

RESOLUTION APPROVING THE DETAILED CONSTRUCTION PLANS FOR PHASE II OF THE BISHOP ROAD WATERLINE IMPROVEMENT PROJECT, HARPERSFIELD TOWNSHIP, ACDES

WHEREAS, Doug Starkey, Director of the Ashtabula County Department of Environmental Services, has presented detailed construction plans prepared by CT Consultants, and approved by Ashtabula County Sanitary Engineer, for the Bishop Rd Waterline Extension Phase II Project, Harpersfield Township; and

WHEREAS, The project description is as follows:

The project is phase II of the Bishop Rd waterline project, where new water main will be extended on Bishop Road from LaFevre Rd to Walter Main Rd. The new water main will be 12" AWWA C909. In Harpersfield Township, in Ashtabula County.

WHEREAS, Doug Starkey, Director of ACDES, is authorized after plan approval to submit signed drawings to OEPA for PTI; Permit to Install; and

WHEREAS, Doug Starkey, Director of ACDES, recommends approval of these plans; now

THEREFORE, BE IT RESOLVED, by the Board of County Commissioners of the County of Ashtabula, Ohio, that:

Section 1. The detailed construction plans for Phase II of the Bishop Road Waterline Improvement Project in Harpersfield Township are hereby approved.

Section 2. Those detailed plans shall be filed in the office of the Ashtabula County Sanitary Engineer, in the Department of Environmental Services and kept continuously on file there for inspection by all persons interested therein.

Section 3. This Board finds and determines that all formal actions of this Board concerning and relating to the adoption of this resolution were taken in an open meeting of the Board and all deliberations of this Board and of any of its committees that resulted in those formal actions were in meetings open to the public.

**ASHTABULA COUNTY COMMISSIONERS
CERTIFICATION PAGE**

Resolution No. 2024-312

June 20, 2024

**RESOLUTION APPROVING DETAILED CONSTRUCTION PLANS FOR PHASE II OF
THE BISHOP ROAD WATERLINE IMPROVEMENT PROJECT, HARPERSFIELD
TOWNSHIP, ACDES**

Upon the motion of J.P. Ducro IV, seconded by Casey R. Kozlowski.

VOTE:

**Kathryn L. Whittington
J.P. Ducro IV
Casey R. Kozlowski**

**Aye
Aye
Aye**

CERTIFICATE OF CLERK

IT IS HEREBY CERTIFIED that the foregoing is a true and correct transcript of a resolution acted upon and duly passed by the Board of County Commissioners of Ashtabula County, Ohio, on the date noted above.



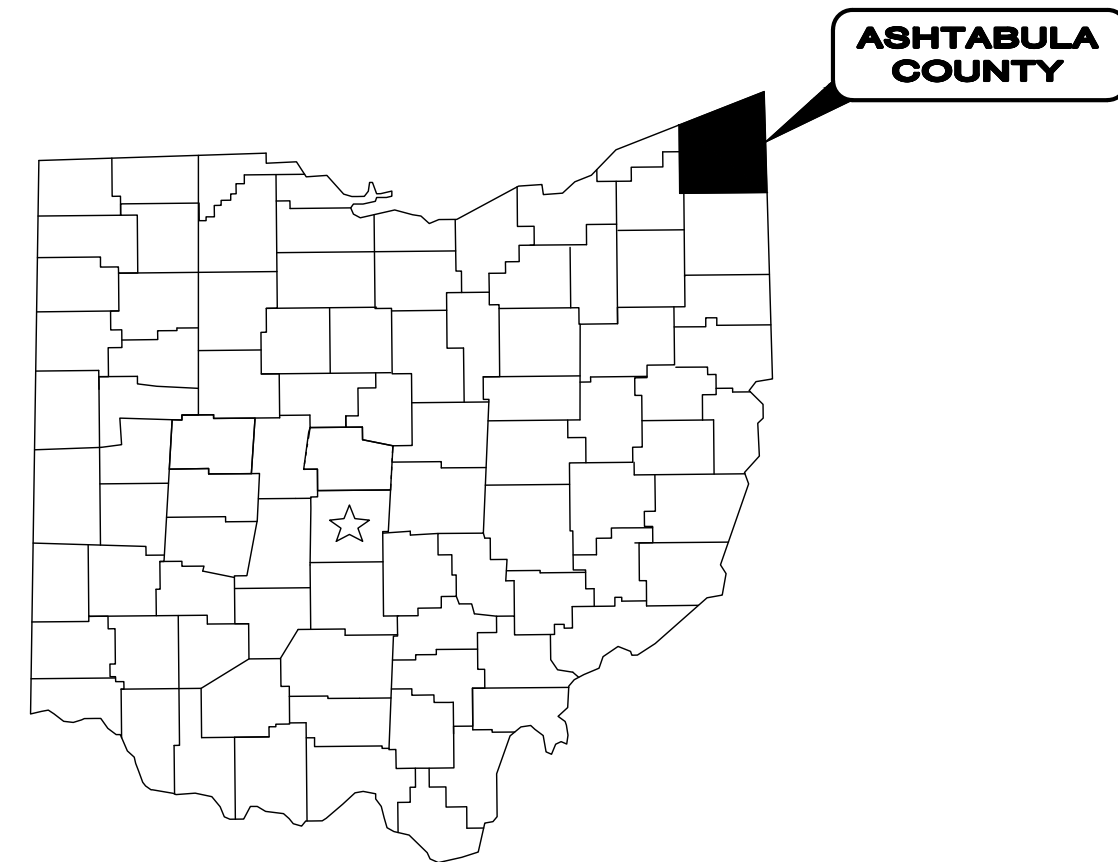
Lisa Hawkins, Clerk of the Board
Board of County Commissioners
Ashtabula County, Ohio

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

PHASE 2 - BISHOP ROAD WATERMAIN

HARPERSFIELD TOWNSHIP, OHIO

JUNE 2024



LOCATION MAP
NOT TO SCALE

ASHTABULA COUNTY APPROVALS:

COUNTY COMMISSIONER	KATHRYN L. WHITTINGTON	DATE
COUNTY COMMISSIONER	CASEY R. KOZLOWSKI	DATE
COUNTY COMMISSIONER	J.P. DUCRO IV	DATE
DIRECTOR, ACDES	DOUG STARKEY	DATE

ENGINEER/ARCHITECT:

CT CONSULTANTS, INC.
8150 STERLING COURT
MENTOR, OH 44060

(440) 951-9000 PHONE
(440) 951-7487 FAX



OHIO 811 DESIGN SERIAL NUMBER & UTILITY LIST:

OHIO UTILITY PROTECTION SERVICE:
106 WEST RYEN, ROOM 427
YOUNGSTOWN, 44051
(800) 362-2764

ALL-TEL:
360 HIGHLAND ROAD
MACEDONIA, OHIO 44067
(800) 782-6206

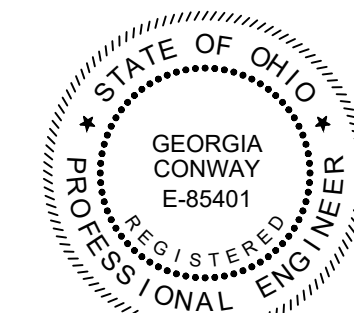
ENVIRONMENTAL SERVICES:
36 W. WALNUT STREET
JEFFERSON, OHIO 44047
(440) 576-3722 PHONE
(440) 576-3781 FAX

CLEVELAND ELECTRIC ILLUMINATING CO.:
2210 SOUTH RIDGE ROAD
ASHTABULA, OHIO 44004

SPRINT:
PO BOX 3555
MANSFIELD, OHIO 44907
(800) 786-6272

TCI:
2904 STATE ROAD
ASHTABULA, OHIO 44004
(440) 998-2148

THE EAST OHIO GAS COMPANY:
1010 WEST 30TH STREET
ASHTABULA, OHIO 44004
(440) 992-5100



GEORGIA CONWAY

P.E. No. E-85401

6/11/24

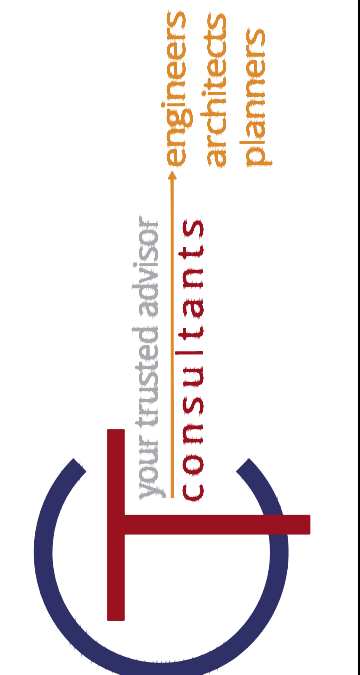
DATE

ENGINEER'S PROJECT No. 241223

- UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO BUILDINGS.
- THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.

NOTE:

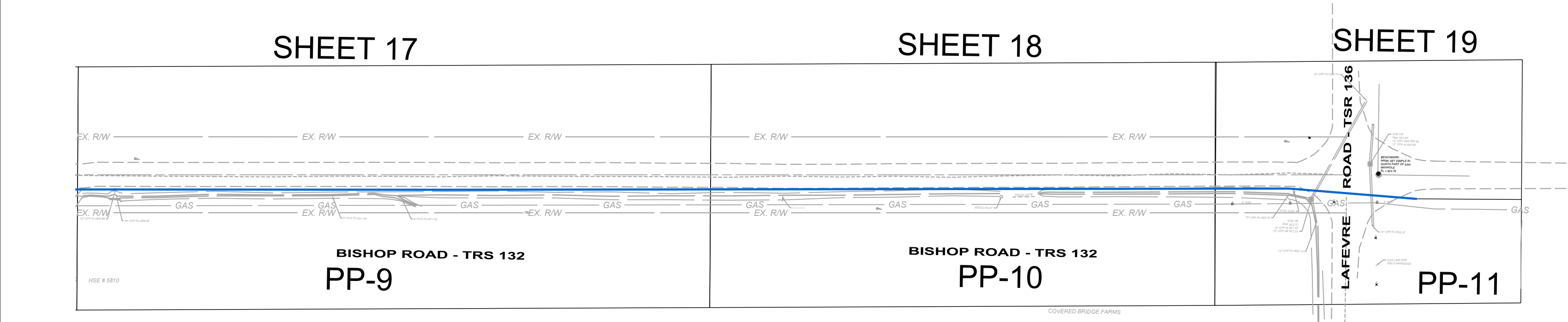
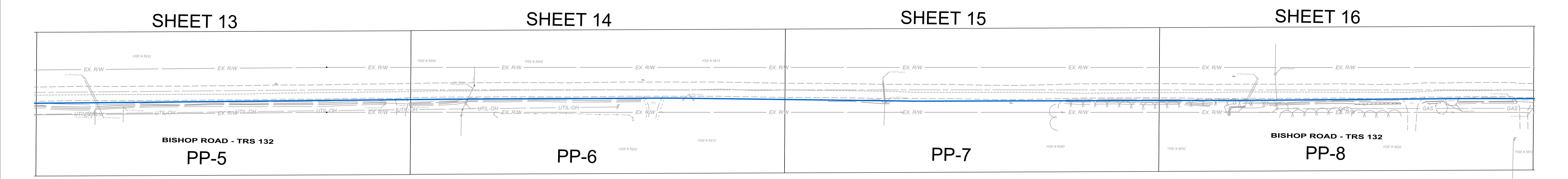
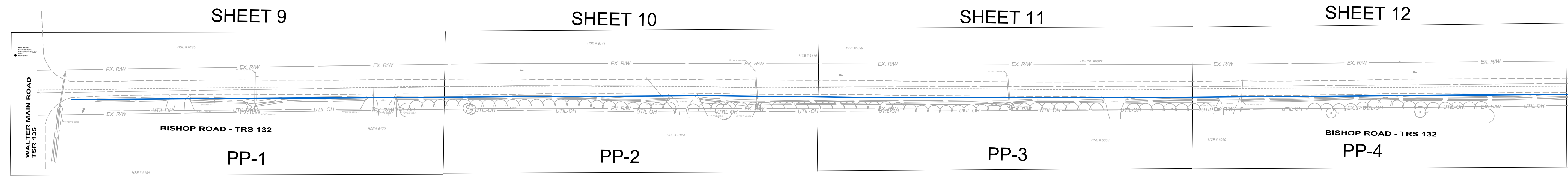
THE SURVEY SHOWN ON THESE PLANS WAS OBSERVED IN THE FIELD FOR CONSTRUCTION PURPOSES ONLY AND MAY NOT BE SUITABLE FOR PROPERTY LINE SURVEYS OR ANY OTHER PURPOSE.



ISSUED FOR:	ISSUE DATE:	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
	4/06/2024	AS SHOWN	JK/GBC	JK	GBC

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
BISHOP ROAD, HARPERSFIELD TWP.
ASHTABULA COUNTY OHIO
COVER SHEET

PROJECT NO.	241223
SHEET NAME	CVR-SHT
SHEET	OF
1	19



Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	SHEET INDEX
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4	GENERAL NOTES 1
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17	PP-9
18	PP-10
19	PP-11

NO	REVISION	DATE

ISSUED FOR:	4/06/2024
ISSUE DATE:	AS SHOWN
SCALE:	JK/CBC
DESIGNED BY:	JK
DRAWN BY:	JK
CHECKED BY:	GBC

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
 BISHOP ROAD, HARPERSFIELD TWP.
 ASHTABULA COUNTY OHIO
SHEET INDEX

PROJECT NO.		241223
SHEET NAME		INDEX
SHEET	OF	
2	19	

EXISTING LINETYPES	
FENCE, GENERAL	
FENCE, BARBED WIRE	
FENCE, CHAIN LINK	
FENCE, DECORATIVE	
FENCE, ELECTRIC	
FENCE, VINYL	
FENCE, WOOD	
FENCE, WOVEN WIRE	
CABLE RAIL	
GUARDRAIL	
HANDRAIL	
CABLE T.V., ABANDONED	
CABLE T.V.	
CABLE T.V., OH	
CABLE T.V., UG	
CABLE T.V., SERVICE	
CABLE T.V., SERVICE OH	
CABLE T.V., SERVICE UG	
COMMUNICATION, ABANDONED	
COMMUNICATION	
COMMUNICATION, OH	
COMMUNICATION, UG	
COMMUNICATION, SERVICE	
COMMUNICATION, SERVICE OH	
COMMUNICATION, SERVICE, UG	
ELECTRIC, ABANDONED	
ELECTRIC, DUCT BANK	
ELECTRIC	
ELECTRIC, OH	
ELECTRIC, UG	
ELECTRIC, SERVICE	
ELECTRIC, SERVICE OH	
ELECTRIC, SERVICE, UG	
FIBER OPTIC, ABANDONED	
FIBER OPTIC, DUCT BANK	
FIBER OPTIC	
FIBER OPTIC, OH	
FIBER OPTIC, UG	
FIBER OPTIC, SERVICE	
FIBER OPTIC, SERVICE OH	
FIBER OPTIC, SERVICE, UG	
GAS, ABANDONED	
GAS	
GAS, SERVICE	
SANITARY, ABANDONED	
SANITARY FORCE MAIN	
SANITARY SEWER	
SANITARY LEACH LINE	
SANITARY SEWER, DOUBLE	
SANITARY SEWER, SERVICE	
STORM SEWER, ABANDONED	
STORM CULVERT	
STORM SEWER	
STORM SEWER, DOUBLE	
STORM, ROOF DRAIN	
STORM, UNDERDRAIN	
TELEPHONE, ABANDONED	
TELEPHONE	
TELEPHONE, OH	
TELEPHONE, UG	
TELEPHONE, SERVICE	
TELEPHONE, SERVICE OH	
TELEPHONE, SERVICE, UG	
TRAFFIC, ABANDONED	
TRAFFIC LINE	
TRAFFIC LINE, OH	
TRAFFIC LINE, UG	
TRAFFIC, LOOP WIRE	
TRAFFIC, SPAN WIRE	
WATER LINE, ABANDONED	
WATER LINE	
WATER LINE, DOUBLE	
WATER LINE, SERVICE	

EXISTING LINETYPES	
BRUSH LINE	
BUSH LINE	
TREE LINE	
MAJOR CONTOUR	
MINOR CONTOUR	
WATER EDGE	
COUNTY LINE	
CORPORATION LINE	
ANNEXATION AREA	
SECTION LINE	
TOWNSHIP LINE	
FLOOD PLAIN LIMIT	
WETLAND LIMIT	
FARM LINE	
BOUNDARY LINE	
PROPERTY LINE	
LEASE LINE	
RIGHT-OF-WAY LINE	
RIGHT-OF-WAY C/L	
SURVEY STATIONING	
FENCE, GENERAL	
FENCE, BARBED WIRE	
FENCE, CHAIN LINK	
FENCE, DECORATIVE	
FENCE, ELECTRIC	
FENCE, VINYL	
FENCE, WOOD	
FENCE, WOVEN WIRE	
CABLE RAIL	
GUARDRAIL	
HANDRAIL	
ELECTRIC, DUCT BANK	
ELECTRIC, OH	
ELECTRIC, UG	
ELECTRIC, SERVICE OH	
ELECTRIC, SERVICE, UG	
GAS	
GAS, SERVICE	
SANITARY FORCE MAIN	
SANITARY SEWER	
SANITARY LEACH LINE	
SANITARY SEWER, DOUBLE	
SANITARY SEWER, SERVICE	
STORM SEWER	
STORM SEWER, DOUBLE	
STORM, ROOF DRAIN	
STORM, UNDERDRAIN	
WATER LINE	
WATER LINE, DOUBLE	
WATER LINE, SERVICE	
BUSH LINE	
TREE LINE	
MAJOR CONTOUR	
MINOR CONTOUR	
WATER EDGE	
BOUNDARY LINE	
PROPERTY LINE	
EASEMENT LINE	
LEASE LINE	
RIGHT-OF-WAY LINE	
RIGHT-OF-WAY CL	
PHASE LINE	
TEMPORARY RIGHT-OF-WAY	
WORK LIMIT	
SETBACK	
SURVEY STATIONING	
CONSTRUCTION FENCE	
SILT FENCE	
FILTER FENCE	
FILTER SOCK	

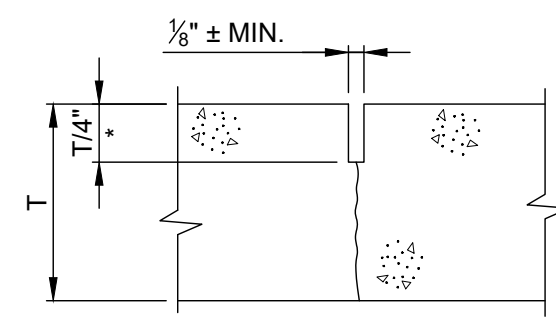
EXISTING SYMBOLS	
SANITARY MANHOLE	
SANITARY CLEANOUT	
SANITARY LINE CAP	
SANITARY LINE PAINT MARKING	
SANITARY STRUCTURE NUMBER	
SANITARY VENT PIPE	
STORM MANHOLE (SOLID LID)	
STORM MANHOLE (OPEN GRATE)	
CURB INLET	
CURB INLET (DOUBLE)	
CATCH BASIN	
CATCH BASIN (ROUND LID)	
CATCH BASIN (DOME)	
CATCH BASIN (SIDE INLET)	
DRAIN	
DOWNSPOUT	
STORM CLEANOUT	
STORM LINE CAP	
STORM ENDWALL	
STORM HEADWALL	
STORM LINE PAINT MARKING	
STORM STRUCTURE NUMBER	
ROCK CHANNEL PROTECTION	
SURFACE DRAINAGE FLOW	
STORM FLOOD ROUTING ARROW	
FIRE HYDRANT	
WATER SIAMESE CONNECTION	
WATER VALVE	
WATER VALVE BOX	
WATER METER	
WATER METER PIT	
WATER LINE REDUCER	
WATER LINE CAP	
WATER LINE PLUG	
WATER LINE PAINT MARKING	
POST INDICATOR VALVE	
WATER MANHOLE	
WATER FLUSHING ASSEMBLY	
WATER FIXTURE	
WATER FITTING (TEE)	
WATER FITTING (CROSS)	
WATER FITTING (45° WYE)	
WATER FITTING (11.25°)	
WATER FITTING (22.50°)	
WATER FITTING (45°)	
WATER FITTING (90°)	
IRRIGATION SPRINKLER HEAD	
IRRIGATION CONTROL BOX	
IRRIGATION BOX	
STEAM MANHOLE	
STEAM VENT	
COMBINED SEWER MANHOLE	
GAS LIGHT POST (YARD)	
GAS MANHOLE	
GAS VALVE	
GAS VALVE BOX	
GAS	
GAS METER	
GAS REGULATOR	
GAS VENT PIPE	
GAS LINE PAINT MARKING	
GAS LINE FIXTURE	
GAS	
ELECTRIC LIGHT POST (YARD)	
ELECTRIC MANHOLE	
ELECTRIC PULL BOX	
ELECTRIC CONTROL BOX	
ELECTRIC JUNCTION BOX	
ELECTRIC VAULT BOX	
ELECTRIC METER	
ELECTRIC PEDESTAL	
ELECTRIC RISER BOX	
ELECTRIC TRANSFORMER	
ELECTRIC HVAC UNIT	
ELECTRIC GROUND LIGHT	
ELECTRIC LINE PAINT MARKING	
CABLE TV MANHOLE	
CABLE TV PEDESTAL	
CABLE TV PAINT MARKING	
TELEPHONE MANHOLE	
TELEPHONE PULL BOX	
TELEPHONE PEDESTAL	
TELEPHONE RISER BOX	
TELEPHONE LINE PAINT MARKING	

