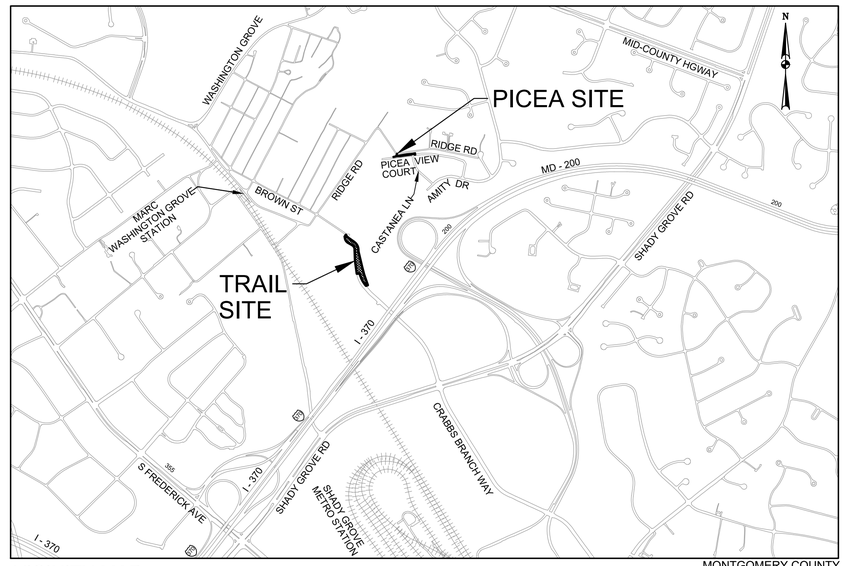
SHEET NO.	TOTAL SHEETS
01	29

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
WASHINGTON GROVE CONNECTOR FROM CRABBS BRANCH WAY TO BROWN STREET
AND
PICEA VIEW COURT SIDEWALK FROM PICEA VIEW COURT TO RIDGE ROAD
FACILITY PLANNING PHASE II CIP PROJECT NO. 509337
FACILITY PLANNING 35% DESIGN

INDEX OF SHEETS

SHEET NO.	DWG. NO.	DESCRIPTION
1	G001	TITLE SHEET
2	G002	LEGEND AND SYMBOLS
3	G003	TYPICAL TRAIL CROSS SECTION
4	C101	TREE CLEARING AND STRIPPING DEMOLITION PLAN 1 OF 2
5	C102	TREE CLEARING AND STRIPPING DEMOLITION PLAN 2 OF 2
6	C103	TREE CLEARING AND STRIPPING DEMOLITION PLAN PICEA - LONG
7	C104	TREE CLEARING AND STRIPPING DEMOLITION PLAN PICEA - SHORT
8	C200	TRAIL GEOMETRIC LAYOUT
9	C201	TRAIL SITE LAYOUT AND PROFILE 1 OF 2
10	C202	TRAIL SITE LAYOUT AND PROFILE 2 OF 2
11	C203	SIDEWALK GEOMETRIC LAYOUT PICEA - LONG
12	C204	SIDEWALK GEOMETRIC LAYOUT PICEA - SHORT
13	C205	SIDEWALK LAYOUT PICEA - LONG
14	C206	SIDEWALK LAYOUT PICEA - SHORT
15	C301	TRAIL ROUGH GRADING PLAN SHEET 1 OF 2
16	C302	TRAIL ROUGH GRADING PLAN SHEET 2 OF 2
17	C303	CROSS SECTIONS
18	C304	SIDEWALK ROUGH GRADING PLAN PICEA - LONG
19	C305	SIDEWALK ROUGH GRADING PLAN PICEA - SHORT
20	C401	CIVIL DETAILS
21	C501	EROSION AND SEDIMENT CONTROL SHEET 1 OF 2
22	C502	EROSION AND SEDIMENT CONTROL SHEET 2 OF 2
23	S001	STRUCTURAL NOTES
24	S201	STRUCTURAL PLAN AND DETAILS
25	S401	STRUCTURAL DETAILS
26	LD101	TRAIL LANDSCAPE PLAN 1 OF 2
27	LD102	TRAIL LANDSCAPE PLAN 2 OF 2
28	LD103	SIDEWALK LANDSCAPE PLAN
29	LD104	LANDSCAPE NOTES AND DETAILS



VICINITY MAP
SCALE: 1" = 1,000'

MONTGOMERY COUNTY
LENGTH OF PROJECT
WASHINGTON GROVE CONNECTOR TRAIL = 0.17 MILES

GENERAL NOTES

1. EXISTING TOPOGRAPHIC CONDITIONS BASED ON FIELD SURVEY PERFORMED BY AULTEC, INC, DATED SEPTEMBER 28, 2023 AND SUPPLEMENTED BY MONTGOMERY COUNTY RECORDS. PROPERTY LINES SHOWN ARE BASED ON AVAILABLE RECORDS.
2. THE HORIZONTAL DATUM OF THIS SURVEY IS NAD83/2011 (MARYLAND COORDINATE SYSTEM) AND THE VERTICAL DATUM IS NAVD88.
3. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS OF THE MARYLAND STATE HIGHWAY ADMINISTRATION, MONTGOMERY COUNTY, AND THE WASHINGTON SUBURBAN SANITARY COMMISSION.
4. CLEARING AND GRUBBING, AND DEMOLITION ARE TO BE LIMITED TO THE LIMIT OF DISTURBANCE (LOD) AS SHOWN ON THE PLANS.
5. 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.
6. CALL "MISS UTILITY" AT 1-800-257-7777 FORTY-EIGHT (48) HOURS PRIOR TO BEGINNING EXCAVATION. THE CONTRACTOR MUST NOTIFY ALL UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THIS AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED NY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION.
7. ALL GRADING SHALL BE DONE IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE.
8. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS TO EXISTING SANITARY MANHOLES TO FINAL GRADE AS NEEDED.
9. RIGHT OF WAY LINES SHOWN ARE NOT OFFICIAL. FOR OFFICIAL RIGHT OF WAY AND EASEMENT INFORMATION SEE APPROPRIATE RIGHT OF WAY PLATS.
10. 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 BEFORE PROCEEDING WITH CONSTRUCTION.
11. ALL DISTURBED AREAS TO BE SEEDED AND MULCHED UNLESS OTHERWISE NOTED. ALL DISTURBED AREAS SHALL BE TOPSOILED PER THE MONTGOMERY COUNTY STANDARDS AND SPECIFICATIONS PRIOR TO FINAL VEGETATIVE STABILIZATION.

CERTIFICATION OF THE QUANTITIES

I/WE HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO 110 CUBIC YARDS OF EXCAVATION, 745 CUBIC YARDS OF FILL AND THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE 19,500 SQUARE FEET OR 0.45 ACRES.

DATE:

NORMAN G. MIKSIC, P.E.
MD. REGISTRATION NO. 21262

35% SUBMITTAL
JULY, 2024

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

CONTACT:
JEAN KAPUSNICK., P.E.
240-777-7240

DRAFT
NOT FOR CONSTRUCTION

SHELADIA ASSOCIATES, INC.
Engineers, Architects
Development Consultants
15825 Shady Grove Road, Rockville, MD. 20850
Phone: 301-590-3939 Fax:301-948-7174
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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE
CONNECTOR TRAIL
AND PICEA VIEW COURT
CONNECTOR SIDEWALK
TITLE SHEET

SCALE : AS SHOWN

G001

Project No. : 509337 — 01 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\G001 - G003.dwg
DATE: Jul 24, 2024 - 5:02pm

ABBREVIATIONS

AASHTO — American Association of State Highway Transportation Officials
ADT — Average Daily Traffic
AHD — Ahead
APPROX. — Approximate
℄ or B/L — Baseline
BK — Back/ Book
BIT. — Bituminous
B.C. — Bituminous Concrete
B.M. — Bench Mark
BOT. — Bottom
C.C. — Center of Curve
CAP — Corrugated Aluminum Pipe
CAPA — Corrugated Aluminum Pipe Arch
CATV — Cable Television
C.B.R. — California Bearing Ratio
℄ or C/L — Centerline
CL. — Class
CLF — Chainlink Fence
CMP — Corrugated Metal Pipe
C.O. — Cleanout
COMB. — Combination
COC. — Concrete
CONSTR. — Construction
COR. — Corner
CORR. — Correction
CPP-S — Corrugated Polyethylene Pipe – Type 'S'
CSP — Corrugated Steel Pipe – Aluminized Type 2
CSPA — Corrugated Steel Pipe Arch – Aluminized Type 2
C — Cut
DC — Degree of Curve
D.H.V. — Desigbn Hourly Volume
D.I. — Drop Inlet
DIA. — Diameter
D.O. — Double Opening
E — East
E — Electric
E — External Distance
EA — Each
EB — Eastbound
ELEV — Elevation
ES — End Section
EX or EXIST — Existing
FT — Feet
F — Fill
FL — Flowline
F.B.D. — Flat bottom Ditch
F.H. — Fire Hydrant
FWD. — Forward
G. — Gas
G.V. — Gas Valve
H.B. — Handbox
HDPE — High Density Polyethylene
HDWL. — Headwall
HERCP — Horizontal Elliptical Reinforced Concrete Pipe
HP — High point
IN — Inch
I.S.T. — Inlet Sediment Trap
INV. — Invert
J.V. — Junction Box
K — K Inlet
L — Length
LF — Linear Feet
L.L — Liquid Limit
LP — Low Point
L.P. — Light Pole
LT. — Left
MAC — Macadam
M.C. — Moisture Content
MAX. — Maximum
M.D.D. — Maximum Dry Content
MOD. — Modified
MIN. — Minimum
N — North
NB — Northbound
NE — Northeast
N.P. — Non-Plastic
O.C. — On Center
OHE — Overhead Electric
O.M. — Optimum Moisture
PAV'T. — Pavement
P.C. — Point of Curvature
P.C.C. — Point of Compound Curvature
P/C — Point of Crown
P/GE — Profile Grade Elevation
P.G.E. — Profile Ground Elevation
P.G.L. — Profile Grade Line
P/GL — Profile Ground Line
P/R — Point of Rotation
P.I. — Plasticity Index
PI — Point of Intersection
POC — Point On Curve
POT — Point of Tangent
PPWP — Polyvinnyl Chloride Profile Wall Pipe
PROP — Proposed
PRC — Point of Reverse Curve
PT — Point
P.T. — Point of Tangency
P.V.C. — Point of Vertical Curve
PVC — Polyvinyl Chloride
P.V.I. — Point of Vertical Intersection
P.V.R.C. — Point of Vertical Reverse Curve
P.V.T. — Point of Vertical Tangency
R — Radius
R.F. — Rock Fragments
RT — Right
RW or R/W — Right of Way
RCP — Reinforced Concrete Pipe
RCPP — Reinforced Concrete Pressure
R.Q.D. — Rock Quality Designation
R.M. — Rootman
S — South
SAN. — Sanitary Sewer
SB or S/B — Southbound
S.D. — Storm Drain
S.D.D. — Surface Drain
S/E — Super Elevation
SF — Silt Fence
SF — Square Feet
SHT. — Sheet
SPP — Structural Steel Plate Pipe
SPPA — Structural Steel Plate Pipe Arch
S.P.T. — Standard Penetration Testing
SRP — Steel Spiral Rib Pipe – Aluminized Type 2
SRPA — Steel Spiral Rib Pipe Arch – Aluminized Type 2
SSD — Stopping Sight Distance
SSF — Super Silt Fence
STD. — Standard
STA. — Station
SO. — Single Opening.
SY — Square Yards
SWM — Stormwater Management
T — Tangent
T — Telephone
T.C. — Top of Cover
T.G. — Top of Grate
T OR TL — Traverse Line
T.M. — Top of Manhole
TRAV. — Traverse
TS — Temporary Swale
T.S. — Top of Slab
T.S. — Topsoil
TYP. — Typical
U.D. — Underdrain
U.G. — Underground
U.P. — Utility Pole
USDA — United States Department of Agriculture
VCL — Vertical Clearance
V.C.L. — Vertical Curve Lenght
W — Water
W — West
WB — Westbound
WB — Wetland Buffer
W.M. — Water Meter
W.S. — Wrapped Steel
WUS — Water of the United States
W.V. — Water Valve

SYMBOLS

EXISTING FEATURES

PROPERTY LINE–RIGHT OF WAY LINE(ROW)
EDGE OF ROADWAY PAVING
CURB OR CURB AND GUTTER
EXISTING GROUND CONTOURS (5') — 55
EXISTING GROUND CONTOURS (1') — 54
WOOD FENCE
WIRE FENCE
GUARDRAIL
FIRE HYDRANT — FH
EDGE OF WOODED AREAS
TREE (FREE STANDING)
SIGN
MAILBOX — MAIL BOX
UTILITY POLE
STORM DRAIN — SD
SANITARY — SS

PROPOSED FEATURES

℄ CONSTRUCTION — 4+00 5+00
CURB & GUTTER
TRAVERSE POINT
LIMIT OF DISTURBANCE — LOD

DEMOLITION LEGEND

SYMBOL	DESCRIPTION	NOTES
	TREE CLEARING AND STRIPPING AREA	1
	REMOVE EXISTING CONCRETE CURB AND GUTTER AT THE NEAREST JOINT	2
	REMOVE EXISTING ASPHALT CURB	3
	REMOVE EXISTING FENCE	4
	REMOVE EXISTING GUARDRAIL	5
	RELOCATE EXISTING SIGN	6
	REMOVE EXISTING TREE	7
X	DEMO NOTE	
LOD	LIMIT OF DISTURBANCE AREA	

ROUGH GRADING PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
	EXISTING MAJOR CONTOUR LINE	1
	EXISTING MINOR CONTOUR LINE	2
	PROPOSED MAJOR CONTOUR LINE	3
	PROPOSED MINOR CONTOUR LINE	4

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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — Date
APPROVED
Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

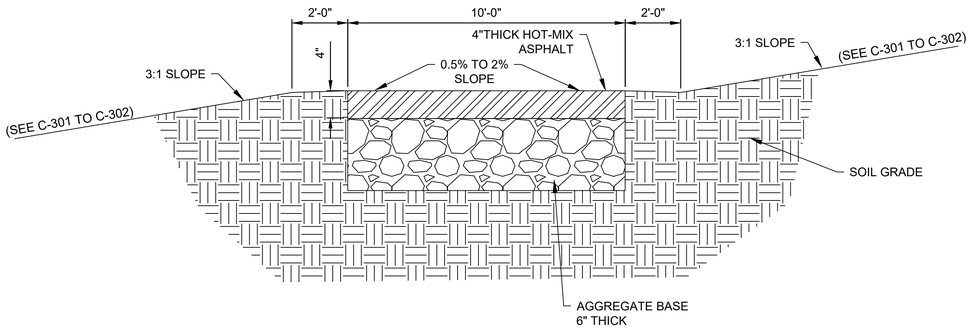
WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

LEGEND AND SYMBOLS

SCALE : NONE

G002

Project No. : 509337 — 02 of 29



1 TYPICAL TRAIL CROSS SECTION
NOT TO SCALE

REGULAR HOT-MIX-ASPHALT

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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

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Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

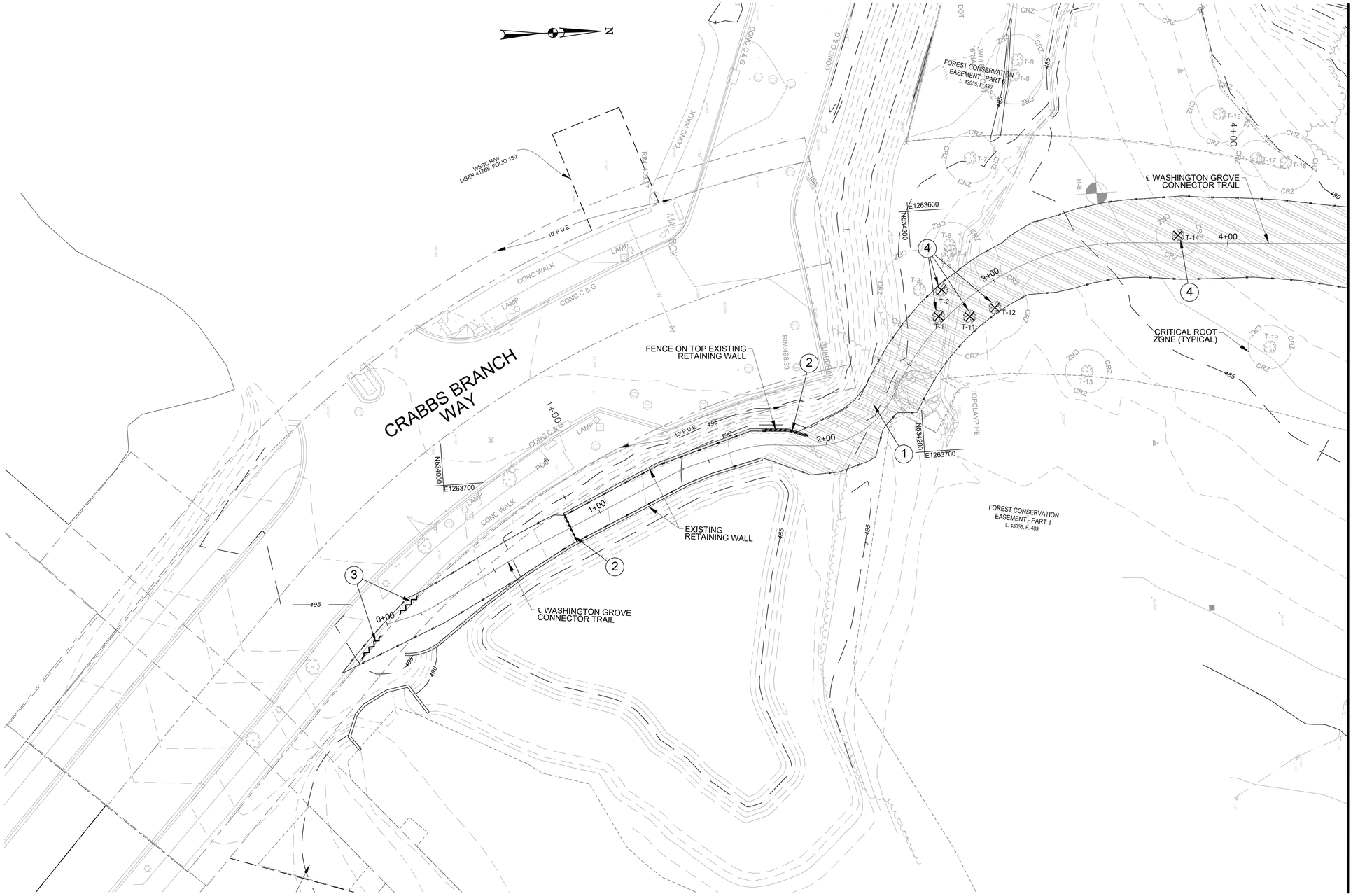
TYPICAL TRAIL CROSS SECTION

SCALE : NONE

G003

Project No. : 509337 — 03 of 29

SHEET NO.	TOTAL SHEETS
04	29



MATCHLINE A-A STA. 4+50 - SEE DWG. C-102

DRAWING LEGEND

EXISTING CONDITIONS LEGEND

SYMBOL	DESCRIPTION
	WATER METER
	WATER VALVE
	FIRE HYDRANT
	ELECTRIC BOX
	SIGN
	ELECTRIC MANHOLE
MB	MAIL BOX
	GROUND SHOT
	POWER POLE
	GUY POLE
	TRAVERSE
	MONUMENT
	BOLLARD
	SANITARY MH
	LIGHT POLE
	GUY WIRE
	POWER POLE
	PROPERTY CNR FOUND
	TREE
	CURB
	EDGE OF CONC.
	STORM PIPE
SS	SEWER PIPE
	EDGE OF ASPHALT
	RIPRAP
	WOODLINE
	PROPERTY LINE
	EASEMENT
450	MAJOR CONTOUR
	MINOR CONTOUR

TREE REMOVAL TABLE

TREE NO.	DIAMETER	TYPE
T1	7"	RED MAPLE
T2	11"	RED MAPLE
T11	11"	BLACK WALNUT
T12	11"	WHITE MULBERRY
T14	6"	EASTERN RED CEDAR

DEMOLITION LEGEND

SYMBOL	DESCRIPTION	NOTES
	TREE CLEARING AND STRIPPING AREA	1
	REMOVE EXISTING FENCE	2
	REMOVE EXISTING GUARDRAIL	3
	REMOVE EXISTING TREE	4
LOD	LIMIT OF DISTURBANCE AREA	
X	DEMO NOTE	

NOTE:

SEE DWG C-201 TRAIL SITE LAYOUT AND PROFILE 1 OF 2.

