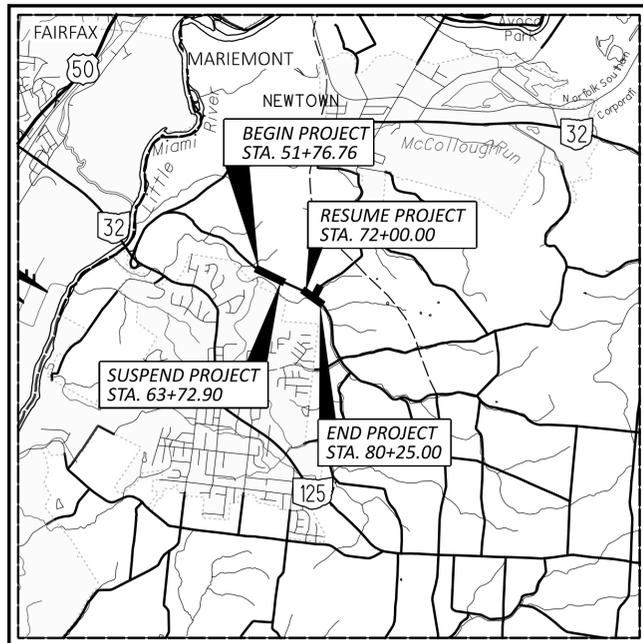


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

HAM-CR 358-0.94

CLOUGH PIKE & NEWTOWN ROAD
MILITARY SURVEY 2276 AND 2204

ANDERSON TOWNSHIP
HAMILTON COUNTY, OHIO



LOCATION MAP

LATITUDE: 39°06'12" LONGITUDE: -84°22'20"



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

DESIGN DESIGNATION	CLOUGH PIKE	NEWTOWN ROAD
CURRENT ADT (2026)	7700	7370
DESIGN YEAR ADT (2046)	9620	9200
DESIGN HOURLY VOLUME (2046)	960	920
DIRECTIONAL DISTRIBUTION	60%	60%
TRUCKS (24 HOUR B&C)	100	160
DESIGN SPEED	45 MPH	40 MPH
LEGAL SPEED	40 MPH	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	(04)- URBAN MINOR ARTERIAL	(05)- URBAN MAJOR COLLECTOR
NHS PROJECT	NO	NO

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig

OHIO811.org
Before You Dig

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

PLAN PREPARED BY:



ENGINEER'S SEAL:



SIGNED: _____
DATE: 2/25/26

ENGINEER'S SEAL:



SIGNED: _____
DATE: 2/25/26

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STANDARD CONSTRUCTION DRAWINGS

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/19/24	HW-2.2	7/20/18	800-2023 7/18/25	WATERWAY PERMIT
BP-4.1	7/19/13			832 7/18/25	CONDITIONS
BP-7.1	7/18/25	MT-97.10	7/18/25	851 1/17/25	3/20/25
		MT-97.12	7/18/25	878 1/16/26	
CB-2-2A, 2B, 2C	7/19/24	MT-101.60	1/17/25		
		MT-101.90	7/17/20		
DM-1.1	1/17/25				
DM-1.2	1/17/25	TC-41.20	10/18/13		
		TC-41.30	4/21/23		
MGS-2.1	7/18/25	TC-41.40	10/18/13		
MGS-4.2	7/18/25	TC-42.20	10/18/13		
MGS-4.3	7/18/25	TC-52.10	10/18/13		
MGS-5.3	7/15/16	TC-52.20	1/15/21		
		TC-61.30	7/19/24		
RM-5.2	7/21/23	TC-71.10	7/18/25		
		TC-74.10	7/21/23		

FEDERAL PROJECT NUMBER

E240 (123)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

CONSTRUCT LEFT TURN LANES ON CLOUGH PIKE AT THE INTERSECTION WITH NEWTOWN ROAD. ALSO COMPLETE THE SIDEWALK ALONG THE SOUTH SIDE OF CLOUGH PIKE BETWEEN COPPERLEAF DRIVE AND NEWTOWN ROAD.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	2.27 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.2 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	2.47 ACRES

2023 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE PART TIME CLOSING OF THE HIGHWAY TO TRAFFIC, AS NOTED ON SHEET P.6. DURING WHICH TIME DETOURS WILL BE PROVIDED AS SHOWN HEREIN. PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Douglas A. Gruver, P.E.
District 08 Deputy Director

Pamela Boratyn
Director, Department of Transportation

FUTURE MAINTENANCE OF PROPOSED ITEMS:

ALL PROPOSED DRAINAGE STRUCTURES AND CONVEYANCES SHOWN ON THESE PLANS ARE NOT ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY, AND THE COUNTY OF HAMILTON IS NOT RESPONSIBLE TO MAINTAIN, REPAIR OR REPLACE ANY PROPOSED DRAINAGE STRUCTURES AND CONVEYANCES SHOWN ON THESE PLANS. EXCEPT HEREIN MODIFIED, ANY PROPOSED DRAINAGE STRUCTURE AND CONVEYANCES CROSSING UNDERNEATH THE COUNTY ROAD SHALL BE THE RESPONSIBILITY OF THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY.

ALL PROPOSED SIDEWALK AND CURB RAMPS SHOWN ON THESE PLANS ARE NOT ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY, AND THE COUNTY OF HAMILTON IS NOT RESPONSIBLE TO MAINTAIN, REPAIR OR REPLACE ANY PROPOSED SIDEWALK SHOWN ON THESE PLANS.

HAM-CR358-0.94

MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 2/23/2026 TIME: 11:27:39 AM USER: cgaerke V:\1736\active\173620162\engineering\118484-400-Engineering\Roadway\Sheets\118484_GT001.dgn

TITLE SHEET



DESIGN AGENCY	ZTM
REVIEWER	SNS 08/04/25
PROJECT ID	118484
SHEET	P.1
TOTAL	61

SHEET NUM.										PART.	ALT	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
4	5	6	7	14	15	49	55	59		01/MPO/ 28/ANDS	(X)		EXT	TOTAL			
ROADWAY																	
LS										LS		201	11000	LS		CLEARING AND GRUBBING	
				287.5						287.5		202	38000	287.5	FT	GUARDRAIL REMOVED	
				231						231		202	35100	231	FT	PIPE REMOVED, 24" DIAMETER AND UNDER	
				2						2		202	58100	2	EACH	CATCH BASIN REMOVED	
				2,596						2,596		203	10000	2,596	CY	EXCAVATION	
				1,209						1,209		203	20000	1,209	CY	EMBANKMENT	
					1,531					1,531		204	10000	1,531	SY	SUBGRADE COMPACTION	
				480						480		204	13000	480	CY	EXCAVATION OF SUBGRADE	
				370						370		204	30010	370	CY	GRANULAR MATERIAL, TYPE B	
1										1		204	45000	1	HOUR	PROOF ROLLING	4
					1,110					1,110		204	50000	1,110	SY	GEOTEXTILE FABRIC, 712.09, TYPE D	
				462.5						462.5		606	15051	462.5	FT	GUARDRAIL, TYPE MGS, AS PER PLAN	4
				1						1		606	26150	1	EACH	ANCHOR ASSEMBLY, MGS TYPE E, (MASH 2016)	
				2						2		606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
				435						435		607	98000	435	FT	FENCE, MISC.:WOOD FENCE	5
				21						21		609	26000	21	FT	CURB, TYPE 6	
										LS		878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
	LS									LS		SPECIAL	69098400	LS		SPECIAL - CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION	5
EROSION CONTROL																	
				26						26		601	11001	26	SY	RIPRAP, TYPE D, AS PER PLAN	
				2						2		601	32200	2	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
1										1		659	00100	1	EACH	SOIL ANALYSIS TEST	
556										556		659	00300	556	CY	TOPSOIL	
				5,000						5,000		659	10000	5,000	SY	SEEDING AND MULCHING	
0.68										0.68		659	20000	0.68	TON	COMMERCIAL FERTILIZER	
1.03										1.03		659	31000	1.03	ACRE	LIME	
28										28		659	35000	28	MGAL	WATER	
				319						319		670	00700	319	SY	DITCH EROSION PROTECTION	
				38,650						38,650		832	30000	38,650	EACH	EROSION CONTROL	
										LS		832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
										LS		832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
										LS		832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
DRAINAGE																	
				0.2						0.2		602	20000	0.2	CY	CONCRETE MASONRY	
				270						270		605	13300	270	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
				1,024						1,024		605	14000	1,024	FT	6" BASE PIPE UNDERDRAINS	
				104						104		611	00510	104	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
				3						3		611	98470	3	EACH	CATCH BASIN, NO. 2-2B	
				1	3					4		611	99654	4	EACH	MANHOLE ADJUSTED TO GRADE	
				2						2		611	99710	2	EACH	PRECAST REINFORCED CONCRETE OUTLET	
DRAINAGE ALTERNATES																	
				8						8	X	611	05700	8	FT	15" CONDUIT, TYPE A, (ALTERNATE 1)	
				8						8	X	611	05701	8	FT	15" CONDUIT, TYPE A, AS PER PLAN, 706.02, (ALTERNATE 2)	51
				80						80	X	611	06100	80	FT	15" CONDUIT, TYPE C, (ALTERNATE 1)	
				80						80	X	611	06101	80	FT	15" CONDUIT, TYPE C, AS PER PLAN, 706.02, (ALTERNATE 2)	51
				108						108	X	611	07400	108	FT	18" CONDUIT, TYPE B, (ALTERNATE 1)	
				108						108	X	611	07401	108	FT	18" CONDUIT, TYPE B, AS PER PLAN, 706.02, (ALTERNATE 2)	51
PAVEMENT																	
				343						343		301	56000	343	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
				369						369		304	20000	369	CY	AGGREGATE BASE	
				524						524		407	20000	524	GAL	NON-TRACKING TACK COAT	
				145						145		441	70200	145	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449)	
				4						4		441	70500	4	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	
				4						4		441	70600	4	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (DRIVEWAYS)	
				145						145		442	20050	145	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (448)	
				8,149						8,149		608	12000	8,149	SF	5" CONCRETE WALK	
				88						88		608	15000	88	SF	8" CONCRETE WALK	
				163						163		608	52000	163	SF	CURB RAMP	

DESIGN AGENCY

Stantec
 10200 Alliance Road,
 Suite 300
 Cincinnati, OH 45242
 (513) 842-9200

DESIGNER
QC

REVIEWER
SNS 08/04/25

PROJECT ID
118484

SHEET TOTAL
 P.12 | 61

EARTHWORK QUANTITIES					
LOCATION	STATION		203		659
			EXCAVATION	EMBANKMENT	SEEDING & MULCHING
	FROM	TO	CU YD	CU YD	SQ YD
CLOUGH PIKE	51+76.76	63+74.69	1022	894	2266
CLOUGH PIKE	71+85.58	80+25.00	1424	304	2581
NEWTOWN ROAD	20+50.00	21+00.00	150	11	153
TOTALS CARRIED TO GENERAL SUMMARY			2596	1209	5000

EROSION CONTROL

ITEM 832, EROSION CONTROL SHALL BE PERFORMED EXCEPT THAT STRAW BALES WILL NOT BE PERMITTED AS A FORM OF EROSION CONTROL. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 832, EROSION CONROL 38,650 EACH

ROADWAY SUBSUMMARY																
SHEET NO.	REF. NO.	LOCATION	STATION		SIDE	202			606			607	609	626	638	
						PIPE REMOVED, 24" AND UNDER	CATCH BASIN REMOVED	GUARDRAIL REMOVED	GUARDRAIL, TYPE MGS. AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE E	ANCHOR ASSEMBLY, MGS TYPE T	FENCE, MISC.: WOOD FENCE	CURB, TYPE 6	BARRIER REFLECTOR, TYPE 2, BI-DIRECTIONAL, WHITE/WHITE	WATER WORK, MISC. REMOVING FIRE HYDRANT	WATER WORK, MISC. REMOVING EXISTING MANHOLE CURB AND COVER
			FROM	TO		FT	EACH	FT	FT	EACH	EACH	FT	FT	EACH		
17	F1	CLOUGH PIKE	52+04.91	53+24.18	RT							120				
20	F2	CLOUGH PIKE	72+41.07	75+58.74	RT							315				
20-21	R1	CLOUGH PIKE	75+34.17	76+46.27	LT	113	1									
21	R2	NEWTOWN ROAD/CLOUGH PIKE	20+62.29	77+17.39	LT	118	1									
21	R3	NEWTOWN ROAD	20+02.62	21+00.00	RT			162.5								
21	R4	NEWTOWN ROAD	20+71.53		LT										1	
21	R5	NEWTOWN ROAD	20+79.38		LT											1
18	G1	CLOUGH PIKE	55+56.69	56+24.13	RT			62.5	62.5		1				2	
18	G2	CLOUGH PIKE	56+50.55	57+17.91	RT			62.5	62.5		1				2	
21	G3	CLOUGH PIKE	76+61.07	78+55.21	LT			337.5	1						7	
21	C1	CLOUGH PIKE	76+56.79	76+84.60	RT										21	
SUBTOTAL						231	2	287.5	462.5	1	2	435	21	11	1	1
TOTALS CARRIED TO GENERAL SUMMARY						231	2	287.5	462.5	1	2	435	21	11	1	1

DRAINAGE SUBSUMMARY																															
SHEET NO.	REF. NO.	LOCATION	STATION		SIDE	601				602	605		611						670	FOR INFORMATION ONLY											
						RIPRAP, TYPE D, AS PER PLAN	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	CONCRETE MASONRY	6" UNCLASSIFIED PIPE UNDERDRAINS	6" BASE PIPE UNDERDRAINS	6" CONDUIT, TYPE F FOR UNDERDRIAN OUTLETS	15" CONDUIT, TYPE A	15" CONDUIT, TYPE A, AS PER PLAN	15" CONDUIT, TYPE C	15" CONDUIT, TYPE C, AS PER PLAN	18" CONDUIT, TYPE B	18" CONDUIT, TYPE B, AS PER PLAN	CATCH BASIN, NO. 2-2B	MANHOLE ADJUSTED TO GRADE	PRECAST REINFORCED CONCRETE OUTLET	DITCH EROSION PROTECTION	OUTLET INTO UNDERDRAIN	OUTLET INTO DRAINAGE STRUCTURE	11.25° BEND	22.50° BEND	45° BEND	90° BEND	PLUG	TEE	WYE
			FROM	TO		SY	SY	CY	CY	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	SY	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
17	D1	CLOUGH PIKE	52+38.73	52+50.35	RT																										
19	D2	CLOUGH PIKE	61+85.12	61+87.44	RT			2	0.13			8	8			1															
20	D3	CLOUGH PIKE	75+33.82	76+11.70	LT									80	80	1															
20-21	D4	CLOUGH PIKE	76+11.70	76+46.27	LT											38	38	1	1												
21	D5	CLOUGH PIKE	76+46.27	77+13.11	LT											70	70														
21	D6	CLOUGH PIKE	77+16.59	77+20.95	LT	26																									
20	E1	CLOUGH PIKE	72+79.97	77+11.56	LT															100											
20-21	E2	CLOUGH PIKE	76+11.39	76+34.99	LT															55											
21	E3	CLOUGH PIKE	77+29.26	80+24.99	LT															164											
20	UD-1	CLOUGH PIKE	72+00.00	76+17.34	LT					135	287	16																			
20	UD-2	CLOUGH PIKE	72+00.00	76+05.97	RT		1.8			135	269	32							1		1										
20-21	UD-3	NEWTOWN ROAD	20+32.89	21+00.00	LT						81	10										1				1					
21	UD-4	NEWTOWN ROAD	20+23.50	21+00.00	RT						82	23										1				1					
21	UD-5	CLOUGH PIKE	77+23.79	80+48.00	LT		1.8				304	23							1							1					
SUBTOTAL						26	3.6	2	0.13	270	1023	104	8	8	80	80	108	108	3	1	2	319	1	2	0	0	3	1	5	1	0
TOTALS CARRIED TO GENERAL SUMMARY						26	3.6	2	0.2	270	1023	104	8	8	80	80	108	108	3	1	2	319	1	2	0	0	3	1	5	1	0

