

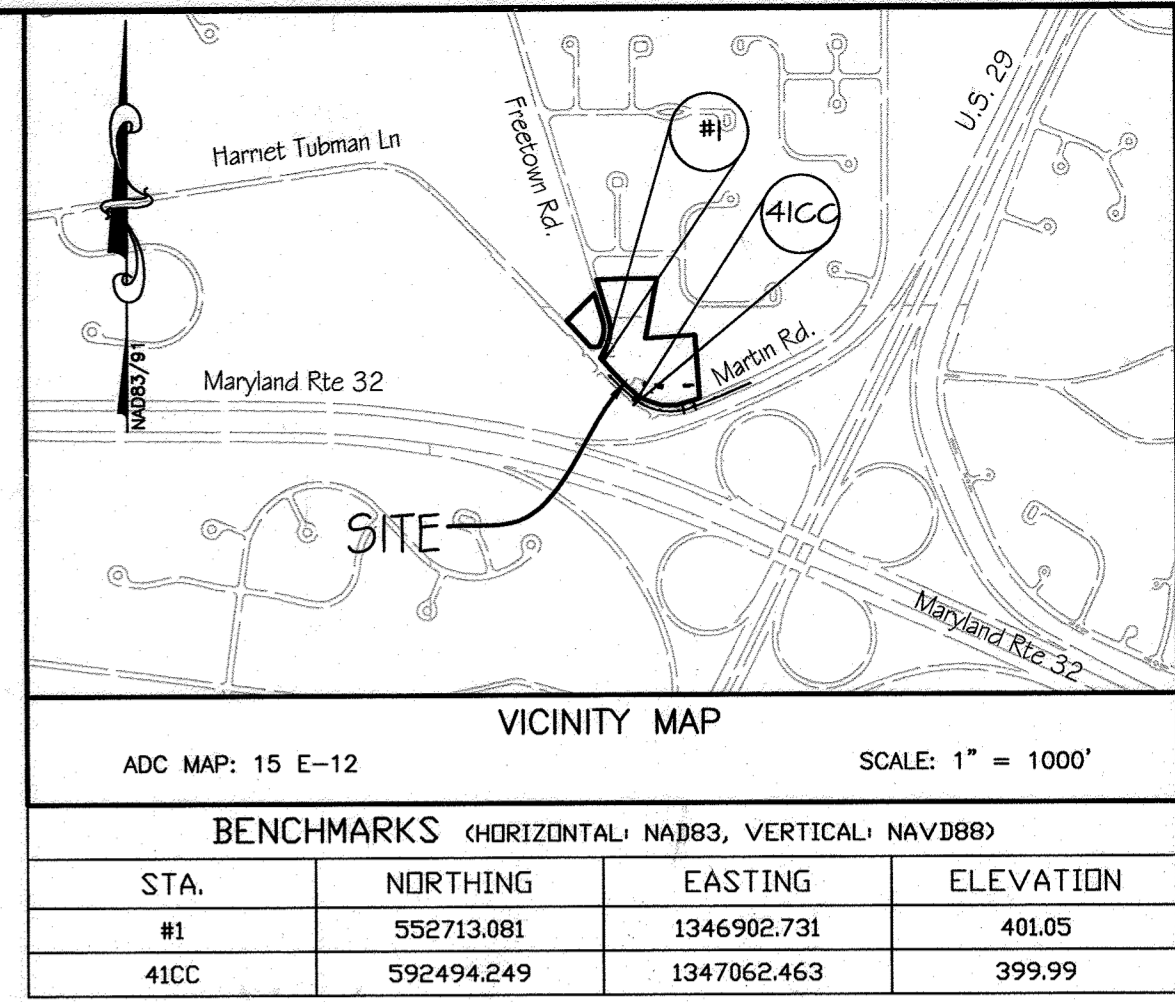
**LEGEND**

---	BOUNDARY LINE	---	PROPOSED CURB AND GUTTER
---	LOT LINE	---	EX. FOREST CONSERVATION AREA
---	EASEMENT	---	TO BE REMOVED
---	EXISTING CONTOUR MAJOR (T.B.R.)	---	POSSIBLE EX. GRAVE SITE WITH 10' SETBACK (LOCATED WITH GROUND PENETRATING RADAR)
---	EXISTING CONTOUR MINOR	---	SPECIMEN TREE IV CRITICAL ROOT
---	PROPOSED CONTOUR MAJOR	---	LANDSCAPE PERIMETER
---	PROPOSED CONTOUR MINOR	---	
---	EXISTING TREE LINE	---	
---	PROPOSED TREE LINE	---	
---	STREAM BUFFER	---	
---	EPHEMERAL STREAM	---	
---	SOILS	---	
---	ZONING DISTRICT LINE	---	
---	LIMIT OF DISTURBANCE	---	
---	EXISTING WATER LINE	---	
---	EXISTING SANITARY LINE	---	
---	EXISTING OVERHEAD POWER LINE	---	

# FINAL DEVELOPMENT PLAN

## LOCUST UNITED METHODIST CHURCH

ZONING DISTRICT: R-SC  
 TAX MAP: 4,1 GRID: 6  
 ELECTION DIST: 5  
 PARCELS: 216, 283 & 284  
 HOWARD COUNTY, MARYLAND



**SHEET INDEX**

SHEET NO.	DRAWING
1	COVER SHEET
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4	SITE DEVELOPMENT DETAILS
5	SITE DEVELOPMENT DETAILS
6	GRADING, SEDIMENT & EROSION CONTROL PLAN AND SEDIMENT & EROSION CONTROL DRAINAGE AREA MAP
7	SEDIMENT & EROSION CONTROL DETAILS
8	STORMWATER MANAGEMENT SOILS AND DRAINAGE AREA MAP
9	STORMWATER MANAGEMENT PROFILES, DETAILS & STRUCTURE SCHEDULE
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12	LANDSCAPE PLANTING PLAN
13	LANDSCAPE DETAILS & NOTES
14	STOPPING SITE DISTANCE SECTION

**SITE DATA:**

1. GROSS PROJECT AREA:	5.63 AC± (245,243 SF±)
2. AREA OF 100 YEAR FLOODPLAIN & FLOODPLAIN BUFFERS:	0.00 AC± (0 SF±)
3. AREA OF DRAINAGE AND UTILITY EASEMENTS:	0.00 AC± (0 SF±)
4. AREA OF WETLANDS & WETLAND BUFFERS:	0.00 AC± (0 SF±)
5. AREA OF STEEP SLOPES (15-25% & 25%+):	0.00 AC± (0 SF±)
6. AREA ERODIBLE SOILS:	0.14 AC± (6,098 SF±)
7. AREA OF FOREST (WITHIN STUDY AREA):	0.00 AC± (0 SF±)
8. RIGHT-OF-WAY DEDICATION:	0.00 AC± (0 SF±)
9. NET PROJECT AREA:	5.63 AC± (245,243 SF±)
10. LIMIT OF DISTURBANCE AREA (ON SITE):	0.91 AC± (39,787 SF±)
11. EXISTING USE:	RELIGIOUS FACILITY
12. PROPOSED USE:	RELIGIOUS FACILITY (1,140 SF± ADDITION)
13. EXISTING LOT COVERAGE:	0.11 ACRE (2,082)
14. PROPOSED LOT COVERAGE:	0.17 ACRE (3,082)
15. BUILDING FLOOR AREAS:	
EXISTING CHURCH ASSEMBLY AREA (SANCTUARY):	2,102 SF±
REMAINING AREA:	2,092 SF±
TOTAL EXISTING CHURCH ASSEMBLY AREA:	4,154 SF±
PROPOSED CHURCH ADDITION ASSEMBLY AREA (MULTI PURPOSE):	1,146 SF±
REMAINING AREA:	142 SF±
TOTAL PROP. CHURCH ADDITION:	2,488 SF±
TOTAL CHURCH FLOOR AREA:	6,642 SF±
EXISTING PARSONAGE FLOOR AREA:	1,140 SF±
EXISTING BUILDING HEIGHT:	32'-2"
17. PROPOSED BUILDING HEIGHT:	32'-2"
18. PARKING TABULATION (SEC. 133.0 D.57.G):	
EXISTING ASSEMBLY/OFFICE AREA:	2,102 SF ± 10 SP/1000 SF = 21 SPACES
PROPOSED ASSEMBLY AREA:	1,146 SF ± 10 SP/1000 SF = 12 SPACES
TOTAL REQUIRED PARKING:	33 SPACES
20. PARKING PROVIDED:	
HANDICAP PARKING:	2 SPACES
STANDARD PARKING:	37 SPACES
TOTAL PARKING PROVIDED:	41 SPACES
21. NO PRESCHOOL OR DAYCARE WILL TAKE PLACE ON SITE, HENCE NO NET GAIN FOR TRAFFIC WILL OCCUR.	

**BA Case No. 17-006C&V**

**ORDER**

Based upon the foregoing, it is this 6<sup>th</sup> day of September 2017, by the Howard County Board of Appeals Hearing Examiner, ORDERED:

That the Petition of Locust United Methodist Church for an existing religious facility and building addition and for variances to reduce the 30-foot structure and use setback from a collector street to 29 feet for the building addition; reduce the 30-foot structure and use setback from a collector street to 15 feet for an accessible ramp; and; reduce in the 30-foot use setback to 16 feet for parking and a drive aisle in an R-SC (Residential: Single Cluster) zoning district, are hereby GRANTED;

Provided, however, that:

- The Conditional Use shall be conducted in conformance with and shall apply only to the uses and structures as described in the petition and as depicted on the Conditional Use/Variance Plan and not to any other activities, uses, structures, or additions on the Property.
- All lighting shall be residential in character and oriented away from area residences and in compliance with county lighting regulations.
- Petitioner shall obtain all required permits.
- Petitioner shall comply with all federal, state, and county laws and regulations.

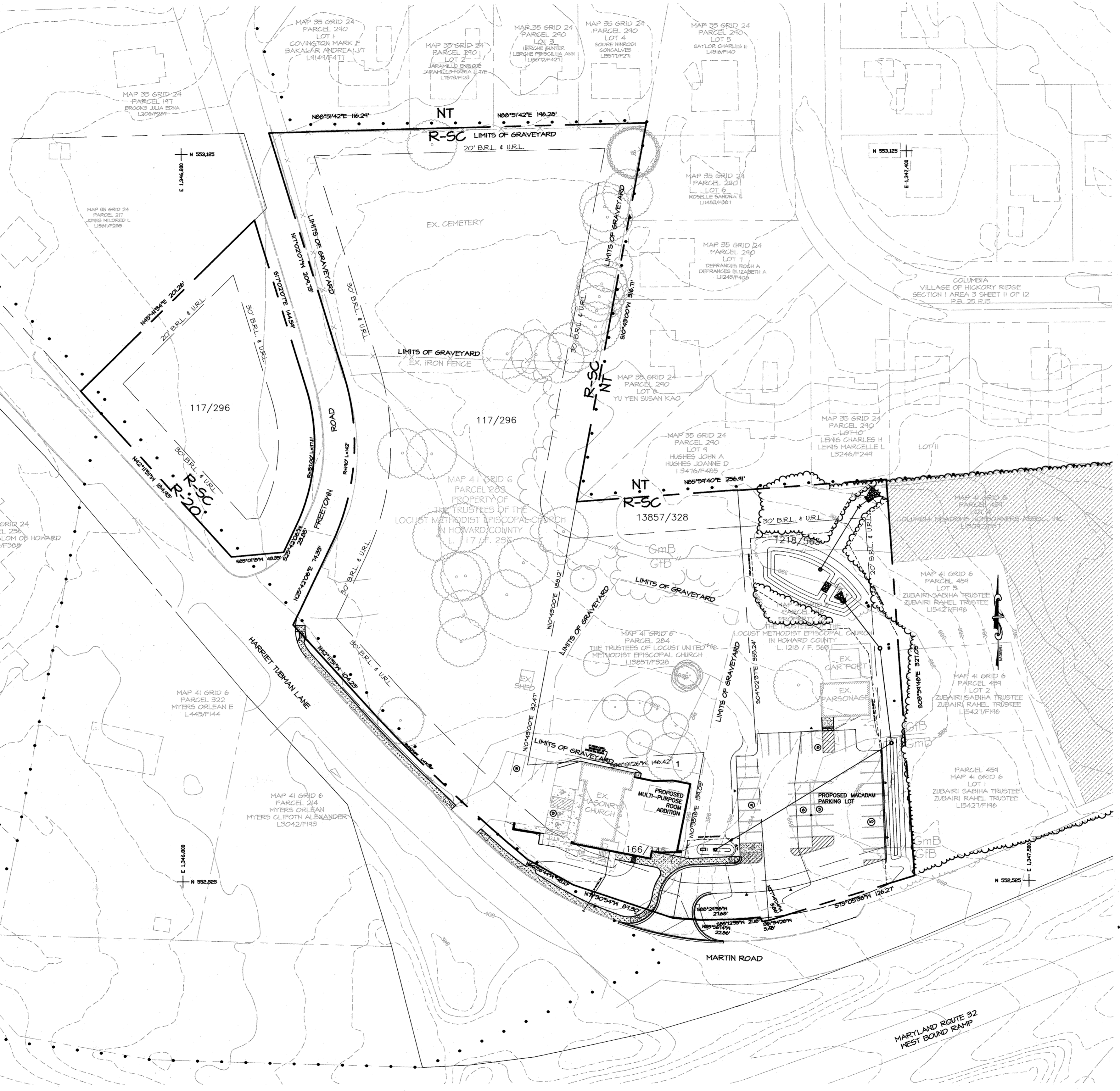
**APPROVED: DEPARTMENT OF PLANNING AND ZONING**

*Cheryl P. Kelly* 5/9/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION # DATE

*John J. G. Jones* 5/21/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT # DATE

*Kenneth W. Snodgrass* 5/25/22  
 SIGNATURE  
 KENNETH W. SNODGRASS

PROFESSIONAL CERTIFICATION:  
 I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 50289, EXPIRES: 01/12/23



**TRACT AREA**

**GRAPHIC SCALE**

SCALE: 1" = 50'

LOT/PARCEL NUMBER	FACILITY NAME & NUMBER	PRACTICE TYPE (QUANTITY)	PUBLIC	PRIVATE	HOA MAINTAINS
284	SWM-1	MICRO-BIORETENTION		X	
216	SWM-2	MICRO-BIORETENTION		X	
216	SWM-3	MICRO-BIORETENTION		X	

**PURPOSE:**

THIS SITE PLAN HAS BEEN REVISED DUE TO ARCHITECTURAL CHANGES INCLUDING REMOVAL OF INTERIOR COURTYARD & ADJUSTMENT OF FLOOR ELEVATION. THERE ARE ASSOCIATED CHANGES TO THE STORM DRAIN SYSTEM, GRADES, ADA ACCESSIBLE ENTRANCE, AND WALKWAYS. AN EMERGENCY EGRESS HAS BEEN ADDED TO THE NORTH END OF THE CHURCH ADDITION.

**OWNER/DEVELOPER**

LOCUST UNITED METHODIST CHURCH  
 6851 MARTIN ROAD  
 COLUMBIA, MD 21044  
 ATTN: MS. JUDY BROWN  
 443-934-2235

- GENERAL NOTES:**
- THE SUBJECT PROPERTY IS ZONED R-SC (RESIDENTIAL: SINGLE CLUSTER) PER THE COMPREHENSIVE ZONING PLAN ADOPTED OCTOBER 6, 2013.
  - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
  - THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-513-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
  - THE CONTRACTOR SHALL NOTIFY "MESA UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
  - PRIOR TO SUBMITTING A BID FOR CONSTRUCTION THE CONTRACTOR SHALL CONTACT B.G.A.E. TO DETERMINE WHAT IMPROVEMENTS TO OVERHEAD UTILITY LINES WILL BE REQUIRED AND INCURE REQUIRED WORK IN THE CONTRACT PRICE.
  - EXISTING UTILITIES SHOWN HEREON WERE DERIVED FROM AVAILABLE PUBLIC RECORDS. THE CONTRACTOR SHALL HAND DIG TEST PITS TO VERIFY THE LOCATION OF EXISTING UTILITIES IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
  - EXISTING WATER FOR THIS PROJECT IS PUBLIC, CAPITAL PROJECT W-8192, AND WATER LINE WILL BE UPGRADED TO 4" SIZE FOR FIRE SUPPRESSION. THE DRAINAGE AREA ALLOCATION FOR THIS SITE IS 902.5 GPD.
  - SEWER FOR THIS PROJECT IS PUBLIC, CONTRACT NUMBER 24-3265. THE DRAINAGE AREA ALLOCATION FOR THIS SITE IS 902.5 GPD.
  - STORMWATER MANAGEMENT HAS BEEN PROVIDED WITH 250 TO THE MET, SPECIFICALLY THREE (3) MICRO-BIORETENTION FACILITIES AND EXISTING PAVEMENT REMOVAL WILL ADDRESS THE STORMWATER MANAGEMENT FOR THIS SITE. ALL PROPOSED ON-SITE STORM DRAINAGE AND STORMWATER MANAGEMENT FACILITIES WILL BE OWNED AND MAINTAINED BY LOCUST UNITED METHODIST CHURCH.
  - TRENCH BEDDING FOR STORM DRAINS STRUCTURES SHALL BE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS (02.01 CLASS C BEDDING) UNLESS OTHERWISE NOTED.
  - ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE ZONING REGULATIONS SECTION 134.0 OF THE ZONING REGULATIONS. PROPOSED LIGHTING SHOULD BE FULL CUTOFF FIXTURES TO PREVENT GLEARE FROM THE NEIGHBORING RESIDENTIAL PROPERTY.
  - STREETLIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)". A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.
  - ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO PLACEMENT OF ANY ASPHALT.
  - TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
  - ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2" GALVANIZED STEEL PERFORATED SQUARE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
  - ALL DRIVEWAYS AND PARKING ARE PRIVATELY OWNED AND MAINTAINED.
  - PROPOSED GUTTER PAN AND CURB SHALL BE PITCHED TO CONFORM TO THE ADJACENT DRAINAGE PATTERNS OF EXISTING ADJOINING PAVEMENT.
  - ANY DAMAGE TO THE COUNTY RIGHT-OF-WAY WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
  - ALL PLAN DIMENSIONS SHALL BE FROM THE FACE OF CURB OR FACE OF BUILDING UNLESS OTHERWISE NOTED. DIMENSIONS ARE MEASURED PERPENDICULARLY OR RADIAL BETWEEN ITEMS UNLESS OTHERWISE NOTED.
  - THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY AXOM ENGINEERING DESIGN, LLC DATED JULY 9, 2016.
  - THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH ARE BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT NO. 410C WAS USED FOR THIS PROJECT.
  - NO APFO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT PER SECTION 16.1107(2)(j) A SITE DEVELOPMENT PLAN WHICH DOES NOT GENERATE ADDITIONAL TRAFFIC IS DEEMED FROM THE REQUIREMENT TO PASS THE TEST FOR ADEQUATE ROAD FACILITIES AS A CONDITION OF SITE DEVELOPMENT PLAN APPROVAL.
  - ALL PROPOSED RAMPS SHALL BE IN ACCORDANCE WITH THE CURRENT A.D.A. STANDARDS FOR ACCESSIBILITY GUIDELINES. MAXIMUM SIDEWALK AND RAMP SLOPE SHALL BE TWO (2) PERCENT. A MINIMUM FIVE FOOT BY FIVE FOOT (5'x5') LANDING WITH A MAXIMUM TWO (2) PERCENT CROSS SLOPE WILL BE PROVIDED AT THE BOTTOM OF ALL RAMPS AND AT ALL BUILDING ENTRANCES AND EXITS. HANDRAILS SHALL BE PROVIDED ON ALL RAMPS IN ACCORDANCE WITH SECTION 505 OF THE A.D.A. STANDARDS AND ACCESSIBILITY GUIDELINES.
  - LANDSCAPING HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL FINANCIAL SURETY IN THE AMOUNT OF \$6,990.00 FOR 10 SHADE TREES @ \$300, 17 EVERGREEN/FLOWERING TREES @ \$150, 48 SHRUBS @ \$30 WILL BE POSTED WITH THE DEVELOPER'S AGREEMENT.
  - TREE PROTECTION MEASURES FOR THE SPECIMEN TREE ARE SHOWN ON THE ESC PLAN.
  - TREE FOREST CONSERVATION AND THE LIMIT OF DISTURBANCE MEMORANDUM DATED SEPTEMBER 15, 2006, IF THE LIMIT OF DISTURBANCE (LOD) DEPICTED ON THE SITE DEVELOPMENT PLAN IS LESS THAN 40,000 SF IN AREA, THE APPLICANT MAY USE THE AREA OF THE LOD AS THE NTA FOR THE FOREST CONSERVATION CALCULATION. THE ONSITE LIMIT OF DISTURBANCE FOR THIS PROJECT IS 39,984 SF.
  - THE FOREST CONSERVATION OBLIGATION FOR THIS PROJECT IS 0.1 ACRE(4,356 S.F.). THE FOREST CONSERVATION OBLIGATION WILL BE MET BY PURCHASING AN OFF-SITE FOREST CONSERVATION BANK (SDP-16-015 - REGAN PROPERTY).
  - THE PROJECT SITE IS WITHIN THE LITTLE PATUXENT WATERSHED.
  - NO FLOODPLAIN IS LOCATED ON SITE.
  - PER ENVIRONMENTAL CERTIFICATION LETTER DATED APRIL 19, 2017, NO WETLANDS ARE FOUND WITHIN THE STUDY AREA OF THIS SITE.
  - NO SLOPES GREATER THAN 25% ARE LOCATED ON SITE.
  - NO FOREST WAS IDENTIFIED WITHIN THE STUDY AREA PER ENVIRONMENTAL CERTIFICATION LETTER PREPARED BY OS THALER & ASSOC. LLC DATED APRIL 19, 2017.
  - PROJECT BACKGROUND INFORMATION  
 LOCATION: COLUMBIA, MD TAX MAP: 41 GRID: 06  
 SUBDIVISION NAME: LOCUST UNITED METHODIST CHURCH TRACT AREA  
 PARCEL 216 = 0.96 ACRE  
 PARCEL 283 = 3.68 ACRE  
 PARCEL 284 = 0.93 ACRE  
 TOTAL AREA = 5.63 ACRE  
 THE SUBJECT PROPERTY ADJACES COLUMBIA'S VILLAGE OF HICKORY RIDGE.  
 ELECTION DISTRICT: 5TH  
 NONCONFORMING USE: NCU 17-002  
 CONDITIONAL USE: 17-006 C & V  
 ECP-17-052
  - THERE ARE TWO (2) CEMETERIES (41-1 AND 41-2) LOCATED WITHIN THE PROPERTIES BOUNDARY. THE HOWARD COUNTY CEMETERY PRESERVATION ADVISORY BOARD HAS REVIEWED THE CASE AND VISITED THE SITE. GRAVE SITE SPECIFIC LOCATIONS HAVE BEEN SHOWN ON THE PLANS. IF GRAVE SITES ARE DISCOVERED DURING CONSTRUCTION PER SECTION 16.1305 OF THE HOWARD COUNTY ZONING ORDINANCE WORK IN THAT AREA SHALL BE SUSPENDED UNTIL A DETERMINATION CAN BE MADE BY DPZ AS TO HOW TO ADDRESS THE SITE.
  - IN ACCORDANCE WITH SECTION 128.0.0.10 OF THE ZONING REGULATIONS, STRUCTURE AND USE SETBACKS FROM INTERNAL PROPERTY LINES FOR CONTIGUOUS PARCELS SHALL NOT BE APPLIED IN AN INTEGRATED DEVELOPMENT UNDER A SINGLE OWNERSHIP AND SHOWN ON A SITE DEVELOPMENT PLAN.
  - A DESIGN MANUAL WAIVER TO REDUCE THE LOAM PLANTING MATERIAL FOR BMP#3 TO 2.0" THICKNESS WAS APPROVED ON DEC. 6, 2018.
  - A DESIGN MANUAL WAIVER TO ALLOW STOPPING SIGHT DISTANCE ALONG A MAJOR COLLECTOR ROAD (MARTIN ROAD) PER VOLUME III, SECTION 2.5.B.9 WAS APPROVED ON JAN. 3, 2019.
  - THE ORIGINAL ARCHITECTURAL DESIGN INCLUDED A 580 SF (APPROX.) COURTYARD. THAT AREA, PREVIOUSLY DESIGNED AS GREEN SPACE, IS NOW BEING ENCLOSED WITH IMPERVIOUS COVER DUE TO ARCHITECTURAL REVISIONS. THE LOD OF 580 SF IS EXEMPT FROM PROVIDING STORMWATER MANAGEMENT. CONCERNING THE ADDITIONAL SIDEWALK (207 SF) IN THE BACK OF THE BUILDING AND ADDITIONAL SWM REQUIREMENTS ARE MET VIA NON-ROOFTOP DISCONNECTION. ANY FUTURE INCREASE THAT EXCEEDS 5,000 SF SHALL ADDRESS STORMWATER MANAGEMENT.

**COVER SHEET**

**LOCUST UNITED METHODIST CHURCH**

6851 MARTIN ROAD  
 COLUMBIA, MD 21044  
 ZONE: R-SC

TAX MAP: 41, GRID: 6  
 ELECTION DISTRICT: 5  
 PARCEL: 216, 283 & 284  
 HOWARD COUNTY, MARYLAND

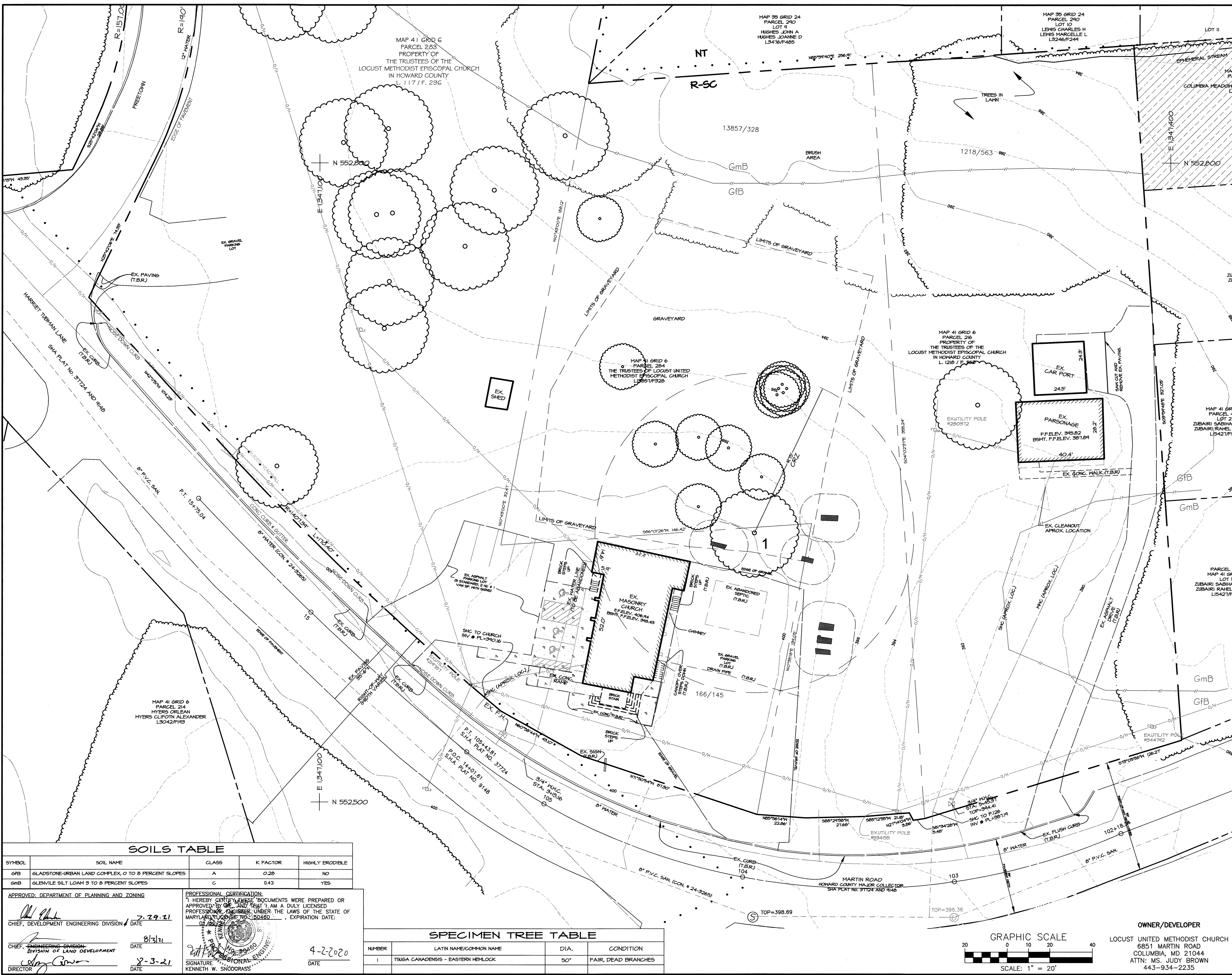
**DSThaler & ASSOC., LLC**

CIVIL AND ENVIRONMENTAL ENGINEERS, SURVEYORS,  
 LANDSCAPE ARCHITECTS & LAND PLANNERS

1115 AMBASSADOR ROAD, P.O. BOX 41420  
 BALTIMORE, MARYLAND 21244-7420  
 PHONE: 410-944-3641

PROJECT NO.: 4073  
 DESIGNED BY: KTG  
 DRAWN BY: KTG  
 CHECKED BY: KWS  
 SCALE: AS SHOWN  
 DATE: MARCH 23, 2020

SHEET: 1 OF 14  
 SDP-18-047



- GENERAL NOTES:
1. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY AXIOM ENGINEERING DESIGN, LLC DATED JULY 9, 2015.
  2. THE PROJECT SITE IS WITHIN THE LITTLE PATUXENT WATERSHED.
  3. NO FLOODPLAIN IS LOCATED ON SITE.
  4. WETLAND ARE NOT PRESENT ON SITE.
  5. NO SLOPES GREATER THAN 25% ARE LOCATED ON SITE.
  6. NO FOREST WAS IDENTIFIED WITHIN THE STUDY AREA PER ENVIRONMENTAL CERTIFICATION LETTER PREPARED BY DS THALER & ASSOC. LLC DATED APRIL 19, 2017.
  7. THERE ARE TWO (2) CEMETERIES (41-1 AND 41-2) LOCATED WITHIN THE PROPERTIES BOUNDARY.

SOILS TABLE				
SYMBOL	SOIL NAME	CLASS	K FACTOR	HIGHLY ERODIBLE
GFB	GLADSTONE-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	A	0.28	NO
GMB	GLENNVILLE SILT LOAM 3 TO 8 PERCENT SLOPES	C	0.43	YES

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 7-29-21

*[Signature]*  
 CHIEF, ENGINEERING DIVISION  
 DATE: 8/3/21

*[Signature]*  
 DIRECTOR  
 DATE: 8-3-21

PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 20460. EXPIRATION DATE: 03/02/22

*[Signature]*  
 SIGNATURE  
 KENNETH W. SNOODGRASS

DATE: 4-2-2020

SPECIMEN TREE TABLE			
NUMBER	LATIN NAME/COMMON NAME	DIA.	CONDITION
1	TSUGA CANADENSIS - EASTERN HEMLOCK	50"	FAIR, DEAD BRANCHES

NO.	REVISION	DATE

**EXISTING CONDITIONS PLAN**  
**LOCUST UNITED METHODIST CHURCH**

6851 MARTIN ROAD  
 COLUMBIA, MD 21044  
 ZONE: R-SC

TAX MAP: 41, GRID: 6  
 ELECTION DISTRICT: 5

PARCEL: 216, 283 & 283  
 HOWARD COUNTY, MARYLAND

**DSThaler**  
 & ASSOC., LLC

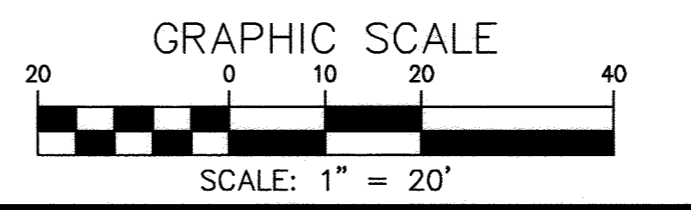
CIVIL AND ENVIRONMENTAL ENGINEERS, SURVEYORS,  
 LANDSCAPE ARCHITECTS & LAND PLANNERS  
 www.dsthaler.com

1115 AMBASSADOR ROAD, P.O. BOX 41428  
 BALTIMORE, MARYLAND 21244-1428  
 PHONE: 410-944-3641

PROJECT NO.: 4073  
 DESIGNED BY: JAM  
 DRAWN BY: JAM  
 CHECKED BY: KWS  
 SCALE: AS SHOWN  
 DATE: MARCH 23, 2020

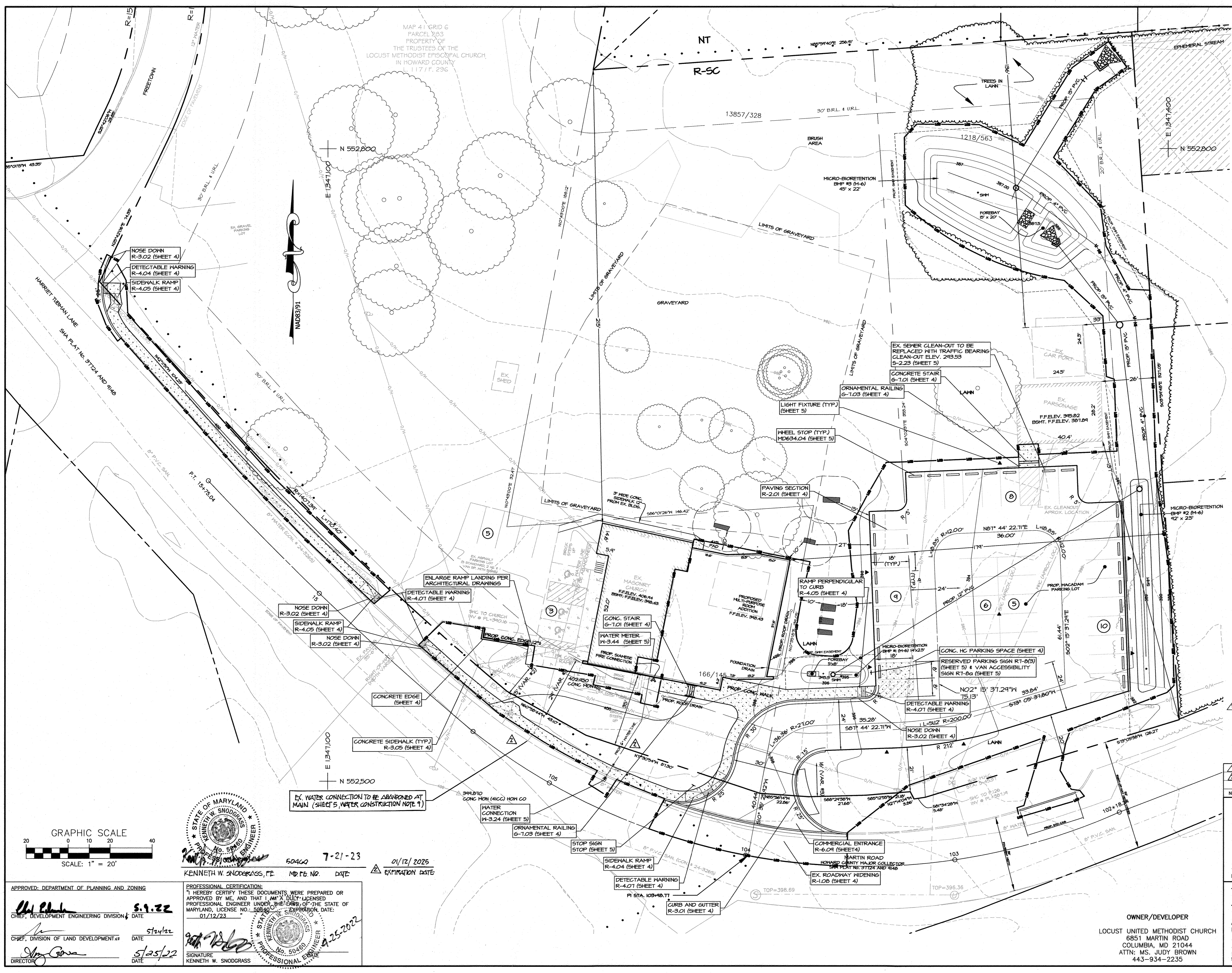
OWNER/DEVELOPER  
 LOCUST UNITED METHODIST CHURCH  
 6851 MARTIN ROAD  
 COLUMBIA, MD 21044  
 ATTN: MS. JUDY BROWN  
 443-934-2235

SHEET: 2 OF 14  
 SDP-18-047



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GENERAL NOTES: (CONTINUED FROM SHEET 1)  
 41.0N MARCH 14, 2022, THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING GRANTED REQUEST FOR ALTERNATIVE COMPLIANCE (WP-22-075) TO SECTION 16.18(C) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS FOR THE SUBJECT PROJECT. "NO GRADING OR CONSTRUCTION SHALL BE PERMITTED WITHIN 30 FEET OF A CEMETERY BOUNDARY OR WITHIN TEN FEET OF INDIVIDUAL GRAVE SITES." THEREFORE, INSTALLATION OF THE WALKWAY FROM THE EMERGENCY EGRESS DOOR AT THE REAR OF THE CHURCH ADDITION TO THE WEST PARKING LOT AS DEPICTED ON THESE PLANS IS PERMITTED WITH THE FOLLOWING CONDITIONS:  
 A. GROUND PENETRATING RADAR SHALL BE PERFORMED WITHIN THE LIMITS OF DISTURBANCE FOR THE PROPOSED WALKWAY PRIOR TO ANY WORK OR DISTURBANCE TO VERIFY THAT THERE ARE NO ADDITIONAL GRAVES IN THE VICINITY, AND TO ENSURE EXISTING KNOWN GRAVES WILL NOT BE DISTURBED IN ANY WAY BY THE PROPOSED WORK.  
 B. THE LIMIT OF DISTURBANCE SHOULD BE TO THE MINIMUM AMOUNT NECESSARY TO CONSTRUCT THE REQUIRED EMERGENCY WALKWAY FROM THE FIRE DOOR TO THE PARKING LOT. THERE SHALL BE NO ACTIVITY OR STOCKPILING OF MATERIALS OUTSIDE THE LIMIT OF DISTURBANCE.  
 C. INCLUDE THIS ALTERNATIVE COMPLIANCE NUMBER, DESCRIPTION, RESULT, AND ANY CONDITIONS IN GENERAL NOTES ON THE SDP AND ANY SUBSEQUENT PLANS.



**PURPOSE:**  
 THIS SITE PLAN HAS BEEN REVISED DUE TO ARCHITECTURAL CHANGES INCLUDING REMOVAL OF INTERIOR COURTYARD & ADJUSTMENT OF FLOOR ELEVATION. THERE ARE ASSOCIATED CHANGES TO THE STORM DRAIN SYSTEM, GRADES, ADA ACCESSIBLE ENTRANCE, AND WALKWAYS. AN EMERGENCY EGRESS HAS BEEN ADDED TO THE NORTH END OF THE CHURCH ADDITION.

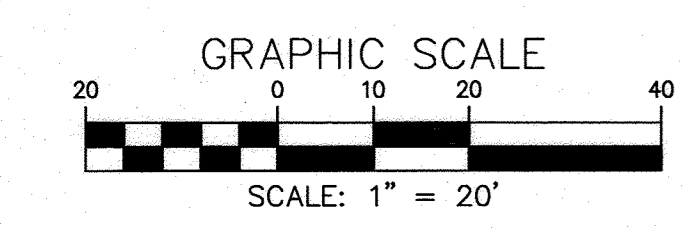
NO.	REVISION	DATE
1	REVISED SITE DEVELOPMENT PLAN	4/25/22
2	INCREASE DIAMETER OF WATER SERVICE CONNECTION TO 6"	7/21/23

**SITE DEVELOPMENT PLAN**  
**LOCUST UNITED METHODIST CHURCH**  
 6851 MARTIN ROAD  
 COLUMBIA, MD 21044  
 ZONE: R-SC  
 TAX MAP: 41, GRID: 6  
 ELECTION DISTRICT: 5  
 PARCEL: 216, 283 & 283  
 HOWARD COUNTY, MARYLAND

**OWNER/DEVELOPER**  
 LOCUST UNITED METHODIST CHURCH  
 6851 MARTIN ROAD  
 COLUMBIA, MD 21044  
 ATTN: MS. JUDY BROWN  
 443-934-2235

**PROJECT NO.:** 4073  
**DESIGNED BY:** JAM  
**DRAWN BY:** JAM  
**CHECKED BY:** KWS  
**SCALE:** AS SHOWN  
**DATE:** MARCH 23, 2020

**SHEET:** 3 OF 14  
**SDP-18-047**



STATE OF MARYLAND  
 KENNETH W. SNOGRASS, P.E.  
 PROFESSIONAL ENGINEER  
 No. 50460  
 7-21-23  
 01/12/2025  
 EXPIRATION DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 5/9/22

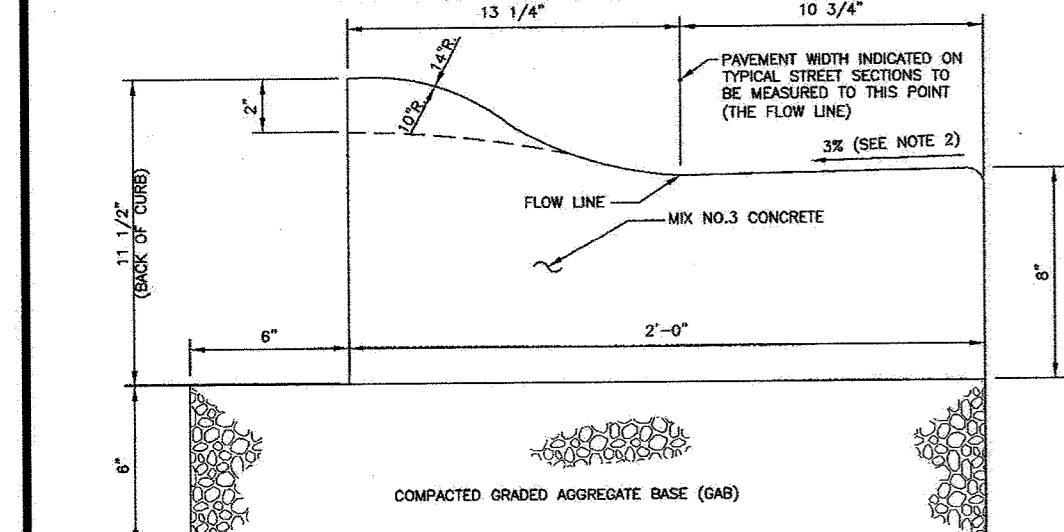
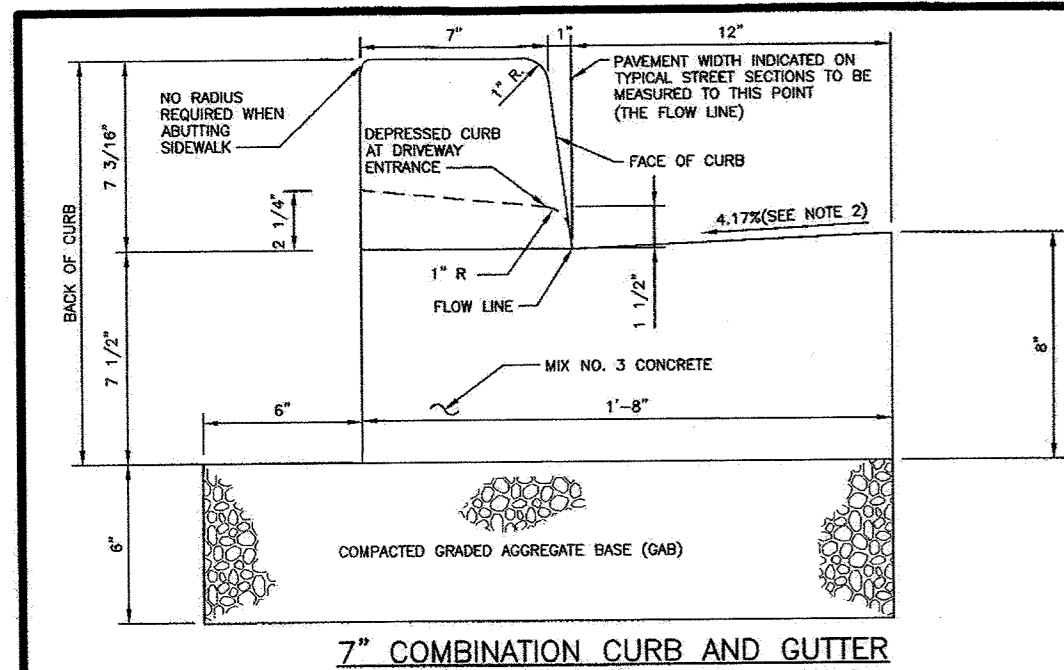
CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 5/25/22

DIRECTOR  
 DATE: 5/25/22

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 50460, EXPIRATION DATE: 01/12/23

SIGNATURE  
 KENNETH W. SNOGRASS

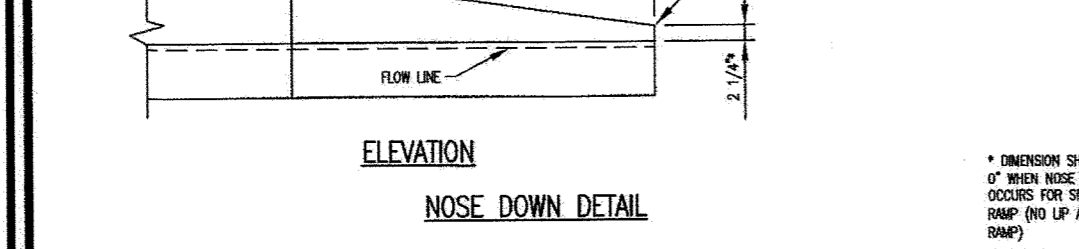
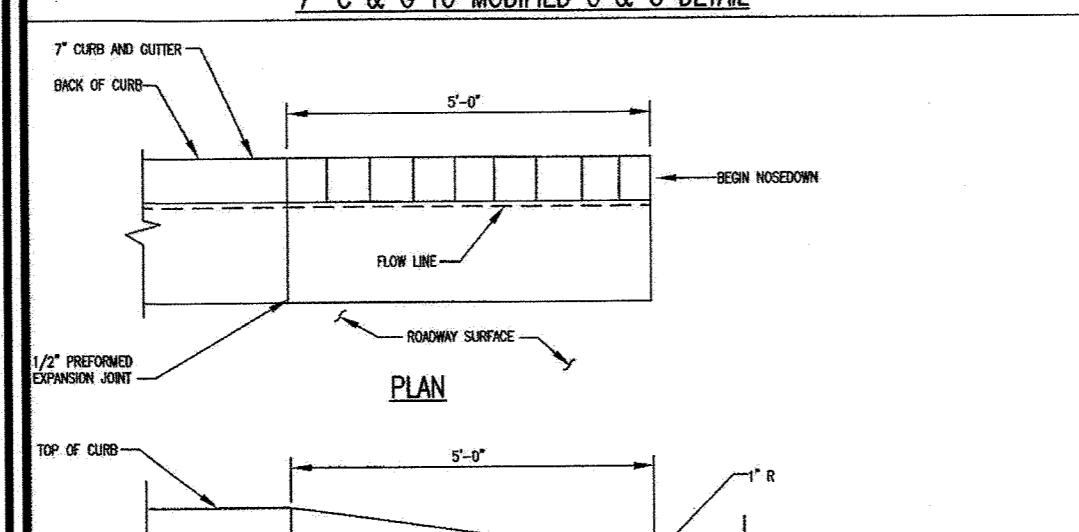
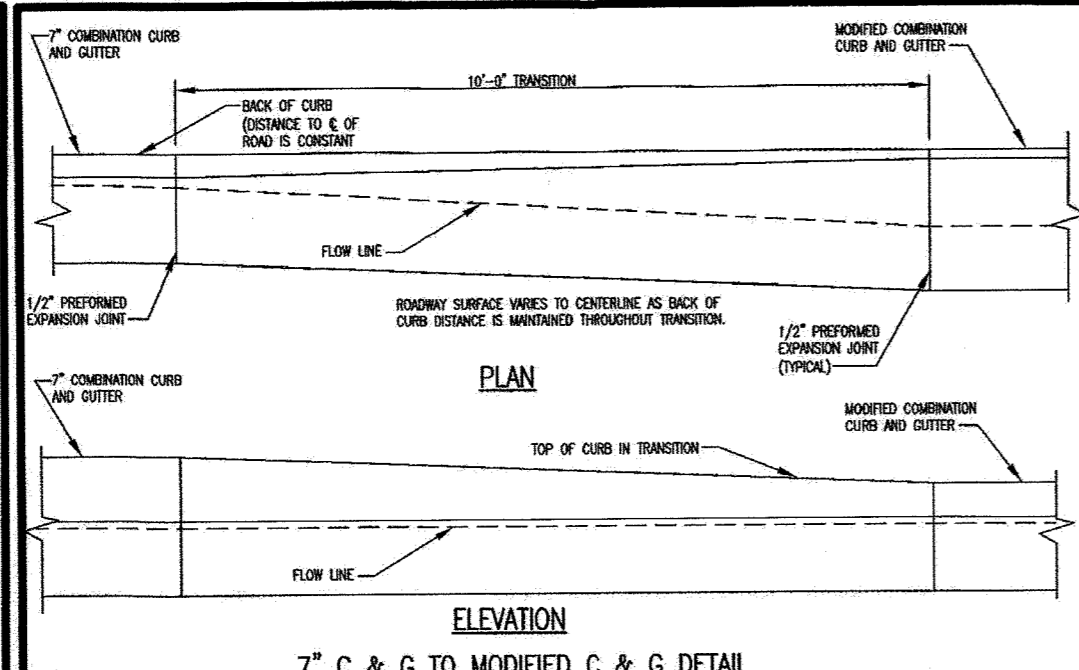
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 User: JAM  
 Date: 4/25/22 2:18pm



**NOTE: MODIFIED COMBINATION CURB AND GUTTER**

- A REVERSE GUTTER PAN SHALL HAVE AN OUTER SLOPE OF 4.17% AWAY FROM THE FLOW LINE, AND SHALL NOT BE USED WHERE THIS DRAINAGE CREATES A HAZARDOUS CONDITION.
- GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE ADJACENT PAVEMENT CROSS SLOPE. WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB & GUTTER:
- A MINIMUM OF TWO (2) FEET OF COMPACTED STABILIZED EARTH, OR EQUIVALENT, SHALL SUPPORT THE ENTIRE BACK OF CURB.
- POSITIVE DRAINAGE SHALL BE PROVIDED BOTH BEHIND THE CURB AND ALONG THE GUTTER AND FLOW LINE.

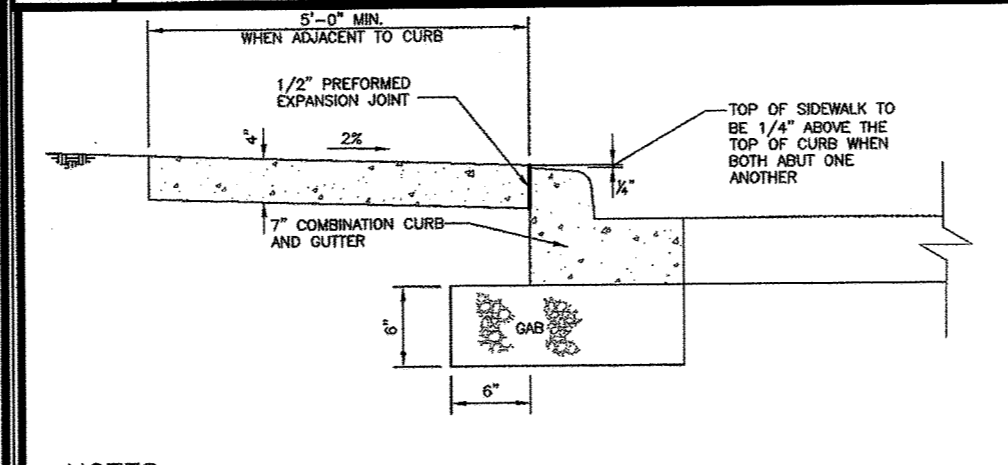
Howards County, Maryland Department of Public Works	CURB AND GUTTER 7" & Modified	Detail R-3.01
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Howards County, Maryland Department of Public Works	CURB AND GUTTER 7" Transition to Modified & Nose Down	Detail R-3.02
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SECTION NUMBER	DESCRIPTION	CONCRETE MIXTURE (CYCLES)	3 IN. DIA. (CY)	4 IN. DIA. (CY)	5 IN. DIA. (CY)	6 IN. DIA. (CY)	7 IN. DIA. (CY)	8 IN. DIA. (CY)	9 IN. DIA. (CY)	10 IN. DIA. (CY)
P-1	CONCRETE MIX NO. 2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
P-2	CONCRETE MIX NO. 3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

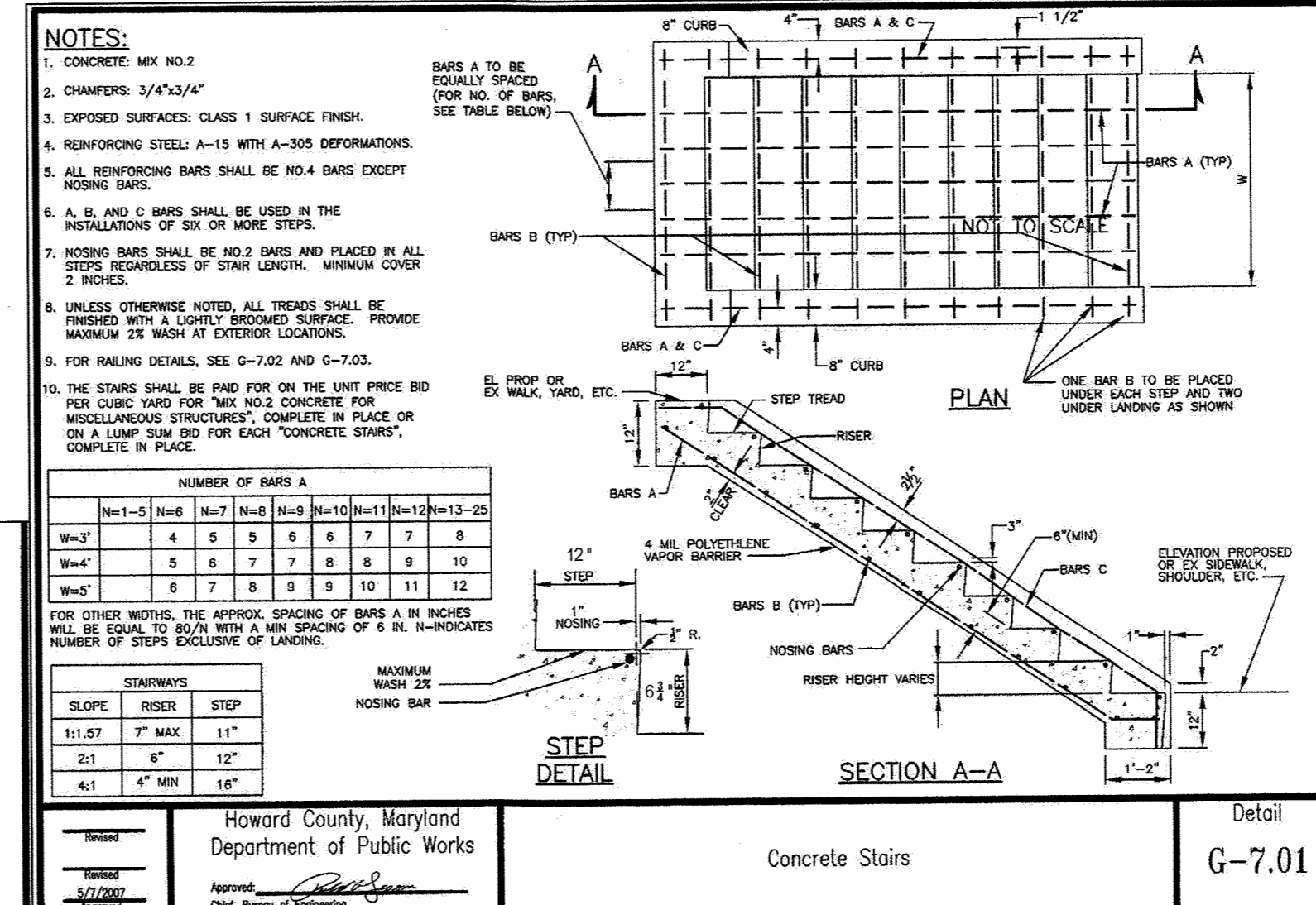
Howards County, Maryland Department of Public Works	CONCRETE STAIRS P-1 to P-4	Detail R-2.01
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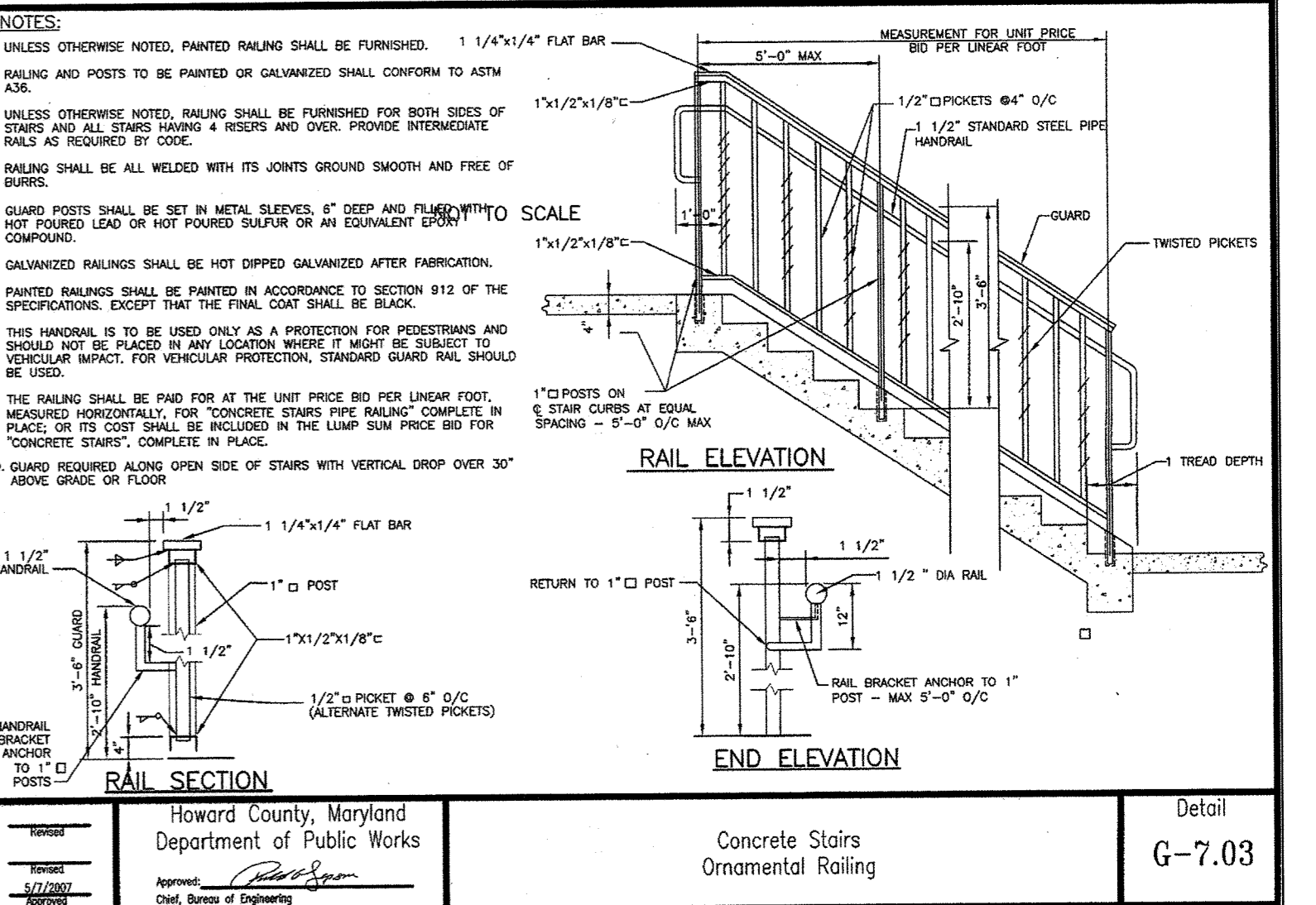
**NOTES:**

- CONCRETE SHALL BE CLASS 1 SURFACE FINISH.
- ALL REINFORCING BARS SHALL BE NO. 4 BARS EXCEPT REINFORCING BARS.
- REINFORCING STEEL: A-15 WITH A-305 DEFORMATIONS.
- ALL REINFORCING BARS SHALL BE NO. 4 BARS EXCEPT REINFORCING BARS.
- UNLESS OTHERWISE NOTED, ALL TRENCHES SHALL BE FURNISHED WITH A LOOSELY BROKEN SURFACE. PROVIDE MAXIMUM 2% WASH AT EXTERIOR LOCATIONS.
- FOR RAILING DETAILS, SEE G-7.02 AND G-7.03.
- THE STAIRS SHALL BE PAID FOR AT THE UNIT PRICE BID PER CURB YARD FOR "NO. 2 CONCRETE FOR MISCELLANEOUS STRUCTURES" COMPLETE IN PLACE OR ON A LUMP SUM BASIS FOR EACH "CONCRETE STAIR".

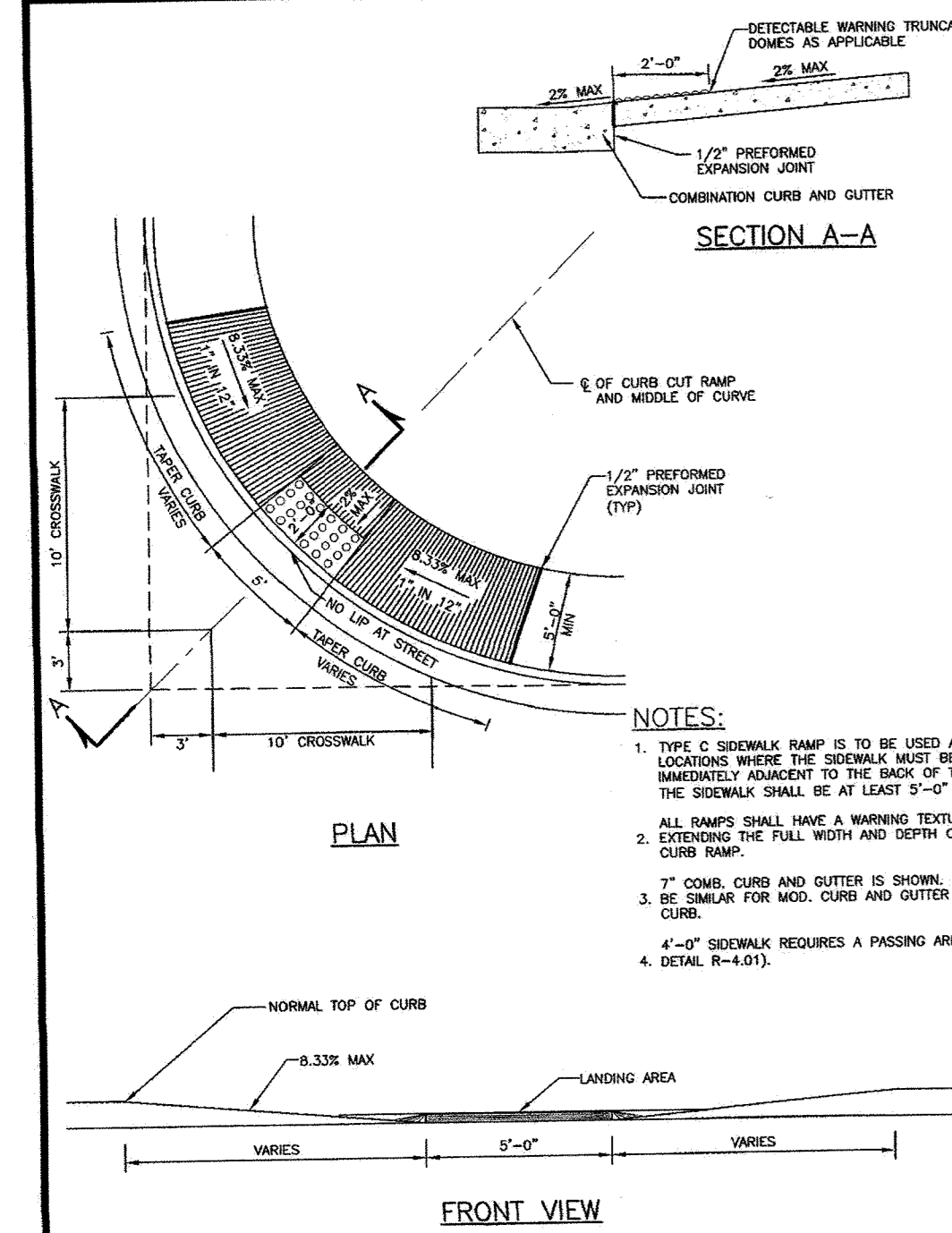
Howards County, Maryland Department of Public Works	Concrete Sidewalk	Detail R-3.05
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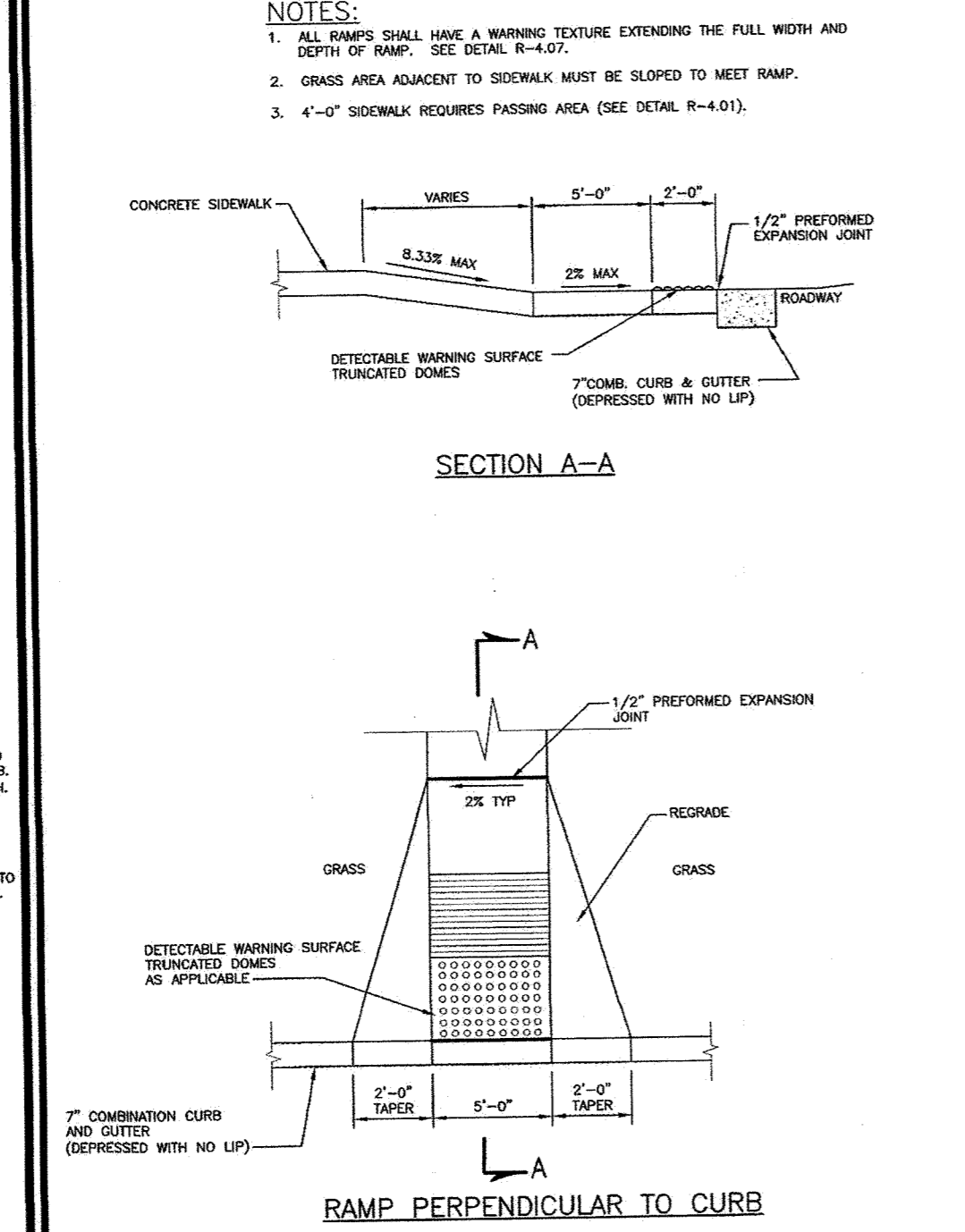
Howards County, Maryland Department of Public Works	Concrete Stairs	Detail G-7.01
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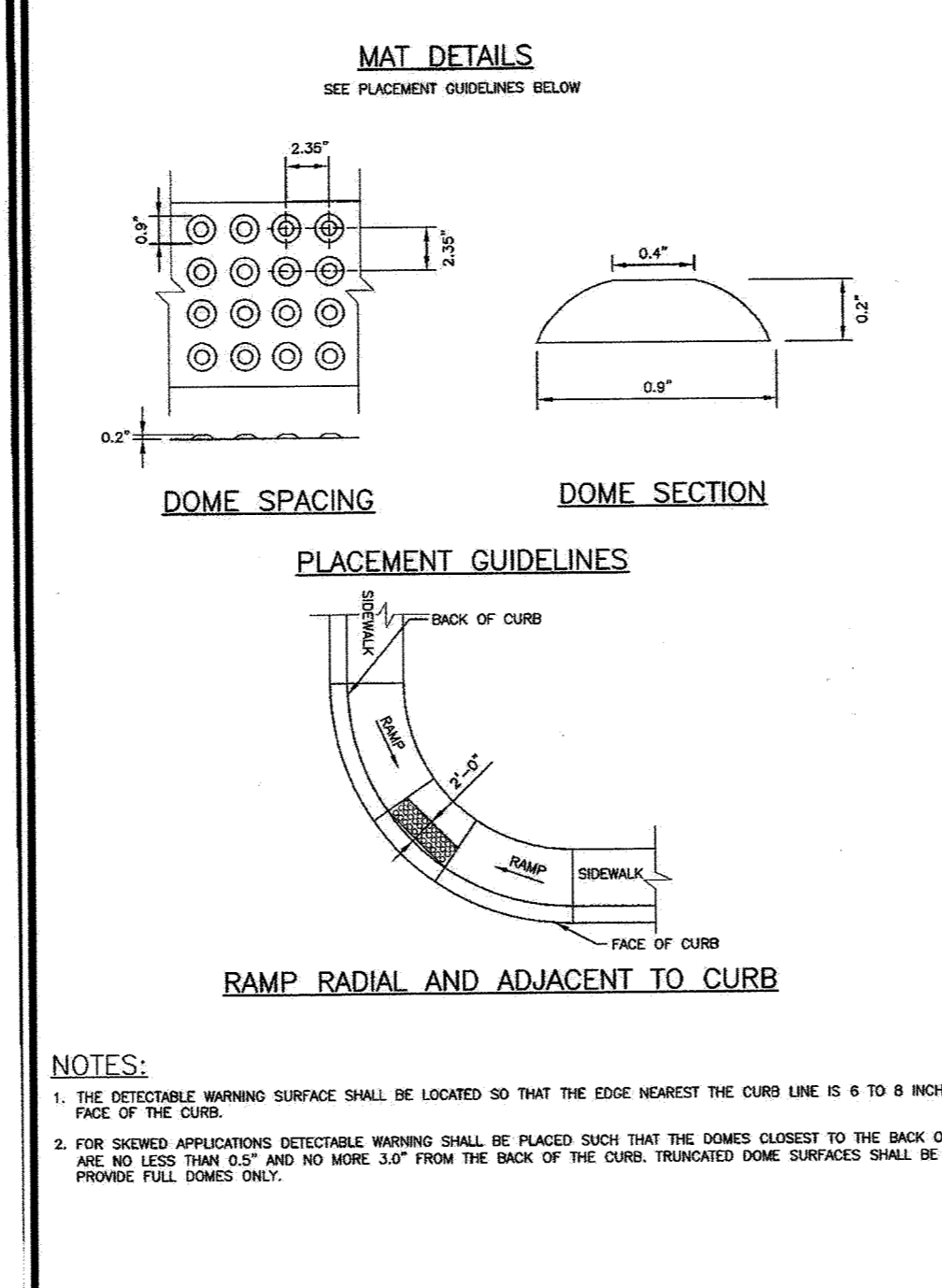
Howards County, Maryland Department of Public Works	Concrete Stairs Ornamental Railing	Detail G-7.03
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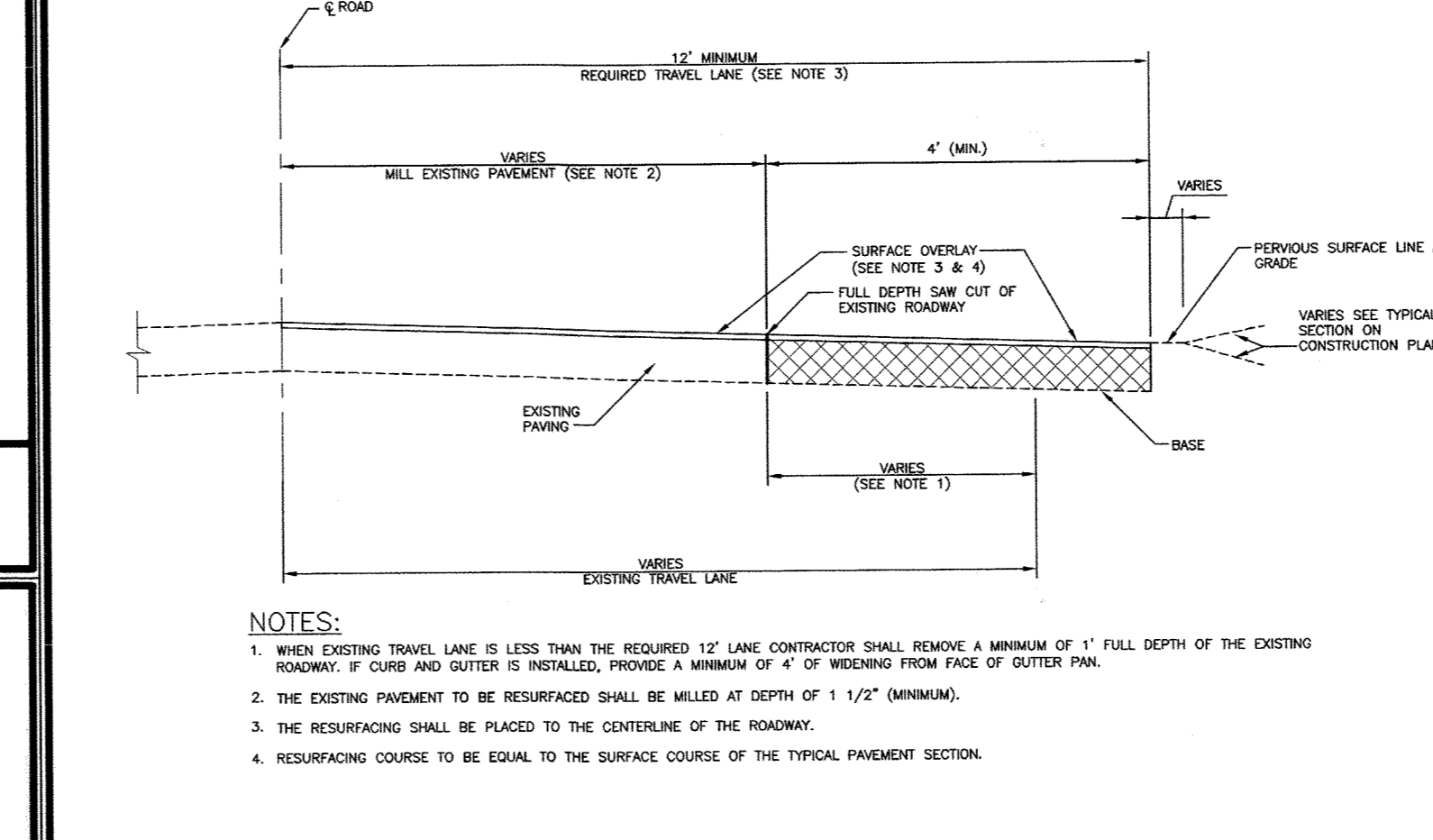
Howards County, Maryland Department of Public Works	SIDEWALK RAMP Type C	Detail R-4.04
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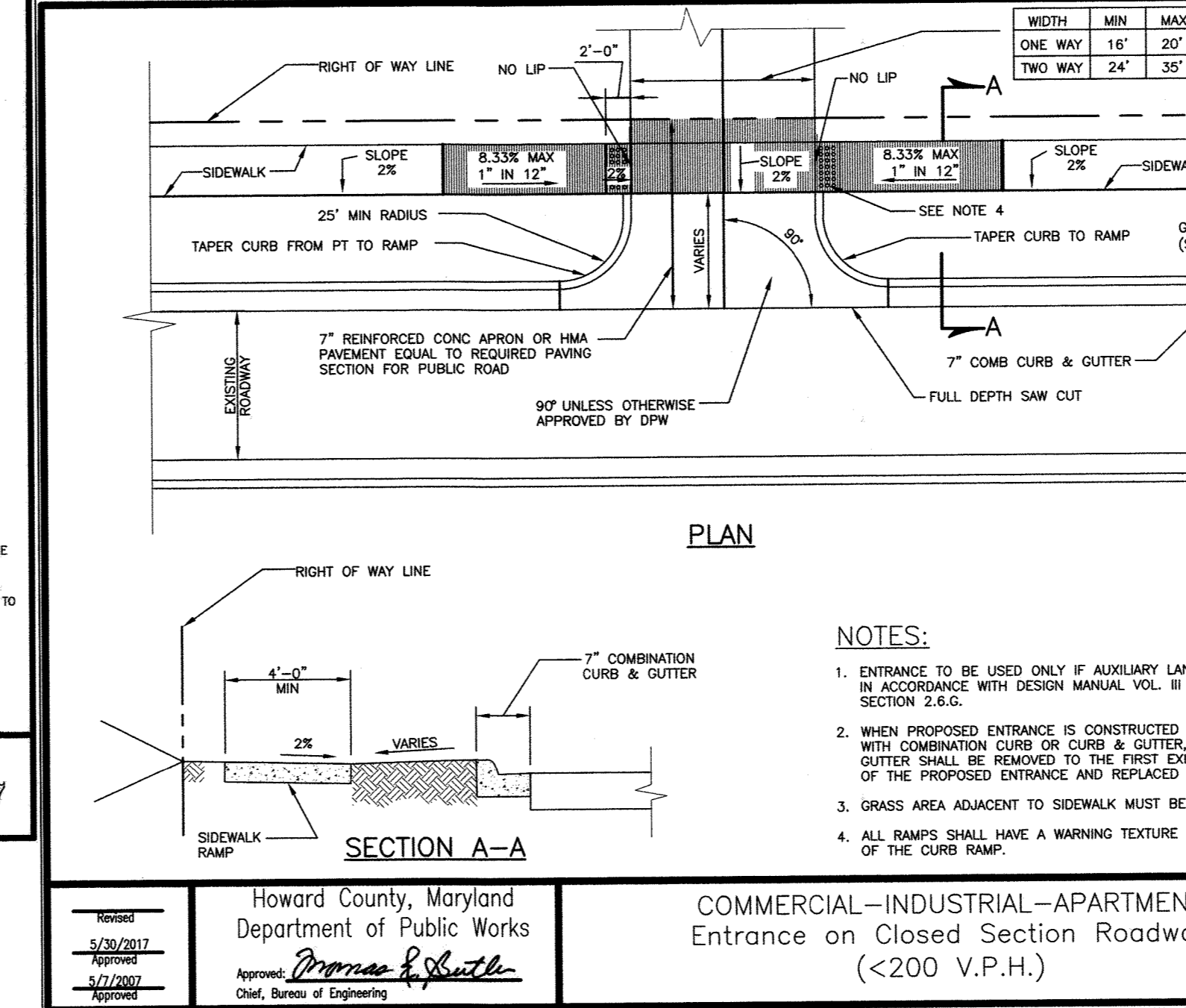
Howards County, Maryland Department of Public Works	SIDEWALK RAMP Layout & Grading Perpendicular to Curb	Detail R-4.05
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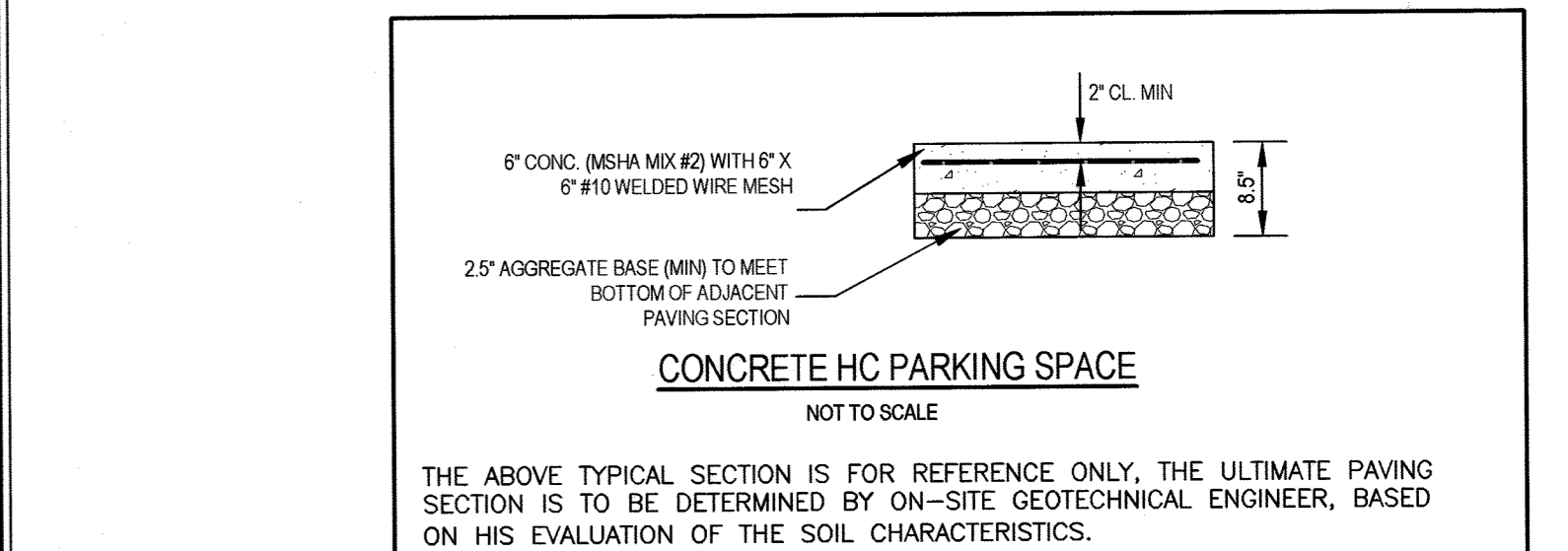
Howards County, Maryland Department of Public Works	SIDEWALK RAMP Detectable Warning Truncated Domes	Detail R-4.07
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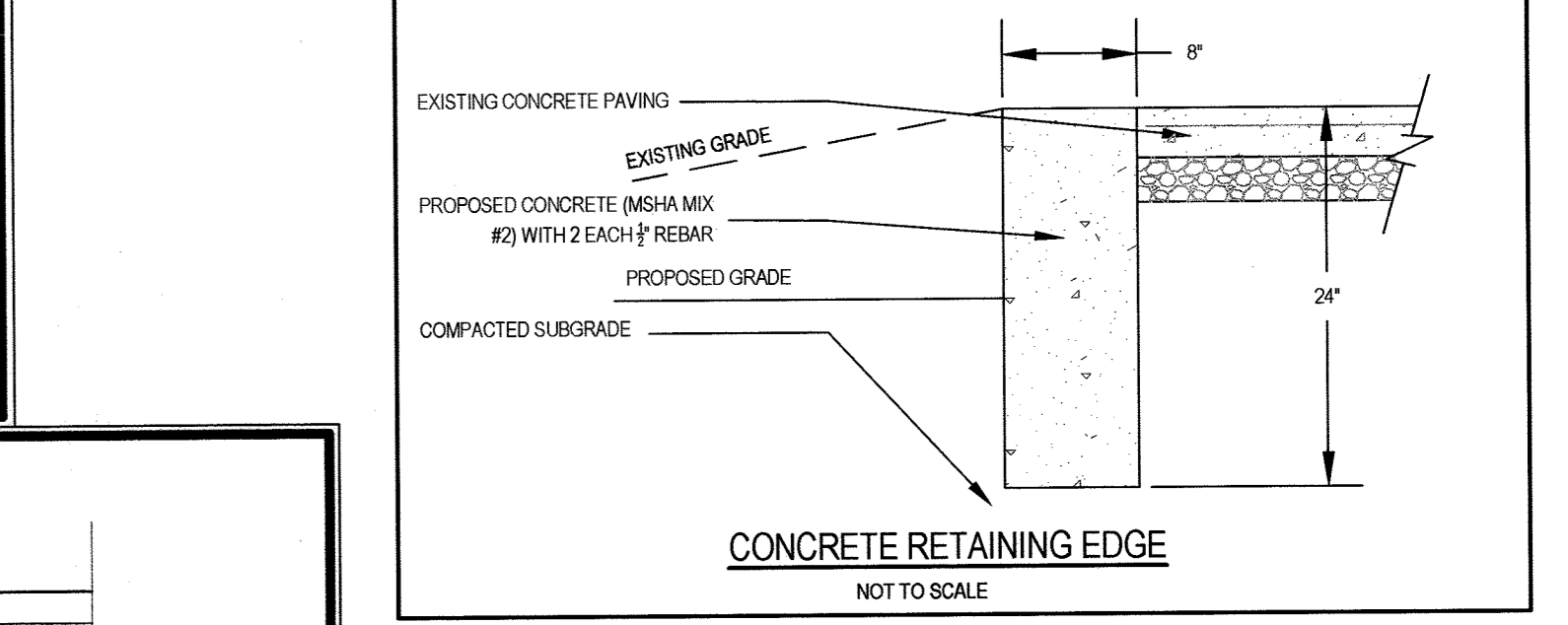
Howards County, Maryland Department of Public Works	Existing Roadway Widening Strip	Detail R-1.08
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Howards County, Maryland Department of Public Works	COMMERCIAL-INDUSTRIAL-APARTMENT Entrance on Closed Section Roadway ( $<200$ V.P.H.)	Detail R-6.09
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Howards County, Maryland Department of Public Works	Concrete HC Parking Space	Detail R-1.08
--	---------------------------	------------------



Howards County, Maryland Department of Public Works	Concrete Retaining Edge	Detail R-1.08
--	-------------------------	------------------

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE: 8/3/21

DATE: 8-3-21

PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 150944, EXPIRATION DATE: 01/12/21

SIGNATURE: KENNETH W. SINDERS

DATE: 4-2-2020

OWNER/DEVELOPER

LOCUST UNITED METHODIST CHURCH  
6851 MARTIN ROAD  
COLUMBIA, MD 21044  
ATTN: MS. JUDY BROWN  
443-934-2235

**SITE DEVELOPMENT DETAILS**

**LOCUST UNITED METHODIST CHURCH**

6851 MARTIN ROAD  
COLUMBIA, MD 21044  
ZONE: R-SC

TAX MAP: 41, GRID: 6  
ELECTION DISTRICT: 5

PARCEL: 216, 283 & 283  
HOWARD COUNTY, MARYLAND

PROJECT NO.: 4073  
DESIGNED BY: JAM  
DRAWN BY: JAM  
CHECKED BY: KWS  
SCALE: AS SHOWN  
DATE: MARCH 23, 2020

**DSThaler & ASSOC., LLC**

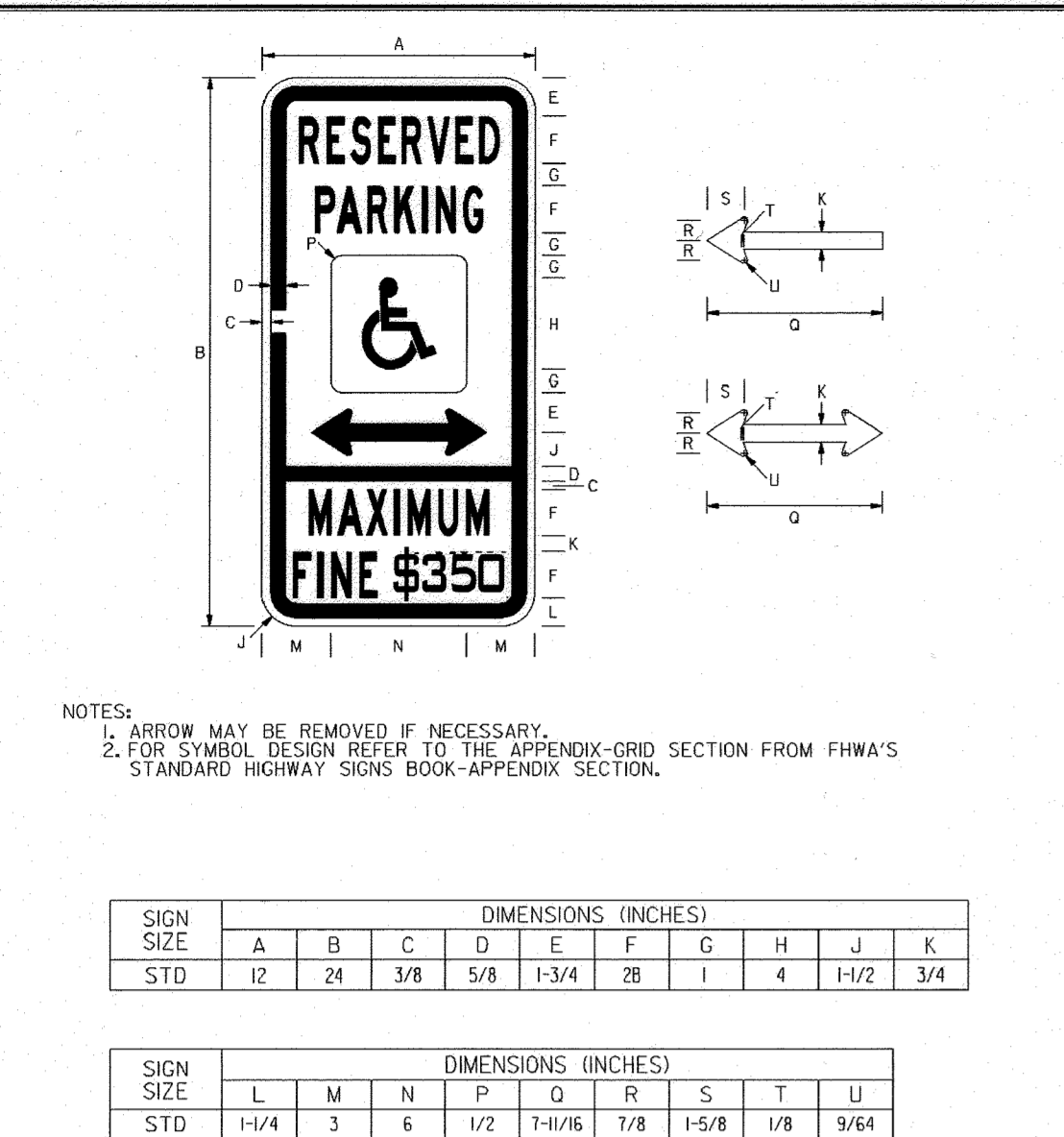
CIVIL AND ENVIRONMENTAL ENGINEERS, SURVEYORS,  
LANDSCAPE ARCHITECTS & LAND PLANNERS

www.dsthaler.com

7115 AMBASSADOR ROAD, P.O. BOX 41428  
BALTIMORE, MARYLAND 21244-1428  
PHONE: 410-444-3647

SHEET: 4 OF 14  
SDP-18-047

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REFERENCES  
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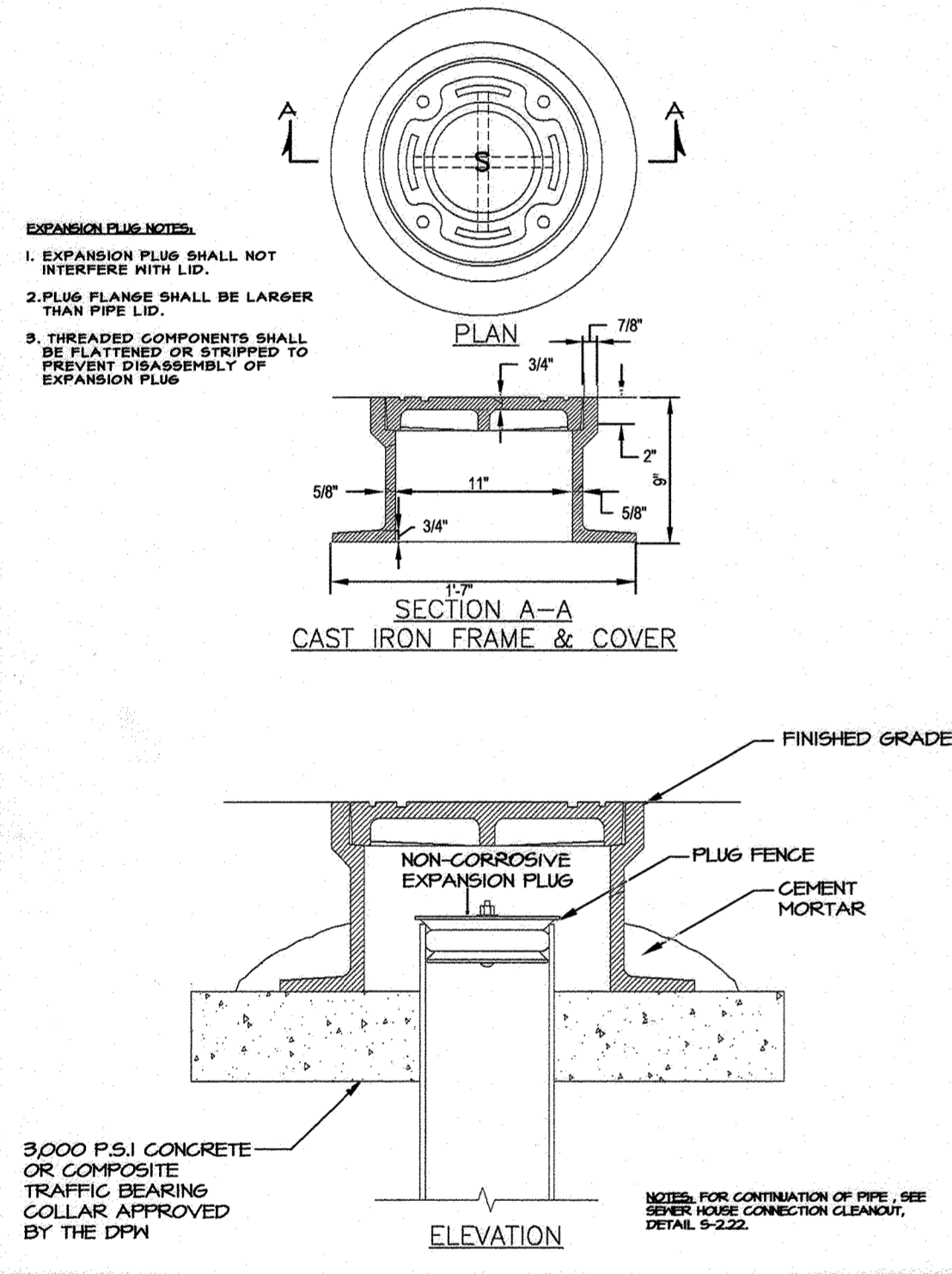
COLORS  
 LEGEND - GREEN  
 BACKGROUND - WHITE  
 HANDICAP INLAY - WHITE ON BLUE

APPROVED: Tom Madsen, Director, Office of Traffic and Safety

**Maryland Department of Transportation STATE HIGHWAY ADMINISTRATION**

MARYLAND STANDARD HIGHWAY SIGNS  
**RESERVED PARKING (HANDICAP SYMBOL) MAXIMUM FINE \$300**

SIGN NUMBER: R7-8(3)



Howard County, Maryland Department of Public Works

Cleanout Cover Assembly For All Paved Areas

Detail S-2.23



APPROVED: DEPARTMENT OF PLANNING AND ZONING

PROFESSIONAL CERTIFICATION:  
 I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE CHARTER OF THE STATE OF MARYLAND, LICENSE NO. 50489. EXPIRATION DATE: 01/12/23

7-21-23  
 50489  
 a/12/2025

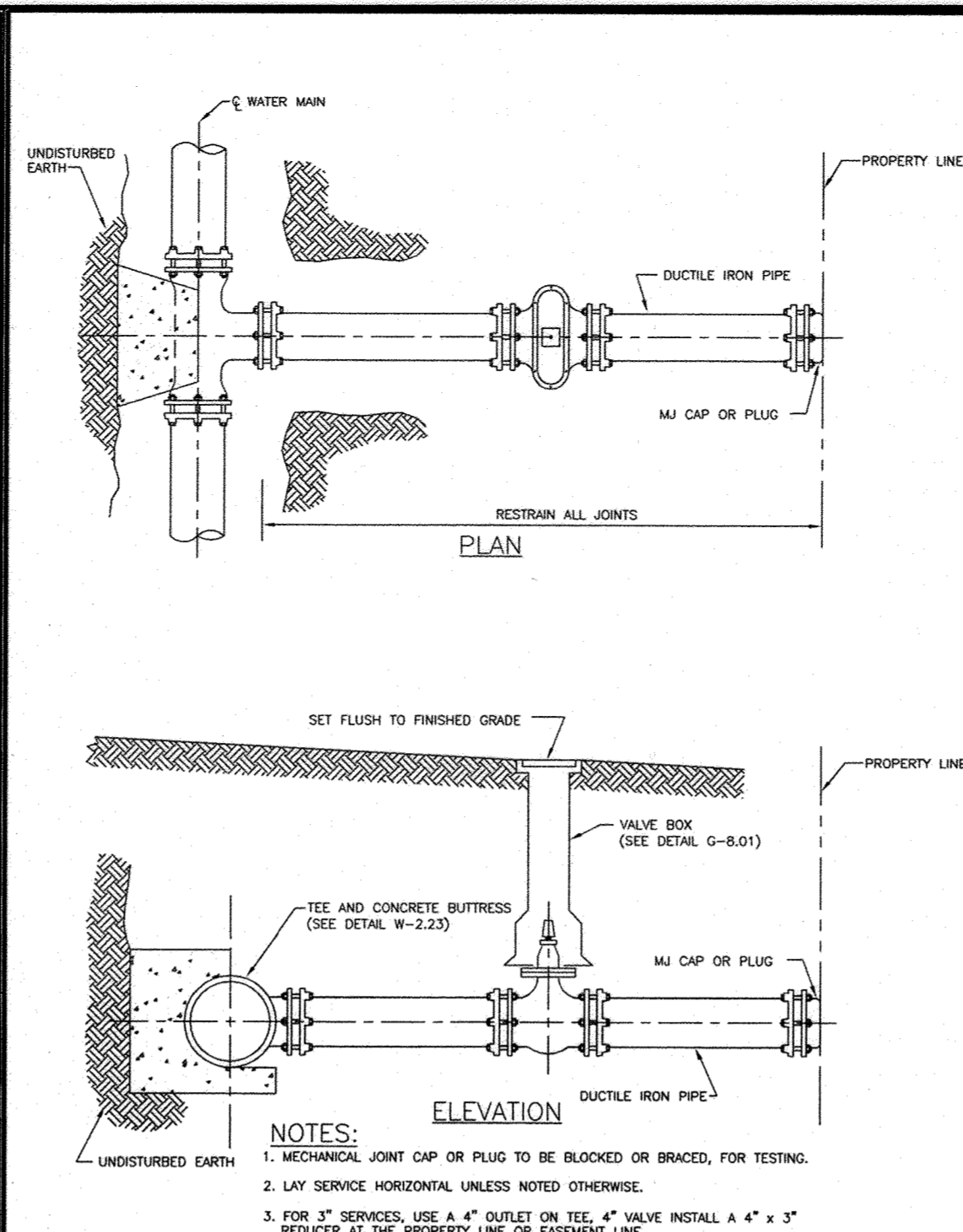
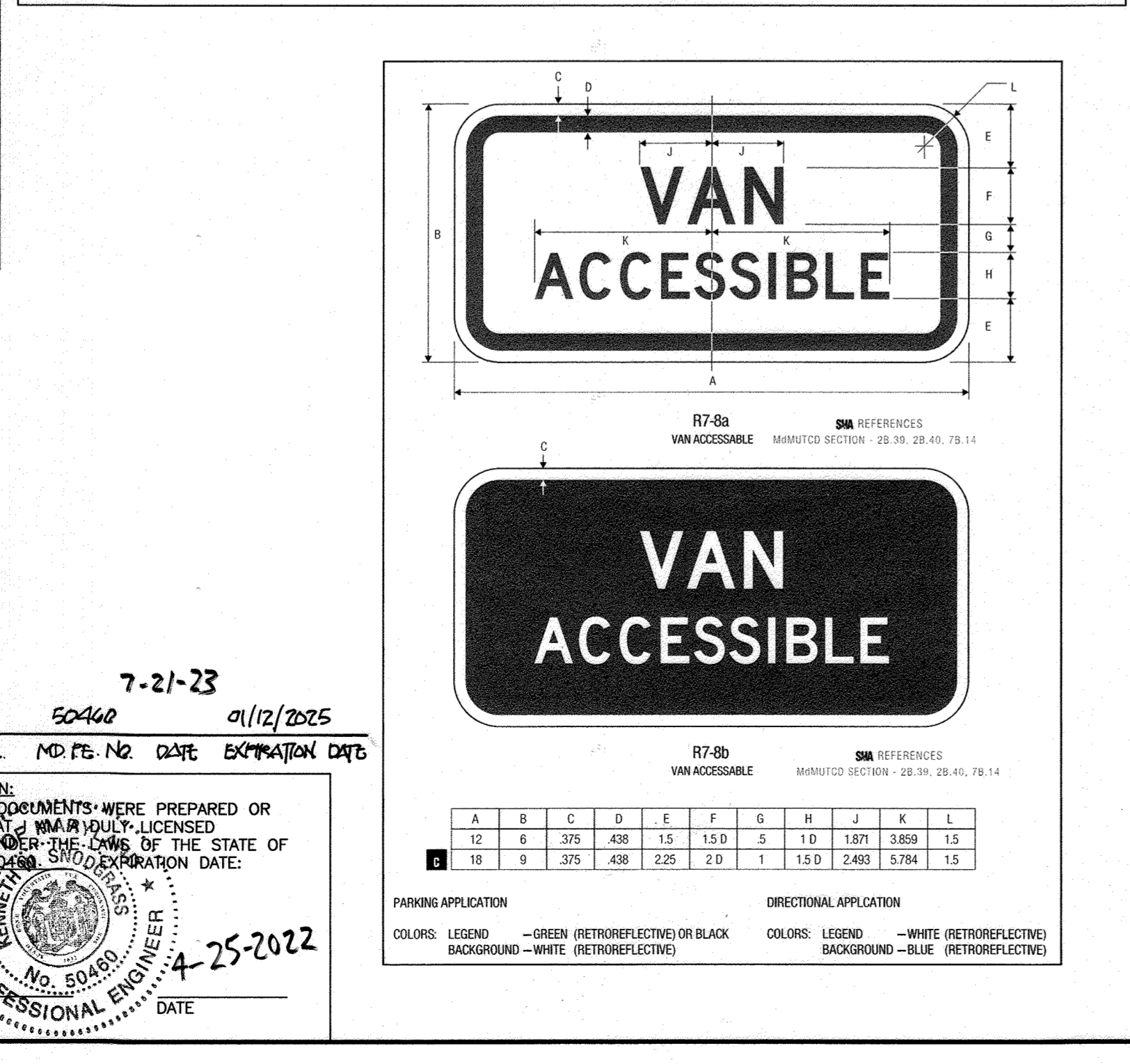
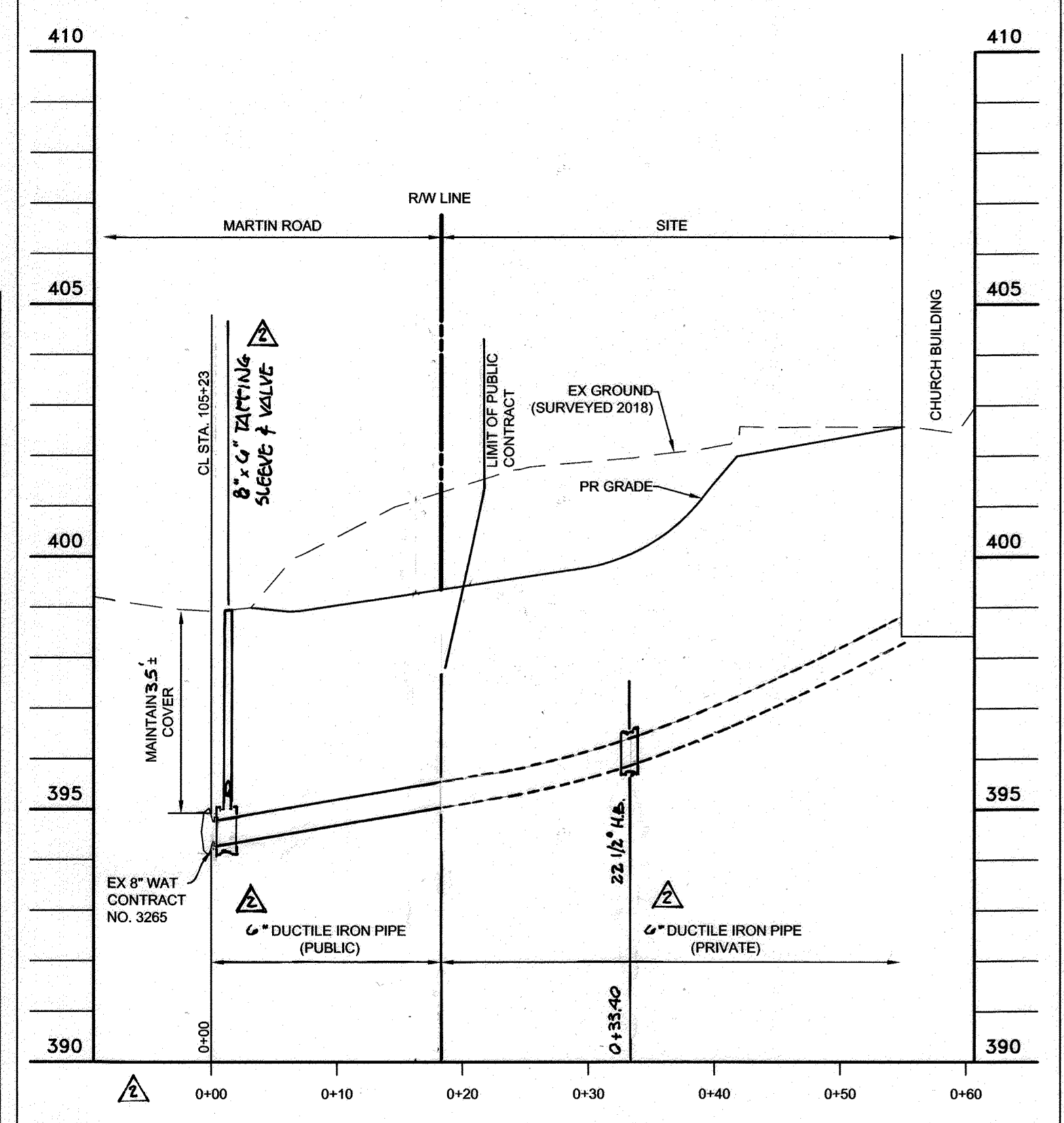
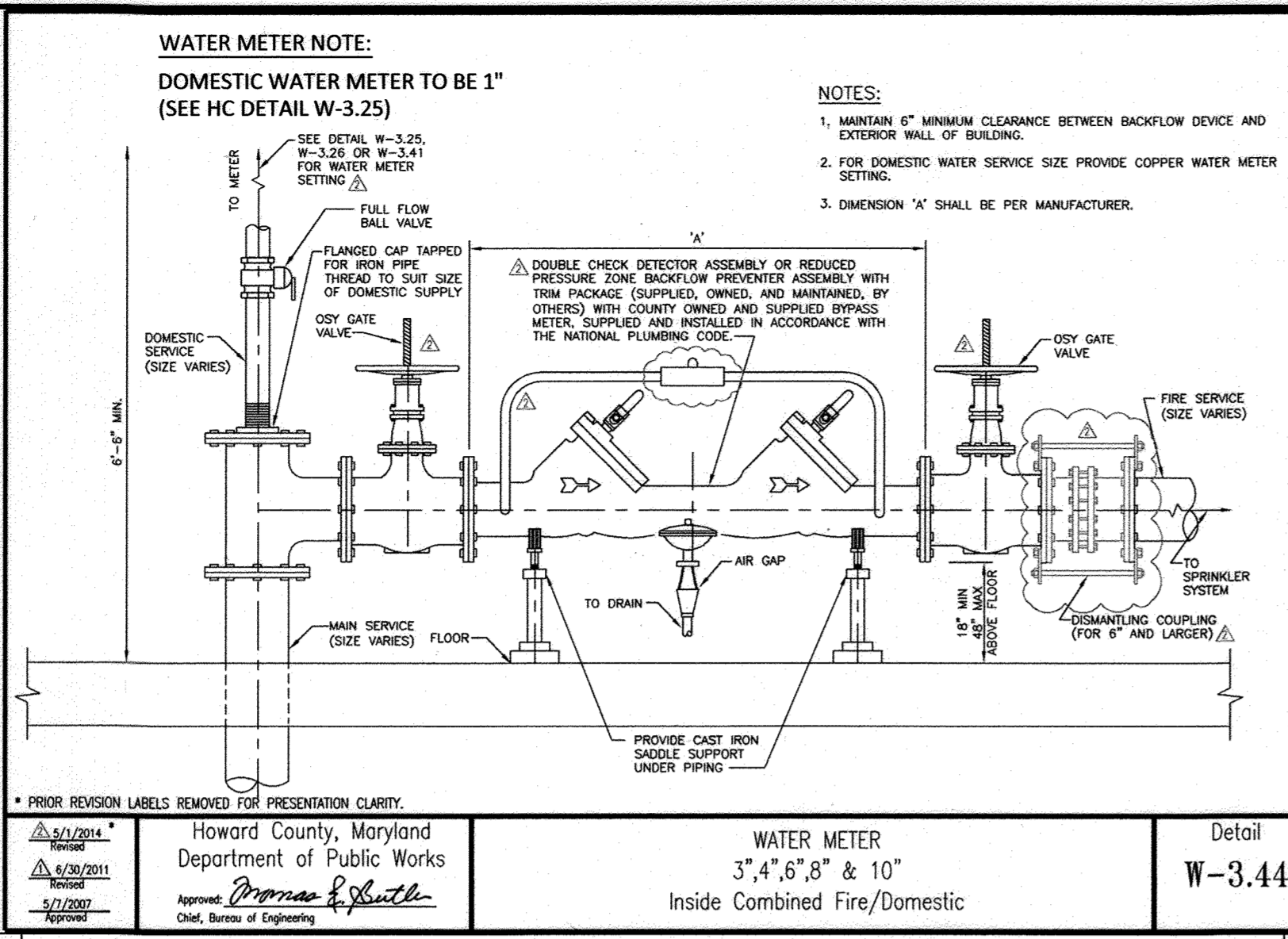
KENNETH W. SNODGRASS, P.E. MD PE NO DATE EXPIRATION DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 5/9/22

CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 5/25/22

DIRECTOR DATE: 5/25/22

4-25-2022



Howard County, Maryland Department of Public Works

WATER SERVICE CONNECTION  
 3", 4", 6", 8", 10", & 12"  
 Inside Meter Settings

Detail W-3.24

NOTES:  
 1. PRIOR TO START OF CONSTRUCTION, THE DEVELOPER/OWNER/CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE TRAFFIC ENGINEERING DIVISION (PHONE: 410-313-2430) OF THE HOWARD COUNTY BUREAU OF HIGHWAYS FOR REVIEW AND APPROVAL FOR THE MAINTENANCE OF TRAFFIC DURING CONSTRUCTION ACTIVITIES ALONG MAIN STREET.

2. PLEASE NOTIFY HOWARD COUNTY DPM REGULATION INSPECTOR AT 410-313-4158 BEFORE BEGINNING UTILITY WORK.

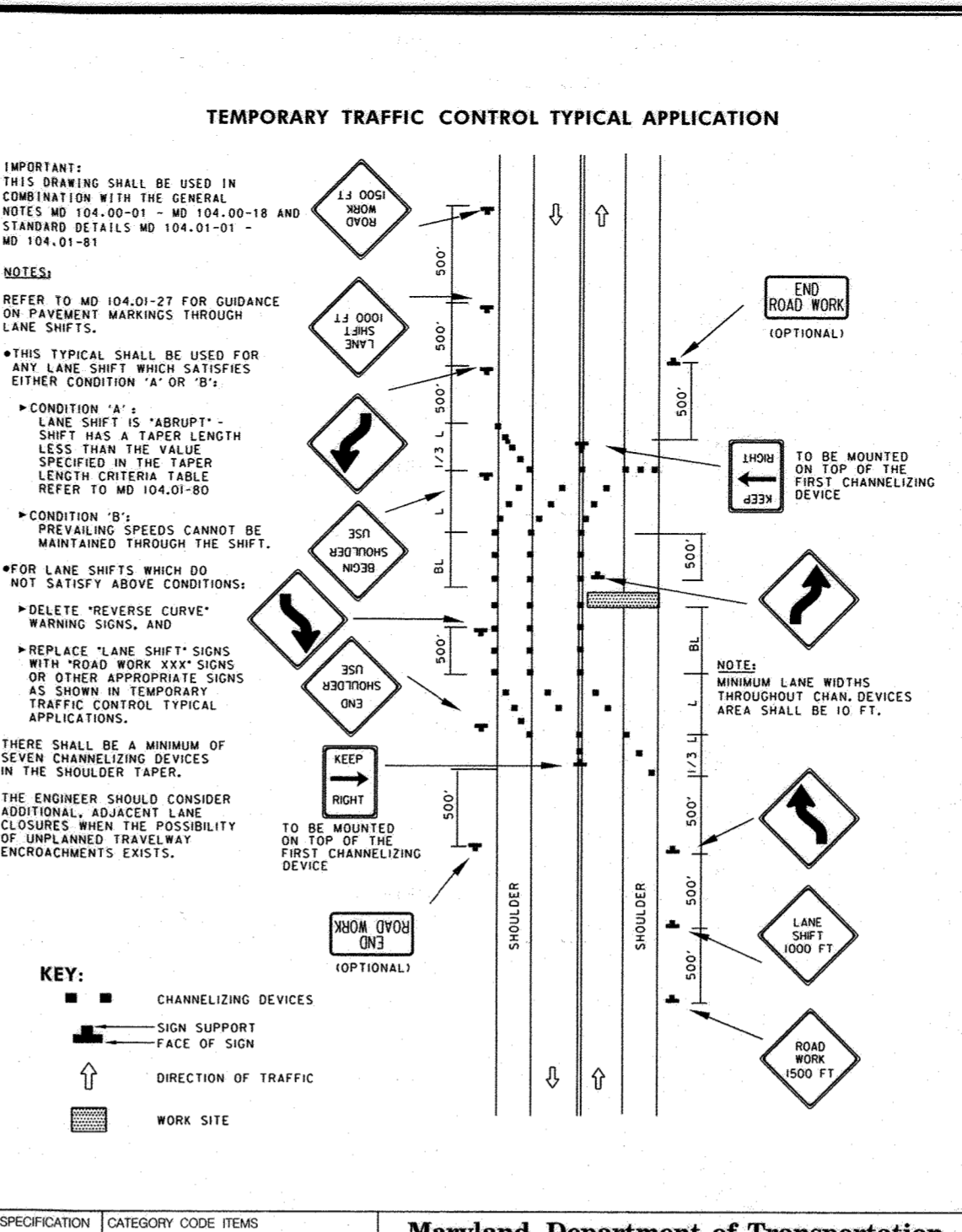
ADVANCED DEPOSIT ORDER

PART I - GENERAL CONSTRUCTION NOTES

- FOR DETAILS NOT SHOWN ON THE DRAWING, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- THE A.D.O. CONSTRUCTION WORK MUST BE PERFORMED UNDER THE CONTINUOUS INSPECTION OF THE HOWARD COUNTY BUREAU OF UTILITIES. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF UTILITIES (410-313-4900) AT LEAST FIVE (5) DAYS PRIOR TO THE START OF ANY CONSTRUCTION FOR THIS A.D.O.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITIES AND AGENCIES AND MISS UTILITY AT LEAST TWO (2) WORKING DAYS BEFORE STARTING WORK SHOWN ON THE PLANS.
- EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY BUREAU OF HIGHWAYS, 410-313-7450, AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER OR SEWER MAINS OR SERVICE CONNECTIONS.
- EXCAVATIONS MUST BE SUPPORTED FOR THE PROTECTION OF WORKERS, THE CONSTRUCTION WORK AREA AND ADJACENT PROPERTY. REFER TO TEMPORARY EXCAVATION SUPPORT SYSTEMS UNDER SECTION 1000.03.03 OF THE STANDARD SPECIFICATIONS.
- EXCAVATIONS MUST BE KEPT WELL DRAINED AT ALL TIMES. DEWATERING, DRAINAGE AND PUMPING IS REQUIRED DURING CONSTRUCTION. REFER TO DEWATERING, DRAINAGE AND PUMPING UNDER SECTION 1000.03.03 OF THE STANDARD SPECIFICATIONS. PUMPS MUST BE THE PROPER TYPE AND CAPACITY TO MAINTAIN A DRY WORK AREA.
- THE USE OF STEEL PLATES TO PROTECT THE TRENCH AND ROADWAY SHALL BE AS SPECIFIED UNDER SECTION 1000.03.05, SECTION 104 AND STANDARD DETAIL PLATE G-4.02 OF THE STANDARD SPECIFICATIONS.
- TEMPORARY AND PERMANENT REPAIR OF ROADWAY OPENINGS SHALL BE AS SPECIFIED UNDER SECTION 1000.03.08 AND STANDARD DETAIL PLATE G-4.01 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE SPECIFIED BY PERMIT FROM THE AUTHORITY HAVING JURISDICTION.

PART II - WATER CONSTRUCTION NOTES

- ALL WATER MAINS SHALL BE D.I.P., CLASS 54 MINIMUM, OR AWWA C900/C905 P.V.C. PIPE, CLASS DR18 MINIMUM.
- TOPS OF ALL WATER PIPES SHALL HAVE NOT LESS THAN 4'-0" OF COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF UTILITIES AT LEAST 48 HOURS IN ADVANCE OF SCHEDULED SHUTDOWNS OF THE EXISTING WATER MAIN. SHUTDOWNS OF THE EXISTING WATER MAIN FOR NEW CONNECTIONS AND REMOVAL OF EXISTING SERVICE CONNECTIONS SHALL BE AS SPECIFIED UNDER SECTION 1002.06 CONNECTIONS OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- THE NEW WATER METER ASSEMBLY SHALL BE THE OUTSIDE COMBINED FIRE/DOMESTIC PER HOWARD COUNTY DETAIL PLATE W-3.36.
- IF THE EXISTING WATER METER WILL BE REMOVED, THE CONTRACTOR SHALL CONTACT THE METER DIVISION OF THE BUREAU OF UTILITIES AT 410-313-4948 TO SCHEDULE THE METER SETTING.
- THE ABANDONMENT OF EXISTING WATER SERVICE CONNECTIONS SHALL BE AS SPECIFIED UNDER SECTION 1015.03 OF THE STANDARD SPECIFICATIONS. REMOVAL OF THE EXISTING CORPORATION STOP OR TAPPING SADDLE REQUIRES A SCHEDULED SHUTDOWN OF THE WATER MAIN. THE EXISTING CORPORATION STOP SHALL BE REMOVED FROM THE WATER MAIN AND THE PIPE REPAIRED WITH A COUNTY-APPROVED STAINLESS STEEL FULL CIRCLE REPAIR CLAMP SUCH AS FORD METER FS2, MUELLER 550 OR ROMAC SS2 SERIES.
- TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL WATER MAINS IN ACCORDANCE WITH DETAIL PLATE G-8.21 OF THE STANDARD SPECIFICATIONS.
- PROPER ASSEMBLY OF GASKETED PVC PIPE JOINTS. THE MANUFACTURER'S INSERTION LINE OF GASKETED PVC PIPE JOINTS INDICATES THE MAXIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. AFTER ASSEMBLY OF THE JOINT, THE LINE SHALL REMAIN VISIBLE. DUAL INSERTION LINES ON GASKETED PVC PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL.
- TEES, CROSSES, BENDS GREATER THAN 5 DEGREES, AND SIMILAR FITTINGS FOR USE WITH C-900 PVC WATER PIPE SHALL BE DUCTILE IRON CONFORMING TO AWWA C153.
- ALL CHANGES IN HORIZONTAL OR VERTICAL DIRECTION OF PVC WATER PIPE SHALL BE MADE WITH HIGH-DIRECTIONAL COUPLINGS, 5-DEGREE SWEEPS OR STANDARD BENDS. NO BENDING OF PVC PIPE JOINTS IS PERMITTED.
- SEVENTEEN (17) POUND SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND DETAILS. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL IRON VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSSES. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC WATER MAINS.



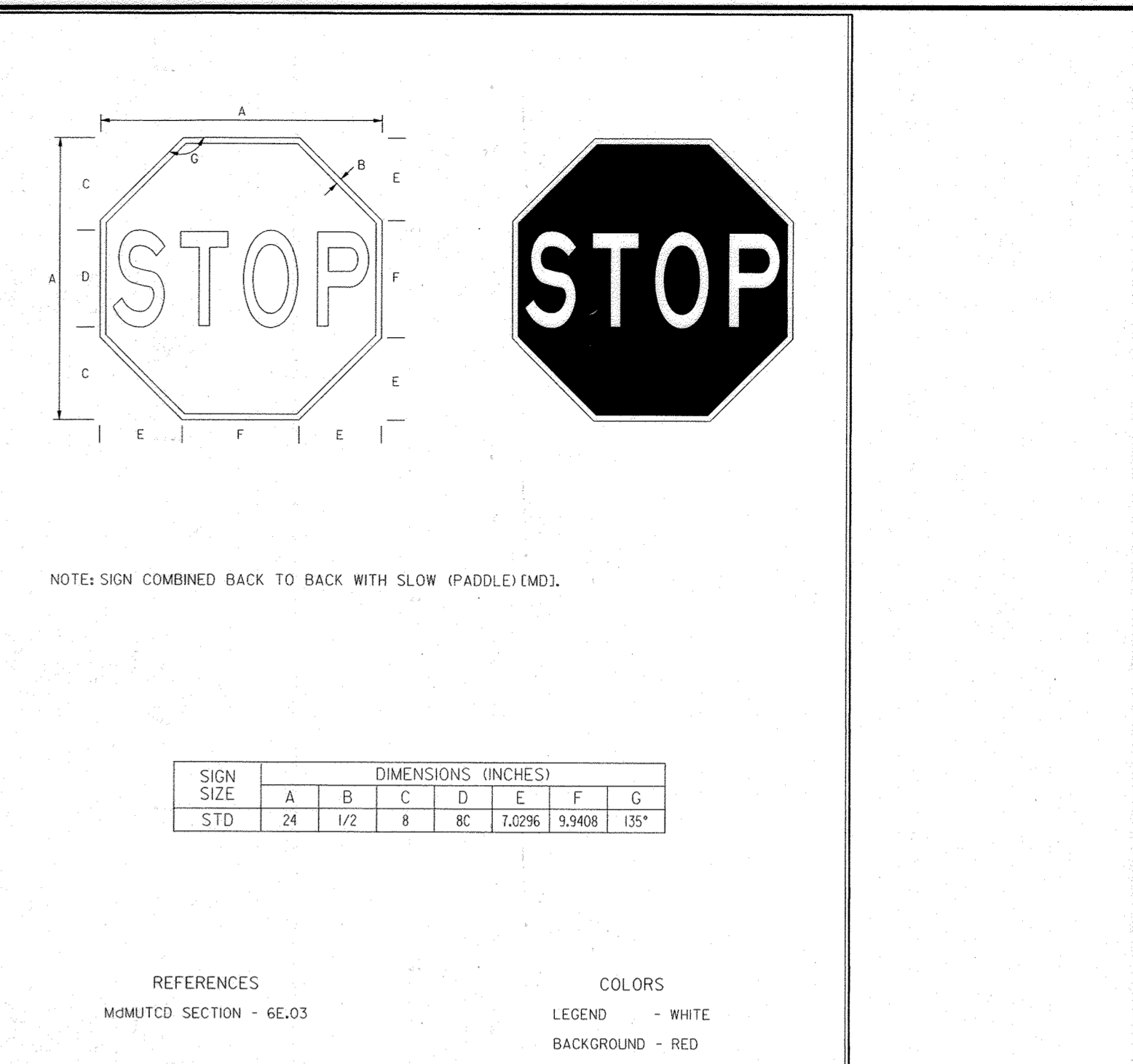
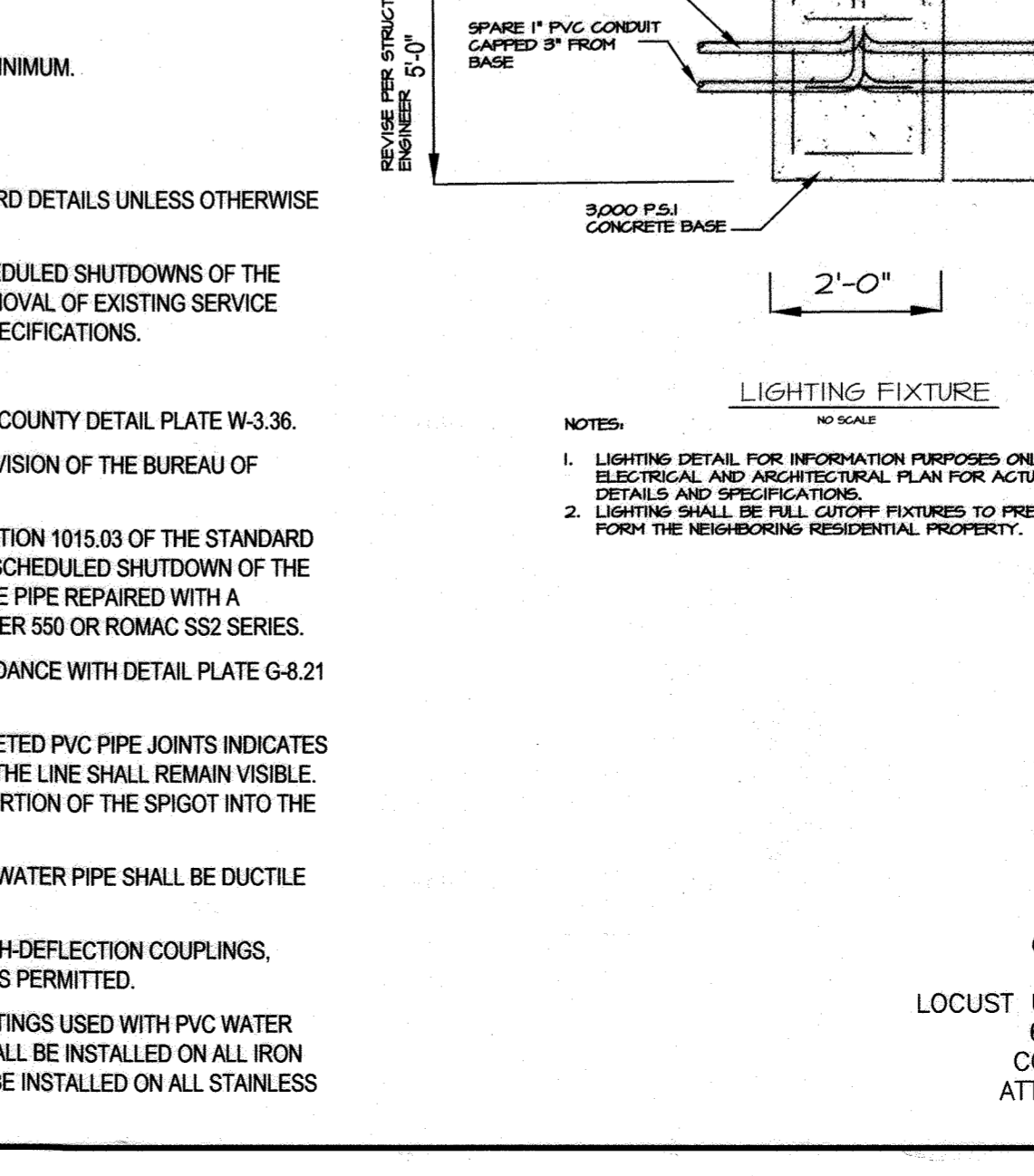
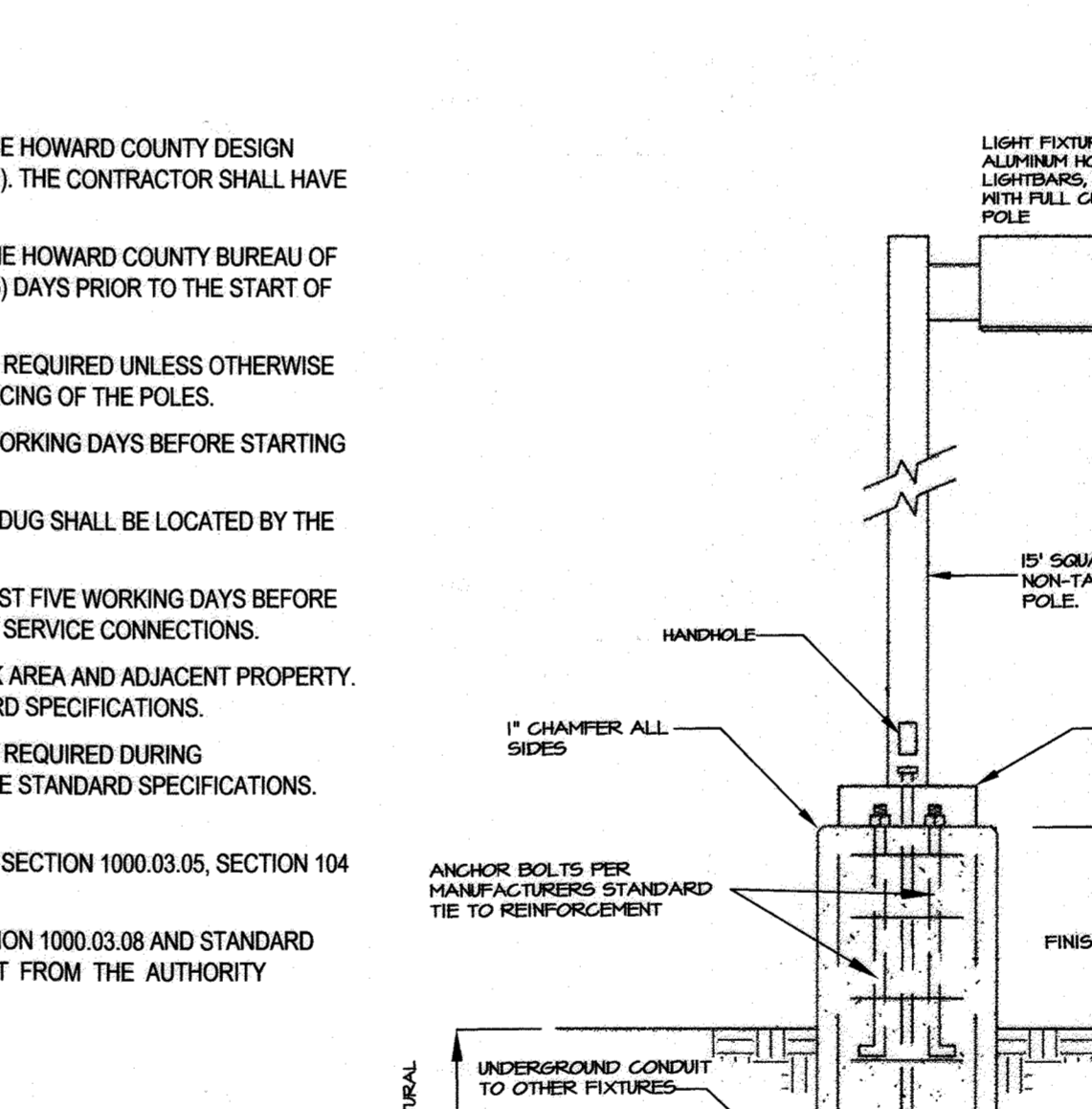
Howard County, Maryland Department of Public Works

WATER SERVICE CONNECTION  
 3", 4", 6", 8", 10", & 12"  
 Inside Meter Settings

Detail W-3.24

NOTES:  
 1. PRIOR TO START OF CONSTRUCTION, THE DEVELOPER/OWNER/CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE TRAFFIC ENGINEERING DIVISION (PHONE: 410-313-2430) OF THE HOWARD COUNTY BUREAU OF HIGHWAYS FOR REVIEW AND APPROVAL FOR THE MAINTENANCE OF TRAFFIC DURING CONSTRUCTION ACTIVITIES ALONG MAIN STREET.

2. PLEASE NOTIFY HOWARD COUNTY DPM REGULATION INSPECTOR AT 410-313-4158 BEFORE BEGINNING UTILITY WORK.



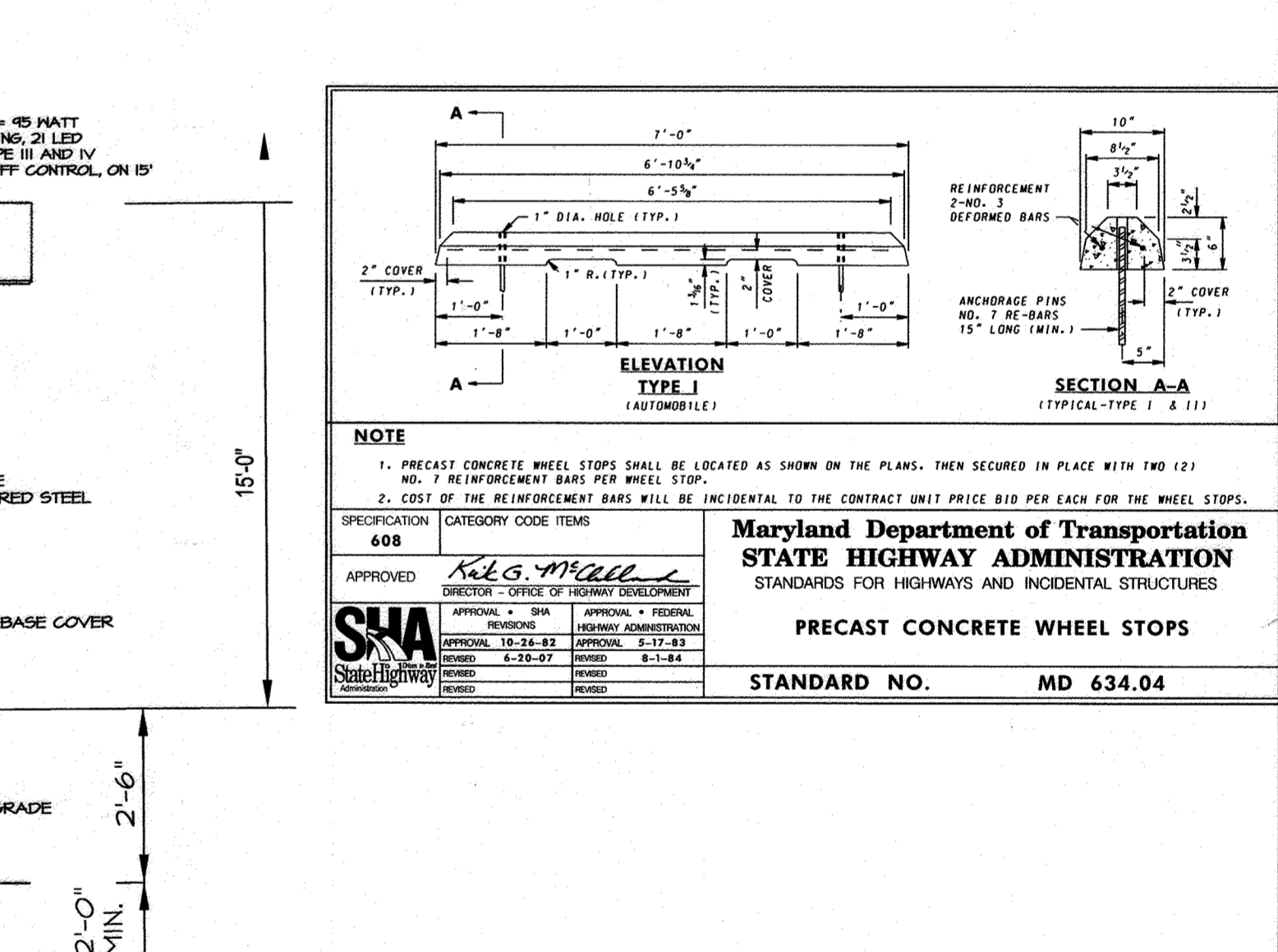
Howard County, Maryland Department of Public Works

WATER SERVICE CONNECTION  
 3", 4", 6", 8", 10", & 12"  
 Inside Meter Settings

Detail W-3.24

NOTES:  
 1. PRIOR TO START OF CONSTRUCTION, THE DEVELOPER/OWNER/CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE TRAFFIC ENGINEERING DIVISION (PHONE: 410-313-2430) OF THE HOWARD COUNTY BUREAU OF HIGHWAYS FOR REVIEW AND APPROVAL FOR THE MAINTENANCE OF TRAFFIC DURING CONSTRUCTION ACTIVITIES ALONG MAIN STREET.

2. PLEASE NOTIFY HOWARD COUNTY DPM REGULATION INSPECTOR AT 410-313-4158 BEFORE BEGINNING UTILITY WORK.



Maryland Department of Transportation STATE HIGHWAY ADMINISTRATION

STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES

**PRECAST CONCRETE WHEEL STOPS**

TYPE 1

STANDARD NO. MD 634.04

PURPOSE:  
 THIS SITE PLAN HAS BEEN REVISED DUE TO ARCHITECTURAL CHANGES INCLUDING REMOVAL OF INTERIOR COURTYARD & ADJUSTMENT OF FLOOR ELEVATION. THERE ARE ASSOCIATED CHANGES TO THE STORM DRAIN SYSTEM, GRADES, ADA ACCESSIBLE ENTRANCE, AND WALKWAYS. AN EMERGENCY EGRESS HAS BEEN ADDED TO THE NORTH END OF THE CHURCH ADDITION.

REVISIONS:

NO.	REVISION	DATE
1	REVISED SITE DEVELOPMENT PLAN	4/25/22
2	INCREASE DIAMETER OF WATER SERVICE CONNECTION TO 6"	7/21/23

SITE DEVELOPMENT DETAILS

LOCUST UNITED METHODIST CHURCH

6851 MARTIN ROAD  
 COLUMBIA, MD 21044  
 ZONE: R-SC

TAX MAP: 41, GRID: 6  
 ELECTION DISTRICT: 5

PARCEL: 216, 283 & 283  
 HOWARD COUNTY, MARYLAND

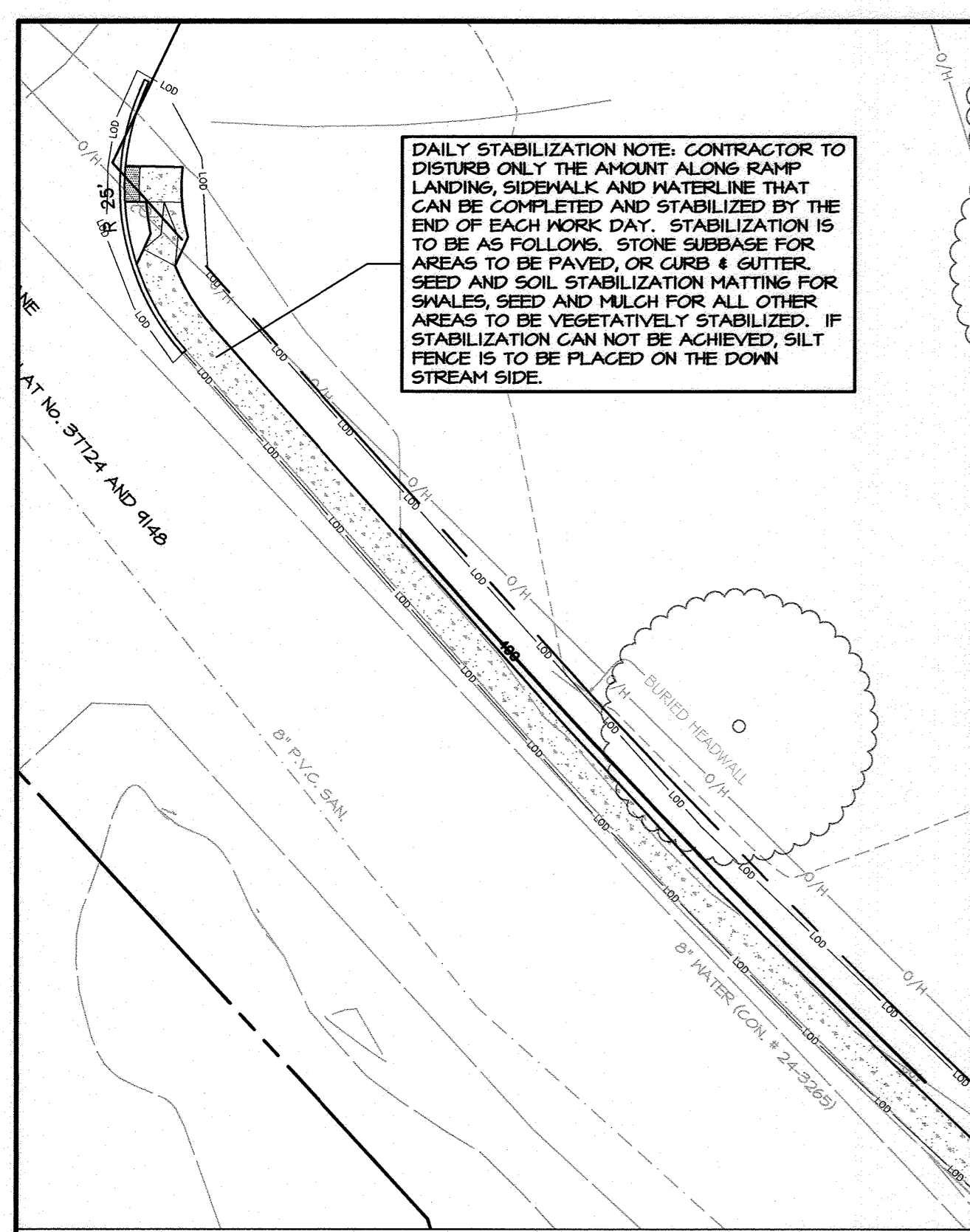
PROJECT NO.: 4073  
 DESIGNED BY: JAM  
 DRAWN BY: JAM  
 CHECKED BY: KWS  
 SCALE: AS SHOWN  
 DATE: MARCH 23, 2020

OWNER/DEVELOPER  
 LOCUST UNITED METHODIST CHURCH  
 6851 MARTIN ROAD  
 COLUMBIA, MD 21044  
 ATTN: MS. JUDY BROWN  
 443-934-2235

DSThaler & ASSOC., LLC  
 CIVIL AND ENVIRONMENTAL ENGINEERS, SURVEYORS, LANDSCAPE ARCHITECTS & LAND PLANNERS  
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7115 AMBASSADOR ROAD, P.O. BOX 47420  
 BALTIMORE, MARYLAND 21244-7420  
 PHONE: 410-444-3647

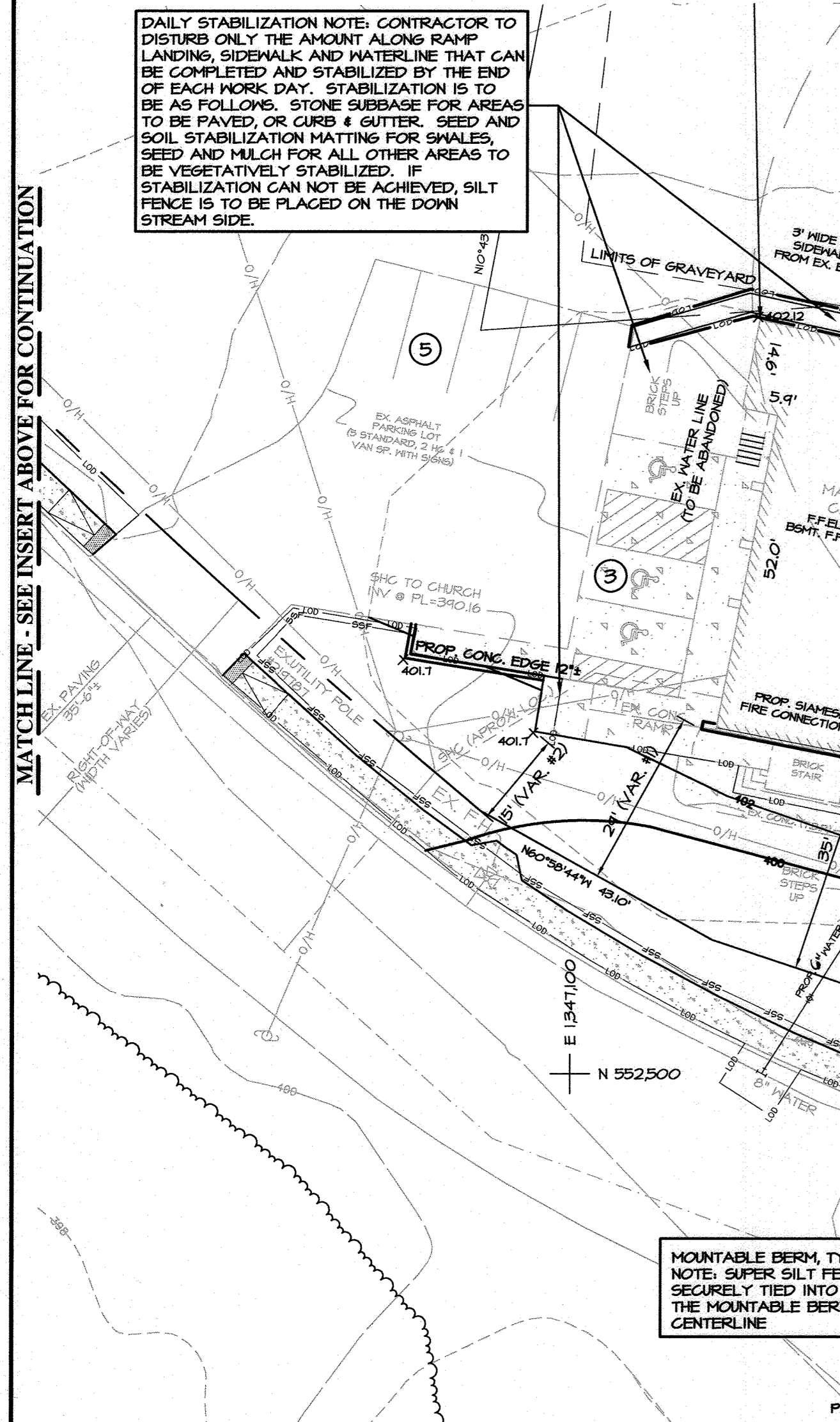
SHEET: 5 OF 14  
 SDP-18-047



DAILY STABILIZATION NOTE: CONTRACTOR TO DISTURB ONLY THE AMOUNT ALONG RAMP LANDING, SIDEWALK AND WATERLINE THAT CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORK DAY. STABILIZATION IS TO BE AS FOLLOWS: STONE SUBBASE FOR AREAS TO BE PAVED, OR CURB & GUTTER, SEED AND SOIL STABILIZATION MATTING FOR SHALES, SEED AND MULCH FOR ALL OTHER AREAS TO BE VEGETATIVELY STABILIZED. IF STABILIZATION CAN NOT BE ACHIEVED, SILT FENCE IS TO BE PLACED ON THE DOWN STREAM SIDE.

POINT #	STATION	ELEVATION
1	0+00.00	348.26
2	0+40.44	348.20
3	0+76.78	346.60
4	1+12.09	345.10
5	1+35.43	344.46
6	1+63.20	343.75
7	1+11.09	342.55
8	2+58.47	342.05
9	2+71.32	343.21
10	3+13.32	344.22
11	3+32.17	344.52

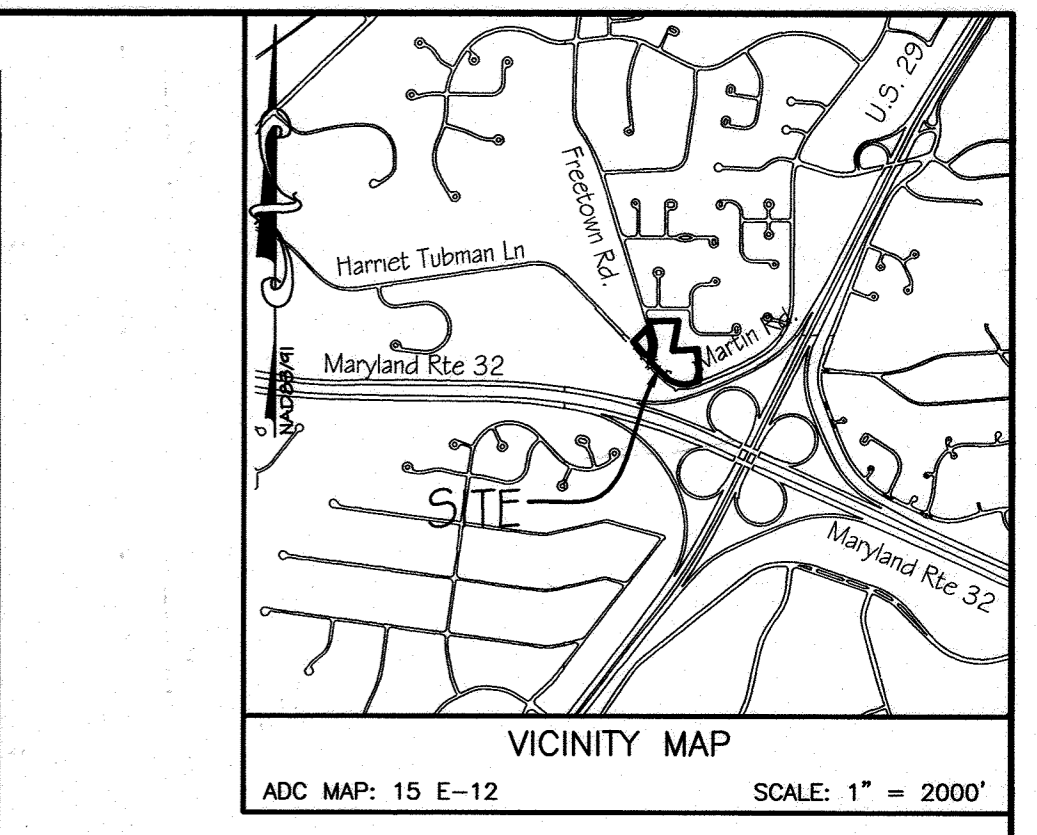
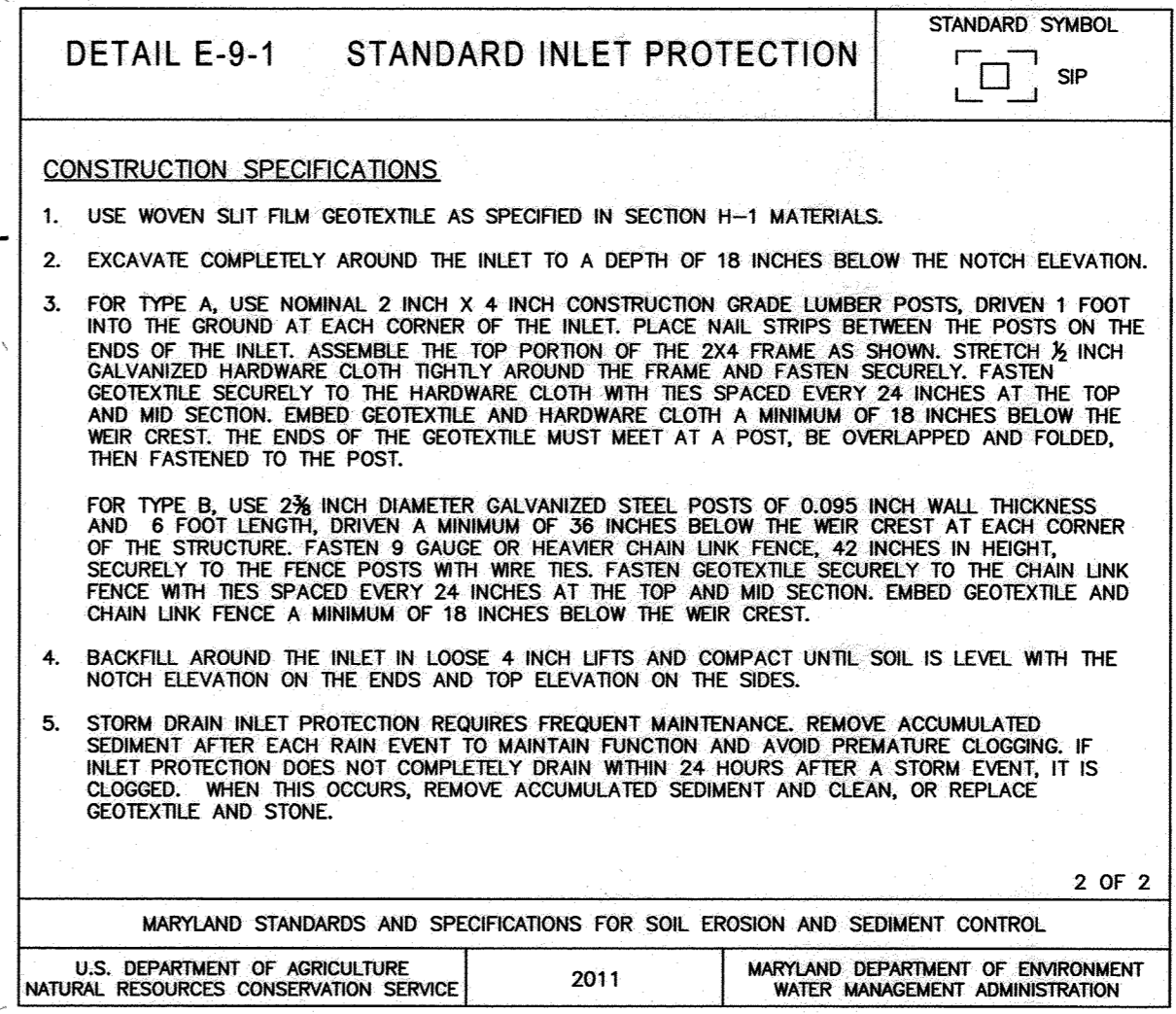
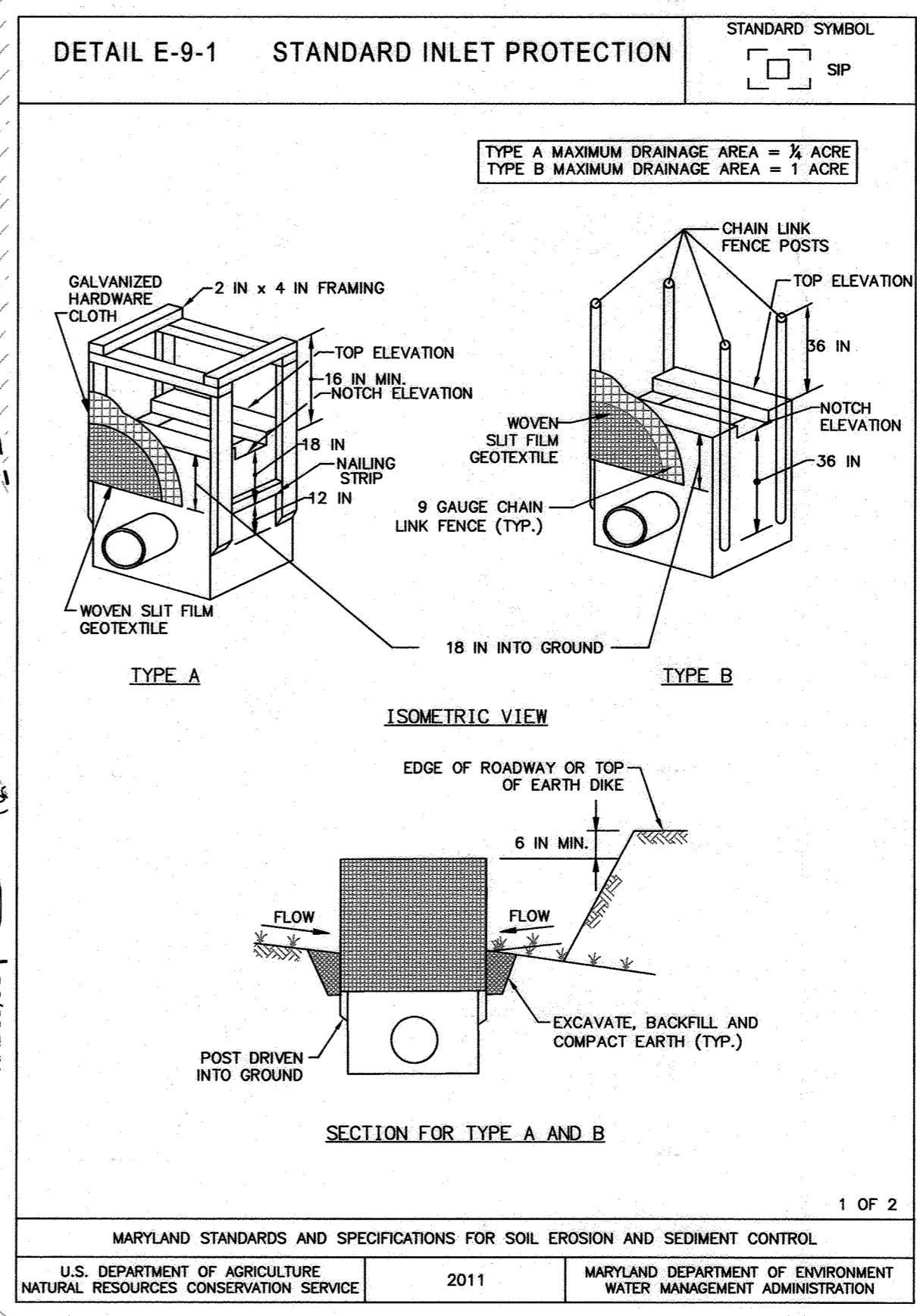
**SIDEWALK CONTINUATION**  
SCALE: 1" = 20'



DAILY STABILIZATION NOTE: CONTRACTOR TO DISTURB ONLY THE AMOUNT ALONG RAMP LANDING, SIDEWALK AND WATERLINE THAT CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORK DAY. STABILIZATION IS TO BE AS FOLLOWS: STONE SUBBASE FOR AREAS TO BE PAVED, OR CURB & GUTTER, SEED AND SOIL STABILIZATION MATTING FOR SHALES, SEED AND MULCH FOR ALL OTHER AREAS TO BE VEGETATIVELY STABILIZED. IF STABILIZATION CAN NOT BE ACHIEVED, SILT FENCE IS TO BE PLACED ON THE DOWN STREAM SIDE.

MATCH LINE - SEE INSERT ABOVE FOR CONTINUATION

MATCH LINE - SEE BELOW FOR CONTINUATION



**LEGEND**

- BOUNDARY LINE
- LOT LINE
- EASEMENT
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- EXISTING TREE LINE
- PROPOSED TREE LINE
- EPHEMERAL STREAM
- SOILS
- ZONING DISTRICT LINE
- EXISTING WATER LINE
- EXISTING SANITARY LINE
- EXISTING OVERHEAD POWER LINE
- SPECIMEN TREE W/ CRITICAL ROOT ZONE
- EX. FOREST CONSERVATION AREA
- EX. GRAVE SITE WITH 10' SETBACK (LOCATED WITH GROUND PENETRATING RADAR)
- LIMIT OF DISTURBANCE
- SUPPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- MOUNTABLE BERM
- WASH RACK
- STANDARD INLET PROTECTION
- TO BE REMOVED
- DRAINAGE AREA
- EX. CONCRETE PAVEMENT
- PROP. CONCRETE WALK

**SOIL TABLE**

SYMBOL	SOIL NAME	CLASS	K-FACTOR	HIGHLY ERODIBLE
GmB	GLADSTONE-URBAN LAND COMPLEX, 0-8% SLOPE	A	0.28	NO
GmB	GLENNVILLE SILT LOAM, 3-8% SLOPE			

**PURPOSE:**  
THIS SITE PLAN HAS BEEN REVISED DUE TO ARCHITECTURAL CHANGES INCLUDING REMOVAL OF INTERIOR COURTYARD & ADJUSTMENT OF FLOOR ELEVATION. THERE ARE ASSOCIATED CHANGES TO THE STORM DRAIN SYSTEM, GRADES, ADA ACCESSIBLE ENTRANCE, AND WALKWAYS. AN EMERGENCY EGRESS HAS BEEN ADDED TO THE NORTH END OF THE CHURCH ADDITION.

REVISIONS:

NO.	REVISION	DATE
1	REVISED SITE DEVELOPMENT PLAN	4/25/22
2	INCREASE DIAMETER OF WATER SERVICE CONNECTION TO 6"	7/21/23

**GRADING, SEDIMENT & EROSION CONTROL PLAN AND SEDIMENT & EROSION CONTROL DRAINAGE MAP**  
**LOCUST UNITED METHODIST CHURCH**  
6851 MARTIN ROAD  
COLUMBIA, MD 21044  
ZONE: R-SC

TAX MAP: 41, GRID: 6  
ELECTION DISTRICT: 5

OWNER/DEVELOPER  
LOCUST UNITED METHODIST CHURCH  
6851 MARTIN ROAD  
COLUMBIA, MD 21044  
ATTN: MS. JUDY BROWN  
443-934-2235

PROJECT NO.: 4073  
DESIGNED BY: JAM  
DRAWN BY: JAM  
CHECKED BY: KWS  
SCALE: AS SHOWN  
DATE: MARCH 23, 2020

SHEET: 6 OF 14  
SDP-18-047

APPROVED: DEPARTMENT OF PLANNING AND ZONING

**U.C.L.** 5.9.22  
CHIEF, DEVELOPMENT ENGINEERING DIVISION 4 DATE

**Stylize** 5/25/22  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

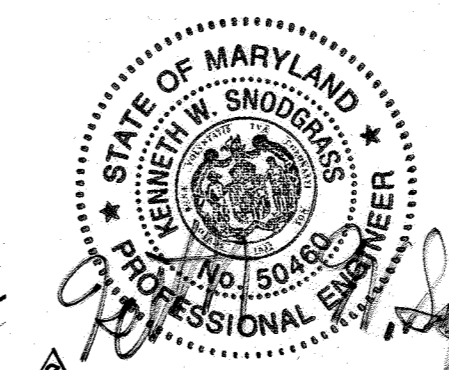
**Alvanda Bratchi** 05/02/22  
HOWARD SOIL CONSERVATION DISTRICT DATE

PROFESSIONAL CERTIFICATION:  
I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 50460, EXPIRATION DATE: 01/12/23

**Kenneth W. Snodgrass** 5-25-2022  
PROFESSIONAL ENGINEER

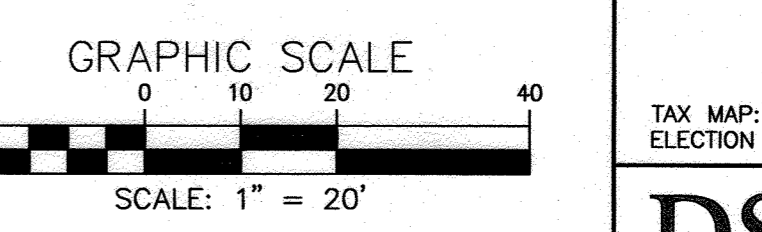
DEVELOPER/BUILDER CERTIFICATION:  
I HEREBY CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF THE LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIAL WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

**Judy Brown** 10/6/20  
DEVELOPER'S SIGNATURE DATE



7-21-23  
KENNETH W. SNOGRASS, P.E. MD P.E. NO. DATE

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE REVISED DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 50460, EXPIRATION DATE: 01-12-2025.



FILE NO.: U:\Locust\_United\_Methodist\_Church\Arch\Planning\Final\SDP\_Review\SDP08-2022-02 & SDP\_Review\SDP08-2022-02.dwg Layout: Locust1.dwg Apr 25, 2022 2:18pm

H-4 STANDARDS AND SPECIFICATIONS

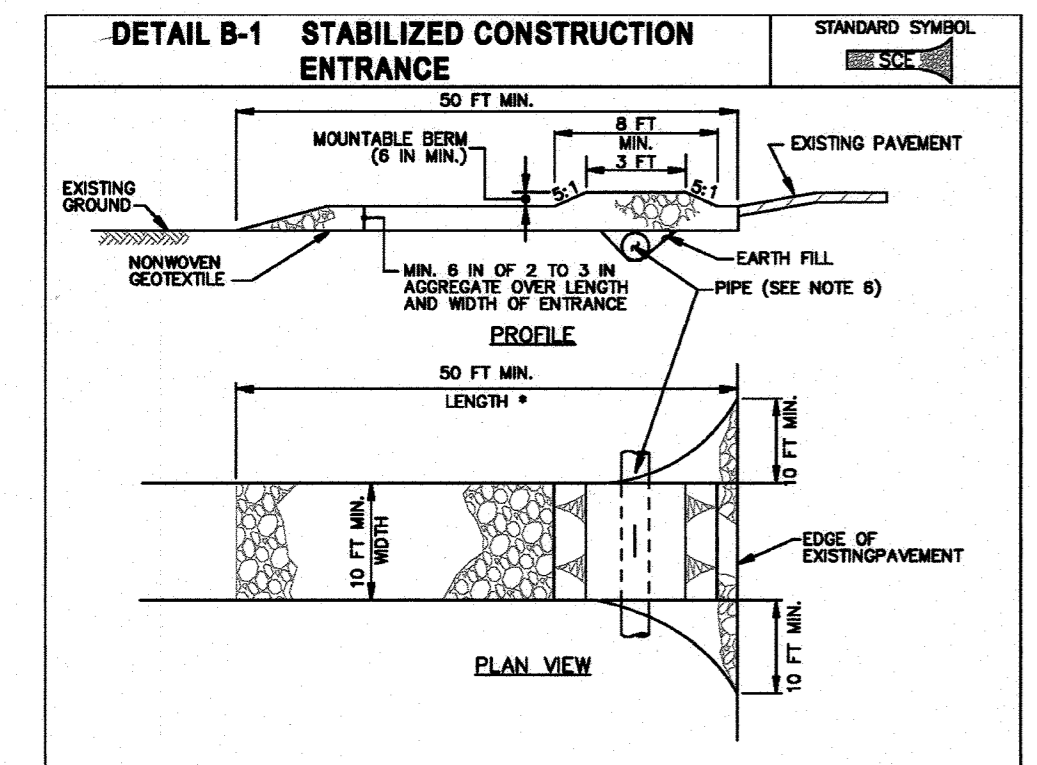
B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

FOR DUST CONTROL Definition Controlling the suspension of dust particles from construction activities.

PURPOSE To prevent blowing and movement of dust from exposed soil surfaces to reduce on and off-site damage including health and traffic hazards.

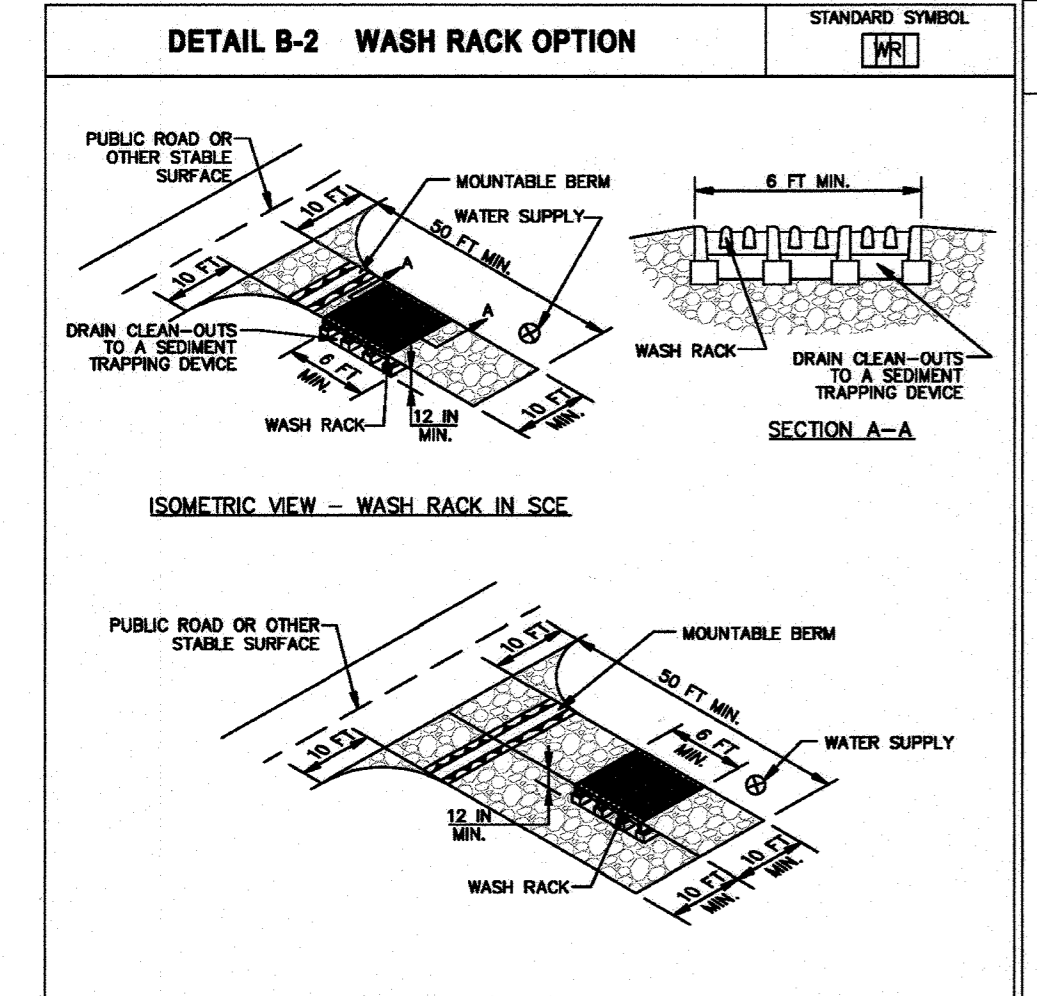
CONDITIONS WHERE PRACTICE APPLIES Areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

- 1. Mulching See Section B-4-2 Soil Preparation, Topsoiling, and Soil Amendments, Section B-4-3 Seeding and Mulching, and Section B-4-4 Temporary Stabilization. Mulch must be anchored to prevent blowing.
2. Vegetative Cover See Section B-4-4 Temporary Stabilization.
3. Tillage Till to roughen surface and bring clods to the surface. Begin plowing on windward side of site. Chisel-type plow spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment that may produce the desired effect.
4. Irrigation Sprinkle site with water until the surface is moist. Repeat as needed. The site must not be irrigated to the point that runoff occurs.
5. Barriers Solid board fences, silt fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing.
6. Chemical Treatment Use of chemical treatment requires approval by the appropriate plan review authority.



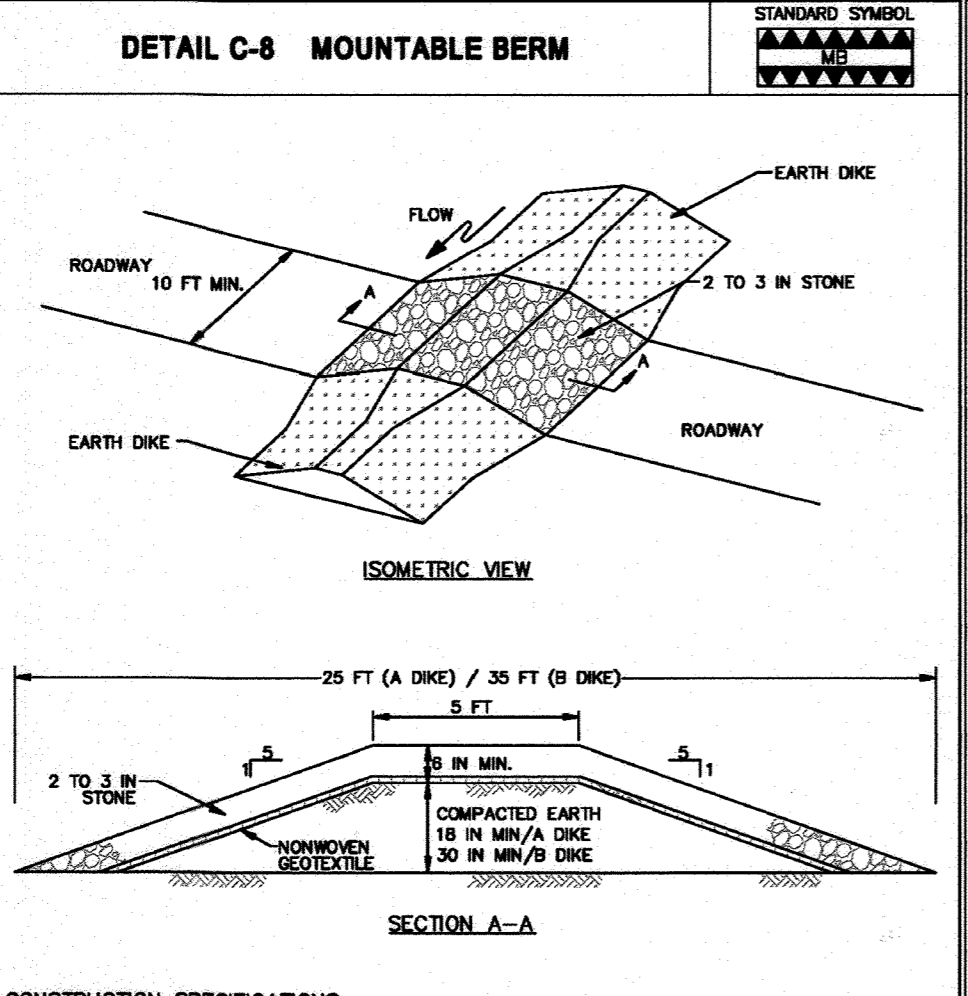
CONSTRUCTION SPECIFICATIONS
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SOE. USE MINIMUM LENGTH OF 50 FEET (30 FEET FOR SINGLE PERSON SECTOR). USE MINIMUM WIDTH OF 10 FEET. LENGTH SOE TO FIT MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED THROUGH THE SOE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SOE WITH A MOUNTABLE BEAM WITH 2:1 SLOPES AND A MINIMUM OF 12 INCHES OF PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SOE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO HAND, A PIPE IS NOT NECESSARY. A MOUNTABLE BEAM IS REQUIRED WHEN SOE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SOE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. MOUNTABLE BEAM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRODDEN INTO ADJACENT ROADWAY BY VACUATING, SCOPING, AND/OR SHREDDING. WASHING ROADWAY TO REMOVE WAD TRACKED ON PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011. MARYLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION.



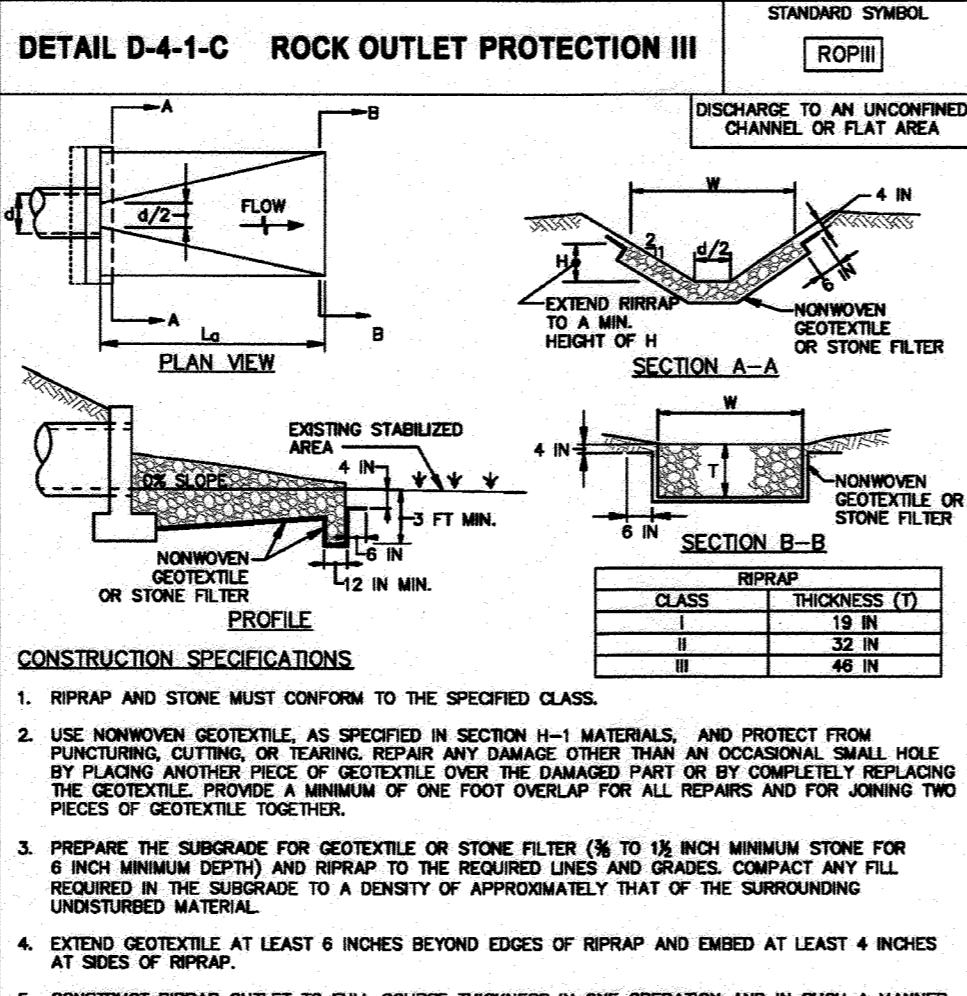
CONSTRUCTION SPECIFICATIONS
1. USE A WASH RACK DESIGNED AND CONSTRUCTED/MANUFACTURED FOR THE ANTICIPATED TRAFFIC LOADS. CONCRETE, STEEL, OR OTHER MATERIALS ARE ACCEPTABLE. PRE-FABRICATED UNITS SUCH AS CATTLE GRASSES ARE ACCEPTABLE. USE MINIMUM DIMENSION OF 6 FEET X 10 FEET. ORIENT DIRECTION OF RISERS AS SHOWN ON THE DETAIL.
2. INSTALL PRIOR TO, ALONG SIDE OF, OR AS PART OF THE SOE.
3. DIRECT WASH WATER TO AN APPROVED SEDIMENT TRAPPING DEVICE.
4. KEEP AREA UNDER WASH RACK FREE OF ACCUMULATED SEDIMENT. IF DAMAGED, REPAIR OR REPLACE WASH RACK.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011. MARYLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION.



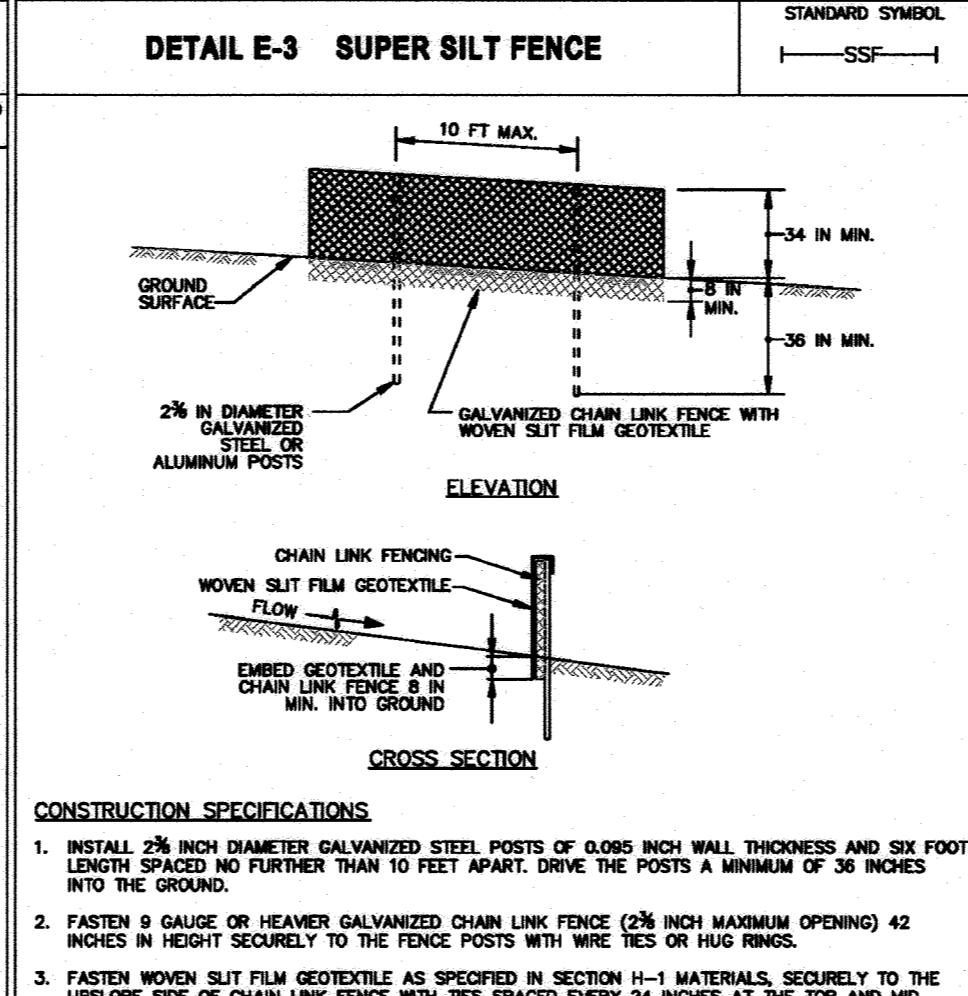
CONSTRUCTION SPECIFICATIONS
1. USE MINIMUM WIDTH OF 10 FEET TO ALLOW FOR VEHICULAR PASSAGE.
2. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE EARTH MOUND PRIOR TO PLACING STONE.
3. PLACE 2 TO 3 INCH STONE OR EQUIVALENT RECYCLED CONCRETE AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE MOUNTABLE BERM.
4. MAINTAIN LINE, GRADE, AND CROSS SECTION. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN SPECIFIED DIMENSIONS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011. MARYLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION.



CONSTRUCTION SPECIFICATIONS
1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
2. USE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (6 TO 18 INCH MINIMUM STONE FOR 6 INCH MINIMUM RIPRAP) TO THE REQUIRED LINE AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.
5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPOSING MATERIALS BEHIND THE RIPRAP. THE RIPRAP SHOULD BE PLACED IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENEOUS WITH THE SMALLER STONES AND SPACING PLACING THE LARGER STONES PLACING RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE RIPRAP SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
7. CONSTRUCT RIPRAP WITH ONE SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF SEDIMENT. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND RIPRAP DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011. MARYLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION.



CONSTRUCTION SPECIFICATIONS
1. INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 6003 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. EMBED THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 6 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE NAILS AND RINGS.
3. FASTEN WOVEN Silt FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH THIS SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 18 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPBEAT AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USE MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCE AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011. MARYLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

PURPOSE - TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS. CONDITIONS WHERE PRACTICE APPLIES - EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

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

ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE SECTION 342 - CRITICAL AREA PLANTING. c. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY SUMMARY.

d. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 1000 SQUARE FEET (50 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.

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

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

c. KENTUCKY BLUEGRASS: FULL SUN MIXTURE FOR USE IN AREAS THAT RECEIVE INTENSIVE MAINTENANCE. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

d. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE FOR USE IN FULL SUN AREAS WHERE 8-22 INCH PERENNIAL ESTABLISHMENT IS NECESSARY. WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MAINTENANCE, CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

e. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MAINTENANCE IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 50 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 5 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.

f. KENTUCKY BLUEGRASS/FESCUE: SHADE MIXTURE FOR USE IN AREAS WITH SHADES IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1 1/2 TO 3 POUNDS PER 1000 SQUARE FEET.

NOTES: SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, ACRONYM NEMO #77, 'TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND' CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE.

3. IDEAL TIMES FOR SEEDING FOR TURF GRASSES WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1. HARDNESS ZONES: 5B (CENTRAL MD); MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 6B); SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 7A, 7B).

4. TALL GRASSES TO BE SEEDING BY SPRING OR IN WETTER WEATHER. USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR PERMANENT SEEDING.

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

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT.
2. NOTIFY MISS UTILITY (1-800-297-7777) 48 HOURS BEFORE STARTING WORK. NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-1884) AT LEAST 24 HOURS BEFORE STARTING ANY WORK AND NOTIFY THE BALTIMORE GAS AND ELECTRIC CO. (410-291-5739) FIVE (5) WORKING DAYS PRIOR TO STARTING WORK (3 DAYS).
3. CLEAR AND GRUB SITE FOR INSTALLATION OF PERMETER CONTROLS. (3 DAYS).
4. WITH PRIOR APPROVAL OF HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, INSTALL ALL PERMETER CONTROLS: STABILIZED CONSTRUCTION ENTRANCE (SCE) WITH MOUNTABLE BERM (MB) & WASH RACK AT ENTRANCE, SUPER SILT FENCE (SSF), SILT FENCE (SF), (1 WEEK).
5. UPON RECEIVING PERMISSION FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB SITE. (1 WEEK).
6. GRADING OPERATIONS MAY BEGIN. (3 WEEKS).
7. AS GRADING OPERATIONS ALLOW, UTILITY AND BUILDING CONSTRUCTION MAY BEGIN AT THIS TIME. (8 MONTHS).
8. STORM DRAIN & STORMWATER MANAGEMENT CONSTRUCTION: WHERE SYSTEMS COINCIDE CONSTRUCTION OF BOTH SHALL BE COMPLETED SIMULTANEOUSLY. UPON COMPLETION, CONTRACTOR SHALL STABILIZE THE STORMWATER MANAGEMENT AREAS IMMEDIATELY. INSTALL INLET PROTECTION AND WRAP THE VOLUME AREA WITH SILT FENCE TO PREVENT SEDIMENT FINES FROM ENTERING THE MICRO-BIOTREATMENT. (3 WEEKS).
9. UPON COMPLETION OF UTILITY CONSTRUCTION AND ROAD GRADING TO SUB-GRADE, INSTALL STONE BASE AND CURB & GUTTER. (3 WEEKS).
10. MAINTAIN ROAD IMPROVEMENTS MAY BEGIN AT THIS TIME. CONTRACTOR TO STABILIZE ALL WORK IN ACCORDANCE WITH THE DAILY STABILIZATION NOTE AS SHOWN ON PLAN VIEW (SHEET 4).
11. COMPLETE FINAL GRADING AND BUILDING CONSTRUCTION, INSTALL SIDEWALKS, LIGHTING AND LANDSCAPING. (2 WEEKS).
12. STABILIZED ALL DISTURBED AREAS IN ACCORDANCE WITH THE STANDARD STABILIZATION NOTES 'A' AND 'B' SHOWN ON THIS SHEET. (2 DAYS).
13. FOLLOWING SUCCESSFUL STABILIZATION (I.E., FULLY-ESTABLISHED VEGETATION OR PAVING) OF ALL DISTURBED AREAS, OBTAIN PERMISSION FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTOR TO REMOVE ALL REMAINING SEDIMENT & EROSION CONTROL DEVICES AND THEN STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS WITH PERMANENT SEEDING. (1 WEEK).

SEQUENCE NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT & EROSION CONTROL MEASURES SHOWN HEREIN AFTER EACH RAINFALL EVENT AND ON A DAILY BASIS REMOVE SEDIMENT FROM THE SEDIMENT CONTROL DEVICES AS NOTED IN THE CONSTRUCTION SPECIFICATIONS ON THIS SHEET.

B-4-4 TEMPORARY STABILIZATION

PURPOSE TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS. TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS. CONDITIONS WHERE PRACTICE APPLIES EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

- 1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3) AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.9 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY table with columns: HARDNESS ZONE, SEED MIXTURE, NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING DEPTHS, FERTILIZER RATE (10-20-20), LIME RATE. Includes rows for BARLEY, OATS, and RYE.

PERMANENT SEEDING SUMMARY table with columns: HARDNESS ZONE, SEED MIXTURE, NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING DEPTHS, FERTILIZER RATE (10-20-20), LIME RATE. Includes row for TALL FESCUE.

- B. SOE: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).
1. GENERAL SPECIFICATIONS
a. CLASS OF TURFGRASS SOE MUST BE MARYLAND STATE CERTIFIED. SOE LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
b. SOE MUST BE MACHINE CUT AT A UNIFORM SOE THICKNESS OF 1/2 INCH, PLUS OR MINUS 1/8 INCH. AT THE TIME OF CUTTING, MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROWN PADS AND TORN OR UNDEEN ENDS WILL NOT BE ACCEPTABLE.
c. STANDARD SIZE SECTIONS OF SOE MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
d. SOE MUST NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
e. SOE MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOE NOT TRANSPORTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.
2. SOE INSTALLATION
a. DURING PERIOD OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOE.
b. LAY THE FIRST ROW OF SOE IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOE IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT WIND WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
c. WHEREVER POSSIBLE, LAY SOE WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERED JOINTS. ROLL AND TAMPS THE SOE IMMEDIATELY FOLLOWING THE ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOE PAD AND SOE SURFACE BELOW THE SOE ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOE WITHIN EIGHT HOURS.
d. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER MUST DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOISTURE TO A DEPTH OF 2 TO 4 INCHES. WATER SHOULD BE APPLIED TO PREVENT WILTING.
e. AFTER THE FIRST WEEK, SOE WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
f. DO NOT MOW UNTIL THE SOE IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

APPROVED: DEPARTMENT OF PLANNING AND ZONING. Chief, Development Engineering Division. Date: 5/9/22.

HOWARD SCD SIGNATURE BLOCK. This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District. Signature: Kenneth W. Snodgrass. Date: 05/02/22.

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. License No.: 30866. Signature: Kenneth W. Snodgrass. Date: 05/02/22.

DEVELOPER/BUILDER CERTIFICATION: I/WE HEREBY CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.12.4 OF THE HOWARD COUNTY ENGINEERING UNDER THE LAWS OF THE STATE OF MARYLAND. Signature: Kenneth W. Snodgrass. Date: 05/02/22.

PURPOSE: THIS SITE PLAN HAS BEEN REVISED DUE TO ARCHITECTURAL CHANGES INCLUDING REMOVAL OF INTERIOR COURTYARD & ADJUSTMENT OF FLOOR ELEVATION. THERE ARE ASSOCIATED CHANGES TO THE STORM DRAIN SYSTEM, GRADES, ADA ACCESSIBLE ENTRANCE, AND WALKWAYS. AN EMERGENCY EGRESS HAS BEEN ADDED TO THE NORTH END OF THE CHURCH ADDITION.

OWNER/DEVELOPER: LOCUST UNITED METHODIST CHURCH. 6851 MARTIN ROAD, COLUMBIA, MD 21044. ZONE: R-SC. Tax Map: 41, GRID: 6. ELECTION DISTRICT: 5. Parcel: 216, 283 & 283 HOWARD COUNTY, MARYLAND.

PROJECT NO.: 4073. DESIGNED BY: JAM. DRAWN BY: JAM. CHECKED BY: KWS. SCALE: AS SHOWN. DATE: MARCH 23, 2020. SHEET: 7 OF 14. SDP-18-047.

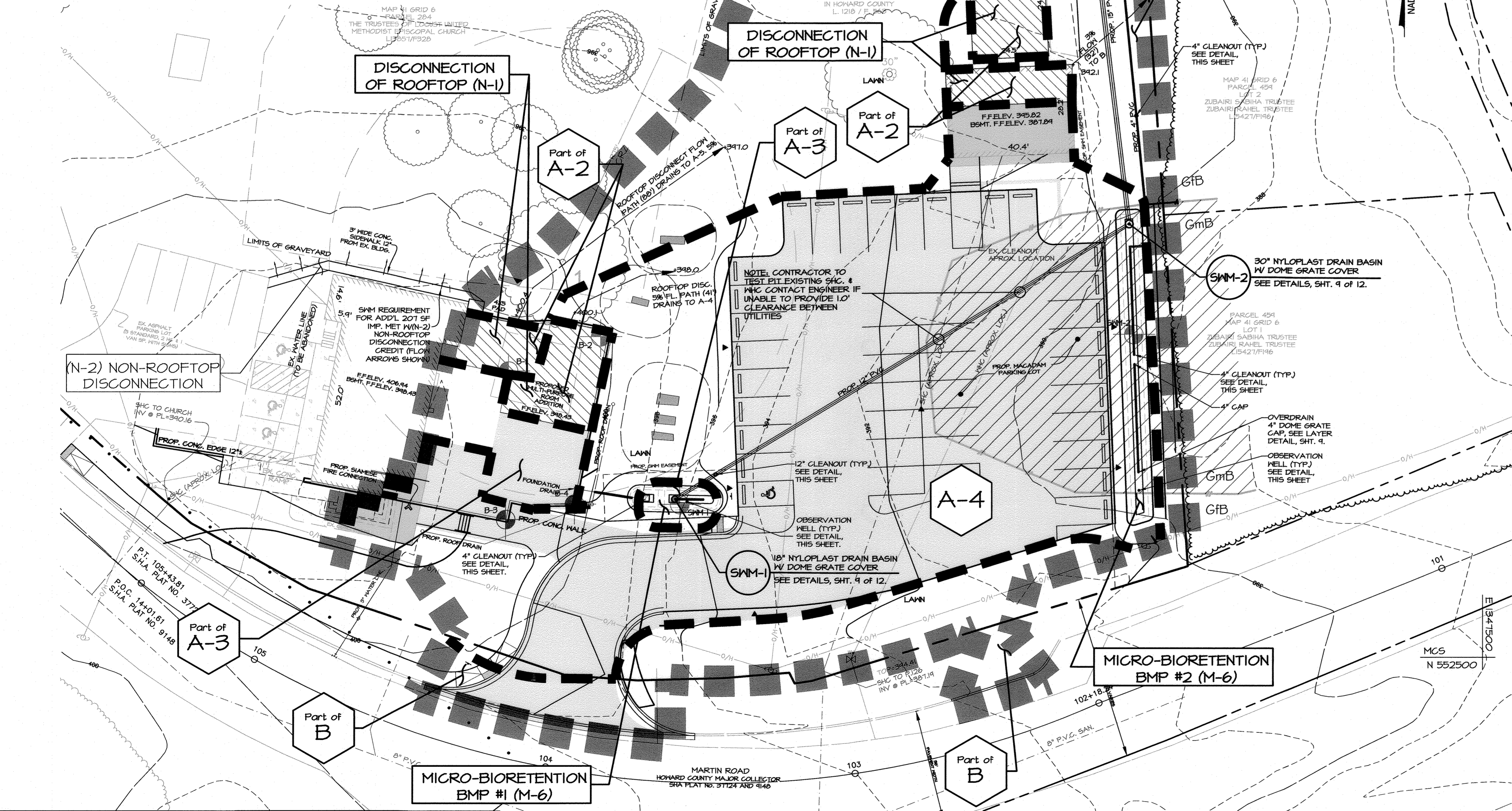
SEDIMENT & EROSION CONTROL DETAILS. LOCUST UNITED METHODIST CHURCH. 6851 MARTIN ROAD, COLUMBIA, MD 21044. ZONE: R-SC. CIVIL AND ENVIRONMENTAL ENGINEERS, SURVEYORS, LANDSCAPE ARCHITECTS & LAND PLANNERS. DStThaler & Assoc., LLC. 7115 AMBASSADOR ROAD, P.O. BOX 47428, BALTIMORE, MARYLAND 21244-7428. PHONE: 410-444-3641.

Table with 2 columns: NO. REVISION, DATE. Row 1: REVISED SITE DEVELOPMENT PLAN, 4/25/22. Row 2: NO. REVISION, DATE.

Vertical text on the right edge of the page, likely a project or document identifier.

PROPOSED DRAINAGE AREA SUMMARY TABLE						
DRAINAGE AREA	FACILITY	DRAINAGE AREA TOTAL (sf)	IMPERVIOUS AREA (sf)	QUANTITY	REQUIRED	PROVIDED
DRAINAGE AREA A-2 RATIONAL C = 0.96	DISCONNECTION (N-1)	2,610	2,610	Pe (IN)	0.20	0.01
				ESDv (CF)	341	131
				Rev (CF)	74	70
DRAINAGE AREA A-3 RATIONAL C = 0.75	BMP #1 (M-6)	1,741	1,411	Pe (IN)	0.11	0.09
				ESDv (CF)	127	177
				Rev (CF)	24	0
DRAINAGE AREA A-4 RATIONAL C = 0.65	BMP #2 (M-6)	26,543	18,700	Pe (IN)	1.47	0.37
				ESDv (CF)	2,640	736
				Rev (CF)	532	122
DRAINAGE AREA A-5 RATIONAL C = 0.20	BMP #3 (M-6)	12,886	0	Pe (IN)	0.00	1.21
				ESDv (CF)	0	2,519
				Rev (CF)	0	492
DRAINAGE AREA B RATIONAL C = 0.24	BYPASS	14,560	745	Pe (IN)	0.06	0.00
				ESDv (CF)	121	0
				Rev (CF)	23	0
207 SF ADD'L SIDEWALK	NRTD (N-2)			ESDv (CF)	29	16
				Pe (IN)	1.80	1.80
				ESDv (CF)	3,485	3,562
TOTAL		58,346	23,516	Pe (IN)	647	684
				ESDv (CF)		
				Rev (CF)		

SOILS TABLE				
SYMBOL	SOIL NAME	CLASS	K FACTOR	HIGHLY ERODIBLE
GfB	GLADSTONE-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	A	0.28	NO
GmB	GLENVILLE SILT LOAM 3 TO 8 PERCENT SLOPES	C	0.43	YES



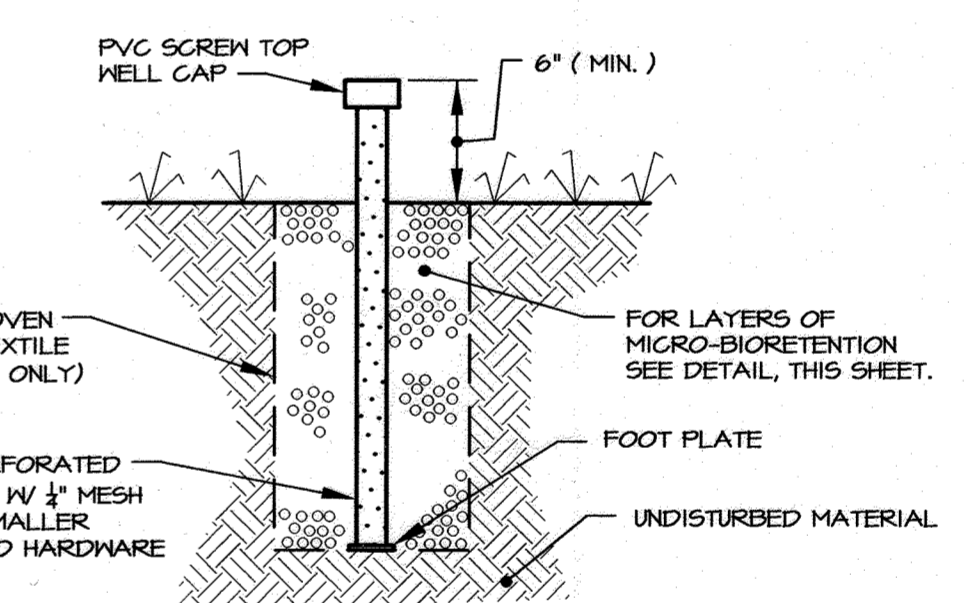
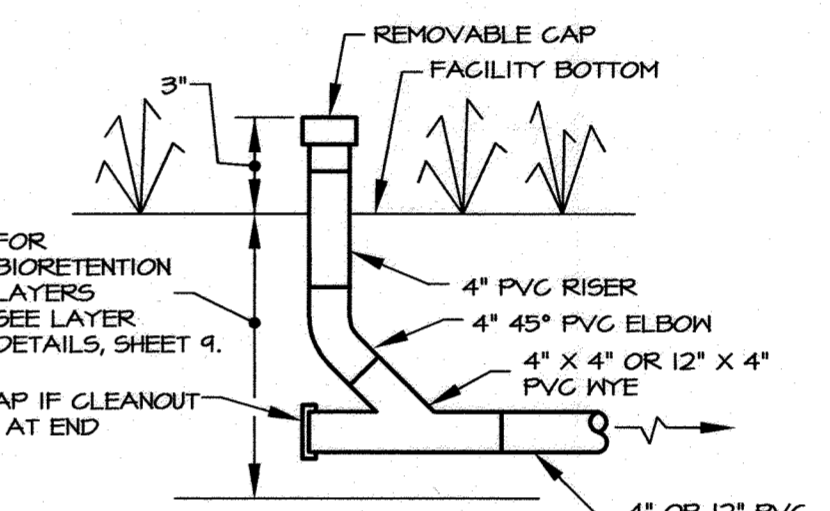
### SWM LEGEND

- LIMIT OF STUDY (ESD ANALYSIS)
- BMP DRAINAGE AREA LIMITS
- DRAINAGE AREA DESIGNATION
- DP DESIGN POINT DESIGNATION
- 'A' SOIL
- 'C' SOIL
- EX. IMPERVIOUS
- PROP. IMPERVIOUS
- DISCONNECTION OF ROOFTOP RUNOFF

### PLAN LEGEND

- BOUNDARY LINE
- LOT LINE
- EASEMENT
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- EXISTING TREE LINE
- PROPOSED TREE LINE
- EPHEMERAL STREAM
- SOILS
- ZONING DISTRICT LINE
- EXISTING WATER LINE
- EXISTING SANITARY LINE
- EXISTING OVERHEAD POWER LINE
- ENVIRONMENTAL STUDY AREA
- SPECIMEN TREE W/ CRITICAL ROOT ZONE
- EX. GRAVE SITE WITH 10' SETBACK (LOCATED WITH GROUND PENETRATING RADAR)
- SOIL BORING (FOR BORING PROFILES, SEE SHEET 12 OF 12)

MINIMUM  $t_c = 0.1$  HOURS FOR ALL DRAINAGE AREAS.



- EACH OBSERVATION WELL / CLEANOUT SHALL INCLUDE THE FOLLOWING:
- FOR AN UNDERGROUND FLUSH MOUNTED OBSERVATION WELL/CLEANOUT, PROVIDE A TUBE WITH AN INSIDE DIAMETER OF AT LEAST 4 INCHES.
  - THE TUBE SHALL HAVE A FACTORY ATTACHED CAST IRON OR HIGH IMPACT PLASTIC COLLAR WITH RIBS TO PREVENT ROTATION WHEN REMOVING SCREEN TOP LID. THE SCREEN TOP LID SHALL BE CAST IRON OR HIGH IMPACT PLASTIC THAT WILL WITHSTAND ULTRA-VIOLET RAYS.

**PURPOSE:**  
THIS SITE PLAN HAS BEEN REVISED DUE TO ARCHITECTURAL CHANGES INCLUDING REMOVAL OF INTERIOR COURTYARD & ADJUSTMENT OF FLOOR ELEVATION. THERE ARE ASSOCIATED CHANGES TO THE STORM DRAIN SYSTEM, GRADES, ADA ACCESSIBLE ENTRANCE, AND WALKWAYS. AN EMERGENCY EGRESS HAS BEEN ADDED TO THE NORTH END OF THE CHURCH ADDITION.

NO.	REVISION	DATE
1	REVISED SITE DEVELOPMENT PLAN	4/25/22

**STORMWATER MANAGEMENT  
SOILS AND DRAINAGE AREA MAP**

**LOCUST UNITED METHODIST CHURCH**

6851 MARTIN ROAD  
COLUMBIA, MD 21044  
ZONE: R-SC

TAX MAP: 41, GRID: 6  
ELECTION DISTRICT: 5

PARCEL: 216, 283 & 283  
HOWARD COUNTY, MARYLAND

**DSThaler & ASSOC., LLC**

CIVIL AND ENVIRONMENTAL ENGINEERS, SURVEYORS,  
LANDSCAPE ARCHITECTS & LAND PLANNERS

www.dsthaler.com

7115 AMBASSADOR ROAD, P.O. BOX 41428  
BALTIMORE, MARYLAND 21244-1428  
PHONE: 410-444-3647

OWNER/DEVELOPER  
LOCUST UNITED METHODIST CHURCH  
6851 MARTIN ROAD  
COLUMBIA, MD 21044

PROJECT NO.: 4073  
DESIGNED BY: KNK  
DRAWN BY: KNK  
CHECKED BY: KWS  
SCALE: AS SHOWN  
DATE: MARCH 23, 2020

SHEET: 8 OF 14  
SDP-18-047

APPROVED: DEPARTMENT OF PLANNING AND ZONING

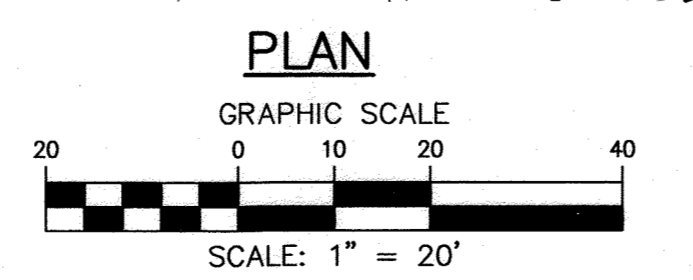
*[Signature]* 5/4/22  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 5/24/22  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 5/25/22  
DIRECTOR

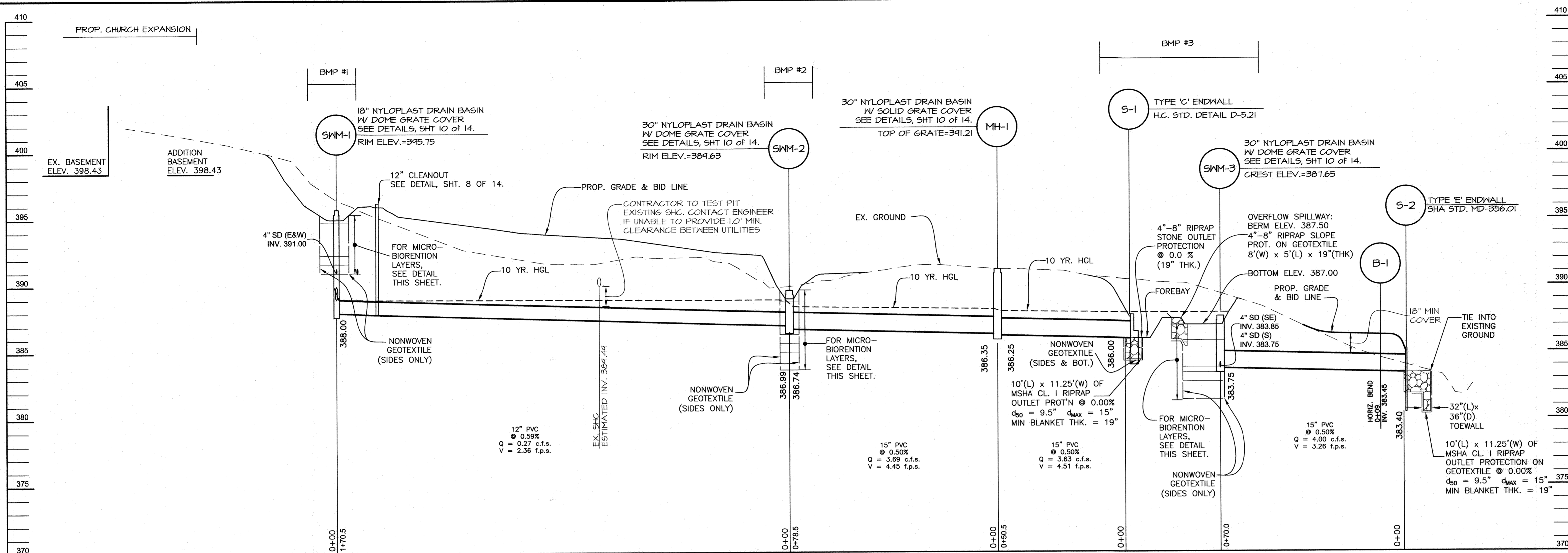
PROFESSIONAL CERTIFICATION:  
I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER OF THE STATE OF MARYLAND, LICENSE NO. 30860, EXPIRATION DATE: 01/12/23

*[Signature]* 4-25-2022  
KENNETH W. SNODGRASS, PROFESSIONAL ENGINEER



File name: U:\Locust United Methodist Church\Plan\Planning\Final\SDP\_Review\SDP-SWM & DA\_Plan.dwg Layout: Layout1 Apr 25, 2022 - 2:12pm MDT

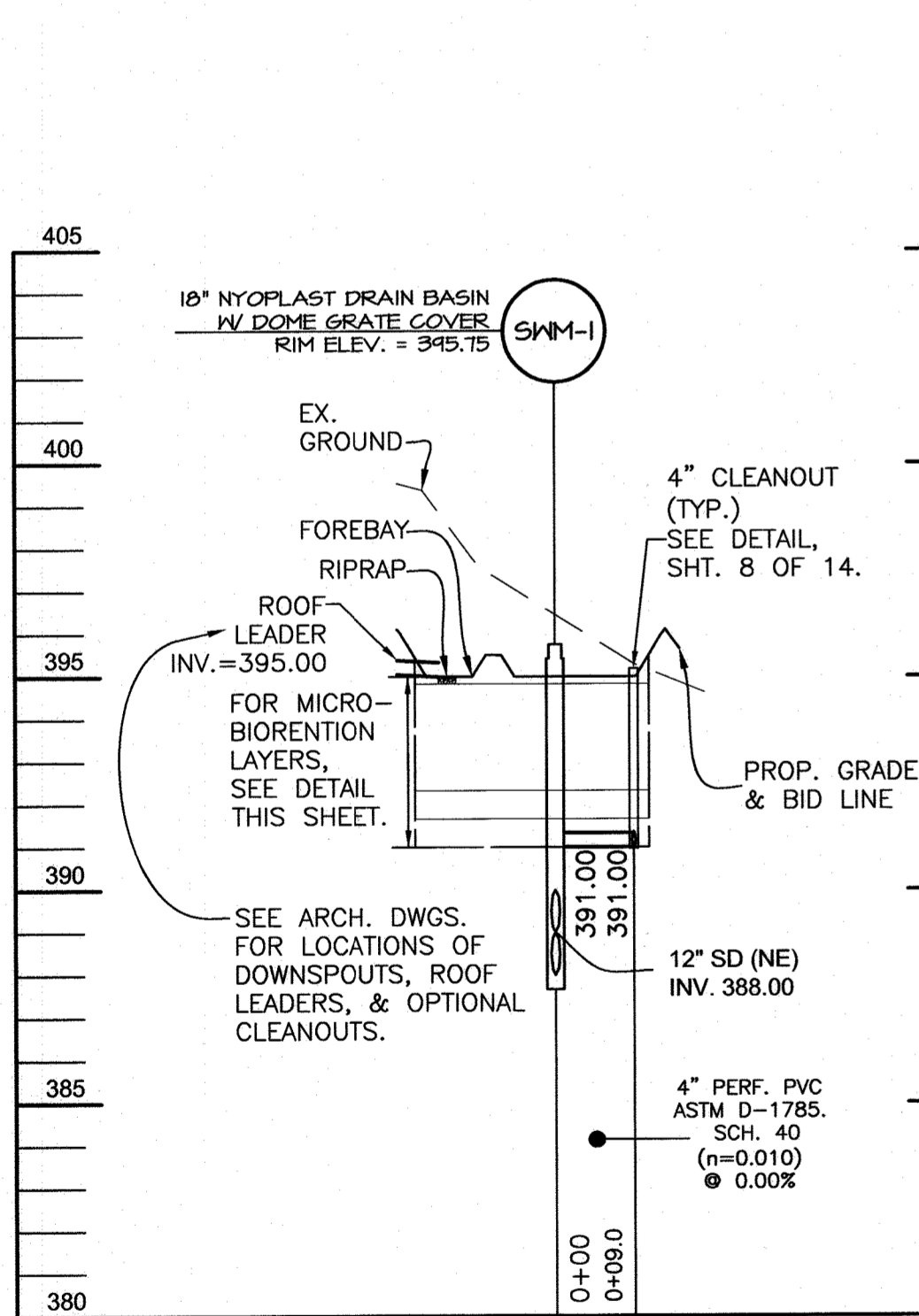




STORM DRAIN PRINCIPAL SPILLWAY PROFILE

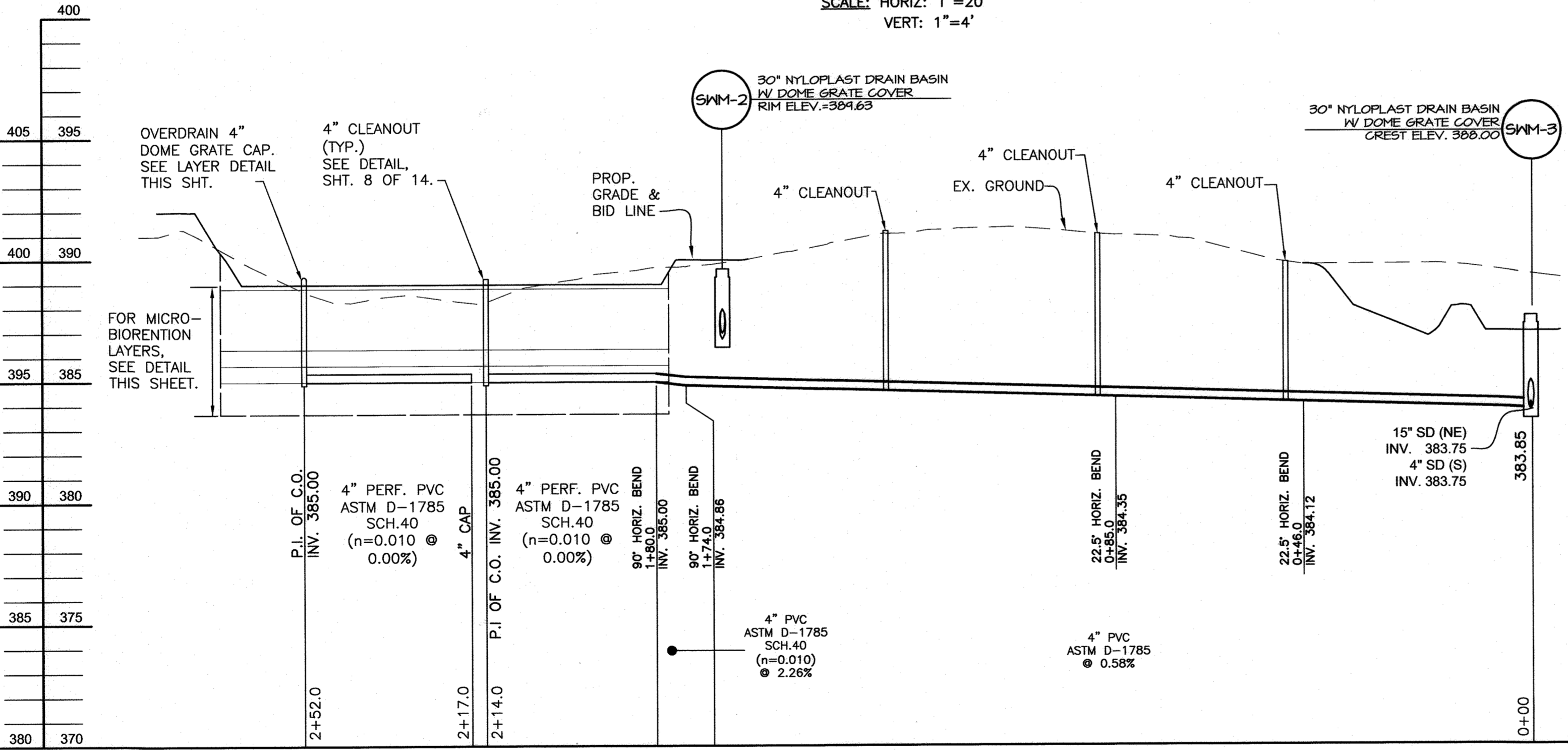
SCALE: HORIZ: 1"=20'  
VERT: 1"=4'

PIPE SCHEDULE (PRIVATE)		
SIZE	CLASS	LENGTH
4"	PERF. PVC	177
4"	SOLID PVC SCH. 40	232
12"	SOLID PVC SCH. 40	170
15"	SOLID PVC SCH. 40	195



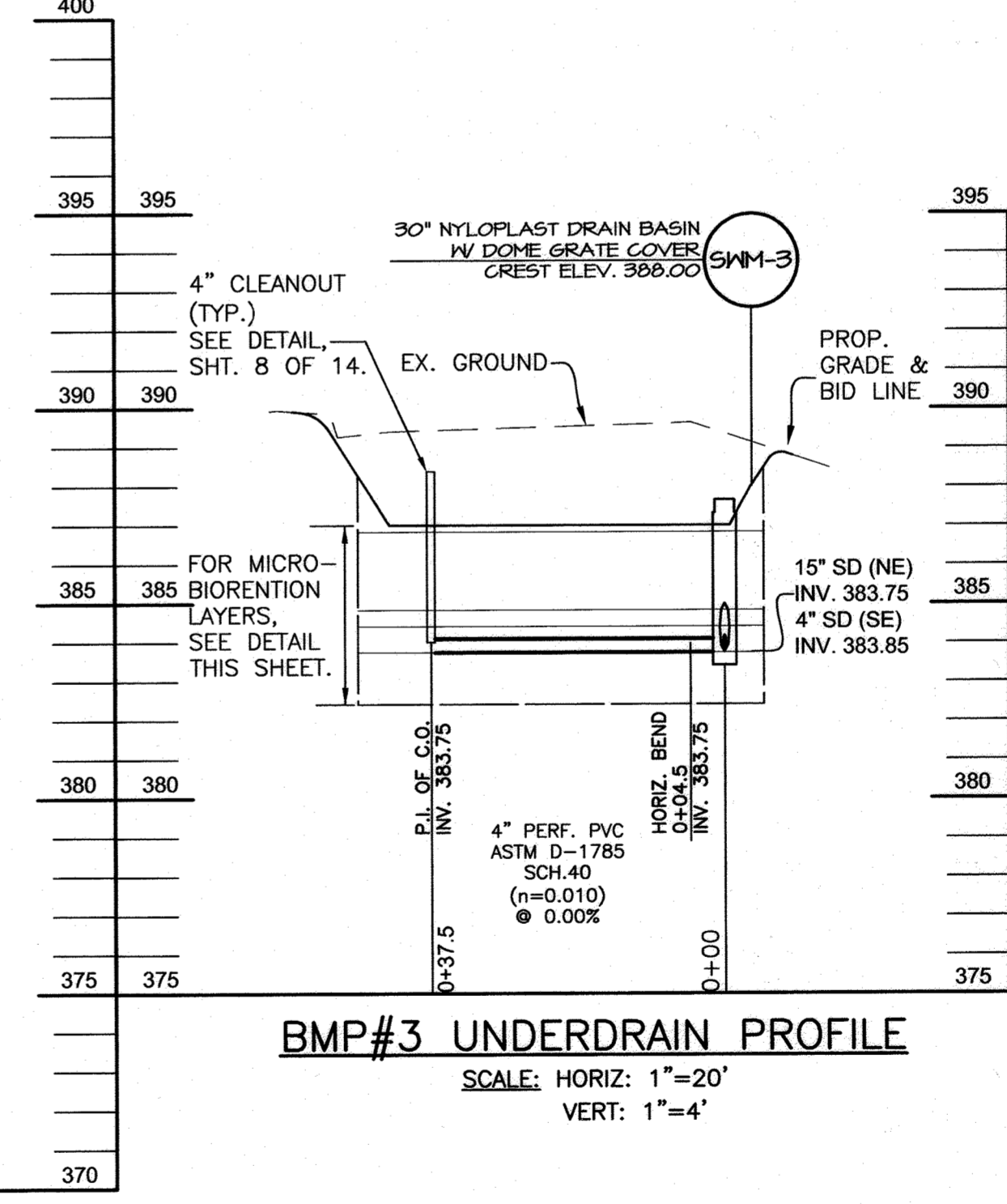
BMP#1 UNDERDRAIN PROFILE

SCALE: HORIZ: 1"=20'  
VERT: 1"=4'



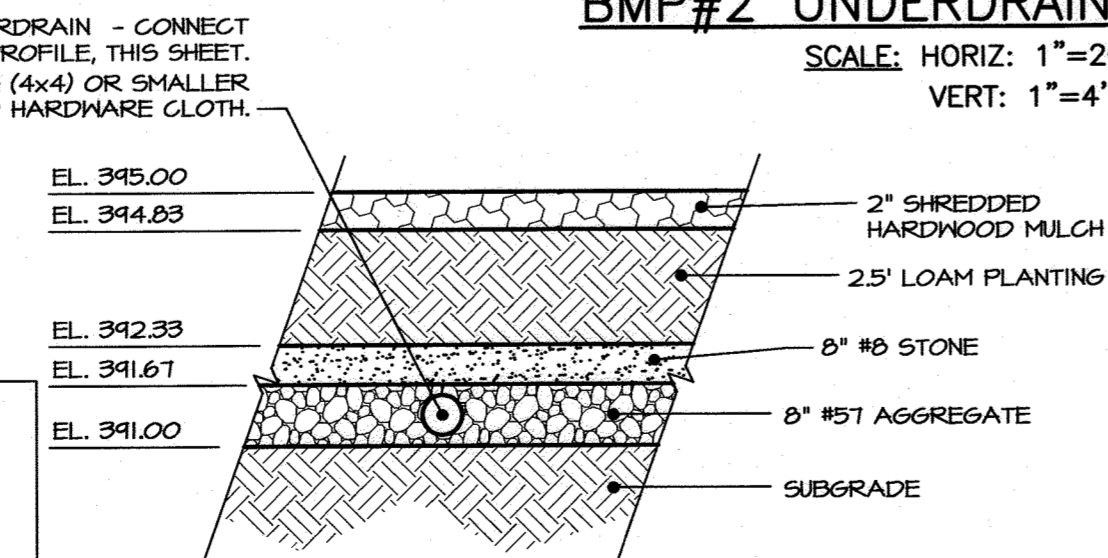
BMP#2 UNDERDRAIN PROFILE

SCALE: HORIZ: 1"=20'  
VERT: 1"=4'

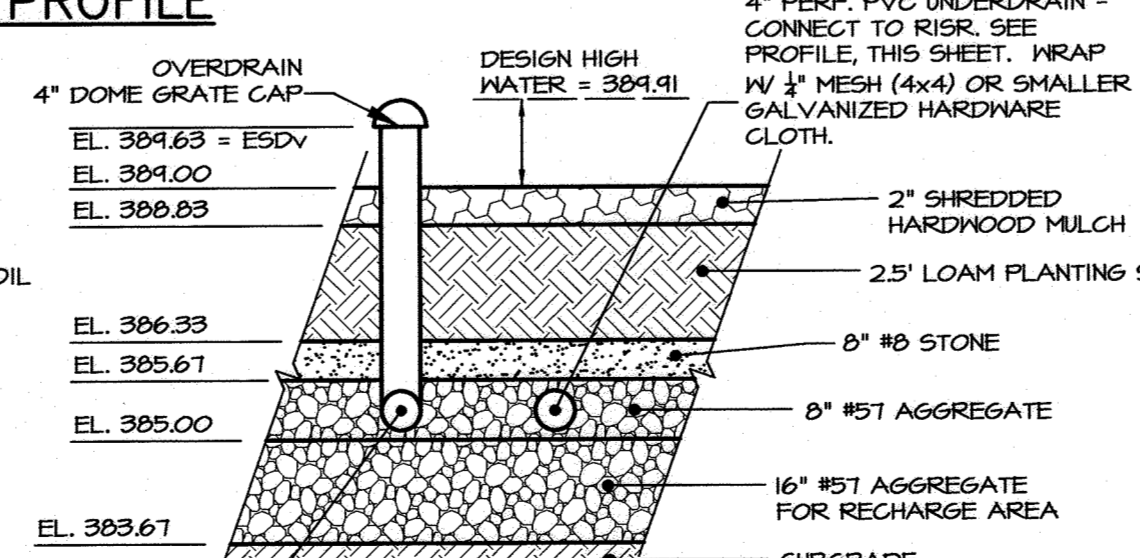


BMP#3 UNDERDRAIN PROFILE

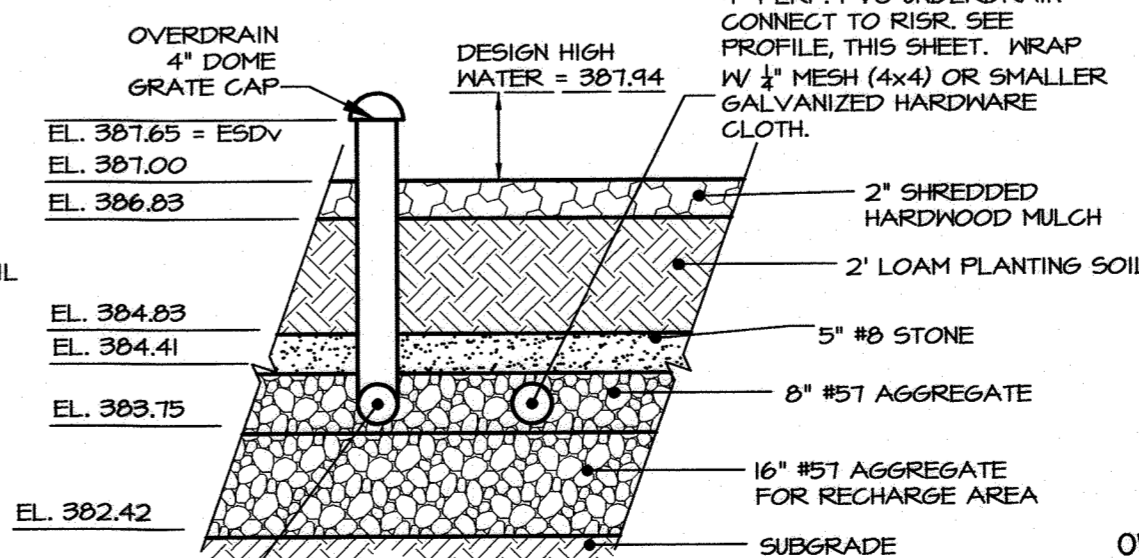
SCALE: HORIZ: 1"=20'  
VERT: 1"=4'



BMP#1 LAYER DETAIL



BMP#2 LAYER DETAIL



BMP#3 LAYER DETAIL

STRUCTURE SCHEDULE (PRIVATE)						
NO.	TYPE	INV. IN	INV. OUT	RIM ELEV.	COORDINATES	DETAIL
SWM-1	18" NYLOPLAST DRAIN BASIN	389.00	388.00	395.75	N 552,548.48 E 1,347,248.08	NYLOPLAST DWG. NO. 7001-110-397
SWM-2	30" NYLOPLAST DRAIN BASIN	387.09	386.84	389.63	N 552,636.56 E 1,347,386.48	NYLOPLAST DWG. NO. 7001-110-397
SWM-3	30" NYLOPLAST DRAIN BASIN	383.85	383.75	387.65	N 552,773.05 E 1,347,329.95	NYLOPLAST DWG. NO. 7001-110-397
MH-1	30" NYLOPLAST DRAIN BASIN	386.38	386.28	391.21	N 552,716.42 E 1,347,376.94	NYLOPLAST DWG. NO. 7001-110-298
S-1	TYPE 'C' ENDWALL	-	-	-	N 552,755.18 E 1,347,347.75	H.C. STD. D-5.21
S-2	TYPE 'E' ENDWALL	-	-	-	N 552,836.09 E 1,347,369.82	SHA STD. MD-356.01
B-1	15" PVC 22.5" ELBOW	383.45	383.45	-	N 552,833.23 E 1,347,359.86	-

**PURPOSE:**  
THIS SITE PLAN HAS BEEN REVISED DUE TO ARCHITECTURAL CHANGES INCLUDING REMOVAL OF INTERIOR COURTYARD & ADJUSTMENT OF FLOOR ELEVATION. THERE ARE ASSOCIATED CHANGES TO THE STORM DRAIN SYSTEM, GRADES, ADA ACCESSIBLE ENTRANCE, AND WALKWAYS. AN EMERGENCY EGRESS HAS BEEN ADDED TO THE NORTH END OF THE CHURCH ADDITION.

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature]  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION & DATE 5/2/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT & DATE 5/25/22  
 DIRECTOR

PROFESSIONAL CERTIFICATION:  
 I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 50880, EXPIRATION DATE: 01/12/23  
 [Signature]  
 KENNETH W. SNOGRASS  
 PROFESSIONAL ENGINEER  
 STATE OF MARYLAND  
 LICENSE NO. 50880  
 EXPIRES 01-12-23

NO.	REVISION	DATE

**STORMWATER PROFILES, DETAILS & STRUCTURE SCHEDULE**  
**LOCUST UNITED METHODIST CHURCH**  
 6851 MARTIN ROAD  
 COLUMBIA, MD 21044  
 TAX MAP: 41, GRID: 6  
 ELECTION DISTRICT: 5  
 PARCEL: 216, 283 & 283  
 HOWARD COUNTY, MARYLAND  
 ZONE: R-SC

**OWNER/DEVELOPER**  
 LOCUST UNITED METHODIST CHURCH  
 6851 MARTIN ROAD  
 COLUMBIA, MD 21044

**PROJECT NO.:** 4073  
**DESIGNED BY:** KNK  
**DRAWN BY:** KNK  
**CHECKED BY:** KWS  
**SCALE:** AS SHOWN  
**DATE:** MARCH 23, 2020

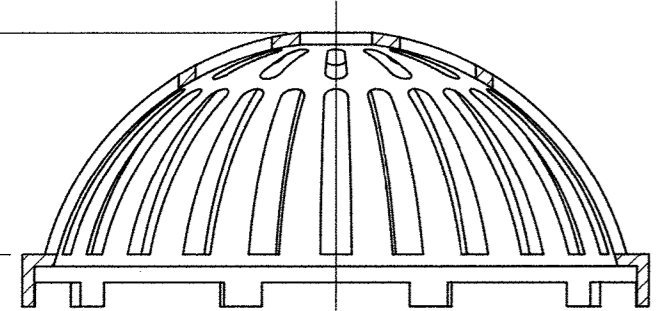
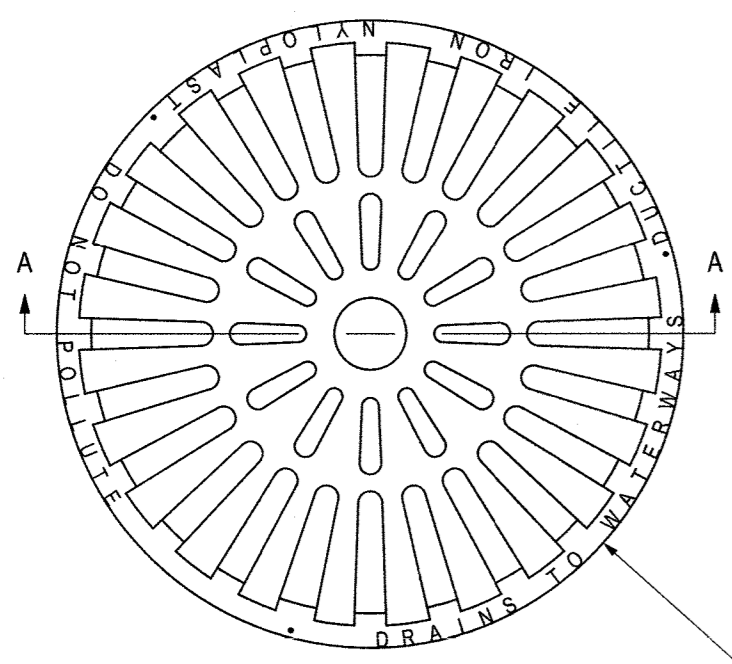
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 PHONE: 410-444-3641

SHEET: 9 OF 14  
 SDP-18-047

File name: U:\Locust United Methodist Church\Eng Planning\Task\SDP Revised\SDP-SWM Prof & Details.dwg Layout:PROFILES Apr 25, 2022 2:10pm m

1899CGD

APPROX. DRAIN AREA = 175.59 SQ IN  
APPROX. WEIGHT = 32.00 LBS



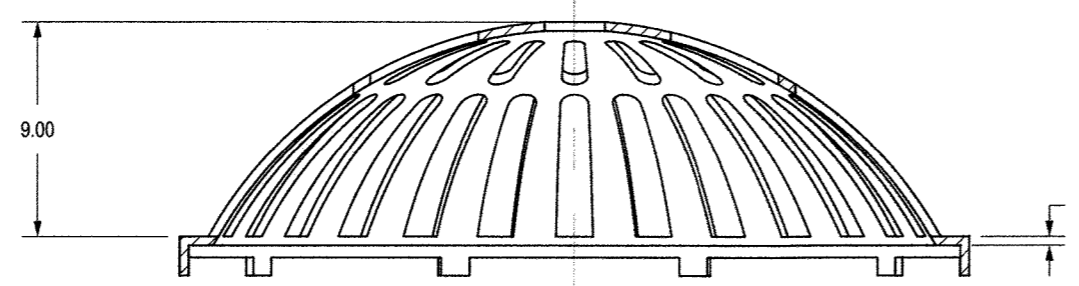
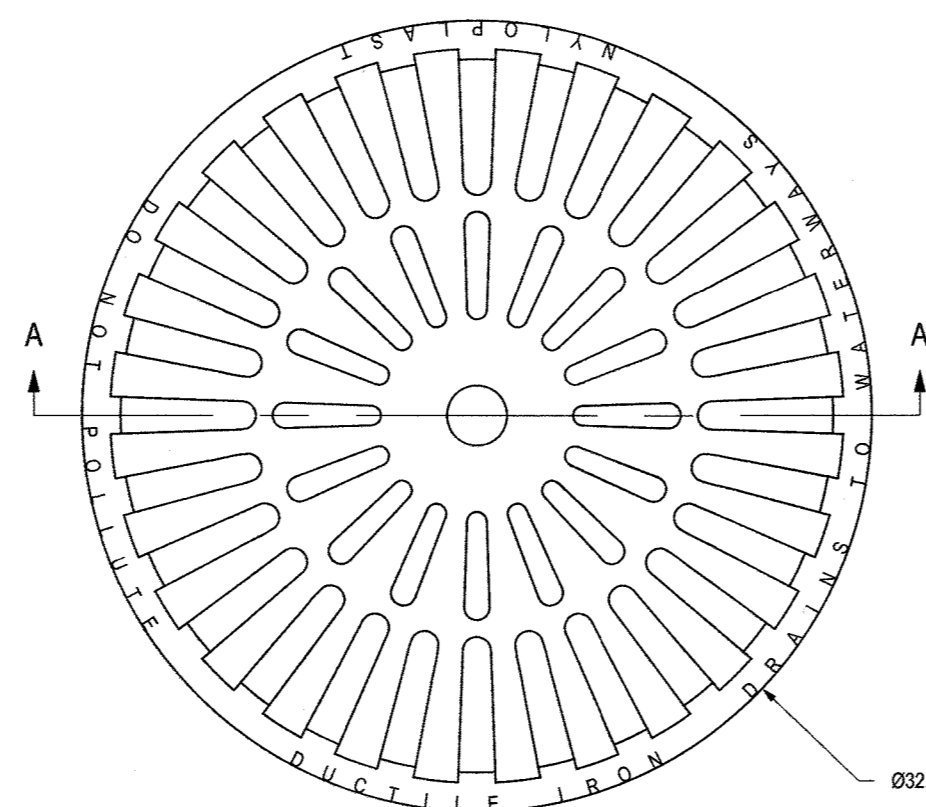
SECTION A-A

DIMENSIONS ARE FOR REFERENCE ONLY  
ACTUAL DIMENSIONS MAY VARY  
DIMENSIONS ARE IN INCHES  
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05  
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT  
LOOKING DEVICE AVAILABLE UPON REQUEST

Table with project information including title '18 IN DOME GRATE', DWG NO. 7001-110-215, and revision 'REV D'. Includes Nyloplast logo and contact information for 3130 Verona Ave, Buford, GA 30518.

3099CGD

APPROX. DRAIN AREA = 409.94 SQ IN  
APPROX. WEIGHT WITH FRAME = 93.00 LBS



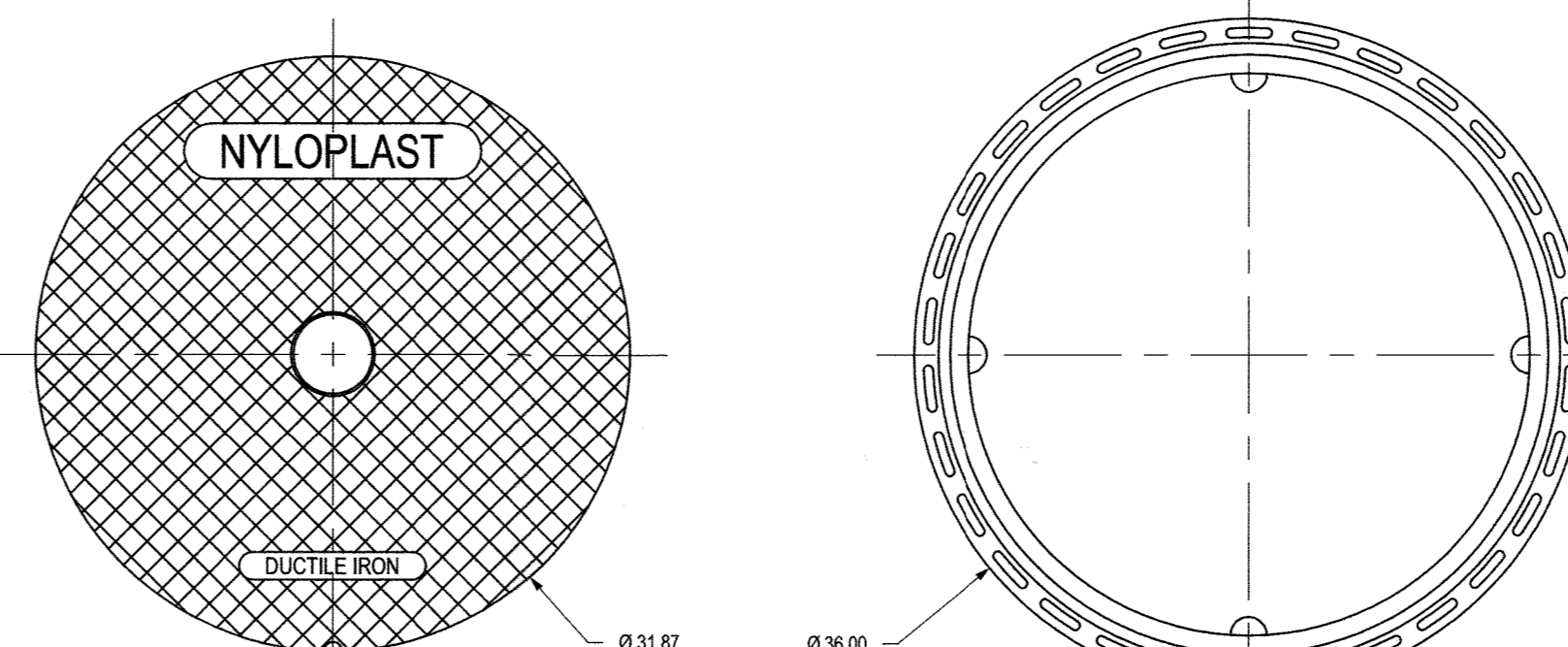
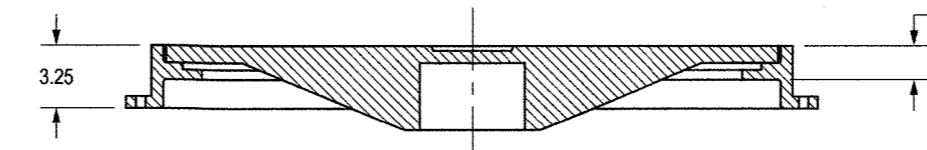
SECTION A-A

DIMENSIONS ARE FOR REFERENCE ONLY  
ACTUAL DIMENSIONS MAY VARY  
DIMENSIONS ARE IN INCHES  
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05  
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT  
LOOKING DEVICE AVAILABLE UPON REQUEST

Table with project information including title '30 IN DOME GRATE', DWG NO. 7001-110-223, and revision 'REV D'. Includes Nyloplast logo and contact information for 3130 Verona Ave, Buford, GA 30518.

3099CGC

APPROX. WEIGHT WITH FRAME = 262.50 LBS



DIMENSIONS ARE FOR REFERENCE ONLY  
ACTUAL DIMENSIONS MAY VARY  
DIMENSIONS ARE IN INCHES  
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05  
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT  
LOOKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-026

Table with project information including title '30 IN SOLID COVER ASSEMBLY - TYPE B', DWG NO. 7001-110-222, and revision 'REV C'. Includes Nyloplast logo and contact information for 3130 Verona Ave, Buford, GA 30518.

PIPE CONDUITS

ALL PIPES SHALL BE CIRCULAR IN CROSS SECTION.  
CONCRETE SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 414, MIX NO. 3.

- 1. MATERIALS - PVC PIPE SHALL BE PVC-1120 OR PVC-1220 CONFORMING TO ASTM D-1785 OR ASTM D-2241...
2. JOINTS AND CONNECTIONS TO ANTI-SEEP COLLARS SHALL BE COMPLETELY WATER-TIGHT.
3. BEDDING - THE PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED THROUGHOUT ITS ENTIRE LENGTH...
4. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL".

CONCRETE

CONCRETE SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 414, MIX NO. 3.

ROCK RIPRAP

ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 311.

GEOTEXTILE SHALL BE PLACED UNDER ALL RIPRAP AND SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 921.09, CLASS C.

CARE OF WATER DURING CONSTRUCTION

ALL WORK ON PERMANENT STRUCTURES SHALL BE CARRIED OUT IN AREAS FREE FROM WATER... THE MAIN COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED AT A MINIMUM SLOPE OF 0.5%.

STABILIZATION

ALL BORROW AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND LEFT IN A SLIGHTLY CONCAVE CONDITION... THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321.

EROSION AND SEDIMENT CONTROL

CONSTRUCTION OPERATIONS WILL BE CARRIED OUT IN SUCH A MANNER THAT EROSION WILL BE CONTROLLED AND WATER AND AIR POLLUTION MINIMIZED... GENERAL STORMWATER MANAGEMENT NOTES

1. STORMWATER MANAGEMENT HAS BEEN PROVIDED WITH THREE (3) MICRO-BIORETENTION FACILITIES... 2. ALL CONSTRUCTION SHALL MEET THE MD DEP. OF THE ENVIRONMENT'S CURRENT STORMWATER DESIGN MANUAL...

3. THE UTILITY LOCATIONS ARE APPROXIMATE... 4. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS...

5. CONTRACTOR SHALL NOTIFY MISS UTILITY 1-800-257-7777... 6. D.S. THALER & ASSOC., LLC IS NOT RESPONSIBLE FOR THE CONTRACTOR'S UTILIZATION OF MEN, MATERIALS, EQUIPMENT, OR SAFETY MEASURES...

7. THE BMPs MAY BE GRADED, HOWEVER, THE PLANTING SOIL IN THE BMPs SHALL NOT BE INSTALLED UNTIL ALL UPSTREAM AREAS HAVE BEEN STABILIZED... 8. THE STORMWATER MANAGEMENT MICRO-BIORETENTION BMPs FOR THIS PROJECT WILL BE PRIVATELY OWNED AND MAINTAINED.

B.4.C. SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDENS, LANDSCAPE INFILTRATION & INFILTRATION BERMS

- 1. MATERIAL SPECIFICATIONS
THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.4.C.1.

- 2. FILTERING MEDIA OR PLANTING SOIL
THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES...

THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES... THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:

- SOIL COMPONENT - LOAMY SAND OR SANDY LOAM (USDA SOIL TEXTURAL CLASSIFICATION)
• ORGANIC CONTENT - MINIMUM 10% BY DRY WEIGHT (ASTM D 2974)...

- 3. COMPACTION
IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF BIORETENTION PRACTICES AND THE REDUCED BACKFILL...

WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE...

WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN...

WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE...

WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN...

RECOMMENDED PLANT MATERIAL FOR MICRO-BIORETENTION PRACTICES CAN BE FOUND IN APPENDIX A, SECTION A.2.3.

- 5. PLANT INSTALLATION
COMPOST IS A BETTER ORGANIC MATERIAL SOURCE, IS LESS LIKELY TO FLOAT, AND SHOULD BE PLACED IN THE INVERT AND OTHER LOW AREAS...

ROOTSTOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE... THE PLANT ROOTBALL SHOULD BE PLANTED 50% DEEPER THAN THE FINAL GRADE SURFACE...

GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH... THE TOPSOIL SPECIFICATIONS PROVIDE ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING...

UNDERDRAINS SHOULD MEET THE FOLLOWING CRITERIA:
• PIPE - SHOULD BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTM F 758, TYPE PS 28, OR AASHTO-M-278) IN A GRAVEL LAYER...

• PERFORATIONS - IF PERFORATED PIPE IS USED, PERFORATIONS SHOULD BE 3/8" DIAMETER LOCATED 6" ON CENTER WITH A MAXIMUM OF FOUR HOLES PER ROW...

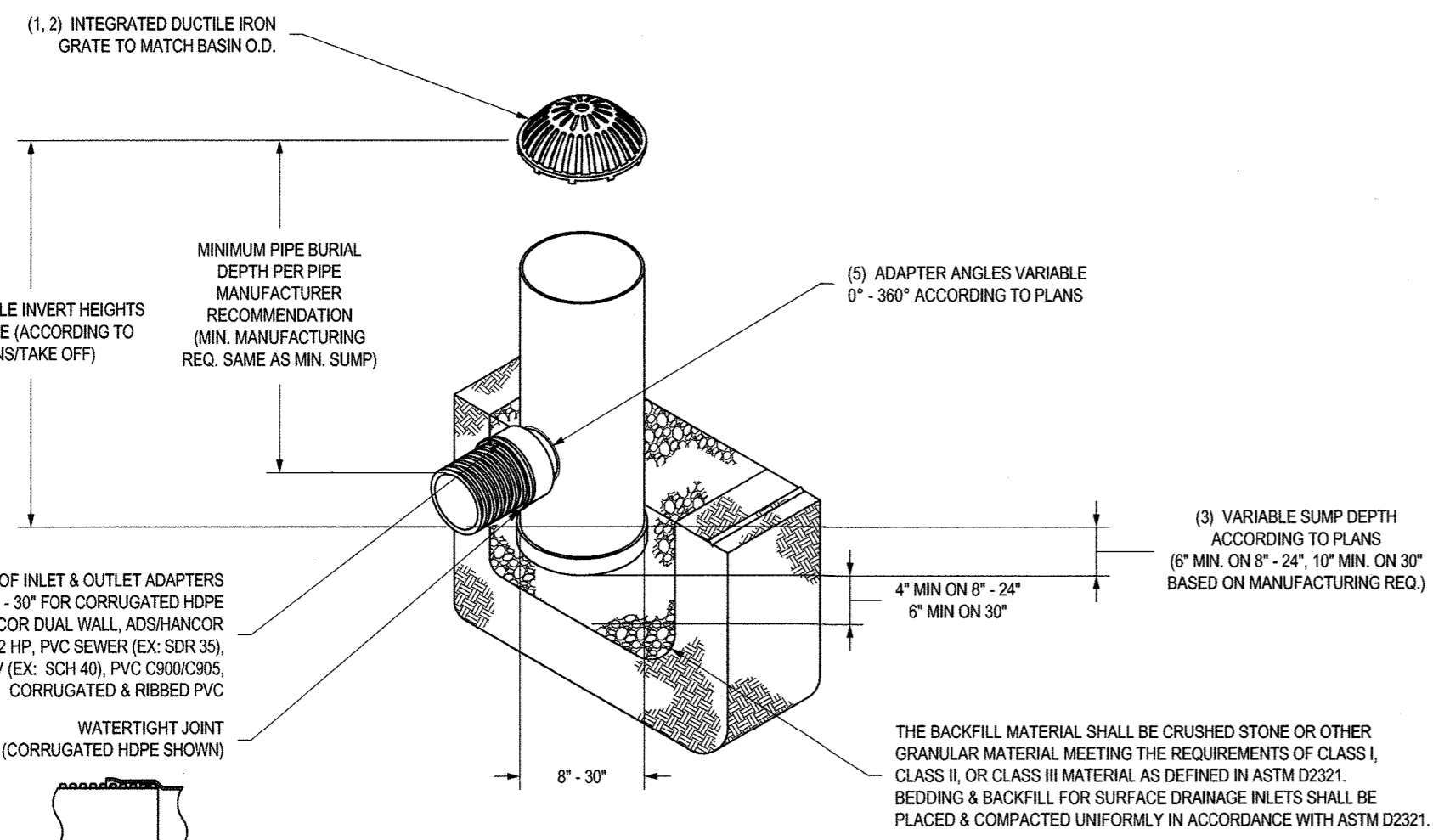
• GRAVEL - THE GRAVEL LAYER (NO. 57 STONE PREFERRED) SHALL BE AT LEAST 3" THICK ABOVE AND BELOW THE MAIN COLLECTOR PIPE...

• MISCELLANEOUS
THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.

STORMWATER FACILITY LANDSCAPING NOTES:
1. IF SPECIFIC PLANTS ARE NOT SURVIVING, THE PLANT TYPE SHOULD BE CHANGED TO BETTER SUITED SPECIES.

2. PLANT WATERING MAYBE NEEDED DURING PROLONGED PERIODS.

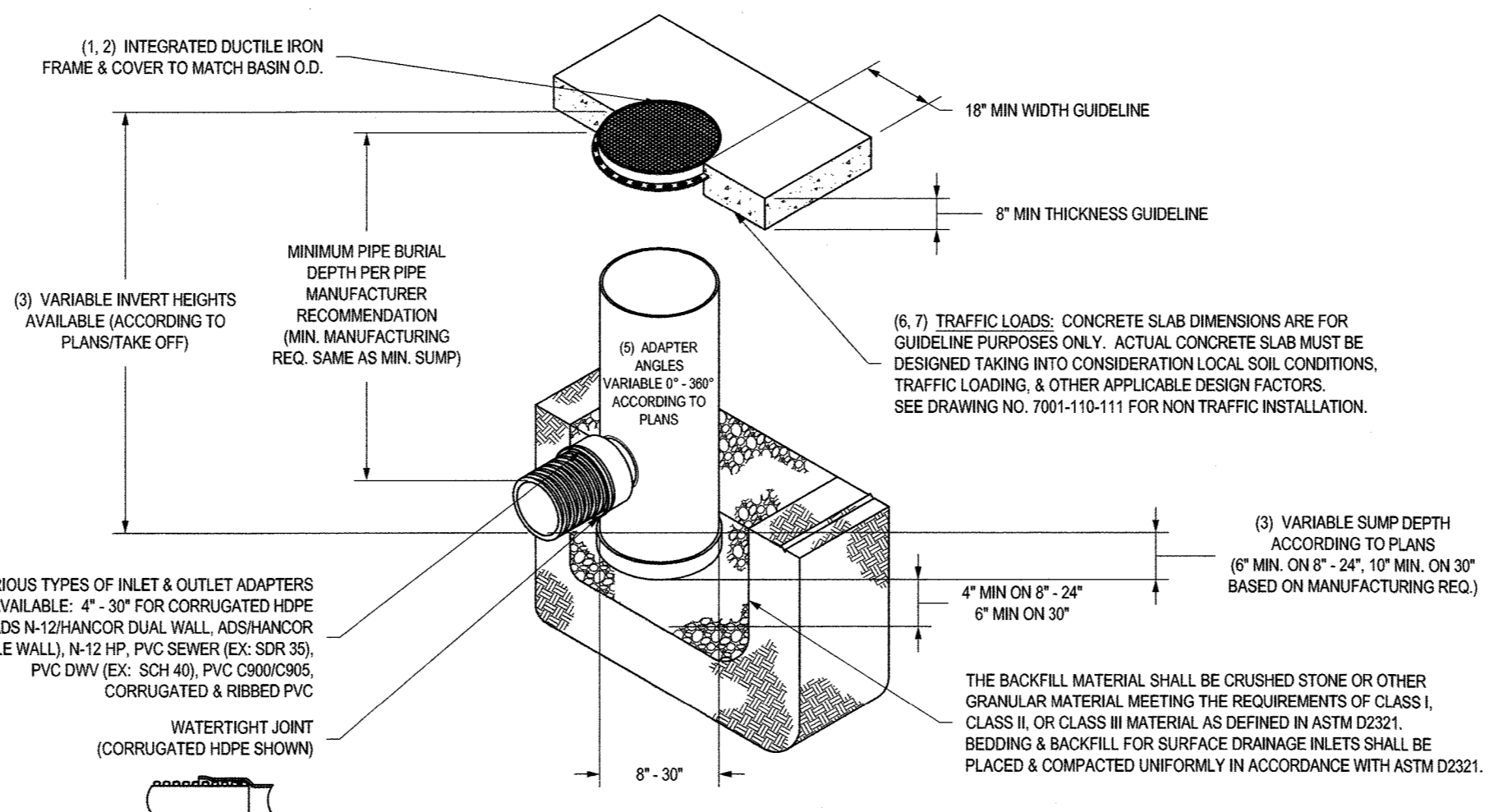
NYLOPLAST DRAIN BASIN WITH DOME GRATE



- 1 - 6" - 30" DOME GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - 8" & 10" PVC DOME GRATES FIT ONTO THE DRAIN BASINS WITH THE USE OF A PVC BODY TOP...

Table with project information including title 'DRAIN BASIN WITH DOME GRATE QUICK SPEC INSTALLATION DETAIL', DWG NO. 7001-110-387, and revision 'REV D'. Includes Nyloplast logo and contact information for 3130 Verona Ave, Buford, GA 30518.

NYLOPLAST DRAIN BASIN WITH SOLID COVER



- 1 - 6" - 30" SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS...

Table with project information including title 'DRAIN BASIN WITH SOLID COVER QUICK SPEC INSTALLATION DETAIL', DWG NO. 7001-110-298, and revision 'REV D'. Includes Nyloplast logo and contact information for 3130 Verona Ave, Buford, GA 30518.

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION BMPs #1, #2, & #3:

THE MICRO-BIORETENTION FACILITIES SHALL BE INSPECTED AT LEAST EVERY YEAR (ONCE EACH IN THE SPRING AND FALL) AND AFTER HEAVY STORMS THE OWNER IS RESPONSIBLE FOR MAINTAINING DETAILED LOG OF THE MAINTENANCE INSPECTION FINDINGS AND HISTORY OF COMPLETED WORK...

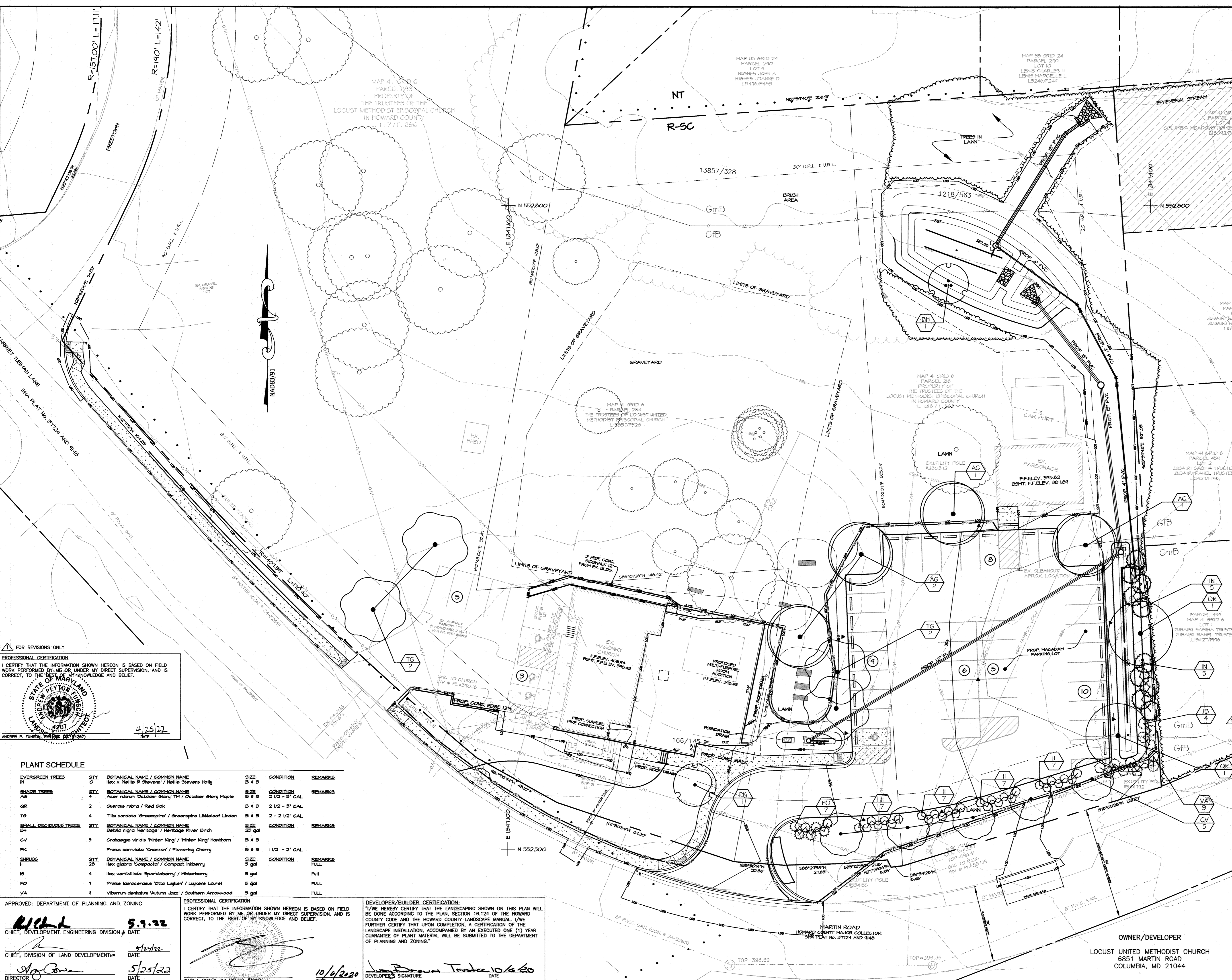
- 1. PLANT MATERIAL PLANTS SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION... 2. MULCH LAYER SHALL BE REPLACED EVERY SPRING... 3. SOIL LAYER: SHOULD STORMWATER POND FOR MORE THAN 48 HRS... 4. SPILLWAY OUTFALL, INTERIOR SLOPES: ERODED AREAS SHALL BE REPAIRED... 5. INLET AND DRAIN BASINS: REPAIR CRACKS, DAMAGED CONCRETE... 6. REMOVE AND PROPERLY DISPOSE ACCUMULATED SEDIMENT GREATER THAN ONE (1) INCH.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 7-23-21

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME OR UNDER MY SUPERVISION...
SIGNATURE: KENNETH W. SHODGRASS
DATE: 4-2-2020

STORMWATER MANAGEMENT DETAILS
LOCUST UNITED METHODIST CHURCH
6851 MARTIN ROAD
COLUMBIA, MD 21044
PROJECT NO.: 4073
DESIGNED BY: KNK
DRAWN BY: KNK
CHECKED BY: KSW
SCALE: AS SHOWN
DATE: MARCH 23, 2020
SHEET: 10 OF 14
SDP-18-047





FOR REVISIONS ONLY

PROFESSIONAL CERTIFICATION  
I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF MARYLAND  
LANDSCAPE ARCHITECT  
4201  
ANDREW P. FUNKE, P.L.A. (L127)

4/25/22  
DATE

**PLANT SCHEDULE**

REVISIONS	QTY.	BOTANICAL NAME / COMMON NAME	SIZE	CONDITION	REMARKS
IN	10	Ilex x 'Nellie R. Stevens' / Nellie Stevens Holly	B 4 B		
SHADE TREES	4	BOTANICAL NAME / COMMON NAME	SIZE <td>CONDITION <td>REMARKS</td> </td>	CONDITION <td>REMARKS</td>	REMARKS
AG	1	Acer rubrum 'October Glory' TM / October Glory Maple	B 4 B	2 1/2 - 3' GAL	
QR	2	Quercus nigra / Red Oak	B 4 B	2 1/2 - 3' GAL	
TG	4	Tilia cordata 'Greenspire' / Greenspire Littleleaf Linden	B 4 B	2 - 2 1/2' GAL	
SMALL DECIDUOUS TREES	1	BOTANICAL NAME / COMMON NAME	SIZE <td>CONDITION <td>REMARKS</td> </td>	CONDITION <td>REMARKS</td>	REMARKS
BH	1	Betula nigra 'Heritage' / Heritage River Birch	25 gal		
CV	5	Crataegus viridis 'Winter King' / Winter King Hawthorn	B 4 B		
PK	1	Prunus serrulata 'Kanzan' / Flowering Cherry	B 4 B	1 1/2 - 2' GAL	
SHRUBS	20	BOTANICAL NAME / COMMON NAME	SIZE <td>CONDITION <td>REMARKS</td> </td>	CONDITION <td>REMARKS</td>	REMARKS
IS	4	Ilex verticillata 'Sparkleberry' / Winterberry	5 gal	FULL	
PO	7	Prunus laurocerasus 'Otto Luyken' / Luyken Laurel	5 gal	FULL	
VA	4	Viburnum dentatum 'Autumn Jazz' / Southern Arrowwood	5 gal	FULL	

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Michael S. G. 5/9/22*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION # DATE

*Kevin T. Garvey 10/6/20*  
CHIEF, DIVISION OF LAND DEVELOPMENT # DATE

*Andrew P. Funke 4/25/22*  
DIRECTOR DATE

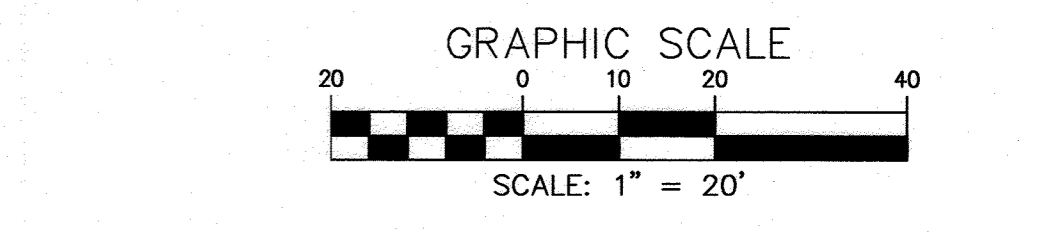
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I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF MARYLAND  
LANDSCAPE ARCHITECT  
4201  
KEVIN T. GARVEY, P.L.A. (MD LIC. #380)

10/6/20  
DATE

DEVELOPER/BUILDER CERTIFICATION:  
I HEREBY CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF THE LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIAL WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

*Kevin T. Garvey 10/6/20*  
DEVELOPER'S SIGNATURE DATE



**PURPOSE:**  
THIS SITE PLAN HAS BEEN REVISED DUE TO ARCHITECTURAL CHANGES INCLUDING REMOVAL OF INTERIOR COURTYARD & ADJUSTMENT OF FLOOR ELEVATION. THERE ARE ASSOCIATED CHANGES TO THE STORM DRAIN SYSTEM, GRADES, ADA ACCESSIBLE ENTRANCE, AND WALKWAYS. AN EMERGENCY EGRESS HAS BEEN ADDED TO THE NORTH END OF THE CHURCH ADDITION.

REVISION	DATE
1	4/25/22

**LANDSCAPE PLAN**  
**LOCUST UNITED METHODIST CHURCH**  
6851 MARTIN ROAD  
COLUMBIA, MD 21044  
ZONE: R-SC

TAX MAP: 41, GRID: 6  
ELECTION DISTRICT: 5

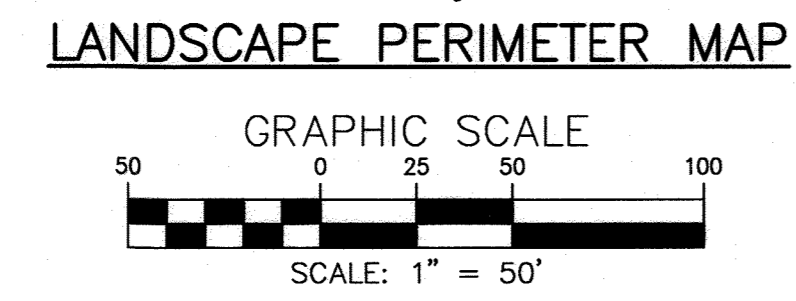
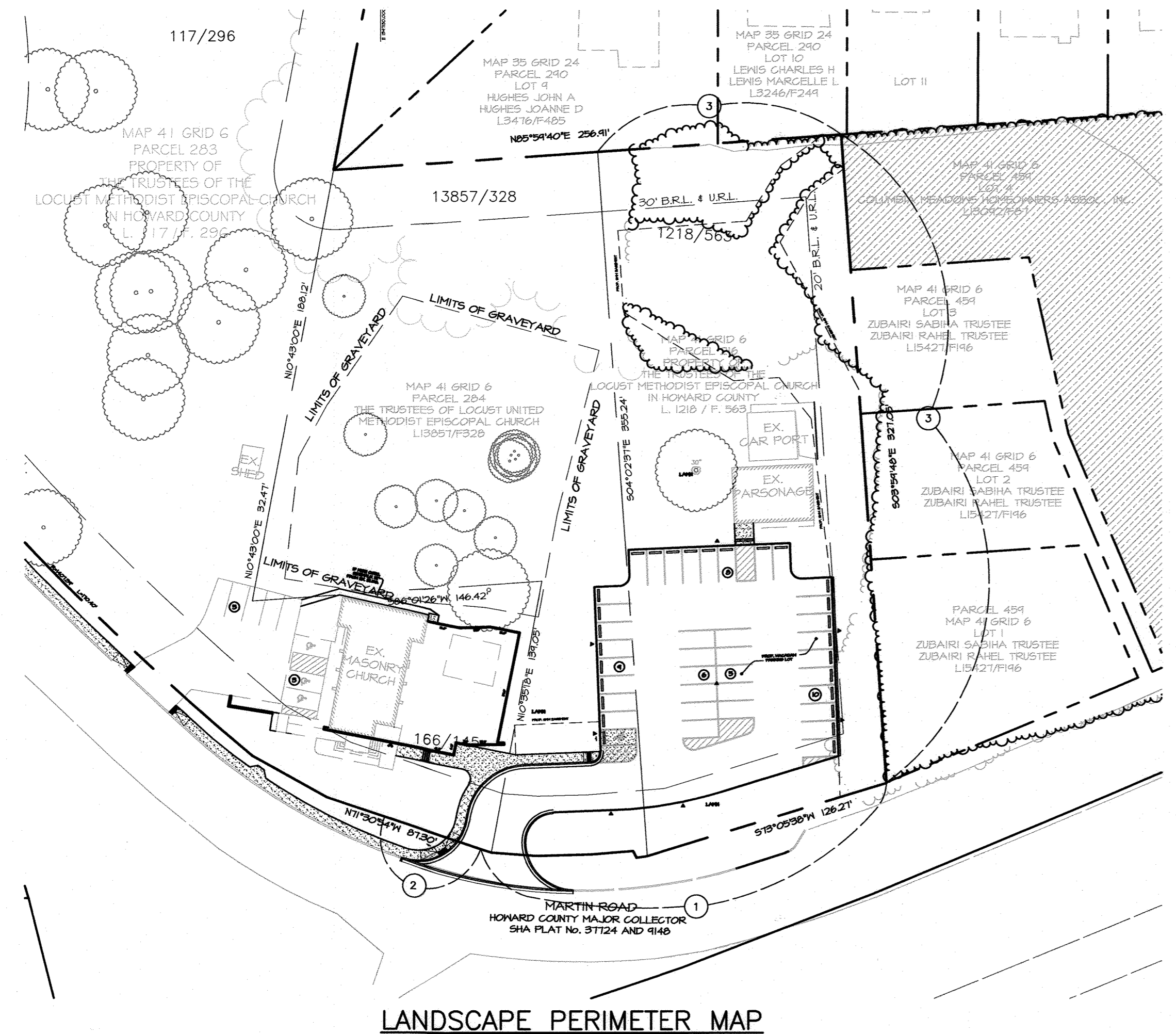
PARCEL: 216, 283 & 283  
HOWARD COUNTY, MARYLAND

**DSThaler & ASSOC., LLC**  
CIVIL AND ENVIRONMENTAL ENGINEERS, SURVEYORS,  
LANDSCAPE ARCHITECTS & LAND PLANNERS  
www.dsthaler.com

1115 AMBASSADOR ROAD, P.O. BOX 41420  
BALTIMORE, MARYLAND 21244-7420  
PHONE: 410-444-3641

PROJECT NO.: 4073  
DESIGNED BY: KTG  
DRAWN BY: KTG  
CHECKED BY: KWS  
SCALE: AS SHOWN  
DATE: MARCH 23, 2020

SHEET: 12 OF 14  
SDP-18-047



**FOREST CONSERVATION WORKSHEET  
VERSION 1.0**  
(Enter in Yellow Cells)

NET TRACT AREA:

A. Total tract area.....	=	0.91
B. Area within 100 year floodplain.....	=	0.00
C. Area to remain in agricultural production.....	=	0.00
D. Net tract area.....	=	0.91

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)

Input the number "1" under the appropriate land use zoning, and limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
0	0	0	1	0	0

E. Afforestation Threshold.....	15% x D =	0.10
F. Conservation Threshold.....	20% x D =	0.20

EXISTING FOREST COVER:

G. Existing forest cover (excluding floodplain).....	=	0.00
H. Area of forest above afforestation threshold.....	=	0.00
I. Area of forest above conservation threshold.....	=	0.00

BREAK EVEN POINT (BEP):

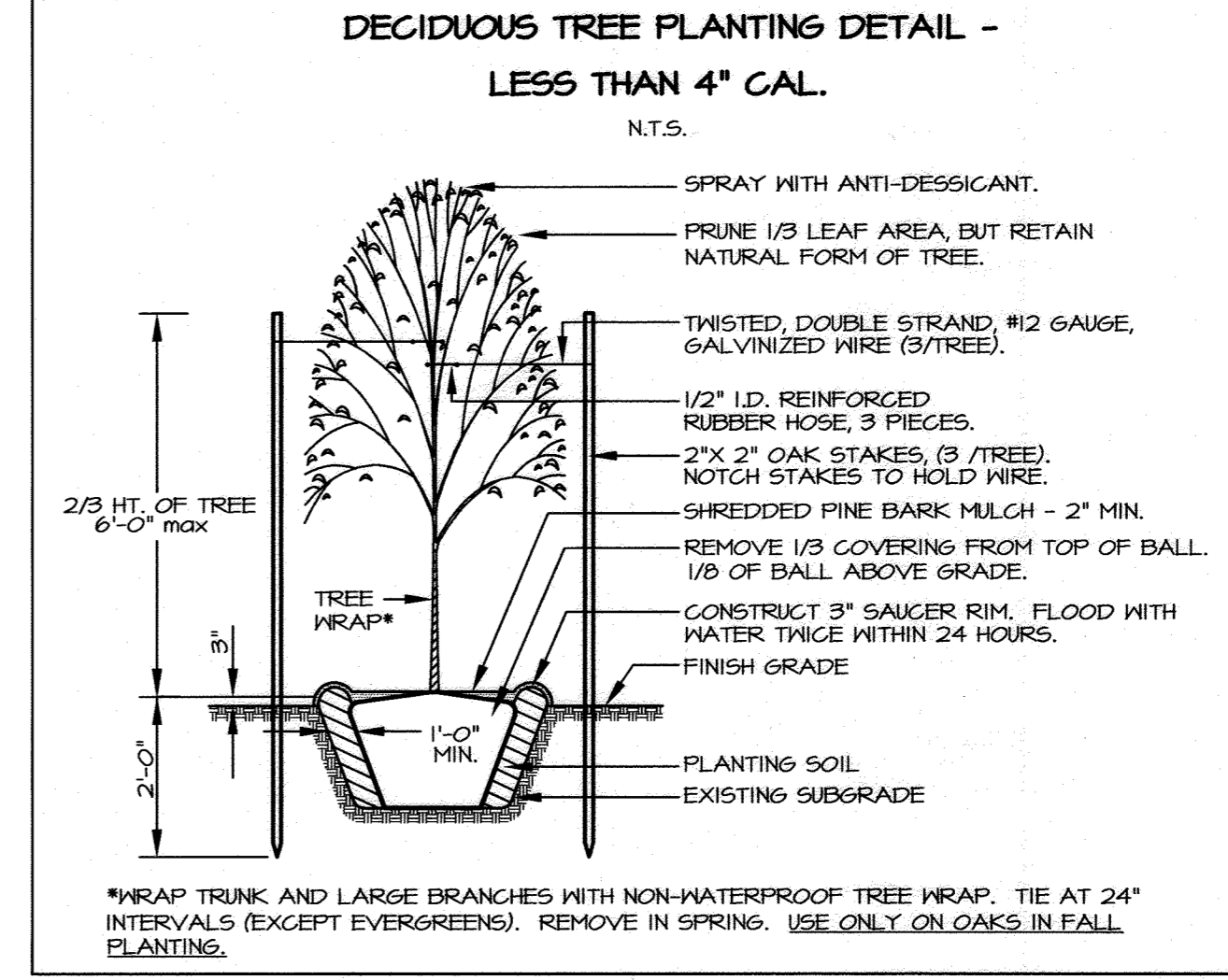
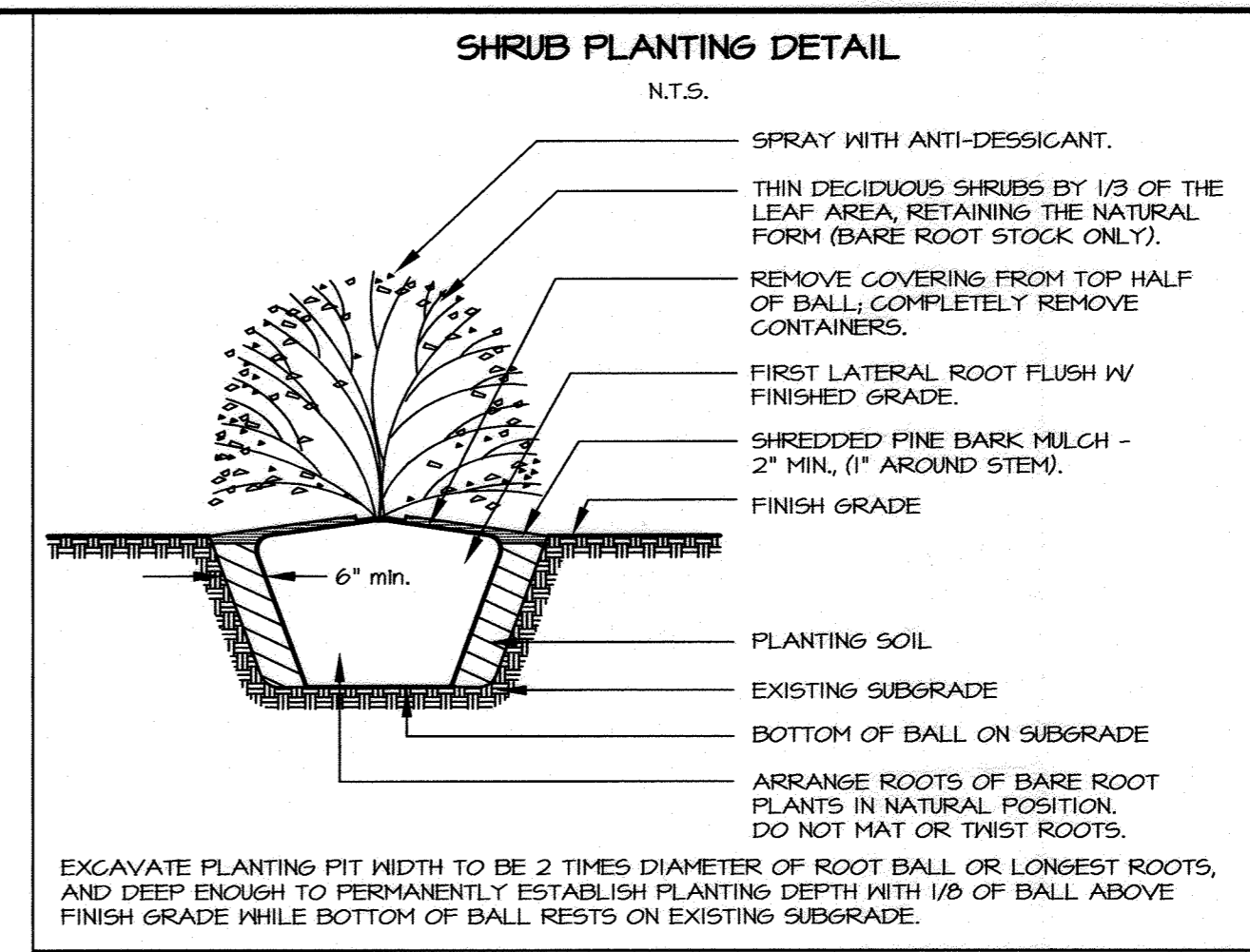
J. Forest retention above threshold with no mitigation (BEP).....	=	0.00
K. Clearing permitted without mitigation.....	=	0.00

PROPOSED FOREST CLEARING:

L. Total area of forest to be cleared.....	=	0.00
M. Total area of forest to be retained.....	=	0.00

PLANTING REQUIREMENTS:

N. Reforestation for clearing above conservation threshold.....	=	0.00
P. Reforestation for clearing below conservation threshold.....	=	0.00
Q. Credit for retention above afforestation threshold.....	=	0.00
R. Total reforestation required.....	=	0.00
S. Total afforestation required.....	=	0.10
T. Total reforestation and afforestation required.....	=	0.10

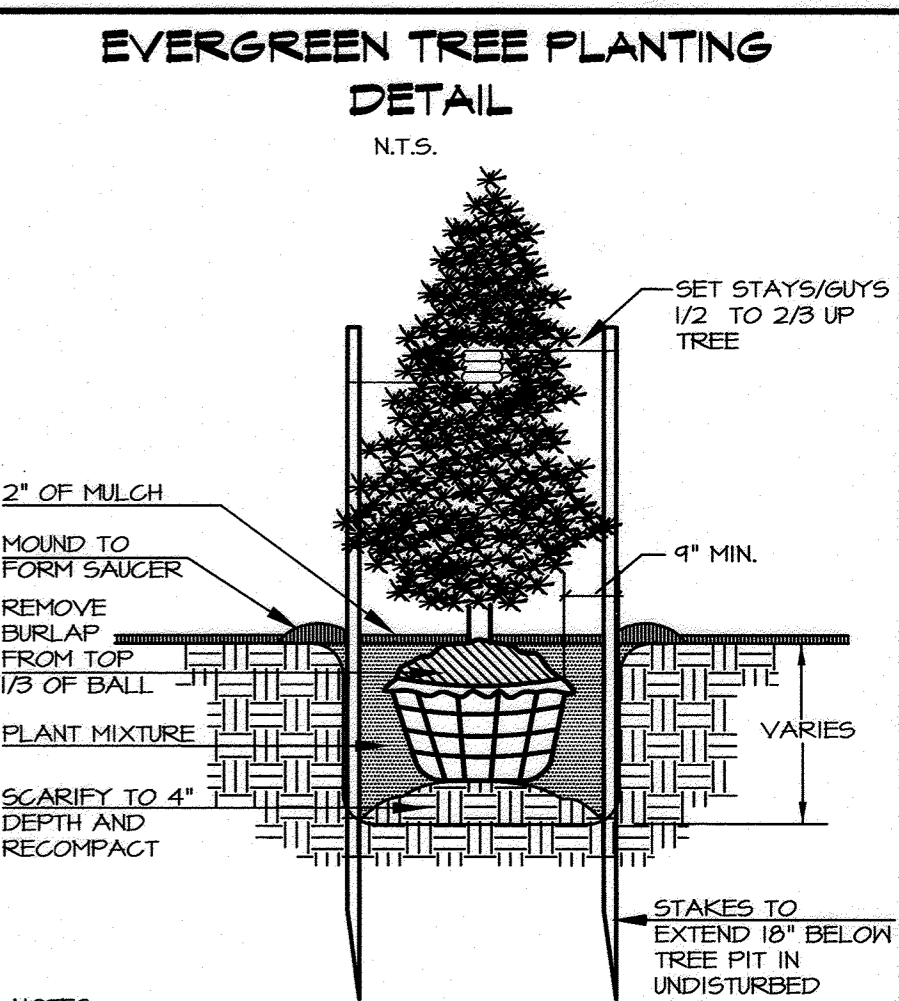


**SCHEDULE A - PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO ROADWAYS	PARKING ADJACENT ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE	B	E	C
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	51'	191'	450'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES	NO	*YES 247'
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO
NUMBER OF PLANTS REQUIRED			
SHADE TREES	1:50 = 1	1:40 = 5	1:40 = 5
EVERGREEN TREES	1:40 = 1	-	1:20 = 10
SHRUBS	-	1:4 = 48	-
NUMBER OF PLANTS PROVIDED			
SHADE TREES	-	8	-
EVERGREEN TREES	-	11	-
OTHER TREES (2:1 SUBSTITUTION)	-	6 **	-
SHRUBS (10:1 SUBSTITUTION)	-	48	-
DESCRIBE PLANT SUBSTITUTIONS CREDITS BELOW IF NEEDED			
* RETENSION OF EXISTING.			
** FLOWERING TREES.			

**SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING**

NUMBER OF PARKING SPACE	41
NUMBER OF TREES REQUIRED	1:20 = 2
NUMBER OF TREES PROVIDED	2
SHADE TREES	
OTHER TREES (2:1 SUBSTITUTION)	



NOTES:  
STAKE ALL EVERGREEN TREES UNDER 12". GUY TREES 12" AND OVER. TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE. NEVER CUT LEADERS. PRUNE ONLY TO REMOVE DAMAGED OR BROKEN BRANCHES.

PLANTING NOTES:  
1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF HOWARD COUNTY CODE AND LANDSCAPE MANUAL AND IS TO BE USED FOR PLANT INSTALLATION PURPOSES ONLY.  
2. FINANCIAL SURETY OF \$8,990.00 FOR THE REQUIRED 10 SHADE TREES, 6 MINOR TREES, 11 EVERGREEN TREES AND 48 SHRUBS SHALL POSTED AS PART OF THE DEVELOPERS AGREEMENT.  
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO START OF WORK. ALL GENERAL NOTES FROM SHEET 1 SHALL APPLY.  
4. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES AND EXISTING CONDITIONS BEFORE THE START OF WORK. CONTACT THE CONSTRUCTION MANAGER IF ANY PLANT RELATIONS ARE REQUIRED.  
5. PLANT SPECIE SELECTION AND LOCATION COMPLY WITH BGE PLANTING GUIDELINES.  
6. PLANT LOCATIONS MAY NEED TO VARY DUE TO FINAL SITE CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF SWALES.  
7. THE DEPARTMENT OF PLANNING AND ZONING MUST REVIEW AND APPROVE ALL SUBSTITUTIONS AND/OR RELOCATION PRIOR TO PLANTING. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER OR HIS REPRESENTATIVE.  
8. AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS LISTED HEREON AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF THE LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIAL ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.  
9. PLANT QUANTITIES SHOWN ON THE PLAN LIST ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF THERE ARE DISCREPANCIES BETWEEN QUANTITIES SHOWN ON THE PLAN AND THOSE SHOWN ON THE PLAN LIST, QUANTITIES ON THE PLAN SHALL TAKE PRECEDENCE. THE CONTRACTOR SHALL VERIFY THE PLANT QUANTITIES PRIOR TO BIDDING.  
10. ALL PLANT MATERIAL SHALL BE FULL AND HEAVY, WELL FORMED AND SYMMETRICAL, CONFORM TO THE AMERICAN NURSERY MEN ASSOCIATION STANDARDS AND INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.  
11. ALL AREA DISTURBED BY CONSTRUCTION ACTIVITIES, NOT WITHIN PLANTING, WILL BE FINISH GRADED AND SEEDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.  
12. ALL PLANTINGS AND PLANTING BEDS SHALL BE MULCHED WITH SHREDDED HARDWOOD MULCH PER PLANTING DETAILS.  
13. THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE REQUIRED LANDSCAPING. PLANT MATERIAL, BERMS, FENCES AND WALLS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY REPAIRED OR REPLACED.  
14. SHOULD ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPE CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD, AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.

**PURPOSE:**  
THIS SITE PLAN HAS BEEN REVISED DUE TO ARCHITECTURAL CHANGES INCLUDING REMOVAL OF INTERIOR COURTYARD & ADJUSTMENT OF FLOOR ELEVATION. THERE ARE ASSOCIATED CHANGES TO THE STORM DRAIN SYSTEM, GRADES, ADA ACCESSIBLE ENTRANCE, AND WALKWAYS. AN EMERGENCY EGRESS HAS BEEN ADDED TO THE NORTH END OF THE CHURCH ADDITION.

**FOR REVISIONS ONLY**

Professional Certification  
I certify that the information shown hereon is based on field work performed by me or under my direct supervision and is correct, to the best of my knowledge and belief.

STATE OF MARYLAND  
LANDSCAPE ARCHITECT  
4207  
4/25/22  
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
4/25/22  
DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION  
4/25/22  
DATE

CHIEF, DIVISION OF LAND DEVELOPMENT  
4/25/22  
DATE

DIRECTOR  
4/25/22  
DATE

PROFESSIONAL CERTIFICATION  
I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

KEVIN T. GARVEY, RIA (MD LIC. #3801)  
10/6/2020  
DATE

DEVELOPER/BUILDER CERTIFICATION:  
I/WE HEREBY CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF THE LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIAL WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER'S SIGNATURE  
10/6/2020  
DATE

REVISED SITE DEVELOPMENT PLAN	4/25/22	
NO.	REVISION	DATE

**LANDSCAPE DETAILS AND NOTES**  
**LOCUST UNITED METHODIST CHURCH**

6851 MARTIN ROAD  
COLUMBIA, MD 21044  
ZONE: R-SC

TAX MAP: 41, GRID: 6  
ELECTION DISTRICT: 5

PARCEL: 216, 283 & 283  
HOWARD COUNTY, MARYLAND

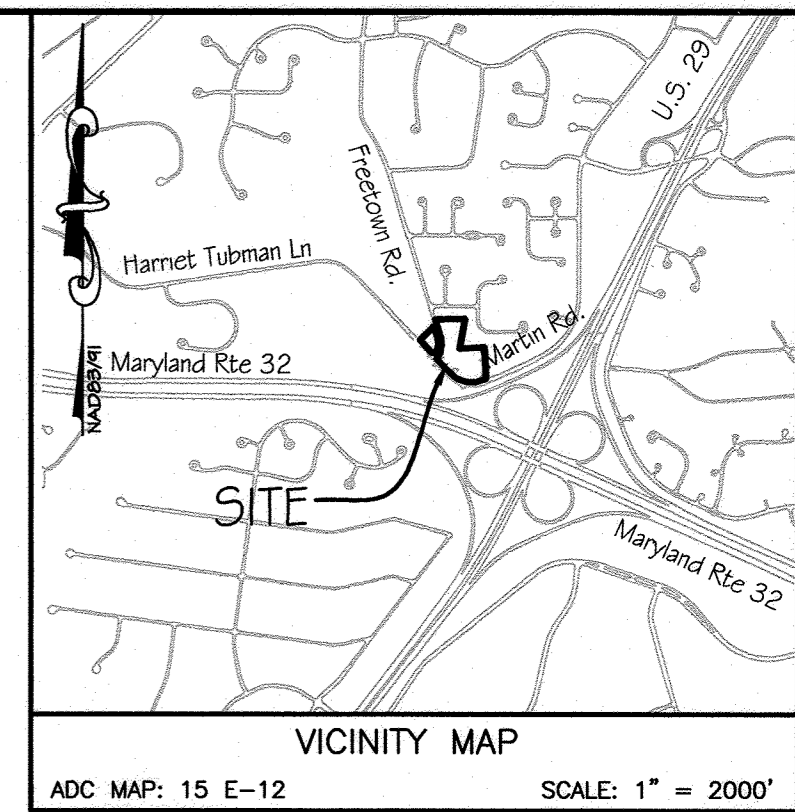
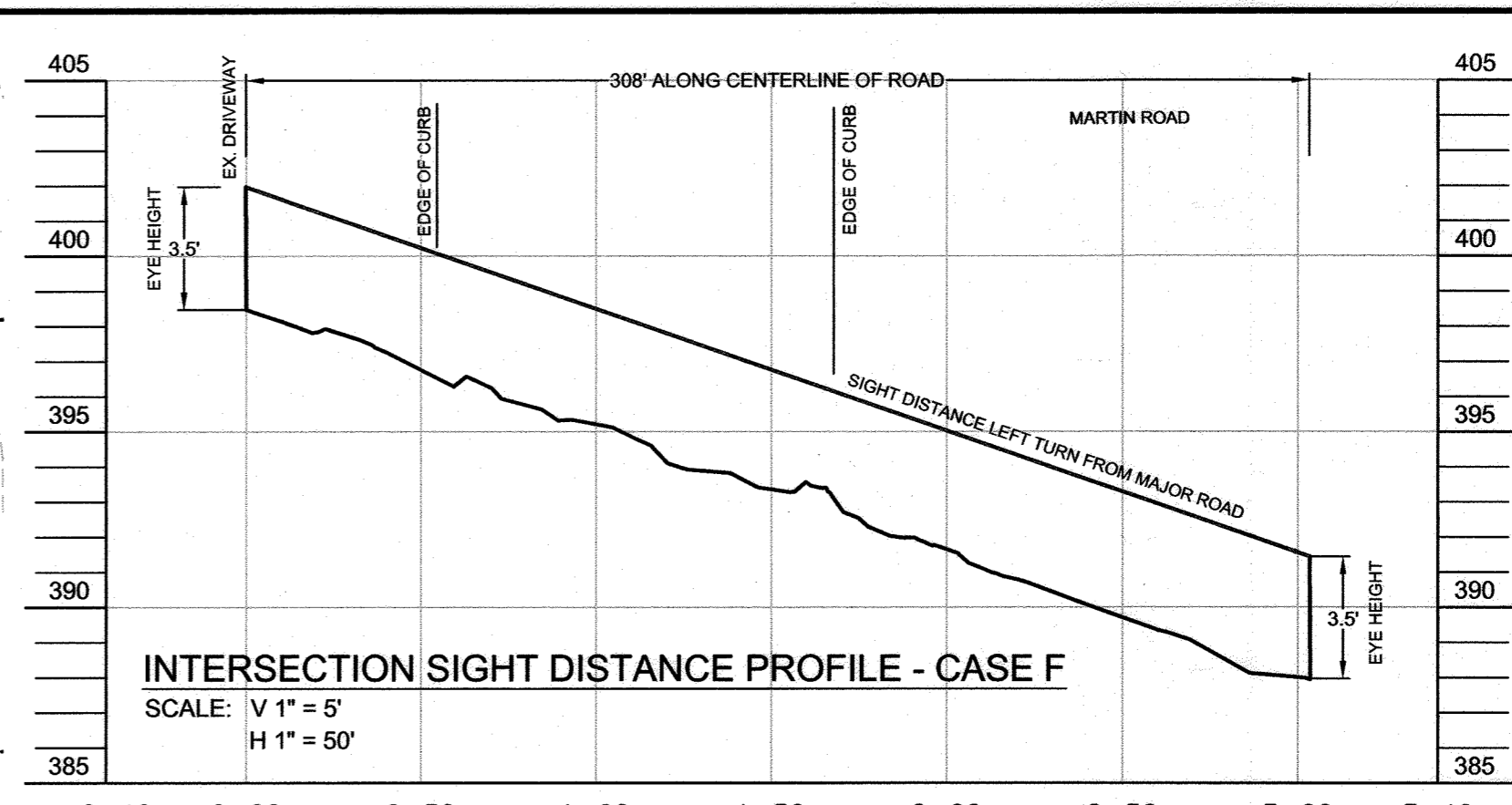
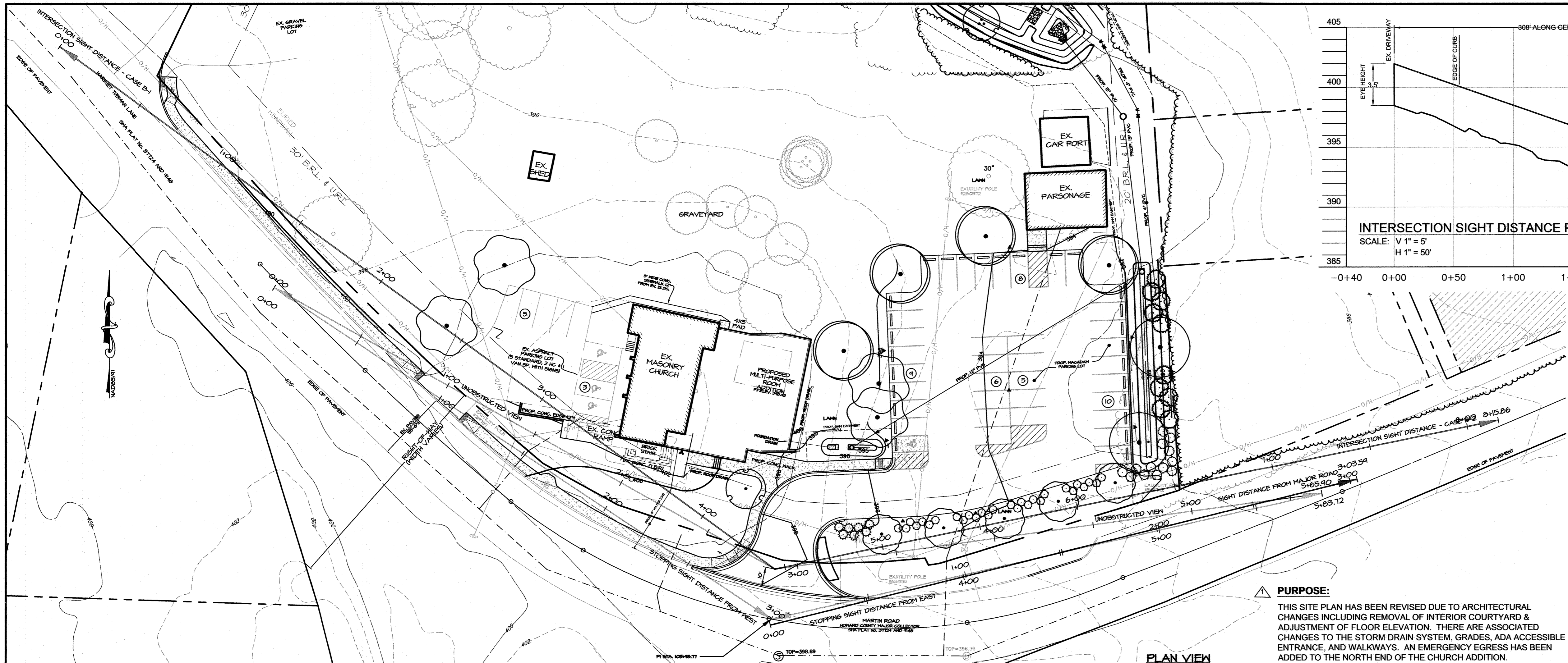
OWNER/DEVELOPER  
LOCUST UNITED METHODIST CHURCH  
6851 MARTIN ROAD  
COLUMBIA, MD 21044

**DSThaler & ASSOC., LLC**  
CIVIL AND ENVIRONMENTAL ENGINEERS, SURVEYORS,  
LANDSCAPE ARCHITECTS & LAND PLANNERS  
www.dsthaller.com

7115 AMBASSADOR ROAD, P.O. BOX 47420  
BALTIMORE, MARYLAND 21244-7420  
PHONE: 410-444-3647

PROJECT NO.: 4073  
DESIGNED BY: KTG  
DRAWN BY: KTG  
CHECKED BY: KWS  
SCALE: AS SHOWN  
DATE: MARCH 23, 2020

SHEET: 13 OF 14  
SDP-18-047



**INTERSECTION SIGHT DISTANCE - CASE F**  
LEFT TURN FROM ROAD

ACTUAL POSTED SPEED (MPH)	ASSUMED DESIGN SPEED	GRADIENT	STOPPING SIGHT DISTANCE REQUIRED (FT)
30	40	3%± UP-GRADIENT	308

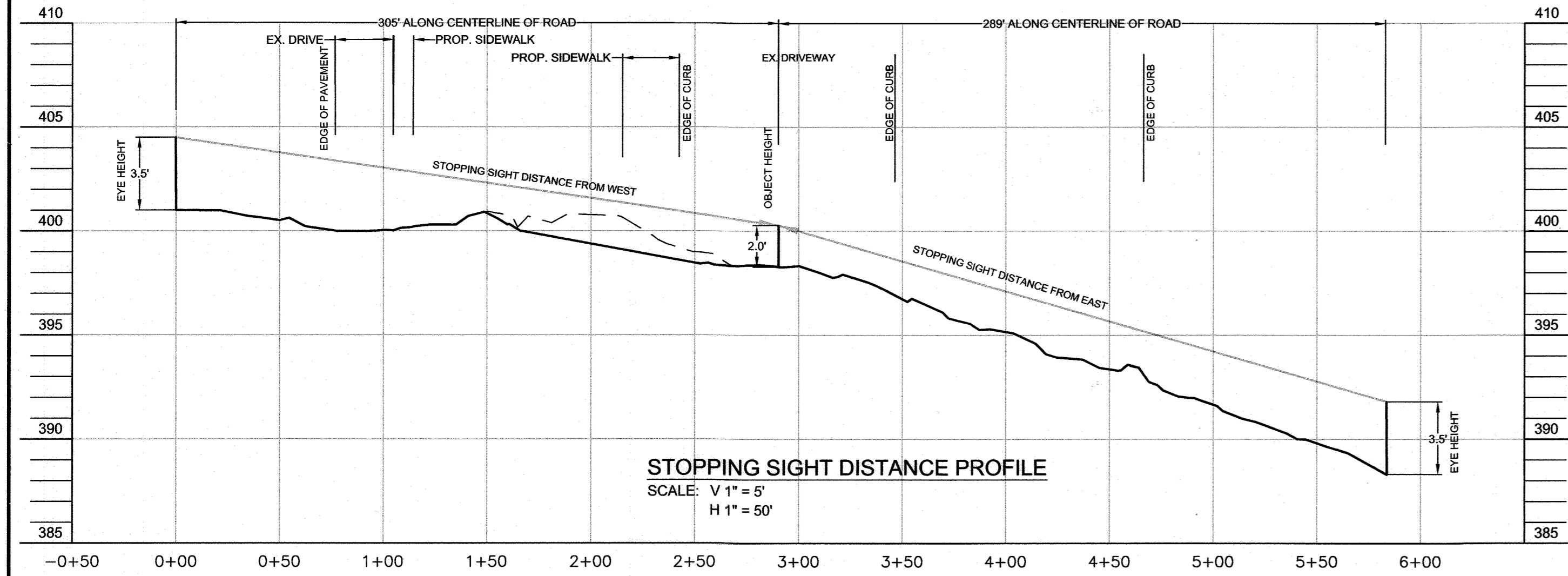
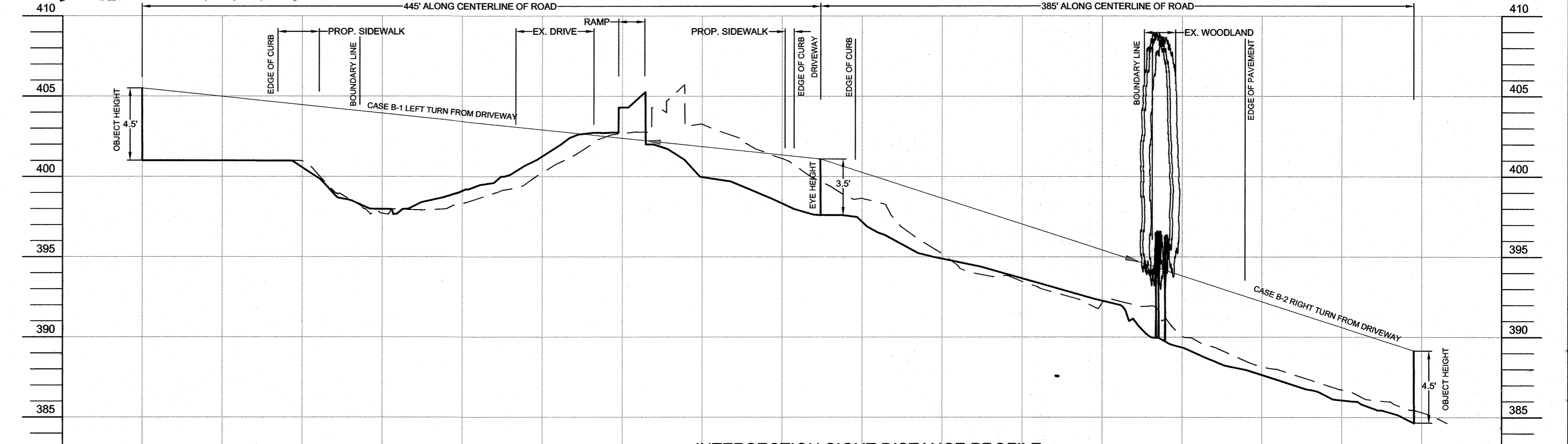
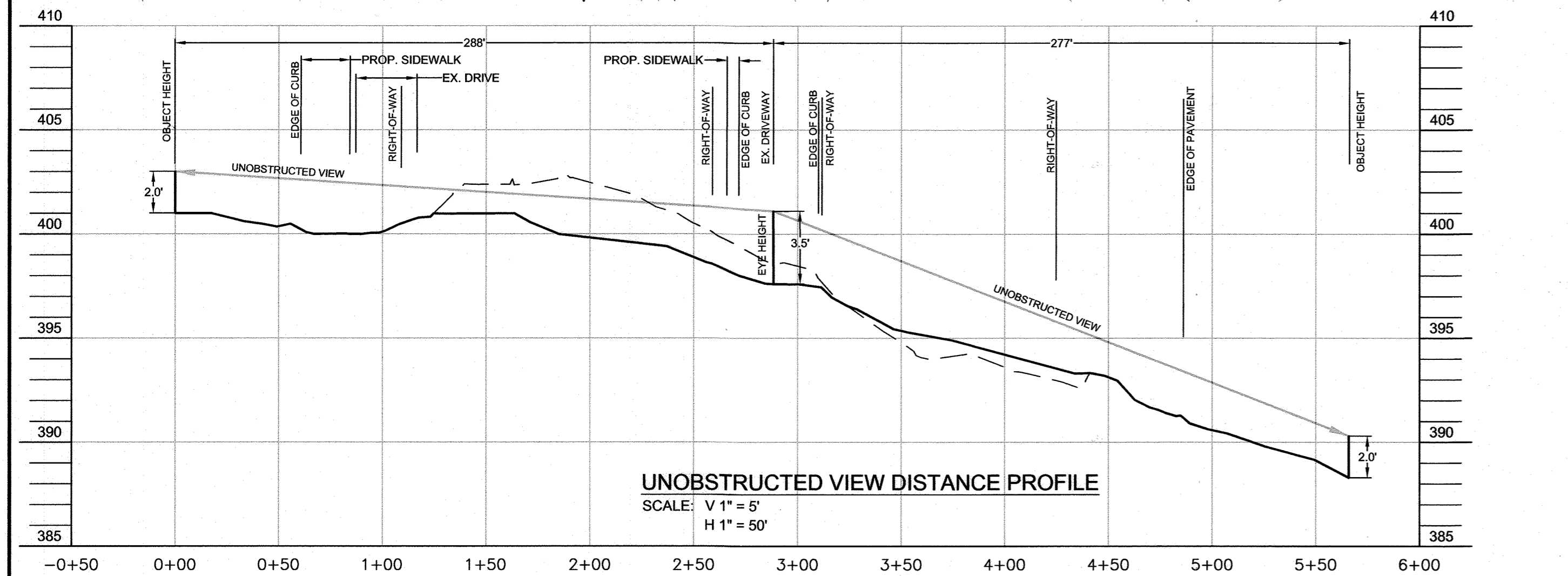
REFERENCE: A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS 2011, "DESIGN INTERSECTION SIGHT DISTANCE - CASE F".

- NOTES:**
- ACCESS TO MARTIN ROAD FROM THE PROPOSED PARKING LOT WILL UTILIZE THE EXISTING ENTRANCE TO THE EXISTING GRAVEL PARKING LOT EAST OF THE EXISTING RELIGIOUS BUILDING.
  - THE EXISTING PARKING LOT ENTRANCE ENTRANCE WILL BE IMPROVED TO MEET HOWARD COUNTY COMMERCIAL ENTRANCE STANDARDS.
  - MARTIN ROAD IS A HOWARD COUNTY RIGHT-OF-WAY AND IS CLASSIFIED AS A MAJOR COLLECTOR.
  - THE POSTED SPEED LIMIT ON MARTIN ROAD IS 30 MPH IN BOTH DIRECTIONS.
  - A SPEED STUDY BY TRAFFIC CONCEPTS, INC. DATED JUNE 26, 2018 FOUND THE 85TH PERCENTILE SPEED MEASURED 40 MPH FOR WESTBOUND TRAFFIC AND 37 MPH FOR EAST BOUND TRAFFIC.
  - MARYLAND STATE HIGHWAY ACCESS MANUAL - SIGHT DISTANCE STANDARDS APPENDIX G: HIGHWAY DESIGN REFERENCE, FOR FULL MOVEMENT ACCESS ON UNDIVIDED HIGHWAYS.
  - ASSUMES PASSENGER VEHICLE FOR DESIGN PURPOSES.

**LEGEND**

--- BOUNDARY LINE	--- WATER	--- EXISTING WATER LINE
--- LOT LINE	--- SAN	--- EXISTING SANITARY LINE
--- EASEMENT		
--- EXISTING CONTOUR MAJOR	○ MAJOR DECIDUOUS TREE	
--- EXISTING CONTOUR MINOR	○ MINOR DECIDUOUS TREE	
--- PROPOSED CONTOUR MAJOR	○ EVERGREEN TREE	
--- PROPOSED CONTOUR MINOR	○ SHRUB	
--- EXISTING TREE LINE		
--- PROPOSED TREE LINE		

**PURPOSE:**  
THIS SITE PLAN HAS BEEN REVISED DUE TO ARCHITECTURAL CHANGES INCLUDING REMOVAL OF INTERIOR COURTYARD & ADJUSTMENT OF FLOOR ELEVATION. THERE ARE ASSOCIATED CHANGES TO THE STORM DRAIN SYSTEM, GRADES, ADA ACCESSIBLE ENTRANCE, AND WALKWAYS. AN EMERGENCY EGRESS HAS BEEN ADDED TO THE NORTH END OF THE CHURCH ADDITION.



**STOPPING SIGHT DISTANCE LEFT TURN FROM STOP**

ACTUAL POSTED SPEED (MPH)	ASSUMED DESIGN SPEED	GRADIENT	STOPPING SIGHT DISTANCE REQUIRED (FT)
30	40	< 3% DOWN GRADE ASSUMED LEVEL	305

**STOPPING SIGHT DISTANCE RIGHT TURN FROM STOP**

ACTUAL POSTED SPEED (MPH)	ASSUMED DESIGN SPEED	GRADIENT	STOPPING SIGHT DISTANCE REQUIRED (FT)
30	40	3%± UP-GRADIENT	289

REFERENCE: A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS 2011, TABLE 3-1, "STOPPING SIGHT DISTANCE ON LEVEL ROADWAY" AND TABLE 3-2, "STOPPING SIGHT DISTANCE ON GRADES".

**NOTE:**  
A DESIGN MANUAL WAIVER TO ALLOW STOPPING SIGHT DISTANCE ALONG A MAJOR COLLECTOR ROAD (MARTIN ROAD) PER VOLUME III, SECTION 2.5.B.9 WAS APPROVED ON JAN. 3, 2019.

**INTERSECTION SIGHT DISTANCE - CASE B-1 LEFT TURN FROM STOP**

ACTUAL POSTED SPEED (MPH)	ASSUMED DESIGN SPEED	INTERSECTION SIGHT DISTANCE REQUIRED (FT) ONE LANE CROSSED
30	40	445

**INTERSECTION SIGHT DISTANCE - CASE B-2 RIGHT TURN FROM STOP**

ACTUAL POSTED SPEED (MPH)	ASSUMED DESIGN SPEED	INTERSECTION SIGHT DISTANCE REQUIRED (FT) ONE LANE CROSSED
30	40	445

REFERENCE: A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS 2011, "DESIGN INTERSECTION SIGHT DISTANCE - CASE B-1 - LEFT TURN FORM STOP" AND "DESIGN INTERSECTION SIGHT DISTANCES - CASE B-2 - RIGHT TURN FROM STOP".

**OWNER/DEVELOPER**  
LOCUST UNITED METHODIST CHURCH  
6851 MARTIN ROAD  
COLUMBIA, MD 21044  
ATTN: MS. JUDY BROWN  
443-934-2235

REVISED SITE DEVELOPMENT PLAN	4/25/22	
NO.	REVISION	DATE
<b>STOPPING SIGHT DISTANCE SECTION</b>		
<b>LOCUST UNITED METHODIST CHURCH</b>		
6851 MARTIN ROAD COLUMBIA, MD 21044 ZONE: R-SC		
TAX MAP: 41, GRID: 6	PARCEL: 216, 283 & 283	
ELECTION DISTRICT: 5	HOWARD COUNTY, MARYLAND	

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**

*[Signature]* 5.9.22  
CHIEF, DEVELOPMENT ENGINEERING DIVISION, DATE

*[Signature]* 5/22/22  
CHIEF, DIVISION OF LAND DEVELOPMENT, DATE

*[Signature]* 5/15/22  
DIRECTOR, DATE

**PROFESSIONAL CERTIFICATION:**  
I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A PROFESSIONAL ENGINEER UNDER THE STATE OF MARYLAND, LICENSE NO. 51201, EXPIRES 01/12/23.

*[Signature]* 4-22-2022  
SIGNATURE  
KENNETH W. SNOODGRASS

**DSThaler & ASSOC., LLC**  
CIVIL AND ENVIRONMENTAL ENGINEERS, SURVEYORS, LANDSCAPE ARCHITECTS & LAND PLANNERS  
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7115 AMBASSADOR ROAD, P.O. BOX 47428  
BALTIMORE, MARYLAND 21244-1428  
PHONE: 410-444-3647

PROJECT NO.: 4073  
DESIGNED BY: KTG  
DRAWN BY: KTG  
CHECKED BY: KWS  
SCALE: AS SHOWN  
DATE: MARCH 23, 2020

SHEET: 14 OF 14  
SDP-18-047