EXISTING SYMBOLS	
TELEPHONE PAY PHONE	
FIBER OPTIC CABLE MANHOLE	
FIBER OPTIC CABLE PAINT MARKING	
TRAFFIC CONTROL MANHOLE	
TRAFFIC CONTROL BOX	
TRAFFIC CONTROL PAINT MARKING	
TRAFFIC PULL BOX	
TRAFFIC SIGNAL PEDESTAL	
UNKNOWN, PULL BOX	
UNKNOWN, CLEANOUT	
UNKNOWN, MANHOLE	
UNKNOWN, VALVE	
MONITORING WELL	
TEST WELL	
WATER WELL	
SOIL BORING	
SWAMP	
POLE, ELECTRIC	
POLE, TELEPHONE	
POLE, LIGHT	
POLE, LIGHT, DECORATIVE	
POLE, LIGHT-OVERHEAD	
POLE, CABLE TV	
POLE, UTILITY	
POLE, GENERAL	
POLE, TRAFFIC CONTROL	
POLE, GUY	
POLE, BRACE	
POLE, ELECTRIC/TELEPHONE	
POLE, ELECTRIC W/LIGHT	
POLE, ELECTRIC/CABLE TV	
POLE, ELECTRIC/TELEPHONE/LIGHT	
POLE, ELECTRIC/TELEPHONE/CABLE TV	
POLE, ELEC./TELE./LIGHT/CABLE TV	
POLE, CABLE TV W/LIGHT	
POLE, GUY WIRE	
SIGN	
SIGN, DOUBLE SIDED	
SIGN, DUAL POST	
SIGN, RAILROAD	
POST	
BOLLARD	
DELINEATOR POST	
PARKING BUMPER BLOCK	
HANDICAP PARKING SYMBOL	
HANDICAP PARKING SYMBOL	
HANDICAP DETECTABLE WARNING	
MAILBOX	
PAPERBOX	
PARKING METER	
GRAVE HEADSTONE	
EX. BARBEQUE GRILL	
FUEL PUMP	
FLAG POLE	
RAISED PAVEMENT MARKER	
GUARDRAIL, CENTER POST	
GUARDRAIL, TERMINAL POST	
GUARDRAIL, BOTTOM POST	
GUARDRAIL, TOP POST	
FENCE POST	
PICNIC TABLE	
BENCH	
DECIDUOUS TREE	
EVERGREEN TREE	
STUMP	
BUSH	
IRON PIN FOUND	
SOLID IRON PIN FOUND	
IRON PIPE FOUND	
DRILL HOLE FOUND	
CHISELED "X" FOUND	
MONUMENT BOX FOUND	
MONUMENT CONCRETE FOUND	
MONUMENT RIGHT-OF-WAY FOUND	
PK NAIL FOUND	
MAG NAIL FOUND	

EXISTING SYMBOLS	
SPIKE FOUND	
HUB FOUND	
AXLE FOUND	
WOOD POST FOUND	
CORNER STONE FOUND	
AERIAL TARGET FOUND	
GPS CONTROL FOUND	
BENCHMARK FOUND	
SANITARY MANHOLE	
SANITARY MANHOLE, ADJUST	
SANITARY CLEANOUT	
SANITARY LINE CAP	
SANITARY STRUCTURE NUMBER	
SANITARY VENT PIPE	
STORM MANHOLE (SOLID GRATE)	
STORM MANHOLE (OPEN GRATE)	
STORM MANHOLE, ADJUST	
CURB INLET	
CURB INLET (DOUBLE)	
CURB INLET, ADJUST	
CURB INLET (DOUBLE), ADJUST	
CATCH BASIN	
CATCH BASIN (SOLID)	
CATCH BASIN, ADJUST	
CATCH BASIN (SIDE INLET)	
DRAIN	
DOWNSPOUT	
STORM CLEANOUT	
STORM LINE CAP	
STORM HEADWALL	
STORM STRUCTURE NUMBER	
ROCK CHANNEL PROTECTION	
SURFACE DRAINAGE FLOW	
SURFACE DRAINAGE FLOW	
STORM FLOOD ROUTING ARROW	
FIRE HYDRANT	
FIRE HYDRANT, ADJUST	
WATER SIAMESE CONNECTION	
WATER VALVE	
WATER VALVE BOX	
WATER METER	
WATER LINE REDUCER	
WATER LINE CAP	
WATER LINE PLUG	
POST INDICATOR VALVE	
WATER MANHOLE	
WATER CORPORATION STOP	
WATER FLUSHING ASSEMBLY	
WATER METER	
GAS LIGHT POST (YARD)	
GAS MANHOLE	
GAS MANHOLE	
GAS VALVE	
GAS METER	
GAS REGULATOR	
GAS VENT PIPE	
ELECTRIC LIGHT (GROUND)	
ELECTRIC LIGHT POST (YARD)	
ELECTRIC MANHOLE	
ELECTRIC MANHOLE, ADJUST	
ELECTRIC PULL BOX	
ELECTRIC CONTROL BOX	
ELECTRIC JUNCTION BOX	
ELECTRIC VAULT BOX	
ELECTRIC METER	
ELECTRIC PEDESTAL	
ELECTRIC TRANSFORMER	
ELECTRIC AIR CONDITION UNIT	
POLE, ELECTRIC	
POLE, TELEPHONE	
POLE, LIGHT	
POLE, LIGHT, DECORATIVE	
POLE, CABLE TV	
POLE, UTILITY	
POLE, GENERAL	

PROPOSED SYMBOLS	
POLE, TRAFFIC CONTROL	
POLE, GUY	
POLE, BRACE	
POLE, ELECTRIC/TELEPHONE	
POLE, ELECTRIC W/LIGHT	
POLE, ELECTRIC/CABLE TV	
POLE, ELEC./TELE./LIGHT	
POLE, ELEC./TELE./CABLE TV	
POLE, ELEC./TELE./LIGHT/CABLE	
POLE, TELEPHONE/LIGHT	
POLE, TELEPHONE/CABLE TV	
POLE, TELE./LIGHT/CABLE TV	
POLE, CABLE TV W/LIGHT	
POLE, FLAG	
GUY WIRE	
POST, SIGN (SINGLE SIDED)	
POST, SIGN (DOUBLE SIDED)	
POST, SIGN (DUAL POST)	
POST (GENERAL)	
BOLLARD	
DELINEATOR POST	
FENCE POST	
PARKING COUNT	
PARKING BUMPER BLOCK	
HANDICAP PARKING SYMBOL	
HANDICAP DETECTABLE WARNING	
MAILBOX	
PAPERBOX	
PARKING METER	
STREET SIGN	
TRAFFIC CONTROL MANHOLE	
TRAFFIC CONT. MANHOLE (ADJ)	
TRAFFIC CONTROL BOX	
TRAFFIC PULL BOX	
TRAFFIC SIGNAL PEDESTAL	
INLET PROTECTION	
STRAW BALE CHECK DAM	
TREE (DECIDUOUS)	
TREE (EVERGREEN)	
BUSH	

ABBREVIATIONS	
EDGE OF PAVEMENT ELEVATION	EP
ELECTRIC	ELEC.
ENCLOSURE	ENCL.
EXISTING	EX.
FACE TO FACE	FIF
FINISHED FLOOR ELEVATION	FFE
FIRE HYDRANT	FH
FOUNDATION	FNDN.
FULL DEPTH RECLAMATION	FDR
FUTURE	FUT.
GAS	G
GALVANIZED PIPE	GP
GRADE BREAK ELEVATION	GB
GRAVEL	GVL
GROUND ELEVATION	GND.
GUTTER ELEVATION	GUT.
HANDICAP (E	

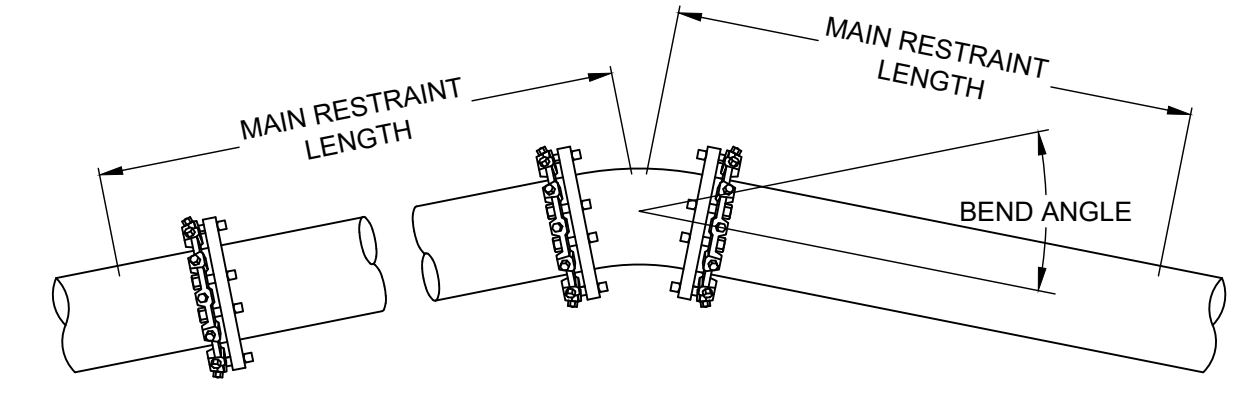


NOTES:

- CONTROL JOINTS ARE THAT ARE TOOL CUT SHALL BE FILLED WITH JOINT SEALANT.
- CONTROL JOINT SPACING SHALL EQUAL NEW SIDEWALK WIDTH, ADD ADDITIONAL DIAGONAL JOINTS AS NECESSARY TO CONTROL CRACKING AT ANGLES, BUILDS OR OR STRUCTURES.

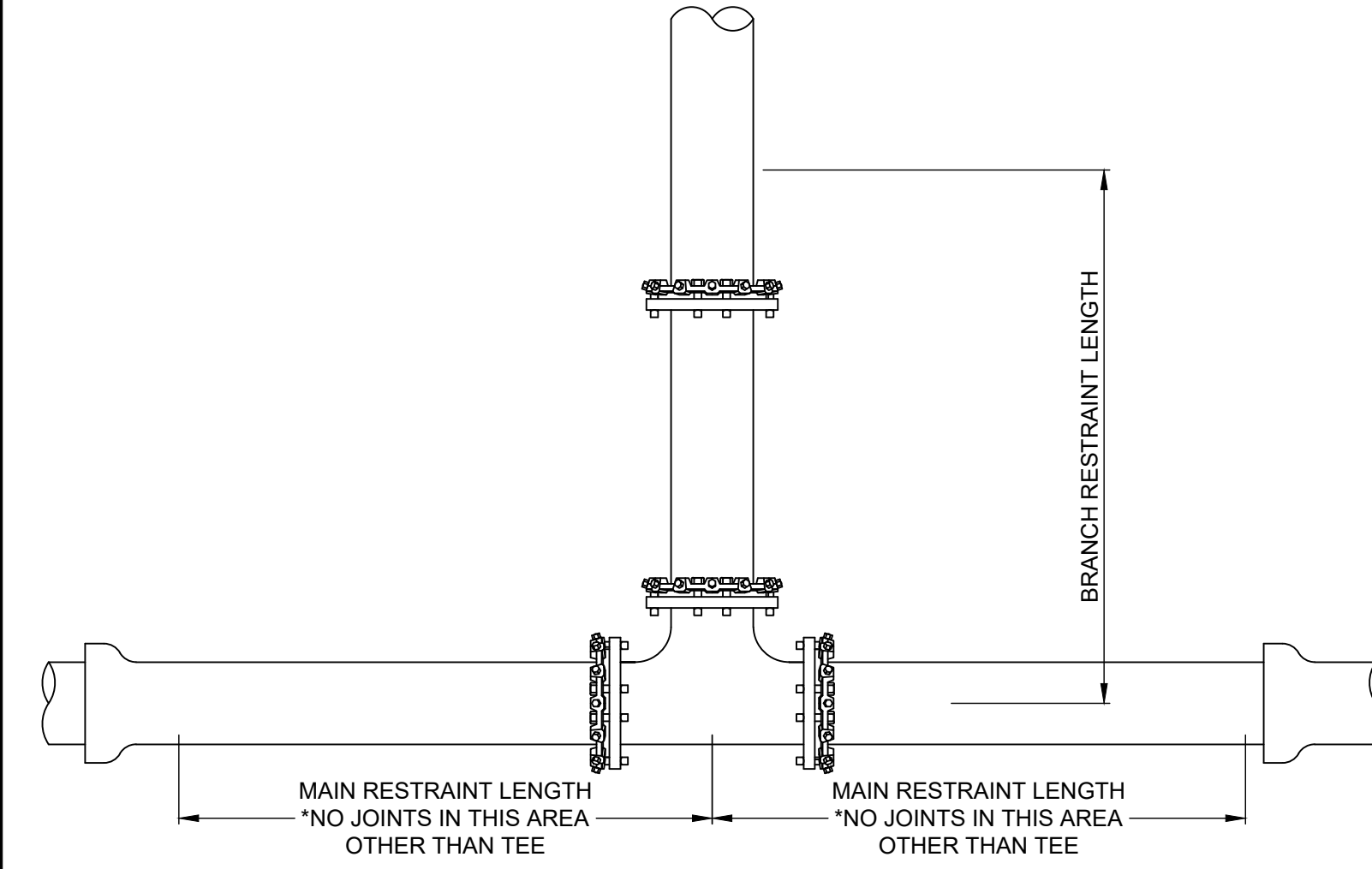
CONTROL JOINT TYPE "C.J."

NOT TO SCALE



TYPICAL HORIZONTAL RESTRAINT

NOT TO SCALE

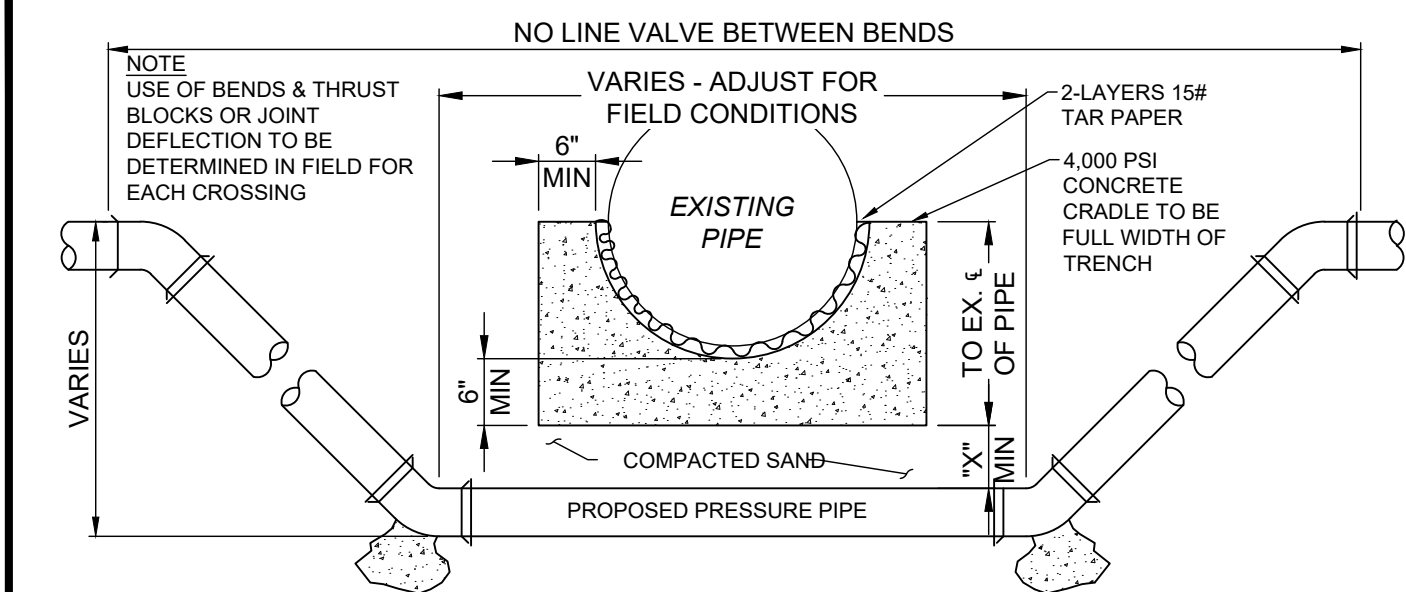


TYPICAL HORIZONTAL TEE RESTRAINT

NOT TO SCALE

THRUST RESTRAIN TABLE FOR STANDARD FITTINGS			
FITTING	SIZE	MINIMUM MAIN RESTRAINT LENGTH	BRANCH RESTRAINT LENGTH*
FITTINGS			
CAP	12"	USE THRUST BLOCK FOR DEAD END	
11 1/4" HORIZ	12"	4'	4'
11 1/4" VERT	12"	14' UPPER	4' LOWER
TEE**	12" X 6"	1'	1'

*ALL JOINTS WITHIN THE CALCULATED LENGTH MUST BE RESTRAINED.
 **A MINIMUM ATTACHED LENGTH OF PIPE OF 20FT TO EXTEND IN EACH DIRECTION ALONG THE RUN OF THE TEE WAS ASSUMED TO CALCULATE THE RESTRAINED LENGTH ALONG THE BRANCH. THE LENGTH OF PIPE ALONG THE RUN MUST BE PF SOLID PIPE WITHOUT JOINTS, FITTINGS, ETC.



CONCRETE CRADLE CONDITIONS

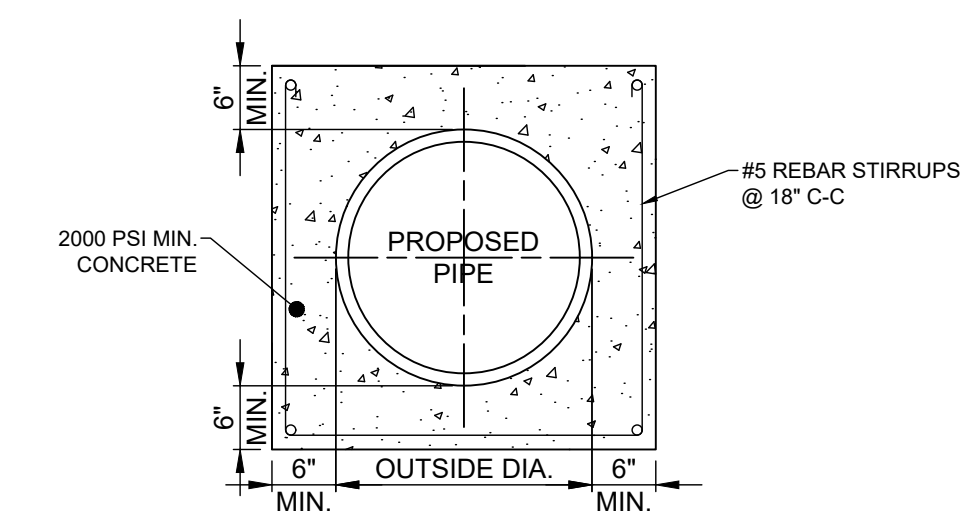
- IF SANITARY OR STORM SEWER PIPE JOINT IS WITHIN PROPOSED IMPROVEMENT TRENCH LIMIT
- IF CROSSING A WATERLINE AT ANY POINT
- IF CROSSING SPACE IS LESS THAN MIN. SPACE OF CRADLE BELOW PIPE BOTTOM PLUS "X" DIMENSION THEN OMIT SAND FILL AND USE CONCRETE

"X" DIMENSION REQUIREMENTS

- 6" FOR WATERLINE CROSSING (ALSO FOR GAS & O.B.T. LINES W/ NO CRADLE NEEDED)
- 18" FOR SANITARY OR STORM SEWER PIPE
- IF CROSSING SPACE IS MORE THAN MIN. SPACE OF CRADLE BELOW PIPE BOTTOM PLUS AFOREMENTIONED "X" DIMENSION THEN EXTEND "X" DIMENSION TO MAKE UP DIFFERENCE

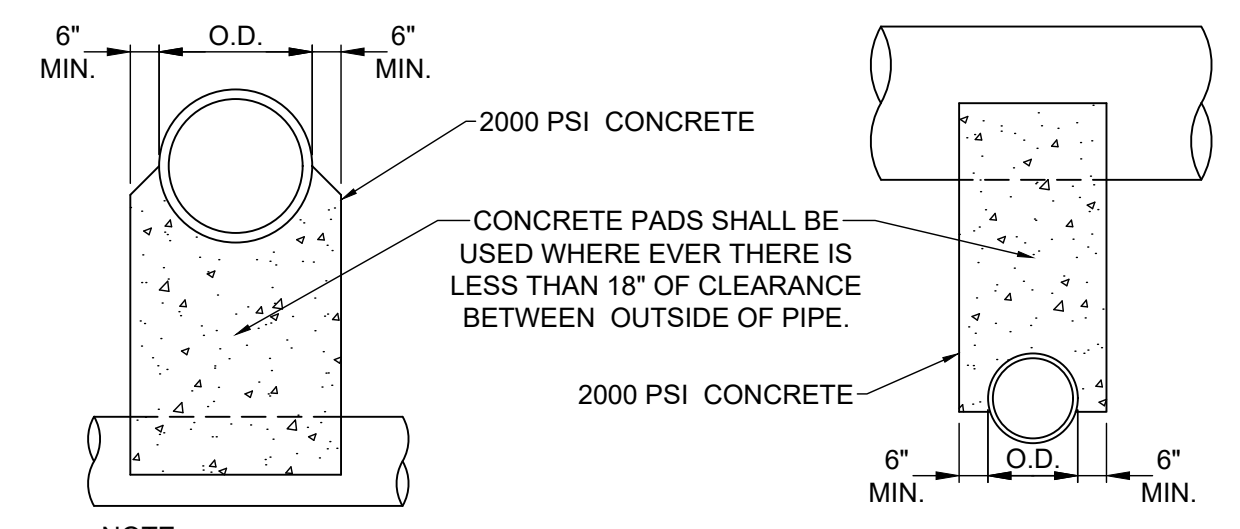
PIPE LOWERING DETAIL

NOT TO SCALE



TYPICAL PIPE ENCASEMENT

NOT TO SCALE

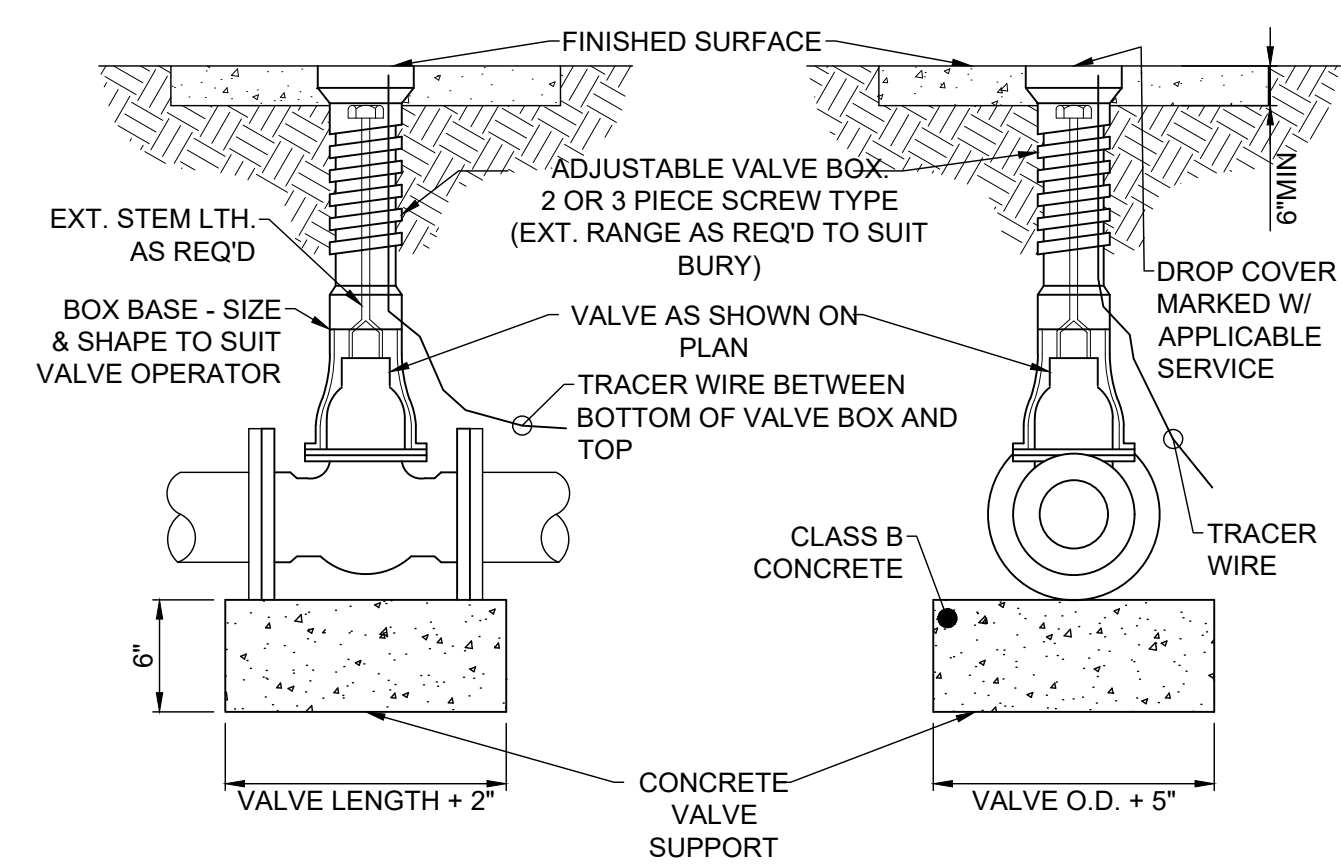


NOTE:

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, WHERE TWO PIPES (SEWER & WATER) CROSS EACH OTHER, A CONCRETE PAD AND CRADLE SEPARATOR SHALL BE PLACED BETWEEN THEM AS INDICATED ABOVE. WHERE PERMISSION IS GRANTED TO OMIT THE CONCRETE PADS, GRANULAR BACKFILL SHALL BE TAMPED IN 6" LAYERS AROUND BOTH PIPES. SUCH TAMPED BACKFILL SHALL BE CONTINUOUS FROM THE CRADLE OF THE LOWER PIPE TO THE TOP OF THE UPPER PIPE AND AT THE BOTTOM SHALL EXTEND IN BOTH DIRECTIONS, FOR THE FULL WIDTH OF THE TRENCH.

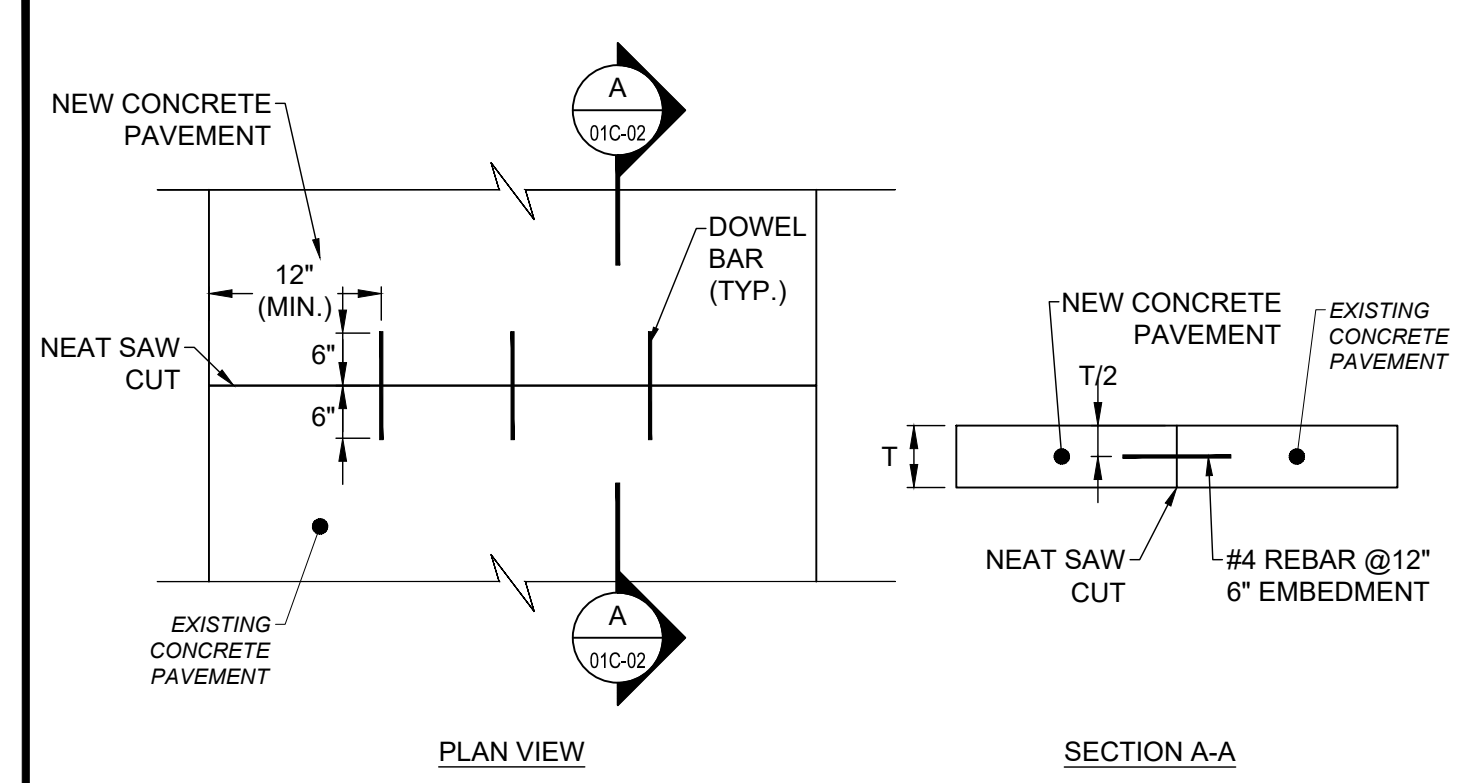
PIPE CROSSING DETAIL

NOT TO SCALE



TYPICAL VALVE AND VALVE BOX SETTING

NOT TO SCALE

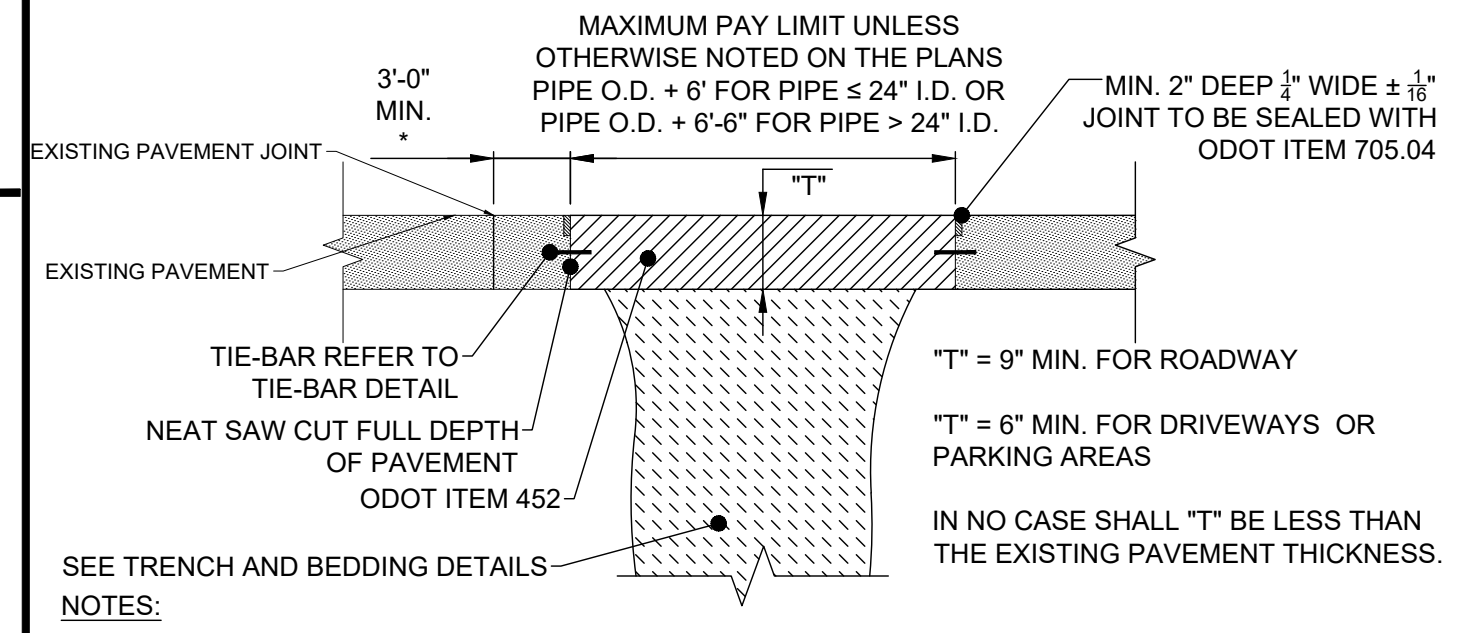


PLAN VIEW

SECTION A-A

TIE BAR DETAIL

NOT TO SCALE

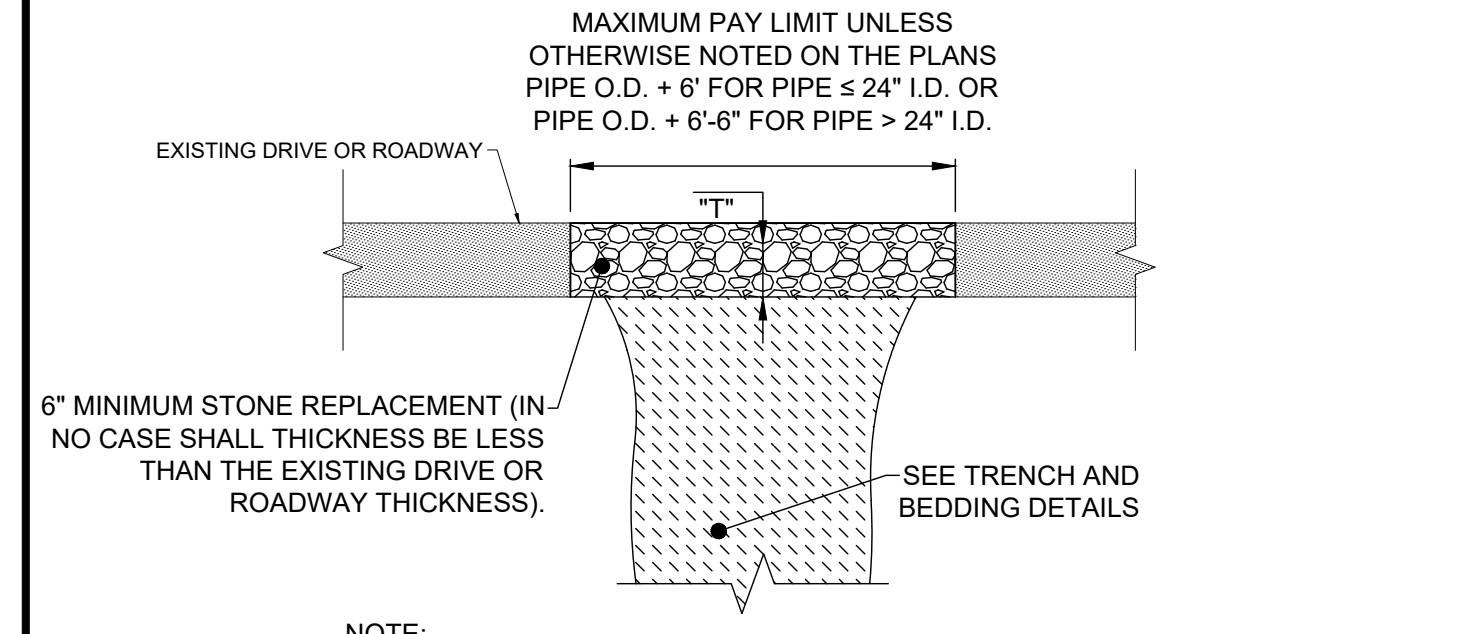


- EXISTING SUBBASE MATERIAL (IF ANY) SHALL BE REPLACED, AS DIRECTED BY ENGINEER.
- REPLACEMENT SHALL BE REINFORCED AS PER O.D.O.T. ITEM 709.10 OR 709.12 IF EXISTING PAVEMENT IS REINFORCED.
- 5/8" HOOKBOLT @ 30" O.C. MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.

* WHERE WIDTH IS LESS THAN 3'-0" OR EXISTING PAVEMENT IS DETERIORATED, THE CONTRACTOR SHALL REPLACE ADDITIONAL PAVEMENT AS DIRECTED BY THE ENGINEER. PAYMENT FOR ADDITIONAL PAVEMENT REPLACEMENT AS DIRECTED BY THE ENGINEER SHALL BE AT THE SAME UNIT PRICE BID.

TYPE A PAVEMENT REPLACEMENT

NOT TO SCALE

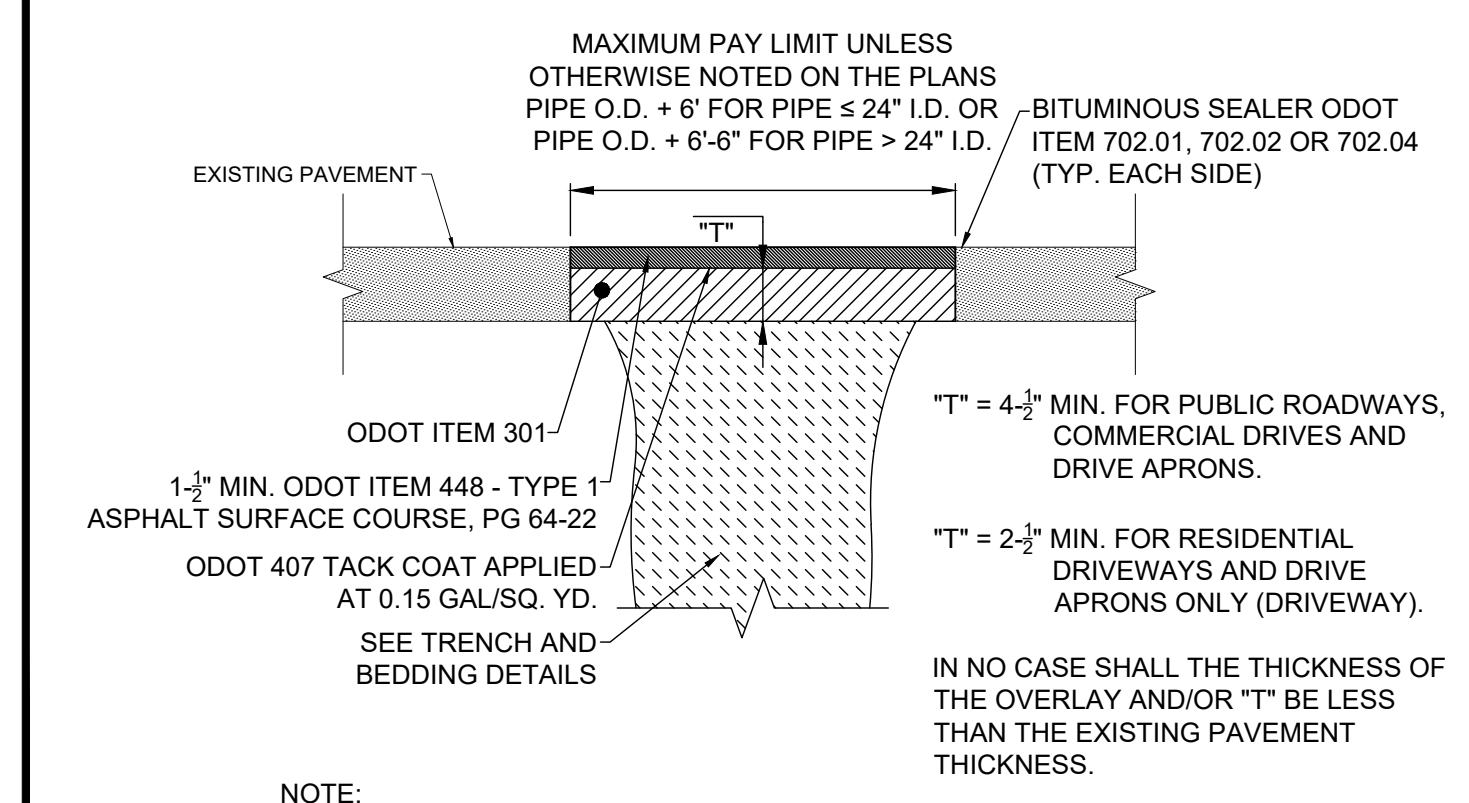


NOTE:

- REPLACEMENT MATERIAL SHALL BE THE SAME TYPE AND SIZE AS EXISTING.

TYPE F PAVEMENT REPLACEMENT

NOT TO SCALE

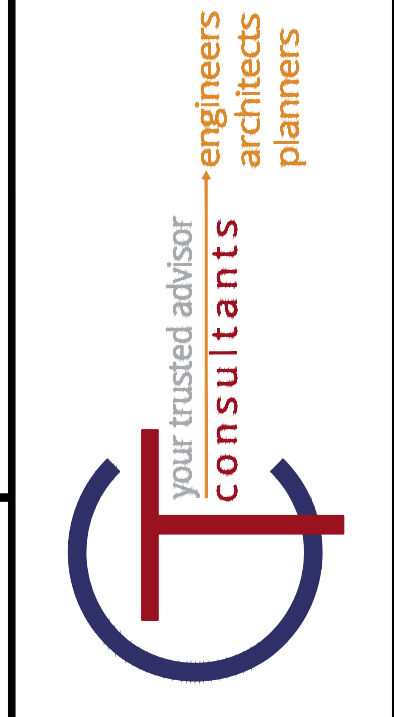


NOTE:

- EXISTING SUBBASE MATERIAL (IF ANY) SHALL BE REPLACED, AS DIRECTED BY ENGINEER.

TYPE C PAVEMENT REPLACEMENT

NOT TO SCALE



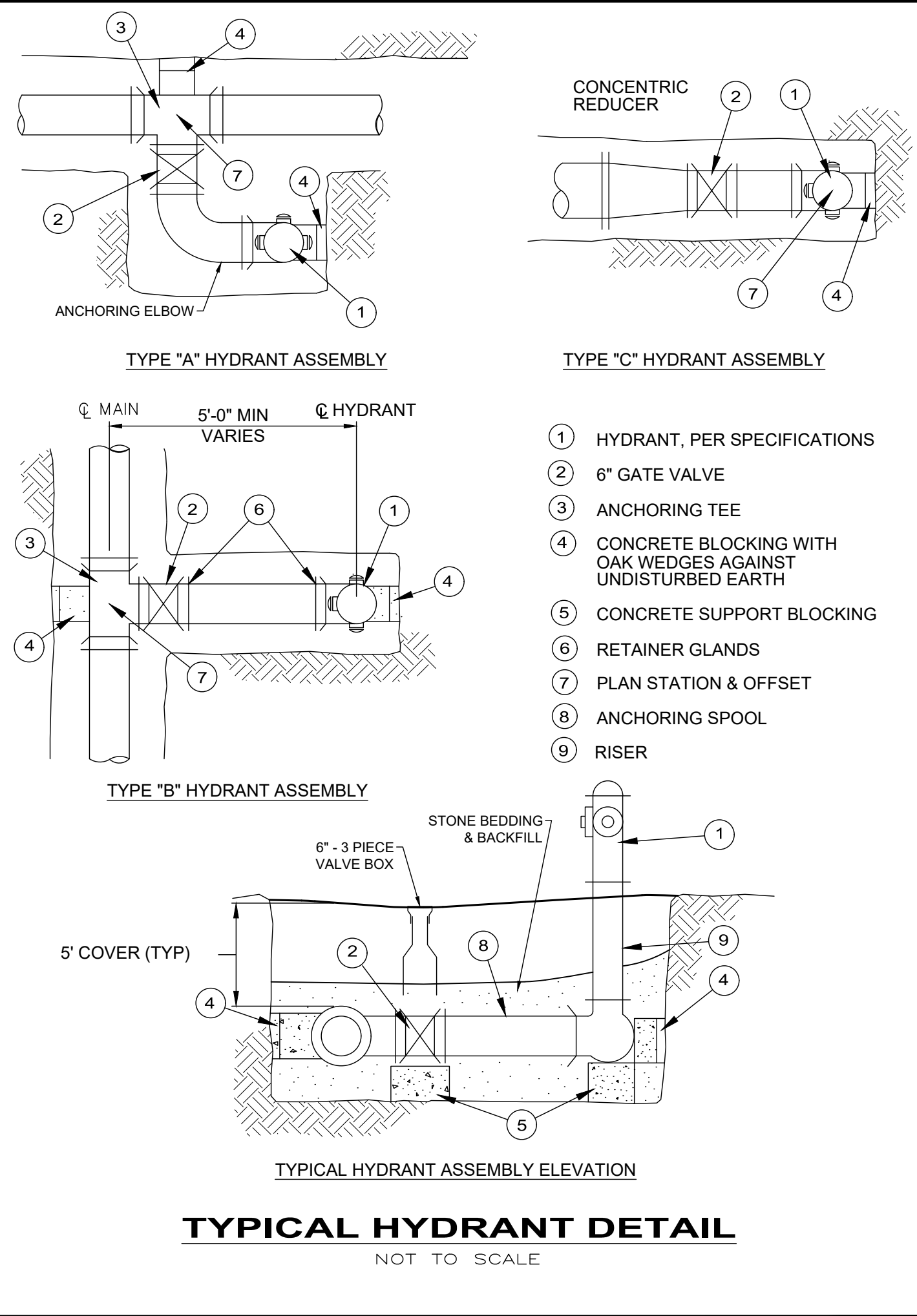
NO	REVISION	DATE

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
 BISHOP ROAD PHASE 2 WATER MAIN
 BISHOP ROAD, HARPERSFIELD TWP., ASHTABULA COUNTY OHIO