DESIGN AGENCY

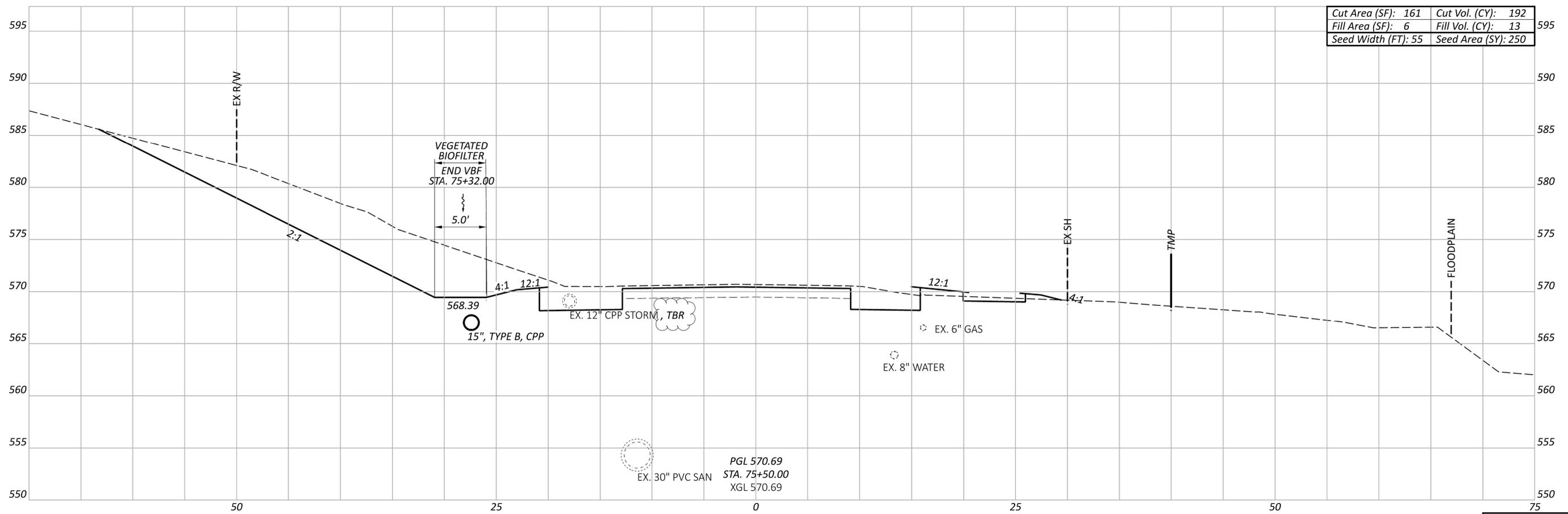
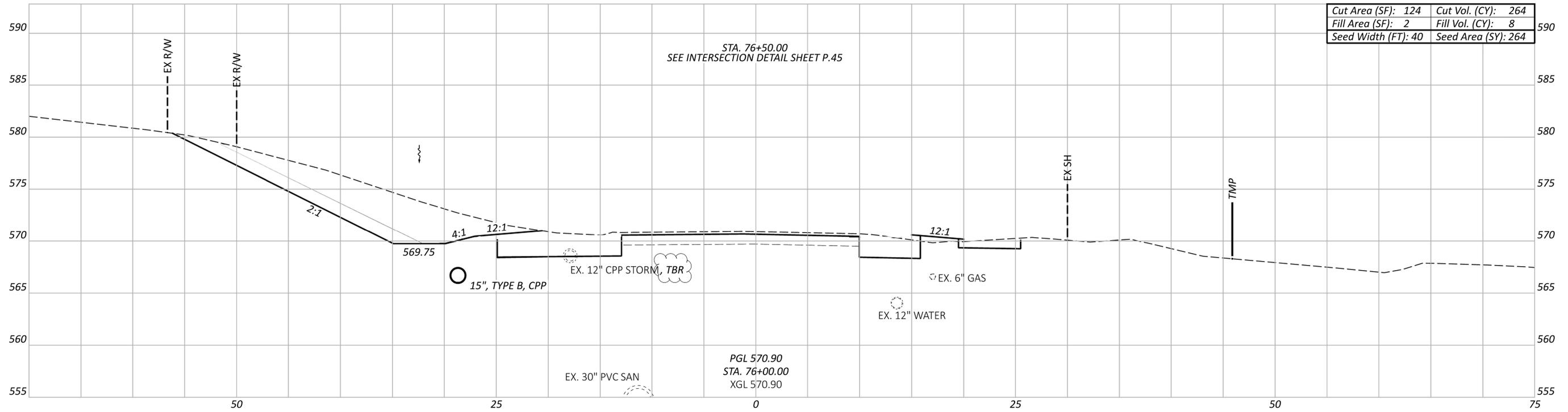
Stantec
 10200 Alliance Road,
 Suite 300
 Cincinnati, OH 45242
 (513) 842-9200

DESIGNER
QC

REVIEWER
SNS 12/03/24

PROJECT ID
118484

SHEET TOTAL
 P.14 | 61



CROSS SECTIONS CLOUGH PIKE
STA. 75+50.00 TO STA. 76+00.00



DESIGNER
ZTM

REVIEWER
SNS 08/04/25

Sheet Totals			118484
Seeding	Cut	Fill	TOTAL
514	456	21	P.39 61

GENERAL PROVISIONS

The Contractor is advised that there are several changes to the most recent edition of the City of Cincinnati Supplement dated January 1, 2023. These General Provisions include these changes. The Supplement and a Summary of Changes can be purchased or downloaded from the City's website: <http://www.cincinnati-oh.gov/date/assets/File/2023%20CITY%20SUPPLEMENT-FINAL.pdf>

Water main items are to be constructed in accordance with the provisions of the State of Ohio, Department of Transportation, Construction and Material Specifications, dated January 1, 2023, and modified by the City of Cincinnati Supplement to said State of Ohio Specifications, effective January 1, 2023, and any supplements or changes thereto. Copies of the State specifications are on file at the Office of Contract Sales of the State of Ohio, Department of Transportation, 25 South Front Street, Columbus, Ohio, and at the offices of the City Engineer of Cincinnati, Ohio. Submission of a bid for this project implies that the Contractor has taken all provisions of the Supplement into account.

The Greater Cincinnati Water Works (GCWW) understands that differing site conditions results in extra work/change orders to the project. Change orders on GCWW contracts will be done in strict accordance with Item 109.05 C of the State of Ohio Department of Transportation Construction and Material Specifications dated January 1, 2023 or most recent edition and as modified in this City of Cincinnati Supplement. GCWW limits the mark up on wages and fringe benefits as described in 109.05 C. 2, "Labor" to 30%. It is expressly understood that regardless of the nature of the claim, or change in scope of work, the Contractor is not entitled to compensation for loss of anticipated profit or production.

As defined in the City of Cincinnati Supplement, sections 107.07 and 107.071, the Contractor is required to submit, at the time of the pre-construction meeting, a Site Safety Plan. Furthermore, the Contractor shall have an authorized and competent safety representative assigned to the project site.

The Contractor is advised that he has certain responsibilities under Section 153.64 of The Ohio Revised Code. For all underground utilities, contact the Ohio Utilities Protection Service at 1-800-362-2764 (toll free) 48 hours in advance of work. The Contractor is advised that all utility information has been shown on the contract plans from information provided by the owner of each utility in compliance with Sec. 153.64 of the Ohio Revised Code. In cases where utility information is incorrect and it results in a change in the contract plans the Contractor shall first notify the owner of the utility to determine the necessary course of action. The Contractor shall submit any subsequent claims as a result of downtime or additional work to the owner of the conflicting utility. The GCWW will not accept claims for any utility other than those as a result of incorrect water main and related appearance information.

The Contractor must locate or "pat hole" all utilities within the alignment of the proposed main a minimum of 50 feet ahead of pipe laying. Test holes must be dug, or trench excavated, a minimum of 50 feet (15.2 m) in advance of pipe laying, to assure proper clearance between the water main and any utility crossing, or underground structure. All utilities and structures shall be suitably braced and supported. The Contractor shall understand that any obstructions encountered in the installation of the main, due to the failure of having 50 feet (15.2m) of trench excavated ahead of laying operations, may require removal and relaying of the pipe at the contractor's expense. The GCWW will not accept a claim for different utility conditions encountered when test holes are not performed as required.