GRAPHIC SCALE

20 10 0 20 40

SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

TREE CLEARING AND STRIPPING DEMOLITION PLAN 1 OF 2

SCALE : AS SHOWN

C101

Project No. : 509337

04 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C101 - C102.dwg
DATE: Jul 24, 2024 - 5:12pm

SHEET NO.	TOTAL SHEETS
05	29

DRAWING LEGEND

EXISTING CONDITIONS LEGEND

SYMBOL	DESCRIPTION
	WATER METER
	WATER VALVE
	FIRE HYDRANT
E	ELECTRIC BOX
	SIGN
E	ELECTRIC MANHOLE
MB	MAIL BOX
	GROUND SHOT
	POWER POLE
	GUY POLE
	TRAVERSE
	MONUMENT
	BOLLARD
S	SANITARY MH
D	STORM MH
	LIGHT POLE
	GUY WIRE
	POWER POLE
	PROPERTY CNR FOUND
	TREE
	CURB
	EDGE OF CONC.
	STORM PIPE
SS	SEWER PIPE
	EDGE OF ASPHALT
	RIPRAP
	WOODLINE
	PROPERTY LINE
	EASEMENT
450	MAJOR CONTOUR
	MINOR CONTOUR

TREE REMOVAL TABLE

TREE NO.	DIAMETER	TYPE
T30	7"	BLACK WALNUT
T62	6"	BLACK LOCUST
T63	8"	WHITE MULBERRY
T64	11"	BLACK LOCUST
T65	13"	BLACK CHERRY
T66	14"	BLACK LOCUST
T67	14"	BLACK LOCUST
T68	14"	BLACK LOCUST
T69	9"	BLACK WALNUT
T70	10"	BLACK WALNUT
T71	8"	BLACK WALNUT
T72	6"	BOX ELDER MAPLE
T73	7"	BLACK CHERRY
T75	12"	SLIPPER ELM

DEMOLITION LEGEND

SYMBOL	DESCRIPTION	NOTES
	TREE CLEARING AND STRIPPING AREA	1
	REMOVE EXISTING FENCE	2
	REMOVE EXISTING GUARDRAIL	3
	REMOVE EXISTING TREE	4
	REMOVE EXISTING ASPHALT CURB	5
LOD	LIMIT OF DISTURBANCE AREA	
X	DEMO NOTE	

NOTE:

SEE DWG C-202 TRAIL SITE LAYOUT AND PROFILE 2 OF 2.

GRAPHIC SCALE

20 10 0 20 40

SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

TREE CLEARING AND STRIPPING DEMOLITION PLAN 2 OF 2

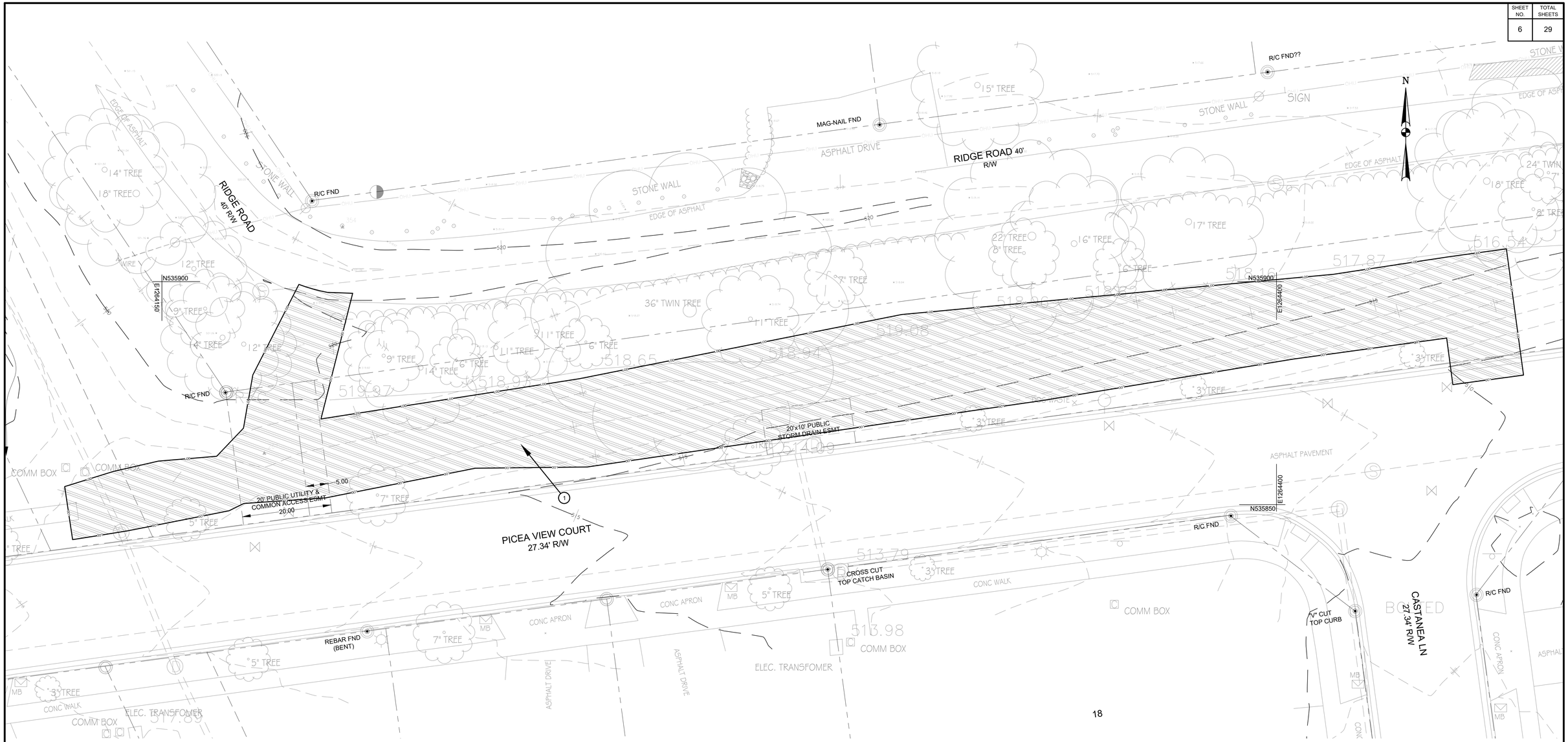
SCALE : AS SHOWN

C102

Project No. : 509337 — 05 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C101 - C102.dwg
DATE: Jul 24, 2024 - 5:13pm

SHEET NO.	TOTAL SHEETS
6	29



DRAWING LEGEND

EXISTING CONDITIONS LEGEND

SYMBOL	DESCRIPTION
	WATER METER
	WATER VALVE
	FIRE HYDRANT
E	ELECTRIC BOX
	SIGN
E	ELECTRIC MANHOLE
MB	MAIL BOX
•	GROUND SHOT
	POWER POLE
	GUY POLE
	TRAVERSE
	MONUMENT
	BOLLARD
S	SANITARY MH
D	STORM MH
	LIGHT POLE

DRAWING LEGEND

EXISTING CONDITIONS LEGEND

SYMBOL	DESCRIPTION
	GUY WIRE
	POWER POLE
	PROPERTY CNR FOUND
	TREE
	CURB
	EDGE OF CONC.
	STORM PIPE
SS	SEWER PIPE
	EDGE OF ASPHALT
	RIPRAP
	WOODLINE
	PROPERTY LINE
	EASEMENT
450	MAJOR CONTOUR
	MINOR CONTOUR

DEMOLITION LEGEND

SYMBOL	DESCRIPTION	NOTES
	STRIPPING AREA	1
LOD	LIMIT OF DISTURBANCE	
X	DEMO NOTE	

GRAPHIC SCALE
10 5 0 10 20
SCALE: 1"=10'-0"
UNIT OF MEASURE: FEET

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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — Date
APPROVED
Chief, Division of Transportation Engineering — Date

Designed by: ___ Drawn by: ___ Checked by: ___

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

EXISTING CONDITION AND STRIPPING PLAN PICEA – LONG

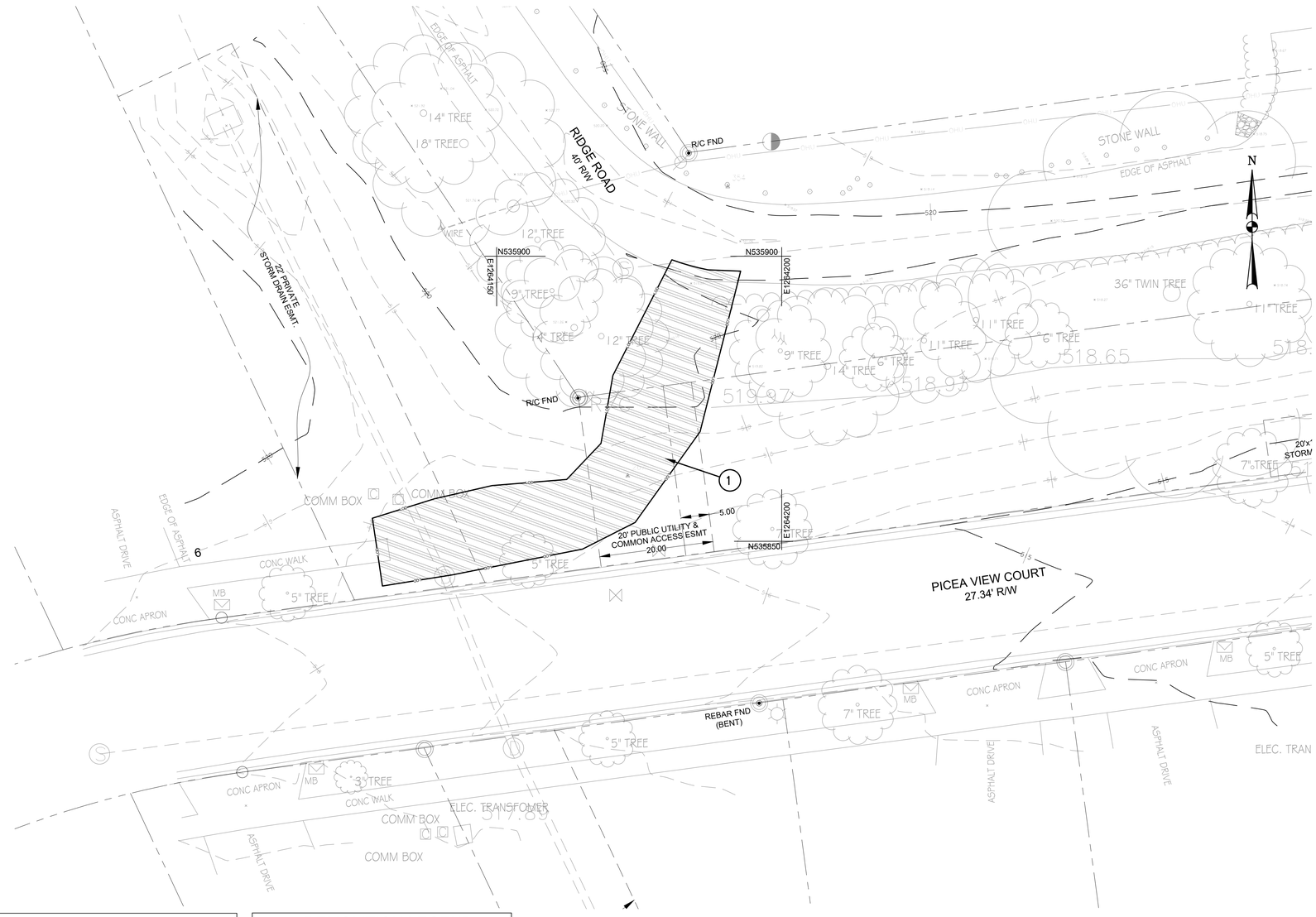
SCALE : AS SHOWN

C103

Project No. : 509337 — 6 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C103.dwg
DATE: Jul 24, 2024 - 5:14pm

SHEET NO.	TOTAL SHEETS
7	29



DRAWING LEGEND

EXISTING CONDITIONS LEGEND

SYMBOL	DESCRIPTION
	WATER METER
	WATER VALVE
	FIRE HYDRANT
E	ELECTRIC BOX
	SIGN
E	ELECTRIC MANHOLE
MB	MAIL BOX
	GROUND SHOT
	POWER POLE
	GUY POLE
	TRAVERSE
	MONUMENT
	BOLLARD
S	SANITARY MH
D	STORM MH
	LIGHT POLE

DRAWING LEGEND

EXISTING CONDITIONS LEGEND

SYMBOL	DESCRIPTION
	GUY WIRE
	POWER POLE
	PROPERTY CNR FOUND
	TREE
	CURB
	EDGE OF CONC.
	STORM PIPE
SS	SEWER PIPE
	EDGE OF ASPHALT
	RIPRAP
	WOODLINE
	PROPERTY LINE
	EASEMENT
450	MAJOR CONTOUR
	MINOR CONTOUR

DEMOLITION LEGEND

SYMBOL	DESCRIPTION	NOTES
	STRIPPING AREA	1
LOD	LIMIT OF DISTURBANCE	
X	DEMO NOTE	

GRAPHIC SCALE

10 5 0 10 20

SCALE: 1"=10'-0"
UNIT OF MEASURE: FEET

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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ___ Drawn by: ___ Checked by: ___

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

EXISTING CONDITION AND STRIPPING PLAN PICEA – SHORT

SCALE : AS SHOWN

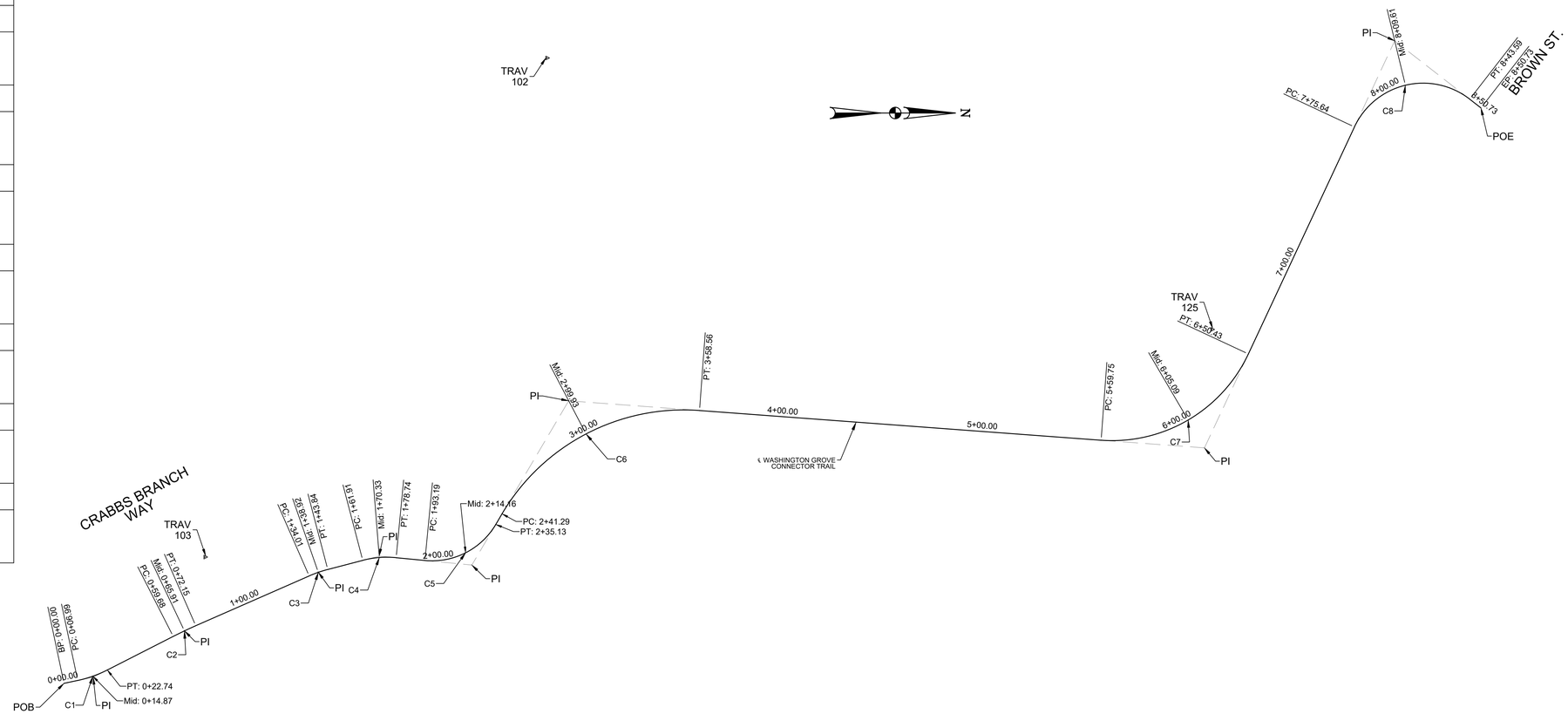
C104

Project No. : 509337 — 7 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C104.dwg
DATE: Jul 24, 2024 - 5:15pm

CENTER ALIGNMENT

CURVE NO.	DESCRIPTION	STATION	COORDINATES NORTHING	COORDINATES EASTING	BEARING
	POB	0+00.00	533972.6859	1263755.6373	N11° 57' 57"W
C1	PC	0+06.99	533979.5258	1263754.1877	
	PI	0+14.87	533987.2736	1263752.5457	
	PT	0+22.74	533994.3304	1263748.9506	N26° 59' 48"W
C2	PC	0+59.68	534027.2413	1263732.1840	
	PI	0+65.91	534032.8011	1263729.3516	
	PT	0+72.15	534038.5151	1263726.8449	N23° 41' 10"W
C3	PC	1+34.01	534095.1587	1263701.9966	
	PI	1+38.92	534099.6685	1263700.0183	
	PT	1+43.84	534104.4328	1263698.7718	N14° 39' 43"W
C4	PC	1+61.91	534121.9208	1263694.1963	
	PI	1+70.33	534130.1474	1263692.0439	
	PT	1+78.74	534138.6112	1263692.8651	N5° 32' 29"E
C5	PC	1+93.19	534152.9920	1263694.2603	
	PI	2+14.16	534176.4342	1263696.5346	
	PT	2+35.13	534188.3978	1263676.2471	N59° 28' 20"W
C6	PC	2+41.29	534191.5296	1263670.9363	
	PI	2+99.93	534224.8152	1263614.4913	
	PT	3+58.56	534290.1648	1263619.3283	N4° 13' 60"E
C7	PC	5+59.75	534490.7984	1263634.1789	
	PI	6+05.09	534542.4479	1263638.0019	
	PT	6+50.43	534564.3768	1263591.0826	N64° 56' 59"W
C8	PC	7+75.64	534617.3925	1263477.6493	
	PI	8+09.61	534637.4831	1263434.6630	
	PT	8+43.59	534674.9409	1263463.7899	N37° 52' 06"E
	POE	8+50.73	534680.5765	1263468.1721	



HORIZONTAL CURVE DATA

CURVE NO.	DELTA	RADIUS	LENGTH	TANGENT	CHORD LENGTH
C1	15°01'51"	60.03	15.75	7.92	15.70
C2	03°18'39"	215.91	12.48	6.24	12.47
C3	09°01'27"	62.41	9.83	4.92	9.82
C4	20°12'12"	47.73	16.83	8.50	16.74
C5	65°00'49"	36.96	41.94	23.55	39.72
C6	63°42'19"	105.47	117.27	65.53	111.32
C7	69°10'59"	75.10	90.68	51.79	85.27
C8	102°49'05"	37.87	67.95	47.45	59.19

CONTROL TRAVERSE

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
102	534213.8385	1264680.9190	489.00	REBAR & CAP
103	534043.0170	1263692.5510	497.34	REBAR & CAP
125	534546.0770	1263578.8589	501.95	REBAR & CAP

GRAPHIC SCALE
30 15 0 30 60
SCALE: 1"=30'-0"
UNIT OF MEASURE: FEET

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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — Date
APPROVED
Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

TRAIL GEOMETRIC LAYOUT

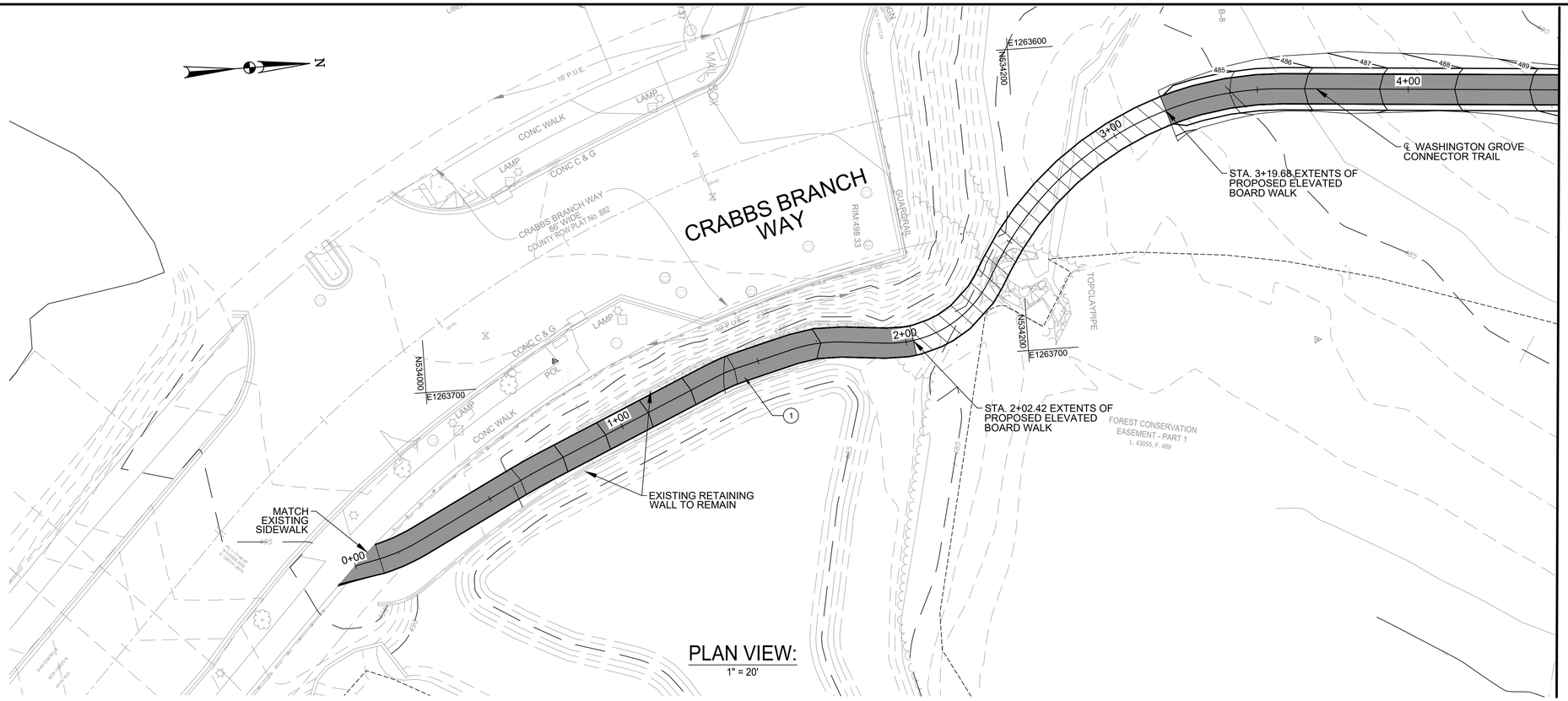
SCALE : AS SHOWN

C200

Project No. : 509337 — 08 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C200.dwg
DATE: Jul 24, 2024 - 4:29pm

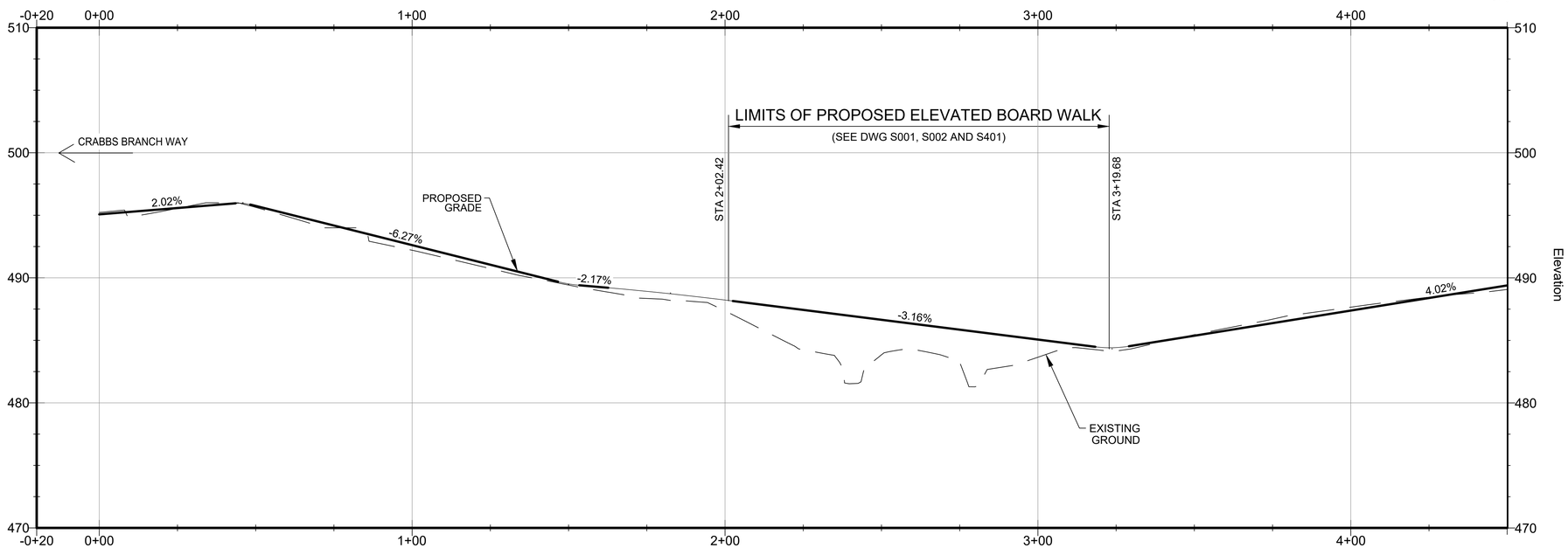
SHEET NO.	TOTAL SHEETS
09	29



PLAN VIEW:

1" = 20'

MATCH LINE B-B STA. 4+50 - SEE DWG. C202



PROFILE VIEW:

H: 1" = 20'
V: 1" = 5'

GRAPHIC SCALE

H: 20 10 0 20 40
SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

V: 5 2.5 0 5 10
SCALE: 1"=5'-0"
UNIT OF MEASURE: FEET

TRAIL SITE PLAN LEGEND

	DESCRIPTION	NOTES
	HOT MIX ASPHALT	1

NOTES:

1. THE EXISTING RETAINING WALL IS TIE-IN DOWN TO THE PATH EXISTING GRADE BETWEEN STATION 1+87 TO STATION 1+93. THE DESIGN ENGINEER WILL PROVIDE A FILL ON TOP OF THAT SECTION OF THE RETAINING WALL FOR THE TRAIL PATH ALIGNMENT.

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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

TRAIL SITE LAYOUT AND PROFILE

1 OF 2

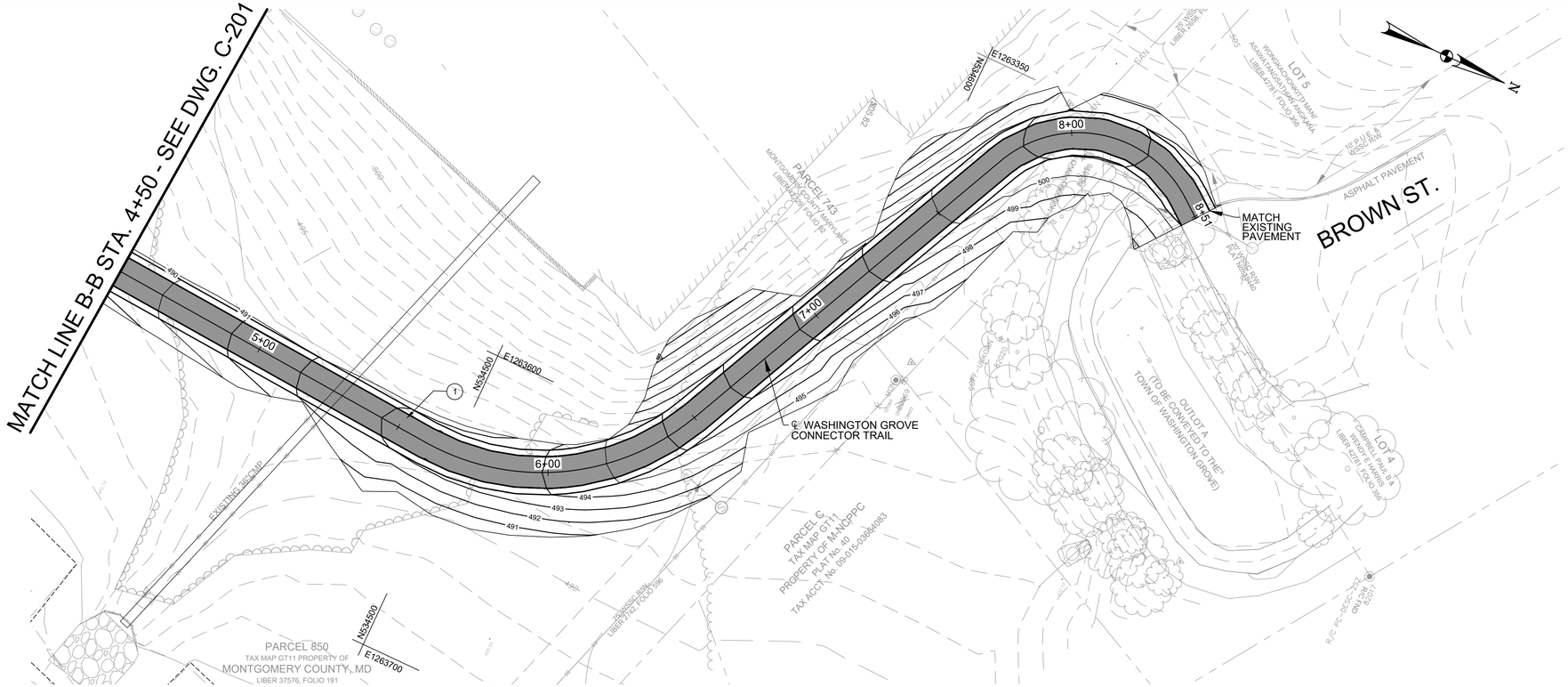
SCALE : AS SHOWN

C201

Project No.: 509337 — 09 of 29

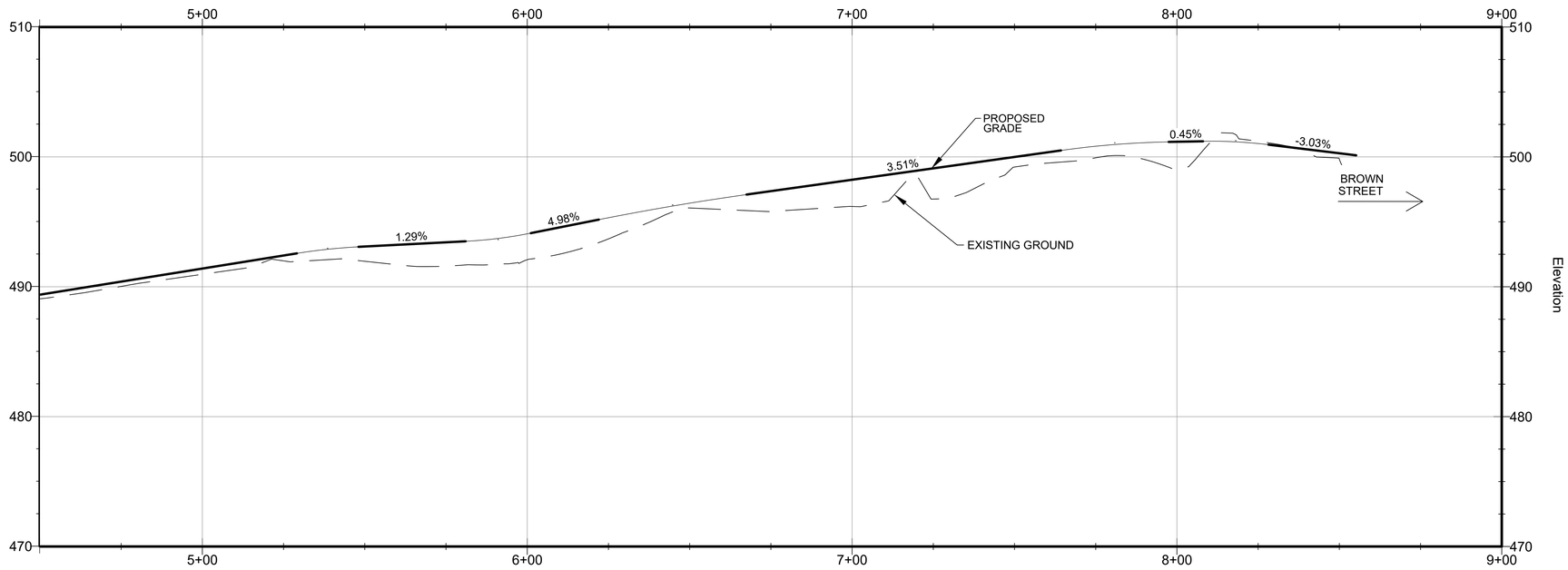
FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C201 - C202.dwg
DATE: Jul 24, 2024 - 4:29pm

SHEET NO.	TOTAL SHEETS
10	29



PLAN VIEW:

1" = 20'



PROFILE VIEW:

H: 1" = 20'
V: 1" = 5'

GRAPHIC SCALE

H: 20 10 0 20 40
SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

V: 5 2.5 0 5 10
SCALE: 1"=5'-0"
UNIT OF MEASURE: FEET

TRAIL SITE PLAN LEGEND

	DESCRIPTION	NOTES
	HOT MIX ASPHALT	1

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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

TRAIL SITE LAYOUT AND PROFILE

2 OF 2

SCALE : AS SHOWN

C202

Project No.: 609337 — 10 of 29

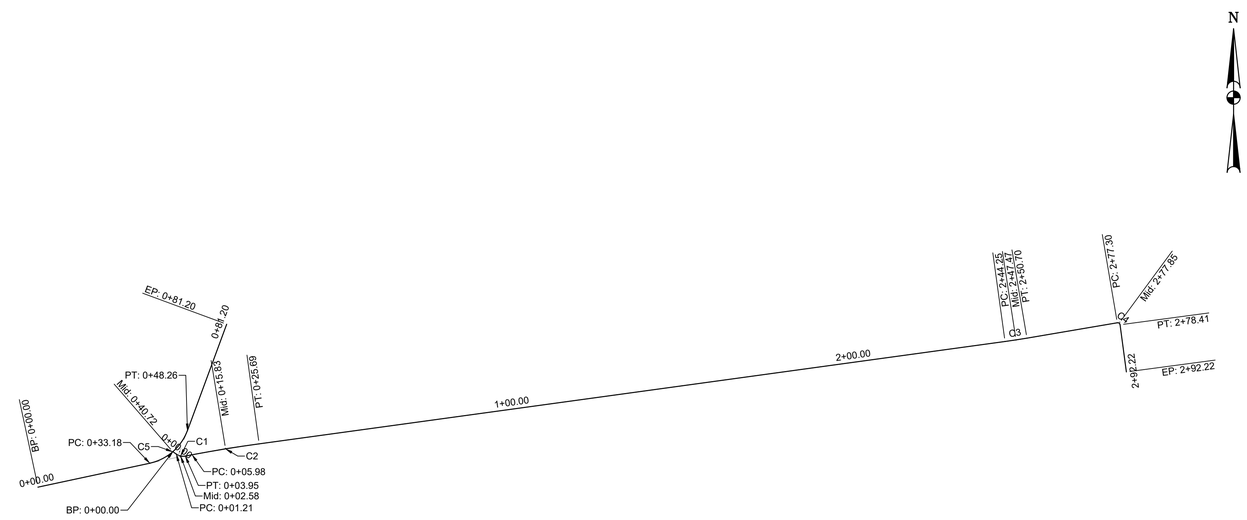
FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C201 - C202.dwg
DATE: Jul 24, 2024 - 4:30pm

CENTER ALIGNMENT

CURVE NO.	DESCRIPTION	STATION	COORDINATES		BEARING
			NORTHING	EASTING	
	POB	0+00.00	535858.8070	1264170.1995	S54° 27' 49"E
C1	PC	0+01.21	535858.1053	1264171.1819	
	PI	0+02.58	535857.2628	1264172.3615	
	PT	0+03.95	535857.5330	1264173.7856	N79° 15' 16"E
C2	PC	0+05.98	535857.9115	1264175.7798	
	PI	0+15.83	535859.7497	1264185.4661	
	PT	0+25.69	535861.0899	1264195.2338	N82° 11' 14"E
C3	PC	2+44.25	535890.7992	1264411.7613	
	PI	2+47.47	535891.2377	1264414.9570	
	PT	2+50.70	535891.7790	1264418.1369	N80° 20' 21"E
C4	PC	2+77.30	535896.2433	1264444.3626	
	PI	2+77.85	535896.3634	1264445.0676	
	PT	2+78.41	535895.6545	1264445.1623	S7° 36' 35"E
	POE	2+92.22	535881.9617	1264446.9917	
	POB	0+00.00	535848.5228	1264131.0482	N77° 56' 07"E
C5	PC	0+33.18	535855.4585	1264163.4988	
	PI	0+40.72	535857.1821	1264171.5633	
	PT	0+48.26	535864.9195	1264174.4162	N20° 14' 24"E
	POE	0+81.20	535895.8260	1264185.8123	

HORIZONTAL CURVE DATA

CURVE NO.	DELTA	RADIUS	LENGTH	TANGENT	CHORD LENGTH
C1	46°16'54"	3.39	2.74	1.45	2.67
C2	02°55'58"	385.14	19.71	9.86	19.71
C3	01°50'53"	200.00	6.45	3.23	6.45
C4	92°03'03"	0.69	1.11	0.72	0.99
C5	57°41'43"	14.97	15.08	8.25	14.45



GRAPHIC SCALE
20 10 0 20 40
SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

