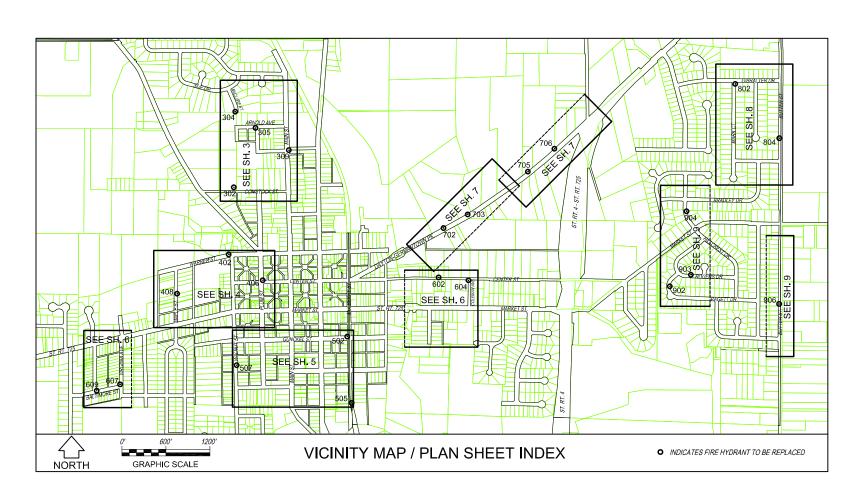
FIRE HYDRANT AND VALVE REPLACEMENT PROGRAM PHASE 1 **CONSTRUCTION PLANS**

CITY OF GERMANTOWN MONTGOMERY COUNTY, OHIO

FIRE HYDRANT LOCATION

FH#	NEAR ADDRESS	* EZ VALVE	SEE SHEET
302	110 COMSTOCK ST.	YES	3
304	202 McCLURE ST.	NO	3
305	555 N. PLUM ST.	YES	3
309	468 N. MAIN ST.	YES	3
402	202 W. WARREN ST.	YES	4
406	52 W. CENTER ST.	YES	4
408	62 N. MAPLE ST.	YES	4
502	150 E. GUNCKEL ST.	YES	5
505	380 S. MULBERRY ST.	YES	5
507	152 S. WALNUT ST.	YES	5
602	440 E. CENTER ST.	YES	6
604	495 E. CENTER ST.	YES	6
607	95 S. VIRGINIA AVE.	YES	6
609	40 BALTIMORE ST.	YES	6
702	706 DAYTON-GERMANTOWN PK.	YES	7
703	826 DAYTON-GERMANTOWN PK.	YES	7
705	1200 DAYTON-GERMANTOWN PK.	YES	7
706	1235 DAYTON-GERMANTOWN PK.	YES	7
802	253 MARK CT.	YES	8
804	191 N. BUTTER ST.	YES	8
902	51 PAGETT DR.	YES	9
903	136 ROGERS DR.	NO	9
904	32 N. HILLCREST DR.	NO	9
-	189 S. BUTTER ST.	YES	9

* NEW EZ VALVE INSTALLATION REQUIRED TO SHUT DOWN WATER MAIN PRIOR TO FIRE HYDRANT AND WATCH DOG VALVE REPLACEMENT.



INDEX OF SHEETS

- 1. COVER SHEET
- 2. GENERAL NOTES & DETAILS SHEET
- 3. 9. PLAN SHEETS

APPROVALS

Judith A. Gillsland

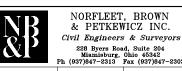
02/23/2024

CITY MANAGER

DATE







SHEET: 1 of 9 DRAWN: D.O.M. CHK'D: DATE: FEB. 21, 2024 JOB No.: 2019-7611(09)

GENERAL NOTES

- 1. ALL CONSTRUCTION IS TO CONFORM TO THE MUNICIPALITY OF GERMANTOWN STANDARDS AND MATERIAL AND CONSTRUCTION SPECIFICATIONS.
- 2. INSPECTION WILL BE BY THE MUNICIPALITY OF GERMANTOWN AND WORKMANSHIP TESTED ACCORDING TO SPECIFICATIONS. 3. EXISTING UNDERGROUND UTILITIES AND SERVICES ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR:
 - A. CONTACTING THE INDIVIDUAL UTILITY OWNERS TEN DAYS PRIOR TO CONSTRUCTION AND ADVISING THEM OF THE WORK TO TAKE PLACE.
 - B. SOLICITING THEIR AID IN LOCATING AND PROTECTING ANY UTILITY WHICH MAY INTERFERE WITH CONSTRUCTION.
 - C. EXCAVATING AND VERIFYING THE HORIZONTAL AND VERTICAL LOCATION OF EACH UTILITY. D. ALL DAMAGE TO ANY EXISTING UTILITY.

THE FOLLOWING ARE OWNERS OF UNDERGROUND UTILITIES AND SHALL BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION TO FIELD LOCATE SAID UTILITIES:

WATER, STORM & SANITARY CENTERPOINT ENERGY MUNICIPALITY OF GERMANTOWN 6500 CLYO RD. 1 N. PLUM ST. DAYTON, OH 45459 GERMANTOWN, OHIO 45327

(937) 312-2533 (937) 885-7255

ELECTRIC TELECOMMUNICATIONS SPECTRUM **AES OHIO** 1900 DRYDEN RD. 36 N. PLUM ST. 3691 TURNER RD. DAYTON, OH 45439 GERMANTOWN, OHIO 45327 DAYTON, OH 45415 (937) 855-6511 (937) 331-3900 (937) 425-8850



