DELAWARE COUNTY, OHIO

WOODS OF GLEN ERIN

SANITARY SEWERS

2020

COUNTY MAP

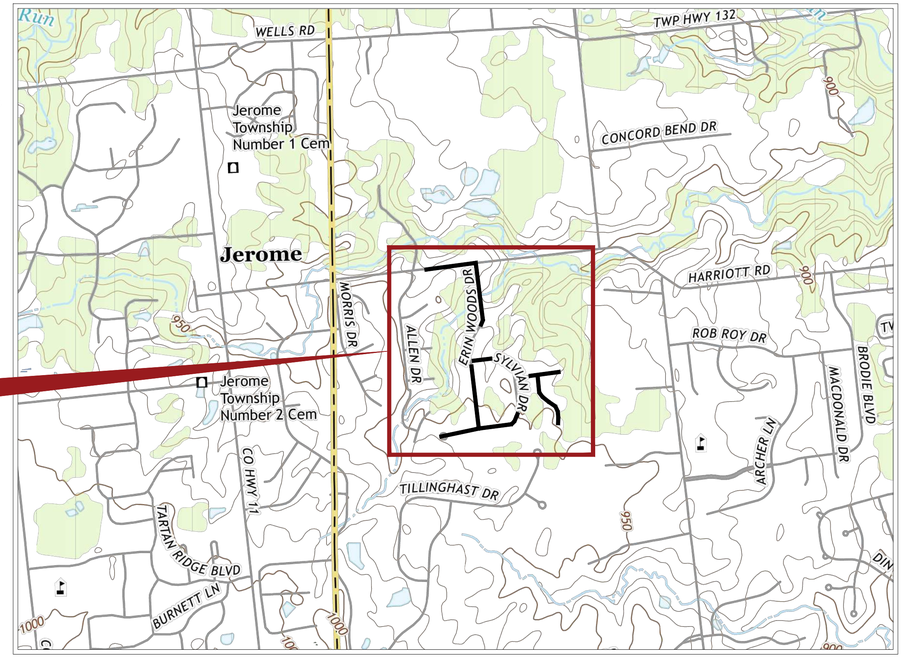
SCALE: NONE

STANDARD DETAIL DRAWINGS

Sa.S-1 - TYPICAL TRENCH (RIGID AND FLEXIBLE PIPE)
Sa.S-2 - TYPICAL BACKFILL
Sa.S-3 - PRECAST CONCRETE MANHOLE (TYPE A, TYPE B, TYPE C)
Sa.S-5 - MANHOLE FRAME AND COVER CASTING
Sa.S-6 - TYPICAL WATERTIGHT MANHOLE CASTING
Sa.S-7 - MANHOLE STEPS AND CHANNEL
Sa.S-8 - DROP PIPE AT MANHOLE
Sa.S-11 - 6" SANITARY SEWER SERVICE (MAIN LINE TO R/W)
Sa.S-15 - TYPICAL RISER
Sa.S-16 - TYPICAL CLEANOUT
Sa.S-20 - WATERLINE CROSSING
Sa.S-26 - TYPICAL PRESSURE PIPE LOWERING
Sa.S-31 GRINDER PUMP INSTALLATION
Sa.S-32 - CONCRETE SIDEWALK AND BERM REPLACEMENT
Sa.S-33 - TEMPORARY PAVEMENT REPLACEMENT
Sa.S-34 - PERMANENT PAVEMENT REPLACEMENT
Sa.S-35 - DRIVEWAY PAVEMENT REPLACEMENT

REVISIONS

DATE	COMMENTS



LOCATION MAP

GRAPHIC SCALE

0 500 1000 2000

1 inch = 1000 feet

Ohio Utilities Protection Service
Call 811 before you dig
Hey Ohio! BEFORE YOU DIG
Click! oups.org
Call! 8-1-1
Tap! the OUPS app

DRAWING SET STATUS

- [x] PRELIMINARY ENGINEERING SET
- [ ] ISSUED FOR BIDDING SET
- [ ] ISSUED FOR CONSTRUCTION SET
- [ ] AS-BUILT DOCUMENT SET

PLANS PREPARED BY :

PRIME AE

8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

DRAWING COORDINATES ARE GRID VALUES, BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD83), AS ESTABLISHED BY GPS SURVEY.

SOURCE BENCHMARK:
OHIO DEPARTMENT OF TRANSPORTATION C.O.R.S. STATION "COLB" LOCATED AT THE ODOT CENTRAL OFFICE GARAGE COMPLEX.
ELEV: 611.63 (NAVD88)

DELAWARE COUNTY APPROVAL

THE SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSE AND LOCATION OF THE PROPOSED IMPROVEMENT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER WHO PREPARED AND CERTIFIED THESE PLANS.

APPROVED THIS _____ DAY OF _____ , 2020 _____
DELAWARE COUNTY SANITARY ENGINEER

APPROVED THIS _____ DAY OF _____ , 2020 _____
DELAWARE COUNTY ENGINEER

APPROVED THIS _____ DAY OF _____ , 2020 _____
COUNTY COMMISSIONER

APPROVED THIS _____ DAY OF _____ , 2020 _____
COUNTY COMMISSIONER

APPROVED THIS _____ DAY OF _____ , 2020 _____
COUNTY COMMISSIONER

APPROVED BY LETTER:
OHIO ENVIRONMENTAL PROTECTION AGENCY
DATE : -

THIS IS TO CERTIFY THAT GOOD ENGINEERING PRACTICES HAVE BEEN UTILIZED IN THE DESIGN OF THIS PROJECT AND THAT ALL OF THE MINIMUM STANDARDS FOR DELAWARE COUNTY HAVE BEEN MET, INCLUDING THOSE STANDARDS GREATER THAN THE MINIMUM WHERE, IN MY OPINION, THEY ARE NEEDED TO PROTECT THE SAFETY OF THE PUBLIC. ANY VARIANCES TO THE ABOVE STANDARDS ARE CONSISTENT WITH SOUND ENGINEERING PRACTICES AND ARE NOT DETRIMENTAL TO THE PUBLIC SAFETY AND CONVENIENCE. THESE VARIANCES HAVE BEEN LISTED HEREIN AND HAVE BEEN APPROVED BY THE DELAWARE COUNTY SANITARY ENGINEER.

Registered Engineer | E-73937 Reg. No. | JULY 1, 2020 Date | Seal

STATE OF OHIO · WILLIAM D. BOGGS · E-73937 · REGISTERED · PROFESSIONAL ENGINEER

ESTIMATED QUANTITIES TABLE

ITEM	QTY	UNIT	DESCRIPTION
108	1	LS	CONSTRUCTION LAYOUT STAKES
126	1	LS	TREE PROTECTION DURING CONSTRUCTION
201*	1	LS	CLEARING & GRUBBING
201*	7	EA	TREE REMOVED, 12-INCH
203	176	CY	AGGREGATE BASE
203*	9	CY	ROCK EXCAVATION
208	1,045	LF	8" SDR 35 SANITARY PIPE WITH TYPE A BEDDING
208	4,844	LF	8" SDR 35 SANITARY PIPE WITH TYPE B BEDDING
208	451	LF	8" C900 SANITARY PIPE W/TYPE A BEDDING
208	535	LF	12-INCH STORM PIPE WITH TYPE B BEDDING
208	61	LF	15-INCH STORM PIPE WITH TYPE B BEDDING
208	90	LF	6-INCH DIAMETER PIPE RISERS
208	56	EA	8-INCH X 6-INCH DIAMETER WYE FITTING
209	30	EA	MANHOLE
210	793	LF	2" HDPE SDR 9 PRESSURE SERVICE LINE & APPENDAGES
254*	2,434	SY	ASPHALT PLANING
301*	47	CY	ASPHALT CONCRETE BASE
303	1	LS	DEWATERING
314	39	CY	DRIVEWAY PAVEMENT, ASPHALT
314	76	CY	DRIVEWAY PAVEMENT, CONCRETE
314	4	CY	PERMANENT PAVEMENT REPLACEMENT, TYPE III
315	1	LS	TRAFFIC CONTROL
317	14,903	SY	SEEDING AND MULCHING, TYPE 3C
407*	203	GAL.	TACK COAT
408*	379	GAL.	PRIME COAT
412	2,710	LF	6-INCH DIAMETER PIPE, SANITARY HOUSE CONNECTION SERVICE
441*	114	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
609*	6,300	LF	FILTER FABRIC FENCE
613*	15	CY	LOW STRENGTH MORTAR BACKFILL
616*	0.5	MGal	WATER
624*	1	LS	MOBILIZATION
661*	4	EA	DECIDUOUS TREE
670*	10	EA	INLET PROTECTION
SPEC	1	LS	LANDSCAPE RESTORATION
SPEC	1	LS	DEWATERING
SPEC	1	LS	DEL-CO WATER ALLOWANCE

* ITEM NUMBERS TAKEN FROM ODOT ITEM MASTER 2019

CONVENTIONAL LINETYPES & SYMBOLS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORPORATION LINE ——— OR ———
FENCE LINE (EX) ——— (PR) ———
CENTER LINE
RIGHT OF WAY (EX)
RIGHT OF WAY (PR)
STANDARD HIGHWAY EASE.(EX)
TEMPORARY RIGHT OF WAY
CHANNEL EASE. (PR)
UTILITY EASE. (EX)
RAILROAD ——— OR ———
GUARDRAIL (EX) ——— (PR) ———
CONSTRUCTION LIMITS
EDGE OF PAVEMENT (EX)
EDGE OF PAVEMENT (PR)
EDGE OF SHOULDER (EX)
EDGE OF SHOULDER (PR)
DITCH/CREEK (EX)
DITCH/CREEK (PR)
TREE LINE (EX)
OWNERSHIP HOOK SYM , EXAMPLE
PROPERTY LINE SYMI , EXAMPLE
BREAK LINE SYM , EXAMPLE

TREE (PR)
TREE (EX)
SHRUB (EX)
TREE (REMOVE)
SHRUB (REMOVE)
EVERGREEN (EX)
STUMP
EVERGREEN (REMOVE)
STUMP (REMOVE)
WETLAND (PR)
GRASS (PR)
AERIAL TARGET

POST (EX)
MAILBOX (EX)
MAILBOX (PR)
LIGHT (EX)
TELEPHONE MARKER (EX)
FIRE HYDRANT (EX)
WATER METER (EX)
WATER VALVE (EX)
UTILITY VALVE UNKNOWN (EX.)
TELEPHONE POLE (EX)
POWER POLE (EX)
LIGHT POLE (EX)

DRAWING INDEX

SANITARY SEWER LATERAL TABLE

ADDRESS	STATION	MAIN CL. ELEVATION	LATERAL SLOPE: 0.0208 LATERAL START ELEVATION	LATERAL LENGTH (FT)	EOS ELEVATION	EOS GRADE	EOS DEPTH w/o RISER	RISER LENGTH (FT) (APPROX.)	GRINDER PUMP	SHT #
7839 HARRIOTT RD.	01+00.00	918.13	918.63	42	919.49	937.25	17.76	6	N	C-1
7801 HARRIOTT RD.	02+32.00	918.67	919.17	42	920.03	941.95	21.92	10	N	C-1
7769 HARRIOTT RD.	04+27.00	919.54	920.04	42	920.90	940.91	20.01	9	N	C-1
9716 ERIN WOODS DR.	05+81.00	920.16	920.66	42	921.52	937.74	16.22	5	N	C-1
9750 ERIN WOODS DR.	10+21.00	922.13	922.63	* 72	924.12	925.82	1.70	0	Y	C-2
9719 ERIN WOODS DR.	10+31.00	922.17	922.67	* 89	924.51	925.15	0.64	0	Y	C-2
7639 HARRIOTT RD.	10+51.00	922.24	922.74	** 240	927.72	931.04	3.32	0	N/A***	C-2
9776 ERIN WOODS DR.	11+68.00	922.72	923.22	* 27	923.77	920.90	-2.87	0	Y	C-2
9761 ERIN WOODS DR.	12+51.00	923.15	923.65	* 71	925.12	921.58	-3.54	0	Y	C-2
9808 ERIN WOODS DR.	13+72.00	924.38	924.88	81	926.55	938.30	11.75	0	N	C-2
9787 ERIN WOODS DR.	14+00.00	924.77	925.27	25	925.78	936.87	11.09	0	N	C-2
9817 ERIN WOODS DR.	14+79.00	925.85	926.35	23	926.82	938.17	11.35	0	N	C-2
9845 ERIN WOODS DR.	15+93.00	926.54	927.04	24	927.53	942.84	15.31	4	N	C-2
9846 ERIN WOODS DR.	17+33.00	927.2	927.7	81	929.37	948.77	19.40	8	N	C-2
9877 ERIN WOODS DR.	18+33.00	927.67	928.17	28	928.74	948.37	19.63	8	N	C-3
9882 ERIN WOODS DR.	18+84.00	927.97	928.47	83	930.19	949.68	19.49	8	N	C-3
9904 ERIN WOODS DR.	21+14.00	930.63	931.13	82	932.83	949.79	16.96	5	N	C-3
9937 ERIN WOODS DR.	22+22.00	934.42	934.92	22	935.37	948.10	12.73	1	N	C-3
9930 ERIN WOODS DR.	22+80.00	936.44	936.94	72	938.43	948.20	9.77	0	N	C-3
9971 ERIN WOODS DR.	24+34.00	938.04	938.54	22	938.99	947.00	8.01	0	N	C-3
9956 ERIN WOODS DR.	24+42.00	938.1	938.6	72	940.09	948.60	8.51	0	N	C-3
9980 ERIN WOODS DR.	24+70.00	938.29	938.79	72	940.28	948.50	8.22	0	N	C-3
9989 ERIN WOODS DR.	25+87.00	939.09	939.59	22	940.04	949.44	9.40	0	N	C-3
10002 ERIN WOODS DR.	26+39.00	939.54	940.04	72	941.53	954.00	12.47	1	N	C-3
10222 SYLVIAN DR.	27+95.00	940.69	941.19	72	942.68	955.90	13.22	2	N	C-4
10201 SYLVIAN DR.	29+66.00	942.42	942.92	71	944.39	958.10	13.71	2	N	C-4
10225 SYLVIAN DR.	30+18.00	943.16	943.66	71	945.13	958.20	13.07	2	N	C-4
10251 SYLVIAN DR.	31+97.00	945.74	946.24	70	947.69	958.20	10.51	0	N	C-4
10266 SYLVIAN DR.	32+21.00	946.13	946.63	24	947.12	956.50	9.38	0	N	C-4
10275 SYLVIAN DR.	34+04.00	948.77	949.27	115	951.65	962.45	10.80	0	N	C-4
10291 SYLVIAN DR.	34+26.00	949.08	949.58	99	951.63	959.60	7.97	0	N	C-4
10288 SYLVIAN DR.	34+75.00	949.79	950.29	28	950.86	959.40	8.54	0	N	C-4
9913 ERIN WOODS DR.	40+41.00	928.92	929.42	36	930.16	945.92	15.76	4	N	C-5
9961 SYLVIAN DR.	43+27.00	930.09	930.59	* 79	932.22	941.09	8.87	0	Y	C-5
9955 SYLVIAN DR.	43+79.00	930.43	930.93	56	932.08	945.49	13.41	2	N	C-5
9979 SYLVIAN DR.	44+92.00	931.47	931.97	82	933.67	944.15	10.48	0	N	C-5
7650 SERENITY DR.	45+82.00	932.14	932.64	99	934.69	946.78	12.09	1	N	C-5
9990 SYLVIAN DR.	45+93.00	932.18	932.68	32	933.34	950.20	16.86	5	N	C-5
7673 SERENITY DR.	51+25.00	934.61	935.11	27	935.66	943.95	8.29	0	N	C-6
7655 SERENITY DR.	51+55.00	934.74	935.24	68	936.64	947.78	11.14	0	N	C-6
7669 SERENITY DR.	54+28.00	938.57	939.07	22	939.52	949.35	9.83	0	N	C-6
7661 SERENITY DR.	55+19.00	939.52	940.02	74	941.55	949.61	8.06	0	N	C-6
7665 SERENITY DR.	57+23.00	941.69	942.19	38	942.97	950.00	7.03	0	N	C-6
10174 SYLVIAN DR.	61+43.00	942.28	942.78	21	943.21	953.09	9.88	0	N	C-7
10177 SYLVIAN DR.	61+92.00	942.51	943.01	74	944.54	951.80	7.26	0	N	C-7
10151 SYLVIAN DR.	63+40.00	943.19	943.69	75	945.24	954.10	8.86	0	N	C-7
10125 SYLVIAN DR.	63+85.00	943.4	943.9	68	945.30	953.14	7.84	0	N	C-7
10036 SYLVIAN DR.	70+26.00	934.95	935.45	25	935.96	953.59	17.63	6	N	C-7
10070 SYLVIAN DR.	72+58.00	938.55	939.05	32	939.71	950.20	10.49	0	N	C-7
10069 SYLVIAN DR.	73+63.00	940.14	940.64	97	942.65	952.23	9.58	0	N	C-7
10120 SYLVIAN DR.	74+03.00	940.75	941.25	32	941.91	951.02	9.11	0	N	C-7
10099 SYLVIAN DR.	74+16.00	940.94	941.44	98	943.47	950.08	6.61	0	N	C-7
7664 SERENITY DR.	80+10.00	934.32	934.82	76	936.39	946.00	9.61	0	N	C-8
7670 SERENITY DR.	81+56.00	935.06	935.56	79	937.19	942.35	5.16	0	N	C-8
7690 SERENITY DR.	82+53.00	935.56	936.06	* 109	938.32	950.52	12.20	1	Y	C-8
7694 SERENITY DR.	82+64.00	935.61	936.11	* 106	938.30	941.00	2.70	0	N/A***	C-8

SANITARY LATERALS CALCULATED AT 2.08% SLOPE
RISER LENGTHS CALCULATED BASED ON 45 DEGREE CONNECTION ANGLE OF WYE AT MAIN.
* LATERAL TO BE PRESSURE SERVICE LINE INSTALLED PER DCRSD STD. DETAIL Sa.S-31
** LATERAL TO BE 2" HDPE SDR 9 PRESSURE SERVICE LINE INSTALLED PER DCRSD STD. DETAIL Sa.S-31
*** N/A NO RESIDENCE AT THIS ADDRESS AT THE TIME OF DESIGN.

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DATE: JULY 2020
DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH

LEGEND & SYMBOLS, DRAWING INDEX, LATERAL TABLE & ESTIMATED QUANTITIES

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

G-1

P:\Projects\2018\20HD01WD-18563 Woods of Glen Erin Delaware County\05 CADD_Drawings\Sheet\90 Submittal\G-1_Legends & Symbols_R1.dwg Jul 01, 2020 - 2:36pm

GENERAL NOTES

1. THE CURRENT COUNTY OF DELAWARE REQUIREMENTS, TOGETHER WITH THE SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING ALL SUPPLEMENTS THERETO, AND THE DCRSD CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS) AND STANDARD DRAWINGS SHALL GOVERN ALL MATERIALS, METHODS OF CONSTRUCTION AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS THAT ARE A PART OF THIS PLAN.

2. APPROVAL OF THESE PLANS IS CONTINGENT UPON ALL REQUIRED SANITARY SEWER EASEMENTS BEING APPROVED BY THE DCRSD AND RECORDED PRIOR TO CONSTRUCTION.

3. THE CONTRACTOR SHALL NOTIFY THE SANITARY ENGINEER'S OFFICE FORTY-EIGHT (48) HOURS PRIOR TO CONSTRUCTION.

4. ANY MODIFICATIONS TO THE WORK AS SHOWN ON THESE DRAWINGS SHALL HAVE PRIOR WRITTEN APPROVAL BY THE SANITARY ENGINEER.

5. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL CALL, TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) FORTY-EIGHT (48) HOURS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES. THE IDENTITY AND LOCATION OF THE EXISTING UNDERGROUND UTILITY FACILITIES KNOWN TO BE LOCATED IN THE CONSTRUCTION AREA HAVE BEEN SHOWN ON THE PLANS AS ACCURATELY AS PROVIDED BY THE OWNER OF THE UNDERGROUND UTILITY. THE COUNTY OF DELAWARE AND THE SANITARY ENGINEER ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OF THE UNDERGROUND FACILITIES SHOWN ON THE PLANS.

6. THE FOLLOWING UTILITIES AND/OR OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT AND MAY NOT SUBSCRIBE TO A REGISTERED UNDERGROUND UTILITY PROTECTION SERVICE.

UNION RURAL ELECTRIC COOPERATIVE
ATTN. ED PEPER
15461 US RTE. 36
MARYSVILLE, OHIO 43040
PH: (937) 645-9240
EMAIL: EPEPER@URE.COM

AT&T
111 N. 4TH ST. RM 1460
COLUMBUS, OHIO 43215
ATTN. CHRIS WOODLEY
ATO, C&E OHIO
CELL 614-282-7793
OFFICE 614-223-4455
EMAIL CW1479@ATT.COM

OHIO EDISON (FIRST ENERGY)
ATTN. GARY SMITH
1040 S. PROPECT ST.
MARION, OHIO 43302
PH: (937) 382-7101
EMAIL: SMITHGL@FIRSTENERGYCORP.COM

COLUMBIA GAS OF OHIO, INC.
ATTN. HEIDI ZACHER
EMAIL: HZACHER@NISOURCE.COM
3550 JOHNNY APPLESEED CT.
COLUMBUS, OHIO 43231
PHONE: (614) 818-2107

DELAWARE COUNTY REGIONAL SEWER DISTRICT
50 CHANNING STREET (SOUTH WING) DELAWARE, OH 43015
P: (740) 833-2240
WWW.CO.DELAWARE.OH.US\SANITARY

DEL-CO WATER COMPANY
ATTN: RUSTY GRIFFITH
ASSISTANT ENGINEER SUPERVISOR
6773 OLENTANGY RIVER ROAD
DELAWARE, OHIO 43015
PH. (740) 548-7746 EXT. 2408
FAX (740) 549-1149

CHARTER
JOSEPH VLOCK
CONSTRUCTION COORDINATOR
CELL 614-402-1979
JOSEPH.VLOCK@CHARTER.COM
MID-OHIO DIVISION

7. THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT, EXISTING RIGHTS-OF-WAY, CONSTRUCTION EASEMENTS AND PERMANENT EASEMENTS, AND SHALL NOT TRESPASS UPON OTHER PRIVATE PROPERTY WITHOUT THE WRITTEN CONSENT OF THE PROPERTY OWNER.

8. COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED, AND APPLICABLE OSHA REGULATIONS IS REQUIRED OF ALL CONTRACTORS ON THE PROJECT. EACH CONTRACTOR AND SUBCONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING, MAINTAINING, AND SUPERVISING ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

9. THE TRACKING OF MUD, DIRT, AND DEBRIS UPON ANY PUBLIC ROADWAY IS PROHIBITED AND ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIALS RESULTING FROM CONSTRUCTION OPERATIONS AND RESTORE ALL SURFACES, STRUCTURES, DITCHES, AND PROPERTY TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE SANITARY ENGINEER.

10. ANY TREES OR LANDSCAPING IN EXISTING EASEMENTS OR PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED AND NOT IMPACTED BY CONSTRUCTION ACTIVITIES UNLESS PRIOR APPROVAL IS OBTAINED BY THE SANITARY ENGINEER. ANY TREES OR LANDSCAPING THAT ARE APPROVED TO BE REMOVED ARE REQUIRED TO BE REPLACED TO THE SATISFACTION OF THE SANITARY ENGINEER.

11. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS AND REQUIREMENTS.

12. WHERE IT IS ANTICIPATED THAT THE UTILITY WORK WILL CLOSE A STREET, THE CONTRACTOR SHALL INFORM RESIDENTS TO BE AFFECTED, THE COUNTY SHERIFF'S OFFICE OR LOCAL POLICE DEPARTMENT, THE FIRE DEPARTMENT, THE SANITARY ENGINEER, THE COUNTY ENGINEER, THE APPLICABLE SCHOOL DISTRICT, AND OTHER APPLICABLE ENTITIES AS TO THE EXTENT, NATURE, AND TIME OF THE ANTICIPATED WORK.

13. PROHIBITED CONSTRUCTION ACTIVITIES: THE FOLLOWING CONSTRUCTION ACTIVITIES ARE PROHIBITED ON THE PROJECT:
    a) USING ANY SUBSTANCE OTHER THAN WATER TO CONTROL DUST.
    b) TRACKING OF MUD, DIRT AND DEBRIS ONTO ANY PUBLIC ROADWAY.
    c) OPEN BURNING OF PROJECT DEBRIS WITHOUT A PERMIT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE PERMIT OR DISPOSING OF TREES AND STUMPS.
    d) PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS INTO ANY SURFACE WATERS, ANY STREAM CORRIDORS, ANY WETLANDS, OR STORM SEWERS.
    e) DISCHARGING POLLUTANTS, SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE, AND OTHER HARMFUL WASTE INTO OR ALONGSIDE RIVERS, STREAMS, IMPOUNDMENTS, OR INTO NATURAL OR MAN-MADE CHANNELS LEADING THERETO.
    f) STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED FOR SAID PURPOSES.
    g) DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOODPLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER.
    h) INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, WETLANDS, SURFACE WATERS, OR OUTSIDE THE EASEMENT AREA.
    i) PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW LINE OF A STREAM.
    j) REMOVAL OF TREES AND SHRUBS, OR DAMAGING VEGETATION OUTSIDE THE LIMITS OF THE CONSTRUCTION AREA.
    k) DISPOSAL OF TREES, BRUSH AND OTHER DEBRIS IN STREAM CORRIDORS, WETLANDS, SURFACE WATERS, OR AT UNSPECIFIED LOCATIONS.

14. SEDIMENT AND EROSION CONTROL: THE CONTRACTOR SHALL SUBMIT A COPY OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE SANITARY ENGINEER THAT HAS BEEN APPROVED BY THE GOVERNING STORM WATER AUTHORITY, DELAWARE COUNTY ENGINEER'S OFFICE, PRIOR TO THE PRE-CONSTRUCTION MEETING FOR THE SANITARY SEWER. ADDITIONAL EROSION AND SEDIMENTATION CONTROLS MAY BE REQUIRED AT THE DISCRETION OF THE SANITARY ENGINEER BEFORE AND/OR DURING CONSTRUCTION ACTIVITIES.

SANITARY SEWER NOTES:

1. ALL SANITARY SEWERS SHALL BE SEPARATED A MINIMUM OF 10 FEET HORIZONTALLY AND 1.5 FEET VERTICALLY FROM ALL WATER MAINS.
2. WHEREVER A SANITARY SEWER MUST CROSS AN EXISTING WATER MAIN, THE ELEVATION OF THE CROWN OF THE SEWER SHALL BE AT LEAST 1.5 FEET MINIMUM, MEASURED BETWEEN THE OUTSIDE PIPE WALLS, BELOW THE BOTTOM OF THE WATER MAIN.
3. ALL GRAVITY SANITARY MAINS (8 INCHES THROUGH 15 INCHES) AND SERVICES (6 INCH) SHALL BE PVC PIPE MEETING THE REQUIREMENTS OF ASTM D-3034, SDR 35, CELL CLASS 12454, UNLESS OTHERWISE NOTED. PVC SEWER JOINTS SHALL MEET ASTM 3212 SPECIFICATIONS. FOR PIPE SIZES 18 INCHES AND LARGER, PVC PIPE SHALL CONFORM TO ASTM F 679, WITH A CELL CLASSIFICATION OF 12454. PIPE AND FITTINGS SHALL BE SDR 26 OR PS 115 FOR DEPTHS GREATER THAN 20 FEET. FOR PIPES WITH DEPTHS GREATER THAN 28 FEET, PLEASE SEE THE DISTRICT CMS.
4. THERE SHALL BE NO STORM OR CLEAN WATER CONNECTIONS TO THE SANITARY SEWER (ROOF DRAINS, FOOTER DRAINS, ETC.)
5. ALL SANITARY SEWER WYE FITTINGS SHALL HAVE A 10-FOOT MINIMUM SERVICE EXTENSION INSTALLED PRIOR TO THE SERVICE BEING CAPPED AND BACKFILL BEING PLACED OVER THE MAINLINE AND LATERAL SEWER.
6. TRENCH DAMS ARE REQUIRED FOR ALL SANITARY SERVICES AND SHALL BE CONSTRUCTED OF NATIVE CLAY OR IMPERVIOUS SOIL ACROSS AND ALONG THE TRENCH UPSTREAM OF THE MAIN LINE SEWER TO RETARD AND RESIST THE MOVEMENT OF GROUNDWATER THROUGH THE TRENCH BEDDING OR BACKFILL MATERIAL. COMPACT THE TRENCH DAMS TO 6 FEET IN LENGTH, AS MEASURED ALONG THE SERVICE CENTERLINE TO A LIMIT OF 36 INCHES ABOVE THE TOP OF PIPE.
7. SEWER TRENCHES SHALL BE DE-WATERED TO 2 INCHES BELOW THE BELL OF PIPE PRIOR TO AND DURING INSTALLATION OF PIPE.
8. THE CONTRACTOR SHALL PROVIDE AND INSTALL WYE POLES AT ALL WYE LOCATIONS AS CONSTRUCTED. WYE POLES SHALL EXTEND ABOVE THE EXISTING OR PROPOSED GRADE, WHICHEVER IS HIGHER, A MINIMUM OF 2 FEET.
9. ANY FIELD TILE DISTURBED DURING CONSTRUCTION SHALL BE REPLACED AS DIRECTED BY THE SANITARY ENGINEER WITH PVC PIPE SPANNING THE TRENCH. THE TRENCH SHALL BE FILLED WITH COMPACTED GRANULAR BACKFILL.
10. FINISH GRADE AT ALL SANITARY MANHOLES SHALL BE AT LEAST 6 INCHES BELOW TOP OF CASTING TO AVOID UNNECESSARY INFILTRATION INTO THE SANITARY SEWER SYSTEM.
11. ALL SANITARY SERVICES SHALL BE INSTALLED WITH A MINIMUM 2.08% SLOPE UNLESS OTHERWISE NOTED ON PLANS.
12. BACKFILL SHALL BE INSTALLED PER TYPICAL TRENCH DETAIL SA.S-1 AND SA.S-2. FOR SANITARY PIPES PARALLEL TO ROAD INSIDE OF RIGHT-OF-WAY, REFER TO DETAIL (1) SHEET G-5.
13. SERVICE RISERS SHALL BE INSTALLED WHERE DEPTHS FROM THE WYE TO THE EXISTING OR PROPOSED ELEVATION EXCEEDS 12 FEET. THE TOPS OF RISERS SHALL BE NO MORE THAN 10 FEET BELOW EXISTING OR PROPOSED SURFACE ELEVATION, WHICHEVER IS HIGHER, UNLESS OTHERWISE NOTED.
14. CONTRACTOR SHALL INSTALL PLUGS IN THE UPSTREAM AND DOWNSTREAM INVERTS OF MANHOLE #1. THE PLUGS SHALL BE INSPECTED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER RAINFALL EVENTS.
15. SANITARY SEWERS SHALL BE TESTED BY AIR TESTING METHOD. AIR TESTING SHALL BE MADE IN ACCORDANCE WITH ASTM F1417-92. ALLOWABLE LEAKAGE SHALL NOT EXCEED THE LIMITS AS SHOWN IN CMS ITEM 409.01. CONTRACTOR SHALL COOPERATE WITH THE SANITARY ENGINEER AND PROVIDE ALL NECESSARY EQUIPMENT, MATERIALS, AND LABOR TO PERFORM THE TESTING.
16. SANITARY MANHOLES SHALL BE TESTED USING VACUUM TEST METHODS PER CMS ITEM 409.02.
17. WHEN PVC PIPE IS USED A DEFLECTION TEST SHALL BE PERFORMED. PIPE DEFLECTION SHALL NOT EXCEED 5 PERCENT IF TESTED AFTER 30 DAYS, OR 7.5 PERCENT IF TESTED AFTER 90 DAYS FROM THE TRENCH BEING BACKFILLED TO FINISH GRADE. THE METHOD OF TESTING SHALL BE SUBJECT TO THE APPROVAL OF THE SANITARY ENGINEER. IF RIGID BALLS OR MANDRELS ARE USED TO TEST THE PIPE DEFLECTION, NO MECHANICAL PULLING DEVICES SHALL BE USED. ANY LINES WHICH FAIL THE TEST MUST BE REPAIRED AND RETESTED, AFTER AN ADDITIONAL 30-DAY PERIOD TO COMMENCE AFTER THE REPAIR HAS BEEN MADE, BY THE CONTRACTOR AT NO COST TO THE DCRSD.

18. ALL MANHOLES SHALL BE SOLID, GASKETED, WITH CONCEALED PICK HOLES. ALL SANITARY MANHOLES SHALL BE NEENAH R-1762, EAST JORDAN 1837, OR APPROVED EQUAL, WITH "DELAWARE COUNTY SANITARY SEWER" AND LOGO CAST IN THE MANHOLE LID.
19. MANHOLE #6 ON ERIN WOODS DRIVE SHALL BE MODIFIED FROM STANDARD DRAWING Sa.S-3 TO ACCOUNT FOR PAVEMENT SLOPE AND TO PERMIT MANHOLE ACCESS. SEE DETAILS (2) AND (3) SHEET G-5 FOR MODIFICATIONS.

DEL-CO WATER NOTES:

1. CONTRACTOR TO PROTECT EXISTING WATERMAINS, WATER SERVICES AND METER PITS DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH DEL-CO WATER COMPANY AND THE SANITARY ENGINEER IF RELOCATION/REPLACEMENT OF WATERLINES, WATER SERVICES, VALVES, FIRE HYDRANTS, OR METER PITS IS REQUIRED. WORK SHALL BE PERFORMED BY DEL-CO WATER COMPANY AFTER APPROVAL BY THE SANITARY ENGINEER AT THE COST OF THE CONTRACTOR. A BID ALLOWANCE FOR THE WATERLINE PAY ITEMS IS PROVIDED ON THE BID FORM.

SURVEY NOTES:

DRAWING COORDINATES ARE GRID VALUES, BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD83), AS ESTABLISHED BY GPS SURVEY.

SOURCE BENCHMARK:
OHIO DEPARTMENT OF TRANSPORTATION C.O.R.S. STATION "COLB" LOCATED AT THE ODOT CENTRAL OFFICE GARAGE COMPLEX. ELEV: 611.63 (NAVD88)

BUILDING LOCATIONS ARE SHOWN USING GIS DATA ONLY AND ARE APPROXIMATE.

A MAJORITY OF THE PRIVATE SEPTIC SYSTEM LOCATIONS ARE FROM HEALTH DEPARTMENT RECORDS ONLY. THEREFORE, SEPTIC SYSTEM LOCATIONS ARE APPROXIMATE.

WATER METERS ARE SHOWN LABELED AS "BY PLAN" UNLESS THEY WERE PHYSICALLY OBSERVED AND LOCATED BY FIELD CREWS.

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH
DATE: JULY 2020

GENERAL NOTES

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

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STORMWATER POLLUTION PREVENTION (SWPPP)

PLAN DESIGNER: PRIME AE GROUP
8415 PULSAR PLACE, SUITE 300
COLUMBUS, OHIO 43240
PHONE: 614-839-0250

PROJECT NAME: WOODS OF GLEN ERIN SANITARY IMPROVEMENTS

PROJECT LOCATION: CONCORD TOWNSHIP, DELAWARE COUNTY, OHIO

OWNER: DELAWARE COUNTY REGIONAL SEWER DISTRICT (DCRSD)
50 CHANNING STREET, 2ND FLOOR
DELAWARE, OHIO 43015
PHONE: 740-833-2240
DCRSD PROJECT MANAGER: JULIE McGILL
EMAIL: JMCGILL@CO.DELAWARE.OH.US

TOTAL ACRES DISTURBED: 1.44 ACRES

1. SITE INFORMATION
   1.1. INSTALLATION OF 6,340 FEET OF 8" SANITARY SEWER BY PIPE IN TRENCH (OPEN CUT). INSTALLATION OF 30 MANHOLE STRUCTURES.
   1.2. SOIL DISTURBING ACTIVITIES WILL INCLUDE CLEARING AND GRUBBING, EXCAVATION, BACKFILL AND FINAL GRADING.

2. SEQUENCE OF MAJOR ACTIVITIES
   2.1. SILT FENCE SHALL BE INSTALLED PRIOR TO CLEARING OR GRADING ANY PORTIONS OF THE SITE. AREAS WHERE CONSTRUCTION CEASES FOR MORE THAN 21 DAYS SHALL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH.

3. NAME OF RECEIVING WATERS
   3.1. THE SITE DRAINS INTO AN UNNAMED TRIBUTARIES OF THE SCIOTO RIVER

4. EROSION AND SEDIMENT CONTROL GENERAL NOTES
   4.1. STOCKPILED TOPSOIL AND EXCAVATED MATERIAL IS TO BE PROTECTED THROUGH THE USE OF TEMPORARY AND PERMANENT SEEDING, OR COVERED WITH ANCHORED STRAW MULCH.
   4.2. FINAL GRADING WILL BE CONSISTENT WITH PRE-CONSTRUCTION TOPOGRAPHY TO MAINTAIN DRAINAGE AND AESTHETICS.
   4.3. REMOVE ONLY THOSE TREES, SHRUBS, AND GRASSES THAT MUST BE REMOVED TO PERMIT ACTUAL CONSTRUCTION. PROTECT THE REMAINING TO PRESERVE THEIR AESTHETIC AND EROSION CONTROL VALUE.
   4.4. ALL EROSION/SEDIMENT/DUST CONTROL PRACTICES SHALL BE PERFORMED AS DIRECTED BY THE ODNR PUBLICATION "RAINWATER AND LAND DEVELOPMENT", CURRENT EDITION. EROSION CONTROL DEVICES ARE TO BE MAINTAINED IN EFFECTIVE WORKING CONDITION DURING CONSTRUCTION AND UNTIL THE CONSTRUCTION AREA HAS BEEN PERMANENTLY STABILIZED.
   4.5. BACKFILL TRENCHES IMMEDIATELY AFTER COMPACTION. SEED AND MULCH TRENCHES WITHIN 7 DAYS AFTER TRENCHES ARE OPENED.
   4.6. SILT FROM CONSTRUCTION OPERATIONS SHALL NOT BE PERMITTED TO ENTER THE STORM DRAIN SYSTEM OR WATERWAYS (NATURAL OR MAN-MADE OR ADJACENT PRIVATE PROPERTY). CONSTRUCTION OCCURRING NEAR STORM DRAIN INLETS OR WATERWAYS (NATURAL OR MAN-MADE), SHALL REQUIRE EROSION CONTROL MEASURES, SUCH AS SILT FENCE AND STRAW BALES BARRIERS, TO PREVENT SILT FROM ENTERING THE STORM DRAIN AND WATERWAYS (NATURAL OR MAN-MADE OR ADJACENT PRIVATE PROPERTY).
   4.7. TIMING OF SEDIMENT - TRAPPING PRACTICES
      4.7.1. SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL THROUGHOUT EARTH DISTURBING ACTIVITY. SETTLING FACILITIES, PERIMETER CONTROLS AND OTHER PRACTICES INTENDED TO TRAP SEDIMENT SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING OR CONSTRUCTION AND WITHIN SEVEN DAYS FROM THE, START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE UPSLOPE DEVELOPMENT AREA IS RE-STABILIZED. THESE CONTROLS SHALL BE SELECTED AND LOCATED AS DIRECTED BY THE ENGINEER.
   4.8. STABILIZATION OF DENUDED AREAS
      4.8.1. DENUDED AREAS SHALL HAVE SOIL STABILIZATION APPLIED WITHIN SEVEN DAYS OF DISTURBANCE IF THEY ARE TO REMAIN SUBSTANTIALLY UNWORKED FOR MORE THAN 21 DAYS. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE, AND SHALL ALSO BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WHICH WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 21 DAYS.
   4.9. SEDIMENT BARRIERS
      4.9.1. SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE FILTERED OR DIVERTED TO A SETTLING FACILITY. ADDITIONAL CONTROLS MAY BE SELECTED AND INSTALLED AS DIRECTED BY THE ENGINEER.
   4.10. STORM WATER INLET PROTECTION
      4.10.1. ALL STORM SEWER INLETS WHICH ACCEPT WATER RUNOFF FROM THE PROJECT AREA SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER WILL NOT ENTER THE STORM SEWER SYSTEMS WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT, UNLESS THE STORM SEWER SYSTEM DRAINS TO A SETTLING FACILITY. THESE CONTROLS SHALL BE SELECTED AND LOCATED AS DIRECTED BY THE ENGINEER.
   4.11. SLOUGHING AND DUMPING
      4.11.1. NO SOIL, ROCK, DEBRIS OR ANY OTHER MATERIAL SHALL BE DUMPED OR PLACED INTO A WATER RESOURCE OR INTO SUCH PROXIMITY THAT IT MAY READILY SLOUGH, SLIP, OR ERODE INTO A WATER RESOURCE UNLESS SUCH DUMPING OR PLACING IS AUTHORIZED BY THE ENGINEER. UNSTABLE SOILS PRONE TO SLIPPING OR LANDSLIDING SHALL NOT BE GRADED, EXCAVATED, FILLED OR HAVE LOADS IMPOSED UPON THEM UNLESS THE WORK IS AUTHORIZED BY THE ENGINEER.
   4.12. ESTABLISHMENT OF PERMANENT VEGETATION
      4.12.1 PERMANENT VEGETATON SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED WHICH, IN THE OPINION OF THE ENGINEER, PROVIDES ADEQUATE COVER AND IS MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY AND TO SURVIVE ADVERSE WEATHER CONDITIONS.
   4.13 MAINTENANCE
      4.13.1 ALL SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED TO MINIMIZE MAINTENANCE REQUIREMENTS. THEY SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE CONTINUED MAINTENANCE OF ALL EROSION CONTROLS DURING THE LIFE OF THE PROJECT.
   4.14 DETAILS HAVE BEEN SHOWN ON THE PLAN IN AN EFFORT TO HELP THE CONTRACTOR PROVIDE EROSION AND SEDIMENTATION CONTROL. THE DETAILS SHOWN ON THE PLAN SHALL BE CONSIDERED A MINIMUM. ADDITONAL OR ALTERNATE DETAILS MAY BE FOUND IN THE ODNR MANUAL: "RAINWATER AND LAND DEVELOPMENT", LATEST EDITION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING NECESSARY AND ADEQUATE MEASURES FOR PROPER CONTROL FOR EROSION AND SEDIMENT RUNOFF FROM THE CONSTRUCTION AREAS, SUBJECT TO APPROVAL FROM THE ENGINEER.