Item 1120, "Exploratory Excavation", shall not include excavations within the limits of the proposed trench as defined in 1101.04 and 1101.05. Test holes are required on all utilities within 50 feet of the last laid pipe. Test holes within the alignment of the proposed trench are included in the Contractor's unit bid for Item 1101. Locations to be explored will vary from areas within the roadway to areas outside of the roadway.

It is the nature of construction that unmarked utilities or utilities not shown on the plans may be encountered within the excavation for the proposed work. The contractor is responsible for identifying all utilities encountered within the excavation and removing any abandoned utilities as necessary for the work. If abandoned utilities are encountered that: are shown on the plans, are crossing the trench, or do not impede the excavation; no extra payment will be made to the contractor. Such work shall be included in the contractor's unit price bid for the appropriate "Item 1101 Furnishing & Laying Pipe and Fittings". If abandoned utilities are encountered that: are not shown on the plans, are along the length of the trench, and impede the excavation, such work will be paid via the contractor's unit price for "Item 202 Existing Pipe Removal".

Street pavement or sidewalk should not be disturbed for a distance of more than 200 Feet (61.0 m) ahead of the last laid pipe. Backfill shall be completed within 50 feet (15.2 m) of the last laid pipe. Temporary or permanent surface restoration must be installed within a distance of 200 feet (61.0 m) of the laid pipe, including those areas where main installations occur within a closed lane or closed street condition. Roadway plates may be used as a temporary measure for a period not to exceed 24 hours without the approval of the GCWW.

Any undermined pavement of more than 6 inches horizontal must be removed prior to starting trench backfill. If undermining of pavement occurs more than 1 foot, then pavement must be shored to protect traffic, or arrangements made for additional lane closures must be made. If problems continue to occur regarding trenching integrity, sheeting and bracing can be required by the City Engineer or the City Engineer's representative, at the contractor's expense. If any tunneling is necessary, adequate information shown in both plan and profile and tunneling procedures must be submitted to the City Engineer's Office prior to commencement of work.

The GCWW has made every effort to depict the pipe sewers and lateral information on the plans. The Contractor is advised that sewer laterals are shown in plan view only. The Contractor shall determine the elevation of the sewer laterals in advance of laying the water main at these crossings. If the sewer laterals require changing in order to avoid conflict with the water main, or if the Contractor encounters a pipe sewer or lateral in the excavation that was not shown on the plans and requires a change of grade or alignment due to the installation of the water main, the Contractor shall furnish all necessary labor, material, tools, and equipment required to change the grade or alignment of pipe sewers and laterals of various sizes, allowing installation of water mains and appurtenances as shown on the plans, or as directed by the GCWW Inspector. This work shall include all necessary excavation, backfill, and restoration. The Contractor will be compensated under Item 1123, "Changing Pipe Sewers 8 Inch and Under". When crossing sanitary and combination sewers, a vertical clearance of 18" must be maintained.

Notice of Confidentiality – Public Infrastructure Record

This Document is a Public Infrastructure Record of the City of Cincinnati and its Greater Cincinnati Water Works, and is not subject to the public disclosure requirements of the public records laws of the State of Ohio and federal government. This Document is being provided on the basis of your reported need, and shall be considered confidential. By accepting this Document, you agree that it will not be shared or otherwise disclosed to anyone other than persons who have a direct need to know for the sole purpose of carrying out the project for which this Document was obtained. Anyone receiving this Document is bound by the same confidentiality requirements and must take precautions to protect against its dissemination.

The failure to observe the confidentiality requirements of this Notice shall serve as the basis for the City of Cincinnati to immediately seek legal recourse, including the recovery of actual damages resulting from unauthorized access or disclosure of the Document.

1-800-362-2764



Call Before You Dig

The Contractor is advised that due to the alignment of the proposed water main, it may be necessary to install a temporary valve box over an existing chambered valve that must remain in service during the water main installation as directed by the GCWW Inspector. The chamber shall be abandoned, a valve box (furnished by the contractor) placed over the valve, and upon project completion, the valve box must be removed. The contractor will not receive additional compensation for this work, but should include the cost of this work in his unit bid price for Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

It is the Contractor's responsibility to provide adequate water supply for domestic and fire fighting purposes. In order to accomplish the water main connections with a minimum amount of inconvenience to the consumers, it may be necessary to do the work at other than normal working hours or as may be scheduled by the GCWW.

The Contractor is advised that the operating pressure of the existing water main within the limits of the subject project is approximately **161-165 P.S.I.**

In order to minimize the inconvenience of the consumers, the number of shutdowns required to do the proposed water main work shall be limited. Only one shutdown, limited to 8 hours, will be allowed during a 24 hour period.

All water service branches have a minimum cover of 3.0 feet.

The Contractor is advised that it shall be necessary to install temporary Plug/caps on the existing and proposed water mains in order to maintain service during testing and water main and branch connections. These temporary Plug shall be furnished by the contractor. He is responsible for their proper installation. The cost for this work shall be included in the Contractor's unit bid price for the appropriate Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

The Contractor is required to excavate and expose the existing utilities and existing water mains along the line of the proposed water main and all proposed connection points to verify location, diameter, line and grade. Also, if the removal of the bulkhead or plug is required all excavation and temporary/permanent restoration shall be compensated under the Contractor's unit bid price for Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

The Contractor is advised that all C.J. Plug are to be restrained with a Field Lok Gasket and all M.J. caps are to be restrained using a M.J.R.G.. This includes temporary Plug and caps for testing purposes. When a temporary plug is used, the contractor is permitted to remove the plug by cutting the section of pipe containing the plug and using a solid sleeve at that point to complete the tie-in. In the event that a cap is used, the contractor shall remove the M.J.R.G. and cap before completing the tie-in.

The Contractor is advised that on any fire hydrant required to be relocated with this project, all bolt assemblies shall be replaced. The cost for this work shall be included in the unit bid price for Item 1113 "Relocating Existing Fire Hydrants". No part of any fire hydrant setting shall be installed closer than five feet to any driveway, inlet, utility pole or guy wire anchor. No part of any fire hydrant setting shall be installed closer than five feet to any driveway, inlet, utility pole or guy wire anchor. Contractor shall provide all labor, material, equipment and traffic control to test fire flow on all fire hydrants included in this water main replacement project in accordance with the fire hydrant flow testing scope included with the bid documents. If necessary, existing adjacent hydrants may need to be included in the fire hydrant testing. The need to test existing hydrants will be determined by the GCWW Inspector. Contractor shall provide all labor, material and equipment to point [all] fire hydrants [numbered F.H.#xx - F.H.#yy] that are located within the Cincinnati City limits in accordance with the fire hydrant painting scope included with the bid documents. Painting shall only apply to fire hydrants inside the Cincinnati City limits as noted on the plans.

Item 1111, "Water Works Valve Chambers", shall also cover the furnishing and installing of Precast Reinforced Concrete Chambers in accordance with O.D.O.T. Specification 706.13. All pertinent provisions of this Item and GCWW Standard Drawing No. 104-1A shall apply. Precast chambers shall be used in all locations where space permits and as directed by the GCWW.

Air cocks may be necessary for the proper operation of the water system. The Air Release Assembly, which may not be shown on the drawing, will be furnished and installed by the Contractor per the detail on these plans, if required by the GCWW.

It shall be the Contractor's responsibility to arrange for the removal and replacement of any poles and guys necessary for the installation of the proposed water mains, and any cost connected thereto shall be at his expense.

All pipe and specials shall be in accordance with City of Cincinnati Specification 40-110-16.

All procured water main and appurtenance materials, other than those furnished through the GCWW must be properly certified; certified for GCWW Inspection: or already inspected by the GCWW. Pipe, fittings, valves and fire hydrants must be GCWW inspected and stamped materials.