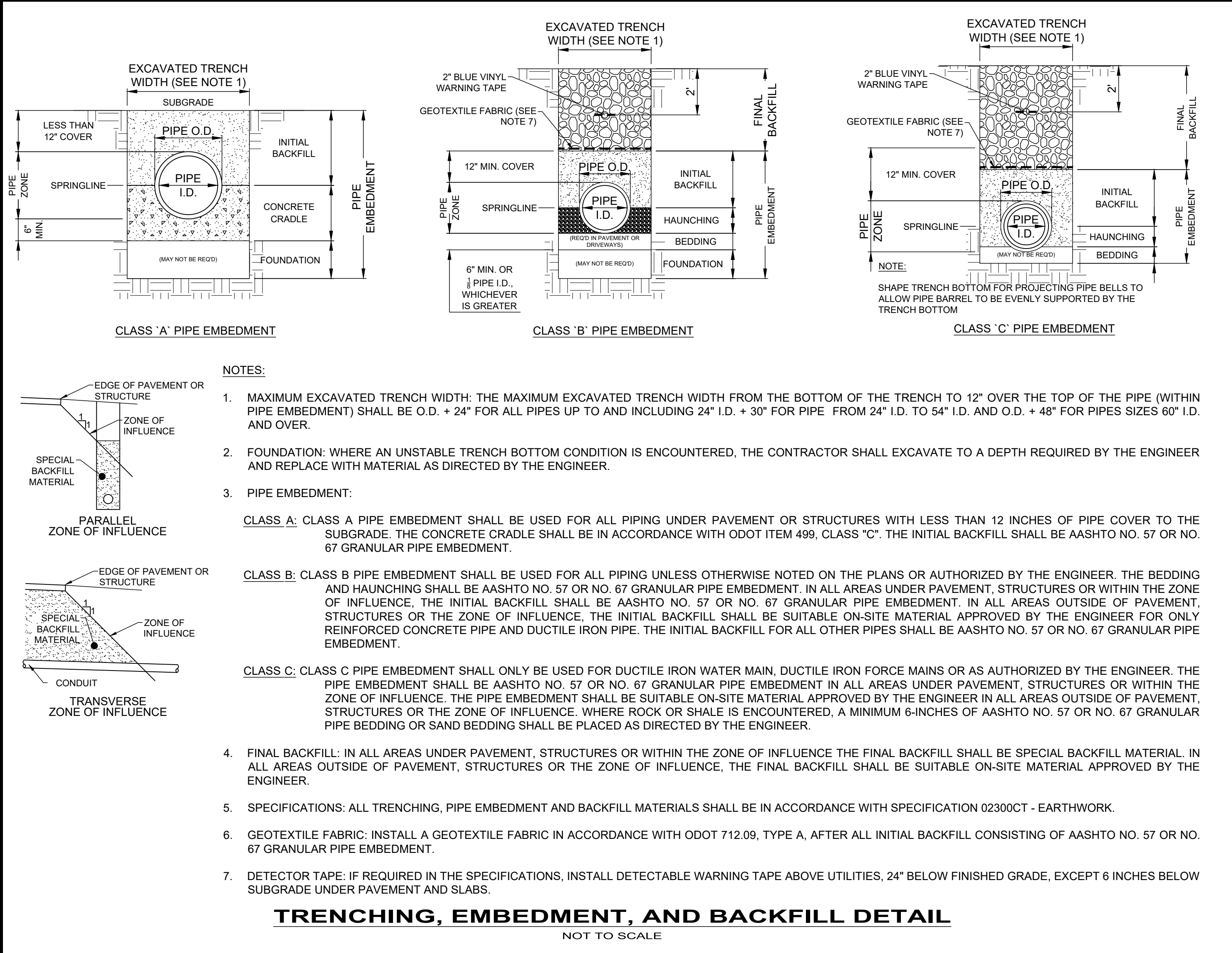
PROJECT NO. 241223
 SHEET NAME DET-1
 SHEET 6 OF 19

ISSUED FOR: ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
 ISSUE DATE: 4/09/2024
 SCALE: AS SHOWN
 DESIGNED BY: JK/GBC
 DRAWN BY: JK
 CHECKED BY: GBC

CONSTRUCTION DETAILS



- 1 HYDRANT, PER SPECIFICATIONS
- 2 6" GATE VALVE
- 3 ANCHORING TEE
- 4 CONCRETE BLOCKING WITH OAK WEDGES AGAINST UNDISTURBED EARTH
- 5 CONCRETE SUPPORT BLOCKING
- 6 RETAINER GLANDS
- 7 PLAN STATION & OFFSET
- 8 ANCHORING SPOOL
- 9 RISER

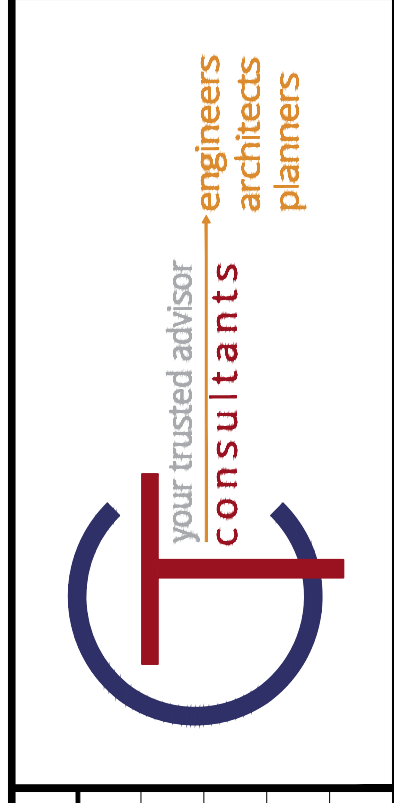
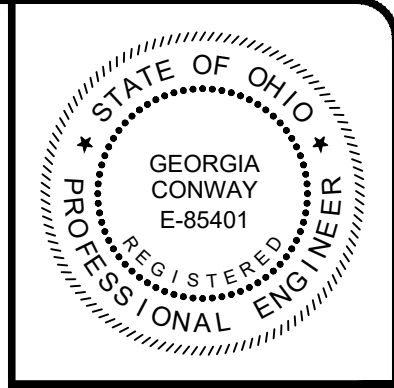


ISSUED FOR:		4/09/2024	
ISSUE DATE:	AS SHOWN	DESIGNED BY:	JK/GBC
SCALE:	JK/GBC	DRAWN BY:	JK
		CHECKED BY:	GBC

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
 BISHOP ROAD, HARPERSFIELD, TWP.
 ASHTABULA COUNTY OHIO

CONSTRUCTION DETAILS

PROJECT NO.	241223
SHEET NAME	DET-2
SHEET	7
OF	19



CONTRACTOR'S RESPONSIBILITIES:

- CONTRACTORS MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL. DEFINITIONS OF CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE ARE PROVIDED BELOW.
- CLEAN FILL:** UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSIBLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE) REFER TO STANDARD DETAILS AND PROJECT MANUAL FOR SPECIFIC PROJECT REQUIREMENTS.
- ENVIRONMENTAL DUE DILIGENCE: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTIC TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECT TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL.
- FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

SITE RESTORATION:

- ALL DISTURBED PROPERTY SHALL BE RESTORED TO ITS PRE-CONSTRUCTION CONDITION, AS NEAR AS POSSIBLE WITHIN 20 DAYS.
- ONCE AN AREA IS GRADED TO ITS FINAL GRADE IT MUST BE STABILIZED WITH THE PERMANENT SEED MIX SPECIFICATION ACCORDING TO ITS SLOPE.

INSPECTION AND MAINTENANCE:

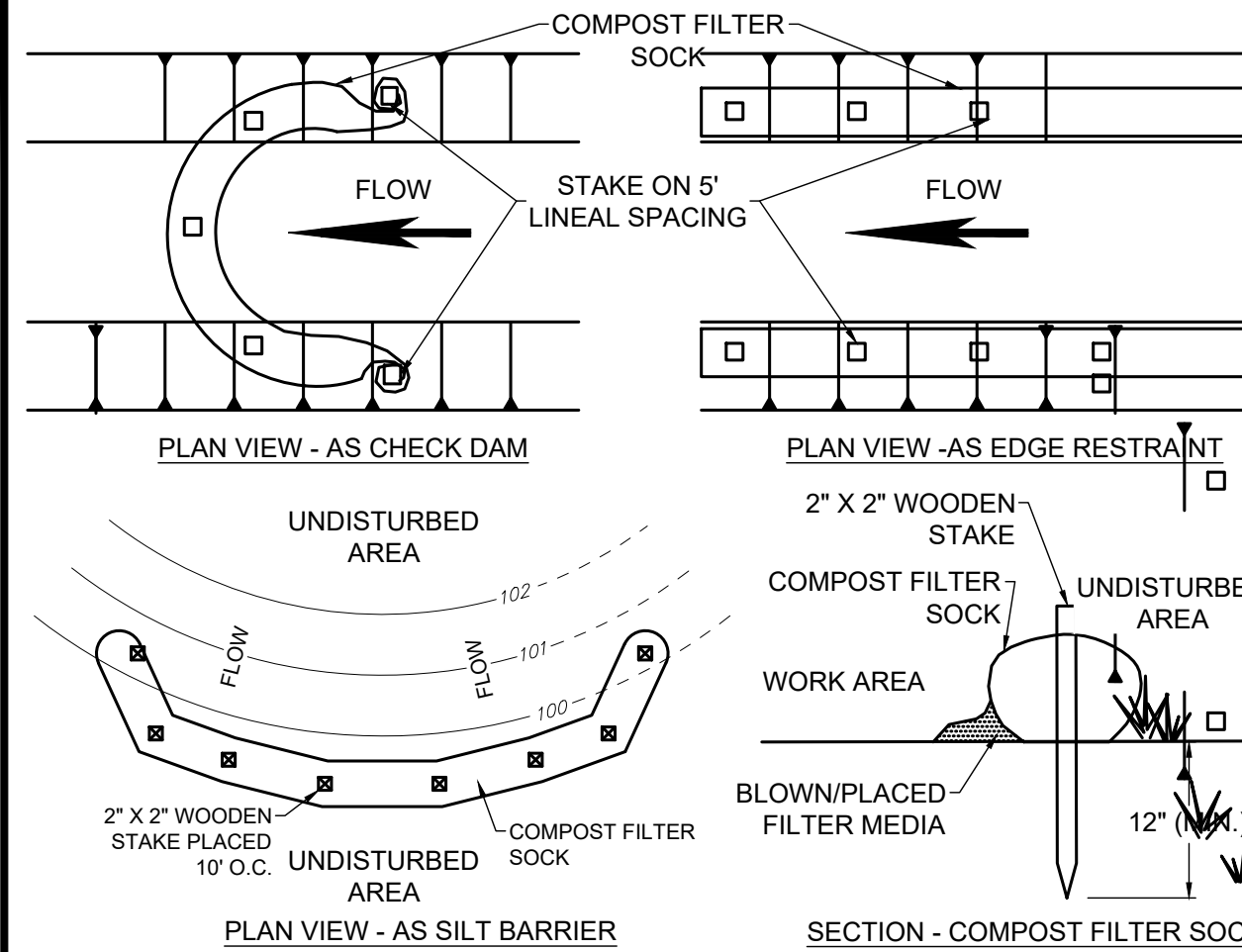
- ALL EROSION AND SEDIMENTATION CONTROL FACILITIES SHALL BE INSPECTED WEEKLY AND AFTER EACH
- FABRIC FENCES: REPAIR DAMAGE TO FENCES. BACKFILL UNDERCUTTING. OVERTOPPED AREAS SHALL BE REPLACED WITH AN OUTLET ROCK FILTER. IF SEDIMENT REACHES ONE HALF THE FENCE HEIGHT, IT SHALL BE REMOVED AND PLACED IN THE TOPSOIL AND FILL STOCKPILE AREA. REPLACEMENT FENCE AND STAKES SHALL BE KEPT ON SITE.
- CONSTRUCTION ENTRANCE: WHEN UTILIZED, INSPECTED DAILY. EXCESS SEDIMENT SHALL BE REMOVED AND STORED IN THE TOPSOIL AND FILL STOCKPILE AREA AND USED AS FILL OR ROAD SUBBASE. A STOCKPILE OF REPLACEMENT ROCK SHALL BE KEPT ON SITE.

GENERAL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF SEDIMENTATION AND EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AS OUTLINED HEREIN, AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE COUNTY SOIL CONSERVATION DISTRICT AND THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- ALL EROSION CONTROL MEASURES SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN ARE TO BE INSTALLED PRIOR TO BEGINNING ANY OTHER EARTH DISTURBING ACTIVITY.
- EROSION AND SEDIMENT BMPs (BEST MANAGEMENT PRACTICES) MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTRIBUTION BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING INSPECTIONS OF ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER ALL STORMS THAT PRODUCE MORE THAN 1/2" TOTAL RAINFALL. ANY NEEDED REPAIRS SHALL BE PERFORMED IMMEDIATELY.
- THE CONTRACTOR SHALL DOCUMENT ALL INSPECTIONS AND REPAIRS THAT ARE DONE TO MAINTAIN EFFICIENCY. COPIES OF EROSION CONTROL INSPECTION REPORTS SHALL BE SUBMITTED TO THE COUNTY SOIL CONSERVATION DISTRICT. CONTRACTOR SHALL USE DEP FORM 3150-FM-BWEW0083, VISUAL SITE INSPECTION REPORT.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.

RECYCLING/DISPOSAL OF WASTE REQUIREMENTS:

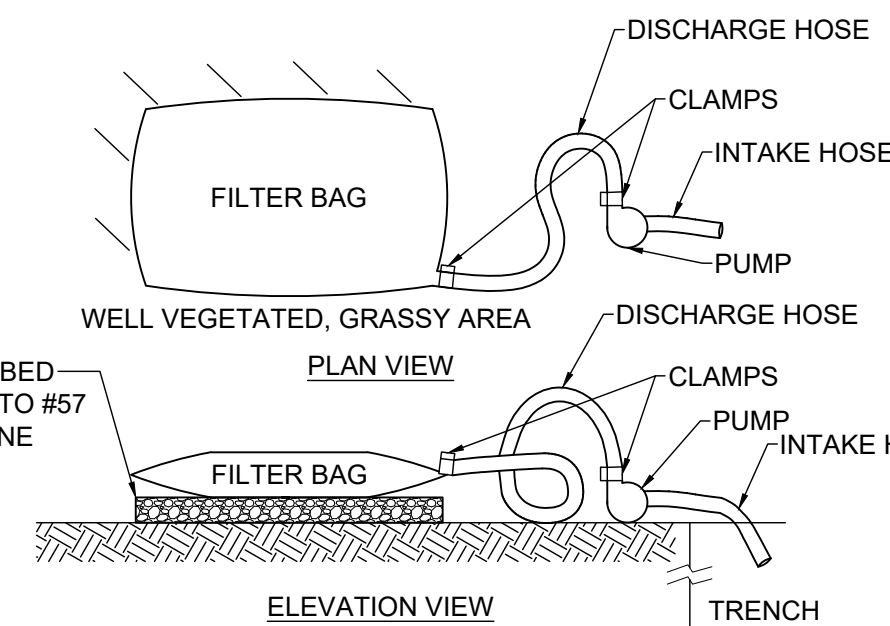
- ALL CONSTRUCTION/DEMOLITION WASTE MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET. SEQ., 287.1 ET. SEQ. THIS INCLUDES SOLID WASTE RESULTING FROM THE CONSTRUCTION OR DEMOLITION OF BUILDINGS OR OTHER STRUCTURES, INCLUDING BUT NOT LIMITED TO: WOOD, PLASTER, METALS, ASPHALTIC SUBSTANCES, BRICKS, BLOCK AND UNSEGREGATED CONCRETE. THIS DOES NOT INCLUDE: UNCONTAMINATED SOIL, ROCK, STONE, GRAVEL, BRICK, BLOCK, CONCRETE, USED ASPHALT, WASTE FROM LAND CLEARING, GRUBBING AND EXCAVATION, INCLUDING TREES, BRUSH, STUMPS AND VEGETATIVE MATERIAL IF THEY ARE SEPARATE FROM OTHER WASTE AND ARE USED AS CLEAN FILL.
- CONSTRUCTION WASTES (INCLUDING BUT NOT LIMITED TO EXCESS SOIL, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC.) ARE TO BE DISPOSED OF OR RECYCLED AT APPROPRIATE, PERMITTED FACILITIES.
- THE CONTRACTOR MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT (IF ANY) QUALIFIES AS CLEAN FILL MATERIAL. THE CONTRACTOR IS RESPONSIBLE FOR SECURING ANY REQUIRED PERMITS.
- DISPOSAL OF WASTE MATERIALS MUST COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- ANTICIPATED CONSTRUCTION WASTE:
 - FILL MATERIAL FROM EXCAVATION - LANDFILL
 - CONSTRUCTION DEMOLITION FROM BUILDINGS, TANKS, ETC. - LANDFILL OR RECYCLE IF FEASIBLE
 - CONCRETE WASHOUT - USE WASHOUT FACILITY



NOTES:

- THIS PROJECT REQUIRES THE USE OF 8" DIA. COMPOST FILTER SOCK.
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8' UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN IN THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCK.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED IN THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL.
- SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- SOCK FABRIC AND COMPOST SHALL MEET THE STANDARDS OF THE LATEST VERSION OF THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL.
- BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.
- SACKS MAY BE LEFT IN PLACE OR REMOVED. IN THE FORMER CASE, THE SOCK MATERIAL SHALL BE CUT OPEN AND THEN MULCH SPREAD AS A SOIL SUPPLEMENT.

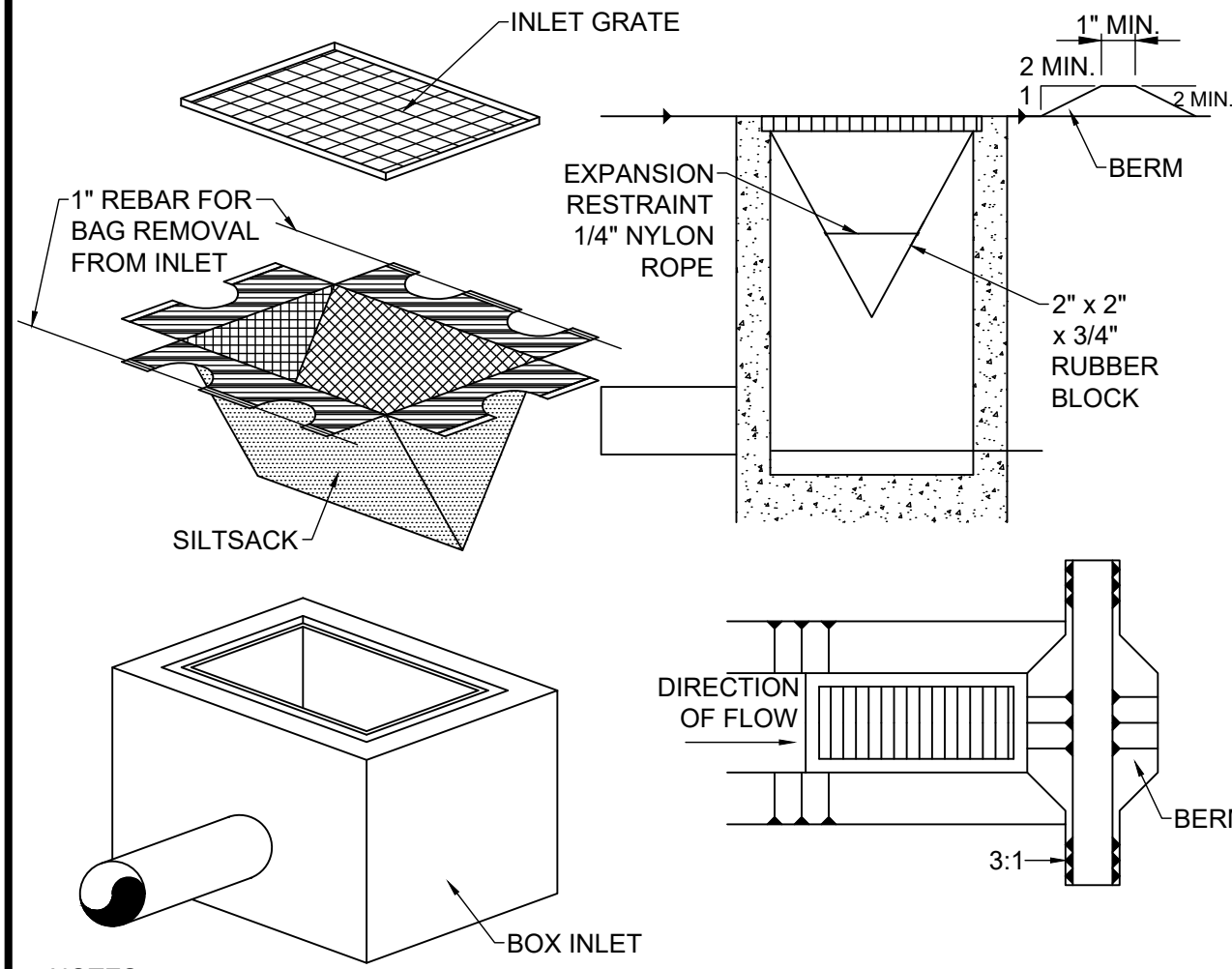
COMPOST FILTER SOCK
NOT TO SCALE



NOTES:

- USE FILTER BAGS MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS, CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
- A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. REPLACE FILTER BAGS WHEN THEY BECOME 1/2 FULL. KEEP SPARE BAGS AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
- PLACE BAGS IN WELL-VEGETATED (GRASSY) AREAS, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, PROVIDE A GEOTEXTILE FLOW PATH. DO NOT PLACE BAGS ON SLOPES GREATER THAN 5%.
- INSERT PUMP DISCHARGE HOSE INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED.
- THE PUMPING RATE SHOULD BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.
- INSPECT FILTER BAGS DAILY. IF ANY PROBLEM IS DETECTED, CEASE PUMPING IMMEDIATELY AND DO NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

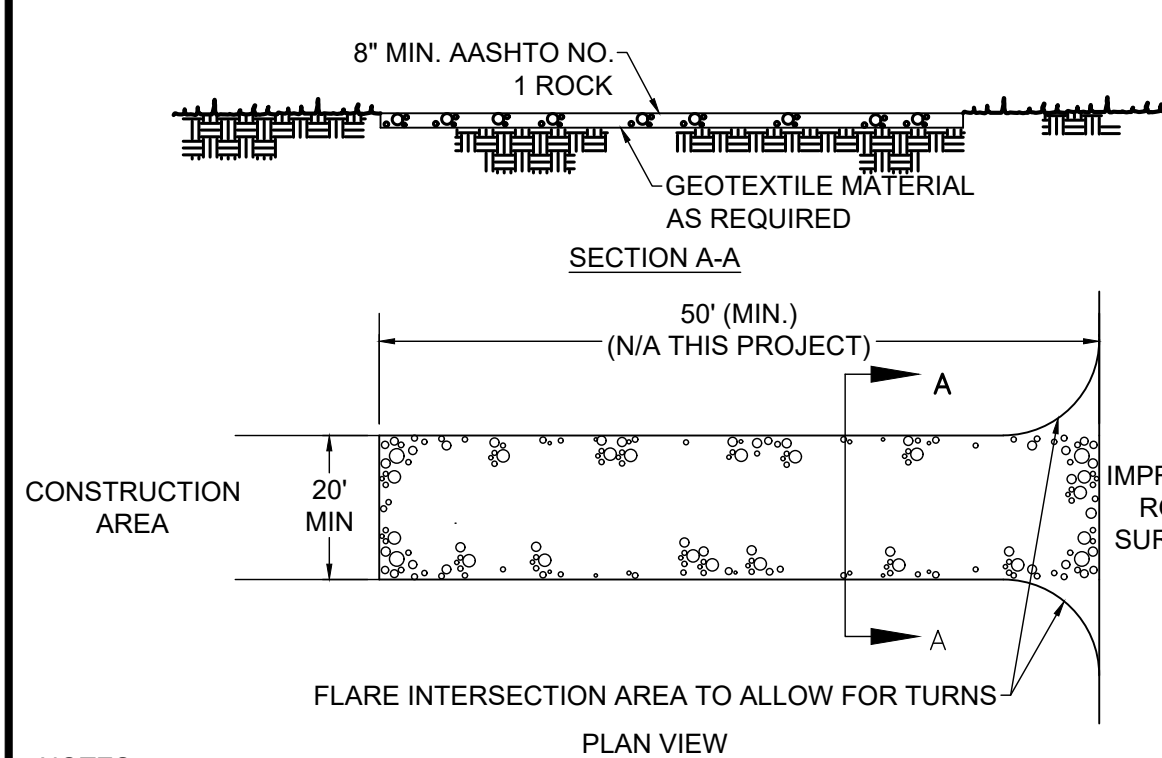
PUMPED WATER FILTER BAG DETAIL
NOT TO SCALE



NOTES:

- MAXIMUM DRAINAGE AREA = 1/2 ACRE.
- INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP.
- BERMS REQUIRED FOR ALL INSTALLATIONS.
 - EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED.
 - ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED.
 - EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.

SILT SACK DETAIL
NOT TO SCALE



NOTES:

- ROCK CONSTRUCTION ENTRANCES SHALL BE PLACED AT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS AND CONSTRUCTED TO THE MINIMUM WIDTH, LENGTH AND THICKNESS DIMENSIONS SHOWN.
- ROCK SHALL BE AASHTO NO.1 AS SPECIFIED IN SECTION 703.2 OF THE PENNDOT PUBLICATION 408.
- FOR INSTALLATION ON CLAYEY OR POORLY DRAINED SOILS, A GEOTEXTILE FABRIC UNDERLAYMENT, OF A TYPE RECOMMENDED FOR SUCH APPLICATIONS BY THE MANUFACTURER, SHALL BE USED.
- MAINTENANCE: THE ROCK CONSTRUCTION ENTRANCE SHALL BE REDRESSED WHEN VOIDS BECOME CHOKED WITH SEDIMENT. THE STRUCTURES THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY CLEANING OR ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON DRIVEWAYS AND PUBLIC ROADWAYS, SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE DRIVEWAYS OR ROADWAYS WITH WATER IS NOT PERMITTED.

ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE

PERMANENT SEED MIX:

TYPE	GERMINATION RATE	APPLICATION RATE
PERMANENT SEED MIXTURE FOR SLOPES 3:1 AND LESS		
50% KENTUCKY BLUEGRASS	85%	1 LBS. PER 1250 SF
20% PERENNIAL RYEGRASS	90%	
30% CREEPING RED FESCUE	88%	
PERMANENT SEED MIXTURE FOR SLOPES GREATER THAN 3:1		
30% ANNUAL RYEGRASS	90%	1 LBS. PER 1000 SF
25% KENTUCKY BLUEGRASS	90%	
31% TALL FESCUE	90%	
15% BIRDSFOOT TREFLOIL	90%	
15% WHITE CLOVER	90%	
10% CLIMAX TIMOTHY	90%	
5% REDTOP	90%	
98% PURE LIVE SEED		

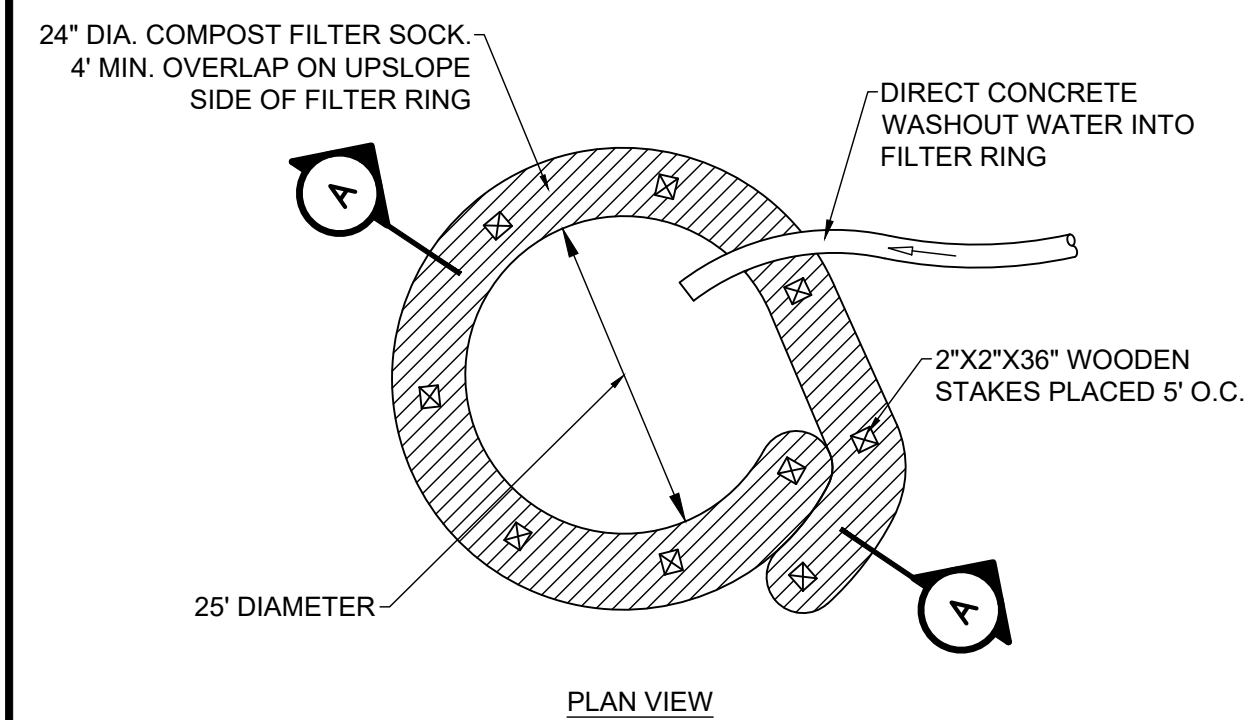
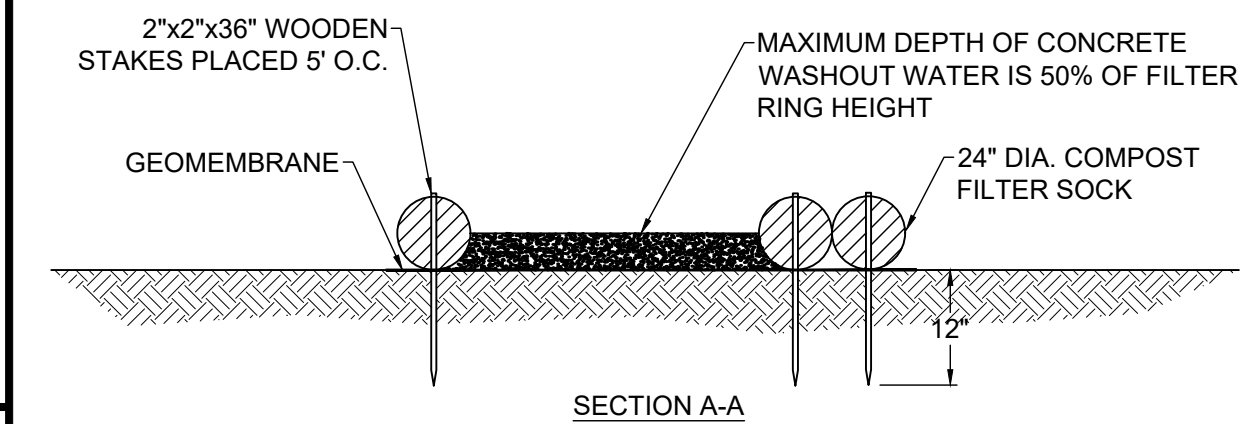
APPLICATION RATE: 100 LB/ACRE
 FERTILIZER 10-20-20, APPLICATION RATE: 680 LB/ACRE
 LIMING RATE: 2.0 TON/ACRE
 MULCH: STRAW - MULCHING RATE: 3.0 TON/ACRE
 PROTECT SEED WITH: NAG 575 OR APPROVED SUBSTITUTE
 SEEDING SEASONS: MARCH 15 - JUNE 1 & AUG 1 - OCT 15

BIODEGRADABLE EROSION CONTROL MATTING/BLANKET

A TEMPORARY DEGRADABLE ROLLED EROSION CONTROL PRODUCT COMPOSED OF PROCESSED NATURAL FIBERS MECHANICALLY BOUND TOGETHER TO FORM A CONTINUOUS MATRIX. AREAS WITH SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH NORTH AMERICAN GREEN S758N EROSION CONTROL BLANKET (ECB) OR APPROVED SUBSTITUTE.

TEMPORARY SEED MIX:

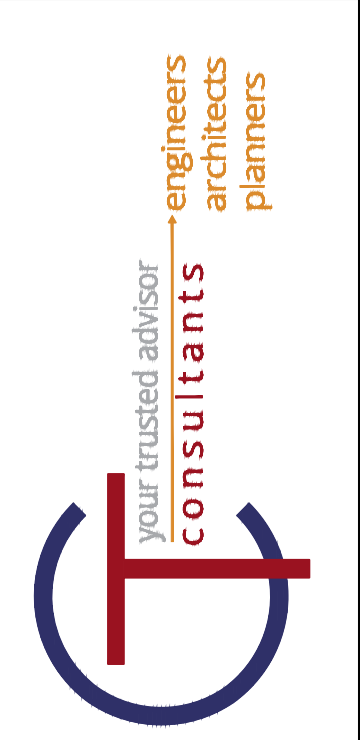
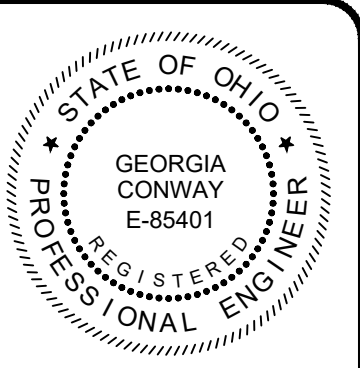
SPECIES: ANNUAL RYE
 % PURE LIVE SEED: 98%
 APPLICATION RATE: 50 LB/ACRE
 FERTILIZER: 10-20-20
 FERTILIZER APPLICATION RATE: 680 LB/ACRE
 LIMING RATE: 2.0 TON/ACRE
 MULCH: STRAW
 MULCHING RATE: 3.0 TON/ACRE



NOTES:

- PROVIDE PROPER SIGNAGE FOR CONCRETE DELIVERY VEHICLE DRIVERS SO THAT THEY ARE AWARE OF THE PRESENCE OF WASHOUT FACILITIES.
- WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50' OF STORM DRAINS, OPEN DITCHES, OR SURFACE WATERS. UNDER NO CIRCUMSTANCES SHOULD WASH WATER BE ALLOWED TO ENTER ANY SURFACE WATERS.
- WHEREVER POSSIBLE, CONCRETE WASHOUTS SHOULD BE LOCATED ON SLOPES NOT EXCEEDING A 2% GRADE.
- A SUITABLE IMPERVIOUS GEOMEMBRANE SHOULD BE PLACED AT THE LOCATION OF THE WASHOUT. COMPOST SOCKS SHOULD BE STAKED IN THE MANNER RECOMMENDED BY THE MANUFACTURER AROUND PERIMETER OF THE GEOMEMBRANE SO AS TO FORM A RING WITHIN THE ENDS OF THE SOCK LOCATED AT THE UPSLOPE CORNER. CARE MUST BE TAKEN TO ENSURE CONTINUOUS CONTACT OF THE SOCK WITH THE GEOMEMBRANE AT ALL LOCATIONS. WHERE NECESSARY, 18" SOCKS MAY BE STACKED ONTO 24" SOCKS AND STAKED SO AS TO FORM A TRIANGULAR CROSS SECTION.

TYPICAL COMPOST SOCK WASHOUT INSTALLATION DETAIL
NOT TO SCALE



NO	DATE	REVISION

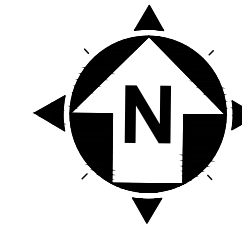
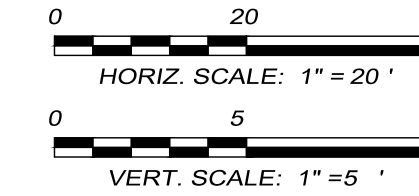
ISSUED FOR:	ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
ISSUE DATE:	4/06/2024
SCALE:	AS SHOWN
DESIGNED BY:	JK/GBC
DRAWN BY:	JK
CHECKED BY:	GBC

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATER MAIN
 BISHOP ROAD, HARPERSFIELD TWP., ASHTABULA COUNTY OHIO

PROJECT NO.	241223
SHEET NAME	DET-3
SHEET	8
OF	19

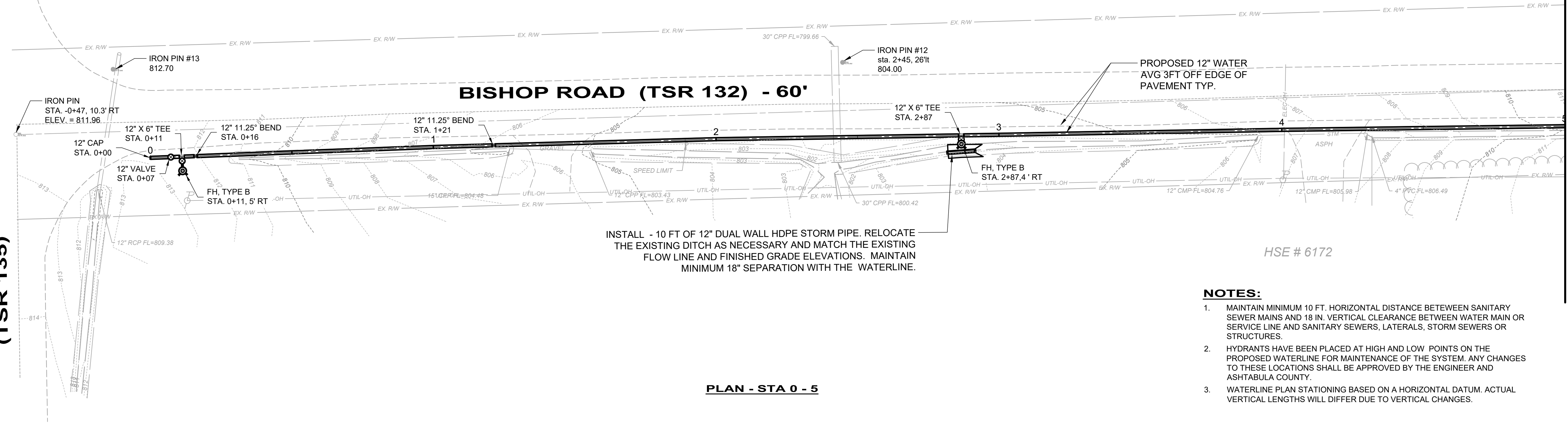
BENCHMARK:
MAG NAIL SET IN
EAST SIDE OF UTILITY
POLE
ELEV. 811.31

HSE # 6195



WALTER MAIN ROAD
(TSR 135)

MATCHLINE (SEE SHEET 10 OF 19) STA. 5+00



INSTALL - 10 FT OF 12\"/>

HSE # 6172

PLAN - STA 0 - 5

NOTES:

1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
2. HYDRANTS HAVE BEEN PLACED AT HIGH AND LOW POINTS ON THE PROPOSED WATERLINE FOR MAINTENANCE OF THE SYSTEM. ANY CHANGES TO THESE LOCATIONS SHALL BE APPROVED BY THE ENGINEER AND ASHTABULA COUNTY.
3. WATERLINE PLAN STATIONING BASED ON A HORIZONTAL DATUM. ACTUAL VERTICAL LENGTHS WILL DIFFER DUE TO VERTICAL CHANGES.

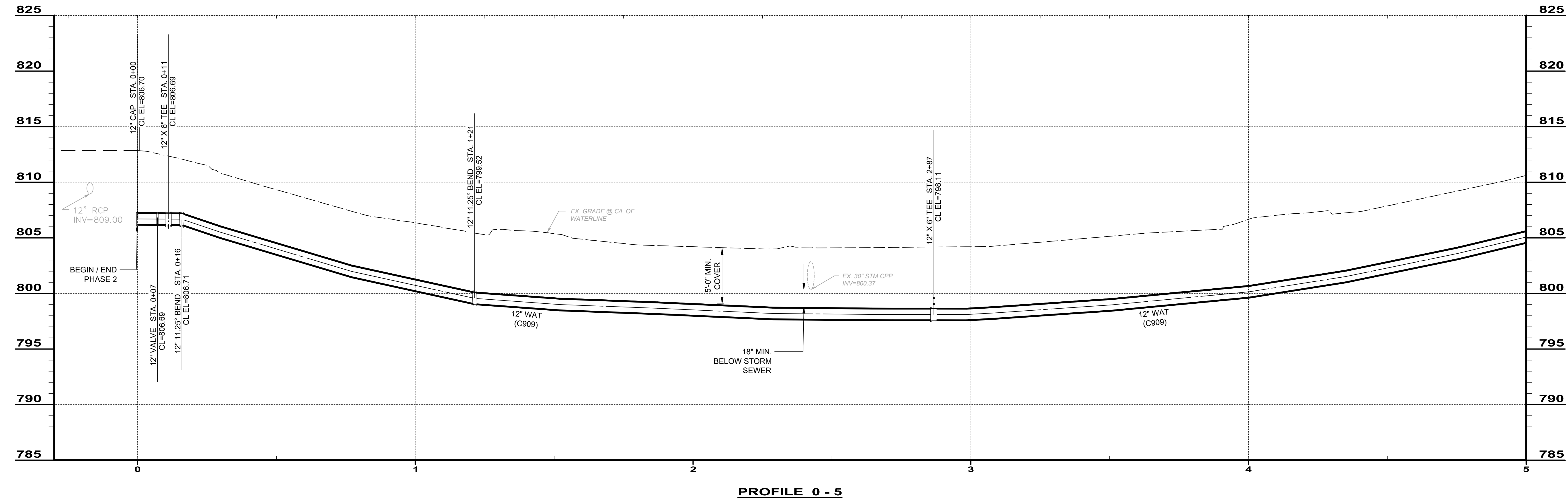
HSE # 6194

NO	REVISION	DATE

ISSUED FOR:	ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
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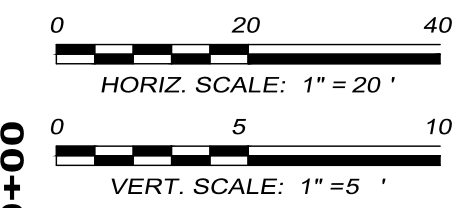
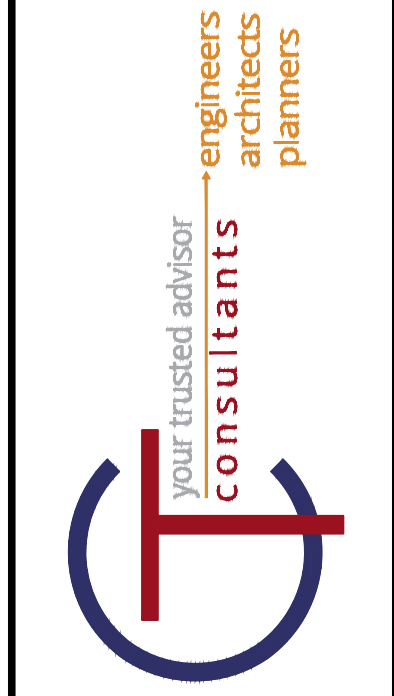
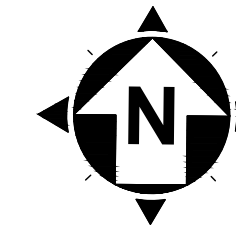
ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
BISHOP ROAD, HARPERSFIELD, TWP.
ASHTABULA COUNTY OHIO
WATERLINE PLAN & PROFILE
STA. 0+00 TO STA. 5+00

PROJECT NO.	241223
SHEET NAME	PP-1
SHEET	9
OF	19



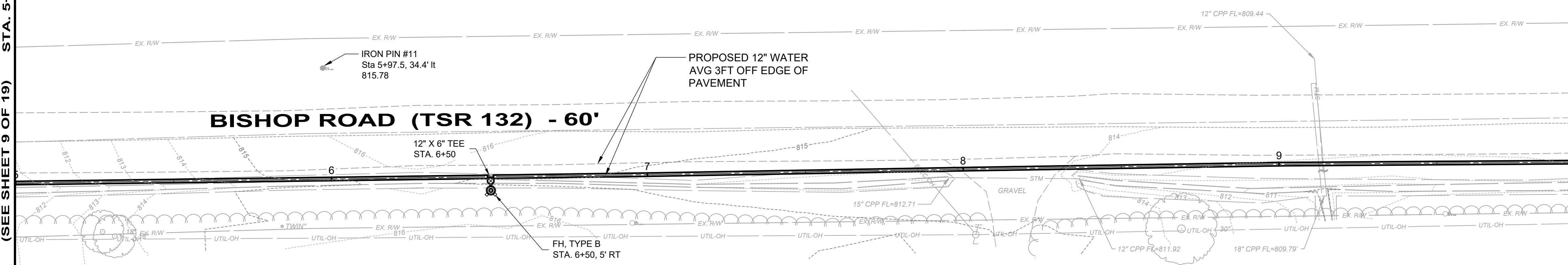
PROFILE 0 - 5

HSE # 6141



MATCHLINE (SEE SHEET 9 OF 19) STA. 5+00

MATCHLINE (SEE SHEET 11 OF 19) STA. 10+00

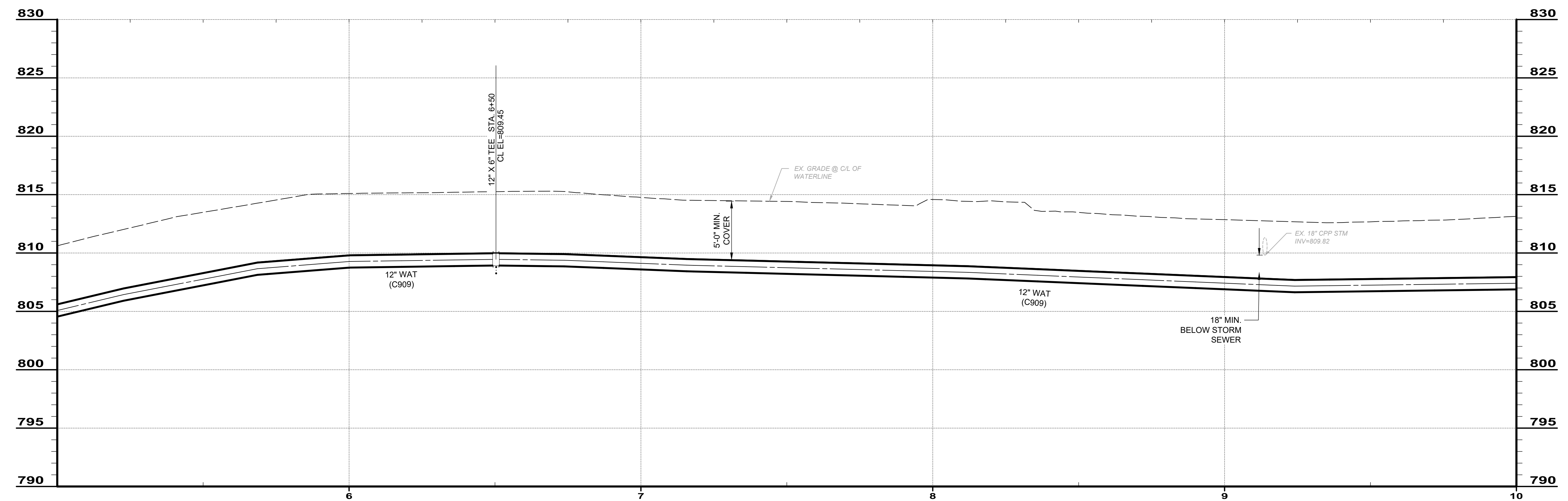


HSE # 6124

NOTES:

1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
2. HYDRANTS HAVE BEEN PLACED AT HIGH AND LOW POINTS ON THE PROPOSED WATERLINE FOR MAINTENANCE OF THE SYSTEM. ANY CHANGES TO THESE LOCATIONS SHALL BE APPROVED BY THE ENGINEER AND ASHTABULA COUNTY.
3. WATERLINE PLAN STATIONING BASED ON A HORIZONTAL DATUM. ACTUAL VERTICAL LENGTHS WILL DIFFER DUE TO VERTICAL CHANGES.

PLAN - STA 5 - 10



PROFILE 5 - 10

NO	REVISION	DATE

ISSUED FOR: ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
 ISSUE DATE: 4/09/2024
 SCALE: AS SHOWN
 DESIGNED BY: JK/GBC
 DRAWN BY: JK
 CHECKED BY: GBC

BISHOP ROAD PHASE 2 WATERMAIN
 BISHOP ROAD, HARPERSFIELD TWP.
 ASHTABULA COUNTY OHIO

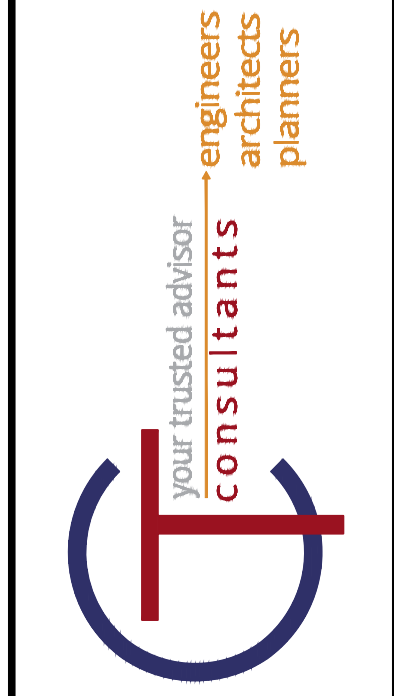
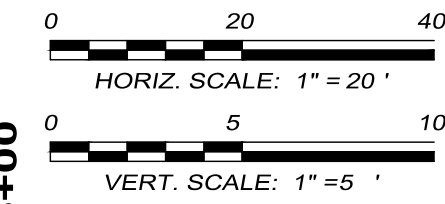
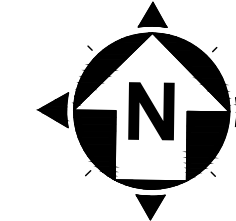
WATERLINE PLAN & PROFILE
 STA. 5+00 TO STA. 10+00

PROJECT NO.	241223
SHEET NAME	PP-2
SHEET	OF
10	19



1-800-362-2764
CALL TWO WORKING DAYS BEFORE YOU DIG
(NON MEMBERS MUST BE CALLED DIRECTLY)

HSE #6099



NO	REVISION	DATE

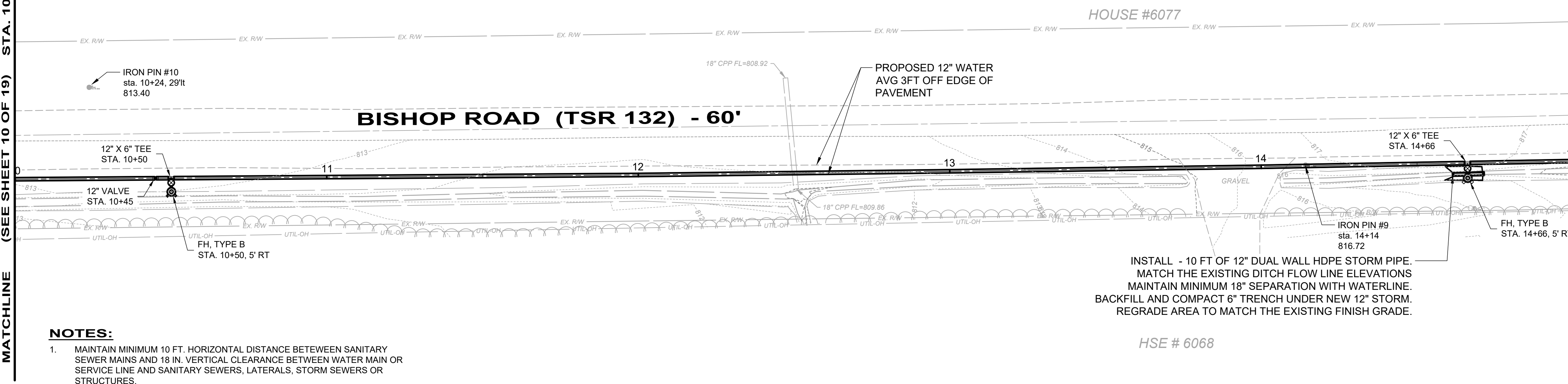
ISSUED FOR:	
ISSUE DATE:	4/06/2024
SCALE:	AS SHOWN
DESIGNED BY:	JK/GBC
DRAWN BY:	JK
CHECKED BY:	GBC

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
 BISHOP ROAD, HARPERSFIELD, TWP.
 ASHTABULA COUNTY OHIO
WATERLINE PLAN & PROFILE
STA. 10+00 TO STA. 15+00

PROJECT NO.	241223
SHEET NAME	PP-3
SHEET	11
OF	19

MATCHLINE (SEE SHEET 10 OF 19) STA. 10+00

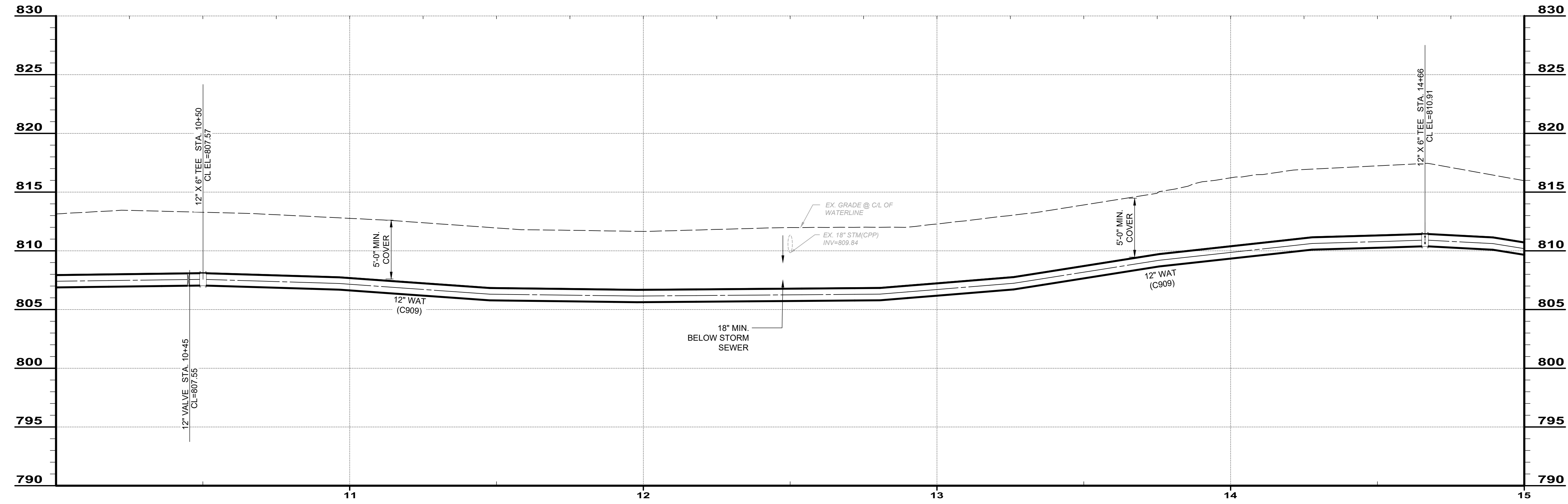
MATCHLINE (SEE SHEET 12 OF 19) STA. 15+00



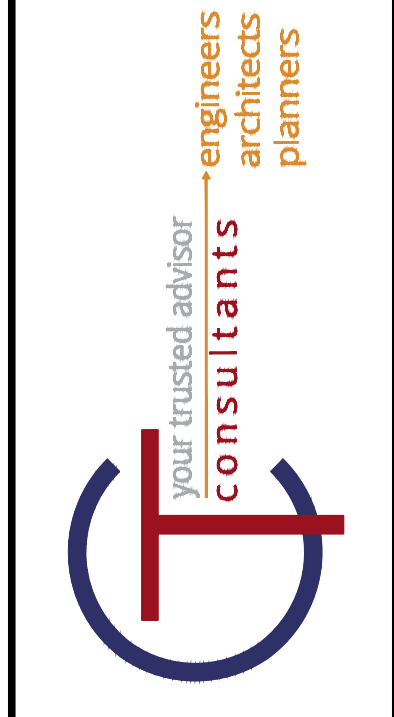
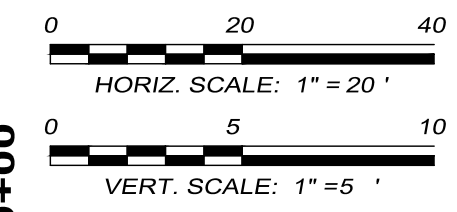
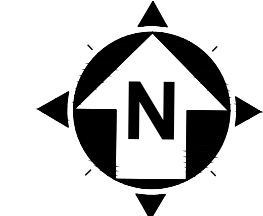
NOTES:

1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
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3. WATERLINE PLAN STATIONING BASED ON A HORIZONTAL DATUM. ACTUAL VERTICAL LENGTHS WILL DIFFER DUE TO VERTICAL CHANGES.

PLAN - STA 10 - 15



PROFILE 10 - 15



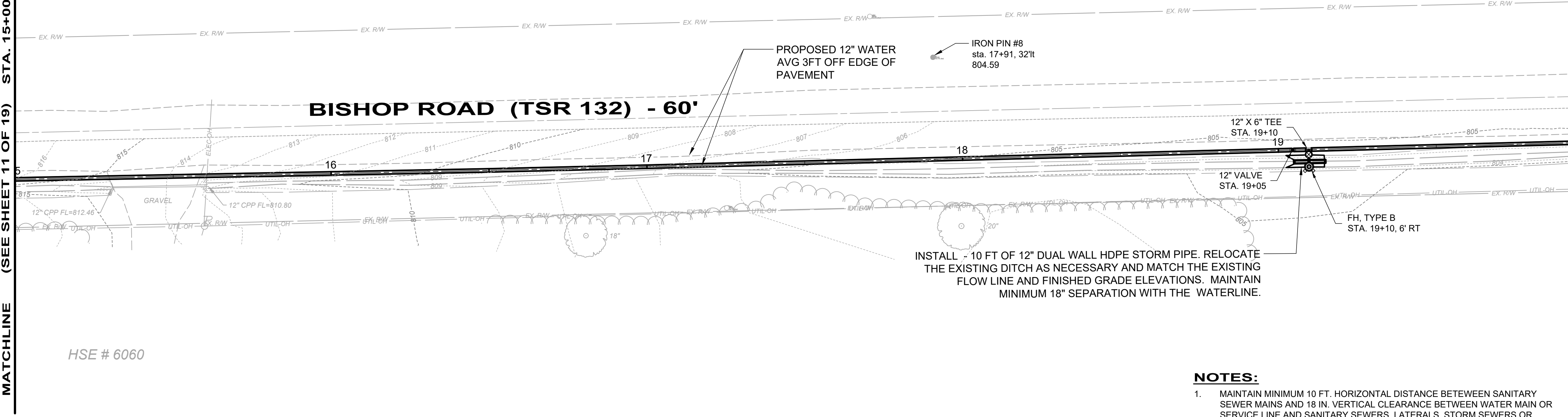
ISSUED FOR:	NO	REVISION	DATE
ISSUE DATE: 4/06/2024			
SCALE: AS SHOWN			
DESIGNED BY: JK/GBC			
DRAWN BY: JK			
CHECKED BY: GBC			

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
BISHOP ROAD, HARPERSFIELD, TWP.
ASHTABULA COUNTY OHIO
WATERLINE PLAN & PROFILE
STA. 15+00 TO STA. 20+00

PROJECT NO.	241223
SHEET NAME	PP-4
SHEET	12
OF	19

MATCHLINE (SEE SHEET 11 OF 19) STA. 15+00

MATCHLINE (SEE SHEET 13 OF 19) STA. 20+00

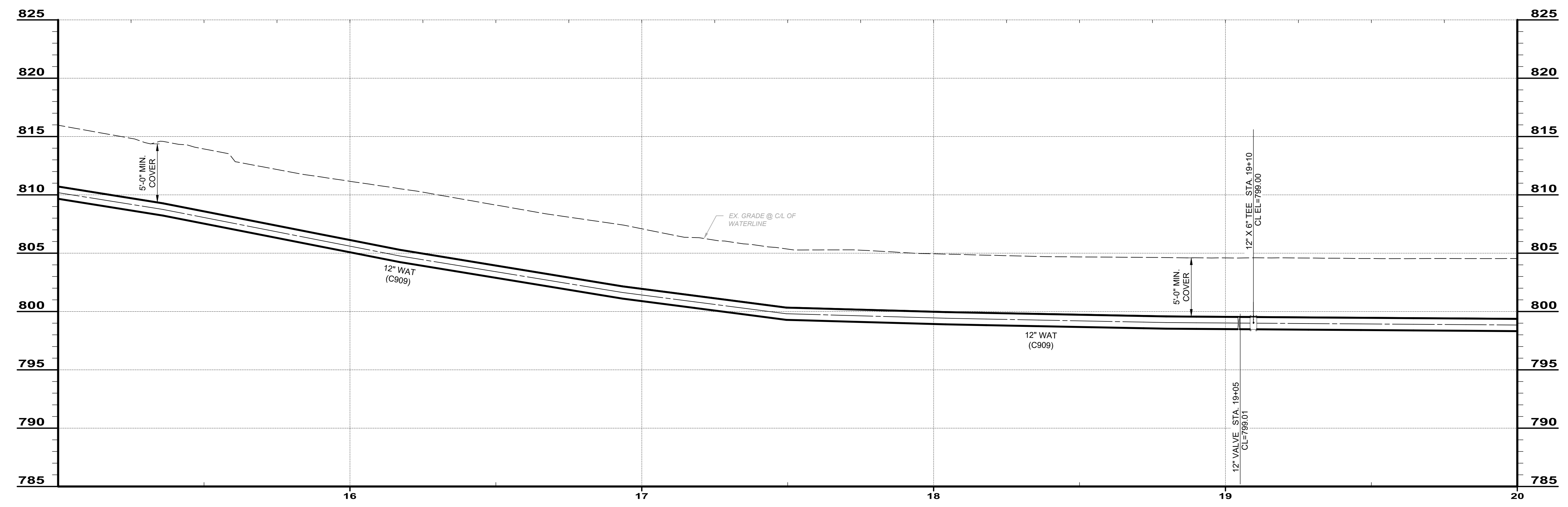


HSE # 6060

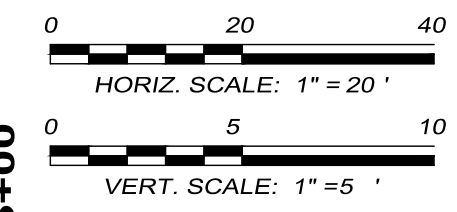
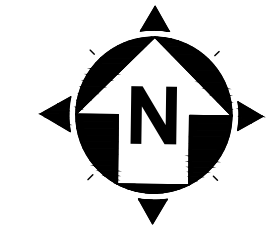
PLAN - STA 15 - 20

NOTES:

1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
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3. WATERLINE PLAN STATIONING BASED ON A HORIZONTAL DATUM. ACTUAL VERTICAL LENGTHS WILL DIFFER DUE TO VERTICAL CHANGES.



PROFILE 15 - 20



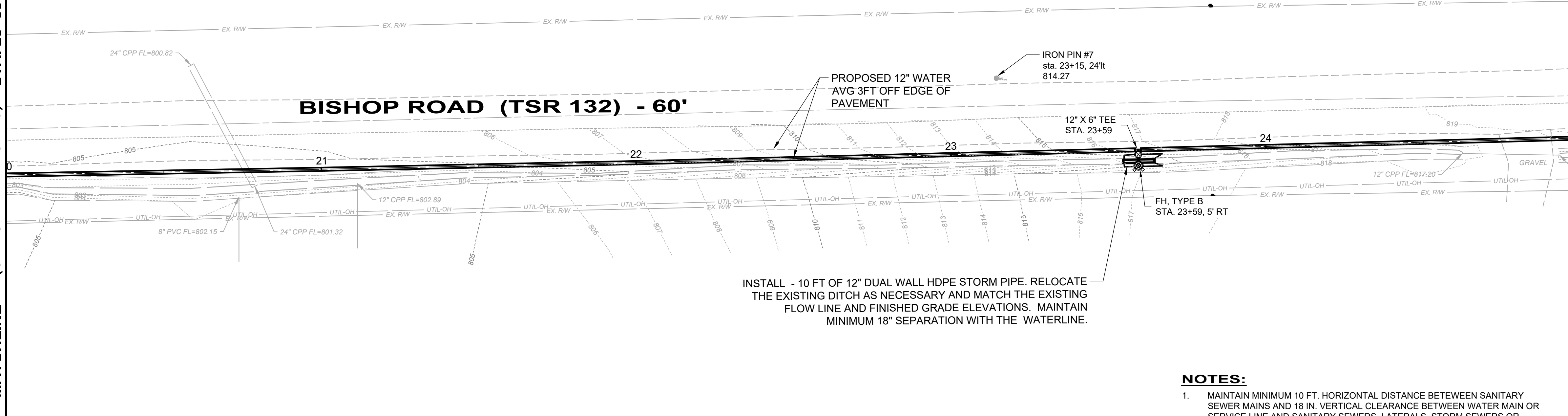
ISSUED FOR:	NO	REVISION	DATE
ISSUE DATE: 4/06/2024			
SCALE: AS SHOWN			
DESIGNED BY: JK/GBC			
DRAWN BY: JK			
CHECKED BY: GBC			

ASHTABULA COUNTY DEPARTMENT OF
ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
BISHOP ROAD, HARPERSFIELD TWP.
ASHTABULA COUNTY OHIO
WATERLINE PLAN & PROFILE
STA. 20+00 TO STA. 25+00

PROJECT NO.	241223
SHEET NAME	PP-5
SHEET	OF
13	19

MATCHLINE (SEE SHEET 12 OF 19) STA. 20+00

MATCHLINE (SEE SHEET 14 OF 19) STA. 25+00

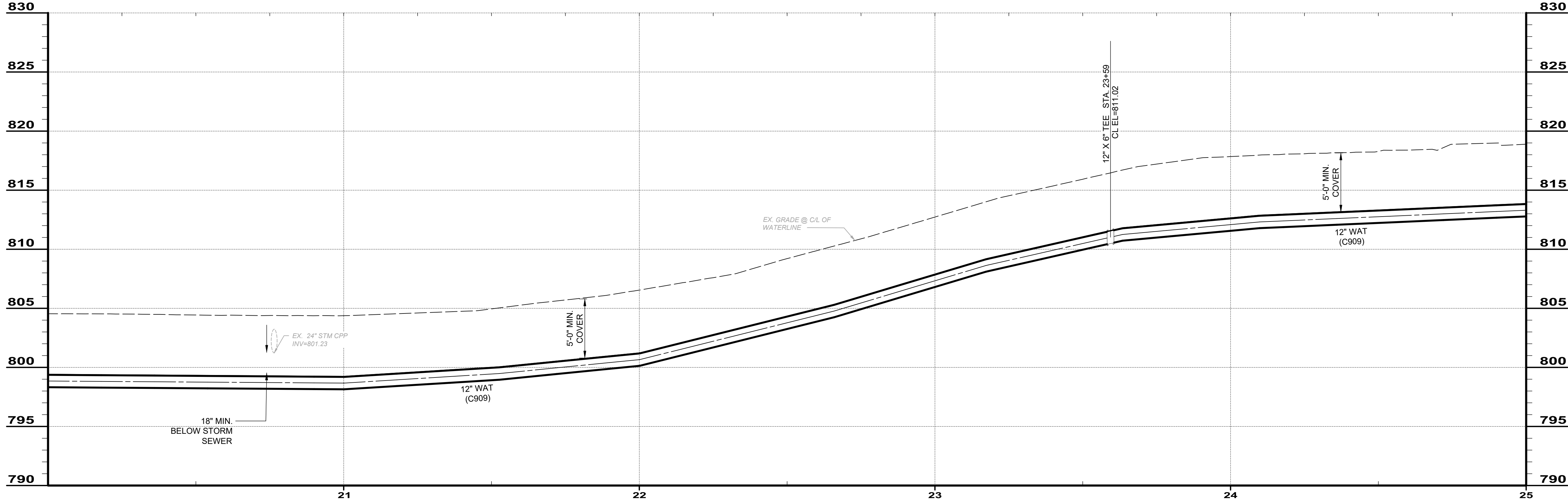


PLAN - STA 20 - 25

INSTALL - 10 FT OF 12" DUAL WALL HDPE STORM PIPE. RELOCATE THE EXISTING DITCH AS NECESSARY AND MATCH THE EXISTING FLOW LINE AND FINISHED GRADE ELEVATIONS. MAINTAIN MINIMUM 18" SEPARATION WITH THE WATERLINE.

NOTES:

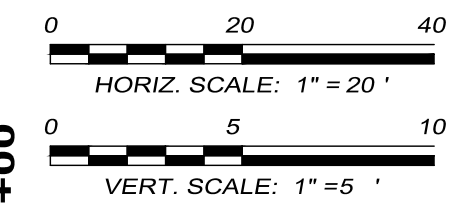
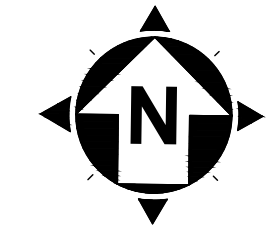
1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
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3. WATERLINE PLAN STATIONING BASED ON A HORIZONTAL DATUM. ACTUAL VERTICAL LENGTHS WILL DIFFER DUE TO VERTICAL CHANGES.



PROFILE 20 - 25



1-800-362-2764
CALL TWO WORKING DAYS BEFORE YOU DIG
(NON MEMBERS MUST BE CALLED DIRECTLY)



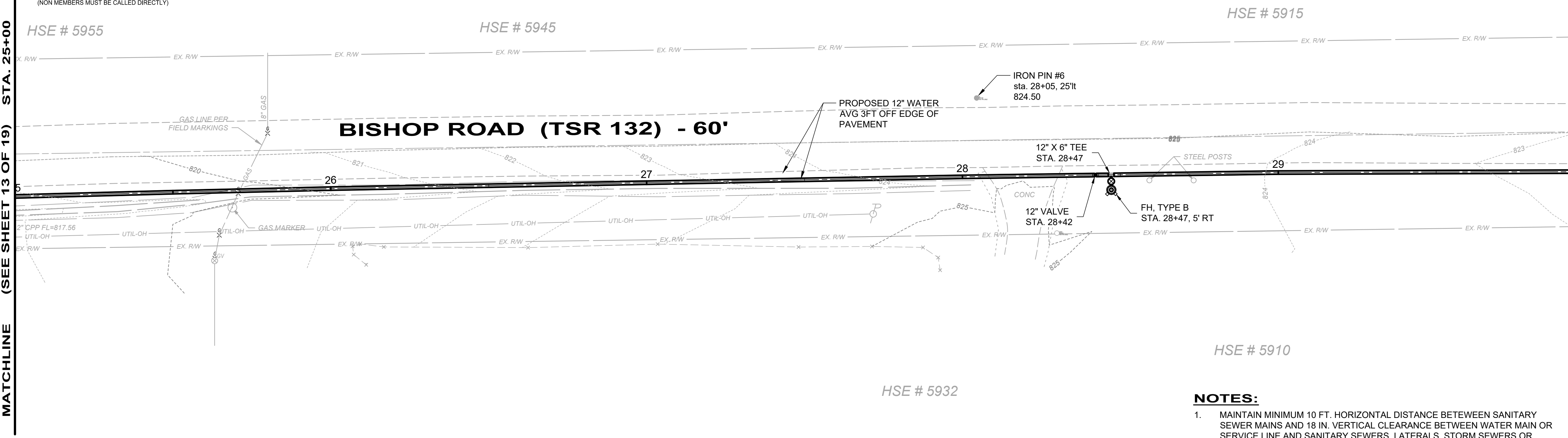
ISSUED FOR:	NO.	REVISION	DATE
ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES			
BISHOP ROAD PHASE 2 WATERMAIN			
BISHOP ROAD, HARPERSFIELD TWP.			
ASHTABULA COUNTY OHIO			
WATERLINE PLAN & PROFILE			
STA. 25+00 TO STA. 30+00			

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
BISHOP ROAD, HARPERSFIELD TWP.
ASHTABULA COUNTY OHIO
WATERLINE PLAN & PROFILE
STA. 25+00 TO STA. 30+00

PROJECT NO.	241223
SHEET NAME	PP-6
SHEET	14
OF	19

MATCHLINE (SEE SHEET 13 OF 19) STA. 25+00

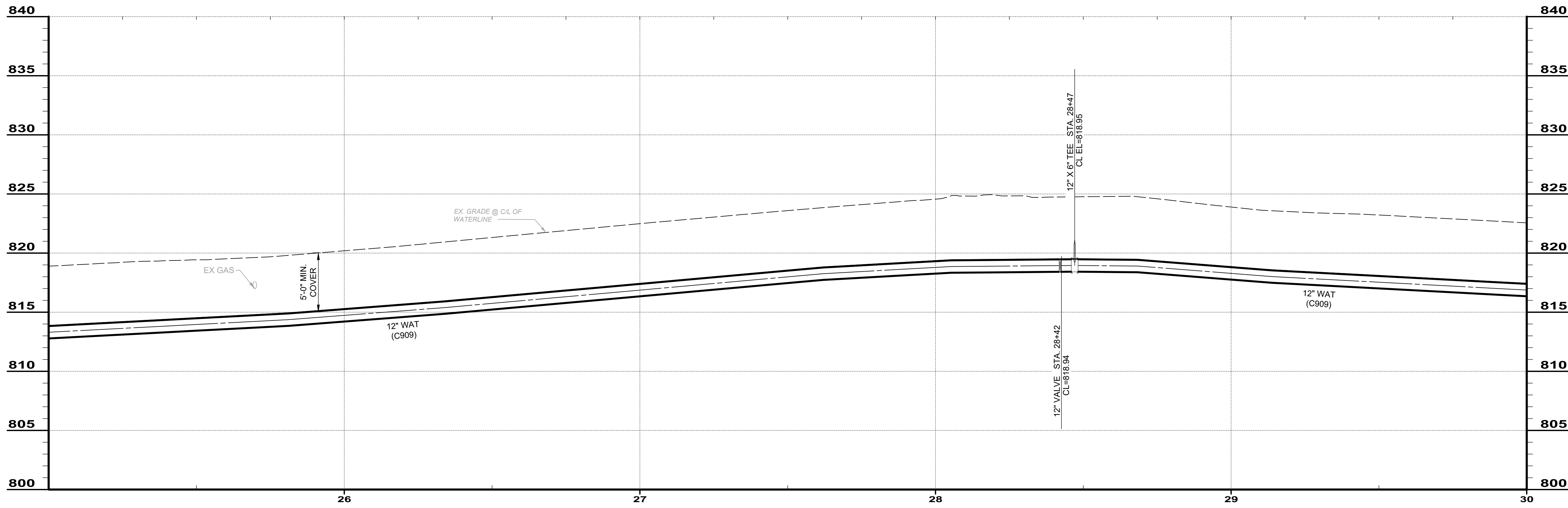
MATCHLINE (SEE SHEET 15 OF 19) STA. 30+00



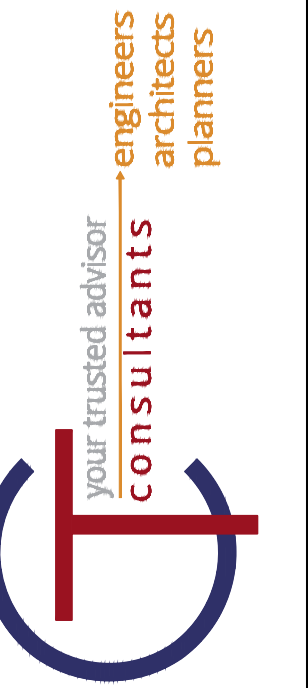
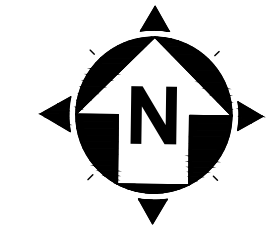
PLAN - STA 25 - 30

NOTES:

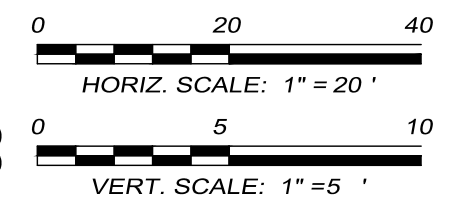
1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
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3. WATERLINE PLAN STATIONING BASED ON A HORIZONTAL DATUM. ACTUAL VERTICAL LENGTHS WILL DIFFER DUE TO VERTICAL CHANGES.



PROFILE 25 - 30

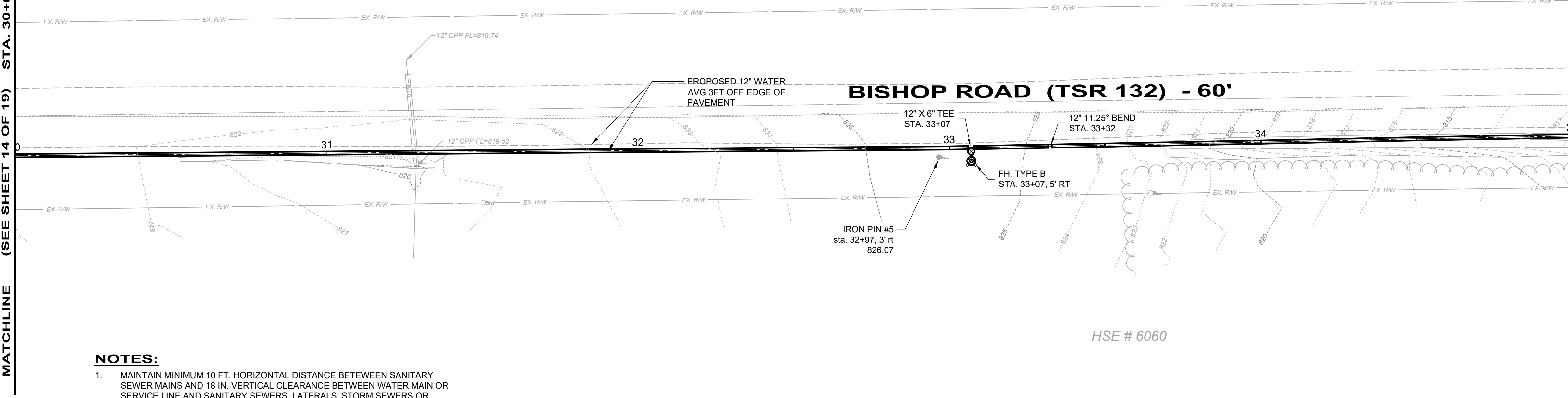


ISSUED FOR:	NO	REVISION	DATE
ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES BISHOP ROAD PHASE 2 WATERMAIN ASHTABULA COUNTY OHIO	4/06/2024	AS SHOWN	
DESIGNED BY: JK/GBC			
DRAWN BY: JK			
CHECKED BY: GBC			



MATCHLINE (SEE SHEET 14 OF 19) STA. 30+00

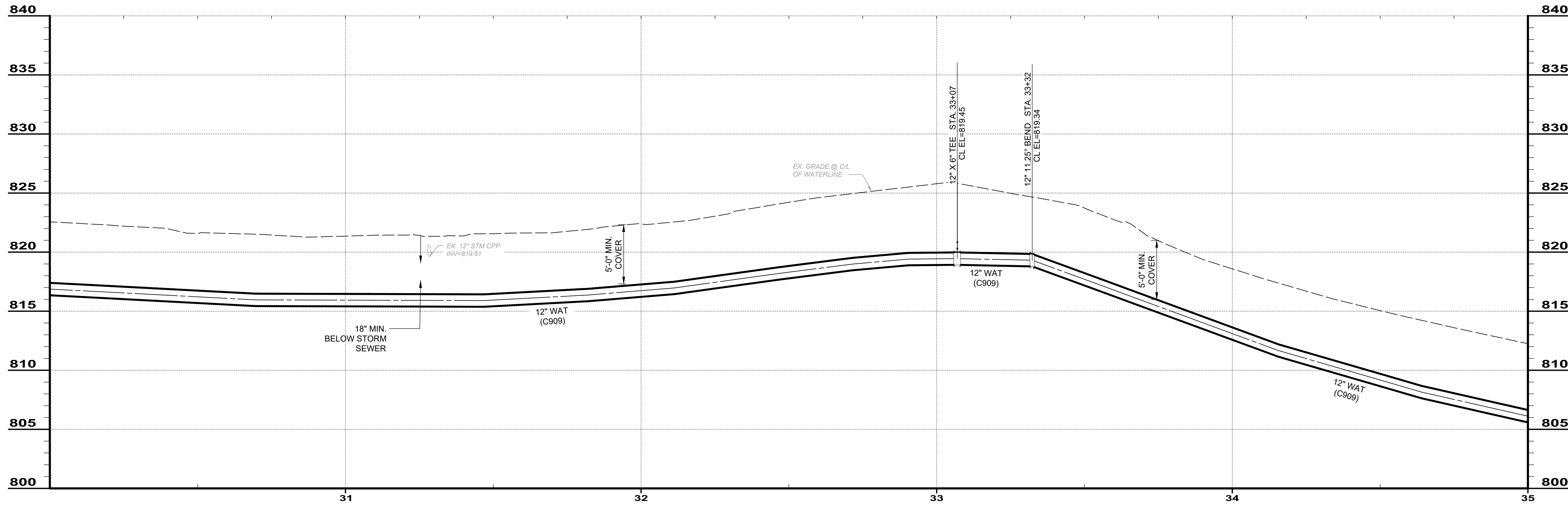
MATCHLINE (SEE SHEET 16 OF 19) STA. 35+00



NOTES:

1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
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3. WATERLINE PLAN STATIONING BASED ON A HORIZONTAL DATUM. ACTUAL VERTICAL LENGTHS WILL DIFFER DUE TO VERTICAL CHANGES.

PLAN - STA 30 - 35



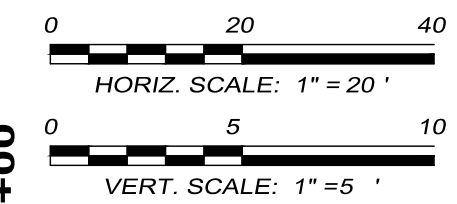
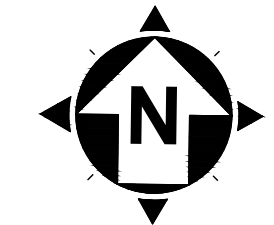
PROFILE 30 - 35

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
 BISHOP ROAD, HARPERSFIELD, TWP.
 ASHTABULA COUNTY OHIO
WATERLINE PLAN & PROFILE
STA. 30+00 TO STA. 35+00

PROJECT NO.	241223
SHEET NAME	PP-7
SHEET	OF
15	19



1-800-362-2764
CALL TWO WORKING DAYS BEFORE YOU DIG
(NON MEMBERS MUST BE CALLED DIRECTLY)



NO	REVISION	DATE

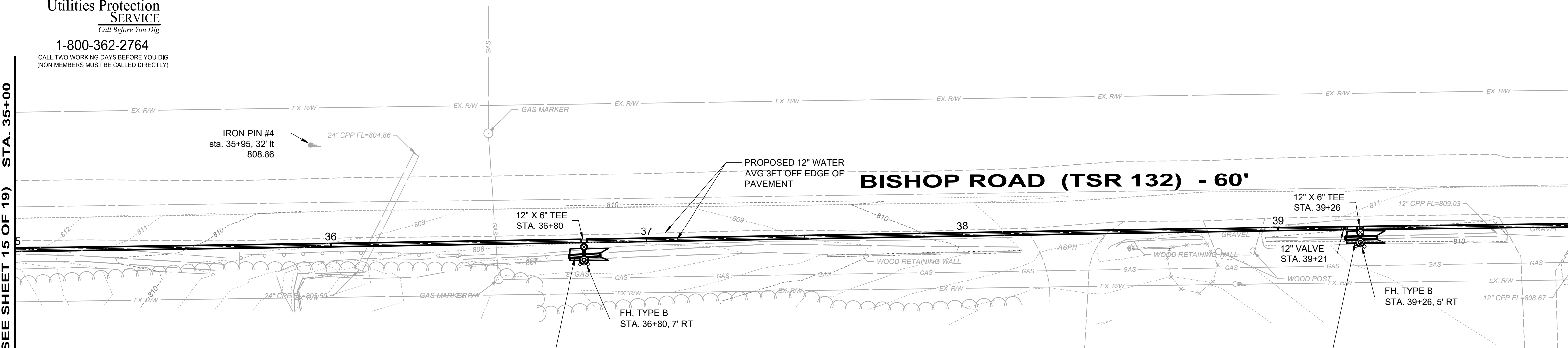
ISSUED FOR:	4/06/2024
ISSUE DATE:	AS SHOWN
SCALE:	JK/GBC
DESIGNED BY:	JK
DRAWN BY:	GBC
CHECKED BY:	

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
BISHOP ROAD, HARPERSFIELD, TWP.
ASHTABULA COUNTY OHIO
WATERLINE PLAN & PROFILE
STA. 35+00 TO STA. 40+00

PROJECT NO.	241223
SHEET NAME	PP-8
SHEET	OF
16	19

MATCHLINE (SEE SHEET 15 OF 19) STA. 35+00

MATCHLINE (SEE SHEET 17 OF 19) STA. 40+00



INSTALL - 10 FT OF 12" DUAL WALL HDPE STORM PIPE. RELOCATE THE EXISTING DITCH AS NECESSARY AND MATCH THE EXISTING FLOW LINE AND FINISHED GRADE ELEVATIONS. MAINTAIN MINIMUM 18" SEPARATION WITH THE WATERLINE.

INSTALL - 10 FT OF 12" DUAL WALL HDPE STORM PIPE. RELOCATE THE EXISTING DITCH AS NECESSARY AND MATCH THE EXISTING FLOW LINE AND FINISHED GRADE ELEVATIONS. MAINTAIN MINIMUM 18" SEPARATION WITH THE WATERLINE.

HSE # 5932

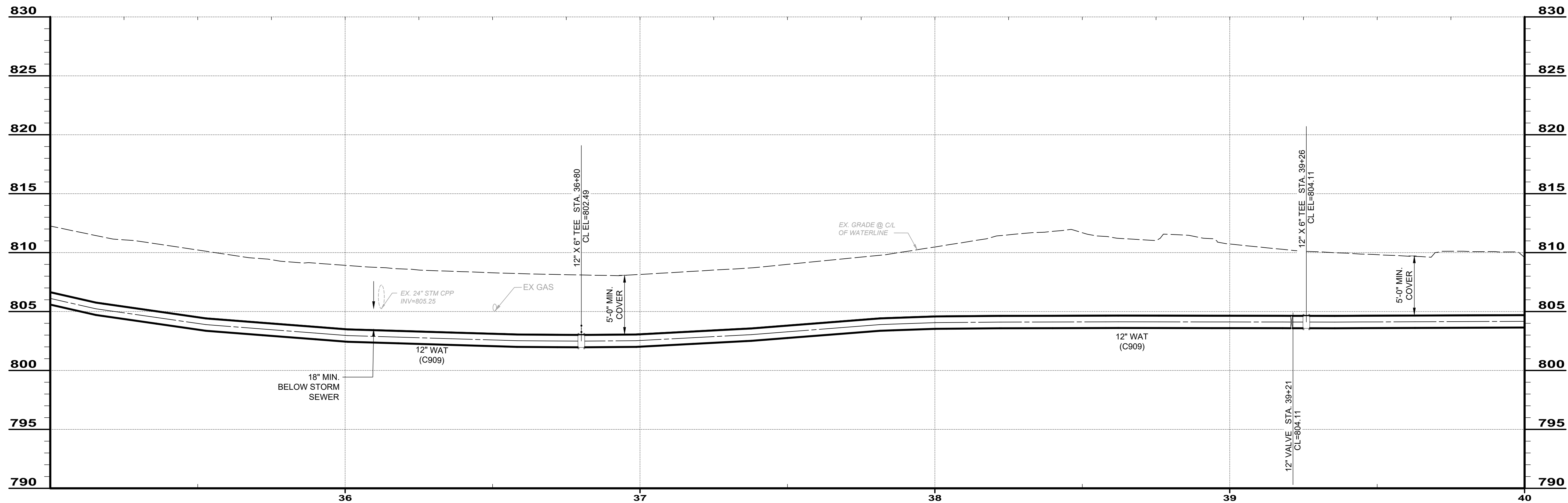
HSE # 5830

HSE # 5810

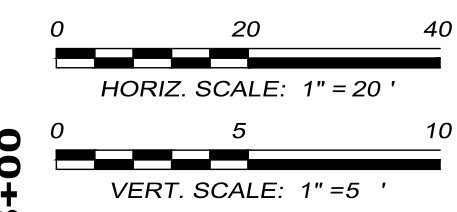
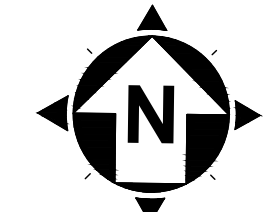
NOTES:

1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
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3. WATERLINE PLAN STATIONING BASED ON A HORIZONTAL DATUM. ACTUAL VERTICAL LENGTHS WILL DIFFER DUE TO VERTICAL CHANGES.

PLAN - STA 35 - 40



PROFILE 35 - 40



NO	REVISION	DATE

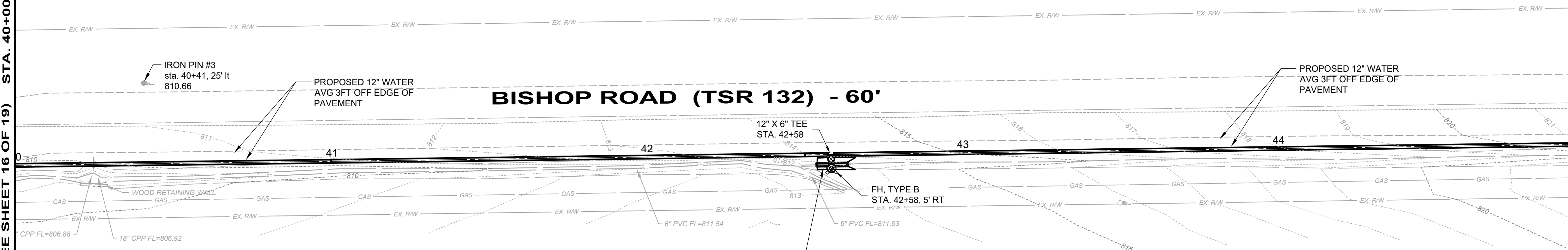
ISSUED FOR:
ISSUE DATE: 4/06/2024
SCALE: AS SHOWN
DESIGNED BY: JK/GBC
DRAWN BY: JK
CHECKED BY: GBC

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
BISHOP ROAD, HARPERSFIELD, TWP.
ASHTABULA COUNTY OHIO
WATERLINE PLAN & PROFILE
STA. 40+00 TO STA. 45+00

PROJECT NO.	241223
SHEET NAME	PP-9
SHEET	OF
17	19

MATCHLINE (SEE SHEET 16 OF 19) STA. 40+00

MATCHLINE (SEE SHEET 18 OF 19) STA. 45+00

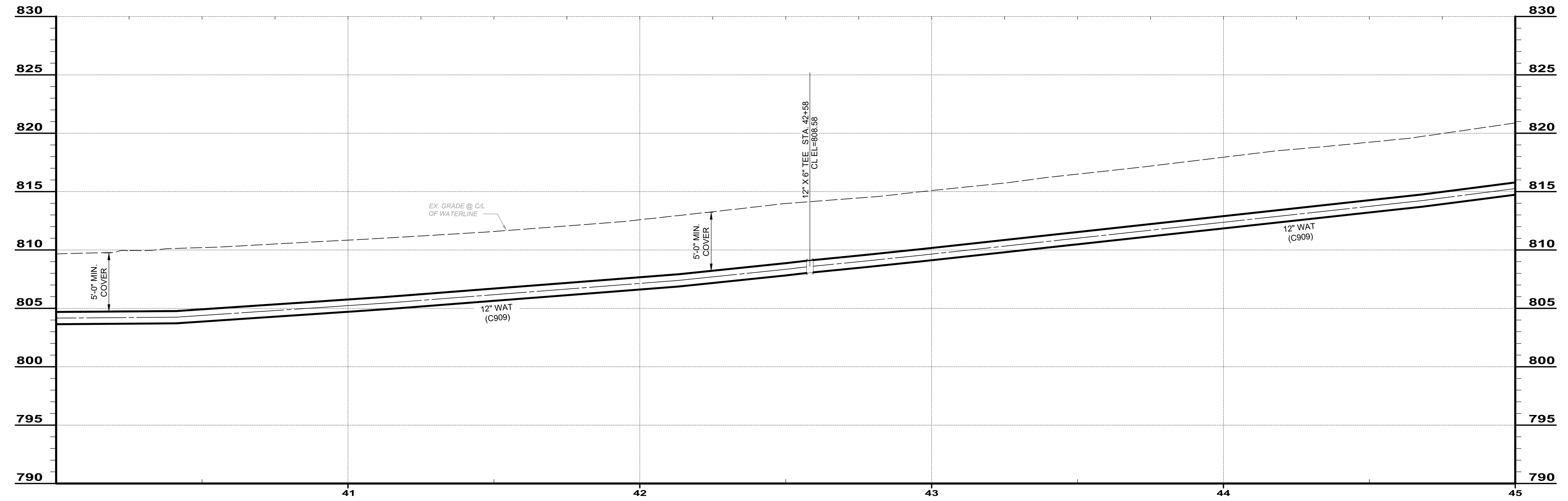


INSTALL - 10 FT OF 12\"/>

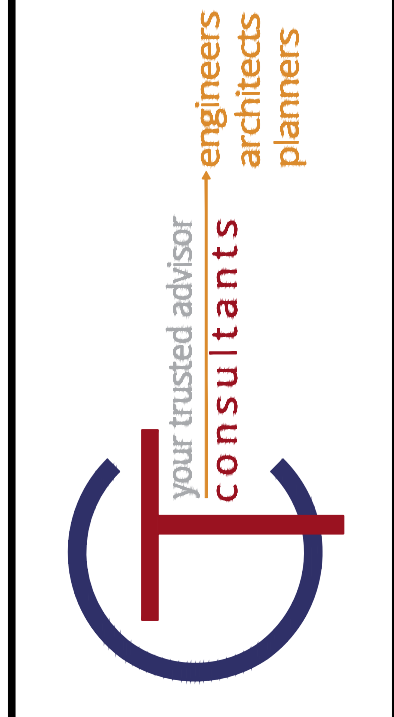
NOTES:

1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
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3. WATERLINE PLAN STATIONING BASED ON A HORIZONTAL DATUM. ACTUAL VERTICAL LENGTHS WILL DIFFER DUE TO VERTICAL CHANGES.

PLAN - STA 40 - 45



PROFILE 40 - 45

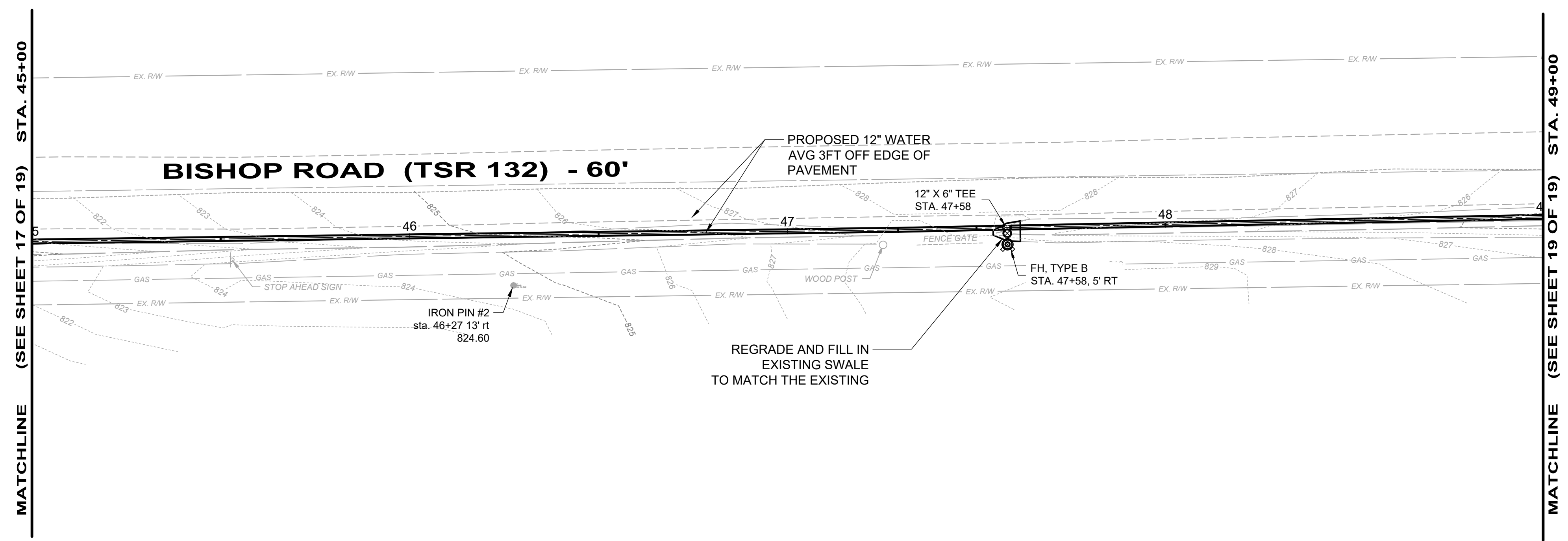
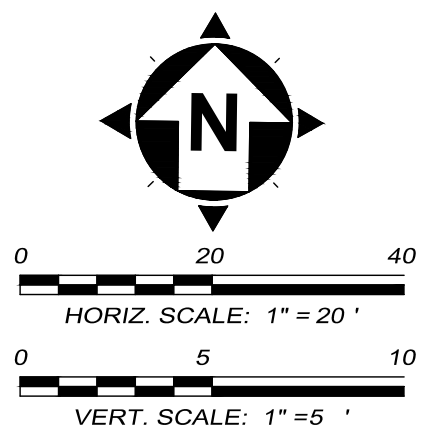


NO	REVISION	DATE

ISSUED FOR:	4/06/2024
ISSUE DATE:	AS SHOWN
SCALE:	JK/GBC
DESIGNED BY:	JK
DRAWN BY:	JK
CHECKED BY:	GBC

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
 BISHOP ROAD PHASE 2 WATERMAIN
 BISHOP ROAD, HARPERSFIELD, TWP.
 ASHTABULA COUNTY OHIO
WATERLINE PLAN & PROFILE
STA. 45+00 TO STA. 49+00

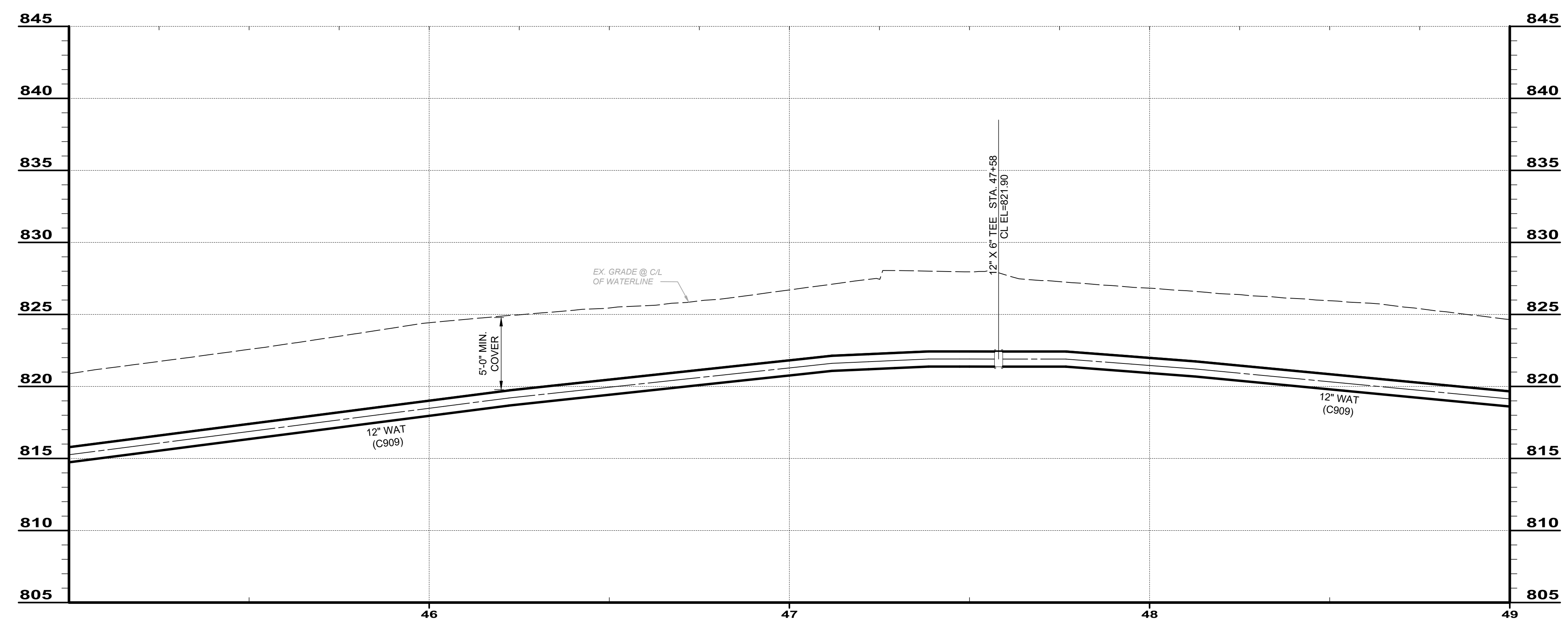
PROJECT NO.	241223
SHEET NAME	PP-10
SHEET	OF
18	19



PLAN - STA 40 - 45 *COVERED BRIDGE FARMS*

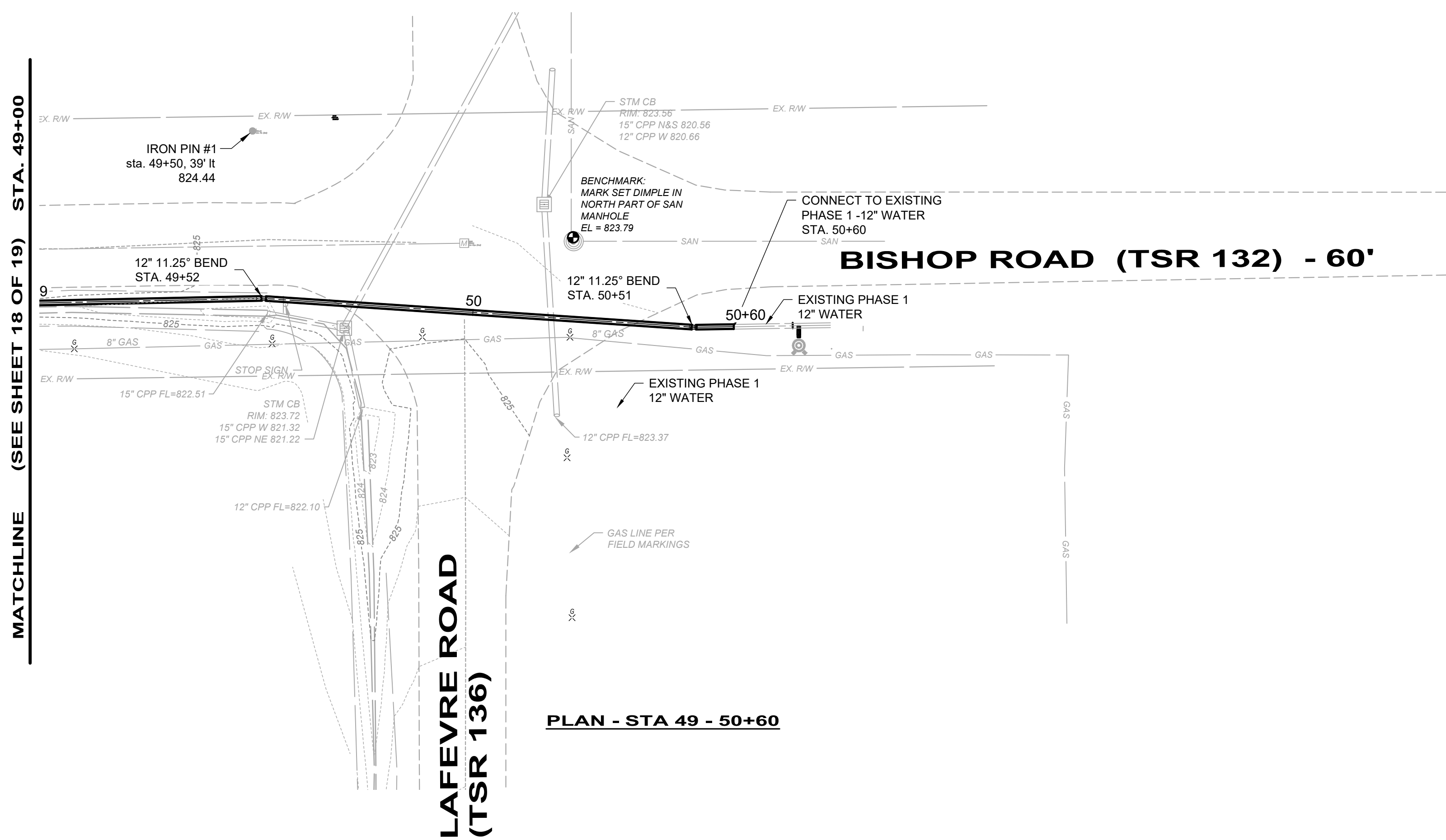
NOTES:

1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
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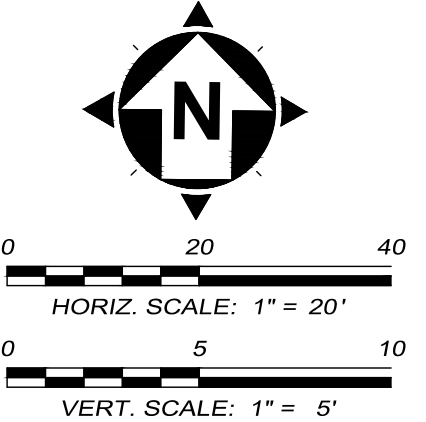


PROFILE 45- 49

OHIO
 Utilities Protection
 SERVICE
Call Before You Dig
 1-800-362-2764
CALL TWO WORKING DAYS BEFORE YOU DIG (NON MEMBERS MUST BE CALLED DIRECTLY.)

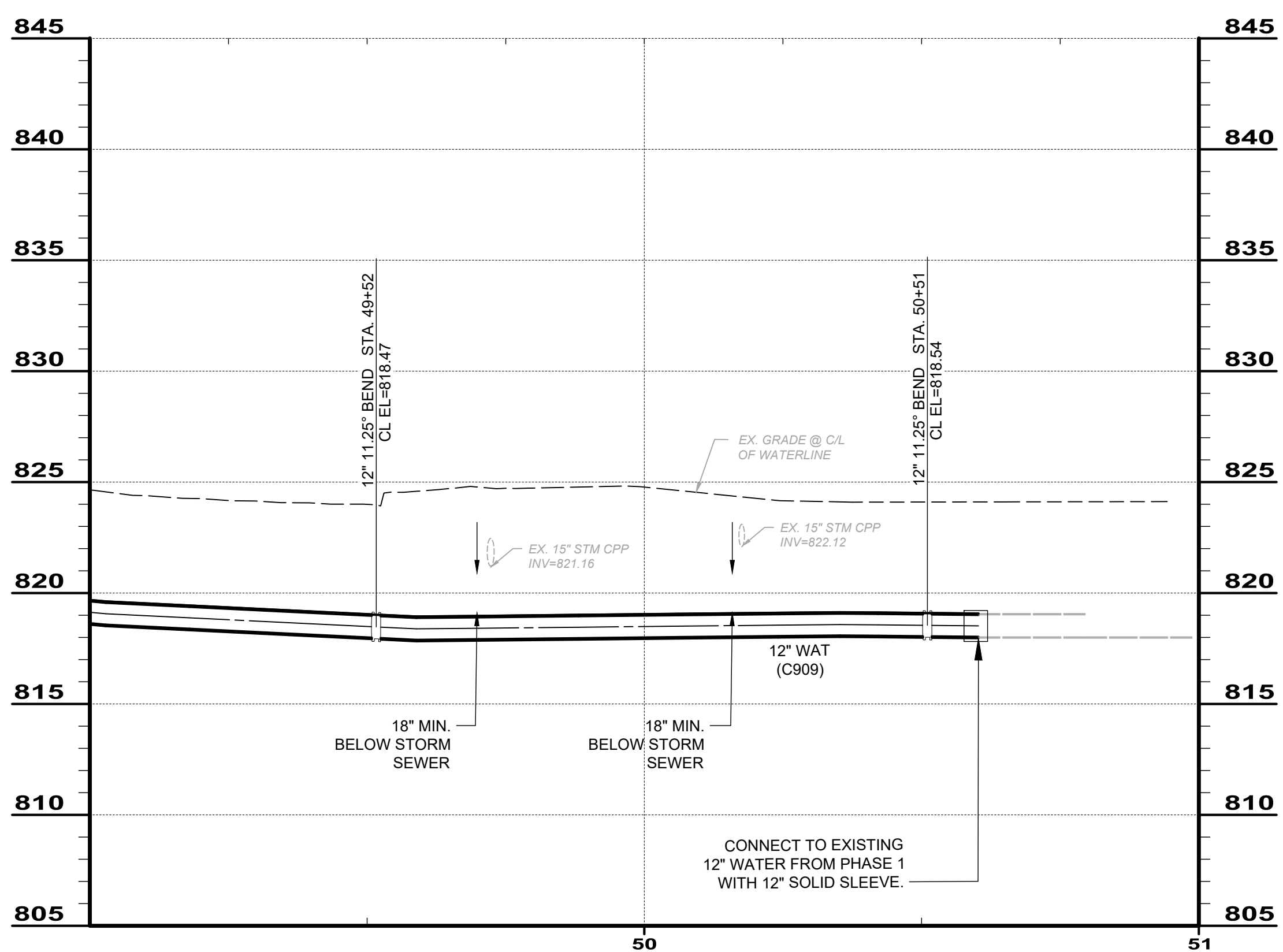


PLAN - STA 49 - 50+60

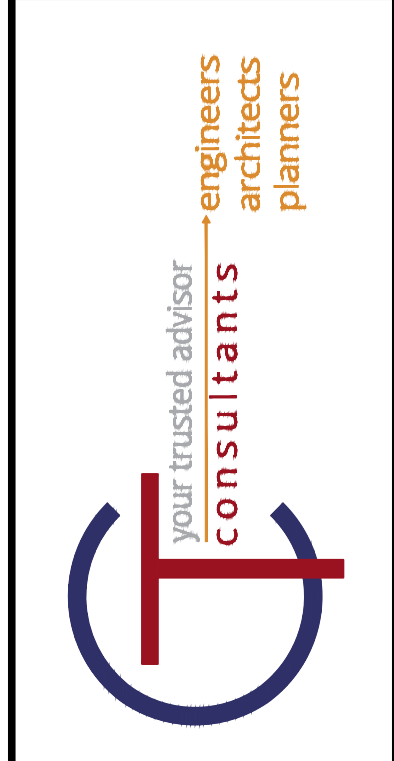


NOTES:

1. MAINTAIN MINIMUM 10 FT. HORIZONTAL DISTANCE BETWEEN SANITARY SEWER MAINS AND 18 IN. VERTICAL CLEARANCE BETWEEN WATER MAIN OR SERVICE LINE AND SANITARY SEWERS, LATERALS, STORM SEWERS OR STRUCTURES.
2. HYDRANTS HAVE BEEN PLACED AT HIGH AND LOW POINTS ON THE PROPOSED WATERLINE FOR MAINTENANCE OF THE SYSTEM. ANY CHANGES TO THESE LOCATIONS SHALL BE APPROVED BY THE ENGINEER AND ASHTABULA COUNTY.
3. WATERLINE PLAN STATIONING BASED ON A HORIZONTAL DATUM. ACTUAL VERTICAL LENGTHS WILL DIFFER DUE TO VERTICAL CHANGES.



PROFILE 49 - 51



ISSUED FOR:	NO	REVISION	DATE
ISSUE DATE: 4/06/2024			
SCALE: AS SHOWN			
DESIGNED BY: JK/GBC			
DRAWN BY: JK			
CHECKED BY: GBC			

ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
BISHOP ROAD PHASE 2 WATERMAIN
 BISHOP ROAD, HARPERSFIELD, TWP.
 ASHTABULA COUNTY OHIO
WATERLINE PLAN & PROFILE
STA. 49+00 TO STA. 51+00

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 SERVICE
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CALL TWO WORKING DAYS BEFORE YOU DIG (NON MEMBERS MUST BE CALLED DIRECTLY)

PROJECT NO.	241223
SHEET NAME	PP-11
SHEET	OF
19	19