MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

BOYDS TRANSIT IMPROVEMENTS — 95% DESIGN

C. I. P. PROJECT 501915

REQD NOT REQD TYPE OF PERMIT EXPIRATION RESTRICTION DATE: M.C.D.E.P. Floodplain District WATERWAY/WETLANDS a. Corps of Engineers X c. M.D.E. Water Quality Certification M.D.E. Dam Safety DPS Roadside Tree Protection Plan TBD TBD N.P.D.E.S. NOTICE OF INTENT TBD TBD M.C.D.P.S. STORMWATER 285472 N/AMANAGEMENT 288386 TBD D.P.S. BUILDING PERMIT TBD TBD M.C.P.D.S SEPTIC SYSTEM PERMIT TBD TBD OTHERS: (PLEASE LIS SHA ACCESS PERMIT | 22-AP-MO-022-XX|

DEVELOPER'S/BUILDER'S CERTIFICATION

I HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE OF A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

DATE

TIMOTHY H. CUPPLES, P.E., CHIEF
DIVISION OF TRANSPORTATION FNGINFFRING

DESIGN CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES EXECUTIVE REGULATIONS 5-90, 7-02AM AND 36-90, AND MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION "STORM DRAIN DESIGN CRITERIA" DATED JUNE, 2014.

DATE

TREE CANOPY REQUIREMENTS TABLE be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Management plan set for all projects.
kempt: Yes No If exempt under Section 55-5 of the Code, please check the oplicable exemption category below.

Total Property Area	Total Disturbed Area
59,242 square feet	56,628 square feet
Shade Trees Required	Shade Trees Proposed to be Planted
21	34
Fee in Lieu (Trees Required – Trees Planted) x \$250	\$

Required Number of Shade Trees

Area (sq. of Disturb	ft.) of the Limits ance	Number of Shade Trees Required	
FROM	<u>TO</u>		
1	6,000	3	
6,001	8,000	6	
8,001	12,000	9	
12,001	14,000	12	
14,001	40,000	15	

If the square footage of the limits of disturbance is more than 40,000, then the number of shade trees required must be calculated using the following formula:

(Number of Square Feet in Limits of Disturbance \div 40,000) × 15

EXEMPTION CATEGORIES:

□ 55-5(a) any activity that is subject to Article II of Chapter 22A;
□ 55-5(b) any commercial logging or timber harvesting operation with an approved exemption from Article II of Chapter 22A;
□ 55-5(f) any activity conducted by the County Parks Department;

maintenance has obtained all required permits;

55-5(h) any stream restoration project if the person performing the work has obtained all necessary permits;

55-5(i) cutting or clearing any tree to comply with

□ 55-5(f) any activity conducted by the County Parks
Department;
□ 55-5(g) routine or emergency maintenance of an existing stormwater management facility, including an existing access road, if the person performing the

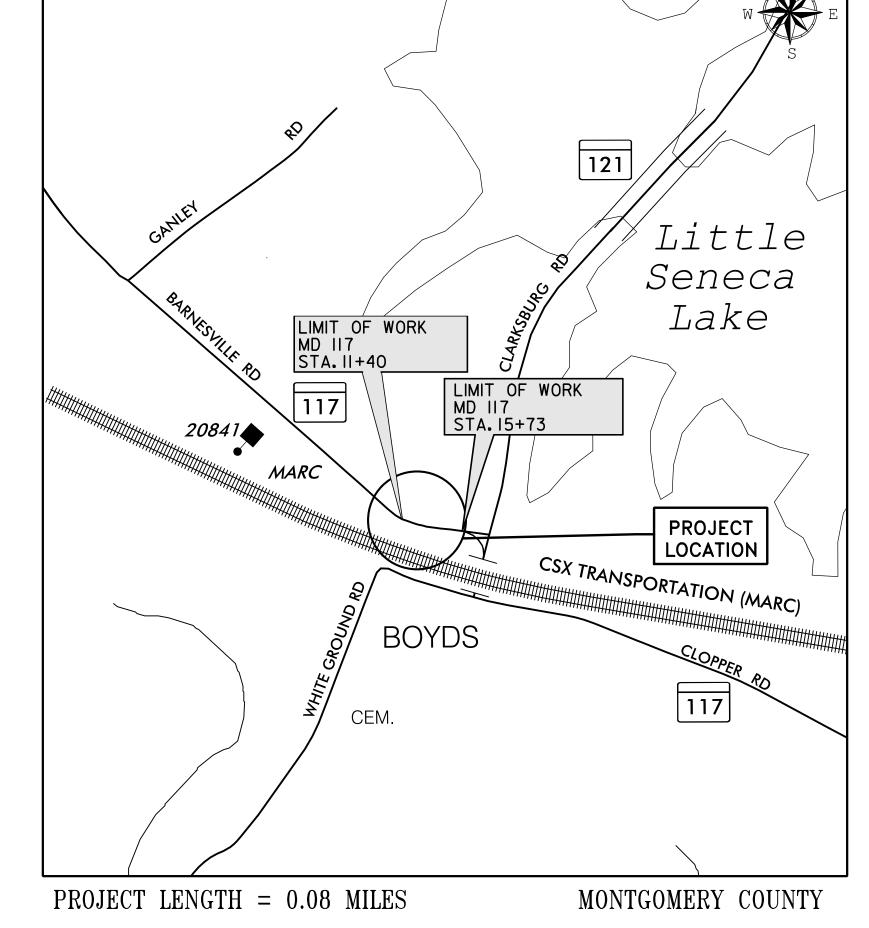
JASON D. COSLER, P.E. MD REGISTRATION NO. 28467

CERTIFICATION OF QUANTITIES

I FURTHER CERTIFY THAT THE TOTAL AMOUNTS OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAVE BEEN COMPUTED TO BE 4,500 CUBIC YARDS OF EXCAVATION AND 1,300 CUBIC YARDS OF FILL AND THAT THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE A MAXIMUM OF 56,464 SQUARE FEET OR 1.30 ACRES.

PAMELA H. DESTINO, P.E. MD REGISTRATION NO. 42708

DATE



VICINITY MAP

SCALE: 1"= 500'

GENERAL NOTES

- 1. SITE CLEANUP AND GROUNDWATER REMEDIATION SHALL BE DONE UNDER A SEPARATE CONTRACT.
- 2. THE SPECIFICATIONS FOR THIS CONTRACT WILL BE THOSE OF THE LATEST EDITION OF THE MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION. THE MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES, WASHINGTON SUBURBAN SANITARY COMMISSION (W.S.S.C.) STANDARDS, MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION STANDARDS, AND SOIL CONSERVATION SERVICE POND CONSTRUCTION SPECIFICATIONS FOR MARYLAND.
- 3. HORIZONTAL DATUM: NAD 83(1991) VERTICAL DATUM: NAVD 88.
- 4. TYPES OF STORM DRAIN STRUCTURES REFER TO THE "DESIGN STANDARDS" OF MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION, UNLESS OTHERWISE NOTED.
- 5. WHEN THE DROP ON THE MAIN LINE THROUGH A STORM DRAIN STRUCTURE CAN BE ACCOMMODATED BY AN INVERT SLOPE OF 1.5:1 OR FLATTER, A ROUNDED CHANNEL LINED WITH SEWER BRICK ON EDGE SHALL BE BUILT TO THE CROWN OF THE PIPES. WHEN THE INVERT SLOPES WOULD BE GREATER THAN 1.5:1 A SPECIAL INVERT SHALL BE CONSTRUCTED AS NOTED.
- 6. ALL STORM DRAIN PIPE SHALL BE INSTALLED WITH CLASS "C" BEDDING UNLESS OTHERWISE SPECIFIED.
- 7. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS TO STORM DRAIN STRUCTURES, WHEN NECESSARY, TO MEET EXISTING CONDITIONS, AS APPROVED BY MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION'S PROJECT INSPECTOR.
- 8. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATIONS AND ELEVATIONS OF THE LINES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SHOWN OR SIX (6) INCHES, WHICHEVER IS LESS, CONTACT MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION'S PROJECT INSPECTOR AND THE APPROPRIATE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION.
- 9. REPAIRS TO UTILITIES OR PROPERTY DAMAGE AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION MUST BE MADE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE COUNTY BEFORE PROCEEDING WITH CONSTRUCTION.
- 10. CLEARING IS TO BE LIMITED TO THE "LIMIT OF GRADING" AS SHOWN ON THE PLANS.
- 11. ALL GRADING SHALL BE DONE IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE.
- 12. DISTURBED AREAS ADJACENT TO ESTABLISHED LAWNS SHALL BE SODDED. OTHER DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
- 13. THE CONTRACTOR SHALL OBTAIN A ROADSIDE TREE PERMIT FOR ANY MAINTENANCE, TREATMENT, PLANTING, REMOVAL, OR ROOT CUTTING ON TREES WITHIN THE PUBLIC RIGHT OF WAY. PERMIT REQUIREMENTS MAY BE OBTAINED FROM THE DEPARTMENT OF NATURAL RESOURCES, MARYLAND FOREST, PARK AND WILDLIFE SERVICE, TELEPHONE 301-854-6060.
- 14. CONTACT THE WASHINGTON SUBURBAN SANITARY COMMISSION SYSTEM MAINTENANCE ENGINEER BEFORE EXCAVATING BENEATH OR IN THE VICINITY OF EXISTING WATER OR SEWER LINES. BACKFILL TO BE DONE UNDER SUPERVISION OF WSSC MAINTENANCE ENGINEER, CALL 301-206-9772
- 15. ALL UTILITY POLES NOTED FOR RELOCATION SHALL BE PERFORMED BY OTHERS.
- 16. PRIOR TO VEGETATIVE STABILIZATION, ALL DISTURBED AREAS MUST BE TOPSOILED PER THE MONTGOMERY COUNTY "STANDARDS AND SPECIFICATIONS FOR TOPSOIL".
- 17. CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

MCDPS—SC/SWM SHEET NO. 1 OF 18

	AL REVIEW OF NT CONTROL	А	DMINISTRATIVE REVIEW	DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or
				concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of
R EVIEWE D	DATE	REVIEWED	DATE	professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or
	AL REVIEW OF ER MANAGEMENT	SMAL	L LOT DRAINAGE APPROVAL	downfill properties.
0101 (11117)		N/A: □ OF	<u> </u>	SEDIMENT CONTROL PERMIT NO.
				285472
REVIEWED	DATE	REVIEWED	DATE	SM. FILE NO. STORMWATER MANAGEMENT:
YEARS FROM THE I	THIS PLAN WILL EXPIRE TWO DATE OF APPROVAL IF THE HAS NOT STARTED.		CDPS APPROVAL DOES NOT NEGATE THE ED FOR A <u>MCDPS ACCESS PERMIT.</u>	

OWNER/ADDRESS:
MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
100 EDISON PARK DRIVE, 4TH FLOOR
GAITHERSBURG, MD 20878

CONTACT: REBECCA PARK, P.E. 240-777-7263

PROFESSIONAL CERTIFICATION.

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.______
EXPIRATION DATE:



.P					
31					\vdash
	NO.	REVISION	DATE	BY	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section
APPROVED

Chief, Division of Transportation Engineering

Date

SC

Designed by: __AMU__ Drawn by: __AMU__ Checked by: __PHD__ P

TI-01 TITLE SHEET

BOYDS TRANSIT IMPROVEMENTS

JANUARY 2023

03 SHEET __1 of 60

ENGINEER UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO.

EXPIRATION DATE:

OTHER: Specify per Section 55-5 of the Code.

OF MARYLAND, LICENSE NO.

EXPIRATION DATE:

No. REMSION DATE BY

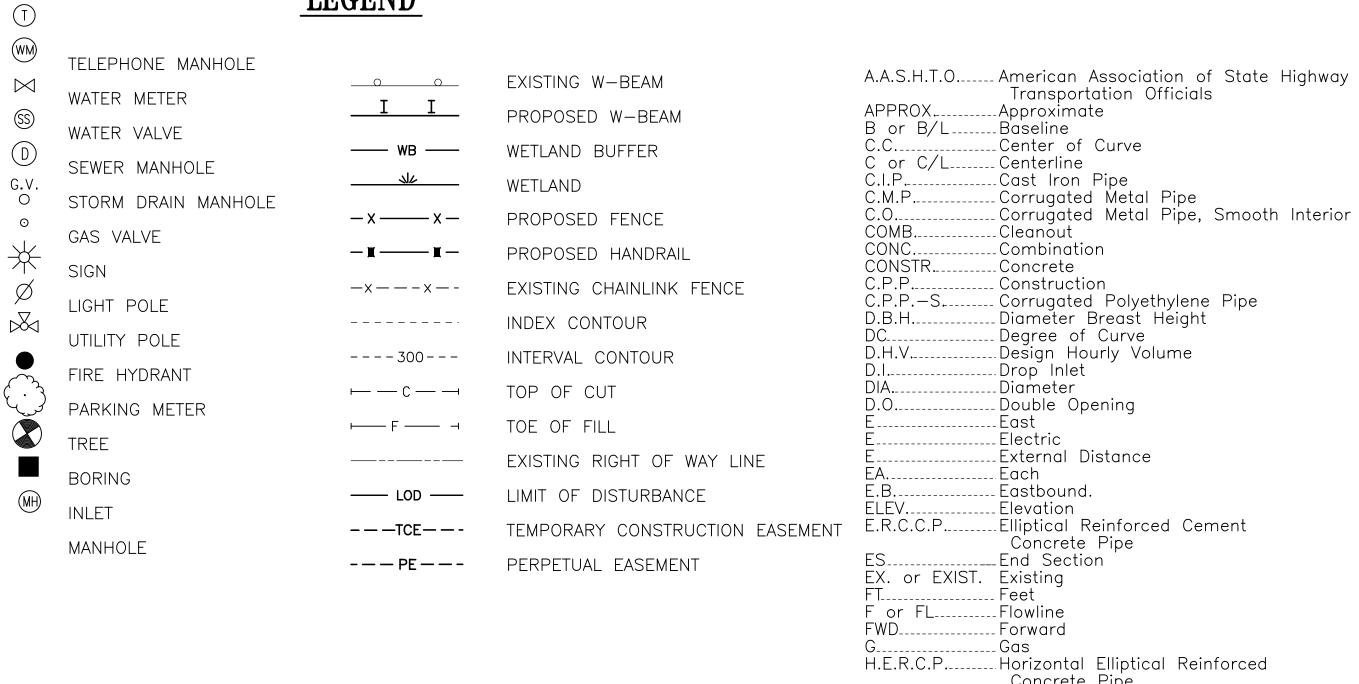
Designed by: AMU Drawn by: AMU Checked by: PHD Project No.: 32207.003

INDEX OF SHEETS

1 2	1		
2	· '	SC0001.PDF	TITLE SHEET
_	2	SC0002.PDF	INDEX OF SHEETS, LEGEND, AND ABBREVIATIONS
3			GS-01 - GEOMETRIC LAYOUT SHEET
4			EC-01 - EXISTING CONDITIONS
5			EC-02 - DEMO PLAN
6	3	SC0003.PDF	HT-01 - TYPICAL SECTIONS
7	4	SC0004.PDF	HT-02 - TYPICAL SECTIONS
8	5	SC0005.PDF	PD-01 - PAVEMENT DETAILS
9			DE-01 - RAMP DETAILS
10			DE-02 - RAMP DETAILS
11	6	SC0006.PDF	HD-01 - ROADWAY PLAN
12	7	SC0007.PDF	HD-02 - ROADWAY PLAN
13		300007.11 31	HP-01 - ROADWAY PROFILE
14			HP-02 - HANDRAIL PROFILE
15		C00000 DDE	CL-01 - CURB LAYOUT
16	8	SC0008.PDF	GR-01 - SITE GRADING PLAN
17			TCP-A - TRAFFIC CONTROL PLAN GENERAL NOTES
18			TCP-01 - TRAFFIC CONTROL PLAN
19	9	SC0009.PDF	EN-01 - EROSION AND SEDIMENT GENERAL CONTROL NOTES
20	10	SC0010.PDF	EN-02 - EROSION AND SEDIMENT CONTROL NOTES AND DETAIL
21	10A	SC0010A.PDF	EN-03 - EROSION AND SEDIMENT CONTROL NOTES AND DETAIL
22	11	SC0011.PDF	ES-01 - EROSION AND SEDIMENT CONTROL PLAN STAGE 1 - SUBGRADE GRADING
23	12	SC0012.PDF	ES-02 - EROSION AND SEDIMENT CONTROL PLAN STAGE 2 - FINAL GRADING
24	13	SC0013.PDF	DP-01 - DRAINAGE PROFILES
25	14	SC0014.PDF	DD-01 - FILTERING TREE PIT INLET DETAILS
26	15	SC0015.PDF	SW-01 - PERVIOUS CONCRETE SUBGRADE GRADING PLAN
27	15A	SC0015A.PDF	SW-02 - STORMWATER MANAGEMENT PLAN
28			SN-2.01 - SIGNING AND MARKING PLAN
29			SN-11 - SIGNING AND MARKING QUANTITIES
30	16	SC0016.PDF	LD-01 - TREE PROTECTION PLAN
31	17	SC0017.PDF	LD-02 - LANDSCAPE PLAN
32	18	SC0018.PDF	LD-03 - DETAILS AND NOTES
33			A-001 - ARCHITECTURAL ABBREVIATIONS & LEGEND
34			A-101 - FLOOR PLAN
35			A-102 - BIKE STORAGE PLAN REFLECTED CEILING PLAN, & ROOF PLAN
36			A-301 - EXTERIOR ELEVATIONS
37			A-401 - BUILDING & WALL SECTIONS
38			A-402 - WALL SECTIONS
39			A-501 - ENLARGED PLAN, INTERIOR ELEVATIONS, & TOILET ROOM DETAILS
40			A-601 - FLOOR PLAN & SECTION DETAILS
41			A-701 - HANDRAIL PLAN & DETAILS
42			A-801 - DOOR, WINDOW, & LOUVER SCHEDULES, TYPES, & DETAILS
43			M-101 - FLOOR PLAN
44			P-101 - FLOOR PLAN
45			S0-01 - GENERAL STRUCTURE NOTES
46			S0-02 - TYPICAL STRUCTURE DETAILS
47			S1-03 - STRUCTURE PLANS
48			S2-01 - SECTION
+∪	+		S2-01 - SECTIONS AND ELEVATIONS
	1	1	SZ SZ SECTIONS AND ELEVATIONS
49			S5_01 _ DETAILS
			S5-01 - DETAILS S5-02 - SECTIONS AND DETAILS

SHEET NO.	SC/SWM N	10. S	SC FILENAME	DRAWING DESCRIPTION
53				E-001 - ELECTRICAL GENERAL NOTES AND DEFINITIONS
54				E-002 - ELECTRICAL LEGEND
55				E-003 - ELECTRICAL ABBREVIATIONS AND SCHEMATIC LEGEND
56				ES101 - ELECTRICAL SITE PLAN
57				E-101 - POWER AND LIGHTING PLANS
58				E-501 - DETAILS AND DIAGRAMS
59				E-601 - ELECTRICAL ONE-LINE DIAGRAM
60				E-701 - SCHEDULES

LEGEND



ABBREVIATIONS

- 6		OT A
LP	Low Point	STA.
LT	- Lett	SO
MAX	- Maximum.	S.Y
MOD		SWM
MIN	WIMITHUM No set la	\$W
N		T
NB	- Northogat	T.C.P
NTC	Northeast Not To Scale	
N13	-Not 10 Scale	TYP U.P
O.C	Point of Curvature	V.F
P.C.	Point of Compound Curve	VAR V.C.L
D/C	Point of Compound Curve Point of Crown	W
F/ C	Profile Grade Elevation	W
D C F	Profile Ground Elevation	WB
P.G.L	Profile Grade Line	۷۷ D
P/GI	Profile Ground Line	
P/R	Point of Rotation	
	Point of Intersection	
	Point on Curve	
P.O.T.	Point on Tangent.	
P.P.W.P.	Polyvinyl Chloride Profile Wall Pipe	
PROP	Proposed	
PT	Point	
P.T	Point of Tangency	
P.V.C	Point of Vertical Curve	
PVC	Polyvinyl Chloride	
PVI	Polyvinyl Chloride Point of Intersection	
R	₋ Radius	
REI. WALL	₋ Retainina Wall	
RT	Right	
RW or R W	Right of Way	
R.C.P	Reinforced Cement Pipe	
R.C.C.P	Reinforced Cement Concrete Pipe	
S		
SAM	Superpave Asphalt Mix	
	Southbound	
5.D	Storm Drain	
3.L	Superelevation	
O F	Silt Fence Square Feet	
3.1 SS	Sanitary Sewer	
	Stopping Sight Distance	
SSF	Super Silt Fence	
STD	- Standard	
J.D.		

DRAINAGE BUBBLES (SAMPLES)

Station

Sidewalk

.Tangent

Variés

Water

West

Telephone

Typical Utility Pole

Westbound

Single Opening
Square Yards

Terra Cotta Pipe

--Vertical Curve Length

Stormwater Management

()	
INLET	
MANHOLE	MH 1
JUNCTION BOX ·	JB 1
FIELD CONNECTION	$\frac{\mathbb{C}}{1}$
BEND	$\frac{\mathbb{B}}{1}$
END SECTION	ES 1
END WALL	EW 1
ADJUST EX. STRUCTURE	$\begin{pmatrix} A \\ 1 \end{pmatrix}$

DRAINAGE STRUCTURE STAKEOUT LOCATION

Inch Invert

LANDSC.

Baseline

... Centerline

Cleanout

Concrete

..Drop Inlet

Double Opening

External Distance

_ Diameter

East

Electric

Eastbound.

_End Section

Concrete Pipe

Hot Mix Asphalt

Elevation

Each

._ Feet

₋₋Flowline

Forward

- High Point

Length Landscaped LLinear Feet

Combination

Construction

Center of Curve

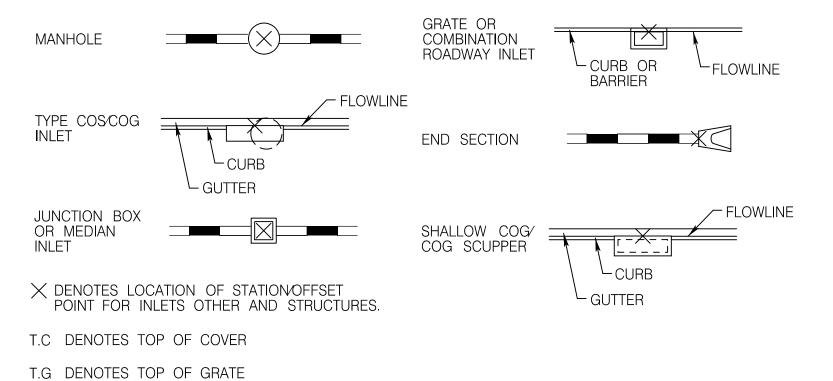
Cast Iron Pipe
Corrugated Metal Pipe
Corrugated Metal Pipe, Smooth Interior

Corrugated Polyethylene Pipe
Diameter Breast Height
Degree of Curve

Elliptical Reinforced Cement Concrete Pipe

Horizontal Elliptical Reinforced

Dešign Hourly Volume



Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, Maryland 21231

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPOR GAITHERSBURG, MARYLAN	TATION	
				RECOMMENDED FOR APPROVAL		
				Chief, Transportation Planning and Design Section APPROVED	Date	
				Chief, Division of Transportation Engineering	Date	SCA
NO.	REVISION	DATE	BY	Designed by: <u>AMU</u> Drawn by: <u>JDG</u>	Checked by: PHD	Proj

MCDPS-SC/SWM SHEET NO. 2 OF 18

INDEX OF SHEETS, LEGEND, AND ABBREVIATIONS

BOYDS TRANSIT IMPROVEMENTS

CALE : NTS JANUARY 2023 Project No. : <u>32207.003</u> SHEET <u>2</u> of 60

PROFESSIONAL CERTIFICATION. 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._ EXPIRATION DATE:_

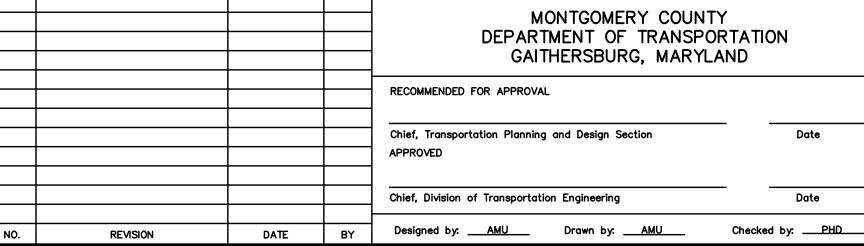
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ENGINEER UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO.

EXPERATION DATE: EXPIRATION DATE:_

20+00





LIMIT OF WORK MD 117 STA.15+73

MD 117-B

14+00 S82° 00′57.66°E 15+00

16+00 16+31

GS-01 GEOMETRIC LAYOUT SHEET

1. HORIZONTAL DATUM: NAD 83(1991) VERTICAL DATUM: NAV 88.

	SURVEY	CONTROL	
TRAVERSE	NORTH	EAST	ELEVATION
MER100	552,913.78	1,223,769.59	401.84
MER101	553,004.33	1,223,277.12	429.05
MER150	552,912.07	1,223,526.45	418.17
MER151	552,820.98	1,223,484.05	422.28
MER152	552,937.51	1,223,419.19	431.62
MER153	552,935.49	1,223,334.61	429.90
MER154	552,884.43	1,223,244.72	423.98
KCI#1/700	552,988.68	1,223,712.71	404.68
KCI#5/712	552,788.42	1,223,486.78	421.22
KCI#6/701	552,913.13	1,223,578.80	413.62

CONSTRUCTION CONTROL COORDINATES						
OINT	CURVE	DESCRIPTION	NORTH	EAST		
	B OF CONS	STRUCTION MD 117 (B)	ARNESVILLE RO	AD)		
1		POT STA. 10+00.00	553,123.9829	1,223,161.3159		
2	MD 117-1	PC STA. 10+68.01	553,077.3405	1,223,210.8094		
3	MD 117-1	PI STA. 11+82.61	552,998.7409	1,223,294.2136		
4	MD 117-1	PT STA. 12+89.91	552,982.8228	1,223,407.7071		
5		POT STA. 16+30.76	552,935.4801	1,223,745.2524		
	₽ OF CONSTRUCTION PARKING LOT					
1		POT STA. 20+00.00	552,982.8390	1,223,186.6813		
2		POT STA. 25+00.00	552,834.2413	1,223,664.0896		
	·	·				

	LEGEND
X-A	HORTIZONTAL LINE ID NUMBER
X-1	HORTIZONTAL CURVE ID NUMBER

-₽ OF CONSTRUCTION MD 117

MD 117-1

13+00

22+00

S72° 42′38_•77"E

23+00

MERI5I▲

LIMIT OF WORK MD 117 STA.11+40

21+00

CURVE DATA									
CURVE	DELTA		Dc	R	L	Т	E	PI NORTH	PI EAST
MD 117-1	35°19′ 02.24″	LT	15°54' 55.78"	360.00'	221.91	114.60	17.80'	552,998.74	1,223,294.21

68.01' S 46° 41' 55.42" E

340.85' S 82° 00' 57.66"

500.00' S 72° 42' 38.77" E

CURVE	L	JELIA	L	<i>J</i> C	Γ	L	ı		FI NO
MD 117-1	35°19'	02.24"	LT 15°54'	55.78"	360.00'	221.91	114.60	17.80	552,998
	Г								
				LIN	IE DATA				
	Ī		LINE		LENGTH	BE	ARING		

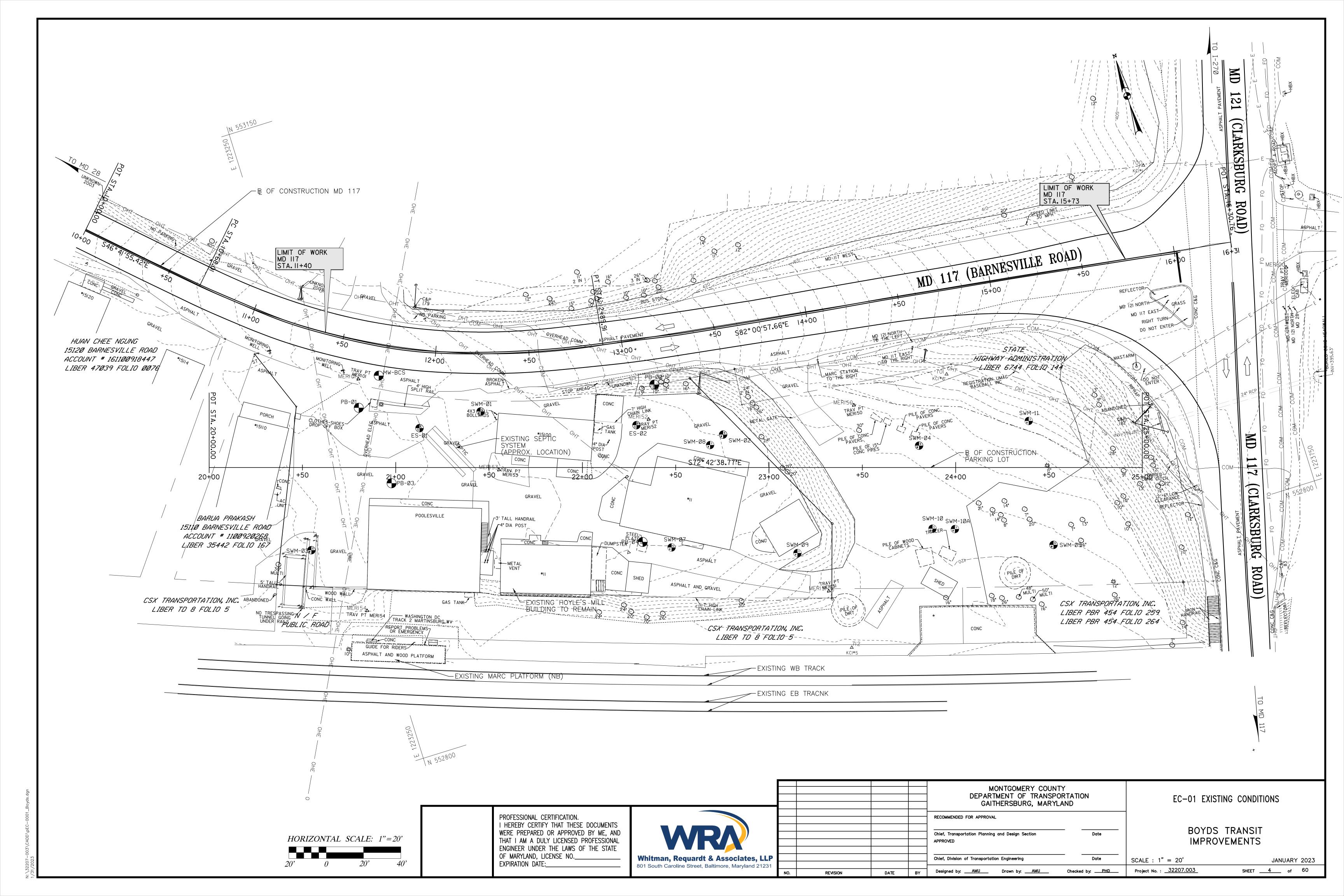
MD 117-A

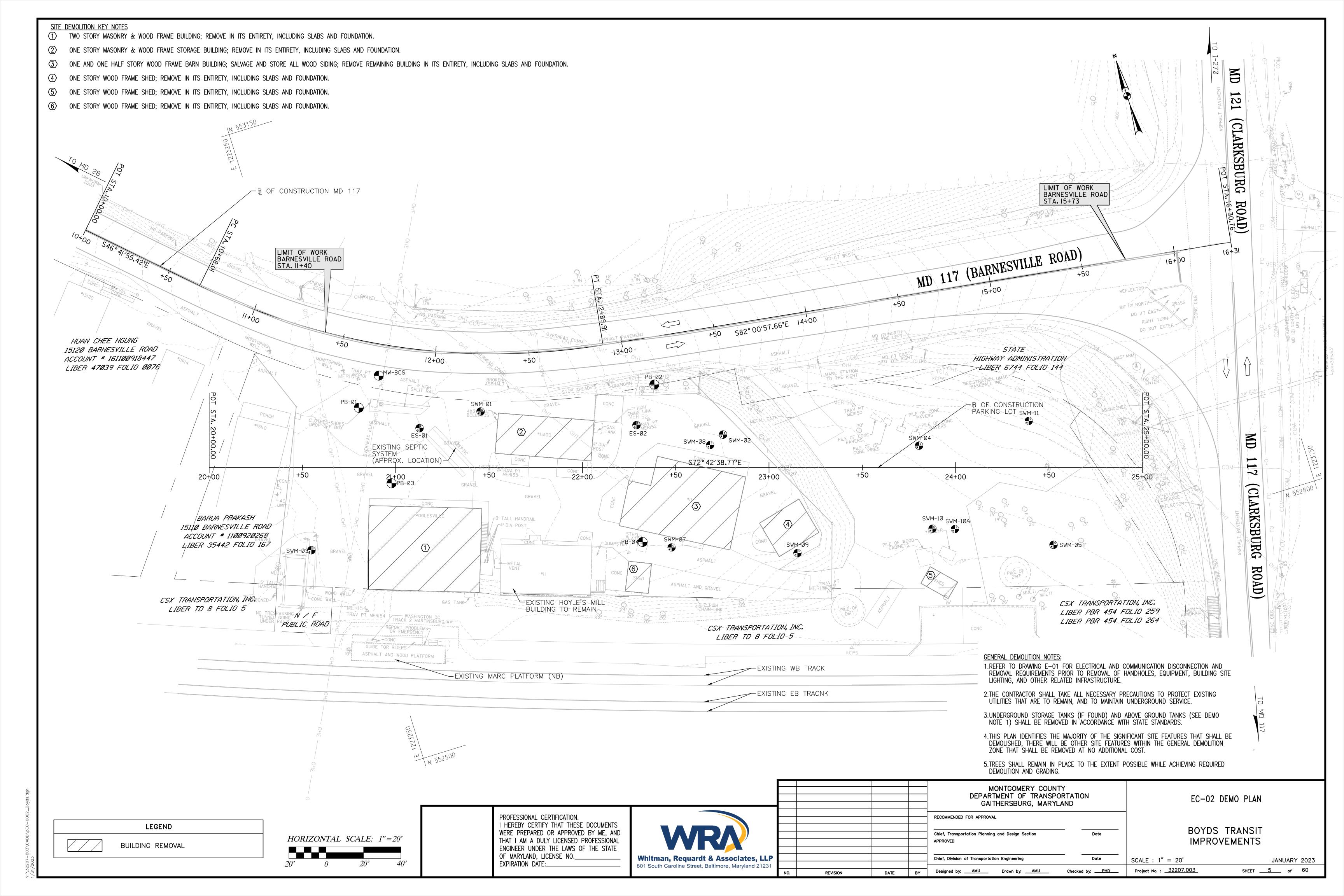
MD 117-B

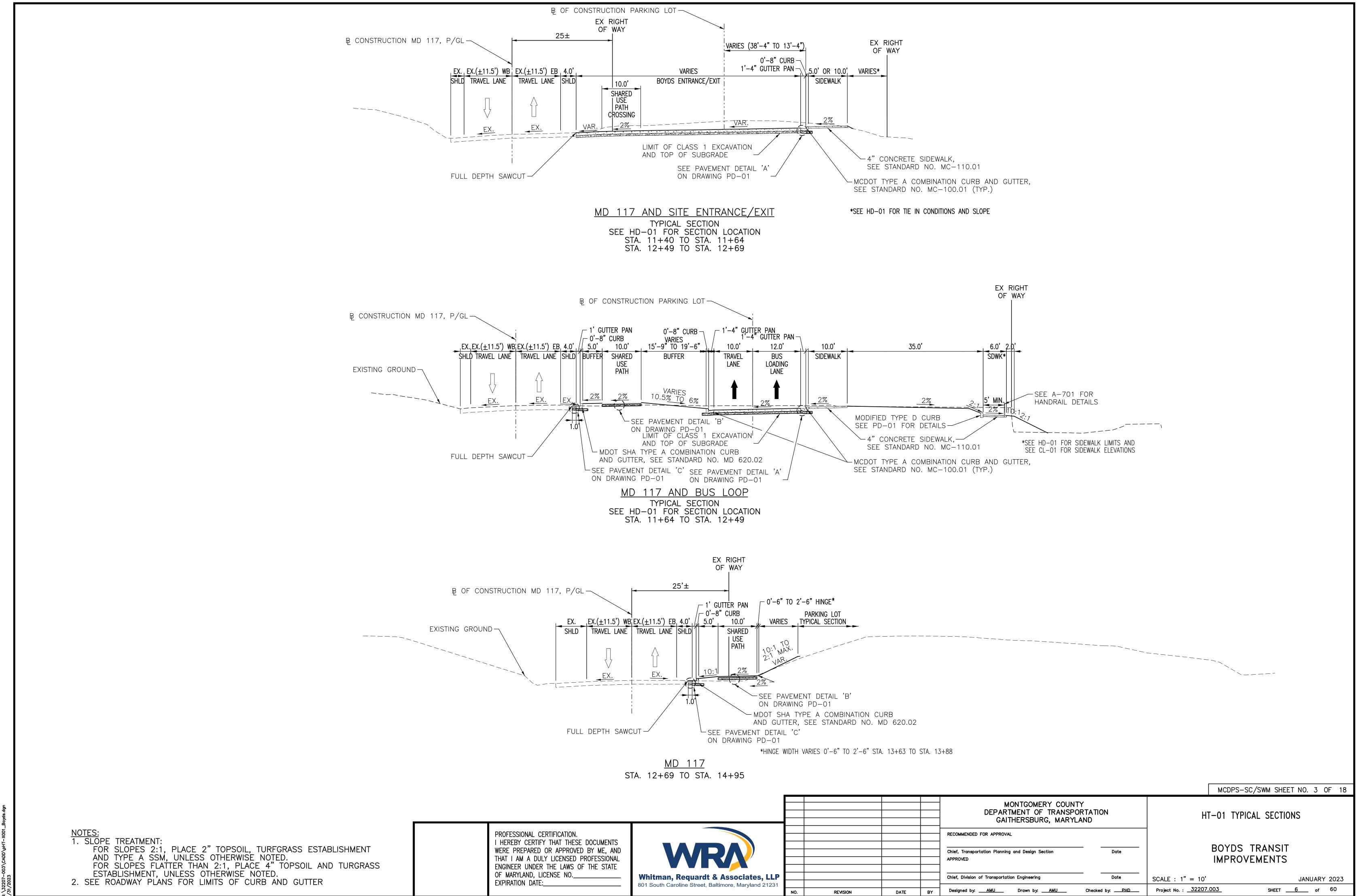
PARKING LOT-A

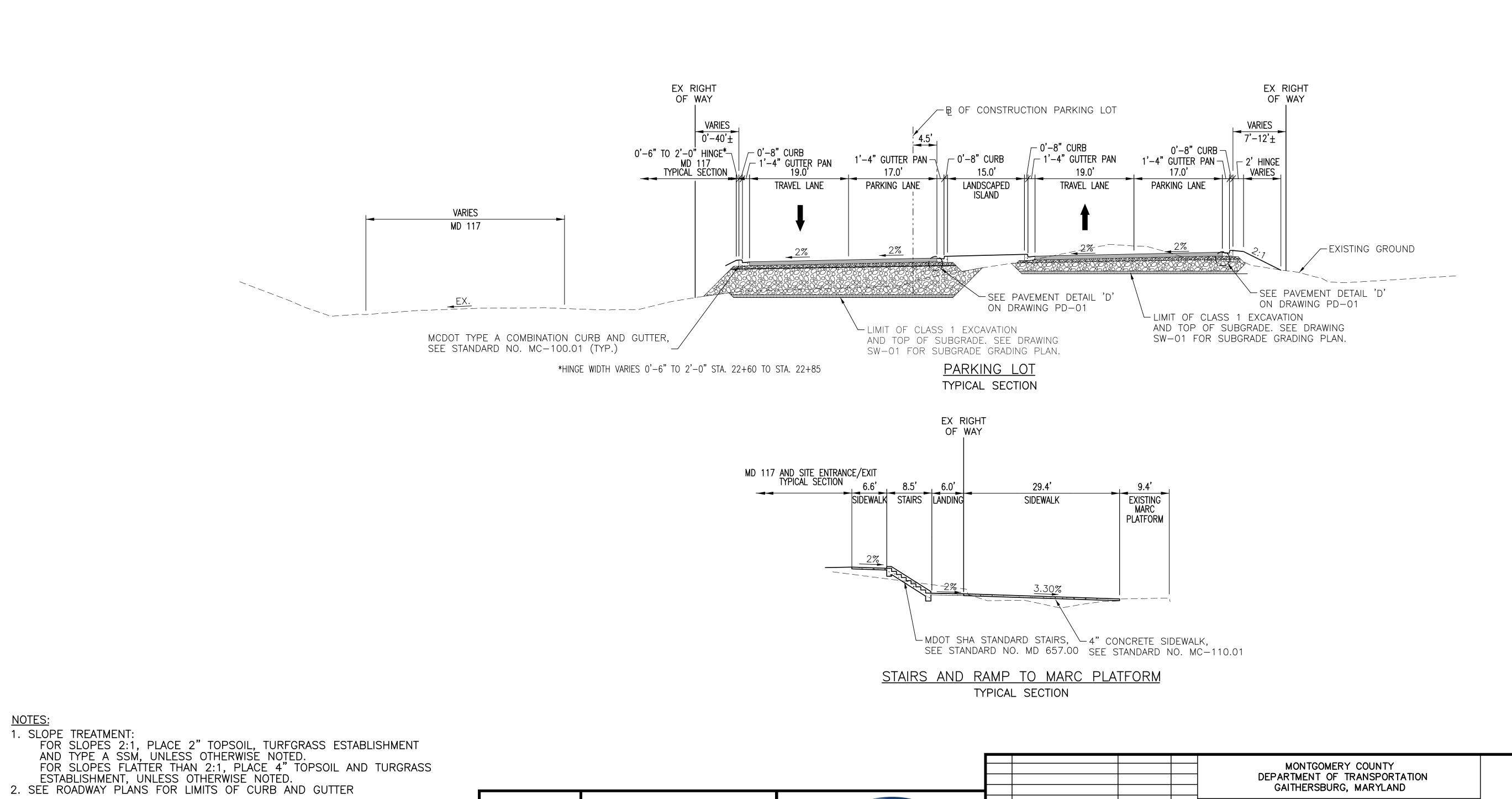
BOYDS TRANSIT IMPROVEMENTS

ALE : $1" = 50'$	JANUARY 20
oject No. : <u>32207.003</u>	SHEET <u>3</u> of 60









Whitman, Requardt & Associates, LLP

801 South Caroline Street, Baltimore, Maryland 21231

PROFESSIONAL CERTIFICATION.

OF MARYLAND, LICENSE NO.___

EXPIRATION DATE:__

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ENGINEER UNDER THE LAWS OF THE STATE

MCDPS-SC/SWM SHEET NO. 4 OF 18

JANUARY 2023

SHEET <u>7</u> of 60

HT-02 TYPICAL SECTIONS

BOYDS TRANSIT

IMPROVEMENTS

SCALE: 1" = 10'

Checked by: PHD

Project No. : <u>32207.003</u>

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

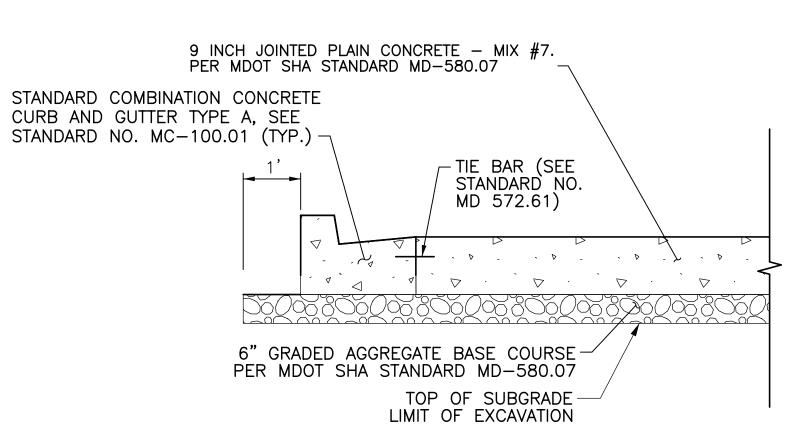
Chief, Transportation Planning and Design Section

Designed by: <u>AMU</u> Drawn by: <u>AMU</u>

Chief, Division of Transportation Engineering

NOTES:

1. SLOPE TREATMENT:

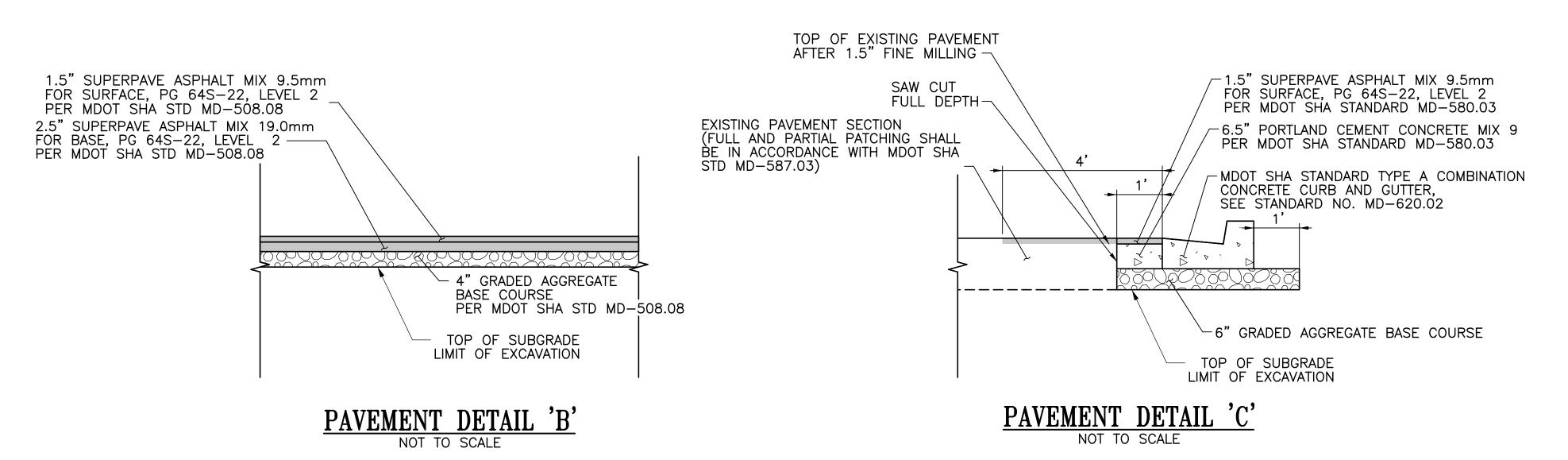


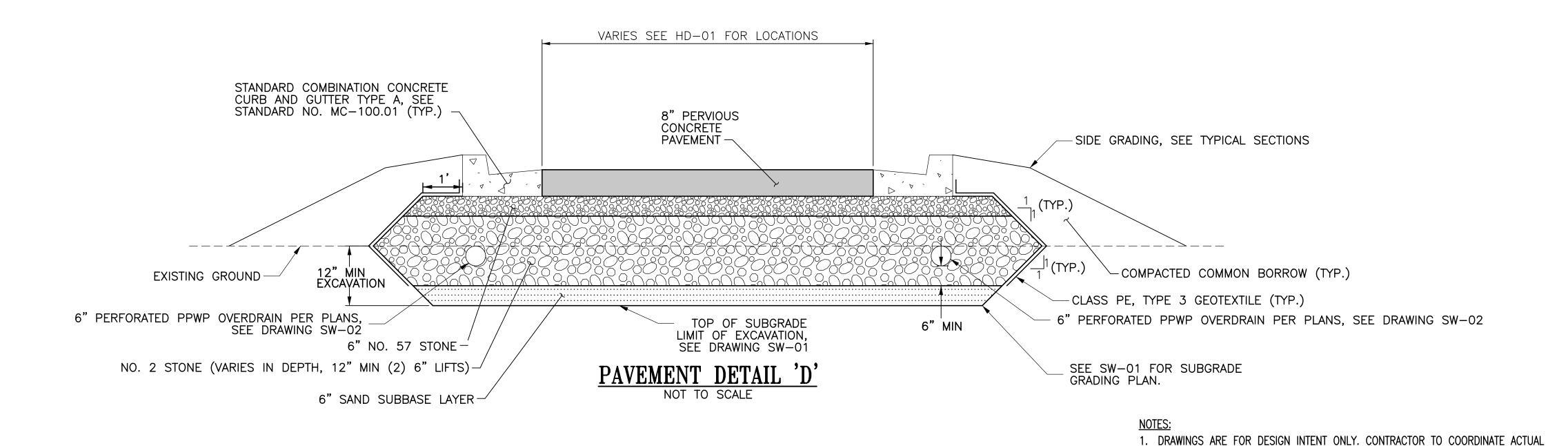
3. IN CURVED SECTIONS THE SLAB DIMENSIONS ARE PROVIDED ALONG THE OUTER RADIUS.

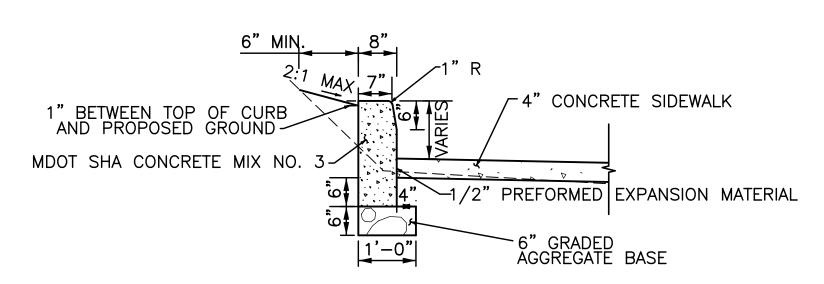
PAVEMENT DETAIL 'A' NOT TO SCALE

NOTES:

1. SLAB WIDTH IS 4' MINIMUM AND 16' MAXIMUM UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. TRAVERSE JOINT SPACING IS 7' MINIMUM AND 18' MAXIMUM UNLESS OTHERWISE APPROVED BY THE ENGINEER.







MODIFIED TYPE D CONCRETE CURB DETAIL

NOT TO SCALE
*SEE DWG HD-01 AND HD-02 FOR PROPOSED CURB LIMITS AND HEIGHTS

PROFESSIONAL CERTIFICATION.

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ENGINEER UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO.
EXPIRATION DATE:



				MONTGOMERY COUNTY	,	
				DEPARTMENT OF TRANSPOR		
				GAITHERSBURG, MARYLA		
				GAITILISDONG, MAINTLA	טאוו	
				RECOMMENDED FOR APPROVAL		
				Chief Transportation Dispuing and Design Speking		
				Chief, Transportation Planning and Design Section	Date	
				APPROVED		
				Chief, Division of Transportation Engineering	Date	SCALE
NO.	REVISION	DATE	BY	Designed by: <u>AMU</u> Drawn by: <u>AMU</u>	Checked by: PHD	Project

SLOPES AND DIMENSIONS WITH SITE CONDITIONS.
2. THE SUBGRADE SHALL BE TEST ROLLED AS SPECIFIED IN SECTION 204 OF THE LATEST

STANDARD AND SPECIFICATION FOR CONSTRUCTION MATERIALS.

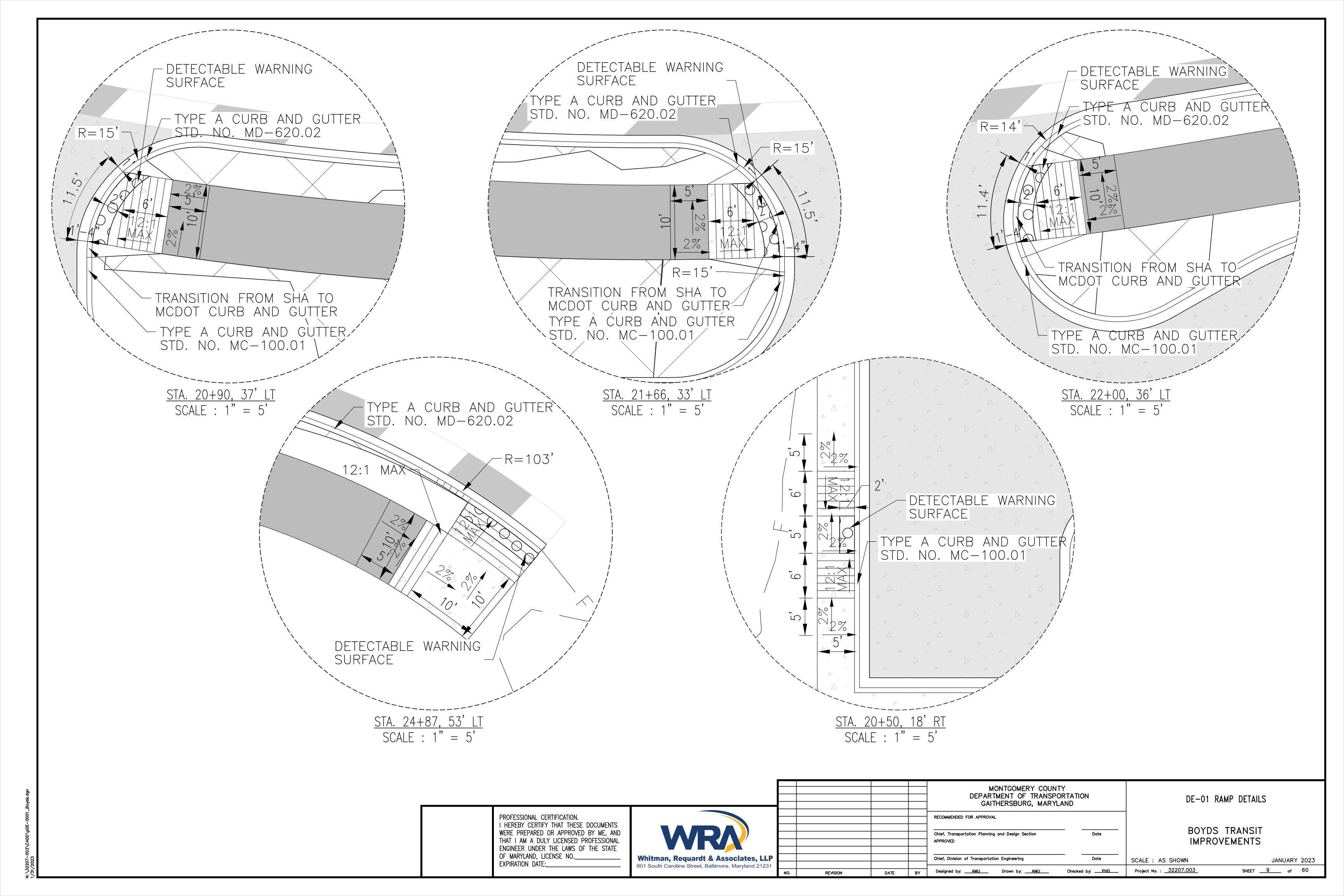
MCDPS-SC/SWM SHEET NO. 5 OF 18

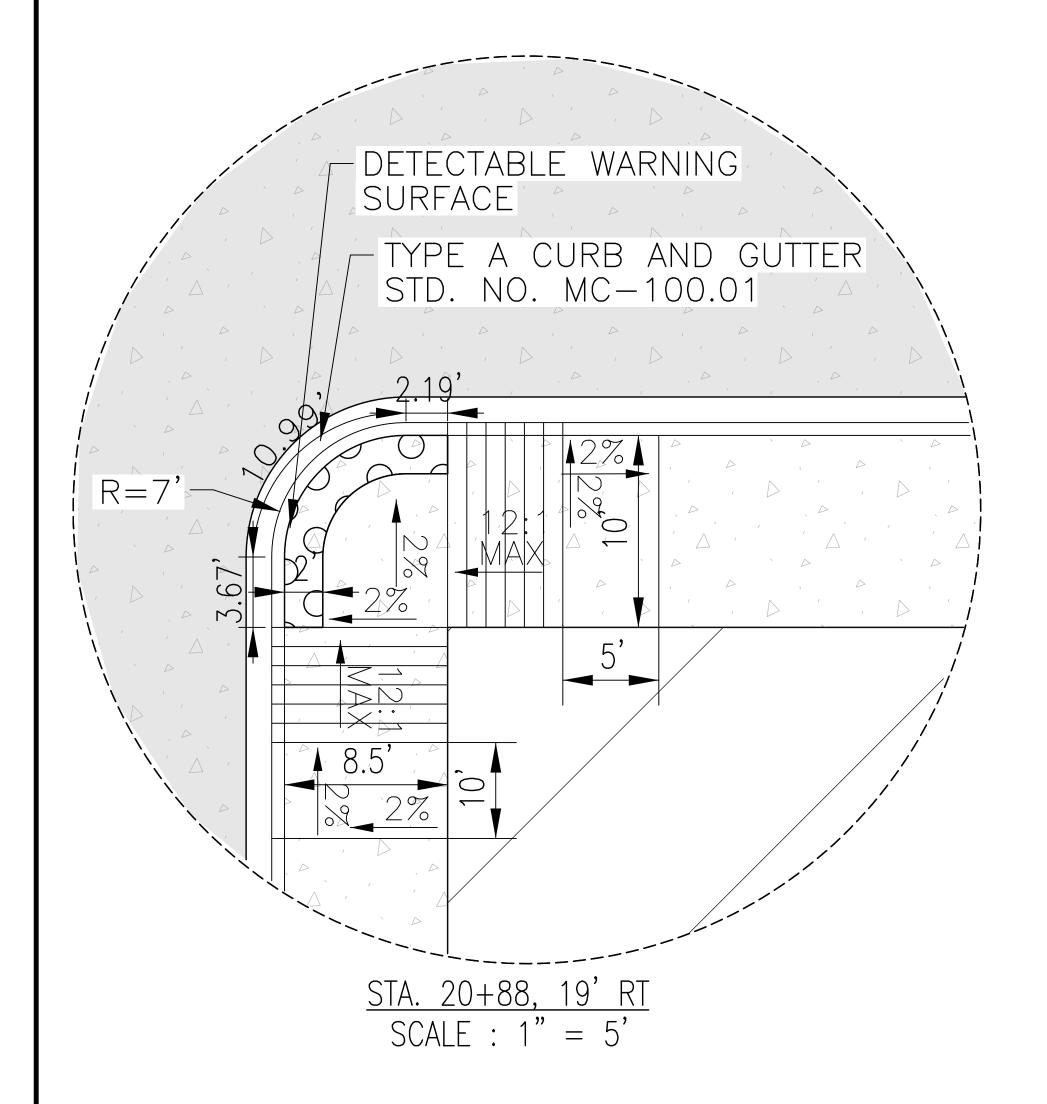
PD-01 PAVEMENT DETAILS

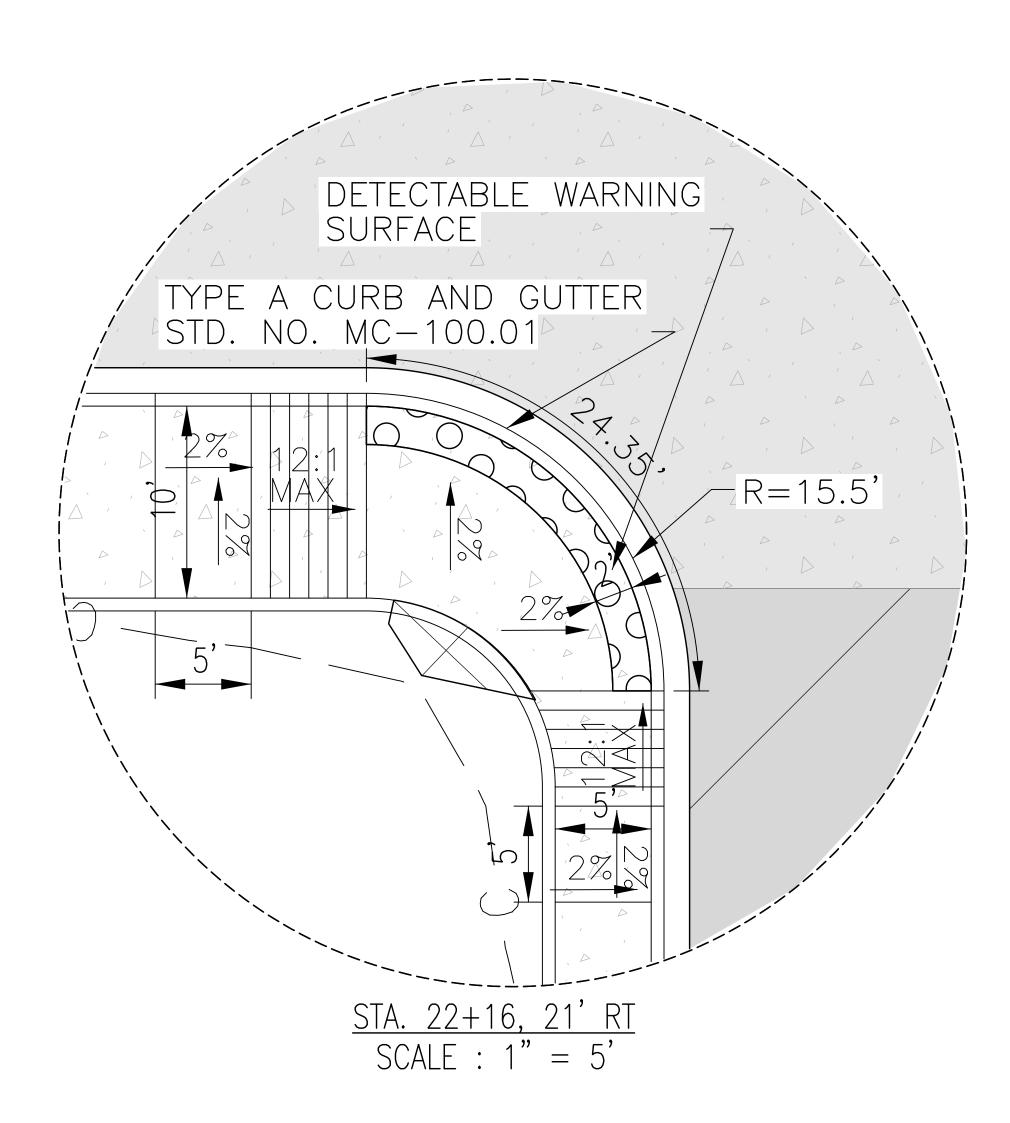
BOYDS TRANSIT IMPROVEMENTS

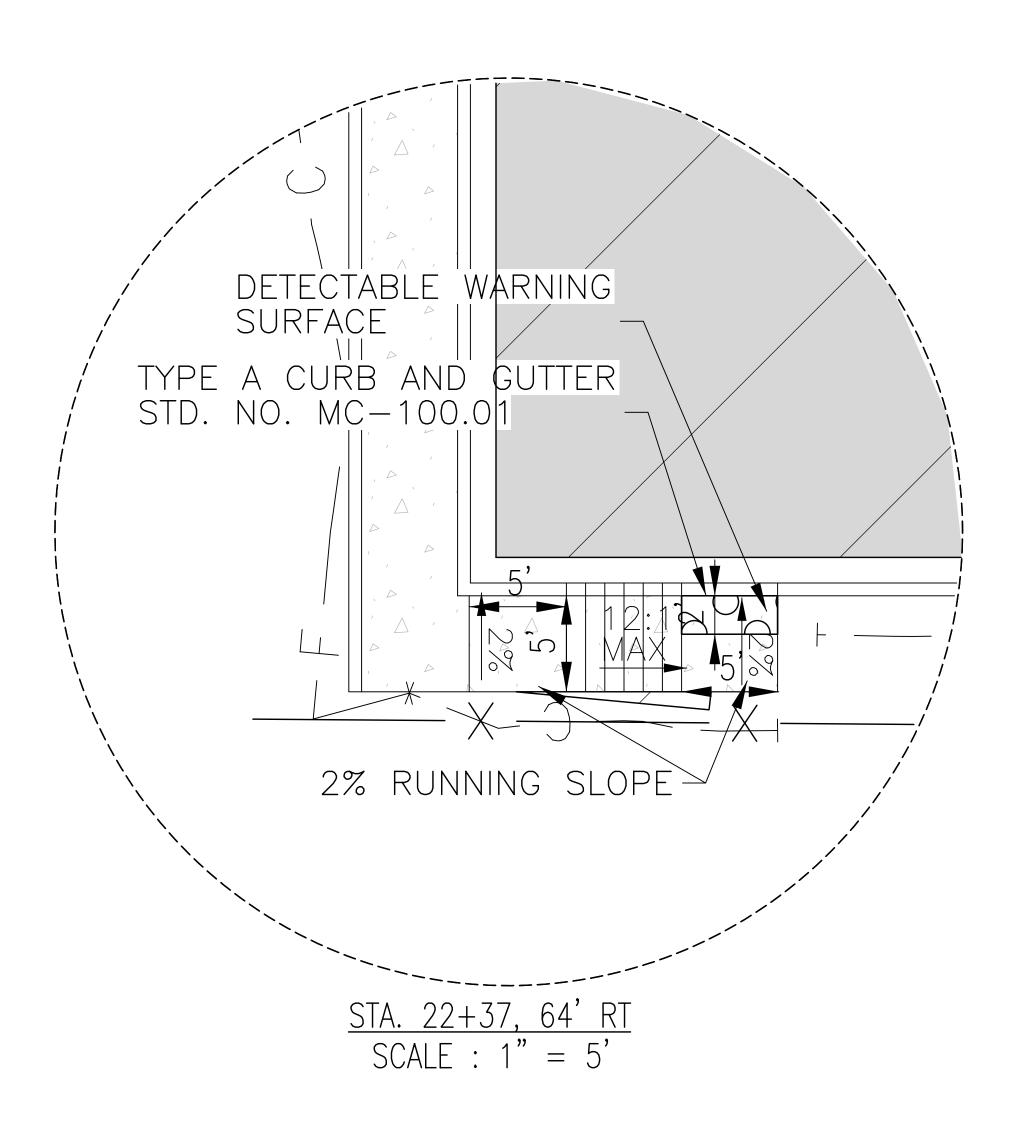
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ject No.: 32207.003 SHEET 8 of 60









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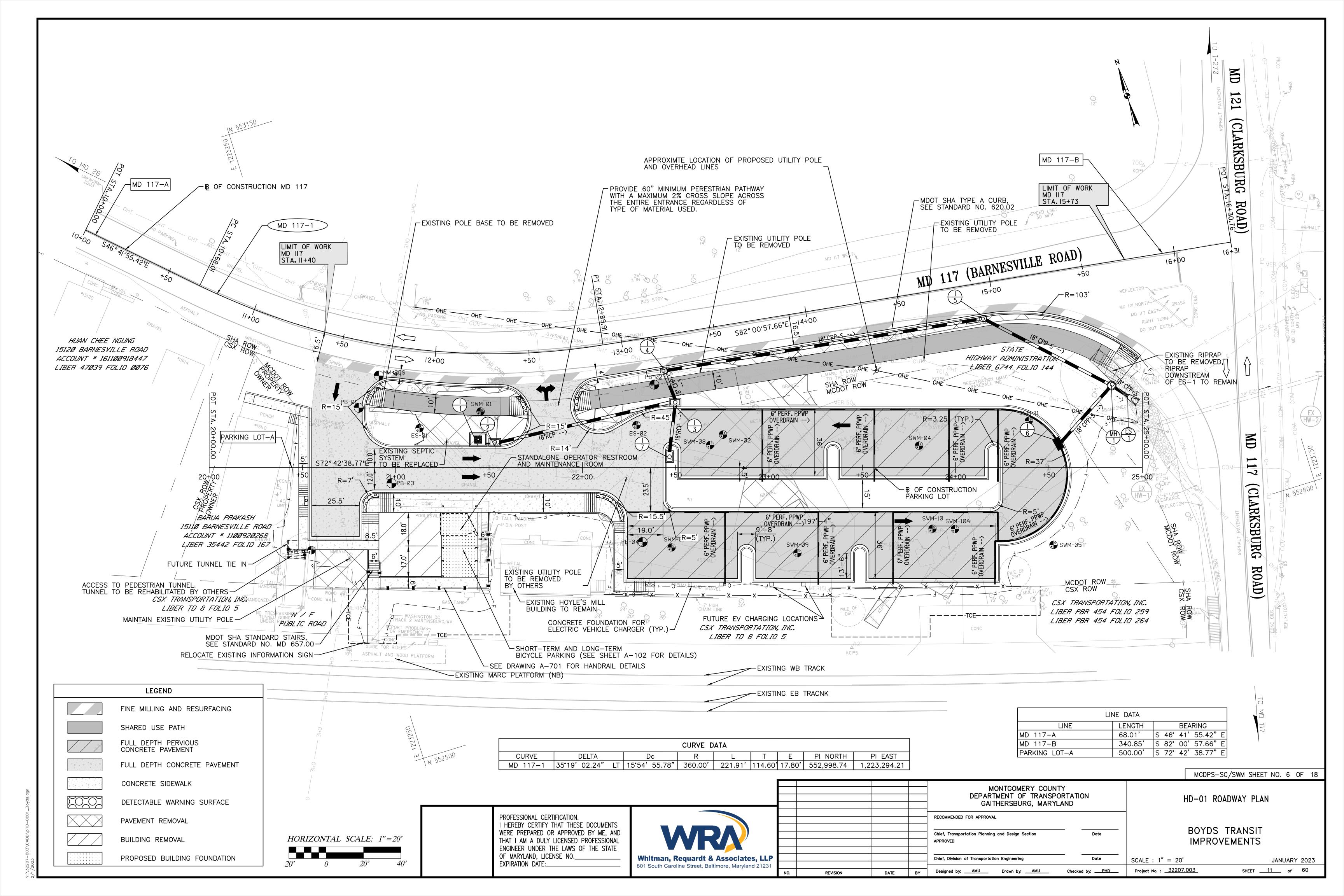
			MONTGOMERY COUNTY	
			DEPARTMENT OF TRANSPOR GAITHERSBURG, MARYLAI	
			RECOMMENDED FOR APPROVAL	
			Chief, Transportation Planning and Design Section APPROVED	D
			Chief, Division of Transportation Engineering	D
REVISION	DATE	BY	Designed by: <u>AMU</u> Drawn by: <u>AMU</u>	Checked by:

DE-02 RAMP DETAILS

BOYDS TRANSIT IMPROVEMENTS

 SCALE : AS SHOWN
 JANUARY 2023

 Project No. : 32207.003
 SHEET 10 of 60



MODIFIED TYPE D CONCRETE CURB					
STATION AND OFFSET	LENGTH	REMARKS			
21+66, 24' RT, 24" HEIGHT TO 22+17, 67' RT, 24" HEIGHT	88'	HOYLES MILL			
20+91, 58' RT, 6" HEIGHT TO 21+24, 58' RT, 18" HEIGHT	37'	SIDEWALK TO MARC			
21+43, 65' RT 0" HEIGHT TO 21+49, 65' RT, 20" HEIGHT	6'	LANDING			
21+49, 65' RT, 20" HEIGHT TO 21+49, 61' RT, 0" HEIGHT	4'	LANDING			

MDOT SHA TYPE A COMBINATION CURE	B AND GUT	TER (MD-620.02)
STATION AND OFFSET	LENGTH	REMARKS
11+69, 23' RT TO 12+46, 23' RT	84'	BARNESVILLE RD
12+72, 23' RT TO 15+73, 53' RT	315'	BARNESVILLE RD

MDOT SHA 6 FT CHAIN LINK I	FENCE (MD	-690.01)
STATION AND OFFSET	LENGTH	REMARKS
22+12, 68' RT TO 24+35, 63' RT	228'	PARKING LOT

MDOT SHA STANDARD STAIR	WAY (MD-6	557.00)
STATION AND OFFSET	VOLUME	REMARKS
20+85, 51' RT TO 20+91, 59' RT	0.5 CY	PARKING LOT

4 INCH SIDEWALK (MC-110.01)						
STATION AND OFFSET	AREA	REMARKS				
20+19, 35' LT TO 22+39, 67' RT	3482 SF	SIDEWALK FROM COUNTRY STORE TO PARKING LOT				
11+68, 33' RT TO 11+79, 23' RT	99 SF	SHARED USE PATH RAMP				
12+37, 23' RT TO 12+48, 33' RT	100 SF	SHARED USE PATH RAMP				
12+70, 31' RT TO 12+81, 23' RT	96 SF	SHARED USE PATH RAMP				
15+52, 54' RT TO 15+72, 53' RT	195 SF	SHARED USE PATH RAMP				

MCDOT TYPE A COMBINATI	ON CURB	AND GUTTER (MC-100.01)
STATION AND OFFSET	LENGTH	REMARKS
20+55, 32' LT TO 21+96, 41' LT	947'	BOYDS COUNTRY STORE TO BUS EXIT
22+43, LT&RT TO 24+28, LT&RT	500'	PARKING LOT
20+87, 44' LT TO 21+68, 39' LT	142'	PARK AND RIDE BUS LOOP

METAL HANDRAIL							
STATION AND OFFSET	LF	REMARKS					
20+85, 44' RT TO 20+85, 59' RT	11'	PARKING LOT					
20+91, 51' RT TO 20+91, 59' RT	8'	PARKING LOT					

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EXPIRATION DATE:______



MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section
APPROVED

Chief, Division of Transportation Engineering
Date

SION
DATE BY
Designed by: __AMU__ Drawn by: __AMU__ Checked by: __PHD__

HD-02 ROADWAY PLAN

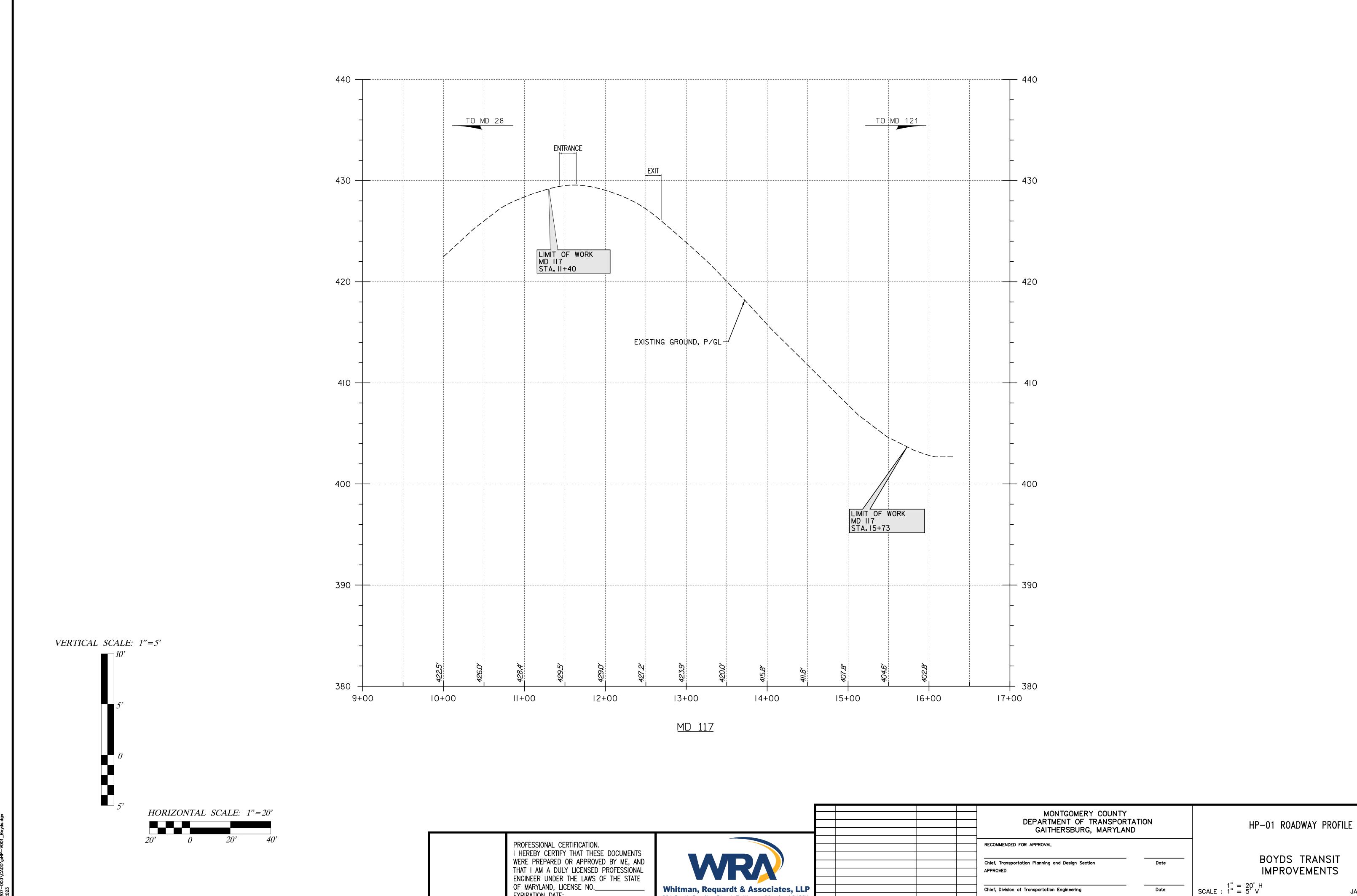
MCDPS-SC/SWM SHEET NO. 7 OF 18

BOYDS TRANSIT

IMPROVEMENTS

 SCALE : NTS
 JANUARY 2023

 Project No. : 32207.003
 SHEET 12 of 60



Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, Maryland 21231

EXPIRATION DATE:__

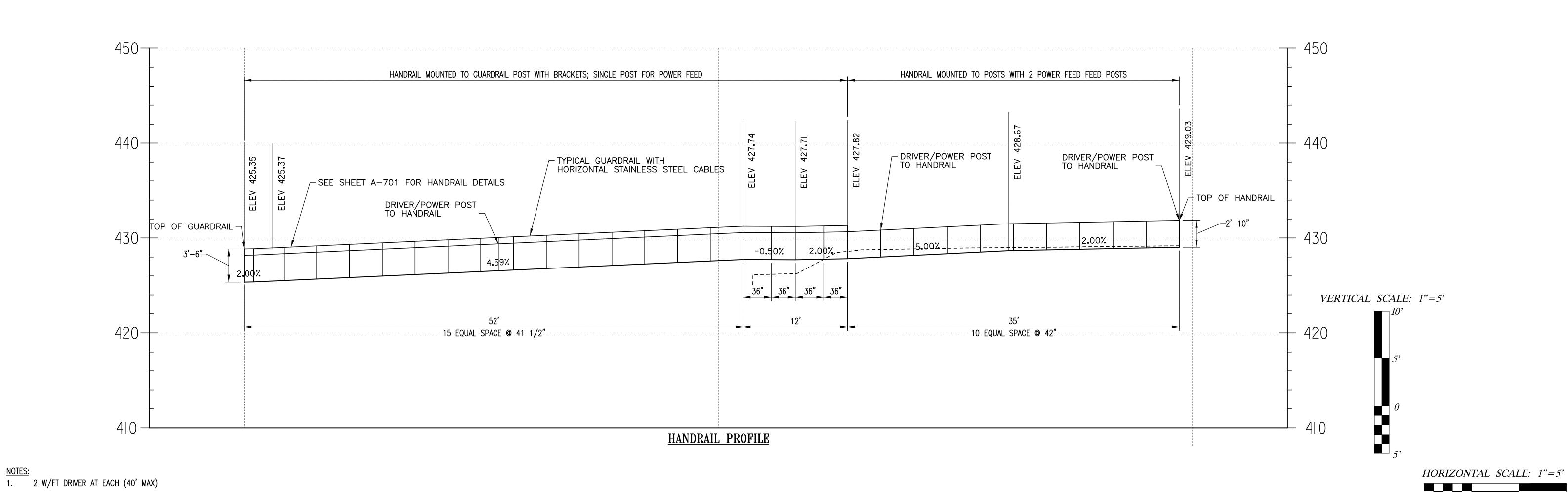
Chief, Division of Transportation Engineering

Designed by: <u>AMU</u> Drawn by: <u>AMU</u>

Checked by: PHD

JANUARY 2023

SHEET <u>13</u> of 60



Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, Maryland 21231

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EXPIRATION DATE:__

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section

Designed by: <u>AMU</u> Drawn by: <u>AMU</u>

Chief, Division of Transportation Engineering

HP-02 HANDRAIL PROFILE

BOYDS TRANSIT

IMPROVEMENTS

JANUARY 2023

SHEET <u>14</u> of 60

SCALE : 1" = 1' H

Checked by: PHD

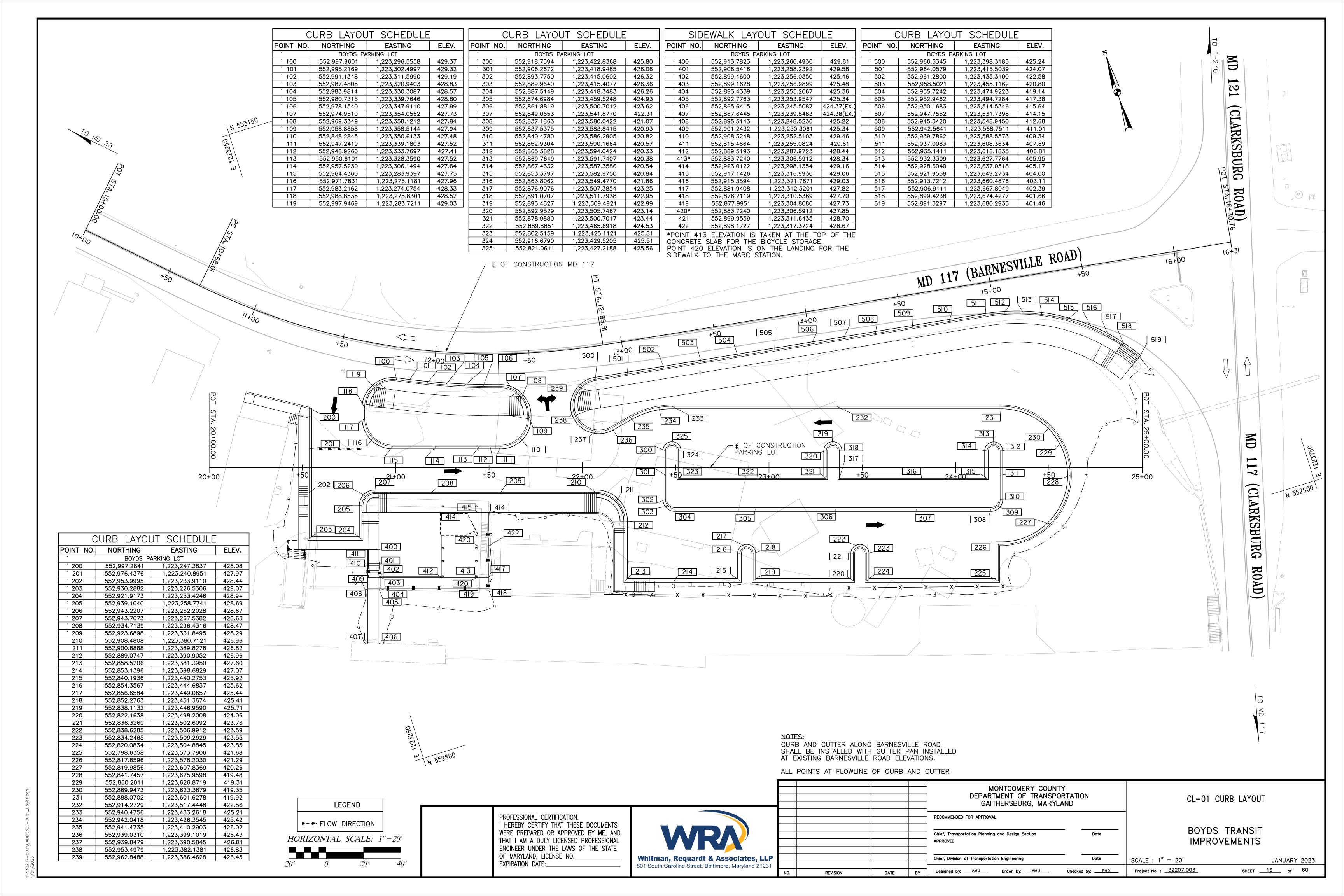
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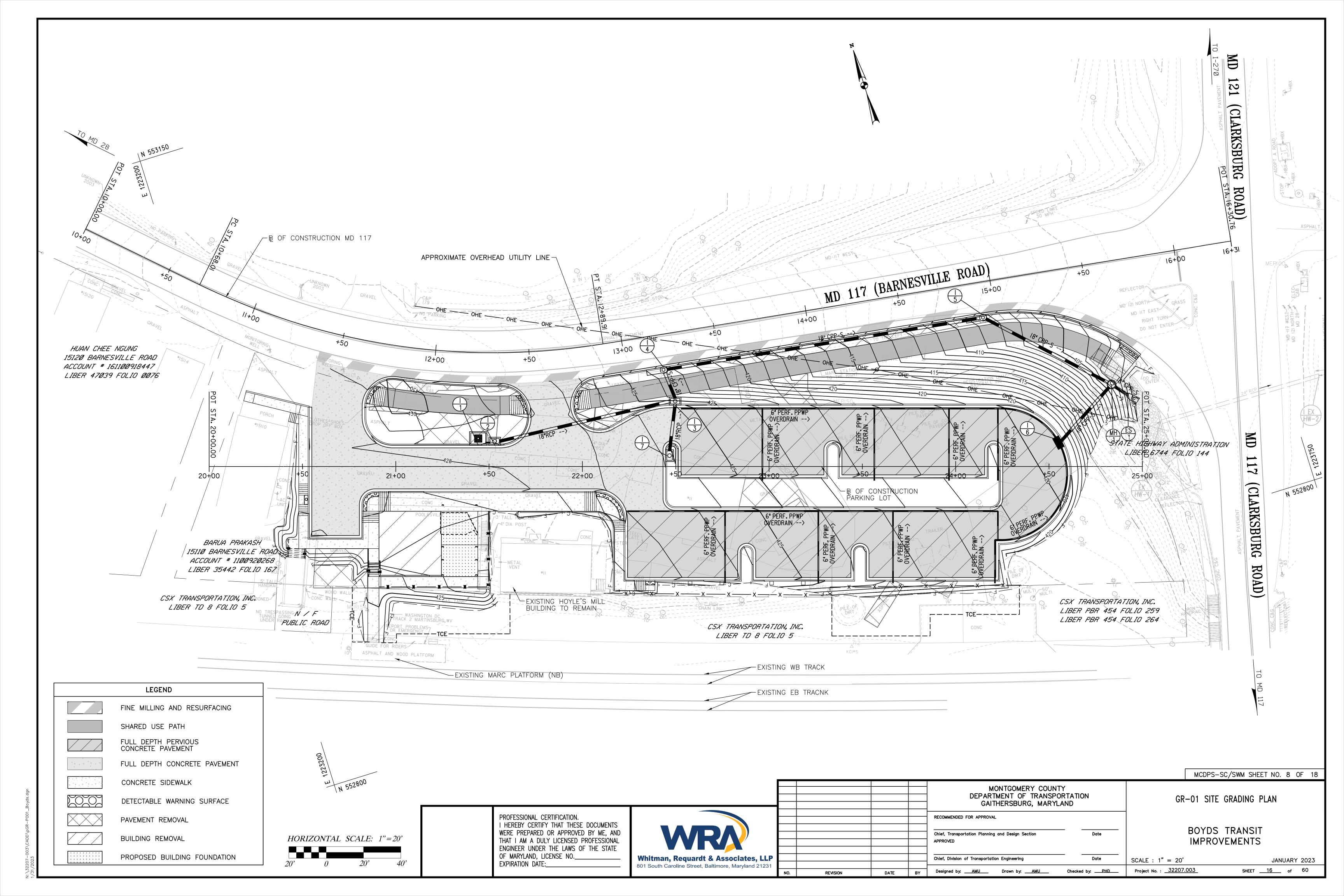
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2. 3/4" CONDUIT CAST IN CONCRETE

4. 1.5" PIPE POST (TYPICAL)

POST SPACING 42" - 48" (MAX.)





TRAFFIC CONTROL GENERAL NOTES

TEMPORARY TRAFFIC CONTROL REQUIREMENTS

- I. THE PERMITTEE SHALL REFER TO THE ATTACHED TEMPORARY TRAFFIC CONTROL PLAN (TTCP) DRAWINGS TO SELECT THE APPROPRIATE WORK ZONE TEMPORARY TRAFFIC CONTROLS FOR EACH PHASE OF CONSTRUCTION. WORK ZONE SITUATIONS WHICH ARE NOT ADDRESSED IN THE ATTACHED TTCP SHALL CONFORM TO THE GUIDELINES SET FORTH IN THE MARYLAND MANUAL ON TRAFFIC CONTROL DEVICES, MOST RECENT EDITION, AND MARYLAND BOOK OF STANDARDS FOR HIGHWAYS, INCIDENTAL STRUCTURES, & TRAFFIC CONTROL APPLICATIONS.
- 2. ANY WORK WITHIN THE TRAVELED PORTION OF ROADWAYS SHALL BE RESTRICTED TO THE HOURS OF 9:00 AM TO 3:00 PM, MONDAY THROUGH FRIDAY. WORK ON HOLIDAYS AND WEEKENDS SHALL NOT OCCUR UNLESS AN EXCEPTION IS GRANTED IN WRITING BY THE COUNTY'S DOT INSPECTOR, REFER TO SP 104-01 FOR DETAILS ON LANE CLOSURE TIMINGS.
- 3. CONSTRUCTION ACTIVITY. LOADING OR UNLOADING OF EQUIPMENT SHALL NOT BLOCK ANY TRAFFIC LANE OTHER THAN THOSE DELINEATED WITHIN THE WORK ZONE.
- 4. EXCLUSIVE OF EMERGENCY WORK, THE PERMITTEE SHALL CONTACT OCCUPANTS OF ALL ADJOINING PROPERTIES AND INFORM THEM OF THE SCOPE AND THE TIMING OF CONSTRUCTION, A MINIMUM OF 48 HOURS NOTIFICATION SHALL BE REQUIRED PRIOR TO THE COMMENCEMENT OF ANY ACTIVITY ON THE SITE.
- 5. ACCESS SHALL BE MAINTAINED TO ALL DRIVEWAYS UNLESS PERMISSION FOR CLOSURE IS GRANTED BY THE PROPERTY OWNER/MANAGER. HOWEVER. ACCESSIBILITY FOR EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES.
- 6. IF ANY TRAFFIC CONTROL SIGNS ARE TO BE PLACED ALONG A MDOT SHA ROADWAY OR WITHIN THE LIMITS OF AN INCORPORATED AREA. THE PERMITTEE SHALL NOTIFY THE APPROPRIATE AGENCY OF SIGNAGE TO BE INSTALLED.
- 7. NO HAZARDOUS MATERIALS SHALL BE STORED WITHIN PUBLIC RIGHT-OF-WAY. NO MATERIALS OR EQUIPMENT SHALL BE STORED ON THE ROADWAY SURFACE OR SIDEWALK DURING NON-WORK PERIODS.
- 8. ALL EXISTING TRAFFIC CONTROL DEVICES (I.E. SIGNS, MARKING, ETC.) THAT MUST BE REMOVED SHALL BE REPLACED IN THEIR PROPER LOCATION PRIOR TO THE COMPLETION OF THE PROJECT. COST FOR THE REPLACEMENT AND/OR REPAIR OF DEVICES DAMAGED AS A RESULT OF THE PROJECT SHALL BE ASSESSED TO THE PERMITTEE.
- 9. FOR MERGING, SHIFTING, SHOULDER TAPERS, THE MAXIMUM SPACING BETWEEN DEVICES EQUALS THE POSTED SPEED IN FEET.
- IO. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE MUTCD. ALL SIGNS, TRAFFIC DRUMS AND CONES SHALL BE FULLY REFLECTORIZED WITH HIGH INTENSITY, REFLECTIVE SHEETING AS PER THE MUTCD.
- II. PROVISION SHALL BE MADE FOR SAFE MAINTENANCE OF PEDESTRIAN AND BICYCLE TRAFFIC, SUBJECT TO APPROVAL OF THE COUNTY'S DOT INSPECTOR, AT LEAST ONE 10-FOOT TRAVEL LANE SHALL BE AVAILABLE FOR TRAFFIC AT ALL TIMES,
- 12. ALL WARNING SIGNS, UNLESS OTHERWISE SPECIFIED, SHALL BE A MINIMUM OF 48" X 48", BLACK SYMBOL OR LEGEND ON ORANGE BACKGROUND AND DIAMOND SHAPED. ALL TEMPORARY TRAFFIC SIGNS SHALL BE PLACED ON PORTABLE SUPPORTS ("WINDMASTERS") AND SHALL BE REMOVED DURING NON-APPLICABLE PERIODS. ALL PORTABLE SIGNS SHALL MOUNTED A MINIMUM OF ONE (I) FOOT ABOVE THE LEVEL OF THE ROADWAY, WITH HIGHER MOUNTING HEIGHTS DESIRABLE.
- 13. WHEN PAVEMENT MARKINGS HAVE BEEN OBLITERATED BY THE WORK ACTIVITY, THE PERMITTEE SHALL INSTALL ANY CRITICAL INTERIM PAVEMENT MARKINGS PRIOR TO THE END OF THE WORKDAY AS SPECIFIED BY THE COUNTY'S DOT INSPECTOR AND/OR THE TRAFFIC ENGINEERING AND OPERATIONS SECTION. ON ROAD SECTIONS THAT ARE NOT SCHEDULED TO BE OVERLAID. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE (REMOVABLE) DETOUR GRADE MARKING TAPE, ANY CONFLICTING MARKINGS, WHICH NEED TO BE TEMPORARILY REMOVED, ARE TO BE MASKED USING "3M REMOVABLE BLACK LANE MASK" OR AN APPROVED EQUAL. ON ROAD SECTIONS THAT ARE TO BE OVERLAID, TEMPORARY MARKINGS CAN BE EITHER TAPE OR PAINT, ANY CONFLICTING MARKINGS SHOULD BE REMOVED WITH A PAVEMENT GRINDER
- 14. CONTRACTOR SHALL INSTALL APPROPRIATE TEMPORARY TRAFFIC CONTROL DEVICES (I.E. CHAIN LINK FENCE/PLASTIC DRUMS) TO PROTECT MOTORISTS AND/OR PEDESTRIANS FROM HAZARDS WITHIN THE WORK AREA DURING NON-WORKING HOURS.
- 15. ALL TCP PLAN SHEETS SHOW SIGNING AND ROADWAY CONDITIONS DURING NON-WORK HOURS. THE CONTRACTOR SHALL FOLLOW STANDARDS AS LISTED UNDER SEQUENCE OF CONSTRUCTION DURING WORK HOURS.
- 16. DURING FLAGGING OPERATIONS. THE TRAVEL LANE NEXT TO THE WORK AREA SHALL BE SEPERATED BY DRUMS AND SPACED AS PER THE MARYLAND BOOK OF STANDARDS FOR THE ENTIRE DURATION OF THE PROJECT.
- 17. THE CONTRACTOR SHALL COVER THE WORK AREA SEGMENT WITH STEEL PLATES AND PLACE APPROPRIATE ADVANCE WARNING SIGNS FOR STEEL PLATES BEFORE OPENING ALL TRAVEL LANES TO TRAFFIC AT THE END OF WORK DAY FOR ENTIRE DURATION OF THE PROJECT.
- 18. ALL TRAFFIC CONTROL DEVICES AND STANDARDS SHALL CONFORM TO THE 30 MPH POSTED SPEED LIMIT AND 35 MPH DESIGN SPEED WITHIN THE ENTIRE PROJECT LIMITS.

FLAGGING OPERATIONS

- I. WHEN POSSIBLE. TWO-WAY TRAFFIC SHALL BE MAINTAINED. OTHERWISE. FLAGGERS SHALL BE USED TO CONTROL TRAFFIC.
- 2. FLAGGERS SHALL BE MARYLAND STATE HIGHWAY ADMINISTRATION OR AATSA APPROVED FLAGGERS AND SHALL BE USED AT THE DIRECTION OF THE COUNTY INSPECTOR, FLAGGERS SHALL USE STOP/SLOW PADDLES TO DIRECT TRAFFIC,
- 3. RADIO COMMUNICATION SHALL BE REQUIRED BETWEEN FLAGGERS AT THE DISCRETION OF THE COUNTY INSPECTOR OR UNDER THE FOLLOWING CONDITIONS:
- * IF THE FLAGGERS CANNOT SEE EACH OTHER * IF THE LANE CLOSURE EXCEEDS 200 FEET

PAVEMENT DROP-OFF

- I. ANY EXCAVATION(S) IN THE ROADWAY SHALL BE PAVED TO LEVEL GRADE OR PLATED AND THE ROADWAY REOPENED TO ITS FULL CROSS-SECTION PRIOR TO THE END OF EACH WORKDAY. "STEEL PLATES AHEAD" (W2I-9) SIGNS SHALL BE PLACED APPROXIMATELY 250 FEET IN ADVANCE OF ANY STEEL PLATE, ANY EXCAVATIONS IN THE SIDEWALK SHALL BE BACKFILLED OR PLATED PRIOR TO THE END OF EACH WORKDAY AND SIDEWALK REOPENED TO ITS FULL CROSS SECTION.
- 2. TRAFFIC SHALL NOT BE PERMITTED WITHIN TEN (IO) FEET OF ANY EXCAVATION THAT RESULTS IN A VERTICAL DROP-OFF OF MORE THAN FIVE (5) INCHES IN THE LEVEL OF PAVEMENT DURING NON-WORKING HOURS UNLESS PROTECTED BY TEMPORARY CONCRETE BARRIERS OR RAMPED WITH AGGREGATE MATERIAL AT A 3:1 OR FLATTER SLOPE FROM THE EDGE OF PAVEMENT. WHEN RAMPING IS UTILIZED, TTC DRUMS SHALL BE POSITIONED ADJACENT TO THE EDGE OF THE WORK AREA ON THE TRAFFIC SIDE OF THE SLOPE.
- 3. TRAFFIC SHALL NOT BE PERMITTED WITHIN TWO (2) FEET OF ANY EXCAVATION THAT RESULTS IN A VERTICAL DROP-OFF OF MORE THAN TWO (2) INCHES BUT NO MORE THAN FIVE (5) INCHES IN THE LEVEL OF PAVEMENT DURING NON-WORKING HOURS UNLESS EITHER RAMPED WITH AGGREGATE MATERIAL AT A 4:1 OR FLATTER SLOPE, PROVIDED WITH AN ABUTTING WEDGE OF BITUMINOUS MATERIAL AT A 3:1 OR FLATTER SLOPE OR PROTECTED BY TRAFFIC DRUMS.
- 4. AT DROP-OFFS IN EXCESS OF 5 INCHES, EITHER GRADDED AGGREGATE BASE WEDGE SHALL BE USED IN ACCORDANCE WITH MDOT SHA STANDARD 104.01-28. OR POSITIVE PROTECTION FROM THE DROP-OFF IN THE FORM OF CONCRETE BARRIERS SHALL BE USED IN ACCORDANCE WITH MDOT SHA STANDARD 104.06-18,
- AT THE END OF WORKDAYS.

PROFESSIONAL CERTIFICATION. 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.__ EXPIRATION DATE:



DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND RECOMMENDED FOR APPROVAL

Chief, Division of Transportation Engineering

Designed by: ____AMU Drawn by: ___AMU

MONTGOMERY COUNTY

Chief, Transportation Planning and Design Section

Checked by: PHD

BOYDS TRANSIT IMPROVEMENTS

JANUARY 2023 SHEET <u>17</u> of 60

TCP-A TRAFFIC CONTROL PLAN

GENERAL NOTES

TRAFFIC CONTROL GENERAL NOTES (CONT.)

INSPECTOR AUTHORITY

- I. THE COUNTY'S DEPARTMENT OF TRANSPORTATION (DOT) INSPECTOR HAS THE AUTHORITY TO MODIFY THE TTCP AS DEEMED NECESSARY. THE INSPECTOR HAS THE AUTHORITY TO ORDER THE PERMITTEE TO STOP WORK AND VACATE THE PUBLIC RIGHT-OF-WAY IF THE TTCP IS NOT COMPLIED WITH.
- 2. THE IMPLEMENTATION DATE AND CONTINUANCE OF WORK ACTIVITIES MAY BE ALTERED AT THE DISCRETION OF THE COUNTY'S DOT INSPECTOR IN THE EVENT OF CONFLICTS WITH PREVIOUSLY APPROVED OR EMERGENCY ACTIVITIES.

MISCELLANEOUS

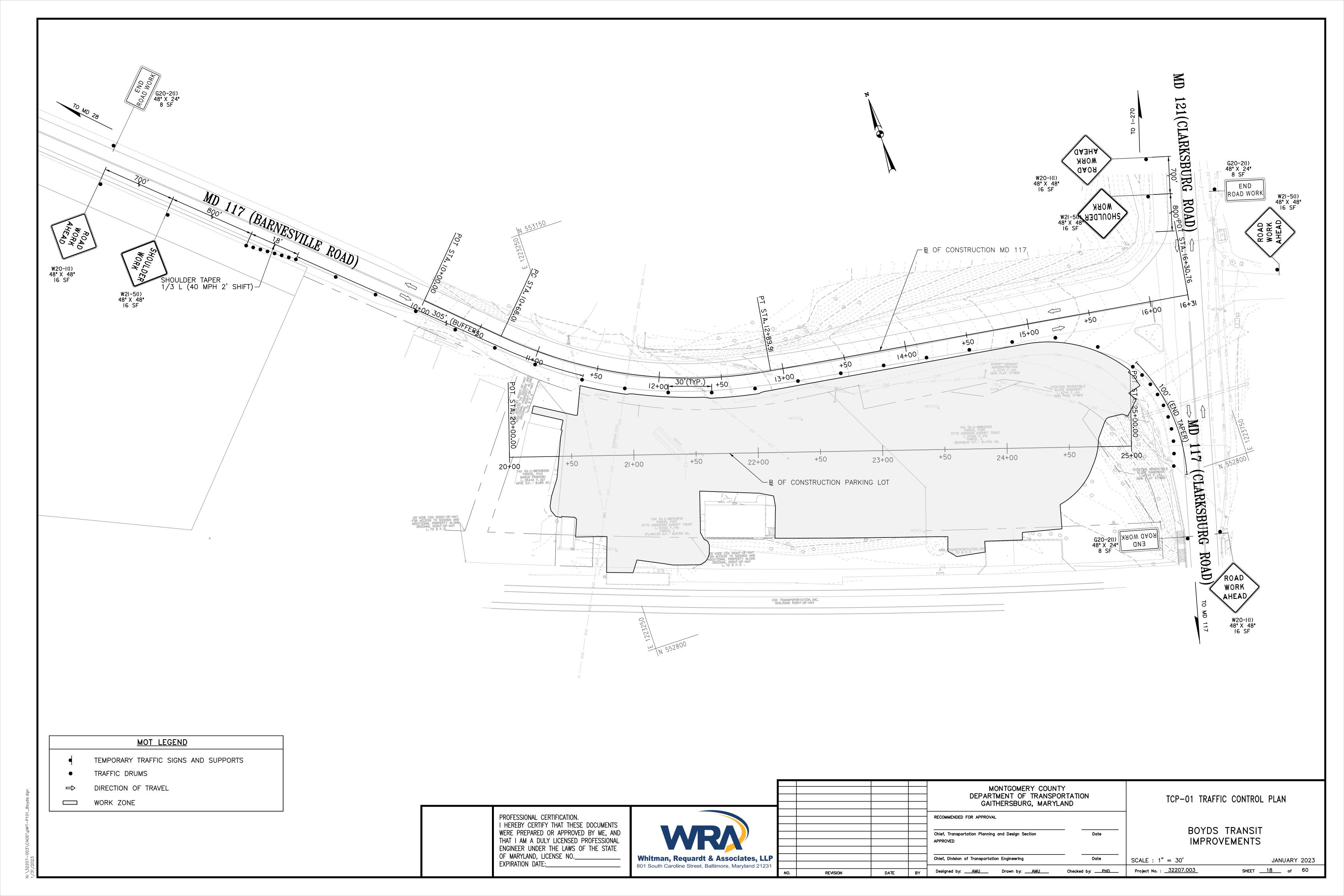
- I. THE PERMITTEE WILL BE SOLELY RESPONSIBLE FOR ALL ACCIDENTS AND/OR DAMAGE TO PERSONS AND/OR PROPERTY DAMAGE RESULTING FROM HIS OPERATIONS.
- 2. HAZARDOUS MATERIAL SHALL NOT BE STORED WITHIN PUBLIC RIGHT-OF-WAY. NO MATERIALS OR EQUIPMENT SHALL BE STORED ON THE ROADWAY SURFACE OR SIDEWALK DURING NON-WORKING PERIODS. ALL STORED MATERIALS AND EQUIPMENT SHALL BE SET BACK AT LEAST SIX (6) FEET BEHIND THE CURB ALONG A CLOSED SECTION ROADWAY AND AT LEAST TWELVE (12) FEET FROM THE EDGE OF OPEN SECTION ROADWAY.
- 3. ALL TTC DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME. TTC DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
- 4. AT THE COMPLETION OF WORK ACTIVITIES, CONDITIONS WITHIN THE PUBLIC SPACE SHALL BE FULLY RESTORED TO THOSE THAT EXISTED PRIOR TO THE WORK ACTIVITY.

CONTACT INFORMATION

- I. CONTACT THE MCDOT TRANSPORTATION MANAGEMENT CENTER 240-777-2100 BETWEEN 5:00 AM AND 11:00 PM TO INFORM THEM OF TEMPORARY LANE CLOSURES IN THE VICINITY OF ANY TRAFFIC SIGNALS.
- 2. THE PERMITTEE SHALL CONTACT THE TRANSPORTATION SYSTEMS ENGINEERING TEAM AT 240-777-2100 AT LEAST TWO WEEKS IN ADVANCE TO COORDINATE ANY MINOR TRAFFIC SIGNAL WORK, MAJOR TRAFFIC SIGNAL WORK SHALL BE COORDINATED A MINIMUM OF THIRTY (30) DAYS IN ADVANCE OF THE PROJECT, THE PERMITTEE SHALL CONTACT THE MONTGOMERY COUNTY TRAFFIC MANAGEMENT CENTER AT 240-777-2100 A MINIMUM OF 72 HOURS PRIOR TO BEGINNING WORK TO HAVE EXISTING TRAFFIC SIGNAL EQUIPMENT MARKED.
- 3. THE PERMITTEE SHALL CONTACT TRAFFIC ENGINEERING STUDIES SECTION (TES) AT 240-777-6000 AT LEAST TEN (IO) WORKING DAYS IN ADVANCE OF THE FINAL PAVING OPERATIONS TO SCHEDULE THE INSTALLATION OF PERMANENT PAVEMENT MARKING AND SIGNS.
- 4. THE PERMITTEE SHALL CONTACT THE DIRECTOR OF THE UPCOUNTY REGIONAL SERVICES CENTER AT 240-777-8040 AND THE DISTRICT 5 TRAFFIC SERGEANT OF THE MONTGOMERY COUNTY POLICE DEPARTMENT AT 240-773-6200, A MINIMUM OF ONE WEEK PRIOR TO THE BEGINNING OF ANY WORK ACTIVITIES.
- 5. FIELD ASSISTANCE BY THE MCDOT. DIVISION OF TRAFFIC ENGINEERING DESIGN AND OPERATION SECTION (TEDO) IS AVAILABLE UPON REQUEST. CONTACT TRAFFIC ENGINEERING DESIGN AND OPERATION SECTION (TEDO) AT 240-777-6000.
- 6. FOR MDOT SHA OFFICE OF TRAFFIC AND SAFETY. CALL I-888-963-0307.

MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION

- I. INSTALL TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLANS.TWO WAY TRAFFIC SHALL BE MAINTAINED ALONG BARNESVILLE ROAD AT ALL TIMES.
- 2. INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLANS.
- 3. DEMOLISH BUILDINGS ON THE SITE THAT ARE NOT BEING MAINTAINED AND REMOVE EXISTING PAVEMENT.
- 4. COMPLETE SOIL CLEAN-UP.
- 6. CONSTRUCT THE PARK AND RIDE ACCORDING TO THE PLANS.
- 7. CONSTRUCT FINAL PAVEMENT COURSE IN THE PARK AND RIDE AND ALONG BARNESVILLE ROAD.
- 8. REMOVE EROSION AND SEDIMENT CONTROL DEVICES.
- 9. REMOVE TRAFFIC CONTROL DEVICES.



STANDARD EROSION AND SEDIMENT CONTROL NOTES

(JANUARY 2017, DPS NOTES)

- THE PERMITTEE SHALL NOTIFY THE DEPARTMENT OF PERMITTING SERVICES (DPS) FORTY-EIGHT (48) HOURS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITYAND, UNLESS WAIVED BY THE DEPARTMENT, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETINGBETWEEN THEM OR THEIR REPRESENTATIVE. THEIR ENGINEER AND AN AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT.
- 2. THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE FOLLOWING POINTS:
- A. AT THE REQUIRED PRE-CONSTRUCTION MEETING.
- B. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRIOR TO ANY OTHER LAND DISTURBING ACTIVITY.
- C. DURING THE INSTALLATION OF A SEDIMENT BASIN OR STORMWATER MANAGEMENT STRUCTURE AT THE REQUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION IS MANDATORY.
- D. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).
- E. PRIOR TO FINAL ACCEPTANCE.
- THE PERMITTEE SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE, SHALL HAVE THEM INSPECTED AND APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES, SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE DEPARTMENT.
- 4. THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC THOROUGHFARE(S). ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY.
- 5. THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE DEPARTMENT. THE PERMITTEE IS RESPONSIBLE FOR IMMEDIATELY REPAIRING OR REPLACING ANY SEDIMENT CONTROL MEASURES WHICH HAVE BEEN DAMAGED OR REMOVED BY THE PERMITTEE OR ANY OTHER PERSON.
- 5. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
- A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO I VERTICAL (3H:IV): AND
- B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
- ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATEDLY, MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.
- . THE PERMITTEE SHALL APPLY SOD, SEED, AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS WITHIN SEVEN (7) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED ON THAT AREA, MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION, ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS, AND AREAS WITHIN FIFTY (50) FEET OF A BUILDING UNDER CONSTRUCTION MAY BE EXEMPT FROM THIS REQUIREMENT, PROVIDED THAT EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND MAINTAINED TO PROTECT THOSE AREAS.
- . PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES. THE PERMITTEE SHALL STABILIZE ALL CONTRIBUTORY DISTURBED AREAS WITH REQUIRED SOIL AMENDMENTS AND TOPSOIL, USING SOD OR AN APPROVED PERMANENT SEED MIXTURE AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHEN THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED WITHIN SEVEN (7) CALENDAR DAYS OF ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, AN APPROVED TEMPORARY SEED AND STRAW ANCHORED MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE COMPLETED PRIOR TO THE FOLLOWING APRIL 15.
- 9. THE SITE PERMIT. WORK. MATERIALS. APPROVED SC/SWM PLANS. AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF MONTGOMERY COUNTY.
- 10. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO LOWER THE WATER DOWNSLOPE WITHOUT CAUSING EROSION, DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. MECHANICAL DEVICES MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
- PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITHIN THREE (3) CALENDAR DAYS OF ESTABLISHMENT WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILIZATION MEASURES.
- 12. SEDIMENT CONTROL DEVICES SHALL BE REMOVED. WITH PERMISSION OF THE DEPARTMENT. WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS, STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.
- 13. NO PERMANENT CUT OR FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS OR ON RESIDENTIAL LOTS. A SLOPE GRADIENT OF UP TO 2:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2: WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.
- 14. THE PERMITTEE SHALL INSTALL A SPLASHBLOCK AT THE BOTTOM OF EACH DOWNSPOUT UNLESS THE DOWNSPOUT IS CONNECTED BY A DRAIN LINE TO AN ACCEPTABLE OUTLET.
- 15. FOR FINISHED GRADING, THE PERMITTEE SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO PREVENT WATER FROM STANDING ON THE SURFACE OF LAWNS MORE THAN TWENTY-FOUR (24) HOURS AFTER THE END OF A RAINFALL, EXCEPT IN DESIGNATED DRAINAGE COURSES AND SWALE FLOW AREAS, WHICH MAY DRAIN AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL.
- 16. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A BUILDING WHICH IS EXISTING OR UNDER CONSTRUCTION, NO BUILDING MAY BE CONSTRUCTED WITHIN 20 FEET OF A SEDIMENT TRAP OR BASIN.
- 17. ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHMENT.
- 18. THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, AS DEEMED NECESSARY.
- 19. ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND.
- 20. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL.

- 21. SEDIMENT TRAP(S)/BASIN(S) SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO THE POINT OF ONE-HALF (1/2) THE WET STORAGE DEPTH OF THE TRAP/BASIN (I/4 THE WET STORAGE DEPTH FOR ST-III) OR WHEN REQUIRED BY THE SEDIMENT CONTROL INSPECTOR.
- 22. SEDIMENT REMOVED FROM TRAPS/BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN.
- 23. ALL SEDIMENT BASINS AND TRAPS MUST BE SURROUNDED WITH A WELDED WIRE SAFETY FENCE. THE FENCE MUST BE AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN TWO INCHES IN WIDTH AND FOUR INCHES IN HEIGHT, WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.
- 24. NO EXCAVATION IN THE AREA OF EXISTING UTILITIES IS PERMITTED UNLESS THEIR LOCATION HAS BEEN DETERMINED. CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF
- 25. OFF-SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.

EARTH DIKE

TEMPORARY SWALE

STONE CHECK DAM

SUPER SILT FENCE ...

SILT FENCE

PERIMETER DIKE/SWALE.

STONE OUTLET STRUCTURE

SILT FENCE ON PAVEMENT

STANDARD INLET PROTECTION

AT GRADE INLET PROTECTION.

CURB INLET PROTECTION

MEDIAN INLET PROTECTION

GABION INFLOW PROTECTION

RIPRAP INFLOW PROTECTION

REMOVABLE PUMPING STATION .

PORTABLE SEDIMENT TANK.

SUMP PIT ...

FILTER LOG ...

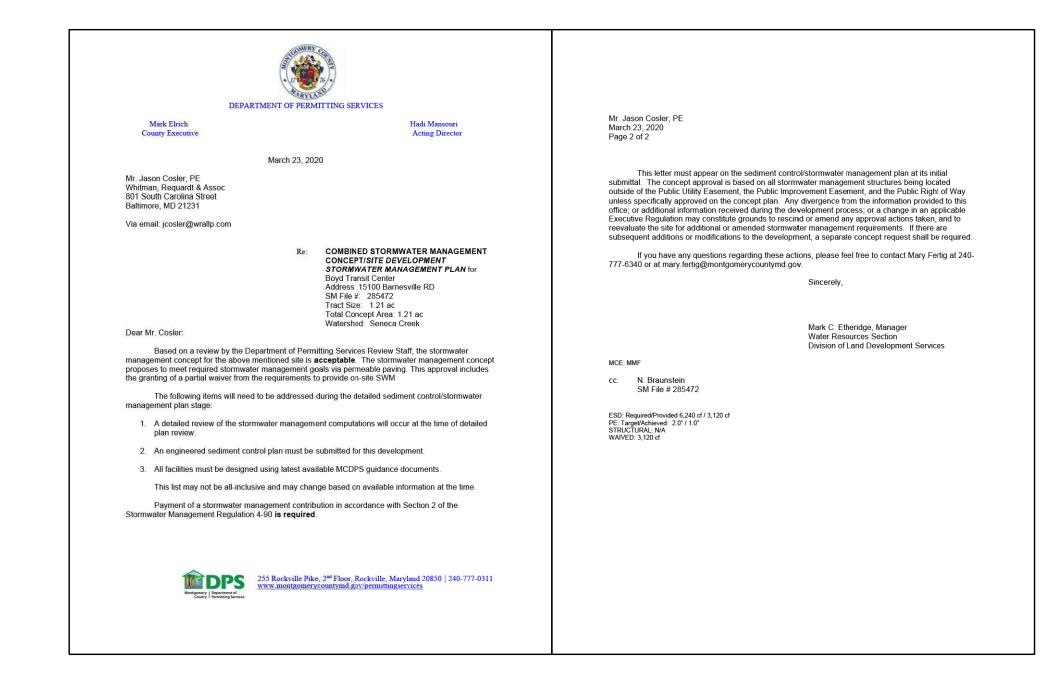
TEMPORARY BERM

- 26. SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT OR REPAIR MAY ONLY BE DONE WITH THE DPS INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DEWATERING METHOD FOR EACH APPLICATION. THE FOLLOWING METHODS MAY BE CONSIDERED:
- A. PUMP DISCHARGE MAY BE DIRECTED TO ANOTHER ON-SITE SEDIMENT TRAP OR BASIN. PROVIDED IT IS OF SUFFICIENT VOLUME AND THE PUMP INTAKE IS FLOATED TO PREVENT AGITATION OR SUCTION OF A DEPOSITED SEDIMENTS; OR
- B. THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR
- C. THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ. NON-WOVEN FABRIC), OR APPROVED EQUIVALENT, LOCATED IN AN UNDISTURBED BUFFER

REMEMBER: DEWATER OPERATIONS AND METHODS MUST HAVE PRIOR APPROVAL BY THE DPS INSPECTOR.

- 27. THE PERMITTEE MUST NOTIFY THE DEPARTMENT OF ALL UTILITY CONSTRUCTION ACTIVITIES WITHIN THE PERMITTED LIMITS OF DISTURBANCE PRIOR TO THE COMMENCEMENT OF THOSE ACTIVITIES.
- 28. TOPSOIL MUST BE APPLIED TO ALL PERVIOUS AREAS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS."

STORMWATER MANAGEMENT CONCEPT APPROVAL



MISS UTILITY

CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

<u>DESIGN CERTIFICAT</u>ION

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I & II, INCLUDING SUPPLEMENTS, THE ENVIRONMENT ARTICLE SECTIONS 4-101 THROUGH II6 AND SECTIONS 4-201 AND 215, AND THE CODE OF MARYLAND REGULATIONS (COMAR) 26,17,01 AND COMAR 26,17,02 FOR EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT, RESPECTIVELY."

JASON D. COSLER				
NAME	SIGNATURE			
28467				
MARYLAND. REGISTRATION NUMBER. P.E., R.L.S. OR R.L.A. (circle)	DATE			

PROFESSIONAL CERTIFICATION THEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT IAM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

Checked by: ____JDC____

LICENSE NO	28467	-
EXPIRATION DATE:	12/20/2024	

MONTGOMERY COUNTY

RECOMMENDED FOR APPROVAL

APPROVED

Chief, Transportation Planning and Design Section

Designed by: <u>ABR</u> Drawn by: <u>ABR</u>

Chief, Division of Transportation Engineering

DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND

SITE INFORMATION * (NOT FOR BIDDING PURPOSES)

REVISION

ROP

CWD - 12

PSD - 12

ST-I

PCWD

DESIGNATION CWD-12 REFERS TO 12 INCH CLEAR WATER DIVERSION.

DESIGNATION PSD-12 REFERS TO

| ST-II | ST-III

——LOD ——

TOTAL AREA OF SITE	1.30	_ACRES
AREA DISTURBED	1.30	_ACRES
AREA TO BE ROOFED OR PAVED _		
TOTAL CUT	4,500	CU. YE
TOTAL FILL	1,300	CU. YE
OFFSITE WASTE/BORROW		
AREA LOCATION (IF KNOWN) _	N/A	_

MCDPS-SC/SWM SHEET NO. 9 OF 18

EN-01 EROSION AND SEDIMENT GENERAL CONTROL NOTES

BOYDS TRANSIT

SCALE: NONE

Project No. : 32207.003

IMPROVEMENTS JANUARY 2023

SHEET 19 of 60

PROFESSIONAL CERTIFICATION. 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.__ EXPIRATION DATE:

Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, Maryland 21231

STANDARD SYMBOLS

—SSF——SSF—

├── SF0P ──┤

SIP

AGIP

CIP

GM

PST

⊢ FL-I8 — →

DESIGNATION FL-18 REFERS TO 18 INCH DIAMETER FILTER LOG.

|--- FB-A ----|

|--- FB-B ----|

PLACE DESIGNATION (e.g., a-1) on STABILIZED CONSTRUCTION ENTRANCE.

SOIL STABILIZATION MATTING

CLEAR WATER DIVERSION PIPE

PIPE OUTLET SEDIMENT TRAP _

STONE/RIPRAP OUTLET SEDIMENT TRAP ...

LIMIT OF DISTURBANCE

PUMP. CLEAR WATER DIVERSION

EXISTING CONTOURS -----

PROPOSED CONTOURS ______ 100 — ____

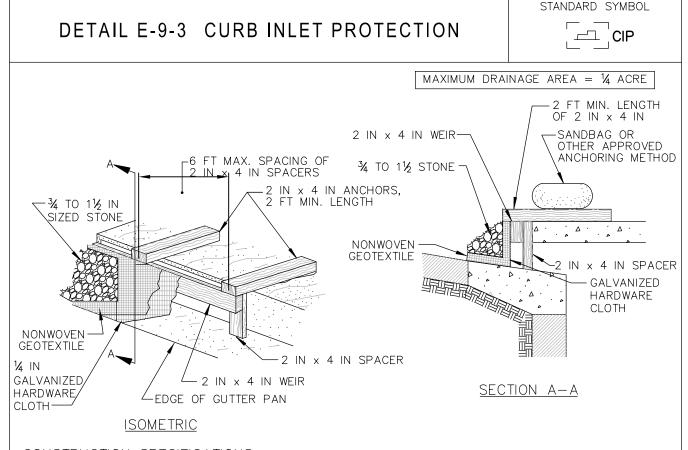
WETLAND BOUNDARY ------

WETLAND BUFFER _________

WATERS OF THE U.S. _____

ROCK OUTLET PROTECTION

GABIONS



CONSTRUCTION SPECIFICATIONS

- 1. USE NOMINAL 2 INCH x 4 INCH LUMBER
- 2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
- 3. NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
- . ATTACH A CONTINUOUS PIECE OF 14 INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4 WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE.
- PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 WEIR.
- . PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
- INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
- FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE.
- AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
- O. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

SEQUENCE OF CONSTRUCTION NOTES FOR EROSION AND SEDIMENT CONTROL (PROJECT IS EXEMPT FROM FOREST CONSERVATION LAW)

GENERAL NOTES FOR PROJECT

- I. PRIOR TO CLEARING OF TREES, INSTALLING SEDIMENT CONTROL MEASURES, OR GRADING, A PRE-CONSTRUCTION MEETING MUST BE CONDUCTED ON-SITE WITH THE MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES (MCDPS) SEDIMENT CONTROL INSPECTOR (240) 777-0311 (48 HOURS NOTICE), THE OWNER'S REPRESENTATIVE, AND THE SITE ENGINEER. IN ORDER FOR THE MEETING TO OCCUR. THE PERMITTEE MUST PROVIDE ONE PAPER SET OF APPROVED SEDIMENT CONTROL PLANS TO THE MCDPS SEDIMENT CONTROL INSPECTOR AT THE PRE-CONSTRUCTION MEETING, IF NO PLANS ARE PROVIDED, THE MEETING SHALL NOT OCCUR AND WILL NEED TO BE RE-SCHEDULED PRIOR TO COMMENCING WORK.
- 2. THE LIMITS OF DISTURBANCE MUST BE FIELD MARKED PRIOR TO CLEARING OF TREES. INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.

FOLLOWING PROCEDURES SHALL BE IMPLEMENTED DURING EXECUTION OF THE DETAILED SEQUENCE CONSTRUCTION INCLUDED ON THE "EN-OI EROSION AND SEDIMENT CONTROL NOTES AND DETAILS"

- 3. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES.
- 4. ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING. OR GRADING.
- 5. COORDINATE SEDIMENT CONTROL ACTIVITIES WITH MAINTENANCE OF TRAFFIC PLAN.

STAGE I - SUBGRADE

- 6. INSTALL PERIMETER CONTROL SSF 1-1 THROUGH SSF 1-7 AND REMOVE EXISTING STRUCTURES WITHIN THE FOOTPRINT OF PROPOSED SUBGRADE GRADING.
- 7. INSTALL STABILIZED CONSTRUCTION ENTRANCE SCE I-I AND COMMENCE EXCAVATION OPERATIONS PER SUBGRADE GRADING PLAN ON SW-OI AND INSTALL SP I-I THROUGH SP I-4, AND ED I-I. ADJUST ED I-I AS GRADING OF SITE DEVELOPS.
- 8. UPON COMPLETION OF SUBGRADE GRADING, INSTALL STORM DRAIN FROM I-6 TO ES-I AND REMOVE AND RESET EXISTING RIPRAP AS REQUIRED.
- 9. COMMENCE OPERATIONS TO INSTALL PERVIOUS CONCRETE AGGREGATE SUBBASE PER TYPICAL DETAIL ON SHEET 7 AND CONTRACT SPECIAL PROVISIONS, INSTALL AND CONNECT OVERDRAIN DRAINAGE SYSTEM TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO
- 10. UPON PLACEMENT OF PERVIOUS CONCRETE SUBBASE, REMOVE SSF 1-5, SSF 1-6, SSF 1-7, SP I-I THROUGH I-4, ED I-I, AND INSTALL TSOS I-I AND PROCEED TO STAGE 2.

STAGE 2

- II. PERFORM DEMOLITION AND REMOVAL OF EXISTING POOLESVILLE BUILDING AND SEPTIC SYSTEM IMPROVEMENTS.
- 12. INSTALL THE REMAING PROPOSED STORM DRAIN SYSTEM STRUCTURES AND PIPES ALONG WITH INLET PROTECTION CIP 2-1, CIP 2-2, CIP 2-3, CIP 2-4, CIP 2-5, AND AGIP 2-1
- 13. UPON COMPLETION OF CONSTRUCTION AND WITH APPROVAL OF THE MCDPS SEDIMENT CONTROL INSPECTOR, THE SEDIMENT CONTROL DEVICES MAY BE REMOVED. ANY AREAS DISTURBED BY THE REMOVAL PROCESS MUST BE STABILIZED IMMEDIATELY.

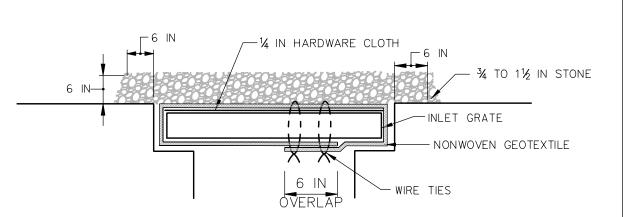
DETAIL E-9-2 AT-GRADE INLET PROTECTION



WATER MANAGEMENT ADMINISTRATION

IAXIMUM DRAINAGE AREA = 1 ACR 34 TO 11/2 IN STONE 1/4 IN GALVANIZED HARDWARE CLOTH NONWOVEN GEOTEXTILE

<u>PLAN / CUT AWAY VIEW</u>



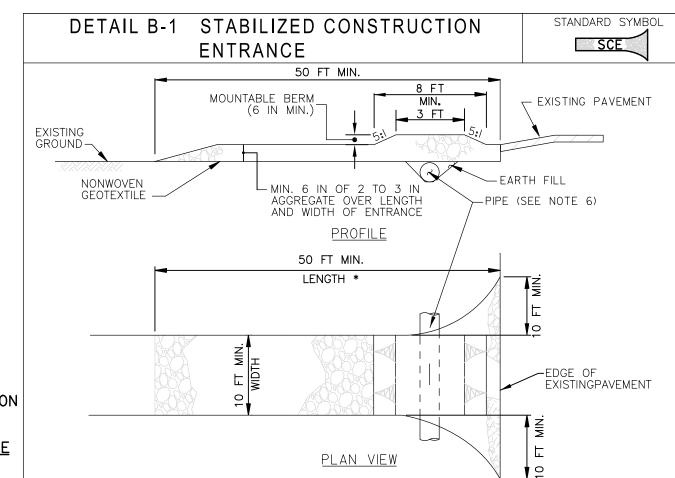
CROSS SECTION

CONSTRUCTION SPECIFICATIONS

NATURAL RESOURCES CONSERVATION SERVICE

- I. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-I MATERIALS.
- . LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS, SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.
- 3. PLACE CLEAN $^3\!\!\!/$ TO I $^\prime\!\!\!/$ Inch stone or equivalent recycled concrete 6 inches thick on the
- 4. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT

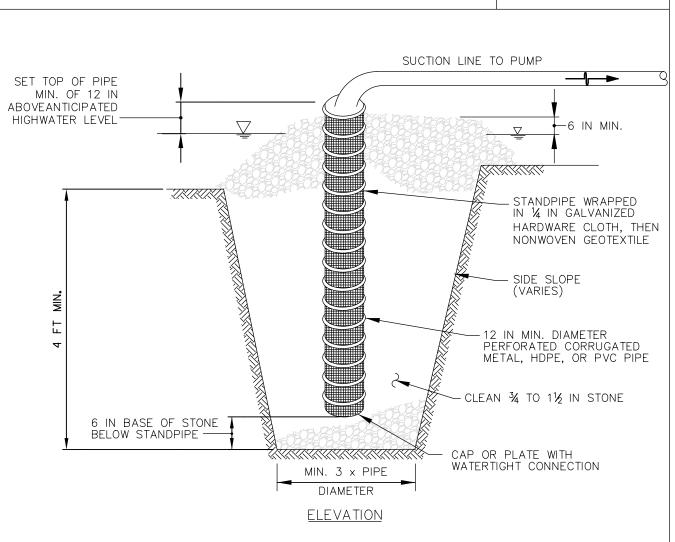


CONSTRUCTION SPECIFICATIONS

NATURAL RESOURCES CONSERVATION SERVICE

- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH
- . PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-I MATERIALS.
- I. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND
- SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT



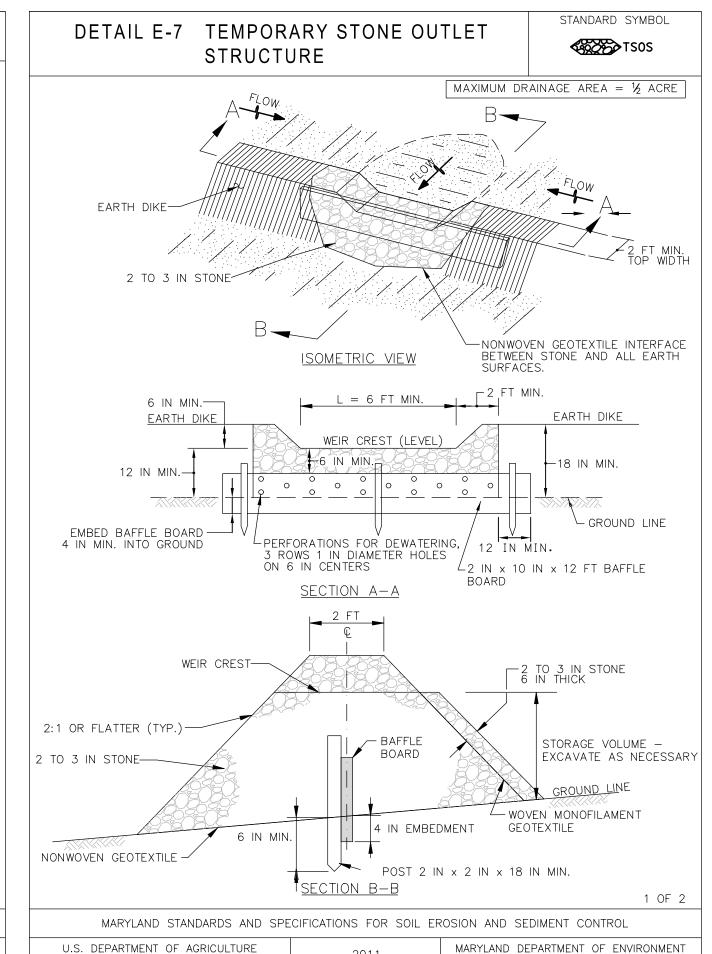
DETAIL F-2 SUMP PIT

STANDARD SYMBOL

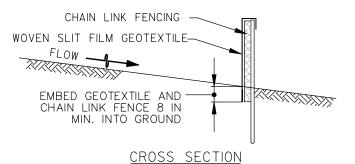
CONSTRUCTION SPECIFICATIONS

- USE 12 INCH OR LARGER DIAMETER CORRUGATED METAL, HDPE, OR PVC PIPE WITH 1 INCH DIAMETER PERFORATIONS, 6 INCHES ON CENTER. BOTTOM OF PIPE MUST BE CAPPED WITH WATERTIGHT SEAL.
- WRAP PIPE WITH 1/4 INCH GALVANIZED HARDWARE CLOTH AND WRAP NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH.
- EXCAVATE PIT TO THREE TIMES THE PIPE DIAMETER AND FOUR FEET IN DEPTH. PLACE 34 TO 11/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.
- 4. SET TOP OF PIPE MINIMUM 12 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION. BACKFILL PIT AROUND THE PIPE WITH 3/4 TO 11/2 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE
- 6. DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
- A SUMP PIT REQUIRES FREQUENT MAINTENANCE. IF SYSTEM CLOGS, REMOVE PERFORATED PIPE AND REPLACE GEOTEXTILE AND STONE. KEEP POINT OF DISCHARGE FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION



118118118118 1/8//8//8 SURFACE— 2% IN DIAMETER GALVANIZED CHAIN LINK FENCE WITH GALVANIZED WOVEN SLIT FILM GEOTEXTILE ALUMINUM ELEVATION CHAIN LINK FENCING WOVEN SLIT FILM GEOTEXTILE—



DETAIL E-3 SUPER SILT FENCE

CONSTRUCTION SPECIFICATIONS

THE SUPER SILT FENCE.

- INSTALL 23/4 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO
- 2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (23/8 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
- 3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-I MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
- . WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES,
- FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS. 5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT

45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF

- PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-I MATERIALS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT

DETAIL E-7 TEMPORARY STONE OUTLET STRUCTURE

STANDARD SYMBOL **₹**

WATER MANAGEMENT ADMINISTRATION

STANDARD SYMBOL

H—SSF—H

CONSTRUCTION SPECIFICATIONS

NATURAL RESOURCES CONSERVATION SERVICE

- 1. PROVIDE STORAGE VOLUME AS SPECIFIED ON APPROVED PLANS.
- 2. USE NONWOVEN GEOTEXTILE ON INTERFACE BETWEEN GROUND AND STONE.
- . PERFORATE BAFFLE BOARD WITH 3 ROWS OF 1 INCH DIAMETER HOLES 6 INCHES ON CENTER, EMBED A MINIMUM OF 4 INCHES INTO GROUND, AND EXTEND BAFFEL BOARD MINIMUM OF 12 INCHES INTO EARTH DIKE.
- 4. USE CLEAN 2 TO 3 INCH STONE OR EQUIVALENT RECYCLED CONCRETE, PLACE WOVEN MONOFILAMENT GEOTEXTILE ON UPSTREAM FACE AND COVER WITH A MINIMUM OF 6 INCHES OF ADDITIONAL STONE.
- · USE NONWOVEN AND WOVEN MONOFILAMENT GEOTEXTILES AS SPECIFIED IN SECTION H-1 MATERIALS.
- 6. SET WEIR CREST OF STONE 6 INCHES LOWER THAN THE TOP OF EARTH DIKE. USE MINIMUM
- LENGTH OF 6 FEET FOR WEIR CREST. REMOVE SEDIMENT WHEN IT HAS ACCUMULATED TO WITHIN 6 INCHES OF WEIR CREST. REPLACE GEOTEXTILE AND STONE FACING WHEN STRUCTURE CEASES TO DRAIN. MAINTAIN LINE, GRADE,
- 3. UPON REMOVAL OF STONE OUTLET STRUCTURE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

MONTGOMERY COUNTY EN-02 EROSION AND SEDIMENT CONTROL NOTES DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND AND DETAILS RECOMMENDED FOR APPROVAL

BOYDS TRANSIT

IMPROVEMENTS

MCDPS-SC/SWM SHEET NO. 10 OF 18

PROFESSIONAL CERTIFICATION. 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._ EXPIRATION DATE:_

WATER MANAGEMENT ADMINISTRATION

Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, Maryland 21231

U.S. DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE

WATER MANAGEMENT ADMINISTRATION

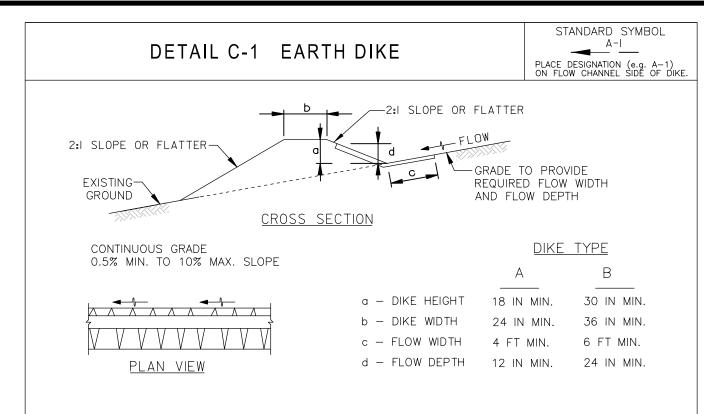
APPROVED Chief, Division of Transportation Engineering Designed by: <u>ABR</u> Drawn by: <u>ABR</u> Checked by: ____JDC___

Chief, Transportation Planning and Design Section

SCALE: NONE Project No. : 32207.003

2 OF 2

JANUARY 2023 SHEET <u>20</u> of 60



FLOW CHANNEL STABILIZATION

A-1 SEED WITH STRAW MULCH AND TACK. (NOT ALLOWED FOR CLEAR WATER DIVERSION.)

A-2/P-2 SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOIL

A-2/B-2 SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOD.

A-3/B-3 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL A MINIMUM OF 7 INCHES AND FLUSH WITH GROUND.

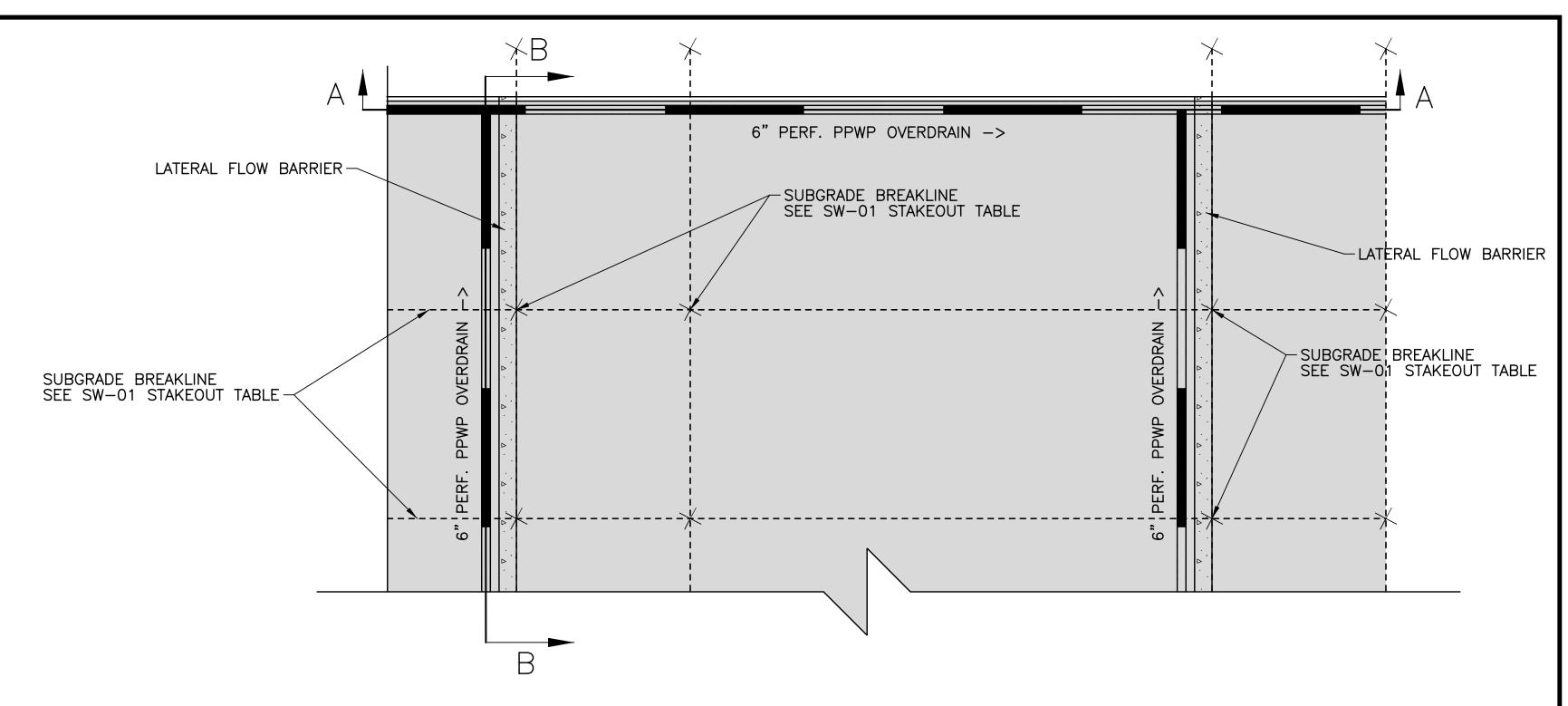
CONSTRUCTION SPECIFICATIONS

- I. REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTHDIKE.
- 2. EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK
- PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.
- 3. COMPACT FILL.
- 4. CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
- 5. PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
- 6. STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION. STABILIZE FLOW CHANNEL FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.
- 7. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP EARTH DIKE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.
- 8. UPON REMOVAL OF EARTH DIKE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

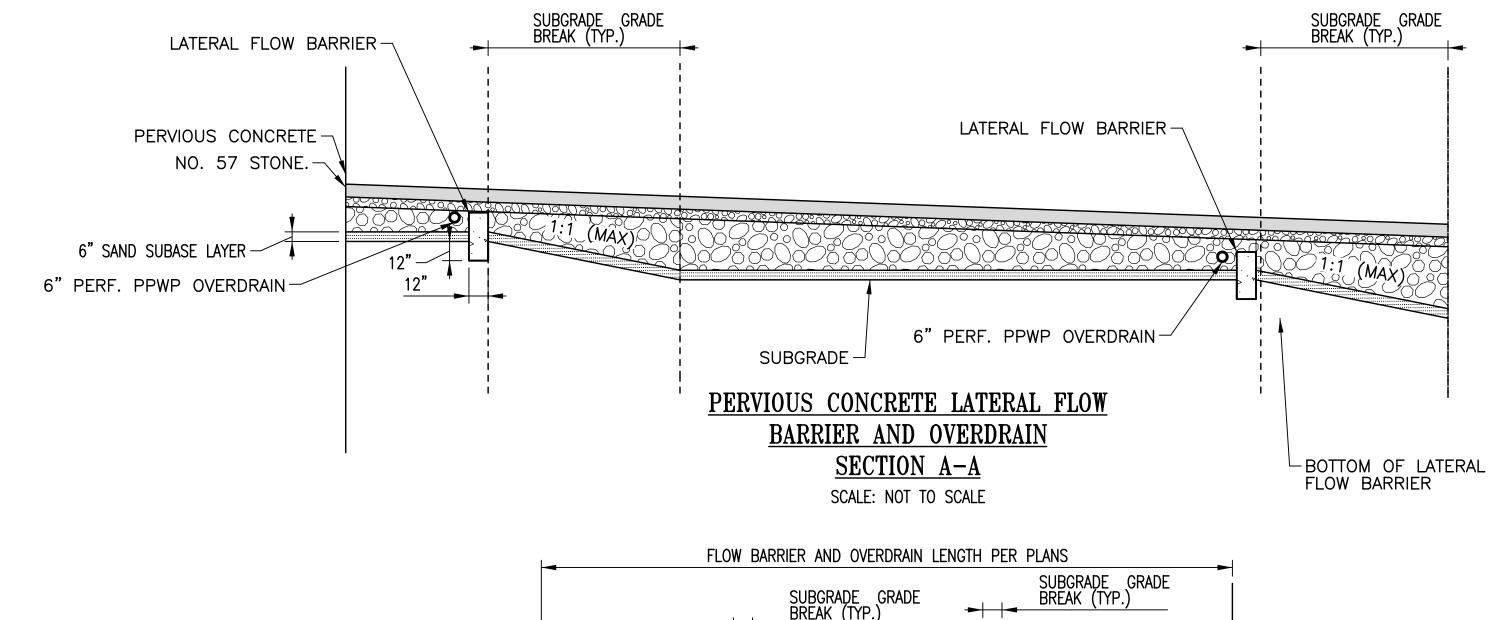
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

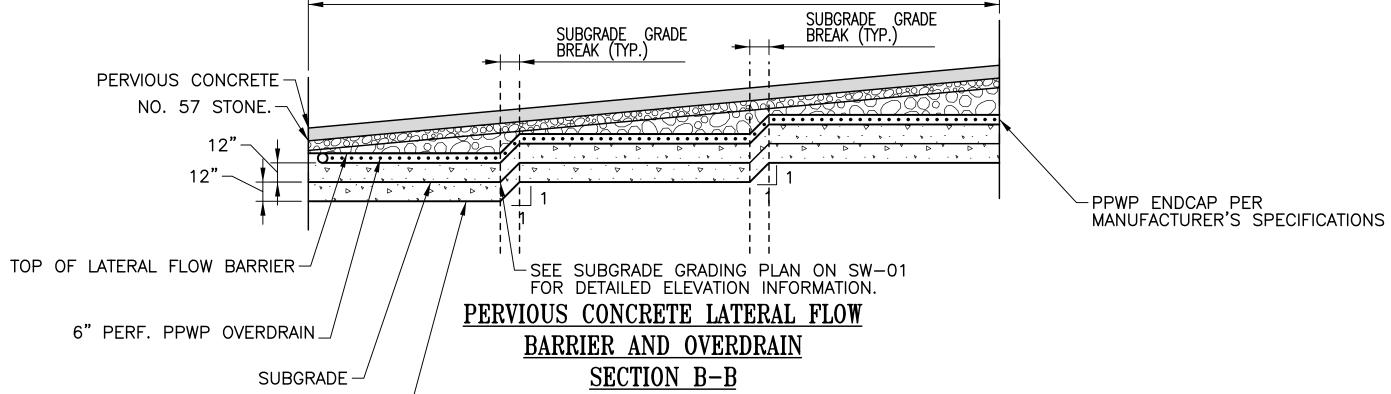
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



PERVIOUS CONCRETE LATERAL FLOW BARRIER AND OVERDRAIN PLAN VIEW SCALE: NOT TO SCALE





SCALE: NOT TO SCALE

LATERAL FLOW BARRIER AND OVERDRAIN NOTES:

- 1. LATERAL FLOW BARRIERS SHALL BE CONSTRUCTRED FROM MIX 3 CONCRETE, CONCRETE MASONRY UNITS (UNITS TO BE FILLED WITH CONCRETE) OR A COMBINATION OF THESE MATERIALS TO FORM AN IMPERVIOUS, SUBGRADE BARRIER TO FLOW MIGRATION ACROSS SUBGRADE. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE FLOW BARRIER T OTHE ENGINEER FOR APPROVAL.
- 2. ALL OVERDRAIN BENDS, FITTINGS AND APPURTENANCES SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND THE CONTRACT SPECIAL PROVISIONS. ALL PENETRATIONS OF THE LATERAL FLOW BARRIER SHALL BE SEALED WITH NON-SHRINK GROUT.
- 3. SEE CONTRACT SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

Whitman, Requardt & Associates, LLP
801 South Caroline Street, Baltimore, Maryland 21231

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section
APPROVED

Chief, Division of Transportation Engineering
Date
SCALE

NO. REVISION
DATE BY Designed by: __ABR__ Drawn by: __ABR__ Checked by: __JDC__ Project

BOTTOM OF LATERAL FLOW BARRIER

EN-03 EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

MCDPS-SC/SWM SHEET NO. 10A OF 18

BOYDS TRANSIT IMPROVEMENTS

 SCALE: NONE
 JANUARY 2023

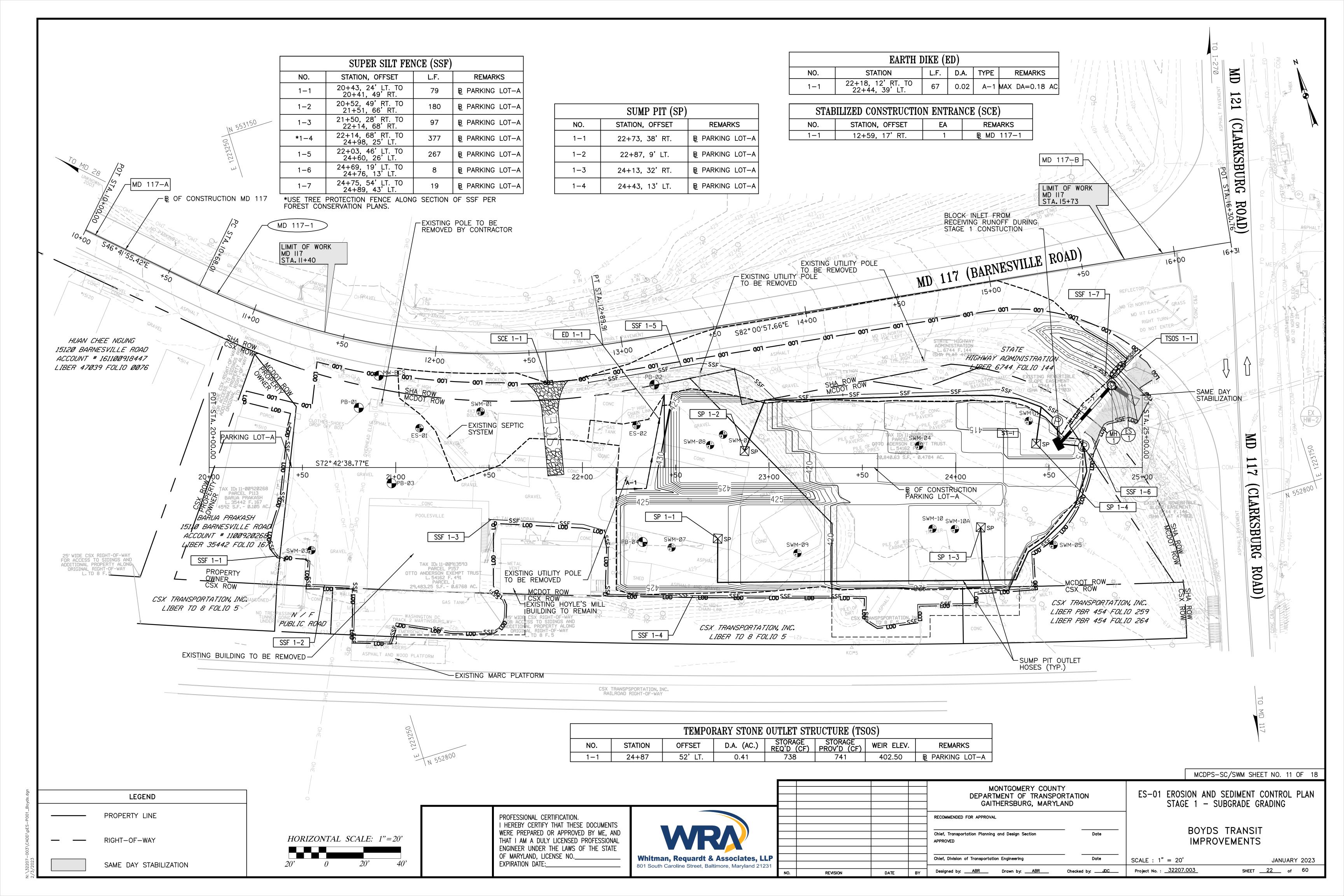
 Project No.: 32207.003
 SHEET 21 of 60

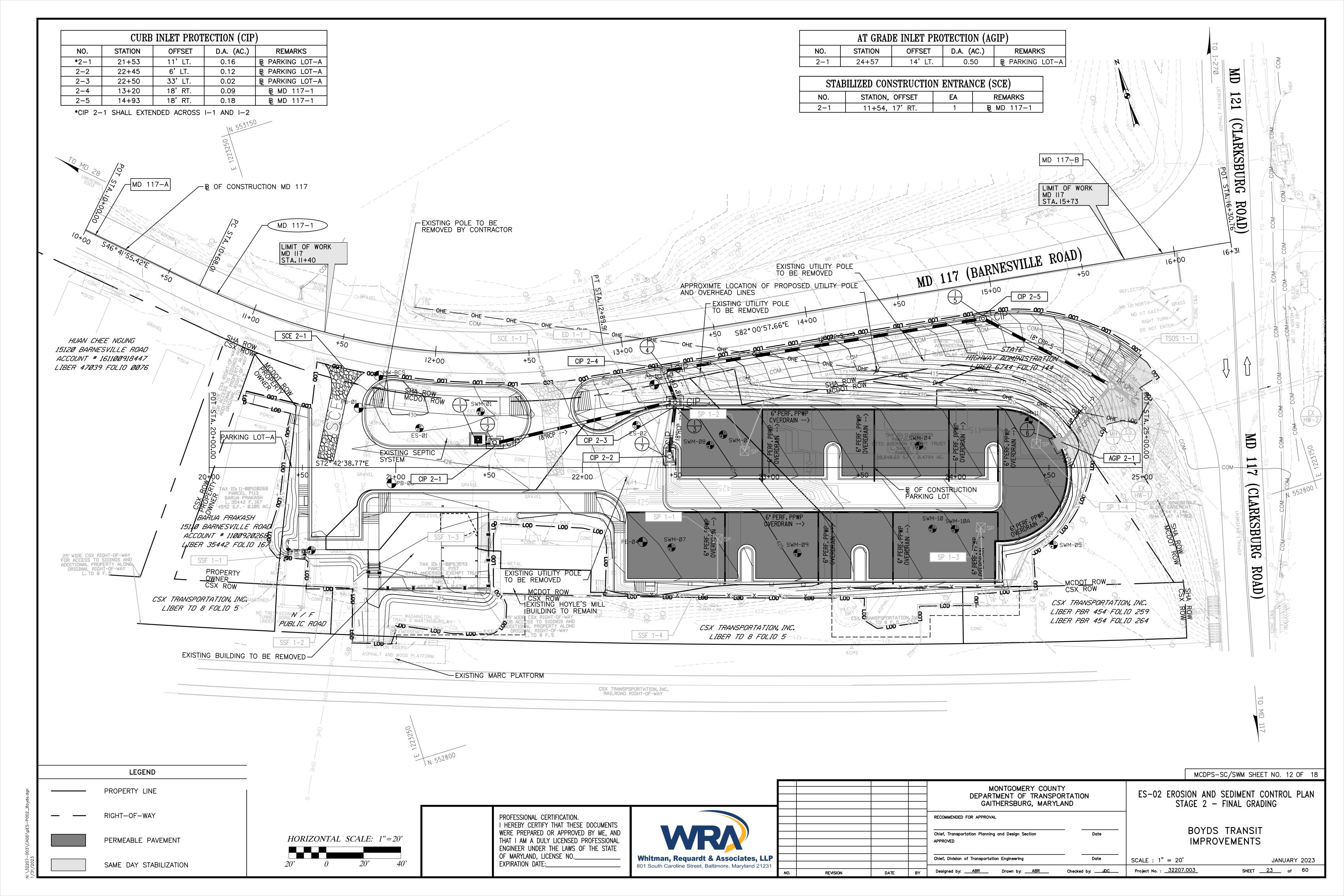
PROFESSIONAL CERTIFICATION.

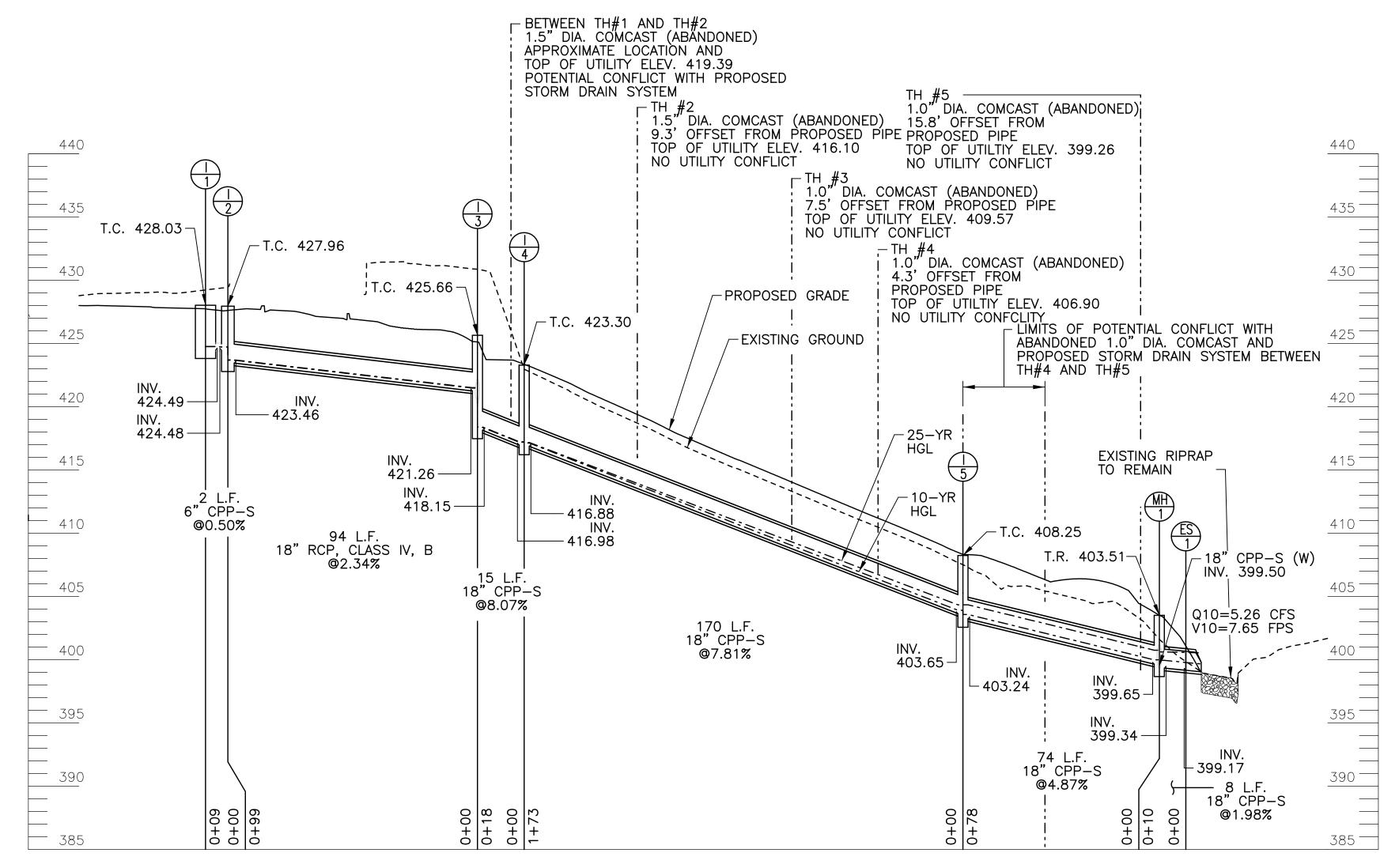
I HEREBY CERTIFY THAT THESE DOCUMENTS
WERE PREPARED OR APPROVED BY ME, AND

THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO._____

EXPIRATION DATE:_







T.C. 426.37

T.C. 426.37

T.C. 425.66

430

18" RCP (W)

1NV. 421.26

18" RCP (N)

1NV. 418.15

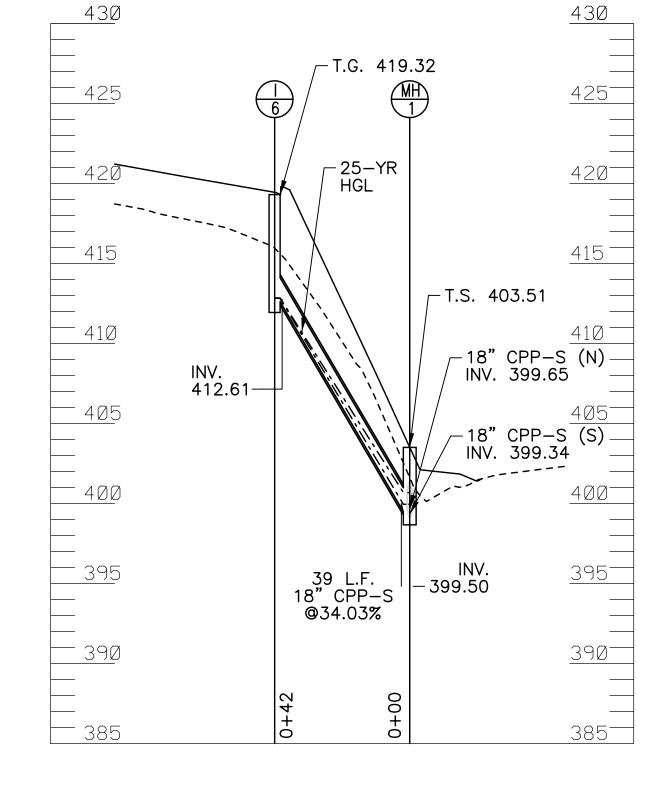
420

1NV. 420.50

18" RCP, CLASS IV, B

410

65.00%



STA 21+44, LT B PARKING LOT-A LT TO STA 15+63, RT B MD 117-1

HORI SCALE: 1"=30'
VERT SCALE: 1"=6'

STA 22+45, LT B PARKING LOT-A LT TO

STA 22+50, LT B PARKING LOT-A

HORI SCALE: 1"=30'
VERT SCALE: 1"=6'

STA 24+57, LT B PARKING LOT-A LT TO

STA 15+63, RT B MD 117-1

HORI SCALE: 1"=30'
VERT SCALE: 1"=6'

Checked by: ____JDC

NOTES:

1. CONTRACTOR SHALL CONFIRM UTILITY STATUS AS ACTIVE OR ABANDONED PRIOR TO EXCAVATION FOR STORM DRAIN INSTALLATION.

ENTS
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IONAL
TATE
_____ White

Whitman, Requardt & Associates, LLP
801 South Caroline Street, Baltimore, Maryland 21231

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section
APPROVED

Chief, Division of Transportation Engineering

Date

Designed by: <u>ABR</u> Drawn by: <u>ABR</u>

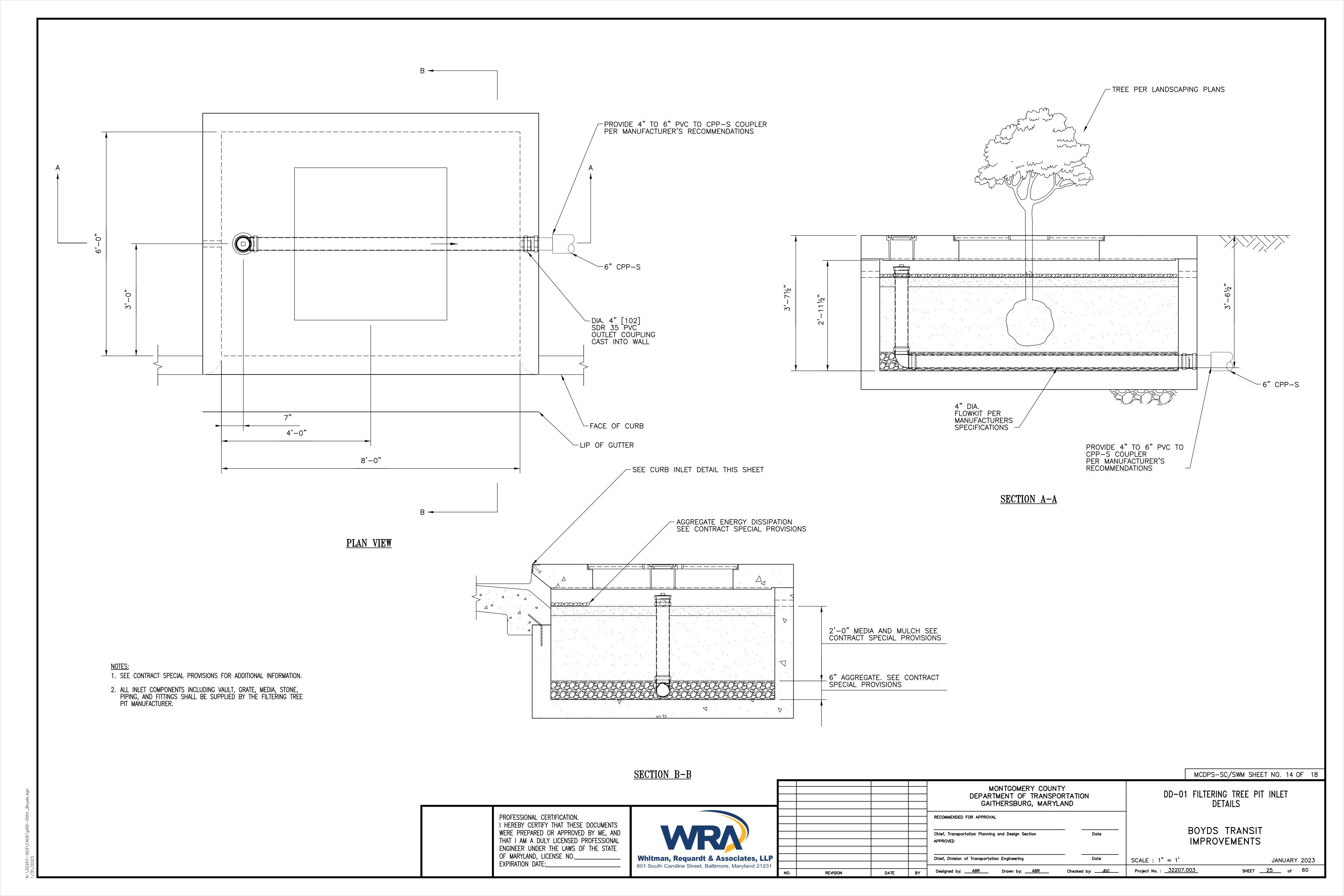
MCDPS-SC/SWM SHEET NO. 13 OF 18

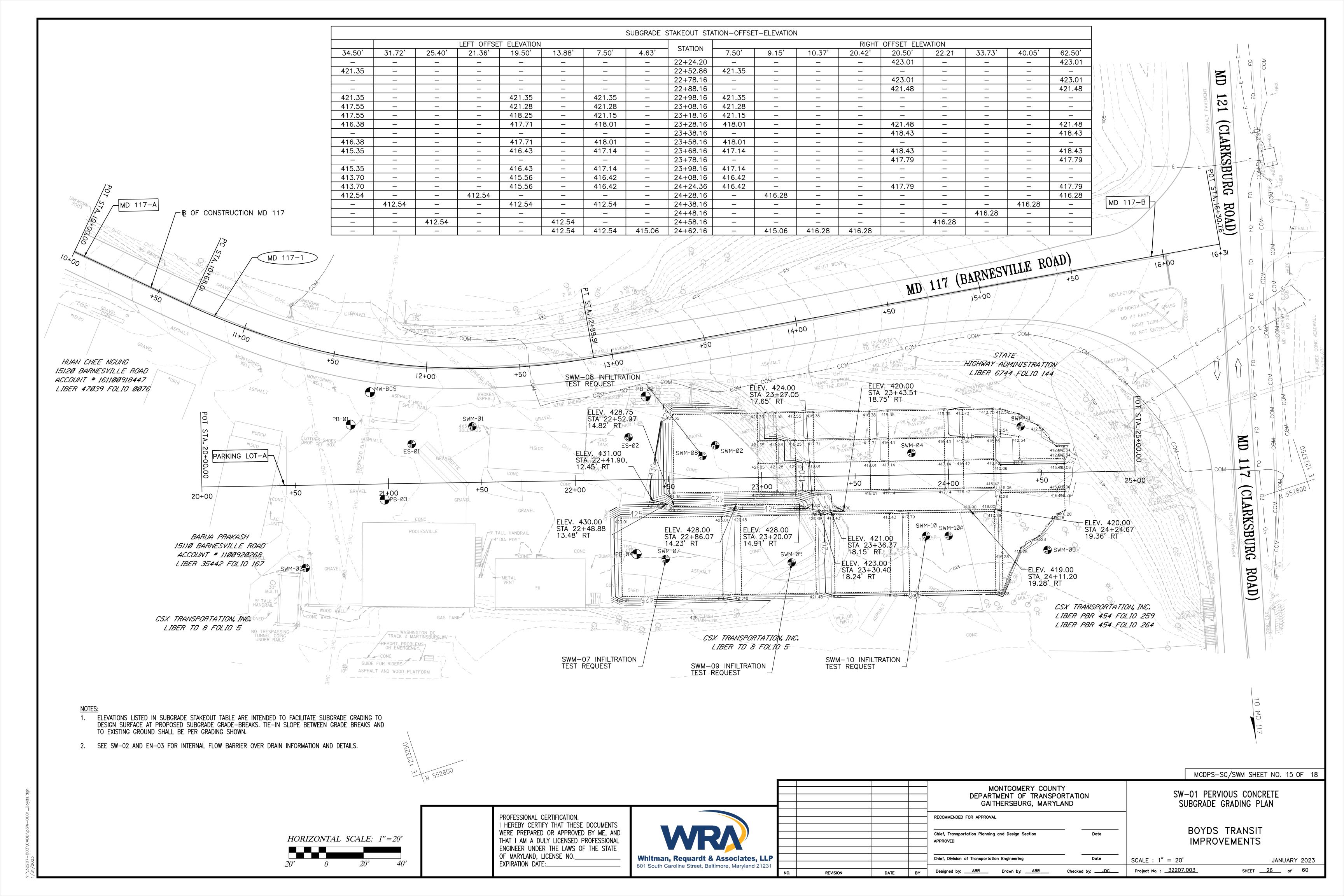
DP-01 DRAINAGE PROFILES

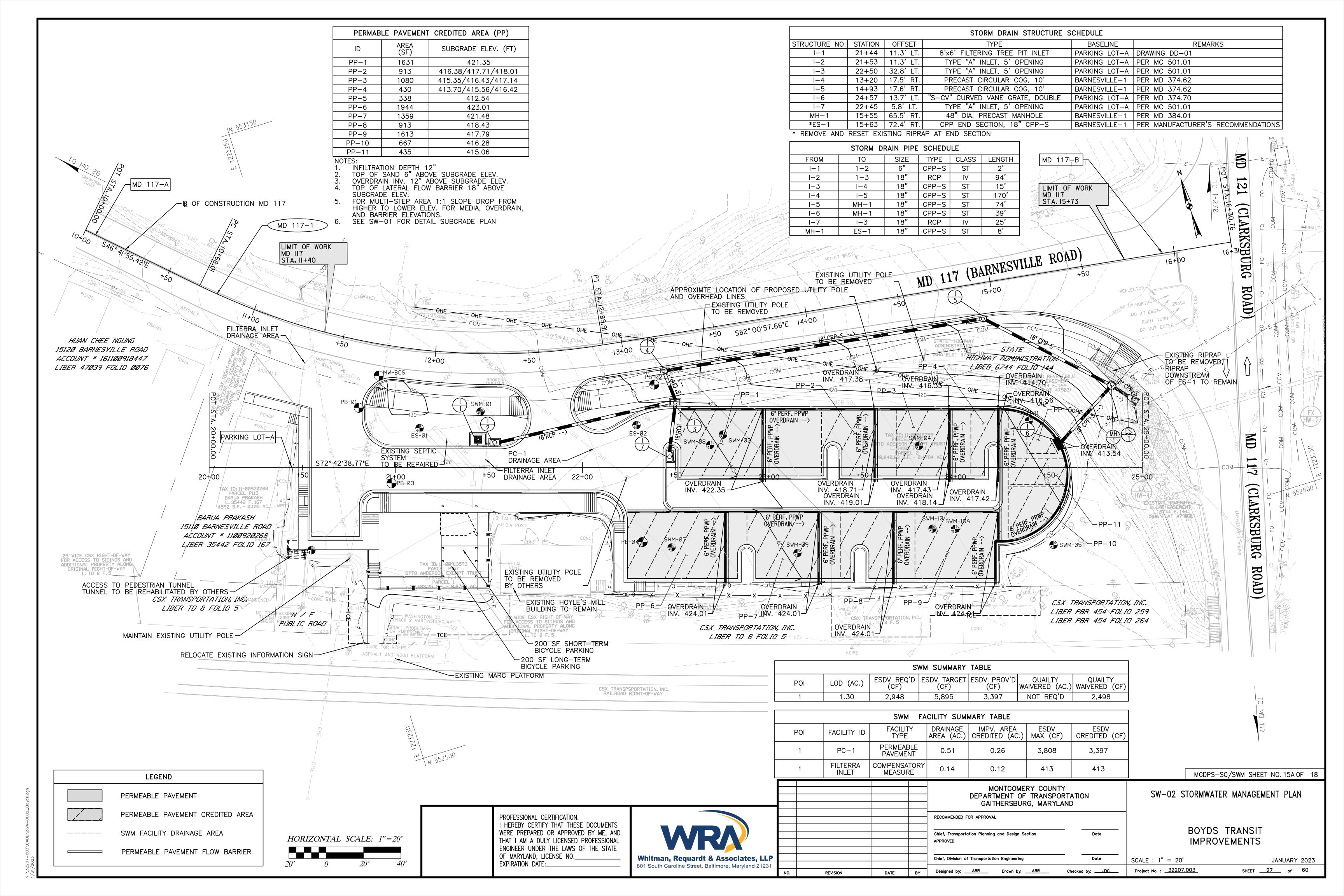
BOYDS TRANSIT IMPROVEMENTS

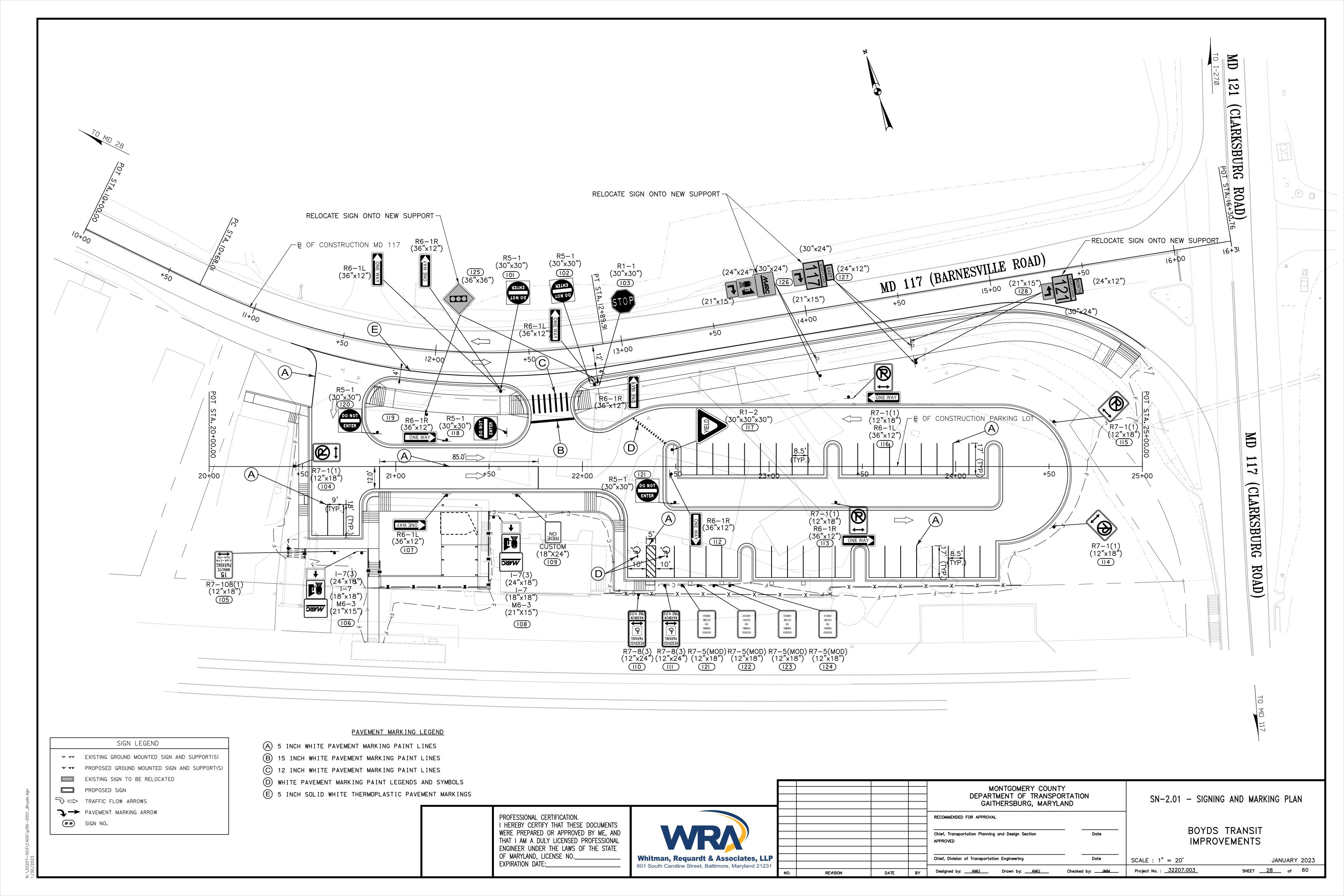
 SCALE: 1" = 30'
 JANUARY 2023

 Project No.: 32207.003
 SHEET 24 of 60









*CODE NUMBERS DESCRIPTION AND UNITS

RELOCATE EXISTING GROUND MOUNTED SIGN
5 INCH WHITE PAVEMENT MARKING PAINT LINES

12 INCH WHITE PAVEMENT MARKING PAINT LINES

15 INCH WHITE PAVEMENT MARKING PAINT LINES

5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS

PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS

SQUARE PERFORATED TUBULAR STEEL SIGN POST AND ANCHOR BASE

SHEET ALUMINUM SIGNS

CODE NUMBERS | DESCRIPTION



					REC
					Chie
					APP
P					
1					
-	NO.	REVISION	DATE	BY	De

DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section
APPROVED

Chief, Division of Transportation Engineering

Date

Designed by: __AMU___ Drawn by: __AMU__ Checked by: __JMM___

MONTGOMERY COUNTY

SN-11 - SIGNING AND MARKING QUANTITIES

BOYDS TRANSIT IMPROVEMENTS

E : 1" = 20'		JAN	JARY	2023	
oct No. : <u>32207.003</u>	SHEET _	29	of	60	

110.	110.		' ' +		 					——
SN-2.01	101	R5-1 (30"x30"), R6-1R (36"x12"), R6-1L (36"x12")	12.25	1						
	102	R5-1 (30"x30"), R6-1R (36"x12"), R6-1L (36"x12")	12.25	1						
	103	R1-1 (30"x30")	6.25	1						
	104	R7-1(1) (12"x18")	1.5	1						
	105	R7-108(1) (12"x18")	1.5	1						
	106	I-7(3) (24"x18"), I-7 (18"x18"), M6-3 (21"x15")	7.4375	1						
	107	R6-1L (36"x12")	3	1						
	108	I−7(3) (24"x18"), I−7 (18"x18"), M6−3 (21"x15")	7.4375	1						
	109	CUSTOM (18"x24")	3	1						
	110	R7-8(3) (12"x24")	2	1						
	111	R7-8(3) (12"x24")	2	1						
	112	R6-1R (36"x12"), R3-5(3) (24"x18")	6	1						
	113	R7-1(1) (12"x18"), R6-1R (36"x12")	4.5	1						
	114	R7-1(1) (12"x18")	1.5	1						
	115	R7-1(1) (12"x18")	1.5	1						
	116	R7-1(1) (12"x18"), R6-1L (36"x12")	9.25	1						
	117	R1-2 (30"x30"x30")	6.25	1						
	118	R5-1 (30"x30"), R6-1R (36"x12"), R6-1L (36"x12")	12.25	1						
	119	R6-1R (36"x12")	3	1						
	120	R5-1 (30"x30")	6.25	1						
	121	R7-5(MOD) (12"x18")	1.5	1						
	122	R7-5(MOD) (12"x18")	1.5	1						
	123	R7-5(MOD) (12"x18")	1.5	1						
	124	R7-5(MOD) (12"x18")	1.5	1						
	125	RELOCATE EX. W3-3 (36"x36")		1	9					
	126	RELOCATE EX. $I-7(3)$ (24"x18"), $I-7$ (24"x24"), $M5-1(R)$ (21"x15")		1	11.1875					
	127	RELOCATE EX. $M3-2$ (24"x12"), $M1-5(1)$ (30"x24"), $M5-1(R)$ (21"x15")		1	9.1875					
	128	RELOCATE EX. $M3-2$ (24"x12"), $M1-5(1)$ (30"x24"), $M5-1(L)$ (21"x15")		1	9.1875					
		PAVEMENT MARKING QUANTITIES				810	25	70	460	35
		PROPOSED QUANTITIES	112.125	28	38.56	810	25	70	460	35

UNIT SF

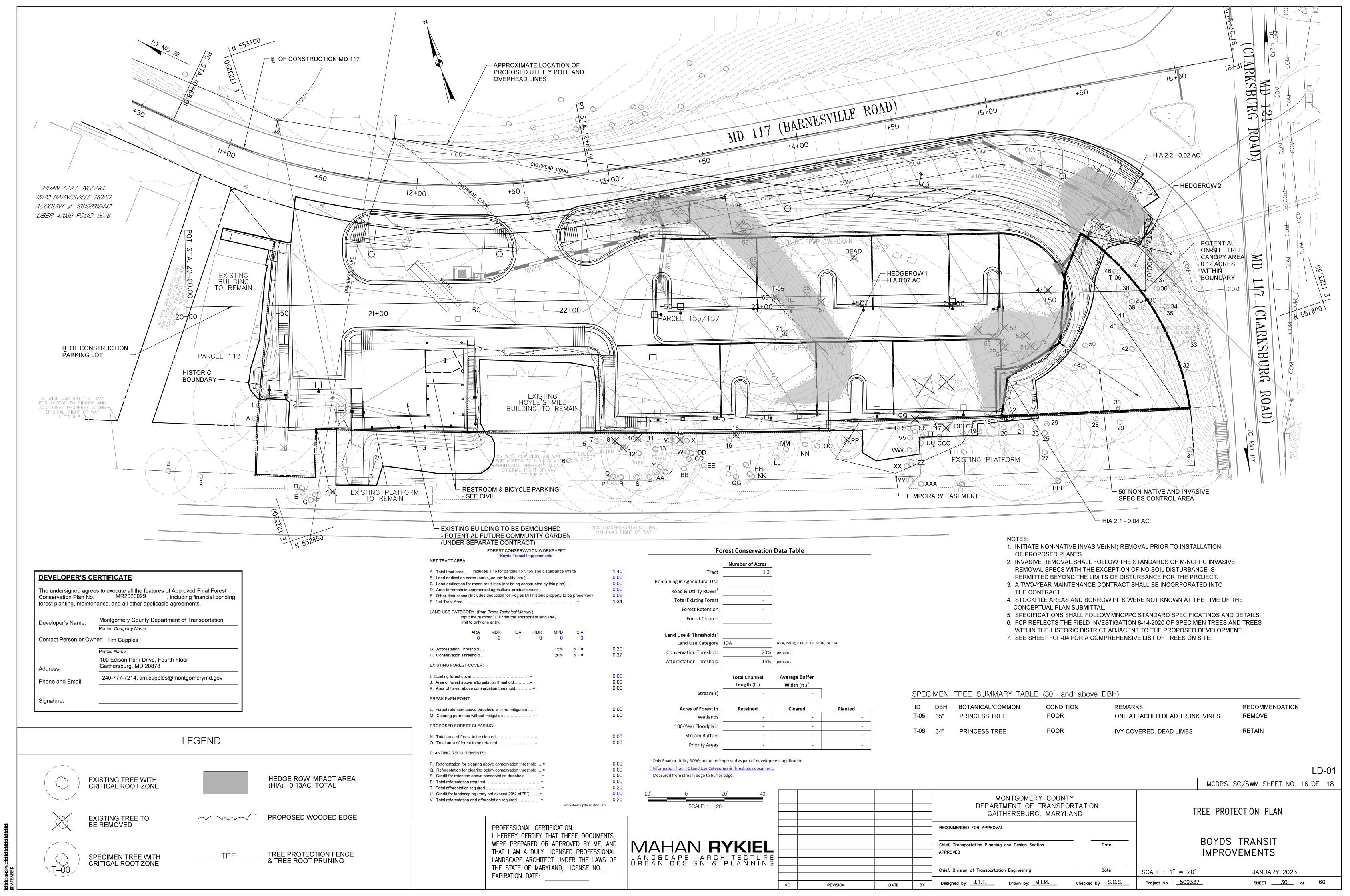
EA SF

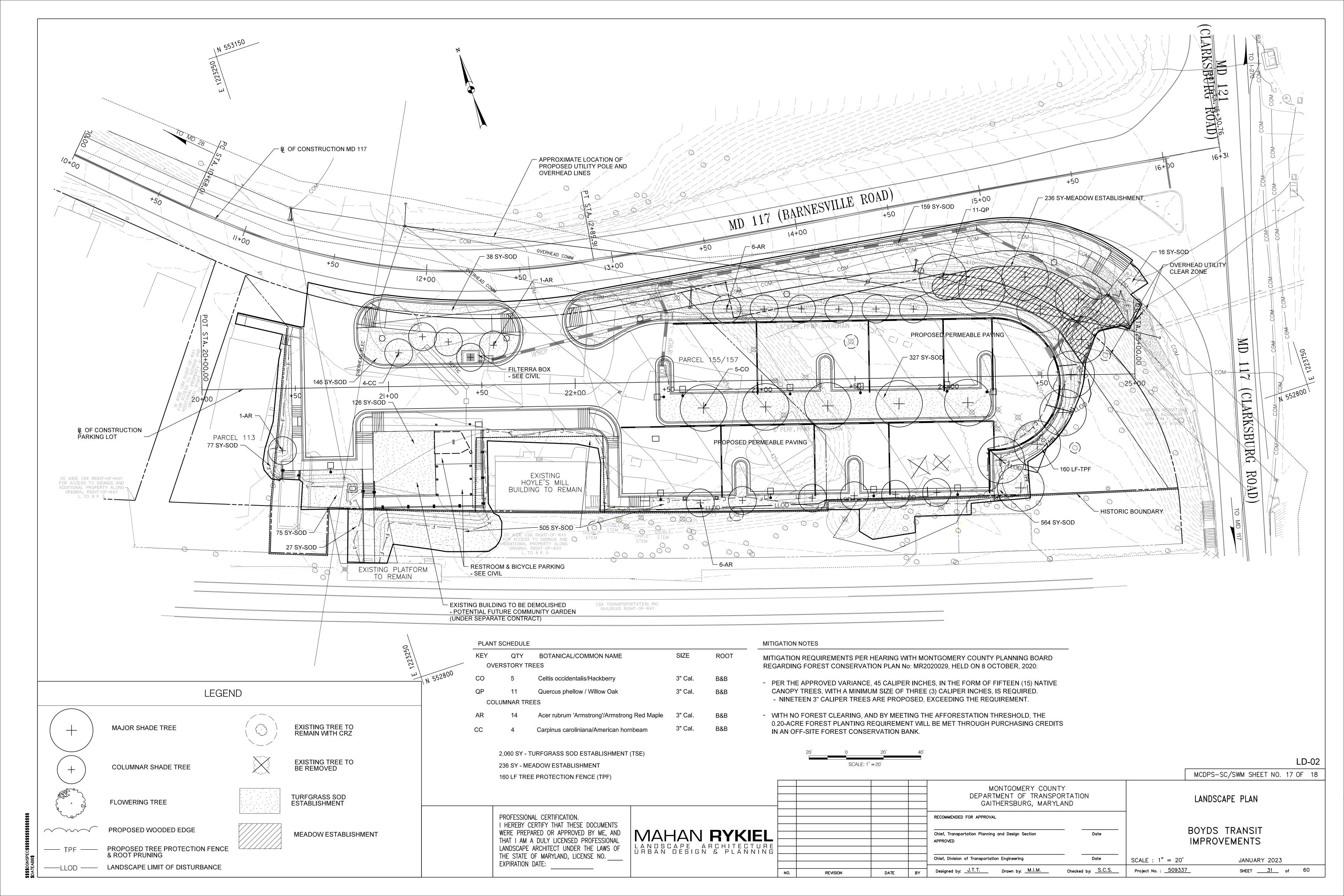
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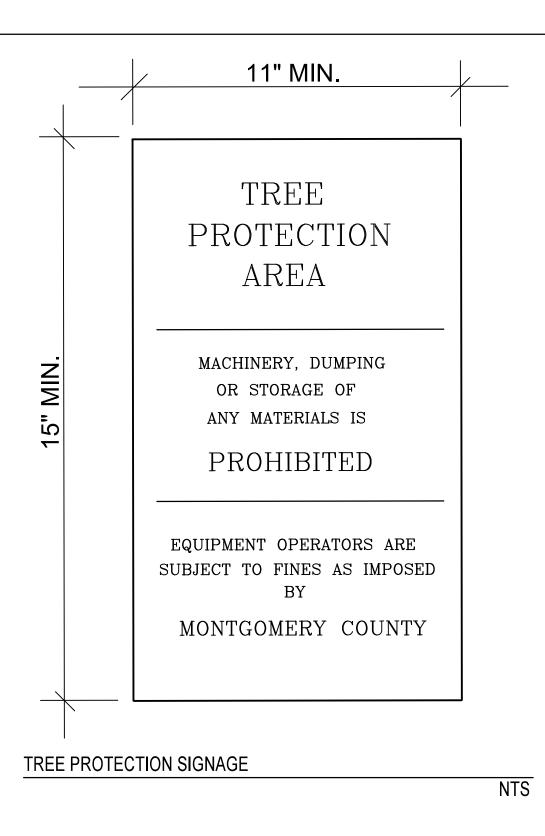
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LF LF

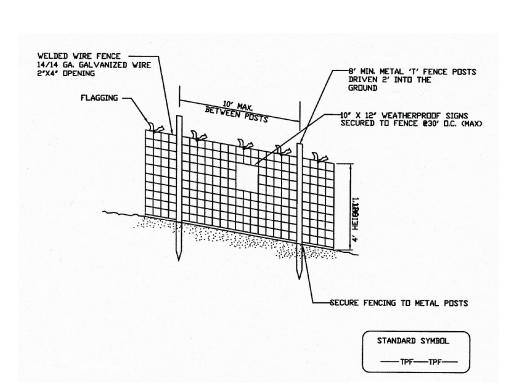
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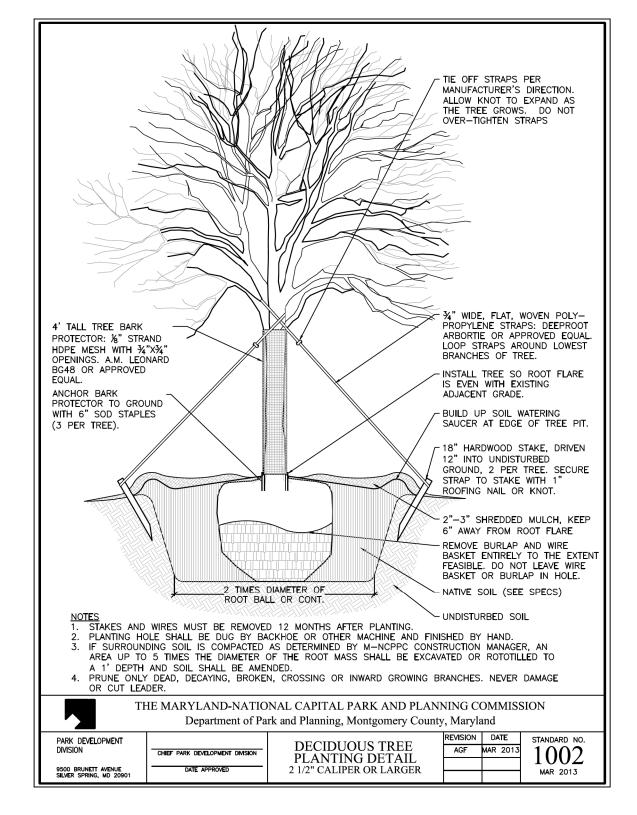
Tree Protection Fence Detail Not to scale

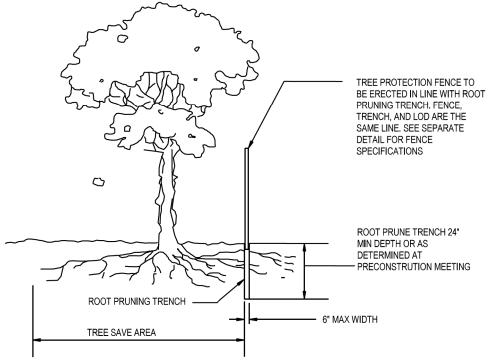


- Practice may be combined with sediment control
- fencing. Location and limits of fencing should be
- coordinated in field with arborist. Boundaries of protection area should be staked
- prior to installing protective device. Root damage should be avoided.
- Protection signage is required.
- Fencing shall be maintained throughout construction.

Montgomery County Planning Department • Market Mr. McPPC MontgomeryPlanning.org







NOTES:

1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRECONSTRUCTION

2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRECONSTRUCTION MEETING AND FLAGGED PRIOR TO TRENCHING.

3. EXACT LOCATION OF TRENCH SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FOREST CONSERVATION (FC) INPECTOR.

4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FC INSPECTOR. 5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE

6. ALL PRUNING MUST BE EXECUTED WITH LOD SHOWN ON PLANS OR AS AUTHORIZED IN

ROOT PRUNING DETAIL

WRITING BY THE FC INSPECTOR.

INSPECTIONS

All field inspections must be requested by the applicant.

Field Inspections must be conducted as follows:

Plans without Planting Requirements

- 1. After the limits of disturbance have been staked and flagged, but before any clearing or
- 2. After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begin and before release of the
- 3. After completion of all construction activities, but before removal of tree protection fencing, to determine the level of compliance with the provision of the forest conservation.

Additional Requirements for Plans with Planting Requirements

- 4. Before the start of any required reforestation and afforestation planting.
- 5. After the required reforestation and afforestation planting has been completed to verify that the planting is acceptable and prior to the start the maintenance period.
- 6. At the end of the maintenance period to determine the level of compliance with the provisions of the planting plan, and if appropriate, release of the performance bond.

PROFESSIONAL CERTIFICATION.

I HEREBY CERTIFY THAT THESE DOCUMENTS

Sequence of Events for Properties Required to Comply With Forest Conservation Plans, Exemptions from Submitting Forest Conservation Plans, and Tree Save Plans

Tree # for FCP

The property owner is responsible for ensuring all tree protection measures are performed in accordance with the approved final forest conservation plan or tree save plan, and as modified in the field by a Planning Department Forest Conservation Inspector. The measures must meet or exceed the most recent standards published by the American National Standards Institute (ANSI

Pre-Construction

- 1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance.
- 2. The property owner must arrange for the meeting and following people should must participate at the pre-construction meeting: the property owner or their representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist/Maryland Licensed Tree Expert (representing owner) that will implement the tree protection measures, The Planning Department Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector. The purpose of this meeting is verify the limits of disturbance and discuss specific tree protection and tree care measures shown on the approved plan. No land disturbance shall begin before tree protection and stress-reduction measures have been implemented and approved by the Planning Department's Forest Conservation Inspector.
 - a. Typical tree protection devices include: i. Chain link fence (four feet high)
 - ii. Super silt fence with wire strung between the support poles (minimum 4 feet high) with high visibility flagging
 - iii. 14 gauge, 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.
 - b. Typical stress reduction measures may include, but are not limited to: i. Root pruning with a root cutter or vibratory plow designed for that purpose. Trenchers are not allowed, unless approved by the Forest
 - Conservation Inspector ii. Crown Reduction or pruning
 - iii. Watering
 - iv. Fertilizing
 - v. Vertical mulching vi. Root aeration systems

Measures not specified on the Forest Conservation Plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist.

3. A Maryland Licensed Tree expert must perform, or directly supervise, the implementation of all stress reduction measures. Documentation of the process (including

Page 1 of 3 February 2017

photographs) may be required by the Forest Conservation Inspector, and will be determined at the pre-construction meeting.

- 4. Temporary tree protection devices must be installed per the approved Forest Conservation Plan, Exemption Plan, or Tree Save Plan and prior to any land disturbance. The Forest Conservation Inspector, in coordination with the DPS Sediment Control Inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan.
- 5. Tree protection fencing must be installed and maintained by the property owner for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. All construction activity within protected tree and forest areas is prohibited. This includes the following activities:
- a. Parking or driving of equipment, machinery or vehicles of any type.
- b. Storage of any construction materials, equipment, stockpiling, fill, debris, etc. c. Dumping of any chemicals (i.e., paint thinner), mortar or concrete remainder,
- trash, garbage, or debris of any kind. d. Felling of trees into a protected area.
- e. Trenching or grading for utilities, irrigation, drainage, etc.
- 6. Forest and tree protection signs must be installed as required by the Forest Conservation Inspector. The signs must be waterproof and wording provided in both English and

During Construction

- 7. Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to tree protection devices must be completed within the timeframe given by the
- 8. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions, and the relative timeframes to restore these areas, will be determined by the Forest Conservation Inspector.

Post-Construction

- 9. After construction is completed, but before tree protection devices have been removed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require
- additional corrective measures, which may include: a. Removal, and possible replacement, of dead, dying, or hazardous trees
- b. Pruning of dead or declining limbs
- c. Soil aeration d. Fertilization
- e. Watering f. Wound repair

Page 2 of 3

February 2017

g. Clean up of retention areas, including trash removal

10. After the final inspection and completion of all corrective measures the Forest Conservation Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both DPS and the Forest Conservation Inspector and cannot be removed without permission of the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

11. Long-term protection measures, including permanent signage, must be installed per the approved plan. Installation will occur at the appropriate time during the construction project. Refer to the approved plan drawing for the long-term protection measures to be

documentation 1	Tree - Common Name Black Locust	DBH(inches) 23.0	Condition Fair	Comments Some Dead Branches. Multi-stem White Mulberry growing at base	Recommendat Retain, Root P
2	Black Walnut Black Walnut	8.0 9.0	Fair Fair	2x Trunk. Dead Branches. Leaning. Bag Worm 2x Trunk. Dead Branches. Leaning. 6"+ Scar on trunk. Bag Worm	Retain Retain
4	Virginia Red Cedar	9.0	Good	3x Trunk. 6,3,3. Trunk adjacent to wall.	Remove
5 6	Black Locust White Mulberry	22.0 9.0	Poor Poor	Significant lean. Dead Branches Significant lean. Dead Branches. MCIS	Retain, Root P Retain
7 8	Black Cherry Princess Tree	11.0 22.0	Poor Poor	Significant lean. Dead Branches Significant lean. Dead Branches. MCIS	Retain, Root P
9	Princess Tree	28.0	Poor	Dead Branches	Remove to ba
10 11	Tree of Heaven Tree of Heaven	13.0 8.0	Poor Poor	3x Trunk. 12,13,10. Trunk adjacent to wall. MCIS Dead Branches. MCIS	Remove to ba
12	Tree of Heaven	10.0	Poor	2x Trunk, 10 and 6, Significant lean, Dead Branches. MCIS	Retain, Root P
13 14	Tree of Heaven Princess Tree	12.0 23.0	Poor Poor	3x Trunk. 12",7",8". Covered with vines. Broken branches Significant lean. Covered with vines. Dead Branches	Retain, Root P Remove to ba
15	Boxelder	22.5	Poor	2x Trunk, 16,13, Significant lean, Dead Branches	Remove to ba
16 17	Boxelder Black Locust	16.0 18.0	Dead Poor	Significant lean. Dead Branches Large cavity at base of trunk. Growing on corner of shed.	Retain, Root P Remove to bas
18 19	Princess Tree Tree of Heaven	17.0 8.0	Poor Poor	Significant lean. Covered with vines. Cut top. Covered with vines. Dead and cut branches. Top Cut.	Retain, Root P
20	Princess Tree	26.0	Poor	Covered with Vines. Dead Branches. MCIS	Retain, Root P
21	Tree of Heaven Tree of Heaven	14.0 9.0	Poor Poor	Covered with vines. Dead Branches. MCIS Significant lean. Covered with vines.	Retain Retain, Root P
23	Tree of Heaven	16.0	Poor	Multi-trunk. Covered with vines. Dead Branches. Large scar on trunk.	Retain
24 25	Tree of Heaven Tree of Heaven	13.0 16.0	Poor Poor	Covered with Vines. Dead Branches. MCIS Multi-trunk. Covered with vines. Dead Branches.	Retain Retain
26 27	Tree of Heaven Tree of Heaven	16.0 14.0	Poor Poor	Covered with vines. Dead and cut branches. Covered with vines. Dead and cut branches.	Retain Retain
28	Black Cherry	10.0	Poor	Covered with Vines. Dead Branches. Significant Lean.	Retain
29 30	Boxelder Eastern Red Cedar	23.5 12.0	Fair/Poor Poor	3x Trunk. 14,10,9. Covered with vines. Dead Branches Covered with Vines. Dead Branches. Insect boring damage	Retain Retain
31	Tree of Heaven	14.0	Poor	Covered with Vines. Dead Branches. MCIS	Retain
32 33	Tree of Heaven Tree of Heaven	8.0 11.5	Poor Poor	Covered with Vines. Dead Branches. MCIS Covered with Vines. Dead Branches. MCIS	Retain Retain
34 35	Tree of Heaven Tree of Heaven	14.0 10.0	Poor Poor	Covered with Vines. Dead Branches. MCIS Covered with Vines. Dead Branches. MCIS	Retain Retain
36	Tree of Heaven	10.0	Poor	Covered with Vines. Dead Branches. MCIS	Retain
37 38	Tree of Heaven Tree of Heaven	7.0 11.0	Poor Poor	Covered with Vines. Dead Branches. MCIS Covered with Vines. Dead Branches. MCIS	Retain Retain
39	Tree of Heaven	10.0	Poor	Covered with Vines. Dead Branches. MCIS Covered with Vines. Dead Branches. MCIS	Retain
40 41	Tree of Heaven Tree of Heaven	6.0 11.0	Poor Poor	Covered with Vines. Dead Branches. MCIS Covered with Vines. Dead Branches. MCIS	Retain Retain
42 43	Tree of Heaven Tree of Heaven	14.0 11.0	Poor Poor	Covered with Vines. Dead Branches. MCIS Covered with Vines. Dead Branches. MCIS	Retain Retain, Root P
44	Tree of Heaven	10.0	Poor	Covered with Vines. Dead Branches. MCIS	Remove
45 46	Tree of Heaven Tree of Heaven	12.0 34.0	Poor Poor	Covered with Vines. Dead Branches. MCIS T-06 Specimen. Covered with Vines. Dead Branches. MCIS	Remove Retain, Root P
47	Eastern Red Cedar	10.0	Fair	Covered with Vines.	Remove
48 49	Princess Tree Boxelder	7.0	Fair/Poor Poor	Covered with vines. Dead Branches. MCIS Covered with Vines. Dead Branches.	Retain, Root P Retain
50 51	Boxelder Boxelder	10.0 16.0	Poor Fair	Covered with Vines. Dead Branches. 2x Trunk, 11 and 10	Retain Remove
52	Boxelder	Dead	Dead	Dead	N/A
53 54	Boxelder White Mulberry	10.0 11.0	Poor Poor	Covered with Vines. Dead Branches. 2x Trunk, 8 and 6. Vine covered. MCIS	Remove Remove
55	Boxelder	10.0	Poor	Covered with Vines. Dead Branches.	Remove
56 57	Boxelder American Elm	20.0 Dead	Poor Dead	Covered with Vines. Dead Branches. Dead	Remove N/A
58 59	Sassafras Sassafras	8.0 8.0	Poor Poor	Vine covered. Dead Branches. 2 Trees adjacent to each other Vine covered. Dead Branches.	Remove Remove
60	Princess Tree	20.5	Poor	2x Trunk, 13 and 14. one dead trunk. MCIS	Remove
61 62	American Elm American Elm	16.0 14.0	Poor Poor	Vine covered. Dead Branches. Vine covered. Dead Branches.	Remove Remove
63	Black Gum	17.0	Poor	3x Trunk. 10,6,8. Covered with vines. Dead Branches	Remove
64 65	Black Gum Black Gum	8.0 12.0	Fair Fair	Some Vines Some Vines	Remove Remove
66	Black Gum	12.0	Fair	Some Vines	Remove
67 68	Black Gum Black Cherry	10.0 12.0	Fair Fair	Some Vines Dead Branches.	Remove Remove
69 70	American Elm Princess Tree	16.0 35.0	Poor Poor	Vine covered. Dead Branches. T5 Specimen. 2x Trunk, 35" live and 30" dead trunk. MCIS	Remove Remove
71	Common Hackberry	7.0	Fair	Some dead branches.	Remove
8/19/2020 Tree # for FCP					
	Tree- Common Name		Condition	Comments Triple stem-7", 8", 9". Branch die back. Growing at base of Black Locust	Datain
A D	White Mulberry Black Locust	9.0 6.0	Fair Good	Some vines around base.	Retain Retain
E F	Black Locust Silver Maple	2.0 1.5	Fair Good	Growing next to wall. Leaning. Main leader cut. Growing next to wall. Under Overhead utility lines	Retain Retain
G	Eastern Red Cedar	1.0	Good	Growing next to wall. Under Overhead utility lines	Retain
P Q	Hackberry Tree of Heaven	2.0 1.5	Poor Poor	Significant lean. Covered with vines. Significant lean. Covered with vines.	Retain Retain
R	Tree of Heaven	3.0	Poor	Significant lean. Covered with vines.	Retain
S T	Silver Maple Silver Maple	1.5 2.0	Fair Poor	Significant lean. Covered with vines. 2x Trunk. Top Cut-off. Vine covered.	Retain Retain
V W	Black Cherry Tree of Heaven	2.0 2.0	Poor Poor	Significant lean. Covered with vines. Cut and dead branches. Growing out of fence. Cut top/branches. Covered with vines.	Retain Retain
Х	Staghorn Sumac	2.0	Poor	Significant lean. Covered with vines. Cut top.	Retain
Z Z	Black Walnut White Mulberry	1.5 1.0	Poor Poor	Covered with vines. Cut branches. Covered with vines. Cut branches.	Retain Retain
AA	Boxelder	1.5	Poor	Covered with vines. Cut branches.	Retain
BB CC	White Mulberry Black Walnut	1.5 2.0	Poor Poor	Covered with vines. Cut branches. Covered with vines. Cut branches.	Retain Retain
DD EE	Staghorn Sumac Black Walnut	2.0 1.5	Poor Poor	Significant lean. Covered with vines. Significant lean. Covered with vines.	Retain Retain
FF	Black Walnut	3.0	Fair	Covered with vines.	Retain
GG HH	Tree of Heaven Black Walnut	1.0	Poor Poor	Cut off top. Adjacent to RR tracks Cut off top. Adjacent to RR tracks.Covered with vines.	Retain Retain
II	White Mulberry	1.0	Poor	Covered with vines. Cut branches.	Retain
KK LL	Tree of Heaven Black Walnut	2.0 3.0	Fair Fair	Some vines in canopy. Some vines in canopy	Retain Retain
MM NN	Black Walnut Black Walnut	3.0 2.5	Poor Poor	Girdling vines on trunk and canopy. Girdling vines on trunk and canopy.	Retain Retain
00	Tree of Heaven	2.0	Fair	Long scar down trunk. Cut	Retain
PP QQ	Black Locust Tree of Heaven	4.0 2.5	Fair Poor	Some Dead Branches. Covered with vines. Dead branches.	Remove Remove
RR	Tree of Heaven	1.5	Fair	Leaning. Some vines in canopy.	Retain
SS TT	Tree of Heaven Tree of Heaven	1.5 1.0	Poor Poor	Covered with vines. Dead branches. Significant lean. Covered with vines.	Retain Retain
UU	Tree of Heaven	4.0	Fair	Some vines in canopy.	Retain
VV WW	Tree of Heaven Black Walnut	5.0 2.5	Poor Fair	Covered with vines. Cut branches. Some vines	Retain Retain
	Black Walnut	1.0 1.5	Fair Fair	Tree of Heaven growing at base	Retain
XX	Black Walnut Black Walnut	2.0	Fair Fair	Some vines in canopy. Some vines in canopy.	Retain Retain
XX YY ZZ	Black Walliut		1	Some vines in canopy.	Retain
YY ZZ AAA	Tree of Heaven	1.0	Fair Poor	Girdling vines on trunk and canony	Retain
YY ZZ AAA CCC DDD	Tree of Heaven Tree of Heaven Tree of Heaven	1.0 3.0	Poor Poor	Girdling vines on trunk and canopy. Girdling vines on trunk and canopy.	Retain Retain
YY ZZ AAA CCC	Tree of Heaven Tree of Heaven	1.0	Poor		

LD-03 18 OF 18

MAHAN RYKIEL				
ANDSCAPE ARCHITECTURE				
IRBAN DESIGN & PLANNING				
	NO.	REVISION	DATE	E

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND	DETAILS AND NOTES

RECOMMENDED FOR APPROVAL **BOYDS TRANSIT**

SCALE: NTS JANUARY 2023

WERE PREPARED OR APPROVED BY ME, AND Chief, Transportation Planning and Design Section **IMPROVEMENTS** THAT I AM A DULY LICENSED PROFESSIONAL APPROVED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. Chief, Division of Transportation Engineering EXPIRATION DATE: SHEET <u>32</u> of 52 Checked by: S.C.S. Project No. : <u>509337</u> Drawn by: M.I.M.

FEX

FEC

FIRE T

FIN

FTG

GALV

GEN

GMU GRD

GYPB

GYPBS

HDW

HTR

LOC LOCK

AIR CONDITIONING (CONDITIONER)

AMERICANS WITH DISABILITÍES ACT

ACOUSTICAL PANEL CEILING (LAY-IN)

BULLETIN BOARD (CLASS COVERED)

ACOUSTICAL TILE CEILING (CONCEALED SUSPENSION)

ACCESS DOOR (OR PANEL)

ABOVE EXISTING SLAB

ABOVE FINISHED FLOOR

ACOUSTICAL WALL PANEL

BACKER ROD AND SEALANT

CENTER TO CENTER

CHALK BOARD

CARPET TILE

BOTTOM OF CURB

AIR HANDLING UNIT

ACCESS FLOOR

ADDENDUM

ALTERNATE

ALUMINUM

ASBESTOS

BENCH

BETWEEN

BUILDING

BOTTOM

CONDUIT

CABINET

CEMENT

CERAMIC

CAST IRON

CORNER GUARD

CEILING HEIGHT

CONTROL JOINT

CLEAR OPENING

CORRUGATED METAL PIPE

CONCRETE MASONRY UNIT

CHLOROSULFONATED POLYETHYLENE ELASTOMER

CENTERLINE

CLOSET

CEILING

COLUMN

COMPACTED

CONSTRUCTION

CONTINUOUS

CONVECTOR

COLD ROLLED

COUNTERSUNK

CERAMIC TILE

COLD WATER

CONNECT TO EXISTING

DRINKING FOUNTAIN

COUNTER

DOUBLE

DEGREE

DETAIL

DOWN

DOOR

EAST

EACH

DEMOLITION

DIAMETER

DIRECTORY

DOWNSPOUT

EACH FACE

DRAWING

DOOR OPENING

CONCRETE

APPROXIMATE

ARCHITECTURAL

ADJACENT

AHU

ALUM

APPROX

ARCH

ASB

BD

BEN

BETW BLDG

CAB CARP

CARPT

CEM

CER

CLOS

CLG

CLR

CMP

CMU

COL

COMP

CONC

CONT

CONV

CSK

CSPE

CTR

DEMO

ELEV

EPB EPDM

EPS

EPX

EQUIP EST

ΕM

CW

CONSTR

BM

FILLER FAN COIL UNIT FLOOR DRAIN OR FIRE DAMPER FOLDING DOOR (WOOD OR FABRIC) FIRE EXTINGUISHER WALL MOUNT W/O CABINET FIRE EXTINGUISHER CABINET FLAT HEAD FIRE TREATED

FINISH OR FINISHED FIXTURE FLASHING FULL LENGTH MIRROR FLOOR FIRE RATED FIBER-REINFORCED COATING PTD FOLDING SHELF PTN FOLDING SHOWER SEAT

QTY

RD

REBAR REINF RESF REQ REQ'D

RM

R0

RWR

SCH SCR

SHT SIM

SND

SQ SS SSM STAT

STL STRUCT

SUSP SWR SYS

UNO UR

FOOT OR FEET FABRIC-WRAPPED PANEL (FABRICATED; TACKABLE; ACOUSTICAL PANEL)

GALVANIZED GRAB BAR GENERAL GLASS UNIT MASONRY (GLASS BLOCK) GLAZED MASONRY UNIT GROUND GYPSUM PLASTER

GYPSUM VENEER PLASTER GYPSUM BOARD (WALL OR CEILING) GYPSUM BOARD SHAFT-WALL ASSEMBLY

HORIZONTAL BLIND HARDWARE HOLLOW METAL HORIZONTAL HIGH POINT HOUR

HEIGHT HEATER HEATING. VENTILATING AND AIR CONDITIONING

HOT WATER INSIDE DIAMETER INCH INSULATION

INTERIOR LAVATORY

LINOLEUM FLOOR COVERING LONG LEG VERTICAL LOCATION LOCKER

LOW POINT LIGHT LIGHTING LOUVER MIRROR OR MEN

MACHINE MASONRY MATERIAL MAXIMUM

MEDICINE CABINET MEDIUM DENSITY FIBERBOARD MFB MINERAL FIBER BLANKET MECHANICAL METAL MANUFACTURER MANHOLE

MOUNTED

METAL

NORTH

EXTERIOR FINISH SYSTEM EXTERIOR INSULATION AND FINISH SYSTEM MIN MINIMUM EXPANSION JOINT MISCELLANEOUS ELEVATION ELECTRIC OR ELECTRICAL MASONRY OPENING METAL PANEL MOP RACK

ELEVATOR ENTRY MAT ETHYLENE PROPYLENE-BASED (SINGLE PLY ROOFING) MTD ELECTRIC PANEL BOX ETHYLENE-PROPYLENE-DIENE MEMBRANE EXPANDED POLYSTYRENE

NOT APPLICABLE EPOXY SANITARY NAPKIN DISPENSER EQUAL NOT IN CONTRACT **EQUIPMENT** NO NUMBER ESTIMATE NOM NTS NOMINAL ELECTRIC UNIT HEATER NOT TO SCALE

OPERABLE PANEL PARTITION (HUNG FROM OVERHEAD TRACK) OPENING **OPPOSITE** OUNCE PAVER TILE PLASTIC FABRICATION PLATE PLASTIC LAMINATE PLASTER PREFABRICATED

PRESSURE TREATED PAPER TOWEL DISPENSER PARTITION PPOLYVINYL CHLORIDE QUARRY TILE QUANTITY

RESILIENT WALL BASE AND ACCESSORIES (VINYL

RESILIENT FLOORING (VINYL; RUBBER; VINYL

SPECIAL COATING (OTHER THAN PAINT SYSTEMS)

SECTIONAL OVERHEAD DOOR (STEEL; ALUMINUM;

BASE; RUBBER BASE; TREADS; NOSING; EDGINGS)

RISER OR RADIUS

REINFORCING BAR

REQUIRED

REQUIRED

REVISION

ROBE HOOK

ROOF VENT

SHEET

SIMILAR

STEEL JOIST

SPECIFICATION

STAND PIPE

SQUARE

STATIONARY

SUSPENDED

TOWEL BAR

TOP & BOTTOM

TOP OF CURB

TOP OF STEEL

TOP OF WALL

TELEPHONE

TERRAZZO

THICK

TREAD

TYPICAL

TOP OF

TONGUE & GROOVE

STEEL

ROUGH OPENING

REMOVE EXISTING

SILL, SOUTH OR SINGLE

SHOWER CURTAIN ROD

STRUCTURAL FACING TILE

SANITARY NAPKIN DISPENSER

STAINLESS STEEL OR SERVICE SINK

SURFACE-MOUNTED WASTE RECEPTACLE

PLASTIC PANEL)

SOLID SURFACING MATERIAL

STRUCTURAL OR STRUCTURE

TOILET SEAT COVER DISPENSER

TOILET PARTITION (WATER CLOSET; URINAL;

SCHEDULE OR SCHEDULED

SOAP DISPENSER OR STORM DRAIN

SQUARE FOOT OR SQUARE FEET

RETURN

RESINOUS FLOORING

REINFORCED CONCRETE PIPE

REINFORCED OR REINFORCING

COMPOSITION; SHEET FLOORING)

RECESSED WASTE RECEPTACLE

ROOF DRAIN OR ROUND

VISUAL DISPLAY BOARD (HINGED CONFERENCE UNIT)

VESTIBULE VERIFY IN FIELD VAPOR BARRIER VERTICAL STANDPIPE WOMEN, WIDTH, WEST OR WOVEN

WATER CLOSET OR WALL COVERING (VINYL OR TEXTILE WALL COVERING; WALL PAPER) WEEP HOLE WHITE WINDOW OPENING WATERPROOF OR WORKING POINT

WATER RESISTANT OR WASTE RECEPTACLE WEIGHT WOVEN WIRE FABRIC YEAR

VERTICAL BLIND

VERTICAL

YD

LEGEND

CONCRETE MASONRY UNITS

STRUCTURAL CLAY UNITS

GYPSUM BOARD PARTITIONS

WOOD-FINISH GRADE

RIGID WALL/PERIMETER INSULATION

WOOD BLOCKING

RIGID ROOF INSULATION

BATT INSULATION

CONCRETE

POROUS FILL

DOOR NUMBER SYMBOL



LOUVER NUMBER SYMBOL



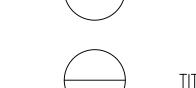
WINDOW NUMBER SYMBOL

ROOM NUMBER SYMBOL

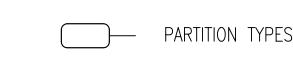




WALL/BUILDING SECTION SYMBOL



TITLE AND DETAIL REFERENCE SYMBOL



DEMOLITION KEY NOTES



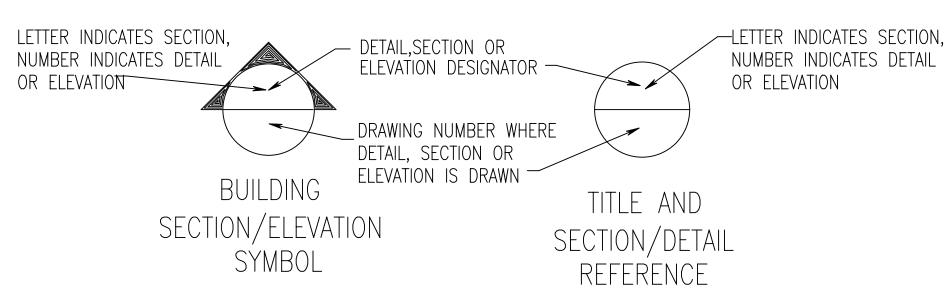




NORTH ARROW (CONSTRUCTION NORTH)

FIRE EXTINGUISHER -WALL MOUNT W/O CABINET

FIRE EXTINGUISHER AND CABINET



UNIT UNLESS OTHERWISE NOTED

SHOWER: SCREEN)

TOILET PAPÉR DISPENSER

PROFESSIONAL CERTIFICATION. 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.__ EXPIRATION DATE:__



				MONTOOMEDY COM				
				MONTGOMERY COU				
				DEPARTMENT OF TRANS				
				GAITHERSBURG, MA				
				DECOMMENDED FOR ADDROVAL				
				RECOMMENDED FOR APPROVAL				
				Chief, Transportation Planning and Design Section				
				APPROVED				
				Chief, Division of Transportation Engineering				
NO.	REVISION	DATE	BY	Designed by: <u>WRA</u> Drawn by: <u>KMR</u>				

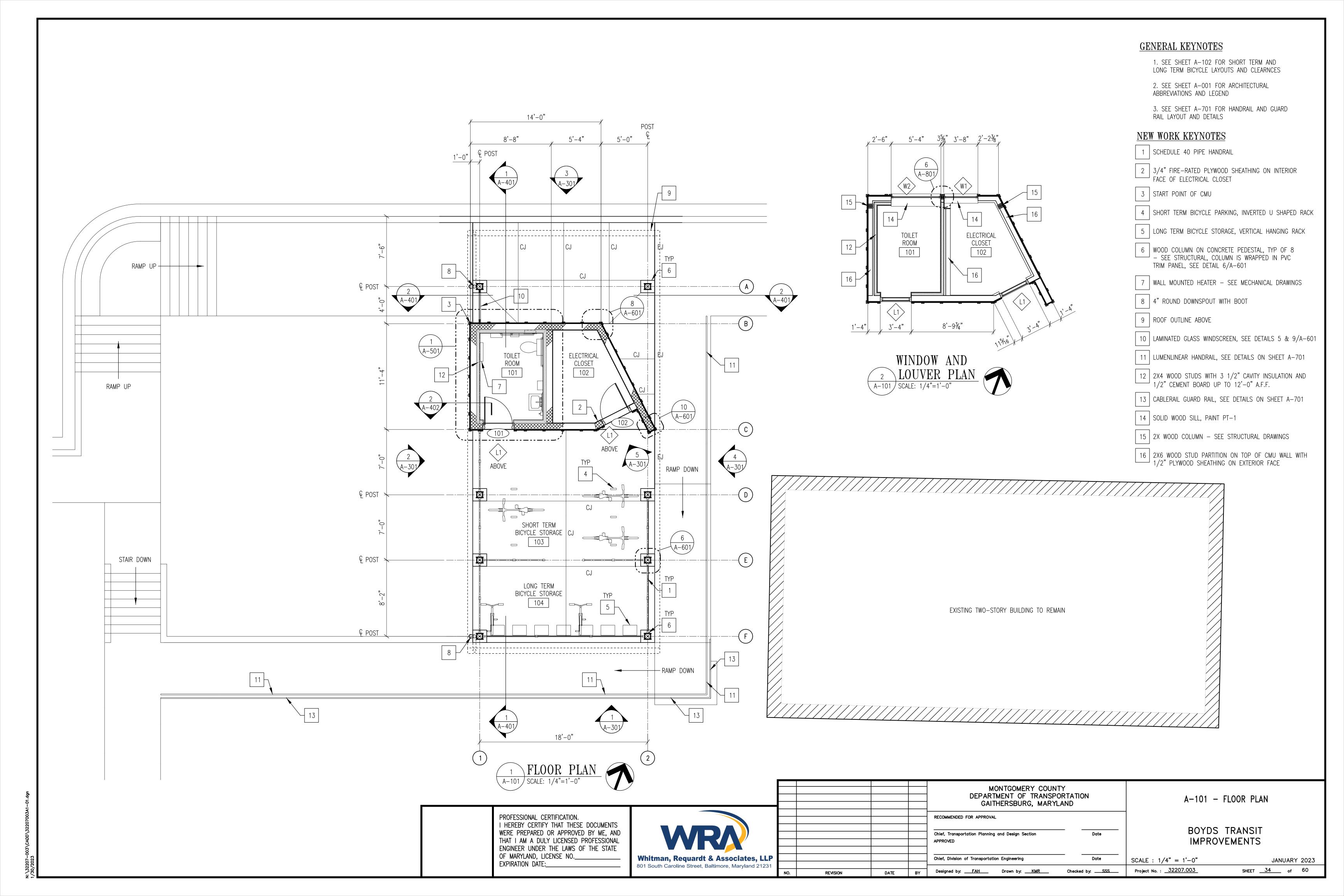
MONTGOMERY COUNTY A-001 - ARCHITECTURAL DEPARTMENT OF TRANSPORTATION ABBREVIATIONS & LEGEND GAITHERSBURG, MARYLAND NDED FOR APPROVAL

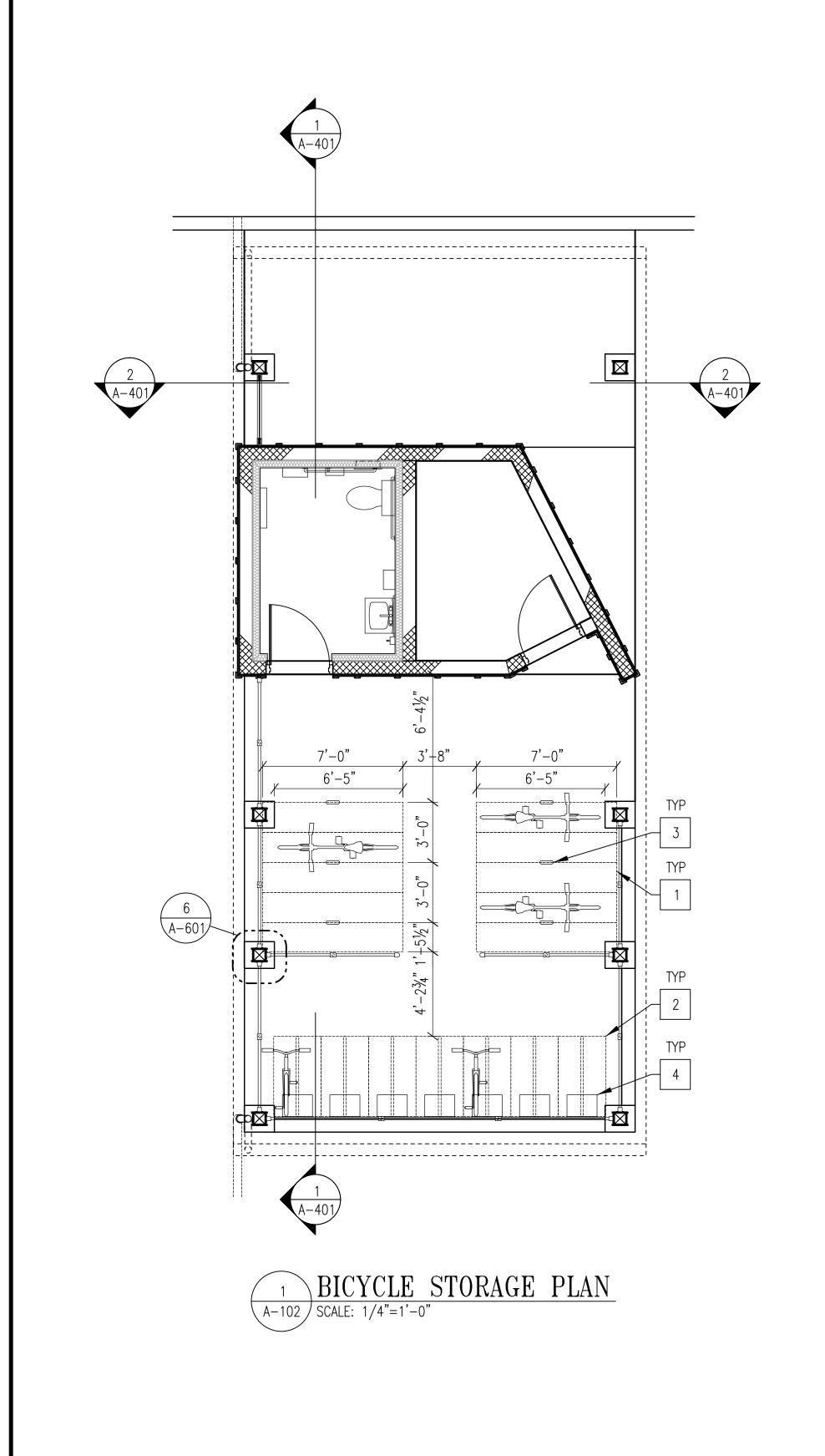
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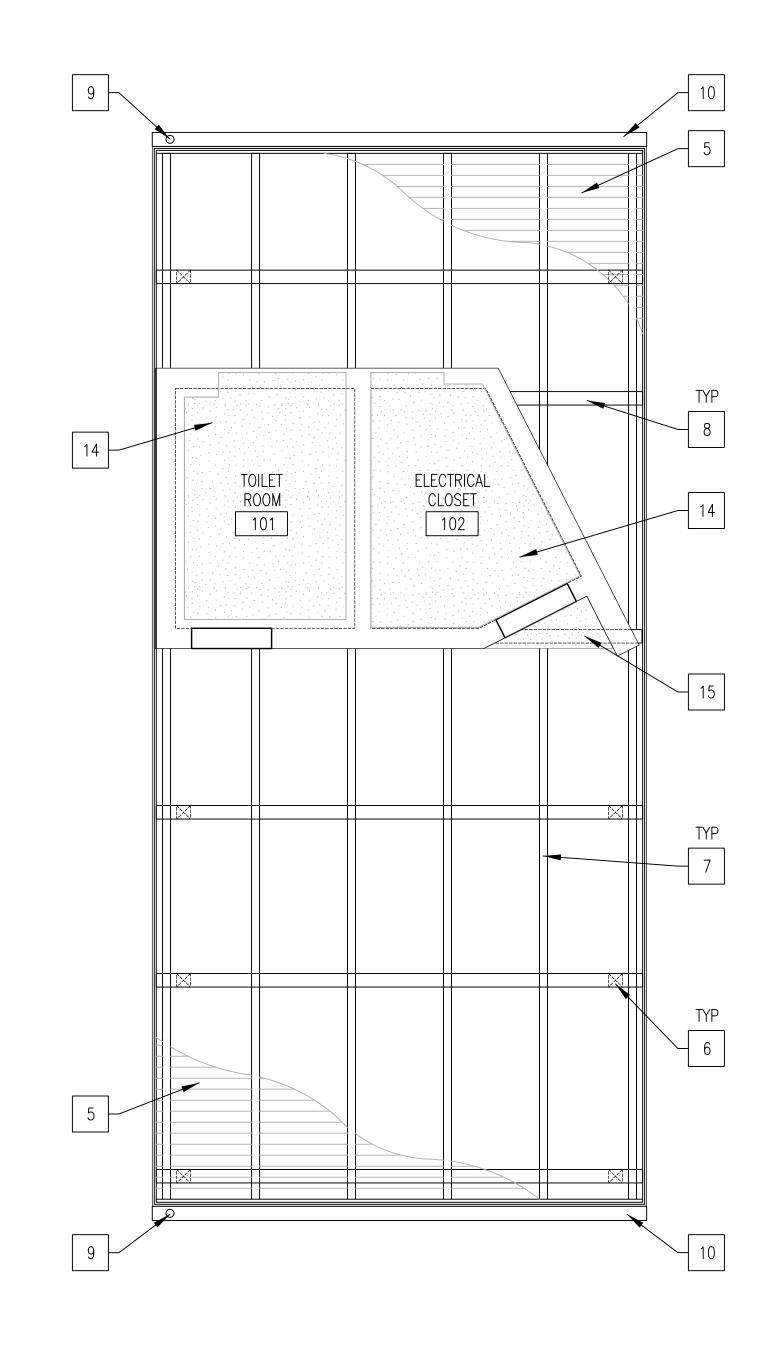
SYMBOL

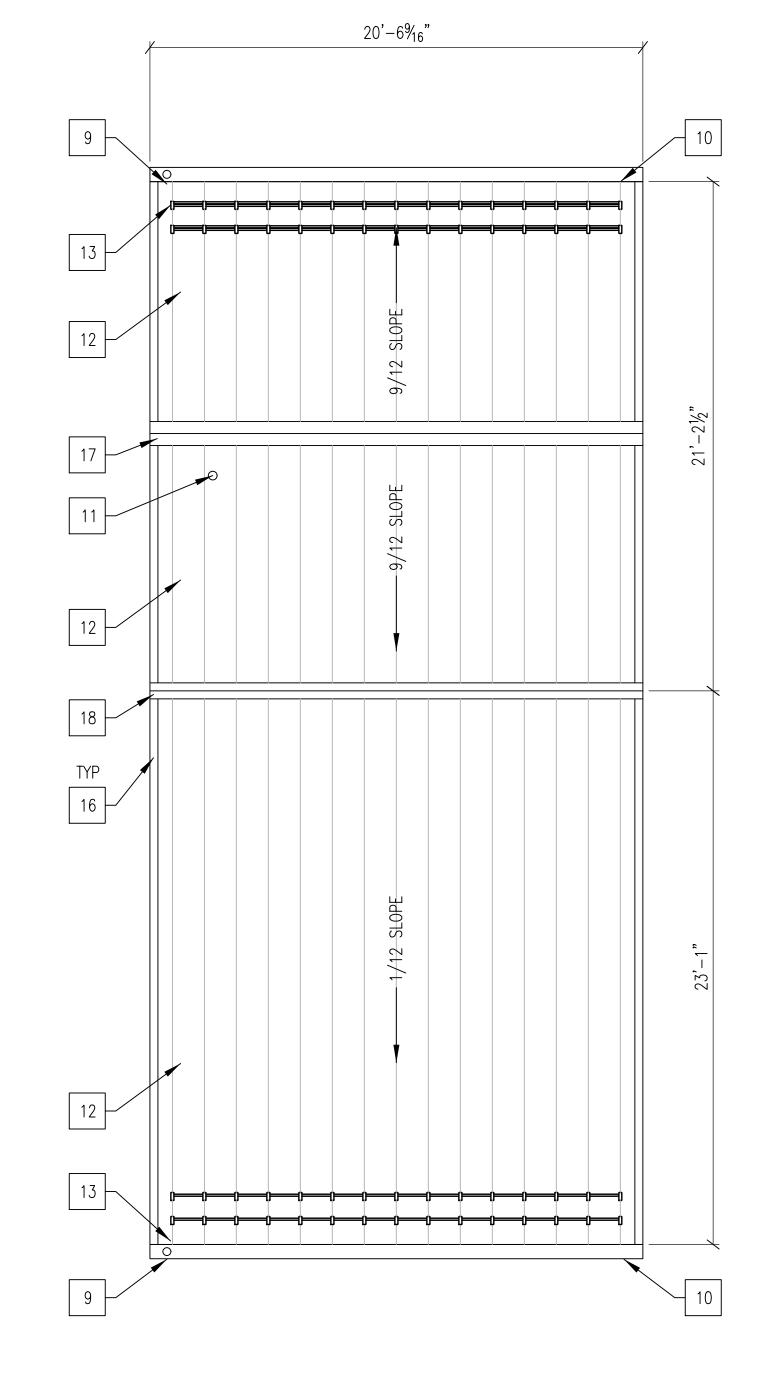
BOYDS TRANSIT IMPROVEMENTS

SCALE: NO SCALE JANUARY 2023 Project No. : 32207.003 SHEET <u>33</u> of 60









3 ROOF PLAN SCALE: 1/4"=1'-0"

GENERAL KEYNOTES

1. SHORT TERM BICYCLE PARKING = 10 LONG TERM BICYCLE PARKING = 14 TOTAL BICYCLE PARKING = 24

NEW WORK KEYNOTES

- 1 OUTLINE OF BICYCLE CLEARANCE, 7'-0" x 1'-6"
- 2 OUTLINE OF BICYCLE CLEARANCE, 4'-0" X 1'-3"
- 3 SHORT TERM BICYCLE PARKING, INVERTED U SHAPED RACK
- 4 LONG TERM BICYCLE STORAGE, VERTICAL HANGING RACK
- 5 EXPOSED WOOD DECK
- 6 WOOD COLUMN BELOW GLULAM BEAM
- 7 EXPOSED WOOD RAFTERS SEE STRUCTURAL DRAWINGS
- 8 WOOD GLULAM BEAM SEE STRUCTURAL DRAWINGS
- 9 4" ROUND DOWNSPOUT
- 10 7" HALF ROUND GUTTER
- 11 PLUMBING VENT SEE PLUMBING DRAWINGS
- 12 STANDING SEAM METAL ROOF, 16" O.C.
- 13 SNOW/ICE GUARD RAIL
- 14 GYPSUM BOARD CEILING
- 15 EXTERIOR GRADE GYPSUM BOARD SOFFITT
- 16 METAL ROOF EDGE TRIM
- 17 METAL RIDGE CAP
- 18 METAL FLASHING AT VALLEY

PROFESSIONAL CERTIFICATION.

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.______

EXPIRATION DATE:_

2 REFLECTED CEILING PLAN

A-102 | SCALE: 1/4"=1'-0"



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] D				
RECOMMENDED FOR				
Chief, Transportatio				
APPROVED				
Chief, Division of Tr				
Designed by: <u>F</u>	BY	DATE	REVISION	NO.
•				

DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

ECOMMENDED FOR APPROVAL

nief, Transportation Planning and Design Section

PPROVED

Date

Date

Checked by: SSS

MONTGOMERY COUNTY

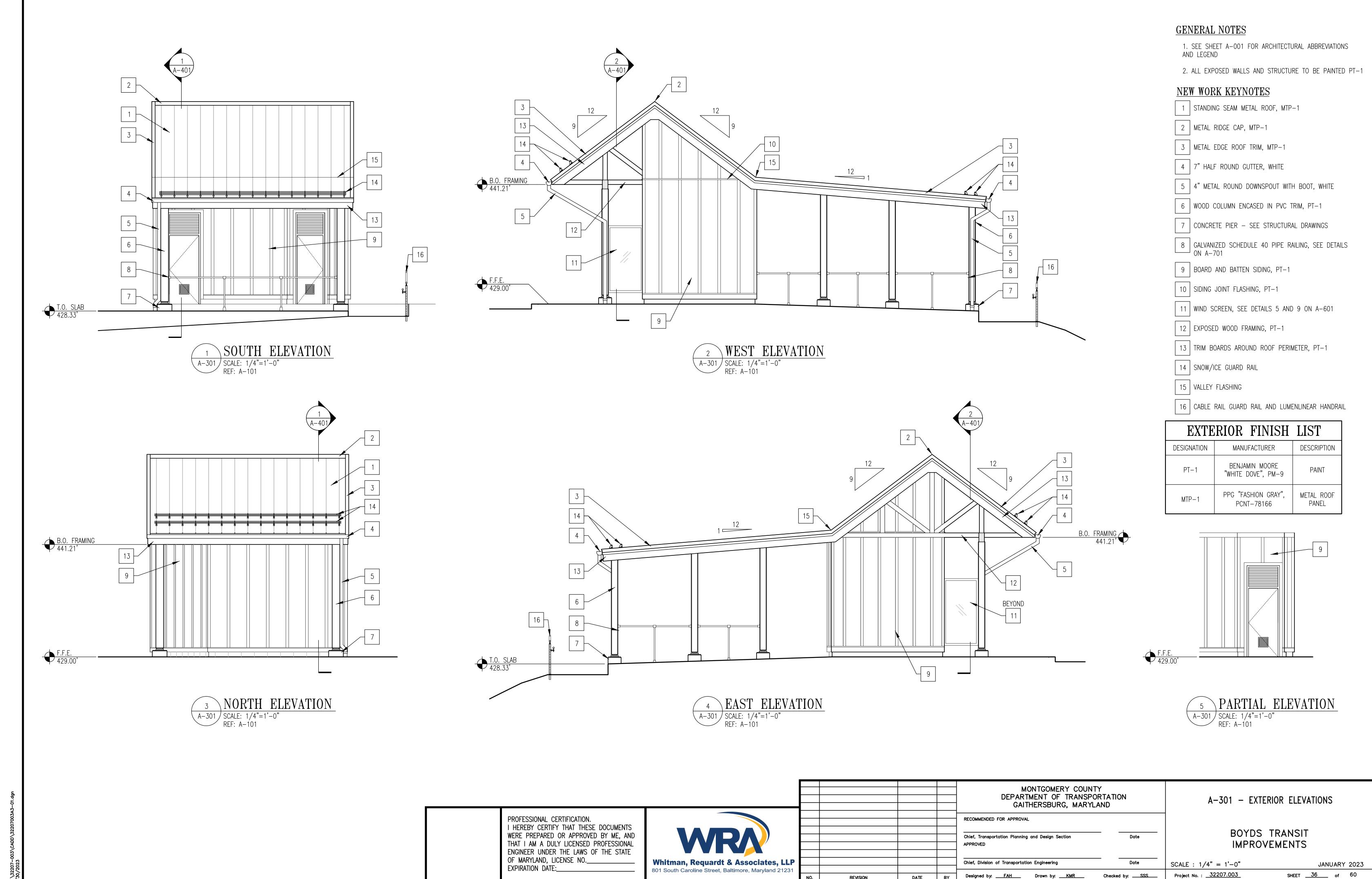
A-102 - BIKE STORAGE PLAN, REFLECTED CEILING PLAN, & ROOF PLAN

BOYDS TRANSIT IMPROVEMENTS

SCALE: 1/4" = 1'-0"

Project No.: 32207.003

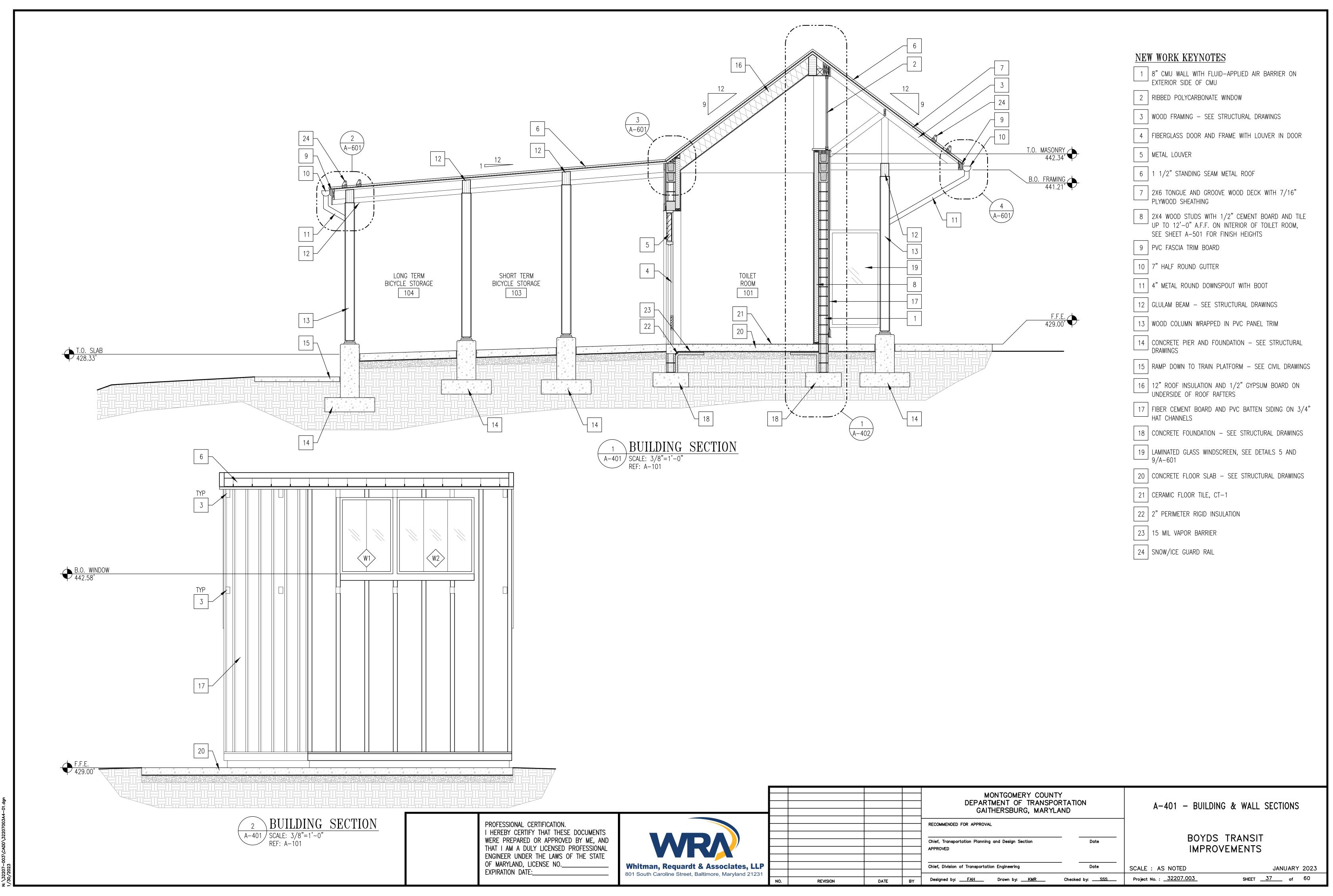
SHEET 35 of 60

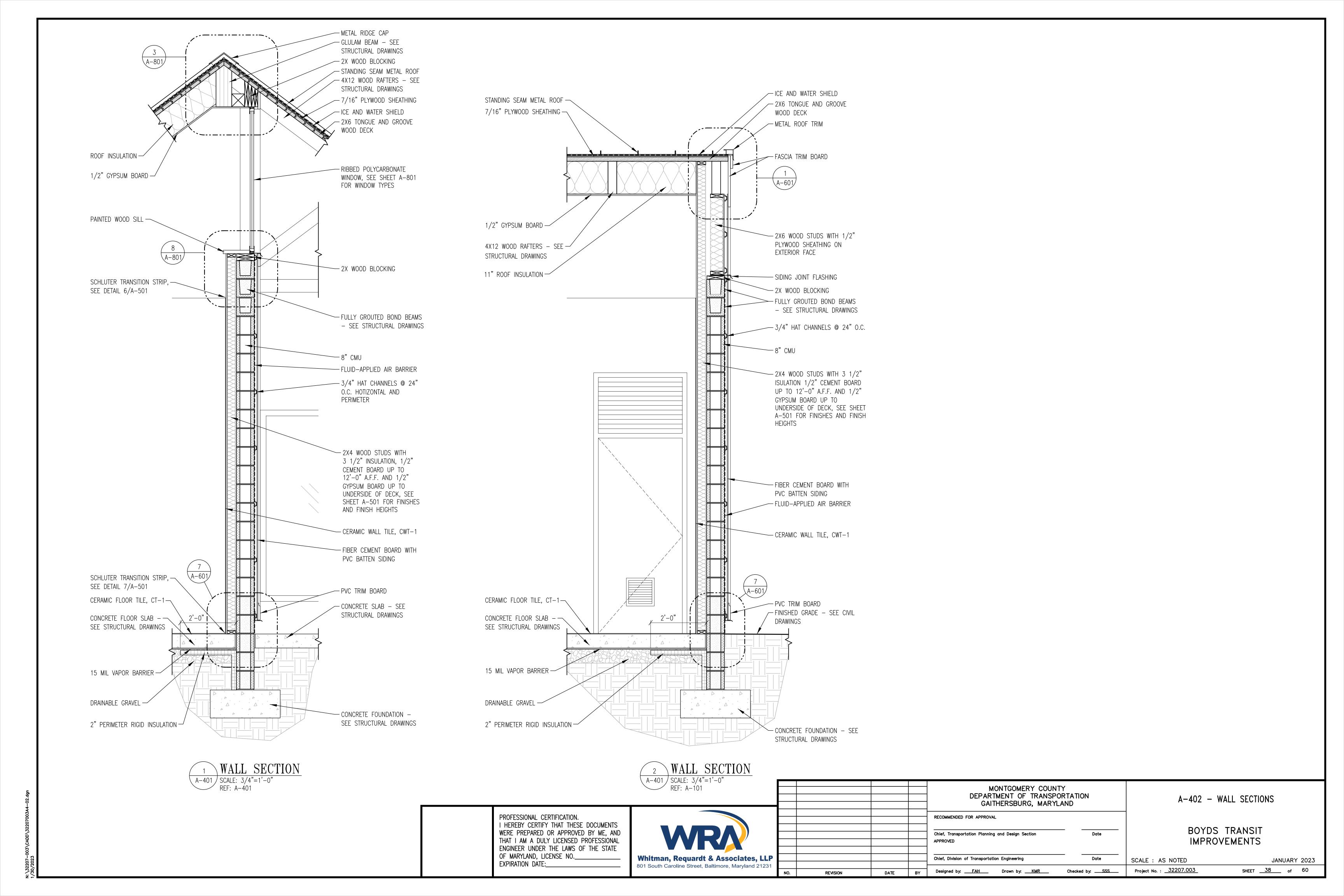


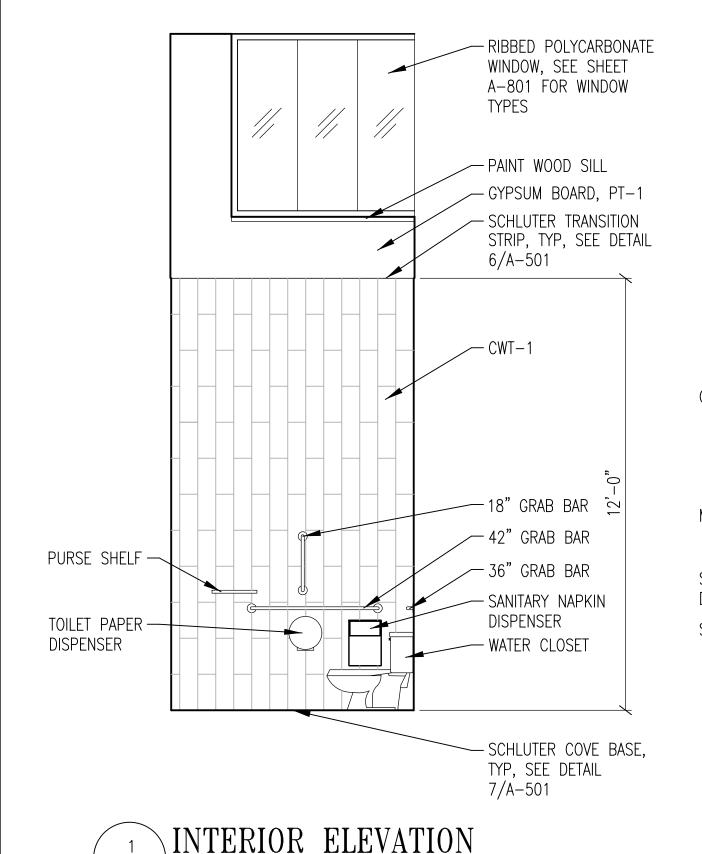
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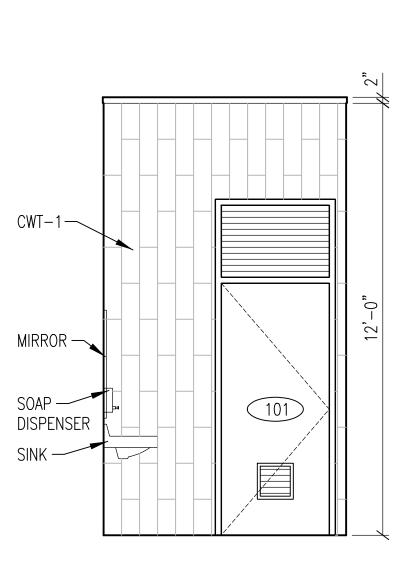
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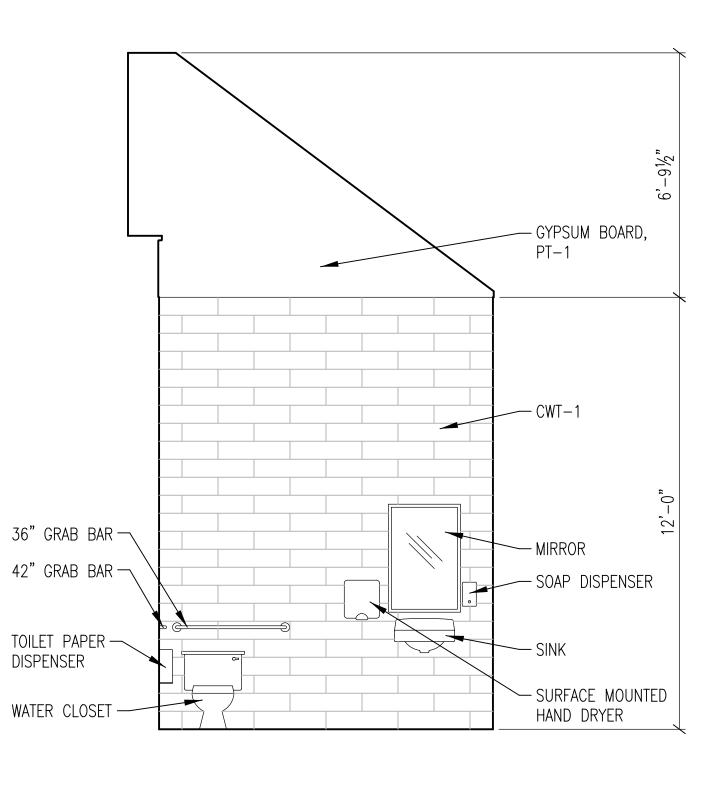
Designed by: <u>FAH</u> Drawn by: <u>KMR</u>

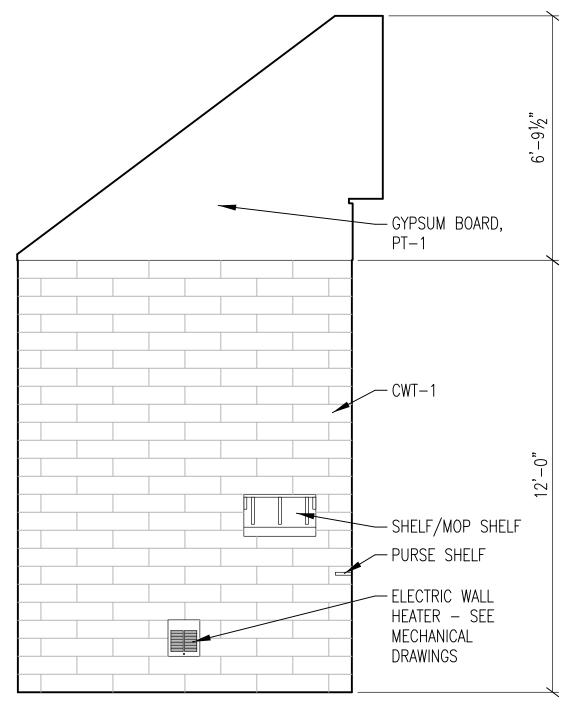


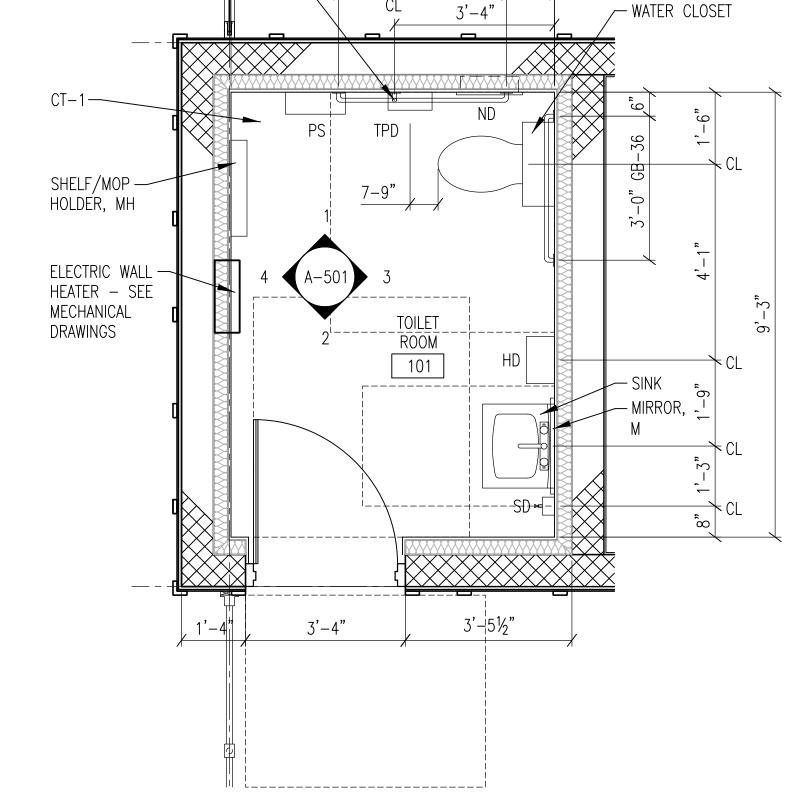












6'-9"

3'-6" GB-42

VERTICAL GRAB BAR, GB−18 —

INTERIOR ELEVATION A-501 | SCALE: 3/8"=1'-0"

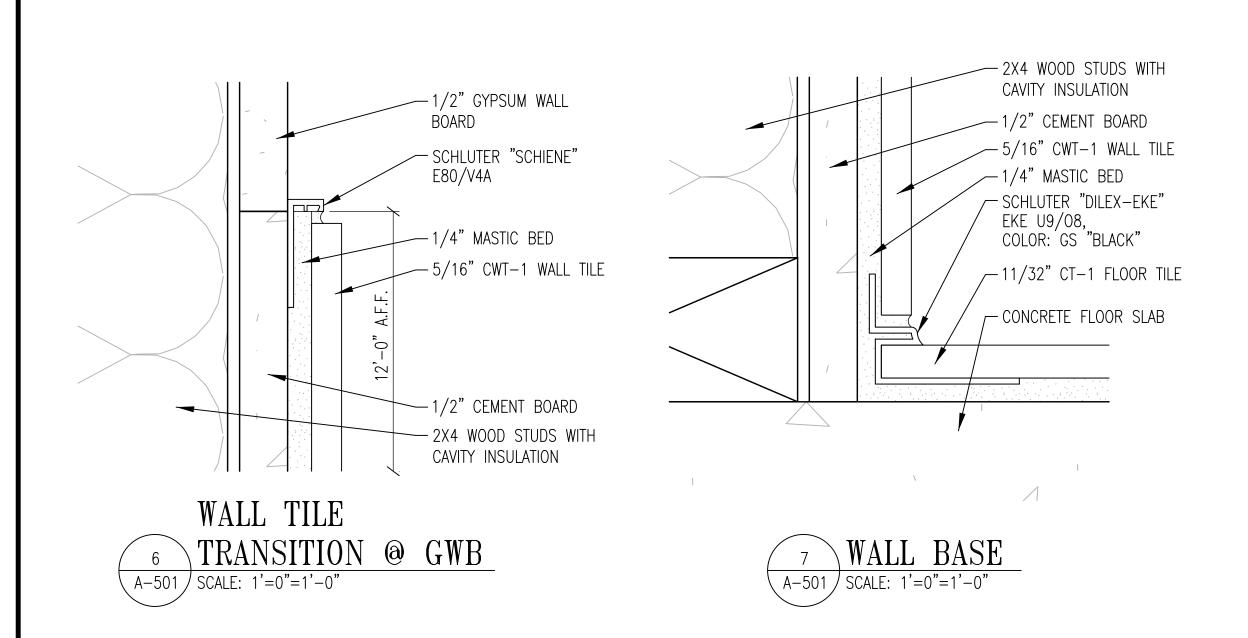
INTERIOR ELEVATION A-501 | SCALE: 3/8"=1'-0"



4	INTERIOR	ELEVATION
A-501	SCALE: 3/8"=1'-0"	

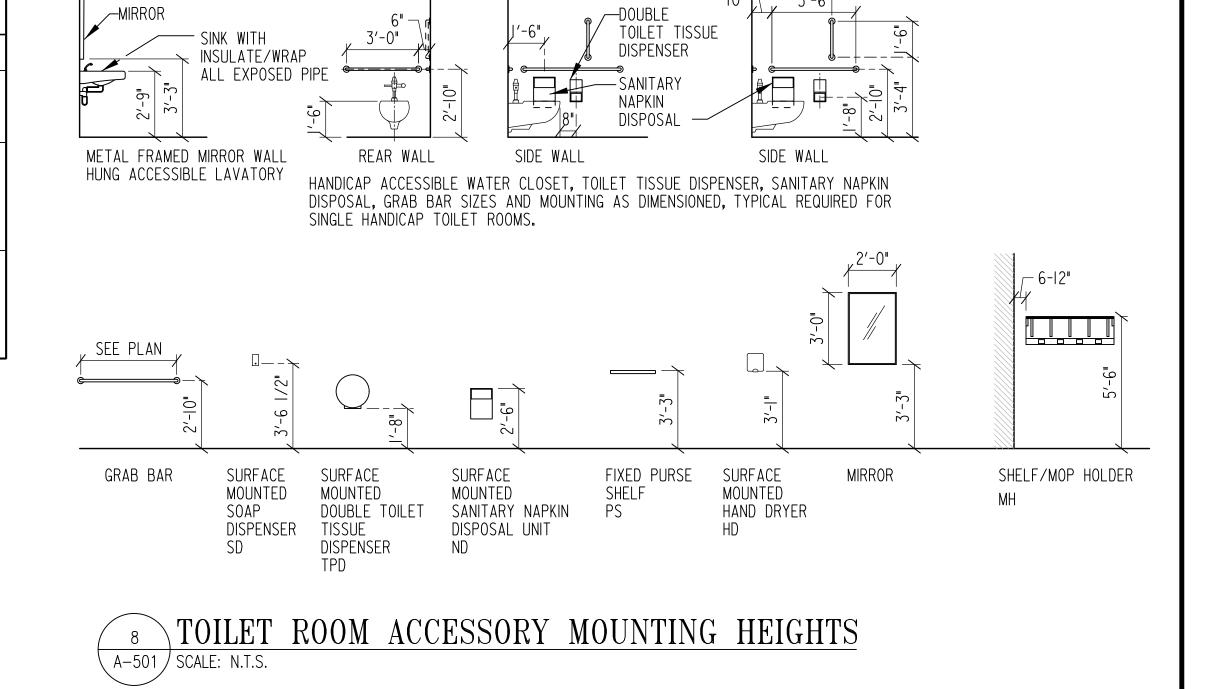
(5	ENLARGED	RESTROOM	PLAN	
$ \left[\right] $	A-501	SCALE: 1/2"=1'-0"			

ı. 3'-4"



TO2	TOILET ACCESSORY SCHEDULE											
DESIGNATION	DESCRIPTION											
GB-18	18" STAINLESS STEEL GRAB BAR											
GB-36	36" STAINLESS STEEL GRAB BAR											
GB-42	42" STAINLESS STEEL GRAB BAR											
SD	SURFACE-MOUNTED, VERTICAL ABS PLASTIC SOAP DISPENSER											
TPD	SURFACE-MOUNTED JUMBO ROLL TOILET TISSUE DISPENSER, STAINLESS STEEL											
ND	SURFACE-MOUNTED SANITARY NAPKIN DISPOSAL UNIT											
WR	FREE STANDING STAINLESS STEEL WASTE RECEPTACLE											
PS	15" LONG X 5" WIDE STAINLESS STEEL FIXED PURSE SHELF											
HD	SURFACE-MOUNTED HAND DRYER											
М	24" X 36" STAINLESS STEEL MIRROR											
HK	DOUBLE PRONG HOOK											
MH	SHELF/MOP HOLDER											

	INTE	RIOR FINISH	LIST
	DESIGNATION	MANUFACTURER	DESCRIPTION
	PT-1	BENJAMIN MOORE "WHITE DOVE", PM-9	PAINT
	CT-1	ARCHITESSA: "TREK", #10710038827, "12 X 24" X 9MM; "VULCAN"	FLOOR TILE
	CWT-1	ARCHITESSA: "BEYOND", #13910058511, "6 X 24" X 8MM; "WHITE"	WALL TILE



PROFESSIONAL CERTIFICATION. 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.__

EXPIRATION DATE:_

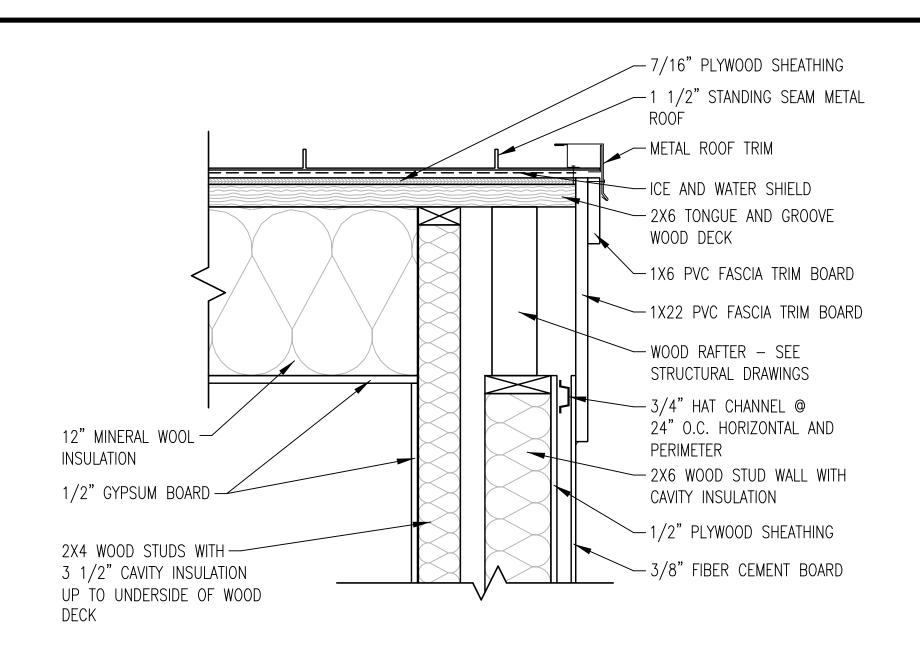


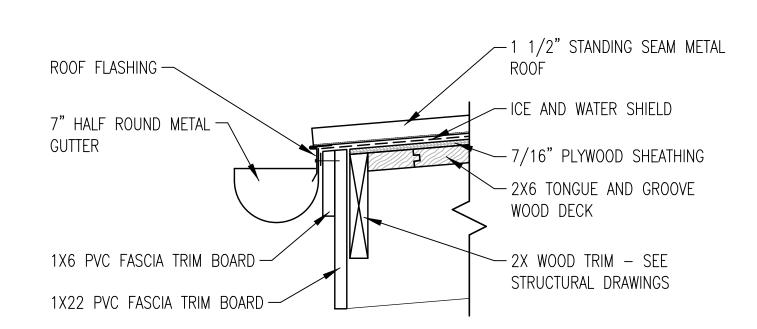
			MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATIO GAITHERSBURG, MARYLAND)N
			RECOMMENDED FOR APPROVAL	
			Chief, Transportation Planning and Design Section APPROVED	Date
			Chief, Division of Transportation Engineering	Date
REVISION	DATE	BY	Designed by: <u>FAH</u> Drawn by: <u>KMR</u> Checked	l by:

A-501 - ENLARGED PLAN, INTERIOR ELEVATIONS, & TOILET ROOM DETAILS

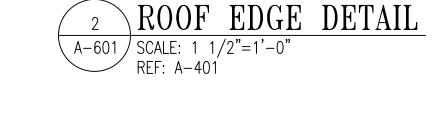
> **BOYDS TRANSIT IMPROVEMENTS**

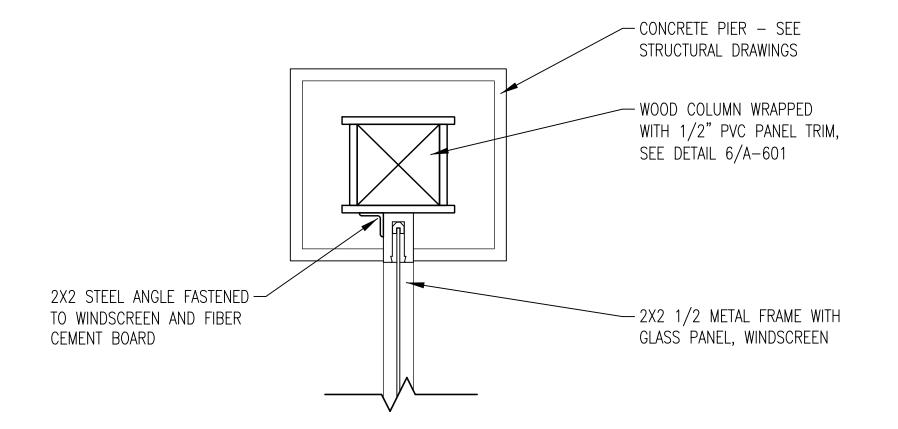
SCALE : AS NOTED JANUARY 2023 Project No. : 32207.003 SHEET <u>39</u> of 60

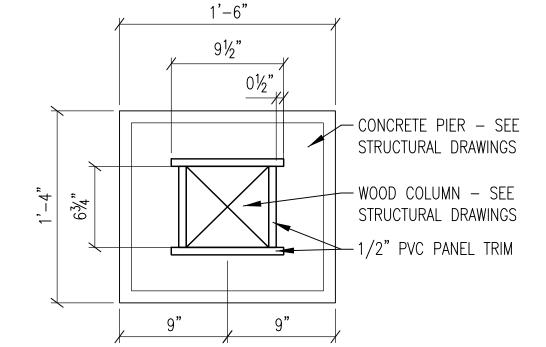




ROOF RAKE DETAIL A-601 SCALE: 1 1/2"=1'-0" REF: A-402

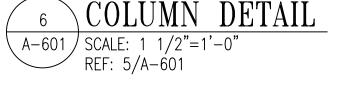


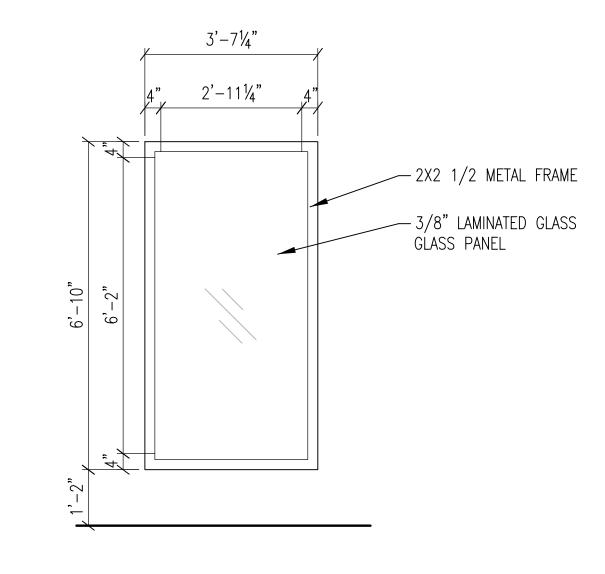


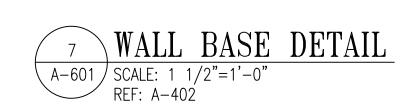


COLUMN DETAIL

WINDSCREEN JAMB DETAIL A-601 SCALE: 1 1/2"=1'-0"







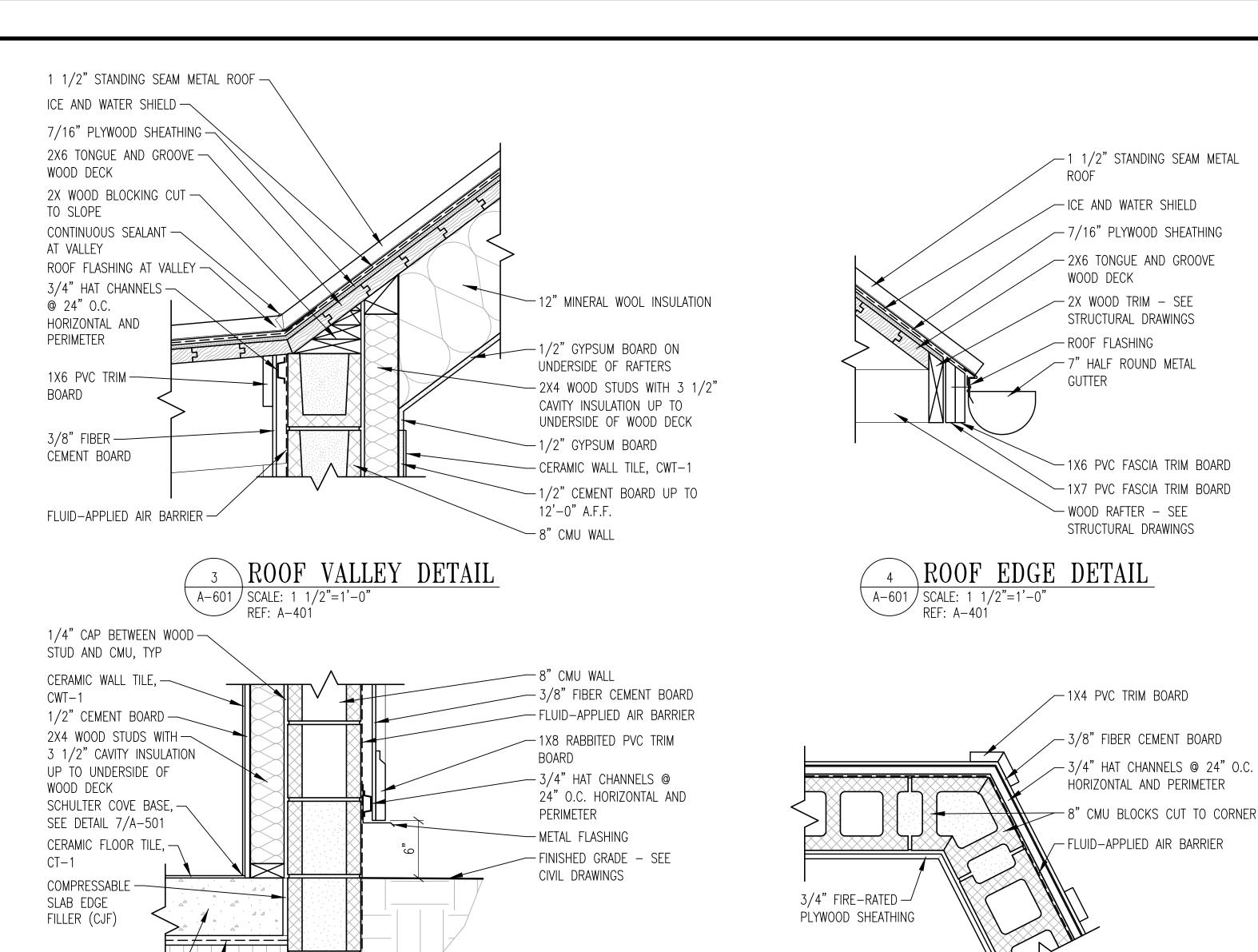
CONCRETE SLAB --SEE STRUCTURAL

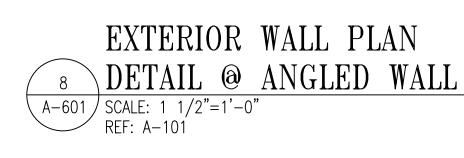
DRAINABLE GRAVEL —

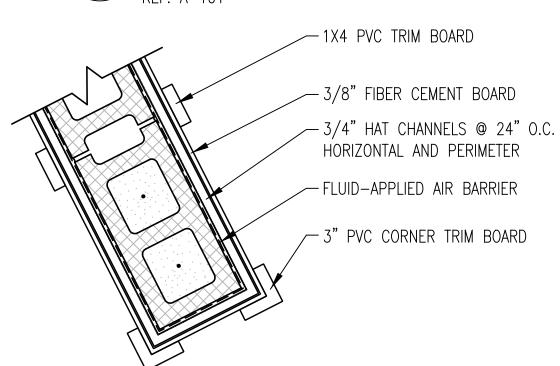
15 MIL VAPOR BARRIER —

2" PERMIETER RIGID INSULATION —

DRAWINGS







EXTERIOR WALL PLAN 10 DETAIL @ END OF WALL A-601 SCALE: 1 1/2"=1'-0" REF: A-101

WINDSCREEN ELEVATION A-601 | SCALE: 1 1/2"=1'-0"

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EXPIRATION DATE:_



_					
P					
31					┝
	NO.	REVISION	DATE	BY	

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND RECOMMENDED FOR APPROVAL									
RECOMMENDED FOR APPROVAL									
Chief, Transportation Planning and Design Section APPROVED	Date								

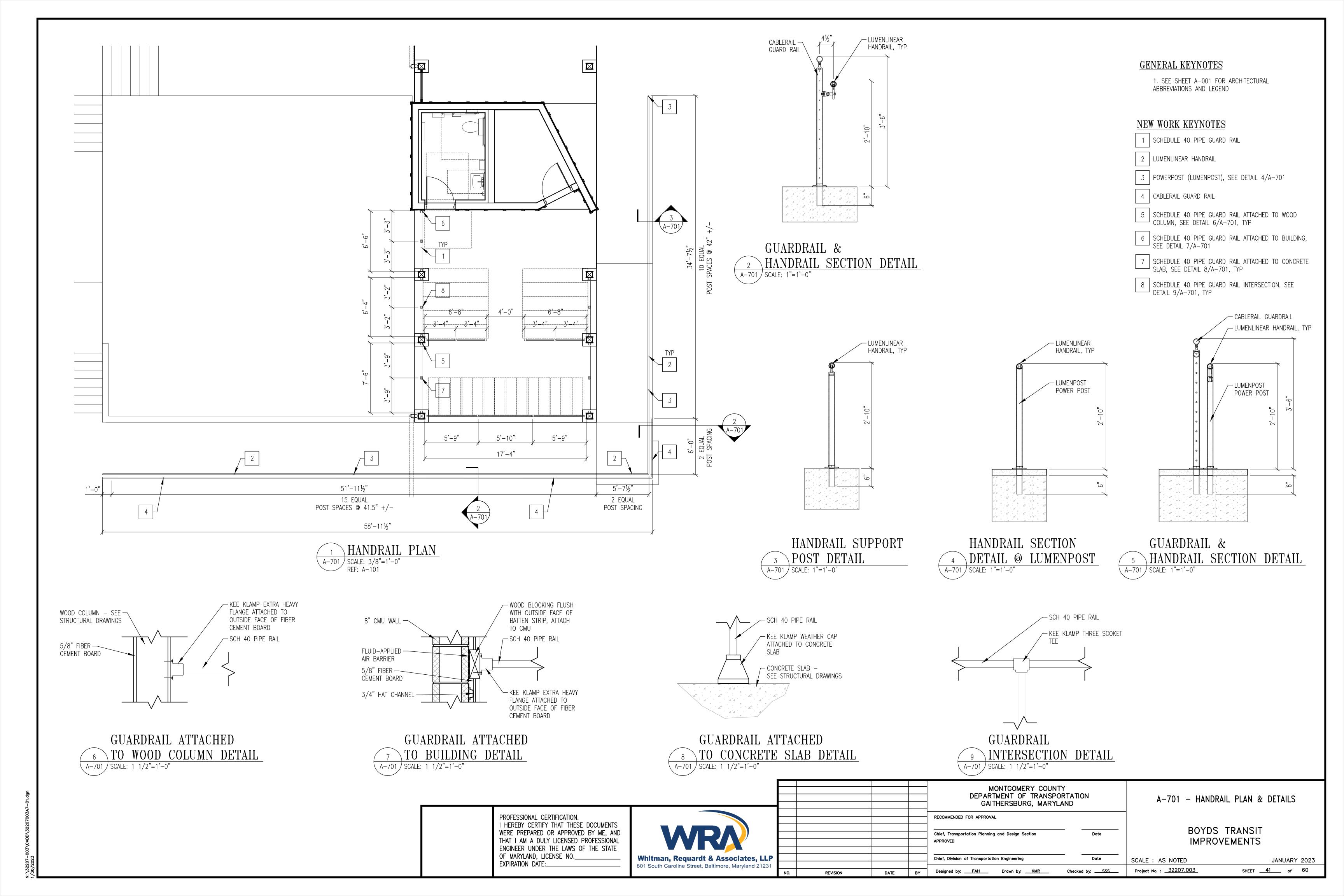
Designed by: <u>FAH</u> Drawn by: <u>KMR</u>

Checked by: SSS

-601 - FLOOR PLAN & SECTION DETAILS

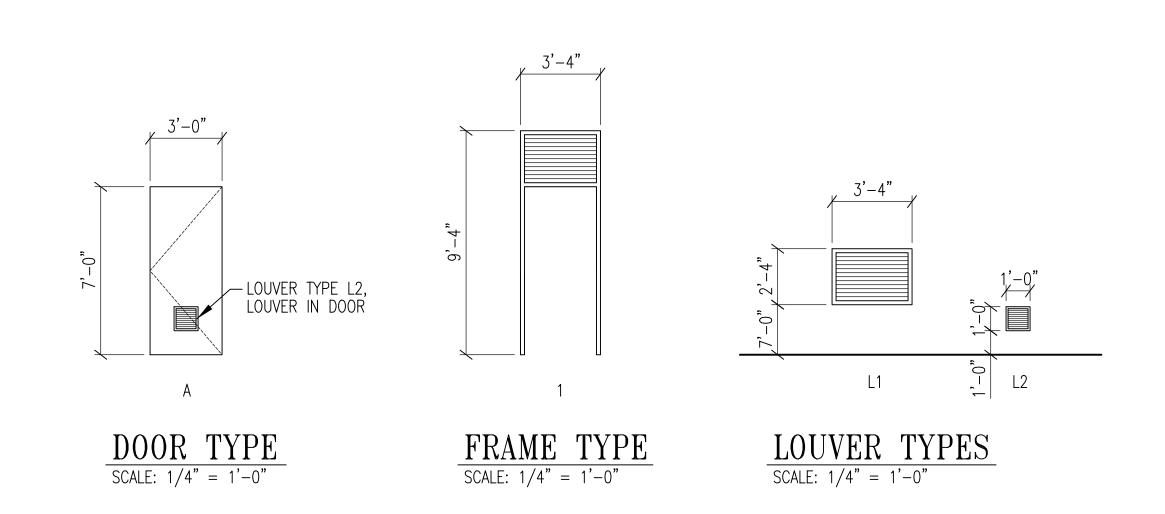
BOYDS TRANSIT IMPROVEMENTS

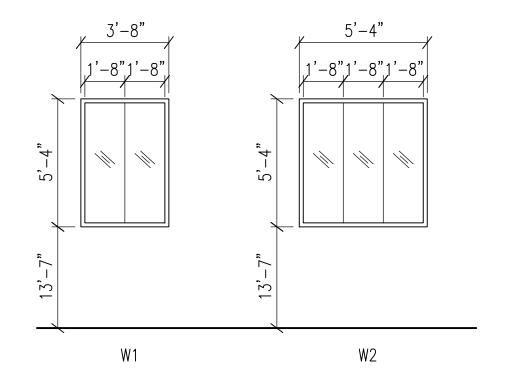
SCALE: AS NOTED JANUARY 2023 Project No. : 32207.003 SHEET <u>40</u> of 60



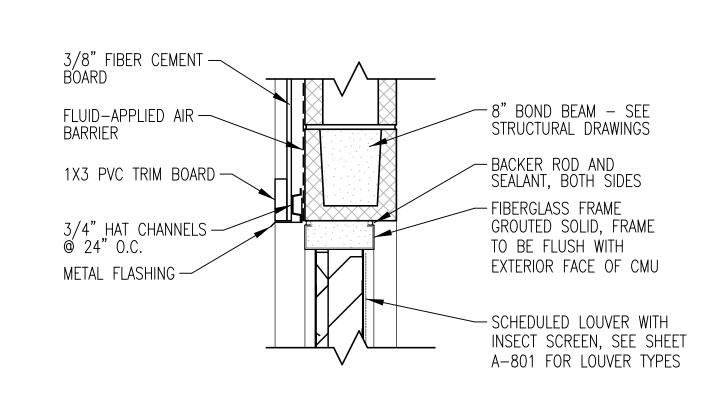
	DOOR SCHEDULE														
	OPENING FIRE DOOR									FRAMES	COMMENTS				
DOOR NO.	SPACE	DETAILS	RATING	TYPE	SIZE	THICKNESS	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	COMMINICIALS			
101	TOILET ROOM	2, 4 & 7/A-801	NOT RATED	Α	3070	1 3/4"	FIBERGLASS	FACT	1	FIBERGLASS	FACT	DOOR WILL HAVE			
101	TOILLY NOOW	2, 4 & 7/A 001	NOTRATED	^	3070	1 3/4	TIBERGEASS	IACI		FIDENCEASS	IACI	WEATHERSTRIPPING			
102	ELECTRICAL CLOSET	2, 4 & 7/A-801	NOT BATED	А	3070	1 3/4"	FIBERGLASS	EACT	1	FIBERGLASS	EACT	DOOR WILL HAVE			
102	LLLCTNICAL CLOSLT	2, 4 & 7/A-801	INOTRAILD	A	3070	1 3/4	ITULINGLASS	IACI	1	TIDENGLASS	IACI	WEATHERSTRIPPING			

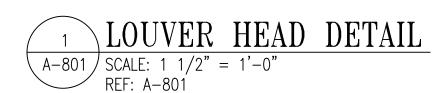
	HARDWARE SCHEDULE																
		HIN	IGES		LOCKSE	T FUNC	CTIONS	5	CLO	CLOSERS PUSH / DOOR STOP			KICK	FLUSH	SILENCER	REMARKS	
DOOR NO.	SPACE	HVY	NRP	PASS	OFFICE	CLASS	PRIV.	CARD	PAR.	REG.	PULL SET	WALL	FLOOR	PLATES	BOLTS	SET	KLIVIAKKS
101	TOILET ROOM	1.5	-	-	-	-	-	1	-	1	-	1	-	1	-	-	DOOR WILL HAVE WEATHERSTRIPPING
102	ELECTRICAL CLOSET	1.5	-	-	-	-	-	1	-	1	-	1	-	1	-	-	DOOR WILL HAVE WEATHERSTRIPPING





WINDOW TYPES SCALE: 1/4" = 1'-0"





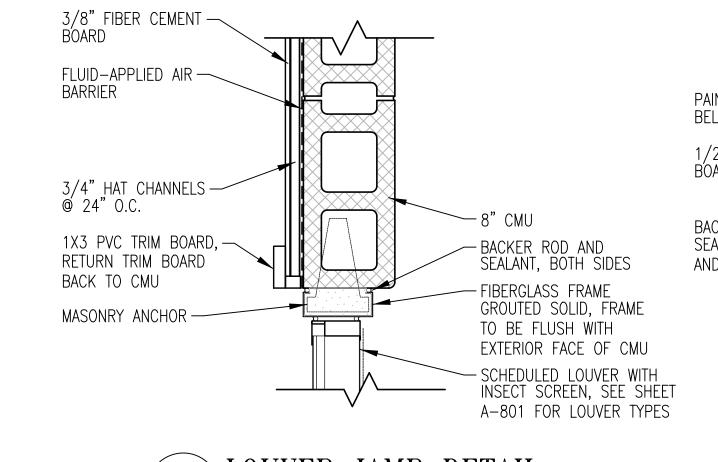
SCHEDULED LOUVER WITH INSECT SCREEN, SEE SHEET

A-801 FOR LOUVER TYPES

– SCHEDULED DOOR, SEE SHEET A-801 FOR LOUVER

-FIBERGLASS FRAME

TYPES



DOOR JAMB DETAIL

A-801 SCALE: 1 1/2" = 1'-0" REF: A-801

BACKER ROD AND SEALANT, BOTH SIDES

FIBERGLASS FRAME GROUTED SOLID, FRAME

TO BE FLUSH WITH

SHEET A-801 FOR

LOUVER TYPES

EXTERIOR FACE OF CMU

SCHEDULED DOOR, SEE

3/8" FIBER CEMENT —

FLUID-APPLIED AIR BARRIER

3/4" HAT CHANNELS -@ 24" O.C.

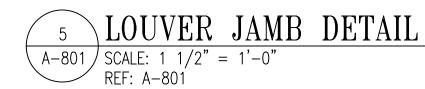
1X3 PVC TRIM BOARD,

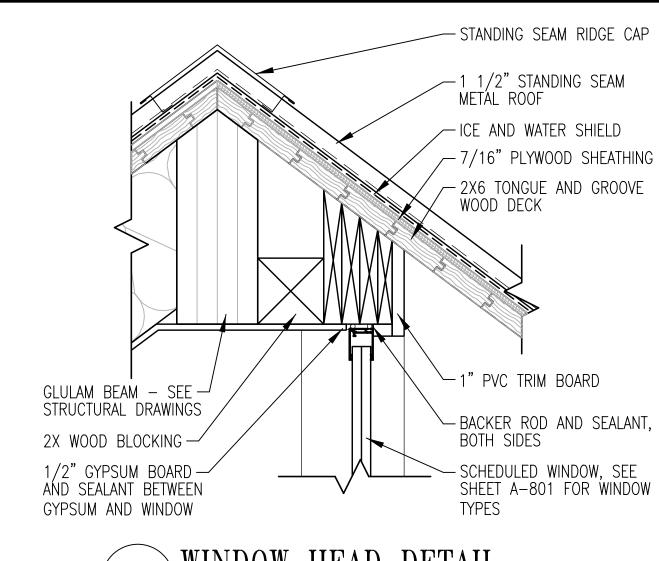
RETURN TRIM BOARD

BACK TO CMU

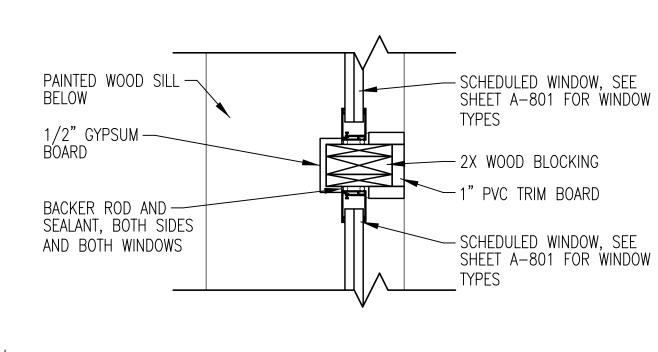
MASONRY ANCHOR

BÓARD

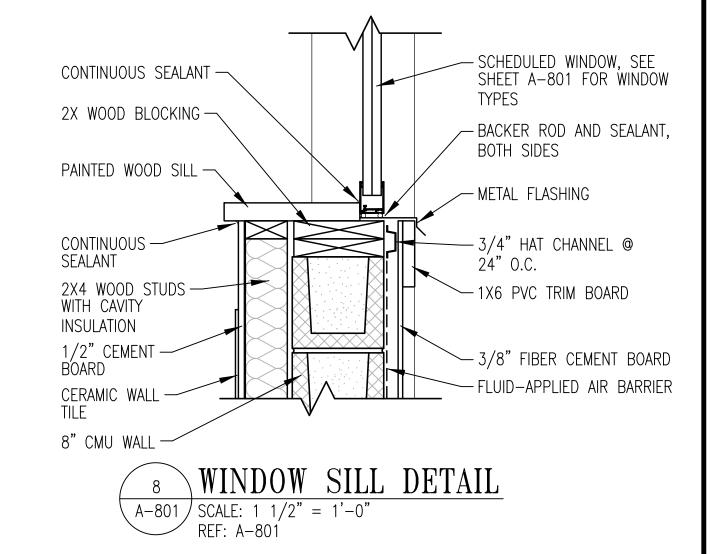


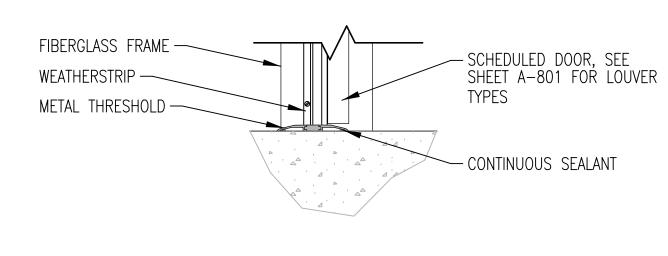


WINDOW HEAD DETAIL A-801 | SCALE: 1 1/2" = 1'-0" REF: A-801



WINDOW JAMB DETAIL A-801 SCALE: 1 1/2" = 1'-0" REF: A-801



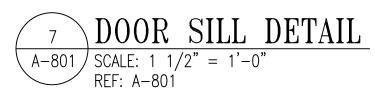


DOOR HEAD &

4 LOUVER SILL DETAIL

A-801 SCALE: 1 1/2" = 1'-0"

REF: A-801



PROFESSIONAL CERTIFICATION.

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.______ EXPIRATION DATE:_

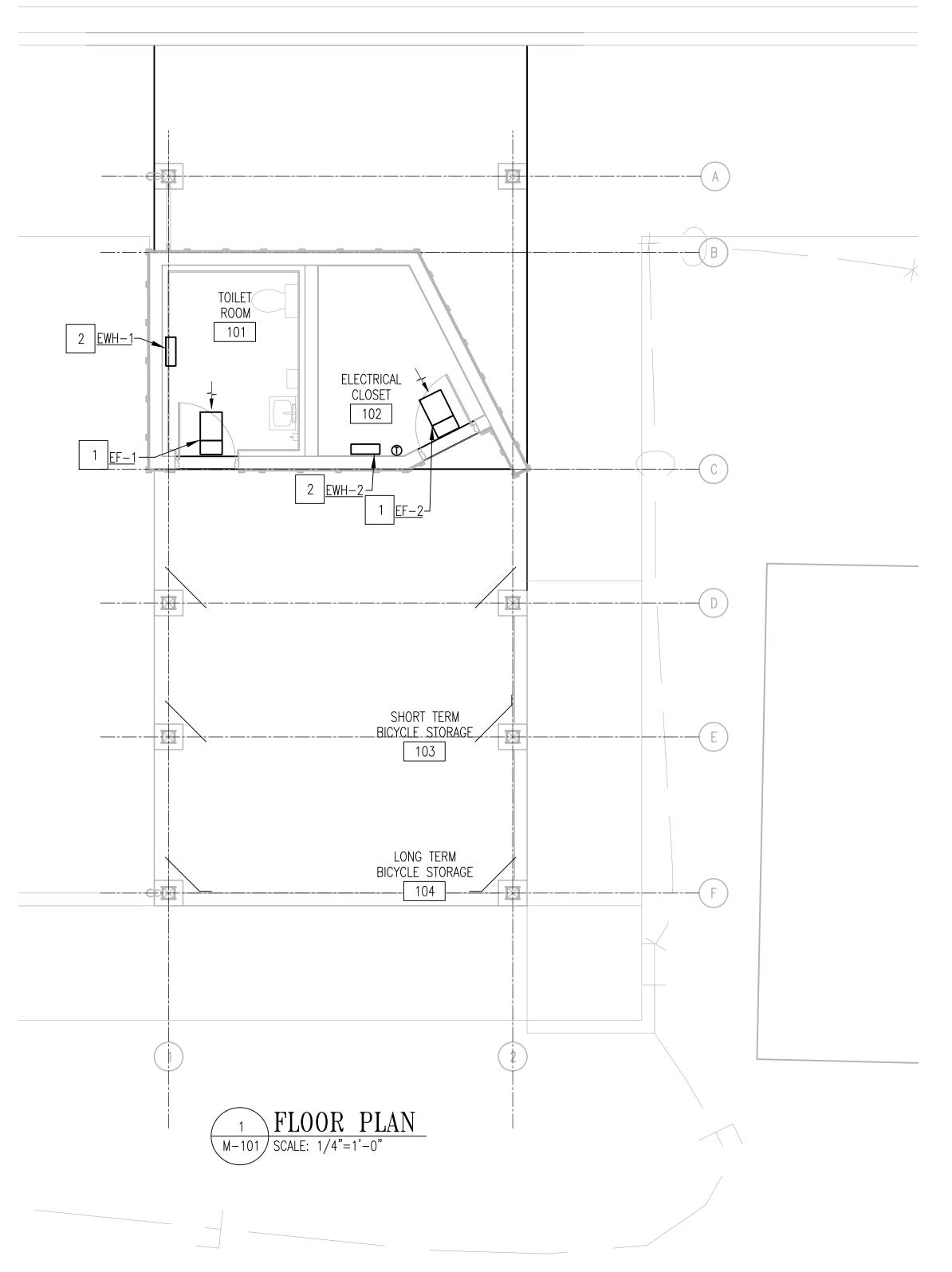


			MONTGOMERY COUNTY DEPARTMENT OF TRANSPOR	RTATION
			GAITHERSBURG, MARYLA RECOMMENDED FOR APPROVAL	
			Chief, Transportation Planning and Design Section APPROVED	Date
			Chief, Division of Transportation Engineering	- Date
REVISION	DATE	BY	Designed by: <u>FAH</u> Drawn by: <u>KMR</u>	Checked by:SSS

A-801 - DOOR, WINDOW, & LOUVER SCHEDULES, TYPES, & DETAILS

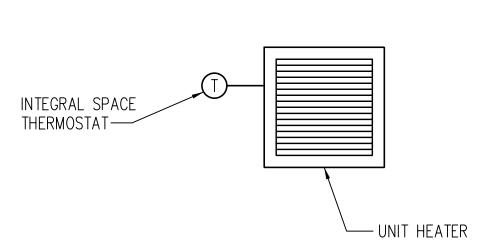
BOYDS TRANSIT IMPROVEMENTS

SCALE : AS NOTED JANUARY 2023 Project No. : 32207.003 SHEET <u>42</u> of 60



NEW WORK KEYNOTES

- 1 INLINE EXHAUST FAN MOUNTED AT 8'-0" AFF AND CONNECT TO EXHAUST LOUVER ABOVE DOOR. PROVIDE 12" DEEP SHEET METAL PLENUM, 12"x12" AND CONNECT TO ARCHITECTURAL LOUVER. BLANK OFF REMAINDER OF LOUVER. REFER TO ARCHITECTURAL PLANS FOR EXHAUST LOUVER INSTALLATION ABOVE DOOR AND INTAKE LOUVER LOW ON DOOR.
- 2 | ELECTRIC WALL HEATER MOUNTED AT 12" AFF.

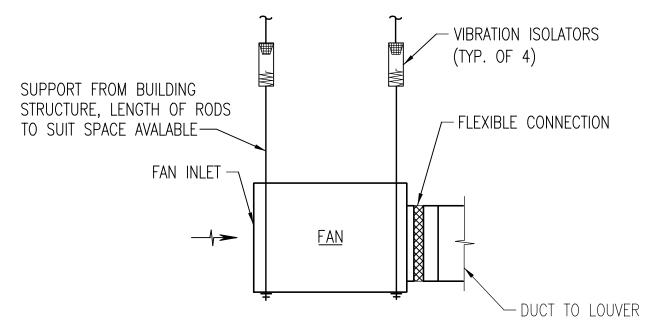


UNIT HEATER (EWH-1, EWH-2) - SEQUENCE OF OPERATION

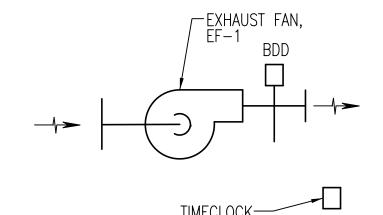
GENERAL

1. WHEN INTEGRAL SPACE THERMOSTAT SENSES A TEMPERATURE BELOW THE HEATING SETPOINT (50°F, ADJUSTABLE), THE UNITS HEATER SHALL ENERGIZE TO MAINTAIN SETPOINT. WHEN THE SPACE THERMOSTAT IS SATISFIED THE HEATER SHALL CYCLE

WALL HEATER CONTROLS SCHEMATIC M-101 SCALE: 1/4"=1'-0"



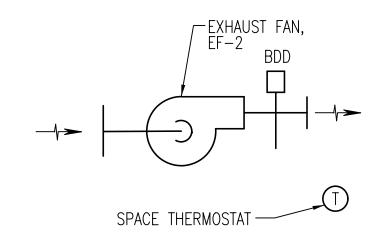
5 CENTRIFUGAL IN-LINE FAN M-101 | SCALE: 1/4"=1'-0"



EXHAUST SEQUENCE OF OPERATIONS

- 1. PROVIDE TIMECLOCK FOR EXHAUST FAN (EF-1) TO OPERATE DURING OCCUPIED HOURS.
- 2. WHEN TIMECLOCK CALLS FOR FAN TO RUN, ENERGIZE EXHAUST FAN (EF-1) AND RUN CONTINUOUSLY.
- 3. WHEN TIMECLOCK CALLS FOR FAN TO CEASE OPERATION, DE-ENERGIZE EF-1.

EXHAUST FAN (EF-1) CONTROLS SCHEMATIC M-101 SCALE: 1/4"=1'-0"



EXHAUST SEQUENCE OF OPERATIONS

- 1. WHEN SPACE TEMPERATURE EXCEEDS 83 F (ADJ), ENERGIZE EXHAUST FAN (EF-2)AND RUN CONTINUOUSLY.
- 2. WHEN SPACE TEMPERATURE FALLS BELOW 80 F (ADJ), DE-ENERGIZE EF-2.

4 EXHAUST FAN CONTROLS SCHEMATIC M-101 | SCALE: 1/4"=1'-0"

GENERAL NOTES:

- GENERAL NOTES ARE DISCIPLINE SPECIFIC, AND APPLY TO EVERY DRAWING IN THAT DISCIPLINE, DRAWING NOTES APPLY TO ALL WORK SHOWN ON A DRAWING. CONTRACTOR/DEMOLITION NOTES APPLY TO INDIVIDUAL SITUATIONS AND
- MAKE PROPER CONNECTION TO FIXTURES AND EQUIPMENT, DRAWINGS ARE SCHEMATIC AND ALL BRANCH MAINS, ELBOWS, AND CONNECTIONS ARE NOT
- COORDINATE LOCATION OF DUCTWORK WITH LIGHTING FIXTURES, PIPING, EQUIPMENT AND BUILDING STRUCTURE, DUCTWORK SHALL BE RUN TO AVOID CONFLICTS WITH
- DO NOT LOCATE MECHANICAL EQUIPMENT DIRECTLY ABOVE ELECTRICAL SUBSTATIONS, CABLE TRAYS, TRANSFORMERS, PANEL BOARDS, OR SWITCHGEAR.
- DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.
- INSTALL DUCTWORK SO THAT DAMPERS ARE ACCESSIBLE.
- CERTAIN ITEMS SUCH AS ACCESS DOORS, RISE AND DROPS IN DUCTWORK ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED IN THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- DETAILS WITHOUT SPECIFIC REFERENCE TO A LOCATION SHALL BE APPLIED TO THE GENERAL INSTALLATION OF PIPES, DUCTS, ETC.
- MOUNT TEMPERATURE SENSORS 48 AFF UNLESS NOTED OTHERWISE.

MECHANICAL LEGEND

NEW EQUIPMENT NEW WORK LINE WEIGHT TEMPERATURE SENSOR

MECHANICAL ABBREVIATIONS

ADJUSTABLE ABOVE FINISHED FLOOR BACK DRAFT DAMPER BOTTOM OF DUCT BRITISH THERMAL UNIT PER HOUR CAPACITY CFM CUBIC FEET PER MINUTE DEGREE FAHRENHEIT DIAMETER DRAWING EXHAUST FAN EFF EFFICIENCY ESP, TSP EXTERNAL/TOTAL STATIC PRESSURE EXHAUST ELECTRIC WALL HEATER FULL LOAD AMPERES HORSEPOWER KILOWATT MAXIMUM MINIMUM NORTH NOT TO SCALE

PRESSURE DROP

REVOLUTIONS PER MINUTE

	ELECTRIC WALL HEATER SCHEDULE												
UNIT ID	LOCATION	ATION MOUNTING HEA		CAPACITY (BTUH)	AIR FLOW (CFM)	KW	LECTRICAL FLA	DATA VOLTS/PH	BASIS OF DESIGN	NOTES			
EWH-1	TOILET ROOM	WALL - RECESSED	ELECTRIC	6,826	65	2.0	9.6	208/1	QMARK CWH1208				
EWH-2	ELEC ROOM	WALL - RECESSED	ELECTRIC	6,826	65	2.0	9.6	208/1	QMARK CWH1208				

	FAN SCHEDULE														
UNIT ID	NIT ID TYPE SERVICE LOCATION		MAX. CFM	ESP (IN. WG)	FAN RPM	DRIVE TYPE	METHOD OF CONTROL	ELECT HP	RICAL DATA VOLTS/PH	BASIS OF DESIGN	NOTES				
EF-1	INLINE	EXHAUST	TOILET ROOM	75	0.3	1550	DIRECT	TIMER	1/40	115/1	GREENHECK SQ-60				
EF-2	INLINE	EXHAUST	ELEC ROOM	75	0.3	1550	DIRECT	TSTAT	1/40	115/1	GREENHECK SQ-60				

NOTES:

1. PROVIDE FAN WITH BACKDRAFT DAMPER.

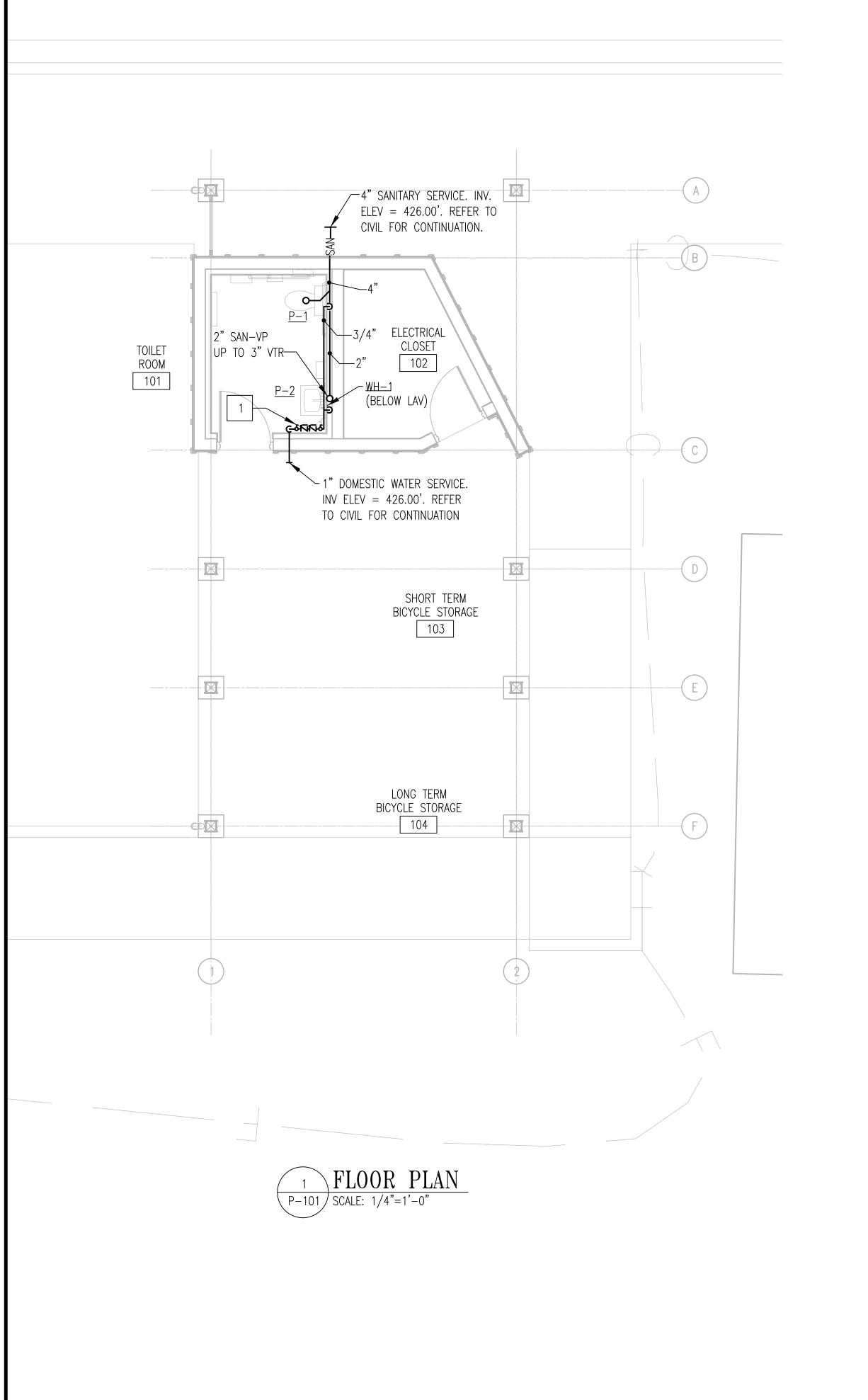
2.	PROVIDE FAN WITH MOTOR S	TARTER.				
				MONTGOMERY COUNTY DEPARTMENT OF TRANSPOR GAITHERSBURG, MARYLA	OITAT	١
				RECOMMENDED FOR APPROVAL		
				Chief, Transportation Planning and Design Section APPROVED		Date
				Chief, Division of Transportation Engineering		Date
NO.	REVISION	DATE	BY	Designed by: <u>NA</u> Drawn by: <u>NA</u>	Checked b	oy: <u>CAH</u>

M-101 - FLOOR PLAN

BOYDS TRANSIT IMPROVEMENTS

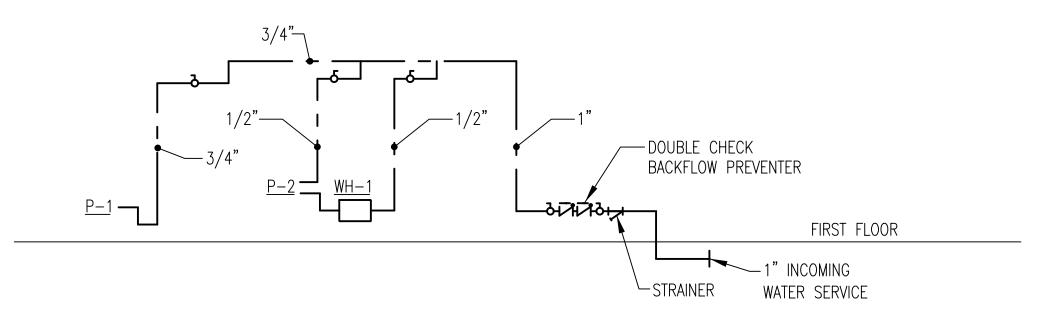
Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, Maryland 21231

SCALE : 1/4" = 1'-0"JANUARY 2023 SHEET <u>43</u> of 60



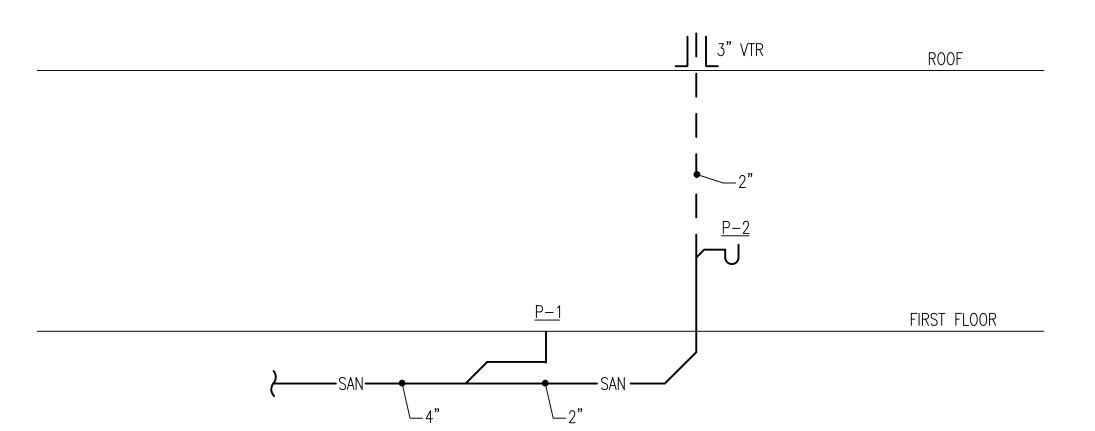
NEW WORK KEYNOTES

1 1" DOUBLE CHECK BACKFLOW PREVENTER MOUNTED AT 36" AFF.



DOMESTIC WATER RISER DIAGRAM

P-101 NOT TO SCALE



SANITARY RISER DIAGRAM
P-101 NOT TO SCALE

GENERAL NOTES:

- 1. GENERAL NOTES ARE DISCIPLINE SPECIFIC, AND APPLY TO EVERY DRAWING IN THAT DISCIPLINE. DRAWING NOTES APPLY TO ALL WORK SHOWN ON A DRAWING. CONTRACTOR NOTES APPLY TO INDIVIDUAL SITUATIONS AND EQUIPMENT.
- 2. SLOPES AND INVERT ELEVATIONS SHALL BE ESTABLISHED BEFORE ANY PIPING IS INSTALLED IN ORDER TO MAINTAIN PROPER SLOPES.
- 3. MAKE PROPER CONNECTION TO FIXTURES AND EQUIPMENT.DRAWINGS ARE SCHEMATIC AND ALL BRANCH MAINS, ELBOWS, AND CONNECTIONS ARE NOT SHOWN
- 4. COORDINATE LOCATION OF PIPING WITH LIGHTING FIXTURES, OTHER PIPING AND DUCTWORK, EQUIPMENT AND BUILDING STRUCTURE. PIPING SHALL BE RUN TO AVOID CONFLICTS WITH OTHER TRADES.
- 5. DO NOT RUN PIPING DIRECTLY ABOVE ELECTRICAL SUBSTATIONS, CABLE TRAYS, TRANSFORMERS, PANEL BOARDS, OR SWITCHGEAR.
- 6. DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.
- 7. UNLESS NOTED OTHERWISE, PIPING IS OVERHEAD, TIGHT TO UNDERSIDE OF STRUCTURE, WITH SPACE FOR INSULATION IF REQUIRED.
- omoorane, with armoe ran incoentral in
- 8. INSTALL PIPING SO THAT VALVES ARE ACCESSIBLE.
- 9. CERTAIN ITEMS SUCH AS PIPING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A
 SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS
 THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR
 SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED IN THE CONTRACT
 DRAWINGS AND SPECIFICATIONS.
- 10. SCHEMATIC AND RISER DIAGRAMS INDICATE FLOW AND OPERATIONAL CONCEPT AS WELL AS GENERAL ARRANGEMENT OF EQUIPMENT. VALVES, PRESSURE GAUGES, ETC. ADDITIONAL VALVES PRESSURE GAUGES, ETC. SHALL BE PROVIDED AS SHOWN ON DETAILS AND AS INDICATED IN SPECIFICATIONS.
- 11. DETAILS WITHOUT SPECIFIC REFERENCE TO A LOCATION SHALL BE APPLIED TO THE GENERAL INSTALLATION OF PIPES, ETC.

PLUMBING LEGEND

NEW EQUIPMENT

NEW WORK LINE WEIGHT

TEE TURNED UP

TEE TURNED DOWN

PIPING TURNED DOWN

PIPING TURNED UP

SAN SANITARY PIPING

DOMESTIC COLD WATER

VENT PIPING

REDUCED PRESSURE BACKFLOW PREVENTER ASSEMBLY

CO WALL CLEANOUT

CO FLOOR CLEANOUT

BALL VALVE

DIRECTION OF FLOW ARROW

PLUMBING ABBREVIATIONS

AFF ABOVE FINISHED FLOOR
BTUH BRITISH THERMAL UNIT PER HOUR
CAP CAPACITY
CO CLEANOUT

DCW DOMESTIC COLD WATER, POTABLE DEG F, °F DEGREE FAHRENHEIT DIA DIAMETER

VENT THROUGH ROOF WATER HEATER

DIA DIAMETER
DN DOWN
DWG DRAWING
EFF EFFICIENCY

FLA FULL LOAD AMPERES
FT FEET
GAL GALLONS
GPM GALLONS PER MINUTE
HP HORSEPOWER
HW HOT WATER, POTABLE

HW HOT WATE HZ HERTZ IN INCH

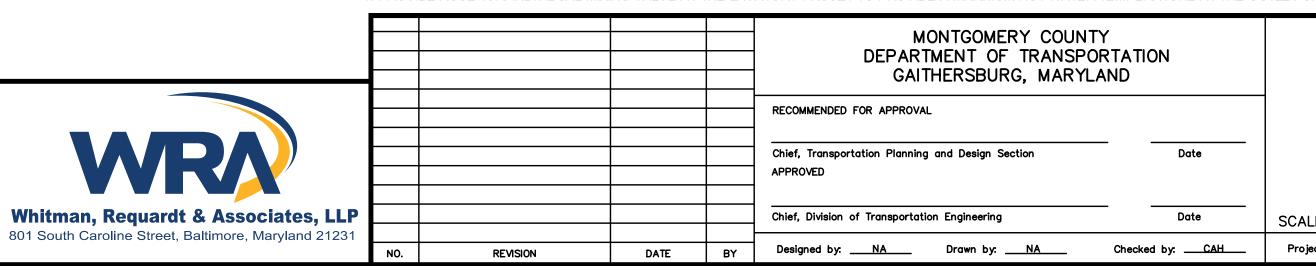
KW KILOWATT
MAX MAXIMUM
MIN MINIMUM
N NORTH
NTS NOT TO SCALE
PH PHASE
V VENT

INSTANTANEOUS DOMESTIC WATER HEATER SCHEDULE

INSTANTANEOUS DOMESTIC WATER REATER SCREDULE								
UNIT ID	LOCATION	TYPE	CAPACITY INPUT (KW)	TEMP RISE @ 0.5 GPM (DEG F)	ACTIVATION FLOW (GPM)	VOLTS/PH	BASIS OF DESIGN	NOTES
WH-1	TOILET ROOM	ELECTRIC	4.2	56	0.2	208/1	EEMAX 4208T	

PLUMBING FIXTURE SCHEDULE									
UNIT ID	DESCRIPTION CW (IN) HW (IN) SAN (IN) VENT (IN) WSFU DFU REMARKS BASIS OF DESIGN								
P-1	WATER CLOSET FLOOR MOUNTED, TANK TYPE	3/4	-	4	2	2.2	3	TANK TYPE , 1.28 GPF	AMERICAN STANDARD, CADET 3
P-2	LAVATORY WALL MOUNTED BARRIER FREE	1/2	1/2	1 1/2	1 1/2	2	1	MANUAL FAUCET 0.5 GPM (NOTE 1)	AMERICAN STANDARD, LUCERNE

1. PROVIDE ASSE 1070 INDIVIDUAL MIXING VALVE AT THE LAVATORY FAUCET TO PROVIDE A MAXIMUM HOT WATER TEMPERATURE AT THE OUTLET OF THE FAUCET OF 110° F FOR PUBLIC HANDWASHING SINKS.



P-101 - FLOOR PLAN

BOYDS TRANSIT IMPROVEMENTS

SCALE : 1/4" = 1'-0"

Project No. : 32207.003

SHEET 44 of 60

GENERAL

- FIELD VERIFY DIMENSIONS, LOCATIONS AND ELEVATIONS SHOWN ON DRAWINGS FOR EXISTING STRUCTURES. BRING DISCREPANCIES TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- COORDINATE ACTIVITIES WITH THE OWNER.
- NOT ALL OPENINGS IN THE STRUCTURAL WORK ARE SHOWN. REVIEW DRAWINGS FROM OTHER DISCIPLINES AND COORDINATE OPENINGS AND EMBEDDED ITEMS SUCH AS SLEEVES, ANCHORS, CONDUITS, ETC. INCORPORATED INTO THE STRUCTURAL WORK.
- THE SPECIAL INSPECTION PROGRAM AND SPECIAL INSPECTOR WILL BE PROCURED AND FUNDED BY THE OWNER. COORDINATE APPLICABLE ACTIVITIES AND SCHEDULE WITH THE OWNER, SPECIAL INSPECTOR, AND THE STATEMENT OF SPECIAL INSPECTIONS INCLUDED IN THE SPECIFICATIONS.
- THE DRAWINGS SHOW THE FINAL CONDITION OF THE STRUCTURES. PROVIDE MEANS TO STABILIZE THE STRUCTURES DURING TEMPORARY CONDITIONS.
- SCALES NOTED ON THE DRAWINGS ARE FOR GENERAL INFORMATION ONLY. DO NOT OBTAIN DIMENSIONAL INFORMATION FROM DIRECT SCALING OF THE DRAWINGS.

SHALLOW FOUNDATIONS AND SLABS-ON-GROUND

- DESIGN OF SHALLOW FOUNDATIONS AND SLABS-ON-GROUND IS IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT BY DATED AUGUST 2019 (REVISED JUNE 2022).
- SHALLOW FOUNDATIONS, SUCH AS MAT FOUNDATIONS, THAT ARE NOT PART OF A PILE FOUNDATION SYSTEM, MUST BEAR UPON UNDISTURBED SOIL OR COMPACTED ENGINEERED FILL WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 3000 PSF. OBTAIN THE SERVICES OF A GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF MARYLAND WHO IS RESPONSIBLE FOR VERIFICATION OF THE SPECIFIED MINIMUM ALLOWABLE BEARING CAPACITY AT EACH FOOTING.
- SHALLOW FOUNDATION ELEVATIONS SHOWN ON THE DRAWINGS ARE MINIMUM EXCAVATION DEPTHS. EXCAVATE FURTHER AS REQUIRED TO REMOVE UNSATISFACTORY SOILS TO A LAYER WITH THE MINIMUM SPECIFIED ALLOWABLE BEARING CAPACITY. WHERE REQUIRED, PROVIDE COMPACTED ENGINEERED FILL TO ACHIEVE THE REQUIRED SUBGRADE ELEVATIONS. NOTIFY THE ENGINEER OF ANY CONDITIONS THAT REQUIRE CHANGES IN FOUNDATION ELEVATIONS.
- PLACE SHALLOW FOUNDATIONS ON THE SAME DAY THAT THE BEARING SURFACE IS INSPECTED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER. ANY BEARING SURFACE NOT PLACED ON THE SAME DAY OF INITIAL INSPECTION MUST BE RE-INSPECTED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER ON THE DAY CONCRETE IS
- KEEP EXCAVATIONS DRY.
- REMOVE UNSATISFACTORY SOILS BELOW SLABS-ON-GROUND TO A COMPETENT SOIL STRATUM AND REPLACE WITH COMPACTED ENGINEERED FILL
- MINIMUM DEPTH BELOW GRADE FOR BOTTOM OF FOUNDATIONS FOR FROST PROTECTION IS 30 INCHES.
- PROVIDE A 6" LAYER OF OPEN-GRADED COARSE AGGREGATE AND A 15-MIL VAPOR RETARDER BENEATH INTERIOR SLABS-ON-GROUND. SUBGRADE FOR SLABS-ON-GROUND MUST BE INSPECTED AND APPROVED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER BEFORE PLACING ANY CONCRETE OR OPEN-GRADED COARSE AGGREGATE.
- REFER TO OTHER DISCIPLINES' DRAWINGS FOR WORK INCORPORATED IN, OR COORDINATED WITH, FOUNDATION AND SLAB-ON-GROUND WORK.
- PROVIDE SUPPORT OF EXCAVATIONS REQUIRED TO COMPLETE THE WORK SHOWN ON THE DRAWINGS. SUPPORT OF EXCAVATION SYSTEMS MUST BE DESIGNED BY THE CONTRACTOR'S PROFESSIONAL ENGINEER.

CONCRETE

- PROVIDE NORMAL-WEIGHT CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS AS FOLLOWS, UNLESS NOTED OTHERWISE.
- 2. CONCRETE MUST BE AIR ENTRAINED
- DETAIL AND CONSTRUCT REINFORCED CONCRETE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE ACI 301. "SPECIFICATION FOR STRUCTURAL CONCRETE", AND AS SPECIFIED HEREIN.
- DETAIL REINFORCING STEEL IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE ACI 315, "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" AND ACI SP-66, "ACI DETAILING MANUAL.
- PROVIDE REINFORCING STEEL CONFORMING TO ASTM A615, GRADE 60, DEFORMED BARS,
- UNLESS NOTED OTHERWISE ON THE DRAWINGS. PROVIDE CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS: CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH, FILL, OPEN-GRADED COARSE AGGREGATE:
 - OTHER CONCRETE: 2"
- SUBMIT REINFORCING STEEL DETAILS AND JOINT LAYOUT (SHOP DRAWINGS) AND RECEIVE APPROVAL FROM THE ENGINEER BEFORE PROCEEDING WITH FABRICATION.
- CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS NOTED OTHERWISE.
- DETAIL ALL SPLICES AND STANDARD HOOKS FOR REINFORCING BARS NOT DIMENSIONED ON THE DRAWINGS AS TABULATED ON SHEET SO-02.
- 10. PROVIDE JOINTS ONLY AS DETAILED ON THE DRAWINGS AND ON APPROVED SHOP DRAWINGS. DO NOT PROVIDE ADDITIONAL JOINTS NOR OMIT ANY JOINTS EXCEPT BY WRITTEN AUTHORIZATION FROM THE ENGINEER. APPROVED ADDITIONAL JOINTS MUST NOT RESULT IN ADDITIONAL EXPENSE TO THE OWNER.
- PROVIDE CONSTRUCTION JOINT INTERFACE CLEAN AND FREE OF LAITANCE. WHERE INDICATED ON THE DRAWINGS. INTENTIONALLY ROUGHEN CONSTRUCTION JOINTS TO A FULL AMPLITUDE OF 1/4 INCH. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED. CONSTRUCTION JOINTS MUST BE PREWETTED AND STANDING WATER REMOVED.
- 12. WHERE A CONCRETE MEMBER IS SLOPED (TOP AND/OR BOTTOM). PROVIDE SLOPED REINFORCING STEEL PARALLEL TO THE CONCRETE SURFACE UNLESS OTHERWISE NOTED.
- 13. OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS ARE PRINCIPAL OPENINGS. REVIEW DRAWINGS FROM OTHER DISCIPLINES AND COORDINATE OPENINGS AND EMBEDDED ITEMS SUCH AS SLEEVES, ANCHORS, CONDUIT, ETC. INCORPORATED INTO THE CONCRETE WORK.
- 14. COLD WEATHER PLACEMENT OF CONCRETE MUST BE IN ACCORDANCE WITH ACI 306R, ACI 306.1, AND THE SPECIFICATIONS.
- 15. HOT WEATHER PLACEMENT OF CONCRETE MUST BE IN ACCORDANCE WITH ACI 305R, ACI 305.1, AND THE SPECIFICATIONS.

CONCRETE MASONRY

- CONSTRUCT MASONRY IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE ACI-530/ ASCE 5/ TMS 402, (2016) "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND ACI 530.1/ ASCE 6/ TMS 602 (2016) "SPECIFICATION FOR MASONRY STRUCTURES".
- PROVIDE HOLLOW LIGHTWEIGHT LOAD-BEARING CONCRETE MASONRY UNITS MEETING THE REQUIREMENTS OF ASTM
- PROVIDE MORTAR CONFORMING TO THE REQUIREMENTS OF ASTM C-270. CEMENT USED FOR MORTAR MUST BE
- PROVIDE GROUT CONFORMING TO THE REQUIREMENTS OF ASTM C476 COARSE OR FINE GROUT, WITH A MINIMUM COMPRESSIVE STRENGTH EQUAL TO OR GREATER THAN THE SPECIFIED COMPRESSIVE STRENGTH OF MASONRY (F'm) BUT NOT LESS THAN 2,000 PSI AT 28 DAYS.
- PROVIDE CONCRETE MASONRY WITH A MINIMUM COMPRESSIVE STRENGTH (F'm) OF 2,000 PSI. PROVIDE CONCRETE MASONRY UNITS WITH A SPECIFIED MINIMUM NET AREA COMPRESSIVE STRÈNGTH 2,000 PSI.
- PROVIDE REINFORCING STEEL CONFORMING TO ASTM A615, GRADE 60, DEFORMED BARS. REINFORCING STEEL REQUIRING WELDABILITY MUST CONFORM TO ASTM A706, GRADE 60, DEFORMED BARS.
- UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE MASONRY COVER FOR REINFORCING STEEL AS FOLLOWS:
 - BARS LARGER THAN #5: 2" #5 BARS AND SMALLËR: 1-1/2
- MASONRY FACE NOT EXPOSED TO EARTH, FILL, OR WEATHER: 1-1/2"

MASONRY FACE EXPOSED TO EARTH, FILL, OR WEATHER:

- FULLY GROUT CELLS CONTAINING REINFORCING STEEL, CELLS IN CONTACT WITH EARTH OR FILL, AND THE BOTTOM COURSE OF WALLS.
- LAY MASONRY IN RUNNING BOND.
- REINFORCE MORTAR JOINTS OF MASONRY WALLS WITH HORIZONTAL JOINT REINFORCING AT 16" ON CENTER MAXIMUM. PROVIDE 9 GAUGE LADDER-TYPE HORIZONTAL JOINT REINFORCING CONFORMING TO ASTM A1064.
- 11. PROVIDE CONTINUOUS BOND BEAMS AT THE TOP OF WALLS, AT BEARING ELEVATIONS, AND AT OTHER LOCATIONS SPECIFIED ON THE DRAWINGS.

WOOD

- GLUED LAMINATED (GLULAM) MEMBERS SHALL BE SPECIFIED SP/SP WET CONDITIONS USE, AND ARCHITECTURAL APPEARANCE. THE REFERENCE DESIGN VALUES FOR GLULAM MEMBER SHALL SATISFY THE VALUES FOR COMBINATION SYMBOL "24F-E1.8" AS INDICATED IN NDS-2018 "DESIGN VALUES FOR WOOD CONSTRUCTION."
- MANUFACTURER QUALIFICATIONS INCLUDE CERTIFICATION BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) OR THE AMERICAN PLYWOOD ASSOCIATION (APA).
- GLULAM MEMBERS SHALL COMPLY WITH AITC, A190.1, WITH EACH PIECE MARKED WITH AN AITC QUALITY MARK, OR APA-EWS TRADEMARK.
- DIMENSIONAL LUMBER MEMBERS SHALL BE SOUTHERN PINE, GRADED NO. 1, OR APPROVED EQUAL. THE REFERENCE DESIGN VALUES FOR SOLID SAWN MEMBER SHALL SATISFY THE VALUES FOR "SOUTHERN PINE NO. 1" AS INDICATED IN NDS-2018 "DESIGN VALUES FOR WOOD CONSTRUCTION."
- PROVIDE HOT-DIPPED GALVANIZED ASTM A307 STEEL BOLTS, WITH ASTM A 563 HEX HEAD NUTS, UNLESS OTHERWISE NOTED.
- ALL STRUCTURAL WOOD MEMBERS (GLULAM, WOOD DECKING, WOOD BEAMS, AND WOOD JOISTS) SHALL BE TREATED WITH PRESERVATIVES.
- 7. ROOF DECKING AND GLULAM MEMBER DIMENSIONS ARE ACTUAL SIZES.
- ROOF JOIST, RAFTER, AND OTHER MISCELLANEOUS WOOD MEMBER DIMENSIONS ARE NOMINAL SIZES.
- ROOF PLYWOOD CONSTRUCTION:
 - PLYWOOD THICKNESS: 7/16" PLYWOOD GRADE: STRUĆTURAL 1
 - . THE PLYWOOD LAYOUT SHALL BE CASE I AS SPECIFIED IN TABLE 2306.2.1(1) IN IBC 2018.
 - NAIL SIZE: 10d (GALVANIZED) MAXIMUM NAIL SPACING: 6 INCH
 - i. THE PANEL SHALL BE NAILED TO THE ROOF FRAMING COMPLETELY AROUND THE PANEL PERIMETER
 - FASTENER PENETRATION INTO ROOF FRAMING: 1-1/2"

DESIGN LOADS AND CRITERIA

- ALL LOADS INDICATED BELOW ARE UNFACTORED
- 1. RISK CATEGORY: II
- DEAD LOADS:
 - STRUCTURES: ACTUAL WEIGHT
 - SUPERIMPOSED DEAD LOAD:
 - ROOF: 15 PSF SUPERIMPOSED DEAD LOAD INCLUDES COMBINED WEIGHT OF ALL PERMANENT NON-STRUCTURAL COMPONENTS SUPPORTED BY THE FRAMING. INCLUDING MEP COMPONENTS. ROOFING. AND FLOOR AND CEILING FINISHES.

3. LIVE LOADS:

- GUARDRAIL 200 LBS AT EACH POST OR 50 PLF ALONG THE TOP RAIL, WHICHEVER IS GREATER.
- 4. ROOF LIVE LOAD: 20 PSF OR 300 LB CONCENTRATED LOAD
- ROOF SNOW LOAD:
- GROUND SNOW LOAD (Pg): 30 PSF EXPOSURE FACTOR (Ce): 1.0
- THERMAL FACTOR (Ct): 1.2
- SNOW LOAD IMPORTANCE FACTOR (Is): 1.0
- FLAT ROOF SNOW LOAD (Pf): 20 PSF SNOW DRIFT: PER ASCE

DESIGN LOADS AND CRITERIA (CONTINUED)

- 6. WIND LOAD:
 - ULTIMATE WIND SPEED (Vult): 115 MPH NOMINAL WIND SPEED (Vasd): 89 MPH
 - EXPOSURE CATEGORY: C
 - INTERNAL PRESSURE COEFFICIENT: +/- 0.18 COMPONENTS AND CLADDING: PER ASCE 7-16
- SEISMIC LOAD: SEISMIC IMPORTANCE FACTOR (Ie): 1.0
- MAXIMUM EARTHQUAKE SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS: Ss=0.135q MAXIMUM EARTHQUAKE SPECTRAL RESPONSE ACCELERATION AT ONE-SECOND: S1=0.043q
- SITE CLASSIFICATION: D SITE SEISMIC COEFFICIENT: Fa=1.6; Fv=2.4
- SPECTRAL RESPONSE COEFFICIENTS: SDS = 0.144; SD1 = 0.069
- SEISMIC DESIGN CATEGORY: B
- ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE BASIC SEISMIC FORCE RESISTING SYSTEM: ORDINARY REINFORCED CMU SHEAR WALLS
- RESPONSE MODIFICATION FACTOR: R=2 SEISMIC RESPONSE COEFFICIENT: Cs=0.072
- DESIGN BASE SHEAR, v: V = Cs * W (W, EFFECTIVE SEISIC WEIGHT OF STRUCTURE)

CODES AND STANDARDS

- 1. INTERNATIONAL BUILDING CODE IBC (2018), INCLUDING THE MODIFICATIONS MADE BY LOCAL JURISDICTION
- "AMERICAN INSTITUTE OF STEEL CONSTRUCTION AISC 360 (2016) "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"
- AMERICAN CONCRETE INSTITUTE ACI 318 (2014), "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
- THE MASONRY SOCIETY (TMS)
- TMS 402 (2016). "BUILDING CODE FOR MASONRY STRUCTURES"
- TMS 602 (2016), "SPECIFICATION FOR MASONRY STRUCTURES"
- AMERICAN SOCIETY OF CIVIL ENGINEERS ASCE 7 (2016), "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER

AMERICAN WOOD COUNCIL NDS (2018), "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION"

STRUCTURES"

PROFESSIONAL CERTIFICATION. 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.__ EXPIRATION DATE:



DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND RECOMMENDED FOR APPROVAL Chief, Transportation Planning and Design Section APPROVED

Checked by: WC

Chief, Division of Transportation Engineering

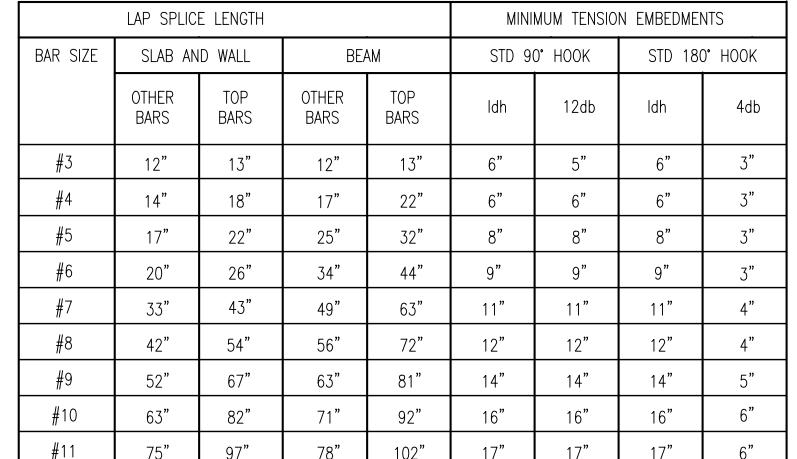
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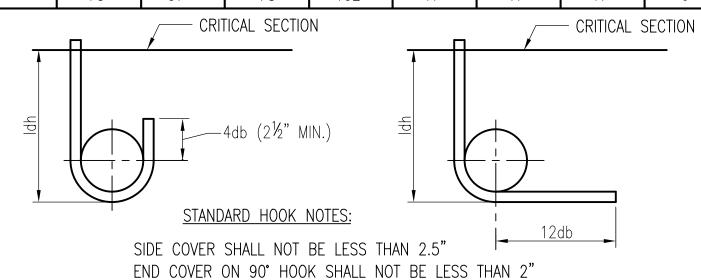
MONTGOMERY COUNTY

SO-01 GENERAL STRUCTURAL NOTES

BOYDS TRANSIT IMPROVEMENTS

SCALE: NTS JANUARY 2023 SHEET <u>45</u> of 60 Project No. : 32207.003





STANDARD 180° AND 90° END HOOKS

LAP SPLICE NOTES:

CONCRETE: 5000 PSI COMPRESSIVE STRENGTH (NORMALWEIGHT CONCRETE) SLAB AND WALL: 6" MINIMUM REBAR SPACING WITH CONCRETE COVER = 1.5" CLEAR

MINIMUM CLEAR SPACING BETWEEN BARS = 1.5 db (1.5" MIN). MINIMUM CONCRETE BEAM:

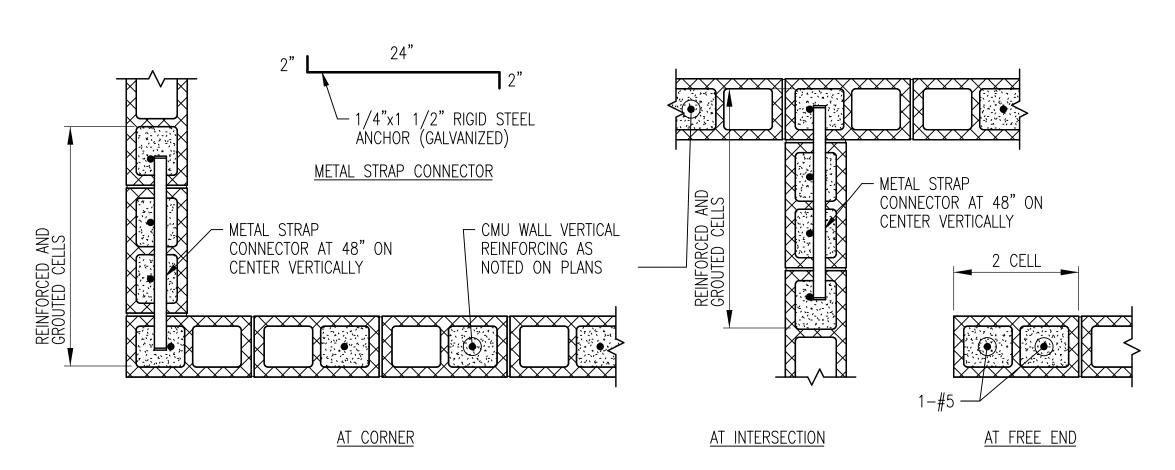
COVER = 1.5" CLEAR. MINIMUM STIRRUP #4@12" PROVIDED.

TOP BAR: HORIZONTAL REINFORCEMENT PLACED SUCH THAT MORE THAN 12? OF FRESH CONCRETE

IS CAST BELOW THE DEVELOPMENT LENGTH OR SPLICE.

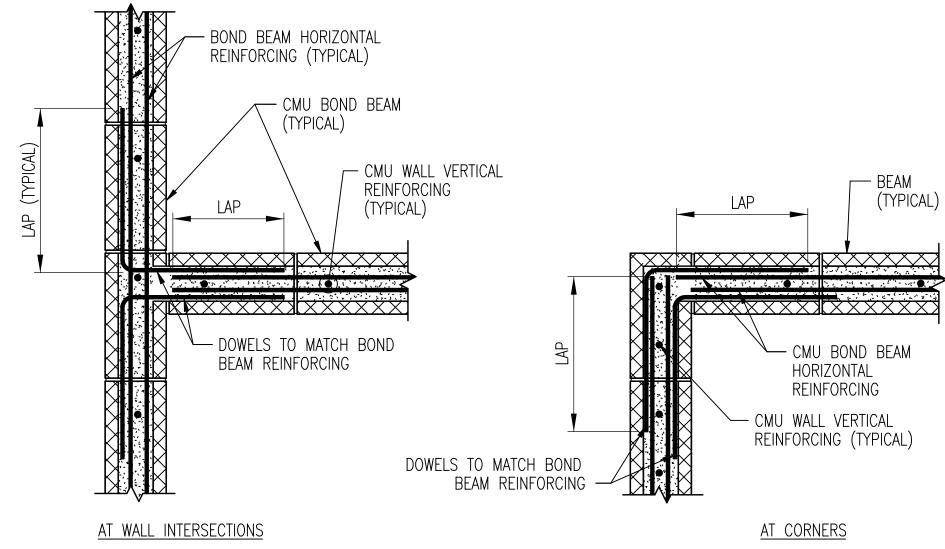
TENSION LAP SPLICE AND STANDARD HOOK LENGTH (ACI 318–14)

SO-02 / SCALE: NTS

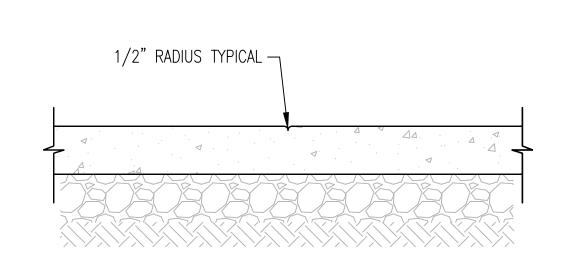


AS AN ALTERNATIVE TO THE METAL STRAP CONNECTOR, INTERLOCK AT LEAST FIFTY PERCENT OF MASONRY UNITS AT THE INTERSECTION.

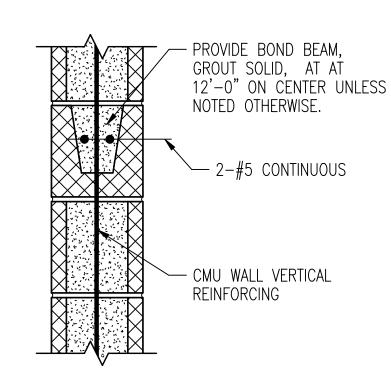
TYPICAL CMU WALL REINFORCING DETAILS AT FREE ENDS, CORNERS, AND INTERSECTIONS S0-02 SCALE: NTS



TYPICAL CMU BOND BEAM REINFORCING DETAIL SO-02 SCALE: NTS



TYPICAL FIBER REINFORCED SLAB-ON-GROUND SCORED JOINT (SJ) DETAIL SO-02 / SCALE: NTS



TYPICAL CMU BOND BEAM DETAIL SO-02 SCALE: NTS

CMU TENSION							
LAP SPLICE							
BAR	8"	CMU					
SIZE	А	В					
#3	12"	17"					
#4	13"	30"					
# 5	20"	46"					
#6	78 "	86"					

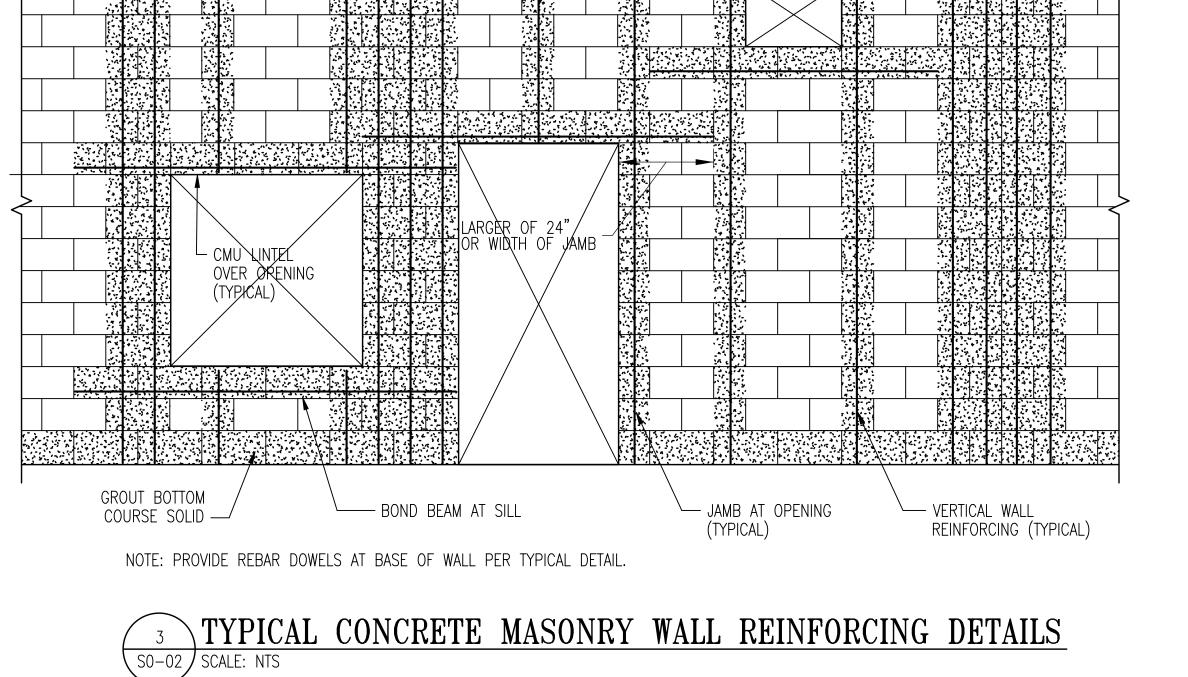
A= ONE BAR PER CELL. B= TWO BARS PER CELL. REFER TO "TYPICAL CMU WALL VERTICAL REINFORCING LAYOUT DETAIL."

BARS SPLICED BY NON-CONTACT LAP SPLICES MUST NOT BE SPACED FARTHER THAN ONE-FIFTH THE REQUIRED LENGTH OF LAP NOR MORE THAN 8".

3. F'm = 2,000 psi 4. GRADE 60 REINFORCING BAR.

CMU TENSION LAP SPLICE LENGTH SO-02 SCALE: NTS





- CONTINUOUS WALL

- CONTINUOUS BOND BEAM AT

FLOOR AND ROOF LEVELS

REINFORCING ABOVE

OPENINGS (TYPICAL)

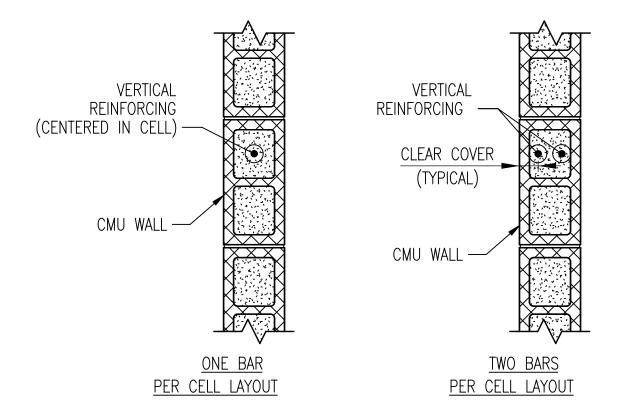
- CONTROL JOINT, SEE PLANS FOR

LOCATIONS

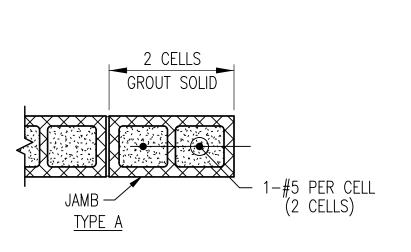
— DO NOT INTERCEPT

OPENING

BOND BEAM WITH

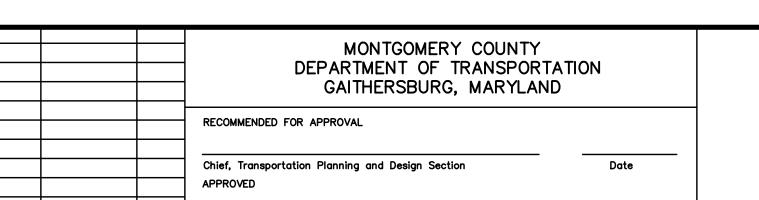


TYPICAL CMU WALL VERTICAL REINFORCING LAYOUT DETAIL \setminus S0-02 / SCALE: NTS



NOTE: PROVIDE TYPE A FOR OPENINGS UP TO 5'-0" WIDE.

TYPICAL BASE OF CMU WALL DETAIL TYPICAL CMU JAMB DETAIL SO-02 SCALE: NTS SO-02 SCALE: NTS



CMU WALL—

DOWEL TO MATCH CMU WALL REINFORCING

SIZE AND SPACING

GROUT BOTTOM COURSE SOLID

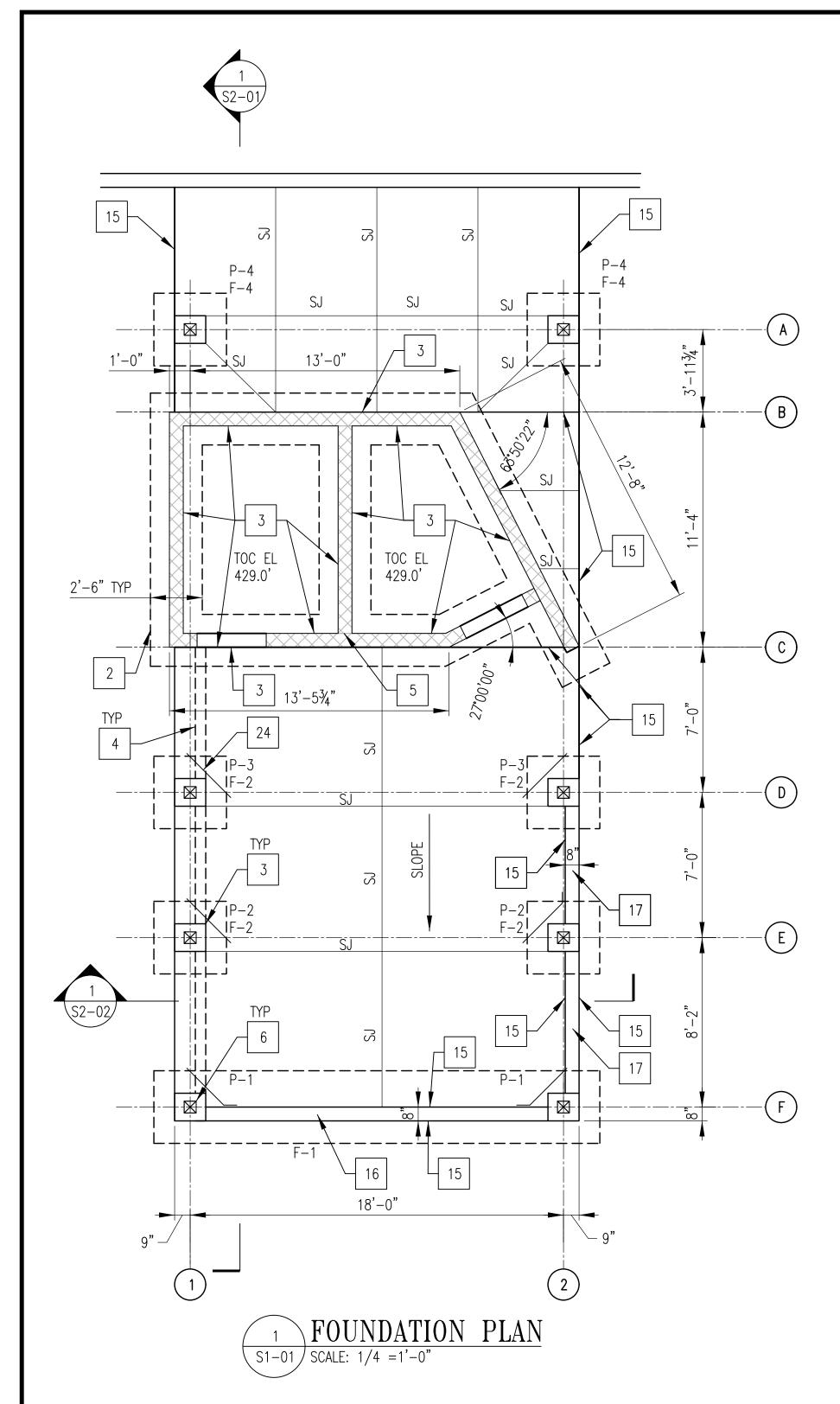
CONCRETE

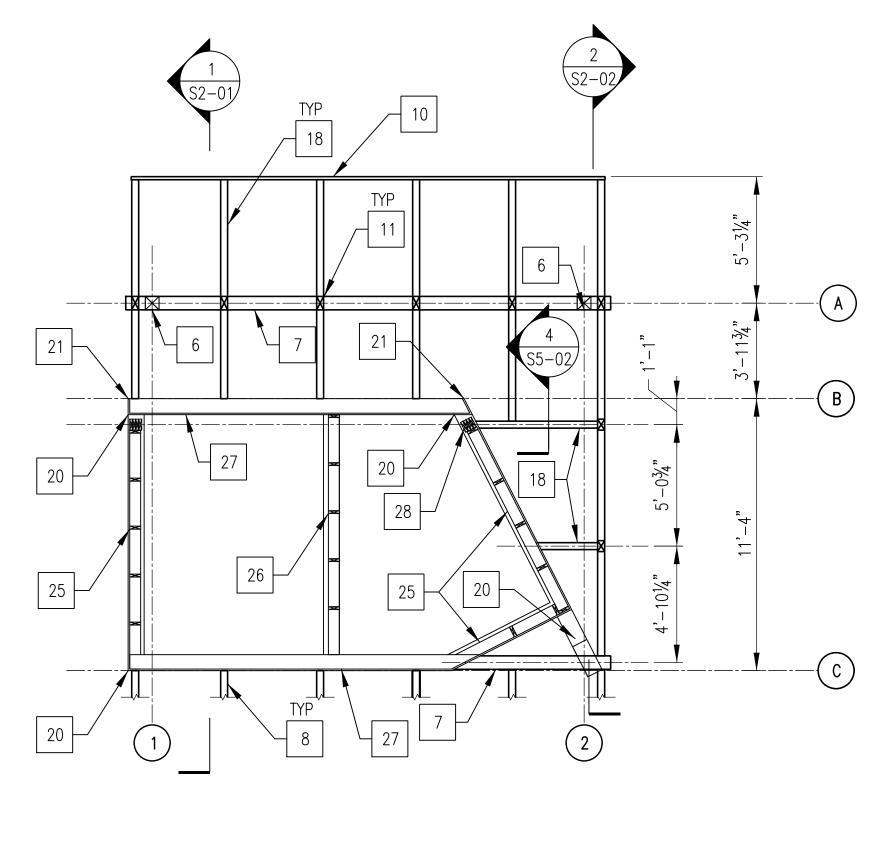
SO-02 - STRUCTURAL TYPICAL DETAILS

BOYDS TRANSIT IMPROVEMENTS

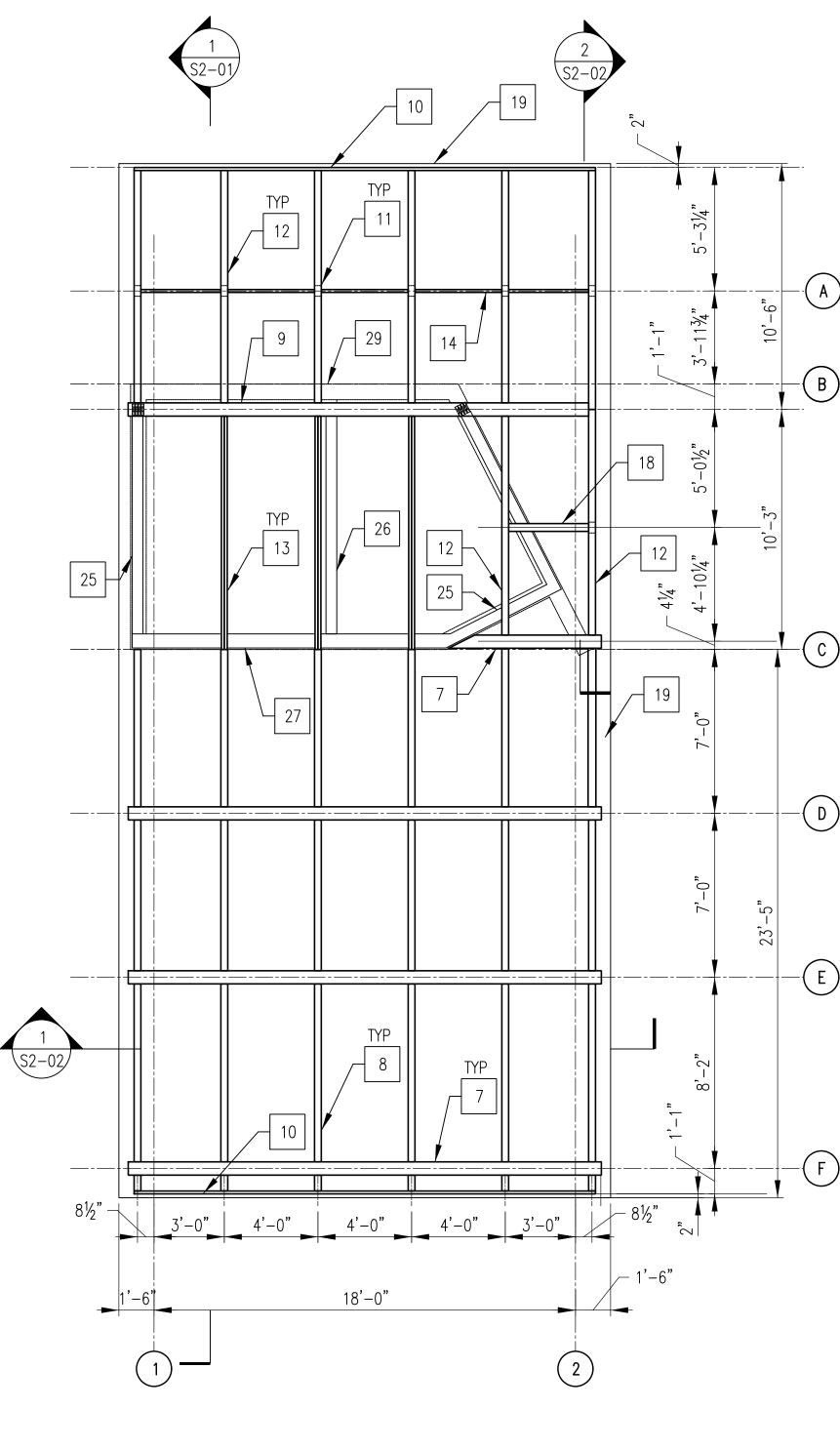
SCALE: AS NOTED JANUARY 2023 Project No. : 32207.003 SHEET <u>46</u> of 60

PROFESSIONAL CERTIFICATION.
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
EXPIRATION DATE:





2 LOWER ROOF FRAMING PLAN S1-01 | SCALE: 1/4 =1'-0"



S1-01 | SCALE: 1/4 =1'-0"

3 ROOF FRAMING PLAN

- 1. SEE SHEET SO-01 FOR GENERAL STRUCTURAL
- 2. SEE SHEET SO-02 FOR TYPICAL STRUCTURAL DETAILS.

NEW WORK KEYNOTES

- 1 EDGE OF CONCRETE SLAB
- 2 CONTINUOUS CONCRETE FOOTING
- 7 1/2" ISOLATION JOINT AROUND CONCRETE PIER,
- OR CMU WALL WITH BACKER ROD AND SEALANT, TYPICAL
- 4 THICKENED SLAB EDGE
- 5 8" CMU WALL WITH #5@24
- | 6 | 6-3/4"X6-7/8" GLULAM POST
- 7 | 6-3/4"X11" GLULAM BEAM
- 8 4x8 WOOD JOIST ABOVE BICYCLE STORAGE
-] 6-3/4"X 17-7/8" GLULAM RIDGE MEMBER, CUT
- 9 TO MATCH ROOF SLOPE
- 10 2x8 FASCIA BOARD, CUT TO MATCH ROOF SLOPE
- 11 4X6 WOOD POST
- 12 4x6 WOOD RAFTER
- 13 (2)2x12 WOOD RAFTER
- 14 2x6 WOOD PURLIN
- 15 1/2" ISOLATION JOINT WITH BACKER ROD AND SEALANT
- 16 8" THICK CONCRETE RETAINING WALL
- PROVIDE CONCRETE CURB SIMILAR TO MODIFIED TYPE D 17 CONCRETE CURB DETAIL ON SHEET PD-01.
- 18 4x6 WOOD JOIST
- 19 EDGE OF 1-1/2" TONGUE & GROOVE DECKING AND 7/16" THICK PLYWOOD
- 20 TOP OF CMU WALL EL 441.67'
- 21 TOP OF CMU WALL EL 442.33'
- 22 TOP OF CMU WALL EL XXX.XX' (TBD)
- PROVIDE POCKET FOR GLULAM BEAM, TOP OF CMU WALL AT POCKET EL 440.33'
- 24 2-#4X3'-0" RE-ENTRANT CORNER REINFORCING STEEL AT CENTER OF SLAB. TYPICAL
- 25 2X8 WOOD STUD FRAMING WITH VERTICAL MEMBERS AT 2'-0" ON CENTER
- 26 2X6 WOOD STUD FRAMING WITH VERTICAL MEMBERS AT 2'-0" ON CENTER
- 27 2X8 WOOD SILL PLATE
- 28 4-2X6 WOOD POST
- 28 8" CMU WALL (BELOW)

SCALE: 1/4" = 1'-0"

TYPE

F-2

F-3

CONCRETE FOOTING SCHEDULE

SIZE

21'-6"X3'-6"

3'-6"X3'-6"

2'-6" WIDE

(SEE NOTE 2)

3'-6"X3'-6" | 426.00'

1. PLACE TRANSVERSE REINFORCING STEEL AT EXTERIOR FACES OF THE FOOTING.

LONGITUDINAL

REINFORCING

#4@12 T&B

#4@12 T&B

#4@12 T&B

#4@12 T&B

STEEL

TRANSVERSE

REINFORCING

#4@12 T&B

#4@12 T&B

#4@12 T&B

#5@12

STEEL (SEE NOTE 1)

2. CENTER THE FOOTING UNDER 8" CMU WALL. PROVIDE DOWEL BARS TO MATCH WALL REINFORCING STEEL.

BOTTOM OF

FOOTING

424.25

424.50'

426.00'

ELEVATION

CONCRETE PIER SCHEDULE								
TYPE	SIZE	TOP OF PIER ELEVATION	VERTICAL REINFORCING STEEL	HORZIONTAL TIES				
P-1	1'-6"X1'-4"	429.00'	(8)#6	#4@12				
P-2	1'-6"X1'-4"	429.25'	(8)#6	#4@12				
P-3	1'-6"X1'-4"	429.46'	(8)#6	#4@12				
P-4	1'-6"X1'-4"	429.67'	(8)#6	#4@12				

PROFESSIONAL CERTIFICATION.

OF MARYLAND, LICENSE NO.__

EXPIRATION DATE:__

I HEREBY CERTIFY THAT THESE DOCUMENTS

THAT I AM A DULY LICENSED PROFESSIONAL

ENGINEER UNDER THE LAWS OF THE STATE

SHEET LEGEND

P-X INDICATES A PIER TYPE. SEE PIER SCHEDULE. F-1 INDICATES A FOOTING TYPE. SEE FOOTING SCHEDULE.

SJ INDICATES SCORED JOINT

WERE PREPARED OR APPROVED BY ME, AND Whitman, Requardt & Associates, LLI 801 South Caroline Street, Baltimore, Maryland 21231

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31					_
	NO.	REVISION	DATE	BY	

MONTGOMERY COUNTY DEPARTMENT OF TRANSPOR GAITHERSBURG, MARYLA	RTATION
RECOMMENDED FOR APPROVAL	
Chief, Transportation Planning and Design Section	 Date
APPROVED	2.10

Checked by: WC

signed by: <u>KC</u> Drawn by: <u>KC</u>

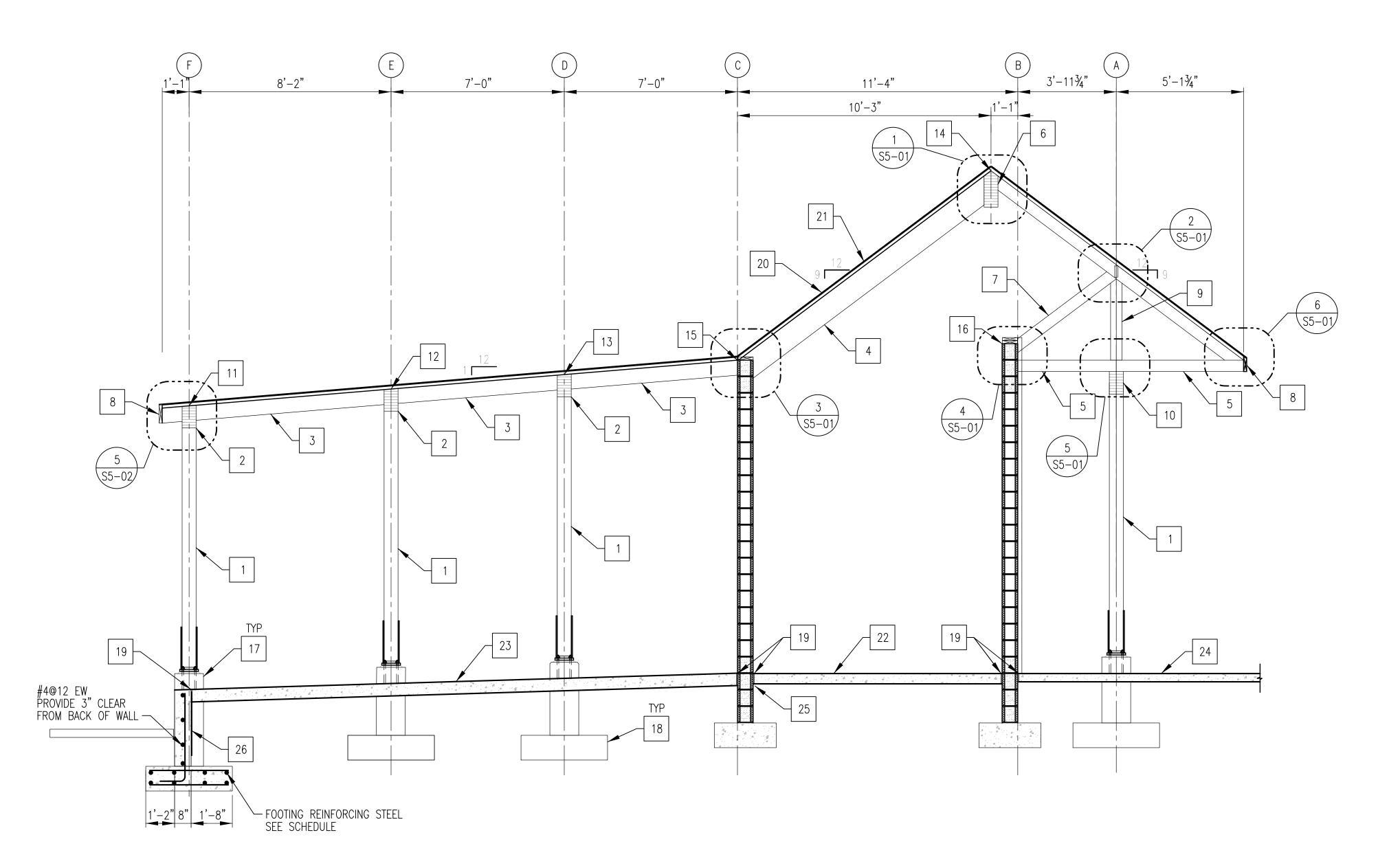
S1-01 STRUCTURAL PLANS

BOYDS TRANSIT IMPROVEMENTS

SCALE: 1/4" = 1'-0"

JANUARY 2023 SHEET <u>47</u> of 60

Project No. : 32207.003



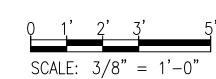
SECTION S2-01 | SCALE: 3/8"=1'-0" REF: S1-01

GENERAL KEYNOTES

- 1. SEE SHEET SO-01 FOR GENERAL STRUCTURAL NOTES.
- 2. SEE SHEET S0-02 TYPICAL STRUCTURAL DETAILS.

NEW WORK KEYNOTES

- 1 | 6-3/4"X6-7/8" GLULAM POST
- 2 6-3/4"X11" GLULAM BEAM. SLOPE TOP OF BEAM TO MATCH ROOF SLOPE.
- 3 4X8 WOOD JOIST
- 4 (2) 2X12 WOOD BUILT-UP RAFTER
- 5 4X6 WOOD RAFTER / JOIST
- 6 GLULAM RIDGE BEAM, CUT FROM 6-3/4"X17-7/8" TO MATCH ROOF SLOPE
- 7 4X6 WOOD DIAGONAL
- 8 2X8 FASCIA BOARD. CUT TO MATCH ROOF SLOPE
- 9 4X6 POST
- 10 6-3/4"X11" GLULAM BEAM. TOP OF BEAM EL 441.21'
- 11 WORKING POINT ELEVATION 439.82'
- 12 WORKING POINT ELEVATION 440.50'
- 13 WORKING POINT ELEVATION 441.08'
- 14 WORKING POINT ELEVATION 449.32' (TOP OF GLULAM)
- 15 TOP OF CMU BOND BEAM EL 441.67'
- 16 TOP OF CMU BOND BEAM EL 442.33'
- 17 CONCRETE PIER (SEE PIER SCHEDULE)
- 18 CONCRETE FOOTING (SEE FOOTING SCHEDULE)
- 19 1/2" ISOLATION JOINT WITH JOINT SEALANT
- 20 1 1/2" TONGUE AND GROOVE DECK
- 21 7/16" PLYWOOD
- 22 5" THICK FIBER REINFORCED SLAB-ON-GROUND ON 15 MIL VAPOR BARRIER AND 6" OF NO. 57 STONE. TOP OF FINISHED FLOOR ELEVATION 429.00'
- 23 6" THICK FIBER REINFORCED SLAB-ON-GROUND ON 6" OF GRADED AGGREGAT BASE
- 24 4" THICK SIDEWALK. SEE CIVIL SHEETS FOR REQUIREMENTS
- FOUNDATION INSULATION NOT SHOWN FOR CLARITY.
 REFER TO ARCHITECTURAL SHEETS FOR REQUIREMENTS
- PROVIDE DAMP PROOFING ON BACK FACE OF RETANING 26 WALL FROM 4" BELOW TOP OF WALL TO 6" BELOW BOTTOM OF CONCRETE SIDEWALK AT FRONT OF WALL.



Checked by: WC

PROFESSIONAL CERTIFICATION. 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.__

EXPIRATION DATE:__



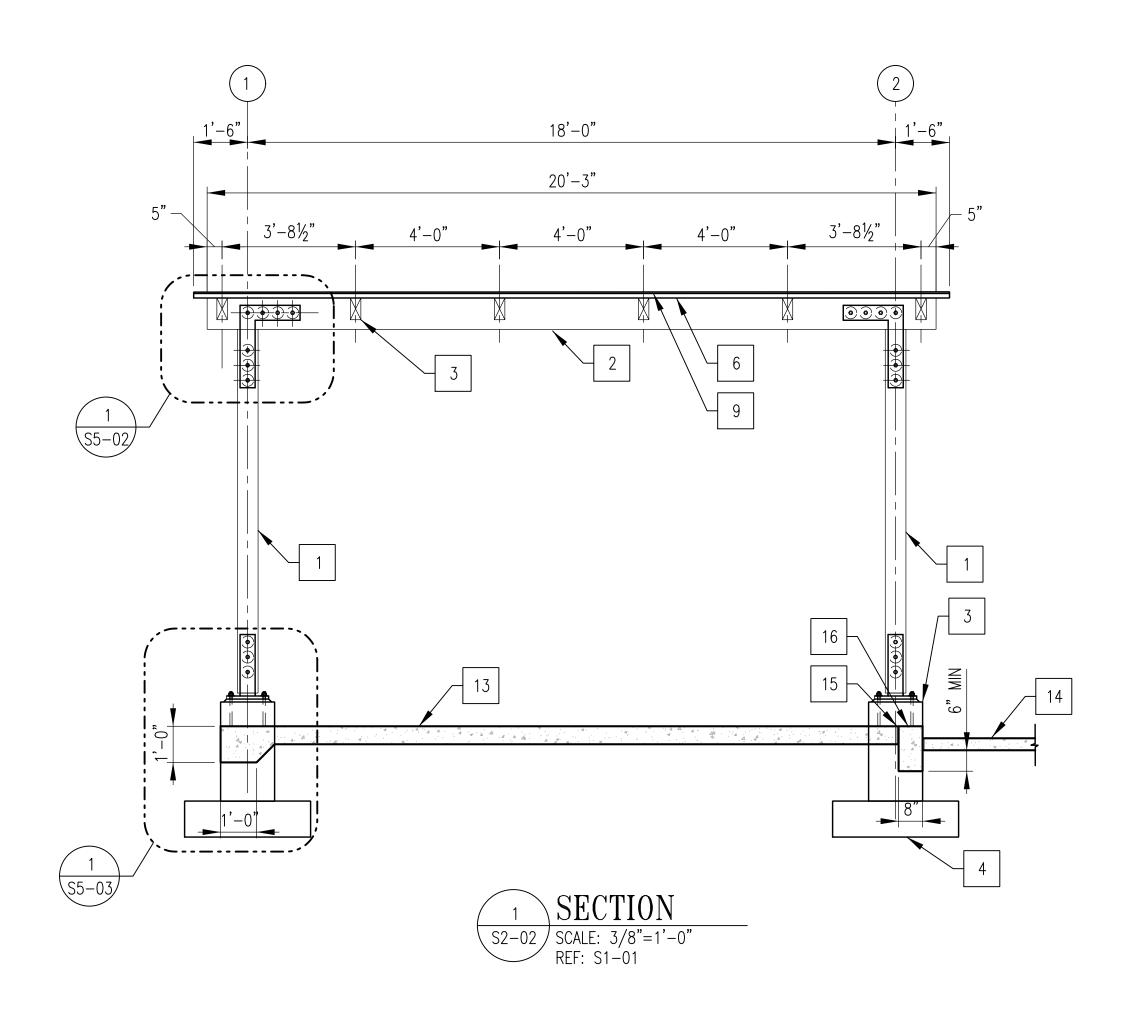
				MONTGOMERY COUN DEPARTMENT OF TRANSF GAITHERSBURG, MARY
				RECOMMENDED FOR APPROVAL
				Chief, Transportation Planning and Design Section APPROVED
				Chief, Division of Transportation Engineering
NO.	REVISION	DATE	BY	Designed by: <u>KC</u> Drawn by: <u>WC</u>

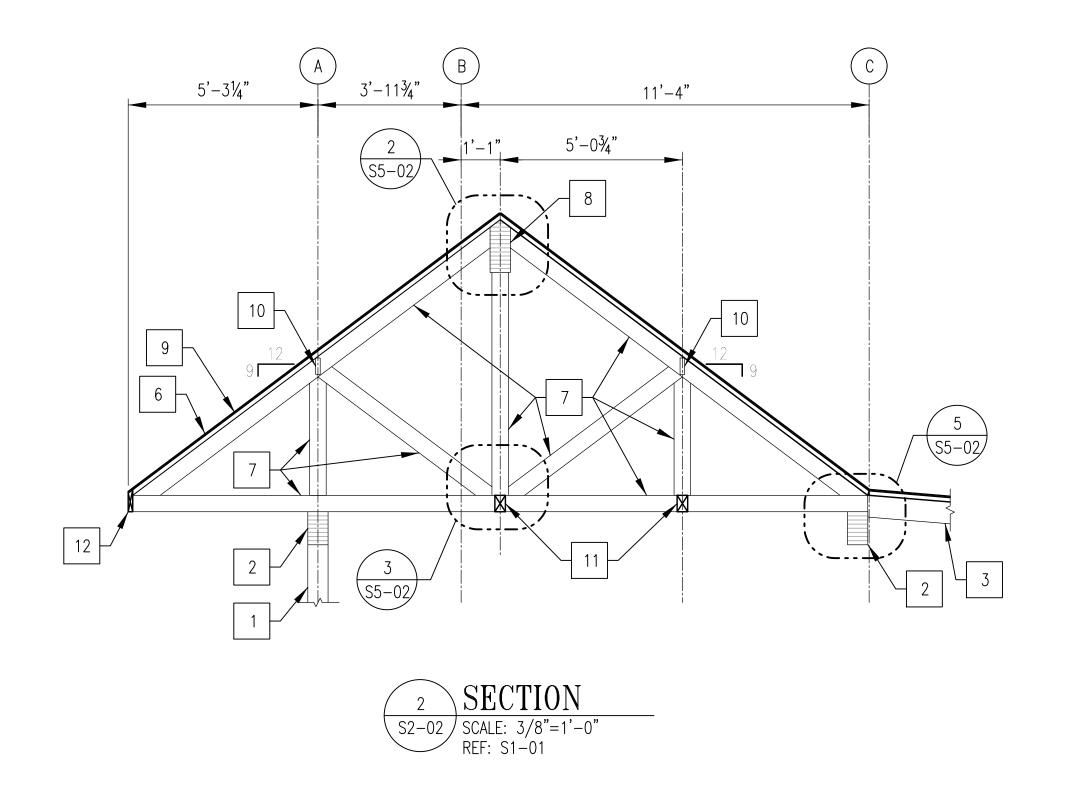
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND ECOMMENDED FOR APPROVAL chief, Transportation Planning and Design Section PPROVED nief, Division of Transportation Engineering

S2-01 - ELEVATIONS

BOYDS TRANSIT IMPROVEMENTS

SCALE : AS NOTED JANUARY 2023 Project No. : <u>32207.003</u> SHEET <u>48</u> of 60





GENERAL KEYNOTES

- 1. SEE SHEET SO-01 FOR GENERAL STRUCTURAL NOTES.
- 2. SEE SHEET SO-02 FOR TYPICAL STRUCTURAL DETAILS.

NEW WORK KEYNOTES

- 1 | 6-3/4"X6-7/8" GLULAM POST
- 2 6-3/4"X11" GLULAM BEAM
- 3 4X8 WOOD JOIST
- 4 | SCHEDULED FOOTING (SEE SHEET S1-01)
- 5 | SCHEDULED PIER (SEE SHEET S1-01)
- 6 | 1 1/2" TONGUE AND GROOVE DECK
- 7 4X6 WOOD TRUSS MEMBERS
- 8 GLULAM RIDGE MEMBER. CUT FROM 6-3/4"X17-7/8" TO MATCH ROOF SLOPE
- 9 7/16" PLYWOOD
- 10 2X6 WOOD PURLIN
- 11 4X6 WOOD JOIST
- 12 2X8 WOOD FASCIA BOARD, CUT TO MATCH ROOF SLOPE
- 13 6" THICK FIBER REINFORCED SLAB-ON-GROUND ON 6" GRADED AGGREGATE BASE
- 4" THICK CONCRETE SIDEWALK, REFER TO CIVIL SHEETS FOR REQUIREMENTS.
- 15 1/2" ISOLATION JOINT WITH BACKER ROD AND SEALANT
- 16 CONCRETE CURB. SIMILAR TO MODIFIED TYPE D CONCRETE CURB DETAIL ON SHEET PD-01

PROFESSIONAL CERTIFICATION. 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.___

EXPIRATION DATE:__



				MONTGOMER DEPARTMENT OF GAITHERSBURG
				RECOMMENDED FOR APPROVAL
				Chief, Transportation Planning and Design Sec APPROVED
				Chief, Division of Transportation Engineering
NO.	REVISION	DATE	BY	Designed by: <u>KC</u> Drawn by: _

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND ECOMMENDED FOR APPROVAL chief, Transportation Planning and Design Section

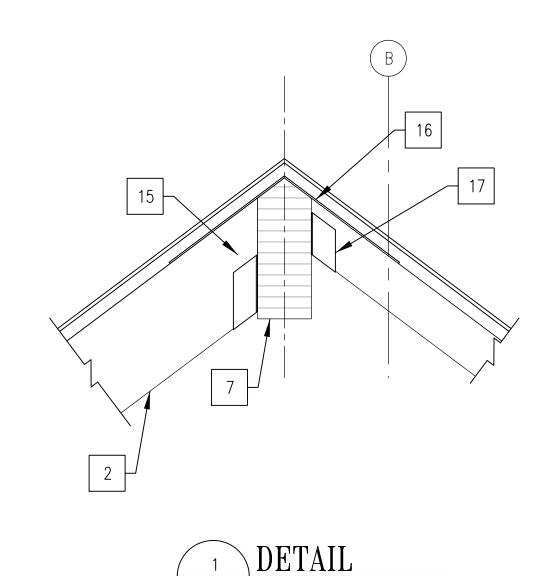
Checked by: WC

esigned by: <u>KC</u> Drawn by: <u>WC</u>

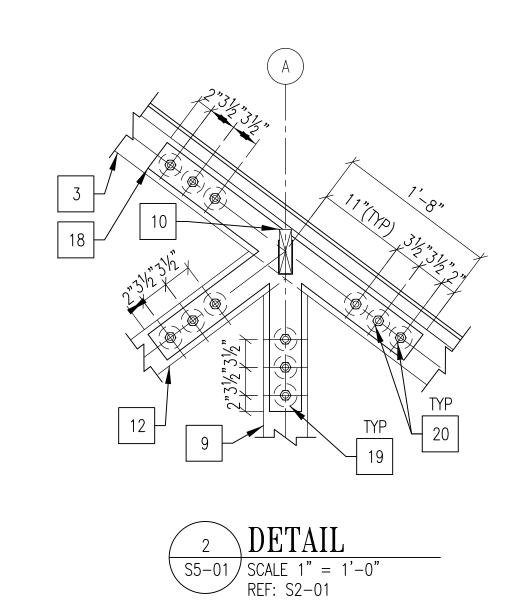
BOYDS TRANSIT **IMPROVEMENTS**

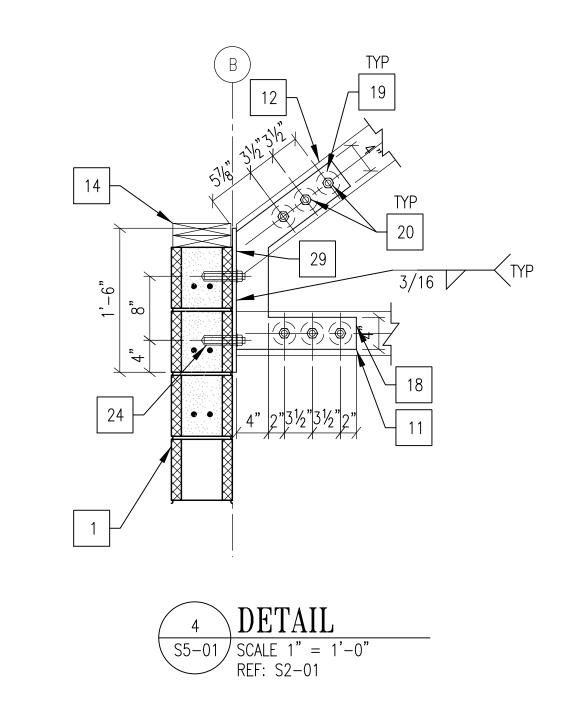
SCALE : AS NOTED JANUARY 2023 Project No. : <u>32207.003</u> SHEET <u>49</u> of 60

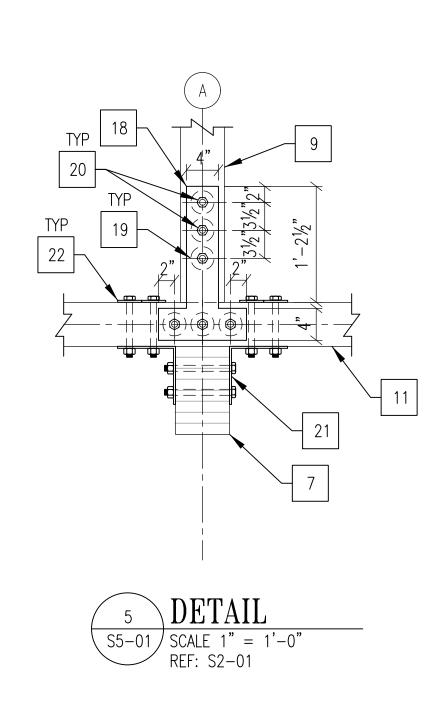
S2-02 - ELEVATION AND DETAILS

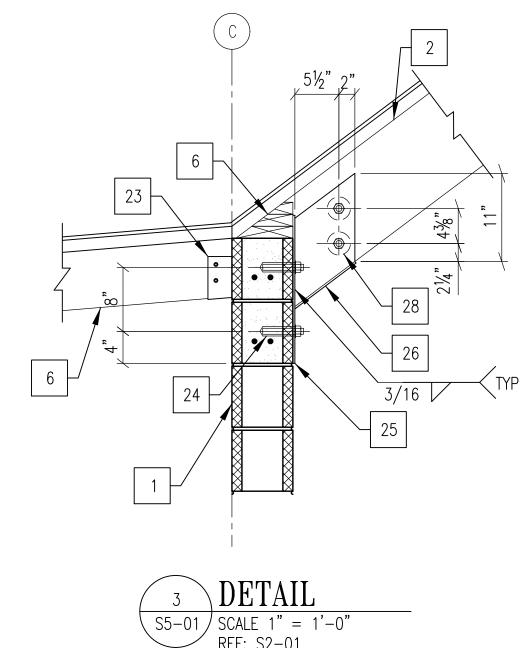


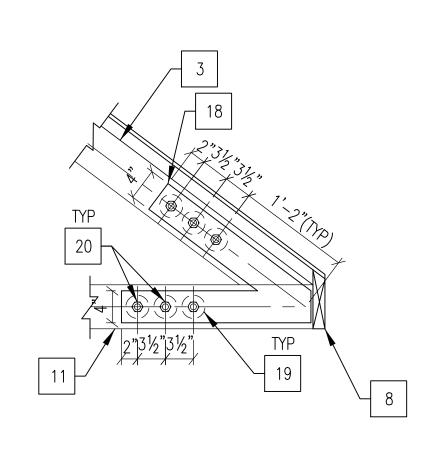
S5-01 SCALE 1" = 1'-0" REF: S2-01



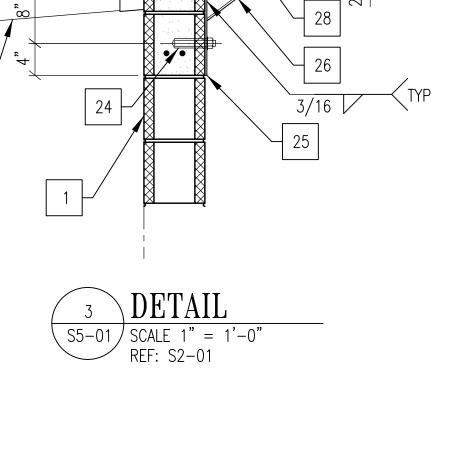




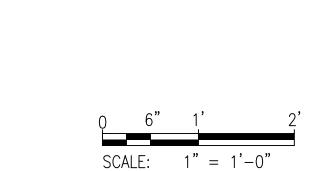












GENERAL KEYNOTES

- 1. SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES.
- 2. SEE SHEET S-002 FOR TYPICAL STRUCTURAL DETAILS.

NEW WORK KEYNOTES

- 1 8" CMU WALL
- 2 (2)x 2x12 WOOD RAFTER
- 3 4X6 WOOD RAFTER
- 4 6-3/4"X6-7/8" GLULAM POST
- 5 GLULAM RIDGE BEAM. CUT FROM 6-3/4" X 17-7/8" TO MATCH ROOF SLOPE.
- 6 4x8 WOOD JOIST
- 7 | 6-3/4"X11" GLULAM BEAM
- 8 2x8 FASCIA BOARD. CUT TO MATCH ROOF SLOPE.
- 9 4X6 WOOD POST
- 10 2x6 WOOD PURLIN
- 11 4X6 WOOD JOIST
- 12 4X6 WOOD DIAGONAL
- 13 2X8 SILL PLATE. CUT TO MATCH ROOF SLOPE.
- 14 (2) 2X8 SILL PLATES
- 15 SIMPSON STRONG—TIE JOIST HANGER MODEL NO. HHUS48xSLD41
- 16 SIMPSON STRONG-TIE STRAP TIE MODEL NO. MSTI36
- 17 SIMPSON STRONG-TIE JOIST HANGER MODEL NO. HHUS446xSLD41
- 18 3/8" GUSSET PLATE ON BOTH SIDES OF MEMBER
- 19 (3) 2-5/8" DIAMETER SHEAR PLATE ON BOTH SIDES OF MEMBER WITH 3/4" DIAMETER THROUGH BOLTS
- 20 SHORT-SLOTTED HOLES IN STEEL PLATE (BOTH SIDES) PERPENDICULAR TO LENGTH OF MEMBER. TWO PER BOLT GROUP.
- 21 SIMSPON STRONG-TIE HEAVY ANGLE MODEL NO. HL73 BOTH SIDES
- 22 3" DIAMETER 1/4" THICK HOT-DIP GALVANIZED ROUND PLATE WASHER, TYPICAL
- 23 SIMPSON STRONG-TIE JOIST HANGER MODEL NO. APHH46
- 24 (2) 3/4" DIAMETER HILTI HY-270 ADHESIVE ANCHOR WITH 6-3/4" EMBEDMEDMENT. BOTH SIDES AT 8" SPACING CENTERED ON JOIST.
- 25 PL3/8"x1'-0"x1'-6 1/2" CENTERED ON RAFTER
- 26 1/4" BENT PLATE JOIST SEAT

Project No. : <u>32207.003</u>

- 28 (2)2-5/8" DIAMETER SHEAR PLATE ON BOTH SIDES OF MEMBER WITH 3/4" DIAMETER THROUGH BOLTS
- 29 PL3/8x1'-0"x1'-6" CENTERED ON JOIST

PROFESSIONAL CERTIFICATION. 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. EXPIRATION DATE:__



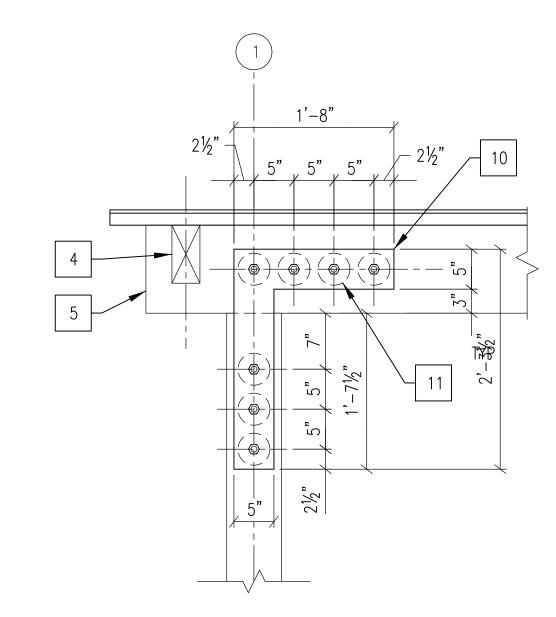
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NO.	REVISION	DATE	BY	D€

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND ECOMMENDED FOR APPROVAL chief, Transportation Planning and Design Section PPROVED signed by: <u>KC</u> Drawn by: <u>WC</u> Checked by: WC

S5-01 - DETAILS

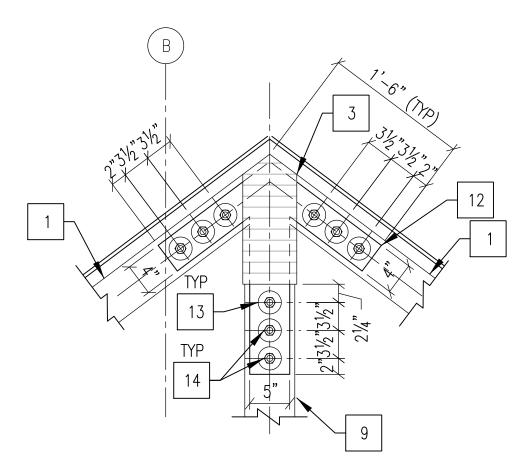
BOYDS TRANSIT IMPROVEMENTS

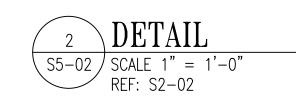
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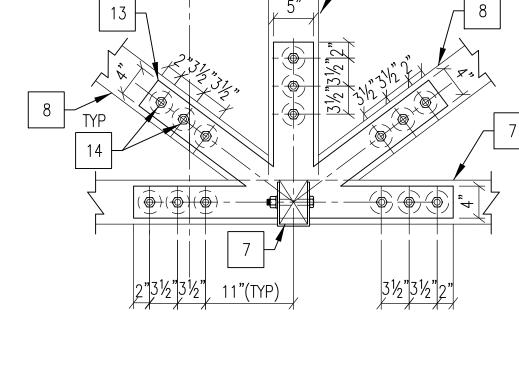


NOTE: GLULAM BEAM CONNECTIONS TO GLULAM POST IS TYPICAL FOR ALL 8 LOCATIONS.

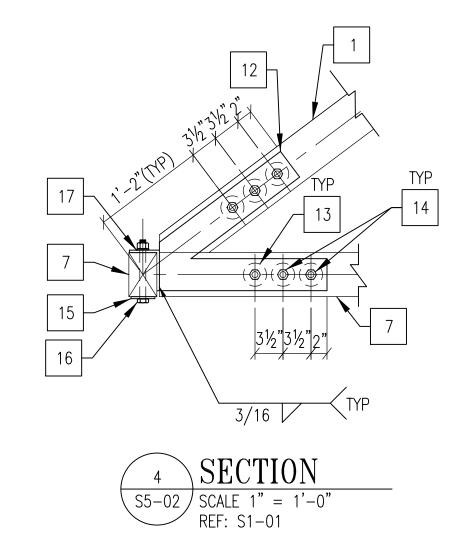


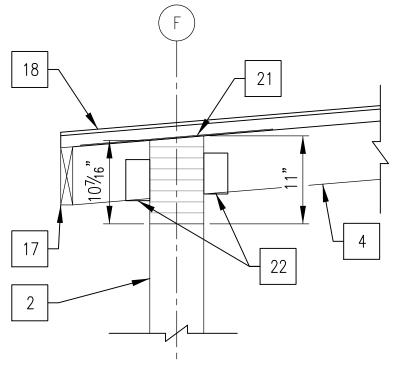


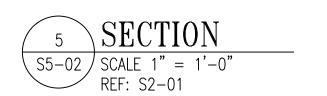












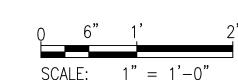


GENERAL KEYNOTES

- 1. SEE SHEET SO-01 FOR GENERAL STRUCTURAL NOTES.
- 2. SEE SHEET SO-02 FOR TYPICAL STRUCTURAL DETAILS.

NEW WORK KEYNOTES

- 1 4X6 WOOD RAFTER
- 2 6-3/4"X6-7/8" GLULAM POST
- 3 GLULAM RIDGE BEAM. CUT FROM 6-3/4" X 17-7/8" TO MATCH ROOF SLOPE.
- 4 4x8 WOOD JOIST
- 5 | 6-3/4"X11" GLULAM BEAM
- 6 4X6 WOOD POST
- 7 4X6 WOOD JOIST
- 8 4X6 WOOD DIAGONAL
- 9 4x8 WOOD POST
- 10 1/2" GUSSET PLATE ON BOTH SIDES OF MEMBER
- 4" DIAMETER SHEAR PLATE ON BOTH SIDES OF MEMBER WITH 3/4" DIAMETER THROUGH BOLTS
- 12 3/8" GUSSET PLATE BOTH SIDES OF MEMBER
- (3) 2-5/8" DIAMETER SHEAR PLATE ON BOTH SIDES OF MEMBER WITH 3/4" DIAMETER THROUGH BOLTS
- SHORT-SLOTTED HOLES (13/16"X1") IN STEEL PLATE (BOTH SIDES) PERPENDICULAR TO LENGTH OF MEMBER. TWO PER BOLT GROUP.
- 15 3" DIAMETER 1/4" THICK HOT-DIP GALVANIZED ROUND PLATE WASHER, TYPICAL
- 16 (2)3/4" DIAMETER THROUGH BOLT @ 3" ON CENTER
- $17 \mid L5x3-1/2x5/16$ (LLV) X 0'-6" LONG. GRIND CORNER OF 4X6 AT CONER OF ANGLE TO PROVIDE TIGHT FIT. PROVIDE TRANSERVE SHORT-SLOTTED HOLE (13/16"x1") FOR 3/4" DIAMETER THROUGH BOLTS
- 18 2X8 FASCIA BOARD, CUT TO MATCH ROOF SLOPE.
 SECURE FASCIA BOARD TO WOOD JOIST WITH (3) 10d NAIL
- 19 1-1/2" TONGUE AND GROOVED DECKING AND 7/16" PLYWOOD
- 20 (2)3/4" DIAMETER THROUGH BOLT @ 3" ON CENTER
- 21 SIMPSON STRONG-TIE MSTA24 (1-1/4"X24")-18 GAUGE GALVANIZED STEEL STRAP TIE, CENTERED OVER GLULAM MEMBER. FASTEN STRAP TIE WITH MINIMUM (8) 0.148X2-1/2 NAILS TO THE 4X8 JOISTS ON BOTH SIDES OF THE GLULAM MEMBER. NAIL STRAP TO GLULAM MEMBER. TYPICAL FOR ALL CANTILEVERED JOIST.
- 22 SIMPSON STRONG-TIE JOIST HANGER NO. APHH46. PROVIDE FILLER TO SIT JOIST SQUARE ON HANGER. TYPICAL FOR 4X8 JOISTS.



Designed by: KC Drawn by: WC

PROFESSIONAL CERTIFICATION. 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.__ EXPIRATION DATE:_



				MONTGOMEI DEPARTMENT OF GAITHERSBUR
				RECOMMENDED FOR APPROVAL
				Chief, Transportation Planning and Design Se APPROVED
				Chief, Division of Transportation Engineering
NO.	REVISION	DATE	BY	Designed by: <u>KC</u> Drawn by: _

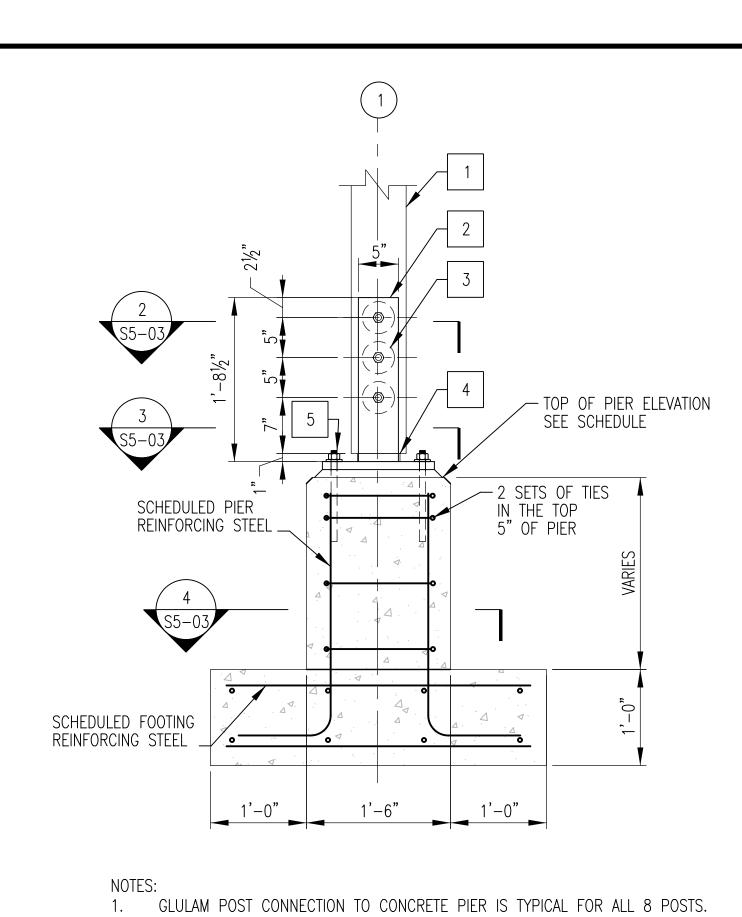
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RECOMMENDED FOR APPROVAL	
Chief, Transportation Planning and Design Section APPROVED	Date

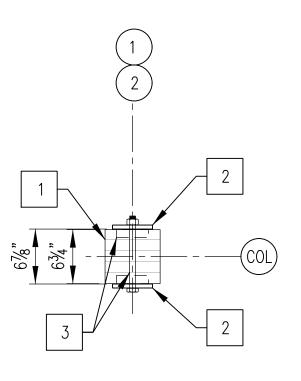
Checked by: WC

S5-02 - DETAILS

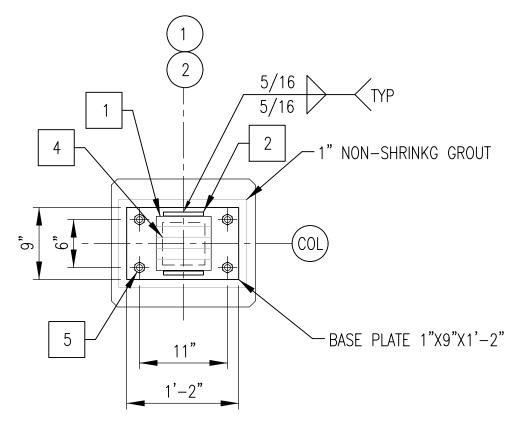
BOYDS TRANSIT IMPROVEMENTS

SCALE : AS NOTED JANUARY 2023 Project No. : 32207.003 SHEET <u>51</u> of 60

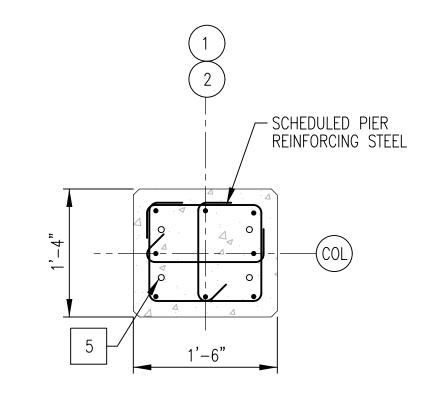




SECTION S5-03 | SCALE 1" = 1'-0" REF: S5-03



SECTION S5-03 | SCALE 1" = 1'-0" REF: S5-03



3 SECTION S5-03 | SCALE 1" = 1'-0" REF: S5-03



- 1. SEE SHEET SO-01 FOR GENERAL STRUCTURAL NOTES.
- 2. SEE SHEET SO-02 FOR TYPICAL STRUCTURAL DETAILS.

NEW WORK KEYNOTES

 $| 1 | 6-3/4" \times 6-7/8"$ GLULAM POST.

2 GUSSET PLATE 1/2" THICK WITH 13/16" DIAMETER HOLES FOR 3/4" DIAMETER THROUGH BOLTS.

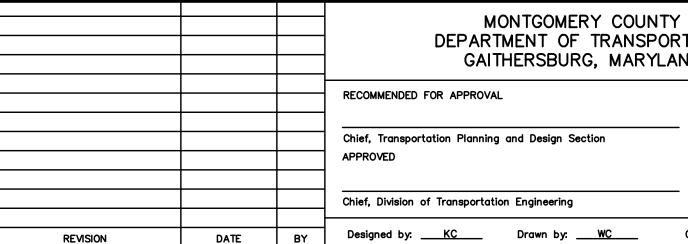
3 4" DIAMETER SHEAR PLATE WITH 3/4" DIAMETER THROUGH BOLTS

SIMPSON STRONG-TIE CSP-8 STANDOFF BASE 5 5/16" X 4 5 5/16" X 1". SECURE STANDOFF TO POST WITH 0.148"X3" NAIL.

(4) 3/4" DIAMETER ADHESIVE BOLT (HILTI HY-200) WITH 5 HOT-DIPPED GALVANIZED, GRADE 36, HAS ROD WITH 8" EMBEDMENT.

PROFESSIONAL CERTIFICATION. 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.__





DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND Chief, Transportation Planning and Design Section

Checked by: WC

S5-03 - SECTIONS AND DETAILS

BOYDS TRANSIT IMPROVEMENTS

SCALE : AS NOTED JANUARY 2023 Project No. : <u>32207.003</u> SHEET <u>54</u> of 60

EXPIRATION DATE:_

2. CONCRETE SLAB-ON-GROUND NOT SHOWN FOR CLARITY.

S5-03 | SCALE 1" = 1'-0" REF: S2-02

DEFINITIONS GENERAL NOTES FURNISH: SUPPLY AND DELIVER TO PROJECT SITE, READY FOR UNLOADING 1. INSTALLATION OF ELECTRICAL WORK MUST CONFORM TO THE AHJ'S LATEST ACCEPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL UNPACKING, INSTALLATION, AND SIMILAR OPERATIONS. APPLICABLE LOCAL CODES AND QUALITY WORKMANSHIP STANDARDS. INSTALL: UNLOAD, TEMPORARILY STORE, UNPACK, ASSEMBLE, ERECT, PLACE, ANCHOR, APPLY, WORK TO DIMENSION, FINISH, CURE, PROTECT, 2. DRAWINGS ARE DIAGRAMMATIC. FINAL EQUIPMENT LOCATIONS MUST BE COORDINATED IN THE FIELD AND FIT INTO THE AVAILABLE SPACE IN ACCORDANCE WITH GIVEN CLEAN AND SIMILAR OPERATIONS AT PROJECT SITE. WORK SPACE REQUIRED BY CODE AND MAINTENANCE REQUIRED BY THE FURNISH AND INSTALL, COMPLETE AND READY FOR INTENDED USE. PROVIDE: MANUFACTURER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE EQUIPMENT THAT MEETS THE ABOVE REQUIREMENTS AND NOTIFY THE OWNER/ENGINEER WHEN THE REQUIREMENTS ARE NOT MET. WIRING: CONDUIT AND WIRES / CONDUCTORS. EXISTING TO REMAIN: LEAVE EXISTING ITEMS THAT ARE NOT TO BE REMOVED AND THAT 3. THE ELECTRICAL CONTRACTOR MUST PROVIDE THE NECESSARY COORDINATION, INSTRUCTIONS AND SUPERVISION NEEDED WHEN WORKING WITH OTHER TRADES. ARE NOT OTHERWISE INDICATED TO BE SALVAGED OR REINSTALLED. 4. COORDINATE WORK RELATED TO THE ELECTRICAL SERVICE DIRECTLY WITH THE REMOVE / DEMOLISH: DETACH ITEMS FROM EXISTING CONSTRUCTION AND DISPOSE OF THEM OFF-SITE UNLESS INDICATED TO BE SALVAGED OR UTILITY COMPANY AND OBTAIN APPROVAL BEFORE INSTALLATION. REINSTALLED. 5. COORDINATE WORK RELATED TO TELEPHONE SERVICE DIRECTLY WITH THE TELEPHONE COMPANY AND OBTAIN APPROVAL BEFORE INSTALLATION. REMOVE AND SALVAGE: DETACH ITEMS FROM EXISTING CONSTRUCTION, IN A MANNER TO PREVENT DAMAGE AND DELIVER TO OWNER FOR REUSE. 6. SUBMIT A LIST OF MAJOR EQUIPMENT INCLUDING LIGHT FIXTURES TO THE ENGINEER FOR REVIEW AND APPROVAL. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT THE REMOVE AND REINSTALL: DETACH ITEMS FROM EXISTING CONSTRUCTION, IN A MANNER TO PERMISSION OF THE OWNER/ENGINEER IN WRITING. EQUIPMENT MUST BE NEW PREVENT DAMAGE, PREPARE FOR REUSE, AND REINSTALL WHERE AND INCLUDE THE MANUFACTURER'S NAME, TRADE NAME AND UL CERTIFICATION. 7. ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT ARE BASED ON EQUIPMENT SPECIFIED. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL SHOP DRAWINGS PRIOR TO ORDERING AND INSTALLING EQUIPMENT. 8. ELECTRICAL EQUIPMENT INSTALLED AGAINST CONCRETE OR MASONRY WALLS MUST BE INSTALLED WITHIN A 1/4" SPACE BETWEEN THE EQUIPMENT AND THE MOUNTING SURFACE. SPACERS MUST BE STAINLESS STEEL, PVC OR NYLON. 9. PROVIDE NECESSARY COMPONENTS REQUIRED FOR MAKING FINAL CONNECTIONS OF EQUIPMENT INSTALLED AS PART OF THIS CONTRACT. 10. CIRCUIT NUMBERS ARE FOR IDENTIFICATION PURPOSE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR BALANCING LOADS AND CORRECTLY PHASING THE CIRCUITS IN PANELBOARDS. 11. MINIMUM CONDUIT AND WIRE SIZE IS 3/4" AND #12 AWG. 12. DO NOT INSTALL MORE THAN THREE CIRCUITS IN ONE HOMERUN UON. 13. 120V CIRCUITS MUST HAVE SEPARATE NEUTRALS. 14. PROVIDE #10 AWG OR LARGER WIRES TO 120 VOLT RECEPTACLE CIRCUITS WHERE THE LAST RECEPTACLE IS LOCATED 100 FEET OR MORE FROM THE PANELBOARD 15. PROVIDE PULL STRINGS IN EMPTY CONDUIT TO FACILITATE PULLING OF CABLES IN FUTURE. 16. CONTRACTOR MUST VERIFY DOOR SWINGS BEFORE SETTING SWITCHES. INSTALL SWITCHES ON THE LOCK SIDE OF DOORS 4 FEET AFF, UNLESS OTHERWISE NOTED. 17. PANEL BUSSES MUST BE COPPER UON. 18. CONDUIT ROUTING, WHEN SHOWN, IS DIAGRAMMATIC AND MUST BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS. INTERIOR CONDUITS INCLUDING THOSE EXPOSED, ABOVE SUSPENDED CEILINGS, AND CONCEALED WITHIN FURRED WALLS MUST BE INSTALLED PARALLEL TO BEAMS AND WALLS. CONDUITS INSTALLED IN FINISHED AREAS MUST BE CONCEALED. 19. PROVIDE PULL BOXES AND JUNCTION BOXES, WHEN REQUIRED, IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS THOUGH THESE BOXES MAY NOT BE SHOWN ON THE DRAWINGS. JUNCTION AND PULL BOXES, ASSOCIATED WITH FEEDERS AND BRANCH CIRCUITS, MUST BE LABELED SHOWING THE PANEL AND CIRCUIT NUMBERS ROUTED THROUGH THEM. 20. THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUITS ARE BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS, APPROVED BY THE ENGINEER, MAY BE MADE BY THE CONTRACTOR AT THEIR EXPENSE TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. 21. NUMBERS ADJACENT TO EQUIPMENT AND DEVICES INDICATE THE PANEL AND CIRCUIT SERVING THAT EQUIPMENT OR DEVICE. PROVIDE COMPLETE WIRING IN CONDUIT. 22. ELECTRICAL EQUIPMENT LOCATED OUTDOORS MUST HAVE NEMA 4X ENCLOSURE 23. OUTDOOR UNDERGROUND CONCRETE ENCASED CONDUITS SHALL BE PVC SCHEDULE 40 UON. 24. DIRECT-BURIED UNDERGROUND CONDUITS MUST BE SCHEDULE 80 UON. 25. WIRES: INTERIOR — THHN / THWN-2 , UON 26. WIRES: EXTERIOR - XHHN / XHWN-2, UON 27. PROVIDE SYSTEM GROUNDING CONDUCTORS AND EQUIPMENT GROUNDING CONDUCTORS IN ACCORDANCE WITH NEC-250, UON. MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION E-001 - ELECTRICAL GAITHERSBURG, MARYLAND GENERAL NOTES AND DEFINITIONS PROFESSIONAL CERTIFICATION. RECOMMENDED FOR APPROVAL I HEREBY CERTIFY THAT THESE DOCUMENTS BOYDS TRANSIT WERE PREPARED OR APPROVED BY ME, AND Chief, Transportation Planning and Design Section IMPROVEMENTS THAT I AM A DULY LICENSED PROFESSIONAL APPROVED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.____ Whitman, Requardt & Associates, LLP Chief, Division of Transportation Engineering SCALE : NO SCALE JANUARY 2023 EXPIRATION DATE: 801 South Caroline Street, Baltimore, Maryland 21231 Project No. : <u>32207.003</u> SHEET <u>53</u> of 60 Designed by: <u>RWL</u> Drawn by: <u>PD</u> Checked by: ____IHK___ REVISION DATE BY

LIGHTING o LED LIGHTING FIXTURE WG ├── LED INDUSTRIAL TYPE LIGHTING FIXTURE, WG = WIRE GUARD WALL PACK LIGHTING FIXTURE FLOOD/SPOT LIGHTING FIXTURE EXIT LIGHTING FIXTURE, ARROW, INDICATES DIRECTION EXIT LIGHTING FIXTURE TYPE SYMBOL (SEE LIGHTING FIXTURE SCHEDULE) EMERGENCY BATTERY POWERED LIGHTING UNIT SINGLE LIGHTING FIXTURE - HIGH INTENSITY DISCHARGE POLE MOUNTED. DOUBLE LIGHTING FIXTURES — HIGH INTENSITY DISCHARGE POLE MOUNTED. COLONIAL POST MOUNTED LIGHT FIXTURE SWITCHES SINGLE POLE SWITCH, 20A, 120-277V LIGHTING CONTACTOR (X POLE) 277V PHOTO CELL OCCUPANCY SENSOR PROVIDE POWER PACK AS REQUIRED. CEILING MOUNTED. RECEPTACLES DUPLEX CONVENIENCE RECEPTACLE, 20A, 125V AC, MOUNT 1'-6" AFF (UON) DUPLEX CONVENIENCE RECEPTACLE 20A, 125V AC, SUBSCRIPT "G" INDICATES GFI TYPE, MOUNT 18" AFF (UON) DUPLEX CONVENIENCE RECEPTACLE 20A, 125V AC, SUBSCRIPT "G" INDICATES GFI TYPE, MOUNT 12" ABOVE COUNTER (UON) SPECIAL PURPOSE RECEPTACLE 20A OR 30A OR 50A, 3P, 4W, 208V AC MOUNT 48" AFF (UON)

SAFETY SWITCHED/BREAKERS/STARTERS

 $\Box^{1}\frac{60}{3}$ Non-fused disconnect switch, subscript indicates ampacity and number of poles

FUSED DISCONNECT SWITCH, SUBSCRIPT INDICATES FUSED SIZE 2, NEMA SIZE 1 STARTER UON

MANUAL MOTOR STARTER SWITCH WITH OVERLOAD. PROVIDE HOA AS

VFD VARIABLE FREQUENCY DRIVE, INDIVIDUALLY MOUNTED.

EQUIPMENT CONNECTION

₩2 MOTOR, NUMBER INDICATES HORSEPOWER

ELECTRIC UNIT HEATER

J JUNCTION BOX

E © EQUIPMENT CONNECTION AS NOTED

(CUH) CABINET UNIT HEATER

CP CONTROL PANEL

GROUNDING

● GROUND ROD, 3/4" DIAMETER X 10'-0" LONG UON

SECURITY SYSTEM

CR CARD READER

ELECTRICAL LEGEND

DCI MAGNETIC DOOR CONTACT

ML MAGNETIC LOCK

SITE SYSTEM

© EXISTING HANDHOLE

—— G—— GROUND CONDUCTOR

HANDHOLE

UNDERGROUND DUCTBANK

---- E---- DIRECT BURIED CONDUIT

MH MANHOLE

•□ SINGLE LIGHTING FIXTURE - POLE MOUNTED

DOUBLE LIGHTING FIXTURES - POLE MOUNTED

WIRING

BRANCH CIRCUIT HOMERUN TO PANELBOARD. HPA DENOTES TO PANEL HPA AND NUMERALS IDENTIFY CIRCUIT NUMBERS. ARROWS DENOTE NO. OF CIRCUITS.

CONDUIT WITH WIRES, #12 AWG IN 3/4" C. UNLESS OTHERWISE NOTED.

NUMBER OF CONDUCTORS AS REQUIRED. PROVIDE SEPARATE NEUTRALS

FOR ALL SINGLE PHASE CIRCUITS.

BRANCH CIRCUIT OR FEEDER WIRING IN CONDUIT. NO TICK MARKS INDICATES 2#12 CONDUCTORS AND 1#12 GROUND IN A 1/2"C (UON)

INDICATES A CONDUIT RUN CONCEALED IN CEILING WALL, FLOOR, OR ABOVE SUSPENDED CEILING (UON)

EXPOSED CONDUIT RUN AS INDICATED.

CONDUIT TURNED UP

CONDUIT TURNED DOWN

—— G —— GROUNDING CONDUCTOR (BCSD)

RACEWAY WITH SEALING FITTING

PANELBOARDS

ELECTRICAL PANELBOARD (208Y/120V, 3W+G)

MISCELLANEOUS

SPECIFIC NOTE NUMBER

(1) FEEDER SIZE

SECTION NUMBER

DRAWING NUMBER

DETAIL NUMBER

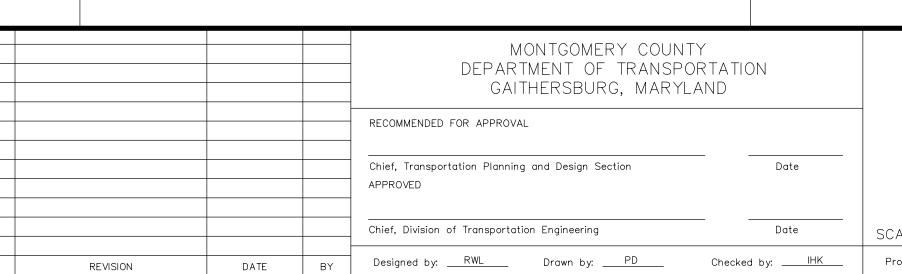
DRAWING NUMBER WHERE SHOWN

PROFESSIONAL CERTIFICATION.

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THAT I AM A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO._____

EXPIRATION DATE:__



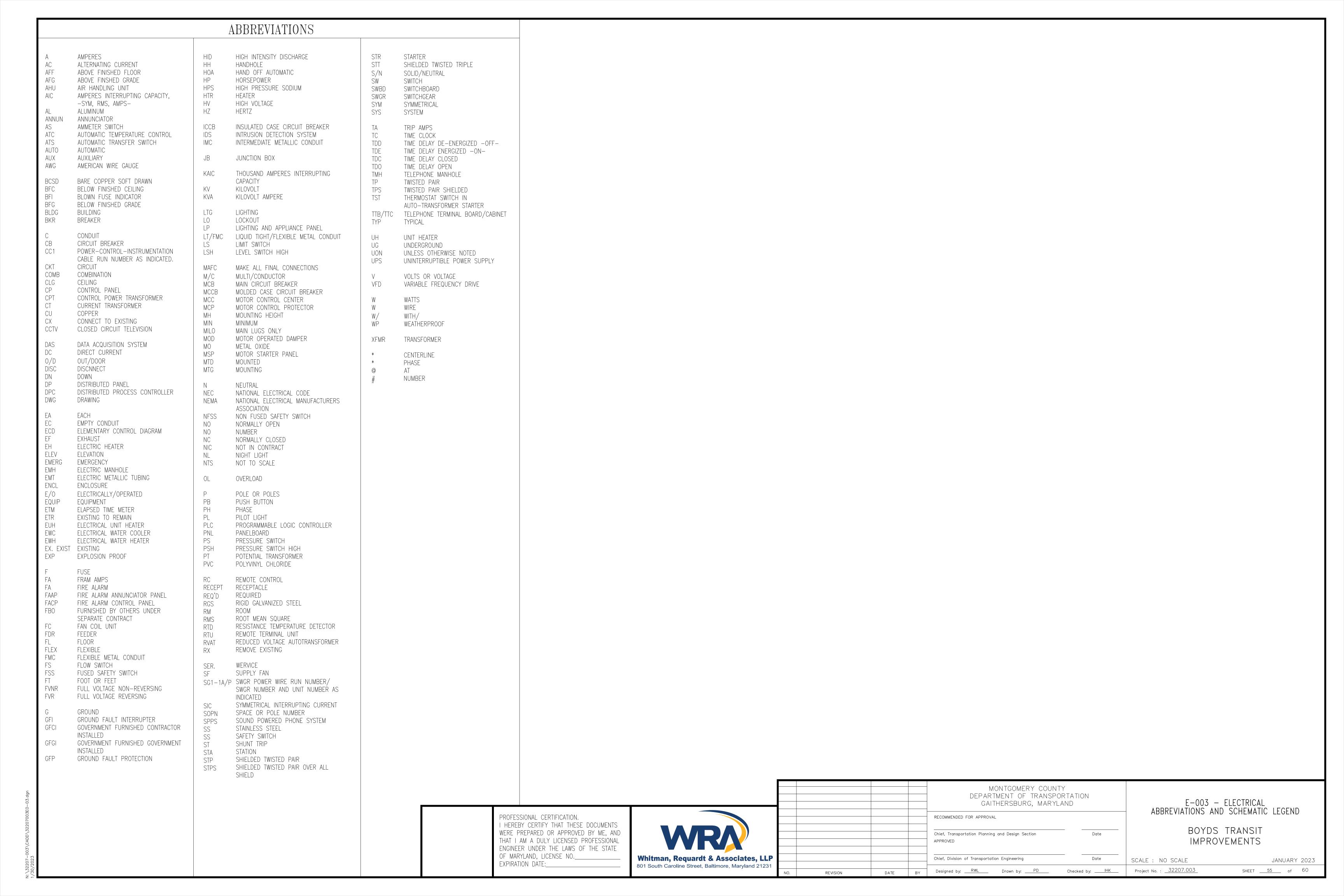


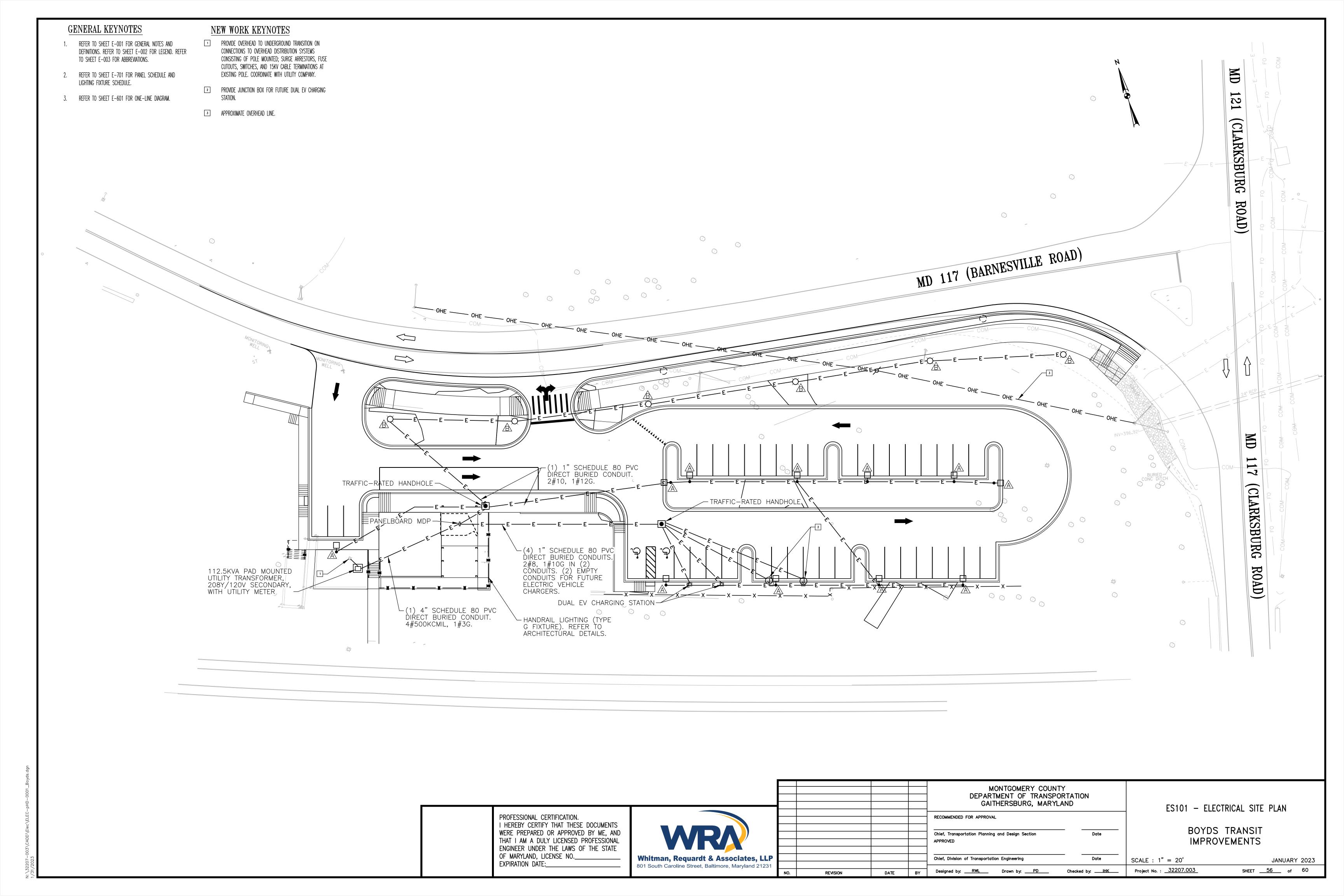
E-002 - ELECTRICAL LEGEND

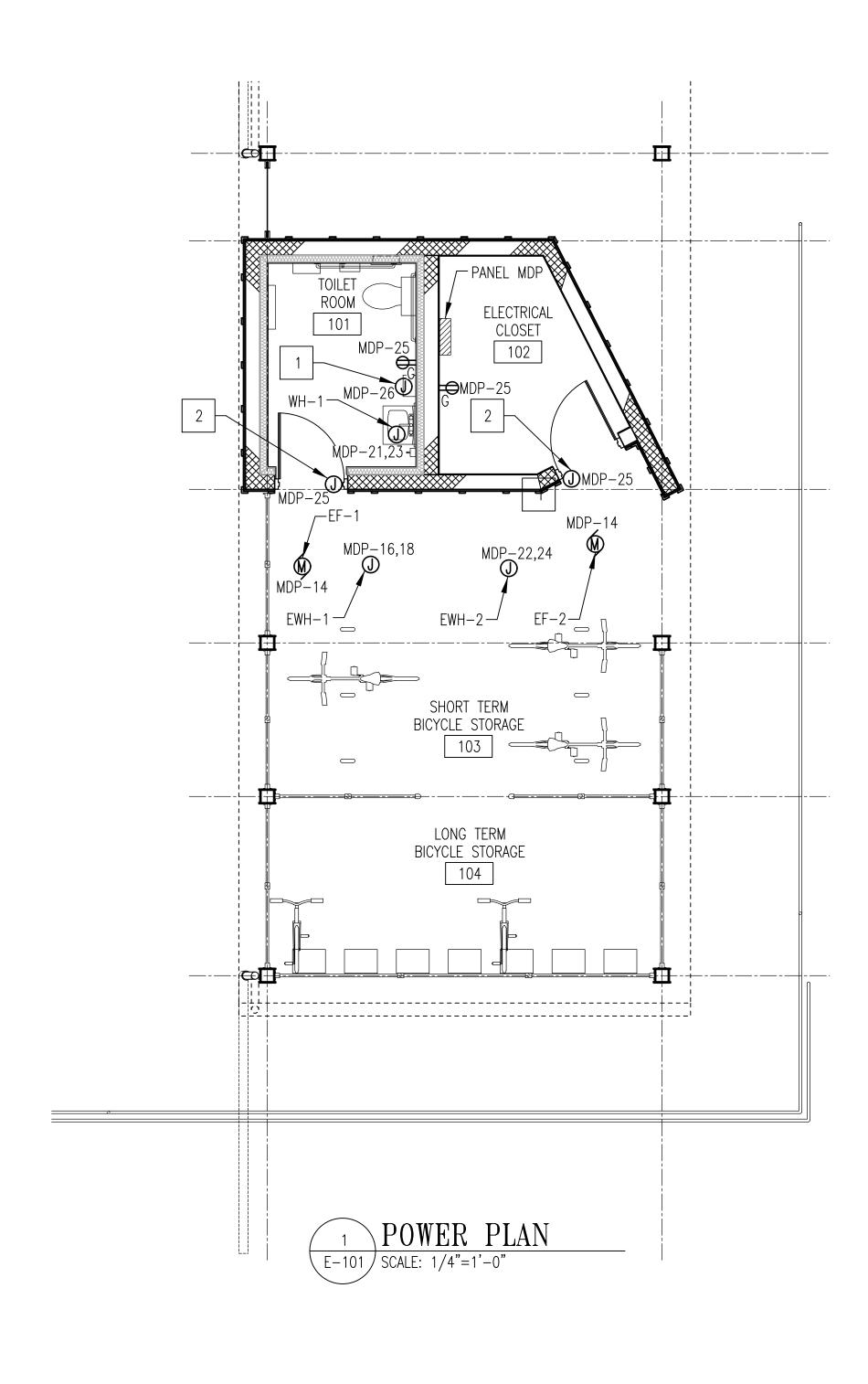
BOYDS TRANSIT IMPROVEMENTS

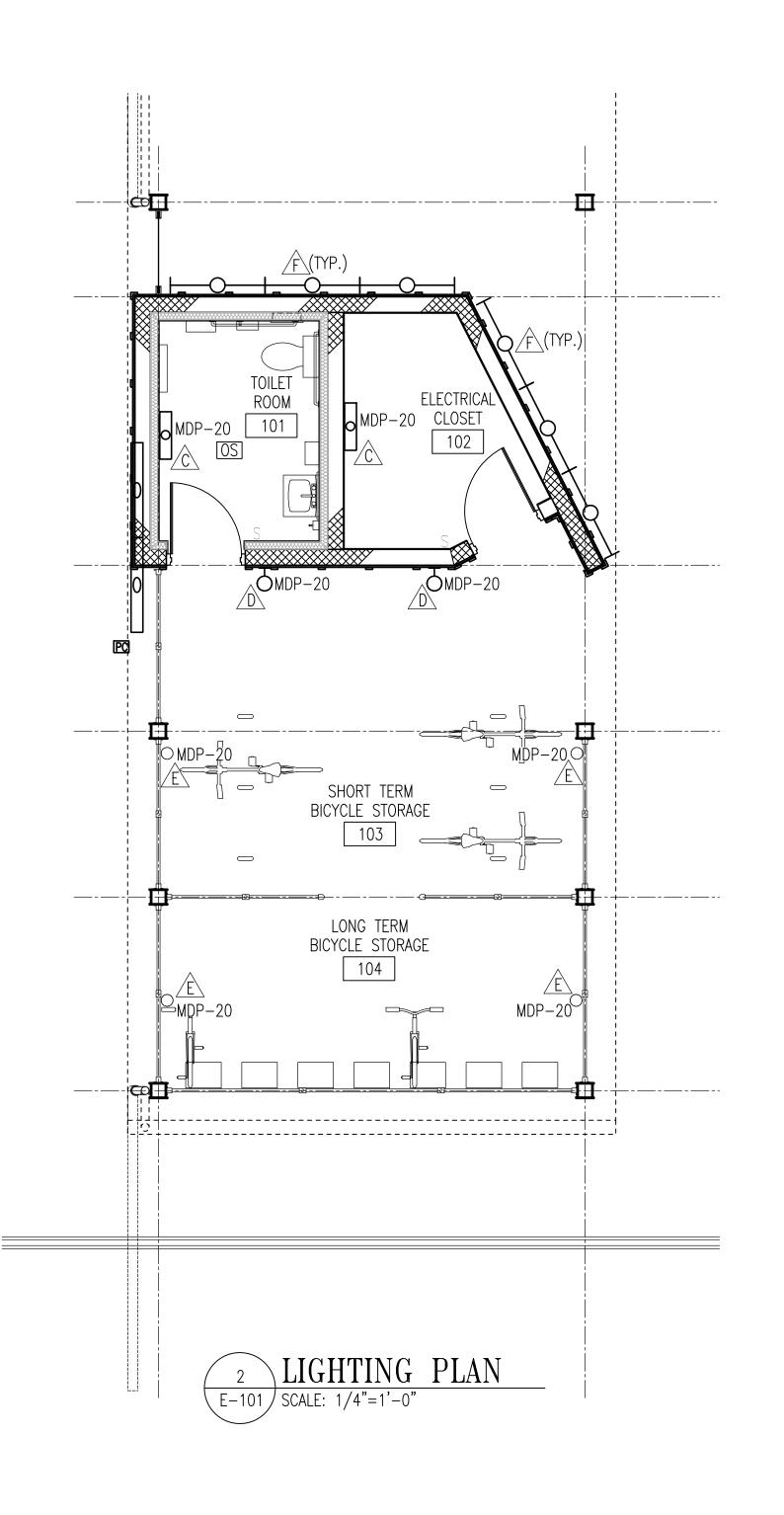
 SCALE : NO SCALE
 JANUARY 2023

 Project No. : 32207.003
 SHEET 54 of 60









GENERAL KEYNOTES

- REFER TO SHEET E-001 FOR GENERAL NOTES AND DEFINITIONS. REFER TO SHEET E-002 FOR LEGEND. REFER TO SHEET E-003 FOR ABBREVIATIONS.
- 2. REFER TO SHEET E-701 FOR PANEL MDP PANEL SCHEDULE AND LIGHTING FIXTURE SCHEDULE.

NEW WORK KEYNOTES

- 1 HARDWIRED CONNECTION FOR HAND DRYER.
- 2 HARDWIRED CONNECTION FOR CARD READER.

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OF MARYLAND, LICENSE NO.

EXPIRATION DATE:



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	NO.	REVISION	DATE	BY	D
_		, , . ,			

DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section
APPROVED

Chief, Division of Transportation Engineering

Date

Checked by: ____IHK____

esigned by: <u>RWL</u> Drawn by: <u>PD</u>

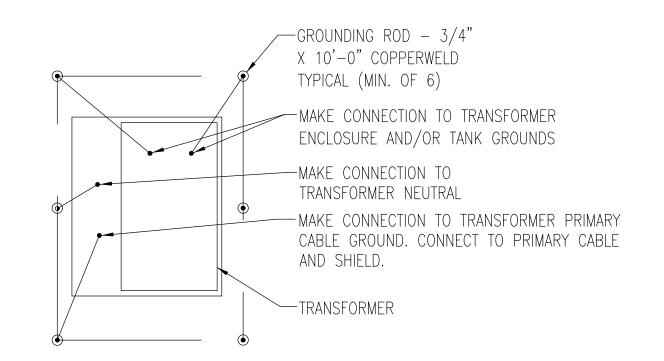
MONTGOMERY COUNTY

E-101 - POWER AND LIGHTING PLANS

BOYDS TRANSIT IMPROVEMENTS

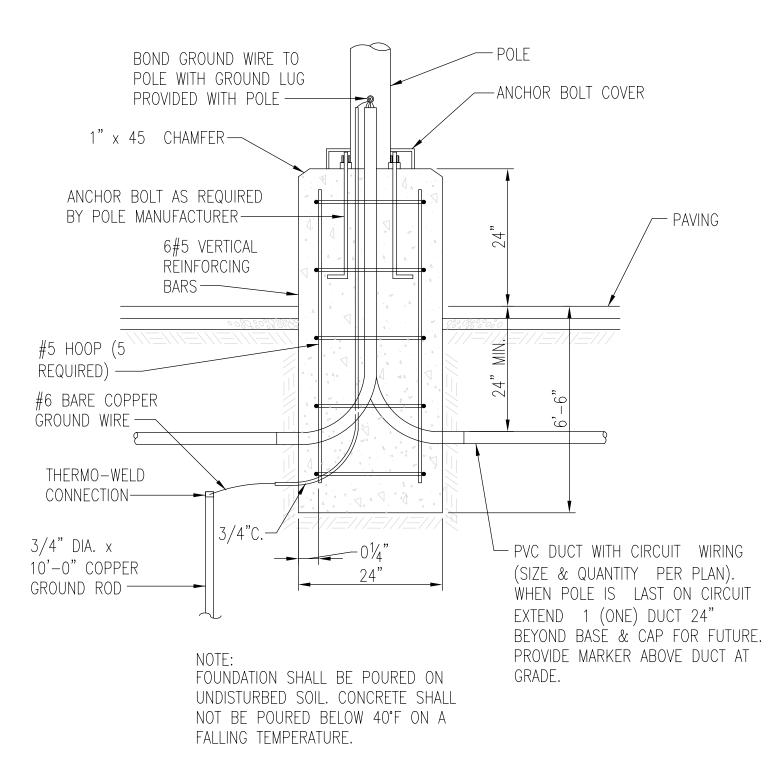
SCALE : 1/4" = 1'-0" JANUARY 2023

Project No. : 32207.003 SHEET 57 of 60



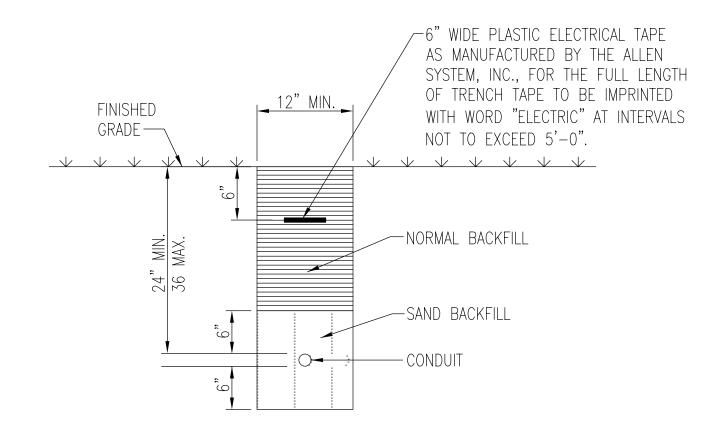
ALL UNDERGROUND CONNECTIONS SHALL BE EXOTHERMIC WELD

PAD MOUNTED TRANSFORMER GROUNDING GRID DETAIL E-501 NOT TO SCALE

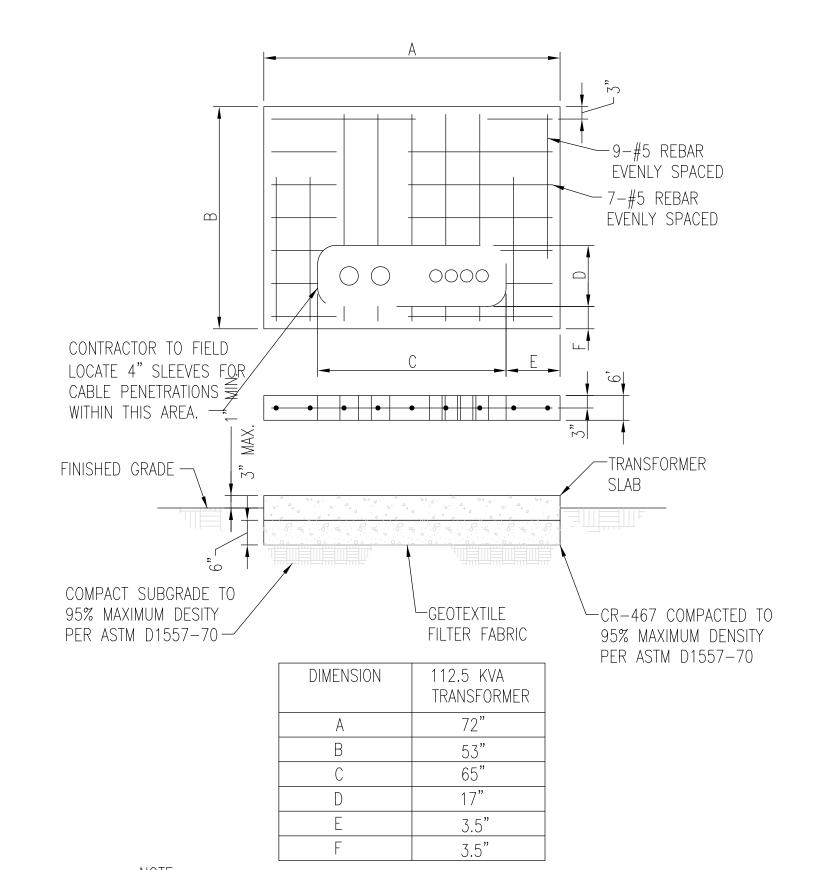


ELEVATION/SECTION

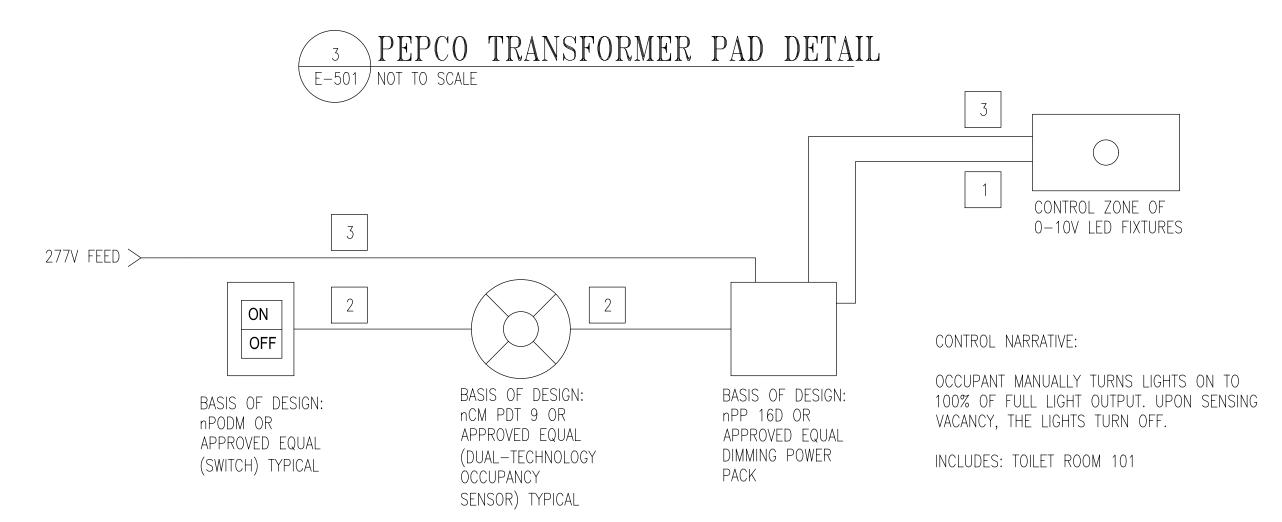
4 POLE BASE DETAIL - FIXTURE TYPE E-501 NOT TO SCALE



UNDERGROUND CONDUIT INSTALLATION DETAIL E-501 NOT TO SCALE



NOTE: CONDUIT AND GROUNDING SHALL BE COORDINATED WITH PAD INSTALLATION.



PROVIDE QUANTITY OF SWITCHES AND OCCUPANCY SENSORS AS INDICATED ON PLANS FOR EACH ROOM OR LIGHTING CONTROL ZONE

RESTROOM LIGHTING CONTROL DIAGRAM E-501 NOT TO SCALE

SEQUENCE OF OPERATIONS FOR SPACES WITHOUT CONTROL DIAGRAMS:

ELECTRICAL ROOM: OCCUPANT MANUALLY TURNS THE LIGHTS ON UPON ENTERING THE SPACE AND OCCUPANT MANUALLY TURNS THE LIGHTS OFF WHEN EXITING.

PROFESSIONAL CERTIFICATION. 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.___ EXPIRATION DATE:__



				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTAT GAITHERSBURG, MARYLAND	ION
				RECOMMENDED FOR APPROVAL	
				Chief, Transportation Planning and Design Section APPROVED	Date
				Chief, Division of Transportation Engineering	Date
۱0.	REVISION	DATE	BY	Designed by: <u>RWL</u> Drawn by: <u>PD</u> Checl	ked by: <u>IHk</u>

E-501 - DETAILS

BOYDS TRANSIT **IMPROVEMENTS**

SCALE : NO SCALE JANUARY 2023 Project No. : <u>32207.003</u> SHEET <u>58</u> of 60

GENERAL KEYNOTES

NEW WORK KEYNOTES

2 CAT 5 (OR EQUIVALENT) CABLE.

— CONDUCTOR FOR DIMMING.

1 (2) #18 AWG 0-10V DIMMING WIRES.

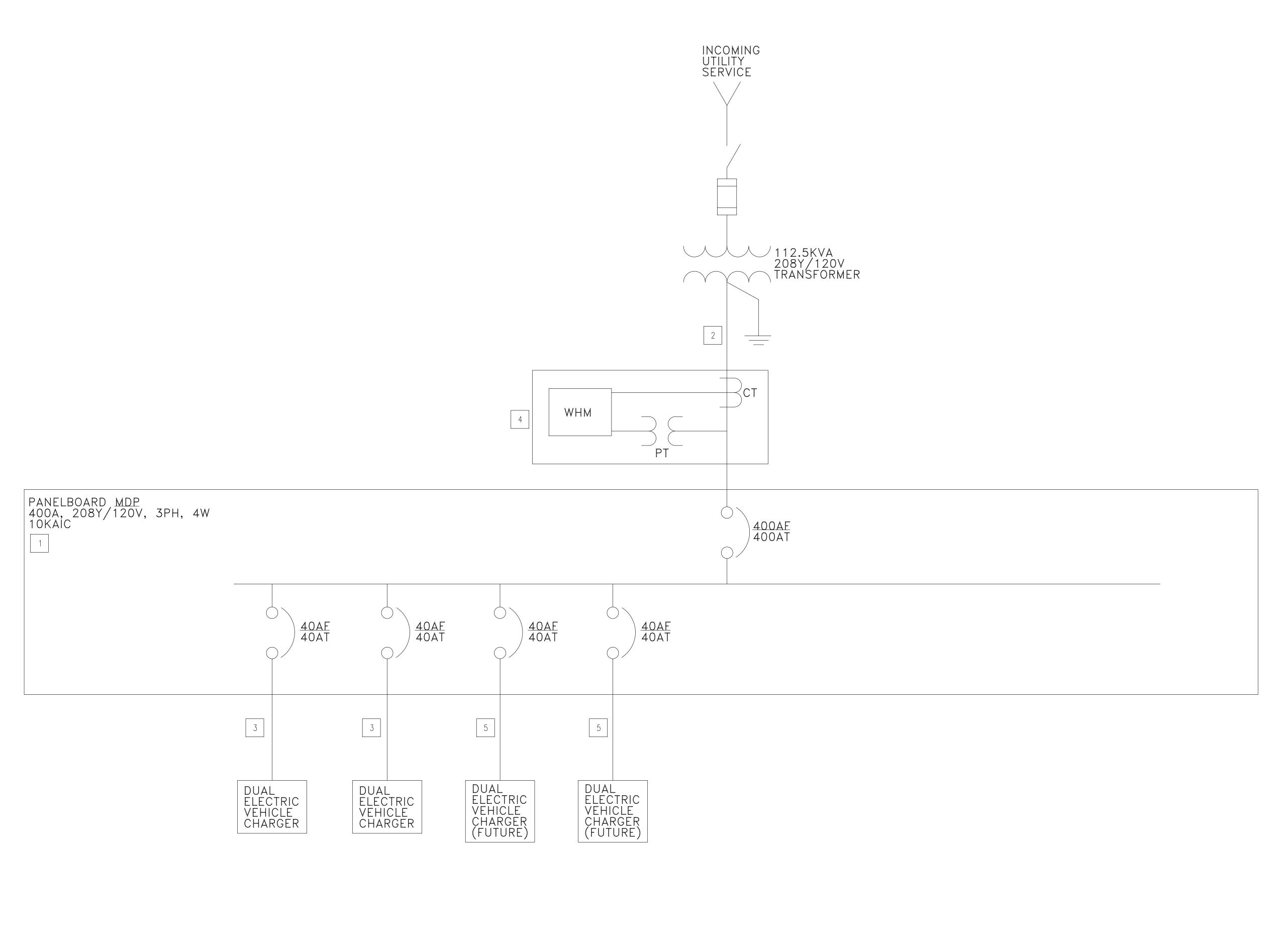
3 LINE VOLTAGE WIRING, MAY INCLUDE LOW VOLTAGE

ABBREVIATIONS.

1. REFER TO SHEET E-001 FOR GENERAL NOTES AND DEFINITIONS. REFER TO SHEET E-002 FOR

LEGEND. REFER TO SHEET E-003 FOR

2. REFER TO SHEET ES101 FOR SITE PLAN.



GENERAL KEYNOTES

1. REFER TO SHEET E-001 FOR GENERAL NOTES AND DEFINITIONS. REFER TO SHEET E-002 FOR LEGEND. REFER TO SHEET E-003 FOR ABBREVIATIONS.

2. REFER TO SHEET E-701 FOR PANEL MDP PANEL SCHEDULE AND LIGHTING FIXTURE SCHEDULE.

NEW WORK KEYNOTES

1 REFER TO PANEL SCHEDULE ON SHEET E-701 FOR BRANCH CIRCUITS.

2 PROVIDE (1) 4" SCHEDULE 80 PVC DIRECT BURIED CONDUIT. 4#500KCMIL, 1#3G.

3 PROVIDE (1) 1" SCHEDULE 80 PVC DIRECT BURIED CONDUIT. 2#8, 1#10G.

4 400A METER SOCKET.

5 PROVIDE (1) 1" SCHEDULE 80 PVC DIRECT BURIED CONDUIT.

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			MONTGOMERY COUNTY		Τ
			DEPARTMENT OF TRANSPORT GAITHERSBURG, MARYLAN		
			RECOMMENDED FOR APPROVAL		
			Chief, Transportation Planning and Design Section APPROVED	Date	
			Chief, Division of Transportation Engineering	Date	SC
REVISION	DATE	BY	Designed by: <u>RWL</u> Drawn by: <u>PD</u> C	Checked by:IHK	Р

E-601 - ELECTRICAL ONE-LINE DIAGRAM

> BOYDS TRANSIT **IMPROVEMENTS**

SCALE : NO SCALE JANUARY 2023 Project No. : <u>32207.003</u> SHEET <u>59</u> of 60

					PAN	VE L	B0	AR		/DF)				
10,000 RMS AIC NEMA 1 ENCLOSURE							400 A 208Y/1 JRFACE	20 VOI	_TS				PANEL		400 AMP MCB 3 PHASE, 4 WIRE + GROUND ON - ELECTRICAL ROOM 102
LOAD SERVED	LC)AD (KV		СВ	WIRE	CKT.		IASE	CKT.	WIRE	СВ	LC	LOAD (KVA)		LOAD SERVED
EO/ND GENVED	А	В	С	TRIP	SIZE	NO.	A	ВС	NO.	SIZE	TRIP	А	В	С	EOND SERVED
EV CHARGER	4.2	4.2		40	1	3			2 4	$ \begin{bmatrix} 1 \end{bmatrix}$	40	4.2	4.2		EV CHARGER (FUTURE)
EV CHARGER	4.2		4.2	40	1	5 7			6 8	1	40	4.2		4.2	EV CHARGER (FUTURE)
EV CHARGER		4.2	4.2	40	1	9			10	1	40		4.2	4.2	EV CHARGER (FUTURE)
EV CHARGER	4.2	4.2		40	1	13 15			14	#12	15	0.2	1.2		EF-1, EF-2
EV CHARGER (FUTURE)	4.2		4.2	40	1	17			18 20	#12	15 15	1.9		1.2	TYPE C,D,E,F,G LIGHT FIXTURES
WH-1		2.2	2.2	30	#10	21 23			22 24	#12	15		1.2	1.2	- EWH-2
RECEPTS AND CARD READERS	1.0			20	#12	25			26	#12	20	1.0			HAND DRYER
TYPE A LIGHT FIXTURES		1.0	1.0	20	#12	27 29			28						
TYPE B LIGHT FIXTURES	0.4	0.4		20	#10	31			32						
						35 37			36 38						
						39			40						
						41			42						
TOTAL	18.2	16.2	15.8			O.T.1.	CONNEC	TED 1"		A=29.7		11.5 	10.8	10.8 =26.60	TOTAL

LIGHTING FIXTURE SCHEDULE									
FIX.	DESCRIPTION	MOUNTING		LAMPS	MANUFACTURER	REMARKS			
TYPE	2200	in a artificial	VOLT	TYPE		TEMP INTO			
Â	18' EXTERIOR POLE - SINGLE ARM	POLE 18' AFG	208	LED	LITHONIA LIGHTING DSXWPM LED 20C 1000 40K T4M 208 PIRH1FC3V	INTEGRAL DAYLIGHT SENSING			
B	16' COLONIAL POST TOP LIGHT	POLE 16' AFG	208	LED	LEOTEK PTC S F N S 30J MV 40K 3R BK 030				
Ĉ	24" LINEAR LIGHT FIXTURE	WALL 7' AFF	120	LED	LITHONIA LIGHTING CLX L24 4500LM SEF L/LENS MVOLTS GZ10 35K 80CRI				
	6" UP/DOWN CYLINDER LIGHT	WALL 7' AFF	120	LED	PROGRESS LIGHTING P5642-30/30K	DAYLIGHT SENSING WITH HUBBELL DHOP PHOTOCELL			
É	ADJUSTABLE FLOOD LIGHT	CEILING 11.5' AFF	120	LED	LITHONIA LIGHTING HGX LED 3RH ALO 40K 120 PE	INTEGRAL DAYLIGHT SENSING			
Æ	LINEAR SIGN LIGHT	WALL	120	LED	COOPER LIGHTING LINE 2.0				
G	HANDRAIL LIGHT	HANDRAIL	120	LED	WAGNER LUMENLINEAR				

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				RECOMMENDED FOR APPROVAL					
				Chief, Transportation Planning and Design Section APPROVED	Date				
				Chief, Division of Transportation Engineering	Date				
NO.	REVISION	DATE	BY	Designed by: RWL Drawn by: PD C	Checked by: <u>IHK</u>				

BOYDS TRANSIT

PANEL SCHEDULE

E-701 - ELECTRICAL

GENERAL KEYNOTES

ABBREVIATIONS.

1. REFER TO SHEET E-001 FOR GENERAL NOTES

1 REFER TO ES101 FOR CONDUIT AND WIRING SIZE.

LEGEND. REFER TO SHEET E-003 FOR

2. MINIMUM CONDUIT SIZE SHALL BE 3/4".

3. INTERIOR CONDUITS SHALL BE EMT.

NEW WORK KEYNOTES

AND DEFINITIONS. REFER TO SHEET E-002 FOR

IMPROVEMENTS

SCALE : NO SCALE JANUARY 2023 Project No. : <u>32207.003</u> SHEET <u>60</u> of 60