SIDEWALK GEOMETRIC LAYOUT PICEA – LONG

SCALE : AS SHOWN

C203

Project No. : 509337 — 11 of 29

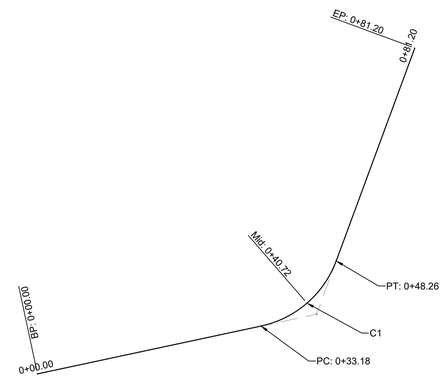
SHEET NO.	TOTAL SHEETS
12	29

CENTER ALIGNMENT

CURVE NO.	DESCRIPTION	STATION	COORDINATES		BEARING
			NORTHING	EASTING	
	POB	0+00.00	535848.5228	1264131.0482	N77° 56' 07"E
C1	PC	0+33.18	535855.4585	1264163.4988	
	PI	0+40.72	535857.1821	1264171.5633	
	PT	0+48.26	535864.9195	1264174.4162	N20° 14' 24"E
	PT	0+81.20	535895.8260	1264185.8123	

HORIZONTAL CURVE DATA

CURVE NO.	DELTA	RADIUS	LENGTH	TANGENT	CHORD LENGTH
C1	57°41'43"	14.97	15.08	8.25	14.45



GRAPHIC SCALE

10 5 0 10 20

SCALE: 1"=10'-0"
UNIT OF MEASURE: FEET

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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
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RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

SIDEWALK GEOMETRIC LAYOUT PICEA – SHORT

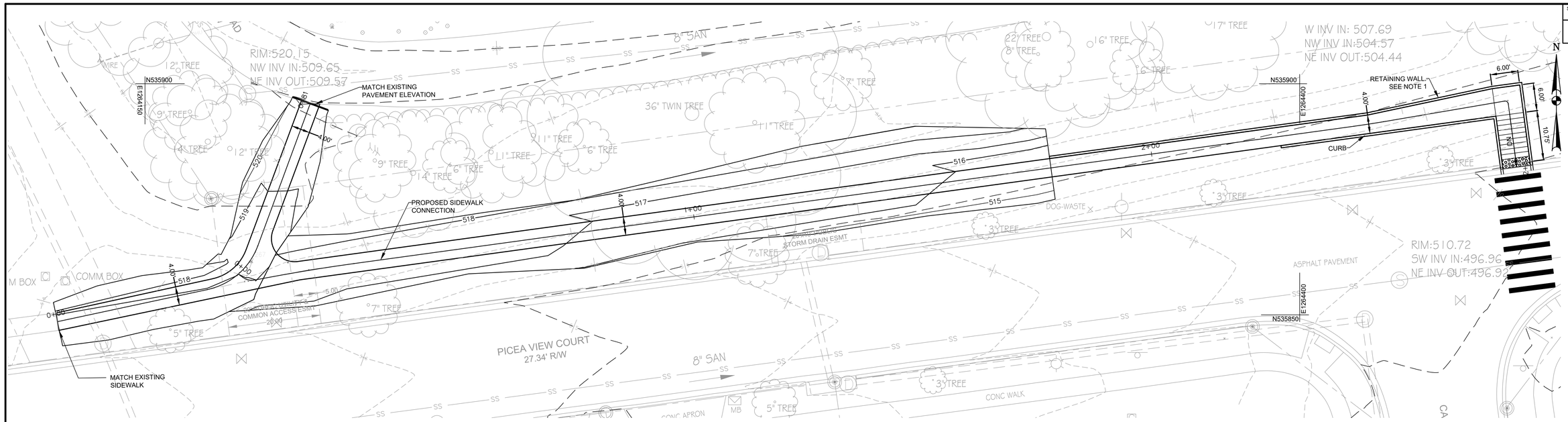
SCALE : AS SHOWN

C204

Project No. : 509337 — 12 of 29

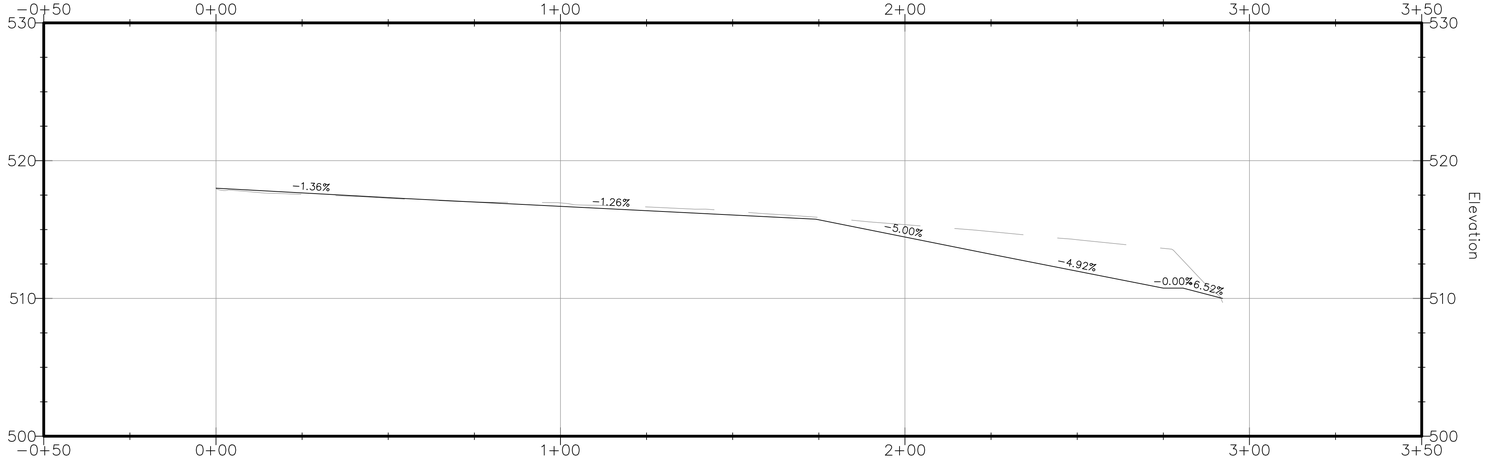
FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C204.dwg
DATE: Jul 24, 2024 - 4:30pm

SHEET NO.	TOTAL SHEETS
13	29



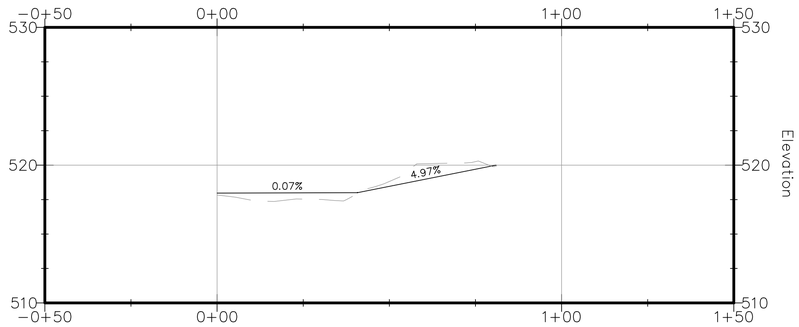
PLAN VIEW:

1" = 10'



LONG PORTION PROFILE VIEW:

H: 1" = 20'
V: 1" = 5'



SHORT PORTION PROFILE VIEW:

H: 1" = 20'
V: 1" = 5'

NOTE

1. SEE S401 FOR RETAINING WALL DETAILS FOR CURBS ABOVE 3FT IN HEIGHT.

NO.	REVISION	DATE	BY
	15% BRIDGING DOCUMENTS	11/3/2023	
	35% BRIDGING DOCUMENTS	7/24/2024	

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RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

SIDEWALK LAYOUT PICEA – LONG

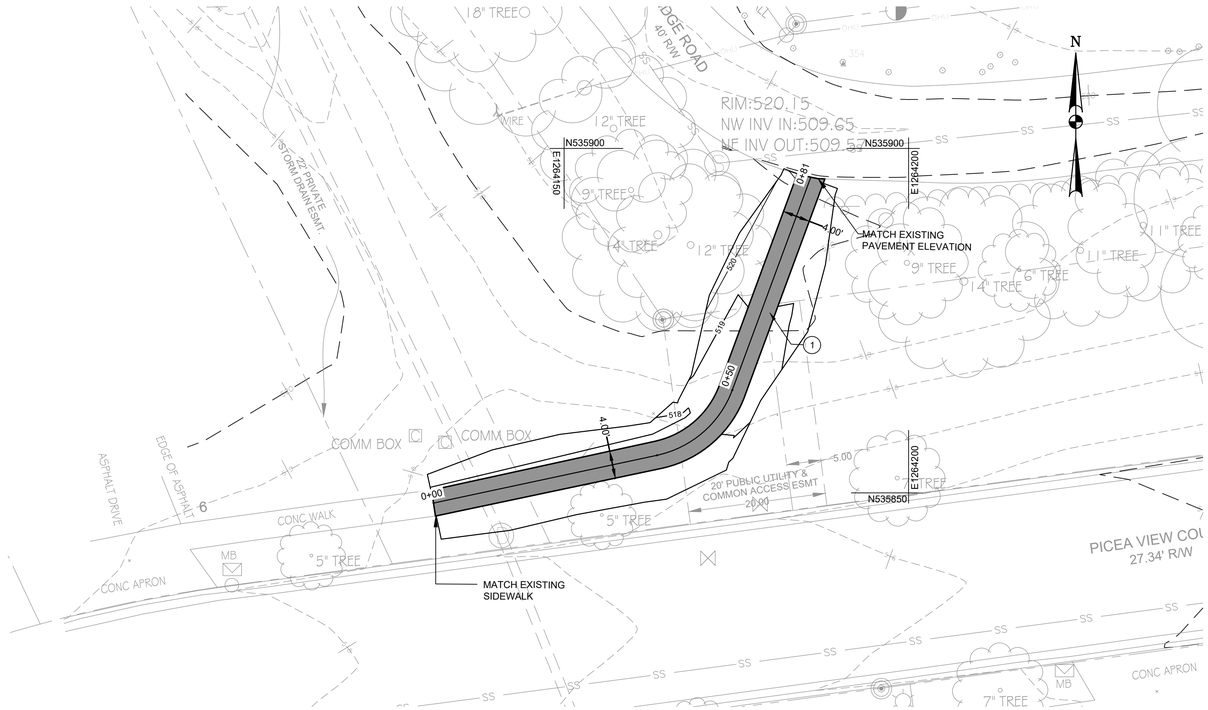
SCALE : AS SHOWN

C205

Project No. : 509337 — 13 of 29

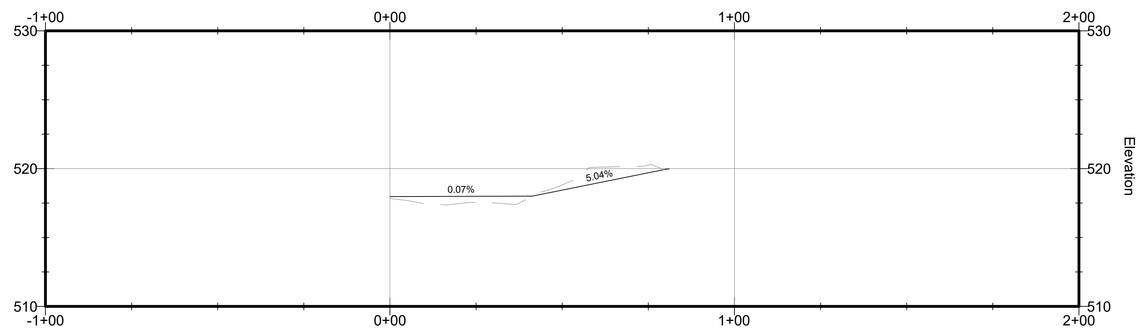
FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\PICEA CT\PICEA LONG OPTION\C-201L.dwg
DATE: Jul 24, 2024 - 4:31pm

SHEET NO.	TOTAL SHEETS
14	29



PLAN VIEW:

1" = 10'



PROFILE VIEW:

H: 1" = 20'
V: 1" = 5'

TRAIL SITE PLAN LEGEND		
	DESCRIPTION	NOTES
	HOT MIX ASPHALT	1

NO.	REVISION	DATE	BY
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	35% BRIDGING DOCUMENTS	7/24/2024	

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MONTGOMERY COUNTY
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ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

SIDEWALK LAYOUT PICEA – SHORT

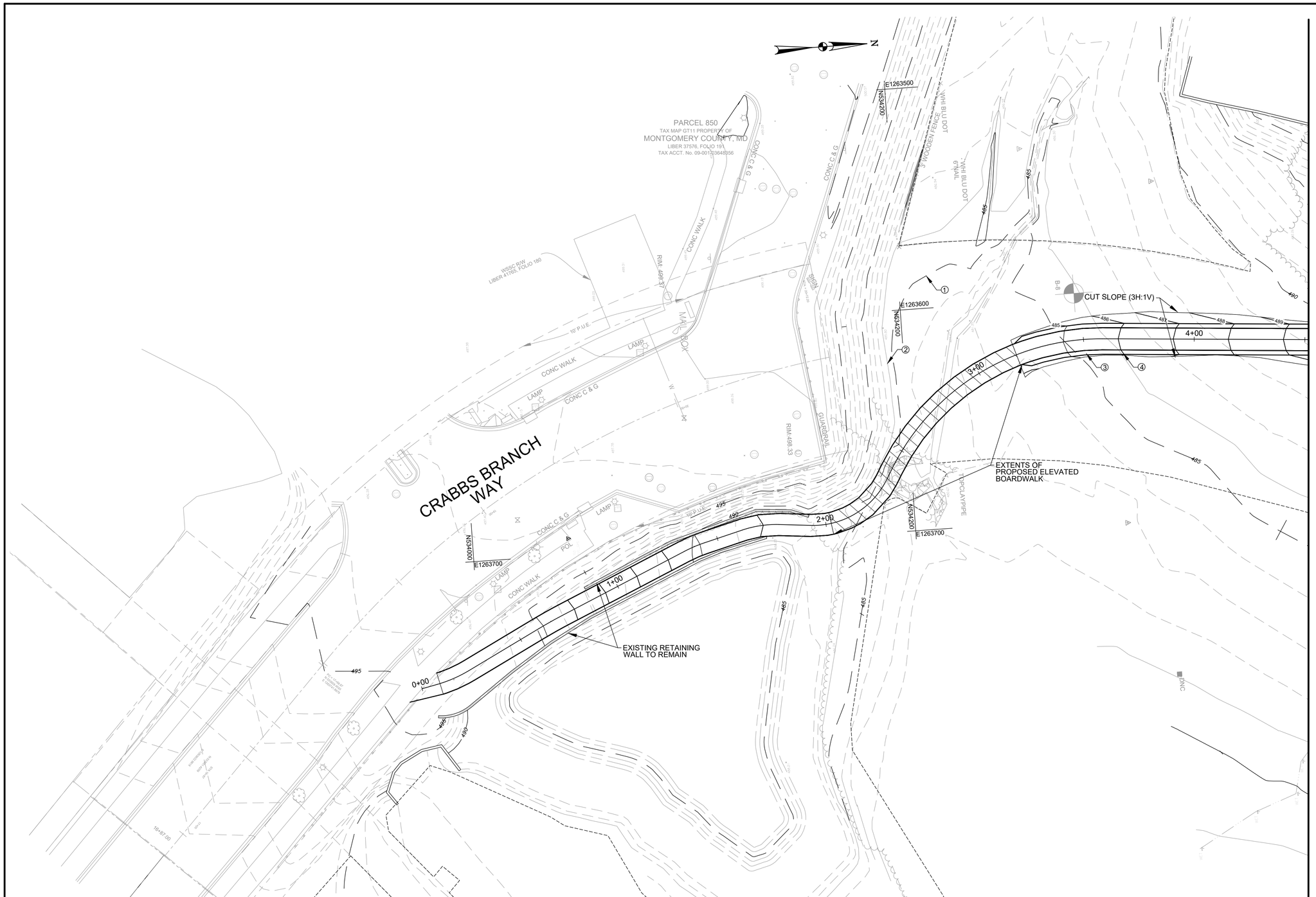
SCALE : AS SHOWN

C206

Project No. : 509337 — 14 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\PICEA CT\PICEA SHORT OPTION\C-201S.dwg
DATE: Jul 24, 2024 - 4:31pm

SHEET NO.	TOTAL SHEETS
15	29



ROUGH GRADING PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
— — —	EXISTING MAJOR CONTOUR LINE	1
- - - - -	EXISTING MINOR CONTOUR LINE	2
————	PROPOSED MAJOR CONTOUR LINE	3
————	PROPOSED MINOR CONTOUR LINE	4

NOTES:

1. FOR GENERAL NOTES, SEE DRAWING G-002.
2. FOR TRAIL ALIGNMENT/PROFILE AND CULVERT PIPE INFORMATION, SEE DRAWINGS C-201 THROUGH C-202.

GRAPHIC SCALE

20 10 0 20 40

SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

TRAIL ROUGH GRADING PLAN 1 OF 2

SCALE : AS SHOWN

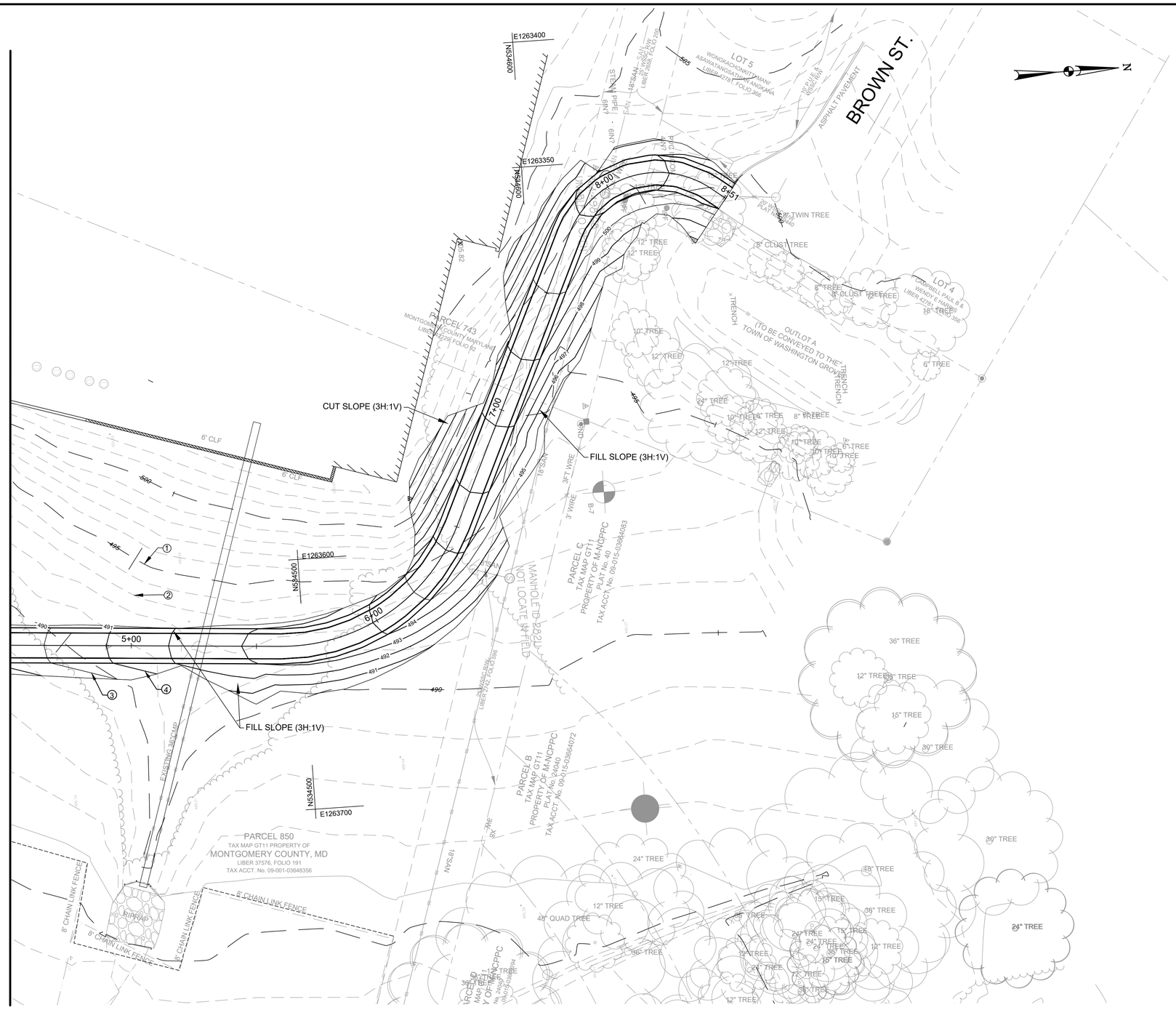
C301

Project No. : 509337 — 15 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C301 - C302.dwg
DATE: Jul 24, 2024 - 4:30pm