The Contractor should be advised that all Fittings (Bends, Offset Bends, Tees, Crosses, Sleeves, Caps and Plug) supplied for this job may be either ANSI/AWWA C-110 Full-body Ductile Iron, Cement Lined Fittings or ANSI/AWWA C-153 Compact Ductile Iron, Fusion Bonded Epoxy Coated Fittings in accordance with City of Cincinnati, Department of Purchasing, Standard Specification No. 40-110-12 for Pipe and Fittings Water, Ductile Iron 3" to 60". All fittings are subject to inspection and approval by appropriate GCWW Inspection personnel. Minor pinholes and abrasions to epoxy coated valves and fittings are to be repaired using 3M Hot Melt Patch Compounds (H.M.P.C.) in the stick form. Repair procedures shall be in accordance with the General Application Steps identified for the H.M.P.C. All repairs to epoxy coated fittings are subject to inspection and approval by appropriate GCWW Inspection personnel.

All rejected material, including pipe and fittings, shall be removed from the project site immediately.

The Contractor must maintain access to sidewalks at all times. Storage of any materials within the public Right of Way, including sidewalks, is not permitted unless approved by GCWW, the Project Engineer, or as indicated on the approved plans.

All copper tubing shall be type "K" of a standard nominal size: 3/4", 1", 1-1/2" and 2". All fittings will have copper flare type connections and shall be in accordance with City of Cincinnati Specification No. 40-113-05.

The contractor shall furnish the necessary certifications for branch material.

All proposed water mains will be hydrostatically tested for leakage in accordance with 1101.054, "Hydrostatic Test for Leakage", of the appropriate Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

The Contractor will be responsible for filling, flushing, and pressure testing new water mains, 20" or smaller. The contractor will provide all labor, material and equipment (including the necessary pumps to apply the pressure test). The Water Works will provide the necessary meter and gauge. All costs for this work shall be included in the contractor's unit bid price for Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings". Once the filling and pressure testing are completed, the Contractor will be responsible for flushing the proposed water main and the GCWW will be responsible for bacteria sampling. The GCWW will be responsible for filling, pressure testing and flushing new water mains greater than 20".

The Contractor is responsible for all pipe sewers disturbed in the completion of this project. In the event it becomes necessary to repair or replace existing pipe sewers, the Contractor must notify Sewer Maintenance, (513)244-1369, before proceeding with the work.

The Contractor is advised that his unit bid prices for the appropriate Item 1101, "Furnish & Install Pipe and Fittings", includes final restoration of all disturbed surfaces. The GCWW will not make full compensation under Item 1101 until final restoration is complete.

*All valve and air release box assemblies shall be domestically manufactured.

All box assemblies for 12-inch and smaller gate valves and 1-inch air releases shall be either Tyler Union Series 6850, EJ Series 8500, or Bingham & Taylor Series 4905, or GCWW approved equal. Box assemblies for these applications require a frost plug and "BOXLOK."

All box assemblies for 16-inch and above butterfly or gate valves and 2-inch air releases shall be EJ Series 460, or GCWW approved equal. Box assemblies for these applications require a frost plug.

All costs associated with adherence to these requirements shall be included in the Contractor's unit bid price for Item 1116 - Furnishing and Installing Valve Box Complete.

SUGGESTED BILL OF MATERIALS

FURNISHED BY CONTRACTOR

QTY	UNIT	DESCRIPTION	
1	EACH	6" DUCTILE IRON PIPE, C.J., TH. CL. 55, 20' LENGTH	
6	EACH	16" DUCTILE IRON PIPE, C.J., TH. CL. 56, 20' LENGTH	
2	EACH	POLYETHYLENE TUBE, 16" WIDE X 20' LONG, 4 MIL CROSS LAMINATE	
7	EACH	POLYETHYLENE TUBE, 34" WIDE X 20' LONG, 4 MIL CROSS LAMINATE	
2	ROLLS	POLYETHYLENE TAPE, 2" WIDE X 100' LONG	
6	EACH	16" 45° BEND, 2 M.J.	
2	EACH	16" SOLID SLEEVE, D.P.	
2	EACH	16" CAP, M.J. (TEMP.)	
1	EACH	16" X 6" TEE, 2 M.J. X FLG.	
1	EACH	6" VALVE, FLG. X M.J.	
1	EACH	6" FLANGE TYTE GASKET	
2	EACH	VALVE BOX COMPLETE	
2	EACH	VALVE BOX FROST PLUG	
2	EACH	VALVE BOX BOXLOK	
1	EACH	FIRE HYDRANT EXTENSION, (12" LONG)	
2	EACH	6" M.J.R.G. ASSEMBLY	
NOTE 4	18	EACH	16" M.J.R.G. ASSEMBLY
NOTE 4	1	EACH	16" FIELD LOK GASKET

AIR RELEASE MATERIAL FURNISHED BY CONTRACTOR

QTY.	UNIT	DESCRIPTION	
2	EACH	2" FERRULE	
NOTE 2	8	LIN. FT.	2" COPPER SERVICE PIPE
2	EACH	2" X 1 1/2" X 2" BLOW-OFF VALVE ASSY.	
2	EACH	VALVE BOX COMPLETE	
2	EACH	VALVE BOX FROST PLUG	

FURNISHED BY ANDERSON TOWNSHIP

QTY.	UNIT	DESCRIPTION
1	EACH	6" FIRE HYDRANT

FURNISHED BY GCWW

QTY.	UNIT	DESCRIPTION
1	EACH	16" Valve, 2 M.J.

***Note: Contractor shall verify the size and material of each service branch at the property line prior to installing branch. Cost for this work to be included in Item 1126--"Furnishing and Installing Copper Service Pipe w/ Aqua Shield".

The materials listed are only suggested for use during the water main and branch relocation work as proposed on the drawings. The contractor shall furnish additional material where needed. No allowance will be made for unused material nor will any extra payment be made for additional specials required to complete the water main work. Before ordering material the contractor is responsible for making his own field measurements and for field verifying the O.D. of existing water mains where sleeves and pipe couplings are involved.

Note 1:
Valves furnished by the contractor shall be; American Resilient Wedge Gate Valve Series 2500, U.S. Pipe Metrosael Gate Valve, Kennedy Valve Ken Seal II Resilient Gate Valve, Clow F-6100 Series Resilient Wedge Gate Valve, Mueller 2360 Resilient Wedge Gate Valve.

Note 2:
Low-Lead Brass Material Requirements:
All components in contact with water shall be fabricated from Sebiloy II or Federalloy I-836 alloys or a material approved by the Engineer. All components that do not come in contact with water shall comply with the requirements of ASTM B 62 Copper Alloy Number. Coated or washed metals are not acceptable if their lead levels exceed .25% by weight prior to the coating or washing process. All service fittings and materials shall be certified as suitable for contact with drinking water by an accredited certification organization in accordance with ANSI/NSF Standard 61, Drinking Water Systems Components - Health Effects. All service fittings shall either be stamped or embossed with the letter "NL", to indicate "No-Lead", or marked to indicate that the product is manufactured from the low-lead alloys.

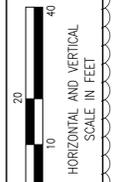
Note 3:
Special Note on Service Pipe in Corrosive Soils:
Service tubing is to be soft K Copper manufactured to the requirements of ASTM B88. Service tubing coating shall have NOVA Polyethylene LDPE extrusion resin PP-0118-F coating to meet minimum of .026 mil thickness containing UV inhibitors. Service tubing shall have identification & traceability on both copper & plastic continuously line-marked with tube contents, ASTM specification, size, & descending footage. Unique lot number printed on both copper & plastic allowing product to be traced back to origin and time of manufacturing. Service tubing shall be Aqua Shield as manufactured by KAMCO Products Inc. or approved equal.

Note 4:
Mechanical Joint Restrain Gland (MJRG):
All mechanical joint restraint glands furnished by the contractor shall be any of the following:
EBAA--Megalug
TYLER/UNION--Tufgrip
STAR--Stargrip
FORD--Uni-Flange Series 1400

All products shall be domestically manufactured.

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RESTORATION DETAILS2
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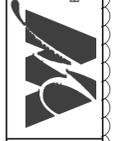
CLOUGH-NEWTOWN TURN LANES	
APPROVED:	WW004665 / 4-4172 / MF-17047
 GCWW SUPERVISING ENGINEER - DESIGN	1/21/2025 DATE
 GCWW PRINCIPAL ENGINEER - SYSTEM FACILITIES	01-22-25 DATE
 GCWW CHIEF ENGINEER	1/27/25 DATE
 Ohio Environmental Protection Agency "Self-Certification" letter required prior to the start of construction.	
<input checked="" type="checkbox"/> OEPA CERTIFICATION EXEMPT	 1/21/2025
<input type="checkbox"/> NON - EXEMPT	OEPA REVIEW DATE



CALCULATED	MRD	CHECKED
REVISIONS	REV. NO	DATE
01/21/2025	REV. NO	DATE

01/21/2025	REV. NO	DATE

GREATER CINCINNATI
WATER WORKS
ENGINEERING DIVISION / DESIGN SECTION
3845 EASTERN AVENUE, CINCINNATI, OHIO 45226



SUGGESTED BILL OF MATERIAL
G.C.W.W. SPECIAL PROVISIONS

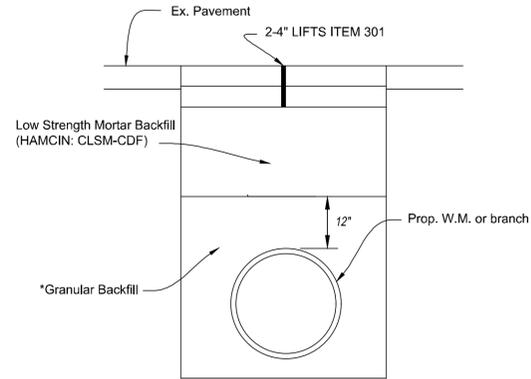
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MF-17047

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61

CLOUGH-NEWTOWN TURN LANES

CLOUGH ROAD

STANDARD WATER MAIN TRENCH INSTALLATION DETAIL (TEMPORARY RESTORATION)



**PERMANENT RESTORATION SHALL BE DONE IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS AND/OR PROJECT PLAN TYPICAL SECTIONS.

IN AREAS WHERE THE PAVEMENT, BASE AND/OR SUB-BASE IS TO BE REPLACED AS PART OF THE ROADWAY CONTRACT, THE COST FOR PERMANENT RESTORATION SHALL BE INCLUDED UNDER THE APPROPRIATE PAVEMENT BID ITEMS. COST FOR TEMPORARY PAVEMENT RESTORATION IN THESE AREAS SHALL BE INCLUDED IN THE CONTRACTOR'S APPROPRIATE UNIT BID PRICE FOR ITEM 1101 OR ITEM 1126.

UNLESS OTHERWISE NOTED ON THE PLANS, AREAS WHERE THE EXISTING PAVEMENT, BASE AND/OR SUB-BASE ARE NOT TO BE DISTURBED, THE COST FOR TEMPORARY AND PERMANENT PAVEMENT RESTORATION SHALL BE INCLUDED IN THE CONTRACTOR'S APPROPRIATE UNIT BID PRICE FOR ITEM 1101 OR ITEM 1126.

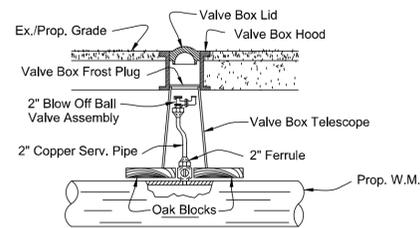
*BACKFILL OF THE WATER MAIN AND BRANCH TRENCH SHALL BE DONE IN ACCORDANCE WITH G.C.W.W. SPECIFICATIONS. ALL WATER MAINS AND BRANCHES INSTALLED OUTSIDE OF THE PAVEMENT AREA SHALL UTILIZE GRANULAR BACKFILL IN LIEU OF THE CONTROL DENSITY FILL. ALL COSTS FOR BACKFILL SHALL BE INCLUDED UNDER ITEM 1101 OR ITEM 1126.

CONTROLLED DENSITY FILL MUST MEET BOTH HAMCIN: CLSM-CDF PERFORMANCE SPECIFICATION AND O.D.O.T. SPECIFICATION. ALL FLOWABLE FILL PRODUCTS SHALL MEET THE REQUIREMENTS OF THE CURRENT HAMCIN CLSM-CDF BACKFILL SPECIFICATION (DATED MARCH 2015). COPIES OF THE HAMCIN CLSM-CDF BACKFILL SPECIFICATION ARE MADE AVAILABLE AT THE GCWW ENGINEERING OFFICES AT 4747 SPRING GROVE AVENUE, CINCINNATI DEPARTMENT OF TRANSPORTATION & ENGINEERING AT 801 PLUM STREET, OR THEIR WEBSITE: [HTTP://WWW.CINCINNATI-OH.GOV/DOT/MANUALS-PERMITS-SUPPLEMENTS/](http://www.cincinnati-oh.gov/dot/manuals-permits-supplements/) ALSO, THE CONTRACTOR SHALL SUBMIT, PRIOR TO THE START OF CONSTRUCTION, THE NECESSARY DOCUMENTATION FOR REVIEW AND APPROVAL BY THE GCWW.

PLEASE NOTE THAT THE G.C.W.W. REQUIREMENT IS IN ADDITION TO HAMCIN SPECIFICATIONS FOR FLOWABLE FILL PRODUCTS. A COPY OF THE G.C.W.W. REQUIREMENT IS AVAILABLE AT THE G.C.W.W. ENGINEERING OFFICE LOCATED AT 4747 SPRING GROVE AVENUE. CONTACT THE SUPERVISOR OF INSPECTION AT 591-7870.

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT THE NECESSARY CONTROLLED DENSITY FILL COMPLIANCE DOCUMENTATION FOR REVIEW AND APPROVAL BY THE G.C.W.W.

GCWW NOTE:
ALL FIELD LAYOUT OF WATER MAIN PIPE AND SPECIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED BY A LICENSED SURVEYOR.



NOTE: AIR RELEASE MUST BE 15" - 19" BELOW FINAL GRADE

- 1 - VALVE BOX COMPLETE
- 1 - VALVE BOX FROST PLUG
- 1 - 2" FERRULE
- 4 - L.F. +/- 2" COPPER SERVICE PIPE (LENGTH VARIES DEPENDING ON WM DEPTH)
- 1 - 2"x1-1/2"x2" BLOW-OFF BALL VALVE ASSEMBLY (A.Y. McDONALD PART #76109BCAP)

NOTE: ALL COST FOR MATERIAL AND LABOR SHALL BE INCLUDED IN THE CONTRACTOR UNIT BID UNDER ITEM 1116 "FURNISH AND INSTALL 2" AIR RELEASE WITH VALVE BOX"

