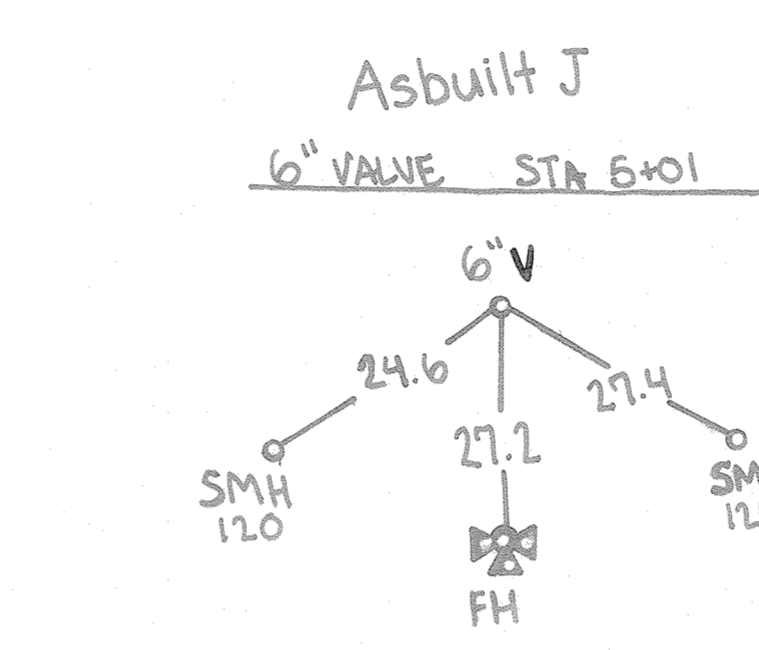
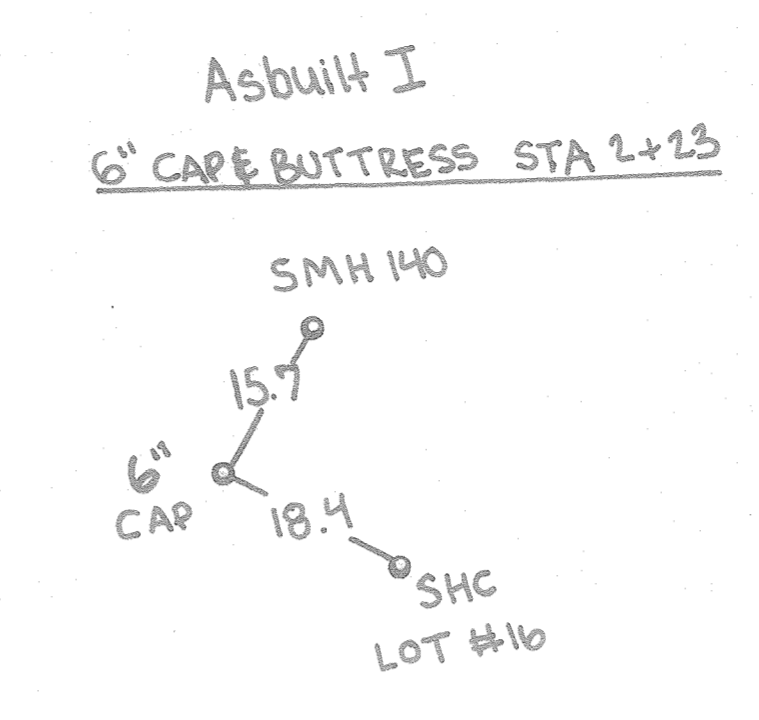
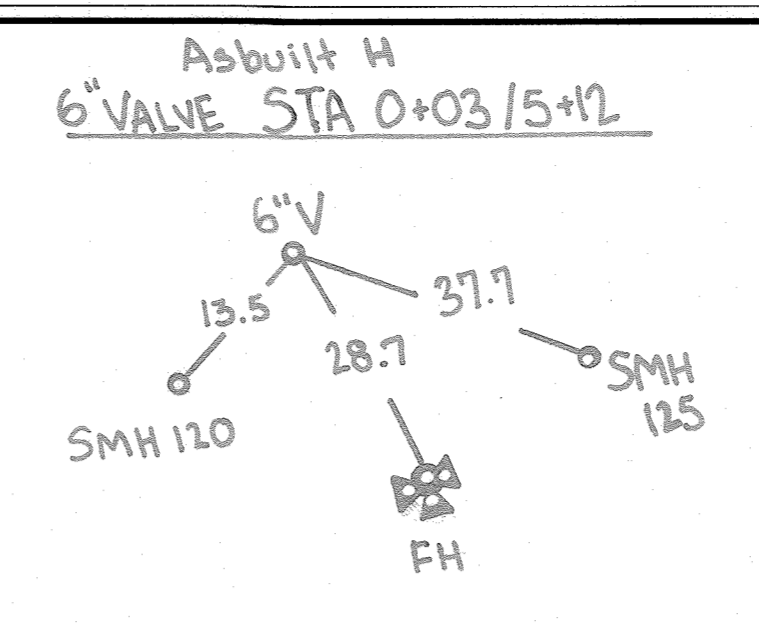
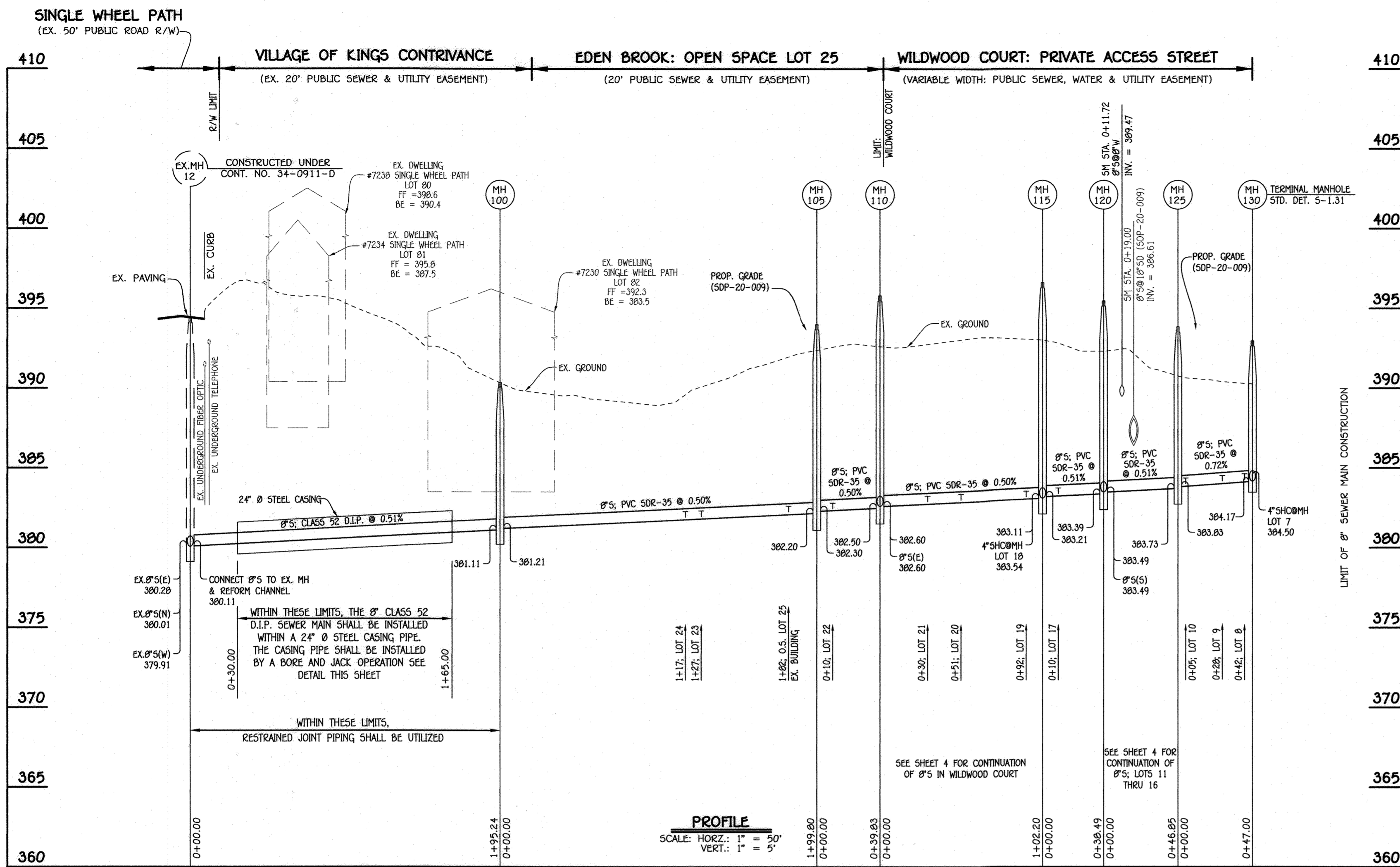
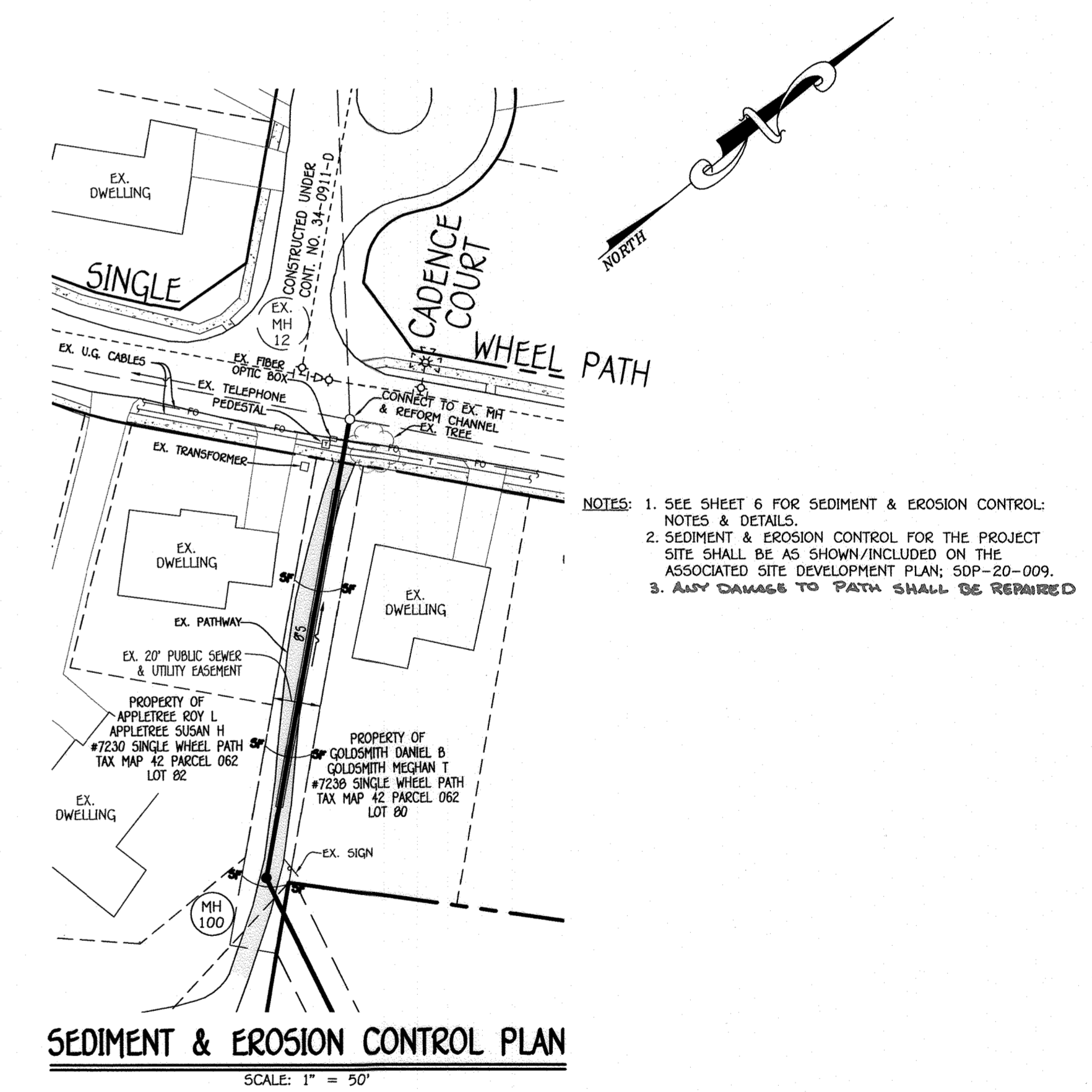


DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES DATE: 5/11/2020	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 5.29.20	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE 5/31/2020. <b>FISHER, COLLINS &amp; CARTER, INC.</b> CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SQUARE OFFICE PARK 10272 BALTIMORE NATIONAL PIKE ELICOTT CITY, MARYLAND 21042 (410) 461-2899		DESIGNED BY: P.W.K. DRAWN BY: T.C.R. CHECKED BY: P.W.K. DATE: APRIL, 2020 BY NO. REVISION DATE	<b>SEWER &amp; WATER MAIN EXTENSIONS PLAN, ABANDONMENT PLAN &amp; ENLARGEMENT: FRONT FOOTAGES</b> 600' SCALE MAP NO. 42 BLOCK NO. 7 F.C.C. WORK ORDER NO. 17007 FILE NAME: SEWER & WATER MAIN EXTENSION PLAN	<b>EDEN BROOK LOTS 1 THRU 24 &amp; OPEN SPACE LOTS 25 THRU 27</b> SEWER & WATER MAIN EXTENSIONS CONTRACT NO. 24-5081-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE: AS SHOWN SHEET: 2 OF 6
--	--	---	--	---	---	--	----------------------------------

1:2017/17007/Engineering/Dwg/Sewer & Water Contract No. 24-5081-D/Plan/17007 Sewer and Water Contract Plan.dwg, Plan Sheet 2, 1 of 1

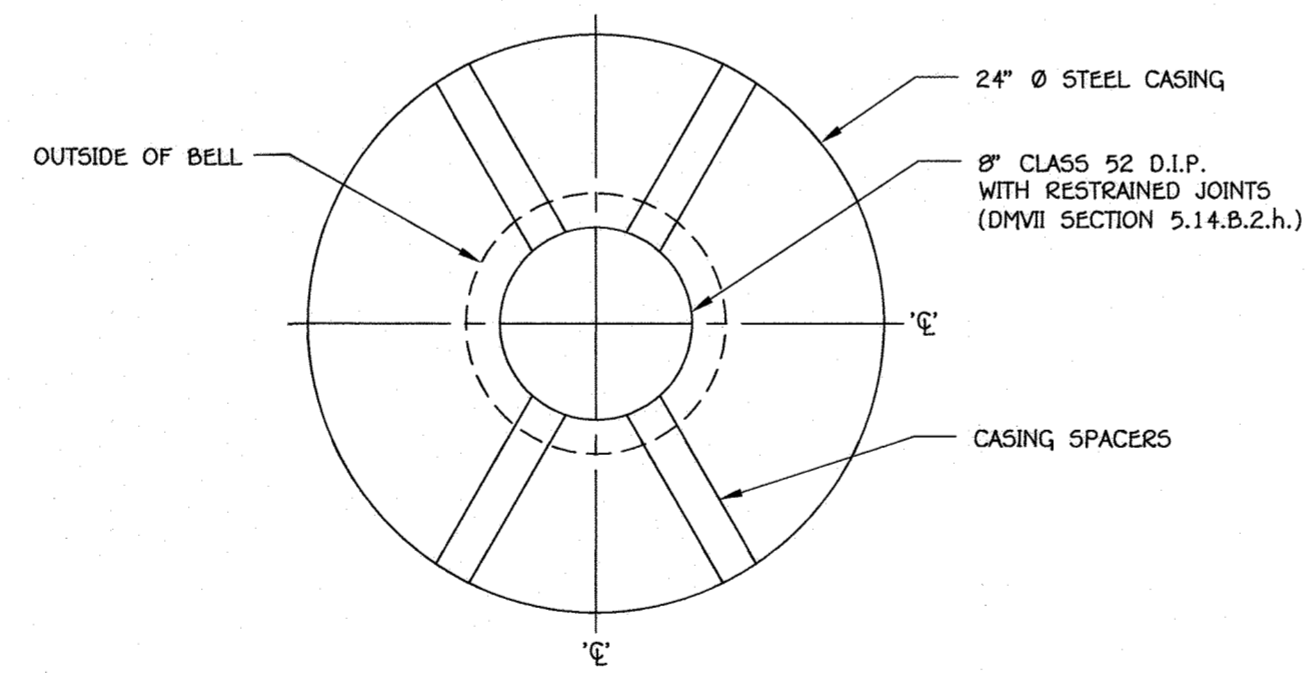


LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1	7305 WILD WOOD CT.	SHC-1 TO WHC 42=8.5'	SHC-1 TO 6" VALVE=28.2'
2	7301	SHC-2 TO WHC 42=20.8	SHC-2 TO SHC-3=8.5'
3	7309	SHC-3 TO SHC-4=8.5'	SHC-3 TO WHC-5=27.5'
4	7313	SHC-4 TO WHC-5=22.4'	SHC-4 TO WHC 42=12.4'
5	7319	SHC-5 TO WHC 42=12.7'	SHC-5 TO WHC 42=28.0'
6	7319	SHC-6 TO SMH-120=20.7'	SHC-6 TO WHC 42=12.4'
7	7321	SHC-7 TO WHC 42=5.1'	SHC-7 TO WHC 42=9.5'
8	7323	SHC-8 TO WHC 42=10.8'	SHC-8 TO WHC 42=9.0'
9	7327	SHC-9 TO WHC 42=11.2'	SHC-9 TO WHC 42=9.5'
10	7329	SHC-10 TO WHC 42=14.2'	SHC-10 TO WHC 42=18.4'
11	7333	SHC-11 TO WHC 42=11.1'	SHC-11 TO SMH-125=17.7'
12	7339	SHC-12 TO WHC 42=16.4'	SHC-12 TO SMH-125=28.9'
13	7337	SHC-13 TO WHC 42=19.7'	SHC-13 TO WHC 42=21.7'
14	7341	SHC-14 TO WHC 42=23.4'	SHC-14 TO SHC-15=23.3'
15	7345	SHC-15 TO WHC 42=16.7'	SHC-15 TO SMH-145=28.5'
16	7345	SHC-16 TO WHC 42=8.0'	SHC-16 TO SMH-145=18.6'
17	7320	SHC-17 TO WHC 42=14.2'	SHC-17 TO SMH-115=22.5'
18	7324	SHC-18 TO WHC 42=15.3'	SHC-18 TO SMH-115=23.1'
19	7322	SHC-19 TO WHC 42=25.5'	SHC-19 TO SMH-115=29.2'
20	7318	SHC-20 TO WHC 42=14.2'	SHC-20 TO SHC-21=23.5'
21	7316	SHC-21 TO SHC-20=23.5'	SHC-21 TO WHC 42=16.8'
22	7314	SHC-22 TO SMH-106=14.5'	SHC-22 TO SMH-110=41.8'
23	7304	SHC-23 TO SHC-24=12.1'	SHC-23 TO SHC-25=18.0'
24	7302	SHC-24 TO SHC-25=12.1'	SHC-24 TO SHC-25=20.7'
25: EX. BLDG.	WILD WOOD CT	SHC-25 TO SMH-105=24.6'	SHC-25 TO SMH-110=24.4'



NO.	NORTHING	EASTING	RIM ELEVATION
100	547949.40	1349782.64	390.34
105	547903.99	1349979.20	394.00
110	547908.76	1350018.74	395.80
115	547837.08	1350091.59	396.61
120	547838.67	1350130.04	395.48
125	547872.95	1350161.96	393.85
130: TERMINAL MH	547939.95	1350201.91	392.97

NOTE: SET MH RIMS FLUSH W/EXISTING GROUND OR PROPOSED GRADE AS APPLICABLE.

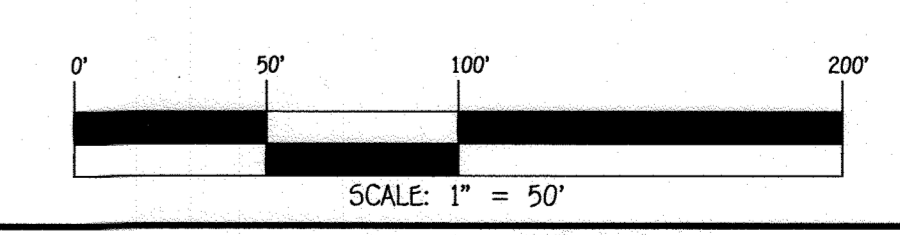


STATION	LOT	ELEVATION AT MAIN	ELEVATION AT EDGE OF EASEMENT	M.C.E.	B.E.	F.F.
MH 100 TO MH 105						
1+17 LT.	24 @ 1.00%	381.95	382.54	385.14	385.39	395.58
1+27 LT.	23 @ 1.00%	381.97	382.49	385.09	385.39	395.58
1+82 LT.	O.S. LOT 25: EX BLDG.	382.27	382.47	386.37		395.03
MH 105 TO MH 110						
0+10 RT.	22	382.52	382.72	387.12	387.34	397.53
MH 110 TO MH 115						
0+30 RT.	21	382.92	383.42	387.02	387.34	397.53
0+51 RT.	20	383.03	383.85	387.15	387.34	397.53
0+92 RT.	19	383.23	383.77	387.47	387.72	397.91
0+115 RT.	18 @ 1.00%	383.54	383.76	387.46	387.72	397.91
MH 115 TO MH 120						
0+10 RT.	17 @ 1.00%	383.43	383.64	387.44	387.72	397.91
MH 125 TO MH 130						
0+05 RT.	10'	384.04	384.38	388.88	386.75	396.94
0+28 RT.	9'	384.20	384.62	389.22	386.75	396.94
0+42 RT.	8'	384.30	384.66	389.76	386.62	396.81
0+130 RT.	7'	384.50	384.84	390.54	386.62	396.81

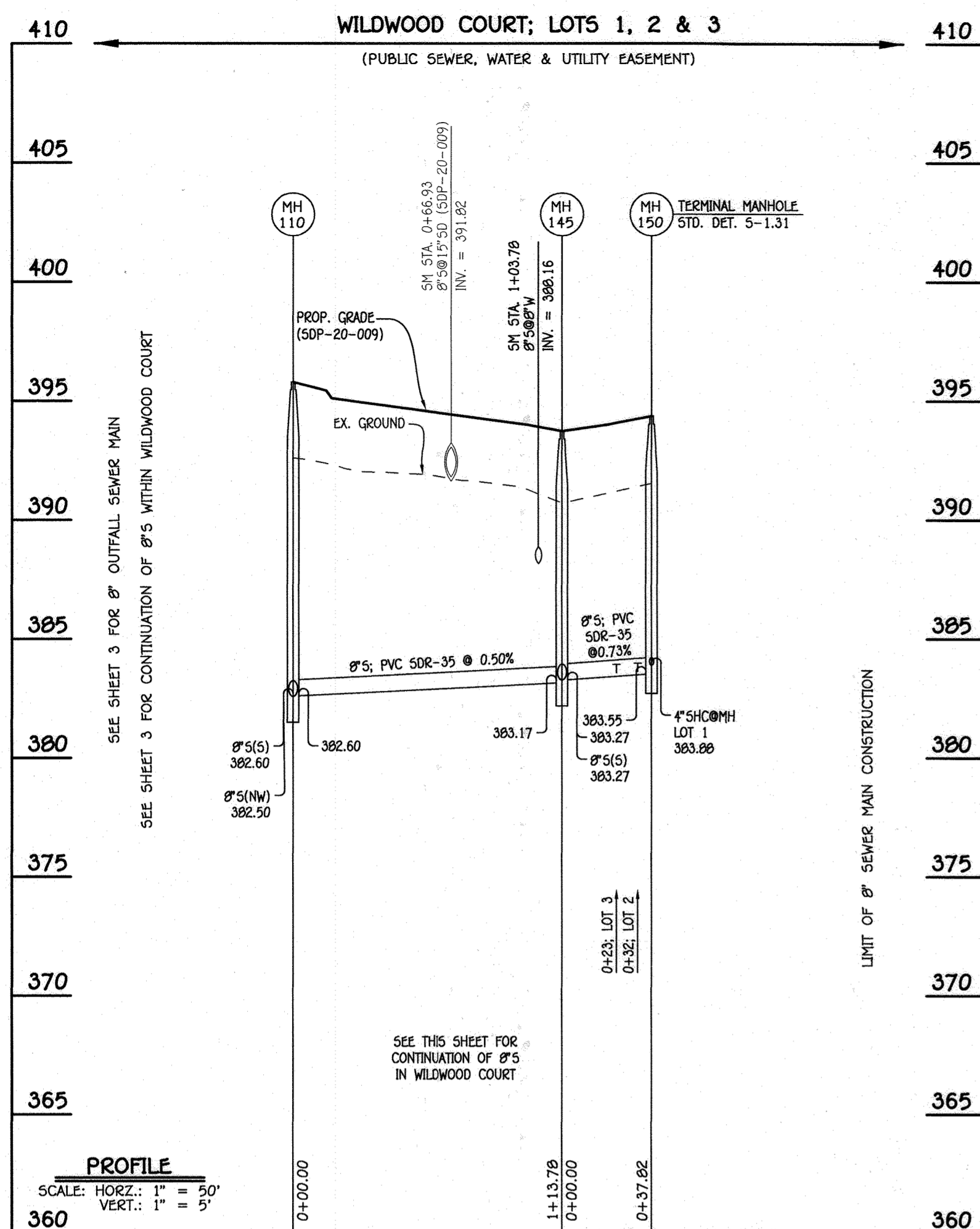
\*GRAVITY SEWER SERVICE: FIRST FLOOR ONLY

NOTE:  
1. THE 24" Ø STEEL CASING SHALL HAVE A MINIMUM THICKNESS OF 0.50" AND SHALL BE IN ACCORDANCE WITH SECTION 963.02.  
2. THE EXTERNAL COATING FOR THE 24" Ø CASING SHALL BE IN ACCORDANCE WITH SECTION 963.02.01 WHICH REQUIRES TWO (2) COATS OF COAL TAR EPOXY.  
3. THE CASING SPACERS SHALL BE MANUFACTURED BY ADVANCE PRODUCTS & SYSTEMS, INC. OR AS APPROVED ON THE LATEST EDITION OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING APPROVED MATERIAL LIST.

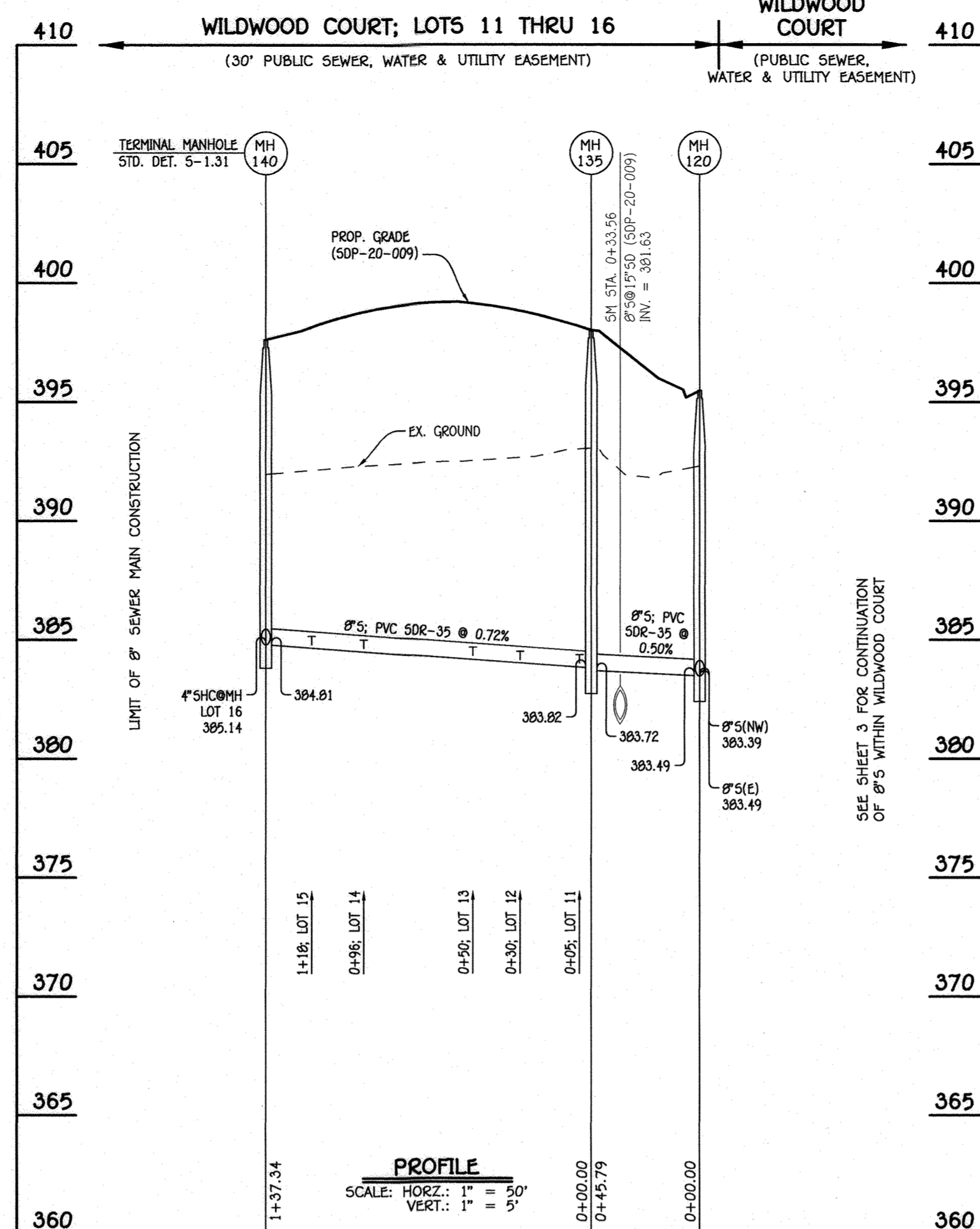
**AS BUILTS**  
BY: DFI DATE: 4/14/21



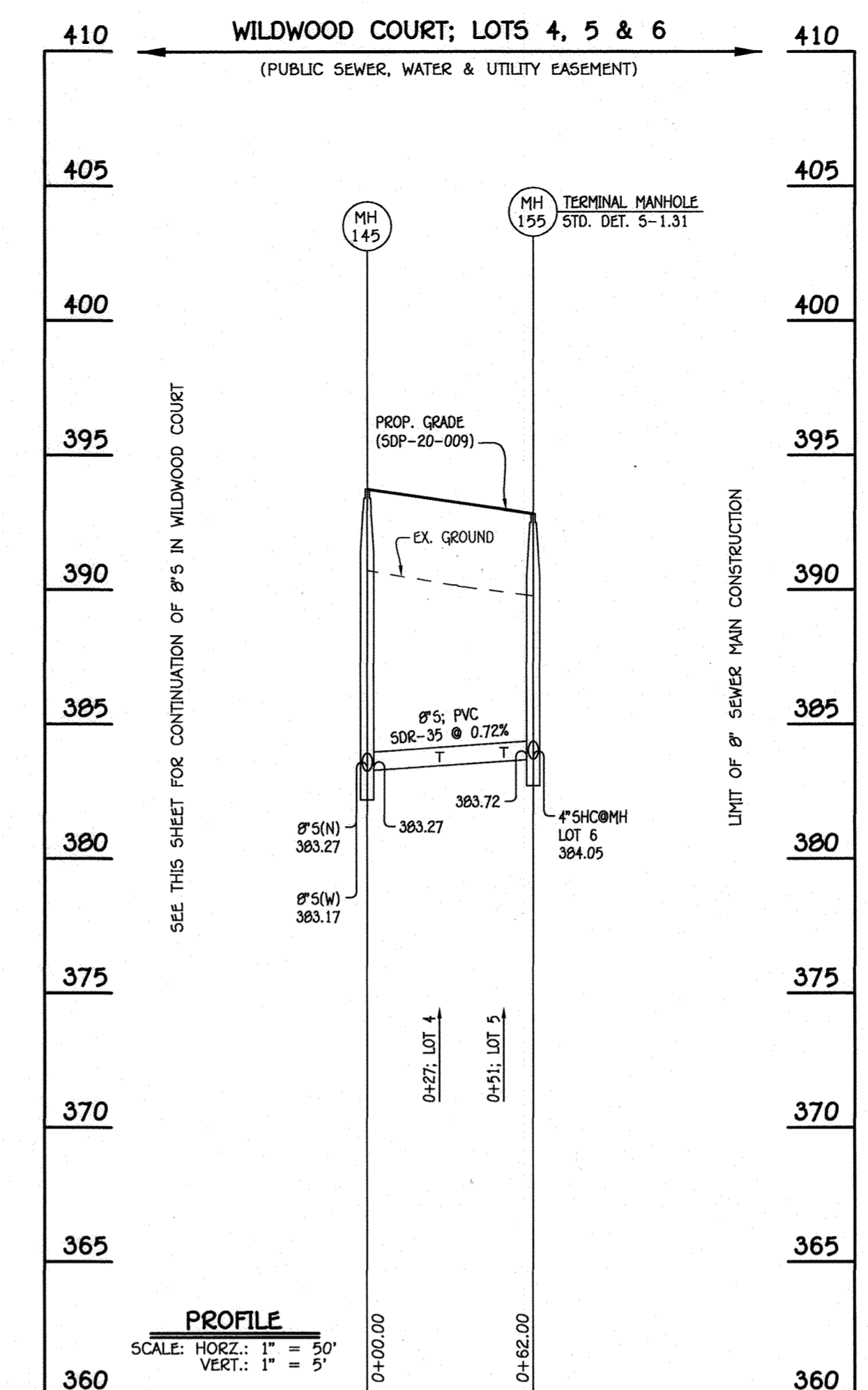
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES DATE: 5/11/2020	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 5.21.20	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE IS 7/18/22. <b>FISHER, COLLINS &amp; CARTER, INC.</b> CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SQUARE OFFICE PARK - 10225 BALTIMORE NATIONAL PIKE ELLETT CITY, MARYLAND 21042 (410) 461-2895	DESIGNED BY: P.W.K. DRAWN BY: T.C.R. CHECKED BY: P.W.K. DATE: APRIL, 2020	SEWER MAIN EXTENSIONS PROFILE, CHARTS, "AS-BUILT" LOCATION TABLE & SEDIMENT/EROSION CONTROL PLAN 600' SCALE MAP NO. 42 BLOCK NO. 7 F.C.C. WORK ORDER NO. 17007 FILE NAME: SEWER & WATER MAIN EXTENSION PLAN	EDEN BROOK LOTS 1 THRU 24 & OPEN SPACE LOTS 25 THRU 27 SEWER & WATER MAIN EXTENSIONS CONTRACT NO. 24-5081-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN SHEET 3 OF 6
--	--	--	--	---	--



8" SEWER MAIN; WILDWOOD COURT: LOTS 1 THRU 3



8" SEWER MAIN; WILDWOOD COURT: LOTS 11 THRU 16



8" SEWER MAIN; WILDWOOD COURT: LOTS 4 THRU 6

NO.	NORTHING	EASTING	RIM ELEVATION
145	547990.06	1350098.33	393.73
150: TERMINAL MH	548016.17	1350070.96	394.36

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

NO.	NORTHING	EASTING	RIM ELEVATION
135	547794.57	1350142.38	398.02
140: TERMINAL MH	547664.55	1350098.13	397.63

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

NO.	NORTHING	EASTING	RIM ELEVATION
155: TERMINAL MH	547947.26	1350143.19	392.82

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

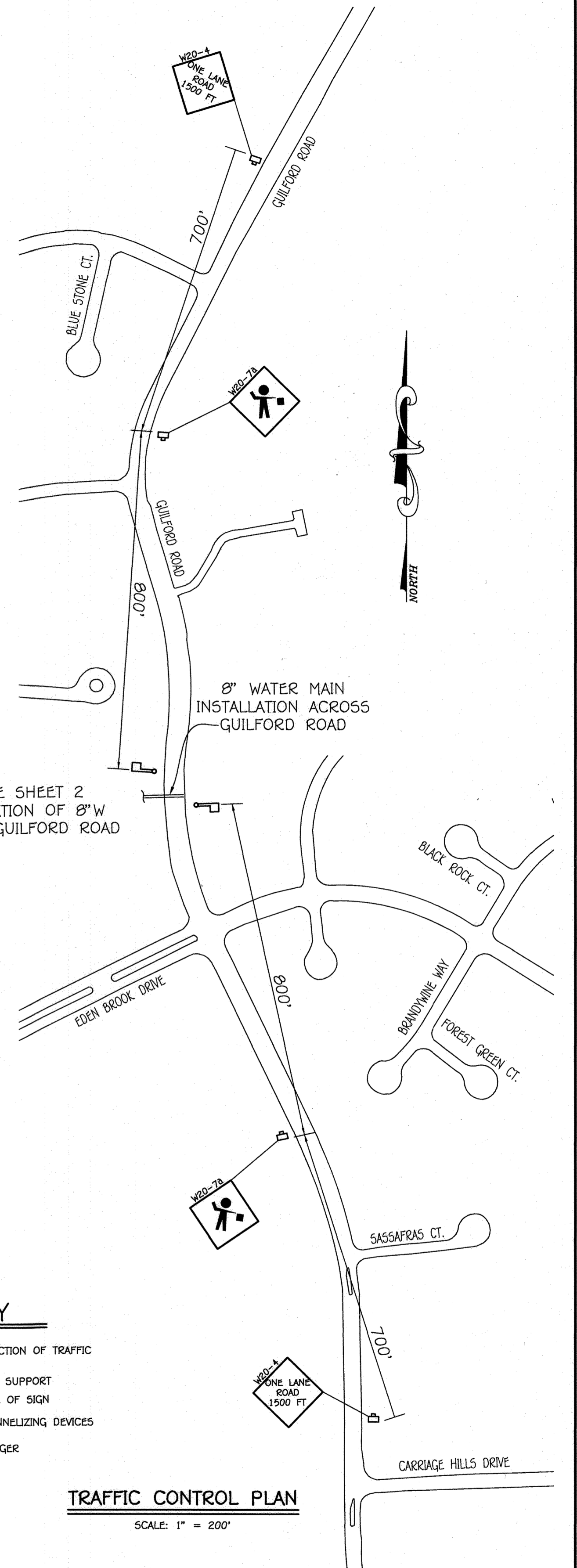
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT EDGE OF EASEMENT	M.C.E.	B.E.	F.F.
MH 145 TO MH 150						
0+23 RT.	3 @ 1.00%	383.61	383.78	386.43	386.56	396.75
0+32 RT.	2 @ 1.00%	383.67	383.84	386.49	386.56	396.75
⊙MH 150 RT.	1"	383.88	384.47	389.17	386.56	396.75

\*GRAVITY SEWER SERVICE; FIRST FLOOR ONLY

STATION	LOT	ELEVATION AT MAIN	ELEVATION AT EDGE OF EASEMENT	M.C.E.	B.E.	F.F.
MH 135 TO MH 140						
0+09 LT.	11	384.03	384.43	388.93	390.06	400.25
0+30 LT.	12	384.21	384.61	389.11	390.06	400.25
0+50 LT.	13	384.35	384.75	389.25	390.06	400.25
0+96 LT.	14	384.68	385.08	389.08	389.57	399.76
1+18 LT.	15	384.84	385.24	389.24	389.57	399.76
⊙MH 140 LT.	16	385.14	385.54	389.54	389.57	399.76

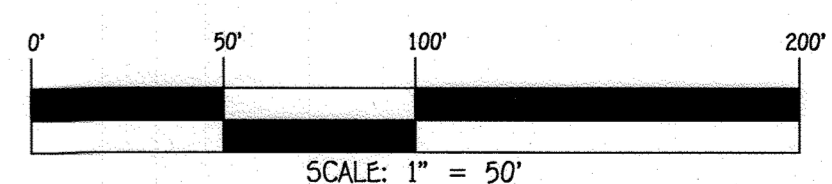
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT EDGE OF EASEMENT	M.C.E.	B.E.	F.F.
MH 145 TO MH 155						
0+27 LT.	4 @ 1.00%	383.63	383.80	386.45	386.56	396.75
0+51 LT.	5 @ 1.00%	383.81	383.98	386.53	386.56	396.75
⊙MH 155 LT.	6"	384.05	384.49	390.59	386.62	396.81

\*GRAVITY SEWER SERVICE; FIRST FLOOR ONLY



- KEY**
- ➔ DIRECTION OF TRAFFIC
  - SIGN SUPPORT
  - ▭ FACE OF SIGN
  - ○ ○ CHANNELIZING DEVICES
  - ⚑ FLAGGER

TRAFFIC CONTROL PLAN  
SCALE: 1" = 200'



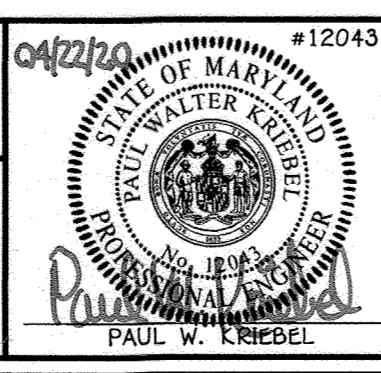
**AS BUILTS**  
DATE: 4/14/21

CONTRACT NO. 24-5081-D  
EDEN BROOK  
LOTS 1 THRU 24 &  
OPEN SPACE  
LOTS 25 THRU 27  
SEWER & WATER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
CHIEF, BUREAU OF UTILITIES  
DATE: 5/21/2020

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 5.21.20

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
LICENSE NO. 12043 EXPIRATION DATE 5/7/16/20  
**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 15272 BALDWIN NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21042  
(410) 461-2895

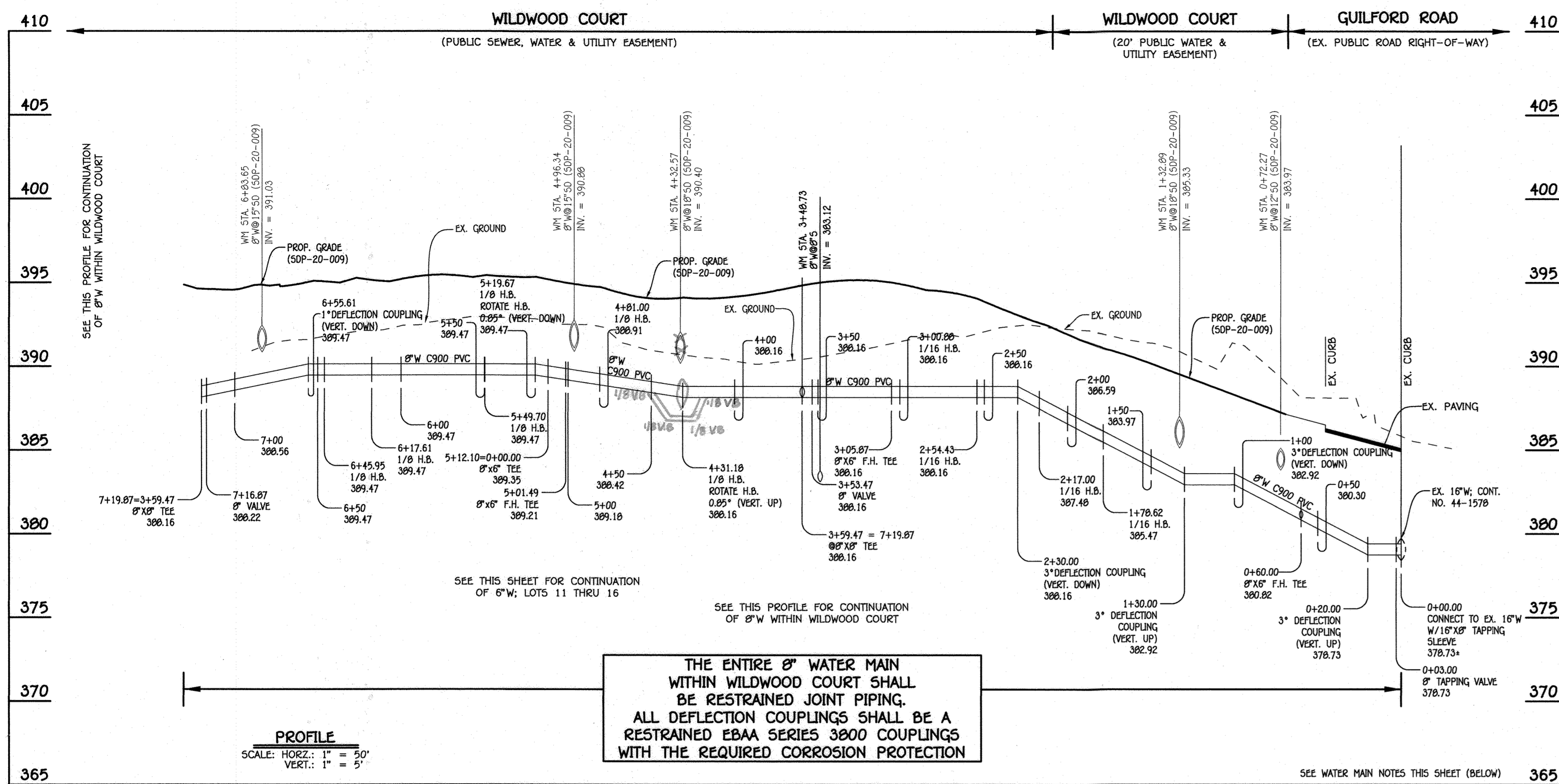


DESIGNED BY: P.W.K.  
DRAWN BY: T.C.R.  
CHECKED BY: P.W.K.  
DATE: APRIL, 2020

SEWER MAIN EXTENSIONS  
PROFILES & CHARTS  
600' SCALE MAP NO. 42 BLOCK NO. 7  
F.C.C. WORK ORDER NO. 17007  
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

EDEN BROOK  
LOTS 1 THRU 24 &  
OPEN SPACE LOTS 25 THRU 27  
SEWER & WATER MAIN EXTENSIONS  
CONTRACT NO. 24-5081-D  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 4 OF 6

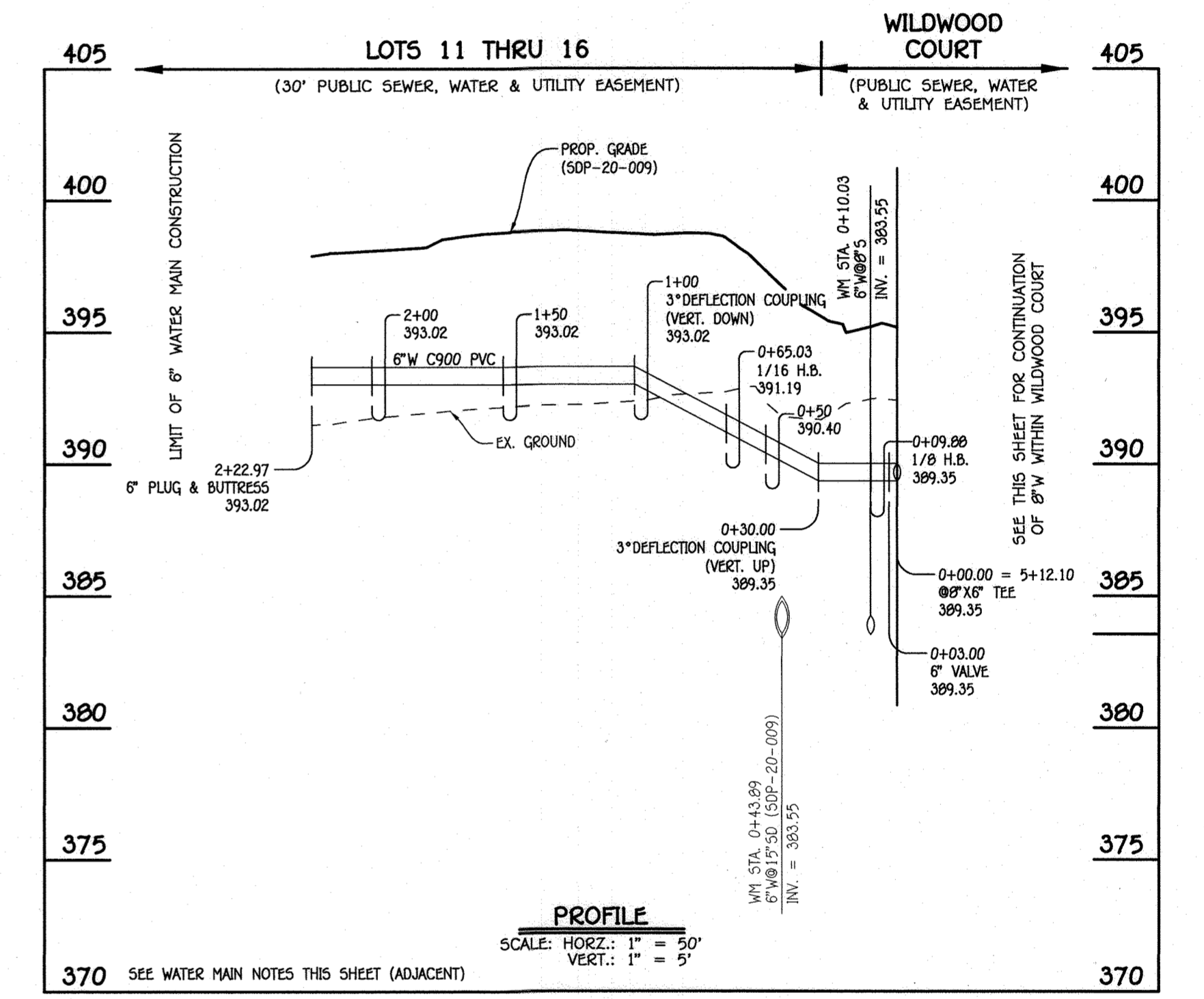


**8" WATER MAIN: WILDWOOD COURT**

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: WILDWOOD COURT			
0+00.00	16" X 8" TAPPING SLEEVE	548261.20	1350175.21
0+03.00	8" TAPPING VALVE	548259.03	1350173.14
0+20.00	3" DEFLECTION COUPLING (VERT. UP)	548246.73	1350161.40
0+60.00	8" X 6" F.H. TEE	548218.03	1350132.27
1+78.62	1/16 H.B.	548132.25	1350090.33
2+17.00	1/16 H.B.	548096.47	1350036.46
2+54.43	1/16 H.B.	548059.05	1350037.32
3+00.28	1/16 H.B.	548016.55	1350056.09
3+05.87	8" X 6" F.H. TEE	548013.10	1350059.70
3+53.47	8" VALVE	547980.25	1350094.13
3+59.47 = 7+19.87	8" X 8" TEE	547976.11	1350098.47
4+31.18	1/8 H.B.	547926.60	1350150.35
4+81.00	1/8 H.B.	547876.80	1350151.85
5+01.49	8" X 6" F.H. TEE	547861.89	1350137.98
5+12.10 = 0+00.00	8" X 6" TEE	547854.12	1350130.75
5+19.67	1/8 H.B.	547848.49	1350125.52
5+49.70	1/8 H.B.	547847.25	1350095.51
6+17.61	1/8 H.B.	547894.87	1350047.11
6+45.95	1/8 H.B.	547923.21	1350046.82
7+16.87	8" VALVE	547973.96	1350096.37
7+19.87 = 3+59.47	8" X 8" TEE	547976.11	1350098.47

- WATER MAIN NOTES:**
- ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-18.
  - ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.
  - DEFLECTION COUPLINGS FOR THE 8" WATER MAIN, WILDWOOD COURT SHALL BE AS SPECIFIED IN THE NOTE INCLUDED WITHIN THE PROFILE. DEFLECTION COUPLINGS FOR THE 8" WATER MAIN, LOTS 11 THRU 16 SHALL BE CERTAIN-TIED PVC HIGH DEFLECTION COUPLINGS.
  - ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

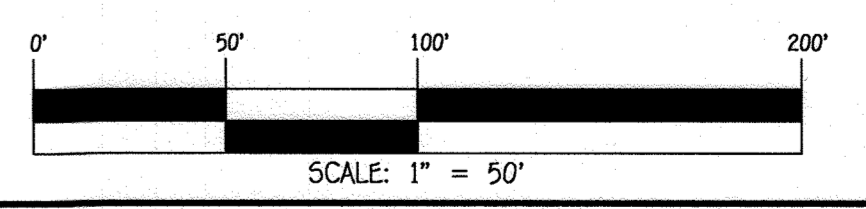
WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE			
LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1	7205 WILDWOOD CT	NHC-1 TO SMH-180 = 25.1'	NHC-1 TO SCH-2 = 19.9'
2	7207	NHC-2 TO SMH-180 = 25.1'	NHC-2 TO SCH-2 = 19.9'
3	7209	NHC-3 TO SMH-145 = 16.7'	NHC-3 TO 8" VALVE = 21.2'
4	7215	NHC-4 TO NHC-3 = 24.7'	NHC-4 TO SMH = 83.4'
5	7215	NHC-5 TO NHC-3 = 24.7'	NHC-5 TO SMH = 83.4'
6	7219	NHC-6 TO NHC-9 = 14.6'	NHC-6 TO SMH-180 = 17.8'
7	7219	NHC-7 TO NHC-9 = 14.6'	NHC-7 TO SMH-180 = 17.8'
8	7223	NHC-8 TO NHC-9 = 14.6'	NHC-8 TO SMH-180 = 17.8'
9	7227	NHC-9 TO NHC-9 = 14.6'	NHC-9 TO SMH-180 = 17.8'
10	7227	NHC-10 TO FIRE HYDRANT-28.4'	NHC-10 TO SMH-180 = 17.8'
11	7227	NHC-11 TO SMH-180 = 20.4'	NHC-11 TO SCH-11 = 10.6'
12	7227	NHC-12 TO SMH-180 = 20.4'	NHC-12 TO SCH-11 = 10.6'
13	7227	NHC-13 TO SMH-180 = 22.4'	NHC-13 TO SCH-14 = 23.6'
14	7227	NHC-14 TO SMH-180 = 22.4'	NHC-14 TO SCH-14 = 23.6'
15	7227	NHC-15 TO SMH-180 = 20.4'	NHC-15 TO SMH-180 = 20.4'
16	7227	NHC-16 TO SMH-180 = 20.4'	NHC-16 TO SMH-180 = 20.4'
17	7227	NHC-17 TO SMH-180 = 18.4'	NHC-17 TO SCH-18 = 14.3'
18	7227	NHC-18 TO SMH-180 = 18.4'	NHC-18 TO SCH-18 = 14.3'
19	7227	NHC-19 TO SMH-180 = 21.4'	NHC-19 TO SCH-20 = 21.6'
20	7227	NHC-20 TO SMH-180 = 21.4'	NHC-20 TO SCH-20 = 21.6'
21	7227	NHC-21 TO SMH-180 = 22.4'	NHC-21 TO SMH-180 = 22.4'
22	7227	NHC-22 TO SMH-180 = 22.4'	NHC-22 TO SMH-180 = 22.4'
23	7204	NHC-23 TO NHC-25 = 52.5'	NHC-23 TO 6" VALVE = 13.1'
24	7204	NHC-24 TO NHC-25 = 52.5'	NHC-24 TO 6" VALVE = 13.1'
D.S. 25; EX. BLDG. WILDWOOD CT. NHC-25 TO 6" VALVE = 13.0'; NHC-25 TO FIRE HYDRANT = 28.4'			



**6" WATER MAIN: LOTS 11 THRU 16**

W.M. STA.	APPURTENANCE	NORTHING	EASTING
6" WATER MAIN: LOTS 11 THRU 16			
0+00.00 = 5+12.10	8" X 6" TEE	547854.12	1350130.75
0+03.00	6" VALVE	547852.07	1350132.95
0+09.00	1/8 H.B.	547847.39	1350137.99
0+65.03	1/16 H.B.	547794.28	1350152.85
2+22.97	6" PLUG & BUTTRESS	547644.77	1350101.96

**AS BUILTS**  
DATE: 4/14/21



CONTRACT NO. 24-5081-D  
EDEN BROOK  
LOTS 1 THRU 24 &  
OPEN SPACE  
LOTS 25 THRU 27  
SEWER & WATER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

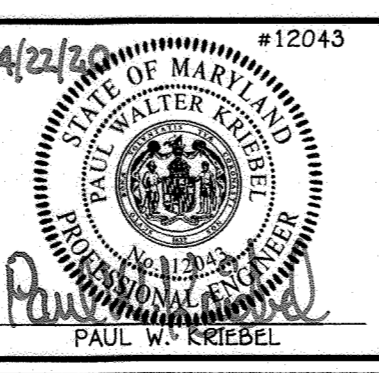
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

DATE: 5/11/2020

DATE: 5-29-20

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE 5/7/16/20.

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21042  
(410) 461-2895



DESIGNED BY:	P.W.K.
DRAWN BY:	T.C.R.
CHECKED BY:	P.W.K.
DATE:	APRIL, 2020
BY NO.	
REVISION	
DATE	

**WATER MAIN EXTENSIONS  
PROFILES, CHARTS, NOTES &  
"AS-BUILT" LOCATION TABLE**

600' SCALE MAP NO. 42 BLOCK NO. 7  
F.C.C. WORK ORDER NO. 17007  
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

**EDEN BROOK  
LOTS 1 THRU 24 &  
OPEN SPACE LOTS 25 THRU 27**  
SEWER & WATER MAIN EXTENSIONS  
CONTRACT NO. 24-5081-D  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 5 OF 6

**SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)**

**A. SOIL PREPARATION**

1. TEMPORARY STABILIZATION

A. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.

B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.

C. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

2. PERMANENT STABILIZATION

A. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:

- SOIL PH BETWEEN 6.0 AND 7.0.
- SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
- SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
- SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
- SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.

B. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.

C. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.

D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.

E. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE. REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRAGILE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

**B. TOPSOILING**

1. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.

3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE: A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH. B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS. C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.

5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:

A. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLUG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2 INCHES IN DIAMETER.

B. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

C. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

**6. TOPSOIL APPLICATION**

A. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.

B. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.

C. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

**C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)**

1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSIS.

2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.

3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.

4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

**STANDARD STABILIZATION NOTE**

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

- THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
- SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

**PERMANENT SEEDING NOTES (B-4-3)**

**A. SEED MIXTURES**

1. GENERAL USE

A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

B. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING.

C. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.

D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.

2. TURFGRASS MIXTURES

A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.

B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

C. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.

D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.

2. TURFGRASS MIXTURES

A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.

B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

C. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.

D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.

- KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
- KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
- TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN BROUGHOUT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.
- KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1 1/2 TO 3 POUNDS PER 1000 SQUARE FEET.

NOTES: SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND"

CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE.

C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A) CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 6B) SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 7A, 7B)

D. TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.

E. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

**PERMANENT SEEDING SUMMARY**

Hardiness Zone (from Figure B.3):		Fertilizer Rate (10-20-20)		Lime Rate
Seed Mixture (from Table B.3):		Seed Mixture (from Table B.3):		Seed Mixture (from Table B.3):
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
1	TALL FESCUE	100	Mar. 15 - May 15 Aug. 15 - Oct. 15	1/4" - 1/2" in.
2	FINE FESCUE	100	Mar. 15 - May 15 Aug. 15 - Oct. 15	1/4" - 1/2" in.

Hardiness Zone (from Figure B.3):		Fertilizer Rate (10-20-20)		Lime Rate
Seed Mixture (from Table B.3):		Seed Mixture (from Table B.3):		Seed Mixture (from Table B.3):
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
1	TALL FESCUE	100	Mar. 15 - May 15 Aug. 15 - Oct. 15	1/4" - 1/2" in.
2	FINE FESCUE	100	Mar. 15 - May 15 Aug. 15 - Oct. 15	1/4" - 1/2" in.

Hardiness Zone (from Figure B.3):		Fertilizer Rate (10-20-20)		Lime Rate
Seed Mixture (from Table B.3):		Seed Mixture (from Table B.3):		Seed Mixture (from Table B.3):
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
1	TALL FESCUE	100	Mar. 15 - May 15 Aug. 15 - Oct. 15	1/4" - 1/2" in.
2	FINE FESCUE	100	Mar. 15 - May 15 Aug. 15 - Oct. 15	1/4" - 1/2" in.

Hardiness Zone (from Figure B.3):		Fertilizer Rate (10-20-20)		Lime Rate
Seed Mixture (from Table B.3):		Seed Mixture (from Table B.3):		Seed Mixture (from Table B.3):
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
1	TALL FESCUE	100	Mar. 15 - May 15 Aug. 15 - Oct. 15	1/4" - 1/2" in.
2	FINE FESCUE	100	Mar. 15 - May 15 Aug. 15 - Oct. 15	1/4" - 1/2" in.

Hardiness Zone (from Figure B.3):		Fertilizer Rate (10-20-20)		Lime Rate
Seed Mixture (from Table B.3):		Seed Mixture (from Table B.3):		Seed Mixture (from Table B.3):
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
1	TALL FESCUE	100	Mar. 15 - May 15 Aug. 15 - Oct. 15	1/4" - 1/2" in.
2	FINE FESCUE	100	Mar. 15 - May 15 Aug. 15 - Oct. 15	1/4" - 1/2" in.

**B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA**

A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES.

**PURPOSE**

TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS. CONDITIONS WHERE PRACTICE APPLIES STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE.

**CRITERIA**

- THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
- THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.
- RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE.
- ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE.
- CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER.
- WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE.
- STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION.
- IF THE STOCKPILE IS LOCATED ON AN IMPROVISED SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING.

**MAINTENANCE**

THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN A 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.

**TEMPORARY SEEDING NOTES (B-4-4)**

TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

**PURPOSE**

TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

**CONDITIONS WHERE PRACTICE APPLIES**

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

**CRITERIA**

- SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
- FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
- WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH AS PRESCRIBED IN SECTION B-4-3A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

Temporary Seeding Summary

Hardiness Zone (from Figure B.3):		Fertilizer Rate (10-20-20)		Lime Rate
Seed Mixture (from Table B.1):		Seed Mixture (from Table B.1):		Seed Mixture (from Table B.1):
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	
BARLEY	96	3/1 - 5/15	1"	436 lb/ac (10 lb/1000 sf)
OATS	72	8/15 - 10/15	1"	2 tons/ac (90 lb/1000 sf)
RYE	112			

Temporary Seeding Summary

Hardiness Zone (from Figure B.3):		Fertilizer Rate (10-20-20)		Lime Rate
Seed Mixture (from Table B.1):		Seed Mixture (from Table B.1):		Seed Mixture (from Table B.1):
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	
BARLEY	96	3/1 - 5/15	1"	436 lb/ac (10 lb/1000 sf)
OATS	72	8/15 - 10/15	1"	2 tons/ac (90 lb/1000 sf)
RYE	112			

**HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES**

1. A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1895 AFTER THE FUTURE LID AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES:

- PRIOR TO THE START OF EARTH DISTURBANCE.
- UPON COMPLETION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING.
- PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT.
- PRIOR TO THE REPAIR OR MODIFICATION OF SEDIMENT CONTROL PRACTICES.
- OTHER BONDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS PLAN.

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.

3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE GRADING.

4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-3), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-5).

5. TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH 3:1 OF CUT AND/OR FILL STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST BE BENCHING WITH STABLE OUTLET. ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATING (SEC. B-4-6).

6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE CID.

6. SITE ANALYSIS:

TOTAL AREA OF SITE:	4.91 ACRES
AREA DISTURBED:	4.72 ACRES
AREA TO BE ROOFED OR PAVED:	2.10 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	0.10 ACRES
TOTAL CUT:	0 CU. YDS.
TOTAL FILL:	0 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION:	N/A

7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

8. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE CID, THE SITE AND ALL CONTROLS MUST BE INSPECTED BY THE CONTRACTOR WEEKLY AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE:

- INSPECTION DATE
- INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT)
- NAME AND TITLE OF INSPECTOR
- WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION)
- BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES
- EVIDENCE OF SEDIMENT DISCHARGES
- IDENTIFICATION OF PLAN DEFICIENCIES
- IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE
- IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS
- COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS
- PHOTOGRAPHS
- MONITORING/SAMPLING
- MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED
- OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION
- ACTIVITIES (NPDES, NPDES)

**SEQUENCE OF CONSTRUCTION**

- OBTAIN GRADING PERMIT. (7 DAYS)
  - NOTIFY "MISS UTILITY" AT 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 48 HOURS BEFORE STARTING WORK.
  - REQUEST FOR A PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE ENFORCEMENT AUTHORITY. (1 DAY)
  - INSTALL SEDIMENT CONTROLS AS INDICATED ON SHEET 3. THE CONTRACTOR SHALL INSPECT AND PROVIDE THE NECESSARY MAINTENANCE ON ALL SEDIMENT CONTROL DEVICES/PRACTICES ON A DAILY BASIS AND IMMEDIATELY AFTER A RAINFALL. (1 DAY)
  - CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF THE SEWER & WATER MAINS. (3 DAYS)
  - INSTALL REMAINING PERIMETER CONTROL MEASURES AND INSTALL TEMPORARY SEEDING AS REQUIRED. (2 DAYS)
  - CONSTRUCT SEWER & WATER MAINS AND CONNECTIONS. (2 DAYS)
  - APPROVAL OF THE APPROPRIATE ENFORCEMENT AUTHORITY PRIOR TO REMOVAL OF SEDIMENT CONTROLS. (2 DAYS)
  - REMOVAL OF CONTROLS AND STABILIZATION OF AREAS THAT ARE DISTURBED BY REMOVAL OF SEDIMENT CONTROLS. (2 DAYS)
12. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.
13. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE.
14. ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON THE CONTOUR, AND BE IMBERGATED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2" IN ELEVATION.
15. STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE):
- USE I: AND IP: MARCH 1 - JUNE 15
  - USE II: AND IIP: OCTOBER 1 - APRIL 30
  - USE IV: MARCH 1 - MAY 31
16. A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND ASSOCIATED PERMITS SHALL BE ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE.

**DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE**