					
RAMP DESIGNATION	MOVEMENT	NO CLOSURES ALLOWED		PRIMARY DETOUR ROUTE	SECONDARY DETOUR ROUTE
		MON - FRI	SAT - SUN		
L	NEW ALBANY RD TO SR-161 WB	5 AM - 9 PM	8 AM - 8 PM	RAMP N TO SR-161 EB TO RAMP K TO JOHNSTOWN RD NB TO RAMP G TO SR-161 WB	NONE
P	SR-161 EB TO NEW ALBANY RD	5 AM - 9 PM	8 AM - 8 PM	SR-161 EB TO RAMP K TO JOHNSTOWN RD NB TO RAMP G TO SR-161 WB TO RAMP M TO NEW ALBANY RD	NONE

SHORT DURATION RAMP CLOSURES

FOR THE PURPOSE OF PERFORMING THE REQUIRED WORK, RAMPS MAY BE CLOSED FOR SHORT DURATIONS AND DETOURED IN ACCORDANCE WITH THE RAMP CLOSURE TABLE IF APPROVED BY THE ENGINEER. RAMP CLOSURES ARE SUBJECT TO DISINCENTIVES.

FOR ALL SERVICE RAMP CLOSURES LASTING MORE THAN 12 HOURS BUT LESS THAN 60 HOURS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING:

A MINIMUM OF TWO PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) PLACED, AS DIRECTED BY THE ENGINEER, TO WARN DRIVERS OF THE CLOSURE AND TO PROVIDE THE DESIGNATED DETOUR ROUTE. POSITIVE GUIDANCE ALONG THE DETOUR ROUTE WITH DETOUR SIGNS (M4-9 SERIES) IN ACCORDANCE WITH THE DETOUR SIGNS NOTE.

FOR ALL RAMP CLOSURES LASTING LESS THAN 12 HOURS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING:

A MINIMUM OF TWO PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) PLACED, AS DIRECTED BY THE ENGINEER, TO WARN DRIVERS OF THE CLOSURE AND TO PROVIDE THE DESIGNATED DETOUR ROUTE.

WHEN CLOSING ENTRANCE RAMPS, CORRESPONDING LEAD-IN LANES AND TURN LANES SHALL ALSO BE CLOSED.

IF A DESIGNATED DETOUR ROUTE IS NOT PROVIDED IN THE PLANS, TRAFFIC SHALL BE DIRECTED TO THE NEXT INTERCHANGE, IF AVAILABLE, TO TURN AROUND. IF THE USE OF THE NEXT INTERCHANGE IS NOT POSSIBLE, AN ALTERNATIVE DETOUR ROUTE SHALL BE PROVIDED BY THE ENGINEER.

DETOUR SIGNING

SIZE AND PLACEMENT OF DETOUR SIGNS (M4-9) SHOULD FOLLOW THE REQUIREMENTS OF THE OMTCD SECTION 6F.03, SECTION 2A.11 AND TABLE 6F-01.

DETOUR SIGNING SHALL PROVIDE DRIVERS ADEQUATE TIME TO CLEARLY READ THE SIGNS AND MAKE THE PROPER DECISIONS AT EACH REQUIRED TURNING MOVEMENT. THE DESIGNATED DETOUR ROUTE SHALL BE SIGNED IN ACCORDANCE WITH THE REQUIREMENTS BELOW:

- APPROXIMATELY 1500 FEET PRIOR TO TIP OF THE PAINTED GORE AT AN INTERCHANGE WHEN EXITING A HIGH SPEED (45 MPH OR HIGHER) FACILITY.
- AT OR NEAR THE EXISTING SIGN IN THE GORE OF AN INTERCHANGE RAMP.
- AT OR NEAR THE FIRST EXISTING LANE ASSIGNMENT SIGN ON AN INTERCHANGE EXIT RAMP.
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT THE END OF AN EXIT RAMP.
- APPROXIMATELY 500 FEET PRIOR TO A REQUIRED TURN AT AN INTERSECTION NOT CONTROLLED BY A STOP SIGN (FOR 45 MPH OR HIGHER ONLY).
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT AN INTERSECTION.
- EVERY TWO MILES ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS OUTSIDE A CITY.
- EVERY TWO BLOCKS ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS WITHIN A CITY.
- AT ANY OTHER INTERSECTION OR DECISION POINT WHERE THE DETOUR ROUTE IS CONTRARY TO THE NORMAL, EXPECTED TURNING MANEUVER OR OTHERWISE UNCLEAR.

DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD OR RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP RE-OPENING TO TRAFFIC.

PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.
 ITEM 614 - DETOUR SIGNING = LUMP SUM

FRA-161-15.80 NOISE ABATEMENT

MODEL: GG001 PAPER: SIZE: 34x42 (in.) DATE: 2024-09-05 TIME: 1:03:36 PM USER: danny.tran
 p:\arcadis-us-pw\entley.com\arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GG001.dgn

SHEET NUM.						PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
P.9	P.10	P.26	P.27	P.28	P.222	01/NHS/20									
LS									LS				ROADWAY		
			1,262						201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN	P.9	
			1						202	38000	1,262	FT	GUARDRAIL REMOVED		
			4,001						202	42040	1	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T		
			1,229	2,229					202	75000	4,001	FT	FENCE REMOVED		
									203	10000	3,458	CY	EXCAVATION		
				684					203	20000	684	CY	EMBANKMENT		
				67					203	98000	67	CY	ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL	P.10	
		362							606	15050	362	FT	GUARDRAIL, TYPE MGS		
		3							606	26150	3	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)		
		4							606	35002	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		
		1							606	35102	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2		
		1							606	60002	1	EACH	IMPACT ATTENUATOR, TYPE 1 (UNIDIRECTIONAL)		
			201						607	35000	201	FT	FENCE REMOVED AND REBUILT		
			80						607	98000	80	FT	FENCE, MISC.: WHITE SPLIT RAIL FENCE	P.10	
4,202									607	98000	4,202	FT	FENCE, MISC.: TEMPORARY FENCE	P.9	
		3,743							622	90000	3,743	FT	BARRIER, MISC.: 81" SINGLE SLOPE BARRIER	P.224	
									29	90200	29	EACH	BARRIER, MISC.: 81" SINGLE SLOPE BARRIER END ANCHORAGE, REINFORCED	P.224	
									622	90200	6	EACH	BARRIER, MISC.: BARRIER DRAINAGE WINDOW SECTION	P.230	
									622	90200	6	EACH	BARRIER, MISC.: 81" CONCRETE BARRIER END SECTION	P.223	
									LS	878	25000	LS	INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS		
													EROSION CONTROL		
1									1	659	00100	1	EACH	SOIL ANALYSIS TEST	
887			1,012						659	00300	1,899	CY	TOPSOIL		
			955						659	00590	955	SY	SEEDING AND MULCHING, CLASS 6		
7,985									659	10000	7,985	SY	SEEDING AND MULCHING		
400									659	14000	400	SY	REPAIR SEEDING AND MULCHING		
									659	15000	400	SY	INTER-SEEDING		
400									659	20000	1.08	TON	COMMERCIAL FERTILIZER		
1.08									659	31000	1.65	ACRE	LIME		
1.65									659	35000	45	MGAL	WATER		
45			9,090						670	00500	9,090	SY	SLOPE EROSION PROTECTION		
									LS	832	15000	LS	STORM WATER POLLUTION PREVENTION PLAN		
									LS	832	15002	LS	STORM WATER POLLUTION PREVENTION INSPECTIONS		
									LS	832	15010	LS	STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		
									832	30000	142,257	EACH	EROSION CONTROL		
													DRAINAGE		
	10		237						601	21050	247	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		
		2.43							602	20000	2.43	CY	CONCRETE MASONRY		
	50		9,333						605	13300	9,383	FT	6" UNCLASSIFIED PIPE UNDERDRAINS		
	50								605	31100	50	FT	AGGREGATE DRAINS		
	25		532						611	00510	557	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS		
		339							611	06100	339	FT	15" CONDUIT, TYPE C		
		83							611	06700	83	FT	15" CONDUIT, TYPE F		
		11							611	99500	11	EACH	INLET, MISC.: INLET NO. 3 FOR 81" SINGLE SLOPE BARRIER	P.226	
	5		26						611	99710	31	EACH	PRECAST REINFORCED CONCRETE OUTLET		
													PAVEMENT		
		4,822							254	01000	4,822	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3"		
		998							304	20000	998	CY	AGGREGATE BASE		
		219							407	10000	219	GAL	TACK COAT		
		760							407	20000	760	GAL	NON-TRACKING TACK COAT		
		189							442	22101	189	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG70-22M	P.10	
		189							442	22300	189	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449)		
		583							452	12010	583	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P		
		2,367							452	13010	2,367	SY	9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P		
		108							609	24000	108	FT	CURB, TYPE 4-A		
		4,401							872	10000	4,401	FT	VOID REDUCING ASPHALT MEMBRANE (VRAM)		
													NOISE BARRIERS		
									519	11101	4	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	P.222	
									SPECIAL	60610210	115,010	SF	NOISE BARRIER (REFLECTIVE)	P.9	

① 8-12-2024 - ADDED TEMPORARY FENCE ITEM
 ② 9-05-2024 - UPDATED QUANTITY OF 15" TYPE C PIPE, CONCRETE MASONRY, 8" CONCRETE PAVEMENT, AND 9" CONCRETE PAVEMENT. UPDATED ASPHALT DENSITY ACCEPTANCE

GENERAL SUMMARY

DESIGN AGENCY
ARCADIS
 8101 NORTH HIGH ST SUITE 100
 COLUMBUS, OHIO 43235
 (614) 884-6000
 www.arcadis.com

DESIGNER
JMK

REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET TOTAL
P.24 P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: GS001 PAPER SIZE: 34x22 (in.) DATE: 2024-09-04 TIME: 5:47:24 PM USER: dammy.iran
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SHEET NO.	REF. NO.	STATION		SIDE	606	606	606	606	606	622	622	622	622	602	611	611	611	254	304	407	407	442	442	452	452	609	872	606	
		FROM	TO		GUARDRAIL, TYPE MGS	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	IMPACT ATTENUATOR, TYPE 1 (UNIDIRECTIONAL)	BARRIER, MISC.: 81" SINGLE SLOPE BARRIER	BARRIER, MISC.: 81" SINGLE SLOPE BARRIER END ANCHORAGE, REINFORCED	BARRIER, MISC.: BARRIER DRAINAGE WINDOW SECTION	BARRIER, MISC.: 81" CONCRETE BARRIER END SECTION	CONCRETE MASONRY	15" CONDUIT, TYPE C	15" CONDUIT, TYPE F	INLET, MISC.: INLET NO. 3 FOR 81" SINGLE SLOPE BARRIER	PAVEMENT PLANING, ASPHALT CONCRETE, 3"	AGGREGATE BASE (10")	TACK COAT (APPLIED AT A RATE 0.055 GAL/SY)	NON-TRACKING TACK COAT (APPLIED AT A RATE 0.085 GAL/SY)	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449) AS PER PLAN, PG70-22M (1.5")	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449) (1.5")	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	CURB, TYPE 4-A	VOID REDUCING ASPHALT MEMBRANE (VRAM)	SPECIAL - NOISE BARRIER (REFLECTIVE)	
WALL 3 / BARRIER 3																													
P.33 - P.34	NW-3	300+00.00	305+76.00	LT																									8064
P.34 - P.35	B-3	3000+00.00	3006+99.96	LT	100	1	1	1		552	5	1	1	0.27	15				120	22	156	32	32	394	477	27	700		
WALL 6 / BARRIER 6																													
P.36 - P.37	B-6	5999+90.38	6008+25.00	LT	50	1	1			654	5		2	0.81	160	1		1326	145	26	189	39	39			27	835		
P.37 - P.38	NW-6	600+00.00	605+28.00	LT																								7392	
WALL 8 / BARRIER 8																													
P.39 - P.40	B-8	8000+00.00	8007+00.00	RT	187		1			552	5	1	1	0.54	60			1117	120	61	68	30	30			394	27	700	
P.40 - P.43	NW-8	800+00.00	818+08.00	RT																								25312	
WALL 9																													
P.44 - P.46	NW-9	900+16.00	912+70.00	LT										1															17556
BARRIER 10																													
P.47 - P.50	B-10	1000+00.00	1012+70.07	LT						1	1332	11	4	1	0.54	104	45	3	1962	227	41	270	57	57		743	1270		
		1012+70.07	1014+15.44	LT																								145	
		1014+15.44	1016+49.64	LT																									
WALL 11																													
P.51 - P.54	NW-11	1100+00.00	1115+60.00	RT																								21840	
WALL 12 / BARRIER 12																													
P.55 - P.56	B-12	1200+00.00	1202+97.05	RT	25	1	1			653	3		1	0.27		38	1		129	25	38	14	14			449	27	297	
		1202+97.05	1205+23.39	RT															417	53	32	21	12	12			173	226	
		1205+23.39	1207+51.00	RT																39	7	11	3	3			131	228	
P.56 - P.57	NW-12	120+00.00	124+97.00	RT																								6958	
WALL 15																													
P.58 - P.62	NW-15	1500+00.00	1502+40.00	RT																								3360	
		1504+27.00	1518+43.00	RT											1													19824	
		1518+90.00	1522+26.00	RT																								4704	
TOTALS					362	3	4	1	1	3,743	29	6	6	2.43	339	83	11	4,822	998	219	760	189	189	583	2,367	108	4,401	115,010	

SHEET NO.	REF. NO.	STATION		SIDE	630	630	630	630	630	630	630	630	630	630	807	
		FROM	TO		GROUND MOUNTED SUPPORT, NO. 3 POST	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W8X18	OVERHEAD SIGN SUPPORT, INSTALLATION ONLY, AS PER PLAN	CONCRETE MEDIAN BARRIER SIGN BRACKET	SIGN BACKING ASSEMBLY	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"
P.36	LL-1	2126+70	2150+50	LT											0.45	
P.37	S-1	2188+00		LT	3.7				1					1		
P.37	S-2	6008+00		LT		20.0	19.9		1	1	2			2		
P.47	S-3	2232+50		LT	3				1					1		
P.56	S-4	1207+00		RT					1					1		
TOTALS					6.7	39.9	1	2	1	2	1	3	1	2	2	0.45

1 9-05-2024 - UPDATED QUANTITY OF 15" TYPE C PIPE, CONCRETE MASONRY, 8" CONCRETE PAVEMENT, AND 9" CONCRETE PAVEMENT. UPDATED ASPHALT DENSITY ACCEPTANCE

SHEET NO.	REF. NO.	STATION		SIDE	614	614	614	614	614	614	622	
		FROM	TO		WORK ZONE EDGE LINE, CLASS 1, 6", 740.06, TYPE I	WORK ZONE DOTTED LINE, CLASS 1, 6", 740.06, TYPE I	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	OBJECT MARKER (ONE-WAY)	PORTABLE BARRIER, UNANCHORED		
WALL 3 / BARRIER 3												
P.15	PB-1	2135+33	2143+97	LT					1	18	18	870
P.15	WE-1	2126+70	2150+50	LT	0.45							
P.15	WD-1	2142+70	2150+50	LT		780						
WALL 6 / BARRIER 6												
P.16	PB-2	2187+50	2198+46	LT					1	22	22	3300
WALL 8 / BARRIER 8												
P.16	PB-3	2191+84	2200+50	RT					1	18	18	2610
BARRIER 10												
P.17	PB-4	2229+85	2247+50	LT					1	38	38	4670
P.17	WE-2	2236+68	2246+05	LT	0.18							
WALL 12 / BARRIER 12												
P.17	PB-5	2230+34	2241+78	RT					1	23	23	2250
TOTALS					0.63	780	5	119	119	119	119	13,700

SUBSUMMARY

DESIGN AGENCY
ARCADIS
 8101 NORTH HIGH ST SUITE 100
 COLUMBUS, OHIO 43235
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DESIGNER
JMK

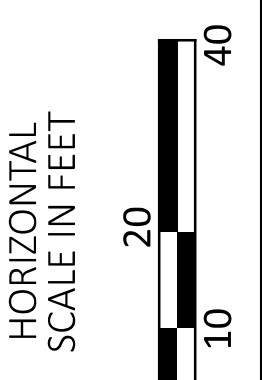
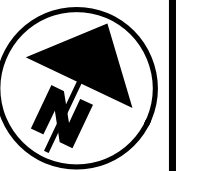
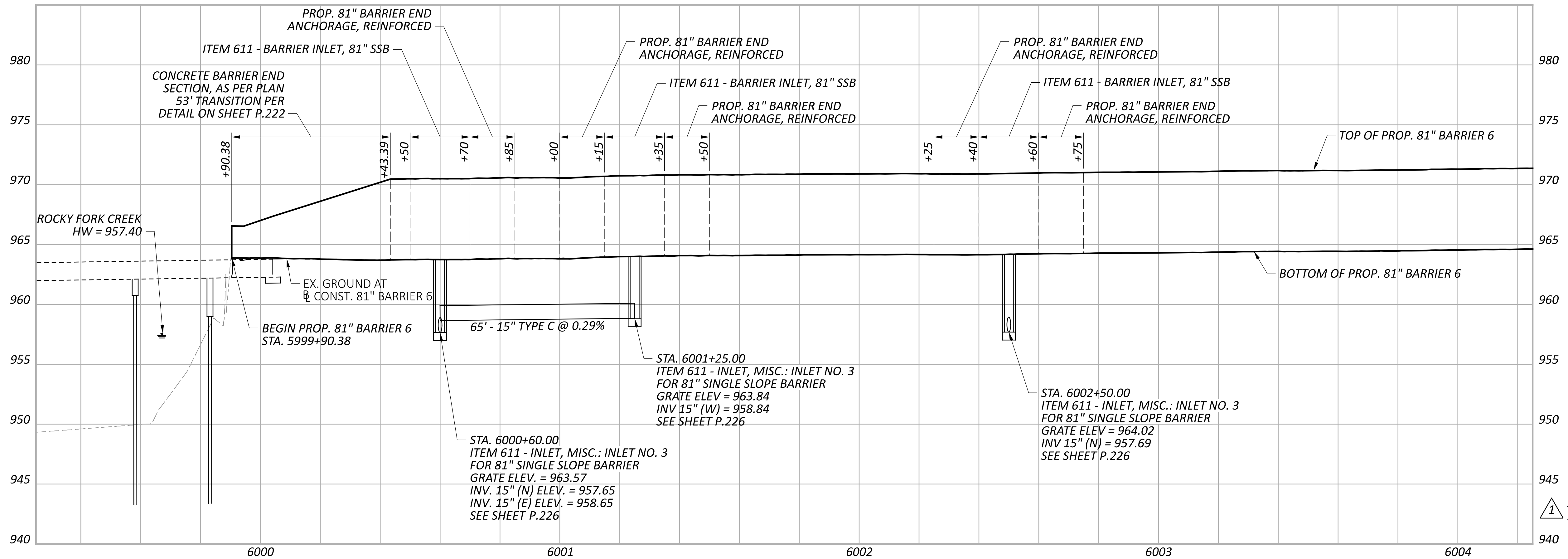
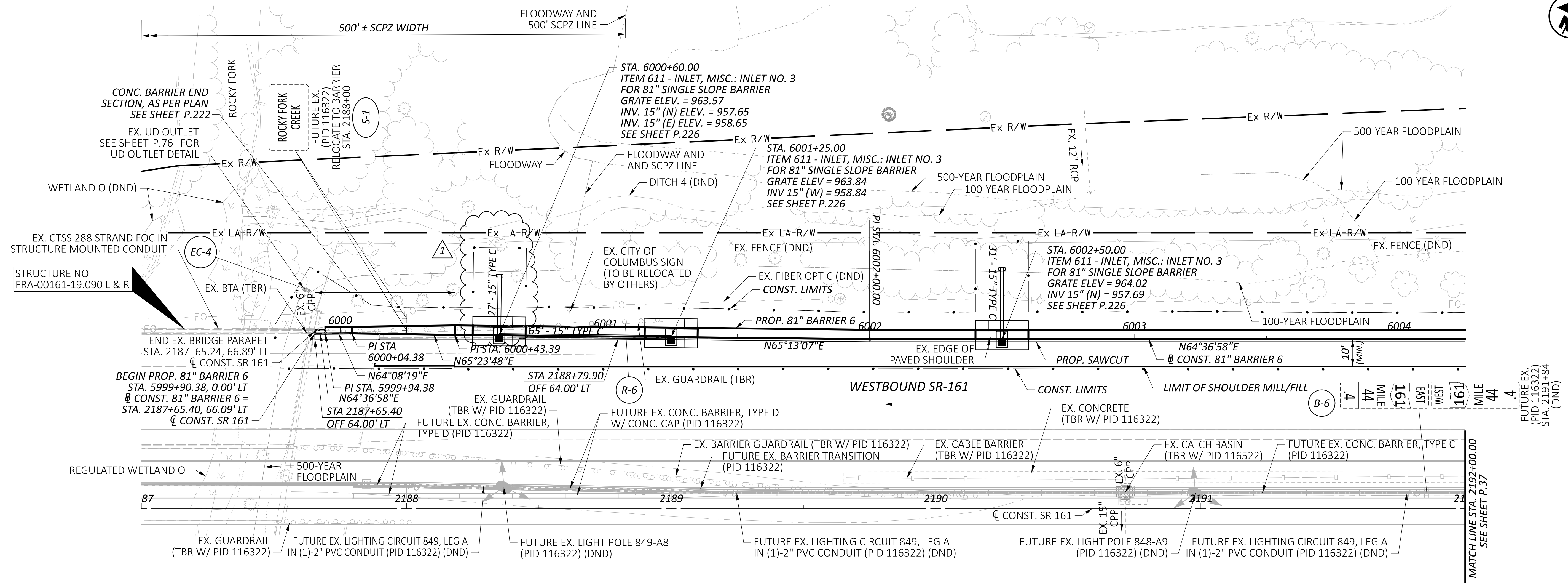
REVIEWER
 JDH 05-22-24

PROJECT ID
117607

SHEET TOTAL
 P.26 | P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 6 - Plan 5 PAPER SIZE: 34x22 (in.) DATE: 2024-09-04 TIME: 1:36:40 PM USER: danny.tran
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PLAN & PROFILE - 81" BARRIER 6
 STA. 2187+00.00 TO STA. 2192+00.00

DESIGN AGENCY	ARCADIS
DESIGNER	JMK
REVIEWER	JDH
PROJECT ID	117607
SHEET	P.36
TOTAL	P.297

9-05-24 - UPDATED PIPE LENGTH TO 27 FEET