2" AIR RELEASE ASSEMBLY DETAIL

FIRE HYDRANT MATERIAL

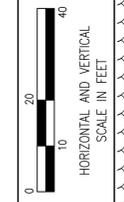
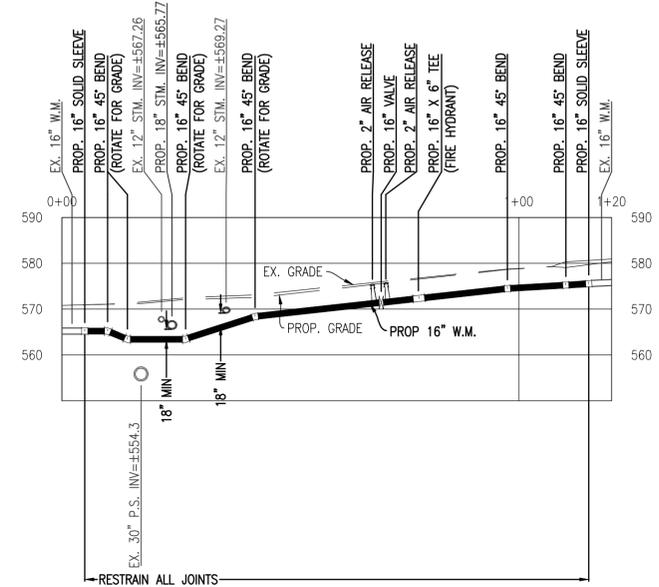
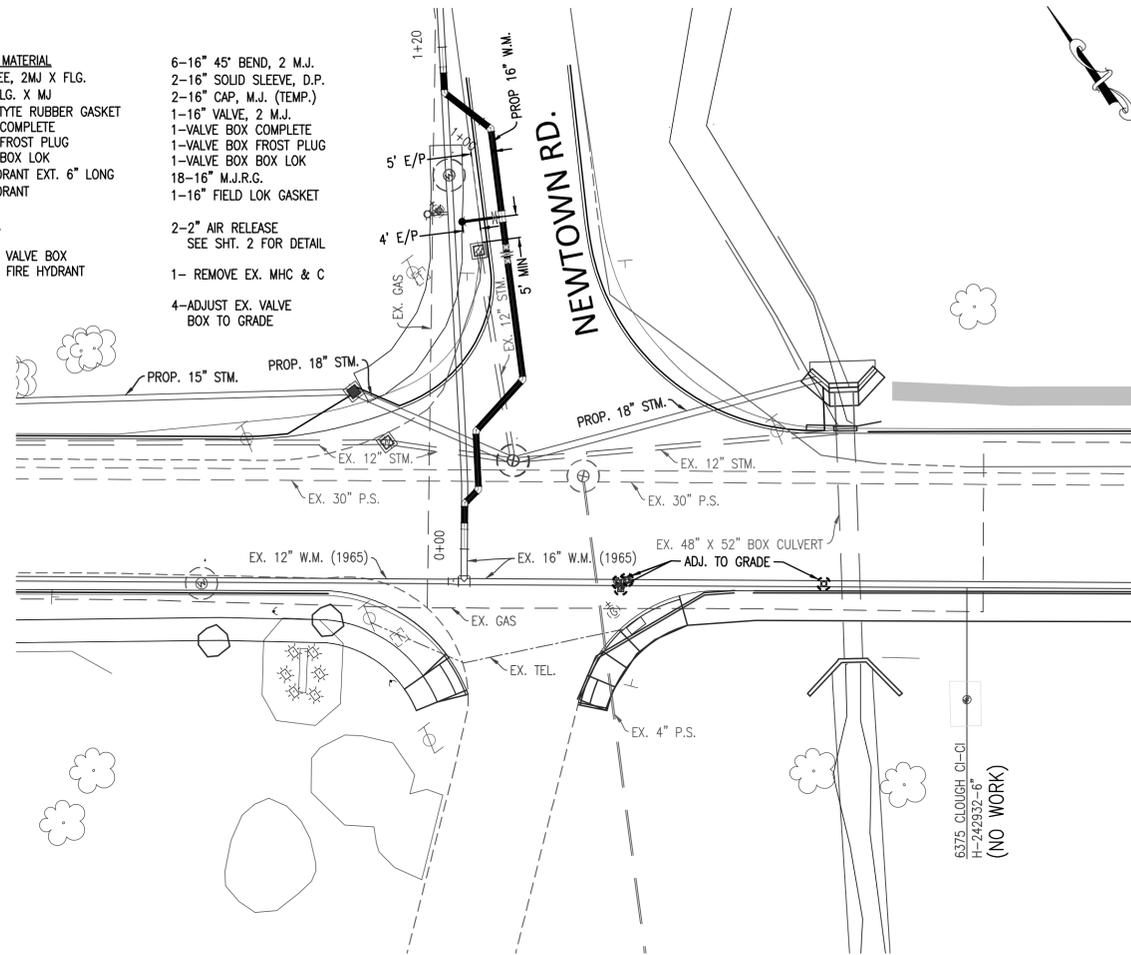
- 1-16" X 6" TEE, 2MJ X FLG.
- 1-6" VALVE, FLG. X MJ
- 1-6" FLANGE TYE RUBBER GASKET
- 1-VALVE BOX COMPLETE
- 1-VALVE BOX FROST PLUG
- 1-VALVE BOX BOX LOK
- 1-6" FIRE HYDRANT EXT. 6" LONG
- 1-6" FIRE HYDRANT
- 2-6" M.J.R.G.
- 2-16" M.J.R.G.

- 1-REMOVE EX. VALVE BOX
- 1-REMOVE EX. FIRE HYDRANT

- 6-16" 45° BEND, 2 M.J.
- 2-16" SOLID SLEEVE, D.P.
- 2-16" CAP, M.J. (TEMP.)
- 1-16" VALVE, 2 M.J.
- 1-VALVE BOX COMPLETE
- 1-VALVE BOX FROST PLUG
- 1-VALVE BOX BOX LOK
- 18-16" M.J.R.G.
- 1-16" FIELD LOK GASKET

- 2-2" AIR RELEASE
SEE SHT. 2 FOR DETAIL
- 1- REMOVE EX. MHC & C

- 4-ADJUST EX. VALVE BOX TO GRADE



REVISIONS	CALCULATED	MRD	CHECKED	EGB
01/12/26 REV. WM ALIGNMENT				

GREATER CINCINNATI
WATER WORKS
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3845 EASTERN AVENUE, CINCINNATI, OHIO 45226

CLOUGH RD PLAN AND PROFILE

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WW004665
MF-17047

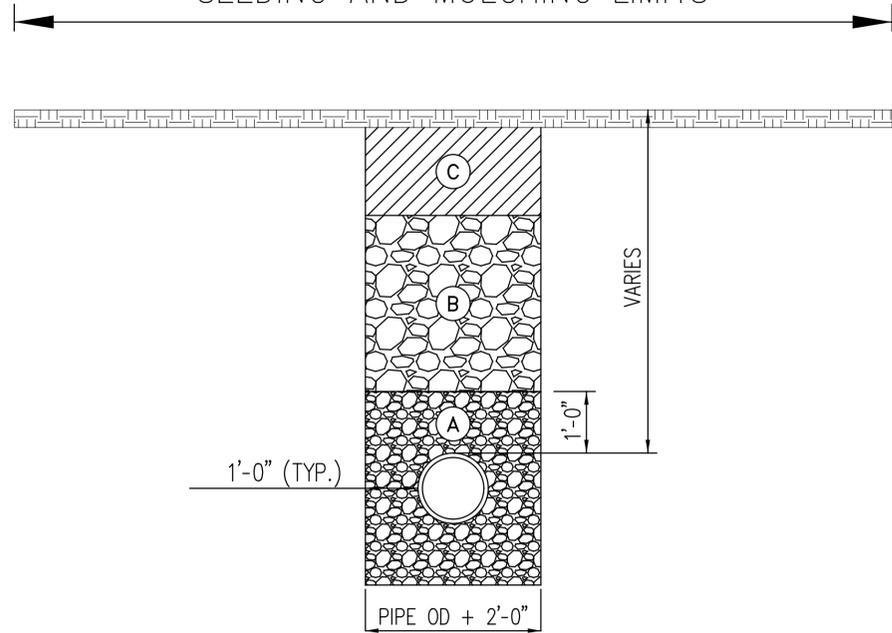
CLOUGH-NEWTOWN TURN LANES

NOTICE OF CONFIDENTIALITY - PUBLIC INFRASTRUCTURE RECORD

THIS DOCUMENT IS A PUBLIC INFRASTRUCTURE RECORD OF THE CITY OF CINCINNATI AND ITS GREATER CINCINNATI WATER WORKS, AND IS NOT SUBJECT TO THE PUBLIC DISCLOSURE REQUIREMENTS OF THE PUBLIC RECORDS LAWS OF THE STATE OF OHIO AND FEDERAL GOVERNMENT. THIS DOCUMENT IS BEING PROVIDED ON THE BASIS OF YOUR REPORTED NEED, AND SHALL BE CONSIDERED CONFIDENTIAL. BY ACCEPTING THIS DOCUMENT, YOU AGREE THAT IT WILL NOT BE SHARED OR OTHERWISE DISCLOSED TO ANYONE OTHER THAN PERSONS WHO HAVE A DIRECT NEED TO KNOW FOR THE SOLE PURPOSE OF CARRYING OUT THE PROJECT FOR WHICH THIS DOCUMENT WAS OBTAINED. ANYONE RECEIVING THIS DOCUMENT IS BOUND BY THE SAME CONFIDENTIALITY REQUIREMENTS AND MUST TAKE PRECAUTIONS TO PROTECT AGAINST ITS DISSEMINATION.

THE FAILURE TO OBSERVE THE CONFIDENTIALITY REQUIREMENTS OF THIS NOTICE SHALL SERVE AS THE BASIS FOR THE CITY OF CINCINNATI TO IMMEDIATELY SEEK LEGAL RECOURSE, INCLUDING THE RECOVERY OF ACTUAL DAMAGES RESULTING FROM UNAUTHORIZED ACCESS OR DISCLOSURE OF THE DOCUMENT.

SEEDING AND MULCHING LIMITS



TRENCH DETAIL N.T.S.

HAUNCHING (RCP): GRANULAR MATERIAL - (611.06, 703.11) CLASS B. BEDDING MATERIAL PLACED AND COMPLETED IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS.

HAUNCHING (THERMOPLASTIC & HDPE PIPE): GRANULAR MATERIAL - #57 STONE, AASHTO M43, (REFERENCE ODOT 703), MECH. COMPACTED.

INITIAL BACKFILL: GRANULAR MATERIAL ODOT ITEM 304 OR ITEM 310 OR #57 STONE; 98% COMPACTION

FINAL BACKFILL: TYPE B CONDUIT-UNDER PAVEMENT & 3 FT. BEHIND CURB: HAMCIN: CLSM-CDF
TYPE C CONDUIT-OUTSIDE OF PAVEMENT: SUITABLE CLAYEY SOIL FREE OF LARGE STONES & CLUMPS

PAVEMENT BACKFILL: ODOT ITEM 301 ASPHALT CONCRETE BASE, PG 64-22
ODOT ITEM 441 ASPHALT INTERMEDIATE COURSE, TYPE 1, (448)
ODOT ITEM 442 ASPHALT SURFACE COURSE, PG 70-22, (448)

*NOTE: ALL RESTORATION COSTS SHALL BE INCLUDED IN UNIT COST BID FOR CONDUIT, UNLESS A SEPARATE PAY ITEM HAS BEEN ESTABLISHED AND LIMITS ARE IDENTIFIED ON THE PLANS.

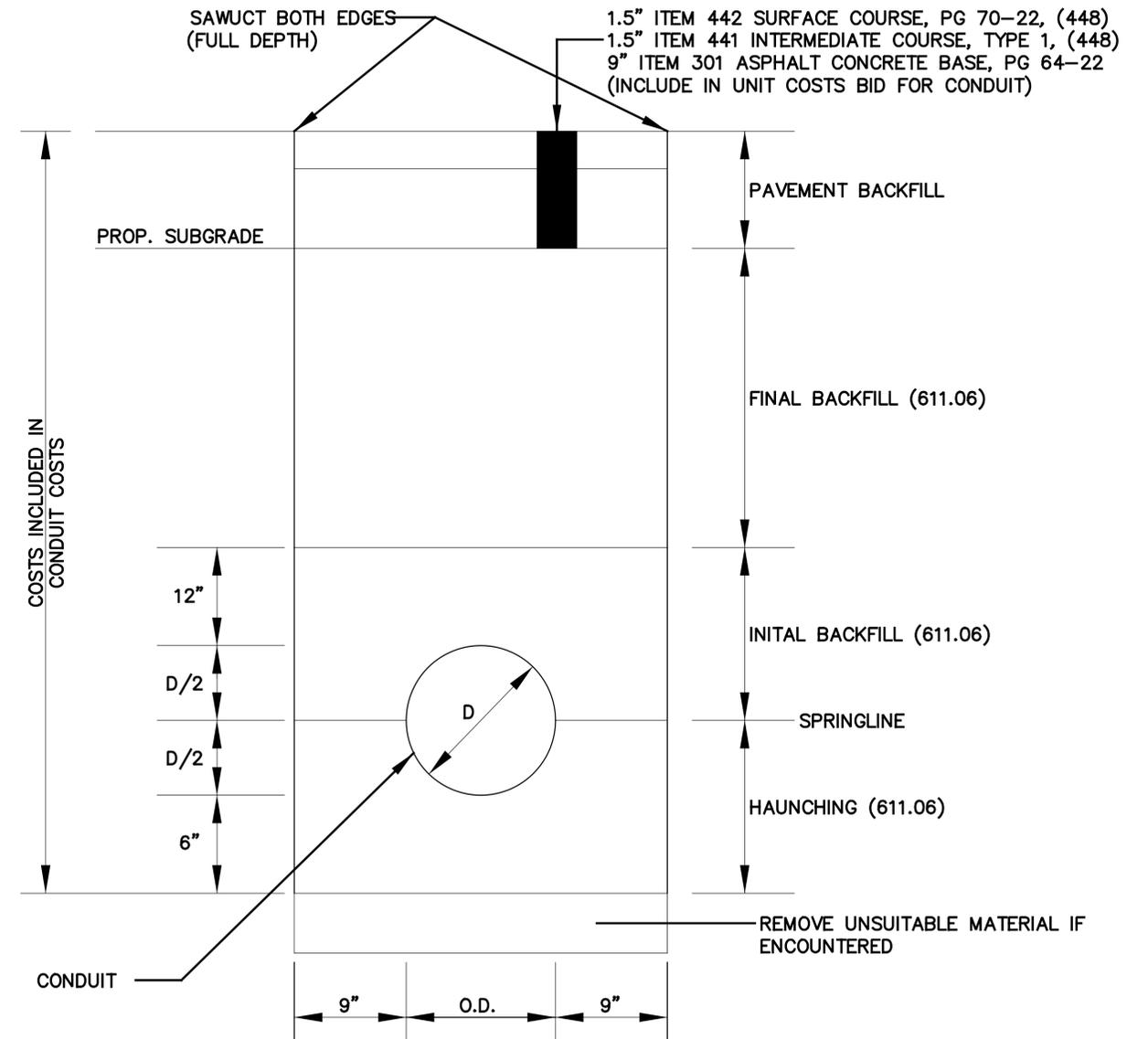
TRENCH DETAIL N.T.S.

- A. BEDDING SHALL BE PER ODOT 703.11 "STRUCTURAL BACKFILL" TYPE 3 (#57 OR #67 AGGREGATE), OR OTHER APPROVED EQUIVALENT BY THE TOWNSHIP. THE FOLLOWING BEDDING MATERIAL USED SHALL BE CRUSHED LIMESTONE OR NATURAL CRUSHED STONE.
- B. STRUCTURAL BACKFILL - DENSITY TEST TO 95% OF ASTM D698 STANDARD PROCTOR CURVE MAY BE REQUIRED BY THE TOWNSHIP TO BE COMPLETED BY A CERTIFIED COMMERCIAL TESTING LABORATORY. THE BACKFILL MATERIAL SHALL BE COMPACTED NATIVE MATERIAL IN 12" MAXIMUM LIFTS OR AS APPROVED BY THE TOWNSHIP. NO MATERIAL SHALL BE USED FOR BACKFILLING THAT CONTAINS STONE, ROCKS, ETC., GREATER THAN 3" DIAMETER.
- C. ALL AREAS SHALL RECEIVED A MIN. OF 6" TOPSOIL OVER THE COMPACTED MATERIAL AND THEN SEEDED PER ODOT 659.

ITEM 611 - 15" CONDUIT, TYPE A, AS PER PLAN 706.02
ALL ASPECTS OF ITEM 611 SHALL APPLY EXCEPT TRENCH BACKFILL SHALL BE PER THE DETAILS ON THIS PAGE.

ITEM 611 - 15" CONDUIT, TYPE C, AS PER PLAN 706.02
ALL ASPECTS OF ITEM 611 SHALL APPLY EXCEPT TRENCH BACKFILL SHALL BE PER THE DETAILS ON THIS PAGE.

ITEM 611 - 18" CONDUIT, TYPE B, AS PER PLAN 706.02
ALL ASPECTS OF ITEM 611 SHALL APPLY EXCEPT TRENCH BACKFILL SHALL BE PER THE DETAILS ON THIS PAGE.



TRENCH DETAILS