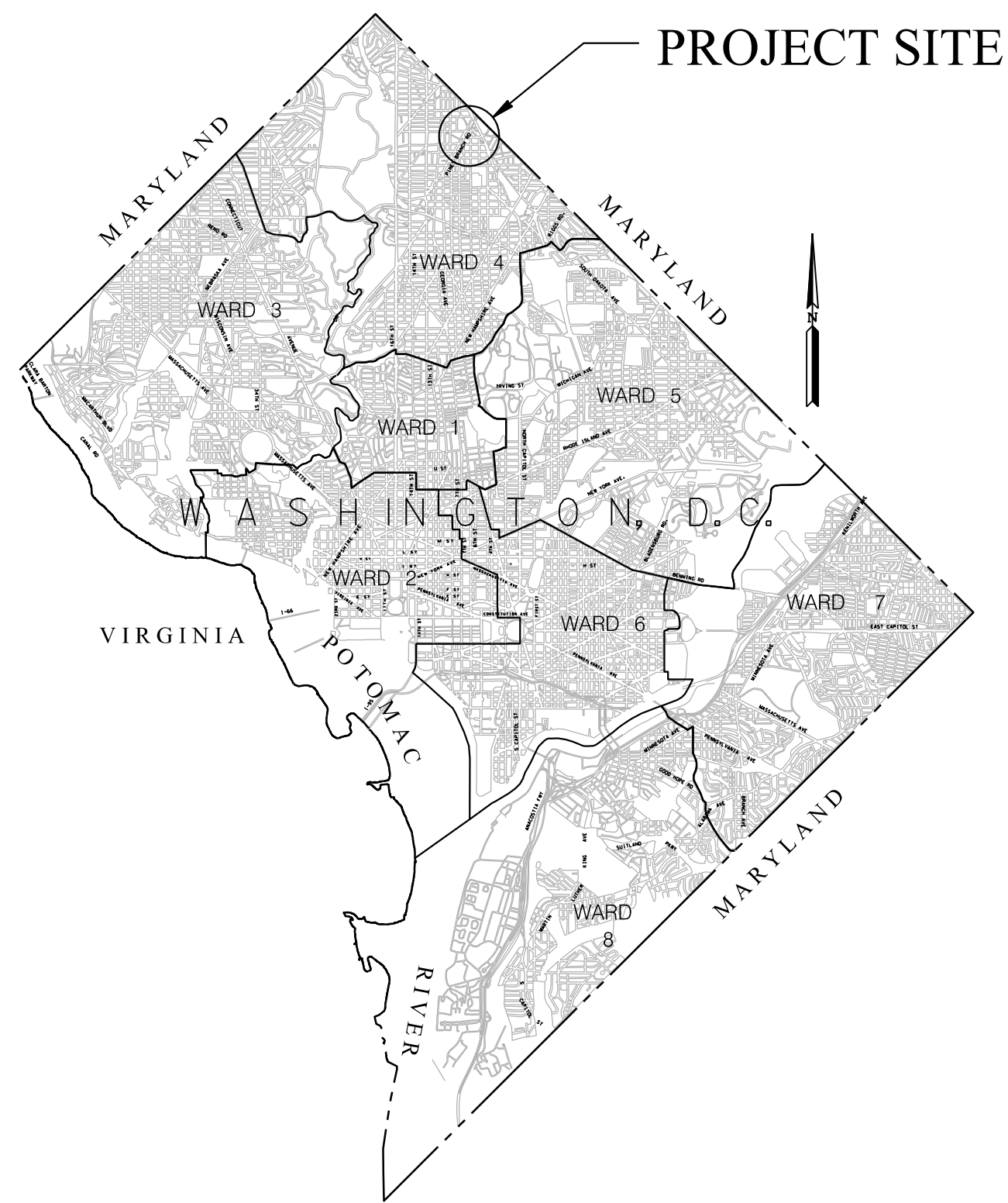


| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 1         | 160          |



# DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION

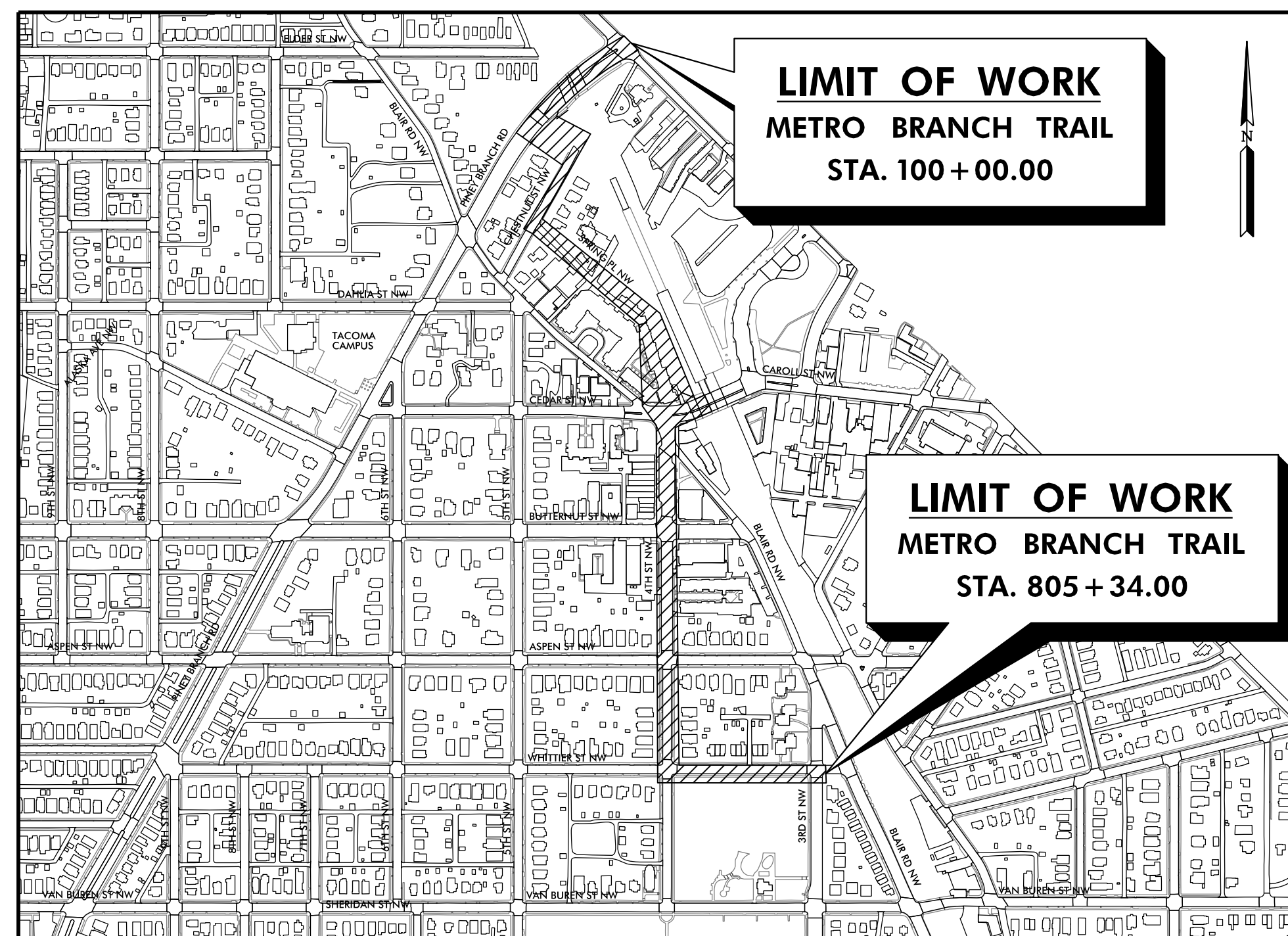
## PLANS OF PROPOSED METROPOLITAN BRANCH TRAIL FROM BLAIR RD NW TO PINEY BRANCH RD NW

LENGTH OF PROJECT = 0.73 MILES

### VICINITY MAP

#### INDEX OF SHEETS

| SHEET # | DRAWING          | TITLE  |
|---------|------------------|--|
| 1       | -                | TITLE SHEET  |
| 2       | GN-01            | SYMBOLS AND ABBREVIATIONS                          |
| 3       | GN-02            | GENERAL NOTES                                      |
| 4       | QN-01            | SUMMARY OF QUANTITIES                              |
| 5-7     | GS-01 TO GS-03   | GEOMETRIC LAYOUT                                   |
| 8-13    | EX-01 TO EX-06   | EXISTING SURVEY PLANS                              |
| 14-15   | HT-01 TO HT-02   | TYPICAL SECTIONS                                   |
| 16-21   | HD-01 TO HD-06   | ROADWAY PLANS                                      |
| 22      | HP-01            | SHARED USE PATH PROFILES                           |
| 23-29   | UT-01 TO UT-07   | UTILITY PLANS                                      |
| 30-35   | RW-01 TO RW-06   | RIGHT OF WAY PLANS                                 |
| 36-47   | SN-01 TO SN-10   | SIGNING & PAVEMENT MARKING PLANS                   |
| 48-52   | BR-01 TO BR-05   | RETAINING WALL PLANS                               |
| 53-55   | SO-01 TO SO-03   | BORING AND DRIVE TEST                              |
| 56-59   | DA-E01 TO DA-P01 | DRAINAGE AREAS                                     |
| 60-69   | DD-01 TO DD-10   | DRAINAGE DESIGN & DETAILS                          |
| 70-72   | DP-01 TO DP-03   | DRAINAGE PROFILES                                  |
| 73      | SW-00            | STORMWATER MANAGEMENT CALCULATIONS                 |
| 74      | C-1-I            | DC WATER PLAN                                      |
| 75      | L0               | LANDSCAPING GENERAL NOTES                          |
| 76-82   | LI-1 TO LI-6     | TREE DEMOLITION PLANS                              |
| 83      | L2-0             | MATERIALS SCHEDULE & NOTES                         |
| 84-89   | L2-1 TO L2-6     | MATERIALS & LAYOUT PLAN                            |
| 90-92   | L3-0.1 TO L3-0.3 | PLANTING NOTES, CORRIDOR PLAN & SCHEDULE           |
| 93-98   | L3-1 TO L3-6     | PLANTING PLANS                                     |
| 99-105  | L4-0 TO L4-6     | SOILS NOTES & PLANS                                |
| 106     | L5-1             | PLANTING DETAILS                                   |
| 107-122 | LT-01 TO LT-16   | LIGHTING PLANS, NOTES & DETAILS                    |
| 123-126 | SG-1 TO SG-4     | TRAFFIC SIGNAL PLANS                               |
| 127-136 | ES-01 TO ES-10   | EROSION AND SEDIMENT CONTROL PLANS, NOTES, DETAILS |
| 137     | MT-A             | MAINTENANCE OF TRAFFIC GENERAL NOTES               |
| 138     | MT-B             | SEQUENCE OF CONSTRUCTION                           |
| 139-160 | MT-01 TO MT-22   | MAINTENANCE OF TRAFFIC PLANS                       |



LOCATION MAP  
SCALE: 1"=500'  
500' 0 500' 1000'  
SCALE: 1"=500'

| ROADWAY                          | DESIGN DESIGNATION |               |               |                    |                                      |                                      |
|----------------------------------|--------------------|---------------|---------------|--------------------|--------------------------------------|--------------------------------------|
|                                  | PINEY BRANCH RD.   | CHESTNUT ST.  | SPRING PL.    | CEDAR ST.          | 4TH ST.                              | WHITTIER ST.                         |
| CONTROL OF ACCESS                | LIMITED            | UNLIMITED     | UNLIMITED     | UNLIMITED          | UNLIMITED                            | UNLIMITED                            |
| ADT (2022 EST.)                  | 9,375              | NOT AVAILABLE | NOT AVAILABLE | 6,970              | 1,070                                | 2,320                                |
| ADT (2045 EST.)                  | 10,030             | NOT AVAILABLE | NOT AVAILABLE | 7,450              | 1,140                                | 2,480                                |
| DESIGN HOURLY VOLUME (2045 EST.) | 1,000              | NOT AVAILABLE | NOT AVAILABLE | 745                | 115                                  | 250                                  |
| DISTRIBUTION (NB/SB, EB/WB)      | NOT AVAILABLE      | NOT AVAILABLE | NOT AVAILABLE | EB: 70%<br>WB: 30% | SB: 100%                             | EB: 50%<br>WB: 50%                   |
| TRUCK %                          | NOT AVAILABLE      | NOT AVAILABLE | NOT AVAILABLE | NOT AVAILABLE      | EB: 2%<br>WB: 2%<br>NB: 2%<br>SB: 2% | EB: 2%<br>WB: 2%<br>NB: 2%<br>SB: 2% |
| POSTED SPEED                     | 30 MPH             | 25 MPH        | 25 MPH        | 25 MPH             | 25 MPH                               | 25 MPH                               |
| DESIGN SPEED                     | 30 MPH             | 25 MPH        | 25 MPH        | 25 MPH             | 25 MPH                               | 25 MPH                               |
| CLASSIFICATION                   | MINOR ARTERIAL     | LOCAL STREET  | LOCAL STREET  | LOCAL STREET       | LOCAL STREET                         | LOCAL STREET                         |

**65% DESIGN PLANS  
JULY 2023  
NOT FOR CONSTRUCTION**

|  |
|--|
| DISTRICT OF COLUMBIA<br>DEPARTMENT OF TRANSPORTATION |
| RECOMMENDED FOR APPROVAL:                            |
| PROGRAM MANAGER IPMA /CHIEF, IPMD SUPPORT DIVISION   |
| APPROVED:  |
| CHIEF TRANSPORTATION ENGINEER                        |
| DATE: _____  |

**FEHR PEERS**  
1003 K Street NW Washington, DC 20001  
Suite 209 (202) 854-2750

**RK&K**  
Rummel, Klepper & Kahl, LLP  
100 M STREET SE | SUITE 950 | WASHINGTON, DC 20003  
PH: (202) 479-2707 FAX: (855) 263-6293  
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**design green**

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 7/12/2023

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 2         | 160          |

# STANDARD SYMBOLS

# ABBREVIATIONS

|  |   |
|--|---|
|  | EXISTING SANITARY SEWER MANHOLE   |
|  | EXISTING STORMDRAIN MANHOLE   |
|  | EXISTING COMBINED SANITARY & STORMDRAIN MANHOLE                                 |
|  | EXISTING WATER MANHOLE  |
|  | EXISTING GAS, TELEPHONE, ELECTRIC MANHOLE                                       |
|  | EXISTING MANHOLE - UNKNOWN  |
|  | EXISTING WATER METER  |
|  | EXISTING WATER VALVE OR CUT-OFF   |
|  | EXISTING SANITARY SEWER VENT  |
|  | EXISTING SANITARY SEWER CLEANOUT  |
|  | EXISTING GAS METER  |
|  | EXISTING GAS VALVE OR CUT-OFF   |
|  | EXISTING GAS VENT   |
|  | EXISTING ELECTRIC METER   |
|  | PROPOSED SANITARY SEWER OR WATER MANHOLE  |
|  | EXISTING FIRE HYDRANT   |
|  | PROPOSED FIRE HYDRANT   |
|  | PROPOSED WATER VALVE, GATE VALVE  |
|  | EXISTING CULVERT WITH DIRECTION OF FLOW   |
|  | PROPOSED CULVERT WITH DIRECTION OF FLOW   |
|  | EXISTING UNDERDRAIN   |
|  | PROPOSED UNDERDRAIN   |
|  | EXISTING CATCH BASIN CONNECTION WITH DIRECTION OF FLOW                          |
|  | PROPOSED CATCH BASIN CONNECTION WITH DIRECTION OF FLOW                          |
|  | EXISTING SINGLE CATCH BASIN   |
|  | EXISTING DOUBLE CATCH BASIN   |
|  | EXISTING TRIPLE CATCH BASIN   |
|  | EXISTING SINGLE CATCH BASIN WITH DOUBLE THROAT ELONGATION                       |
|  | EXISTING SINGLE CATCH BASIN WITH TRIPLE THROAT ELONGATION                       |
|  | EXISTING SINGLE CATCH BASIN WITH GRATE  |
|  | EXISTING DOUBLE CATCH BASIN WITH GRATE  |
|  | PROPOSED SINGLE CATCH BASIN   |
|  | PROPOSED DOUBLE CATCH BASIN   |
|  | PROPOSED TRIPLE CATCH BASIN   |
|  | PROPOSED SINGLE CATCH BASIN WITH GRATE  |
|  | PROPOSED DOUBLE CATCH BASIN WITH GRATE  |
|  | CHECK DAM   |
|  | TREE PROTECTION   |
|  | INLET PROTECTION  |
|  | EXISTING SANITARY SEWER, COMBINED SEWER, STORMDRAIN, WATER LINE LESS THAN 24"   |
|  | EXISTING SANITARY SEWER, COMBINED SEWER, STORMDRAIN, WATER LINE 24" OR GREATER  |
|  | EXISTING UNDERGROUND GAS, TELEPHONE, ELECTRIC LINE                              |
|  | EXISTING SANITARY SEWER, COMBINED SEWER, STORMDRAIN, WATER LINE TO BE ABANDONED |
|  | EXISTING UNDERGROUND GAS, TELEPHONE, ELECTRIC LINE TO BE ABANDONED              |
|  | EXISTING SANITARY SEWER, COMBINED SEWER, STORMDRAIN, WATER LINE TO BE REMOVED   |
|  | EXISTING UNDERGROUND GAS, TELEPHONE, ELECTRIC LINE TO BE REMOVED                |
|  | PROPOSED STORMDRAIN LINE WITH DIRECTION OF FLOW, LESS THAN 24"                  |
|  | PROPOSED STORMDRAIN LINE WITH DIRECTION OF FLOW, 24" OR GREATER                 |

|  |   |
|--|---|
|  | EXISTING RAILROAD   |
|  | EXISTING STREET CAR TRACKS  |
|  | PROPOSED LIMIT OF RECONSTRUCTION  |
|  | PROPOSED LIMIT OF WORK  |
|  | EXISTING BUSH OR SHRUB  |
|  | EXISTING HEDGEROW   |
|  | EXISTING DECIDUOUS TREE, EVERGREEN TREE                                 |
|  | PROPOSED TREE   |
|  | EXISTING TREE STUMP   |
|  | EXISTING TREE TO BE REMOVED   |
|  | EXISTING TREE WITH TREE PROTECTION                                      |
|  | EXISTING WALL OR COPING   |
|  | PROPOSED WALL OR COPING   |
|  | EXISTING ELECTRIC VAULT   |
|  | EXISTING GUY WIRE ANCHOR  |
|  | EXISTING DIRECTION OF TRAFFIC   |
|  | PROPOSED DIRECTION OF TRAFFIC   |
|  | EXISTING SIGN AND POST  |
|  | PROPOSED SIGN AND POST  |
|  | EXISTING PARKING METER  |
|  | EXISTING FIRE ALARM BOX   |
|  | EXISTING POLICE CALL BOX  |
|  | EXISTING TRASH /WASTER CAN  |
|  | PROPOSED TRASH /WASTER CAN  |
|  | EXISTING WHEELCHAIR /BICYCLE RAMP                                       |
|  | PROPOSED WHEELCHAIR /BICYCLE RAMP                                       |
|  | EXISTING BOLLARD OR POST  |
|  | MAIL BOX  |
|  | LOCATION OF TEST BORING WITH NUMBER                                     |
|  | LOCATION OF TEST PIT WITH NUMBER  |
|  | BENCH MARK WITH NUMBER  |
|  | TRIANGULATION OR CONTROL POINT  |
|  | BREAK IN GRADE  |
|  | STATION EQUATION  |
|  | REVISION WITH NUMBER  |
|  | EXISTING SPOT ELEVATION AND /OR FEATURE (0.10 SLANT TEXT FOR 20' SCALE) |
|  | PROPOSED SPOT ELEVATION AND /OR FEATURE (0.12 TEXT FOR 20' SCALE)       |
|  | EXISTING BASE LINE OR CENTER LINE                                       |
|  | PROPOSED BASE LINE  |
|  | PROPOSED CENTER LINE  |
|  | STATE LINE  |
|  | RIGHT-OF-WAY LINE   |
|  | BUILDING RESTRICTION LINE   |
|  | LOT LINE  |
|  | EXISTING FENCE (Indicate Type)  |
|  | PROPOSED FENCE (Indicate Type)  |
|  | EXISTING GUARDRAIL - DOUBLE FACE  |
|  | PROPOSED GUARDRAIL - DOUBLE FACE  |
|  | EXISTING GUARDRAIL - SINGLE FACE  |
|  | PROPOSED GUARDRAIL - SINGLE FACE  |

|  |   |
|--|---|
|  | PROPOSED 3 SECTION TRAFFIC SIGNAL                               |
|  | PROPOSED 4 SECTION TRAFFIC SIGNAL                               |
|  | PROPOSED 5 SECTION TRAFFIC SIGNAL                               |
|  | EXISTING 3 SECTION TRAFFIC SIGNAL                               |
|  | EXISTING 4 SECTION TRAFFIC SIGNAL                               |
|  | EXISTING 5 SECTION TRAFFIC SIGNAL                               |
|  | EXISTING LUMINAIRE AND SUPPORT ARM INDICATES DIRECTION OF LIGHT |
|  | PROPOSED LUMINAIRE AND SUPPORT ARM INDICATES DIRECTION OF LIGHT |
|  | REMOVE INDICATED TRAFFIC SIGNAL OR STREETLIGHT UNIT             |
|  | EXISTING PEDESTRIAN SIGNAL                                      |
|  | PROPOSED PEDESTRIAN SIGNAL                                      |
|  | EXISTING TRAFFIC SIGNAL CONTROL BOX                             |
|  | PROPOSED TRAFFIC SIGNAL CONTROL BOX                             |
|  | EXISTING TRAFFIC SIGNAL COMMUNICATION CABINET                   |
|  | PROPOSED TRAFFIC SIGNAL COMMUNICATION CABINET                   |
|  | EXISTING SL /TS CONDUIT - SL-STREETLIGHT, TS-TRAFFIC SIGNAL     |
|  | PROPOSED 2" PVC CONDUIT   |
|  | PROPOSED 4" PVC CONDUIT   |
|  | PROPOSED 2" & 4" PVC CONDUITS                                   |
|  | PROPOSED 2-4" PVC CONDUITS                                      |
|  | PROPOSED 4-4" PVC CONDUITS                                      |
|  | PROPOSED LOCATION FOR PEPCO POWER CONNECTION                    |
|  | EXISTING 6'X6' ELECTRICAL MANHOLE                               |
|  | PROPOSED 6'X6' ELECTRICAL MANHOLE                               |
|  | EXISTING 4'X4' ELECTRICAL MANHOLE                               |
|  | PROPOSED 4'X4' ELECTRICAL MANHOLE                               |
|  | EXISTING 4'X4' ELECTRICAL MANHOLE                               |
|  | PROPOSED 4'X4' ELECTRICAL MANHOLE                               |
|  | EXISTING 3'X3' ELECTRICAL MANHOLE                               |
|  | PROPOSED 3'X3' ELECTRICAL MANHOLE                               |
|  | EXISTING #14 STREETLIGHT POLE                                   |
|  | PROPOSED #14 STREETLIGHT POLE                                   |
|  | EXISTING #16 STREETLIGHT POLE                                   |
|  | PROPOSED #16 STREETLIGHT POLE                                   |
|  | EXISTING #18 STREETLIGHT POLE                                   |
|  | PROPOSED #18 STREETLIGHT POLE                                   |
|  | EXISTING TWIN 20 STREETLIGHT POLE                               |
|  | PROPOSED TWIN 20 STREETLIGHT POLE                               |
|  | EXISTING 5A STREETLIGHT POLE                                    |
|  | PROPOSED 5A STREETLIGHT POLE                                    |
|  | EXISTING PENDANT POLE   |
|  | PROPOSED PENDANT POLE   |
|  | EXISTING PEPCO WOOD POLE  |
|  | PROPOSED PEPCO WOOD POLE  |
|  | EXISTING DC WOOD POLE   |
|  | PROPOSED DC WOOD POLE   |
|  | EXISTING 20 FOOT TRAFFIC SIGNAL POLE                            |
|  | PROPOSED 20 FOOT TRAFFIC SIGNAL POLE                            |
|  | TRAFFIC SIGNAL(S) MOUNTED ON STREETLIGHT POLE                   |
|  | PROPOSED BICYCLE RACK   |

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

|   |             |   |
|---|-------------|---|
| DATE: JULY 2023   | SCALE: NONE | <b>GN-01</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |             |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |             | PROJECT ENG. _____<br>DESIGNED BY _____<br>CHECKED BY _____<br>DRAWN BY _____<br>PROJECT MGR. _____ |
| <b>SYMBOLS AND ABBREVIATIONS</b>  |             | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 2 OF 160                                  |

|  |           |             |      |      |
|--|-----------|-------------|------|------|
| <br><b>Rummel, Klepper &amp; Kahl, LLP</b><br>100 M STREET SE   SUITE 950   WASHINGTON, DC 20003<br>PH: (202) 479-2707 FAX: (855) 263-6293<br>Engineers   Construction Managers   Planners   Scientists<br>www.rkk.com | NO.       | DESCRIPTION | NAME | DATE |
|  | REVISIONS |             |      |      |

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 7/13/2023

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 3         | 160          |

## GENERAL NOTES

### SPECIFICATIONS

ALL PROCEDURES SHALL BE GOVERNED BY THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES DATED 2014, ISSUED BY THE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION, EXCEPT AS AMENDED BY THESE PLANS AND THE SPECIAL PROVISIONS.

### TOPOGRAPHY AND SURVEYS

TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED FROM FIELD SURVEYS MADE IN 2022 BY:

WILES MENCH CORPORATION – DC

ALL ELEVATIONS REFER TO DC DEPARTMENT OF PUBLIC WORKS DATUM.

COORDINATES ARE BASED ON MARYLAND STATE PLANE COORDINATE SYSTEM NAD 832011.

### UTILITIES

- EXISTING UTILITIES ARE SHOWN ON THE CONTRACT PLANS BASED ON AVAILABLE RECORDS, FIELD UTILITY INVESTIGATIONS, AND UTILITY OWNER COMMENTS. NO GUARANTEE IS MADE TO THE COMPLETENESS OR ACCURACY OF THIS INFORMATION. THE CONTRACTOR SHALL IDENTIFY THE PRESENCE AND LOCATION OF ALL UTILITIES THROUGHOUT THE JOBSITE INCLUDING ELECTRICAL, COMMUNICATIONS, GAS, SANITARY, WATER, STORM, LIGHTING, ETC. CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS UTILITY AT 1-800-257-7777 PRIOR TO BEGINNING WORK. PRIOR TO CONSTRUCTION, UTILITY LOCATION AND TEST PITTING MUST BE PERFORMED BY THE CONTRACTOR TO IDENTIFY LOCATION OF UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL UTILITIES DURING CONSTRUCTION. ANY DAMAGE INCURRED TO UTILITIES MUST BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- THE CONTRACTOR IS ADVISED THAT NEITHER CSX OR WMATA ARE PART OF THE MISS UTILITY ONE-CALL SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING CSX AND/OR WMATA TO LOCATE THEIR RESPECTIVE FACILITIES.
- THE ABOVE PRECAUTIONS SHALL BE CONSIDERED INCIDENTAL TO THE ITEMS OF WORK AND AT NO ADDITIONAL COST TO DDOT.
- FRAME AND COVERS FOR VERIZON MANHOLES MUST BE ADJUSTED BY VERIZON'S SSP CONTRACTOR IF NEEDED.

### WMATA

- ALL WORKING PLANS SHALL INCLUDE SPECIFIC REFERENCE TO THE WMATA ADJACENT CONSTRUCTION PROJECT MANUAL FOR WORK WHICH WILL INVOLVE AND OR IMPACT WMATA INTERESTS; SUCH AS BUT NOT LIMITED TO WORK HOURS, RAIL ROAD PROTECTIVE LIABILITY INSURANCE, NO DRIVING OF SHEET PILE WITHIN 25' OF THE WMATA RIGHT-OF-WAY, CONSTRUCTION SEQUENCE PLAN AND STAGING PLAN, EQUIPMENT POSITIONING PLAN, CONTINGENCY AND MONITORING PLAN ETC.
- CONTRACTOR SHALL VERIFY AND LOCATE ANY UNDERGROUND UTILITIES (BOTH HORIZONTALLY AND VERTICALLY) IN THE VICINITY OF WMATA UTILITIES OR THOSE SERVING WMATA FACILITIES, AND THE PROPOSED GAS AND WATER LINES (TO BE INSTALLED PRIOR TO THE START OF THIS PROJECT) BY PRIVATE UTILITY COMPANY PRIOR TO PERFORMING ANY WORK. CONTRACTOR SHALL UNDERTAKE TEST PITS IF NECESSARY TO VERIFY LOCATIONS AND DEPTHS OF UTILITIES LOCATED ON WMATA PROPERTY, EASEMENTS OR SERVING WMATA FACILITIES.
- CONTRACTOR SHALL KEEP THE EQUIPMENT AND MACHINERY TO BE USED FOR THE EXECUTION OF WORK INSIDE THE FENCED OR BARRICADED AREAS AND NOT TO RESTRICT THE WMATA USE OF ITS ACCESS AND FACILITIES.
- CONTRACTOR SHALL RESTORE THE WMATA PERMITTED PREMISES IN ACCORDANCE WITH WMATA SPECIFICATIONS AND REQUIREMENTS UPON COMPLETION OF THE WORK AS DESCRIBED IN THE WMATA APPROVED WORK PLAN.
- CONTRACTOR SHALL PROVIDE INDEMNIFICATION AND INSURANCE TO WMATA IN ACCORDANCE WITH THE REQUIREMENTS OF WMATA'S ACPM AND WMATA'S REAL ESTATE PERMIT REQUIREMENTS.
- CONTRACTOR SHALL SUBMIT AS-BUILT PLANS PER THE REQUIREMENTS OUTLINED IN THE WMATA'S ACPM FOR ALL APPLICABLE WORK LOCATED WITHIN WMATA ZONE OF INFLUENCE.

### VERIFICATION OF DIMENSIONS AND ELEVATIONS

THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL PLAN AND ELEVATION DIMENSIONS PRIOR TO ORDERING MATERIALS FOR THE CONSTRUCTION OF VARIOUS BID ITEMS ON THE PROJECT.

### PROPERTY NOTES

- HORIZONTAL DATUM IS NAD83 MARYLAND STATE PLANE COORDINATE SYSTEM – NORTH AMERICAN DATUM 1983 (MD-NAD83) U.S. SURVEY FEET.
- THE PROPERTY LINES SHOWN HEREON ARE BASED ON PROPERTY RECORDS FROM THE DC SURVEYOR'S OFFICE, THE NATIONAL PARK SERVICE, DDOT BRIDGE PLANS AND FIELD SURVEYED PROPERTY MONUMENTATION.
- PROPERTY CORNERS MARKERS WERE NOT INSTALLED BY THIS SURVEY.
- OWNERSHIP INFORMATION SHOWN HEREON IS BASED UPON DC OFFICE TAX AND REVENUE WEBSITE.
- NO TITLE REPORT INFORMATION WAS PROVIDED OR UTILIZED IN THE PREPARATION OF THIS SURVEY.

### EXISTING TREES

- THERE ARE EXISTING MATURE TREES ALONG THESE STREETS. UNLESS OTHERWISE NOTED, ALL EXISTING TREES SHALL BE PRESERVED IN PLACE ACCORDING DDOT STANDARD SPECIFICATION 107.12 TREE PROTECTION AND REPLACEMENT. THE CONTRACTOR SHALL BE EXTREMELY CAREFUL WHILE WORKING AROUND THESE MATURE TREES AND IS LIABLE IN FIXED LIQUIDATED DAMAGES PER 107.12-B8.
- CONTRACTOR SHALL CONTACT THE URBAN FORESTRY ADMINISTRATION AT (202) 617-5133 FOR ALL ISSUES CONCERNING TREES.

### AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE

- THE CONTRACTOR IS ADVISED THAT THE EXISTING CONDITIONS WILL CONTROL CERTAIN FEATURES OF THE PROPOSED RAMPS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT THE PROPOSED RAMPS TO BE IN FULL COMPLIANCE WITH THE CURRENT ADA REQUIREMENTS WHILE BLENDING IN WITH THE EXISTING CONDITIONS. AT NO POINT SHALL THE EXISTING FIELD CONDITIONS BE USED AS JUSTIFICATION FOR NOT MEETING THE ADA REQUIREMENTS. IT IS UNDERSTOOD THAT SIDEWALK SURFACES MAY HAVE TO BE WARPED AND /OR PCC COPING OR OTHER ELEMENTS MAY HAVE TO BE INCORPORATED INTO THE WORK TO ENSURE ADA COMPLIANCE. UNLESS PROVIDED FOR OTHERWISE, THESE ADDITIONAL FEATURES ARE CONSIDERED TO BE INCIDENTAL TO CONSTRUCTION OF THE PROPOSED RAMPS.
- ALL PEDESTRIAN RAMPS AND SIDEWALK SHALL BE CONSTRUCTED IN CONFORMANCE WITH DDOT STANDARD DWG. NO'S 606.05 THROUGH 606.13 UNLESS OTHERWISE NOTED. REFER TO THE STANDARD DRAWINGS FOR ADDITIONAL NOTES AND DETAILS.
- ALL RAMPS SHALL CONFORM TO THE LATEST AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) CRITERIA.
- CONTRACTOR'S PROJECT MANAGER WILL CONTACT THE ADA COORDINATOR IN THE EVENT THAT FIELD MODIFICATIONS ARE NEEDED TO THE PROPOSED WORK FOR ADA COMPLIANCE.
- FINAL LOCATION OF RAMP WILL BE REVIEWED AND ACCEPTED BY THE ENGINEER ON SITE. FINAL LOCATION OF RAMP MUST ALSO HAVE WRITTEN APPROVAL FROM DDOT ADA COORDINATOR.

### DRAINAGE

- SEWER BENCHMARK SHALL BE USED FOR SEWER CONSTRUCTION.
  - WATER BENCHMARK SHALL BE USED FOR WATER CONSTRUCTION.
  - THE CONTRACTOR SHALL NOTIFY MISS UTILITY, 1-800-257-7777, 48 HOURS PRIOR TO EXCAVATION.
  - THE CONTRACTOR SHALL KEEP ALL THE UTILITIES IN SERVICE DURING CONSTRUCTION. IF ANY UTILITY IS ACCIDENTALLY DISRUPTED DURING CONSTRUCTION, THE UTILITY OWNER AND THE CHIEF ENGINEER SHALL BE NOTIFIED IMMEDIATELY AND REPLACEMENT SHALL BE DONE IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. PLANNED DISRUPTIONS IN UTILITY SERVICE MUST BE COORDINATED THROUGH THE CHIEF ENGINEER.
- ### EROSION AND SEDIMENT CONTROL
- THE CONTRACTOR SHALL KEEP ALL DRAINAGE INLETS PROTECTED USING APPROPRIATE SEDIMENT CONTROL METHODS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AS SHOWN IN THE PLANS.
  - THE CONTRACTOR SHALL INSTALL SEDIMENT CONTROL PROTECTION FOR NEW INLETS IMMEDIATELY AFTER THE INLETS ARE CONSTRUCTED.
  - THE CONTRACTOR SHALL INSTALL SEDIMENT CONTROL PROTECTION FOR EXISTING NEARBY INLETS OUTSIDE THE LIMIT OF WORK THAT ARE IMPACTED BY THE CONSTRUCTION.
  - THE CONTRACTOR SHALL REMOVE SEDIMENT CONTROL PROTECTION UPON COMPLETION OF EACH PHASE OF CONSTRUCTION AS DIRECTED BY THE CHIEF ENGINEER.

### MAINTAINENCE OF TRAFFIC (MOT)

- DURING ALL PHASES OF CONSTRUCTION AND THE DURATION OF THE CONTRACT THE TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIAL PROVISIONS.
- IF THE CONTRACTOR DOES NOT WISH TO USE THE MOT PLANS IN THE CONTRACT DOCUMENTS, ALTERNATE MOT PLANS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE CHIEF ENGINEER FOR APPROVAL.
- TEMPORARY TRAFFIC CONTROL SIGNS SHALL NOT BE INSTALLED AT TREE PROTECTION STRUCTURES.

### SPECIAL NOTES

- THE FINISHED ELEVATIONS, ALIGNMENTS AND LIMITS OF WORK PROVIDED IN THE PLANS ARE BASED ON THE FIELD SURVEY DATA. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IF THE INFORMATION GIVEN IN THESE PLANS IS DIFFERENT FROM THAT FOUND IN THE FIELD.
- THE CONTRACTOR SHALL ENSURE THAT ANY DISTURBANCE TO THE NORMAL MOVEMENT OF PERSONNEL AND VEHICLES IS KEPT TO A MINIMUM.
- STAGING AREAS ARE NOT DESIGNATED ON THE CONTRACT PLANS. USAGE PLANS FOR STAGING AREAS ARE TO BE SUBMITTED AND ARE SUBJECT TO APPROVAL OF DDOT, WMATA, NPS, AND/OR PROPERTY OWNER. AREAS ARE TO HAVE GEO-TEXTILE FABRIC SEPARATION FROM GRADE WITH A MINIMUM OF SIX-INCHES OF STONE (NO.2, CR-6 OR NO.57). CONTRACTOR SHALL COVER ALL STOCK PILED MATERIALS AND PROVIDE APPROPRIATE SEDIMENT CONTROL MEASURES. CONTRACTOR SHALL SECURE STAGING AREA WITH CHAIN LINK FENCE AND GATES. THE TOTAL COST OF STAGING AREAS, INCLUDING FENCING, GATES, GEO-TEXTILE, SECURITY, STONE, SEDIMENT CONTROL AND RESTORATION TO THE SATISFACTION OF DDOT AND THE PROPERTY OWNER WILL NOT BE MEASURED SEPARATELY BUT SHALL BE INCIDENTAL TO ALL ITEMS OF WORK AND AT NO ADDITIONAL COST TO DDOT.
- WHEN NOT ENGAGED IN CONSTRUCTION ACTIVITIES THE CONTRACTOR'S CONSTRUCTION EQUIPMENT AND VEHICLES SHALL BE PARKED IN THE STORAGE SITE OR STORAGE AREA IDENTIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL COORDINATE ACTIVITIES THROUGHOUT THE PROJECT IN THE MANNER THAT ALLOWS EMERGENCY ACCESS TO ALL AREAS OF THE JOB THAT ARE OCCUPIED WITHOUT DELAYS TO EMERGENCY RESPONSE VEHICLES.
- THE CONTRACTS SHALL NOT STOCKPILE CONSTRUCTION MATERIALS, SPOIL, DEBRIS, OR REFUSE IN ANY AREA OTHER THAN THAT SPECIFICALLY APPROVED FOR SUCH PURPOSE BY THE ENGINEER.
- STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT ITS MOVEMENT BY THE WIND.
- ANY DAMAGE TO THE EXISTING ROADS OR SYSTEMS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER. ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITIONS AT THE COMPLETION OF THE PROJECT.
- ESTABLISHMENT OF TREE PROTECTION AREAS AND SUPPLEMENTAL TREE CARE ACTIVITIES SHALL BE SUPERVISED AND/OR PERFORMED BY THE PROJECT ARBORIST, AND SHALL BE COORDINATED WITH THE ENGINEER AND THE CONTRACTOR. SPECIAL CARE SHALL BE TAKEN DURING EXCAVATIONS NEAR EXISTING TREES TO AVOID UNNECESSARY DAMAGE. TREES DAMAGED BY THE CONTRACTOR THAT WERE NOT MARKED FOR REMOVAL BY THE PLANS OR THE PROJECT ARBORIST SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL MATERIAL REMOVED AND NOT REUSED IN THE CONSTRUCTION OF THIS PROJECT SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF BY THE CONTRACTOR, EXCEPT THAT GRANITE CURB IDENTIFIED BY THE ENGINEER AS SALVAGE SHALL REMAIN THE PROPERTY OF DDOT, AND SHALL BE LOADED AND HAULED TO SUCH LOCATIONS OFF THE PROJECT AS MAY BE IDENTIFIED BY THE ENGINEER, IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL NOT REMOVE ANY EXISTING CSXT OWNED MATERIAL (INCLUDING BUT NOT LIMITED TO SOIL, STONE, BRIDGE AND RETAINING WALL ELEMENTS, COMMUNICATIONS AND SIGNALS DEVICE COMPONENTS, AND DRAINAGE FACILITIES) FROM CSXT RIGHT-OF-WAY WITHOUT PRIOR AUTHORIZATION FROM CSXT. IN THE EVENT THAT SUCH MATERIAL CANNOT BE RELOCATED WITHIN CSXT'S RIGHT-OF-WAY IN A MANNER SATISFACTORY TO CSXT, THE MATERIAL SHALL BE PROPERLY TESTED BY CSXT FOR CONTAMINATION AND DISPOSED OF IN ACCORDANCE WITH THE ATTACHED CSX DISPOSAL POLICY. ALL COSTS ASSOCIATED WITH THE TESTED, COORDINATION AND/OR DISPOSAL WILL BE AT PROJECT EXPENSE.
- EXISTING SIGNS SHALL BE MAINTAINED PRIOR TO FINAL SIGNING INSTALLATION. ANY EXISTING SIGNS DAMAGED OR REMOVED PRIOR TO FINAL SIGNING INSTALLATION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNERS TO ENSURE THAT ACCESS TO ADJACENT PROPERTIES, INCLUDING MAILBOXES, IS MAINTAINED AT ALL TIMES.
- UNLESS OTHERWISE SHOWN ON THE PLANS, ALL EXCESS FILL, SPOIL MATERIAL, DEBRIS, AND CONSTRUCTION MATERIAL SHALL BE DISPOSED OF OUTSIDE OF NONTIDAL WETLANDS, NONTIDAL WETLANDS BUFFERS, AND THE 100-YEAR FLOODPLAIN, AND IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS.
- NON-MECHANICAL EXCAVATION METHODS SHALL BE USED WITHIN EXISTING TREE CRITICAL ROOTS ZONES AND WITHIN 3' OF EXISTING UTILITIES.
- THE CONTRACTOR SHALL NOT BE PERMITTED TO USE THE CSXT RIGHT-OF-WAY FOR STORAGE OF MATERIALS OR EQUIPMENT DURING CONSTRUCTION. THE CSXT RIGHT-OF-WAY MUST REMAIN CLEAR AT ALL TIMES.

|  |             |   |
|--|-------------|---|
| DATE: JULY 2023  | SCALE: NONE | <b>GN-02</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION</b><br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |             |   |
| <b>METROPOLITAN BRANCH TRAIL</b><br>DESIGN   |             | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>GENERAL NOTES</b>   |             | DIVISION CHIEF<br><br>DATE _____<br>FILE _____<br>SHEET 3 OF 160  |

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

|  |           |             |      |      |
|--|-----------|-------------|------|------|
| <br>100 M STREET SE   SUITE 950   WASHINGTON, DC 20003<br>PH: (202) 479-2707 FAX: (855) 263-6293<br>Engineers   Construction Managers   Planners   Scientists<br>www.rkk.com | NO.       | DESCRIPTION | NAME | DATE |
|  | REVISIONS |             |      |      |

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 7/13/2023

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 4         | 160          |

TO BE PROVIDED AT 90% DESIGN

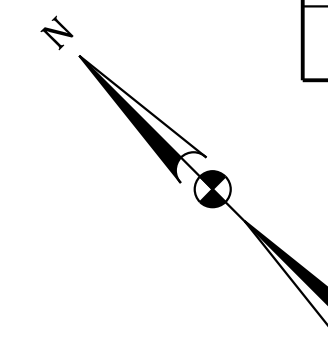
**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

|   |           |  |
|---|-----------|--|
| DATE: JULY 2023   | SCALE: NA | <b>QN-01</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |           |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |           | PROJECT ENG. . . . AF<br>DESIGNED BY . . . . AF<br>CHECKED BY . . . . MJG<br>DRAWN BY . . . . AF<br>PROJECT MGR. . . . MJG |
| <b>SUMMARY OF QUANTITIES</b>  |           | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET 4 OF 160   |

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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

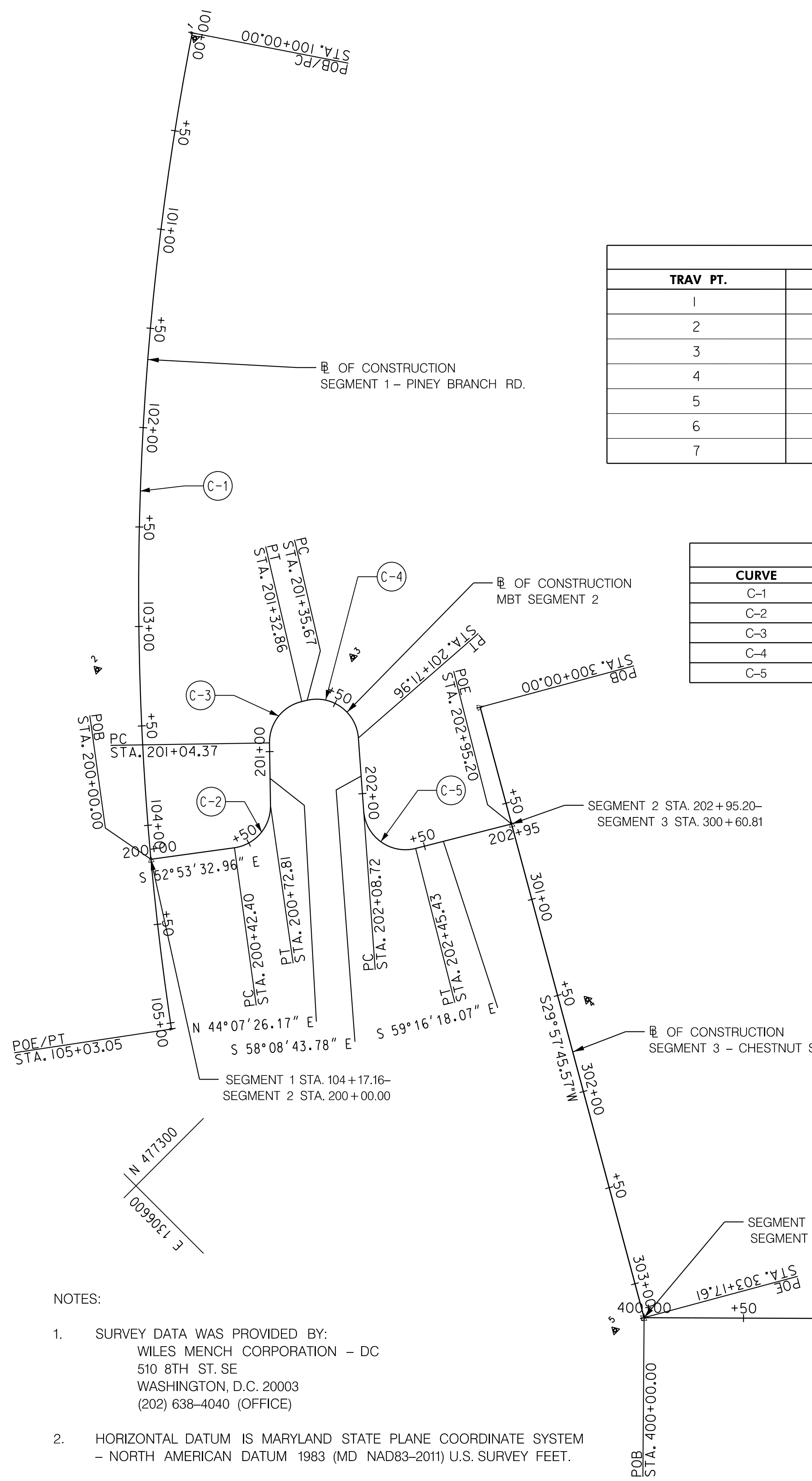
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 7/13/2023



| TRAVERSE CONTROL |             |              |           |             |
|------------------|-------------|--------------|-----------|-------------|
| TRAV PT.         | NORTHING    | EASTING      | ELEVATION | DESCRIPTION |
| 1                | 477686.7835 | 1307028.6129 | 288.20    | CROSS-CUT   |
| 2                | 477497.1659 | 1306769.5985 | 281.80    | MAG-NAIL    |
| 3                | 477410.6819 | 1306864.8949 | 297.84    | PIPE        |
| 4                | 477205.6670 | 1306826.6364 | 287.77    | MAG-NAIL    |
| 5                | 477078.3474 | 1306718.9939 | 282.19    | MAG-NAIL    |
| 6                | 476886.5015 | 1306933.4645 | 274.95    | CROSS-CUT   |
| 7                | 476704.3847 | 1307152.7979 | 276.87    | PIPE        |

| CURVE DATA |                    |                 |        |          |          |          |
|------------|--------------------|-----------------|--------|----------|----------|----------|
| CURVE      | DELTA              | Dc              | RADIUS | TANGENT  | LENGTH   | EXTERNAL |
| C-1        | 19° 33' 21.01" LT  | 3° 53' 14.70"   | 1474.0 | 253.9980 | 503.0549 | 21.7260  |
| C-2        | 82° 59' 00.87" LT  | 272° 50' 13.36" | 21.0   | 18.5739  | 30.4151  | 7.0355   |
| C-3        | 77° 43' 50.06" RT  | 272° 50' 13.36" | 21.0   | 16.9239  | 28.4897  | 5.9707   |
| C-4        | 99° 00' 47.71" RT  | 272° 50' 13.36" | 21.0   | 24.5936  | 36.2903  | 11.3395  |
| C-5        | 100° 08' 22.00" LT | 272° 50' 13.36" | 21.0   | 25.0888  | 36.7030  | 11.7177  |

| BASELINE CONTROL COORDINATES  |           |           |             |              |                    |
|-------------------------------|-----------|-----------|-------------|--------------|--------------------|
| BASELINE                      | POINT NO. | STATION   | NORTH       | EAST         | BEARING            |
| SEGMENT 1<br>PINEY BRANCH RD. | POB/PC    | 100+00.00 | 477689.6784 | 1307029.6189 |                    |
|                               | PI        | 102+54.00 | 477547.5224 | 1306819.1274 | N 55° 58' 00.42" W |
|                               | POE/PT    | 105+03.05 | 477343.1098 | 1306668.3611 | S 36° 24' 39.41" W |
| SEGMENT 2                     | POB       | 200+00.00 | 477410.7147 | 1306721.3330 | S 52° 53' 32.96" E |
|                               | PC        | 200+42.40 | 477385.1348 | 1306755.1465 |                    |
|                               | PI        | 200+60.97 | 477373.9289 | 1306769.9592 |                    |
|                               | PT        | 200+72.81 | 477387.2619 | 1306782.8906 | N 44° 07' 26.17" E |
|                               | PC        | 201+04.37 | 477409.9115 | 1306804.8579 |                    |
|                               | PI        | 201+21.29 | 477422.0601 | 1306816.6406 |                    |
|                               | PT        | 201+32.86 | 477413.1283 | 1306831.0155 | S 58° 08' 43.78" E |
|                               | PC        | 201+35.67 | 477411.6452 | 1306833.4025 |                    |
|                               | PI        | 201+60.26 | 477398.6655 | 1306854.2921 |                    |
|                               | PT        | 201+71.96 | 477380.0673 | 1306838.2001 |                    |
| SEGMENT 3<br>CHESTNUT ST.     | POB       | 300+00.00 | 477321.1655 | 1306877.1369 | S 29° 57' 45.57" W |
|                               | POE       | 302+86.95 | 477072.5625 | 1306733.8219 |                    |
| SEGMENT 4<br>SPRING PL.       | POB       | 400+00.00 | 477072.5625 | 1306733.8219 | S 44° 43' 56.76" E |
|                               | PI        | 403+32.74 | 476836.1805 | 1306968.0063 | S 50° 37' 12.89" E |
|                               | POE       | 405+38.34 | 476729.2301 | 1307098.3038 | N 72° 37' 45.45" E |
| SEGMENT 5                     | POB       | 500+00.00 | 476740.2852 | 1307133.6440 | S 15° 14' 46.42" E |
|                               | PI        | 500+22.82 | 476718.2654 | 1307139.6457 | S 27° 14' 41.19" E |
|                               | PI        | 501+81.98 | 476576.7632 | 1307212.5078 | S 22° 10' 33.65" E |
|                               | PI        | 502+56.58 | 476507.6826 | 1307240.6654 | S 30° 04' 34.66" E |
|                               | PI        | 502+78.18 | 476488.9881 | 1307251.4918 | S 22° 05' 38.00" E |
|                               | POE       | 503+73.89 | 476400.3108 | 1307287.4889 |                    |



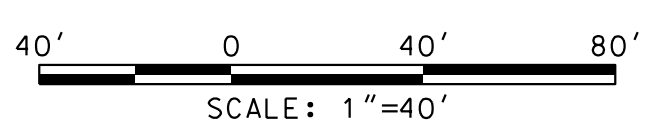
- NOTES:
- SURVEY DATA WAS PROVIDED BY:  
WILES MENCH CORPORATION - DC  
510 8TH ST. SE  
WASHINGTON, D.C. 20003  
(202) 638-4040 (OFFICE)
  - HORIZONTAL DATUM IS MARYLAND STATE PLANE COORDINATE SYSTEM  
- NORTH AMERICAN DATUM 1983 (MD NAD83-2011) U.S. SURVEY FEET.
  - VERTICAL DATUM IN NORTH AMERICAN VERTICAL DATUM OF 1988  
- (NAVD88-GEOID12B).

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

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| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
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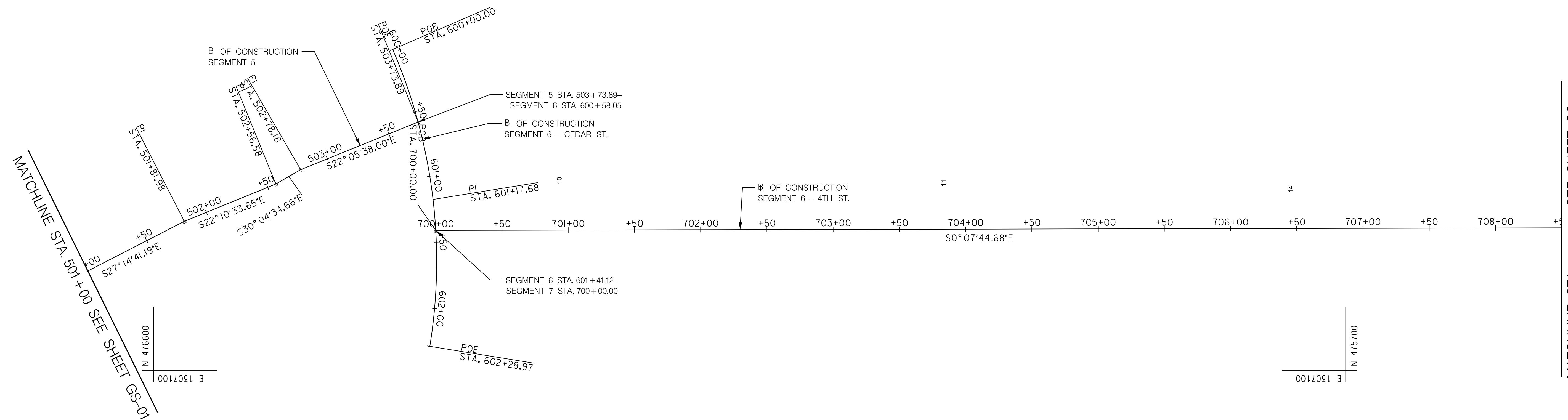
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|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 40' | <b>GS-01</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJS</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJS</u> |
| <b>GEOMETRIC LAYOUT</b>   |                 | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET 5 OF 160  |



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| BASELINE CONTROL COORDINATES |           |           |             |              |                    |
|------------------------------|-----------|-----------|-------------|--------------|--------------------|
| BASELINE                     | POINT NO. | STATION   | NORTH       | EAST         | BEARING            |
| SEGMENT 5                    | POB       | 500+00.00 | 476740.2852 | 1307133.6440 |                    |
|                              | PI        | 500+22.82 | 476718.2654 | 1307139.6457 | S 15° 14' 46.42" E |
|                              | PI        | 501+81.98 | 476576.7632 | 1307212.5078 | S 27° 14' 41.19" E |
|                              | PI        | 502+56.58 | 476507.6826 | 1307240.6654 | S 22° 10' 33.65" E |
|                              | PI        | 502+78.18 | 476488.9881 | 1307251.4918 | S 30° 04' 34.66" E |
|                              | PDE       | 503+73.89 | 476400.3108 | 1307287.4889 | S 22° 05' 38.00" E |
| SEGMENT 6<br>CEDAR ST.       | POB       | 600+00.00 | 476419.4649 | 1307342.2376 |                    |
|                              | PI        | 601+17.68 | 476372.7045 | 1307234.2519 | S 66° 35' 10.47" W |
|                              | PDE       | 602+28.97 | 476391.4666 | 1307118.0821 | N 80° 39' 32.20" W |
| SEGMENT 6<br>4TH ST.         | POB       | 700+00.00 | 476386.9961 | 1307205.6451 |                    |
|                              | PI        | 708+73.66 | 475513.3378 | 1307207.6133 | S 00° 07' 44.68" E |

| TRAVERSE CONTROL |             |              |           |             |
|------------------|-------------|--------------|-----------|-------------|
| TRAV PT.         | NORTHING    | EASTING      | ELEVATION | DESCRIPTION |
| 8                | 476561.3548 | 1307224.5880 | 279.42    | PIPE        |
| 9                | 476432.4234 | 1307272.5802 | 271.14    | CROSS-CUT   |
| 10               | 476291.2015 | 1307239.3350 | 274.60    | CROSS-CUT   |
| 11               | 476007.0106 | 1307239.3350 | 263.96    | CROSS-CUT   |
| 14               | 475744.5289 | 1307232.5357 | 259.17    | CROSS-CUT   |



NOTES:

- SURVEY DATA WAS PROVIDED BY:  
WILES MENSCH CORPORATION - DC  
510 8TH ST. SE  
WASHINGTON, D.C. 20003  
(202) 638-4040 (OFFICE)
- HORIZONTAL DATUM IS MARYLAND STATE PLANE COORDINATE SYSTEM  
- NORTH AMERICAN DATUM 1983 (MD NAD83-2011) U.S. SURVEY FEET.
- VERTICAL DATUM IN NORTH AMERICAN VERTICAL DATUM OF 1988  
- (NAVD88-GEOID12B).

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

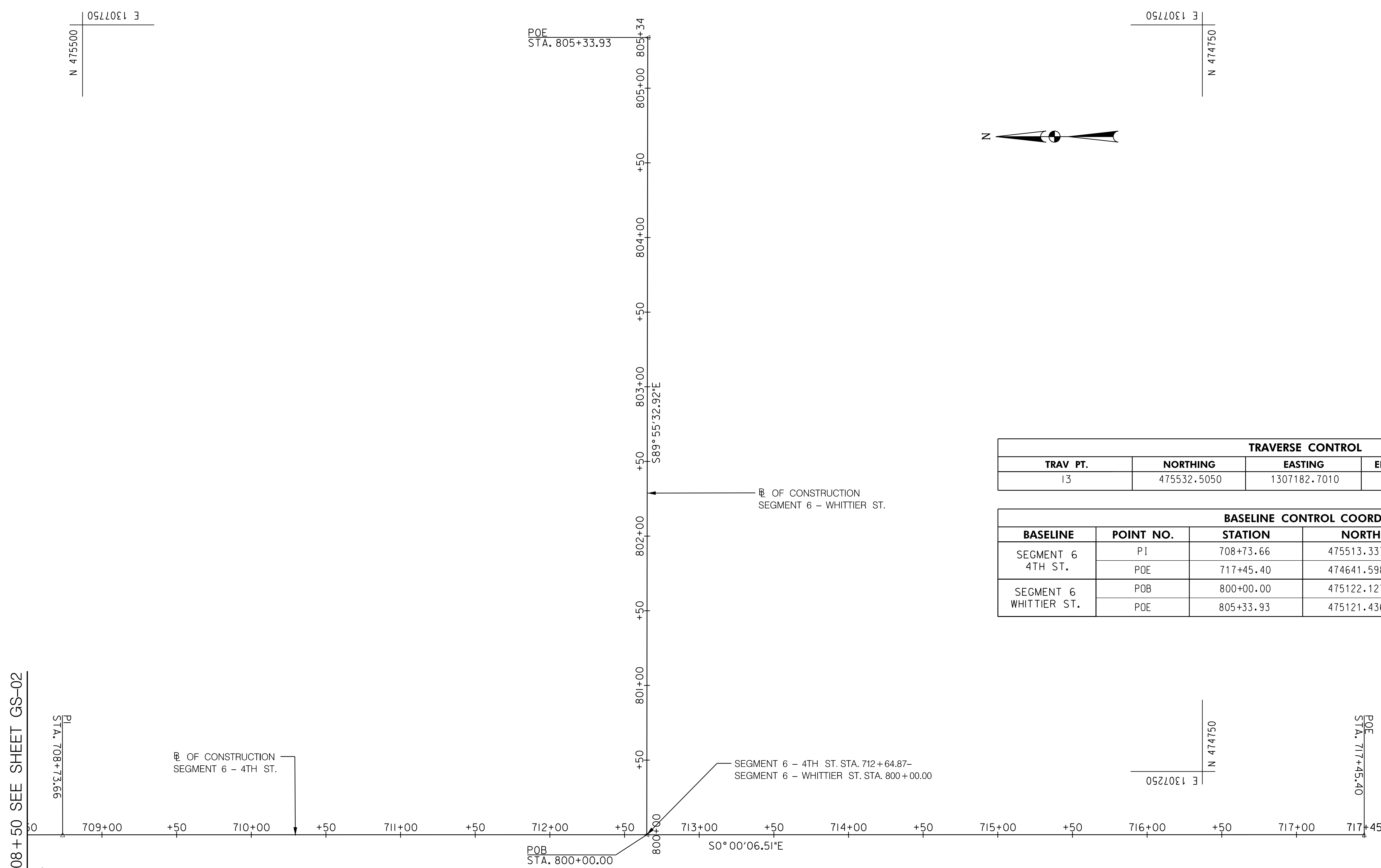


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PH: (202) 479-2707 FAX: (855) 263-6293  
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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |                 |   |
|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 40' | <b>GS-02</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>GEOMETRIC LAYOUT</b>   |                 | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET 6 OF 160  |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 7         | 160          |



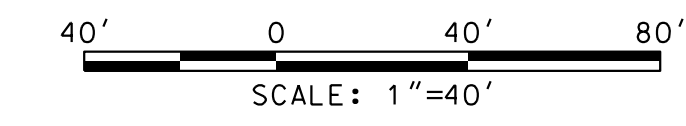
| TRAVERSE CONTROL |             |              |           |             |
|------------------|-------------|--------------|-----------|-------------|
| TRAV PT.         | NORTHING    | EASTING      | ELEVATION | DESCRIPTION |
| 13               | 475532.5050 | 1307182.7010 | 256.93    | DRILL-HOLE  |

| BASELINE CONTROL COORDINATES |           |           |             |              |                  |
|------------------------------|-----------|-----------|-------------|--------------|------------------|
| BASELINE                     | POINT NO. | STATION   | NORTH       | EAST         | BEARING          |
| SEGMENT 6<br>4TH ST.         | PI        | 708+73.66 | 475513.3378 | 1307207.6133 | S 00°00'06.51" E |
|                              | POE       | 717+45.40 | 474641.5987 | 1307207.6409 |                  |
| SEGMENT 6<br>WHITTIER ST.    | POB       | 800+00.00 | 475122.1273 | 1307207.6257 | S 89°55'32.92" E |
|                              | POE       | 805+33.93 | 475121.4360 | 1307741.5554 |                  |

MATCHLINE STA. 708+50 SEE SHEET GS-02

- NOTES:
- SURVEY DATA WAS PROVIDED BY:  
WILES MENSCH CORPORATION - DC  
510 8TH ST. SE  
WASHINGTON, D.C. 20003  
(202) 638-4040 (OFFICE)
  - HORIZONTAL DATUM IS MARYLAND STATE PLANE COORDINATE SYSTEM  
- NORTH AMERICAN DATUM 1983 (MD NAD83-2011) U.S. SURVEY FEET.
  - VERTICAL DATUM IN NORTH AMERICAN VERTICAL DATUM OF 1988  
- (NAVD88-GEOID12B).

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



DATE: JULY 2023      SCALE: 1" = 40'      **GS-03**

**D.C. DEPARTMENT OF TRANSPORTATION**  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

**METROPOLITAN BRANCH TRAIL  
DESIGN**

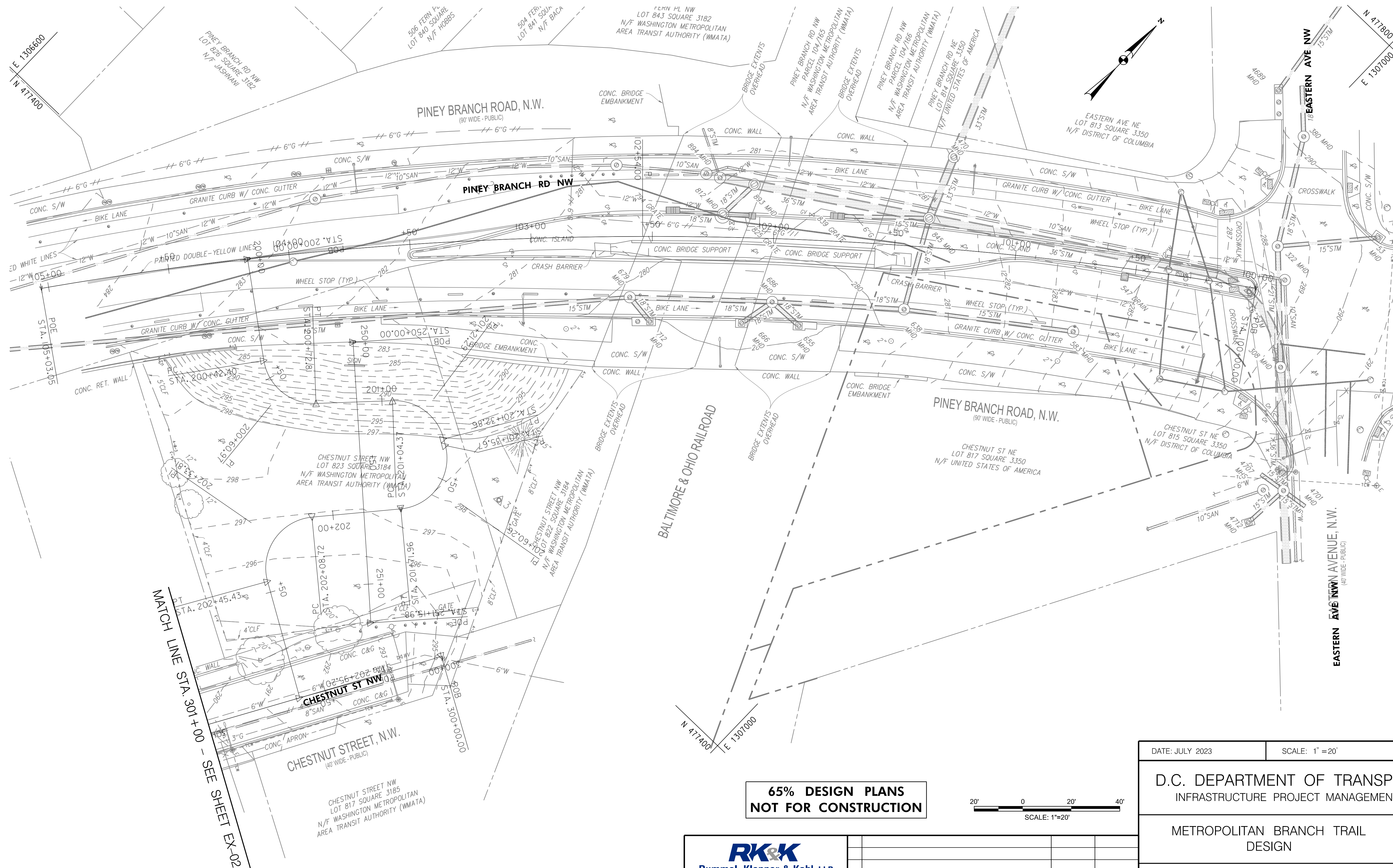
**GEOMETRIC LAYOUT**

PROJECT ENG. AF  
DESIGNED BY AF  
CHECKED BY MJG  
DRAWN BY AF  
PROJECT MGR. MJG  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 7 OF 160

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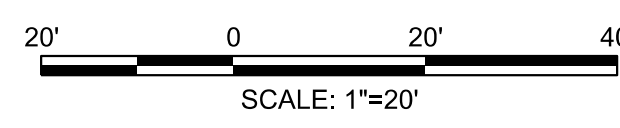
| NO. | DESCRIPTION | NAME | DATE |
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MATCH LINE STA 301+00 - SEE SHEET EX-02

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



DATE: JULY 2023      SCALE: 1" = 20'      **EX-01**

**D.C. DEPARTMENT OF TRANSPORTATION**  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

**METROPOLITAN BRANCH TRAIL  
DESIGN**

**EXISTING SURVEY PLAN**

PROJECT ENG. AF  
DESIGNED BY AF  
CHECKED BY MJG  
DRAWN BY AF  
PROJECT MGR. MJG  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 8 OF 160

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| NO. | DESCRIPTION | NAME | DATE |
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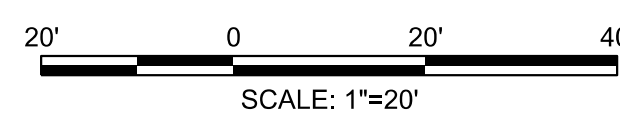
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 9         | 160          |

MATCH LINE STA. 301+00 - SEE SHEET EX-01

MATCH LINE STA. 404+00 - SEE SHEET EX-03



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



DATE: JULY 2023      SCALE: 1" = 20'      **EX-02**

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

**EXISTING SURVEY PLAN**

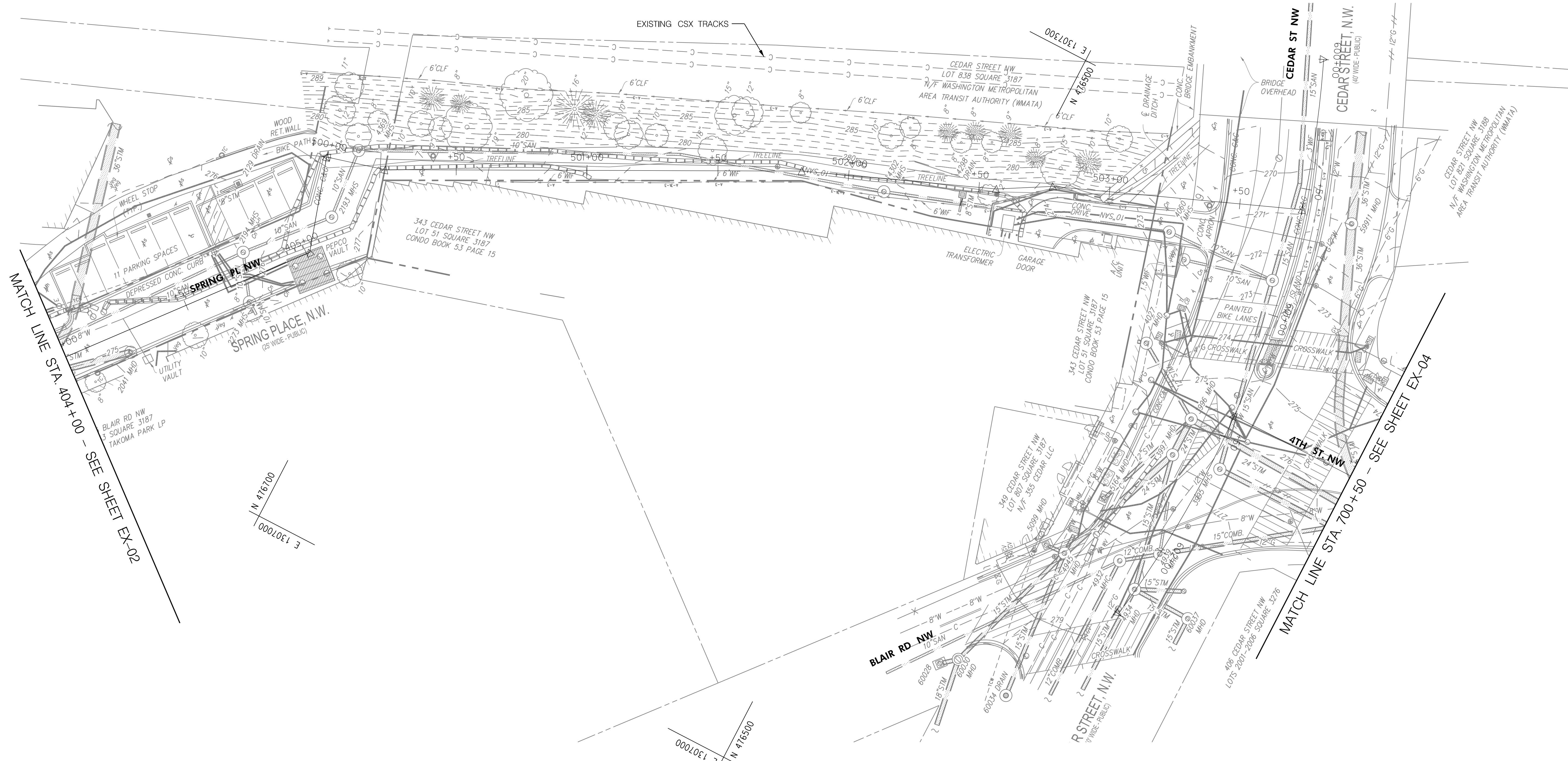
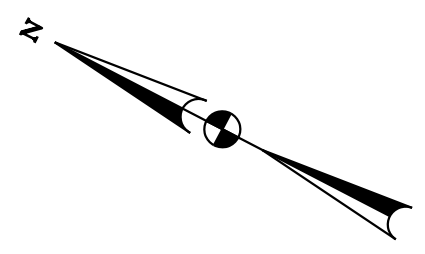
PROJECT ENG. AF  
DESIGNED BY AF  
CHECKED BY MJG  
DRAWN BY AF  
PROJECT MGR. MJG  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 9 OF 160

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| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
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 7/13/2023

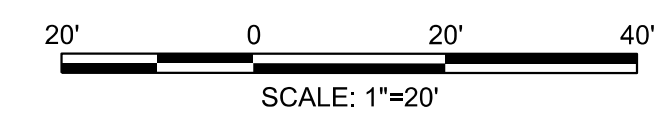
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|-----|-------|---------------------------|-----------|--------------|
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 10        | 160          |



MATCH LINE STA. 404+00 - SEE SHEET EX-02

MATCH LINE STA. 700+50 - SEE SHEET EX-04

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



DATE: JULY 2023      SCALE: 1" = 20'      **EX-03**

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

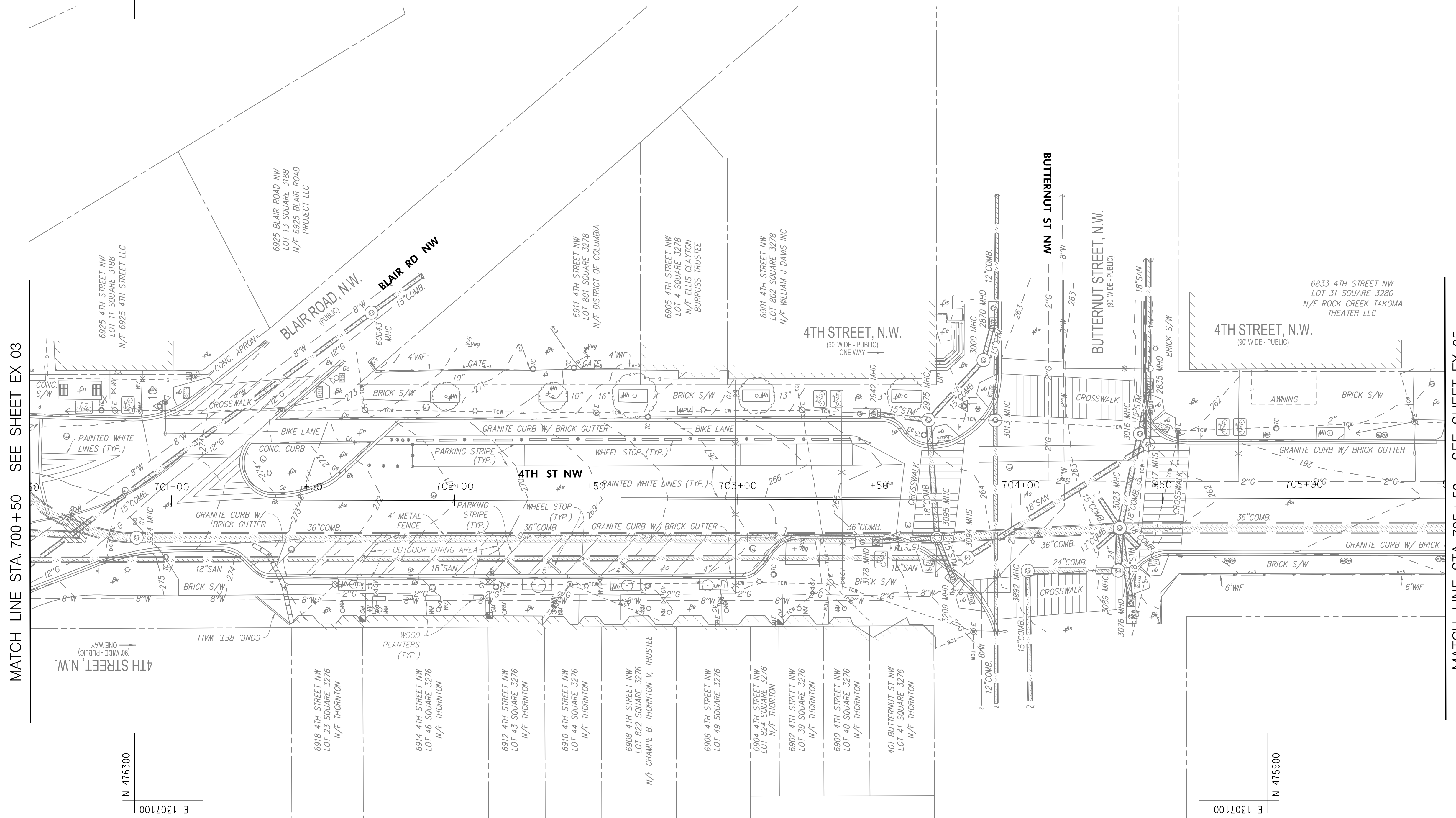
**EXISTING SURVEY PLAN**

|                |           |
|----------------|-----------|
| PROJECT ENG.   | AF        |
| DESIGNED BY    | AF        |
| CHECKED BY     | MJG       |
| DRAWN BY       | AF        |
| PROJECT MGR.   | MJG       |
| DIVISION CHIEF |           |
| DATE           |           |
| FILE           |           |
| SHEET          | 10 OF 160 |

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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

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 7/13/2023

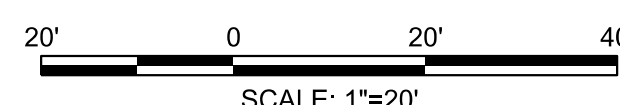


MATCH LINE STA. 700+50 - SEE SHEET EX-03

MATCH LINE STA. 705+50 - SEE SHEET EX-05

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 7/13/2023

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

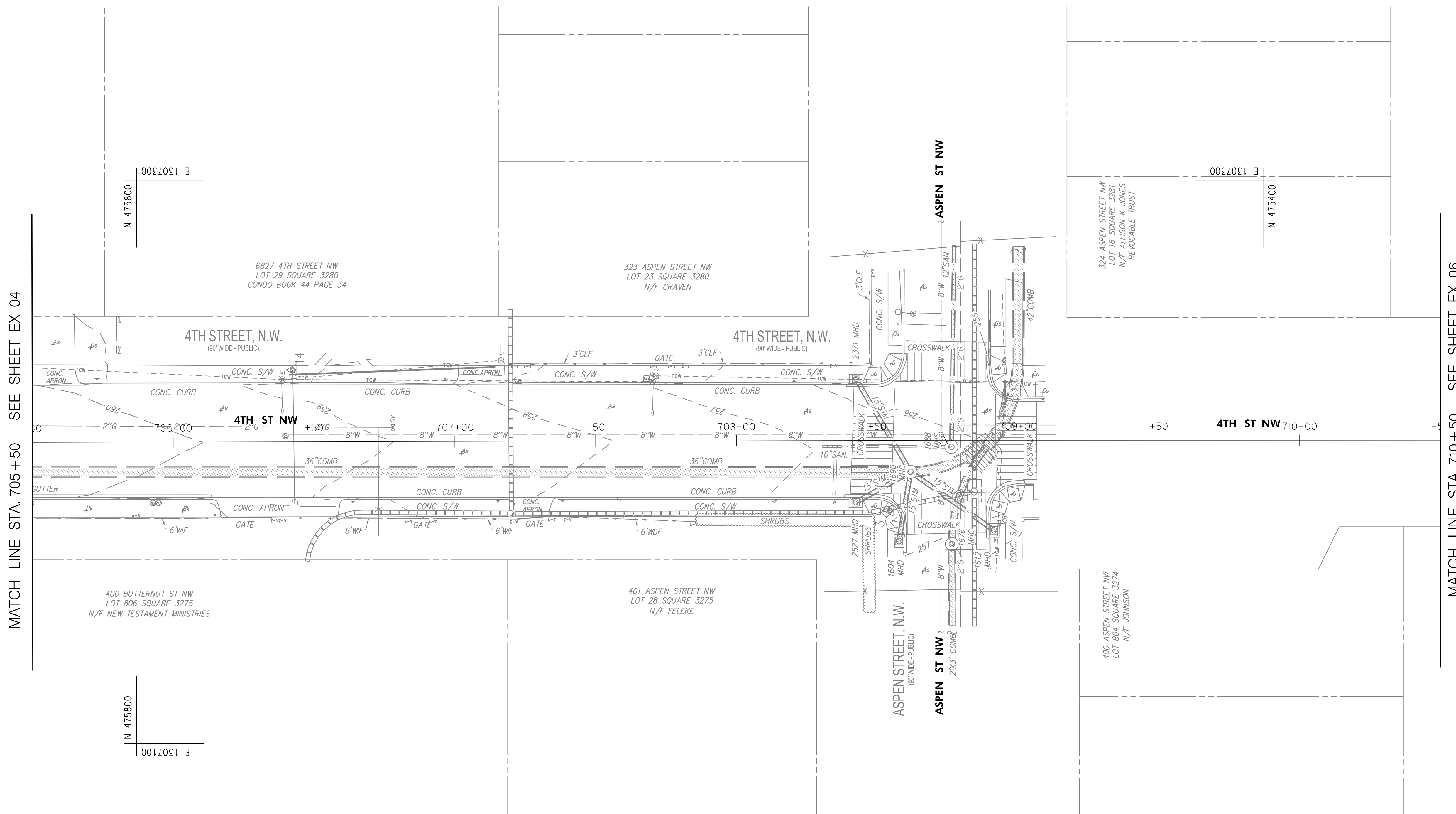


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|  |                 |   |
|--|-----------------|---|
| DATE: JULY 2023  | SCALE: 1" = 20' | <b>EX-04</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION</b><br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| <b>METROPOLITAN BRANCH TRAIL</b><br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>EXISTING SURVEY PLAN</b>  |                 | DIVISION CHIEF<br><br>DATE _____<br>FILE _____<br>SHEET 11 OF 160   |

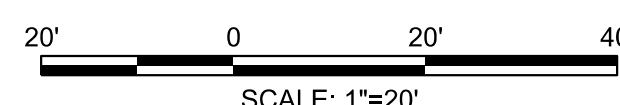
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 12        | 160          |



MATCH LINE STA. 705+50 - SEE SHEET EX-04

MATCH LINE STA. 710+50 - SEE SHEET EX-06

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



DATE: JULY 2023      SCALE: 1" = 20'      **EX-05**

**D.C. DEPARTMENT OF TRANSPORTATION**  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

**METROPOLITAN BRANCH TRAIL**  
DESIGN

**EXISTING SURVEY PLAN**

PROJECT ENG. AF  
DESIGNED BY AF  
CHECKED BY MJG  
DRAWN BY AF  
PROJECT MGR. MJG  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 12 OF 160

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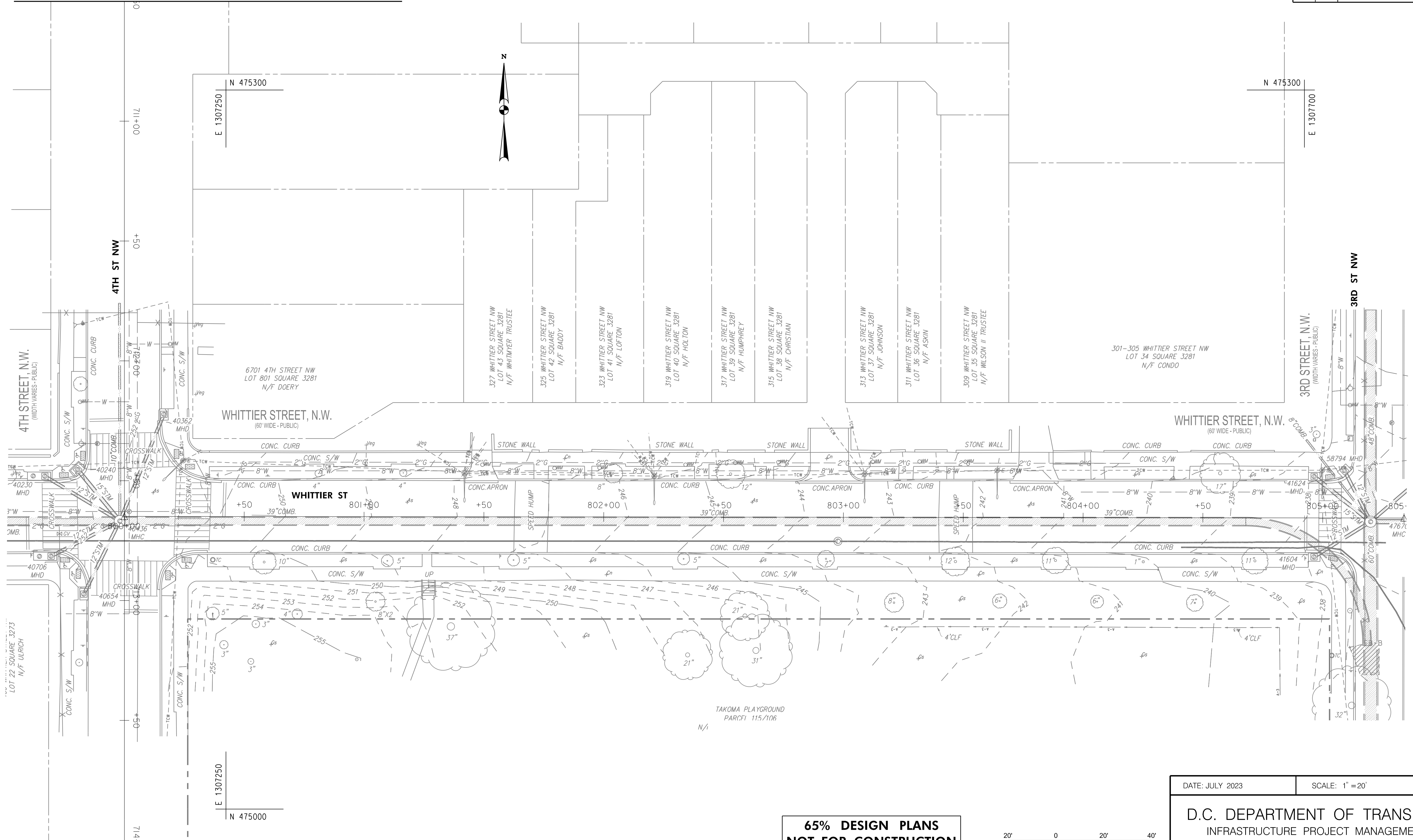
| NO. | DESCRIPTION | NAME | DATE |
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REVISIONS

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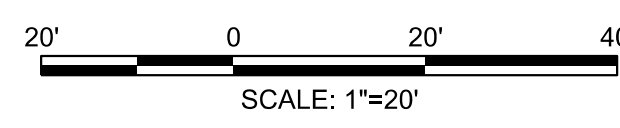
MATCH LINE STA. 710+50 - SEE SHEET EX-05

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 13        | 160          |



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NOT FOR CONSTRUCTION**



DATE: JULY 2023      SCALE: 1" = 20'      **EX-06**

**D.C. DEPARTMENT OF TRANSPORTATION**  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

**METROPOLITAN BRANCH TRAIL  
DESIGN**

**EXISTING SURVEY PLAN**

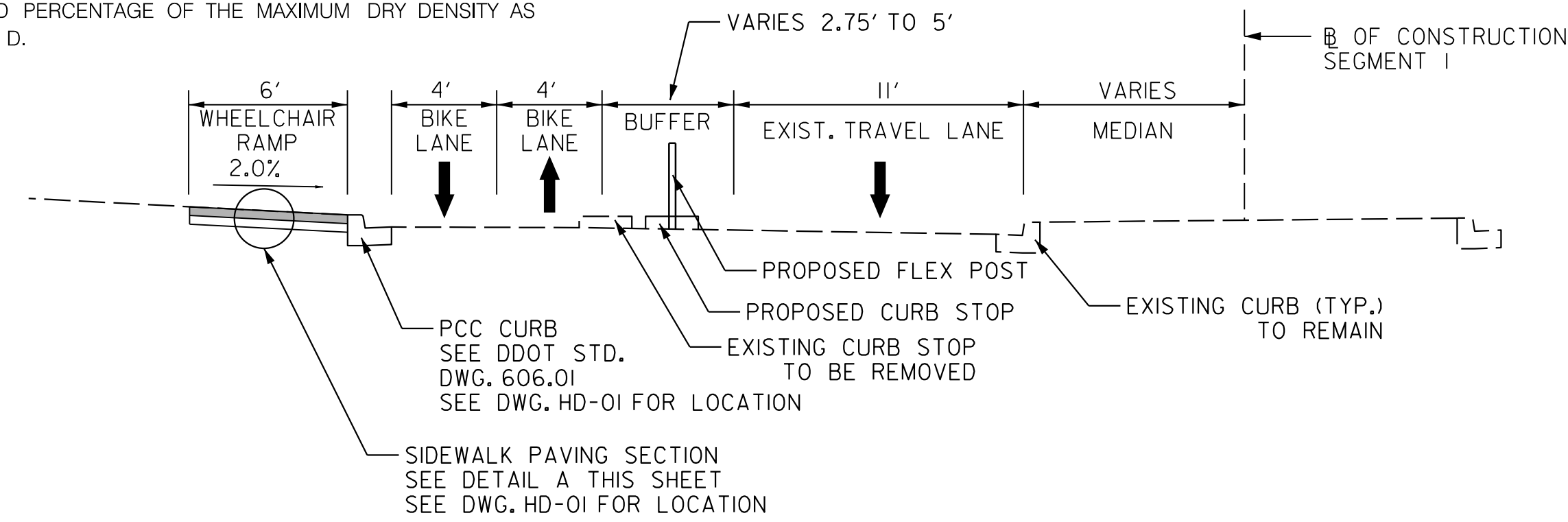
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| PROJECT ENG.   | AF        |
| DESIGNED BY    | AF        |
| CHECKED BY     | MJG       |
| DRAWN BY       | AF        |
| PROJECT MGR.   | MJG       |
| DIVISION CHIEF |           |
| DATE           |           |
| FILE           |           |
| SHEET          | 13 OF 160 |

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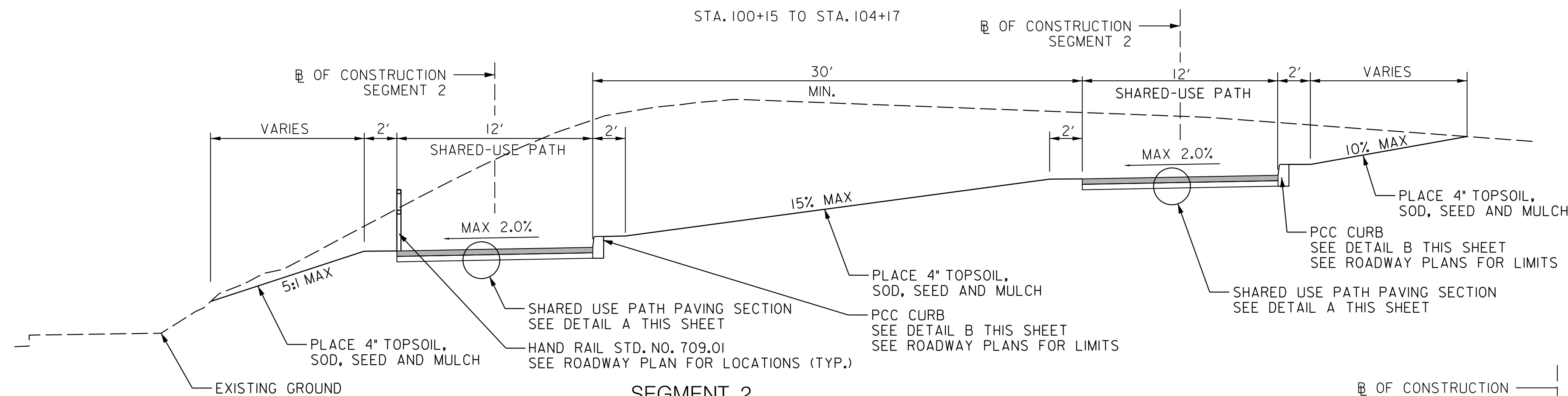
REVISIONS

NOTES:  
 1. PROOF ROLLING OF THE EXISTING ROAD BED SOILS IS REQUIRED PRIOR TO REPLACEMENT OF THE SOILS BASE MATERIALS. UNSTABLE ROADBED SOILS DETECTED DURING PROOF ROLLING MUST BE REMOVED AND REPLACED WITH APPROVED SOILS BASE MATERIAL. THE DEPTH OF THE UNDERCUT WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION. THE SUBGRADE MUST BE COMPACTED TO THE SPECIFIED PERCENTAGE OF THE MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO T-180 METHOD D.



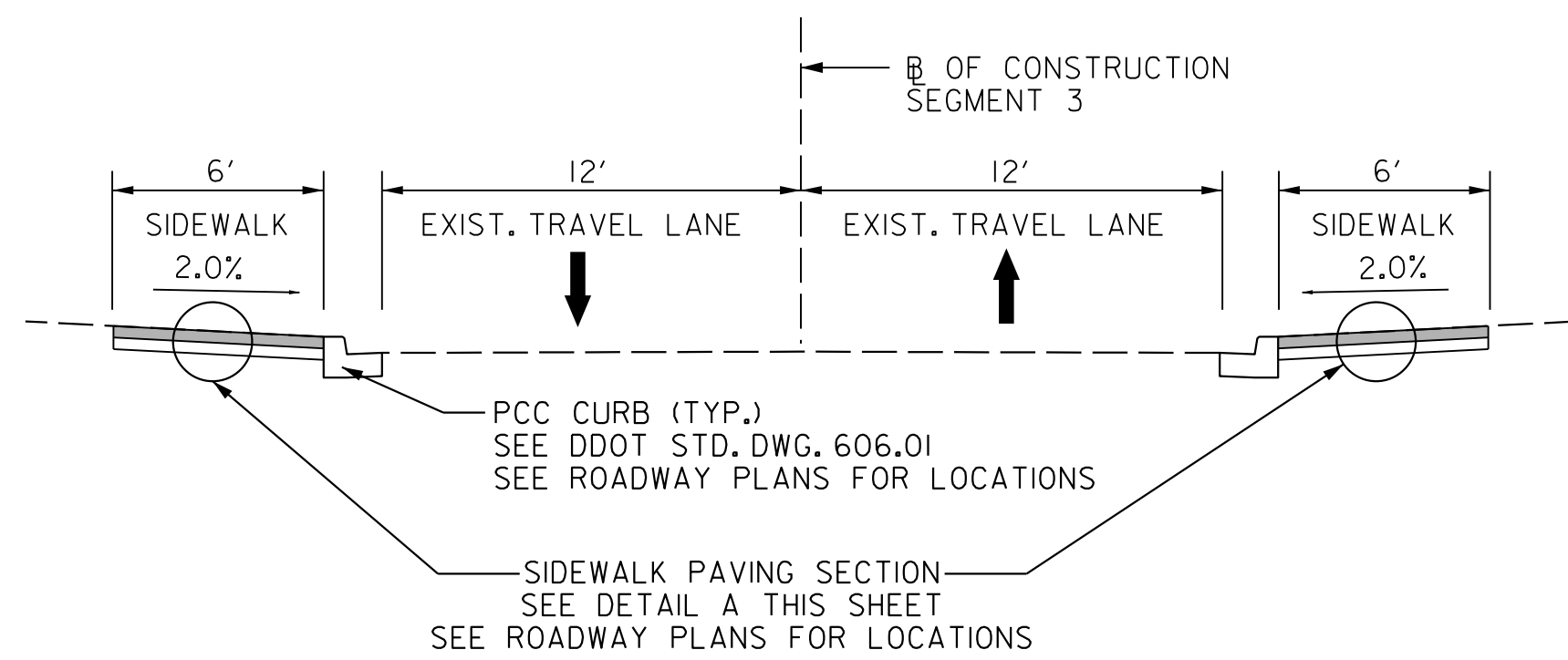
**SEGMENT 1 – PINEY BRANCH RD.**

STA. 100+15 TO STA. 104+17



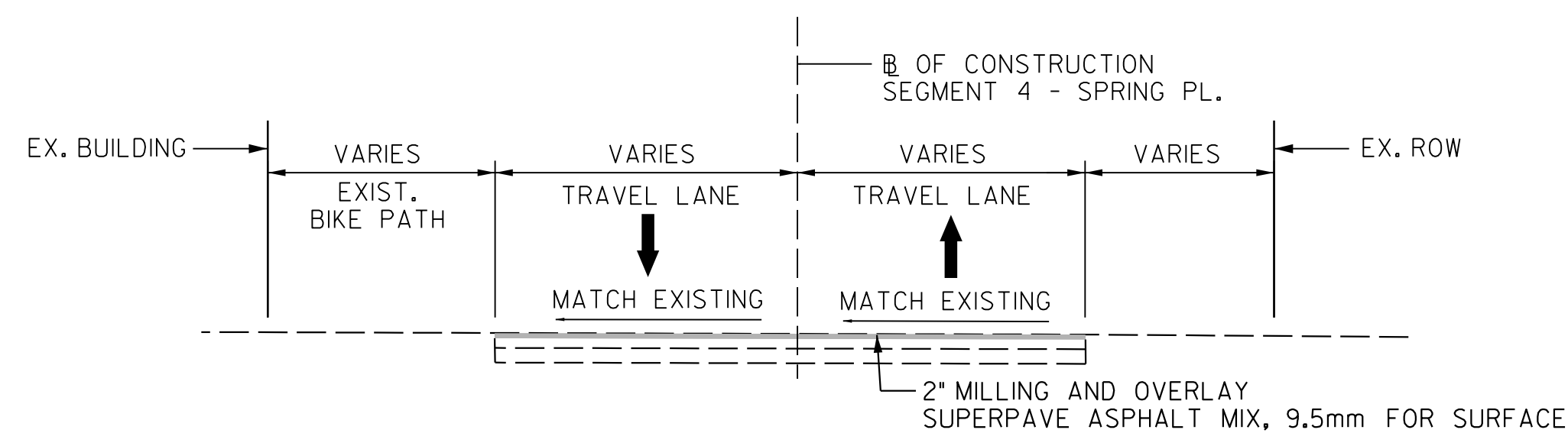
**SEGMENT 2**

STA. 200+36 TO STA. 202+71



**SEGMENT 3 – CHESTNUT ST.**

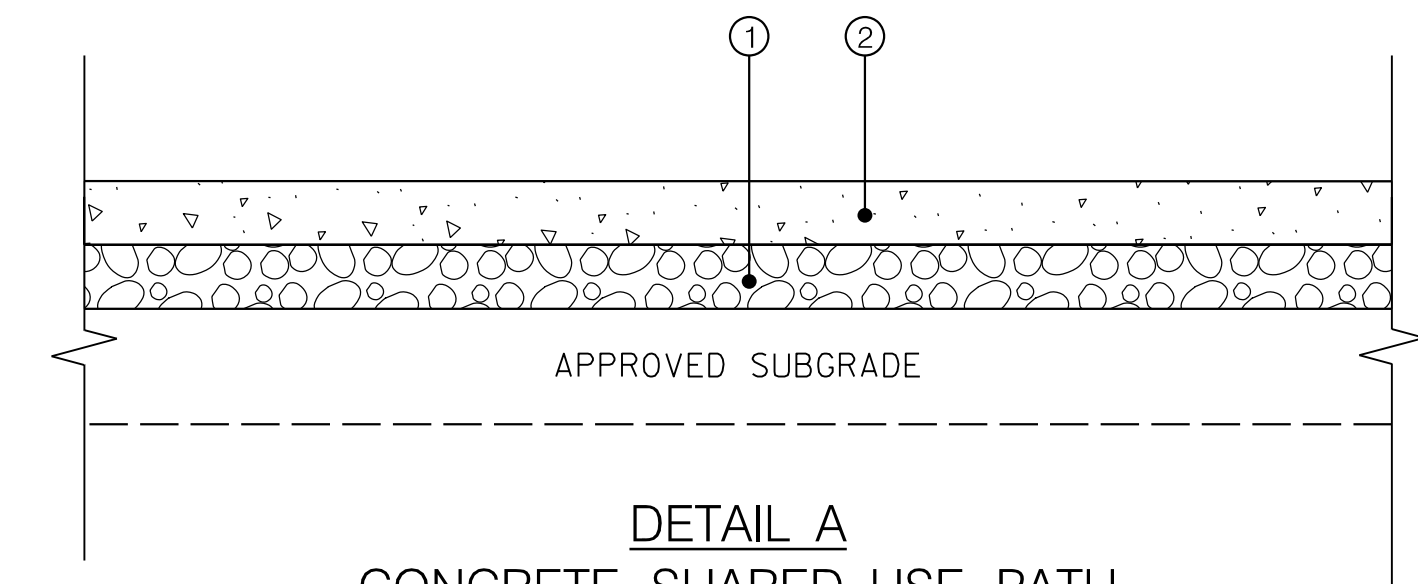
STA. 300+06 TO STA. 303+18



**SEGMENT 4 – SPRING PL.**

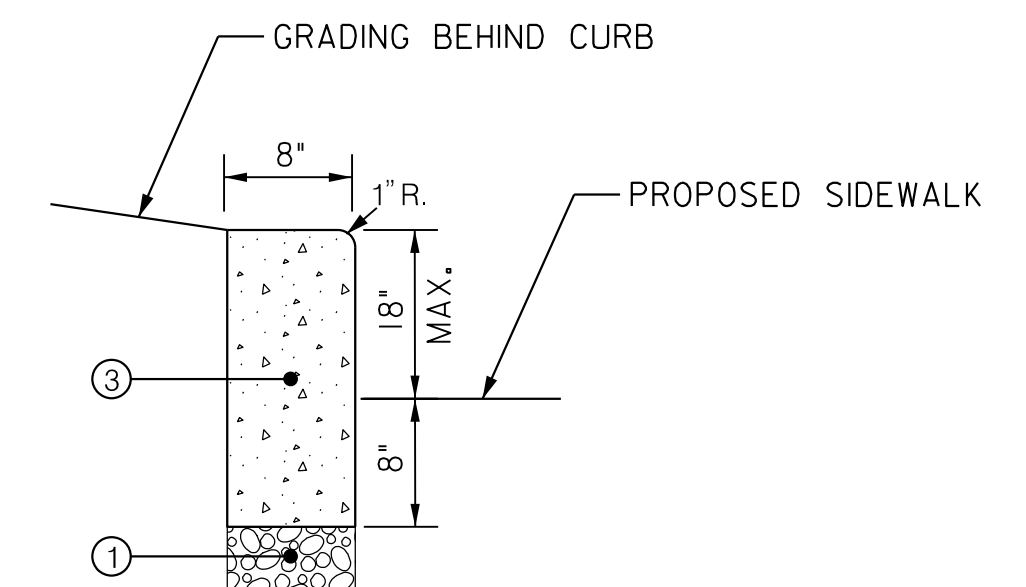
STA. 400+26 TO STA. 405+38

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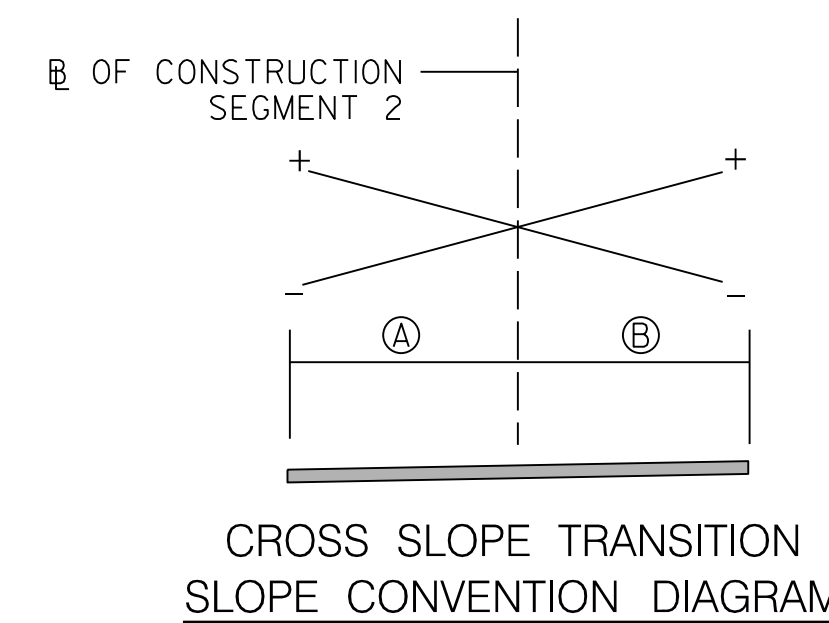
**DETAIL A  
 CONCRETE SHARED-USE PATH  
 AND SIDEWALK SECTION**

NOT TO SCALE



**DETAIL B  
 MODIFIED TYPE A CURB**

NOT TO SCALE



**CROSS SLOPE TRANSITION  
 SLOPE CONVENTION DIAGRAM**

| SEGMENT 2<br>CROSS SLOPE TRANSITIONS |             |       |
|--------------------------------------|-------------|-------|
| STATION                              | CROSS SLOPE |       |
|                                      | A           | B     |
| 201+35.67                            | -2.0%       | 2.0%  |
| 201+71.96                            | 2.0%        | -2.0% |

**PAVEMENT LEGEND**

- ① 4" GRADED AGGREGATE BASE COURSE
- ② 4" PORTLAND CEMENT CONCRETE
- ③ PORTLAND CEMENT CONCRETE CURB

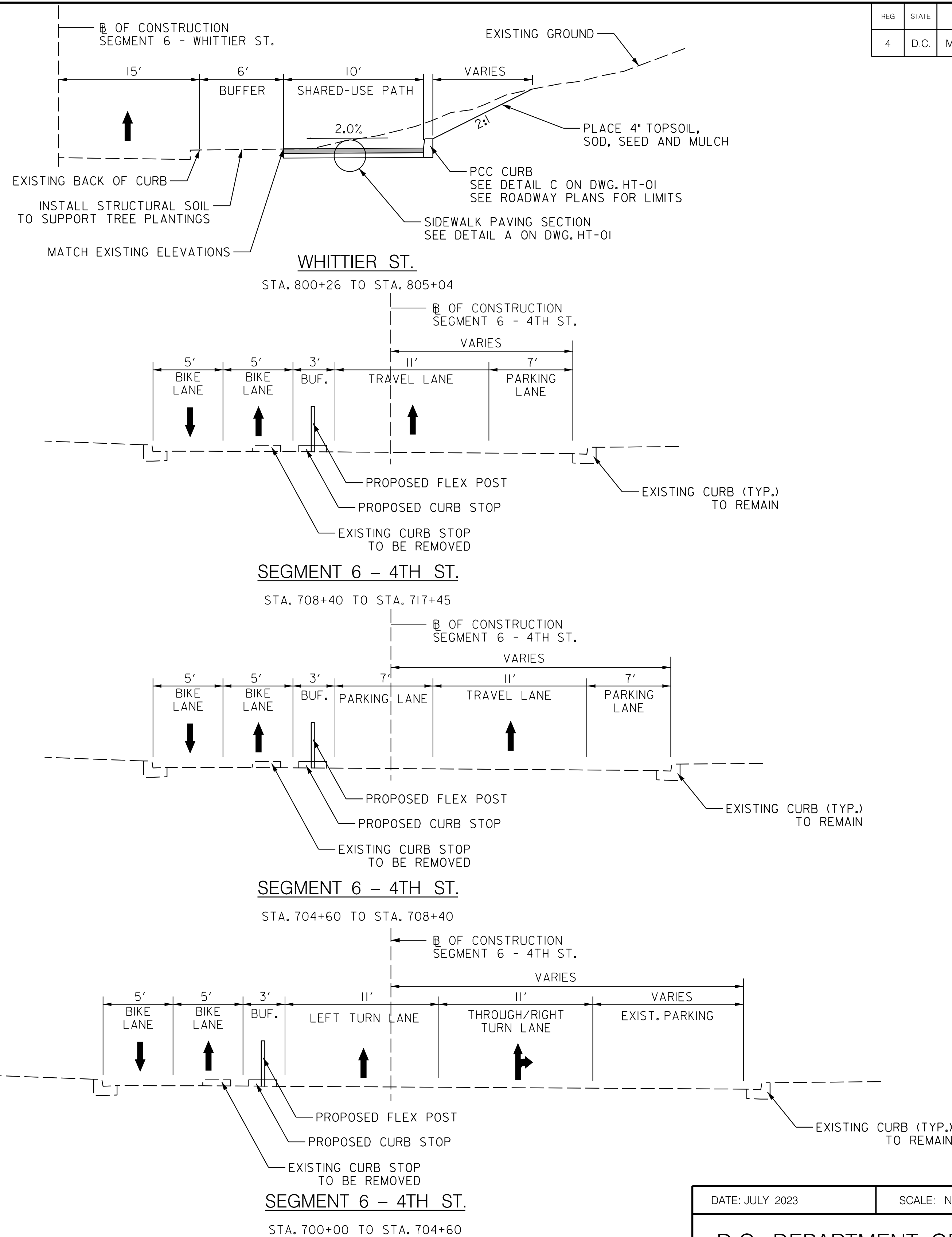
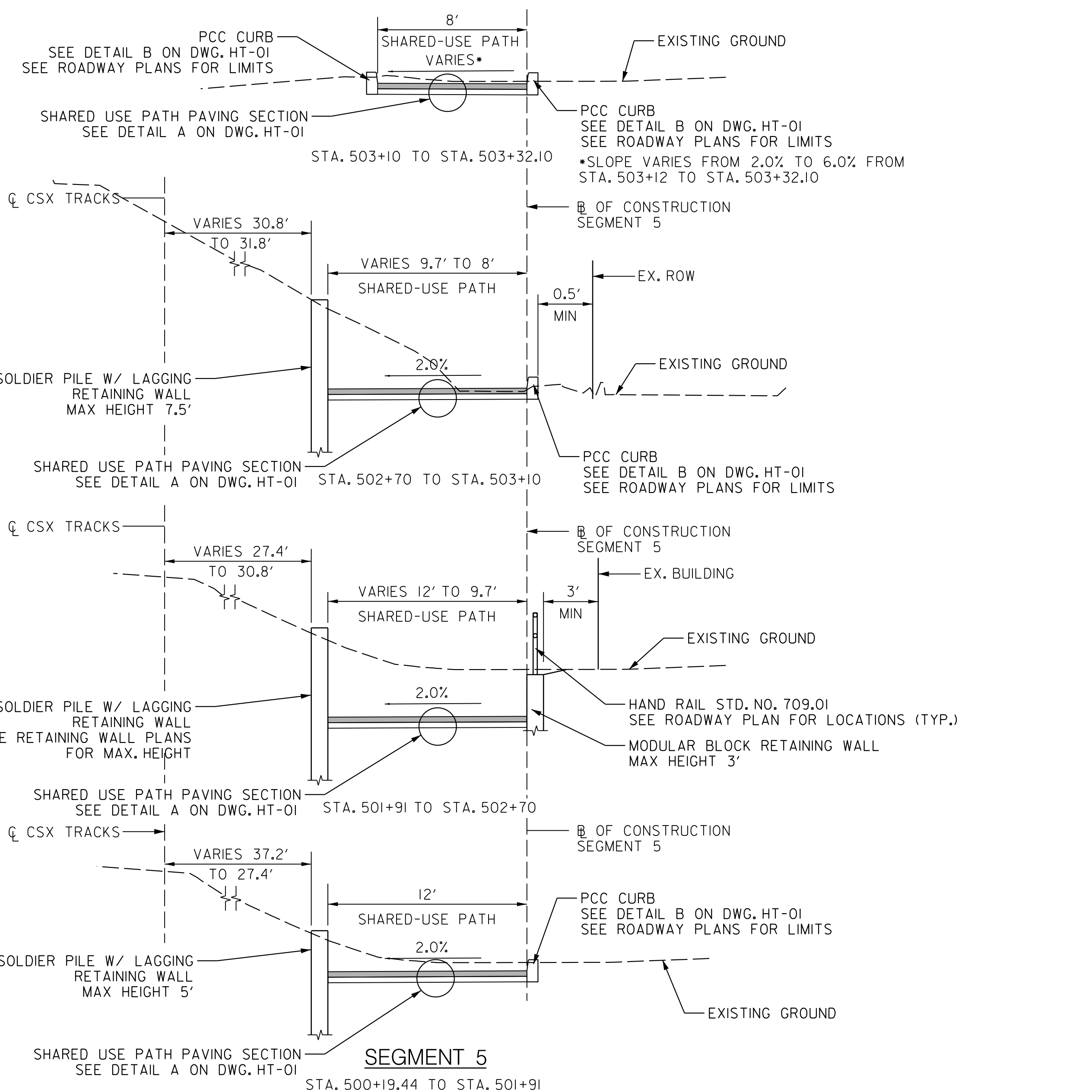
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|--|-------------|---|
| DATE: JULY 2023  | SCALE: NONE | <b>HT-01</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>   INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |             |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>   DESIGN</b>   |             | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>TYPICAL SECTIONS</b>  |             | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 14 OF 160  |

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 7/13/2023

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
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| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 15        | 160          |



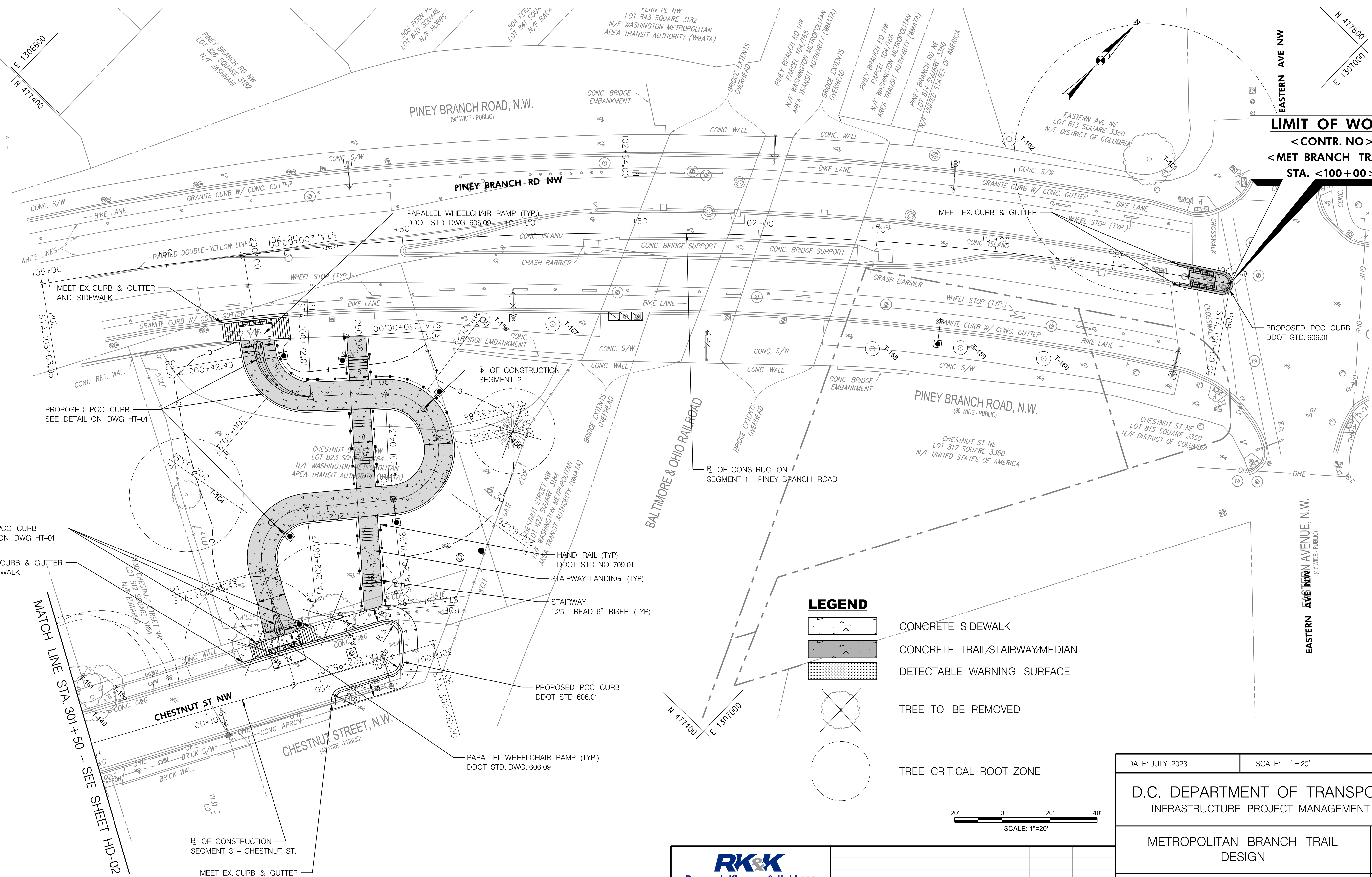
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|--|-------------|---|
| DATE: JULY 2023  | SCALE: NONE | <b>HT-02</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>   INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |             |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>   DESIGN</b>   |             | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>TYPICAL SECTIONS</b>  |             | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE <u> </u><br>SHEET <u>15</u> OF <u>160</u>                                 |

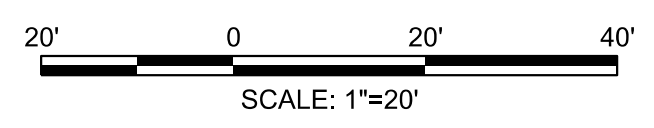
\\ed-rkk.com\fs\Cloud\Projects\2021\186-D00\TMBT\CADD\Plans\pht-002-MetBranchTrail.dgn  
 7/13/2023



**LIMIT OF WORK**  
 <CONTR. NO.>  
 <MET BRANCH TRAIL>  
 STA. <100+00>

**LEGEND**

- CONCRETE SIDEWALK
- CONCRETE TRAIL/STAIRWAY/MEDIAN
- DETECTABLE WARNING SURFACE
- TREE TO BE REMOVED
- TREE CRITICAL ROOT ZONE



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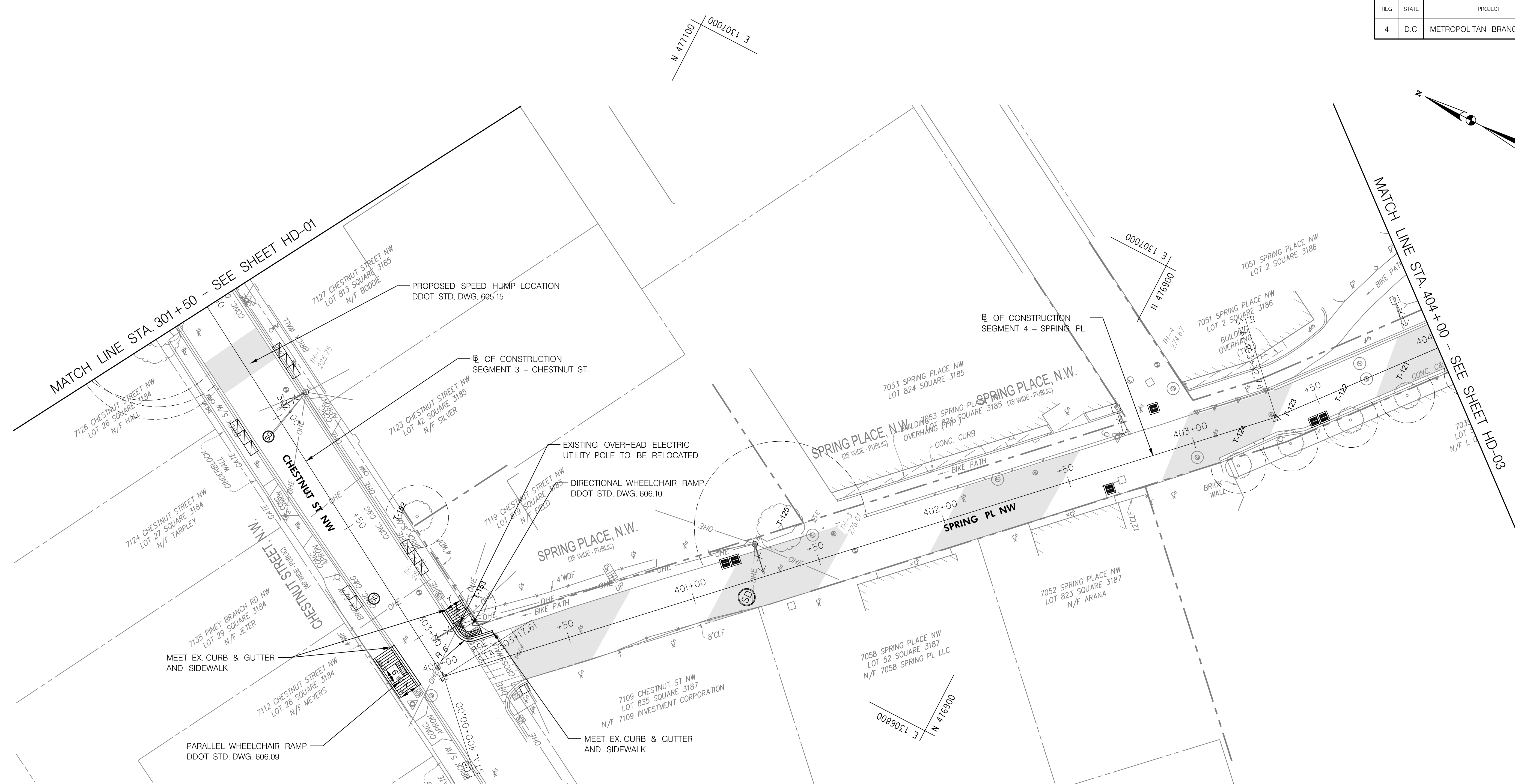
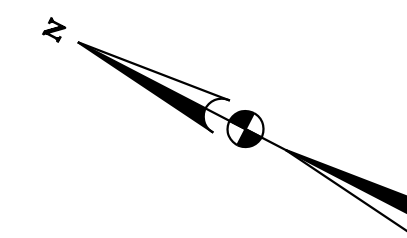
| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
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|--|-----------------|---|
| DATE: JULY 2023  | SCALE: 1" = 20' | <b>HD-01</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>   INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>   DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>ROADWAY PLAN</b>  |                 | DIVISION CHIEF  |
| DATE: <u>JULY 2023</u>   |                 |   |
| FILE: _____  |                 |   |
| SHEET <u>16</u> OF <u>160</u>  |                 |   |



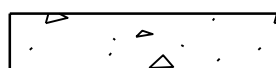

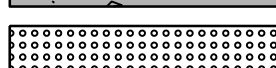

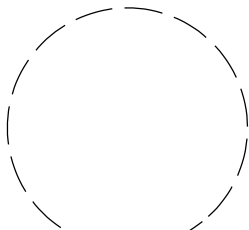
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 7/13/2023



| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 17        | 160          |



**LEGEND**

-  MILL AND OVERLAY
-  ASPHALT SPEED HUMP
-  CONCRETE SIDEWALK
-  CONCRETE STAIRWAY/DRIVEWAY
-  DETECTABLE WARNING SURFACE
-  TREE TO BE REMOVED
-  TREE CRITICAL ROOT ZONE

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



|   |                 |   |
|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>HD-02</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>ROADWAY PLAN</b>   |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 17 OF 160  |

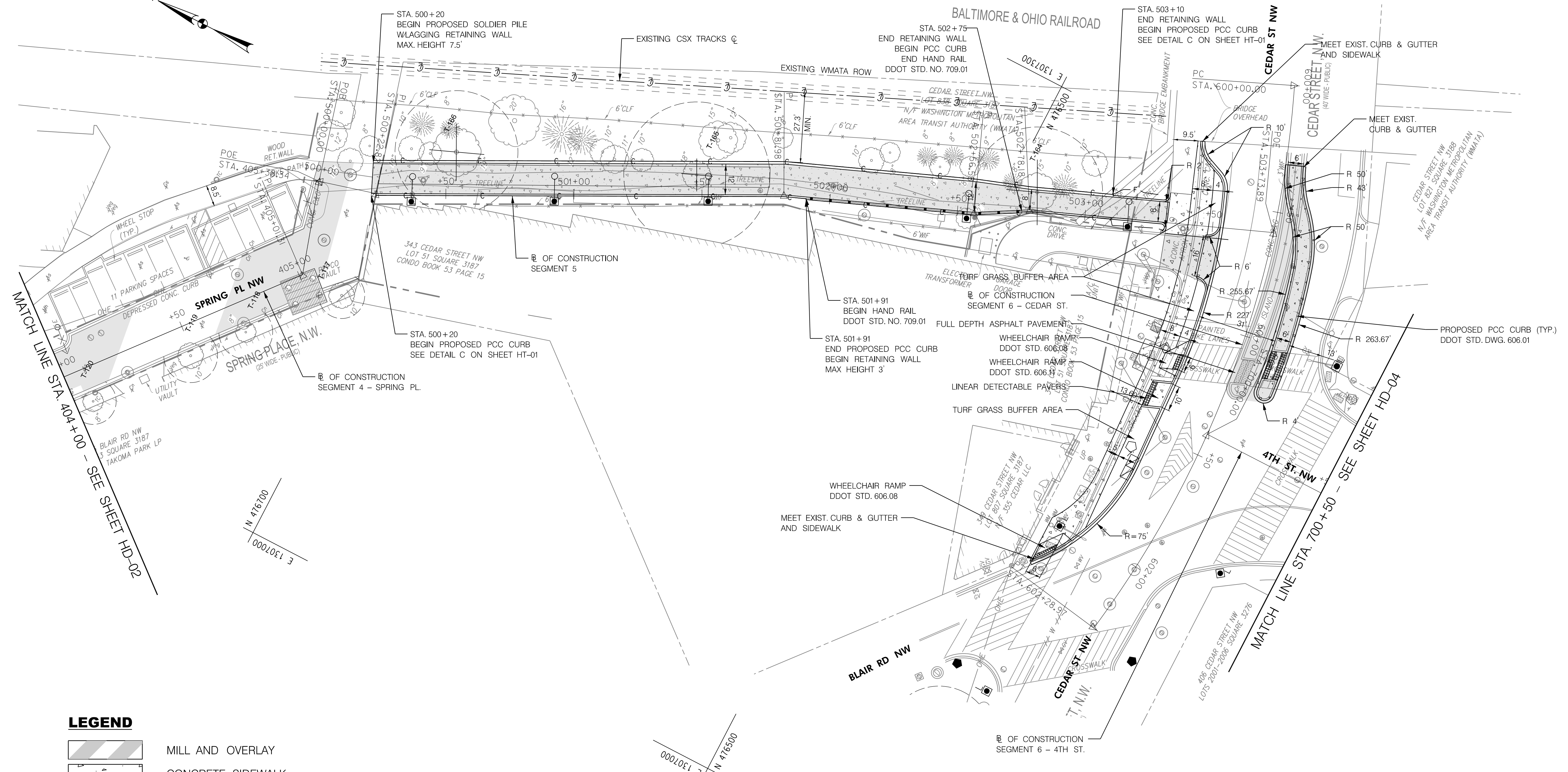
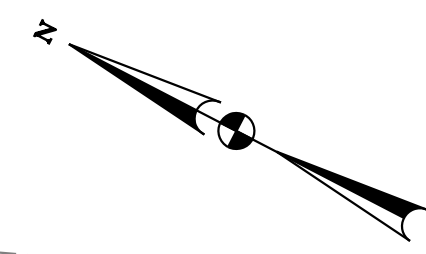
**RK&K**  
**Rummel, Klepper & Kahl, LLP**

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PH: (202) 479-2707 FAX: (855) 263-6293


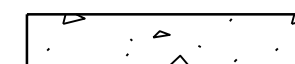

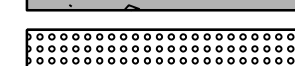


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| NO. | DESCRIPTION | NAME | DATE |
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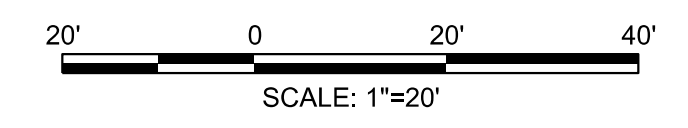
**LEGEND**

-  MILL AND OVERLAY
-  CONCRETE SIDEWALK
-  CONCRETE TRAIL/DRIVEWAY/MEDIAN
-  DETECTABLE WARNING SURFACE
-  TREE TO BE REMOVED
-  TREE CRITICAL ROOT ZONE

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

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| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
|     |             |      |      |
|     |             |      |      |
|     |             |      |      |



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|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>HD-03</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>ROADWAY PLAN</b>   |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 18 OF 160  |

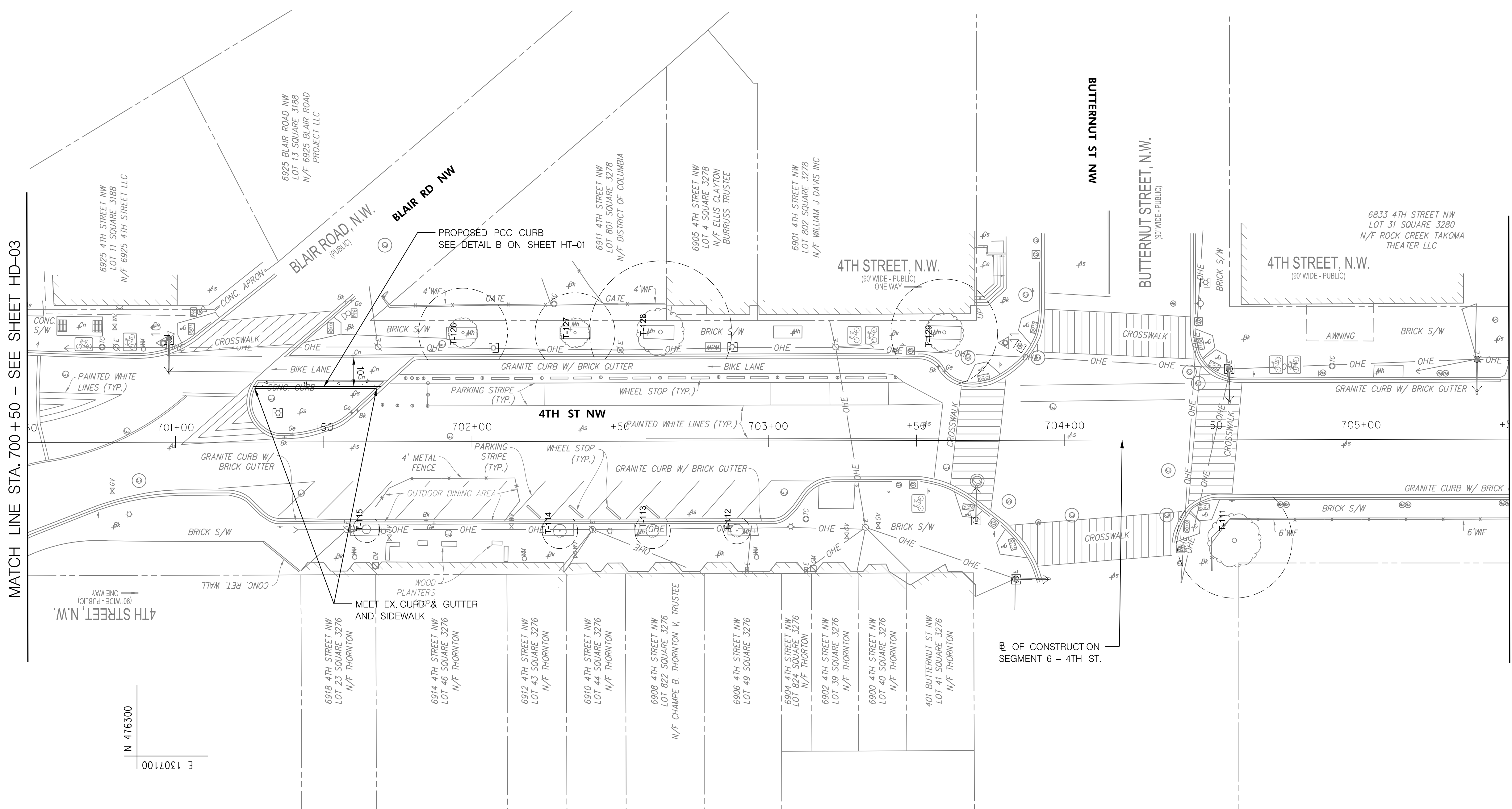
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 19        | 160          |

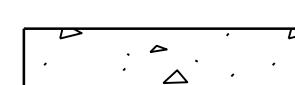

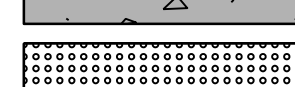
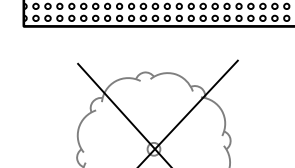
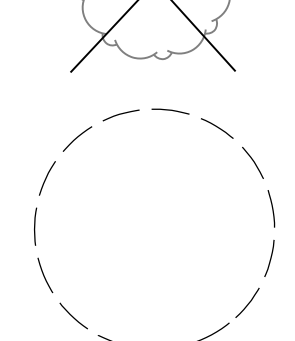


MATCH LINE STA. 700 + 50 - SEE SHEET HD-03

MATCH LINE STA. 705 + 50 - SEE SHEET HD-05



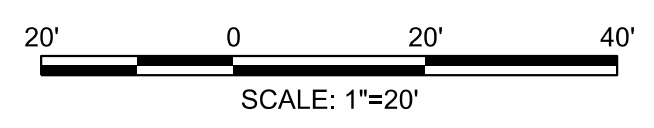
**LEGEND**

-  CONCRETE SIDEWALK
-  CONCRETE STAIRWAY/DRIVEWAY
-  DETECTABLE WARNING SURFACE
-  TREE TO BE REMOVED
-  TREE CRITICAL ROOT ZONE

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

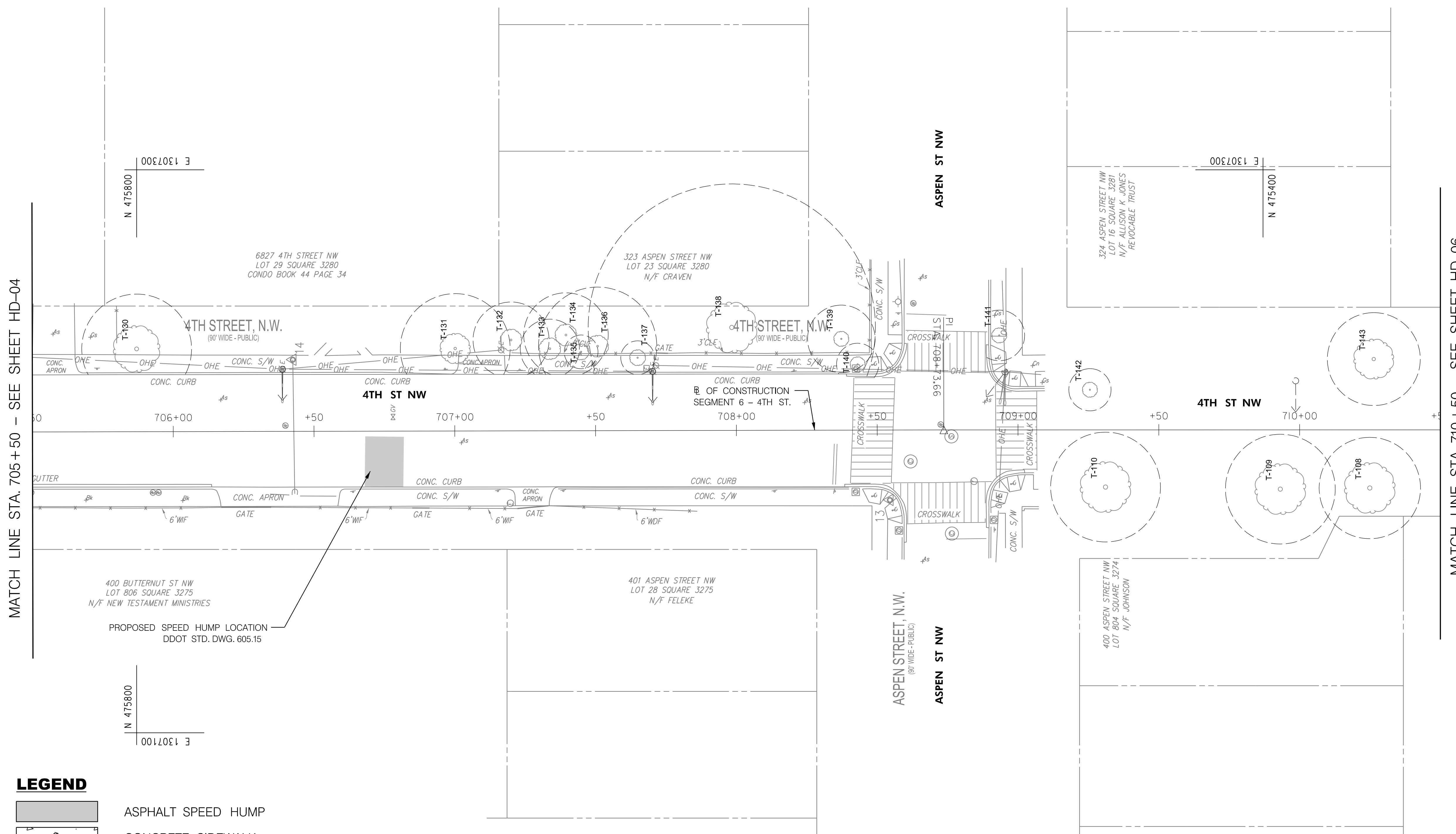
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| NO. | DESCRIPTION | NAME | DATE |
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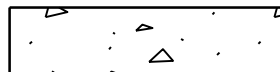

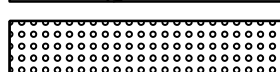
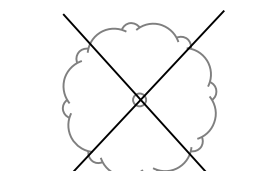
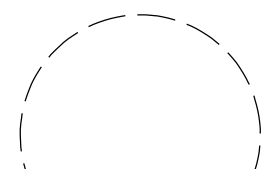


|   |                 |   |
|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>HD-04</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>ROADWAY PLAN</b>   |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 19 OF 160  |

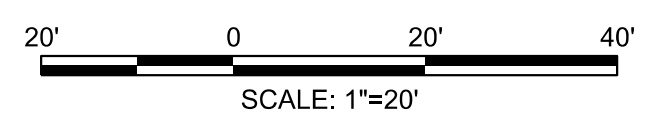
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7/13/2023



**LEGEND**

-  ASPHALT SPEED HUMP
-  CONCRETE SIDEWALK
-  CONCRETE STAIRWAY/DRIVEWAY
-  DETECTABLE WARNING SURFACE
-  TREE TO BE REMOVED
-  TREE CRITICAL ROOT ZONE

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



|   |                 |   |
|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>HD-05</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>ROADWAY PLAN</b>   |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 20 OF 160  |

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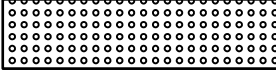


| NO. | DESCRIPTION | NAME | DATE |
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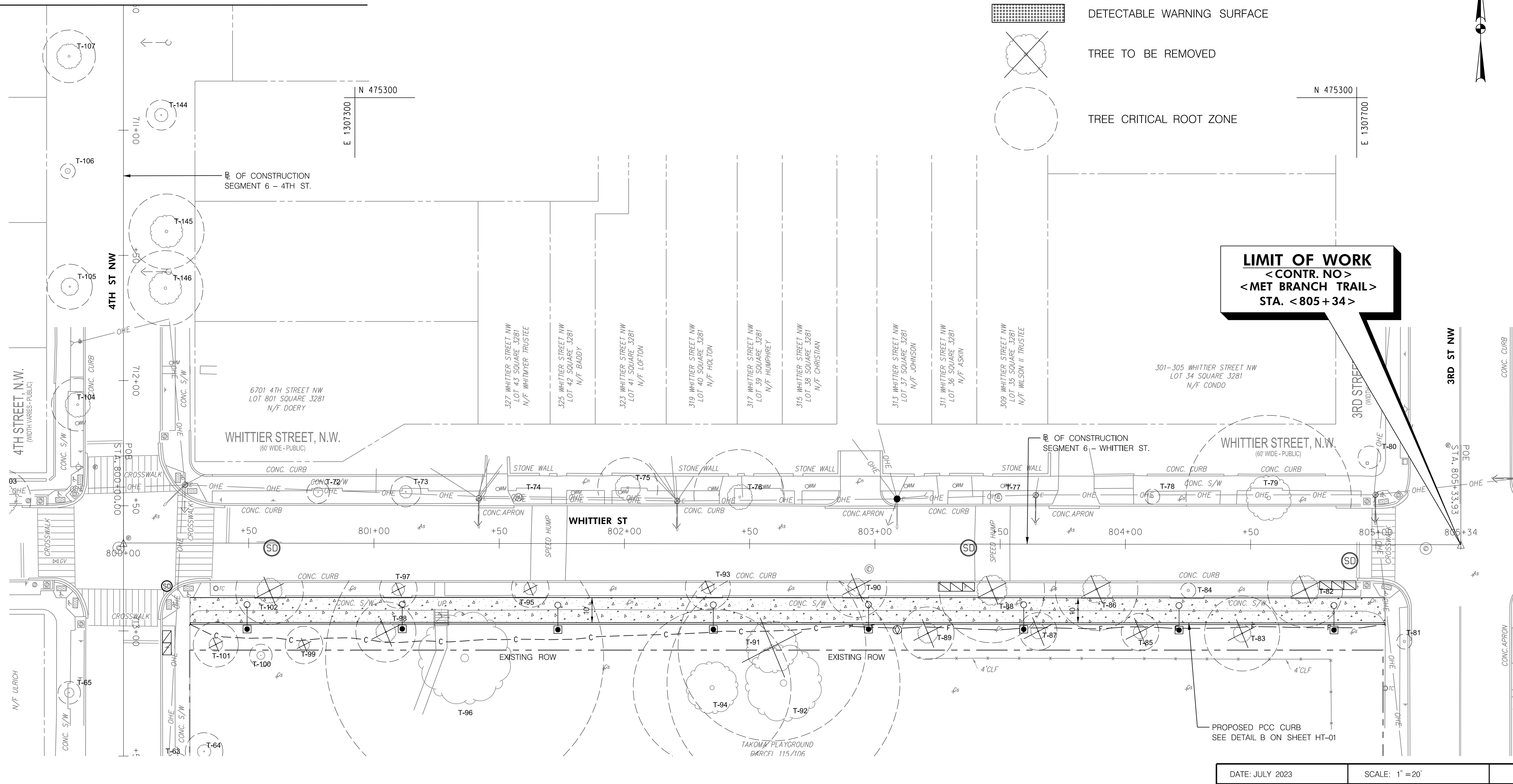
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 21        | 160          |

**LEGEND**

-  CONCRETE SIDEWALK
-  CONCRETE STAIRWAY/DRIVEWAY
-  DETECTABLE WARNING SURFACE
-  TREE TO BE REMOVED
-  TREE CRITICAL ROOT ZONE



MATCH LINE STA. 710+50 - SEE SHEET HD-05



**LIMIT OF WORK**  
 < CONTR. NO >  
 < MET BRANCH TRAIL >  
 STA. < 805+34 >

DATE: JULY 2023      SCALE: 1" = 20'      **HD-06**

D.C. DEPARTMENT OF TRANSPORTATION  
 INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
 DESIGN

**ROADWAY PLAN**

PROJECT ENG. AF  
 DESIGNED BY AF  
 CHECKED BY MJG  
 DRAWN BY AF  
 PROJECT MGR. MJG

DIVISION CHIEF

DATE JULY 2023  
 FILE \_\_\_\_\_  
 SHEET 21 OF 160



**65% DESIGN PLANS  
 NOT FOR CONSTRUCTION**

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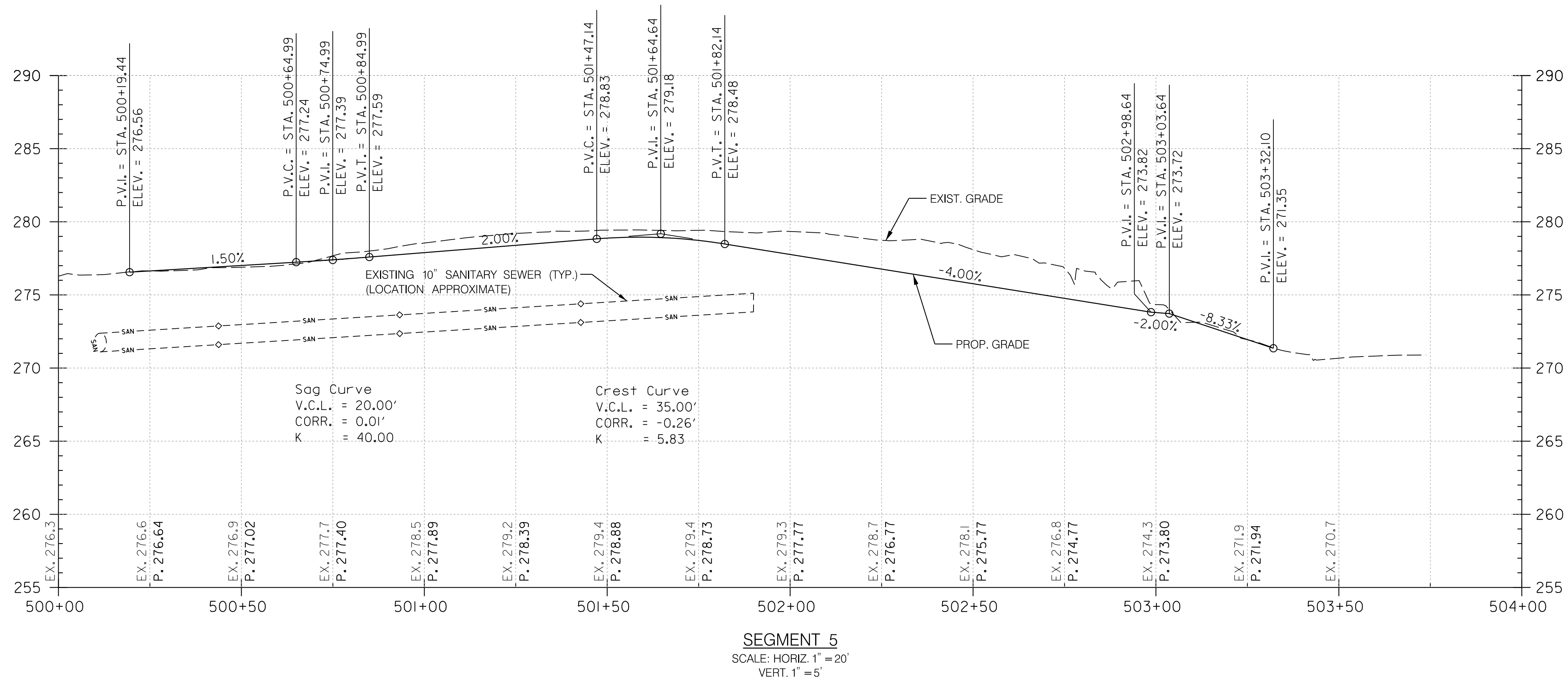
Engineers | Construction Managers | Planners | Scientists  
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| NO. | DESCRIPTION | NAME | DATE |
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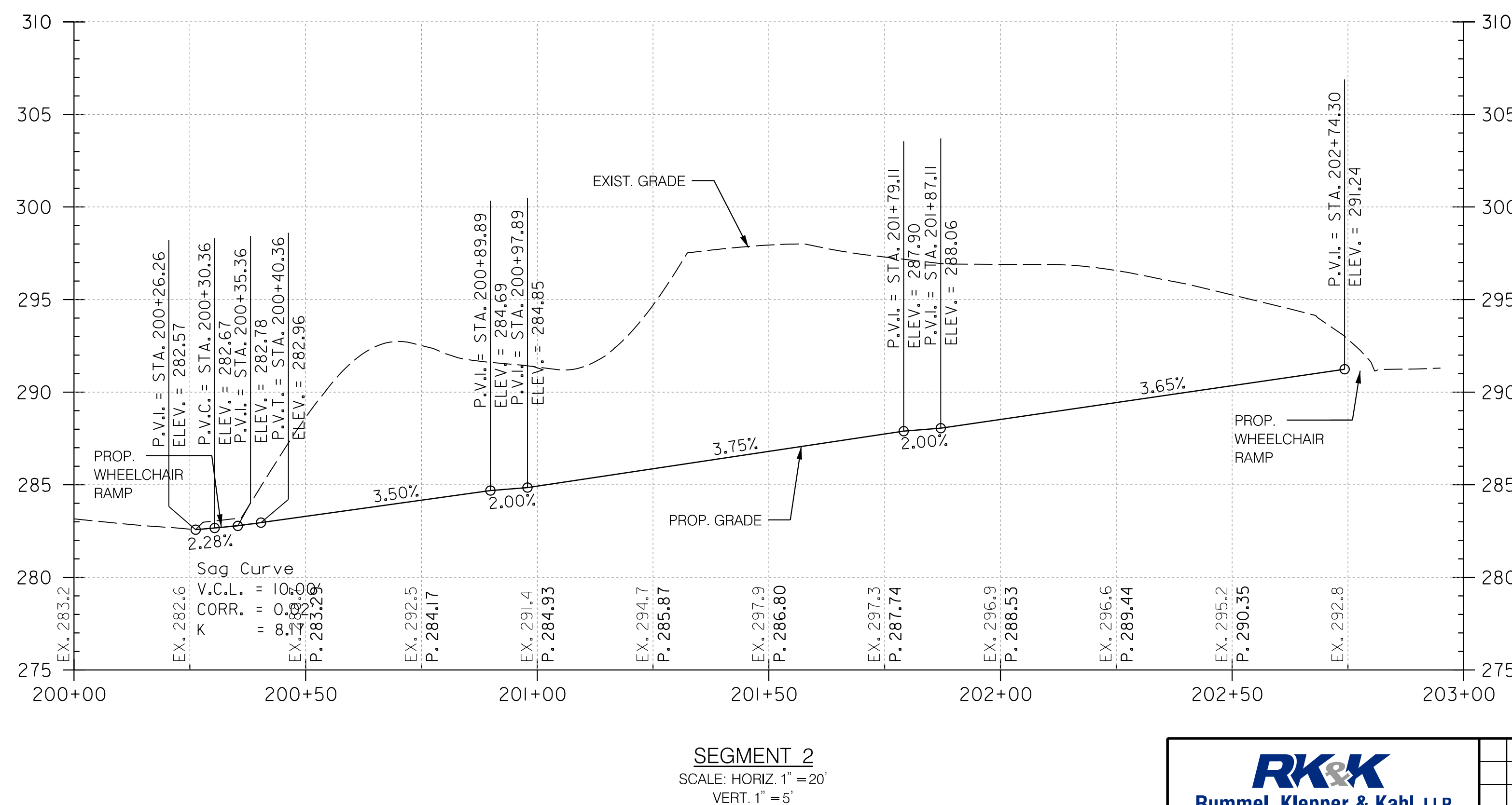
REVISIONS

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 7/13/2023

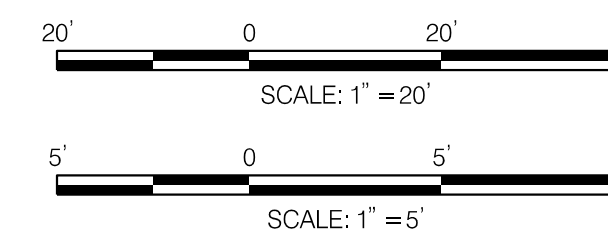
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 22        | 160          |



NOTES:  
1. CONTRACTOR SHALL NOT EXCEED GRADES SHOWN



**DRAFT PLANS  
NOT FOR CONSTRUCTION**



DATE: JULY 2023 SCALE: AS SHOWN HP-01

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

SHARED USE PATH PROFILES

PROJECT ENG. AF  
DESIGNED BY AF  
CHECKED BY MJG  
DRAWN BY AF  
PROJECT MGR. MJG

DIVISION CHIEF

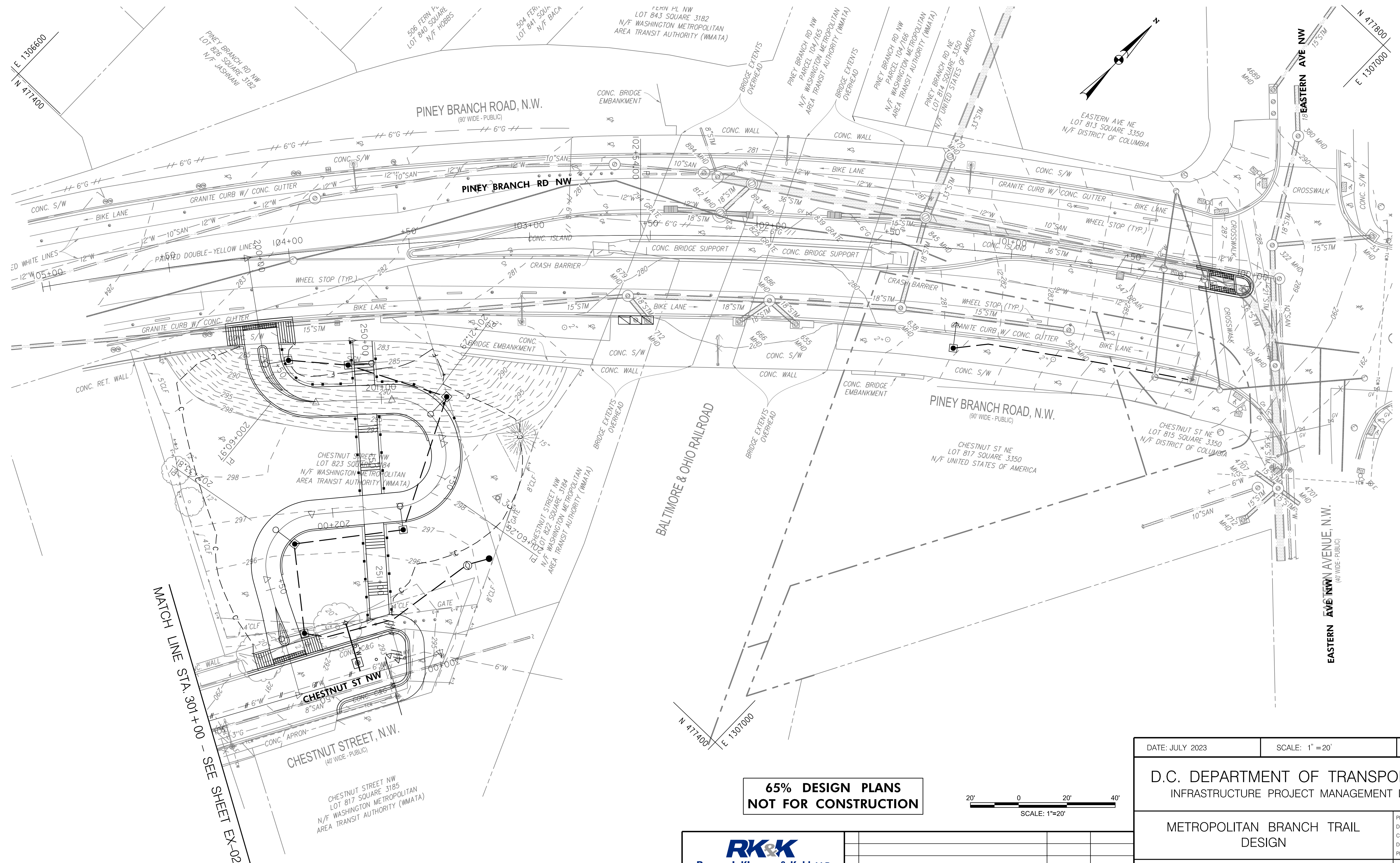
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 22 OF 160

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| NO. | DESCRIPTION | NAME | DATE |
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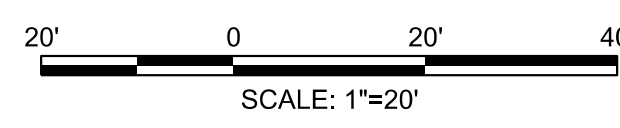
REVISIONS

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MATCH LINE STA 301+00 - SEE SHEET EX-02

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



|   |                 |   |
|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>UT-01</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>COMPOSITE UTILITY PLAN</b>   |                 | DIVISION CHIEF<br><br>DATE _____<br>FILE _____<br>SHEET 23 OF 160   |

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| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
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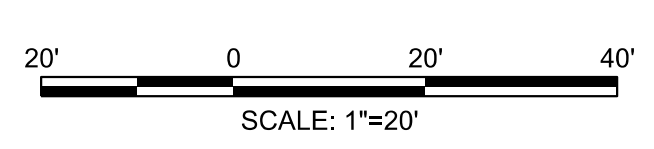
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 24        | 160          |

MATCH LINE STA. 301+00 - SEE SHEET UT-01

MATCH LINE STA. 404+00 - SEE SHEET UT-03



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



DATE: JULY 2023      SCALE: 1" = 20'      **UT-02**

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

**COMPOSITE UTILITY PLAN**

PROJECT ENG. AF  
 DESIGNED BY AF  
 CHECKED BY MJG  
 DRAWN BY AF  
 PROJECT MGR. MJG  
 DIVISION CHIEF  
 DATE \_\_\_\_\_  
 FILE \_\_\_\_\_  
 SHEET 24 OF 160

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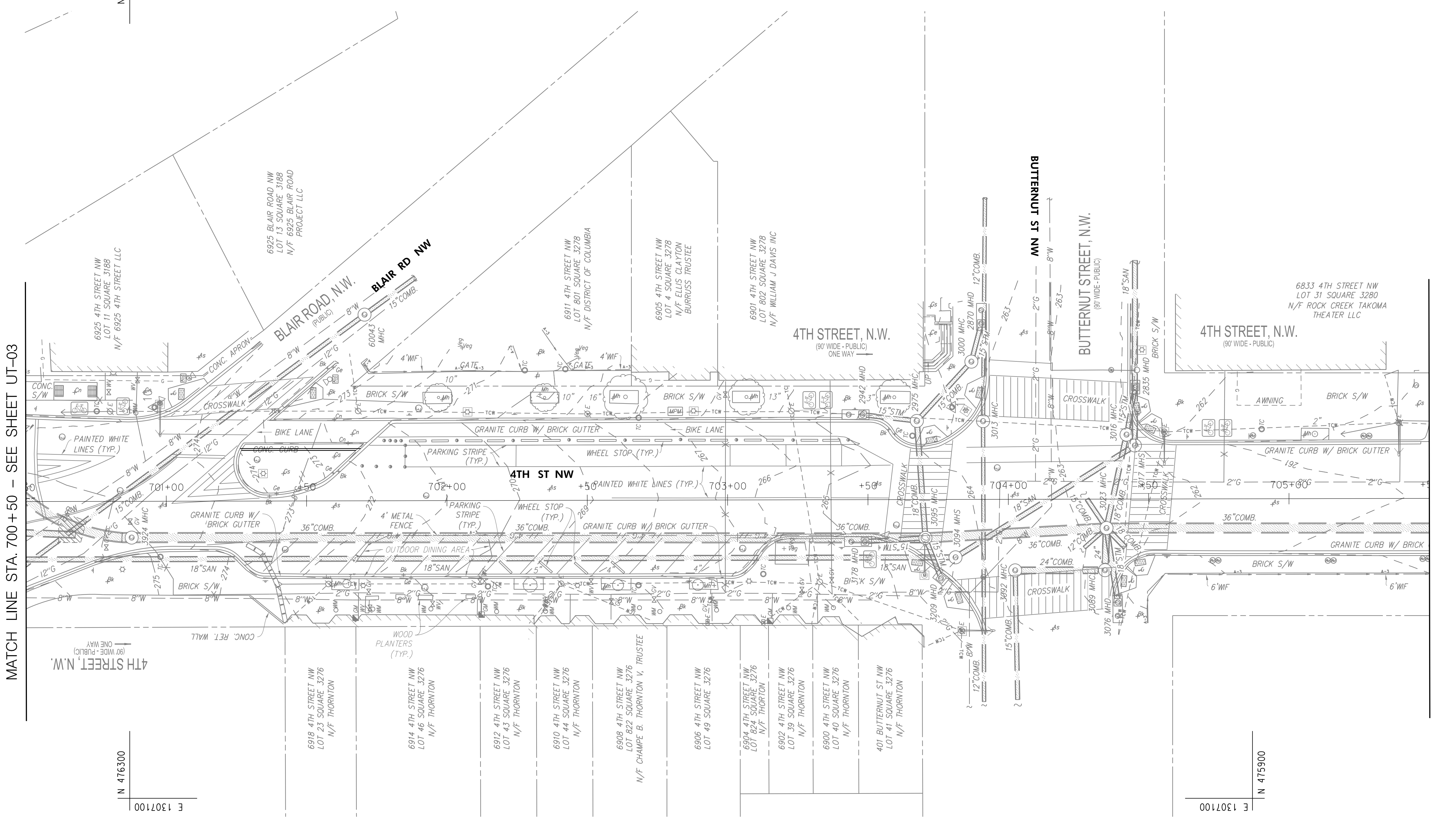
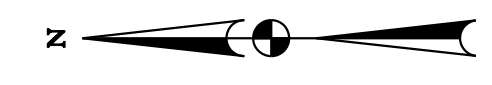
| NO. | DESCRIPTION | NAME | DATE |
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REVISIONS

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 7/13/2023







MATCH LINE STA. 700+50 - SEE SHEET UT-03

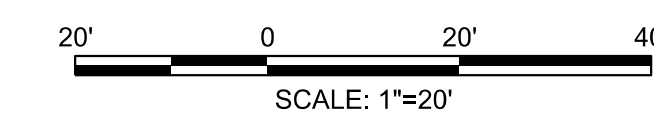
MATCH LINE STA. 705+50 - SEE SHEET UT-05

N 476300  
E 1307400

N 476300  
E 1307100

N 475900  
E 1307100

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



|   |                 |   |
|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>UT-04</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>COMPOSITE UTILITY PLAN</b>   |                 | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET 26 OF 160   |

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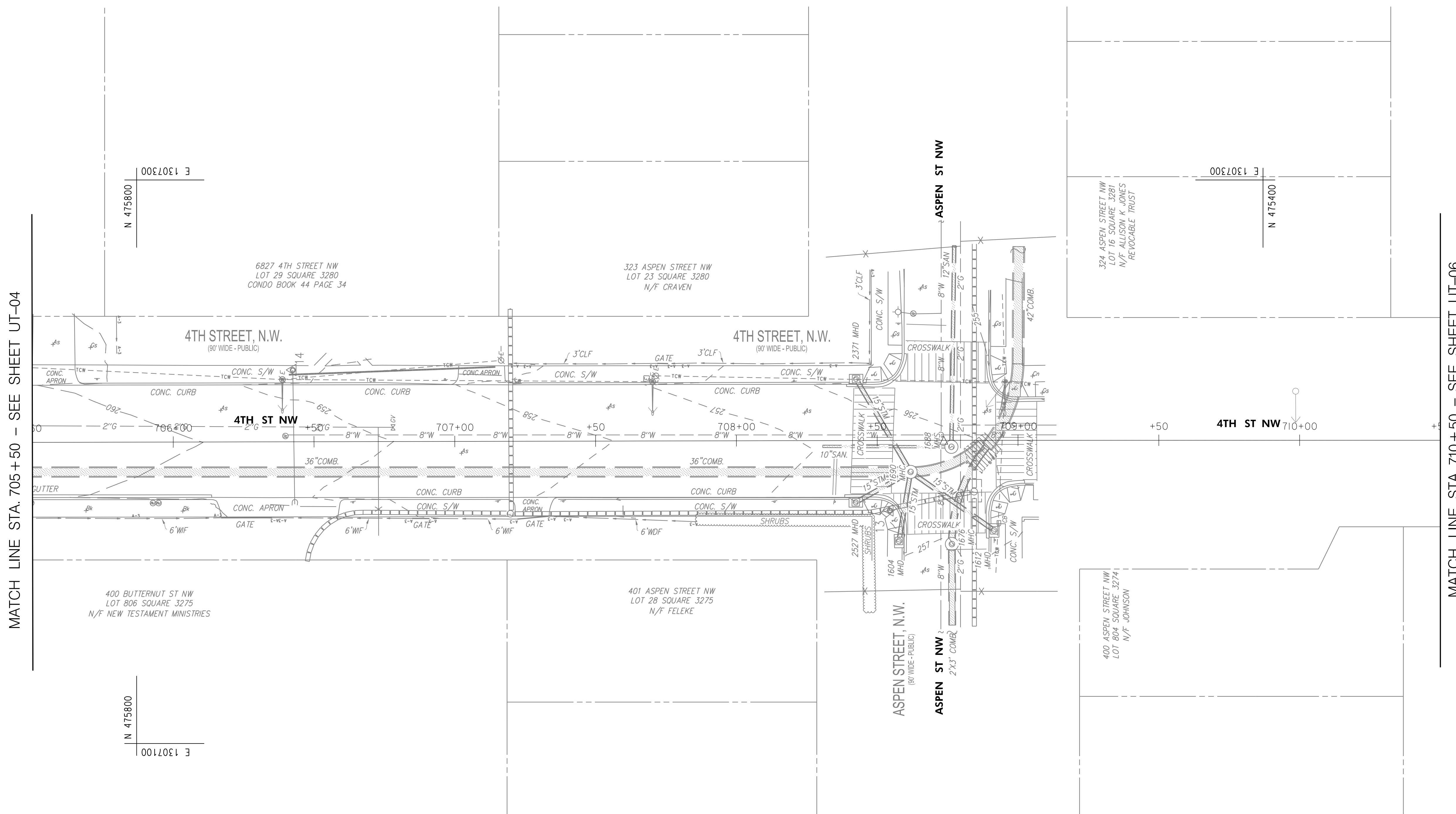
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| NO. | DESCRIPTION | NAME | DATE |
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7/13/2023

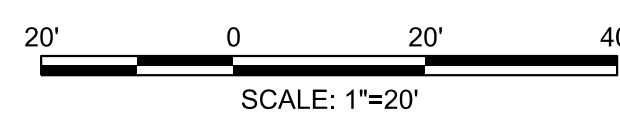
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 27        | 160          |



MATCH LINE STA. 705+50 - SEE SHEET UT-04

MATCH LINE STA. 710+50 - SEE SHEET UT-06

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



DATE: JULY 2023      SCALE: 1" = 20'      **UT-05**

**D.C. DEPARTMENT OF TRANSPORTATION**  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

**METROPOLITAN BRANCH TRAIL**  
DESIGN

**COMPOSITE UTILITY PLAN**

PROJECT ENG. AF  
DESIGNED BY AF  
CHECKED BY MJG  
DRAWN BY AF  
PROJECT MGR. MJG  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 27 OF 160

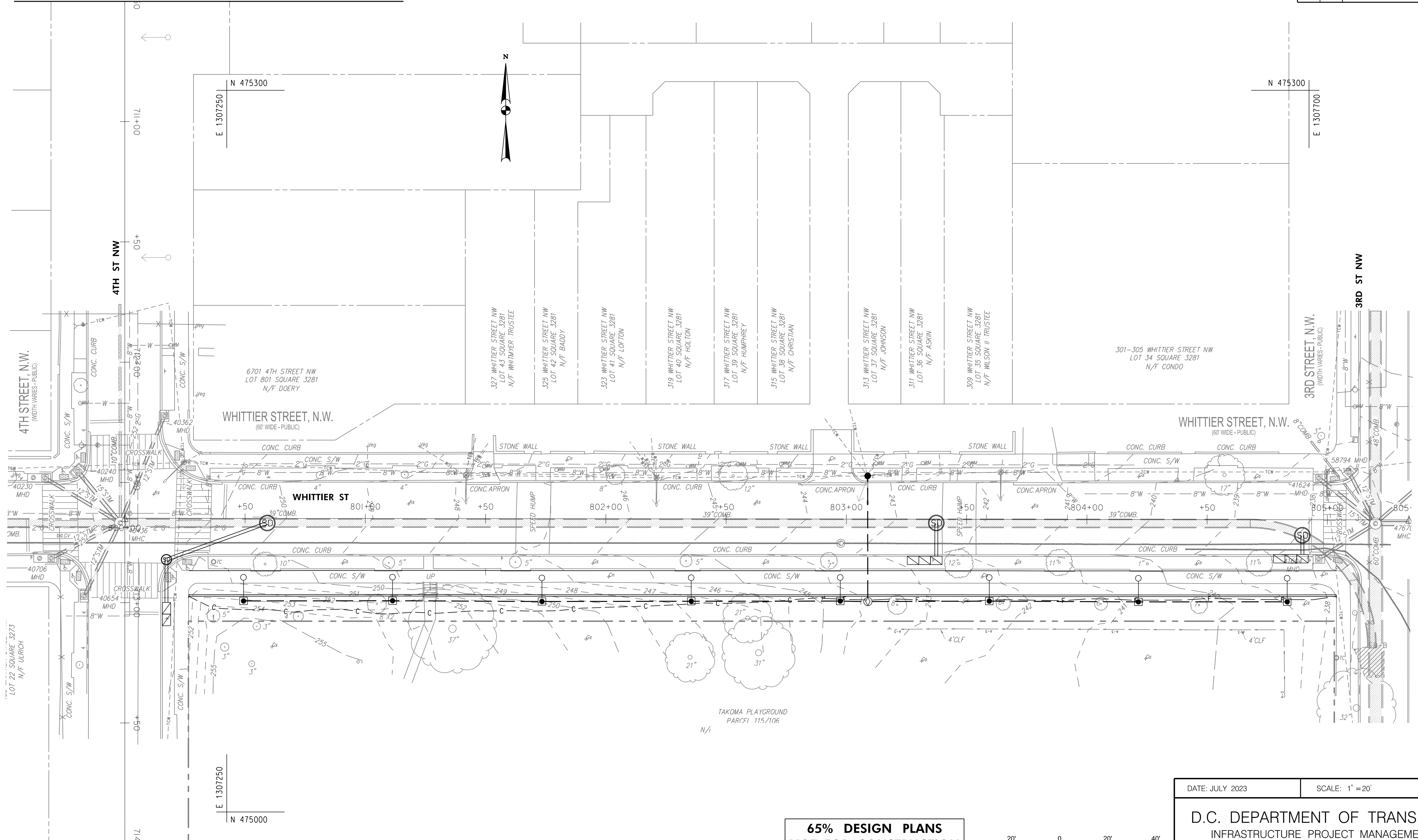
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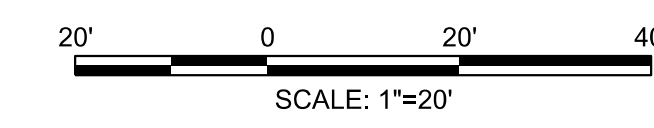
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 28        | 160          |

MATCH LINE STA. 710+50 - SEE SHEET UT-05



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



DATE: JULY 2023      SCALE: 1" = 20'      **UT-06**

**D.C. DEPARTMENT OF TRANSPORTATION**  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

**METROPOLITAN BRANCH TRAIL  
DESIGN**

**COMPOSITE UTILITY PLAN**

|                |           |
|----------------|-----------|
| PROJECT ENG.   | AF        |
| DESIGNED BY    | AF        |
| CHECKED BY     | MJG       |
| DRAWN BY       | AF        |
| PROJECT MGR.   | MJG       |
| DIVISION CHIEF |           |
| DATE           |           |
| FILE           |           |
| SHEET          | 28 OF 160 |

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 7/13/2023

| STRUCTURE TABLE |   |
|-----------------|---|
| NAME            | STRUCTURE DETAILS   |
| 40230 MHD       | RIM = 252.55<br>12" INV OUT = 247.85 SE   |
| 40240 MHD       | RIM = 252.44<br>15" INV OUT = 248.09 SE   |
| 40362 MHD       | RIM = 251.98<br>12" INV OUT = 246.88 S  |
| 40436 MHC       | RIM = 251.85<br>10" INV IN = 242.96 N<br>36" INV IN = 239.67 W<br>12" INV IN = 244.85 SW<br>12" INV IN = 245.45 SW<br>12" INV IN = 246.37 NW<br>15" INV IN = 245.47 NW<br>12" INV IN = 245.80 N<br>36" INV OUT = 239.59 E |
| 40654 MHD       | RIM = 252.10  |
| 40706 MHD       | RIM = 252.46<br>12" INV OUT = 247.86 NE   |
| 41604 MHD       | RIM = 237.80<br>12" INV OUT = 233.05 NE   |
| 41624 MHD       | RIM = 238.54<br>15" INV OUT = 233.79 SE   |
| 47670 MHC       | RIM = 237.60<br>18" INV IN = 226.81 E<br>48" INV IN = 225.91 N<br>15" INV IN = 229.86 NW<br>12" INV IN = 234.08 NW<br>12" INV IN = 233.60 SW<br>8" INV IN = 234.08 NW<br>60" INV OUT = 225.79 S                           |
| 50178 MHC       | RIM = 237.82<br>18" INV IN = 227.41 E<br>12" INV IN = 234.17 N<br>18" INV OUT = 227.26 W  |
| 58774 MHD       | RIM = 238.58<br>12" INV OUT = 234.08 S  |
| 58794 MHD       | RIM = 238.38<br>12" INV OUT = 233.48 SE   |

| STRUCTURE TABLE |  |
|-----------------|--|
| NAME            | STRUCTURE DETAILS  |
| 1781 DRAIN      | RIM = 277.59   |
| 1850 GRATE      | RIM = 274.48   |
| 1851 MHD        | RIM = 274.56<br>12" INV IN = 270.21 N<br>18" INV IN = 267.71 NE<br>8" INV IN = 271.11 SE<br>18" INV OUT = 267.56 SW    |
| 1858 DRAIN      | RIM = 273.93<br>36" INV IN = 266.03 NW<br>15" INV IN = 270.13 NW<br>36" INV OUT = 266.03 SE                            |
| 1865 MHD        | RIM = 274.59<br>15" INV OUT = 270.24 SE  |
| 1901 MHD        | RIM = 274.78<br>36" INV IN = 265.48 NW<br>18" INV IN = 266.88 NE<br>36" INV OUT = 265.43 SE                            |
| 1960 MHD        | RIM = 274.86<br>36" INV IN = 264.79 NW<br>12" INV IN = 265.16 SW<br>36" INV OUT = 264.73 SE<br>24" INV OUT = 274.36 SE |
| 2041 MHD        | RIM = 274.94   |
| 2129 DRAIN      | RIM = 275.87<br>8" INV OUT = 271.47 NW   |
| 2193 MHS        | RIM = 276.43<br>10" INV IN = 262.57 NW<br>10" INV OUT = 262.41 E   |
| 2194 MHS        | RIM = 275.82<br>10" INV IN = 262.58 NW<br>10" INV IN = 263.23 SW<br>10" INV OUT = 262.62 SE                            |
| 2273 MHS        | RIM = 276.81<br>10" INV IN = 264.17 SW<br>10" INV OUT = 264.13 NE  |
| 4302 MHS        | RIM = 280.00<br>10" INV IN = 261.52 N<br>10" INV OUT = 261.41 S  |
| 4369 MHS        | RIM = 276.34<br>10" INV IN = 262.87 W<br>10" INV OUT = 262.77 SE   |

| STRUCTURE TABLE |  |
|-----------------|--|
| NAME            | STRUCTURE DETAILS  |
| 1604 MHD        | RIM = 257.24<br>15" INV OUT = 252.89 E   |
| 1612 MHD        | RIM = 256.70   |
| 1676 MHC        | RIM = 257.02<br>24" INV IN = 245.50 W<br>24" INV OUT = 245.50 E  |
| 1688 MHS        | RIM = 256.17<br>10" INV IN = 246.33 N<br>12" INV OUT = 245.83 E  |
| 1690 MHC        | RIM = 256.55<br>36" INV IN = 242.88 N<br>15" INV IN = 250.50 NE<br>15" INV IN = 250.55 NW<br>15" INV IN = 249.55 W<br>15" INV IN = 249.20 SW<br>36" INV OUT = 242.75 S |
| 2371 MHD        | RIM = 256.19<br>15" INV OUT = 251.34 SW  |
| 2527 MHD        | RIM = 257.04<br>15" INV OUT = 252.29 SE  |

| STRUCTURE TABLE |  |
|-----------------|--|
| NAME            | STRUCTURE DETAILS  |
| 3924 MHC        | RIM = 274.80<br>36" INV IN = 256.38 N<br>36" INV OUT = 256.00 S  |
| 3995 MHS        | RIM = 276.52<br>15" INV IN = 260.52 E<br>18" INV OUT = 260.50 S  |
| 3996 MHD        | RIM = 275.82<br>24" INV IN = 267.55 W<br>12" INV IN = 271.35 W<br>12" INV IN = 263.15 NE<br>24" INV OUT = 263.02 S                         |
| 3997 MHD        | RIM = 276.55<br>15" INV IN = 269.49 W<br>24" INV IN = 267.97 W<br>24" INV OUT = 267.91 E   |
| 4027 MHD        | RIM = 275.33<br>12" INV IN = 263.85 N<br>12" INV OUT = 264.08 SW   |
| 4060 MHS        | RIM = 272.52<br>10" INV IN = 260.97 N<br>10" INV OUT = 260.91 S  |
| 4298 DRAIN      | RIM = 278.44<br>8" INV OUT = 274.97 W  |
| 4932 MHC        | RIM = 278.13<br>12" INV IN = 270.80 W<br>10" INV IN = 270.80 NW<br>12" INV OUT = 270.80 SE   |
| 4934 MHD        | RIM = 278.11<br>15" INV IN = 274.26 S<br>15" INV IN = 270.25 W<br>15" INV IN = 273.78 SE<br>15" INV OUT = 270.17 E                         |
| 4939 MHC        | RIM = 277.76<br>12" INV IN = 270.48 NW<br>10" INV IN = 270.48 E<br>15" INV OUT = 270.48 SE   |
| 4945 MHD        | RIM = 278.39<br>12" INV IN = 274.85 N<br>15" INV IN = 272.20 W<br>15" INV IN = 272.64 W<br>12" INV IN = 275.60 E<br>24" INV OUT = 269.20 E |
| 5099 MHD        | RIM = 278.91   |
| 5164 MHD        | RIM = 277.98   |
| 59911 MHD       | RIM = 270.97<br>36" INV IN = 258.02 E<br>36" INV OUT = 258.02 SW   |
| 60028           | RIM = 279.52   |
| 60030 MHD       | RIM = 279.45<br>18" INV IN = 274.72 W<br>15" INV IN = 274.87 NW<br>15" INV OUT = 274.22 E  |
| 60034 DRAIN     | RIM = 279.22<br>15" INV OUT = 273.31 E   |
| 60037 MHD       | RIM = 278.55<br>15" INV IN = 274.59 W<br>15" INV OUT = 274.54 N  |
| 60043 MHC       | RIM = 273.14<br>15" INV IN = 264.53 NW<br>15" INV OUT = 264.53 SE  |

| STRUCTURE TABLE |  |
|-----------------|--|
| NAME            | STRUCTURE DETAILS  |
| 2835 MHD        | RIM = 262.28   |
| 2870 MHD        | RIM = 263.38<br>15" INV OUT = 260.38 W   |
| 2942 MHD        | RIM = 264.95<br>15" INV OUT = 259.60 S   |
| 2975 MHC        | RIM = 264.37<br>15" INV IN = 258.17 SE<br>15" INV IN = 258.12 N<br>18" INV OUT = 258.07 W  |
| 3000 MHC        | RIM = 263.63<br>15" INV IN = 260.23 E<br>15" INV OUT = 258.73 NW   |
| 3013 MHC        | RIM = 263.42<br>12" INV IN = 258.55 W<br>12" INV OUT = 258.55 E  |
| 3016 MHC        | RIM = 262.12   |
| 3017 MHS        | RIM = 262.05<br>18" INV IN = 256.43 NW<br>18" INV OUT = 256.43 E   |
| 3023 MHC        | RIM = 262.71<br>36" INV IN = 249.96 N<br>18" INV IN = 258.96 W<br>24" INV IN = 250.79 W<br>18" INV IN = 257.76 E<br>15" INV IN = 256.86 NE<br>12" INV IN = 258.36 NW<br>18" INV IN = 253.81 SW<br>36" INV OUT = 249.91 S |
| 3076 MHD        | RIM = 262.99<br>18" INV OUT = 259.09 E   |
| 3089 MHC        | RIM = 262.61   |
| 3092 MHC        | RIM = 263.81<br>15" INV IN = 258.81 W<br>24" INV OUT = 255.86 S  |
| 3094 MHS        | RIM = 264.00<br>18" INV IN = 256.73 N<br>18" INV OUT = 256.73 SE   |
| 3095 MHC        | RIM = 264.17<br>36" INV IN = 250.32 N<br>15" INV IN = 258.77 W<br>18" INV IN = 257.07 E<br>15" INV IN = 258.67 N<br>36" INV OUT = 250.22 S   |
| 3178 MHD        | RIM = 265.34<br>15" INV OUT = 258.99 S   |
| 3209 MHD        | RIM = 264.37<br>15" INV OUT = 259.77 E   |

| STRUCTURE TABLE |   |
|-----------------|---|
| NAME            | STRUCTURE DETAILS   |
| 1284 MHD        | RIM = 282.12  |
| 1289 MHD        | RIM = 281.84<br>15" INV IN = 278.04 N<br>15" INV IN = 276.14 S<br>15" INV IN = 275.34 NE<br>24" INV IN = 269.04 SW<br>36" INV OUT = 267.14 SE |
| 1388 MHD        | RIM = 282.55  |
| 1456 MHD        | RIM = 282.27<br>15" INV OUT = 276.62 N  |

| STRUCTURE TABLE |  |
|-----------------|--|
| NAME            | STRUCTURE DETAILS  |
| 53 MHD          | RIM = 290.83   |
| 308 MHD         | RIM = 289.57<br>21" INV IN = 278.82 NW<br>36" INV IN = 269.93 NW<br>36" INV OUT = 269.87 SE  |
| 322 MHD         | RIM = 288.37<br>18" INV IN = 281.92 NW<br>15" INV IN = 283.47 NE<br>21" INV OUT = 279.32 SE  |
| 380 MHD         | RIM = 290.30<br>18" INV IN = 285.20 NW<br>18" INV OUT = 285.20 SE  |
| 470 MHD         | RIM = 281.95<br>33" INV IN = 273.00 N<br>33" INV OUT = 273.00 S  |
| 547 DRAIN       | RIM = 284.54   |
| 583 MHD         | RIM = 283.53<br>15" INV OUT = 277.38 SW  |
| 638 MHD         | RIM = 280.31<br>18" INV IN = 272.91 SW<br>15" INV IN = 273.41 NE<br>18" INV OUT = 272.76 NW  |
| 655 MHD         | RIM = 279.73<br>18" INV OUT = 274.58 W   |
| 666 MHD         | RIM = 279.66<br>18" INV OUT = 275.21 N   |
| 679 MHD         | RIM = 279.70<br>15" INV IN = 273.60 SW<br>18" INV IN = 275.00 E<br>18" INV OUT = 273.60 NE   |
| 686 MHD         | RIM = 279.27<br>18" INV IN = 273.42 SW<br>18" INV IN = 274.47 S<br>18" INV IN = 274.27 E<br>18" INV OUT = 273.32 NE                            |
| 712 MHD         | RIM = 280.09<br>18" INV OUT = 275.24 W   |
| 794 GRATE       | RIM = 280.25<br>18" INV OUT = 275.44 NE  |
| 812 MHD         | RIM = 280.11<br>18" INV IN = 275.00 SW<br>18" INV IN = 275.00 NE<br>18" INV OUT = 272.85 N   |
| 825 GRATE       | RIM = 280.07<br>18" INV OUT = 275.17 SW  |
| 839 GRATE       | RIM = 280.08<br>15" INV OUT = 276.08 NE  |
| 845 MHD         | RIM = 280.87<br>33" INV IN = 272.47 N<br>36" INV IN = 271.52 SW<br>15" INV IN = 275.72 SW<br>18" INV IN = 271.47 SE<br>36" INV OUT = 271.42 NE |
| 893 MHD         | RIM = 280.13<br>36" INV IN = 272.33 SW<br>18" INV IN = 272.23 S<br>36" INV OUT = 272.13 NE   |
| 894 MHD         | RIM = 280.39<br>8" INV IN = 276.79 NW<br>36" INV OUT = 272.79 NE   |
| 4701 MHD        | RIM = 295.31<br>36" INV IN = 269.32 NW<br>15" INV IN = 287.93 W<br>15" INV IN = 285.98 E<br>15" INV IN = 288.45 S<br>36" INV OUT = 269.32 SE   |
| 4712 MHD        | RIM = 293.04<br>15" INV OUT = 289.55 N   |

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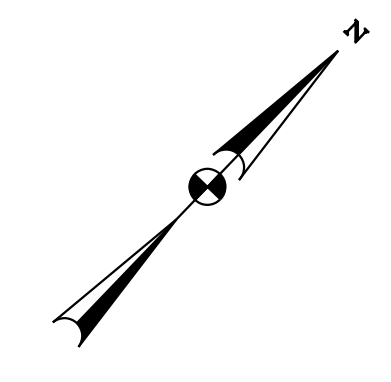
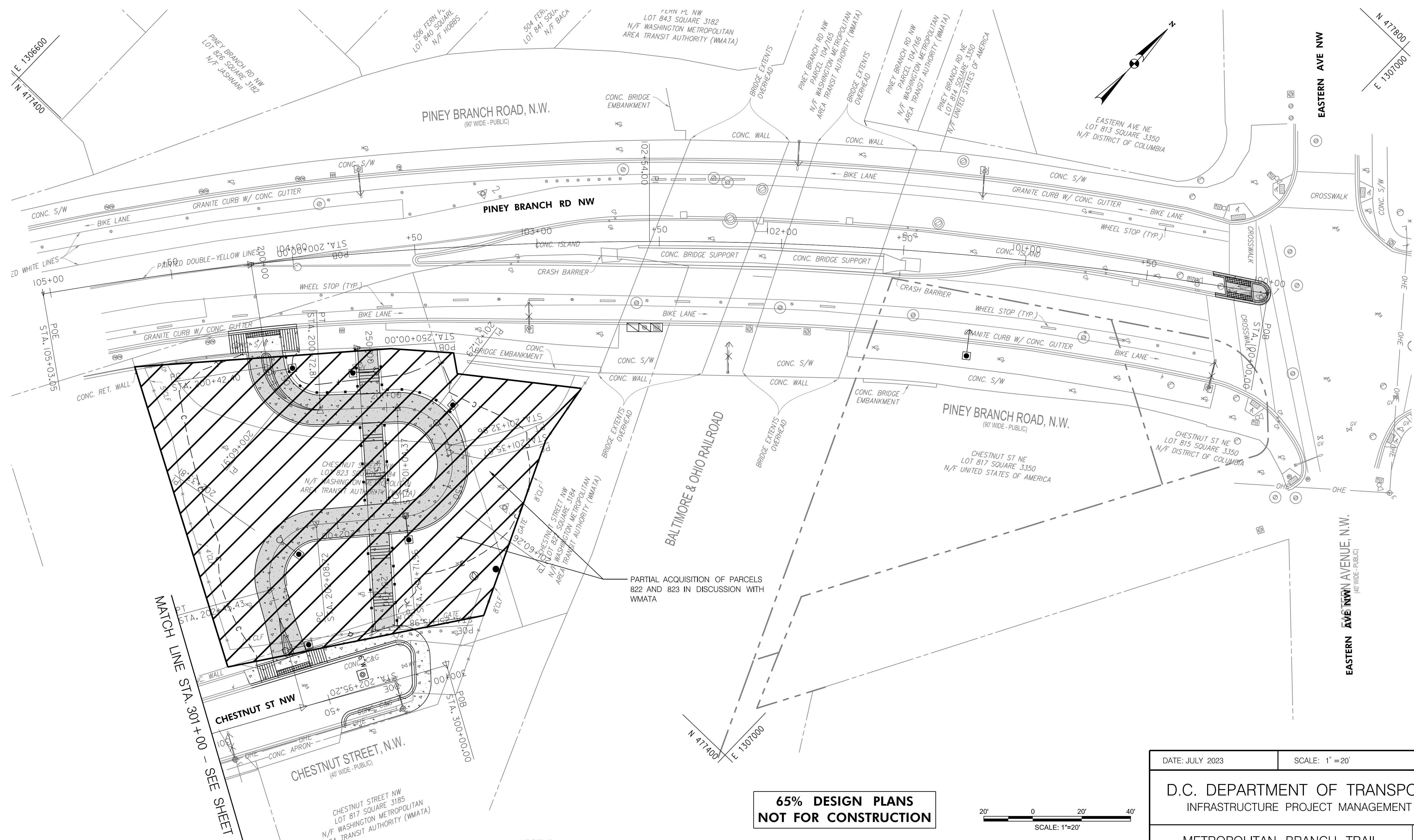
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| DATE: JULY 2023   | SCALE: | <b>UT-07</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |        |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |        | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| EXISTING RIM & INVERT ELEVATIONS  |        | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET 29 OF 160   |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
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| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 30        | 160          |



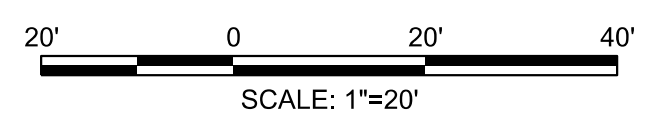
MATCH LINE STA 301+00 - SEE SHEET RW-02

PARTIAL ACQUISITION OF PARCELS 822 AND 823 IN DISCUSSION WITH WMATA

**LEGEND**

|                             |  |
|-----------------------------|--|
| PROPOSED ROW                |  |
| PROPOSED PERPETUAL EASEMENT |  |
| EXISTING ROW                |  |

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|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>RW-01</b>  |
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| <b>RIGHT OF WAY PLAN</b>  |                 | DIVISION CHIEF  |
| DATE _____  |                 | FILE _____  |
| SHEET 30 OF 160   |                 |   |

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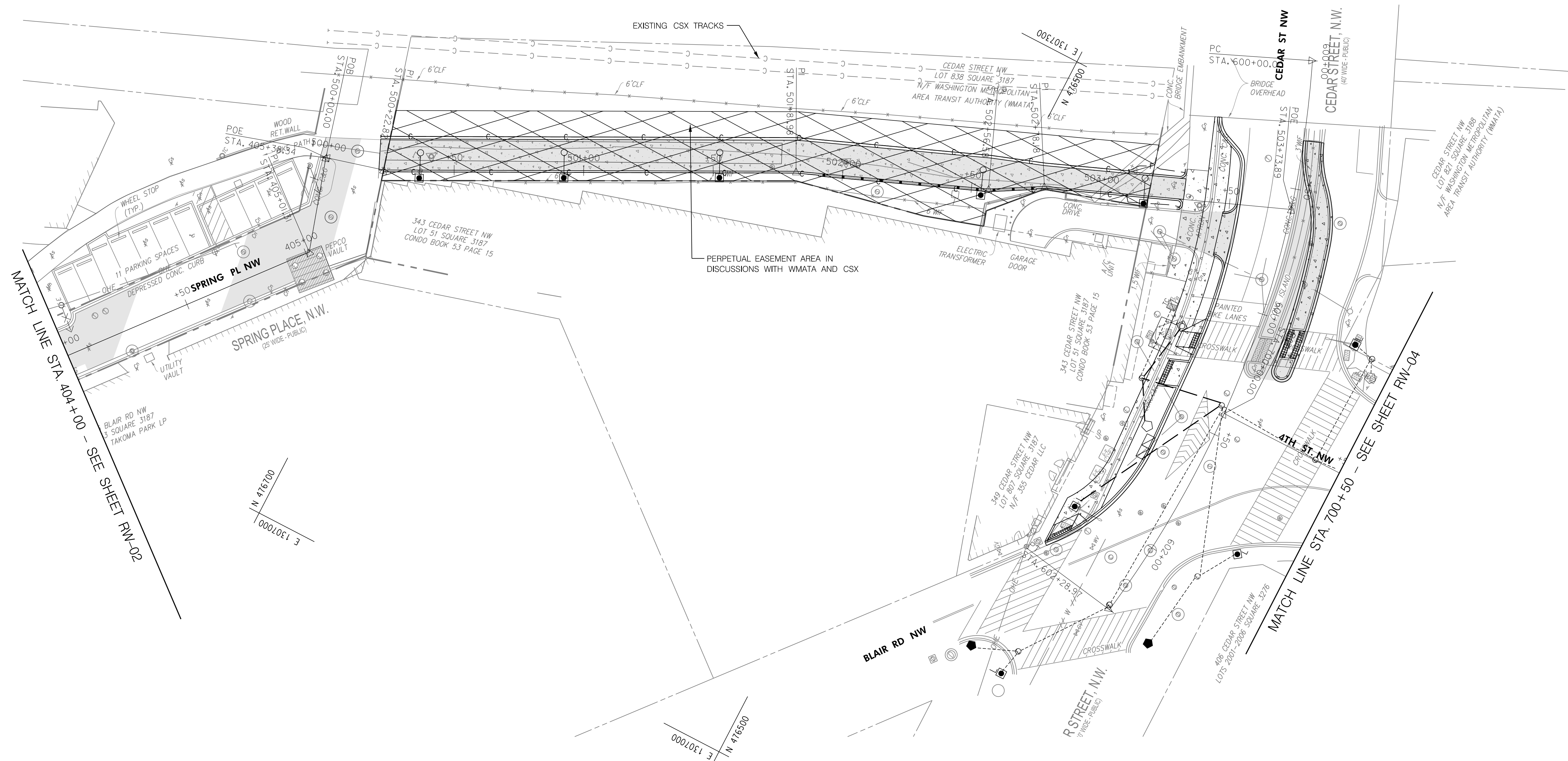
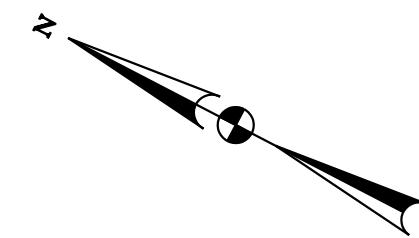
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REVISIONS

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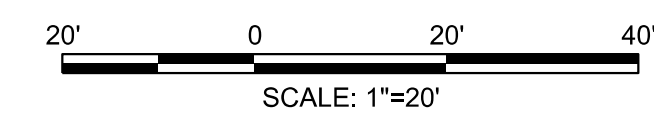
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 32        | 160          |



MATCH LINE STA. 404+00 - SEE SHEET RW-02

MATCH LINE STA. 700+50 - SEE SHEET RW-04

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**LEGEND**

|                             |  |
|-----------------------------|--|
| PROPOSED ROW                |  |
| PROPOSED PERPETUAL EASEMENT |  |
| EXISTING ROW                |  |

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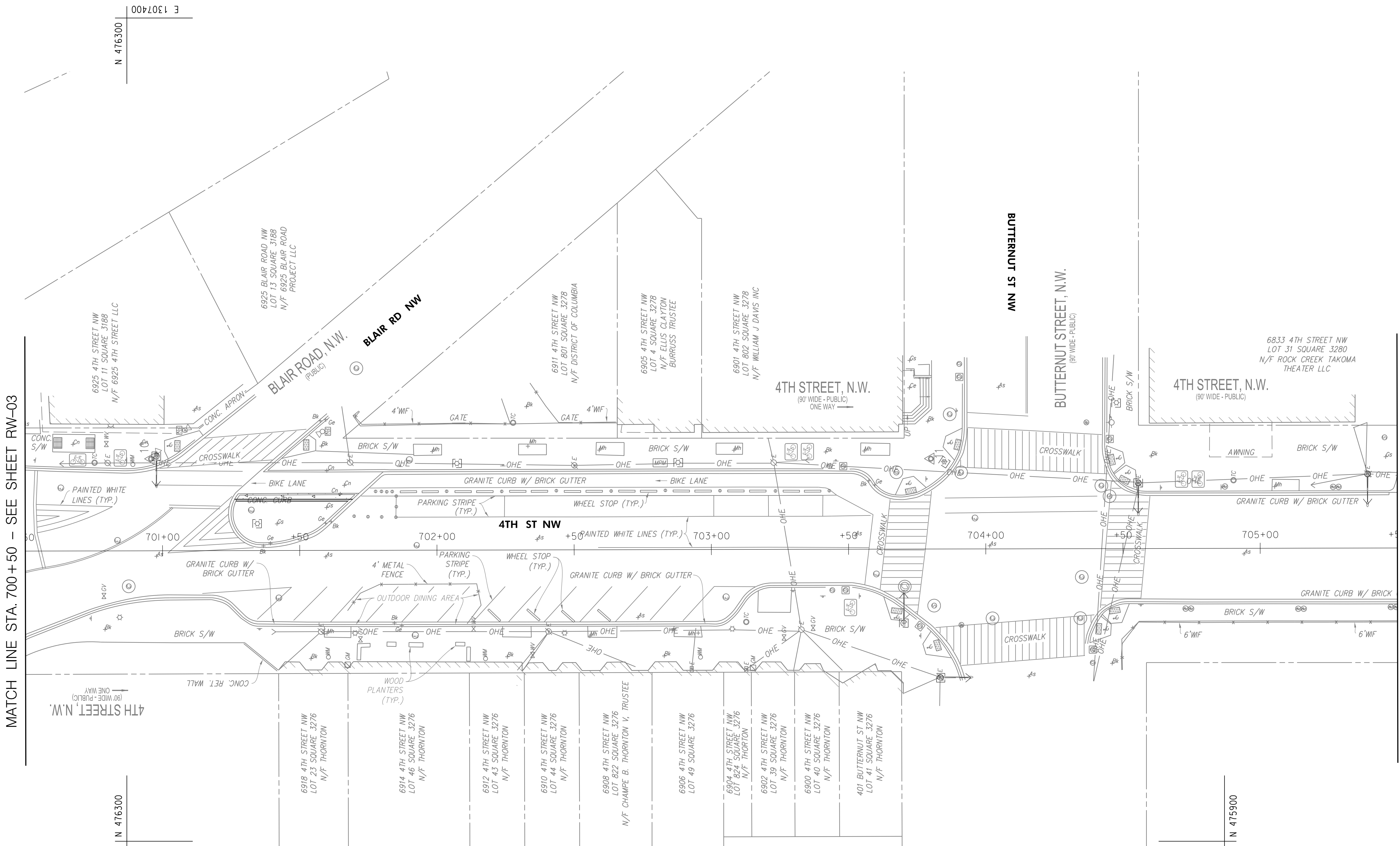
REVISIONS

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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>RW-03</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
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| <b>RIGHT OF WAY PLAN</b>  |                 | DIVISION CHIEF<br>DATE _____<br>FILE _____  |
| SHEET 32 OF 160   |                 |   |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
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| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 33        | 160          |

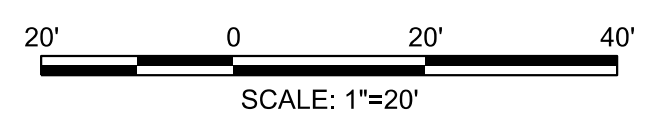


MATCH LINE STA. 700+50 - SEE SHEET RW-03

MATCH LINE STA. 705+50 - SEE SHEET RW-05

NOTES:  
1. NO ROW ACQUISITIONS PROPOSED ON THIS SHEET.

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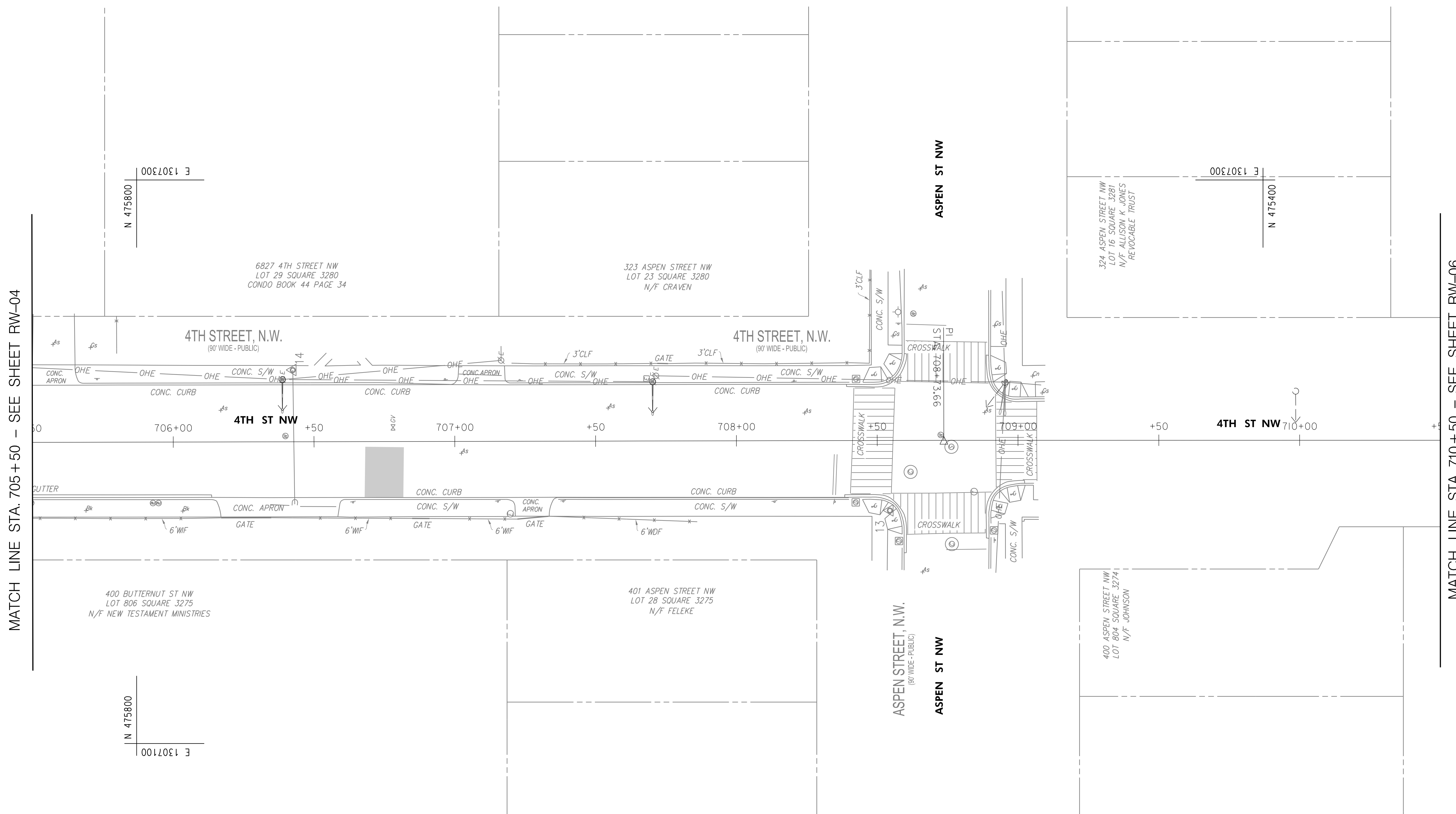
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|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>RW-04</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>RIGHT OF WAY PLAN</b>  |                 | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET 33 OF 160   |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 34        | 160          |

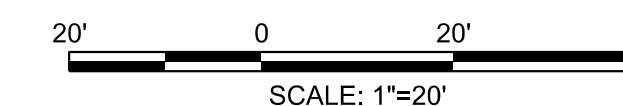
NOTES:  
1. NO ROW ACQUISITIONS PROPOSED ON THIS SHEET.



MATCH LINE STA. 705+50 - SEE SHEET RW-04

MATCH LINE STA. 710+50 - SEE SHEET RW-06

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



DATE: JULY 2023      SCALE: 1" = 20'      **RW-05**

**D.C. DEPARTMENT OF TRANSPORTATION**  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

**METROPOLITAN BRANCH TRAIL**  
DESIGN

PROJECT ENG. AF  
DESIGNED BY AF  
CHECKED BY MJG  
DRAWN BY AF  
PROJECT MGR. MJG

DIVISION CHIEF

**RIGHT OF WAY PLAN**

DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 34 OF 160

**RK&K**  
**Rummel, Klepper & Kahl, LLP**  
100 M STREET SE | SUITE 950 | WASHINGTON, DC 20003  
PH: (202) 479-2707      FAX: (855) 263-6293  
Engineers | Construction Managers | Planners | Scientists  
www.rkk.com

| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
|     |             |      |      |
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REVISIONS

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 36        | 160          |

**GENERAL NOTES**

- ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL BE GOVERNED BY THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES DATED 2013, ISSUED BY THE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION EXCEPT AS AMENDED BY THE SPECIAL PROVISIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS UTILITY PRIOR TO BEGINNING WORK. ANY DAMAGES TO UTILITIES MUST BE REPAIRED OR REPLACED BY THE CONTRACTOR AS HIS OWN EXPENSE.
- THE CONTRACTOR SHALL TAKE ADEQUATE PRECAUTION TO PROTECT WALKS, GRADING, SIDEWALKS AND FEATURES OUTSIDE THE LIMITS OF WORK AND SHALL REPAIR AND REPLACE OR OTHERWISE MAKE GOOD AS DIRECTED BY THE ENGINEER ANY SUCH OR OTHER DAMAGE SO CAUSED.

**SIGNING AND PAVEMENT MARKINGS**

- ALL STRIPING AND SIGN WORK SHALL MEET ALL APPLICABLE DDOT STANDARDS AND SPECIFICATIONS AND 2009 MANUAL ON UNIFORM TRAFFIC CONTROL (MUTCD) REQUIREMENTS.
- ALL PAVEMENT MARKINGS ARE THERMOPLASTIC UNLESS OTHERWISE NOTED.
- ALL EXISTING PAVEMENT MARKINGS MAY NOT BE SHOWN. ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED PAVEMENT MARKINGS SHALL BE ERADICATED BY A METHOD APPROVED BY DDOT.
- ALL SIGNS SHALL BE HIGH INTENSITY SHEETING MEETING THE REQUIREMENTS OF AASHTO M268.
- PROPOSED SIGN POSTS SHALL BE LOCATED SO THAT PROPOSED EDGE OF SIGN PANELS ARE LOCATED A MINIMUM OF 2 FEET FROM THE EDGE OF TRAIL AND 7' FROM THE SURFACE OF TRAIL (MEASURED TO BOTTOM OF SIGN).
- PROPOSED SIGNS AT NEW LOCATIONS SHALL BE INSTALLED SO THEY DO NOT BLOCK THE VISIBILITY OF ANY EXISTING SIGNS OR SIGNALS.
- PROPOSED SIGNS AND POSTS SHALL BE CLEAR OF EXISTING FIRE HYDRANTS, SURFACE UTILITIES, AND OVERHEAD UTILITY EQUIPMENT A MINIMUM OF 10 FEET.
- FOR NEW POST INSTALLATION, THE CONTRACTOR SHALL VERIFY THAT THERE ARE NO CONFLICTING UNDERGROUND OR OVERHEAD UTILITIES.
- SIGNS MOUNTED TO EXISTING LIGHT, SIGNAL OR UTILITY POLES SHALL BE FASTENED WITH A MANUFACTURED STEEL BANDING SYSTEM. POLES SHALL NOT BE DRILLED DIRECTLY. THE CONTRACTOR SHALL SUBMIT MANUFACTURER INFORMATION ON THE BANDING SYSTEM TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. THE COST FOR MOUNTING SIGNS IS INCLUDED IN THE UNIT BID PRICE FOR 620 014 TRAFFIC SIGN PANELS.
- IF SIGN INSTALLATION IS SHOWN ON A POLE THAT IS NOT OWNED BY THE CITY, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF UTILITY COMPANY OR PROPERTY OWNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING REQUIRED PERMISSION.
- ALL SIGN LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC AND MAY NOT REFLECT ACTUAL FIELD LOCATIONS. THE CONTRACTOR SHALL VERIFY EACH LOCATION PRIOR TO INSTALLING A SIGN. IF AT ANY POINT THE CONTRACTOR FINDS A CONFLICT, THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO INSTALLING THE PROPOSED SIGN. PROPOSED SIGN LOCATIONS CAN BE ADJUSTED AS APPROVED BY THE ENGINEER.
- ALL EXISTING SIGNS MUST BE REPLACED IN-KIND FOLLOWING CONSTRUCTION. ANY FADED OR DAMAGED SIGNS MUST BE REPLACED. SIGN CONDITION TO BE VERIFIED DURING CONSTRUCTION

**DETAIL OF PAVEMENT MARKINGS (IF SHOWN)**

**TRAIL**

- CENTERLINE**
  - 4-INCH YELLOW DASH LINES USED ON SHARED-USE PATH SHALL HAVE THE USUAL 1 TO 3 SEGMENT-TO-GAP RATIO. A NOMINAL 3 FOOT SEGMENT WITH A 9 FOOT GAP SHOULD BE USED.
  - WHERE CONDITIONS MAKE IT DESIRABLE TO SEPARATE TWO DIRECTIONS OF TRAVEL AT A PARTICULAR LOCATION, A 4-INCH SOLID YELLOW LINE SHOULD BE USED TO INDICATE NO PASSING AND NO TRAVELING TO THE LEFT OF THE LINE.
  - CENTERLINE LINES STOP ONE FOOT BEFORE CROSSWALK BACK EDGE LINE.
- EDGELINES** - 4-INCH, WHITE EDGELINES TO BE USED WHEN VERTICAL OBSTRUCTION ARE ADJACENT TO THE SHARED USE PATH AND PLACED LESS THAN TWO FEET HORIZONTALLY FROM THE PATH.

**STOP LINES**

- ONE FOOT WIDE (UNLESS OTHERWISE NOTED), LOCATED FOUR FEET BEFORE THE CROSSWALK (UNLESS OTHERWISE SHOWN).

**CROSSWALKS**

- PEDESTRIAN CROSSWALK** - TEN FEET WIDE, UNLESS OTHERWISE NOTED.
  - EDGE LINES - SOLID WHITE LINES, 6 INCHES THICK
  - STRIPED CROSSWALKS - TWO FOOT WIDE, WHITE STRIPED WITH TWO FOOT WIDE SPACING. MAKE STRIPES PARALLEL TO VEHICULAR WHEEL PATH.
  - ALL SIDEWALK HANDICAP RAMPS MUST BE LOCATED WITHIN A CROSSWALK, EXCLUDING SIDE FLARES OF RAMPS.

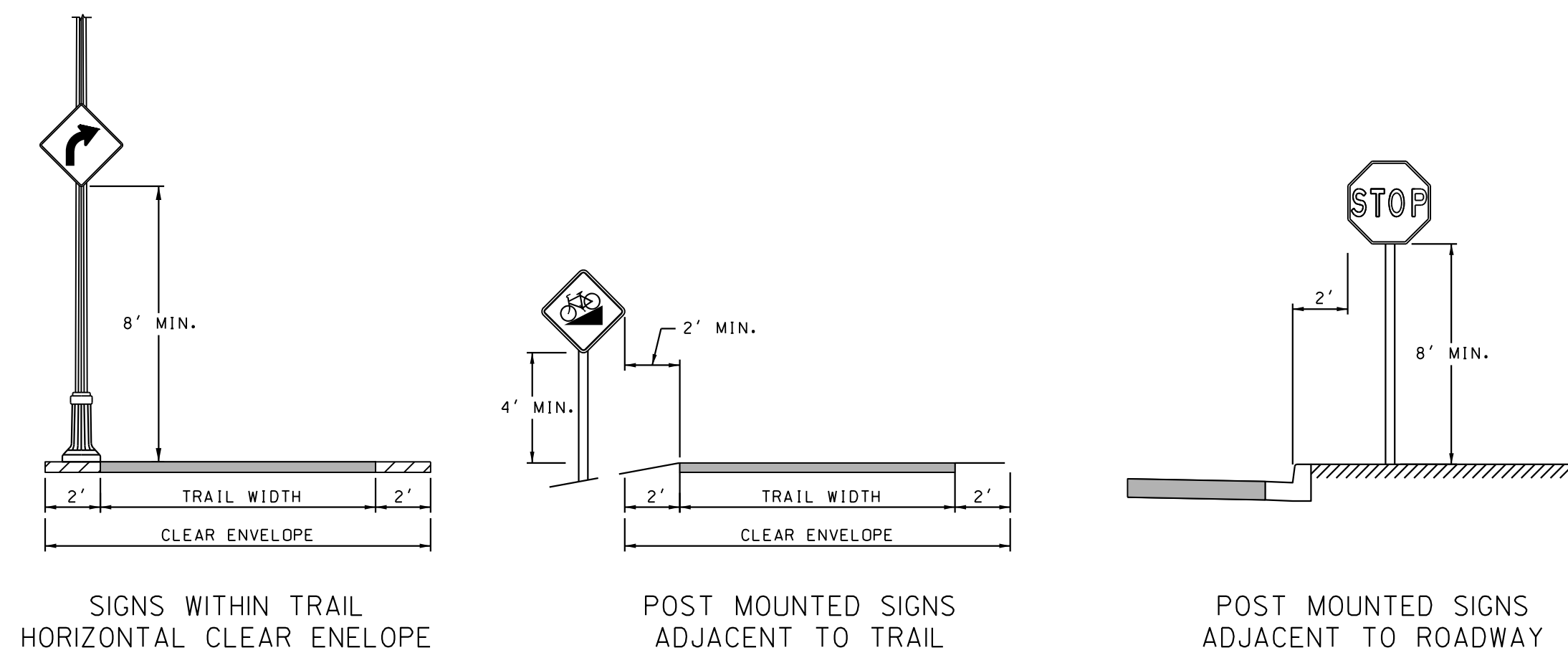
**65% DESIGN PLANS  
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**FEHR PEERS**  
 1003 K Street NW Washington, DC 20001  
 Suite 209 (202) 854-2750

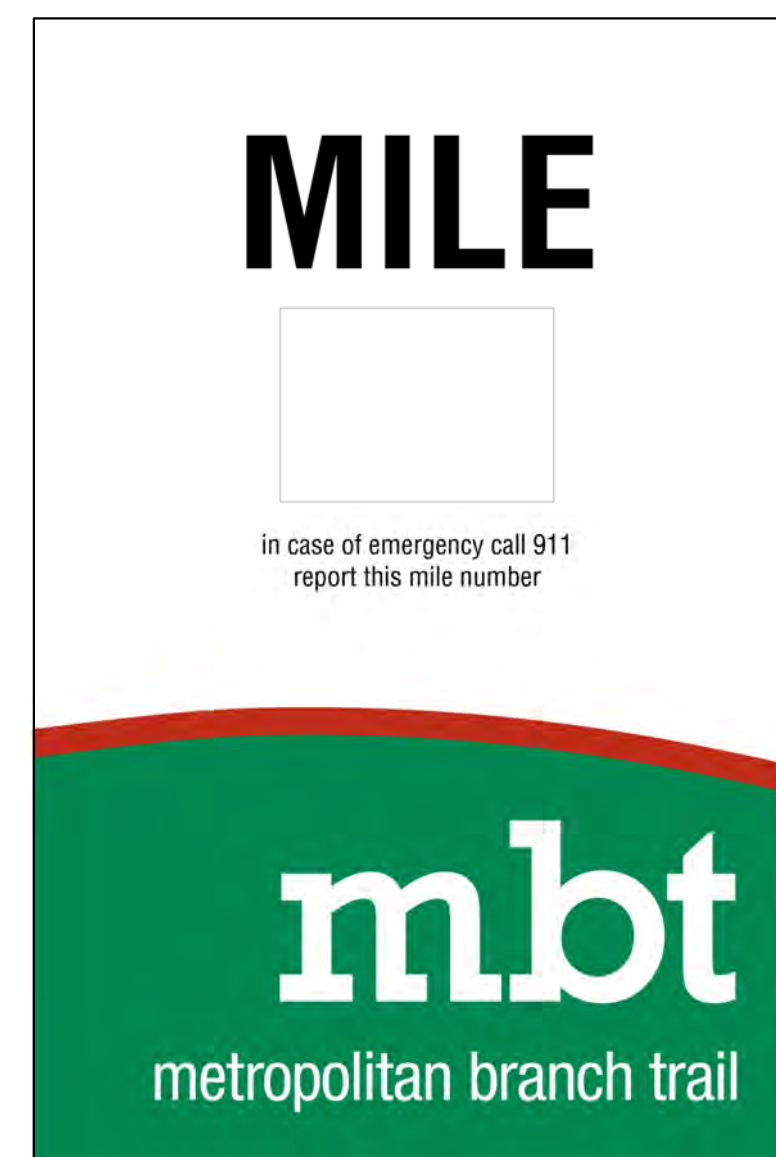
| NO.       | DESCRIPTION | NAME | DATE |
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| REVISIONS |             |      |      |

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|---|--------|--|
| DATE: JUNE 2023   | SCALE: | <b>SND-01</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |        |  |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |        | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| <b>PAVEMENT MARKING &amp; SIGNAGE PLANS<br/>GENERAL NOTES</b>                           |        | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET <b>36</b> OF <b>160</b>  |

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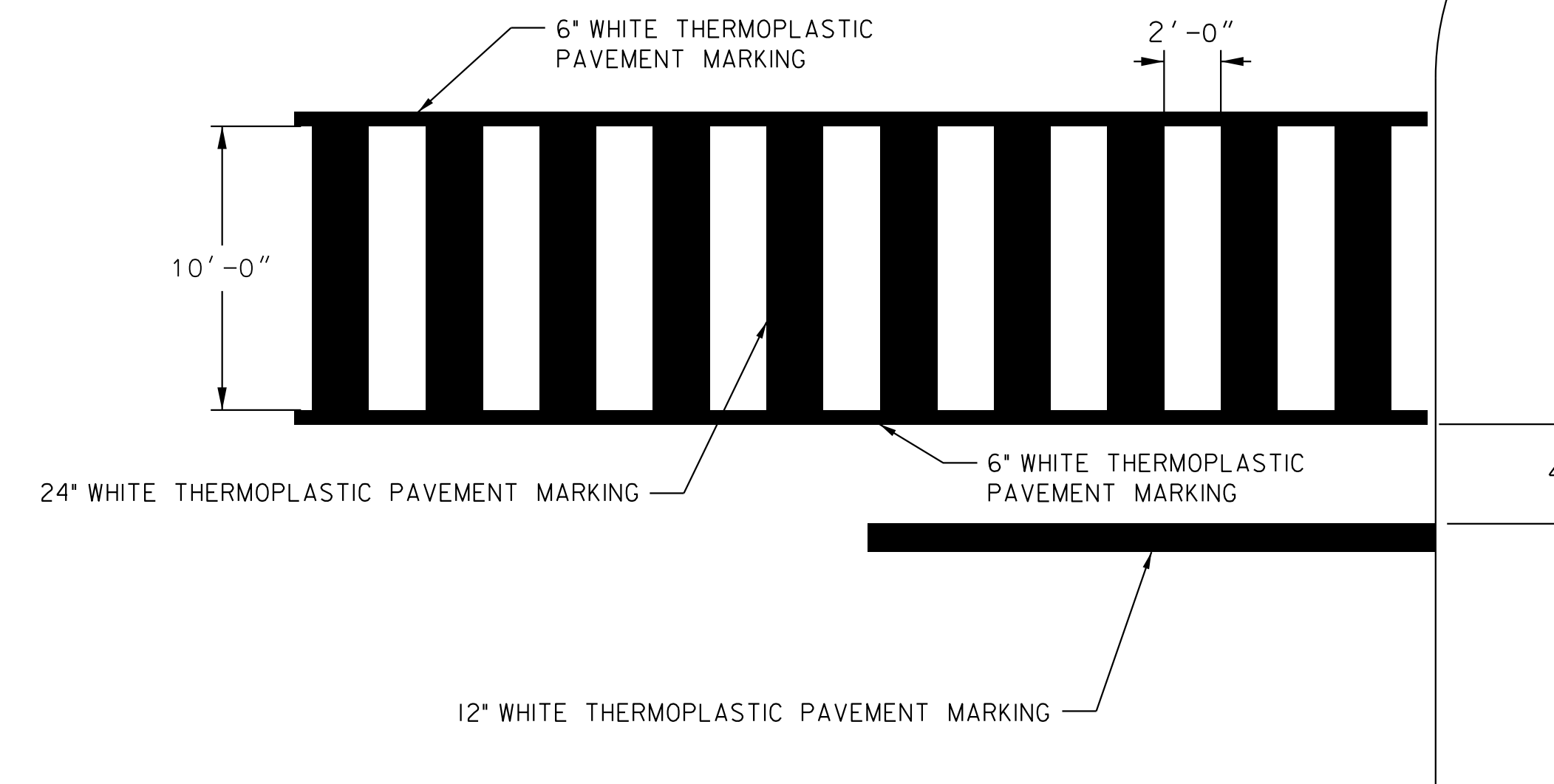
DETAIL A  
SIGN MOUNTING DETAILS  
SCALE: N/A



DETAIL C  
MILE MARKER SIGN  
SCALE: N/A

NOTES:

- ALL SIGNS SHALL BE RETROREFLECTIVE SHEER/EXTRUDED ALUMINUM UNLESS INDICATED OTHERWISE IN THE PLANS
- ALL ADA CURB RAMP MUST BE LOCATED WITHIN THE CROSSWALK.



DETAIL B  
CROSSWALK STRIPING DETAILS  
SCALE: N/A

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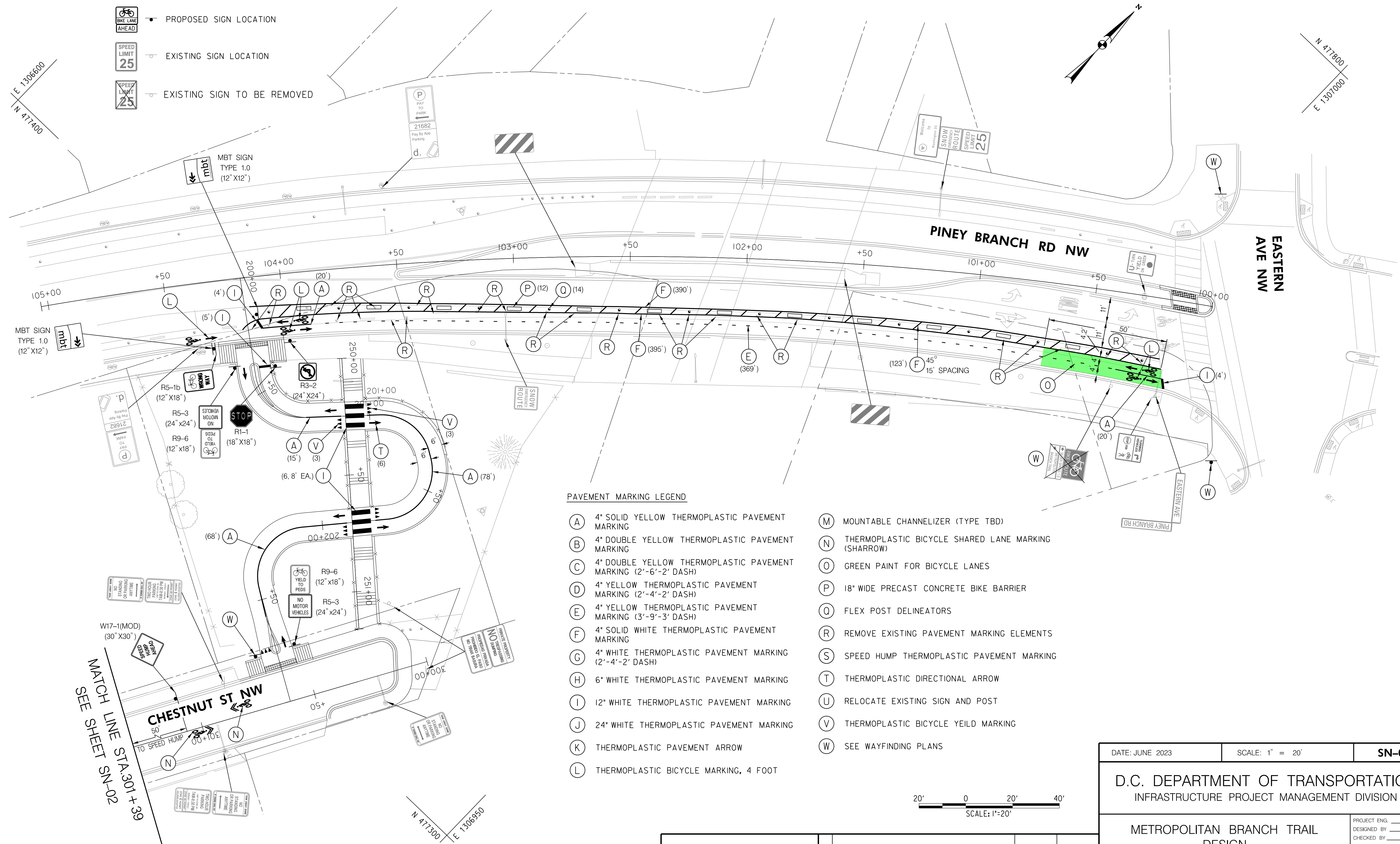
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| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |        |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |        | PROJECT ENG. _____<br>DESIGNED BY _____<br>CHECKED BY _____<br>DRAWN BY _____<br>PROJECT MGR. _____ |
| PAVEMENT MARKING & SIGNAGE<br>DETAILS   |        | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 37 OF 160                                 |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 38        | 160          |

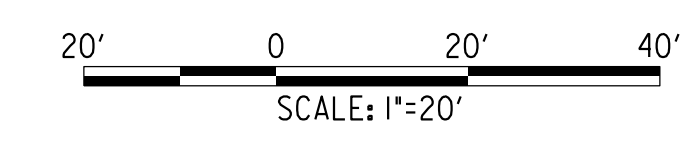
**SIGNING LEGEND**

- PROPOSED SIGN LOCATION
- EXISTING SIGN LOCATION
- EXISTING SIGN TO BE REMOVED



**PAVEMENT MARKING LEGEND**

- (A) 4" SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING
- (B) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING
- (C) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-6"-2' DASH)
- (D) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-4"-2' DASH)
- (E) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (3'-9"-3' DASH)
- (F) 4" SOLID WHITE THERMOPLASTIC PAVEMENT MARKING
- (G) 4" WHITE THERMOPLASTIC PAVEMENT MARKING (2'-4"-2' DASH)
- (H) 6" WHITE THERMOPLASTIC PAVEMENT MARKING
- (I) 12" WHITE THERMOPLASTIC PAVEMENT MARKING
- (J) 24" WHITE THERMOPLASTIC PAVEMENT MARKING
- (K) THERMOPLASTIC PAVEMENT ARROW
- (L) THERMOPLASTIC BICYCLE MARKING, 4 FOOT
- (M) MOUNTABLE CHANNELIZER (TYPE TBD)
- (N) THERMOPLASTIC BICYCLE SHARED LANE MARKING (SHARROW)
- (O) GREEN PAINT FOR BICYCLE LANES
- (P) 18" WIDE PRECAST CONCRETE BIKE BARRIER
- (Q) FLEX POST DELINEATORS
- (R) REMOVE EXISTING PAVEMENT MARKING ELEMENTS
- (S) SPEED HUMP THERMOPLASTIC PAVEMENT MARKING
- (T) THERMOPLASTIC DIRECTIONAL ARROW
- (U) RELOCATE EXISTING SIGN AND POST
- (V) THERMOPLASTIC BICYCLE YIELD MARKING
- (W) SEE WAYFINDING PLANS



MATCH LINE STA 301 + 39  
SEE SHEET SN-02

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| DATE: JUNE 2023   | SCALE: 1" = 20' | <b>SN-01</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| SIGNING AND PAVEMENT<br>MARKING PLANS   |                 | DIVISION CHIEF<br><br>DATE _____<br>FILE _____<br>SHEET 38 OF 160  |

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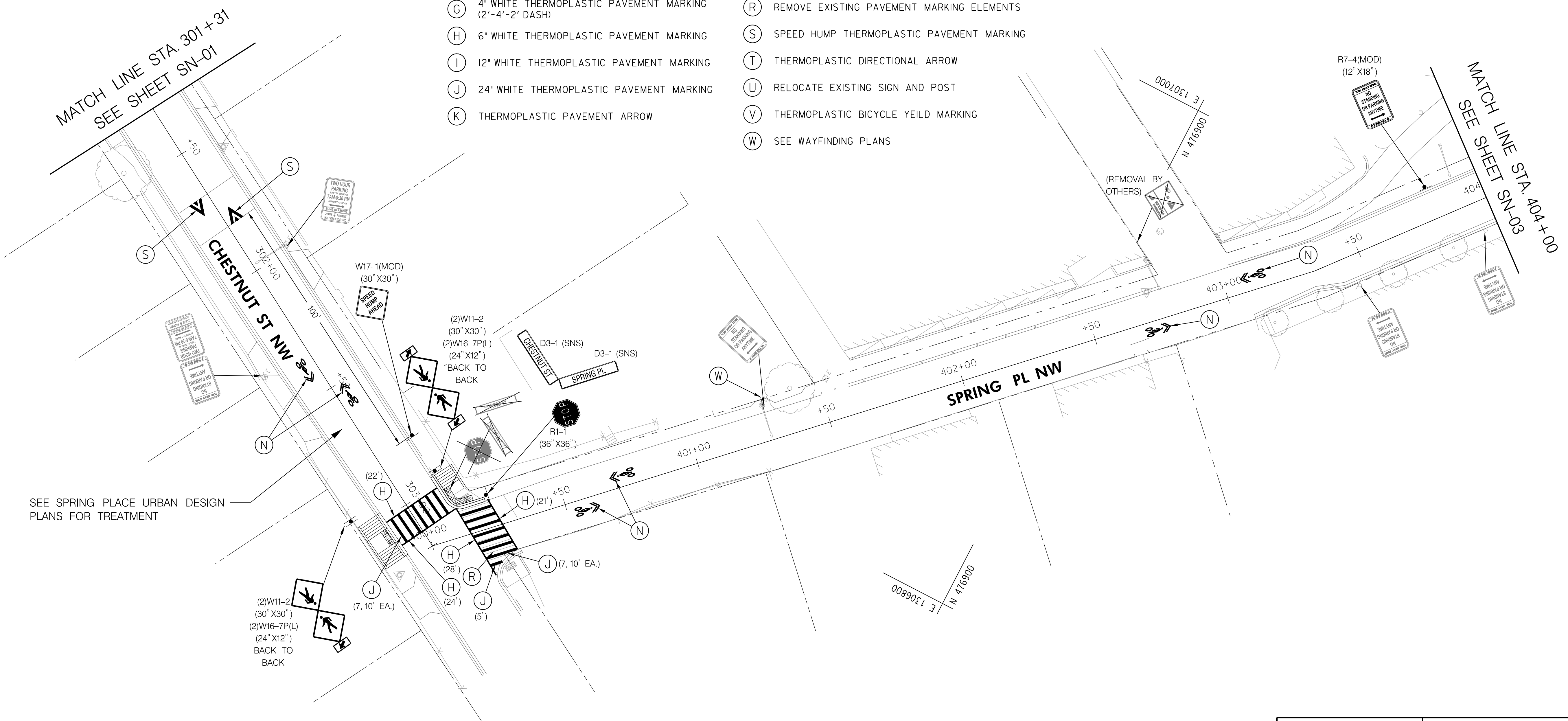
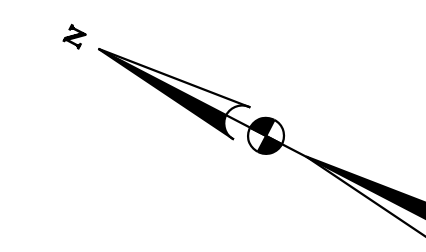
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 39        | 160          |

**SIGNING LEGEND**

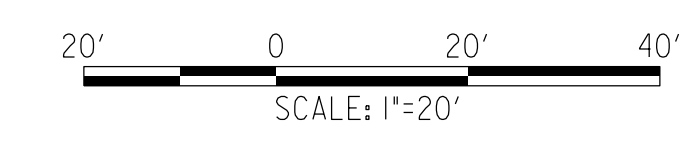
-  PROPOSED SIGN LOCATION
-  EXISTING SIGN LOCATION
-  EXISTING SIGN TO BE REMOVED

**PAVEMENT MARKING LEGEND**


- (A) 4" SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING
- (B) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING
- (C) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-6"-2' DASH)
- (D) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-4'-2' DASH)
- (E) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (3'-9"-3' DASH)
- (F) 4" SOLID WHITE THERMOPLASTIC PAVEMENT MARKING
- (G) 4" WHITE THERMOPLASTIC PAVEMENT MARKING (2'-4'-2' DASH)
- (H) 6" WHITE THERMOPLASTIC PAVEMENT MARKING
- (I) 12" WHITE THERMOPLASTIC PAVEMENT MARKING
- (J) 24" WHITE THERMOPLASTIC PAVEMENT MARKING
- (K) THERMOPLASTIC PAVEMENT ARROW
- (L) THERMOPLASTIC BICYCLE MARKING, 4 FOOT
- (M) MOUNTABLE CHANNELIZER (TYPE TBD)
- (N) THERMOPLASTIC BICYCLE SHARED LANE MARKING, (SHARROW)
- (O) GREEN PAINT FOR BICYCLE LANES
- (P) 18" WIDE PRECAST CONCRETE BIKE BARRIER
- (Q) FLEX POST DELINEATORS
- (R) REMOVE EXISTING PAVEMENT MARKING ELEMENTS
- (S) SPEED HUMP THERMOPLASTIC PAVEMENT MARKING
- (T) THERMOPLASTIC DIRECTIONAL ARROW
- (U) RELOCATE EXISTING SIGN AND POST
- (V) THERMOPLASTIC BICYCLE YIELD MARKING
- (W) SEE WAYFINDING PLANS



SEE SPRING PLACE URBAN DESIGN PLANS FOR TREATMENT



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**




|   |  |           |             |      |      |
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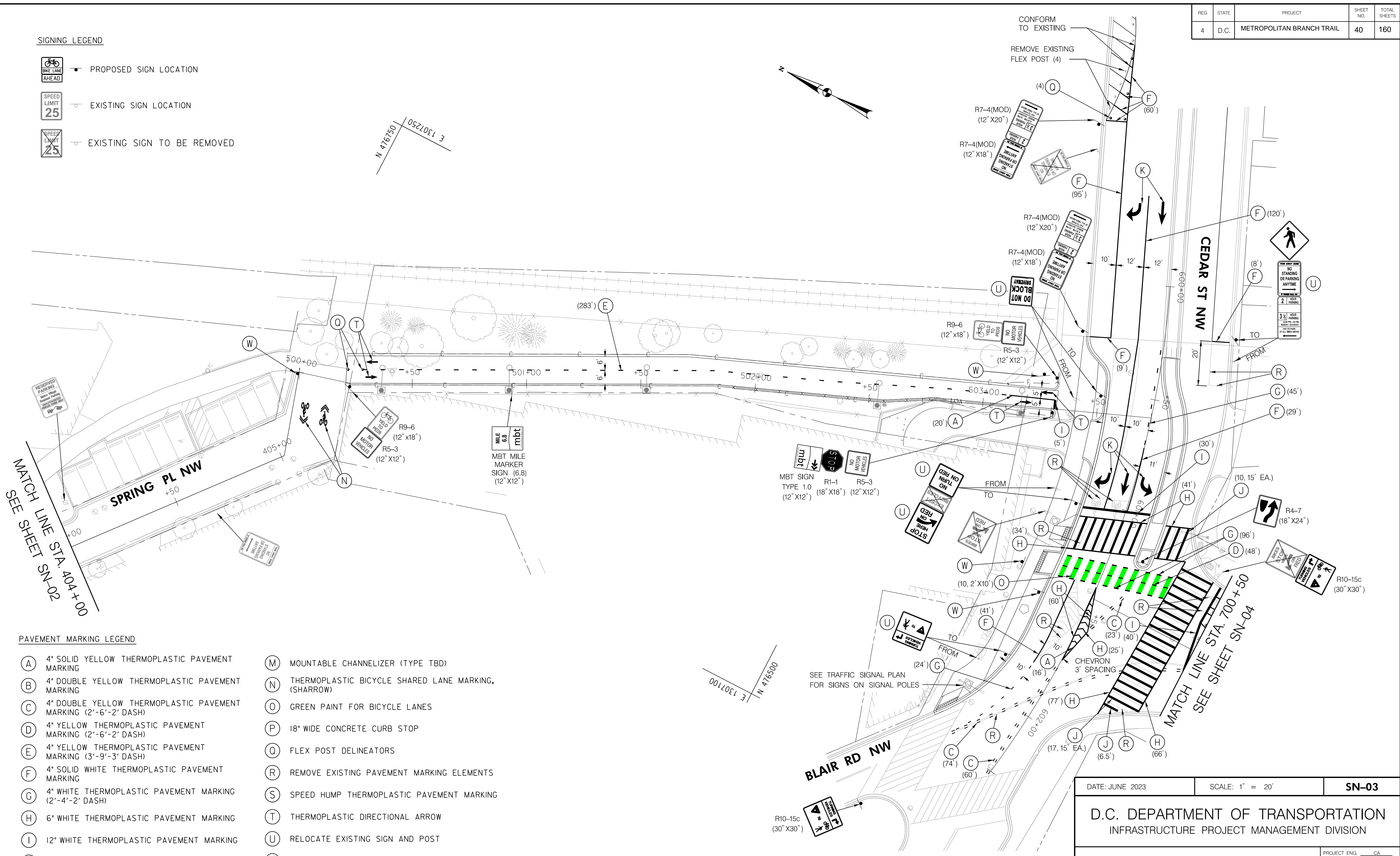
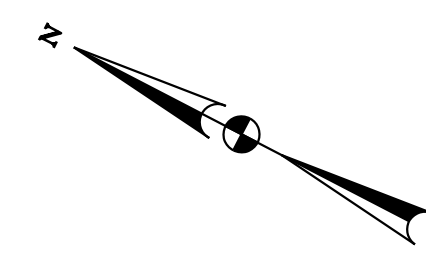
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| DATE: JUNE 2023  | SCALE: 1" = 20' | <b>SN-02</b>   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION</b><br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |  |
| <b>METROPOLITAN BRANCH TRAIL</b><br>DESIGN   |                 | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| <b>SIGNING AND PAVEMENT</b><br><b>MARKING PLANS</b>                                    |                 | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET <b>39</b> OF 160   |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
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| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 40        | 160          |

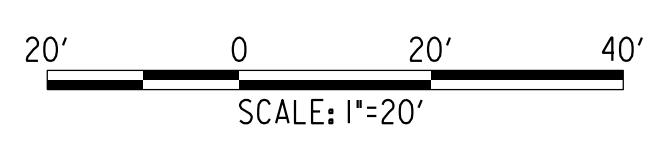
**SIGNING LEGEND**

-  PROPOSED SIGN LOCATION
-  EXISTING SIGN LOCATION
-  EXISTING SIGN TO BE REMOVED



**PAVEMENT MARKING LEGEND**

- |   |  |
|---|--|
| (A) 4" SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING                  | (M) MOUNTABLE CHANNELIZER (TYPE TBD)                     |
| (B) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING                 | (N) THERMOPLASTIC BICYCLE SHARED LANE MARKING, (SHARROW) |
| (C) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-6"-2' DASH) | (O) GREEN PAINT FOR BICYCLE LANES                        |
| (D) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-6"-2' DASH)        | (P) 18" WIDE CONCRETE CURB STOP                          |
| (E) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (3'-9"-3' DASH)        | (Q) FLEX POST DELINEATORS                                |
| (F) 4" SOLID WHITE THERMOPLASTIC PAVEMENT MARKING                   | (R) REMOVE EXISTING PAVEMENT MARKING ELEMENTS            |
| (G) 4" WHITE THERMOPLASTIC PAVEMENT MARKING (2'-4"-2' DASH)         | (S) SPEED HUMP THERMOPLASTIC PAVEMENT MARKING            |
| (H) 6" WHITE THERMOPLASTIC PAVEMENT MARKING                         | (T) THERMOPLASTIC DIRECTIONAL ARROW                      |
| (I) 12" WHITE THERMOPLASTIC PAVEMENT MARKING                        | (U) RELOCATE EXISTING SIGN AND POST                      |
| (J) 24" WHITE THERMOPLASTIC PAVEMENT MARKING                        | (V) THERMOPLASTIC BICYCLE YIELD MARKING                  |
| (K) THERMOPLASTIC PAVEMENT ARROW                                    | (W) SEE WAYFINDING PLANS                                 |
| (L) THERMOPLASTIC BICYCLE MARKING, 4 FOOT                           |  |



**65% DESIGN PLANS  
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| DATE: JUNE 2023   | SCALE: 1" = 20' | <b>SN-03</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| <b>SIGNING AND PAVEMENT<br/>MARKING PLANS</b>                                   |                 | DIVISION CHIEF<br><br>DATE _____<br>FILE _____<br>SHEET 40 OF 160  |

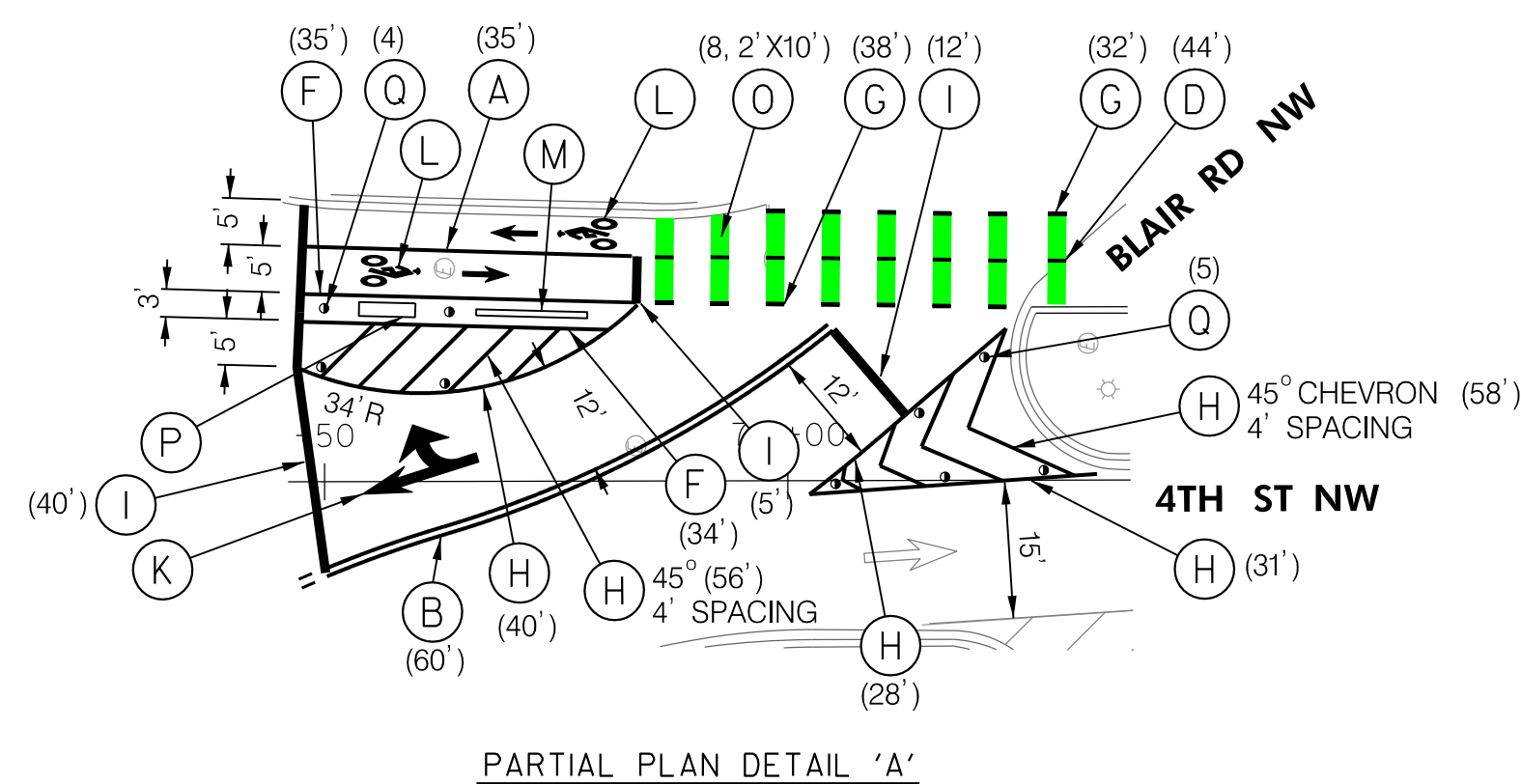
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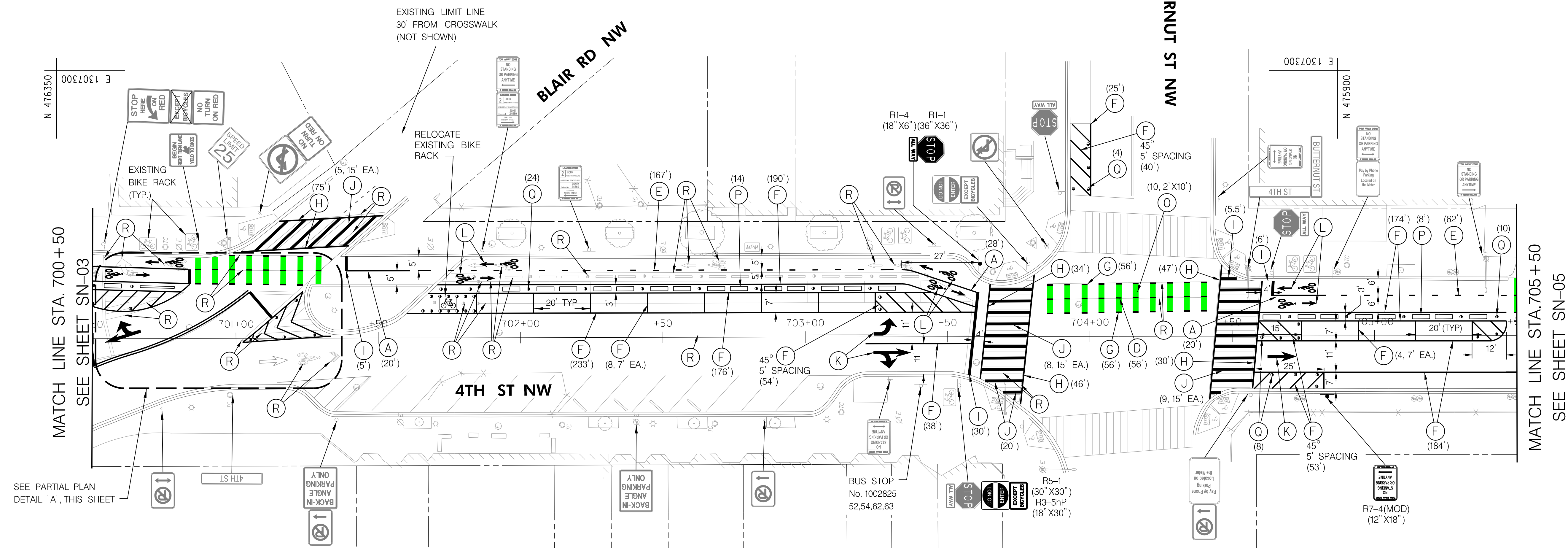
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 41        | 160          |

**SIGNING LEGEND**

-  PROPOSED SIGN LOCATION
-  EXISTING SIGN LOCATION
-  EXISTING SIGN TO BE REMOVED



PARTIAL PLAN DETAIL 'A'



**PAVEMENT MARKING LEGEND**

- |   |  |
|---|--|
| (A) 4" SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING                  | (L) THERMOPLASTIC BICYCLE MARKING, 4 FOOT                |
| (B) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING                 | (M) MOUNTABLE CHANNELIZER (TYPE TBD)                     |
| (C) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-6"-2' DASH) | (N) THERMOPLASTIC BICYCLE SHARED LANE MARKING, (SHARROW) |
| (D) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-4'-2' DASH)        | (O) GREEN PAINT FOR BICYCLE LANES                        |
| (E) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (3'-9'-3' DASH)        | (P) 18" WIDE CONCRETE CURB STOP                          |
| (F) 4" SOLID WHITE THERMOPLASTIC PAVEMENT MARKING                   | (Q) FLEX POST DELINEATORS                                |
| (G) 4" WHITE THERMOPLASTIC PAVEMENT MARKING (2'-4'-2' DASH)         | (R) REMOVE EXISTING PAVEMENT MARKING ELEMENTS            |
| (H) 6" WHITE THERMOPLASTIC PAVEMENT MARKING                         | (S) SPEED HUMP THERMOPLASTIC PAVEMENT MARKING            |
| (I) 12" WHITE THERMOPLASTIC PAVEMENT MARKING                        | (T) THERMOPLASTIC DIRECTIONAL ARROW                      |
| (J) 24" WHITE THERMOPLASTIC PAVEMENT MARKING                        | (U) RELOCATE EXISTING SIGN AND POST                      |
| (K) THERMOPLASTIC PAVEMENT ARROW                                    | (V) THERMOPLASTIC BICYCLE YIELD MARKING                  |

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

**FEHR PEERS**

1003 K Street NW Washington, DC 20001  
Suite 209 (202) 854-2750




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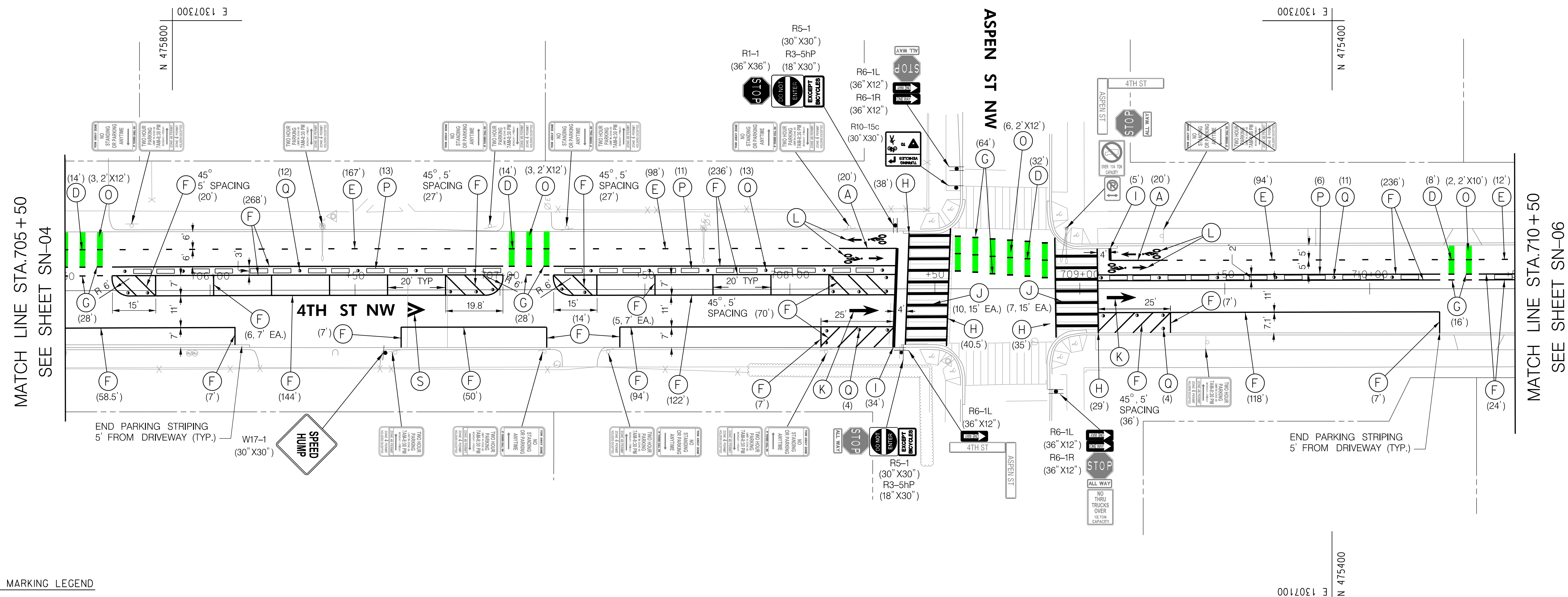


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| DATE: JUNE 2023   | SCALE: 1" = 20' | <b>SN-04</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| SIGNING AND PAVEMENT<br>MARKING PLANS   |                 | DIVISION CHIEF   |
| DATE _____  |                 | FILE _____   |
| SHEET 41 OF 160   |                 |  |

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SIGNING LEGEND

-  PROPOSED SIGN LOCATION
-  EXISTING SIGN LOCATION
-  EXISTING SIGN TO BE REMOVED



- |   |  |
|---|--|
| (A) 4" SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING                  | (L) THERMOPLASTIC BICYCLE MARKING, 4 FOOT                |
| (B) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING                 | (M) MOUNTABLE CHANNELIZER (TYPE TBD)                     |
| (C) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-6"-2' DASH) | (N) THERMOPLASTIC BICYCLE SHARED LANE MARKING, (SHARROW) |
| (D) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-4'-2' DASH)        | (O) GREEN PAINT FOR BICYCLE LANES                        |
| (E) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (3'-9'-3' DASH)        | (P) 18" WIDE CONCRETE CURB STOP                          |
| (F) 4" SOLID WHITE THERMOPLASTIC PAVEMENT MARKING                   | (Q) FLEX POST DELINEATORS                                |
| (G) 4" WHITE THERMOPLASTIC PAVEMENT MARKING (2'-4'-2' DASH)         | (R) REMOVE EXISTING PAVEMENT MARKING ELEMENTS            |
| (H) 6" WHITE THERMOPLASTIC PAVEMENT MARKING                         | (S) SPEED HUMP THERMOPLASTIC PAVEMENT MARKING            |
| (I) 12" WHITE THERMOPLASTIC PAVEMENT MARKING                        | (T) THERMOPLASTIC DIRECTIONAL ARROW                      |
| (J) 24" WHITE THERMOPLASTIC PAVEMENT MARKING                        | (U) RELOCATE EXISTING SIGN AND POST                      |
| (K) THERMOPLASTIC PAVEMENT ARROW                                    | (V) THERMOPLASTIC BICYCLE YIELD MARKING                  |

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



|   |                 |  |
|---|-----------------|--|
| DATE: JUNE 2023   | SCALE: 1" = 20' | <b>SN-05</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| <b>SIGNING AND PAVEMENT<br/>MARKING PLANS</b>                                   |                 | DIVISION CHIEF   |
| DATE _____  |                 | FILE _____   |
| SHEET 42 OF 160   |                 |  |

**FEHR PEERS**  
1003 K Street NW Washington, DC 20001  
Suite 209 (202) 854-2750

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
|           |             |      |      |
|           |             |      |      |
|           |             |      |      |

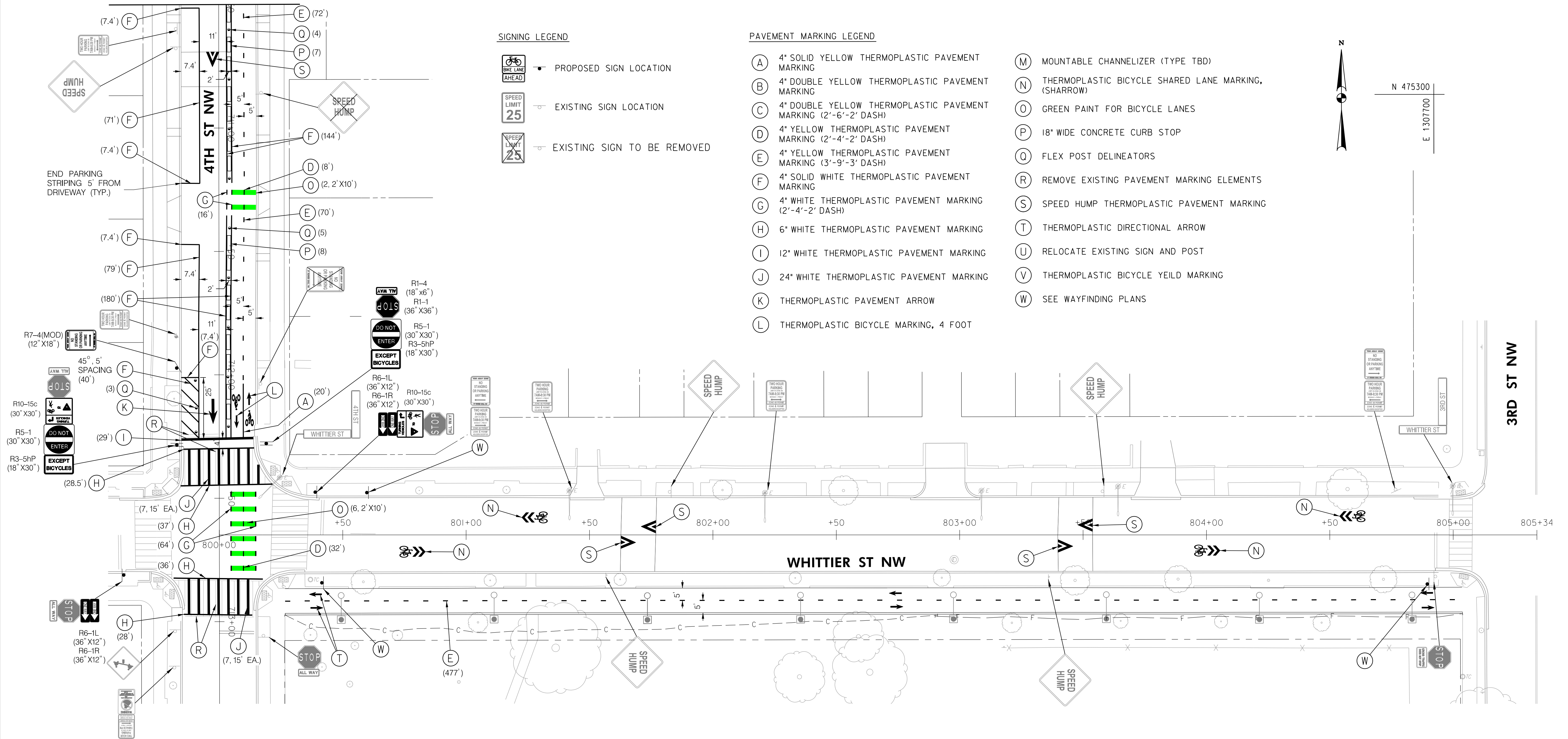
MATCH LINE STA.710+50  
SEE SHEET SN-05

- SIGNING LEGEND**
- PROPOSED SIGN LOCATION
  - EXISTING SIGN LOCATION
  - EXISTING SIGN TO BE REMOVED

- PAVEMENT MARKING LEGEND**
- (A) 4" SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING
  - (B) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING
  - (C) 4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-6"-2' DASH)
  - (D) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (2'-4'-2' DASH)
  - (E) 4" YELLOW THERMOPLASTIC PAVEMENT MARKING (3'-9'-3' DASH)
  - (F) 4" SOLID WHITE THERMOPLASTIC PAVEMENT MARKING
  - (G) 4" WHITE THERMOPLASTIC PAVEMENT MARKING (2'-4'-2' DASH)
  - (H) 6" WHITE THERMOPLASTIC PAVEMENT MARKING
  - (I) 12" WHITE THERMOPLASTIC PAVEMENT MARKING
  - (J) 24" WHITE THERMOPLASTIC PAVEMENT MARKING
  - (K) THERMOPLASTIC PAVEMENT ARROW
  - (L) THERMOPLASTIC BICYCLE MARKING, 4 FOOT
  - (M) MOUNTABLE CHANNELIZER (TYPE TBD)
  - (N) THERMOPLASTIC BICYCLE SHARED LANE MARKING, (SHARROW)
  - (O) GREEN PAINT FOR BICYCLE LANES
  - (P) 18" WIDE CONCRETE CURB STOP
  - (Q) FLEX POST DELINEATORS
  - (R) REMOVE EXISTING PAVEMENT MARKING ELEMENTS
  - (S) SPEED HUMP THERMOPLASTIC PAVEMENT MARKING
  - (T) THERMOPLASTIC DIRECTIONAL ARROW
  - (U) RELOCATE EXISTING SIGN AND POST
  - (V) THERMOPLASTIC BICYCLE YIELD MARKING
  - (W) SEE WAYFINDING PLANS



N 475300  
E 1307700



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

**FEHR PEERS**  
1003 K Street NW  
Suite 209  
Washington, DC 20001  
(202) 854-2750

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

DATE: JUNE 2023      SCALE: 1" = 20'      **SN-06**

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

**SIGNING AND PAVEMENT  
MARKING PLANS**

PROJECT ENG. \_\_\_\_\_ CA  
DESIGNED BY \_\_\_\_\_ JM  
CHECKED BY \_\_\_\_\_ JP  
DRAWN BY \_\_\_\_\_ JM  
PROJECT MGR. \_\_\_\_\_ CA  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 43 OF 160

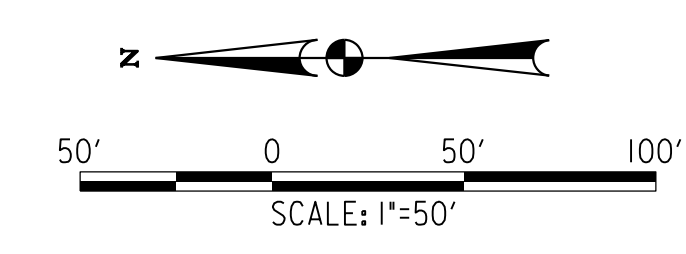
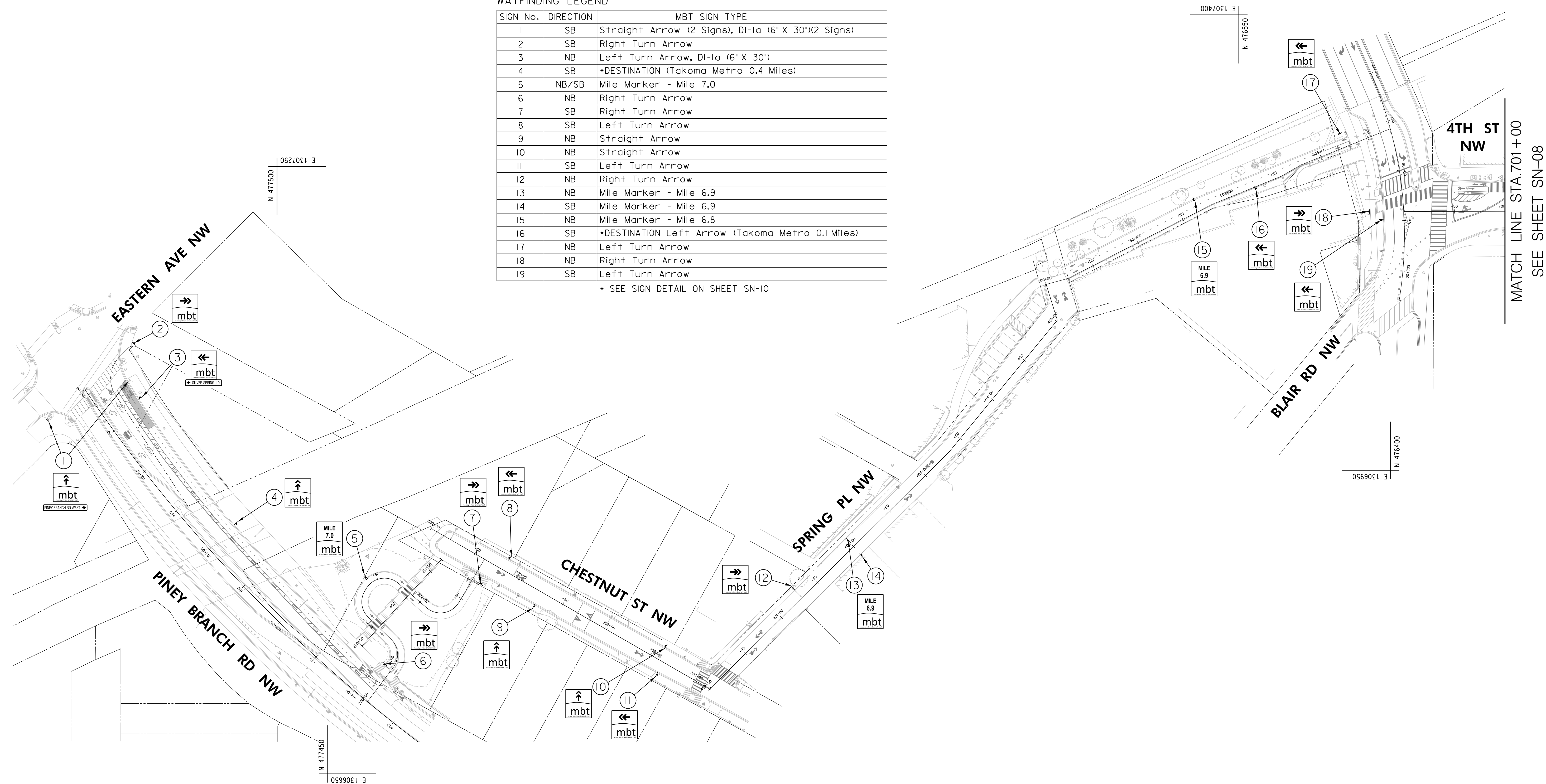
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WAYFINDING LEGEND

| SIGN No. | DIRECTION | MBT SIGN TYPE  |
|----------|-----------|--|
| 1        | SB        | Straight Arrow (2 Signs), DI-1a (6" X 30" X 2 Signs) |
| 2        | SB        | Right Turn Arrow                                     |
| 3        | NB        | Left Turn Arrow, DI-1a (6" X 30")                    |
| 4        | SB        | •DESTINATION (Takoma Metro 0.4 Miles)                |
| 5        | NB/SB     | Mile Marker - Mile 7.0                               |
| 6        | NB        | Right Turn Arrow                                     |
| 7        | SB        | Right Turn Arrow                                     |
| 8        | SB        | Left Turn Arrow                                      |
| 9        | NB        | Straight Arrow                                       |
| 10       | NB        | Straight Arrow                                       |
| 11       | SB        | Left Turn Arrow                                      |
| 12       | NB        | Right Turn Arrow                                     |
| 13       | NB        | Mile Marker - Mile 6.9                               |
| 14       | SB        | Mile Marker - Mile 6.9                               |
| 15       | NB        | Mile Marker - Mile 6.8                               |
| 16       | SB        | •DESTINATION Left Arrow (Takoma Metro 0.1 Miles)     |
| 17       | NB        | Left Turn Arrow                                      |
| 18       | NB        | Right Turn Arrow                                     |
| 19       | SB        | Left Turn Arrow                                      |

• SEE SIGN DETAIL ON SHEET SN-10



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

**FEHR PEERS**  
1003 K Street NW  
Suite 209  
Washington, DC 20001  
(202) 854-2750

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |                 |  |
|---|-----------------|--|
| DATE: JUNE 2023   | SCALE: 1" = 50' | <b>SN-08</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| <b>WAYFINDING SIGNS</b>   |                 | DIVISION CHIEF   |
| DATE: _____   |                 |  |
| FILE: _____   |                 |  |
| SHEET 45 OF 160   |                 |  |

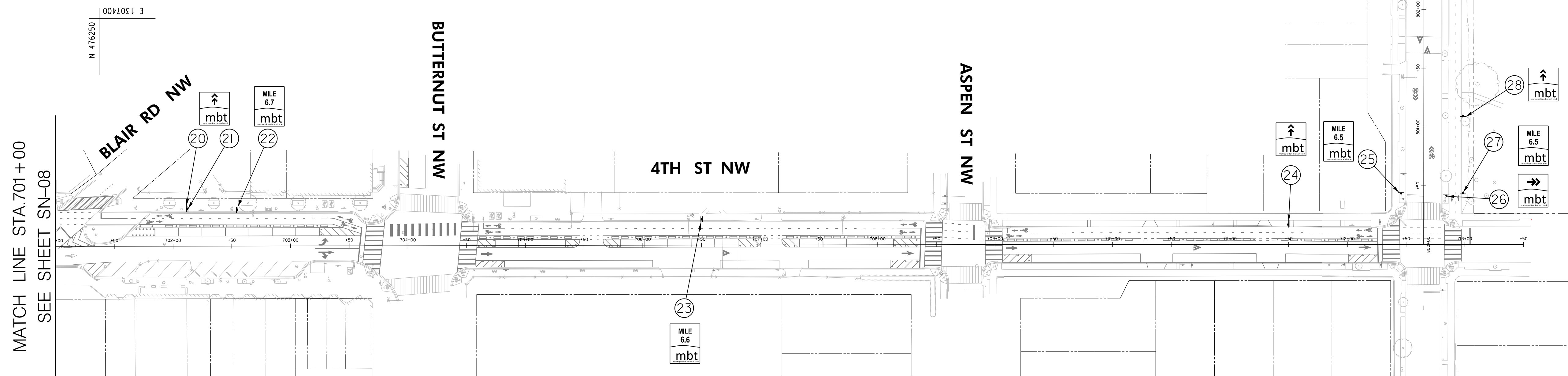
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 46        | 160          |

WAYFINDING LEGEND

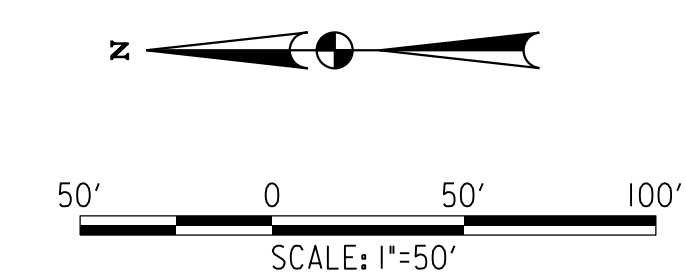
| SIGN No. | DIRECTION | MBT SIGN TYPE   |
|----------|-----------|---|
| 20       | SB        | •DESTINATION (Ft. Totten Metro 2.0 miles; Takoma Recreation Center 0.3 miles) |
| 21       | NB        | •DESTINATION Right Arrow (Takoma Metro 0.1 Miles)                             |
| 22       | NB/SB     | Mile Marker - Mile 6.7  |
| 23       | NB/SB     | Mile Marker - Mile 6.6  |
| 24       | NB        | •DESTINATION (Takoma Metro 0.3 Miles)   |
| 25       | NB        | Mile Marker - Mile 6.5  |
| 26       | NB        | Right Turn Arrow  |
| 27       | SB        | Mile Marker - Mile 6.5  |
| 28       | SB        | •DESTINATION (Ft Totten Metro 1.8 Miles)                                      |
| 29       | NB        | Straight Arrow  |
| 30       | NB        | Mile Marker - Mile 6.4  |
| 31       | SB        | Mile Marker - Mile 6.4  |

• SEE SIGN DETAIL ON SHEET SN-10



MATCH LINE STA. 701+00  
SEE SHEET SN-08

N 476250  
E 1306950



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

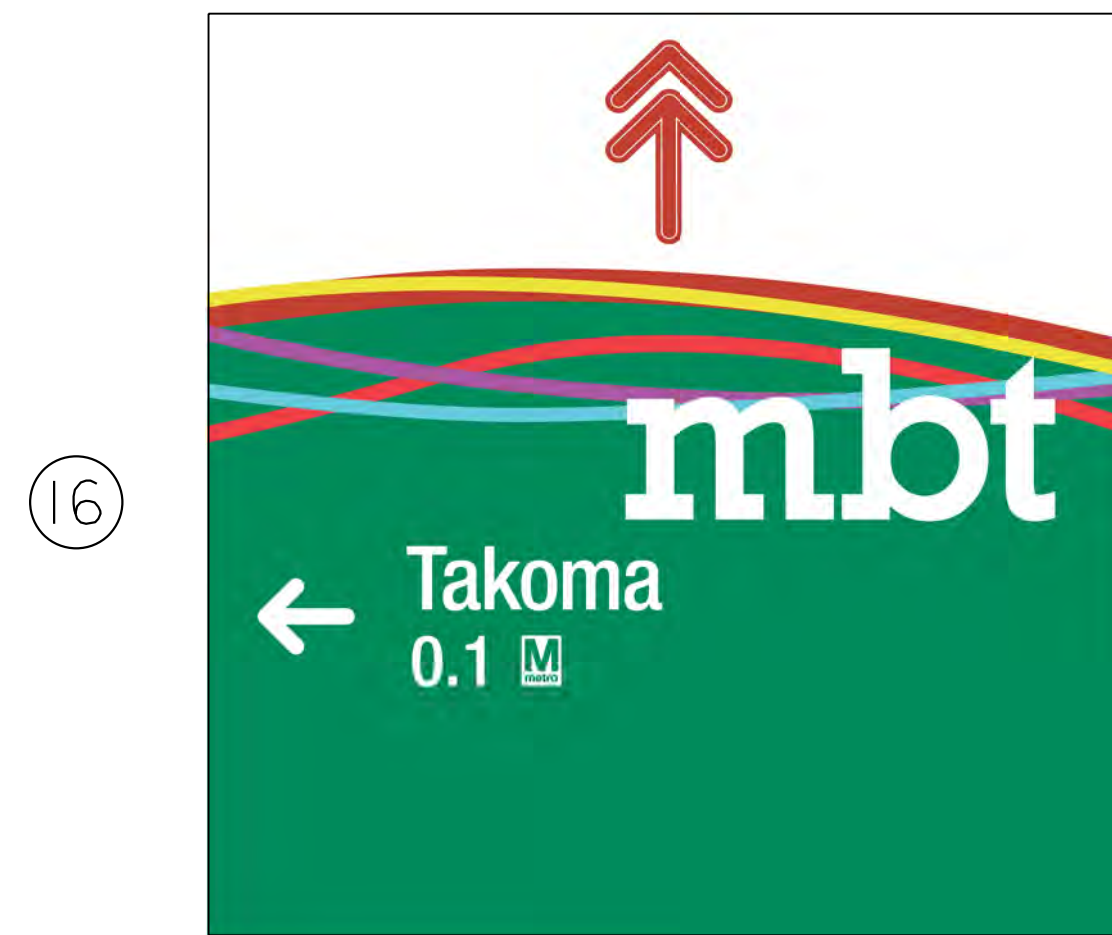
| <b>FEHR PEERS</b>             |             |  |      |
|-------------------------------|-------------|--|------|
| 1003 K Street NW<br>Suite 209 |             | Washington, DC 20001<br>(202) 854-2750 |      |
| NO.                           | DESCRIPTION | NAME                                   | DATE |
| REVISIONS                     |             |  |      |

|   |                 |  |
|---|-----------------|--|
| DATE: JUNE 2023   | SCALE: 1" = 50' | <b>SN-09</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| <b>WAYFINDING SIGNS</b>   |                 | DIVISION CHIEF   |
| DATE _____  |                 |  |
| FILE _____  |                 |  |
| SHEET <b>46</b> OF 160  |                 |  |

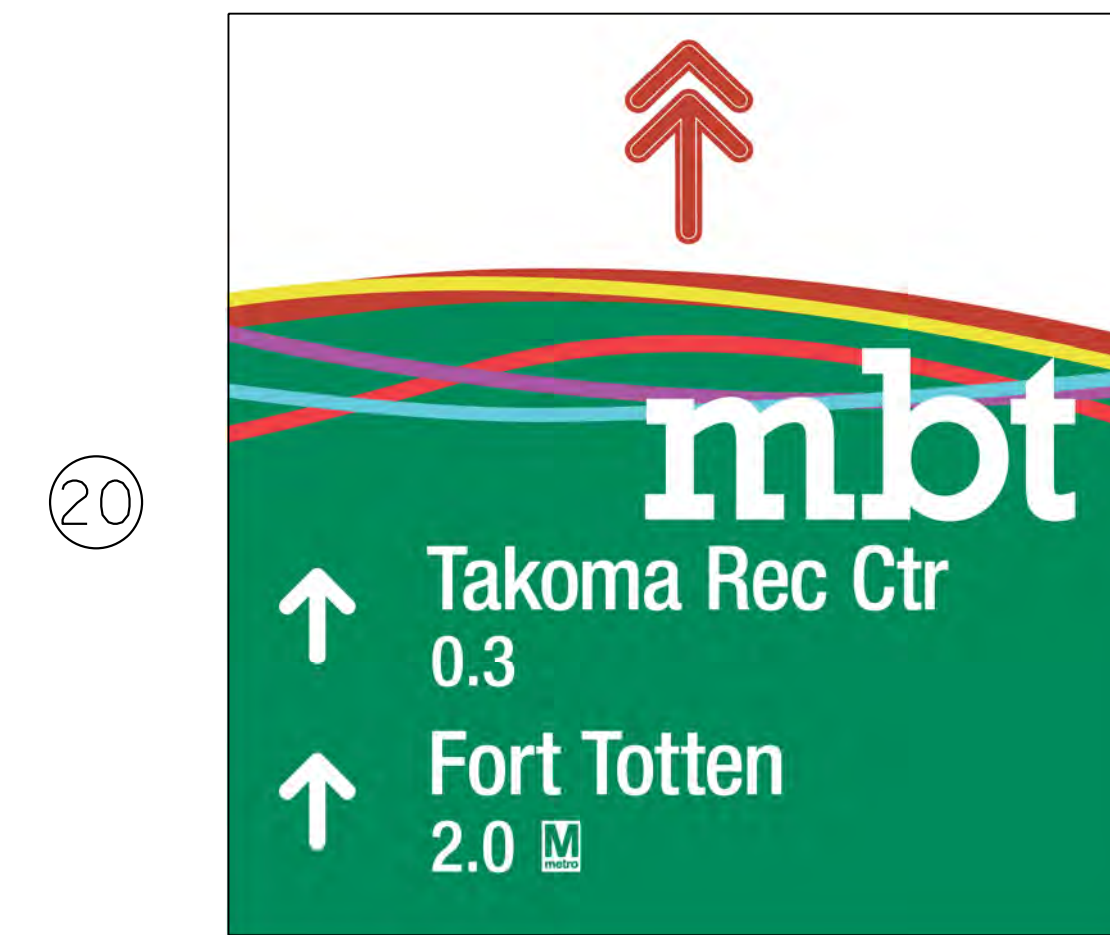
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16" X 16"



16" X 16"



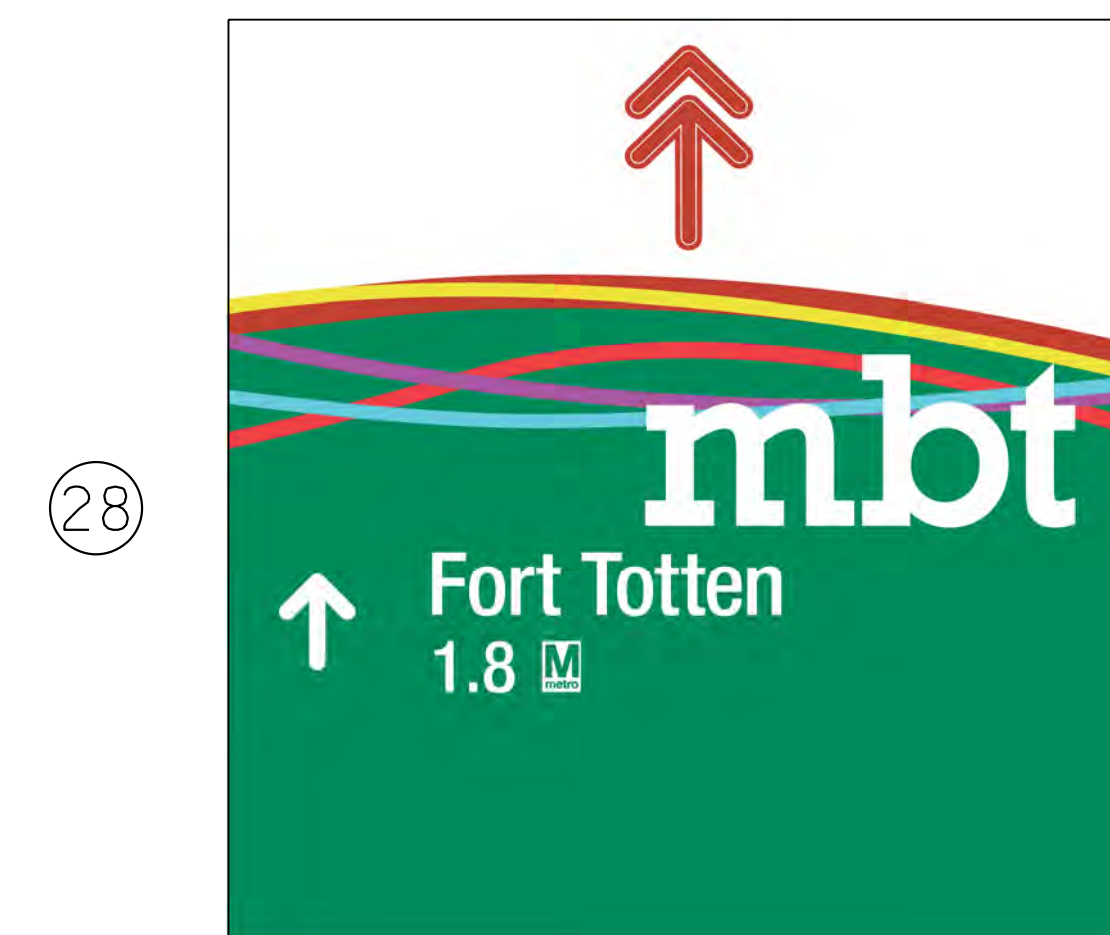
16" X 16"



16" X 16"



16" X 16"



16" X 16"

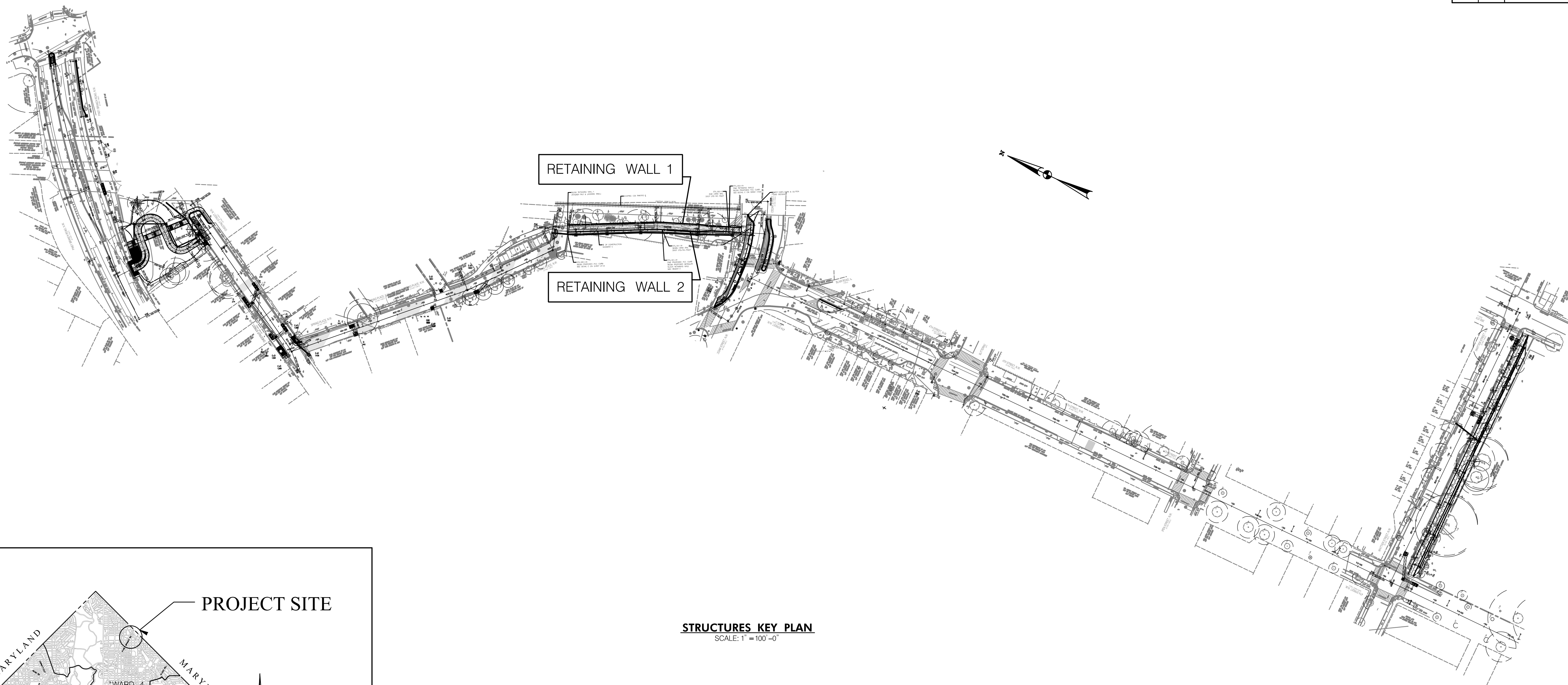
**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

| <b>FEHR PEERS</b> |             | 1003 K Street NW<br>Suite 209 |      | Washington, DC 20001<br>(202) 854-2750 |  |
|-------------------|-------------|-------------------------------|------|--|--|
| NO.               | DESCRIPTION | NAME                          | DATE | REVISIONS                              |  |
|                   |             |                               |      |  |  |

|   |             |   |
|---|-------------|---|
| DATE: JUNE 2023   | SCALE: NONE | <b>SN-10</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |             |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |             | PROJECT ENG. _____<br>DESIGNED BY _____<br>CHECKED BY _____<br>DRAWN BY _____<br>PROJECT MGR. _____ |
| <b>WAYFINDING SIGNS<br/>DETAILS</b>   |             | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET <b>47</b> OF 160                          |

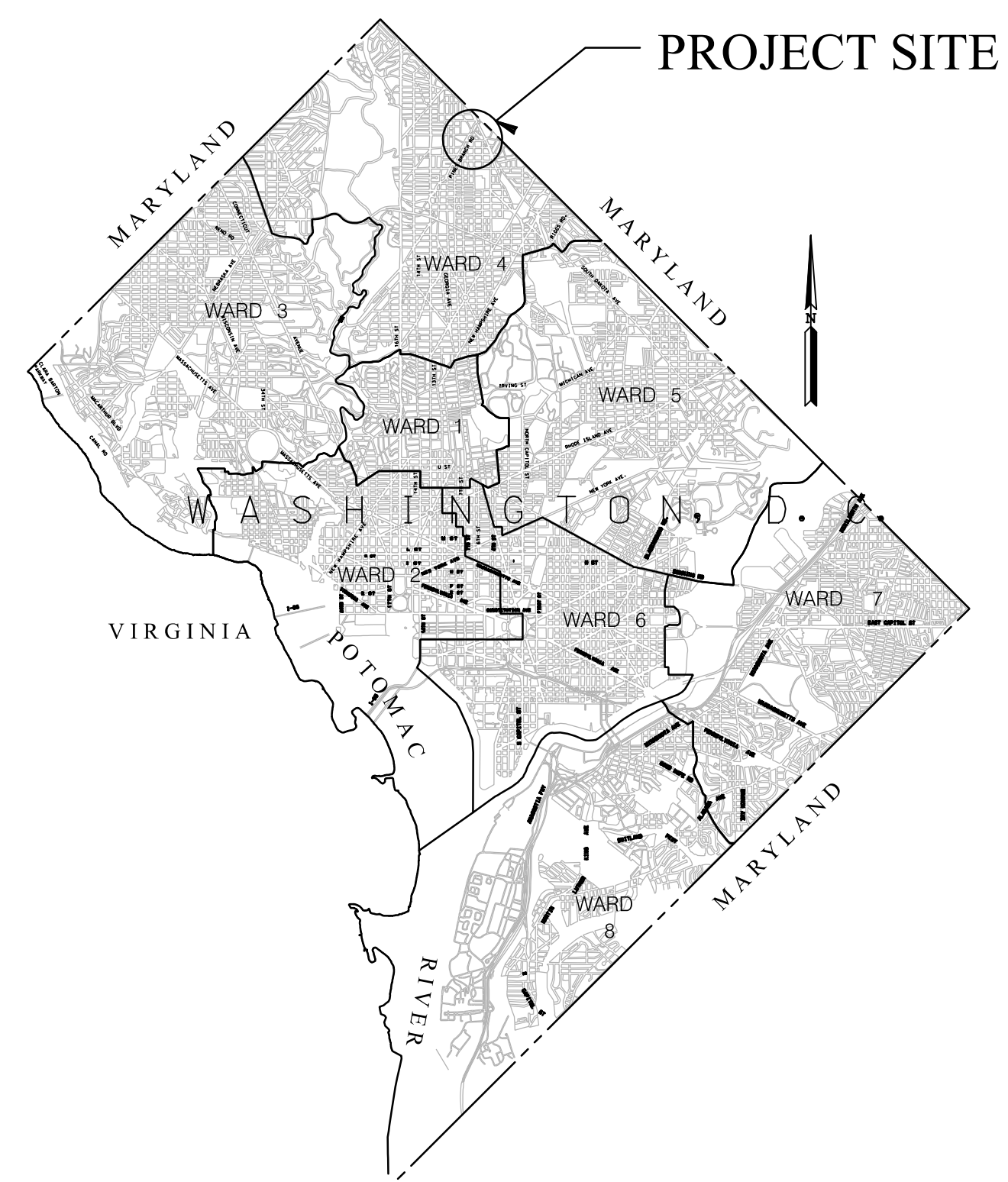
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 48        | 160          |



**STRUCTURES KEY PLAN**  
SCALE: 1" = 100'-0"

| STRUCTURES IN CONTRACT |                             |
|------------------------|-----------------------------|
| NAME                   | DESCRIPTION                 |
| RETAINING WALL 1       | SOLDIER PILE & LAGGING WALL |
| RETAINING WALL 2       | MODULAR BLOCK WALL          |



**VICINITY MAP**

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

**RK&K**  
Rummel, Klepper & Kahl, LLP  
100 M STREET SE | SUITE 950 | WASHINGTON, DC 20003  
PH: (202) 479-2707 FAX: (855) 263-6293  
Engineers | Construction Managers | Planners | Scientists  
www.rkk.com

| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
|     |             |      |      |
|     |             |      |      |
|     |             |      |      |
|     |             |      |      |

|   |                 |   |
|---|-----------------|---|
| DATE: JUNE 2023   | SCALE: NO SCALE | <b>BR-01</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>    </u> PLO<br>DESIGNED BY <u>    </u> PLO<br>CHECKED BY <u>    </u> JSW<br>DRAWN BY <u>    </u> MBP<br>PROJECT MGR. <u>    </u> JSW |
| <b>STRUCTURAL KEY PLAN</b>  |                 | DIVISION CHIEF<br>DATE <u>    </u> JUNE 2023<br>FILE <u>    </u><br>SHEET <b>48</b> OF 160  |

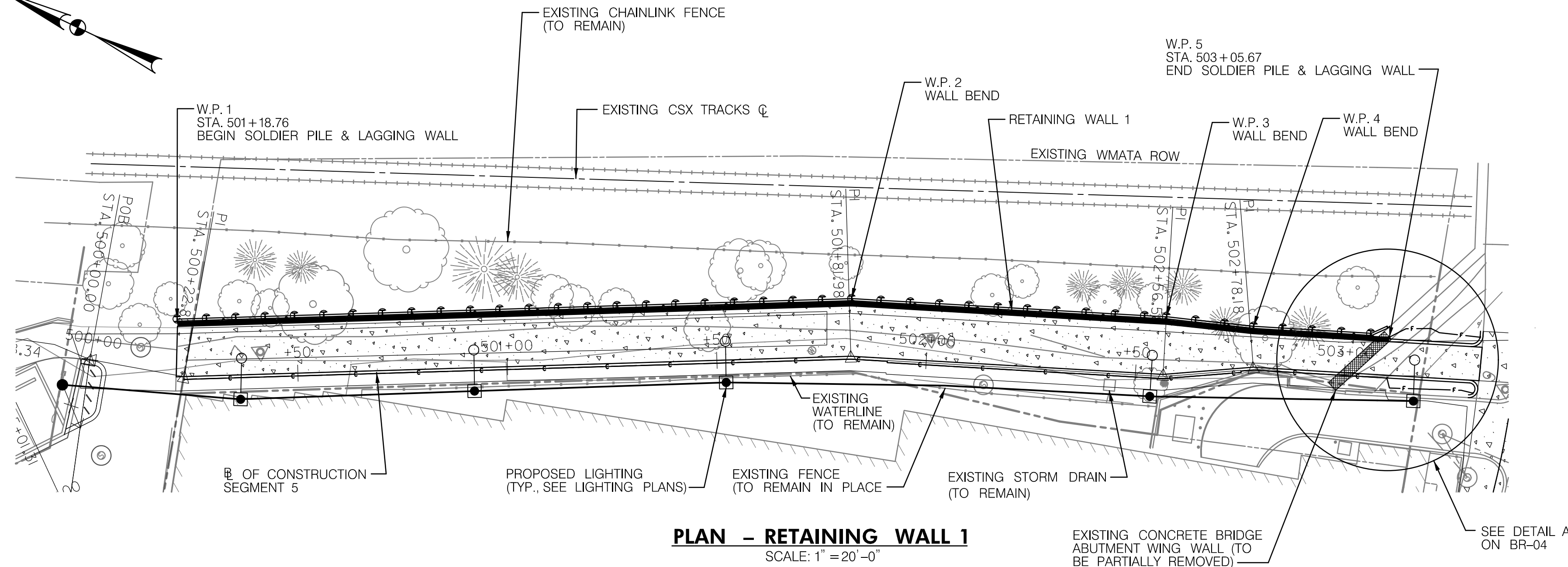
FILES & DATES



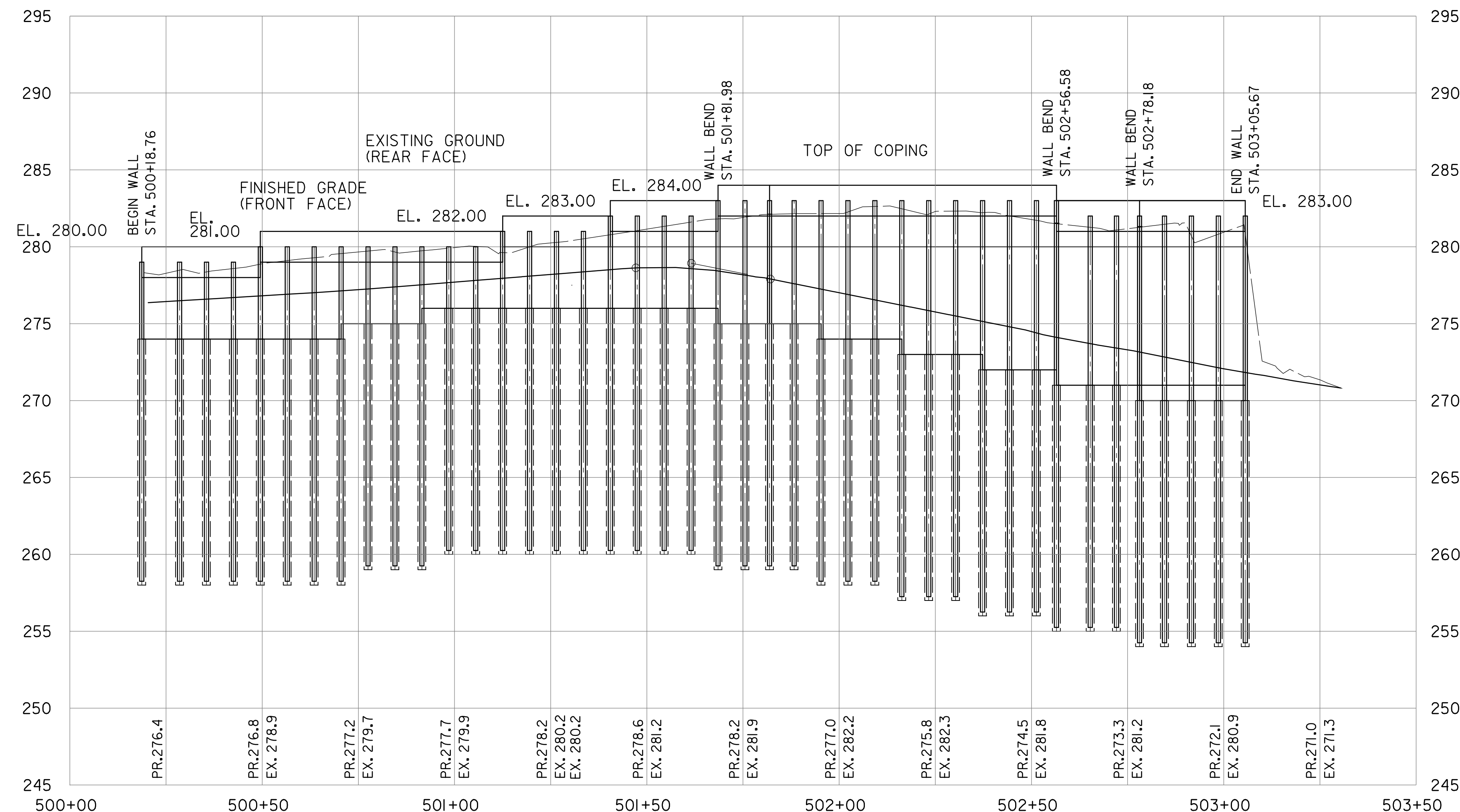
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 49        | 160          |

**GENERAL NOTES:**

- CONSTRUCTION SPECIFICATIONS: ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL BE GOVERNED BY THE "STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES" DATED 2013 ISSUED BY THE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION, EXCEPT AS AMENDED OR SUPPLEMENTED BY SPECIAL PROVISIONS.
- DESIGN SPECIFICATIONS: - D.C. DEPARTMENT OF TRANSPORTATION DESIGN AND ENGINEERING MANUAL, 2019 - AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION DATED 2020 AND ALL INTERIMS
- DELEGATED DESIGN: THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF RETAINING WALL 2 - MODULAR BLOCK WALL. THE CONTRACTOR SHALL SUBMIT DRAWINGS AND DESIGN CALCULATIONS FOR REVIEW IN ACCORDANCE WITH DDOT STANDARD SPECIFICATIONS AS SUPPLEMENTED BY SPECIAL PROVISIONS.
- SITE VERIFICATION: THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS AT THE SITE PRIOR TO THE START OF CONSTRUCTION. CONFLICTS BETWEEN THE DRAWINGS AND THE ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH WORK.
- ELEVATIONS AND COORDINATES: COORDINATES SHOWN ON THESE PLANS ARE BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. ALL ELEVATIONS ARE BASED ON THE DISTRICT OF COLUMBIA DATUM FOR WHICH -2.11 FT MEANS LOWER WATER.
- DIMENSIONS: ALL STRUCTURE DIMENSIONS ARE BASED UPON A NORMAL TEMPERATURE OF 70 DEGREES FAHRENHEIT, UNLESS OTHERWISE NOTED. ALL PLAN DIMENSIONS ARE HORIZONTAL, UNLESS OTHERWISE NOTED.
- SUPPORT OF EXCAVATION: THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF TEMPORARY SUPPORT OF EXCAVATION WHERE REQUIRED. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN COMPUTATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE DISTRICT OF COLUMBIA FOR REVIEW AND APPROVAL.
- TEMPORARY FORMWORK, SHORING, BRACING: STRUCTURES SHOWN ON THESE DRAWINGS HAVE BEEN DESIGNED FOR STABILITY UNDER FINAL CONDITIONS ONLY. DESIGN SHOWN DOES NOT INCLUDE NECESSARY COMPONENTS OR EQUIPMENT REQUIRED FOR STABILITY OF THE STRUCTURES DURING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING, AND OTHER WORK AIDS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETE.
- LOAD RESTRICTIONS: THERE ARE RESTRICTIONS FOR PLACING EQUIPMENT AND MATERIALS ON OR AGAINST EXISTING AND NEW STRUCTURES. REFER TO SPECIAL PROVISION TITLED "RESTRICTIONS FOR PLACING AND USING EQUIPMENT ON STRUCTURES, OR STORING MATERIALS ON OR AGAINST STRUCTURES". IN ORDER TO COMPLY WITH THIS ARTICLE, THE CONTRACTOR SHALL READ THE SPECIAL PROVISION PRIOR TO COMMENCING ANY WORK ON STRUCTURES IN THIS CONTRACT.
- MAINTENANCE OF TRAFFIC: DURING ALL PHASES OF PROJECT OPERATIONS AND FOR THE DURATION OF THE CONTRACT, VEHICULAR AND PEDESTRIAN TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS. IF THE CONTRACTOR DEVELOPS AN ALTERNATIVE MAINTENANCE OF TRAFFIC PLAN, IT SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER PRIOR TO BEGINNING OF CONSTRUCTION.
- SOILS AND FOUNDATIONS:
  - FOUNDATION REPORT: ALL EARTHWORK AND FOUNDATION WORK SHALL CONFORM TO THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THE PROJECT GEOTECHNICAL REPORT. ACCESS TO THIS REPORT AND CORE BORINGS FOR THIS PROJECT CAN BE ARRANGED BY CONTACTING THE GEOTECHNICAL SECTION OF DDOT.
  - EXISTING SOIL PROPERTIES: ALLOWABLE BEARING CAPACITY = 1,000 PSF  
SOIL UNIT WEIGHT = 120 PCF  
ANGLE OF INTERNAL FRICTION = 25°
- STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270 (ASTM A709) GRADE 50 INCLUDING THE ADDITIONAL REQUIREMENTS FOR CHARPY V-NOTCH TESTING.
  - STRUCTURAL STEEL SHALL BE GALVANIZED.
  - EXPOSED SURFACES SHALL BE PAINTED. THE FINISH COAT SHALL BE AN AMS-STD-595 COLOR MATCHING WALL CONCRETE.
- ALL CONCRETE SHALL BE CLASS B (4,500 PSI).
  - ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4" x 3/4", EXCEPT AS NOTED.
- ALL REINFORCING STEEL SHALL BE AASHTO M31 (ASTM A615, GRADE 60) AND SHALL BE EPOXY COATED.
  - ALL BENDS AND HOOKS SHALL MEET THE REQUIREMENTS OF AASHTO ARTICLE 5.10.2, UNLESS NOTED OTHERWISE. ALL BEND DIMENSIONS FOR REINFORCING STEEL SHALL BE OUT-TO-OUT FOR BARS. ALL PLACEMENT DIMENSIONS FOR REINFORCING STEEL SHALL BE TO CENTER OF BARS, UNLESS OTHERWISE NOTED.
  - MINIMUM CONCRETE COVER: CAST-IN-PLACE CONCRETE..... 2" (UNLESS OTHERWISE NOTED)  
PRECAST CONCRETE..... 1 1/4" (UNLESS OTHERWISE NOTED)
  - FOR TIES AND STIRRUPS: STANDARD ACI BENDING TOLERANCES ARE MODIFIED TO PLUS (+) ZERO INCHES, MINUS (-) NORMAL ACI BENDING TOLERANCES.



**PLAN - RETAINING WALL 1**  
SCALE: 1" = 20'-0"

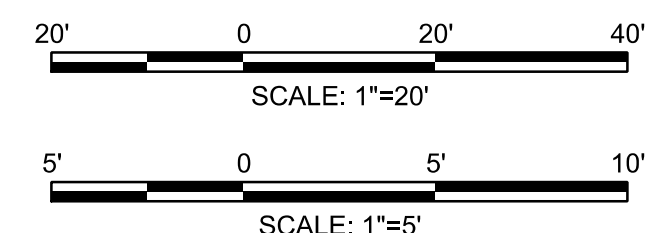


**DEVELOPED ELEVATION  
RETAINING WALL 1**  
SCALE: HORIZ: 1" = 20'-0"  
VERT: 1" = 5'-0"

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

**RK&K**  
Rummel, Klepper & Kahl, LLP  
100 M STREET SE | SUITE 950 | WASHINGTON, DC 20003  
PH: (202) 479-2707 FAX: (855) 263-6293  
Engineers | Construction Managers | Planners | Scientists  
www.rkk.com

| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
|     |             |      |      |



|   |               |   |
|---|---------------|---|
| DATE: JUNE 2023   | SCALE: VARIES | <b>BR-02</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |               |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |               | PROJECT ENG. PLO<br>DESIGNED BY PLO<br>CHECKED BY JSW<br>DRAWN BY MBP<br>PROJECT MGR. JSW |
| <b>RETAINING WALL 1<br/>GENERAL PLAN AND ELEVATION</b>                                  |               | DIVISION CHIEF  |
| DATE: JUNE 2023   |               |   |
| FILE: _____   |               |   |
| SHEET 49 OF 160   |               |   |

FILES & DATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 50        | 160          |

# SOLDIER PILE SCHEDULE

## 7'-0" MAX. PILE SPACING

| PILE NO. | BASELINE STATION | OFFSET     | COORDINATES |            | ELEVATION TOP OF PILE | TYPE       |
|----------|------------------|------------|-------------|------------|-----------------------|------------|
|          |                  |            | NORTHING    | EASTING    |                       |            |
| 1        | 500+18.76        | 13.22' LT. | 476725.66   | 1307151.33 | 279.00                | CANTILEVER |
| 2        | 500+28.59        | 13.78' RT. | 476719.44   | 1307154.54 | 279.00                | CANTILEVER |
| 3        | 500+35.59        | 13.78' RT. | 476713.22   | 1307157.74 | 279.00                | CANTILEVER |
| 4        | 500+42.59        | 13.78' RT. | 476706.99   | 1307160.94 | 280.00                | CANTILEVER |
| 5        | 500+49.59        | 13.78' RT. | 476700.77   | 1307164.15 | 280.00                | CANTILEVER |
| 6        | 500+56.59        | 13.78' RT. | 476694.55   | 1307167.35 | 280.00                | CANTILEVER |
| 7        | 500+63.59        | 13.78' RT. | 476688.32   | 1307170.56 | 280.00                | CANTILEVER |
| 8        | 500+70.59        | 13.78' RT. | 476682.10   | 1307173.76 | 280.00                | CANTILEVER |
| 9        | 500+77.59        | 13.78' RT. | 476675.88   | 1307176.97 | 280.00                | CANTILEVER |
| 10       | 500+84.59        | 13.78' RT. | 476669.65   | 1307180.17 | 280.00                | CANTILEVER |
| 11       | 500+91.59        | 13.78' RT. | 476663.43   | 1307183.38 | 281.00                | CANTILEVER |
| 12       | 500+98.59        | 13.78' RT. | 476657.21   | 1307186.58 | 281.00                | CANTILEVER |
| 13       | 501+05.59        | 13.78' RT. | 476650.98   | 1307189.79 | 281.00                | CANTILEVER |
| 14       | 501+12.59        | 13.78' RT. | 476644.76   | 1307192.99 | 281.00                | CANTILEVER |
| 15       | 501+19.59        | 13.78' RT. | 476638.54   | 1307196.19 | 281.00                | CANTILEVER |
| 16       | 501+26.59        | 13.78' RT. | 476632.31   | 1307199.40 | 281.00                | CANTILEVER |
| 17       | 501+33.59        | 13.78' RT. | 476626.09   | 1307202.60 | 281.00                | CANTILEVER |
| 18       | 501+40.59        | 13.78' RT. | 476619.87   | 1307205.81 | 282.00                | TIEBACK    |
| 19       | 501+47.59        | 13.78' RT. | 476613.64   | 1307209.01 | 282.00                | TIEBACK    |
| 20       | 501+54.59        | 13.78' RT. | 476607.42   | 1307212.22 | 282.00                | TIEBACK    |
| 21       | 501+61.59        | 13.78' RT. | 476601.20   | 1307215.42 | 282.00                | TIEBACK    |
| 22       | 501+68.59        | 13.78' RT. | 476594.97   | 1307218.63 | 283.00                | TIEBACK    |
| 23       | 501+75.59        | 13.78' RT. | 476588.75   | 1307221.83 | 283.00                | TIEBACK    |
| 24       | 501+81.98        | 13.79' RT. | 476582.53   | 1307225.04 | 283.00                | TIEBACK    |
| 25       | 501+88.37        | 13.78' RT. | 476576.04   | 1307227.68 | 283.00                | TIEBACK    |
| 26       | 501+95.37        | 13.78' RT. | 476569.56   | 1307230.32 | 283.00                | TIEBACK    |
| 27       | 502+02.37        | 13.78' RT. | 476563.08   | 1307232.96 | 283.00                | TIEBACK    |
| 28       | 502+09.37        | 13.78' RT. | 476556.60   | 1307235.60 | 283.00                | TIEBACK    |
| 29       | 502+16.37        | 13.78' RT. | 476550.12   | 1307238.25 | 283.00                | TIEBACK    |
| 30       | 502+23.37        | 13.78' RT. | 476543.63   | 1307240.89 | 283.00                | TIEBACK    |
| 31       | 502+30.37        | 13.78' RT. | 476537.15   | 1307243.53 | 283.00                | TIEBACK    |
| 32       | 502+37.37        | 13.78' RT. | 476530.67   | 1307246.17 | 283.00                | TIEBACK    |
| 33       | 502+44.37        | 13.78' RT. | 476524.19   | 1307248.82 | 283.00                | TIEBACK    |
| 34       | 502+51.37        | 13.78' RT. | 476517.70   | 1307251.46 | 283.00                | TIEBACK    |
| 35       | 502+56.58        | 13.78' RT. | 476512.84   | 1307253.44 | 283.00                | TIEBACK    |
| 36       | 502+65.36        | 12.34' RT. | 476506.28   | 1307255.74 | 282.00                | TIEBACK    |
| 37       | 502+72.19        | 11.05' RT. | 476499.71   | 1307258.05 | 282.00                | TIEBACK    |
| 38       | 502+78.18        | 9.79' RT.  | 476493.14   | 1307260.36 | 282.00                | TIEBACK    |
| 39       | 502+84.67        | 9.78' RT.  | 476486.66   | 1307262.99 | 282.00                | TIEBACK    |
| 40       | 502+91.67        | 9.78' RT.  | 476480.17   | 1307265.62 | 282.00                | TIEBACK    |
| 41       | 502+98.67        | 9.78' RT.  | 476473.68   | 1307268.26 | 282.00                | TIEBACK    |
| 42       | 503+05.67        | 9.78' RT.  | 476467.20   | 1307270.89 | 282.00                | TIEBACK    |

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE TIEBACKS AND THE CONNECTION TO THE SOLDIER PILES. HOWEVER, THE NUMBER AND LOCATION OF THE TIEBACKS SHALL BE AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL SUBMIT, TO THE ENGINEER FOR APPROVAL, CALCULATIONS AND SHOP DRAWINGS FOR THE TIEBACK DESIGN AND THE CONNECTION DETAILS. CONTRACTOR SHALL ALSO VERIFY THAT THE TIEBACKS WITHIN A WALL DO NOT INTERACT WITH EACH OTHER. THE DESIGN OF THE TIEBACKS AND SHOP DRAWINGS SHALL BE PERFORMED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND QUALIFIED IN TIEBACK DESIGN.
2. TIEBACK CONNECTION WITH THE SOLDIER PILES SHALL BE DETAILED SUCH THAT THE STRUCTURAL CAPACITY OF THE SOLDIER PILES IS EQUIVALENT TO OR GREATER THAN THE BASE SECTION AS SPECIFIED (APPLICABLE TO BENDING MOMENT AND SHEAR).

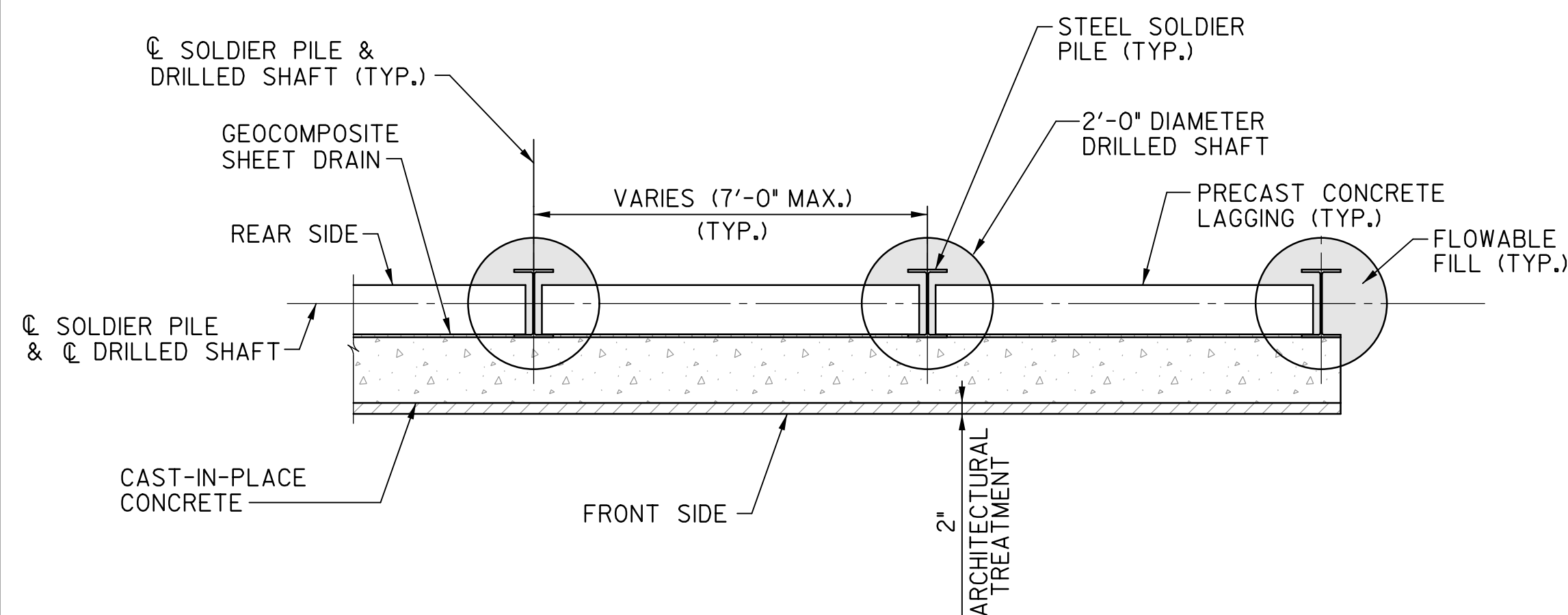
**65% DESIGN PLANS  
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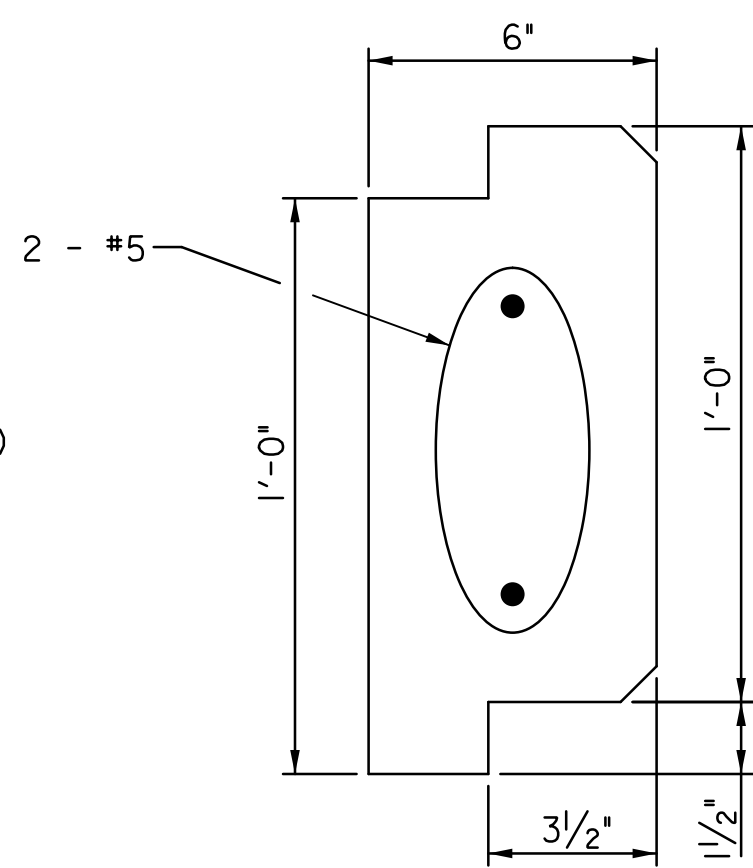
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| DATE: JUNE 2023   | SCALE: VARIES | <b>BR-03</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |               |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |               | PROJECT ENG. _____ PLO<br>DESIGNED BY _____ PLO<br>CHECKED BY _____ JSW<br>DRAWN BY _____ MBP<br>PROJECT MGR. _____ JSW |
| <b>SOLDIER PILE &amp; LAGGING WALL<br/>PILE SCHEDULE</b>                                |               | DIVISION CHIEF<br>DATE: JUNE 2023<br>FILE: _____<br>SHEET 50 OF 160   |

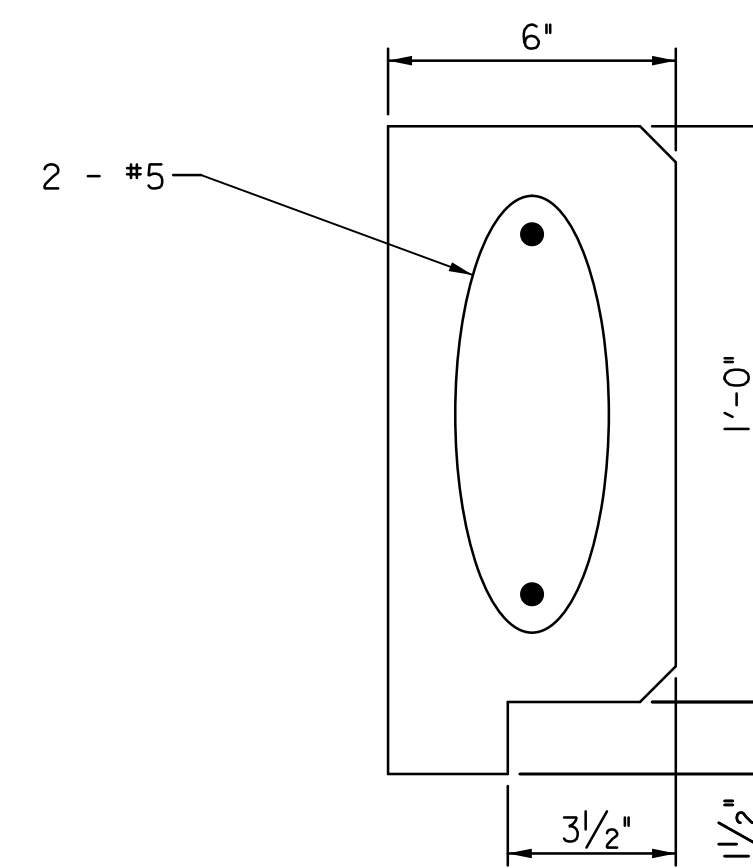
FILES & DATES



**TYPICAL PLAN DETAIL**  
SCALE: 1/2" = 1'-0"

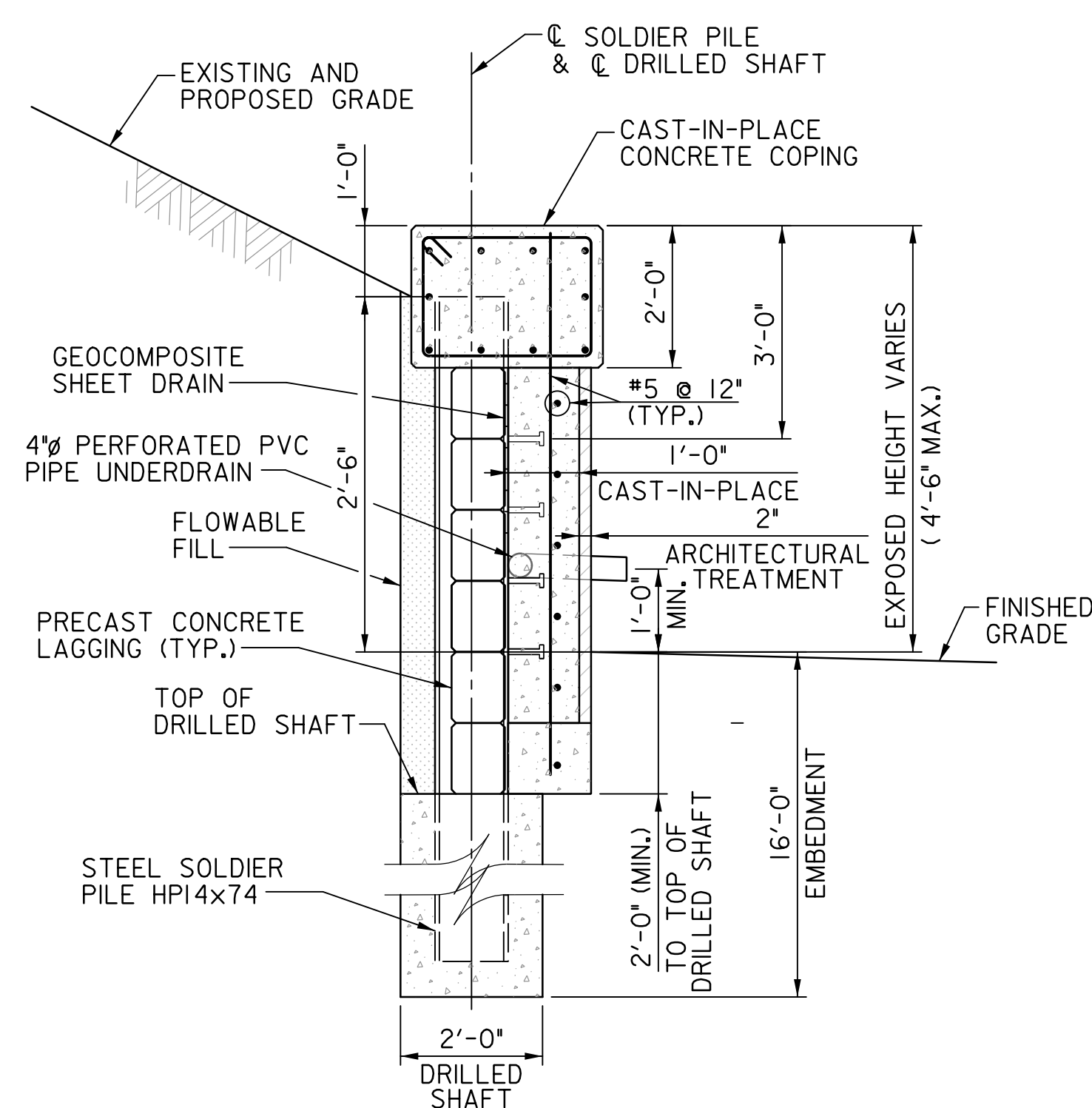


**TYPICAL**

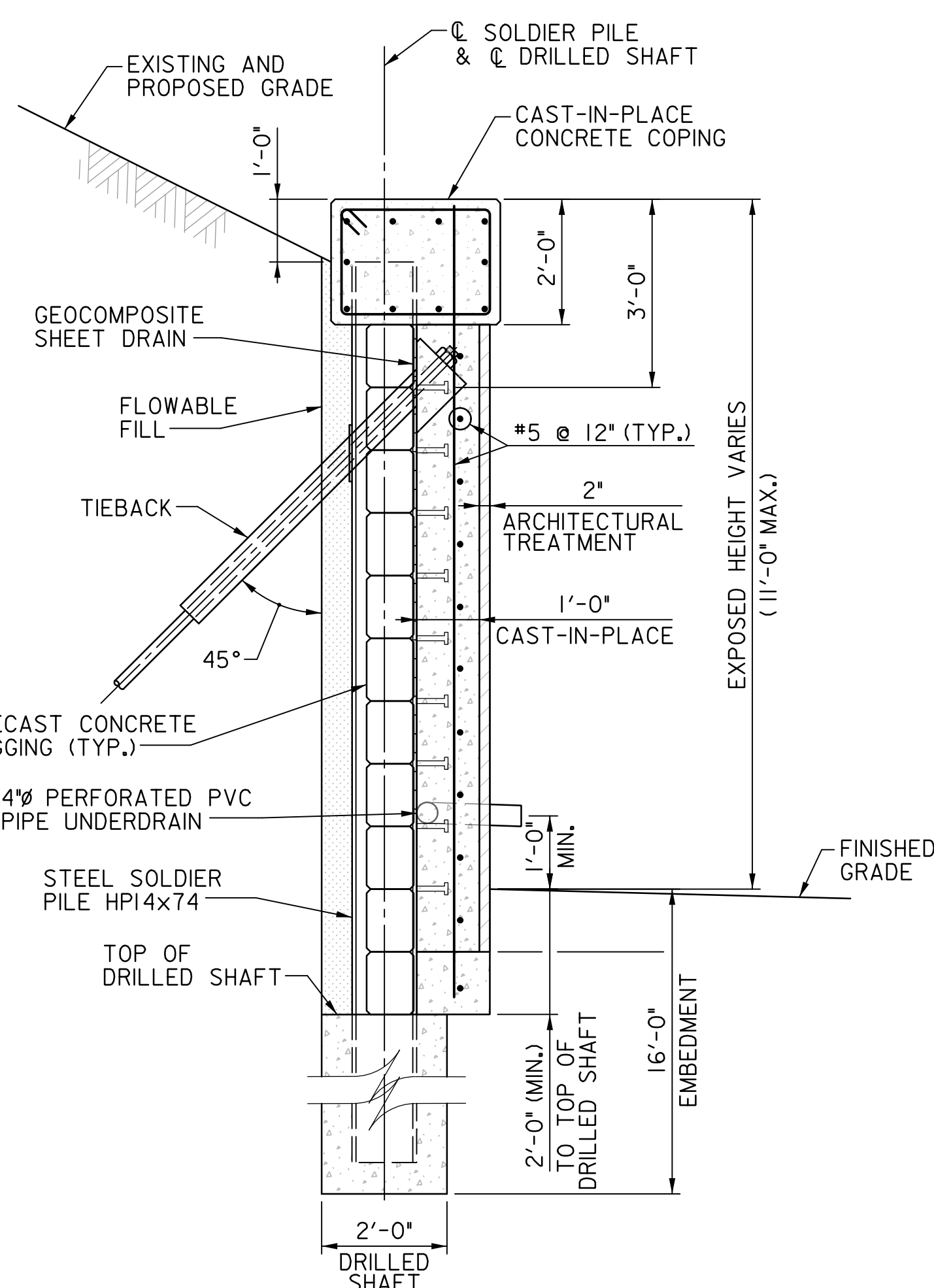


**TOP PANEL**

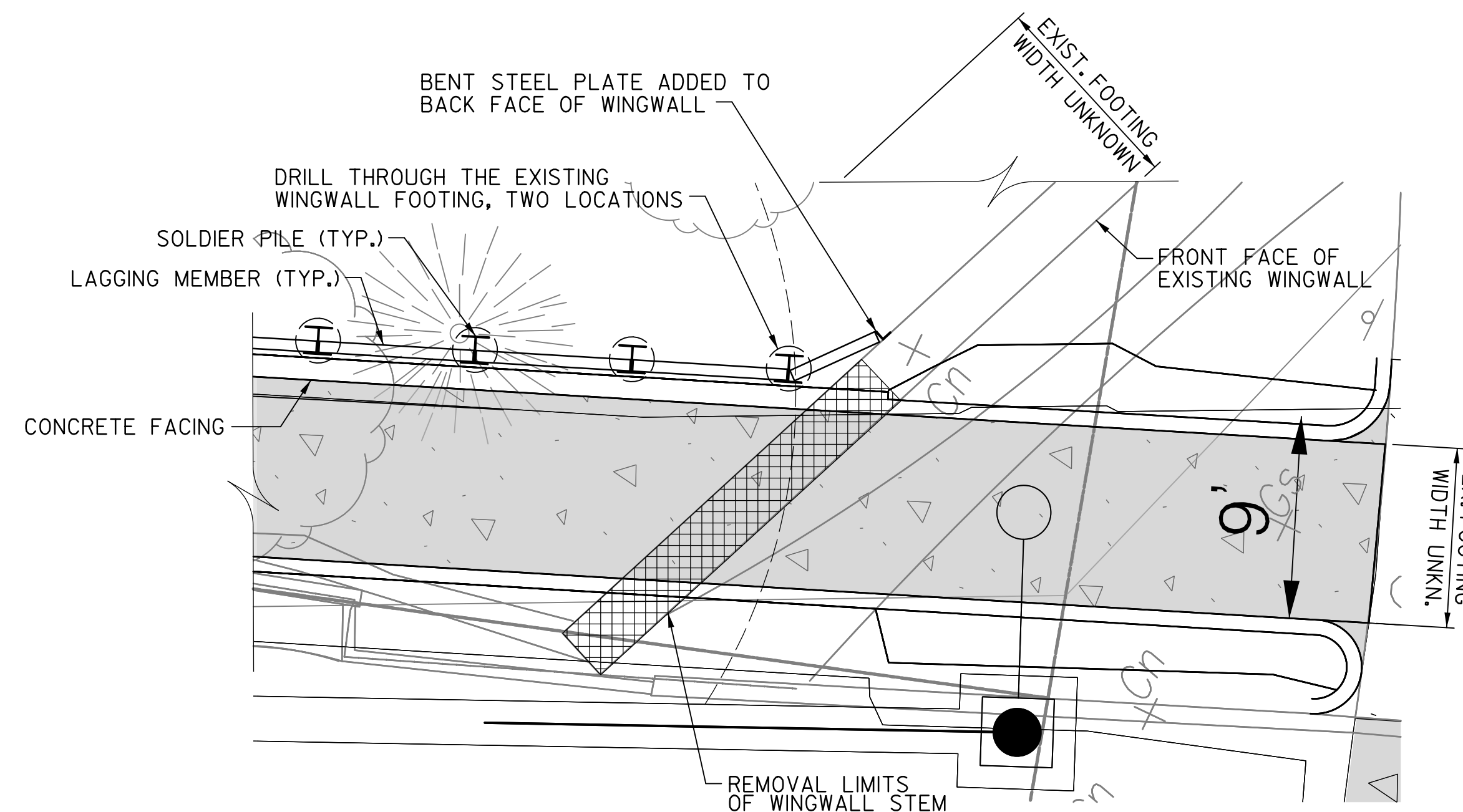
**PRECAST CONCRETE LAGGING DETAIL**  
SCALE: 3/8" = 1'-0"



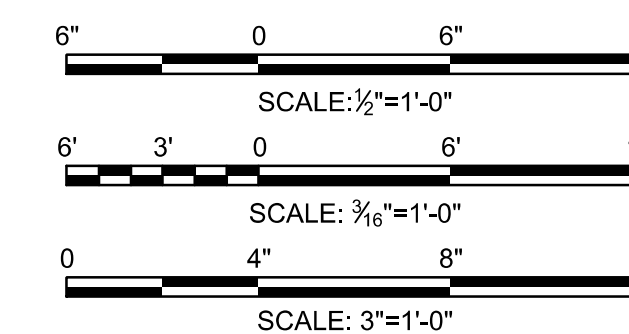
**TYPICAL SECTION - CANTILEVERED**  
**STA. 500+18.76 TO STA. 501+33.59**  
SCALE: 1/2" = 1'-0"



**TYPICAL SECTION - WITH TIEBACK**  
**STA. 501+33.59 TO STA. 503+05.67**  
SCALE: 1/2" = 1'-0"



**DETAIL A - REMOVAL OF EXISTING WINGWALL AND WALL ATTACHMENT**  
SCALE: 3/16" = 1'-0"

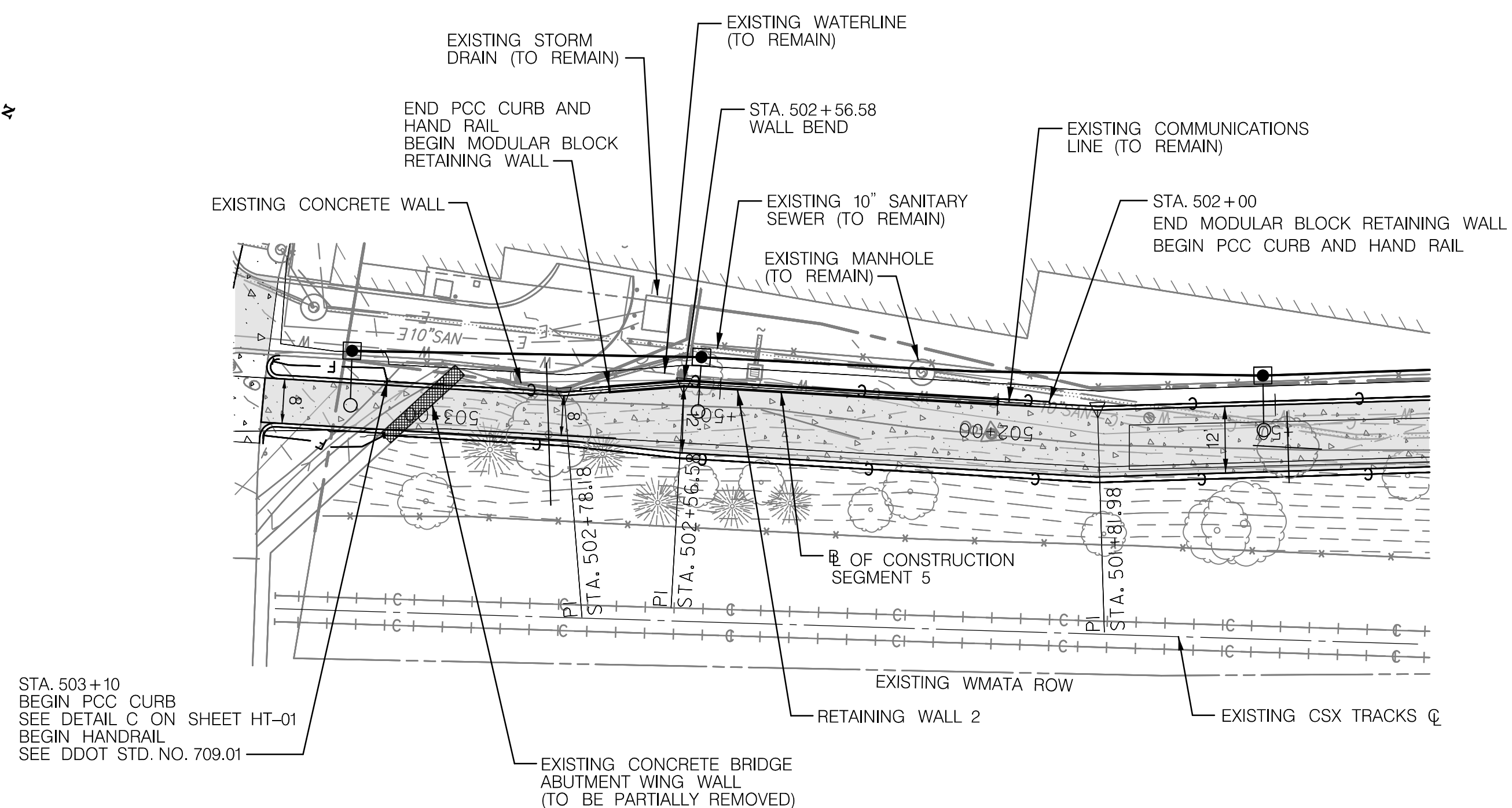


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|---|---------------|---|
| DATE: JUNE 2023   | SCALE: VARIES | <b>BR-04</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |               |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |               | PROJECT ENG. PLO<br>DESIGNED BY PLO<br>CHECKED BY JSW<br>DRAWN BY MBP<br>PROJECT MGR. JSW |
| <b>RETAINING WALL 2</b><br>TYPICAL SECTIONS AND DETAILS                         |               | DIVISION CHIEF<br>DATE: JUNE 2023<br>FILE:<br>SHEET 51 OF 160                             |

**65% DESIGN PLANS  
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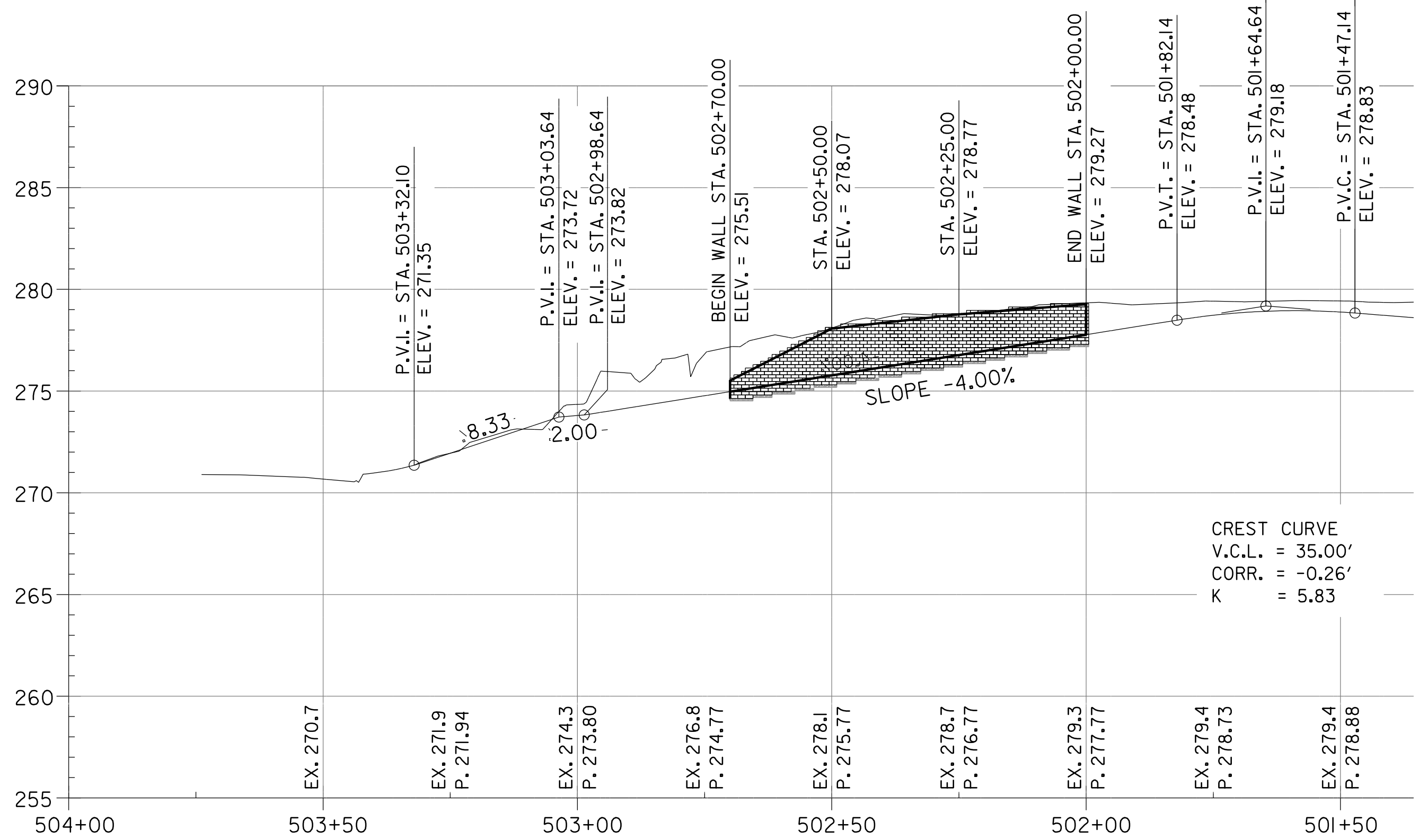
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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

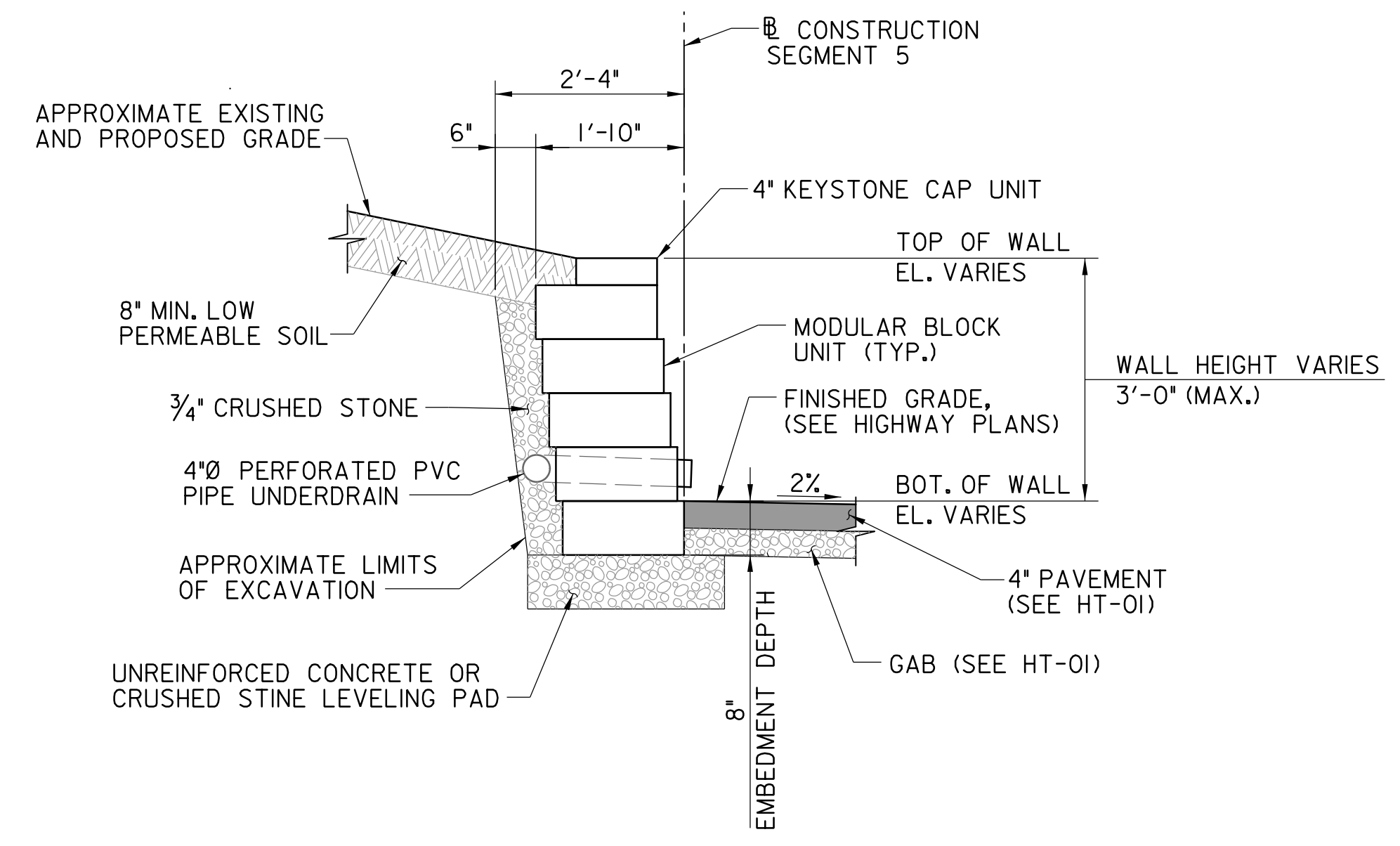


**NOTES:**  
 1. MODULAR BLOCK WALL SHOWN IS FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT DRAWINGS AND DESIGN CALCULATIONS FOR REVIEW IN ACCORDANCE WITH DDOT STANDARD SPECIFICATIONS AS SUPPLEMENTED BY SPECIAL PROVISIONS.

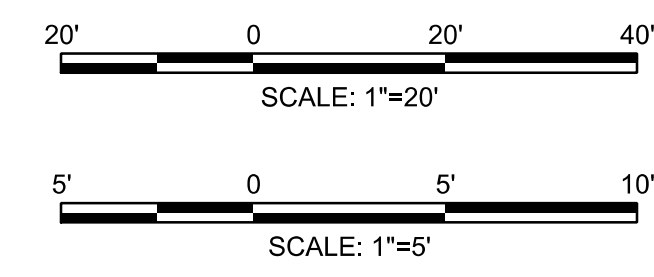
**PLAN  
RETAINING WALL 2**  
 SCALE: 1" = 20'-0"



**DEVELOPED ELEVATION  
RETAINING WALL 2**  
 HORIZ: 1" = 20'-0"  
 VERT: 1" = 5'-0"



**TYPICAL MODULAR BLOCK WALL SECTION**  
 SCALE: 1" = 1'-0"



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| NO. | DESCRIPTION | NAME | DATE |
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|---|---------------|---|
| DATE: JUNE 2023   | SCALE: VARIES | <b>BR-05</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |               |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |               | PROJECT ENG. PLO<br>DESIGNED BY PLO<br>CHECKED BY JSW<br>DRAWN BY MBP<br>PROJECT MGR. JSW |
| <b>RETAINING WALL 2<br/>GENERAL PLAN AND ELEVATION</b>                          |               | DIVISION CHIEF  |
| DATE: JUNE 2023   |               |   |
| FILE: _____   |               |   |
| SHEET 52 OF 160   |               |   |

FILES  
DATES



| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 54        | 160          |

|  |                |   |                                     |
|--|----------------|---|-------------------------------------|
| <b>DMY</b>                             |                | PROJECT NAME: DDOT Metropolitan Branch Trail<br>PROJECT NO.: 02.03335.01<br>LOCATION: Washington, DC<br>CLIENT: RK&K  | <b>DCP-01</b><br>PAGE 1 OF 1        |
| <b>FIELD DATA</b>                      |                | DATE(S) DRILLED: 1/25/2023<br>DRILLING METHOD(S): Hand Augers<br>DRILLING EQUIPMENT: Hand Augers<br>DRILLER: H. Guzman LOGGER: H. Dehghanpour<br>SURFACE ELEVATION: 285.0 | <b>LAB DATA</b>                     |
| DEPTH (FT)                             | ELEVATION (FT) | NO LONG TERM MEASUREMENTS TAKEN   | LIQUID LIMIT                        |
| SPT BLOW COUNTS                        | SAMPLE LEGEND  | <b>MATERIAL DESCRIPTION OF STRATA</b>   | PLASTICITY INDEX                    |
| SAMPLE INTERVAL                        | % RECOVERY     | 0.0 / 285.0<br>TOPSOIL, Tops -2 in  | MOISTURE CONTENT (%)                |
| ROCK QUALITY DESIGNATION (%)           | RMR            | 0.2 / 284.8<br>Dark brown, fine to medium CLAYEY SAND WITH GRAVEL, contains trace roots, very loose, moist SC   | % Finer than #200                   |
| GEOLOGIC STRATA GRAPHIC LOG            |                | 2.0 / 283.0<br>Light brown, sandy SILT WITH GRAVEL, contains trace roots, very soft, moist ML   |                                     |
|  |                | 4.0 / 281.0<br>Light brown, fine to medium SILTY SAND, trace gravel, contains trace roots, very loose, moist SM   | 15.9                                |
|  |                | 6.0 / 279.0<br>Brown, sandy LEAN CLAY, trace gravel, contains trace roots, very soft, moist, Possibly Fill CL   | 7.7                                 |
|  |                | 8.0 / 277.0 Hand Auger Refusal  |                                     |
| REMARKS: Cave-in at depth of 7.2 feet. |                |   |                                     |
|  |                |   | <b>PAGE 1 OF 1</b><br><b>DCP-01</b> |

|  |                |   |                                     |
|--|----------------|---|-------------------------------------|
| <b>DMY</b>                             |                | PROJECT NAME: DDOT Metropolitan Branch Trail<br>PROJECT NO.: 02.03335.01<br>LOCATION: Washington, DC<br>CLIENT: RK&K  | <b>DCP-02</b><br>PAGE 1 OF 1        |
| <b>FIELD DATA</b>                      |                | DATE(S) DRILLED: 1/27/2023<br>DRILLING METHOD(S): Hand Augers<br>DRILLING EQUIPMENT: Hand Augers<br>DRILLER: M. Santos LOGGER: H. Dehghanpour<br>SURFACE ELEVATION: 284.0 | <b>LAB DATA</b>                     |
| DEPTH (FT)                             | ELEVATION (FT) | NO LONG TERM MEASUREMENTS TAKEN   | LIQUID LIMIT                        |
| SPT BLOW COUNTS                        | SAMPLE LEGEND  | <b>MATERIAL DESCRIPTION OF STRATA</b>   | PLASTICITY INDEX                    |
| SAMPLE INTERVAL                        | % RECOVERY     | 0.0 / 284.0<br>TOPSOIL, Tops -2 in  | MOISTURE CONTENT (%)                |
| ROCK QUALITY DESIGNATION (%)           | RMR            | 0.2 / 283.6<br>Light brown, fine to medium POORLY-GRADED SAND WITH GRAVEL, contains trace roots, very loose, moist SP   |                                     |
| GEOLOGIC STRATA GRAPHIC LOG            |                | 2.0 / 282.0<br>Brown, LEAN CLAY WITH SAND, very soft, moist CL  | 27                                  |
|  |                | 4.0 / 280.0<br>Light brown, fine to medium POORLY-GRADED SAND WITH GRAVEL, very loose, moist SP   | 11                                  |
|  |                | 6.0 / 278.0<br>Brown, sandy LEAN CLAY, very soft, moist, Possibly Fill CL   | 15.1                                |
|  |                | 6.5 / 277.5 Hand Auger Refusal  | 75.6                                |
| REMARKS: Cave-in at depth of 6.5 feet. |                |   |                                     |
|  |                |   | <b>PAGE 1 OF 1</b><br><b>DCP-02</b> |

**NOTES:**

- BORINGS AND SAMPLES CONFORM TO ASTM DESIGNATION D 1586.
- BORINGS WERE TAKEN IN FEBRUARY 2023 BY DMY ENGINEERING CONSULTANTS, INC.
- LABORATORY TESTING FOR SELECTED SOIL AND ROCK SAMPLES FROM THE BORINGS WAS COMPLETED BY DMY ENGINEERING CONSULTANTS, INC.

**SOIL CLASSIFICATION CHART**

| MAJOR DIVISIONS  |        | SYMBOLS  |        | TYPICAL DESCRIPTIONS  | MAJOR DIVISIONS    |        | SYMBOLS |        | TYPICAL DESCRIPTIONS   |
|--|--------|--|--------|---|--------------------|--------|---------|--------|--|
| GRAPH  | LETTER | GRAPH  | LETTER |   | GRAPH              | LETTER | GRAPH   | LETTER |  |
| GRAVEL AND GRAVELLY SOILS (LITTLE OR NO FINES)           | GW     | CLEAN GRAVELS                                  | GW     | WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES   | FINE GRAINED SOILS | ML     | ML      | ML     | INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY |
| GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)         | GM     | GRAVELS WITH FINES                             | GM     | POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES |                    | CL     | CL      | CL     | INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS                  |
| CLEAN SANDS (LITTLE OR NO FINES)                         | SW     | CLEAN SANDS                                    | SW     | WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES             |                    | OL     | OL      | OL     | ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY  |
| MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SEIVE | SP     | GRAVELS WITH FINES                             | SP     | POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES            | SILTS AND CLAYS    | MH     | MH      | MH     | INORGANIC SILTS, MUCKEY OR CLAYEY FINE SAND OR SILTY SOILS   |
| SAND AND SANDY SOILS (LITTLE OR NO FINES)                | SM     | CLEAN SANDS                                    | SM     | WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES             |                    | CH     | CH      | CH     | INORGANIC CLAYS OF HIGH PLASTICITY   |
| MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SEIVE  | SC     | SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES) | SC     | CLAYEY SANDS, SAND - CLAY MIXTURES                                |                    | OH     | OH      | OH     | ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS  |
|  |        |  |        |   |                    | PT     | PT      | PT     | PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS  |

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

**LEGEND:**

- FILL: MAN-MADE DEPOSITS
- CMR: COMPLETELY WEATHERED ROCK
- BEDROCK: SCHIST
- GROUNDWATER EL. AT THE COMPLETION OF THE BORING

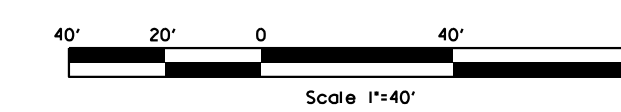


|                                      |                |   |                                      |
|--------------------------------------|----------------|---|--------------------------------------|
| <b>DMY</b>                           |                | PROJECT NAME: DDOT Metropolitan Branch Trail<br>PROJECT NO.: 02.03335.01<br>LOCATION: Washington, DC<br>CLIENT: RK&K  | <b>DCP-03A</b><br>PAGE 1 OF 1        |
| <b>FIELD DATA</b>                    |                | DATE(S) DRILLED: 1/27/2023<br>DRILLING METHOD(S): Hand Augers<br>DRILLING EQUIPMENT: Hand Augers<br>DRILLER: M. Santos LOGGER: H. Dehghanpour<br>SURFACE ELEVATION: 284.0 | <b>LAB DATA</b>                      |
| DEPTH (FT)                           | ELEVATION (FT) | NO LONG TERM MEASUREMENTS TAKEN   | LIQUID LIMIT                         |
| SPT BLOW COUNTS                      | SAMPLE LEGEND  | <b>MATERIAL DESCRIPTION OF STRATA</b>   | PLASTICITY INDEX                     |
| SAMPLE INTERVAL                      | % RECOVERY     | 0.0 / 284.0<br>TOPSOIL, Tops -2 in  | MOISTURE CONTENT (%)                 |
| ROCK QUALITY DESIGNATION (%)         | RMR            | 0.2 / 283.8<br>Light brown, sandy LEAN CLAY WITH GRAVEL, contains trace roots, very soft, wet CL  |                                      |
| GEOLOGIC STRATA GRAPHIC LOG          |                | 2.0 / 282.0<br>Brown, fine to medium SILTY SAND WITH GRAVEL, very loose, moist SM   |                                      |
|                                      |                | 4.0 / 280.0 Hand Auger Refusal  |                                      |
| REMARKS: Cave-in at depth of 4 feet. |                |   |                                      |
|                                      |                |   | <b>PAGE 1 OF 1</b><br><b>DCP-03A</b> |

|  |                |   |                                      |
|--|----------------|---|--------------------------------------|
| <b>DMY</b>   |                | PROJECT NAME: DDOT Metropolitan Branch Trail<br>PROJECT NO.: 02.03335.01<br>LOCATION: Washington, DC<br>CLIENT: RK&K  | <b>DCP-03B</b><br>PAGE 1 OF 1        |
| <b>FIELD DATA</b>  |                | DATE(S) DRILLED: 1/27/2023<br>DRILLING METHOD(S): Hand Augers<br>DRILLING EQUIPMENT: Hand Augers<br>DRILLER: M. Santos LOGGER: H. Dehghanpour<br>SURFACE ELEVATION: 284.0 | <b>LAB DATA</b>                      |
| DEPTH (FT)   | ELEVATION (FT) | NO LONG TERM MEASUREMENTS TAKEN   | LIQUID LIMIT                         |
| SPT BLOW COUNTS  | SAMPLE LEGEND  | <b>MATERIAL DESCRIPTION OF STRATA</b>   | PLASTICITY INDEX                     |
| SAMPLE INTERVAL  | % RECOVERY     | 0.0 / 284.0<br>TOPSOIL, Tops -2 in  | MOISTURE CONTENT (%)                 |
| ROCK QUALITY DESIGNATION (%)   | RMR            | 0.2 / 283.8<br>Light brown, sandy LEAN CLAY WITH GRAVEL, contains trace roots, NA, moist CL   |                                      |
| GEOLOGIC STRATA GRAPHIC LOG  |                | 2.0 / 282.0<br>Brown, fine to medium SILTY SAND WITH GRAVEL, contains trace roots, NA, moist SM   |                                      |
|  |                | 4.0 / 280.0 Hand Auger Refusal  |                                      |
| REMARKS: Cave-in at depth of 4 feet. At the same elevation, the boring location is offset by 2 feet towards the southwest. |                |   |                                      |
|  |                |   | <b>PAGE 1 OF 1</b><br><b>DCP-03B</b> |

**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

BORING LOCATION

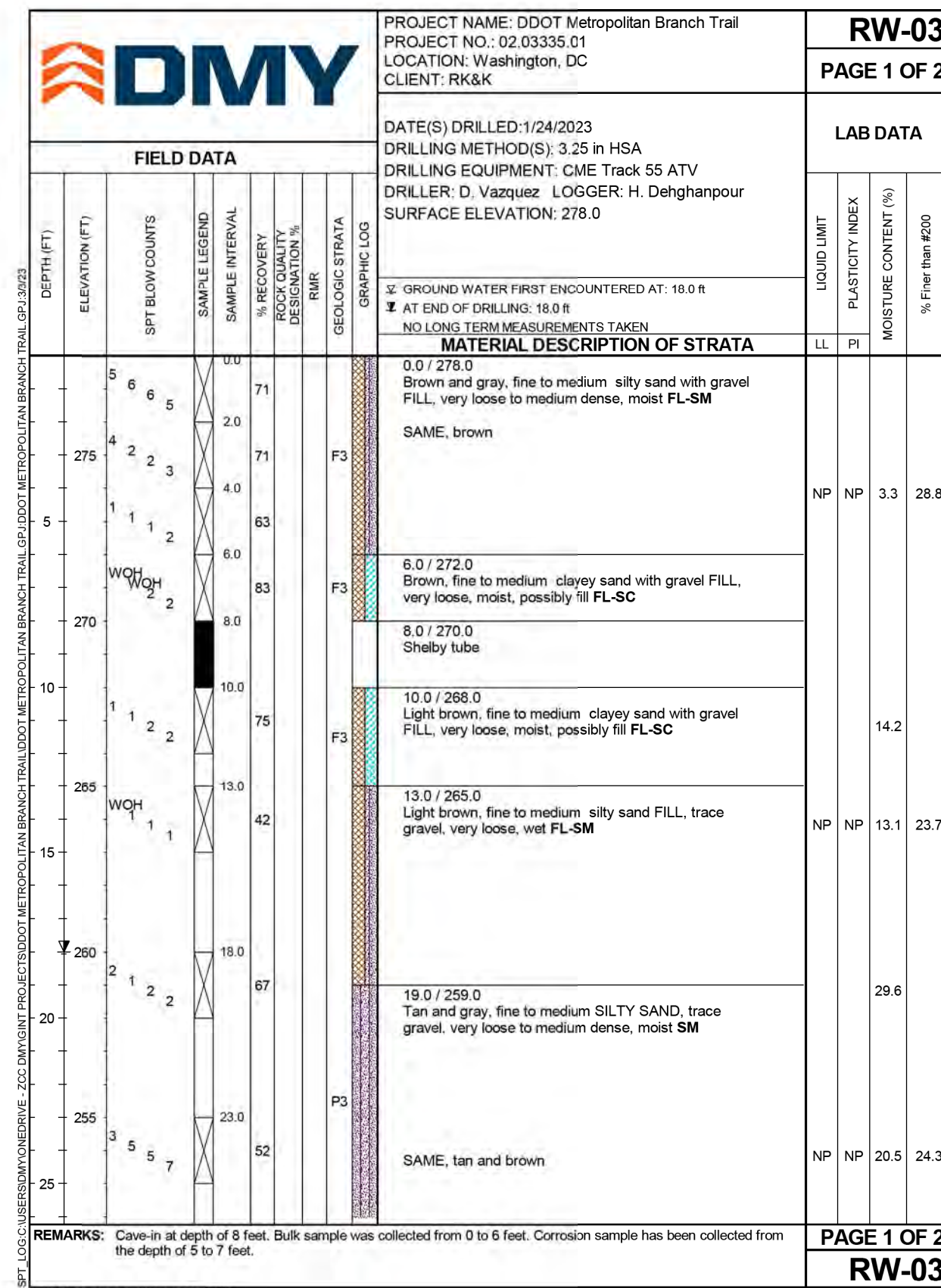
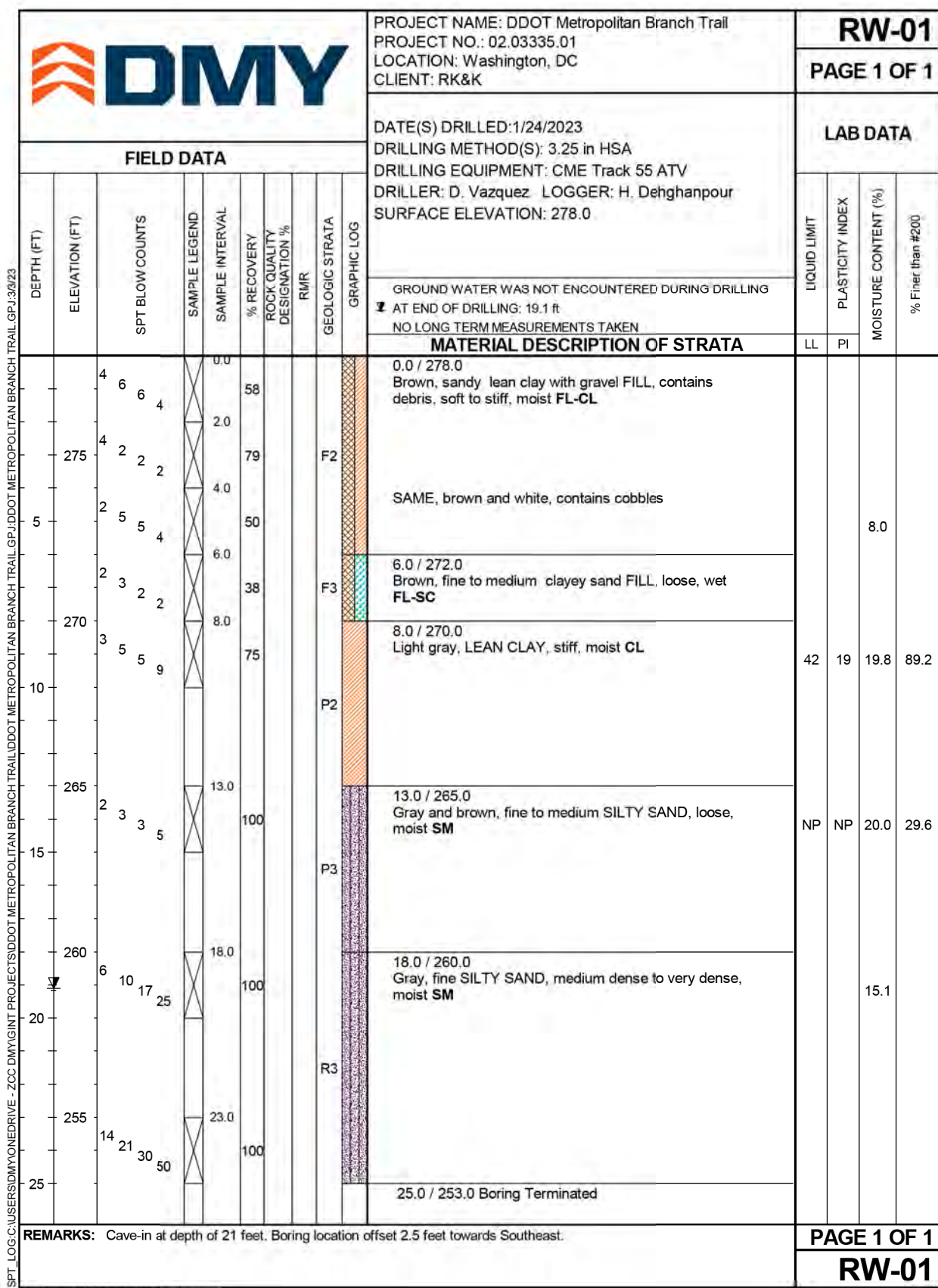


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| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
|     |             |      |      |
|     |             |      |      |

|   |                 |   |
|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 40' | <b>SO-02</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. _____<br>DESIGNED BY _____<br>CHECKED BY _____<br>DRAWN BY _____<br>PROJECT MGR. _____ |
| <b>BORING AND DRIVE TEST - SHEET 2</b>  |                 | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET OF 160                                    |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 55        | 160          |



**NOTES:**

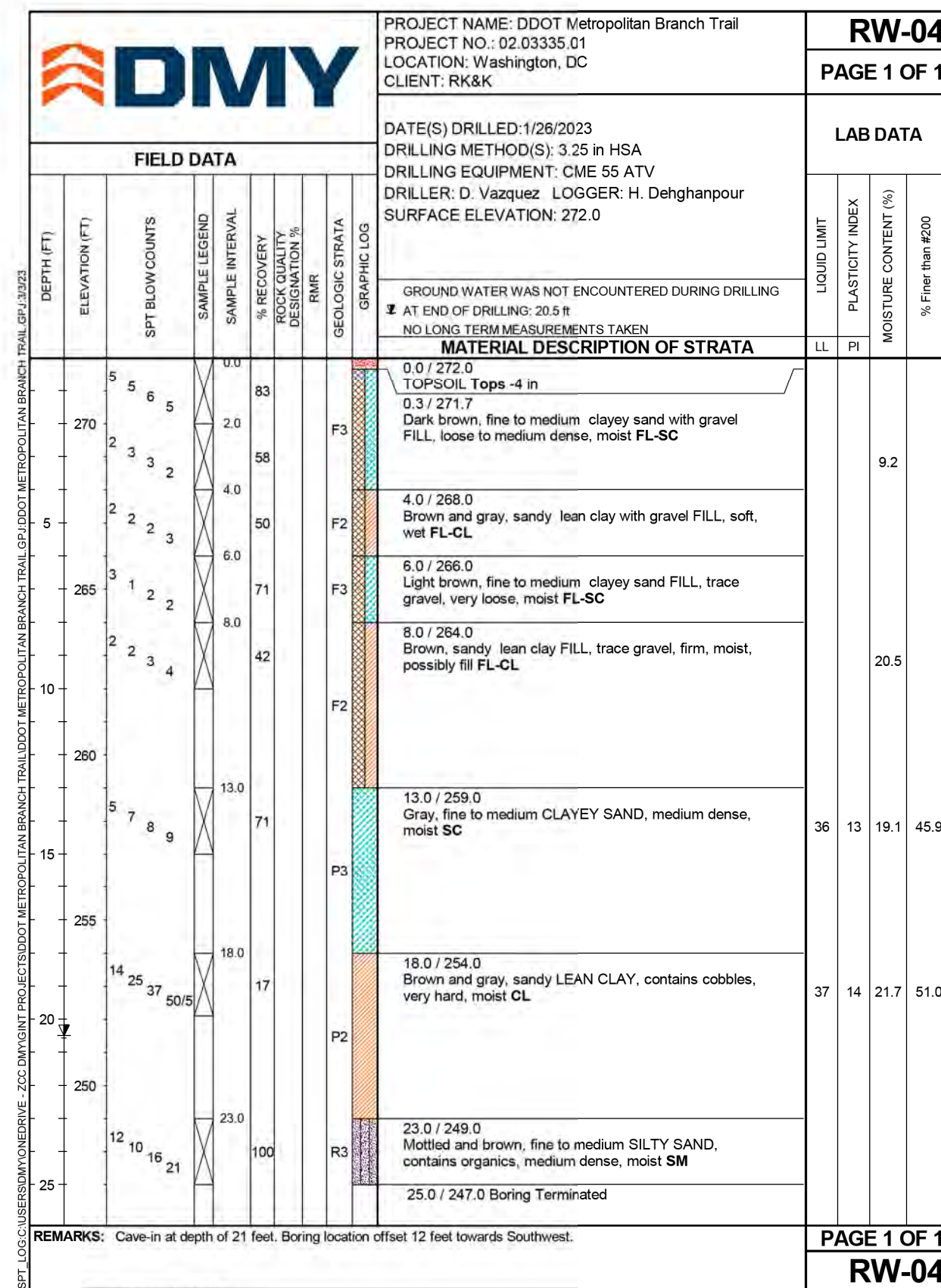
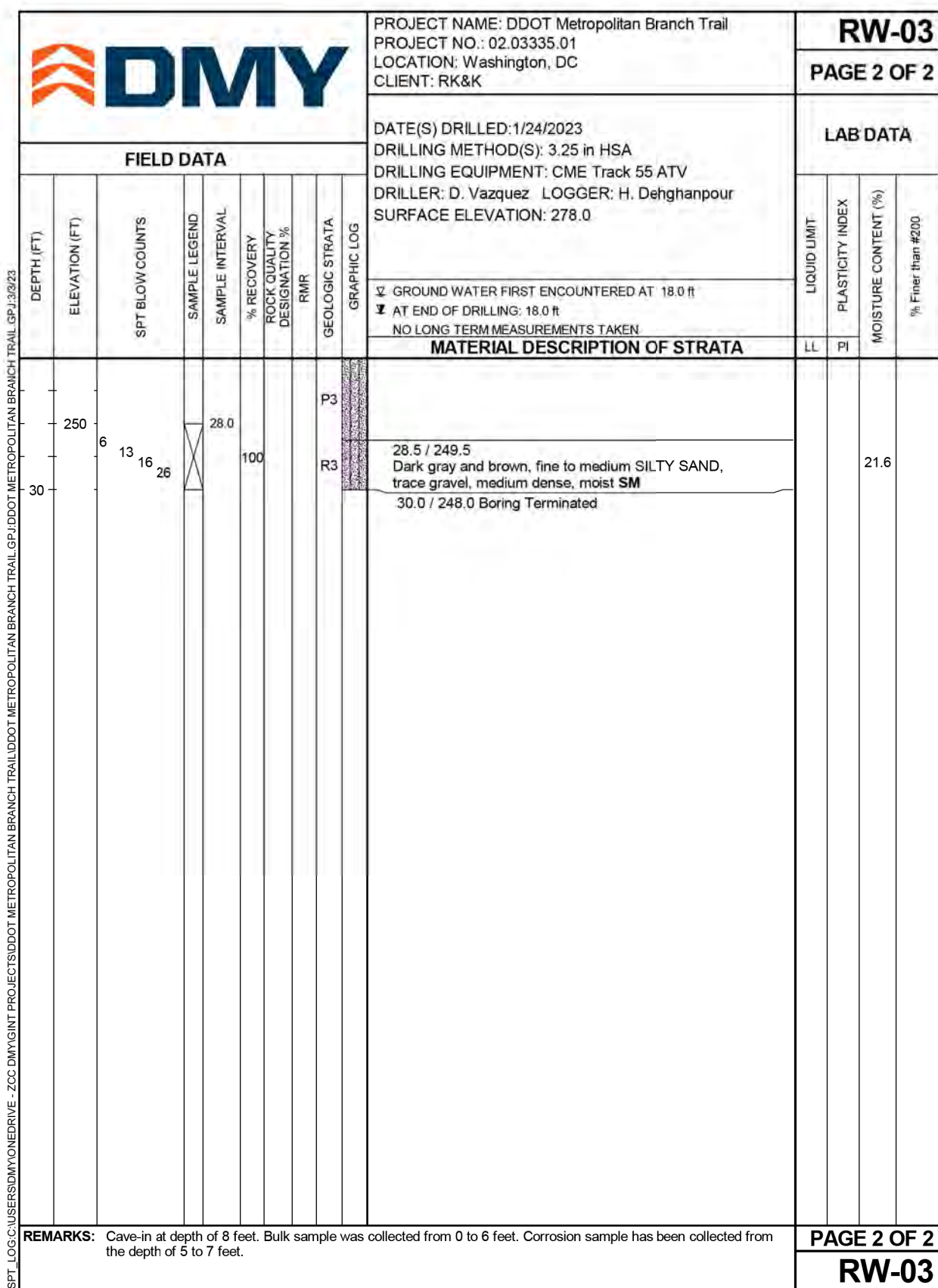
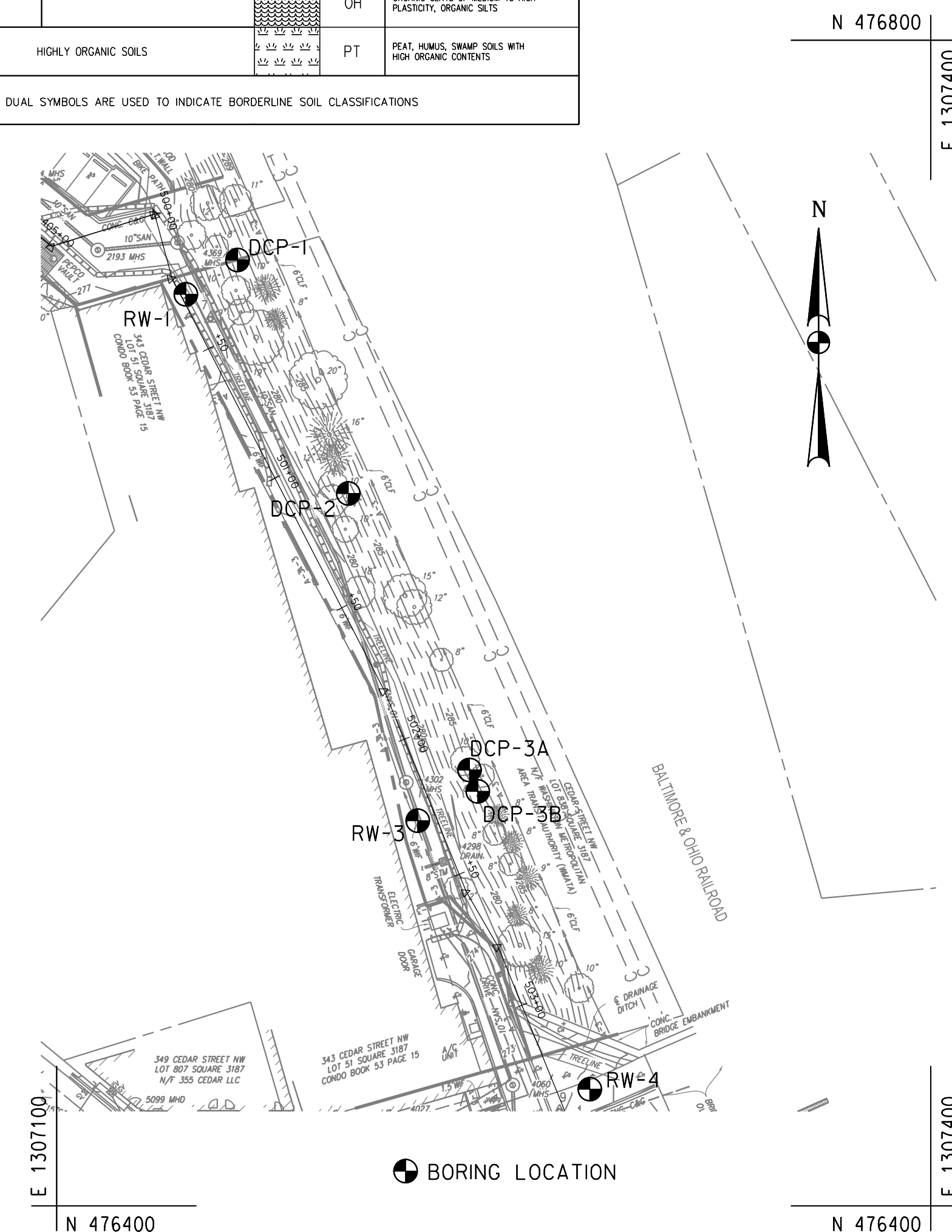
- BORINGS AND SAMPLES CONFORM TO ASTM DESIGNATION D 1586.
- BORINGS WERE TAKEN IN FEBRUARY 2023 BY DMY ENGINEERING CONSULTANTS, INC.
- LABORATORY TESTING FOR SELECTED SOIL AND ROCK SAMPLES FROM THE BORINGS WAS COMPLETED BY DMY ENGINEERING CONSULTANTS, INC.

**SOIL CLASSIFICATION CHART**

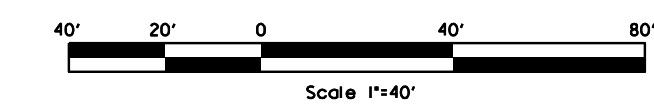
| MAJOR DIVISIONS   |  | SYMBOLS |        | TYPICAL DESCRIPTIONS  |  | MAJOR DIVISIONS      |                              | SYMBOLS                   |    | TYPICAL DESCRIPTIONS                                      |  |
|---|--|---------|--------|---|--|----------------------|------------------------------|---------------------------|----|---|--|
|   |  | GRAPH   | LETTER |   |  | GRAPH                | LETTER                       |                           |    |   |  |
| COARSE GRAINED SOILS  | GRAVEL AND GRAVELLY SOILS (LITTLE OR NO FINES)           |         | GW     | WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES   |  | FINE GRAINED SOILS   | SILTS AND CLAYS              | LIQUID LIMIT LESS THAN 50 |    | ML  | INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY |
|   | GRAVELS WITH FINES (APPROXIMATE AMOUNT OF FINES)         |         | GP     | POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES |  |                      |                              |                           |    | CL  | INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS                  |
|   | MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SEIVE |         | GM     | SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES                      |  |                      |                              |                           |    | OL  | ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY  |
|   |  |         | GC     | CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES                     |  |                      |                              |                           |    | MH  | INORGANIC SILTS, MUCKEUS OR CLAYEUS FINE SAND OR SILTY SOILS   |
| MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SEIVE SIZE                           | CLEAN SANDS (LITTLE OR NO FINES)                         |         | SW     | WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES             |  | SILTS AND CLAYS      | LIQUID LIMIT GREATER THAN 50 |                           | CH | INORGANIC CLAYS OF HIGH PLASTICITY                        |  |
|   | SAND AND SANDY SOILS (LITTLE OR NO FINES)                |         | SP     | POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES           |  |                      |                              |                           | OH | ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS |  |
| MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SEIVE (APPROXIMATE AMOUNT OF FINES) | SANDS WITH FINES (APPROXIMATE AMOUNT OF FINES)           |         | SM     | SILTY SANDS, SAND - SILT MIXTURES                                 |  |                      |                              |                           | PT | PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS       |  |
|   |  |         | SC     | CLAYEY SANDS, SAND - CLAY MIXTURES                                |  | HIGHLY ORGANIC SOILS |                              |                           |    |   |  |

**LEGEND:**

- FILL: MAN-MADE DEPOSITS
- CRK: COMPLETELY WEATHERED ROCK
- BEDROCK: SCHIST
- GROUNDWATER CL. AT THE COMPLETION OF THE BORING



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



|   |                 |                      |
|---|-----------------|----------------------|
| DATE: JULY 2023   | SCALE: 1" = 40' | <b>SO-03</b>         |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b>             |                 |                      |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 |                      |
| PROJECT ENG. _____<br>DESIGNED BY _____<br>CHECKED BY _____<br>DRAWN BY _____<br>PROJECT MGR. _____ |                 | DIVISION CHIEF _____ |
| <b>BORING AND DRIVE TEST - SHEET 3</b>  |                 |                      |
| DATE _____  | FILE _____      | SHEET OF 160         |

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| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
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|     |             |      |      |

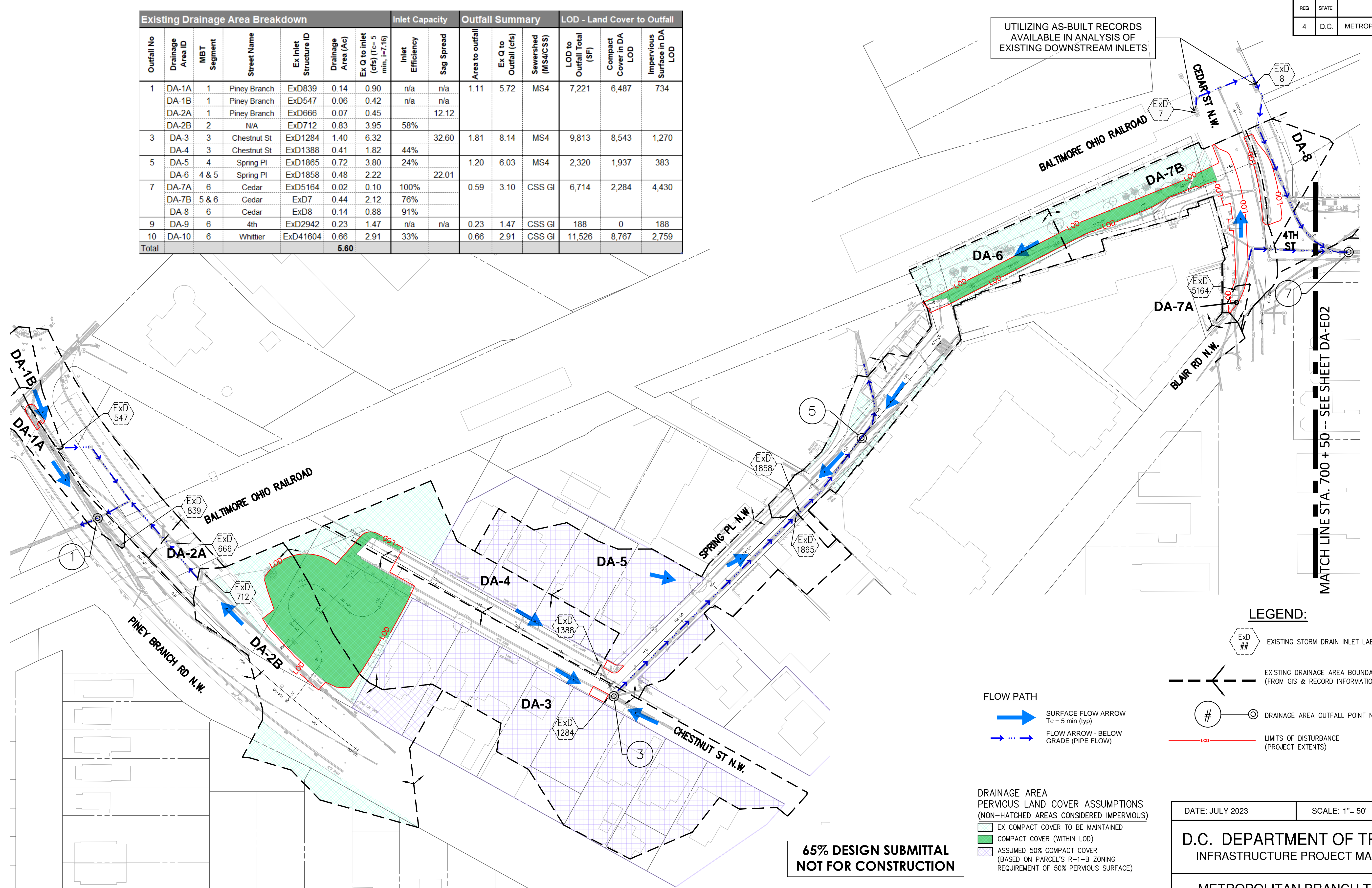
REVISIONS

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 56        | 160          |

| Existing Drainage Area Breakdown |                  |             |              |                       |                    |   | Inlet Capacity   |            | Outfall Summary |                       |                     | LOD - Land Cover to Outfall |                         |                              |  |
|----------------------------------|------------------|-------------|--------------|-----------------------|--------------------|---|------------------|------------|-----------------|-----------------------|---------------------|-----------------------------|-------------------------|------------------------------|--|
| Outfall No                       | Drainage Area ID | MBT Segment | Street Name  | Ex Inlet Structure ID | Drainage Area (Ac) | Ex Q to inlet (cfs) (T <sub>c</sub> =5 min, I=7.16) | Inlet Efficiency | Sag Spread | Area to outfall | Ex Q to Outfall (cfs) | Sewershed (MS4/CSS) | LOD to Outfall Total (SF)   | Compact Cover in DA LOD | Impervious Surface in DA LOD |  |
| 1                                | DA-1A            | 1           | Piney Branch | ExD839                | 0.14               | 0.90  | n/a              | n/a        | 1.11            | 5.72                  | MS4                 | 7,221                       | 6,487                   | 734                          |  |
|                                  | DA-1B            | 1           | Piney Branch | ExD547                | 0.06               | 0.42  | n/a              | n/a        |                 |                       |                     |                             |                         |                              |  |
|                                  | DA-2A            | 1           | Piney Branch | ExD666                | 0.07               | 0.45  |                  | 12.12      |                 |                       |                     |                             |                         |                              |  |
|                                  | DA-2B            | 2           | N/A          | ExD712                | 0.83               | 3.95  | 58%              |            |                 |                       |                     |                             |                         |                              |  |
| 3                                | DA-3             | 3           | Chestnut St  | ExD1284               | 1.40               | 6.32  |                  | 32.60      | 1.81            | 8.14                  | MS4                 | 9,813                       | 8,543                   | 1,270                        |  |
|                                  | DA-4             | 3           | Chestnut St  | ExD1388               | 0.41               | 1.82  | 44%              |            |                 |                       |                     |                             |                         |                              |  |
| 5                                | DA-5             | 4           | Spring Pl    | ExD1865               | 0.72               | 3.80  | 24%              |            | 1.20            | 6.03                  | MS4                 | 2,320                       | 1,937                   | 383                          |  |
|                                  | DA-6             | 4 & 5       | Spring Pl    | ExD1858               | 0.48               | 2.22  |                  | 22.01      |                 |                       |                     |                             |                         |                              |  |
| 7                                | DA-7A            | 6           | Cedar        | ExD5164               | 0.02               | 0.10  | 100%             |            | 0.59            | 3.10                  | CSS GI              | 6,714                       | 2,284                   | 4,430                        |  |
|                                  | DA-7B            | 5 & 6       | Cedar        | ExD7                  | 0.44               | 2.12  | 76%              |            |                 |                       |                     |                             |                         |                              |  |
|                                  | DA-8             | 6           | Cedar        | ExD8                  | 0.14               | 0.88  | 91%              |            |                 |                       |                     |                             |                         |                              |  |
| 9                                | DA-9             | 6           | 4th          | ExD2942               | 0.23               | 1.47  | n/a              | n/a        | 0.23            | 1.47                  | CSS GI              | 188                         | 0                       | 188                          |  |
| 10                               | DA-10            | 6           | Whittier     | ExD41604              | 0.66               | 2.91  | 33%              |            | 0.66            | 2.91                  | CSS GI              | 11,526                      | 8,767                   | 2,759                        |  |
| Total                            |                  |             |              |                       | 5.60               |   |                  |            |                 |                       |                     |                             |                         |                              |  |

UTILIZING AS-BUILT RECORDS AVAILABLE IN ANALYSIS OF EXISTING DOWNSTREAM INLETS



MATCH LINE STA. 700 + 50 -- SEE SHEET DA-E02

**LEGEND:**

- EXISTING STORM DRAIN INLET LABEL
- EXISTING DRAINAGE AREA BOUNDARY (FROM GIS & RECORD INFORMATION)
- DRAINAGE AREA OUTFALL POINT NUMBER
- LIMITS OF DISTURBANCE (PROJECT EXTENTS)

- FLOW PATH**
- SURFACE FLOW ARROW T<sub>c</sub> = 5 min (typ)
  - FLOW ARROW - BELOW GRADE (PIPE FLOW)

- DRAINAGE AREA PERVIOUS LAND COVER ASSUMPTIONS (NON-HATCHED AREAS CONSIDERED IMPERVIOUS)**
- EX COMPACT COVER TO BE MAINTAINED
  - COMPACT COVER (WITHIN LOD)
  - ASSUMED 50% COMPACT COVER (BASED ON PARCEL'S R-1-B ZONING REQUIREMENT OF 50% PERVIOUS SURFACE)

**65% DESIGN SUBMITTAL NOT FOR CONSTRUCTION**

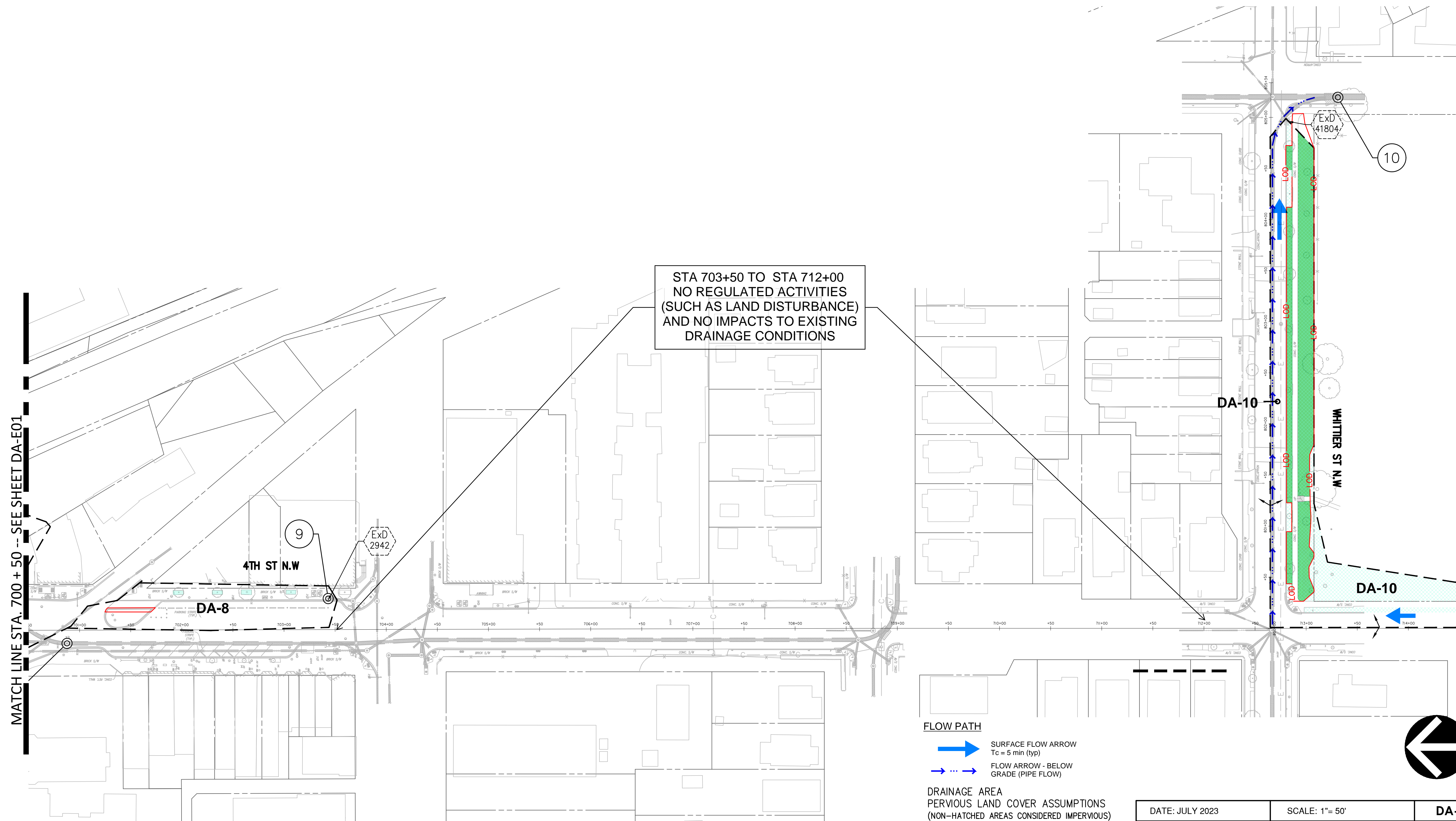
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| DATE: JULY 2023   | SCALE: 1" = 50' | <b>DA-E01</b>   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. BMW<br>DESIGNED BY BMW<br>CHECKED BY RS<br>DRAWN BY BMW<br>PROJECT MGR. RS |
| <b>EXISTING DRAINAGE AREA PLAN</b>  |                 | DIVISION CHIEF  |
| DATE _____  |                 | FILE _____  |
| SHEET 56 OF 160   |                 |   |

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|-----------|-------------|------|------|
| REVISIONS |             |      |      |



| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 57        | 160          |

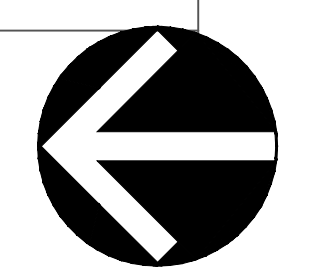


**FLOW PATH**

- SURFACE FLOW ARROW  
Tc = 5 min (typ)
- FLOW ARROW - BELOW GRADE (PIPE FLOW)

**DRAINAGE AREA PERVIOUS LAND COVER ASSUMPTIONS (NON-HATCHED AREAS CONSIDERED IMPERVIOUS)**

- EX COMPACT COVER TO BE MAINTAINED
- COMPACT COVER (WITHIN LOD)
- ASSUMED 50% COMPACT COVER (BASED ON PARCEL'S R-1-B ZONING REQUIREMENT OF 50% PERVIOUS SURFACE)



**LEGEND:**

- EXISTING STORM DRAIN INLET LABEL
- EXISTING DRAINAGE AREA BOUNDARY (FROM GIS & RECORD INFORMATION)
- DRAINAGE AREA OUTFALL POINT NUMBER
- LIMITS OF DISTURBANCE (PROJECT EXTENTS)

**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**

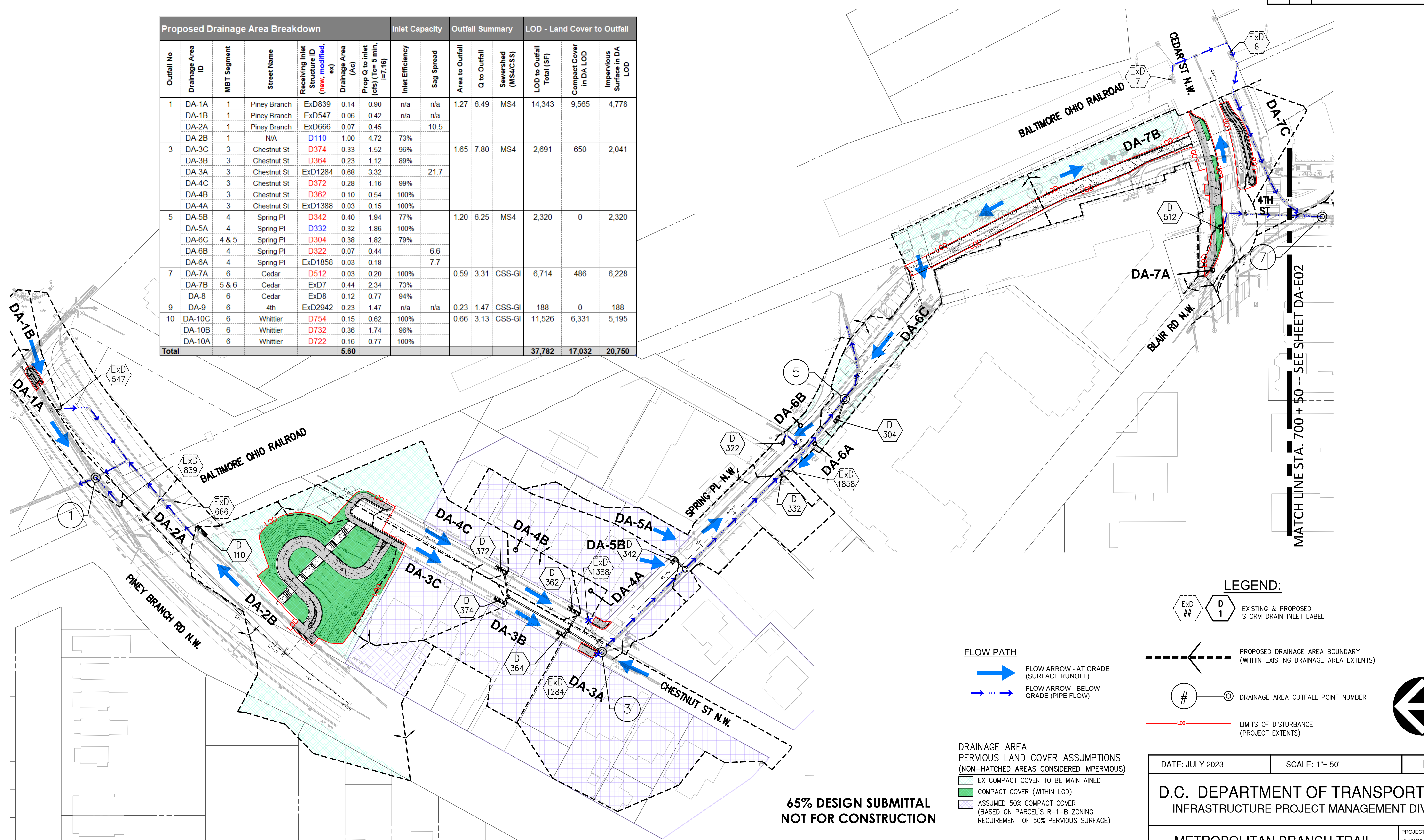
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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

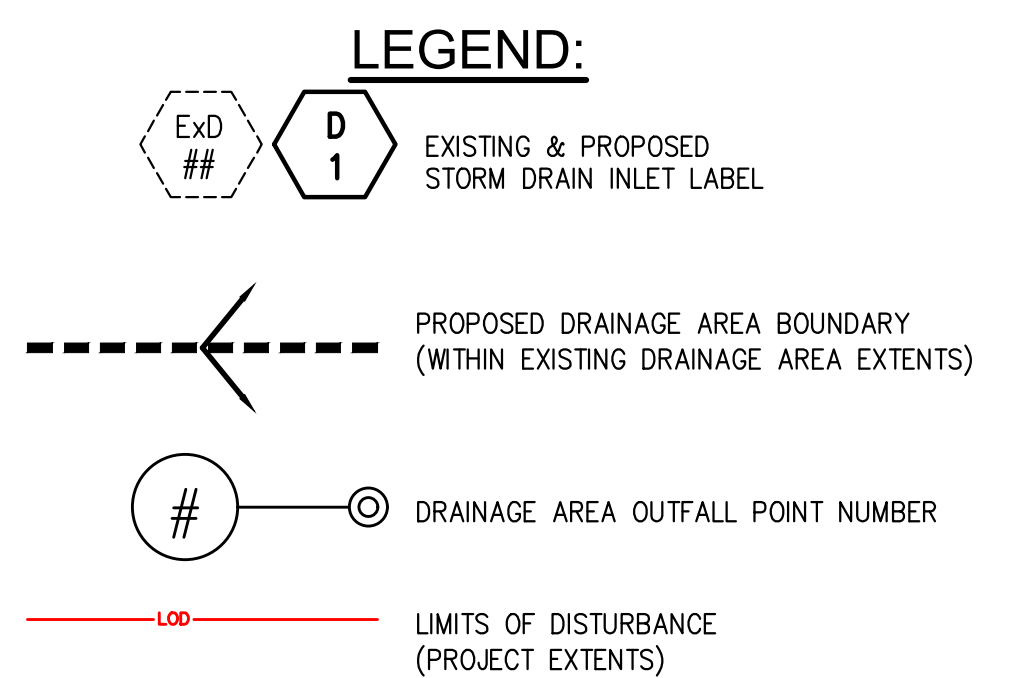
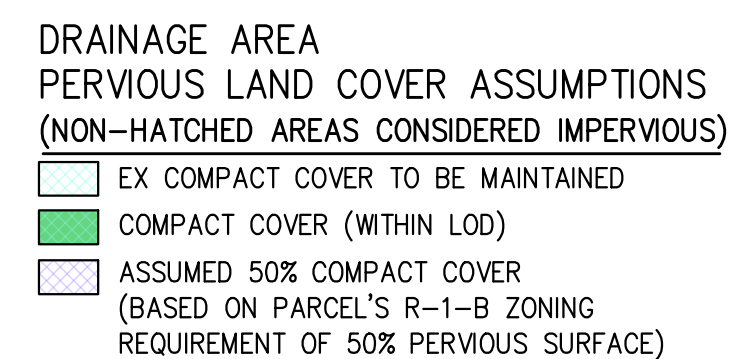
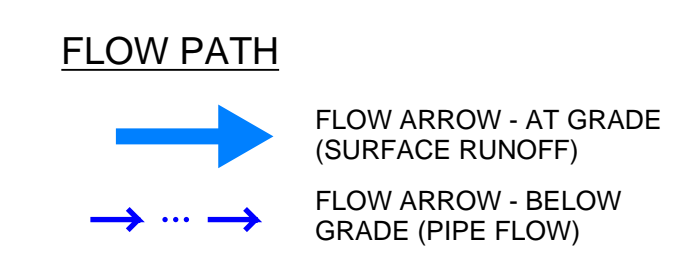
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| DATE: JULY 2023   | SCALE: 1" = 50' | DA-E02  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. BMW<br>DESIGNED BY BMW<br>CHECKED BY RS<br>DRAWN BY BMW<br>PROJECT MGR. RS |
| <b>EXISTING DRAINAGE AREA PLAN</b>  |                 | DIVISION CHIEF  |
| DATE _____  |                 | FILE _____  |
| SHEET 57 OF 160   |                 |   |

FILES  
DATES

| Proposed Drainage Area Breakdown |                  |             |              |  |                    |   |                  |            |                 | Inlet Capacity |                     | Outfall Summary           |                         | LOD - Land Cover to Outfall  |  |  |
|----------------------------------|------------------|-------------|--------------|--|--------------------|---|------------------|------------|-----------------|----------------|---------------------|---------------------------|-------------------------|------------------------------|--|--|
| Outfall No                       | Drainage Area ID | MBT Segment | Street Name  | Receiving Inlet Structure ID (new, modified, ex) | Drainage Area (Ac) | Prop Q to Inlet (cfs) (Tcr = 6 min, I=7.16) | Inlet Efficiency | Sag Spread | Area to Outfall | Q to Outfall   | Sewershed (MS4/CSS) | LOD to Outfall Total (SF) | Compact Cover in DA LOD | Impervious Surface in DA LOD |  |  |
| 1                                | DA-1A            | 1           | Piney Branch | ExD839   | 0.14               | 0.90  | n/a              | n/a        | 1.27            | 6.49           | MS4                 | 14,343                    | 9,565                   | 4,778                        |  |  |
|                                  | DA-1B            | 1           | Piney Branch | ExD547   | 0.06               | 0.42  | n/a              | n/a        |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-2A            | 1           | Piney Branch | ExD666   | 0.07               | 0.45  |                  | 10.5       |                 |                |                     |                           |                         |                              |  |  |
| 3                                | DA-2B            | 1           | N/A          | D110   | 1.00               | 4.72  | 73%              |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-3C            | 3           | Chestnut St  | D374   | 0.33               | 1.52  | 96%              |            | 1.65            | 7.80           | MS4                 | 2,691                     | 650                     | 2,041                        |  |  |
|                                  | DA-3B            | 3           | Chestnut St  | D364   | 0.23               | 1.12  | 89%              |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-3A            | 3           | Chestnut St  | ExD1284  | 0.68               | 3.32  |                  | 21.7       |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-4C            | 3           | Chestnut St  | D372   | 0.28               | 1.16  | 99%              |            |                 |                |                     |                           |                         |                              |  |  |
| 5                                | DA-4B            | 3           | Chestnut St  | D362   | 0.10               | 0.54  | 100%             |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-4A            | 3           | Chestnut St  | ExD1388  | 0.03               | 0.15  | 100%             |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-5B            | 4           | Spring Pl    | D342   | 0.40               | 1.94  | 77%              |            | 1.20            | 6.25           | MS4                 | 2,320                     | 0                       | 2,320                        |  |  |
|                                  | DA-5A            | 4           | Spring Pl    | D332   | 0.32               | 1.86  | 100%             |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-6C            | 4 & 5       | Spring Pl    | D304   | 0.38               | 1.82  | 79%              |            |                 |                |                     |                           |                         |                              |  |  |
| 7                                | DA-6B            | 4           | Spring Pl    | D322   | 0.07               | 0.44  |                  | 6.6        |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-6A            | 4           | Spring Pl    | ExD1858  | 0.03               | 0.18  |                  | 7.7        |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-7A            | 6           | Cedar        | D512   | 0.03               | 0.20  | 100%             |            | 0.59            | 3.31           | CSS-GI              | 6,714                     | 486                     | 6,228                        |  |  |
| 9                                | DA-7B            | 5 & 6       | Cedar        | ExD7   | 0.44               | 2.34  | 73%              |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-8             | 6           | Cedar        | ExD8   | 0.12               | 0.77  | 94%              |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-9             | 6           | 4th          | ExD2942  | 0.23               | 1.47  | n/a              |            | 0.23            | 1.47           | CSS-GI              | 188                       | 0                       | 188                          |  |  |
| 10                               | DA-10C           | 6           | Whittier     | D754   | 0.15               | 0.62  | 100%             |            | 0.66            | 3.13           | CSS-GI              | 11,526                    | 6,331                   | 5,195                        |  |  |
|                                  | DA-10B           | 6           | Whittier     | D732   | 0.36               | 1.74  | 96%              |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-10A           | 6           | Whittier     | D722   | 0.16               | 0.77  | 100%             |            |                 |                |                     |                           |                         |                              |  |  |
| <b>Total</b>                     |                  |             |              |  | <b>5.60</b>        |   |                  |            |                 |                |                     | <b>37,782</b>             | <b>17,032</b>           | <b>20,750</b>                |  |  |



**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**



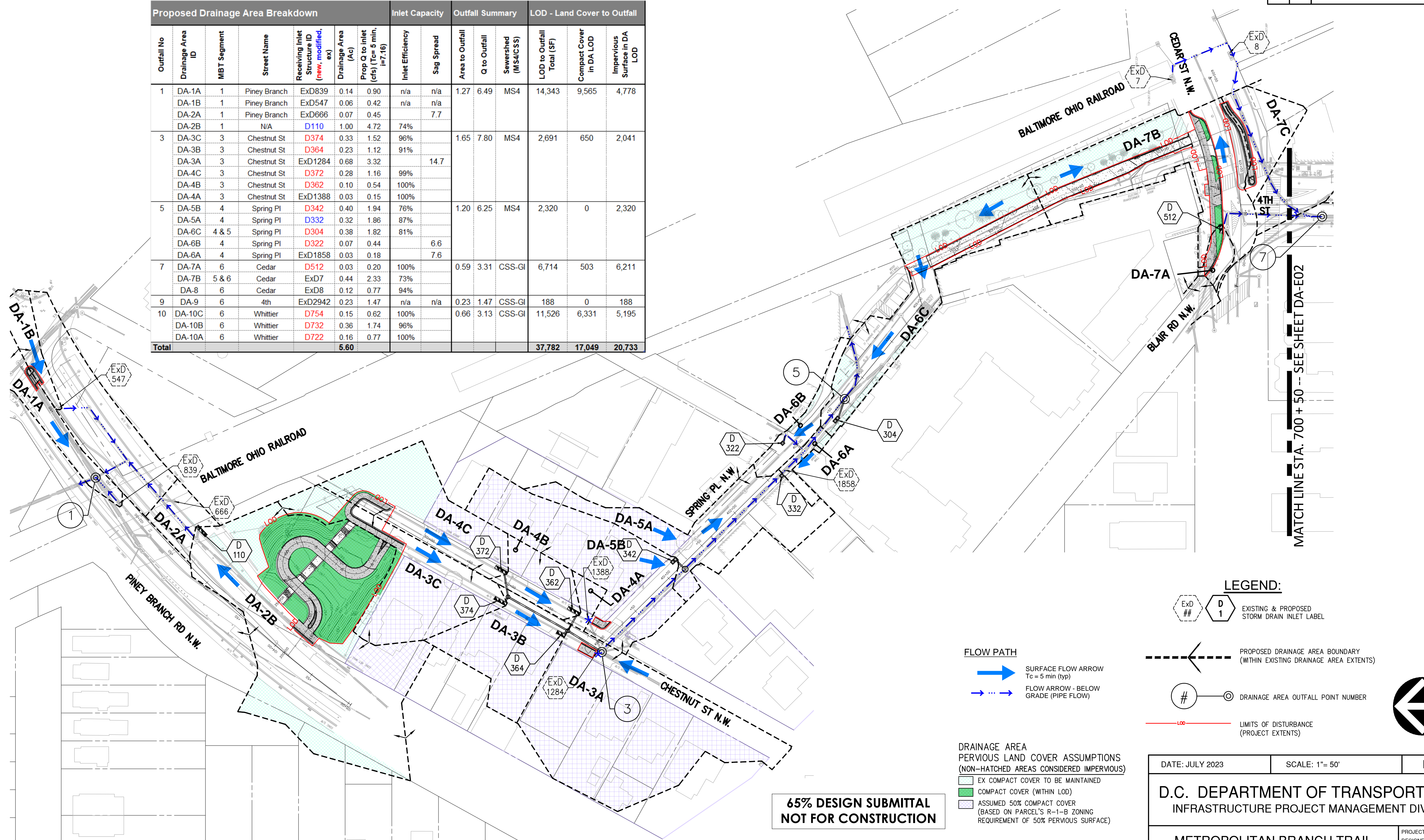
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|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 50' | <b>DA-P01</b>   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. BMW<br>DESIGNED BY BMW<br>CHECKED BY RS<br>DRAWN BY BMW<br>PROJECT MGR. RS |
| <b>PROPOSED DRAINAGE AREA PLAN</b>  |                 | DIVISION CHIEF  |
| DATE _____  |                 | FILE _____  |
| SHEET 58 OF 160   |                 |   |

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|-----------|-------------|------|------|
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FILES  
DATES

| Proposed Drainage Area Breakdown |                  |             |              |  |                    |   |                  |            |                 | Inlet Capacity |                     | Outfall Summary           |                         | LOD - Land Cover to Outfall  |  |  |
|----------------------------------|------------------|-------------|--------------|--|--------------------|---|------------------|------------|-----------------|----------------|---------------------|---------------------------|-------------------------|------------------------------|--|--|
| Outfall No                       | Drainage Area ID | MBT Segment | Street Name  | Receiving Inlet Structure ID (new, modified, ex) | Drainage Area (Ac) | Prop Q to inlet (cfs) (Tc= 5 min, I=7.16) | Inlet Efficiency | Sag Spread | Area to Outfall | Q to Outfall   | Sewershed (MS4/CSS) | LOD to Outfall Total (SF) | Compact Cover in DA LOD | Impervious Surface in DA LOD |  |  |
| 1                                | DA-1A            | 1           | Piney Branch | ExD839   | 0.14               | 0.90                                      | n/a              | n/a        | 1.27            | 6.49           | MS4                 | 14,343                    | 9,565                   | 4,778                        |  |  |
|                                  | DA-1B            | 1           | Piney Branch | ExD547   | 0.06               | 0.42                                      | n/a              | n/a        |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-2A            | 1           | Piney Branch | ExD666   | 0.07               | 0.45                                      |                  | 7.7        |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-2B            | 1           | N/A          | D110   | 1.00               | 4.72                                      | 74%              |            |                 |                |                     |                           |                         |                              |  |  |
| 3                                | DA-3C            | 3           | Chestnut St  | D374   | 0.33               | 1.52                                      | 96%              |            | 1.65            | 7.80           | MS4                 | 2,691                     | 650                     | 2,041                        |  |  |
|                                  | DA-3B            | 3           | Chestnut St  | D364   | 0.23               | 1.12                                      | 91%              |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-3A            | 3           | Chestnut St  | ExD1284  | 0.68               | 3.32                                      |                  | 14.7       |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-4C            | 3           | Chestnut St  | D372   | 0.28               | 1.16                                      | 99%              |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-4B            | 3           | Chestnut St  | D362   | 0.10               | 0.54                                      | 100%             |            |                 |                |                     |                           |                         |                              |  |  |
| 5                                | DA-4A            | 3           | Chestnut St  | ExD1388  | 0.03               | 0.15                                      | 100%             |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-5B            | 4           | Spring Pl    | D342   | 0.40               | 1.94                                      | 76%              |            | 1.20            | 6.25           | MS4                 | 2,320                     | 0                       | 2,320                        |  |  |
|                                  | DA-5A            | 4           | Spring Pl    | D332   | 0.32               | 1.86                                      | 87%              |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-6C            | 4 & 5       | Spring Pl    | D304   | 0.38               | 1.82                                      | 81%              |            |                 |                |                     |                           |                         |                              |  |  |
| 7                                | DA-6B            | 4           | Spring Pl    | D322   | 0.07               | 0.44                                      |                  | 6.6        |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-6A            | 4           | Spring Pl    | ExD1858  | 0.03               | 0.18                                      |                  | 7.6        |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-7A            | 6           | Cedar        | D512   | 0.03               | 0.20                                      | 100%             |            | 0.59            | 3.31           | CSS-GI              | 6,714                     | 503                     | 6,211                        |  |  |
| 9                                | DA-7B            | 5 & 6       | Cedar        | ExD7   | 0.44               | 2.33                                      | 73%              |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-8             | 6           | Cedar        | ExD8   | 0.12               | 0.77                                      | 94%              |            |                 |                |                     |                           |                         |                              |  |  |
| 10                               | DA-9             | 6           | 4th          | ExD2942  | 0.23               | 1.47                                      | n/a              | n/a        | 0.23            | 1.47           | CSS-GI              | 188                       | 0                       | 188                          |  |  |
|                                  | DA-10C           | 6           | Whittier     | D754   | 0.15               | 0.62                                      | 100%             |            | 0.66            | 3.13           | CSS-GI              | 11,526                    | 6,331                   | 5,195                        |  |  |
|                                  | DA-10B           | 6           | Whittier     | D732   | 0.36               | 1.74                                      | 96%              |            |                 |                |                     |                           |                         |                              |  |  |
|                                  | DA-10A           | 6           | Whittier     | D722   | 0.16               | 0.77                                      | 100%             |            |                 |                |                     |                           |                         |                              |  |  |
| <b>Total</b>                     |                  |             |              |  | <b>5.60</b>        |   |                  |            |                 |                |                     | <b>37,782</b>             | <b>17,049</b>           | <b>20,733</b>                |  |  |



**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**

**LEGEND:**

- ExD ## D 1 EXISTING & PROPOSED STORM DRAIN INLET LABEL
- PROPOSED DRAINAGE AREA BOUNDARY (WITHIN EXISTING DRAINAGE AREA EXTENTS)
- # DRAINAGE AREA OUTFALL POINT NUMBER
- LIMITS OF DISTURBANCE (PROJECT EXTENTS)

**FLOW PATH**

- SURFACE FLOW ARROW Tc = 5 min (typ)
- FLOW ARROW - BELOW GRADE (PIPE FLOW)

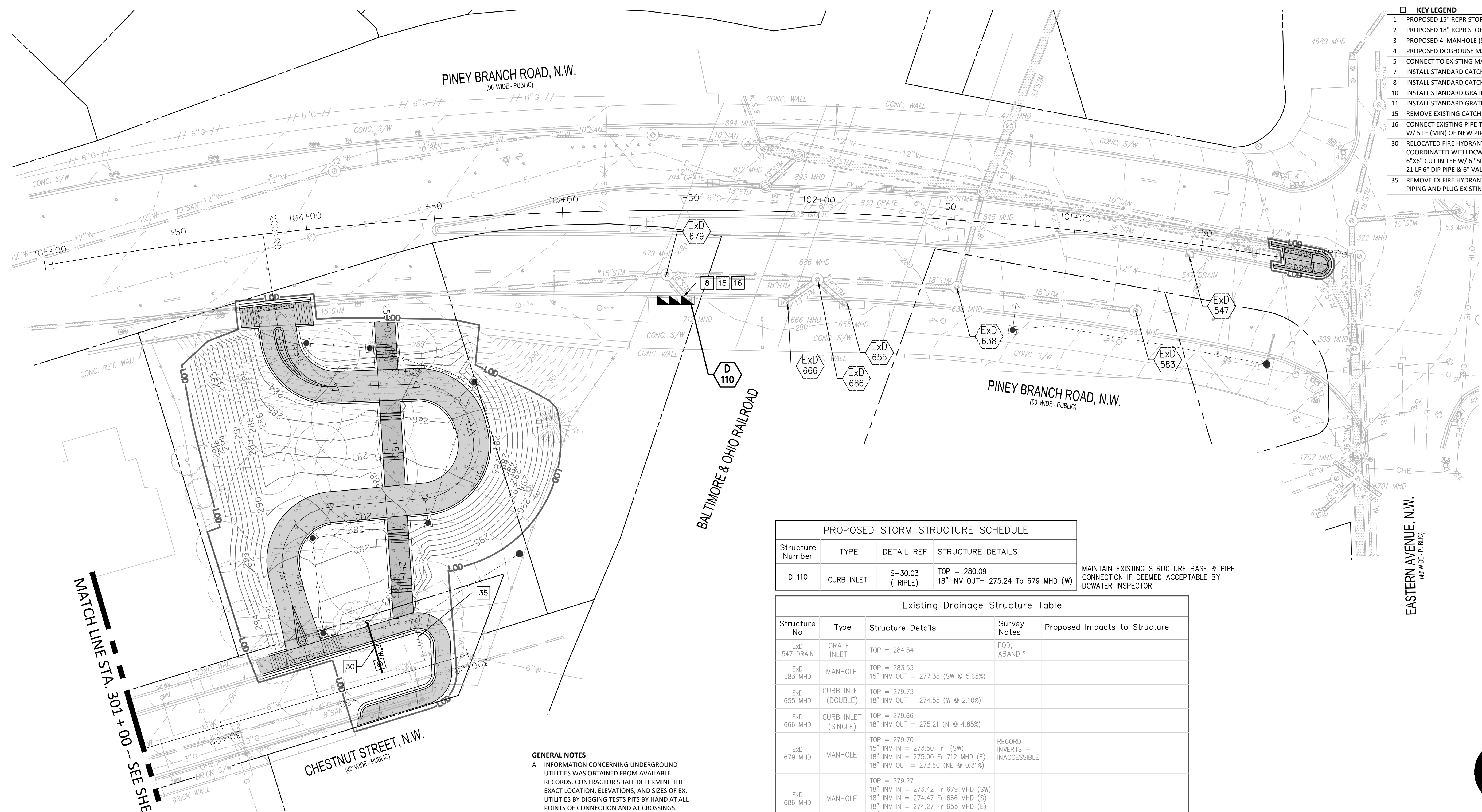
**DRAINAGE AREA PERVIOUS LAND COVER ASSUMPTIONS (NON-HATCHED AREAS CONSIDERED IMPERVIOUS)**

- EX COMPACT COVER TO BE MAINTAINED
- COMPACT COVER (WITHIN LOD)
- ASSUMED 50% COMPACT COVER (BASED ON PARCEL'S R-1-B ZONING REQUIREMENT OF 50% PERVIOUS SURFACE)

|   |                 |   |
|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 50' | DA-P01  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. BMW<br>DESIGNED BY BMW<br>CHECKED BY RS<br>DRAWN BY BMW<br>PROJECT MGR. RS |
| PROPOSED DRAINAGE AREA PLAN   |                 | DIVISION CHIEF  |
| REVISIONS   |                 | DATE<br>FILE<br>SHEET 59 OF 160   |

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- KEY LEGEND**
- PROPOSED 15" RCPR STORM DRAIN
  - PROPOSED 18" RCPR STORM DRAIN
  - PROPOSED 4' MANHOLE (S-20.01)
  - PROPOSED DOGHOUSE MANHOLE (TEST PIT)
  - CONNECT TO EXISTING MANHOLE
  - INSTALL STANDARD CATCH BASIN (DOUBLE)
  - INSTALL STANDARD CATCH BASIN (TRIPLE)
  - INSTALL STANDARD GRATE INLET (SINGLE)
  - INSTALL STANDARD GRATE INLET (DOUBLE)
  - REMOVE EXISTING CATCH BASIN
  - CONNECT EXISTING PIPE TO NEW CATCH BASIN W/ 5 LF (MIN) OF NEW PIPE & CONC. COLLAR
  - RELOCATED FIRE HYDRANT, LOCATION TO BE COORDINATED WITH DCWATER; 6"x6" CUT IN TEE W/ 6" SLEEVE; 21 LF 6" DIP PIPE & 6" VALVE W/ CASING
  - REMOVE EX FIRE HYDRANT; REMOVE VALVE & PIPING AND PLUG EXISTING TEE



**PROPOSED STORM STRUCTURE SCHEDULE**

| Structure Number | TYPE       | DETAIL REF       | STRUCTURE DETAILS                                  |
|------------------|------------|------------------|--|
| D 110            | CURB INLET | S-30.03 (TRIPLE) | TOP = 280.09<br>18" INV OUT= 275.24 To 679 MHD (W) |

MAINTAIN EXISTING STRUCTURE BASE & PIPE CONNECTION IF DEEMED ACCEPTABLE BY DCWATER INSPECTOR

**Existing Drainage Structure Table**

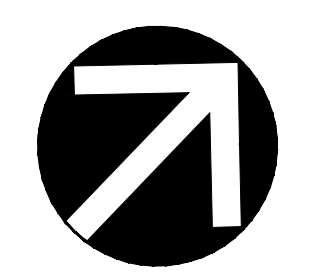
| Structure No | Type                | Structure Details  | Survey Notes                  | Proposed Impacts to Structure           |
|--------------|---------------------|--|-------------------------------|---|
| ExD 547      | GRATE INLET         | TOP = 284.54   | FOD, ABAND.?                  |   |
| ExD 583      | MANHOLE             | TOP = 283.53<br>15" INV OUT = 277.38 (SW @ 5.65%)  |                               |   |
| ExD 655      | CURB INLET (DOUBLE) | TOP = 279.73<br>18" INV OUT = 274.58 (W @ 2.10%)   |                               |   |
| ExD 666      | CURB INLET (SINGLE) | TOP = 279.66<br>18" INV OUT = 275.21 (N @ 4.85%)   |                               |   |
| ExD 679      | MANHOLE             | TOP = 279.70<br>15" INV IN = 273.60 Fr (SW)<br>18" INV IN = 275.00 Fr 712 MHD (E)<br>18" INV OUT = 273.60 (NE @ 0.31%)   | RECORD INVERTS - INACCESSIBLE |   |
| ExD 686      | MANHOLE             | TOP = 279.27<br>18" INV IN = 273.42 Fr 679 MHD (SW)<br>18" INV IN = 274.47 Fr 666 MHD (S)<br>18" INV IN = 274.27 Fr 655 MHD (E)<br>18" INV OUT = 273.32 (NE @ 0.75%) |                               |   |
| ExD 712      | CURB INLET (DOUBLE) | TOP = 280.09<br>18" INV OUT = 275.24 (W @ 1.85%)   |                               | MODIFIED TO A TRIPPLE CURB INLET (D110) |

MATCHLINE STA. 301+00 -- SEE SHEET DD-02

- GENERAL NOTES**
- INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. CONTRACTOR SHALL DETERMINE THE EXACT LOCATION, ELEVATIONS, AND SIZES OF EX. UTILITIES BY DIGGING TESTS PITS BY HAND AT ALL POINTS OF CONNECTION AND AT CROSSINGS. RESULTS FROM THESE TEST PITS SHALL BE SUBMITTED TO THE ENGINEER FIVE (5) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION AND/OR ORDERING MATERIALS.
  - ADJUST EX STRUCTURES TO PROPOSED GRADE
  - CATCH BASIN STRUCTURES CONNECTING TO COMBINED SEWERS SHALL BE PROVIDED WITH APPROVED DCWATER WATERSEAL CONNECTIONS
  - CONTRACTOR SHALL PROVIDE 12" HORIZONTAL AND VERTICAL CLEAR BETWEEN EXISTING COMMUNICATION AND ELECTRICAL LINES
  - CLEAN OUT ALL EXISTING INLETS WITH WATER/DIRT
  - THIS SHEET IS FOR DRAINAGE IMPROVEMENTS ONLY.
  - SEE EROSION & SEDIMENT CONTROL FOR LAND DISTURBANCE BREAKDOWN (INCLUDING UTILITY TRENCH EXTENTS);  
SEE DRAINAGE AREA SHEETS FOR PROJECT AREA LIMITS (L.O.D.) AND PROPOSED LAND USE IMPACTS.  
SEE LANDSCAPE PLANS FOR PROPOSED TREE PLANTING INSTALLATION AND ROOTABLE SOIL VOLUME BOUNDARIES AND DETAILS.

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or 48 HOURS IN ADVANCE OF ANY  
WORK IN THIS VICINITY™**



|   |                        |                      |
|---|------------------------|----------------------|
| DATE: JULY 2023   | SCALE: 1"= 20'         | <b>DD-01</b>         |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                        |                      |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                        |                      |
| <b>DRAINAGE PLAN</b>  |                        |                      |
| PROJECT ENG. <u>BMW</u>   | DESIGNED BY <u>BMW</u> | CHECKED BY <u>RS</u> |
| DRAWN BY <u>BMW</u>   | PROJECT MGR. <u>RS</u> | DIVISION CHIEF       |
| DATE _____  | FILE _____             | SHEET 60 OF 160      |

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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

CHESTNUT ST:

| Existing Drainage Structure Table |                     |  |                    |                               |
|-----------------------------------|---------------------|--|--------------------|-------------------------------|
| Structure No                      | Type                | Structure Details  | Survey Notes       | Proposed Impacts to Structure |
| ExD 1284 MHD                      | CURB INLET (SINGLE) | TOP = 282.12   |                    |                               |
| ExD 1289 MHD                      | MANHOLE             | TOP = 281.84<br>15" INV IN = 278.04 Fr (N)<br>15" INV IN = 276.14 Fr 1456 MHD (S)<br>15" INV IN = 275.34 Fr (NE)<br>24" INV IN = 269.04 Fr (SW)<br>36" INV OUT = 267.14 (SE @ 0.40%) | BOT=277.05;<br>FOW |                               |
| ExD 1388 MHD                      | CURB INLET (SINGLE) | TOP = 282.55   | FOW                |                               |
| ExD 1456 MHD                      | CURB INLET (SINGLE) | TOP = 282.27<br>15" INV OUT = 276.62 (N @ 1.35%)   |                    |                               |

| PIPE SCHEDULE |       |      |      |             |       |
|---------------|-------|------|------|-------------|-------|
| FR            | TO    | SIZE | TYPE | LENGTH (FT) | SLOPE |
| D374          | D370  | 15"  | RCPR | 5           | 2.0%  |
| D372          | D370  | 15"  | RCPR | 24          | 2.0%  |
| D370          | D360  | 18"  | RCPR | 70          | 2.0%  |
| D364          | D360  | 15"  | RCPR | 4           | 2.0%  |
| D362          | D360  | 15"  | RCPR | 19          | 2.0%  |
| D360          | D1289 | 18"  | RCPR | 39          | 2.0%  |
| D340          | D1289 | 36"  | RCPR | 121         | 0.4%  |

SPRING PL:

| Existing Drainage Structure Table |                     |   |                    |  |
|-----------------------------------|---------------------|---|--------------------|--|
| Structure No                      | Type                | Structure Details   | Survey Notes       | Proposed Impacts to Structure  |
| ExD 1850 GRATE                    | GRATE INLET         | TOP = 274.48  | BOT=268.45;<br>FOW |  |
| ExD 1851 MHD                      | MANHOLE             | TOP = 274.56<br>12" INV IN = 270.21 Fr (N)<br>18" INV IN = 267.71 Fr (NE)<br>8" INV IN = 271.11 Fr (SE)<br>18" INV OUT = 267.56 (SW @ 2.44%)                    |                    |  |
| ExD 1858 DRAIN                    | GRATE INLET         | TOP = 273.93<br>36" INV IN = 266.03 Fr 1289 MHD (NW)<br>15" INV IN = 270.13 Fr 1865 MHD (NW)<br>36" INV OUT = 266.03 (SE @ 1.83%)                               |                    |  |
| ExD 1865 MHD                      | CURB INLET (SINGLE) | TOP = 274.59<br>15" INV OUT = 270.24 (SE @ 1.94%)   |                    | REPLACE EX TOP WITH GRATE INLET;<br>SEE D332 FOR PROPOSED CONDITIONS |
| ExD 1901 MHD                      | MANHOLE             | TOP = 274.78<br>36" INV IN = 265.48 Fr 1858 DRAIN (NW)<br>18" INV IN = 266.88 Fr 1851 MHD (NE)<br>36" INV OUT = 265.43 (SE @ 0.90%)                             |                    |  |
| ExD 1960 MHD                      | MANHOLE             | TOP = 274.86<br>36" INV IN = 264.79 Fr 1901 MHD (NW)<br>12" INV IN = 265.16 Fr (SW)<br>36" INV OUT = 264.73 (SE @ 1.42%)<br>24" INV OUT = 264.36 (SE @ 492.42%) |                    |  |

| PIPE SCHEDULE |       |      |      |             |       |
|---------------|-------|------|------|-------------|-------|
| FR            | TO    | SIZE | TYPE | LENGTH (FT) | SLOPE |
| D1858         | D332  | 15"  | RCPR | 3           | 3.2%  |
| D342          | D340  | 15"  | RCPR | 10          | 2.0%  |
| D322          | D1851 | 15"  | RCPR | 8           | 2.0%  |
| D304          | D1960 | 15"  | RCPR | 18          | 2.0%  |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 61        | 160          |

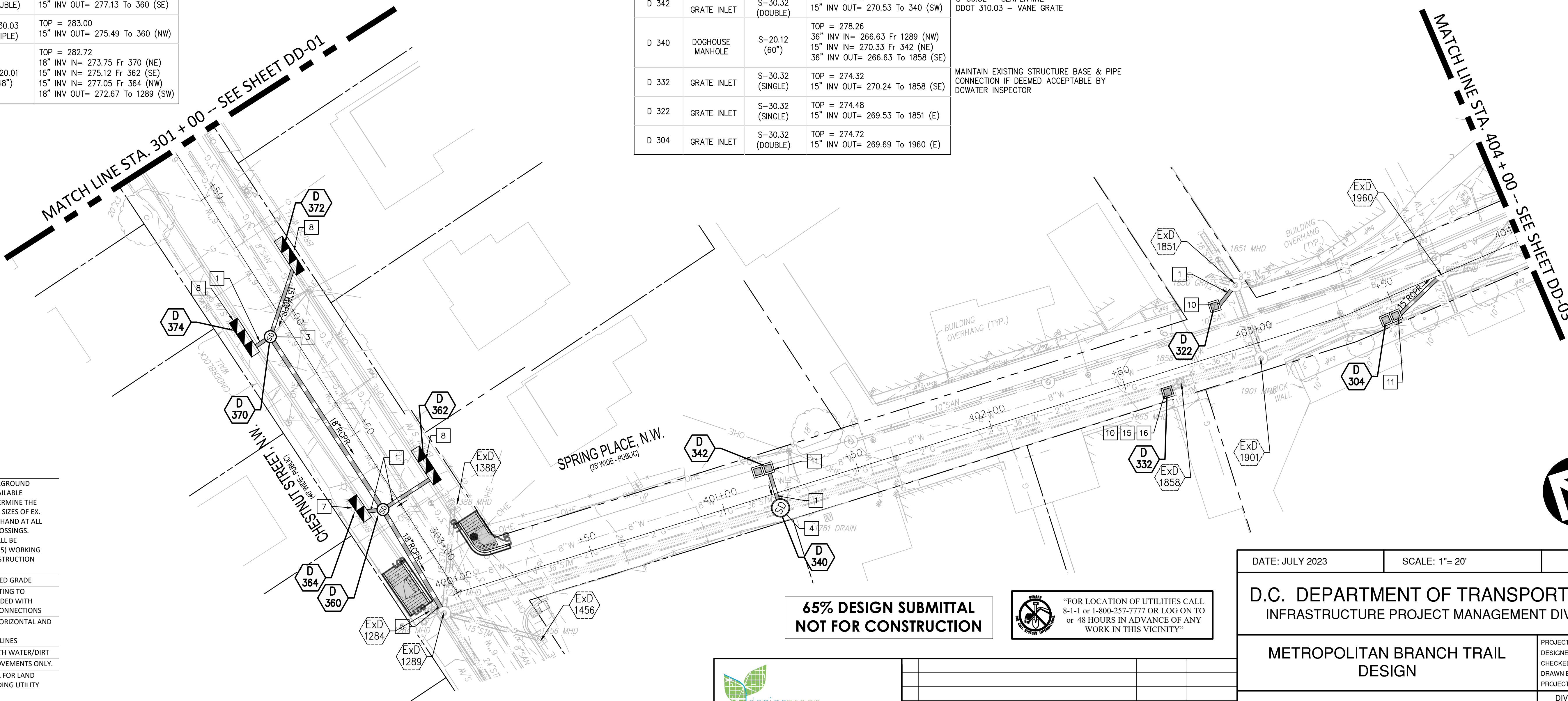
- KEY LEGEND**
- PROPOSED 15" RCPR STORM DRAIN
  - PROPOSED 18" RCPR STORM DRAIN
  - PROPOSED 4" MANHOLE (S-20.01)
  - PROPOSED DOGHOUSE MANHOLE (TEST PIT)
  - CONNECT TO EXISTING MANHOLE
  - INSTALL STANDARD CATCH BASIN (DOUBLE)
  - INSTALL STANDARD CATCH BASIN (TRIPLE)
  - INSTALL STANDARD GRATE INLET (SINGLE)
  - INSTALL STANDARD GRATE INLET (DOUBLE)
  - REMOVE EXISTING CATCH BASIN
  - CONNECT EXISTING PIPE TO NEW CATCH BASIN W/ 5 LF (MIN) OF NEW PIPE & CONC. COLLAR
  - RELOCATED FIRE HYDRANT, LOCATION TO BE COORDINATED WITH DCWATER; 6"x6" CUT IN TEE W/ 6" SLEEVE; 21 LF 6" DIP PIPE & 6" VALVE W/ CASING
  - REMOVE EX FIRE HYDRANT; REMOVE VALVE & PIPING AND PLUG EXISTING TEE

| PROPOSED STORM STRUCTURE SCHEDULE |            |                  |  |
|-----------------------------------|------------|------------------|--|
| Structure Number                  | TYPE       | DETAIL REF       | STRUCTURE DETAILS  |
| D 374                             | CURB INLET | S-30.03 (TRIPLE) | TOP = 285.68<br>15" INV OUT= 280.77 To 370 (SE)  |
| D 372                             | CURB INLET | S-30.03 (TRIPLE) | TOP = 286.47<br>15" INV OUT= 276.59 To 370 (W)   |
| D 370                             | MANHOLE    | S-20.01 (48")    | TOP = 285.50<br>15" INV IN= 276.11 Fr 372 (E)<br>15" INV IN= 280.67 Fr 374 (NW)<br>18" INV OUT= 275.14 To 360 (SW)                                     |
| D 364                             | CURB INLET | S-30.03 (DOUBLE) | TOP = 283.07<br>15" INV OUT= 277.13 To 360 (SE)  |
| D 362                             | CURB INLET | S-30.03 (TRIPLE) | TOP = 283.00<br>15" INV OUT= 275.49 To 360 (NW)  |
| D 360                             | MANHOLE    | S-20.01 (48")    | TOP = 282.72<br>18" INV IN= 273.75 Fr 370 (NE)<br>15" INV IN= 275.12 Fr 362 (SE)<br>15" INV IN= 277.05 Fr 364 (NW)<br>18" INV OUT= 272.67 To 1289 (SW) |

| PROPOSED STORM STRUCTURE SCHEDULE |                  |                  |   |
|-----------------------------------|------------------|------------------|---|
| Structure Number                  | TYPE             | DETAIL REF       | STRUCTURE DETAILS   |
| D 342                             | GRATE INLET      | S-30.32 (DOUBLE) | TOP = 278.02<br>15" INV OUT= 270.53 To 340 (SW)   |
| D 340                             | DOGHOUSE MANHOLE | S-20.12 (60")    | TOP = 278.26<br>36" INV IN= 266.63 Fr 1289 (NW)<br>15" INV IN= 270.33 Fr 342 (NE)<br>36" INV OUT= 266.63 To 1858 (SE) |
| D 332                             | GRATE INLET      | S-30.32 (SINGLE) | TOP = 274.32<br>15" INV OUT= 270.24 To 1858 (SE)  |
| D 322                             | GRATE INLET      | S-30.32 (SINGLE) | TOP = 274.48<br>15" INV OUT= 269.53 To 1851 (E)   |
| D 304                             | GRATE INLET      | S-30.32 (DOUBLE) | TOP = 274.72<br>15" INV OUT= 269.69 To 1960 (E)   |

S-30.32 - SERPENTINE  
DDOT 310.03 - VANE GRATE

MAINTAIN EXISTING STRUCTURE BASE & PIPE CONNECTION IF DEEMED ACCEPTABLE BY DCWATER INSPECTOR



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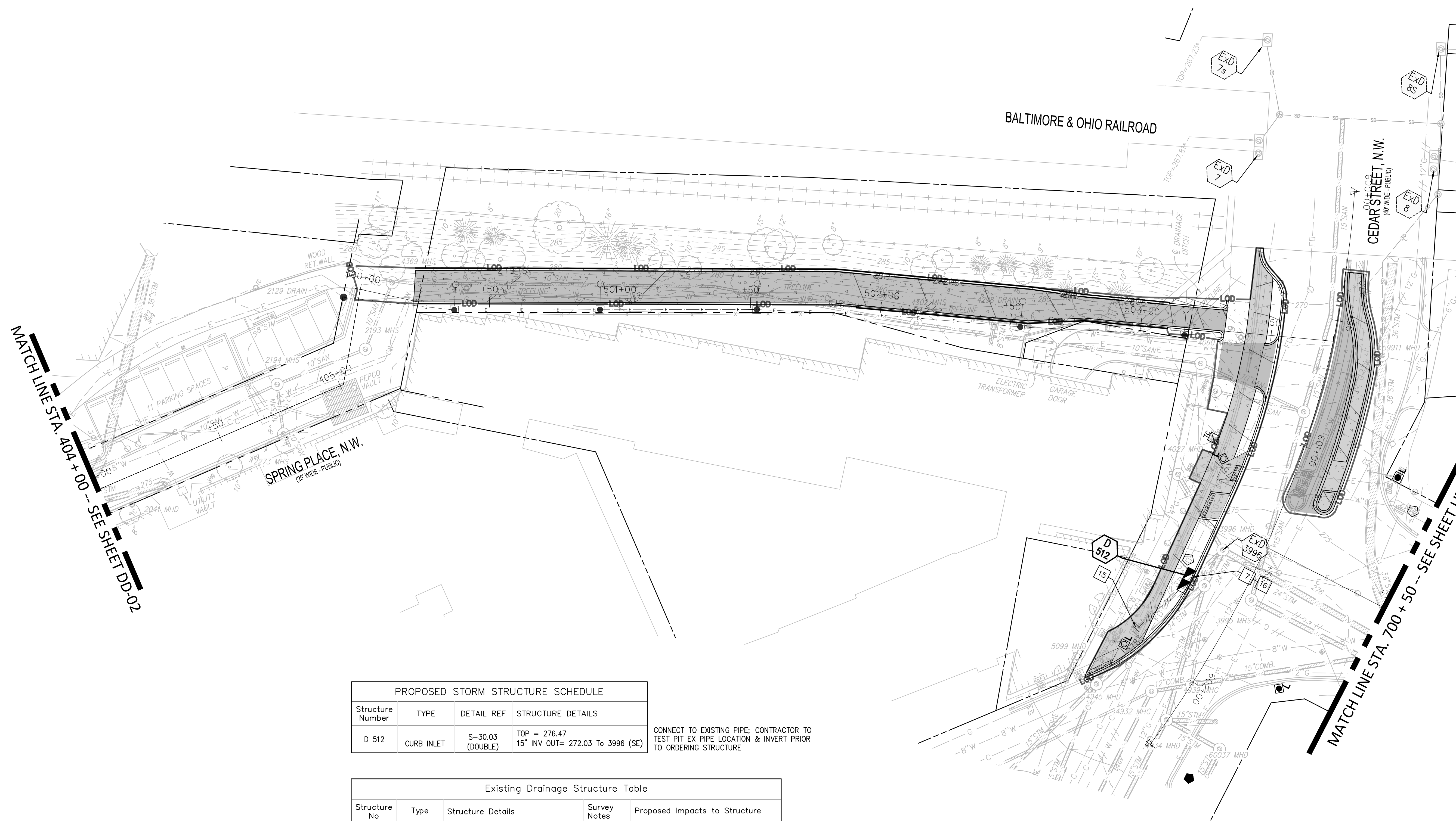
|   |                 |   |
|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | DD-02   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. BMW<br>DESIGNED BY BMW<br>CHECKED BY RS<br>DRAWN BY BMW<br>PROJECT MGR. RS |
| <b>DRAINAGE PLAN</b>  |                 | DIVISION CHIEF  |
| NO. DESCRIPTION NAME DATE   |                 | DATE<br>FILE<br>SHEET 61 OF 160   |

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FILES  
DATES

- KEY LEGEND**
- 1 PROPOSED 15" RCPR STORM DRAIN
  - 2 PROPOSED 18" RCPR STORM DRAIN
  - 3 PROPOSED 4' MANHOLE (S-20.01)
  - 4 PROPOSED DOGHOUSE MANHOLE (TEST PIT)
  - 5 CONNECT TO EXISTING MANHOLE
  - 7 INSTALL STANDARD CATCH BASIN (DOUBLE)
  - 8 INSTALL STANDARD CATCH BASIN (TRIPLE)
  - 10 INSTALL STANDARD GRATE INLET (SINGLE)
  - 11 INSTALL STANDARD GRATE INLET (DOUBLE)
  - 15 REMOVE EXISTING CATCH BASIN
  - 16 CONNECT EXISTING PIPE TO NEW CATCH BASIN W/ 5 LF (MIN) OF NEW PIPE & CONC. COLLAR
  - 30 RELOCATED FIRE HYDRANT, LOCATION TO BE COORDINATED WITH DCWATER; 6"x6" CUT IN TEE W/ 6" SLEEVE; 21 LF 6" DIP PIPE & 6" VALVE W/ CASING
  - 35 REMOVE EX FIRE HYDRANT; REMOVE VALVE & PIPING AND PLUG EXISTING TEE

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| Structure Number | TYPE       | DETAIL REF       | STRUCTURE DETAILS                                |
|------------------|------------|------------------|--|
| D 512            | CURB INLET | S-30.03 (DOUBLE) | TOP = 276.47<br>15" INV OUT= 272.03 To 3996 (SE) |

CONNECT TO EXISTING PIPE; CONTRACTOR TO TEST PIT EX PIPE LOCATION & INVERT PRIOR TO ORDERING STRUCTURE

| Structure No | Type                | Structure Details  | Survey Notes    | Proposed Impacts to Structure  |
|--------------|---------------------|--|-----------------|--|
| ExD 3996 MHD | MANHOLE             | TOP = 275.82<br>24" INV IN = 267.55 Fr 3997 MHD (W)<br>12" INV IN = 271.35 Fr (W)<br>12" INV IN = 263.15 Fr 4027 MHD (NE)<br>24" INV OUT = 263.02 (S @ 322.50%)                                |                 |  |
| ExD 3997 MHD | MANHOLE             | TOP = 276.55<br>15" INV IN = 269.49 Fr 4934 MHD (W)<br>24" INV IN = 267.97 Fr 4945 MHD (W)<br>24" INV OUT = 267.91 (E @ 2.33%)   |                 |  |
| ExD 4945 MHD | MANHOLE             | TOP = 278.39<br>12" INV IN = 274.85 Fr (N)<br>15" INV IN = 272.20 Fr 60030 MHD (W)<br>15" INV IN = 272.64 Fr 60034 DRAIN (W)<br>12" INV IN = 275.60 Fr (E)<br>24" INV OUT = 269.20 (E @ 2.20%) |                 |  |
| ExD 5099 MHD | CURB INLET (DOUBLE) | TOP = 278.91   | BOT=274.41; FOW | TO BE REMOVED; MAINTAIN EX. PIPE FOR REUSE; SEE D512 FOR PROP CONDITIONS |
| ExD 5164 MHD | CURB INLET (SINGLE) | TOP = 277.98   | BOT=271.38; FOW |  |

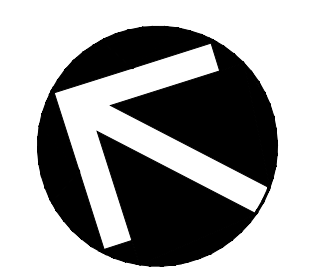
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or 48 HOURS IN ADVANCE OF ANY  
WORK IN THIS VICINITY™**

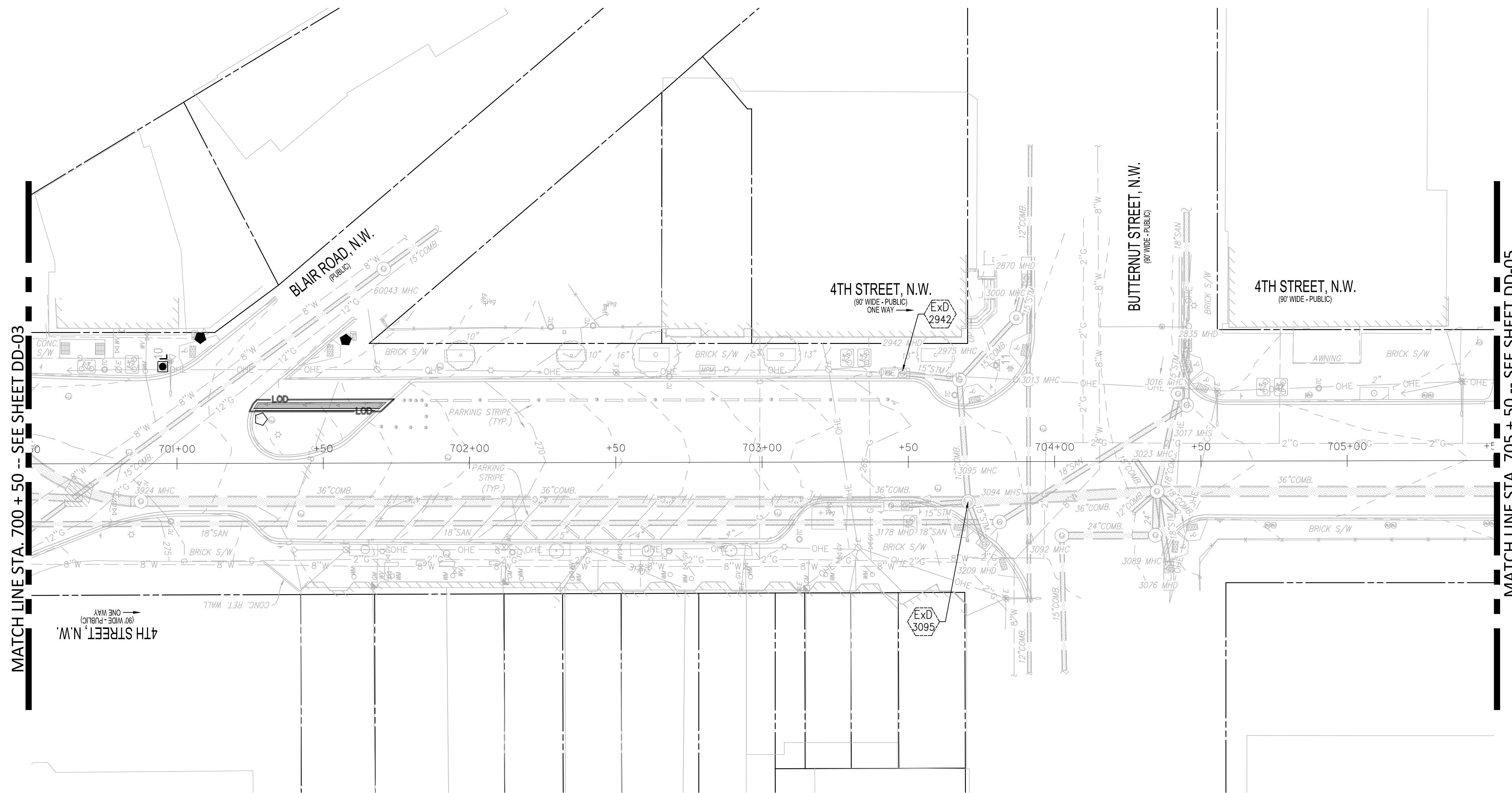
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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |                |  |
|---|----------------|--|
| DATE: JULY 2023   | SCALE: 1"= 20' | <b>DD-03</b>   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                |  |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                | PROJECT ENG. <u>BMW</u><br>DESIGNED BY <u>BMW</u><br>CHECKED BY <u>RS</u><br>DRAWN BY <u>BMW</u><br>PROJECT MGR. <u>RS</u> |
| <b>DRAINAGE PLAN</b>  |                | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET 62 OF 160  |

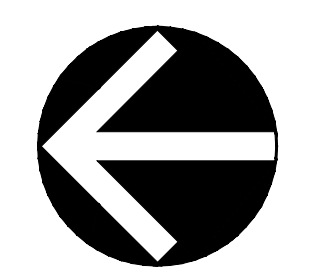


| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 63        | 160          |



MATCH LINE STA. 700 + 50 -- SEE SHEET DD-03

MATCH LINE STA. 705 + 50 -- SEE SHEET DD-05



**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**

**“FOR LOCATION OF UTILITIES CALL  
8-1-1 or 1-800-257-7777 OR LOG ON TO  
or 48 HOURS IN ADVANCE OF ANY  
WORK IN THIS VICINITY”**

DATE: OCTOBER 2022      SCALE: 1" = 20'      DD-04

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

**DRAINAGE PLAN**

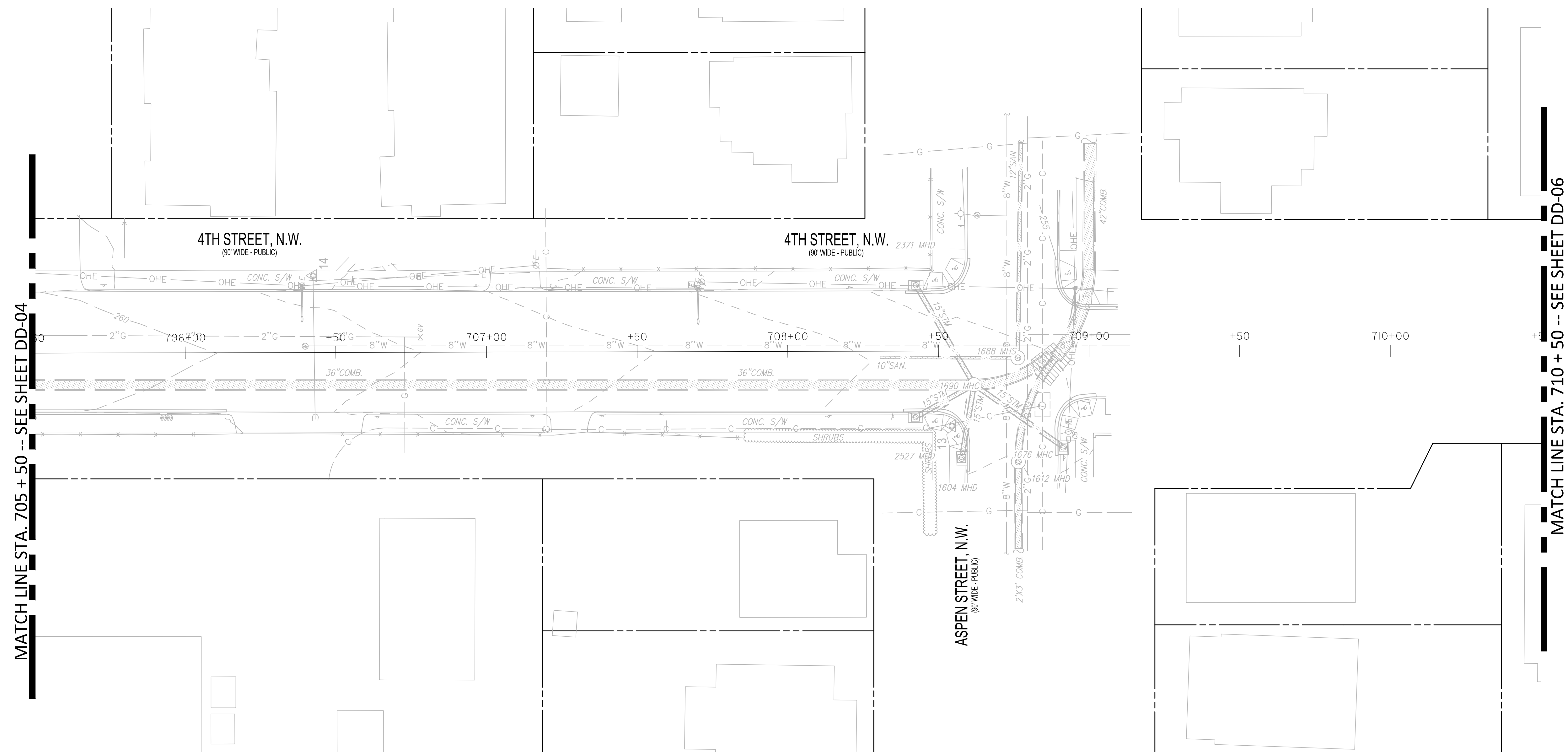
PROJECT ENG. **BMW**  
DESIGNED BY **BMW**  
CHECKED BY **RS**  
DRAWN BY **BMW**  
PROJECT MGR. **RS**  
DIVISION CHIEF  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 63 OF 160

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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
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|           |             |      |      |

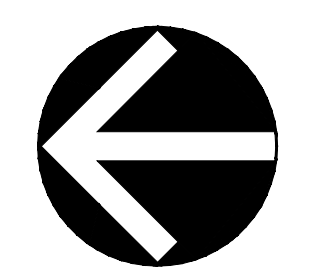
FILES  
DATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 64        | 160          |



MATCH LINE STA. 705 + 50 -- SEE SHEET DD-04

MATCH LINE STA. 710 + 50 -- SEE SHEET DD-06



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NOT FOR CONSTRUCTION**

**FOR LOCATION OF UTILITIES CALL  
8-1-1 or 1-800-257-7777 OR LOG ON TO  
or 48 HOURS IN ADVANCE OF ANY  
WORK IN THIS VICINITY**

DATE: OCTOBER 2022      SCALE: 1" = 20'      DD-05

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

PROJECT ENG. BMW  
DESIGNED BY BMW  
CHECKED BY RS  
DRAWN BY BMW  
PROJECT MGR. RS

DIVISION CHIEF

**DRAINAGE PLAN**

DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 64 OF 160

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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
|           |             |      |      |
|           |             |      |      |

FILES  
DATES



MATCH LINE STA. 710 + 50 -- SEE SHEET DD-05

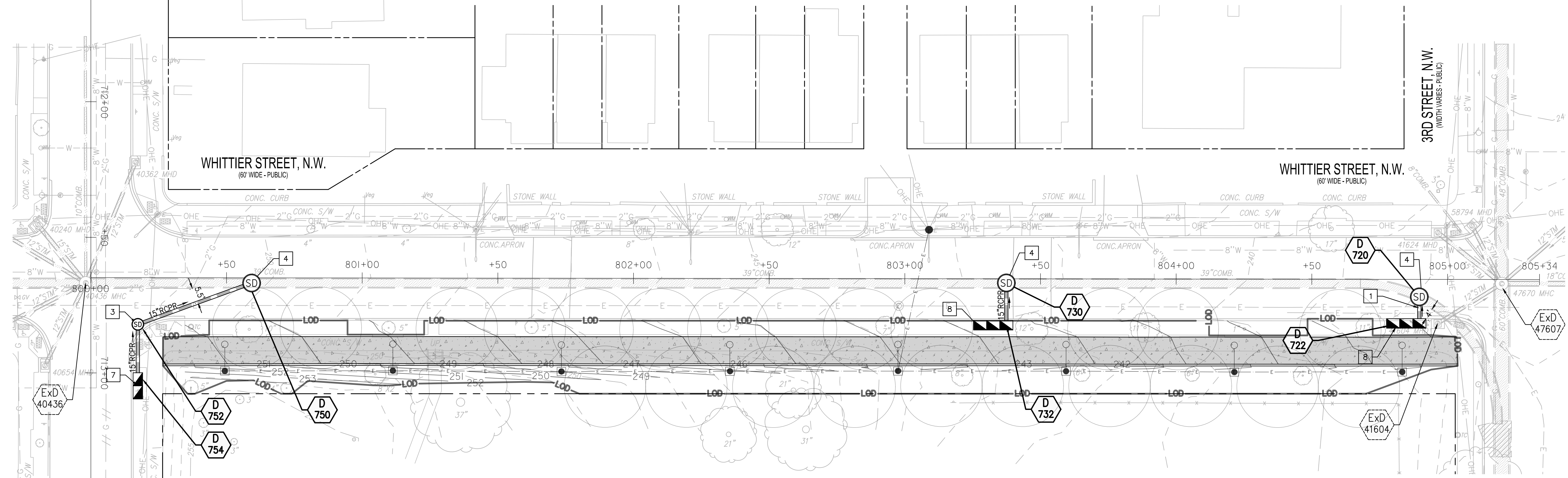
| Existing Drainage Structure Table |                     |  |                    |                               |
|-----------------------------------|---------------------|--|--------------------|-------------------------------|
| Structure No                      | Type                | Structure Details  | Survey Notes       | Proposed Impacts to Structure |
| ExD 40436 MHC                     | MANHOLE             | TOP = 251.85<br>10" INV IN = 242.96 Fr (N)<br>36" INV IN = 239.67 Fr (W)<br>12" INV IN = 244.85 Fr (SW)<br>12" INV IN = 245.45 Fr 40706 MHD (SW)<br>12" INV IN = 246.37 Fr 40230 MHD (NW)<br>15" INV IN = 245.47 Fr 40240 MHD (NW)<br>12" INV IN = 245.80 Fr 40362 MHD (N)<br>36" INV OUT = 239.59 (E @ 0.55%) |                    |                               |
| ExD 40654 MHD                     | CURB INLET (SINGLE) | TOP = 252.10   | BOT=245.95;<br>FOW |                               |
| ExD 41604 MHD                     | CURB INLET (SINGLE) | TOP = 237.80<br>12" INV OUT = 233.05 (NE @ -1.98%)   | FOW                |                               |
| ExD 47670 MHC                     | MANHOLE             | TOP = 237.60<br>18" INV IN = 226.81 Fr 50178 MHC (E)<br>48" INV IN = 225.91 Fr (N)<br>15" INV IN = 229.86 Fr 41624 MHD (NW)<br>12" INV IN = 234.08 Fr 58794 MHD (NW)<br>12" INV IN = 233.60 Fr 41604 MHD (SW)<br>8" INV IN = 234.08 Fr (NW)<br>60" INV OUT = 225.79 (S @ 0.88%)                                |                    |                               |

| PROPOSED STORM STRUCTURE SCHEDULE |                  |                       |   |
|-----------------------------------|------------------|-----------------------|---|
| Structure Number                  | TYPE             | DETAIL REF            | STRUCTURE DETAILS   |
| D 754                             | CURB INLET       | S-30.03 (TRIPLE)      | TOP = 251.47<br>15" INV OUT= 245.85 To 752 (N)                                  |
| D 752                             | MANHOLE          | S-20.01 (48")         | TOP = 251.19<br>15" INV IN= 245.52 Fr 754 (S)<br>15" INV OUT= 243.82 To 750 (E) |
| D 750                             | DOGHOUSE MANHOLE | S-20.12 (MOD FOR 39") | TOP = 250.17<br>15" INV IN= 243.03 Fr 752 (W)                                   |
| D 732                             | CURB INLET       | S-30.03 (TRIPLE)      | TOP = 242.55<br>15" INV OUT= 235.45 To 730 (N)                                  |
| D 730                             | DOGHOUSE MANHOLE | S-20.12 (MOD FOR 39") | TOP = 242.53<br>15" INV IN= 235.22 Fr 732 (S)<br>40" INV OUT= 230.09 To (E)     |
| D 722                             | CURB INLET       | S-30.03 (TRIPLE)      | TOP = 237.96<br>15" INV OUT= 231.32 To 720 (N)                                  |
| D 720                             | DOGHOUSE MANHOLE | S-20.12 (MOD FOR 39") | TOP = 237.97<br>15" INV IN= 231.21 Fr 722 (S)<br>40" INV OUT= 225.91 To (SE)    |

| PIPE SCHEDULE |      |      |      |             |       |
|---------------|------|------|------|-------------|-------|
| FR            | TO   | SIZE | TYPE | LENGTH (FT) | SLOPE |
| D754          | D752 | 15"  | RCPR | 17          | 2.0%  |
| D752          | D750 | 15"  | RCPR | 40          | 2.0%  |
| D732          | D730 | 15"  | RCPR | 11          | 2.0%  |
| D722          | D720 | 15"  | RCPR | 6           | 2.0%  |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 65        | 160          |

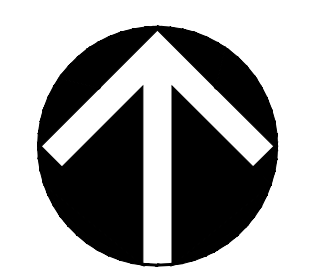
- KEY LEGEND**
- PROPOSED 15" RCPR STORM DRAIN
  - PROPOSED 18" RCPR STORM DRAIN
  - PROPOSED 4' MANHOLE (S-20.01)
  - PROPOSED DOGHOUSE MANHOLE (TEST PIT)
  - CONNECT TO EXISTING MANHOLE
  - INSTALL STANDARD CATCH BASIN (DOUBLE)
  - INSTALL STANDARD CATCH BASIN (TRIPLE)
  - INSTALL STANDARD GRATE INLET (SINGLE)
  - INSTALL STANDARD GRATE INLET (DOUBLE)
  - REMOVE EXISTING CATCH BASIN
  - CONNECT EXISTING PIPE TO NEW CATCH BASIN W/ 5 LF (MIN) OF NEW PIPE & CONC. COLLAR
  - RELOCATED FIRE HYDRANT, LOCATION TO BE COORDINATED WITH DCWATER; 6"x6" CUT IN TEE W/ 6" SLEEVE; 21 LF 6" DIP PIPE & 6" VALVE W/ CASING
  - REMOVE EX FIRE HYDRANT; REMOVE VALVE & PIPING AND PLUG EXISTING TEE



- GENERAL NOTES**
- INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. CONTRACTOR SHALL DETERMINE THE EXACT LOCATION, ELEVATIONS, AND SIZES OF EX. UTILITIES BY DIGGING TESTS PITS BY HAND AT ALL POINTS OF CONNECTION AND AT CROSSINGS. RESULTS FROM THESE TEST PITS SHALL BE SUBMITTED TO THE ENGINEER FIVE (5) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION AND/OR ORDERING MATERIALS.
  - ADJUST EX STRUCTURES TO PROPOSED GRADE
  - CATCH BASIN STRUCTURES CONNECTING TO COMBINED SEWERS SHALL BE PROVIDED WITH APPROVED DCWATER WATERSEAL CONNECTIONS
  - CONTRACTOR SHALL PROVIDE 12" HORIZONTAL AND VERTICAL CLEAR BETWEEN EXISTING COMMUNICATION AND ELECTRICAL LINES
  - CLEAN OUT ALL EXISTING INLETS WITH WATER/DIRT
  - THIS SHEET IS FOR DRAINAGE IMPROVEMENTS ONLY.
  - SEE EROSION & SEDIMENT CONTROL FOR LAND DISTURBANCE BREAKDOWN (INCLUDING UTILITY TRENCH EXTENTS); SEE DRAINAGE AREA SHEETS FOR PROJECT AREA LIMITS (L.O.D.) AND PROPOSED LAND USE IMPACTS. SEE LANDSCAPE PLANS FOR PROPOSED TREE PLANTING INSTALLATION AND ROOTABLE SOIL VOLUME BOUNDARIES AND DETAILS.

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NOT FOR CONSTRUCTION**

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or 48 HOURS IN ADVANCE OF ANY  
WORK IN THIS VICINITY™**



|   |                        |                      |
|---|------------------------|----------------------|
| DATE: JULY 2023   | SCALE: 1" = 20'        | <b>DD-06</b>         |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                        |                      |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                        |                      |
| <b>DRAINAGE PLAN</b>  |                        |                      |
| PROJECT ENG. <u>BMW</u>   | DESIGNED BY <u>BMW</u> | CHECKED BY <u>RS</u> |
| DRAWN BY <u>BMW</u>   | PROJECT MGR. <u>RS</u> | DIVISION CHIEF       |
| DATE _____  | FILE _____             | SHEET 65 OF 160      |

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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

FILES  
DATES





# General Construction Notes

- Contact:** Notify the following DC Water departments prior to the commencement of utility construction:
  - Construction Inspection Section at 202-787-4024 at least two weeks prior to the commencement of utility construction to schedule pre-construction meeting.
  - Department of Water Services at 202-612-3400 at least one week prior to the commencement of water utility construction.
  - Department of Sewer Services at 202-264-3862 or 3873 at least one week prior to the commencement of sewer utility construction.
- Standards:** All construction, materials, and appurtenances shall comply with the latest editions of the DC Water Project Design Manual, Standard Details & Design Guidelines, and Specifications.
- Lead Service Replacement:** If this project includes the replacement of a water main that has existing lead water service laterals, the Contractor is responsible for contacting the DC Water Construction Inspection Section at 202-787-4024 at least 90 days prior to construction to allow adequate time to initiate standard lead service replacement protocol. Lateral replacement includes the full length of pipe in public space.
- Owner Responsibility:** The Owner is responsible for all work and costs associated with excavation, installation, and restoration of public space to perform a water/sewer connection/abandonment. Once the Contractor has obtained a Public Space Permit he/she must then contact DC Water prior to performing the excavation to install/inspect the utility work. The Owner shall be held responsible for all damages to existing structures and utilities caused by construction activity.
- DC Water Responsibility:** DC Water is only responsible for installation of small water service taps (2" diameter and less) to the public main, small water service tap removals from the public main, furnishing & installing the meter in public space, and inspection of work performed on the public systems.
- Miss Utility:** Contact Miss Utility at 800-257-7777 48 hours before any digging.
- Plan Set:** A set of signed & sealed DC Water stamped Plans shall be kept at all times at the job site on which all changes or variations in the work, including all existing utilities, are to be recorded and/or corrected daily.
- Abandonments:** The Owner must physically disconnect existing water, sewer, and storm laterals that are to be abandoned at their connection to the public main.
- Unmetered Water:** There shall be no unmetered connections to the City's water system, including connections bypassing meters for testing on-site plumbing or for obtaining construction water.
- Pressure Testing Against Valves:** Pressure testing against valves will not be allowed.
- Water Meter Installation:** To schedule the installation of a domestic water meter contact Permit Operations at 202-646-8600. DC Water will furnish and install the meter after the connection to the main has been made and the meter pit/vault has been installed.

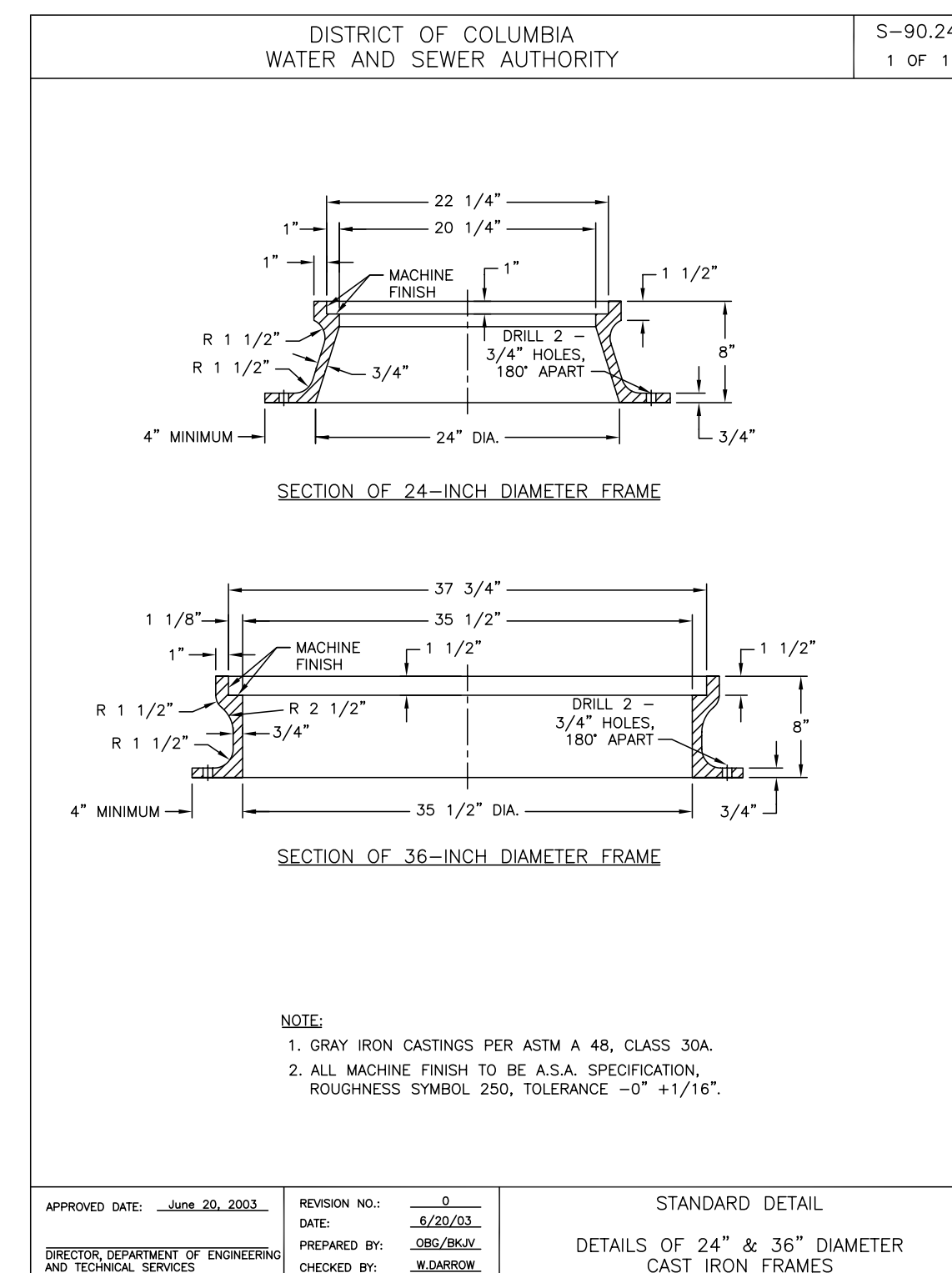
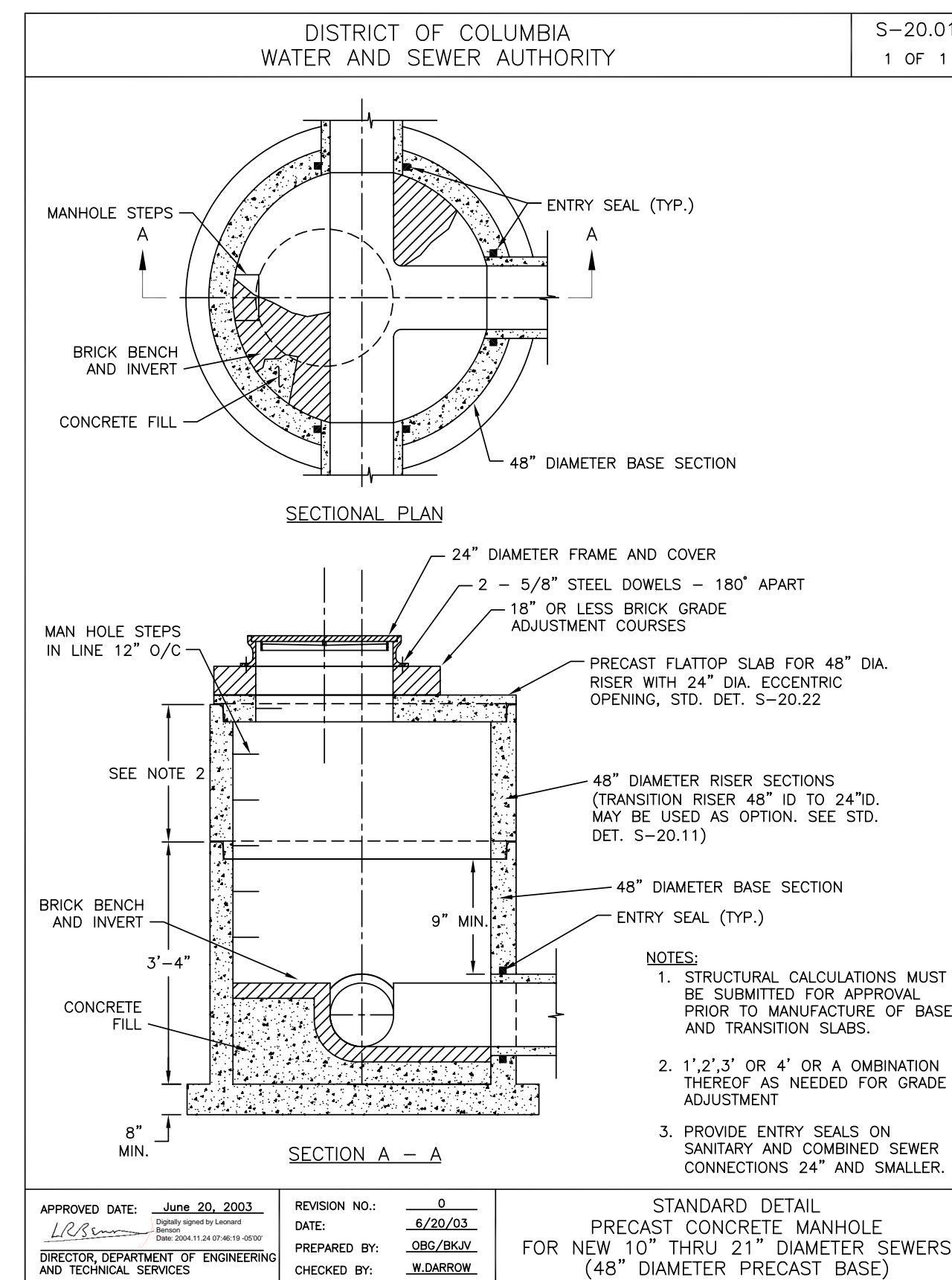
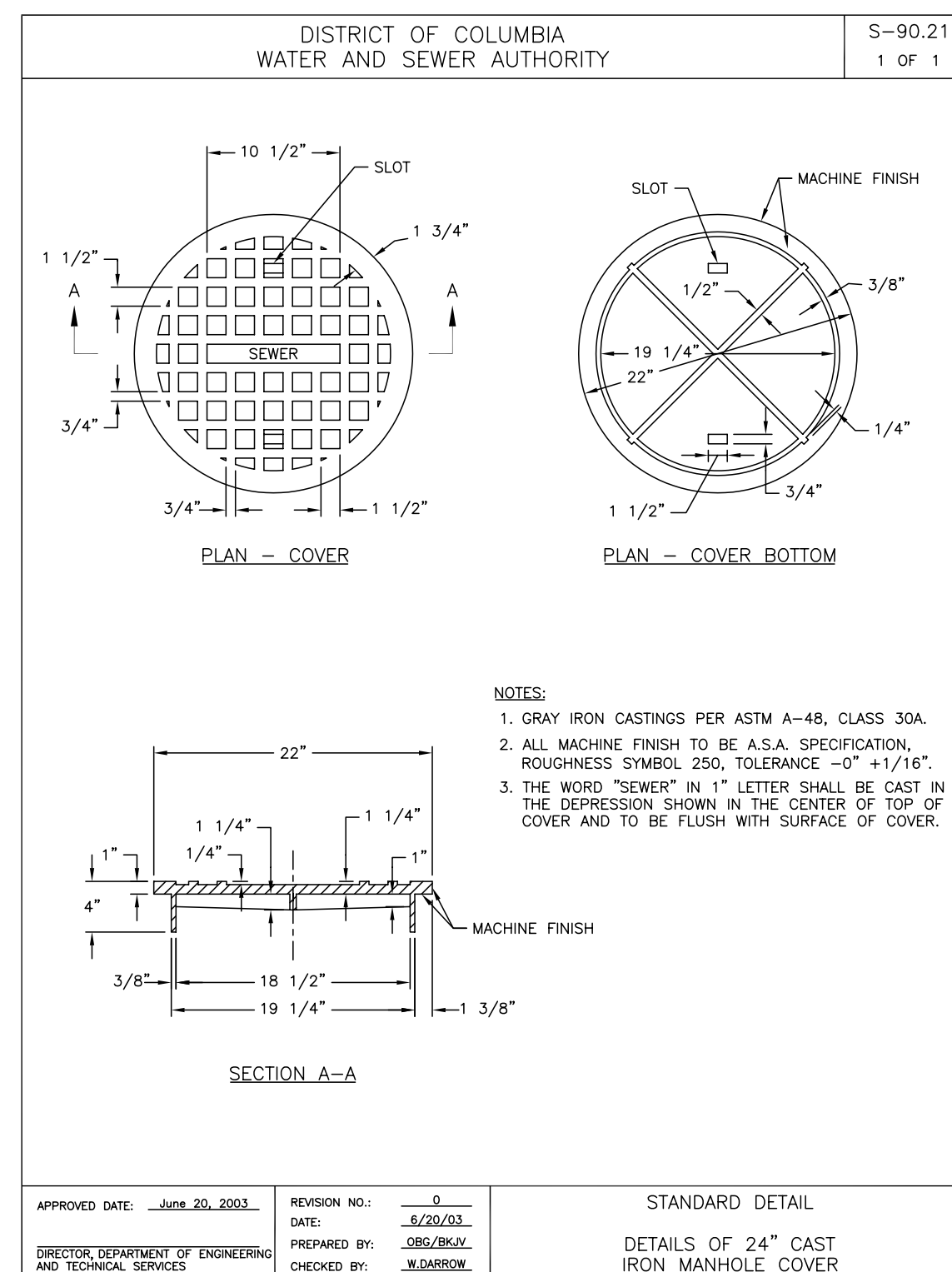
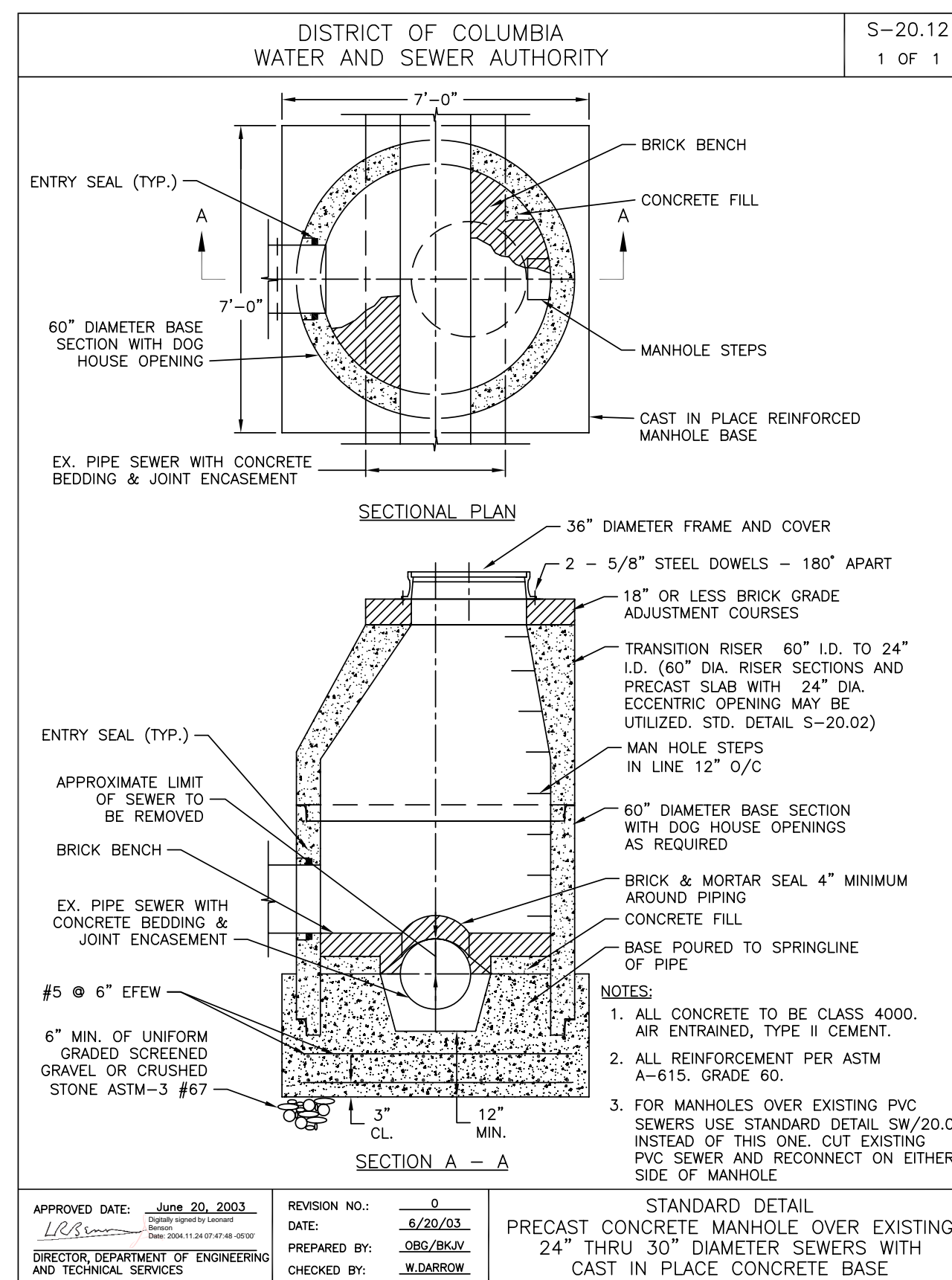
February 2017

Page 1

- Cross Contamination Control:** ASSE 1048 certified backflow prevention assemblies are required on all fire services and are to be located inside the building (unless an external location is necessary or required by DC Water) where it is supplied, owned, operated, and maintained by the Owner. DC Water does not furnish nor install fire double check detector fire protection backflow prevention assemblies.
- Utility Service Disruptions:** Phase all utility work to maintain utility services to the surrounding area during all phases of construction. Limit required utility shut-downs in number and duration. Coordinate these shut-downs with DC Water Construction Inspection staff.
- Water Valve Operation:** The Contractor is required to coordinate with DC Water for all necessary water main shut-downs with adequate advanced notice. Only DC Water employees may shut down a public water main. A certified plumber is only authorized to turn off valves inside meter pits.
- Water Gate Valve Location:** Locate gate valves for domestic and fire services as close to the public water main tee as possible. However, if necessary adjustments are required due to conflicts, coordinate with a DC Water inspector.
- Material:** The Contractor is responsible for submitting shop cuts to the appropriate DC Water office for approval or obtaining a DC Water approval stamp for all work in public space in advance of installation. Only approved materials may be used.
- Temporary Conditions Minimum Cover:** A nominal four feet of cover is required for all water mains at final grade. Cover of less than four feet requires DC Water approval.
- As-Built:** Developers, contractors and/or plumbers must submit final construction as-built information to the appropriate DC Water inspector(s) for review and approval, upon completion of installation of new services or abandonment of existing services. When the final as-built is approved all deposits will be returned to the applicant. See DC Water as-built requirements for additional information.
- Conflicts:** The Contractor shall field verify the location of existing underground utilities prior to installation of proposed utilities. A minimum of one foot vertical and five feet horizontal clearance shall be maintained from any utilities and public water and sewer mains.
- Fire Hydrant Use:** The use of a fire hydrant as a water source is prohibited unless a permit has been obtained from DC Water for use of a specific hydrant(s). Daily or extended use permits can be obtained from the DC Water Permit Operations Department 202-646-8600.
- Fire Hydrant Status:** The Contractor shall notify FEMS at 202-277-1889, prior to taking any fire hydrant out of service or rendering any hydrant inaccessible for any reason. FEMS is also to be provided with the location of any new installation of private fire hydrants.
- DC Water Safety Office:** The DC Water Safety Office can be contacted at 202-787-4350.
- Sewer Backwater Prevention:** The plumbing system must be in compliance with Section 715 of the 2006 International Plumbing Code which states a backwater valve is required for all plumbing fixtures below the elevation of the manhole cover of the next upstream manhole in the public sewer.

February 2017

Page 2



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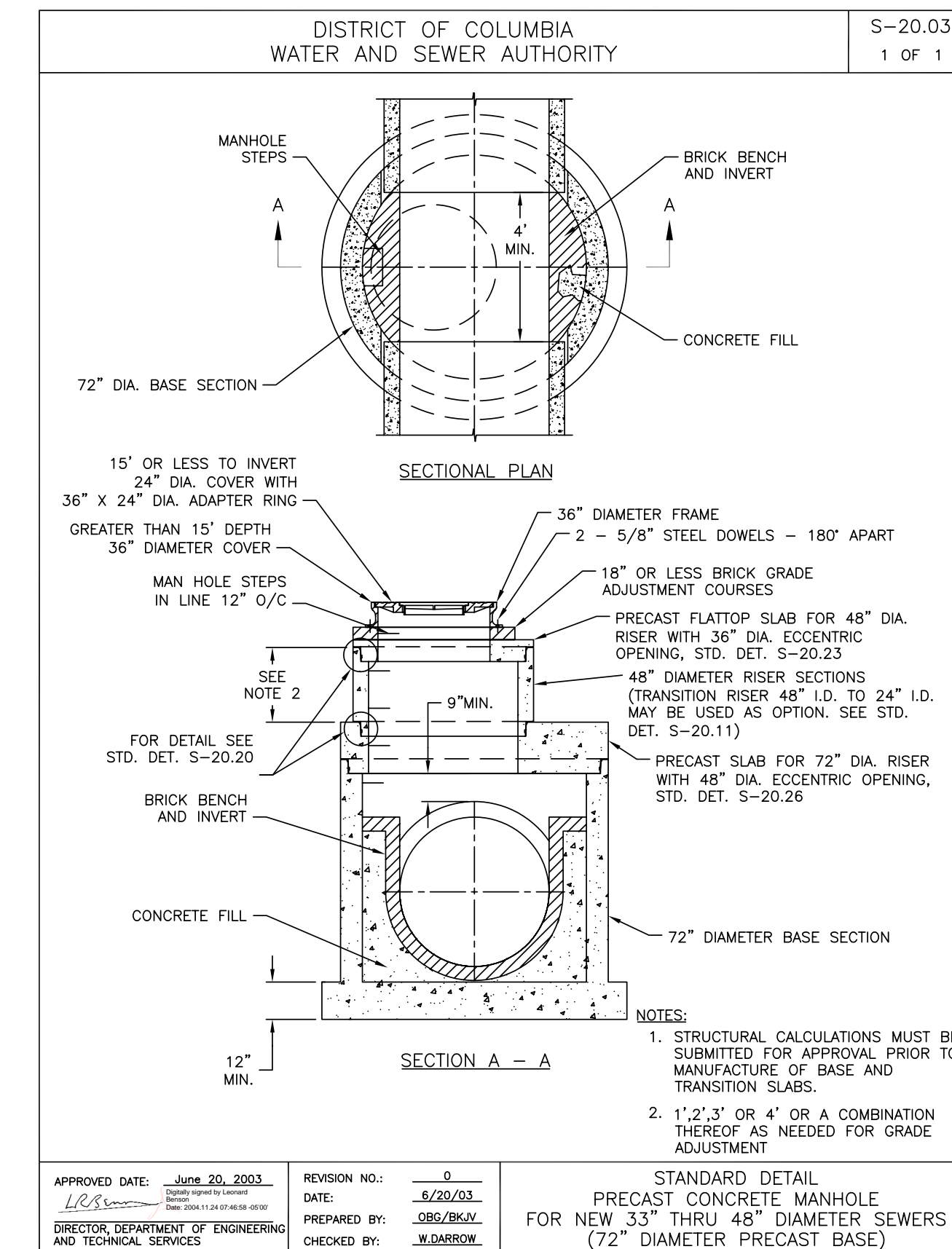


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|     |             |      |      |

REVISIONS

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 67        | 160          |



DATE: JULY 2023 SCALE: DD-08

**D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION**

**METROPOLITAN BRANCH TRAIL  
DESIGN**

PROJECT ENG. BMW  
DESIGNED BY BMW  
CHECKED BY RS  
DRAWN BY BMW  
PROJECT MGR. RS

DIVISION CHIEF

**DRAINAGE & UTILITY  
DETAIL SHEET**

DATE  
FILE  
SHEET 67 OF 160

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 68        | 160          |

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

S-30.01  
1 OF 1

NOTES:

1. ALL CONCRETE TO BE CLASS 4000, AIR ENTRAINED, TYPE II CEMENT
2. REINFORCING SHALL BE CENTERED IN WALLS AND BASE AND SHALL CONFORM TO ASTM A615, GRADE 60.

APPROVED DATE: June 20, 2003  
REVISION NO.: 0  
DATE: 6/20/03  
PREPARED BY: OBS/BK/V  
CHECKED BY: W.BARROW

STANDARD CATCH BASIN

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

S-30.03  
1 OF 2

NOTES:

1. ALL CONCRETE TO BE CLASS 4000, AIR ENTRAINED, TYPE II CEMENT.
2. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.

APPROVED DATE: June 20, 2003  
REVISION NO.: 0  
DATE: 6/20/03  
PREPARED BY: OBS/BK/V  
CHECKED BY: W.BARROW

STANDARD DOUBLE AND STANDARD TRIPLE BASINS

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

S-30.03  
2 OF 2

NOTES:

1. ALL CONCRETE TO BE CLASS 4000, AIR ENTRAINED, TYPE II CEMENT.
2. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.

APPROVED DATE: June 20, 2003  
REVISION NO.: 0  
DATE: 6/20/03  
PREPARED BY: OBS/BK/V  
CHECKED BY: W.BARROW

STANDARD DOUBLE AND STANDARD TRIPLE BASINS

ISSUED: 8/30/15  
REVISION: APPROVAL

RECOMMENDED: Adil Raza  
PROJECT MANAGER

APPROVED: Muhammed Khalid  
CHIEF ENGINEER

**d.** DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION

DWG. NO. 310.02

GRATE TYPE CATCH BASIN WITH SERPENTINE GRATE

NOTES:

1. GRAY IRON CASTINGS PER AASHTO MIDS. CLASS 30A.
2. ALL MACHINE FINISH TO BE A.S.A. SPECIFICATION, ROUGHNESS SYMBOL 250, TOLERANCE -0 +1/16".
3. ALL CONCRETE TO BE CLASS 4000, AIR ENTRAINED, TYPE II CEMENT.
4. REINFORCING SHALL BE CENTERED IN WALL AND BASE AND SHALL CONFORM TO AASHTO M31 GRADE 60.
5. FOR INSTALLATION OR MAINTENANCE, CONTRACTOR SHALL REFER TO LATEST DC WATER SPECIFICATIONS AND DETAILS.
6. INSTALLATION SHALL BE PER APPROVAL OF DOTT CHIEF ENGINEER.

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

S-90.31  
1 OF 1

NOTES:

1. GRAY IRON CASTINGS PER ASTM A-48, CLASS 30A, OR 35.
2. ALL MACHINE FINISH TO BE A.S.A. SPECIFICATION, ROUGHNESS SYMBOL 250, TOLERANCE -0 +1/16".
3. THE WORD "SEWER" IN 1" LETTERS SHALL BE CAST IN THE DEPRESSION SHOWN IN THE CENTER OF TOP OF COVER AND TO BE FLUSH WITH SURFACE OF COVER.

APPROVED DATE: June 20, 2003  
REVISION NO.: 0  
DATE: 6/20/03  
PREPARED BY: OBS/BK/V  
CHECKED BY: W.BARROW

STANDARD DETAIL  
DETAILS OF 24" CAST IRON COVER AND FRAME FOR BASIN TOP

ISSUED: 8/30/15  
REVISION: APPROVAL

RECOMMENDED: Adil Raza  
PROJECT MANAGER

APPROVED: Muhammed Khalid  
CHIEF ENGINEER

**d.** DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION

DWG. NO. 310.05

METHOD OF DEPRESSING PAVEMENT (FOR GUTTER OPENING INLET)

NOTES:

1. ALL CONCRETE TO BE CLASS 4000, AIR ENTRAINED, TYPE II CEMENT.
2. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.

ISSUED: 8/30/15  
REVISION: APPROVAL

RECOMMENDED: Adil Raza  
PROJECT MANAGER

APPROVED: Muhammed Khalid  
CHIEF ENGINEER

**d.** DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION

DWG. NO. 310.03

CURVE VANE GRATE WITH FRAME FOR SINGLE TYPE S INLET (FOR BICYCLE LANES)

NOTES:

1. GRAY IRON CASTINGS PER AASHTO MIDS. CLASS 30A.
2. ALL MACHINE FINISH TO BE A.S.A. SPECIFICATION, ROUGHNESS SYMBOL 250, TOLERANCE -0 +1/16".
3. ALL CONCRETE TO BE CLASS 4000, AIR ENTRAINED, TYPE II CEMENT.
4. REINFORCING SHALL BE CENTERED IN WALL AND BASE AND SHALL CONFORM TO AASHTO M31 GRADE 60.
5. FOR INSTALLATION OR MAINTENANCE, CONTRACTOR SHALL REFER TO LATEST DC WATER SPECIFICATIONS AND DETAILS.

DATE: JULY 2023 SCALE: DD-09

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

DRAINAGE & UTILITY  
DETAIL SHEET

PROJECT ENG. BMW  
DESIGNED BY BMW  
CHECKED BY RS  
DRAWN BY BMW  
PROJECT MGR. RS

DIVISION CHIEF

DATE  
FILE  
SHEET 68 OF 160

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION

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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
|           |             |      |      |
|           |             |      |      |
|           |             |      |      |

FILES  
DATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 69        | 160          |

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

S-12.01  
1 OF 2

APPROVED DATE: June 20, 2003  
REVISION NO.: 0  
DATE: 6/20/03  
PREPARED BY: OBG/BK/V  
CHECKED BY: W.DARROW

STANDARD DETAIL  
CONCRETE PIPE SEWER  
TRENCH LAYING CONDITION

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

S-12.01  
2 OF 2

| PIPE DIAMETER<br>D | PIPE BEDDING DIMENSION<br>W | PIPE BEDDING DIMENSION<br>A | PIPE BEDDING DIMENSION<br>B |         | TRENCH PAY WIDTH |               |
|--------------------|-----------------------------|-----------------------------|-----------------------------|---------|------------------|---------------|
|                    |                             |                             | IN SOIL                     | IN ROCK | UNSHEETED<br>Wu  | SHEETED<br>Ws |
| 12"                | 12"                         | 5"                          | 3"                          | 6"      | 3' - 4"          | 3' - 10"      |
| 15"                | 12"                         | 5"                          | 3"                          | 6"      | 3' - 7"          | 4' - 1"       |
| 18"                | 12"                         | 6"                          | 3"                          | 6"      | 3' - 11"         | 4' - 5"       |
| 21"                | 12"                         | 7"                          | 3"                          | 6"      | 4' - 3"          | 4' - 9"       |
| 24"                | 12"                         | 8"                          | 3"                          | 6"      | 4' - 6"          | 5' - 0"       |
| 27"                | 18"                         | 8"                          | 3"                          | 6"      | 5' - 9"          | 6' - 3"       |
| 30"                | 18"                         | 9"                          | 4"                          | 9"      | 6' - 1"          | 6' - 7"       |
| 33"                | 18"                         | 10"                         | 4"                          | 9"      | 6' - 5"          | 6' - 11"      |
| 36"                | 18"                         | 10"                         | 4"                          | 9"      | 6' - 8"          | 7' - 2"       |
| 42"                | 18"                         | 13"                         | 4"                          | 9"      | 7' - 3"          | 7' - 9"       |
| 48"                | 24"                         | 15"                         | 4"                          | 9"      | 8' - 10"         | 9' - 4"       |
| 54"                | 24"                         | 16"                         | 4"                          | 9"      | 9' - 5"          | 9' - 11"      |
| 60"                | 24"                         | 18"                         | 4"                          | 9"      | 10' - 0"         | 10' - 6"      |
| 66"                | 24"                         | 20"                         | 6"                          | 12"     | 10' - 7"         | 11' - 1"      |
| 72"                | 24"                         | 22"                         | 6"                          | 12"     | 11' - 2"         | 11' - 8"      |
| 78"                | 24"                         | 23"                         | 6"                          | 12"     | 11' - 9"         | 12' - 3"      |
| 84"                | 24"                         | 25"                         | 6"                          | 12"     | 12' - 4"         | 12' - 10"     |
| 90"                | 24"                         | 27"                         | 6"                          | 12"     | 12' - 11"        | 13' - 5"      |
| 96"                | 24"                         | 28"                         | 6"                          | 12"     | 13' - 6"         | 14' - 0"      |
| 102"               | 24"                         | 30"                         | 6"                          | 12"     | 14' - 1"         | 14' - 7"      |
| 108"               | 24"                         | 32"                         | 6"                          | 12"     | 14' - 8"         | 15' - 2"      |

NOTES:  
1. IF NECESSARY TO EXCEED W BELOW A HORIZONTAL PLANE 1'-0" ABOVE TOP OF PIPE, SEE SPECIFICATION SECTION 02220.  
2. SHEETING, IF USED, SHALL BE REMOVED IN CONJUNCTION WITH THE BACKFILLING OPERATION UNLESS OTHERWISE SPECIFIED OR SHOWN ON DRAWING. HOWEVER, IF APPROVED IN WRITING, SHEETING MAY BE CUT-OFF AND LEFT IN PLACE BELOW A LINE 1'-0" ABOVE THE TOP OF THE PIPE OR AS DIRECTED BY THE ENGINEER.

APPROVED DATE: June 20, 2003  
REVISION NO.: 0  
DATE: 6/20/03  
PREPARED BY: OBG/BK/V  
CHECKED BY: W.DARROW

STANDARD DETAIL  
CONCRETE PIPE SEWER  
TRENCH LAYING CONDITION

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

S-12.02  
1 OF 1

APPROVED DATE: June 20, 2003  
REVISION NO.: 0  
DATE: 6/20/03  
PREPARED BY: OBG/BK/V  
CHECKED BY: W.DARROW

STANDARD DETAIL  
CATCH BASIN CONNECTION PIPE  
TRENCH LAYING CONDITION

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

W-50.01  
1 OF 1

APPROVED DATE: June 20, 2003  
REVISION NO.: 0  
DATE: 6/20/03  
PREPARED BY: OBG/BK/V  
CHECKED BY: W.DARROW

STANDARD DETAIL  
TRAFFIC FIRE HYDRANT INSTALLATION

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

S-30.20  
1 OF 2

NOTES:  
1. GRAY IRON CASTINGS PER ASTM A-48, CLASS 30A.  
2. ALL MACHINE FINISH TO BE A.S.A. SPECIFICATION, ROUGHNESS SYMBOL 250, TOLERANCE -0" +1/16".  
3. WHEN THE CATCH BASIN CONNECTION PIPE IS NOT PERPENDICULAR TO THE CATCH BASIN WALL, THE WALL SHALL BE MODIFIED TO INSTALL WATER SEAL ON SAME ALIGNMENT AS THE CATCH BASIN PIPE. SEE SECTIONAL PLAN, SHEET 2 OF 2 FOR TYPICAL DETAIL.

APPROVED DATE: June 20, 2003  
REVISION NO.: 0  
DATE: 6/20/03  
PREPARED BY: OBG/BK/V  
CHECKED BY: W.DARROW

STANDARD DETAIL  
WATER SEAL FOR 15" DIAMETER  
CATCH BASIN CONNECTION  
(COMBINED AREA ONLY)

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

S-30.20  
2 OF 2

APPROVED DATE: June 20, 2003  
REVISION NO.: 0  
DATE: 6/20/03  
PREPARED BY: OBG/BK/V  
CHECKED BY: W.DARROW

STANDARD DETAIL  
TYPICAL FOR NON-PERPENDICULAR  
CATCH BASIN CONNECTION PIPE

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|     |             |      |      |
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|     |             |      |      |

DATE: JULY 2023      SCALE:      DD-10

**D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION**

**METROPOLITAN BRANCH TRAIL  
DESIGN**

**DRAINAGE & UTILITY  
DETAIL SHEET**

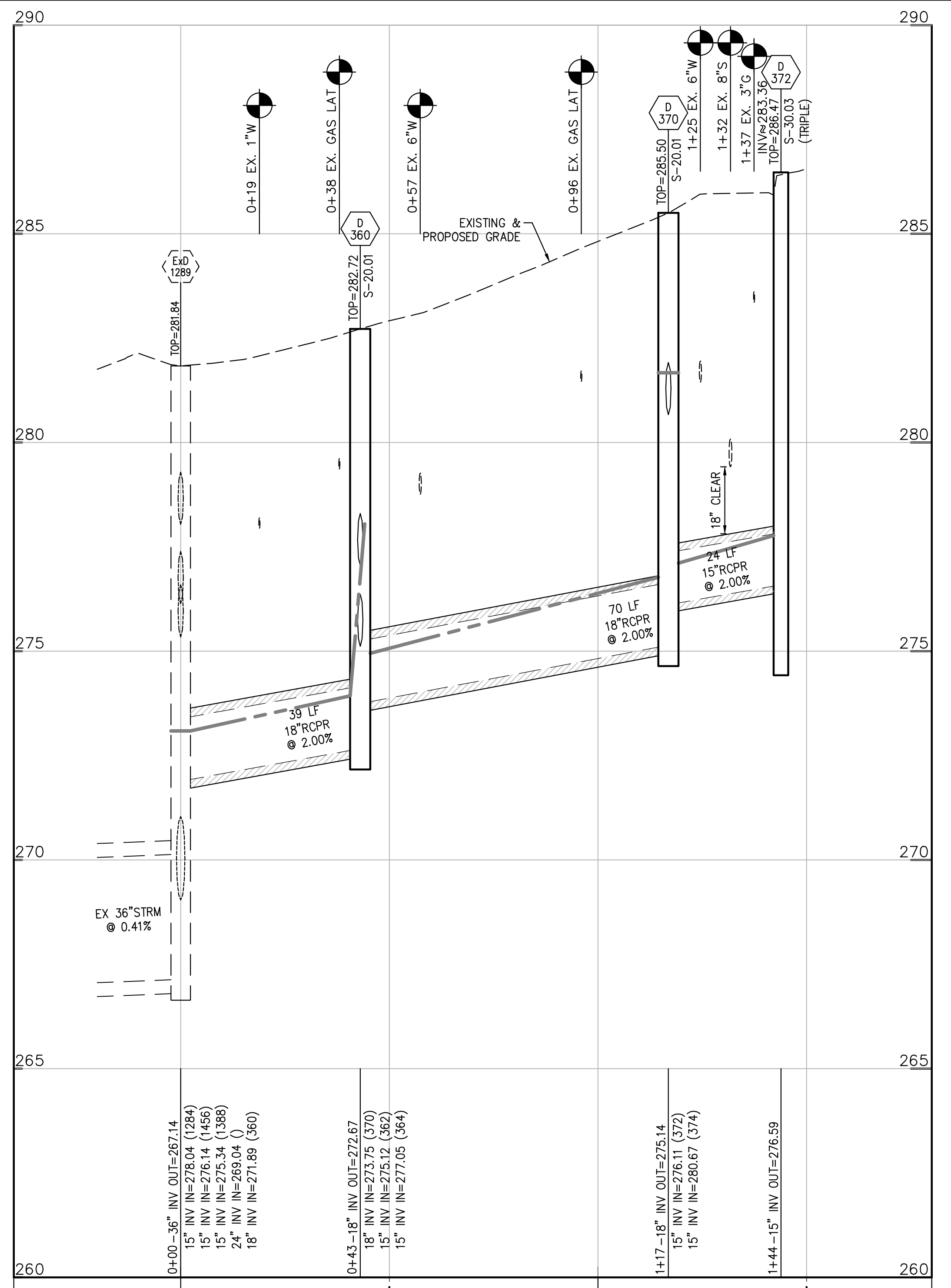
PROJECT ENG. BMW  
DESIGNED BY BMW  
CHECKED BY RS  
DRAWN BY BMW  
PROJECT MGR. RS

DIVISION CHIEF

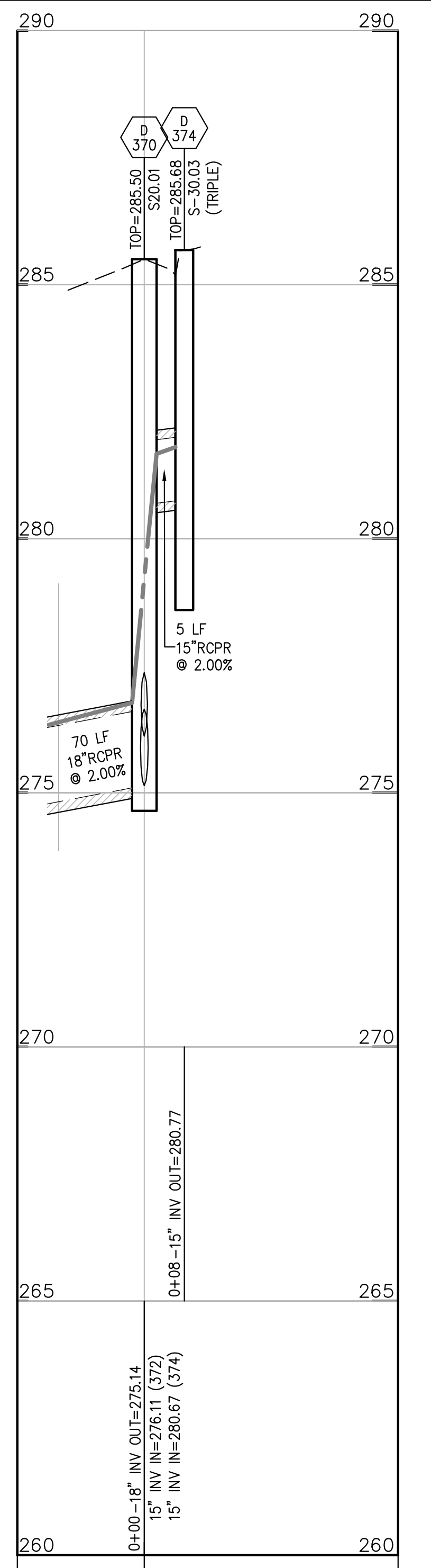
DATE  
FILE  
SHEET 69 OF 160

FILES  
SHEETS

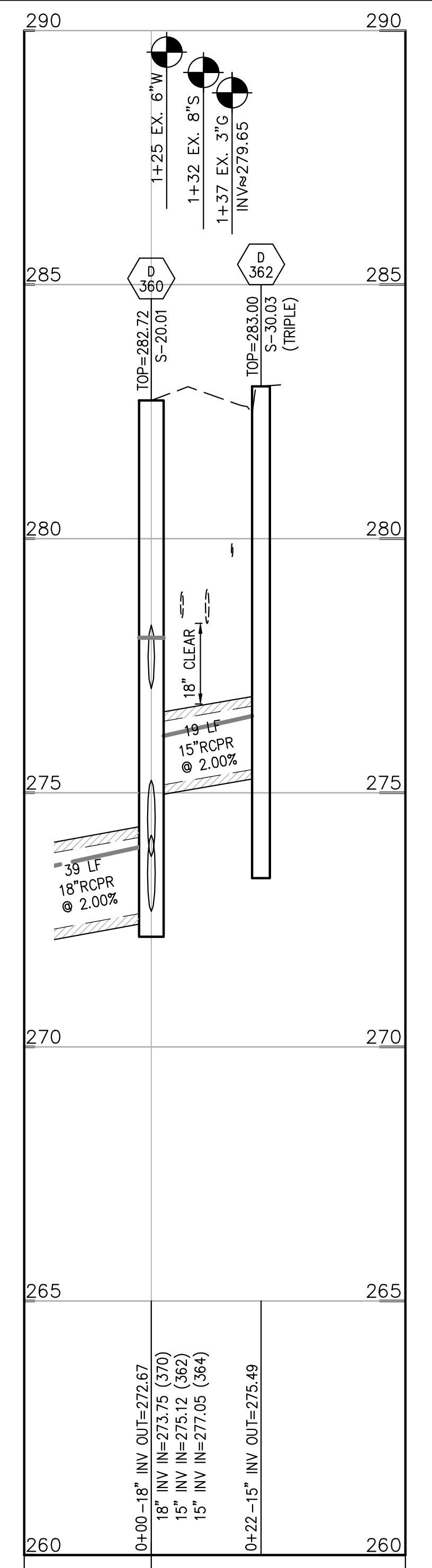
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 70        | 160          |



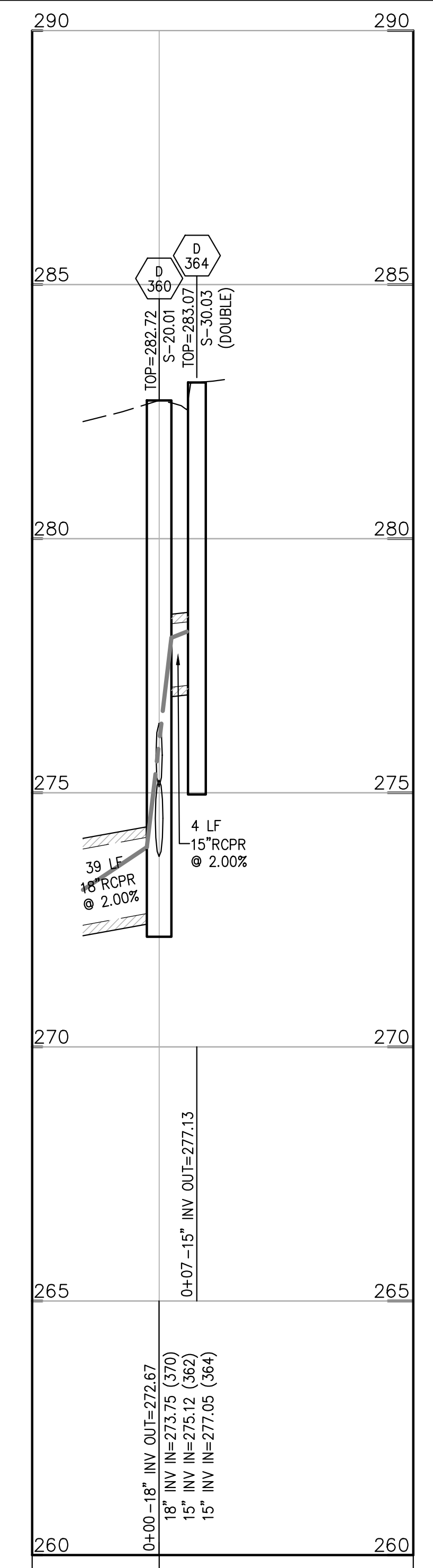
**PROPOSED STORM**  
**CHESTNUT ST. EX D1284 - D372**  
 HORIZ. 1"=20  
 VERT. 1"=2



**PROPOSED STORM**  
**CHESTNUT ST. D370-D374**  
 HORIZ. 1"=20  
 VERT. 1"=2



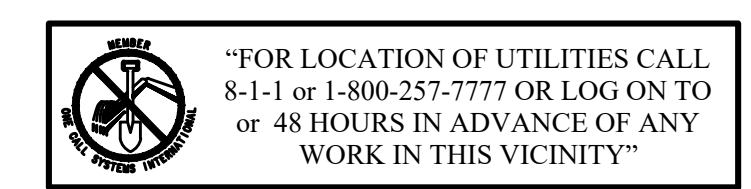
**PROPOSED STORM**  
**CHESTNUT ST. D360-D362**  
 HORIZ. 1"=20  
 VERT. 1"=2



**PROPOSED STORM**  
**CHESTNUT ST. D360-D364**  
 HORIZ. 1"=20  
 VERT. 1"=2

**TEST PIT NOTE:**  
 INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION, ELEVATIONS, AND SIZES OF EX. UTILITIES BY DIGGING TESTS PITS BY HAND AT ALL POINTS OF CONNECTION AND AT CROSSINGS. RESULTS FROM THESE TEST PITS SHALL BE SUBMITTED TO THE ARCHITECT FIVE (5) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION AND/OR ORDERING MATERIALS.

**65% DESIGN SUBMITTAL**  
**NOT FOR CONSTRUCTION**



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|     |             |      |      |
|     |             |      |      |
|     |             |      |      |

DATE: JULY 2023      SCALE: AS SHOWN      DP-01

**D.C. DEPARTMENT OF TRANSPORTATION**  
 INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

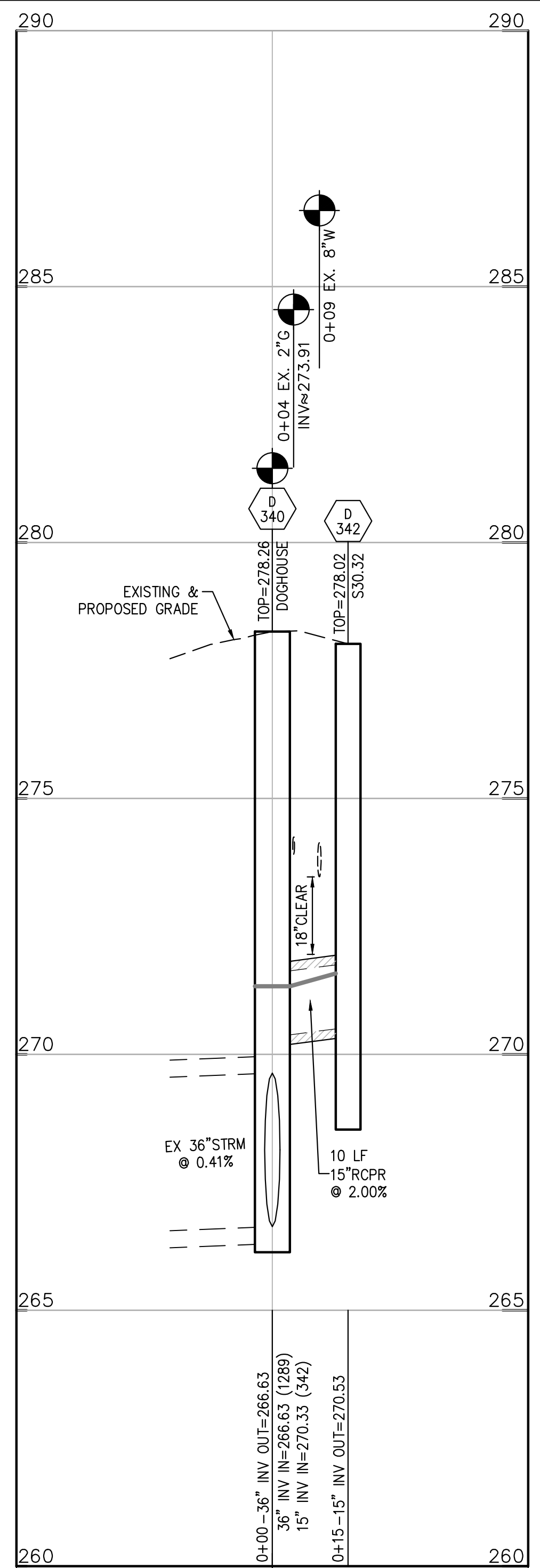
**METROPOLITAN BRANCH TRAIL**  
 DESIGN

**STORM PROFILES**

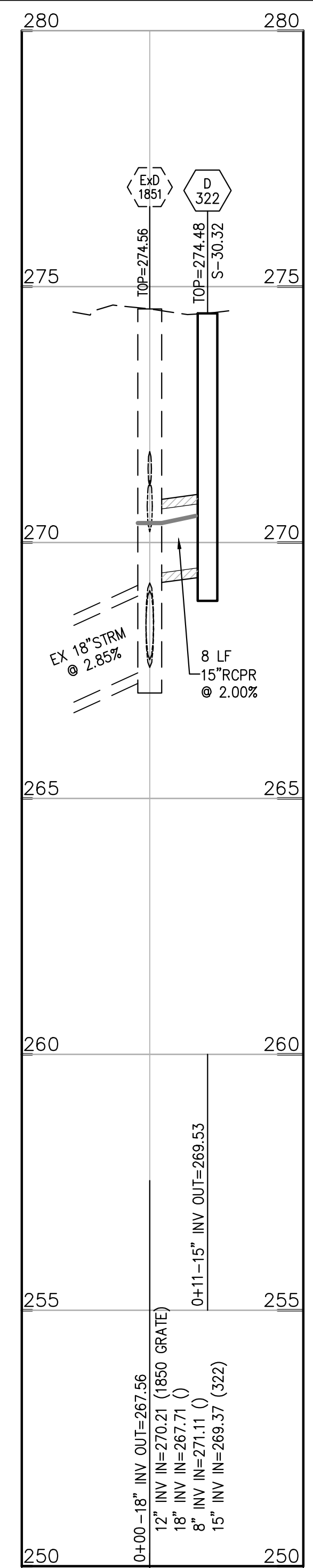
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| PROJECT ENG. <u>  </u> BMW |
| DESIGNED BY <u>  </u> BMW  |
| CHECKED BY <u>  </u> RS    |
| DRAWN BY <u>  </u> BMW     |
| PROJECT MGR. <u>  </u> RS  |
| DIVISION CHIEF             |
| DATE <u>  </u>             |
| FILE <u>  </u>             |
| SHEET 70 OF 160            |

FILES  
 DATES

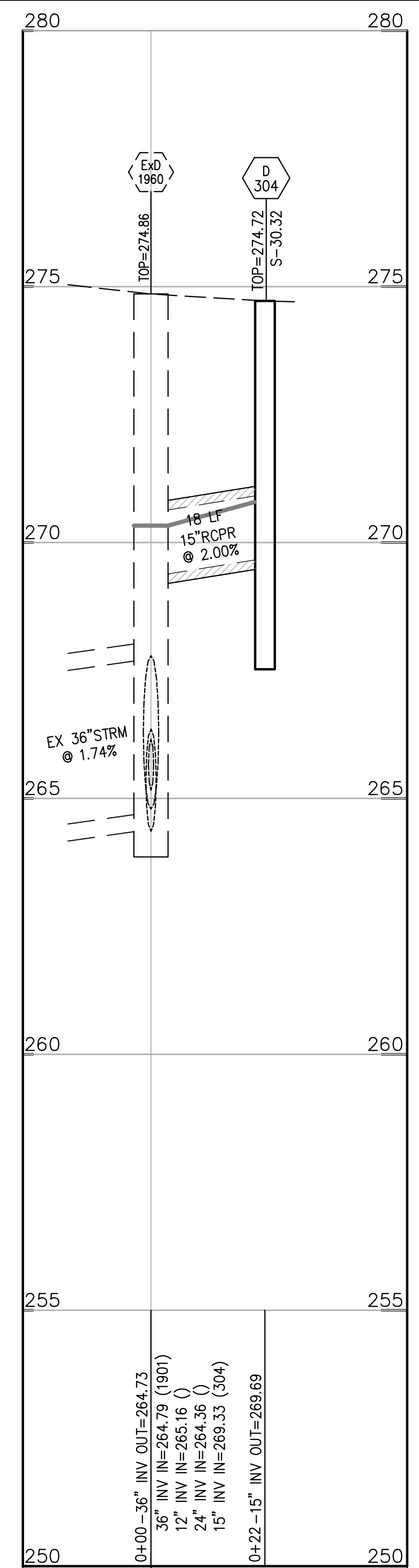
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| REG | STATE | PROJECT | SHEET NO. | TOTAL SHEETS |
| 4   | D.C.  |         |           | XX           |



**PROPOSED STORM  
SPRING PL: D340-D342**  
HORIZ. 1"=20  
VERT. 1"=2



**PROPOSED STORM  
SPRING PL: D322**  
HORIZ. 1"=20  
VERT. 1"=2



**PROPOSED STORM  
SPRING PL: D304**  
HORIZ. 1"=20  
VERT. 1"=2



**TEST PIT NOTE:**

INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION, ELEVATIONS, AND SIZES OF EX. UTILITIES BY DIGGING TESTS PITS BY HAND AT ALL POINTS OF CONNECTION AND AT CROSSINGS. RESULTS FROM THESE TEST PITS SHALL BE SUBMITTED TO THE ARCHITECT FIVE (5) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION AND/OR ORDERING MATERIALS.

**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**

**FOR LOCATION OF UTILITIES CALL  
8-1-1 or 1-800-257-7777 OR LOG ON TO  
or 48 HOURS IN ADVANCE OF ANY  
WORK IN THIS VICINITY™**

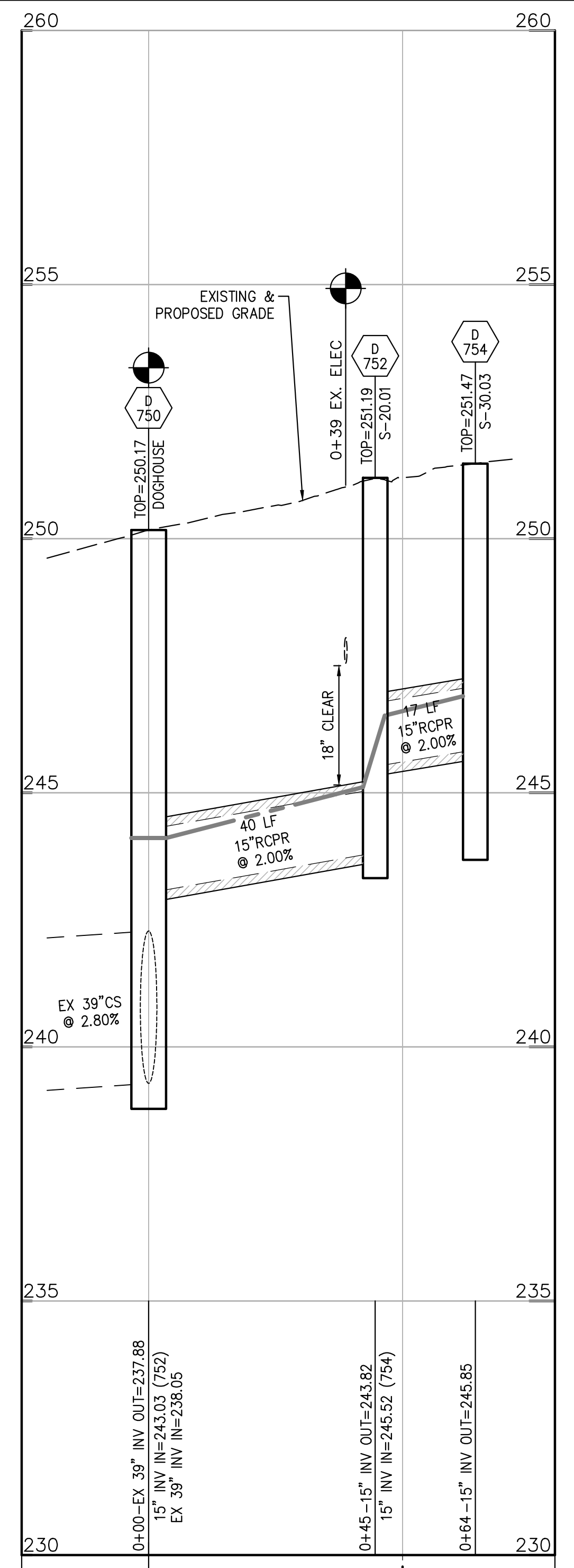
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| REVISIONS |             |      |      |

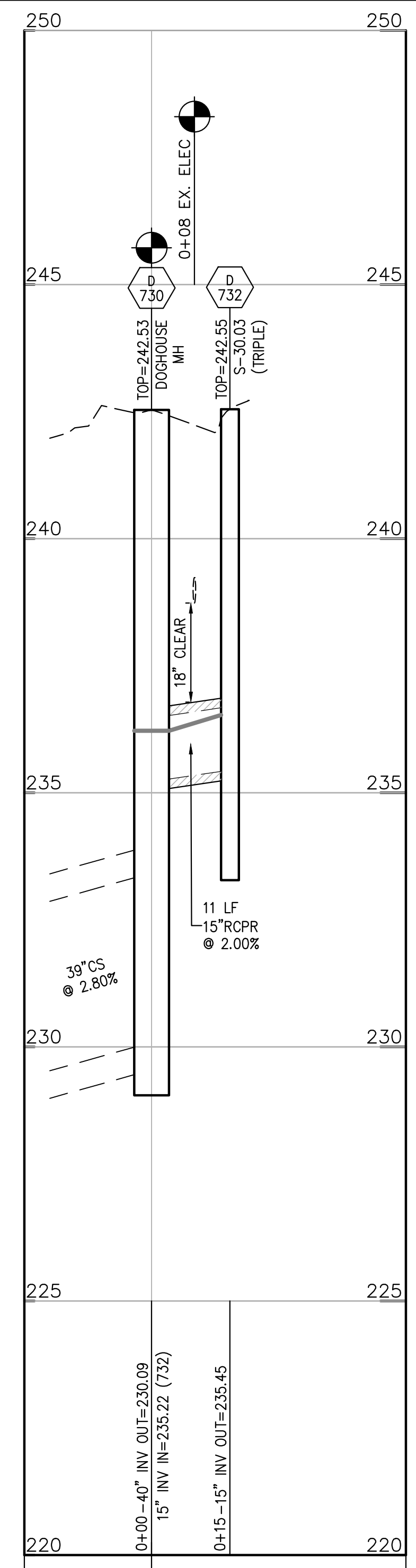
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| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. BMW<br>DESIGNED BY BMW<br>CHECKED BY RS<br>DRAWN BY BMW<br>PROJECT MGR. RS |
| <b>STORM PROFILES</b>   |                 | DIVISION CHIEF  |
| DATE _____<br>FILE _____<br>SHEET 37 OF   |                 |   |

FILES  
DATES

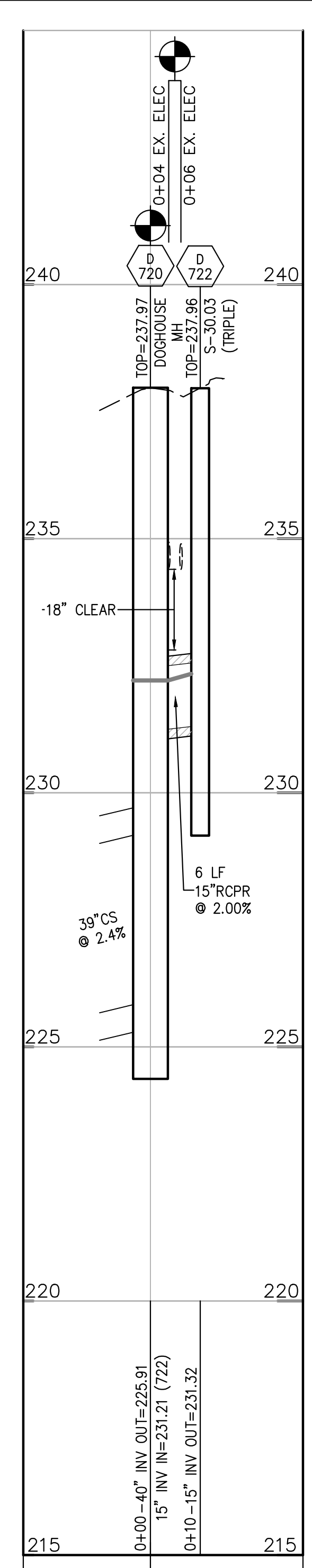
| REG | STATE | PROJECT | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------|-----------|--------------|
| 4   | D.C.  |         |           | XX           |



**PROPOSED STORM  
WHITTIER ST. D750-D754**  
HORIZ. 1"=20  
VERT. 1"=2



**PROPOSED STORM  
WHITTIER: D730-D732**  
HORIZ. 1"=20  
VERT. 1"=2



**PROPOSED STORM  
WHITTIER: D720-D722**  
HORIZ. 1"=20  
VERT. 1"=2

**TEST PIT NOTE:**  
INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION, ELEVATIONS, AND SIZES OF EX. UTILITIES BY DIGGING TESTS PITS BY HAND AT ALL POINTS OF CONNECTION AND AT CROSSINGS. RESULTS FROM THESE TEST PITS SHALL BE SUBMITTED TO THE ARCHITECT FIVE (5) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION AND/OR ORDERING MATERIALS.

**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**

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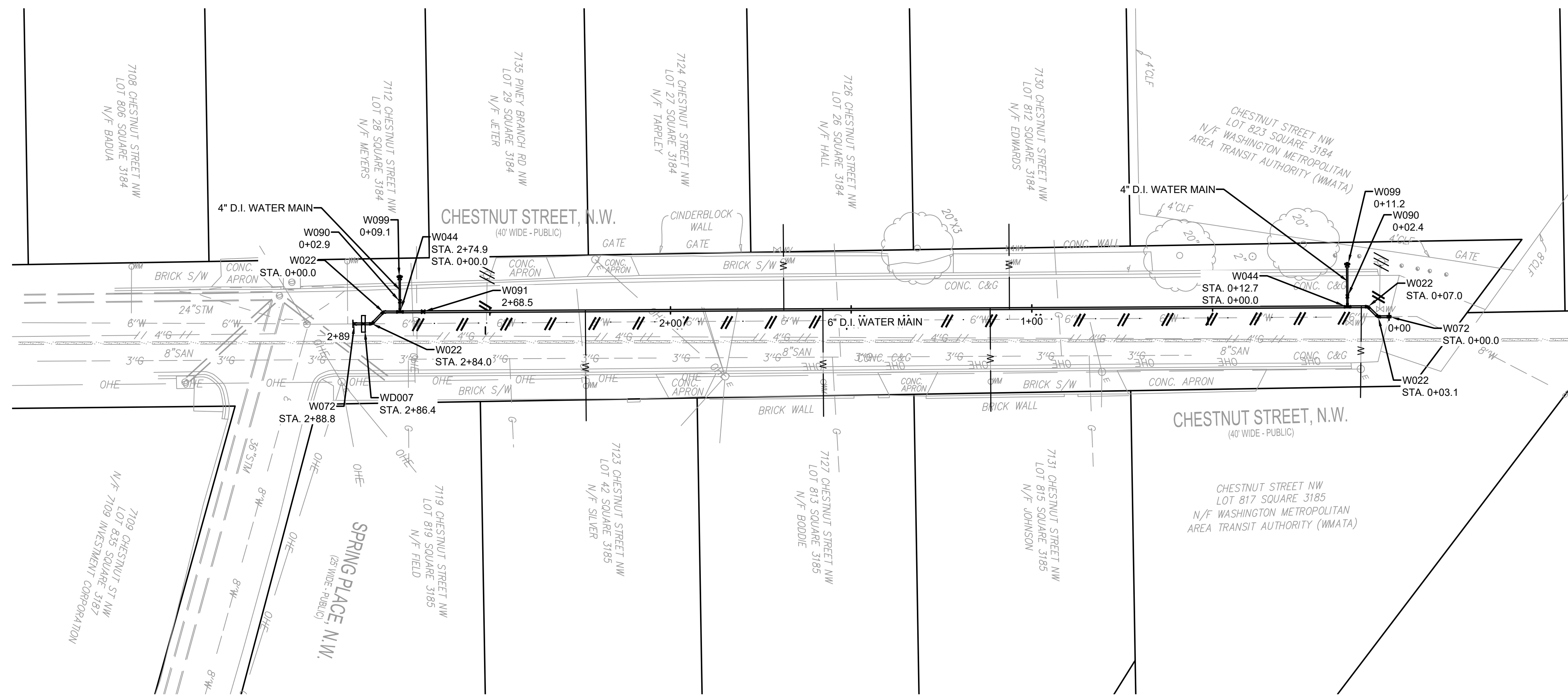
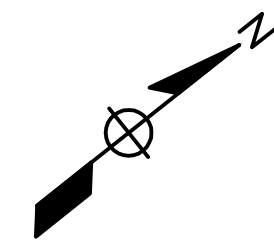
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|-----------|-------------|------|------|
| REVISIONS |             |      |      |

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|---|-----------------|---|
| DATE: JULY 2023   | SCALE: AS SHOWN | DP-03   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. BMW<br>DESIGNED BY BMW<br>CHECKED BY RS<br>DRAWN BY BMW<br>PROJECT MGR. RS |
| <b>STORM PROFILES</b>   |                 | DIVISION CHIEF  |
| DATE _____<br>FILE _____<br>SHEET 37 OF   |                 |   |

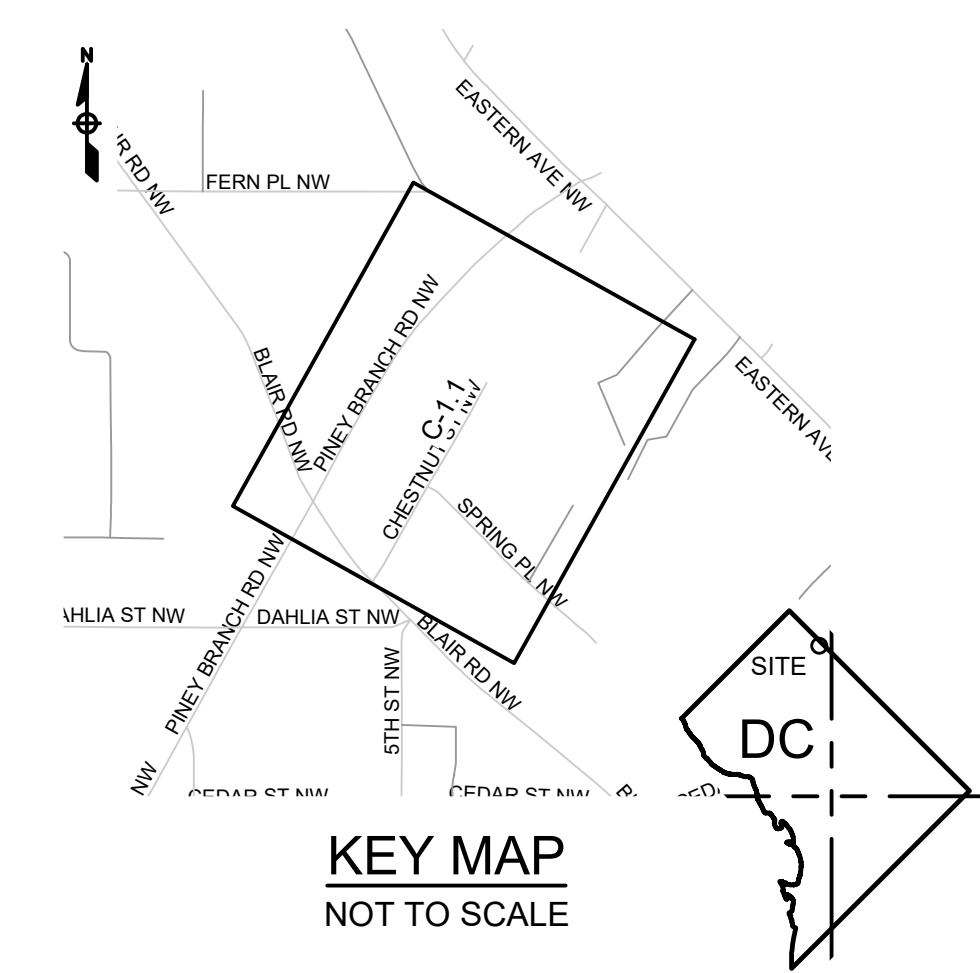
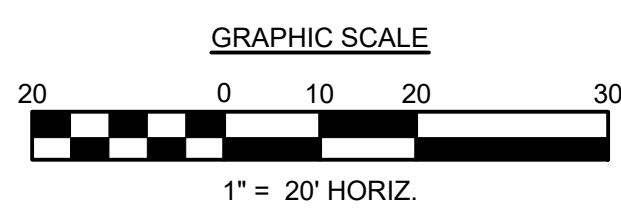
FILES  
DATES







**PLAN**



**KEY MAP**  
NOT TO SCALE

**CHESTNUT ST W**

**ECP SUBMITTAL**

NOT FOR CONSTRUCTION  
May-23

DISTRICT OF COLUMBIA  
WATER & SEWER AUTHORITY  
DEPARTMENT OF ENGINEERING  
& TECHNICAL SERVICES  
WATER & SEWER DESIGN  
5000 OVERLOOK AVENUE, SW  
WASHINGTON D.C. 20032

| REVISION BLOCK |             |      |
|----------------|-------------|------|
| NO.            | DESCRIPTION | DATE |
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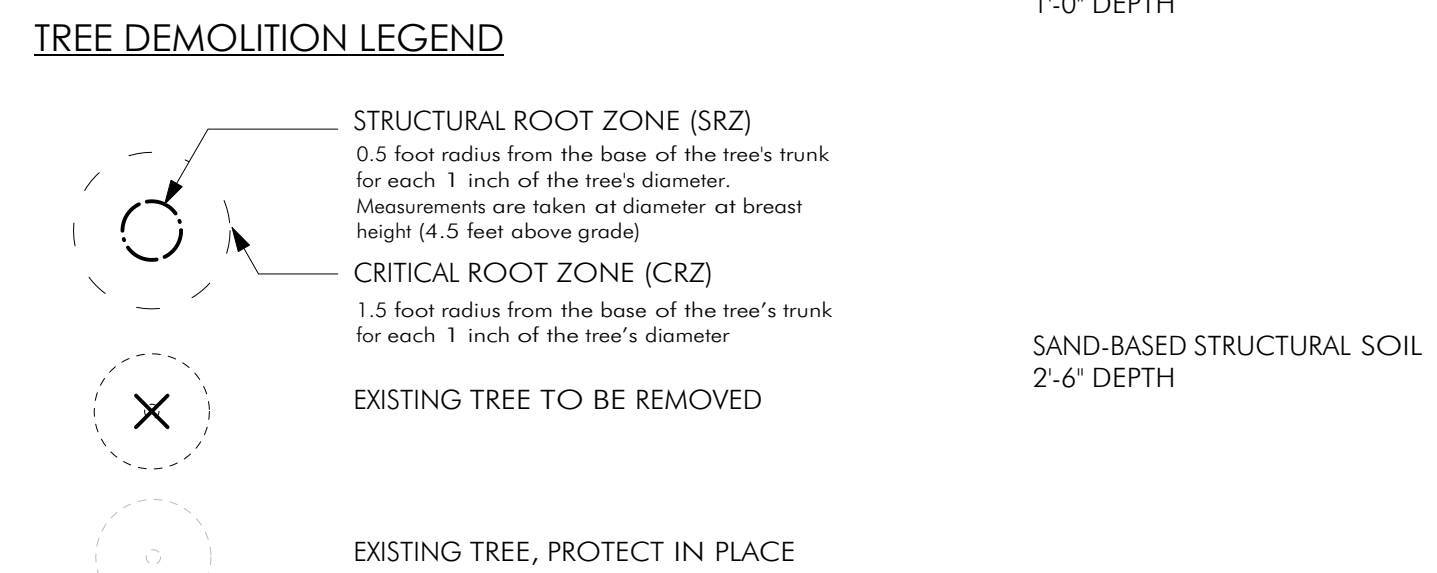
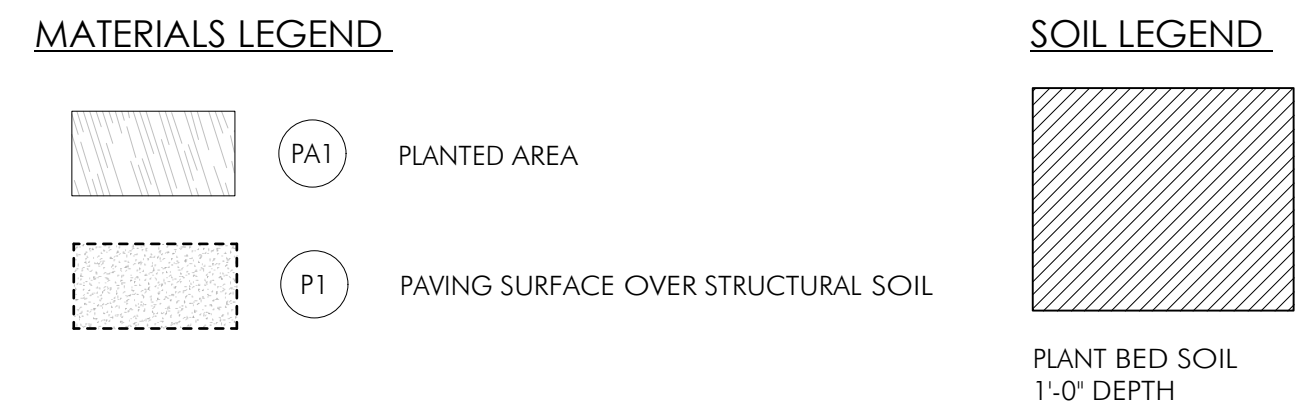
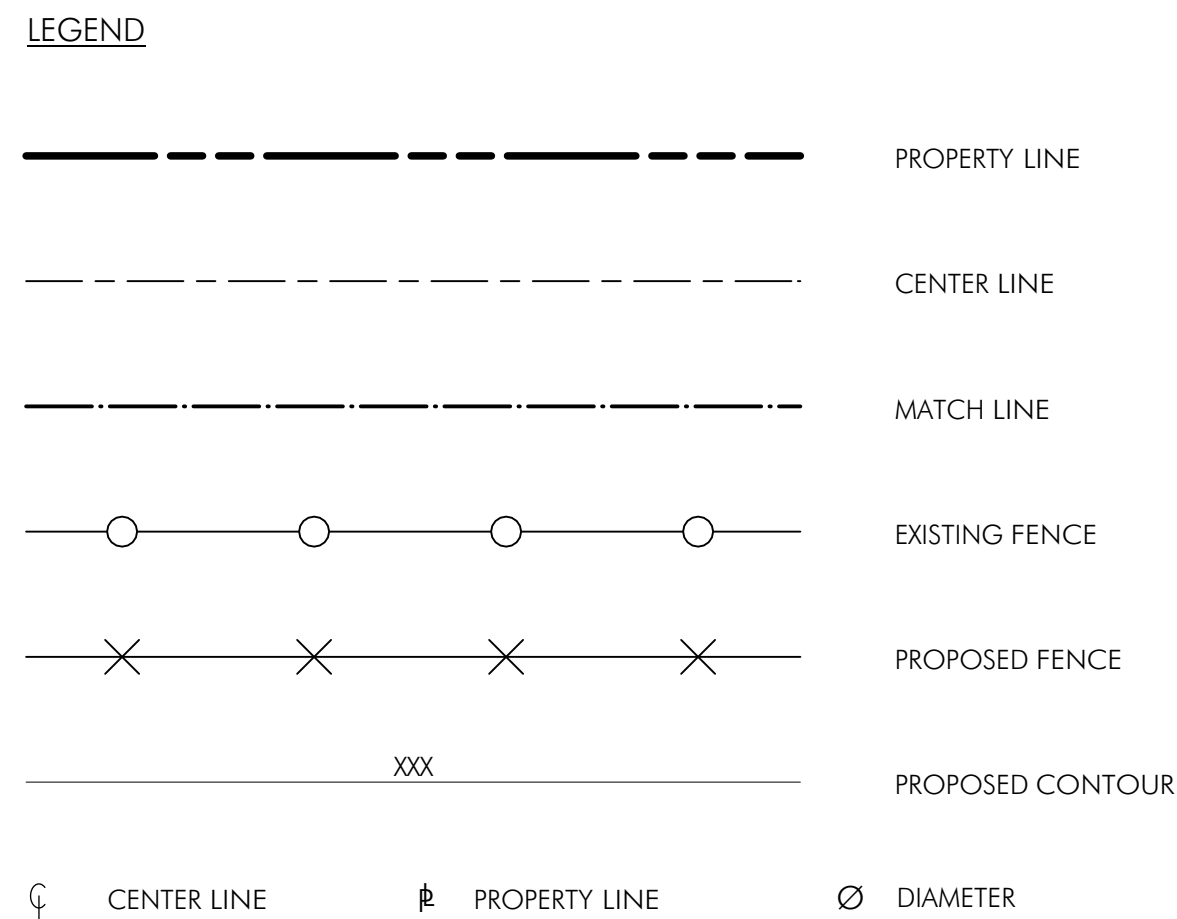
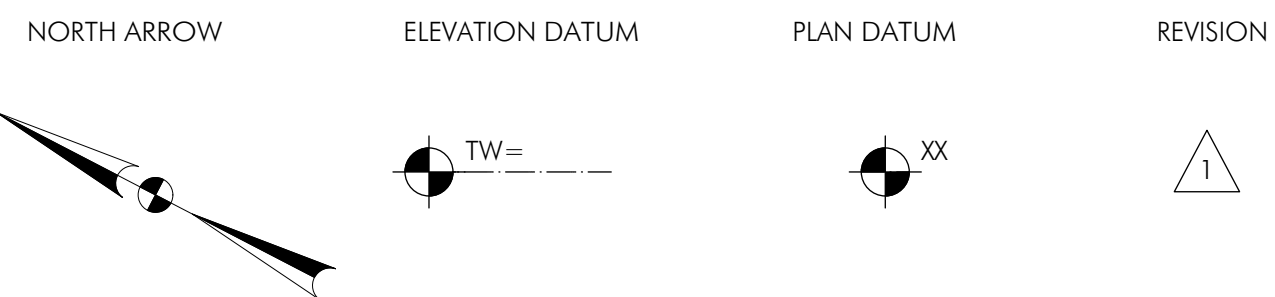
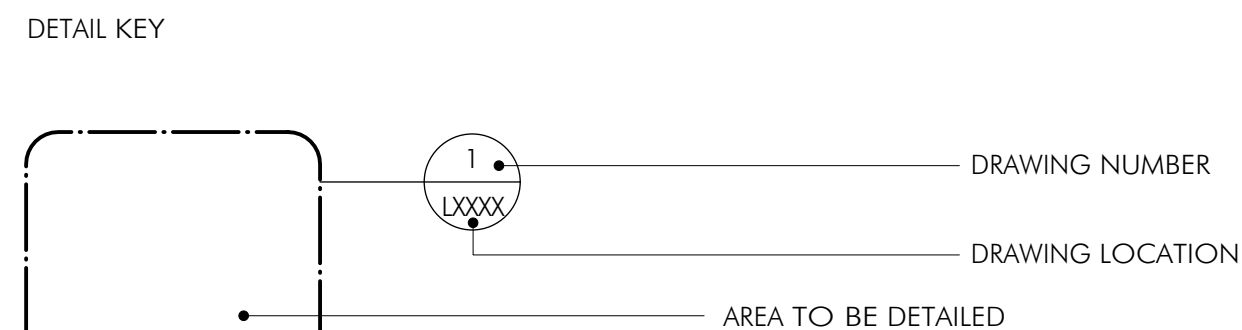
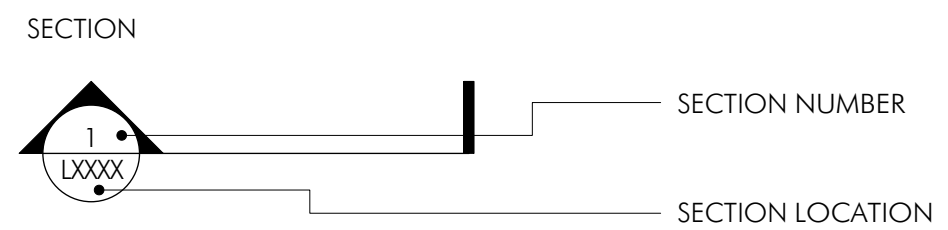
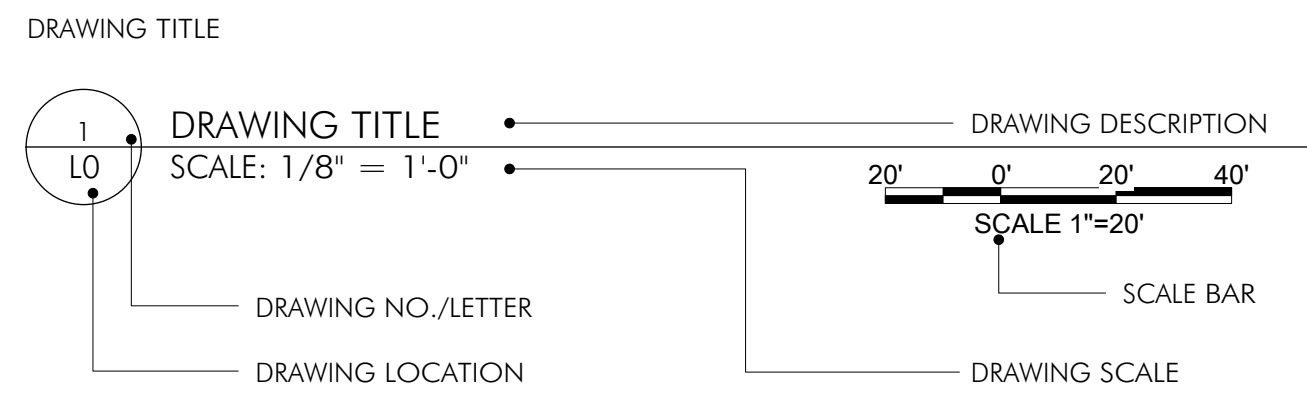
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| DESIGN                                   | IN-HOUSE DCFA NO. <input checked="" type="checkbox"/> N/A |
| CADD FILE: MIETBRACHTRAILWATERDESIGN.DWG |   |

|                          |                   |
|--------------------------|-------------------|
| WATER MAIN REPLACEMENT   |                   |
| <b>C-1.1</b>             |                   |
| CIVIL                    |                   |
| LOCATION: CHESTNUT ST NW |                   |
| N/A                      |                   |
| SCALE: 1"=20'            | DRAWN: KDT        |
| DATE: 15 May 2023        | CHECKED: CSS, MLR |

CADD FILE: C:\Users\mlr\Documents\DDOT\_Metro Branch Trail\METBRACHTRAILWATERDESIGN.DWG 05/16/2023 10:24:18 AM.mxd

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 75        | 160          |

SYMBOLS



GENERAL NOTES

- ALL WORK SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, COUNTY AND/OR LOCAL STATUTES, ORDINANCES, REGULATIONS, LAWS AND CODES. THE CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO ENSURE SUCH COMPLIANCE AT NO ADDITIONAL COST TO THE OWNER. IF ANY INCONSISTENCIES ARE FOUND BETWEEN CODE REQUIREMENTS AND THE CONTENT OF THE CONTRACT DOCUMENTS (CD'S), THE CONTRACTOR WILL INFORM THE CONSTRUCTION MANAGEMENT TEAM (CMT) IMMEDIATELY AND STOP WORK UNTIL GIVEN APPROVAL TO PROCEED BY THE CMT.
- THE CONTRACTOR SHALL FULLY EXAMINE AND BE FAMILIAR WITH THE CONDITIONS OF THE SITE AND THE DRAWINGS AND SPECIFICATIONS. SHOULD THE CONTRACTOR FIND, AFTER VISITING THE SITE OR DURING CONSTRUCTION, ANY DISCREPANCIES, OMISSIONS, AMBIGUITIES, OR CONFLICTS IN THE CDS OR BE IN DOUBT AS TO THEIR MEANING, THEY SHALL IMMEDIATELY BRING THESE ITEMS TO THE ATTENTION OF THE CMT AND SHALL NOT PROCEED WITH WORK UNTIL THESE DISCREPANCIES ARE RESOLVED AND WRITTEN APPROVAL IS GIVEN BY THE CMT. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- CONSULT ALL DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS PRIOR TO BEGINNING CONSTRUCTION. SHOULD THERE BE ANY DISCREPANCIES BETWEEN LANDSCAPE ARCHITECTURAL OR ENGINEERING DRAWINGS, THE CONTRACTOR IS TO CONTACT THE CONSTRUCTION MANAGEMENT TEAM TO REVIEW AND COORDINATE BEFORE PROCEEDING WITH WORK.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CMT AND OWNER.
- CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK. CONTACT THE LOCAL UTILITY AGENCY A MINIMUM OF 72 HOURS IN ADVANCE. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED FOR DAMAGE TO UTILITIES, PIPES AND STRUCTURES DUE TO THEIR WORK.
- THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING CONDITIONS TO REMAIN. CONTRACTOR SHALL PROMPTLY REPAIR ANY DAMAGE TO EXISTING SITE ELEMENTS SUCH AS PAVEMENT, DRIVEWAYS, AND OTHER ADJACENT FACILITIES CAUSED BY CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO THE OWNER. REPAIRS TO EXISTING SITE ELEMENTS SHALL MATCH THE EXISTING IN CONSTRUCTION, MATERIAL AND FINISH, PER THE OWNER'S APPROVAL, AND SHALL BLEND WITH THE ADJACENT EXISTING SITE CONDITIONS AS SEAMLESSLY AS POSSIBLE.
- THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL WORK AND RELATED ACTIVITIES WITHIN THE PROPERTY LINE OR THE DESIGNATED LIMIT OF WORK. AT NO TIME IS ACCESS, STORAGE, OR MOVEMENT OF MATERIALS, MACHINERY, OR DEBRIS TO TAKE PLACE OUTSIDE OF THE PROJECT LIMIT OF WORK LINE OR PROPERTY LINES.
- CONSTRUCTION ACCESS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF WAY. ANY STREETS, SIDEWALKS, ALLEYS, OR DRIVEWAYS DISTURBED DURING CONSTRUCTION MUST BE CLEARED OF DEBRIS, SWEEPED, AND WASHED ON A DAILY BASIS DURING CONSTRUCTION. THE CONTRACTOR SHALL KEEP THE SITE CLEAN AND FREE OF TRASH AT ALL TIMES DURING CONSTRUCTION.
- INSTALL TEMPORARY TREE PROTECTION AND TEMPORARY EROSION CONTROL MEASURES PRIOR TO ANY LAND DISTURBANCE AS REQUIRED BY LOCAL CODES AND AS SHOWN ON THE CIVIL ENGINEER'S DRAWINGS. REFER TO THE CIVIL ENGINEER'S EROSION CONTROL DRAWINGS.
- THE CONTRACTOR SHALL INSPECT ALL TREE PROTECTION AND EROSION CONTROL DEVICES AND CORRECT ANY DEFICIENCIES AT THE END OF EACH WORK DAY TO ENSURE THEIR PERFORMANCE. THE CONTRACTOR SHALL REMOVE SOIL TRAPPED BY EROSION CONTROL DEVICES AS REQUIRED TO PREVENT SOIL LEVEL FROM OVER-TOPPING THE DEVICE OR BULGING AT ANY POINT DURING CONSTRUCTION. SEE CIVIL ENGINEER'S DOCUMENTS.
- ALL EXISTING TREES TO REMAIN SHALL BE FENCED AT THE DRIP LINE OF THEIR CANOPIES, OR PER THE CIVIL ENGINEER'S PLANS IF PLANS INDICATE A LARGER TREE PROTECTION ZONE. DO NOT DRIVE VEHICLES, STOCKPILE SOIL OR CONSTRUCTION MATERIALS, OR PERFORM ANY CONSTRUCTION OPERATIONS WITHIN THE DRIP LINE, ROOT ZONE, OR PROTECTIVE FENCING OF EXISTING TREES. CONTRACTORS NOT FOLLOWING THESE PROTECTIVE RULES SHALL BE LIABLE FOR THE COST OF AN ARBORIST'S FEES AND ALL COSTS ASSOCIATED WITH TREATMENT AND/OR REPLACEMENT OF THE TREES. BEFORE FINAL GRADING AND PLANTING BEGINS, THE CMT WILL INSPECT TREE PROTECTION AREAS FOR COMPACTION AND MECHANICAL DAMAGE. IF THE CMT DETERMINES THAT EITHER OF THESE EXISTS, THE CONTRACTOR WILL REMEDY AT HIS EXPENSE. MEASURES MAY INCLUDE BUT ARE NOT LIMITED TO EVALUATION BY A LICENSED ARBORIST, AIRSPADING, BIOPLEX TREATMENT, CABLING, ROOT PRUNING AND PRUNING OF CANOPY/LIMBS.
- THE CMT SHALL APPROVE ALL TRENCHING OR OTHER DISTURBANCE REQUIRED WITHIN THE ROOT ZONES OF TREES PRIOR TO EXECUTION. THE CONTRACTOR IS RESPONSIBLE FOR CONSULTING THE ARBORIST PRIOR TO MAJOR EXCAVATION, AS DIRECTED BY THE CMT. APPROVED TRENCHING SHALL BE PERFORMED USING A VERMEER TRENCHING MACHINE, VIBRATORY PLOW OR EQUIVALENT.
- ROOT PRUNING SHALL BE COMPLETED PRIOR TO BASE OR SUBGRADE PREPARATION AND PRIOR TO ANY EXCAVATION ADJACENT TO ANY EXISTING TREE. TREE ROOTS SHALL BE ROOT PRUNED TO AVOID TEARING AND SHREDDING BY GRADING EQUIPMENT. ROOT PRUNING SHALL BE TO A DEPTH OF 18". THE CONTRACTOR SHALL TRENCH AROUND THE TREE BEYOND THE EDGE OF THE TREE PROTECTION AREA AND THEN CLEAR THE SOIL BY HAND TO THE EDGE OF THE TREE PROTECTION AREA AND HAND-PRUNE THE ROOTS. ROOTS SHALL BE CUT CLEANLY, AS FAR FROM THE TRUNK OF THE TREE AS POSSIBLE.
- EXCAVATION IN AN AREA WHERE ROOTS ARE PRESENT SHALL NOT CAUSE THE TEARING OR RIPPING OF TREE ROOTS. ROOTS MUST BE CLEANLY SEVERED PRIOR TO CONTINUING WITH EXCAVATION, OR TUNNELED AROUND TO PREVENT DAMAGE TO THE ROOT.
- AT SITES WHERE ROOT PRUNING OR EXCAVATION HAS TAKEN PLACE NEAR TREES TO REMAIN, AND MANY LIVING ROOTS REMAIN EXPOSED TO THE AIR, THE CONTRACTOR SHALL COVER THE EXPOSED ROOTS WITH SAND, SOIL, OR MOIST BURLAP WITHIN 2 HOURS. ROOT ENDS SHALL BE COVERED WITH SOIL OR BURLAP AND KEPT MOIST UNTIL THE FINAL BACKFILL OR GRADE IS ESTABLISHED.
- ALL TREE PRUNING AND REMOVAL PERFORMED SHALL BE EXECUTED UNDER THE SUPERVISION OF A CERTIFIED ARBORIST. PRUNING SHALL BE PERFORMED TO THE STANDARDS OF THE INTERNATIONAL SOCIETY OF ARBORISTS PRUNING GUIDELINES, AND TO ANSI A-300.
- THE CONTRACTOR SHALL PROVIDE MOCK-UPS IN THE FIELD OF PROPOSED SITE FEATURES, THAT ARE SO DESIGNATED IN THE DOCUMENTS, FOR APPROVAL BY OWNER AND CMT PRIOR TO CONSTRUCTION. ALL MOCK-UPS SHALL BE PRESERVED TO BE USED FOR REFERENCE DURING CONSTRUCTION. DO NOT REMOVE MOCK-UPS UNTIL CONSTRUCTION IS COMPLETE.
- SUBSTITUTIONS IN LANDSCAPE PRODUCTS AND MATERIALS ARE NOT PERMITTED WITHOUT PRIOR APPROVAL BY THE CMT.
- THE CONTRACTOR, OR THEIR REPRESENTATIVE, SHALL BE ON SITE AT THE TIME OF ALL MATERIALS DELIVERIES. IF THEY ARE NOT AVAILABLE TO ACCEPT THE DELIVERY, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY RESULTING LOSSES OR DAMAGE.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION PRIOR TO COMMENCING WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED CONSTRUCTION INSPECTIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR LICENSING, BONDING, AND INSURANCE AS REQUIRED BY APPLICABLE REGULATORY AGENCIES.
- THE CONTRACTOR SHALL OBTAIN THE OWNERS APPROVAL FOR TIMES OF DAY DURING WHICH CONSTRUCTION OPERATIONS MAY OCCUR. ALL CONSTRUCTION OPERATIONS SHALL OCCUR WITHIN TIMES SPECIFIED BY LOCAL ORDINANCES.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THEIR WORK WITH ALL OTHER TRADES ON THE SITE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO GROUND AND BOND ALL METAL OBJECTS IN THE LANDSCAPE, AS REQUIRED BY CODE.
- UPON COMPLETION OF THE PROJECT, ALL EXCESS SOIL, TEMPORARY FENCING, CONSTRUCTION SIGNS, TAGS, EROSION CONTROL MEASURES, STABILIZATION MATERIALS, AND OTHER DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY. ALL PAVED AREAS, WALLS, ETC. SHALL BE THOROUGHLY WASHED AND CLEANED.
- REFER TO INDIVIDUAL DRAWINGS FOR FURTHER NOTES.
- HORIZONTAL CLEARANCE IS 3' MIN FOR TREES FROM OUTER EDGE OF TREE AT BREAST HEIGHT TO OUTER EDGE OF WATER UTILITY AS PER DC WATER GREEN INFRASTRUCTURE UTILITY PROTECTION GUIDELINES
- EXCAVATION FOR STRUCTURAL SOIL IN AREAS WITH EXISTING UTILITIES IS TO BE DONE USING HAND DIGGING METHODS ONLY.
- SEND ALL REMOVED BIKE RACKS TO THE DDOT WAREHOUSE. COORDINATE WITH GREG MATLESKY AT GREG.MATLESKY@DC.GOV

DRAWING INDEX

| SHEET NUMBER | SHEET NAME                                | CURRENT REVISION DATE | DESCRIPTION   | NOTE               |
|--------------|---|-----------------------|---------------|--------------------|
| L0           | LANDSCAPE NOTES                           | 7/13/23               | 65% SUBMITTAL |                    |
| L1-0         | TREE DEMOLITION CORRIDOR PLAN             | 7/13/23               | 65% SUBMITTAL |                    |
| L1-1         | TREE DEMOLITION PLAN                      | 7/13/23               | 65% SUBMITTAL |                    |
| L1-2         | TREE DEMOLITION PLAN                      | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L1-3         | TREE DEMOLITION PLAN                      | 7/13/23               | 65% SUBMITTAL |                    |
| L1-4         | TREE DEMOLITION PLAN                      | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L1-5         | TREE DEMOLITION PLAN                      | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L1-6         | TREE DEMOLITION PLAN                      | 7/13/23               | 65% SUBMITTAL |                    |
| L2-0         | MATERIALS SCHEDULE, NOTES & CORRIDOR PLAN | 7/13/23               | 65% SUBMITTAL |                    |
| L2-1         | MATERIALS & LAYOUT PLAN                   | 7/13/23               | 65% SUBMITTAL |                    |
| L2-2         | MATERIALS & LAYOUT PLAN                   | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L2-3         | MATERIALS & LAYOUT PLAN                   | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L2-4         | MATERIALS & LAYOUT PLAN                   | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L2-5         | MATERIALS & LAYOUT PLAN                   | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L2-6         | MATERIALS & LAYOUT PLAN                   | 7/13/23               | 65% SUBMITTAL |                    |
| L3-0.1       | PLANTING & MAINTENANCE NOTES              | 7/13/23               | 65% SUBMITTAL |                    |
| L3-0.2       | PLANTING SCHEDULE & CORRIDOR PLAN         | 7/13/23               | 65% SUBMITTAL |                    |
| L3-0.3       | PLANTING NOTES                            | 7/13/23               | 65% SUBMITTAL |                    |
| L3-1         | PLANTING PLAN                             | 7/13/23               | 65% SUBMITTAL |                    |
| L3-2         | PLANTING PLAN                             | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L3-3         | PLANTING PLAN                             | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L3-4         | PLANTING PLAN                             | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L3-5         | PLANTING PLAN                             | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L3-6         | PLANTING PLAN                             | 7/13/23               | 65% SUBMITTAL |                    |
| L4-0         | SOILS NOTES & CORRIDOR PLAN               | 7/13/23               | 65% SUBMITTAL |                    |
| L4-1         | SOILS PLAN                                | 7/13/23               | 65% SUBMITTAL |                    |
| L4-2         | SOILS PLAN                                | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L4-3         | SOILS PLAN                                | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L4-4         | SOILS PLAN                                | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L4-5         | SOILS PLAN                                | 7/13/23               | 65% SUBMITTAL | NO LANDSCAPE SCOPE |
| L4-6         | SOILS PLAN                                | 7/13/23               | 65% SUBMITTAL |                    |
| L5-1         | PLANTING DETAILS                          | 7/13/23               | 65% SUBMITTAL |                    |

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION

**MKSK**

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202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |        |  |
|---|--------|--|
| DATE: JUNE 2023   | SCALE: | L0   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |        |  |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |        | PROJECT ENG. _____<br>DESIGNED BY: GG<br>CHECKED BY: JF<br>DRAWN BY: GG<br>PROJECT MGR: GG |
| <b>LANDSCAPE NOTES</b>  |        | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 75 OF 160                        |

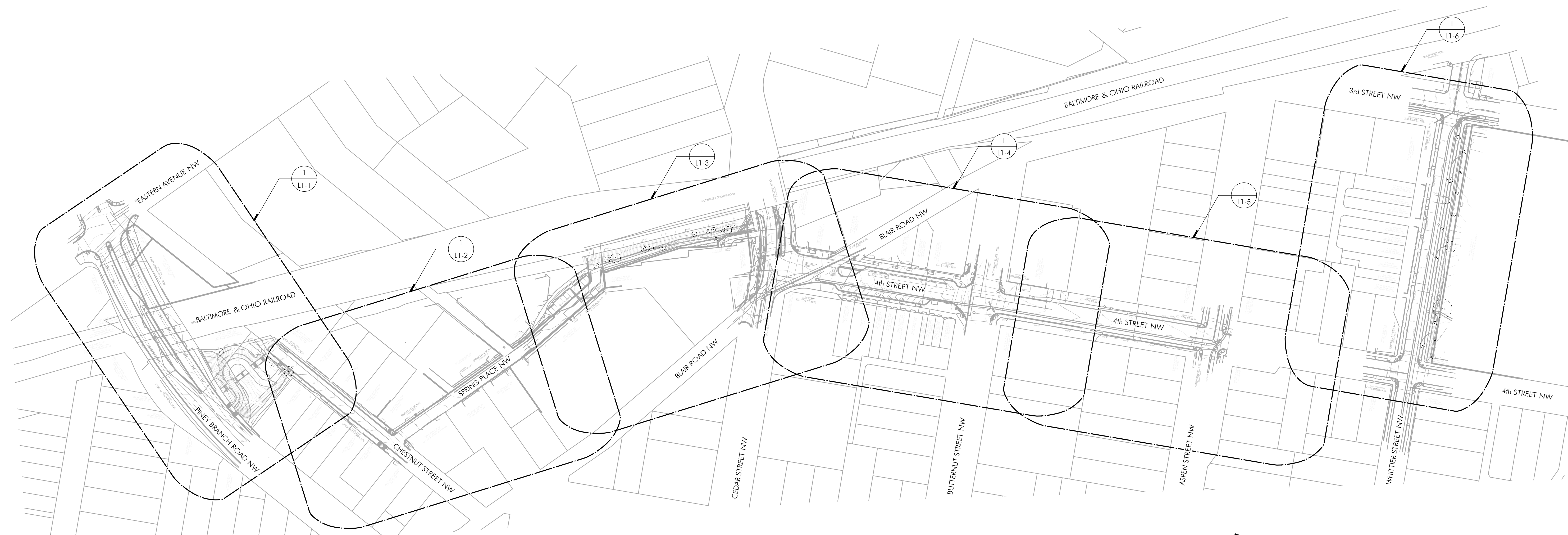
DRILL HOLES

DRILL HOLES

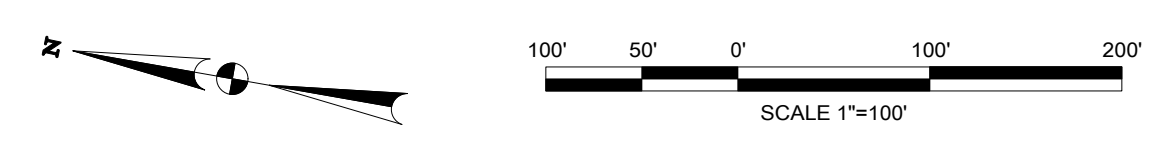
DRILL HOLES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 76        | 160          |

DRILL HOLES



1 TREE DEMOLITION CORRIDOR PLAN  
Scale: 1" = 100'-0"



65% DESIGN SUBMITTAL  
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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

DATE: JUNE 2023      SCALE: 1"=100'      L1-0

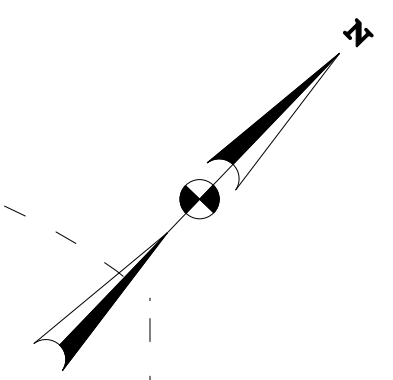
D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

TREE DEMOLITION  
CORRIDOR PLAN

PROJECT ENG. \_\_\_\_\_  
DESIGNED BY GG  
CHECKED BY JF  
DRAWN BY GG  
PROJECT MGR. GG  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 76 OF 160

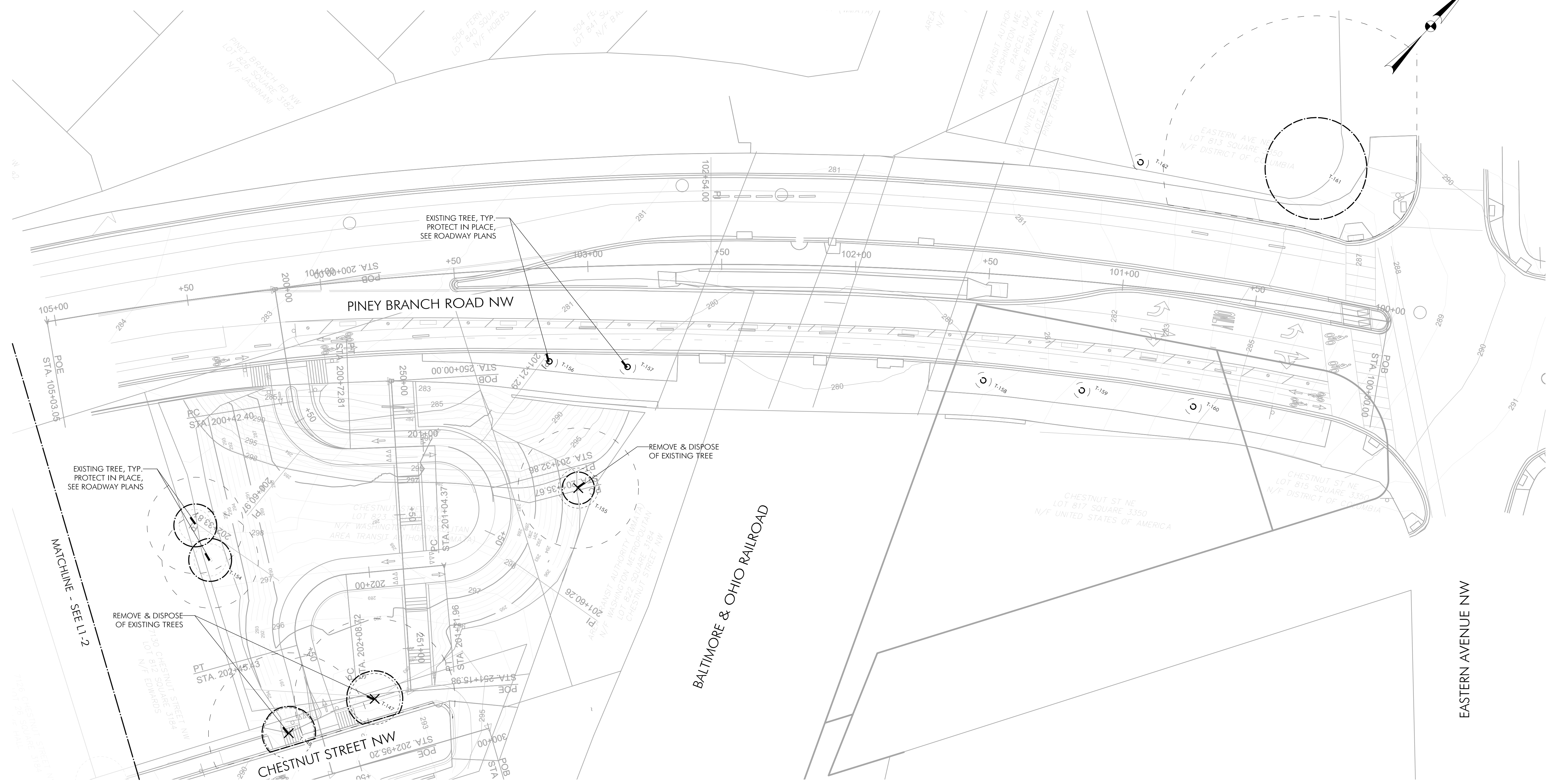
FILES  
DATES



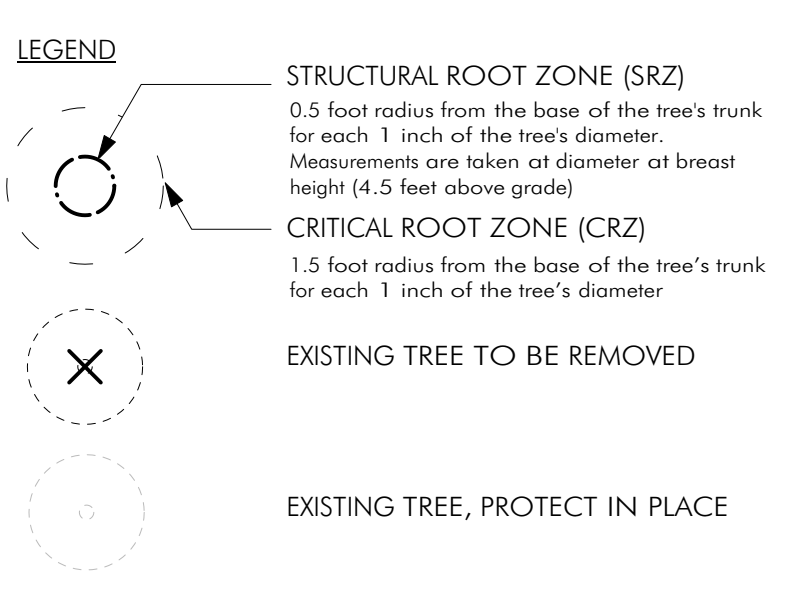
DRILL HOLES

DRILL HOLES

DRILL HOLES



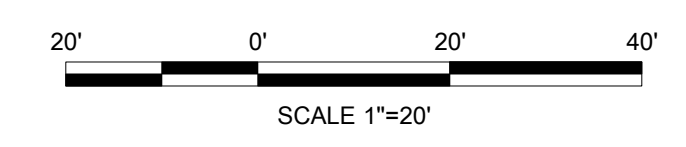
1 TREE DEMOLITION PLAN  
Scale: 1" = 20'-0"



| TREE SURVEY INFORMATION |                   |                 |     |           |       |   |
|-------------------------|-------------------|-----------------|-----|-----------|-------|---|
| TAG                     | SCIENTIFIC NAME   | COMMON NAME     | DBH | CONDITION | TAKEN | COMMENTS  |
| T-147*                  | Quercus palustris | Pin oak         | 21  | Fair      | Y     | Vines on trunk. Dead branches. Exposed roots. Growing into fence.             |
| T-148*                  | Nyssa sylvatica   | Black gum       | 20  | Fair      | Y     | Lean. Extensive dead branches. Vines on trunk.                                |
| T-154*                  | Prunus serotina   | Black cherry    | 16  | Fair      |       | Major lean. Water sprouting. Dead branches.                                   |
| T-155                   | Abies concolor    | White fir       | 12  | Poor      | Y     | Twin 12x3. Vines into canopy. Sparse growth in crown. Extensive dead branches |
| T-156                   | Quercus robur     | English oak     | 2   | Fair      |       | Dead branches. Interfering branches. Primary leader was topped                |
| T-157                   | Quercus robur     | English oak     | 2   | Fair      |       | Irregular growth form. Lean.  |
| T-158                   | Quercus robur     | English oak     | 2   | Fair      |       | Dead branches. Lean. Peeling bark. Exposed roots                              |
| T-159                   | Quercus bicolor   | Swamp white oak | 2   | Good      |       |   |
| T-160                   | Quercus robur     | English oak     | 2   | Fair      |       | Poor growth form. Dead branches   |
| T-161**                 | Quercus phellos   | Willow oak      | 38  | Good      |       | Pruned branches. Minor vines.   |
| T-162                   | Nyssa sylvatica   | Black gum       | 2   | Fair      |       | Broken branches. Stunted growth   |

\* SPECIAL TREE, \*\* HERITAGE TREE

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION

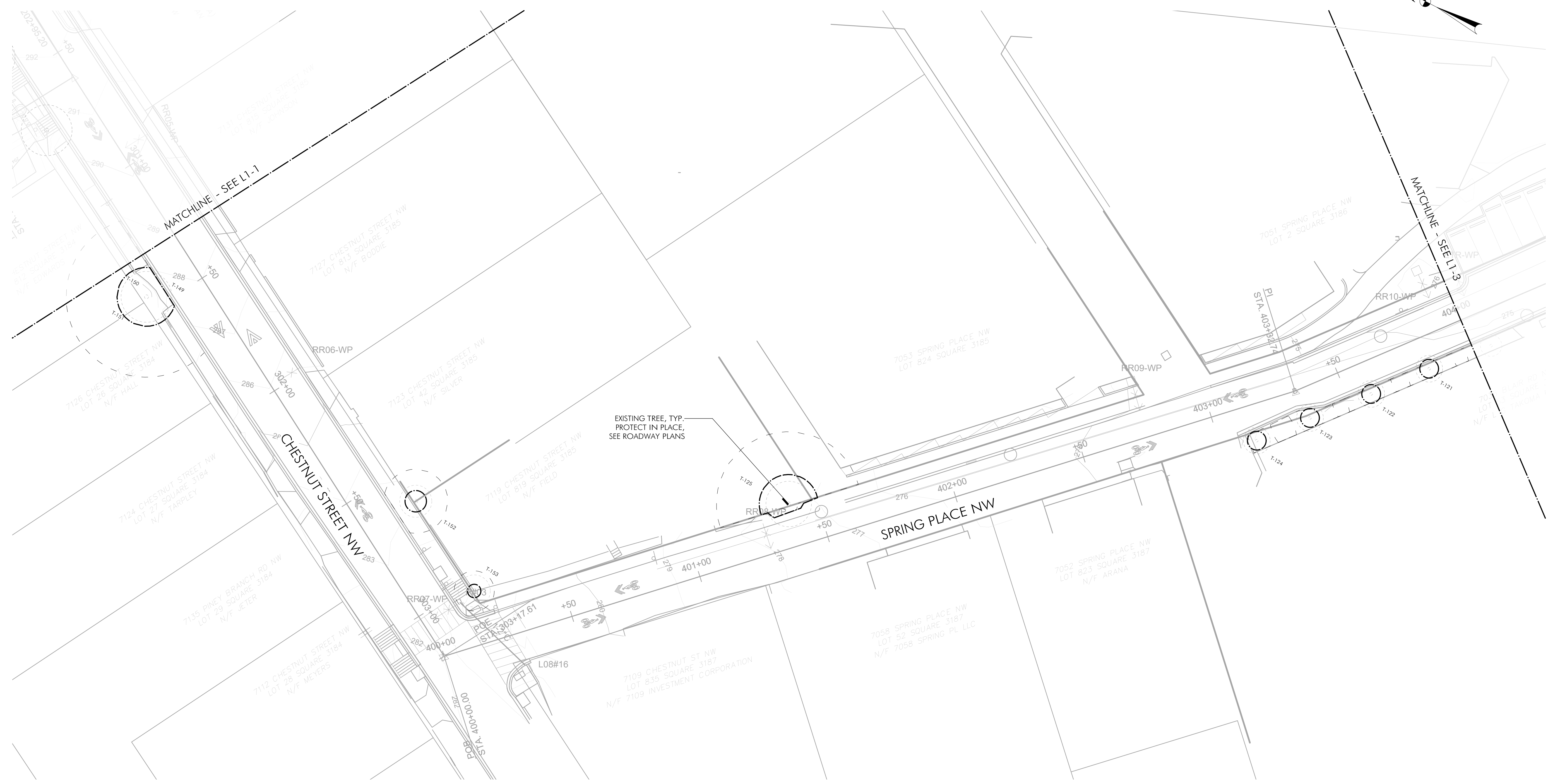
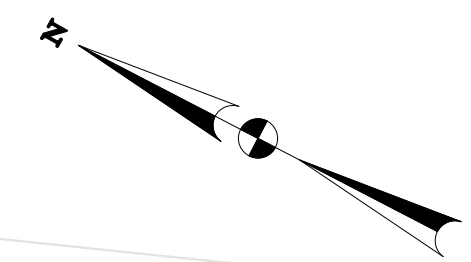


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202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |               |  |
|---|---------------|--|
| DATE: JUNE 2023   | SCALE: 1"=20' | L1-1   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |               |  |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |               | PROJECT ENG. _____<br>DESIGNED BY: GG<br>CHECKED BY: JF<br>DRAWN BY: GG<br>PROJECT MGR: GG |
| <b>TREE DEMOLITION PLAN</b>   |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 77 OF 160                        |

FILES  
DATES

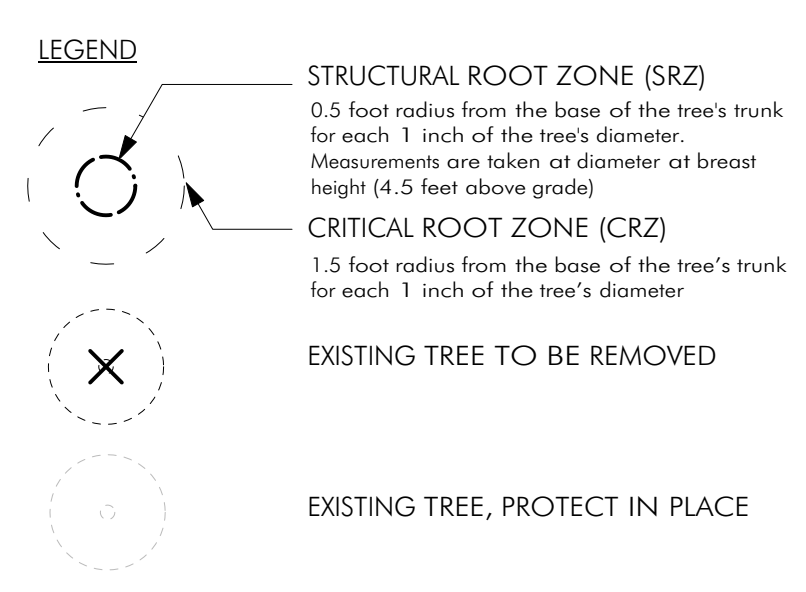


DRILL HOLES

DRILL HOLES

DRILL HOLES

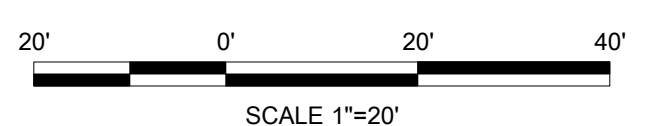
1 TREE DEMOLITION PLAN  
Scale: 1" = 20'-0"



| TREE SURVEY INFORMATION |                  |                    |     |           |       |   |
|-------------------------|------------------|--------------------|-----|-----------|-------|---|
| TAG                     | SCIENTIFIC NAME  | COMMON NAME        | DBH | CONDITION | TAKEN | COMMENTS  |
| T-121                   | Carpinus betulus | European hornbeam  | 7   | Fair      |       | Pruned  |
| T-122                   | Carpinus betulus | European hornbeam  | 7   | Fair      |       | Pruned  |
| T-123                   | Carpinus betulus | European hornbeam  | 7   | Fair      |       | Pruned  |
| T-124                   | Carpinus betulus | European hornbeam  | 7   | Fair      |       | Pruned  |
| T-125*                  | Quercus rubra    | Northern red oak   | 22  | Fair      |       | Exposed roots. Growing into fence. Extensive water sprouting. Pruned for power lines. |
| T-149*                  | Quercus rubra    | Northern red oak   | 22  | Fair      |       | Growing into sidewalk. Broken branches. Exposed roots. One sided growth               |
| T-150*                  | Quercus rubra    | Northern red oak   | 22  | Fair      |       | Growing into sidewalk. Broken branches. Exposed roots. Growing on slope               |
| T-151*                  | Quercus rubra    | Northern red oak   | 21  | Fair      |       | Lean. One sided growth. Exposed roots. Sparse canopy                                  |
| T-152                   | Pyrus calleryana | Bradford pear      | 8   | Poor      |       | Heavy vines on trunk and into canopy  |
| T-153                   | Acer palmatum    | Japanese red maple | 5   | Good      |       | Multistem 5x4x4x4x2   |

\* SPECIAL TREE, \*\* HERITAGE TREE

65% DESIGN SUBMITTAL  
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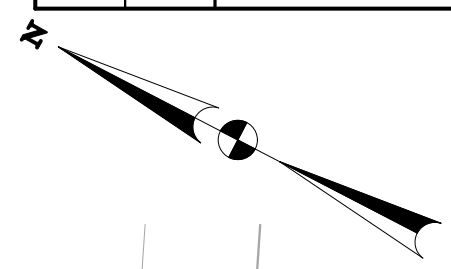
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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |               |   |
|---|---------------|---|
| DATE: JUNE 2023   | SCALE: 1"=20' | L1-2  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |               |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |               | PROJECT ENG. _____<br>DESIGNED BY GG<br>CHECKED BY JF<br>DRAWN BY GG<br>PROJECT MGR. GG |
| <b>TREE DEMOLITION PLAN</b>   |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 78 OF 160                     |

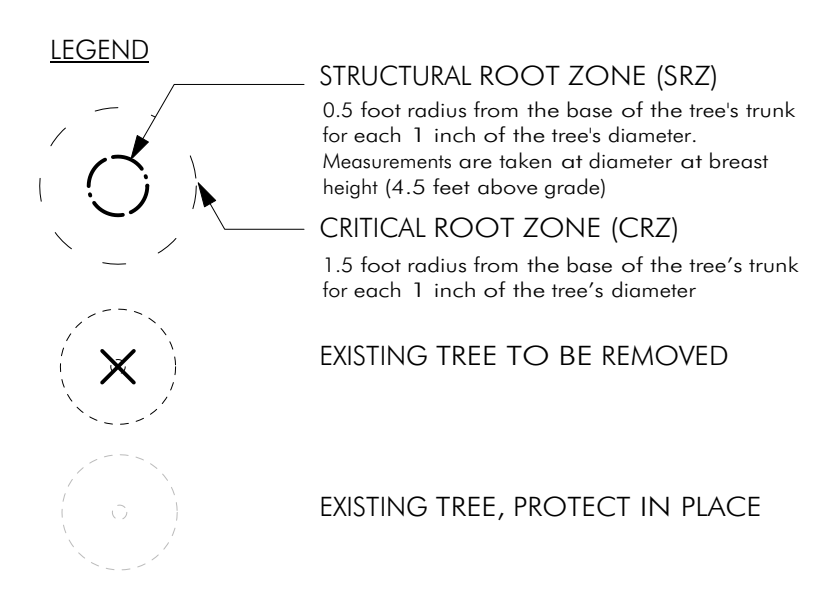
SEALS  
STATES



DRILL HOLES



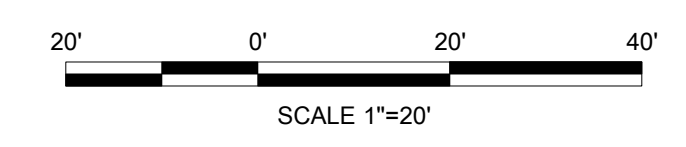
**1 TREE DEMOLITION PLAN**  
Scale: 1" = 20'-0"



| TREE SURVEY INFORMATION FROM ARBORIST |                      |                   |     |           |       |   |
|---------------------------------------|----------------------|-------------------|-----|-----------|-------|---|
| TAG                                   | SCIENTIFIC NAME      | COMMON NAME       | DBH | CONDITION | TAKEN | COMMENTS  |
| T-117                                 | Carpinus betulus     | European hornbeam | 6   | Fair      |       | Split below DBH. Trunk wounds. Imbricated bark.       |
| T-118                                 | Carpinus betulus     | European hornbeam | 7   | Good      |       |   |
| T-119                                 | Carpinus betulus     | European hornbeam | 7   | Fair      |       | Pruned  |
| T-120                                 | Carpinus betulus     | European hornbeam | 6   | Fair      |       | Pruned  |
| T-164*                                | Acer rubrum          | Red maple         | 17  | Fair      | Y     | Dead branches. Growing on slope.                      |
| T-165*                                | Robinia pseudoacacia | Black locust      | 19  | Fair      | Y     | Twin 19x12. Extensive dead wood. One dead leader.     |
| T-166*                                | Robinia pseudoacacia | Black locust      | 16  | Poor      | Y     | Extensive dead wood. Many dead leader. Sparse growth. |

\* SPECIAL TREE, \*\* HERITAGE TREE

**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**

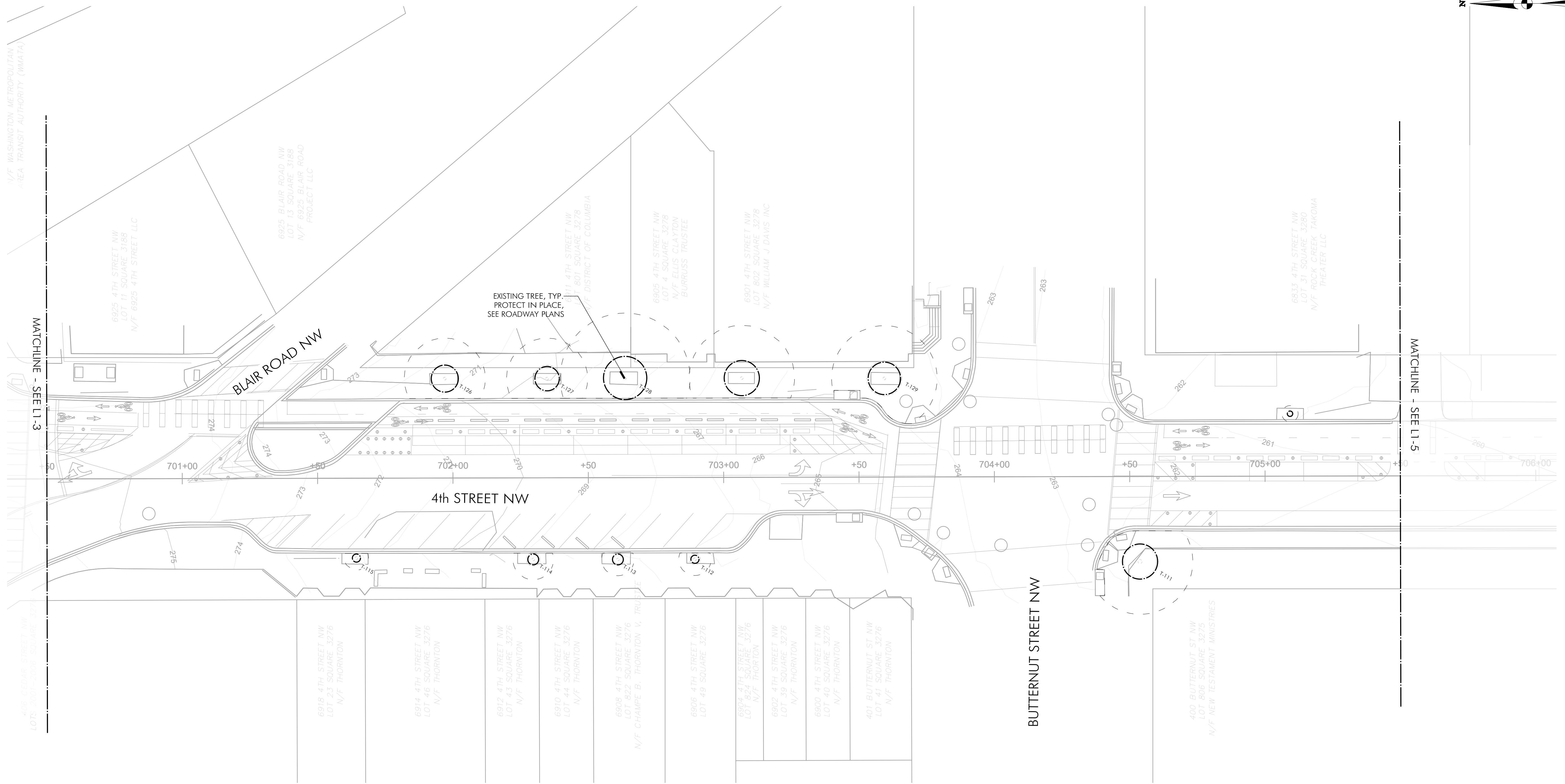


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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |               |   |
|---|---------------|---|
| DATE: JUNE 2023   | SCALE: 1"=20' | L1-3  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |               |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |               | PROJECT ENG. _____<br>DESIGNED BY GG<br>CHECKED BY JF<br>DRAWN BY GG<br>PROJECT MGR. GG |
| <b>TREE DEMOLITION PLAN</b>   |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 79 OF 160                     |

SEALS  
STATES







DRILL HOLES

DRILL HOLES

DRILL HOLES

FILES  
DATES

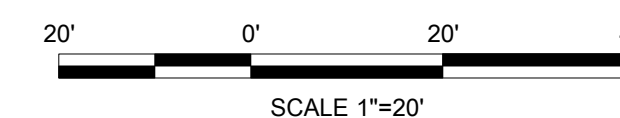
**1 TREE DEMOLITION PLAN**  
Scale: 1" = 20'-0"

- LEGEND**
-  STRUCTURAL ROOT ZONE (SRZ)  
0.5 foot radius from the base of the tree's trunk for each 1 inch of the tree's diameter. Measurements are taken at diameter at breast height (4.5 feet above grade)
  -  CRITICAL ROOT ZONE (CRZ)  
1.5 foot radius from the base of the tree's trunk for each 1 inch of the tree's diameter
  -  EXISTING TREE TO BE REMOVED
  -  EXISTING TREE, PROTECT IN PLACE

| TREE SURVEY INFORMATION |                           |             |     |           |       |   |
|-------------------------|---------------------------|-------------|-----|-----------|-------|---|
| TAG                     | SCIENTIFIC NAME           | COMMON NAME | DBH | CONDITION | TAKEN | COMMENTS  |
| T-111                   | <i>Fraxinus americana</i> | White Ash   | 13  | Poor      |       | Dead branches and leaders. Water sprouting. Pruned. |
| T-112                   | <i>Prunus sp.</i>         | Cherry      | 3   | Good      |       |   |
| T-113                   | <i>Prunus virginiana</i>  | Chokecherry | 4   | Good      |       |   |
| T-114                   | <i>Prunus virginiana</i>  | Chokecherry | 4   | Good      |       |   |
| T-115                   | <i>Prunus virginiana</i>  | Chokecherry | 3   | Good      |       |   |
| T-126                   | <i>Acer rubrum</i>        | Red maple   | 10  | Fair      |       | Trunk wound. Broken and pruned branches.            |
| T-127                   | <i>Acer rubrum</i>        | Red maple   | 9   | Good      |       | Pruned branches.                                    |
| T-128*                  | <i>Acer rubrum</i>        | Red maple   | 16  | Fair      |       | Heavily pruned. Partially topped. Girdling roots    |
| T-129                   | <i>Acer rubrum</i>        | Red maple   | 12  | Fair      |       | Pruned branches. Branch dieback. Girdling roots     |

\* SPECIAL TREE, \*\* HERITAGE TREE

**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**



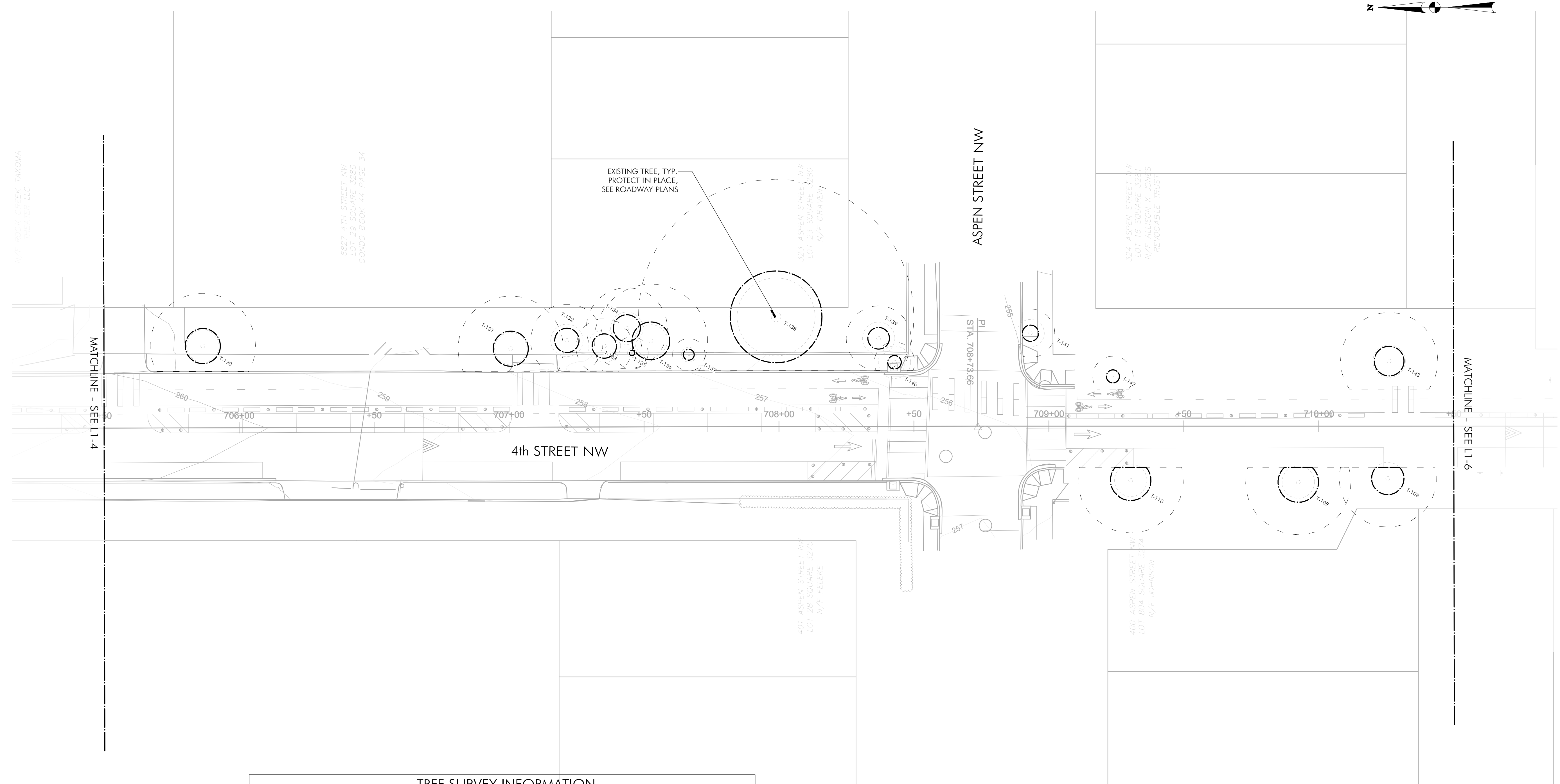
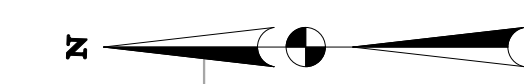
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Washington, DC 20003  
202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |               |   |
|---|---------------|---|
| DATE: JUNE 2023   | SCALE: 1"=20' | L1-4  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |               |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |               | PROJECT ENG. _____<br>DESIGNED BY GG<br>CHECKED BY JF<br>DRAWN BY GG<br>PROJECT MGR. GG |
| <b>TREE DEMOLITION PLAN</b>   |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 80 OF 160                     |



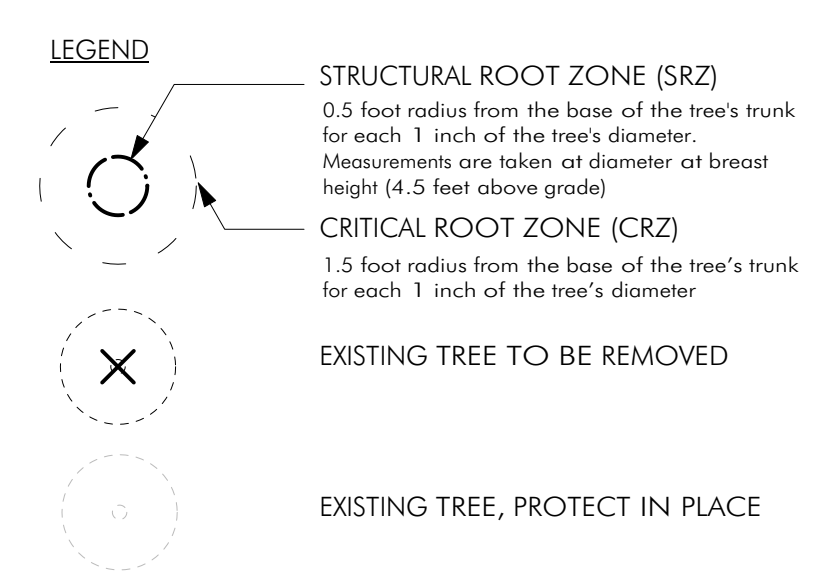


DRILL HOLES

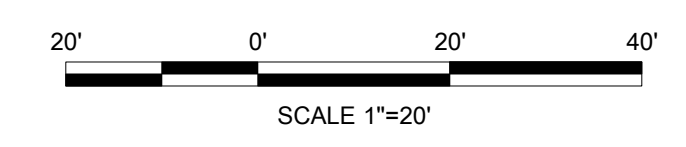
| TREE SURVEY INFORMATION |                       |                   |     |           |       |  |
|-------------------------|-----------------------|-------------------|-----|-----------|-------|--|
| TAG                     | SCIENTIFIC NAME       | COMMON NAME       | DBH | CONDITION | TAKEN | COMMENTS   |
| T-108                   | Platanus occidentalis | American sycamore | 12  | Good      |       |  |
| T-109                   | Platanus occidentalis | American sycamore | 13  | Good      |       |  |
| T-110                   | Acer rubrum           | Red maple         | 13  | Poor      |       | Exposed roots. Trunk wound. Extensive dead branches. Stunted growth  |
| T-130                   | Acer rubrum           | Red maple         | 13  | Good      |       | Minor exposed roots. Included bark.                                  |
| T-131                   | Acer rubrum           | Red maple         | 13  | Fair      |       | Exposed roots. Pruned and dead branches. Included bark               |
| T-132                   | Ulmus americana       | American elm      | 9   | Poor      |       | Multistem 9x8. Topped. Water sprouting. Girdling roots. Sparse crown |
| T-133                   | Quercus rubra         | Northern red oak  | 7   | Fair      |       | Sparse growth. Dead wood   |
| T-134                   | Quercus rubra         | Northern red oak  | 10  | Fair      |       | Sparse growth. Dead wood. Broken branches                            |
| T-135                   | Quercus phellos       | Willow oak        | 4   | Fair      |       | Dead branches. Irregular growth form                                 |
| T-136*                  | Robinia pseudoacacia  | Black locust      | 14  | Fair      |       | Sparse crown. Dead and broken branches.                              |
| T-137                   | Pyrus calleryana      | Bradford pear     | 4   | Good      |       |  |
| T-138**                 | Quercus alba          | White oak         | 34  | Good      |       | Water sprouting. Pruned for power lines                              |
| T-139                   | Acer rubrum           | Red maple         | 8   | Good      |       |  |
| T-140                   | Prunus virginiana     | Chokecherry       | 5   | Good      |       |  |
| T-141                   | Acer campestre        | Hedge maple       | 6   | Good      |       | Pruned for power lines   |
| T-142                   | Cercis canadensis     | Red bud           | 5   | Good      |       |  |
| T-143                   | Prunus serotina       | Black cherry      | 11  | Fair      |       | Broken branches. Lean  |

\* SPECIAL TREE, \*\* HERITAGE TREE

1 TREE DEMOLITION PLAN  
Scale: 1" = 20'-0"



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|---|---------------|---|
| DATE: JUNE 2023   | SCALE: 1"=20' | L1-5  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |               |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |               | PROJECT ENG. _____<br>DESIGNED BY GG<br>CHECKED BY JF<br>DRAWN BY GG<br>PROJECT MGR. GG |
| <b>TREE DEMOLITION PLAN</b>   |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 81 OF 160                     |

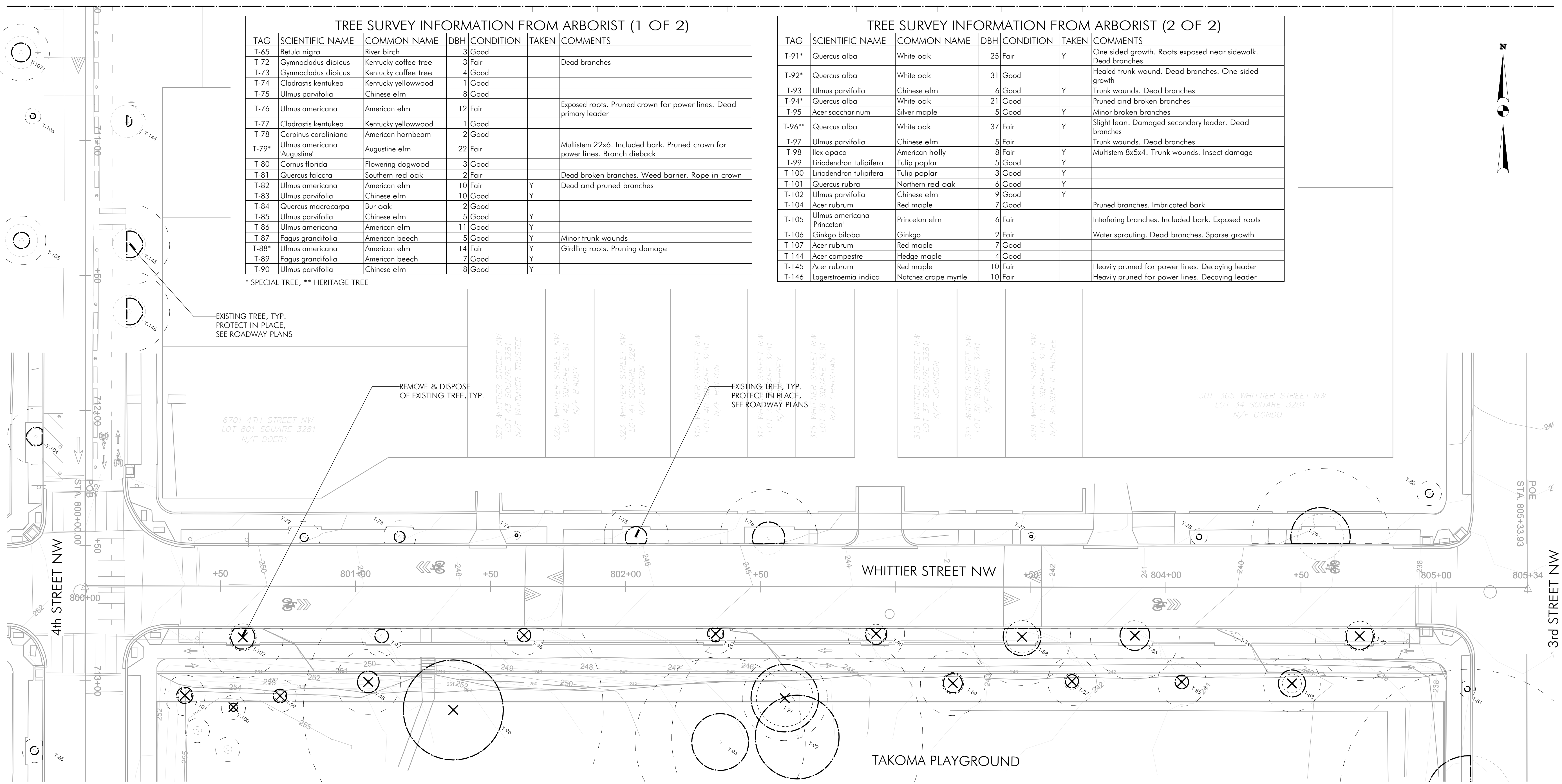
SEALS  
STATES

MATCHLINE - SEE L1-5

| TREE SURVEY INFORMATION FROM ARBORIST (1 OF 2) |                             |                      |     |           |       |   |
|--|-----------------------------|----------------------|-----|-----------|-------|---|
| TAG  | SCIENTIFIC NAME             | COMMON NAME          | DBH | CONDITION | TAKEN | COMMENTS  |
| T-65   | Betula nigra                | River birch          | 3   | Good      |       |   |
| T-72   | Gymnocladus dioicus         | Kentucky coffee tree | 3   | Fair      |       | Dead branches   |
| T-73   | Gymnocladus dioicus         | Kentucky coffee tree | 4   | Good      |       |   |
| T-74   | Cladrastis kentuckea        | Kentucky yellowwood  | 1   | Good      |       |   |
| T-75   | Ulmus parvifolia            | Chinese elm          | 8   | Good      |       |   |
| T-76   | Ulmus americana             | American elm         | 12  | Fair      |       | Exposed roots. Pruned crown for power lines. Dead primary leader            |
| T-77   | Cladrastis kentuckea        | Kentucky yellowwood  | 1   | Good      |       |   |
| T-78   | Carpinus caroliniana        | American hornbeam    | 2   | Good      |       |   |
| T-79*  | Ulmus americana 'Augustine' | Augustine elm        | 22  | Fair      |       | Multistem 22x6. Included bark. Pruned crown for power lines. Branch dieback |
| T-80   | Cornus florida              | Flowering dogwood    | 3   | Good      |       |   |
| T-81   | Quercus falcata             | Southern red oak     | 2   | Fair      |       | Dead broken branches. Weed barrier. Rope in crown                           |
| T-82   | Ulmus americana             | American elm         | 10  | Fair      | Y     | Dead and pruned branches  |
| T-83   | Ulmus parvifolia            | Chinese elm          | 10  | Good      | Y     |   |
| T-84   | Quercus macrocarpa          | Bur oak              | 2   | Good      |       |   |
| T-85   | Ulmus parvifolia            | Chinese elm          | 5   | Good      | Y     |   |
| T-86   | Ulmus americana             | American elm         | 11  | Good      | Y     |   |
| T-87   | Fagus grandifolia           | American beech       | 5   | Good      | Y     | Minor trunk wounds  |
| T-88*  | Ulmus americana             | American elm         | 14  | Fair      | Y     | Girdling roots. Pruning damage  |
| T-89   | Fagus grandifolia           | American beech       | 7   | Good      | Y     |   |
| T-90   | Ulmus parvifolia            | Chinese elm          | 8   | Good      | Y     |   |

\* SPECIAL TREE, \*\* HERITAGE TREE

| TREE SURVEY INFORMATION FROM ARBORIST (2 OF 2) |                             |                      |     |           |       |  |
|--|-----------------------------|----------------------|-----|-----------|-------|--|
| TAG  | SCIENTIFIC NAME             | COMMON NAME          | DBH | CONDITION | TAKEN | COMMENTS   |
| T-91*  | Quercus alba                | White oak            | 25  | Fair      | Y     | One sided growth. Roots exposed near sidewalk. Dead branches |
| T-92*  | Quercus alba                | White oak            | 31  | Good      |       | Healed trunk wound. Dead branches. One sided growth          |
| T-93   | Ulmus parvifolia            | Chinese elm          | 6   | Good      | Y     | Trunk wounds. Dead branches                                  |
| T-94*  | Quercus alba                | White oak            | 21  | Good      |       | Pruned and broken branches                                   |
| T-95   | Acer saccharinum            | Silver maple         | 5   | Good      | Y     | Minor broken branches  |
| T-96**   | Quercus alba                | White oak            | 37  | Fair      | Y     | Slight lean. Damaged secondary leader. Dead branches         |
| T-97   | Ulmus parvifolia            | Chinese elm          | 5   | Fair      |       | Trunk wounds. Dead branches                                  |
| T-98   | Ilex opaca                  | American holly       | 8   | Fair      | Y     | Multistem 8x5x4. Trunk wounds. Insect damage                 |
| T-99   | Liriodendron tulipifera     | Tulip poplar         | 5   | Good      | Y     |  |
| T-100  | Liriodendron tulipifera     | Tulip poplar         | 3   | Good      | Y     |  |
| T-101  | Quercus rubra               | Northern red oak     | 6   | Good      | Y     |  |
| T-102  | Ulmus parvifolia            | Chinese elm          | 9   | Good      | Y     |  |
| T-104  | Acer rubrum                 | Red maple            | 7   | Good      |       | Pruned branches. Imbricated bark                             |
| T-105  | Ulmus americana 'Princeton' | Princeton elm        | 6   | Fair      |       | Interfering branches. Included bark. Exposed roots           |
| T-106  | Ginkgo biloba               | Ginkgo               | 2   | Fair      |       | Water sprouting. Dead branches. Sparse growth                |
| T-107  | Acer rubrum                 | Red maple            | 7   | Good      |       |  |
| T-144  | Acer campestre              | Hedge maple          | 4   | Good      |       |  |
| T-145  | Acer rubrum                 | Red maple            | 10  | Fair      |       | Heavily pruned for power lines. Decaying leader              |
| T-146  | Lagerstroemia indica        | Natchez crape myrtle | 10  | Fair      |       | Heavily pruned for power lines. Decaying leader              |



DRILL HOLES

DRILL HOLES

DRILL HOLES

1 TREE DEMOLITION PLAN  
Scale: 1" = 20'-0"

- LEGEND**
- STRUCTURAL ROOT ZONE (SRZ)  
0.5 foot radius from the base of the tree's trunk for each 1 inch of the tree's diameter. Measurements are taken at diameter at breast height (4.5 feet above grade)
  - CRITICAL ROOT ZONE (CRZ)  
1.5 foot radius from the base of the tree's trunk for each 1 inch of the tree's diameter
  - EXISTING TREE TO BE REMOVED
  - EXISTING TREE, PROTECT IN PLACE

65% DESIGN SUBMITTAL  
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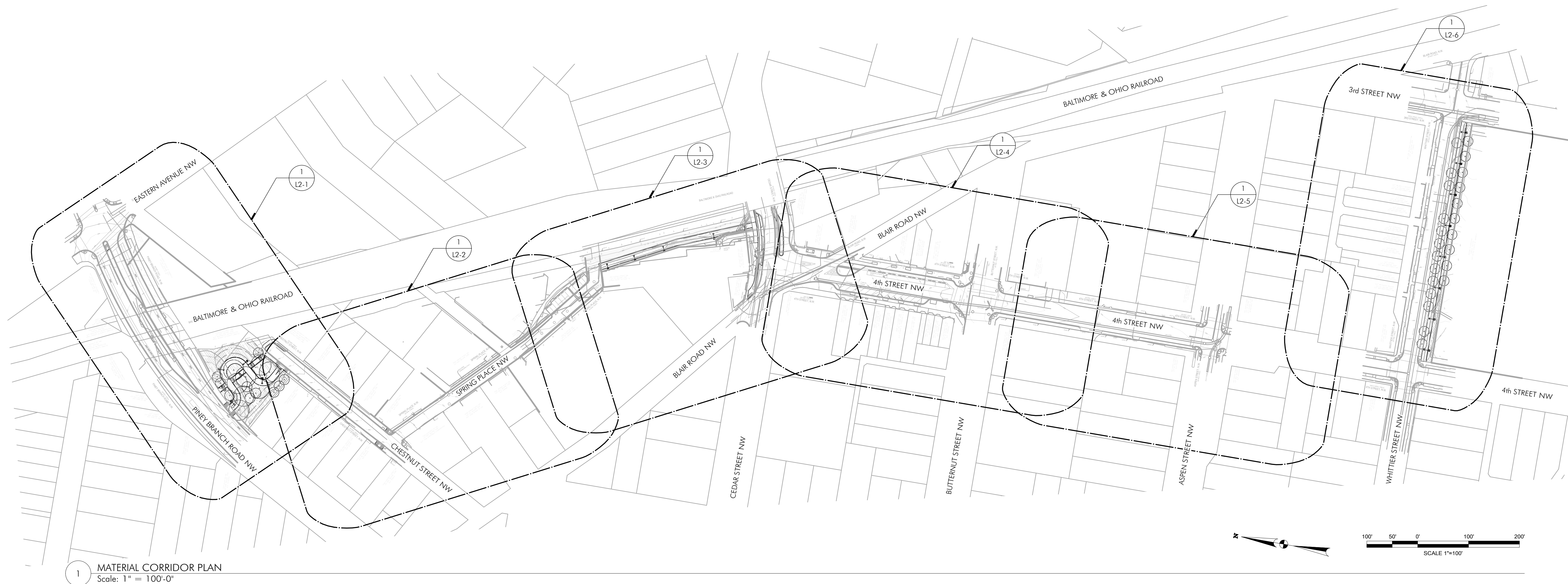
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|   |               |   |
|---|---------------|---|
| DATE: JUNE 2023   | SCALE: 1"=20' | L1-6  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |               |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |               | PROJECT ENG. _____<br>DESIGNED BY GG<br>CHECKED BY JF<br>DRAWN BY GG<br>PROJECT MGR. GG |
| TREE DEMOLITION PLAN  |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 82 OF 160                     |

FILES  
DATES

| MATERIAL SCHEDULE |                                    |                     |            |              |         |       |        |                   |
|-------------------|------------------------------------|---------------------|------------|--------------|---------|-------|--------|-------------------|
| HARDSCAPE         |                                    |                     |            |              |         |       |        |                   |
| KEY               | DESCRIPTION                        | PATTERN/APPLICATION | DIMENSIONS | MANUFACTURER | PRODUCT | COLOR | FINISH | REMARKS           |
| P1                | PAVED SURFACE OVER STRUCTURAL SOIL | N/A                 | N/A        | N/A          | N/A     | N/A   | N/A    | SEE DETAIL 6/L5-1 |
| PLANTING AREA     |                                    |                     |            |              |         |       |        |                   |
| Key               | DESCRIPTION                        | REMARKS             |            |              |         |       |        |                   |
| PA1               | PLANTED AREA                       |                     |            |              |         |       |        |                   |



1 MATERIAL CORRIDOR PLAN  
Scale: 1" = 100'-0"

LAYOUT NOTES

- DO NOT SCALE DRAWINGS. ALL WRITTEN DIMENSIONS SUPERSEDE ALL SCALED DISTANCES AND DIMENSIONS. ALL LINES AND DIMENSIONS ARE PARALLEL AND PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED. IF DIMENSIONS OR ANY NECESSARY INFORMATION IS UNCLEAR OR MISSING, OR IF THE CONTRACTOR FINDS ANY DISCREPANCIES, CONTACT THE LA FOR CLARIFICATION.
- ALL DIMENSIONS ARE TO FACE OF TREAD, FACE OF EDGING, FACE OF CURB AND FACE OF WALLS, ETC., UNLESS OTHERWISE NOTED. ALL DIMENSIONS TO FACES OF BUILDINGS ARE TO THE FACE OF FINISHED WALL SURFACE WHERE THE WALL MEETS GRADE, UNLESS OTHERWISE NOTED.
- ALL HORIZONTAL DIMENSIONS OF PAVERS, TREADS, COPING, CURBS, ETC. ARE TO CENTER OF JOINT, UNLESS OTHERWISE NOTED.
- NOTIFY CONSTRUCTION MANAGEMENT TEAM IMMEDIATELY IF CONFLICTS IN LAYOUT OF LANDSCAPE FEATURES ARISE DUE TO CHANGES TO OTHER CONSULTANTS DOCUMENTS. ANY ALTERATIONS TO THESE DRAWINGS PROPOSED IN THE FIELD FOR CONSTRUCTION SHALL BE PROMPTLY REPORTED TO THE CMT FOR APPROVAL PRIOR TO CONSTRUCTION.
- REFER TO GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

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|   |                |  |
|---|----------------|--|
| DATE: JUNE 2023   | SCALE: 1"=100' | L2-0   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                |  |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                | PROJECT ENG. _____<br>DESIGNED BY: GG<br>CHECKED BY: JF<br>DRAWN BY: GG<br>PROJECT MGR: GG |
| <b>MATERIALS SCHEDULE &amp;<br/>NOTES &amp; CORRIDOR PLAN</b>                           |                | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 83 OF 160                        |

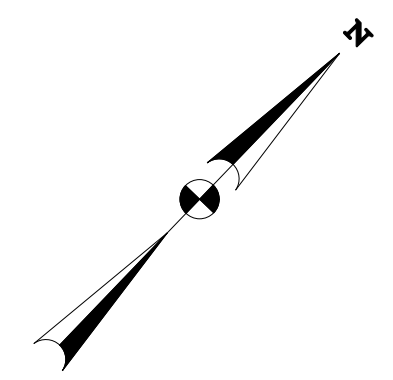
DRILL HOLES

DRILL HOLES

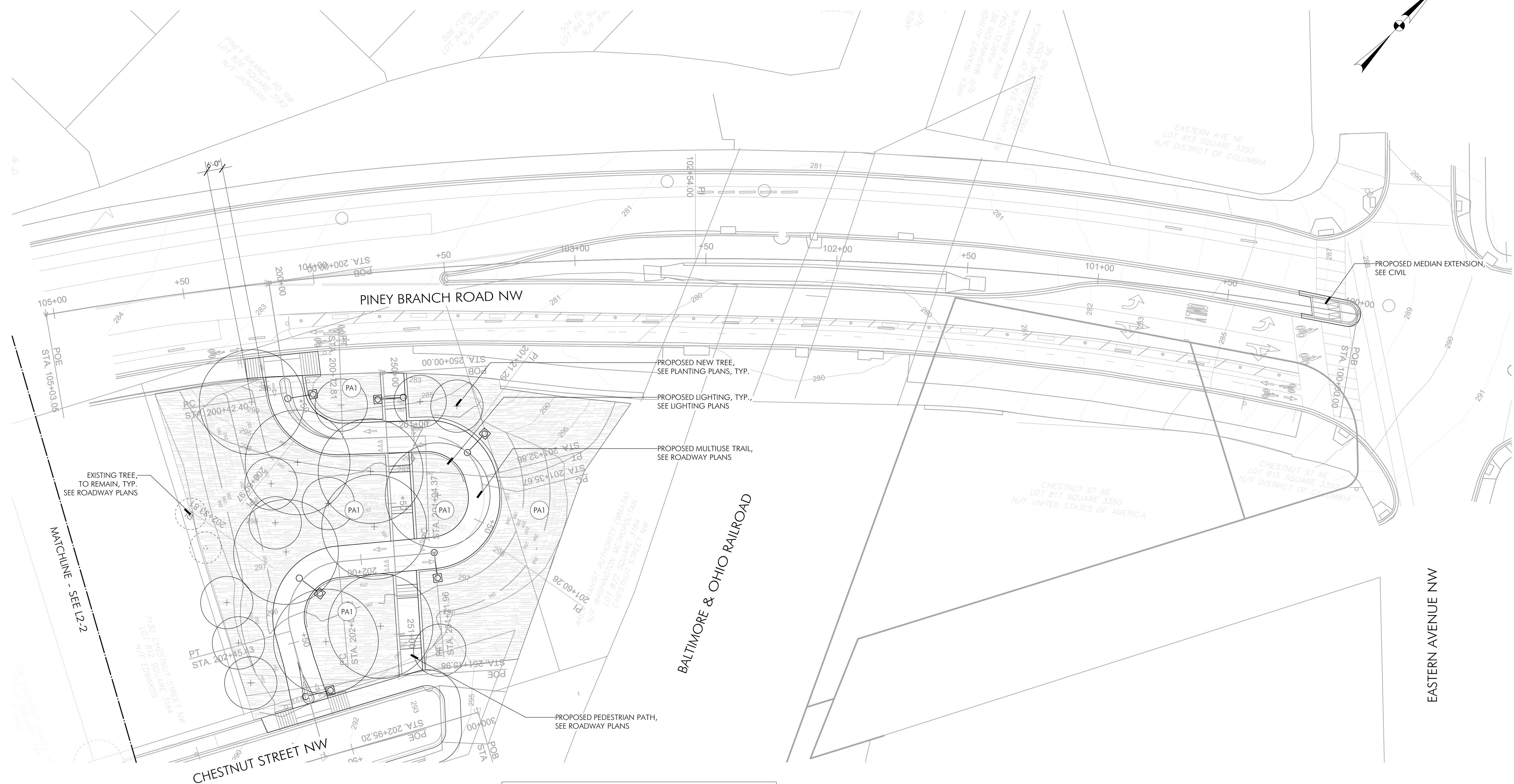
DRILL HOLES

FILES  
DATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 84        | 160          |



DRILL HOLES



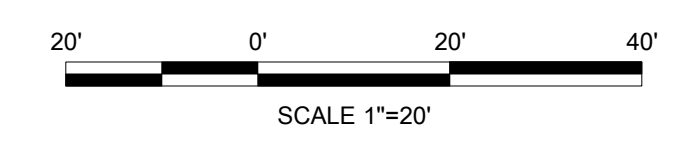
1 MATERIALS PLAN  
Scale: 1" = 20'-0"

**LEGEND**

|  |     |                                     |
|--|-----|-------------------------------------|
|  | PA1 | PLANTED AREA                        |
|  | P1  | PAVING SURFACE OVER STRUCTURAL SOIL |

NOTE: TREES SHOULD MAINTAIN A 6-FOOT OFFSET FROM PAVED AREAS.

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|                 |               |      |
|-----------------|---------------|------|
| DATE: JUNE 2023 | SCALE: 1"=20' | L2-1 |
|-----------------|---------------|------|

**D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION**

**METROPOLITAN BRANCH TRAIL  
DESIGN**

**MATERIALS &  
LAYOUT PLAN**

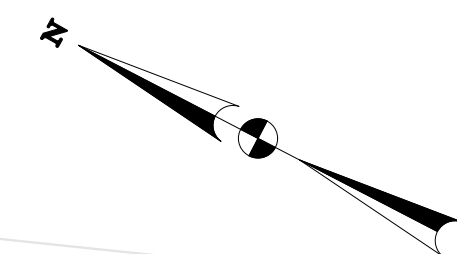
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| PROJECT ENG. _____   |
| DESIGNED BY: GG      |
| CHECKED BY: JF       |
| DRAWN BY: GG         |
| PROJECT MGR: GG      |
| DIVISION CHIEF _____ |
| DATE _____           |
| FILE _____           |
| SHEET 84 OF 160      |

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|           |             |      |      |

FILES  
SDATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 85        | 160          |



DRILL HOLES

DRILL HOLES

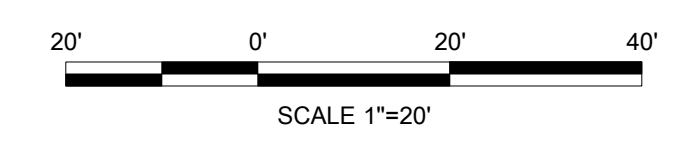
DRILL HOLES

1 MATERIALS PLAN  
Scale: 1" = 20'-0"

**LEGEND**

|  |     |                                     |
|--|-----|-------------------------------------|
|  | PA1 | PLANTED AREA                        |
|  | P1  | PAVING SURFACE OVER STRUCTURAL SOIL |

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DATE: JUNE 2023      SCALE: 1"=20'      L2-2

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

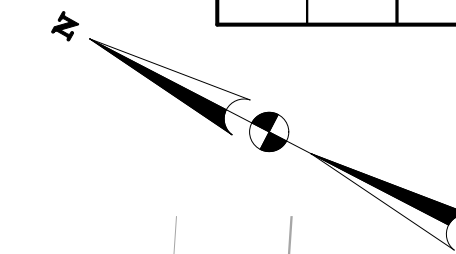
METROPOLITAN BRANCH TRAIL  
DESIGN

MATERIALS &  
LAYOUT PLAN

PROJECT ENG. \_\_\_\_\_  
DESIGNED BY: GG  
CHECKED BY: JF  
DRAWN BY: GG  
PROJECT MGR: GG  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 85 OF 160

FILES  
SDATES

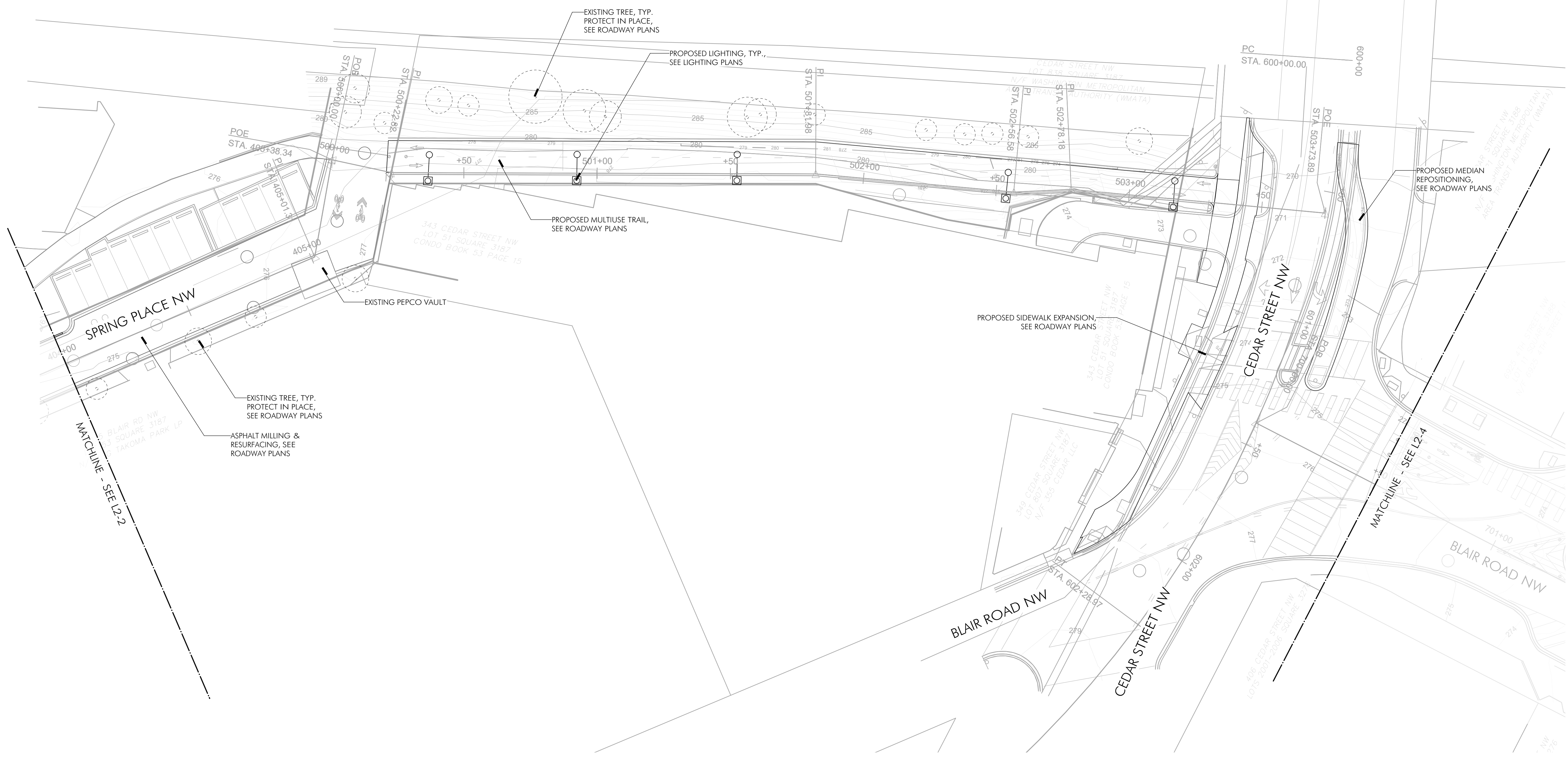
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 86        | 160          |



DRILL HOLES

DRILL HOLES

DRILL HOLES

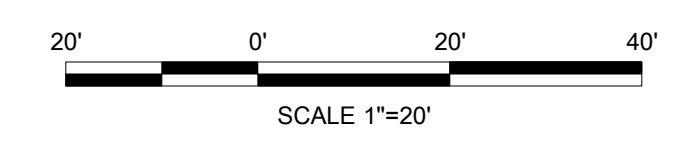


1 MATERIALS PLAN  
Scale: 1" = 20'-0"

**LEGEND**

|  |     |                                     |
|--|-----|-------------------------------------|
|  | PA1 | PLANTED AREA                        |
|  | P1  | PAVING SURFACE OVER STRUCTURAL SOIL |

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DATE: JUNE 2023      SCALE: 1"=20'      L2-3

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

MATERIALS &  
LAYOUT PLAN

PROJECT ENG. \_\_\_\_\_  
DESIGNED BY: GG  
CHECKED BY: JF  
DRAWN BY: GG  
PROJECT MGR: GG

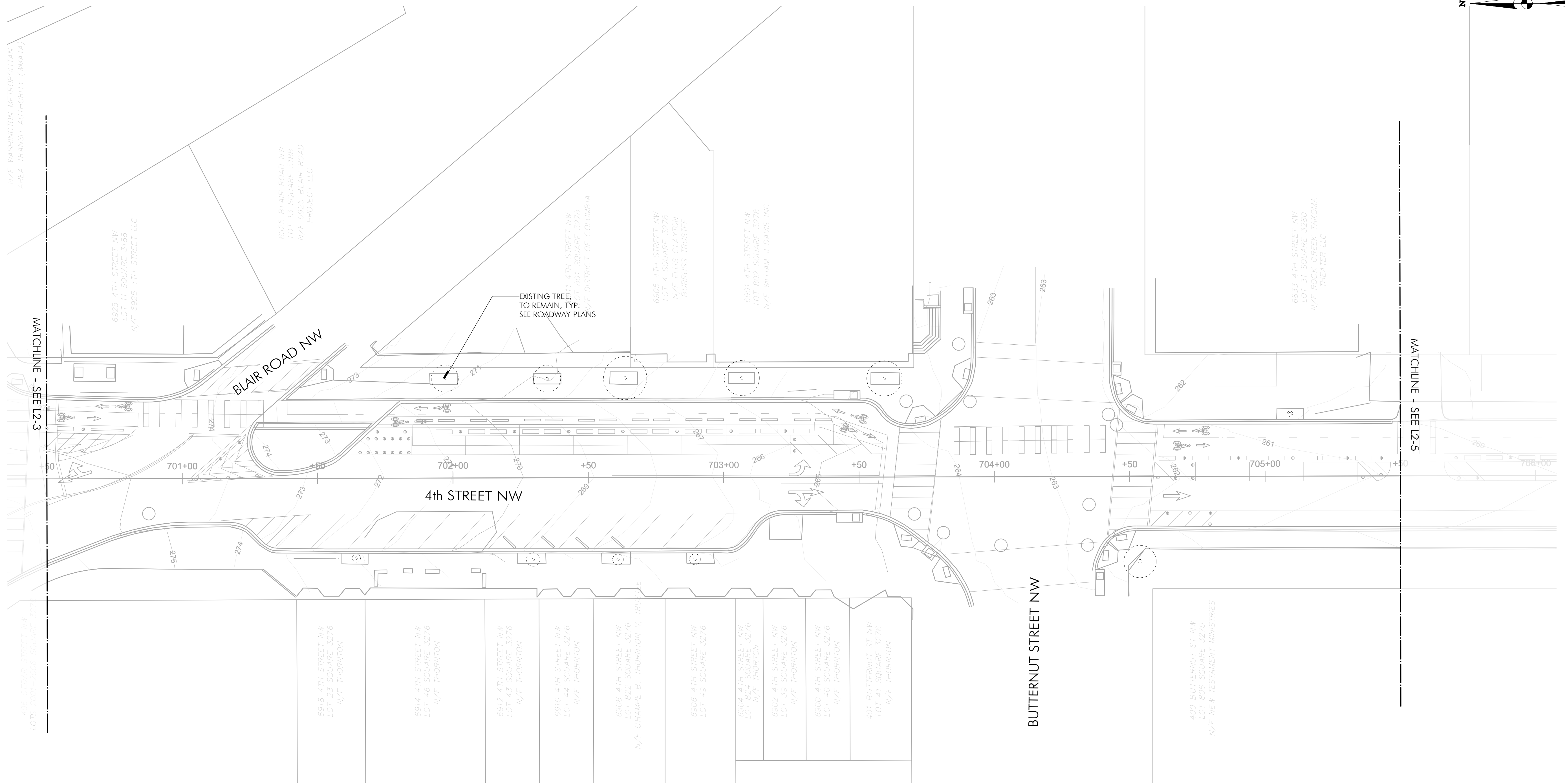
DIVISION CHIEF \_\_\_\_\_  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 86 OF 160

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FILES  
SDATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 87        | 160          |



DRILL HOLES

DRILL HOLES

DRILL HOLES

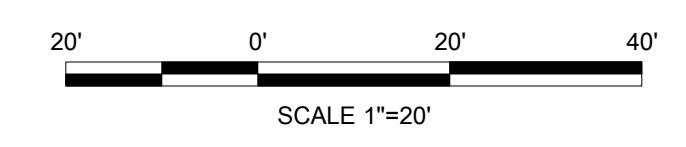
FILES  
DATES

1 MATERIALS PLAN  
Scale: 1" = 20'-0"

**LEGEND**

|  |     |                                     |
|--|-----|-------------------------------------|
|  | PA1 | PLANTED AREA                        |
|  | P1  | PAVING SURFACE OVER STRUCTURAL SOIL |

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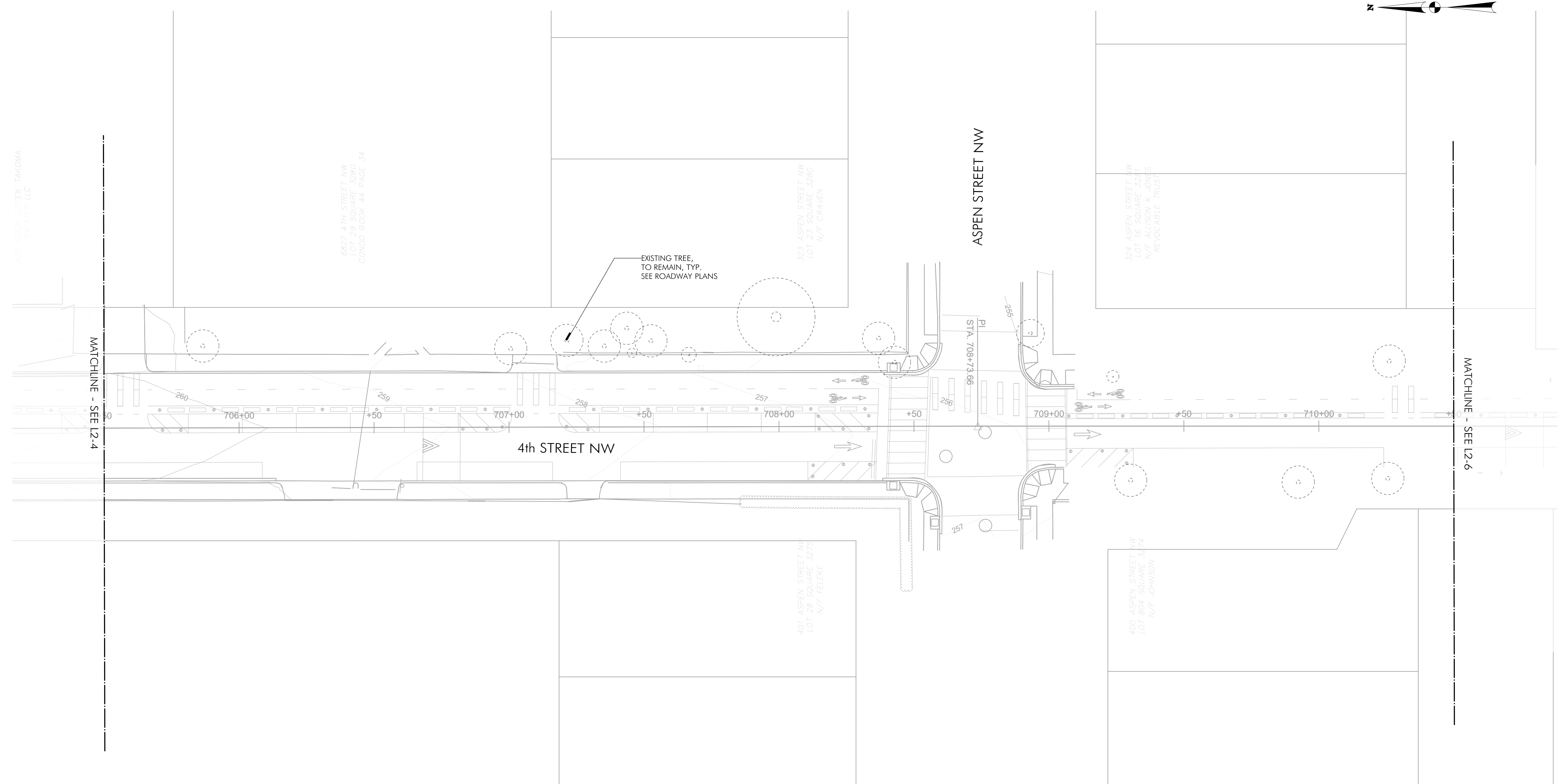
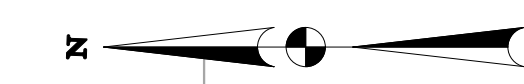


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|-----------|-------------|------|------|
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|           |             |      |      |
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|           |             |      |      |

|   |               |  |
|---|---------------|--|
| DATE: JUNE 2023   | SCALE: 1"=20' | L2-4   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |               |  |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |               | PROJECT ENG. _____<br>DESIGNED BY: GG<br>CHECKED BY: JF<br>DRAWN BY: GG<br>PROJECT MGR: GG |
| <b>MATERIALS &amp;<br/>LAYOUT PLAN</b>  |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 87 OF 160                        |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 88        | 160          |



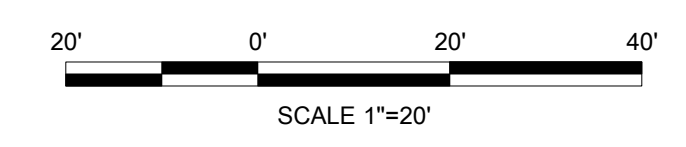
DRILL HOLES

1 MATERIALS PLAN  
Scale: 1" = 20'-0"

**LEGEND**

|  |     |                                     |
|--|-----|-------------------------------------|
|  | PA1 | PLANTED AREA                        |
|  | P1  | PAVING SURFACE OVER STRUCTURAL SOIL |

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION



| <b>MKSK</b>   |             |      |      |
|---|-------------|------|------|
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| NO.   | DESCRIPTION | NAME | DATE |
| REVISIONS   |             |      |      |

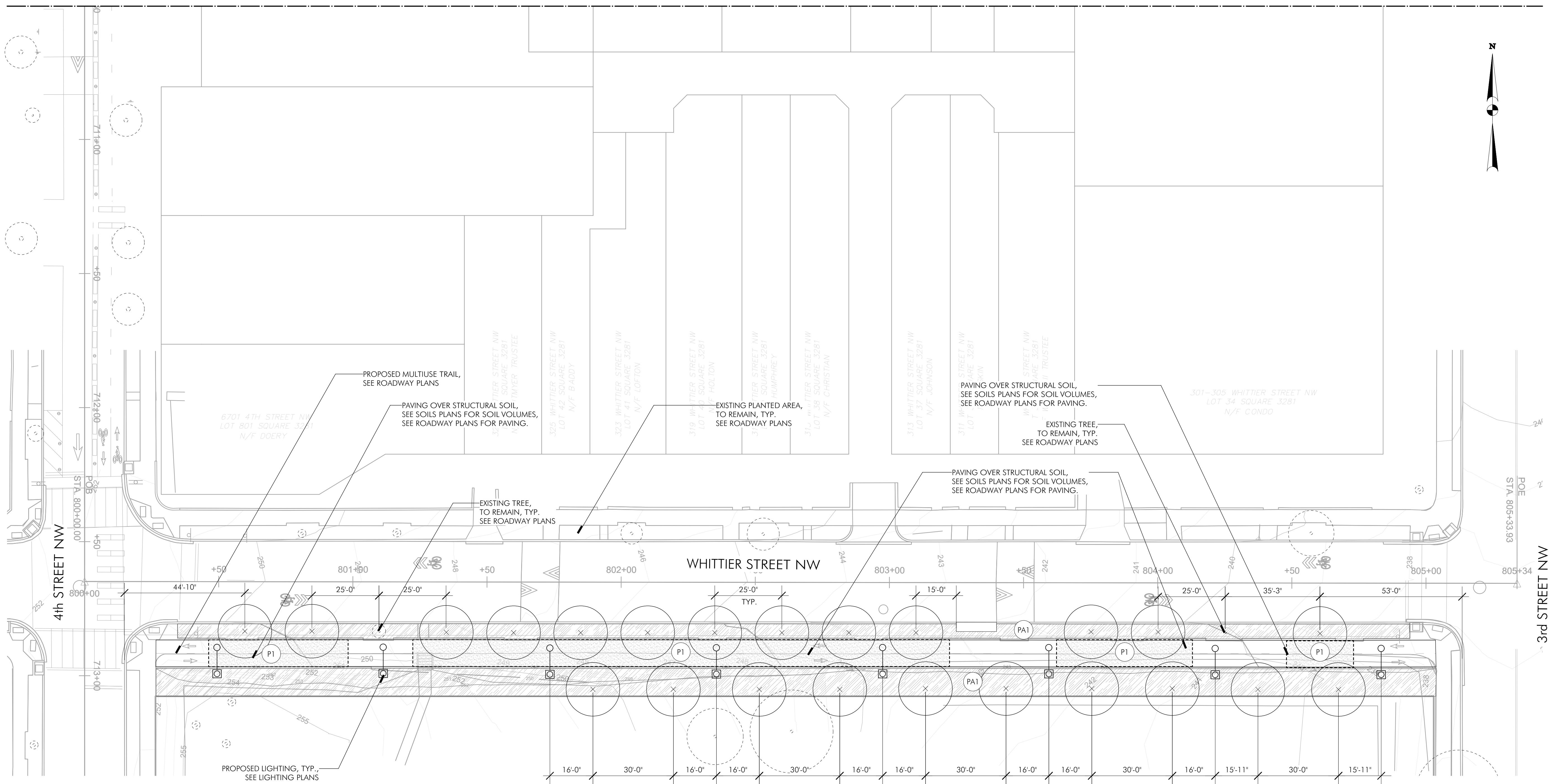
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|---|---------------|---|
| DATE: JUNE 2023   | SCALE: 1"=20' | L2-5  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |               |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |               | PROJECT ENG. _____<br>DESIGNED BY GG<br>CHECKED BY JF<br>DRAWN BY GG<br>PROJECT MGR. GG |
| <b>MATERIALS &amp;<br/>LAYOUT PLAN</b>  |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 88 OF 160                     |

SEALS  
SDATES



| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 89        | 160          |

MATCHLINE - SEE L2-6

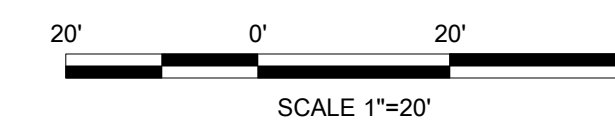


1 MATERIALS PLAN  
Scale: 1" = 20'-0"

LEGEND

- PA1 PLANTED AREA
- P1 PAVING SURFACE OVER STRUCTURAL SOIL

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION



|  |               |  |
|--|---------------|--|
| DATE: JUNE 2023  | SCALE: 1"=20' | L2-6   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION</b><br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |               |  |
| <b>METROPOLITAN BRANCH TRAIL</b><br>DESIGN   |               | PROJECT ENG. _____<br>DESIGNED BY: GG<br>CHECKED BY: JF<br>DRAWN BY: GG<br>PROJECT MGR: GG |
| <b>MATERIALS &amp; LAYOUT PLAN</b>   |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 89 OF 160                        |

| <b>MKSK</b>   |             |      |      |
|---|-------------|------|------|
| 714 7th Street SE<br>Washington, DC 20003<br>202.543.6550 |             |      |      |
| NO.   | DESCRIPTION | NAME | DATE |
| REVISIONS   |             |      |      |

DRILL HOLES

DRILL HOLES

DRILL HOLES

FILES  
DATES

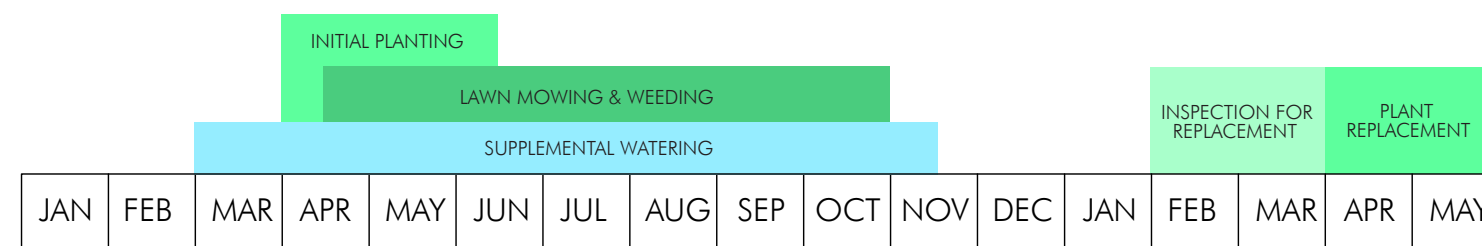
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 90        | 160          |

**PLANTING NOTES:**

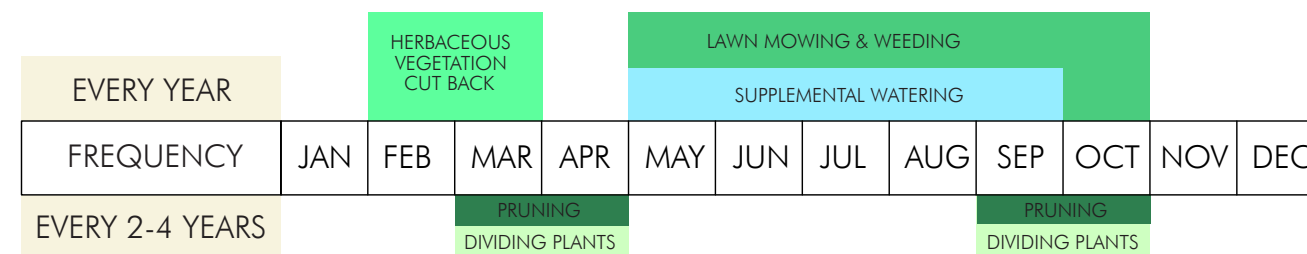
- NUMBER OF PLANTS TO BE INSTALLED SHALL BE THE NUMBER SHOWN GRAPHICALLY ON THE DRAWINGS. IF THERE ARE CONFLICTS BETWEEN THE NUMBER OF PLANTS SHOWN ON THE DRAWINGS AND THE NUMBER SHOWN IN THE PLANT LIST, THE NUMBER OF PLANTS ON THE DRAWINGS SHALL BE INSTALLED. BRING ALL SUCH CONFLICTS TO THE ATTENTION OF THE CONSTRUCTION MANAGEMENT TEAM (CMT).
- NO PLANTING SHALL BE DONE BEFORE ACCEPTANCE OF GRADING BY THE CMT.
- NO EXISTING TREES OR SHRUBS SHALL BE REMOVED BY THE CONTRACTOR WITHOUT PRIOR APPROVAL OF THE CMT.
- DO NOT PROCEED WITH PLANTING IF CONDITIONS ON THE SITE DIFFER FROM THOSE SHOWN IN THE SURVEY, PARTICULARLY IF OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE CMT. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK. CONTACT THE LOCAL UTILITY AGENCY A MINIMUM OF 72 HOURS IN ADVANCE. CONTRACTOR SHALL STAKE ALIGNMENTS OF ALL UTILITY LINES FOR THE FIELD REVIEW BY THE CMT BEFORE PROCEEDING. STAKES SHALL BE LEFT IN PLACE DURING PLANTING, FOR REFERENCE. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED FOR DAMAGE TO UTILITIES, PIPES AND STRUCTURES DUE TO PLANTING WORK.
- FINAL LOCATION OF ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE CMT. ALL TREE LOCATIONS WILL BE STAKED IN THE FIELD FOR REVIEW AND APPROVAL OF THE CMT BEFORE COMMENCING WITH TREE PLANTING. THE CONTRACTOR SHALL NOTIFY THE CMT FOR INSPECTION FOR EACH AREA BEFORE INSTALLATION. THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE CMT OF ANY UNDERGROUND OBSTACLES DISCOVERED DURING PLANTING THAT MAY AFFECT THE LOCATION OF TREES, AND WILL NOT PROCEED UNTIL THE FINAL TREE LOCATION IS APPROVED BY THE CMT.
- ALL PLANT MATERIAL SHALL BE APPROVED BY THE CMT PRIOR TO OR AT THE TIME OF ITS ARRIVAL ON SITE. THE CONTRACTOR WILL NOTIFY THE CMT OF ALL PLANT DELIVERIES AT LEAST 48 HOURS IN ADVANCE. THE CMT WILL REJECT ANY PLANTS THAT ARE DAMAGED, DESICATED, DISEASED, DO NOT HAVE FULL AND BALANCED FORM, DO NOT MEET THE SIZE OR SPECIES/CULTIVAR SPECIFIED IN THE DRAWINGS OR DO NOT MEET INDUSTRY STANDARDS OF QUALITY. REJECTED PLANTS WILL BE REPLACED BY THE CONTRACTOR IMMEDIATELY AT NO ADDITIONAL COST TO THE OWNER.
- ALL PLANTS SHALL BE PLANTED PLUMB AND TRUE AND TO DDOT STANDARDS AND SPECIFICATIONS. ALL TREES WILL BE PLANTED WITH THE NORTH SIDE FACING NORTH, AS MARKED IN THE NURSERY, UNLESS OTHERWISE DIRECTED BY THE CMT. SEE PLANTING DETAILS AND DDOT SPECIFICATIONS FOR TREE, SHRUB, PERENNIAL, AND BULB PLANTING, INCLUDING STAKING METHODS, PLANT PIT DIMENSIONS AND PLANTING SOIL REQUIREMENTS.
- ALL PLANT TYING MATERIAL AND MARKING TAPE SHALL BE REMOVED AT TIME OF PLANTING.
- WATER ALL PLANTS IMMEDIATELY AFTER PLANTING PER THE SPECIFICATIONS. FLOOD PLANTS TWICE DURING THE FIRST 24 HOUR PERIOD OF PLANTING.
- NO SUBSTITUTIONS OF PLANT SPECIES/CULTIVARS SHALL BE MADE WITHOUT THE PRIOR WRITTEN PERMISSION OF THE CMT. THE CMT RESERVES THE RIGHT TO MAKE SUBSTITUTIONS, ADDITIONS AND DELETIONS IN THE PLANTING SCOPE WHILE WORK IS IN PROGRESS. EQUITABLE ADJUSTMENTS TO THE CONTRACT PRICE, BASED ON THE COST OF COMPARABLE PLANTS IN THE CONTRACT, SHALL BE MADE SUBJECT TO DDOT APPROVAL.
- ALL AREAS DISTURBED BY CONSTRUCTION OPERATIONS AND NOT OTHERWISE SPECIFIED SHALL BE SEEDED/SODDED PER THE PLANS AND SPECIFICATIONS.
- ALL PLANT MATERIALS SHALL MEET OR EXCEED THE STANDARDS DESCRIBED IN ANSI-Z60.1, AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN HORTICULTURE INDUSTRY ASSOCIATION, WASHINGTON, DC, CURRENT EDITION.
- UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIALS, EQUIPMENT AND DEBRIS RESULTING FROM THE WORK. ALL PAVED AREAS SHALL BE BROOM CLEANED AND THE SITE LEFT IN A NEAT, AS APPROVED BY THE OWNER.
- CONTRACTOR TO FOLLOW MAINTENANCE AND WARRANTY REQUIREMENTS AS OUTLINED IN ALL DDOT SPECIFICATIONS. SEE DDOT DESIGN AND ENGINEERING MANUAL.
- ALL PLANTING SHALL BE PERFORMED IN ACCORDANCE WITH DDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES DATED 2013.
- ALL PLANTING AND SITE WORK SHALL BE WITHIN THE RIGHT OF WAY UNLESS OTHERWISE INDICATED.
- THE PLANTING SEASON FOR THIS PROJECT SHALL CONFORM TO THE PLANTING CALENDARS SHOWN ON THE DRAWINGS.
- PLANTING PITS MAY BE DUG PRIOR TO PLANTING SEASON ONLY UNDER THE FOLLOWING CONDITIONS:
  - THEY WILL NOT CAUSE EROSION OR JEOPARDIZE STABILIZATION AS DETERMINED BY THE ENGINEER.
  - THEY ARE BACK FILLED WITH PREPARED TOPSOIL AND A STAKE, 1 X 2 INCH STAKE EXTENDING AT LEAST 24 INCHES ABOVE GROUND, IS PLACED IN EACH PIT IN AREAS TO BE MOWN.
  - PITS THAT ARE DELETED OR RELOCATED WILL NOT BE INCLUDED FOR PAYMENT.
- PLANTS SHALL BE SET IN THE PLANTING PIT, AT THE PROPER DEPTH EQUAL TO THAT OF THE ROOTBALL OR CONTAINER ON COMPACTED EARTH. SOIL MIX SHALL THEN BE FILLED AROUND THE ROOTS TO COMPLETELY BACKFILL THE PLANTING PIT. TAMP THE BACKFILL MATERIAL AND THROUGHY WATER. AFTER SETTLEMENT OF THE SOIL, THE REMAINDER OF THE PIT SHALL BE FILLED WITH SOIL MIX, FERTILIZED, TAMPED, AND AGAIN WATERED, ALL WITHIN THE SAME DAY OF PLANTING. THE SAME PROCEDURE SHALL BE FOLLOWED IN PLANTING REPLACEMENTS.
- DURING THE ESTABLISHMENT PERIOD THE CONTRACTOR SHALL WATER EACH PLANT WITH THE FOLLOWING MINIMUM QUANTITIES OF WATER FOR EACH WATERING UNLESS OTHERWISE DIRECTED BY THE CMT:
  - DECIDUOUS TREES OVER 10' HT. 12 GALLONS PER PLANT
  - DECIDUOUS TREES 10' HT. OR LESS 6 GALLONS PER PLANT
  - EVERGREEN TREES 8 GALLONS PER PLANT
  - SHRUBS OVER 18" HT. 2 GALLONS PER PLANT
  - SHRUBS 18" HT. OR LESS 1 GALLON PER PLANT
- A REPRESENTATIVE OF DDOT SHALL BE GIVEN THE OPPORTUNITY TO INSPECT AND APPROVE ALL PLANT MATERIAL AT ITS SOURCE PRIOR TO DIGGING OR DELIVERY. IF THIS OPPORTUNITY IS WAIVED, A REPRESENTATIVE SAMPLE OF EACH SPECIES SHALL BE MADE AVAILABLE FOR APPROVAL AT THE PROJECT SITE.
- THE MULCHING MATERIAL FOR THIS PROJECT SHALL BE SHREDDED HARDWOOD BARK MULCH. SEE DDOT STANDARD SPECIFICATION 823.04(C). FINISH OFF UNPLANTED AREAS IN LID FACILITIES WITH A 2-3" LAYER OF MULCH, BUT DO NOT PLACE AGAINST OR MOUND AROUND ROOT FLARE.
- ON CENTER SPACING OF PLANT MATERIAL SHALL BE AS INDICATED IN THE PLANTING SCHEDULES SHOWN IN THE DRAWINGS UNLESS OTHERWISE DIRECTED BY THE CMT.
- CONTRACTOR SHALL PROVIDE A THIRD PARTY ISA CERTIFIED ARBORIST DURING THE FOLLOWING THREE PROJECT PHASES. THE THIRD PARTY ISA CERTIFIED ARBORISTS RESPONSIBILITIES SHALL INCLUDE THE FOLLOWING DURING THE RESPECTIVE PHASES:
  - DEMO PHASE SHALL ENSURE PROPER TREE PROTECTION AND TREE REMOVAL MEASURES.
  - TREE INSTALLATION PHASE SHALL ENSURE PROPER SITE PREPARATION AND PLANT MATERIAL INSTALLATION PER DRAWINGS AND SPECIFICATIONS.
  - MAINTENANCE PHASE SHALL ENSURE PROPER WEED CONTROL AND IRRIGATION METHODS AND MEASURE PER DRAWINGS AND SPECIFICATIONS.
- TREES ADJACENT TO THE SHARED USE PATH SHALL BE LIMBED UP TO 8' ABOVE THE FINISHED GRADE OF THE SHARED USE PATH.
- CONTRACTOR IS RESPONSIBLE FOR A TWO YEAR WARRANTY FOR ALL PLANT MATERIAL PER THE DDOT STANDARD SPECIFICATIONS. 608 TREES, SHRUBS, VINES AND GROUND COVER, SECTION 608.02, C., 14. WEEKLY WATERING SHALL BE PART OF THE CONTRACTOR'S STANDARD WARRANTY.
- ALL EXISTING TREES TO REMAIN SHALL BE FENCED AT THE DRIP LINE OF THEIR CANOPIES, OR PER PLANS IF PLANS INDICATE A LARGER TREE PROTECTION ZONE. DO NOT DRIVE VEHICLES, STOCKPILE SOIL OR CONSTRUCTION MATERIALS, OR PERFORM ANY HEAVY CONSTRUCTION OPERATIONS WITHIN THE DRIP LINE, ROOT ZONE, OR PROTECTIVE FENCING OF EXISTING TREES. WHEN EXCAVATING OR INSTALLING PAVING WITHIN THE DRIP LINE NO HEAVY EQUIPMENT IS TO BE USED THAT WILL COMPACT TREE ROOTS. ALL WORK WITHIN THE DRIP LINE MUST BE PERFORMED BY HAND. CONTRACTORS NOT FOLLOWING THESE PROTECTIVE RULES SHALL BE LIABLE FOR THE COST OF AN ARBORIST'S FEES AND TREATMENT OF THE TREES AND/OR REPLACEMENT OF THE TREES AND ALL ASSOCIATED COSTS. BEFORE FINAL GRADING AND PLANTING BEGINS, THE ARBORIST WILL INSPECT TREE PROTECTION AREAS FOR COMPACTION AND MECHANICAL DAMAGE. IF THE ARBORIST DETERMINES THAT EITHER OF THESE EXISTS, THE CONTRACTOR WILL REMEDY AT HIS EXPENSE. MEASURES MAY INCLUDE BUT ARE NOT LIMITED TO EVALUATION BY A LICENSED ARBORIST, AIRSPADING, BIOPLEX TREATMENT, CABLING, ROOT PRUNING AND PRUNING OF CANOPY/LIMBS.
- CONSTRUCTION ACTIVITIES, INCLUDING BUT NOT LIMITED TO THE REMOVAL OF ALL TIMBER CURBS AND REPLACEMENT WITH NEW CURB MATERIALS, WITHIN THE CRITICAL ROOT ZONES OF EXISTING TREES TO REMAIN SHALL BE REVIEWED AND APPROVED BY A ISA CERTIFIED THIRD PARTY ARBORIST. ADDITIONAL TREE PROTECTION MEASURES SHALL COMPLY WITH THE CURRENT VERSION OF DDOT STANDARD SPECIFICATIONS FOR HIGHWAY STRUCTURES, SECTION 608.07 & 608.08.
- FOR TREES WITHIN THEBIORETENTION AREAS, REFER TO DOEE SWM GUIDEBOOK FOR TREE INSPECTION AND TREE MAINTENANCE CRITERIA (SECTIONS 3.14.3 & 3.14.4).
- TREE PLANTING SHALL COMPLY WITH THE CURRENT VERSION OF THE DISTRICT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES AND STANDARD DRAWINGS NO. 611.18 AND 611.19. DECIDUOUS TREES SHALL ONLY BE PLANTED BETWEEN OCTOBER 15 AND MAY 1 AS PER THE SPRING AND FALL PLANTING SEASON DATES.
- TREE STAKING SHALL BE AS PER SECTION 608.02 (2013 DDOT STANDARD SPECIFICATIONS). ONLY 2 STAKES SHALL BE INSTALLED WITH ARBOR TIES.
- PEAT MOSS IS NOT ALLOWED FOR USE AS A SOIL AMENDMENT.
- THERE ARE EXISTING MATURE TREES ALONG THESE STREETS. UNLESS OTHERWISE NOTED, ALL EXISTING TREES SHALL BE PRESERVED IN PLACE ACCORDING TO DDOT STANDARD SPECIFICATION 107.12 TREE PROTECTION AND REPLACEMENT. THE CONTRACTOR SHALL BE EXTREMELY CAREFUL WHILE WORKING AROUND THESE MATURE TREES AND IS LIABLE IN FIXED LIQUIDATED DAMAGES PER 107.12-B.8. CONTRACTOR SHALL CONTACT THE URBAN FORESTRY ADMINISTRATION AT (202) 671-5133 FOR ALL ISSUES CONCERNING TREES.
- DO NOT PLANT GRASS/SOD WITHIN 4 FT. OF THE ROOT FLARE OF A TREE. FINISH THIS AREA OFF WITH A 2-3" LAYER OF MULCH, BUT DO NOT PLACE UP AGAINST OR MOUND AROUND ROOT FLARE.
- CONTRACTOR SHALL CONTACT ARBORIST JOEL CONLON (EMAIL: JOEL.CONLON@DC.GOV, PHONE: 202-345-4038) WHEN THE TREES ARE READY TO BE PLANTED, PROVIDING AT LEAST 48 HOURS' NOTICE.

**LANDSCAPE MAINTENANCE CALENDARS:**

**FIRST YEAR LANDSCAPE ESTABLISHMENT**



**REGULAR MAINTENANCE SCHEDULE**



**PLANT LAYER DEFINITIONS**

**BASE LAYER - FERNS** - Ferns begin producing fiddleheads in early spring with green fronds emerging by mid-late spring. Fronds remain green and persist throughout the winter, offering fall and winter color. Standing winter vegetation protects groundcover species from extreme cold.

**BASE LAYER - GRASSES + RUSHES** - Warm season grasses reach their peak at midsummer and persist throughout the winter, offering fall color and winter interest. Rushes should be cut back in early spring to encourage late spring leaf growth. Standing winter vegetation protects groundcover species from extreme cold.

**PERENNIALS - SEASONAL COLOR** - Perennials provide color throughout the growing season. In the winter, seed heads and foliage add structural interest and provide food and cover for wildlife, especially birds. Plants should be allowed to spread and fill in open areas.

**PERENNIALS - FILLER** - These species were selected for their ability to spread and fill open spaces in the meadow area and some typical perennial mixes. They should be allowed to spread (within reason) so that weeds cannot establish in the open space.

**GROUNDCOVERS - 'GREENMULCH'** - Serving as 'green mulch', groundcover plants spread via seed and rhizomes to fill open spaces. They are cool season species, growing and flowering early in the year when warm season plants are still dormant. They are protected from the harsh summer sun as grasses and perennials shade them from above. These groundcovers are semi-evergreen throughout the winter and should not be cut back. They can be easily divided and planted in bare areas.

**LANDSCAPE MAINTENANCE PRACTICES:**

- WATERING:**
- Selected plants are drought tolerant once established but will need frequent watering throughout the initial establishment period, especially during the first summer.
  - Watering bags should be placed at all trees and filled once per week throughout the first growing seasons (Spring through Fall)
  - Watering activities should take care not to disturb tender herbaceous plants, especially as they establish root systems in the first growing seasons.
- MOWING & WEEDING:**
- When weeds do occur, they should be cut at the base, NOT PULLED, to discourage soil disturbance.
  - Take care not to remove desirable species as they spread to fill open voids in the planting.
  - Weeding should be done weekly in the spring and summer, especially during the first two years of establishment.
  - Weeding will become less necessary over time as the ground layer becomes increasingly covered and shaded by the designed planting. If weeds are not allowed sunlight, they will not grow.
- INSPECTION & PLANT REPLACEMENT**
- Plants will be inspected by the DDOT Landscape Architect or Arborist upon request by the Contractor and Owner.
  - All dead plants and all plants not in a thriving condition will be replaced by the contractor according to the terms of the plant warranty.
- CUTTING BACK: PERENNIALS AND GRASSES**
- Vegetation should be left standing throughout the winter with a cut back in early spring as new growth begins to emerge from the base of plants.
  - Standing vegetation provides food and habitat for wildlife (especially birds) and reduces weed germination by completely covering the ground throughout the year.
  - Herbaceous plants (with the exception of groundcovers) should be cut to a height of 3-6 inches of the ground.
- MULCHING:**
- Planting should require very little mulch after planting and initial establishment.
  - The goal is for the plants themselves to be a living mulch, completely covering the ground once fully established.
  - Seasonal mulching is discouraged except as needed around trees and shrubs.
  - Adding mulch will disturb the soil and encourage weed germination. It will also discourage desired groundcovers and perennials from spreading.
  - When mulching trees and shrubs, apply 1 inch of mulch when initial mulch layer has deteriorated and areas of bare soil can be seen. Dividing groundcover plants and planting them at bare areas below trees and shrubs can be used as an alternative or in addition to regular mulching.
  - Mulch should be double-shredded hardwood or pine bark mulch. DO NOT USE DYED MULCH
- FERTILIZER AND COMPOST:**
- Apply compost the top layer of soil when mulch is applied to areas of trees and shrubs.
  - Compost should be well-decomposed material, free of weeds, contaminants, and foul odors. Compost may be derived from yard waste or food waste.
  - Areas with grasses and perennials will not need regular fertilizer or compost applications.
  - Fertilizer should only be applied after compost has been added and the soil has been tested for nutrient levels. Do not over-fertilize.
- PRUNING OF TREES AND SHRUBS.**
- Trees and shrubs should not be pruned in their first year of establishment.
  - Shrubs should require little pruning, except to cut back dead or diseased vegetation or preserve window views.
  - Pruning should be done in late winter or early spring. It may be best to coordinate pruning activities with the cutting back of herbaceous plants. Do not prune when conditions are wet. (See tree and shrub guides)
  - Trees should be pruned by a trained arborist.
- PLANT DIVISION:**
- Perennials and grasses may require occasional division to rejuvenate growth. This can be done every 2-4 years, or as plants begin to show die back in their centers.
  - When dividing plants, amend backfill soil with compost.
  - Divided plants can be used to fill in open areas around the site.

**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**

|             |           |             |      |      |
|-------------|-----------|-------------|------|------|
| <b>MKSK</b> | NO.       | DESCRIPTION | NAME | DATE |
|             | REVISIONS |             |      |      |

| MAINTENANCE SCHEDULE FOR STREET TREE SPACE  |   |   |
|---|---|---|
| MAINTENANCE TASKS   | FREQUENCY   | TIME OF YEAR/ TIMING                                |
| Inspect tree for health and establishment and report any changes to UFA via 311 or 311.dc.gov   | Three times during establishment; every five years for life of tree | Spring 1st season, Fall 1st season, Fall 2nd season |
| Remove stakes and wires   | One time  | One year after planting                             |
| Water tree – first year   | 25 gallons weekly via slow release device                           | April-October                                       |
| Water tree – second & third year  | 25 gallons bi-monthly via slow release device                       | April-October                                       |
| Remove weeds and trash  | Quarterly   | March-November                                      |
| Mulch with 3 inches double ground shredded hardwood mulch. Place mulch in a ring to capture rain water. Mulch shall not be mounded around tree. | Annually or as needed   | February-April                                      |
| If tree pruning is needed, call 311 or 311.dc.gov to request an inspection by UFA.  | As-needed   |   |
| Remove sediment and trash from any inlets and slot drains   | Annually  |   |

|   |               |   |
|---|---------------|---|
| DATE: JUNE 2023   | SCALE: 1"=20' | L3-0.1  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |               |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |               | PROJECT ENG. _____<br>DESIGNED BY _____ GG<br>CHECKED BY _____ JF<br>DRAWN BY _____ GG<br>PROJECT MGR. _____ GG |
| <b>PLANTING NOTES</b>   |               | DIVISION CHIEF _____<br><br>DATE _____<br>FILE _____<br>SHEET 90 OF 160   |

DRILL HOLES

DRILL HOLES

DRILL HOLES

SEALES  
STAKES

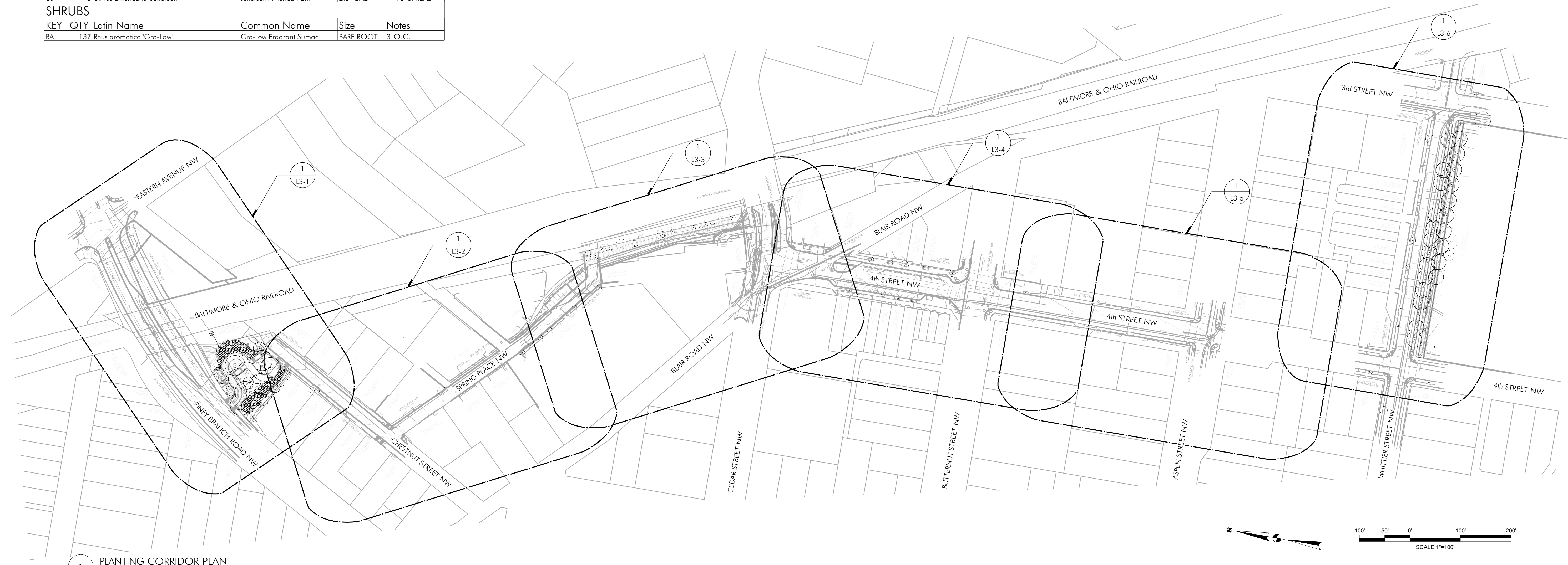
**Plant Schedule**

**TREES**

| KEY | QTY | Latin Name                                    | Common Name              | Size      | Notes                     |
|-----|-----|---|--------------------------|-----------|---------------------------|
| AG  | 3   | Amelanchier x grandiflora 'Autumn Brilliance' | Serviceberry             | 8-10' HT. | ≤ 40' SPREAD; MULTISTEM   |
| CC  | 1   | Cercis canadensis                             | Redbud                   | 8-10' HT. | ≤ 40' SPREAD              |
| CK  | 4   | Cladrastis kentuckea                          | American Yellowwood      | 2.5" CAL. | > 40' SPREAD              |
| CO  | 2   | Celtis occidentalis                           | Hackberry                | 2.5" CAL. | > 40' SPREAD              |
| FG  | 2   | Fagus grandifolia                             | American Beech           | 2.5" CAL. | > 40' SPREAD              |
| MG  | 3   | Metasequoia glyptostroboides                  | Dawn Redwood             | 2.5" CAL. | > 40' SPREAD              |
| MV  | 6   | Magnolia virginiana                           | Sweetbay Magnolia        | 2.5" CAL. | ≤ 40' SPREAD; SINGLE STEM |
| NY  | 4   | Nyssa sylvatica                               | Blackgum                 | 2.5" CAL. | > 40' SPREAD              |
| QP  | 5   | Quercus phellos                               | Willow Oak               | 2.5" CAL. | > 40' SPREAD              |
| TD  | 2   | Taxodium distichum                            | Bald Cypress             | 2.5" CAL. | Taxodium                  |
| UA  | 3   | Ulmus americana 'New Harmony'                 | New Harmony American Elm | 2.5" CAL. | > 40' SPREAD              |
| UJ  | 6   | Ulmus americana 'Jefferson'                   | Jefferson American Elm   | 2.5" CAL. | > 40' SPREAD              |

**SHRUBS**

| KEY | QTY | Latin Name               | Common Name            | Size      | Notes   |
|-----|-----|--------------------------|------------------------|-----------|---------|
| RA  | 137 | Rhus aromatica 'Gro-Low' | Gro-Low Fragrant Sumac | BARE ROOT | 3' O.C. |



1 PLANTING CORRIDOR PLAN  
Scale: 1" = 100'-0"

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION

**MKSK**

714 7th Street SE  
Washington, DC 20003  
202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |                |   |
|---|----------------|---|
| DATE: JUNE 2023   | SCALE: 1"=100' | L3-0.2  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                | PROJECT ENG. _____<br>DESIGNED BY GG<br>CHECKED BY JF<br>DRAWN BY GG<br>PROJECT MGR. GG |
| PLANTING<br>CORRIDOR PLAN   |                | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 91 OF 160                     |

DRILL HOLES

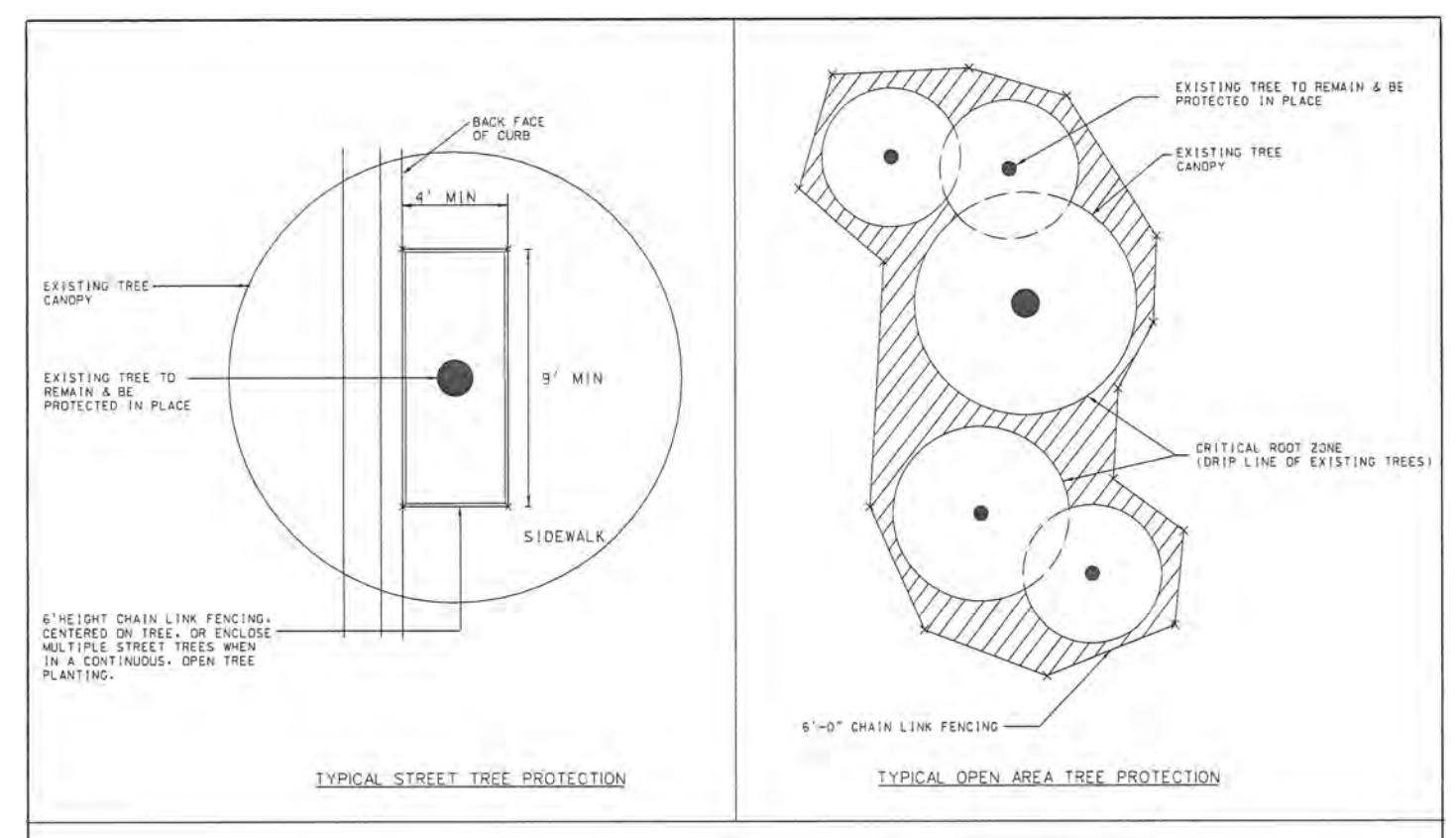
DRILL HOLES

DRILL HOLES

FILES  
SDATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 92        | 160          |

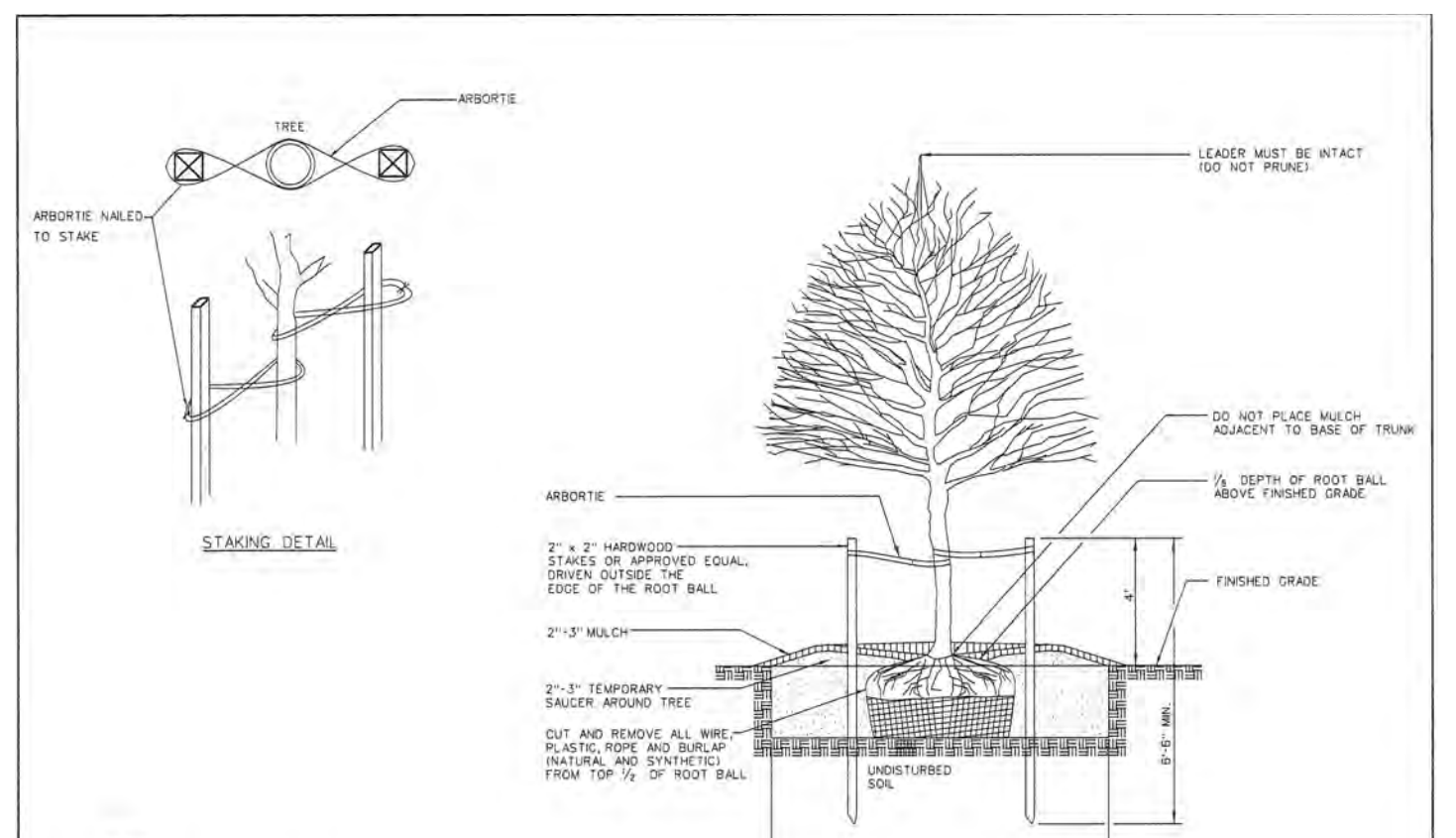
DRILL HOLES



**TREE PROTECTION FENCE - PLAN VIEW**

ISSUED: 8/2015  
 REVISION: APPROVAL  
 PROJECT: METROPOLITAN BRANCH TRAIL  
 PROJECT MANAGER: Adil Raza  
 CHECKED BY: Mohammed Khalid  
 APPROVED BY: Mohammed Khalid

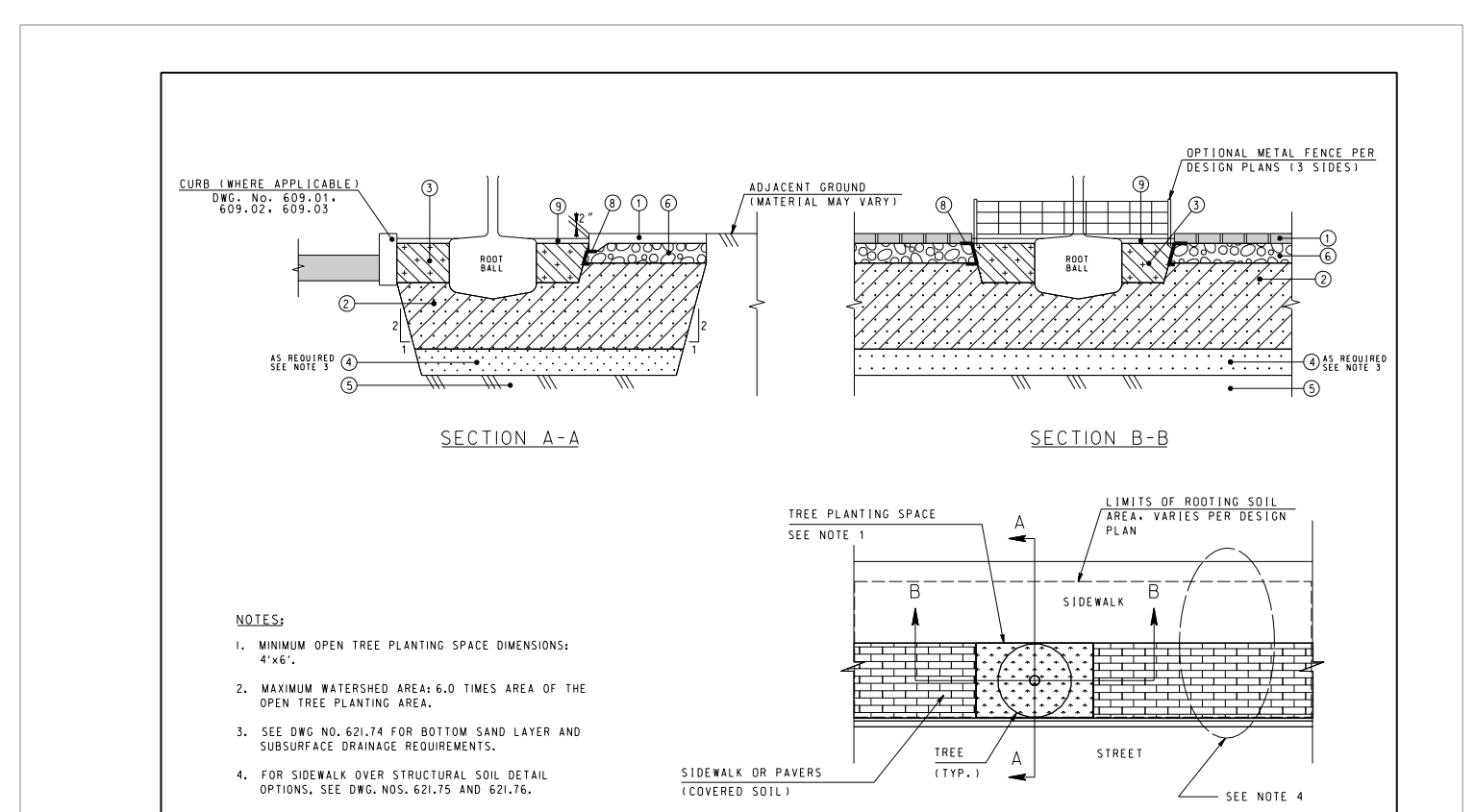
DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION  
 D.W.G. NO. 608.11



**STANDARD PLANTING DETAILS DECIDUOUS TREE**

ISSUED: 8/2015  
 REVISION: APPROVAL  
 PROJECT: METROPOLITAN BRANCH TRAIL  
 PROJECT MANAGER: Adil Raza  
 CHECKED BY: Mohammed Khalid  
 APPROVED BY: Mohammed Khalid

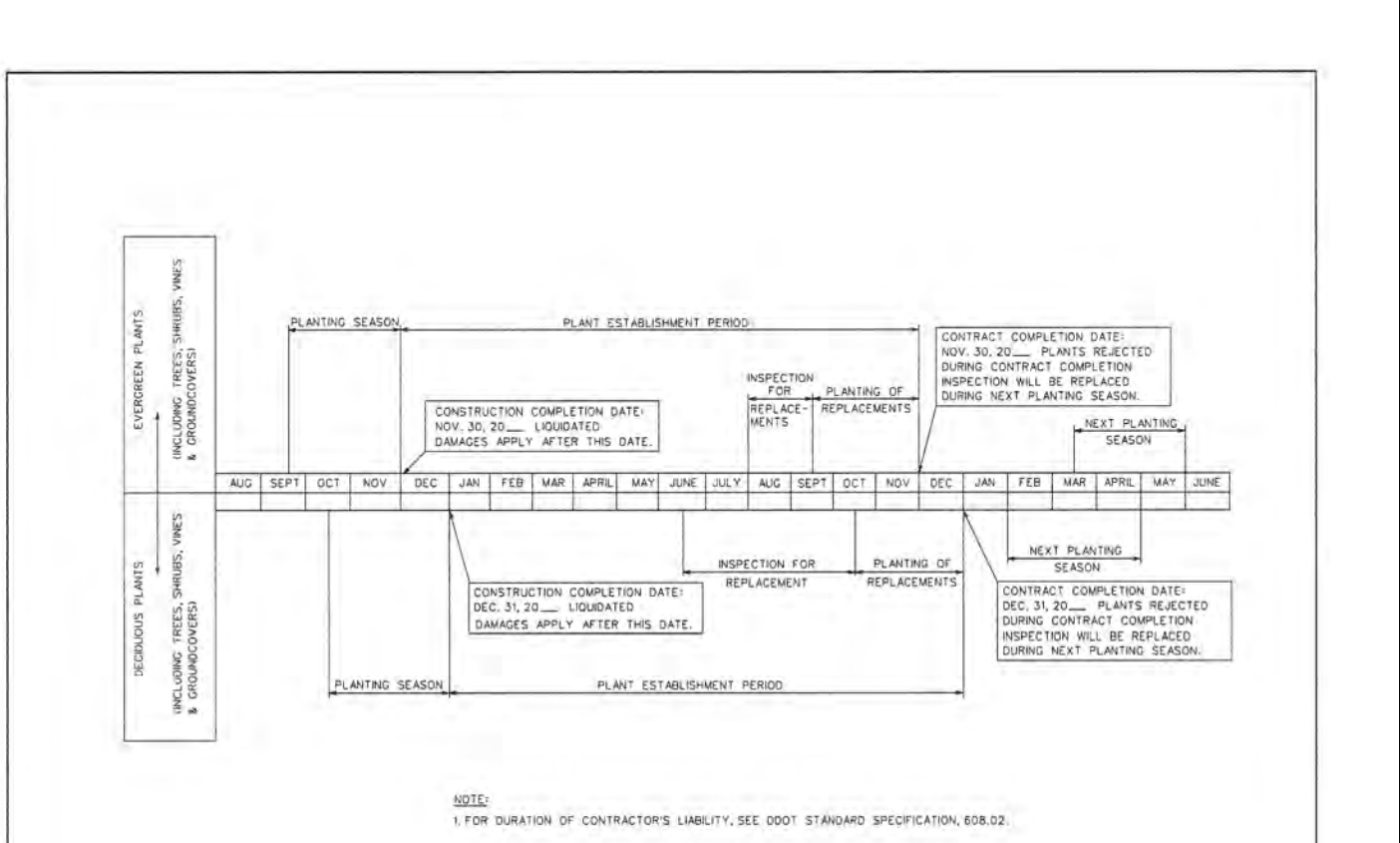
DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION  
 D.W.G. NO. 608.03



**STRUCTURAL SOIL UNDER SIDEWALK - COVERED TREE SPACE**

ISSUED: 8/2015  
 REVISION: APPROVAL  
 PROJECT: METROPOLITAN BRANCH TRAIL  
 PROJECT MANAGER: Adil Raza  
 CHECKED BY: Mohammed Khalid  
 APPROVED BY: Mohammed Khalid

DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION  
 D.W.G. NO. 621.70

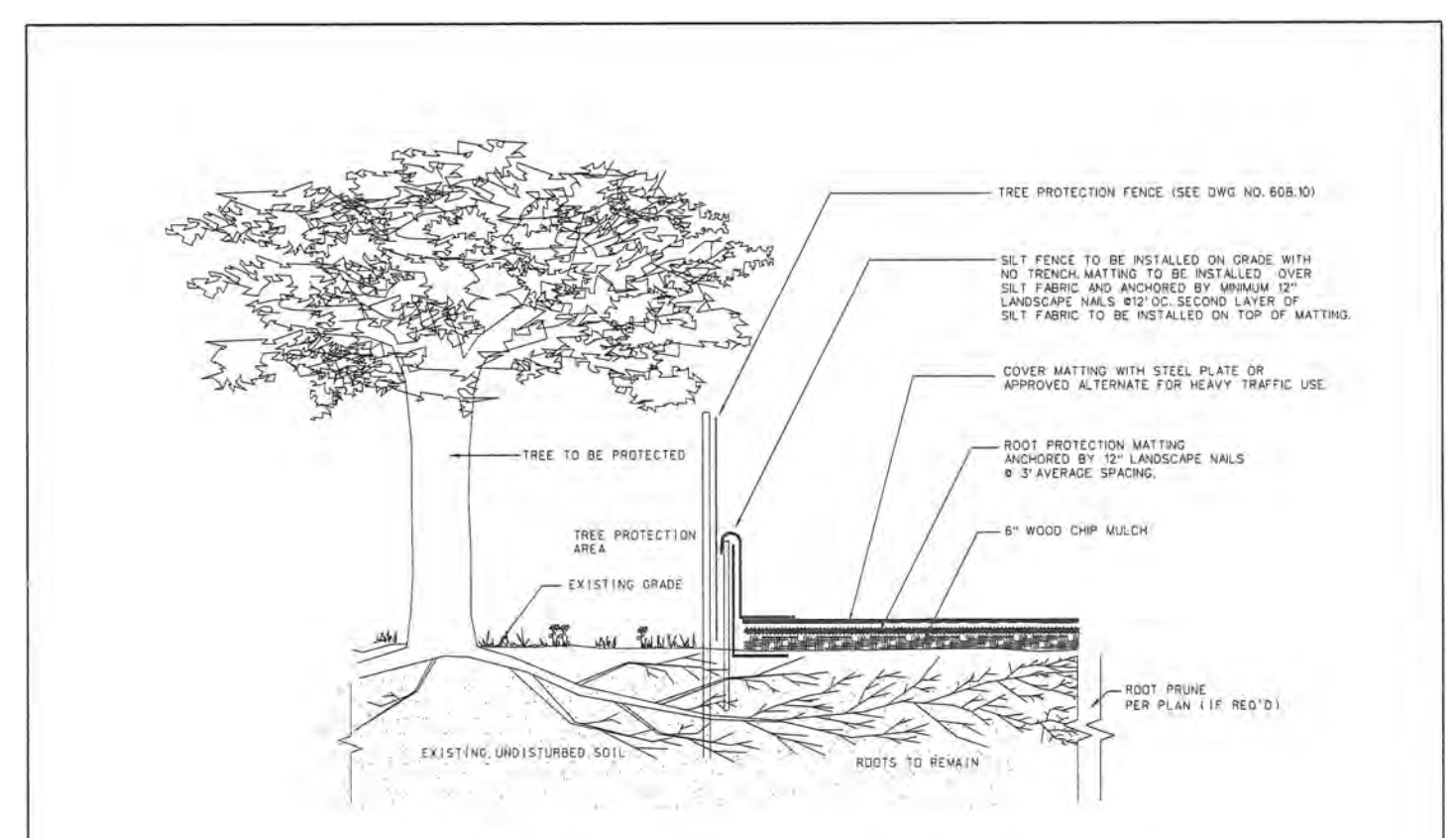


**PLANTING & PLANT ESTABLISHMENT PERIODS FALL PLANTING SEASON**

ISSUED: 8/2015  
 REVISION: APPROVAL  
 PROJECT: METROPOLITAN BRANCH TRAIL  
 PROJECT MANAGER: Adil Raza  
 CHECKED BY: Mohammed Khalid  
 APPROVED BY: Mohammed Khalid

DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION  
 D.W.G. NO. 608.09

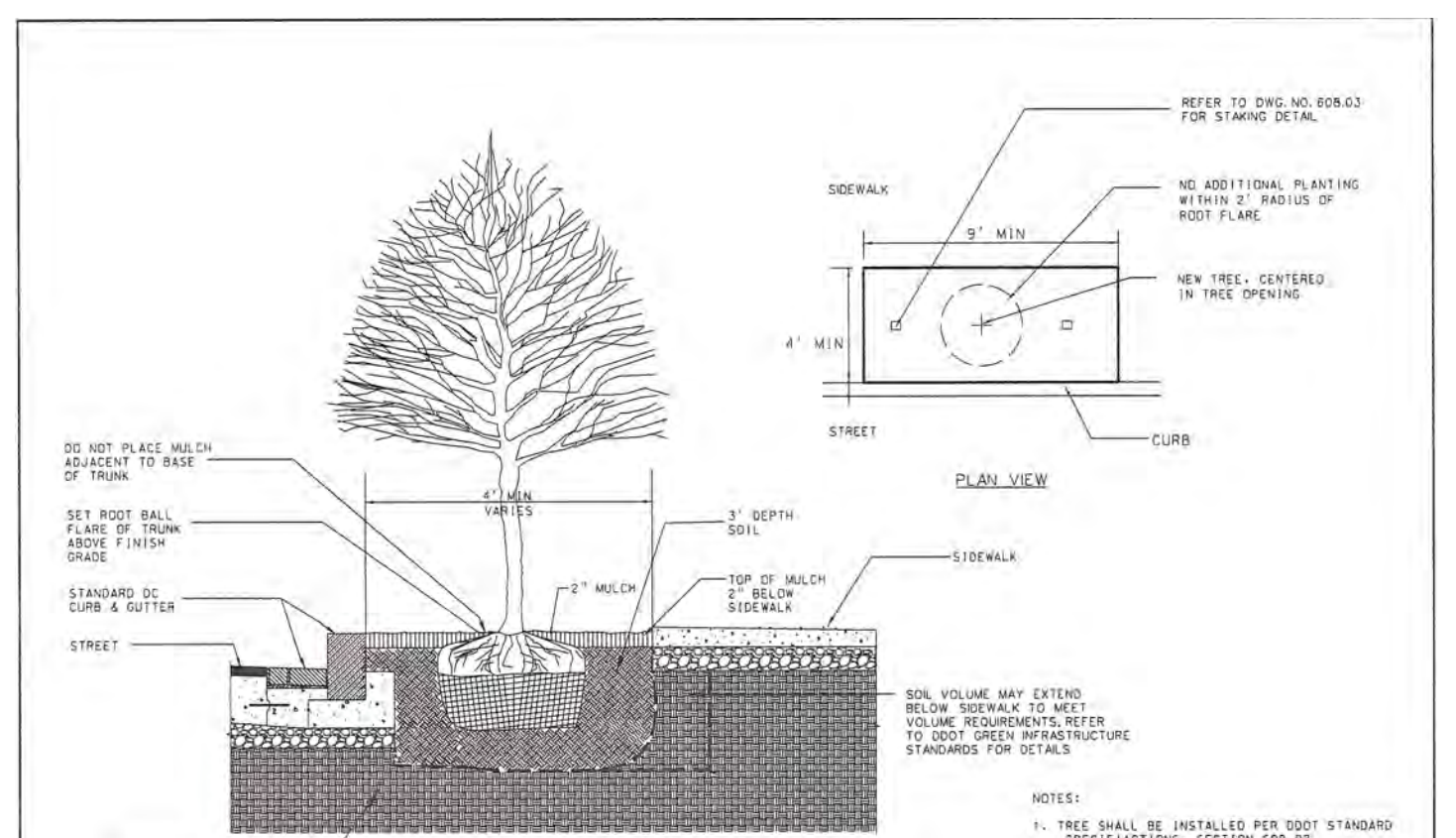
DRILL HOLES



**TREE ROOT PROTECTION W/SILT FENCE**

ISSUED: 8/2015  
 REVISION: APPROVAL  
 PROJECT: METROPOLITAN BRANCH TRAIL  
 PROJECT MANAGER: Adil Raza  
 CHECKED BY: Mohammed Khalid  
 APPROVED BY: Mohammed Khalid

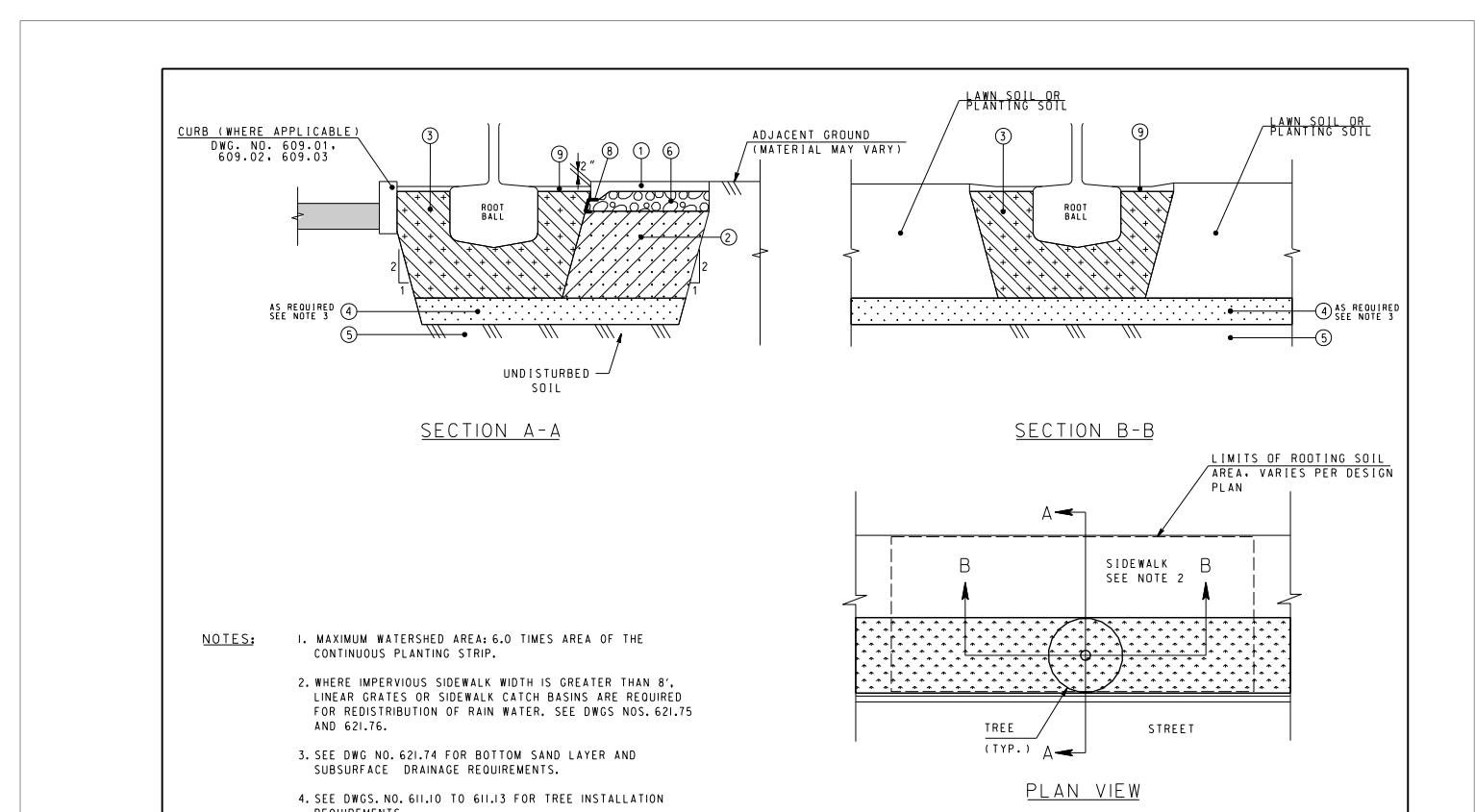
DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION  
 D.W.G. NO. 608.12



**STANDARD PLANTING DETAILS STREET TREE**

ISSUED: 8/2015  
 REVISION: APPROVAL  
 PROJECT: METROPOLITAN BRANCH TRAIL  
 PROJECT MANAGER: Adil Raza  
 CHECKED BY: Mohammed Khalid  
 APPROVED BY: Mohammed Khalid

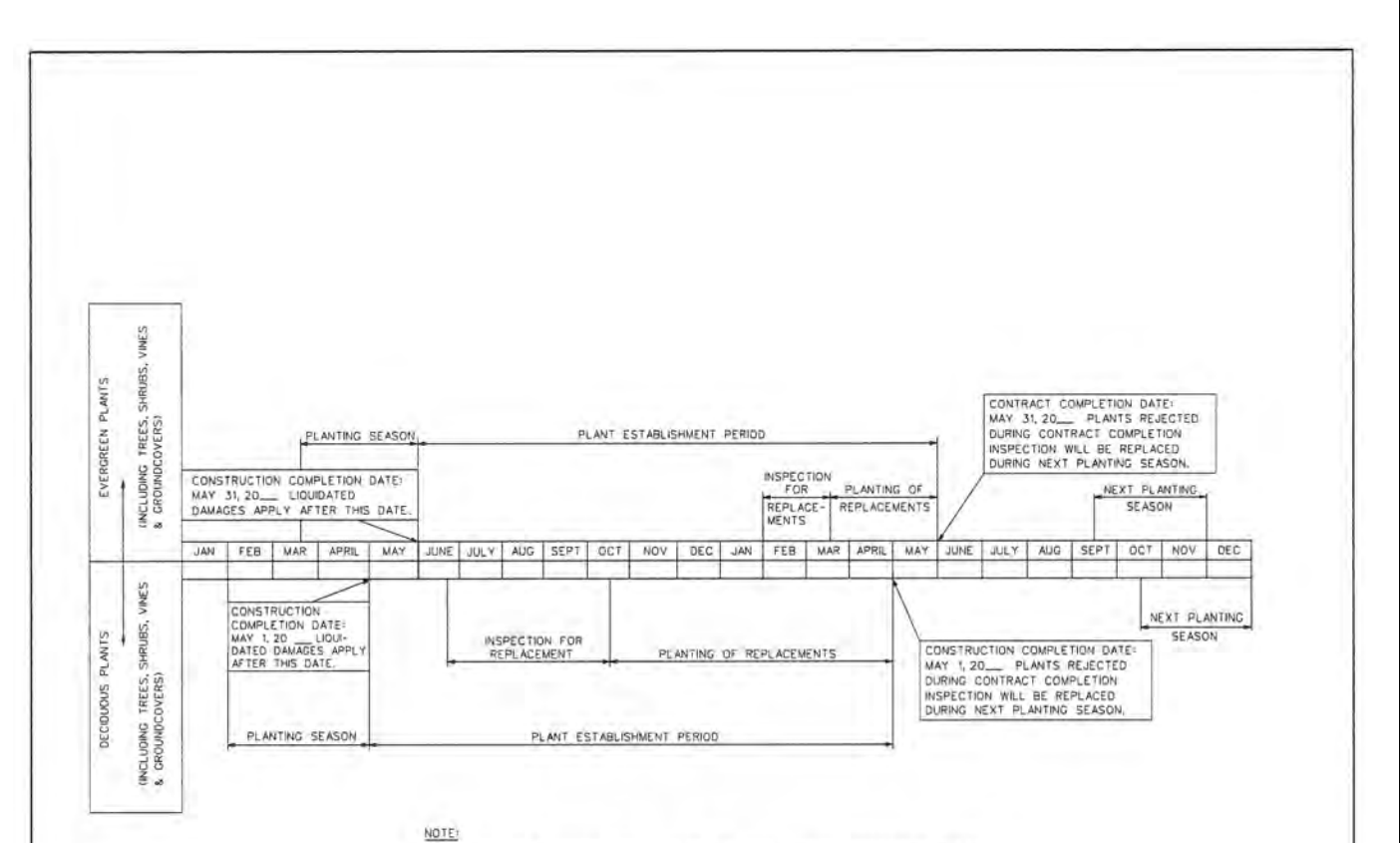
DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION  
 D.W.G. NO. 608.02



**STRUCTURAL SOIL UNDER SIDEWALK - CONTINUOUS OPEN TREE SPACE**

ISSUED: 8/2015  
 REVISION: APPROVAL  
 PROJECT: METROPOLITAN BRANCH TRAIL  
 PROJECT MANAGER: Adil Raza  
 CHECKED BY: Mohammed Khalid  
 APPROVED BY: Mohammed Khalid

DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION  
 D.W.G. NO. 621.71

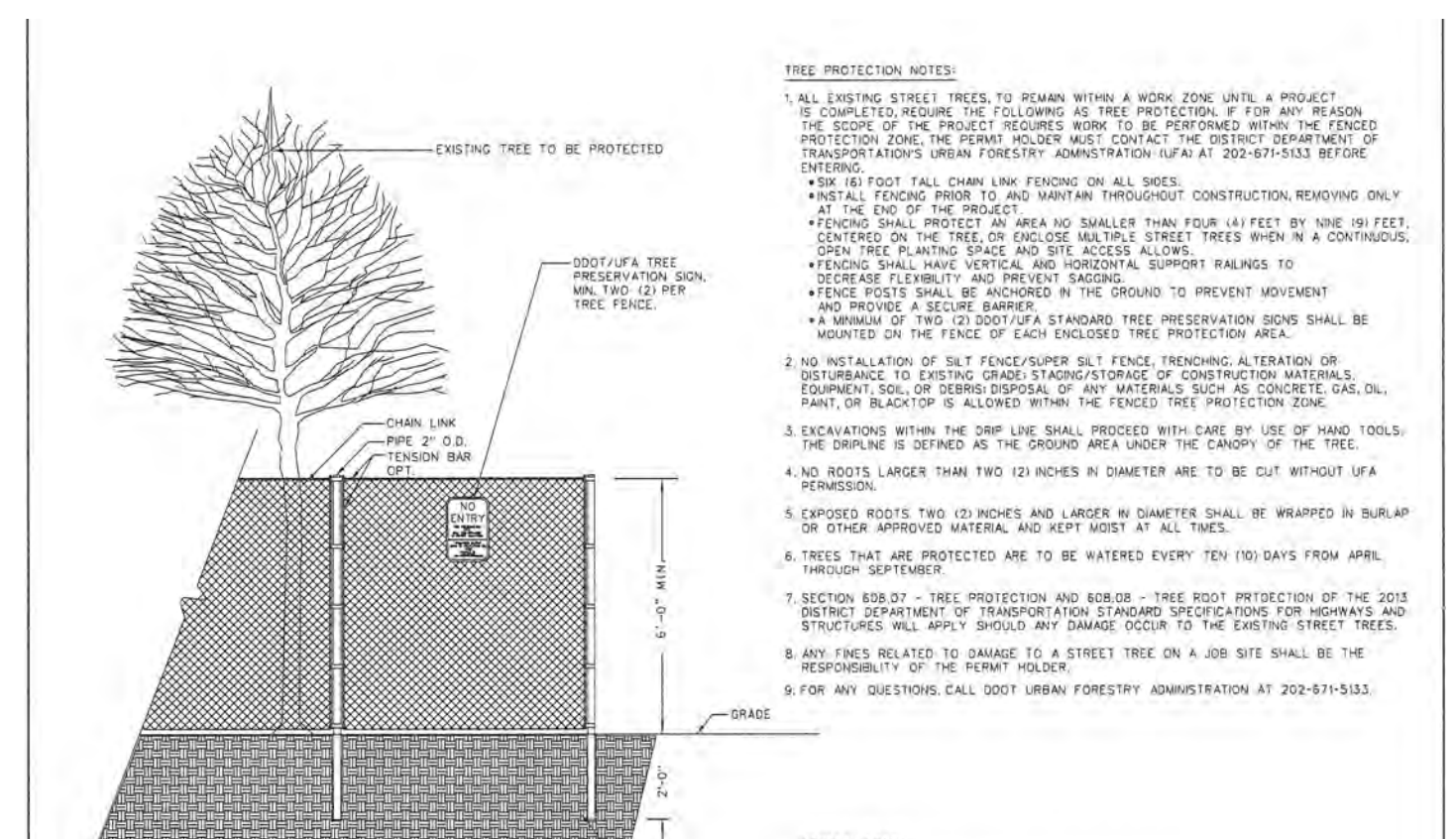


**PLANTING & PLANT ESTABLISHMENT PERIODS SPRING PLANTING SEASON**

ISSUED: 8/2015  
 REVISION: APPROVAL  
 PROJECT: METROPOLITAN BRANCH TRAIL  
 PROJECT MANAGER: Adil Raza  
 CHECKED BY: Mohammed Khalid  
 APPROVED BY: Mohammed Khalid

DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION  
 D.W.G. NO. 608.08

DRILL HOLES



**TREE PROTECTION FENCE - ELEVATION**

ISSUED: 8/2015  
 REVISION: APPROVAL  
 PROJECT: METROPOLITAN BRANCH TRAIL  
 PROJECT MANAGER: Adil Raza  
 CHECKED BY: Mohammed Khalid  
 APPROVED BY: Mohammed Khalid

DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION  
 D.W.G. NO. 608.10

65% DESIGN SUBMITTAL NOT FOR CONSTRUCTION

**MKSK**

714 7th Street SE  
 Washington, DC 20003  
 202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

DATE: JUNE 2023 SCALE: L3-0.3

D.C. DEPARTMENT OF TRANSPORTATION  
 INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
 DESIGN

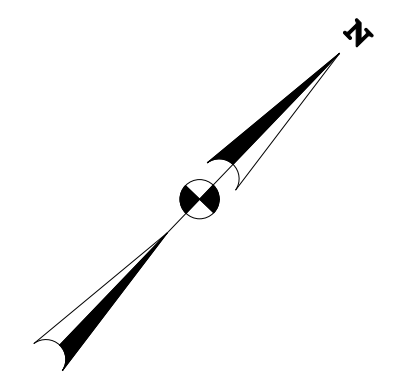
PLANTING NOTES & SCHEDULE

PROJECT ENG. G.G.  
 DESIGNED BY G.G.  
 CHECKED BY J.F.  
 DRAWN BY G.G.  
 PROJECT MGR. G.G.

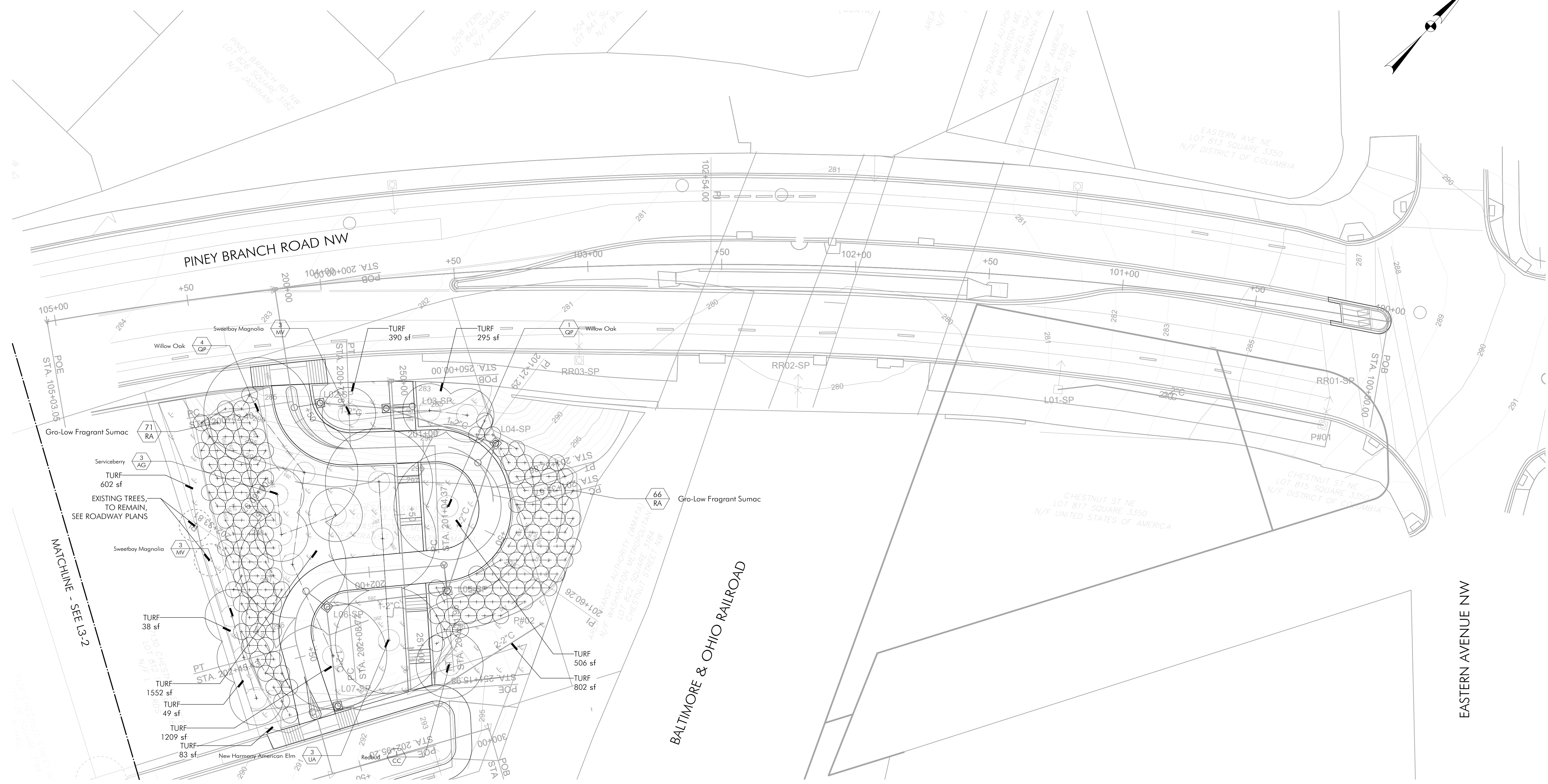
DIVISION CHIEF  
 DATE  
 FILE  
 SHEET 92 OF 160

FILES  
 SDATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
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| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 93        | 160          |

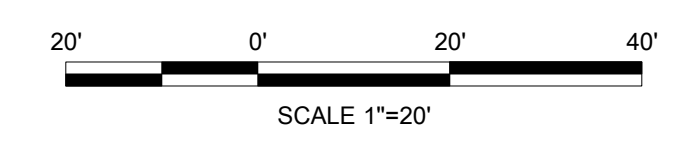


DRILL HOLES



1 PLANTING PLAN  
Scale: 1" = 20'-0"

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION



DATE: JUNE 2023      SCALE: 1"=20'      L3-1

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

PLANTING PLAN

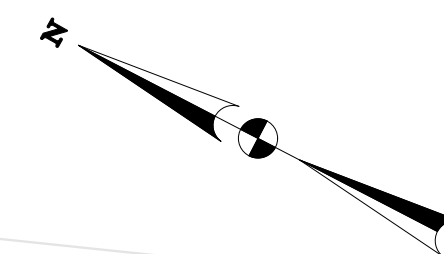
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DESIGNED BY: GG  
CHECKED BY: JF  
DRAWN BY: GG  
PROJECT MGR: GG  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 93 OF 160

**MKSK**  
714 7th Street SE  
Washington, DC 20003  
202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
|           |             |      |      |
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|           |             |      |      |

FILES  
SDATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 94        | 160          |



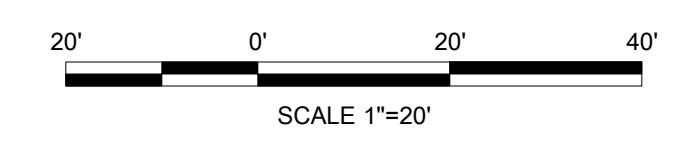
DRILL HOLES

DRILL HOLES

DRILL HOLES

1 PLANTING PLAN  
Scale: 1" = 20'-0"

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION



DATE: JUNE 2023      SCALE: 1"=20'      L3-2

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

PLANTING PLAN

PROJECT ENG. \_\_\_\_\_  
DESIGNED BY GG  
CHECKED BY JF  
DRAWN BY GG  
PROJECT MGR. GG  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 94 OF 160

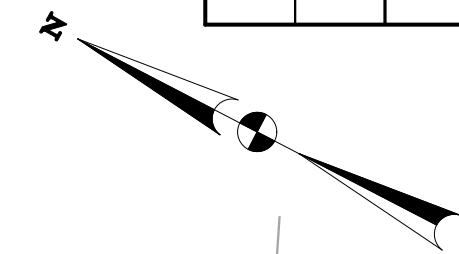
**MKSK**

714 7th Street SE  
Washington, DC 20003  
202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
|           |             |      |      |
|           |             |      |      |
|           |             |      |      |

FILES  
SDATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 95        | 160          |

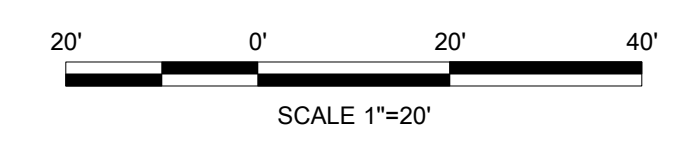


DRILL HOLES



1 PLANTING PLAN  
Scale: 1" = 20'-0"

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION



DATE: JUNE 2023      SCALE: 1"=20'      L3-3

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

PLANTING PLAN

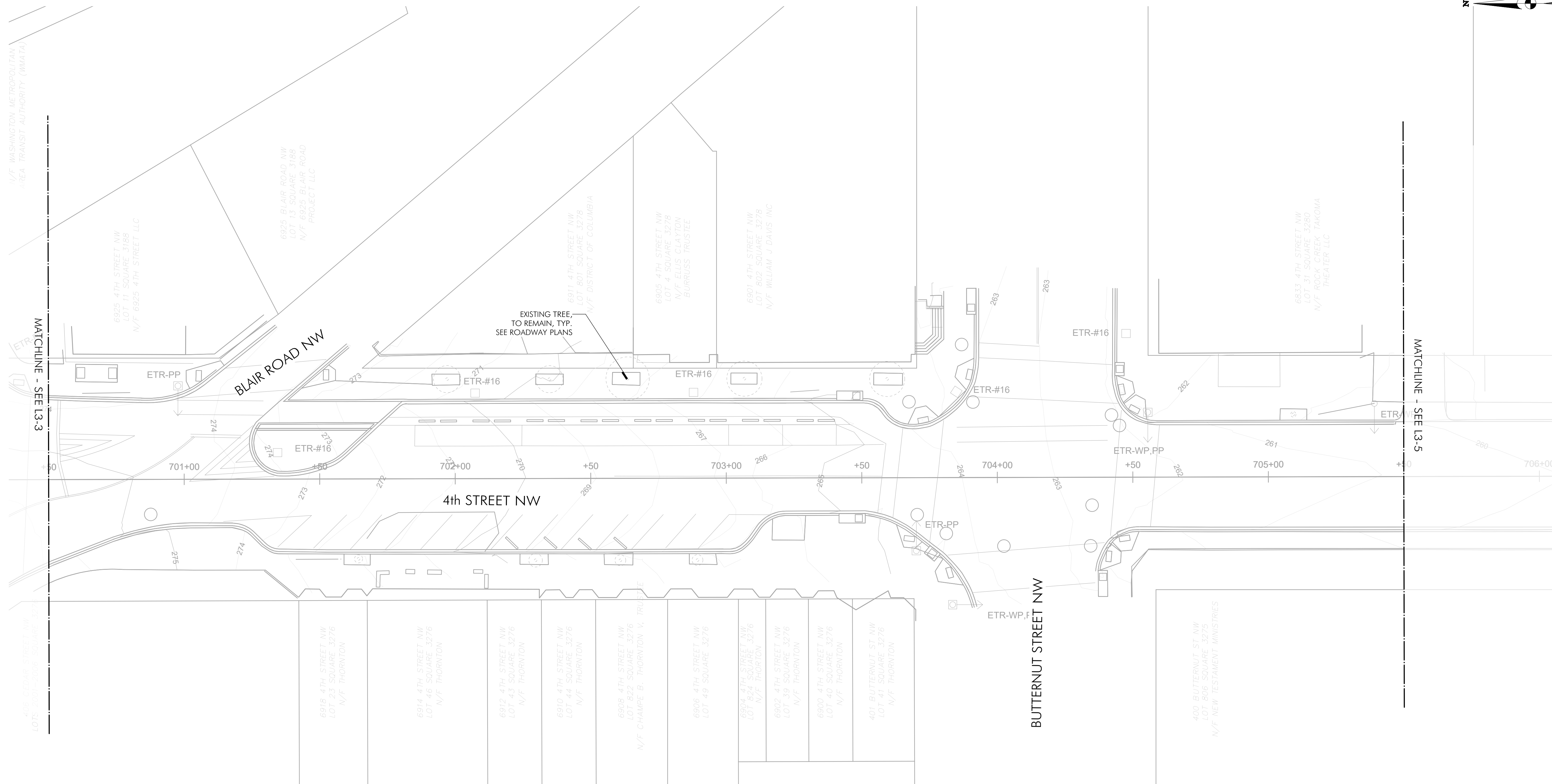
PROJECT ENG. \_\_\_\_\_  
DESIGNED BY: GG  
CHECKED BY: JF  
DRAWN BY: GG  
PROJECT MGR: GG  
DIVISION CHIEF  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 95 OF 160

**MKSK**  
714 7th Street SE  
Washington, DC 20003  
202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
|           |             |      |      |
|           |             |      |      |

FILES  
SDATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 96        | 160          |



DRILL HOLES

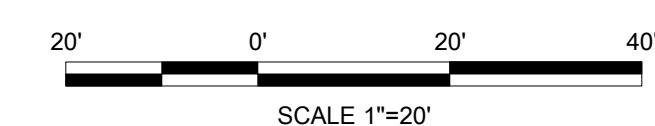
DRILL HOLES

DRILL HOLES

FILES  
SDATES

1 PLANTING PLAN  
Scale: 1" = 20'-0"

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION

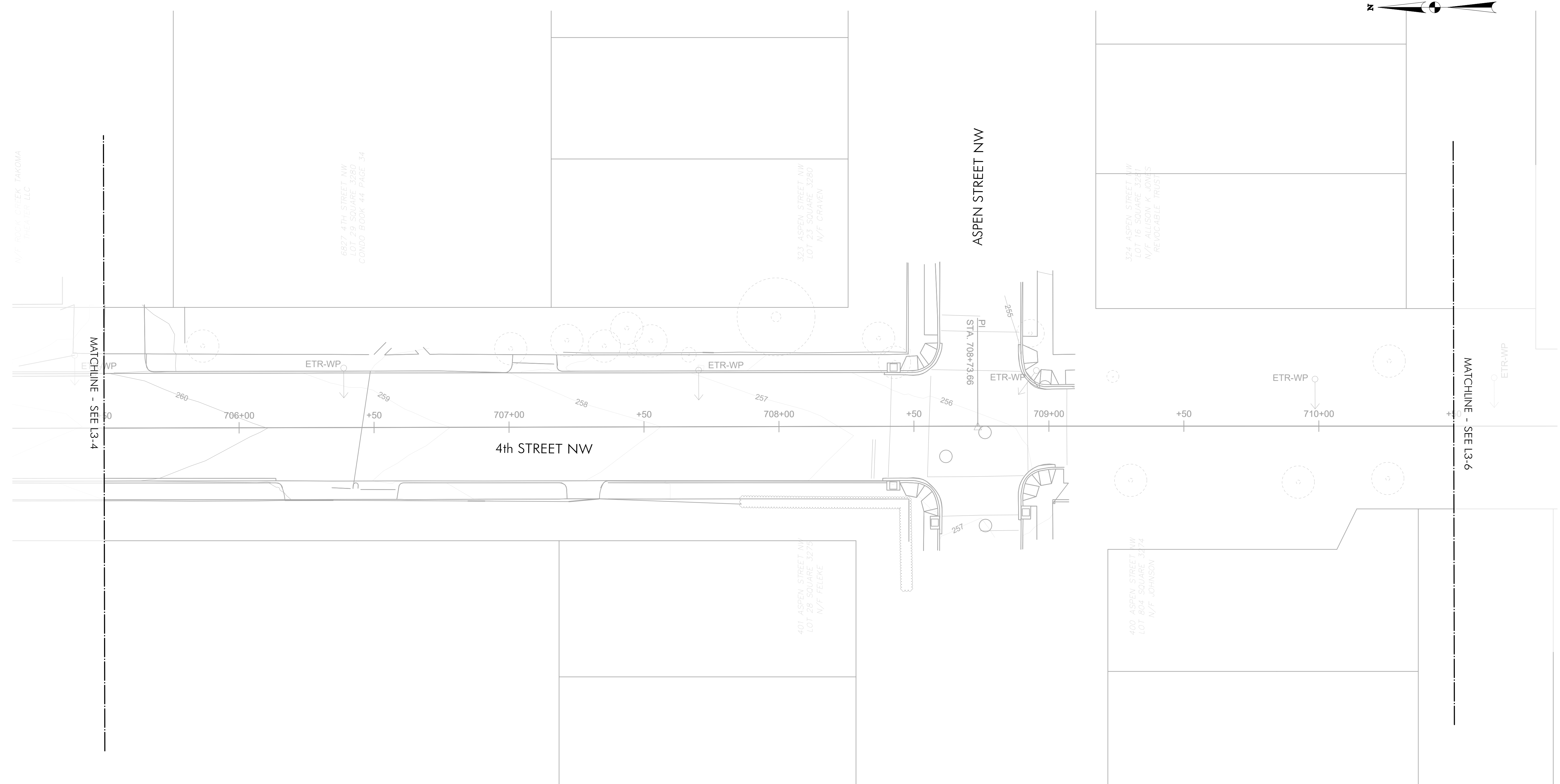
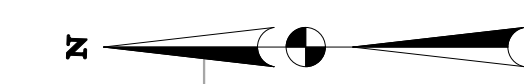


|   |               |  |
|---|---------------|--|
| DATE: JUNE 2023   | SCALE: 1"=20' | L3-4   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |               |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |               | PROJECT ENG. _____<br>DESIGNED BY: GG<br>CHECKED BY: JF<br>DRAWN BY: GG<br>PROJECT MGR: GG |
| PLANTING PLAN   |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 96 OF 160                        |

|             |   |             |           |
|-------------|---|-------------|-----------|
| <b>MKSK</b> | 714 7th Street SE<br>Washington, DC 20003<br>202.543.6550 |             |           |
|             | NO.   | DESCRIPTION | NAME DATE |
| REVISIONS   |   |             |           |



| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 97        | 160          |



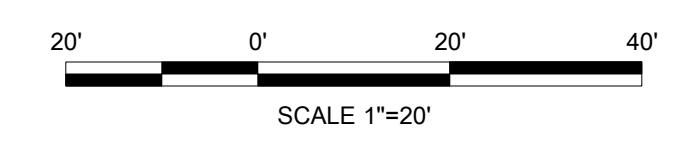
DRILL HOLES

DRILL HOLES

DRILL HOLES

1 PLANTING PLAN  
Scale: 1" = 20'-0"

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION



DATE: JUNE 2023      SCALE: 1"=20'      L3-5

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

PLANTING PLAN

PROJECT ENG. \_\_\_\_\_  
DESIGNED BY GG  
CHECKED BY JF  
DRAWN BY GG  
PROJECT MGR GG  
DIVISION CHIEF  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 97 OF 160

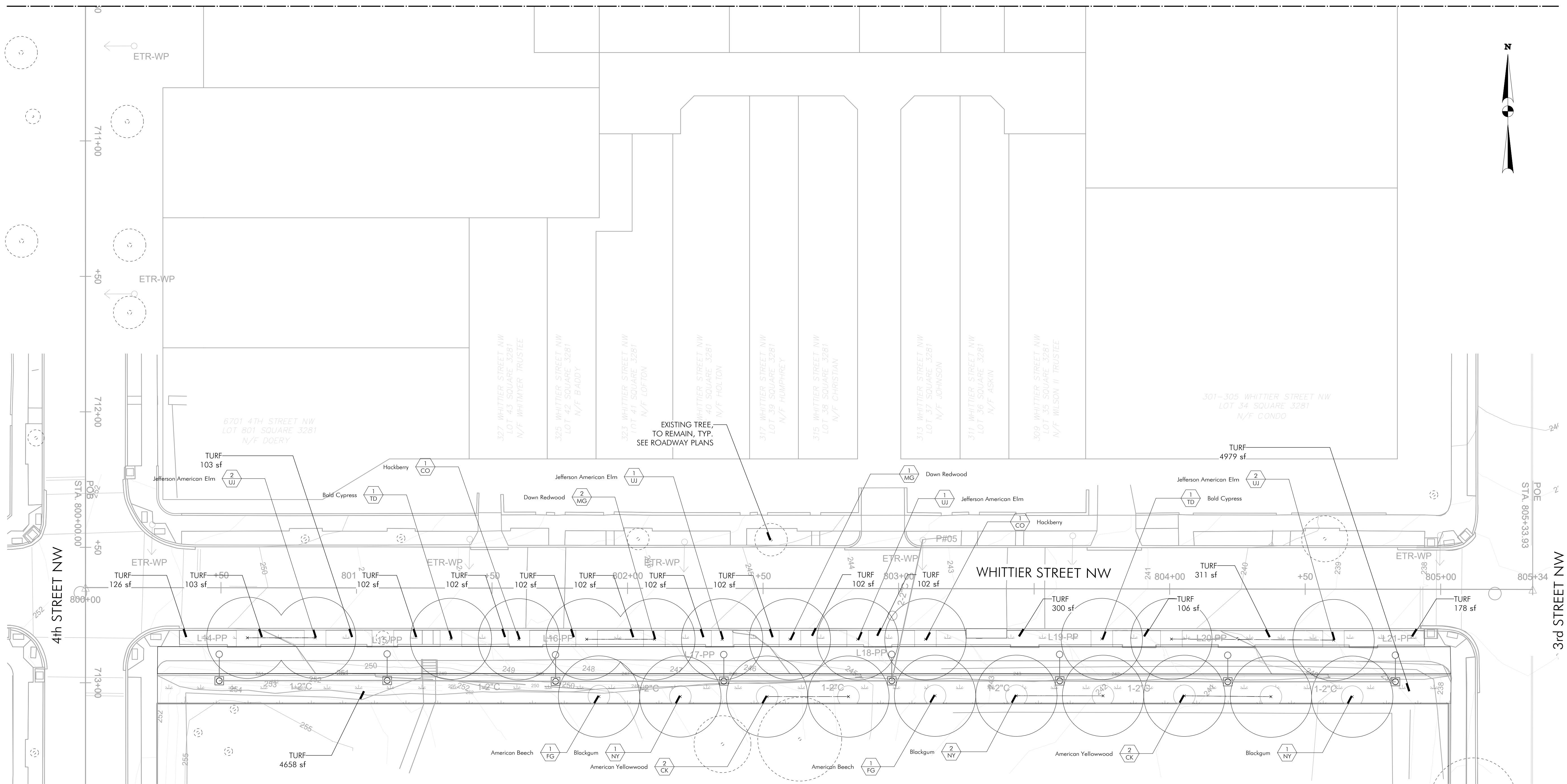
**MKSK**  
714 7th Street SE  
Washington, DC 20003  
202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
|           |             |      |      |
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SEALS  
SDATES

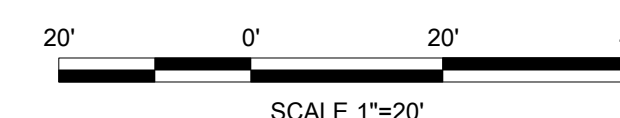
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 98        | 160          |

MATCHLINE - SEE L3-5



1 PLANTING PLAN  
Scale: 1" = 20'-0"

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION



|   |               |   |
|---|---------------|---|
| DATE: JUNE 2023   | SCALE: 1"=20' | L3-6  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |               |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |               | PROJECT ENG. _____<br>DESIGNED BY GG<br>CHECKED BY JF<br>DRAWN BY GG<br>PROJECT MGR. GG |
| PLANTING PLAN   |               | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 98 OF 160                     |

|  |           |             |      |      |
|--|-----------|-------------|------|------|
| <b>MKSK</b><br>714 7th Street SE<br>Washington, DC 20003<br>202.543.6550 | NO.       | DESCRIPTION | NAME | DATE |
|  | REVISIONS |             |      |      |

DRILL HOLES

DRILL HOLES

DRILL HOLES

FILES  
DATES

**SOIL VOLUME CALCULATIONS**

**SOIL AREA 1**  
 REQUIRED SOIL VOLUME (CF): 10,575  
 5 LARGE TREES: 1,500 EACH, 25% SHARED = 1,125 EACH X 5 = 5,625  
 2 EXISTING LARGE TREES: 1,500 EACH, 25% SHARED = 1,125 EACH X 2 = 2,250  
 6 SMALL TREES: 600 EACH, 25% SHARED = 450 EACH X 6 = 2,700  
 AVAILABLE SOIL VOLUME (CF): 15,804  
 ADJACENT SOILS AVAILABLE? YES  
 SHEET NUMBER: L4-1

**SOIL AREA 2**  
 REQUIRED SOIL VOLUME (CF): 600  
 1 SMALL TREE: 600  
 AVAILABLE SOIL VOLUME (CF): 1,380  
 ADJACENT SOILS AVAILABLE? NO  
 SHEET NUMBER: L4-1

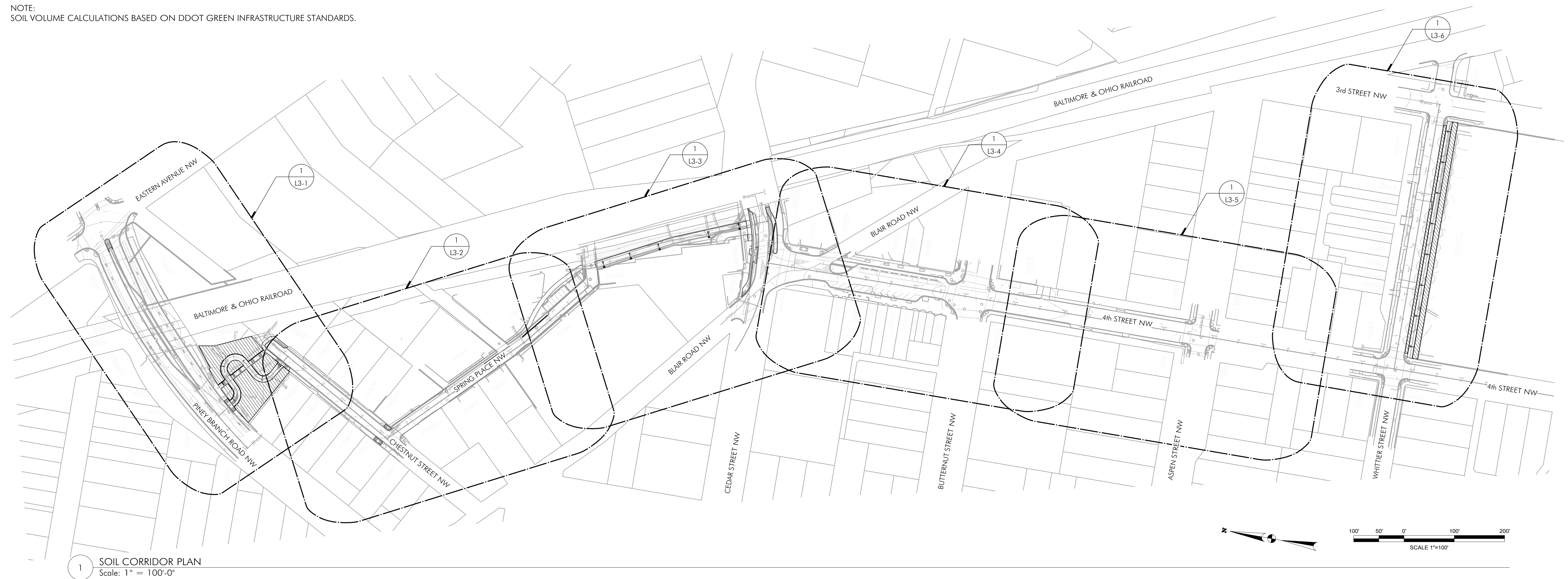
**SOIL AREA 3**  
 REQUIRED SOIL VOLUME (CF): 2,250  
 2 LARGE TREES: 1,500 EACH, 25% SHARED = 1,125 EACH X 2 = 2,250  
 AVAILABLE SOIL VOLUME (CF): 3,987  
 ADJACENT SOILS AVAILABLE? NO  
 SHEET NUMBER: L4-1

**SOIL AREA 4**  
 REQUIRED SOIL VOLUME (CF): 1,500  
 1 LARGE TREE: 1,500  
 AVAILABLE SOIL VOLUME (CF): 1,668  
 ADJACENT SOILS AVAILABLE? NO  
 SHEET NUMBER: L4-1

**SOIL AREA 5**  
 REQUIRED SOIL VOLUME (CF): 1,350  
 3 SMALL TREES: 600 EACH, 25% SHARED = 450 EACH X 3 = 1,350  
 AVAILABLE SOIL VOLUME (CF): 13,611  
 ADJACENT SOILS AVAILABLE? YES  
 SHEET NUMBER: L4-1

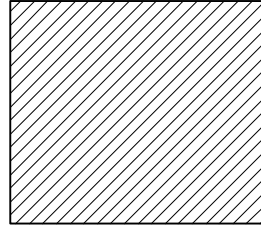
**SOIL AREA 6**  
 REQUIRED SOIL VOLUME (CF): 22,500  
 12 LARGE TREES: 1,500 EACH, 25% SHARED = 1,125 EACH X 12 = 13,500  
 11 MEDIUM TREES: 1,000 EACH, 25% SHARED = 750 EACH X 11 = 8,250  
 1 EXISTING MEDIUM TREE: 1,000 EACH, 25% SHARED = 750 EACH X 1 = 750  
 AVAILABLE SOIL VOLUME (CF): 30,774  
 STRUCTURAL SOIL (CF): 8,205  
 PLANT BED SOIL (CF): 22,569  
 ADJACENT SOILS AVAILABLE? YES  
 SHEET NUMBER: L4-6

NOTE:  
 SOIL VOLUME CALCULATIONS BASED ON DDOT GREEN INFRASTRUCTURE STANDARDS.



1 SOIL CORRIDOR PLAN  
 Scale: 1" = 100'-0"

**SOIL LEGEND**

|   |                               |   |
|---|-------------------------------|---|
|  | PLANT BED SOIL<br>1'-0" DEPTH | SAND-BASED STRUCTURAL SOIL<br>2'-6" DEPTH |
|---|-------------------------------|---|

65% DESIGN SUBMITTAL  
 NOT FOR CONSTRUCTION

**MKSK**

714 7th Street SE  
 Washington, DC 20003  
 202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

DATE: JUNE 2023      SCALE: 1"=20'      L4-0

D.C. DEPARTMENT OF TRANSPORTATION  
 INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
 DESIGN

SOILS NOTES

PROJECT ENG. \_\_\_\_\_  
 DESIGNED BY: GG  
 CHECKED BY: JF  
 DRAWN BY: GG  
 PROJECT MGR: GG  
 DIVISION CHIEF \_\_\_\_\_  
 DATE \_\_\_\_\_  
 FILE \_\_\_\_\_  
 SHEET 99 OF 160

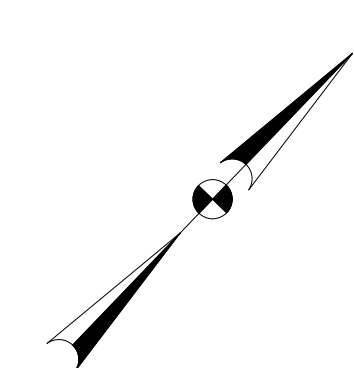
DRILL HOLES

DRILL HOLES

DRILL HOLES

FILES  
 STATES

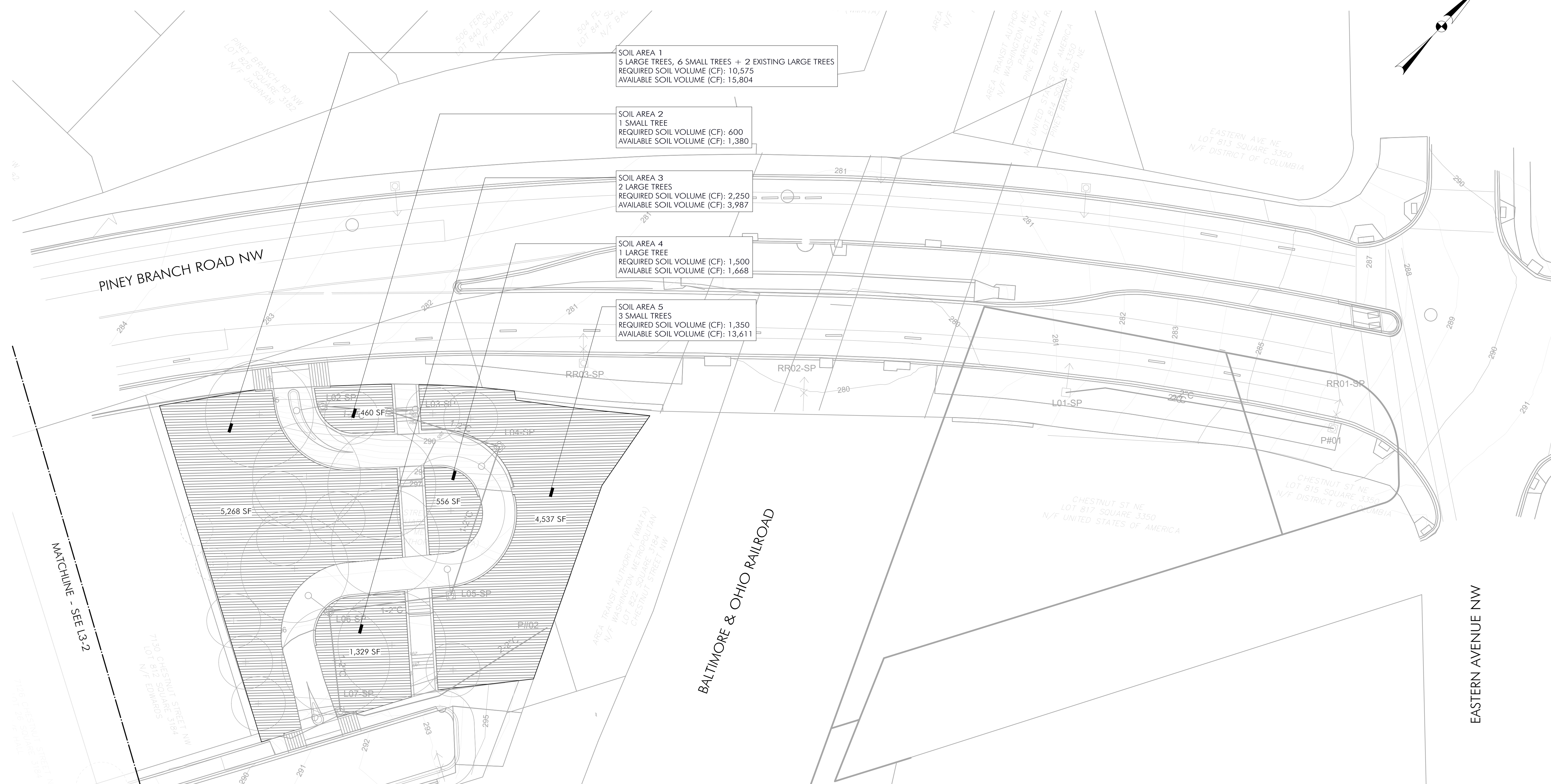
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 100       | 160          |



DRILL HOLES

DRILL HOLES

DRILL HOLES



SOIL AREA 1  
5 LARGE TREES, 6 SMALL TREES + 2 EXISTING LARGE TREES  
REQUIRED SOIL VOLUME (CF): 10,575  
AVAILABLE SOIL VOLUME (CF): 15,804

SOIL AREA 2  
1 SMALL TREE  
REQUIRED SOIL VOLUME (CF): 600  
AVAILABLE SOIL VOLUME (CF): 1,380

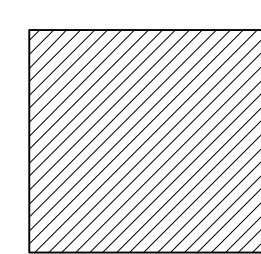
SOIL AREA 3  
2 LARGE TREES  
REQUIRED SOIL VOLUME (CF): 2,250  
AVAILABLE SOIL VOLUME (CF): 3,987

SOIL AREA 4  
1 LARGE TREE  
REQUIRED SOIL VOLUME (CF): 1,500  
AVAILABLE SOIL VOLUME (CF): 1,668

SOIL AREA 5  
3 SMALL TREES  
REQUIRED SOIL VOLUME (CF): 1,350  
AVAILABLE SOIL VOLUME (CF): 13,611

1 SOILS PLAN  
Scale: 1" = 20'-0"

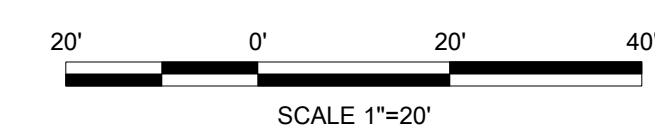
SOIL LEGEND



PLANT BED SOIL  
1'-0" DEPTH

SAND-BASED STRUCTURAL SOIL  
2'-6" DEPTH

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION



DATE: JUNE 2023      SCALE: 1"=20'      L4-1

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

PROJECT ENG. \_\_\_\_\_  
DESIGNED BY: GG  
CHECKED BY: JF  
DRAWN BY: GG  
PROJECT MGR: GG

SOILS PLAN

DIVISION CHIEF \_\_\_\_\_  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 100 OF 160

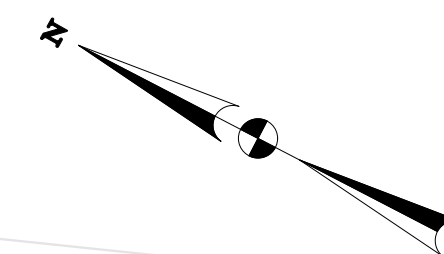
**MKSK**

714 7th Street SE  
Washington, DC 20003  
202.543.6550

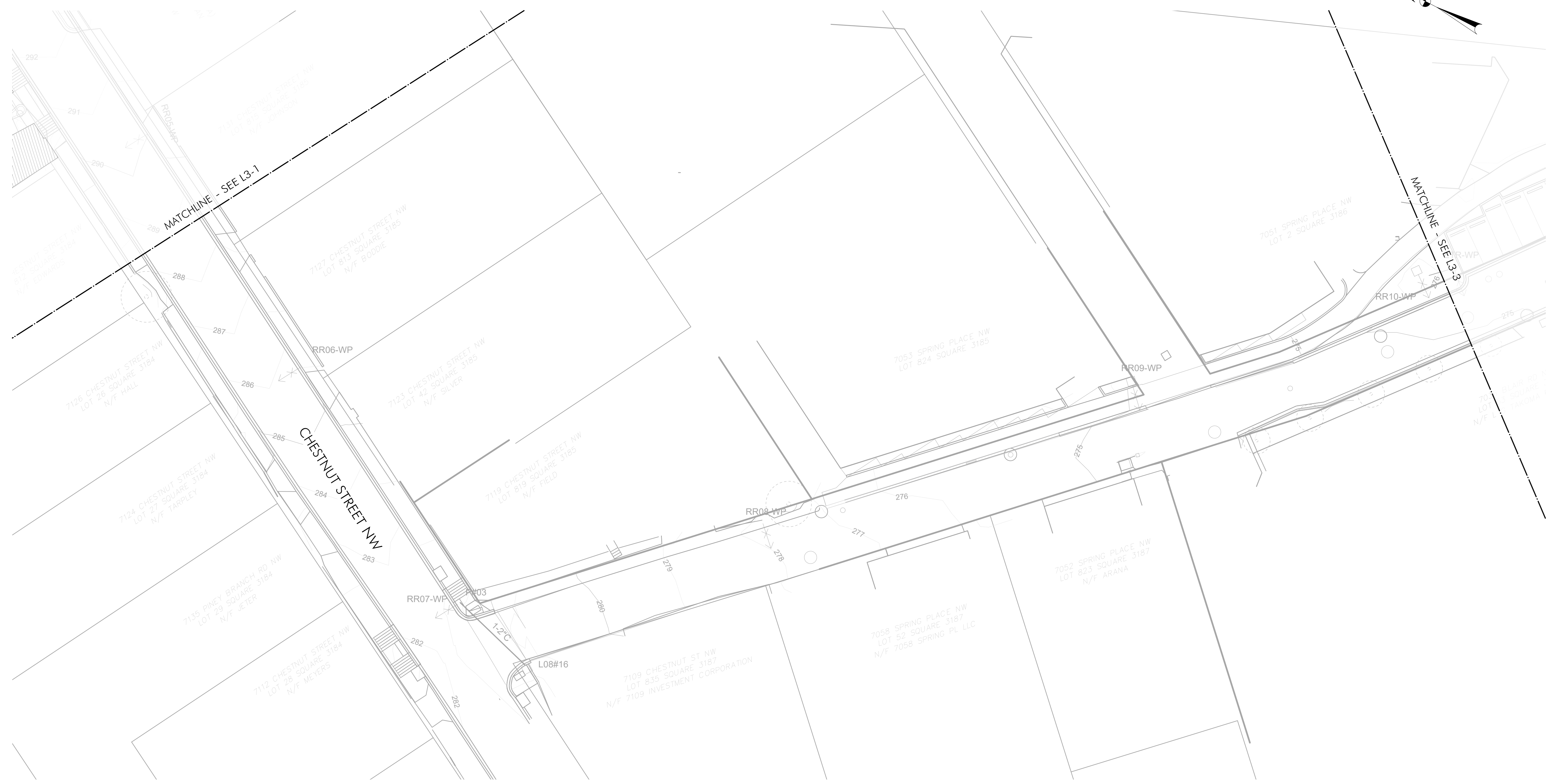
| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
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|           |             |      |      |

SOILS  
STATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 101       | 160          |

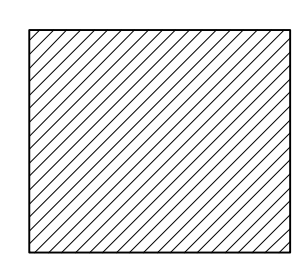


DRILL HOLES



1 SOILS PLAN  
Scale: 1" = 20'-0"

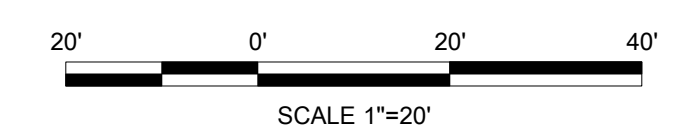
**SOIL LEGEND**



PLANT BED SOIL  
1'-0" DEPTH

SAND-BASED STRUCTURAL SOIL  
2'-6" DEPTH

**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**



DATE: JUNE 2023      SCALE: 1"=20'      L4-2

**D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION**

**METROPOLITAN BRANCH TRAIL  
DESIGN**

**SOILS PLAN**

PROJECT ENG. \_\_\_\_\_  
DESIGNED BY: GG  
CHECKED BY: JF  
DRAWN BY: GG  
PROJECT MGR: GG

DIVISION CHIEF \_\_\_\_\_

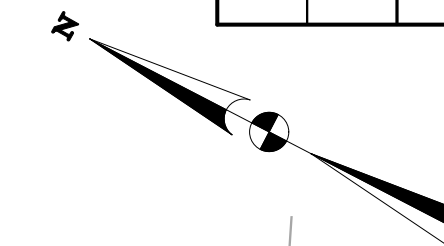
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 101 OF 160

**MKSK**

714 7th Street SE  
Washington, DC 20003  
202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
|           |             |      |      |
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|           |             |      |      |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 102       | 160          |

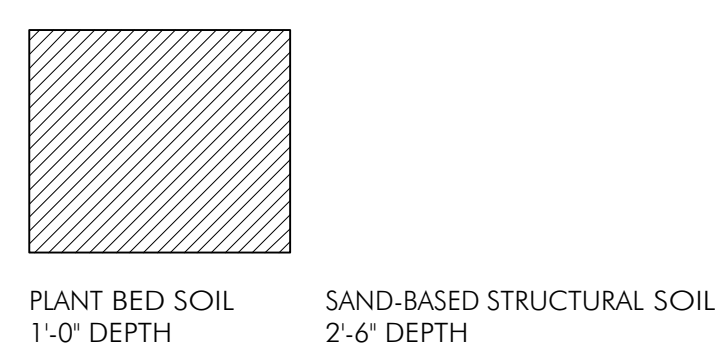


DRILL HOLES

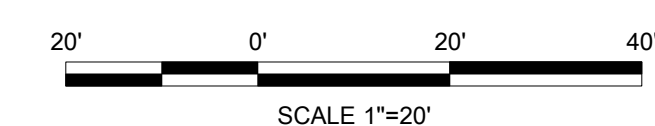


1 SOILS PLAN  
Scale: 1" = 20'-0"

SOIL LEGEND



65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION



DATE: JUNE 2023      SCALE: 1"=20'      L4-3

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

SOILS PLAN

PROJECT ENG. \_\_\_\_\_  
DESIGNED BY GG  
CHECKED BY JF  
DRAWN BY GG  
PROJECT MGR. GG  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 102 OF 160

**MKSK**

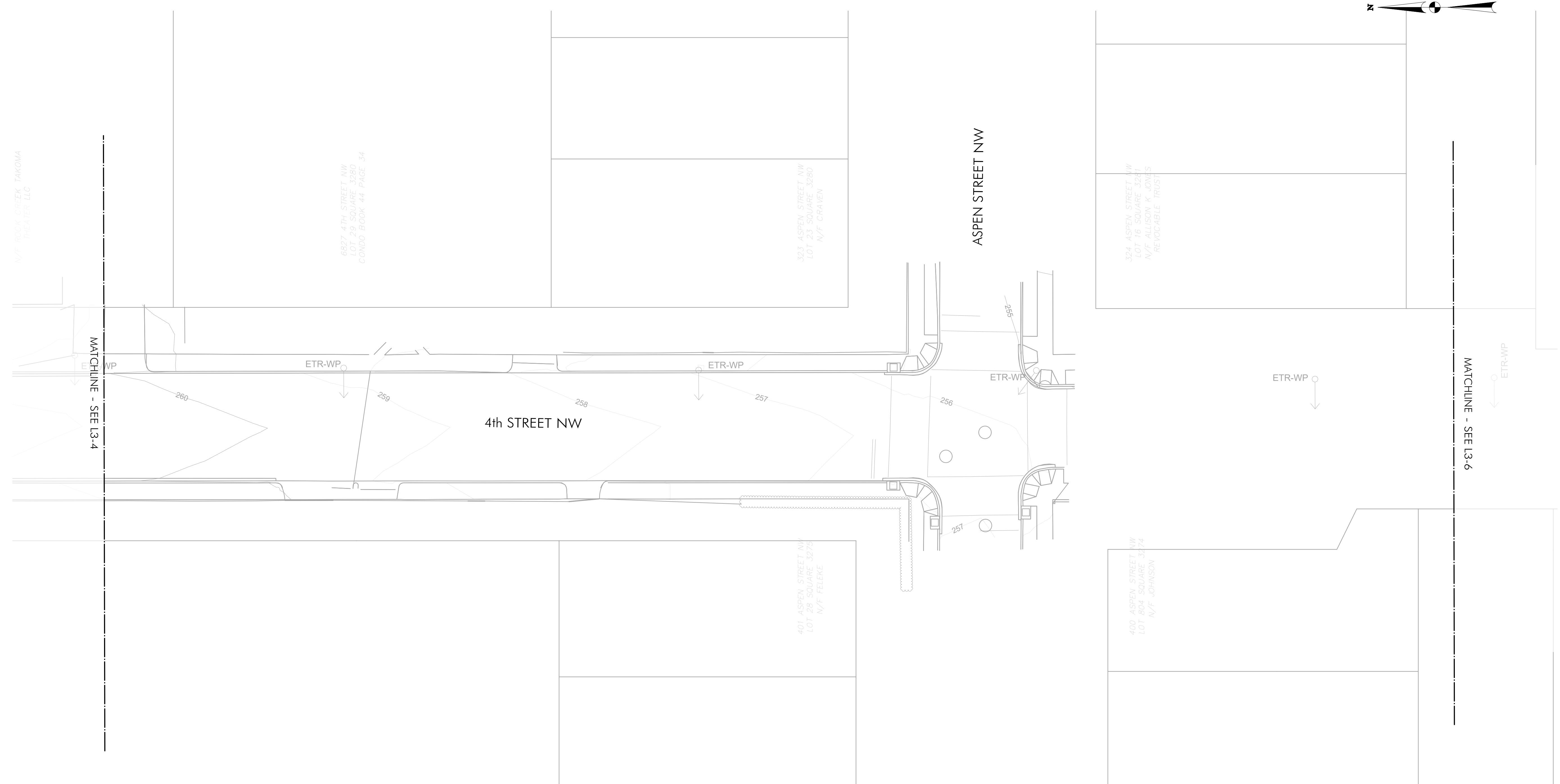
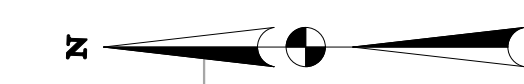
714 7th Street SE  
Washington, DC 20003  
202.543.6550

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
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SEALS  
STATES



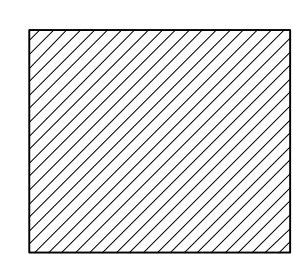
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 104       | 160          |



DRILL HOLES

1 SOILS PLAN  
Scale: 1" = 20'-0"

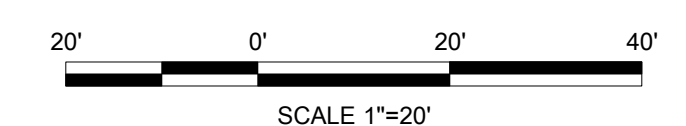
SOIL LEGEND



PLANT BED SOIL  
1'-0" DEPTH

SAND-BASED STRUCTURAL SOIL  
2'-6" DEPTH

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION



DATE: JUNE 2023      SCALE: 1"=20'      L4-5

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

SOILS PLAN

PROJECT ENG. \_\_\_\_\_  
DESIGNED BY GG  
CHECKED BY JF  
DRAWN BY GG  
PROJECT MGR. GG

DIVISION CHIEF

DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 104 OF 160

**MKSK**

714 7th Street SE  
Washington, DC 20003  
202.543.6550

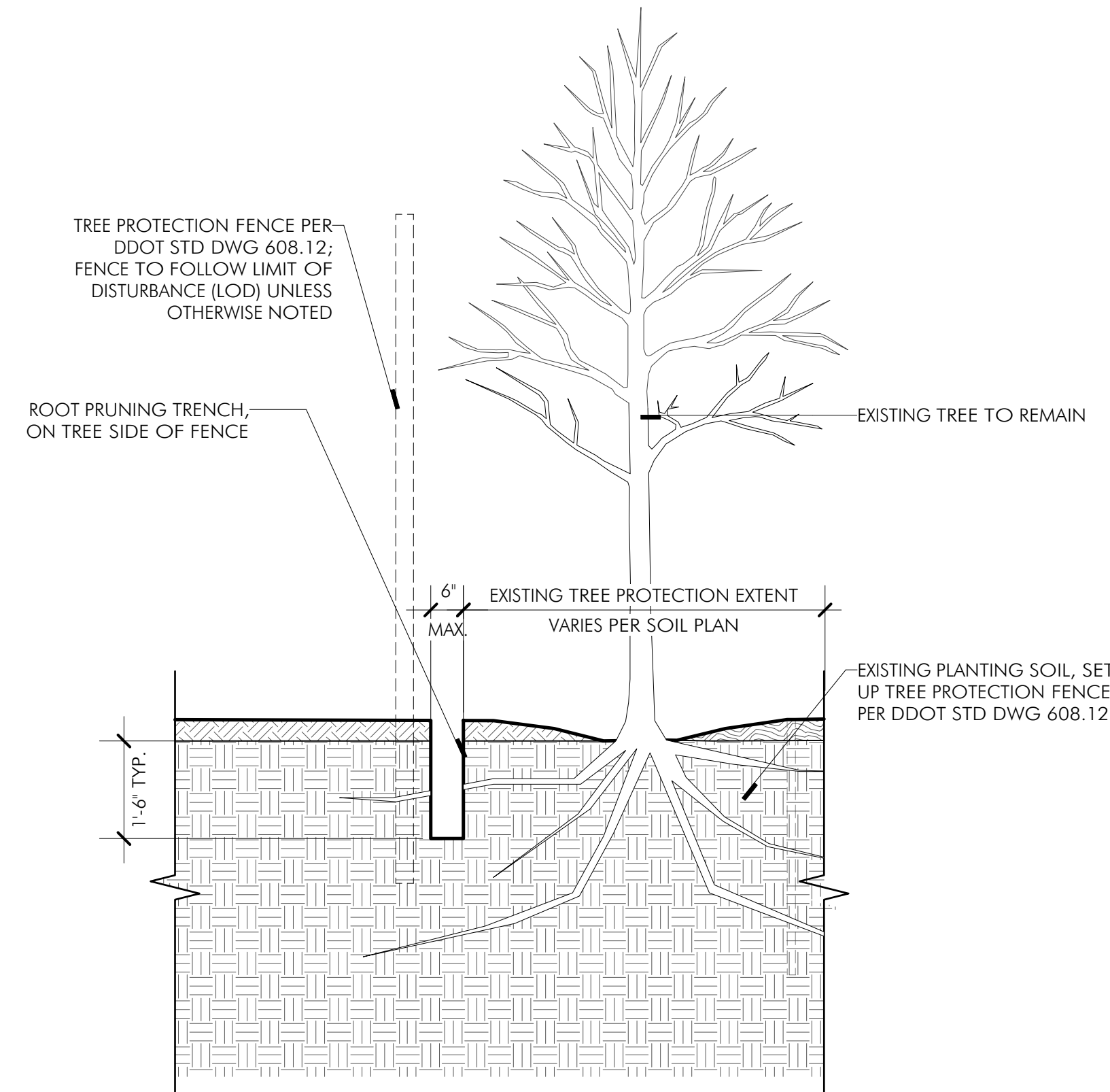
| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 106       | 160          |

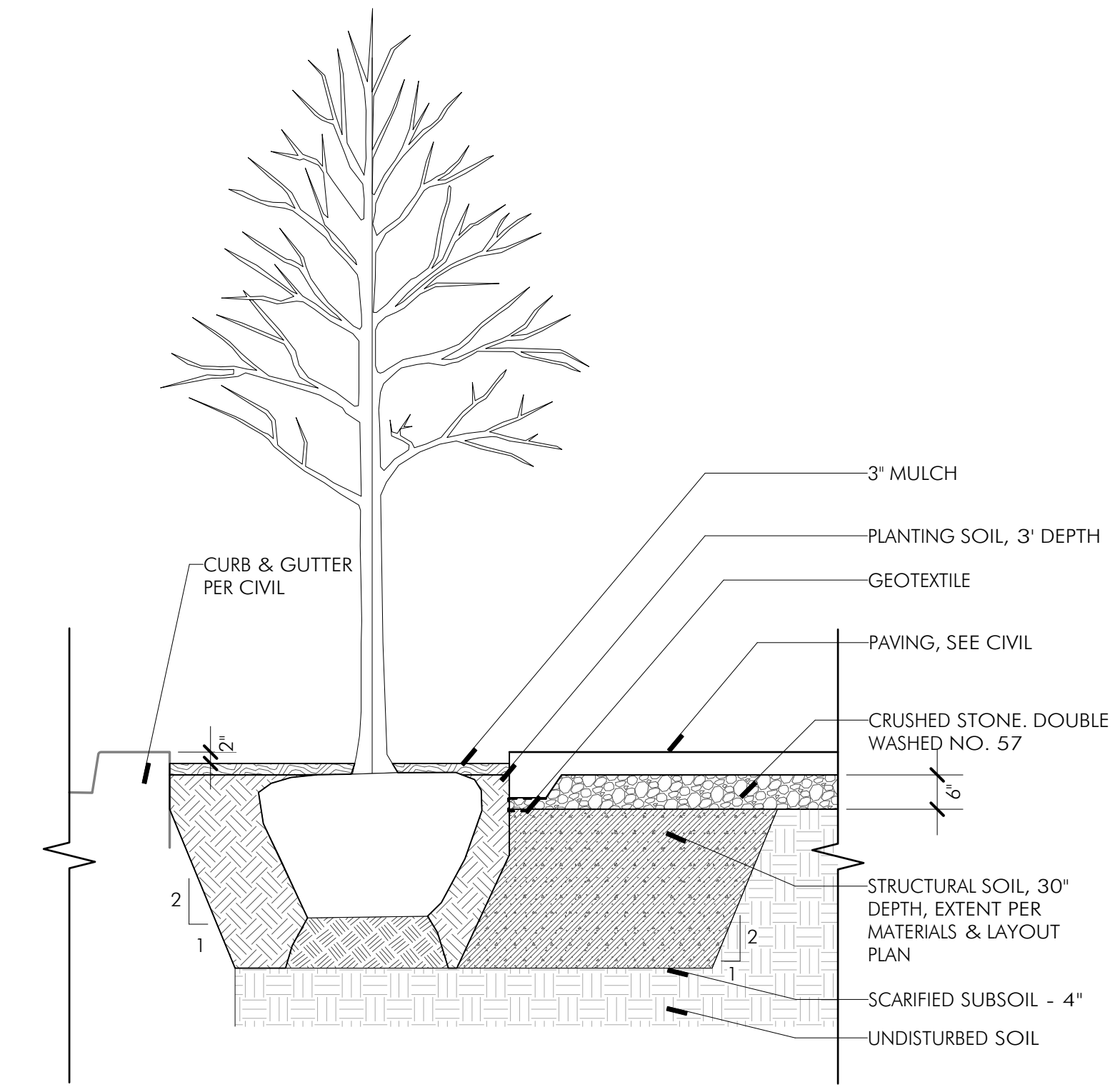
DRILL HOLES



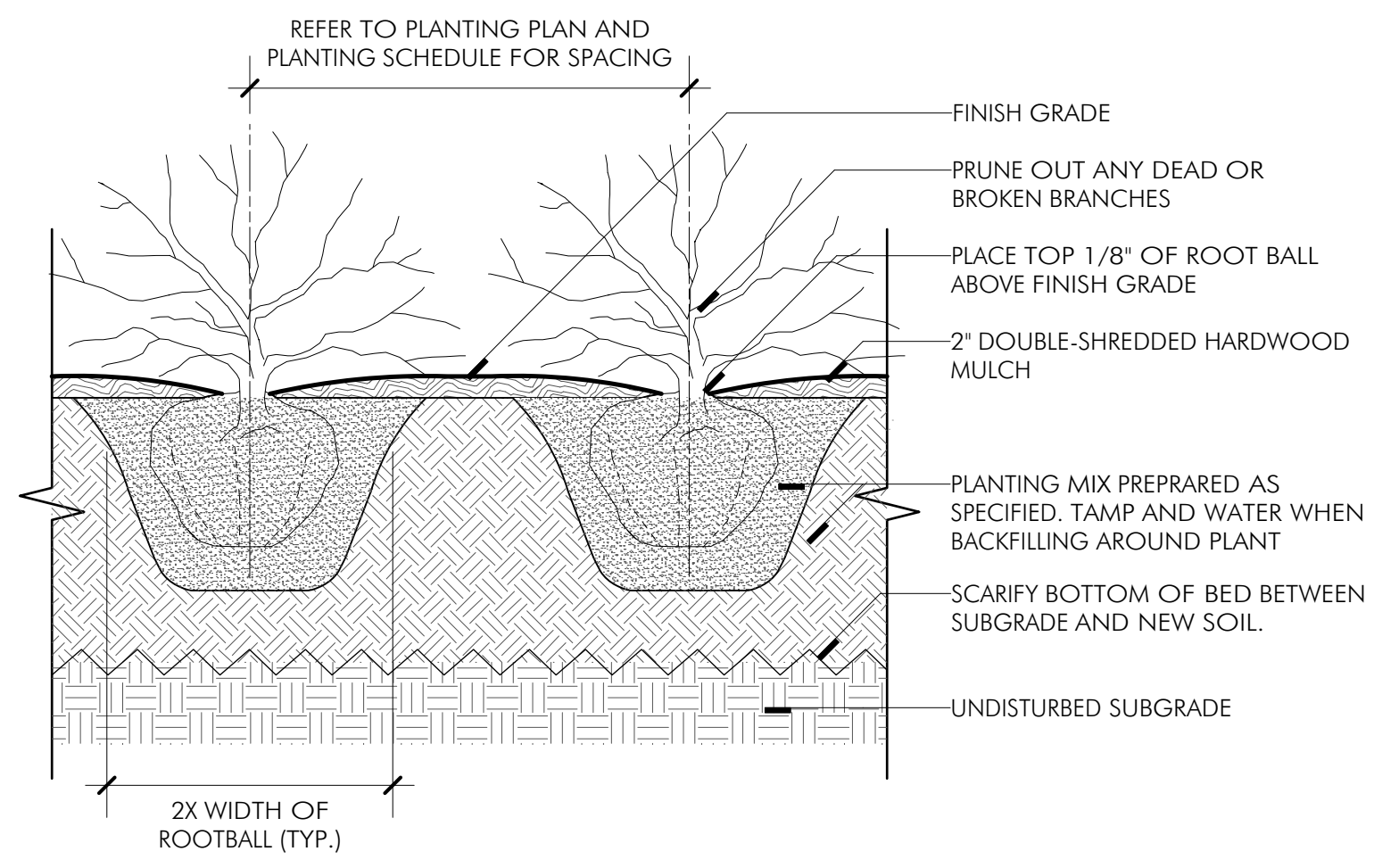
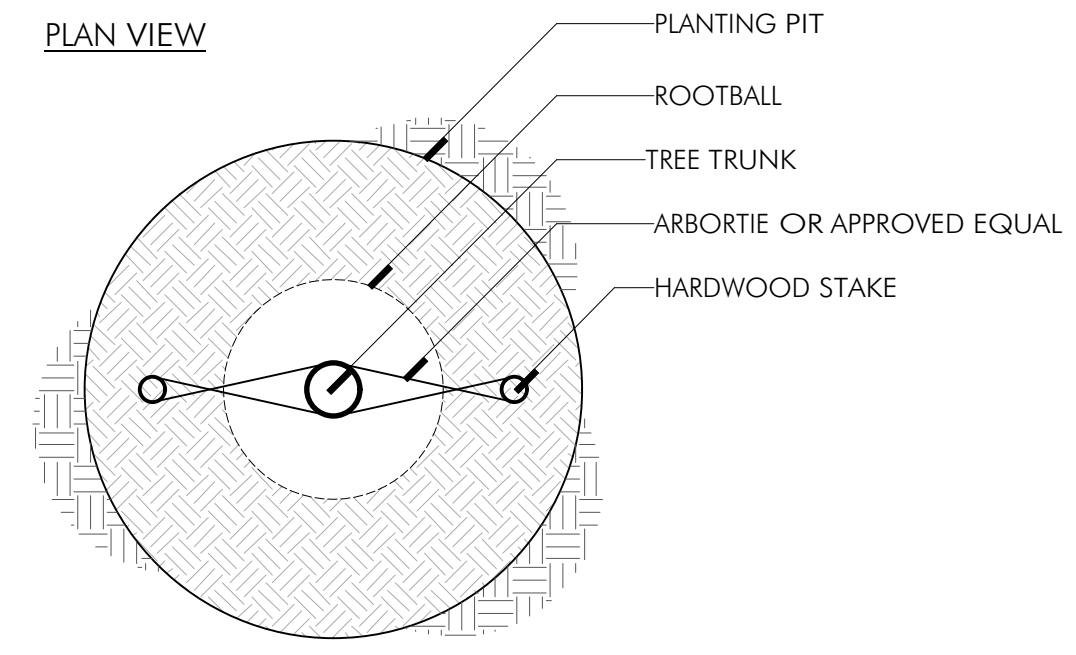
- NOTES:**
1. TREE PROTECTION AREA WILL BE DETERMINED AS PART OF THE PLAN REVIEW PROCESS. EXACT LOCATION, DEPTH AND METHODS OF ROOT PRUNING TO BE DETERMINED IN THE FIELD BY PROJECT ARBORIST.
  2. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING.
  3. TRENCH SHOULD BE BACKFILLED IMMEDIATELY OR INCORPORATED WITH SILT FENCE INSTALLATION.
  4. ROOTS SHOULD BE SEVERED BY TRENCHER, VIBRATORY PLOW OR APPROVED EQUIVALENT. ROOTS OVER 1.5\"/>

7 ROOT PRUNING OF EXISTING TREE DETAIL  
NTS

DRILL HOLES

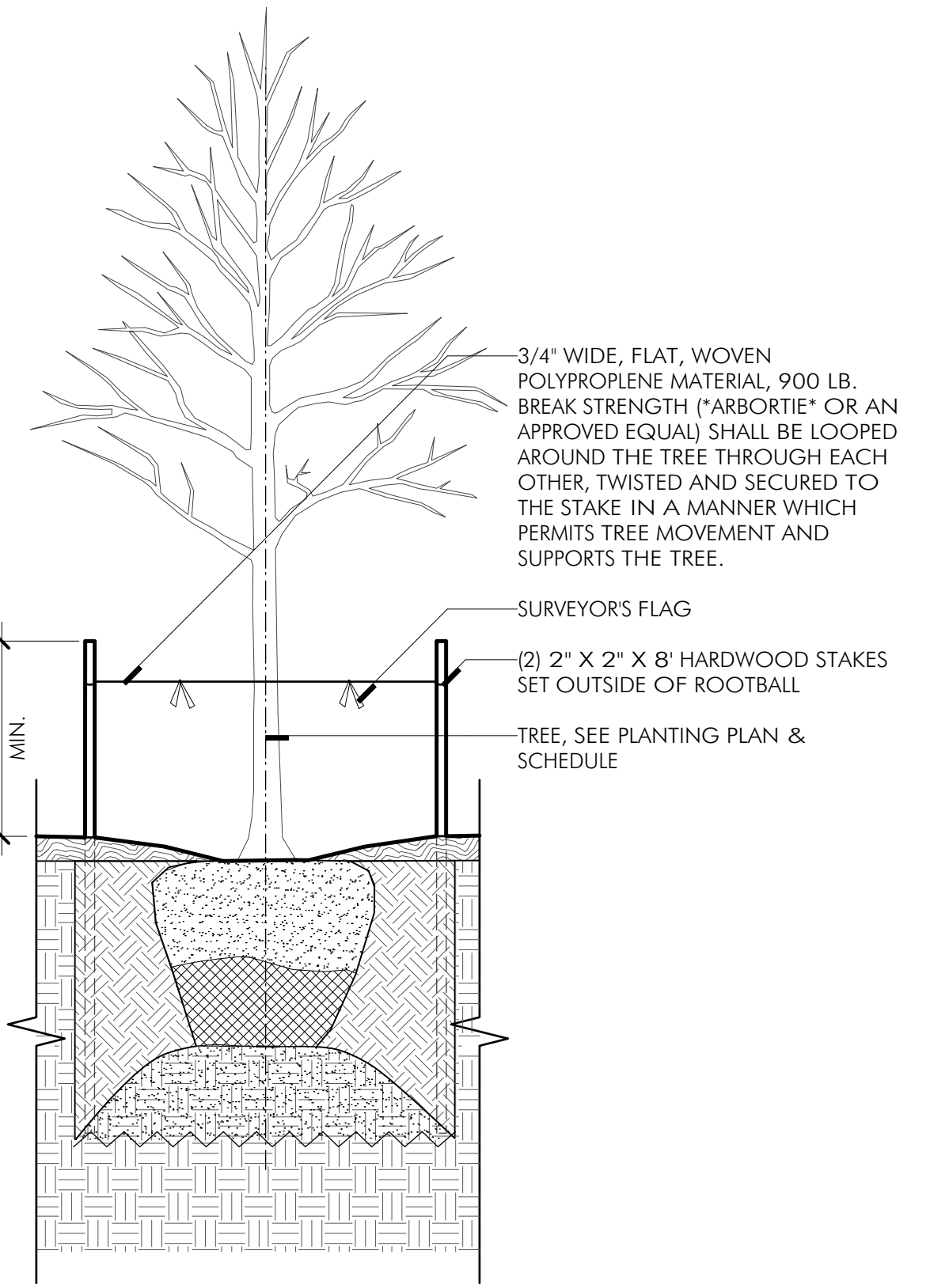


6 STREET TREE PLANTING DETAIL  
NTS



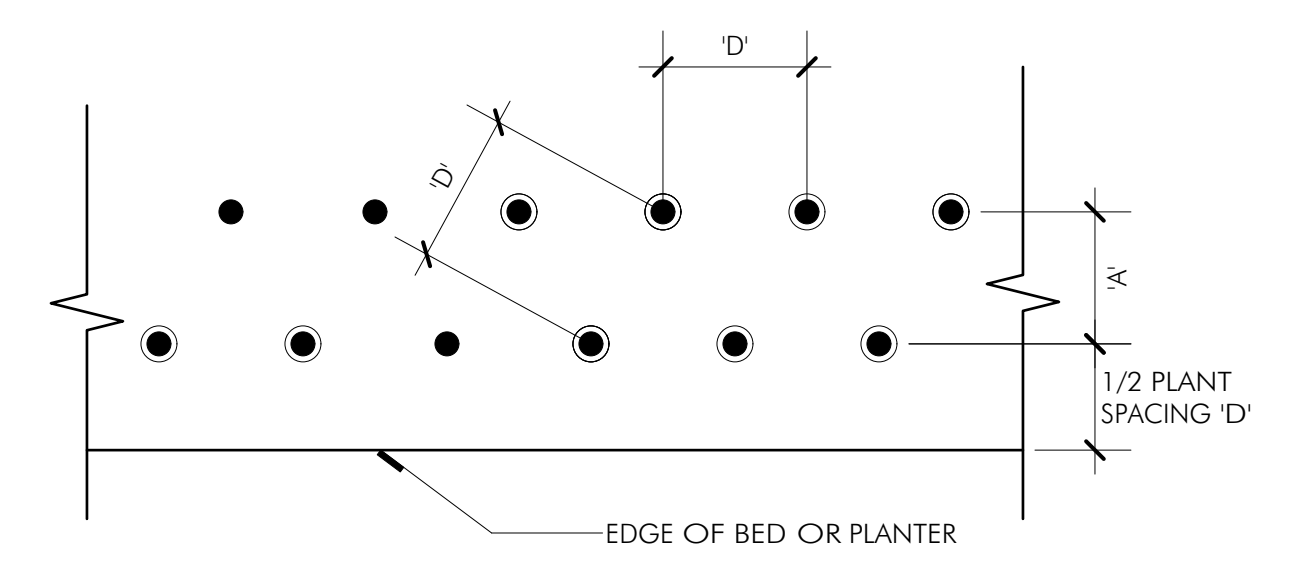
- NOTES:**
1. FOR B & B SHRUBS: CUT AND REMOVE BURLAP, ROPES, & WIRES FROM TOP THIRD OF ROOTBALL AND REMOVE FROM SITE.
  2. FOR CONTAINER STOCK, PULL POTTING MIX AND ROOT MASS APART TO DIRECT THE OUTER ROOTS INTO ADJACENT SOIL. DO NOT LEAVE CIRCLING ROOTS AGAINST ROOT BALL.

4 SHRUB PLANTING DETAIL  
NTS



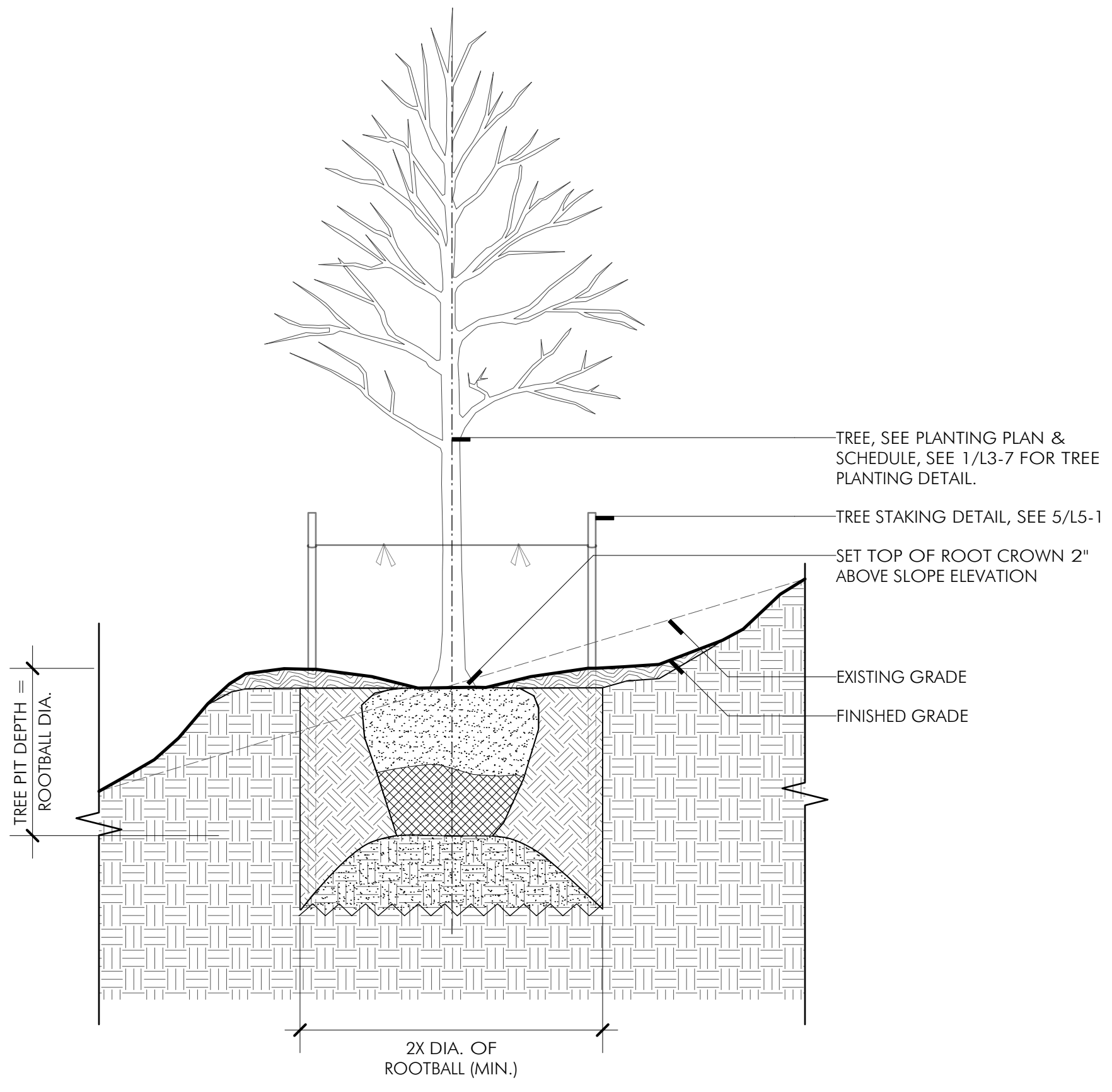
- NOTES:**
1. STAKING AND GUYING MAY ONLY BE IMPLEMENTED WHERE SITE CONDITIONS WARRANT THEIR USE. PLANTED TREES WILL BE ASSESSED INDIVIDUALLY BY PROJECT OFFICER. STAKING AND GUYING WILL BE INSTALLED ONLY IF REQUIRED BY PROJECT OFFICER. CONDITIONS WHERE STAKING AND GUYING MAY BE NECESSARY TO ENSURE STABILITY INCLUDE: WINDY LOCATIONS, STEEP SLOPES, OR WHERE VANDALISM MAY BE A CONCERN.
  2. STAKES AND GUYS WILL BE INSTALLED USING ACCEPTED ARBORICULTURE PRACTICES. TREES SHALL STAND PLUMB AFTER STAKING.
  3. INSTALLATION WILL INCLUDE THE REMOVAL OF ALL STAKING AND GUYING MATERIAL ONE YEAR AFTER INSTALLATION. ANY HOLES LEFT BY REMOVING STAKING SHALL BE FILLED WITH APPROVED TOPSOIL/BACKFILL MIXTURE.
  4. REFER TO DETAILS FOR TREE PLANTING INFORMATION.

5 TREE STAKING DETAIL  
NTS

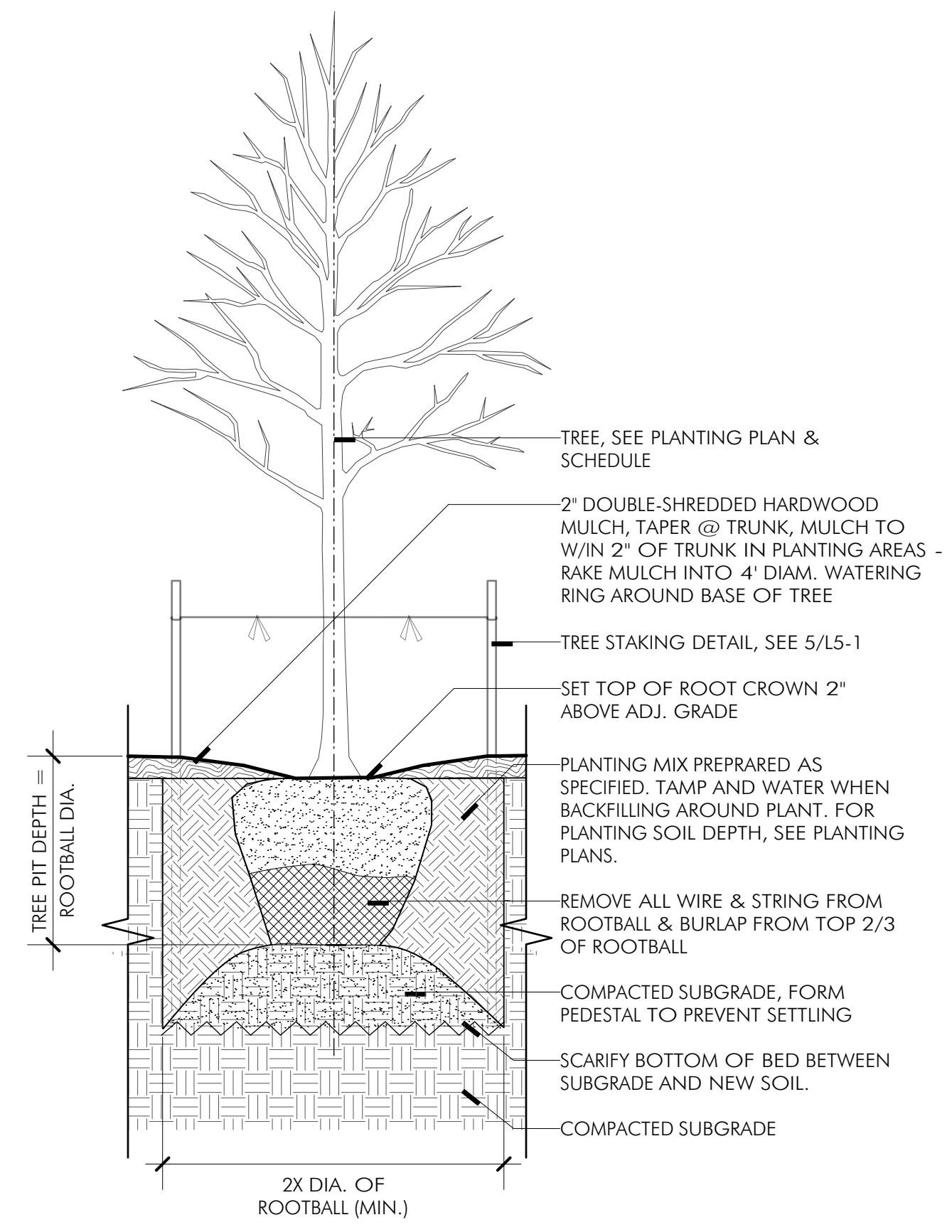


| PLANT SPACING 'D' O.C. | PLANT SPACING 'A' O.C. | PLANTS PER S.F. |
|------------------------|------------------------|-----------------|
| 6'                     | 5'                     | 4.00            |
| 8'                     | 7'                     | 2.25            |
| 9'                     | 8'                     | 1.77            |
| 12'                    | 10'                    | 1.00            |
| 15'                    | 13'                    | 0.77            |
| 18'                    | 16'                    | 0.44            |

2 TRIANGULAR PLANTING PLAN & CHART  
NTS



3 TREE PLANTING ON SLOPE DETAIL  
NTS



1 TREE PLANTING DETAIL  
NTS

DRILL HOLES

65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION

|   |        |   |
|---|--------|---|
| DATE: JUNE 2023   | SCALE: | L5-1  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |        |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |        | PROJECT ENG. _____<br>DESIGNED BY GG<br>CHECKED BY JF<br>DRAWN BY GG<br>PROJECT MGR. GG |
| <b>PLANTING DETAILS</b>   |        | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 106 OF 160                    |

|  |           |             |      |      |
|--|-----------|-------------|------|------|
| <b>MKSK</b><br>714 7th Street SE<br>Washington, DC 20003<br>202.543.6550 | NO.       | DESCRIPTION | NAME | DATE |
|  | REVISIONS |             |      |      |

FILES  
DATES

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 107       | 160          |

**GENERAL NOTES**

1. THE LOCATION OF THE UTILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD OBSERVATION AND/OR RECORD DRAWINGS. THE INFORMATION SHOWN IS NOT NECESSARILY COMPLETE AND THE LOCATION OF THE UTILITIES SHOWN IS APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UTILITIES IN ADVANCE OF CONDUCTING CONSTRUCTION OPERATIONS THAT COULD DAMAGE THESE UTILITIES.
2. IN THE AREAS WHERE PROPOSED CONSTRUCTION MAY CONFLICT WITH EXISTING UTILITIES, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THESE UTILITIES. THE CONTRACTOR SHALL MAINTAIN A MINIMUM ONE (1) FOOT CLEARANCE FROM ALL PEPCO INFRASTRUCTURE.
3. IF AN UNDERGROUND UTILITY IS DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER OF THE UTILITY. ANY DAMAGE SUSTAINED TO UTILITIES ABOVE OR BELOW GROUND SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE UTILITY OWNER AT THE CONTRACTOR'S EXPENSE. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR BACKFILL AN EXCAVATION AFFECTING SAID UTILITY WITHOUT FIRST RECEIVING PERMISSION FROM THE UTILITY OWNER.
4. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING PARTIES AT LEAST FORTY EIGHT (48) HOURS, BUT NOT MORE THAN TEN (10) WORKING DAYS, IN ADVANCE OF PROCEEDING WITH ANY EXCAVATION WORK:

| TYPE OF WORK                                   | NOTIFY AGENCIES   |
|--|---|
| GAS, TELEPHONE, ELECTRICAL, CONDUIT & CABLE TV | MISS UTILITY (800-257-7777)   |
| WATERMAIN & SEWERS                             | WASA (202-673-6600)   |
| FIRE ALARM                                     | DDOT (202-698-3600)   |
| STREET LIGHT DESIGN SECTION                    | DDOT (202-671-4625 MR. ABDALLA FATAH) (202-359-2678 MR. ANTONIO BYRD)   |
| STREET LIGHT INSPECTION                        | DDOT (202-359-2678, ANTONIO.BYRD@DC.GOV, MR. ANTONIO BYRD) OR (202-671-4625, ABDALLA.FATAH@DC.GOV, MR. ABDALLA FATAH) |

5. ALL LIGHTING FOUNDATIONS SHOWN ON THE PLANS SHALL BE REMOVED COMPLETELY AND BACKFILLED. ALL EXISTING LIGHT CONDUITS TO BE ABANDONED SHALL BE SEALED WITH CONCRETE.
6. ALL ELECTRICAL WORK SHALL CONFORM TO NATIONAL ELECTRIC CODE (NEC), DC ELECTRICAL CODE, DISTRICT OF COLUMBIA STANDARD SPECIFICATIONS (2013 GOLD BOOK), AND DISTRICT OF COLUMBIA STREETLIGHT POLICY AND DESIGN GUIDELINES (FEBRUARY 2013).
7. EXISTING CONDITIONS SHALL BE FIELD VERIFIED. NECESSARY ADJUSTMENTS SHALL BE MADE AS REQUIRED AT NO ADDITIONAL COST TO THE DISTRICT.
8. THE CONTRACTOR SHALL NOTIFY IPMA'S ELECTRICAL INSPECTOR 72 HOURS IN ADVANCE BEFORE ALL STREET LIGHT ELECTRICAL CONSTRUCTION BEGINS AND 48 HOURS ADVANCE NOTIFICATION FOR ELECTRICAL INSPECTION OF CONDUIT DUCT BANK AND LIGHT POLE FOUNDATIONS PRIOR TO CONCRETE ENCASUREMENT. CONTACT MR. ANTONIO BYRD AT ANTONIO.BYRD@DC.GOV AND 202-359-2678 (CELL).

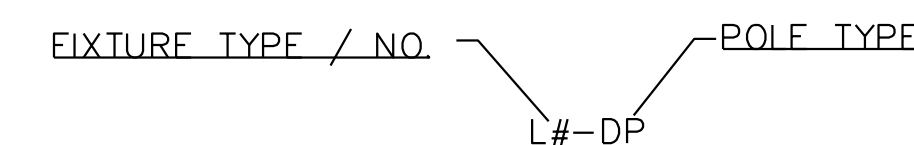
**LIGHTING LEGEND**

- NEW STEEL STREETLIGHT POST AND STEEL TRANSFORMER BASE WITH LUMINAIRE
- EXISTING STEEL STREETLIGHT POST WITHOUT STEEL TRANSFORMER BASE WITH LUMINAIRE. LUMINAIRE TO BE REMOVED AND REPLACED.
- EXISTING STREET LIGHT POLE WITH STEEL TRANSFORMER WITH LUMINAIRE TO REMAIN
- NEW NO. 16 STREET LIGHT POLE
- EXISTING NO. 16 STREET LIGHT POLE TO REMAIN
- NEW DECORATIVE PENDANT POLE.
- EXISTING WOOD POLE WITH LUMINAIRE TO BE REMOVED AND REPLACED
- EXISTING WOOD POLE WITH LUMINAIRE TO REMAIN
- EXISTING WALL MOUNTED LUMINAIRE ARM WITH LUMINAIRE TO BE REMOVED AND REPLACED
- EXISTING WALL MOUNTED LUMINAIRE ARM AND LUMINAIRE TO REMAIN
- ONE 2" SCHEDULE 80 PVC CONDUIT DUCT (DIRECT BURIED)
- TWO 2" SCHEDULE 80 PVC CONDUIT DUCT (DIRECT BURIED)
- PROPOSED PEPCO POWER SOURCE
- D.C. MANHOLE (3'X3'X3')
- EXISTING TREE
- EXISTING WATER MANHOLE
- EXISTING TELEPHONE MANHOLE
- EXISTING ELECTRICAL MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING STORM DRAIN MANHOLE
- EXISTING UNKNOWN MANHOLE
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING TRAFFIC CABINET
- EXISTING TRASH CAN
- EXISTING WATER CUT-OFF
- EXISTING FIRE HYDRANT
- EXISTING CURB DROP INLET
- EXISTING STORM, WATER OR SANITARY LINE
- EXISTING UNDERGROUND - (ELECTRIC, GAS OR TELEPHONE)

**ABBREVIATION LIST**

|         |  |
|---------|--|
| LED     | LIGHT EMITTING DIODES  |
| HPS     | HIGH PRESSURE SODIUM   |
| MH      | MOUNTING HEIGHT  |
| P#      | PEPCO FEED POINT   |
| #16     | #16 CAST IRON BLACK POST AND CASING  |
| DP      | DECORATIVE PENDANT POLE  |
| PP      | PENDANT STREETLIGHT POLE   |
| SP      | STEEL STREETLIGHT POLE   |
| WP      | WOOD POLE  |
| LXX-#16 | INSTALL NEW #16 CAST IRON STREETLIGHT POLE WITH LUMINAIRE  |
| ETR     | EXISTING TO REMAIN   |
| RRXX-SP | REMOVE AND REPLACE EXISTING LUMINAIRE ON STEEL POLE WITH STEEL TRANSFORMER BASE WITH NEW LUMINAIRE |
| RRXX-WP | REMOVE AND REPLACE EXISTING LUMINAIRE ON WOOD POLE WITH NEW LUMINAIRE.                             |
| LXX-SP  | INSTALL STEEL POST AND STEEL TRANSFORMER BASE WITH LUMINAIRE.                                      |
| LXX-DP  | DECORATIVE PENDANT POLE  |

**POLE CALL-OUT LEGEND**



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

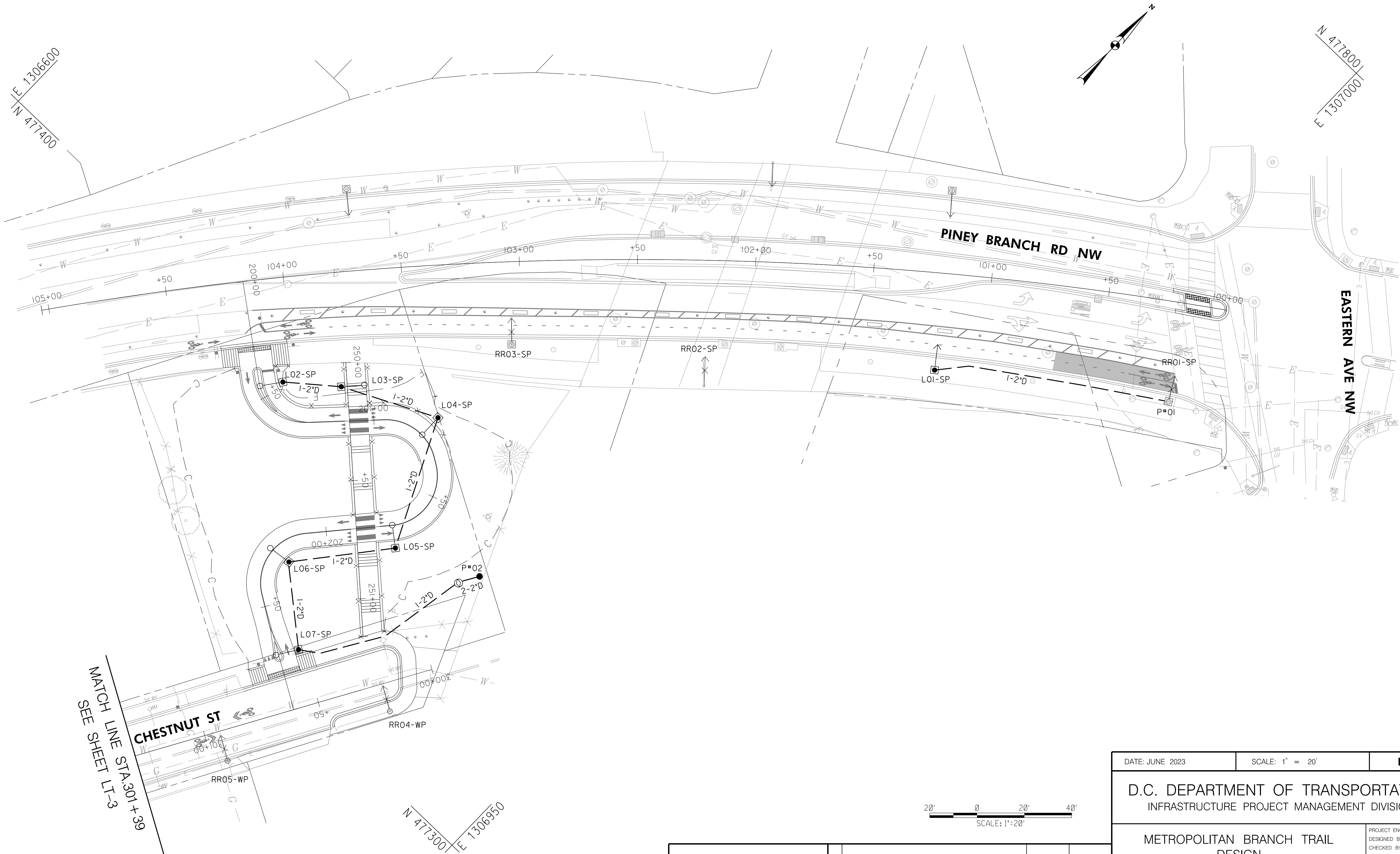
**FEHR PEERS**  
1003 K Street NW Suite 209 Washington, DC 20001 (202) 854-2750

| NO.       | DESCRIPTION | NAME | DATE |
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| REVISIONS |             |      |      |

|   |        |   |
|---|--------|---|
| DATE: JUNE 2023   | SCALE: | <b>LT-1</b>   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |        |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |        | PROJECT ENG. <u>CA</u><br>DESIGNED BY <u>JM</u><br>CHECKED BY <u>JP</u><br>DRAWN BY <u>JM</u><br>PROJECT MGR. <u>CA</u> |
| <b>STREET LIGHTING<br/>GENERAL NOTES</b>  |        | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET <b>107</b> OF 160   |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 108       | 160          |



MATCH LINE STA. 301+39  
SEE SHEET LT-3

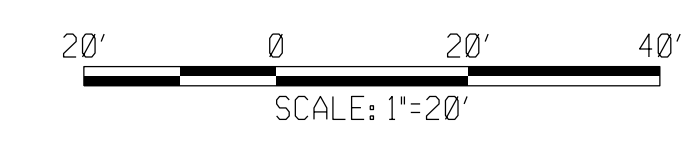
DATE: JUNE 2023      SCALE: 1" = 20'      **LT-2**

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

**LIGHTING PLAN**

PROJECT ENG. \_\_\_\_\_ CA  
DESIGNED BY \_\_\_\_\_ JM  
CHECKED BY \_\_\_\_\_ JP  
DRAWN BY \_\_\_\_\_ JM  
PROJECT MGR. \_\_\_\_\_ CA  
  
DIVISION CHIEF  
  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 108 OF 160



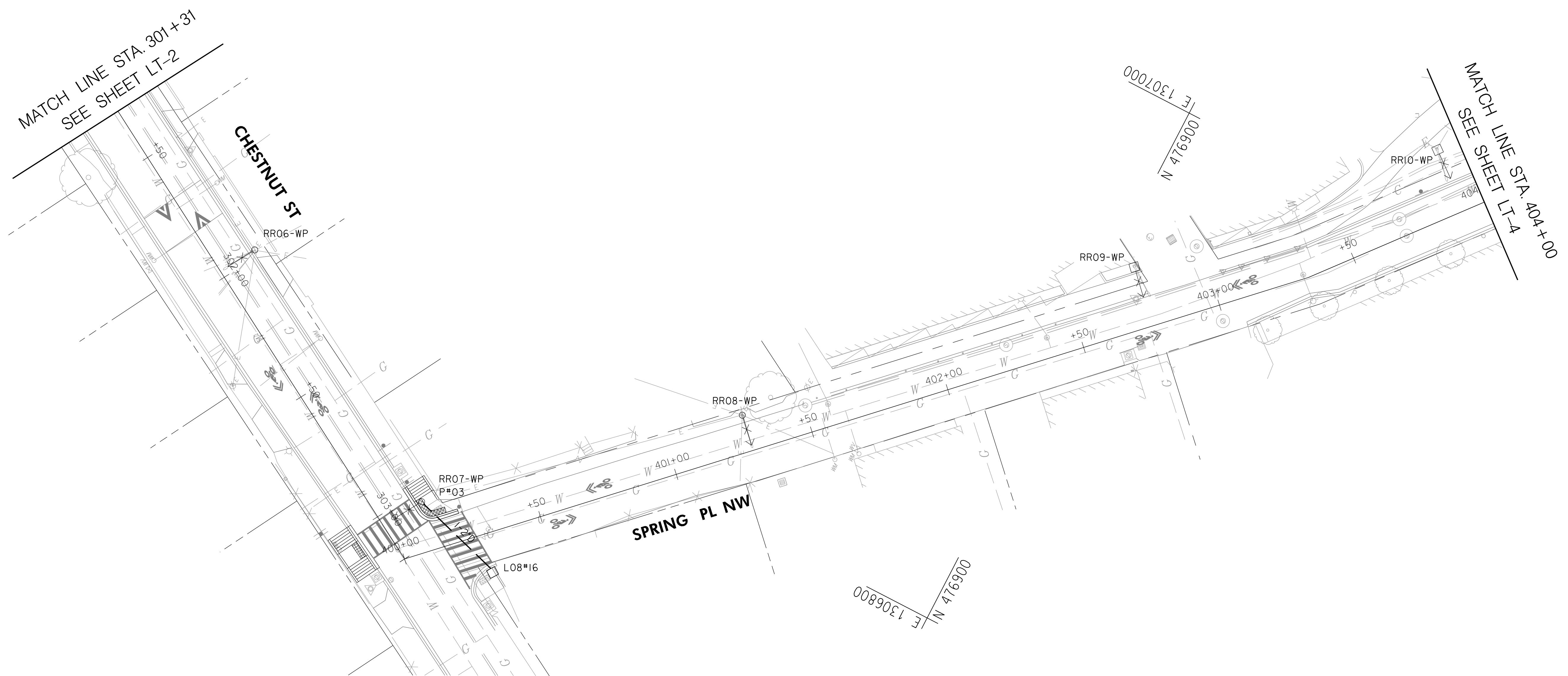
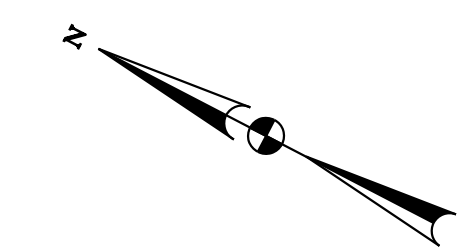
**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

**FEHR PEERS**  
1003 K Street NW      Washington, DC 20001  
Suite 209      (202) 854-2750

| NO.       | DESCRIPTION | NAME | DATE |
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 109       | 160          |



MATCH LINE STA. 301+31  
SEE SHEET LT-2

MATCH LINE STA. 404+00  
SEE SHEET LT-4



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

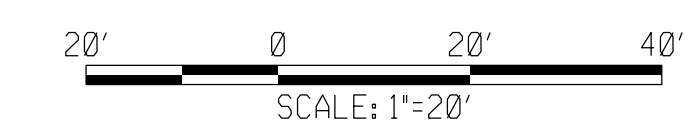
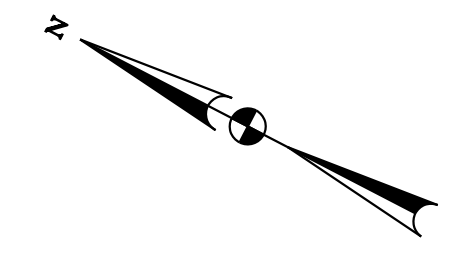
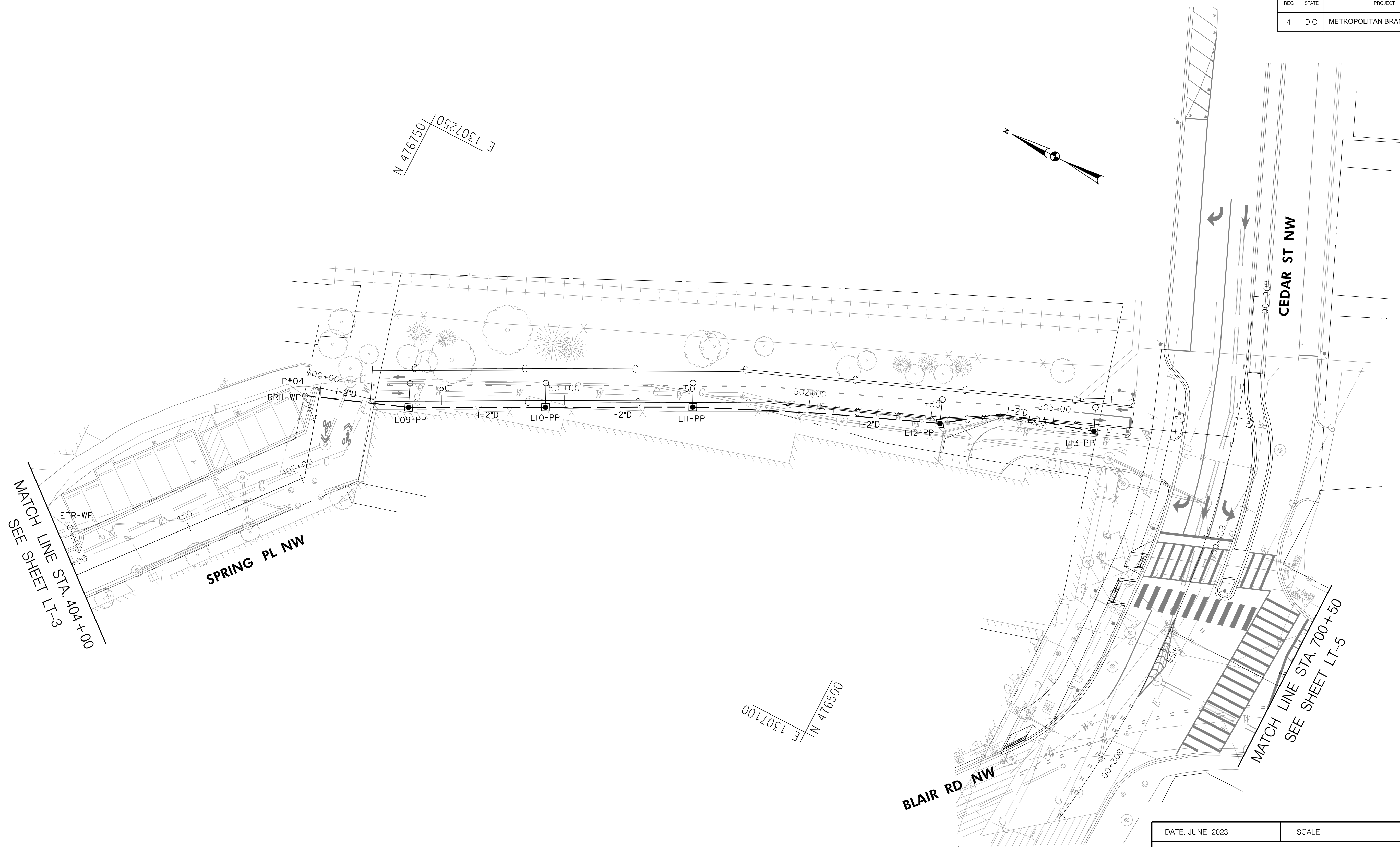
**FEHR PEERS**  
1003 K Street NW Suite 209 Washington, DC 20001 (202) 854-2750

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

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|---|-----------------|---|
| DATE: JUNE 2023   | SCALE: 1" = 20' | <b>LT-3</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>CA</u><br>DESIGNED BY <u>JM</u><br>CHECKED BY <u>JP</u><br>DRAWN BY <u>JM</u><br>PROJECT MGR. <u>CA</u> |
| <b>LIGHTING PLAN</b>  |                 | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET <b>109</b> OF 160   |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 110       | 160          |



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

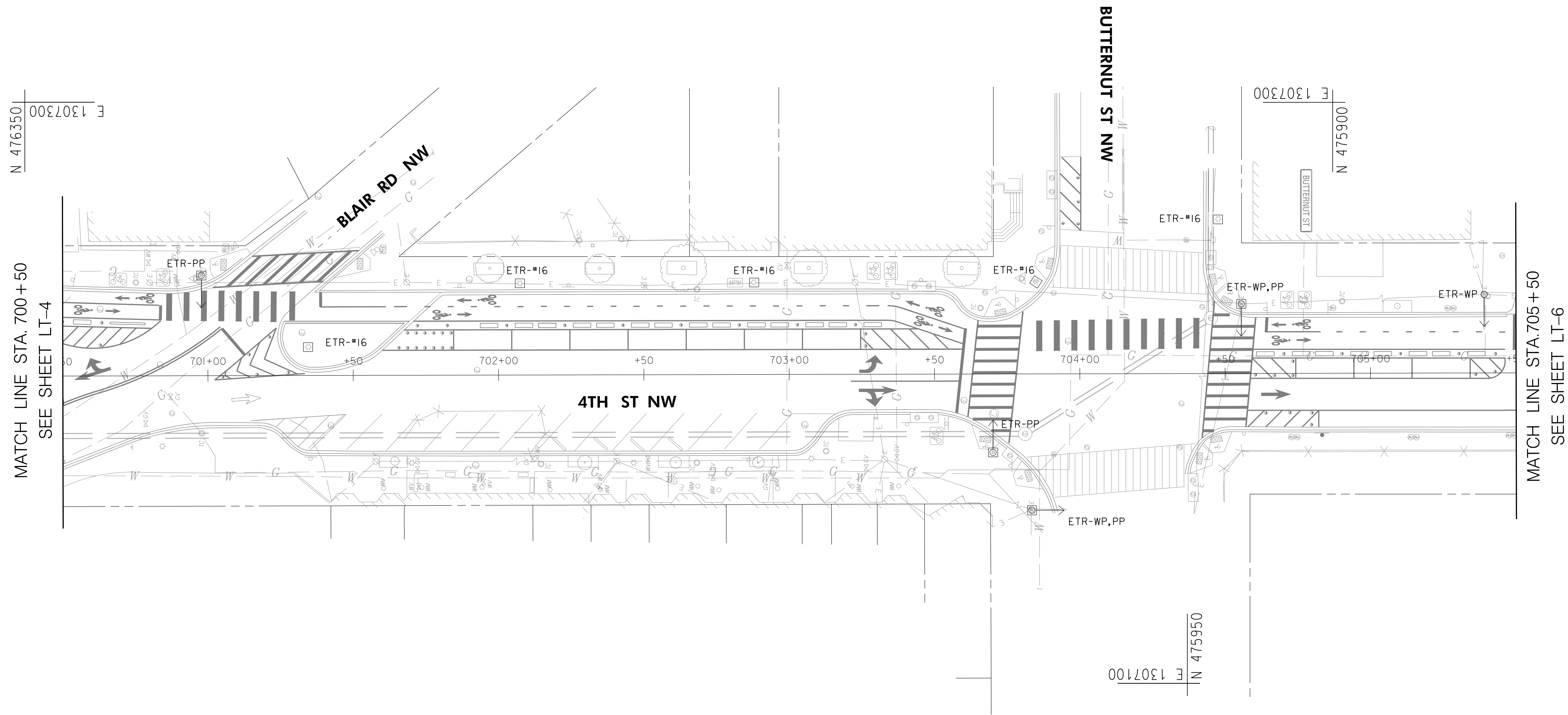
**FEHR PEERS**  
 1003 K Street NW Washington, DC 20001  
 Suite 209 (202) 854-2750

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

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|---|--------|---|
| DATE: JUNE 2023   | SCALE: | <b>LT-4</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |        |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |        | PROJECT ENG. <u>CA</u><br>DESIGNED BY <u>JM</u><br>CHECKED BY <u>JP</u><br>DRAWN BY <u>JM</u><br>PROJECT MGR. <u>CA</u> |
| <b>LIGHTING PLAN</b>  |        | DIVISION CHIEF<br><br>DATE _____<br>FILE _____<br>SHEET <b>110</b> OF 160   |

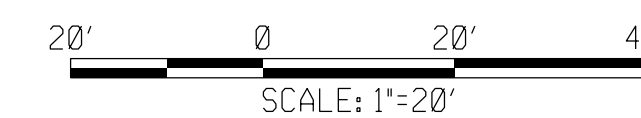
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 111       | 160          |



MATCH LINE STA. 700 + 50  
SEE SHEET LT-4

MATCH LINE STA. 705 + 50  
SEE SHEET LT-6



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

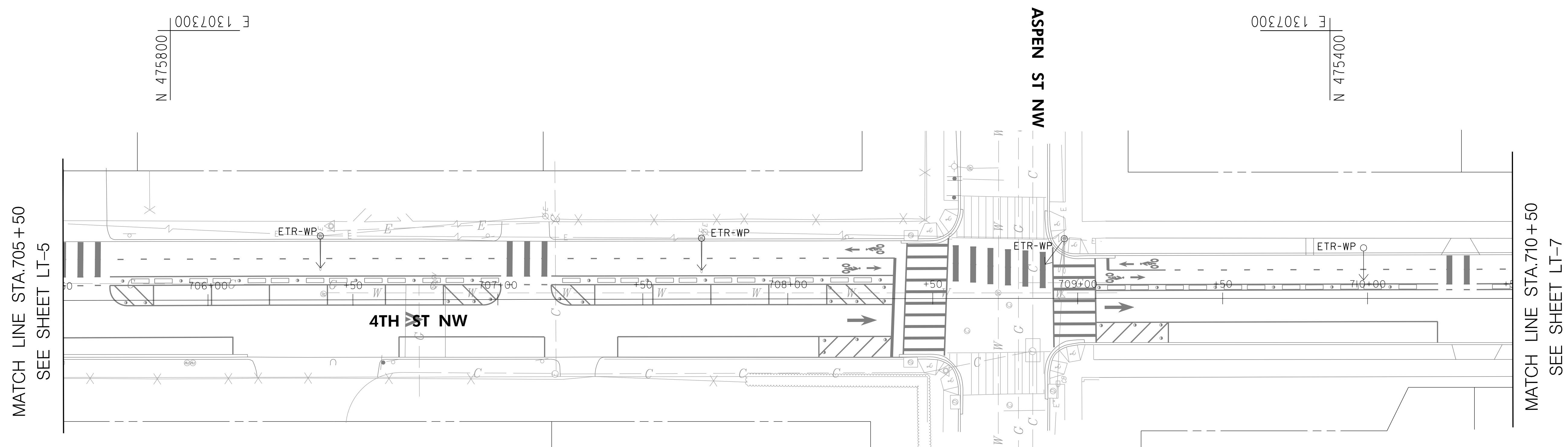
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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |                 |  |
|---|-----------------|--|
| DATE: JUNE 2023   | SCALE: 1" = 20' | <b>LT-5</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| <b>LIGHTING PLAN</b>  |                 | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET 111 OF 160   |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 112       | 160          |



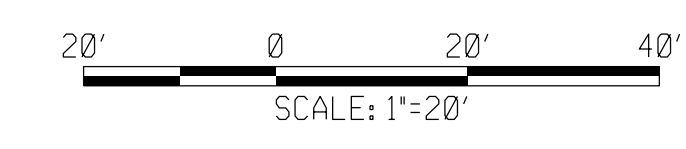
MATCH LINE STA. 705 + 50  
SEE SHEET LT-5

MATCH LINE STA. 710 + 50  
SEE SHEET LT-7

N 475800  
E 1307300

N 475400  
E 1307300

N 475400  
E 1307100



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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

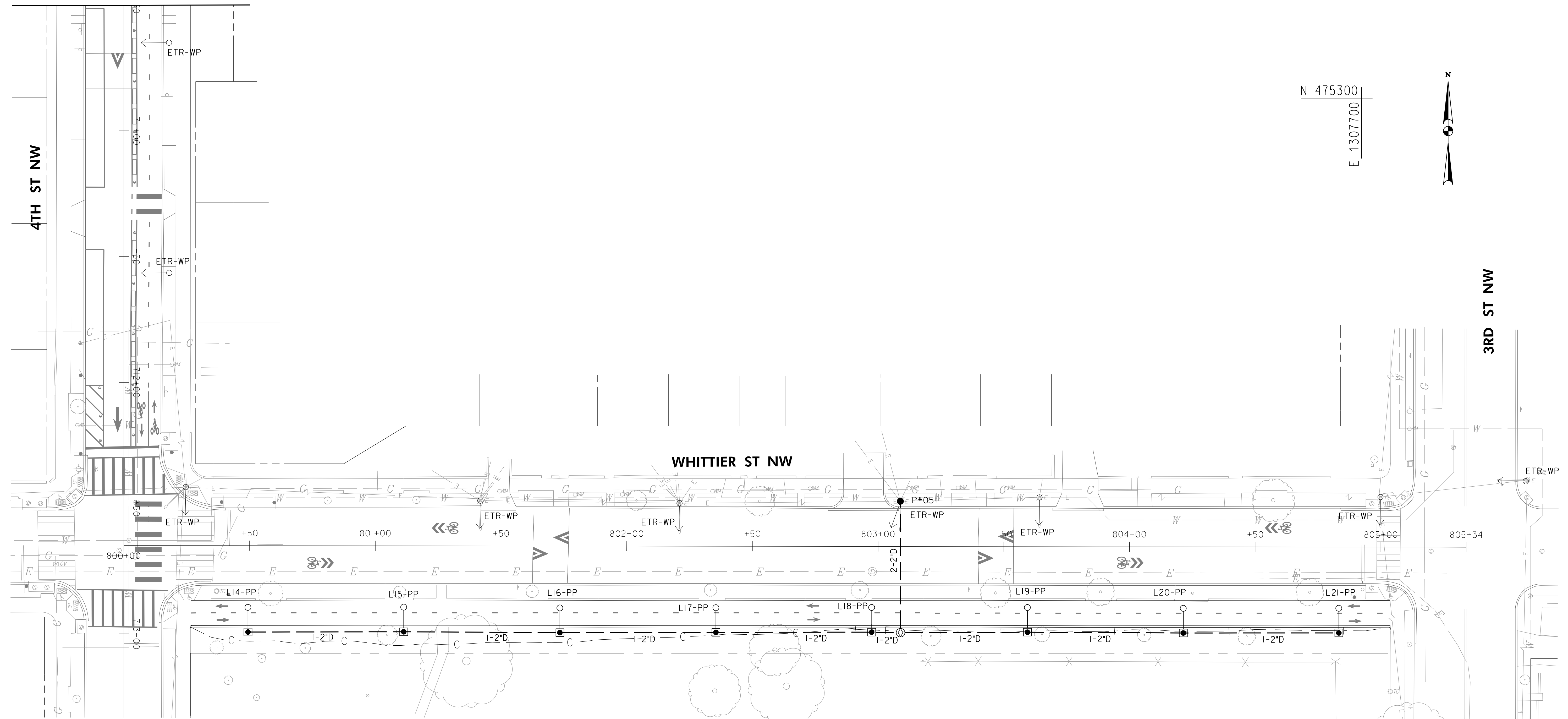
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|---|-----------------|--|
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| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| <b>LIGHTING PLAN</b>  |                 | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 112 OF 160   |

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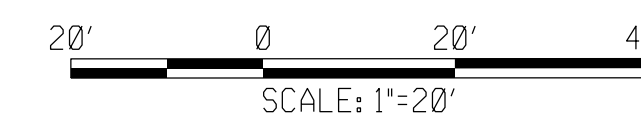


| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 113       | 160          |

MATCH LINE STA.710+50  
SEE SHEET LT-6



N 475000  
E 1307250



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

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|-----------|-------------|------|------|
| REVISIONS |             |      |      |

DATE: JUNE 2023 SCALE: 1" = 20' **LT-7**

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

PROJECT ENG. CA  
DESIGNED BY JM  
CHECKED BY JP  
DRAWN BY JM  
PROJECT MGR. CA

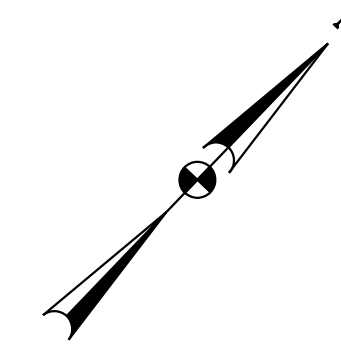
**LIGHTING PLAN**

DIVISION CHIEF

DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 113 OF 160

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
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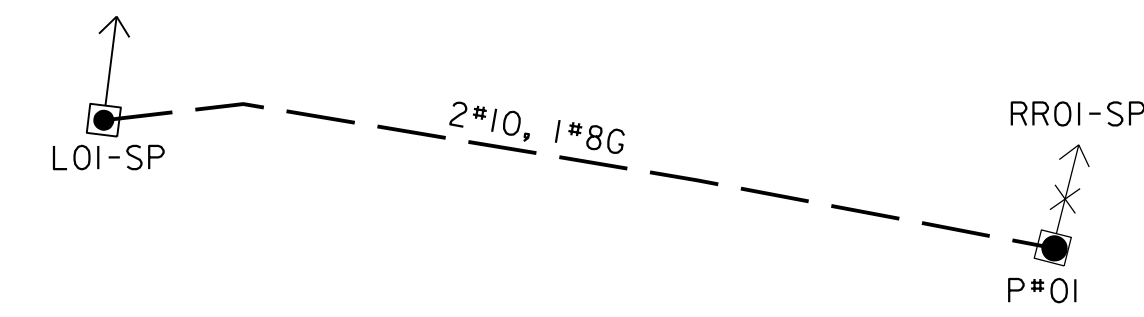
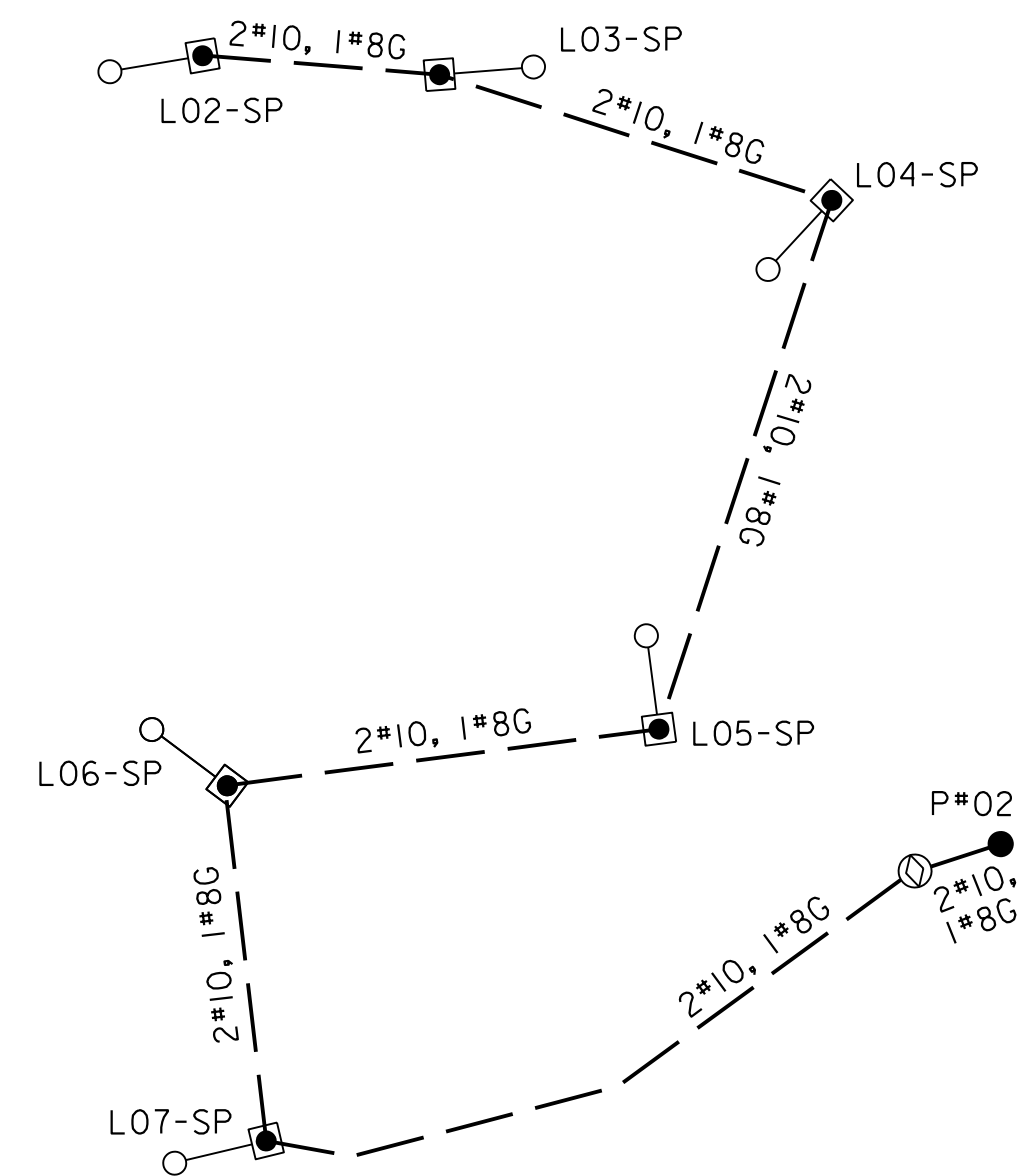
N 477800  
E 1307000

E 1306600  
N 477400

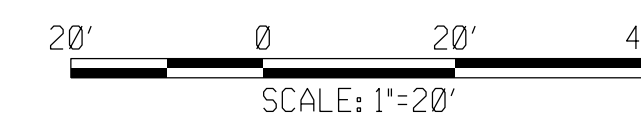
PINEY BRANCH RD NW

EASTERN AVE NW

CHESTNUT ST



N 477300  
E 1306950



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

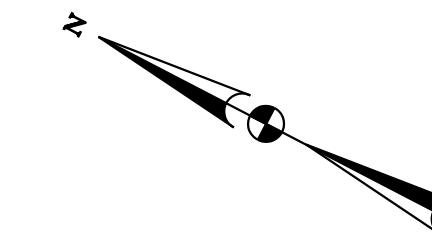
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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |                 |   |
|---|-----------------|---|
| DATE: JUNE 2023   | SCALE: 1" = 20' | <b>LT-8</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____<br>DESIGNED BY _____<br>CHECKED BY _____<br>DRAWN BY _____<br>PROJECT MGR. _____ |
| LIGHTING CABLE SCHEMATIC  |                 | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 114 OF 160                                |

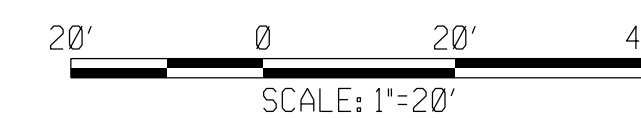
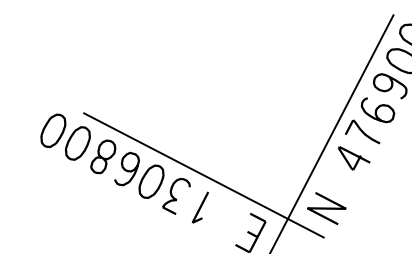
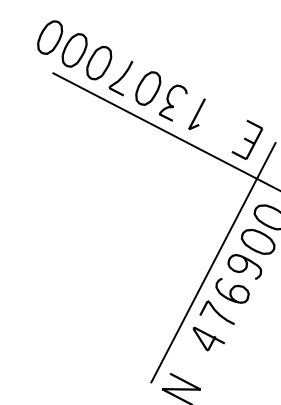
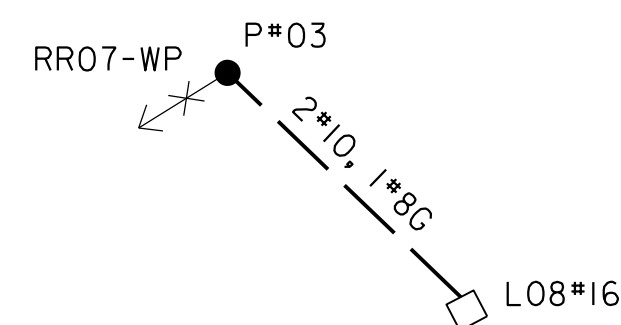
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 115       | 160          |



CHESTNUT ST

SPRING PL NW



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

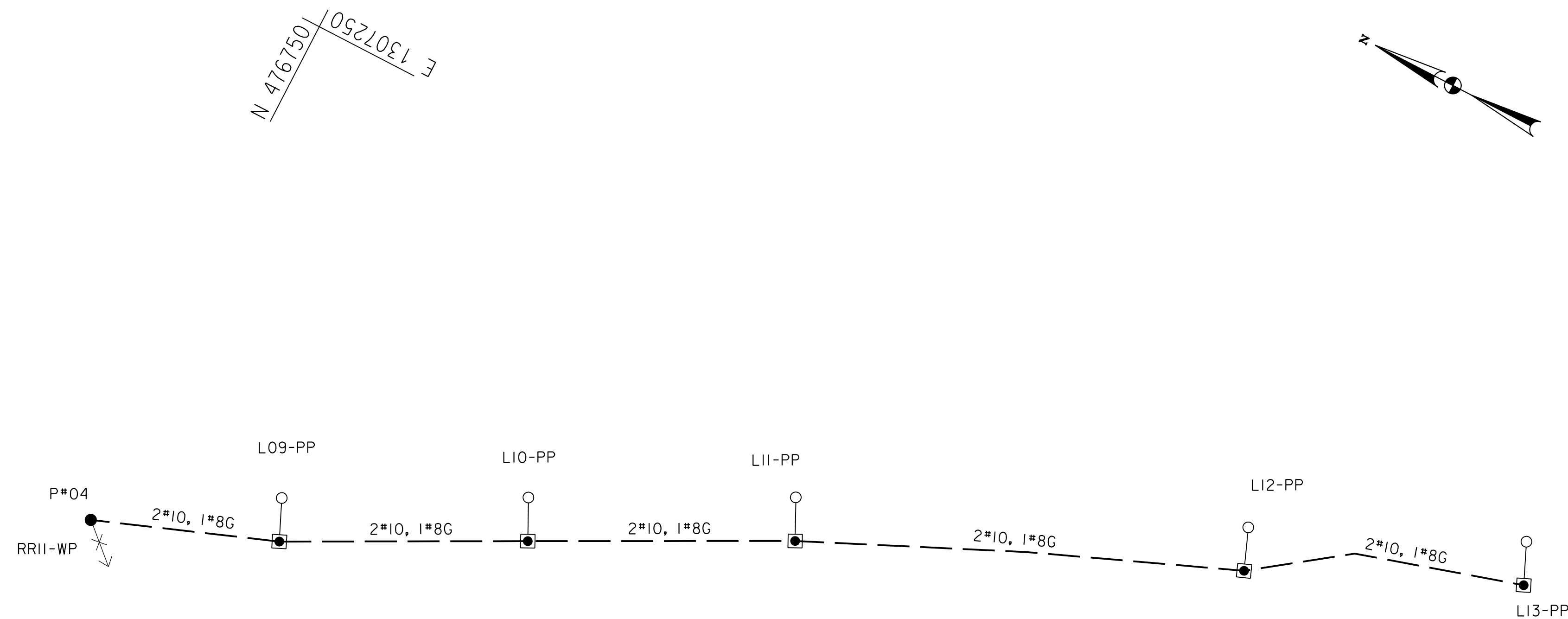
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|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |                 |   |
|---|-----------------|---|
| DATE: JUNE 2023   | SCALE: 1" = 20' | <b>LT-9</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____<br>DESIGNED BY _____<br>CHECKED BY _____<br>DRAWN BY _____<br>PROJECT MGR. _____ |
| LIGHTING CABLE SCHEMATIC  |                 | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET 115 OF 160                                |

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 7/17/2023

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 116       | 160          |



SPRING PL NW

CEDAR ST NW

BLAIR RD NW

N 476750  
E 1307250

N 476500  
E 1307100



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 Suite 209 (202) 854-2750

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |                 |   |
|---|-----------------|---|
| DATE: JUNE 2023   | SCALE: 1" = 20' | <b>LT-10</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____<br>DESIGNED BY _____<br>CHECKED BY _____<br>DRAWN BY _____<br>PROJECT MGR. _____ |
| LIGHTING CABLE SCHEMATIC  |                 | DIVISION CHIEF _____<br>DATE _____<br>FILE _____<br>SHEET <b>116</b> OF 160                         |

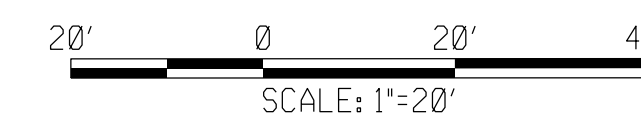
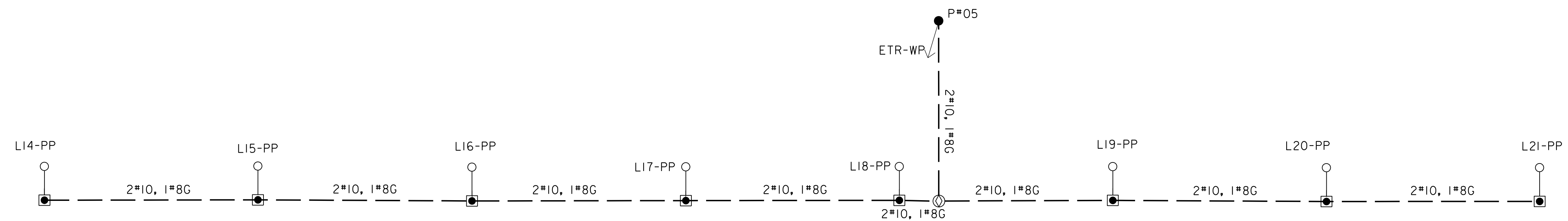
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 117       | 160          |

4TH ST NW

3RD ST NW

WHITTIER ST NW



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| NO.       | DESCRIPTION | NAME | DATE |
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| REVISIONS |             |      |      |

|   |                 |  |
|---|-----------------|--|
| DATE: JUNE 2023   | SCALE: 1" = 20' | <b>LT-11</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. _____ CA<br>DESIGNED BY _____ JM<br>CHECKED BY _____ JP<br>DRAWN BY _____ JM<br>PROJECT MGR. _____ CA |
| <b>LIGHTING CABLE SCHEMATIC</b>   |                 | DIVISION CHIEF   |
| DATE _____  |                 | FILE _____   |
| SHEET 117 OF 160  |                 |  |

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STREETLIGHT POLE SCHEDULE

| LIGHT NO. | POLE TYPE               | EXISTING LIGHT SOURCE | NEW LIGHT SOURCE | LUMINAIRE MANUFACTURER | LUMINAIRE MODEL               | LUMINAIRE WATTS | LUMINAIRE LUMENS | NOTES |
|-----------|-------------------------|-----------------------|------------------|------------------------|-------------------------------|-----------------|------------------|-------|
| RR01-SP   | STEEL POLE              | HPS                   | LED              | LEOTEK                 | GCM2-60J-MV-30K-2R-145        | 100             | 14,556           |       |
| L01-SP    | STEEL POLE              | HPS                   | LED              | LEOTEK                 | GCM2-60J-MV-30K-2R-146        | 100             | 14,556           |       |
| RR02-SP   | MAST ARM ONLY           | HPS                   | LED              | LEOTEK                 | GCM2-60J-MV-30K-2R-147        | 100             | 14,556           |       |
| RR03-SP   | STEEL POLE              | HPS                   | LED              | LEOTEK                 | GCM2-60J-MV-30K-2R-148        | 100             | 14,556           |       |
| L02-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-2       | 52              | 4,945            |       |
| L03-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-2       | 52              | 4,945            |       |
| L04-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-2       | 52              | 4,945            |       |
| L05-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-2       | 52              | 4,945            |       |
| L06-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-2       | 52              | 4,945            |       |
| L07-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-2       | 52              | 4,945            |       |
| RR04-WP   | WOOD POLE               | HPS                   | LED              | LEOTEK                 | GCJ4-30J-MV-30K-2R-105        | 70              | 10,490           |       |
| RR05-WP   | WOOD POLE               | HPS                   | LED              | LEOTEK                 | GCJ4-30J-MV-30K-2R-106        | 70              | 10,490           |       |
| RR06-WP   | WOOD POLE               | HPS                   | LED              | LEOTEK                 | GCJ4-30J-MV-30K-2R-107        | 70              | 10,490           |       |
| RR07-WP   | WOOD POLE               | HPS                   | LED              | LEOTEK                 | GCJ4-30J-MV-30K-2R-108        | 70              | 10,490           |       |
| L08-#16   | #16 STREETLIGHT POLE    |                       | LED              | STERNBERG              | A850LED-VC0B-4L40TA-MDL05-HSS | 78              | 7,581            |       |
| RR08-WP   | WOOD POLE               | HPS                   | LED              | LEOTEK                 | GCJ4-30J-MV-30K-2R-105        | 70              | 10,490           |       |
| RR09-SP   | STEEL POLE              | LED                   | LED              | LEOTEK                 | GCJ4-30J-MV-30K-2R-106        | 70              | 10,490           |       |
| RR10-SP   | STEEL POLE              | LED                   | LED              | LEOTEK                 | GCJ4-30J-MV-30K-2R-107        | 70              | 10,490           |       |
| RR11-SP   | STEEL POLE              | LED                   | LED              | LEOTEK                 | GCJ4-30J-MV-30K-2R-108        | 70              | 10,490           |       |
| L09-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-2       | 52              | 4,945            |       |
| L10-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-3       | 52              | 4,945            |       |
| L11-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-4       | 52              | 4,945            |       |
| L12-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-5       | 52              | 4,945            |       |
| L13-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-6       | 52              | 4,945            |       |
| L14-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-7       | 52              | 4,945            |       |
| L15-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-8       | 52              | 4,945            |       |
| L16-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-9       | 52              | 4,945            |       |
| L17-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-10      | 52              | 4,945            |       |
| L18-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-11      | 52              | 4,945            |       |
| L19-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-12      | 52              | 4,945            |       |
| L20-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-13      | 52              | 4,945            |       |
| L21-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-13      | 52              | 4,945            |       |
| L22-DP    | DECORATIVE PENDANT POLE |                       | LED              | SIGNIFY-LUMEC          | DMS50-C-140L1150NW-G1-13      | 52              | 4,945            |       |

| FEED POINT | DISTANCE | PAY ITEM NUMBER |         |
|------------|----------|-----------------|---------|
|            |          | 614-122         | 614-123 |
|            |          | 1-2"            | 2-2"    |
| P01        | 100      | 100             |         |
| P02        | 294      | 286             | 8       |
| P03        | 64       | 34              | 30      |
| P04        | 323      | 323             |         |
| P05        | 487      | 434             | 53      |
| TOTAL      |          | 1177            | 91      |

| FEED POINT | DISTANCE | PAY ITEM NUMBER |           |
|------------|----------|-----------------|-----------|
|            |          | 614-230         | 614-332   |
|            |          | #10             | #8 GROUND |
| P01        | 100      | 230             | 130       |
| P02        | 294      | 708             | 414       |
| P03        | 64       | 633             | 109       |
| P04        | 323      | 721             | 398       |
| P05        | 487      | 1124            | 637       |
| TOTAL      |          | 3416            | 1688      |

**65% DESIGN PLANS  
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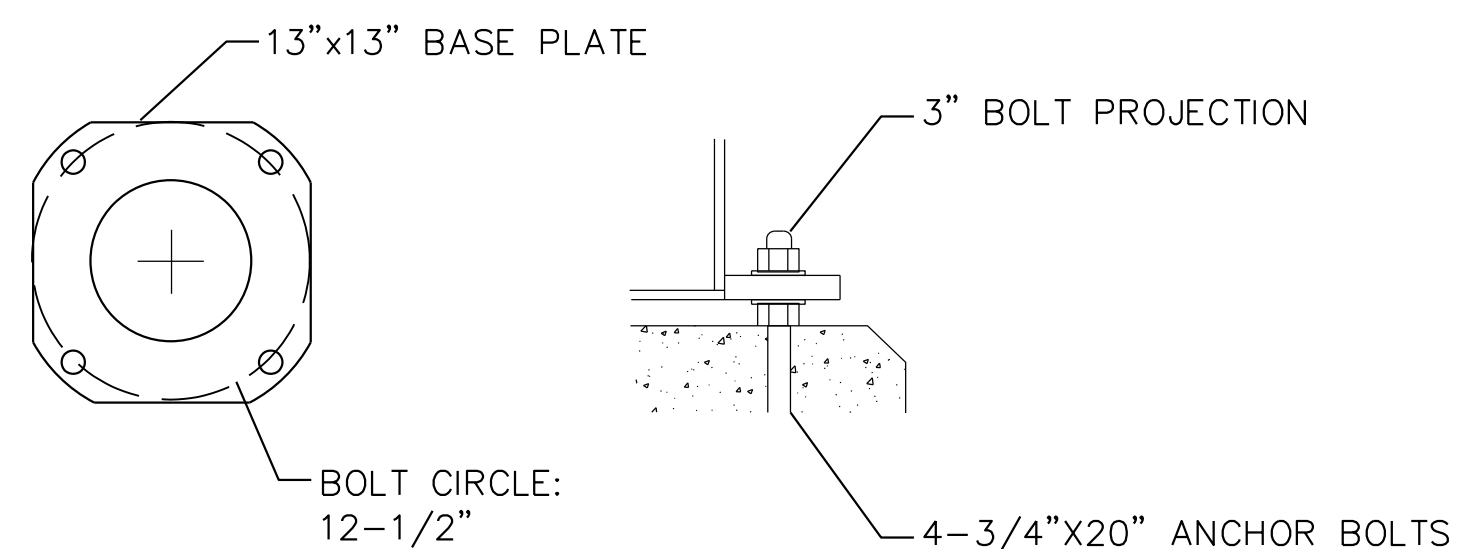
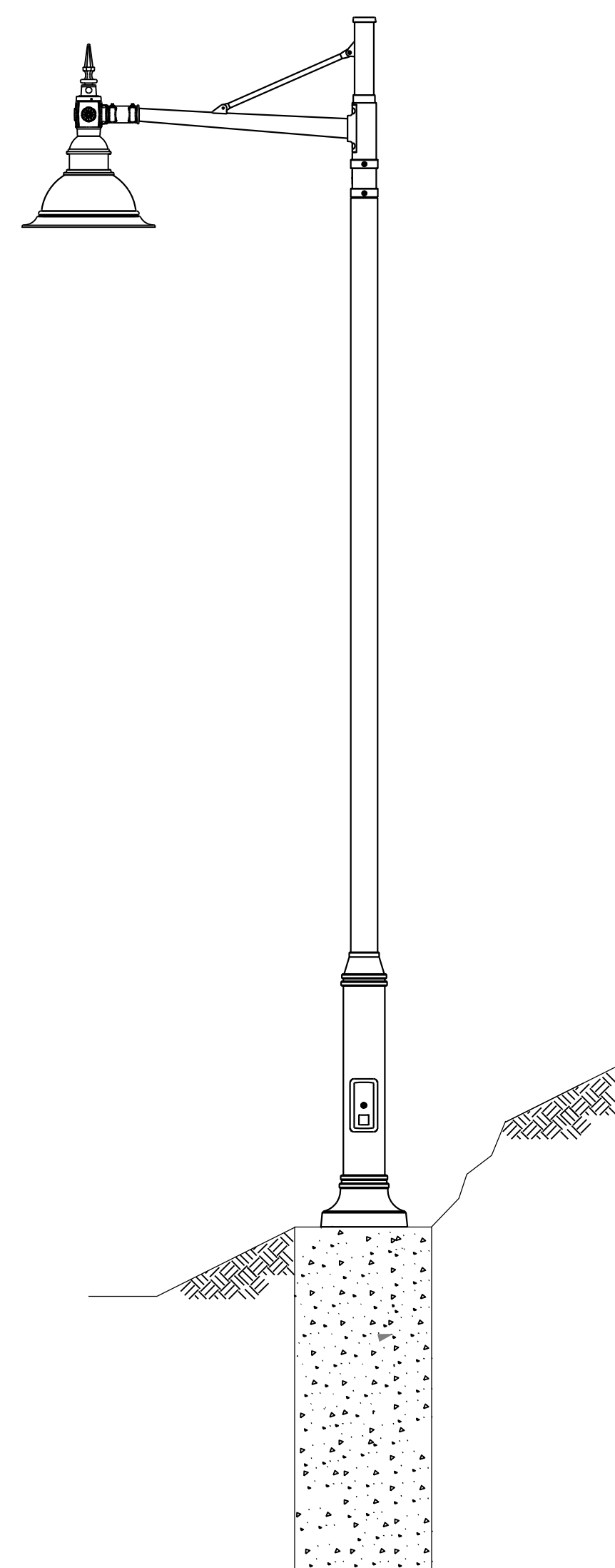
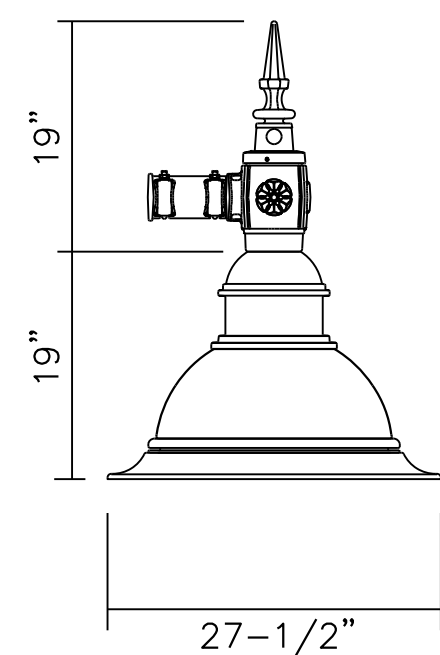
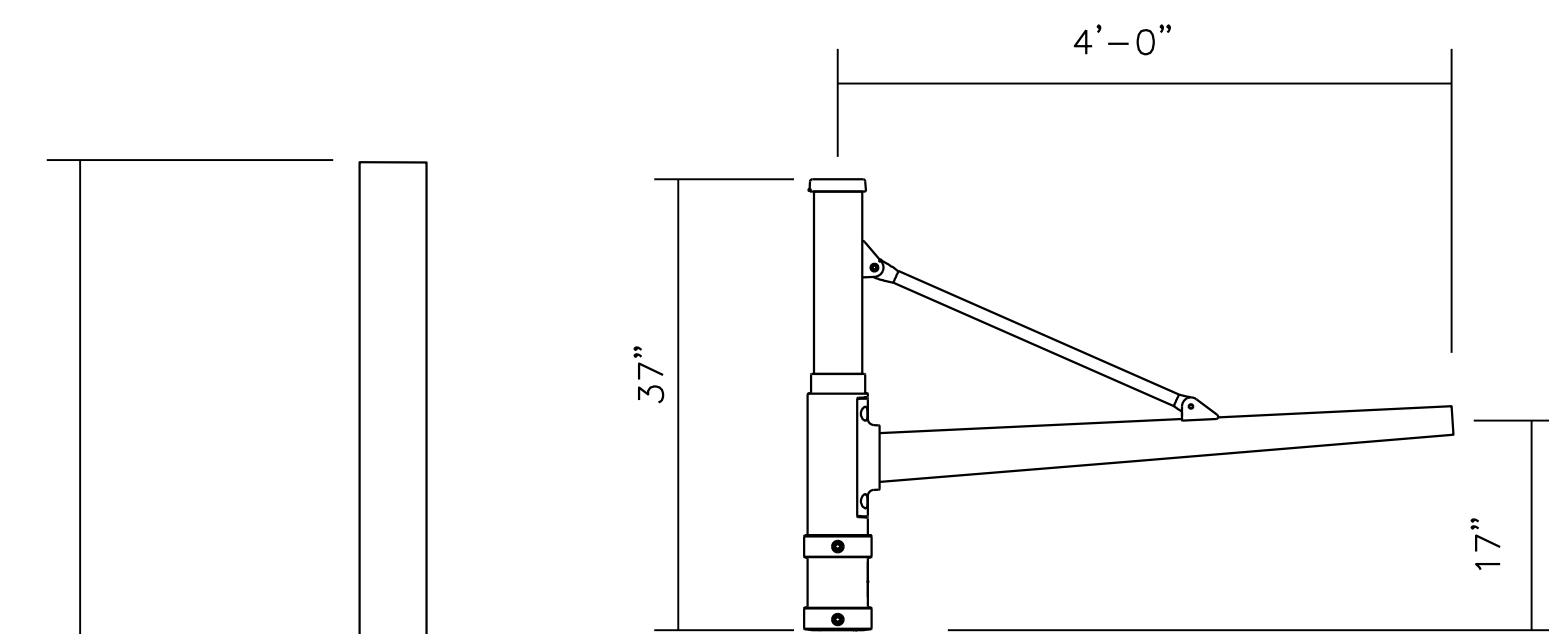
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 1003 K Street NW Washington, DC 20001  
 Suite 209 (202) 854-2750

| NO. | DESCRIPTION | NAME | DATE |
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|     |             |      |      |
|     |             |      |      |
|     |             |      |      |

|   |        |   |
|---|--------|---|
| DATE: JUNE 2023   | SCALE: | <b>LT-12</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |        |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |        | PROJECT ENG. _____<br>DESIGNED BY _____<br>CHECKED BY _____<br>DRAWN BY _____<br>PROJECT MGR. _____ |
| LIGHTING TABLES   |        | DIVISION CHIEF<br><br>DATE _____<br>FILE _____<br>SHEET 118 of 160                                  |

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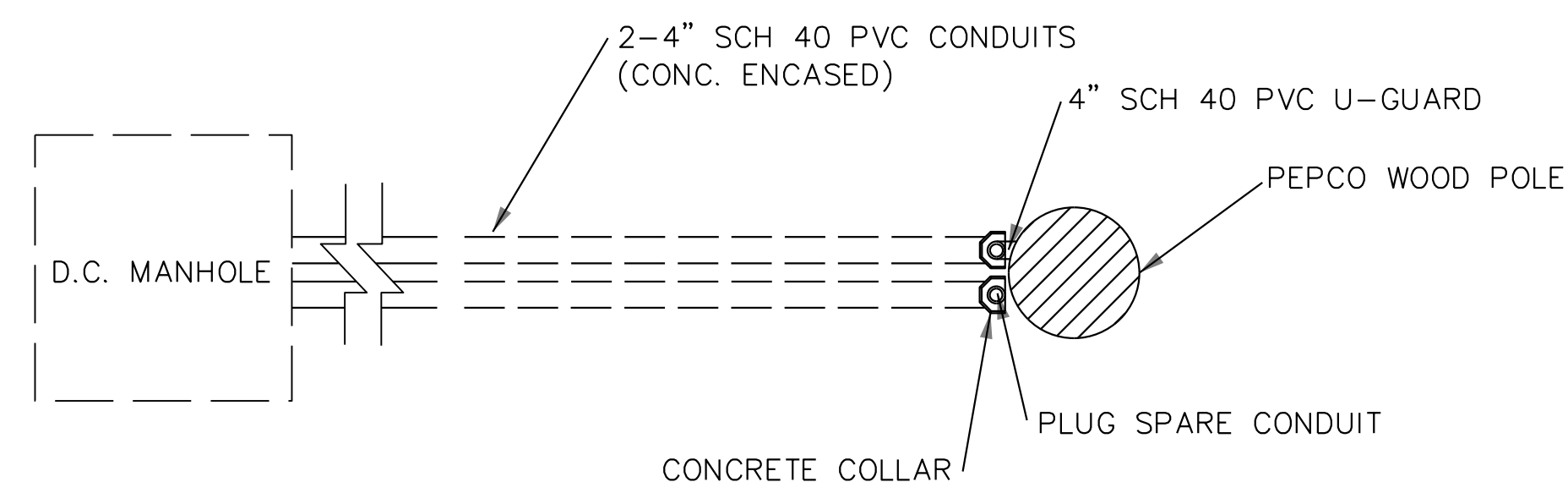
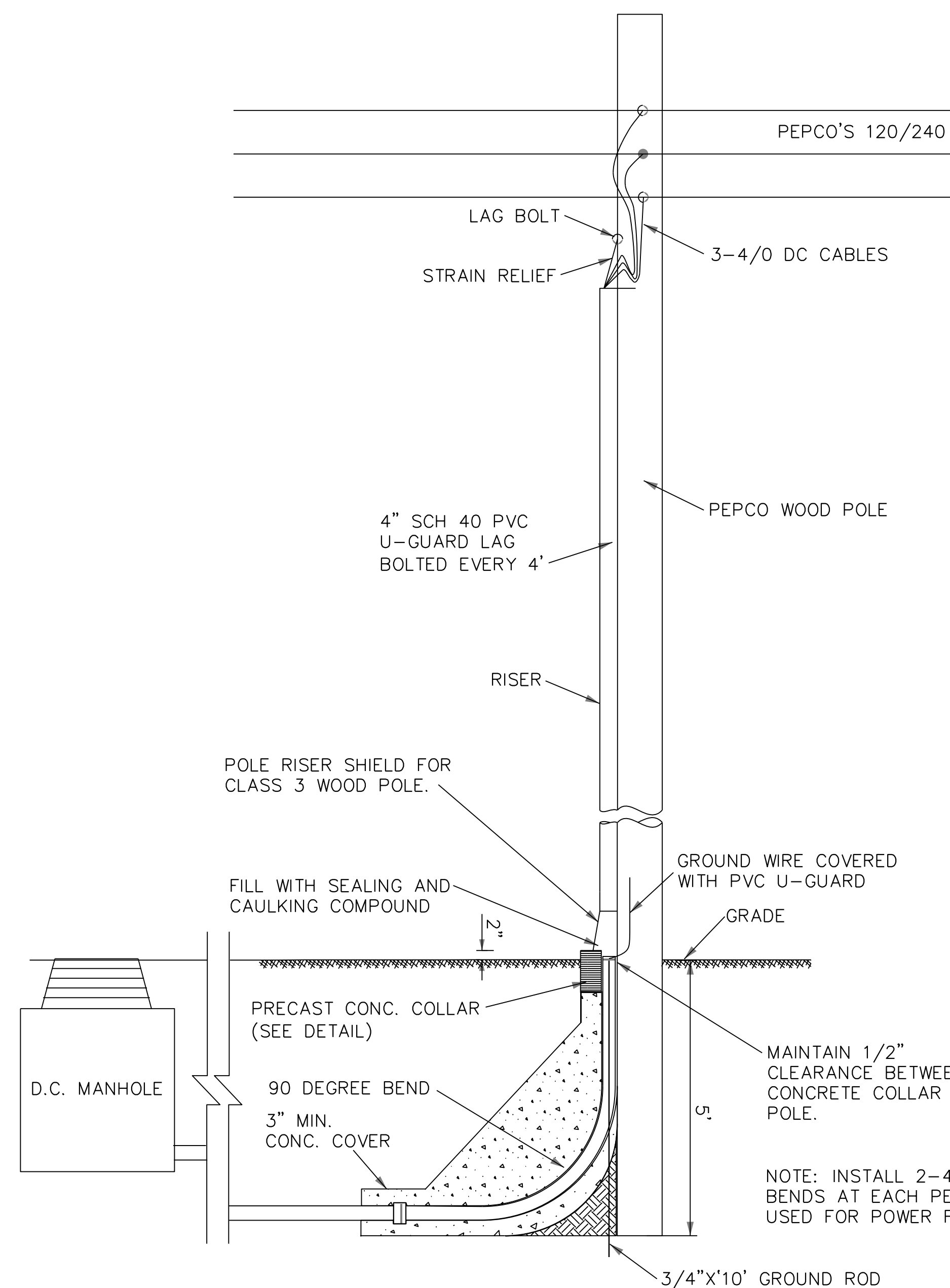
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 119       | 160          |



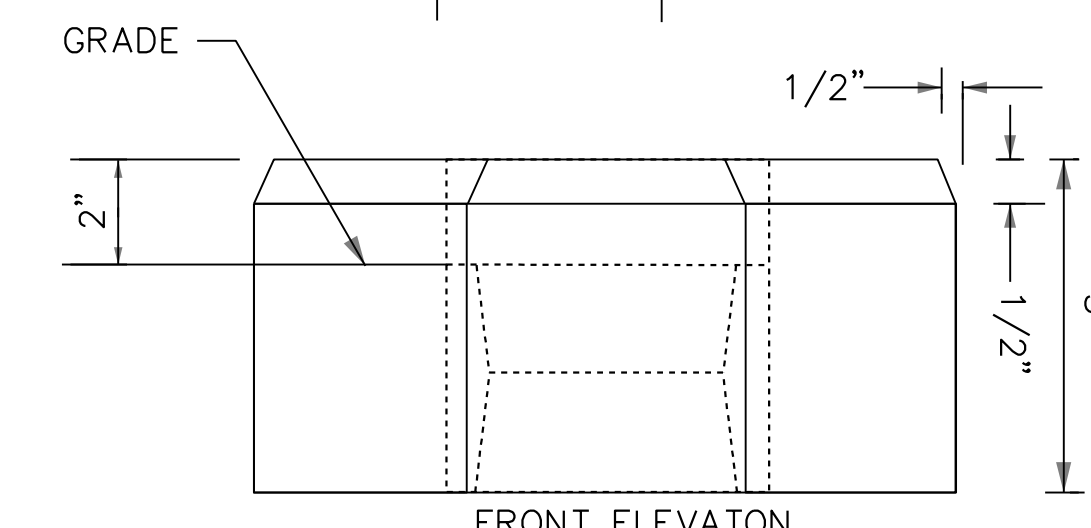
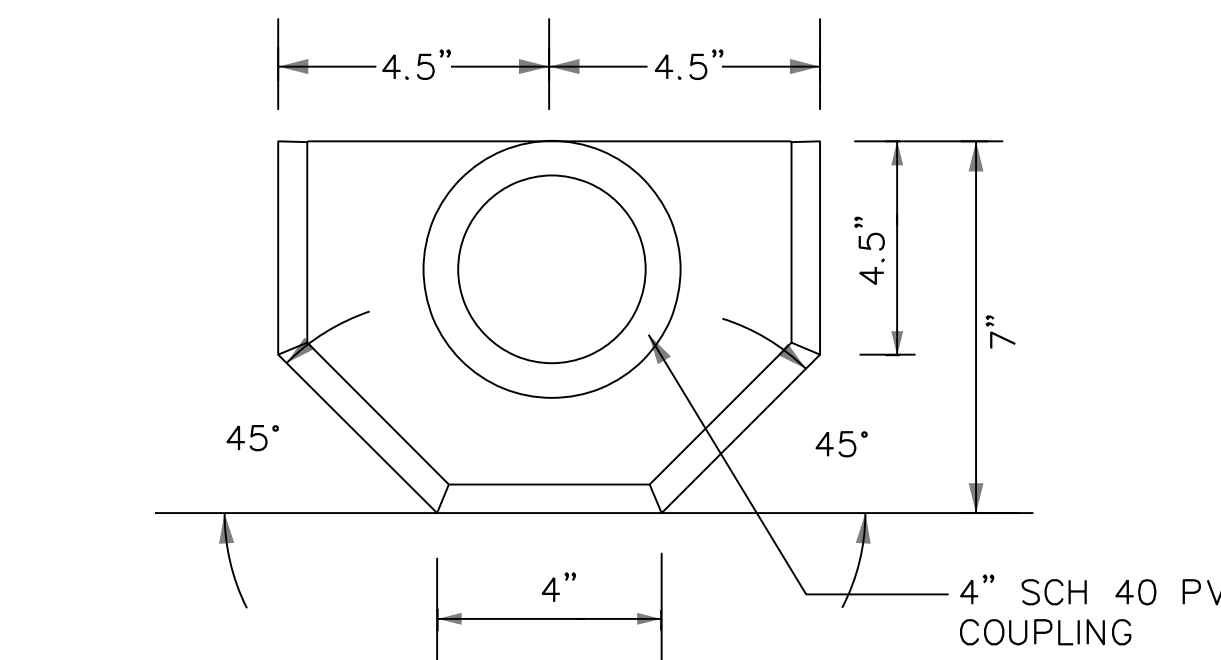
DECORATIVE PENDANT POLE DETAIL  
NOT TO SCALE

DECORATIVE PENDANT POLE ADJACENT  
TO PATH IN 2:1 SLOPE DETAIL  
NOT TO SCALE

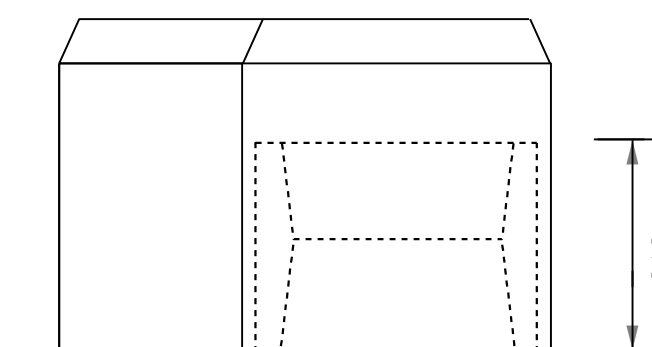
**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



WOOD POLE POWER CONNECTION  
NOT TO SCALE



FRONT ELEVATION



SIDE ELEVATION

PRECAST CONCRETE COLLAR  
NOT TO SCALE

|                 |        |              |
|-----------------|--------|--------------|
| DATE: JUNE 2023 | SCALE: | <b>LT-13</b> |
|-----------------|--------|--------------|

D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION

METROPOLITAN BRANCH TRAIL  
DESIGN

LIGHTING DETAILS

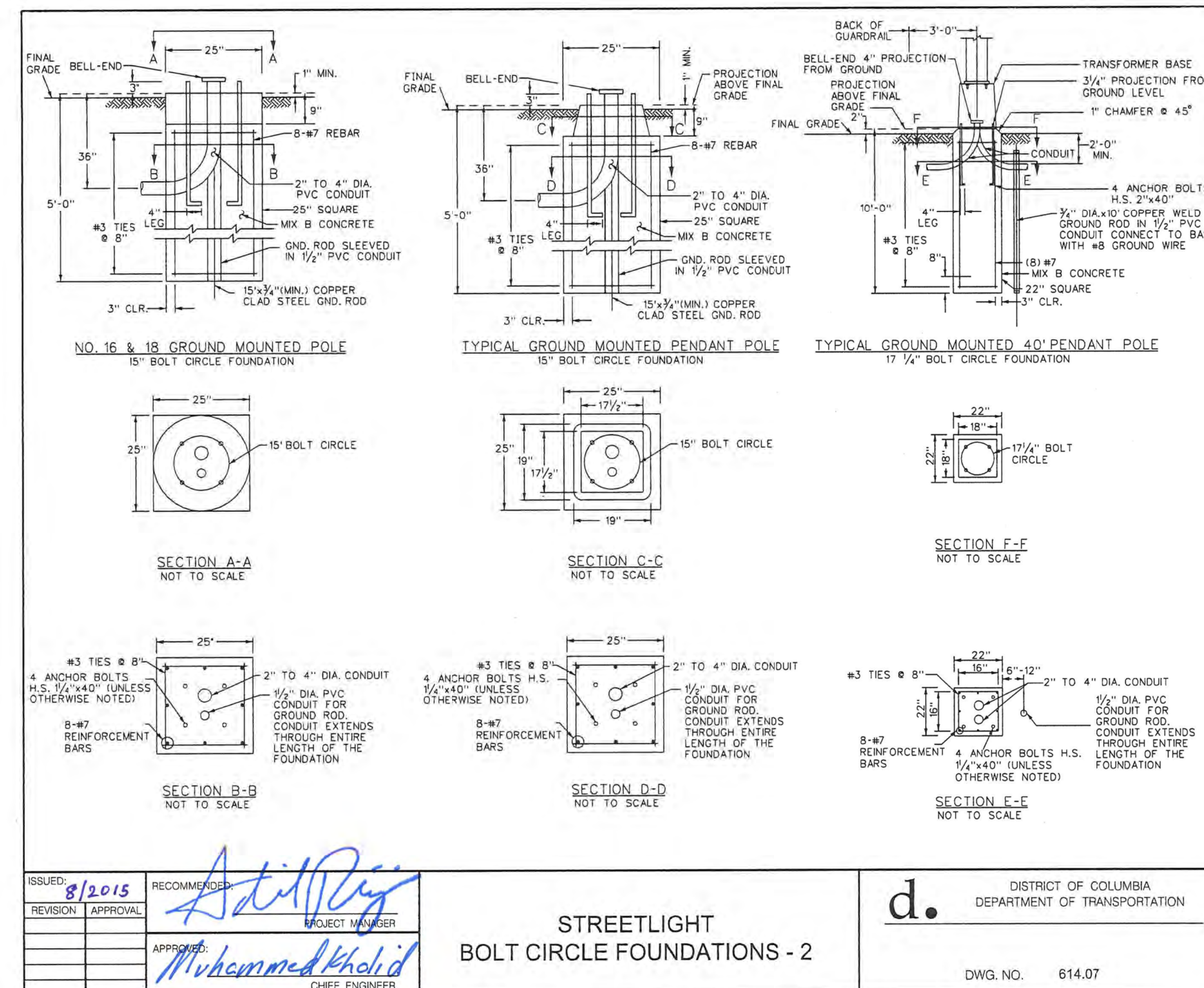
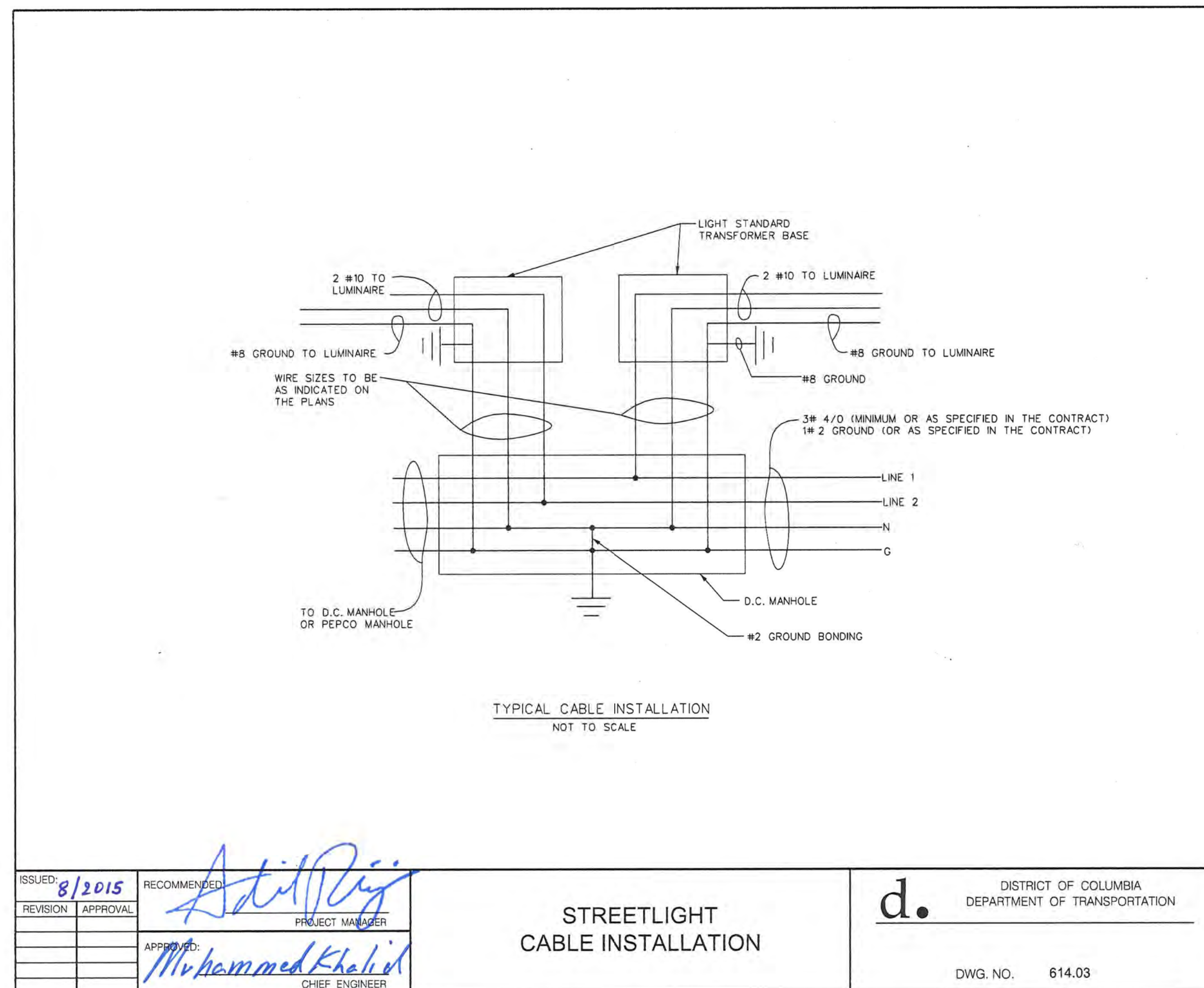
PROJECT ENG. CA  
DESIGNED BY JM  
CHECKED BY JP  
DRAWN BY JM  
PROJECT MGR. CA

DIVISION CHIEF

DATE  
FILE  
SHEET 119 OF 160

| <b>FEHR PEERS</b> |             | 1003 K Street NW<br>Suite 209 |      | Washington, DC 20001<br>(202) 854-2750 |  |
|-------------------|-------------|-------------------------------|------|--|--|
| NO.               | DESCRIPTION | NAME                          | DATE | REVISIONS                              |  |
|                   |             |                               |      |  |  |

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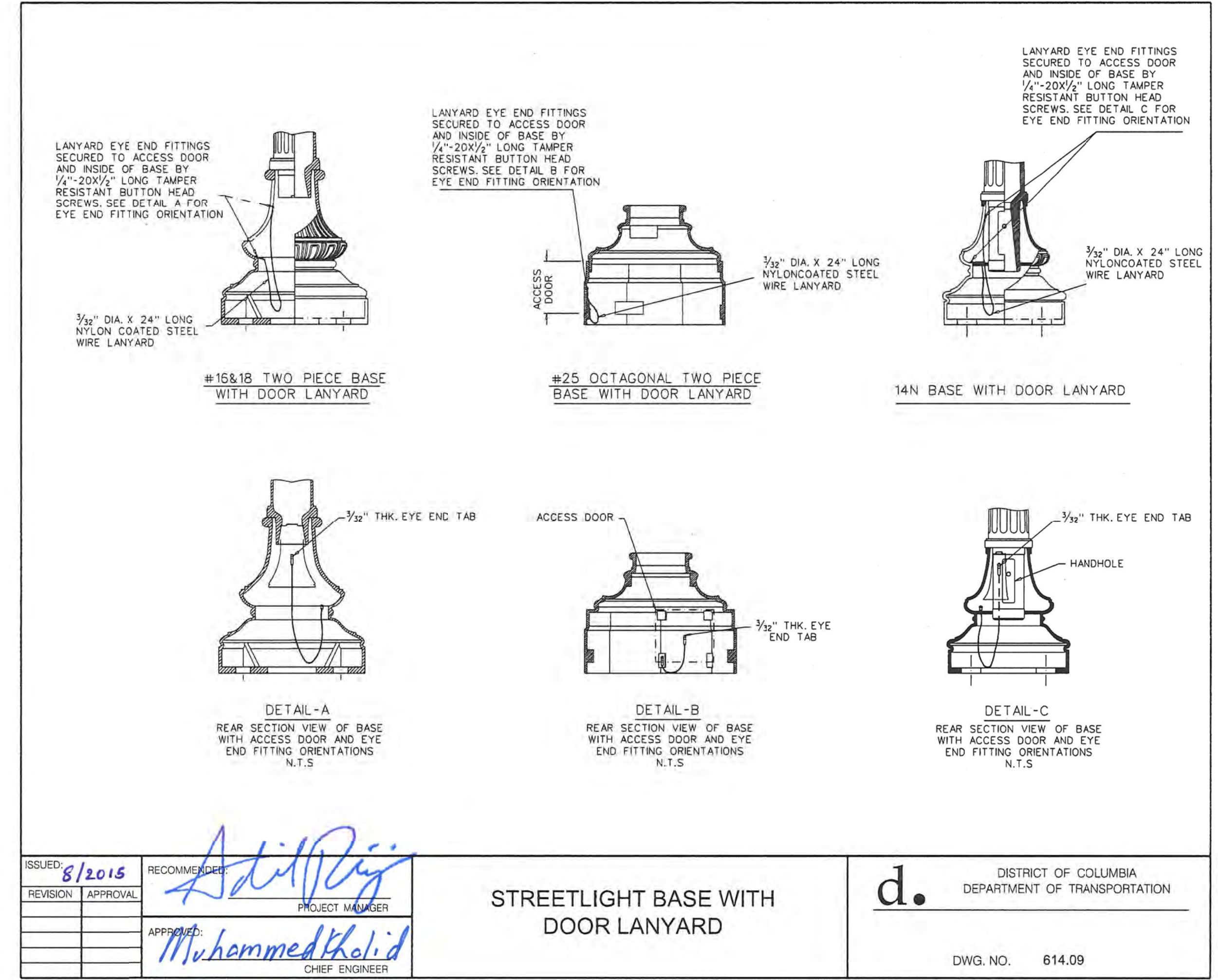
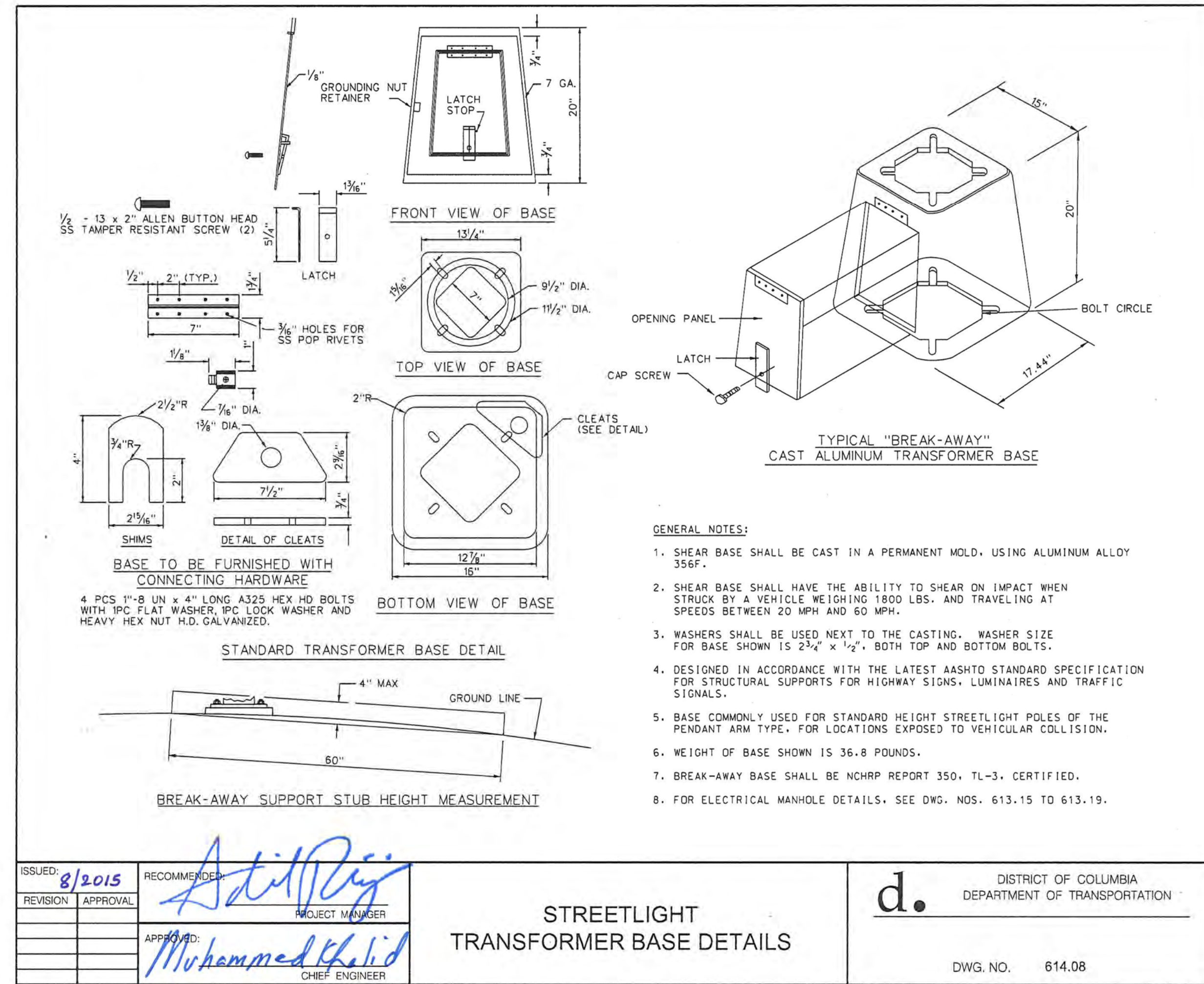
**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

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| NO.               | DESCRIPTION | NAME                          | DATE | REVISIONS                              |  |
|                   |             |                               |      |  |  |

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|---|--------|---|
| DATE: JUNE 2023   | SCALE: | <b>LT-14</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |        |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |        | PROJECT ENG. <u>CA</u><br>DESIGNED BY <u>JM</u><br>CHECKED BY <u>JP</u><br>DRAWN BY <u>JM</u><br>PROJECT MGR. <u>CA</u> |
| <b>LIGHTING DETAILS</b>   |        | DIVISION CHIEF  |
| DATE: _____   |        |   |
| FILE: _____   |        |   |
| SHEET <b>120</b> OF 160   |        |   |

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**65% DESIGN PLANS  
 NOT FOR CONSTRUCTION**

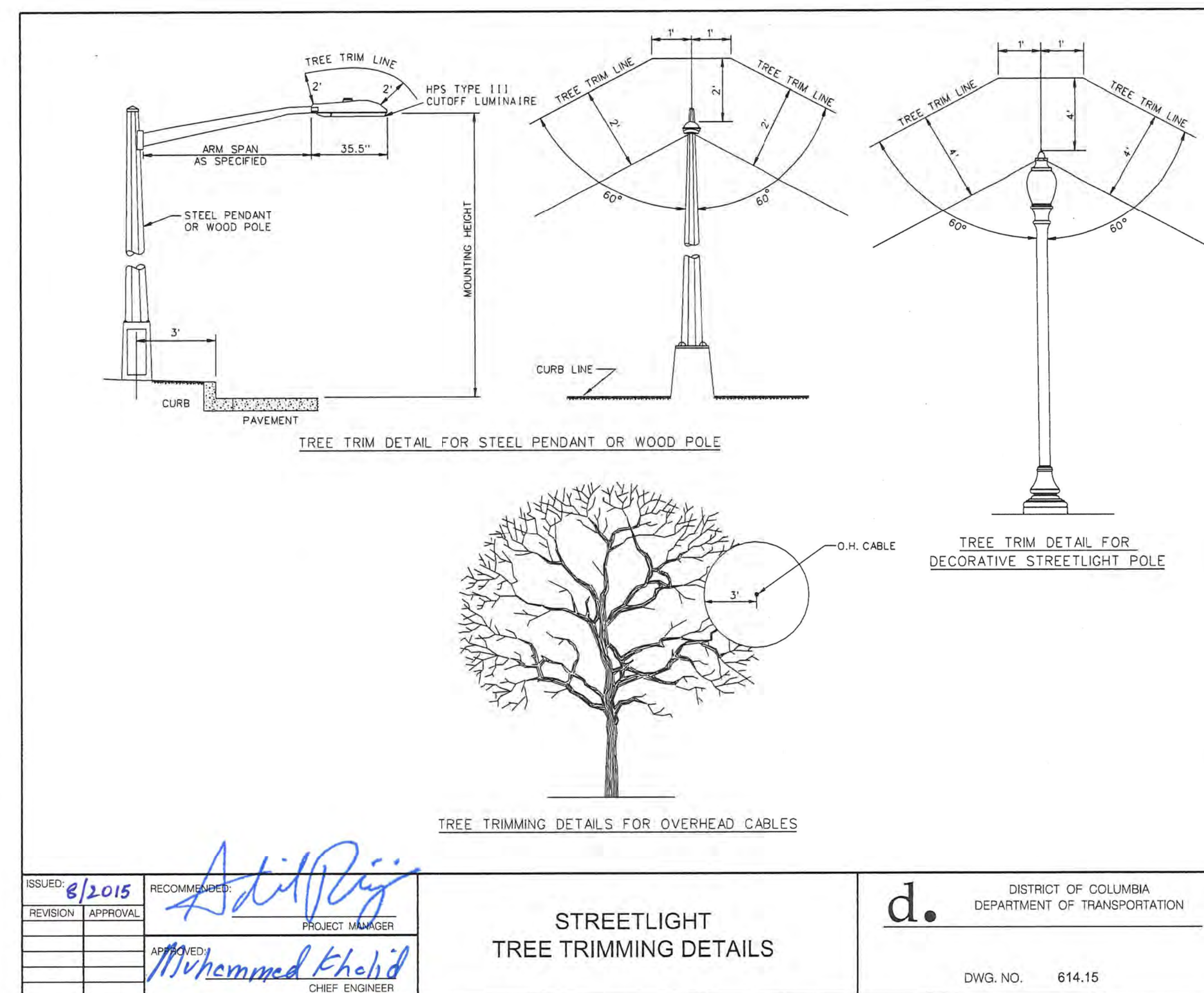
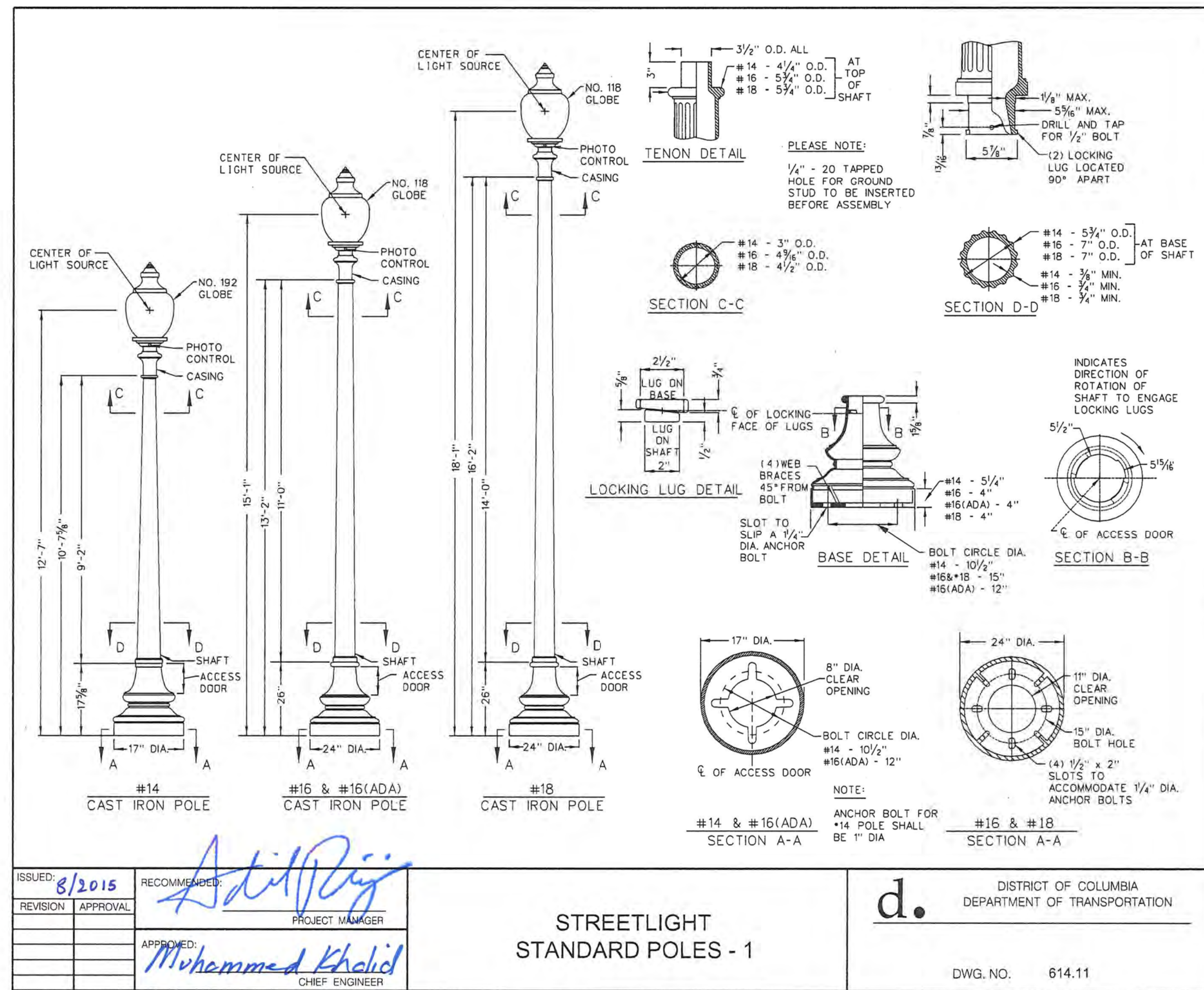
**FEHR PEERS**  
 1003 K Street NW  
 Suite 209  
 Washington, DC 20001  
 (202) 854-2750

| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|  |        |  |
|--|--------|--|
| DATE: JUNE 2023  | SCALE: | <b>LT-15</b>   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>   INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |        |  |
| <b>METROPOLITAN BRANCH TRAIL<br/>   DESIGN</b>   |        | PROJECT ENG. CA<br>DESIGNED BY JM<br>CHECKED BY JP<br>DRAWN BY JM<br>PROJECT MGR. CA |
| <b>LIGHTING DETAILS</b>  |        | DIVISION CHIEF   |
| DATE: _____  |        |  |
| FILE: _____  |        |  |
| SHEET 121 OF 160   |        |  |

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|     |       |                           |           |              |
|-----|-------|---------------------------|-----------|--------------|
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 122       | 160          |



**65% DESIGN PLANS  
 NOT FOR CONSTRUCTION**

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 Suite 209 Washington, DC 20001  
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| NO.       | DESCRIPTION | NAME | DATE |
|-----------|-------------|------|------|
| REVISIONS |             |      |      |

|   |        |  |
|---|--------|--|
| DATE: JUNE 2023   | SCALE: | <b>LT-16</b>   |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |        |  |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |        | PROJECT ENG. CA<br>DESIGNED BY JM<br>CHECKED BY JP<br>DRAWN BY JM<br>PROJECT MGR. CA |
| <b>LIGHTING DETAILS</b>   |        | DIVISION CHIEF<br>DATE<br>FILE<br>SHEET 122 OF 160                                   |

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| DESCRIPTION | REVISION |      |      |      |      |      |      |
|-------------|----------|------|------|------|------|------|------|
|             | DATE     | COR. | CHK. | APP. | APP. | APP. | APP. |
|             |          |      |      |      |      |      |      |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 8   | D.C.  | METROPOLITAN BRANCH TRAIL | 123       | 160          |

**GENERAL NOTES:**

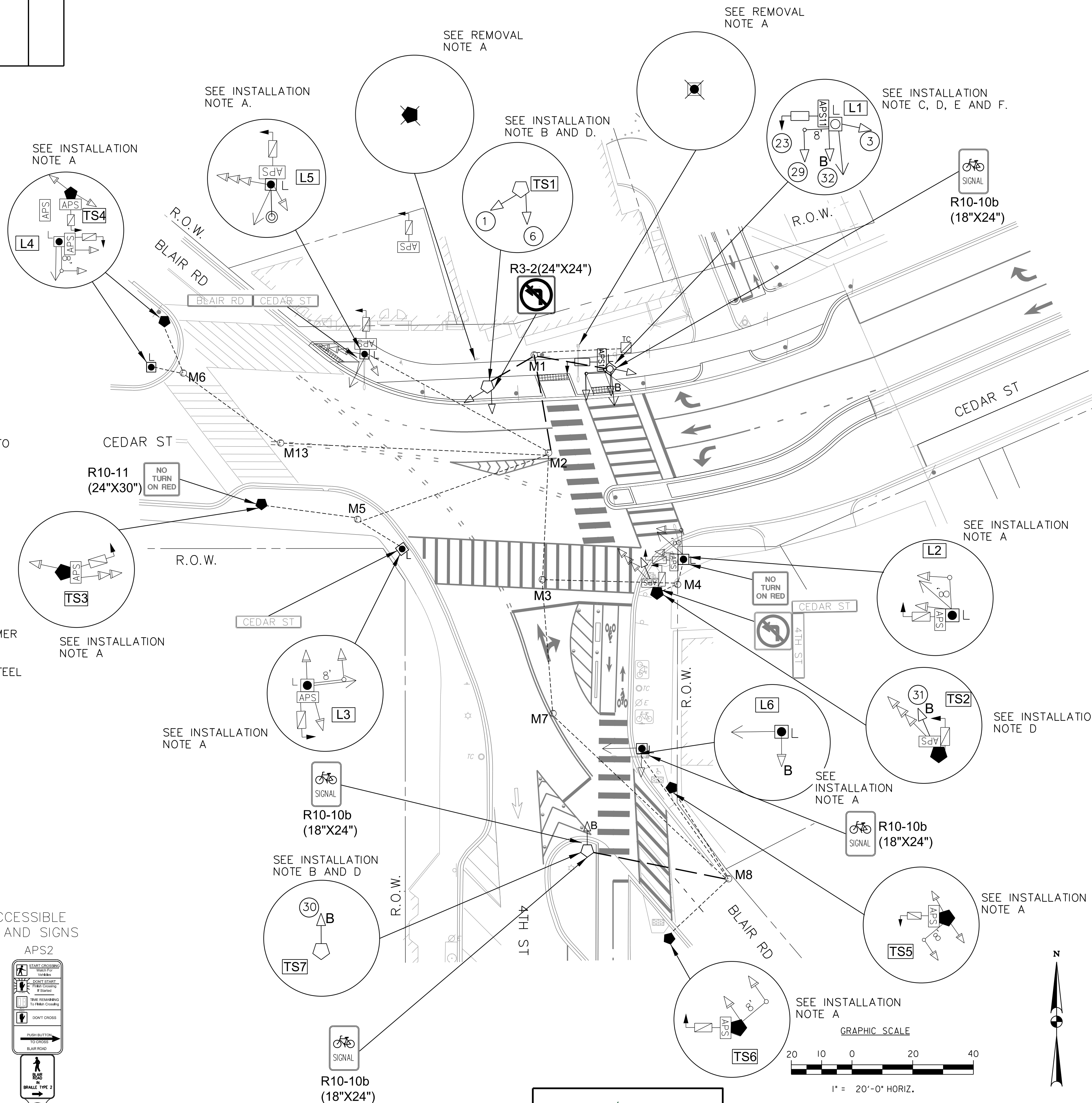
1. ALL WORK RELATING TO THE INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH APPROPRIATE PROVISIONS OF THE LATEST VERSIONS OF DDOT STANDARD DRAWINGS, STANDARD SPECIFICATIONS AND THE CONTRACT SPECIAL PROVISIONS. THE CONTRACTOR SHALL SUBMIT TO THE DDOT CATALOG CUTS OF ALL EQUIPMENT AND MATERIALS TO BE FURNISHED AND INSTALLED. WRITTEN APPROVAL FROM DDOT SHALL BE SECURED PRIOR TO PROCUREMENT.
2. THE LOCATION OF PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIALS SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
3. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL PROPOSED CONDUITS, MANHOLES, POLE FOUNDATIONS, AND CONTROLLER CABINET FOUNDATION.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TRAFFIC AND PEDESTRIAN SIGNAL HEADS, TRAFFIC SIGNAL POLES, TRANSFORMER BASES, APS UNITS AND ALL MOUNTING HARDWARE.
5. THE CONTRACTOR SHALL RETURN ALL REMOVED TRAFFIC SIGNAL EQUIPMENT TO DDOT TRAFFIC SIGNAL SHOP. CONTACT MR. HARVEY ALEXANDER 72 HOURS IN ADVANCE AT (202) 671-1495 TO ARRANGE SERVICE.
6. NO ABOVE GROUND HARDWARE OR EQUIPMENT SHALL BE LOCATED SUCH THAT A 4 FEET CLEAR ADA PATH IS NOT AVAILABLE.
7. STREETLIGHT LUMINAIRE MUST BE MAINTAINED ALL THE TIME. USE PROPOSED STREETLIGHTS AS NECESSARY.

**INSTALLATION NOTES:**

- A. EXISTING TRAFFIC SIGNAL EQUIPMENT TO REMAIN.
- B. INSTALL 20-FOOT TRAFFIC SIGNAL POLE WITH A STEEL TRANSFORMER BASE.
- C. INSTALL 28.5-FOOT PENDANT POST STREETLIGHT POLE WITH A STEEL TRANSFORMER BASE AND LED LUMINAIRE.
- D. INSTALL LED TRAFFIC SIGNAL HEAD(S).
- E. INSTALL LED COUNT-DOWN PEDESTRIAN SIGNAL HEAD(S).
- F. INSTALL APS PUSH BUTTON UNIT(S) AND SIGN.
- G. INSTALL SPREAD TYPE POLE FOOTING PER DDOT DWG NO.614.05.

**REMOVAL NOTES:**

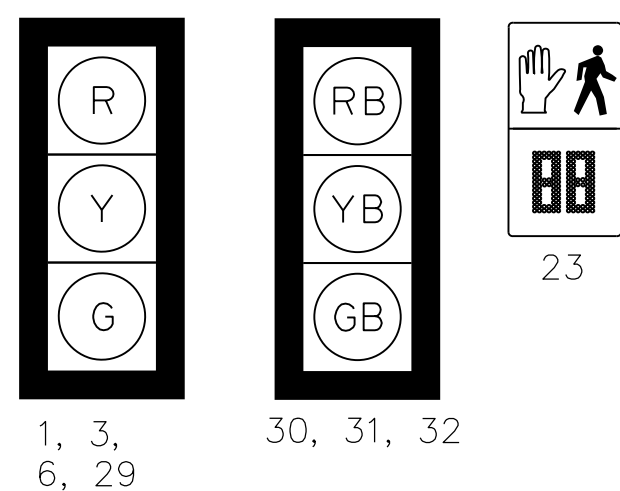
- A. REMOVE EXISTING TRAFFIC SIGNAL POLE(S) (ANY TYPE), EXISTING SIGNAL HEADS (ANY TYPE), AND EXISTING SIGN(S).



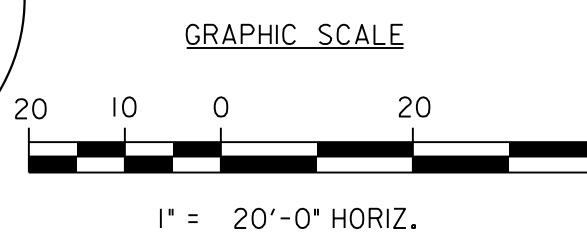
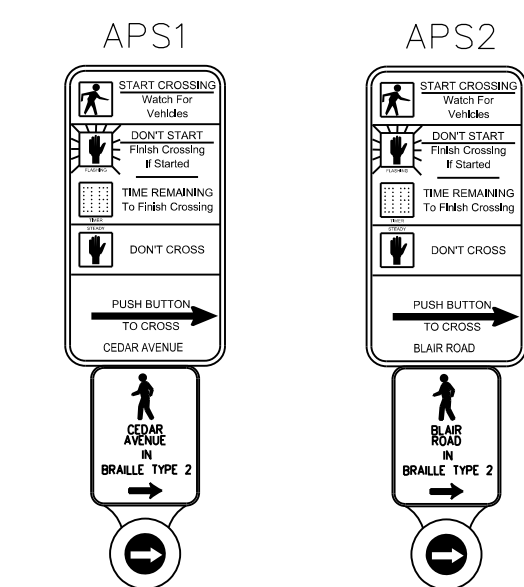
**LEGEND:**

- TC [Symbol] EXISTING TRAFFIC SIGNAL CONTROLLER WITH CABINET AND UNINTERRUPTED POWER SUPPLY (UPS) SYSTEM
- L [Symbol] EXISTING PENDANT POST STREETLIGHT POLE WITH A STEEL TRANSFORMER BASE AND LUMINAIRE
- L [Symbol] PROPOSED 28.5-FOOT STEEL PENDANT POST STREETLIGHT POLE WITH A STEEL TRANSFORMER BASE AND LED LUMINAIRE
- [Symbol] EXISTING 20-FOOT STEEL TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- [Symbol] PROPOSED 20-FOOT STEEL TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- [Symbol] LUMINAIRE AND SUPPORT ARM INDICATING DIRECTION OF LIGHT
- [Symbol] EXISTING 3-SECTION LED TRAFFIC SIGNAL HEAD CONVENTIONAL (ALL LENSES 12 INCHES)
- [Symbol] PROPOSED 3-SECTION LED TRAFFIC SIGNAL HEAD CONVENTIONAL (ALL LENSES 12 INCHES)
- [Symbol] EXISTING 4-SECTION LED TRAFFIC SIGNAL HEAD CONVENTIONAL (ALL LENSES 12 INCHES)
- [Symbol] PROPOSED 4-SECTION LED TRAFFIC SIGNAL HEAD CONVENTIONAL (ALL LENSES 12 INCHES)
- [Symbol] EXISTING 5-SECTION LED TRAFFIC SIGNAL HEAD CONVENTIONAL (ALL LENSES 12 INCHES)
- [Symbol] PROPOSED 5-SECTION LED TRAFFIC SIGNAL HEAD CONVENTIONAL (ALL LENSES 12 INCHES)
- [Symbol] EXISTING 3-SECTION LED BIKE SIGNAL HEAD CONVENTIONAL (ALL LENSES 12 INCHES)
- [Symbol] PROPOSED 3-SECTION LED BIKE SIGNAL HEAD CONVENTIONAL (ALL LENSES 12 INCHES)
- [Symbol] EXISTING 2-SECTION LED COUNT-DOWN PEDESTRIAN SIGNAL HEAD
- [Symbol] PROPOSED 2-SECTION LED COUNT-DOWN PEDESTRIAN SIGNAL HEAD
- [Symbol] EXISTING ACCESSIBLE PEDESTRIAN SIGNAL (APS)
- [Symbol] PROPOSED ACCESSIBLE PEDESTRIAN SIGNAL (APS)
- [Symbol] EXISTING 8-FOOT MAST ARM WITH CAP AND CLAMP
- TS TRAFFIC SIGNAL (S) MOUNTED ON STREETLIGHT POLE
- X REMOVE INDICATED TRAFFIC SIGNAL OR STREETLIGHT UNIT
- (E) EXISTING PEPCO ELECTRICAL MANHOLE
- (C) EXISTING CCTV CAMERA
- PROPOSED DDOT ELECTRICAL PVC CONDUIT
- - - EXISTING DDOT ELECTRICAL PVC CONDUIT
- RIGHT OF WAY LINE

**PROPOSED LED SIGNALS**



**PROPOSED ACCESSIBLE PUSHBUTTON AND SIGNS**



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**

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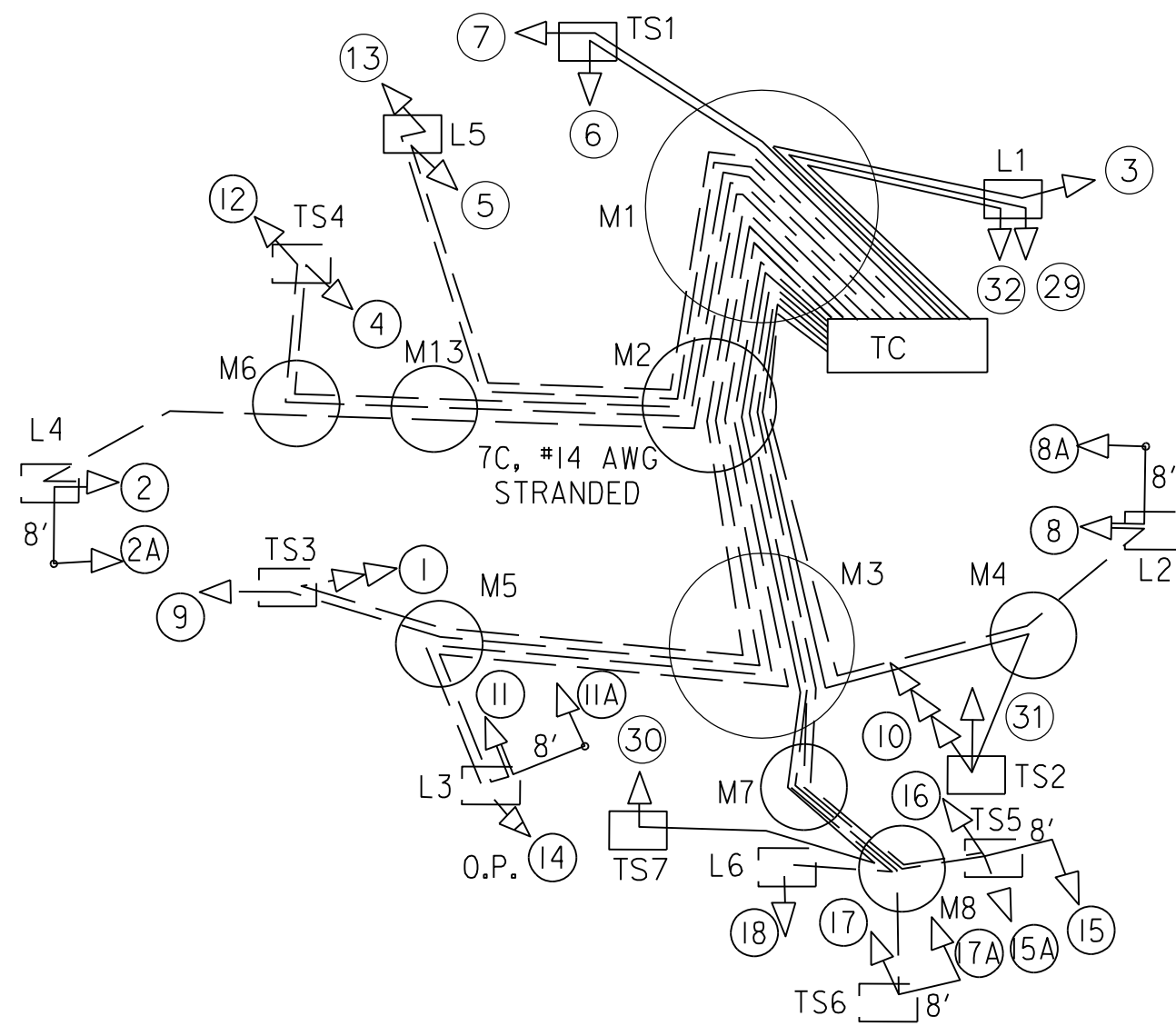
S.L.F. NO. \_\_\_\_\_  
APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

|   |  |                                   |
|---|--|-----------------------------------|
| SEQUENCE OF OPERATION DRAWING NO. TS-213-K, ACISA NO. 5009                                      |  | <b>SG-1</b>                       |
| DISTRICT OF COLUMBIA<br>DEPARTMENT OF TRANSPORTATION<br>TRAFFIC ENGINEERING AND SAFETY DIVISION |  | FINAL                             |
| 4TH STREET, BLAIR ROAD, AND<br>CEDAR STREET, N.W.<br>TRAFFIC SIGNAL MODIFICATION                |  | FIELD CHECKED BY<br>S.J.L./M.F.W. |
| SUBMITTED BY _____ DATE _____   |  | DESIGNED BY<br>J.D.               |
| RECOMMENDED<br>TRAFFIC SIGNAL DESIGN PROJECT MANAGER _____ DATE _____                           |  | DRAWN BY<br>J.D.                  |
| ITS /TRAFFIC SIGNAL MAINTENANCE DIVISION MANAGER _____ DATE _____                               |  | REVIEWED BY<br>J.J.P.             |
| APPROVED<br>TRAFFIC SIGNAL PROGRAM MANAGER _____ DATE _____                                     |  | DATE<br>6/2023                    |
| SCALE<br>1" = 20'   |  | SCALE<br>1" = 20'                 |
| SHEET<br>123  |  | OF<br>160                         |
| DRAWING NO.<br>S-188-C  |  |                                   |

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| DESCRIPTION | REVISION |      |      |      |      |      |      |
|-------------|----------|------|------|------|------|------|------|
|             | DATE     | COR. | CHK. | APP. | APP. | APP. | APP. |
|             |          |      |      |      |      |      |      |

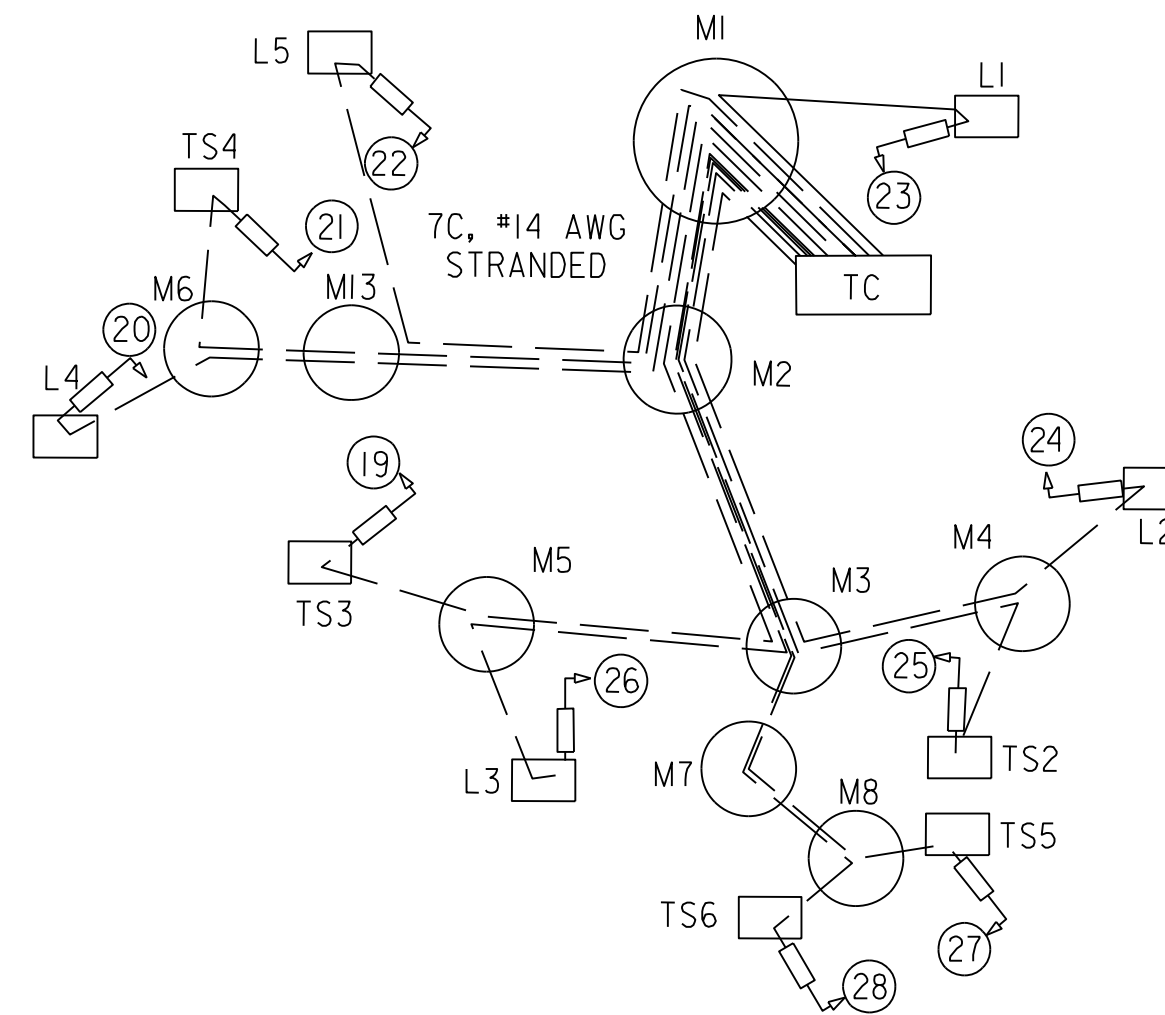
MODIFIED TRAFFIC SIGNAL HEAD CABLE SCHEMATIC



MODIFIED TRAFFIC SIGNAL HEAD CABLE ROUTING

- |                          |                           |                              |                              |
|--------------------------|---------------------------|------------------------------|------------------------------|
| TC-MI-M2-M3-M5- [TS3] -1 | TC-MI-M2-M3-M4- [L2] -8   | TC-MI-M2-M3-M5- [L3] -14     | TC-MI-M2-M3-M7-M8- [TS7] -30 |
| TC-MI-M2-M3-M6- [L4] -2  | 8-8A                      | TC-MI-M2-M3-M7-M8- [TS5] -15 | TC-MI-M2-M3-M4- [TS2] -31    |
| 2-2A                     | TC-MI-M2-M3-M5- [TS3] -9  | I5-I5A                       | TC-MI- [L1] -32              |
| TC-MI- [L1] -3           | TC-MI-M2-M3-M4- [TS2] -10 | TC-MI-M2-M3-M7-M8- [TS5] -16 |                              |
| TC-MI-M2-M3-M6- [TS4] -4 | TC-MI-M2-M3-M5- [L3] -11  | TC-MI-M2-M3-M7-M8- [TS6] -17 |                              |
| TC-MI-M2- [L5] -5        | II-IIA                    | 17-17A                       |                              |
| TC-MI- [TS1] -6          | TC-MI-M2-M3-M6- [TS4] -12 | TC-MI-M2-M3-M7-M8- [L6] -18  |                              |
| TC-MI- [TS1] -7          | TC-MI-M2- [L5] -13        | TC-MI- [L1] -29              |                              |

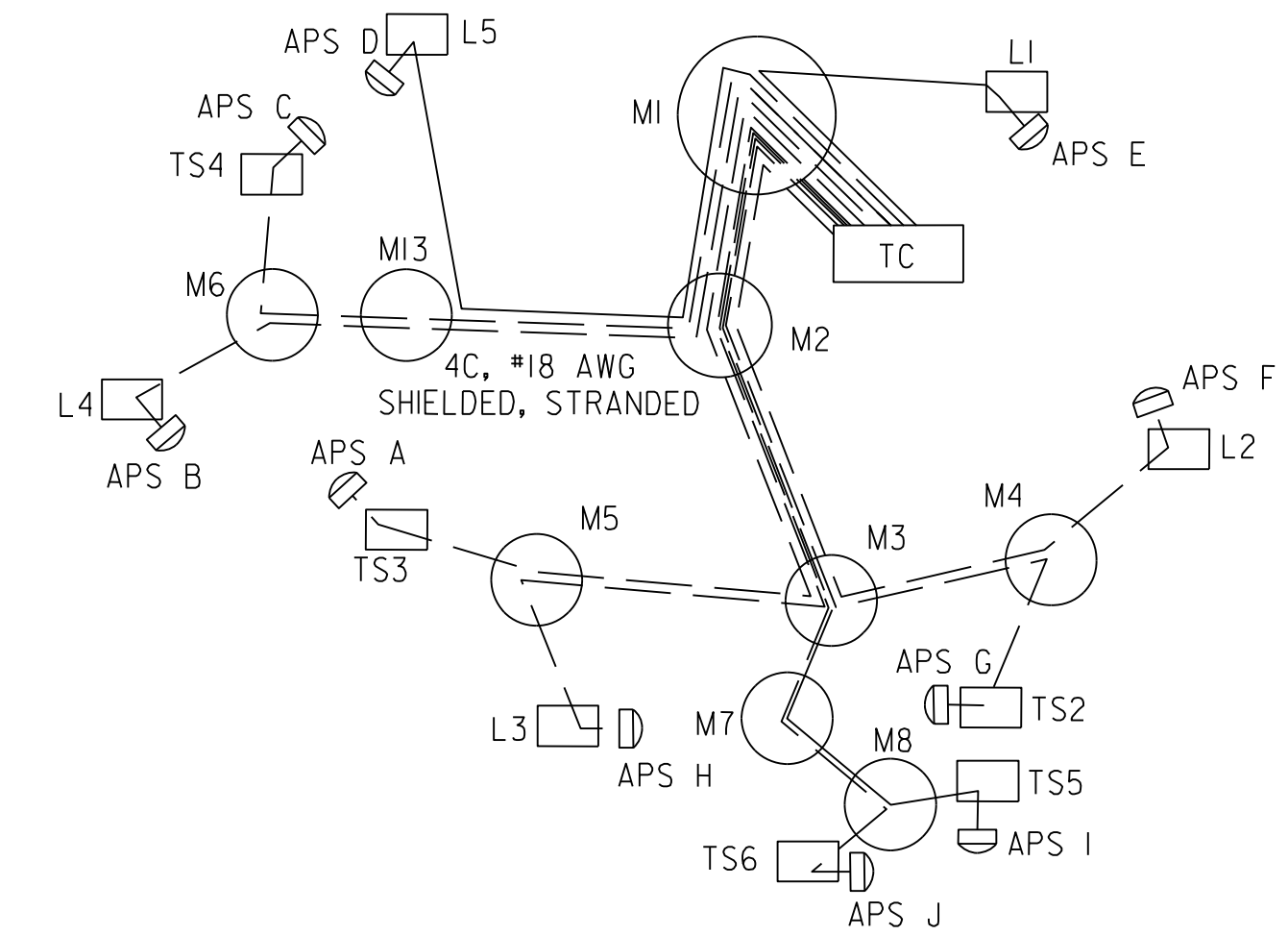
MODIFIED PEDESTRIAN SIGNAL HEAD CABLE SCHEMATIC



MODIFIED PEDESTRIAN SIGNAL HEAD CABLE ROUTING

- |                           |                              |
|---------------------------|------------------------------|
| TC-MI-M2-M3-M5- [TS3] -19 | TC-MI- [L1] -23              |
| TC-MI-M2-M3-M6- [L4] -20  | TC-MI-M2-M3-M4- [L2] -24     |
| TC-MI-M2-M3-M6- [TS4] -21 | TC-MI-M2-M3-M4- [TS2] -25    |
| TC-MI-M2- [L5] -22        | TC-MI-M2-M3-M5- [L3] -26     |
|                           | TC-MI-M2-M3-M7-M8- [TS5] -27 |
|                           | TC-MI-M2-M3-M7-M8- [TS6] -28 |

MODIFIED ACCESSIBLE PEDESTRIAN SIGNAL (APS) CABLE SCHEMATIC



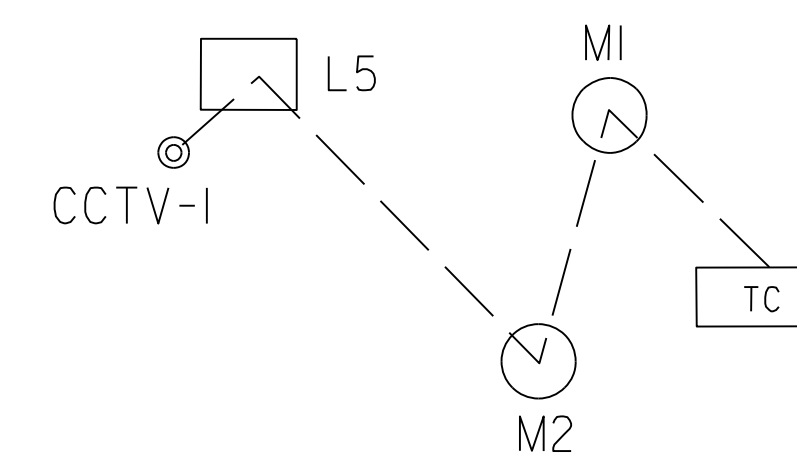
MODIFIED ACCESSIBLE PEDESTRIAN SIGNAL (APS) CABLE ROUTING

- |                              |                                 |
|------------------------------|---------------------------------|
| TC-MI-M2-M3-M5- [TS3] -APS A | TC-MI- [L1] -APS E              |
| TC-MI-M2-M3-M6- [L4] -APS B  | TC-MI-M2-M3-M4- [L2] -APS F     |
| TC-MI-M2-M3-M6- [TS4] -APS C | TC-MI-M2-M3-M4- [TS2] -APS G    |
| TC-MI-M2- [L5] -APS D        | TC-MI-M2-M3-M5- [L3] -APS H     |
|                              | TC-MI-M2-M3-M7-M8- [TS5] -APS I |
|                              | TC-MI-M2-M3-M7-M8- [TS6] -APS J |

| STA.    | STATUS   | DESCRIPTION   |
|---------|----------|---|
| TC- [ ] | EXISTING | TRAFFIC SIGNAL CONTROLLER WITH UPS                              |
| PI      | EXISTING | PEPCO MANHOLE (SERVICE FEED LOCATION *XXXXX)                    |
| MI      | EXISTING | DDOT MANHOLE (4'X4'X4')   |
| M2      | EXISTING | DDOT MANHOLE (4'X4'X4')   |
| M3      | EXISTING | DDOT MANHOLE (4'X4'X4')   |
| M4      | EXISTING | DDOT MANHOLE (3'X3'X3')   |
| M5      | EXISTING | DDOT MANHOLE (3'X3'X3')   |
| M6      | EXISTING | DDOT MANHOLE (3'X3'X3')   |
| M7      | EXISTING | DDOT MANHOLE (4'X4'X4')   |
| M8      | EXISTING | DDOT MANHOLE (4'X4'X4')   |
| MI3     | EXISTING | DDOT MANHOLE (4'X4'X4')   |
| [L1]    | PROPOSED | PENDANT POLE WITH LUMINAIRE                                     |
| [L2]    | EXISTING | PENDANT POLE WITH LUMINAIRE, 8 FOOT MAST ARM WITH CAP AND CLAMP |
| [L3]    | EXISTING | PENDANT POLE WITH LUMINAIRE, 8 FOOT MAST ARM WITH CAP AND CLAMP |
| [L4]    | EXISTING | PENDANT POLE WITH LUMINAIRE, 8 FOOT MAST ARM WITH CAP AND CLAMP |
| [L5]    | EXISTING | PENDANT POLE WITH LUMINAIRE                                     |
| [L6]    | EXISTING | PENDANT POLE  |
| [TS1]   | PROPOSED | 20 FOOT TRAFFIC SIGNAL POLE                                     |
| [TS2]   | EXISTING | 20 FOOT TRAFFIC SIGNAL POLE                                     |
| [TS3]   | EXISTING | 20 FOOT TRAFFIC SIGNAL POLE                                     |
| [TS4]   | EXISTING | 20 FOOT TRAFFIC SIGNAL POLE                                     |
| [TS5]   | EXISTING | 20 FOOT TRAFFIC SIGNAL POLE                                     |
| [TS6]   | EXISTING | 20 FOOT TRAFFIC SIGNAL POLE                                     |
| [TS7]   | PROPOSED | 20 FOOT TRAFFIC SIGNAL POLE                                     |

| CONDUIT SUMMARY      |                  |                    |              |                  |                  |    |
|----------------------|------------------|--------------------|--------------|------------------|------------------|----|
| SCHEDULE             |                  |                    | QUANTITY     |                  |                  |    |
| LOCATION TO LOCATION | SIZE (DIA.) INCH | NUMBER OF CONDUITS | CONDUIT FEET | 2 INCH BEND (EA) | 4 INCH BEND (EA) |    |
| [ ] TC-PI            | EXISTING         | 2                  | 1            | 10               | 1                | -- |
| [ ] TC-MI            | EXISTING         | 2,4                | 1,2          | 30               | 1                | 2  |
| MI- [TS1]            | PROPOSED         | 2,4                | 1,1          | 25               | 1                | 1  |
| MI- [L1]             | PROPOSED         | 2,4                | 1,1          | 15               | 1                | 1  |
| MI-M2                | EXISTING         | 4                  | 4            | 25               | -                | -  |
| M2-M3                | EXISTING         | 4                  | 4            | 40               | -                | -  |
| M2- [L5]             | EXISTING         | 2,4                | 1,1          | 80               | 1                | 1  |
| M2-MI3               | EXISTING         | 4                  | 4            | 85               | -                | -  |
| M3-M4                | EXISTING         | 4                  | 4            | 50               | -                | -  |
| M4- [L2]             | EXISTING         | 2,4                | 1,1          | 10               | 1                | 1  |
| M4- [TS2]            | EXISTING         | 2,4                | 1,1          | 10               | 1                | 1  |
| M3-M5                | EXISTING         | 4                  | 4            | 55               | -                | -  |
| M5- [L3]             | EXISTING         | 2,4                | 1,1          | 20               | 1                | 1  |
| M5- [TS3]            | EXISTING         | 2,4                | 1,1          | 35               | 1                | 1  |
| M6- [L4]             | EXISTING         | 2,4                | 1,1          | 15               | 1                | 1  |
| M6- [TS4]            | EXISTING         | 2,4                | 1,1          | 15               | 1                | 1  |
| M3-MH#792645         | EXISTING         | 4                  | 2            | 25               | -                | -  |
| M3-M7                | EXISTING         | 4                  | 4            | 55               | -                | -  |
| M7-M8                | EXISTING         | 4                  | 4            | 85               | -                | -  |
| M8- [TS5]            | EXISTING         | 2,4                | 1,1          | 40               | -                | -  |
| M8- [TS6]            | EXISTING         | 2,4                | 1,1          | 20               | -                | 1  |
| MI3-M6               | EXISTING         | 4                  | 4            | 45               | -                | -  |
| M8- [L6]             | EXISTING         | 2,4                | 1,1          | 60               | -                | -  |
| M8- [TS7]            | PROPOSED         | 4                  | 1            | 30               | -                | -  |

EXISTING CCTV CAMERA CABLE SCHEMATIC

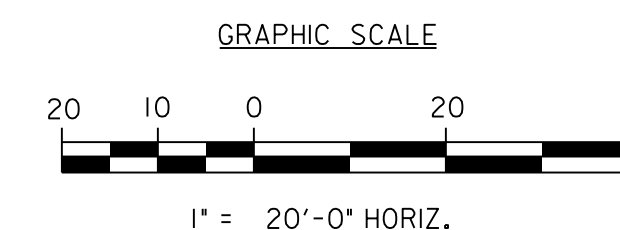


EXISTING CCTV CAMERA CABLE ROUTING

TC-MI-M2- [L5] -CCTV-1

SEQUENCE OF OPERATION DRAWING NO. TS-213-K, ACISA NO. 5009 **SG-2**

|   |  |                                   |
|---|--|-----------------------------------|
| DISTRICT OF COLUMBIA<br>DEPARTMENT OF TRANSPORTATION<br>TRAFFIC ENGINEERING AND SAFETY DIVISION |  | FINAL                             |
| 4TH STREET, BLAIR ROAD, AND<br>CEDAR STREET, N.W.<br>CABLE ROUTING SCHEMATIC                    |  | FIELD CHECKED BY<br>S.J.L./W.F.W. |
| DESIGNED BY<br>JD   |  | DRAWN BY<br>JD                    |
| REVIEWED BY<br>JJP  |  | DATE<br>6/2023                    |
| SUBMITTED BY<br>TRAFFIC SIGNAL PROJECT ENGINEER   |  | DATE                              |
| RECOMMENDED<br>TRAFFIC SIGNAL DESIGN PROJECT MANAGER  |  | SCALE<br>1" = 20'                 |
| ITS /TRAFFIC SIGNAL MAINTENANCE DIVISION MANAGER  |  | SHEET<br>124                      |
| APPROVED<br>TRAFFIC SIGNAL PROGRAM MANAGER  |  | OF<br>160                         |
| DATE  |  | DRAWING NO.<br>S-188-C            |



**65% DESIGN PLANS  
NOT FOR CONSTRUCTION**



S.L.F. NO. \_\_\_\_\_  
APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

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| DESCRIPTION | REVISION |      |      |      |      |      |      |
|-------------|----------|------|------|------|------|------|------|
|             | DATE     | COR. | CHK. | APP. | APP. | APP. | APP. |
|             |          |      |      |      |      |      |      |

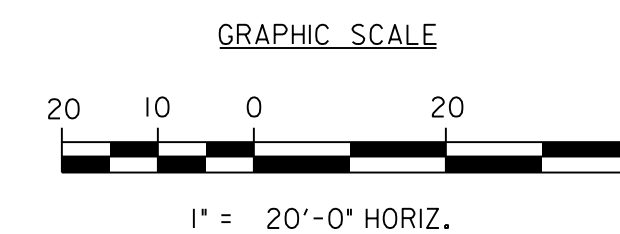
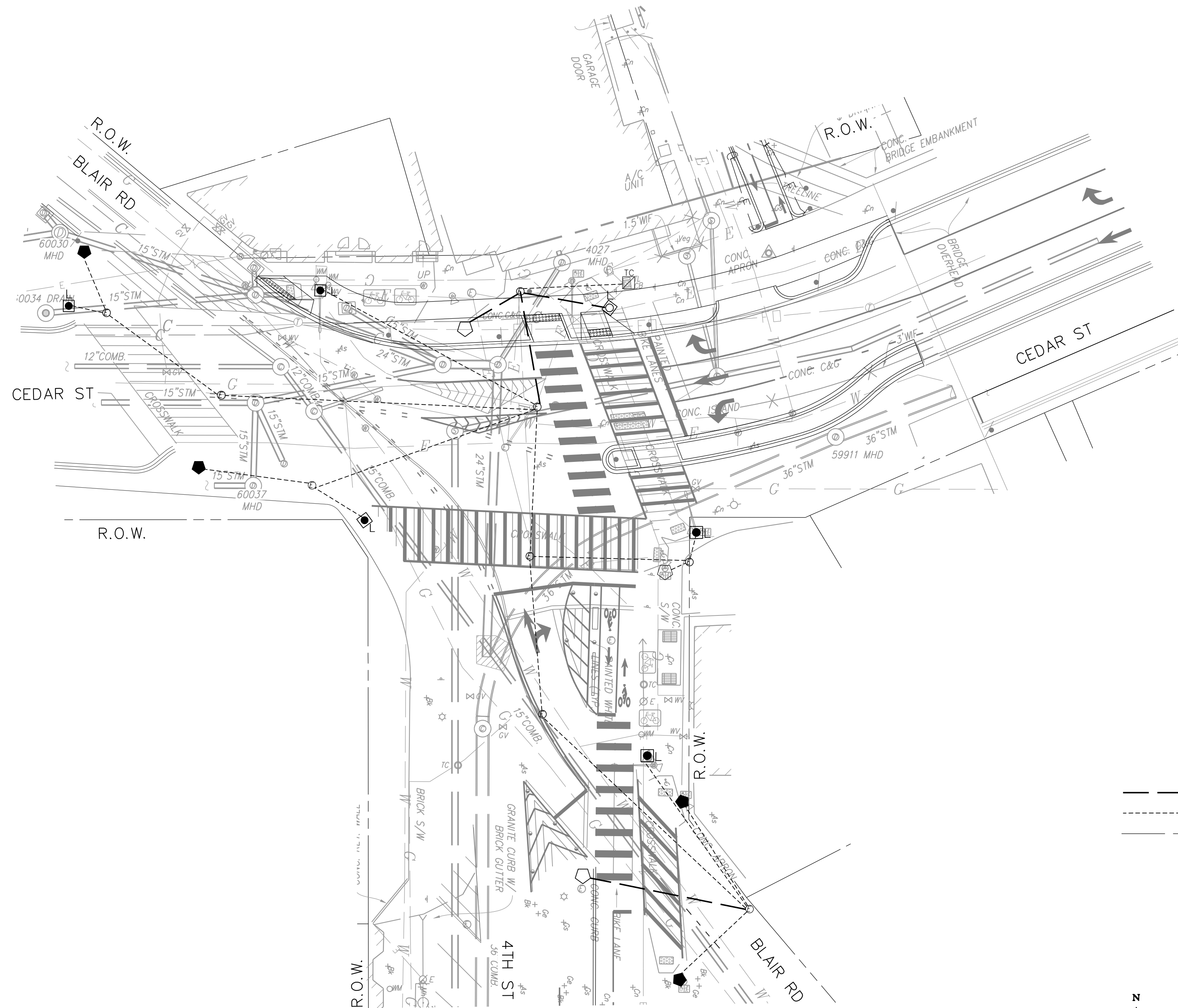
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 8   | D.C.  | METROPOLITAN BRANCH TRAIL | 125       | 160          |

**LEGEND:**

- TC  EXISTING TRAFFIC SIGNAL CONTROLLER
- TC  PROPOSED TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET AND AN EXTERNAL UNINTERRUPTED POWER SUPPLY (UPS) SYSTEM
- EXISTING AD-11 TRAFFIC SIGNAL POLE
- L  EXISTING PENDANT POST STREETLIGHT POLE WITH A STEEL TRANSFORMER BASE AND LUMINAIRE
- L  PROPOSED 28.5-FOOT STEEL PENDANT POST STREETLIGHT POLE WITH A STEEL TRANSFORMER BASE AND LED LUMINAIRE
- EXISTING 20-FOOT STEEL TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- PROPOSED 20-FOOT STEEL TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING LUMINAIRE AND SUPPORT ARM INDICATING DIRECTION OF LIGHT
- ⋯→ PROPOSED LUMINAIRE AND SUPPORT ARM INDICATING DIRECTION OF LIGHT
- EXISTING 3-SECTION LED TRAFFIC SIGNAL HEAD CONVENTIONAL (ALL LENSES 12 INCHES)
- EXISTING 2-SECTION LED COUNT-DOWN PEDESTRIAN SIGNAL HEAD
- EXISTING 3-SECTION LED TRAFFIC SIGNAL HEAD CONVENTIONAL (ALL LENSES 12 INCHES)
- EXISTING 2-SECTION LED COUNT-DOWN PEDESTRIAN SIGNAL HEAD
- SF EXISTING SCHOOL FLASHER
- SP PROPOSED SCHOOL FLASHER
- APS PROPOSED ACCESSIBLE PEDESTRIAN SIGNAL (APS)
- ▲ PROPOSED ADA COMPLIANT WHEELCHAIR RAMP
- EXISTING TREE
- EXISTING TRASH RECEPTACLE
- ▲ PROPOSED TRAFFIC SIGN AND POST
- ▲ EXISTING TRAFFIC SIGN
- ▲ EXISTING BUS STOP SIGN
- CB EXISTING CATCH BASIN
- EXISTING FIRE HYDRANT
- W EXISTING WATER MANHOLE
- W EXISTING WATER METER
- S EXISTING SEWER MANHOLE
- φ EXISTING GAS VALVE
- E EXISTING PEPCO ELECTRICAL MANHOLE
- ⊙ PROPOSED DDOT MANHOLE (4'X4'X4')
- ⊙ PROPOSED DDOT MANHOLE (3'X3'X3')
- \* PROPOSED LOCATION FOR PEPCO POWER CONNECTION
- EXISTING DDOT SIGNAL HANDBOX
- PROPOSED DDOT ELECTRICAL PVC CONDUIT
- - - EXISTING DDOT ELECTRICAL PVC CONDUIT
- RIGHT OF WAY LINE

**UTILITY NOTES:**

- A. THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE BASED ON FIELD SURVEY DATA AND/OR RECORD DRAWINGS. THE LOCATION OF UTILITIES SHOWN IS APPROXIMATE AND THE INFORMATION SHOWN IS NOT NECESSARILY COMPLETE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UTILITIES WELL IN ADVANCE OF CONDUCTING CONSTRUCTION OPERATIONS WHICH COULD DAMAGE THESE FACILITIES. IN AREAS WHERE PROPOSED CONSTRUCTION MAY CONFLICT WITH EXISTING UTILITIES, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING UTILITIES. IF A UTILITY IS DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND THE OWNER OF THE SAID UTILITY. ANY DAMAGE SUSTAINED TO UTILITIES ABOVE OR BELOW THE GROUND SHALL BE REPAIRED BY OR UNDER THE DIRECTION OF THE OWNER AT CONTRACTOR'S EXPENSE. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR BACKFILL AN EXCAVATION AFFECTING SAID UTILITY WITHOUT FIRST RECEIVING PERMISSION FROM THE UTILITY OWNER.
- B. THE CONTRACTOR SHALL EXCAVATE AND LOCATE VERTICALLY AND HORIZONTALLY ALL UTILITIES IN CLOSE PROXIMITY TO THE PROPOSED TRAFFIC SIGNAL WORK AREA AS NECESSARY FOR CONSTRUCTION.
- C. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777, 48 HOURS PRIOR TO EXCAVATING.
- D. THE CONTRACTOR SHALL MAINTAIN A MINIMUM 2 FOOT HORIZONTAL CLEARANCE TO ALL UTILITIES DURING CONSTRUCTION.
- E. ALL TRAFFIC SIGNAL CONDUITS SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR.
- F. THE QUANTITIES SHOWN IN THE SUMMARY OF THE QUANTITIES ARE ESTIMATED BASED ON WHAT IS INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY QUANTITIES FOR THE PAY ITEM BID.



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 Washington, DC 20001  
 (202) 854-2750

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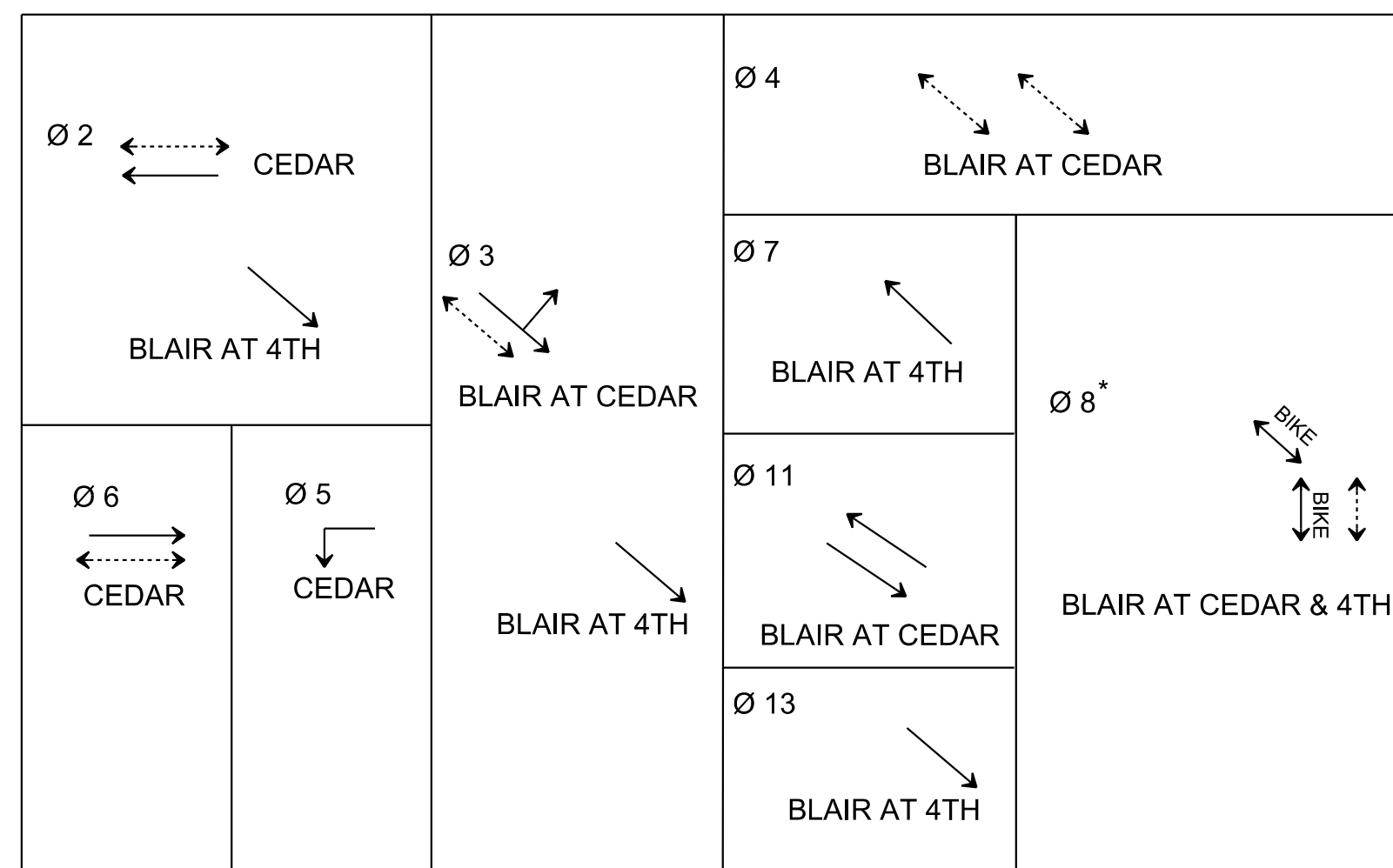
|   |  |                               |
|---|--|-------------------------------|
| SEQUENCE OF OPERATION DRAWING NO. TS-213-K, ACISA NO. 5009                                      |  | <b>SG-3</b>                   |
| DISTRICT OF COLUMBIA<br>DEPARTMENT OF TRANSPORTATION<br>TRAFFIC ENGINEERING AND SAFETY DIVISION |  | FINAL                         |
| 4TH STREET, BLAIR ROAD, AND<br>CEDAR STREET, N.W.<br>UTILITY PLAN                               |  | FIELD CHECKED BY<br>S.JL /WFW |
| DESIGNED BY<br>JD   |  | DRAWN BY<br>JD                |
| REVIEWED BY<br>JJP  |  | DATE<br>6/2023                |
| SUBMITTED BY<br>TRAFFIC SIGNAL PROJECT ENGINEER   |  | DATE                          |
| RECOMMENDED<br>TRAFFIC SIGNAL DESIGN PROJECT MANAGER  |  | SCALE<br>1" = 20'             |
| ITS /TRAFFIC SIGNAL MAINTENANCE DIVISION MANAGER  |  | SHEET<br>125                  |
| APPROVED<br>TRAFFIC SIGNAL PROGRAM MANAGER  |  | OF<br>160                     |
| DRAWING NO.   |  | S-188-C                       |

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| REVISION    |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|
| DESCRIPTION | DATE | COR. | CHK. | APP. | APP. | APP. | APP. | APP. |
|             |      |      |      |      |      |      |      |      |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 8   | D.C.  | METROPOLITAN BRANCH TRAIL | 126       | 160          |

**PHASE DIAGRAM:**

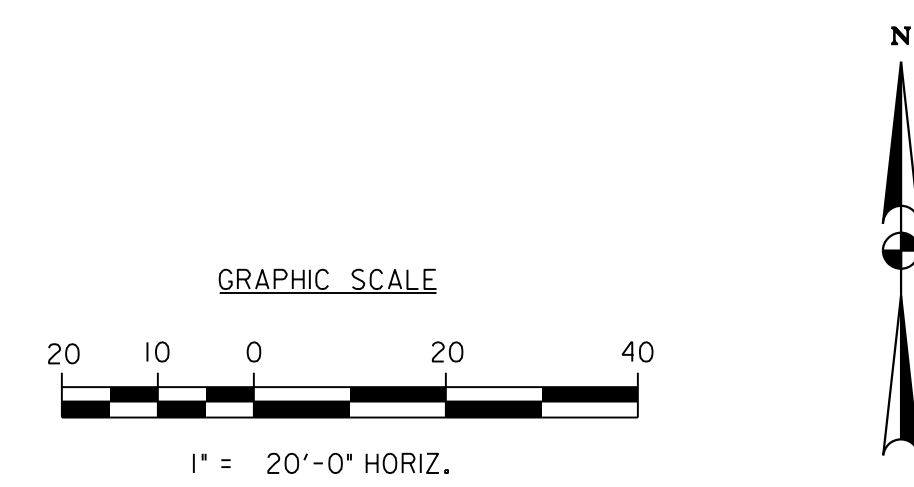


OVERLAP A=2+3+13 FOR SOUTHBOUND BLAIR/4TH  
 OVERLAP B=3+11 FOR SOUTHBOUND THROUGH CEDAR/BLAIR  
 OVERLAP D=3P+4P FOR PEDESTRIAN ACROSS WEST LEG CEDAR/BLAIR

NOTE:  
 \* - MODIFIED EXISTING PHASING TO REMOVE EAST-WEST PEDESTRIAN CROSSINGS AT BLAIR/CEDAR FROM PHASE 8.

SEQUENCE OF OPERATION DRAWING NO. TS-213-K, ACISA NO. 5009 **SG-4**

|   |      |                              |
|---|------|------------------------------|
| DISTRICT OF COLUMBIA<br>DEPARTMENT OF TRANSPORTATION<br>TRAFFIC ENGINEERING AND SAFETY DIVISION |      | FINAL                        |
| 4TH STREET, BLAIR ROAD, AND<br>CEDAR STREET, N.W.<br>PHASING DIAGRAM & SIGNAL TIMING            |      | FIELD CHECKED BY<br>SJL /WFW |
| DESIGNED BY<br>JD   |      | DESIGNED BY<br>JD            |
| DRAWN BY<br>JD  |      | REVIEWED BY<br>JJP           |
| SUBMITTED BY<br>TRAFFIC SIGNAL PROJECT ENGINEER   | DATE | DATE<br>6/2023               |
| RECOMMENDED<br>TRAFFIC SIGNAL DESIGN PROJECT MANAGER  | DATE | SCALE<br>1" = 20'            |
| ITS /TRAFFIC SIGNAL MAINTENANCE DIVISION MANAGER  | DATE | SHEET / OF<br>126 / 160      |
| APPROVED<br>TRAFFIC SIGNAL PROGRAM MANAGER  | DATE | DRAWING NO.<br>S-188-C       |

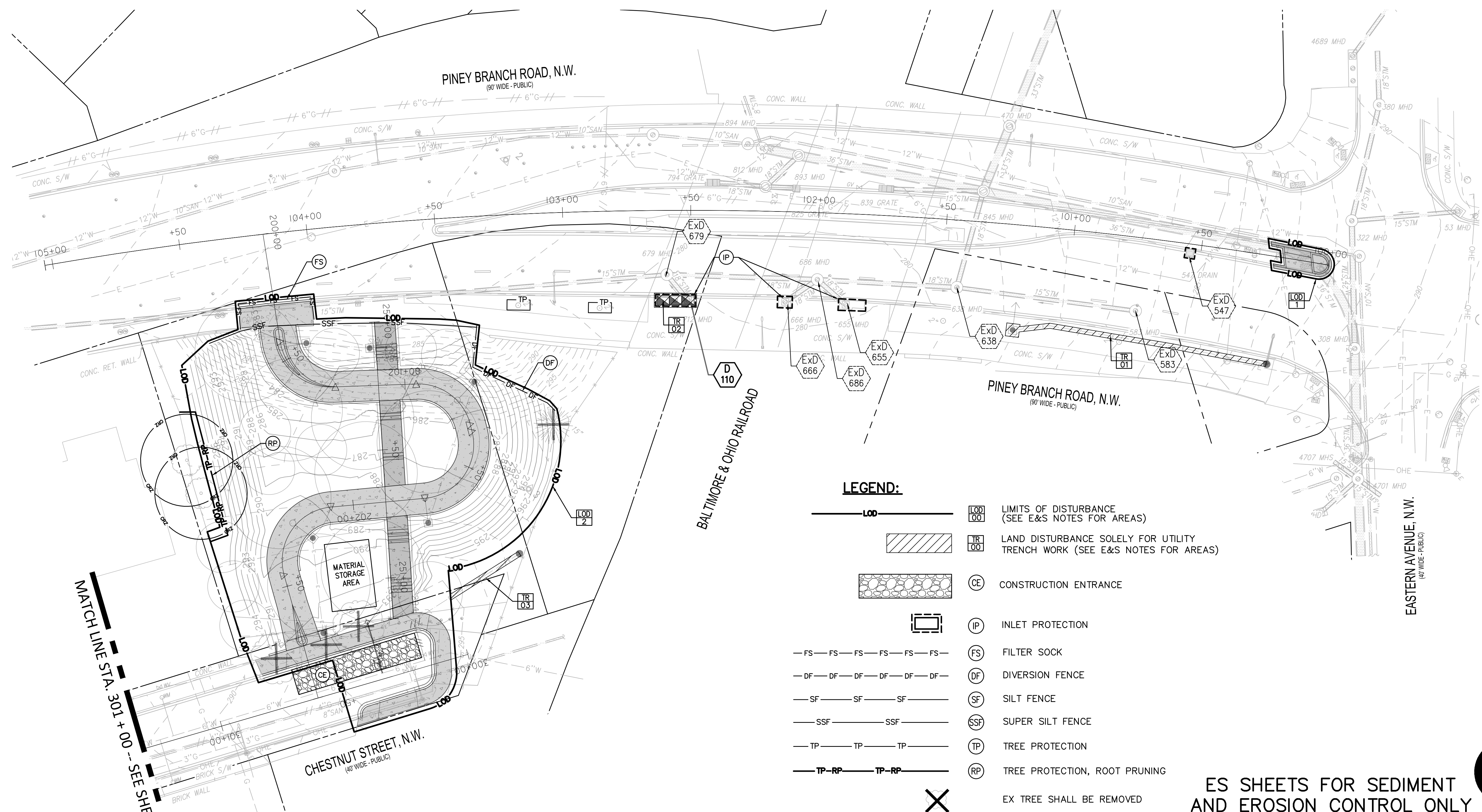


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MATCHLINE STA. 301+00 - SEE SHEET ES-02

- LEGEND:**
- LOD LIMITS OF DISTURBANCE (SEE E&S NOTES FOR AREAS)
  - TR LAND DISTURBANCE SOLELY FOR UTILITY TRENCH WORK (SEE E&S NOTES FOR AREAS)
  - CE CONSTRUCTION ENTRANCE
  - IP INLET PROTECTION
  - FS FILTER SOCK
  - DF DIVERSION FENCE
  - SF SILT FENCE
  - SSF SUPER SILT FENCE
  - TP TREE PROTECTION
  - TP-RP TREE PROTECTION, ROOT PRUNING
  - EX TREE SHALL BE REMOVED

**SITE STABILIZATION NOTE**  
 FOLLOWING INITIAL LAND DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR INTERIM STABILIZATION SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS FOR THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN THREE (3) HORIZONTAL TO ONE (1) VERTICAL (3:1); AND FOURTEEN (14) DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THE REQUIREMENTS OF THIS PARAGRAPH DO NOT APPLY TO THOSE AREAS WHICH ARE SHOWN ON THE PLAN AND ARE BEING USED FOR MATERIAL STORAGE OTHER THAN STOCKPILING, OR FOR THOSE AREAS ON WHICH ACTUAL CONSTRUCTION ACTIVITIES ARE BEING PERFORMED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY SO THAT STABILIZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF THE DISTRICT OF COLUMBIA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

**65% DESIGN SUBMITTAL  
 NOT FOR CONSTRUCTION**

"FOR LOCATION OF UTILITIES CALL 8-1-1 or 1-800-257-7777 OR LOG ON TO or 48 HOURS IN ADVANCE OF ANY WORK IN THIS VICINITY"

**ES SHEETS FOR SEDIMENT  
 AND EROSION CONTROL ONLY**

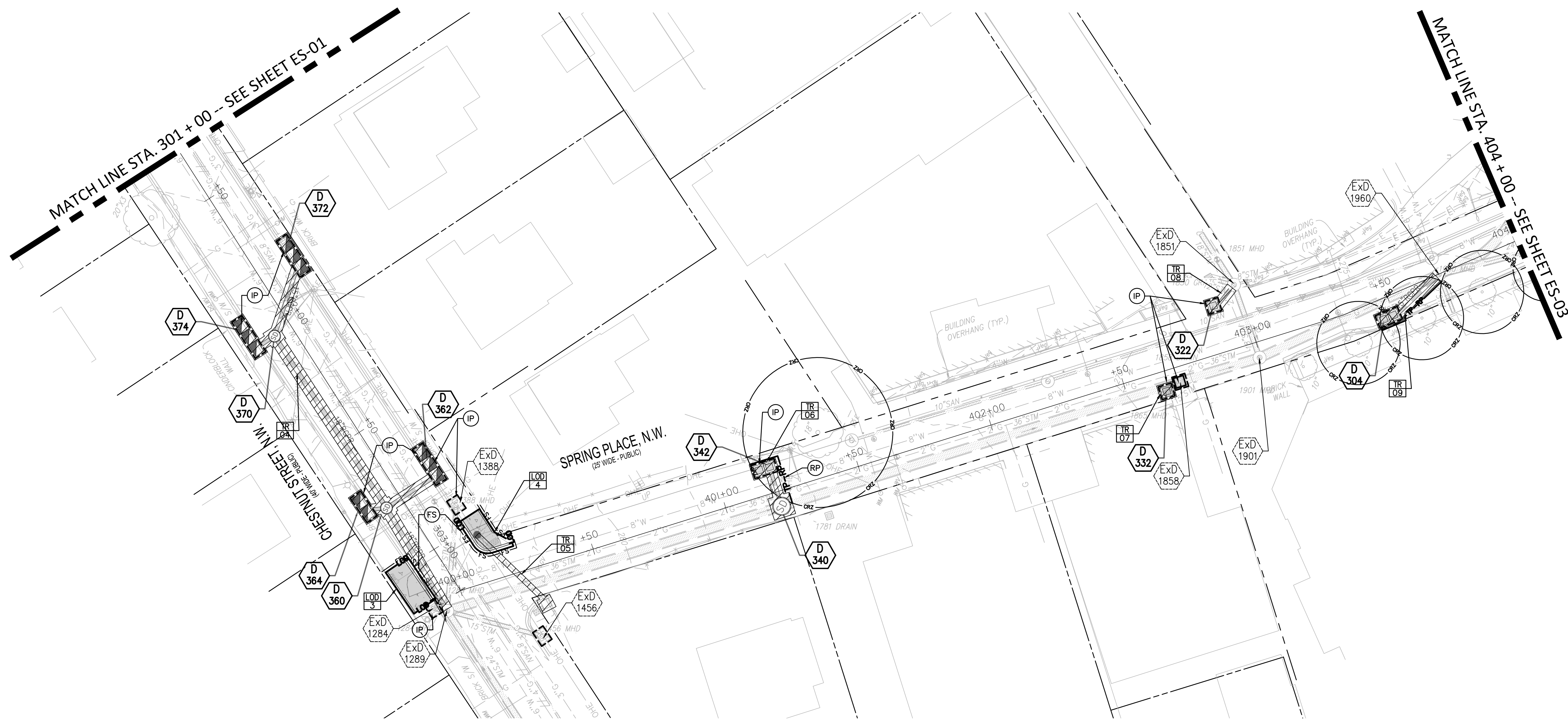


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|--|------------------------|----------------------|
| DATE: JULY 2023  | SCALE: 1" = 20'        | ES-01                |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>   INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                        |                      |
| <b>METROPOLITAN BRANCH TRAIL<br/>   DESIGN</b>   |                        |                      |
| <b>EROSION &amp; SEDIMENT<br/>   CONTROL PLAN</b>  |                        |                      |
| PROJECT ENG. <u>BMW</u>  | DESIGNED BY <u>BMW</u> | CHECKED BY <u>RS</u> |
| DRAWN BY <u>BMW</u>  |                        |                      |
| PROJECT MGR. <u>RS</u>   |                        |                      |
| DIVISION CHIEF   |                        |                      |
| DATE _____   | FILE _____             | SHEET 127 OF 160     |

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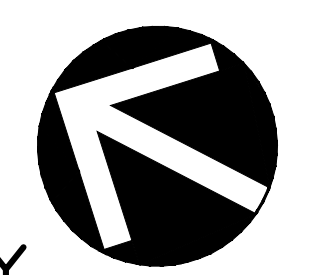
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|           |             |      |      |
|           |             |      |      |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 128       | 160          |



FILES & DATES

**ES SHEETS FOR SEDIMENT AND EROSION CONTROL ONLY**



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NOT FOR CONSTRUCTION**

SEE ES-01 FOR LEGEND OF SEC CONTROL MEASURES AND SUPPORTING NOTES/REFERENCES

|                 |                 |              |
|-----------------|-----------------|--------------|
| DATE: JULY 2023 | SCALE: 1" = 20' | <b>ES-02</b> |
|-----------------|-----------------|--------------|

**D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION**

**METROPOLITAN BRANCH TRAIL  
DESIGN**

**EROSION & SEDIMENT  
CONTROL PLAN**

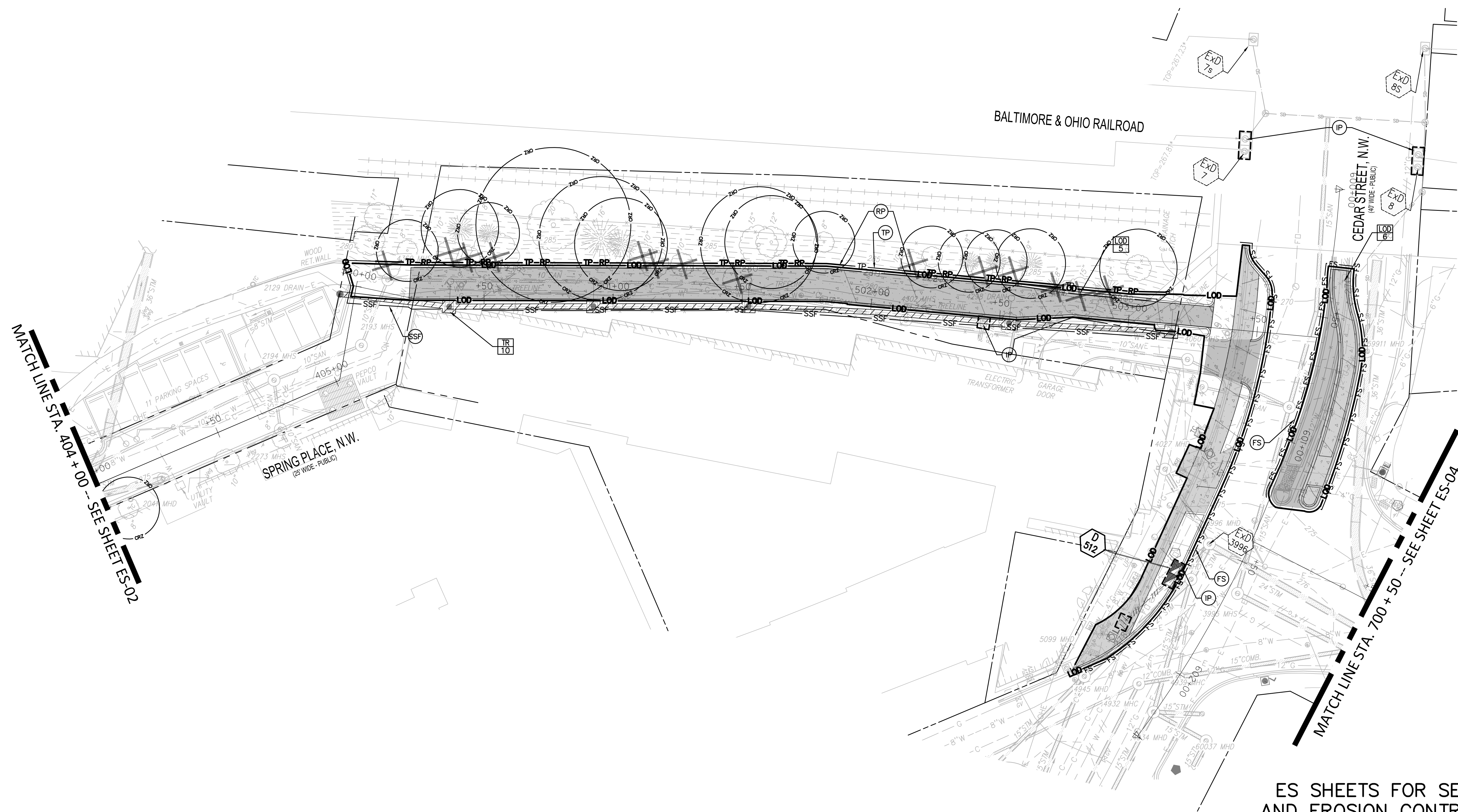
PROJECT ENG. BMW  
 DESIGNED BY BMW  
 CHECKED BY RS  
 DRAWN BY BMW  
 PROJECT MGR. RS  
 DIVISION CHIEF  
 DATE \_\_\_\_\_  
 FILE \_\_\_\_\_  
 SHEET 128 OF 160

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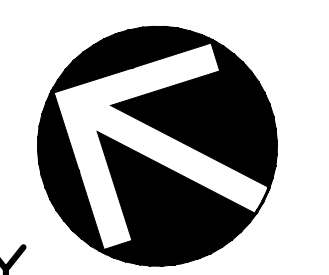
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 129       | 160          |



MATCH LINE STA. 404 + 00 -- SEE SHEET ES-02

MATCH LINE STA. 700 + 50 -- SEE SHEET ES-04


ES SHEETS FOR SEDIMENT AND EROSION CONTROL ONLY



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NOT FOR CONSTRUCTION**

SEE ES-01 FOR LEGEND OF SEC CONTROL MEASURES AND SUPPORTING NOTES/REFERENCES

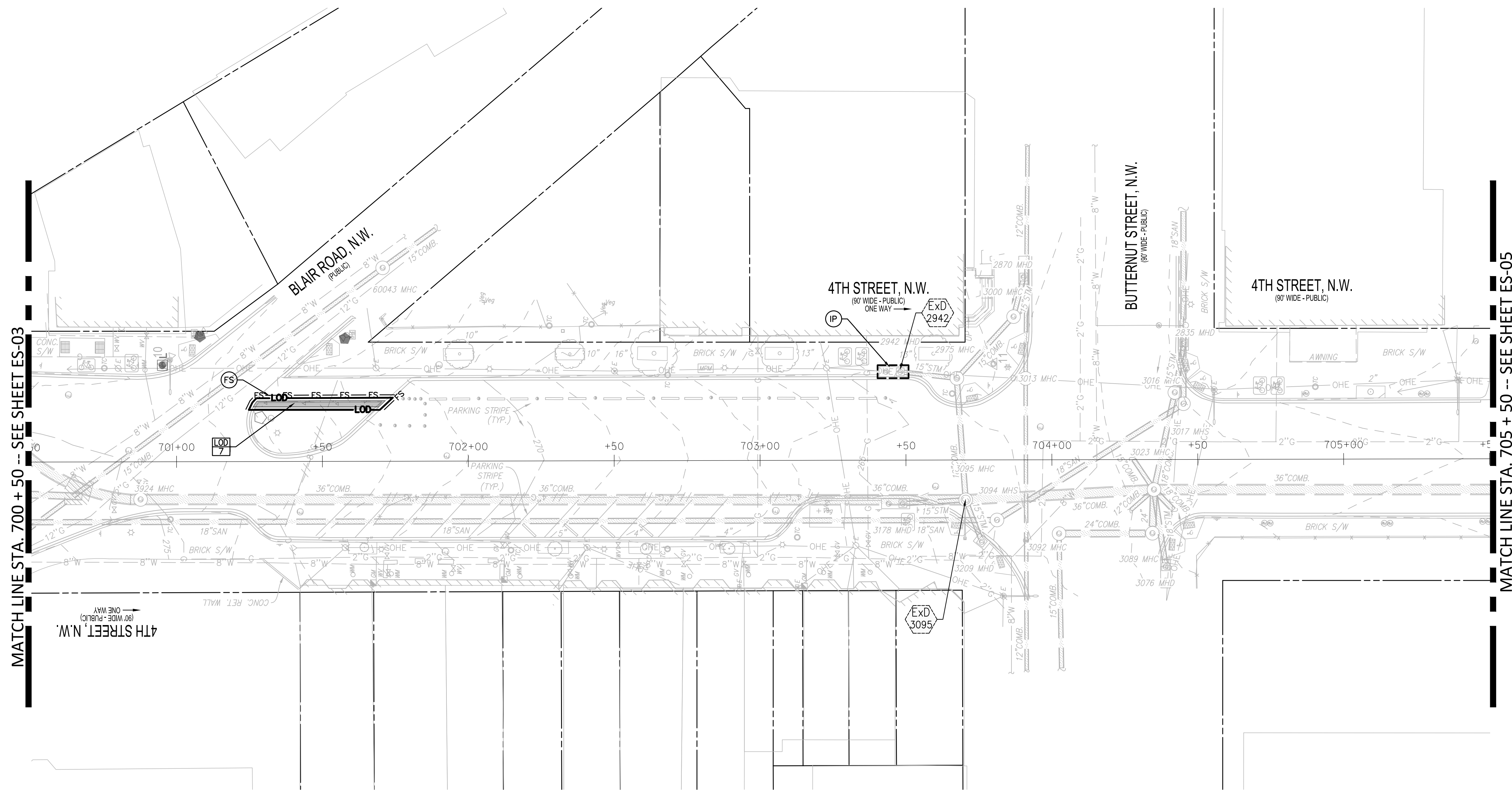
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>ES-03</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. BMW<br>DESIGNED BY BMW<br>CHECKED BY RS<br>DRAWN BY BMW<br>PROJECT MGR. RS |
| EROSION & SEDIMENT<br>CONTROL PLAN  |                 | DIVISION CHIEF  |
|   |                 | DATE _____<br>FILE _____<br>SHEET 129 OF 160  |

  
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FILES  
DATES

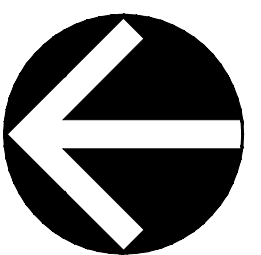
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 130       | 160          |



MATCH LINE STA. 700 + 50 -- SEE SHEET ES-03

MATCH LINE STA. 705 + 50 -- SEE SHEET ES-05

**ES SHEETS FOR SEDIMENT AND EROSION CONTROL ONLY**



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SEE ES-01 FOR LEGEND OF SEC CONTROL MEASURES AND SUPPORTING NOTES/REFERENCES

DATE: JULY 2023      SCALE: 1"= 20'      **ES-04**

**D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION**

**METROPOLITAN BRANCH TRAIL  
DESIGN**

PROJECT ENG. BMW  
DESIGNED BY BMW  
CHECKED BY RS  
DRAWN BY BMW  
PROJECT MGR. RS

**EROSION & SEDIMENT  
CONTROL PLAN**

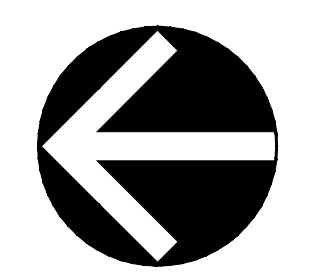
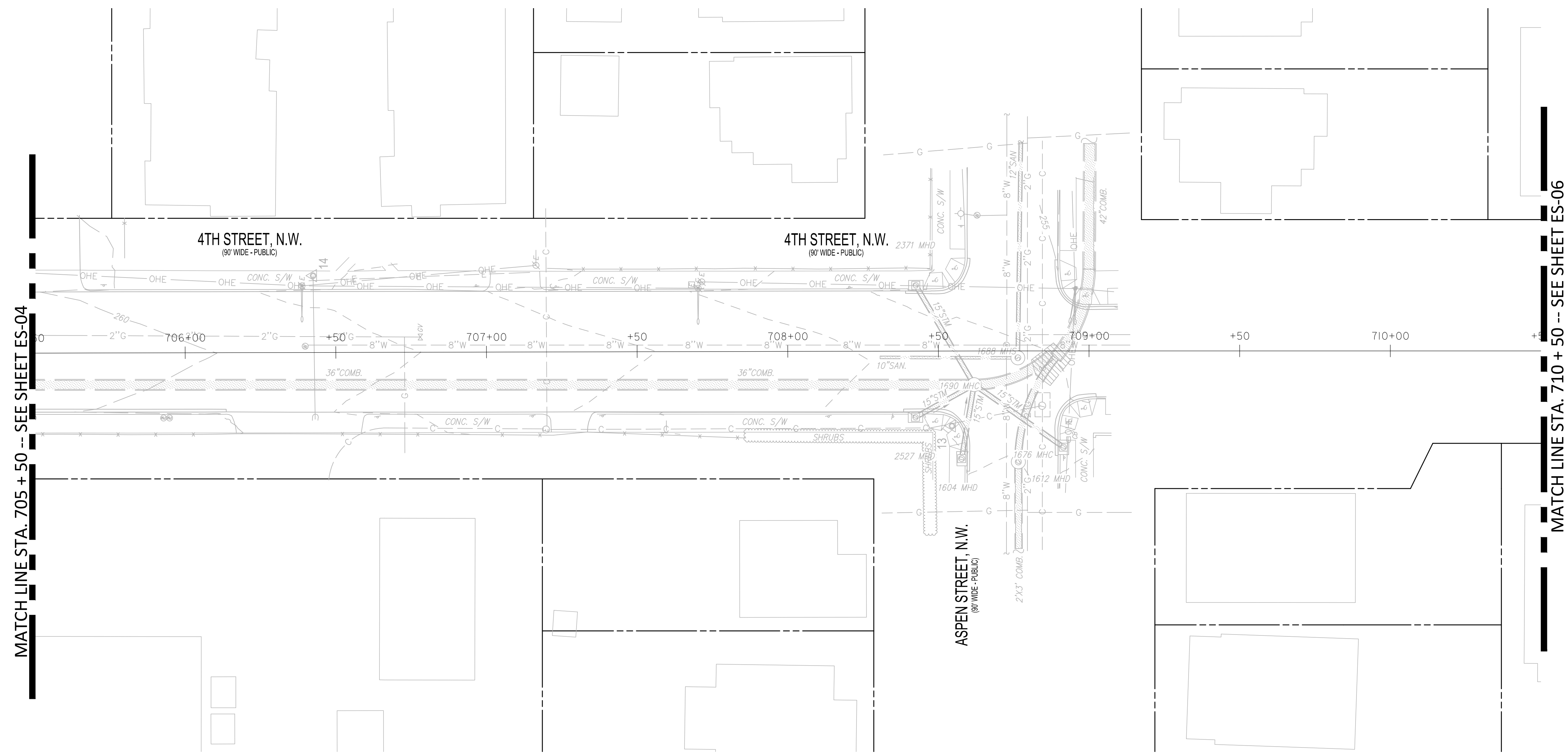
DIVISION CHIEF

DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 130 OF 160

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|           |             |      |      |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 131       | 160          |



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or 48 HOURS IN ADVANCE OF ANY  
WORK IN THIS VICINITY”**

DATE: JULY 2023      SCALE: 1" = 20'      **ES-05**

**D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION**

**METROPOLITAN BRANCH TRAIL  
DESIGN**

PROJECT ENG. BMW  
DESIGNED BY BMW  
CHECKED BY RS  
DRAWN BY BMW  
PROJECT MGR. RS

**EROSION & SEDIMENT  
CONTROL PLAN**

DIVISION CHIEF

DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 131 OF 160

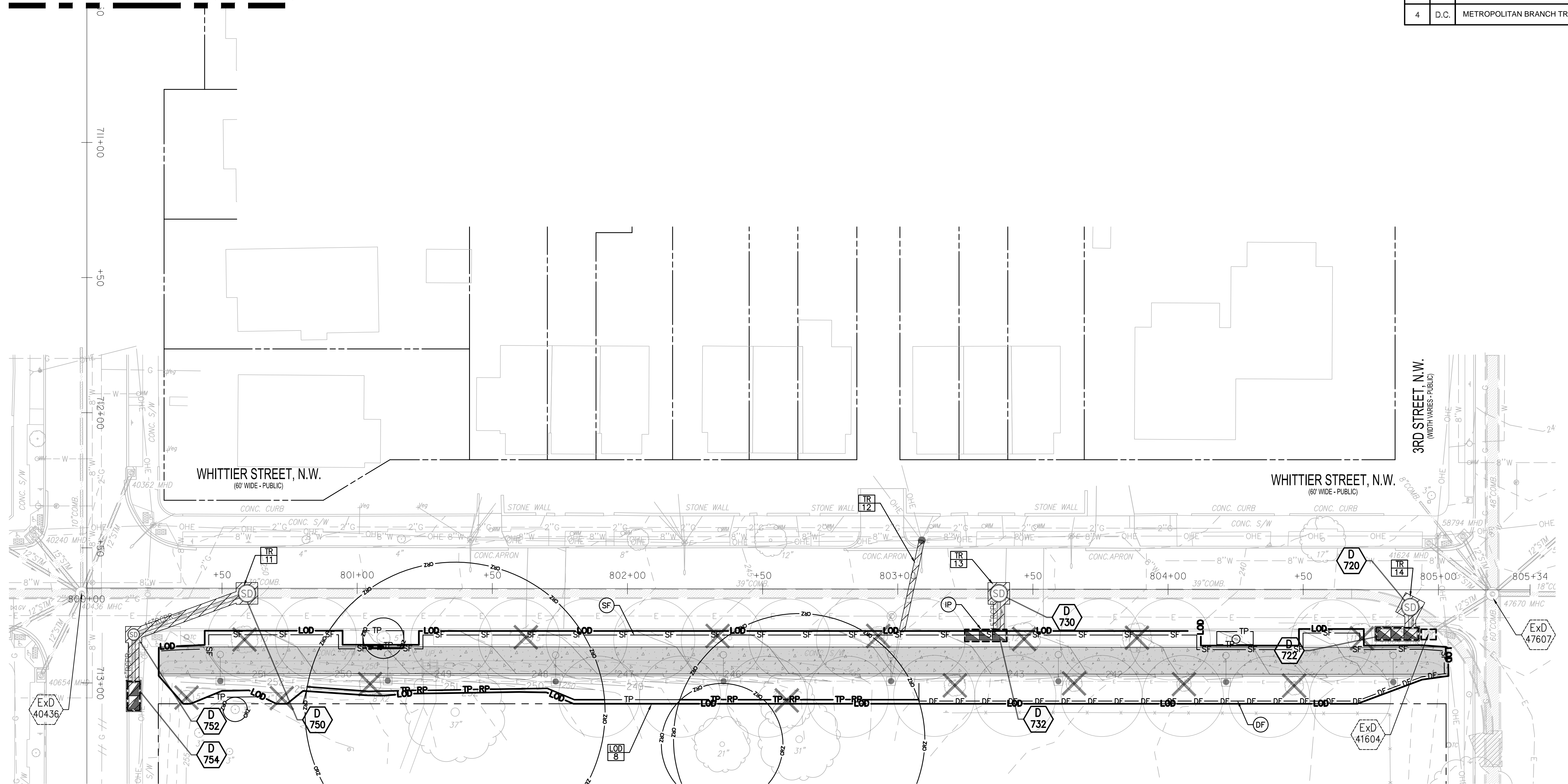
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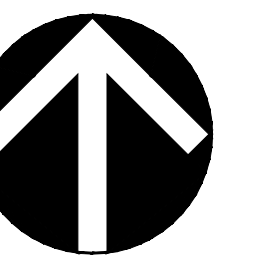
FILES  
DATES

MATCH LINE STA. 710 + 50 -- SEE SHEET ES-05

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 132       | 160          |



ES SHEETS FOR SEDIMENT AND EROSION CONTROL ONLY



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SEE ES-01 FOR LEGEND OF SEC CONTROL MEASURES AND SUPPORTING NOTES/REFERENCES

|                 |                 |              |
|-----------------|-----------------|--------------|
| DATE: JULY 2023 | SCALE: 1" = 20' | <b>ES-06</b> |
|-----------------|-----------------|--------------|

**D.C. DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE PROJECT MANAGEMENT DIVISION**

**METROPOLITAN BRANCH TRAIL  
DESIGN**

**EROSION & SEDIMENT  
CONTROL PLAN**

PROJECT ENG. BMW  
DESIGNED BY BMW  
CHECKED BY RS  
DRAWN BY BMW  
PROJECT MGR. RS

DIVISION CHIEF  
DATE \_\_\_\_\_  
FILE \_\_\_\_\_  
SHEET 132 OF 160

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|-----------|-------------|------|------|
| REVISIONS |             |      |      |

FILES  
DATES

**SEDIMENT & EROSION CONTROL SEQUENCE OF CONSTRUCTION**

**GENERAL CONSTRUCTION NOTES**

- FOR THE INSTALLATION OF ALL PROPOSED BMP FACILITIES (TREE PLANTING/PRESERVATION) REFERENCE THE FOLLOWING CHECKLISTS FROM DDOE'S 2020 STORMWATER MANAGEMENT GUIDEBOOK (SWMG):
  - APPENDIX L: CONSTRUCTION INSPECTION CHECKLISTS
  - APPENDIX M: MAINTENANCE INSPECTION CHECKLISTS
- SEE SPECIFIC BMP INSTALLATION NOTES FOR ADDITIONAL CONSTRUCTION SEQUENCING & REQUIREMENTS
- SEE DDOE'S INSPECTION & SCHEDULING NOTES FOR ADDITIONAL INFO/REQUIREMENTS

**PRE-DISTURBANCE**

- NOTIFY THE DC SEDIMENT AND EROSION CONTROL INSPECTOR 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBING ACTIVITIES. CALL (202) 535-2977 FOR APPOINTMENT.
- MEETING WITH THE OWNER'S REPRESENTATIVE SHALL BE HELD PRIOR TO START OF ANY CONSTRUCTION.

**SITE ACCESS - BEFORE ANY SITE GRADING ACTIVITIES BEGIN**

- FLAG OFF AREAS TO BE PROTECTED, SUCH AS BUFFER ZONES, DRAINAGE FEATURES, VEGETATED FILTER STRIPS, MATURE TREES, ETC.
- INSTALL SEDIMENT CONTROLS DOWN GRADIENT OF ACCESS POINT (ON PAVED STREETS THIS MAY CONSIST OF INLET PROTECTION).
- ESTABLISH VEHICLE TRACKING CONTROL AT SITE ENTRANCES TO PAVED STREETS. FENCE AS NEEDED.
- NO LATER THAN THE FIRST DAY OF CONSTRUCTION, INSTALL CONSTRUCTION ENTRANCES/SITE ACCESS MEASURES TO MINIMIZE OFF-SITE VEHICLE TRACKING OF SEDIMENTS. EACH CONSTRUCTION ENTRANCE MUST BE STABILIZED AND INCLUDE EACH ADDITIONAL MEASURES REQUIRED TO KEEP SEDIMENT FROM BEING CARRIED ONTO PUBLIC STREETS BY CONSTRUCTION VEHICLES AND WASHED INTO A STORM DRAIN OR WATERWAYS.
- INSTALL BOUNDARY PERIMETER CONTROLS (CONSTRUCTION FENCING, TREE PROTECTION, FLAGGING, ETC) TO CLEARLY DEFINE THE BOUNDARIES OF THE PROJECT AND LIMIT ACCESS TO AREAS OF THE SITE THAT ARE NOT TO BE DISTURBED.
- PERFORM STREET SWEEPING AS NEEDED.

**SITE GRADING - SITE CLEARING & GRUBBING**

- INSTALL RUNOFF PERIMETER CONTROLS - AS NEEDED ON DOWN-GRADIENT PERIMETER OF SITE (SILT FENCE, INLET PROTECTION, PERIMETER DIKE/SWALE).
- ALL PERIMETER CONTROLS SHALL BE INSTALLED PER THE SEC PHASE 1 PLAN PRIOR TO COMMENCING LAND DISTURBANCE
- LIMIT CONSTRUCTION ACTIVITIES TO AREAS PLANNED FOR DISTURBANCE AND PROTECT UNDISTURBED AREAS WITHIN THE SITE.
- IF APPLICABLE, PRESERVE VEGETATIVE BUFFER AT SITE PERIMETER.
- ESTABLISH CONSTRUCTION ROUTES; DESIGNATE AREAS FOR PARKING
- CREATE STABILIZED STAGING AREA
- LOCATE PORTABLE TOILETS ON FLAT SURFACES AWAY FROM DRAINAGE PATHS. STAKE IN AREAS SUSCEPTIBLE TO HIGH WINDS.
- CONSTRUCT CONCRETE WASHOUT AREA AND PROVIDE SIGNAGE.
- ESTABLISH WASTE DISPOSAL AREAS.
- INSTALL SEDIMENT BASINS / TRAPS. SEDIMENT TRAPS OR BASINS AND OTHER EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED NO LATER THAN THE FIRST PHASE OF LAND GRADING.
- SEDIMENT TRAPS OR BASINS AND OTHER EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED AS SOON AS NEW SITE-RELATED RUNOFF IS DETECTED AND EMPLOYED AT ALL TIMES TO PROTECT INLETS OR STORM SEWERS BELOW SILT-PRODUCING AREAS.
- IMMEDIATELY AFTER DEBRIS BASINS, DIVERSIONS, WATERWAYS, AND RELATED STRUCTURES ARE BUILT, THEY MUST BE SEEDED AND MULCHED OR HAVE A SOD AND STABILIZATION BLANKET INSTALLED.
- CONSTRUCT ONSITE DIKE/SWALE TO DIRECT ONSITE WATER TO CONTROLLED OUTFALLS DURING GRUBBING AND CLEARING.
- BEGIN CLEARING AND DEMOLITION OF THE SITE.
- BEGIN OVERALL SITE GRADING AND TOPSOIL STRIPPING
- SEPARATE AND STOCKPILE TOPSOIL, LEAVE ROUGHENED AND/OR COVER.
- PROTECT STOCKPILES WITH PERIMETER CONTROL BMPS (SILT FENCES). USE APPROPRIATE EROSION CONTROLS FOR STOCKPILES DURING INACTIVITY; SEE GENERAL SEC NOTES FOR TREATMENT OF STOCKPILES
- LEAVE DISTURBED AREA OF SITE IN A ROUGHENED CONDITION TO LIMIT EROSION. STABILIZE DISTURBED AREAS WHERE CONSTRUCTION WILL CEASE FOR MORE THAN 14 DAYS.
- WATER DISTURBED AREA TO MINIMIZE DUST BUT NOT TO A POINT THAT WATERING CREATES RUNOFF.
- PERMANENTLY STABILIZE ALL AREAS THAT WILL NOT BE REGRADED FOR AT LEAST 1-YEAR.
- REMOVE OFF-SITE ACCUMULATIONS OF SEDIMENT DAILY DURING CONSTRUCTION AND IMMEDIATELY AT THE REQUEST OF A DOEE INSPECTOR.
- ONCE FINAL GRADE IS MET, PERMANENTLY STABILIZE ALL DISTURBED AREAS.
- PERFORM ROUTINE MAINTENANCE TO PREVENT ANY NEW DESTABILIZED AREAS.
- CONTRACTOR TO MOVE TOWARD SEC PHASE 2 PLAN.

**UTILITY AND INFRASTRUCTURE INSTALLATION**

- INSTALL UTILITIES; CLOSE TRENCH AS SOON AS POSSIBLE (GENERALLY AT END OF DAY)
- USE ROUGH-CUT STREET CONTROL OR INSTALL ROAD BASE FOR STREETS THAT WILL NOT BE PROMPTLY PAVED.
- INSTALL GUTTERS, CURBS, STORM INLETS, SEWER MANHOLES AT FINAL GRADE
- PROVIDE INLET PROTECTION TO ALL INSTALLED STORM DRAIN INLETS AS THEY ARE BROUGHT ON-LINE.
- FLUSH ALL NEW AND EXISTING STORM DRAIN PIPE TO ENSURE THAT THE SYSTEM IS FREE OF SEDIMENT.
- PROTECT AND REPAIR BMPS, AS NECESSARY.

**FINAL GRADING & ROAD FINISHING**

- REMOVE TEMPORARY CONCRETE WASHOUT AREA
- REMOVE EXCESS OR WASTE MATERIALS.
- REMOVE STORED MATERIALS.
- FINALIZE PAVEMENT ACTIVITIES

**FINAL STABILIZATION & LANDSCAPING**

- SEED AND MULCH/TACKIFY; INSTALL BLANKETS ON STEEP SLOPES.
- INSTALL PROPOSED LANDSCAPING
- MONITOR STABILIZED AREAS UNTIL FINAL STABILIZATION IS REACHED
- REMOVE ALL TEMPORARY CONTROL BMPS UPON APPROVAL OF DOEE INSPECTOR AND OWNER'S REPRESENTATIVE. STABILIZE ANY AREAS DISTURBED BY THIS REMOVAL WITH EROSION CONTROLS

**FOLLOWING CONSTRUCTION**

AT COMPLETION OF LAND DISTURBING ACTIVITY, GIVE NOTICE TO THE DOEE INSPECTOR ONE WEEK NOTICE TO REQUEST A FINAL CONSTRUCTION INSPECTION. SEE DDOE INSPECTION NOTES FOR MORE INFORMATION

**GENERAL SEDIMENT & EROSION CONTROL NOTES:**

- ALL SOIL EROSION AND SEDIMENT CONTROL (SESC) METHODS SHALL BE INSTALLED PER STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR THE DISTRICT OF COLUMBIA. ALL SEC CONTROL MEASURES SHALL REMAIN IN PLACE DURING LAND DISTURBANCE, EXCEPT AS OTHERWISE STATED OR APPROVED BY THE DOEE INSPECTOR. IF AN ON-SITE INSPECTION REVEALS FURTHER EROSION CONTROL MEASURES ARE NECESSARY, THE SAME SHALL BE PROVIDED. SEE DDOE'S SEC GENERAL NOTES FOR FURTHER INFORMATION.
- PHYSICALLY MARK OFF LIMITS OF LAND DISTURBANCE ON THE SITE WITH TAPE, SIGNS OR OTHER METHODS, SO THE WORKERS CAN SEE AREAS TO BE PROTECTED
- MAINTENANCE SHALL BE PERFORMED
  - ROUTINELY TO PREVENT ANY NEW DESTABILIZED AREAS AND TO PREVENT STABILIZED AREAS FROM BECOMING UNSTABILIZED
  - AS NECESSARY SO THAT STABILIZED AREAS CONTINUOUSLY MEET APPROPRIATE REQUIREMENTS OF DC'S STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
- CONSTRUCTION SITE ACCESS MEASURES SHALL BE INSTALLED NO LATER THAN THE FIRST DAY OF CONSTRUCTION TO MINIMIZE OFF-SITE VEHICLE TRACKING INCLUDING:
  - STABILIZED CONSTRUCTION ENTRANCE AT ANY POINT WHERE TRAFFIC LEAVES THE SITE.
  - STABILIZE ACCESS ROADS, HAUL ROADS, TEMPORARY CONSTRUCTION PARKING AREAS AND OTHER ONSITE VEHICLE TRANSPORTATION ROUTES WITH STONE
- ALLEY AND/OR STREET SHALL BE SWEEP CLEAN AT ALL TIMES DURING EXCAVATION AND CONSTRUCTION.
- ALL CATCH BASINS AND AREA DRAINS SHALL BE PROTECTED DURING EXCAVATION AND CONSTRUCTION. IF ANY CATCH BASIN OR DRAIN BECOMES CLOGGED AS A RESULT OF EXCAVATION OR CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS CLEANING.
- GENERAL PRINCIPLES TO SELECTION AND PLACEMENT OF SEDIMENT CONTROL MEASURES:
  - UTILIZE DIVERSION DIKE/SWALES TO DIVERT CLEAN RUNOFF FROM OFFSITE OR UNDISTURBED AREAS TO AVOID DISTURBED AREAS AND OUTLET IN STABLE AREAS.
  - REMOVE SEDIMENT FROM WATER EXPOSED TO DISTURBED AREAS BEFORE WATER LEAVES THE SITE.
    - CONCENTRATED FLOW MUST BE DIVERTED TO TRAPPING DEVICE SO SUSPENDED SEDIMENT CAN BE DEPOSITED.
    - SURFACE RUNOFF DRAINING IN SHEET FLOW MUST BE FILTERED BEFORE WATER LEAVES THE SITE.
- SEDIMENT TRAPS/BASINS AND OTHER EROSION & SEDIMENT CONTROLS SHALL BE INSTALLED AS SOON AS NEW SITE-RELATED RUNOFF IS DETECTED, BUT NO LATER THAN FIRST PHASE OF LAND GRADING;
- DEBRIS BASINS, DIVERSIONS, WATERWAYS, AND RELATED STRUCTURES SHALL BE SEEDED AND MULCHED, OR HAVE SOD OR A STABILIZATION BLANKET INSTALLED IMMEDIATELY AFTER THEY ARE BUILT.
- VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE DCRA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. REFER TO APPROPRIATE SPECIFICATIONS FOR TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SODDING AND GROUND COVERS.
- ALL CUT/FILL SLOPES SHALL BE STABILIZED IMMEDIATELY WHEN VERTICAL HEIGHT OF THE MULTIPLE LIFTS REACHES 15' OR WHEN GRADING OPERATIONS CEASE AS PRESCRIBED IN THE PLANS.
- CRITICAL AREA STABILIZATION SHALL BE APPLIED TO CUT AND FILL SLOPES STEEPER THAN 3:1 OR TO EVERY CUT AND FILL SLOPE CONSTRUCTED OUT-OF-PLANTING SEASON UNTIL PERMANENT PROTECTION CAN BE PROVIDED.
- RESEED ALL DISTURBED AREAS NOT COVERED BY PAVEMENTS, WALLS, BUILDINGS, AND PERMANENT STRUCTURES UPON COMPLETION OF ALL SITE WORK AS PER SEEDING SPECIFICATIONS.
- SEDIMENT ACCUMULATED IN STRUCTURAL SEC MEASURES MUST BE REMOVED AND DISPOSED OF IN A MANNER THAT MINIMIZES EROSION AND SEDIMENTATION
- OFF-SITE ACCUMULATIONS OF SEDIMENT SHALL BE REMOVED DAILY DURING CONSTRUCTION AND IMMEDIATELY AT THE REQUEST OF A DOEE INSPECTOR
- OFF-SITE SPOIL, WASTE, OR BORROW AREAS IN DC OR ON FEDERAL PROPERTY MUST HAVE PRIOR APPROVAL BY DCRA. ALL WASTE & BORROW AREAS OFF-SITE MUST BE PROTECTED BY SEDIMENT CONTROL MEASURES AND STABILIZED IN ACCORDANCE WITH THE ORDINANCES AND REGULATIONS OF THE JURISDICTION WHERE THE SPOIL, WASTE, OR BORROW AREA IS LOCATED/STABILIZED.
- STOCKPILES:
  - STOCKPILES SHOULD BE LOCATED AWAY FROM DRAINAGE PATHS
  - SHOULD BE ACCESSED FROM THE UP-GRADE SIDE SO THAT PERIMETER CONTROLS CAN REMAIN IN PLACE ON THE DOWN-GRADE SIDE.
  - SEE DDOE'S SEC GENERAL NOTES 6 & 7 FOR ADDITIONAL REQUIREMENTS
- SEDIMENT CONTROL FOR UTILITY CONSTRUCTION FOR AREAS OUTSIDE OF DESIGNED CONTROLS OR AS DIRECTED BY ENGINEER OR DCRA INSPECTOR:
  - CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK.
  - NO MORE THAN FIVE HUNDRED LINEAR FEET (500') OF TRENCH SHALL BE OPEN AT ANY ONE TIME
  - EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
  - TRENCHES FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCHES SHALL BE OPENED THAN CAN BE COMPLETED THE SAME DAY, UNLESS;
  - TEMPORARY SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED FOR MORE THAN ONE DAY.
  - INSTALL INTERIM OR PERMANENT STABILIZATION IMMEDIATELY AFTER A UTILITY TRENCH IS REFILLED.
  - USE MULCH AND MATTING ON EXCAVATED MATERIAL TO MINIMIZE THEIR EROSION WHEN NATURAL OR ARTIFICIAL GRASS FILTER STRIPS ARE INSTALLED TO RECEIVE STORMWATER RUNOFF FROM THE EXCAVATED MATERIALS.
  - WATER PUMPED FROM EXCAVATIONS SHALL BE FILTERED PRIOR TO DISCHARGING TO THE STORM SEWER SYSTEM
- SEC MEASURES FOR ROADWAY PROJECTS
  - ROUGH GRADED RIGHTS-OF-WAY AWAITING INSTALLATION OF UTILITIES OR PAVEMENT SHALL BE PROTECTED BY THE INSTALLATION OF INTERCEPTOR DIKES ACROSS RIGHTS-OF-WAY SO LOCATED AS TO LIMIT ROADWAY GRADE TO A LENGTH BETWEEN DIKES OF NOT MORE THAN FIVE HUNDRED FEET (500 FT); OR
  - PERMANENT STABILIZATION OF STREETS AND PARKING AREAS SHALL BE WITH BASE COURSE CRUSHED STONE OR OTHER DOEE-APPROVED MEASURES

Construction Specifications for Dust Control

| DOEE SOIL EROSION AND SEDIMENT CONTROL PLAN GENERAL NOTES   |   |
|---|---|
| 1.  | Following initial land disturbance or re-disturbance, permanent or interim stabilization must be completed within seven (7) calendar days for the surfaces of all perimeter controls, dikes, swales, ditches, perimeter slopes, and slopes greater than three (3) horizontal to one (1) vertical (3:1); and fourteen (14) days for all other disturbed or graded areas on the project site. These requirements do not apply to areas shown on the plan that are used for material storage other than stockpiling, or for those areas on the plan where actual construction activities are being performed. Maintenance shall be performed as necessary so that stabilized areas continuously meet the appropriate requirements of the District of Columbia Standards and Specifications for Soil Erosion and Sediment Control (ESC). [21 DCMR § 542.9 (a)]  |
| 2.  | ESC measures shall be in place before and during land disturbance. [21 DCMR § 543.6]  |
| 3.  | Contact DOEE Inspection (202) 535-2977 to schedule a preconstruction meeting at least three (3) business days before the commencement of a land-disturbing activity. [21 DCMR § 503.7 (a)]  |
| 4.  | A copy of the approved plan set will be maintained at the construction site from the date that construction activities begin to the date of final stabilization and will be available for DOEE inspectors. [21 DCMR § 542.15]   |
| 5.  | ESC measures shall be in place to stabilize an exposed area as soon as practicable after construction activity has temporarily or permanently ceased but no later than fourteen (14) days following cessation, except that temporary or permanent stabilization shall be in place at the end of each day of underground utility work that is not contained within a larger development site. [21 DCMR § 543.7]  |
| 6.  | Stockpiled material being actively used during a phase of construction shall be protected against erosion by establishing and maintaining perimeter controls around the stockpile. [21 DCMR § 543.16 (a)]   |
| 7.  | Stockpiled material not being actively used or added to shall be stabilized with mulch, temporary vegetation, hydro-seed or plastic within fifteen (15) calendar days after its last use or addition. [21 DCMR § 543.16 (b)]  |
| 8.  | Fill material must be free of contamination levels of any pollutant that is, or may be considered to represent, a possible health hazard to the public or may be detrimental to surface or ground water quality, or which may cause damage to property or the drainage system. All fill material must be free of hazardous materials and comply with all applicable District and federal regulations.   |
| 9.  | Protect best management practices from sedimentation and other damage during construction for proper post construction operation. [21 DCMR § 543.5]   |
| 10.   | Request a DOEE inspector's approval after the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. [21 DCMR § 543.12 (a)]  |
| 11.   | Request a DOEE inspector's approval after final stabilization of the site and before the removal of erosion and sediment controls. [21 DCMR § 542.12 (b)]   |
| 12.   | Final stabilization means that all land-disturbing activities at the site have been completed and either of the following two criteria have been met: (1) a uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of seventy percent (70%) of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or (2) equivalent permanent stabilization measures have been employed (such as the use of riprap, gabions, or geotextiles). [21 DCMR § 542.12 (b.1, b.2)]  |
| 13.   | Follow the requirements of the United States Environmental Protection Agency approved Stormwater Pollution Prevention Plan (SWPPP) and maintain a legible copy of this SWPPP on site. [21 DCMR § 543.10 (b)]  |
| 14.   | Post a sign that notifies the public to contact DOEE in the event of erosion or other pollution. The sign will be placed at each entrance to the site or as directed by the DOEE inspector. Each sign will be no less than 18 x 24 inches in size and made of materials that will withstand weather for the duration of the project. Lettering will be at least 1 inch in height and easily readable by the public from a distance of twelve feet (12 ft). The sign must direct the public, in substantially the following form: "To Report Erosion, Runoff, or Stormwater Pollution" and will provide the construction site address, DOEE's telephone number (202-535-2977), DOEE's e-mail address (IEB.scheduleing@dc.gov), and the 311 mobile app heading ("Construction-Erosion Runoff"). [21 DCMR § 543.22]  |
| If a site disturbs 5,000 square feet of land or greater, the ESC plan must contain the following statement: |   |
| 15.   | A <i>Responsible Person</i> must be present or available while the site is in a land-disturbing phase. The <i>Responsible Person</i> is charged with being available to (a) inspect the site and its ESC measures at least once biweekly and after a rainfall event to identify and remedy each potential or actual erosion problem, (b) respond to each potential or actual erosion problem identified by construction personnel, and (c) speak on site with DOEE to remedy each potential or actual erosion problem. A <i>Responsible Person</i> shall be (a) licensed in the District of Columbia as a civil or geotechnical engineer, a land surveyor, or architect; or (b) certified through a training program that DOEE approves, including a course on erosion control provided by another jurisdiction or professional association. During construction, the <i>Responsible Person</i> shall keep on site proof of professional licensing or of successful completion of a DOEE-approved training program. [21 DCMR § 547] |

| Construction Element  | Timeline  |
|---|---|
| Permanent or Temporary Stabilization: Slopes Steeper than 3:1 | 7 days from last disturbance                            |
| Permanent or Temporary Stabilization: Other Slopes            | 14 days from last disturbance                           |
| ESC Measures in Place   | Before land disturbance; until after land is stabilized |
| Temporary Stabilization of Stockpile Areas                    | 15 days from last use or addition                       |

**Construction Sequence Notes**

- Sediment traps or basins and other erosion and sediment controls shall be installed no later than the first phase of land grading.
- Sediment traps or basins and other erosion and sediment controls shall be, installed as soon as new site-related runoff is detected and employed at all times to protect inlets or storm sewers below silt-producing areas.
- Immediately after debris basins, diversions, waterways, and related structures are built seed and mulch, or install sod & stabilization blanket.
- No later than the first day of construction install site access measures to minimize off-site vehicle tracking of sediments. Each construction entrance must be stabilized and include each additional measure required to keep sediment from being carried, onto public streets by construction vehicles, and washed into a storm drain or waterways.
- Remove off-site accumulations of sediment daily during construction and immediately at the request of a DOEE inspector.
- Perform routine maintenance to prevent any new destabilized areas.

| Pollution Prevention Good Housekeeping Stamp Notes |  |
|--|--|
| Fuels and Oils                                     | On-site refueling will be conducted in a dedicated location away from access to surface waters. Install containment berms and, or secondary containments around refueling areas and storage tanks. Spills will be cleaned up immediately and contaminated soils disposed of in accordance with all federal and District of Columbia regulations. Petroleum products will be stored in clearly labeled tightly sealed containers. All vehicles on site will be monitored for leaks and receive regular preventive maintenance activities. Any asphalt substances used on site will be applied according to manufacturer's recommendations. Spill kits will be included with all fueling sources and maintenance activities. |
| Solid Waste  | No solid materials shall be discharged to surface water. Solid materials including building materials, garbage and paint debris shall be cleaned up daily and deposited into dumpsters, which will be periodically removed and deposited into a landfill.  |
| Abrasive Blasting                                  | Water blasting, sandblasting, and other forms of abrasive blasting on painted surfaces built prior to 1978 may only be performed if an effective containment system prevents dispersal of paint debris.  |
| Fertilizer   | Fertilizers will be applied only in the minimum amounts recommended by the manufacturer, worked into the soil to limit exposure to stormwater, and stored in a covered shed. Partially used bags will be transferred to a sealable bin to avoid spills.  |
| Paint and Other Chemicals                          | All paint containers and curing compounds will be tightly sealed and stored when not required for use. Excess paint will not be discharges to the storm sewers, but will be properly disposed of according to manufacturer's recommendations. Spray guns will be cleaned on a removable tarp. Chemicals used on site are kept in small quantities and in closed containers undercover and kept out of direct contact with stormwater. As with fuels and oils, any inadvertent spills will be cleaned up immediately and disposed of according federal and District of Columbia regulations.  |
| Concrete   | Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash on site, except in a specially designated concrete disposal area. Form release oil for decorative stone work will be applied over a pallet covered with an absorbent material to collect excess fluid. The absorbent material will be replaced and disposed of properly when saturated.   |
| Water Testing                                      | When testing and, or cleaning water supply lines, the discharge from the tested pipe will be collected and conveyed to a completed stormwater conveyance system for ultimate discharge into a stormwater best management practice (BMP).   |
| Sanitary Waste                                     | Portable lavatories located on site will be services on a regular basis by a contractor. Portable lavatories will be located in an upland area away from direct contact with surface waters. Any spills occurring during servicing will be cleaned immediately and contaminated soils disposed of in accordance with all federal and District of Columbia regulations.   |

Table 1.4 Inspections during Construction

| Inspection Type                        | When Required  | When to Notify DOEE   |
|--|--|---|
| Preconstruction                        | Before land disturbance  | 3 business days before any land disturbing activity begins                  |
| Pre-BMP construction                   | Before construction of a stormwater BMP  | 3 business days before BMP construction begins                              |
| Other phase of construction            | As indicated on the plan, or per DOEE request either during the preconstruction meeting or during regular construction inspections | 3 business days before inspection   |
| Completion of land disturbing activity | At the completion and stabilization of a land-disturbing activity  | Within 2 weeks of completing the activity                                   |
| Final BMP inspection                   | After a permanent stormwater BMP is constructed  | 1 week before completing BMP construction                                   |
| Final construction inspection          | Once the site is entirely stabilized and all permanent practices are in place  | 1 week before inspection and within 4 weeks of completing site construction |
| As-Built Plan submission               | After final site inspection  | Within 21 days of final construction inspection                             |

| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 133       | 160          |

**PROJECT DESCRIPTION**

The purpose of this project is to complete the final section of the overall MBT construction (Blair Road to Piney Branch Road) providing upgraded bicycle and pedestrian facilities throughout the corridor. The project area is divided into six segments that can support an increase of bicycle and pedestrian facilities and infrastructure.

The product area extents shall be determined by the Limits of Disturbance as shown on the DA-P01 & DA-P02

This project scope meets the "Trails" conditions as stated in DOEE's SWMG, Section 2.13.2, and subsequently is permitted to follow the Practicable Process. The design scope will demonstrate a reasonable effort has been made to retain runoff from the project area, but will not be assigned Offv requirements if unable to achieve 100% of the SWRv on-site.

LOD Area Table

| LOD | Number | Area   |
|-----|--------|--------|
| 1   | 1      | 266    |
| 2   | 2      | 16,594 |
| 3   | 3      | 174    |
| 4   | 4      | 152    |
| 5   | 5      | 7,219  |
| 6   | 6      | 1,664  |
| 7   | 7      | 188    |
| 8   | 8      | 11,526 |

Land cover breakdown of Project Area Extents on sheet DA-P01.

TRENCH ONLY Area Table

| TR | Number | Area  |
|----|--------|-------|
| 1  | 1      | 221   |
| 2  | 2      | 91    |
| 3  | 3      | 64    |
| 4  | 4      | 1,068 |
| 5  | 5      | 74    |
| 6  | 6      | 152   |
| 7  | 7      | 34    |
| 8  | 8      | 60    |
| 9  | 9      | 128   |
| 10 | 10     | 683   |
| 11 | 11     | 368   |
| 12 | 12     | 69    |
| 13 | 13     | 103   |
| 14 | 14     | 165   |

|   |                 |  |
|---|-----------------|--|
| DATE: JULY 2023   | SCALE: AS NOTED | ES-07  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |  |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <input type="checkbox"/> BMW<br>DESIGNED BY <input type="checkbox"/> BMW<br>CHECKED BY <input type="checkbox"/> RS<br>DRAWN BY <input type="checkbox"/> BMW<br>PROJECT MGR. <input type="checkbox"/> RS |
| <b>EROSION &amp; SEDIMENT CONTROL<br/>PLAN NOTES</b>                                    |                 | DIVISION CHIEF   |
| DATE _____<br>FILE _____<br>SHEET 133 OF 160  |                 |  |

**65% DESIGN SUBMITTAL  
NOT FOR CONSTRUCTION**



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| NO. | DESCRIPTION | NAME | DATE |
|-----|-------------|------|------|
|     |             |      |      |
|     |             |      |      |
|     |             |      |      |
|     |             |      |      |

REVISIONS

FILES & DATES

MAXIMUM DRAINAGE AREA = 1/4 ACRE

**CONSTRUCTION SPECIFICATIONS**

- LIFT GRATE AND WRAP WITH GEOTEXTILE CLASS E TO COMPLETELY COVER ALL OPENINGS, SECURE WITH WIRE TIES, THEN SET GRATE BACK IN PLACE.
- PLACE CLEAN 3/4 TO 1-1/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 4 TO 6 INCHES THICK ON THE GRATE TO SECURE THE FABRIC.
- IF THERE ARE ANY SIGNS OF STREET FLOODING OR WATER PONDING, THIS STRUCTURE MUST BE CLEANED OR REPLACED, OR REDESIGNED WITH A VIABLE ALTERNATIVE.

|         |           |  |
|---------|-----------|--|
| DATE    | APPR.     |  |
| REVISED |           |  |
| ISSUED  |           |  |
|         | REFERENCE |  |

**AT GRADE INLET PROTECTION  
STORM DRAIN INLET PROTECTION**

DISTRICT OF COLUMBIA  
DEPARTMENT OF ENERGY & ENVIRONMENT  
DWG. NO 307.2

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

**CONSTRUCTION SPECIFICATIONS**

- BEFORE INSTALLING, CLEAR ALL OBSTRUCTIONS INCLUDING ROCKS, CLODS, AND DEBRIS GREATER THAN 1-INCH THAT MAY INTERFERE WITH PROPER FUNCTION OF THE FILTER SOCK.
- FILL SOCK UNIFORMLY WITH COMPOST OR ALTERNATE FILTER MEDIA TO DESIRED LENGTH, WITH ENOUGH MATERIAL THAT THE SOCKS DO NOT DEFORM.
- PLACE SOCKS ALONG CONTOURS, WITH THE ENDS TURNED UPSLOPE AT 30 TO 45 DEGREES FOR A LENGTH OF AT LEAST 5 FEET TO PREVENT RUNOFF BYPASS.
- FOR UNTRENCHED INSTALLATION, BACKFILL MULCH OR COMPOST ON THE UPSTREAM SIDE OF THE SOCK AND TAMP TO PREVENT UNDERCUTTING AND PIPING.
- ANCHORING MUST CONFORM TO THE FOLLOWING LIST: (a) MINIMUM 2-INCH SQUARE CROSS SECTION HARDWOOD; (b) DRIVEN AT LEAST 12 INCHES BELOW GRADE, OR 8 INCHES IF IN DENSE CLAY SOILS; (c) PROTRUDE ABOVE FILTER SOCKS AT LEAST 3 INCHES; (d) DRIVEN IN AT 45-DEGREE ANGLE UPSLOPE; (e) SPACED AT NO MORE THAN 4 FEET APART, OR 8 FEET APART IF THE FILTER SOCK IS ENTRENCHED 4 INCHES INTO THE GROUND.
- DO NOT USE ENTRENCHED INSTALLATION ON FILTER SOCKS SMALLER THAN 12 INCHES IN DIAMETER.
- FOR HARD SURFACE INSTALLATION, SUCH AS ON PAVEMENT, ANCHORING MAY BE NECESSARY WHERE STRAIGHT SECTIONS EXCEED 4 FEET. SEE DETAIL ABOVE, AND GREATER INSTRUCTION IN THE FILTER SOCK SPECIFICATION. WHEN NO ANCHORING IS USED, THE PRACTICE MUST BE CHECKED DAILY, REGARDLESS OF WHETHER RAINFALL OCCURS. ANCHORED INSTALLATION IS ALWAYS PREFERRED TO NON-ANCHORED INSTALLATION, IF POSSIBLE.
- FOR AT-GRADE INLET PROTECTION, FILTER SOCKS MUST COMPLETELY ENCLOSE THE DRAIN. IF USED AS CURB INLET PROTECTION, THE EFFECTIVE HEIGHT OF THE FILTER SOCK MUST NOT BE HIGHER THAN THE HEIGHT OF THE CURB; USE 8-INCH DIAMETER FILTER SOCK FOR STANDARD HIGHWAY APPLICATIONS.
- IF MULTIPLE SECTIONS OF FILTER SOCK ARE NEEDED FOR A CONTINUOUS RUN, OVERLAP ENDS OF SEPARATE SECTIONS A MINIMUM OF 2 FEET AND STAKE ENDS.
- TO REACH TALLER HEIGHTS, IT IS POSSIBLE TO STACK FILTER SOCKS. SEE SPECIFICATION FOR MORE DETAIL.
- REMOVE SEDIMENT WHEN IT HAS ACCUMULATED TO A DEPTH OF HALF THE EXPOSED HEIGHT OF SOCK AND REPLACE SOCK. REPLACE FILTER SOCK IF TORN. REINSTALL FILTER SOCK IF UNDERMINING OR DISLODGING OCCURS. REPLACE CLOGGED FILTER SOCKS.
- FOR VEGETATED, PERMANENT OR SEMI-PERMANENT INSTALLATIONS, MAINTAIN THE PLANTS AS IS APPROPRIATE FOR THE SPECIES USED.

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|         | REFERENCE |  |

**FILTER SOCK - 1**

DISTRICT OF COLUMBIA  
DEPARTMENT OF ENERGY & ENVIRONMENT  
DWG. NO 303.1

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

**CONSTRUCTION SPECIFICATIONS**

- BEFORE INSTALLING, CLEAR ALL OBSTRUCTIONS INCLUDING ROCKS, CLODS, AND DEBRIS GREATER THAN 1-INCH THAT MAY INTERFERE WITH PROPER FUNCTION OF THE FILTER SOCK.
- FILL SOCK UNIFORMLY WITH COMPOST OR ALTERNATE FILTER MEDIA TO DESIRED LENGTH, WITH ENOUGH MATERIAL THAT THE SOCKS DO NOT DEFORM.
- PLACE SOCKS ALONG CONTOURS, WITH THE ENDS TURNED UPSLOPE AT 30 TO 45 DEGREES FOR A LENGTH OF AT LEAST 5 FEET TO PREVENT RUNOFF BYPASS.
- FOR UNTRENCHED INSTALLATION, BACKFILL MULCH OR COMPOST ON THE UPSTREAM SIDE OF THE SOCK AND TAMP TO PREVENT UNDERCUTTING AND PIPING.
- ANCHORING MUST CONFORM TO THE FOLLOWING LIST: (a) MINIMUM 2-INCH SQUARE CROSS SECTION HARDWOOD; (b) DRIVEN AT LEAST 12 INCHES BELOW GRADE, OR 8 INCHES IF IN DENSE CLAY SOILS; (c) PROTRUDE ABOVE FILTER SOCKS AT LEAST 3 INCHES; (d) DRIVEN IN AT 45-DEGREE ANGLE UPSLOPE; (e) SPACED AT NO MORE THAN 4 FEET APART, OR 8 FEET APART IF THE FILTER SOCK IS ENTRENCHED 4 INCHES INTO THE GROUND.
- DO NOT USE ENTRENCHED INSTALLATION ON FILTER SOCKS SMALLER THAN 12 INCHES IN DIAMETER.
- FOR HARD SURFACE INSTALLATION, SUCH AS ON PAVEMENT, ANCHORING MAY BE NECESSARY WHERE STRAIGHT SECTIONS EXCEED 4 FEET. SEE DETAIL ABOVE, AND GREATER INSTRUCTION IN THE FILTER SOCK SPECIFICATION. WHEN NO ANCHORING IS USED, THE PRACTICE MUST BE CHECKED DAILY, REGARDLESS OF WHETHER RAINFALL OCCURS. ANCHORED INSTALLATION IS ALWAYS PREFERRED TO NON-ANCHORED INSTALLATION, IF POSSIBLE.
- FOR AT-GRADE INLET PROTECTION, FILTER SOCKS MUST COMPLETELY ENCLOSE THE DRAIN. IF USED AS CURB INLET PROTECTION, THE EFFECTIVE HEIGHT OF THE FILTER SOCK MUST NOT BE HIGHER THAN THE HEIGHT OF THE CURB; USE 8-INCH DIAMETER FILTER SOCK FOR STANDARD HIGHWAY APPLICATIONS.
- IF MULTIPLE SECTIONS OF FILTER SOCK ARE NEEDED FOR A CONTINUOUS RUN, OVERLAP ENDS OF SEPARATE SECTIONS A MINIMUM OF 2 FEET AND STAKE ENDS.
- TO REACH TALLER HEIGHTS, IT IS POSSIBLE TO STACK FILTER SOCKS. SEE SPECIFICATION FOR MORE DETAIL.
- REMOVE SEDIMENT WHEN IT HAS ACCUMULATED TO A DEPTH OF HALF THE EXPOSED HEIGHT OF SOCK AND REPLACE SOCK. REPLACE FILTER SOCK IF TORN. REINSTALL FILTER SOCK IF UNDERMINING OR DISLODGING OCCURS. REPLACE CLOGGED FILTER SOCKS.
- FOR VEGETATED, PERMANENT OR SEMI-PERMANENT INSTALLATIONS, MAINTAIN THE PLANTS AS IS APPROPRIATE FOR THE SPECIES USED.

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| DATE    | APPR.     |  |
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**FILTER SOCK - 2**

DISTRICT OF COLUMBIA  
DEPARTMENT OF ENERGY & ENVIRONMENT  
DWG. NO 303.2

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

MAXIMUM DRAINAGE AREA = 1/2 ACRE

**CONSTRUCTION SPECIFICATIONS**

- INSTALL PROPRIETARY FILTER BAG PRODUCTS PER MANUFACTURER'S RECOMMENDATIONS.
- GEOTEXTILE MUST MEET THE SPECIFICATIONS OUTLINED IN TABLE 3.9- GEOTEXTILE MATERIAL PROPERTIES FOR INLET FILTER BAG.
- INSPECT FILTER BAGS ON A WEEKLY BASIS OR AFTER EACH RAINFALL EVENT, WHICHEVER IS SOONER.
- CLEAN FILTER BAGS AND/OR REPLACE WHEN THE BAG IS HALF FULL.
- REPLACE DAMAGED FILTER BAGS IMMEDIATELY.
- INITIATE NEEDED REPAIRS IMMEDIATELY AFTER THE INSPECTION.

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**INLET FILTER BAG  
CHANNEL OR ROADWAY SWALE**

DISTRICT OF COLUMBIA  
DEPARTMENT OF ENERGY & ENVIRONMENT  
DWG. NO 309.2

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

**CONSTRUCTION SPECIFICATIONS**

- USE 42 INCH HIGH, 9 GAUGE OR THICKER CHAIN LINK FENCING (2-3/8 INCH MAXIMUM OPENING).
- USE 2-3/8 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.
- FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES.
- 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.
- 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.
- WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING DOWNGRADE.
- 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.

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| ISSUED  |           |  |
|         | REFERENCE |  |

**STANDARD INLET GUARD  
STORM DRAIN INLET PROTECTION**

DISTRICT OF COLUMBIA  
DEPARTMENT OF ENERGY & ENVIRONMENT  
DWG. NO 307.5

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

MAXIMUM DRAINAGE AREA = 2 ACRES

**CONSTRUCTION SPECIFICATIONS**

- USE 42 INCH HIGH, 9 GAUGE OR THICKER CHAIN LINK FENCING (2-3/8 INCH MAXIMUM OPENING).
- USE 2-3/8 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.
- FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES.
- 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.
- 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.
- WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING DOWNGRADE.
- 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.

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| DATE    | APPR.     |  |
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**DIVERSION FENCE**

DISTRICT OF COLUMBIA  
DEPARTMENT OF ENERGY & ENVIRONMENT  
DWG. NO 401.1

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

|   |                             |                           |
|---|-----------------------------|---------------------------|
| DATE: JULY 2023   | SCALE: AS NOTED             | ES-08                     |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                             |                           |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                             |                           |
| <b>EROSION &amp; SEDIMENT CONTROL<br/>PLAN DETAILS</b>                                  |                             |                           |
| PROJECT ENG. <u>    </u> BMW  | DESIGNED BY <u>    </u> BMW | CHECKED BY <u>    </u> RS |
| DRAWN BY <u>    </u> BMW  | PROJECT MGR. <u>    </u> RS |                           |
| DIVISION CHIEF  |                             |                           |
| DATE <u>    </u>  | FILE <u>    </u>            | SHEET 134 OF 160          |

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| REVISIONS |             |      |      |

**CONSTRUCTION SPECIFICATIONS**

- FENCE POSTS MUST BE A MINIMUM OF 36 IN. LONG DRIVEN 16 IN. MINIMUM INTO THE GROUND. WOOD POSTS MUST BE OF SOUND QUALITY HARDWOOD WITH 1-1/2 IN. MINIMUM WIDTH WHEN SQUARE CUT, OR 1-3/4 IN. MINIMUM DIAMETER WHEN ROUND. STEEL POSTS MUST BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 1.00 POUND PER LINEAR FOOT.
- FASTEN GEOTEXTILE SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION. GEOTEXTILE MUST MEET THE FOLLOWING REQUIREMENTS (GEOTEXTILE CLASS F):

| PROPERTY             | VALUE                                  | TEST METHOD |
|----------------------|--|-------------|
| TENSILE STRENGTH     | 50 LBS/IN. (MIN.)                      | ASTM D-4595 |
| TENSILE MODULUS      | 20 LBS/IN. (MIN.)                      | ASTM D-4595 |
| FLOW RATE            | 0.3 GAL/FT <sup>2</sup> /MINUTE (MAX.) | ASTM D-5141 |
| FILTERING EFFICIENCY | 75% (MIN.)                             | ASTM D-5141 |

- WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, OVERLAP, FOLD, AND STAPLE THEM TO PREVENT SEDIMENT BYPASS.
- INSPECT SILT FENCE AFTER EACH RAINFALL EVENT, AT LEAST DAILY DURING SUSTAINED RAINFALL EVENTS, AND MAINTAIN WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHES 30% OF THE FABRIC HEIGHT.

DATE: \_\_\_\_\_ APPR: \_\_\_\_\_  
 REVISED: \_\_\_\_\_  
 ISSUED: \_\_\_\_\_ REFERENCE: \_\_\_\_\_

**SILT FENCE-1**

\*\*\* DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT  
 DWG. NO 301.1

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

**SILT FENCE DESIGN CRITERIA:**

| SLOPE STEEPNESS            | SLOPE LENGTH (MAXIMUM) (FEET) | SILT FENCE LENGTH (MAXIMUM) (FEET) |
|----------------------------|-------------------------------|------------------------------------|
| FLATTER THAN 50:1 (2%)     | UNLIMITED                     | UNLIMITED                          |
| > 50:1 TO 10:1 (2% TO 10%) | 125                           | 1,000                              |
| > 10:1 TO 5:1 (10% TO 20%) | 100                           | 750                                |
| > 5:1 TO 3:1 (20% TO 33%)  | 60                            | 500                                |
| > 3:1 TO 2:1 (33% TO 50%)  | 40                            | 250                                |
| > 2:1 (> 50%)              | 20                            | 125                                |

**NOTE:**

- IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM, SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.
- TO AVOID CIRCUMVENTION, EXTEND THE ENDS OF THE SILT FENCE UPSLOPE TO PREVENT WATER AND SEDIMENT FROM FLOWING AROUND THE ENDS OF THE FENCE.

DATE: \_\_\_\_\_ APPR: \_\_\_\_\_  
 REVISED: \_\_\_\_\_  
 ISSUED: \_\_\_\_\_ REFERENCE: \_\_\_\_\_

**SILT FENCE-2**

\*\*\* DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT  
 DWG. NO 301.2

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

**CONSTRUCTION SPECIFICATIONS**

- FENCING MUST BE AT LEAST 42 INCHES IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST DISTRICT DEPARTMENT OF TRANSPORTATION (DDOT) DETAILS FOR CHAIN LINK FENCING. THE DDOT SPECIFICATION FOR A 6-FOOT FENCE MUST BE USED, SUBSTITUTING MINIMUM 42-INCH FABRIC AND 6-FOOT LENGTH POSTS. POSTS DO NOT NEED TO BE SET IN CONCRETE.
- SECURELY FASTEN CHAIN LINK FENCE TO THE FENCE POSTS WITH WIRE TIES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE.
- SECURELY FASTEN GEOTEXTILE TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID-SECTION.
- EMBED GEOTEXTILE A MINIMUM OF 8 INCHES INTO THE GROUND.
- WHEN TWO SECTIONS OF GEOTEXTILE FABRIC ADJOIN EACH OTHER, FOLD AND OVERLAP BY 6 INCHES.
- GEOTEXTILE MUST MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F (FROM TABLE 3.2--SEE BELOW):

| PROPERTY             | VALUE                                  | TEST METHOD |
|----------------------|--|-------------|
| TENSILE STRENGTH     | 50 LBS/IN. (MIN.)                      | ASTM D-4595 |
| TENSILE MODULUS      | 20 LBS/IN. (MIN.)                      | ASTM D-4595 |
| FLOW RATE            | 0.3 GAL/FT <sup>2</sup> /MINUTE (MAX.) | ASTM D-5141 |
| FILTERING EFFICIENCY | 75% (MIN.)                             | ASTM D-5141 |

- INSPECT SUPER SILT FENCE AFTER EACH RAINFALL EVENT, AT LEAST DAILY DURING SUSTAINED RAINFALL EVENTS, AND MAINTAIN WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHES 30% OF THE FABRIC HEIGHT.

DATE: \_\_\_\_\_ APPR: \_\_\_\_\_  
 REVISED: \_\_\_\_\_  
 ISSUED: \_\_\_\_\_ REFERENCE: \_\_\_\_\_

**SUPER SILT FENCE-1**

\*\*\* DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT  
 DWG. NO 302.1

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

**SUPER SILT FENCE DESIGN CRITERIA:**

| SLOPE    | SLOPE STEEPNESS | SLOPE LENGTH (MAXIMUM) (FEET) | SUPER SILT FENCE LENGTH (MAXIMUM) (FEET) |
|----------|-----------------|-------------------------------|--|
| 0 - 10%  | 0 - 10:1        | Unlimited                     | Unlimited                                |
| 10 - 20% | 10:1 - 5:1      | 200                           | 1,500                                    |
| 20 - 33% | 5:1 - 3:1       | 150                           | 1,000                                    |
| 33 - 50% | 3:1 - 2:1       | 100                           | 500                                      |
| > 50%    | > 2:1           | 50                            | 250                                      |

**NOTE:**

- TO AVOID CIRCUMVENTION, EXTEND THE ENDS OF THE SILT FENCE 5 HORIZONTAL FEET UPSLOPE AT 45-DEGREE ANGLES RELATIVE TO THE MAIN FENCE ALIGNMENT TO PREVENT SEDIMENT ACCUMULATION.

DATE: \_\_\_\_\_ APPR: \_\_\_\_\_  
 REVISED: \_\_\_\_\_  
 ISSUED: \_\_\_\_\_ REFERENCE: \_\_\_\_\_

**SUPER SILT FENCE-2**

\*\*\* DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT  
 DWG. NO 302.2

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

**CONSTRUCTION SPECIFICATIONS**

- USE NOMINAL 2 INCH BY 4 INCH LUMBER.
- USE WOVEN SLIT FILM GEOTEXTILE, AS SPECIFIED IN APPENDIX A.
- SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
- PROVIDE A 2-FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
- KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
- WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN - OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.
- PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT-LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
- SECURE BOARDS TO PAVEMENT WITH 40D 5-INCH MINIMUM LENGTH NAILS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

DATE: \_\_\_\_\_ APPR: \_\_\_\_\_  
 REVISED: \_\_\_\_\_  
 ISSUED: \_\_\_\_\_ REFERENCE: \_\_\_\_\_

**SILT FENCE ON PAVEMENT**

\*\*\* DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT  
 DWG. NO 310.1

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

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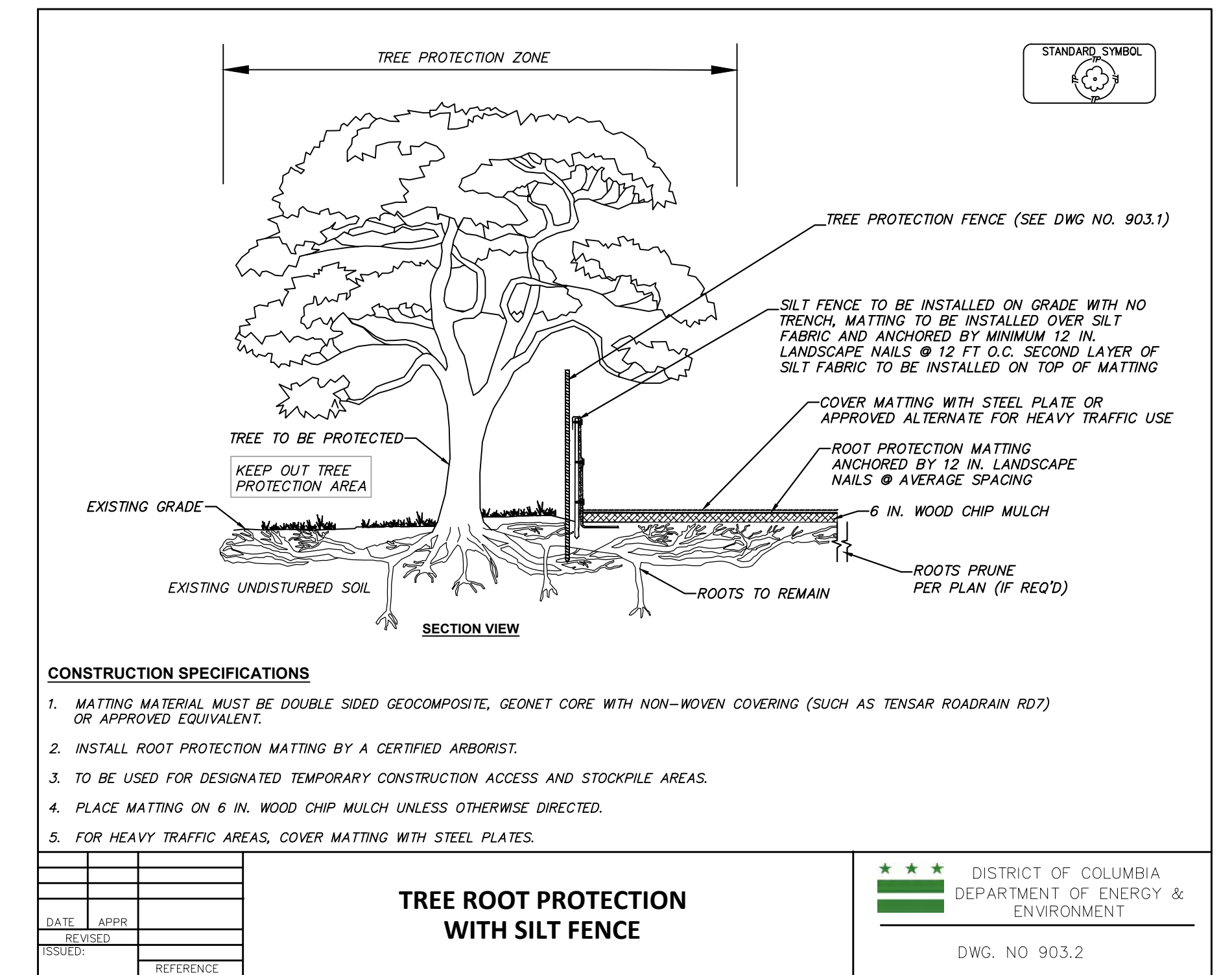
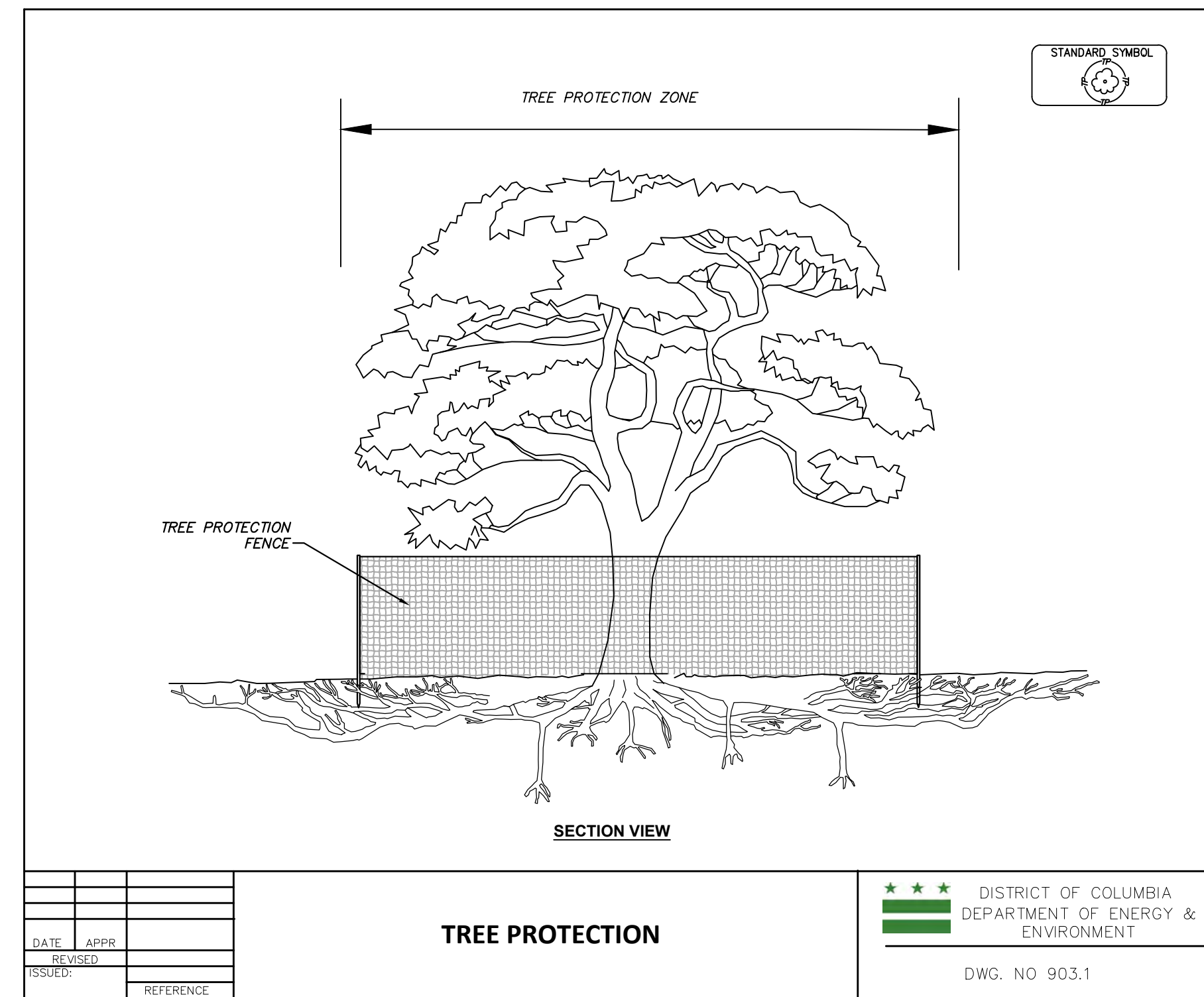
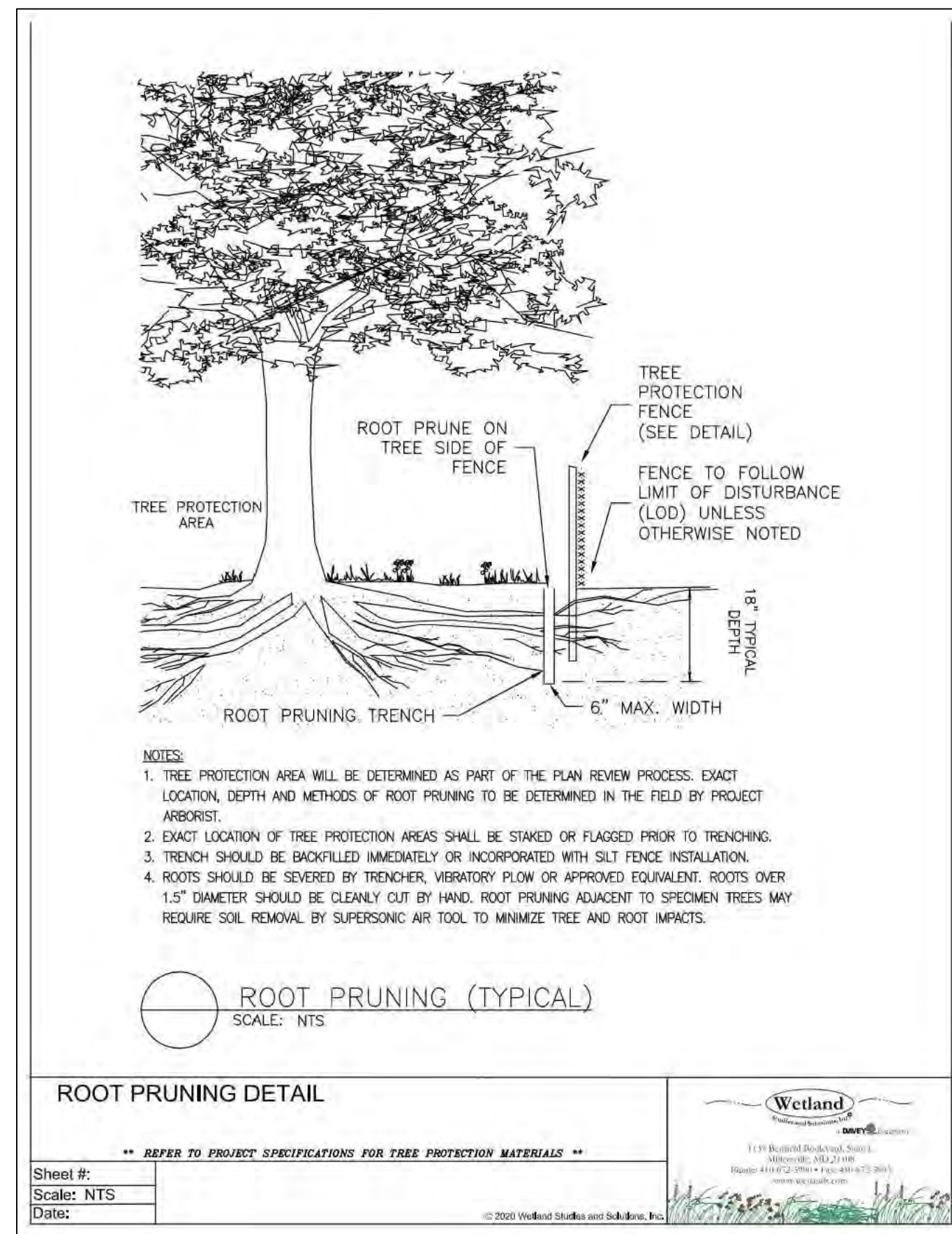
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| DATE: JULY 2023  | SCALE: AS NOTED       | ES-09                 |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>   INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                       |                       |
| <b>METROPOLITAN BRANCH TRAIL<br/>   DESIGN</b>   |                       |                       |
| <b>EROSION &amp; SEDIMENT CONTROL<br/>   PLAN DETAILS</b>                                  |                       |                       |
| PROJECT ENG. _____ BMW   | DESIGNED BY _____ BMW | CHECKED BY _____ RS   |
| DRAWN BY _____ BMW   |                       | PROJECT MGR. _____ RS |
| DIVISION CHIEF   |                       |                       |
| DATE _____   | FILE _____            | SHEET 135 OF 160      |

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| DATE: JULY 2023  | SCALE: AS NOTED | ES-10   |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>   INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>   DESIGN</b>   |                 | PROJECT ENG. _____ BMW<br>DESIGNED BY _____ BMW<br>CHECKED BY _____ RS<br>DRAWN BY _____ BMW<br>PROJECT MGR. _____ RS |
| <b>EROSION &amp; SEDIMENT CONTROL<br/>   PLAN DETAILS</b>                                  |                 | DIVISION CHIEF<br>DATE _____<br>FILE _____<br>SHEET 136 OF 160  |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 137       | 160          |

**GENERAL MAINTENANCE OF TRAFFIC NOTES**

- THE CONTRACTOR SHALL BE REQUIRED TO ADHERE TO THESE PLANS FOR MAINTAINING VEHICULAR, PEDESTRIAN AND BICYCLE TRAFFIC DURING CONSTRUCTION. ANY DEVIATION FROM THESE PLANS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL.
- THE CONTRACTOR SHALL AT ALL TIMES CONDUCT THE WORK IN SUCH A MANNER AS TO ENSURE THE LEAST POSSIBLE OBSTRUCTION TO TRAFFIC. THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND OF THE RESIDENTS WITHIN THE PROJECT LIMITS SHALL BE PROVIDED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY, INSTALL AND MAINTAIN ALL TEMPORARY TRAFFIC CONTROL EQUIPMENT FOR THE DURATION OF THE CONTRACT. ALL MAINTENANCE OF TRAFFIC DEVICES AND INSTALLATION OF THOSE DEVICES WILL BE INSPECTED DAILY BY THE CONTRACTOR'S MAINTENANCE OF TRAFFIC MANAGER. ANY DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN ALL NECESSARY BARRICADES, SUITABLE AND SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL DEVICES, AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF THE WORK AND SAFETY OF THE PUBLIC. ROADWAYS CLOSED TO TRAFFIC SHALL BE PROTECTED BY EFFECTIVE BARRICADES, AND OBSTRUCTIONS SHALL BE ILLUMINATED DURING HOURS OF DARKNESS. SUITABLE WARNING SIGNS SHALL BE PROVIDED TO PROPERLY CONTROL AND DIRECT TRAFFIC.
- THE CONTRACTOR SHALL ERECT WARNING SIGNS IN ADVANCE OF ANY PLACE ON THE PROJECT WHERE OPERATIONS MAY INTERFERE WITH THE USE OF THE ROAD BY TRAFFIC, AND AT ALL INTERMEDIATE POINTS WHERE THE NEW WORK CROSSES OR COINCIDES WITH AN EXISTING ROAD, SUCH WARNING SIGNS SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THE PLANS FURNISHED.
- THE FULL ROADWAY WIDTH SHALL BE OPENED TO TRAFFIC BETWEEN THE HOURS OF 5:30 AM AND 9:30 AM AND BETWEEN 3:30 PM AND 7:00 PM, MONDAY THROUGH FRIDAY, EXCLUSIVE OF LEGAL HOLIDAYS, AND AT ALL TIMES WHEN WORK IS NOT ACTUALLY IN PROGRESS, UNLESS OTHERWISE APPROVED BY THE ENGINEER. DURING THESE RESTRICTED HOURS, WORK MAY BE PERFORMED PROVIDED THAT THE FULL ROADWAY WIDTH REMAINS OPENED TO TRAFFIC. DURING OTHER TIMES TRAFFIC SHALL BE MAINTAINED.
- NO WORK SHALL BE PERMITTED ON WEEKENDS WITHOUT PRIOR WRITTEN APPROVAL OF THE CHIEF ENGINEER, HIS DESIGNEE OR AS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL BE SUBJECTED TO AREA NOISE ORDINANCES FOR NIGHT WORK FROM 7 P.M. TO 7 A.M. AND TO THE RESTRICTIONS ON EQUIPMENT AS INDICATED IN THE 2013 DDOT STANDARD SPECIFICATIONS FOR HIGHWAYS & STRUCTURES (OR CURRENT VERSION), EXCEPT AS PERMITTED BY A WRITTEN VARIANCE AND APPROVED BY THE ENGINEER.
- ALL WORK SHALL COMPLY WITH DDOT SPECIFICATIONS, STANDARDS, AND POLICIES UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH DDOT NEARBY AND ADJACENT PROJECTS AND SPECIAL EVENTS TO ENSURE THERE ARE NO CONFLICTS WITH PLANNED OR EXISTING ROAD, LANE, SHOULDER OR SIDEWALK CLOSURES.
- PEDESTRIAN ACCESS TO ABUTTING PROPERTIES AND VEHICULAR ACCESS FOR AMBULANCES, POLICE, FIRE AND OTHER EMERGENCY EQUIPMENT SHALL BE MAINTAINED. WHEN ACCESS IS TO BE TEMPORARILY CURTAILED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR AT LEAST TWO WEEKS ADVANCE NOTICE TO THE AFFECTED PARTIES PRIOR TO BLOCKING THE ACCESS.
- THE CONTRACTOR SHALL NOT DISTURB IN ANY WAY TREES, FENCES, UTILITY POLES, WIRES, STRUCTURES AND OTHER APPURTENANCES, PUBLIC OR PRIVATE, WITHOUT THE EXPLICIT WRITTEN CONSENT OF THE APPROPRIATE AUTHORITY.
- ALL SIGNS SHALL ADHERE TO THESE PLANS BUT BE FIELD-LOCATED TO AVOID OBSTRUCTIONS WITH ACCESS TO PUBLIC AND PRIVATE FACILITIES THAT WOULD OTHERWISE BE PROVIDED.
- EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY TRAFFIC PATTERNS SHALL BE REMOVED. THE CONTRACTOR SHALL FULLY REMOVE EXISTING LANE MARKINGS AND SHALL INSTALL TEMPORARY LANE MARKINGS, MEETING REQUIREMENTS OF 612.13 OR 612.14 OF THE 2013 DDOT STANDARD SPECIFICATIONS FOR HIGHWAYS & STRUCTURES (OR CURRENT VERSION), TO DELINEATE THE TEMPORARY LANES AS REQUIRED. TEMPORARY LANE MARKINGS SHALL BE REMOVED WHEN NO LONGER REQUIRED.
- THE MAINTENANCE OF TRAFFIC (MOT) PLANS DEPICT EXISTING, TEMPORARY, AND PERMANENT TRAFFIC CONTROL DEVICES NECESSARY FOR THE SAFE MOVEMENT OF ALL TRAFFIC (VEHICLE, PEDESTRIAN, BICYCLE) THROUGH THE PROJECT AREA. THE CONTRACTOR SHALL COVER OR REMOVE ANY SIGNING NOT SPECIFIED FOR EACH PHASE, AS APPROPRIATE OR AS DIRECTED BY THE ENGINEER.
- TEMPORARY TRAFFIC CONTROL SIGN POSTS SHALL EITHER BE EMBEDDED 4" INTO THE GROUND FOR 4"x4" POSTS, OR 5" INTO THE GROUND FOR 4"x6" POSTS. 4"x6" WOOD POSTS SHALL BE MADE BREAKAWAY BY DRILLING TWO 1-1/2" HOLES CENTERED AT 4" AND 18" ABOVE THE GROUNDLINE AND PERPENDICULAR TO THE ROADWAY. POSTS SHALL BE BACKFILLED USING SUITABLE MATERIAL AND TAMPED THOROUGHLY TO PROVIDE A RIGID SUB-SURFACE CONDITION AROUND THE POST. SIGNS PLACED ON SKID SUPPORTS AND OTHER SIGN STANDS ARE ACCEPTABLE. ALL SIGN SUPPORTS SHALL COMPLY WITH THE LATEST VERSION OF THE AASHTO ROADSIDE DESIGN GUIDE AND THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
- PORTABLE CHANGEABLE MESSAGE SIGN MESSAGES, LOCATION, CONTENT, TIMING, AND DURATIONS SHALL BE SUGGESTED BY THE CONTRACTOR AND APPROVED BY DDOT. ALL CHANGES TO THE TRAFFIC PATTERN SHALL BE COMMUNICATED TO THE PUBLIC IN ADVANCE THROUGH THE PCMS AND PUBLIC TRAFFIC ADVISORIES, AS DIRECTED BY DDOT. GENERALLY, PCMS WILL BE REQUIRED FOR AT LEAST 7 TO 14 DAYS IN ADVANCE OF IMPLEMENTING A TRAFFIC SWITCH OR PATTERN CHANGE. IF INADEQUATE ADVANCE NOTICE IS PROVIDED TO THE PUBLIC, DDOT MAY NOT ALLOW THE CONTRACTOR TO IMPLEMENT TRAFFIC PATTERN CHANGES.
- ALL BARRICADES, WARNING SIGNS, LIGHTS, TEMPORARY SIGNALS, AND OTHER PROTECTIVE DEVICES SHALL CONFORM WITH THE CURRENT VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND 612 TRAFFIC CONTROL OF THE 2013 DDOT STANDARD SPECIFICATIONS FOR HIGHWAYS & STRUCTURES (OR CURRENT VERSION)
- REFER TO THE CURRENT VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR THE APPROPRIATE LENGTHS, TYPES OF TAPERS, SPACING OF CHANNELIZING DEVICES, LENGTHS OF LONGITUDINAL AND BUFFER SPACING.
- NO WORK IS TO BEGIN UNTIL ALL ADVANCE WARNING SIGNS, CHANNELIZING DEVICES, PCMS, DETOUR SIGNS AND TEMPORARY PAVEMENT MARKINGS ARE IN PLACE AND OPERATIONAL.
- REFER TO SECTION 104.02 OF THE 2013 DDOT STANDARD SPECIFICATIONS FOR HIGHWAYS & STRUCTURES (OR CURRENT VERSION), FOR INFORMATION RELATED TO WORK RESTRICTIONS, TEMPORARY LANE CLOSURES, SHOULDER CLOSURES, AND RAMP CLOSURES.
- WHERE A SIDEWALK IS CLOSED DURING CONSTRUCTION, THE CONTRACTOR SHALL INSTALL TYPE II OR TYPE III BARRICADE ACROSS THE FULL WIDTH OF THE SIDEWALK APPROACHING THE CLOSURE. THIS BARRICADE SHALL BE DETECTABLE BY AN INDIVIDUAL WITH A VISUAL IMPAIRMENT TRAVELING WITH THE AID OF A CANE. DETOURS MUST BE PROVIDED TO MAINTAIN PEDESTRIAN ACCESS ON ALL SIDEWALKS AND AT ALL INTERSECTIONS.
- DURING ALL PHASES OF CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN ACCESS TO DC WATER MANHOLES AND CATCH BASINS.
- ACCESS POINTS TO THE CONSTRUCTION SITE WILL BE DETERMINED IN THE FIELD WITH THE APPROVAL OF THE ENGINEER OF RECORD. THE CONTRACTOR MAY RELOCATE THE ACCESS POINTS TO FACILITATE CONSTRUCTION. ACCESS POINTS SHOWN WITHIN THE WORK ZONE SHALL BE CLOSED OR RELOCATED AT THE APPROPRIATE TIME TO FACILITATE CONSTRUCTION WITHIN THE VICINITY OF THE ACCESS POINT.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING APPROPRIATE MOTORIST AND PEDESTRIAN SIGHT DISTANCES, AT ALL TIMES, IN ACCORDANCE WITH THE LATEST VERSION OF AASHTO'S "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" AND THE "MUTCD".
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRAFFIC ON ALL ROADWAYS AND ENTRANCES AT ALL TIMES UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER.

**GENERAL MAINTENANCE OF TRAFFIC NOTES (CONTINUED)**

- CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED OUTSIDE OF TRAVEL LANES, AND OUTSIDE THE DEFLECTION ZONE WHEN BEHIND APPROPRIATE TRAFFIC CONTROL DEVICES (CONCRETE, TRAFFIC BARRIER, DRUMS, ETC.), AND OUTSIDE THE CLEAR ZONE WHEN NO TRAFFIC CONTROL DEVICES ARE USED, AT ALL TIMES, AS APPROVED BY THE ENGINEER.
- WHEN PLACING TEMPORARY TRAFFIC CONTROL DEVICES (SIGNS, DRUMS, BARRIERS, ETC.) OUTSIDE OF THE LIMITS OF DISTURBANCE (LOD), NO GROUND DISTURBANCE SHALL OCCUR.
- ADA-COMPLIANT ACCESS TO ALL METRO RAIL STATIONS AND EXISTING OR RELOCATED BUS STOPS WITHIN THE PROJECT AREA MUST BE MAINTAINED THROUGH ALL PHASES OF CONSTRUCTION.
- TEMPORARY TRAFFIC BARRIER SHALL BE SELECTED AND INSTALLED TO PROVIDE THE APPROPRIATE DEFLECTION (PER SECTION 9 OF THE AASHTO ROADSIDE DESIGN GUIDE). IF A CLEAR ZONE OF LESS THAN 5 FEET EXISTS BEHIND THE BARRIER, THEN FIXED CONNECTIONS (BOLT, EPOXY, ETC.) TO THE ROADWAY SHALL BE USED TO REDUCE DEFLECTION OF THE BARRIER.
- ONCE THE WORK ZONE IS NO LONGER ACTIVE, TEMPORARY TRAFFIC BARRIER MAY BE REMOVED AS LONG AS THERE ARE NO DROPOFFS GREATER THAN 2" OR OBSTRUCTIONS WITHIN THE CLEAR ZONE.
- THE TYPE OF ARROW PANEL TO BE USED SHALL BE SELECTED BASED ON THE FOLLOWING CONDITIONS:
  - TYPE A ARROW PANEL - LOW SPEED (BELOW 35 MPH POSTED SPEED) URBAN STREETS
  - TYPE B ARROW PANEL - INTERMEDIATE SPEED (35 MPH TO 44 MPH POSTED SPEED) FACILITIES AND FOR MAINTENANCE OR MOBILE OPERATIONS ON HIGH SPEED (45 MPH AND GREATER POSTED SPEED) ROADWAYS
  - TYPE C ARROW PANEL - HIGH SPEED, HIGH VOLUME MOTOR VEHICLE TRAFFIC CONTROL PROJECTS
- ARROW PANEL TRAILERS SHALL BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, KNOWN AS CONSPICUITY MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.
- AT CONTRACTORS OPTION, PEDESTRIAN WALKWAYS MAY BE MAINTAINED USING AGGREGATE OR ASPHALT PAVEMENT SURFACES. ADA COMPLIANCE MUST BE MET AT ALL TIMES.
- THE CONTRACTOR SHALL ARRANGE AND HOST A PRE-TRAFFIC SWITCH MEETING AT LEAST THREE WEEKS PRIOR TO SWITCHING TRAFFIC INTO A NEW MOT PHASE. THE CONTRACTOR SHALL INVITE DDOT, POLICE, FIRE/RESCUE AND OTHER KEY STAKEHOLDERS AND DISCUSS DETAILS OF HOW THE NEXT MOT PHASE WILL BE SAFELY IMPLEMENTED. THE CONTRACTOR SHALL RESPOND TO QUESTIONS AT THE MEETING AND REQUEST WHEN THEY WOULD PREFER TO IMPLEMENT THE NEXT MOT PHASE. THE ENGINEER WILL DETERMINE WHEN THE NEXT MOT PHASE MAY BE IMPLEMENTED.\*
- CONTRACTOR SHALL COORDINATE ALL WORK INVOLVING IMPACTS TO WMATA FACILITIES AT LEAST 3 WEEKS PRIOR TO BEGINNING WORK.
- PEDESTRIAN DETOURS DEPICTED ON THE MOT PLANS SHALL ONLY BE IMPLEMENTED FOR SHORT DURATIONS AS NEEDED, AND APPROVED BY THE ENGINEER, FOR THE SETUP OF THE WORK ZONE AND WHEN REQUIRED BY CONSTRUCTION ACTIVITIES. AT ALL OTHER TIMES THE CONTRACTOR SHALL PROVIDE AN ACCESSIBLE PEDESTRIAN PATHWAY.

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| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |           |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |           | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC<br/>GENERAL NOTES</b>   |           | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 137 OF 160   |

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| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 138       | 160          |

**SEQUENCE OF CONSTRUCTION**

SEGMENT 1 (PINEY BRANCH RD.)

PHASE 1: ADA RAMP CONSTRUCTION

- DURING OFF PEAK PERIODS IMPLEMENT SIDEWALK DIVERSION AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT ADA RAMP.

PHASE 2: PROTECTED 2-WAY BIKE LANE

- DURING OFF PEAK PERIODS IMPLEMENT BICYCLE DETOUR AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT LIGHTING AND DRAINAGE FEATURES, INTSTALL PAVEMENT MARKINGS, FLEXIPOSTS AND CURB STOPS.

PHASE 3: PINEY BRANCH MEDIAN IMPROVEMENTS

- DURING OFF PEAK PERIODS IMPLEMENT THE PEDESTRIAN DETOUR, EASTBOUND LEFT LANE CLOSURE AND WESTBOUND THROUGH LANE NARROWING AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT PROPOSED MEDIAN IMPROVEMENTS.

SEGMENT 2 (PINEY BRANCH RD. TO CHESTNUT ST.)

PHASE 1: ADA RAMP CONSTRUCTION

- DURING OFF PEAK PERIODS IMPLEMENT PEDESTRIAN DETOUR AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- INSTALL TEMPORARY FENCING AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS TO PROVIDE SEPARATION FROM THE WORKZONE AND PINEY BRANCH RD. AND CHESTNUT ST. PEDESTRIAN ACTIVITIES.
- CONSTRUCT DRAINAGE, TRAIL, STAIRWAY, LIGHTING AND LANDSCAPING FEATURES AND RELOCATE FIRE HYDRANT.

SEGMENT 3 (CHESTNUT ST.)

PHASE 1: WEST SIDE OF CHESTNUT ST.

- RESTRICT PARKING ON BOTH SIDES OF CHESTNUT ST.
- DURING OFF PEAK PERIODS IMPLEMENT FLAGGING OPERATION AND PEDESTRIAN DETOUR AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT DRAINAGE, WATER MAIN, SPEED HUMP AND SIDEWALK FEATURES AND INSTALL PAVEMENT MARKINGS AND SIGNAGE ON WEST SIDE OF CHESTNUT ST.

PHASE 2: EAST SIDE OF CHESTNUT ST.

- MAINTAIN RESTRICTED PARKING ON BOTH SIDES OF CHESTNUT ST.
- DURING OFF PEAK PERIODS IMPLEMENT FLAGGING OPERATION AND PEDESTRIAN DETOUR AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT DRAINAGE, WATER MAIN, LIGHTING, SPEED HUMP AND SIDEWALK FEATURES AND INSTALL PAVEMENT MARKINGS AND SIGNAGE ON EAST SIDE OF CHESTNUT ST.

SEGMENT 4 (SPRING PL.)

PHASE 1: WEST SIDE OF SPRING PL.

- RESTRICT PARKING ON BOTH SIDES OF SPRING PL.
- DURING OFF PEAK PERIODS IMPLEMENT FLAGGING OPERATION AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT DRAINAGE AND PAVING FEATURES AND INSTALL PAVEMENT MARKINGS ON EAST SIDE OF SPRING PL.

PHASE 2: EAST SIDE OF SPRING PL.

- MAINTAIN RESTRICTED PARKING ON BOTH SIDES OF SPRING PL.
- DURING OFF PEAK PERIODS IMPLEMENT FLAGGING OPERATION AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT DRAINAGE AND PAVING FEATURES AND INSTALL PAVEMENT MARKINGS AND SIGNAGE ON EAST SIDE OF SPRING PL.

SEGMENT 5 (SPRING PL. TO CEDAR ST.)

PHASE 1

- INSTALL TYPE III BARRICADES AT SPRING PL. AND ON THE CEDAR ST. SIDEWALK AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT DRAINAGE, TRAIL, LIGHTING AND RETAINING WALL FEATURES.

SEGMENT 6 (CEDAR ST.)

PHASE 1: MEDIAN CONSTRUCTION

- DURING OFF PEAK PERIODS IMPLEMENT PEDESTRIAN DETOUR, LEFT LANE CLOSURE ON WESTBOUND CEDAR ST. AND LANE NARROWING ON EASTBOUND CEDAR ST. AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT THE PROPOSED MEDIAN AND PAVEMENT ON CEDAR ST.

PHASE 2: SIDEWALK EXTENSION

- MAINTAIN PEDESTRIAN DETOUR ESTABLISHED IN PHASE 1. MAINTAIN AT LEAST 1 PEDESTRIAN RAMP ON NORTH SIDE OF CEDAR ST. AT ALL TIMES.
- DURING OFF PEAK PERIODS IMPLEMENT RIGHT LANE CLOSURE ON WESTBOUND CEDAR ST. AND LANE NARROWING ON EASTBOUND CEDAR ST. AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT THE PROPOSED SIDEWALK/DRIVEWAY EXTENSION, PEDESTRIAN RAMPS AND SIGNAL EQUIPMENT.

SEGMENT 6 (4TH ST.)

PHASE 1: BIKE LANE AND PARKING LANE CONSTRUCTION

- DURING OFF PEAK PERIODS IMPLEMENT PARKING LANE CLOSURE ON EAST SIDE OF 4TH ST. FROM BLAIR RD. TO BUTTERNUT ST., ON WEST SIDE OF 4TH ST. BETWEEN BUTTERNUT ST. AND ASPEN HILL RD. AND ON BOTH SIDES OF 4TH ST. BETWEEN ASPEN HILL RD. AND WHITTIER ST. AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- INSTALL PROPOSED STRIPING, FLEXIPOSTS, SIGNAGE AND CURB STOPS ON 4TH ST.

PHASE 2: BIKE LANE AND PARKING LANE CONSTRUCTION

- DURING OFF PEAK PERIODS IMPLEMENT CLOSURE OF EAST SIDE OF 4TH ST. FROM BUTTERNUT ST. TO WHITTIER ST., RESTRICTING 4TH ST. TO SOUTHBOUND TRAFFIC ONLY AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- INSTALL PROPOSED BIKE LANE AND PARKING LANE STRIPING, FLEXIPOSTS, CURB STOPS AND SIGNAGE ON 4TH ST.

SEGMENT 6 (WHITTIER ST.)

PHASE 1: TRAIL CONSTRUCTION

- DURING OFF PEAK PERIODS CLOSE BOTH PARKING LANES ON WHITTIER ST. IMPLEMENT PEDESTRIAN DETOUR AND RIGHT LANE CLOSURE WITH TEMPORARY STRIPING AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- CONSTRUCT DRAINAGE, TRAIL AND LIGHTING FEATURES ALONG WHITTIER ST.
- INSTALL PAVEMENT MARKINGS AND SIGNAGE ON SOUTH SIDE OF WHITTIER ST.

PHASE 2: CENTER LANE FEATURE CONSTRUCTION

- DURING OFF PEAK PERIODS IMPLEMENT CLOSURE OF CENTER OF WHITTIER ST. AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- INSTALL PROPOSED DRAINAGE AND LIGHTING FEATURES AND PAVEMENT MARKINGS IN CENTER OF WHITTIER ST.

PHASE 3: LIGHTING CONSTRUCTION NORTH SIDE OF WHITTIER

- DURING OFF PEAK PERIODS IMPLEMENT CLOSURE OF NORTH SIDE OF WHITTIER ST. AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.
- INSTALL PROPOSED LIGHTING FEATURES ON NORTH SIDE OF WHITTIER ST.

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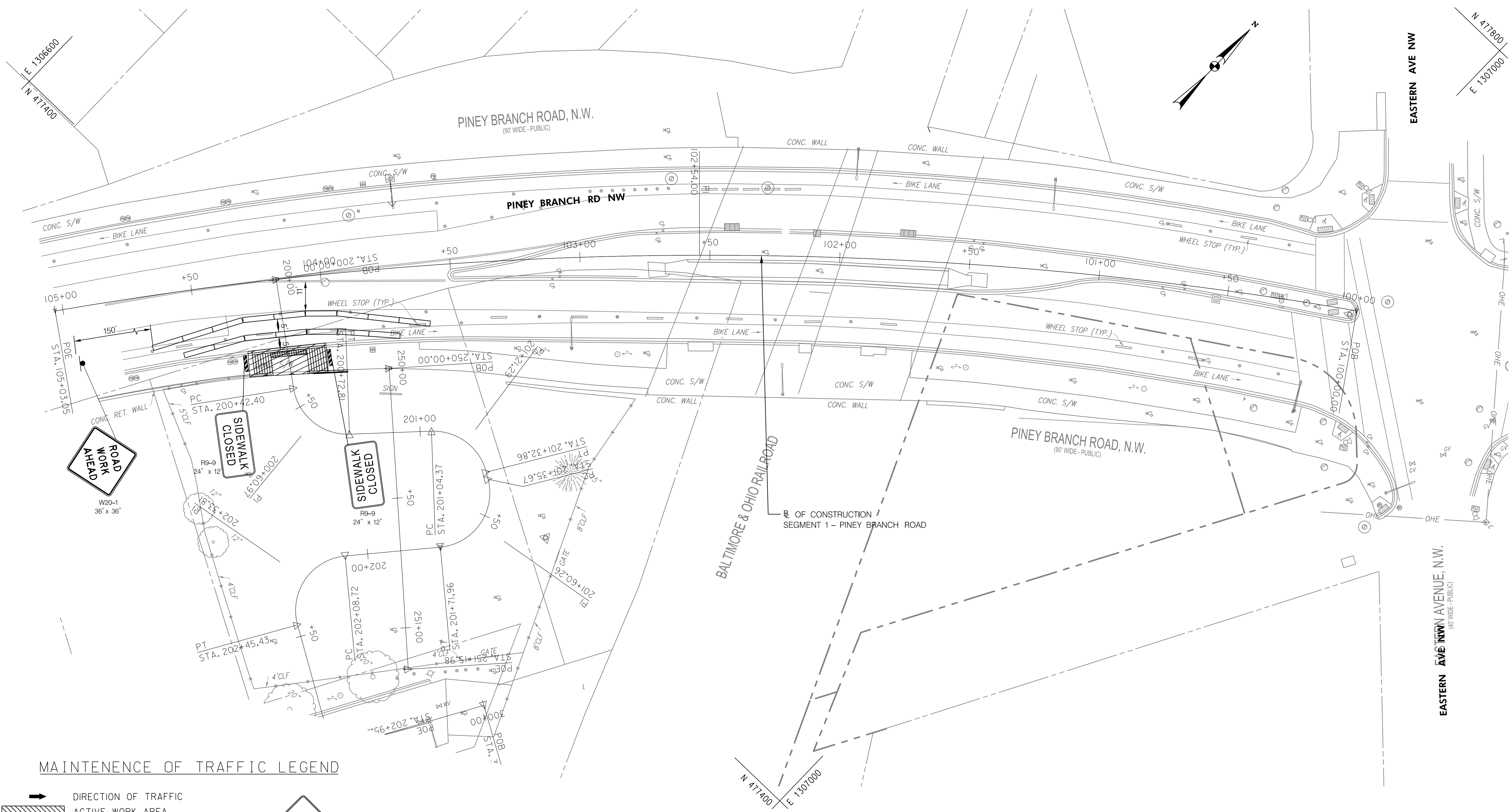
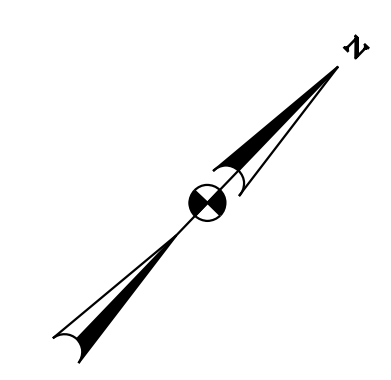
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| <b>MAINTENANCE OF TRAFFIC<br/>SEQUENCE OF CONSTRUCTION</b>                              |           | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 138 OF 160   |

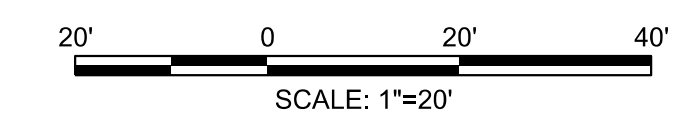
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**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- ROAD WORK AHEAD PROPOSED SIGNS
- ROAD WORK AHEAD EXISTING SIGNS



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| <b>MAINTENANCE OF TRAFFIC PLAN<br/>SEGMENT 1 - PHASE 1</b>                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 139 OF 160   |

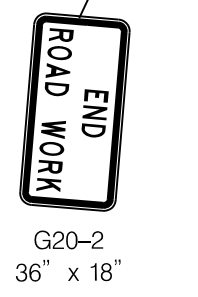
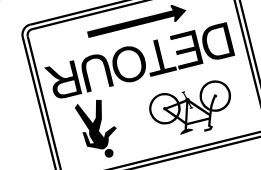
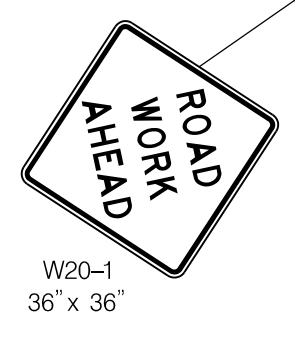
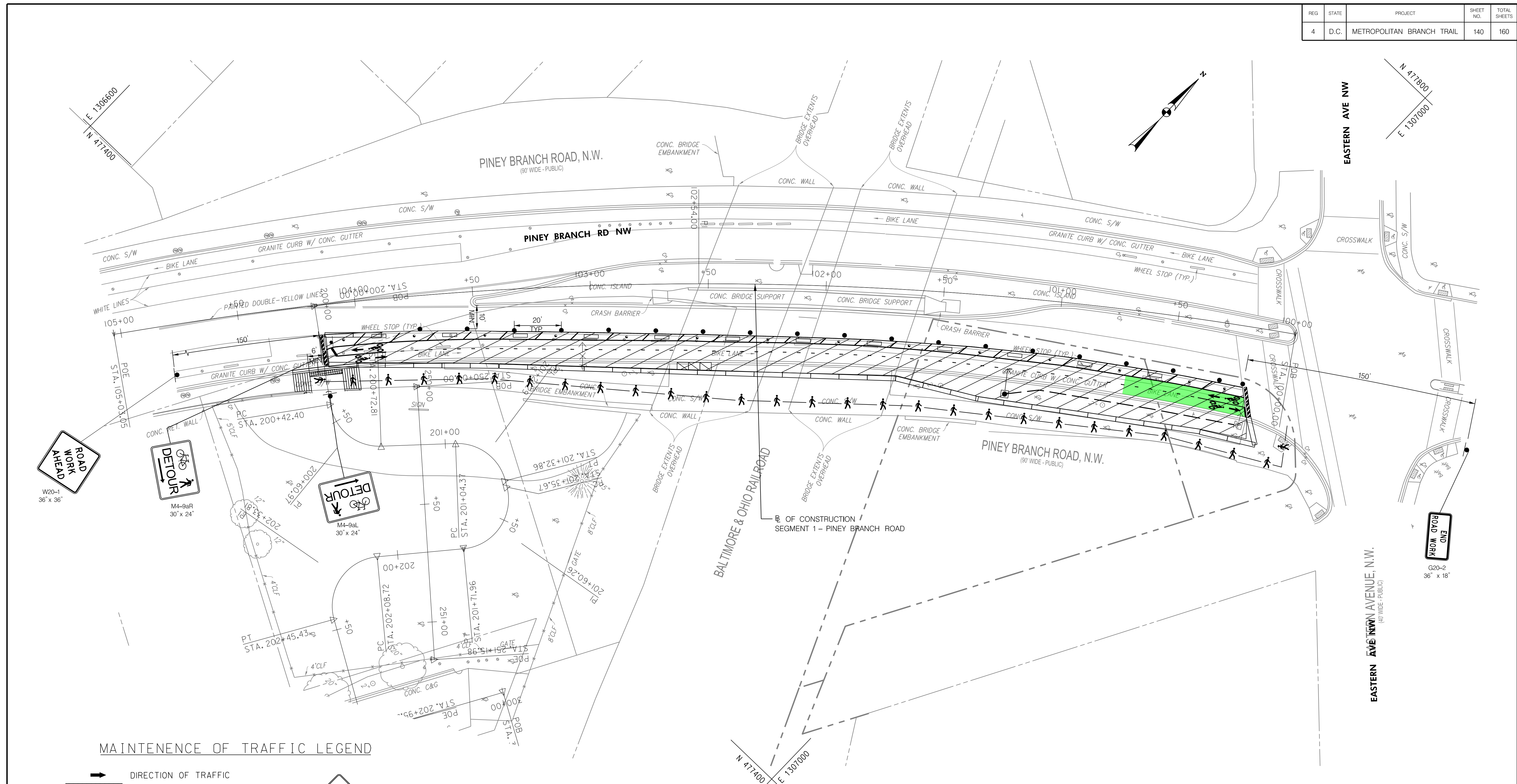
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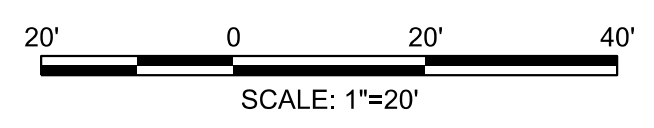
**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- PROPOSED SIGNS
- EXISTING SIGNS

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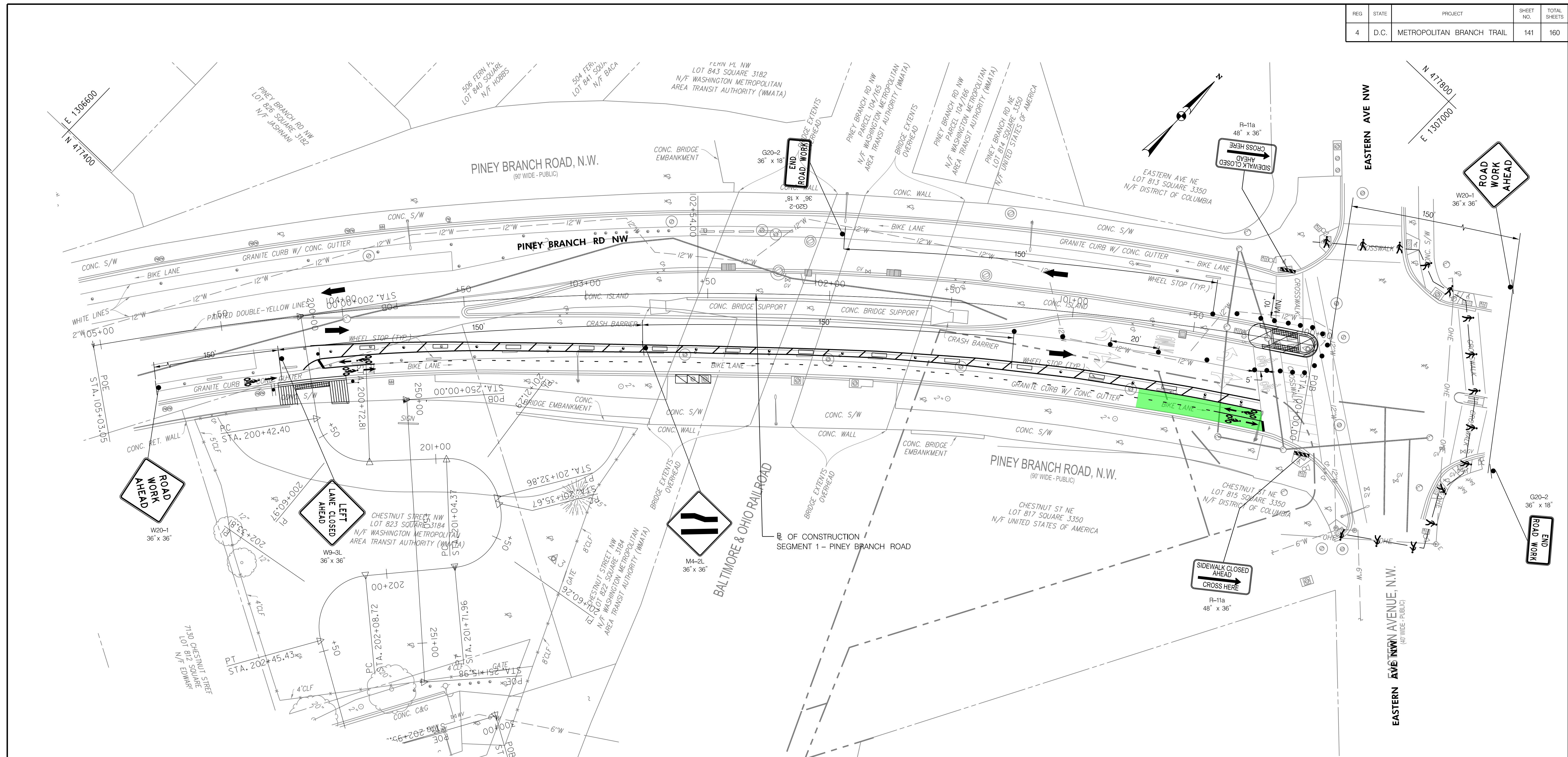
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| MAINTENANCE OF TRAFFIC PLAN<br>SEGMENT 1 - PHASE 2                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 140 OF 160   |

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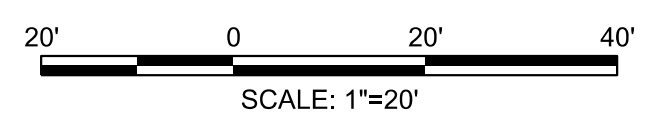
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- FLAGGER
- TEMPORARY BARRIER
- PROPOSED SIGNS
- EXISTING SIGNS

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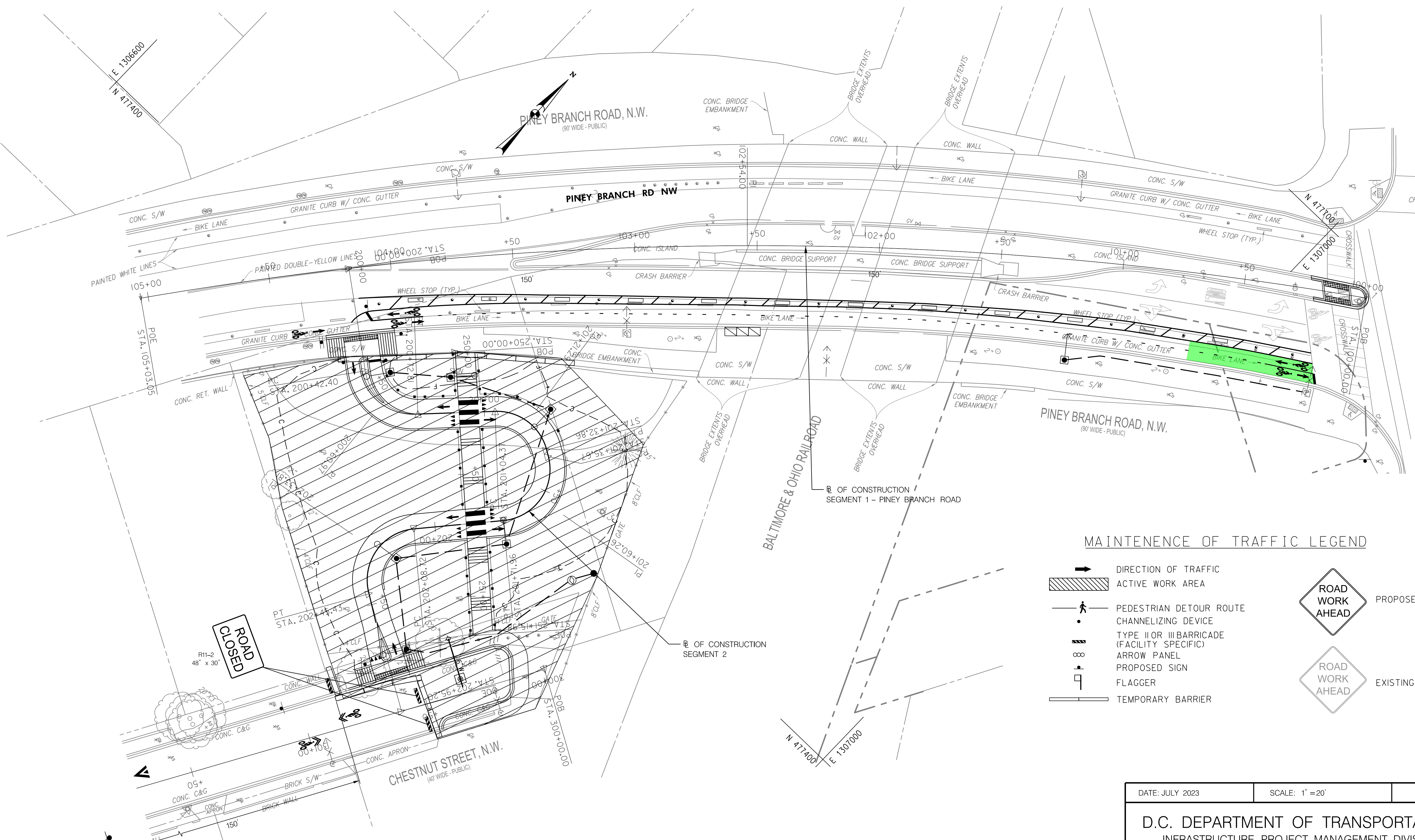
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-03</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>SEGMENT 1 - PHASE 3</b>                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 141 OF 160   |

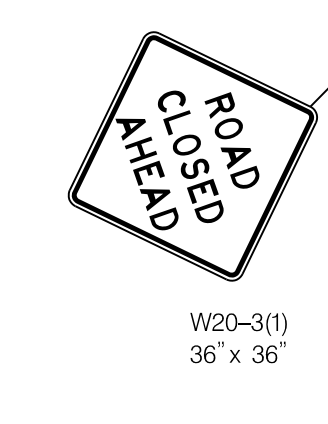
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
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| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 142       | 160          |



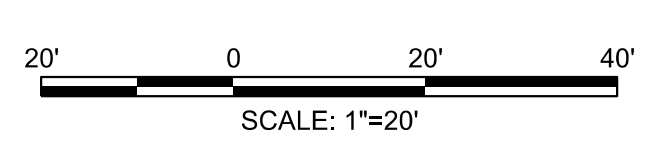
**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- PROPOSED SIGNS
- EXISTING SIGNS



W20-3(1)  
36" x 36"

**65% DESIGN PLANS  
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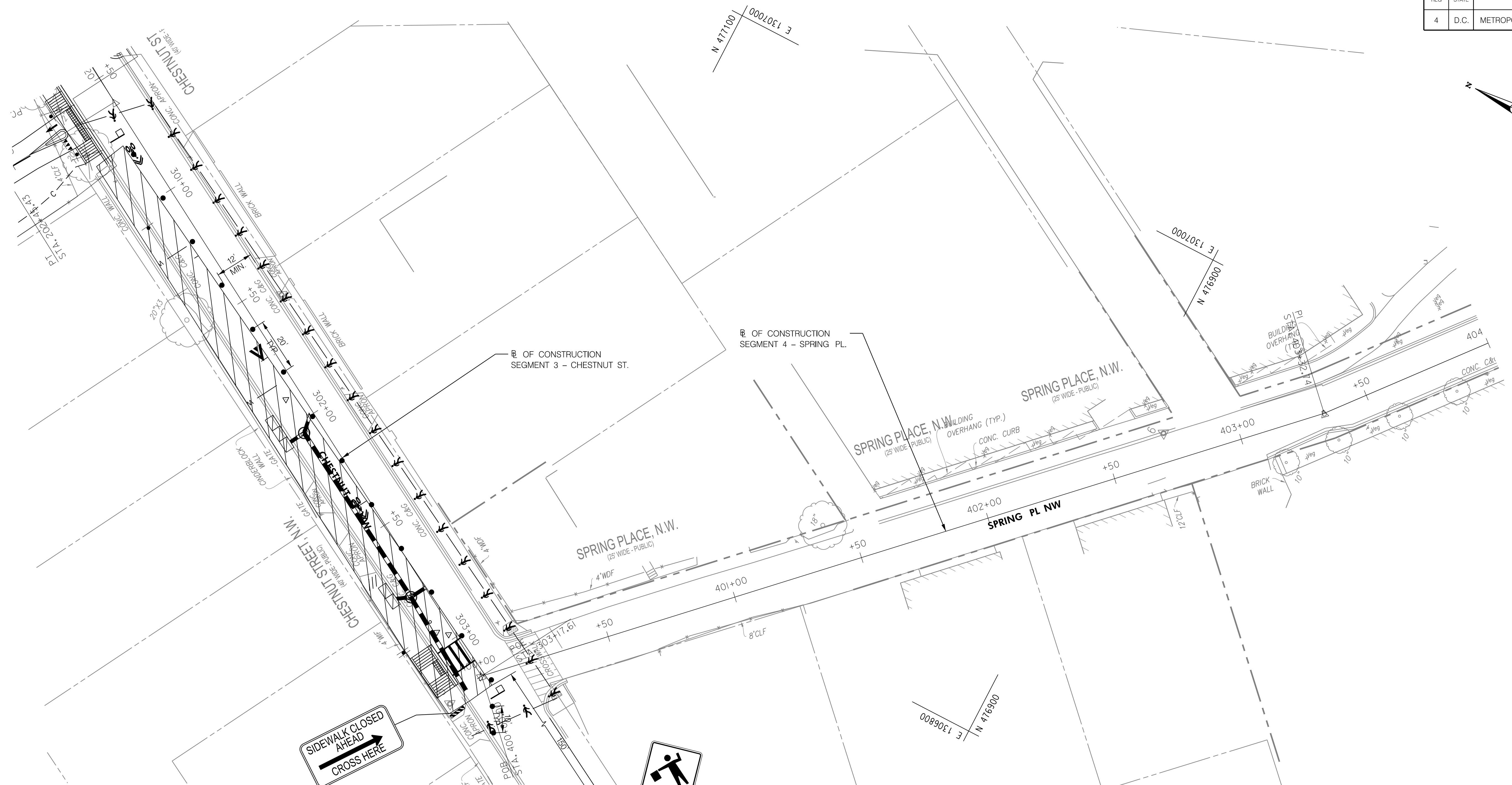
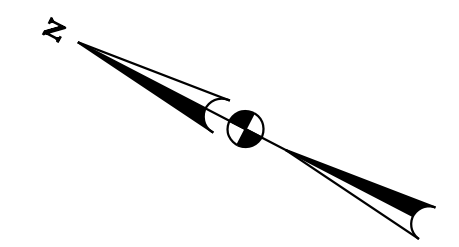


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| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>SEGMENT 2 - PHASE 1</b>                      |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 142 OF 160   |

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R9-11a  
48" x 36"



W20-7A  
36" x 36"



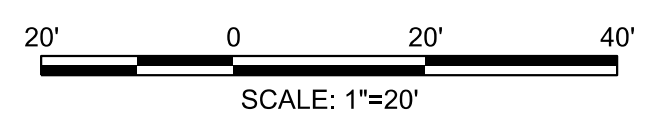
W20-4  
36" x 36"



W20-1  
36" x 36"

**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- ROAD WORK AHEAD PROPOSED SIGNS
- ROAD WORK AHEAD EXISTING SIGNS



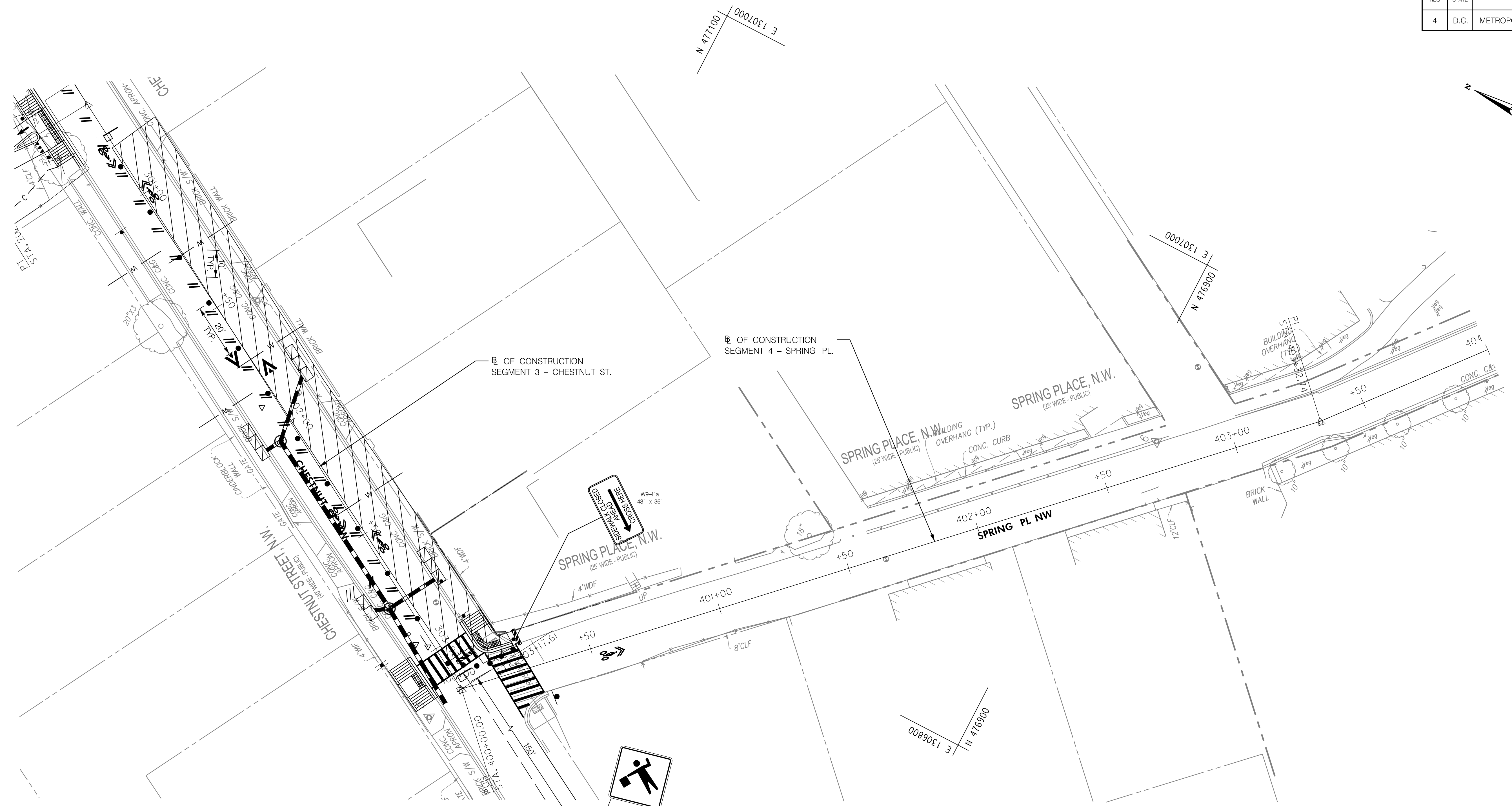
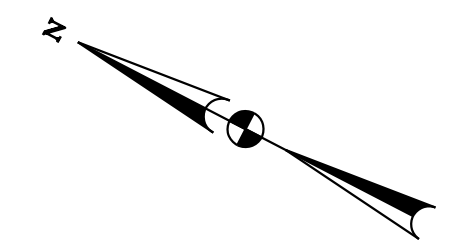
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-05</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| MAINTENANCE OF TRAFFIC PLAN<br>SEGMENT 3 - PHASE 1                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE <u> </u><br>SHEET 143 OF 160  |

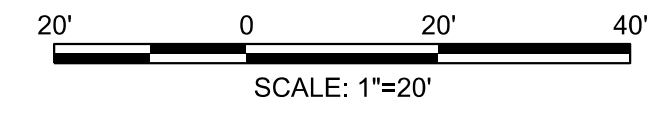
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 7/13/2023



**MAINTENANCE OF TRAFFIC LEGEND**

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|--|--|--|----------------|
|  | DIRECTION OF TRAFFIC                         |  | PROPOSED SIGNS |
|  | ACTIVE WORK AREA                             |  | EXISTING SIGNS |
|  | PEDESTRIAN DETOUR ROUTE                      |  |                |
|  | CHANNELIZING DEVICE                          |  |                |
|  | TYPE II OR III BARRICADE (FACILITY SPECIFIC) |  |                |
|  | ARROW PANEL                                  |  |                |
|  | PROPOSED SIGN                                |  |                |
|  | FLAGGER                                      |  |                |
|  | TEMPORARY BARRIER                            |  |                |

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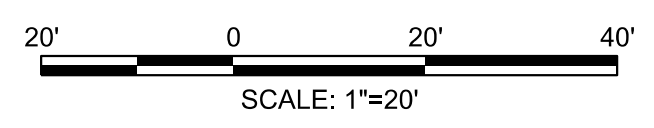
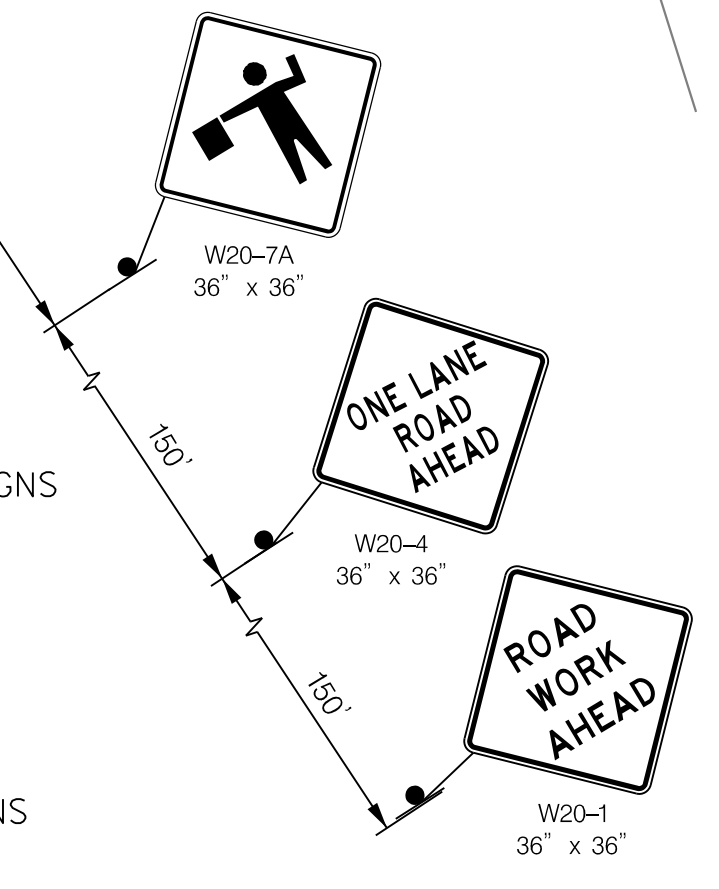
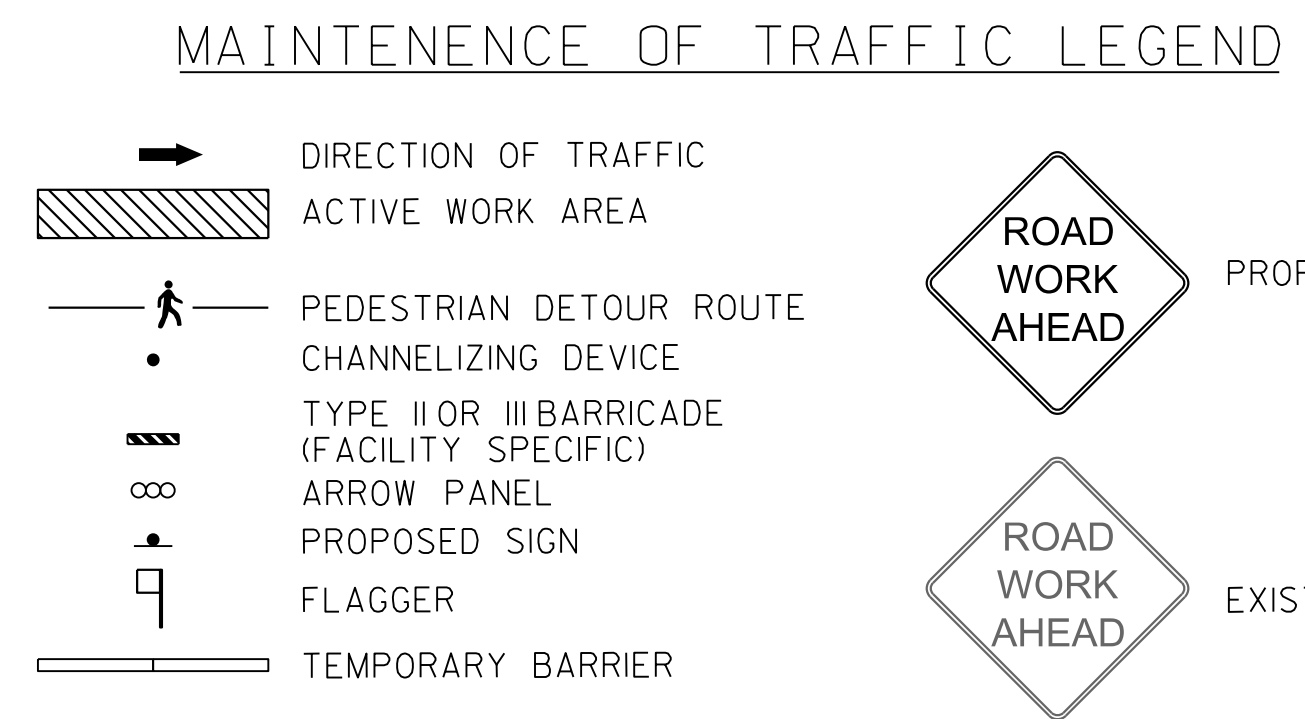
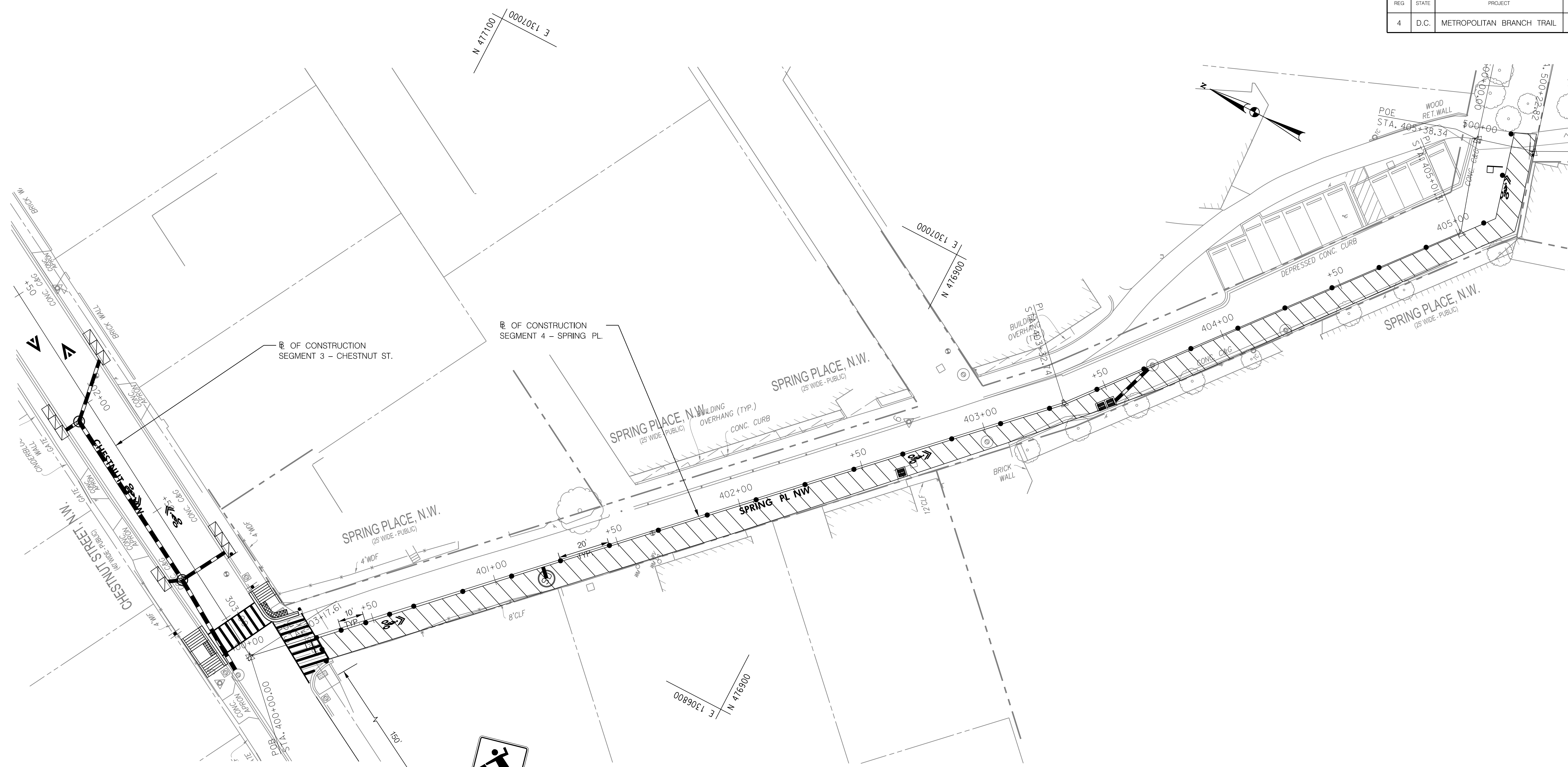
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-06</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| MAINTENANCE OF TRAFFIC PLAN<br>SEGMENT 3 - PHASE 2                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 144 OF 160   |

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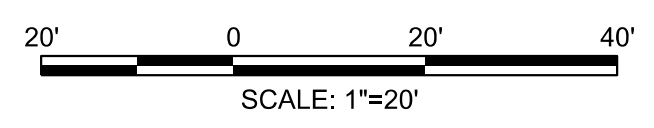
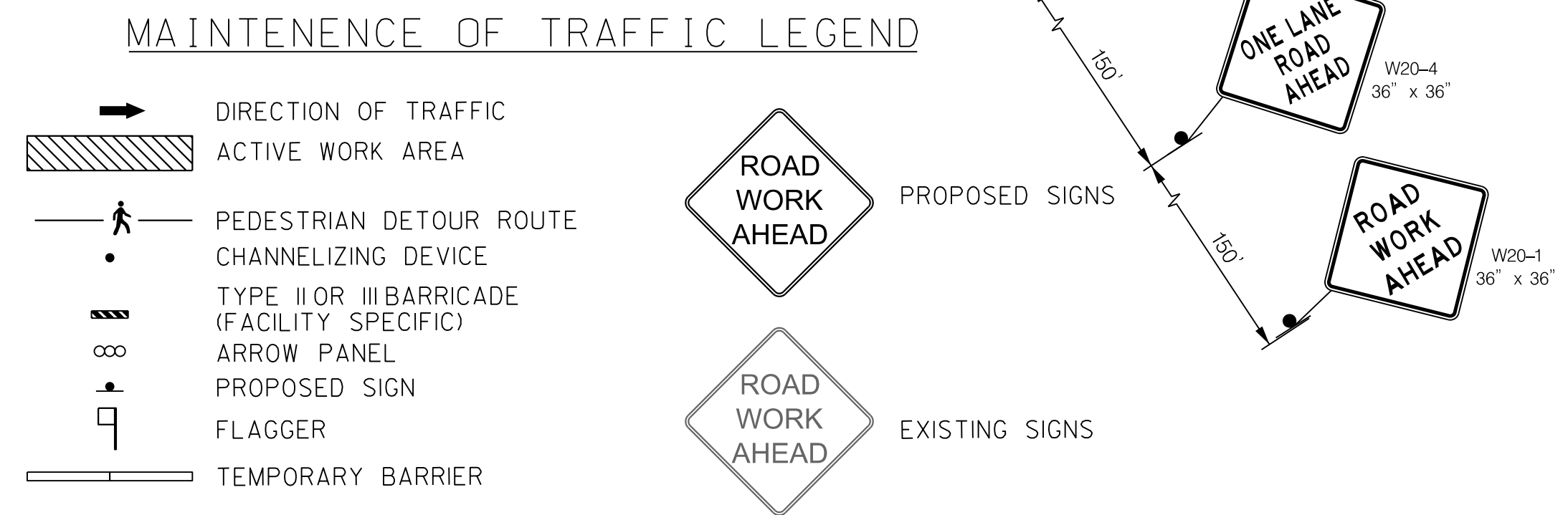
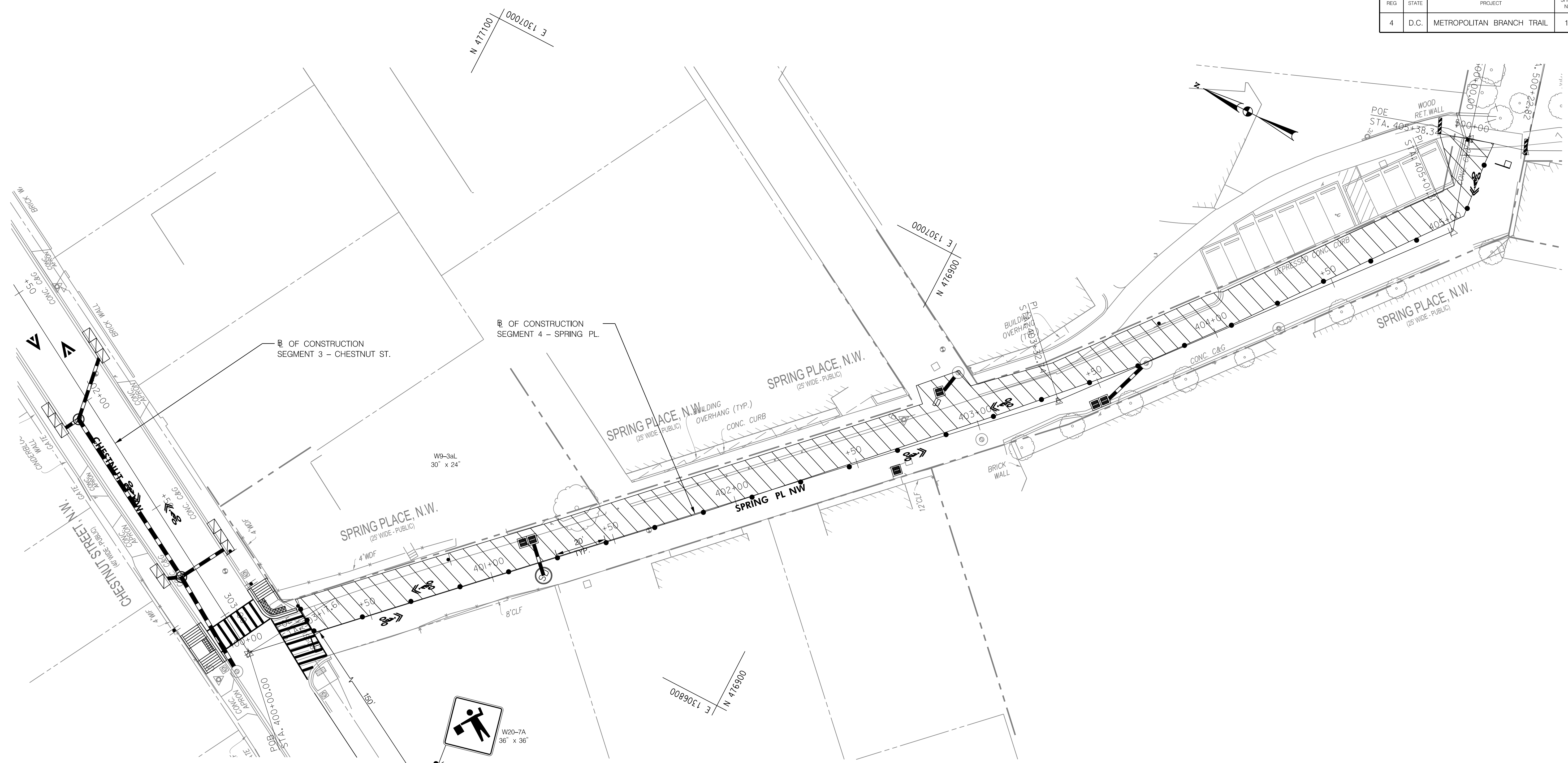
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-07</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>SEGMENT 4 - PHASE 1</b>                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 145 OF 160   |

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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-08</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>SEGMENT 4 - PHASE 2</b>                      |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 146 OF 160   |

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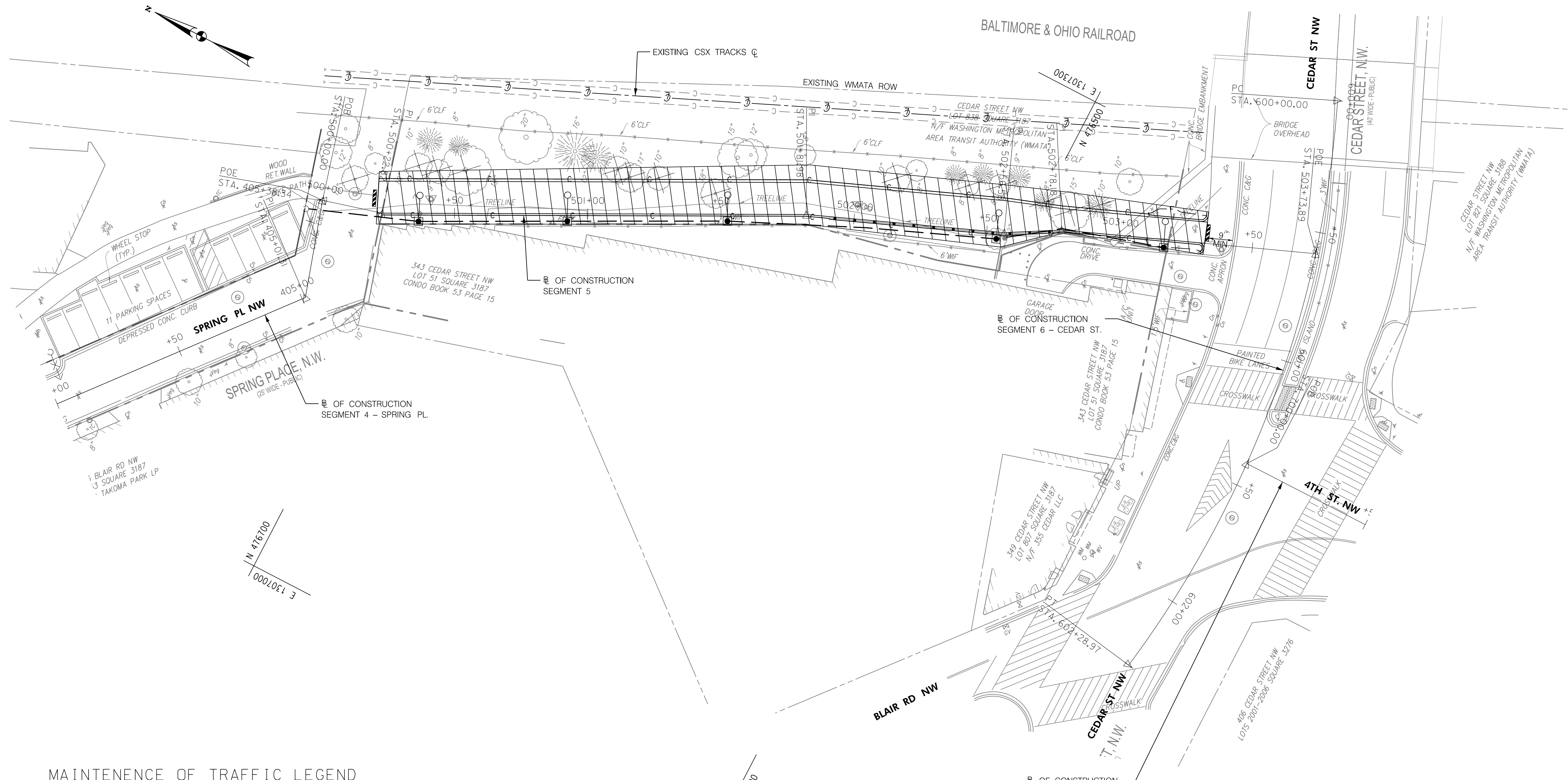
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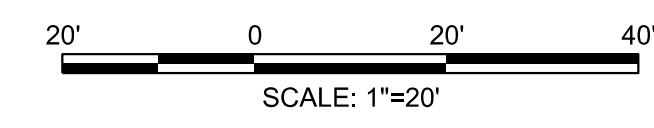
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**MAINTENANCE OF TRAFFIC LEGEND**

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|  | DIRECTION OF TRAFFIC                         |  | PROPOSED SIGNS |
|  | ACTIVE WORK AREA                             |  | EXISTING SIGNS |
|  | PEDESTRIAN DETOUR ROUTE                      |  |                |
|  | CHANNELIZING DEVICE                          |  |                |
|  | TYPE II OR III BARRICADE (FACILITY SPECIFIC) |  |                |
|  | ARROW PANEL                                  |  |                |
|  | PROPOSED SIGN                                |  |                |
|  | FLAGGER                                      |  |                |
|  | TEMPORARY BARRIER                            |  |                |



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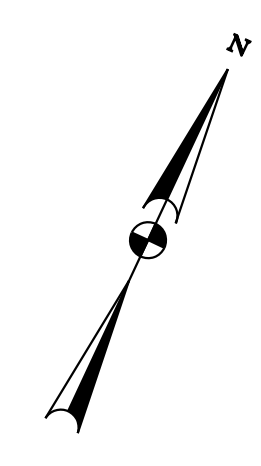
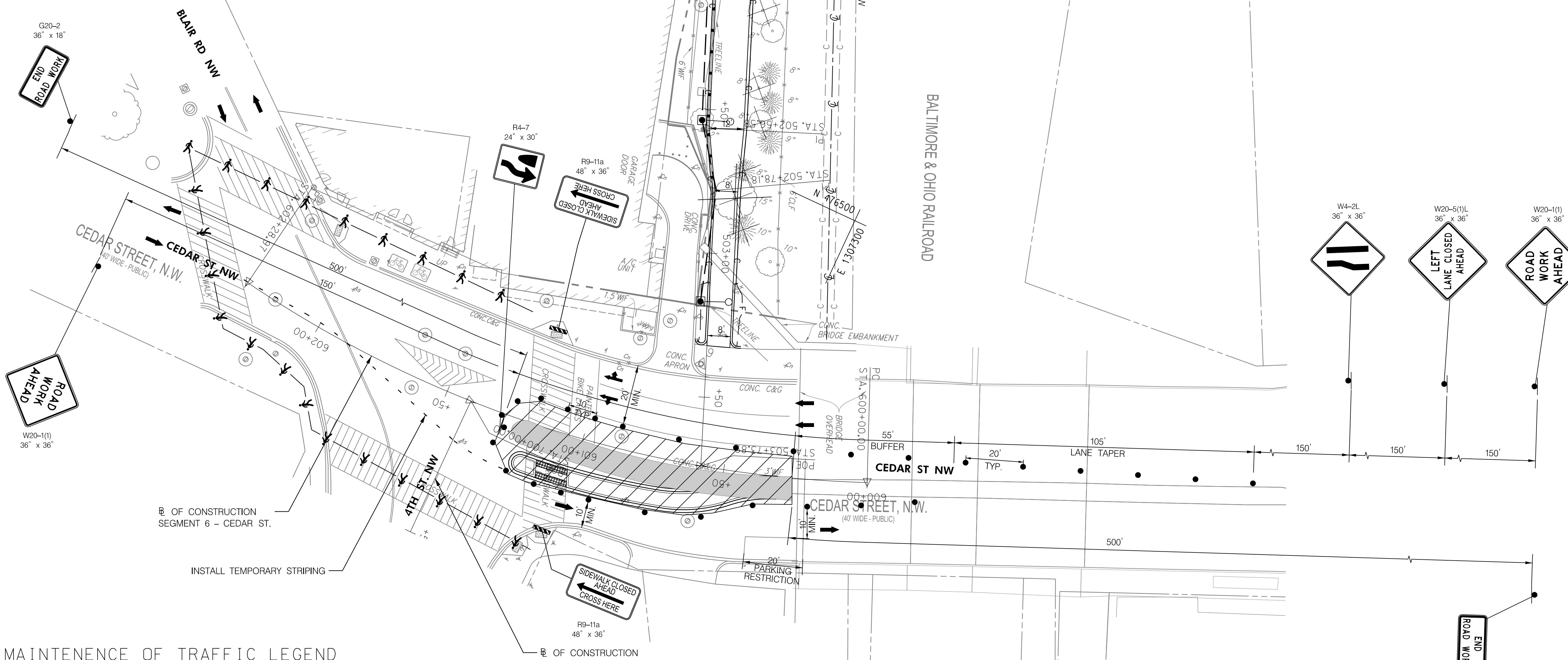
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-09</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>SEGMENT 5 - PHASE 1</b>                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE <u> </u><br>SHEET 147 OF 160  |

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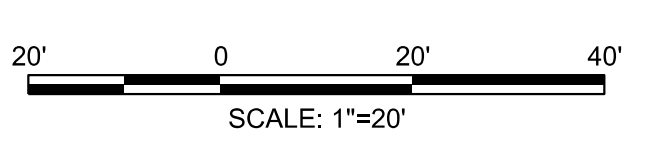
- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- ROAD WORK AHEAD PROPOSED SIGNS
- ROAD WORK AHEAD EXISTING SIGNS

OF CONSTRUCTION SEGMENT 6 - CEDAR ST.  
OF CONSTRUCTION SEGMENT 6 - 4TH ST.

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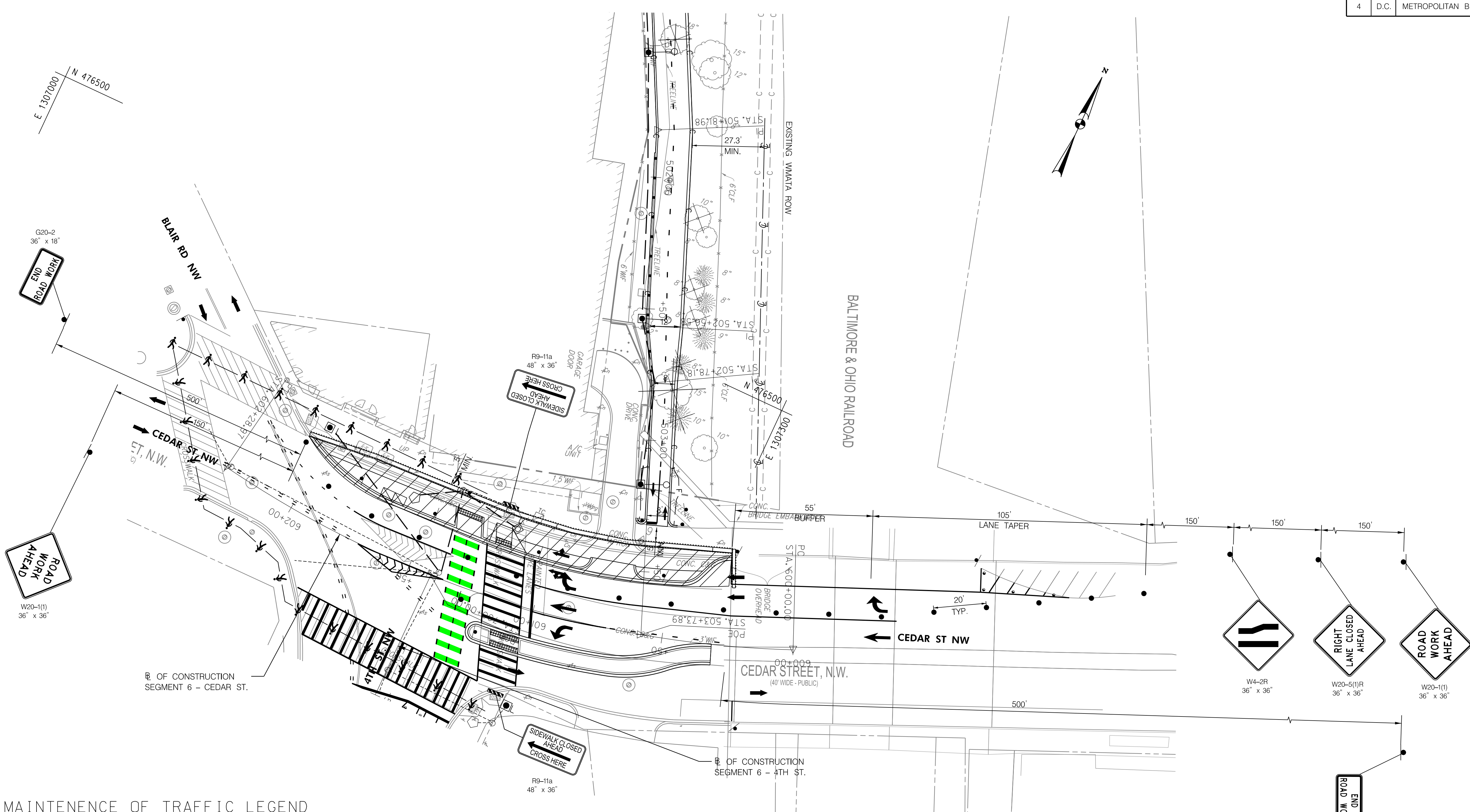
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-10</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| MAINTENANCE OF TRAFFIC PLAN<br>CEDAR ST - PHASE 1                               |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 148 OF 160   |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
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| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 149       | 160          |



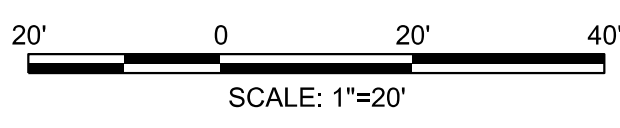
**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- ROAD WORK AHEAD PROPOSED SIGNS
- ROAD WORK AHEAD EXISTING SIGNS

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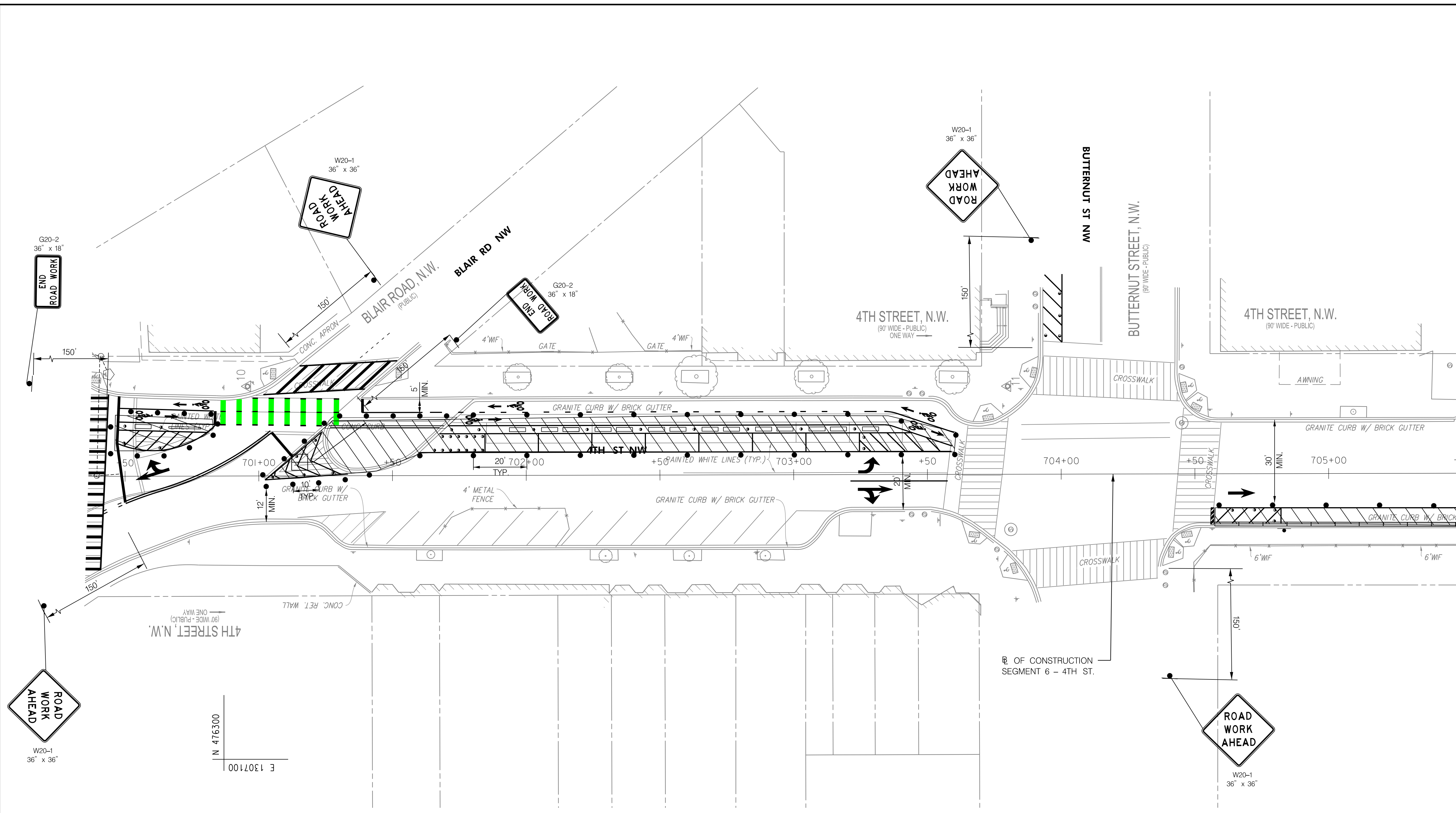
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-11</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| MAINTENANCE OF TRAFFIC PLAN<br>CEDAR ST. - PHASE 2                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE <u> </u><br>SHEET 149 OF 160  |

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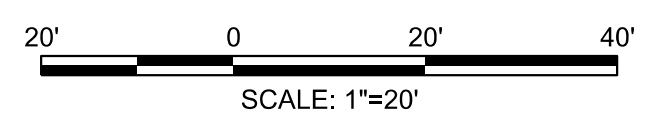
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
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| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 150       | 160          |



MATCH LINE STA. 705+50 - SEE SHEET MT-13

**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- PROPOSED SIGNS
- EXISTING SIGNS



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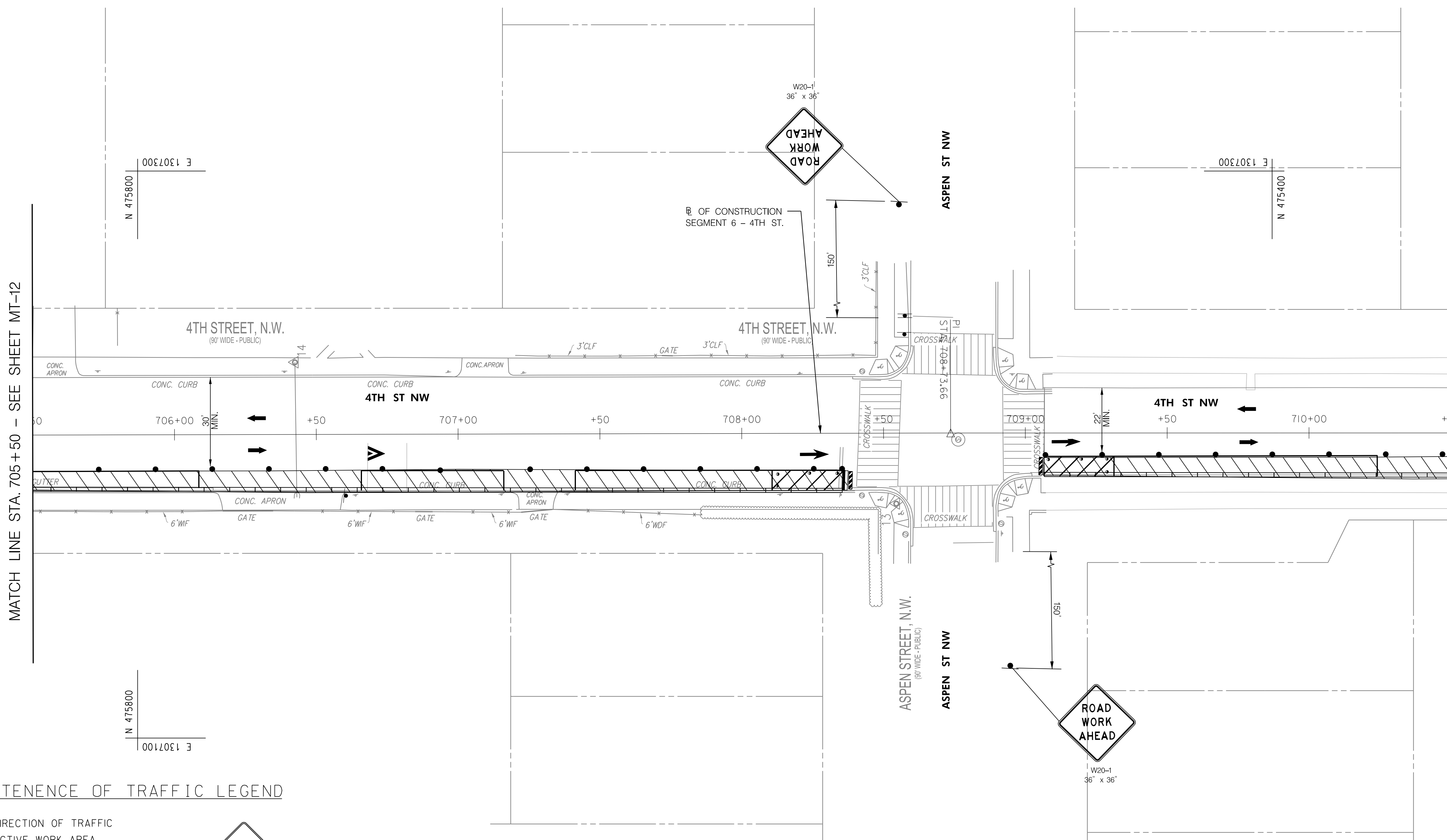
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-12</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>SEGMENT 6 - PHASE 1</b>                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 150 OF 160   |

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MATCH LINE STA. 705+50 - SEE SHEET MT-12

MATCH LINE STA. 710+50 - SEE SHEET MT-14

**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- PROPOSED SIGNS
- EXISTING SIGNS



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| NO. | DESCRIPTION | NAME | DATE |
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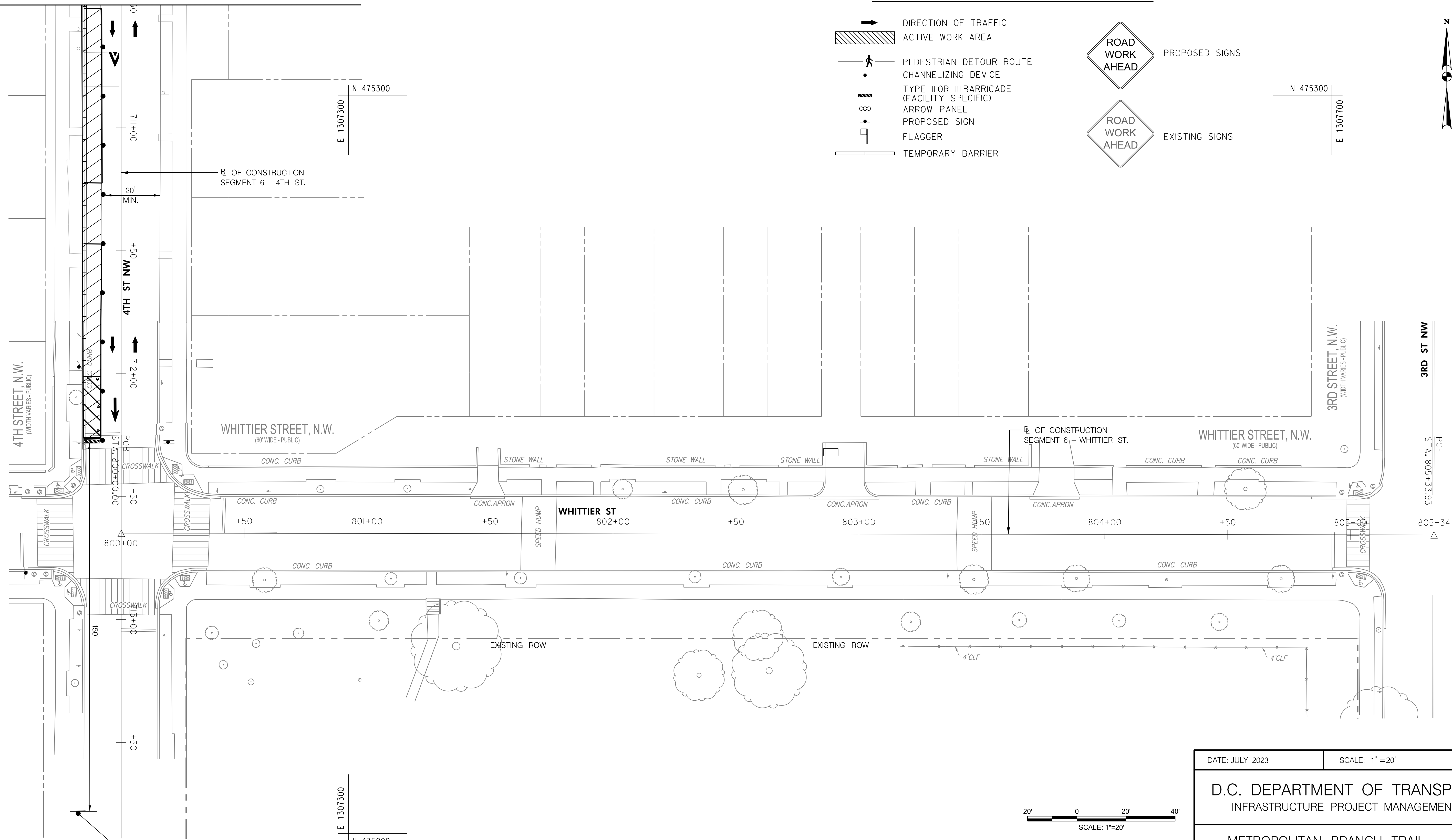
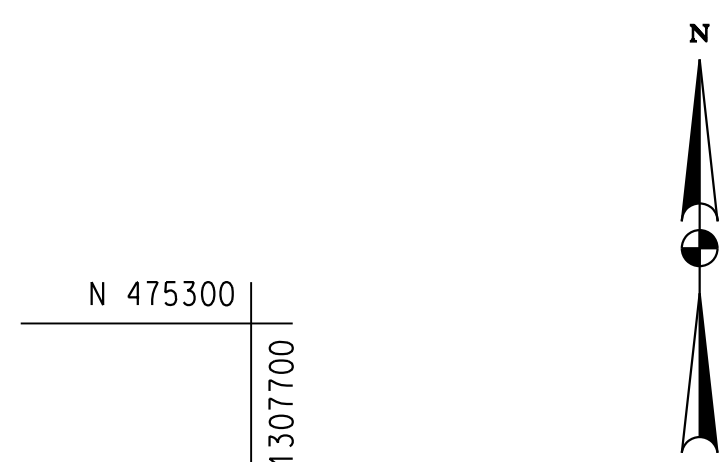
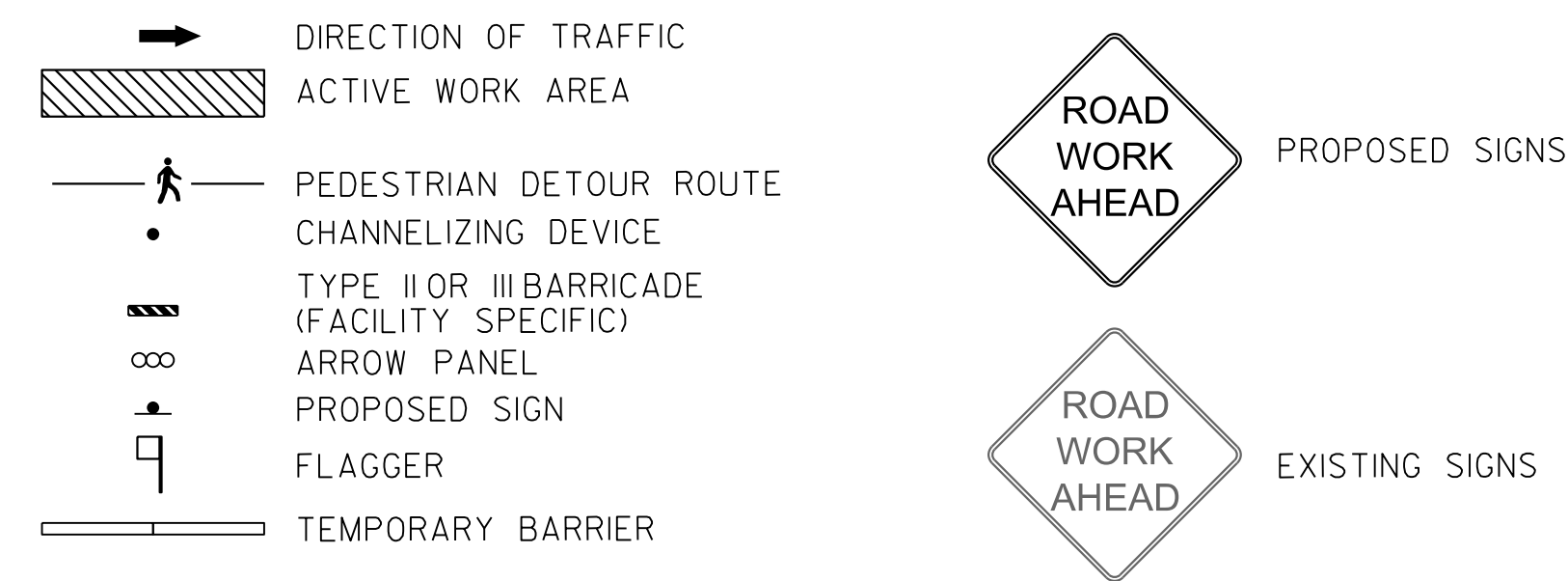
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-13</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>SEGMENT 6 - PHASE 1</b>                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 151 OF 160   |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 152       | 160          |

MATCH LINE STA. 710+50 - SEE SHEET MT-13

MAINTENANCE OF TRAFFIC LEGEND



|   |                 |   |
|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-14</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| MAINTENANCE OF TRAFFIC PLAN<br>SEGMENT 6 - PHASE 1                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 152 OF 160   |

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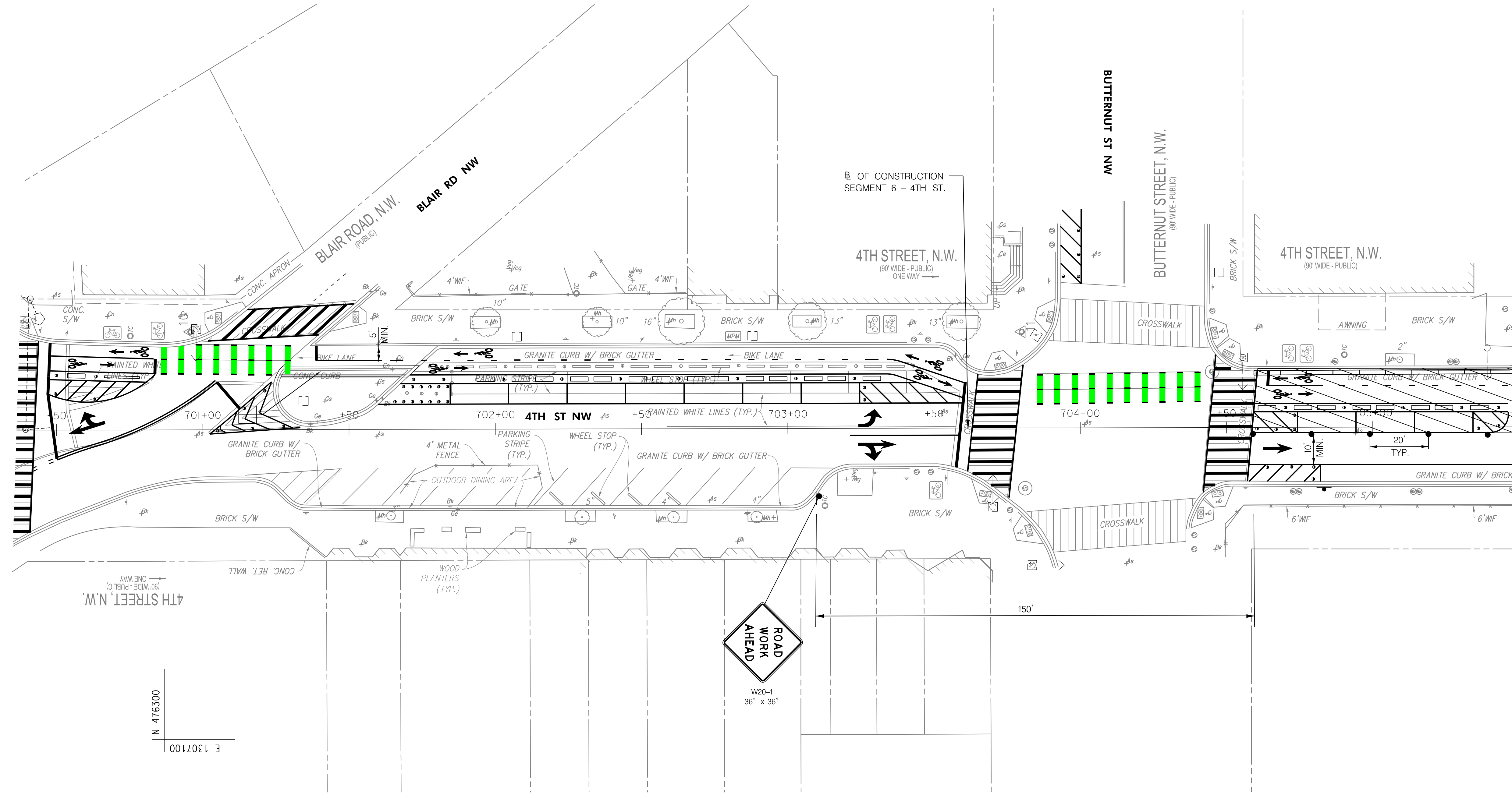
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| NO. | DESCRIPTION | NAME | DATE |
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
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| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 153       | 160          |



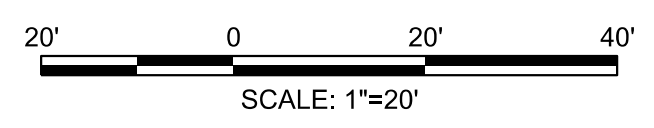
MATCH LINE STA. 705+50 - SEE SHEET MT-16

N 476300  
E 1307100

N 475800  
E 1307100

**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- PROPOSED SIGNS
- EXISTING SIGNS



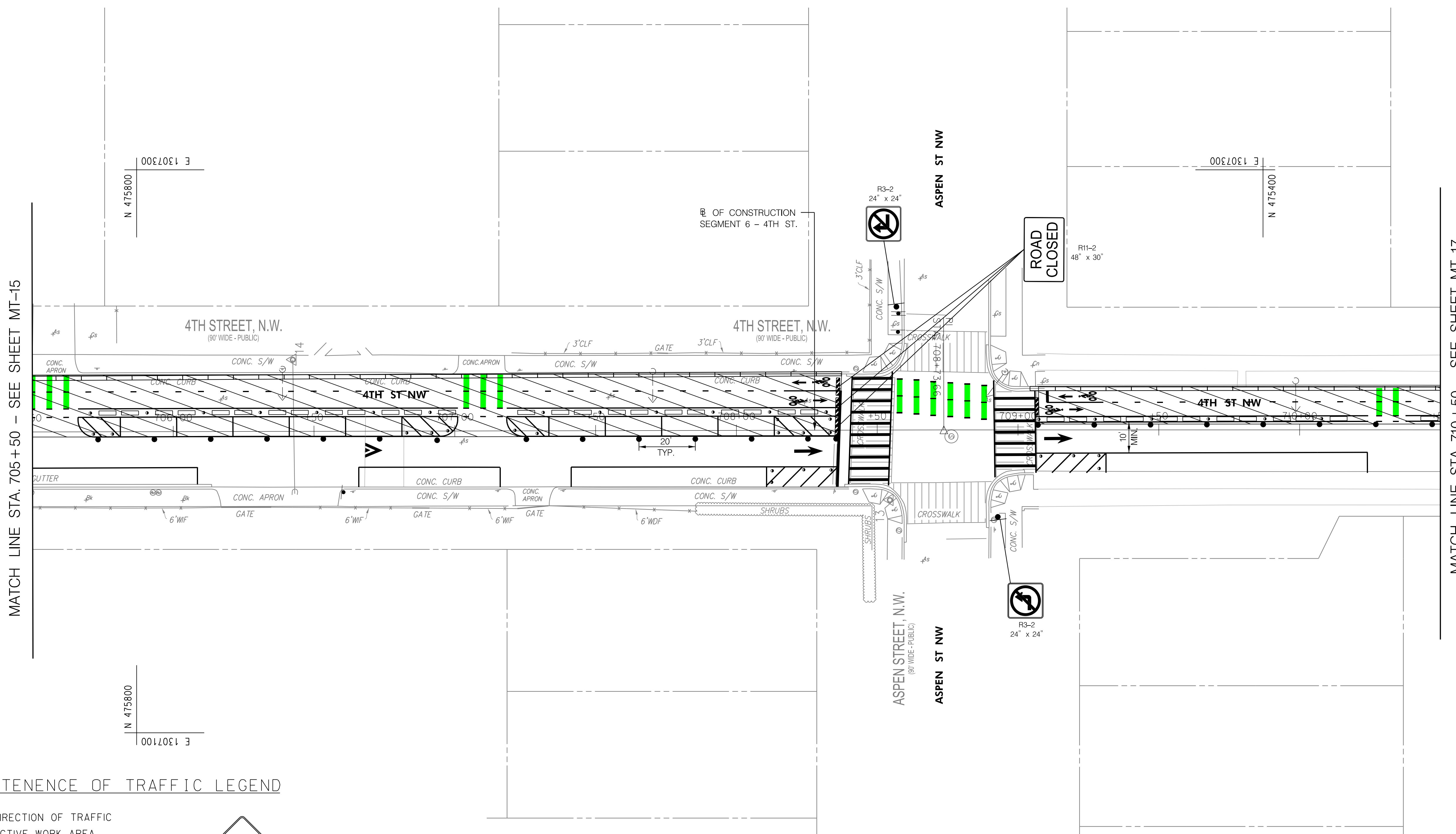
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|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-15</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| MAINTENANCE OF TRAFFIC PLAN<br>SEGMENT 6 - PHASE 2                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE <u> </u><br>SHEET 153 OF 160  |

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MATCH LINE STA. 705+50 - SEE SHEET MT-15

MATCH LINE STA. 710+50 - SEE SHEET MT-17

**MAINTENANCE OF TRAFFIC LEGEND**

- |  |  |  |                |
|--|--|--|----------------|
|  | DIRECTION OF TRAFFIC                         |  | PROPOSED SIGNS |
|  | ACTIVE WORK AREA                             |  | EXISTING SIGNS |
|  | PEDESTRIAN DETOUR ROUTE                      |  |                |
|  | CHANNELIZING DEVICE                          |  |                |
|  | TYPE II OR III BARRICADE (FACILITY SPECIFIC) |  |                |
|  | ARROW PANEL                                  |  |                |
|  | PROPOSED SIGN                                |  |                |
|  | FLAGGER                                      |  |                |
|  | TEMPORARY BARRIER                            |  |                |



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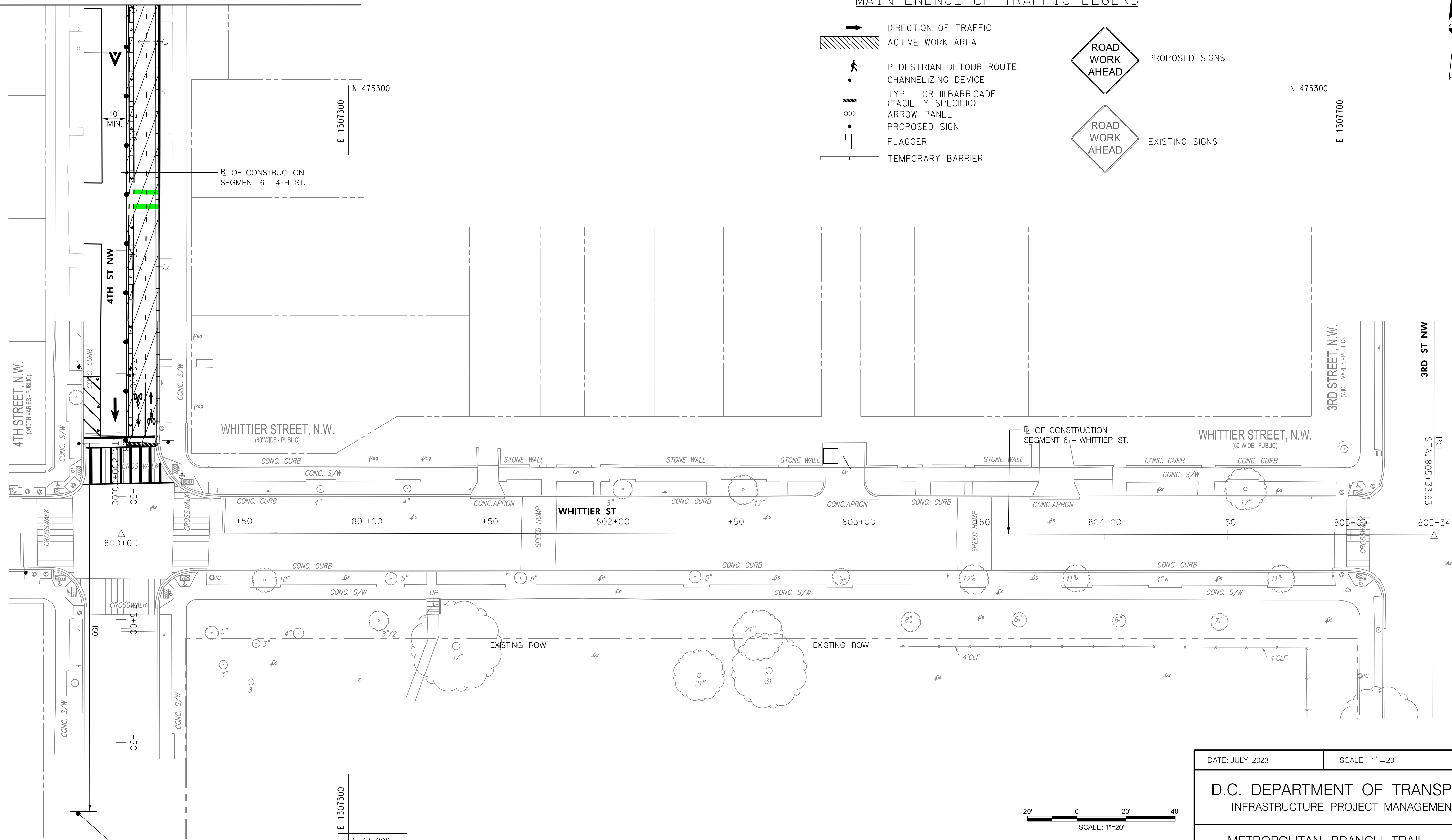
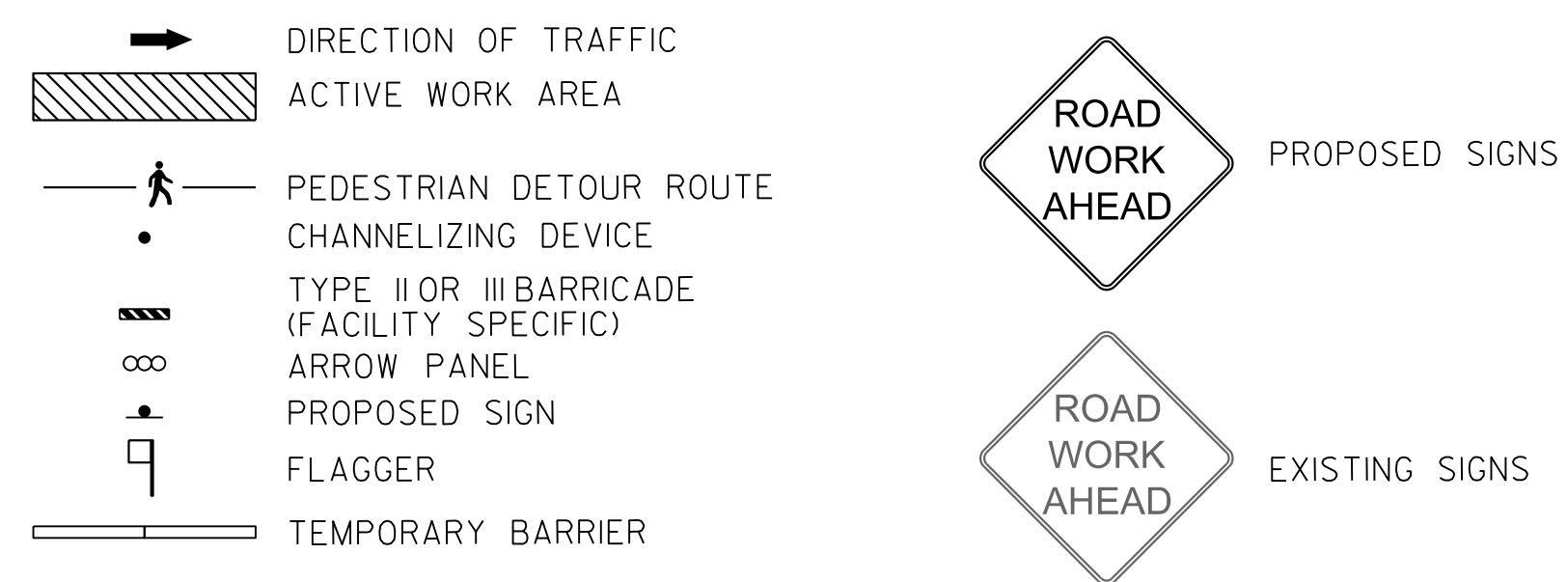
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-16</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| MAINTENANCE OF TRAFFIC PLAN<br>SEGMENT 6 - PHASE 2                              |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE <u> </u><br>SHEET 154 OF 160  |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 155       | 160          |

MATCH LINE STA. 710+50 - SEE SHEET MT-16

MAINTENANCE OF TRAFFIC LEGEND



ROAD WORK  
END  
G20-2  
36" x 18"

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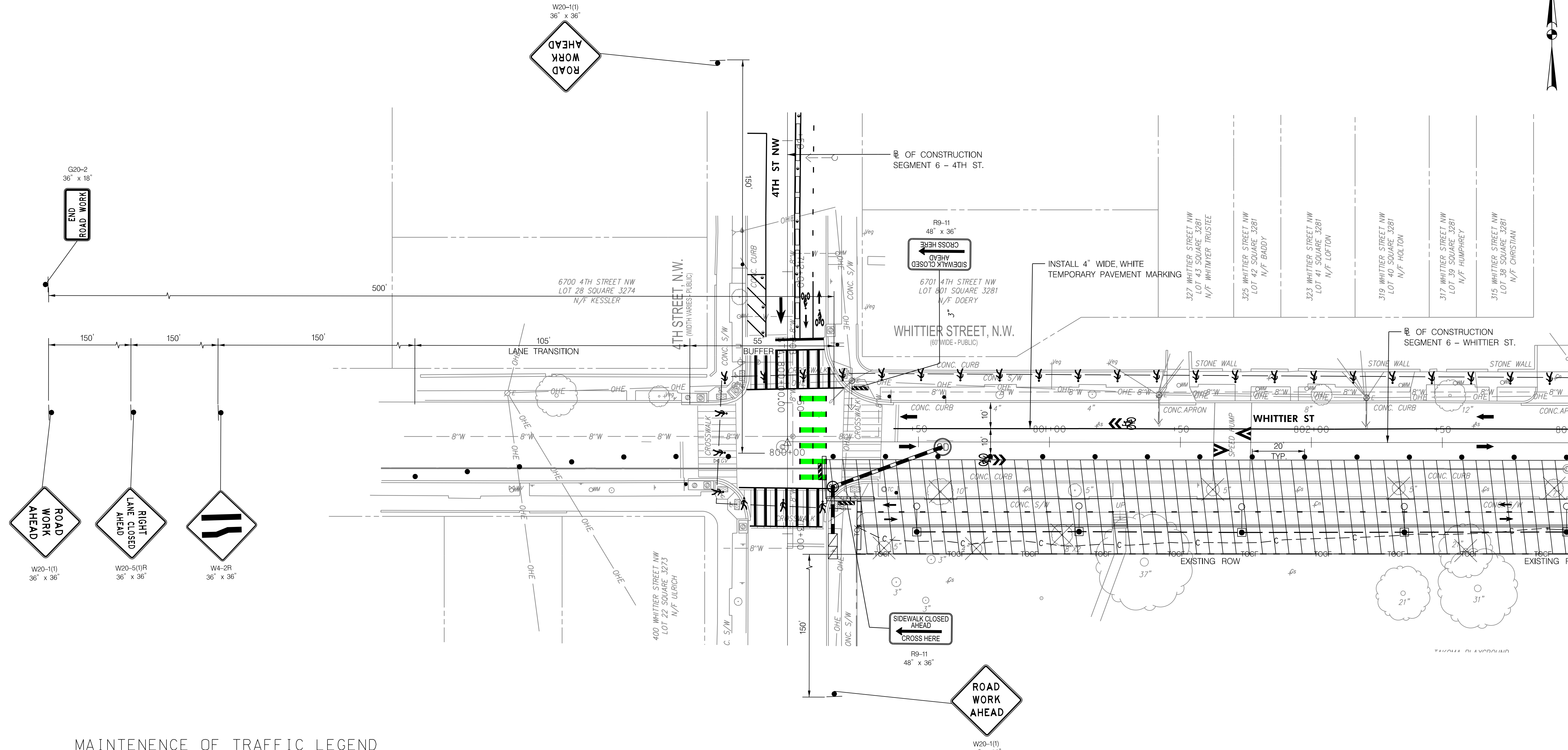
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-17</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>SEGMENT 6 - PHASE 2</b>                      |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 155 OF 160   |

| NO. | DESCRIPTION | NAME | DATE |
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REVISIONS

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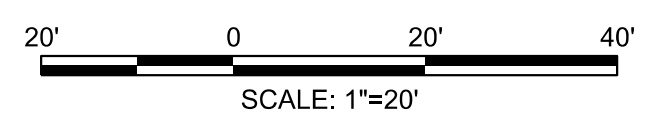
| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 156       | 160          |



MATCH LINE STA. 803+00 - SEE SHEET MT-19

**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
  - ACTIVE WORK AREA
  - PEDESTRIAN DETOUR ROUTE
  - CHANNELIZING DEVICE
  - TYPE II OR III BARRICADE (FACILITY SPECIFIC)
  - ARROW PANEL
  - PROPOSED SIGN
  - FLAGGER
  - TEMPORARY BARRIER
- 
- ROAD WORK AHEAD PROPOSED SIGNS
  - ROAD WORK AHEAD EXISTING SIGNS



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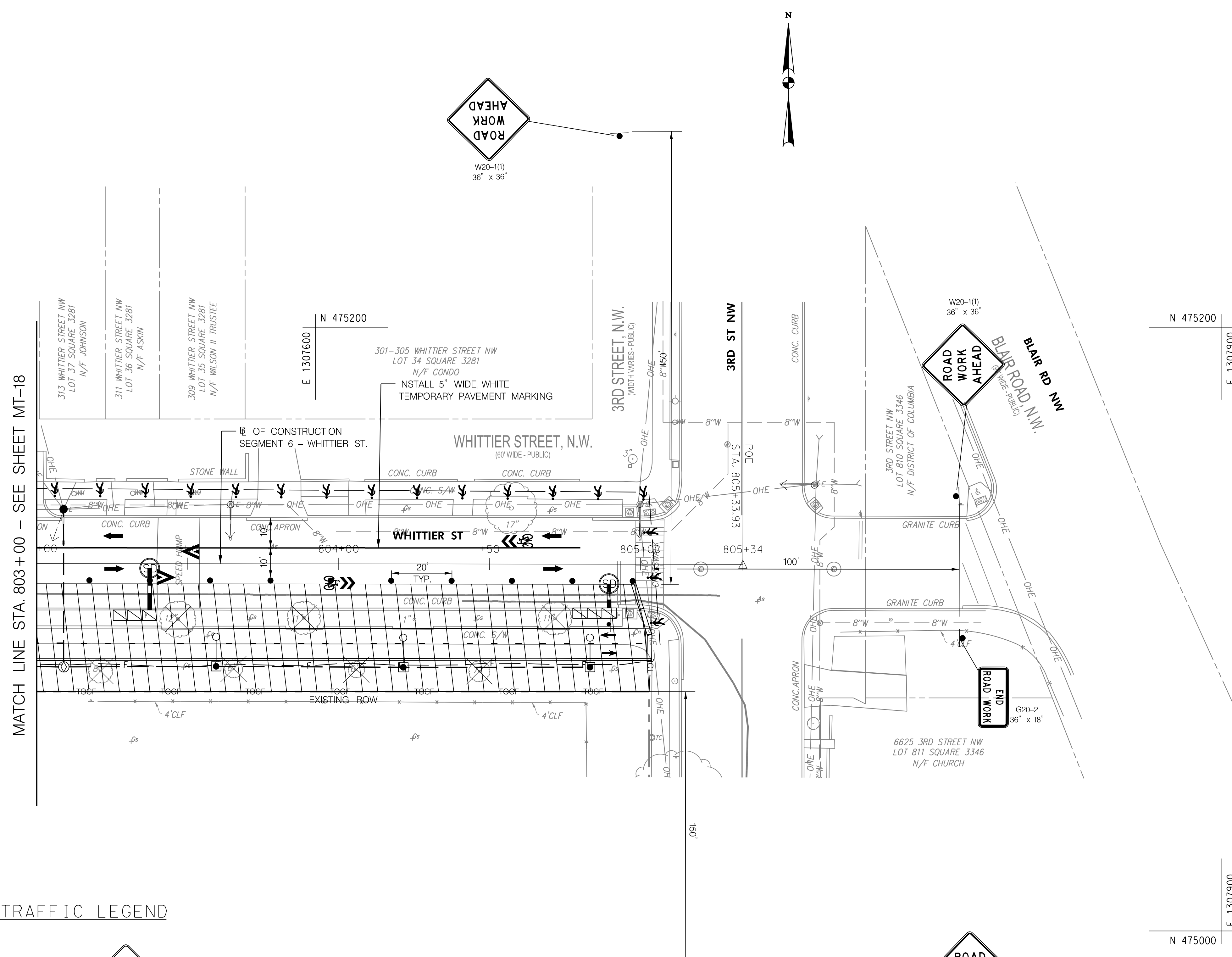
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| NO. | DESCRIPTION | NAME | DATE |
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-18</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| MAINTENANCE OF TRAFFIC PLAN<br>WHITTIER ST - PHASE 1                            |                 | DIVISION CHIEF<br>DATE: <u>JULY 2023</u><br>FILE: <u> </u><br>SHEET 156 OF 160  |

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 157       | 160          |



MATCH LINE STA. 803+00 - SEE SHEET MT-18

**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- PROPOSED SIGNS
- EXISTING SIGNS

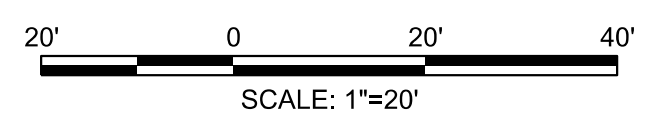
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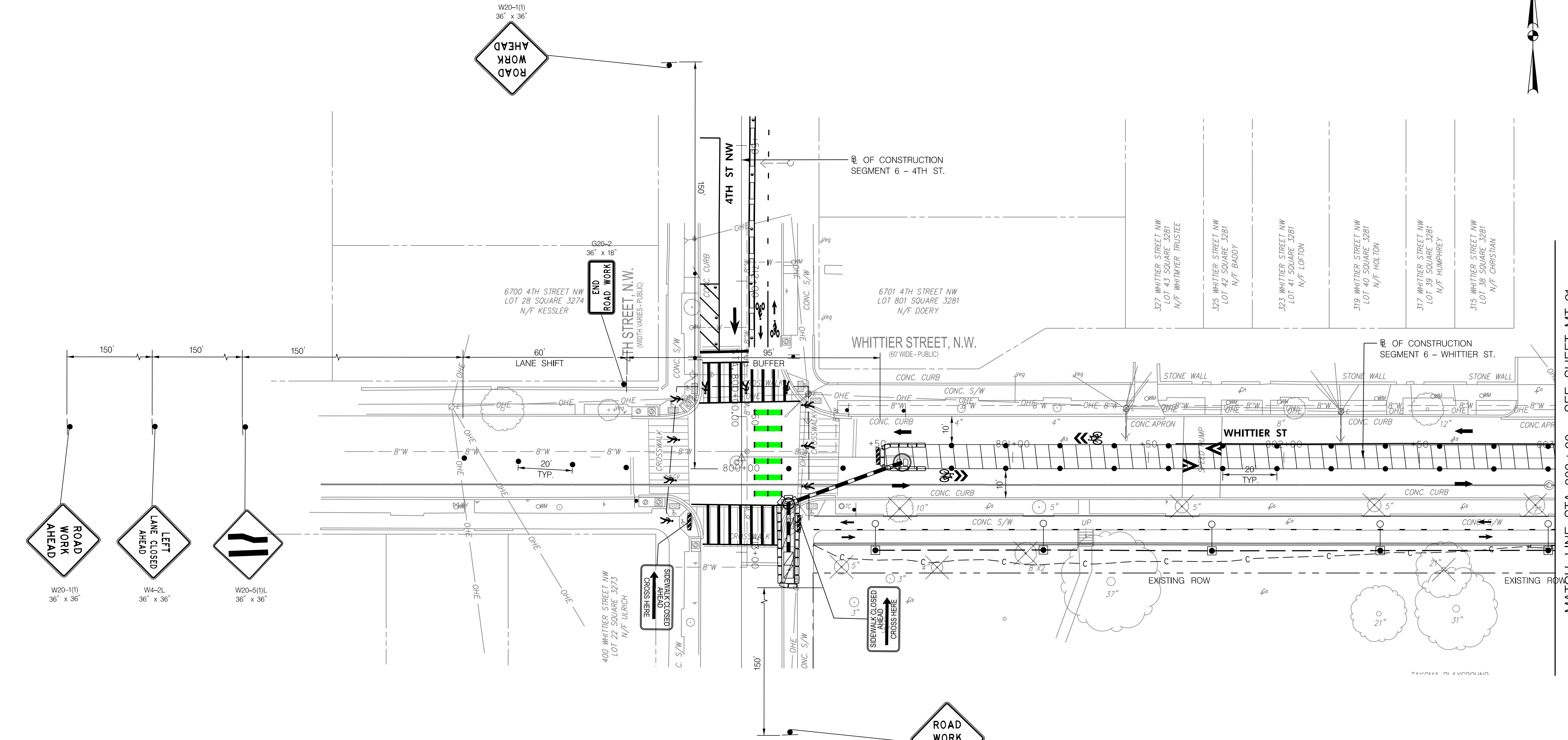
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|---|-----------------|---|
| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-19</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>WHITTIER ST - PHASE 1</b>                            |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 157 OF 160   |

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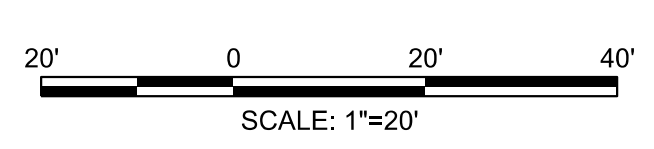
**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
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- ROAD WORK AHEAD PROPOSED SIGNS
- ROAD WORK AHEAD EXISTING SIGNS

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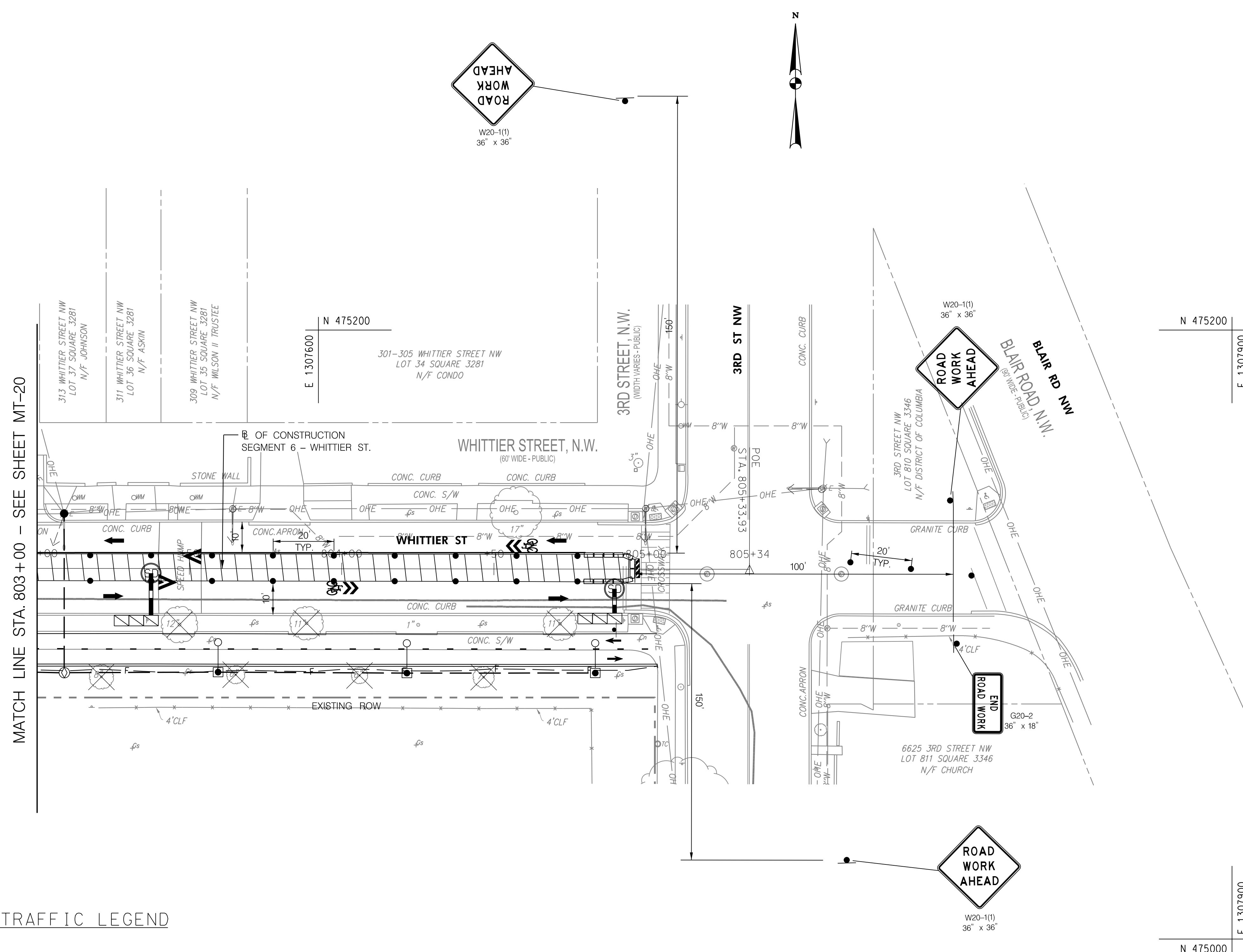


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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-20</b>  |
| D.C. DEPARTMENT OF TRANSPORTATION<br>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION |                 |   |
| METROPOLITAN BRANCH TRAIL<br>DESIGN   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| MAINTENANCE OF TRAFFIC PLAN<br>WHITTIER ST - PHASE 2                            |                 | DIVISION CHIEF<br>DATE: <u>JULY 2023</u><br>FILE: <u> </u><br>SHEET 158 OF 160  |

MATCH LINE STA. 803+00 - SEE SHEET MT-21

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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 159       | 160          |



MATCH LINE STA. 803+00 - SEE SHEET MT-20

**MAINTENANCE OF TRAFFIC LEGEND**

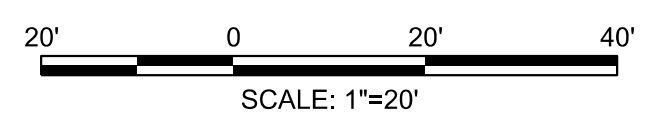
- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
- ARROW PANEL
- PROPOSED SIGN
- FLAGGER
- TEMPORARY BARRIER
- ROAD WORK AHEAD PROPOSED SIGNS
- ROAD WORK AHEAD EXISTING SIGNS

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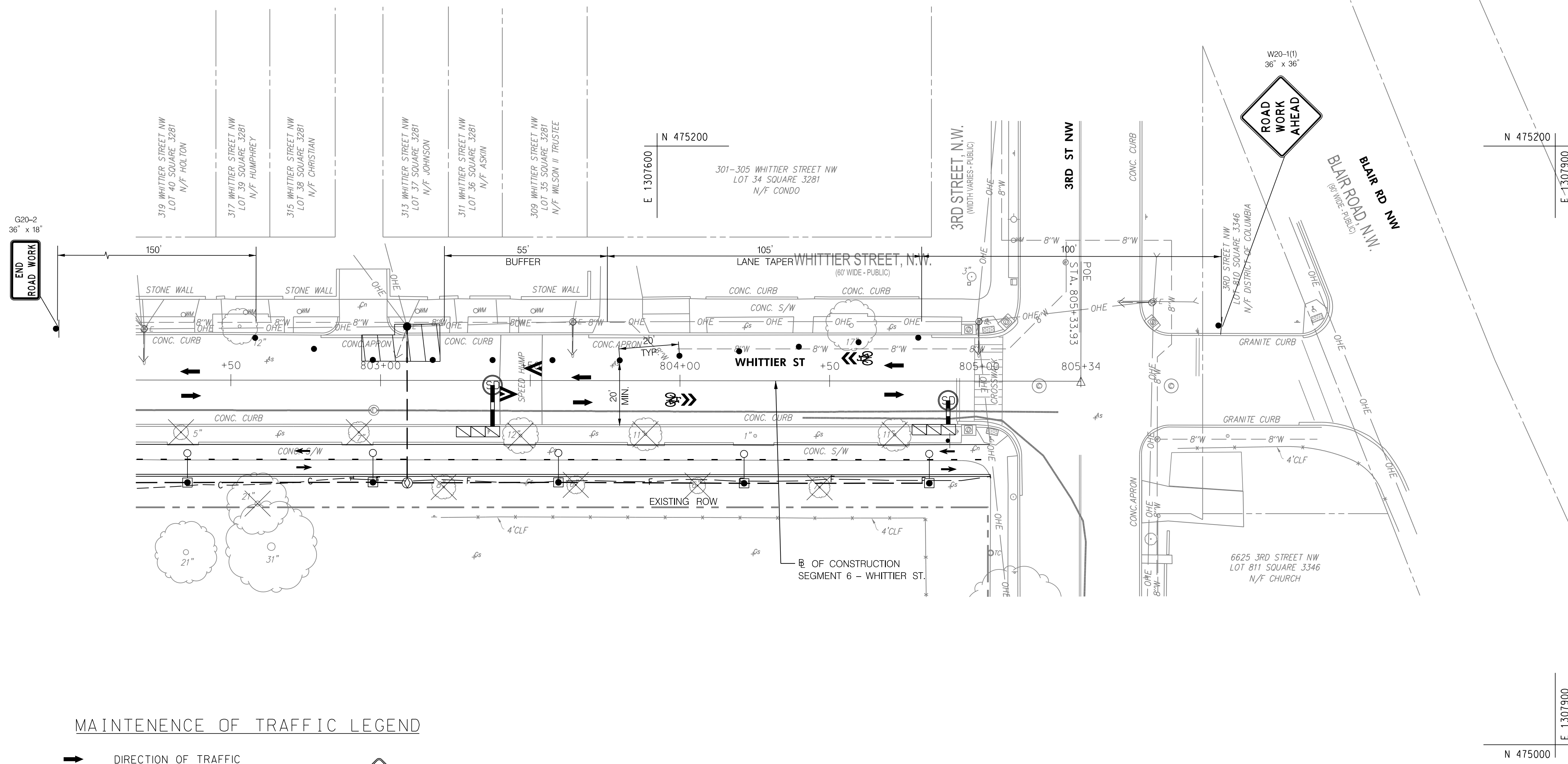


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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-21</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>WHITTIER ST - PHASE 2</b>                            |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 159 OF 160   |

| NO. | DESCRIPTION | NAME | DATE |
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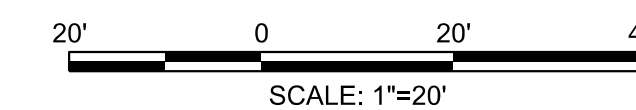
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| REG | STATE | PROJECT                   | SHEET NO. | TOTAL SHEETS |
|-----|-------|---------------------------|-----------|--------------|
| 4   | D.C.  | METROPOLITAN BRANCH TRAIL | 160       | 160          |



**MAINTENANCE OF TRAFFIC LEGEND**

- DIRECTION OF TRAFFIC
- ACTIVE WORK AREA
- PEDESTRIAN DETOUR ROUTE
- CHANNELIZING DEVICE
- TYPE II OR III BARRICADE (FACILITY SPECIFIC)
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| DATE: JULY 2023   | SCALE: 1" = 20' | <b>MT-22</b>  |
| <b>D.C. DEPARTMENT OF TRANSPORTATION<br/>INFRASTRUCTURE PROJECT MANAGEMENT DIVISION</b> |                 |   |
| <b>METROPOLITAN BRANCH TRAIL<br/>DESIGN</b>   |                 | PROJECT ENG. <u>AF</u><br>DESIGNED BY <u>AF</u><br>CHECKED BY <u>MJG</u><br>DRAWN BY <u>AF</u><br>PROJECT MGR. <u>MJG</u> |
| <b>MAINTENANCE OF TRAFFIC PLAN<br/>WHITTIER ST - PHASE 3</b>                            |                 | DIVISION CHIEF<br>DATE <u>JULY 2023</u><br>FILE _____<br>SHEET 160 OF 160   |

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