SHEET NO.	TOTAL SHEETS
16	29

MATCHLINE A-A STA. 4+50 - SEE DWG. C301



ROUGH GRADING PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
— — —	EXISTING MAJOR CONTOUR LINE	1
- - - - -	EXISTING MINOR CONTOUR LINE	2
———	PROPOSED MAJOR CONTOUR LINE	3
———	PROPOSED MINOR CONTOUR LINE	4

NOTES:

1. FOR GENERAL NOTES, SEE DRAWING G002.
2. FOR TRAIL PROFILE, SEE DRAWINGS C201 THROUGH C202.

GRAPHIC SCALE

20 10 0 20 40

SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

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NO.	REVISION	DATE	BY
	15% BRIDGING DOCUMENTS	11/3/2023	
	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

TRAIL ROUGH GRADING PLAN 2 OF 2

SCALE : AS SHOWN

C302

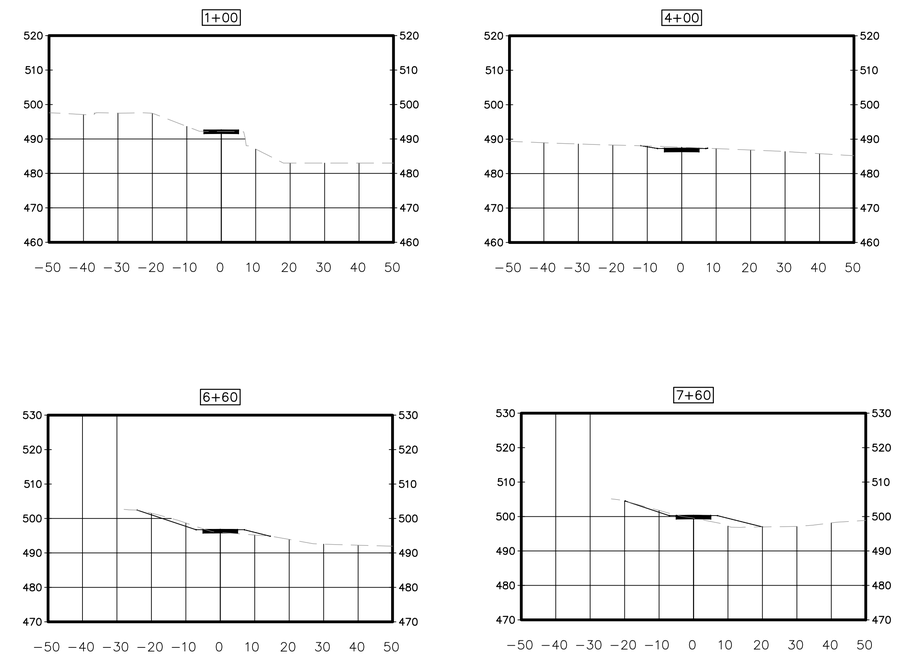
Project No. : 509337 — 16 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C301 - C302.dwg
DATE: Jul 24, 2024 - 4:30pm

SHEET NO.	TOTAL SHEETS
17	29

PLAN VIEW:

1" = 40'



SECTION A-A

H: 1"=20'

V: 1"-5'

NO.	REVISION	DATE	BY
	15% BRIDGING DOCUMENTS	11/3/2023	
	35% BRIDGING DOCUMENTS	7/24/2024	

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www.sheladia.com

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

TRAIL CROSS SECTIONS

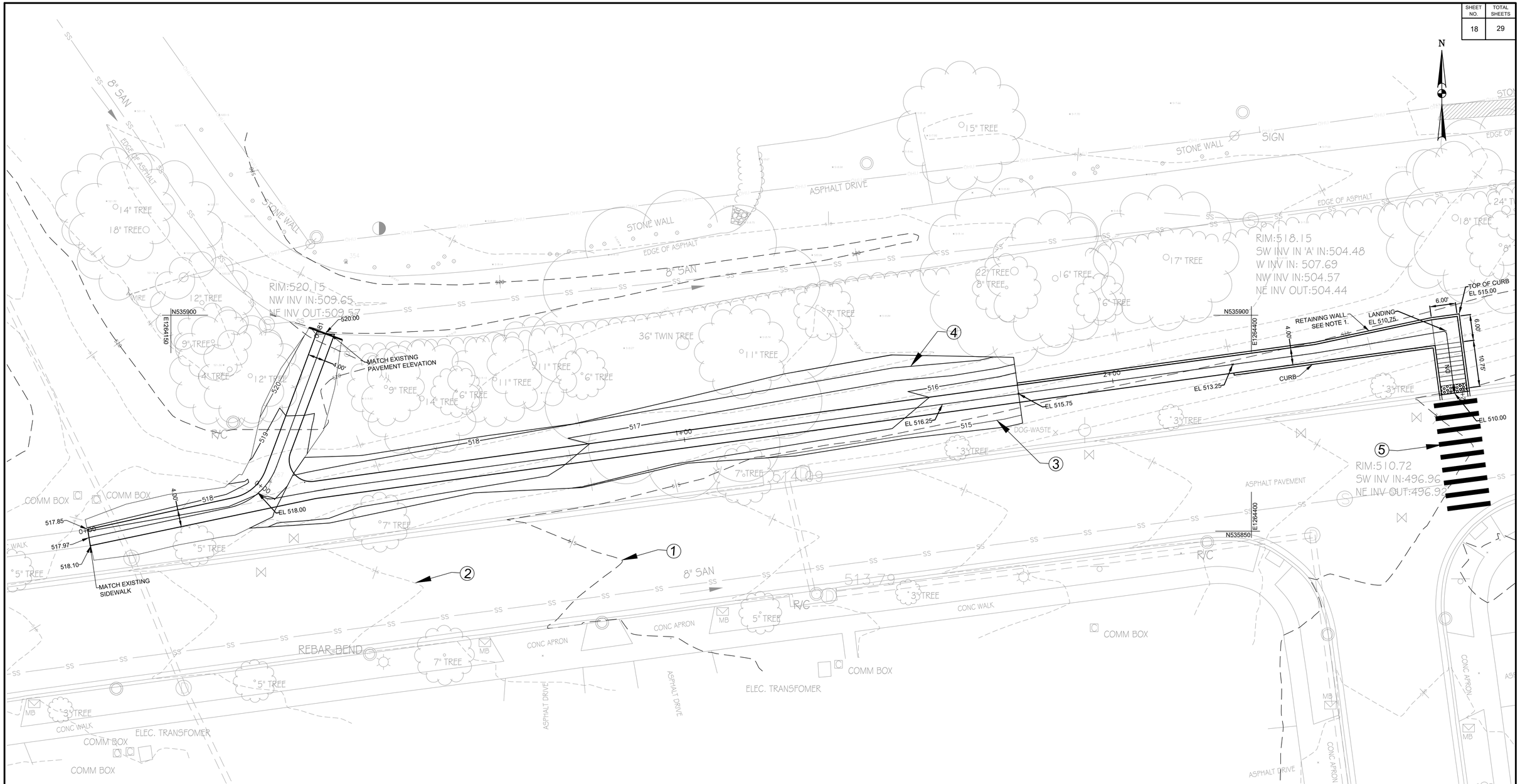
SCALE : AS SHOWN

C303

Project No. : 509337 — 17 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C303.dwg
DATE: Jul 24, 2024 - 4:30pm

SHEET NO.	TOTAL SHEETS
18	29



ROUGH GRADING PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
— — —	EXISTING MAJOR CONTOUR LINE	1
- - - - -	EXISTING MINOR CONTOUR LINE	2
———	PROPOSED MAJOR CONTOUR LINE	3
———	PROPOSED MINOR CONTOUR LINE	4
▬	PEDESTRIAN CROSSING STRIPE	5

NOTE

1. SEE S401 FOR RETAINING WALL DETAILS FOR CURBS ABOVE 3FT IN HEIGHT.

GRAPHIC SCALE
10 5 0 10 20
SCALE: 1"=10'-0"
UNIT OF MEASURE: FEET

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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ___ Drawn by: ___ Checked by: ___

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

SIDEWALK ROUGH GRADING PLAN PICEA – LONG

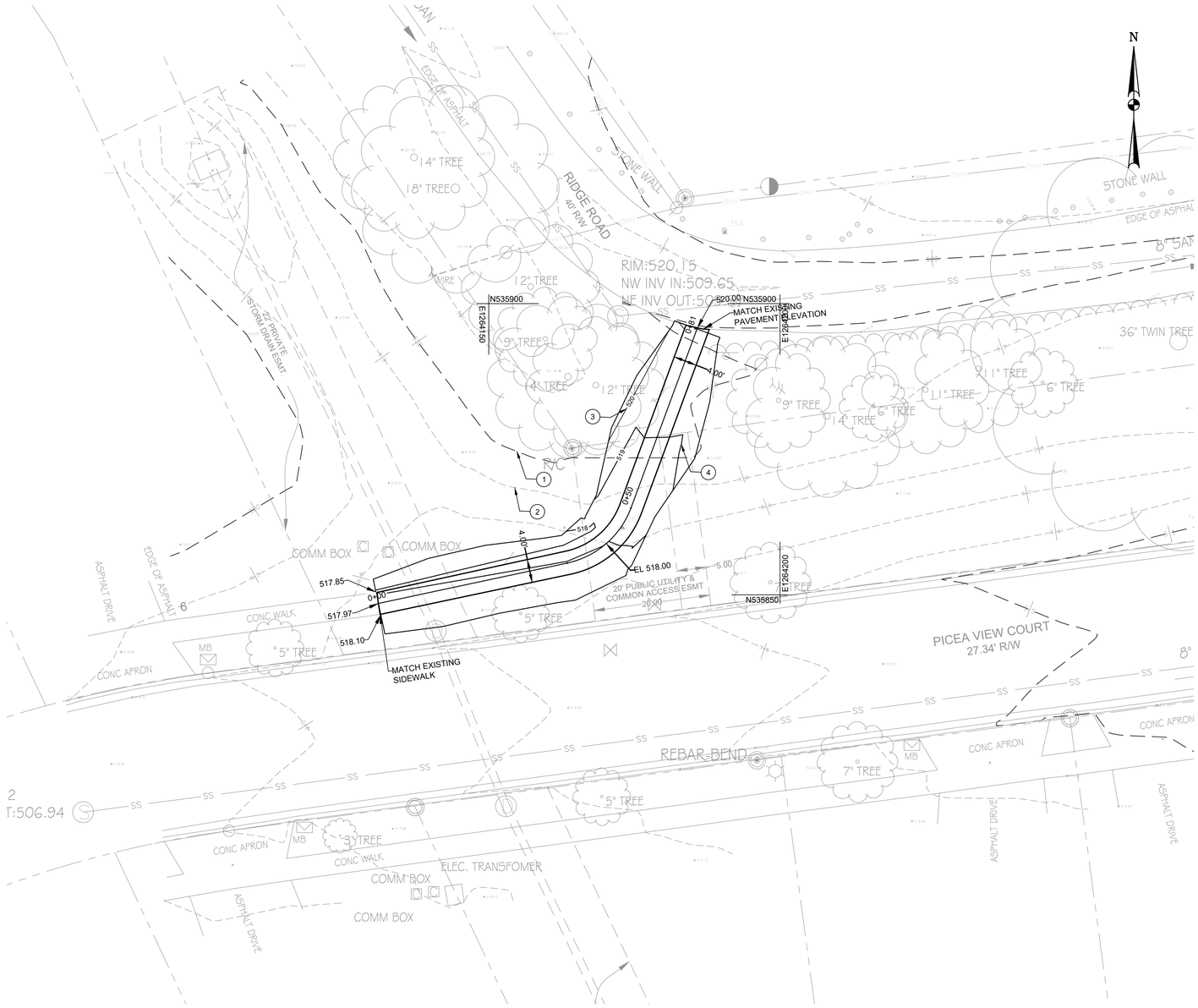
SCALE : AS SHOWN

C304

Project No.: 509337 — 18 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\PICEA CT\PICEA LONG OPTION\C-301L.dwg
DATE: Jul 24, 2024 - 4:31pm

SHEET NO.	TOTAL SHEETS
19	29



ROUGH GRADING PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
— — —	EXISTING MAJOR CONTOUR LINE	1
– – – –	EXISTING MINOR CONTOUR LINE	2
————	PROPOSED MAJOR CONTOUR LINE	3
————	PROPOSED MINOR CONTOUR LINE	4

NOTES:

1. FOR GENERAL NOTES, SEE DRAWING G002.
2. FOR TRAIL PROFILE, SEE DRAWING C206.

GRAPHIC SCALE

10 5 0 10 20

SCALE: 1"=10'-0"
UNIT OF MEASURE: FEET

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NO.	REVISION	DATE	BY
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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

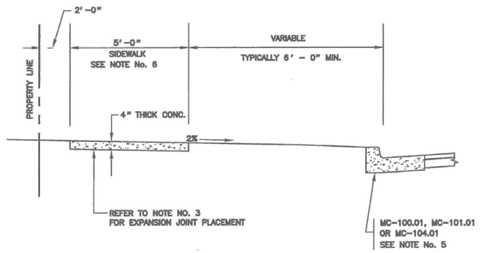
SIDEWALK ROUGH GRADING PLAN PICEA – SHORT

SCALE : AS SHOWN

C305

Project No. : 509337 — 19 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\PICEA CT\PICEA SHORT OPTION\C-301S.dwg
DATE: Jul 24, 2024 - 4:31pm



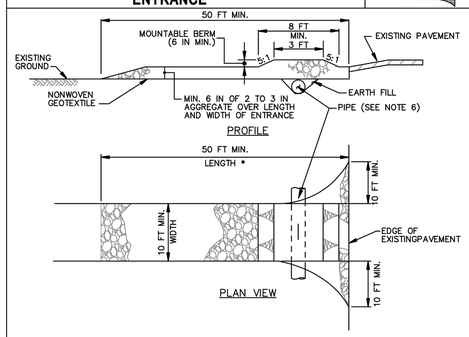
GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. REFER TO THE APPLICABLE MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DETAILS AT DRIVEWAYS.
3. EXPANSION JOINTS SHALL HAVE A MAXIMUM SPACING OF 100 FEET AND BE LOCATED AT POINTS OF CURVATURE. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C920. △1
4. SCORE THE CONCRETE TO A DEPTH OF 1/3 THE SLAB THICKNESS TO PROVIDE WEAKENED PLANE TRANSVERSE JOINTS AT 5'-0" INTERVALS.
5. REFER TO THE APPLICABLE ROAD STANDARD AND CURB AND GUTTER STANDARDS FOR OTHER OPTIONS.
6. SIDEWALK WIDTH SHALL BE 4'-0" FOR SECONDARY AND TERTIARY ROADWAYS.

APPROVED 14 APR '06 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.	△1 ASTM-C920 4/2006	RESIDENTIAL SIDEWALK CLOSED SECTION
for CHIEF, DIV. OF CAP. DEV.		STANDARD NO. MC-110.01

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL SCE



CONSTRUCTION SPECIFICATIONS

1. 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.
2. 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 SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. 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.
5. 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 TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

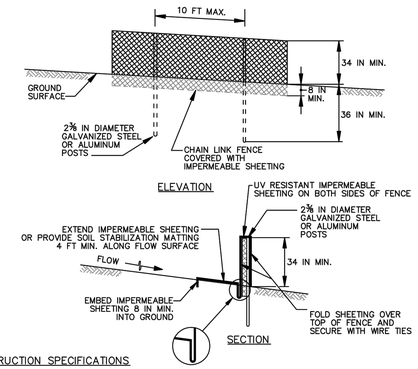
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL C-9 DIVERSION FENCE

STANDARD SYMBOL —— DF ——

MAXIMUM DRAINAGE AREA = 2 ACRES



CONSTRUCTION SPECIFICATIONS

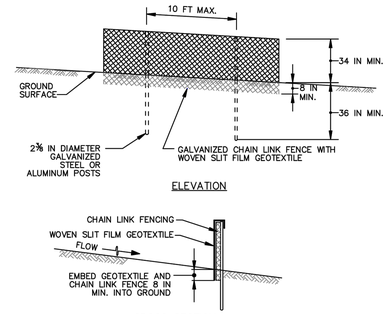
1. USE 42 INCH HIGH, 9 GAUGE OR THICKER CHAIN LINK FENCING (2⅜ INCH MAXIMUM OPENING).
2. USE 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
3. FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES.
4. SECURE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, MID SECTION, AND BELOW GROUND SURFACE.
5. EXTEND SHEETING A MINIMUM OF 4 FEET ALONG FLOW SURFACE AND EMBED END A MINIMUM OF 8 INCHES INTO GROUND. SOIL STABILIZATION MATTING MAY BE USED IN LIEU OF IMPERMEABLE SHEETING ALONG FLOW SURFACE.
6. WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING DOWNGRADE.
7. KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE. REPLACE IMPERMEABLE SHEETING IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-3 SUPER SILT FENCE

STANDARD SYMBOL —SSF—



CONSTRUCTION SPECIFICATIONS

1. INSTALL 2⅜ 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 THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2⅜ 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-1 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.
4. 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 THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. 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 NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

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NO.	REVISION	DATE	BY
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	35% BRIDGING DOCUMENTS	7/24/2024	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

CIVIL DETAILS

SCALE : AS SHOWN

C401

Project No. : 509337 — 20 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C401.dwg
DATE: Jul 24, 2024 - 5:11pm

SHEET NO.	TOTAL SHEETS
21	29

MATCHLINE A-A STA. 4+50 - SEE DWG. C502

EROSION AND SEDIMENT CONTROL LEGEND	
CSA BOUNDARY / LIMITS OF DISTURBANCE	LOD
SUPER SILT FENCE	SSF SSF SSF
SILT FENCE	SF SF SF SF
DIVERSION FENCE	DF DF

GRAPHIC SCALE

20 10 0 20 40

SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

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Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

EROSION AND SEDIMENT CONTROL SHEET 1 OF 2

SCALE : AS SHOWN

C501

Project No. : 509337 — 21 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C501 - C502.dwg
DATE: Jul 24, 2024 - 4:26pm

EROSION AND SEDIMENT CONTROL LEGEND	
CSA BOUNDARY / LIMITS OF DISTURBANCE	LOD
SUPER SILT FENCE	(SSF) SSF SSF
DIVERSION FENCE	(DF) DF

GRAPHIC SCALE

20 10 0 20 40

SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE
CONNECTOR TRAIL
AND PICEA VIEW COURT
CONNECTOR SIDEWALK
EROSION AND SEDIMENT CONTROL SHEET 2 OF 2

SCALE : AS SHOWN

C502

Project No. : 509337 22 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\C501 - C502.dwg
DATE: Jul 24, 2024 - 4:27pm

GENERAL NOTES:

CODES AND STANDARDS

1. ALL DESIGN AND CONSTRUCTION IS BASED ON AND SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES.

   2018 IBC - 2018 INTERNATIONAL BUILDING CODE W/ AMENDMENTS
   ACI - AMERICAN CONCRETE INSTITUTE
   ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   AF&PA - AMERICAN FOREST & PAPER ASSOCIATION
   AF&PA-2012
   SDPWS-2008
   APA - APA - ENGINEERED WOOD ASSOCIATION
   ASCE - AMERICAN SOCIETY OF CIVIL ENGINEERS
   ASCE/SEI 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
   AWPA - AMERICAN WOOD PROTECTION ASSOCIATION

2. ALL REFERENCED STANDARDS SHALL BE OF THE EFFECTIVE DATE NOTED IN THE CONTROLLING BUILDING CODE.
3. NO PROVISION OF ANY REFERENCED STANDARD SPECIFICATION, MANUAL OR CODE (WHETHER OR NOT SPECIFICALLY INCORPORATED BY REFERENCE IN THE CONSTRUCTION DOCUMENTS) SHALL BE EFFECTIVE TO CHANGE THE DUTIES AND RESPONSIBILITIES OF OWNER, CONTRACTOR, ENGINEER, SUPPLIER, OR ANY OF THEIR CONSULTANTS, AGENTS, OR EMPLOYEES FROM THOSE SET FORTH IN THE CONSTRUCTION DOCUMENTS NOR SHALL IT BE EFFECTIVE TO ASSIGN TO THE STRUCTURAL ENGINEER OF RECORD OR ANY OF THE STRUCTURAL ENGINEER OF RECORD'S CONSULTANTS, AGENTS, OR EMPLOYEES ANY DUTY OR AUTHORITY TO SUPERVISE OR DIRECT THE FURNISHING OR PERFORMANCE OF THE WORK OR ANY DUTY OR AUTHORITY TO UNDERTAKE RESPONSIBILITIES CONTRARY TO THE PROVISIONS OF THE CONSTRUCTION DOCUMENTS.

LOADS

DESIGN LOADS (ALL LOADS ARE SERVICE LOADS UNLESS NOTED):

1. DEAD LOADS	
DECK LOAD	50 PSF
2. LIVE LOADS	
PEDESTRIAN LOAD	90 PSF
3. SNOW LOADS	
GROUND SNOW LOAD (PG)	30 PSF
4. WIND DESIGN CRITERIA	
ULTIMATE WIND SPEED (3-SECOND GUST)	115 MPH
WIND DIRECTIONAL FACTOR (KD)	0.85
EXPOSURE CATEGORY	C
TOPOGRAPHIC FACTOR (KZT)	1.16
GUST EFFECT FACTOR (G)	0.85

GENERAL CONDITIONS

1. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING MUNICIPAL CODES & SPECIFICATIONS FOR THIS PROJECT.
2. IF MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.
3. THE CONTRACTOR SHALL MAKE NO DEVIATION FROM THE DESIGN DRAWINGS WITHOUT WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
4. WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES, SHALL BE REPEATED.
5. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
6. CONTRACTOR TO SUPPORT, BRACE AND SECURE ALL STRUCTURE AS REQUIRED DURING ERECTION/CONSTRUCTION. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION. BUILDING IS NOT FULLY BRACED UNTIL ALL SHEAR WALLS, SHEATHING, FASTENERS AND OTHER LATERAL BRACING COMPONENTS HAVE BEEN COMPLETELY INSTALLED.
7. THESE NOTES APPLY TO ALL STRUCTURAL DRAWINGS. NOTES SHALL APPLY UNLESS OTHERWISE INDICATED BY STRUCTURAL DRAWINGS OR SPECIFICATIONS.
8. WHERE A DETAIL, TYPICAL DETAIL, SECTION, TYPICAL SECTION OR PLAN NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL SIMILAR OR LIKE CONDITIONS UNLESS NOTED OTHERWISE.
9. CONSTRUCTION DOCUMENTS INCLUDE, BUT ARE NOT LIMITED TO, THE STRUCTURAL DOCUMENTS (DRAWINGS AND CALCULATIONS), BUT DO NOT INCLUDE SHOP DRAWINGS, VENDOR DRAWINGS, OR MATERIAL PREPARED AND SUBMITTED BY THE GENERAL CONTRACTOR.
10. CONSTRUCTION DOCUMENTS SHALL GOVERN IN THE EVENT OF A CONFLICT WITH THE CODE OF PRACTICE OR SPECIFICATIONS OF ACI, PCI, AISC, SJI OR OTHER STANDARDS. WHERE A CONFLICT OCCURS WITHIN THE CONSTRUCTION DOCUMENTS, THE STRICTEST REQUIREMENT SHALL GOVERN.
11. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS AND NOTIFY ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH WORK. FOR DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS, SEE ARCHITECTURAL DRAWINGS.
12. DO NOT SCALE FOR DIMENSIONS NOT SHOWN ON DRAWINGS. SEND WRITTEN RFI (REQUEST FOR INFORMATION) TO THE ARCHITECT/ENGINEER FOR DIMENSIONS NOT PROVIDED.
13. ELEVATIONS SHOWN ARE TO TOP OF FOUNDATIONS, SLABS OR STEEL BEAMS UNLESS NOTED OTHERWISE.
14. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES IN ORDER TO COMPLY WITH THE CONSTRUCTION DOCUMENTS.
15. THE GENERAL CONTRACTOR HAS SOLE RESPONSIBILITY TO COMPLY WITH ALL APPLICABLE OSHA REGULATIONS.
16. ALL TESTING SHALL BE PAID FOR BY THE OWNER (CONTRACTOR SHALL COORDINATE WITH OWNER TO ENSURE THAT COST OF TESTING IS ACCURATE AND PRESENTED TO OWNER WITH CONSTRUCTION COSTS).

CAST-IN-PLACE CONCRETE

1. ALL CONCRETE SHALL BE READY-MIX, HAVE A MINIMUM OF 500 LBS. OF CEMENT PER CUBIC YARD AND HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:
   - CONCRETE FOR SLABS ON GRADE, RETAINING WALLS AND RETAINING WALL FOOTINGS - 3,500 PSI.
2. ALL CONCRETE SHALL HAVE A SLUMP OF 4" PLUS OR MINUS 1".
3. CONCRETE EXPOSED TO FREEZE THAW SHALL HAVE 4 TO 8% AIR ENTRAINMENT, AND A MAXIMUM WATER/CEMENT RATIO OF 0.50.
4. CONCRETE NOT EXPOSED TO FREEZE THAW SHALL HAVE 2 TO 4% AIR ENTRAINMENT, AND A MAXIMUM WATER/CEMENT RATIO OF 0.56.
5. CONCRETE MIX DESIGN SHALL BE IN ACCORDANCE WITH THE REFERRED EDITION OF ACI 301 CHAPTER 3, METHOD 1 OR METHOD 2.
6. SUBMIT BACKUP DATA AS REQUIRED BY CHAPTER 5 SECTION 5.3. OF THE REFERRED EDITION OF ACI 318.
7. SLAB ON GRADE SHALL BE 5" MINIMUM WITH 6x6 - W1.4 x W1.4 W.W.F. EXCEPT AS NOTED ON THE DRAWINGS.
8. ALL REINFORCING STEEL SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL CONFORMING TO ASTM A-615 GRADE 60.
9. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. WWF SHALL BE LAPPED AT LEAST 8" AND CONTAIN AT LEAST ONE CROSS WIRE WITHIN THE 8".
10. POURING OF CONCRETE SHALL NOT START UNTIL THE REINFORCING HAS BEEN PLACED AND APPROVED BY THE OWNER'S INSPECTING AGENCY.
11. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH "THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" REFERRED EDITION OF ACI 318 , AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS," ACI 301.
12. ALL REINFORCING DETAILS SHALL CONFORM TO "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" ACI 315 (REFERRED IN CODES AND REFERENCES), UNLESS DETAILED OTHERWISE ON THE STRUCTURAL DRAWINGS.
13. CONTRACTOR SHALL PROVIDE SPACERS, CHAIRS, BOLSTERS, NECESSARY TO SUPPORT REINFORCING STEEL. SUPPORT ITEMS WHICH BEAR ON EXPOSED CONCRETE SURFACES SHALL HAVE ENDS WHICH ARE PLASTIC TIPPED OR STAINLESS STEEL.
14. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:
   - 3" - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED EARTH.
   - 2" - CONCRETE EXPOSED TO EARTH OR WEATHER, #6 THROUGH #18 BARS.
   - 1 1/2" - CONCRETE EXPOSED TO EARTH OR WEATHER, #5 BAR SMALLER.
   - 1 1/2" - CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH FOR THE PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS IN BEAMS AND COLUMNS
   - 3/4" - CONCRETE NOT EXPOSED TO WEATHER NOR IN CONTACT WITH EARTH FOR SLABS AND WALLS, #11 BAR AND SMALLER.
18. HORIZONTAL WALL AND FOOTING BARS SHALL BE BENT I'-0' AROUND CORNERS OR CORNER BARS WITH 2'-6" LAP SHALL BE PROVIDED.
19. HORIZONTAL KEYWAYS IN CONSTRUCTION JOINTS SHALL BE PROVIDED IN WALL FOOTINGS WITH A DEPTH OF 1-1/2" AND HEIGHT EQUAL TO 1/3 OF THE FOOTING DEPTH. REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
20. CONTRACTOR SHALL KEEP A COPY OF "FIELD REFERENCE MANUAL" (ACI PUBLICATION SP-15, REFERRED EDITION) AT THE PROJECT FIELD OFFICE.
21. LAP SPLICES, DEVELOPMENT LENGTHS AND DETAILS FOR REINFORCING BARS SHALL BE IN ACCORDANCE WITH THOSE LISTED IN THE AMERICAN CONCRETE INSTITUTE SPECIFICATIONS. MINIMUM LAP SPLICES ON ALL REINFORCING BAR SPLICES SHALL BE 48 BAR DIAMETERS TYPICAL, EXCEPT WHERE OTHERWISE NOTED ON THE DRAWINGS. FOR STAIR AND ELEVATOR TOWER SHEAR WALLS, LAP ALL VERTICAL BARS 60 BAR DIAMETERS.
22. TESTING LABORATORY SHALL SUBMIT ONE COPY OF ALL CONCRETE TEST REPORTS DIRECTLY TO THE ENGINEER.

WOOD CONSTRUCTION

1. WOOD CONSTRUCTION SHALL CONFORM TO THE AFPA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", REFERRED EDITION., NATIONAL FOREST PRODUCTS ASSOCIATION "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", AMERICAN PLYWOOD ASSOCIATION "PLYWOOD DESIGN SPECIFICATION", NATIONAL LUMBER MANUFACTURERS ASSOCIATION "NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND IT'S FASTENINGS" AND AMERICAN WOOD-PRESERVERS ASSOCIATION STANDARDS.
2. ALL STRUCTURAL FRAMING MEMBERS SHALL BE HEM-FIR, GRADE 2, STRESS GRADE LUMBER OR APPROVED EQUAL, UNLESS NOTED OTHERWISE. THE MINIMUM ALLOWABLE PROPERTIES ARE AS FOLLOWS:
   - Fb = 850 PSI
   - Fv = 150 PSI
   - E = 1,300,000 PSI ALL
3. STRUCTURAL TIMBER TO BE STAMPED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION'S "CONSTRUCTION MANUAL".
4. ALL STUDS SHALL BE S-P-F, STUD GRADE, UNLESS NOTED OTHERWISE. ALL STUDS OVER 10'-0" LONG SHALL BE S-P-F, GRADE 2.
5. ALL NAILS SHALL BE COMMON NAILS, UNLESS NOTED OTHERWISE. THE FOLLOWING SIZE NAILS MUST BE USED, WHEN SPECIFIED:
   - 16d COMMON NAILS = 0.162 DIA. x 3 1/2" LONG
   - 16d SINKER NAILS = 0.148 DIA. x 3 1/4" LONG
   - 10d COMMON NAILS = 0.148 DIA. x 3" LONG
   - 8d COMMON NAILS = 0.131 DIA. x 2 1/2" LONG
12. ALL TIMBER CONNECTIONS SHALL BE MADE USING PREFABRICATED CONNECTORS. TOE-NAILING IS NOT PERMITTED, UNLESS SHOWN ON THE DRAWINGS. SUBMIT MANUFACTURER'S DATA FOR REVIEW. FASTENERS SHALL BE AS MANUFACTURED BY SIMPSON OR APPROVED EQUAL. ALL FASTENERS THAT ARE EXPOSED TO THE WEATHER AND/OR ARE IN CONTACT WITH ANY PRESSURE TREATED LUMBER SHALL BE ZMAX (G185) GALVANIZED MINIMUM.
13. ALL CONNECTIONS TO PRESERVATIVE TREATED WOOD, MUST BE MADE USING ONLY GALVANIZED CONNECTORS AND FASTENERS. GALVANIZED CONNECTORS MUST BE A MINIMUM OF (CLASS G-185) 1.85 oz. OF ZINC PER SQUARE FOOT OF SURFACE AREA (HOT-DIP GALVANIZED PER ASTM A653, ALL SURFACES/SIDES) AND HAVE A BARRIER MEMBRANE BETWEEN THE TREATED WOOD AND CONNECTOR. GALVANIZED FASTENERS MUST BE HOT-DIP GALVANIZED PER ASTM A153. ANY HEAVY DUTY CONNECTORS THAT ARE 14 GAUGE OR THICKER REQUIRES A MINIMUM ZINC COATING WEIGHT OF 2.0 oz. PER SQUARE FOOT (PER ASTM 123, ALL SURFACES/SIDES). WHERE BARRIERS ARE REQUIRED, PROVIDE GRACE VYCOR DECK PROTECTOR OR EQUAL. BARRIERS ARE TYPICALLY REQUIRED AT EXTERIOR (OUTDOOR) CONDITIONS (i.e. DECKS, ETC.) AND/OR WHERE GALVANIZED CONNECTORS ARE ATTACHED TO ANY TREATED LUMBER INDOORS, OTHER THAN SBX/DOT OR ZINC BORATE TREATED LUMBER.
14. PROVIDE PRESSURE TREATED LUMBER WHERE LUMBER IS EXPOSED TO THE WEATHER.

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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

STRUCTURAL NOTES

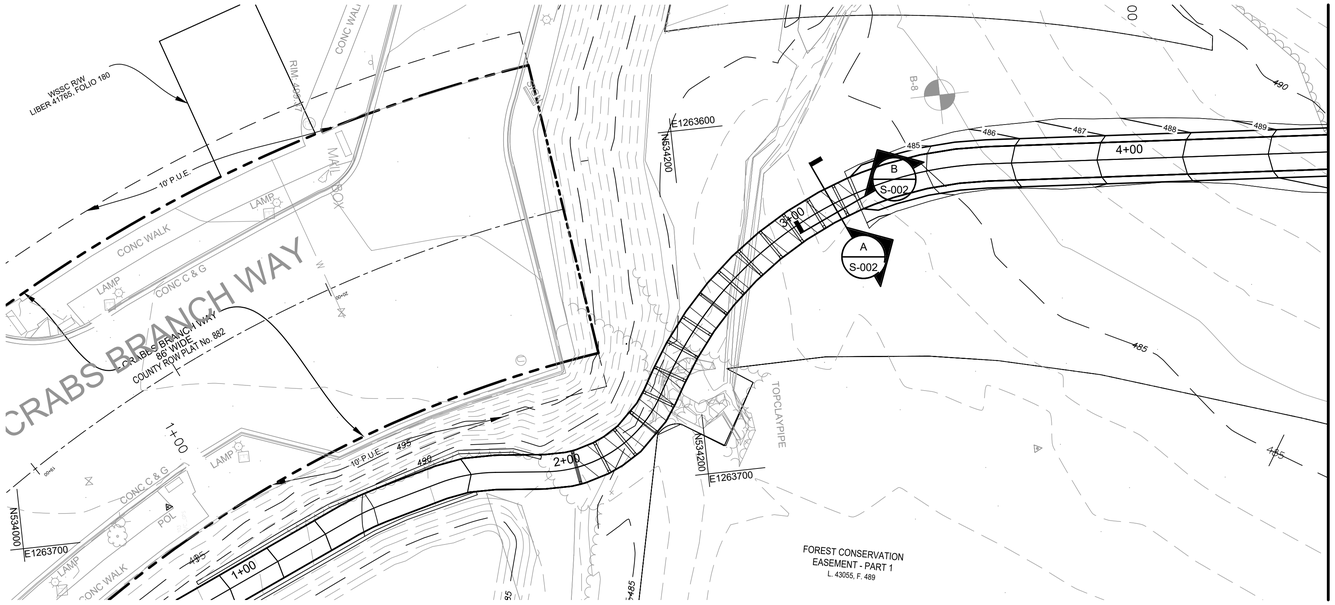
SCALE : NONE

S001

Project No. : 509337 — 23 of 29

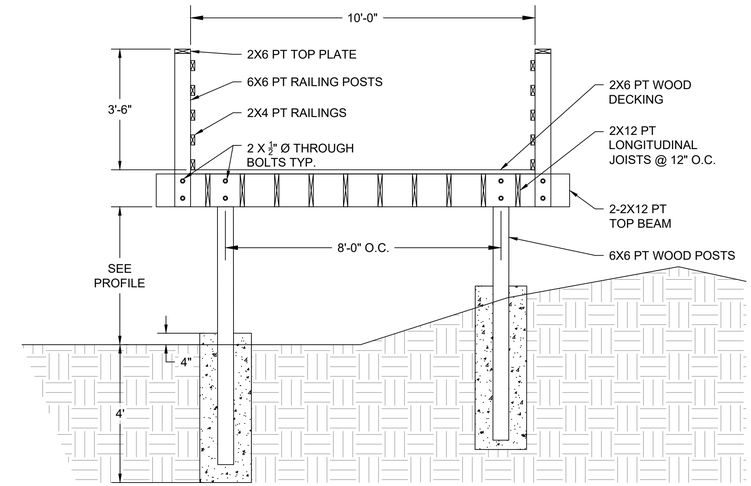
FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\S-001 - 201 - 401.dwg
DATE: Jul 24, 2024 - 4:48pm

SHEET NO.	TOTAL SHEETS
24	29



PLAN VIEW:

1" = 20'

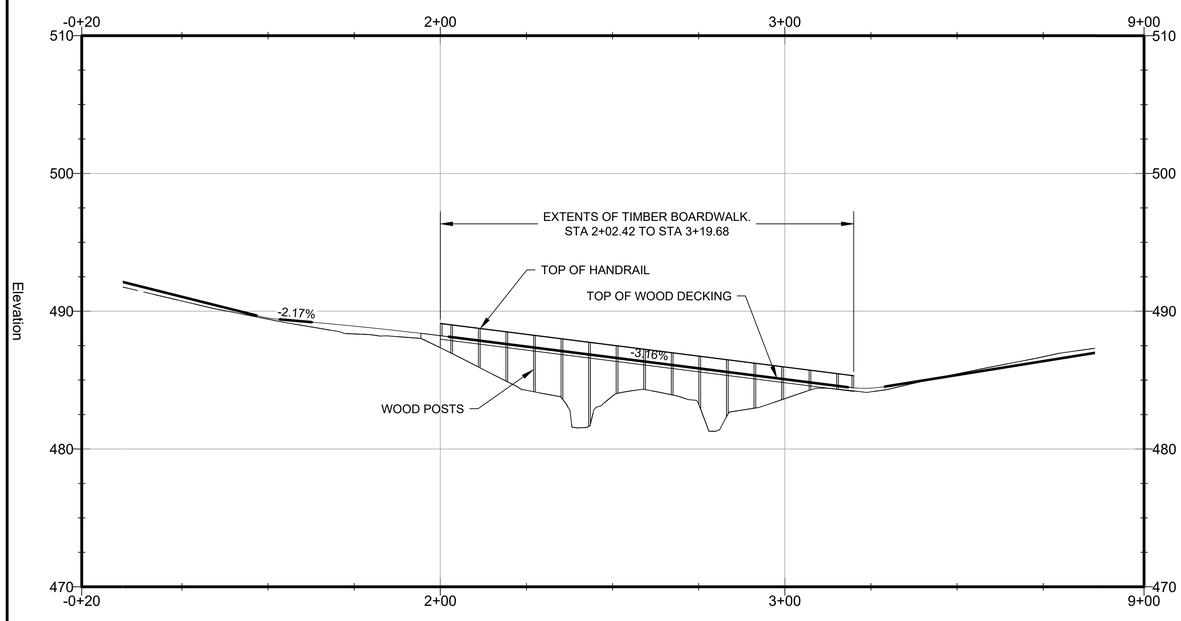


A TYPICAL SECTION

NTS

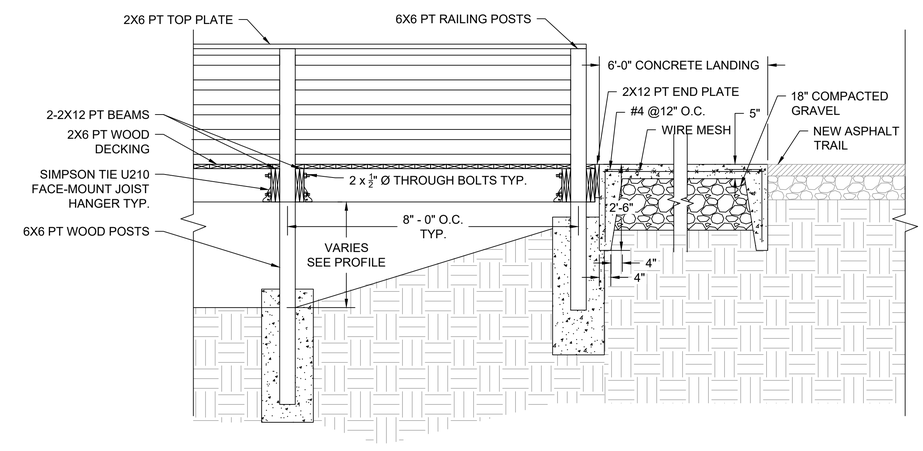
NOTE:

WOOD PILE FOOTINGS: 1'-6" DIAMETER & 4'-0" DEEP MIN.



PROFILE VIEW:

H: 1" = 20'
V: 1" = 5'



B TYPICAL ELEVATION VIEW AND CONCRETE LANDING

NTS

NOTE:

10' X 6' CONCRETE LANDING TO BE CONSTRUCTED AT EACH END OF BOARDWALK TRAIL. CONTRACTOR SHALL MATCH SLOPE AS NEEDED.

GRAPHIC SCALE

H: 20 10 0 20 40
SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

V: 5 2.5 0 5 10
SCALE: 1"=5'-0"
UNIT OF MEASURE: FEET

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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: ____ Drawn by: ____ Checked by: ____

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

STRUCTURAL PLAN AND DETAILS

SCALE : AS SHOWN

S201

Project No. : 509337

24 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\S-001 - 201 - 401.dwg
DATE: Jul 24, 2024 - 4:49pm

GENERAL NOTES

Specifications: MDOT SHA Standard Specifications for Construction and Materials

AASHTO LRFD Bridge Design Specifications, 5th edition, 2010.

Concrete Design: LRFD, f'c= 3.0 ksi.

Reinforcing Steel Design: fy = 60.0 ksi.

Concrete: All structure concrete shall be Mix. No. 3 (3500 psi) except as noted below under reinforcing steel.

Reinforcing Steel: Reinforcing steel shall conform to A 615, Grade 60. All splices, not shown, shall be lapped as per Bar Lap Charts. Minimum cover for any bar shall be 2" unless otherwise noted, with the exception of bars at the bottom and sides of all footings which shall have 3" minimum cover.

If the front face of a retaining wall less than 10 feet from the edge of paved surfaces, epoxy coated reinforcement shall be used in the front face of the stem and Mix. No. 6 (4500 psi) concrete shall be used for the stem.

ONLY GRADE 60 CAN BE USED.

Design Parameters: Earth pressure calculated based on Coulomb Theory.

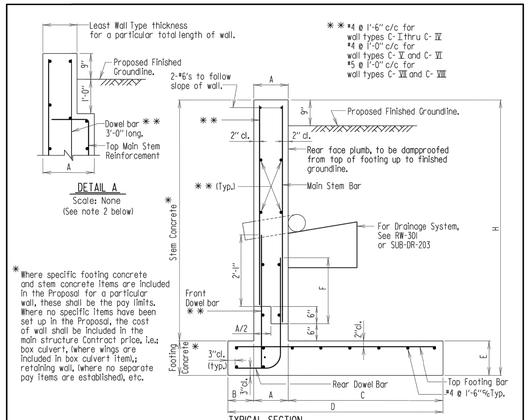
Angle of Internal Friction:
33 degrees for excellent soil
30 degrees for good and poor soils (and all walls on pile footings)

For Wall Types E and F, passive earth pressure from top of footing to bottom of shear key was utilized in the design. In these cases, the top of footing shall have a minimum of 30" cover.

Safe bearing pressures are factored resistances.

APPROVAL	STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF STRUCTURES
DIRECTOR OFFICE OF STRUCTURES DATE: 03/21/2014	RETAINING WALL GENERAL NOTES
VERSION 1.0	DETAIL NO. RW-101 SHEET __ OF __

RETAINING WALLS



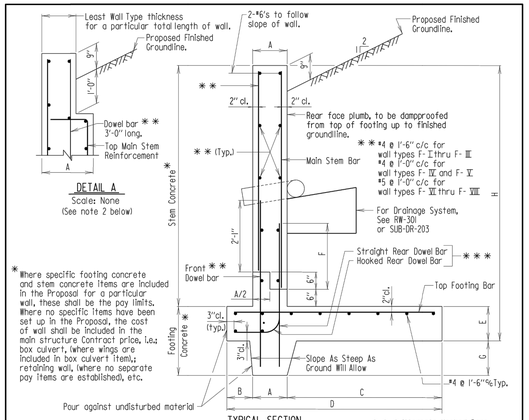
TYPICAL SECTION
Scale: 1/2" = 1'-0"

Wall Type	H	A	B	C	D	E	F	Rear Dowel Bar	Main Stem Bar	Top Foot. Bar
C-I	6'-0"	1'-0"	9"	2'-6"	4'-3"	1'-0"	2'-2"	*5 @ 1'-0" c/c	*5 @ 1'-0" c/c	*5 @ 1'-0" c/c
C-II	8'-0"	1'-0"	9"	3'-6"	5'-3"	1'-0"	2'-2"	*5 @ 1'-0" c/c	*5 @ 1'-0" c/c	*5 @ 1'-0" c/c
C-III	10'-0"	1'-0"	1'-0"	4'-6"	6'-6"	1'-3"	2'-7"	*6 @ 6" c/c	*6 @ 1'-0" c/c	*6 @ 6" c/c
C-IV	12'-0"	1'-0"	1'-0"	5'-6"	7'-6"	1'-3"	2'-7"	*6 @ 6" c/c	*6 @ 1'-0" c/c	*6 @ 6" c/c
C-V	14'-0"	1'-3"	1'-6"	6'-0"	8'-9"	1'-6"	3'-6"	*7 @ 6" c/c	*7 @ 1'-0" c/c	*7 @ 6" c/c
C-VI	16'-0"	1'-6"	2'-3"	6'-9"	10'-6"	1'-6"	3'-6"	*7 @ 6" c/c	*7 @ 1'-0" c/c	*7 @ 6" c/c
C-VII	18'-0"	2'-3"	3'-0"	7'-3"	12'-6"	1'-9"	3'-6"	*7 @ 6" c/c	*7 @ 1'-0" c/c	*7 @ 6" c/c
C-VIII	20'-0"	2'-3"	4'-0"	8'-9"	15'-0"	1'-9"	4'-7"	*8 @ 6" c/c	*8 @ 1'-0" c/c	*8 @ 6" c/c

Notes:
1. A "Poor Soil Condition" is that foundation material that can support a safe bearing pressure of 3 ksf and has an angle of friction of 30°.
2. If in the length of a wall the type of wall changes and provides for a different thickness of stem, then "Detail A" shall be used for all walls of greater than the least wall thickness.
3. Contractor has option of lapping main stem reinforcement with rear dowel reinforcement as shown; or by extending the rear dowel reinforcement with no splicing. However, no additional compensation to Contractor will be allowed for whichever alternative is selected.
4. These walls are valid if traffic is present on the level area adjacent to the wall.

APPROVAL	STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF STRUCTURES
DIRECTOR OFFICE OF STRUCTURES DATE: 12/04/2013	TYPE C RETAINING WALL SECTION (FOR POOR SOIL CONDITION AND TWO FOOT SURCHARGE)
VERSION 1.0	DETAIL NO. RW-104 SHEET __ OF __

RETAINING WALLS



TYPICAL SECTION
Scale: 1/2" = 1'-0"

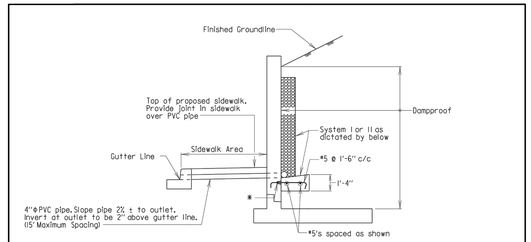
*** Alternate Hooked Bars with Straight Bars

Wall Type	H	A	B	C	D	E	F	G	Straight Rear Dowel Bar	Hooked Rear Dowel Bar	Main Stem Bar	Top Foot. Bar
F-I	6'-0"	1'-0"	1'-9"	4'-6"	1'-3"	1'-0"	2'-2"	1'-0"	*5 @ 2'-0" c/c	*5 @ 2'-0" c/c	*5 @ 1'-0" c/c	*5 @ 6" c/c
F-II	8'-0"	1'-0"	1'-9"	4'-9"	1'-6"	1'-0"	2'-2"	1'-0"	*5 @ 2'-0" c/c	*5 @ 2'-0" c/c	*5 @ 1'-0" c/c	*5 @ 6" c/c
F-III	10'-0"	1'-0"	1'-9"	5'-6"	8'-3"	1'-0"	2'-7"	2'-0"	*6 @ 1'-0" c/c	*6 @ 1'-0" c/c	*6 @ 1'-0" c/c	*6 @ 6" c/c
F-IV	12'-0"	1'-3"	2'-0"	1'-3"	10'-6"	1'-6"	3'-6"	2'-0"	*7 @ 1'-0" c/c	*7 @ 1'-0" c/c	*7 @ 1'-0" c/c	*7 @ 6" c/c
F-V	14'-0"	1'-6"	3'-0"	1'-6"	12'-0"	1'-9"	3'-6"	3'-0"	*7 @ 1'-0" c/c	*7 @ 1'-0" c/c	*7 @ 1'-0" c/c	*7 @ 6" c/c
F-VI	16'-0"	1'-9"	4'-0"	8'-6"	14'-3"	2'-0"	4'-7"	3'-0"	*8 @ 1'-0" c/c	*8 @ 1'-0" c/c	*8 @ 1'-0" c/c	*8 @ 6" c/c
F-VII	18'-0"	2'-3"	5'-0"	10'-3"	17'-6"	2'-3"	5'-9"	3'-0"	*9 @ 1'-0" c/c	*9 @ 1'-0" c/c	*9 @ 1'-0" c/c	*9 @ 6" c/c
F-VIII	20'-0"	2'-9"	6'-3"	12'-0"	21'-0"	2'-6"	5'-9"	3'-0"	*9 @ 1'-0" c/c	*9 @ 1'-0" c/c	*9 @ 1'-0" c/c	*9 @ 6" c/c

Notes:
1. A "Poor Soil Condition" is that foundation material that can support a safe bearing pressure of 3 ksf and has an angle of friction of 30°.
2. If in the length of a wall the type of wall changes and provides for a different thickness of stem, then "Detail A" shall be used for all walls of greater than the least wall thickness.
3. Contractor has option of lapping main stem reinforcement with rear dowel reinforcement as shown; or by extending the rear dowel reinforcement with no splicing. However, no additional compensation to Contractor will be allowed for whichever alternative is selected.
4. These walls are valid if the sloping backfill levels off and traffic is present on the level area.

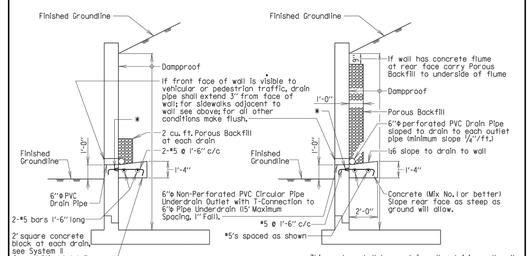
APPROVAL	STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF STRUCTURES
DIRECTOR OFFICE OF STRUCTURES DATE: 12/04/2013	TYPE F RETAINING WALL SECTION (FOR POOR SOIL CONDITION AND SLOPING GROUNDLINE)
VERSION 1.0	DETAIL NO. RW-107 SHEET __ OF __

RETAINING WALLS



DRAIN AT SIDEWALK
Scale : None

* *5 Threaded Rebar Dowel Coupler at 1'-6" c/c.



This system shall be used for all retaining walls, all wing walls (not in System I).

SYSTEM II
Scale : None

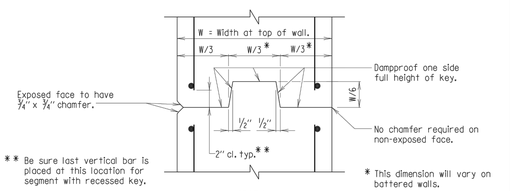
This system shall be used for all box culvert wing walls and other wing walls that are both less than 30' long and less than 16' high (height of wall from bottom of footing to top of highest section). One drain shall be placed at ℄ of wall for all walls less than 15' long. For walls between 15' and 30' long, two drains shall be placed, one at each third point.

SYSTEM I
Scale : None

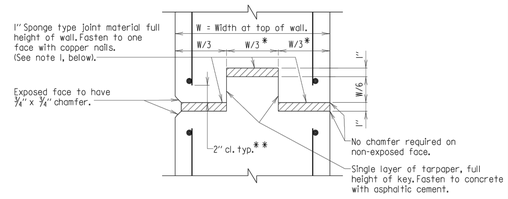
Notes:
1. Exact elevation of drain to be determined by Engineer in field.
2. Porous backfill (refer to Section 469).
3. Use this detail for bridges with wing walls that are not parallel to the highway. For bridges with wing walls parallel to the highway see Detail No. SUB-DR-203 sheet 5 of 5 for details.

APPROVAL	STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF STRUCTURES
DIRECTOR OFFICE OF STRUCTURES DATE: 01/22/2001	RETAINING WALL AND WING WALL DRAINAGE SYSTEMS
VERSION 1.0	DETAIL NO. RW-301 SHEET __ OF __

RETAINING WALLS



SECTION
STEM CONTRACTION JOINT
Scale: 1 1/2" = 1'-0"



SECTION
STEM EXPANSION JOINT
Scale: 1 1/2" = 1'-0"

Notes:
1. Joint locations shall be as shown on contract drawing. If no locations are given concrete retaining walls shall have contraction joints a maximum of every 30'-0"; and expansion joints, with 1" sponge type material (see 911.02), a maximum of every 90'-0"
2. Stop key 9" below top of wall.
3. Reinforcing steel shall not pass through contraction or expansion joint.
4. For battered walls, with stems greater than 12 feet height, key dimensions noted thus *, shall be based on wall thickness at mid height.
5. All keys are nominal size.
6. Only place contraction and expansion joints in stems (no joint in footer).

APPROVAL	STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF STRUCTURES
DIRECTOR OFFICE OF STRUCTURES DATE: 05/04/2006	CONCRETE RETAINING WALL CONTRACTION AND EXPANSION JOINTS
VERSION 1.0	DETAIL NO. RW-401 SHEET __ OF __

RETAINING WALLS

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ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — Date
APPROVED
Chief, Division of Transportation Engineering — Date

Designed by: ___ Drawn by: ___ Checked by: ___

WASHINGTON GROVE CONNECTOR TRAIL AND PICEA VIEW COURT CONNECTOR SIDEWALK

STRUCTURAL DETAILS

SCALE : AS SHOWN

S401

Project No.: 509337 25 of 29

FILE: K:\5547 MC DOT\T4 Crabbs Branch Facility Planning Phase II\Engineering\5. CADD\Conceptual 35 Design\SHEETS\S-001 - 201 - 401.dwg
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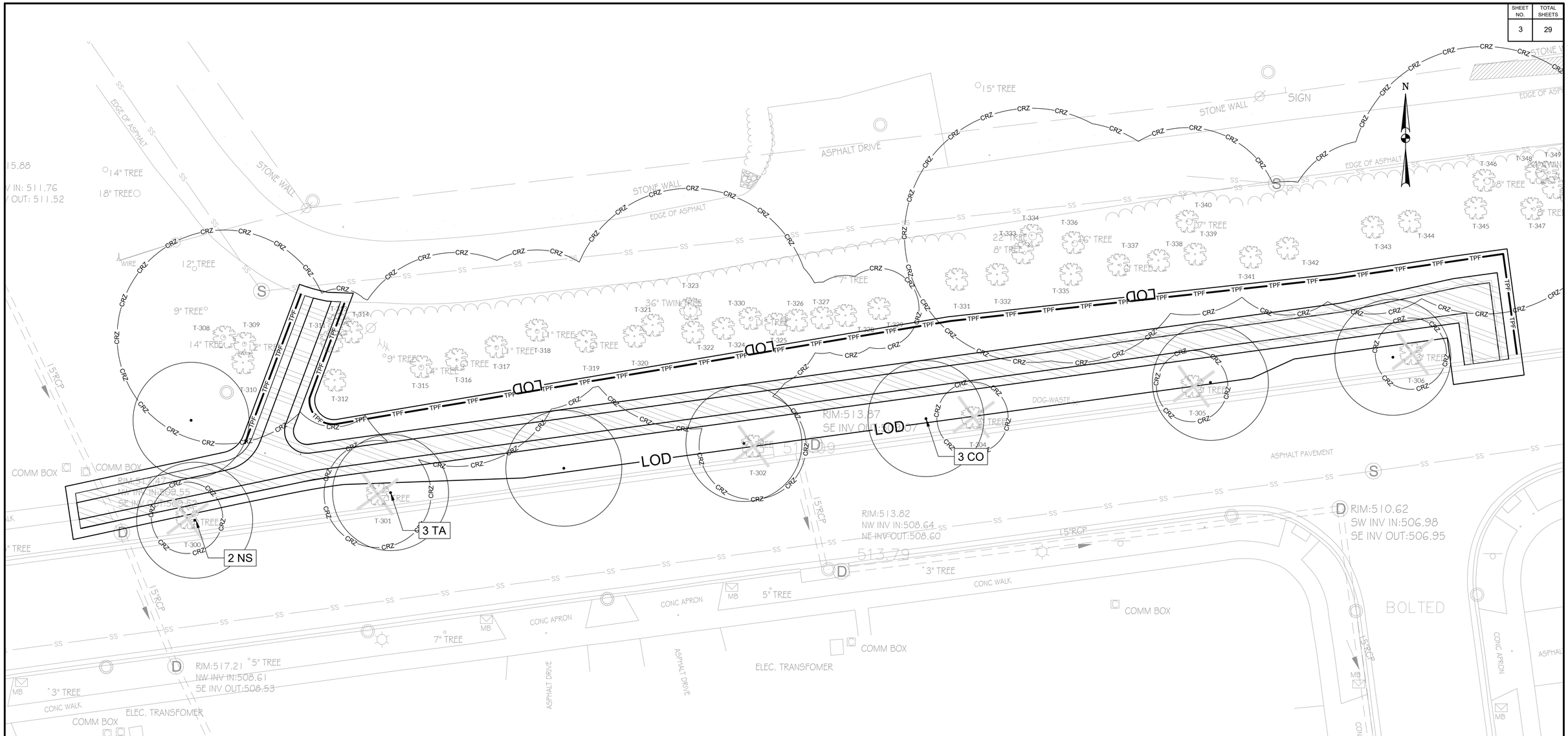
SHEET NO.	TOTAL SHEETS
3	29



LEGEND:

- EXISTING TREE, CRITICAL ROOT ZONE,AND TREE NUMBER (T-01)
- TREE REMOVAL (T-01)
- PROPOSED MAJOR TREE
- PROPOSED MINOR TREE
- TPF — TREE PROTECTION FENCE

NOTES:

1. FOR GENERAL NOTES, SEE DRAWING G-002.
2. ALL DISTURBED AREAS SHALL BE STABILIZED WITH TURF SEED.

PLANT SCHEDULE (THIS SHEET ONLY)

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
CANOPY TREES						
CO	3	*Celtis occidentalis*	Common Hackberry	2.5" Cal.	B&B	
NS	2	*Nyssa sylvatica*	Black Gum	2.5" Cal.	B&B	
TA	3	*Tilia americana*	American Linden	2.5" Cal.	B&B	
MISC. ITEMS/SEED MIXES						
SOD	TBD	Turfgrass Seed Establishment (SY)				
TPF	358	Tree Protection Fence (LF)				

GRAPHIC SCALE
10 5 0 10 20
SCALE: 1"=10'-0"
UNIT OF MEASURE: FEET

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Chief, Design Section — Date
APPROVED
Chief, Division of Transportation Engineering — Date

Designed by: KB Drawn by: KB Checked by: GP

PICEA VIEW COURT SIDEWALK
LANDSCAPE PLAN

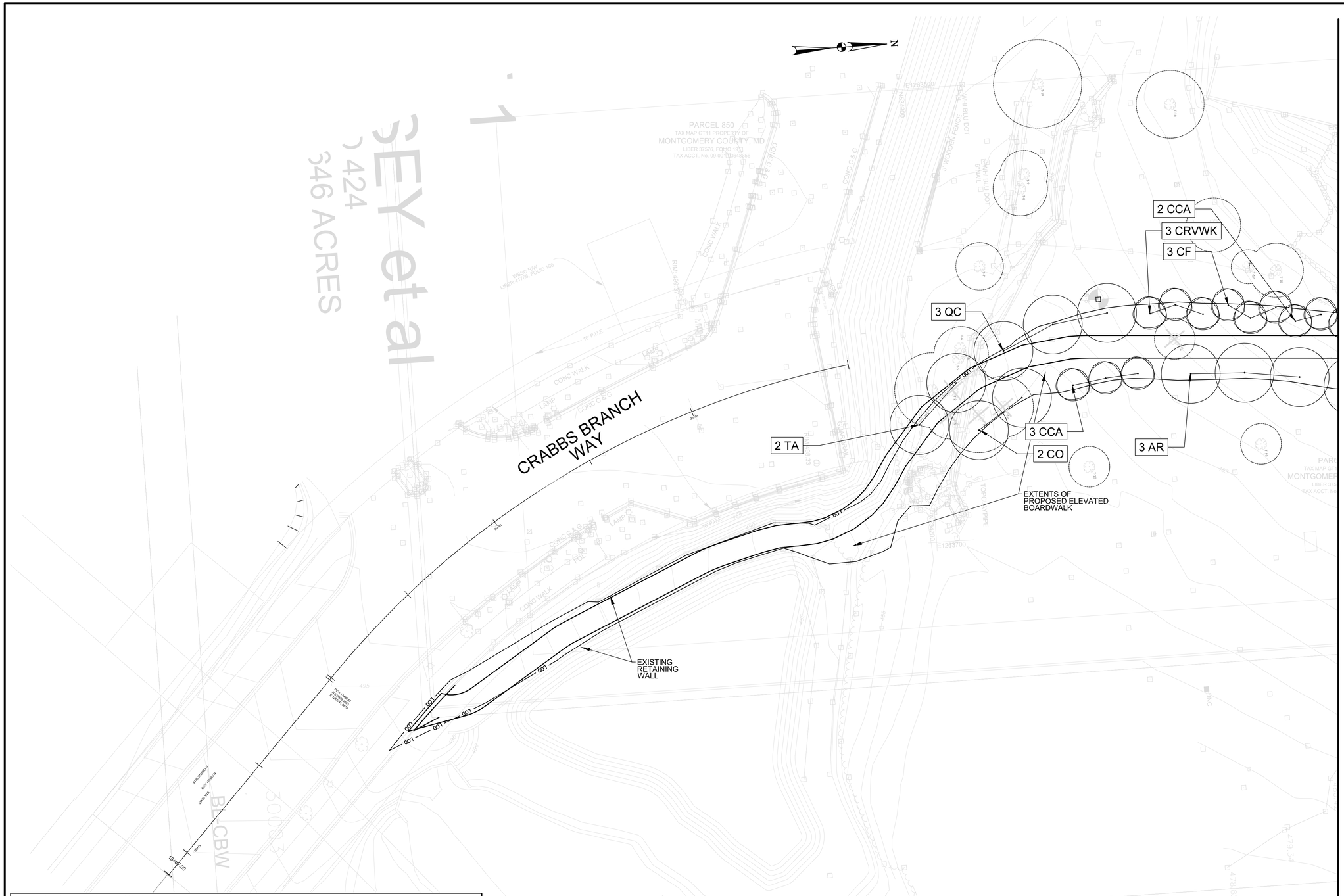
SCALE : 1" = 10'

LD101

Project No. : ____ 3 of 29

FILE:
DATE:

SHEET NO.	TOTAL SHEETS
09	29



LEGEND:

- EXISTING TREE, CRITICAL ROOT ZONE,AND TREE NUMBER (CRZ, CRV, T-01)
- TREE REMOVAL (CRZ, CRV, T-01)
- PROPOSED MAJOR TREE
- PROPOSED MINOR TREE
- TPF — TREE PROTECTION FENCE

NOTES:

1. FOR GENERAL NOTES, SEE DRAWING G-002.
2. ALL DISTURBED AREAS SHALL BE STABILIZED WITH TURF SEED.

PLANT SCHEDULE (THIS SHEET ONLY)

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
CANOPY TREES						
AR	3	*Acer rubrum*	Red Maple	2.5" Cal.	B&B	
CO	2	*Celtis occidentalis*	Common Hackberry	2.5" Cal.	B&B	
QC	3	*Quercus coccinea*	Scarlet Oak	2.5" Cal.	B&B	
TA	2	*Tilia americana*	American Linden	2.5" Cal.	B&B	
UNDERSTORY TREES						
CCA	5	*Cercis canadensis*	Eastern Redbud	2" Cal.	B&B	
CF	3	*Cornus florida*	Flowering Dogwood	2" Cal.	B&B	
CRVWK	3	*Crataegus viridis 'Winter King'*	Winter King Hawthorne	2" Cal.	B&B	
MISC. ITEMS/SEED MIXES						
SOD	TBD	Turfgrass Seed Establishment (SY)				
TPF	43	Tree Protection Fence (LF)				

GRAPHIC SCALE

20 10 0 20 40

SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

FLOURA TEETER
landscape architects
1001 North Charles St. Ste. 500
Baltimore, Maryland 21201
Phone: 410.528.8395
Fax: 410.528.8425

NO.	REVISION	DATE	BY
	15% BRIDGING DOCUMENTS	11/3/2023	
	35% BRIDGING DOCUMENTS	7/24/2023	

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: KB Drawn by: KB Checked by: GP

CRABBS BRANCH WAY EXTENSION

LANDSCAPE PLAN

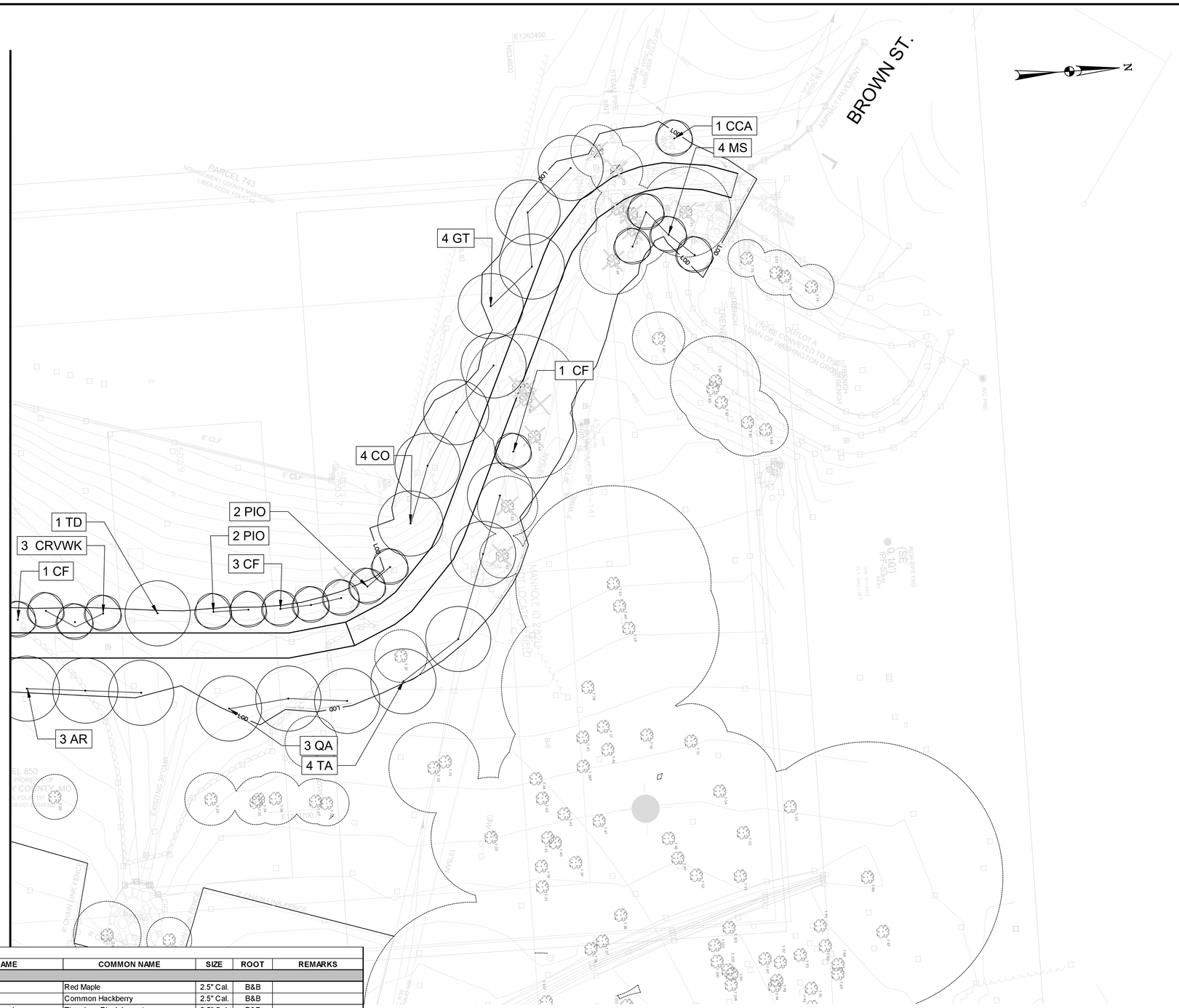
SCALE : 1" = 20'

LD301

Project No. : 509337 — of 29

FILE:
DATE:

SHEET NO.	TOTAL SHEETS
10	29



LEGEND:

- EXISTING TREE, CRITICAL ROOT ZONE, AND TREE NUMBER (CRZ, T-01)
- TREE REMOVAL (CRZ, T-01)
- PROPOSED MAJOR TREE
- PROPOSED MINOR TREE
- TPF — TREE PROTECTION FENCE

NOTES:

1. FOR GENERAL NOTES, SEE DRAWING G-002.
2. ALL DISTURBED AREAS SHALL BE STABILIZED WITH TURF SEED.

PLANT SCHEDULE (THIS SHEET ONLY)

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
CANOPY TREES						
AR	3	*Acer rubrum*	Red Maple	2.5" Cal.	B&B	
CO	4	*Celtis occidentalis*	Common Hackberry	2.5" Cal.	B&B	
GT	4	*Gleditsia triacanthos var. inermis*	Thornless Black Locust	2.5" Cal.	B&B	
QA	3	*Quercus alba*	White Oak	2.5" Cal.	B&B	
TA	4	*Tilia americana*	American Linden	2.5" Cal.	B&B	
TD	1	*Taxodium distichum*	Bald Cypress	2.5" Cal.	B&B	
UNDERSTORY TREES						
CCA	1	*Cercis canadensis*	Eastern Redbud	2" Cal.	B&B	
CF	5	*Cornus florida*	Flowering Dogwood	2" Cal.	B&B	
CRVWK	3	*Crataegus viridis 'Winter King'*	Winter King Hawthorne	2" Cal.	B&B	
MS	4	*Magnolia soulangea*	Saucer Magnolia	2" Cal.	B&B	
PIO	4	*Prunus x incamp 'Okame'*	Okame Hybrid Cherry	2" Cal.	B&B	
MISC. ITEMS/SEED MIXES						
SOD	TBD	Turfgrass Seed Establishment (SY)				
TPF	113	Tree Protection Fence (LF)				

GRAPHIC SCALE
20 10 0 20 40
SCALE: 1"=20'-0"
UNIT OF MEASURE: FEET

FLOURA TEETER
landscape architects
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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL
Chief, Design Section — Date
APPROVED
Chief, Division of Transportation Engineering — Date

Designed by: KB Drawn by: KB Checked by: GP

CRABBS BRANCH WAY EXTENSION

LANDSCAPE PLAN

SCALE : 1" = 20'

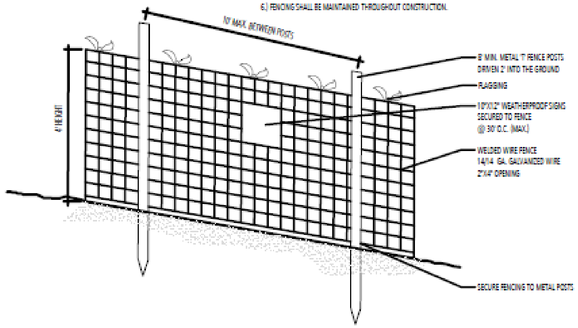
LD302

Project No. : 509337 — of 29

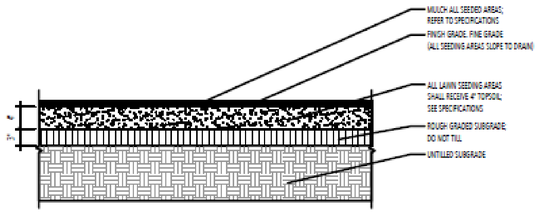
FILE:
DATE:

NOTES:

1.) PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING.
2.) LOCATION AND LIMITS OF FENCING AND TREE ROOT PRUNING SHOULD BE COORDINATED IN FIELD WITH ARBORIST.
3.) BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED PRIOR TO INSTALLING PROTECTIVE DEVICE.
4.) ROOT DAMAGE SHOULD BE AVOIDED.
5.) PROTECTION SIGNAGE IS REQUIRED.
6.) FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

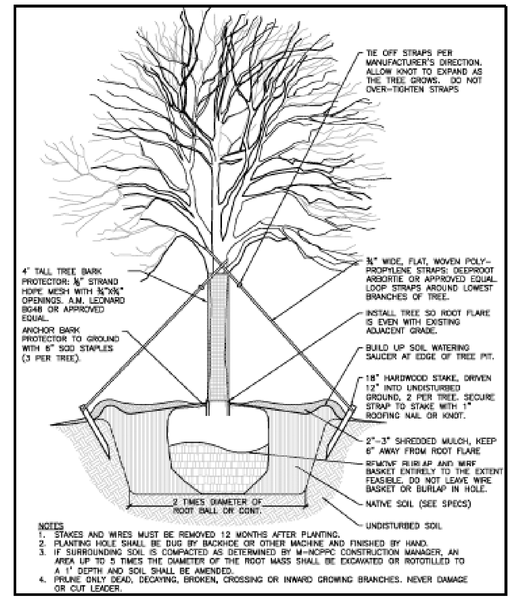


1 TREE PROTECTION FENCE - MONTGOMERY COUNTY — d-TPF.dwg
DETAIL — SCALE: 1"=1'-0"



LAWN SEEDING PREPARATION NOTES:
1. PLACE PLANTING SOIL ON TOP OF TILLED SUBGRADE IN 6 INCH LIFTS TO DEPTH REQUIRED.
2. COMPACT EACH LIFT PER SPECIFICATIONS.
3. FINE GRADE SEEDING AREA PRIOR TO SEEDING.
4. SEED AS PER DETAIL AND SPECIFICATIONS.
5. MULCH AS PER SPECIFICATIONS.
6. FERTILIZE AS REQUIRED. SEE SPECIFICATIONS.
7. PROTECT SEEDED AREAS FROM SUBSEQUENT CONSTRUCTION ACTIVITY.
8. ALL DISTURBED AREAS THAT ARE NOT PLANT BEDS OR SODDED SHALL BE SEEDED.
9. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

2 LAWN DETAIL - SEEDING (TYP.) — d-lawn detail seed.dwg
SECTION — SCALE: 1"=1'-0"



NOTES
1. STAKES AND WIRES MUST BE REMOVED 12 MONTHS AFTER PLANTING.
2. PLANTING HOLE SHALL BE DUG BY BACKHOE OR OTHER MACHINE AND FINISHED BY HAND.
3. IF SURROUNDING SOIL IS COMPACTED AS DETERMINED BY M-NCPPC CONSTRUCTION MANAGER, AN AREA UP TO 5 TIMES THE DIAMETER OF THE ROOT MASS SHALL BE EXCAVATED OR ROTOTILLED TO A 1' DEPTH AND SOIL SHALL BE AMENDED.
4. PRUNE ONLY DEAD, DECAYING, BROKEN, CROSSING OR INWARD GROWING BRANCHES. NEVER DAMAGE OR CUT LEADER.

3 TREE PLANTING DETAIL — d-tree_planting.dwg
SECTION — SCALE: NTS

MASTER LANDSCAPE PLANT SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
CANOPY TREES						
AR	6	*Acer rubrum*	Red Maple	2.5" Cal.	B&B	
CO	9	*Celtis occidentalis*	Common Hackberry	2.5" Cal.	B&B	
GT	4	*Gleditsia triacanthos var. inermis*	Thornless Honey Locust	2.5" Cal.	B&B	
NS	2	*Nyssa sylvatica*	Black Gum	2.5" Cal.	B&B	
TA	9	*Tilia americana*	Amerincan Linden	2.5" Cal.	B&B	
TD	1	*Taxodium distum*	Bald Cypress	2.5" Cal.	B&B	
QC	3	*Quercus coccinea*	Scarlet Oak	2.5" Cal.	B&B	
UNDERSTORY TREES						
CRVWK	3	*Crataegus viridis 'Winter King'*	Winter King Hawthorn	2" Cal.	B&B	
CCA	6	*Cercis canadensis*	Eastern Redbud	2" Cal.	B&B	
CF	8	*Cornus florida*	Flowering Dogwood	2" Cal.	B&B	
MS	4	*Magnolia x soulangea*	Saucer magnolia	2" Cal.	B&B	3-5 stems, equal size
PIO	4	*Prunus x incamp 'Okame'*	Okame Hybrid Cherry	2" Cal.	B&B	
MISC. ITEM/SEED MIXES						
SOD	TBD	Turfgrass Seed Establishment (SY)				
TPF	514	Tree Protection Fence (LF)				

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DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

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Chief, Design Section — Date

APPROVED

Chief, Division of Transportation Engineering — Date

Designed by: KB Drawn by: KB Checked by: GP

CRABBS BRANCH WAY EXTENSION

LANDSCAPE NOTES AND DETAILS

SCALE : N/A

LD303

Project No. : 509337 — of 29

FILE:
DATE: