

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
OFFICE OF TRANSPORTATION ENGINEERING
CLOVER HILL
DRAINAGE IMPROVEMENTS
FREDERICK COUNTY PROJECT NUMBER: XXX

DEVELOPMENT REVIEW ENGINEERING
REVIEWED IN ACCORDANCE WITH LOCAL COUNTY REQUIREMENTS. FREDERICK COUNTY ASSUMES NO LIABILITY FOR DESIGN AND /OR CONSTRUCTION. APPROVAL IS VALID FOR TWO (2) YEARS AFTER THE LAST DATE SHOWN ABOVE. THE PROJECT MUST BE UNDER CONSTRUCTION BEFORE THE APPROVAL EXPIRATION TO BE CONSIDERED ACTIVE. OTHERWISE, RESUBMITTAL OF PLANS, INCLUDING APPLICABLE FEES, MUST BE MADE TO DEVELOPMENT REVIEW FOR APPROVAL. FEES FOR RESUBMITTAL CANNOT BE WAIVED.

NOTICE TO BIDDERS
THE SPECIFICATIONS FOR THIS CONTRACT WILL BE THOSE OF THE STATE HIGHWAY ADMINISTRATION, TITLED "STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS", DATED JULY 2023, REVISIONS THERETO, AND THE SPECIAL PROVISIONS.

SEDIMENT AND EROSION CONTROL WILL BE STRICTLY ENFORCED DURING CONSTRUCTION. BY ENVIRONMENTAL COMPLIANCE SECTION. PHONE No. 301-600-3507

THE GRADING LIMITS SHOWN ON THE PLANS ARE NOT TO BE EXCEEDED. CHANGES IN THE GRADING, EROSION AND SEDIMENT CONTROL PLAN, OR OTHER SEGMENT OF THE WORK MUST BE REVIEWED AND APPROVED BY THE FREDERICK COUNTY DIVISION OF PUBLIC WORKS.

THE FREDERICK COUNTY DIVISION OF PUBLIC WORKS SHALL ONLY BE RESPONSIBLE FOR THE COMPLETENESS OF DOCUMENTS OBTAINED DIRECTLY FROM FREDERICK COUNTY. FAILURE TO ATTACH ALL ADDENDA MAY CAUSE THE BID TO BE NON-RESPONSIVE.

IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR THAT THE STANDARD PLATES IN HIS / HER POSSESSION ARE THE LATEST REVISED S.H.A. STANDARD PLATES AS OF THE DATE OF THE AWARD OF THIS PROJECT.

RIGHT OF WAY LINES ON THESE PLANS ARE FOR ASSISTANCE IN INTERPRETING THE PLANS. THESE LINES DO NOT REPRESENT THE OFFICIAL PROPERTY ACQUISITION LINES. FOR OFFICIAL RIGHT OF WAY AND EASEMENT INFORMATION, SEE APPROPRIATE R / W PLATS NUMBERED: XXXXXX

MDE PERMIT NO. XX /XX, EXPIRATION DATE: XX /XX /20XX

US ARMY CORPS OF ENGINEERS PERMIT NO. XX, EXPIRATION DATE: XX /XX /20XX

ADA COMPLIANCE
THE DESIGN OF THIS PROJECT HAS INCORPORATED FACILITIES FOR THE ELDERLY AND HANDICAPPED IN COMPLIANCE WITH THE STATE AND FEDERAL LEGISLATION.

APPROVALS SUMMARY TABLE					
Permit	Applicable		Tracking No.	Approval Date	Expiration Date
	Yes	No			
Soil Conservation District	X				
MDE Wetlands and Waterways	X				
MDE NOI for Stormwater Associated with Construction Activity	X				
CLOMR/LOMR					
Other:					

PROFESSIONAL CERTIFICATION
IN MY PROFESSIONAL OPINION, THESE PLAN SHEETS COMPLY WITH THE CURRENT REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AS OF THE APPROVED DATE INDICATED ON THIS DOCUMENT. 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.

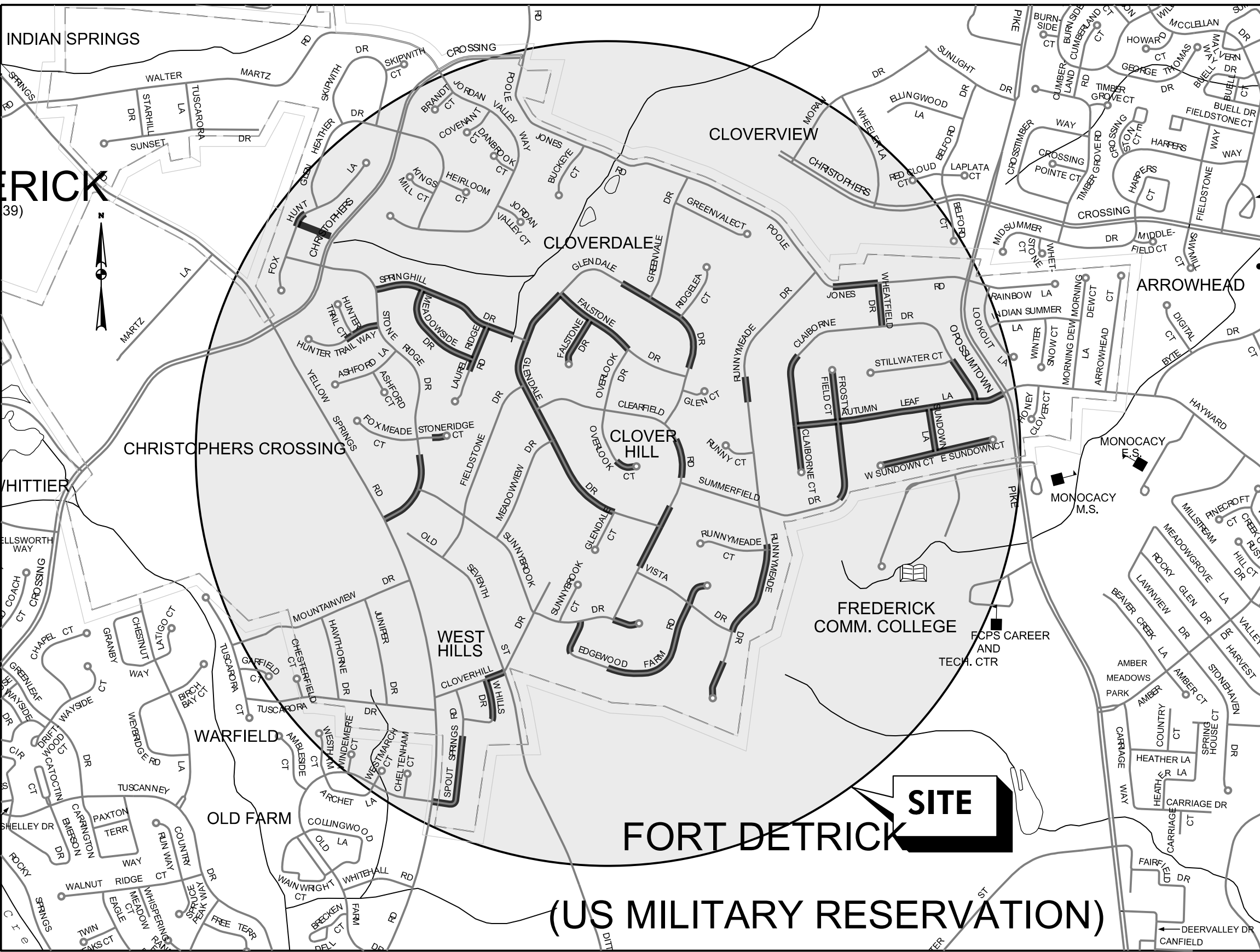
LICENSE NO. 56874 , EXPIRATION DATE: 01 / 04 / 2025

ALEXANDRA D. BOYLE DATE

PROFESSIONAL CERTIFICATION
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LICENSE NO. 56874 , EXPIRATION DATE: 01 / 04 / 2025

ALEXANDRA D. BOYLE DATE



LENGTH OF PROJECT:
XX = 0.XX MILES

LOCATION MAP
SCALE: 1" = 1000'

SURVEY INFORMATION

FIELD SURVEY PREPARED BY:
THE WILSON T. BALLARD CO.
XXXXX 2024 – JULY 2024
HORIZONTAL DATUM: NAD 83 / 91
VERTICAL DATUM: NAVD 88

THIS DATA WAS COLLECTED ELECTRONICALLY AND NO PHYSICAL FIELD BOOKS EXIST. CONTROL INFORMATION IS AVAILABLE UPON REQUEST.

SCD APPROVAL FOR SEDIMENT AND EROSION CONTROL IS CONTINGENT UPON ISSUANCE OF ALL APPLICABLE REGULATORY PERMITS.

FREDERICK COUNTY SOIL CONSERVATION DISTRICT NRCS SMALL POND	FREDERICK COUNTY SOIL CONSERVATION DISTRICT SEDIMENT AND EROSION CONTROL	FREDERICK COUNTY DIVISION OF PUBLIC WORKS	FREDERICK COUNTY OFFICE OF TRANSPORTATION ENGINEERING	WB CONSULTING ENGINEERS OWINGS MILLS, MD	
APPROVED BY: _____ DISTRICT MANAGER	APPROVED BY: _____ DISTRICT MANAGER	APPROVED BY: _____ DIRECTOR	APPROVED BY: _____ CHIEF		
DATE _____	DATE _____	DATE _____	DATE _____		

TI-01

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

TITLE SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
SCALE: AS SHOWN

FREDERICK COUNTY PROJECT NO. XXX

DWG. 1 OF XX

UTILITY GENERAL NOTE
ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FREDERICK COUNTY GENERAL CONDITIONS AND STANDARD SPECIFICATIONS AND DETAILS FOR WATER MAINS, SANITARY SEWER AND RELATED STRUCTURES, SPECIAL PROVISIONS AND AMENDMENTS THERETO.

EXISTING UTILITIES
THE TYPE AND LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS MADE AS TO THE ACCURACY OF SAID LOCATIONS. CONTACT "MISS UTILITY" AT 1-800-257-7777 A MINIMUM OF 5 DAYS PRIOR TO START OF WORK.

WHEN CLEARING AND GRUBBING TO INSTALL AND DURING THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES WITHIN THE TEMPORARY EASEMENT AREAS, (BETWEEN THE LIMITS OF PERMANENT GRADING AND LIMIT OF DISTURBANCE), THE CONTRACTOR SHALL MAKE EVERY POSSIBLE ATTEMPT TO AVOID UNNECESSARY DISTURBANCE TO EXISTING TREES, STRUCTURES AND LANDSCAPING WITHIN THE AREA. THE CONTRACTOR SHALL PRESENT THE ENGINEER WITH POSSIBLE OPTIONS TO MINIMIZE DISTURBANCES TO THESE ITEMS FOR APPROVAL.

INDEX OF SHEETS

DRAWING NO.	SHEET NO.	DRAWING DESCRIPTION
1	TI-01	TITLE SHEET
2	IN-01	INDEX OF SHEETS
3	TS-01	TYPICAL SECTIONS
4	TD-01	TYPICAL DETAILS
5-15	GS-01 TO GS-11	GEOMETRY SHEETS
16	DP-01	DRAINAGE PROFILE
17-21	LA-01 TO LA-5	PLAN SHEET LAYOUT
22-52	PS-01 TO PS-31	PLAN SHEETS
53	GS-12	FOX HUNT LANE - GEOMETRY SHEET
54	SMW-01	FOX HUNT LANE - PLAN VIEW
55	SMW-02	FOX HUNT LANE - DRAINAGE PROFILE
56	SMW-03	FOX HUNT LANE - DESIGN DETAIL & TYPICAL SECTION

IN-01

FREDERICK COUNTY, MARYLAND
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DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

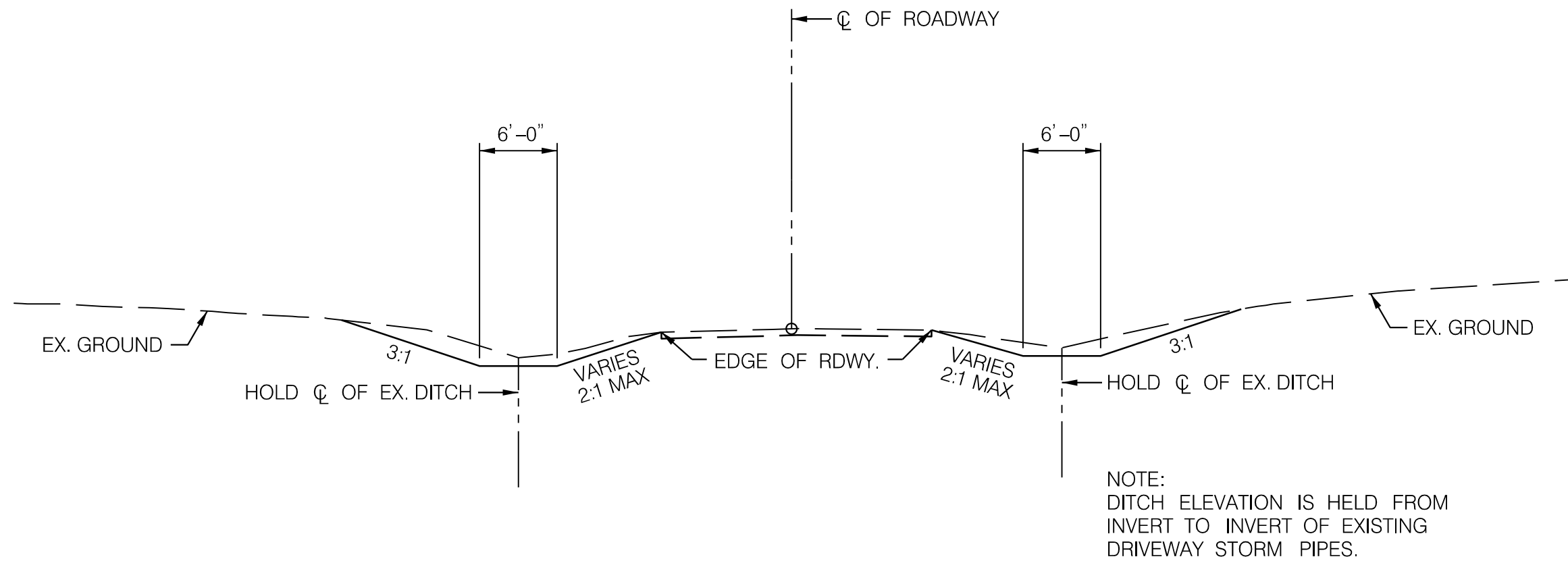
INDEX OF SHEETS

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
SCALE: NONE
FREDERICK COUNTY PROJECT NO. XX
DWG. 2 OF XX

PROFESSIONAL CERTIFICATION.
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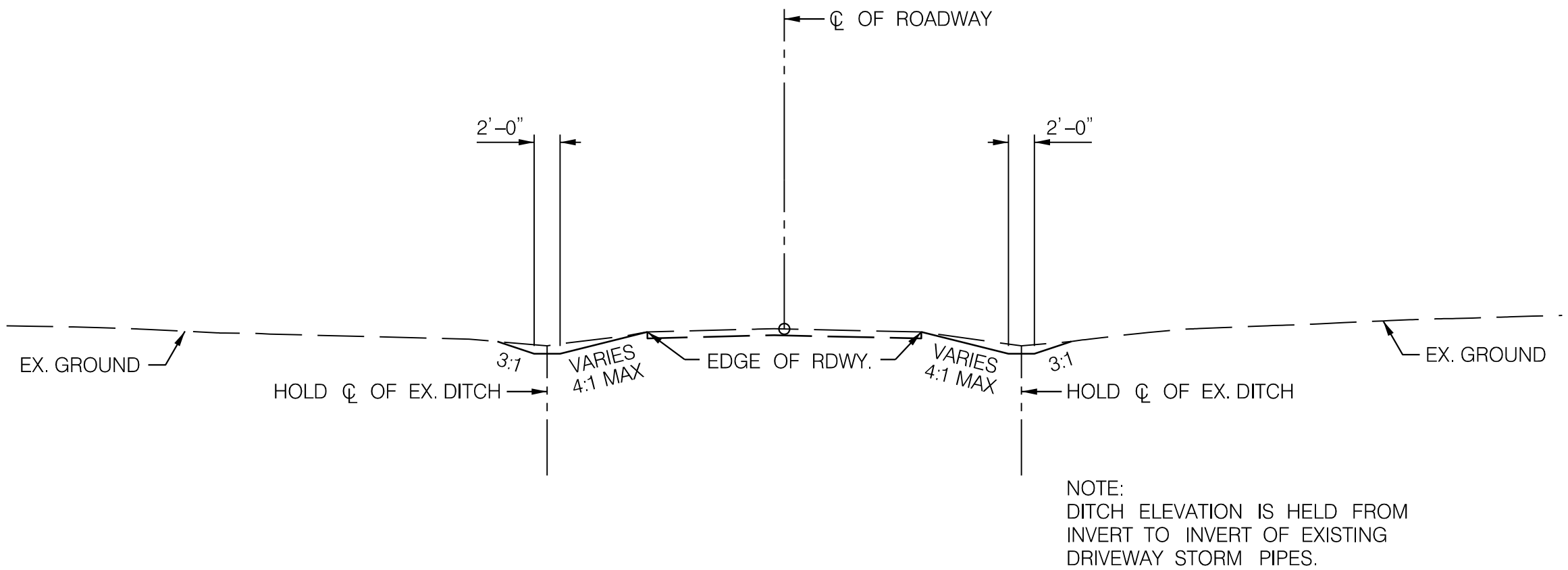
WB
CONSULTING ENGINEERS | THE WILSON T. BALLARD CO.
OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS.....	
PIPE & DRAINAGE SCHEDULE.....	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS.....	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	



QUANTITY AREAS (6' DITCH)

- AUTUMN LEAF LANE – RT AND LT OF STA.1000+15± TO STA.1019+25±
CLAIBORNE DRIVE (EAST) – RT AND LT OF STA.1100+50± TO STA.1104+45±
SUNDOWN LANE – RT AND LT OF STA.1200+30± TO STA.1204+00±
WEST SUNDOWN COURT – LT OF STA.1302+20± TO STA.1304+40±
SUMMERFIELD DRIVE – RT OF STA.1600+35± TO STA.1607+00±
CLAIBORNE DRIVE (NORTHWEST) – LT OF STA.1700+00± TO STA.1706+55±
CLAIBORNE DRIVE (SOUTHWEST) – STA.1800+00± TO STA.1803+35±
GLENDALE DRIVE – RT OF STA.2001+10± TO STA.2017+00±
GLENDALE DRIVE – LT OF STA.2000+00± TO STA.2017+80±
FALSTONE DRIVE – RT OF STA.2100+40± TO STA.2104+40±
FALSTONE DRIVE – LT OF STA.2100+40± TO STA.2105+80±
FALSTONE COURT – LT OF STA.2200+35± TO STA.2203+80±
SPRINGHILL DRIVE – RT OF STA.2302+55± TO STA.2310+90±
SPRINGHILL DRIVE – LT OF STA.2302+50± TO STA.2313+45±
LAUREL RIDGE ROAD – RT OF STA.2400+45± TO STA.2404+55±
LAUREL RIDGE ROAD – LT OF STA.2400+40± TO STA.2403+40±
MEADOWSIDE DRIVE – RT AND LT OF STA.2500+35± TO STA.2509+30±



QUALITY AREAS (2' DITCH)

- EAST SUNDOWN COURT – RT OF STA.1400+30± TO STA.1404+25±
WEST SUNDOWN COURT – RT OF STA.1300+55± TO STA.1304+65±
FROSTY FIELD COURT – RT OF STA.1500+35 TO STA.1504+20±
CLAIBORNE DRIVE (NORTHWEST) – RT OF STA.1700+40± TO STA.1705+35±
FALSTONE COURT – RT OF STA.2200+35± TO STA.2203+60±
SPRINGHILL DRIVE – RT OF STA.2311+10± TO STA.2314+90±
WHEATFIELD DRIVE – RT OF STA.3200+40± TO STA.3203+30±
WHEATFIELD DRIVE – LT OF STA.3203+20± TO STA.3203+80±
POOLE JONES ROAD – LT OF STA.3100+25± TO STA.3102+80±
RUNNYMEADE DRIVE – RT OF STA.3012+55± TO STA.3014+90±
RUNNYMEADE DRIVE – LT OF STA.3029+00± TO STA.3037+85±
RUNNYMEADE DRIVE – LT OF STA.3040+85± TO STA.3044+10±
GLENDALE DRIVE (EAST) – LT OF STA.3306+40± TO STA.3317+90±
CLEARFIELD ROAD – RT OF STA.3414+60± TO STA.3417+95±
CLEARFIELD ROAD – LT OF STA.3421+30± TO STA.3427+70±
SUNNYBROOK DRIVE – RT OF STA.3807+85± TO STA.3810+35±
EDGEWOOD FARM ROAD (NORTH) – RT OF STA.3600+35± TO STA.3602+00±
EDGEWOOD FARM ROAD (NORTH) – LT OF STA.3601+65± TO STA.3602+00±
EDGEWOOD FARM ROAD (SOUTH) – RT OF STA.3705+65± TO STA.3709+30±
EDGEWOOD FARM ROAD (SOUTH) – LT OF STA.3700+60± TO STA.3711+80±
EDGEWOOD FARM ROAD (SOUTH) – LT OF STA.3715+75± TO STA.3718+40±
OVERLOOK COURT – RT OF STA.3505+20± TO STA.3506+85±
CLOVER HILL DRIVE – RT OF STA.4405+35± TO STA.4406+65±
WEST HILLS DRIVE – RT OF STA.3903+10± TO STA.3906+55±
SPOUT SPRING ROAD – LT OF STA.4500+30± TO STA.4508+50±
STONE RIDGE DRIVE – LT OF STA.4023+20± TO STA.4030+20±
STONE RIDGE COURT – LT STA.4300+05± TO STA.4301+30±
HUNTER TRAIL WAY – RT OF STA.4203+45± TO STA.4206+35±
FOX HUNT LANE – RT OF STA.4107+90± TO STA.4108+70±

BY: DAW -
PLOTED: 8/30/2024
FILE: I:\Frederick County NPDES - Clover Hill\CAD\pht-xdd\CloverHill.dgn

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WILLSON T.
BALLARD CO.
CONSULTING ENGINEERS | OWINGS MILLS, MD

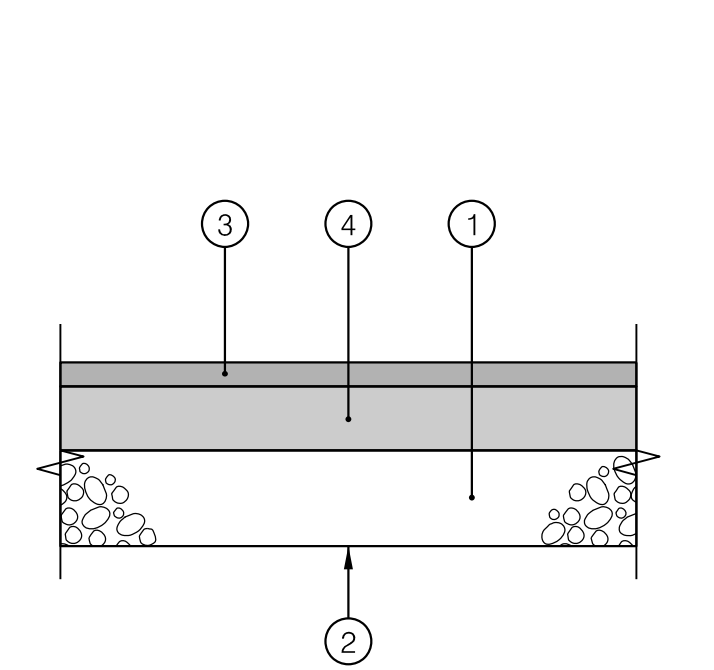
CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS SUPERELEVATION CHARTS PIPE & DRAINAGE SCHEDULE GEOMETRIC LAYOUT SHEETS ROADWAY PLAN SHEETS ROADWAY PROFILE SHEETS TRAFFIC CONTROL SHEETS EROSION & SEDIMENT CONTROL PLANS SIGNING & MARKING PLANS LANDSCAPE PLAN SHEETS RESPECTIVE RIGHT-OF-WAY PLATS	

TS-01
FREDERICK COUNTY, MARYLAND
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OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

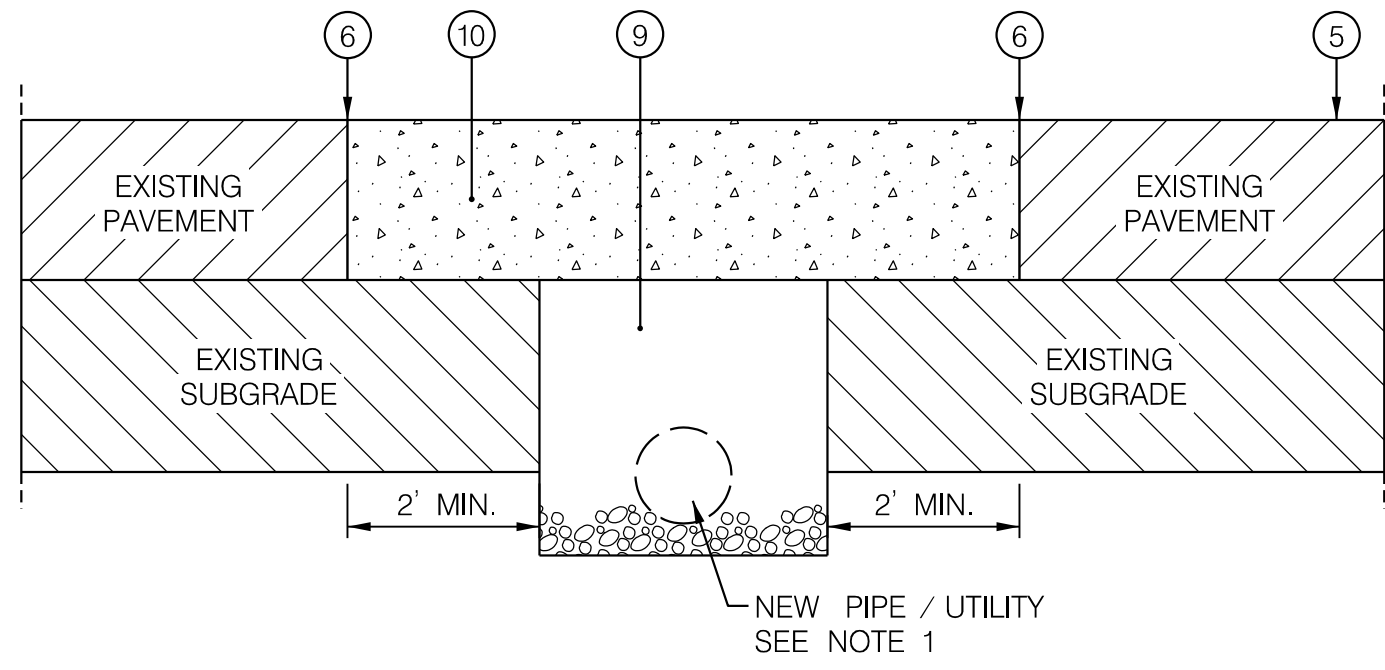
CLOVER HILL

TYPICAL SECTION

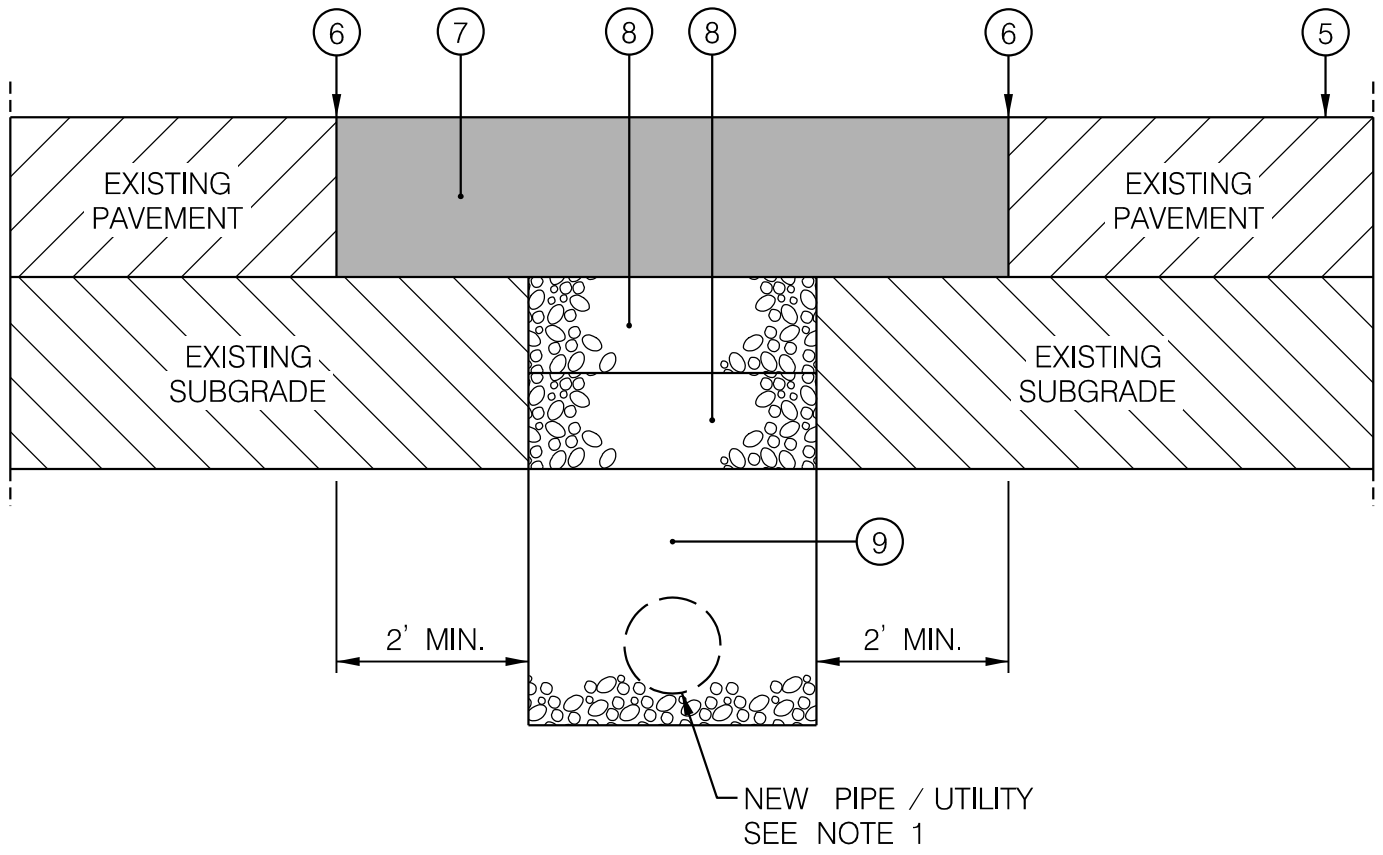
DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
SCALE: 1" = 10'-0"
FREDERICK COUNTY PROJECT NO. XX
DWG. OF XX



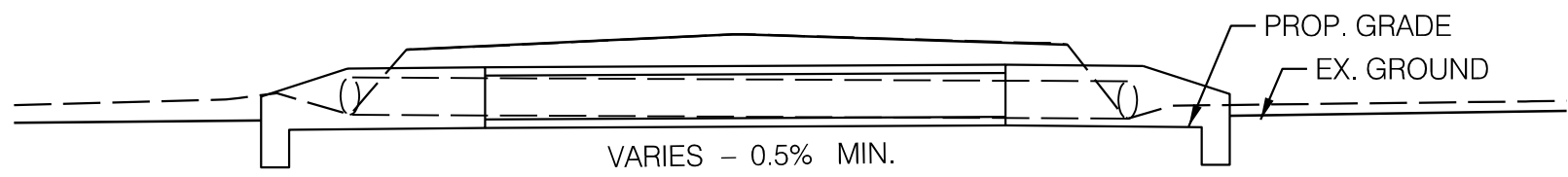
PAVEMENT DETAIL A
RESIDENTIAL ASPHALT DRIVEWAY
NOT TO SCALE



PAVEMENT DETAIL C
CONCRETE APRON
NOT TO SCALE



PAVEMENT DETAIL B
UTILITY PATCHING
NOT TO SCALE



PIPE REPLACEMENT PROFILE
NOT TO SCALE

- NOTES:
- EXISTING PIPES WITH INVERSE SLOPES ARE TO BE REPLACED WITH EQUIVALENT SIZE HERCP AT A MINIMUM 0.5% SLOPE.
 - WHEN PIPE IS TO BE REPLACED, RECONSTRUCT DRIVEWAY USING PAVEMENT DETAIL A (THIS SHEET).
 - IF 12 INCH COVER REQUIREMENT OVER THE PIPE CANNOT BE MET, A CONCRETE APRON SHALL BE INSTALLED.

PAVEMENT LEGEND

- | | | |
|---|----------------|---|
| ① | 6" | GRADED AGGREGATE BASE COURSE |
| ② | | LIMIT OF CLASS 1 EXCAVATION AND TOP OF SUBGRADE |
| ③ | 1.5" | SUPERPAVE ASPHALT MIX 12.5 MM FOR SURFACE, PG 64S-22, LEVEL 2 |
| ④ | 4" | SUPERPAVE ASPHALT MIX 19.0 MM FOR BASE, PG 64S-22, LEVEL 2 |
| ⑤ | | TOP OF EXISTING PAVEMENT |
| ⑥ | | FULL DEPTH SAWCUT, SAWCUT SHALL BE 1' INSIDE EXISTING PAVEMENT EDGE |
| ⑦ | VARIABLE DEPTH | SUPERPAVE ASPHALT MIX 19.0 MM FOR FULL-DEPTH PATCH, PG 64S-22, LEVEL 2 (2" MINIMUM, 4" MAXIMUM LIFT) (SEE NOTE 1) |
| ⑧ | 6" | GRADED AGGREGATE BASE COURSE INCIDENTAL TO NEW PIPE /UTILITY ITEMS (SEE NOTE 1) |
| ⑨ | | MATERIAL FOR BEDDING AND TRENCH BACKFILL (REFER TO SECTION 303 OF THE MDSHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS JULY 2024 AND MD 578.01 OF THE MDSHA STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES FOR REPAIRING PAVEMENT OPENINGS FOR UTILITY TRENCHES) (SEE NOTE 1) |
| ⑩ | | MSHA MIX NO.3 CONCRETE |

NOTES:

- FOR PIPE/UTILITY PATCHES, ALL COSTS FOR SAW-CUTS, TRENCH EXCAVATION, BACKFILL, BEDDING, ASPHALT PAVEMENT, GAB, TOOLS, LABOR, AND INCIDENTAL SHALL BE INCLUDED IN THE CONTRACT PRICE OF THE PIPE ITEM AS PER SECTION 303 AND MD 578.01 OF THE MDSHA STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES FOR REPAIRING PAVEMENT OPENINGS FOR UTILITY TRENCHES.

TD-01

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

SWM DETAIL

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
SCALE: AS SHOWN

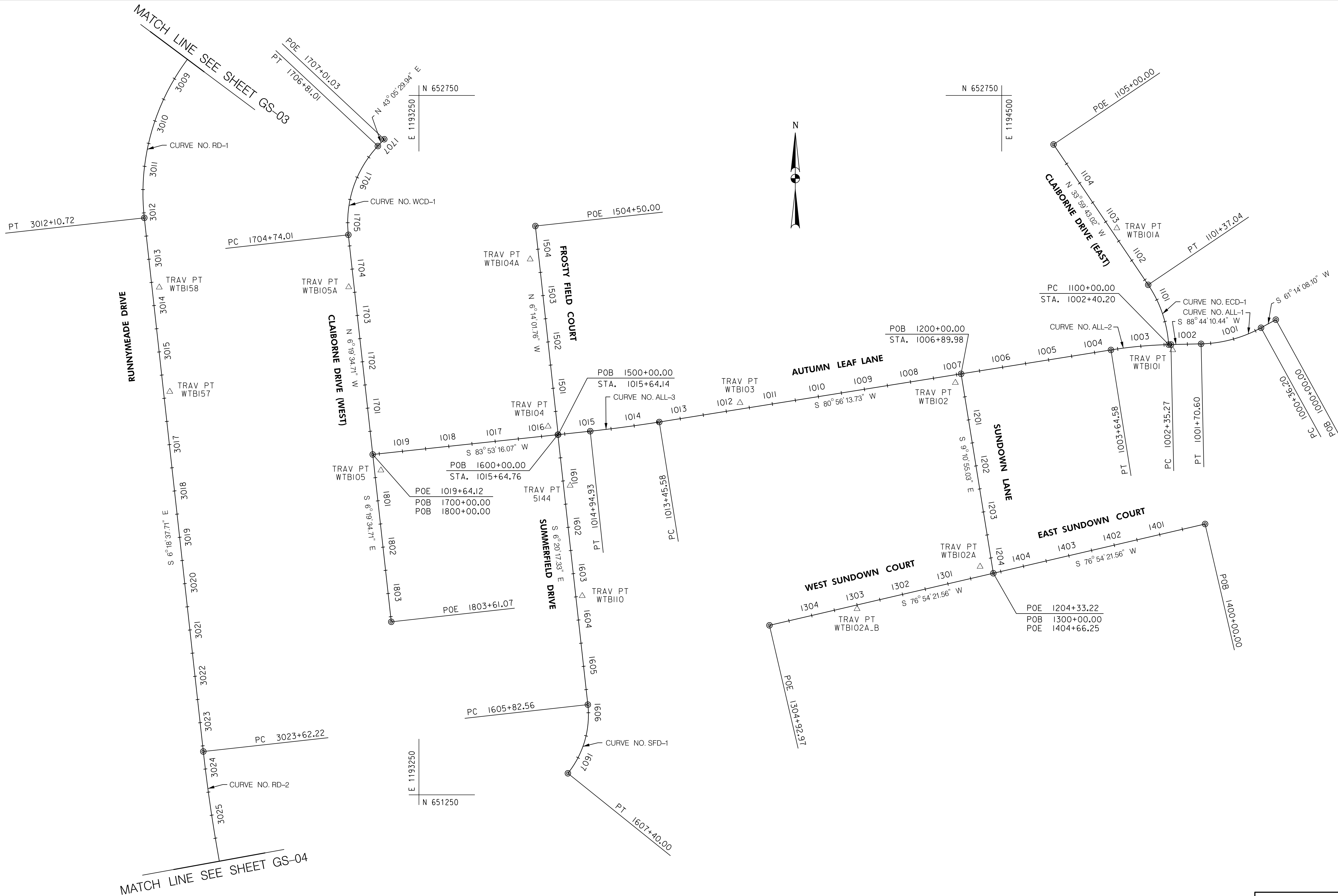
FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX

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LICENSE NO. XXXXX
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WB
CONSULTING ENGINEERS | THE WILSON T. BALLARD CO.
OWINGS MILLS, MD

CROSS REFERENCE	
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SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

BY: DAW -
PLOTED: 8/30/2024
FILE: US\Frederick County NPDES - CloverHill\CAD\65-POD1.CloverHill.dgn



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GS-01

FREDERICK COUNTY, MARYLAND
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DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

GEOMETRY SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET

SCALE: 1" = 100'

FREDERICK COUNTY PROJECT NO.
XX

DWG. # OF XX

TRAVERSE POINTS			
POINT NO.	NORTH	EAST	ELEVATION
WTBIO1	652204.0971	1194866.7514	339.47
WTBIO1A	652465.5689	1194746.8904	341.89
WTBIO2	652133.9796	1194400.5827	349.00
WTBIO2A	651739.6122	1194453.5854	353.25
WTBIO2A_B	651648.9250	1194189.6822	355.36
WTBIO3	652090.8056	1193938.7327	354.53
WTBIO4	652040.1542	1193527.0591	359.27
WTBIO4A	652398.7425	1193488.6188	363.20
WTBIO5	651946.1225	1193168.5084	363.14
WTBIO5A	652339.0498	1193099.4315	364.93
WTBII0	651676.7613	1193600.2507	360.00
WTBI57	652114.7189	1192715.6842	372.00
WTBI58	652338.4670	1192693.1317	372.00
5144	651913.4030	1193574.2715	358.31

AUTUMN LEAF LANE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
ALL-1	P0B 1000+00.00	652269.1475	1195087.9038	S 61°14'08.1037° W
	PC 1000+36.20	652251.7269	1195056.1690	
	PI 1001+04.72	652218.7557	1194996.1064	
	CC	652497.1765	1194921.4304	
	PT 1001+70.60	652217.2446	1194927.6058	S 88°44'10.4423° W
ALL-2	PC 1002+35.27	652215.8182	1194862.9498	
	PI 1003+00.02	652214.3900	1194798.2087	
	CC	651266.0493	1194883.9021	
	PT 1003+64.58	652204.1897	1194734.2602	S 80°56'13.7256° W
	PC 1013+45.58	652049.6641	1193765.5034	
ALL-2	PI 1014+20.27	652037.8991	1193691.7463	
	CC	654913.4609	1193308.7015	
	PT 1014+94.93	652029.9465	1193617.4814	S 83°53'16.0727° W
	P0E 1019+64.12	651979.9887	1193150.9551	

CLAIBORNE DRIVE (EAST)				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
ECD-1	PC 1100+00.00	652215.6966	1194858.0185	N 3°47'45.7730° W
	PI 1100+70.15	652285.6943	1194853.3742	
	CC	652198.4833	1194598.5890	
	PT 1101+37.04	652343.8557	1194814.1507	
	P0E 1105+00.00	652644.7801	1194611.2107	N 33°59'43.0191° W

SUMMERFIELD DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
SFD-1	P0B 1600+00.00	652022.5117	1193548.0525	S 6°20'17.3265° E
	PC 1605+82.56	651443.5086	1193612.3653	
	PI 1606+65.62	651360.9647	1193621.5338	
	CC	651421.4294	1193413.5877	
	PT 1607+40.00	651296.2067	1193569.5342	S 38°45'50.1499° W

RUNNYMEADE DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
RD-1	P0B 3000+00.00	653445.0055	1193337.3622	S 43°37'18.6835° W
	PC 3007+92.41	652871.3734	1192790.6822	
	PI 3010+15.89	652709.5923	1192636.5025	
	CC	652540.2234	1193138.1584	
	PT 3012+10.72	652487.4637	1192661.0668	S 6°18'37.7113° E
RD-2	PC 3023+62.22	651342.9375	1192787.6355	
	PI 3025+12.93	651193.1504	1192804.1998	
	CC	651716.6520	1196167.0344	
	PT 3026+63.43	651045.4161	1192833.9514	S 11°23'10.5506° E

AUTUMN LEAF LANE DRIVE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
ALL-1	1000+36.20	27°30'02.3387° RT.	20°27'46.0022°	280.0000'	68.5172'	134.3935'	8.2614'
ALL-2	1002+35.27	7°47'56.7168° LT.	6°01'52.0849°	950.0000'	64.7569'	129.3138'	2.2045'
ALL-3	1013+45.58	2°57'02.3471° RT.	1°58'32.5795°	2900.0000'	74.6895'	149.3459'	0.9617'

CLAIBORNE DRIVE (EAST) CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
ECD-1	1100+00.00	30°11'57.2462° LT.	22°02'12.6178°	260.0000'	70.1515'	137.0398'	9.2977'

SUMMERFIELD DRIVE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
ECD-1	1605+82.56	45°06'07.4764° RT.	28°38'52.4031°	200.0000'	83.0515'	157.4359'	16.5584'

RUNNYMEADE DRIVE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
RD-1	3007+92.41	49°55'56.3949° LT.	11°56'11.8346°	480.0000'	223.4827'	418.3121'	49.4757'
RD-2	3023+62.22	5°04'32.8393° LT.	1°41'06.6119°	3400.0000'	150.7003'	301.2034'	3.3382'

BY: DAW -
PLOTED: 8/30/2024
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ITEM	SHEET NOS.
TYPICAL SECTIONS	
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PIPE & DRAINAGE SCHEDULE	
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ROADWAY PLAN SHEETS	
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GS-02

FREDERICK COUNTY, MARYLAND

DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

GEOMETRY SHEET

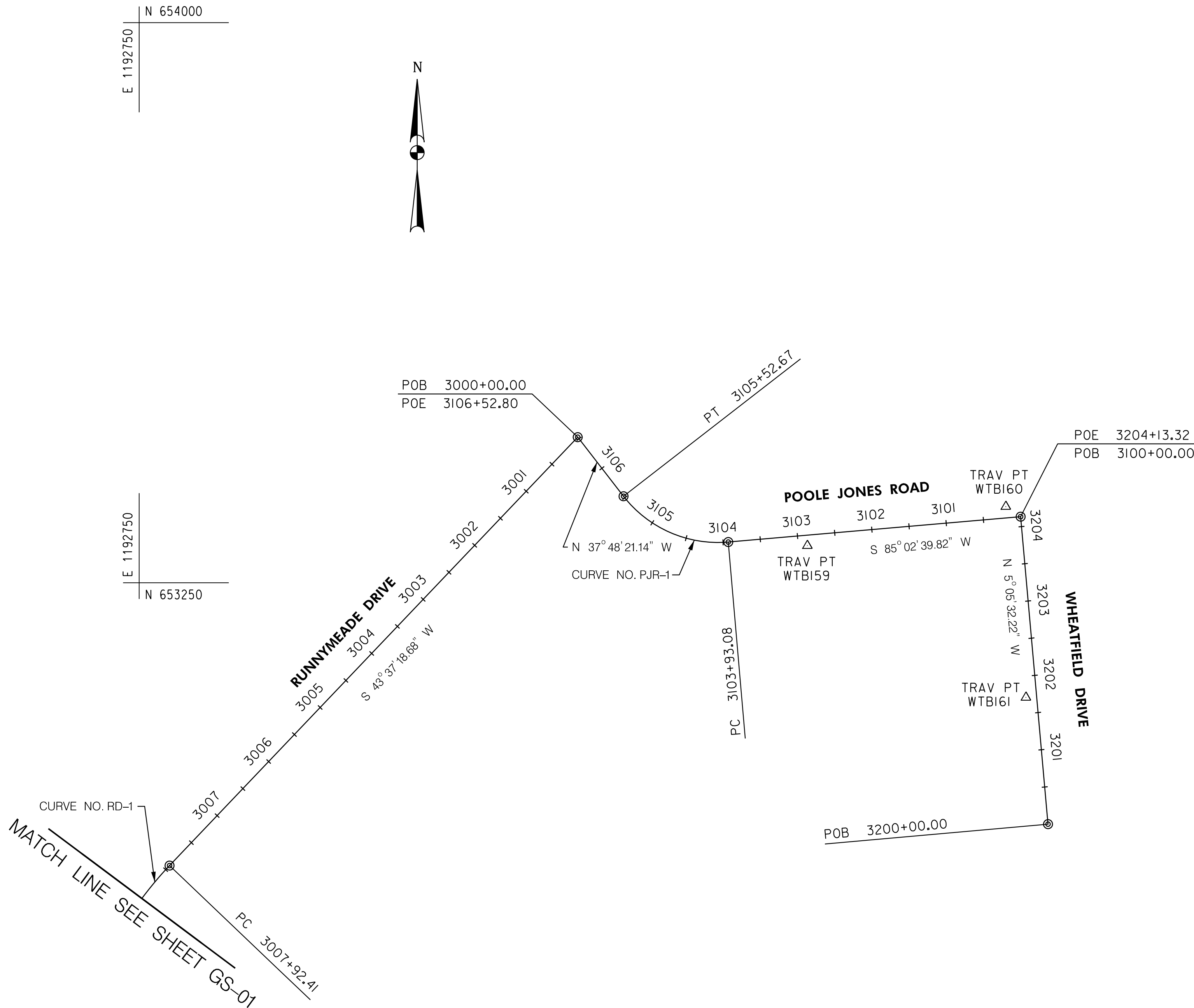
DATE: AUGUST 2024
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SCALE: 1" = 100'

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POOLE JONES ROAD CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
PJR-1	3103+93.08	57° 08' 59.0412" RT.	35° 48' 35.5039"	160.0000'	87.1438'	159.5922'	22.1923'

RUNNYMEADE DRIVE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
RD-1	3007+92.41	49° 55' 56.3949" LT.	11° 56' 11.8346"	480.0000'	223.4827'	418.3121'	49.4757'

TRAVERSE POINTS			
POINT NO.	NORTH	EAST	ELEVATION
WTBI59	653299.7792	1193645.0069	367.78
WTBI60	653352.0876	1193910.8130	363.15
WTBI61	653096.6106	1193937.7699	363.08

POOLE JONES ROAD				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
PJR-1	POB 3100+00.00	653338.5322	1193930.5839	S 85° 02' 39.8209" W
	PC 3103+93.08	653304.5763	1193538.9717	
	PI 3104+80.23	653297.0485	1193452.1537	
	CC	653463.9783	1193525.1503	
	PT 3105+52.67	653365.9002	1193398.7356	N 37° 48' 21.1379" W

RUNNYMEADE DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
RD-1	POB 3000+00.00	653445.0055	1193337.3622	S 43° 37' 18.6835" W
	PC 3007+92.41	652871.3734	1192790.6822	
	PI 3010+15.89	652709.5923	1192636.5025	
	CC	652540.2234	1193138.1584	
	PT 3012+10.72	652487.4637	1192661.0668	S 6° 18' 37.7113" E

GS-03

FREDERICK COUNTY, MARYLAND
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DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
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FREDERICK COUNTY, MARYLAND

CLOVER HILL

GEOMETRY SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
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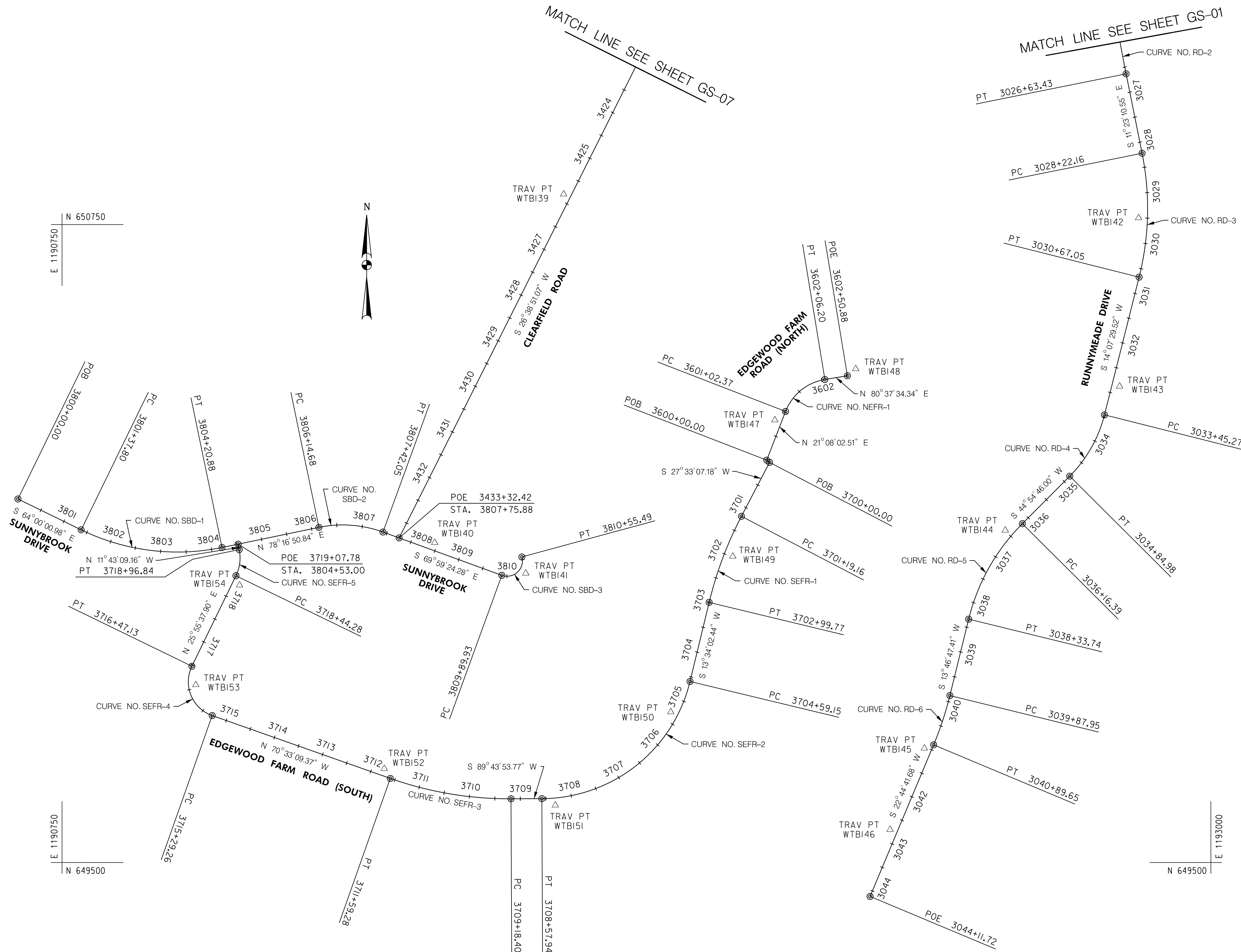
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THE
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GS-04

FREDERICK COUNTY, MARYLAND
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RUNNYMEADE DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
RD-2	PT 3012+10.72	652487.4637	1192661.0668	S 6°18'37.7113° E
	PC 3023+62.22	651342.9375	1192787.6355	
	PI 3025+12.93	651193.1504	1192804.1998	
	CC	651716.6520	1191617.0344	
	PT 3026+63.43	651045.4161	1192833.9514	S 11°23'10.5506° E
RD-3	PC 3028+22.16	650889.8112	1192865.2881	
	PI 3029+46.67	650767.7532	1192889.8688	
	CC	650781.2289	1192326.1129	
	PT 3030+67.05	650647.0092	1192859.4843	S 14°07'29.5171° W
	PC 3033+45.27	650377.2004	1192791.5885	
RD-4	PI 3034+16.85	650307.7783	1192774.1189	
	CC	650440.6497	1192539.4493	
	PT 3034+84.98	650257.0821	1192723.5767	S 44°54'45.9988° W
	PC 3036+16.39	650164.0204	1192630.7980	
	PI 3037+27.82	650085.1078	1192552.1253	
RD-5	CC	649881.6086	1192914.0709	
	PT 3038+33.74	649976.8853	1192525.5837	S 13°46'47.4142° W
	PC 3039+87.95	649827.1124	1192488.8518	
	PI 3040+38.90	649777.6222	1192476.7143	
	CC	649981.9370	1191857.5600	
RD-6	PT 3040+89.65	649730.6281	1192457.0129	S 22°44'41.6846° W
	POE 3044+11.72	649433.6073	1192332.4928	

SUNNYBROOK DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
SBD-1	POB 3800+00.00	650212.3225	1190663.6021	S 64°00'00.9786° E
	PC 3801+37.80	650151.9137	1190787.4600	
	PI 3802+84.69	650087.5254	1190919.4771	
	CC	650538.3960	1190975.9578	
	PT 3804+20.88	650117.3594	1191063.2975	N 78°16'50.8428° E
SBD-2	PC 3806+14.68	650156.7235	1191253.0588	
	PI 3806+80.05	650169.9998	1191317.0598	
	CC	649931.5179	1191299.7754	
	PT 3807+42.05	650147.6336	1191378.4775	S 69°59'24.2818° E
	PC 3809+89.93	650062.8136	1191611.3931	
SBD-3	PI 3810+47.81	650043.0092	1191665.7757	
	CC	650091.0026	1191621.6586	
	PT 3810+55.49	650098.8634	1191650.6104	N 15°11'25.8178° W

EDGEWOOD FARM ROAD (NORTH)				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
NEFR-1	POB 3600+00.00	650288.4603	1192130.1324	N 21°08'02.5060° E
	PC 3601+02.37	650383.9440	1192167.0416	
	PI 3601+59.51	650437.2460	1192187.6455	
	CC	650347.8889	1192260.3156	
	PT 3602+06.20	650446.5536	1192244.0281	N 80°37'34.3448° E
	POE 3602+50.88	650453.8311	1192288.1131	

EDGEWOOD FARM ROAD (SOUTH)				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
SEFR-1	POB 3700+00.00	650284.0866	1192135.7006	S 27°33'07.1784° W
	PC 3701+19.16	650178.4440	1192080.5846	
	PI 3702+09.92	650097.9770	1192038.6033	
	CC	649836.1545	1192736.6623	
	PT 3702+99.77	650009.7497	1192017.3121	S 13°34'02.4434° W
SEFR-2	PC 3704+59.15	649854.8249	1191979.9253	
	PI 3706+94.22	649626.3058	1191924.7785	
	CC	649925.2013	1191688.2968	
	PT 3708+57.94	649625.2046	1191689.7021	S 89°43'53.7732° W
	PC 3709+18.40	649624.9214	1191629.2425	
SEFR-3	PI 3710+40.04	649624.3516	1191507.6042	
	CC	650324.9137	1191625.9634	
	PT 3711+59.28	649664.8504	1191392.9045	N 70°33'09.3735° W
	PC 3715+29.26	649788.0330	1191044.0300	
	PI 3716+07.66	649814.1358	1190970.1024	
SEFR-4	CC	649854.0393	1191067.3359	
	PT 3716+47.13	649884.6453	1191004.3814	N 25°55'37.9048° E
	PC 3718+44.28	650061.9502	1191090.5800	
	PI 3718+71.55	650086.4758	1191102.5034	
	CC	650096.9285	1191018.6320	
SEFR-5	PT 3718+96.84	650113.1777	1191096.9644	N 11°43'09.1572° W
	POE 3719+07.78	650123.8826	1191094.7437	

RUNNYMEADE DRIVE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
RD-2	3023+62.22	5°04'32.8393° LT.	1°41'06.6119°	3400.0000'	150.7003'	301.2034'	3.3382'
RD-3	3028+22.16	25°30'40.0677° RT.	10°25'02.6920°	550.0000'	124.5085'	244.8893'	13.9170'
RD-4	3033+45.27	30°47'16.4817° RT.	22°02'12.6178°	260.0000'	71.5864'	139.7111'	9.6750'
RD-5	3036+16.39	31°07'58.5847° LT.	14°19'26.2016°	400.0000'	111.4297'	217.3489'	15.2308'
RD-6	3039+87.95	8°57'54.2705° RT.	8°48'53.0471°	650.0000'	50.9568'	101.7056'	1.9943'

SUNNYBROOK DRIVE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
SBD-1	3801+37.80	37°43'08.1786° LT.	13°19'28.5596°	430.0000'	146.8822'	283.0775'	24.3945'
SBD-2	3806+14.68	31°43'44.8754° RT.	24°54'40.3505°	230.0000'	65.3635'	127.3689'	9.1075'
SBD-3	3809+89.93	125°12'01.5360° LT.	190°59'09.3542°	30.0000'	57.8764'	65.5548'	35.1895'

EDGEWOOD FARM ROAD (NORTH) CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
NEFR-1	3601+02.37	59°29'31.8387° RT.	57°17'44.8062°	100.0000'	57.1457'	103.8334'	15.1765'

EDGEWOOD FARM ROAD (SOUTH) CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
SEFR-1	3701+19.16	13°59'04.7350° LT.	7°44'33.6225°	740.0000'	90.7599'	180.6178'	5.5450'
SEFR-2	3704+59.15	76°09'51.3298° RT.	19°05'54.9354°	300.0000'	235.0790'	398.7951'	81.1327'
SEFR-3	3709+18.40	19°42'56.8534° RT.	8°11'06.4009°	700.0000'	121.6396'	240.8738'	10.4901'
SEFR-4	3715+29.26	96°28'47.2783° RT.	81°51'04.0089°	70.0000'	78.4005'	117.8723'	35.1030'
SEFR-5	3718+44.28	37°38'47.0621° LT.	71°37'11.0078°	80.0000'	27.2704'	52.5643'	4.5203'

TRAVERSE POINTS			
POINT NO.	NORTH	EAST	ELEVATION
WTBI39	650809.6067	1191732.3226	380.96
WTBI40	650126.7962	1191479.9522	382.17
WTBI41	650066.8480	1191658.2064	385.36
WTBI42	650763.2225	1192858.3686	369.74
WTBI43	650433.1167	1192821.2334	374.23
WTBI44	650150.9751	1192597.1989	374.41
WTBI45	649723.9335	1192438.7584	376.03
WTBI46	649564.4519	1192371.7089	377.41
WTBI47	650367.0457	1192145.9902	379.00
WTBI48	650467.3753	1192304.3640	380.80
WTBI49	650099.9582	1192063.6539	382.98
WTBI50	649795.1167	1191942.2678	391.99
WTBI51	649612.2214	1191716.0357	388.46
WTBI52	649683.9952	1191380.9799	385.67
WTBI53	649848.2718	1191011.8476	377.57
WTBI54	650043.4640	1191097.5497	379.17

GS-05

FREDERICK COUNTY, MARYLAND
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FREDERICK COUNTY, MARYLAND

CLOVER HILL

GEOMETRY SHEET

DATE: AUGUST 2024
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SCALE: 1" = 100'

FREDERICK COUNTY PROJECT NO.
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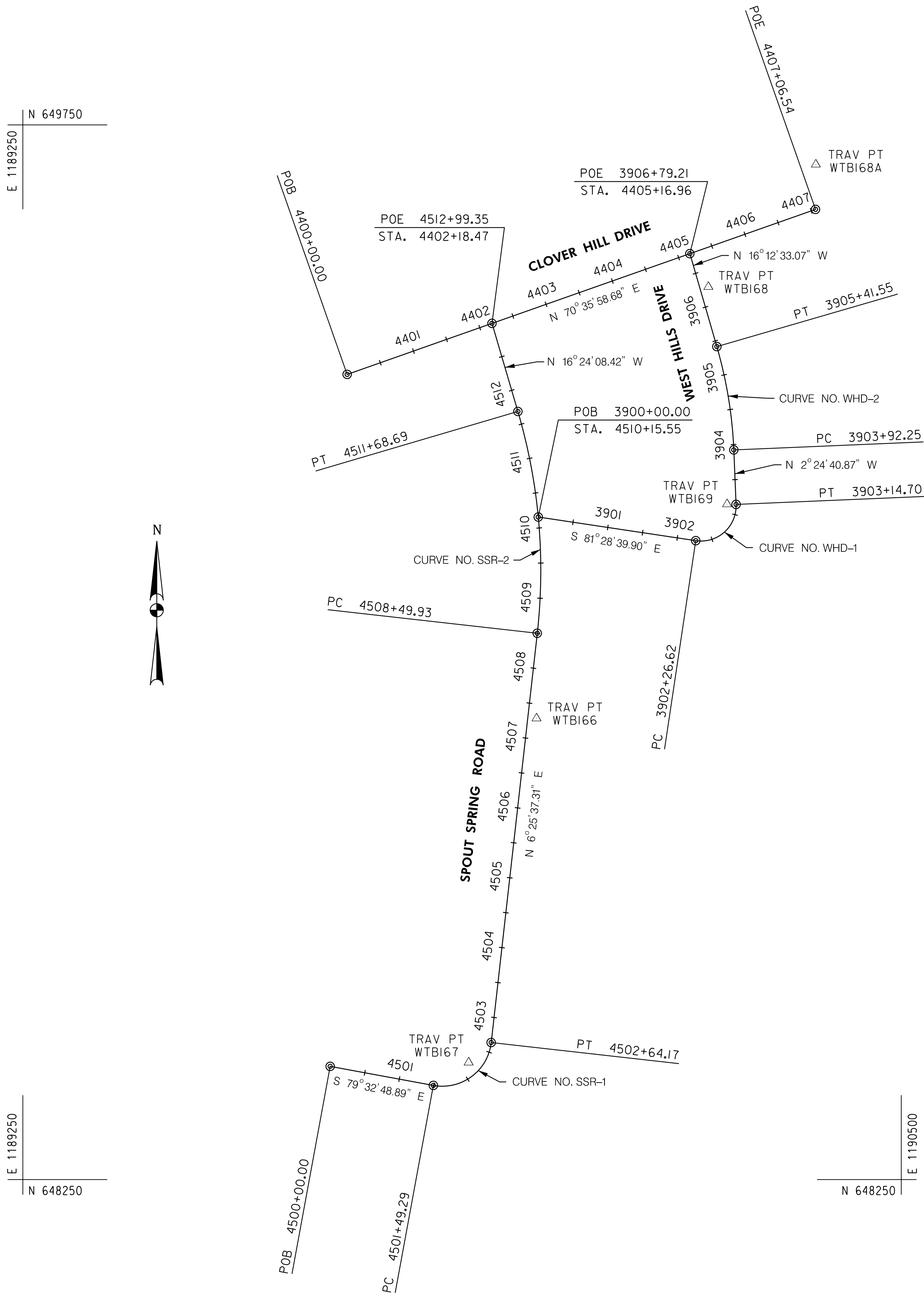
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WEST HILLS DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
WHD-1	POB 3900+00.00	649192.3045	1189983.4650	S 81°28'39.90" E
	PC 3902+26.62	649158.7216	1190207.5783	
	PI 3902+87.20	649149.7435	1190267.4927	
	CC	649208.1695	1190214.9880	
	PT 3903+14.70	649210.2732	1190264.9437	N 2°24'40.87" W
WHD-2	PC 3903+92.25	649287.7551	1190261.6809	
	PI 3904+67.26	649362.7050	1190258.5247	
	CC	649261.6694	1189642.2299	
	PT 3905+41.55	649434.7394	1190237.5842	N 16°12'33.07" W
	POE 3906+79.21	649566.9274	1190199.1571	

SPOUT SPRING ROAD				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
SSR-1	POB 4500+00.00	648410.9924	1189687.3878	S 79°32'48.89" E
	PC 4501+49.29	648383.9060	1189834.2040	
	PI 4502+24.39	648370.2806	1189908.0577	
	CC	648452.7443	1189846.9042	
	PT 4502+64.17	648444.9086	1189916.4642	N 6°25'37.31" E
SSR-2	PC 4508+49.93	649026.9884	1189982.0330	
	PI 4510+11.45	649187.4950	1190000.1134	
	CC	649116.5386	1189187.0609	
	PT 4511+68.69	649342.4431	1189954.5028	N 16°24'08.42" W
	POE 4512+99.35	649467.7861	1189917.6068	

WEST HILLS DRIVE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
WHD-1	3902+26.62	100°56'00.97" LT.	114°35'29.61"	50.0000'	60.5833'	88.0812'	28.5515'
WHD-2	3903+92.25	13°47'52.20" LT.	9°14'28.52"	620.0000'	75.0164'	149.3069'	4.5218'

SPOUT SPRING ROAD CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
SSR-1	4501+49.29	94°01'33.80" LT.	81°51'04.01"	70.0000'	75.1000'	114.8745'	32.6646'
SSR-2	4508+49.93	22°49'45.74" LT.	7°09'43.10"	800.0000'	161.5217'	318.7582'	16.1429'

TRAVERSE POINTS			
POINT NO.	NORTH	EAST	ELEVATION
WTBI66	648906.0672	1189980.9767	365.78
WTBI67	648416.5910	1189884.4022	358.98
WTBI68	649519.7092	1190225.5127	369.35
WTBI68A	649693.8081	1190378.4352	371.00
WTBI69	649210.7045	1190252.1204	367.20

GS-06

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FREDERICK COUNTY, MARYLAND

CLOVER HILL

GEOMETRY SHEET

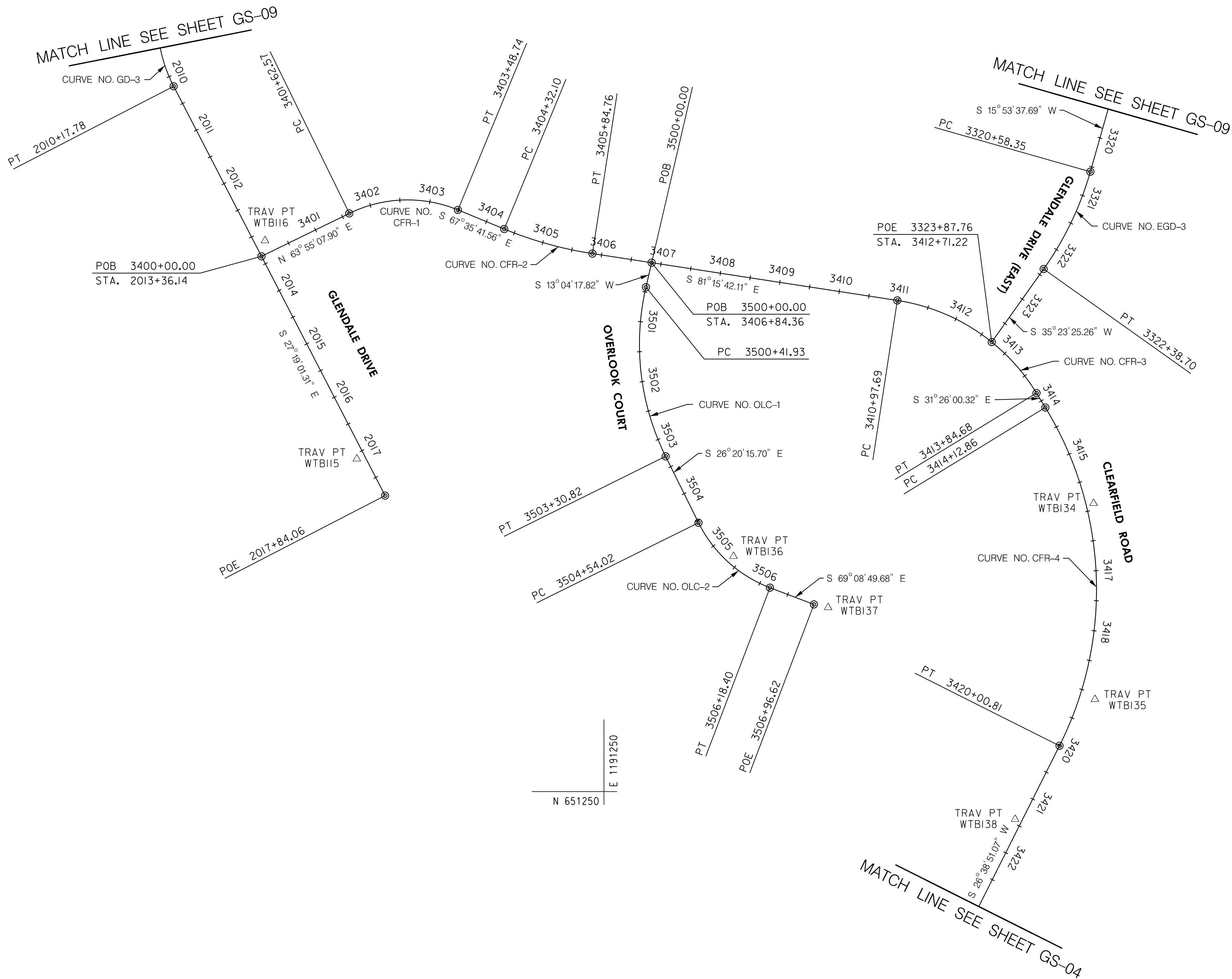
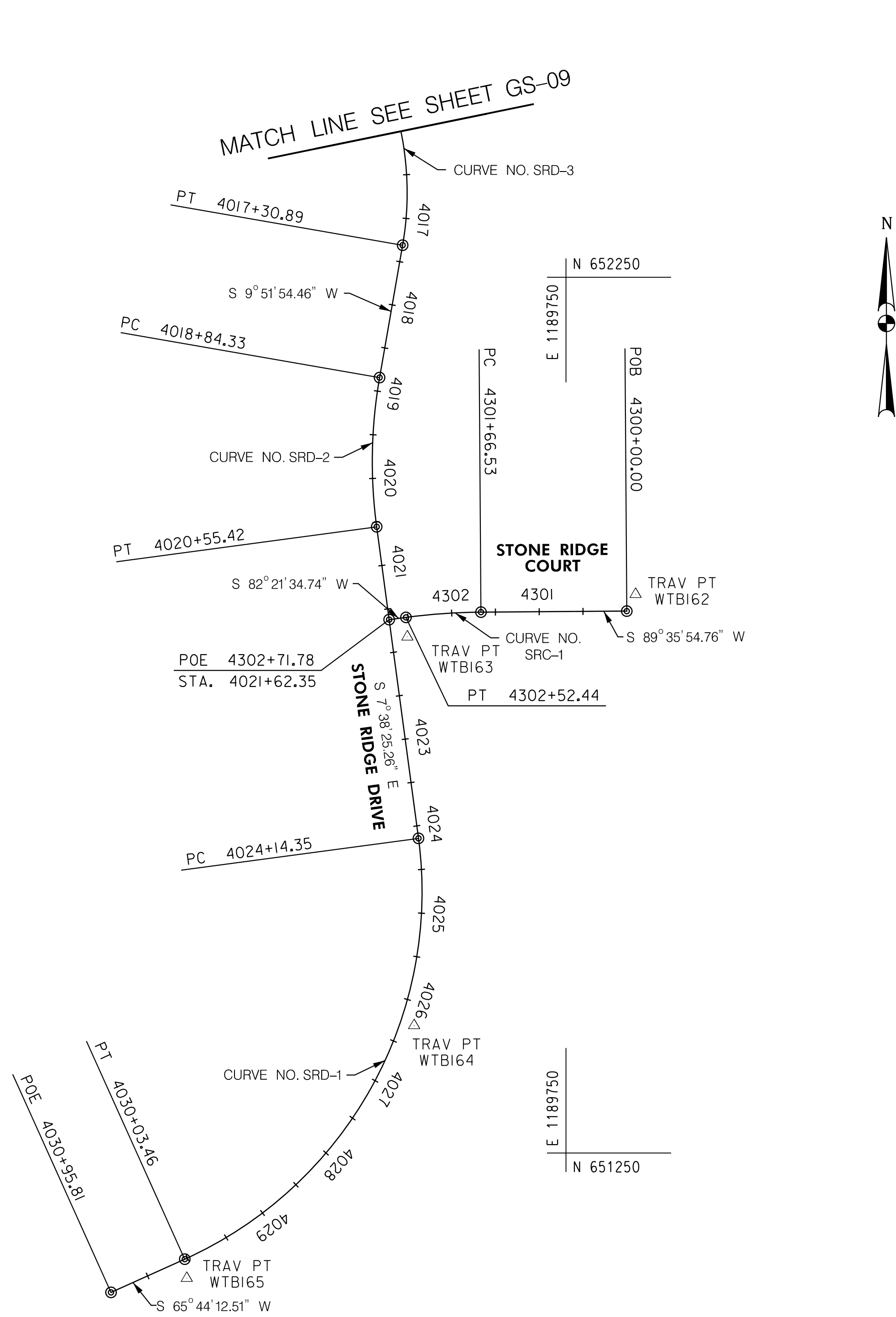
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BY: DAW -
PLOTED: 8/30/2024
FILE: USFrederick County NPDES - CloverHill.CAD\\65-POOT-CloverHill.dgn



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PROFFESIONAL ENGINEER UNDER THE
LAWS OF THE STATE OF MARYLAND.
LICENSE NO. XXXXX
EXPIRATION DATE: XX-XX-20XX

WB THE WILSON T. BALLARD CO.
CONSULTING ENGINEERS | OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

GS-07

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

GEOMETRY SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET

DATE: 1" = 100'

FREDERICK COUNTY PROJECT NO. XX

DWG. # OF XX

BY: DAW -
PLOTED: 8/30/2024
FILE: I:\Frederick County NPDES - Clover Hill CAD\605-POB8-Clover Hill.dgn

STONE RIDGE DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
SRD-1	POB 4000+00.00	653502.2191	1188640.9740	S 76° 42' 23.4032° E
	PC 4000+69.40	653486.2613	1188708.5143	
	PI 4001+16.49	653475.4343	1188754.3392	
	CC	654109.1125	1188855.6755	
	PT 4001+63.40	653471.4304	1188801.2552	S 85° 07' 19.7666° E
SRD-2	PC 4002+87.99	653460.8363	1188925.3943	
	PI 4005+09.66	653441.9874	1189146.2607	
	CC	653206.7599	1188903.7112	
	PT 4006+52.94	653220.6472	1189158.3328	S 3° 07' 18.7446° E
SRD-3	PC 4008+90.11	652983.8311	1189171.2489	
	PI 4010+30.19	652843.9614	1189178.8776	
	CC	653001.8029	1189500.7592	
	PT 4011+55.05	652752.2878	1189284.7911	S 49° 07' 19.6961° E

STONE RIDGE COURT				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
SRC-1	POB 4300+00.00	651868.8609	1189819.4649	S 89° 35' 54.7552° W
	PC 4301+66.53	651867.6940	1189652.9369	
	PI 4302+09.55	651867.3926	1189609.9243	
	CC	651187.7107	1189657.7015	
	PT 4302+52.44	651861.6738	1189567.2925	S 82° 21' 34.7431° W
	POE 4302+71.78	651859.1025	1189548.1244	

GLENDALE DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
GD-3	PCC 2008+59.30	652577.0753	1190511.6698	S 10° 31' 02.6313° W
	PI 2009+41.55	652496.2063	1190496.6562	
	CC	652533.2672	1190747.6377	
	PT 2010+17.78	652423.1279	1190534.4023	
	POE 2017+84.06	651742.2997	1190886.0602	S 27° 19' 01.3098° E

STONE RIDGE DRIVE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
SRD-1	4000+69.40	8° 24' 56.3633° LT.	8° 57' 08.8760°	640.0000'	47.0866'	94.0038'	1.7298'
SRD-2	4002+87.99	82° 00' 01.0219° RT.	22° 28' 08.1593°	255.0000'	221.6692'	364.9496'	82.8790'
SRD-3	4008+90.11	46° 00' 00.9514° LT.	17° 21' 44.4867°	330.0000'	140.0776'	264.9425'	28.4993'

STONE RIDGE COURT CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
SRC-1	4301+66.53	7° 14' 20.0121° LT.	8° 25' 33.0597°	680.0000'	43.0137'	85.9129'	1.3591'

GLENDALE DRIVE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
GD-3	2008+59.30	37° 50' 03.9411° LT.	23° 52' 23.6693°	240.0000'	82.2509'	158.4805'	13.7030'

CLEARFIELD ROAD				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
CFR-1	POB 3400+00.00	652140.2664	1190680.5045	N 63° 55' 07.8979° E
	PC 3401+62.57	652211.7384	1190826.5187	
	PI 3402+61.64	652255.2943	1190915.5016	
	CC	652014.1405	1190923.2403	
	PT 3403+48.74	652217.5331	1191007.0939	S 67° 35' 41.5635° E
CFR-2	PC 3404+32.10	652185.7603	1191084.1611	
	PI 3405+08.80	652156.5282	1191155.0655	
	CC	652777.4479	1191328.0990	
	PT 3405+84.76	652144.8767	1191230.8692	S 81° 15' 42.1065° E
CFR-3	PC 3410+97.69	652066.9516	1191737.8452	
	PI 3412+50.97	652043.6650	1191889.3459	
	CC	651740.7820	1191687.7111	
	PT 3413+84.68	651912.8795	1191969.2825	S 31° 26' 00.3177° E
	PC 3414+12.86	651888.8342	1191983.9791	
CFR-4	PI 3417+34.90	651614.0588	1192151.9227	
	CC	651586.3599	1191489.0959	
	PT 3420+00.81	651326.2296	1192007.4898	S 26° 38' 51.0738° W

OVERLOOK COURT				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
OLC-1	POB 3500+00.00	652129.7460	1191329.3087	S 13° 04' 17.8218° W
	PC 3500+41.93	652088.9015	1191319.8252	
	PI 3501+92.35	651942.3789	1191285.8048	
	CC	651993.9106	1191728.9422	
	PT 3503+30.82	651807.5730	1191352.5404	S 26° 20' 15.7006° E
	PC 3504+54.02	651697.1584	1191407.2012	
OLC-2	PI 3505+40.26	651619.8723	1191445.4616	
	CC	651794.7638	1191604.3640	
	PT 3506+18.40	651589.1743	1191526.0507	S 69° 08' 49.6798° E
	POE 3506+96.62	651561.3300	1191599.1482	

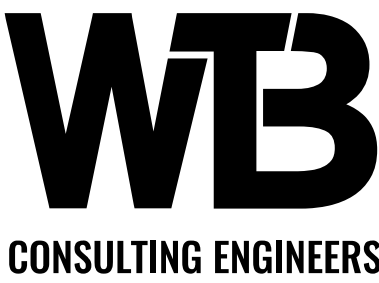
GLENDALE DRIVE (EAST)				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
EGD-3	PC 3320+58.35	652281.0373	1192058.7885	S 15° 53' 37.6876° W
	PI 3321+49.41	652193.4640	1192033.8529	
	CC	652426.1805	1191549.0499	
	PT 3322+38.70	652119.2343	1191981.1194	
	POE 3323+87.76	651997.7192	1191894.7939	S 35° 23' 25.2580° W

CLEARFIELD ROAD CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
CFR-1	3401+62.57	48° 29' 10.5386° RT.	26° 02' 36.7301°	220.0000'	99.0710'	186.1739'	21.2780'
CFR-2	3404+32.10	13° 40' 00.5430° LT.	8° 57' 08.8760°	640.0000'	76.6939'	152.6598'	4.5789'
CFR-3	3410+97.69	49° 49' 41.7888° RT.	17° 21' 44.4867°	330.0000'	153.2799'	286.9903'	33.8609'
CFR-4	3414+12.86	58° 04' 51.3914° RT.	9° 52' 42.8976°	580.0000'	322.0350'	587.9481'	83.4053'

OVERLOOK COURT CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
OLC-1	3500+41.93	39° 24' 33.5224° LT.	13° 38' 30.6682°	420.0000'	150.4203'	288.8853'	26.1236'
OLC-2	3504+54.02	42° 48' 33.9792° LT.	26° 02' 36.7301°	220.0000'	86.2380'	164.3764'	16.2985'

GLENDALE DRIVE (EAST) CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
EGD-3	3320+58.35	19° 29' 47.5704° RT.	10° 48' 37.8880°	530.0000'	91.0542'	180.3478'	7.7647'

PROFESSIONAL CERTIFICATION.
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LICENSE NO. XXXXX
EXPIRATION DATE: XX-XX-20XX



THE
WILSON T.
BALLARD CO.
CONSULTING ENGINEERS | OWINGS MILLS, MD

CROSS REFERENCE	
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TYPICAL SECTIONS SUPERELEVATION CHARTS PIPE & DRAINAGE SCHEDULE GEOMETRIC LAYOUT SHEETS ROADWAY PLAN SHEETS ROADWAY PROFILE SHEETS TRAFFIC CONTROL SHEETS EROSION & SEDIMENT CONTROL PLANS SIGNING & MARKING PLANS LANDSCAPE PLAN SHEETS RESPECTIVE RIGHT-OF-WAY PLATS	

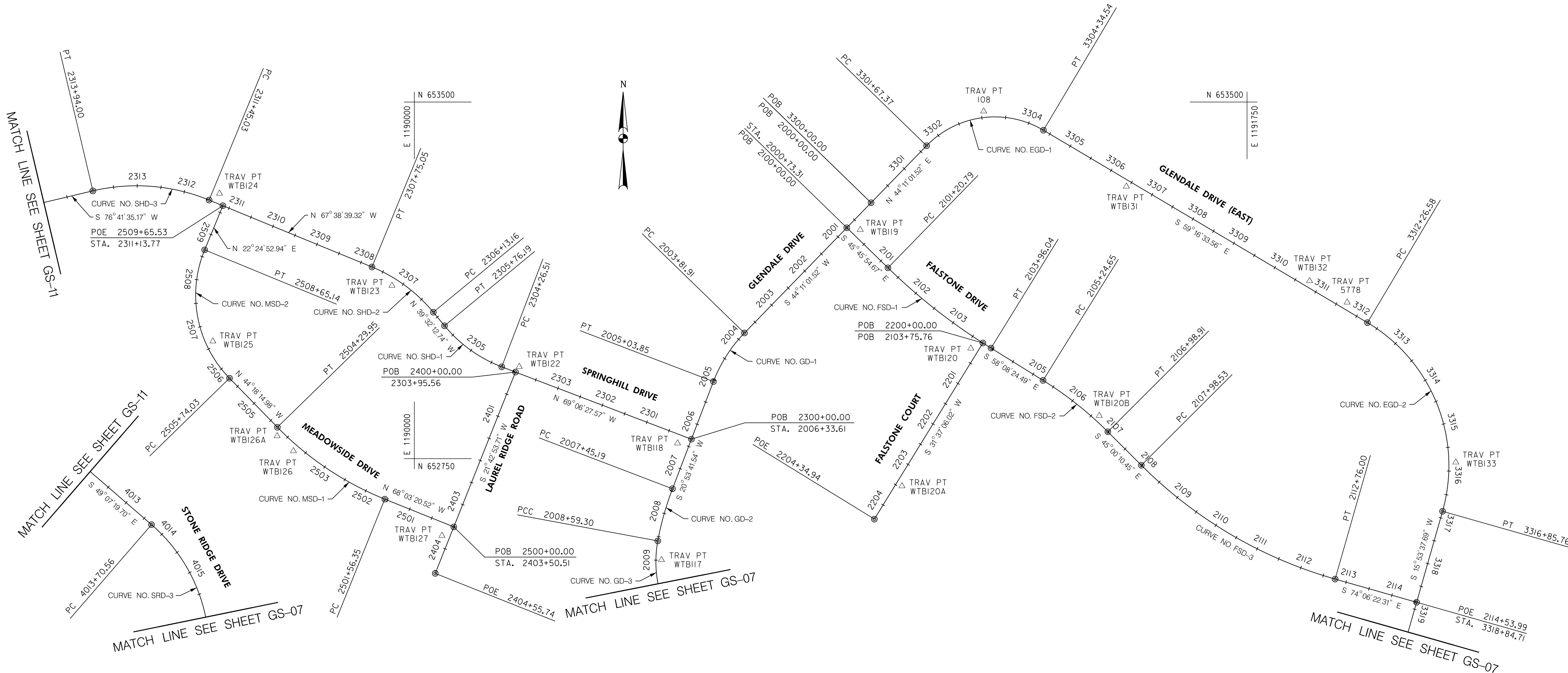
GS-08
FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

GEOMETRY SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
SCALE: 1" = 100'
FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX

BY: DAW -
PLOT: 08/30/2024
FILE: I:\Frederick County NPDES - CloverHill\CAD\605-P009-CloverHill.dgn



PROFESSIONAL CERTIFICATION.
I CERTIFY THAT THIS DOCUMENT WAS
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WB THE
CONSULTING ENGINEERS | WILSON T.
BALLARD CO.
OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOs.
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RESPECTIVE RIGHT-OF-WAY PLATS	

GS-09

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

GEOMETRY SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET

SCALE: 1" = 100'

FREDERICK COUNTY PROJECT NO. XX

DWG. # OF XX

TRAVERSE POINTS			
POINT NO.	NORTH	EAST	ELEVATION
WTBI17	652537.2362	1190519.3543	360.33
WTBI18	652782.4432	1190553.2410	358.88
WTBI19	653231.4557	1190937.0857	356.14
WTBI20	652982.0503	1191169.4368	358.82
WTBI20A	652692.4588	1191024.8004	360.77
WTBI20B	652840.4289	1191439.4976	360.70
WTBI22	652943.4846	1190220.5392	365.50
WTBI23	653113.9825	1189952.9458	369.61
WTBI24	653307.6093	1189590.5360	385.08
WTBI25	652997.1013	1189576.5026	389.38
WTBI26	652766.2568	1189745.8277	378.87
WTBI26A	652797.7807	1189711.6267	380.76
WTBI27	652588.1507	1190058.0295	369.24
WTBI31	653322.5643	1191496.3280	358.03
WTBI32	653123.8769	1191881.3817	369.75
WTBI33	652742.4975	1192188.6932	371.11
108	653480.7321	1191196.5112	353.64
5778	653078.7633	1191960.3152	370.33

STONE RIDGE DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
SRD-3	PT 4006+52.94	653220.6472	1189158.3328	S 3° 07'18.7446" E
	PC 4008+90.11	652983.8311	1189171.2489	
	PI 4010+30.19	652843.9614	1189178.8776	
	CC	653001.8029	1189500.7592	
	PT 4011+55.05	652752.2878	1189284.7911	S 49° 07'19.6961" E

MEADOWSIDE DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
MSD-1	POB 2500+00.00	652606.5074	1190082.9010	N 68° 03'20.5164" W
	PC 2501+56.35	652664.9378	1189937.8751	
	PI 2502+95.15	652716.8052	1189809.1386	
	CC	653277.1192	1190184.5204	
	PT 2504+29.95	652816.1308	1189712.1967	N 44° 18'14.9775" W
MSD-2	PC 2505+74.03	652919.2373	1189611.5647	
	PI 2507+38.62	653037.0253	1189496.6034	
	CC	653093.8541	1189790.4752	
	PT 2508+65.14	653189.1810	1189559.3631	N 22° 24'52.9405" E
	POE 2509+65.53	653281.9874	1189597.6430	

SPRINGHILL DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
SHD-1	POB 2300+00.00	652791.0806	1190582.1373	N 69° 06'27.5689" W
	PC 2304+26.51	652943.1814	1190183.6649	
	PI 2305+03.06	652970.4773	1190112.1552	
	CC	653214.1145	1190287.0827	
	PT 2305+76.19	653029.5079	1190063.4304	N 39° 32'12.7407" W
SHD-2	PC 2306+13.16	653058.0237	1190039.8929	
	PI 2306+95.77	653121.7313	1189987.3075	
	CC	652847.9540	1189785.3919	
	PT 2307+75.05	653153.1513	1189910.9095	N 67° 38'39.3157" W
	PC 2311+45.03	653293.8770	1189568.7334	
SHD-3	PI 2312+73.70	653342.8163	1189449.7368	
	CC	652923.9409	1189416.5909	
	PT 2313+94.00	653313.2014	1189324.5241	S 76° 41'35.1735" W
	POE 2315+73.11	653271.9779	1189150.2302	

GLENDALE DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
GD-1	POB 2000+00.00	653288.2054	1190959.9069	S 44° 11'01.5220" W
	PC 2003+81.91	653014.3359	1190693.7315	
	2004+43.73	652970.0016	1190650.6427	
	CC	652805.2473	1190908.8639	
	PT 2005+03.85	652912.2436	1190628.5930	S 20° 53'41.5354" W
GD-2	PC 2007+45.19	652686.7711	1190542.5166	
	PI 2008+02.40	652633.3238	1190522.1125	
	CC	652462.0789	1191131.0855	
	PCC 2008+59.30	652577.0753	1190511.6698	S 10° 31'02.6313" W
	PI 2009+41.55	652496.2063	1190496.6562	
GD-3	CC	652533.2672	1190747.6377	
	PT 2010+17.78	652423.1279	1190534.4023	S 27° 19'01.3098" E
	POE 2017+84.06	651742.2997	1190886.0602	

GLENDALE DRIVE (EAST)				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
EGD-1	POB 3300+00.00	653288.2054	1190959.9069	N 44° 11'01.5220" E
	PC 3301+67.37	653408.2247	1191076.5544	
	PI 3303+25.15	653521.3709	1191186.5219	
	CC	653268.8323	1191219.9760	
	PT 3304+34.54	653440.7600	1191322.1567	S 59° 16'33.5564" E
EGD-2	PC 3312+26.58	653036.1065	1192003.0206	
	PI 3314+95.97	652898.4746	1192234.5980	
	CC	652735.2331	1191824.2045	
	PT 3316+85.76	652639.3838	1192160.8243	S 15° 53'37.6876" W

FALSTONE DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
FSD-1	POB 2100+00.00	653235.6366	1190908.8150	S 45° 45'54.6716" E
	PC 2101+20.79	653151.3769	1190995.3559	
	PI 2102+58.97	653054.9766	1191094.3662	
	CC	654046.9855	1191867.3566	
	PT 2103+96.04	652982.5311	1191212.0424	S 58° 22'55.7073" E
FSD-2	PC 2105+24.65	652914.6483	1191321.2712	
	PI 2106+12.16	652868.4550	1191395.5998	
	CC	652269.1486	1190920.1102	
	PT 2106+98.91	652806.5770	1191457.4841	S 58° 08'24.4935" E
FSD-3	PC 2107+98.53	652736.1368	1191527.9314	
	PI 2110+42.53	652563.6081	1191700.4776	
	CC	653400.8509	1192192.5781	
	PT 2112+76.00	652496.7862	1191935.1542	S 74° 06'22.3124" E
	POE 2114+53.99	652448.0422	1192106.3416	

STONE RIDGE DRIVE CURVE DATA						
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	EXTERNAL
SRD-3	4008+90.11	46° 00'00.9514" L.T.	17° 21'44.4867"	330.0000'	140.0776'	264.9425'

MEADOWSIDE DRIVE CURVE DATA						
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	EXTERNAL
MSD-1	2501+56.35	23° 45'05.5390" RT.	8° 40'52.2434"	660.0000'	138.7923'	273.5981'
MSD-2	2505+74.03	66° 43'07.9180" RT.	22° 55'05.9225"	250.0000'	164.5908'	291.1160'

SPRINGHILL DRIVE CURVE DATA						
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	EXTERNAL
SHD-1	2304+26.51	29° 34'14.8282" RT.	19° 45'25.7953"	290.0000'	76.5422'	149.6712'
SHD-2	2306+13.16	28° 06'26.5749" L.T.	17° 21'44.4867"	330.0000'	82.6068'	161.8869'
SHD-3	2311+45.03	35° 39'45.5108" L.T.	14° 19'26.2016"	400.0000'	128.6672'	248.9722'

GLENDALE DRIVE CURVE DATA						
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	EXTERNAL
GD-1	2003+81.91	23° 17'19.9865" L.T.	19° 05'54.9354"	300.0000'	61.8237'	121.9403'
GD-2	2007+45.19	10° 22'38.9042" L.T.	9° 05'40.4454"	630.0000'	57.2096'	114.1063'
GD-3	2008+59.30	37° 50'03.9411" L.T.	23° 52'23.6693"	240.0000'	82.2509'	158.4805'

GLENDALE DRIVE (EAST) CURVE DATA						
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	EXTERNAL
EGD-1	3301+67.37	76° 32'24.9216" RT.	28° 38'52.4031"	200.0000'	157.7812'	267.1759'
EGD-2	3312+26.58	75° 10'11.2440" RT.	16° 22'12.8018"	350.0000'	269.3893'	459.1861'

FALSTONE DRIVE CURVE DATA						
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	EXTERNAL
FSD-1	2101+20.79	12° 37'01.0357" L.T.	4° 35'01.1845"	1250.0000'	138.1885'	275.2592'
FSD-2	2105+24.65	13° 08'14.0391" RT.	7° 32'20.1061"	760.0000'	87.5132'	174.2589'
FSD-3	2107+98.53	29° 06'11.8580" L.T.	6° 05'43.0645"	940.0000'	244.0047'	477.4714'

PROFESSIONAL CERTIFICATION.
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GS-10

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

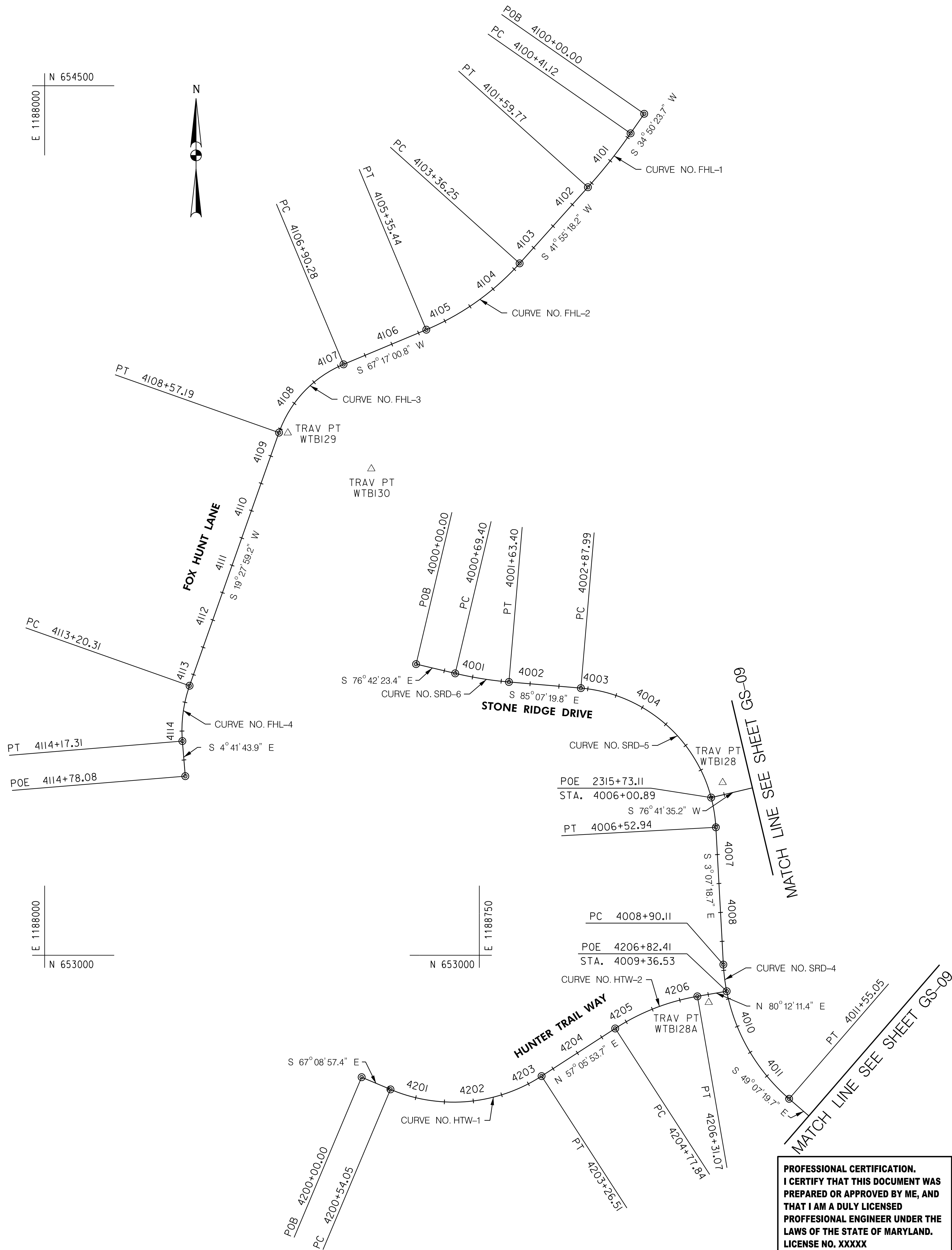
CLOVER HILL

GEOMETRY SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
FREDERICK COUNTY PROJECT NO. XX

SCALE: 1" = 100'
DWG. # OF XX

BY: DAW -
PLOT: 08/30/2024
FILE: I:\Frederick County NPDES - Clover Hill\CAD\65-FOIL\Clover Hill.dgn



HUNTER TRAIL WAY				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
HTW-1	POB 4200+00.00	652789.5161	1188546.9894	S 67°08'57.3583° E
	PC 4200+54.05	652768.5267	1188596.7978	
	PI 4202+02.15	652711.0133	1188733.2783	
	CC	653026.5522	1188705.5307	
	PT 4203+26.51	652791.4633	1188857.6267	N 57°05'53.7063° E
HTW-2	PC 4204+77.84	652873.6651	1188984.6830	
	PI 4205+55.51	652915.8578	1189049.8986	
	CC	652554.6159	1189191.0990	
	PT 4206+31.07	652929.0745	1189126.4401	N 80°12'11.4393° E
	POE 4206+82.41	652937.8089	1189177.0236	

TRAVERSE POINTS			
POINT NO.	NORTH	EAST	ELEVATION
WTBI28	653298.0218	1189170.0314	402.28
WTBI28A	652918.6907	1189146.0453	404.44
WTBI29	653901.1799	1188419.5773	402.38
WTBI30	653839.2309	1188563.7496	399.64

STONE RIDGE DRIVE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
SRD-4	PC 4013+70.56	652611.2506	1189447.7361	
	PI 4015+68.53	652481.6899	1189597.4218	
	CC	652346.6134	1189218.6790	
	PT 4017+30.89	652286.6480	1189563.5039	S 9°51'54.4564° W
	PC 4018+84.33	652135.4832	1189537.2162	
SRD-5	PI 4019+70.55	652050.5384	1189522.4442	
	CC	652039.5387	1190088.9359	
	PT 4020+55.42	651965.0842	1189533.9075	S 7°38'25.2569° E
	PC 4024+14.35	651609.3423	1189581.6286	
	PI 4027+57.08	651269.6542	1189627.1962	
SRD-6	CC	651548.1833	1189125.7124	
	PT 4030+03.46	651128.8163	1189314.7396	S 65°44'12.5120° W
	POE 4030+95.81	651090.8685	1189230.5505	

FOX HUNT LANE				
CURVE NO.	ALIGNMENT	NORTH	EAST	BEARING
FHL-1	POB 4100+00.00	654451.6554	1189034.6225	S 34°50'23.7262° W
	PC 4100+41.12	654417.9101	1189011.1341	
	PI 4101+00.52	654369.1543	1188977.1975	
	CC	654966.3443	1188223.2128	
	PT 4101+59.77	654324.9543	1188937.5088	S 41°55'18.1713° W
FHL-2	PC 4103+36.25	654193.6470	1188819.6037	
	PI 4104+37.50	654118.3078	1188751.9541	
	CC	654494.2986	1188484.7774	
	PT 4105+35.44	654079.2063	1188658.5542	S 67°17'00.8160° W
	PC 4106+90.28	654019.4116	1188515.7256	
FHL-3	PI 4107+78.94	653985.1723	1188433.9399	
	CC	653834.9261	1188592.9598	
	PT 4108+57.19	653901.5771	1188404.3924	S 19°27'59.1605° W
	PC 4113+20.31	653464.9278	1188250.0546	
	PI 4113+69.54	653418.5139	1188233.6492	
FHL-4	CC	653388.2792	1188466.9071	
	PT 4114+17.31	653369.4512	1188237.6790	S 4°41'43.9193° E
	POE 4114+78.08	653308.8831	1188242.6539	

HUNTER TRAIL WAY CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
HTW-1	4200+54.05	55°45'08.9354° LT.	20°27'46.0022°	280.0000'	148.1037'	272.4580'	36.7566'
HTW-2	4204+77.84	23°06'17.7329° RT.	15°04'40.2122°	380.0000'	77.6743'	153.2377'	7.8573'

STONE RIDGE DRIVE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
SRD-4	4013+70.56	58°59'14.1524° RT.	16°22'12.8018°	350.0000'	197.9691'	360.3327'	52.1092'
SRD-5	4018+84.33	17°30'19.7133° LT.	10°13'53.0011°	560.0000'	86.2196'	171.0958'	6.5985'
SRD-6	4024+14.35	73°22'37.7689° RT.	12°27'20.1753°	460.0000'	342.7308'	589.1096'	113.6414'

FOX HUNT LANE CURVE DATA							
CURVE	PC STA.	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
FHL-1	4100+41.12	7°04'54.4451° RT.	5°58'05.9173°	960.0000'	59.4039'	118.6565'	1.8362'
FHL-2	4103+36.25	25°21'42.6447° RT.	12°43'56.6236°	450.0000'	101.2545'	199.1915'	11.2510'
FHL-3	4106+90.28	47°49'01.6555° LT.	28°38'52.4031°	200.0000'	88.6636'	166.9133'	18.7721'
FHL-4	4113+20.31	24°09'43.0798° LT.	24°54'40.3505°	230.0000'	49.2279'	96.9924'	5.2092'

PROFESSIONAL CERTIFICATION.
I CERTIFY THAT THIS DOCUMENT WAS
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PROFESSIONAL ENGINEER UNDER THE
LAWS OF THE STATE OF MARYLAND.
LICENSE NO. XXXXX
EXPIRATION DATE: XX-XX-XXXX

WB

THE
WILLSON T.
BALLARD CO.
CONSULTING ENGINEERS | OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOS.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
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LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

GS-11

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

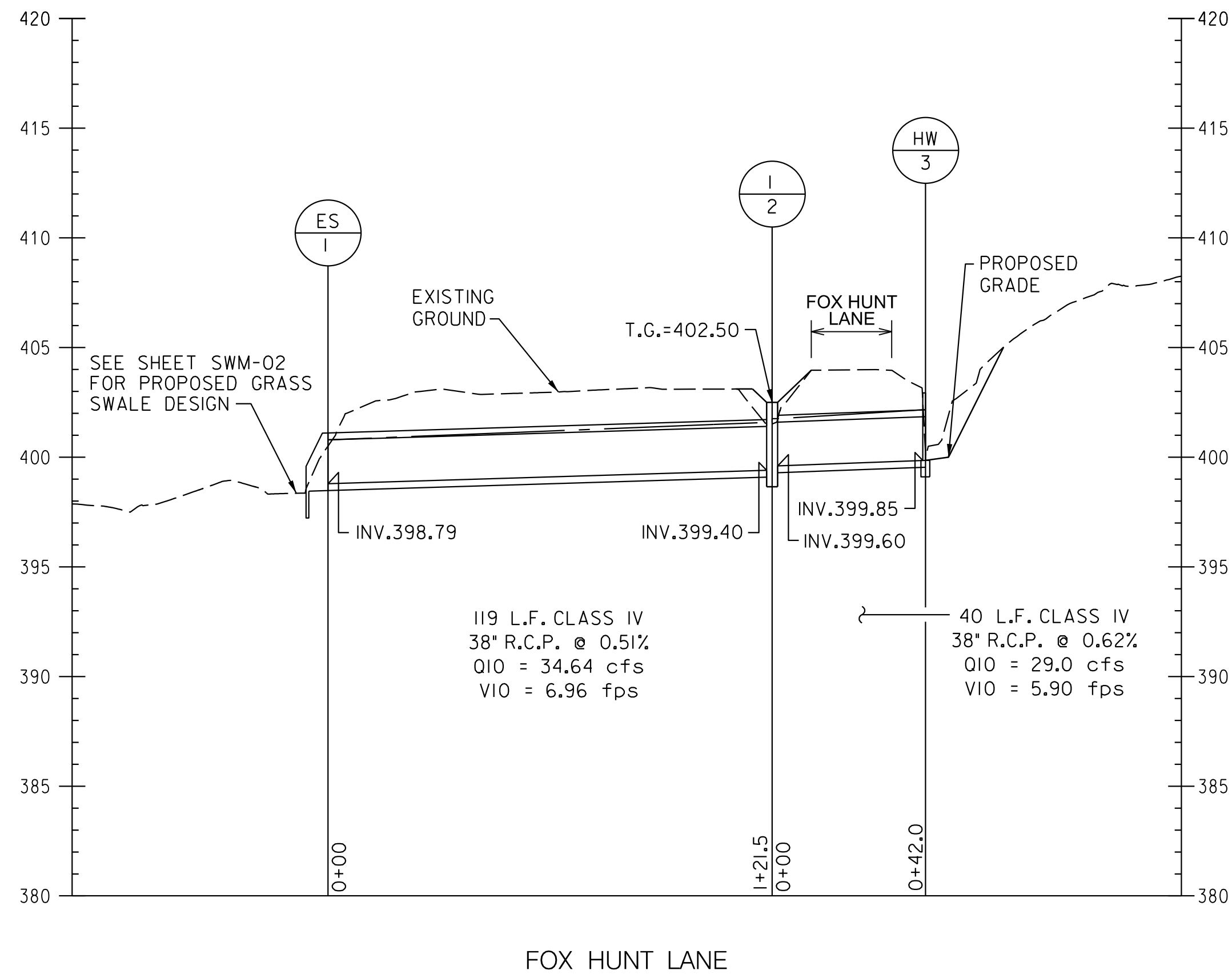
GEOMETRY SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET

SCALE: 1" = 100'

FREDERICK COUNTY PROJECT NO. XX

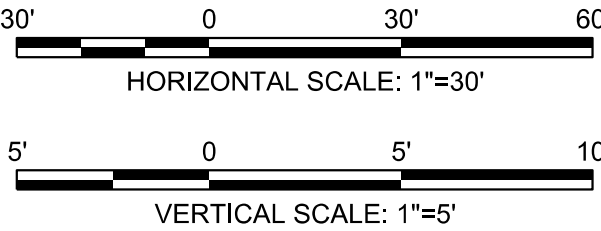
DWG. # OF XX



DRAINAGE SCHEDULE

PIPE					STRUCTURE							
FROM STRUCTURE NO.	TO STRUCTURE NO.	SIZE	TYPE	LENGTH	NO.	STATION	OFFSET	VERTICAL DEPTH	MD STANDARD NO. TYPE	T.C./T.G. OR T.S.	INV. IN	INV. OUT
					ES-1	4108+54	20' RT.		MD-369.00 STANDARD CONCRETE END SECTION	401.87	398.79	398.76
ES-1	I-2	24x38	HERCP	119								
					I-2	4108+56	21' LT.	3.I	MD-378.03 MODIFIED DOUBLE TYPE K INLET	402.50	399.60	399.40
I-2	HW-3	24x38	HERCP	40								
					HW-3	4108+48	143' LT.		MD-355.02 STANDARD TYPE C ENDWALL FOR HERCP	402.93	399.85	

NOTE:
T.C. = TOP OF CURB
T.S. = TOP OF STRUCTURE
T.G. = TOP OF GRATE



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WB
CONSULTING ENGINEERS | THE WILSON T. BALLARD CO.
OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS.....	
PIPE & DRAINAGE SCHEDULE.....	
GEOMETRIC LAYOUT SHEETS.....	
ROADWAY PLAN SHEETS	
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DP-01

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

DRAINAGE PROFILE

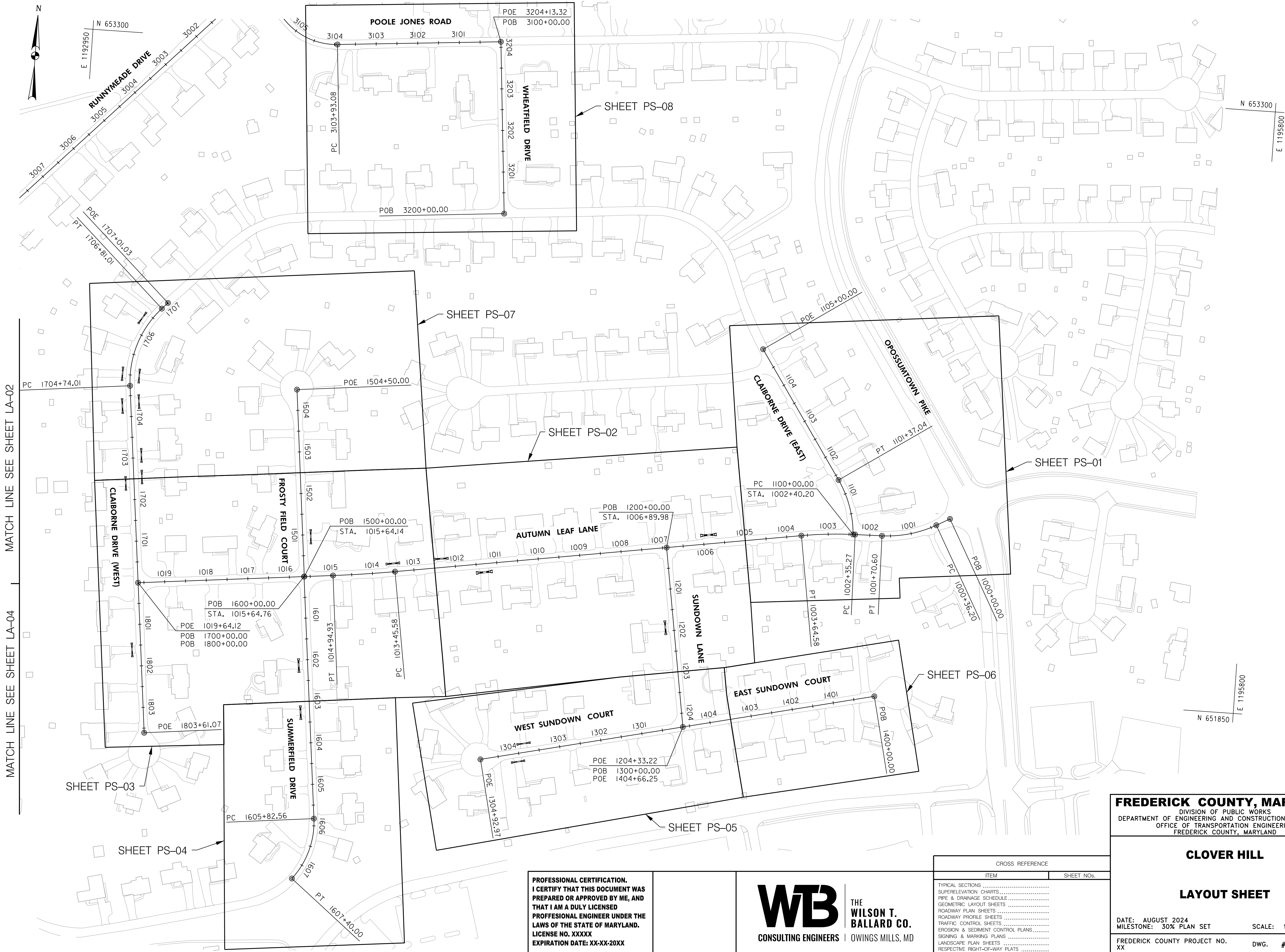
DATE: AUGUST 2024
MILESTONE: 30% PLAN SET

SCALE: AS SHOWN

FREDERICK COUNTY PROJECT NO.
XX

DWG. OF XX

BY: DAW -
PLOT: 08/30/2024
FILE: LA-Frederick County NPDES - CloverHill.CAD\pLA-POD, CloverHill.dgn



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WB THE
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BALLARD CO.
CONSULTING ENGINEERS | OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
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LA-01

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

LAYOUT SHEET

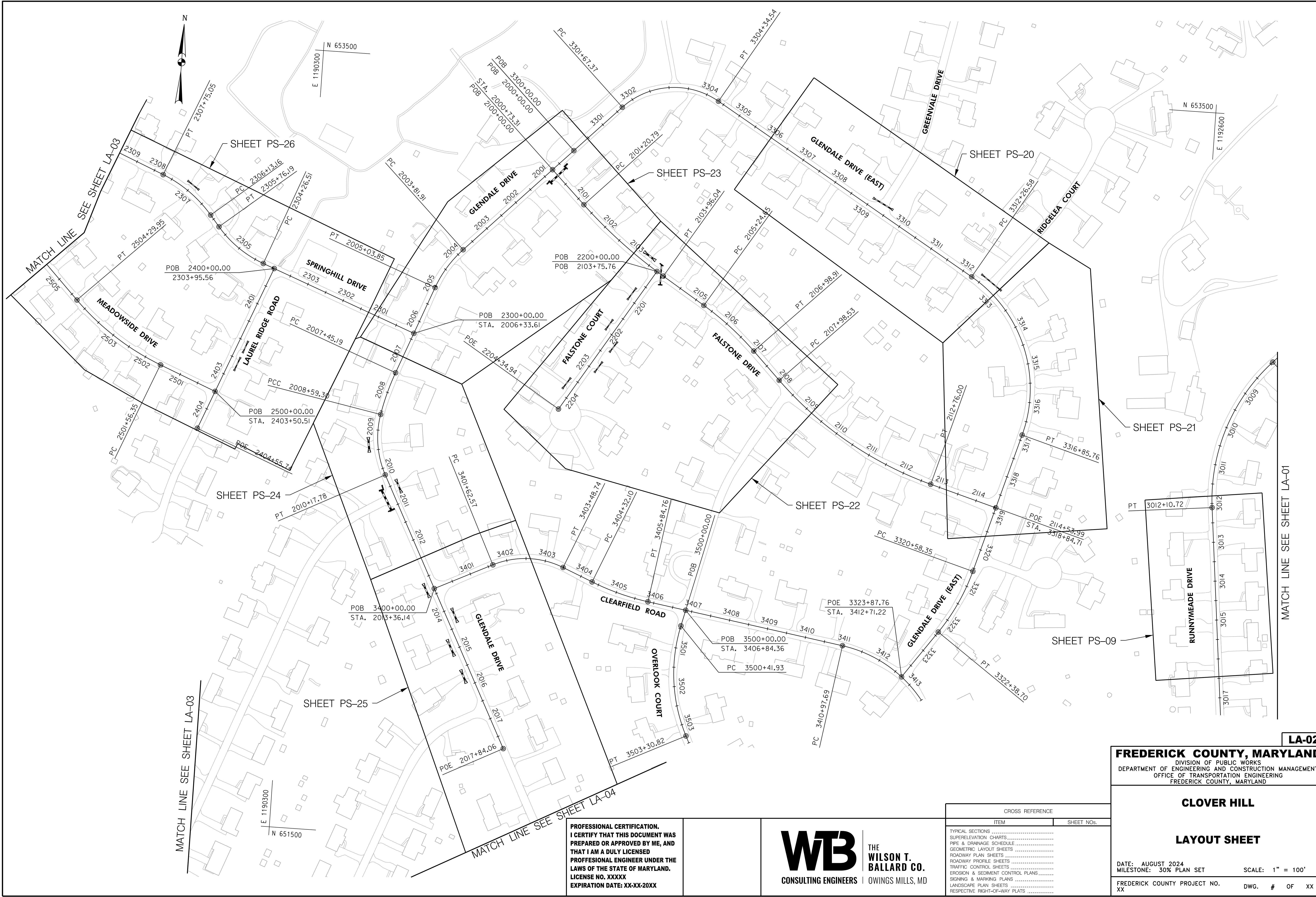
DATE: AUGUST 2024
MILESTONE: 30% PLAN SET

SCALE: 1" = 100'

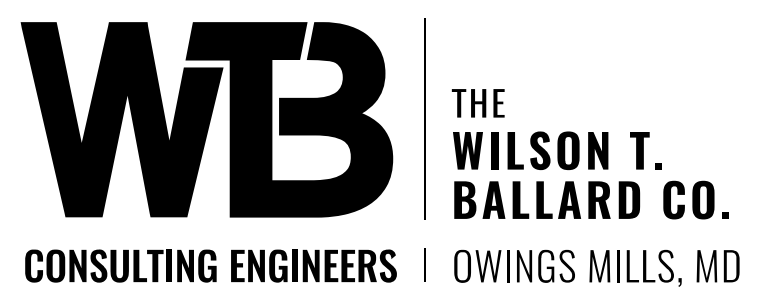
FREDERICK COUNTY PROJECT NO.
XX

DWG. # OF XX

BY: DAW -
PLOTED: 8/30/2024
FILE: LA-Frederick County NPDES - Cloverhill.CAD\pLA-P002-Cloverhill.dgn



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TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
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RESPECTIVE RIGHT-OF-WAY PLATS	

LA-02

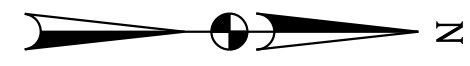
FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

LAYOUT SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
FREDERICK COUNTY PROJECT NO. XX

SCALE: 1" = 100'
DWG. # OF XX



E 1188000
N 651550

E 1188000
N 653900

SHEET PS-29

SHEET PS-30

SHEET PS-28

SHEET PS-27

MATCH LINE SEE SHEET LA-02

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CROSS REFERENCE	
ITEM	SHEET NOS.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
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LA-03

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
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OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

LAYOUT SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET

SCALE: 1" = 100'

FREDERICK COUNTY PROJECT NO.
XX

DWG. # OF XX

BY: DAW -
PLOTED: 8/30/2024
FILE: US\Frederick County NPDES - CloverHill\CAD\LA-03\LA-003_CloverHill.dgn

BY: DAW -
PLOT: 08/30/2024
FILE: LA-Frederick County NPDES - Cloverhill.CAD\LA-004.Cloverhill.dgn

MATCH LINE SEE SHEET LA-02

SHEET PS-10

SHEET PS-11

MATCH LINE SEE SHEET LA-01

SHEET PS-12

SHEET PS-17

SHEET PS-13

SHEET PS-15

SUNNYBROOK DRIVE

EDGEWOOD FARM ROAD (NORTH)

RUNNYMEADE DRIVE

EDGEWOOD FARM ROAD (SOUTH)

MATCH LINE SEE SHEET LA-05

MATCH LINE SEE SHEET LA-05

MATCH LINE SEE SHEET LA-05

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EXPIRATION DATE: XX-XX-XXXX

WB

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CROSS REFERENCE	
ITEM	SHEET NOS.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
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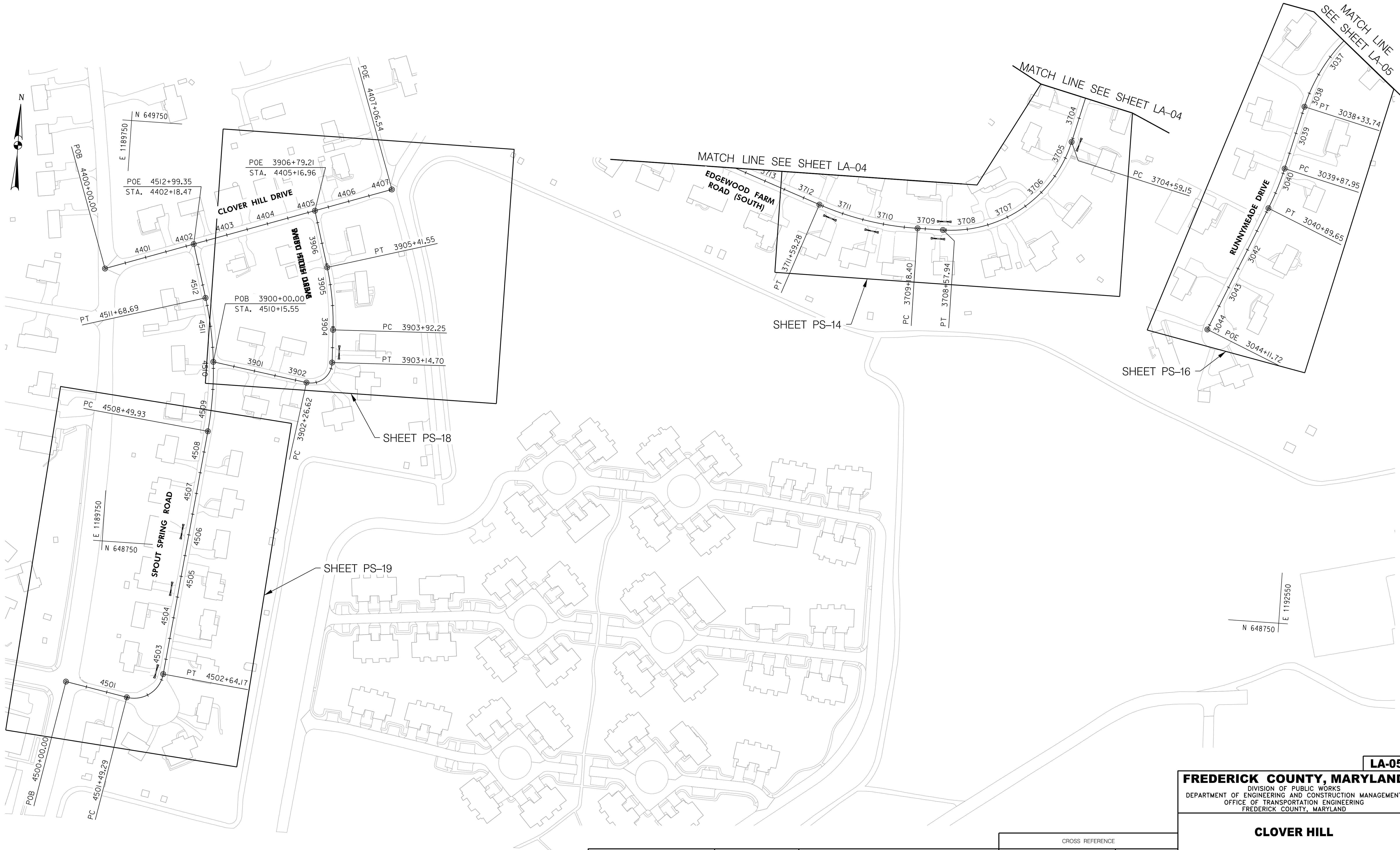
LA-04
FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

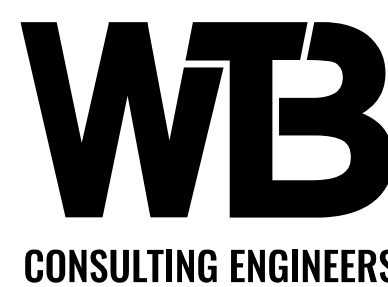
LAYOUT SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
SCALE: 1" = 100'
FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX

BY: DAW -
PLOTED: 8/30/2024
FILE: LA-Frederick County NPDES - CloverHill.CAD\pLA-PODS_CloverHill.dgn



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CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
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LA-05

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
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FREDERICK COUNTY, MARYLAND

CLOVER HILL

LAYOUT SHEET

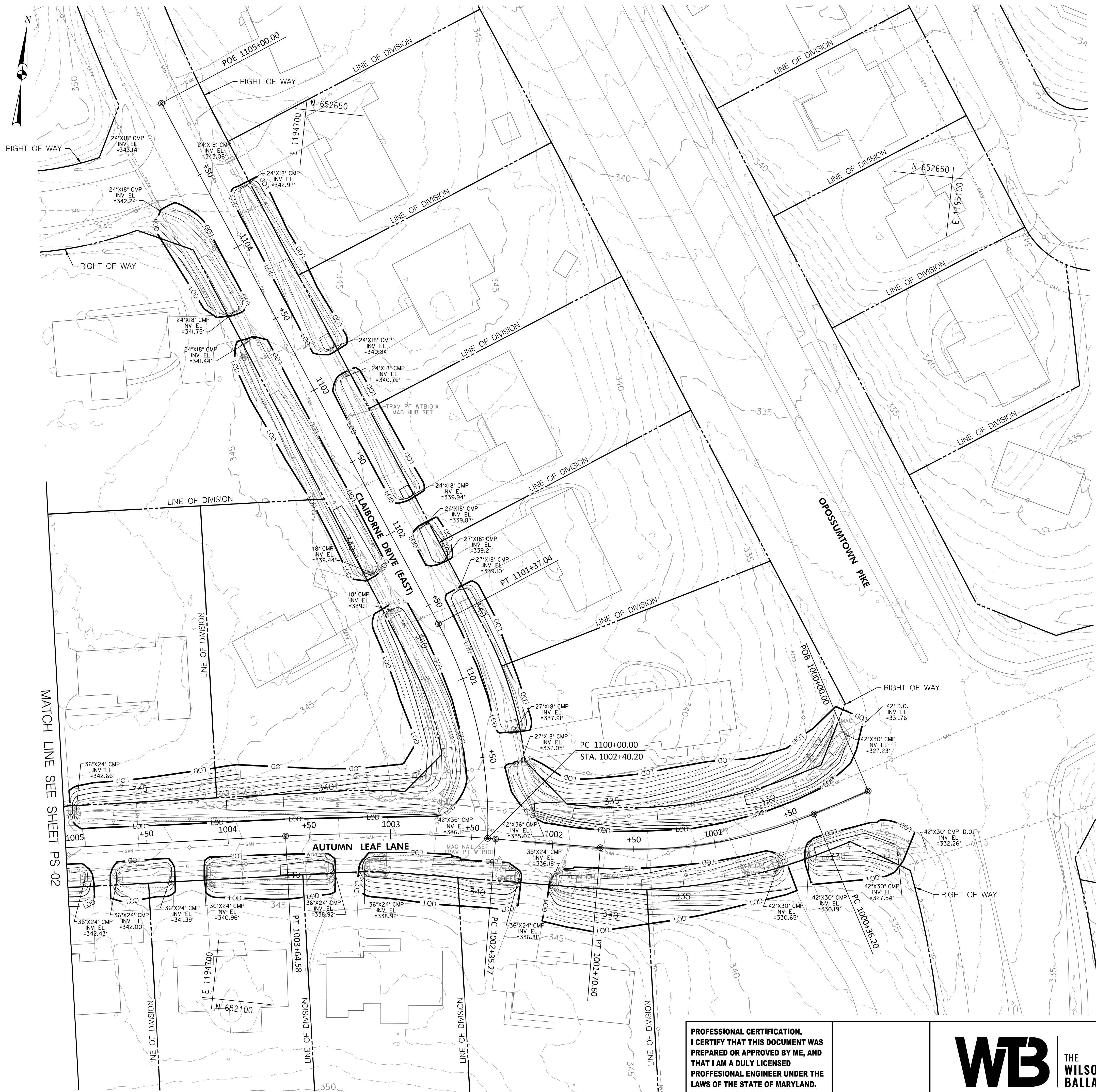
DATE: AUGUST 2024
MILESTONE: 30% PLAN SET

SCALE: 1" = 100'

FREDERICK COUNTY PROJECT NO.
XX

DWG. # OF XX

BY: DAW -
PLOTED: 8/30/2024
FILE: I:\Frederick County NPDES - Cloverhill.CAD\wpb-P001.Cloverhill.dgn



MATCH LINE SEE SHEET PS-02

PROFESSIONAL CERTIFICATION.
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CROSS REFERENCE	
ITEM	SHEET NOS.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
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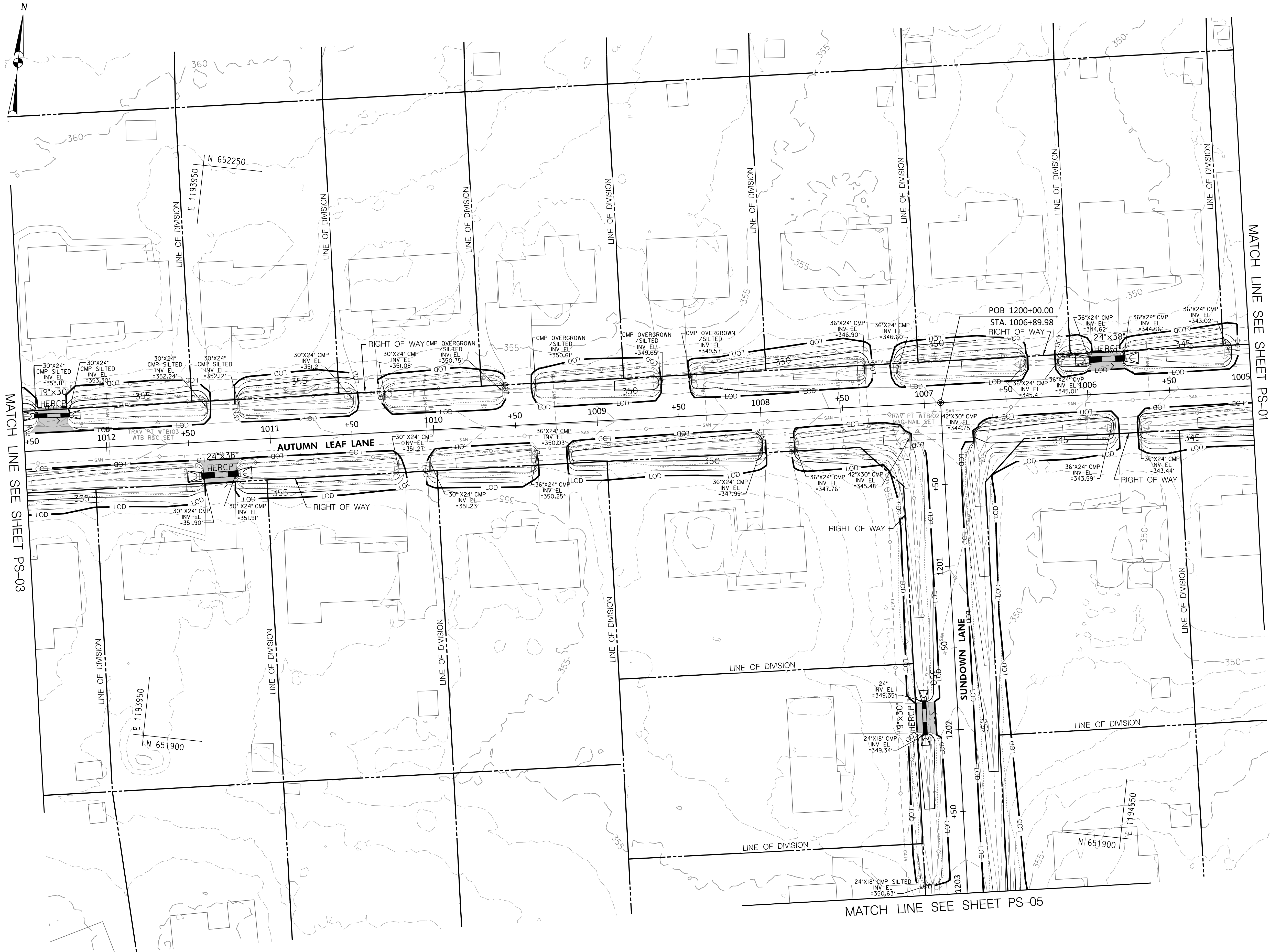
PS-01
FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
SCALE: 1" = 30'-0"
FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX

BY: DAW -
PLOT: 08/30/2024
FILE: USFrederick County NPDES - CloverHill.CAD, vhp-P002, CloverHill.dgn



REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
RT. STA. 1012+21 TO RT. STA. 1012+43 (19"x30" HERCP)	22
LT. STA. 1011+21 TO LT. STA. 1011+43 (24"x38" HERCP)	23
RT. STA. 1005+76 TO RT. STA. 1005+98 (24"x38" HERCP)	22
RT. STA. 1201+81 TO RT. STA. 1202+02 (19"x30" HERCP)	22

PS-02

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

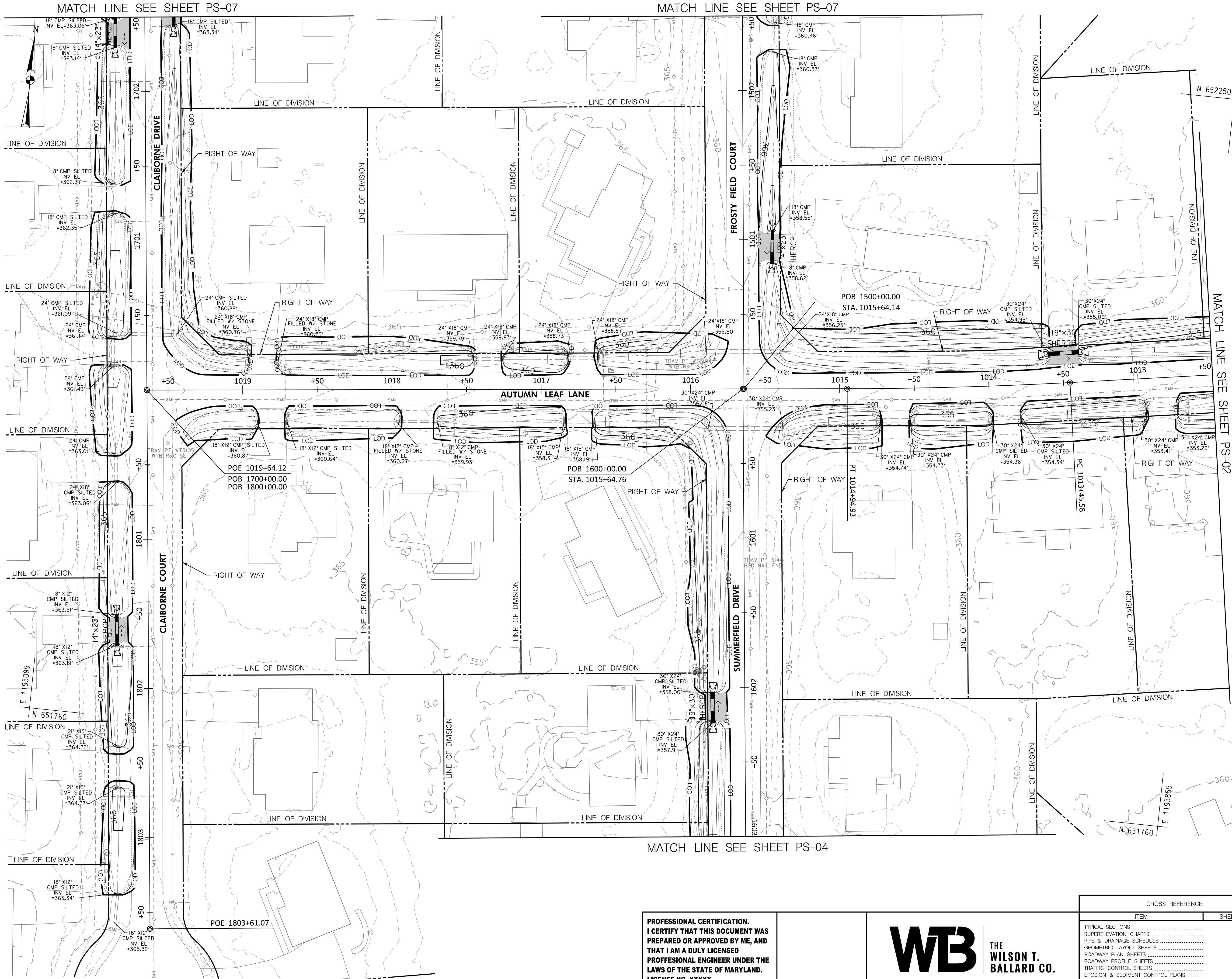
DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
SCALE: 1" = 30'-0"
FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX

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CONSULTING ENGINEERS | OWINGS MILLS, MD

CROSS REFERENCE	
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TYPICAL SECTIONS	
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RESPECTIVE RIGHT-OF-WAY PLATS	

BY: DAW -
PLOT: 08/30/2024
FILE: US\Frederick County NPDES - Clover Hill CAD\wpb-P003_Clover Hill.dgn



REINFORCED CONCRETE PIPE (RCP)		
LOCATION - STATION		LF
LT. STA. 1702+29 TO LT. STA. 1702+50 (14\"x23\" HERCP)		21
RT. STA. 1702+43 TO RT. STA. 1702+50 (14\"x23\" HERCP)		7
RT. STA. 1500+84 TO RT. STA. 1501+06 (14\"x23\" HERCP)		23
RT. STA. 1013+39 TO RT. STA. 1013+60 (19\"x30\" HERCP)		21
RT. STA. 1801+50 TO RT. STA. 1801+71 (14\"x23\" HERCP)		22
RT. STA. 1602+03 TO RT. STA. 1602+24 (19\"x30\" HERCP)		21

PS-03

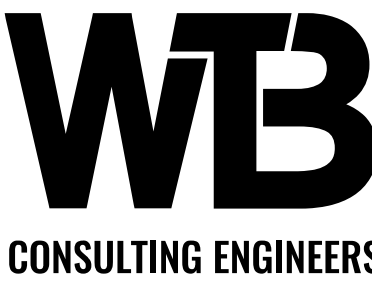
FREDERICK COUNTY, MARYLAND
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OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
FREderick County PROJECT NO. XX
SCALE: 1" = 30'-0"
DWG. # OF XX

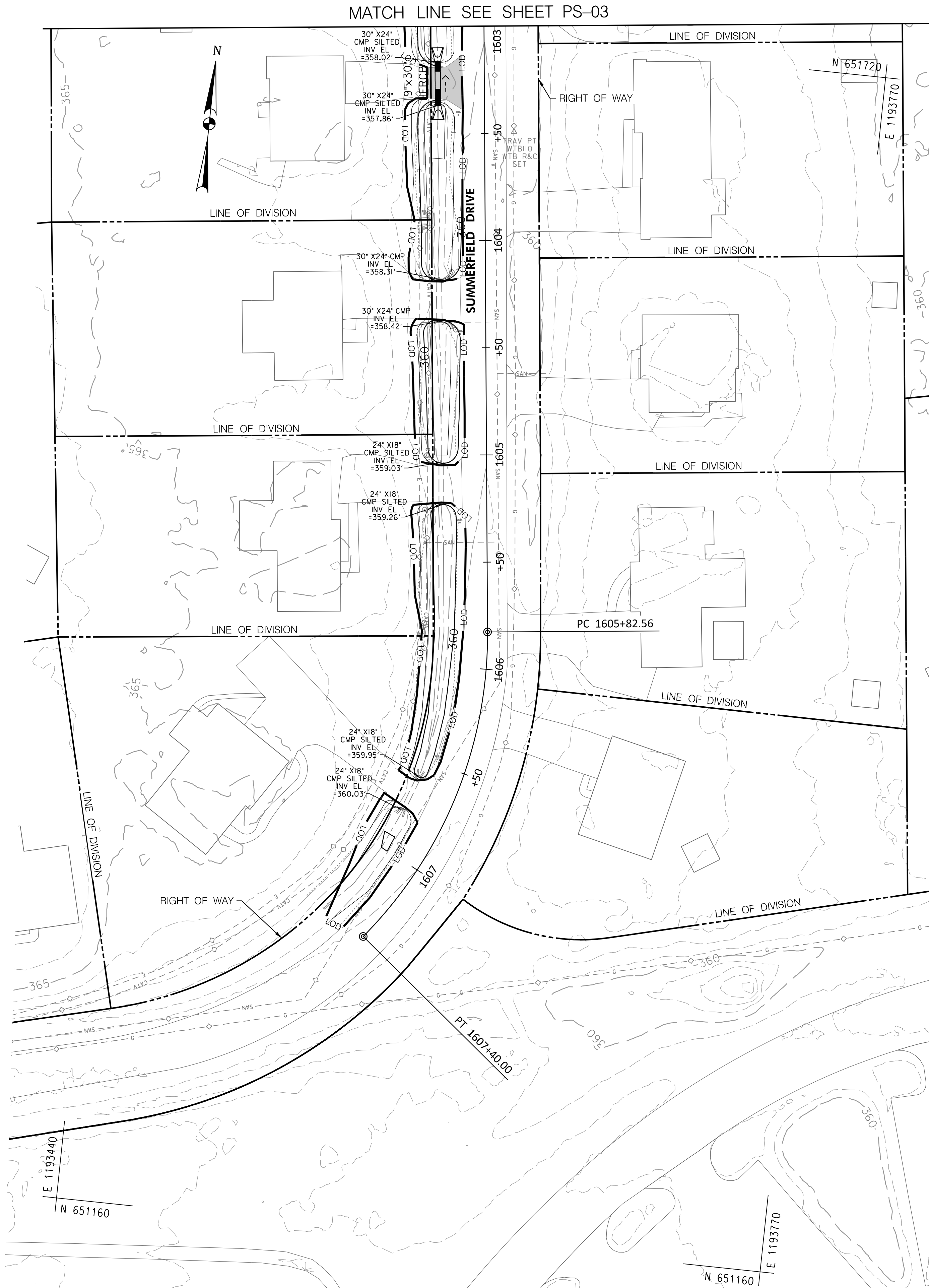
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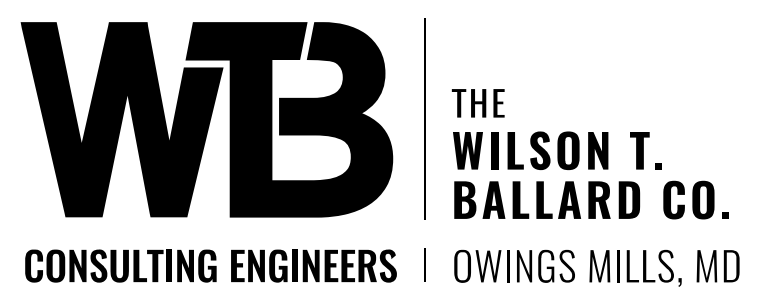
THE
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CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SICING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

BY: DAW -
PLOTED: 8/30/2024
FILE: US\Frederick County\NPDES - Clover Hill\CAD\pH-P004.Clover Hill.dgn



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LICENSE NO. XXXXX
EXPIRATION DATE: XX-XX-20XX



CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
RT. STA. 1603+16 TO RT. STA. 1603+37 (19'x30" HERCP)	21

PS-04

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DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
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FREDERICK COUNTY, MARYLAND

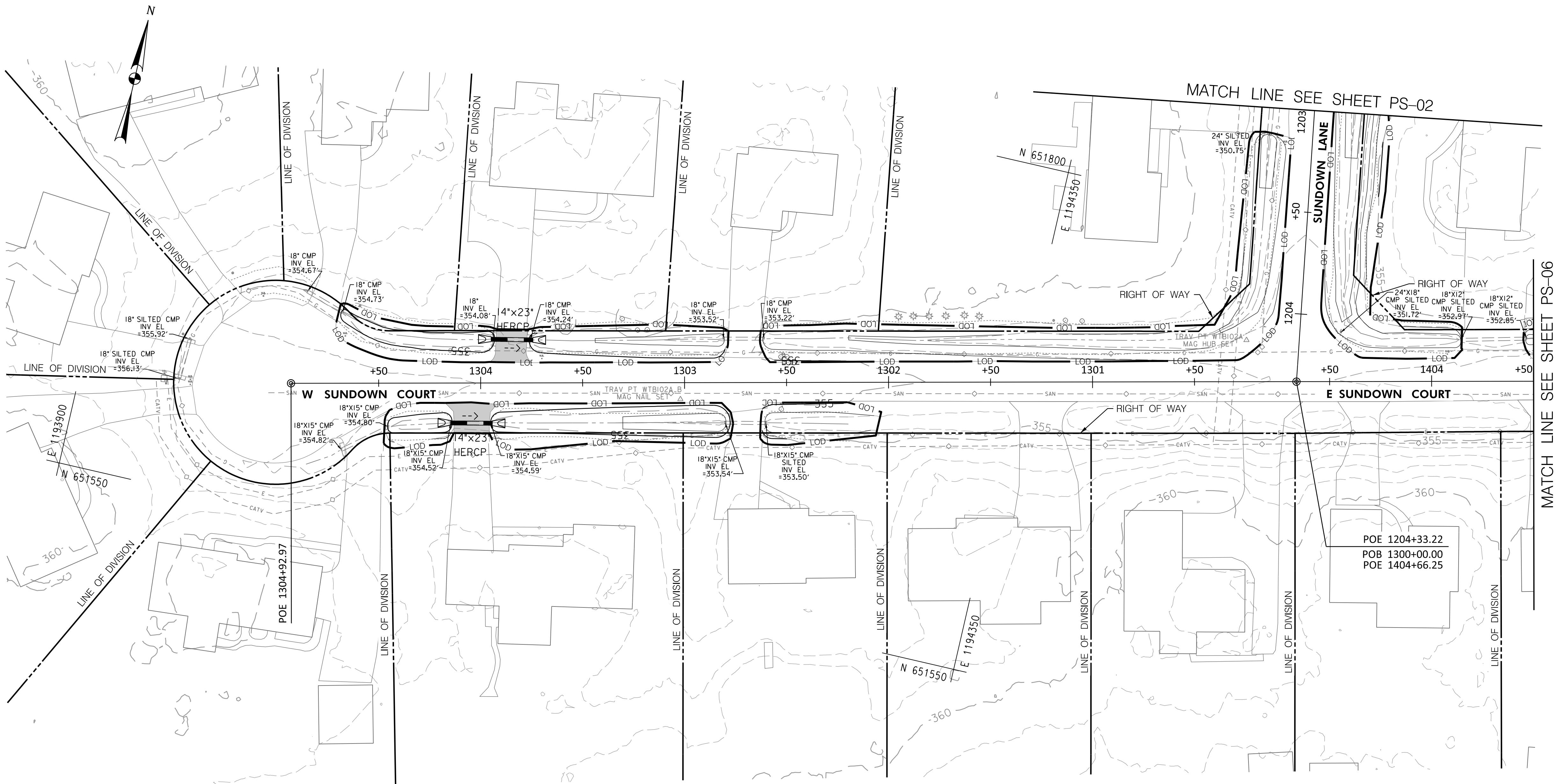
CLOVER HILL

PLAN SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
SCALE: 1" = 30'-0"

FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX

BY: DAW -
PLOTED: 8/30/2024
FILE: USFrederick County NPDES - CloverHill.CAD, v: 10.0, P: 005, CloverHill.dgn



REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
RT. STA. 1303+74 TO RT. STA. 1303+95 (14"x23" HERCP)	21
LT. STA. 1303+94 TO LT. STA. 1304+15 (14"x23" HERCP)	21

PS-05

FREDERICK COUNTY, MARYLAND
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OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

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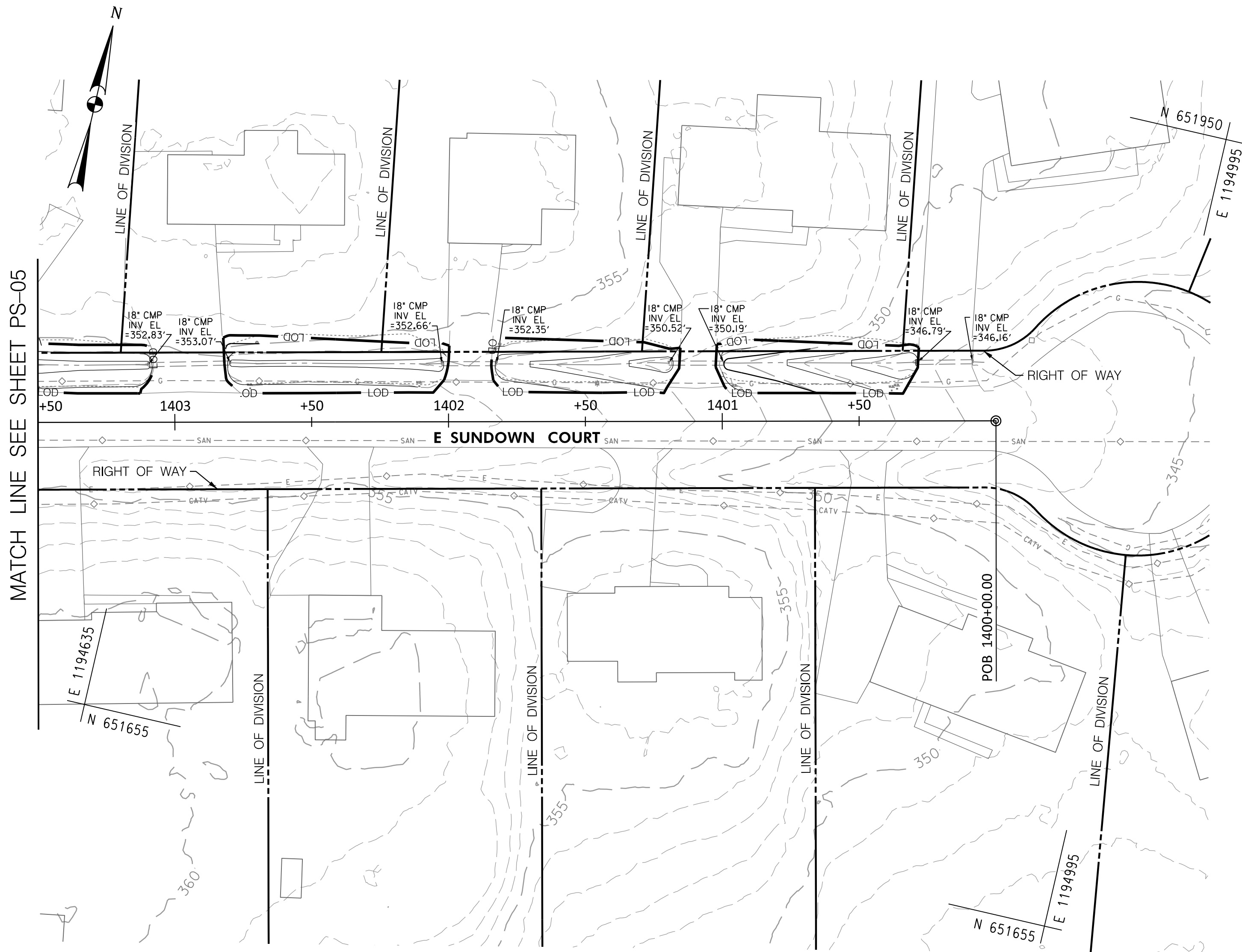
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CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	



MATCH LINE SEE SHEET PS-05

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CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

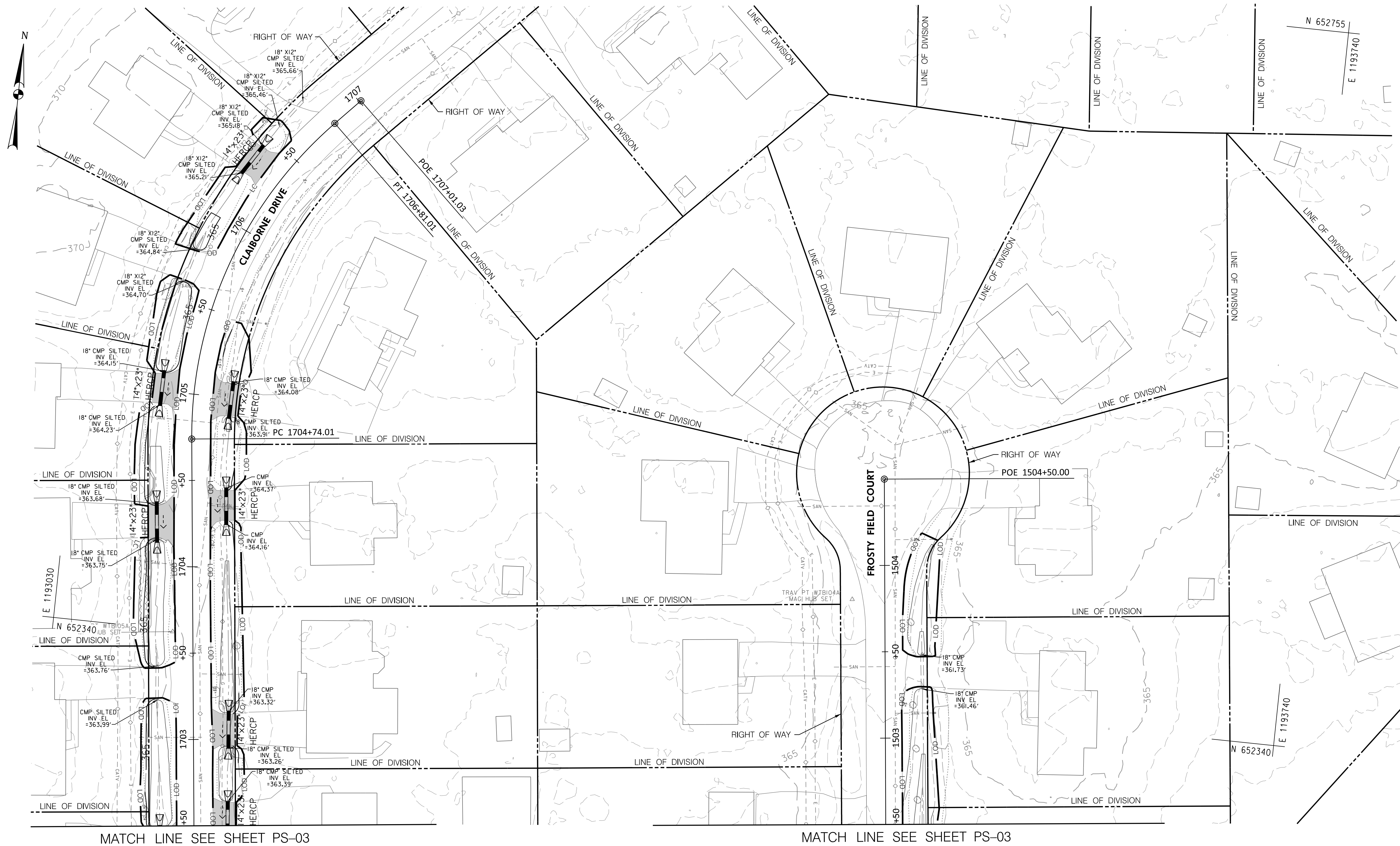
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FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

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PLAN SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
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FREDERICK COUNTY PROJECT NO. XX
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BY: DAW -
PLOT: 08/30/2024
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MATCH LINE SEE SHEET PS-03

MATCH LINE SEE SHEET PS-03

REINFORCED CONCRETE PIPE (RCP)		
LOCATION - STATION		LF
RT. STA. 1702+50 TO RT. STA. 1702+64 (14"x23" HERCP)		14
RT. STA. 1702+95 TO RT. STA. 1703+16 (14"x23" HERCP)		22
LT. STA. 1704+14 TO LT. STA. 1704+38 (14"x23" HERCP)		24
RT. STA. 1704+24 TO RT. STA. 1704+46 (14"x23" HERCP)		22
RT. STA. 1704+87 TO RT. STA. 1705+11 (14"x23" HERCP)		22
LT. STA. 1704+92 TO LT. STA. 1705+11 (14"x23" HERCP)		21
LT. STA. 1706+25 TO LT. STA. 1706+45 (14"x23" HERCP)		21

PS-07

FREDERICK COUNTY, MARYLAND
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DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

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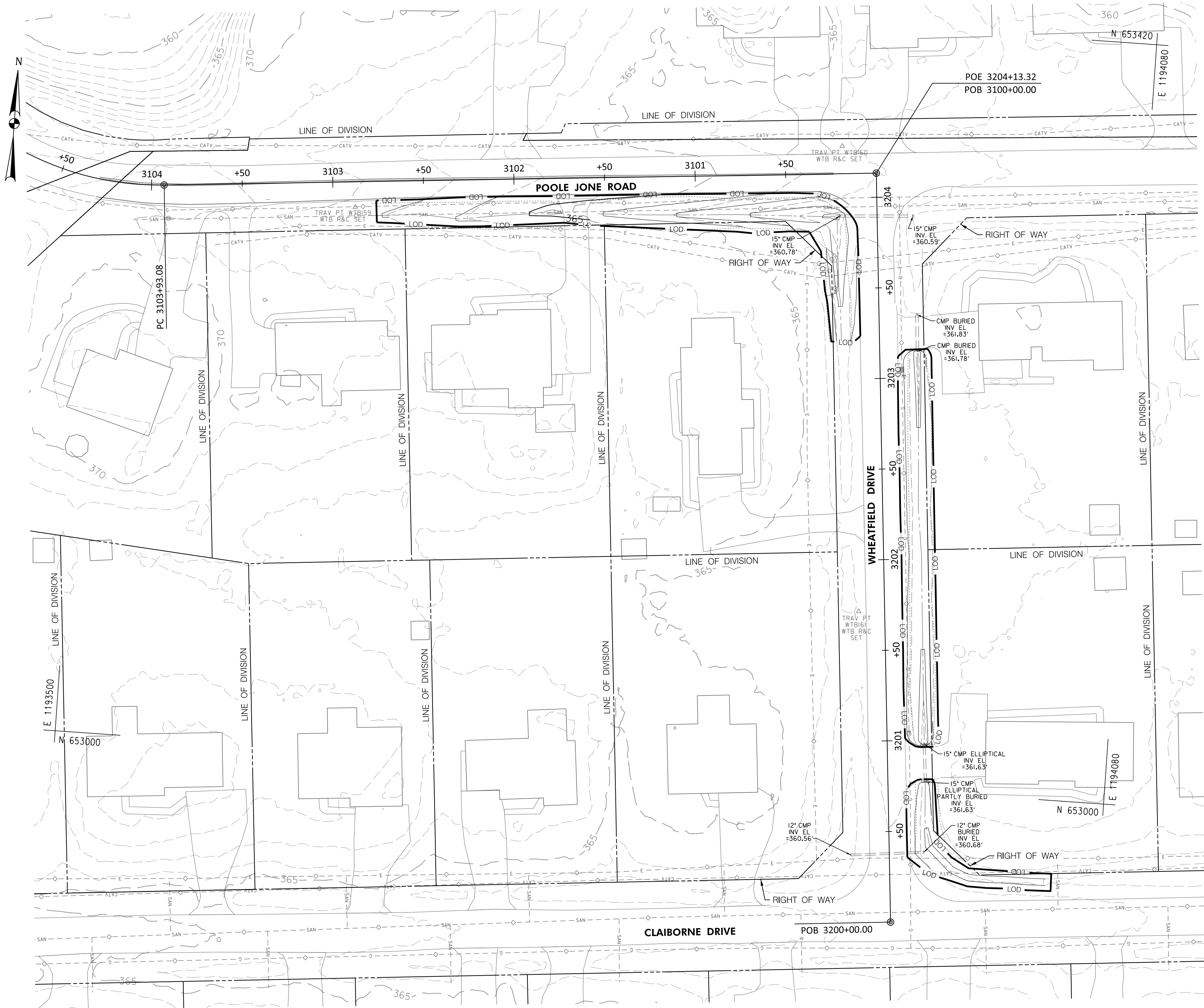
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DATE: AUGUST 2024
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CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
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SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	



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GEOMETRIC LAYOUT SHEETS	
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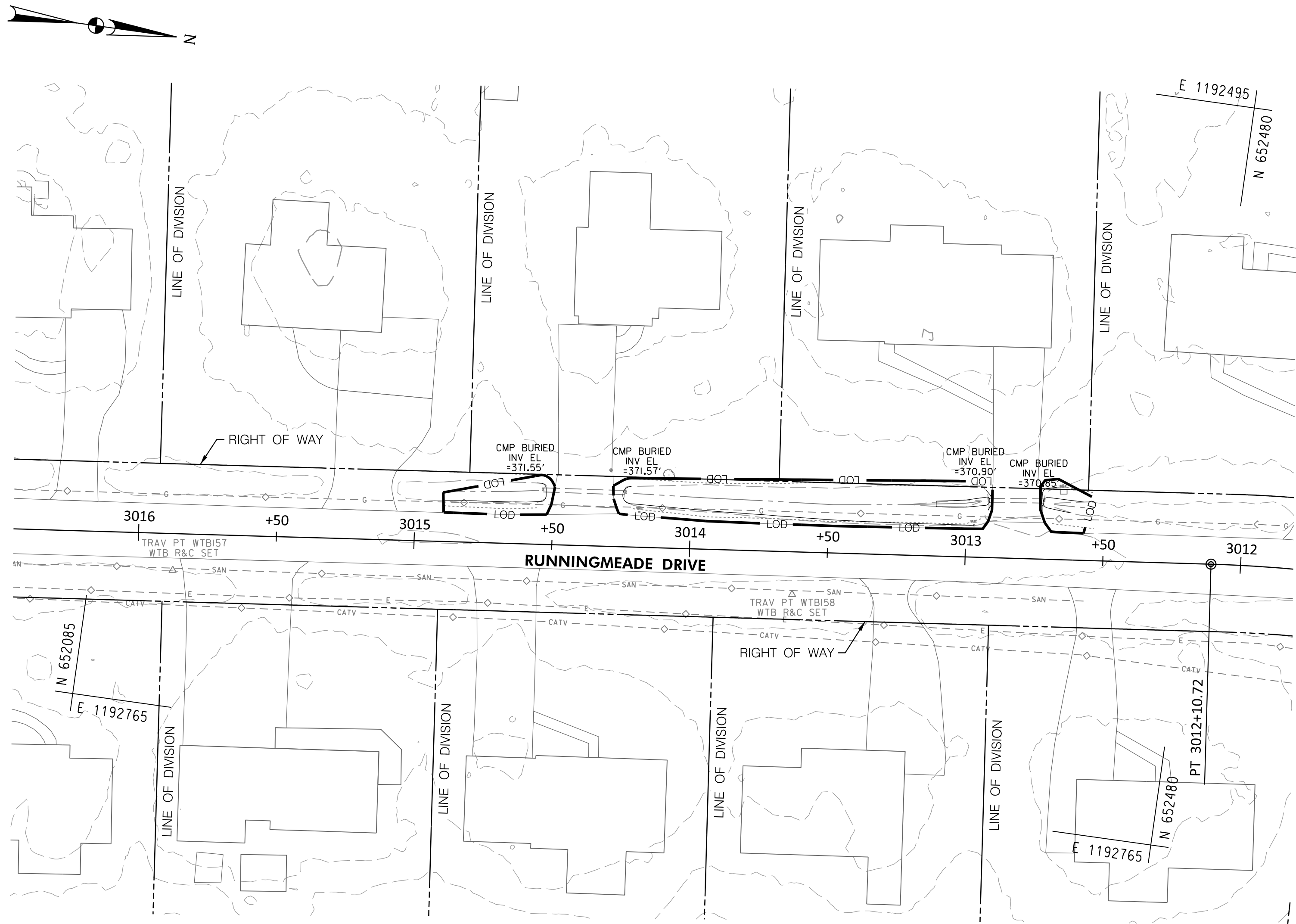
PS-08
FREDERICK COUNTY, MARYLAND
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OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

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PLAN SHEET

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BY: DAW -
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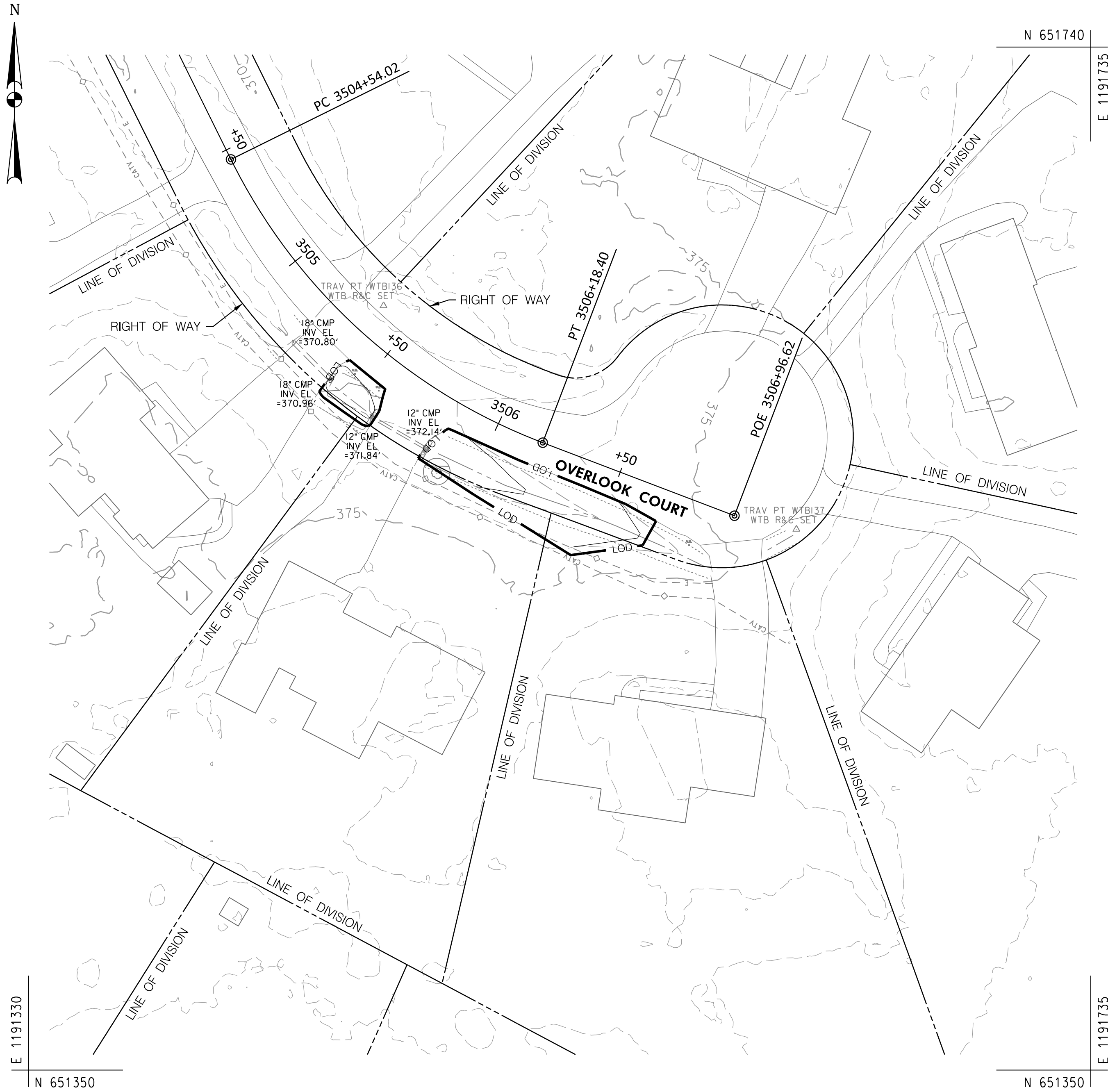
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PS-09
FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

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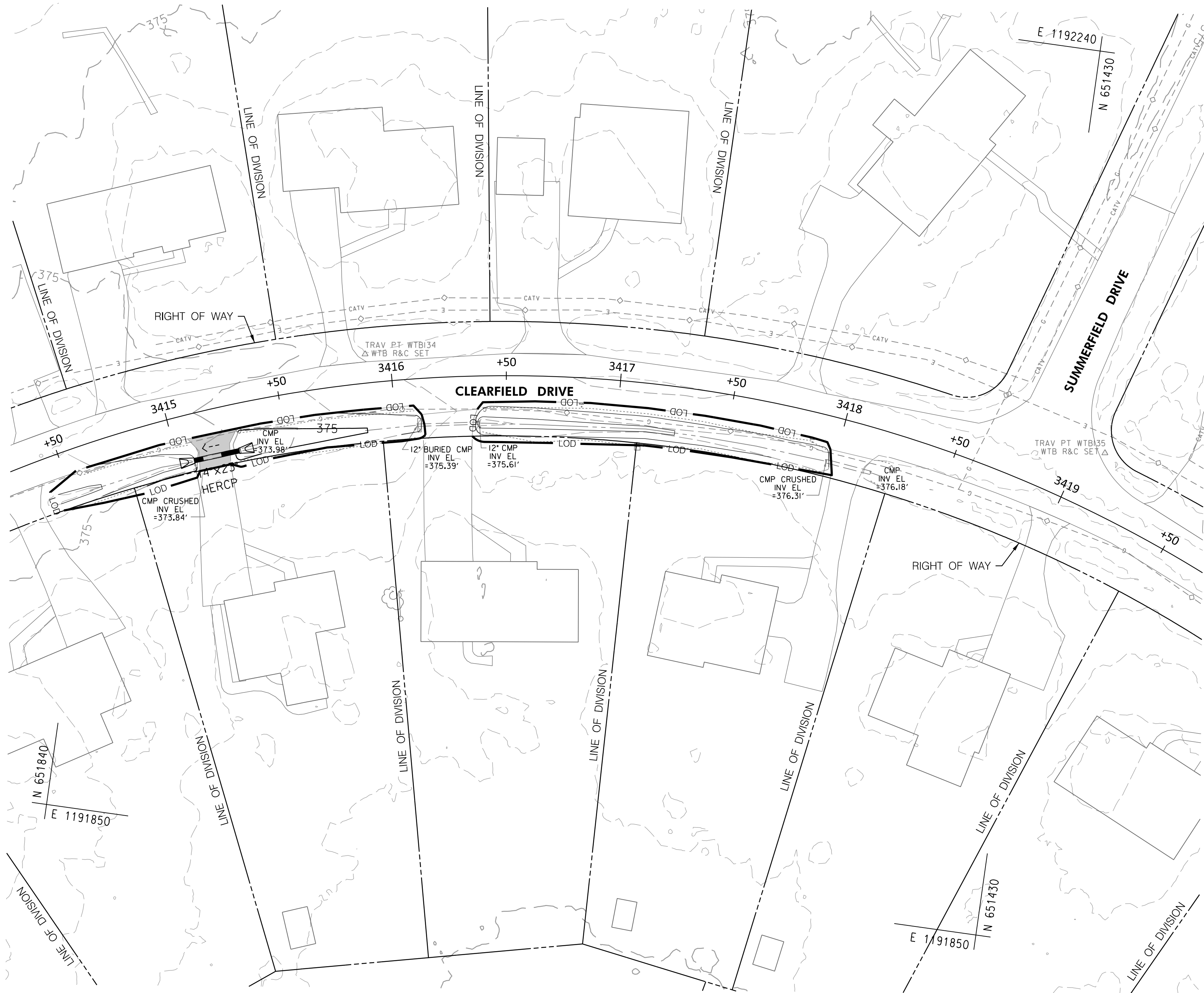
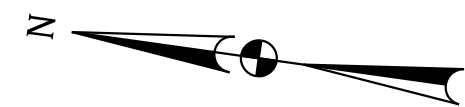
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TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
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LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

PS-10
FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

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PLAN SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
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FREDERICK COUNTY PROJECT NO. XX
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REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
RT. STA. 3415+07 TO RT. STA. 3414+28 (14'x23' HERCP)	20

PS-11

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

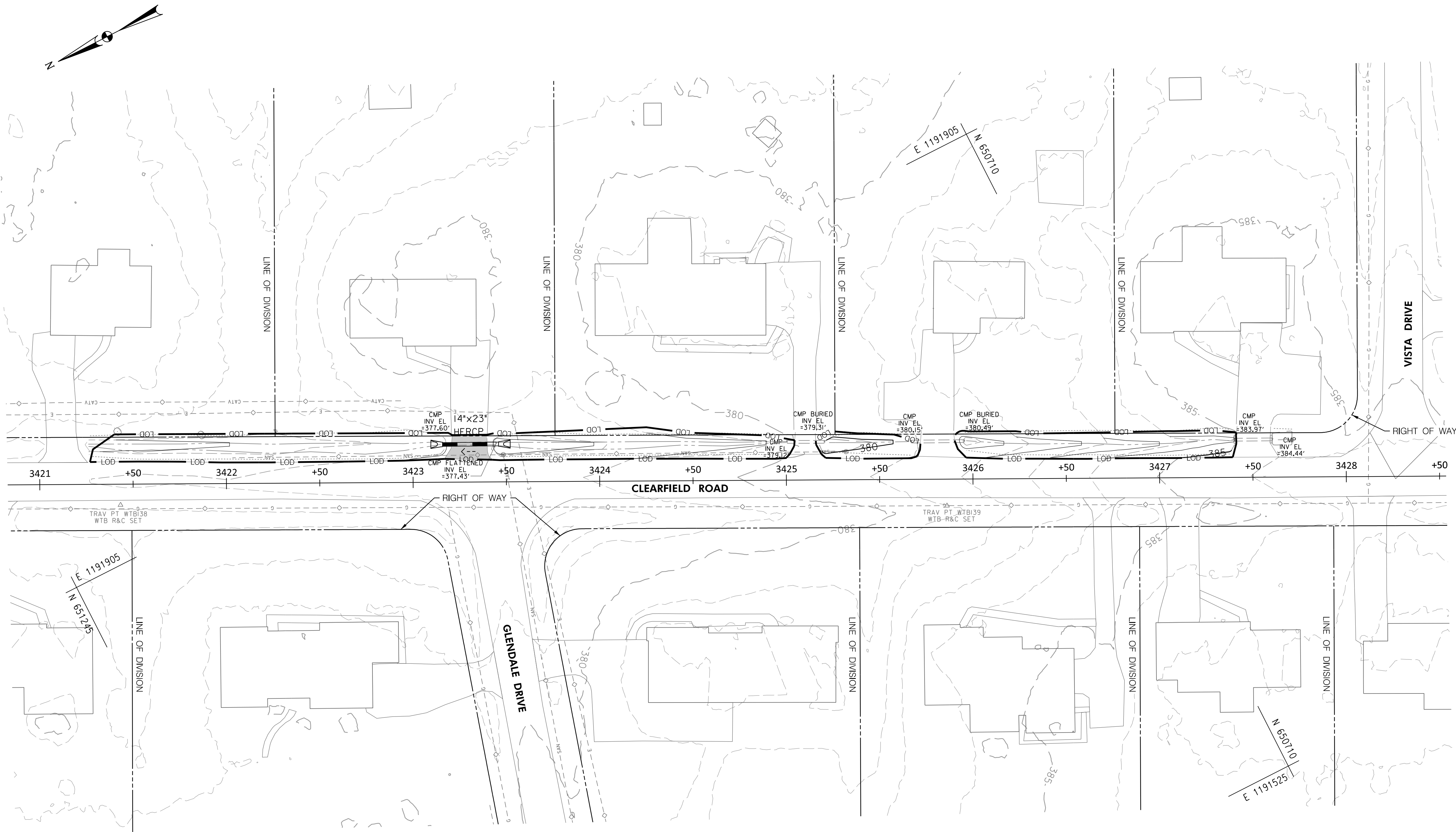
DATE: AUGUST 2024
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FREDERICK COUNTY PROJECT NO. XX
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CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
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EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

BY: DAW -
PLOTED: 8/30/2024
FILE: US\Frederick County NPDES - CloverHill.CAD\pH-P02.CloverHill.dgn



REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
LT, STA. 3423+16 TO LT, STA. 3423+46 (14"x23" HERCP)	30

PS-12

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
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FREDERICK COUNTY, MARYLAND

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CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

BY: DAW -
PLOT: 08/30/2024
FILE: USFrederick County NPDES - CloverHill.CAD\\wpb-P03.CloverHill.dgn



REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
RT. STA. 3810+06 TO RT. STA. 3810+16 (14"x23" HERCP)	18
RT. STA. 3810+37 TO RT. STA. 3810+48 (14"x23" HERCP)	18

PS-13

FREDERICK COUNTY, MARYLAND
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DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
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FREDERICK COUNTY, MARYLAND

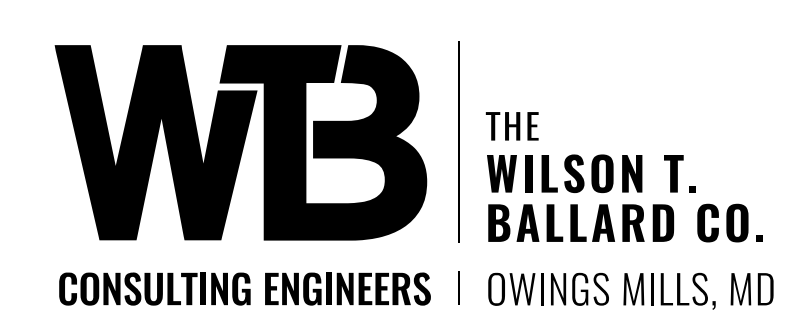
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PLAN SHEET

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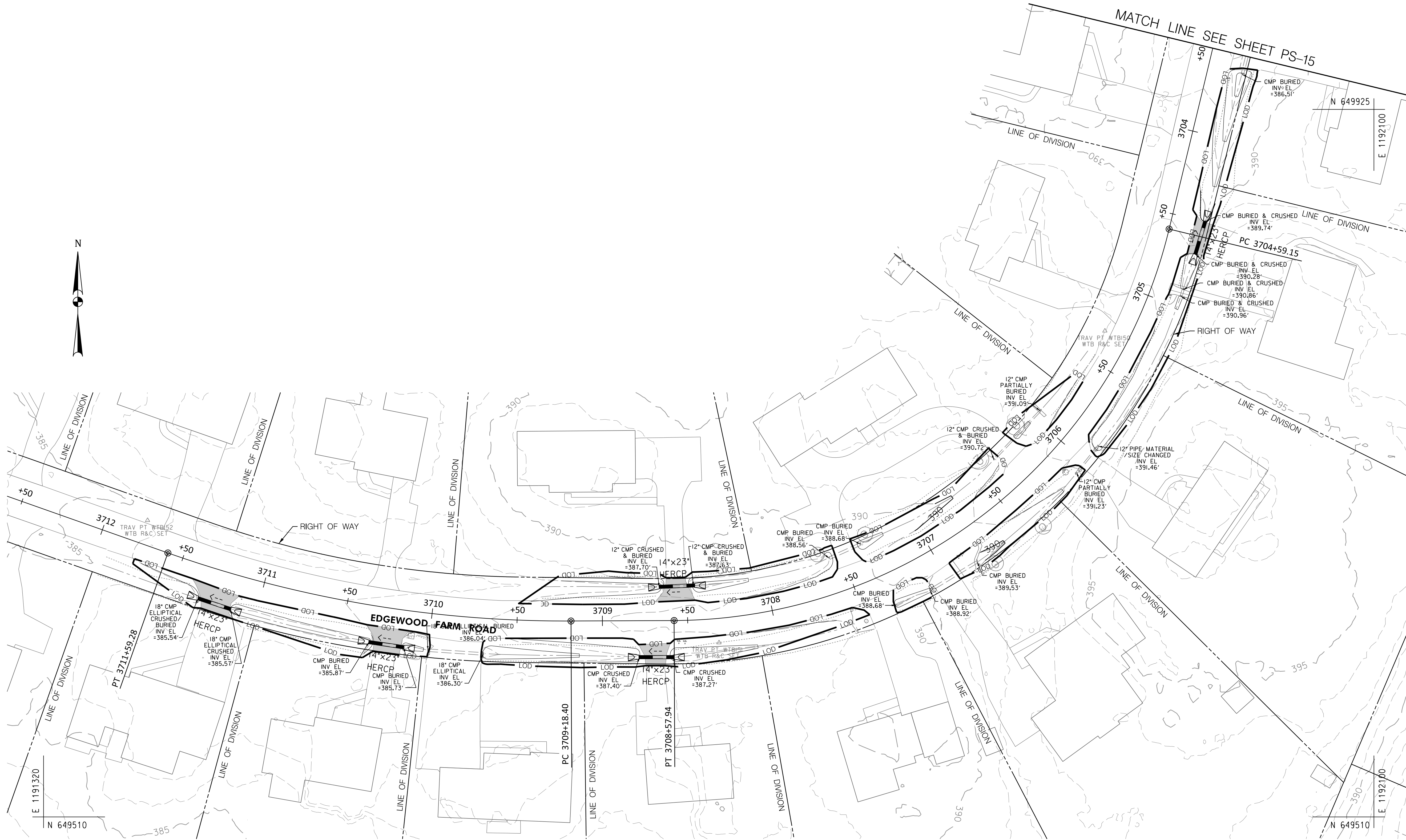
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ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
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LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

BY: DAW -
PLOTED: 8/30/2024
FILE: US\Frederick County NPDES - CloverHill\CAD\p04.CloverHill.dgn



REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
LT. STA. 3704+50 TO LT. STA. 3704+69 (14\"x23\" HERCP)	21
RT. STA. 3708+45 TO RT. STA. 3708+67 (14\"x23\" HERCP)	21
LT. STA. 3708+58 TO LT. STA. 3708+79 (14\"x23\" HERCP)	21
LT. STA. 3710+14 TO LT. STA. 3710+34 (14\"x23\" HERCP)	21
LT. STA. 3711+15 TO LT. STA. 3711+35 (14\"x23\" HERCP)	20

PS-14

FREDERICK COUNTY, MARYLAND
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DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

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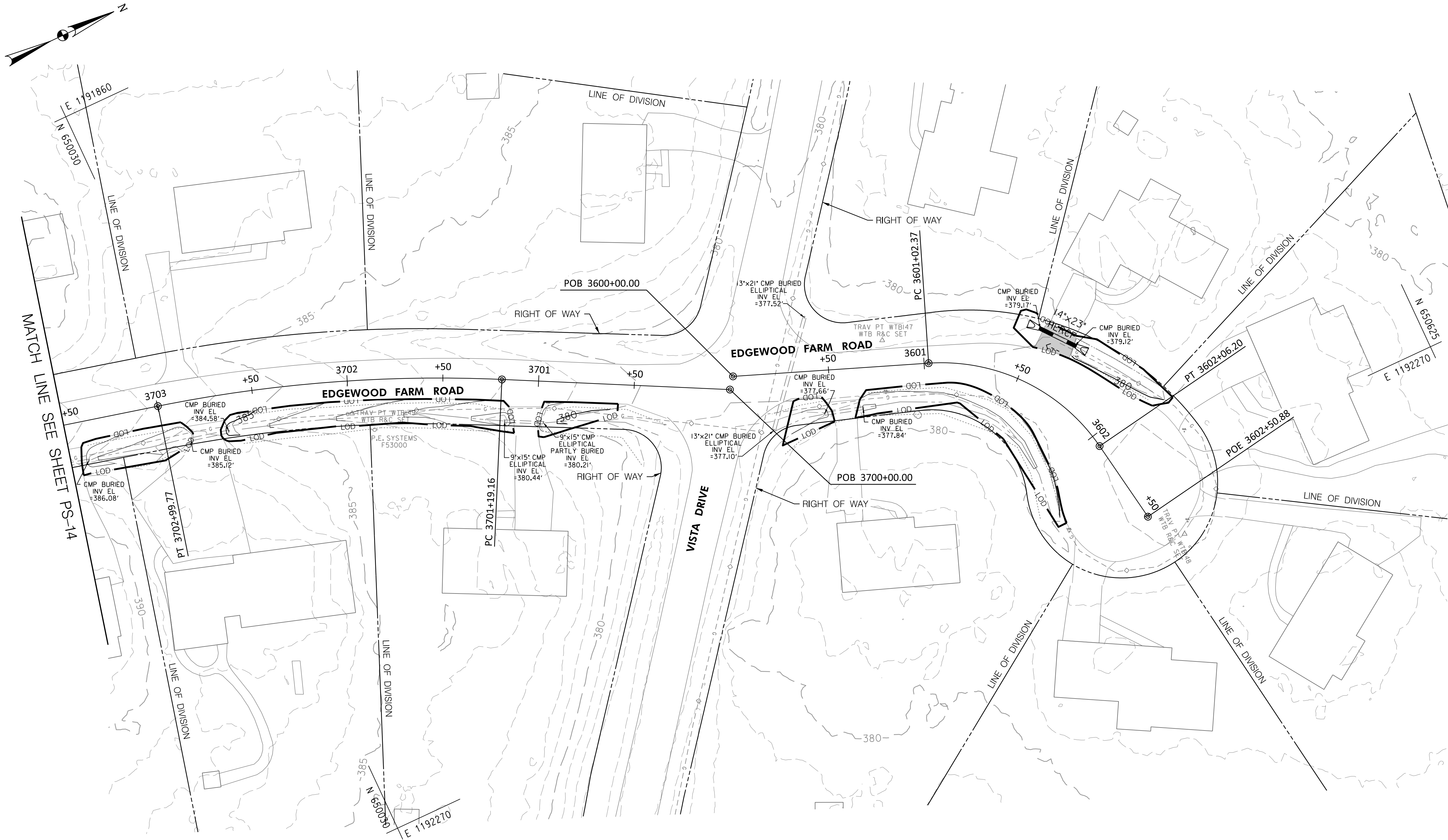
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CROSS REFERENCE	
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TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	



REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
LT. STA. 3601+50 TO LT. STA. 3601+67 (14'x23' HERCP)	22

PS-15

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

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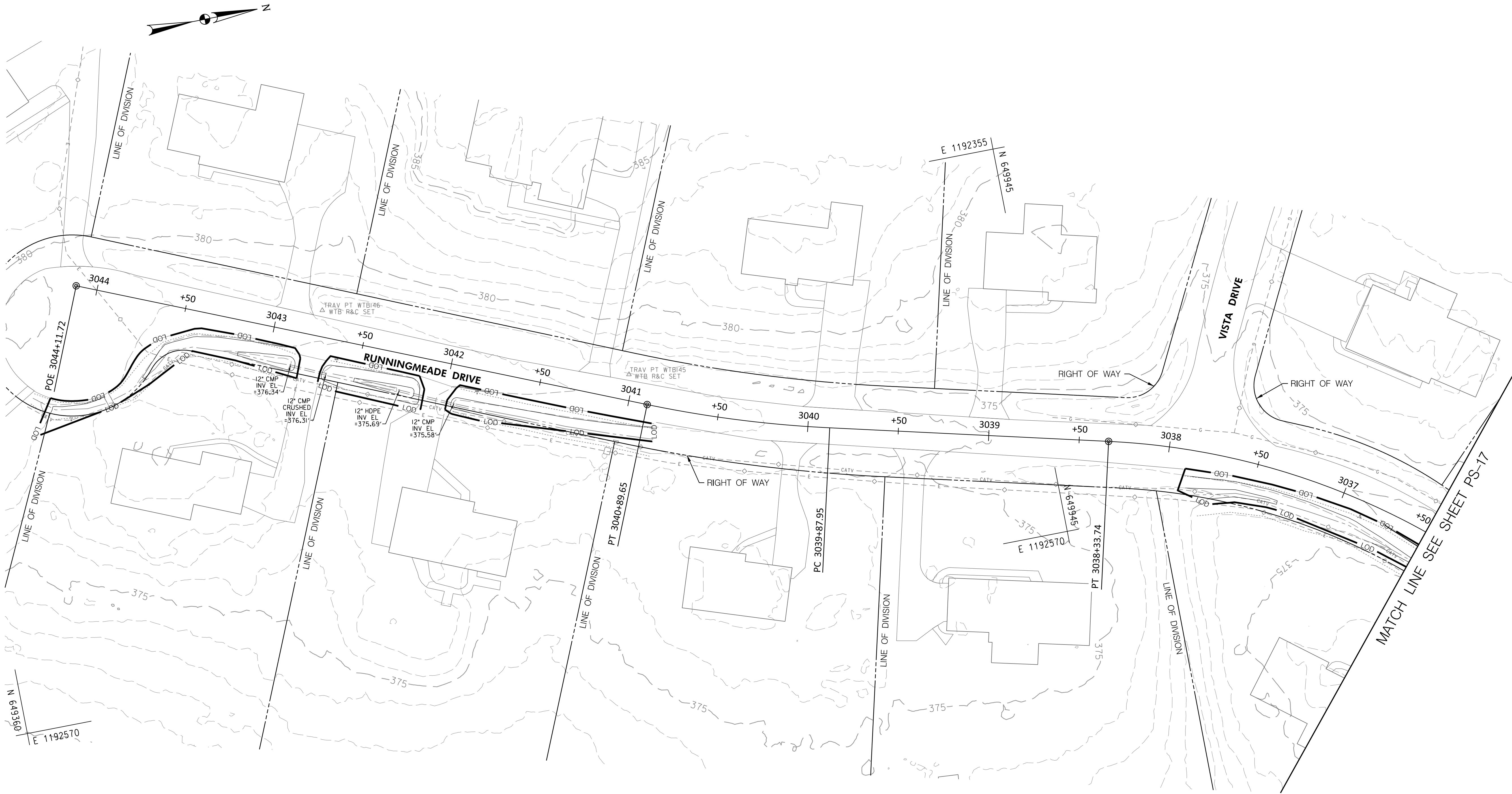
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PIPE & DRAINAGE SCHEDULE	
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ROADWAY PLAN SHEETS	
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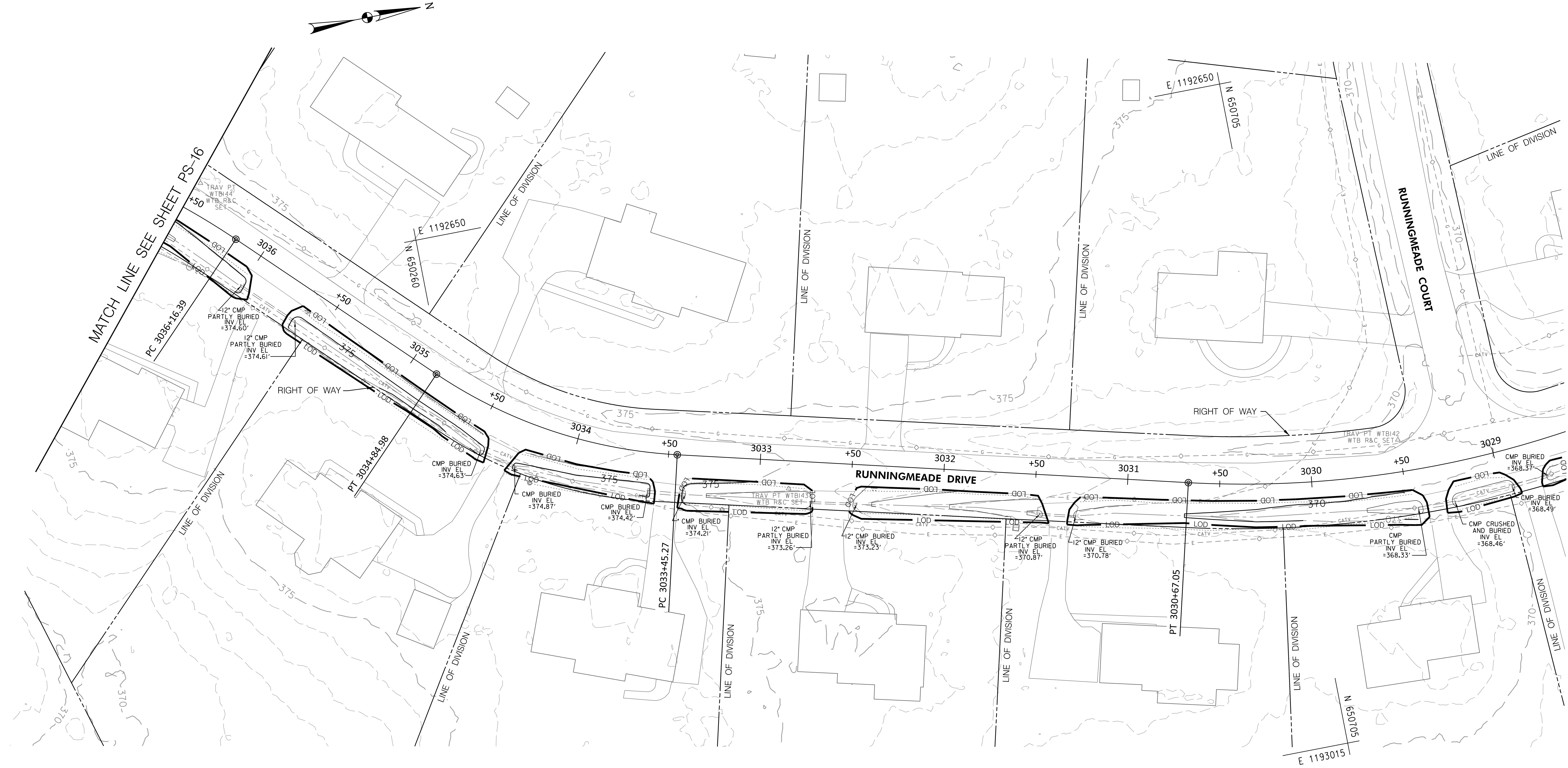
PS-16
FREDERICK COUNTY, MARYLAND
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OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

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BY: DAW -
PLOTED: 8/30/2024
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PS-17

FREDERICK COUNTY, MARYLAND
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FREDERICK COUNTY, MARYLAND

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BY: DAW -
PLOT: 08/30/2024
FILE: USFrederick County NPDES - Cloverhill.CAD\wpb-POB_Cloverhill.dgn



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LAWS OF THE STATE OF MARYLAND.
LICENSE NO. XXXXX
EXPIRATION DATE: XX-XX-XXXX

WB
CONSULTING ENGINEERS | OWINGS MILLS, MD
THE WILSON T. BALLARD CO.

CROSS REFERENCE	
ITEM	SHEET NOS.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
RT. STA. 3903+29 TO RT. STA. 3903+49 (14"x23" HERCP)	20

PS-18

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
SCALE: 1" = 30'-0"
FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX

BY: DAW -
PLOTED: 8/30/2024
FILE: US\Frederick County NPDES - CloverHill.CAD\wpb-P09_CloverHill.dgn



REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
L.T. STA. 4505+93 TO L.T. STA. 4506+16 (14"x23" HERCP)	23
L.T. STA. 4504+57 TO L.T. STA. 4504+77 (14"x23" HERCP)	21
L.T. STA. 4502+55 TO L.T. STA. 4502+77 (14"x23" HERCP)	21

PS-19

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

DATE: AUGUST 2024
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FREDERICK COUNTY PROJECT NO. XX
SCALE: 1" = 30'-0"
DWG. # OF XX

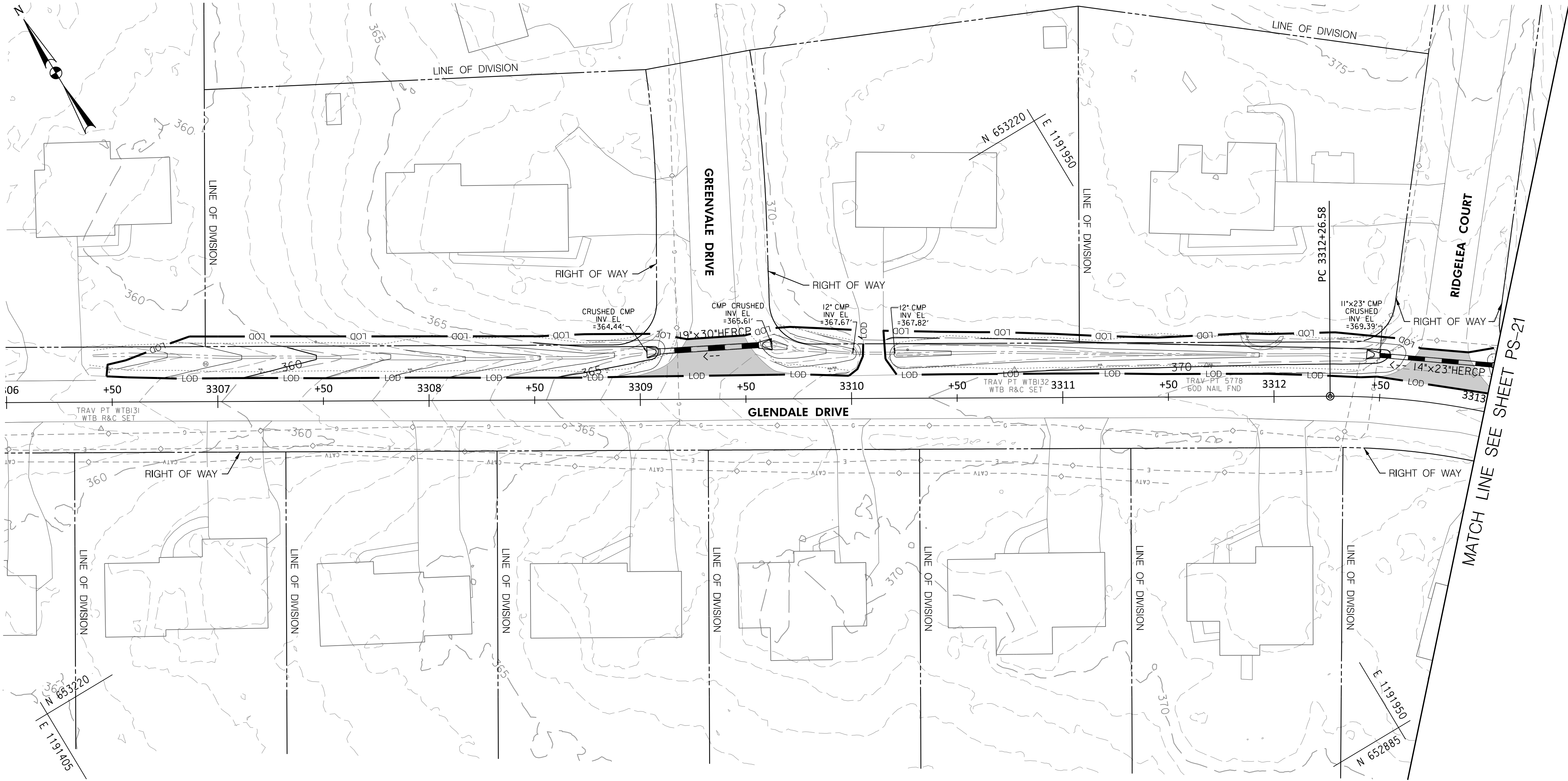
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CROSS REFERENCE	
ITEM	SHEET NOS.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
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SICING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

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TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
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ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
LT. STA. 3309+09 TO LT. STA. 3309+56 (19'x30" HERCP)	47
LT. STA. 3312+49 TO LT. STA. 3313+00 (14'x23" HERCP)	54

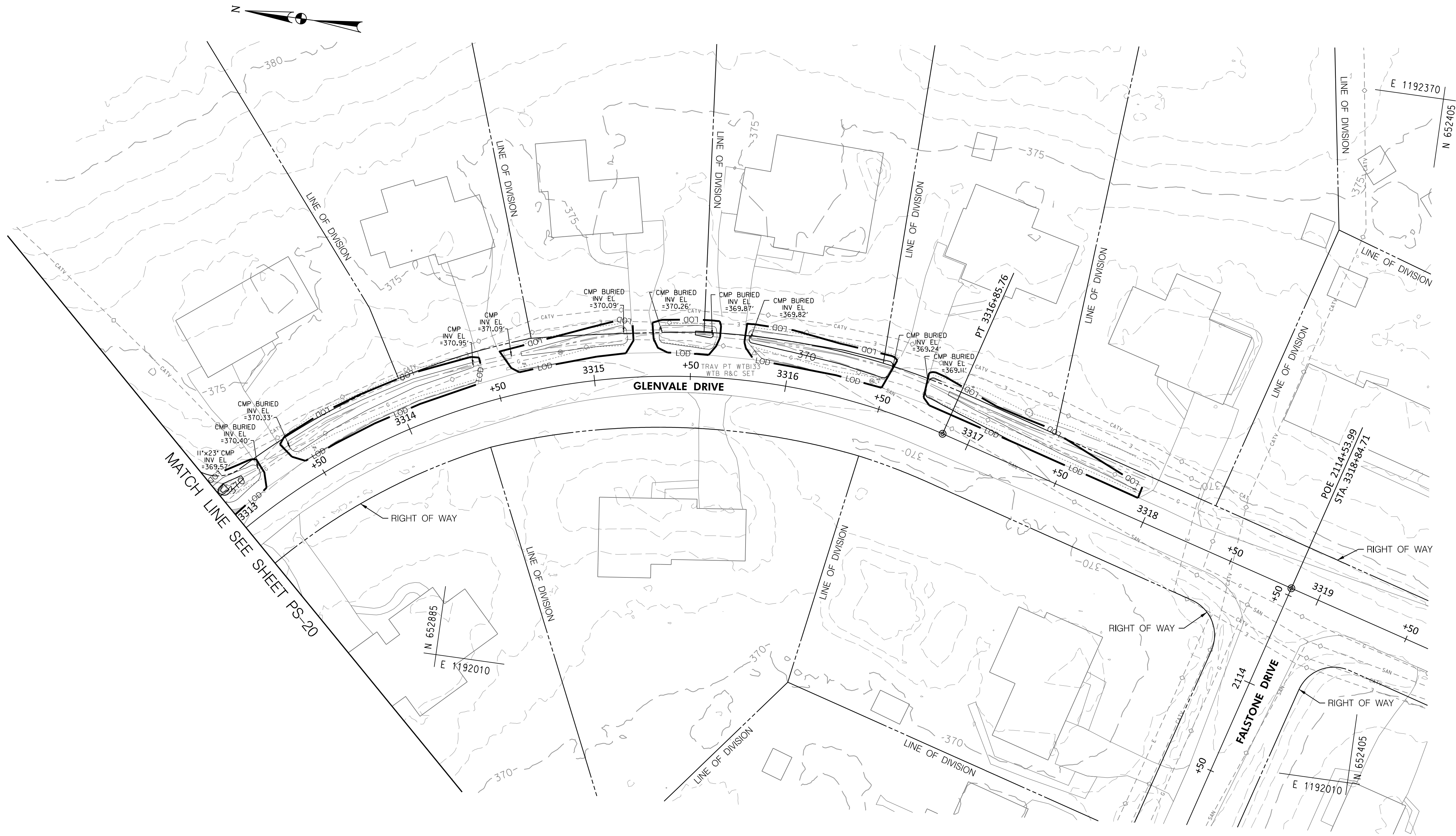
PS-20

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

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FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX



PS-21

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

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THE
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BALLARD CO.
CONSULTING ENGINEERS | OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

BY: DAW -
PLOTED: 8/30/2024
FILE: USFrederick County NPDES - CloverHill.CAD, v: 10.0, p: 022, CloverHill.dgn



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CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
LT. STA. 2103+26 TO LT. STA. 2103+47 (29"x45" HERCP)	21
LT. STA. 2103+75 TO RT. STA. 2104+03 (19"x30" HERCP)	52
RT. STA. 2200+72 TO RT. STA. 2200+97 (14"x23" HERCP)	26
RT. STA. 2201+73 TO RT. STA. 2201+93 (14"x23" HERCP)	21
LT. STA. 2202+13 TO LT. STA. 2202+33 (14"x23" HERCP)	21
LT. STA. 2202+77 TO LT. STA. 2202+98 (14"x23" HERCP)	22
RT. STA. 2203+58 TO RT. STA. 2203+80 (14"x23" HERCP)	23

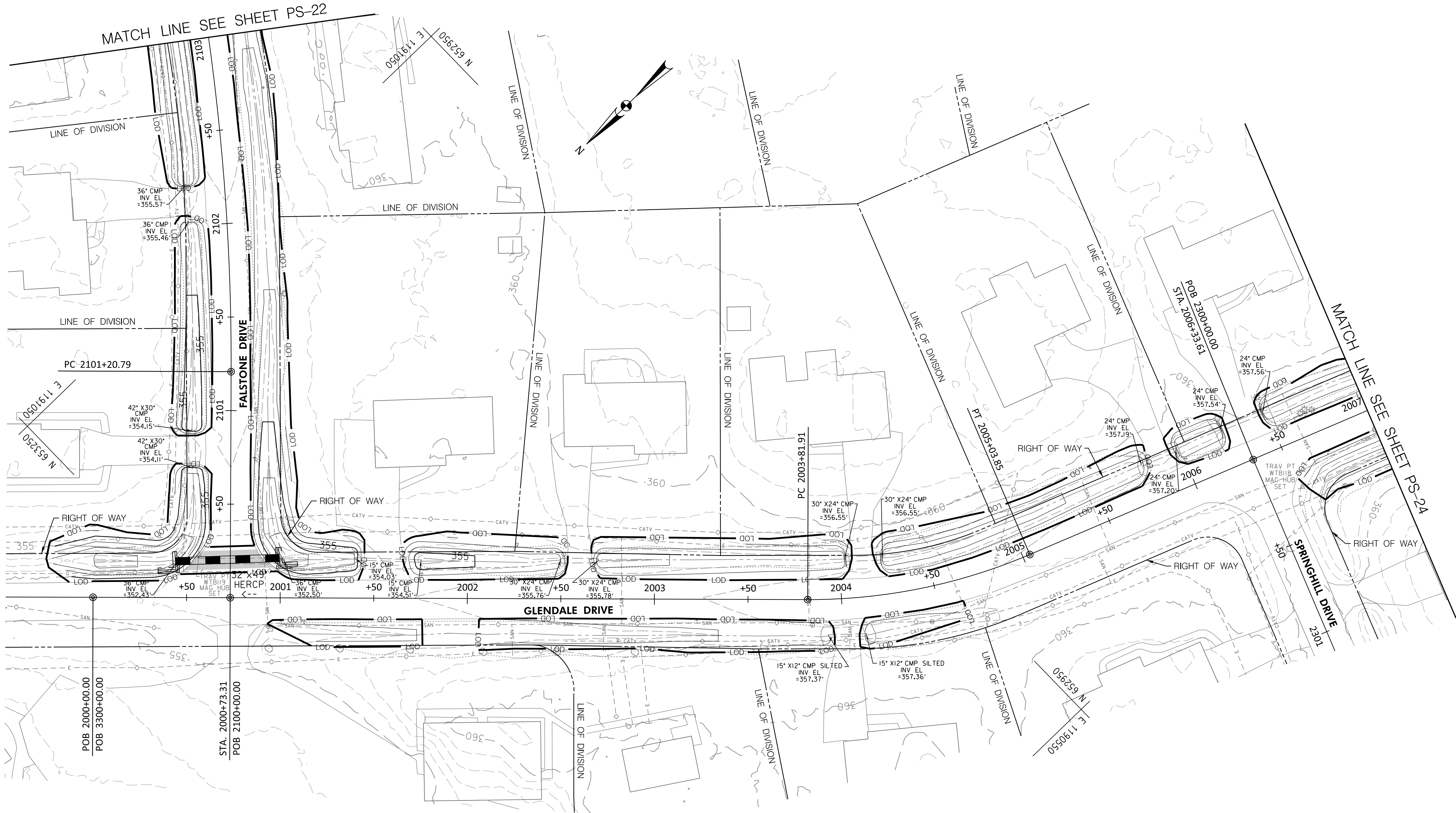
PS-22

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
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OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

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DWG. # OF XX



REINFORCED CONCRETE PIPE (RCP)		
LOCATION - STATION		LF
LT. STA. 2000+44 TO LT. STA. 2000+99 (32"x49" HERCP)		56

PS-23

FREDERICK COUNTY, MARYLAND
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DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
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FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

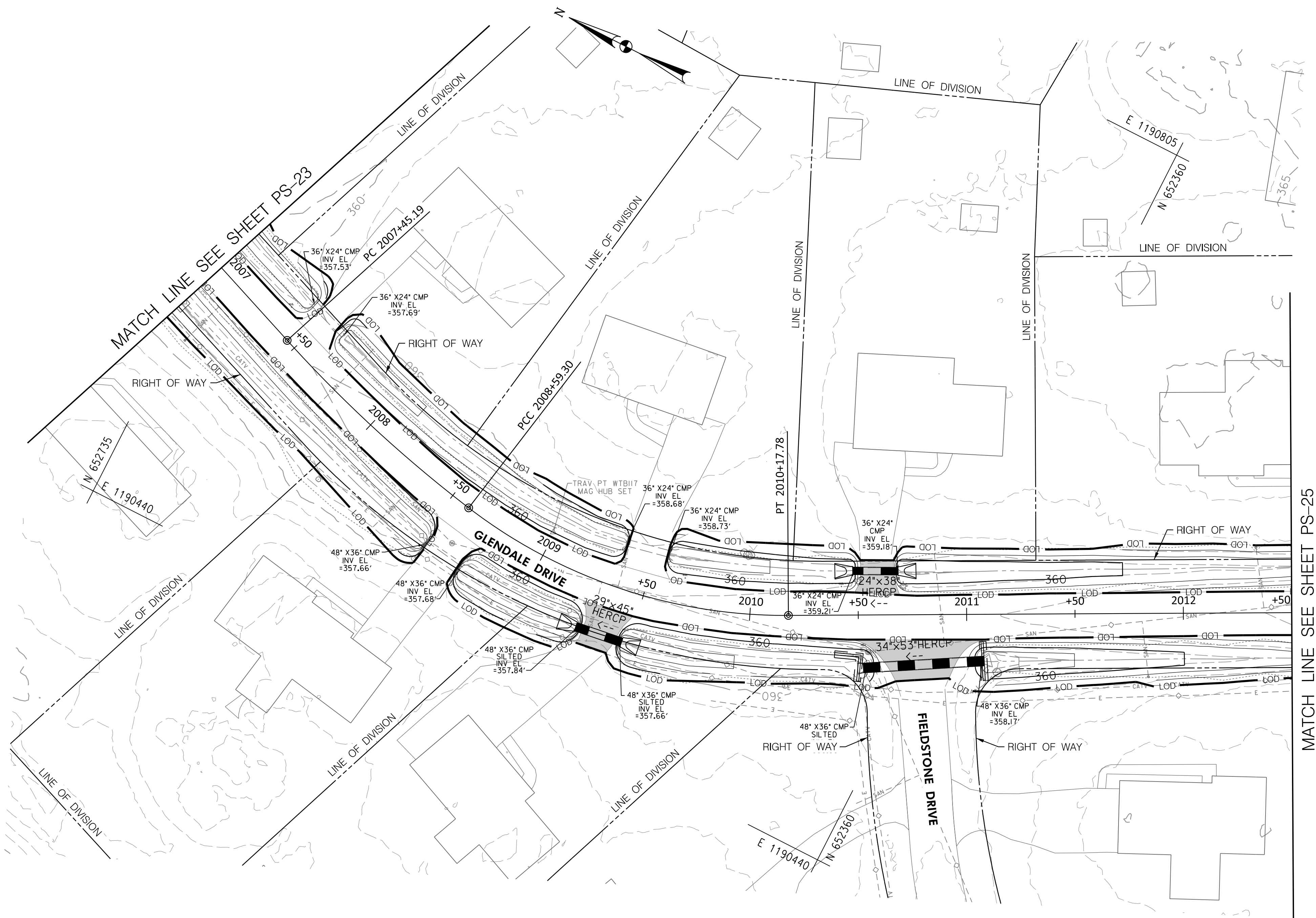
DATE: AUGUST 2024
MILESTONE: 30% PLAN SET
FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX

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CONSULTING ENGINEERS | OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

BY: DAW -
PLOT: 08/30/2024
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THE
**WILSON T.
BALLARD CO.**

CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
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SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
RT. STA. 2009+26 TO RT. STA. 2009+47 (29"x45" HERCP)	23
LT. STA. 2010+48 TO LT. STA. 2010+69 (24"x38" HERCP)	21
RT. STA. 2010+52 TO RT. STA. 2011+08 (34"x53" HERCP)	59

PS-24

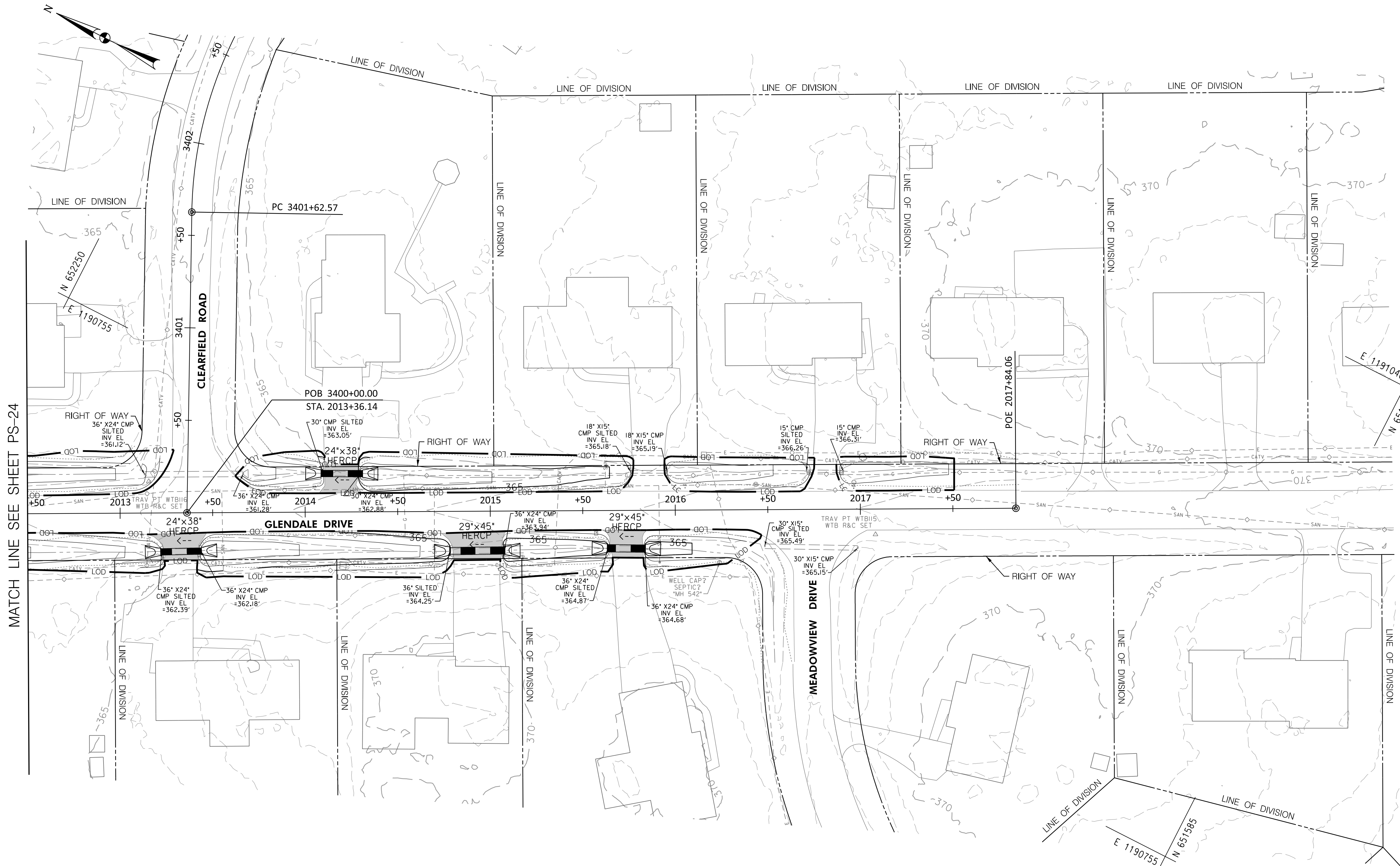
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DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

DATE: AUGUST 2024
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FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX



MATCH LINE SEE SHEET PS-24

REINFORCED CONCRETE PIPE (RCP)		
LOCATION - STATION		LF
RT. STA. 2013+22 TO RT. STA. 2013+44 (24"x38" HERCP)		23
LT. STA. 2014+09 TO LT. STA. 2014+31 (24"x38" HERCP)		23
RT. STA. 2014+78 TO RT. STA. 2015+08 (29"x45" HERCP)		30
RT. STA. 2015+63 TO RT. STA. 2015+84 (29"x45" HERCP)		21

PS-25

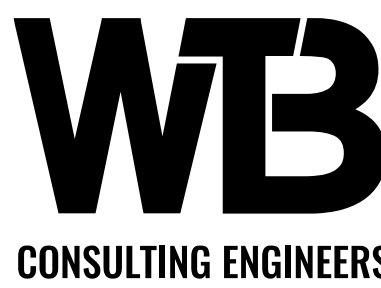
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DIVISION OF PUBLIC WORKS
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FREDERICK COUNTY, MARYLAND

CLOVER HILL

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FREDERICK COUNTY PROJECT NO. XX DWG. # OF XX

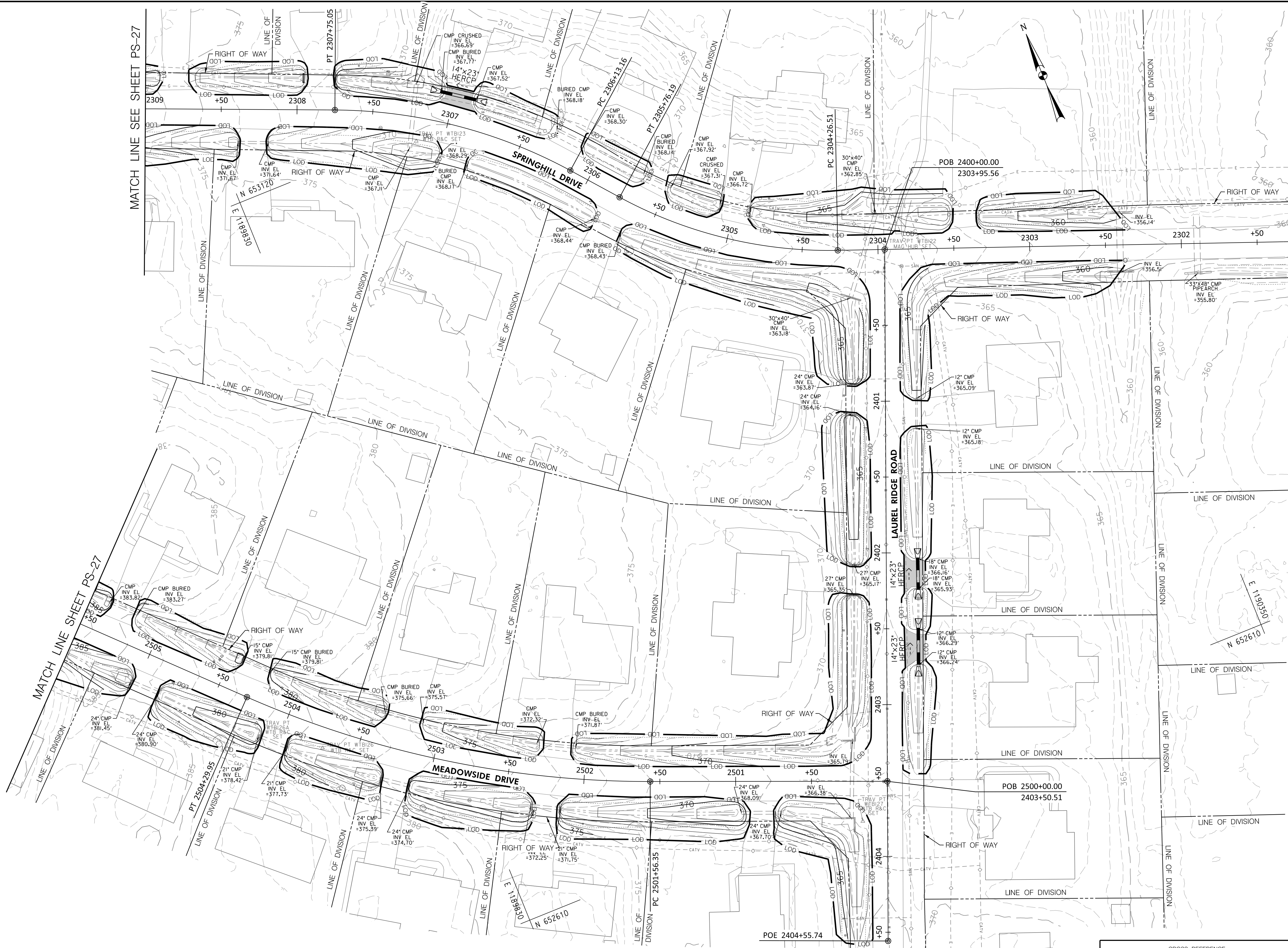
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OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOS.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

BY: DAW -
PLOT: 08/30/2024
FILE: I:\Frederick County NPDES - Clover Hill\CAD\pdp-P026.Clover Hill.dgn



REINFORCED CONCRETE PIPE (RCP)		
LOCATION - STATION		LF
RT. STA. 2306+85 TO RT. STA. 2307+09 (14"x23" HERCP)		25
LT. STA. 2402+03 TO LT. STA. 2402+24 (14"x23" HERCP)		21
LT. STA. 2402+50 TO LT. STA. 2402+75 (14"x23" HERCP)		26

PS-26

FREDERICK COUNTY, MARYLAND
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DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

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DWG. # OF XX

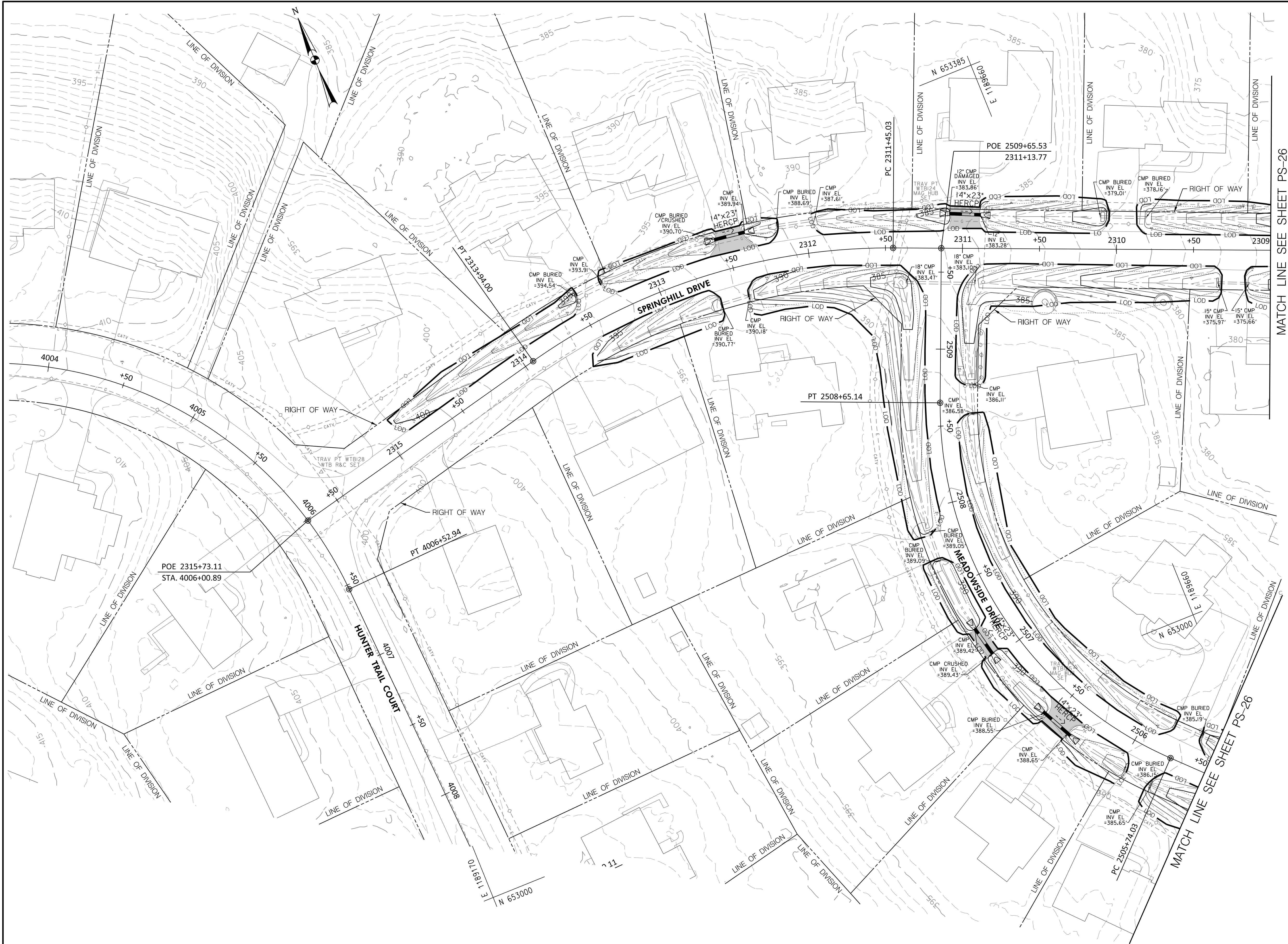
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BALLARD CO.
CONSULTING ENGINEERS | OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOS.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
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SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

BY: DAW -
PLOT: 08/30/2024
FILE: USFrederick County NPDES - Cloverhill.CAD, vph-P021.Cloverhill.dgn



MATCH LINE SEE SHEET PS-26

REINFORCED CONCRETE PIPE (RCP)		
LOCATION - STATION		LF
RT. STA. 2312+38 TO RT. STA. 2312+56 (14"x23" HERCP)		20
RT. STA. 2310+88 TO RT. STA. 2311+09 (14"x23" HERCP)		20
LT. STA. 2507+03 TO LT. STA. 2507+22 (14"x23" HERCP)		21
LT. STA. 2506+35 TO LT. STA. 2506+57 (14"x23" HERCP)		24

PS-27

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

PLAN SHEET

DATE: AUGUST 2024
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FREDERICK COUNTY PROJECT NO. XX
DWG. # OF XX

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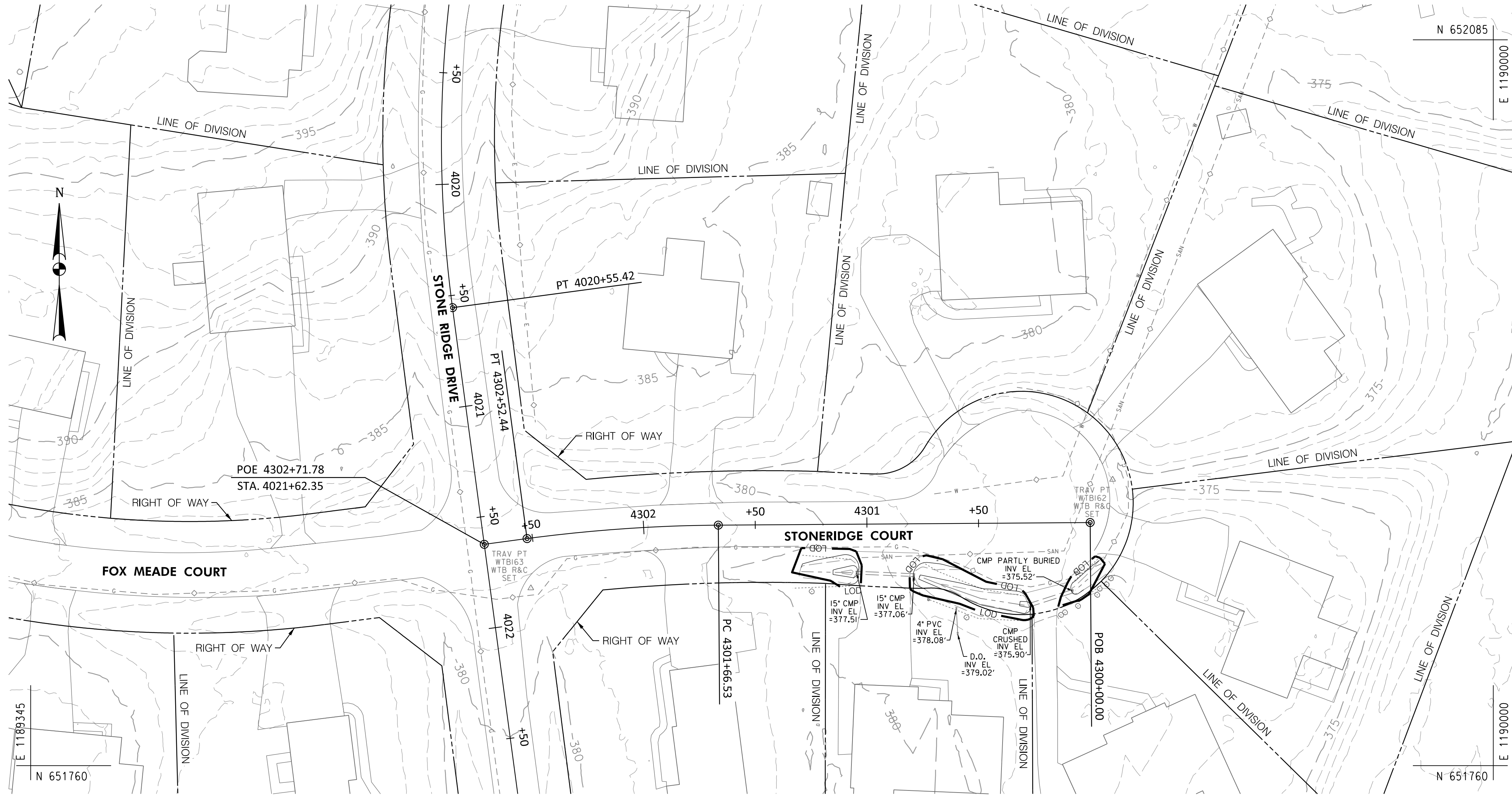


THE
WILSON T.
BALLARD CO.
CONSULTING ENGINEERS | OWINGS MILLS, MD

CROSS REFERENCE

ITEM	SHEET NOs.
------	------------

TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
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EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	



BY: DAW -
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**THE
WILSON T.
BALLARD CO.**

CROSS REFERENCE	
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SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
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LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

PS-28

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

CLOVER HILL

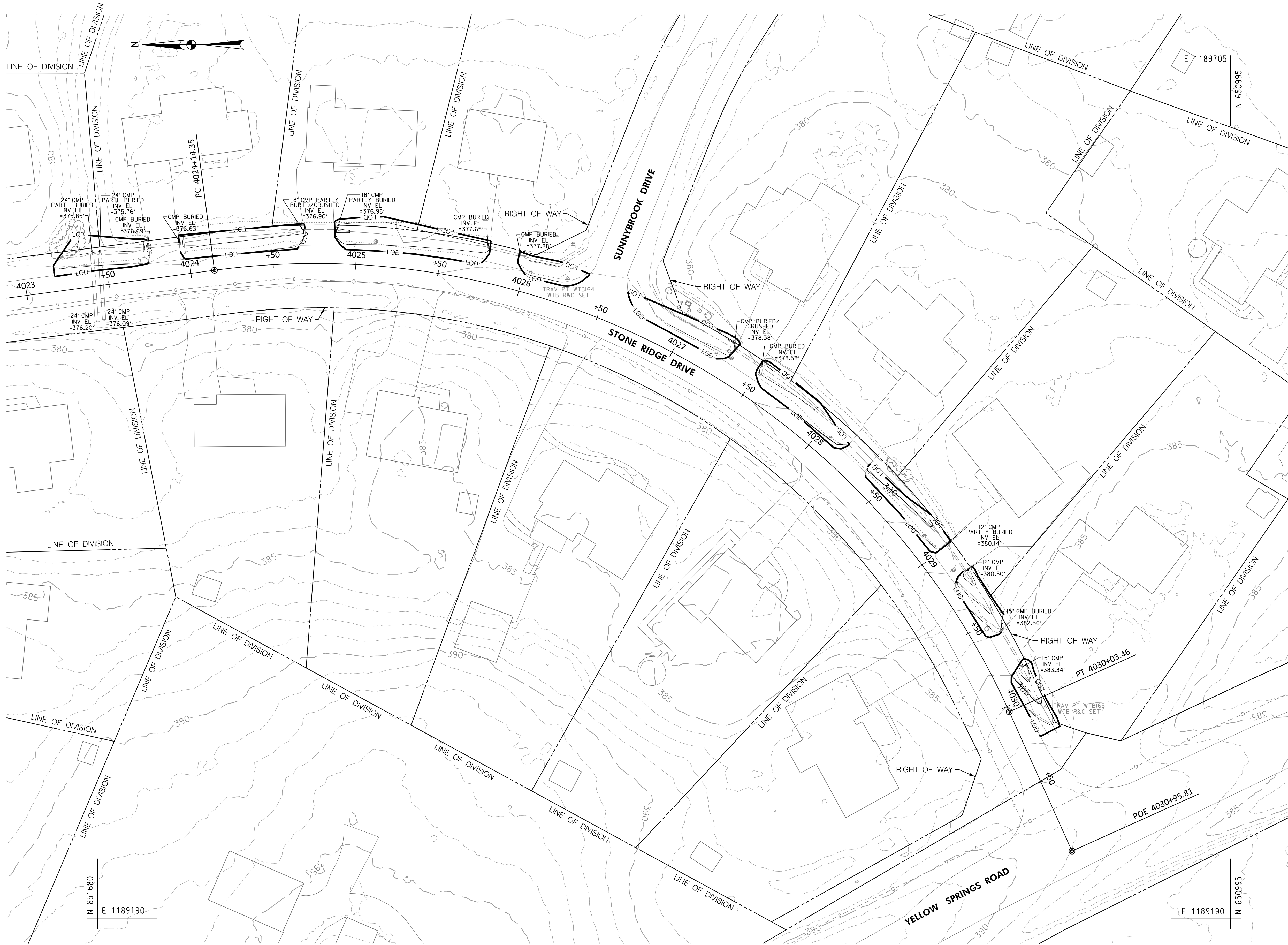
PLAN SHEET

DATE: AUGUST 2024
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SCALE: 1" = 30'-0"

FREDERICK COUNTY PROJECT NO.
XX

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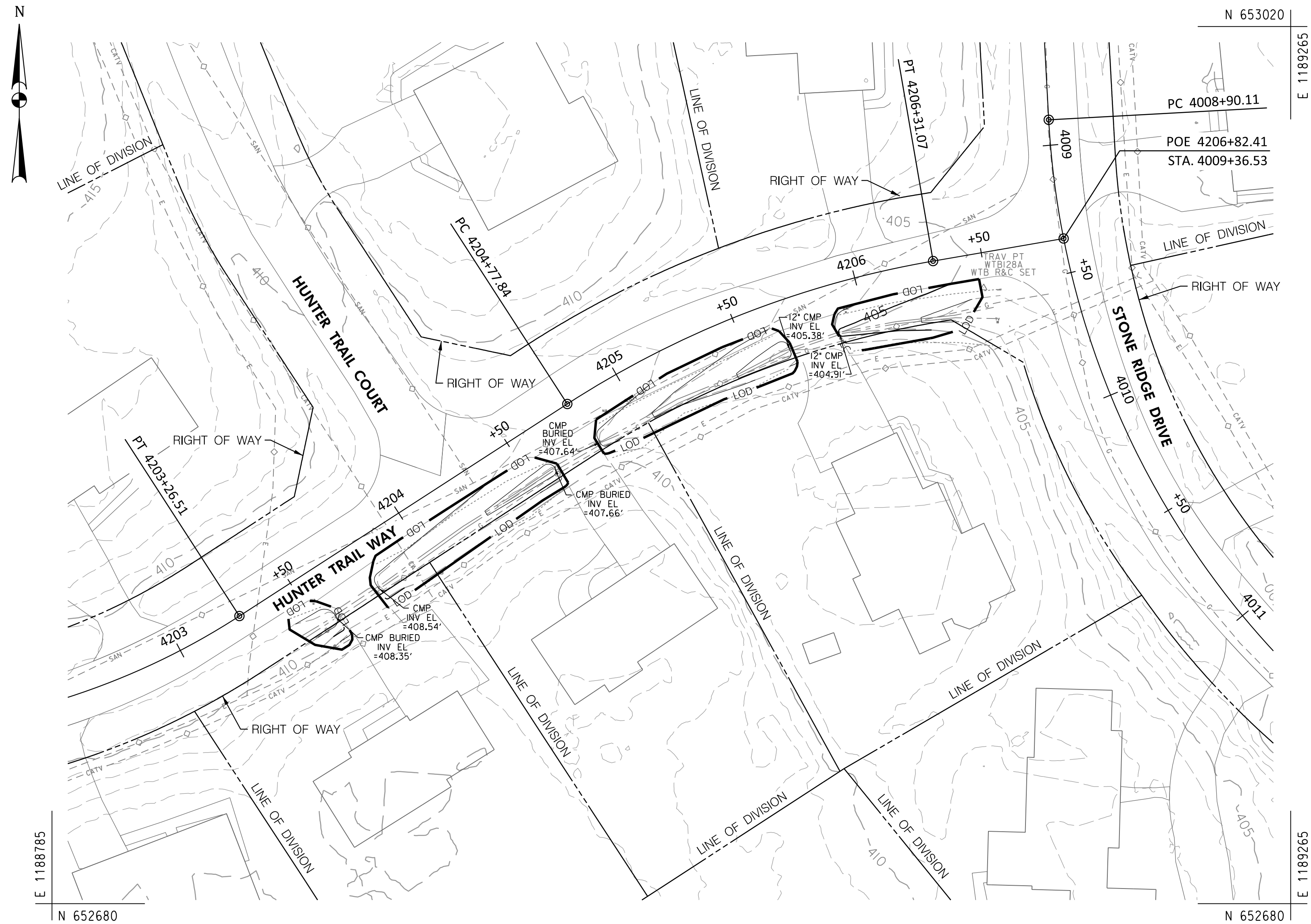
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SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
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LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

PS-29
FREDERICK COUNTY, MARYLAND
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FREDERICK COUNTY, MARYLAND

CLOVER HILL

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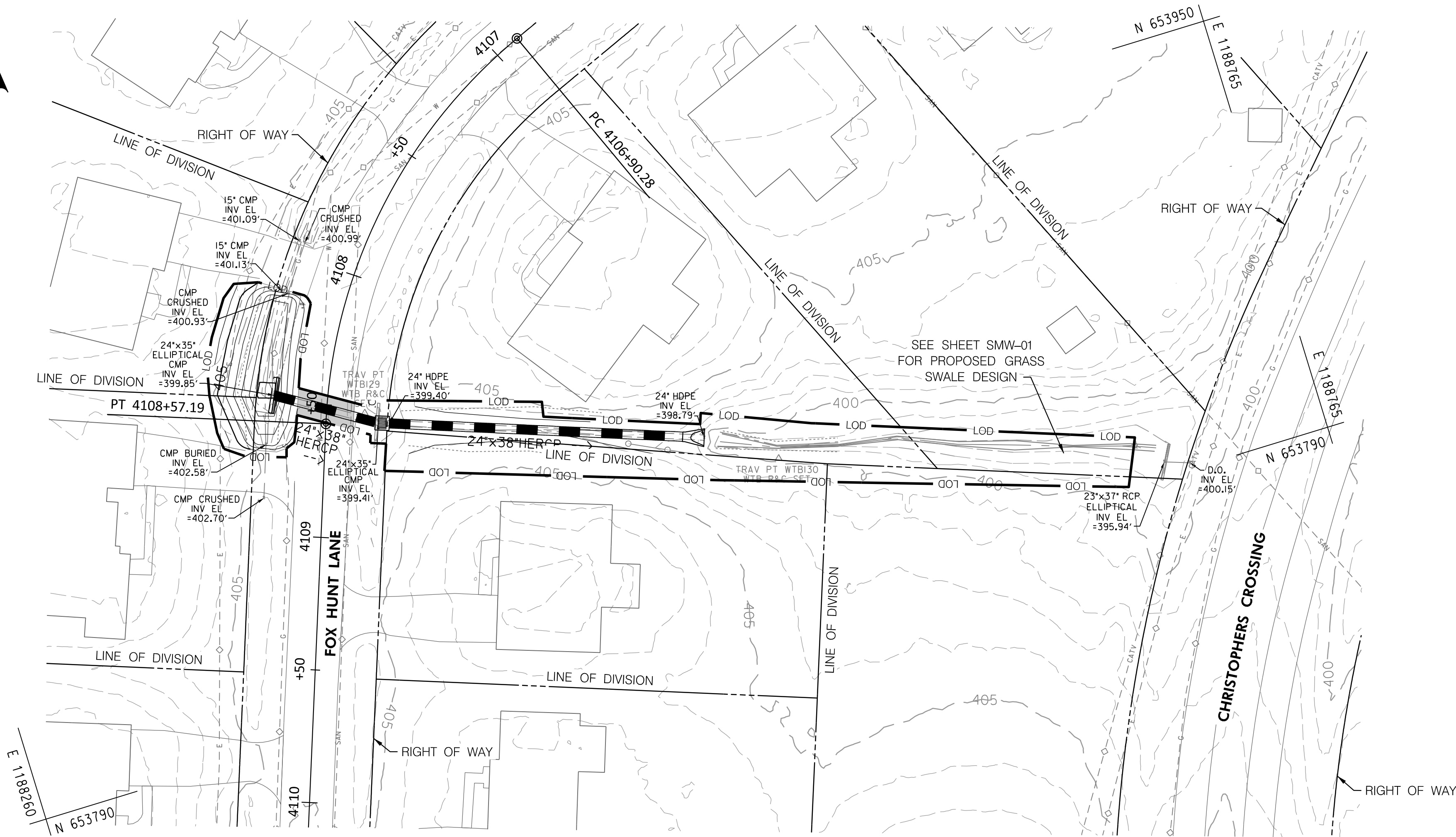
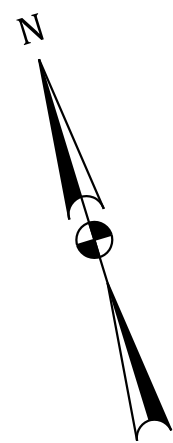
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PIPE & DRAINAGE SCHEDULE	
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PS-30
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REINFORCED CONCRETE PIPE (RCP)	
LOCATION - STATION	LF
RT. STA. 4108+48 TO LT. STA. 4108+56 (24"x38" HERCP)	40
LT. STA. 4108+54 TO LT. STA. 4108+56 (24"x38" HERCP)	119

PS-31

FREDERICK COUNTY, MARYLAND
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FREDERICK COUNTY, MARYLAND

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EXPIRATION DATE: XX-XX-20XX

WB
CONSULTING ENGINEERS | THE WILSON T. BALLARD CO.
OWINGS MILLS, MD

CROSS REFERENCE	
ITEM	SHEET NOs.
TYPICAL SECTIONS	
SUPERELEVATION CHARTS	
PIPE & DRAINAGE SCHEDULE	
GEOMETRIC LAYOUT SHEETS	
ROADWAY PLAN SHEETS	
ROADWAY PROFILE SHEETS	
TRAFFIC CONTROL SHEETS	
EROSION & SEDIMENT CONTROL PLANS	
SIGNING & MARKING PLANS	
LANDSCAPE PLAN SHEETS	
RESPECTIVE RIGHT-OF-WAY PLATS	

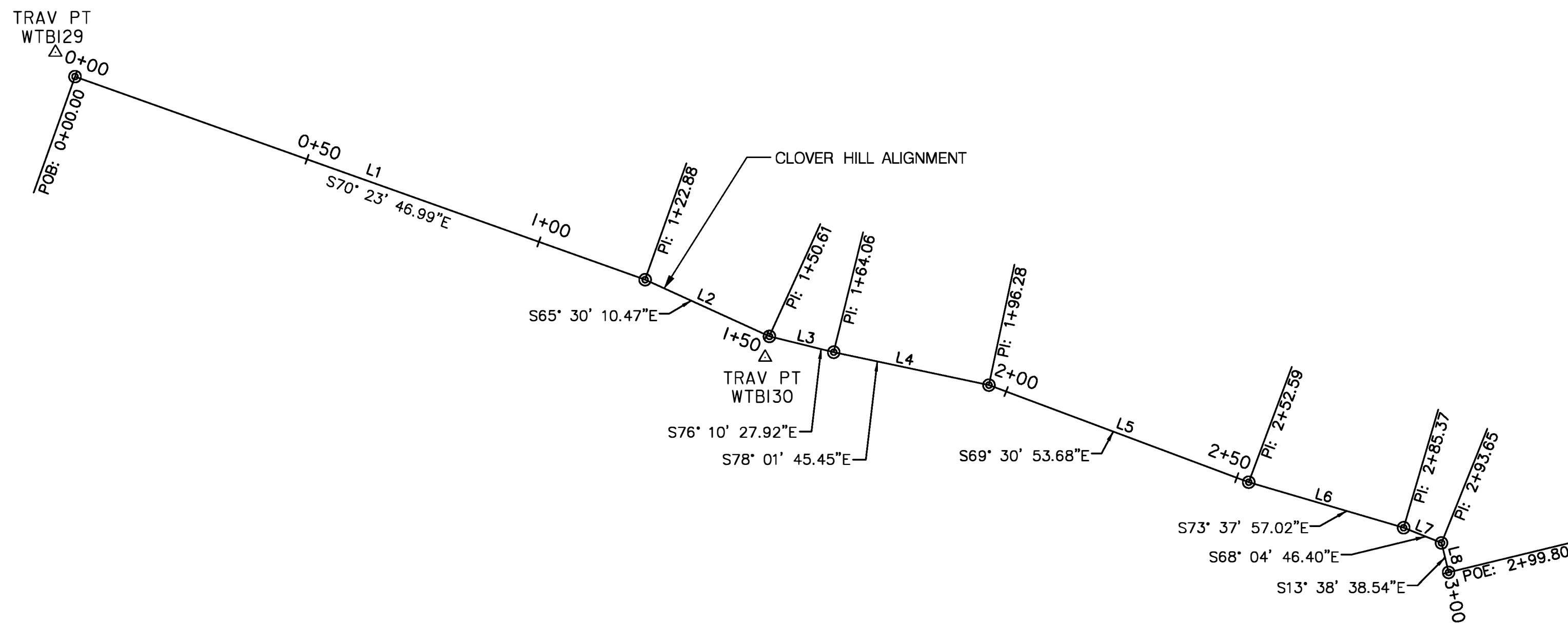
BY: sumera -
PLOTED: Thursday, August 29, 2024 AT 12:04 PM
FILE: G:\Active\2019-12_Frederick Co 19-444 IDD WEDES-WTB-CR\JVT\Task 5- Clover Hill Drainage Design\Mapping\CAD\cgs-2000-Clover Hill.dgn

E 1188250
N 654050

E 1188250
N 653750

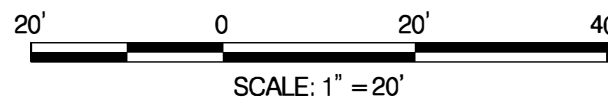


FOX HUNT LANE



CLOVER HILL BASELINE CONTROL COORDINATES			
LOCATION	STATION	NORTHING	EASTING
L1	0+00.00	653896.1444	1188423.4618
L2	1+22.88	653854.9168	1188539.2192
L3	1+50.61	653843.4173	1188564.4559
L4	1+64.06	653840.2029	1188577.5174
L5	1+96.28	653833.5221	1188609.0276
L6	2+52.59	653813.8140	1188661.7810
L7	2+85.37	653804.5769	1188693.2319
L8	2+93.65	653801.4842	1188700.9174

TRAVERSE POINTS			
POINT NO.	NORTHING	EASTING	ELEVATION
WTBI29	653901.1799	1188419.5773	403.19
WTBI30	653839.2309	1188563.7496	399.29



GS-12

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

**CLOVER HILL HOA
STORMWATER DRAINAGE**

FOX HUNT LANE GEOMETRY SHEET

DATE: AUGUST 2024
MILESTONE: 30% CONCEPT PLAN SET SCALE: 1" = 20'

FREDERICK COUNTY PROJECT NO. XX DWG. 53 OF 56

PROFESSIONAL CERTIFICATION.
I CERTIFY THAT THIS DOCUMENT WAS
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LAWS OF THE STATE OF MARYLAND.
LICENSE NO. XXXXX
EXPIRATION DATE: XX-XX-20XX



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SOLOMONS ISLAND
RD, ANNAPOLIS,
MD 21401

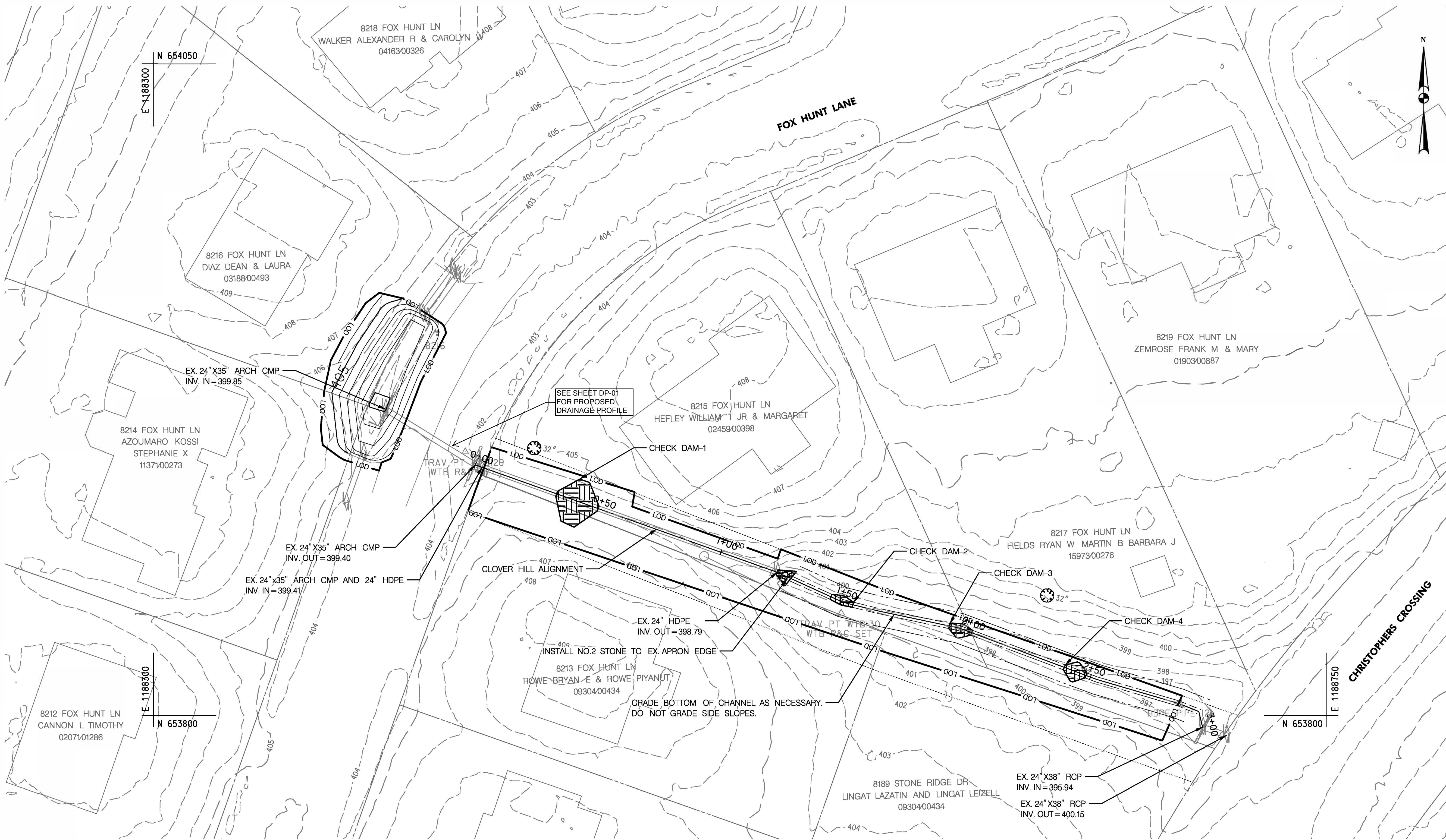


THE
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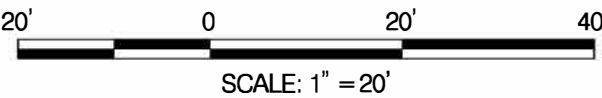
CONSULTING ENGINEERS

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SUPERELEVATION CHARTS.....	•
PPE & DRAINAGE SCHEDULE.....	•
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EROSION & SEDIMENT CONTROL PLANS	•
SIGNING & MARKING PLANS	•
LANDSCAPE PLAN SHEETS	•
RESPECTIVE RIGHT-OF-WAY PLATS	•

By: sunera -
PLOT: DP-Friday, August 30, 2024 AT 09:33 AM
FILE: GR-McNittive 2019-12 Frederick Co 19-444 IDA WPES, WTB-CR-VV1Tgk 5- Clover Hill Drainage Design Mapping CAD to Sfr-P0001.Cover Hill.dgn



- LEGEND
- PROPOSED EARTHEN CHECK DAM
 - 10-YR WATER SURFACE
 - SWALE BOTTOM WIDTH
 - PROPERTY BOUNDARY
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - LOD LIMIT OF DISTURBANCE
 - APPROXIMATE EASEMENT
 - NO.2 STONE



SMW-01

FREDERICK COUNTY, MARYLAND
DIVISION OF PUBLIC WORKS
DEPARTMENT OF ENGINEERING AND CONSTRUCTION MANAGEMENT
OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

**CLOVER HILL HOA
STORMWATER DRAINAGE**

FOX HUNT LANE PLAN VIEW

DATE: AUGUST 2024
MILESTONE: 30% CONCEPT PLAN SET
FREDERICK COUNTY PROJECT NO. XX
DWG. 54 OF 56

CHECKDAM TABLE					
CHECK DAM #	STATION	TOP WIDTH (FT)	TOP ELEVATION (FT)	VEGETATION	MATTING TYPE
CHECK DAM-1	0+25.0	4	404.2	SOD	N/A
CHECK DAM-2	1+50.0	1	398.7	LOWLAND MEADOW	TYPED
CHECK DAM-3	1+96.9	1	398.0	LOWLAND MEADOW	TYPED
CHECK DAM-4	2+43.8	1	397.4	LOWLAND MEADOW	TYPED

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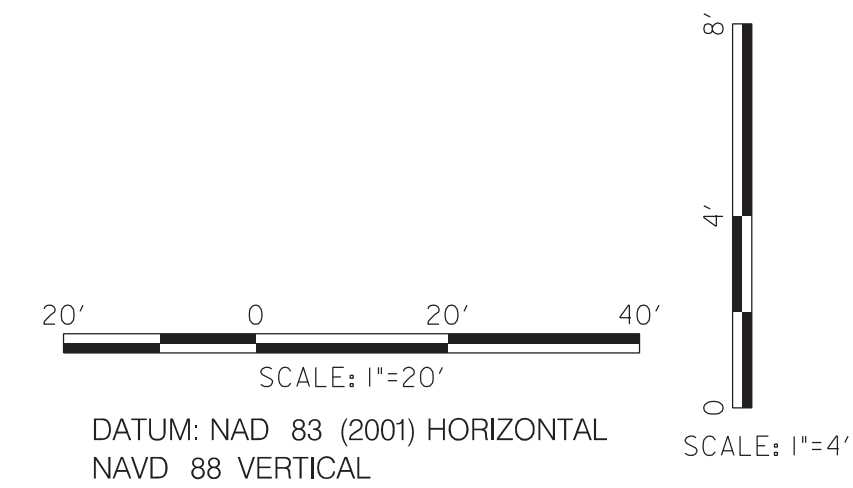
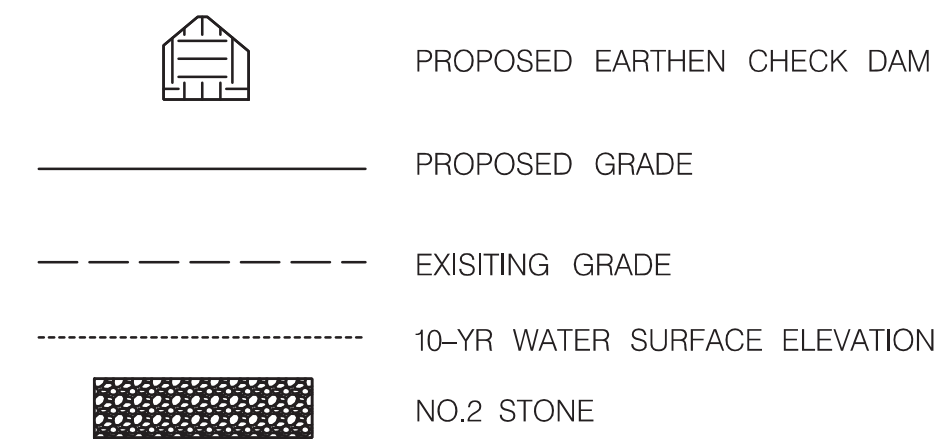
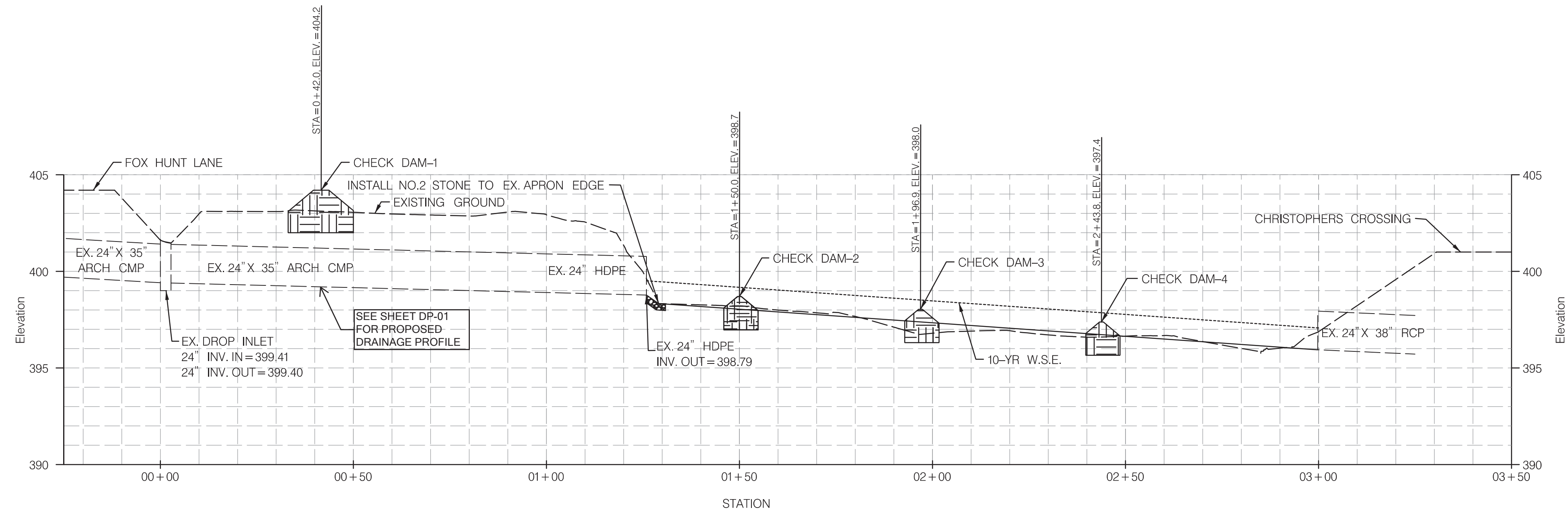


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RESPECTIVE RIGHT-OF-WAY PLATS	•



BY: sumera -
PLOTED: Thursday, August 29, 2024 AT 12:05 PM
FILE: G:\Active\2019-12_Frederick Co 19-444 IDO Verbes, WTB-CR\JUV\Task 5- Clover Hill Drainage Design\Mapping\CAD\pstr-v000_Clover Hill.dgn

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FREDERICK COUNTY, MARYLAND
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FREDERICK COUNTY, MARYLAND

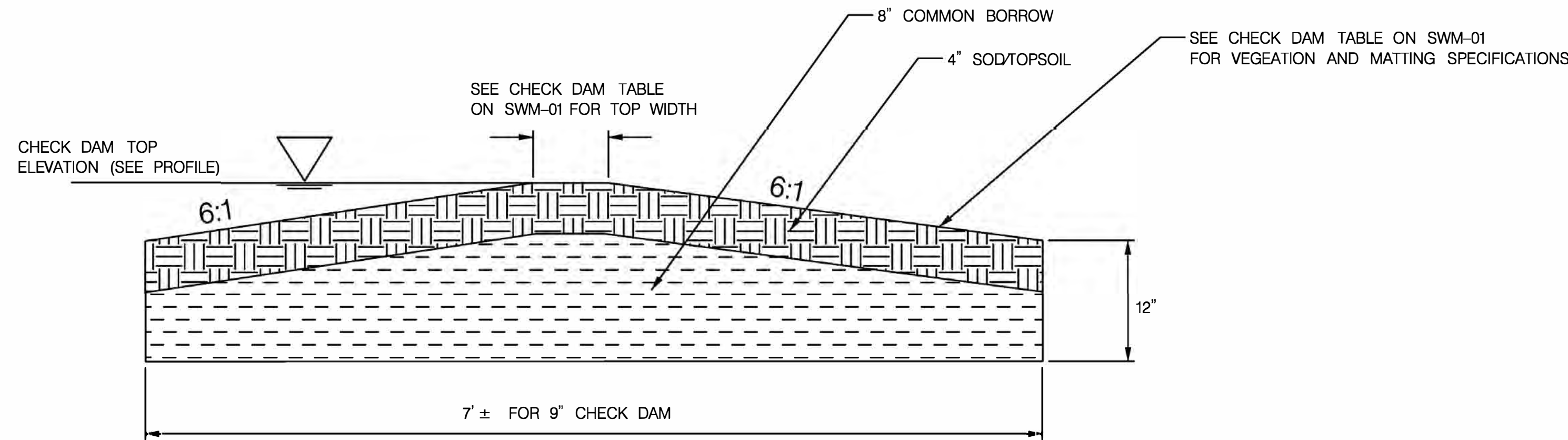
**CLOVER HILL HOA
STORMWATER DRAINAGE**

**FOX HUNT LANE
DRAINAGE PROFILE**

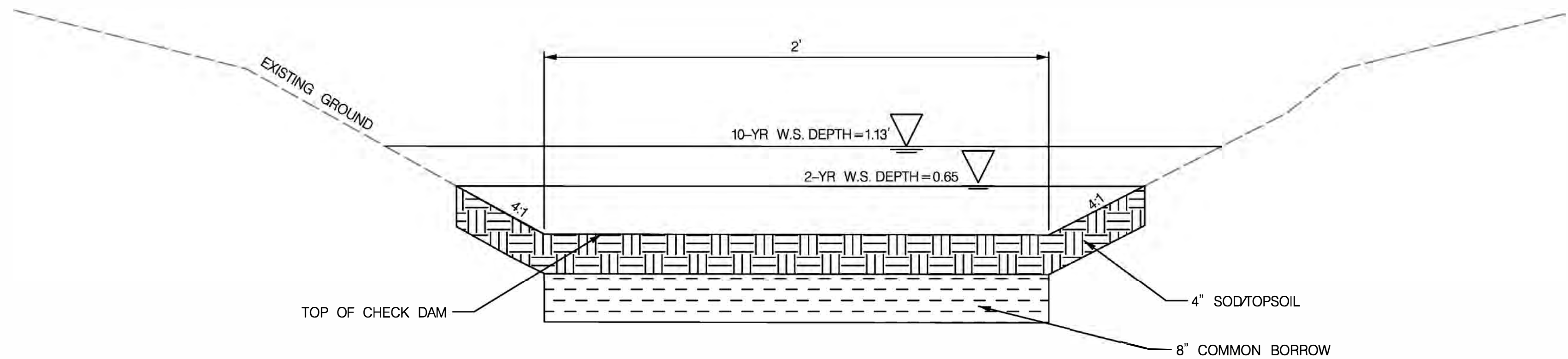
DATE: AUGUST 2024
MILESTONE: 30% CONCEPT PLAN SET
FREDERICK COUNTY PROJECT NO. XX
DWG. 55 OF 56

SMW-02

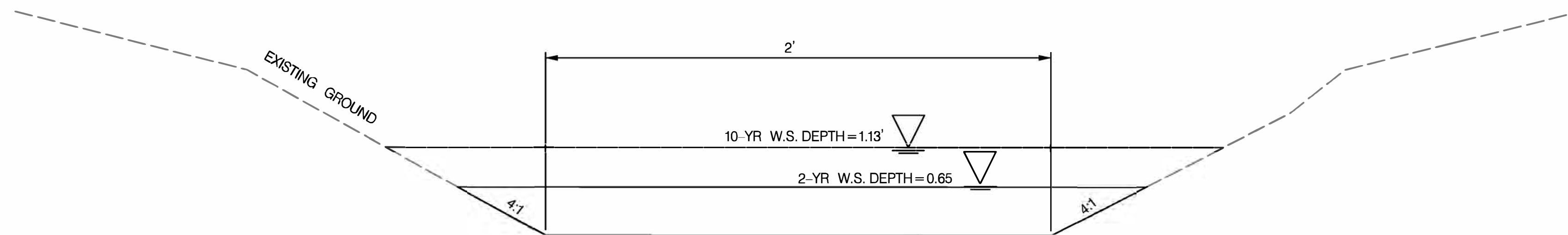
SCALE: 1" = 20'



CHECK DAM PROFILE



GRASS SWALE AT CHECK DAM TYPICAL SECTION



GRASS SWALE TYPICAL SECTION

NOTES:

1. USE SAME-DAY STABILIZATION.
2. INSTALL DURING DRY WEATHER AND WHEN SOIL MOISTURE CONDITIONS ARE SUITABLE.
3. USE METHODS OF EXCAVATION THAT MINIMIZE COMPACTION OF THE UNDERLYING SOILS.
4. USE SOD CUTTER TO HARVEST SOD FOR REINSTALLATION AFTER INSTALLATION OF CHECK DAM. TILL UNDERLYING SOIL TO A MINIMUM DEPTH OF 4 IN. TO LOOSEN SOIL. USE CARE AROUND EXISTING TREES AND SHRUBS.
5. CONSTRUCT TOPSOIL CHECK DAMS TO THE DIMENSIONS, GRADES, AND DEPTHS SPECIFIED.
6. PLACE HARVESTED SOD ON COMPLETED CHECK DAM 1 FIRST. ANY REMAINING SOD CAN GO ON THE OTHER CHECK DAMS ON THE DOWNSTREAM SLOPE. THE REMAINING EXPOSED SOIL WILL BE SEEDED WITH LOWLAND MEADOW SEED MIX AND TYPE D SOIL STABILIZATION MATTING WILL BE INSTALLED. SEE SHA SPECIFICATION 707 AND 709 FOR CONSTRUCTION.

BY: sumera -
PLOT: 07/24/2024 06:24 PM
FILE: G:\Active\2019-12\Frederick Co 19-448 IDD RPDES-WB-CR\JVT\Task 5- Clover Hill Drainage Design\Mappping\CAD\CSW-0000\Clover Hill.dgn

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SWM-03

FREDERICK COUNTY, MARYLAND
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OFFICE OF TRANSPORTATION ENGINEERING
FREDERICK COUNTY, MARYLAND

**CLOVER HILL HOA
STORMWATER DRAINAGE**

**FOX HUNT LANE
DESIGN DETAIL AND
TYPICAL SECTION**

DATE: AUGUST 2024
MILESTONE: 30% CONCEPT PLAN SET SCALE:

FREDERICK COUNTY PROJECT NO. XX DWG. 56 OF 56