- 4. MAINTENANCE OF TRAFFIC AND CONSTRUCTION SIGNING SHALL CONFORM TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, LATEST REVISION AS APPROVED BY THE ENGINEER.
- 5. SAFETY REQUIREMENTS, OUTLINED IN THE STATE OF OHIO "CONSTRUCTION SAFETY CODE" FOR THIS TYPE OF WORK WILL BE ENFORCED AND THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF THE CODE ISSUED AS A GENERAL ORDER BY THE INDUSTRIAL COMMISSION OF OHIO.
- 6. ALL FIELD TILE ENCOUNTERED SHALL BE REPLACED OR CONNECTED TO THE STORM SEWER SYSTEM
- 7. ALL TRENCH EXCAVATION WITHIN THE EXISTING RIGHT-OF-WAY SHALL BE BACKFILLED WITH GRANULAR MATERIAL AS PER TRENCH DETAIL SHOWN ON THIS SHEET.
- 8. THE SUBGRADE FOR PAVEMENT SHALL BE COMPACTED TO A DENSITY OF AT LEAST NINETY-FIVE PERCENT (95%) OF THEIR MAXIMUM DENSITY FOR MATERIALS USED AS DETERMINED BY ASTM DESIGNATION D-698 METHOD OR OTHER APPROVED METHOD FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE FINISHED SUBGRADE ELEVATION.
- 9. THE COMPLETED AGGREGATE BASE SHALL HAVE A DENSITY OF AT LEAST NINETY-FIVE PERCENT (95%) OF THEIR MAXIMUM DENSITY AS DETERMINED BY ASTM DESIGNATION D-698 METHOD OR OTHER APPROVED METHOD.
- 10. THE MATERIAL DESIGNATED BY ITEMS 441 TYPE 1 AND TYPE 2 PG 64-22, 407, 408, 702, 301 AND 304 SHALL MEET THE REQUIREMENTS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION'S "CONSTRUCTION AND MATERIALS SPECIFICATIONS" LATEST EDITION.
- 11. NO DIMENSIONS MAY BE SCALED. REFER UNCLEAR ITEMS TO THE ENGINEER FOR INTERPRETATION. 12. ALL CONCRETE TO BE CLASS S (4500PSI) WITH A MAXIMUM SLUMP OF 4 INCHES AND 6% +/- 2% ENTRAINED AIR. CURING COMPOUND IS TO
- BE USED AT THE APPLICATION RATE OF 1 GALLON PER 200 SQUARE FEET OF SURFACE AREA ON ALL CONCRETE. 13. ALL CONSTRUCTION TO MEET WITH THE APPROVAL OF THE MUNICIPALITY OF GERMANTOWN.
- 14. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH SUFFICIENT WARNING LIGHTS, BARRICADES AND FLAGGERS TO MEET APPLICABLE O.D.O.T. SAFETY REQUIREMENTS. THE CONTRACTOR SHALL WORK CLOSELY WITH THE GERMANTOWN SERVICE DEPARTMENT. ACCESS TO ABUTTING PROPERTIES WITHIN THE CONSTRUCTION AREA SHALL BE AVAILABLE DURING CONSTRUCTION
- 15. DURING THE OFF HOURS, SUFFICIENT WARNING LIGHTS AND BARRICADES SHALL BE PROVIDED BY THE CONTRACTOR AND PLACED ALONG THE ROUTE OF CONSTRUCTION TO PROVIDE ADEQUATE PUBLIC SAFETY. SAFETY FENCE IS TO BE SECURELY INSTALLED AROUND THE EXCAVATION AT THE END OF EACH WORK DAY.
- 16. THE CONTRACTOR SHALL PLAN HIS OPERATIONS SO THAT DISRUPTIONS OF EXISTING FACILITIES IS AT A MINIMUM. THE CONTRACTOR SHALL SUBMIT A SCHEDULE OF CONSTRUCTION TO THE GERMANTOWN SERVICE DEPARTMENT FOR APPROVAL PRIOR TO THE START OF
- 17. WATER MAIN SHALL BE POLYVINYL CHLORIDE (PVC) PIPE CLASS 235 DR18 AND CONFORM TO ASTM F-477, ASTM D3139 AND AWWA C-900. A 6 INCH WIDE DETECTABLE BLUE MARKING TAPE IMPRINTED WITH THE WORDS "CAUTION: POTABLE WATER LINE BURIED BELOW" IN BLACK LETTERING IS TO BE INSTALLED OVER THE WATER MAIN. A 2 INCH WIDE DETECTABLE BLUE MARKING TAPE IMPRINTED WITH THE WORDS "CAUTION WATER LINE BURIED BELOW" IN BLACK LETTERING IS TO BE INSTALLED OVER THE WATER SERVICE LINES. THE MARKING TAPE SHALL BE AS MANUFACTURED BY T. CHRISTY ENTERPRISES OR
- APPROVED EQUAL. 14 GUAGE SOLID THHN WIRE FOR TRACING. BRING THE WIRE UP TO THE TOP OF EACH VALVE AND CURB BOX. 18. WATER MAIN FITTINGS SHALL BE DUCTILE IRON CL52 WITH MECHANICAL JOINT ENDS CONFORMING TO ANSI A-21.10 (AWWA C-110), ANSI A-21.11 (AWWA C-111) AND ANSI A-21.4 (AWWA C-104) OR ANSI A-21.53 (AWWA C-153) DUCTILE IRON, COMPACT FITTINGS WITH MECHANICAL JOINT ENDS.
- 19. RESTRAINED JOINTS ARE REQUIRED FOR WATER MAIN AT DEAD END VALVES, PLUGS, TEES AND BENDS. RESTRAINED JOINTS SHALL BE EBBA IRON SERIES 2000 PV AND SERIES 1600 FOR USE ON PVC PIPE OR APPROVED EQUAL.
- 20. ALL WATER MAINS SHALL HAVE A MINIMUM OF 4'-0" OF COVER. 21. 6" DUCTILE IRON ANCHORING PIPE TO BE USED AT ALL FIRE HYDRANT LOCATIONS. DUCTILE IRON PIPE TO CONFORM TO ANSI A-21.51
- (AWWA C-151) CLASS 52 ANSI A-21.11 (AWWA C-111) AND ANSI A-21.4 (AWWA C-104).
- 22. THE PROCEDURES FOR DISINFECTING THE WATER MAINS AND THE CHEMICALS TO BE USED SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF AWWA C-651.
- 23. HYDROSTATIC LEAKAGE TEST TO BE PERFORMED ON THE WATER MAIN BY THE CONTRACTOR IN ACCORDANCE WITH THE MUNICIPALITY OF GERMANTOWN REQUIREMENTS.
- 24. FIRE HYDRANT PUMP CONNECTIONS TO HAVE 18" TO 21" CLEARANCE FROM FINISHED GRADE. FIRE HYDRANT SHALL BE LOCATED AS SHOWN ON THE CONSTRUCTION DRAWINGS AND THE 4" PUMPER CONNECTION TO FACE THE STREET. FIRE HYDRANTS SHALL BE CLOW MEDALLION TRAFFIC MODEL - THREE WAY WITH 4" INTEGRAL STORZ STEAMER FITTING, TWO 2-1/2" NATIONAL STANDARD HOSE NOZZLES AND SHALL HAVE A WHITE BONNET OVER A RED BODY.
- 25. WATER LINES CROSSING ANY AND ALL UTILITIES SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 12" BETWEEN OUTSIDES OF THE WATER MAIN PIPE AND THE UTILITY.

BID ITEM NOTES

ITEM: EZ VALVE TRENCH AS PER PLAN

THIS ITEM OF WORK IS ASSOCIATED WITH THE INSTALLATION OF AN INSERTION VALVE NEEDED TO ISOLATE A DESIGNATED SEGMENT OF THE EXISTING WATER MAIN SYSTEM. THE ITEM INCLUDES ALL WORK TO SAWCUT AND REMOVE ANY EXISTING ASPHALT PAVEMENT, REMOVE ANY EXISTING CONCRETE SIDEWALK AND/OR CURB, TRENCH EXCAVATION AND TRENCH BACKFILL PER DETAILS SHOWN ON THIS SHEET. PAYMENT FOR THIS ITEM SHALL BE PER SQUARE YARD OF DISTURBED SURFACE AREA AND SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE THE WORK.

ANY SAWCUTTING OF CONCRETE SIDEWALK AND/OR CURB, PAVEMENT RESTORATION, CURB AND GUTTER REPLACEMENT, SIDEWALK REPLACEMENT AND SEEDING AND MULCHING AS NECESSARY, WILL BE PAID UNDER THEIR RESPECTIVE ITEM UNIT BID PRICES.

THE CITY OF GERMANTOWN SERVICE DEPARTMENT WILL SUPPLY AND INSTALL THE ACTUAL EZ VALVE AND VALVE BOX.

ITEM: FIRE HYDRANT TOTAL ASSEMBLY AS PER PLAN

THIS ITEM OF WORK INVOLVES THE REPLACEMENT OF A DESIGNATED FIRE HYDRANT AND WATCH DOG VALVE. THE ITEM INCLUDES ALL WORK TO SAWCUT AND REMOVE ANY EXISTING ASPHALT PAVEMENT, REMOVE ANY EXISTING CONCRETE SIDEWALK AND/OR CURB, TRENCH EXCAVATION, REMOVAL AND DISPOSAL OF EXISTING FIRE HYDRANT, VALVE, PIPING AND INSTALLATION OF ALL PROPOSED REPLACEMENT COMPONENTS (HYDRANT, VALVE, VALVE BOX, PIPING, CONNECTIONS) AND TRENCH BACKFILL PER DETAILS SHOWN ON THIS SHEET. PAYMENT FOR THIS ITEM SHALL BE PER EACH LOCATION AND SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE THE WORK.

ANY SAWCUTTING OF CONCRETE SIDEWALK AND/OR CURB, PAVEMENT RESTORATION, CURB AND GUTTER REPLACEMENT, SIDEWALK REPLACEMENT AND SEEDING AND MULCHING AS NECESSARY, WILL BE PAID UNDER THEIR RESPECTIVE ITEM UNIT BID PRICES.

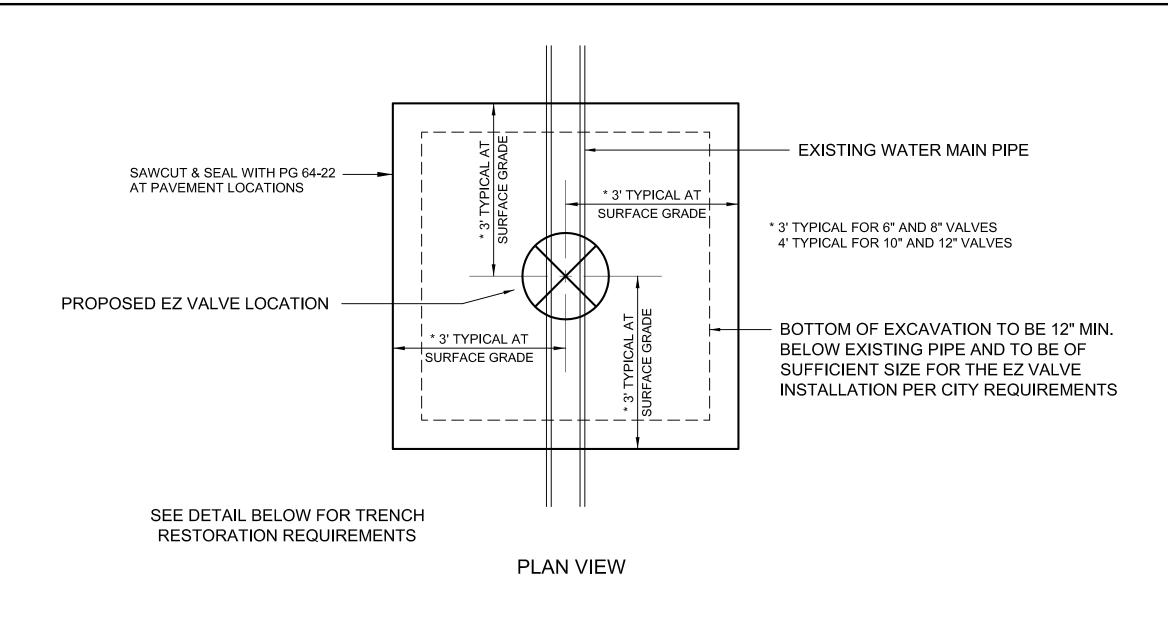
ITEM: ASPHALT PAVEMENT AS PER PLAN

THIS ITEM OF WORK INVOLVES THE RESTORATION OF DISTURBED ASPHALT PAVEMENT AREAS. THE ITEM INCLUDES ALL WORK TO CONSTRUCT REPLACEMENT PAVEMENT SECTION COMPONENTS (ASPHALT CONCRETE COURSES, TACK COAT, PRIME COAT, AGGREGATE BASE, ASPHALT SEALING OF EDGES) PER DETAILS SHOWN ON THIS SHEET.

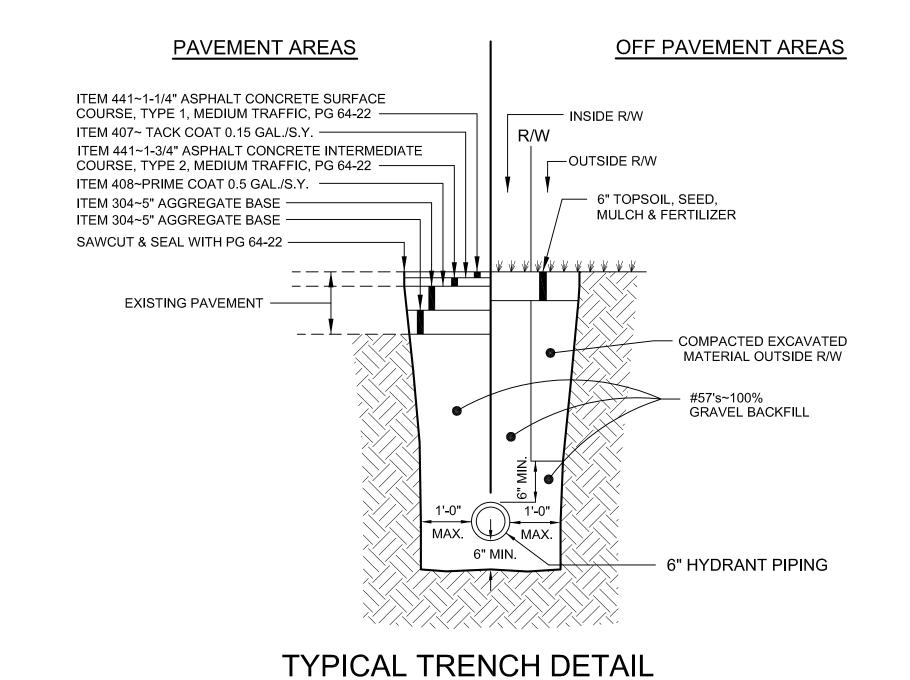
PAYMENT FOR THIS ITEM SHALL BE PER SQUARE YARD OF SURFACE AREA AND SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE THE WORK.

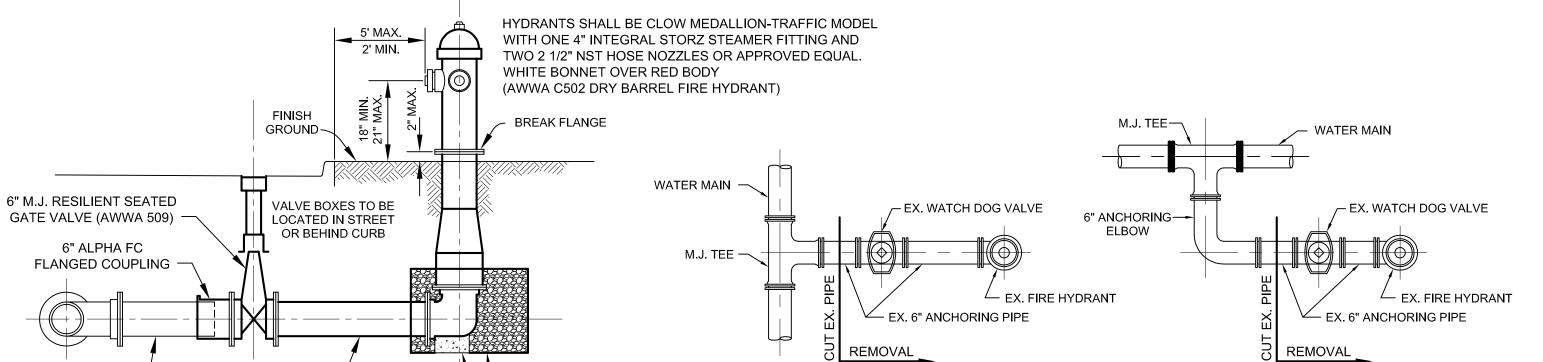
ITEM: SEEDING AND MULCHING AS PER PLAN

THIS ITEM OF WORK INVOLVES THE RESTORATION OF DISTURBED LAWN AREAS. THE ITEM INCLUDES ALL WORK TO CONSTRUCT REPLACEMENT LAWN SECTION COMPONENTS (TOPSOIL, SEEDING, FERTILIZER, MULCHING, WATER) PER DETAILS SHOWN ON THIS SHEET. PAYMENT FOR THIS ITEM SHALL BE PER SQUARE YARD OF SURFACE AREA AND SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE THE WORK.



TYPICAL EXCAVATION DETAIL FOR NEW EZ VALVE INSTALLATION





PROPOSED REPLACEMENT (ELEVATION VIEW)

CONCRETE BLOCK

SUPPORT

6" DUCTILE IRON -

ANCHORING PIECE

(LENGTH VARIES)

EX. 6" PIPE STUB

(AFTER REMOVALS)

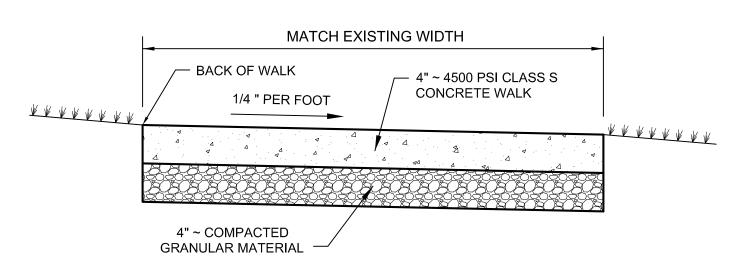
TYPICAL FIRE HYDRANT REPLACEMENT DETAILS

EXISTING CONFIGURATIONS (PLAN VIEWS)

GRAVEL DRAINAGE PIT REQUIRED @

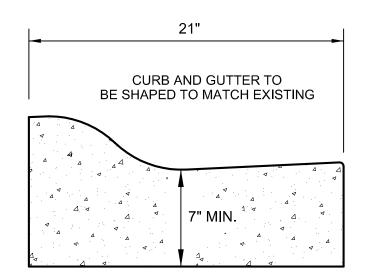
MINIMUM 1/4 CUBIC YARD.

EACH FIRE HYDRANT WITH DRAINS,



- 1. SIDEWALK SHALL HAVE 1" DEEP CONTRACTION JOINT EVERY 5 FEET. 2. 1/2" PREMOLDED EXPANSION JOINT SHALL BE CONSTRUCTED WHERE NEEDED TO MAINTAIN 40 FEET MAXIMUM SPACING. EXPANSION JOINT SHALL BE PROFLEX VINYL EXPANSION JOINT AS MANUFACTURED BY OSCODA PLASTICS, INC. MEETING ASTM D-1752
- AND AASHTO 153-98 OR APPROVED EQUAL. 3. PROVIDE BROOM FINISH AND EDGING TO ALL EXPOSED SURFACES.
- 4. CONCRETE SHALL BE 4500 PSI (ODOT CLASS S) 5. CURING COMPOUND IS TO BE USED AT AN APPLICATION RATE OF 1 GAL.
- PER 200 SQ. FEET OF SURFACE AREA (ODOT 705.07)

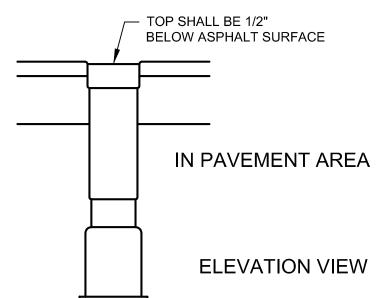
SIDEWALK REPLACEMENT DETAIL



- 1. CURBING SHALL HAVE CONTRACTION JOINT EVERY 10 FEET MAX. 2. 1/2" PREMOLDED EXPANSION JOINT SHALL BE CONSTRUCTED AT P.C. POINTS AT INTERSECTIONS AND 3 FEET EACH SIDE OF CATCH BASINS. EXPANSION JOINT SHALL BE PROFLEX VINYL EXPANSION JOINT AS MANUFACTURED BY OSCODA PLASTICS, INC. MEETING ASTM D-1752 AND AASHTO 153-98 OR APPROVED EQUAL.
- 3. PROVIDE BROOM FINISH AND EDGING TO ALL EXPOSED SURFACES.
- 4. CONCRETE SHALL BE 4500 PSI (ODOT CLASS S) 5. CURING COMPOUND IS TO BE USED AT AN APPLICATION RATE OF 1 GAL.

PER 200 SQ. FEET OF SURFACE AREA (ODOT 705.07)

CURB & GUTTER REPLACEMENT DETAIL



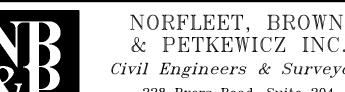
TYPICAL VALVE BOX DETAIL

FIRE HYDRANT AND VALVE REPLACEMENT PROGRAM

CITY OF GERMANTOWN, MONTGOMERY CO., OHIO

PHASE 1

GENERAL NOTES & DETAILS



& PETKEWICZ INC. Civil Engineers & Surveyors 228 Byers Road, Suite 204 Miamisburg, Ohio 45342 Ph (937)847-2313 Fax (937)847-2303

SHEET: 2 of 9 | DRAWN: D.O.M. | CHK'D: DATE: FEB. 21, 2024 | JOB No.: 2019-7611(09)

