

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

# MED - 252 - 03.95

## LIVERPOOL TOWNSHIP MEDINA COUNTY

**PROJECT DESCRIPTION**

THIS PROJECT WORK INVOLVES THE REPLACEMENT OF BRIDGE MED-252-03.95 OVER THE WEST BRANCH OF THE ROCKY RIVER. BRIDGE IS LOCATED APPROXIMATELY 450 FEET NORTH OF WEST LAW ROAD (TR 112) IN LIVERPOOL TOWNSHIP OF MEDINA COUNTY. THIS PROJECT INCLUDES PAVEMENT AND GUARDRAIL REPLACEMENT, WHILE KEEPING AN EXISTING SEWER LINE IN OPERATION.

PROJECT EARTH DISTURBED AREA: 0.78 ACRES  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES  
NOTICE OF INTENT EARTH DISTURBED AREA: N/A  
(NOT NOT REQUIRED)

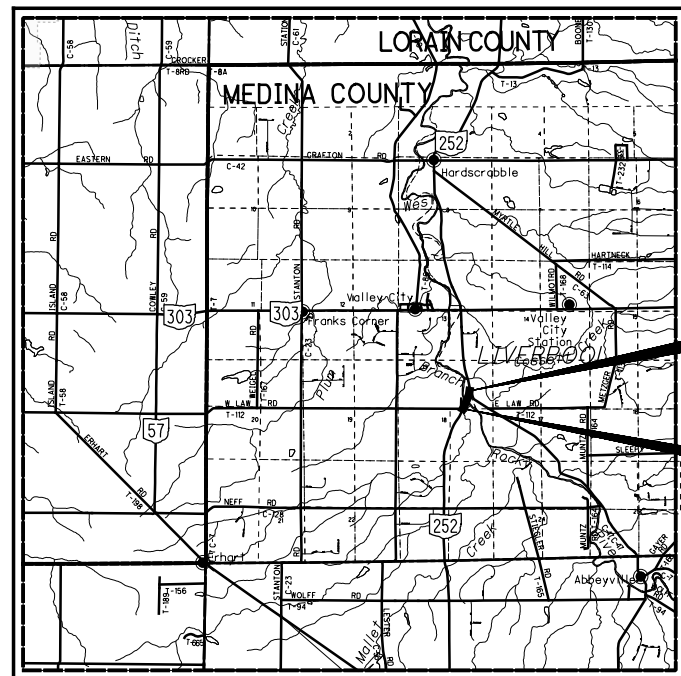
**2019 SPECIFICATIONS**

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET 9.

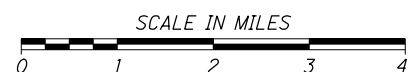
APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_ DISTRICT DEPUTY DIRECTOR

APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_ DIRECTOR, DEPARTMENT OF TRANSPORTATION



LOCATION MAP

LATITUDE: N41°13'26" LONGITUDE: W81°55'18"



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

**DESIGN DESIGNATION**

CURRENT ADT (2019)	4400
DESIGN YEAR ADT (2043)	4600
DESIGN HOURLY VOLUME (2043)	460
DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B&C)	12%
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
05 MAJOR COLLECTOR (RURAL)	
NHS PROJECT	NO

**DESIGN EXCEPTIONS**

NONE

**INDEX OF SHEETS:**

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1 REVISED 10/06/2022

UNDERGROUND UTILITIES

Contact Two Working Days Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764 (Non-members must be called directly)

PLAN PREPARED BY:  
OSBORN ENGINEERING  
1201 EAST MARKET ST., SUITE 200  
AKRON, OHIO 44305

ENGINEERS SEAL:



SIGNED: *Shelley M. Kiwala*  
DATE: 6/10/22

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1/21/22	HL-50.21	1/15/21	AS-1-15	7/17/15	800-2019	7/15/22	WATERWAY PERMIT	
BP-5.1	1/21/22			AS-2-15	1/18/19	832	10/19/18	6/24/22	
		MT-99.20	4/19/19	GSD-1-19	1/15/21	838	1/15/21		
DM-1.1	7/17/20	MT-101.60	1/17/20	PCB-91	7/17/20	902	7/19/19		
DM-4.1	7/17/20	MT-105.10	1/17/20	SBR-1-20	7/17/20				
DM-4.4	1/15/16			SICD-2-14	1/15/21				
		TC-41.20	10/18/13						
MGS-1.1	7/16/21	TC-42.20	10/18/13						
MGS-2.1	1/19/18	TC-52.20	1/15/21						
MGS-3.1	1/19/18	TC-61.10	1/17/20						
MGS-5.3	7/15/16	TC-61.30	7/19/19						
		TC-65.10	1/17/14						
MH-1	7/16/21	TC-65.11	7/21/17						
MH-2	7/16/21								
MH-3	7/16/21								

FEDERAL PROJECT NO. E191 (687)  
PID NO. 88883  
CONSTRUCTION PROJECT NO. TBD  
RAILROAD INVOLVEMENT NONE  
MED - 252 - 03.95

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**ROADWAY**

**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 MASH 2016 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.

**SANITARY SEWER**

**ITEM 611 - MANHOLE, NO. 3, AS PER PLAN**

IN ADDITION TO THE PROVISIONS OF ITEM 611, AND THE MCSE SANITARY SEWER NOTES AND DETAILS (SEE SHEET 22), THE MANHOLE SHALL INCORPORATE A FLAT SLAB TOP AS SHOWN ON ODOT STANDARD CONSTRUCTION DRAWING MH-3. WHERE SPECIFIED IN THE PLANS, THE CONTRACTOR SHALL PROVIDE AN INSIDE DROP MANHOLE PER THE MCSE DETAILS.

**SANITARY SEWER NOTES**

1. ALL MANHOLES SHALL BE SET TO GRADE PER THE MANHOLE SCHEDULE BY THE SEWER CONTRACTOR AT THE TIME OF INSTALLATION. THE FINAL ADJUSTMENT OF THE CASTINGS SHALL BE THE RESPONSIBILITY OF THE PAVING CONTRACTOR AND THE FINAL INSPECTION, APPROVAL AND ACCEPTANCE OF THE SEWER SYSTEM BY THE MEDINA COUNTY SANITARY ENGINEER (MCSE) DEPARTMENT AND MEDINA CITY OR COUNTY ENGINEER WHERE APPLICABLE SHALL BE CONTINGENT UPON THIS FINAL ADJUSTMENT OF THE CASTING.

2. ALL MANHOLES SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE WITH COMPRESSION (PREMIUM) TYPE JOINTS. IN ADDITION TO PREMIUM JOINTS, ALL RISER LEDGES MUST HAVE A LAYER OF EITHER MASTIC ROPING, FLEXIBLE TAR MASTIC, OR BUTYL STRIPS.

3. ALL SANITARY SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MEDINA COUNTY SANITARY ENGINEERING DEPARTMENT STANDARDS, WITH THE EXCEPTION OF THE USE OF DUCTILE IRON PIPE AND STEEL PIPE AS SPECIFIED IN THESE PLANS.

4. SANITARY SEWER HOUSE CONNECTIONS SHALL BE FOUR INCH (4") PVC (SAME AS SANITARY SPECIFICATIONS). SANITARY SEWER CONNECTIONS TO BE LAID AT A MINIMUM SLOPE OF 1.00% AND CARRIED TO A POINT ONE FOOT (1') BEYOND THE UTILITY EASEMENT. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

5. R.C.P. AND P.V.C. TRENCH CONDITIONS:  
A. USE BEDDING PER O.D.O.T. SECTION 611.06. THE MATERIAL FOR THIS BEDDING SHALL MEET O.D.O.T. SPECIFICATIONS FOR #57 LIMESTONE.

B. TRENCHES UNDER OR WITHIN THREE (3) FEET OF PAVEMENT ARE TO BE BACKFILLED WITH #57 CRUSHED LIMESTONE TO WITHIN ONE FOOT (1') OF THE PAVEMENT BASE TOPPED OFF WITH COMPACTED #304 LIMESTONE PREMIUM BACKFILL, OR MEET THE REQUIREMENTS OF THE AUTHORITY HAVING HIGHWAY MAINTENANCE RESPONSIBILITY.

C. FOR P.V.C., MODIFY O.D.O.T. SECTION 611.06 TO CARRY THE BEDDING MATERIAL TO A MINIMUM OF SIX INCHES (6") ABOVE THE PIPE.

D. FOR R.C.P., BEDDING MATERIAL SHALL BE #57 LIMESTONE, FOR R.C.P. MODIFY SECTION 611.06 TO CARRY BEDDING MATERIAL TO A MINIMUM OF HALF THE PIPE OUTSIDE DIAMETER (SEE TRENCH SECTION ON STANDARD DETAIL IN THE PLANS).

E. IF FILL IS TO BE CONSTRUCTED BELOW THE SANITARY SEWER, COMPACTION TESTS INDICATING 95% COMPACTION MUST BE PERFORMED AND OBSERVED BY THE MCSE AND SUBMITTED FOR APPROVAL BEFORE CONSTRUCTION OF ANY SANITARY SEWER WITHIN SAID FILL AREA CAN BEGIN.

**6. TESTING:**

A. TELEVISED INSPECTION OF ALL SANITARY SEWERS AND PASSAGE OF STANDARD INFILTRATION TEST SHALL BE REQUIRED BEFORE THE ACCEPTANCE OF THE SANITARY SYSTEM BY THE MEDINA COUNTY SANITARY ENGINEERS DEPARTMENT.

B. DEFLECTION TESTS WILL BE RUN ON ALL P.V.C. PIPE, NOT LESS THAN 30 DAYS AFTER FINAL BACKFILL HAS BEEN PLACED. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. THESE TESTS SHALL CONSIST OF PULLING A "GO/NO-GO" MANDREL THROUGH THE LINE. THE CONTRACTOR SHALL PERFORM THE WORK UNDER COUNTY SUPERVISION.

C. MAXIMUM ALLOWABLE LEAKAGE INWARD OR OUTWARD (INFILTRATION OR EXFILTRATION) FOR ANY SANITARY SEWER SECTION TESTED, INCLUDING ALL MANHOLES, IS 100 GALLONS PER INCH OF DIAMETER PER MILE OF PIPE PER DAY. MANHOLES MAY BE TESTED SEPARATELY. THE ABOVE ALLOWABLE LEAKAGE RATE IS EQUIVALENT TO 0.08 GALLONS PER INCH OF DIAMETER PER 100 FEET OF PIPE PER HOUR.

D. LOW PRESSURE AIR TESTING WILL BE REQUIRED ON ALL MAIN LINE SANITARY SEWER, LATERALS, AND MANHOLES, PER MCSE RULES AND REGULATIONS (RESOLUTION 07-874).

E. ALL COSTS RELATIVE TO THE ABOVE TESTS SHALL BE BORNE BY THE CONTRACTOR AND INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 611 ITEM.

**7. PIPE SPECIFICATIONS:**

SANITARY SEWER PIPE	MATERIAL SPECS & SIZE	JOINT SPECS	LATERAL SPECS	MINIMUM PIPE STIFFNESS OR SDR
TRUSSPIPE POLYVINYL CHLORIDE (PVC)	8" - 15" ASTM D2680	ASTM D3212 COMPRESSION TYPE	ASTM 3034	200 P.S.I.
SOLID WALL POLYVINYL CHLORIDE (PVC)	4" - 15" ASTM D3034 18" - 27" ASTM F679	ASTM D3212 COMPRESSION TYPE	ASTM 3034	SDR 35
PVC FORCE MAIN POLYVINYL CHLORIDE (PVC)	2" - 18" ASTM D2241	ASTM F477 OR D3139	N/A	SDR 21
PROFILE WALL POLYVINYL CHLORIDE (PVC)	18" - 36" ASTM D1784 CELL CLASSIFICATION 12454C, 12454A, 12364A, 12364C	ASTM F477	ASTM 3034	46 P.S.I.
REINFORCED CONCRETE (RCP)	36"-96" ASTM C76	ASTM C443	ASTM 3034	CLASS IV & CLASS V (AS SHOWN ON PLANS)

8. SEWERS SHALL BE DEEP ENOUGH TO RECEIVE WASTEWATER FROM BASEMENTS, AND TO PREVENT FREEZING.

9. SEWERS SHALL BE LAID WITH UNIFORM SLOPE BETWEEN MANHOLES.

10. WATER TIGHT MANHOLE COVERS SHALL BE USED WHERE THE MANHOLE TOPS MAY BE FLOODED BY STREET RUN-OFF OR HIGH WATER. INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE BY A GASKETED, FLEXIBLE, WATER TIGHT CONNECTION.

**ITEM 202 - REMOVAL MISC.: PIPE EXPANSION JOINT**

PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO REMOVE THE EXISTING SANITARY SEWER PIPE EXPANSION JOINTS AS SHOWN IN THE PLANS, INCLUDING, BUT NOT LIMITED TO: FITTINGS, GASKETS, CAULK AT BOTH FACES OF THE JOINT. CARE SHALL BE TAKEN SO AS TO NOT DAMAGE THE EXISTING STEEL SANITARY SEWER PIPE TO REMAIN.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR ITEM 202 - REMOVAL MISC.: PIPE EXPANSION JOINT.

**ITEM 611 - CONDUIT, TYPE B, AS PER PLAN, 748.01**

PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO INSTALL THE DUCTILE IRON (D.I.) SANITARY SEWER PIPE AS SHOWN IN THE PLANS, INCLUDING, BUT NOT LIMITED TO: PIPE, FITTINGS, GASKETS, FLEXIBLE FOAM EXPANSION JOINT FILLER, THRUST BLOCKING, SURFACE PREP, PRIME COAT AND POLYURETHANE CAULK AT BOTH FACES OF THE DIAPHRAGM.

DUCTILE IRON PIPE AND FITTINGS:  
MEDINA COUNTY SANITARY ENGINEER SHALL PROVIDE THE 12" DUCTILE IRON PIPE TO THE CONTRACTOR. THE 12" DUCTILE IRON PIPE MATERIAL SHALL CONFORM TO CMS 748.01, WITH THE EXCEPTION OF THE FOLLOWING: PIPE SHALL BE ANSI/AWWA C151/A21.51. PIPE SHALL BE SUPPLIED WITH SURFACE PREP AND PRIME COAT PER CMS 514. THE CONTRACTOR WILL BE REQUIRED TO CONTACT MCSE TO SCHEDULE DELIVERY OF THE 12" DUCTILE IRON PIPE MATERIAL TO THEIR STAGING AREA.

**ITEM 611 - CONDUIT, TYPE B, AS PER PLAN, 748.01 (CONT.)**

CONTRACTOR SHALL PROVIDE 12" DUCTILE IRON FITTINGS PER CMS 748.01, WITH THE EXCEPTION OF THE FOLLOWING: FITTINGS SHALL BE ANSI/AWWA C151/A21.51, MECHANICAL JOINTS, UNCOATED WITH THE EXCEPTION OF PLAIN END FITTINGS AT THE PROPOSED SANITARY MANHOLE INVERTS. FITTINGS SHALL BE SUPPLIED WITH SURFACE PREP AND PRIME COAT PER CMS 514. SEE SHEET 27 FOR FIELD PAINTING AND FINAL COAT NOTES.

DUCTILE IRON PIPE AND FITTINGS SHALL BE-

U.S. PIPE  
P.O. BOX 10406  
BIRMINGHAM, AL 35202  
866-347-7473  
FAX 205-254-7165  
WEBSITE WWW.USPIPE.COM

AMERICAN  
P.O. BOX 2727  
BIRMINGHAM, AL 35207  
800-442-2347  
561-900-6117  
FAX 205-488-7645  
WEBSITE WWW.AMERICAN-USA.COM

OR APPROVED EQUAL

FLEXIBLE FOAM EXPANSION JOINT FILLER: CONTRACTOR SHALL PROVIDE FLEXIBLE FOAM EXPANSION JOINT FILLER (FFEJF) COMPOSED OF A SYNTHETIC POLYMER, VERY SMALL CLOSED-CELL FOAM. JOINT FILLER SHALL BE NON-ABSORBENT AND HAVE A RESILIENCY OF 99%. JOINT FILLER SHALL CONFORM TO THE FOLLOWING STANDARDS AND HAVE THE FOLLOWING REQUIREMENTS:

- ASTM D545 USING A (1/2" (12.7 MM) THICK TEST SPECIMEN).
  - COMPRESSION: 13 PSI (9 G/MM ) 89.6 KPA.
  - EXTRUSION: 0.25".
  - RECOVERY: > 95%.
  - WATER ABSORPTION, VOLUME %: < 0.5%.
- ASTM D 7174-05.
- ASTM D5249, TYPE II.
- THICKNESS: 1"

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**SANITARY SEWER (CONT.)**

**MCSE GENERAL NOTES (CONTINUED)**

- 10. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BEFORE ANY WORK CAN COMMENCE.
- 11. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND FINAL CLEARANCE OF ANY REQUIRED NEEDLING, UNDERPINNING, SHORING OR BRACING OF EXISTING STRUCTURES.
- 13. NOTIFY THE ODOT PROJECT ENGINEER OF ANY UNUSUAL SOIL CONDITIONS, SUCH AS SPRINGS OR SEEPAGE OF WATER ENCOUNTERED, OR WHERE A DIFFERENT BEARING MATERIAL IS EVIDENT AND THERE IS A QUESTION OF THE BEARING CAPACITY.
- 14. MINOR ALIGNMENT CHANGES MAY BE REQUIRED DURING CONSTRUCTION DUE TO POSSIBLE UTILITY CONFLICTS, AS DIRECTED AND/OR APPROVED BY THE ODOT PROJECT ENGINEER.
- 15. PAVING AND/OR RESURFACING WORK SHALL NOT BE SCHEDULED FOR COMPLETION UNTIL PRIOR APPROVAL OF THE CONTRACTOR'S PROGRESS SCHEDULE HAS BEEN GRANTED OR DIRECTED BY THE ODOT PROJECT ENGINEER.
- 16. WORK LIMITS SHALL BE LIMITED TO WITHIN THE RIGHT-OF-WAY. ALL OF THE CONTRACTOR'S OPERATIONS MUST BE CONFINED WITHIN THE EXISTING STREET'S RIGHT-OF-WAY LIMITS OR EXISTING EASEMENTS ACQUIRED BY THE OWNER OR ODOT. ANY ADDITIONAL CONSTRUCTION EASEMENTS NEEDED FOR COMPLETION OF HIS WORK MUST BE SECURED FROM THE PROPERTY OWNERS BY THE CONTRACTOR AT HIS EXPENSE AND AT NO ADDITIONAL COST TO THE OWNER OR ODOT.
- 17. RESTORATION OF THE WORK AREA: BEFORE RELEASE OF THE FINAL PAYMENT A COMPLETE REVIEW OF THE ENTIRE WORK AREA WILL BE MADE TO VERIFY THE AREA IS RESTORED TO PRE-CONSTRUCTION CONDITION OR BETTER.

18. THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY, AS REQUIRED BY SECTION 153.64 OHIO REVISED CODE. AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS, IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE OHIO UTILITY PROTECTION SERVICE (OUPS), THE OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE (OGUPS), AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN ON THE PLANS SHALL BE CONTACTED BY THE CONTRACTOR. THE OWNER OF THE UNDERGROUND UTILITY FACILITY SHALL, WITHIN FORTY-EIGHT (48) HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, AFTER NOTICE IS RECEIVED, STAKE, MARK OR OTHERWISE DESIGNATE THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY TWO (2) DAYS AHEAD OF THE PLANNED CONSTRUCTION.

19. SANITARY SEWERS ARE TO BE SEPARATED FROM EXISTING AND PROPOSED POTABLE WATER LINES BY A MINIMUM HORIZONTAL DISTANCE OF TEN FEET (10'), OUTSIDE OF PIPE TO OUTSIDE OF PIPE. IN INSTANCES WHERE WATER AND SEWER LINE MUST CROSS, THE WATER LINE IS TO MAINTAIN A VERTICAL DISTANCE OF EIGHTEEN INCHES (18") ABOVE THE SANITARY SEWER, OUTSIDE OF PIPE TO OUTSIDE OF PIPE.

- 20. ALL CONSTRUCTION EQUIPMENT SHALL BE EQUIPPED WITH MUFFLERS IN ACCORDANCE WITH FEDERAL SAFETY STANDARDS.
- 21. ALL HEAVY EQUIPMENT ON ROAD SURFACES SHALL INCLUDE METAL OR RUBBER PAVEMENT TRACKS.

**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, THE CONTRACTOR SHALL 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, THE ODOT PROJECT ENGINEER SHALL BE NOTIFIED 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, THE ODOT PROJECT ENGINEER SHALL BE NOTIFIED 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 SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

**REVIEW OF DRAINAGE FACILITIES**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ODOT PROJECT ENGINEER.

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

**MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED**

ALL CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT OF WAY FOR SALVAGE BY MCSE FORCES. PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

**ITEM 611 - DRAINAGE STRUCTURE, MISC.: SANITARY SEWER BYPASS PUMPING**

THIS ITEM SHALL CONSIST OF PREPARING PLANS, PROVIDING, MAINTAINING AND SUBSEQUENTLY REMOVING A FULLY ENGINEERED TEMPORARY BYPASS PUMPING SYSTEM BETWEEN EXISTING MANHOLES AT THE INTERSECTION OF LAW ROAD (STA. 204+98.17) AND APPROXIMATELY 212' NORTHEAST OF THE EXISTING BRIDGE (STA. 212+36.71) FOR THE MEDINA COUNTY SANITARY ENGINEER'S (MCSE) EXISTING SANITARY LINE WHICH WILL REMAIN IN SERVICE DURING CONSTRUCTION OF THE PROJECT. SEE BRIDGE REMOVAL DETAILS ON SHEET 30 OF 51 FOR ADDITIONAL INFORMATION.

THE BYPASS PLAN SHALL ADDRESS THE MAINTENANCE OF ACCESS TO THE PRIVATE DRIVEWAY NEAR LAW ROAD (1881 COLUMBIA ROAD) AT ALL TIMES. THE PROPOSED BYPASS SYSTEM SHALL NOT BLOCK OR IMPEDE ACCESS TO THE PROPERTY.

THE MCSE DOES NOT HAVE FLOW RATES FOR THIS SECTION OF SANITARY SEWER. THE CONTRACTOR SHALL ASSUME THAT THE SEWER IS FLOWING AT FULL CAPACITY AND PLAN BYPASS PUMPING AND MCSE COORDINATION ACCORDINGLY.

THREE (3) COPIES OF THE CONTRACTOR'S PLAN FOR THE PROPOSED TEMPORARY BYPASS AND TWO (2) COPIES OF THE DESIGN COMPUTATIONS SHALL BE SUBMITTED TO THE MCSE AND ODOT PROJECT ENGINEER AT LEAST 30 DAYS PRIOR TO ITS SCHEDULED CONSTRUCTION. SUCH CONSTRUCTION SHALL NOT BEGIN UNTIL AFTER APPROVAL HAS BEEN RECEIVED. THE PLANS SHALL BE PREPARED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OHIO.

INSTALLATION, OPERATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF THE TEMPORARY BYPASS SYSTEM AND ALL ANCILLARY REQUIREMENTS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR PAYMENT WITH ITEM 611 - DRAINAGE STRUCTURE, MISC.: SANITARY SEWER BYPASS PUMPING.

**ENVIRONMENTAL COMMITMENTS**

1. THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. THE CONTRACTOR SHALL NOT REMOVE TREES UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THE CONTRACTOR SHALL DEMARCAT CLEARING LIMITS IN THE FIELD TO AVOID ANY UNAUTHORIZED TREE CLEARING. 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.

2. THE CONTRACTOR SHALL NOT WORK BELOW THE ORDINARY HIGH-WATER MARK (OHWM) OF THE WEST BRANCH ROCKY RIVER, OR INSTALL, MODIFY, OR REMOVE ANY EXISTING INSTREAM FILLS DURING THE ODNR INSTREAM WORK RESTRICTION PERIOD OF APRIL 15 TO JUNE 30 UNLESS A WAIVER IS APPROVED BY ODNR AND VERIFIED BY THE USACE.

3. ODOT SHALL SELF-PERMIT BY OBTAINING THE FLOODPLAIN PERMIT OR DOCUMENTATION OF EXEMPTION PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT WORK BELOW THE ORDINARY HIGH-WATER MARK OF WEST BRANCH ROCKY RIVER, OR INSTALL, MODIFY, OR REMOVE ANY EXISTING INSTREAM FILLS UNTIL ODOT HAS RECEIVE THE FLOODPLAIN PERMIT OR DOCUMENT OF EXEMPTION.

4. ODOT SHALL OBTAIN AND ADHERE TO ALL APPROPRIATE WATERWAY PERMITS PRIOR TO ANY WORK BELOW THE ORDINARY HIGH-WATER MARK OF ANY WATERWAY AND ALL SPECIAL PROVISIONS FOR WATERWAY PERMITS WILL BE INCLUDED IN THE PLANS. THE CONTRACTOR SHALL NOT PERFORM ANY WORK WITHIN THE BOUNDARIES OF ANY WETLAND OR BELOW THE ORDINARY HIGH-WATER MARK (OHWM) OF ANY STREAM UNTIL ODOT OBTAINS THE NECESSARY WATERWAY PERMIT(S). THIS INCLUDES THE PLACEMENT OF ANY TEMPORARY OR PERMANENT FILLS BELOW THE OHWM.

5. AN ASBESTOS SURVEY FOR SFN ID#:5206871 SCHEDULED FOR DEMOLITION WORK WAS CONDUCTED BY A LICENSED ASBESTOS HAZARD EVALUATION SPECIALIST. A COPY OF THE ASBESTOS SURVEY REPORT FOR THE STRUCTURE IS INCLUDED IN THE PLAN PACKAGE FOR THIS PROJECT. THE ASBESTOS SURVEY REPORT DID NOT IDENTIFY THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS. IF ASBESTOS CONTAINING MATERIAL IS DISCOVERED DURING CONSTRUCTION, THE REMOVAL AND DISPOSAL OF ANY ASBESTOS CONTAINING MATERIAL MUST COMPLY WITH THE OHIO ADMINISTRATIVE CODE (OAC) REGULATIONS AND THE NATIONAL EMISSIONS STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHA) STANDARD FOR ASBESTOS.

**ENVIRONMENTAL COMMITMENTS (CONT.)**

ELECTRONIC SUBMISSION: THE CONTRACTOR SHALL SUBMIT ELECTRONICALLY TO OEPA A COMPLETED NOTIFICATION OF DEMOLITION & RENOVATION FORM (NDRF) AND APPLICABLE FEES ALONG WITH THE ASBESTOS SURVEY REPORT. THE COMPLETED NDRF MUST BE SUBMITTED TO OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION AND RENOVATION ACTIVITY. THE CONTRACTOR IS RESPONSIBLE FOR RETAINING AN ELECTRONIC COPY OF THE NDRF (IN PDF FORM) FOR SUBMISSION TO THE DISTRICT ENVIRONMENTAL STAFF AND ONE HARD COPY TO THE PROJECT ENGINEER.

(GO TO THE OEPA EBUSINESS CENTER AND SUBMIT THE NDRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT)

HARD COPY SUBMISSION: THE CONTRACTOR MAY ELECT TO SUBMIT A HARD COPY OF THE COMPLETED NDRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT TO THE FOLLOWING:

ASBESTOS PROGRAM OHIO EPA, DAPC P.O. BOX 1049 COLUMBUS, OH 43216-1049	OR	ASBESTOS PROGRAM OHIO EPA, DAPC 50 W. TOWN ST., SUITE 700 COLUMBUS, OH 43215
--	----	---

IF THE CONTRACTOR ELECTS TO SUBMIT A HARD COPY TO THE OEPA, THEY ARE RESPONSIBLE FOR RETAINING A HARD COPY OF THE NDRF FOR SUBMISSION TO THE DISTRICT ENVIRONMENTAL STAFF AND ONE COPY TO THE PROJECT ENGINEER. THE COMPLETED NDRF MUST BE SUBMITTED TO THE OEPA AT LEAST 10 DAYS PRIOR TO DEMOLITION &/OR RENOVATION ACTIVITY.

THE CONTRACTOR SHALL ENSURE THAT THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL IS CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL ENSURE THAT ALL DOCUMENTATION RELATED TO THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS. THE ASBESTOS CONTAINING MATERIALS MUST BE DISPOSED OF IN A LANDFILL LICENSED BY THE LOCAL HEALTH DEPARTMENT AND PERMITTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY, DIVISION OF AIR POLLUTION CONTROL, TO ACCEPT ASBESTOS CONTAINING MATERIALS. PAYMENT FOR NECESSARY WORK INVOLVING ASBESTOS CONTAINING MATERIAL WILL BE PERFORMED BY CHANGE ORDER.



REVISED 10/06/2022

**ITEM 614, MAINTAINING TRAFFIC**

1

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 150 CONSECUTIVE DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 9. THE ROADWAY CLOSURE SHALL NOT BE PUT INTO EFFECT PRIOR TO MARCH 1 AND SHALL NOT EXTEND PAST NOVEMBER 1. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$5,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED IN VIOLATION OF ANY OF THE ABOVE CONDITIONS.

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE DISTRICT OFFICE AND THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE DISTRICT TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW. NOTIFICATIONS SHALL BE SENT TO THE EMAIL ADDRESS [D03.DeTour.Notification@dot.ohio.gov](mailto:D03.DeTour.Notification@dot.ohio.gov) AND THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE NOTIFICATION SIGNS OR MESSAGE BOARDS. UPON RECEIPT OF NOTIFICATION BY THE CONTRACTOR, THE DISTRICT OFFICE WILL ARRANGE NOTIFICATION OF THE FOLLOWING ORGANIZATIONS, IN WRITING, IN ACCORDANCE WITH THE BELOW TABLE:

- MEDINA COUNTY ENGINEER'S OFFICE
- VALLEY CITY FIRE DEPARTMENT
- BUCKEYE LOCAL SCHOOLS
- MEDINA COUNTY SHERIFF'S OFFICE
- ODOT DISTRICT THREE OFFICE OF ROADWAY SERVICES
- ODOT DISTRICT THREE PUBLIC INFORMATION OFFICE
- SPECIAL HAULING PERMITS SECTION  
([Hauling.Permits@dot.ohio.gov](mailto:Hauling.Permits@dot.ohio.gov))
- LIVERPOOL TOWNSHIP

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVEABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE LEAD TIME REQUIRED*
RAMP AND/OR ROAD CLOSURES	TWO WEEKS OR GREATER	21 CALENDAR DAYS
	12 HOURS TO TWO WEEKS	14 CALENDAR DAYS
	12 HOURS OR LESS	4 BUSINESS DAYS
LANE CLOSURES AND RESTRICTIONS	TWO WEEKS OR GREATER	21 CALENDAR DAYS
	12 HOURS TO TWO WEEKS	14 CALENDAR DAYS
START OF CONSTRUCTION AND TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

\* = PRIOR TO CLOSURE DATE, UNLESS NOTED OTHERWISE

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD CLOSURE ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC 14 CALENDAR DAYS PRIOR TO THE CLOSURE. 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 SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MM-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.

**MAINTENANCE OF LOCAL DETOUR ROUTE**

A LOCAL DETOUR ROUTE, OTHER THAN THE OFFICIAL SIGNED ODOT DETOUR ROUTE, WILL BE SELECTED BY AGREEMENT BETWEEN ODOT AND LOCAL GOVERNMENT AGENCIES PRIOR TO THE HIGHWAY CLOSURE.

DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST, AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DIRECTED BY THE ENGINEER. THE DESIGNATED LOCAL DETOUR ROUTE IS TO BE REVIEWED AND REPAIRED PRIOR TO THE ASPHALT CONTRACTOR OR SUBCONTRACTOR LEAVING THE PROJECT.

PAYMENT FOR THE WORK NECESSARY TO REPAIR THESE LOCAL ROADS WILL BE PERFORMED BY CHANGE ORDER.

**ACCESS TO ADJACENT PROPERTY**

ACCESS TO ADJACENT PROPERTY WITHIN AND ADJACENT TO THE WORK LIMITS SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES, AS PER 614.02(a).

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**MAINTENANCE OF TRAFFIC GENERAL NOTES**

**MED - 252 - 03.95**

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OFFICE CALCS	SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED MEP CHECKED DRP
	4	7	13	14	15	24	01/STR/BR	02/STR/BR											
	LS										LS		201	11000	LS		CLEARING AND GRUBBING	4	
						513					513		202	23000	513	SY	PAVEMENT REMOVED		
						67					67		202	23500	67	SY	WEARING COURSE REMOVED		
			142									142	202	35100	142	FT	PIPE REMOVED, 24" AND UNDER		
				400							400		202	38000	400	FT	GUARDRAIL REMOVED		
				4							4		202	42010	4	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E		
				4							4		202	47000	4	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED		
			2									2	202	58000	2	EACH	MANHOLE REMOVED		
			2									2	202	98100	2	EACH	REMOVAL MISC.: PIPE EXPANSION JOINT	5	
					415						415		203	10000	415	CY	EXCAVATION		
					341						341		203	20000	341	CY	EMBANKMENT		
603											603		204	10000	603	SY	SUBGRADE COMPACTION	4	
201											201		204	13000	201	CY	EXCAVATION OF SUBGRADE		
201											201		204	30010	201	CY	GRANULAR MATERIAL, TYPE B		
1	1												2	45000	2	HOUR	PROOF ROLLING	4	
603											603		204	50000	603	SY	GEOTEXTILE FABRIC		
						3					3		209	15000	3	STA	RESHAPING UNDER GUARDRAIL		
					512.5						512.5		606	15100	512.5	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS		
					4						4		606	26150	4	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	5	
					4						4		606	35002	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		
																	<b>EROSION CONTROL</b>		
					7						7		601	21050	7	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		
					40						40		601	21060	40	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT		
					160						160		601	32200	160	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER		
		45									45		659	00300	45	CY	TOPSOIL		
					407						407		659	00530	407	SY	SEEDING AND MULCHING, CLASS 3B	4	
											5,000		832	30000	5,000	EACH	EROSION CONTROL		
					65						65		838	20701	65	CY	GABIONS, AS PER PLAN	28	
																	<b>DRAINAGE</b>		
					4						4		611	99710	4	EACH	PRECAST REINFORCED CONCRETE OUTLET		

**GENERAL SUMMARY**

**MED - 252 - 03.95**

1 REVISD 10/06/2022

PLAN SHEET NO.	STATION		203	203	659
	FROM	TO	EXCAVATION CY	EMBANKMENT CY	SEEDING AND MULCHING, CLASS 3B SY
S.R. 252					
17	207+50.00	208+00.00	20	2	28
18	208+18.67	210+35.87	37	14	77
19	210+55.87	211+25.00	358	325	302
20	212+00.00		0	0	0
SUBTOTALS			415	341	407
TOTALS CARRIED TO GENERAL SUMMARY			415	341	407

PLAN SHEET NO.	REFERENCE NO.	STATION		SIDE	202	202	202	209	606	606	606	620		626	626
		FROM	TO		GUARDRAIL REMOVED FT	ANCHOR ASSEMBLY REMOVED, TYPE E EACH	BRIDGE TERMINAL ASSEMBLY REMOVED EACH	RESHAPING UNDER GUARDRAIL STA	GUARDRAIL, TYPE MGS WITH LONG POSTS FT	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016) EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	DELINEATOR, POST GROUND MOUNTED, TYPE C (WHITE) EACH	DELINEATOR, POST GROUND MOUNTED, TYPE D (YELLOW) EACH	BARRIER REFLECTOR, TYPE 1 (BI-DIRECTIONAL) EACH	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) EACH
S.R. 252															
23	GR-1	206+43.6	208+33.0	LT	75.0	1	1		112.5	1	1		1		
23	GR-2	206+53.0	208+17.4	RT	112.5	1	1		87.5	1	1	1			
23	GR-3	210+41.5	211+30.9	RT	37.5	1	1		12.5	1	1		1		
23	GR-4	210+57.1	214+37.9	LT	175.0	1	1	3.13	300.0	1	1	1			
23	SB BARRIER REFLECTORS			LT										2	8
23	NB BARRIER REFLECTORS			RT										2	5
SUBTOTALS					400.0	4	4	3.13	512.5	4	4	2	2	4	13
TOTALS CARRIED TO GENERAL SUMMARY					400	4	4	3	512.5	4	4	4	4	4	13

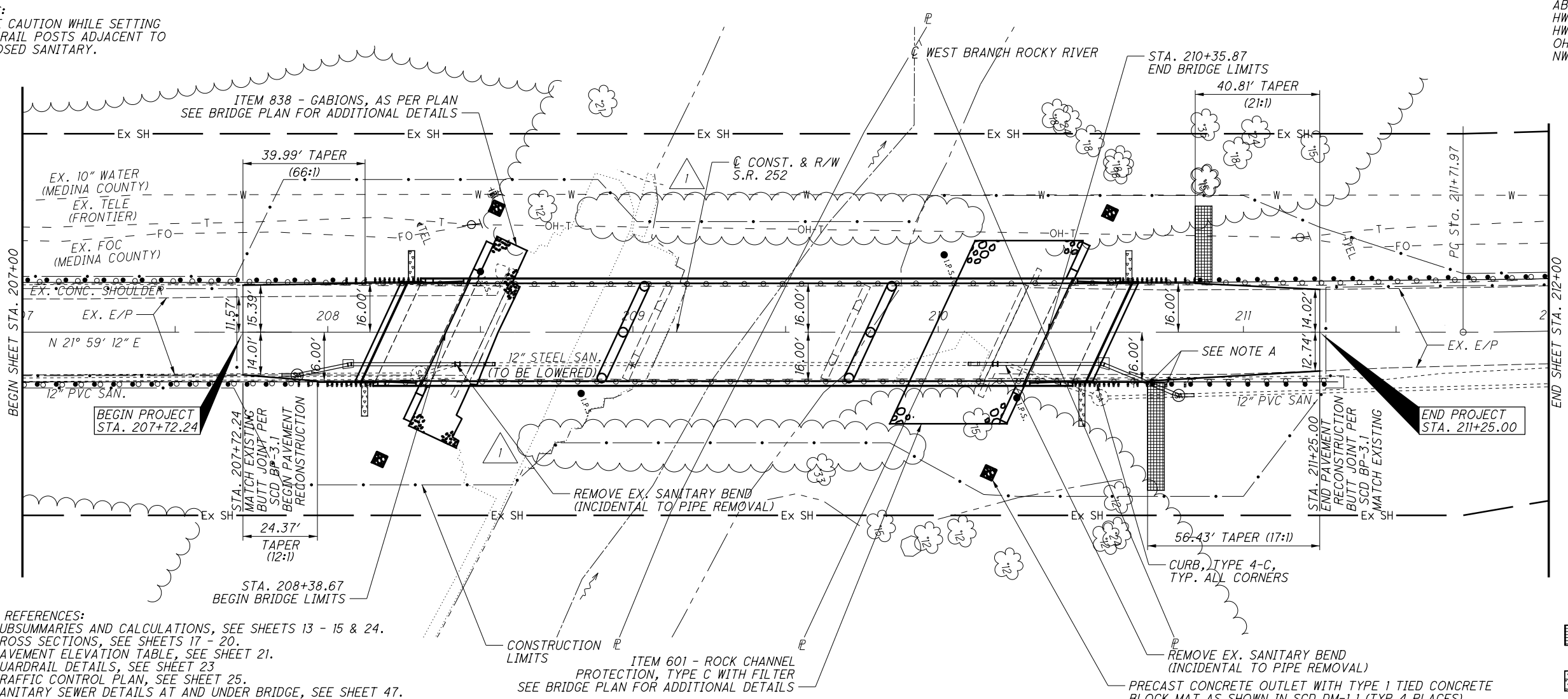
PLAN SHEET NO.	STATION		SIDE	601	601	601	611	838
	FROM	TO		TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT SY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER CY	PRECAST REINFORCED CONCRETE OUTLET EACH	GABIONS, AS PER PLAN CY
S.R. 252								
16	208+17.06		RT	1.78			1	
16	208+26.57	208+65.28	LT/RT					65
16	208+55.14		LT	1.78			1	
16	209+84.13	210+47.37	LT/RT			160		
16	210+16.86		RT	1.78			1	
16	210+58.23		LT	1.78			1	
16	210+71.32		RT		23.53			
16	210+86.94		LT		16.53			
SUBTOTALS				7.12	40.06	160	4	65
TOTALS CARRIED TO GENERAL SUMMARY				7	40	160	4	65

NOTES:  
 A) USE CAUTION WHILE SETTING  
 GUARDRAIL POSTS ADJACENT TO  
 PROPOSED SANITARY.

ABBREVIATIONS:  
 HW25 25-YEAR HEADWATER  
 HW100 100-YEAR HEADWATER  
 OHWM ORDINARY HIGH WATER MARK  
 NWE NORMAL WATER ELEVATION

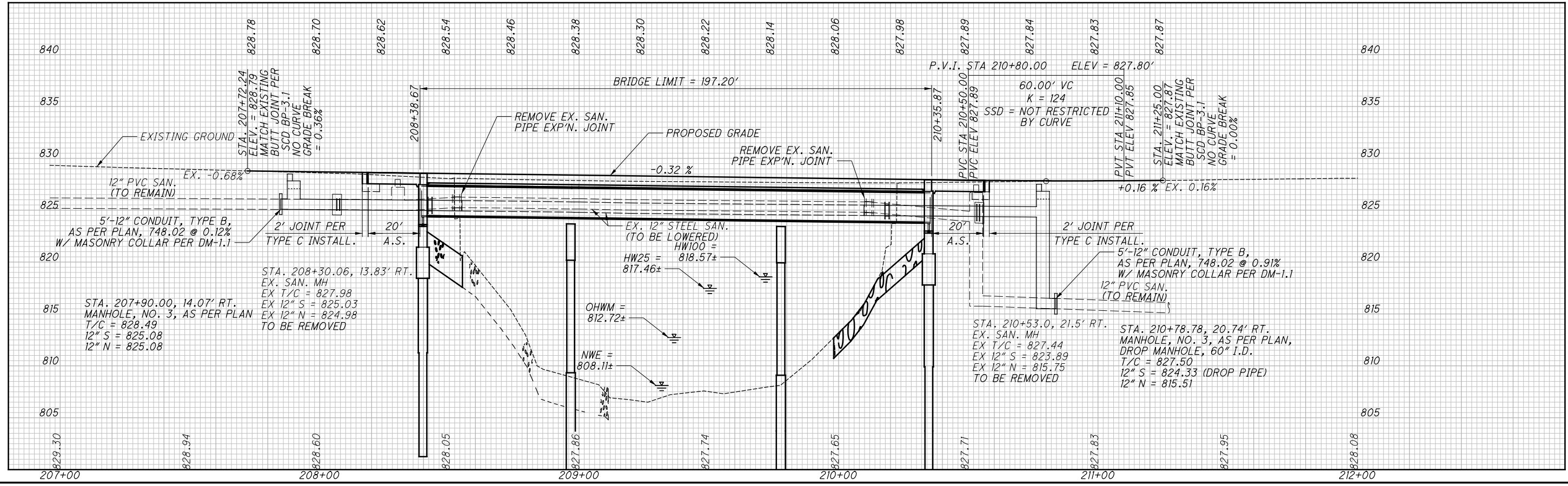


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SHEET REFERENCES:  
 FOR SUBSUMMARIES AND CALCULATIONS, SEE SHEETS 13 - 15 & 24.  
 FOR CROSS SECTIONS, SEE SHEETS 17 - 20.  
 FOR PAVEMENT ELEVATION TABLE, SEE SHEET 21.  
 FOR GUARDRAIL DETAILS, SEE SHEET 23  
 FOR TRAFFIC CONTROL PLAN, SEE SHEET 25.  
 FOR SANITARY SEWER DETAILS AT AND UNDER BRIDGE, SEE SHEET 47.

- 1 REVISED 10/06/2022
- ITEM 601 - TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT AS PER DM-4.1
- AGGREGATE DRAIN AS PER SCD AS-2-15



**MED -252-03.95**

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**NOTES:**

1. EXISTING ANCHOR ASSEMBLIES, GUARDRAIL AND TERMINAL ASSEMBLIES SHALL BE REMOVED IN ACCORDANCE WITH C&MS 202.
2. PROVIDE BARRIER REFLECTORS (BI-DIRECTIONAL) IN ACCORDANCE WITH C&MS 626. TYPE 1 REFLECTORS SHALL BE USED ON CONCRETE BARRIER. TYPE 2 REFLECTORS SHALL BE USED ON GUARDRAIL BLOCKOUTS.
3. ALL ANCHOR ASSEMBLIES, MGS TYPE E SHALL MEET MASH 2016.
4. USE CAUTION WHILE SETTING GUARDRAIL POSTS ADJACENT TO PROPOSED SANITARY.

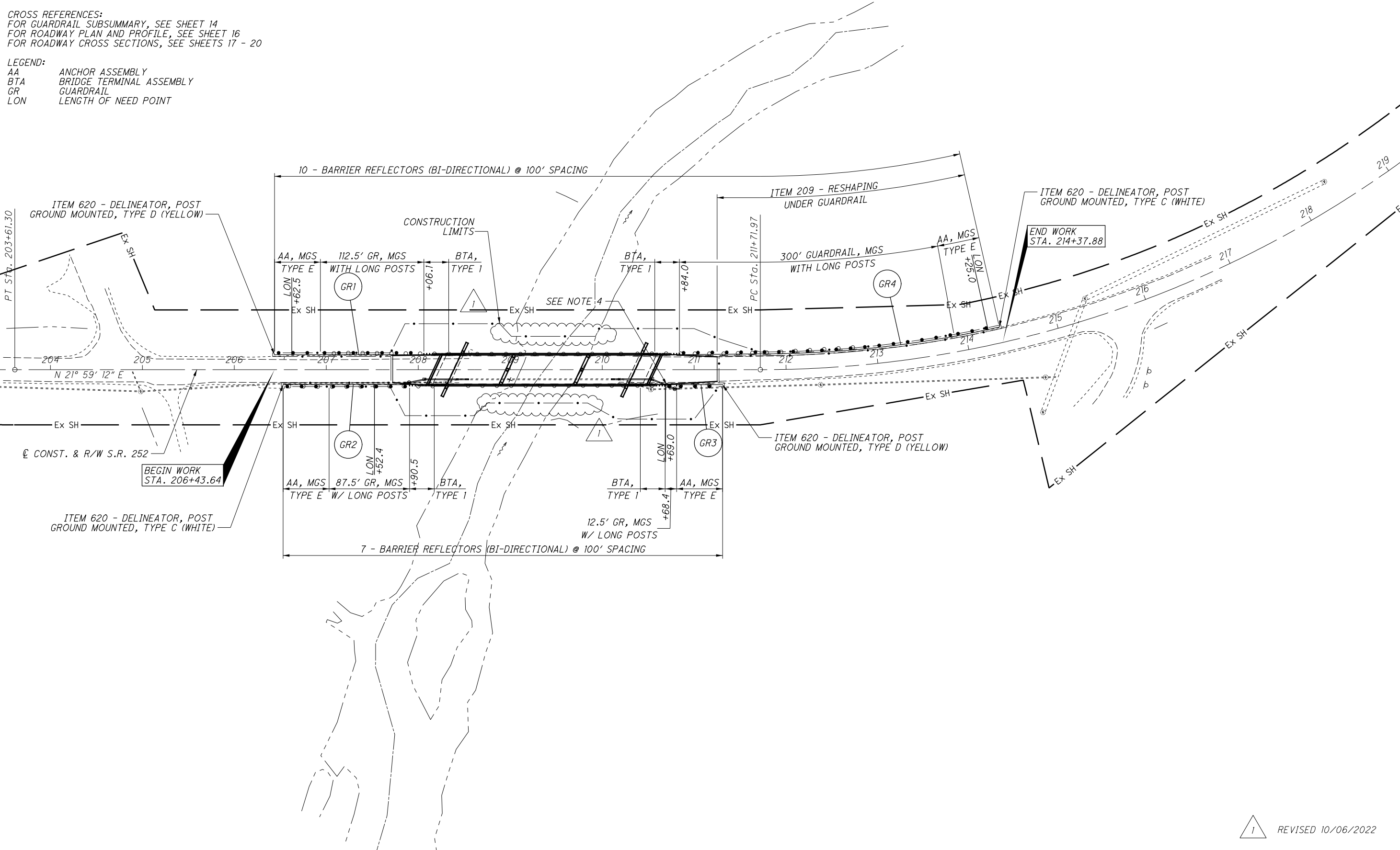
**CROSS REFERENCES:**  
 FOR GUARDRAIL SUBSUMMARY, SEE SHEET 14  
 FOR ROADWAY PLAN AND PROFILE, SEE SHEET 16  
 FOR ROADWAY CROSS SECTIONS, SEE SHEETS 17 - 20

**LEGEND:**  
 AA ANCHOR ASSEMBLY  
 BTA BRIDGE TERMINAL ASSEMBLY  
 GR GUARDRAIL  
 LON LENGTH OF NEED POINT

CALCULATED  
 MEP  
 CHECKED  
 DRP

HORIZONTAL  
 SCALE IN FEET

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**S.R. 252**  
**GUARDRAIL DETAILS**

**MED-252-03.95**



SHEET REFERENCES:  
 FOR PLAN AND PROFILE, SEE SHEET 16  
 FOR ROADSIDE BARRIER RELATED TRAFFIC CONTROL ITEMS, SEE SHEET 23  
 FOR TRAFFIC CONTROL SUBSUMMARY, SEE SHEET 24



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TRAFFIC CONTROL PLAN  
 S.R. 252

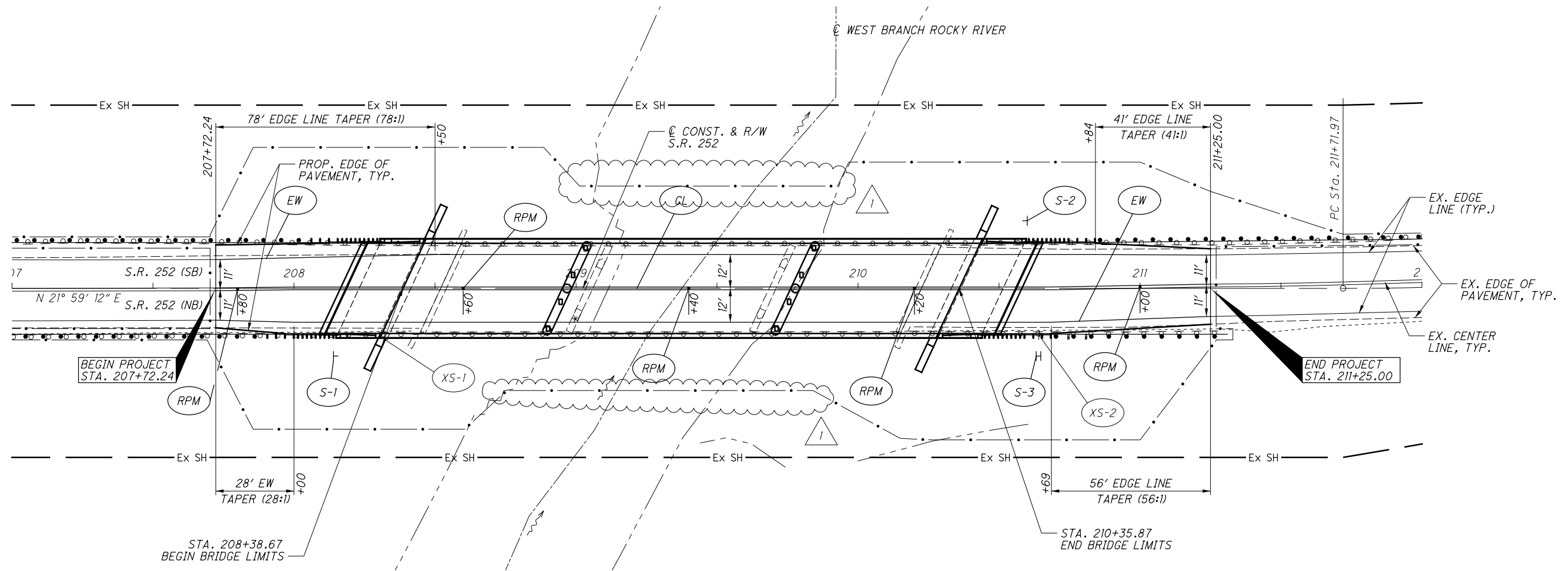
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LEGEND:

- CL CENTER LINE, (SOLID, DOUBLE)
- EW EDGE LINE, 6", (WHITE)
- RPM RAISED PAVEMENT MARKER (YELLOW TWO-WAY)

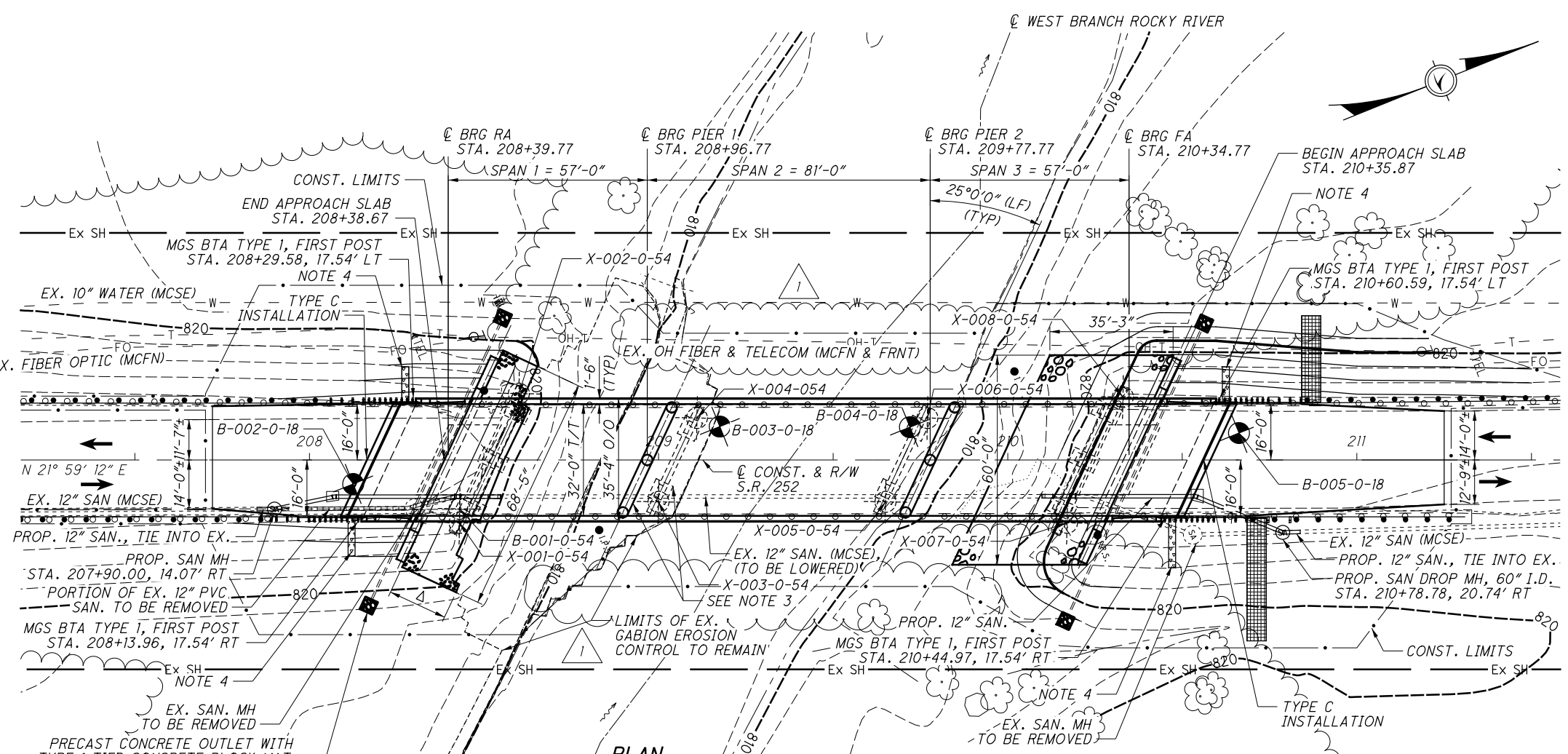
- MED 252 3.95  
 EX. I-H25a  
 STA. 208+32, 18' RT.  
 XS-1  
 REMOVE/DISPOSE
- MED 252 3.95  
 I-H25a-12  
 STA. 208+14, 24' RT.  
 INSTALL ON  
 No. 2 POST  
 S-1
- MED 252 3.95  
 I-H25a-12  
 STA. 210+60, 24' LT.  
 INSTALL ON  
 No. 2 POST  
 S-2
- 4  
 2x D10-H8-12  
 STA. 210+64, 24' RT.  
 INSTALL BACK TO BACK  
 ON No. 2 POST  
 S-3
- 4  
 EX. D10-H8  
 STA. 210+64, 16.5' RT.  
 XS-2  
 REMOVE/DISPOSE



1 REVISED 10/06/2022

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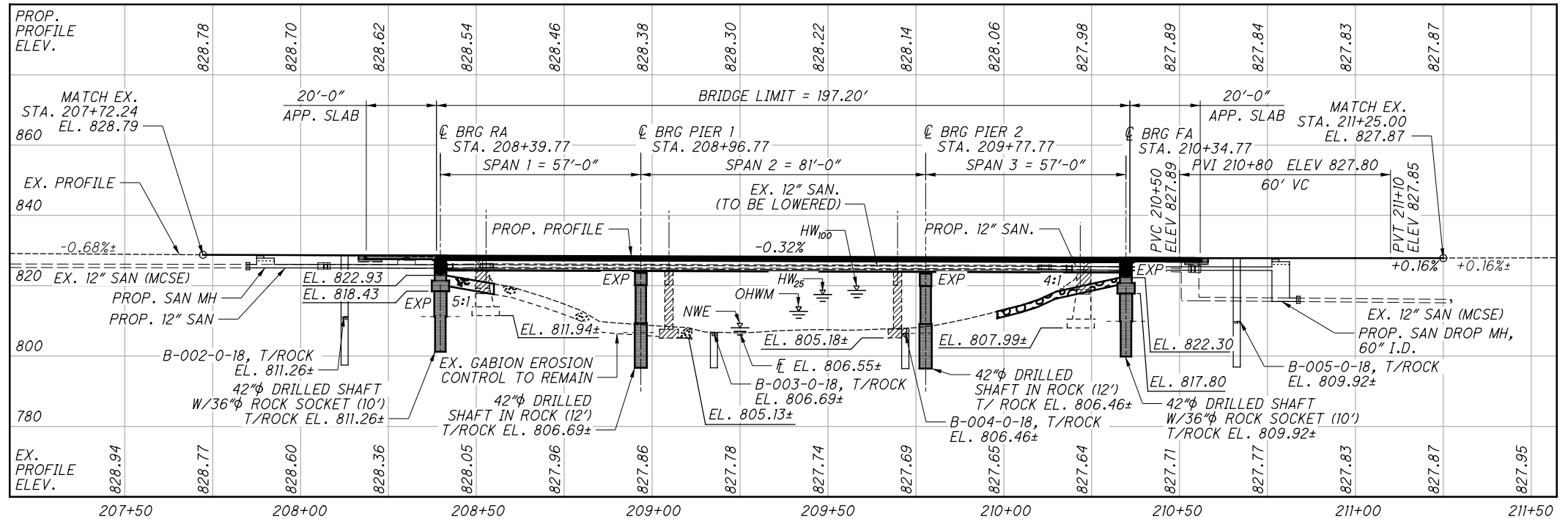
**PLAN**

**NOTES**

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. ALL EXISTING UTILITIES ARE TO REMAIN UNLESS NOTED OTHERWISE.
3. REPAIR EXISTING GABION BASKETS IN AREA OF NEW PIER CONSTRUCTION AND EXISTING PIER DEMOLITION. SEE SHEET [3/26] FOR NOTES.
4. AGGREGATE DRAIN, CMS 605.07, 2'-0" WIDE X 1'-0" DEEP TO BE INCLUDED WITH ITEM 526 - TYPE C INSTALLATION FOR PAYMENT.

**UTILITY ABBREVIATIONS**

FRNT - FRONTIER COMMUNICATIONS  
MCFN - MEDINA COUNTY FIBER NETWORKS  
MCSE - MEDINA COUNTY SANITARY & WATER



**PROFILE ALONG C CONST. & R/W S.R. 252**

REVISED 10/06/2022

**BENCHMARK DATA**

BM #1 STA. 200+78.78, ELEV. 829.69, OFFSET 686.58', LT  
BM #2 STA. 205+03.38, ELEV. 827.92, OFFSET 47.74', LT  
BM #3 STA. 215+61.15, ELEV. 828.05, OFFSET 94.32', RT  
BM #4 STA. 225+01.57, ELEV. 825.37, OFFSET 47.94', RT

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY SHEET [2/57]

**DESIGN TRAFFIC**

2019 ADT = 4400    2019 ADTT = 528  
2043 ADT = 4600    2043 ADTT = 552  
DIRECTIONAL DISTRIBUTION = 50%

**LEGEND**

- ⊕ - PROJECT BORING LOCATION    ⊕ - HISTORIC BORING LOCATION
- ▨ - ITEM 202 - STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN
- ▩ - ITEM 838 - GABIONS, AS PER PLAN
- ⊕ - ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH FILTER (2'-0" THICK)
- ▩ - ITEM 601 - TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT
- ▩ - AGGREGATE DRAIN, SEE NOTE 4

Δ - DIMENSION VARIES, MEET EXISTING GABIONS  
C/C - CENTER-TO-CENTER  
O/O - OUT-TO-OUT  
BRG - BEARING  
RA - REAR ABUTMENT  
FA - FORWARD ABUTMENT  
NWE - NORMAL WATER ELEV. = 808.11±  
OHWM - ORD. HIGH WATER MARK = 812.72±  
HW<sub>25</sub> - 25 YR STORM = 817.46±  
HW<sub>100</sub> - 100 YR STORM = 818.57±

**HYDRAULIC DATA**

DRAINAGE AREA = 113 SQ. MILES  
Q (25) = 5655 CFS (FIS)    V (25) = 6.15 FT/S  
Q (100) = 7377 CFS (FIS)    V (100) = 6.88 FT/S  
STRUCTURE CLEARS THE 25 YEAR DESIGN HW BY 6.52 FEET.

**EXISTING STRUCTURE**

TYPE: THREE SPAN CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK SUPERSTRUCTURE AND REINFORCED CONCRETE SUBSTRUCTURES.  
SPANS: 52'-0"±, 65'-0"±, 52'-0"± C/C BEARING  
ROADWAY: 32'-0"± F/F RAILING  
LOADING: CF-130  
SKEW: 25°± LEFT FORWARD  
WEARING SURFACE: 3" SUPERPLASTICIZED DENSE CONCRETE OVERLAY  
APPROACH SLABS: 15'-0"± AS-4-47  
ALIGNMENT: TANGENT  
CROWN: 0.016  
STRUCTURAL FILE NUMBER: 5206871  
DATE BUILT: 1955  
DISPOSITION: TO BE REPLACED

**PROPOSED STRUCTURE**

PROPOSED WORK: COMPLETE STRUCTURE REPLACEMENT USING FULL-WIDTH CONSTRUCTION. NEW APPROACH SLABS.  
TYPE: THREE (3) SPAN CONTINUOUS STEEL BEAM WITH COMPOSITE REINFORCED CONCRETE DECK ON REINFORCED CONCRETE SEMI-INTEGRAL ABUTMENTS AND CAP-AND-COLUMN PIERS  
SPANS: 57'-0", 81'-0", 57'-0" C/C BEARING  
ROADWAY: 32'-0" TOE/TOE PARAPET  
LOADING: HL93; FUTURE WEARING SURFACE - 60 PSF  
SKEW: 25°-0'-0" LEFT FORWARD  
WEARING SURFACE: 1" MONOLITHIC CONCRETE WEARING SURFACE  
APPROACH SLABS: 20'-0" LONG (AS-1-15 MODIFIED), TYPE C INSTALLATION  
ALIGNMENT: TANGENT  
CROWN: 0.016 FT/FT  
COORDINATES: LATITUDE N 41°-13'-25.53"  
LONGITUDE W 81°-55'-17.74"  
DECK AREA: 6968 SQ FT

DESIGN AGENCY: OSBORN ENGINEERING AKRON, OHIO  
DATE: 05/16/22  
REVIEWED: SMK  
DRAWN: ETW  
CHECKED: P-JW  
MEDINA COUNTY STA. 208+38.67 STA. 210+35.87  
SITE PLAN  
BRIDGE NO. MED-252-03.95  
S.R. 252 OVER WEST BRANCH ROCKY RIVER  
MED-252-03.95  
PID No. 88883  
1/26  
26  
57

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**STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS**

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	REVISED	07/17/2015
AS-2-15	REVISED	01/18/2019
GSD-1-19	DATED	01/15/2021
PCB-91	REVISED	07/17/2020
SBR-1-20	REVISED	07/17/2020
SICD-2-14	DATED	01/15/2021

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800	DATED	07/15/2022
838	DATED	01/15/2021

**DESIGN SPECIFICATIONS**

THIS STRUCTURE CONFORMS TO THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2017, AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

**OPERATIONAL IMPORTANCE**

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL 2019.

**DESIGN LOADING**

DESIGN LOADING: HL-93

FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ .FT.

**DESIGN DATA**

CONCRETE QC2 WITH QC/QA - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)

CONCRETE QC1 WITH QC/QA - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

CONCRETE QC5 - COMPRESSIVE STRENGTH 4500 PSI (DRILLED SHAFTS)

REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI

STRUCTURAL STEEL - ASTM A709 GRADE 50, MINIMUM YIELD STRENGTH 50 KSI

**DECK PROTECTION METHOD**

EPOXY COATED REINFORCING STEEL  
2 1/2" CONCRETE COVER

**MONOLITHIC WEARING SURFACE**

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

**UTILITY LINES**

THE UTILITIES SHALL BORE ALL EXPENSE INVOLVED IN PROPOSED WORK TO, TEMPORARY SUPPORT AND MAINTENANCE OF, OR RELOCATION OF THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITIES ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

EXISTING MEDINA COUNTY SANITARY SERVICE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

**DRILLED SHAFTS**

THE MAXIMUM FACTORED LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT IS 357 KIPS AT THE ABUTMENTS AND 779 KIPS AT THE PIERS. THIS LOAD IS RESISTED BY TIP RESISTANCE. THE FACTORED RESISTANCE PROVIDED BY THE DRILLED SHAFT TIP IS 2554 KIPS AT THE ABUTMENTS AND 3114 KIPS AT THE PIERS.

**EXISTING STRUCTURE VERIFICATION**

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

**DECK PLACEMENT DESIGN ASSUMPTIONS**

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.2 KIPS. A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

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

THE EXISTING MED-252-03.95 BRIDGE STRUCTURE SHALL BE REMOVED IN ITS ENTIRETY EXCEPT AS NOTED:

REMOVAL SHALL BE PERFORMED IN PHASES AS SHOWN ON SHEET [5/26] TO FACILITATE SUPPORT OF TEMPORARY SANITARY BYPASS LINE DURING SANITARY WORK AND SUPPORT OF THE EXISTING SANITARY LINE TO REMAIN IN SERVICE. THE CONTRACTOR HAS THE OPTION TO SUBMIT AN ALTERNATE METHOD OF TEMPORARY SUPPORT FOR APPROVAL.

REMOVE EXISTING ABUTMENTS TO ELEVATIONS SHOWN ON SHEET [5/26].

**ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN**

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO 709.00.

**ITEM 514 - FIELD PAINTING, MISC.: EXISTING SANITARY PIPE**

THIS ITEM SHALL INCLUDE SURFACE PREPARATION AND FIELD PAINTING OF THE EXISTING STEEL SANITARY LINE SUPPORTED ON THE BRIDGE BEAMS. ALL ELEMENTS OF CMS ITEM 514 SHALL APPLY WITH THE FOLLOWING ADDITIONS AND REVISIONS:

SURFACE PREPARATION: REMAINING PORTIONS OF THE EXISTING SANITARY LINE SHALL BE SOLVENT CLEANED IN ACCORDANCE WITH CMS 514.13.A. POWER-TOOL CLEANING BY THE METHODS DESCRIBED IN SSPC-SP-3 SHALL THEN BE USED IN AREAS WITH RUST, CORROSION, OR LOOSE EXISTING PAINT. FOLLOWING THESE STEPS, ANY REMAINING COATING SHALL BE REMOVED BY SANDING. EXTRA CARE SHALL BE TAKEN TO AVOID DAMAGE AND LOSS OF THICKNESS TO THE EXISTING SANITARY PIPE AS A

**ITEM 514 - FIELD PAINTING, MISC.: EXISTING SANITARY PIPE (CONT'D)**

RESULT OF SURFACE PREPARATION OPERATIONS. ABRASIVE BLASTING OF NEW OR EXISTING SANITARY LINE SEGMENTS SHALL NOT BE PERMITTED.

FIELD PAINTING: FIELD PAINTING SHALL BE IN ACCORDANCE WITH CMS 514.17. REMAINING PORTIONS OF THE EXISTING SANITARY LINE SHALL RECEIVE PRIME, INTERMEDIATE, AND FINISH COAT APPLICATIONS OF PAINT SYSTEM OZEU.

FINISH COAT SHALL MATCH THE FINISH COAT COLOR OF THE NEW STEEL BEAMS.

CONTRACTOR SHALL TAKE SPECIAL CARE DURING SURFACE PREPARATION AND PAINTING TO PROTECT THE PIPE EXPANSION JOINTS AND GALVANIZED PIPE SUPPORTS AND ROLLERS. SEE SHEET [22/26] FOR DETAILS ON THE LIMITS OF PAINTING AROUND EXPANSION JOINTS. DAMAGE TO THE GALVANIZED COATING OF PIPE SUPPORTS AND ROLLERS SHALL BE REPAIRED BY THE CONTRACTOR ACCORDING TO ODOT CMS 711.02 AT NO ADDITIONAL COST TO THE DEPARTMENT.

FIELD PAINTING AND INSPECTION REPAIRS OF NEW CROSSFRAMES SUPPORTING THE SANITARY LINE SHALL BE INCLUDED WITH ITEM 514 - FIELD PAINTING OF STRUCTURAL STEEL, INTERMEDIATE COAT, ITEM 514 - FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT, AND ITEM 514 - FINAL INSPECTION REPAIR.

PAYMENT SHALL INCLUDE ALL EQUIPMENT, LABOR AND MATERIAL TO COMPLETE THE SURFACE PREPARATION, PRIME, INTERMEDIATE AND FINAL COATS OF PAINT. PAYMENT SHALL BE THE NUMBER OF SQUARE FEET OF PIPE, ELBOWS AND APPLICABLE FITTINGS PAINTED. PAYMENT SHALL BE MADE UNDER ITEM 514 - FIELD PAINTING, MISC.: EXISTING SANITARY PIPE.

**ITEM 514 - FIELD PAINTING, MISC.: NEW SANITARY PIPE**

THIS ITEM SHALL INCLUDE INTERMEDIATE AND FINAL FIELD PAINTING OF THE NEW SEGMENTS OF THE SANITARY LINE SUPPORTED ON THE BRIDGE BEAMS. ALL ELEMENTS OF CMS ITEM 514 SHALL APPLY WITH THE FOLLOWING ADDITIONS AND REVISIONS:

FIELD PAINTING: FIELD PAINTING SHALL BE IN ACCORDANCE WITH CMS 514.17. NEW SEGMENTS OF THE SANITARY LINE SHALL RECEIVE INTERMEDIATE AND FINISH COAT APPLICATIONS OF PAINT SYSTEM IZEU.

FINISH COAT SHALL MATCH THE FINISH COAT COLOR OF THE NEW STEEL BEAMS.

CONTRACTOR SHALL TAKE SPECIAL CARE DURING PAINTING TO PROTECT THE PIPE EXPANSION JOINTS AND GALVANIZED PIPE SUPPORTS AND ROLLERS. SEE SHEET [22/26] FOR DETAILS ON THE LIMITS OF PAINTING AROUND EXPANSION JOINTS. DAMAGE TO THE GALVANIZED COATING OF PIPE SUPPORTS AND ROLLERS SHALL BE REPAIRED BY THE CONTRACTOR ACCORDING TO ODOT CMS 711.02 AT NO ADDITIONAL COST TO THE DEPARTMENT.

FIELD PAINTING AND INSPECTION REPAIRS OF NEW CROSSFRAMES SUPPORTING THE SANITARY LINE SHALL BE INCLUDED WITH ITEM 514 - FIELD PAINTING OF STRUCTURAL STEEL, INTERMEDIATE COAT, ITEM 514 - FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT, AND ITEM 514 - FINAL INSPECTION REPAIR.

PAYMENT SHALL INCLUDE ALL EQUIPMENT, LABOR AND MATERIAL TO COMPLETE THE INTERMEDIATE AND FINAL COATS OF PAINT. PAYMENT SHALL BE THE NUMBER OF SQUARE FEET OF PIPE, ELBOWS AND APPLICABLE FITTINGS PAINTED. PAYMENT SHALL BE MADE UNDER ITEM 514 - FIELD PAINTING, MISC.: NEW SANITARY PIPE.

**ITEM SPECIAL - STRUCTURES: TEMPORARY UTILITY SUPPORT STRUCTURE, AS PER PLAN**

THIS ITEM SHALL CONSIST OF PREPARING PLANS, PROVIDING, MAINTAINING AND SUBSEQUENTLY REMOVING A FULLY ENGINEERED TEMPORARY UTILITY STRUCTURE FOR SUPPORTING MEDINA COUNTY SANITARY ENGINEER'S (MCSE) EXISTING SANITARY LINE WHICH WILL REMAIN IN SERVICE (VIA BYPASS PUMPS AND TEMPORARY SEWER LINES, PAID UNDER SEPARATE ITEM) DURING CONSTRUCTION OF THE PROJECT, IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, EXCEPT AS MODIFIED HEREIN AND IN REASONABLY CLOSE CONFORMITY WITH THE ALIGNMENT, PROFILE, LOCATION AND DETAILS SHOWN ON SHEET [22/26].

THIS ITEM SHALL ALSO INCLUDE PAYMENT FOR LOWERING OF THE EXISTING PORTION OF THE SANITARY LINE TO REMAIN TO MATCH PROPOSED FLOW LINE ELEVATIONS. THE LINE SHALL BE FULLY SUPPORTED BY THE TEMPORARY STRUCTURE PRIOR TO AND DURING LOWERING. LOWERING SHALL BE UNIFORM WITH A MAXIMUM ALLOWABLE DIFFERENTIAL BETWEEN PIPE SUPPORT LOCATIONS OF 1/8" DURING LOWERING OPERATIONS.

ANY DAMAGE TO THE EXISTING PIPE TO REMAIN RESULTING FROM TEMPORARY SUPPORT OR LOWERING OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DEPARTMENT OR MCSE.

THREE (3) COPIES OF THE CONTRACTOR'S PLAN FOR THE PROPOSED TEMPORARY STRUCTURE AND TWO (2) COPIES OF THE DESIGN COMPUTATIONS SHALL BE SUBMITTED TO THE DEPARTMENT AT LEAST 30 DAYS PRIOR TO ITS SCHEDULED CONSTRUCTION. THE CONTRACTOR SHALL ALSO SUBMIT TWO (2) COPIES OF TEMPORARY STRUCTURE PLANS TO MCSE AT LEAST 30 DAYS PRIOR TO ITS SCHEDULED CONSTRUCTION FOR THEIR REVIEW AND APPROVAL. SUCH CONSTRUCTION SHALL NOT BEGIN UNTIL AFTER APPROVAL HAS BEEN RECEIVED. THE PLANS SHALL BE PREPARED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER.

THE STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH THE AASHTO "LRFD BRIDGE DESIGN SPECIFICATIONS - 8TH EDITION - 2017".

THE STRUCTURE SHALL BE DESIGNED TO SUPPORT A TOTAL FACTORED UTILITY LOAD OF 205 POUNDS PER LINEAR FOOT.

ERECTION, MAINTENANCE AND SUBSEQUENT REMOVAL OF THE TEMPORARY UTILITY STRUCTURE SHALL BE INCLUDED FOR PAYMENT WITH ITEM SPECIAL - STRUCTURES: TEMPORARY UTILITY SUPPORT STRUCTURE, AS PER PLAN.

DESIGNED EJW CHECKED P.JW	DRAWN EJW REVISED -	REVIEWED SMK STRUCTURE FILE NUMBER 5206872	DATE 05/16/22	DESIGN AGENCY OSBORN ENGINEERING AKRON, OHIO
				STRUCTURE GENERAL NOTES - 1 BRIDGE NO. MED-252-03.95 S.R. 252 OVER WEST ROCKY RIVER
MED - 252 - 03.95 PID No. 88883				2 / 26
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**ITEM 838 - GABIONS, AS PER PLAN**

THIS ITEM INCLUDES REMOVING EXISTING GABIONS TO CONSTRUCT THE REAR ABUTMENT AND PIER 1 SUBSTRUCTURES. ALL GABION CONSTRUCTION AND REPAIRS SHALL COMPLY WITH SUPPLEMENTAL SPECIFICATION 838 - GABIONS, EXCEPT THAT GABION HEIGHT SHALL MATCH THE EXISTING ADJACENT GABIONS IN PLACE (1'-6" TYPICAL FOR GABION MATS, 3'-0" FOR GABION WALL). SEE EXISTING PLAN INFORMATION FOR ADDITIONAL DETAILS.

NEW GABIONS AT THE REAR ABUTMENT SHALL BE PLACED TO THE LIMITS SHOWN ON THE SITE PLAN AND FILL THE VOID BETWEEN THE PROPOSED ABUTMENT AND THE EXISTING GABION BASKETS. NEW AND EXISTING ADJOINING GABIONS SHALL BE CONNECTED USING LACING WIRE PER SUPPLEMENTAL SPECIFICATION 838. THE ESTIMATED GABION VOLUME IS 52 CY AT THE REAR ABUTMENT.

EXISTING GABIONS SHALL BE REMOVED FOR INSTALLATION OF THE NEW PIER 1 DRILLED SHAFTS AND COLUMNS. IT IS ANTICIPATED THAT A 6 FOOT BY 6 FOOT PLAN AREA OF EXISTING GABIONS WILL REQUIRE REMOVAL AND REPLACEMENT AT EACH PIER COLUMN. THE CONTRACTOR SHALL CUT TOP AND BOTTOM MATS AND REMOVE INTERFERING SIDE PANELS AND DIAPHRAGMS. REMOVE EXISTING STONE. CONTRACTOR MAY STORE STONE FOR LATER RE-USE IF THE MATERIAL MEETS THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 838 AND IS ACCEPTABLE TO THE ENGINEER. CONSTRUCT PIER 1 PER PLAN. INSTALL NEW GABION BASKETS IN THE AREA REMOVED FOR PIER 1 CONSTRUCTION. THE USE OF LOOSE STONE CONFORMING TO THE SUPPLEMENTAL SPECIFICATION 838.02.B FILL REQUIREMENTS WILL BE PERMITTED TO FILL IN THE GAPS BETWEEN THE PIER 1 COLUMNS AND THE NEW GABION BASKETS INSTALLATION. THE REPLACEMENT GABIONS SHALL BE JOINED TO THE EXISTING ADJACENT GABIONS USING LACING WIRE PER SUPPLEMENTAL SPECIFICATION 838. AFTER PLACING EXISTING SALVAGED OR NEW STONE, THE TOP MAT SHALL BE INSTALLED AND LACED TO NEW SIDE PANELS, DIAPHRAGMS AND ADJOINING GABION BASKETS. THE ESTIMATED GABION VOLUME IS 6 CY AT PIER 1.

AFTER REMOVAL OF THE EXISTING PIER 1, NEW GABIONS SHALL BE PLACED PER SUPPLEMENTAL SPECIFICATION 838 TO INFILL THE GAP BETWEEN THE EXISTING GABION BASKETS. THE CONTRACTOR HAS THE OPTION TO LEAVE THE EXISTING PIER 1 FOOTINGS IN PLACE IN CONFORMANCE WITH THE REQUIREMENTS OF CMS 202.03 STRUCTURES REMOVED AND INSTALL THE NEW GABIONS OVER THE EXISTING PIER 1 FOOTINGS. NEW AND EXISTING GABIONS SHALL BE CONNECTED USING LACING WIRE PER SUPPLEMENTAL SPECIFICATION 838. ESTIMATED GABION VOLUME IS 7 CY.

ADDITIONALLY, THE CONTRACTOR SHALL USE EXTREME CARE DURING CONSTRUCTION OPERATIONS TO NOT DAMAGE EXISTING GABIONS ALONG THE SOUTH BANK OF THE WEST BRANCH OF ROCKY RIVER. AN ACCESS PLAN SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL A MINIMUM OF 30 DAYS PRIOR TO CONSTRUCTION. EXISTING GABIONS DAMAGED WITHIN THE APPROVED ACCESS AREA WILL BE COMPENSATED AT THE BID ITEM UNIT PRICE. EXISTING GABIONS DAMAGED DURING CONSTRUCTION OPERATIONS OUTSIDE OF THE APPROVED ACCESS AREA SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE STATE. REPAIRS SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER.

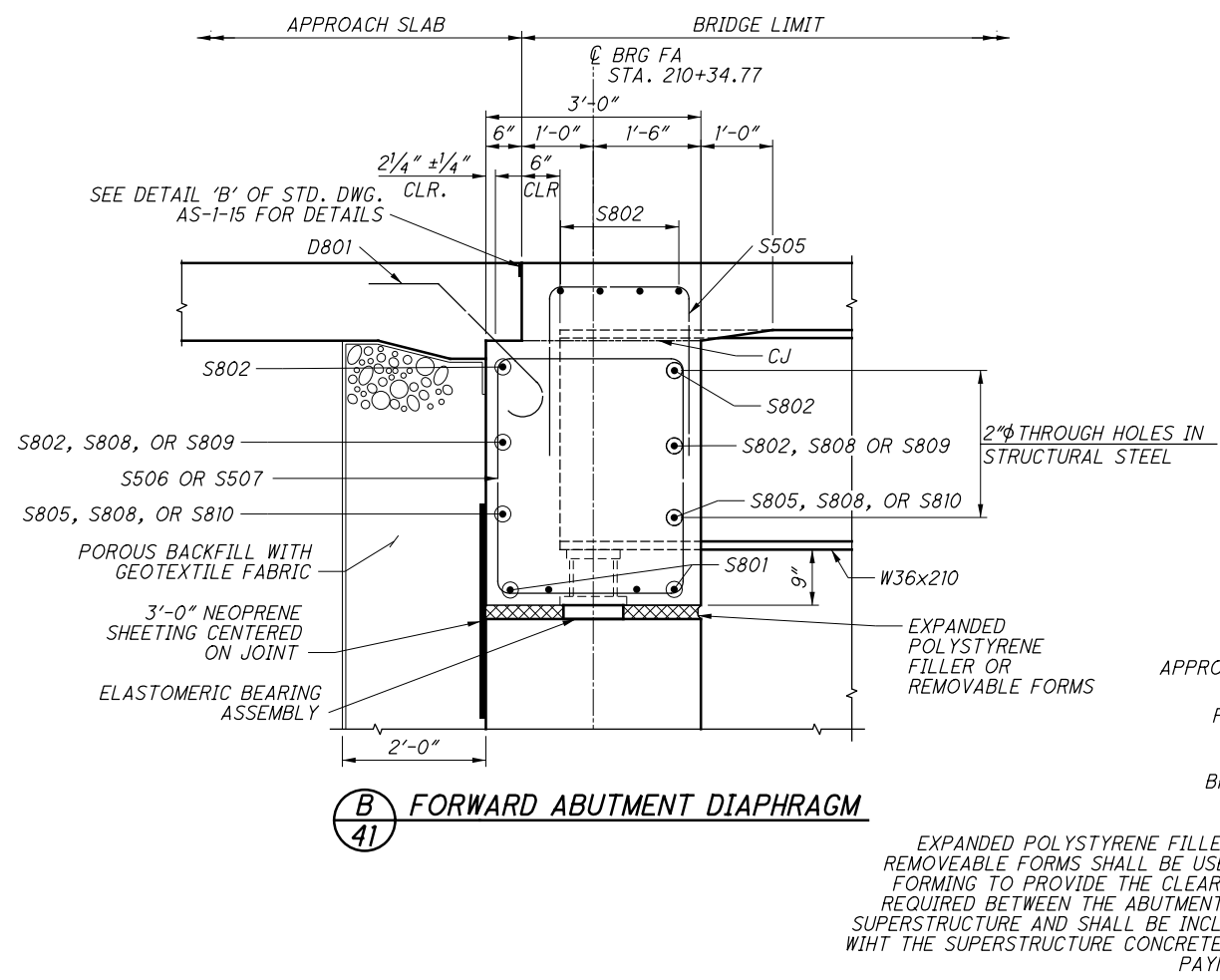
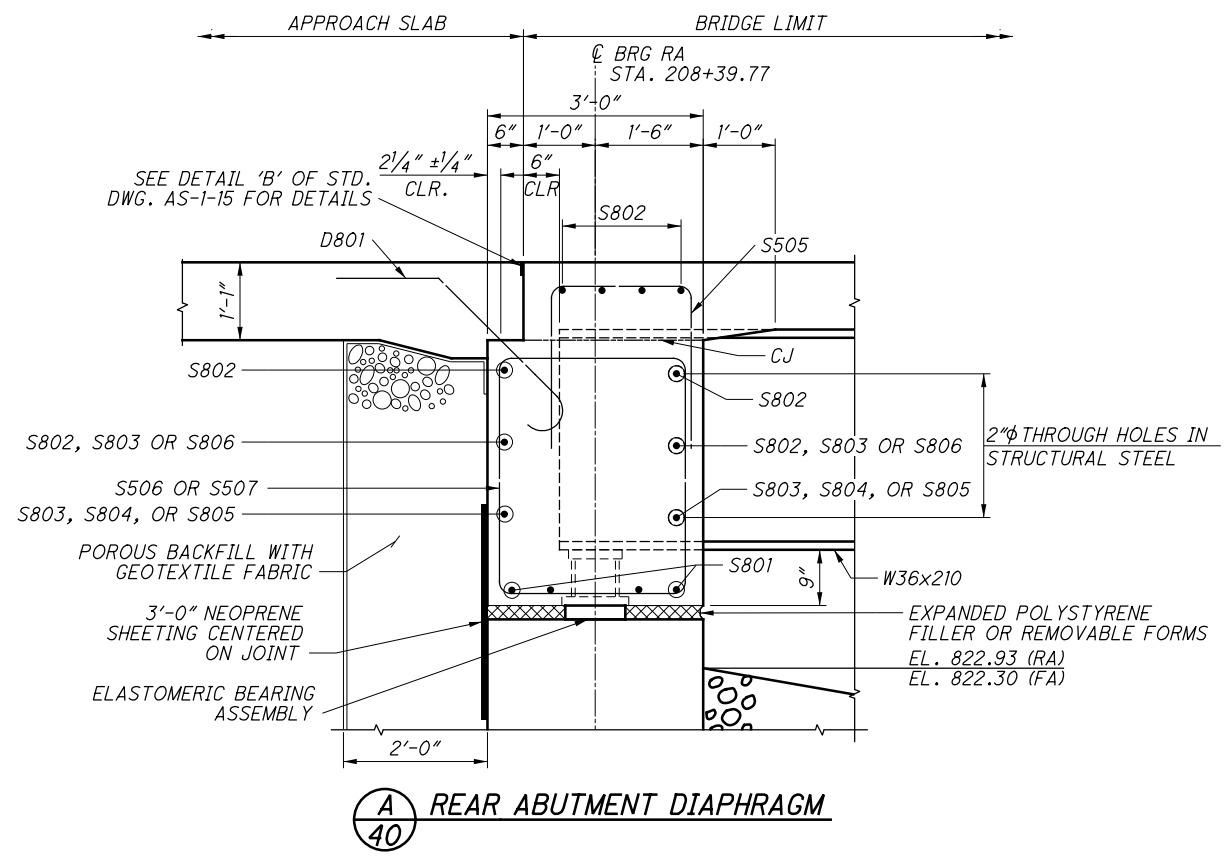
MEASUREMENT OF GABIONS SHALL BE THE NUMBER OF CUBIC YARDS OF VOLUME COMPLETED AND ACCEPTED.

THIS ITEM SHALL INCLUDE THE GABIONS, FILL MATERIAL, EXCAVATION, AND ALL EQUIPMENT, LABOR AND MATERIAL TO COMPLETELY INSTALL THE BASKET. PAYMENT SHALL BE THE CUBIC YARDS IN PLACE AND ACCEPTED. PAYMENT SHALL BE MADE UNDER ITEM 838 - GABIONS, AS PER PLAN.

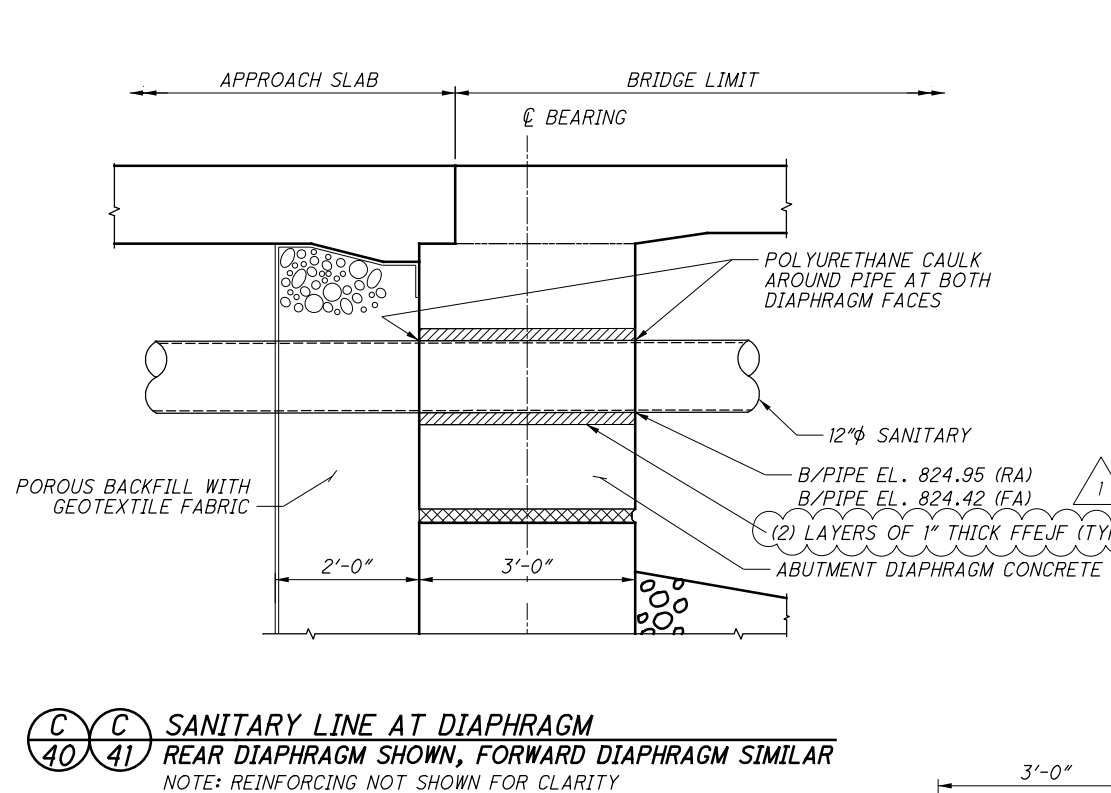
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EIW		EIW		SMK		05/16/22		OSBORN ENGINEERING	
CHECKED		REVISED		STRUCTURE FILE NUMBER		5206872		AKRON, OHIO	
P.J.W		-		-		-		-	
<p><b>STRUCTURE GENERAL NOTES - 2</b></p> <p>BRIDGE NO. MED-252-03.95</p> <p>S.R. 252 OVER WEST ROCKY RIVER</p>					<p><b>MED - 252 - 03.95</b></p> <p>PID No. 88883</p>				
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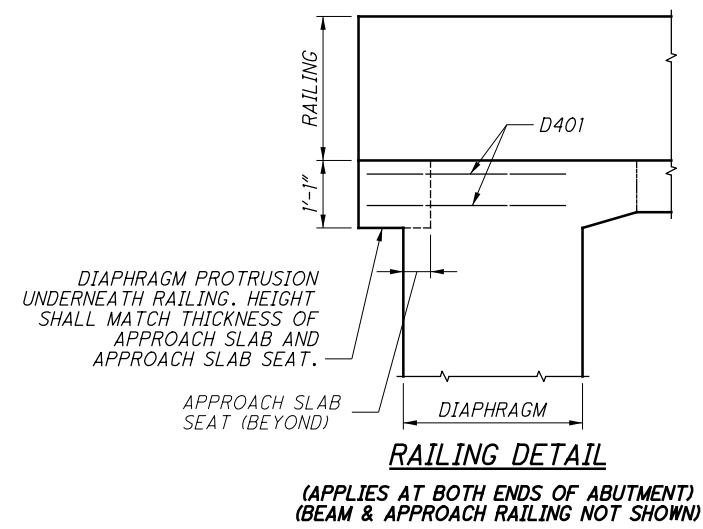
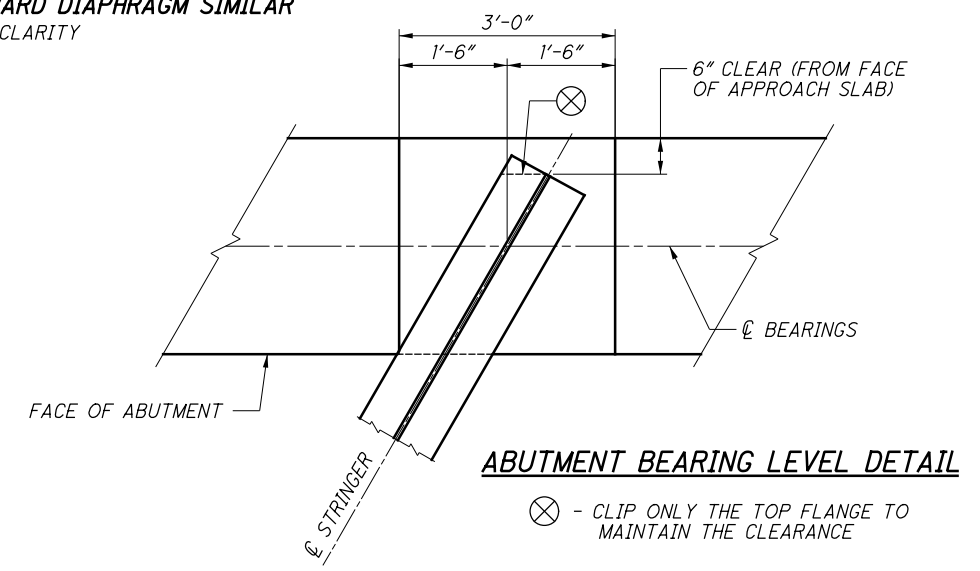
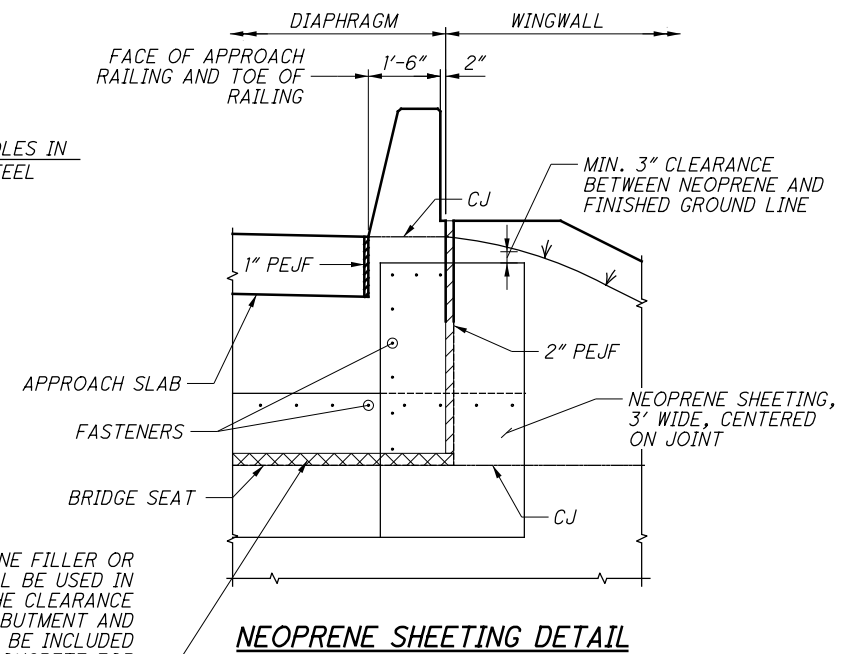
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EXPANDED POLYSTYRENE FILLER OR REMOVEABLE FORMS SHALL BE USED IN FORMING TO PROVIDE THE CLEARANCE REQUIRED BETWEEN THE ABUTMENT AND SUPERSTRUCTURE AND SHALL BE INCLUDED WITH THE SUPERSTRUCTURE CONCRETE FOR PAYMENT



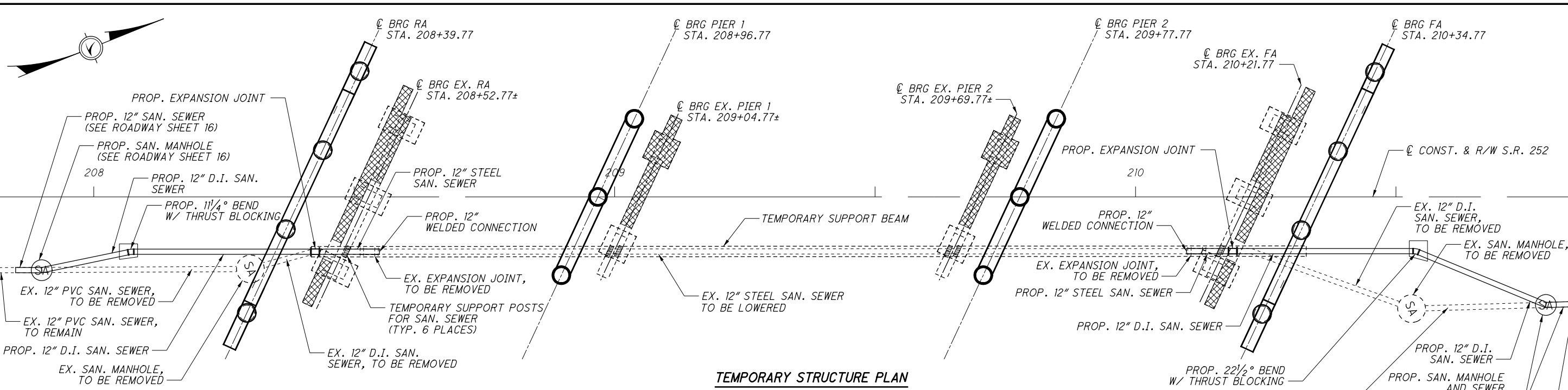
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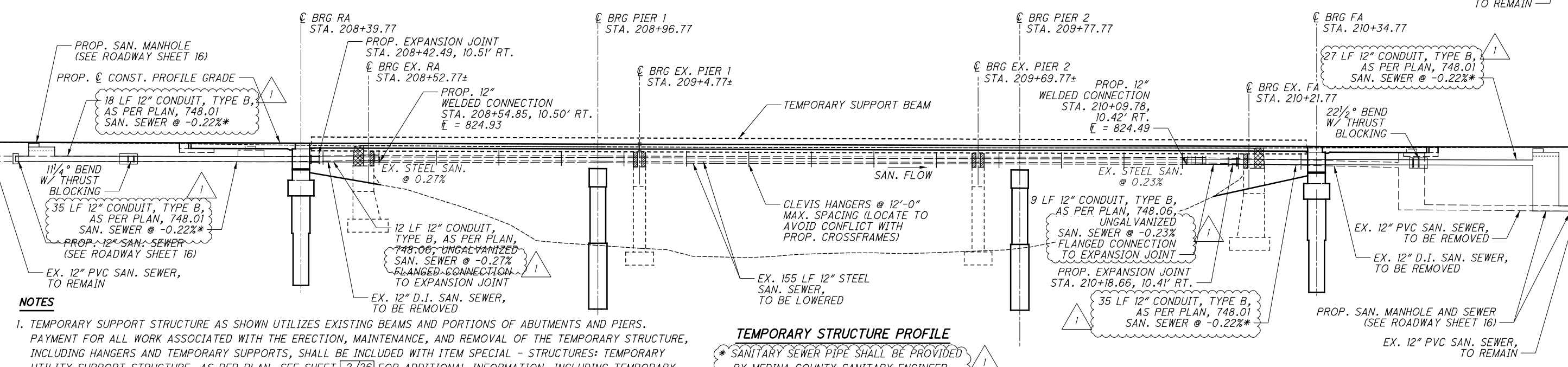
- NOTES**
1. ABUTMENT DIAPHRAGM CONCRETE: PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN ON DETAIL A AND B (THIS SHEET) AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.
  2. EXPANDED POLYSTYRENE FILLER OR REMOVEABLE FORMS AND ABUTMENT DIAPHRAGM CONCRETE SHALL BE INCLUDED WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK FOR PAYMENT.
  3. PAYMENT FOR THE FFEJF SHALL BE INCLUDED WITH ITEM 611 - CONDUIT, TYPE B, 748.01, AS PER PLAN. SEE ROADWAY SHEET (5) 57 FOR DETAILS.
- LEGEND**
- RA - REAR ABUTMENT
  - FA - FORWARD ABUTMENT
  - FFEJF - FLEXIBLE FOAM EXPANSION JOINT FILLER

DESIGNED	PJW	CHECKED	EJW
DRAWN	MJD	REVISD	-
REVIEWED	SMK	DATE	05/16/22
DESIGN AGENCY	OSBORN ENGINEERING AKRON, OHIO		
STRUCTURE FILE NUMBER	5206872		
<b>ABUTMENT DIAPHRAGM DETAILS</b>			
BRIDGE NO. MED-252-03.95			
S.R. 252 OVER WEST BRANCH ROCKY RIVER			
<b>MED-252-03.95</b>			
PID No. 88883			
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**TEMPORARY STRUCTURE PLAN**



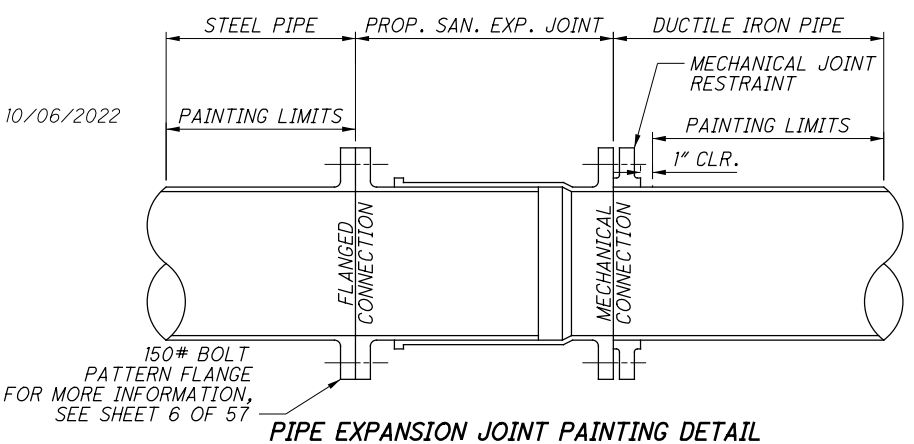
**TEMPORARY STRUCTURE PROFILE**

\* SANITARY SEWER PIPE SHALL BE PROVIDED BY MEDINA COUNTY SANITARY ENGINEER

- NOTES**
- TEMPORARY SUPPORT STRUCTURE AS SHOWN UTILIZES EXISTING BEAMS AND PORTIONS OF ABUTMENTS AND PIERS. PAYMENT FOR ALL WORK ASSOCIATED WITH THE ERECTION, MAINTENANCE, AND REMOVAL OF THE TEMPORARY STRUCTURE, INCLUDING HANGERS AND TEMPORARY SUPPORTS, SHALL BE INCLUDED WITH ITEM SPECIAL - STRUCTURES: TEMPORARY UTILITY SUPPORT STRUCTURE, AS PER PLAN. SEE SHEET [2/26] FOR ADDITIONAL INFORMATION, INCLUDING TEMPORARY STRUCTURE DESIGN LOADING AND PLAN AND SUBMITTAL REQUIREMENTS. THE CONTRACTOR ALSO HAS THE OPTION TO SUBMIT AN ALTERNATE METHOD OF TEMPORARY SUPPORT FOR APPROVAL.
  - THE PORTION OF THE EXISTING SANITARY PIPE CROSSING THE BRIDGE TO REMAIN SHALL BE UNIFORMLY LOWERED TO MEET THE PROPOSED FLOW LINE ELEVATIONS SHOWN. THIS WORK SHALL BE INCLUDED WITH ITEM SPECIAL - STRUCTURES: TEMPORARY UTILITY SUPPORT STRUCTURE, AS PER PLAN FOR PAYMENT. SEE SHEET [2/26] FOR ADDITIONAL INFORMATION, INCLUDING REQUIREMENTS FOR SUPPORT AND LIMITATIONS ON DIFFERENTIAL PIPE MOVEMENT DURING LOWERING.
  - REMOVAL LIMITS SHOWN ARE THOSE TO BE PERFORMED PRIOR TO INSTALLATION OF TEMPORARY SUPPORT STRUCTURE. FOR EXISTING STRUCTURE REMOVAL PHASING AND DETAILS, SEE SHEET [5/26].
  - SANITARY PIPE LENGTHS ARE TAKEN FROM  $\varnothing$  FITTING TO  $\varnothing$  FITTING.
  - SEE ROADWAY SHEETS (13/57) & (22/57) FOR SANITARY LINE QUANTITIES & DETAILS.
  - CLEVIS HANGERS SHALL BE STANDARD DUTY ADJUSTABLE AS MANUFACTURED BY FNW, FASTENAL, OR APPROVED EQUAL.
  - THRUST BLOCKS HAVE BEEN PROVIDED TO ANCHOR DUCTILE IRON PIPE AND TO REQUIRE THE EXPANSION JOINTS TO ACCOMMODATE THE ANTICIPATED MOVEMENT.

**LEGEND**

BRG	- BEARING
$\varnothing$ CONST.	- CENTERLINE CONSTRUCTION
D.I.	- DUCTILE IRON
EX.	- EXISTING
EXP.	- EXPANSION
FA	- FORWARD ABUTMENT
MECH	- MECHANICAL
PROP.	- PROPOSED
RA	- REAR ABUTMENT
SAN.	- SANITARY
STA	- STATION
	- CONCRETE REMOVAL LIMITS
	- TEMPORARY SUPPORT



FOR DETAILS ON PAINTING OF SANITARY PIPE, SEE SHEET [2/26].

DESIGN AGENCY	OSBORN ENGINEERING
AKRON, OHIO	
DATE	05/16/22
REVIEWED	SMK
STRUCTURE FILE NUMBER	5206872
DRAWN	TWC
DESIGNED	PJW
CHECKED	EIW
REVIS	
<b>SANITARY LINE &amp; TEMPORARY UTILITY SUPPORT DETAILS</b>	
BRIDGE NO.	MED-252-03.95
S.R.	252 OVER WEST BRANCH ROCKY RIVER
PID No.	88883
MED-252-03.95	
22/26	
47	
57	