5. EROSION AND SEDIMENT CONTROLS
   5.1. TEMPORARY STABILIZATON
      5.1.1. TOP SOIL STOCKPILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 15 DAYS WILL BE IMMEDIATELY GRADED AND CLEANED UP SO AS NOT TO APPEAR DISHEVELED OR AN EYESORE. STABILIZED WITH TEMPORARY SEED AND MULCH NO LATER THAN 7 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED, AGRICULTURAL LIMESTONE AND FERTILIZER SHALL BE APPLIED ACCORDING TO THE RATES STATED IN DCRSD CMS ITEM 317. ALL AREAS NOT UNDER IMMEDIATE CONSTRUCTION SHALL BE KEPT NEAT. WASHOUTS SHALL BE FIXED IMMEDIATELY AND IN A SAFE MANNER. ROADSIDE DITCHES AND DRAINAGE STRUCTURES SHALL BE OPERABLE IMMEDIATELY AFTER CONSTRUCTION. ALL SEDIMENT AND EROSION CONTROL REQUIREMENTS APPLY.
   5.2. PERMANENT STABILIZATION
      5.2.1. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX, AGRICULTURAL LIMESTONE AND FERTILIZER SHALL BE APPLIED ACCORDING TO THE RATES STATED IN DCRSD CMS ITEM 317.

      5.2.2. THE FOLLOWING SHALL APPLY IF WORK IS PERFORMED OUTSIDE OF NORMAL GROWING SEASON. BETWEEN OCTOBER 1 AND NOVEMBER 20 WHEN SOIL CONDITIONS PERMIT, PERMANENT SEEDING AREAS MAY BE PREPARED WITH LIME AND FERTILIZER BUT SHALL BE MULCHED AND ANCHORED WITHOUT SEEDING. AFTER NOVEMBER 20 AND BEFORE MARCH 15, BROADCAST RECOMMENDED SEED MIXTURE AT 150% OF RECOMMENDED RATES (CONSIDERED DORMANT SEEDING RATES)
   5.3. STRUCTURAL CONTROLS
      5.3.1. SILT FENCE SHALL BE CONSTRUCTED AS INDICATED ON THE STORM WATER POLLUTION PREVENTION PLAN. SILT FENCING SHALL BE OF A TYPE AS INDICATED IN THE SPECIFICATIONS AND SHALL BE INSTALLED AS SOON AS THE AREAS ARE CLEARED IN WHICH THE FENCE IS DESIGNATED TO BE INSTALLED. SILT FENCE SHALL BE INSTALLED AT THE TOP OF ALL SLOPES AND SHALL BE PLACED SUCH THAT NO WATER CAN FLOW AS A CONCENTRATED STREAM. IF AFTER THE INSTALLATION OF THE SILT FENCE, CONCENTRATED FLOWS OCCUR OR WATER BYPASSES THE FENCE, ADDITIONAL MEASURES SHALL BE INSTALLED OR THE EXISTING MEASURES SHALL BE MODIFIED AT THE DIRECTION OF THE ENGINEER.
   5.4. STORM WATER MANAGEMENT
      5.4.1. STORM WATER DRAINAGE WILL BE PROVIDED BY THE CURRENT DRAINAGE PATTERNS OF THE SITE. ADDITIONALLY, SILT FENCING ALONG THE PERIMETER OF THE SITE WILL DIRECT AND DIFFUSE RUNOFF WHILE CAPTURING ANY SEDIMENT CONTAINED IN THE RUNOFF.

6. OTHER CONTROLS
   6.1. WASTE MATERIALS
      6.1.1. ALL CONSTRUCTION WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF ONCE PER WEEK OR MORE OFTEN IF NECESSARY, AND THE TRASH WILL BE HAULED TO AN OEPA APPROVED C AND DD LANDFILL AREA. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ONSITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL NOTICES STATING THESE PRACTICES WILL BE POSTED IN THE OFFICE TRAILER AND THE CONTRACTOR(S) WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.
   6.2. HAZARDOUS MATERIALS
      6.2.1. ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE CONTRACTOR(S) WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

7. TIMING OF CONTROLS/MEASURES
   7.1. AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE EROSION AND SEDIMENT CONTROLS WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF THE SITE AND SHALL BE FUNCTIONAL THROUGHOUT ALL EARTH DISTURBING ACTIVITIES. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 21 DAYS WILL BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. ONLY AFTER THE ENTIRE SITE IS STABILIZED WILL THE EROSION AND SEDIMENT CONTROLS BE REMOVED.

8. CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS
   8.1. THE STORM WATER POLLUTION PREVENTION PLAN REFLECTS THE REQUIREMENTS FOR STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL, AS ESTABLISHED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY. TO ENSURE COMPLIANCE, THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RAINWATER AND LAND DEVELOPMENT, OHIO'S STANDARDS FOR STORMWATER MANAGEMENT - LAND DEVELOPMENT AND URBAN STREAM PROTECTION". LATEST EDITION PUBLISHED BY THE OHIO DEPARTMENT OF NATURAL RESOURCES. THERE ARE NO OTHER LOCAL, STATE OR FEDERAL REQUIREMENTS FOR SEDIMENT AND EROSION SITE PLANS (OR PERMITS), OR STORM WATER MANAGEMENT SITE PLANS (OR PERMITS).

9. MAINTENANCE/INSPECTION PROCEDURES
   9.1. THESE ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.
      9.1.1. PARKING AREAS MAY REQUIRE PERIODIC TOP DRESSING WITH NEW GRAVEL. SEEDED AREAS ADJACENT TO THE ROADS AND PARKING AREAS SHOULD BE CHECKED PERIODICALLY TO ENSURE THAT A VIGOROUS STAND OF VEGETATION IS MAINTAINED. ROADSIDE DITCHES AND OTHER DRAINAGE STRUCTURES SHOULD BE CHECKED REGULARLY TO ENSURE THAT THEY DO NOT BECOME CLOGGED WITH SILT OR OTHER DEBRIS.

      9.1.2. ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.5 INCHES OR GREATER.
      9.1.3. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
      9.1.4. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE. ANY SEDIMENT DEPOSITS REMAINING IN-PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
      9.1.5. SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT AND TEARS TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POST, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
      9.1.6 ALL TEMPORARY AND PERMANENT CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED IN A FUNCTIONAL CONDITION UNTIL ALL UPSLOPE AREAS THEY CONTROL ARE PERMANENTLY STABILIZED. THE SWP3 SHALL BE DESIGNED TO MINIMIZE MAINTENANCE REQUIREMENTS. THE APPLICANT SHALL PROVIDE A DESCRIPTION OF MAINTENANCE PROCEDURES NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF CONTROL PRACTICES.
      9.1.7 THE CONTRACTOR SHALL INSTALL SILT FENCE AND SUITABLE EROSION CONTROL AROUND SOIL STOCKPILES AND MAINTAIN ALL EROSION CONTROL UNTIL NO OTHER EXCESS SOILS ARE EXPECTED, THE AREA HAS BEEN SEEDED AND MULCHED, AND THE THREAT OF EROSION HAS PASSED.
      9.1.8 TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS AND HEALTHY GROWTH.
      9.1.9 A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION, CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNATING INDIVIDUALS TO BE RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION AND SEDIMENT CONTROLS. THESE INDIVIDUALS SHALL BE RESPONSIBLE FOR FILLING OUT INSPECTION AND MAINTENANCE REPORTS.
      9.1.10 PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE DUTIES SHALL BE INSTRUCTED AS TO THE ACTIONS NECESSARY TO MAINTAIN PROPER EROSION AND SEDIMENT CONTROLS ON THE SITE.

PRIME AE

DELAWARE COUNTY REGIONAL SEWER DISTRICT

DESIGNED: WDB | DRAWN: MRB | CHECKED: JS | REVIEWED: KH | DATE: JULY 2020

STORM WATER DETAILS
EROSION CONTROL NOTES

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

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STORMWATER POLLUTION PREVENTION (SWPPP)

10. NON–STORM WATER DISCHARGES
    - 10.1. IT IS EXPECTED THAT THE FOLLOWING NON–STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:
      - 10.1.1. PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED)
      - 10.1.2. UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).
    - 10.2. ALL NON–STORM WATER DISCHARGES WILL BE DIRECTED TO PROTECTED INLETS OR SEDIMENT CONTROL DEVICES PRIOR TO DISCHARGE

11. INVENTORY FOR POLLUTION PREVENTION PLAN
    - 11.1. THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:
      - 11.1.1. CONCRETE
      - 11.1.2. PETROLEUM BASED PRODUCTS

12. SPILL PREVENTION
    - 12.1. MATERIAL MANAGEMENT PRACTICES
      - 12.1.1. THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.
    - 12.2. GOOD HOUSEKEEPING
      - 12.2.1. THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.
        - 12.2.1.1. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
        - 12.2.1.2. ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
        - 12.2.1.3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
        - 12.2.1.4. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
        - 12.2.1.5. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
        - 12.2.1.6. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
        - 12.2.1.7. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.
    - 12.3. HAZARDOUS PRODUCTS
      - 12.3.1. THESE PRACTICES ARE USED TO REDUCE THE RISK ASSOCIATED WITH HAZARDOUS MATERIALS.
        - 12.3.1.1. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE
        - 12.3.1.2. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
        - 12.3.1.3. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.
    - 12.4. PRODUCT SPECIFIC PRACTICES
      - 12.4.1. THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:
        - 12.4.1.1. PETROLEUM PRODUCTS
          - 12.4.1.1.1. ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

13. SPILL CONTROL PRACTICES
    - 13.1. IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
      - 13.1.1. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
      - 13.1.2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
      - 13.1.3. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
      - 13.1.4. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
      - 13.1.5. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
      - 13.1.6. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
      - 13.1.7. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY–TO–DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE AT LEAST THREE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF THE RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.

14. PROHIBITED CONSTRUCTION ACTIVITIES
    - 14.1. THE CONTRACTOR SHALL NOT USE CONSTRUCTION PROCEEDINGS, ACTIVITIES OR OPERATIONS THAT MAY UNNECESSARILY IMPACT THE NATURAL ENVIRONMENT OR THE PUBLIC HEALTH AND SAFETY. PROHIBITED CONSTRUCTION PROCEDURES, ACTIVITIES OR OPERATIONS INCLUDE BUT ARE NOT LIMITED TO:
      - 14.1.1. DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOOD PLAINS EVEN WITH THE PERMISSION OF THE PROPERTY OWNER.
      - 14.1.2. INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR OUTSIDE THE EASEMENT LIMITS.
      - 14.1.3. PUMPING OF SEDIMENT–LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS INTO ANY SURFACE WATERS, ANY STREAM CORRIDORS, ANY WETLANDS, AND STORM DRAINS OR COMBINED SEWERS.
      - 14.1.4. DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE AND OTHER HARMFUL WASTE INTO OR ALONGSIDE OF RIVERS, STREAMS, IMPOUNDMENTS OR INTO NATURAL OR MAN–MADE CHANNELS LEADING THERETO.
      - 14.1.5. PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW LINE OF THE STREAM.
      - 14.1.6. DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA.
      - 14.1.7. DISPOSAL OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR AT UNSPECIFIED LOCATIONS.
      - 14.1.8. OPEN BURNING OF PROJECT DEBRIS WITHOUT A PERMIT.
      - 14.1.9. STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED BY THE ENGINEER FOR SAID PROJECT.
      - 14.1.10. USING ANY SUBSTANCE OTHER THAN WATER TO CONTROL DUST.

15. SILT FENCE NOTES
    - 15.1. SILT FENCING SHALL UTILIZE STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS INTENDED TO BE USED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED.
      - 15.1.1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
      - 15.1.2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
      - 15.1.3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
      - 15.1.4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
      - 15.1.5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 WORKING DAYS FROM THE INSTALLATION OF THE SILT FENCE.
      - 15.1.6. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6 IN. DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
      - 15.1.7. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8 IN. OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6 IN. DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
      - 15.1.8. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
      - 15.1.9. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 IN. ABOVE THE ORIGINAL GROUND SURFACE AND SHALL BE A MAXIMUM OF 36" HIGH (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).
      - 15.1.10. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM OF A 6" OVERLAP, AND SECURELY SEALED.
      - 15.1.11. POSTS SHALL BE SPACED AT A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 16"). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6'.
      - 15.1.12. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1" LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2" AND SHALL NOT EXTEND MORE THAN 36" ABOVE THE ORIGINAL GROUND SURFACE.
      - 15.1.13. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8" OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36" ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
      - 15.1.14. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEM 15.1.10 APPLYING.
      - 15.1.15. MAINTENANCE – SILT FENCES SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED AS APPROPRIATE:
        - 15.1.15.1. THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED.
        - 15.1.15.2. ACCUMULATED SEDIMENT SHALL BE REMOVED.
        - 15.1.15.3. OTHER PRACTICES SHALL BE INSTALLED.
      - 15.1.16. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
    - 15.2. CRITERIA FOR SILT FENCE MATERIALS
      - 15.2.1. FENCE POSTS – THE LENGTH SHALL BE A MINIMUM OF 32 IN. LONG. WOOD POSTS WILL BE 2–BY–2IN. HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
      - 15.2.2. SILT FENCE SHALL BE ODOT ITEM 712.09 TYPE C GEOTEXTILE FABRIC OR AS DESCRIBED BY THE FOLLOWING:
        - 15.2.2.1. FABRIC PROPERTIES:
          - 15.2.2.1.1. MINIMUM TENSILE STRENGTH ..... 120 LBS
          - 15.2.2.1.2. MAXIMUM ELONGATION AT 60 LBS 150%
          - 15.2.2.1.3. MINIMUM PUNCTURE STRENGTH ..... 50 LBS
          - 15.2.2.1.4. MINIMUM TEAR STRENGTH ..... 40 LBS
          - 15.2.2.1.5. APPARENT OPENING SIZE ..... <0.84mm
          - 15.2.2.1.6. MINIMUM PERMITTIVITY 1x10–2SEC–1
          - 15.2.2.1.7. ULTRAVIOLET EXPOSURE STRENGTH RETENTION..... 70%

16. INLET PROTECTION
    - 16.1. INLET PROTECTION SHALL CONSIST OF CATCH BASIN FILTERS INSTALLED OVER STORM INLET GRATES.

PRIME AE

DELAWARE COUNTY, OHIO

DELAWARE COUNTY REGIONAL SEWER DISTRICT

DESIGNED: WDB | DRAWN: MRB | CHECKED: JS | REVIEWED: KH | DATE: JULY 2020

STORM WATER DETAILS
EROSION CONTROL NOTES

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

G-4

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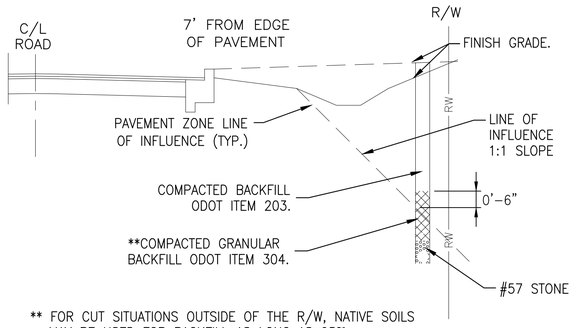
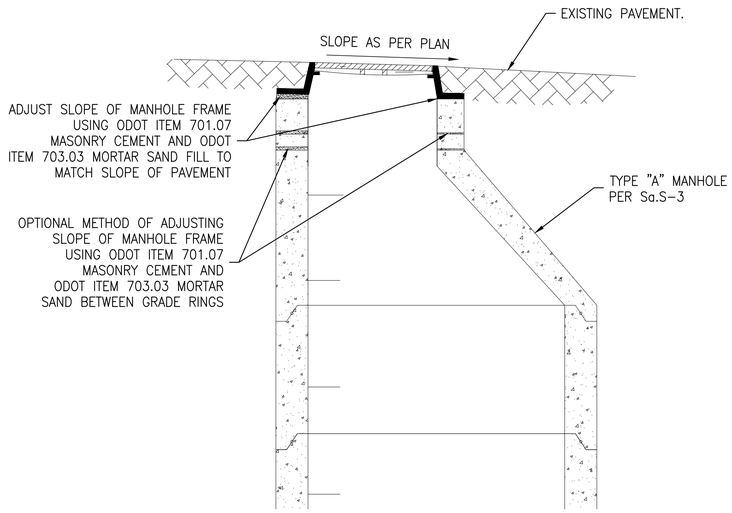


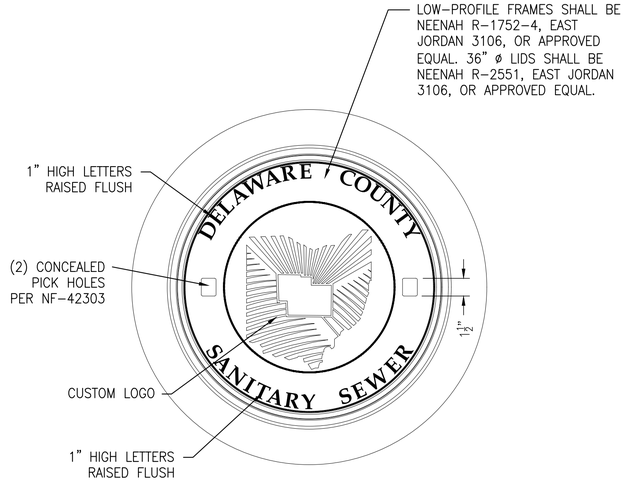
1 SANITARY SEWER OR FORCE MAIN PARALLEL TO ROAD INSIDE OF R/W

N.T.S.



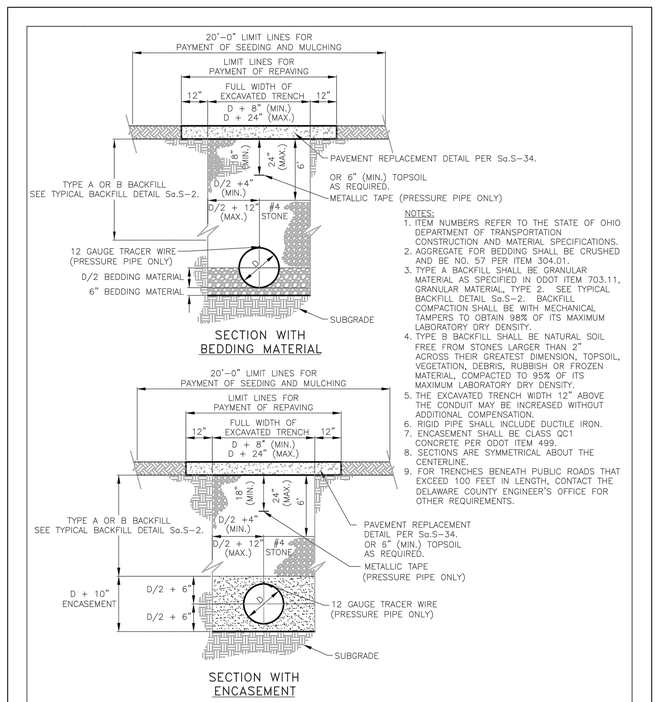
2 MANHOLE FRAME GRADE ADJUSTMENTS FOR MANHOLES WITHIN PAVEMENTS

N.T.S.



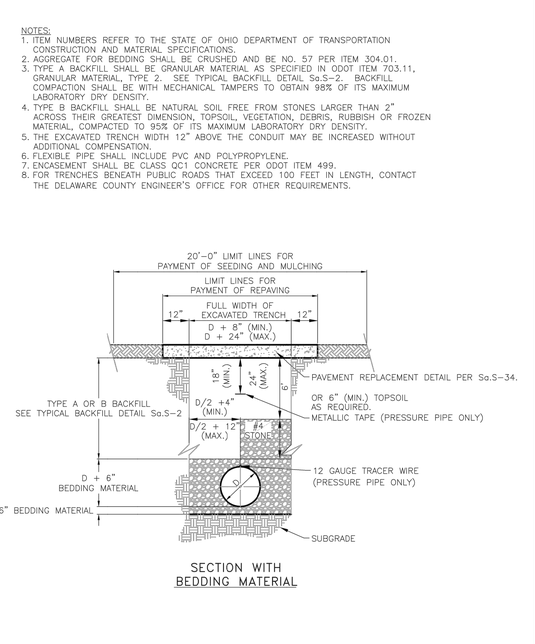
3 36" DIA. MANHOLE COVER FOR MANHOLES WITHIN PAVEMENTS

N.T.S.

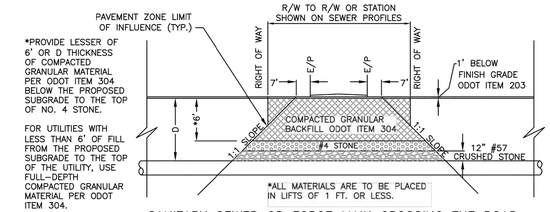


NOTES:
1. ITEM NUMBERS REFER TO THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS.
2. AGGREGATE FOR BEDDING SHALL BE CRUSHED AND BE NO. 57 PER ITEM 304.01.
3. TYPE A BACKFILL SHALL BE GRANULAR MATERIAL AS SPECIFIED IN ODOT ITEM 703.11, GRANULAR MATERIAL, TYPE 2. SEE TYPICAL BACKFILL DETAIL Sa.S-2. BACKFILL COMPACTION SHALL BE WITH MECHANICAL TAMPERS TO OBTAIN 98% OF ITS MAXIMUM LABORATORY DRY DENSITY.
4. TYPE B BACKFILL SHALL BE NATURAL SOIL FREE FROM STONES LARGER THAN 2" ACROSS THEIR GREATEST DIMENSION, TOPSOIL, VEGETATION, DEBRIS, RUBBISH OR FROZEN MATERIAL, COMPACTED TO 95% OF ITS MAXIMUM LABORATORY DRY DENSITY.
5. THE EXCAVATED TRENCH WIDTH 12" ABOVE THE CONDUIT MAY BE INCREASED WITHOUT ADDITIONAL COMPENSATION.
6. RIGID PIPE SHALL INCLUDE DUCTILE IRON.
7. ENCASEMENT SHALL BE CLASS QC1 CONCRETE PER ODOT ITEM 499.
8. SECTIONS ARE SYMMETRICAL ABOUT THE CENTERLINE.
9. FOR TRENCHES BENEATH PUBLIC ROADS THAT EXCEED 100 FEET IN LENGTH, CONTACT THE DELAWARE COUNTY ENGINEER'S OFFICE FOR OTHER REQUIREMENTS.

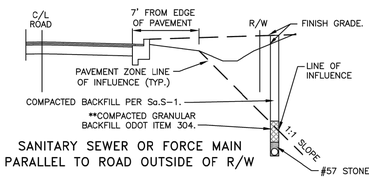
	TYPICAL TRENCH FOR RIGID PIPE	APPROVED: / DATE: / REVISION:	STANDARD CONSTRUCTION DRAWING
		DRAWING NO. Sa.S-1	SHEET NO. 1 of 2



	TYPICAL TRENCH FOR FLEXIBLE PIPE	APPROVED: / DATE: / REVISION:	STANDARD CONSTRUCTION DRAWING
		DRAWING NO. Sa.S-1	SHEET NO. 2 of 2



SANITARY SEWER OR FORCE MAIN CROSSING THE ROAD



SANITARY SEWER OR FORCE MAIN
PARALLEL TO ROAD OUTSIDE OF R/W

** FOR CUT SITUATIONS OUTSIDE OF THE R/W, NATIVE SOILS MAY BE USED FOR BACKFILL AS LONG AS 95% COMPACTION IS MET. TESTING IS REQUIRED FOR THE LAST 5 FEET OF FILL BEING PLACED AND MAY BE REQUIRED FOR ALL TRENCH BACKFILL AT THE DISCRETION OF THE SANITARY ENGINEER.

	TYPICAL BACKFILL (PUBLIC OR PRIVATE ROADS)	APPROVED: / DATE: / REVISION:	STANDARD CONSTRUCTION DRAWING
		DRAWING NO. Sa.S-2	SHEET NO. 1 of 2

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB | DRAWN: MRB | CHECKED: JS | REVIEWED: KH | DATE: JULY 2020

MISCELLANEOUS DETAILS

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

G-5

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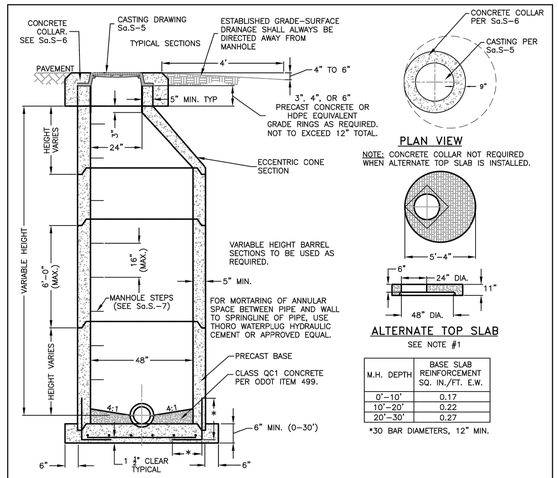
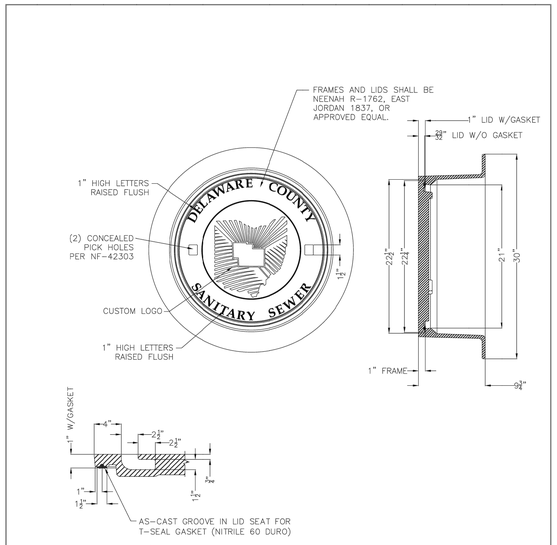


M.H. DEPTH	BASE SLAB REINFORCEMENT SQ. IN./FT. E.W.
0'-10'	0.17
10'-20'	0.22
20'-30'	0.27

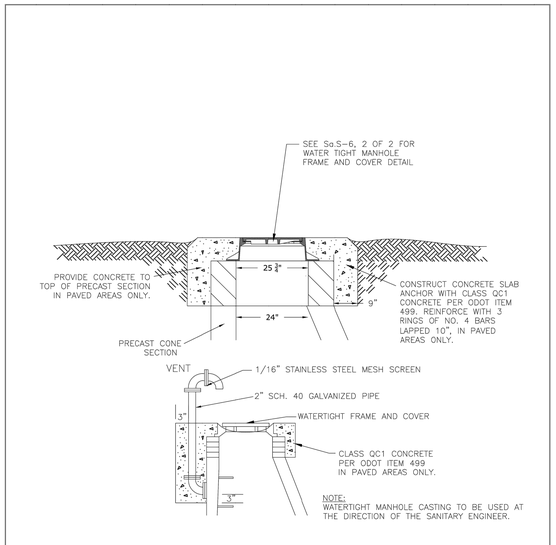
*30 BAR DIAMETERS, 12" MIN.

NOTES:
1. WHEN SHOWN IN TRAFFIC AREAS, THE ALTERNATE TOP SLAB SHALL BE DESIGNED FOR TRAFFIC LOADING.
2. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO ASTM C478 UNLESS OTHERWISE SHOWN.
3. ALL CORE DRILLED OPENINGS SHALL BE DONE ONLY AS APPROVED AND DIRECTED BY THE SANITARY ENGINEER.
4. PRECAST CONCRETE OR HDPE EQUIVALENT GRADE RINGS SEALED WITH CONSEAL SHALL BE USED IF NEEDED BETWEEN THE SLAB OR CONE TOP AND THE ACCESS FRAME CASTING AND COVER. NO MANHOLE BRICK SHALL BE PERMITTED FOR USE.
5. SEWER PIPE SHALL BE SECURED THROUGH THE MANHOLE WALL BY KOR-N-SEAL BOOT, PRESS WEDGE 2 GASKET, A-LOK, OR APPROVED EQUIVALENT MEETING ASTM C923.
6. MANHOLE SECTIONS SHALL BE ASSEMBLED WITH CONSEAL, OR APPROVED EQUAL, AT ALL SECTION JOINTS IN ADDITION TO THE SEALED O-RING JOINT.
7. SANITARY ENGINEER MAY REQUEST A TYPE B OR TYPE C MANHOLE TO PROVIDE PROPER ACCESS.
8. IF WELDED WIRE FABRIC IS USED IN LIEU OF METAL BAR FOR REINFORCEMENT, AREA OF STEEL MAY BE REDUCE BY 1/3.
9. FOR MANHOLE DEPTHS GREATER THAN 30 FEET THE CONTRACTOR'S ENGINEER SHALL PROVIDE CALCULATIONS FOR APPROVAL BY THE SANITARY ENGINEER FOR MANHOLE BASE THICKNESS BASED ON EXISTING SOIL CONDITIONS, MANHOLE DEPTH, AND SOIL PRESSURES.

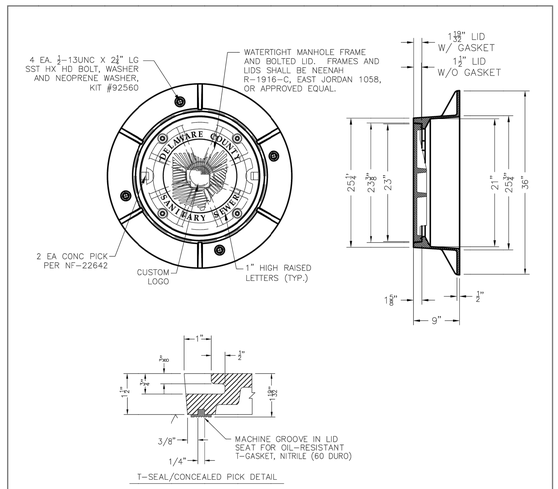
PRECAST CONCRETE MANHOLE, TYPE A (24" PIPE AND SMALLER)	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S-3	SHEET NO. 1 of 3



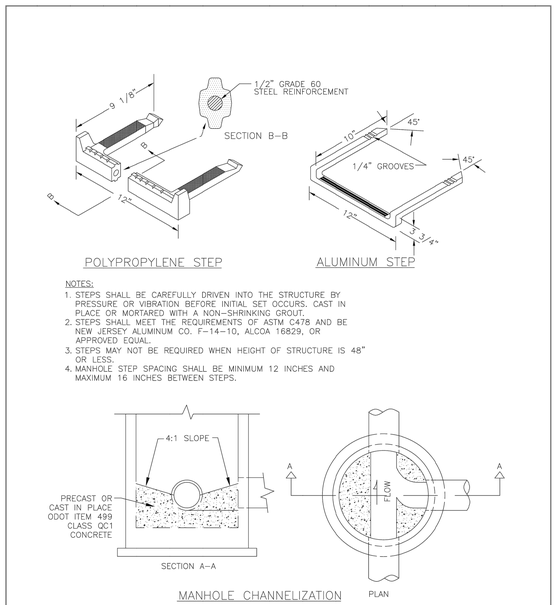
MANHOLE FRAME AND COVER CASTING	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S-5	SHEET NO. 1 of 1



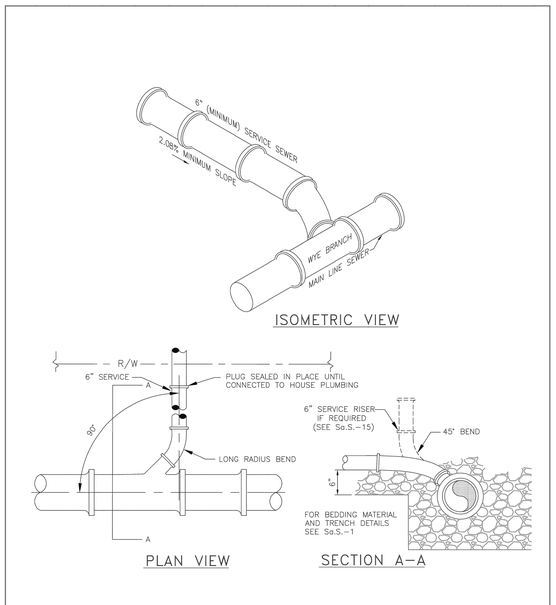
TYPICAL WATERTIGHT MANHOLE CASTING	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S-6	SHEET NO. 1 of 2



TYPICAL WATERTIGHT MANHOLE CASTING	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S-6	SHEET NO. 2 of 2



MANHOLE STEPS AND CHANNEL	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S-7	SHEET NO. 1 of 1



6" SANITARY SEWER SERVICE (MAIN LINE TO R/W)	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S-11	SHEET NO. 1 of 1

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DATE: JULY 2020
CHECKED: JS
REVIEWED: KH
DESIGNED: WDB
DRAWN: MRB

MISCELLANEOUS DETAILS

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

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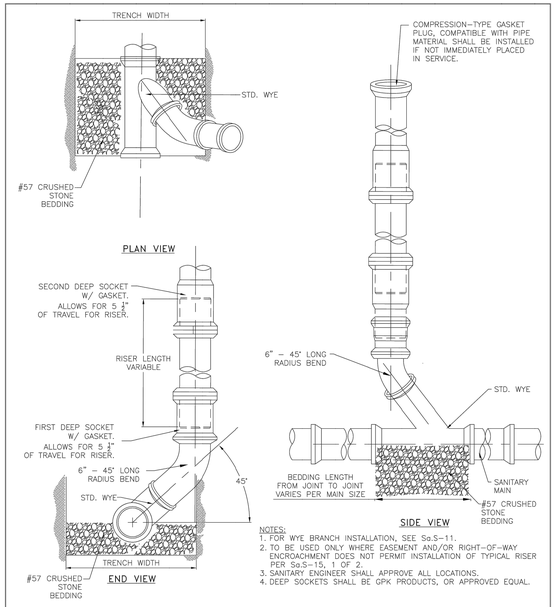
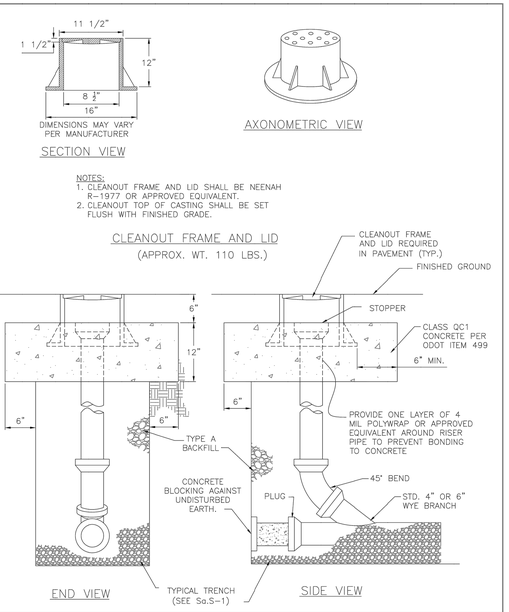


NOTES:
1. FOR WYE BRANCH INSTALLATION, SEE Sa.S–11.
2. TO BE USED ONLY WHERE EASEMENT AND/OR RIGHT–OF–WAY ENCROACHMENT DOES NOT PERMIT INSTALLATION OF TYPICAL RISER PER Sa.S–15, 1 OF 2.
3. SANITARY ENGINEER SHALL APPROVE ALL LOCATIONS.
4. DEEP SOCKETS SHALL BE GPK PRODUCTS, OR APPROVED EQUAL.

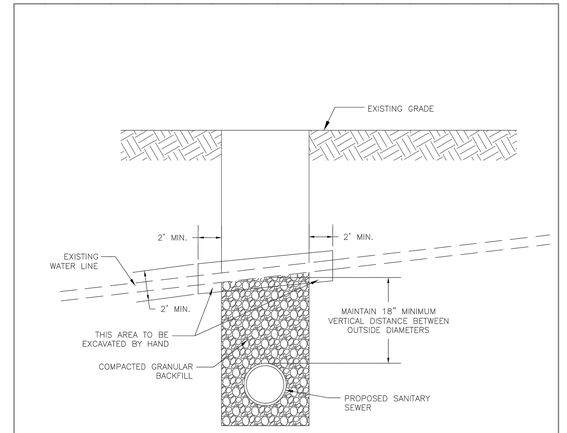
DEEP SOCKET RISER	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S–15	SHEET NO. 2 of 2



NOTES:
1. CLEANOUT FRAME AND LID SHALL BE NEENAH R–1977 OR APPROVED EQUIVALENT.
2. CLEANOUT TOP OF CASTING SHALL BE SET FLUSH WITH FINISHED GRADE.

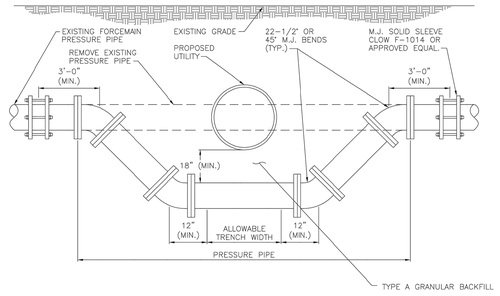
CLEANOUT FRAME AND LID
(APPROX. WT. 110 LBS.)

TYPICAL CLEANOUT	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S–16	SHEET NO. 1 of 1



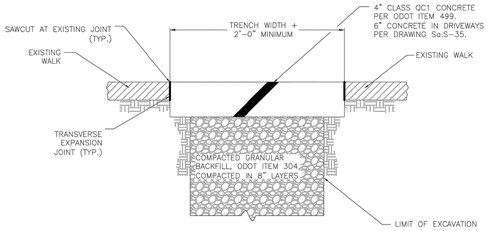
NOTE:
1. CONTRACTOR SHALL PROTECT EXISTING UTILITIES DURING EXCAVATION.
2. IF 18" VERTICAL CLEARANCE IS NOT MET, THEN CONCRETE ENCASEMENT IS REQUIRED ON THE SEWER PER Sa.S–17.
3. CONTRACTOR SHALL HAND DIG AROUND WATERLINE.

WATERLINE CROSSING	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S–20	SHEET NO. 1 of 1

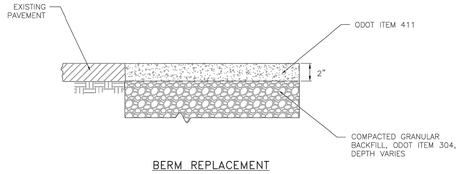


NOTES:
1. TIME AND DURATION OF SHUTDOWN SHALL BE DETERMINED OR APPROVED BY THE SANITARY ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY ANY CUSTOMERS AFFECTED BY THE PROPOSED WORK AT LEAST 48 HOURS IN ADVANCE OF SHUTDOWN.
3. ALL BENDS SHALL BE SECURED BY RESTRAINING GLANDS (MEGALUG), RODDING, OR OTHER METHODS AS APPROVED BY THE SANITARY ENGINEER TO RESTORE MAIN SERVICE AS SOON AS POSSIBLE.
4. THE RELOCATED LINES SHALL BE LAID TO THE NEW LINE AND GRADE AND TESTED AS REQUIRED PRIOR TO THE SHUTDOWN OF EXISTING MAIN AND CONNECTION OF THE RELOCATED LINES TO THE EXISTING MAIN.
5. CONCRETE BLOCKING FOR BENDS SHALL BE PER Sa.S–23 AND Sa.S–24.

TYPICAL FORCEMAIN PRESSURE PIPE LOWERING	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S–26	SHEET NO. 1 of 1

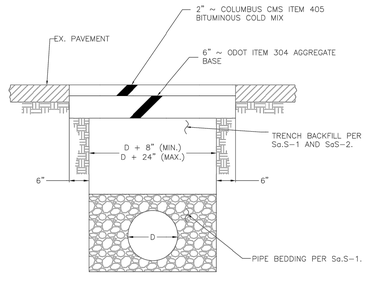


CONCRETE SIDEWALK



BERM REPLACEMENT

CONCRETE SIDEWALK AND BERM REPLACEMENT	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S–32	SHEET NO. 1 of 1



NOTES:
1. UNLESS OTHERWISE APPROVED BY THE SANITARY ENGINEER, TEMPORARY PAVEMENT IS TO BE PLACED ON THE SAME DAY THE EXISTING PAVEMENT IS REMOVED.
2. USE OF TEMPORARY PAVEMENT SHALL BE CALLED OUT ON THE CONSTRUCTION DRAWINGS.

TEMPORARY PAVEMENT REPLACEMENT	APPROVED:	STANDARD CONSTRUCTION DRAWING
	DATE:	
	REVISION:	
	DRAWING NO. Sa.S–33	SHEET NO. 1 of 1

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DATE: JULY 2020
CHECKED: JS
REVIEWED: KH
DESIGNED: WDB
DRAWN: MRB

MISCELLANEOUS DETAILS

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

G-7

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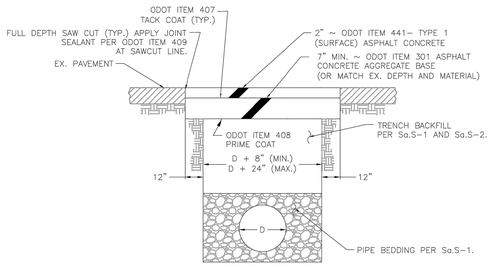
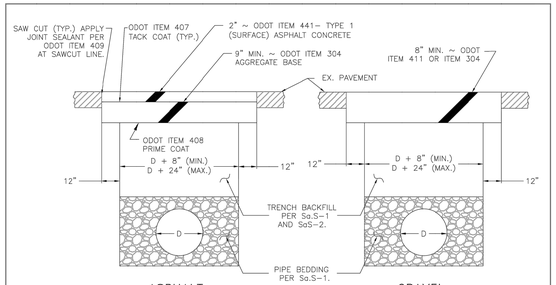
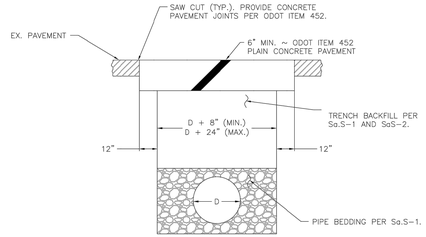


COUNTY OR TOWNSHIP ROADS

PERMANENT PAVEMENT REPLACEMENT	APPROVED:	DATE:	STANDARD CONSTRUCTION DRAWING
	REVISION:	DRAWING NO. Sa.S~34	SHEET NO. 1 of 1



ASPHALT GRAVEL



CONCRETE

DRIVEWAY PAVEMENT REPLACEMENT	APPROVED:	DATE:	STANDARD CONSTRUCTION DRAWING
	REVISION:	DRAWING NO. Sa.S~35	SHEET NO. 1 of 1

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DATE: JULY 2020
CHECKED: JS
REVIEWED: KH
DESIGNED: WDB
DRAWN: MRB

MISCELLANEOUS DETAILS

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

G-8

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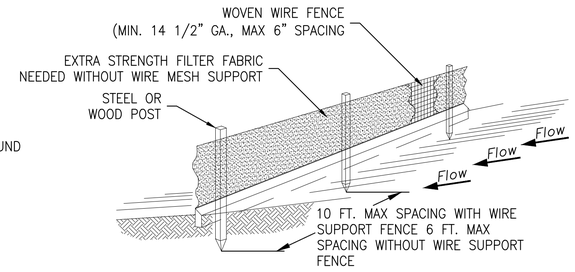
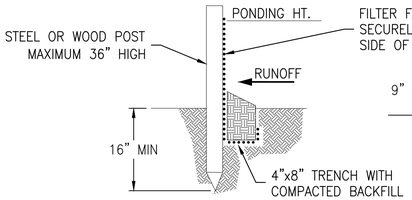
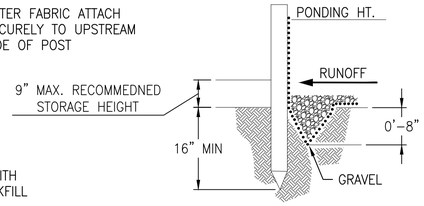
- JOINT SECTION
FILTER FABRIC FENCE





1 STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL



2 ALTERNATE DETAIL
TRENCH WITH GRAVEL

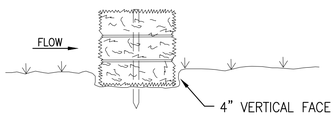
FILTER FABRIC FENCE PROTECTION

SCALE : NONE

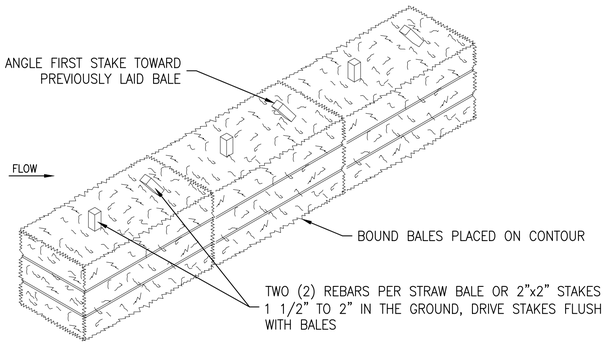
FOR FILTER FABRIC CONSTRUCTION, REFER TO SECTION NO. 15 OF THE SEDIMENT AND EROSION CONTROL NOTES

INSTALLATION NOTES

1.) BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2.) EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3.) BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4.) INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5.) BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

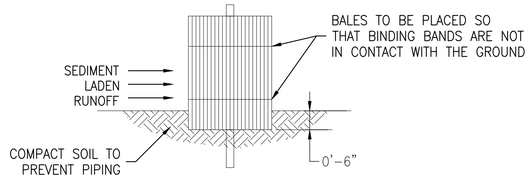


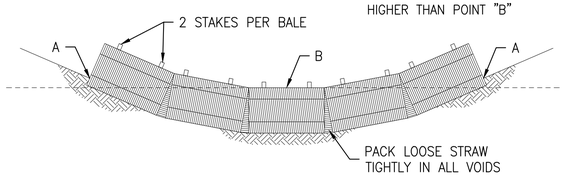
4 BEDDING DETAIL
N.T.S.



3 ANCHORING DETAIL
N.T.S.

STRAW BALE FILTER
NOT TO SCALE



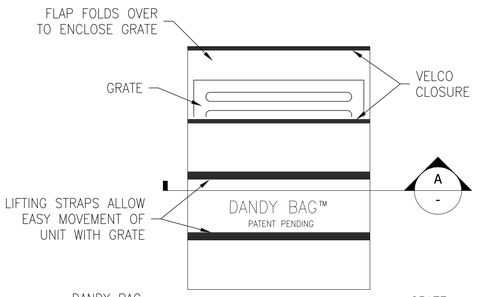


STRAW BALE BARRIERS

1.) THE CONTRACTOR SHALL PROVIDE BALES OF STRAW AS A TEMPORARY PRACTICE TO MINIMIZE EROSION AND SEDIMENT RUNOFF. BALES SHALL BE PROPERLY PLACED TO EFFECTIVELY RETAIN SEDIMENT PRIOR TO EACH PHASE OF WORK (E.G., CLEARING AND GRUBBING, EXCAVATION, EMBANKMENT, AND GRADING) IN EACH INDEPENDENT RUNOFF AREA (E.G., AFTER CLEARING AND GRUBBING IN AN AREA BETWEEN A RIDGE AND DRAIN, BALES SHALL BE PLACED AS WORK PROGRESSES, BALES SHALL BE REMOVED/REPLACED/RELOCATED AS NEEDED FOR WORK TO PROGRESS IN THE DRAINAGE AREA). FINAL REMOVAL OF STRAW BALE BARRIERS SHALL BE UPON APPROVAL BY THE ENGINEER. ROWS OF BALES OF STRAW SHALL BE PROVIDED AS FOLLOWS:
   a. ALONG THE DOWNHILL PERIMETER EDGE OF ALL AREAS DISTURBED.
   b. ALONG THE TOP OF THE SLOPE OR TOP BANK OF DRAINAGE DITCHES, CHANNELS, SWALES, ETC. THAT TRAVERSE DISTURBED AREAS.
   c. ALONG THE TOE OF ALL CUT SLOPES AND FILL SLOPES OF THE CONSTRUCTION AREAS.
   d. PERPENDICULAR TO THE FLOW IN THE BOTTOM OF NEW AND EXISTING DRAINAGE DITCHES, CHANNELS, SWALES, ETC. THAT TRAVERSE DISTURBED AREAS OR CARRY RUNOFF FROM DISTURBED AREAS.
   e. AT THE ENTRANCE TO CULVERTS THAT RECEIVE RUNOFF FROM DISTURBED AREAS.
2.) BALES SHALL BE PLACED IN A SINGLE ROW LENGTHWISE, ORIENTED PERPENDICULAR TO THE CONTOUR WITH THE ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. VOIDS BETWEEN BALES SHALL BE TIGHTLY PACKED WITH LOOSE STRAW. BALE BINDING BANDS SHALL NOT BE IN CONTACT WITH THE GROUND.
3.) STRAW BALE BARRIERS USED IN DRAINAGE WAYS SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALES TO ASSURE THAT SEDIMENT-LADEN RUNOFF WILL EITHER FLOW THROUGH OR OVER THE BARRIER, BUT NOT AROUND IT.
4.) HAY BALES MAY BE USED IN PLACE OF STRAW BALES.
5.) STRAW BALE BARRIERS ARE ONLY APPROVED IN INTERMITTENT FLOW SWALES AND ONLY WHEN USED IN CONJUNCTION WITH SILT FENCE (BACKING UP SILT FENCE ON THE UPSTREAM SIDE OF FLOW).

MAINTENANCE OF STRAW BALE BARRIER

1.) STRAW BALES SHALL BE INSPECTED.
2.) NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
3.) SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4.) ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE STRAW BALE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.



A SECTION VIEW
N.T.S.

INSTALLATION: STAND GRATE ON END. PLACE DANDY BAG TM OVER GRATE. ROLL GRATE OVER SO THAT OPEN END IS UP. PULL UP SLACK. TUCK FLAP IN. PRESS VELCRO STRIPS TOGETHER. BE SURE END OF GRATE IS COMPLETELY COVERED BY FLAP OR DANDY BAG TM WILL NOT WORK PROPERLY. HOLDING HANDLES, CAREFULLY PLACE DANDY BAG TM WITH GRATE INSERTED INTO CATCH BASIN FRAME.

MAINTENANCE: WITH A STIFF BRISTLE BROOM OR SQUARE POINT SHOVEL REMOVE SILT & OTHER DEBRIS OFF SURFACE AFTER EACH EVENT. REMOVE FINE MATERIAL FROM INSIDE ENVELOPE AS NEEDED.

5 CATCH BASIN FILTER
N.T.S.

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH
DATE: JULY 2020

EROSION & SEDIMENT CONTROL DETAILS

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

G-9

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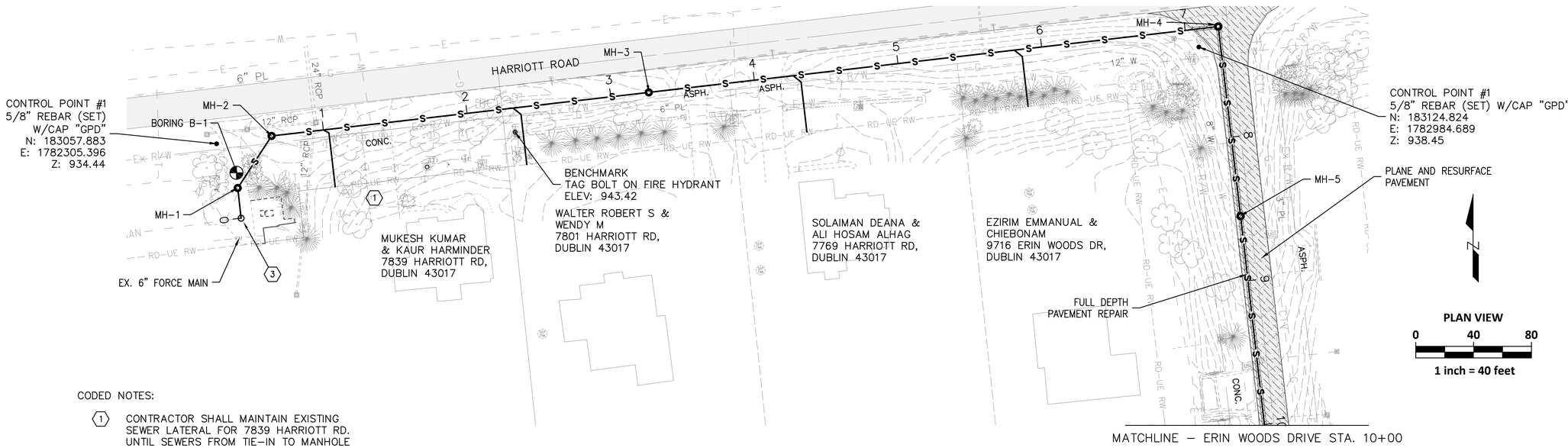
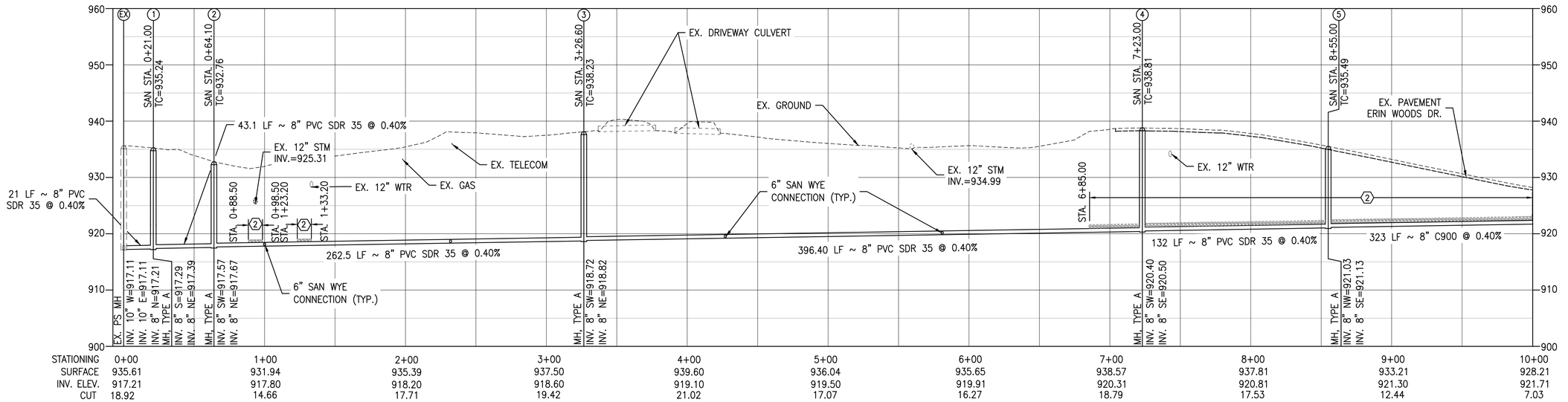


CODED NOTES:

1. CONTRACTOR SHALL MAINTAIN EXISTING SEWER LATERAL FOR 7839 HARRIOTT RD. UNTIL SEWERS FROM TIE-IN TO MANHOLE #3 ARE SUBSTANTIALLY COMPLETE.
2. TYPE A BACKFILL
3. CONTRACTOR TO FIELD VERIFY EXISTING INVERT ELEVATIONS AT PUMP STATION TIE-IN.

GENERAL NOTES:

1. REFERENCE DETAIL (1) SHEET G-5 FOR BACKFILL REQUIREMENTS FOR SANITARY SEWER PARALLEL TO ROAD INSIDE THE ROW.



STATIONING	0+00	1+00	2+00	3+00	4+00	5+00	6+00	7+00	8+00	9+00	10+00
SURFACE	935.61	931.94	935.39	937.50	939.60	936.04	935.65	938.57	937.81	933.21	928.21
INV. ELEV.	917.21	917.80	918.20	918.60	919.10	919.50	919.91	920.31	920.81	921.30	921.71
CUT	18.92	14.66	17.71	19.42	21.02	17.07	16.27	18.79	17.53	12.44	7.03

HORIZONTAL
0 40 80
1 inch = 40 feet

VERTICAL
0 10 20
1 inch = 10 feet

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH
DATE: JULY 2020

PLAN & PROFILE
ERIN WOODS STA. 0+00
TO STA. 10+00

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

C-1

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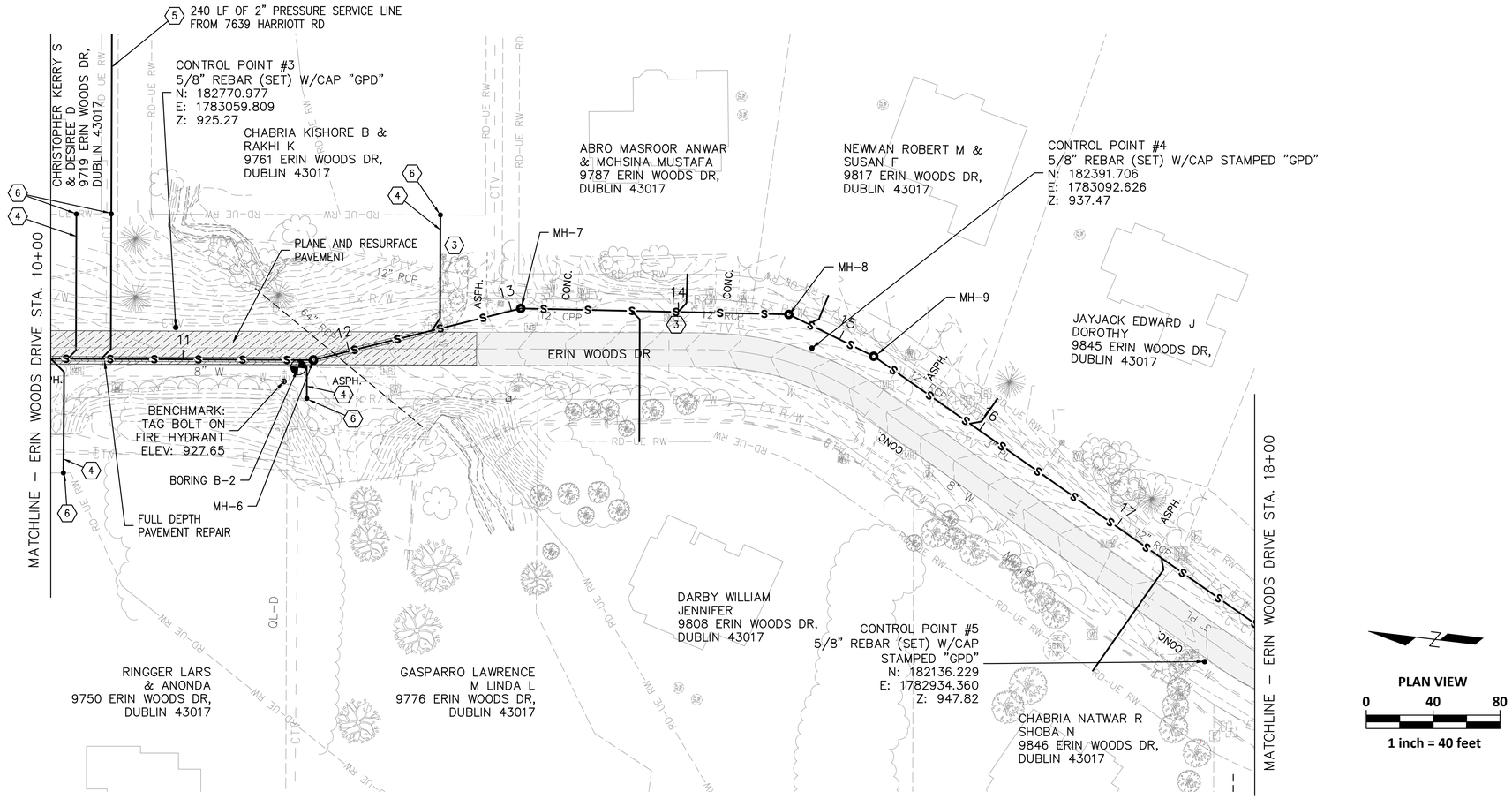


CODED NOTES:

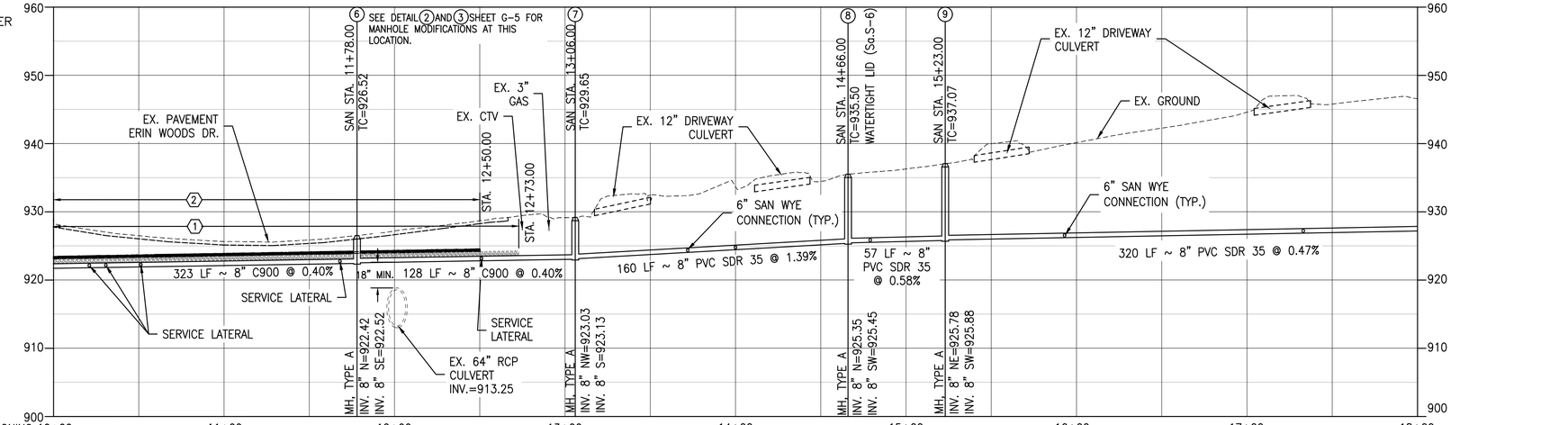
1. TYPE A BACKFILL
2. 6-INCH THICK CONTROLLED DENSITY FILL PER ODOT ITEM 613. CDF TO BE PLACED OVER GRANULAR BACKFILL.
3. IF EXISTING WATER METER PIT OR SERVICE LINE REQUIRES RELOCATION, WORK WILL BE PERFORMED BY DELCO WATER AT THE EXPENSE OF THE PROJECT.
4. PRESSURE SERVICE LINE INSTALLED PER STD. DETAIL Sa.3-31
5. 2" HDPE SDR 9 PRESSURE SERVICE LINE INSTALLED PER STD. DETAIL Sa.3-31
6. CURB STOP AND BOX INSTALLED PER STD. DETAIL Sa.S-31

GENERAL NOTES:

1. REFERENCE DETAIL (1) SHEET G-5 FOR BACKFILL REQUIREMENTS FOR SANITARY SEWER PARALLEL TO ROAD INSIDE THE ROW.

VERTICAL
0 10 20
1 inch = 10 feet

HORIZONTAL
0 40 80
1 inch = 40 feet



PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB | DRAWN: MRB | CHECKED: JS | REVIEWED: KH | DATE: JULY 2020

PLAN & PROFILE
ERIN WOODS STA. 10+00 TO STA. 18+00

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

C-2

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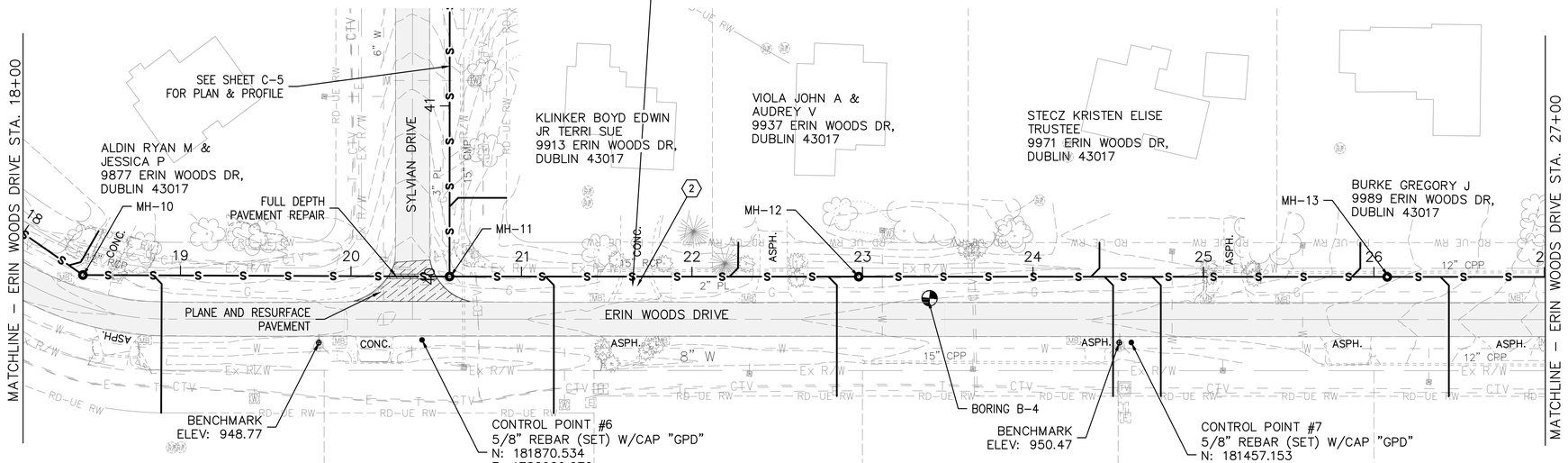


CODED NOTES:

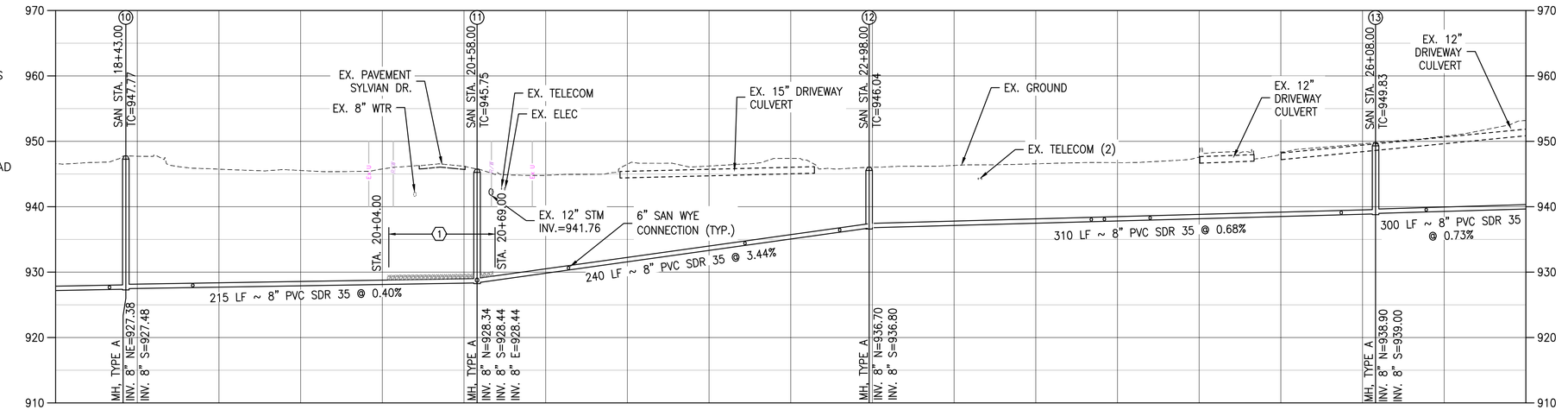
1. TYPE A BACKFILL
2. BRICK PAVER APRON TO BE REMOVED, PROTECTED & REINSTALLED TO PAYABLE LIMITS PER Sa.S-35

GENERAL NOTES:

1. REFERENCE DETAIL (1) SHEET G-5 FOR BACKFILL REQUIREMENTS FOR SANITARY SEWER PARALLEL TO ROAD INSIDE THE ROW.

VERTICAL
0 10 20
1 inch = 10 feet

HORIZONTAL
0 40 80
1 inch = 40 feet



STATIONING	18+00	19+00	20+00	21+00	22+00	23+00	24+00	25+00	26+00	27+00
SURFACE	946.61	945.75	945.73	944.80	946.20	946.09	946.55	947.52	949.59	953.17
INV. ELEV.	927.18	927.70	928.11	929.81	933.31	936.10	937.48	938.17	938.85	939.66
CUT	19.96	18.58	18.15	14.52	13.42	10.52	9.60	9.88	11.27	14.04

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH
DATE: JULY 2020

PLAN & PROFILE
ERIN WOODS STA. 18+00 TO STA. 27+00

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

C-3

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MATCHLINE – ERIN WOODS DRIVE STA. 27+00

WITTEN JOHN P MARGARET L GRAMANN COTRUSTEES
10266 SYLVIAN DR, DUBLIN 43017

SIERRA GLADYS M
10288 SYLVIAN DR, DUBLIN 43017

BURKHOLDER TONYA Y
10291 SYLVIAN DR, DUBLIN 43017

KILOFLISKI PETER C
10275 SYLVIAN DR, DUBLIN 43017

CONTROL POINT #8
5/8" REBAR (SET) W/CAP "GPD"
N: 181001.965
E: 1783016.888
Z: 956.94

ADULPH LAURA AULINO
10222 SYLVIAN DR, DUBLIN 43017

LIGHTELL BRIGETTE R & TODD B
10174 SYLVIAN DR, DUBLIN 43017

ERIN WOODS DR

SYLVIAN DRIVE

FULL DEPTH PAVEMENT REPAIR

SEE SHEET C-7 FOR PLAN & PROFILE

MH-14

MH-15

MH-16

BORING B-6

PLANE AND RESURFACE PAVEMENT

BENCHMARK
BOLT ON FIRE HYDRANT
ELEV: 959.32

CONTROL POINT #9
PK NAIL (SET)
N: 180874.483
E: 1782604.886
Z: 958.80

LINDER ERIC & SARAH
10251 SYLVIAN DR, DUBLIN 43017

SHELTER CHRISTOPHER C
10225 SYLVIAN DR, DUBLIN 43017

MELTON BRYAN & JEANNE
10201 SYLVIAN DR, DUBLIN 43017

LAMBIE DONALD S GAIL A
10177 SYLVIAN DR, DUBLIN 43017

N

PLAN VIEW
0 40 80
1 inch = 40 feet

CODED NOTES:

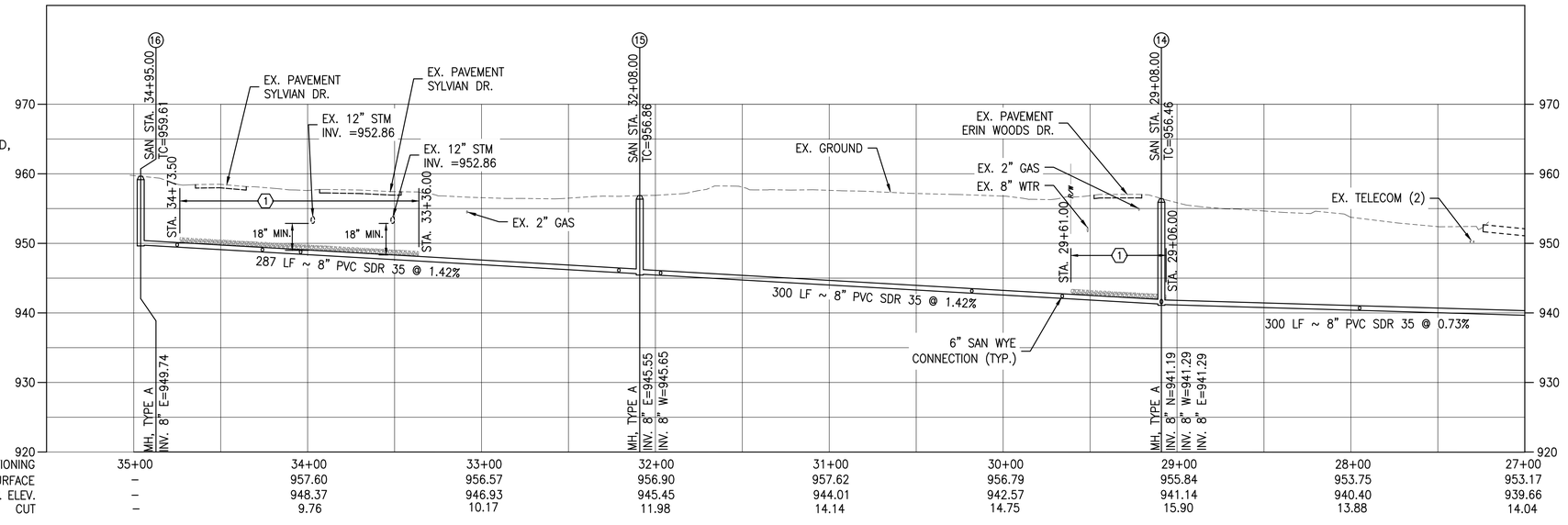
1. TYPE A BACKFILL
2. RELOCATE TELEPHONE PEDESTAL FOR SANITARY SEWER INSTALLATION.
3. BRICK PAVER APRON TO BE REMOVED, PROTECTED & REINSTALLED TO PAYABLE LIMITS PER Sa.S–35

GENERAL NOTES:

1. REFERENCE DETAIL (1) SHEET G–5 FOR BACKFILL REQUIREMENTS FOR SANITARY SEWER PARALLEL TO ROAD INSIDE THE ROW.

VERTICAL
0 10 20
1 inch = 10 feet

HORIZONTAL
0 40 80
1 inch = 40 feet



STATIONING	35+00	34+00	33+00	32+00	31+00	30+00	29+00	28+00	27+00
SURFACE	–	957.60	956.57	956.90	957.62	956.79	955.84	953.75	953.17
INV. ELEV.	–	948.37	946.93	945.45	944.01	942.57	941.14	940.40	939.66
CUT	–	9.76	10.17	11.98	14.14	14.75	15.90	13.88	14.04

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB | DRAWN: MRB | CHECKED: JS | REVIEWED: KH | DATE: JULY 2020

PLAN & PROFILE
ERIN WOODS STA. 27+00
TO STA. 34+95.00

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

C-4

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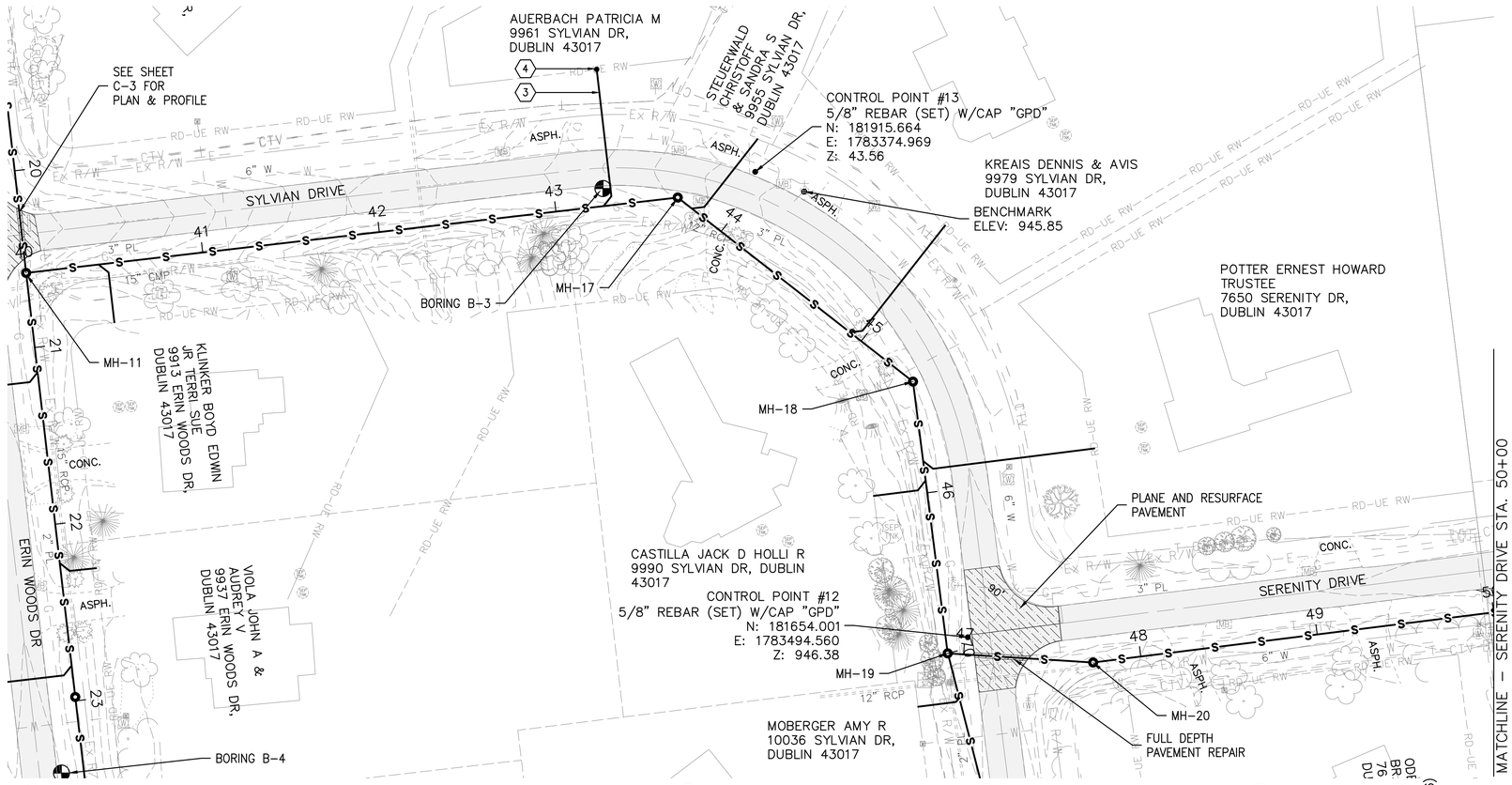

STATIONING	40+00	41+00	42+00	43+00	44+00	45+00	46+00	47+00	48+00	49+00	50+00
SURFACE	945.74	941.94	937.92	938.87	944.17	945.11	943.89	946.18	946.13	945.39	946.95
INV. ELEV.	928.34	928.84	929.24	929.65	930.29	931.21	931.88	932.37	932.87	933.28	933.69
CUT	18.00	13.63	9.21	9.75	14.41	14.43	12.54	14.34	13.79	12.64	13.79

HORIZONTAL
0 40 80
1 inch = 40 feet

VERTICAL
0 10 20
1 inch = 10 feet

PLAN VIEW
0 40 80
1 inch = 40 feet

CODED NOTES:

1. TYPE A BACKFILL
2. 6-INCH THICK CONTROLLED DENSITY FILL PER ODOT ITEM 613. CDF TO BE PLACED OVER GRANULAR BACKFILL.
3. PRESSURE SERVICE LINE INSTALLED PER STD. DETAIL Sa.3-31
4. CURB STOP AND BOX INSTALLED PER STD. DETAIL Sa.S-31

GENERAL NOTES:

1. REFERENCE DETAIL (1) SHEET G-5 FOR BACKFILL REQUIREMENTS FOR SANITARY SEWER PARALLEL TO ROAD INSIDE THE ROW.

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH
DATE: JULY 2020

PLAN & PROFILE
SERENITY DR STA. 40+00
TO STA. 50+00

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

C-5

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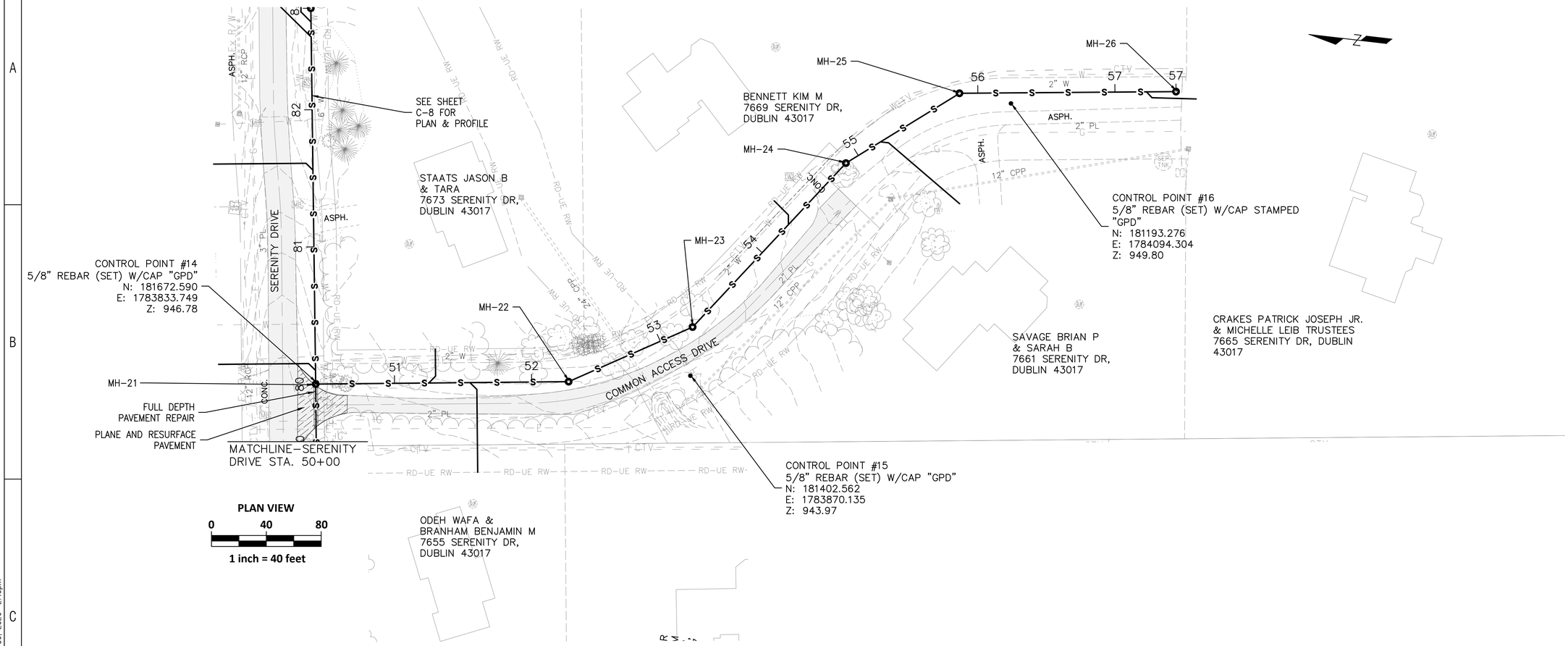


CODED NOTES:

1. TYPE A BACKFILL
2. 6-INCH THICK CONTROLLED DENSITY FILL PER ODOT ITEM 613. CDF TO BE PLACED OVER GRANULAR BACKFILL.

GENERAL NOTES:

1. REFERENCE DETAIL 1 SHEET G-5 FOR BACKFILL REQUIREMENTS FOR SANITARY SEWER PARALLEL TO ROAD INSIDE THE ROW.

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH
DATE: JULY 2020

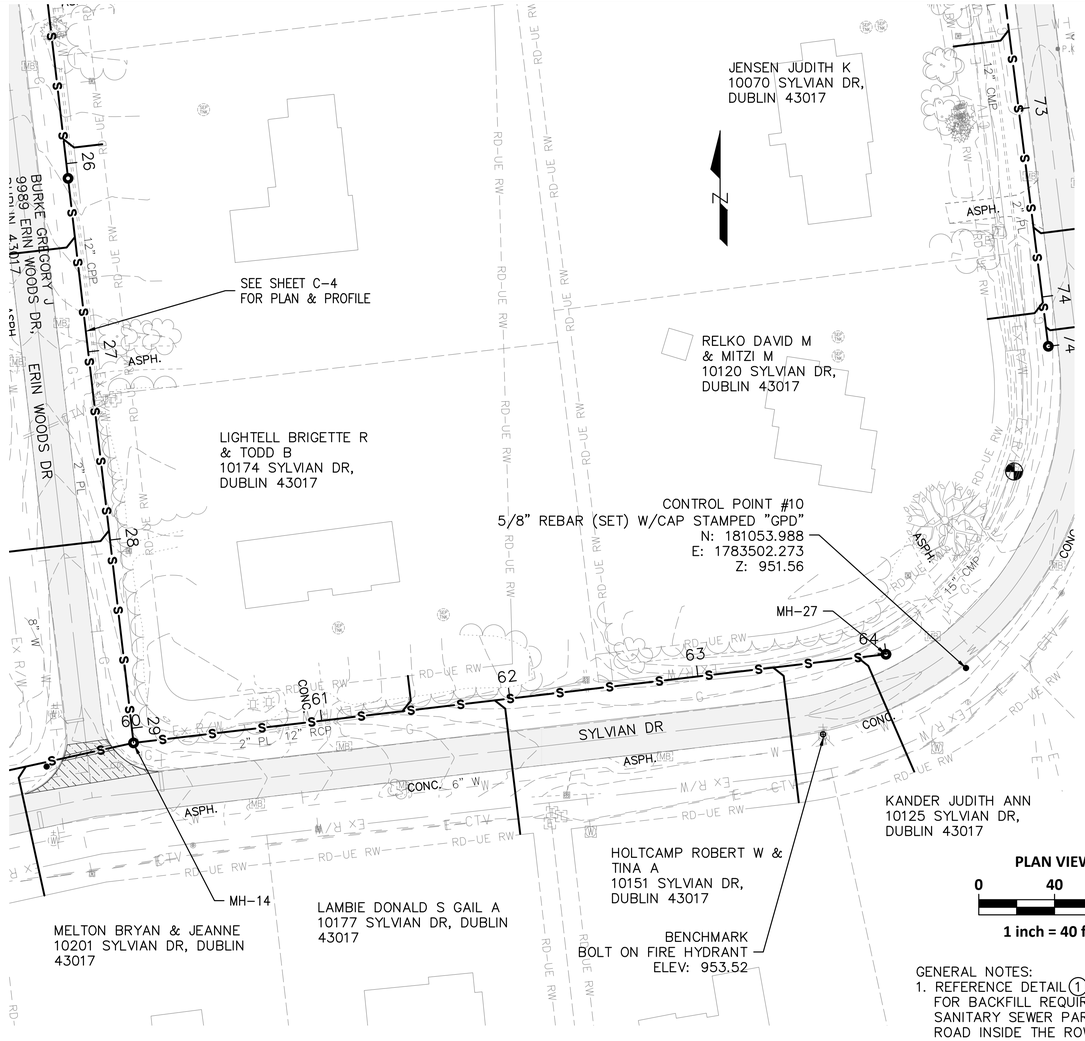
PLAN & PROFILE
COMMON ACCESS DR STA. 50+00 TO STA. 57+45.00

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

C-6

P:\Projects\2018\20H01WD-18563 Woods of Glen Erin Delaware County\05 CADD_Drawings\Sheet\90 Submittal\Plan_Profiles_R1.dwg Jun 30, 2020 - 2:46pm



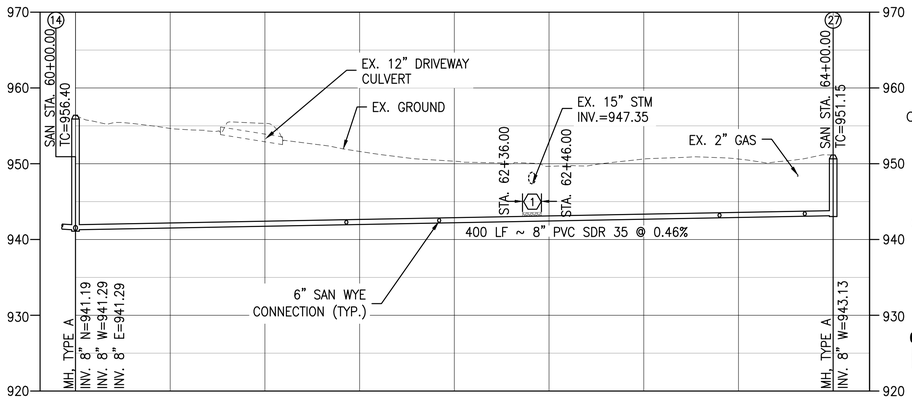
PLAN VIEW

0 40 80

1 inch = 40 feet

GENERAL NOTES:

1. REFERENCE DETAIL (1) SHEET G-5 FOR BACKFILL REQUIREMENTS FOR SANITARY SEWER PARALLEL TO ROAD INSIDE THE ROW.



STATIONING	60+00	61+00	62+00	63+00	64+00
SURFACE	956.40	955.32	950.33	950.62	951.15
INV. ELEV.	941.09	941.75	942.21	942.67	943.03
CUT	15.81	14.10	8.53	8.48	8.62

CODED NOTES:

(1) TYPE A BACKFILL

HORIZONTAL

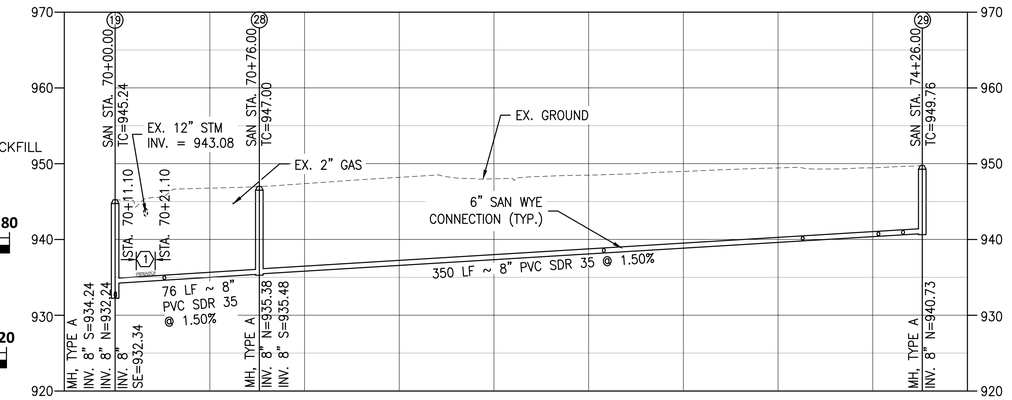
0 40 80

1 inch = 40 feet

VERTICAL

0 10 20

1 inch = 10 feet



STATIONING	70+00	71+00	72+00	73+00	74+00
SURFACE	945.24	947.34	948.00	948.97	949.45
INV. ELEV.	932.34	935.84	937.34	938.84	940.49
CUT	13.10	11.70	10.86	10.33	9.16

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB | DRAWN: MRB | CHECKED: JS | REVIEWED: KH | DATE: JULY 2020

PLAN & PROFILE
SYLVIAN DR STA. 60+00 TO STA. 64+00 AND STA. 70+00 TO STA. 74+26

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

C-7

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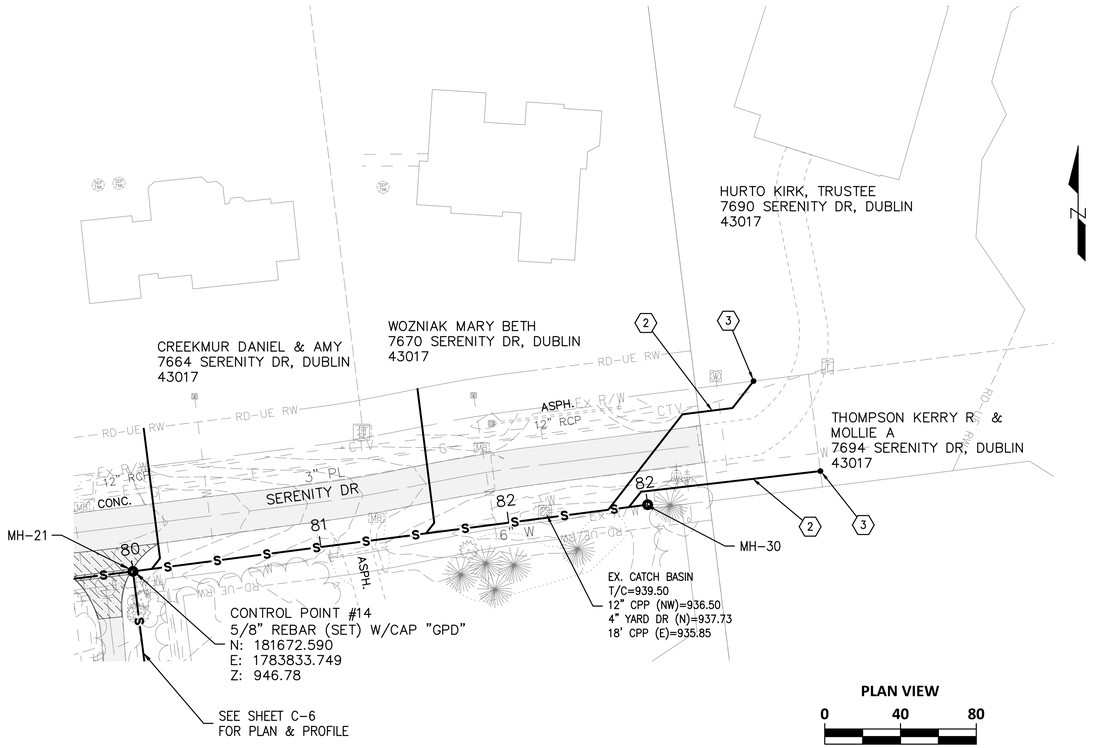
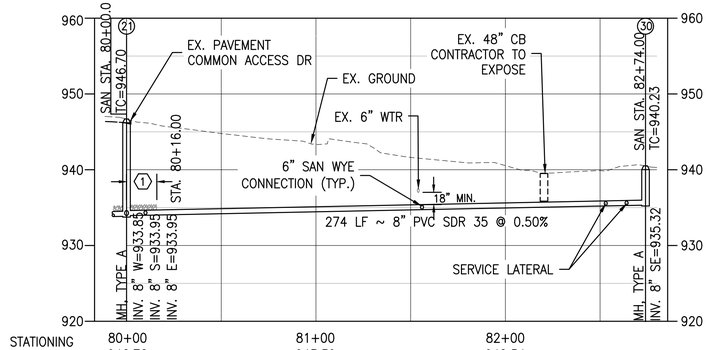


PLAN VIEW

0 40 80

1 inch = 40 feet



STATIONING	80+00	81+00	82+00
SURFACE	946.70	943.39	940.54
INV. ELEV.	933.85	934.45	934.95
CUT	13.45	9.47	6.12

VERTICAL

0 10 20

1 inch = 10 feet

HORIZONTAL

0 40 80

1 inch = 40 feet

CODED NOTES:

1. TYPE A BACKFILL
2. PRESSURE SERVICE LINE INSTALLED PER STD. DETAIL Sa.3-31
3. CURB STOP AND BOX INSTALLED PER STD. DETAIL Sa.S-31

GENERAL NOTES:

1. REFERENCE DETAIL (1) SHEET G-5 FOR BACKFILL REQUIREMENTS FOR SANITARY SEWER PARALLEL TO ROAD INSIDE THE ROW.

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH
DATE: JULY 2020

PLAN & PROFILE
SERENITY DR STA 80+00
TO STA. 82+74.00

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

C-8

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ITEM 614 – MAINTAINING TRAFFIC:

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CMS ITEM 614, DCRSD CMS ITEM 315, AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), CURRENT EDITION. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE BID FOR ITEM 614–MAINTAINING TRAFFIC.

IT IS THE INTENTION TO PERFORM ALL OF THE REQUIRED WORK WITH THE LEAST INCONVENIENCE AND THE MAXIMUM SAFETY TO THE CONTRACTOR AND THE TRAVELING PUBLIC. IN ADDITION TO THE REQUIREMENTS FOR MAINTAINING TRAFFIC AS INDICATED IN THE OMUTCD, THE FOLLOWING REQUIREMENTS APPLY:

1. THE INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES REQUIRED BY THE OMUTCD AS WELL AS ALL TRAFFIC CONTROL DEVICES REQUIRED BY THE MAINTENANCE OF TRAFFIC PLANS SHALL BE PROVIDED BY THE CONTRACTOR.

2. ALL TRAFFIC CONTROL DEVICES SHALL BE REFLECTORIZED WITH ODOT TYPE G OR TYPE H SHEETING. ALL TRAFFIC CONTROL DEVICES SHALL BE NEW OR IN LIKE–NEW CONDITION (I.E., SIGNS NOT BENT, NO INCOMPLETE LETTERS, OR BORDERS, NO DIRT OR LEGIBILITY DEFICIENCIES) AT THE START OF CONSTRUCTION. ALL POST–MOUNTED SIGNS SHALL BE MOUNTED ON THREE (3) POUNDS PER FOOT SIGN SUPPORT CHANNEL POSTS DRIVEN A MINIMUM OF THREE (3) FEET INTO THE GROUND. ALL POST–MOUNTED SIGNS OR SIGNS MOUNTED ON EXITING UTILITY POLES SHALL BE MOUNTED A MINIMUM OF SEVEN (7) FEET BETWEEN THE BOTTOM OF THE SIGN AND THE ROADWAY SURFACE. SIGNS MAY BE MOUNTED ON PORTABLE SIGN STANDS AT A MINIMUM HEIGHT OF FIVE (5) FEET TO THE BOTTOM OF THE SIGN. SIGNS MOUNTED ON TYPE III BARRICADES SHALL BE ERECTED IN ACCORDANCE WITH PLATES C–5 AND C–7 OF THE OMUTCD. ALL SIGNS SHALL BE MOUNTED AND MAINTAINED IN A PLUMB CONDITION.

3. VEHICULAR AND PEDESTRIAN ACCESS TO ALL RESIDENCES SHALL BE MAINTAINED AT ALL TIMES EXCEPT AS NOTED BELOW. PARTIAL CLOSURE OF EXTREMELY WIDE DRIVEWAYS ARE PERMITTED AS LONG AS A MINIMUM OF 20 FEET OF DRIVEWAY WIDTH IS MAINTAINED. THE CONTRACTOR SHALL COORDINATE ANY CHANGE IN A DRIVEWAY'S OPERATION WITH THE OWNER.

   TEMPORARY MATERIAL MAY BE REQUIRED TO MAINTAIN A DRIVEWAY. THIS MATERIAL SHALL BE SUFFICIENT TO MAINTAIN HEAVY AMOUNTS OF TRAFFIC WITHOUT CONTINUOUS MAINTENANCE. USE HIGH EARLY STRENGTH CONCRETE AS DIRECTED BY THE ENGINEER FOR CONSTRUCTION OF ALL DRIVEWAY APRONS.

4. HAZARDOUS CONDITIONS SHALL BE CORRECTED IMMEDIATELY BY THE CONTRACTOR. BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE SANITARY ENGINEER THE NAMES AND TELEPHONE NUMBERS OF A PERSON OR PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY DCRSD AND DELAWARE COUNTY SHERIFF'S DEPARTMENT. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR PLACING AND REPLACING NECESSARY TRAFFIC CONTROL DEVICES.

5. PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN PAVEMENT FOR MAINTAINING TRAFFIC SHALL CONSIST OF 1½" OF ITEM 441, ASPHALT CONCRETE SURFACE COURSE, AND 10" OF ODOT ITEM 301 OR ITEM 302, ASPHALT CONCRETE BASE, AND SHALL CONFORM TO SPECIFICATION REQUIREMENTS FOR ODOT ITEM 615.

6. PROPERTY OWNERS SHALL BE NOTIFIED IN PERSON 48 HOURS IN ADVANCE OF A SERVICE INTERRUPTION. INTERRUPTIONS SHALL BE RESTRICTED TO OVERNIGHT HOURS FROM 9:00 PM TO 5:00 AM ONLY

OVERNIGHT TRENCH CLOSING:
THE TRENCH SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN THREE (3) INCHES BELOW EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE SANITARY ENGINEER.

AT THE END OF EACH WORK DAY, ALL LANES MUST BE OPENED TO TRAFFIC.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES OF TRAFFIC, INCLUDING SHOULDERS, SHALL BE OPEN DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEAR'S	LABOR DAY
MEMORIAL DAY	PRESIDENTS' DAY
THANKSGIVING	DAY AFTER THANKSGIVING
VETERANS' DAY	MARTIN LUTHER KING JR. DAY

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

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

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF $50 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

LENGTH OF LANE CLOSURES SHALL BE CONSISTENT WITH ODOT SCD MT–97.10 MODIFIED FOR MOVING CLOSURES AND FLAGGING OPERATIONS ALONG THE ALIGNMENT ROUTE PER OMUTCD FIGURE 6C–3, UNLESS OTHERWISE DIRECTED BY THE SANITARY ENGINEER.

LENGTH AND DURATION OF LANE CLOSURES SHALL BE AT THE DISCRETION OF THE SANITARY ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE SANITARY ENGINEER, SHALL NOT BE PERMITTED.THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL OTHER WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ODOT CMS ITEM 614, DCRSD CMS ITEM 315, AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614–MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLANS.

DUST CONTROL:
THE CONTRACTOR SHALL FURNISH AND SUPPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.

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

ITEM 614 – LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS:
USE OF LAW ENFORCEMENT OFFICERS (LEOs) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOs SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF ODOT CMS ITEM 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP–MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

– DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
– FOR LANE CLOSURES: DURING INITIAL SETUP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG–TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

IN GENERAL, LEOs SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOs SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED RECKLESS, THE PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOs WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEO(s) WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEO(s). THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOs' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. SHOULD IT BE NECESSARY FOR THE LEO TO LEAVE THE PROJECT SITE, HE/SHE SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO–WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOs (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR CCWRD ITEM 1110, TRAFFIC CONTROL AND MAINTENANCE.

NOTIFICATION OF TRAFFIC RESTRICTIONS:
THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE SANITARY ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE SANITARY ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE TRAFFIC CONTROL DEVICES.

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

ITEM	DURATION	NOTICE DUE
ROAD CLOSURES	>=2 WEEKS >12 HOURS TO < 2WEEKS <= 12 HOURS	21 CALENDAR DAYS PRIOR 14 CALENDAR DAYS PRIOR 4 BUSINESS DAYS PRIOR
LANE CLOSURE & RESTRICTIONS	>=2 WEEKS < 2 WEEKS	14 CALENDAR DAYS PRIOR 5 BUSINESS DAYS PRIOR
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	14 DAYS PRIOR	

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

PRIME AE

DELAWARE COUNTY REGIONAL SEWER DISTRICT

DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH
DATE: JULY 2020

MAINTENANCE OF TRAFFIC NOTES

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

MT-1

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ODOT ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS):
THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN TO NOTIFY THE PUBLIC OF TRAFFIC MODIFICATIONS AT LEAST ONE (1) WEEK PRIOR TO BEGINNING CONSTRUCTION. THE SIGN SHALL BE OF A TYPE SHOWN ON THE APPROVED LIST OF PCMS UNITS AVAILABLE ON ODOT'S OFFICE OF MATERIAL MANAGEMENT WEBSITE. THE LIST CONTAINS CLASS A AND CLASS B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER–MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON–SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH ODOT CMS ITEM 614.03.

PCMS LOCATIONS SHALL BE DETERMINED BY THE SANITARY ENGINEER. PLACEMENT, OPERATION, MAINTENANCE, AND ALL ACTIVATION OF THE SIGNS CONTRACTOR SHALL BE AS DIRECTED BY THE SANITARY ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE SANITARY ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE SANITARY ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE DCRSD PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

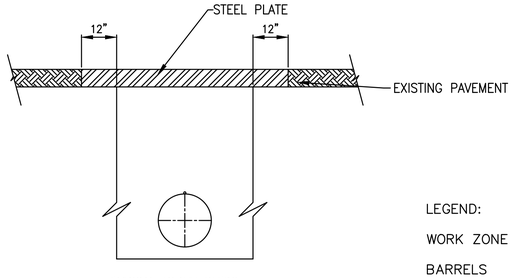
ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE SANITARY ENGINEER. A LIST OF REQUIRED PRE–PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRE–CONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE–PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON–BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE–LINE PRESENTATION FORMATS WITH UP TO SIX (6) MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ TWICE. THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED, OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF ODOT CMS ITEM 614. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24–HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

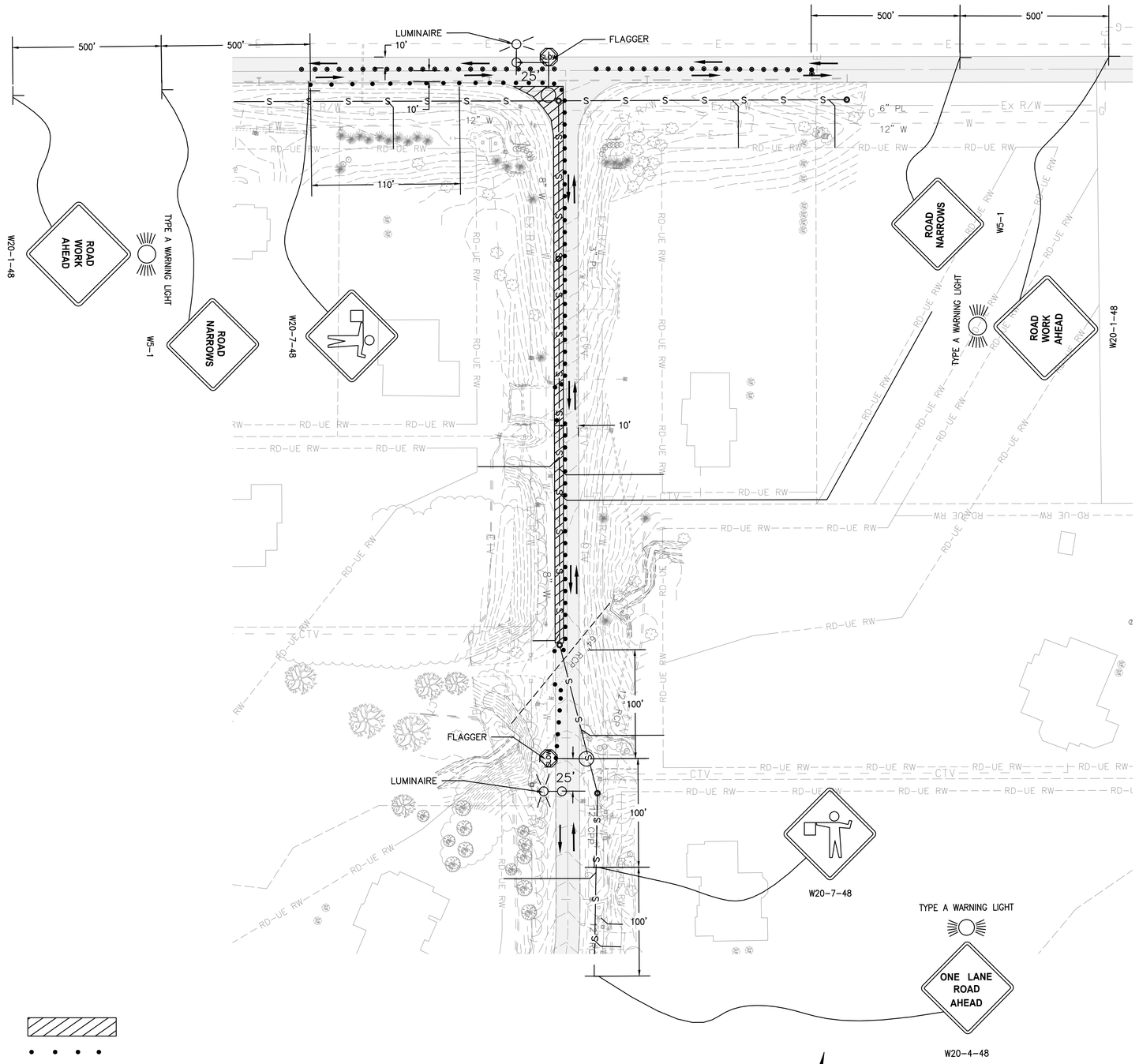
PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE, AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

OPEN–CUT TRENCHES:
OPEN–CUT TRENCH EXCAVATIONS SHALL BE BACKFILLED TO A DEPTH OF NO GREATER THAN THREE (3) INCHES BELOW THE EXISTING PAVEMENT PRIOR TO OPENING THE ROAD TO TRAFFIC. THE OPENING MUST BE PLATED AND THE PLATES SHALL BE RECESSED TO FIT NEATLY IN THE PAVEMENT OPENING TO PROVIDE A SUITABLE PASSAGE OF TRAFFIC AND SNOW REMOVAL EQUIPMENT. NO MORE THAN 200 LINEAR FEET OF PLATES SHALL BE PERMITTED IN PLACE AT ANY ONE TIME. PLATES IN USE ON THE ROADWAY SHALL BE A MINIMUM OF 1–INCH THICK AND BE IN A SMOOTH CONDITION, FREE OF BOWS OR ROUGH EDGES. THE PLATE IS TO EXTEND AT LEAST TWELVE (12) INCHES BEYOND THE TRENCH CUT. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE TRENCH IS ADEQUATELY COVERED AND SAFE PASSAGE IS PROVIDED. PAYMENT FOR COVER PLATES SHALL BE INCLUDED IN THE LUMP SUM BID FOR DCRSD ITEM 315, TRAFFIC CONTROL.



TYPICAL PLATE DETAIL

LEGEND:
WORK ZONE
BARRELS
GRABBER CONES
MOT TEMPORARY SIGN
DIRECTION OF TRAVEL



MAINTENANCE OF TRAFFIC DETAIL–HARRIOTT ROAD AT ERIN WOODS DRIVE
SCALE: NOT TO SCALE

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH
DATE: JULY 2020

MAINTENANCE OF TRAFFIC NOTES & DETAILS

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

MT-2

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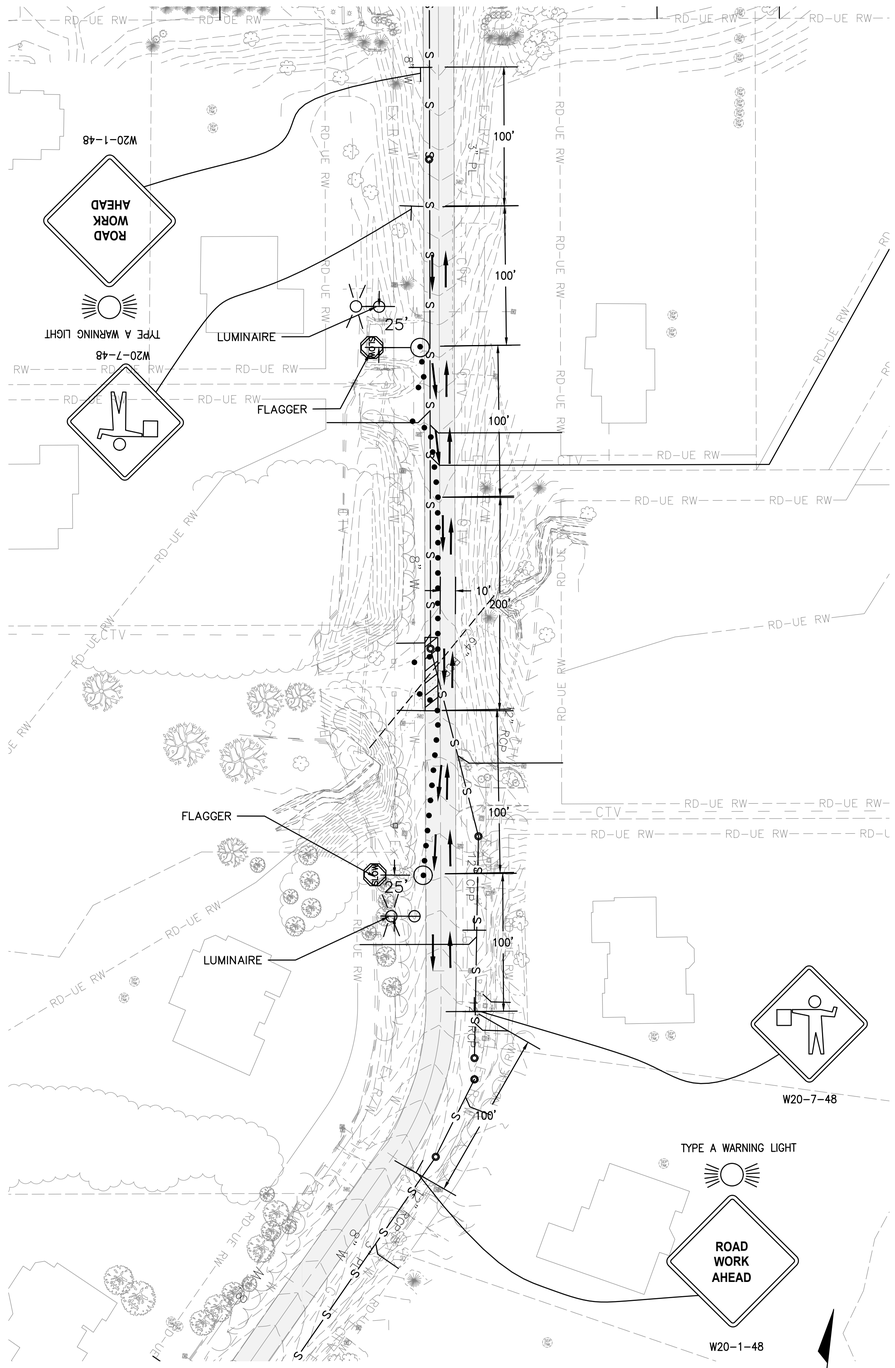


LEGEND:

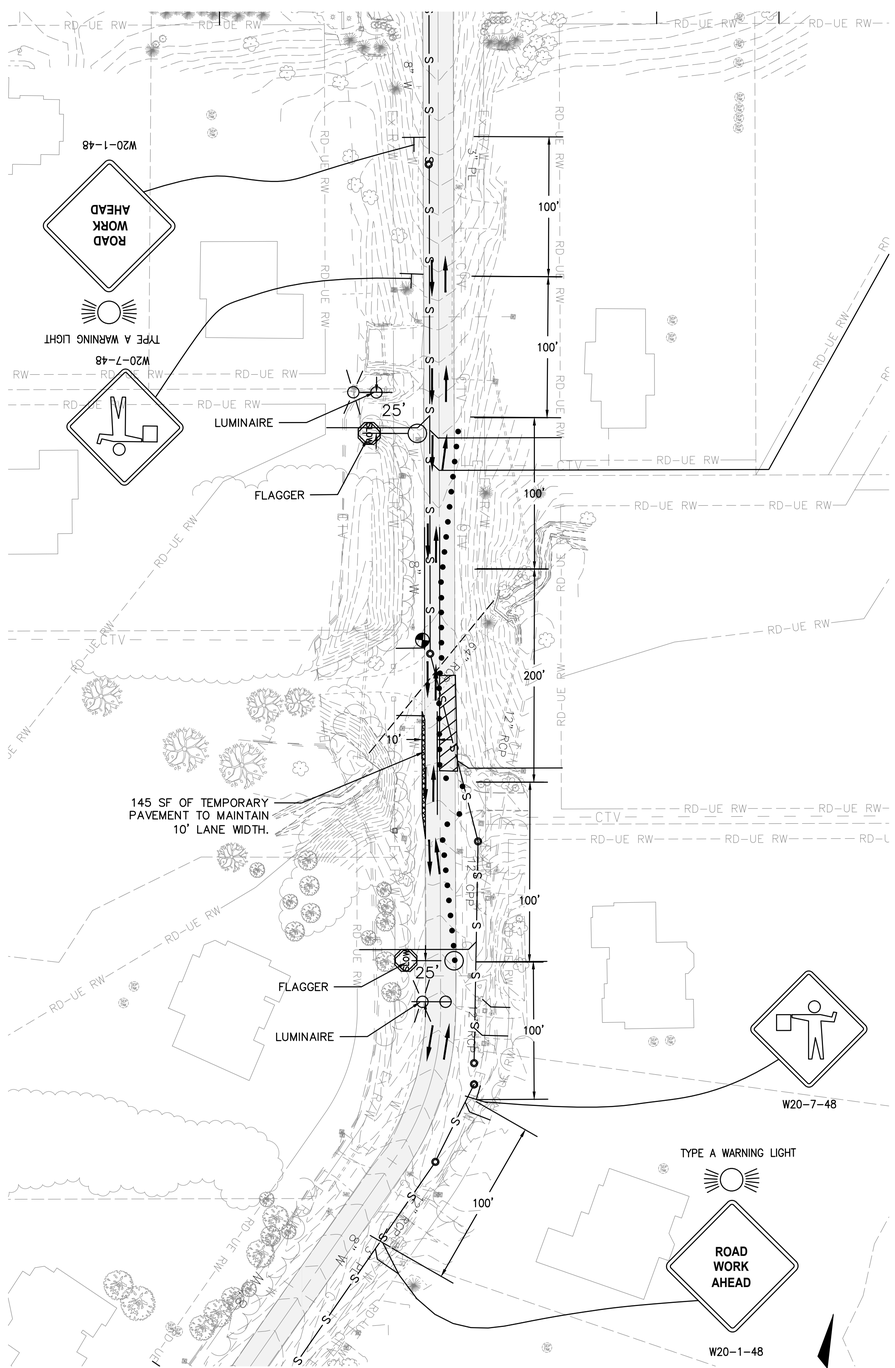
WORK ZONE

BARRELS

MOT TEMPORARY SIGN

DIRECTION OF TRAVEL

MAINTENANCE OF TRAFFIC DETAIL–ERIN WOODS DRIVE PHASE 1
SCALE: NOT TO SCALE



MAINTENANCE OF TRAFFIC DETAIL–ERIN WOODS DRIVE PHASE 2
SCALE: NOT TO SCALE

PRIME AE

DELAWARE COUNTY
REGIONAL SEWER DISTRICT

DESIGNED: WDB
DRAWN: MRB
CHECKED: JS
REVIEWED: KH
DATE: JULY 2020

MAINTENANCE OF TRAFFIC DETAILS

WOODS OF GLEN ERIN
SANITARY SEWER IMPROVEMENTS

REVISION	DATE

MT-3

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