

SITE ANALYSIS DATA CHART

1. GENERAL SITE DATA

a. TOTAL SITE AREA	21.39 AC.±
b. TOTAL LIMIT OF DISTURBED AREA	14.81 AC.±
c. ONSITE LIMIT OF DISTURBED AREA	14.79 AC.±
d. OFFSITE LIMIT OF DISTURBED AREA	0.01 AC.±
e. TOTAL IMPERVIOUS AREA	10.28 AC.±
f. BUILDING COVERAGE OF SITE	211,216.99 SQ FT
g. GREEN OPEN AREA	3.44 AC.±
h. PRESENT ZONING	NT-DMUA
i. PROPOSED USE	HOWARD CO. MIXED USE VACANT/OVERFLOW PARKING FOR EVENTS
j. EXISTING USE	PUBLIC
k. PROPOSED WATER	PUBLIC
l. PROPOSED SEWER	PUBLIC
m. AREA OF STEEP SLOPES 15% AND GREATER	0.68 AC.
n. AREA OF HIGHLY ERODIBLE SOIL 15% AND GREATER	0.56 AC.
o. AREA OF ONSITE FLOODPLAIN AND ITS BUFFER	0.00 AC.
p. AREA OF ONSITE WETLANDS AND THEIR BUFFERS	0.00 AC.
q. AREA OF FORESTS	3.06 AC.
r. AREA OF ERODIBLE SOILS	0.68 AC.±
s. FDP-DC-CRESCENT-1A	

2. FLOOR SPACE

Land Use Type	Phase 1 SDP	Units
Building A-1		
Retail	0	S.F.
Restaurant - Standard	5,818	S.F.
Restaurant - Fast Food	0	S.F.
Restaurant - Fast Casual	0	S.F.
Office	338,930	S.F.
Residential	0	D.U.
Building B		
Retail	4,250	S.F.
Restaurant - Standard	7,030	S.F.
Restaurant - Fast Food	13,069	S.F.
Restaurant - Fast Casual	7,205	S.F.
Fitness	0	S.F.
Medical/Dental Office	2,600	S.F.
Office	0	S.F.
Residential	382	D.U.
Building E-2		
Retail	0	S.F.
Restaurant - Standard	10,638	S.F.
Restaurant - Fast Food	0	S.F.
Restaurant - Fast Casual	0	S.F.
Fitness	0	S.F.
Office	0	S.F.
Residential	0	D.U.
Building E-3		
Retail	0	S.F.
Restaurant - Standard	0	S.F.
Restaurant - Fast Food	1,710	S.F.
Restaurant - Fast Casual	0	S.F.
Fitness	0	S.F.
Office	0	S.F.
Residential	0	D.U.
Overall Project Totals	4,250	S.F.
Restaurant - Standard	40,991	S.F.
Restaurant - Fast Food	7,030	S.F.
Restaurant - Fast Casual	14,779	S.F.
Fitness	7,205	S.F.
Office	338,930	S.F.
Medical/Dental Office	2,600	S.F.
Residential (total)	382	D.U.
Studios & 1 Bedroom units	256	D.U.
2+ Bedroom units	126	D.U.

Note: Retail and restaurant condition reflect Gross Leasable Area (GLA) and are rounded up for conservancy. Office density reflects Gross Floor Area (GFA).

Overall Project Totals (cont.)

Storage	1,006	S.F.
---------	-------	------

3. PARKING REQUIREMENTS:

Use	Phase 1 SDP	Maximum Parking Spaces Required (B)
Retail	16	16
Restaurant (Sit-Down)	718	718
Restaurant (Fast-Food)	0	0
Restaurant (Fast-Casual)	92	92
Fitness	36	36
Office	338,930	338,930
Medical/Dental Office	2,600	2,600
Office (Reserved)	0	0
Subtotal - Commercial	466	466
Parking Provided - Commercial	466	466
Difference (B)	0	0
Residential - Total	382	382
Parking Provided - Residential	382	382
Difference	0	0

Note: 1. Based on highest density zoning ordinance within 1/4 mile of project boundaries.
2. Reflects peak requirement on a weekday in December at 4 PM.
3. Reflects peak requirement on a weekend in December at 4 PM.
4. Reflects peak requirement on a weekday in December at 4 PM.

4. PARKING PROVIDED:

LEVEL	TOTAL SPACES	HANDCAP (STD)	HANDCAP (VAN)	LOW EMISSIONS
1	24	1	4	12
2	77	2	0	13
3	76	2	0	11
4	76	2	0	0
5	76	2	0	0
6	76	1	0	0
7	76	0	0	0
ROOF	73	0	0	0
TOTAL	554	10	4	36

NOTE: THESE 85 SPACES WILL BE REMOVED WHEN PARCEL D-5 IS DEVELOPED.

u. NORTHEAST PARKING LOT:

TOTAL SPACES	HANDCAP (STD)	HANDCAP (VAN)	LOW EMISSIONS
85	6	3	0

v. SOUTHEAST PARKING LOT

TOTAL SPACES	HANDCAP (STD)	HANDCAP (VAN)	LOW EMISSIONS
28	1	1	0

NOTE: THESE 28 SPACES WILL BE REMOVED WHEN PHASE 2 OF PARCEL D-4 IS DEVELOPED.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

w. PARKING GARAGE:

Parking Level	Standard Spaces (90 Degree)	Non-Standard Spaces (70 Degree)	Handicap Spaces	Handicap-Van Spaces	Electric Veh. Spaces	Total Parking
First Level	8	93	2	6	1	109
Second Level	19	152	2	-	1	174
Third Level	19	152	2	-	1	174
Fourth Level	19	152	2	-	1	174
Fifth Level	19	152	2	-	1	174
Sixth Level	19	152	2	-	1	174
Seventh Level	19	152	2	-	1	174
Eighth Level	19	152	2	-	1	174
Ninth Level	19	152	2	-	1	22
Overall Totals	160	1,157	18	6	8	1,349

Note: 1. Based on plans prepared by FOX Architects.

x. ON-STREET PARKING

A. VALENCIA LANE	= 6 SPACES
B. MANGO TREE WAY	= 18 SPACES
TOTAL ON-STREET PARKING	= 24 SPACES

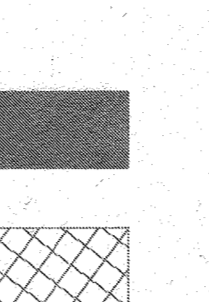
h. OVERALL PARKING SUPPLY SUMMARY

Parcel	Commercial	Residential	Total Spaces
Parcel D-1	4	4	8
Parcel D-2 (Building B)	0	554	554
Parcel D-4 (Merrivether Garage + surface)	4	1,378	1,378
Parcel D-5	85	-	85
Parcel D-8 (Building C)	-	-	-
Parcel D-9	-	-	-
Total Parking Provided	1,463	554	2,017

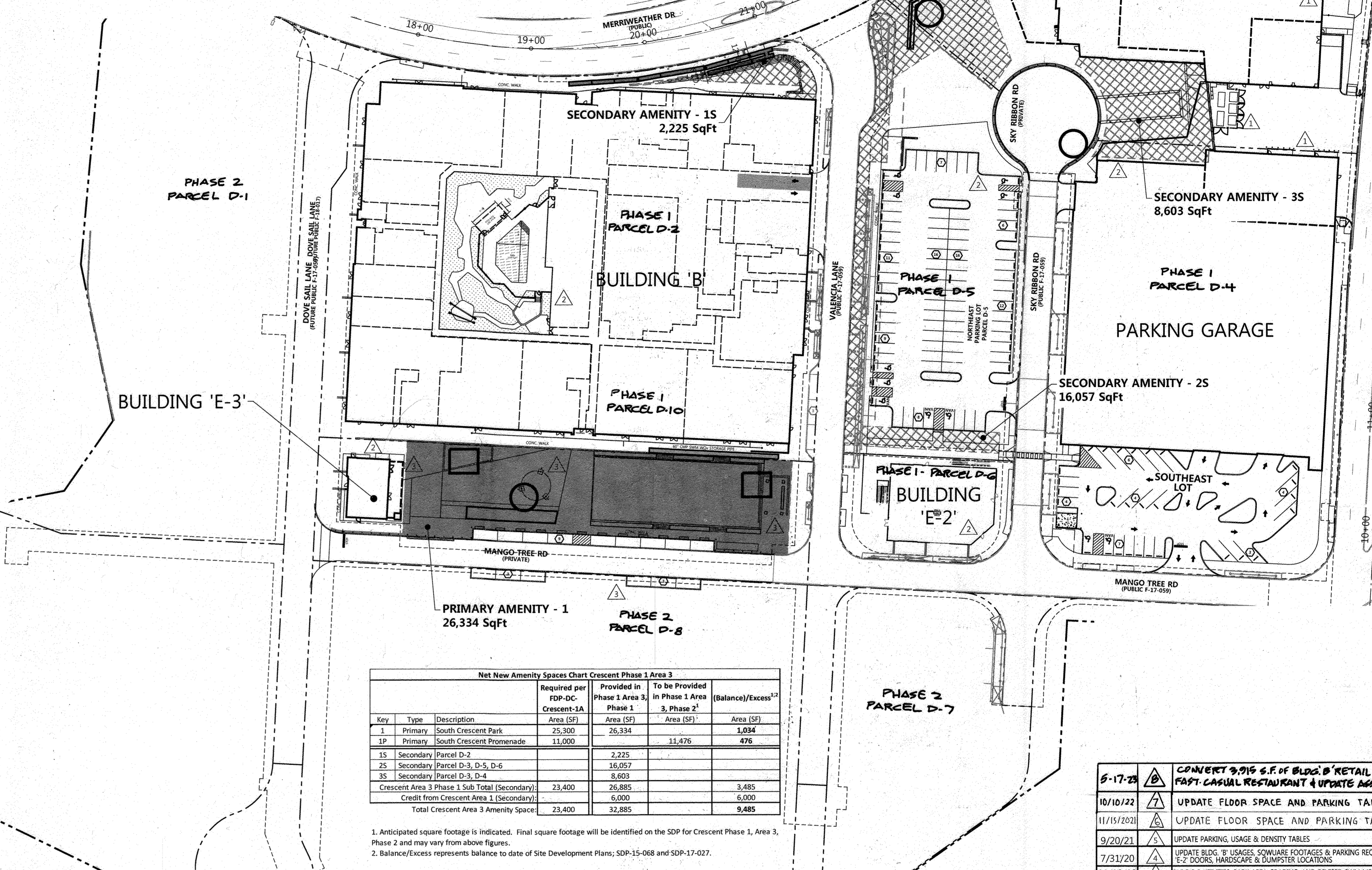
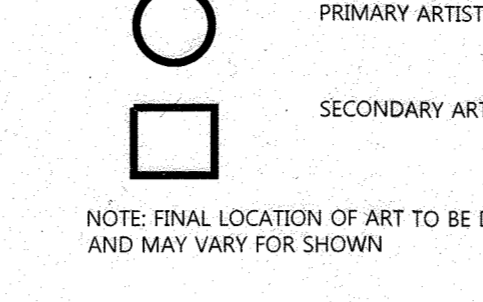
GENERAL NOTES: CONTINUED FROM SHEET 1

- PAYMENTS REQUIRED BY CEPRA #25 AND #27 ARE TO BE MADE UNDER THIS SDP. CHARGES WILL BE CALCULATED IN ACCORDANCE WITH SECTIONS 28.115(B) AND (G) OF THE HOWARD COUNTY CODE, RESPECTIVELY.
- STAFF APPROVED REVISIONS TO BUILDING 'A-1' ARE AUTHORIZED PROVIDED SUCH REVISIONS, IF ANY, SUBSTANTIALLY CONFORM TO THE DESIGN INTENT APPROVED BY THE PLANNING BOARD FOR BUILDING 'A-1' AND THE ADJACENT SPACES.
- DOWNTOWN COMMUNITY COMMONS TO BE PROVIDED WITH THIS SDP SHALL BE IN COMPLIANCE WITH AGREED UPON PARAMETERS SET FORTH BY HOWARD COUNTY AND HOWARD HUGHES RESEARCH & DEVELOPMENT CORPORATION.
- A GEOTECHNICAL REPORT WAS PREPARED BY THE BALTER COMPANIES DATED JULY 12, 2016 AND APPROVED JANUARY 9, 2017.
- ENVIRONMENTAL RESTORATION ACTIVITIES PURSUANT TO CEPRA 15 WILL BE COMPLETED IN ACCORDANCE WITH THE PLANNING BOARD'S DECEMBER 2, 2016 APPROVAL OF CEPRA ALTERNATIVE COMPLIANCE.
 - ENVIRONMENTAL RESTORATION AREAS 3 THROUGH 7 AND SS 5-5 (OFFSITE) SHALL BE COMPLETED PRIOR TO THE ISSUANCE OF THE FIRST USE AND OCCUPANCY PERMIT FOR A BUILDING IN CRESCENT NEIGHBORHOOD DEVELOPMENT, AREA 3.
 - HRD SHALL PROVIDE QUARTERLY MONITORING REPORTS BEGINNING APRIL 1, 2017, THROUGH THE COMPLETION OF THE ENVIRONMENTAL RESTORATION, KEEPING DPZ APPRISED OF ITS STATUS AND TO IDENTIFY ANY POTENTIAL DELAYS TO COMPLETE THE WORK.
- SIGHT DISTANCE ANALYSIS PROVIDED UNDER SP 16-009 FOR THE INTERSECTION OF MANGO TREE ROAD WITH THE SYMPHONY WOODS ROAD AND THE INTERSECTION OF VALENCIA LANE AND MERRIVETHER DRIVE. PRELIMINARY SIGHT DISTANCE ANALYSIS PROVIDED UNDER SP 16-009 FOR THE FOLLOWING PRIVATE DRIVEWAY ENTRANCES:
 - DRIVEWAY FROM PARCEL D-1 TO MERRIVETHER DRIVE
 - DRIVEWAY FROM PARCEL D-3 TO SYMPHONY WOODS ROAD
 - DRIVEWAY FROM PARCEL D-1, D-2, AND D-9 TO DOVE SAIL LANE
 - DRIVEWAY FROM PARCEL D-2 TO VALENCIA LANE
 - INTERSECTION OF SKY RIBBON RD WITH MANGO TREE ROAD
 - DRIVEWAYS FROM PARCEL D-3 TO MANGO TREE ROAD
 NO SIGHT DISTANCE ANALYSIS PROVIDED FOR THE INTERSECTION OF DOVE SAIL LANE WITH MANGO TREE ROAD AND VALENCIA LANE WITH MANGO TREE ROAD AS THESE ARE PROPOSED TO BE ALL-WAY STOP CONTROLLED INTERSECTIONS. ALL PRELIMINARY SIGHT DISTANCE ANALYSIS FOR THE ABOVE DRIVEWAY ENTRIES AND INTERSECTIONS HAVE BEEN VERIFIED AS FULFILLING THE PROPOSED CONDITIONS WITHIN THIS SDP OR AN UPDATED SIGHT DISTANCE ANALYSIS PROVIDED WITH THIS SDP.
- A WAIVER OF SECTION 16.1106 (WP 16-100) WAS APPROVED ON MARCH 17, 2016 WHICH REQUIRES A MILESTONE DATE OF 9 MONTHS FROM THE DECISION DATE TO SUBMIT PLANS IN THE NEXT STAGE OF THE SUBDIVISION AND LAND DEVELOPMENT PROCESS IN ORDER TO MAINTAIN TENTATIVE ALLOCATIONS FOR A PROJECT. APPROVAL IS SUBJECT TO THE FOLLOWING THREE CONDITIONS:
 - THE FIRST PHASE OF 300 ALLOCATIONS MUST BE SUBMITTED ON OR BEFORE JULY 30, 2016. ADDITIONAL EXTENSIONS OF TIME WILL REQUIRE A NEW PETITION.
 - UPDATE THIS PHASING CHART TO REFLECT THE NEW MILESTONE DATE IN ACCORDANCE WITH WP 16-100.
 - PLEASE REFERENCE THE WAIVER PETITION NUMBER, SECTION REQUEST, DATE OF THE DECISION AND CONDITIONS OF APPROVAL ON ALL FUTURE PLANS FOR THIS SITE.
- ALL PUBLIC CROSSWALK INSTALLATIONS ARE SUBJECT TO APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
- A NOISE STUDY FOR THIS PROJECT WAS PREPARED BY HUSH ACOUSTICS, LLC DATED OCTOBER 31, 2016 AND WAS APPROVED ON JANUARY 9, 2017.
- AS AGREED TO BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS ON JUNE 29, 2017, EXCEPT AS PROVIDED BELOW, ALL STORMWATER MANAGEMENT DEVICES ON PRIVATELY OWNED PROPERTY, INCLUDING THOSE THAT PROVIDE TREATMENT FOR PUBLIC ROADS, ARE TO BE PRIVATELY OWNED. THE RINKER STORMCEPTORS WILL BE PRIVATELY OWNED BUT MAINTAINED BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS EXCLUDING PIPES WITH PUBLIC EASEMENTS PROVIDED FOR ACCESS. STORMWATER MANAGEMENT STRUCTURES ADJACENT TO THE PUBLIC RIGHT-OF-WAY OF VALENCIA LANE, DOVE SAIL LN, SKY RIBBON RD AND MANGO TREE ROAD WILL BE PRIVATELY MAINTAINED BY THE OWNER. THE SPECIFICS OF THE AGREED UPON OWNERSHIP, AND MAINTENANCE RESPONSIBILITIES OF THE STORMWATER MANAGEMENT FACILITIES, WILL BE INCLUDED IN A MAINTENANCE AGREEMENT TO BE EXECUTED BY BOTH PARTIES.
- THIS SDP USES 382 HOUSING ALLOCATIONS.
- PROPERTY WITHIN THE AREA OF THIS FINAL PLAN IS SUBJECT TO THE TERMS OF A RECIPROCAL EASEMENT AGREEMENT DATED OCTOBER 19, 2017 AND RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY IN LIBER 17874, FOLIO 496 ("REA"), WHICH AMONG OTHER THINGS CREATES RECIPROCAL RIGHTS AND OBLIGATIONS OF THE PROPERTY OWNERS AS TO ACCESS AND PARKING, UTILITIES AND STORMWATER MANAGEMENT, AMENITIES AND LANDSCAPING, AND SETS FORTH THE PRIVATE MAINTENANCE RESPONSIBILITIES FOR ALL PRIVATELY OWNED COMMON AREA AND/OR QUASI-PUBLIC AMENITIES (SUCH AS PRIVATE ROADWAYS, PRIVATE SIDEWALKS, AND DOWNTOWN COMMONS) AND PUBLIC ART TO BE MAINTAINED BY THE PROPERTY OWNERS, OR ASSUMED BY A MAINTENANCE ORGANIZATION, THE COUNTY OR OTHER ORGANIZATION. PROPERTY OWNER ACKNOWLEDGES AND CONFIRMS THAT ANY REFERENCE IN THE REA TO AN OWNER'S RIGHT TO DEDICATE ALL OR A PORTION OF AN EASEMENT AREA OR MAINTENANCE OF ANY OFF-SITE AREA TO THE COUNTY IS SUBJECT TO THE COUNTY'S AFFIRMATIVE ACCEPTANCE OF ANY SUCH OBLIGATION WHICH IT MAY GRANT OR DENY, IN ITS OWN DETERMINATION, IN ACCORDANCE WITH THE COUNTY'S PROCEDURES REGARDING SAME.
- THE PUBLIC MULTI-PURPOSE AND UTILITY EASEMENTS AND PRIVATE MULTI-PURPOSE EASEMENTS AND PRIVATELY MAINTAINED STORMWATER EASEMENTS SHOWN ON SHEETS 12-20, 22, AND 29-41, FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES 53, 60, AND 61. THE PRIVATE MULTI-PURPOSE EASEMENT AREAS SHOWN HEREON ARE INTENDED TO BE SUBJECT TO THE REA, NOT WITHSTANDING ANY INCONSISTENCIES IN LABELING, LOCATION OR DESIGNATION, SUBJECT TO THE PROVISIONS OF NOTE 56. ALL EXISTING EASEMENTS WERE RECORDED WITH PLAT 24623-24630.
- BUILDING ENTRANCE LOCATIONS ARE PRELIMINARY AND MAY CHANGE TO ADDRESS TENANT NEEDS.
- UNDER NO CIRCUMSTANCES WILL TRUCKS BE PERMITTED TO STOP OR PARK TO LOAD/UNLOAD WITHIN THE SYMPHONY WOODS ROAD RIGHT-OF-WAY.

LEGEND



PUBLIC ART LEGEND



Net New Amenity Spaces Chart Crescent Phase 1 Area 3

Key	Type	Description	Required per FDP-DC Crescent-1A Area (SF)	Provided in Phase 1 Area 3 Phase 1 Area (SF)	To be Provided in Phase 1 Area 3, Phase 2 ¹ Area (SF)	(Balance)/Excess ^{2,3} Area (SF)
1	Primary	South Crescent Park	25,300	26,334	-	1,034
1P	Primary	South Crescent Promenade	11,000	-	11,476	476
15	Secondary	Parcel D-2	-	2,225	-	2,225
25	Secondary	Parcel D-3, D-5, D-6	-	16,057	-	16,057
35	Secondary	Parcel D-3, D-4	-	8,603	-	8,603
Crescent Area 3 Phase 1 Sub Total (Secondary)			23,400	26,885	-	3,485
Credit from Crescent Area 1 (Secondary)			-	6,000	-	6,000
Total Crescent Area 3 Amenity Spaces			23,400	32,885	-	9,485

1. Anticipated square footage is indicated. Final square footage will be identified on the SDP for Crescent Phase 1, Area 3.
 2. Balance/Excess represents balance to date of Site Development Plans; SDP-15-068 and SDP-17-027.

DOWNTOWN COMMUNITY COMMONS AND PUBLIC ART PLAN

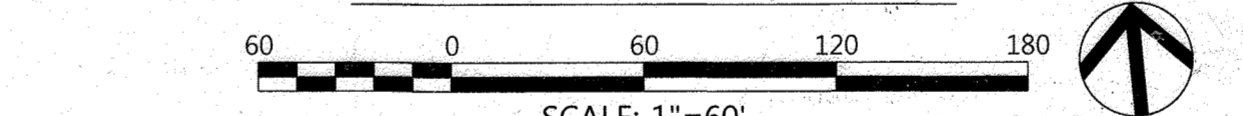


TABLE 11: OWNERSHIP AND MAINTENANCE RESPONSIBILITIES WITHIN EASEMENTS

INFRASTRUCTURE ITEM	OWNERSHIP	MAINTENANCE	ASSOCIATED COUNTY FILE NUMBER
PUBLIC STORM DRAINS (1 & 4)	HOWARD COUNTY	HOWARD COUNTY	F 17-055 F 18-017
PUBLIC STREET TREES (WITHIN TREE PIT)	HOWARD COUNTY	HOWARD COUNTY	F 17-055 F 18-017
PUBLIC STREET LIGHTS AND CONDUITS (1)	HOWARD COUNTY	PROPERTY OWNER	F 17-055 F 18-017
PUBLIC WATER & SEWER (1 & 3)	HOWARD COUNTY	PROPERTY OWNER	CONV. #24-4974-D
STORMCEPTOR (1) (THREE LOCATIONS)	PROPERTY OWNER	PROPERTY OWNER	SDP 17-027 SDP 18-005
THE PRIVATE MULTI-PURPOSE EASEMENT IS CO-TERMINUS WITH THE PUBLIC MULTI-PURPOSE AND UTILITY EASEMENT (EXCEPT WHERE NOTED) AND INCLUDES, BUT IS NOT LIMITED TO THOSE LISTED BELOW. THESE PRIVATE IMPROVEMENTS ARE THE RESPONSIBILITY OF THE PROPERTY OWNERS AS DESCRIBED IN THE RECIPROCAL EASEMENT AGREEMENT. SEE GENERAL NOTES #24 AND #25.			
PRIVATE STORM DRAINS, PRIVATE ROADS & PARKING	PROPERTY OWNER	PROPERTY OWNER	SDP 17-027 SDP 18-005
PRIVATE SWM DEVICES (2) (MICRO BIO-RETENTION)	PROPERTY OWNER	PROPERTY OWNER	SDP 17-027 SDP 18-005
PRIVATE WATER & SEWER (3)	PROPERTY OWNER	PROPERTY OWNER	SDP 17-027 SDP 18-005
GREASE INTERCEPTOR	PROPERTY OWNER	PROPERTY OWNER	SDP 17-027 SDP 18-005
PRIVATE STREET TREES (MICRO BIO-RETENTION & PRIVATE ROADS)	PROPERTY OWNER	PROPERTY OWNER	SDP 17-027 SDP 18-005
PRIVATE STREET LIGHTS AND CONDUITS	PROPERTY OWNER	PROPERTY OWNER	SDP 17-027 SDP 18-005
CERTAIN ITEMS LIE WITHIN THE LIMITS OF THE PUBLIC MULTI-PURPOSE AND UTILITY EASEMENT AND THE PRIVATE MULTI-PURPOSE EASEMENT. THESE ARE THE RESPONSIBILITY OF THE INDIVIDUAL UTILITY COMPANIES. SEE GENERAL NOTE #25.			
PUBLIC DRY UTILITIES AND CONDUITS (5 & 6)	UTILITY COMPANY	UTILITY COMPANY	COVERED BY BGE MASTER AGREEMENT (LIBER 468 PAGE 239)
PRIVATE DRY UTILITIES AND CONDUITS (5)	PROPERTY OWNER	PROPERTY OWNER	---

- UPON COMPLETION OF WORK, HOWARD COUNTY IS NOT RESPONSIBLE FOR RETURNING THE PRIVATE ITEMS WITHIN THE PUBLIC MULTI-PURPOSE AND UTILITY EASEMENTS AND THE PRIVATE MULTI-PURPOSE EASEMENTS BACK TO EXISTING CONDITIONS. THE COUNTY IS ONLY OBLIGATED TO RETURN THE AREAS TO EXISTING GRADE AND PROVIDE ITEMS CONSISTENT WITH A TYPICAL PUBLIC STREET OR SIDEWALK. THE PROPERTY OWNER IS RESPONSIBLE FOR RETURNING HARDSCAPE TO THE PRIOR OR FINISHED CONDITION.
- THIS WOULD INCLUDE, BUT ARE NOT LIMITED TO ITEMS SUCH AS THE CURB OPENINGS THAT CONVEY THE RUNOFF FROM THE CURB TO THE ESP DEVICES, STRUCTURES THAT PROVIDE CHANNEL PROTECTION, ETC.
- THE LIMITS OF PRIVATE AND PUBLIC WATER AND SEWER CONNECTIONS HAVE BEEN PROVIDED WITH CONV. #24-4974-D.
- THE LIMITS OF THE PRIVATE AND PUBLIC STORM DRAIN CONNECTIONS HAVE BEEN PROVIDED WITH F 17-059 AND F 18-017.
- PRIVATE DRY UTILITIES AND CONDUITS MAY INCLUDE, BUT ARE NOT LIMITED TO ELECTRIC LINES, GAS MAINS, CABLE, FIBER OPTICS, AND TELEPHONE.
- UPON COMPLETION OF WORK, THE UTILITY COMPANIES ARE NOT RESPONSIBLE FOR RETURNING THE PRIVATE ITEMS WITHIN THE PUBLIC MULTI-PURPOSE AND UTILITY EASEMENTS AND THE PRIVATE MULTI-PURPOSE EASEMENTS BACK TO EXISTING CONDITIONS. THE UTILITY COMPANIES ARE ONLY OBLIGATED TO RETURN THE AREAS TO EXISTING GRADE AND PROVIDE ITEMS CONSISTENT WITH A TYPICAL PUBLIC STREET OR SIDEWALK. THE PROPERTY OWNER IS RESPONSIBLE FOR RETURNING HARDSCAPE TO THE PRIOR OR FINISHED CONDITION.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE COUNTY'S INFRASTRUCTURE AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE COUNTY ENGINEER AT THE CONTRACTOR'S EXPENSE.

FILE NUMBERS:

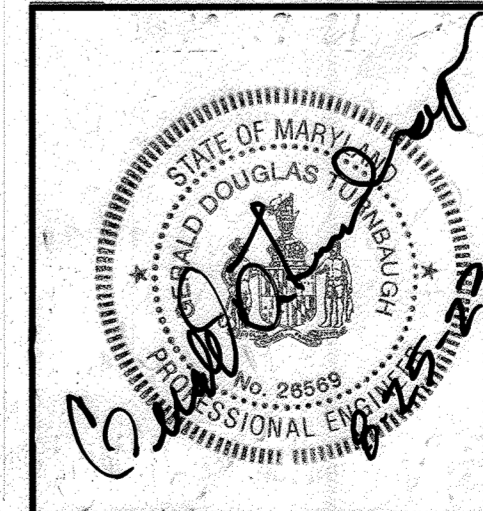
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESENT-1A

CONTRACT NUMBERS:

24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE: 07/18/21



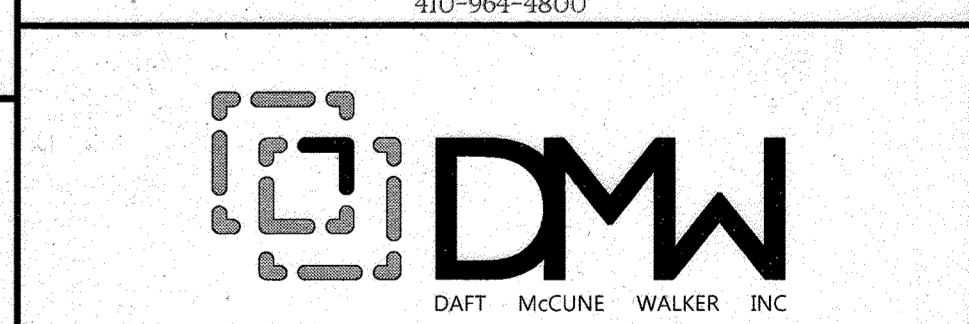
PROFESSIONAL ENGR. NO. 26569

APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE: 11/16/17

Date	No.	Revision Description
5-17-20	1	CONVERT 3,915 S.F. OF BLDG. B RETAIL USE TO FAST CASUAL RESTAURANT & UPDATE ASSOC. PARKING
10/10/20	2	UPDATE FLOOR SPACE AND PARKING TABLES
11/15/20	3	UPDATE FLOOR SPACE AND PARKING TABLES
9/20/21	4	UPDATE PARKING, USAGE & DENSITY TABLES
7/31/20	5	UPDATE BLDG. B' USAGES, SQUARE FOOTAGES & PARKING REQMENTS, AND BLDG. E-2 DOORS, HARDSCAPE & DUMPSTER LOCATIONS
11/18/19	6	BLDG E-3 UTILITIES, PARK AREA GRADING, AND REVISED SWM MB14 & 15 LOCATION
03/06/19	7	BLDG E2, E3, PLAZA HARDSCAPES AND GRADING
12/03/18	8	BUILDING A1 LOADING DOCK RECONFIGURATION AND GARAGE

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14
OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-961-8800



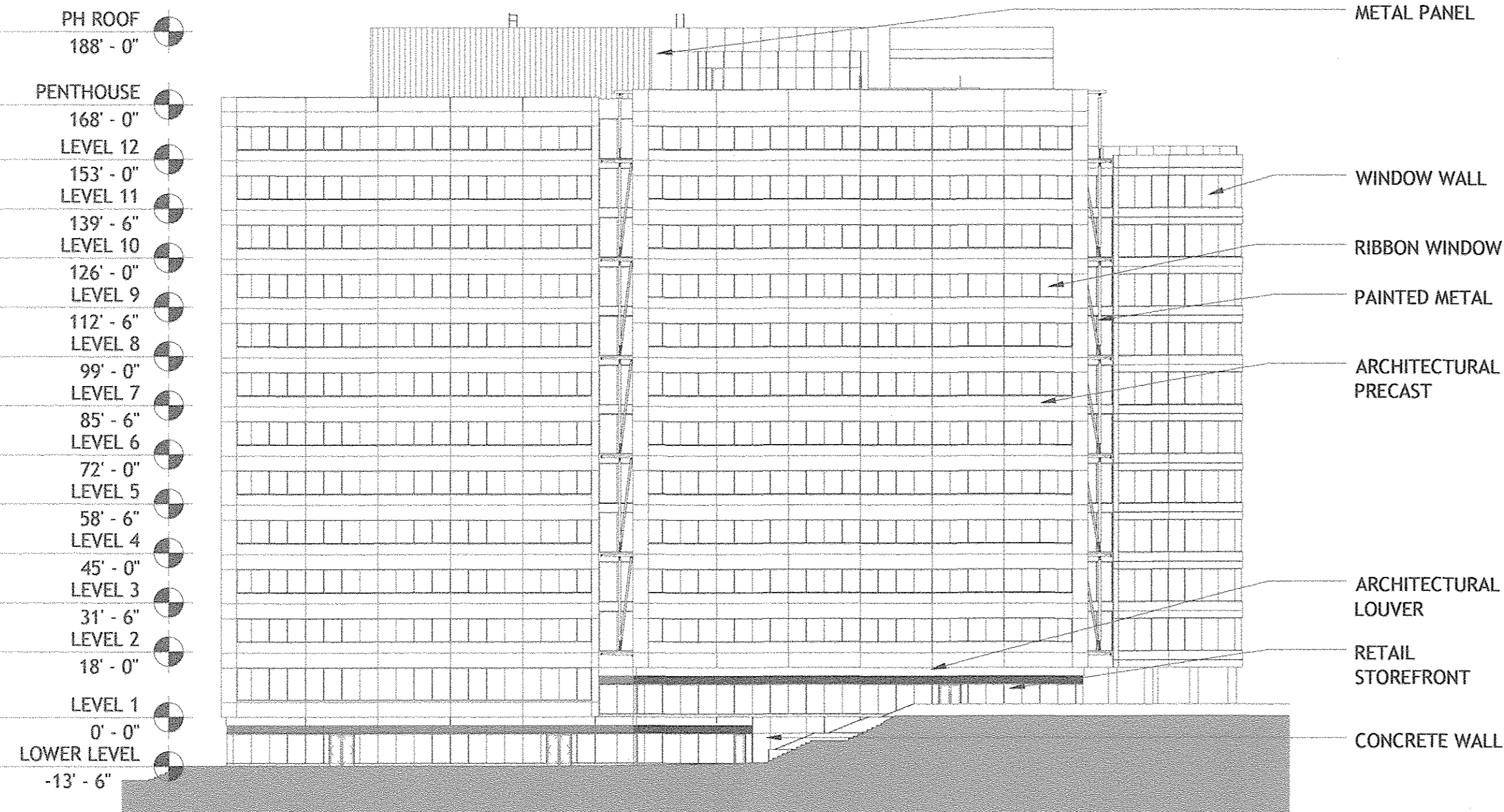
501 FAIRMONT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 279 3333 F: 410 296 4705 WWW.DMW.COM

SECTION/PROJECT NAME	SECTION/PROJECT NAME	LOT/PARCEL	
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D	
PLAT OR LOT	BLOCK # ZONE/APP	BLOCK DISTRICT	
24623-24630	7 D-14A	36	5
OWNER CODE	OWNER CODE	STAGE	605602
550	LITTLE PATUXENT	1	

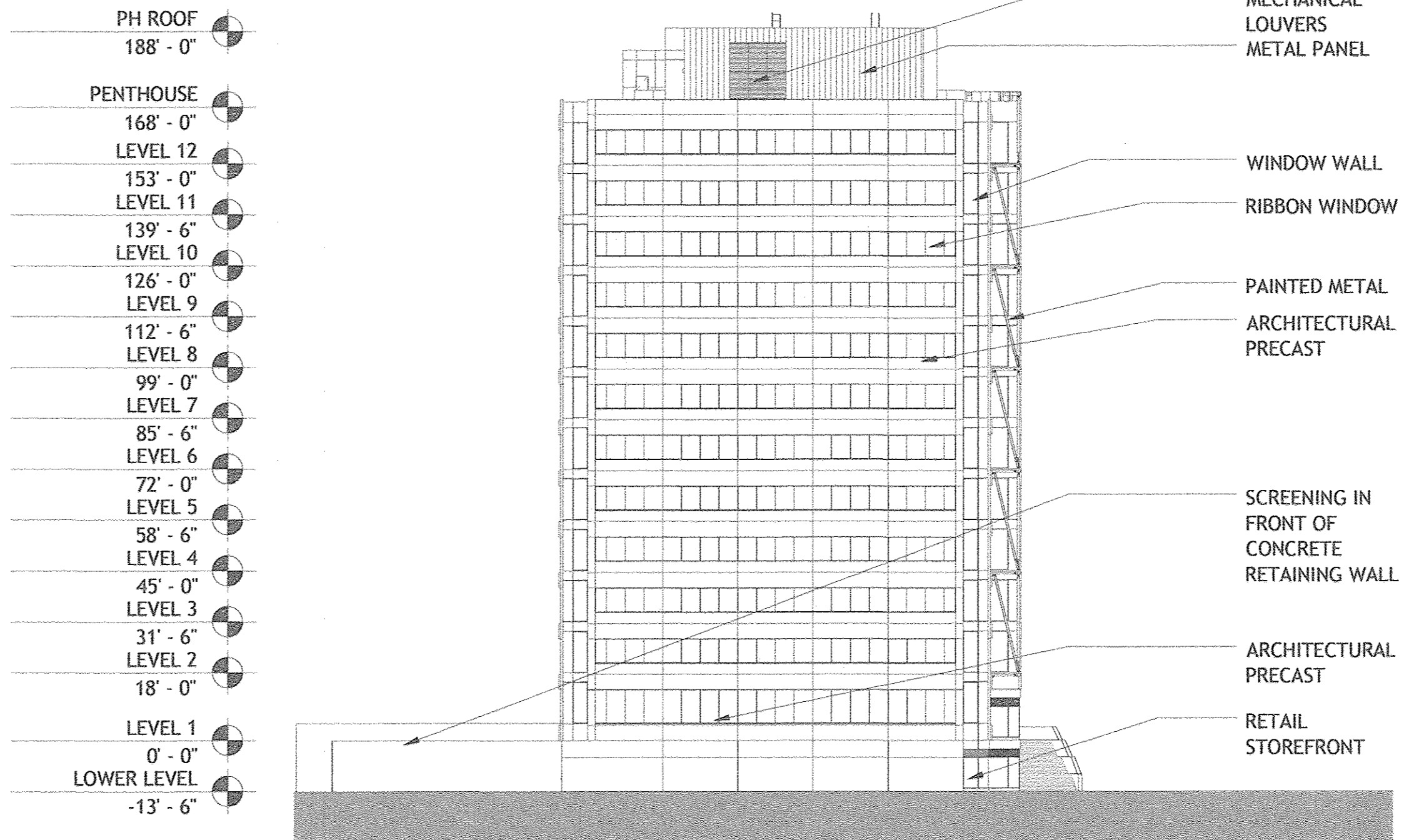
GENERAL NOTES AND AMENITY PLAN
REVISED SITE DEVELOPMENT PLAN

Des. By	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	Date 9-20-21	
Chk. By	Approved MCB	2 of 94

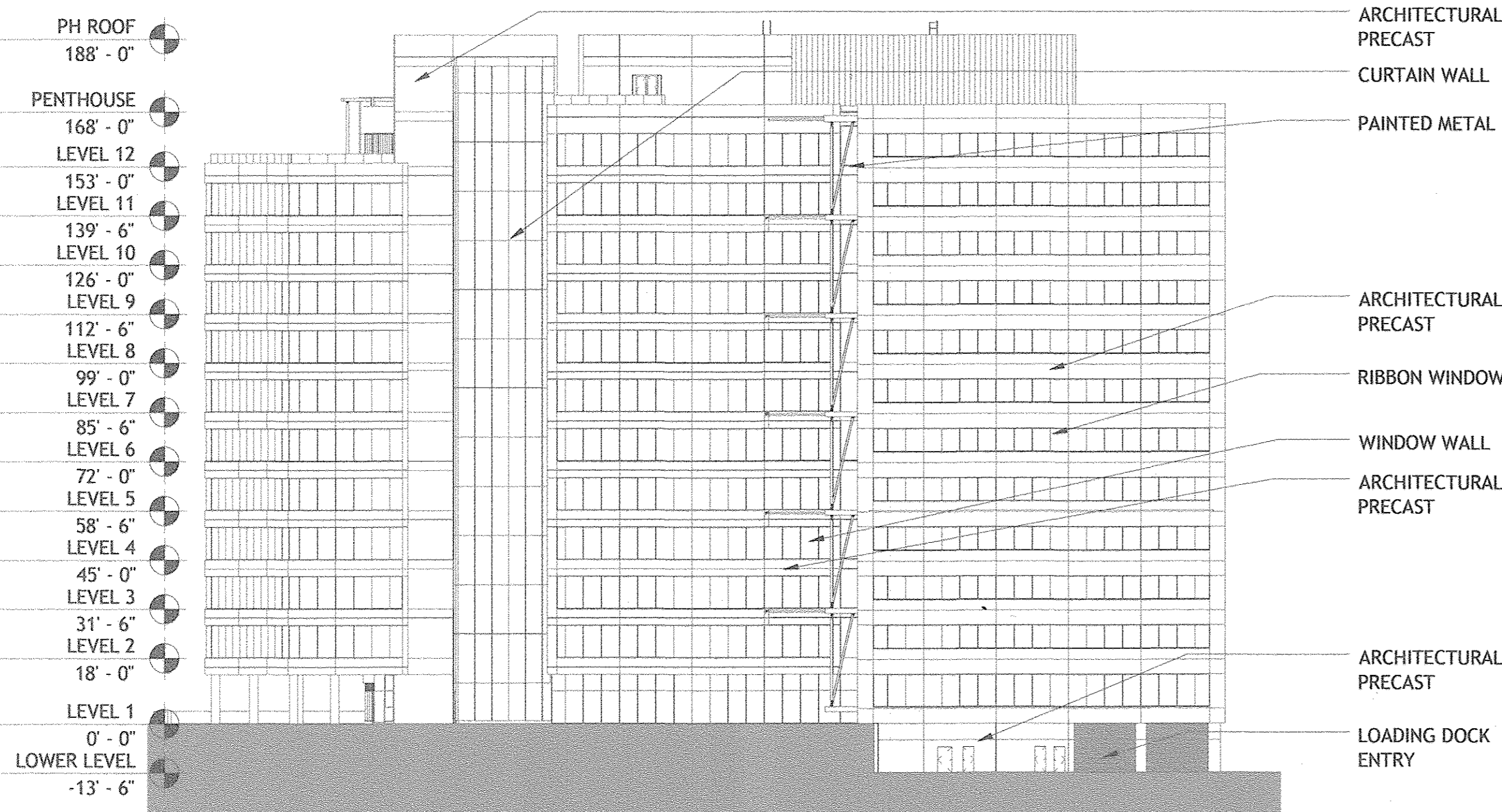
SDP-17-027



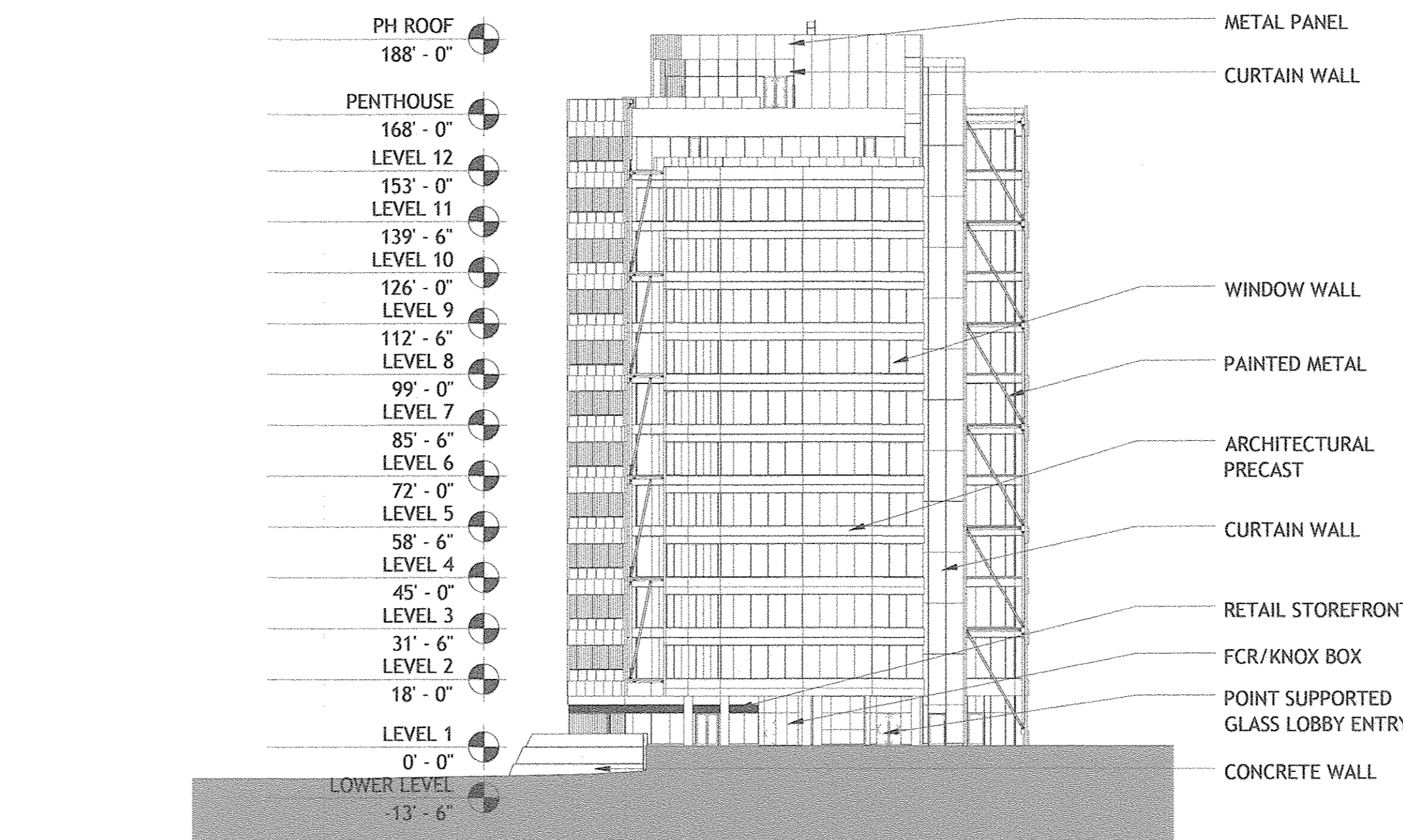
NORTH 1/32" = 1'-0" -A-1 SIGNATURE BUILDING- RETAIL/BUSINESS



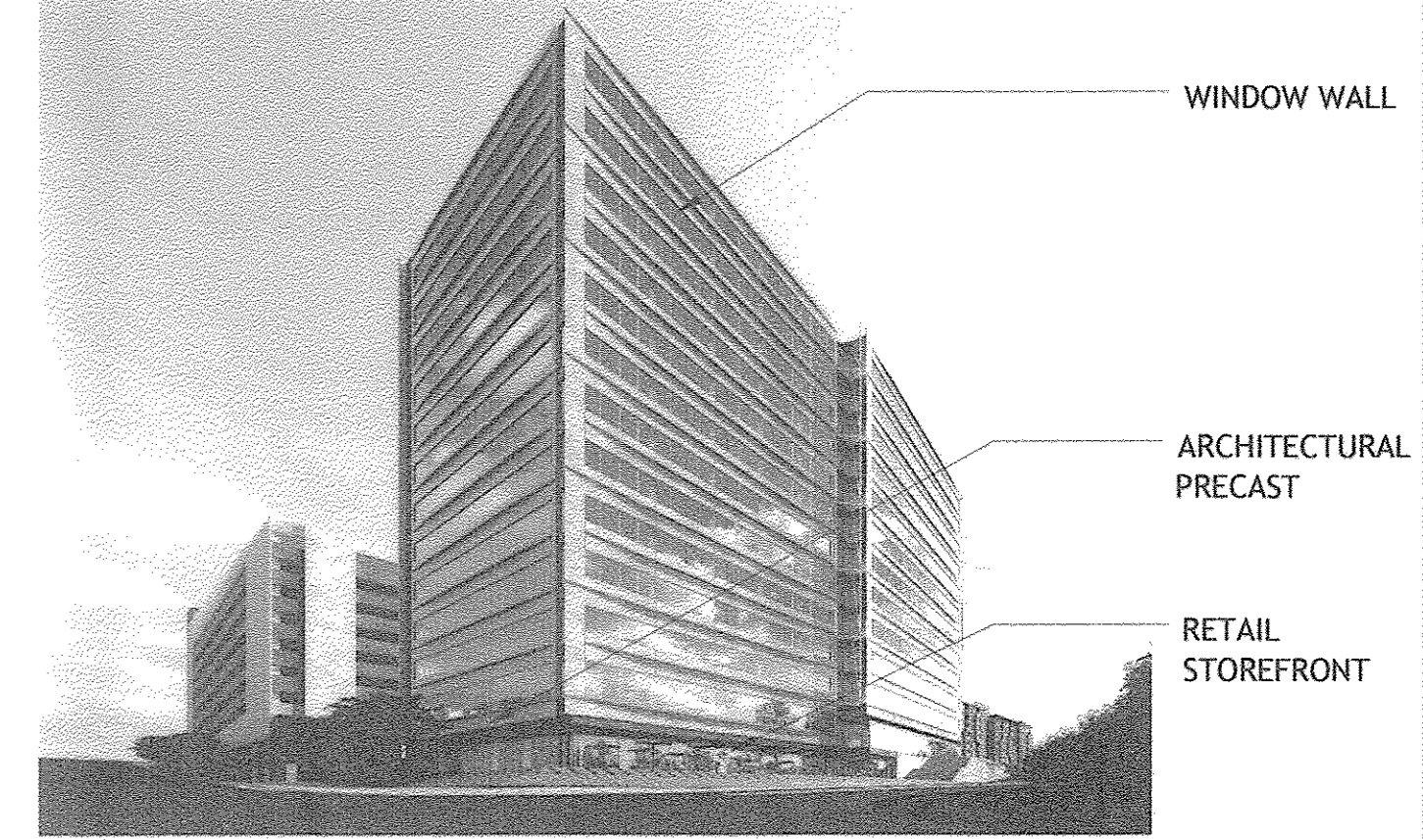
EAST 1/32" = 1'-0" -A-1 SIGNATURE BUILDING- RETAIL/BUSINESS



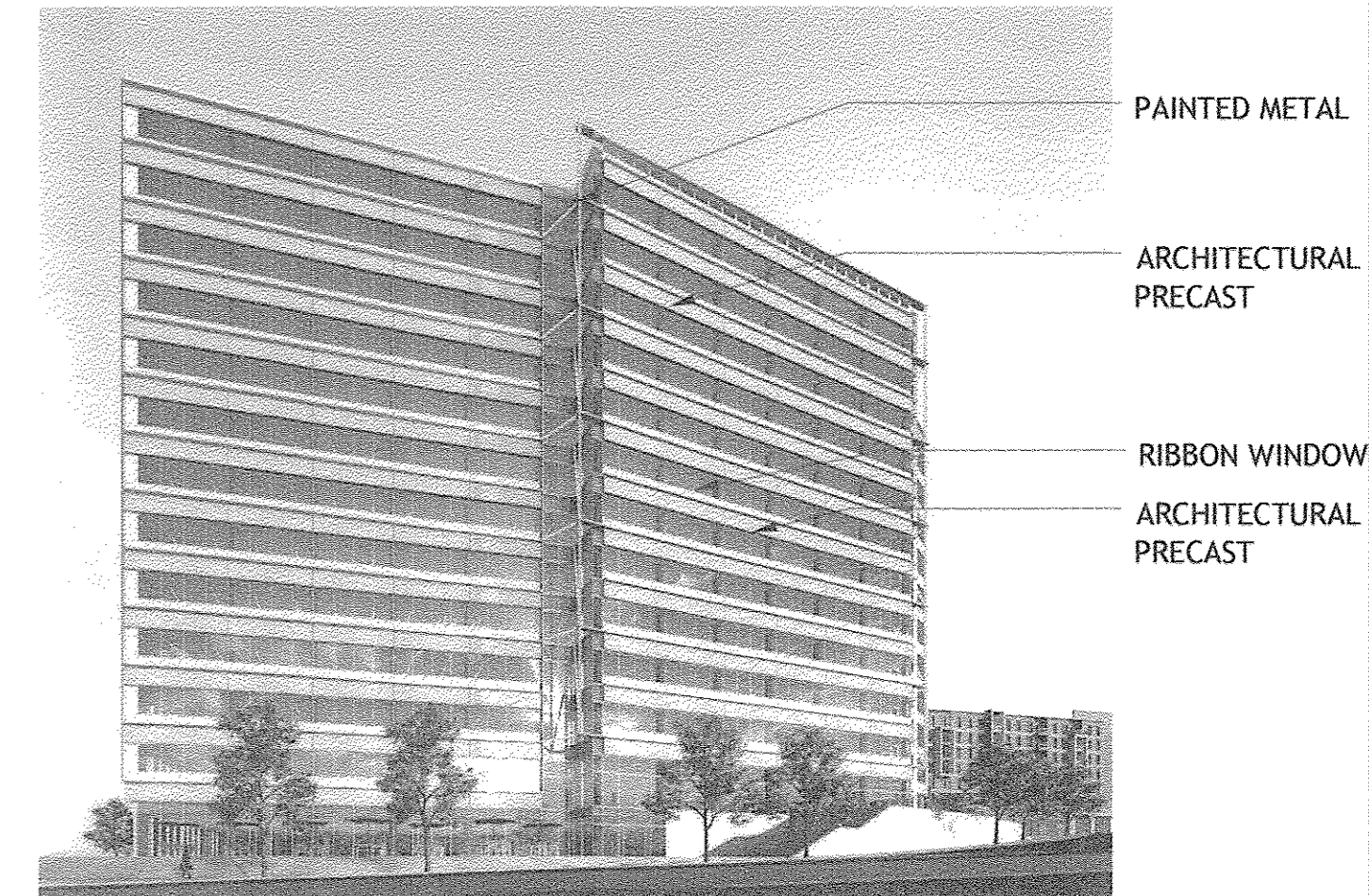
SOUTH 1/32" = 1'-0" -A-1 SIGNATURE BUILDING- RETAIL/BUSINESS



WEST 1/32" = 1'-0" -A-1 SIGNATURE BUILDING- RETAIL/BUSINESS



SDP - NE PERSPECTIVE



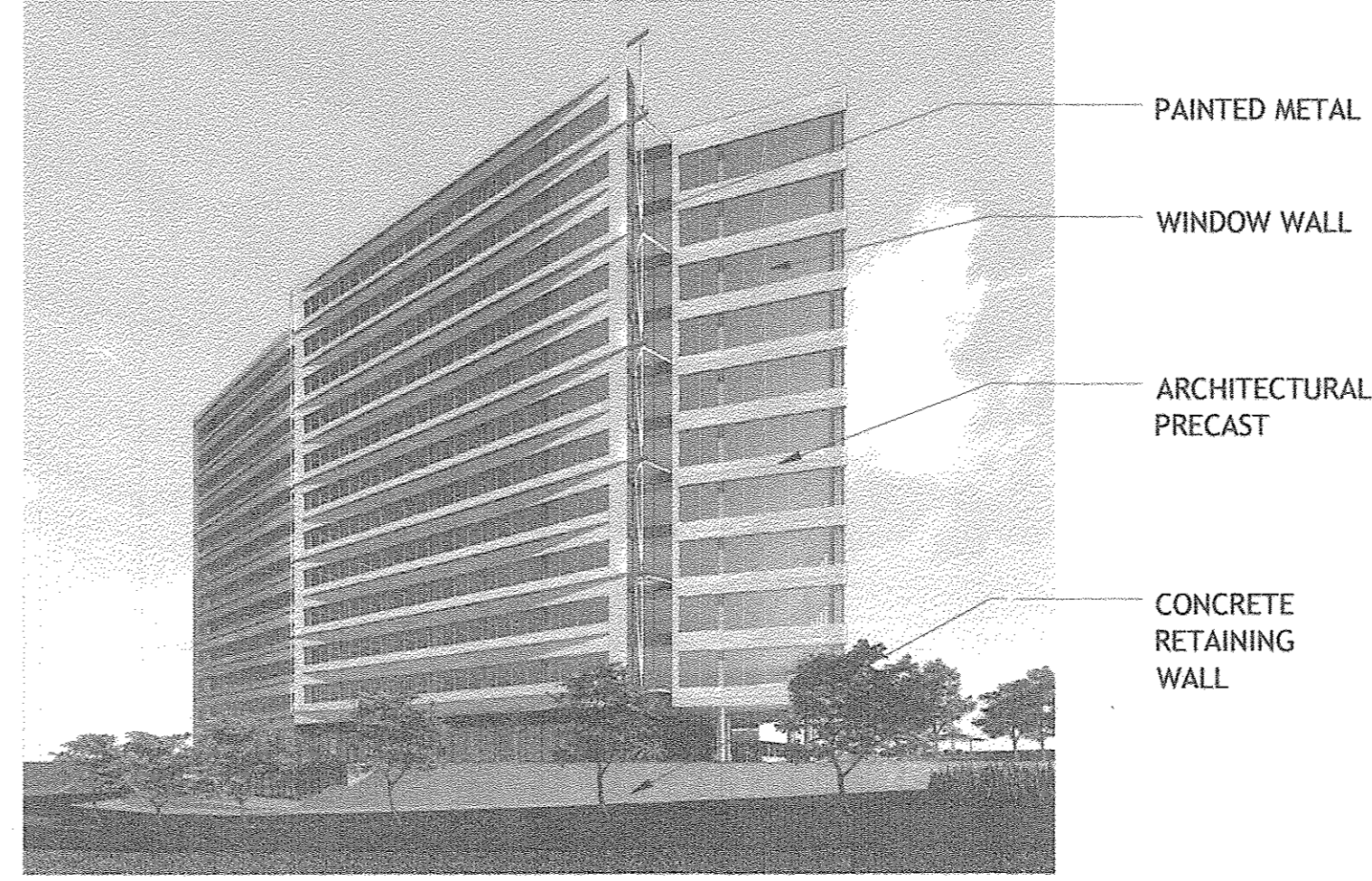
SDP - NORTH PERSPECTIVE

NOTES:

- THIS BUILDING IS TO COMPLY WITH THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES REGARDING SIGNATURE BUILDING ELEMENTS
- COMPLIANT TO THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES THE GLAZING AT THE GROUND FLOOR SHALL BE TRANSPARENT AND NON-REFLECTIVE. ALL OTHER GLAZING WILL HAVE THE MINIMUM REFLECTIVITY TO ACHIEVE ENERGY EFFICIENCY RELYING PRIMARILY ON THE USE OF COATINGS AND/OR TINTS. THE USE OF OPAQUE, TRANSLUCENT, OR FRITTED GLAZING WILL BE LIMITED AND PRIMARILY USED TO PROVIDE PRIVACY BUT SHALL NOT BE USED ON THE GROUND FLOOR STORE AND RESTAURANT FRONTS, AND IS STRONGLY DISCOURAGED FROM GROUND FLOOR OFFICE AND RESIDENTIAL AMENITY USES AS WELL.
- THE FOLLOWING SIGNATURE ELEMENTS ARE PROPOSED FOR BUILDING A-1: THE FORM AND SHAPE OF THE BUILDING REACTS WITH THE LANDSCAPE AND EXISTING ADJACENT ENVIRONMENT. THE ANGLES IN THE FACADE CREATE OPPORTUNITIES TO PROVIDE A CONNECTION BETWEEN THE PUBLIC AND PRIVATE SPACES THAT ARE CREATED AROUND THE BUILDING (IE AT THE OVERHANG AT THE ENTRY LOCATION AT THE PLAZA SPACE TO THE WEST, THE SMALLER PLAZA LOCATED AT THE NORTHEAST CORNER OF THE BUILDING, AS WELL AS THE LAYOUT OF THE CORE SO THAT THE SOUTH SIDE OF THE BUILDING- WHICH IS ALONG THE PLAZA- IS USED AS A CIRCULATION CORRIDOR THROUGHOUT THE BUILDING. THE EXPOSED ILLUMINATED EGRESS STAIR ON THE SOUTH SIDE OF THE BUILDING ALSO FACES THE PLAZA AND CONTINUES THE VISUAL CONNECTION BETWEEN PEOPLE INSIDE THE BUILDING AND OUTSIDE IN THE PLAZA. STRUCTURAL FEATURE ELEMENTS ARE PRESENT AT KEY LOCATIONS AROUND THE FACADE. THESE ARE ALSO ILLUMINATED AND ADD ARCHITECTURAL INTEREST TO THE BUILDING IN A UNIQUE AND ICONIC WAY THAT IS CURRENTLY NOT FOUND IN THIS AREA.

RETAIL STOREFRONT ANALYSIS:

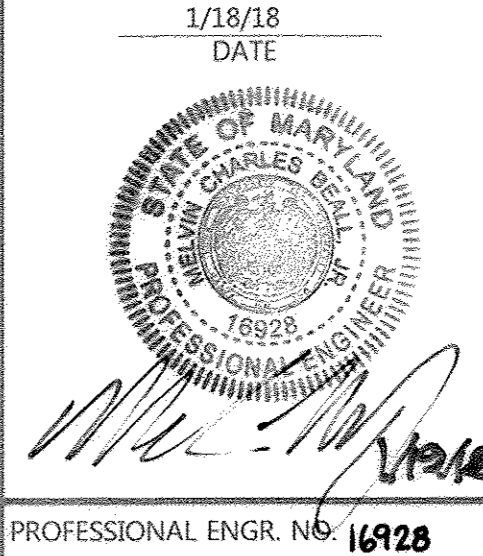
BUILDING A-1	ELEVATION	FACADE LENGTH	RETAIL STOREFRONT	%
	NORTH-LL	140'-1"	109'-11"	78.4%
	NORTH- LEVEL 1	236'-11"	124'-8"	50.6%
	SOUTH- LL	99'-8"	0'-0"	0%
	SOUTH- LEVEL 1	231'-3"	84'-3"	36.4%
	EAST	114'-6"	6'-4"	5%
	WEST	105'-1"	50'-6"	48%



SDP - NW PERSPECTIVE

NOTE:
THE SCHEMATIC BUILDING ELEVATIONS INDICATE BUILDING HEIGHT, MASSING AND ARCHITECTURAL INTENT AND MAY CHANGE WITH FURTHER DESIGN DEVELOPMENT. FINAL ARCHITECTURAL DESIGN WILL BE SHOWN ON THE CONSTRUCTION DOCUMENTS AND WILL BE REVIEWED FOR COMPLIANCE WITH THE NEIGHBORHOOD SPECIFIC DESIGN GUIDELINES AT THE TIME OF BUILDING PERMIT.

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
26-4991-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/18



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

Date No. Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-961-1800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SECTION: ARCHITECTURE
SUBSECTION: NEIGHBORHOOD
SHEET NO: 36 OF 36
DATE: 11/16/17

BUILDING A-1 ELEVATION - SIGNATURE

Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.B0
Dwn. By MCJ Date 1-18-18
Chk. By MCB Approved MCB 3 of 94

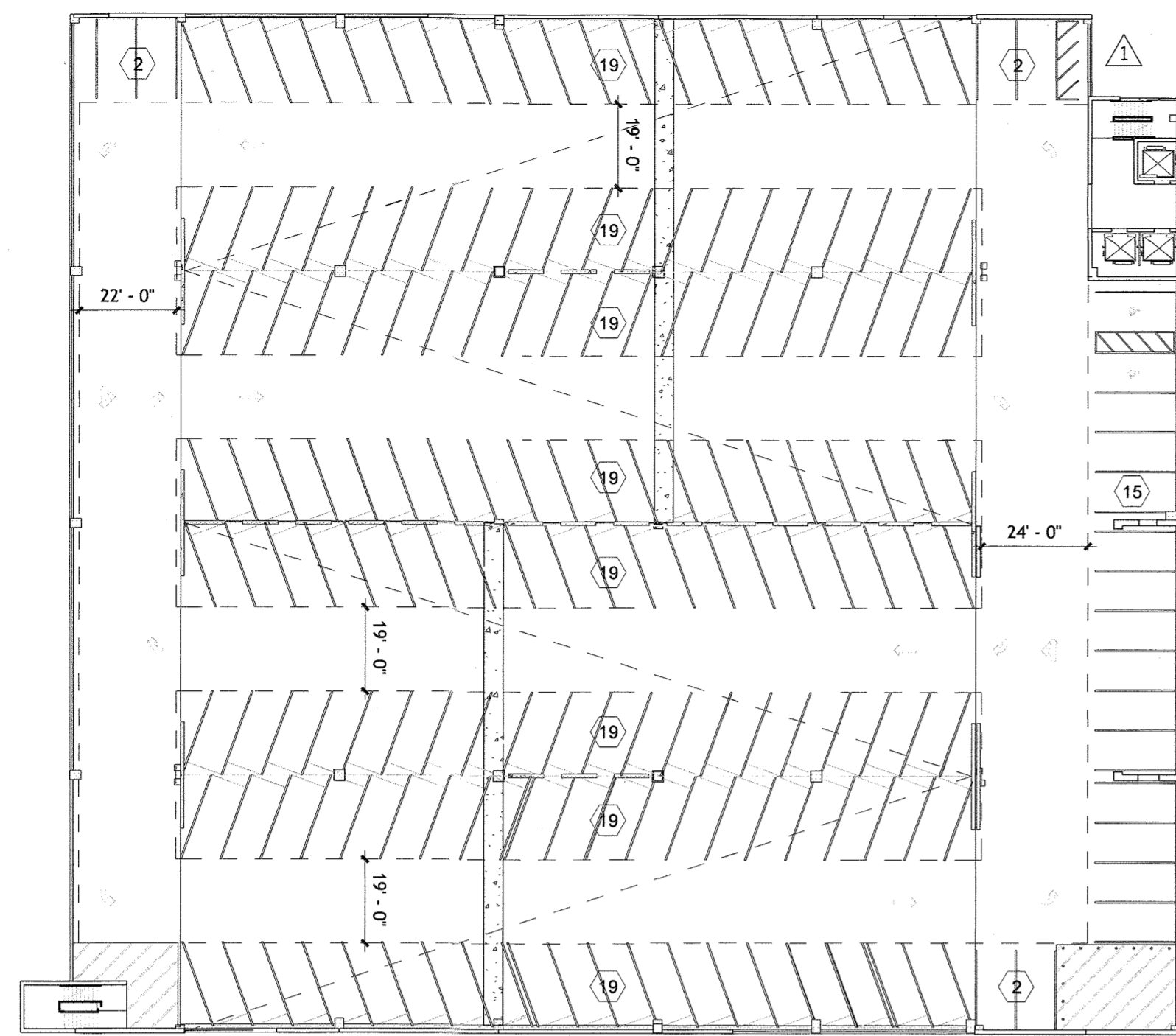
A:\2018\04038\04038-ARCHITECTURE\2018-05-08\2018-05-08-04038-ARCHITECTURE-01.dwg PLOT: SDP-17-027.DWG 11/16/17 10:53 AM

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

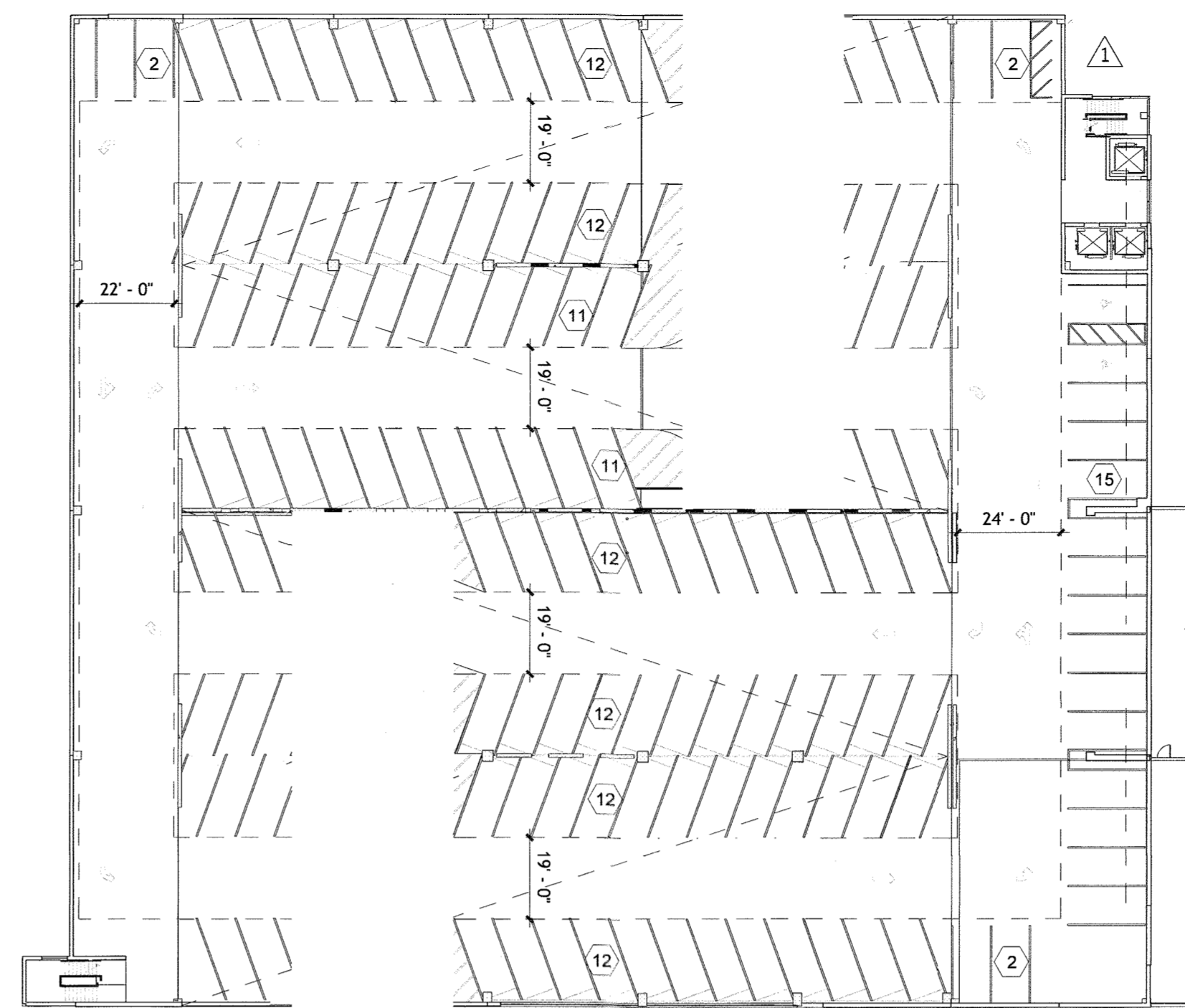
Charles Walker 3-28-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kate Calhoun 6-7-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

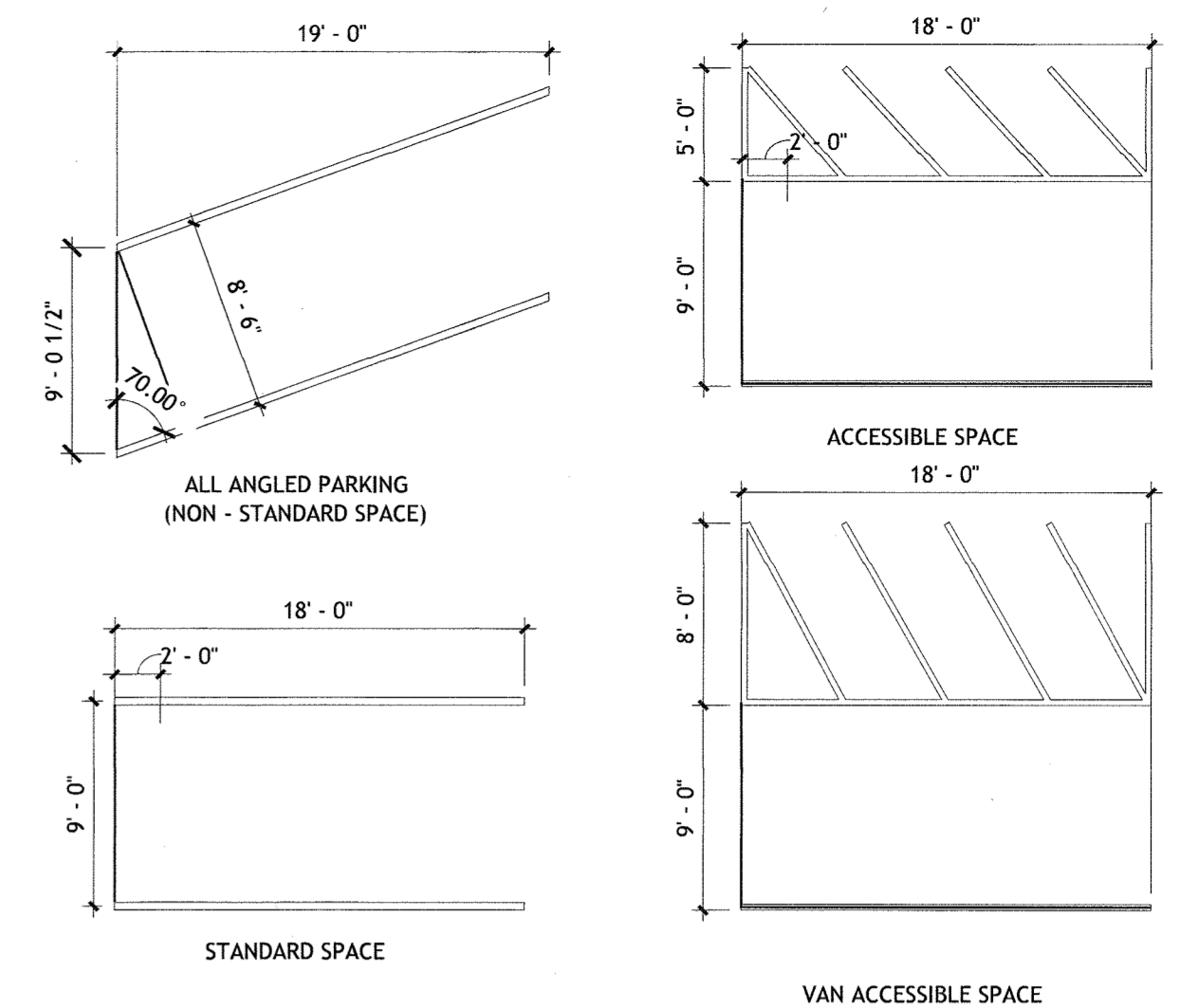
N. M. J. J. J. 6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE



LEVEL 3-9
 TOTAL PUBLIC PARKING SPACES: 173
 HC PARKING SPACES: 2
 HC VAN SPACES: 0
 1/32" = 1'-0"
 PARKING GARAGE



LEVEL 2
 TOTAL PUBLIC PARKING SPACES: 115
 HC PARKING SPACES: 2
 HC VAN SPACES: 0
 1/32" = 1'-0"
 PARKING GARAGE

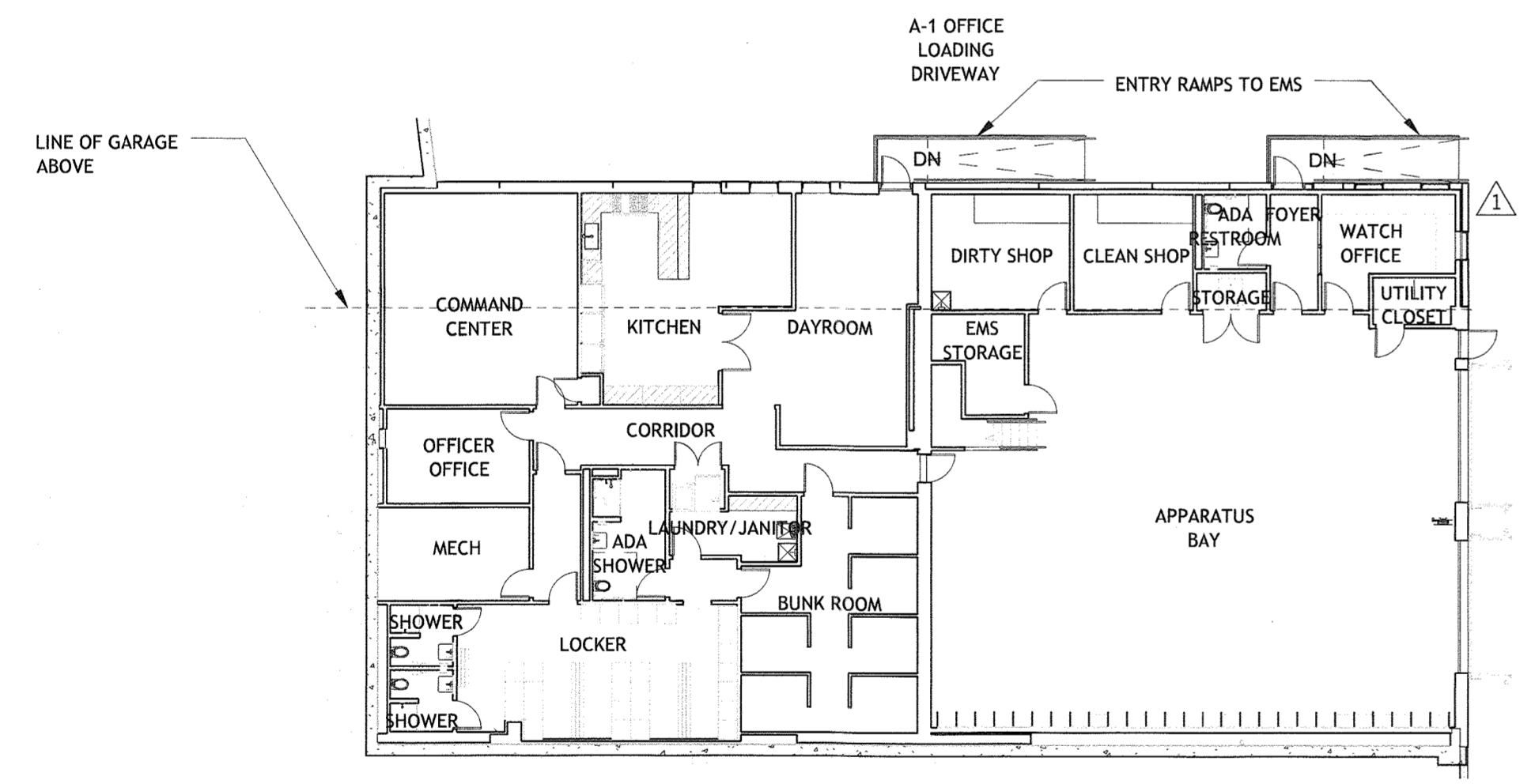


PARKING SPACE DIMENSIONS

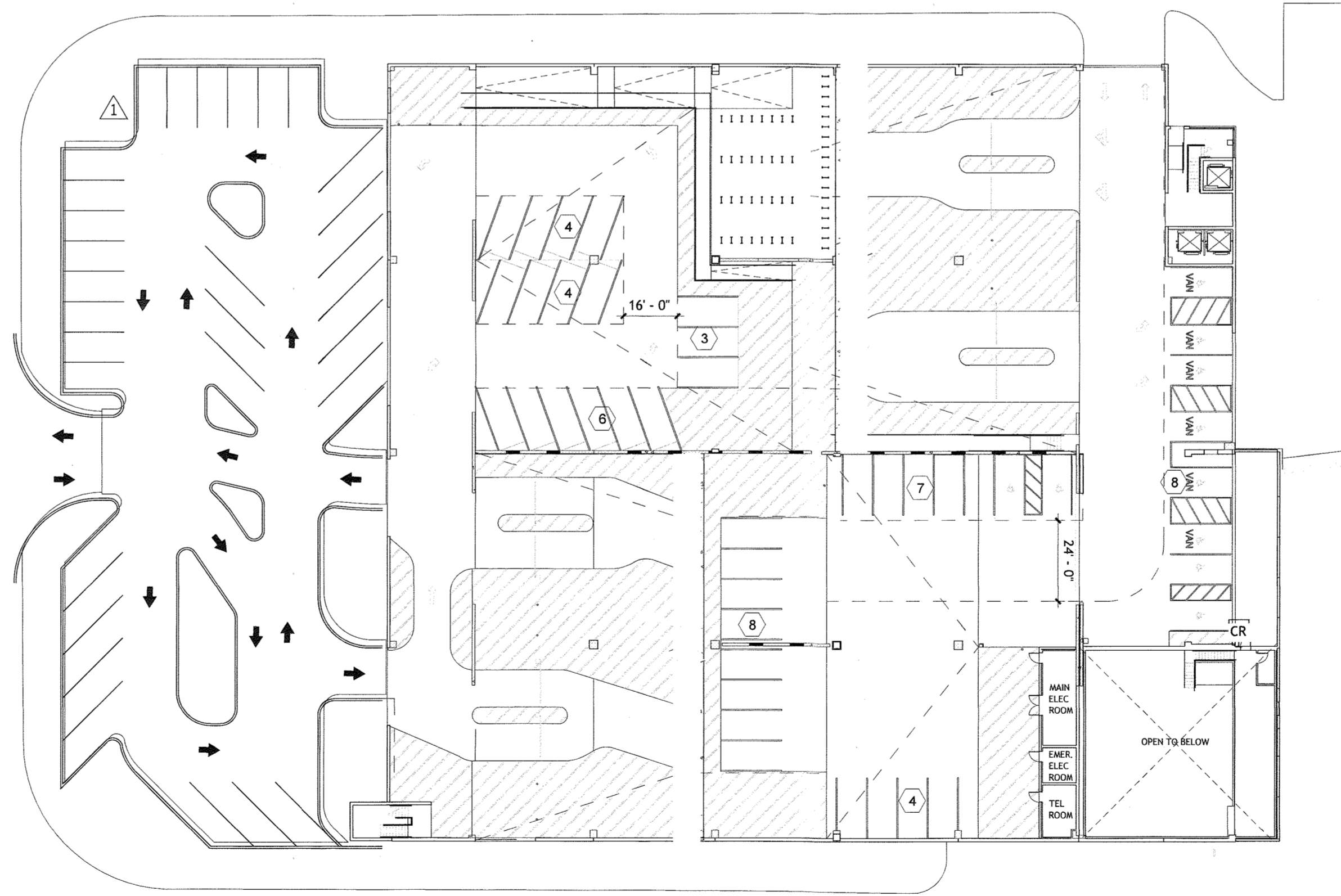
- NOTES:**
- ALL SPACES WILL HAVE PEDESTRIAN ACCESS TO ALL ELEVATORS AND STAIR TOWERS.
 - THE BUILDING ADDRESS FOR EACH SIDE OF THE GARAGE SHALL BE PROMINENTLY DISPLAYED AT EACH BUILDING ENTRANCE, AT EACH STAIRWELL, AT EACH FLOOR, AND AT PROMINENT LOCATIONS WITHIN THE GARAGE LEVELS, SO PATRONS CAN ACCURATELY IDENTIFY THE LOCATION FOR EMERGENCY RESPONDERS.
 - BIKE SPACES WILL BE ADJUSTED UPON EXPANSION OF THE PARKING GARAGE DURING PHASE TWO.
 - TWELVE SPACES IN THE PARKING GARAGE ARE TO BE RESERVED FOR EMT PERSONNEL AND SELECTION OF THESE SPACES WILL BE COORDINATED WITH HOWARD COUNTY FIRE DEPARTMENT.

PARKING COUNTS

LEVEL	STANDARD SPACES (90 DEGREE)	NON-STANDARD SPACES (70 DEGREE)	HANDICAP SPACES	HANDICAP-VAN SPACES	TOTAL PARKING
1	20	14	4	6	44
2	19	94	2	-	115
3	19	152	2	-	173
4	19	152	2	-	173
5	19	152	2	-	173
6	19	152	2	-	173
7	19	152	2	-	173
8	19	152	2	-	173
9	21	152	-	-	173
TOTAL	174	1172	18	6	1370



LOWER LEVEL - EMT PLAN
 TOTAL PUBLIC PARKING SPACES: 0
 HC PARKING SPACES: 0
 HC VAN SPACES: 0
 1/16" = 1'-0"
 PARKING GARAGE



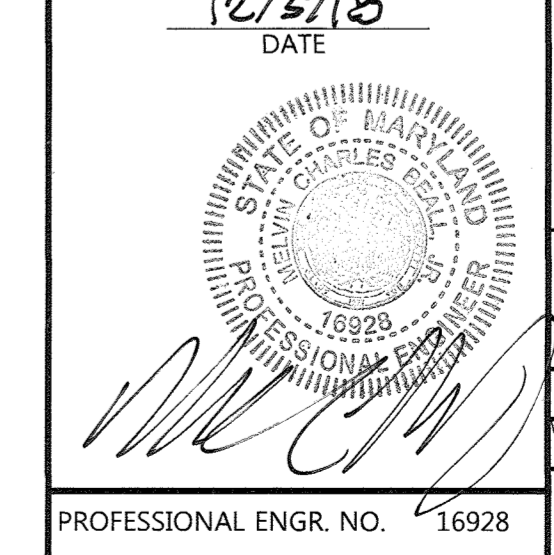
LEVEL 1
 TOTAL PUBLIC PARKING SPACES: 44
 HC PARKING SPACES: 4
 HC VAN SPACES: 6
 1/32" = 1'-0"
 PARKING GARAGE

RETAIL STOREFRONT ANALYSIS:

TIF GARAGE	ELEVATION	FACADE LENGTH	RETAIL STOREFRONT	%
	NORTH	237'-4"	0'-0"	0%
	SOUTH	237'-4"	0'-0"	0%
	EAST	362'-4"	0'-0"	0%
	WEST	362'-4"	0'-0"	0%

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chief Development Engineering Division 1-8-19 DATE
Chief, Division of Land Development 1-10-19 DATE
Director, Division of Land Development 1-10-19 DATE

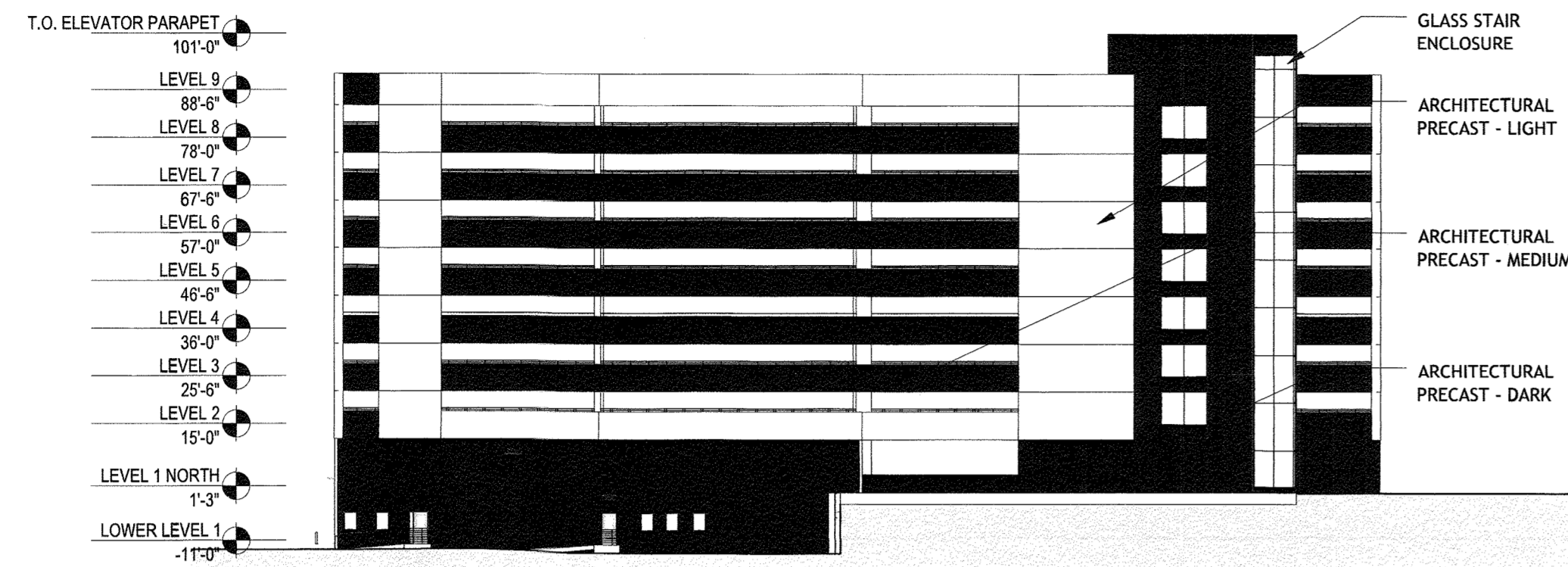
FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/20



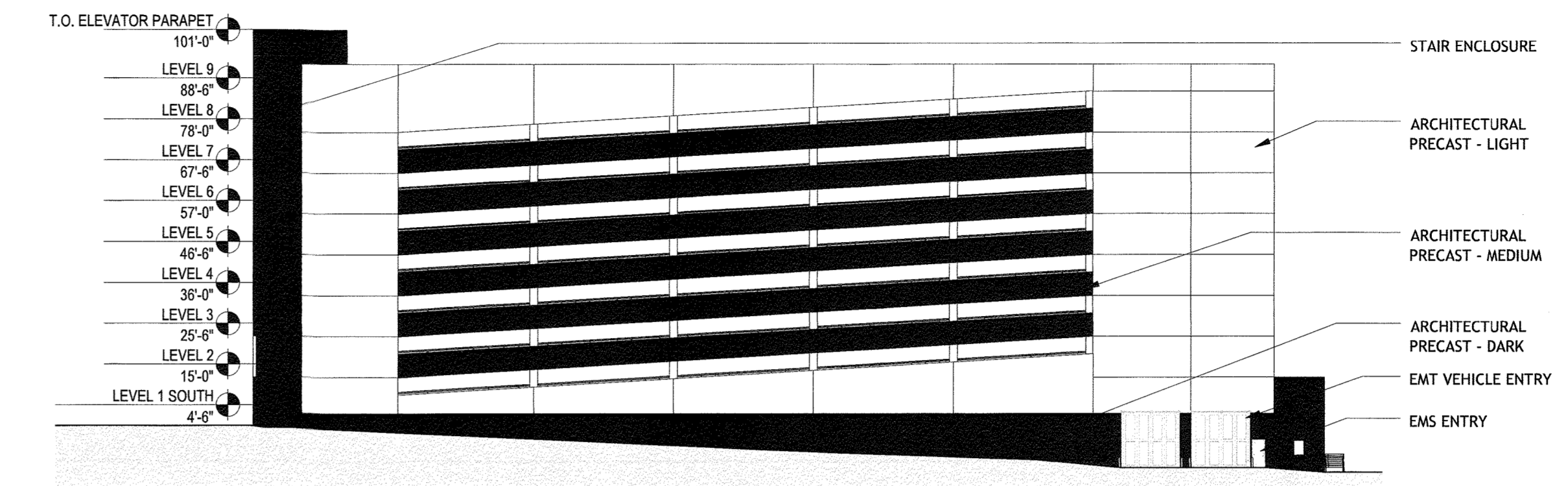
12/03/18 BUILDING A1 LOADING DOCK RECONFIGURATION AND GARAGE
 Date No. Revision Description
DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14
 OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

DMW
 DAFT MCCUNE WALKER INC
 501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

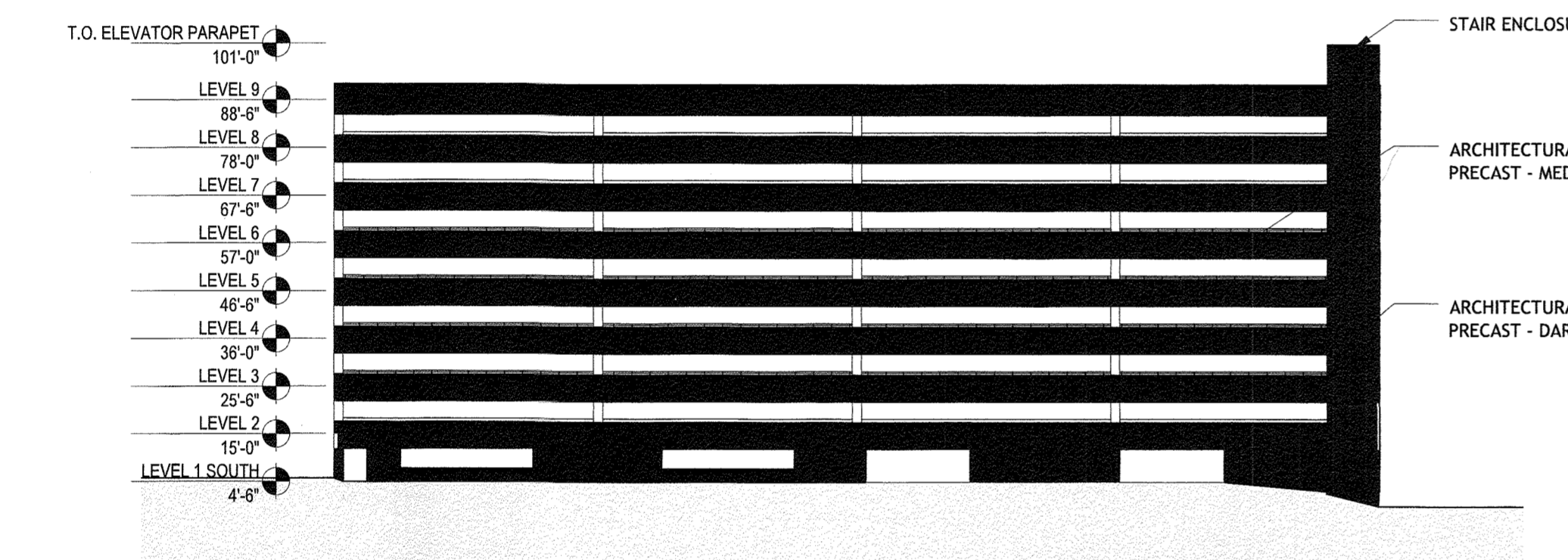
BUILDING GARAGE PLANS
 REPLACEMENT SHEET
 Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.80
 Dwn. By MCJ Date 5-10-18
 Chk. By MCB Approved MCB 4 of 94



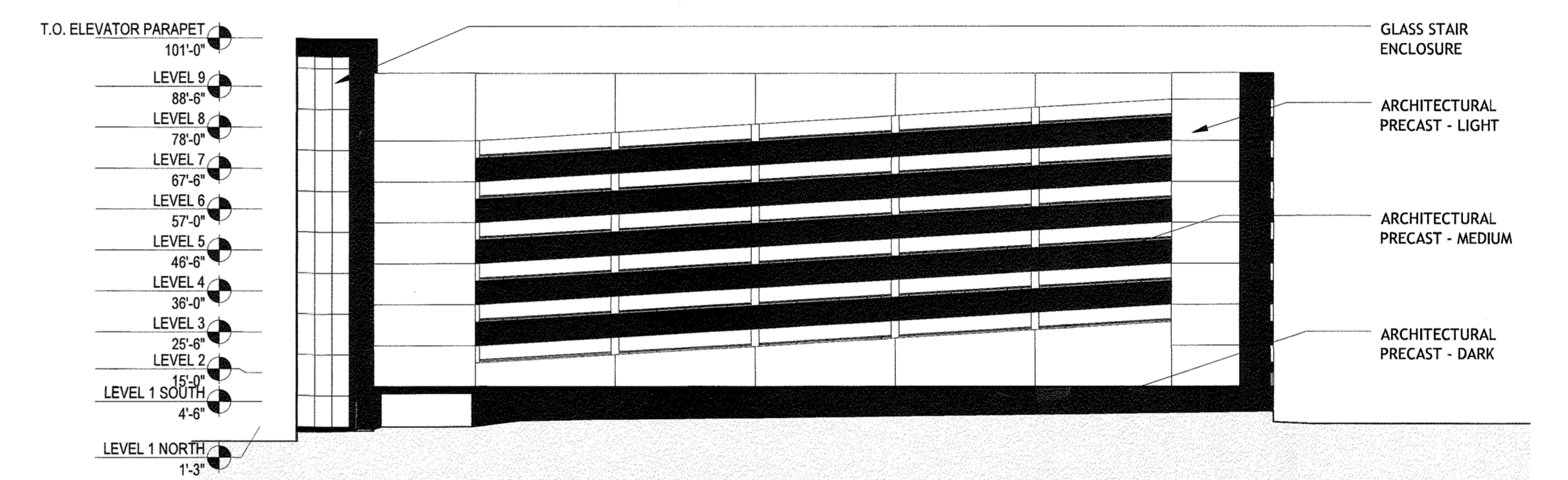
NORTH
1/32" = 1'-0"
PARKING GARAGE



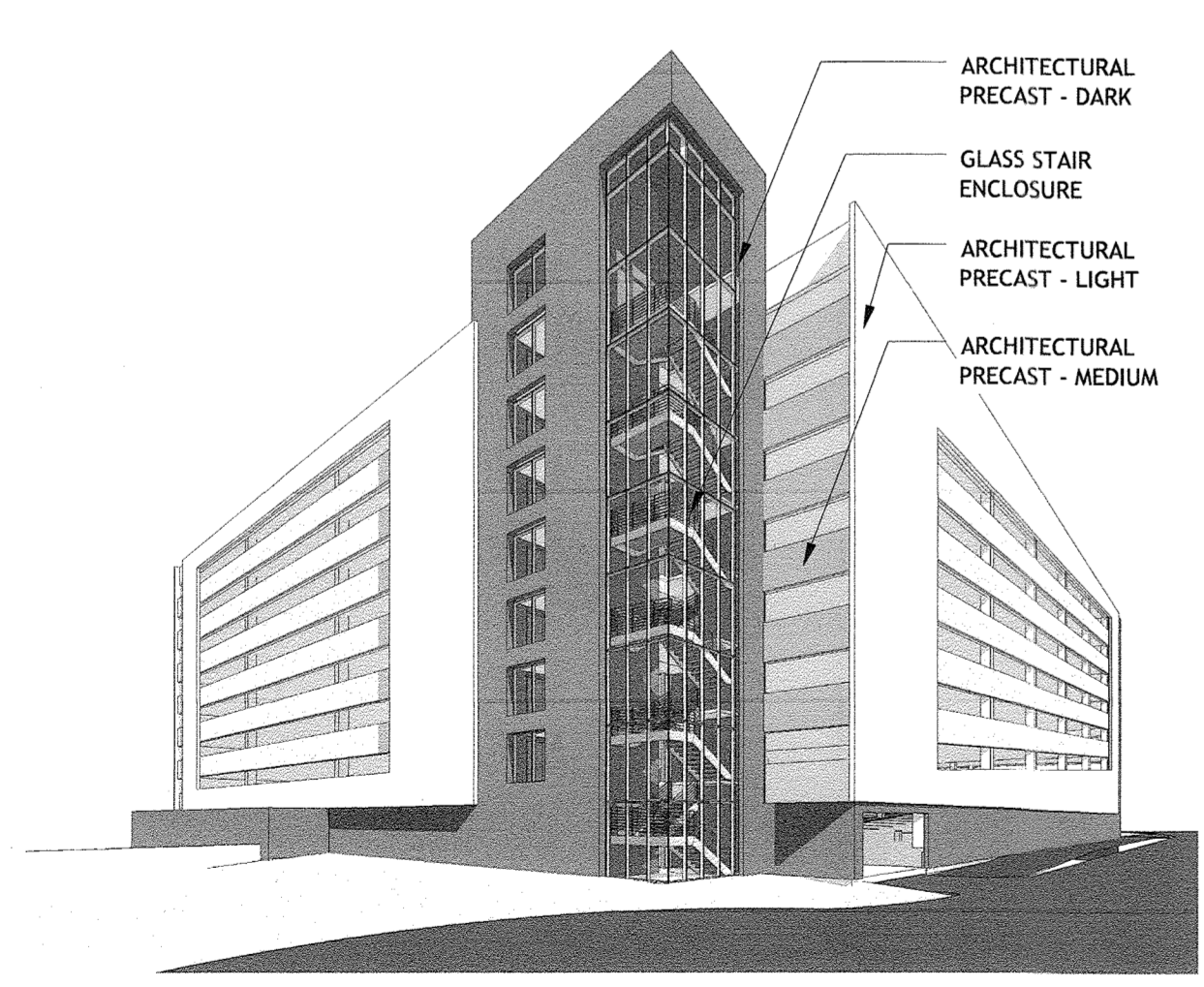
EAST
1/32" = 1'-0"
PARKING GARAGE



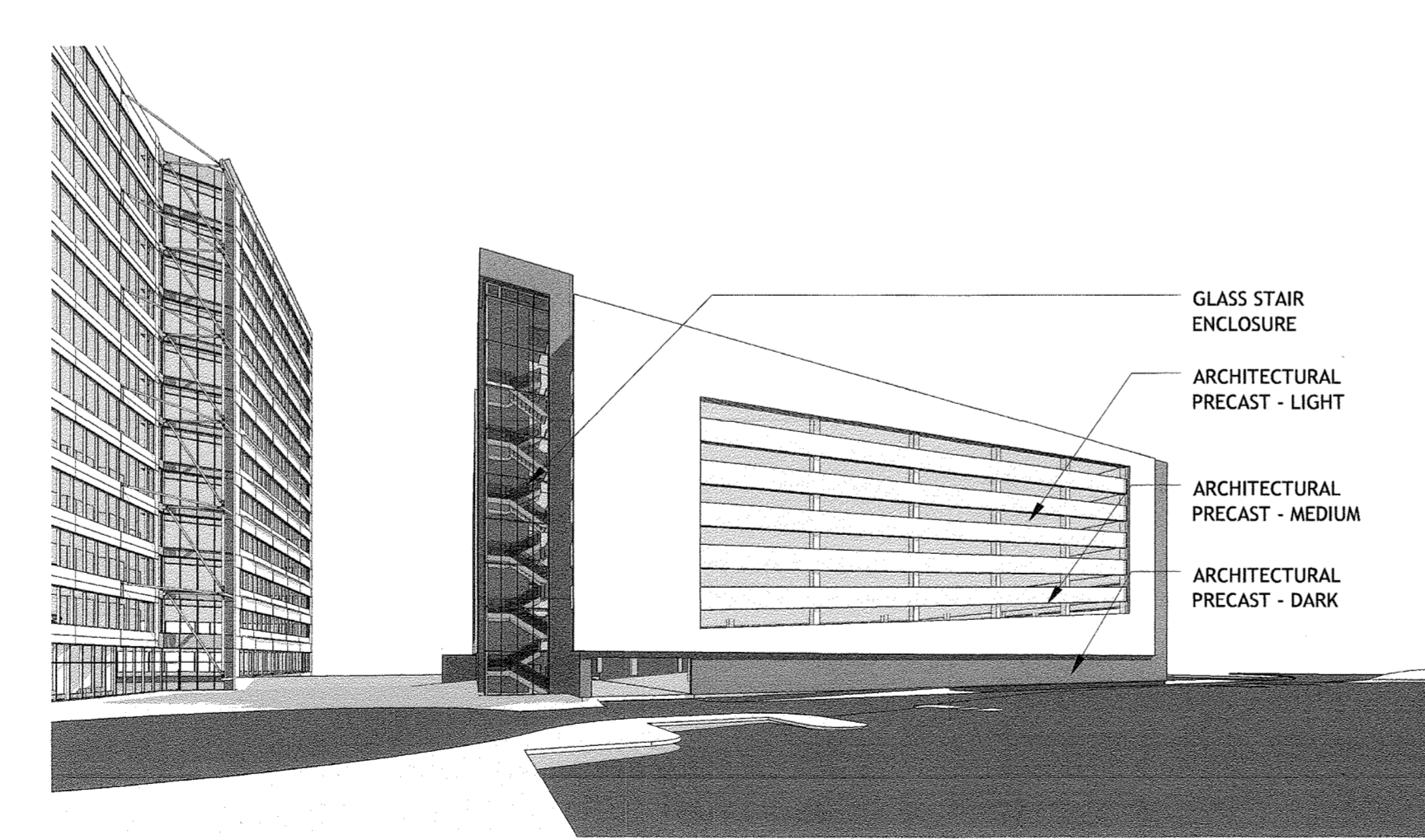
SOUTH
1/32" = 1'-0"
PARKING GARAGE



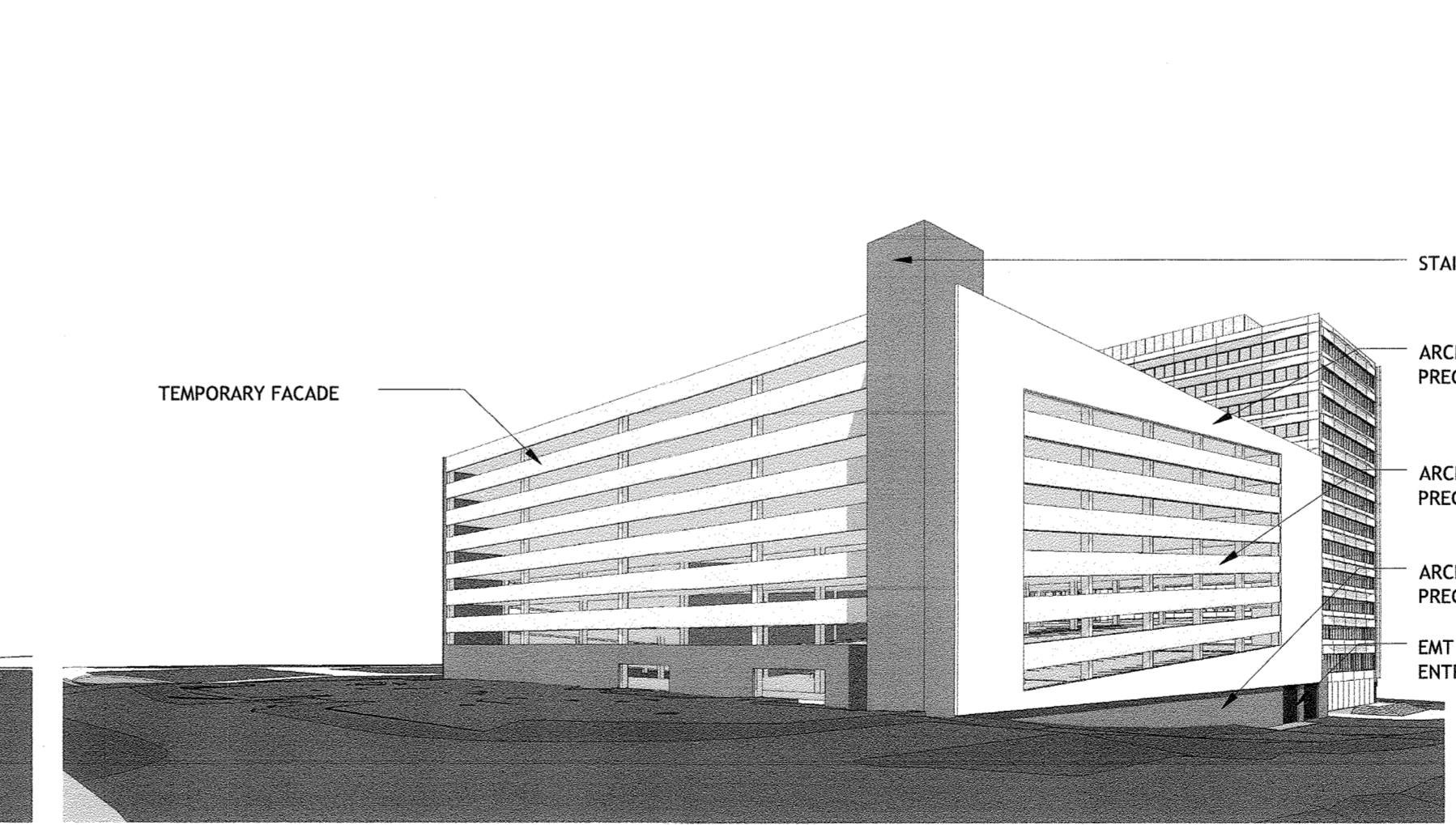
WEST
1/32" = 1'-0"
PARKING GARAGE



SDP - NW PERSPECTIVE



SDP - WEST PERSPECTIVE

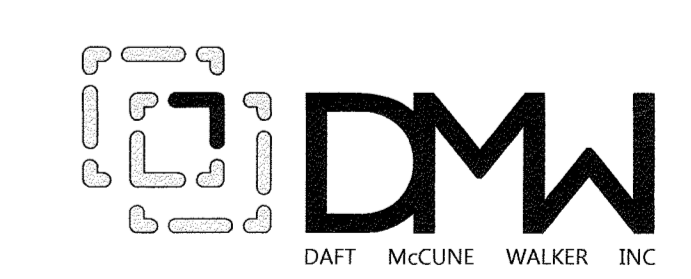


SDP - SE PERSPECTIVE
TEMPORARY UNTIL GARAGE IS EXPANDED TO THE SOUTH AT WHICH TIME IT WILL MATCH THE OTHER FACADES.

NOTE:
THE SCHEMATIC BUILDING ELEVATIONS INDICATE BUILDING HEIGHT, MASSING AND ARCHITECTURAL INTENT AND MAY CHANGE WITH FURTHER DESIGN DEVELOPMENT. FINAL ARCHITECTURAL DESIGN WILL BE SHOWN ON THE CONSTRUCTION DOCUMENTS AND WILL BE REVIEWED FOR COMPLIANCE WITH THE NEIGHBORHOOD SPECIFIC DESIGN GUIDELINES AT THE TIME OF BUILDING PERMIT.

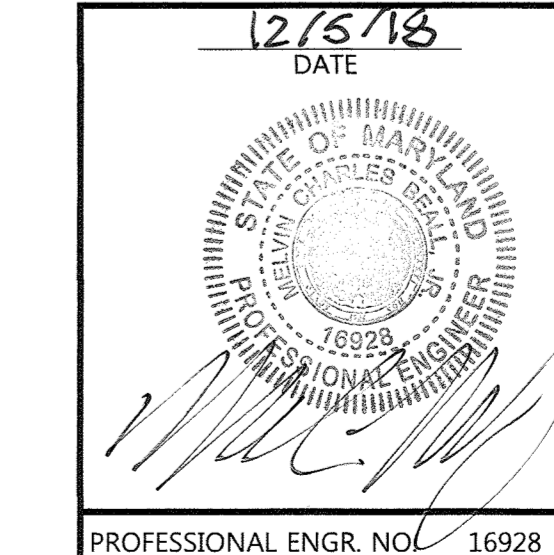
12/03/18	△	BUILDING A1 LOADING DOCK RECONFIGURATION AND GARAGE
Date	No.	Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14
OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 100
COLUMBIA, MD 21044
410-964-1800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286	410 296 3333	F: 410 296 4705	WWW.DMW.COM
SECTION	NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD		
PLAT #	BLOCK #	ZONE	CENSUS TRACT
24032 - 24630	7	36	5
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017,
SDP-16-075, SDP-18-005, WP-17-010,
WP-17-049, WP-17-052, WP-17-115,
WP-18-020, WP-18-021, SP-16-009,
WP-16-100, FDP-DC-CRESCENT-L,
FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D,
24-4931-D, 24-4975-D, 24-4974-D



PROFESSIONAL ENGR. NO. 16928
APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

RETAIL STOREFRONT ANALYSIS:

PARKING GARAGE	ELEVATION	FACADE LENGTH	RETAIL STOREFRONT	%
	NORTH	232'-7"	0'-0"	0%
	SOUTH	232'-7"	0'-0"	0%
	EAST	274'-8"	0'-0"	0%
	WEST	254'-11"	0'-0"	0%

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 1-8-19

 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 1-10-19

 DIRECTOR, DIVISION OF LAND DEVELOPMENT
 DATE: 1-10-19

TITLE			
BUILDING GARAGE ELEVATIONS			
REPLACEMENT SHEET △			
Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By	MCI	Date 5-10-18	
Chk. By	MCB	Approved MCB	5 of 94



NORTH

GLAZED OPENING ANALYSIS:
RESIDENTIAL = 35% TOTAL GLAZING
STOREFRONT GLAZING ANALYSIS:
66% TOTAL GLAZING



EAST

GLAZED OPENING ANALYSIS:
RESIDENTIAL = 34% TOTAL GLAZING
STOREFRONT GLAZING ANALYSIS:
44% TOTAL GLAZING



SOUTH

GLAZED OPENING ANALYSIS:
RESIDENTIAL = 40% TOTAL GLAZING
STOREFRONT GLAZING ANALYSIS:
60% TOTAL GLAZING



WEST

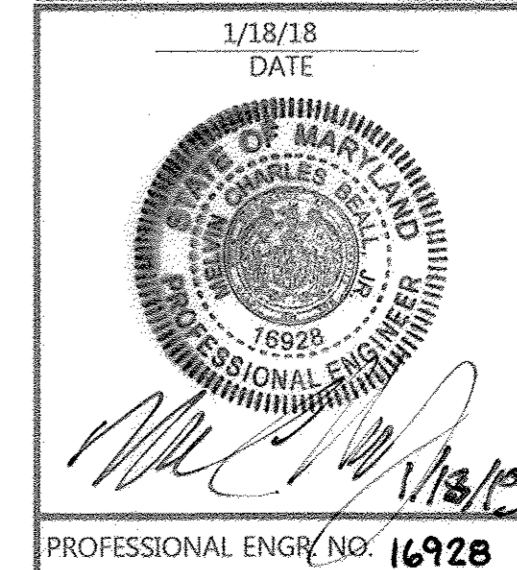
GLAZED OPENING ANALYSIS:
RESIDENTIAL = 34% TOTAL GLAZING
STOREFRONT GLAZING ANALYSIS:
58% TOTAL GLAZING

BUILDING B - ELEVATION

SCALE: 1/32" = 1' - 0"

NOTE:
THE SCHEMATIC BUILDING ELEVATIONS INDICATE BUILDING HEIGHT, MASSING AND ARCHITECTURAL INTENT AND MAY CHANGE WITH FURTHER DESIGN DEVELOPMENT. FINAL ARCHITECTURAL DESIGN WILL BE SHOWN ON THE CONSTRUCTION DOCUMENTS AND WILL BE REVIEWED FOR COMPLIANCE WITH THE NEIGHBORHOOD SPECIFIC DESIGN GUIDELINES AT THE TIME OF BUILDING PERMIT.

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-043, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESENT-1A
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/18.



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14 OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286		P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT	PHASE I	PARCEL D
BLOCK #	TAX ZONE/ADDITIONAL	PLAT DISTRICT	CENSUS TRACT
7	DMW	36	605602
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			#

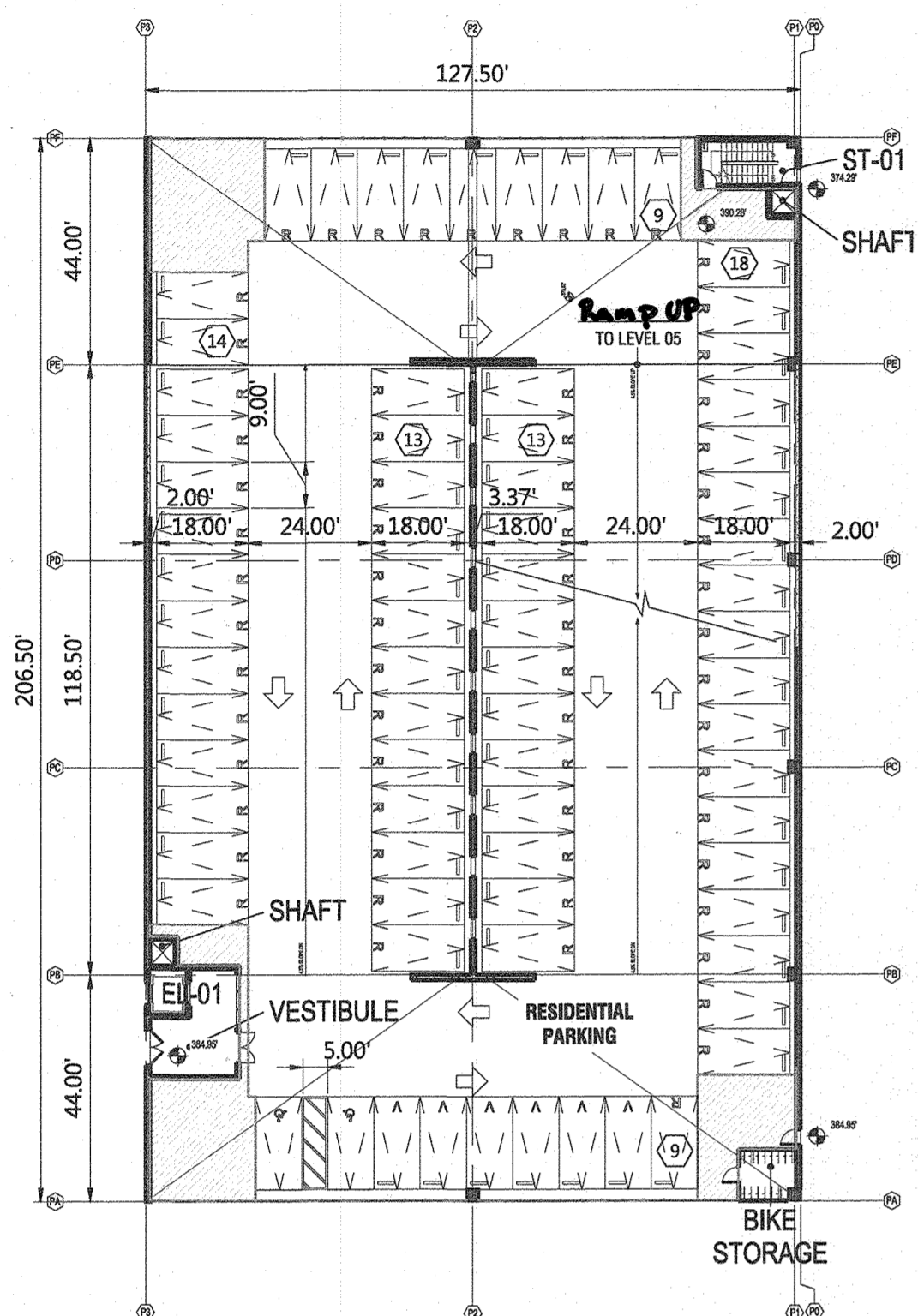
BUILDING B ELEVATION			
Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	MCJ	Date 1-18-18	
Chk. By	MCB	Approved MCB	6 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

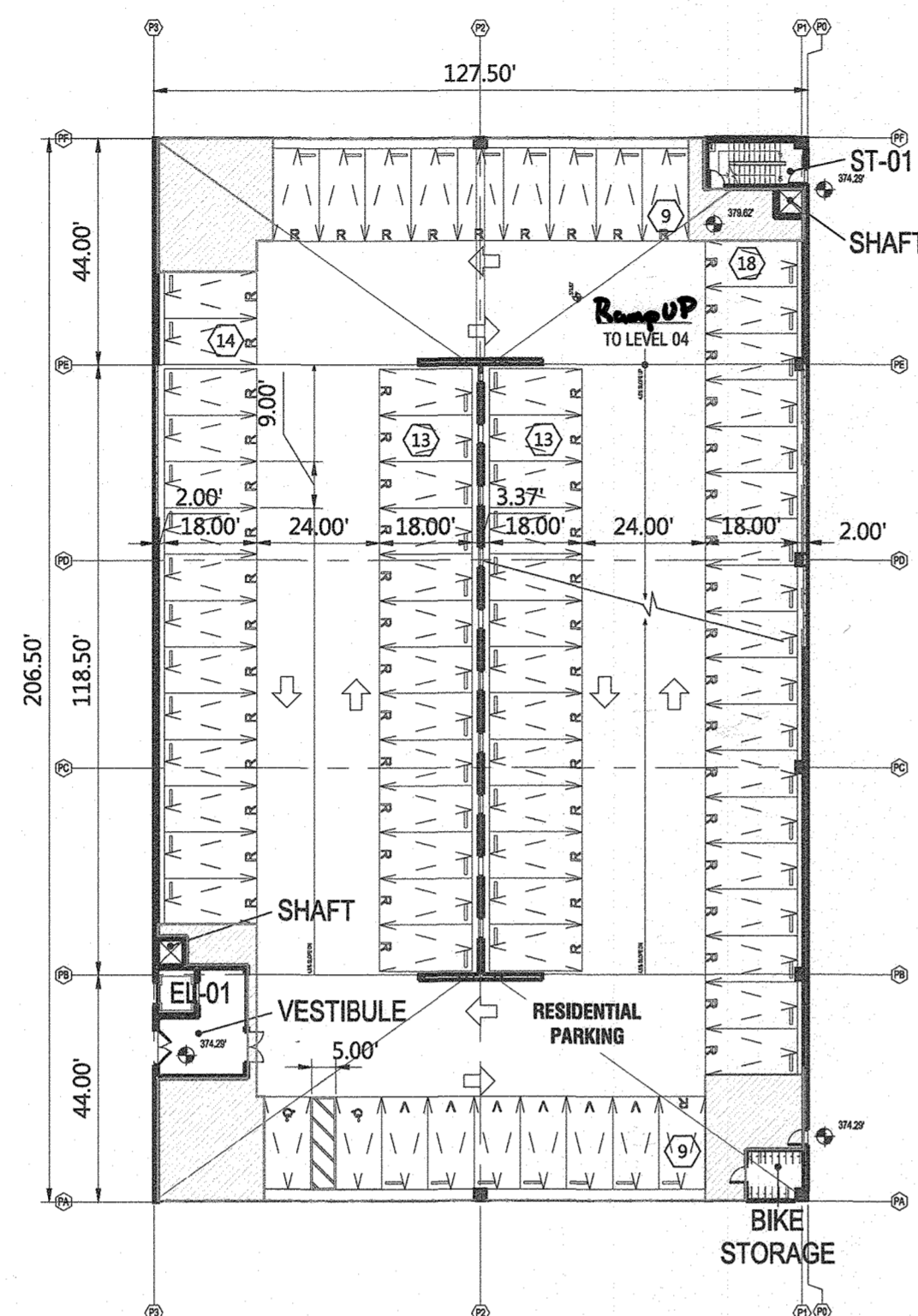
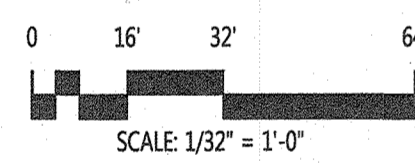
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 3-28-18 DATE

 CHIEF, DIVISION OF LAND DEVELOPMENT 6-7-18 DATE

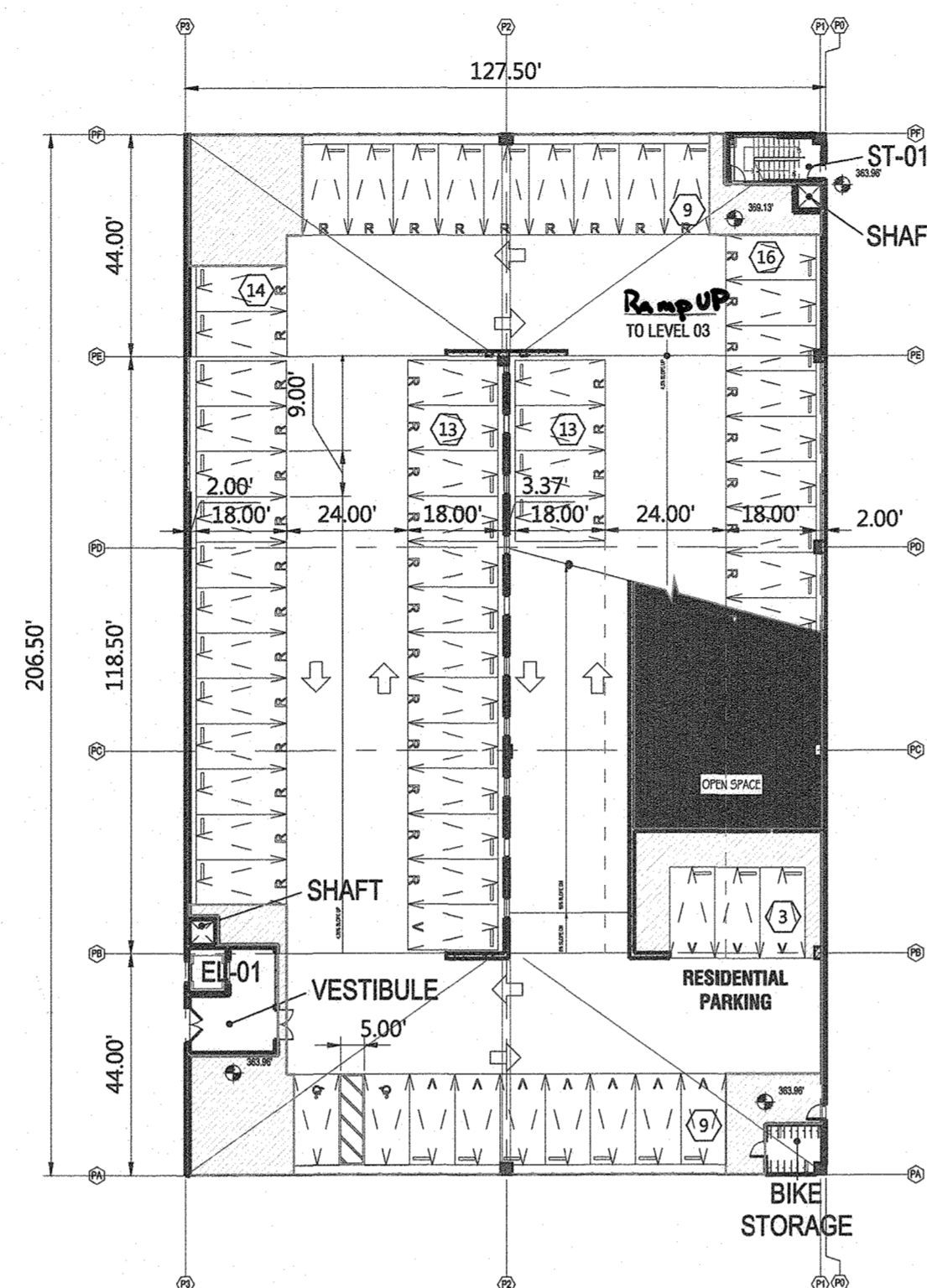
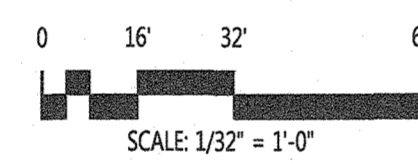
 DIRECTOR, DIVISION OF LAND DEVELOPMENT 6-15-18 DATE



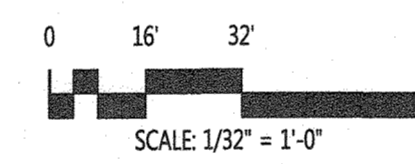
LEVEL 04 TOTAL SPACES: 76
H/C: 2
BIKE SPACES: 23



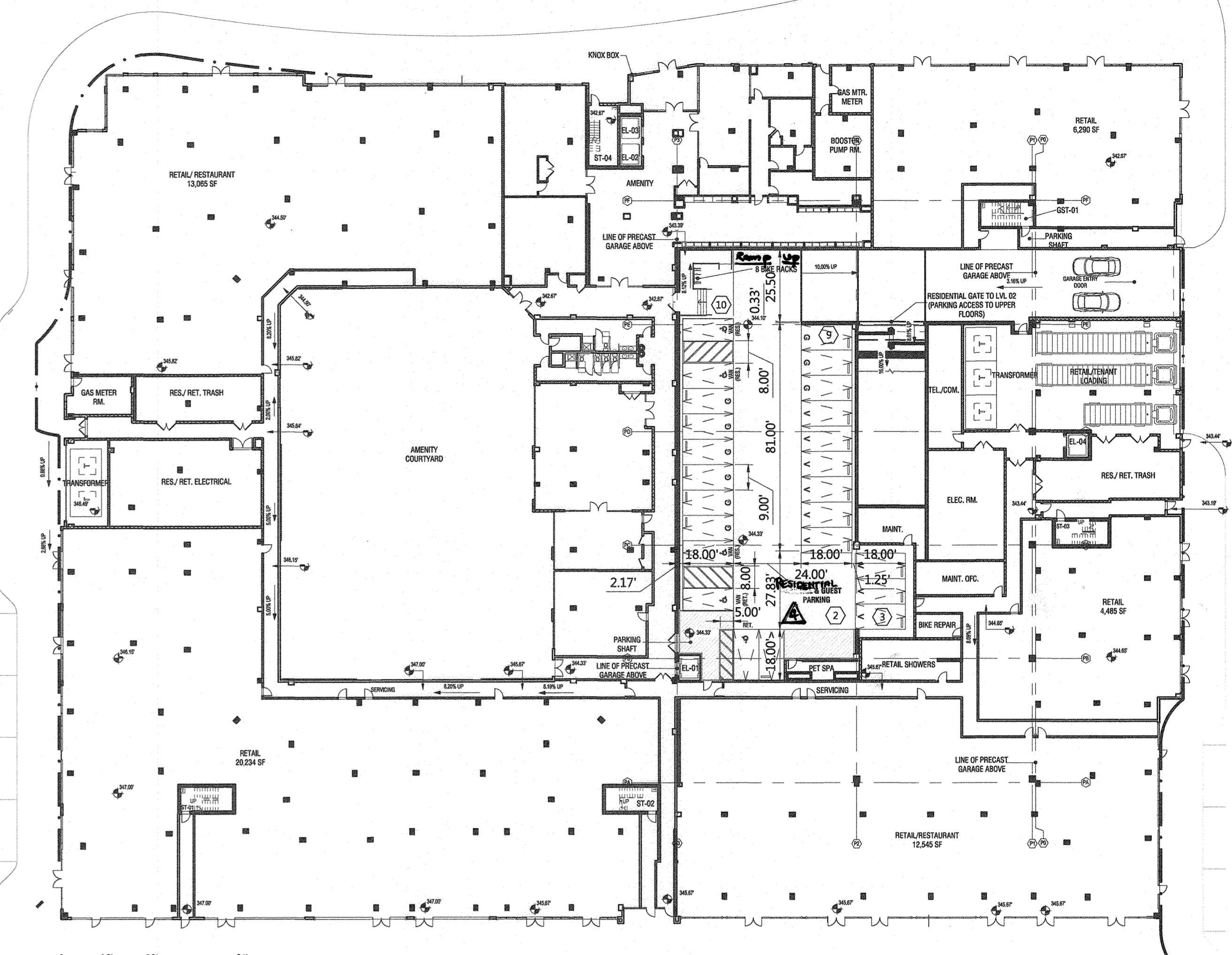
LEVEL 03 TOTAL SPACES: 76
H/C: 2
BIKE SPACES: 23



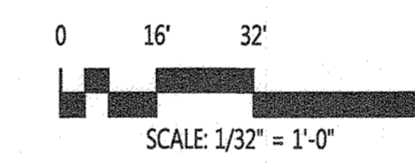
LEVEL 02 TOTAL SPACES: 77
H/C: 2
BIKE SPACES: 23



NOTES:
SEE SHEET 8 FOR PROVIDED PARKING COUNT MATRIX FOR BUILDING B.



LEVEL 1 TOTAL SPACES: 24
H/C: 1
H/C VAN: 4
BIKE SPACES: 8



NOTE:
RETAIL SUITES ARE ACCESSED ALONG EXTERIOR OF BUILDING.

BUILDING B GARAGE SPACE LAYOUT

SCALE: 1/32" = 1'-0"

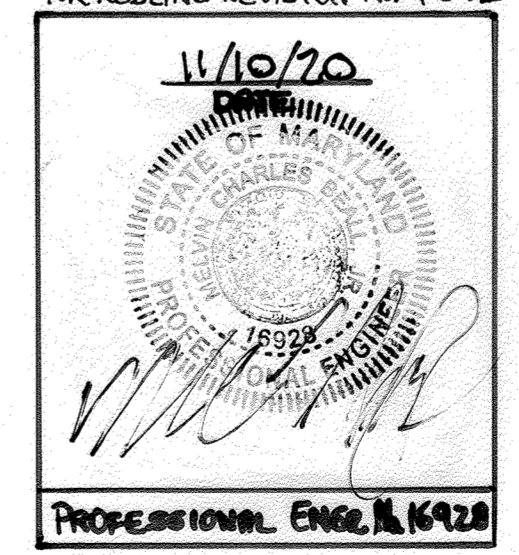
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chad Plank 3-23-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Walt Shee 6-7-18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Nancy J. Miller 6-15-18
 DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

NOTE:
THE SCHEMATIC BUILDING ELEVATIONS INDICATE BUILDING HEIGHT, MASSING AND ARCHITECTURAL INTENT AND MAY CHANGE WITH FURTHER DESIGN DEVELOPMENT. FINAL ARCHITECTURAL DESIGN WILL BE SHOWN ON THE CONSTRUCTION DOCUMENTS AND WILL BE REVIEWED FOR COMPLIANCE WITH THE NEIGHBORHOOD SPECIFIC DESIGN GUIDELINES AT THE TIME OF BUILDING PERMIT.

- GRAPHIC SYMBOL LEGEND:**
- NUMBER OF STALLS PER ROW
 - PARKING STALL, 9'x18' RESIDENTIAL (R)
 - PARKING STALL, 9'x18' RETAIL/ RES. GUEST (G)
 - PARKING STALL, 9'x18' RESIDENTIAL VISITOR (V)
 - ACCESSIBLE PARKING STALL, 9'x18'
 - ACCESSIBLE PARKING STALL, VAN - 8'x18' W/ ACCESS WIDTH, 8'-0"
 - BIKE PARKING STALL
 - TRAFFIC DIRECTION ARROWS
 - PARKING SHAFT
 - ELECTRICAL TRANSFORMER

NOTE:
DUE TO PARKING DECK SPIRALING, THE DEPICTION OF PROPOSED PARKING FROM LEVEL TO LEVEL MAY VARY FROM OTHER CHARTS WITHIN THIS SET.

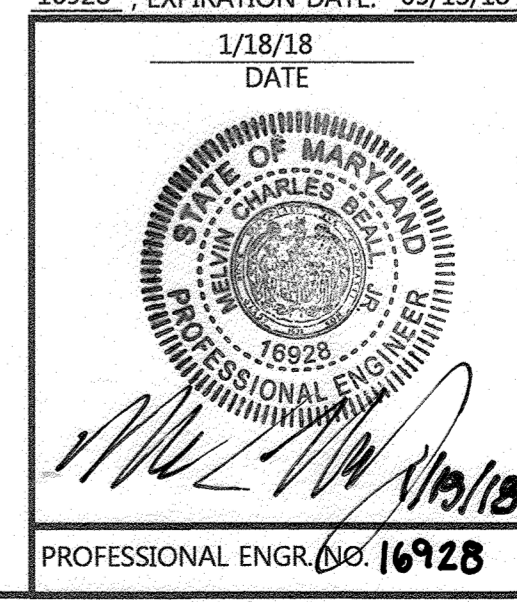
FOR REDLINE REVISION No. 4 ONLY



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16928, EXPIRATION DATE 05/13/22.

FILE NUMBERS:
 F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
 CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/18.

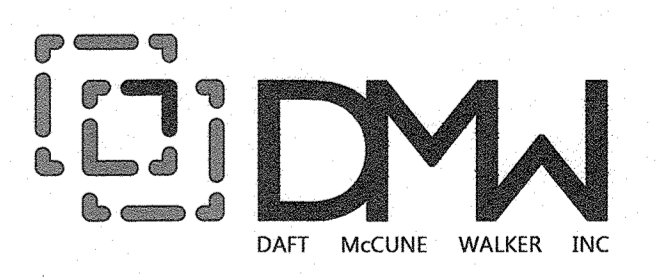


APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

7/13/2021 UPDATE BLDG. USAGES, SQUARE FOOTAGES & PARKING COUNTS AND BLDG. EGRESS DOORS, HARDWARE & DAMPENER LOCATION

Date	No.	Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14
 OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE:
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800



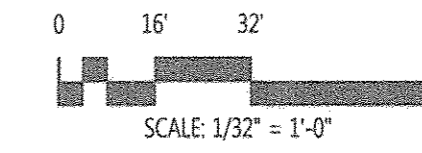
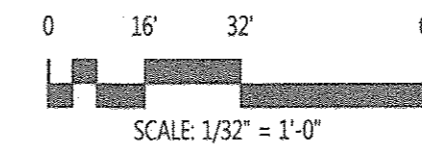
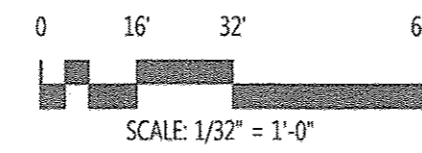
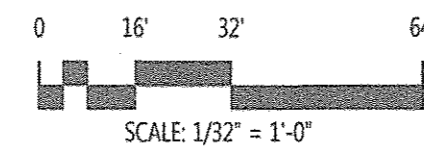
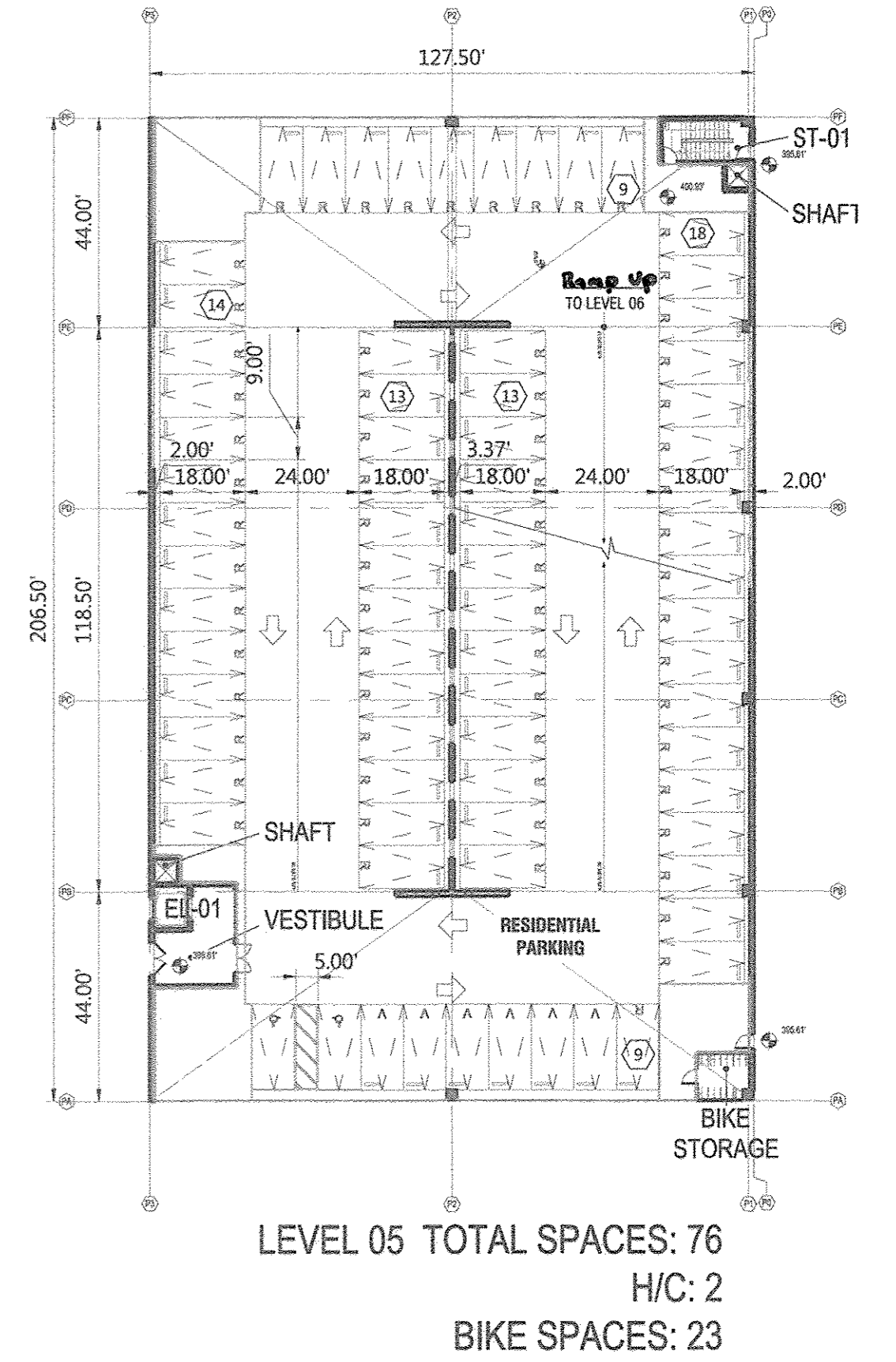
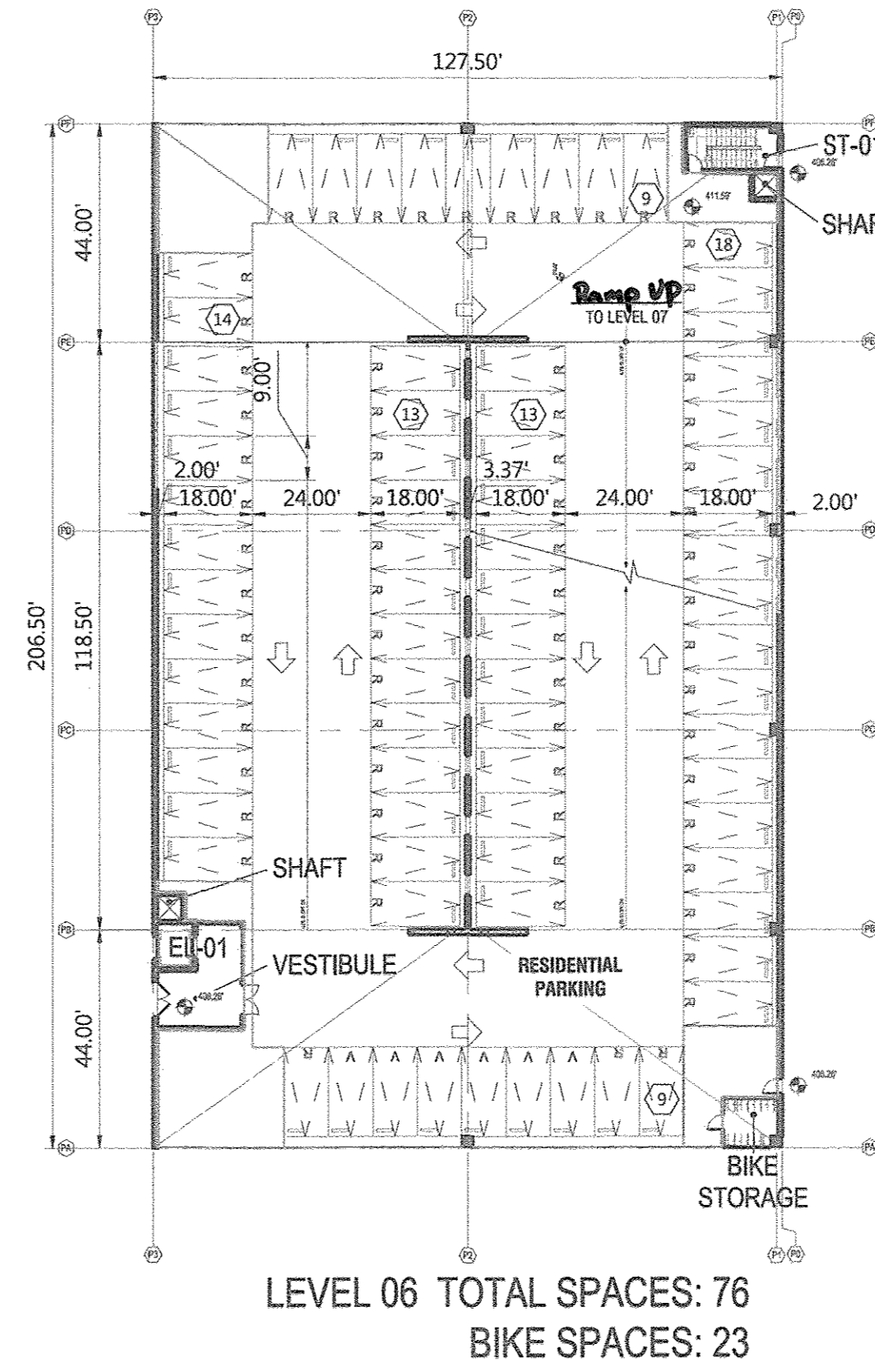
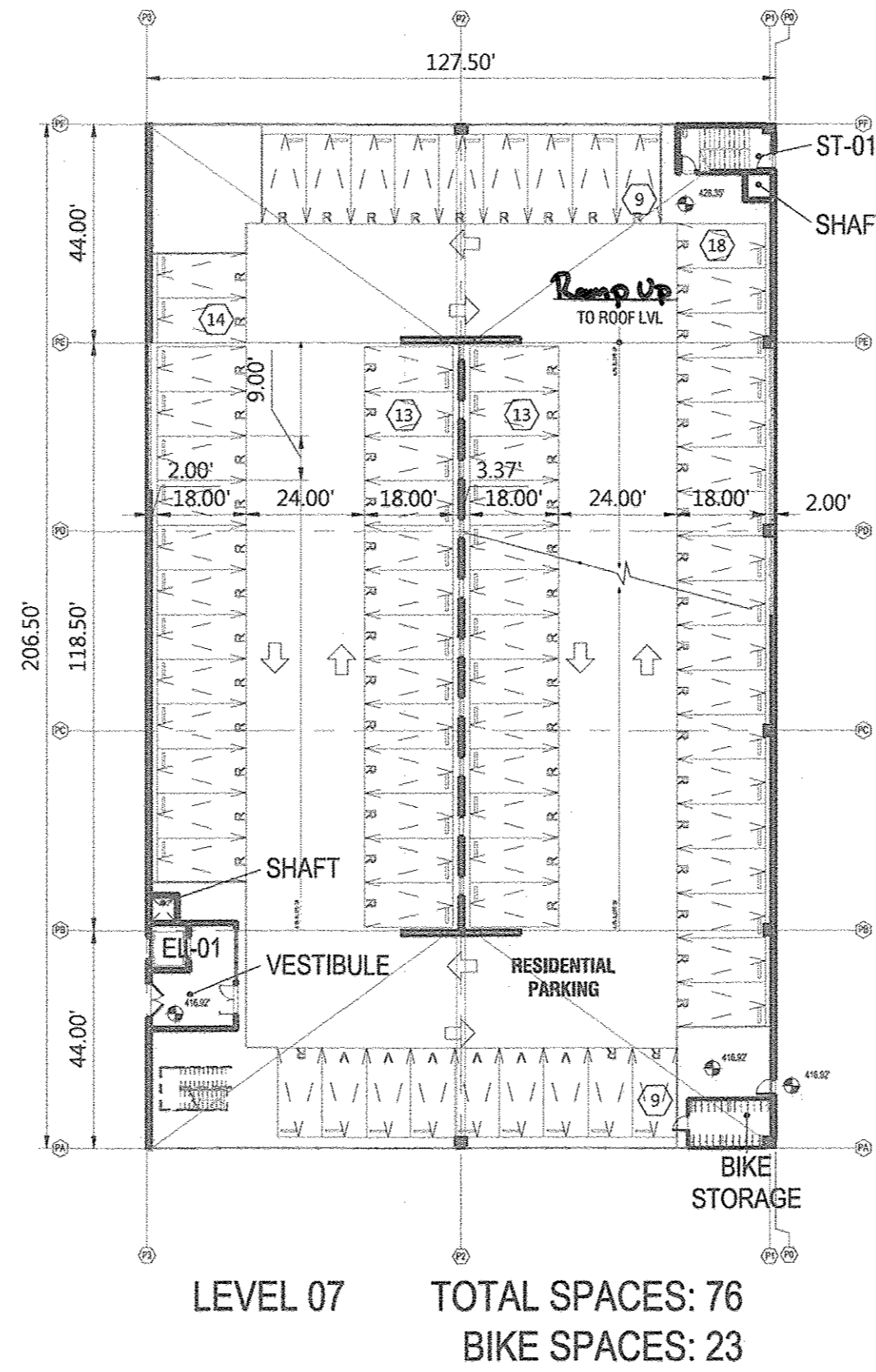
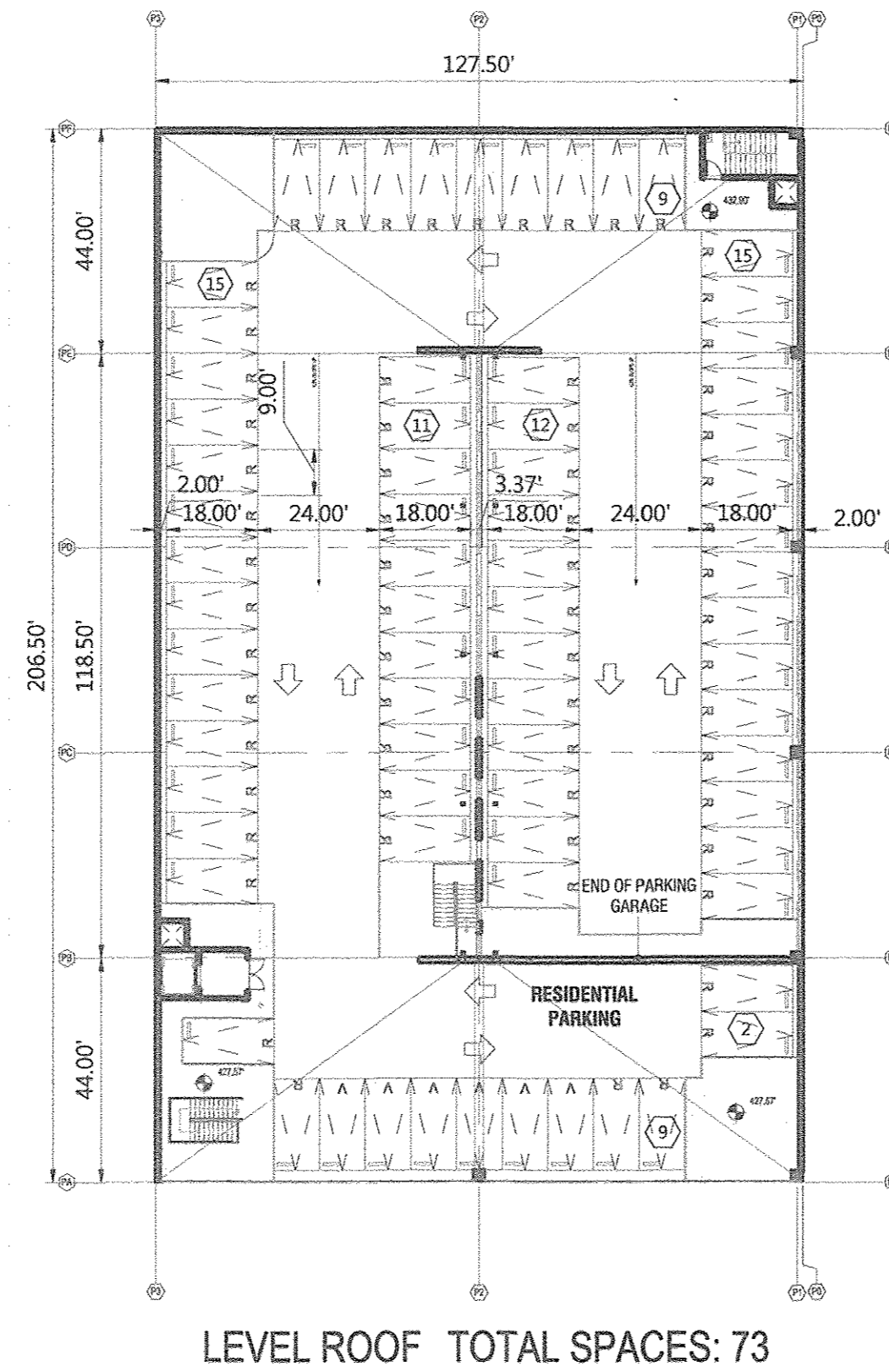
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

BUILDING B 1ST FLR. PLN. & GARAGE PLANS

Des. By	GDT/DM	SCALE AS SHOWN	Proj. No.	04038.B0
Dwn. By	MCI	Date	1-18-18	
Chk. By	MCB	Approved	MCB	7 of 94

SDP-17-027

PROVIDED PARKING COUNT		
LEVELS	TYPE	STALLS
LEVEL 1	14,245 SF	
	9' X 18' STANDARD	7
	9' X 18' ACCESSIBLE (RET.)	1
	9' X 18' ACCESSIBLE VAN (RET.)	1
	9' X 18' ACCESSIBLE (RES.)	0
	9' X 18' ACCESSIBLE VAN (RES.)	3
LEVEL 2	25,123 SF	
	9' X 18' STANDARD	24
	9' X 18' LEV / FEV	2
	9' X 18' EV	2
LEVEL 3	26,329 SF	
	9' X 18' STANDARD	63
	9' X 18' ACCESSIBLE	2
	9' X 18' LEV / FEV	11
LEVEL 4	26,329 SF	
	9' X 18' STANDARD	74
LEVEL 5	26,329 SF	
	9' X 18' STANDARD	74
LEVEL 6	26,329 SF	
	9' X 18' STANDARD	74
LEVEL 7	26,329 SF	
	9' X 18' STANDARD	74
LEVEL 8	26,329 SF	
	9' X 18' STANDARD	73
ROOF		
	9' X 18' ACCESSIBLE	73
TOTAL		554



BUILDING B GARAGE SPACE LAYOUT

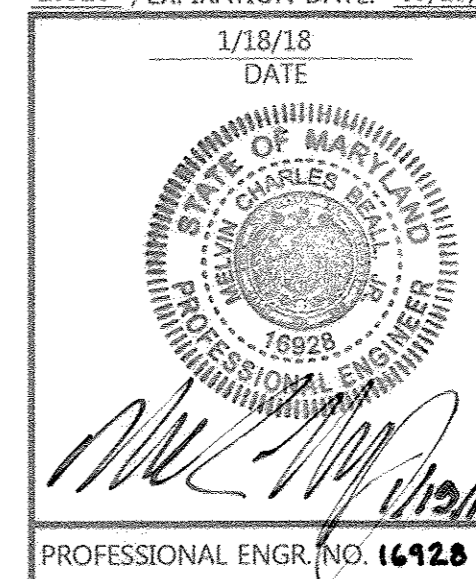
SCALE: 1/32" = 1'-0"

GRAPHIC SYMBOL LEGEND:

- (X) NUMBER OF STALLS PER ROW
- (A/R) PARKING STALL, 9'x18' RESIDENTIAL (R)
- (A/G) PARKING STALL, 9'x18' RETAIL/ REST. GUEST (G)
- (A/V) PARKING STALL, 9'x18' RESIDENTIAL VISITOR (V)
- (A/AS) ACCESSIBLE PARKING STALL, 9'x18'
- (A/AV) ACCESSIBLE PARKING STALL, VAN - 8'x18' W/ ACCESS WIDTH, 8'-0"
- (A/B) BIKE PARKING STALL
- (A/DA) TRAFFIC DIRECTION ARROWS
- (A/S) PARKING SHAFT
- (A/ET) ELECTRICAL TRANSFORMER

NOTE:
DUE TO PARKING DECK SPIRALING, THE DEPICTION OF PROPOSED PARKING FROM LEVEL TO LEVEL MAY VARY FROM OTHER CHARTS WITHIN THIS SET.

FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-043, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
26-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/18.



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/14/17

Date	No.	Revision Description
DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14 OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 300 COLUMBIA, MD 21044 410-964-1800		



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

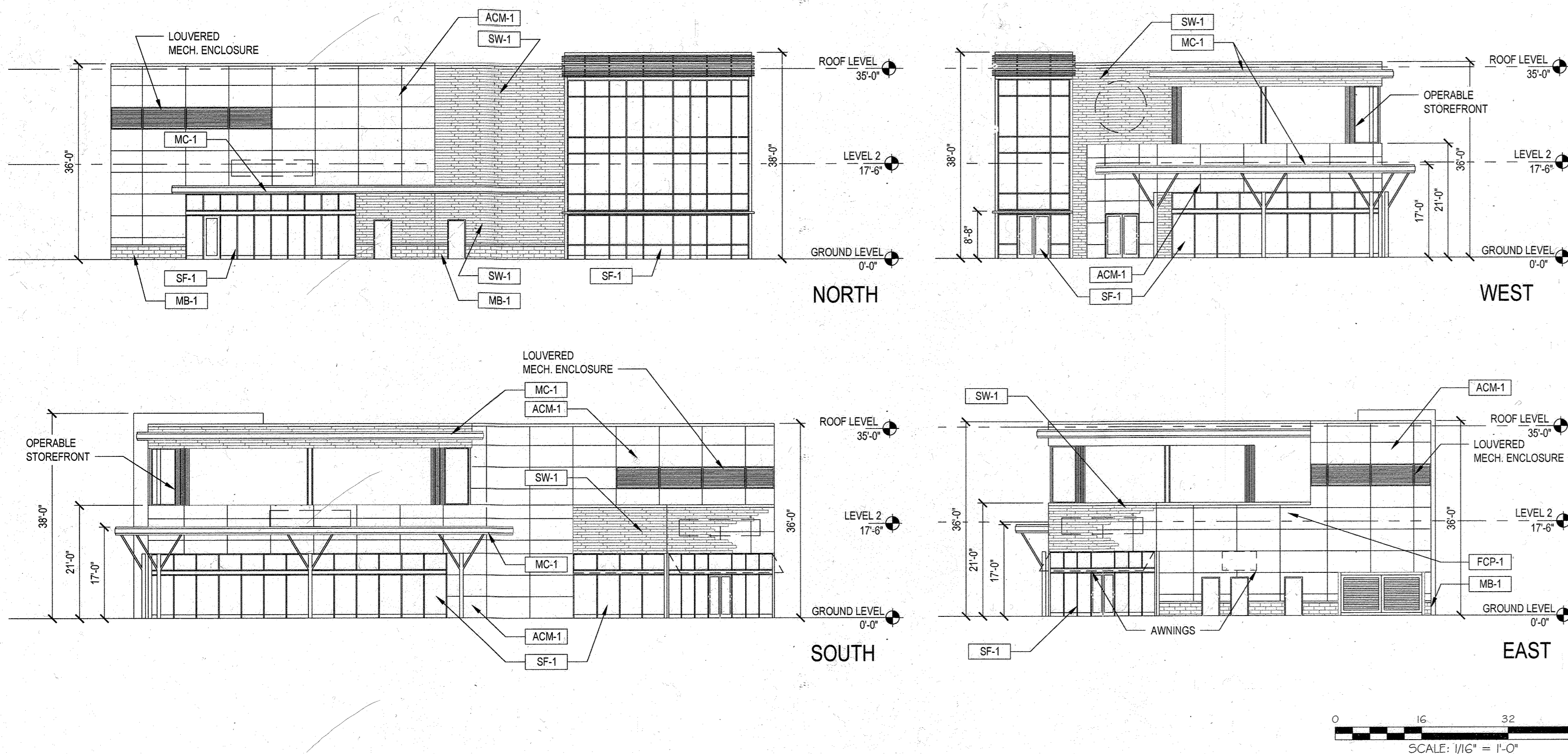
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
7	36	CEPUS TRACT	605602
550	LITTLE PATUXENT	STAGE	

TITLE
BUILDING B GARAGE PLANS

Des. By	GDT/DM	SCALE	AS SHOWN	Proj. No.	04038.00
Drn. By	MCJ	Date	1-18-18		
Chk. By	MCB	Approved	MCB		8 of 94

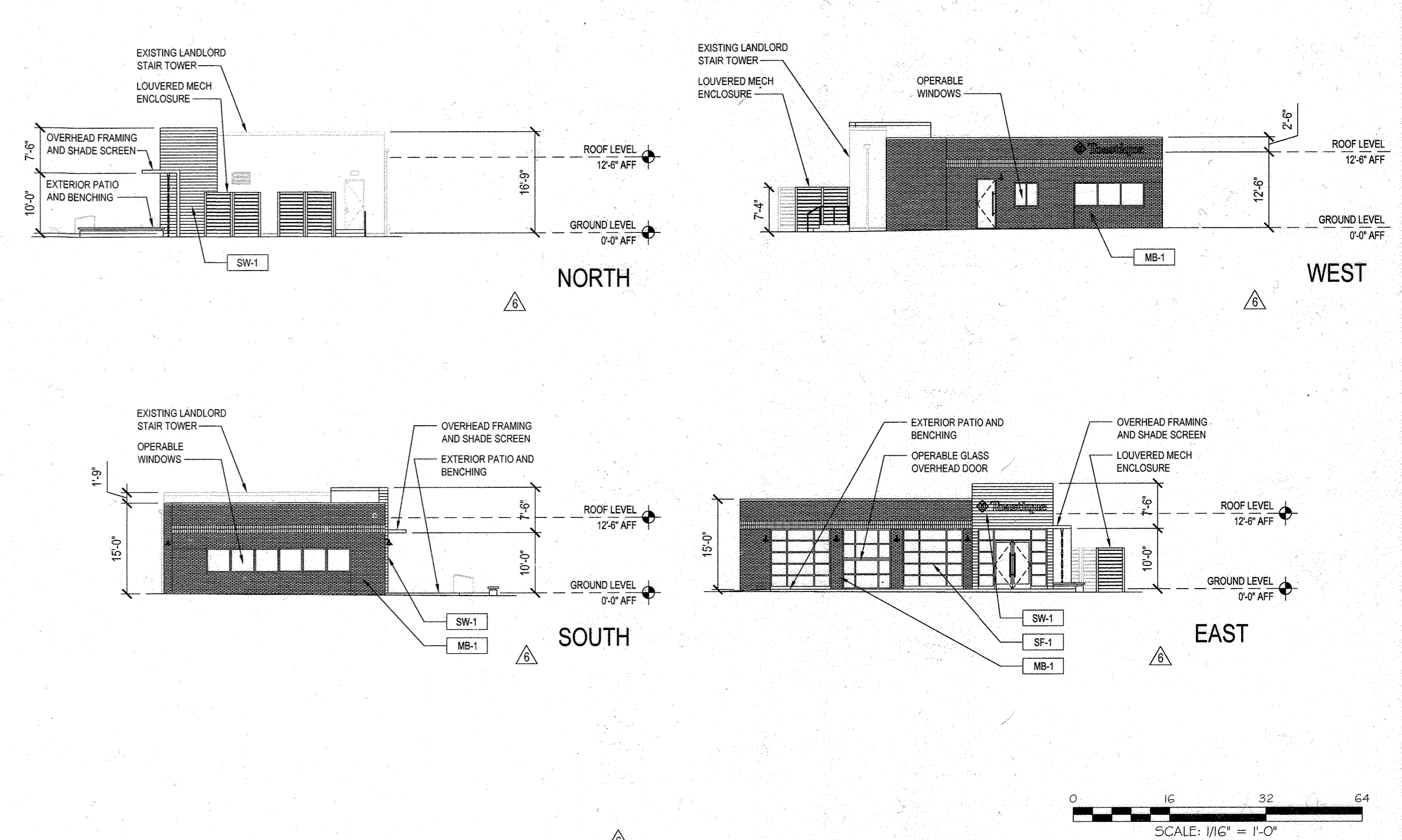
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Chief, Development Engineering Division
 DATE: 3-28-18
 Chief, Division of Land Development
 DATE: 6-7-18
 Director, Division of Land Development
 DATE: 6-15-18

NOTE:
THE SCHEMATIC BUILDING ELEVATIONS INDICATE BUILDING HEIGHT, MASSING AND ARCHITECTURAL INTENT AND MAY CHANGE WITH FURTHER DESIGN DEVELOPMENT. FINAL ARCHITECTURAL DESIGN WILL BE SHOWN ON THE CONSTRUCTION DOCUMENTS AND WILL BE REVIEWED FOR COMPLIANCE WITH THE NEIGHBORHOOD SPECIFIC DESIGN GUIDELINES AT THE TIME OF BUILDING PERMIT.



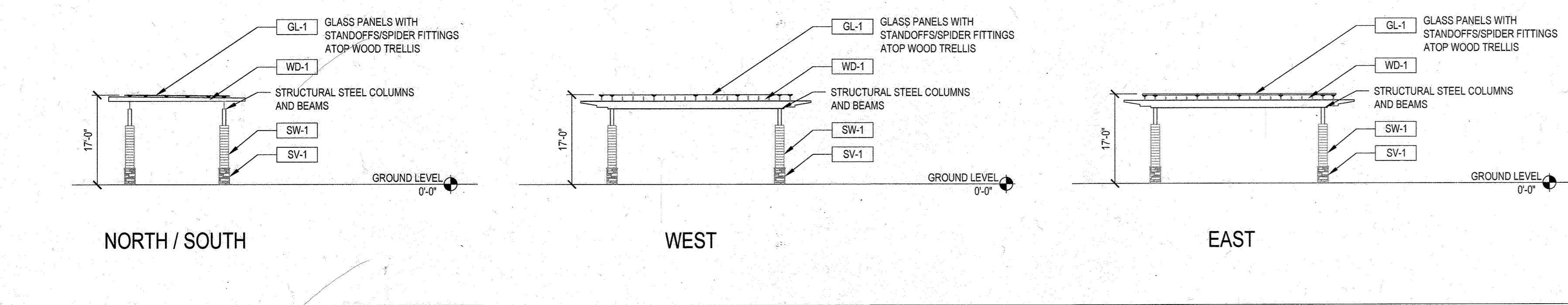
BUILDING E-2 - RESTAURANT

SCALE: 1/16" = 1'-0"



BUILDING E-3 (SOUTH CRESCENT PARK KIOSK)- RESTAURANT

SCALE: 1/16" = 1'-0"



PAVILION

SCALE: 1/16" = 1'-0"

RETAIL STOREFRONT ANALYSIS:

BUILDING E-2	ELEVATION	FACADE LENGTH	RETAIL STOREFRONT	%	BUILDING E-3	ELEVATION	FACADE LENGTH	RETAIL STOREFRONT	%
	NORTH	118'-8"	66'-3"	56%		NORTH	36'-8 7/8"	6'-3 1/8"	17%
	SOUTH	96'	72'-8"	76%		SOUTH	35'-5 3/4"	33'-6 3/4"	95%
	EAST/SOUTHEAST	79'-1"	28'-2"	36%		EAST	50'-10 1/4"	44'-5 1/2"	87%
	WEST	71'-8"	53'-4"	72%		WEST	51'-11 1/8"	29'-8 1/4"	57%

EXTERIOR FINISH LEGEND

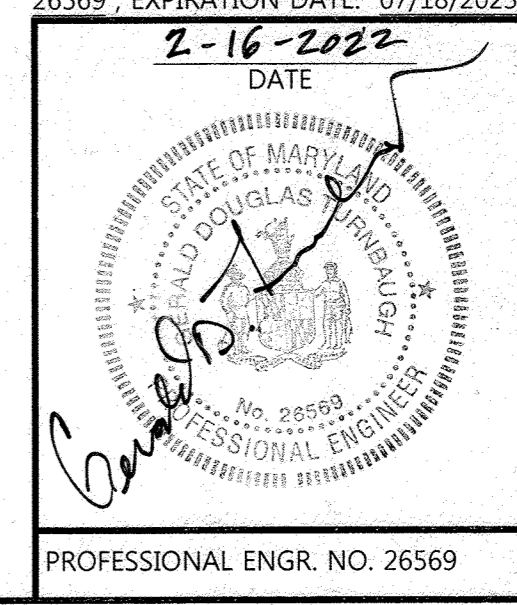
DESIG.	
ACM-1	METAL PANELS
FCP-1	FIBER CEMENT PANEL
GL-1	GLASS PANELS
HPL-1	HIGH PRESSURE LAMINATE
MB-1	MASONRY BASE
MC-1	METAL CANOPY
SF-1	STOREFRONT/ CURTAIN WALL
SV-1	STONE VENEER
SW-1	SYNTHETIC WOOD PANEL
WD-1	WOOD TRELLIS STRUCTURE

NOTE:
THE SCHEMATIC BUILDING ELEVATIONS INDICATE BUILDING HEIGHT, MASSING AND ARCHITECTURAL INTENT AND MAY CHANGE WITH FURTHER DESIGN DEVELOPMENT. FINAL ARCHITECTURAL DESIGN WILL BE SHOWN ON THE CONSTRUCTION DOCUMENTS AND WILL BE REVIEWED FOR COMPLIANCE WITH THE NEIGHBORHOOD SPECIFIC DESIGN GUIDELINES AT THE TIME OF BUILDING PERMIT.

FILE NUMBERS:
F-15-306, F-16-101, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

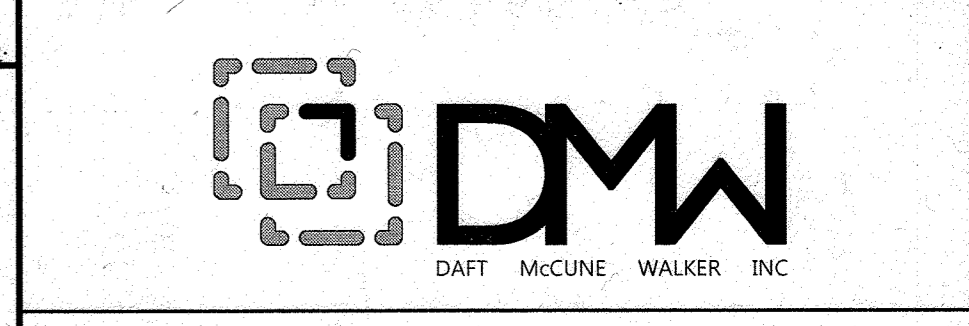
OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 100
COLUMBIA, MD 21044
410-964-4800



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: Nov 16, 2017

Date	No.	Revision Description
11/15/2021	1	UPDATE BUILDING E-3 ELEVATIONS
7/31/2020	2	UPDATE BLDG. 'B' USAGES, SQUARE FOOTAGES & PARKING REQMENTS AND BLDG. 'E-2' DOORS, HARDSCAPES & DUMPSTER LOCATION.
11/18/19	3	BUILDING E2 AND E3 UPDATES
03/06/19	4	BUILDING E2 AND E3 UPDATES

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #	
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D	
PLAT/ OR L.P.	TAX ZONE/MAP	ELECT. DISTRICT	CENSUS TRACT
24628-24630	7	36	5
WATER CODE	SEWER CODE	STAGE	#
550	LITTLE PATUXENT		

TITLE REVISED SITE DEVELOPMENT PLAN (2,4,4)		
BUILDING E-2, E-3 ELEVATION		
Des. By	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	Date 11-15-21	9 of 94
Chk. By	Approved MCB	

SDP-17-027

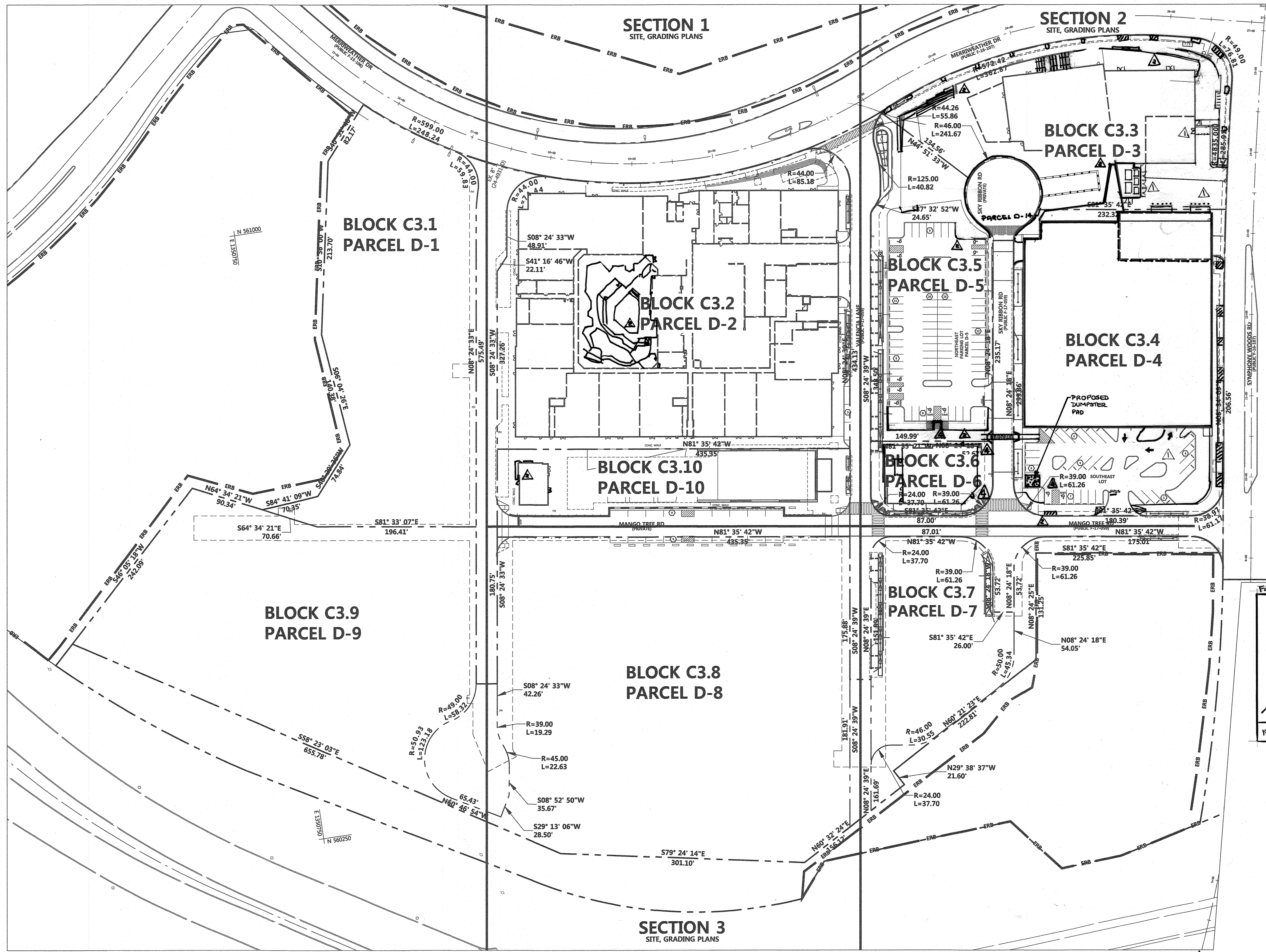
A:\CADD\2017\DC\DC-CRESCENT-1A\DWG\REVISIONS\REV-01\REV-01-REVISIONS.DWG 11/15/2021 10:45 AM

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 3-14-22

 CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 3-21-22

 DIRECTOR DATE: 3-21-22

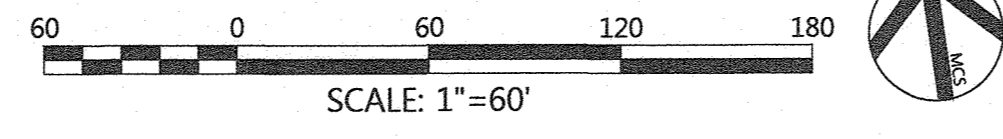


SECTION 1
SITE, GRADING PLANS

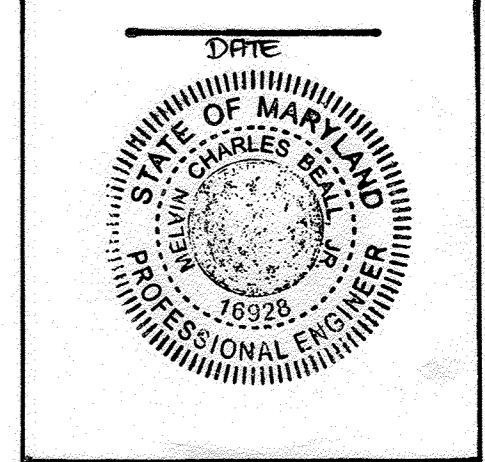
SECTION 2
SITE, GRADING PLANS

SECTION 3
SITE, GRADING PLANS

PLAN VIEW



FOR REDLINE REVISION No. 4 ONLY



PROFESSIONAL ENGR. No. 16928

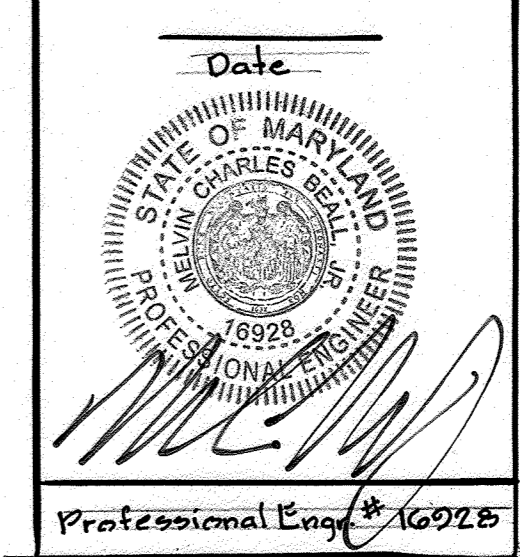
PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE No. 16928, EXPIRATION DATE 05/13/18

LEGEND

- PROPERTY LINE
- - - PROP. EASEMENT
- EX. CURB
- EX. BUILDING
- PUBLIC ROAD

For Revision No. 1 Only



Professional Engr. # 16928

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 16928, Expiration Date: 05/13/18

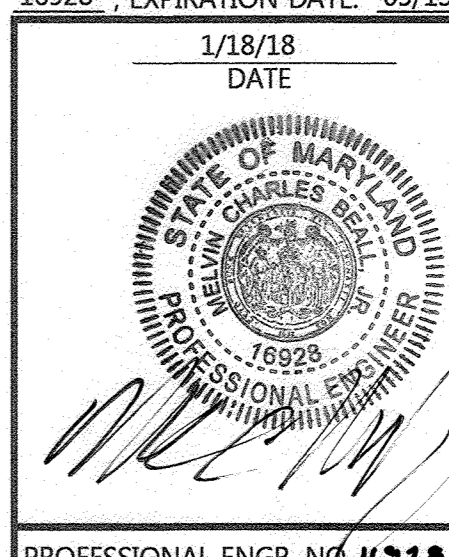
Date	No.	Revision Description
1/11/2019	1	UPDATE BLDG. FOOTPRINTS, SQUARE FOOTAGES, LANDING HEIGHTS, HAND RAILS, 2" DOORS, HARDSCAPE DIMENSIONS, LOCATION
03/06/19	2	BLDG. EXTERIOR PLAZA HARDSCAPE AND GRADING
12/02/18	3	BLDG. ALL loading dock reconfiguration & garage.

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION

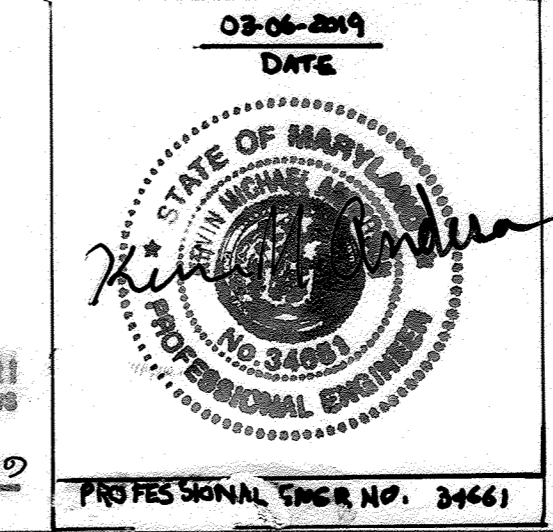
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16928, EXPIRATION DATE: 05/13/18.



PROFESSIONAL ENGR. No. 16928

APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/18

FOR REVISION NO. 2 ONLY

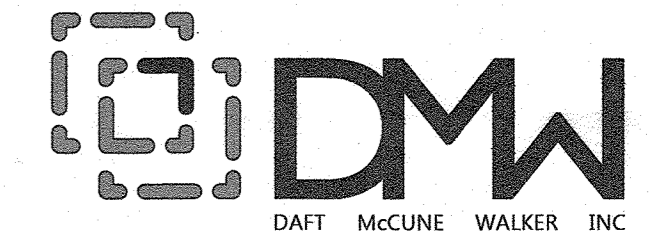


PROFESSIONAL ENGR. No. 34461

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chad Chinn 3-28-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Neil Schuch 6-7-18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Nadine Taylor 6-15-18
 DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

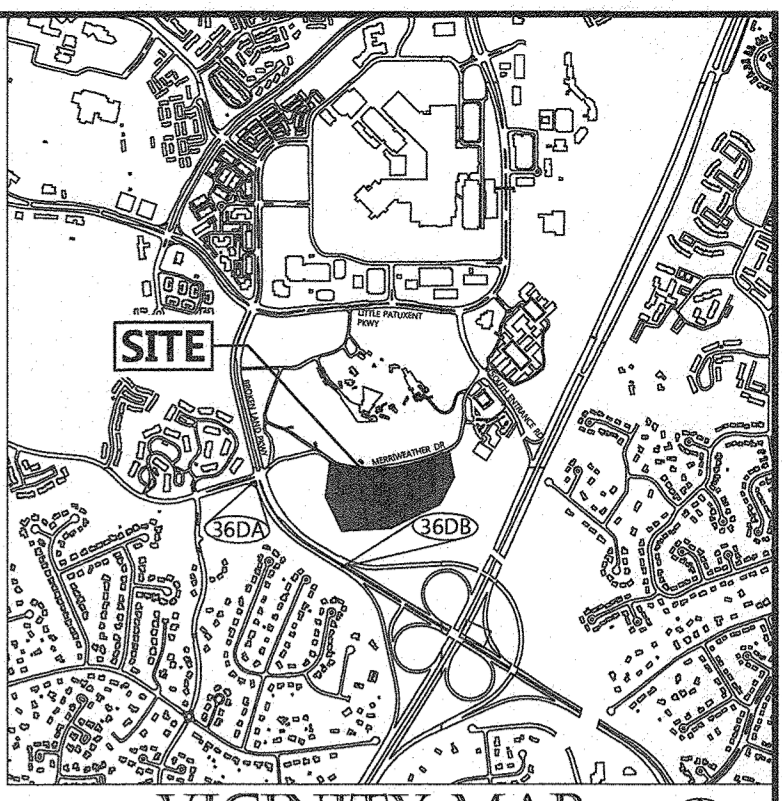


501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

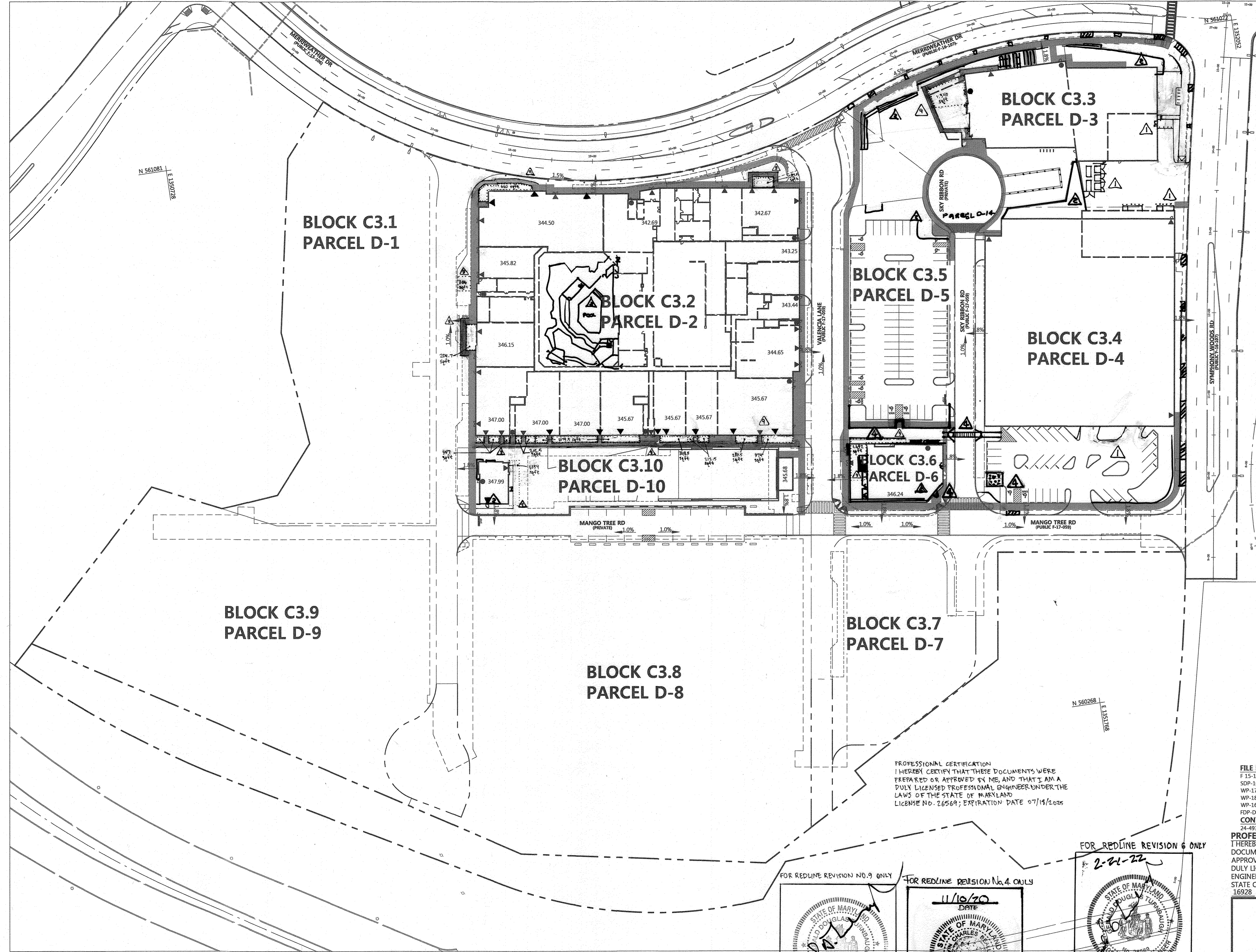
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D
12455	BLOCK 7	36
550	TAX ZONE/MAP	36
	ELECT. DISTRICT	5
	SEWER CODE	
	STAGE	1

TITLE: **BOUNDARY PLAN AND KEY SHEET**

Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	MCJ	Date 1-18-18	
Chk. By	MCB	Approved MCB	10 of 94



VICINITY MAP
SCALE: 1"=2000'
HOWARD COUNTY ADC
MAP NUMBER 15
GRID NO. G - 7



- LEGEND**
- ▲ BUILDING ENTRANCE
 - SECONDARY MEANS OF EGRESS
 - ACCESSIBLE ROUTE
 - △ OUTDOOR SEATING AREA

- NOTES:**
1. THE CROSS SLOPE SHALL NOT EXCEED 1.8%. 5X5 LEVEL LANDINGS AND ENTRANCE AND EXIT DOORS. THE SLOPE IN THE LINE OF TRAVEL SHALL NOT BE 5% OR MORE UNLESS RAMPS ARE PROVIDED.
 2. WHEN BUILDING OR TENANT SPACES ARE REQUIRED TO HAVE A SECOND MEANS OF EGRESS, THIS SECOND MEANS OF EGRESS SHALL BE HANDICAP ACCESSIBLE TO THE PUBLIC WAY.

3/7/2021	▲	ADD OUTDOOR DINING PATIO AREAS, REVISE ADA ACCESSIBLE ROUTE PATHS & BUILDING ENTRANCES
11/15/2021	▲	UPDATE ACCESSIBLE ROUTE PATH

<p>FOR REDLINE NO. 9 ONLY</p> <p>03-06-2019 DATE</p> <p>PROFESSIONAL ENGR. NO. 34661</p>	<p>FOR REDLINE NO. 4 ONLY</p> <p>12-03-2018 DATE</p> <p>PROFESSIONAL ENGR. NO. 16928</p>
--	--

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 34661, Expiration Date: 7-10-2019
 License No. 16928, Expiration Date: 5/13/2020

Date	No.	Revision Description
12/03/18	▲	BLOCKS E3 PLAZA HARDSCAPE AND GRADING BUILDING LOADING DOCK RECONFIGURATION AND GARAGE

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM																		
<table border="1"> <tr> <td>SUBDIVISION NAME</td> <td>SECTION/AREA</td> <td>LOT/PARCEL</td> </tr> <tr> <td>DOWNTOWN COLUMBIA</td> <td>CRESCENT NEIGHBORHOOD</td> <td>PARCEL D</td> </tr> <tr> <td>BLOCK # ZONE</td> <td>TAX ZONE/MAP</td> <td>ELECT. DISTRICT</td> </tr> <tr> <td>7 7</td> <td>36</td> <td>5</td> </tr> <tr> <td>WATER CODE</td> <td>SEWER CODE</td> <td>CENSUS TRACT</td> </tr> <tr> <td>550</td> <td>LITTLE PATUXENT</td> <td>605602</td> </tr> </table>	SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL	DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D	BLOCK # ZONE	TAX ZONE/MAP	ELECT. DISTRICT	7 7	36	5	WATER CODE	SEWER CODE	CENSUS TRACT	550	LITTLE PATUXENT	605602
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL																
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D																
BLOCK # ZONE	TAX ZONE/MAP	ELECT. DISTRICT																
7 7	36	5																
WATER CODE	SEWER CODE	CENSUS TRACT																
550	LITTLE PATUXENT	605602																

ACCESSIBLE ROUTE PLAN

Des. By	GDT/DM	SCALE	AS SHOWN	Proj. No.	04038.80
Dwn. By	MCJ	Date	1-18-18		
Chk. By	MCB	Approved	MCB		11 of 94

FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

FOR REDLINE REVISION NO. 6 ONLY

2-21-22

PROFESSIONAL ENGR. NO. 26569

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 26569 EXPIRATION DATE: 02/19/2023

FOR REDLINE REVISION NO. 9 ONLY

PROFESSIONAL ENGR. NO. 26569

FOR REDLINE REVISION NO. 4 ONLY

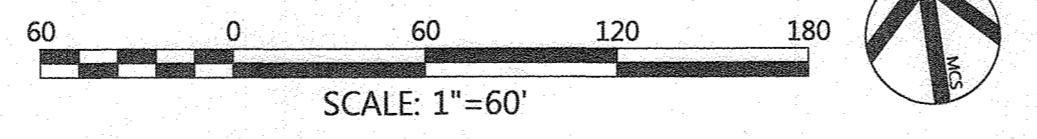
11/10/20

PROFESSIONAL ENGR. NO. 16928

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 16928 EXPIRATION DATE: 05/13/18

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 26569; EXPIRATION DATE: 07/19/2023

PLAN VIEW



1/24/2020	▲	UPDATE BLOCK'S USAGES, SQUARE FOOTAGES & PARKING REQUISITS. AND BLD 'E-2' DOORS, HARDSCAPE & DUMPSTER LOCATION
-----------	---	--

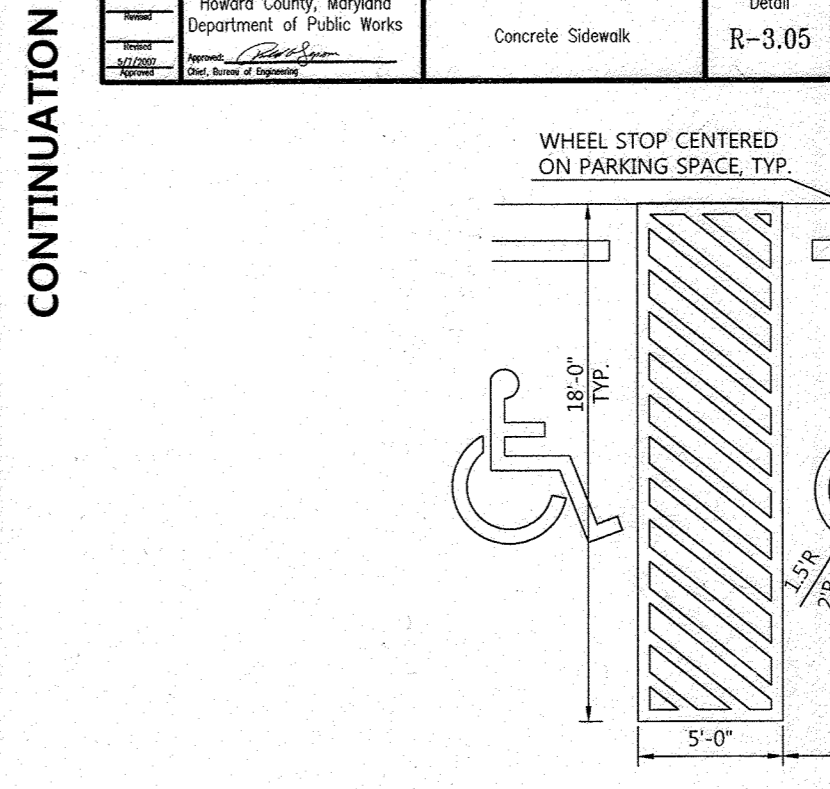
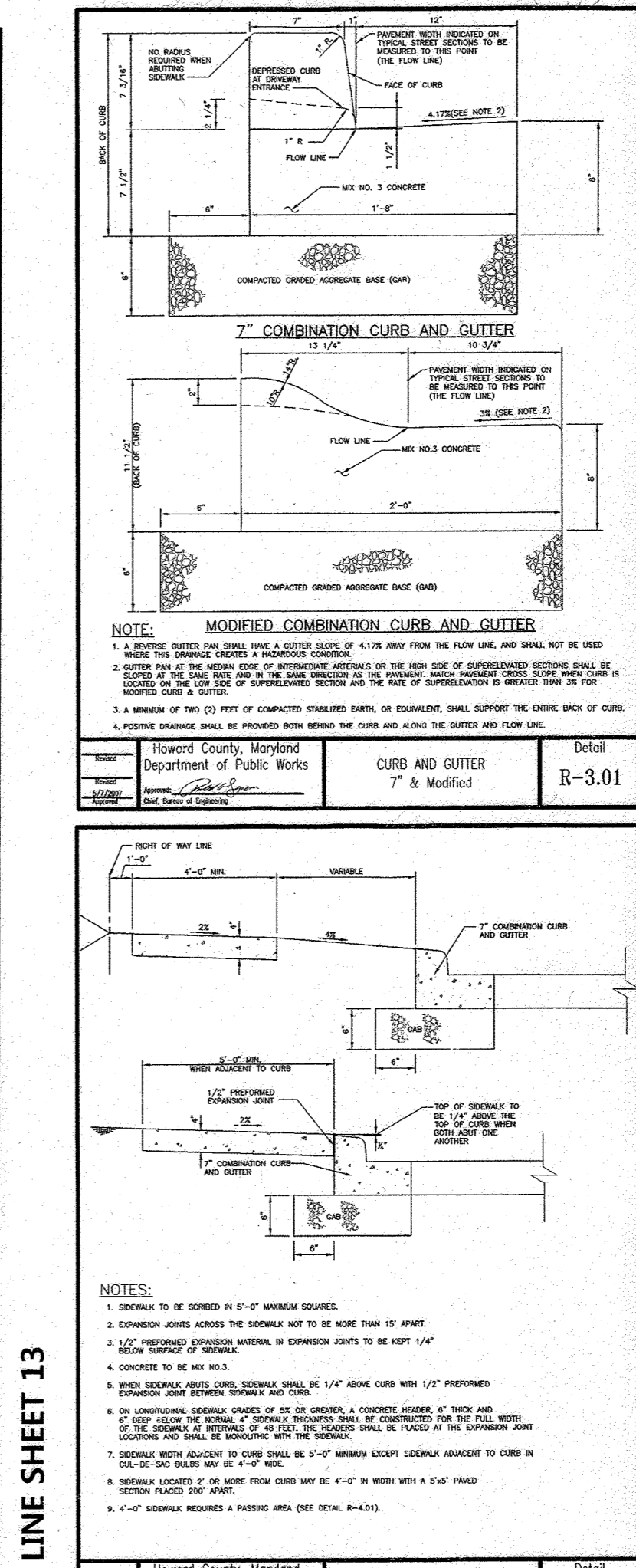
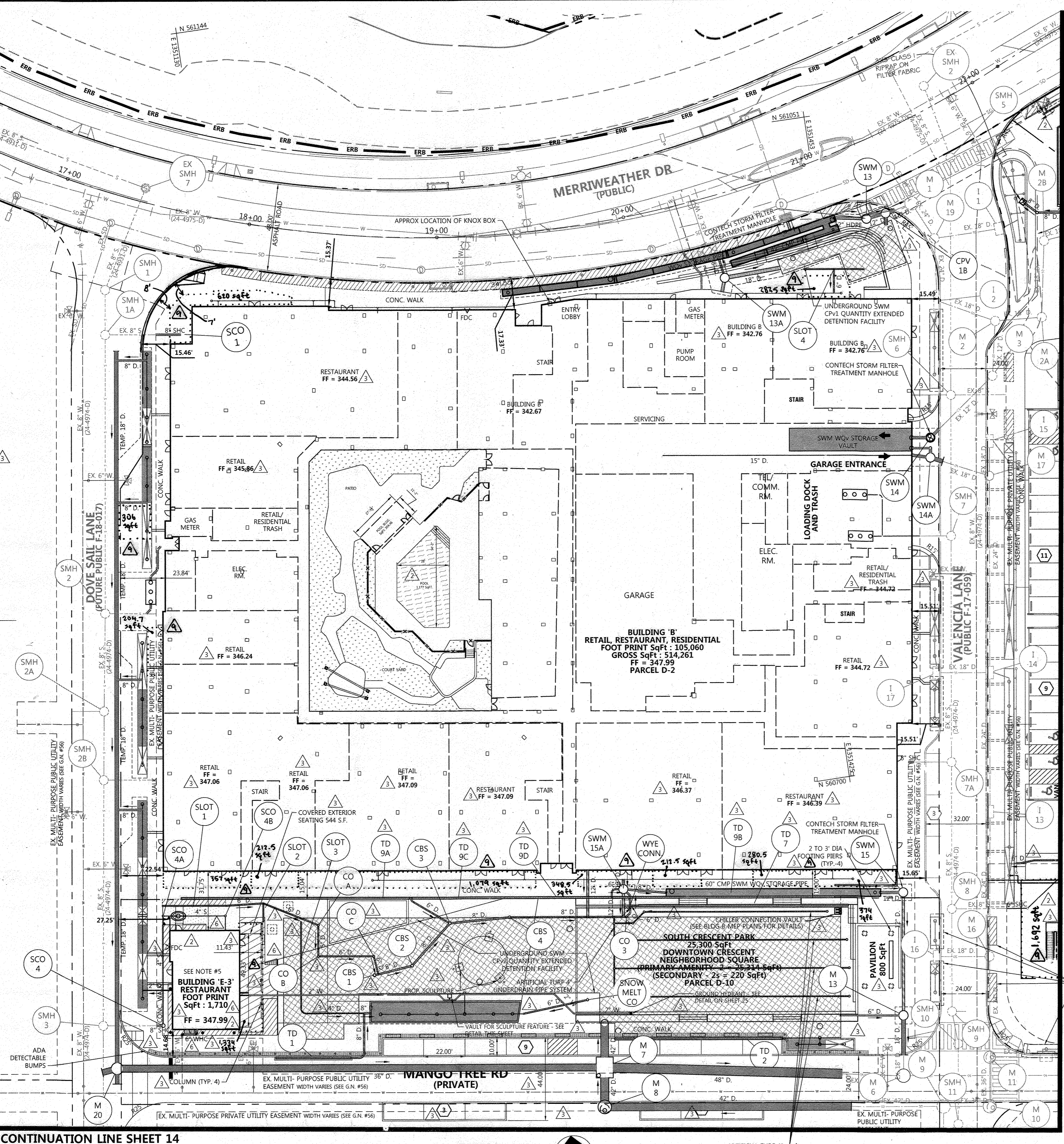
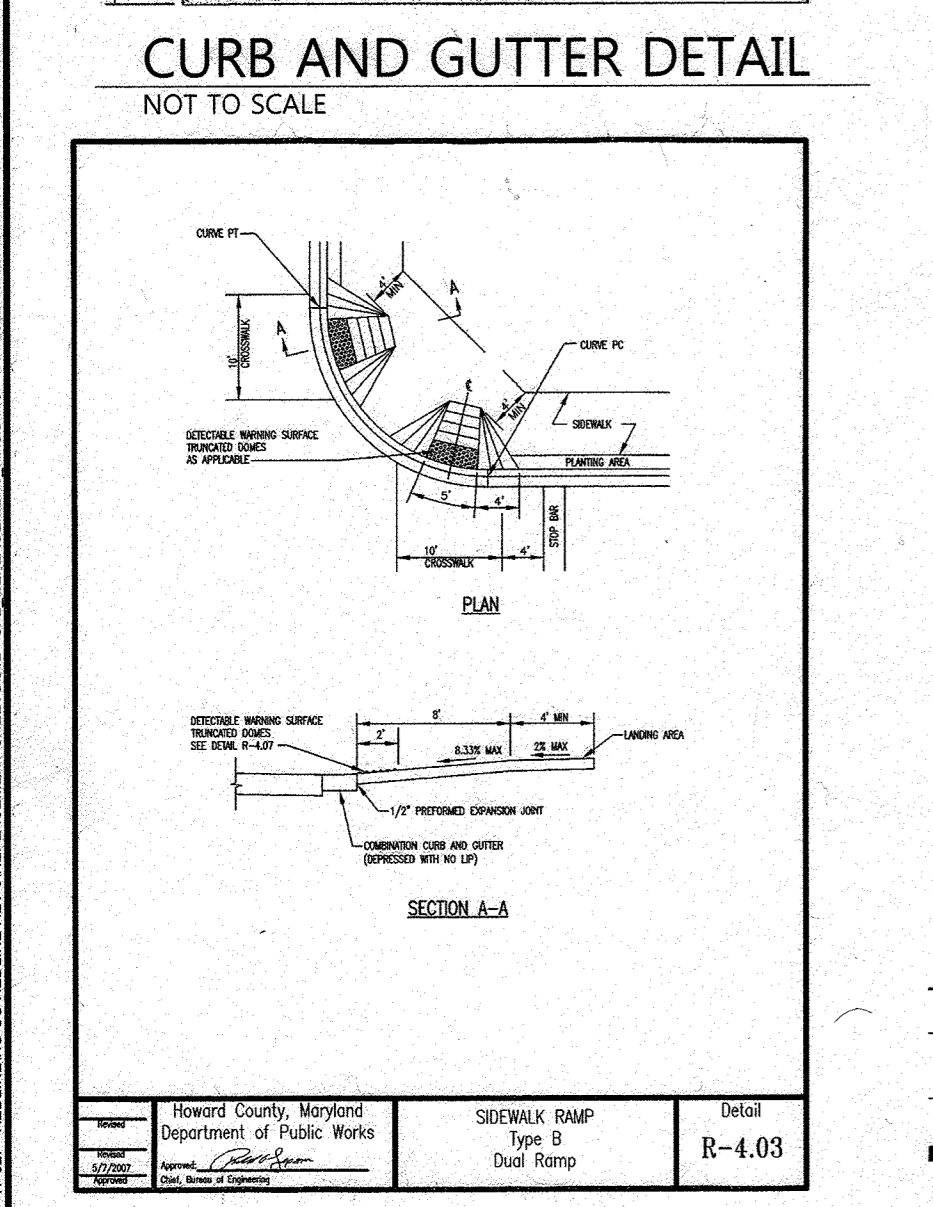
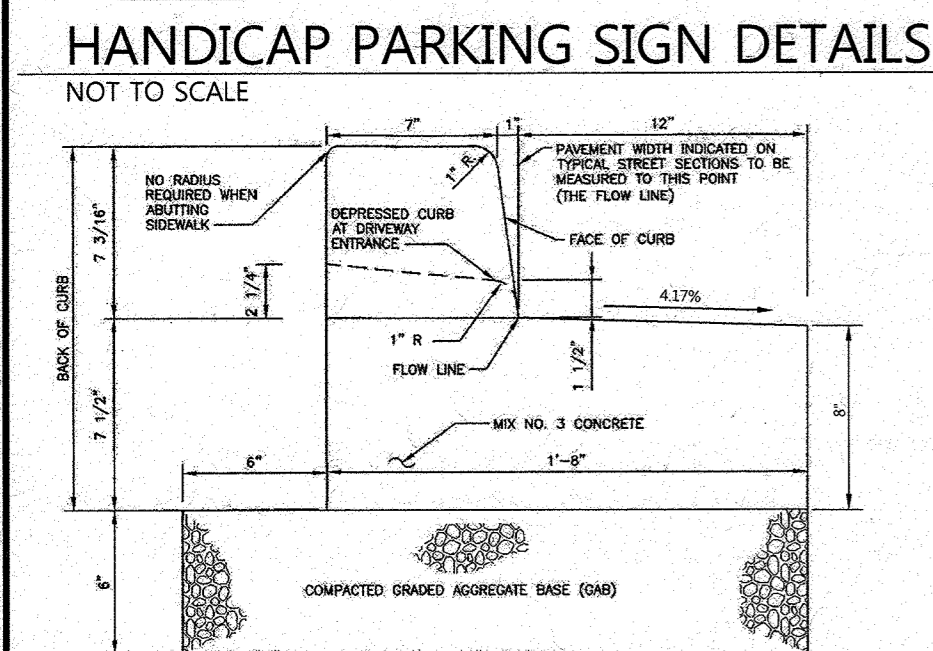
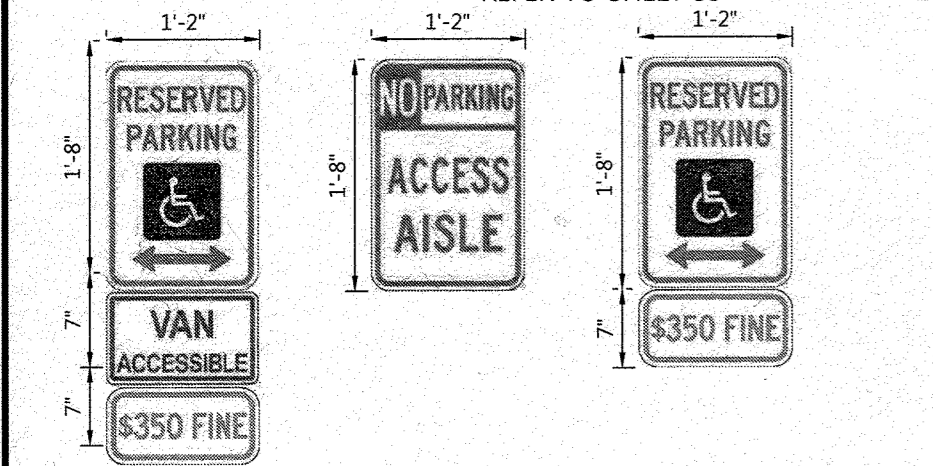
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

	3-28-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
	6-7-18
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
	6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT	DATE

A:\ADMINISTRATIVE\PROJECTS\2018\1802018_001\1802018_001.dwg
 11/20/2018 10:57 AM

LEGEND

---	PROPERTY LINE
---	EX. CONTOURS
---	EX. CURB
---	EX. BUILDING
---	EX. TREELINE
---	EX. WATER
---	EX. SEWER
---	EX. STORM DRAIN
---	EX. OVERHEAD TELEPHONE
---	EX. EASEMENT
---	EX. UTILITY POLE
---	PROP. EASEMENT
---	PROP. CONTOURS
---	PROP. WATER
---	PROP. SEWER
---	PROP. STORM DRAIN
---	PROP. BUILDING
---	PROP. CURB
---	PROP. TREE LINE
---	SURFACE PLANTER BED
---	PROP. PLANTING
---	PROP. SEATING AREA
---	PROP. HARDSCAPE
---	PROP. (M-6) MODULAR MICRO-BIORETENTION FACILITY
---	EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
---	UNDERGROUND CPV STORMWATER MANAGEMENT
---	RAISED METAL PLANTERS (TYP. 12) REFER TO SHEET 55

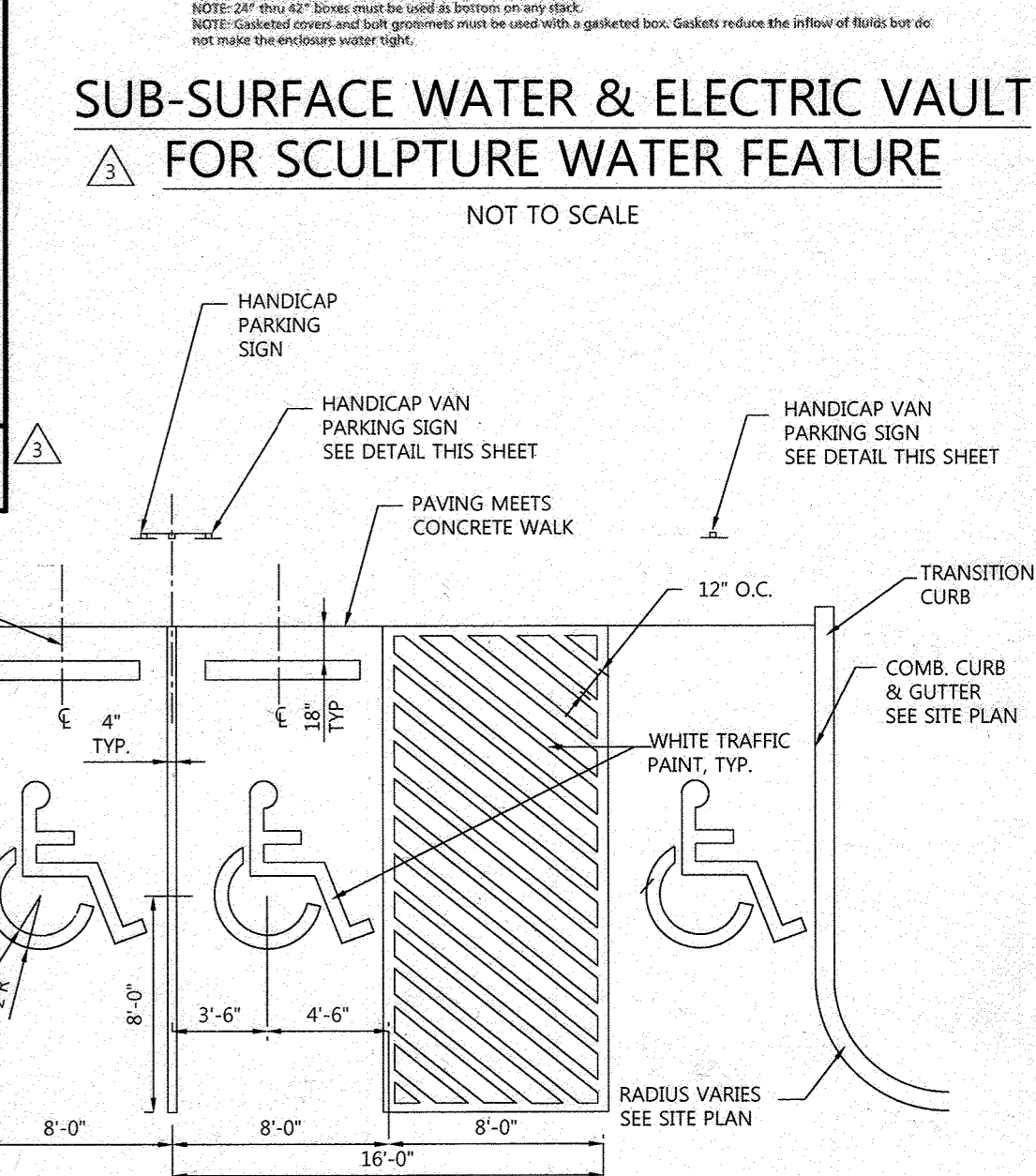


Dimensions / Data

24" x 36" PG Style Polymer Concrete (Stackable) Assembly

How Best to use Standard

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
24" x 36" x 4" Bore	1	8,000 / 12,000	120	10	PC19640001
24" x 36" x 4" Bore	2	8,000 / 12,000	120	10	PC19640002
24" x 36" x 4" Bore	3	8,000 / 12,000	120	10	PC19640003
24" x 36" x 4" Bore	4	8,000 / 12,000	120	10	PC19640004
24" x 36" x 4" Bore	5	8,000 / 12,000	120	10	PC19640005
24" x 36" x 4" Bore	6	8,000 / 12,000	120	10	PC19640006
24" x 36" x 4" Bore	7	8,000 / 12,000	120	10	PC19640007
24" x 36" x 4" Bore	8	8,000 / 12,000	120	10	PC19640008
24" x 36" x 4" Bore	9	8,000 / 12,000	120	10	PC19640009
24" x 36" x 4" Bore	10	8,000 / 12,000	120	10	PC19640010



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

3/14/22 DATE

3/18/22 DATE

3-21-22 DATE

CONSTRUCTION REVISIONS

Date	No.	Revision Description
11/18/21	1	UPDATE BUILDING E-3 USE FLOOR SPACE AND HARDSCAPE
03/06/19	2	BLDG E-3 & PARK AREA UTILITIES, REVISED SWM M614, M615, & CPV1 LOCATION
03/06/19	3	BLDG E-2, E-3, PLAZA HARDSCAPE & GRADING

FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE 07/18/2023.

DATE: 2-16-2022

PROFESSIONAL ENGR. NO. 26569

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

DAFT MCCLINE WALKER INC

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

550 SEWER CODE LITTLE PATUXENT STAGE 1

605602

DATE: Nov 16, 2017

12 of 94

SDP-17-027

CONSTRUCTION REVISIONS

Date	No.	Revision Description
11/18/21	1	UPDATE BUILDING E-3 USE FLOOR SPACE AND HARDSCAPE
03/06/19	2	BLDG E-3 & PARK AREA UTILITIES, REVISED SWM M614, M615, & CPV1 LOCATION
03/06/19	3	BLDG E-2, E-3, PLAZA HARDSCAPE & GRADING

DATE: 2-16-2022

PROFESSIONAL ENGR. NO. 26569

APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE: Nov 16, 2017

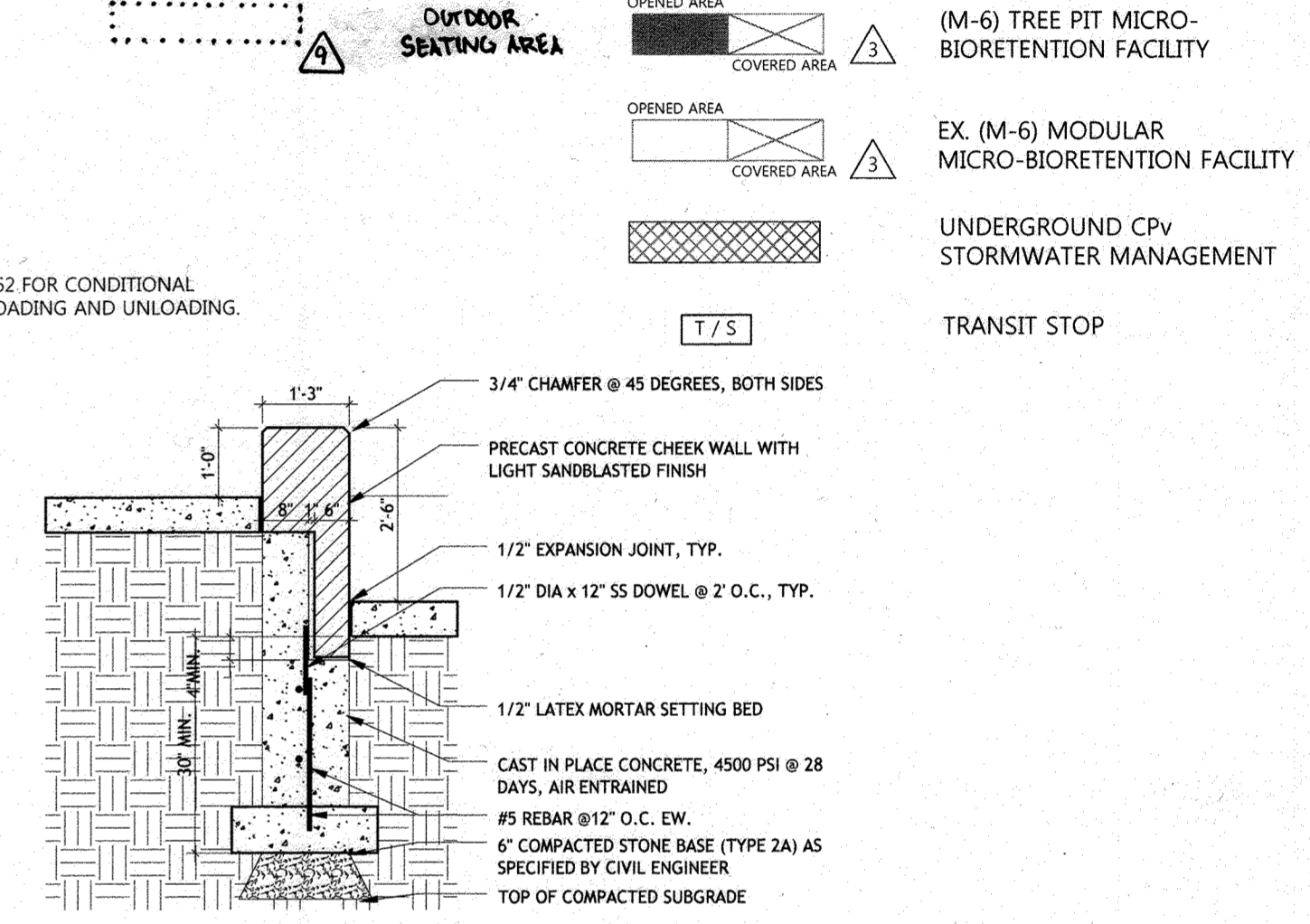
12 of 94

SDP-17-027

LEGEND

- BOLLARD
- PROPERTY LINE
- EX. CONTOURS
- EX. CURB
- EX. BUILDING
- EX. TREELINE
- EX. WATER
- EX. SEWER
- EX. STORM DRAIN
- EX. OVERHEAD TELEPHONE
- EX. EASEMENT
- EX. UTILITY POLE
- PROP. EASEMENT
- PROP. CONTOURS
- PROP. WATER
- PROP. SEWER
- PROP. STORM DRAIN
- PROP. BUILDING
- PROP. CURB
- PROP. TREE LINE
- SURFACE PLANTER BED
- (M-6) TREE PIT MICRO-BIORETENTION FACILITY
- EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
- UNDERGROUND CPV STORMWATER MANAGEMENT
- TRANSIT STOP

(LEGEND CONTINUED)

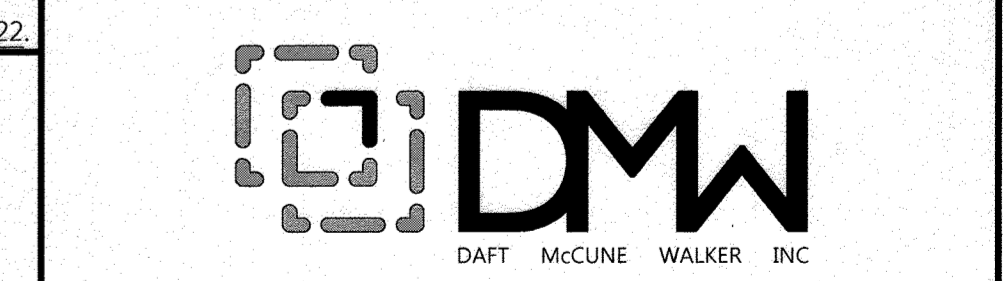


NOTES:

1. THE HARDSCAPE AND LANDSCAPE ARCHITECTURE PLAN SHEETS SHALL REGULATE DESIGN PARAMETERS, DETAIL, LAYOUT AND INTENT OF DEPICTED HARDSCAPE AND LANDSCAPE FEATURES (I.E. PROPOSED SIDEWALKS, OPEN SPACE FEATURES, PROMENADE(S), PROPOSED FOUNTAINS, PLANTINGS, ETC.) THIS INFORMATION IS SHOWN SOLELY FOR TIE-DOWN, LOCATION AND CONSTRUCTION COORDINATION PURPOSES. THE CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE ARCHITECT CONCERNING ANY CHANGE, DEVIATION OR MODIFICATION OF SUCH FEATURES SHOWN AND/OR ILLUSTRATED. SEE ROAD PLAN SHEET AND HARDSCAPE SHEETS FOR DETAIL REGARDING THE EXTENT OF CURBLESS ROADWAY.
2. FOR PRIVATE ROAD PLAN AND PROFILE SEE SHEETS 19 THRU 20.
3. SEE GENERAL NOTE #51 REGARDING STORMWATER MANAGEMENT OWNERSHIP AND MAINTENANCE.
4. SEE GENERAL NOTE #41 REGARDING TRASH SERVICE FOR BUILDINGS E-2 AND E-3.

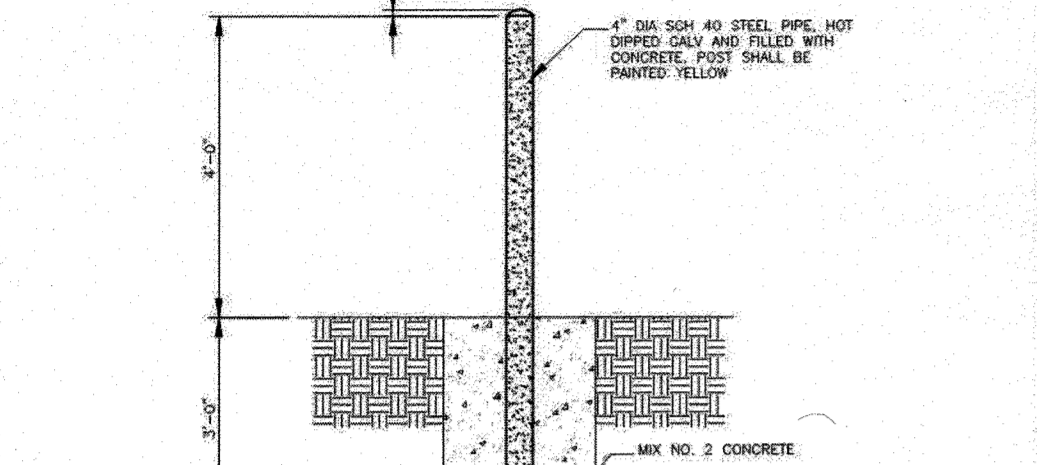
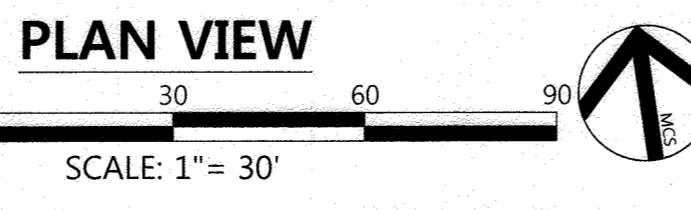
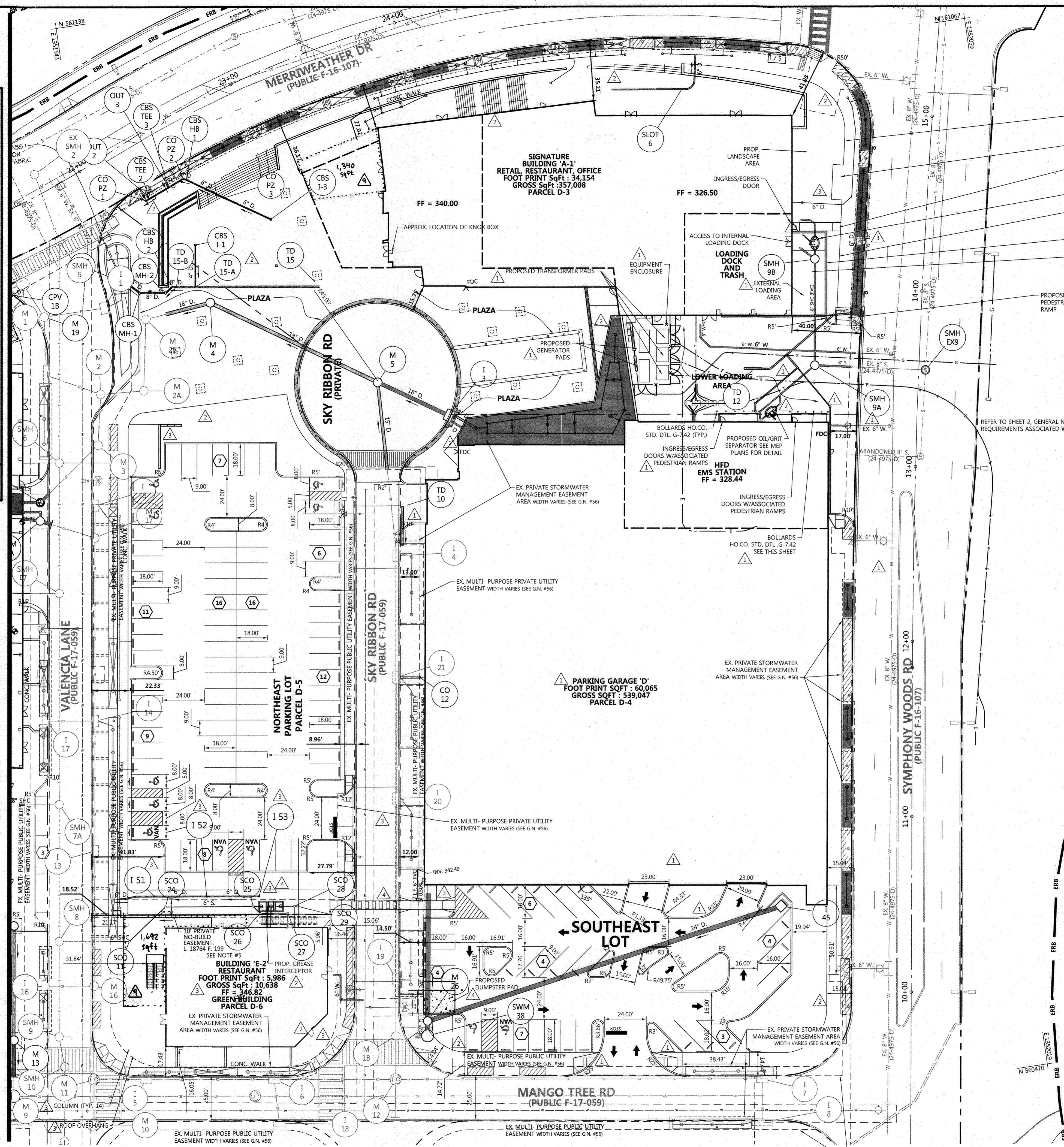
Date	No.	Revision Description
07/31/20	1	ADD OUTDOOR DINING PATIO AREA
07/31/20	2	UPDATE BLDG. 'B' USAGES, SQUARE FOOTAGES & PARKING REQMTS. AND BLDG. E-2 DOORS, HARDSCAPE & DUMPSTER LOCATION.
11/18/19	3	UPDATE BLDG. E2 FOOTPRINT & SITE, GARAGE D ADA WALK, & MB32
03/06/19	4	BLDG. E2, E3, PLAZA HARDSCAPE AND GRADING
12/03/18	5	BUILDING A1 LOADING DOCK RECONFIGURATION AND GARAGE

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14
OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

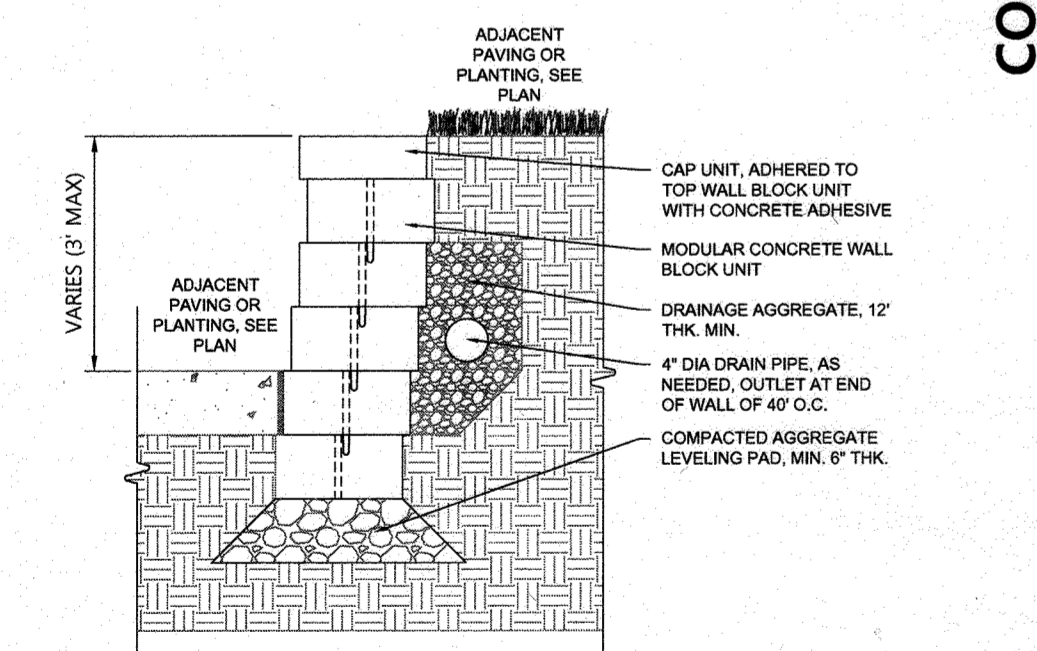
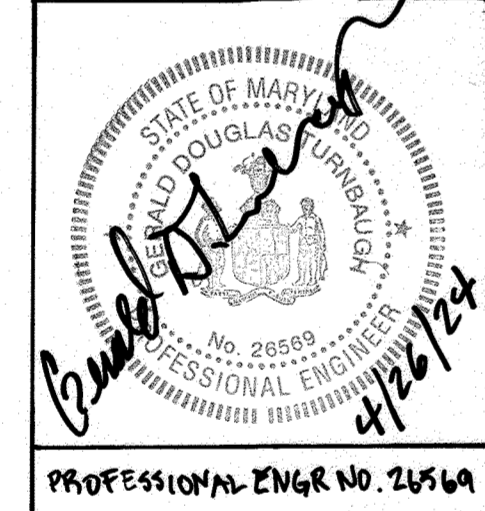
Des. By	GDT/DM	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	MCJ	Date	5-10-18		
Chk. By	MCB	Approved	MCB		13 of 94



Howard County, Maryland Department of Public Works	Metal Bollard	Detail G-7.42
---	---------------	------------------

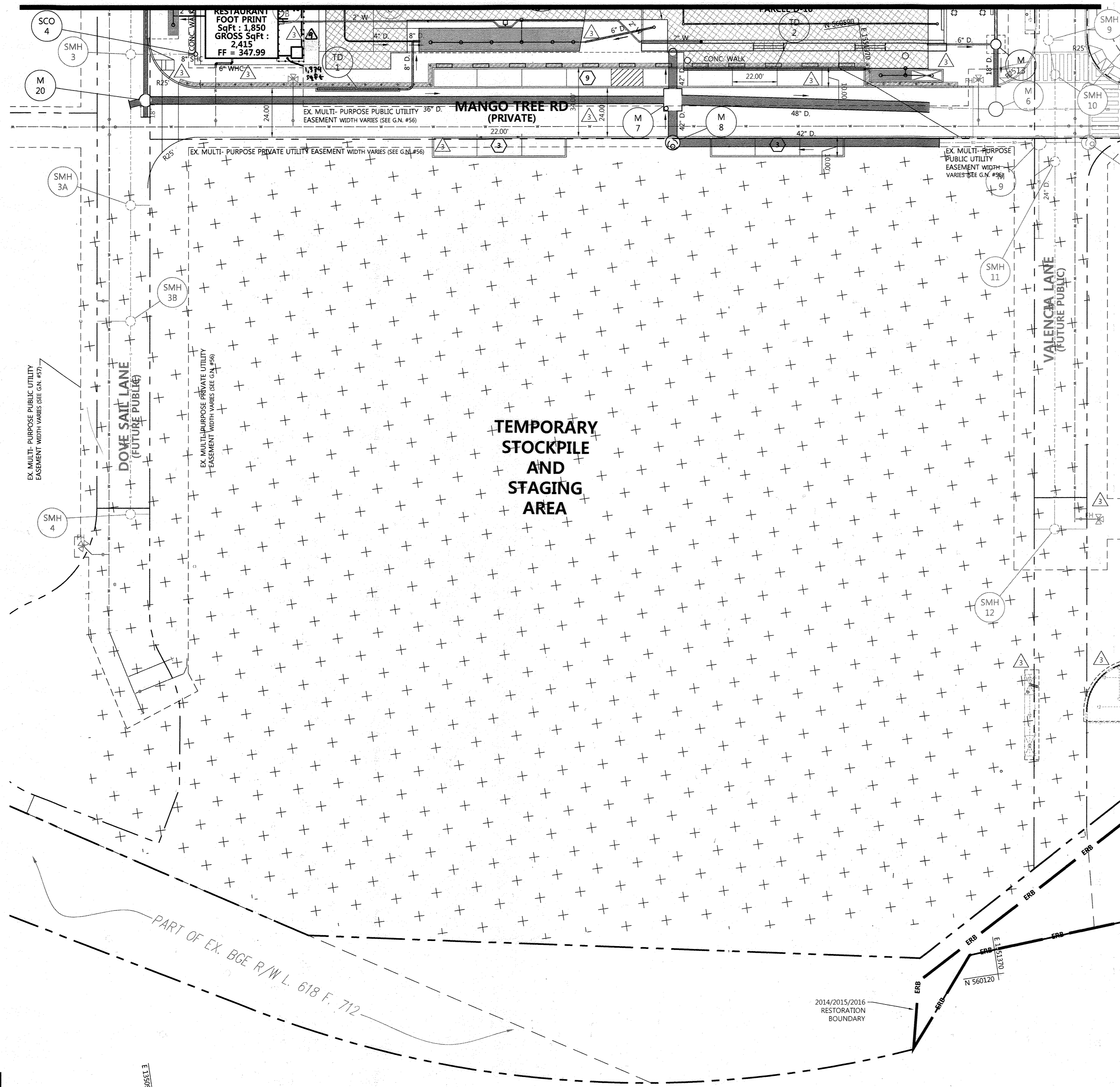
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 26564, EXPIRATION DATE 07/18/2025

FOR REDLINE REVISION NO. 9 ONLY

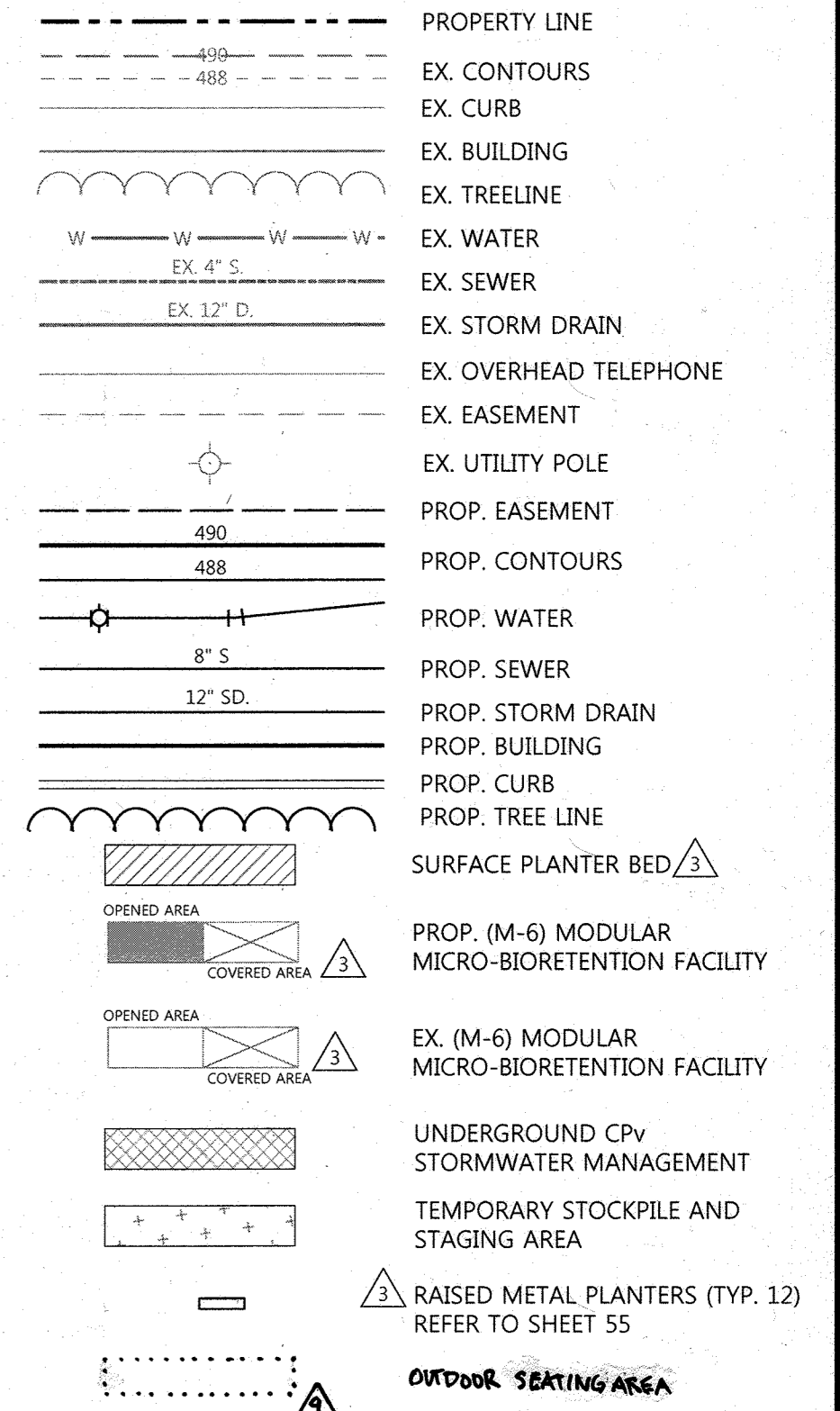


APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	DATE	11-30-20
Chief, Development Engineering Division	DATE	12/14/20
Chief, Division of Land Development	DATE	12-16-20
DIRECTOR	DATE	

CONTINUATION LINE SHEET 12



LEGEND



NOTES:

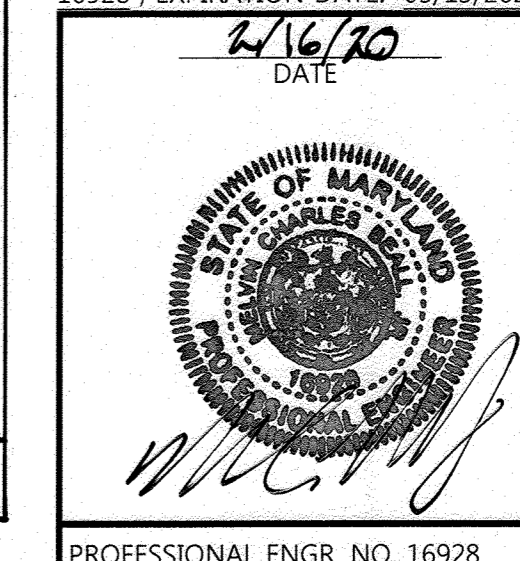
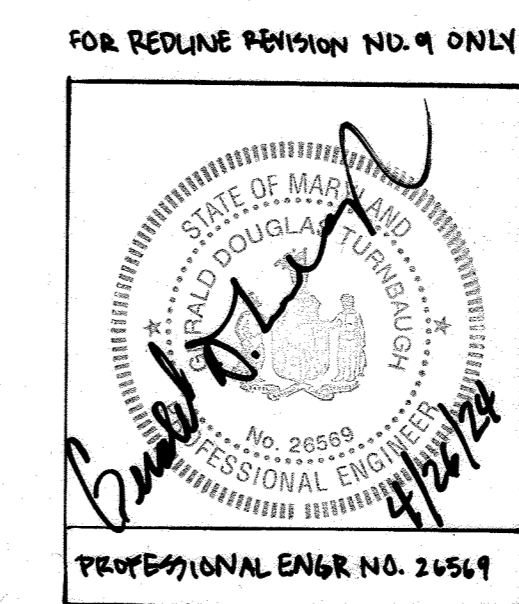
1. THE HARDSCAPE AND LANDSCAPE ARCHITECTURE PLAN SHEETS SHALL REGULATE DESIGN PARAMETERS, DETAIL, LAYOUT AND INTENT OF DEPICTED HARDSCAPE AND LANDSCAPE FEATURES (I.E. PROPOSED SIDEWALKS, OPEN SPACE FEATURES, PROMENADE(S), PROPOSED FOUNTAINS, PLANTINGS, ETC.) THIS INFORMATION IS SHOWN SOLELY FOR TIE-DOWN, LOCATION AND CONSTRUCTION COORDINATION PURPOSES. THE CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE ARCHITECT CONCERNING ANY CHANGE, DEVIATION OR MODIFICATION OF SUCH FEATURES SHOWN AND/OR ILLUSTRATED.
2. SEE ROAD PLAN SHEET AND HARDSCAPE SHEETS FOR DETAIL REGARDING THE EXTENT OF CURBLESS ROADWAY.
3. FOR PRIVATE ROAD PLAN AND PROFILE SEE SHEETS 19 THRU 20.
4. SEE GENERAL NOTE #51 REGARDING STORMWATER MANAGEMENT OWNERSHIP AND MAINTENANCE.
5. SEE GENERAL NOTE #41 REGARDING TRASH SERVICE FOR BUILDING E-3.

03/06/19	BLDG. E-2, E-3, PLAZA HARDSCAPE AND GRADING	
11/18/19	BLDG E-3 UTILITIES, PARK AREA GRADING, AND REVISED SWM MB14 & 15 LOCATION	
Date	No.	Revision Description
DOWNTOWN COLUMBIA		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE I		
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		

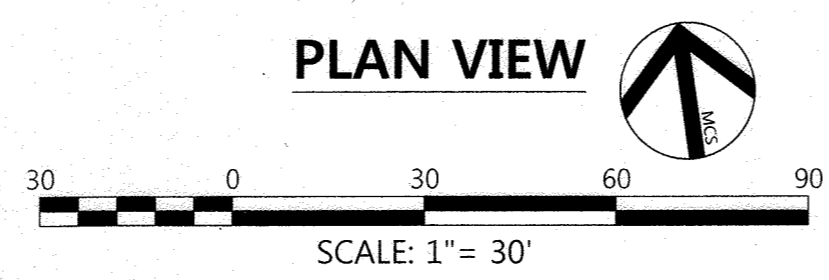
FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESENT-1, FDP-DC-CRESENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE 07/18/2025

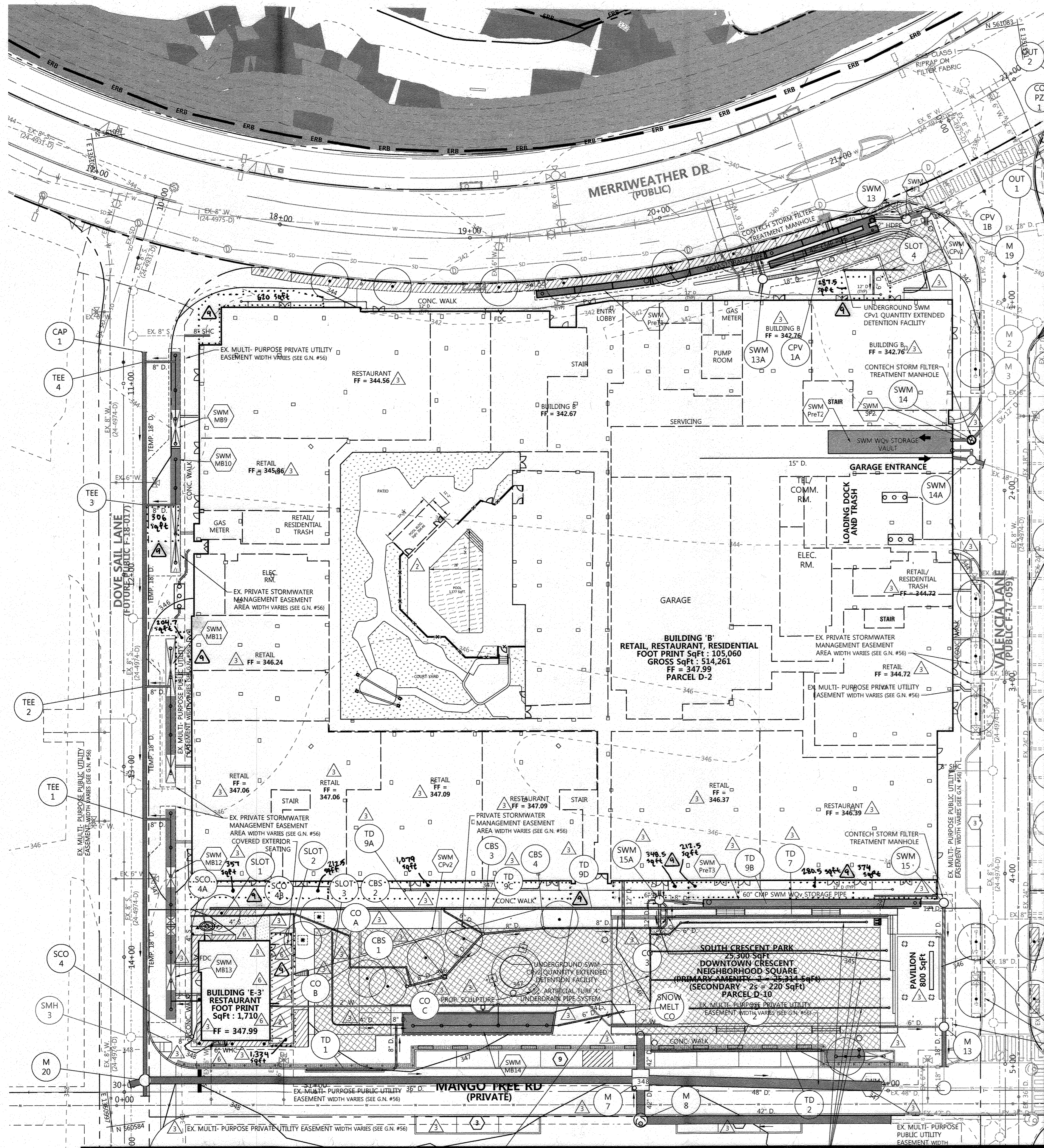


APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
<i>Chad Clark</i>	2-28-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Jane</i>	3/10/2020
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>John</i>	5-10-2020
DIRECTOR	DATE

APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

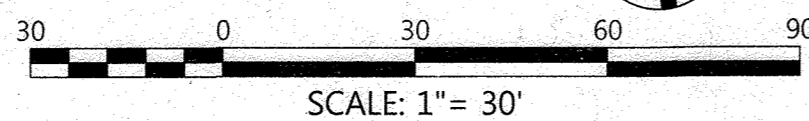
SITE PLAN, SECTION 3	
REVISED SITE DEVELOPMENT PLAN	
Des. By GDT/DM	SCALE AS SHOWN
Drn. By MCJ	Date 5-10-18
Chk. By MCB	Approved MCB
Proj. No. 04038.B0	
14 of 94	

3/7/24 ADD OUTDOOR DINING PATIO AREA



CONTINUATION LINE SHEET 17

PLAN VIEW



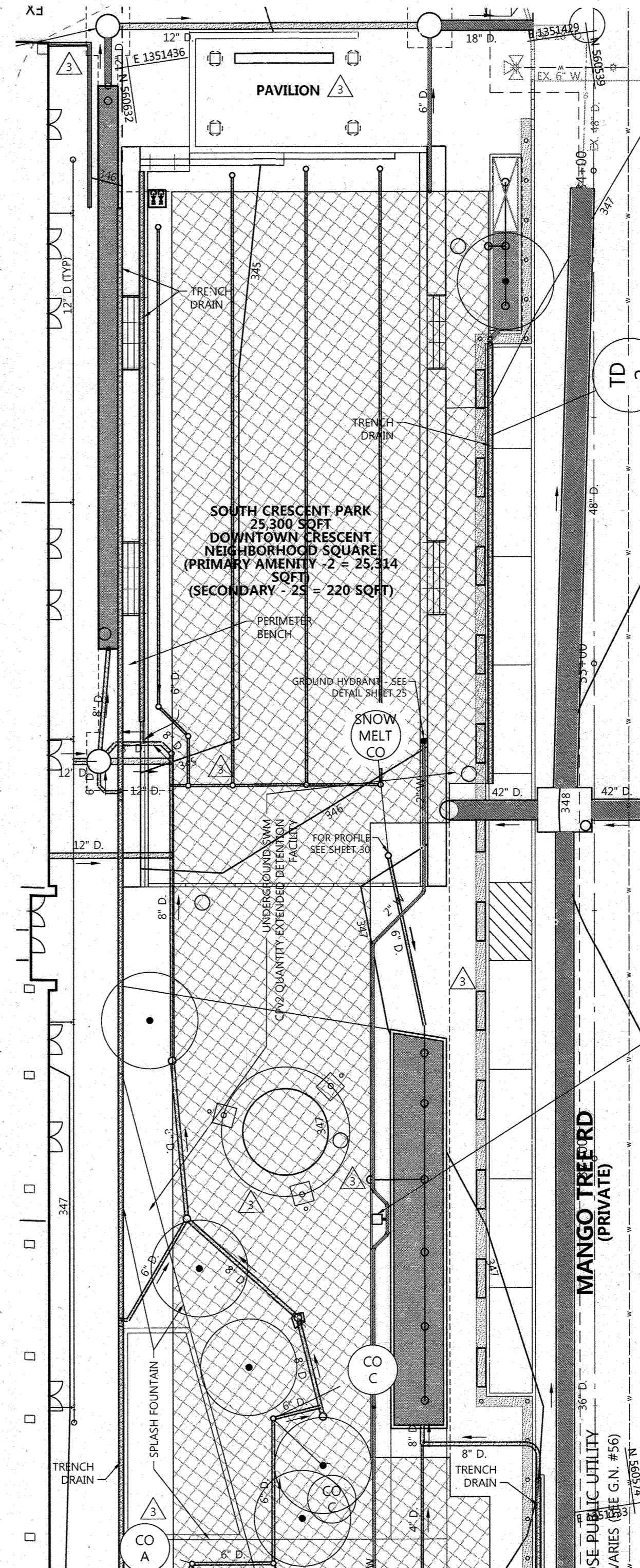
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 3-14-22
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 [Signature] 2/21/22
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 [Signature] 3-21-22
 DIRECTOR DATE

FOR PROFILE OF 6" D. STORM DRAIN FOR PARK AREA, REFER TO SWM MB14 PROFILE ON SHEET 30.

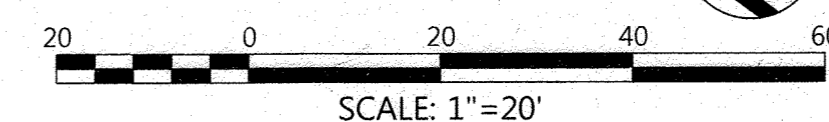
ARTIFICIAL TURF 4" UNDERDRAIN PIPE SYSTEM

NOTE: SPOT GRADES AND DETAILED GRADING BETWEEN THE CURB AND BUILDING, INCLUDING BUT NOT LIMITED TO HARDSCAPE FEATURES SUCH AS PROPOSED SIDEWALKS, OPEN SPACE FEATURES, PROMENADES, PROPOSED FOUNTAINS, ETC., HAVE BEEN DESIGNED BY THE LANDSCAPE ARCHITECT. SEE THE LANDSCAPE AND HARDSCAPE PLAN FOR DETAILED PROPOSED SPOT GRADES. THE CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE ARCHITECT CONCERNING ANY CHANGE, DEVIATION OR MODIFICATION OF SUCH FEATURES SHOWN AND/OR ILLUSTRATED.

CONTINUATION LINE SHEET 16

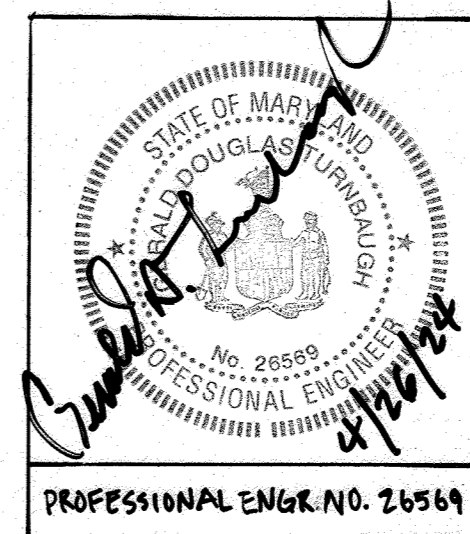


PARK DETAIL



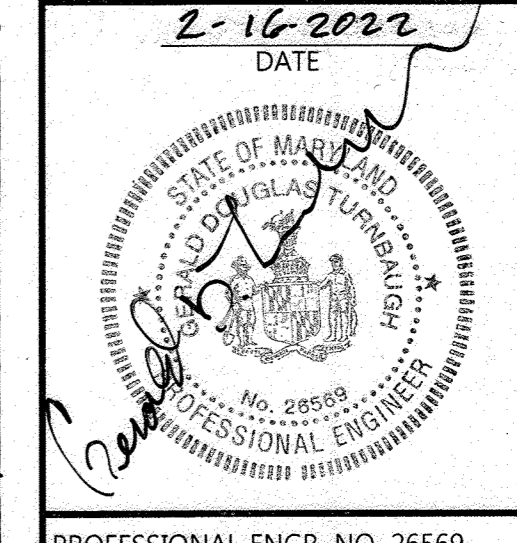
NOTE: SEE HARDSCAPE PLAN FOR ADDITIONAL DETAILS IN SOUTH CRESCENT PARK.

FOR REDLINE REVISION NO. 9 ONLY



FILE NUMBERS:
 F-15-106, F-16-107, F-17-059, F-18-017, SDP-17-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
 CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 26569, EXPIRATION DATE: 07/18/2023.



APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: Nov 16, 2017

LEGEND

[Symbol]	PROPERTY LINE
[Symbol]	EX. CONTOURS
[Symbol]	EX. CURB
[Symbol]	EX. BUILDING
[Symbol]	EX. TREELINE
[Symbol]	EX. WATER
[Symbol]	EX. SEWER
[Symbol]	EX. STORM DRAIN
[Symbol]	EX. OVERHEAD TELEPHONE
[Symbol]	EX. EASEMENT
[Symbol]	EX. UTILITY POLE
[Symbol]	PROP. EASEMENT
[Symbol]	PROP. CONTOURS
[Symbol]	PROP. WATER
[Symbol]	PROP. SEWER
[Symbol]	PROP. STORM DRAIN
[Symbol]	2014/2015 RESTORATION BOUNDARY
[Symbol]	PROP. BUILDING
[Symbol]	PROP. CURB
[Symbol]	SURFACE PLANTER BED
[Symbol]	PROP. PLANTING
[Symbol]	PROP. SEATING AREA
[Symbol]	PROP. HARDSCAPE
[Symbol]	PROP. (M-6) MODULAR MICRO-BIORETENTION FACILITY
[Symbol]	EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
[Symbol]	UNDERGROUND CPV STORMWATER MANAGEMENT
[Symbol]	RAISED METAL PLANTERS (TYP. 12) REFER TO SHEET 55
[Symbol]	OUTDOOR SEATING AREA

STEEP SLOPES DATA

[Symbol]	15% AND UP (HIGHLY ERODIBLE)
[Symbol]	25% AND UP (STEEP SLOPES)

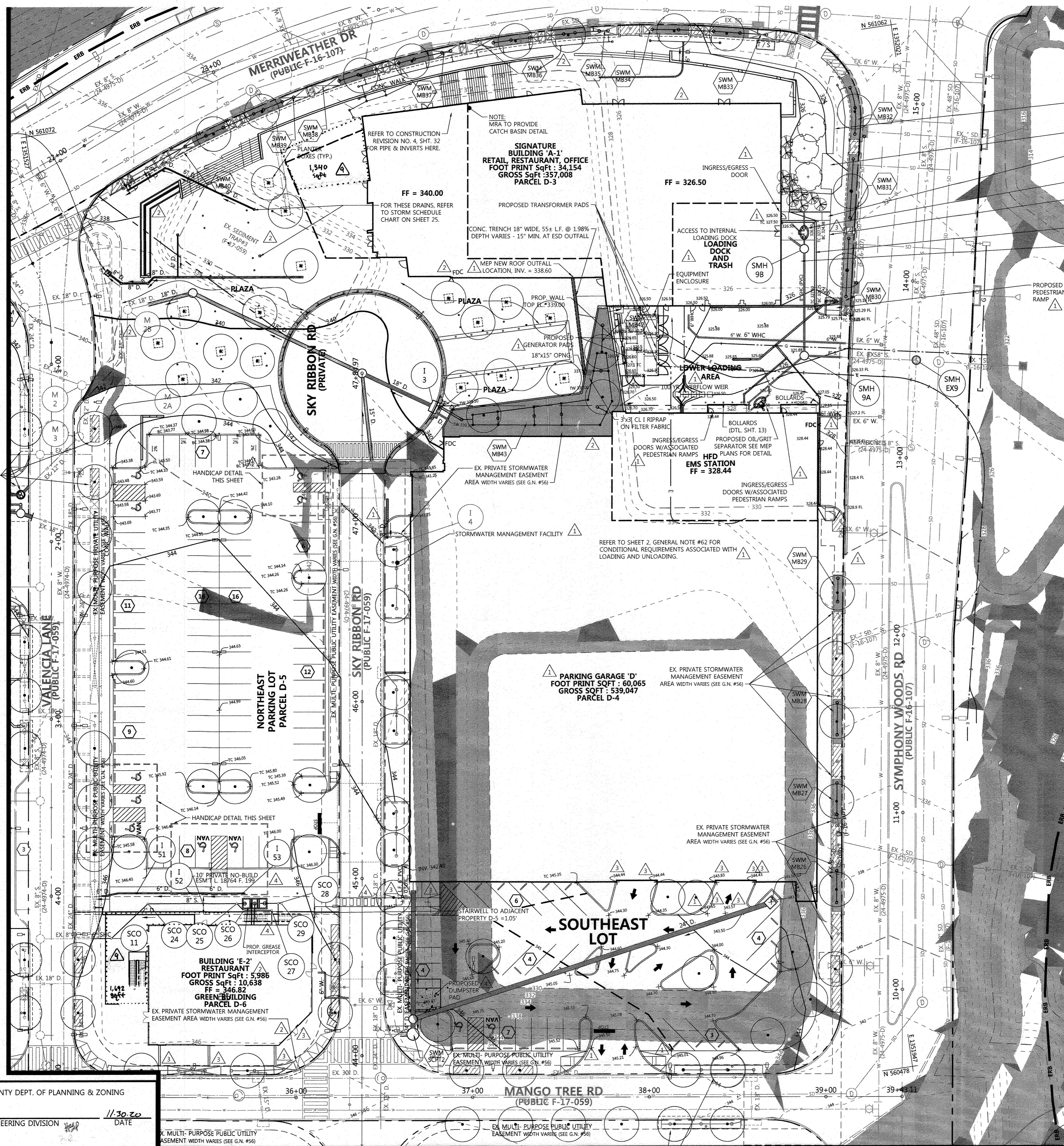
NOTE: SLOPE INFORMATION SHOWN HERE ON IS A RESULT OF MASS GRADING SDP-16-075

3/7/21	ADD OUTDOOR DINING PATIO AREAS	
11/15/21	UPDATE BUILDING E-3 FLOOR SPACE AND HARDSCAPE	
11/18/19	BLDG E-3 UTILITIES, PARK AREA GRADING, AND REVISED SWM MB14 & 15 LOCATION	
07/09/19	BLDG E-2, E-3, PLAZA HARDSCAPE AND GRADING	
Date	No.	Revision Description
DOWNTOWN COLUMBIA		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE I		
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		

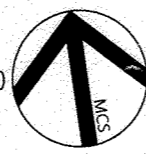
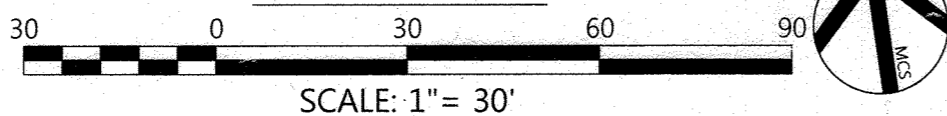
DMW DAFT MCCUNE WALKER INC			
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD		
POINT OF BEGINNING	TAX ZONE/MAP	ELECT. DISTRICT	CENSUS TRACT
7	36	5	605602
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT	1	
TITLE			
GRADING PLAN, SECTION 1			
REVISED SITE DEVELOPMENT PLAN			
Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	MCJ	Date 11-15-21	
Chk. By	Approved MCB		15 of 94

SDP-17-027

CONTINUATION LINE SHEET 15



PLAN VIEW



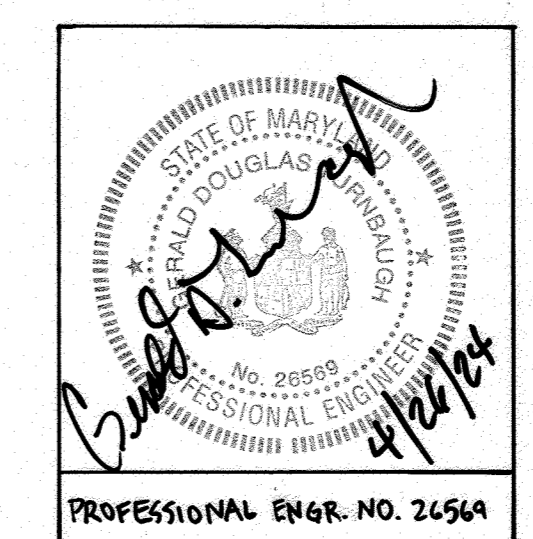
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
1/30/20
1/11/20
12-16-20

NOTE:
FOR BUILDING E-2 SITE UTILITY
PROFILES, SEE SHEETS 25 & 28.

NOTE:
SPOT GRADES AND DETAILED GRADING BETWEEN THE CURB AND BUILDING, INCLUDING BUT NOT LIMITED TO HARDSCAPE FEATURES SUCH AS PROPOSED SIDEWALKS, OPEN SPACE FEATURES, PROMENADES, PROPOSED FOUNTAINS, ETC., HAVE BEEN DESIGNED BY THE LANDSCAPE ARCHITECT. SEE THE LANDSCAPE AND HARDSCAPE PLAN FOR PROPOSED SPOT GRADES. THE CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE ARCHITECT CONCERNING ANY CHANGE, DEVIATION OR MODIFICATION OF SUCH FEATURES SHOWN AND/OR ILLUSTRATED.

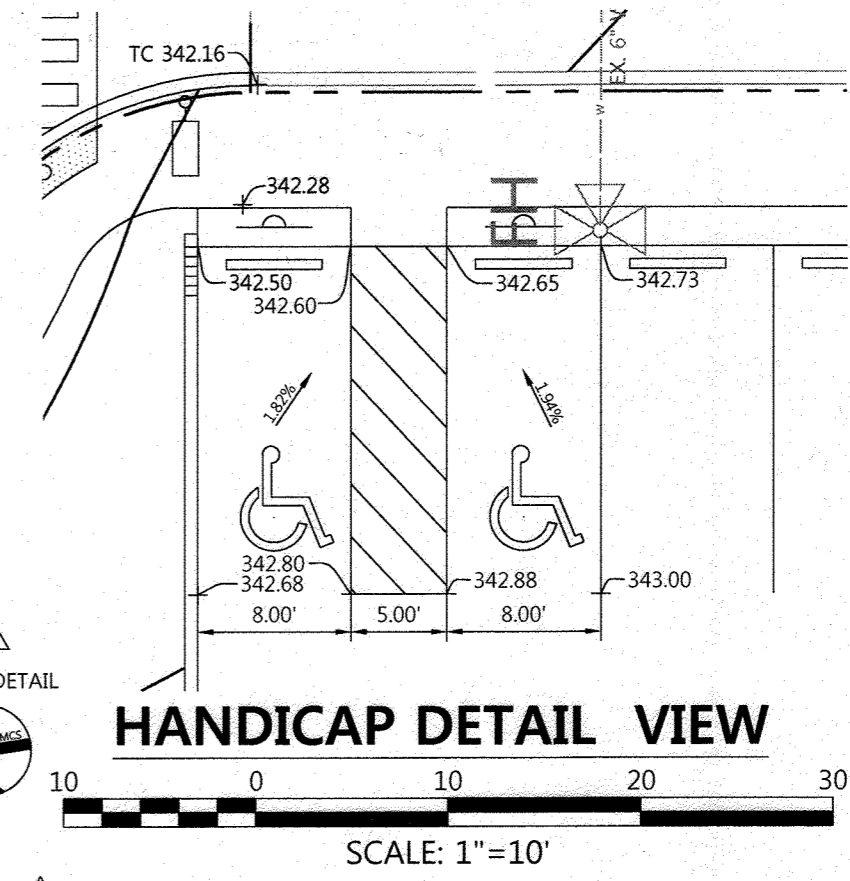
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 26564, EXPIRATION DATE 07/18/25

FOR REPLY REVISION NO. 9 ONLY



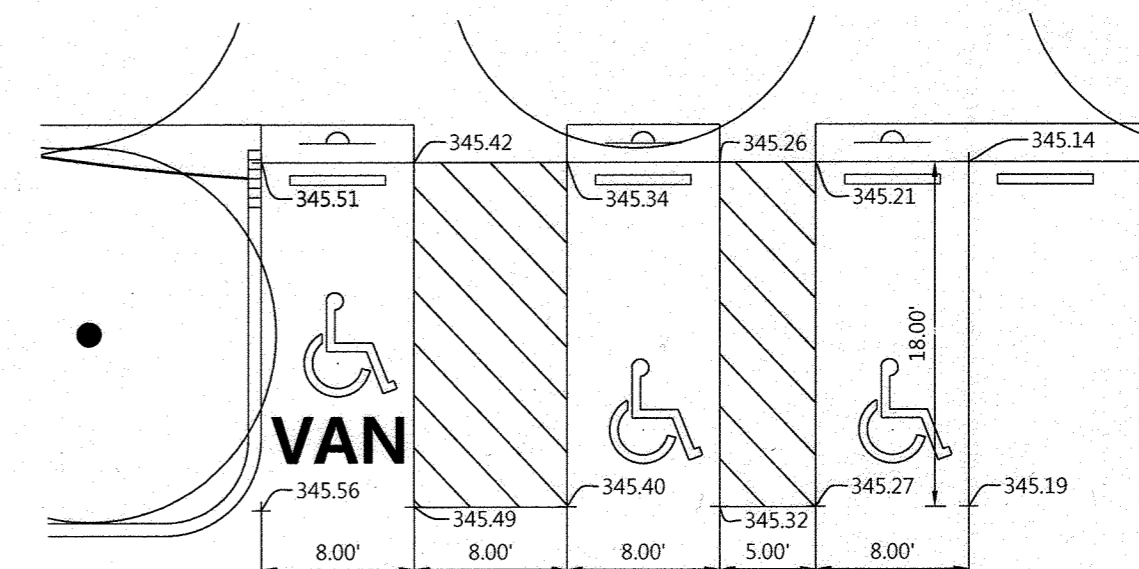
STEEP SLOPES DATA
15% AND UP (HIGHLY ERODIBLE)
25% AND UP (STEEP SLOPES)

NOTE: SLOPE INFORMATION SHOWN HERE ON IS A RESULT OF MASS GRADING SDP-16-075



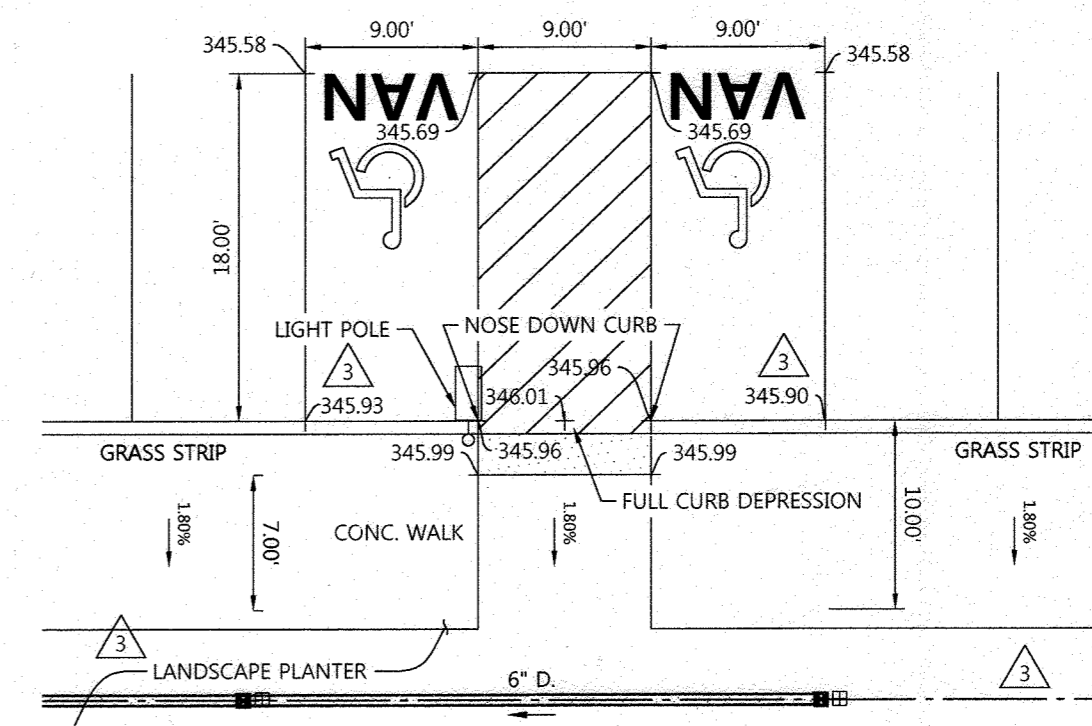
HANDICAP DETAIL VIEW

SCALE: 1"=10'



HANDICAP DETAIL VIEW

SCALE: 1"=10'



HANDICAP DETAIL VIEW

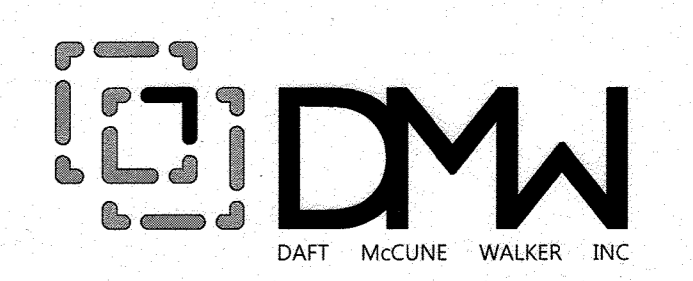
SCALE: 1"=10'

LEGEND

- PROPERTY LINE
EX. CONTOURS
EX. CURB
EX. BUILDING
EX. TREELINE
EX. WATER
EX. SEWER
EX. STORM DRAIN
EX. OVERHEAD TELEPHONE
EX. EASEMENT
EX. UTILITY POLE
PROP. EASEMENT
PROP. CONTOURS
PROP. WATER
PROP. SEWER
PROP. STORM DRAIN
2014/2015 RESTORATION BOUNDARY
PROP. BUILDING
PROP. CURB
SURFACE PLANTER BED
(M-6) TREE PIT MICRO-BIORETENTION FACILITY
EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
UNDERGROUND CPV STORMWATER MANAGEMENT
OUTDOOR SEATING AREA

Revision table with columns for Date, No., and Revision Description. Includes entries for 9/7/24, 7/31/20, 11/18/19, 03/06/19, and 12/03/18.

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION

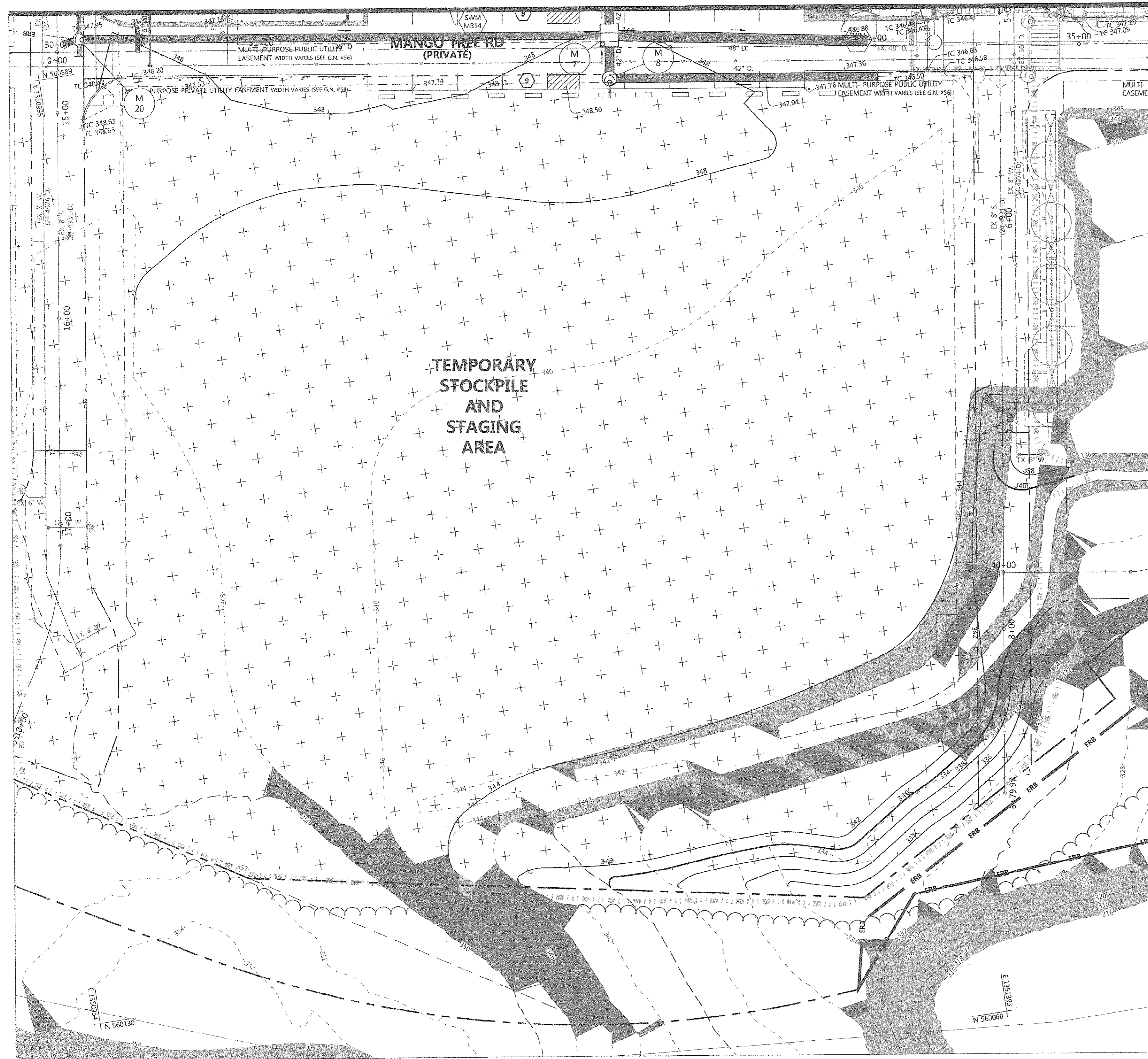


Project information table including address (501 FAIRMOUNT AVENUE), phone numbers, and project details like 'DOWNTOWN COLUMBIA' and 'SECTION 2'.

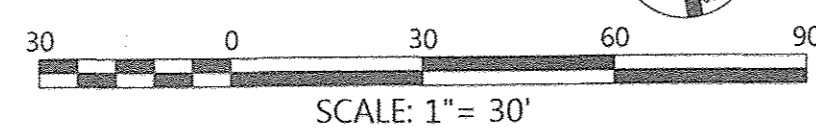
GRADING PLAN, SECTION 2

Des. By GDT/DM
Date 11/16/17
Scale AS SHOWN
Date 5-10-18
Proj. No. 04038.80
Approved MCB
16 of 94

CONTINUATION LINE SHEET 15



PLAN VIEW



LEGEND

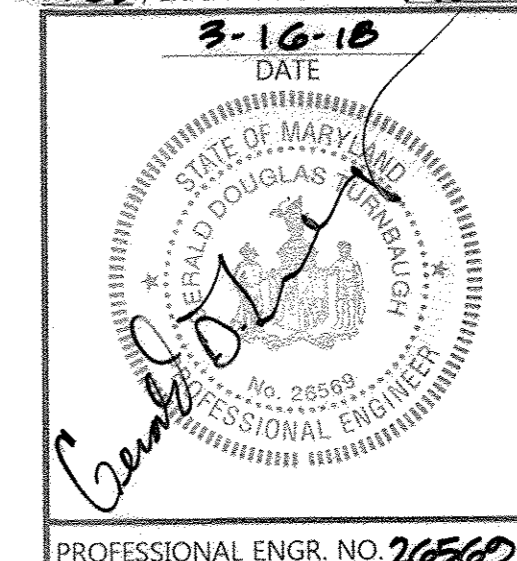
- PROPERTY LINE
- - - EX. CONTOURS
- - - EX. CURB
- - - EX. BUILDING
- - - EX. TREELINE
- - - EX. WATER
- - - EX. SEWER
- - - EX. STORM DRAIN
- - - EX. OVERHEAD TELEPHONE
- - - EX. EASEMENT
- - - EX. UTILITY POLE
- - - PROP. EASEMENT
- - - PROP. CONTOURS
- - - PROP. WATER
- - - PROP. SEWER
- - - PROP. STORM DRAIN
- - - BOUNDARY
- - - 2014/2015 RESTORATION
- - - PROP. BUILDING
- - - PROP. CURB
- ▨ SURFACE PLANTING BED
- ⊕ (M-6) TREE PIT MICRO-BIORETENTION FACILITY
- ⊕ STAGING AND TEMP. STOCK PILE AREA

STEEP SLOPES DATA

- ▨ 15% AND UP (HIGHLY ERODIBLE)
- ▨ 25% AND UP (STEEP SLOPES)

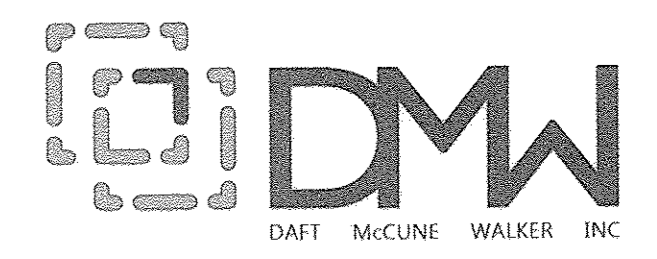
NOTE: SLOPE INFORMATION SHOWN HERE ON IS A RESULT OF MASS GRADING SDP-16-075

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-115,
 WP-18-020, WP-18-021, SP-16-009,
 WP-16-100, FDP-DC-CRESENT-1,
 FDP-DC-CRESENT-1A
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE
 DOCUMENTS WERE PREPARED OR
 APPROVED BY ME, AND THAT I AM A
 DULY LICENSED PROFESSIONAL
 ENGINEER UNDER THE LAWS OF THE
 STATE OF MARYLAND, LICENSE NO.
26560, EXPIRATION DATE: **7-18-19**



APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/14/17

Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14 OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-961-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

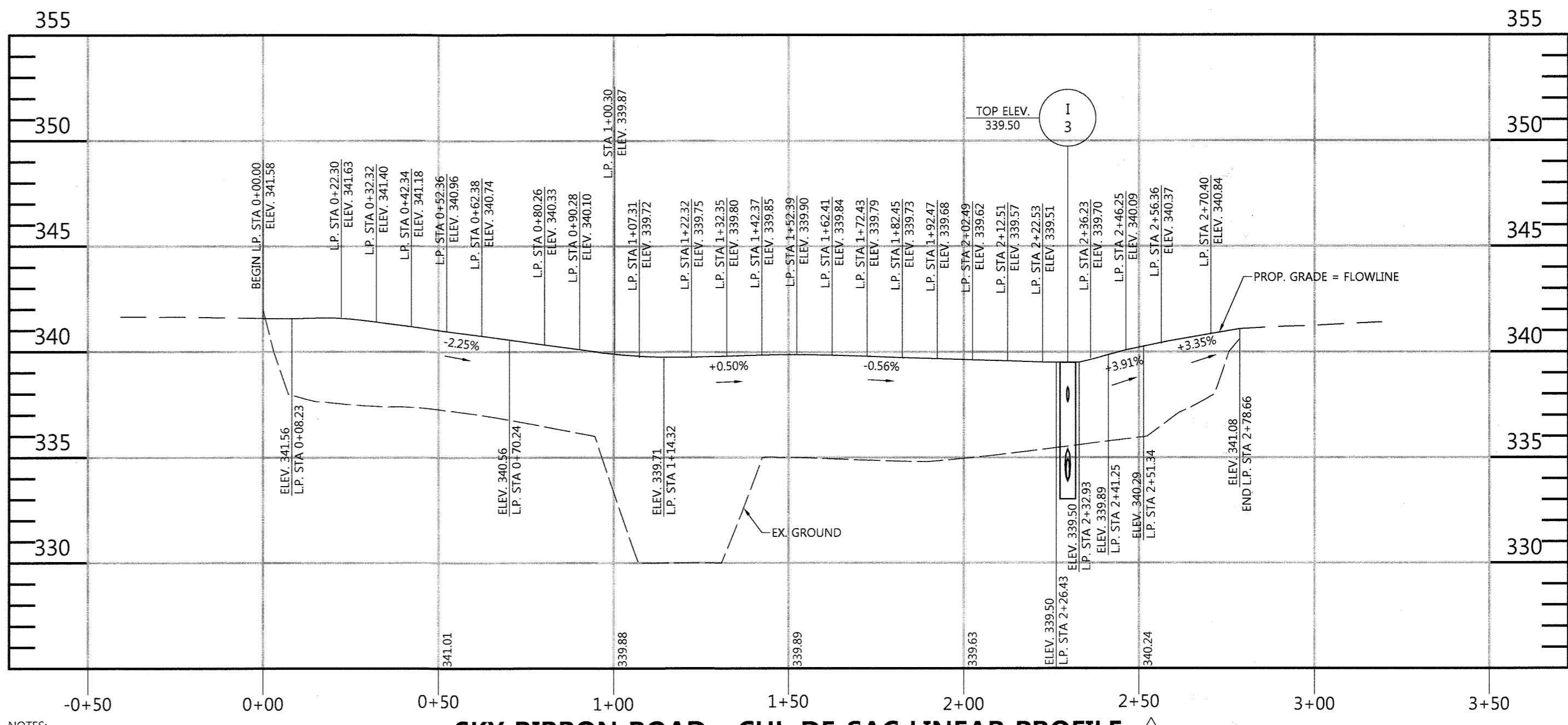
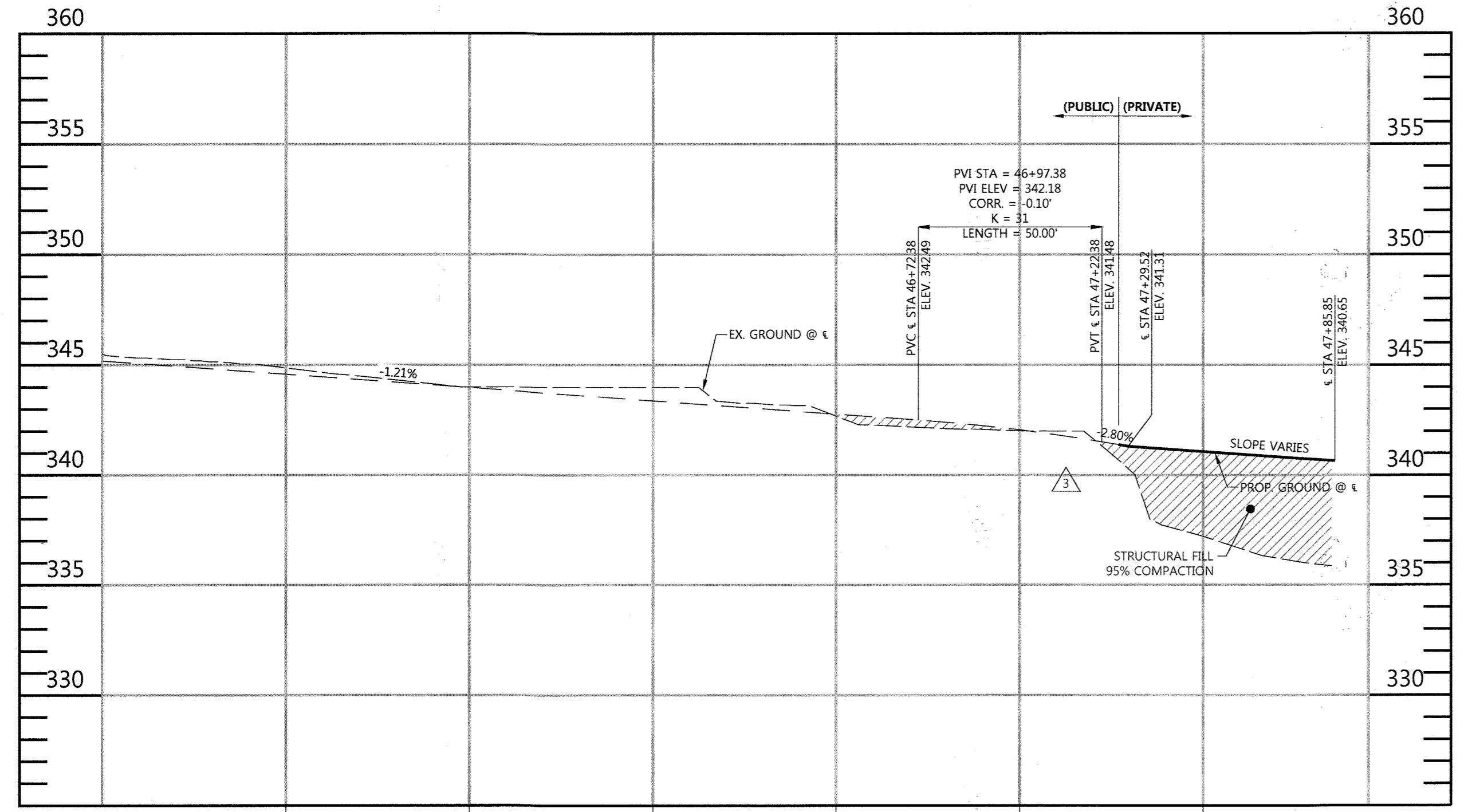
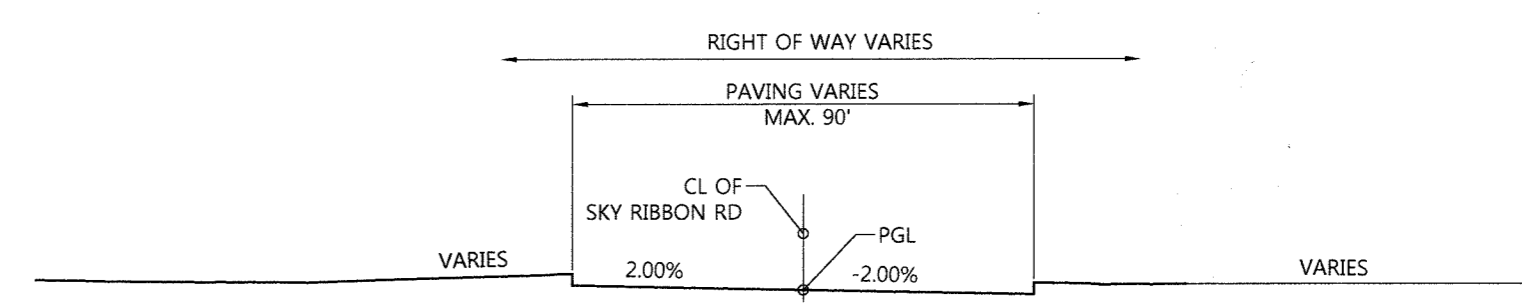
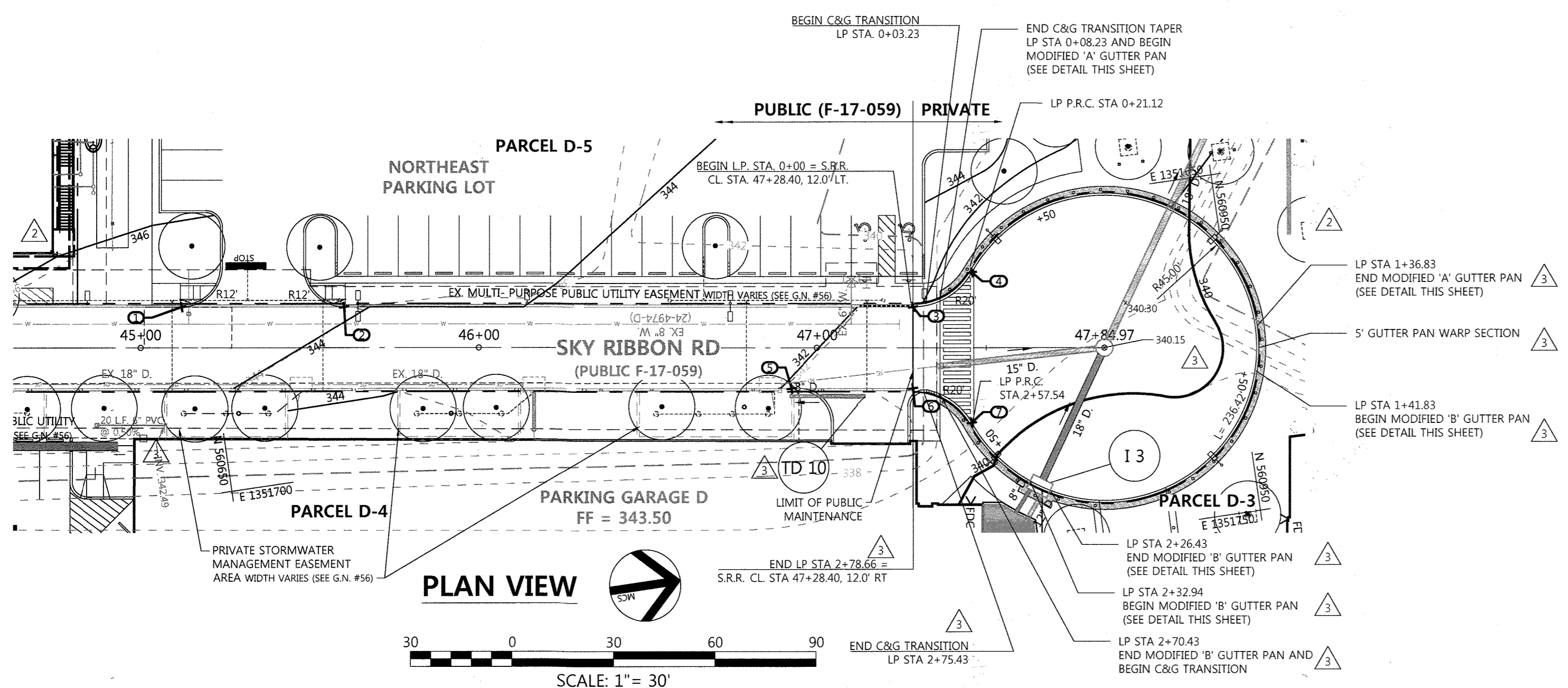
SECTION/AREA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	TAX ZONING/CD	ELECT DISTRICT	CENSUS TRACT
N/A	7	S	605602
WATER CODE	550	SEWER CODE	LITTLE PATUXENT
		STAGE	1

GRADING PLAN, SECTION 3		
Des. By	GDT/DM	SCALE AS SHOWN
Dwn. By	MCJ	Date 1-18-18
Chk. By	MCB	Approved MCB
		Proj. No. 04038.80
		17 of 94

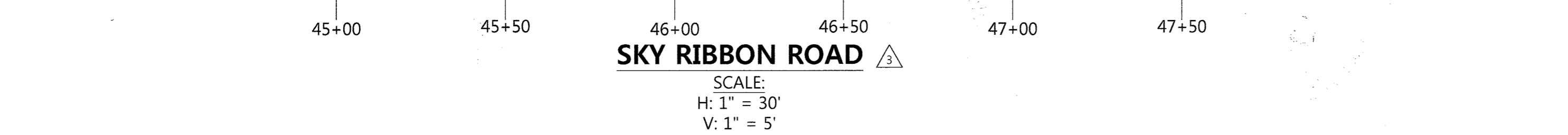
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
<i>Del. Ghosh</i>	3-28-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Veit Schuchert</i>	6-7-18
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>N. M. J. J. J.</i>	6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT	DATE

NOTE:
 SPOT GRADES AND DETAILED GRADING BETWEEN THE CURB AND BUILDING, INCLUDING BUT NOT LIMITED TO HARDSCAPE FEATURES SUCH AS PROPOSED SIDEWALKS, OPEN SPACE FEATURES, PROMENADES, PROPOSED FOUNTAINS, ETC., HAVE BEEN DESIGNED BY THE LANDSCAPE ARCHITECT. SEE THE LANDSCAPE AND HARDSCAPE PLAN FOR ADDITIONAL DETAIL. THE CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE ARCHITECT CONCERNING ANY CHANGE, DEVIATION OR MODIFICATION OF SUCH FEATURES SHOWN AND/OR ILLUSTRATED.

- NOTES:**
- SEE SHEETS 21-25 FOR STORM DRAIN INFORMATION
 - ALL SIDEWALK RAMP ARE TYPE B HOWARD COUNTY DETAIL R-4.03 UNLESS OTHERWISE NOTED.
 - SEE SHEET 89-94 FOR STREET TREES AND STREET LIGHTS.
 - SEE SHEETS 84-87 FOR ROAD SIGNAGE
 - SEE SHEET 59-63 FOR HARDSCAPE DETAILS
 - SEE HARDSCAPE PLANS FOR DETAILS OF CURBLESS SECTION.



- NOTES:**
- CONTRACTOR TO PROVIDE A SMOOTH TRANSITION BETWEEN STATIONS SHOWN.
 - REFER TO HARDSCAPE PLANS FOR CUL-DE-SAC SPOT GRADING.

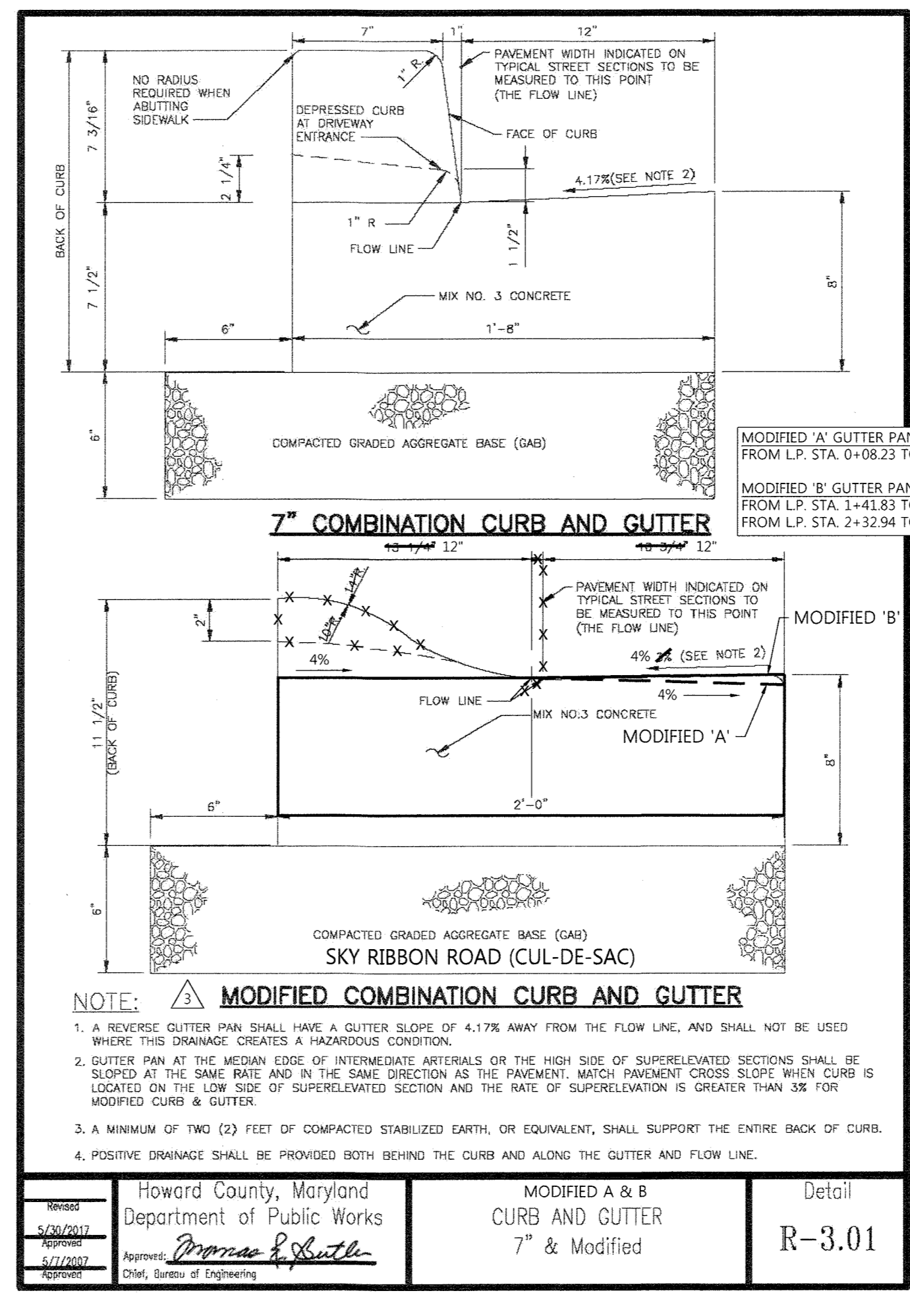


LEGEND

	LIMIT OF DISTURBANCE		PROP STREET LIGHT
	PROPERTY LINE		FIRE HYDRANT
	PARCEL LINE		LIMIT OF PUBLIC ROAD WORK (SEE F-17-059)
	EX. CONTOURS		SURFACE PLANTER BED
	EX. SEWER		(M-6) TREE PIT MICRO-BIORETENTION FACILITY
	EX. STORM DRAIN		EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
	EX. WATER		
	EX. TREELINE		
	PROP. BUILDING		
	PROP. CURB		
	PROP. CONTOURS		
	PROP. SEWER		
	PROP. STORM DRAIN		
	PROP. WATER		
	SOILS		
	PROP. 100 YEAR FLOODPLAIN		
	2014/2015 RESTORATION BOUNDARY		
	2014/2015/2016 RESTORATION BOUNDARY		
	PROP. REVERSE SLOPE CURB		

EASEMENT NOTE:
MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
• WATER
• SEWER
• STREET LIGHTING
• STORM WATER MANAGEMENT
• STORM DRAIN
• UTILITY

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chief, Development Engineering Division 2-28-20
Chief, Division of Land Development 3/6/2020
Director 3-10-2020



FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-18-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.

DATE: 2/16/20
PROFESSIONAL ENGR. NO. 16928

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

11/18/19	3	REV. SKY RIBBON CUL-DE-SAC LINEAR PROF. & GRADING, ADD SIDEWALK TO BLDG D
03/06/19	2	BLDG E2, E3, PLAZA HARDSCAPE AND GRADING
Date	No.	Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-8800

DMW
DAFF MCCUNE WALKER INC

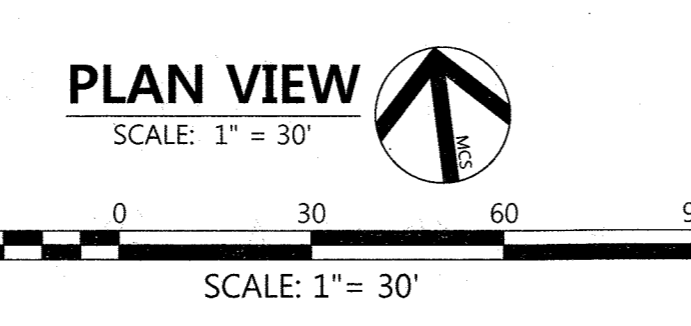
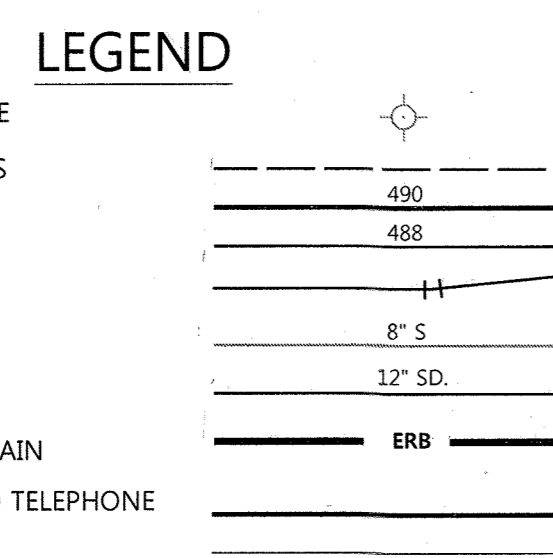
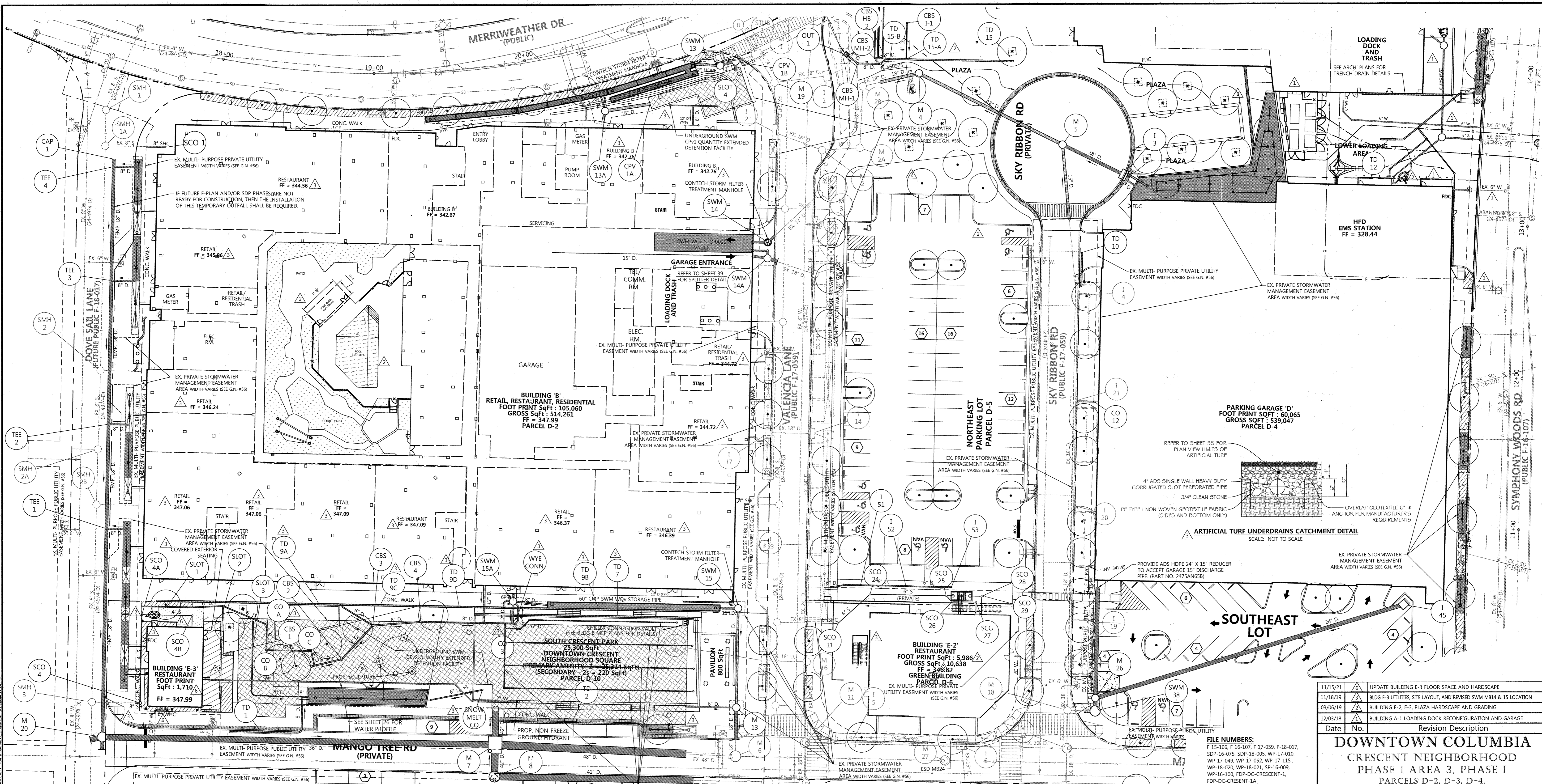
501 FAIRMOUNT AVENUE SUITE 300 TOWSON MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	DOWNTOWN COLUMBIA	SECTION/AREA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
PORTFOLIO ID	24628-24630	TAX ZONE/MAP	7	ELECT. DISTRICT	36
WATER CODE	550	SEWER CODE	LITTLE PATUXENT	STAGE	605602

TITLE
ROAD PLAN (SKY RIBBON RD)
REVISED SITE DEVELOPMENT PLAN

Des. By	GDT/DM	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	MCJ	Date	5-10-18		
Chk. By	MCB	Approved	MCB		20 of 94

SDP-17-027



NOTE:
FOR BUILDING E-2 SITE UTILITY PROFILES, SEE SHEETS 25 & 26.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 3/14/22

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 3/13/22

DIRECTOR
 DATE: 3-21-22

EX. UTILITY POLE
 PROP. EASEMENT
 PROP. CONTOURS
 PROP. WATER
 PROP. SEWER
 PROP. STORM DRAIN
 2014/2015 RESTORATION BOUNDARY
 PROP. BUILDING
 PROP. CURB

SURFACE PLANTER BED
 PROP. PLANTING
 PROP. SEATING AREA
 PROP. HARDSCAPE
 (M-6) TREE PIT MICRO-BIORETENTION FACILITY
 RAISED METAL PLANTERS (TYP. 12) REFER TO SHEET 55

Sky Ribbon Road

Structure #	Station	Offset
I 3	47+66.80	40.77' RT
M 5	47+85.85	0.00'
M 26	44+21.39	28.89' RT

Valencia Lane

Structure #	Station	Offset
CPV 1B	0+42.27	33.55' RT
M 4	0+69.33	83.14' LT
M 13	4+80.34	32.09' RT

Mango Tree Road

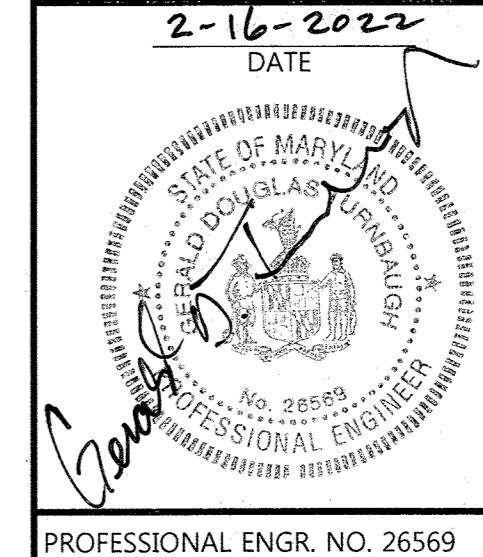
Structure #	Station	Offset
I 45	38+86.89	107.49' LT
M 7	32+70.37	6.00' RT
M 8	32+70.37	15.00' LT
M 20	30+10.88	6.00' LT

EASEMENT NOTE:
 MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
 • WATER
 • SEWER
 • STREET LIGHTING
 • STORM WATER MANAGEMENT
 • STORM DRAIN
 • UTILITY

FILE NUMBERS:
 F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION:
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE: 07/18/2023.

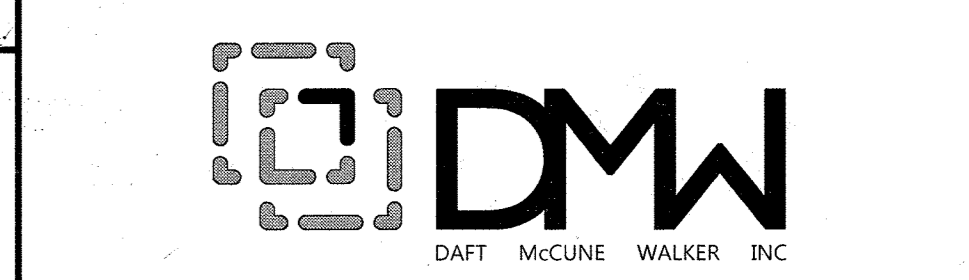


APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: Nov 16, 2017

Date	No.	Revision Description
11/15/21	6	UPDATE BUILDING E-3 FLOOR SPACE AND HARDSCAPE
11/18/19	5	BLDG E-3 UTILITIES, SITE LAYOUT, AND REVISED SWM MB14 & 15 LOCATION
03/06/19	4	BUILDING E-2, E-3, PLAZA HARDSCAPE AND GRADING
12/03/18	3	BUILDING A-1 LOADING DOCK RECONFIGURATION AND GARAGE

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

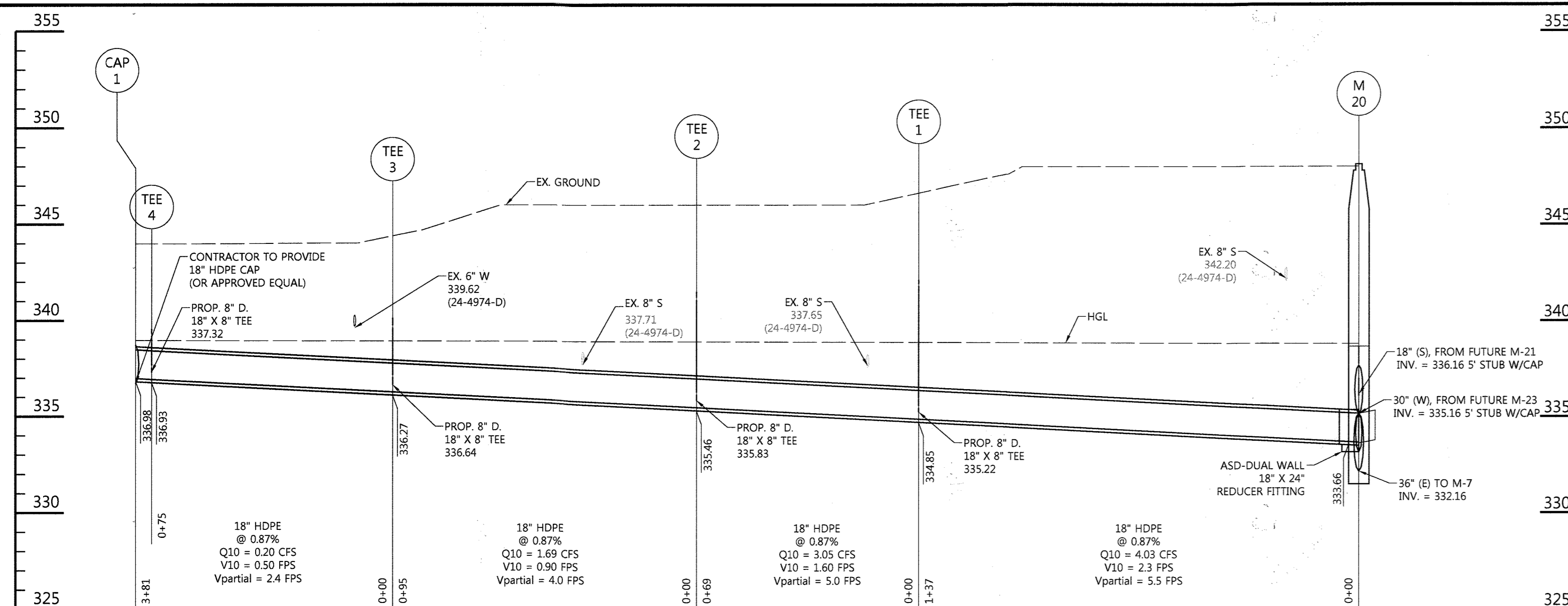
OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P 410 296 3333 F 410 296 4705 WWW.DMW.COM

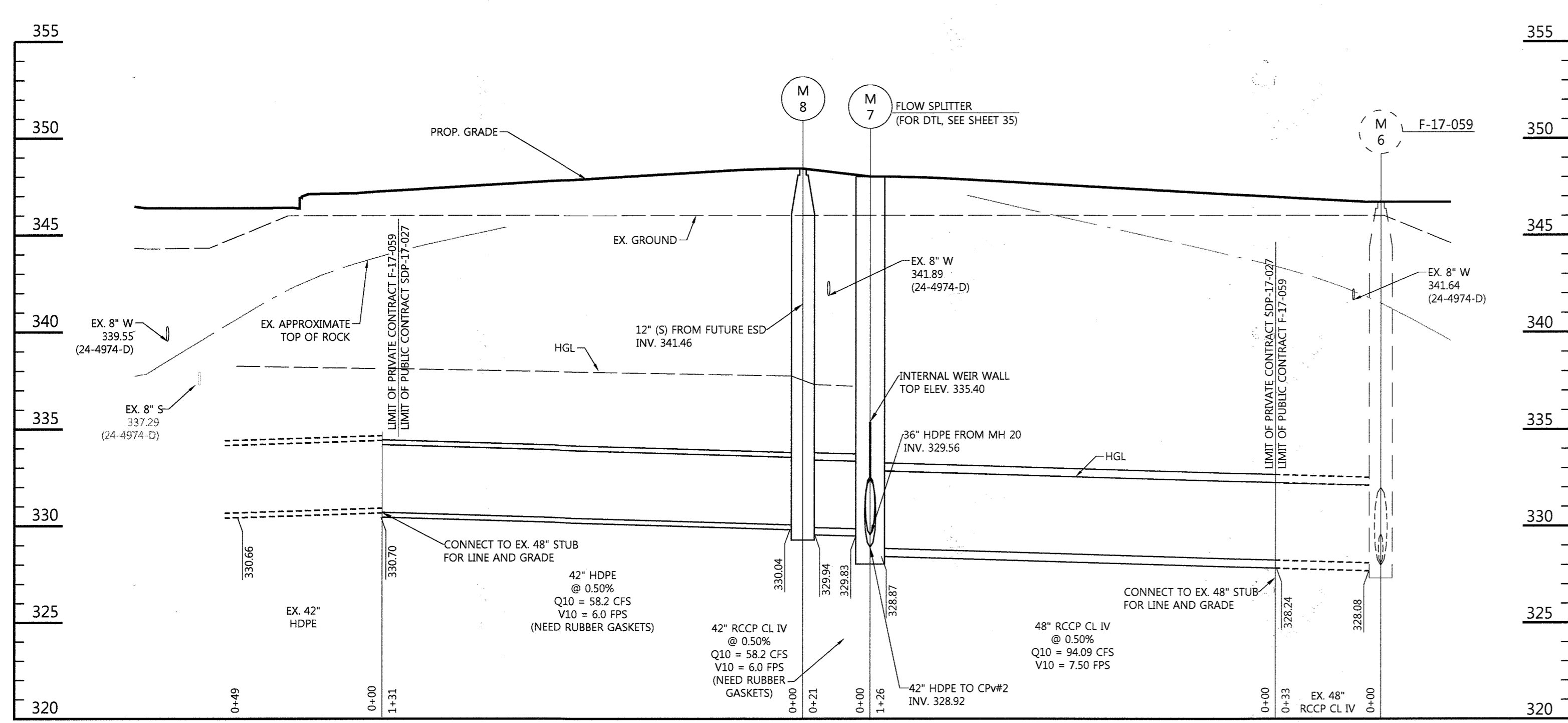
PARCEL OR TRACT	SECTION/VARIATION	CRESCENT NEIGHBORHOOD	LOT/PARCEL
DOWNTOWN COLUMBIA			PARCEL D
26912-24650	7	1	605602
WATER CODE	550	SEWER CODE	LITTLE PATUXENT
			STAGE

STORM DRAIN PLAN
 REVISED SITE DEVELOPMENT PLAN
 Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.80
 Drn. By MCJ Date 11-15-21
 Chk. By Approved MCB 22 of 94



IF FUTURE F-PLAN AND/OR SDP PHASES ARE NOT READY FOR CONSTRUCTION, THEN THE INSTALLATION OF THIS TEMPORARY OUTFALL SHALL BE REQUIRED.

TEMPORARY DRAIN
SCALE: HOR. 1"=30'
VERT. 1"=5'



M8-M7
SCALE: HOR. 1"=30'
VERT. 1"=5'

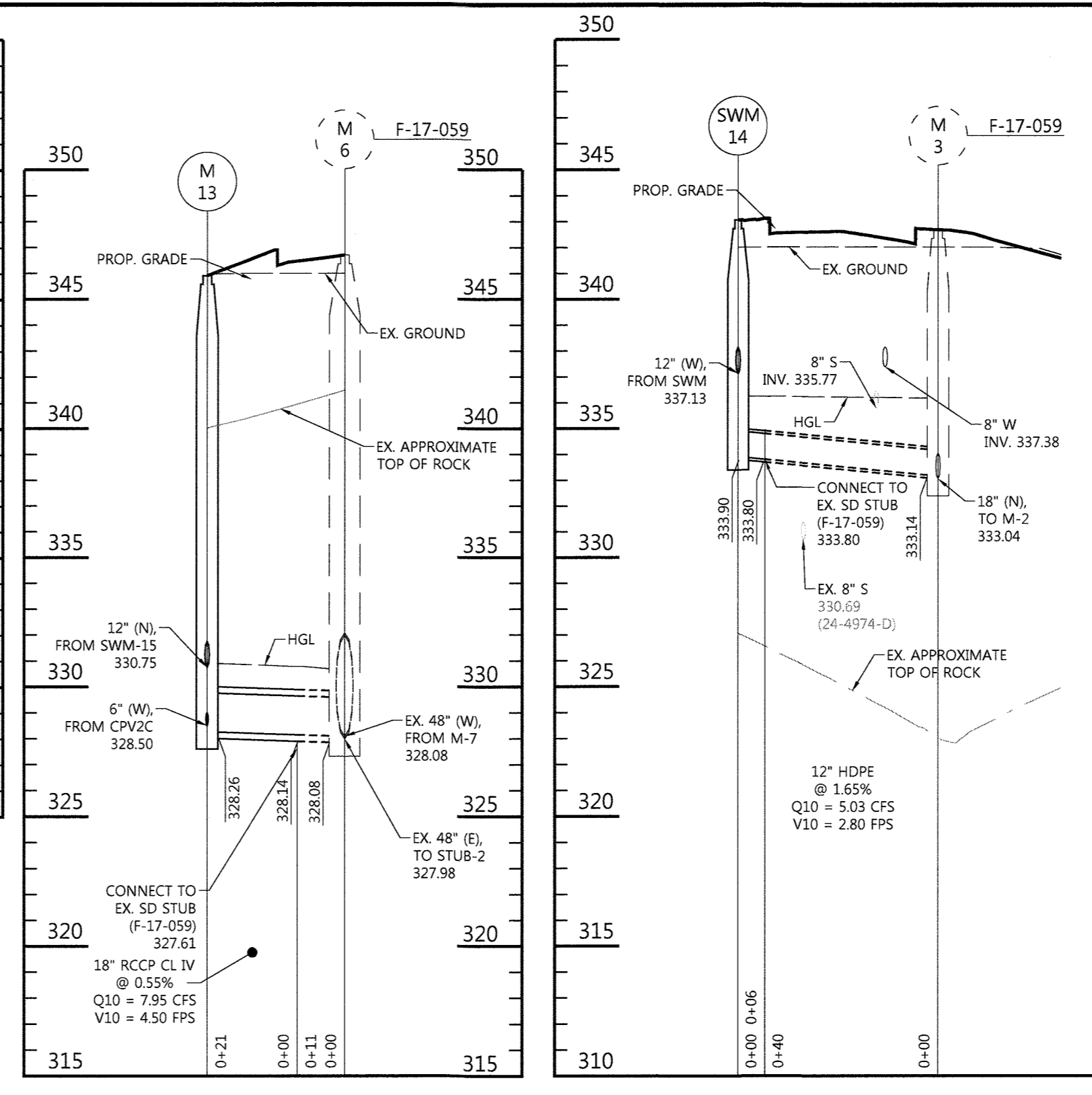
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 DATE FOR CONSTRUCTION OF PUBLIC STORM DRAIN SEE F-17-059
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DIRECTOR

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 DATE FOR CONSTRUCTION OF PUBLIC STORM DRAIN SEE F-17-059
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DIRECTOR

STORM INLET SCHEDULE				
NO.	TYPE / DETAIL NO.	INV. IN.	INV. OUT.	GRATE ELEV.
△ CBS 1	10" NYLOPLAST CUSTOM BASIN (2810AG) WITH 10" DIP DROP-IN GRATE (1001D) BLACK		343.88	346.04
△ CBS 2	10" NYLOPLAST CUSTOM BASIN (2810AG) WITH 10" DIP DROP-IN GRATE (1001D) BLACK	343.67	343.57	345.96
△ CBS 3	10" NYLOPLAST CUSTOM BASIN (2810AG) WITH 10" DIP DROP-IN GRATE (1001D) BLACK	343.27	343.17	346.30
△ CBS 4	10" NYLOPLAST CUSTOM BASIN (2810AG) WITH 10" DIP DROP-IN GRATE (1001D) BLACK	342.85	342.75	346.50
I 3	MODIFIED DOUBLE TYPE "S", HOWARD CO. STD. DTL. D-4-23	333.93	333.88	339.50
I 45	S INLET, HOWARD CO. STD. DTL. D-4-22		337.64	343.00
SLOT 1	ACO 4" S.S. 472 K100 BRICK SLOT HEEL RESISTANT	346.48	346.21	SEE SHEET 24*
SLOT 2	ACO 4" S.S. 472 K100 BRICK SLOT HEEL RESISTANT	346.37	346.24	SEE SHEET 24*
SLOT 3	ACO 4" S.S. 472 K100 BRICK SLOT HEEL RESISTANT	345.65	345.46	346.66
SLOT 4	ACO 4" S.S. 472 K100 BRICK SLOT HEEL RESISTANT	341.44	341.36	342.47
SLOT 6	HEEL RESISTANT BRICKSLOT 100 TYPE 470/472 W/ ACO DRAIN UNITS KI-16 THRU KI-27	325.30	325.10	326.21
△ TD 1	CAST-IN-PLACE CONC. TRENCH @ 1% WITH GRATING PACIFIC PRODUCTS 8" THP-8-EZ TRENCH GRATE SYSTEM	345.45	345.05	VARIES
△ TD 2	CAST-IN-PLACE CONC. TRENCH @ 1% WITH GRATING PACIFIC PRODUCTS 8" THP-8-EZ TRENCH GRATE SYSTEM	346.25	345.36	VARIES
△ TD 7	ACO KLASSIK DRAIN K200 GALV. STEEL EDGE RAIL CHANNEL SYSTEM WITH TYPE 676D LONGITUDINAL D.I. GRATE (ADA)	343.98	343.33	SEE SHEET 25
△ TD 9A	ACO KLASSIK DRAIN K200 GALV. STEEL EDGE RAIL CHANNEL SYSTEM WITH TYPE 676D LONGITUDINAL D.I. GRATE (ADA)	346.13	345.53	SEE SHEET 24
△ TD 9B	ACO KLASSIK DRAIN K200 GALV. STEEL EDGE RAIL CHANNEL SYSTEM WITH TYPE 676D LONGITUDINAL D.I. GRATE (ADA)	345.40	344.83	SEE SHEET 24
△ TD 9C	ACO KLASSIK DRAIN K200 GALV. STEEL EDGE RAIL CHANNEL SYSTEM WITH TYPE 676D LONGITUDINAL D.I. GRATE (ADA)	345.85	345.61	SEE SHEET 24
△ TD 9D	ACO KLASSIK DRAIN K200 GALV. STEEL EDGE RAIL CHANNEL SYSTEM WITH TYPE 676D LONGITUDINAL D.I. GRATE (ADA)	345.85	345.15	SEE SHEET 24
△ TD 12	10" TRENCH DRAIN, ACO DRAIN-POWER S300K (SLOTTED DUCTILE IRON-CLASS F), UPSTREAM INV. 323.50		323.40	325.60
△ TD OUTFALL 1	ACO DRAIN K2-902G INLINE CATCH BASIN (OUTLET D) WITH TYPE 676D LONGITUDINAL DUCTILE IRON GRATE (ADA)	344.83	343.49	346.14
△ TD OUTFALL 2	ACO DRAIN K2-902G INLINE CATCH BASIN (OUTLET D) WITH TYPE 676D LONGITUDINAL DUCTILE IRON GRATE (ADA)	345.53	344.19	346.84

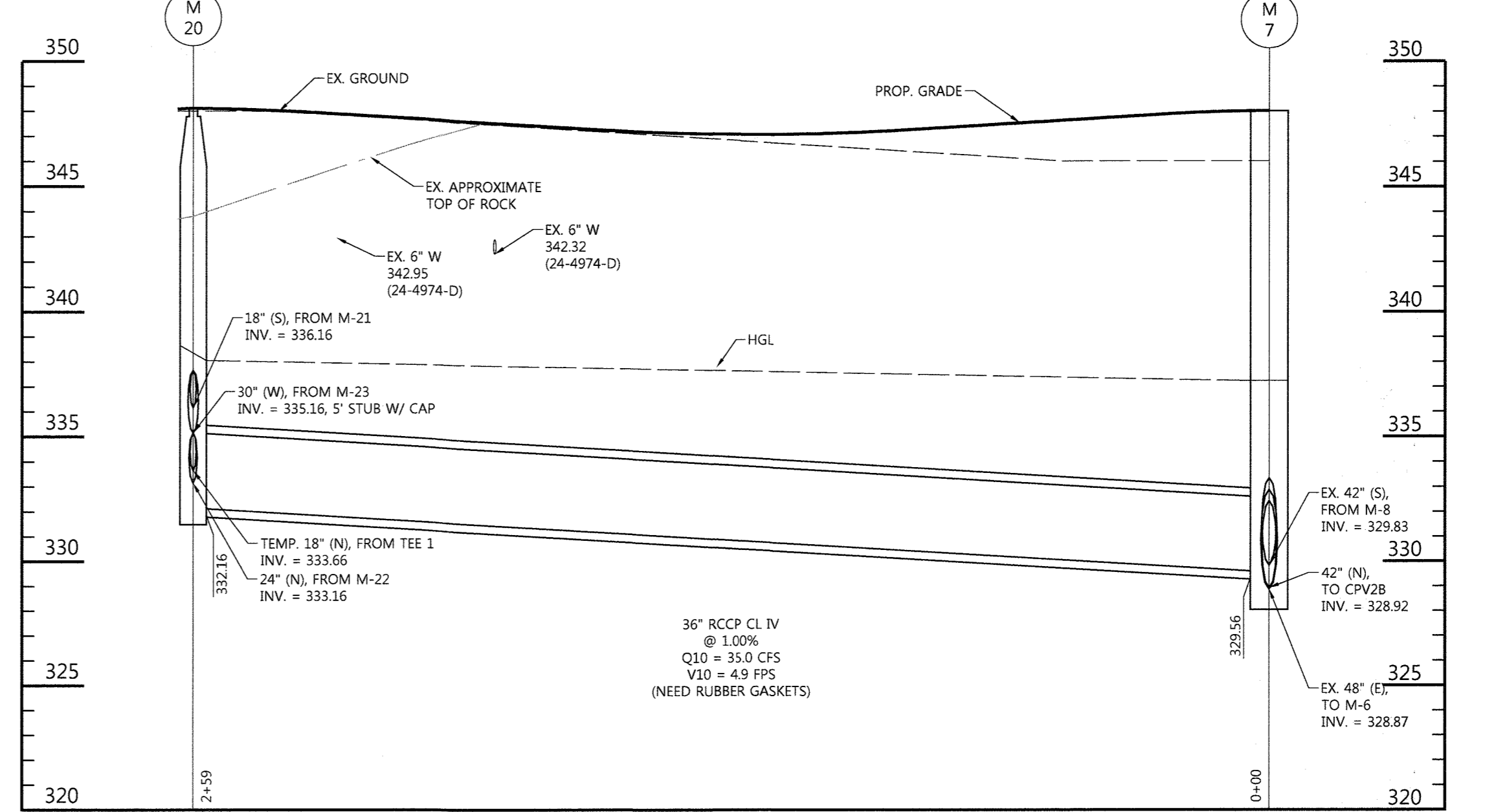
*REFER TO SLOT 1 & SLOT 2 PROFILES ON SHEET 24 FOR BOTTOM KNOCKOUT PVC FITTING OUTLET INVERTS.

*REFER TO TD7 PROFILE ON SHEET 25 FOR BOTTOM KNOCKOUT INVERT AT VERTICAL BEND.



M13-M6
SCALE: HOR. 1"=30'
VERT. 1"=5'

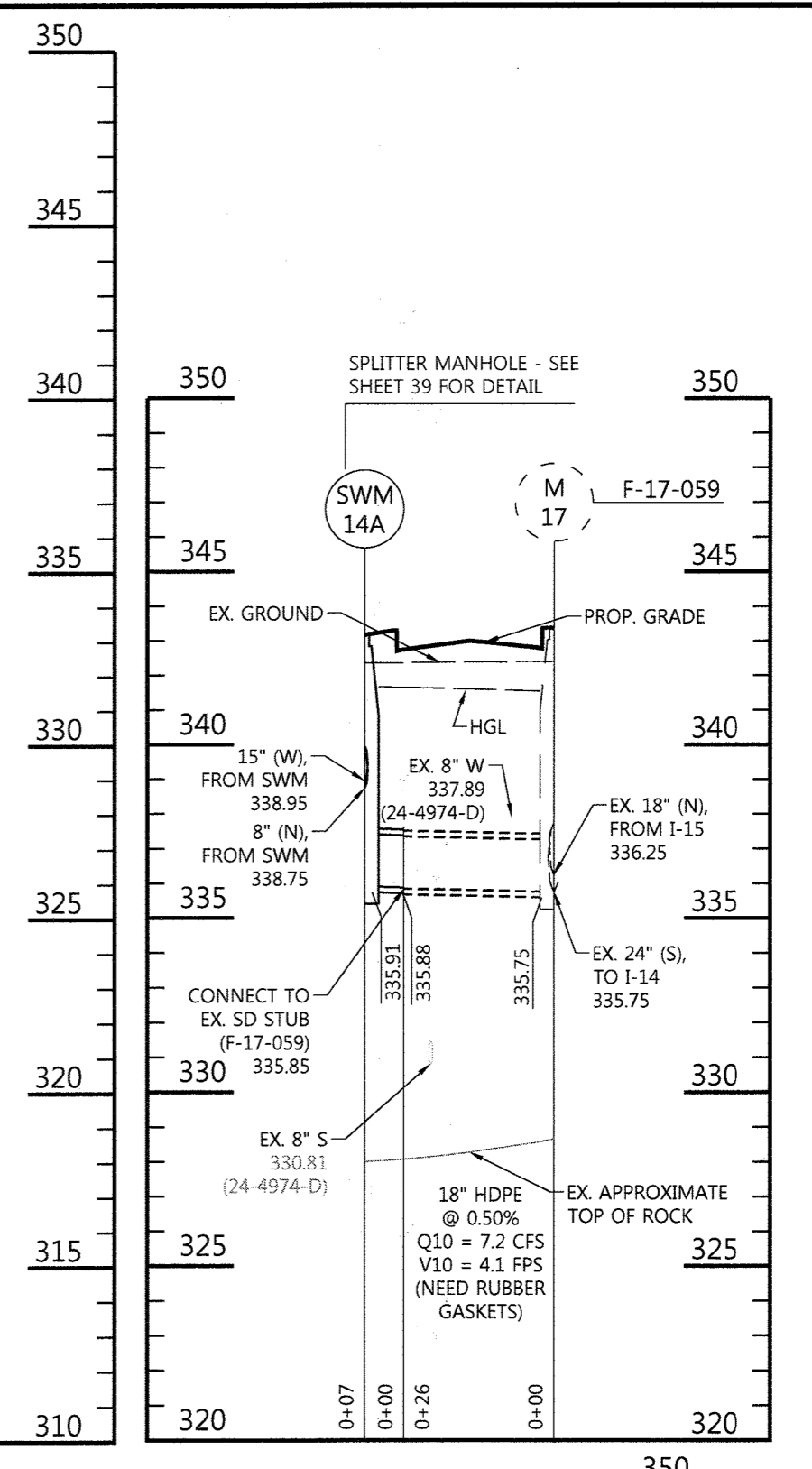
SWM14-M3
SCALE: HOR. 1"=30'
VERT. 1"=5'



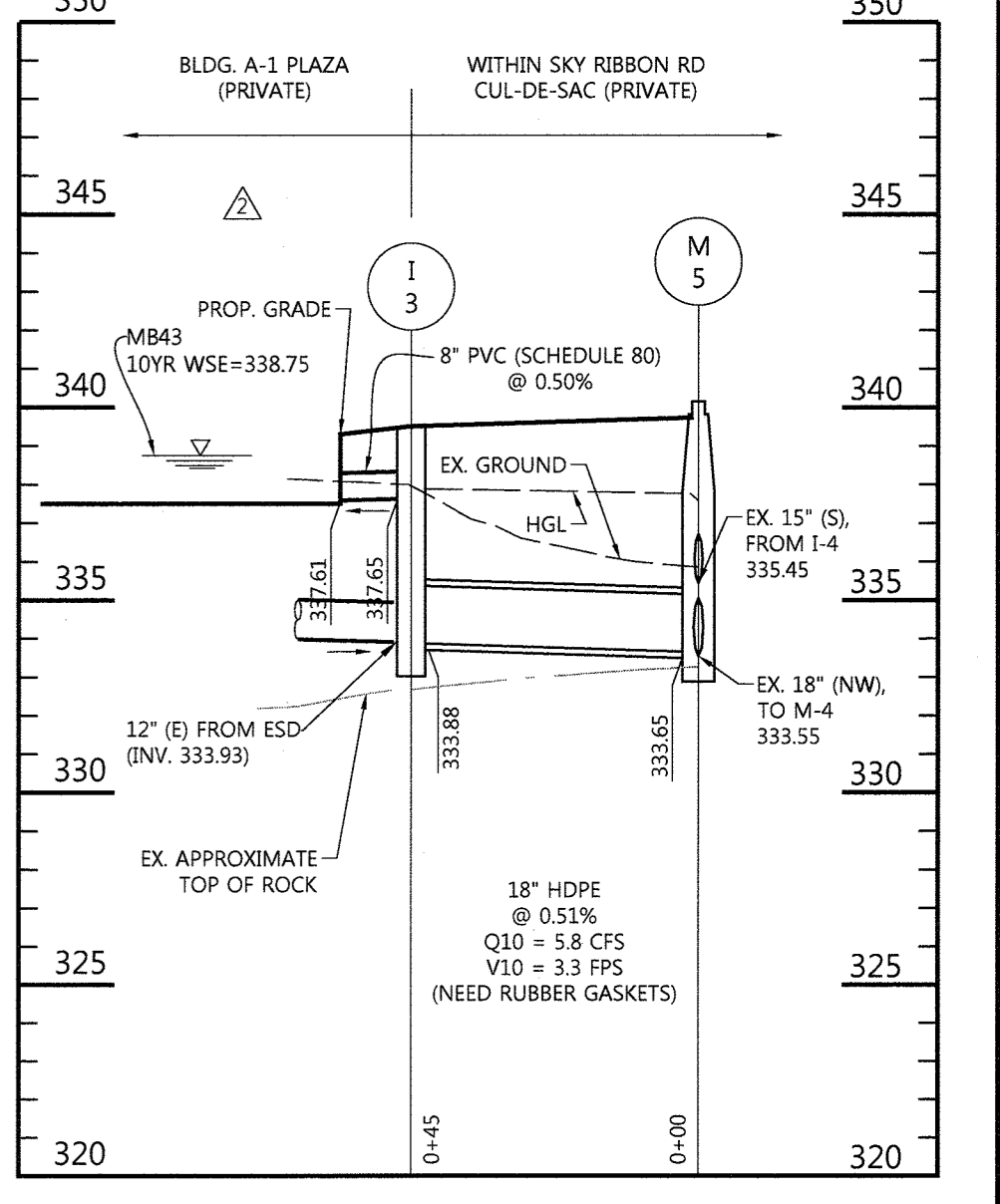
M20-M7
SCALE: HOR. 1"=30'
VERT. 1"=5'

STORM MANHOLE SCHEDULE (PRIVATE)					
NO.	TYPE / DETAIL NO.	SIZE	INV. IN.	INV. OUT.	RIM ELEV.
CPV 1B	STD. MANHOLE, HOWARD CO. STD. DTL. G-5-12	48"	330.03 336.20 331.00	329.81	339.75
M 4	STD. MANHOLE, HOWARD CO. STD. DTL. G-5-12	48"	333.00	332.90	339.94
M 5	STD. MANHOLE, HOWARD CO. STD. DTL. G-5-12	48"	335.45 333.65	333.55	340.15
M 7	FLOW SPLITTER STRUCTURE, SEE DETAIL	121" x 132"	329.56 329.83	328.87 328.92	348.02
M 8	STD. MANHOLE, MSHA STD. DTL. B34.05	72"	330.04	329.94	348.44
M 13	STD. MANHOLE, HOWARD CO. STD. DTL. G-5-12	48"	330.75 328.50	328.26	345.91
M 20	STD. MANHOLE, HOWARD CO. STD. DTL. G-5-13	60"	336.16 335.16 333.66	332.16	348.13
M 26	48" Storm Manhole	48"	336.58 336.58	336.48	346.10

NOTE: FOR CONSTRUCTION OF PUBLIC STORM DRAIN SEE F-17-059.

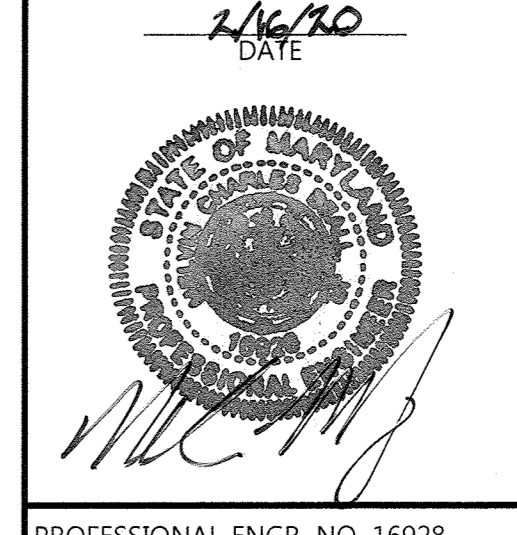


SWM14A-M17
SCALE: HOR. 1"=30'
VERT. 1"=5'



I3-M5
SCALE: HOR. 1"=30'
VERT. 1"=5'

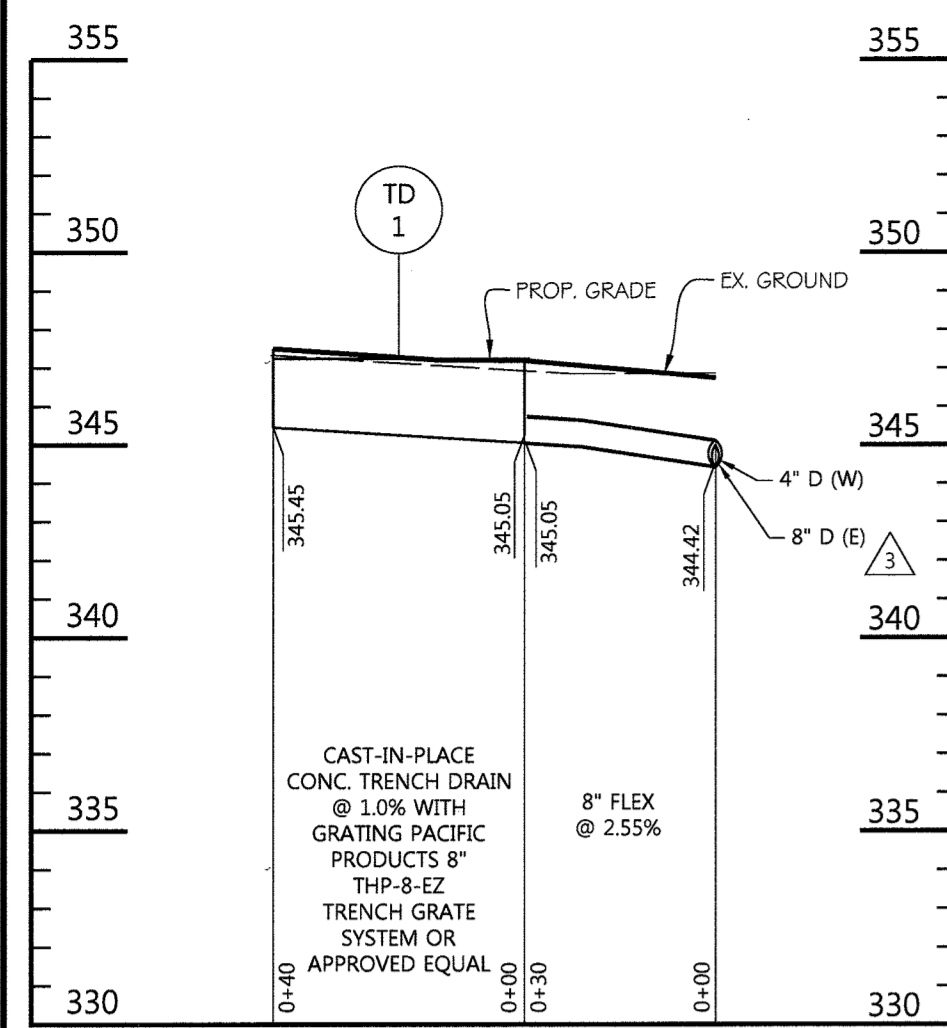
FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-115,
 WP-18-020, WP-18-021, SP-16-009,
 WP-16-100, FDP-DC-CRESCENT-1,
 FDP-DC-CRESENT-1A
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.



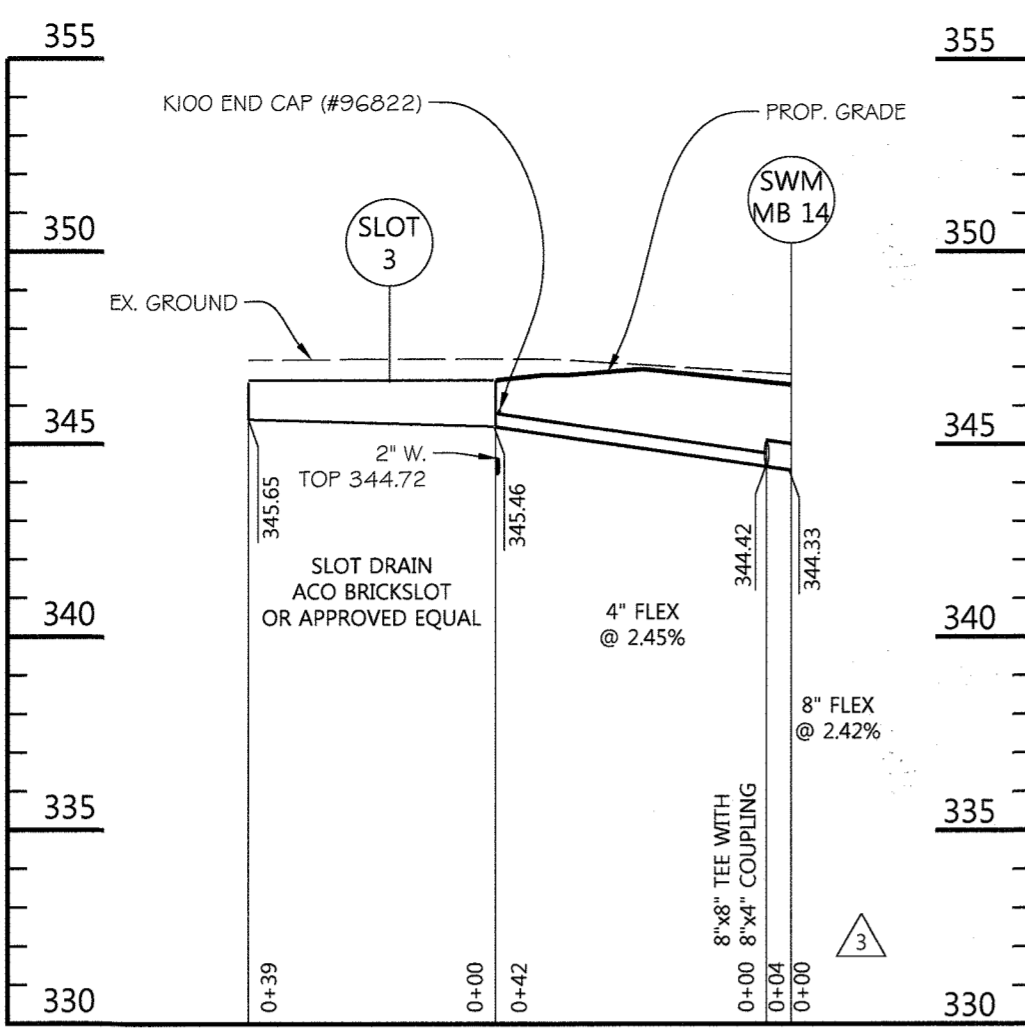
PROFESSIONAL ENGR. NO. 16928

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

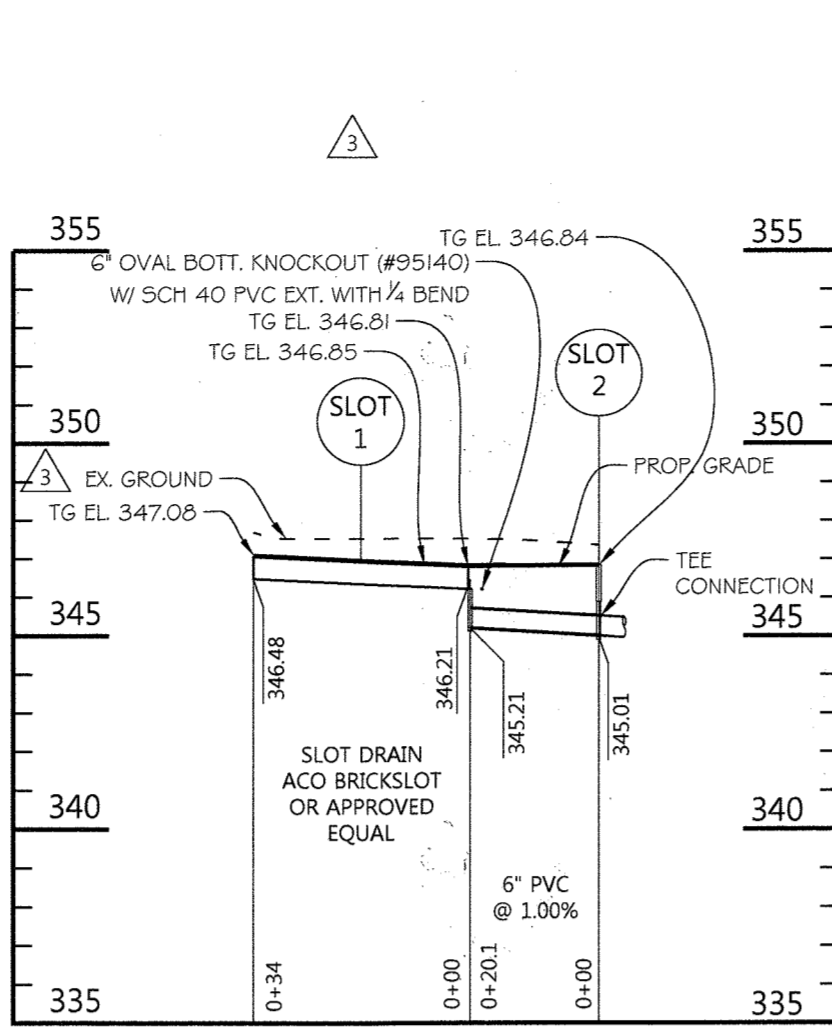
11/18/19	UPDATE UTILITY MATERIALS AND INVERTS
03/06/19	BUILDING E-2, E-3, PLAZA HARDSCAPE AND GRADING
Date	Revision Description
DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14 OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-8800	
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBDIVISION NAME: DOWNTOWN COLUMBIA PLAT FOR L.P.: 2422-2650 WATER CODE: 550	SECTION AREA: CRESCENT NEIGHBORHOOD TAX ZONING MAP: 7 BLOCK #: 7 LOT/PARCEL #: PARCEL D ELEC. DISTRICT: 5 CENSUS TRACT: 605602 STAGE:
TITLE STORM DRAIN PROFILES REVISED SITE DEVELOPMENT PLAN	
Des. By: GDT/DM	SCALE AS SHOWN
Drn. By: MCJ	Date: 5-10-18
Chk. By: MCB	Approved: MCB
Proj. No. 04038.B0 23 of 94	



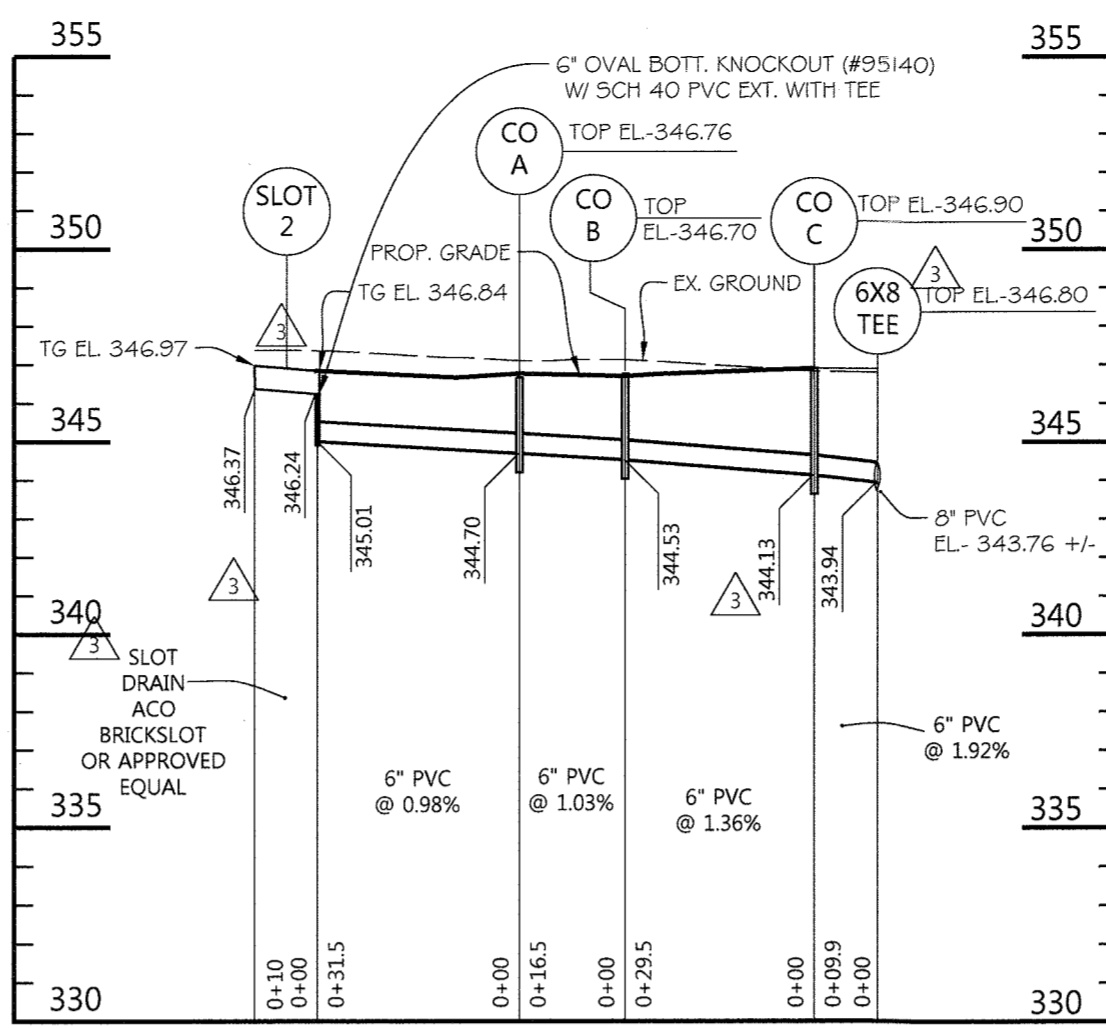
TRENCH DRAIN 1
SCALE: HOR. 1"=30'
VERT. 1"=5'



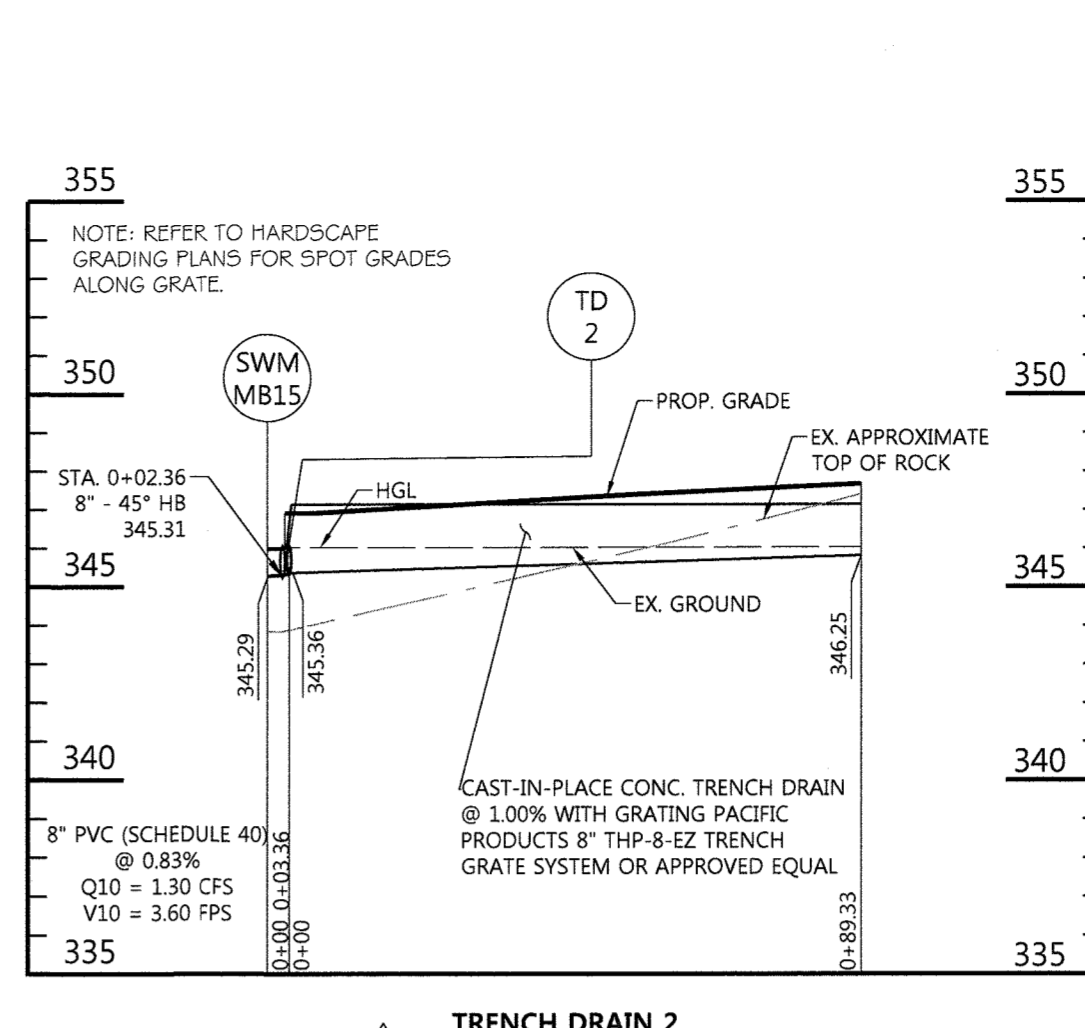
SLOT DRAIN 3
SCALE: HOR. 1"=30'
VERT. 1"=5'



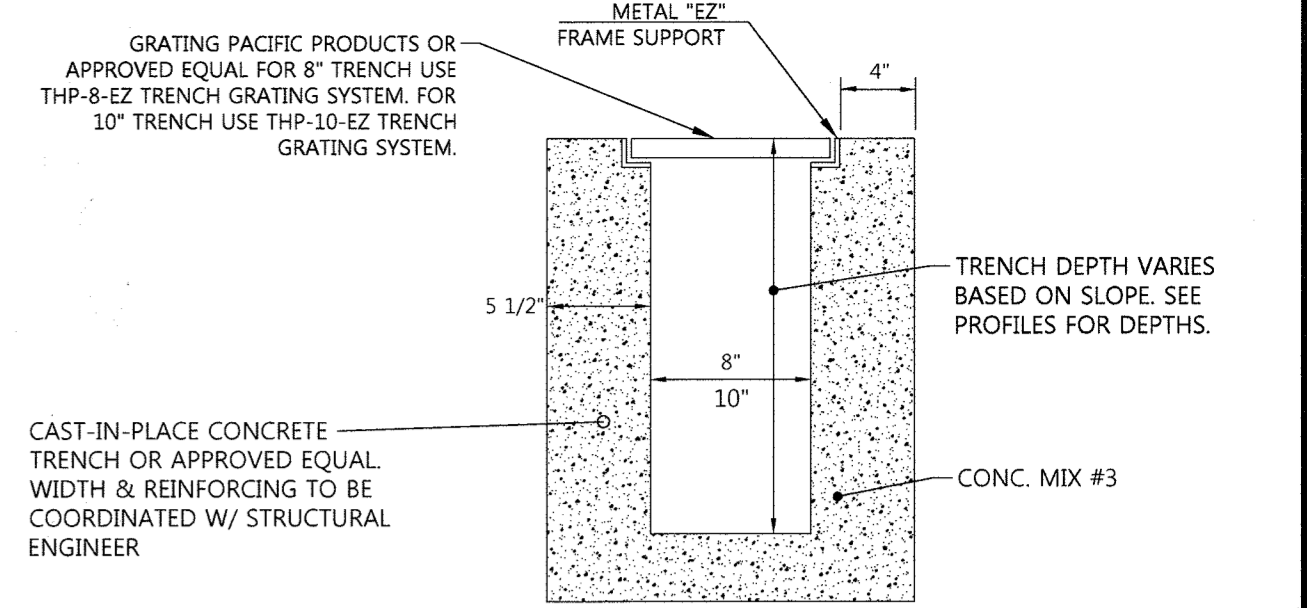
SLOT DRAIN 1
SCALE: HOR. 1"=30'
VERT. 1"=5'



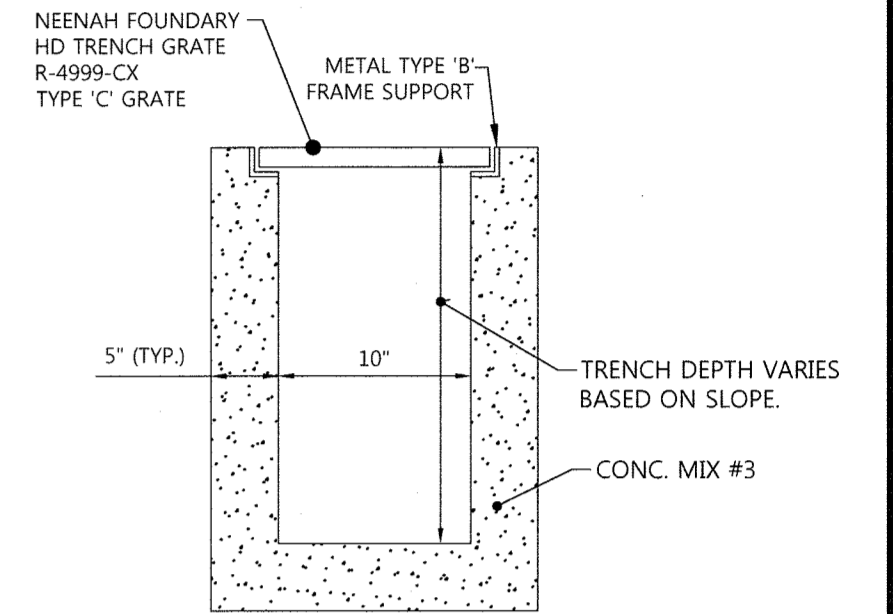
SLOT DRAIN 2
SCALE: HOR. 1"=30'
VERT. 1"=5'



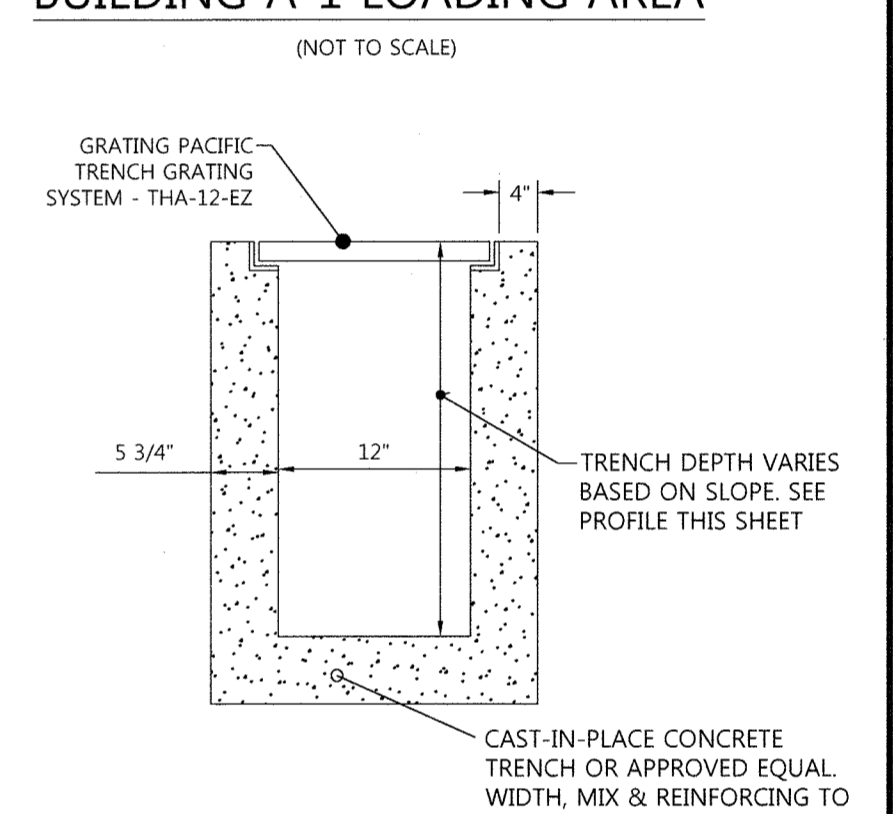
TRENCH DRAIN 2
SCALE: HOR. 1"=30'
VERT. 1"=5'



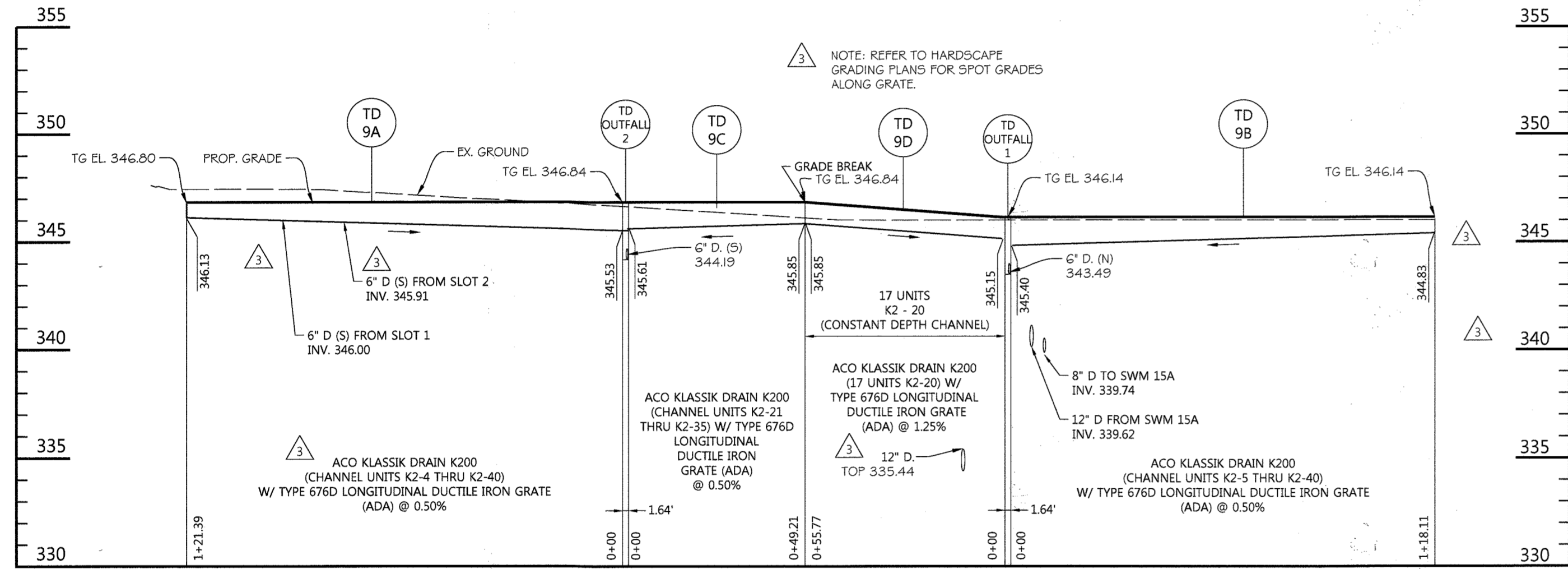
A-1 PLAZA & PARK AREA TRENCH DRAIN DETAIL
(NOT TO SCALE)



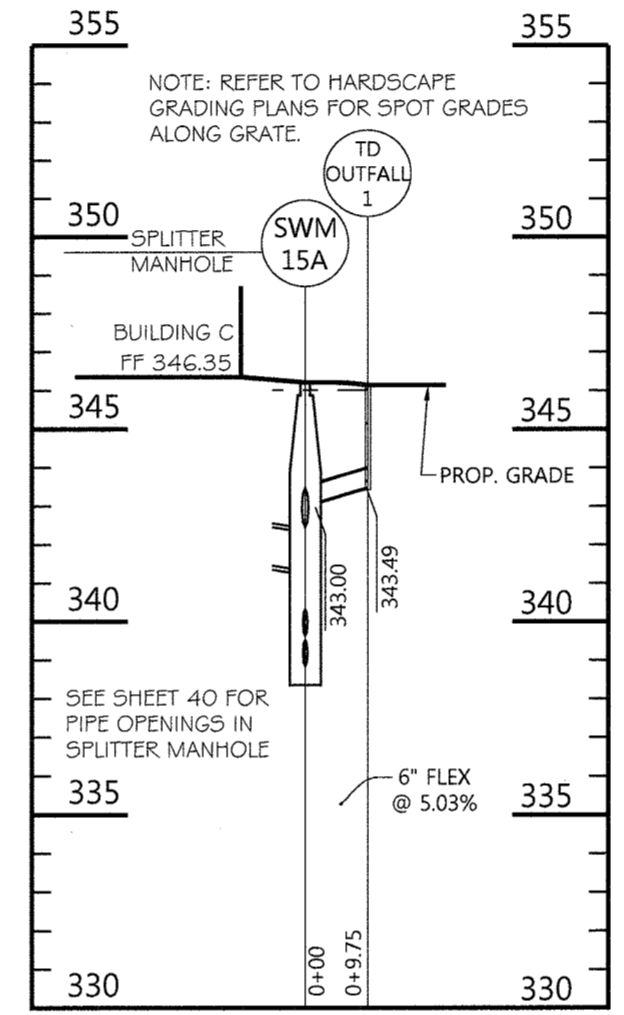
CROSS-SECTION A-1
TRENCH DRAIN - TD 12 DETAIL
BUILDING A-1 LOADING AREA
(NOT TO SCALE)



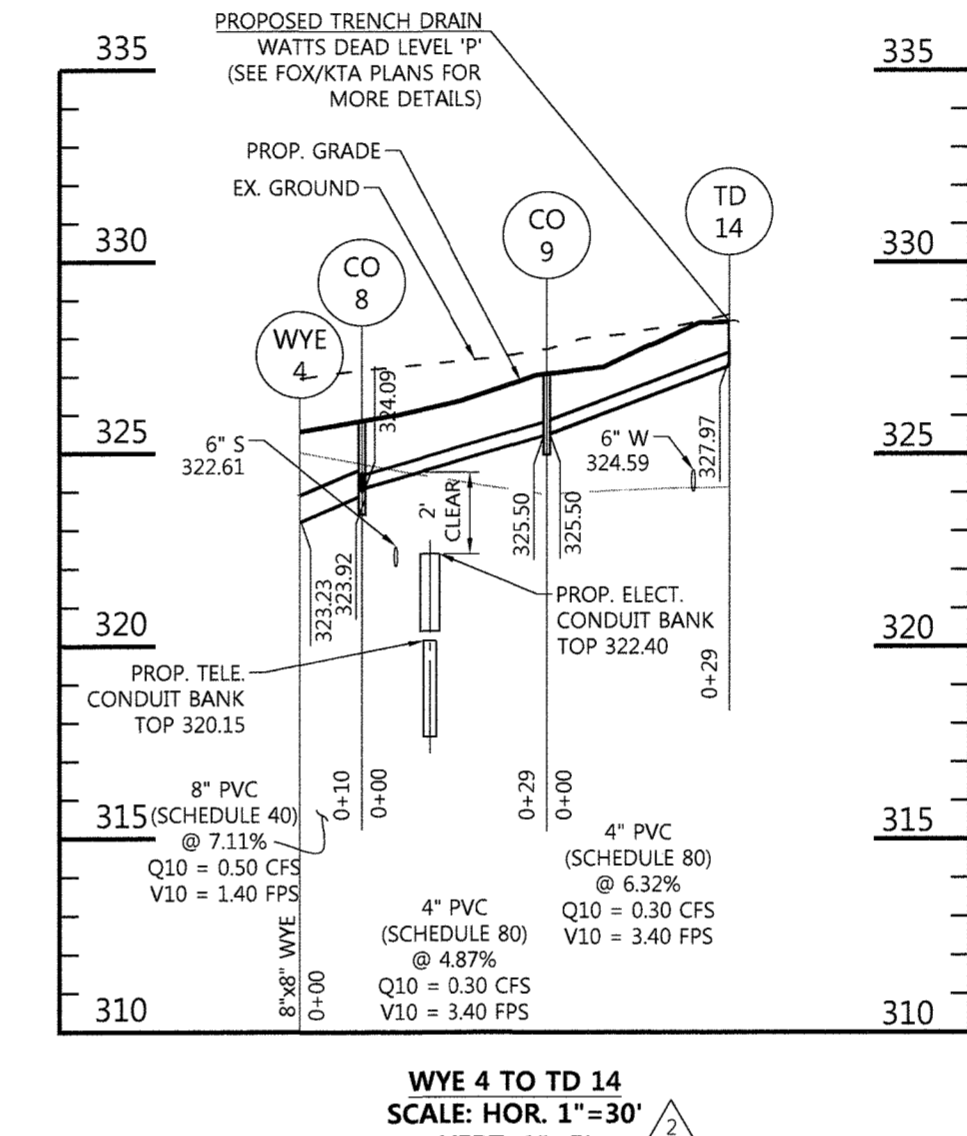
CROSS-SECTION A-A
TRENCH DRAIN - TD 10 DETAIL
(NOT TO SCALE)



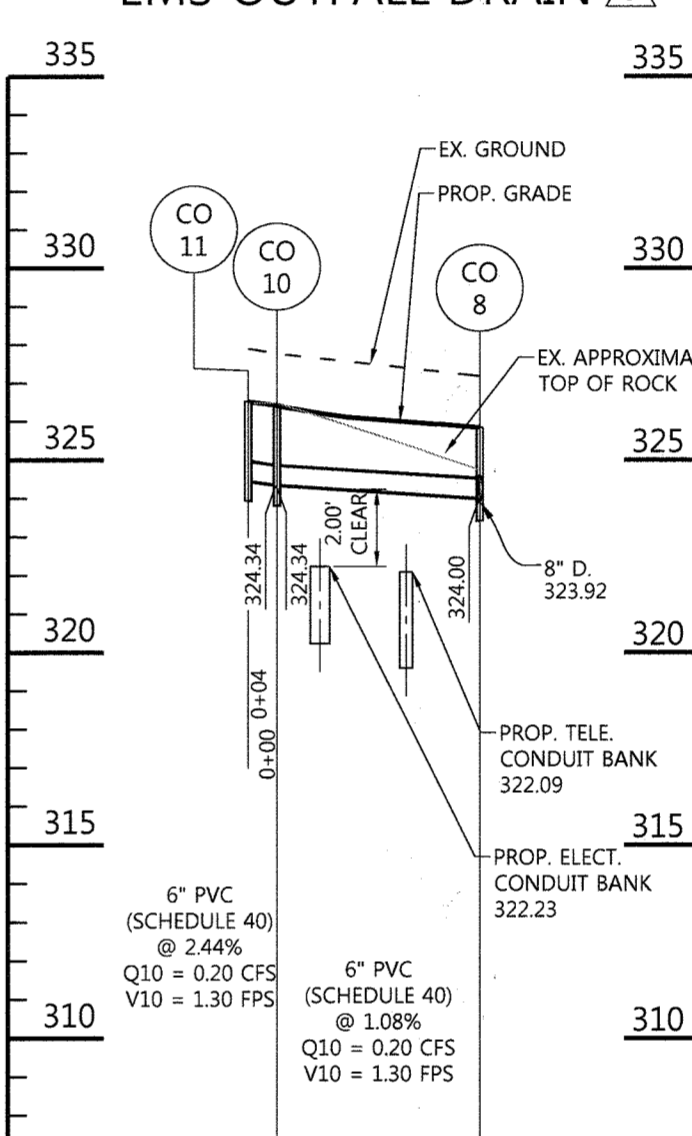
TRENCH DRAINS 9A THROUGH 9D
SCALE: HOR. 1"=30'
VERT. 1"=5'



TD OUTFALL 1 - SWM 15A
SCALE: HOR. 1"=30'
VERT. 1"=5'

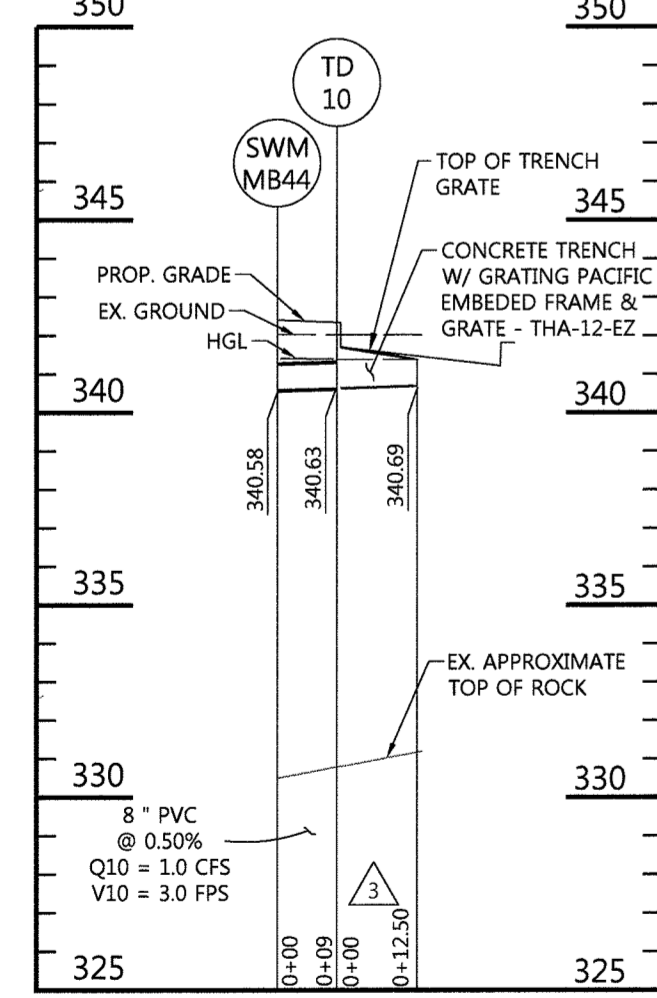


WYE 4 TO TD 14
SCALE: HOR. 1"=30'
VERT. 1"=5'



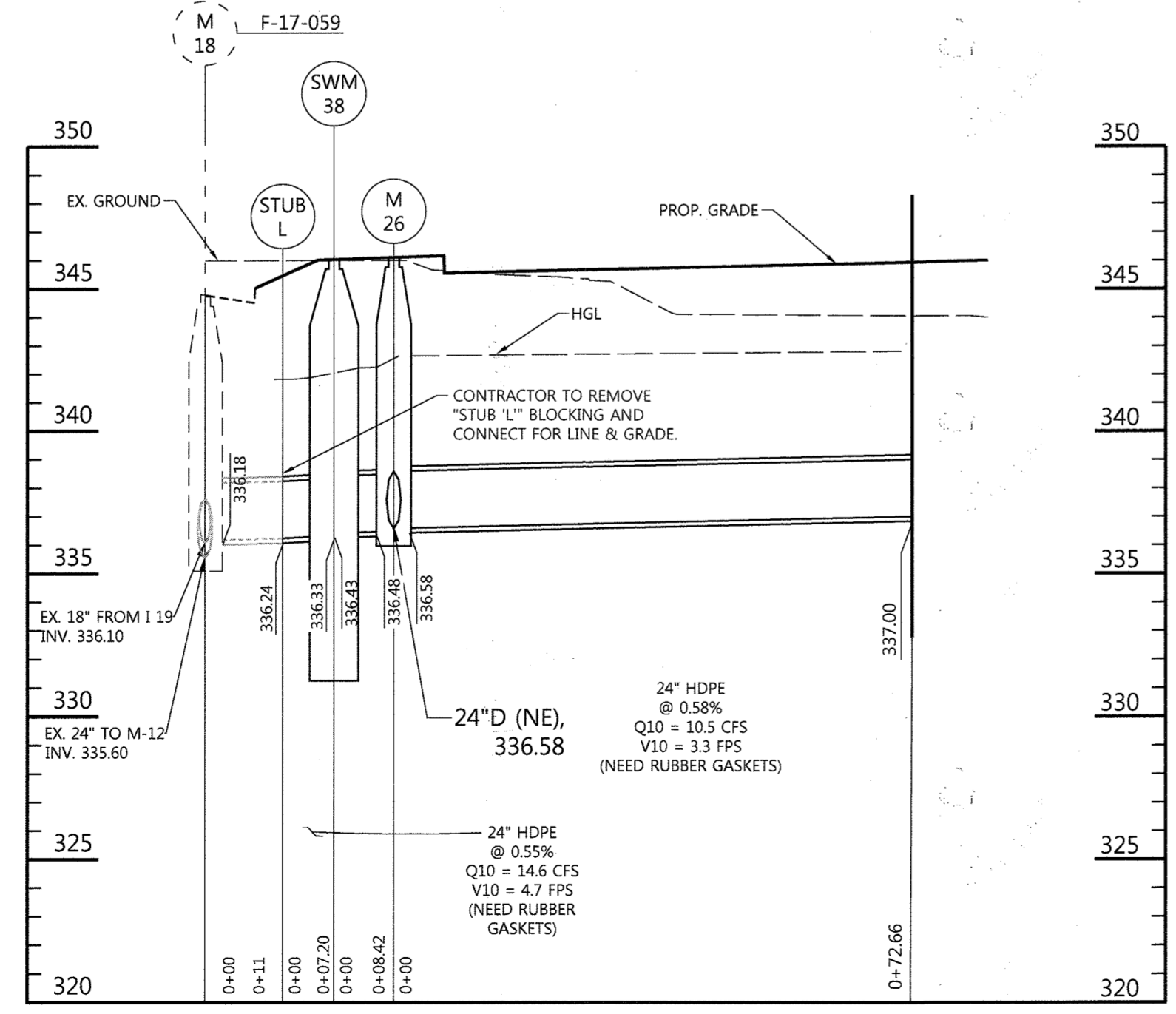
STORM
SCALE: HOR. 1"=30'
VERT. 1"=5'

AT GARAGE 'D' ENTRANCE
OFF SKY RIBBON RD

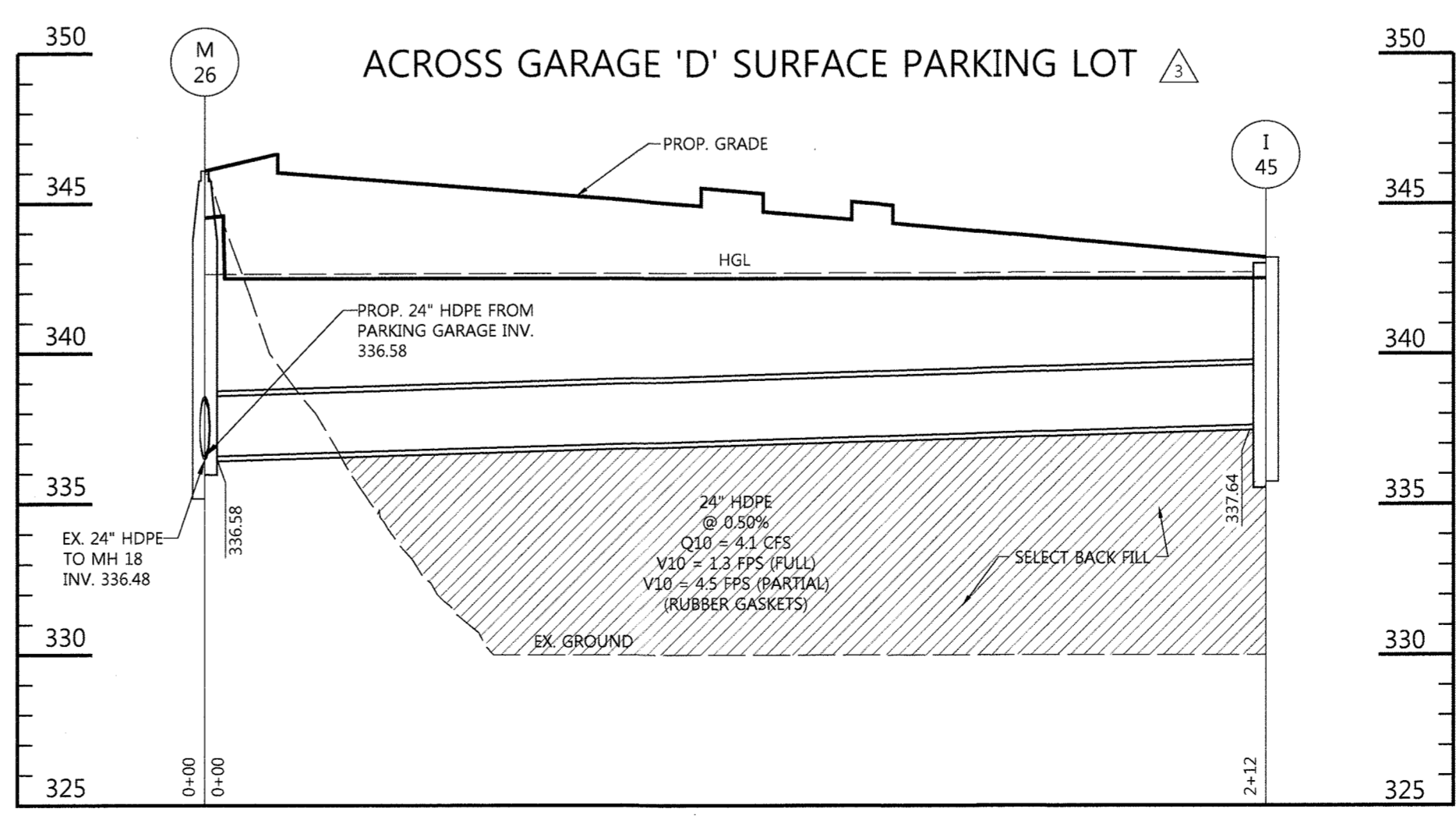


TRENCH DRAIN 10
SCALE: HOR. 1"=30'
VERT. 1"=5'

ACROSS GARAGE 'D' SURFACE PARKING LOT



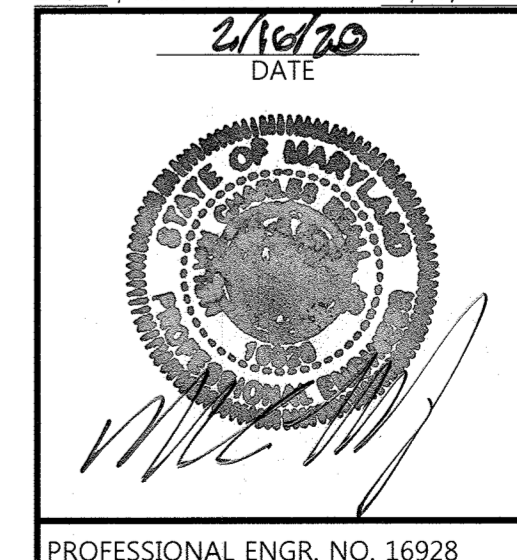
GARAGE-M18
SCALE: HOR. 1"=20'
VERT. 1"=5'



I45-M26
SCALE: HOR. 1"=30'
VERT. 1"=5'

NOTES:
1. APPROXIMATE TOP OF ROCK ELEVATION. REFER TO BALTER REPORT, REB NO. 16-770-0, DATED JULY 1, 2016 FOR DETAILED INFORMATION.
2. SEE SHEETS 27 THRU 42 FOR STORMWATER MANAGEMENT PLANS


FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.

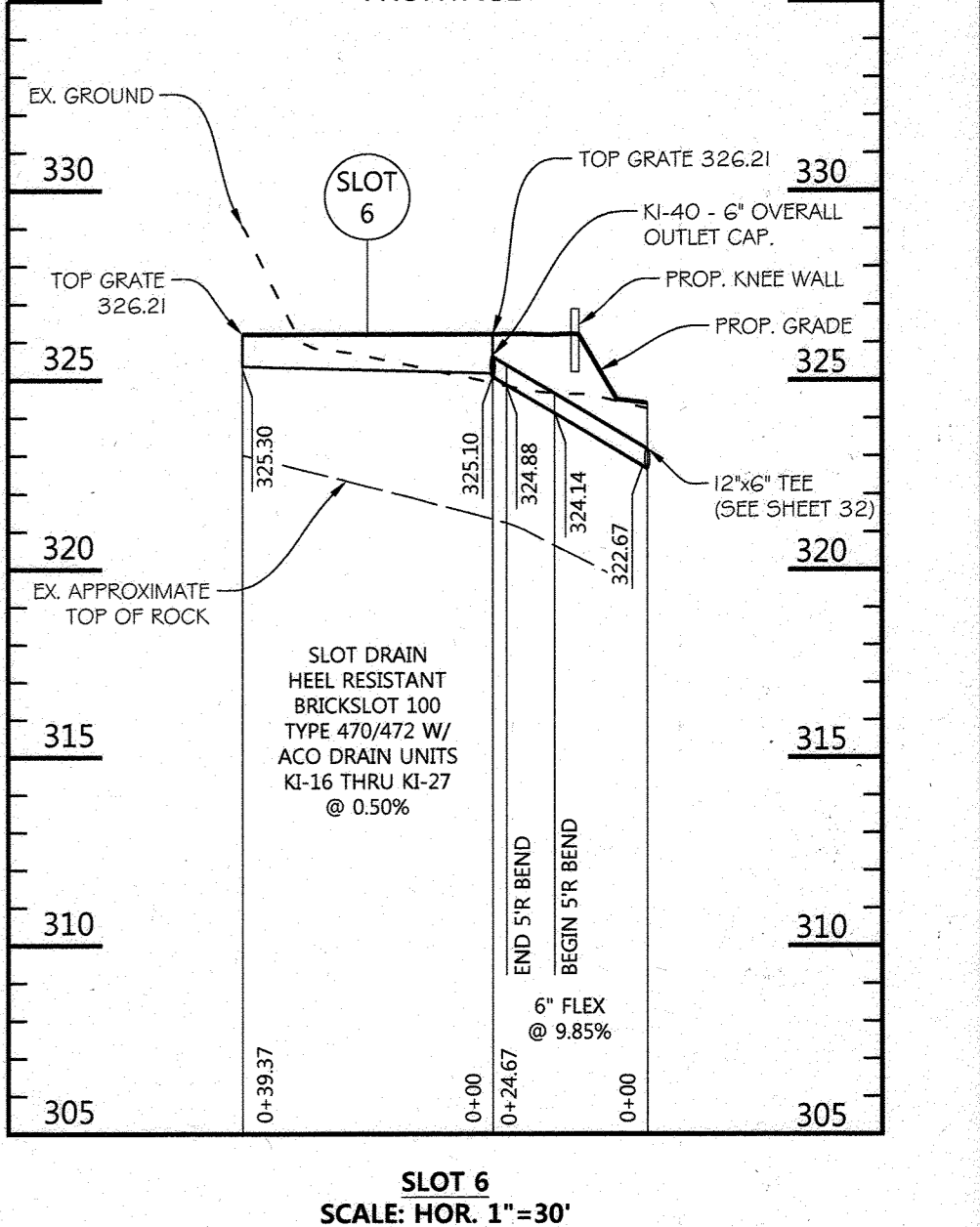
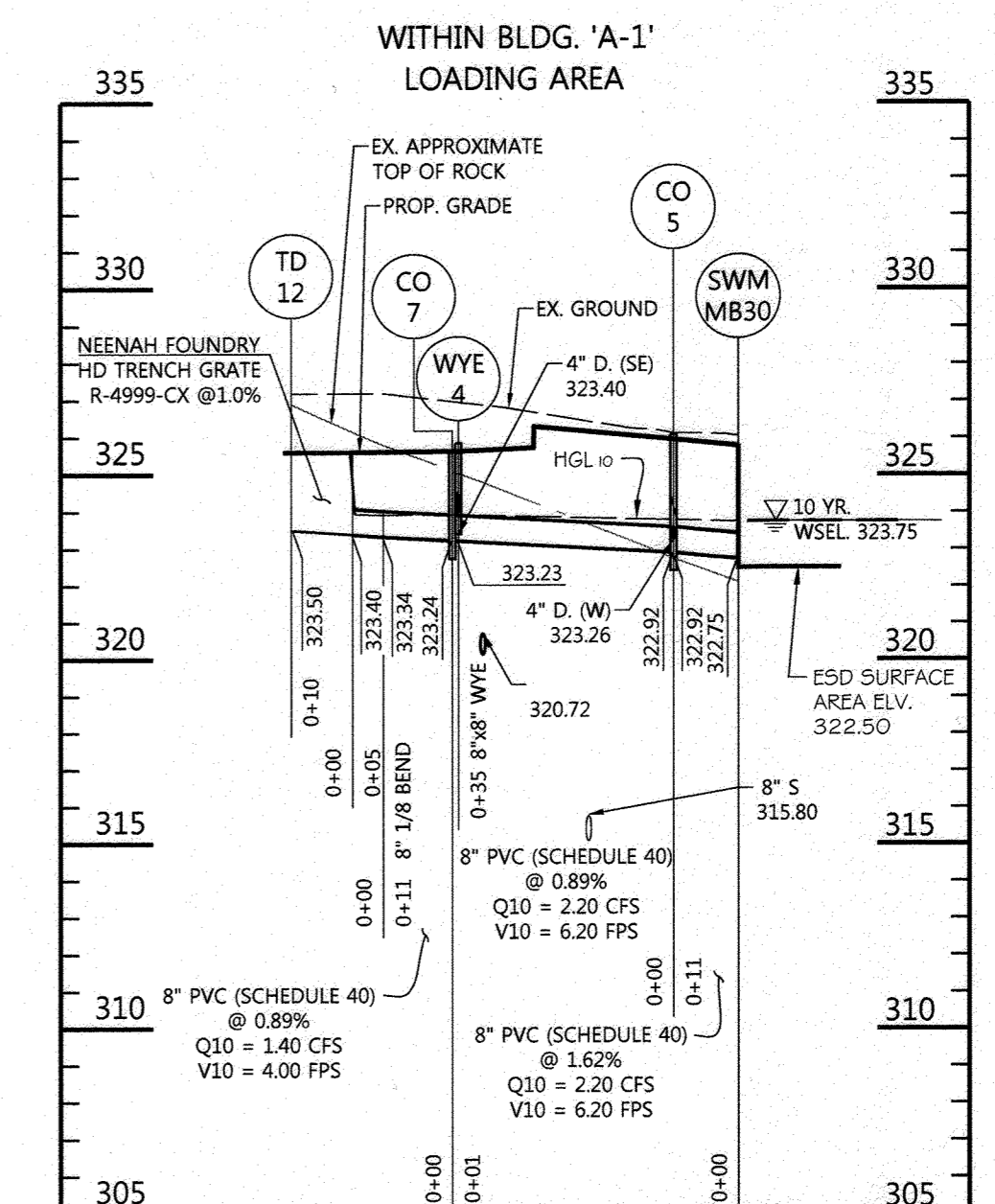
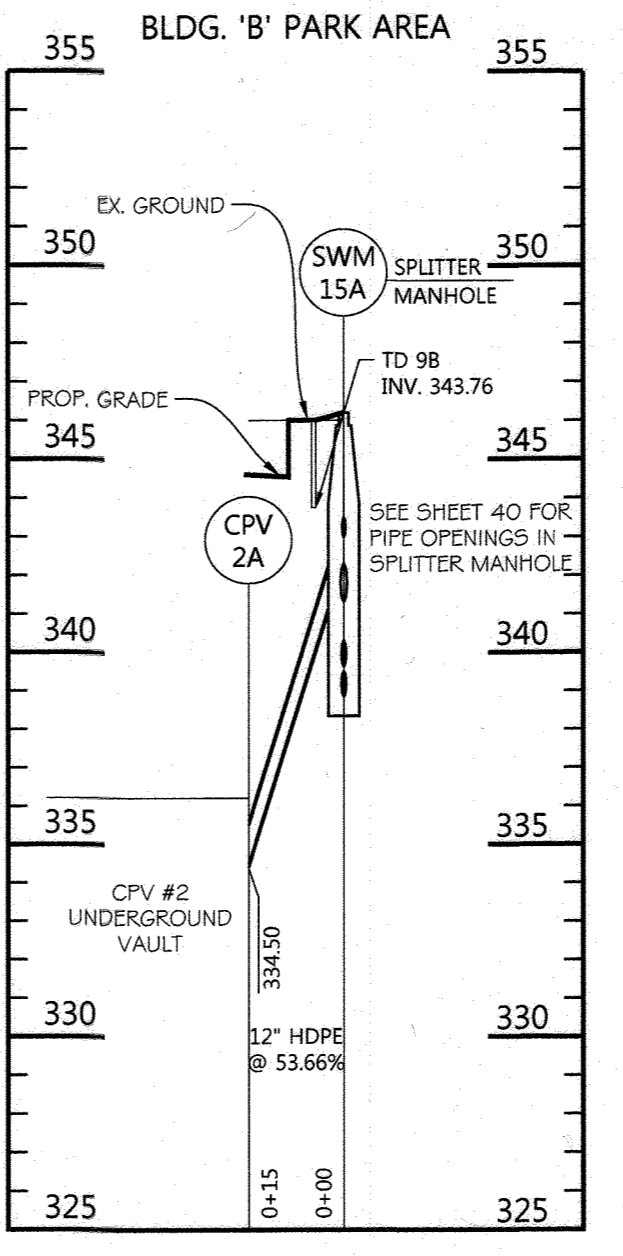
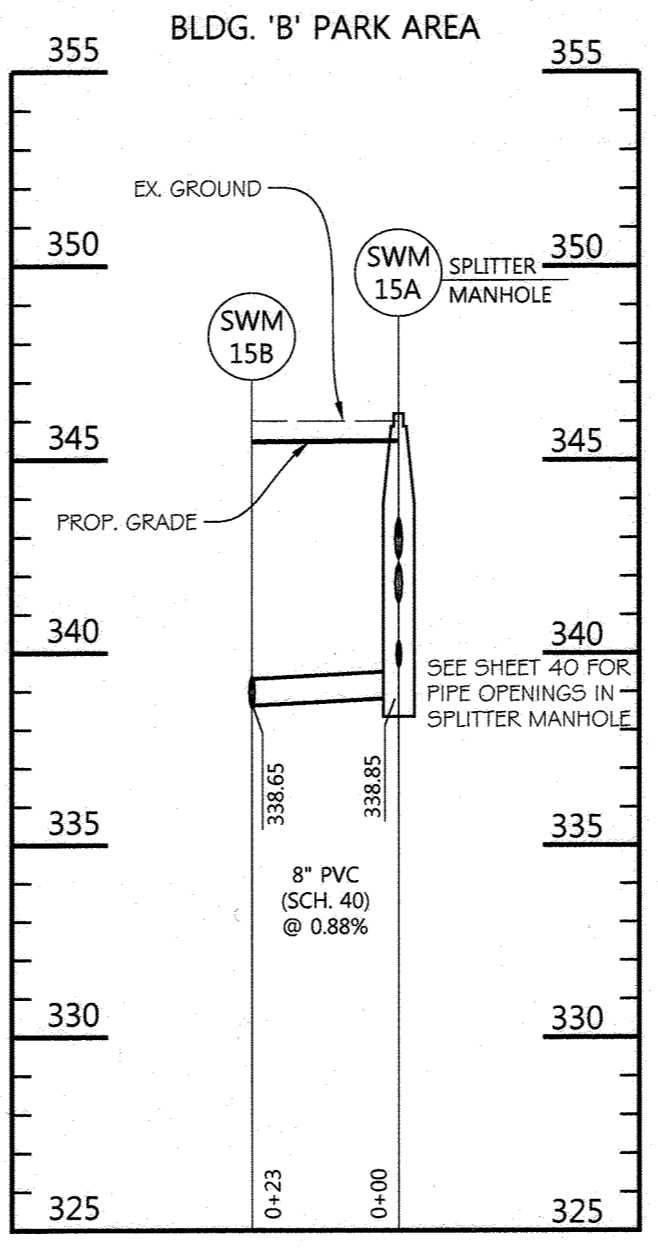
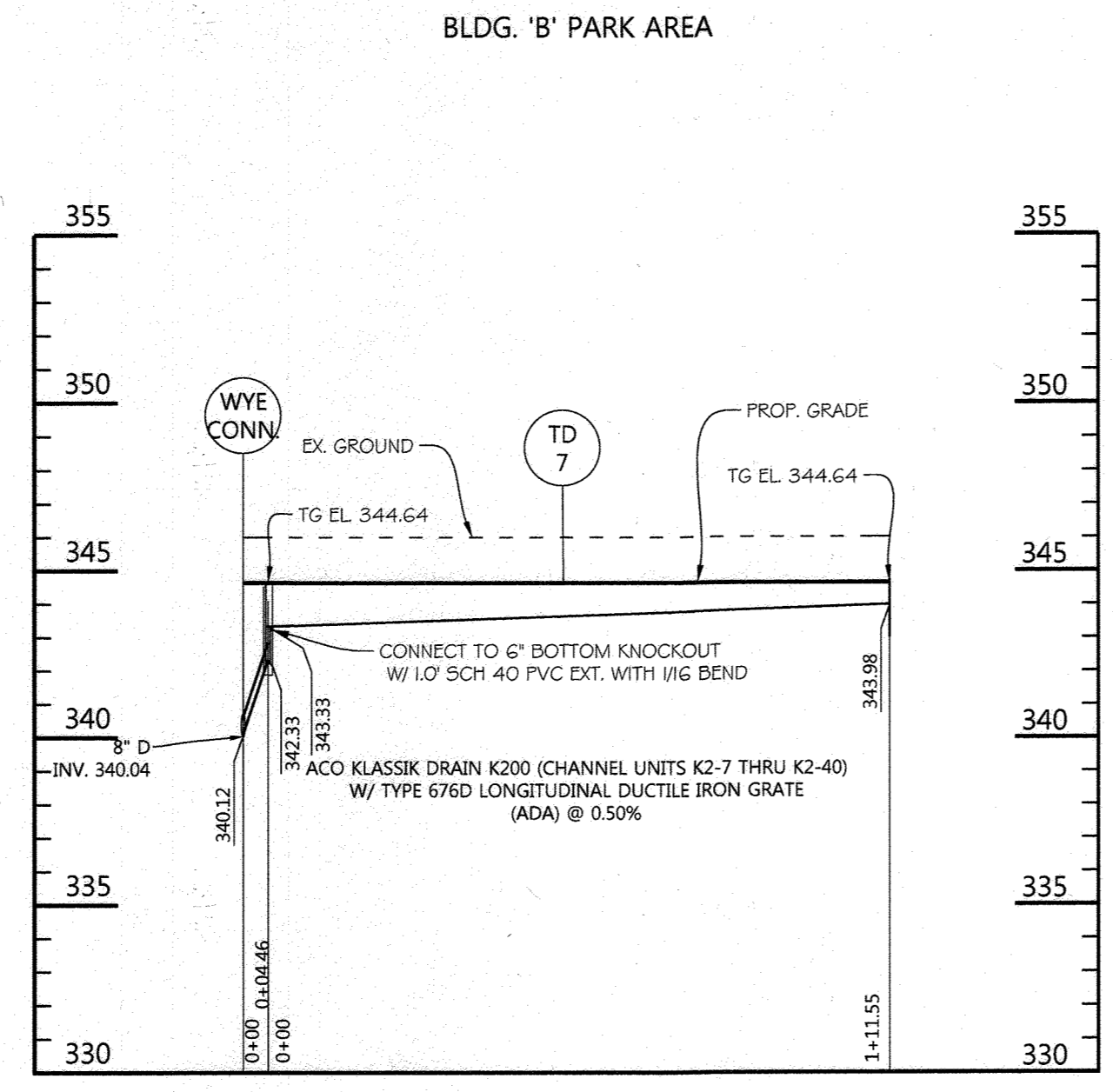
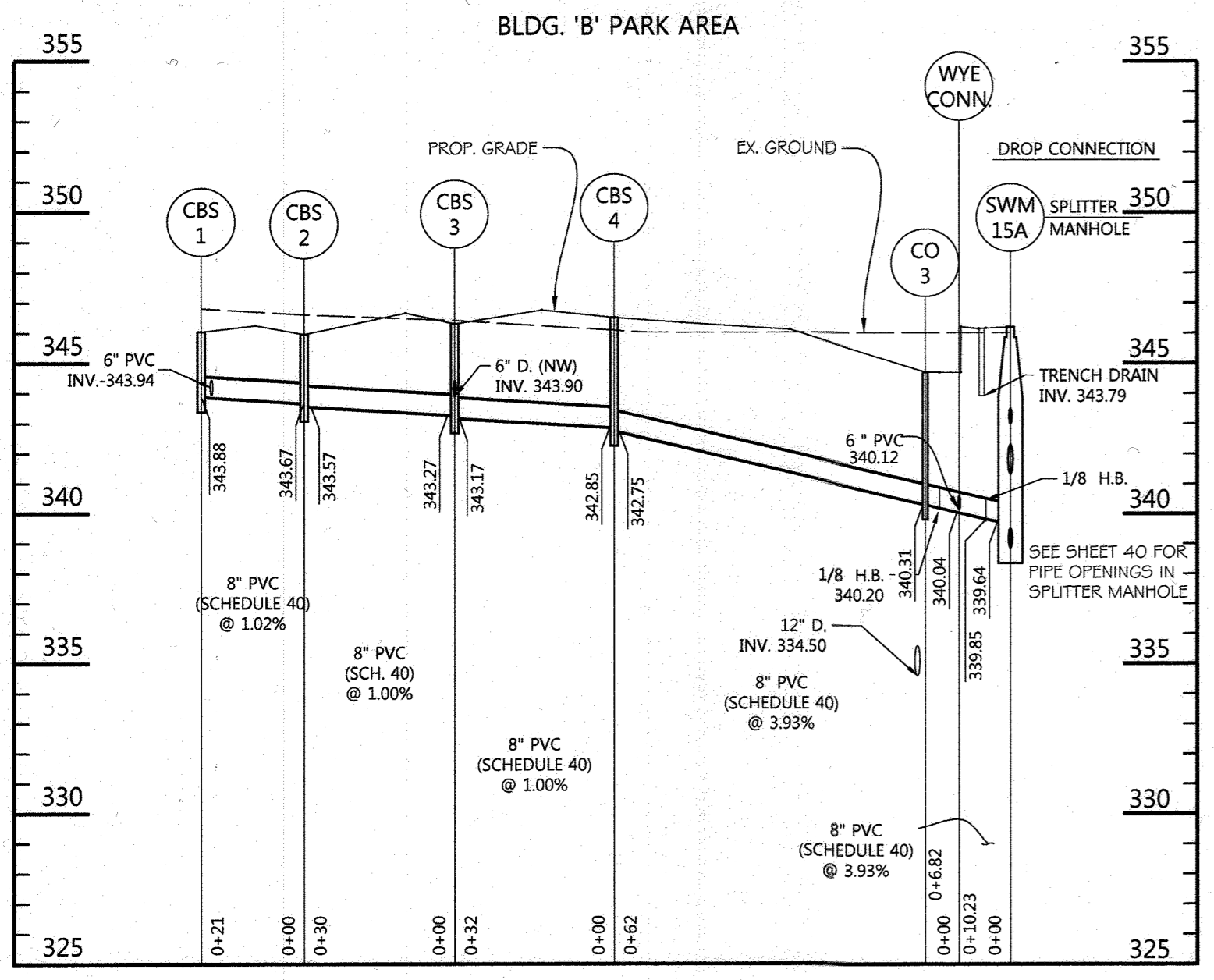


PROFESSIONAL ENGR. NO. 16928

APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DATE: 2-28-20
DATE: 3/10-2020
DATE: 3-10-2020

11/18/19	3	BLDG E-3 UTILITIES, PARK AREA GRADING, AND REVISED SWM MB14 & 15 LOCATION
03/06/19	2	BLDG E2, E3, PLAZA HARDSCAPE, AND GRADING
Date	No.	Revision Description
DOWNTOWN COLUMBIA		
CRESCENT NEIGHBORHOOD		
PHASE 1 AREA 3, PHASE 1		
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
		
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM		
STATION/AREA	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D
PLAN OR USE	TAX ZONE/AREA	PERMITS/PROJECT
24621-24630	7 (M) (W)	36
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	605602
TITLE		
STORM DRAIN PROFILES		
REVISED SITE DEVELOPMENT PLAN		
Des. By	GDT/DM	SCALE AS SHOWN
Drn. By	MJ	Date 5-10-18
Chk. By	MCB	Approved MCB
		Proj. No. 04038.B0
		24 of 94



NOTE:
REFER TO SHEET 16 FOR PLAN LOCATION OF STORM DRAIN SYSTEM ASSOCIATED WITH THE BELOW STORM SCHEDULE.

CATCH BASINS 1-4
SCALE: HOR. 1"=30'
VERT. 1"=5'

TRENCH DRAIN 7
SCALE: HOR. 1"=30'
VERT. 1"=5'

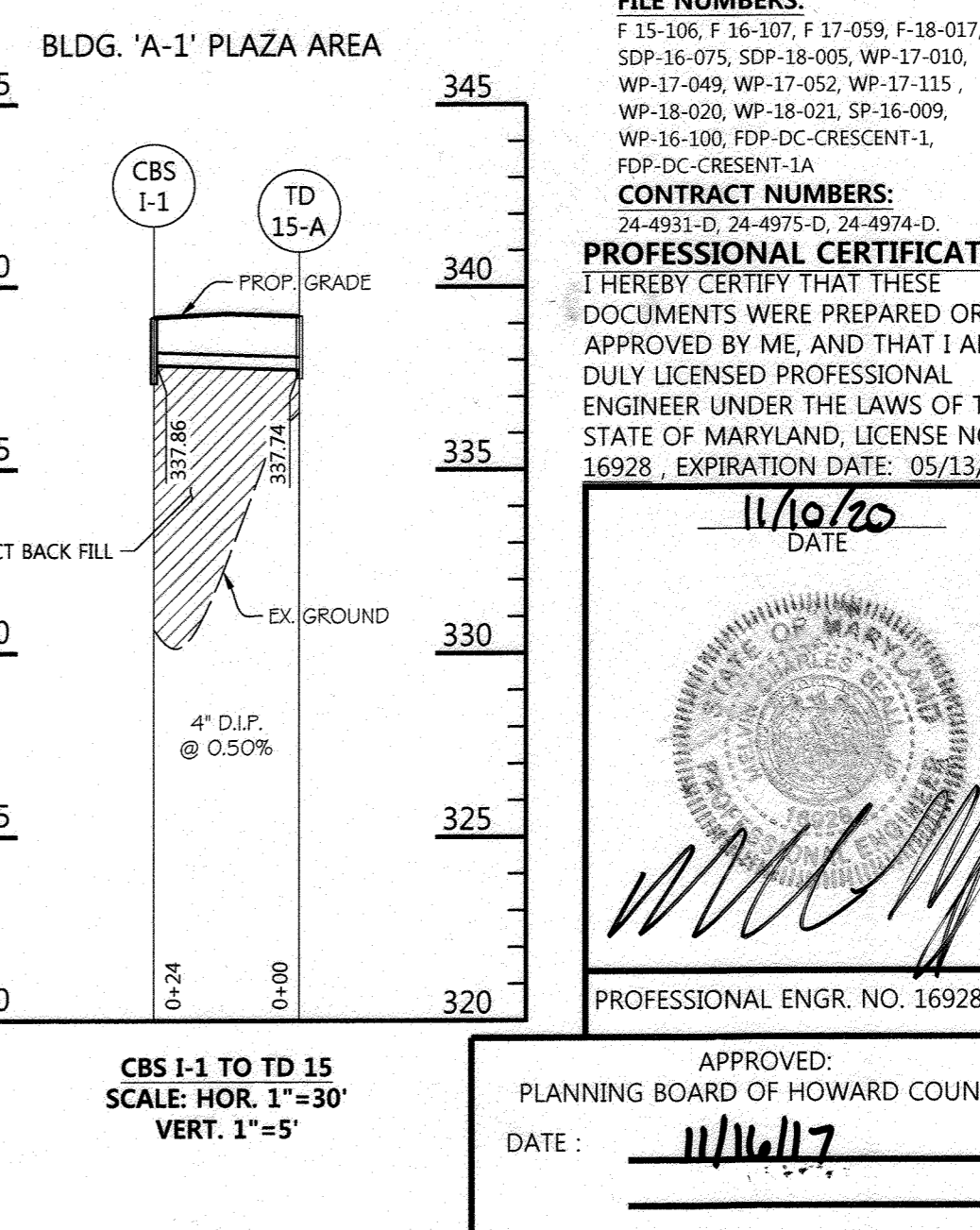
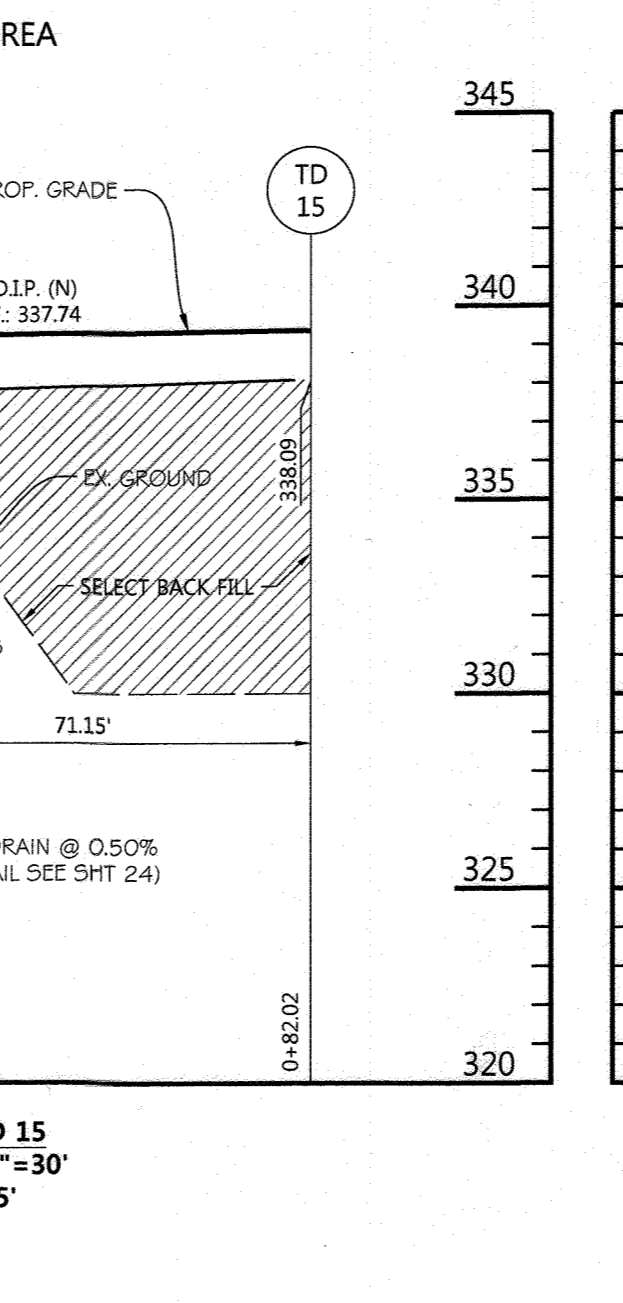
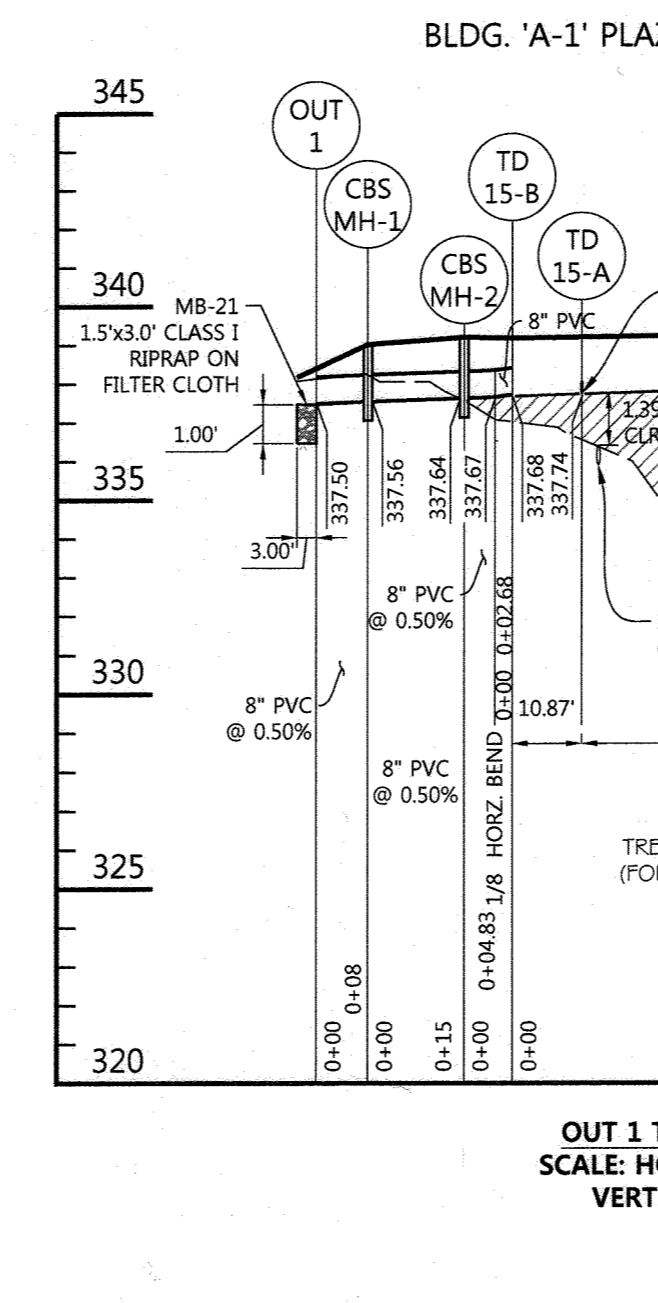
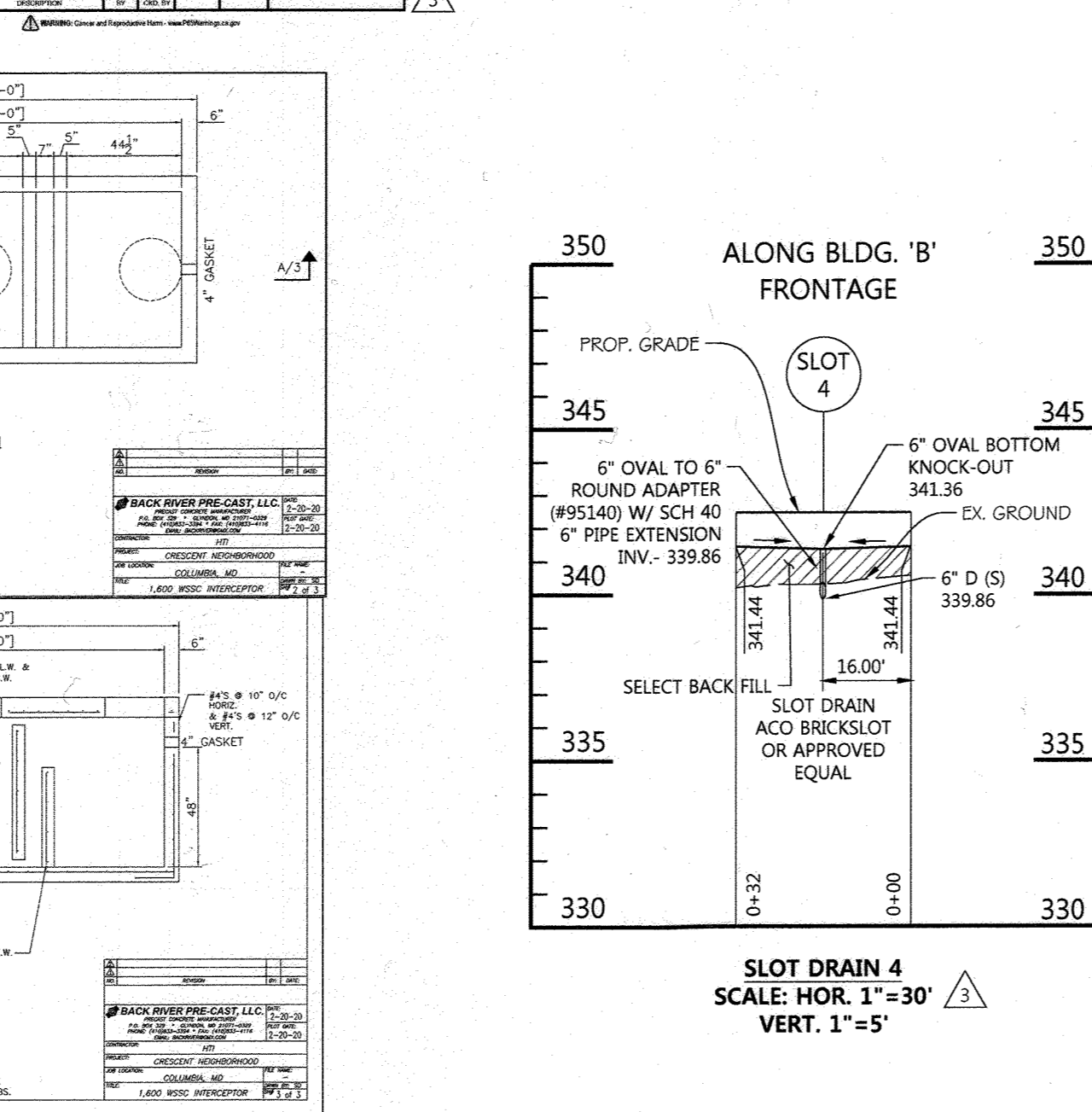
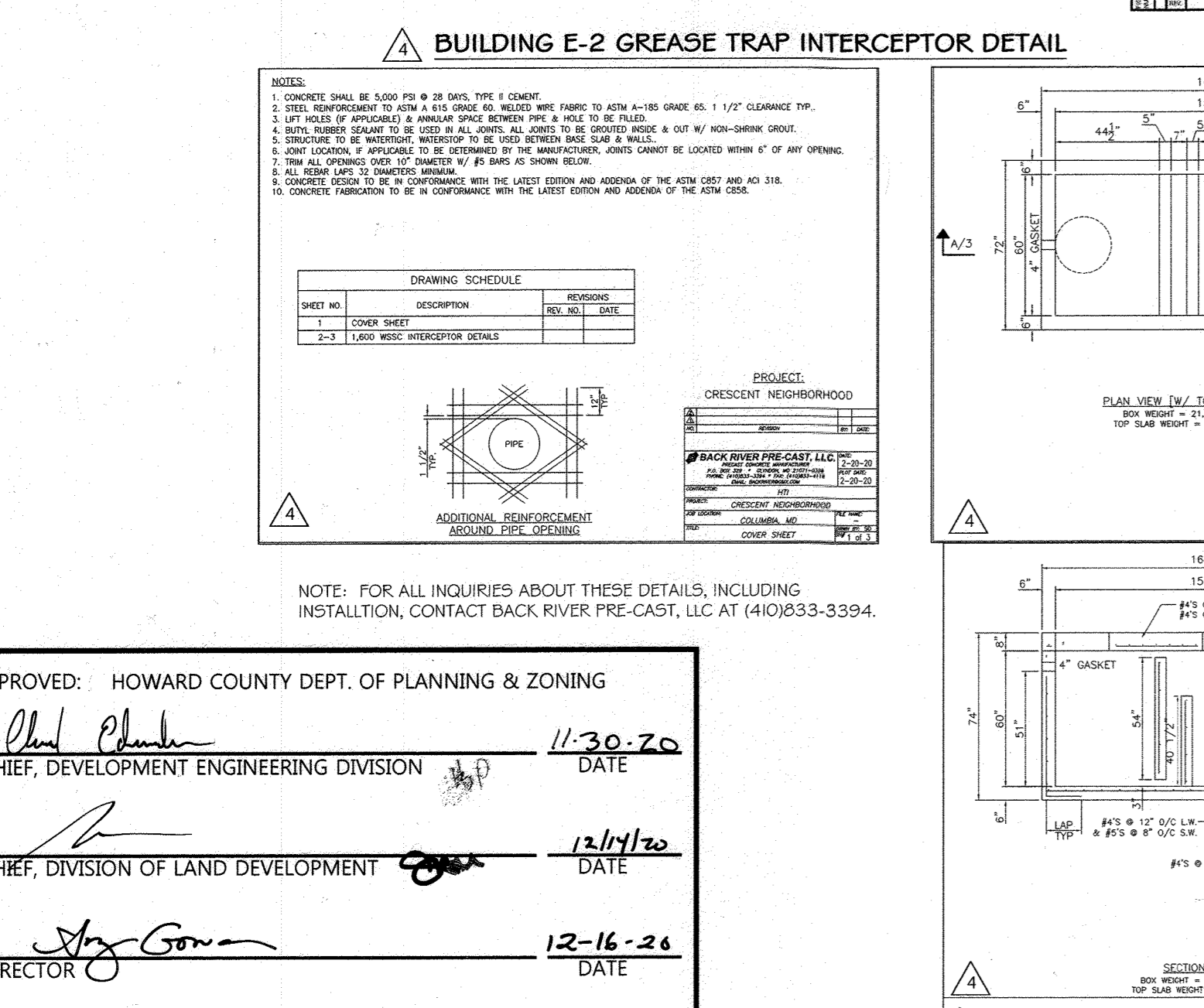
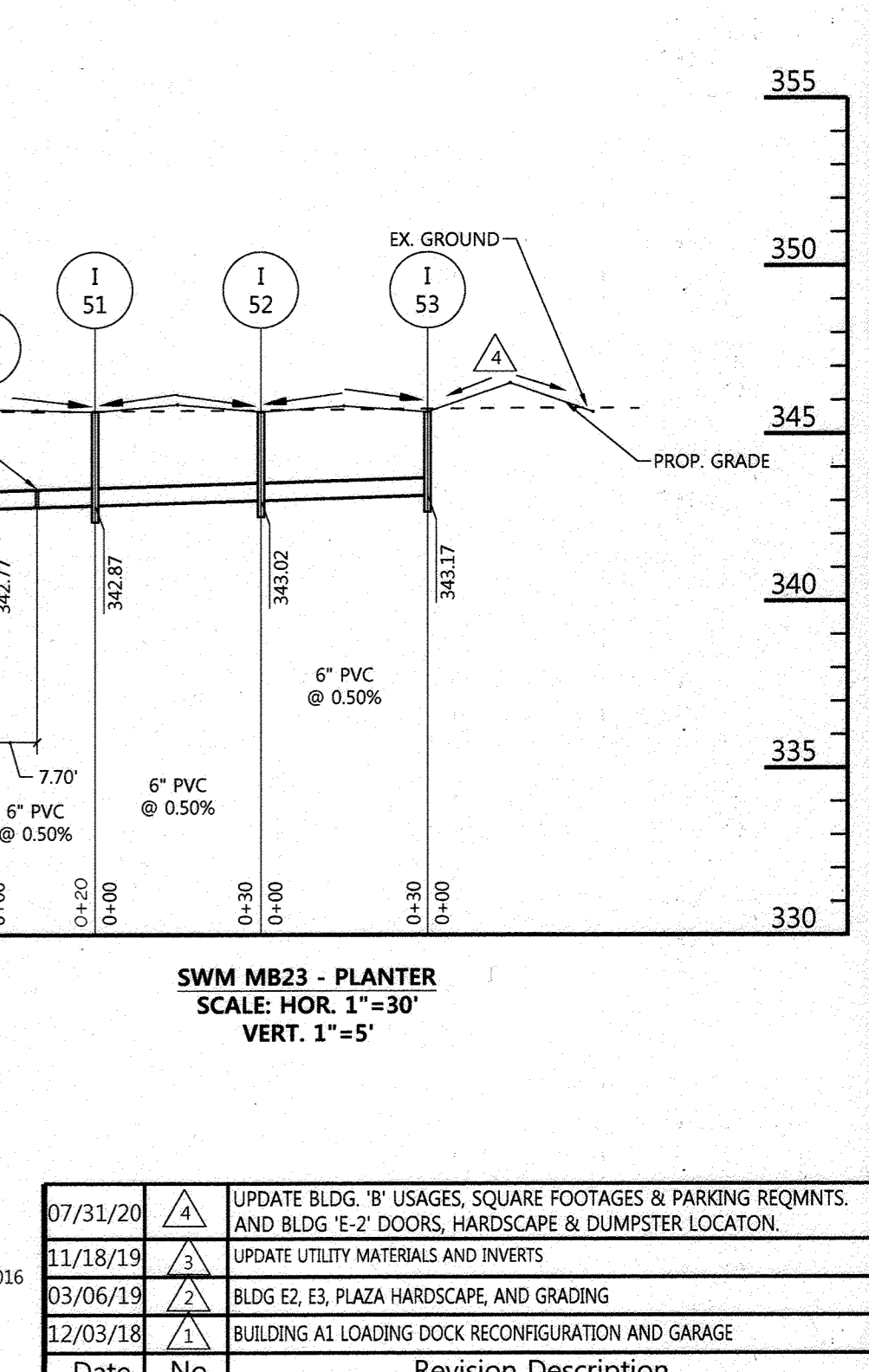
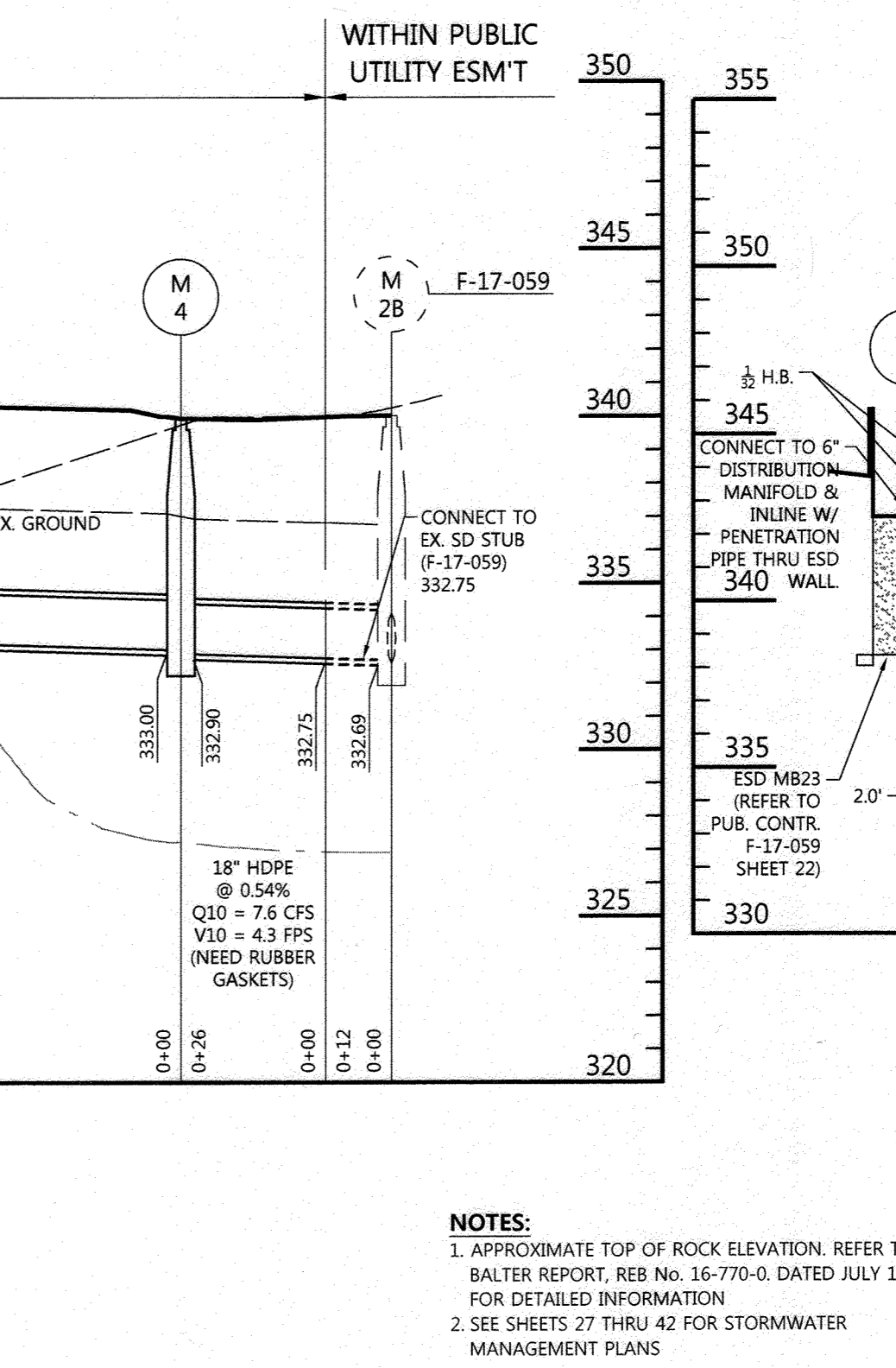
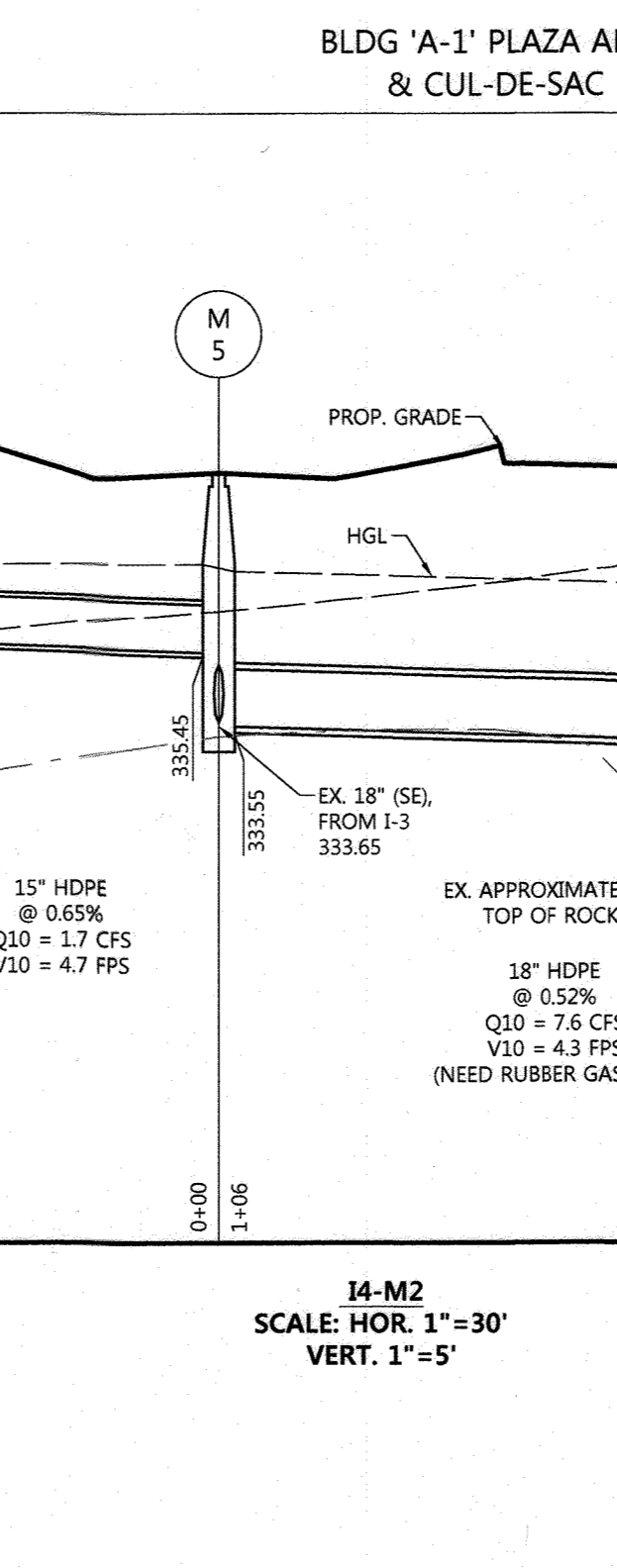
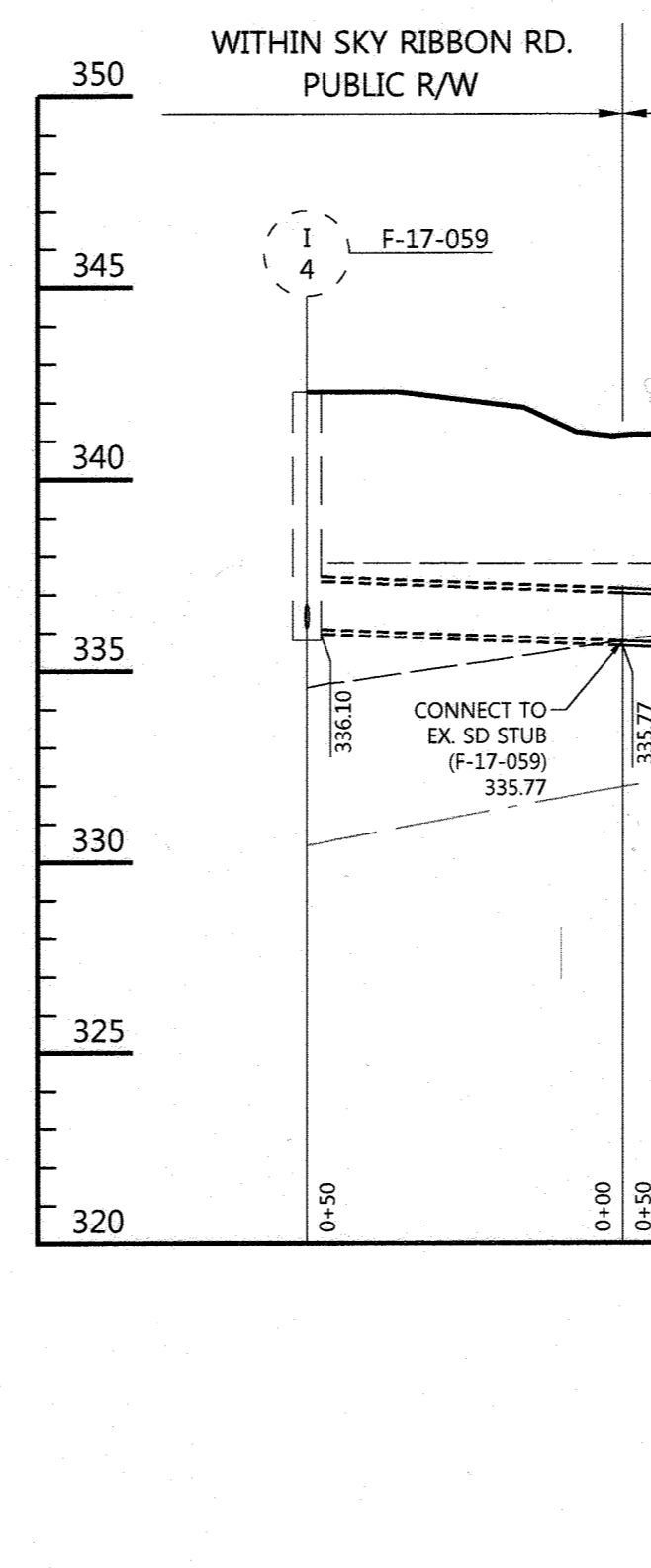
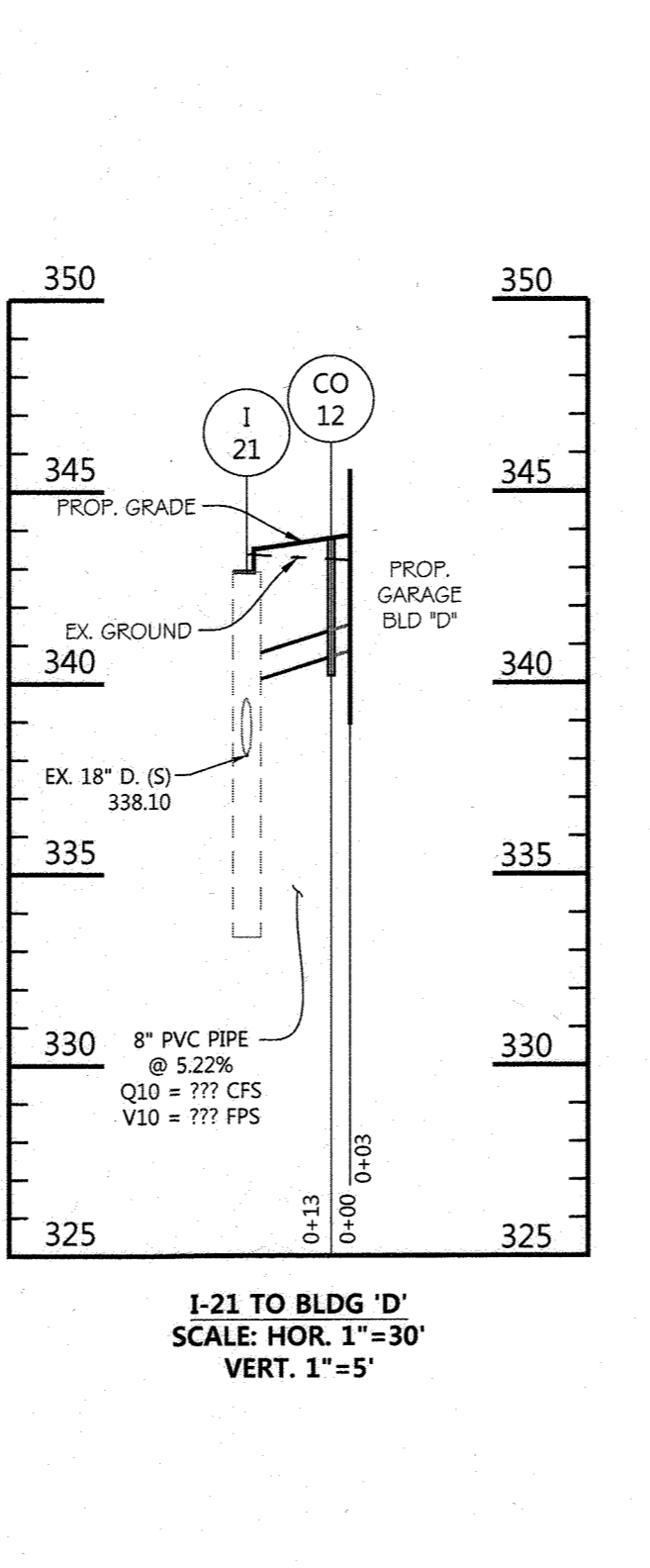
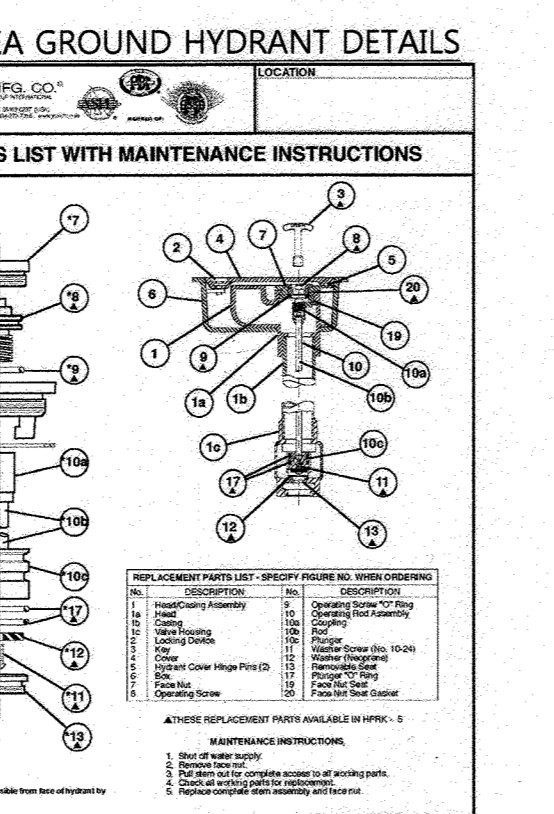
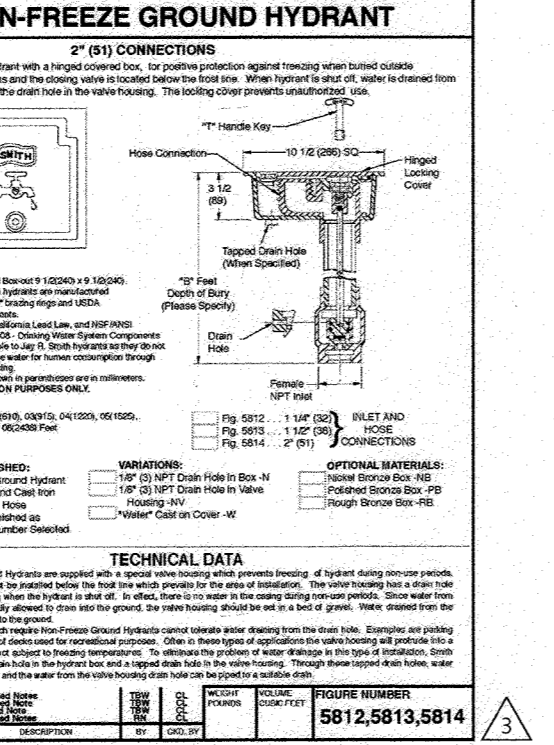
SWM 15
SCALE: HOR. 1"=30'
VERT. 1"=5'

CPV 2
SCALE: HOR. 1"=30'
VERT. 1"=5'

TRENCH DRAIN 12
SCALE: HOR. 1"=30'
VERT. 1"=5'

SLOT 6
SCALE: HOR. 1"=30'
VERT. 1"=5'

CATCH BASIN STRUCTURE STORM SCHEDULE - A-1 PLAZA DRAINAGE (PARTIAL)					
NO.	TYPE / DETAIL NO.	SIZE	INV. IN	INV. OUT	RIM ELEV.
CBS HB 1	1/32 PVC H. BEND	6"	334.72	334.72	336.23
CBS HB 2	1/8 PVC H. BEND	8"	337.67	337.67	N/A
CBS I-1	NYLOPLAST 12" CUSTOM BASIN PART #2812AG W/ 12" STD. H-10 GRATE PART #1299CGP	12"	N/A	337.86	339.16
CBS I-3	NYLOPLAST 12" CUSTOM BASIN PART #2812AG W/ 12" STD. H-10 GRATE PART #1299CGP	12"	N/A	338.03	339.19
CBS MH-1	NYLOPLAST 12" CUSTOM BASIN PART #2812AG W/ 12" SOLID H-20 COVER PART #1299CGC	12"	337.56	337.56	339.02
CBS MH-2	NYLOPLAST 12" CUSTOM BASIN PART #2812AG W/ 12" SOLID H-20 COVER PART #1299CGC	12"	337.64	337.64	339.20
CBS TEE 2	PVC TEE FITTING	6" x 6" x 6"	334.60	334.60	N/A
CBS TEE 3	PVC TEE FITTING	6" x 6" x 6"	334.66	334.66	N/A
CO PZ 1	4" PVC Cleanout	4" / 6"	N/A	334.59	337.00
CO PZ 2	4" PVC Cleanout & 6" 1/8 H. BEND	4" / 6"	334.71	334.71	336.20
CO PZ 3	4" PVC Cleanout	4" / 6"	337.44	334.84	339.15
I 51	NYLOPLAST 12" CUSTOM BASIN PART #2812AG W/ 12" STD. H-10 GRATE PART #1299CGP	6"	342.87	342.87	345.65
I 52	NYLOPLAST 12" CUSTOM BASIN PART #2812AG W/ 12" STD. H-10 GRATE PART #1299CGP	6"	343.02	343.02	345.65
I 53	NYLOPLAST 12" CUSTOM BASIN PART #2812AG W/ 12" STD. H-10 GRATE PART #1299CGP	6"	343.17	343.17	345.65
OUT 1	PVC PIPE @ OUTFALL	8"	N/A	337.50	N/A
OUT 2	PVC PIPE @ MB41	6"	334.50	N/A	N/A
OUT 3	PVC PIPE @ MB41	6"	334.50	N/A	N/A
TD 15	CAST-IN-PLACE CONCRETE TRENCH - (SEE DETAIL SHT 24) W/ GRATING PACIFIC THP-10-EZ	10"	338.09	337.68	339.37 (E) 339.18 (W)



DATE 07/31/20
NO. 1
REVISION DESCRIPTION

Date	No.	Revision Description
11/18/19	1	UPDATE BLDG. 'B' USAGES, SQUARE FOOTAGES & PARKING REQMENTS. AND BLDG. 'E-2' DOORS, HARDSCAPE & DUMPSTER LOCATION.
03/06/19	1	UPDATE UTILITY MATERIALS AND INVERTS
12/03/18	1	BLDG. E2 EX. PLAZA HARDSCAPE AND GRADING
12/03/18	1	BUILDING ALL LOADING DOCK RECONFIGURATION AND GARAGE

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-8800

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2022.

DATE 11/16/20
DATE 11/16/20
DATE 12-16-28

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DATE: 11-30-20
DATE: 12-14-20
DATE: 12-16-28

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-000, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESENT-1A, FDP-DC-CRESENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

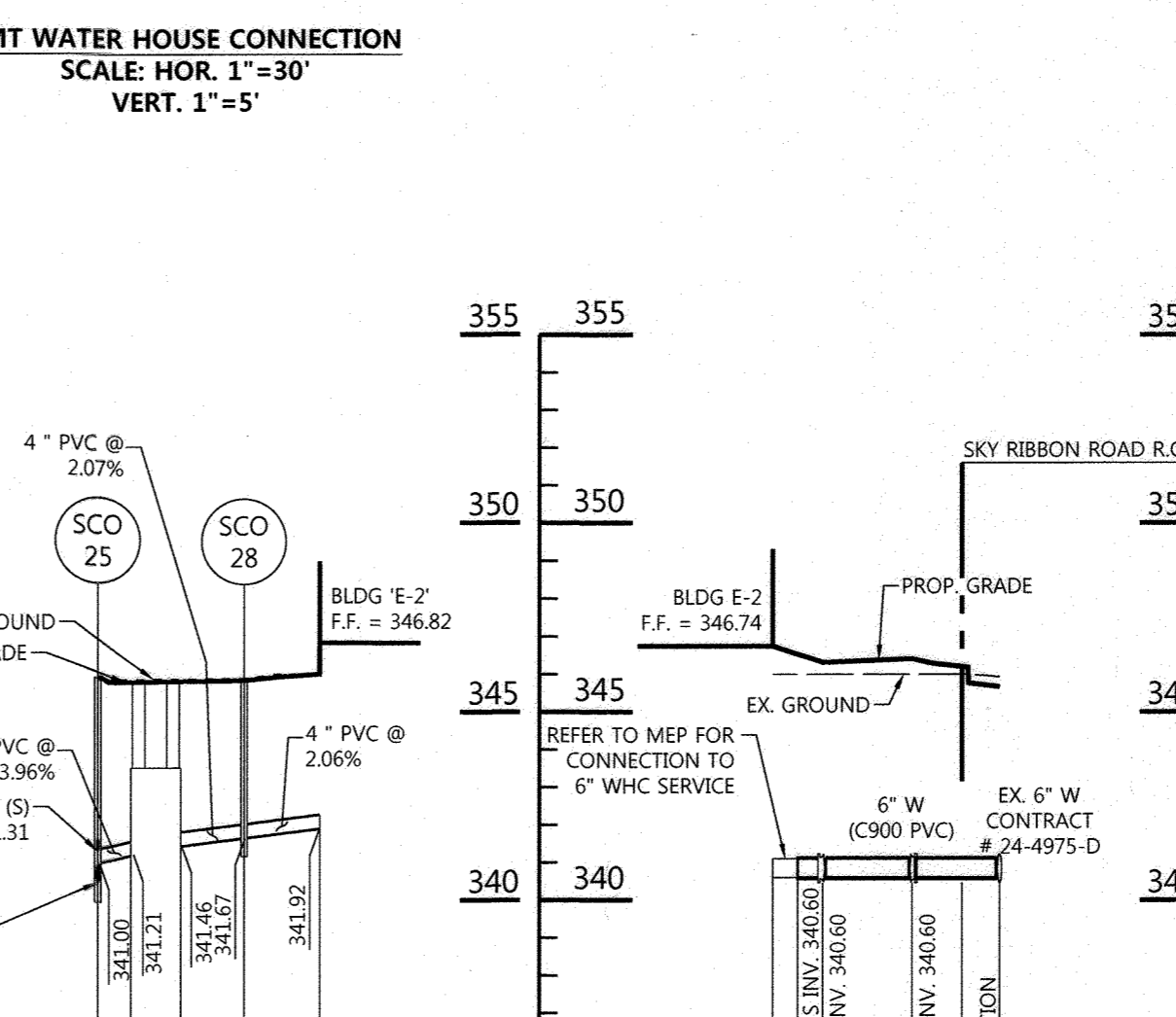
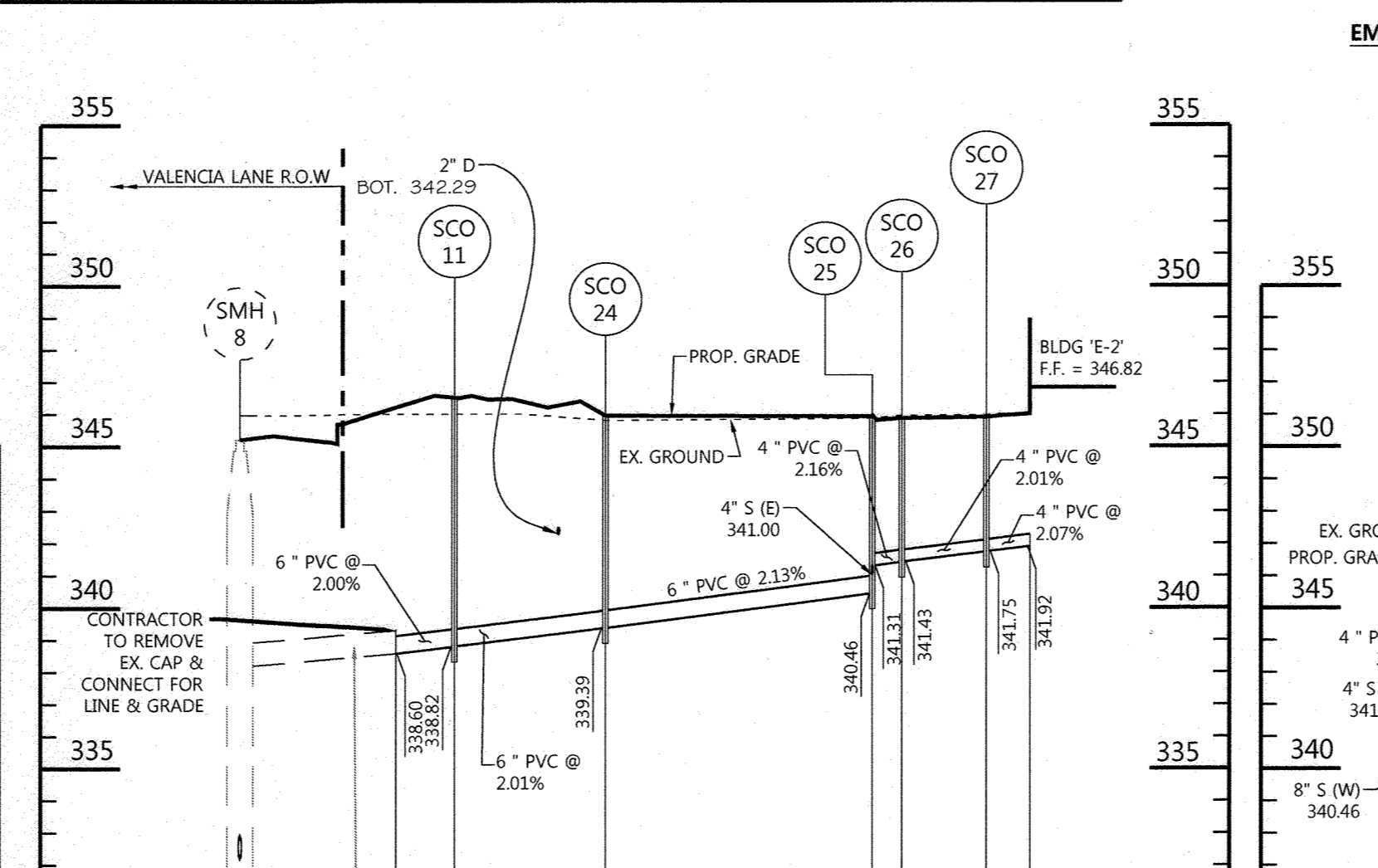
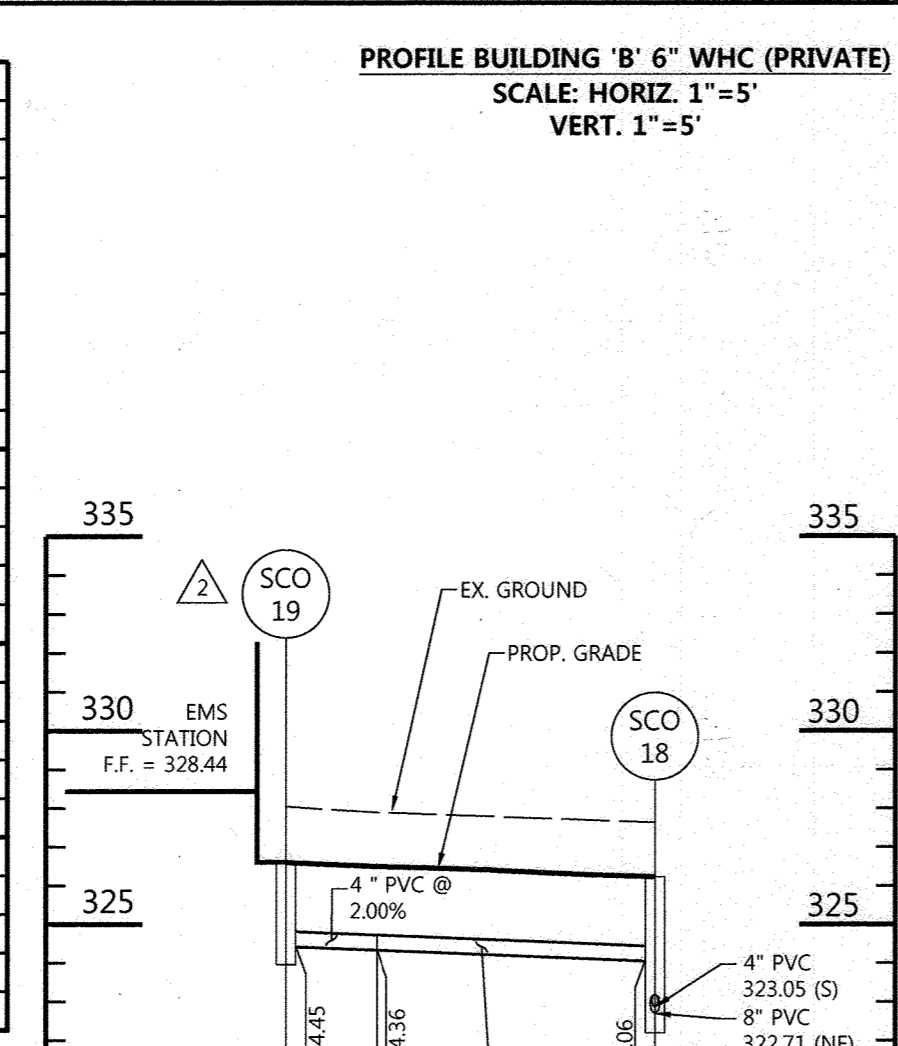
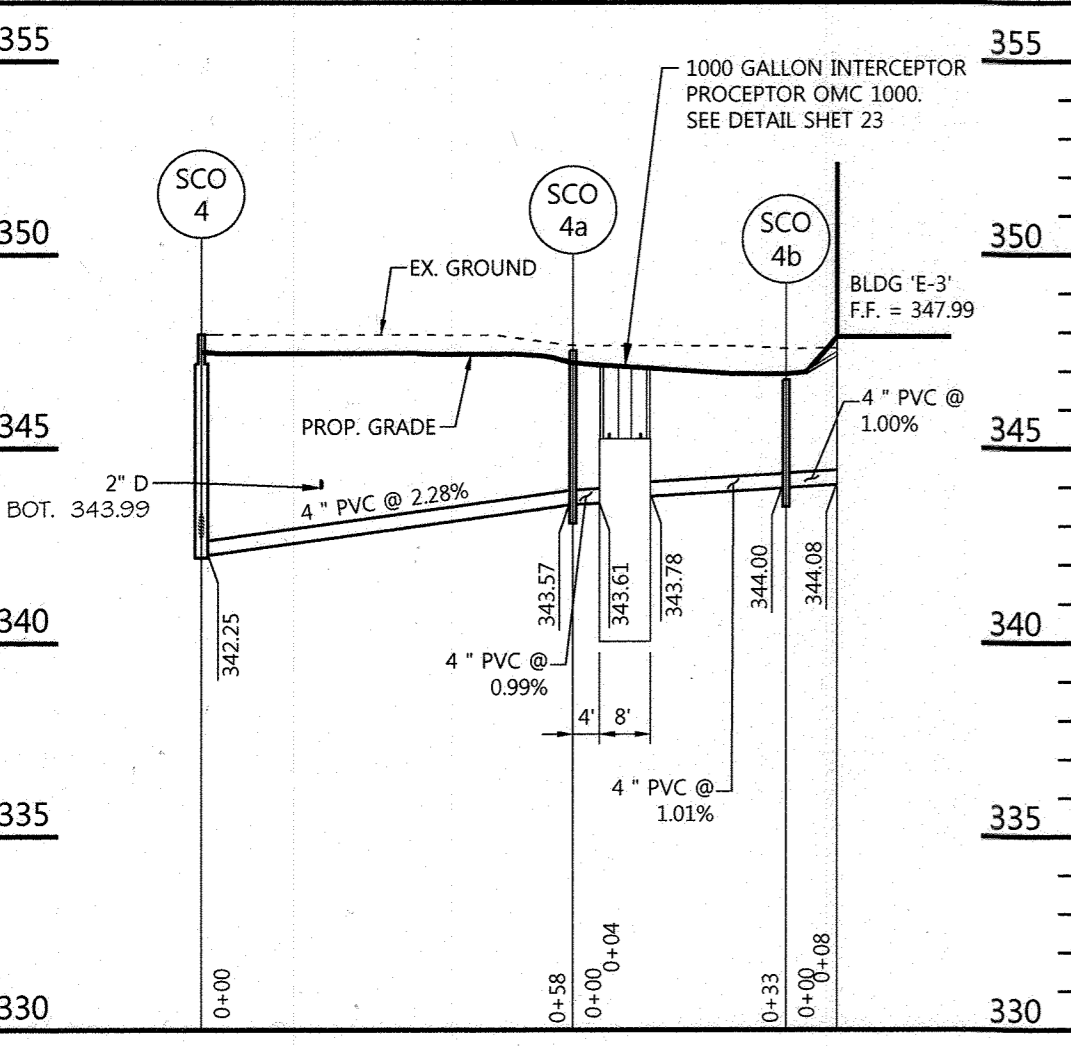
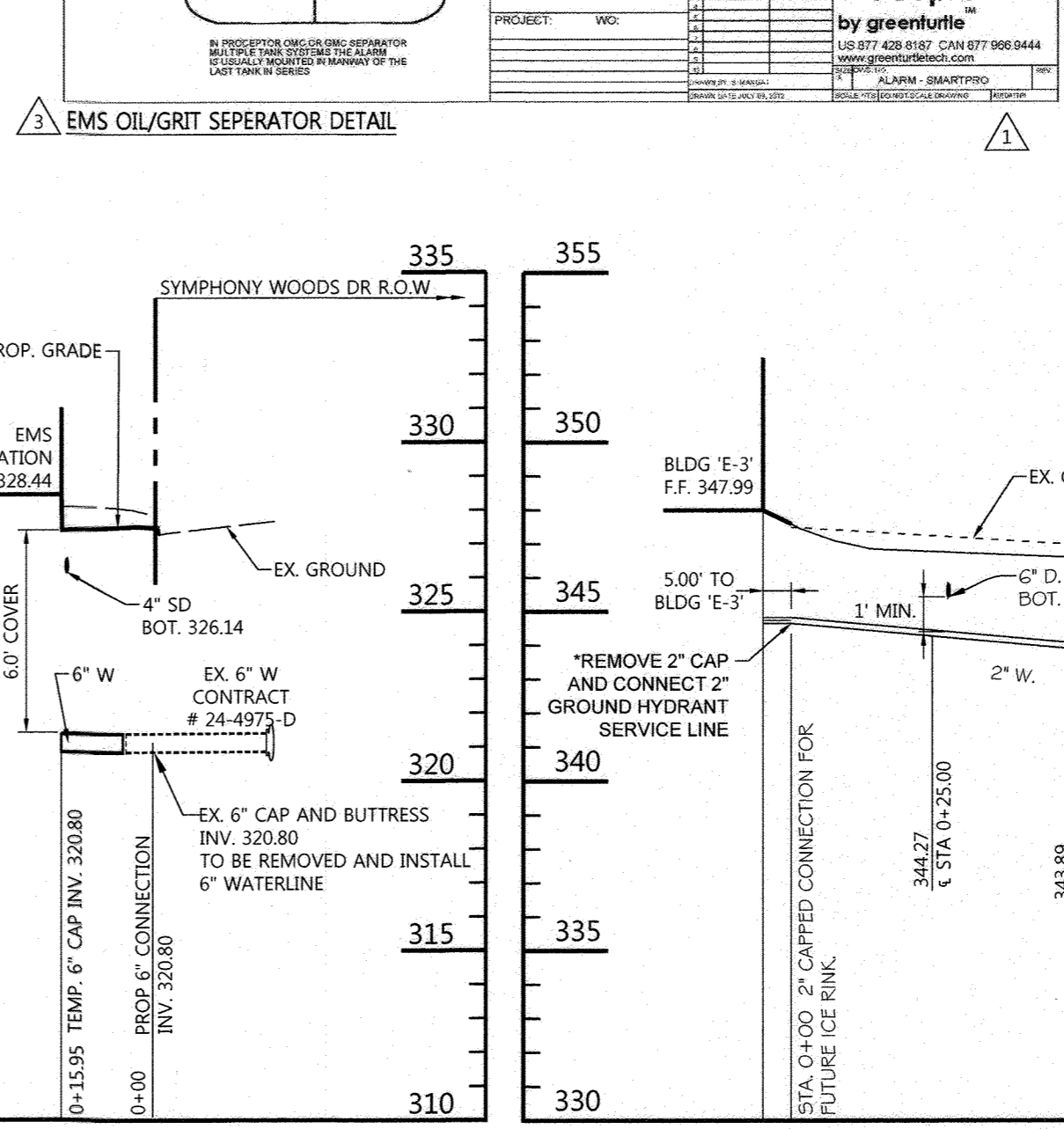
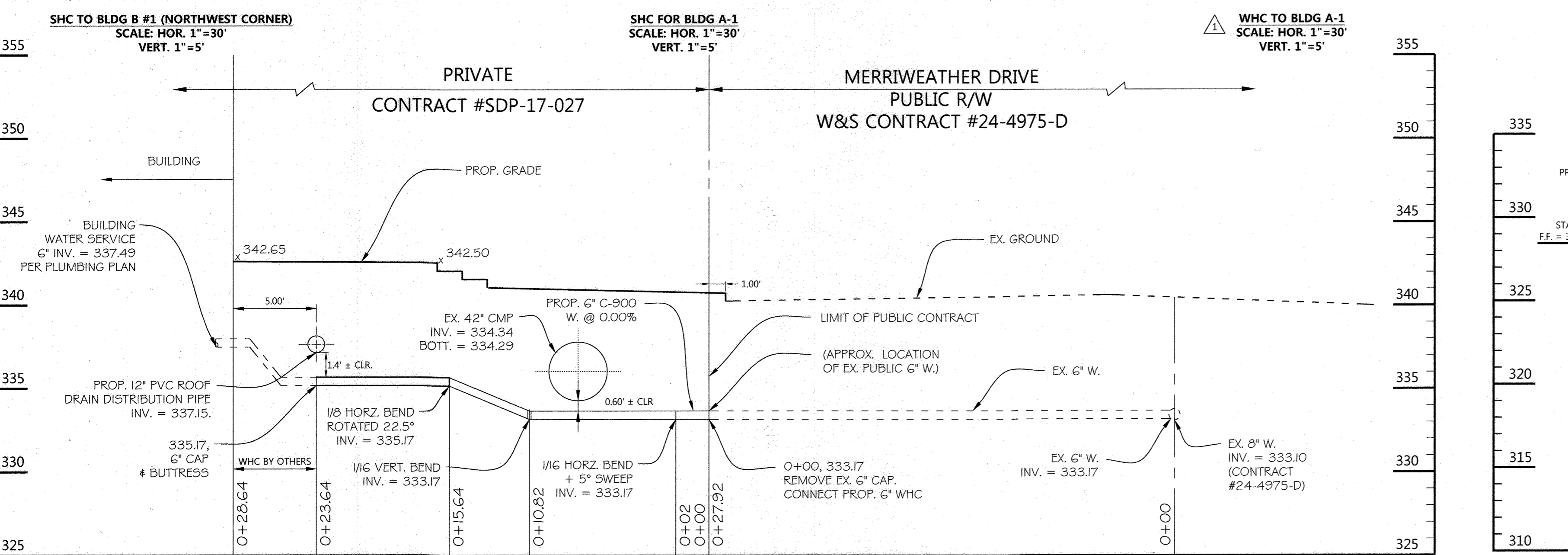
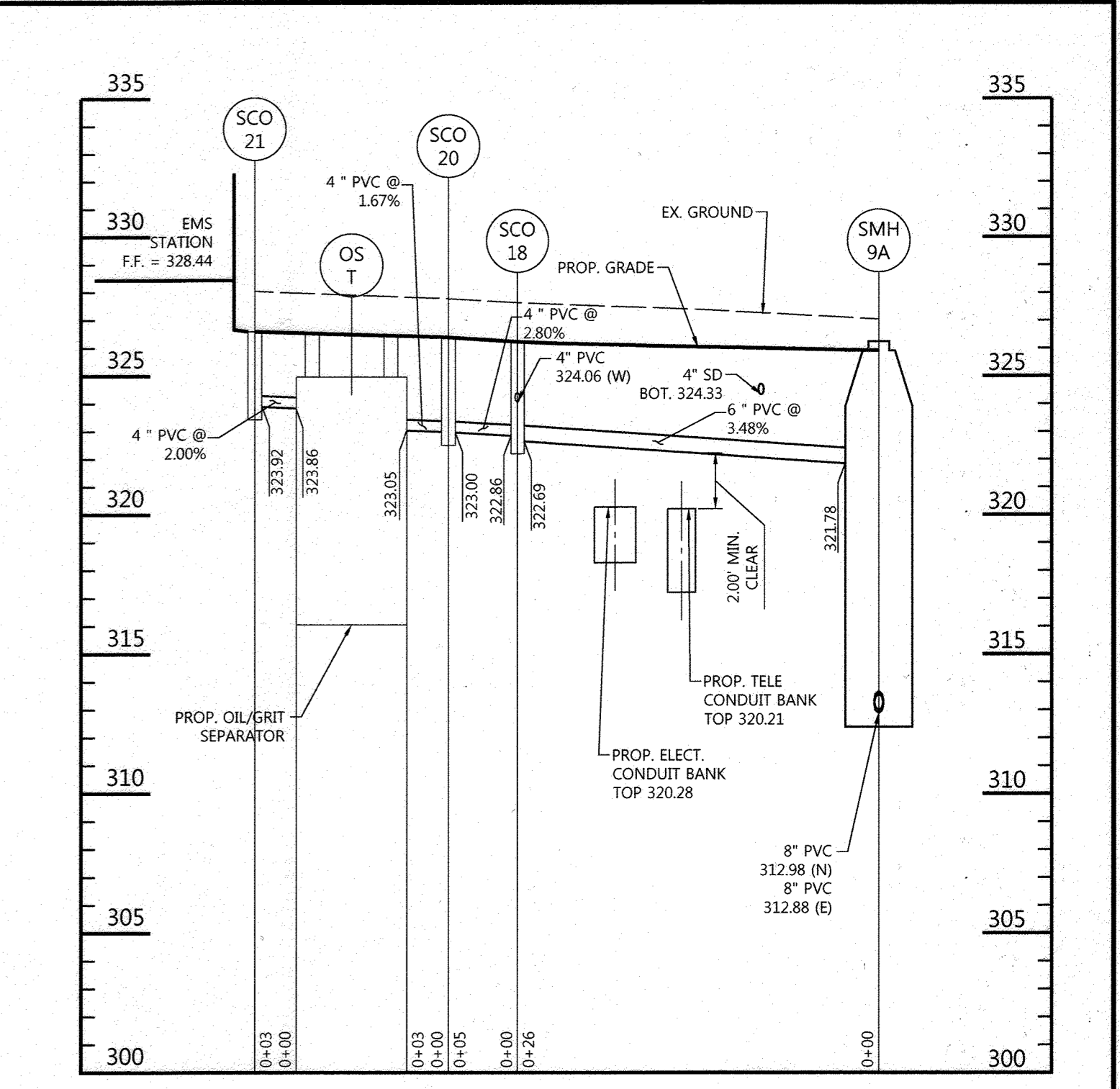
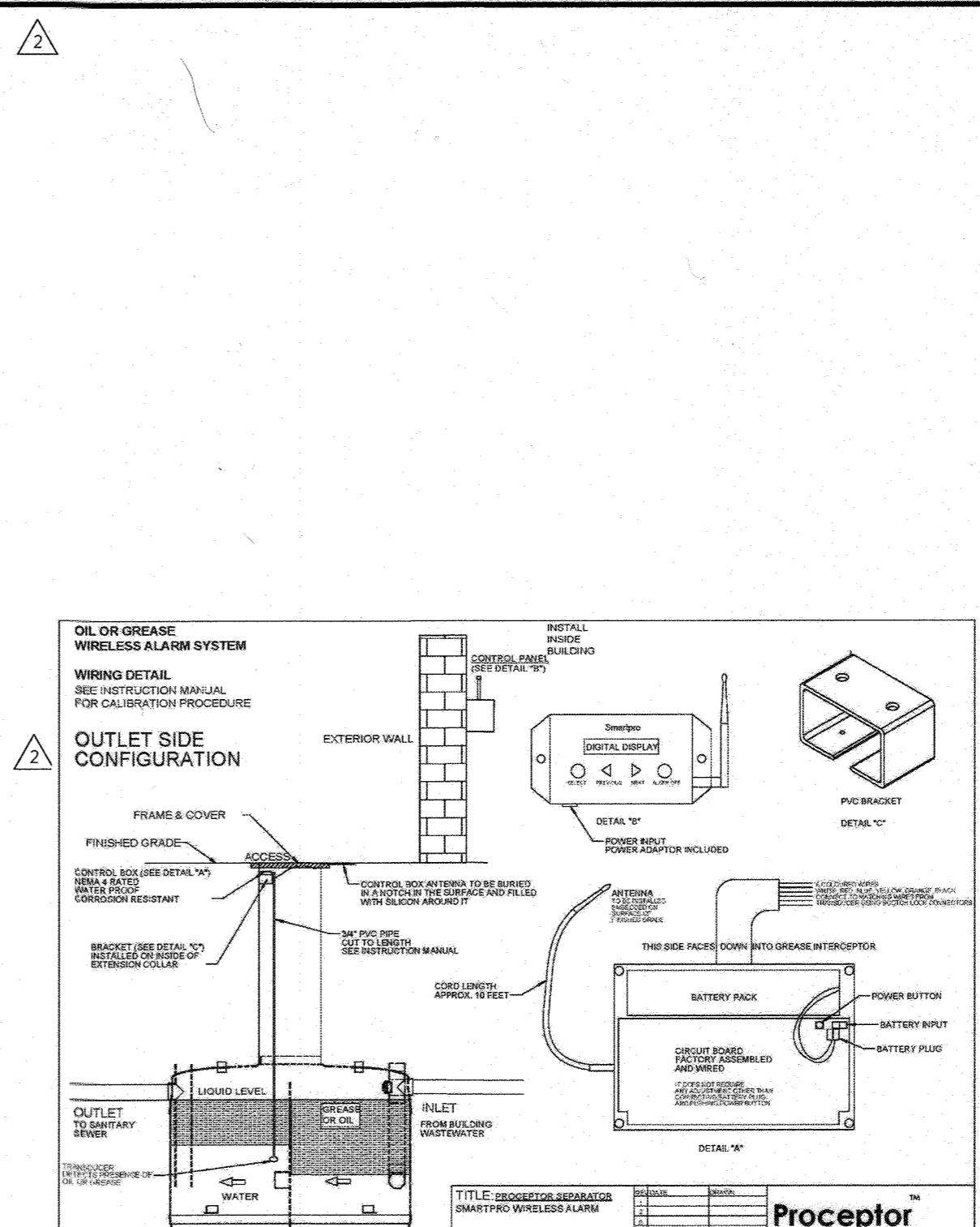
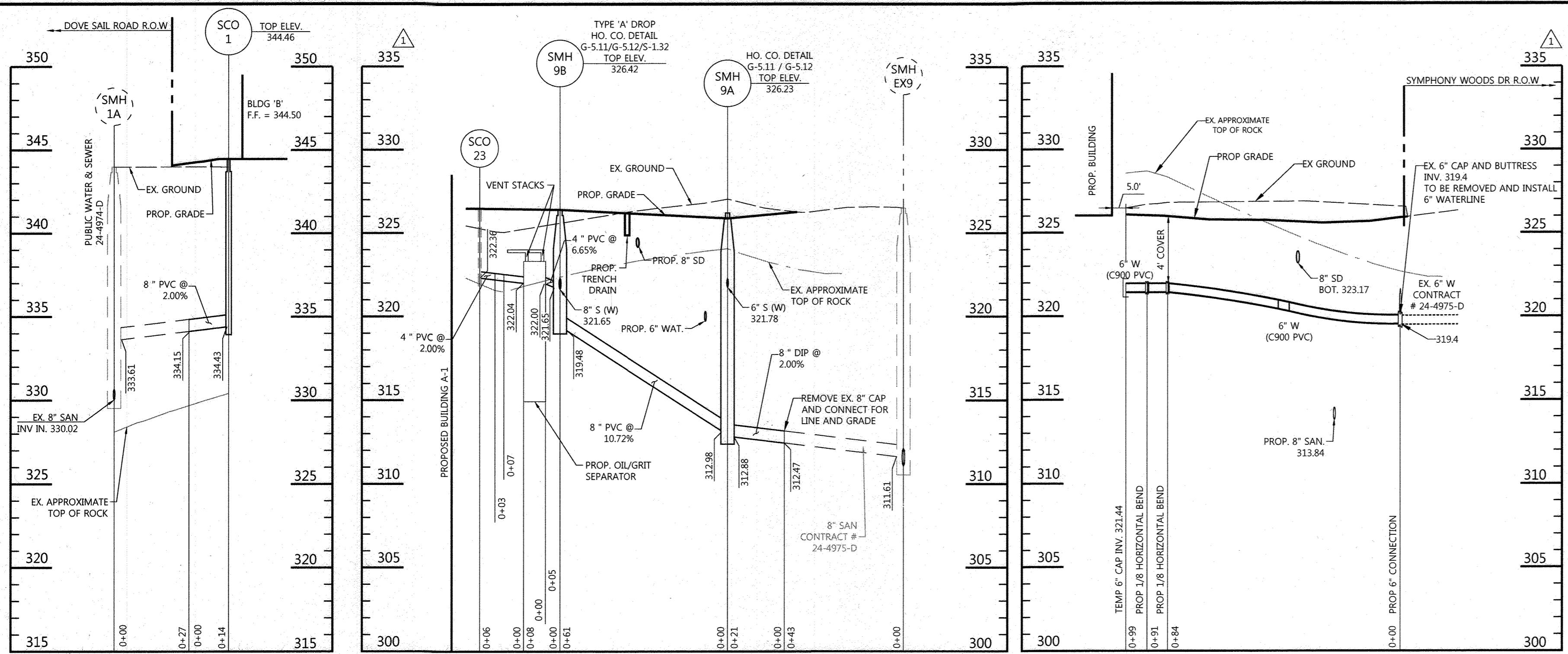
PROFESSIONAL ENGR. NO. 16928

DATE 11/16/20

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/20

DESIGNER: GDT/DM
SCALE: AS SHOWN
DATE: 5-10-18
APPROVED: MCB

PROJECT NO. 04038.B0
25 OF 94



07/31/20	UPDATE BLDG. 'B' USAGES, SQUARE FOOTAGES & PARKING REQUIREMENTS AND BLDG. E-2 DOORS, HARDSCAPE & DUNSTER LOCATION.
11/18/19	ADDED BLDG E-3 TO GROUND HYD. PROF. & SCO-4 TO BLDG E-3 PROF.
03/06/19	BLDG E2, E3, PLAZA HARDSCAPE, AND GRADING
12/03/18	BUILDING A1 LOADING DOCK RECONFIGURATION AND GARAGE

Date	No.	Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

DW
DAFT MCCUNE WALKER INC

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

PROFESSIONAL ENGR. NO. 16928

DATE: 11/16/20

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chief, Development Engineering Division 11-30-20 DATE

Chief, Division of Land Development 12/14/20 DATE

Director 12-16-20 DATE

SCO-4 TO BLDG E-3 GREASE INTERCEPTOR
SCALE: HOR. 1"=30'
VERT. 1"=5'

SHC FOR EX SAN - BLDG E-2
SCALE: HOR. 1"=30'
VERT. 1"=5'

GREASE INTERCEPTOR - BLDG E-2
SCALE: HOR. 1"=30'
VERT. 1"=5'

WHC TO BLDG E-2
SCALE: HOR. 1"=30'
VERT. 1"=5'

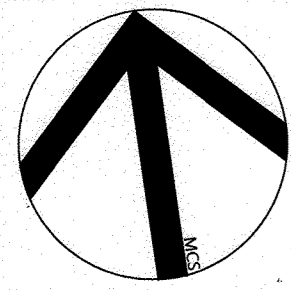
APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE: 11/16/17

DES. BY GDT/DM SCALE AS SHOWN Proj. No. 04038.80

DRN. BY MCJ DATE 5-10-18

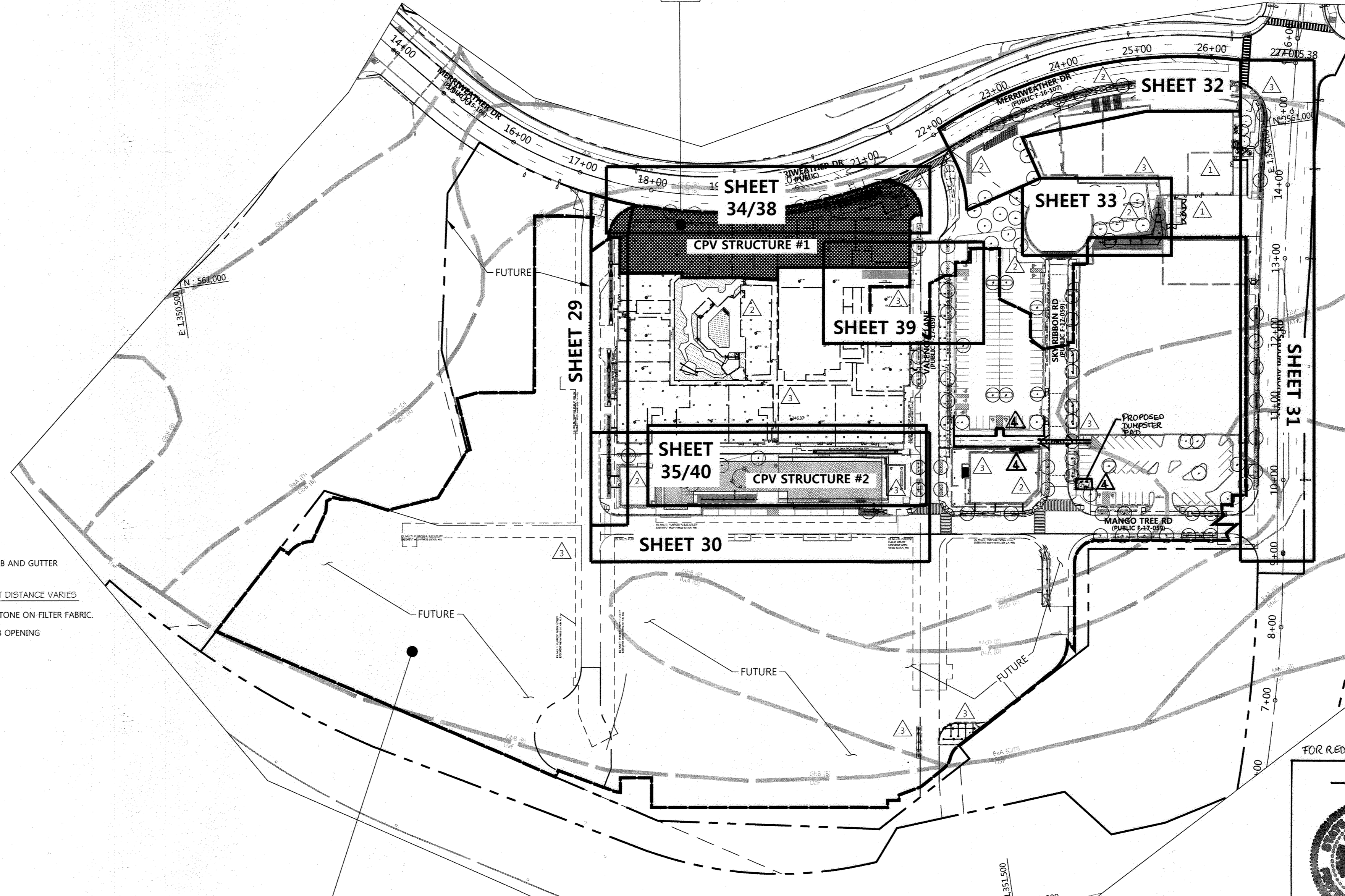
CHK. BY MCB Approved MCB 26 of 94



LEGEND

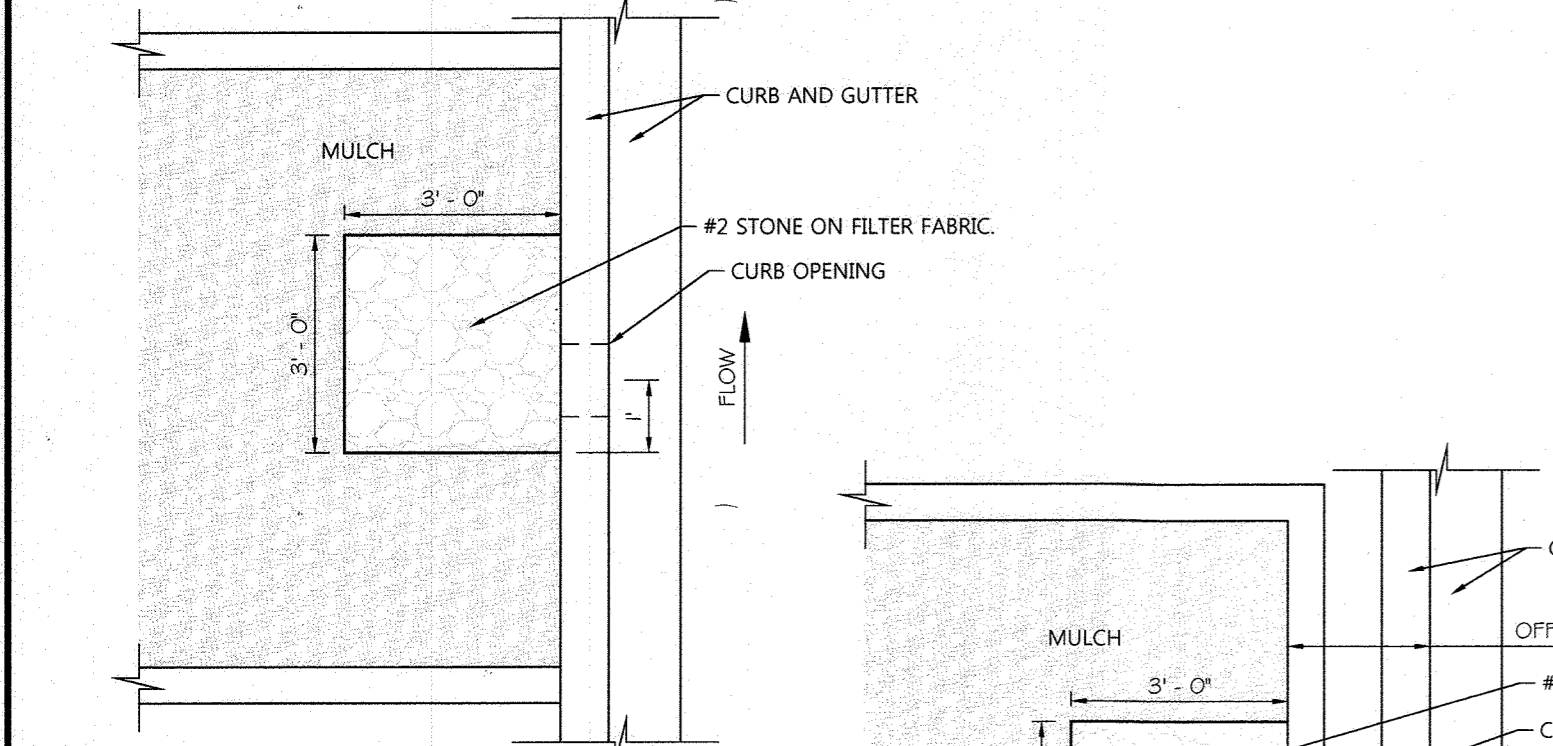
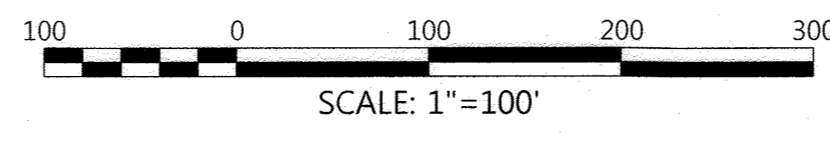
- LIMIT OF DISTURBANCE
- PROPERTY LINE
- PARCEL LINE
- EX. CONTOURS
- EX. SEWER
- EX. STORM DRAIN
- EX. WATER
- EX. TREELINE
- PROP. BUILDING
- PROP. CURB
- PROP. CONTOURS
- PROP. EASEMENT
- PROP. SEWER
- PROP. STORM DRAIN
- PROP. WATER
- SOILS
- DRAINAGE AREA TO CPV1
- DRAINAGE AREA TO CPV2
- PROP STREET LIGHT
- FIRE HYDRANT

D.A. = 0.86 Ac.
0.0013 Sq. Mi. CPv #1 RCN - 98
TC = 0.10 Hr.

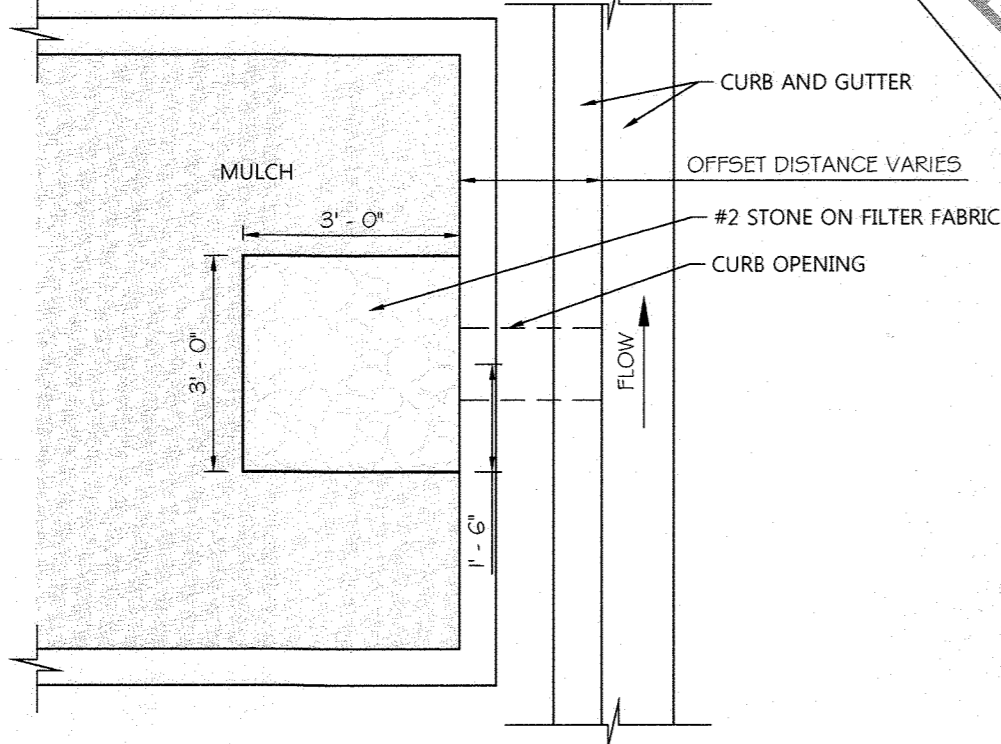


D.A. = 16.30 Ac.
0.0255 Sq. Mi. CPv #2 RCN - 96
TC = 0.10 Hr.

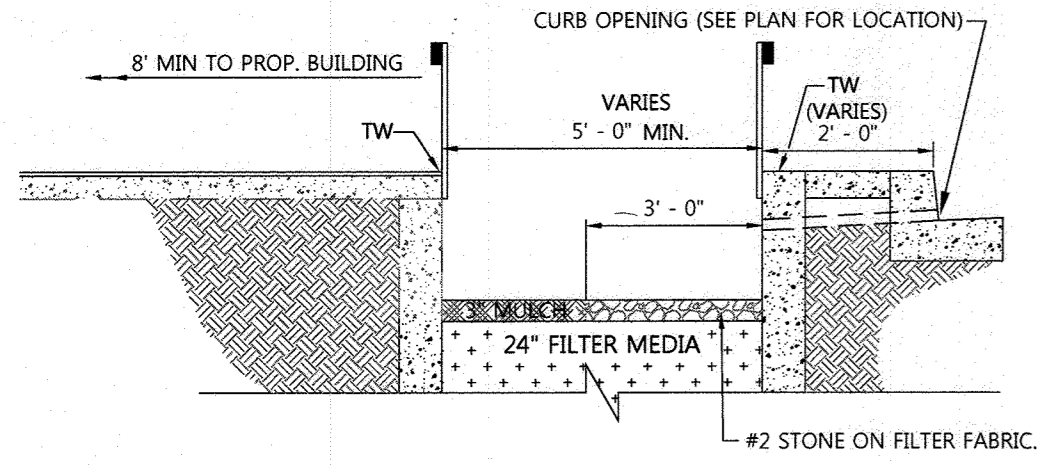
PLAN VIEW



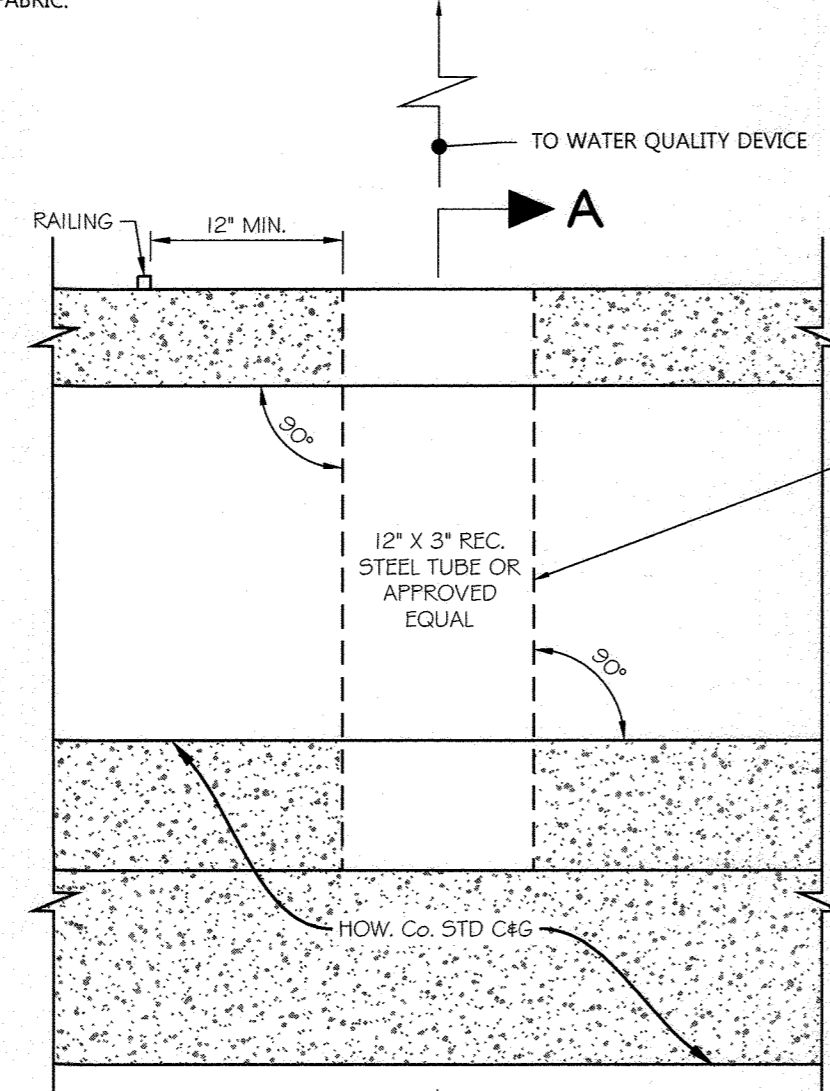
DIRECT DISCHARGE INTO (M-6) FACILITY
N.T.S.



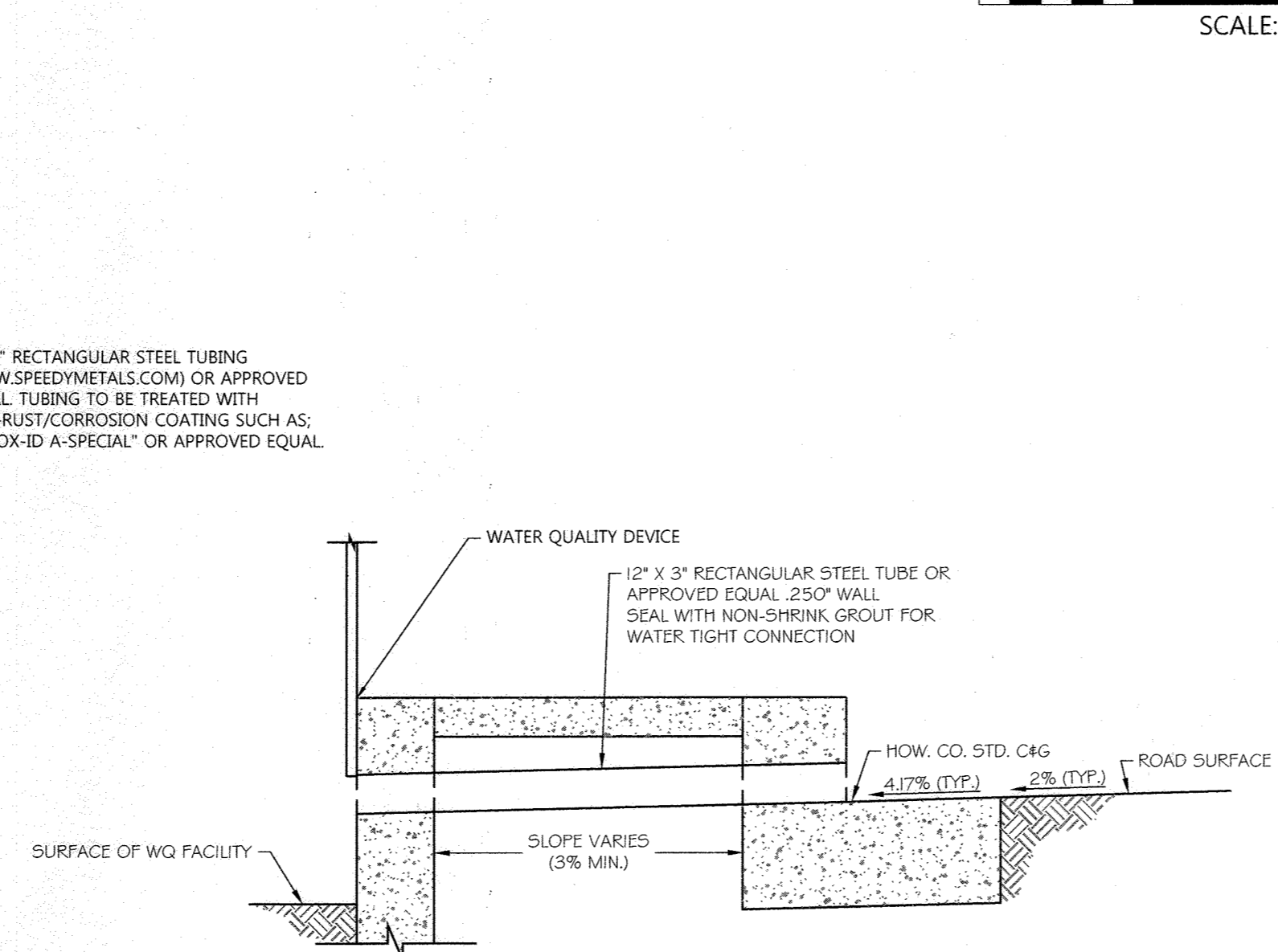
OFFSET DISCHARGE INTO (M-6) FACILITY
N.T.S.



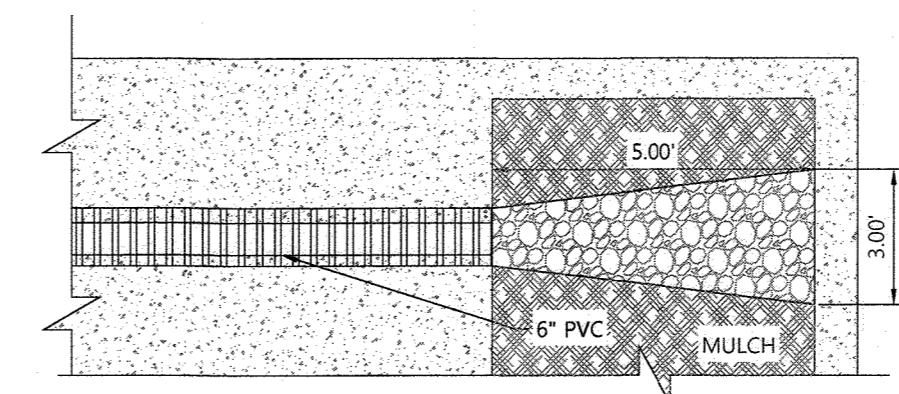
PROFILE VIEW
N.T.S.



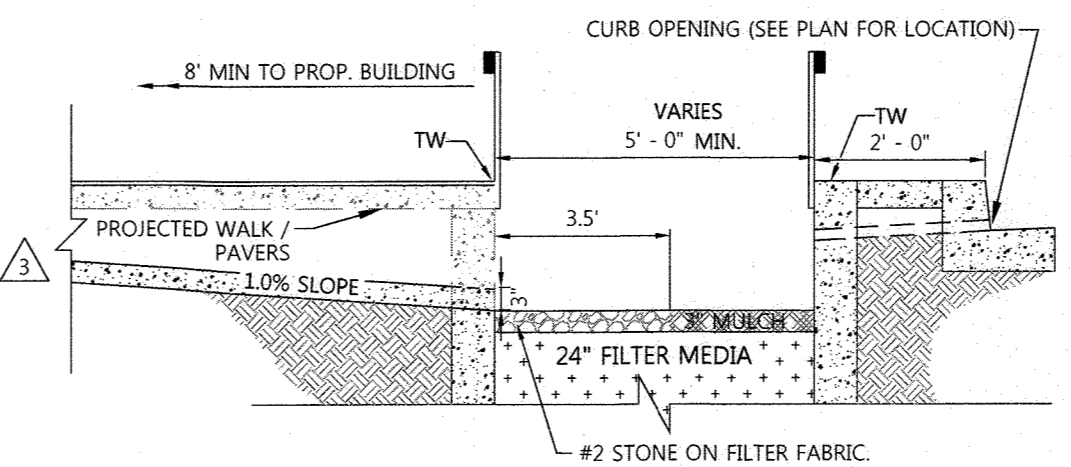
CURB OPENING DETAIL
N.T.S.



SECTION A-A
N.T.S.



PLAN VIEW
N.T.S.

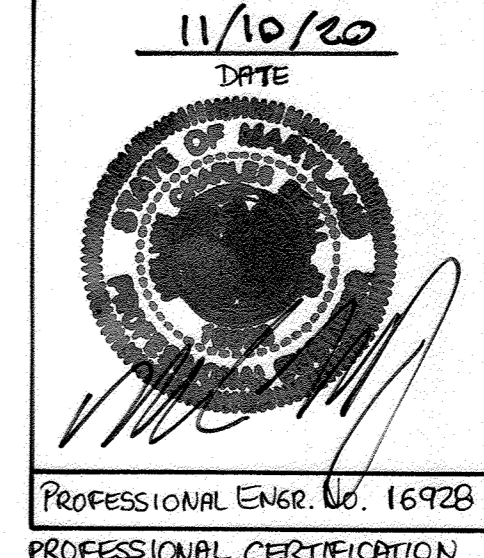


PROFILE VIEW
N.T.S.

ROOF DRAIN INFLOW PROTECTION DETAIL

SDP-17-027	Channel Protection Volume (CPV):	CPV Storage = 77,585.51 c.f. Required
	Recharge Volume (Rev):	Rev Storage = 10,541.52 c.f. Required
PRIVATE Area CPV1 Detention Storage & 10yr. Frequency Safe Passage		
Underground Storage Facility - Manufacturer to be Determined		
	30' x 10' x 6.50' =	5,414.00 c.f.
(No Recharge under this facility)		
SDP-17-027		
PRIVATE Area CPV2 Detention Storage for 1yr. Frequency Only (10yr. Split Out)		
Underground Storage Facility - Manufacturer to be Determined		
	17,000 sq. footprint x 7.0' Depth	100,797.68 c.f.
Recharge Provided Under Private Area		
	(Stone Reservoir - 17,000 sq. ft x 18.75" Depth x 0.4 void) =	10625.00 c.f.
Total CPV Provided Volume Storage =		106,211.68 c.f.
Total Rev Provided Volume Storage =		10,625.00 c.f.

FOR REDLINE REVISION 4 ONLY

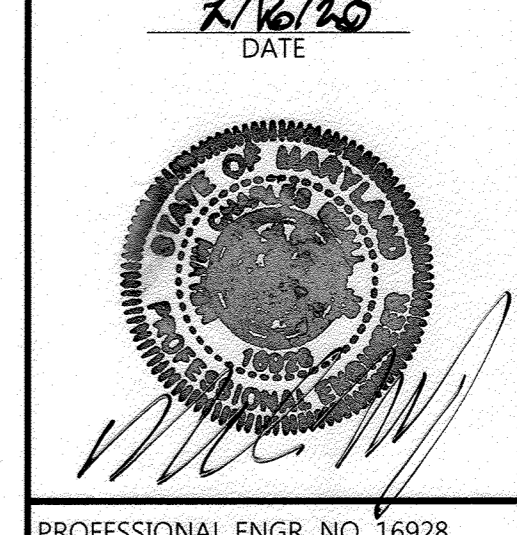


I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16928, EXPIRATION DATE 05/13/2022.

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESENT-1, FDP-DC-CRESENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.

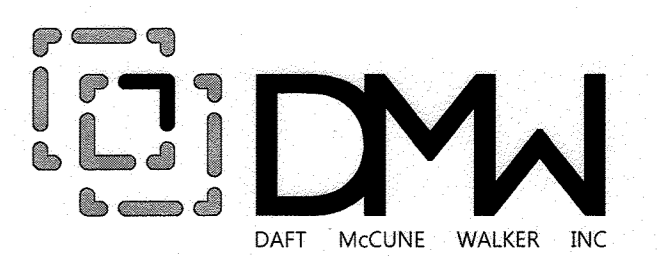


APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/20

Date	No.	Revision Description
11/20/20	1	UPDATE BLDG #1 USAGES, GRADING FOOTINGS & PARKING REQUIREMENTS AND BLDG #2 COCKS, HARDSCAPE & DUMPSTER LOCATIONS
11/18/19	2	BLDG #3 UTILITIES, PARK AREA GRADING AND REVISED SWM MB14 & 15 LOCATION
03/01/19	3	BLDG #2, E3, PLAZA HARDSCAPE AND GRADING
12/03/18	4	BLDG #1 LOADING DOCK CONFIGURATION AND GARAGE

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286		P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	2881	
PLAT OR DEED	TAX ZONING MAP	SUBJECT DISTRICT	
24623-24630	7	36	
WATER CODE	SEWER CODE	STAGE	605602
550	LITTLE PATUXENT	1	

TITLE		
STORMWATER MANAGEMENT KEY SHEET (CPV) CHANNEL PROTECTION DRAINAGE AREA MAP REVISED SITE DEVELOPMENT PLAN		
Des. By	GDT/DM	SCALE AS SHOWN
Drn. By	MCJ	Date 5-10-18
Chk. By	MCB	Approved MCB
		Proj. No. 04038.B0
		27 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 2-28-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 3/6/2020
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 3-10-2020
DIRECTOR DATE

ESD TYPES: (M-6) MICRO-BIORETENTION			
(M-6)-DA 11 Facilities MB11, MB12 & MB13	Drainage Area: SWM 11 3P(s) 925 s.f. Surface Area WQv = 1,233 c.f. Treated AI = 20,349 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.01 inches
(M-6)-DA 12 Facilities MB9 & MB10	Drainage Area: SWM 12 2P(s) 575 s.f. Surface Area WQv = 767 c.f. Treated AI = 12,097 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.05 inches
(M-6)-DA 28 Facilities MB35, MB36, MB37, & Part of MB38	Drainage Area: SWM 28 4P(s) 725 s.f. Surface Area WQv = 972 c.f. Treated AI = 16,136 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.00 inches
(M-6)-DA 29 Facilities MB30, MB31, MB32, MB33 & MB34	Drainage Area: SWM 29 5P(s) 900 s.f. Surface Area WQv = 1,200 c.f. Treated AI = 19,812 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.01 inches
(M-6)-DA 30 Facility MB42	Drainage Area: SWM 30 4P(s) 1,548 s.f. Surface Area WQv = 1,548 c.f. Treated AI = 20,596 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.25 inches
(M-6)-DA 31 Facility MB43	Drainage Area: SWM 31 1P(s) 795 s.f. Surface Area WQv = 795 c.f. Treated AI = 10,588 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.25 inches
(M-6)-DA 32b Facilities MB26, MB27, MB28, & MB29	Drainage Area: SWM 32b 4P(s) 475 s.f. Surface Area WQv = 633 c.f. Treated AI = 7,585 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.39 inches
(M-6)-DA 35 Facilities MB14 & MB15	Drainage Area: SWM 35 2P(s) 925 s.f. Surface Area WQv = 1,233 c.f. Treated AI = 19,307 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.09 inches
(M-6)-DA 39 Facilities Part of MB38, MB39, & MB40	Drainage Area: SWM 39 3P(s) 475 s.f. Surface Area WQv = 633 c.f. Treated AI = 10,152 c.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.04 inches

ESD TYPES: (M-6) MICRO-BIORETENTION - CONTECH STORMFILTER			
StormFilter #1: PRIVATE SDR-17-027	Drainage Area: SWM 13 WQv = 2,410 c.f. Treated AI = 40,041 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.00 inches
StormFilter #2: PRIVATE SDR-17-027	Drainage Area: SWM 14 WQv = 2,340 c.f. Treated AI = 38,349 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.00 inches
StormFilter #3: PRIVATE SDR-17-027	Drainage Area: SWM 15 WQv = 2,308 c.f. Treated AI = 38,390 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.00 inches

ESD TYPES: (M-6) MICRO-BIORETENTION - STORMCEPTORS			
Stormceptor #3: PRIVATE SDR-17-027	Drainage Area: SWM 38 WQv = 3,327 c.f. Treated AI = 42,031 s.f. Treated	Required WQv PE Provided WQv PE	1.00 inches 1.00 inches

(M-6) MICRO-BIORETENTION MODULAR FACILITY SEQUENCE OF CONSTRUCTION

- ONCE CONTRIBUTING DRAINAGE AREAS TO FACILITIES HAVE BEEN STABILIZED, EXCAVATE TO SUB-GRADE. SPECIAL CARE SHOULD BE TAKEN NOT TO DAMAGE THE NEWLY CONSTRUCTED STORM DRAIN OVERFLOW INLET AND ASSOCIATED OUTFALL PIPES.
- ONCE VERIFIED SUB-GRADES HAVE BEEN ESTABLISHED, INSTALL CONTAINMENT WALL FOOTING AND WALL SYSTEM.
- PLACE REQUIRED DEPTH OF GRAVEL JACKET OF NO.57 OR NO. 6 AGGREGATE IN BOTTOM OF EXCAVATION UP TO INVERT OF UNDERDRAIN & OVERFLOW PIPES.
- INSTALL UNDERDRAINS AND ASSOCIATED PARTS & TIE PIPES TO INLET WALLS AT THEIR PRESCRIBED INVERT ELEVATIONS.
- PLACE REMAINDER (10") OF THE 20" GRAVEL JACKET UNLESS OTHERWISE NOTED. CHECK FOR LEVELNESS.
- PLACE 2" PEA GRAVEL LAYER OVER GRAVEL JACKET.
- BACKFILL TOPSOIL FILTER MEDIA (TOTAL 24") IN LIFTS OF 12" TO 18". DO NOT COMPACT. INSTALL LANDSCAPE PLANTINGS.
- INSTALL RIP RAP INFLOW PROTECTION AT ALL CURB OPENING * ROOF DRAIN INFLOW POINTS.
- ADD 3" MULCH AND STONE LAYER.

TABLE B.4.1 MATERIALS SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDENS & LANDSCAPE INFILTRATION

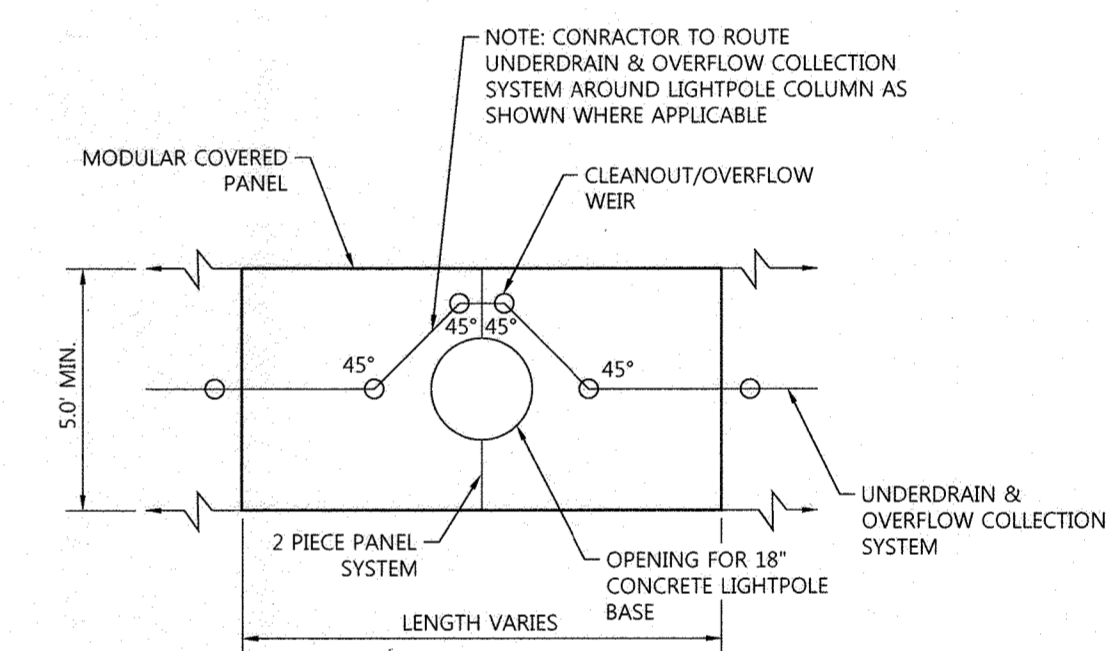
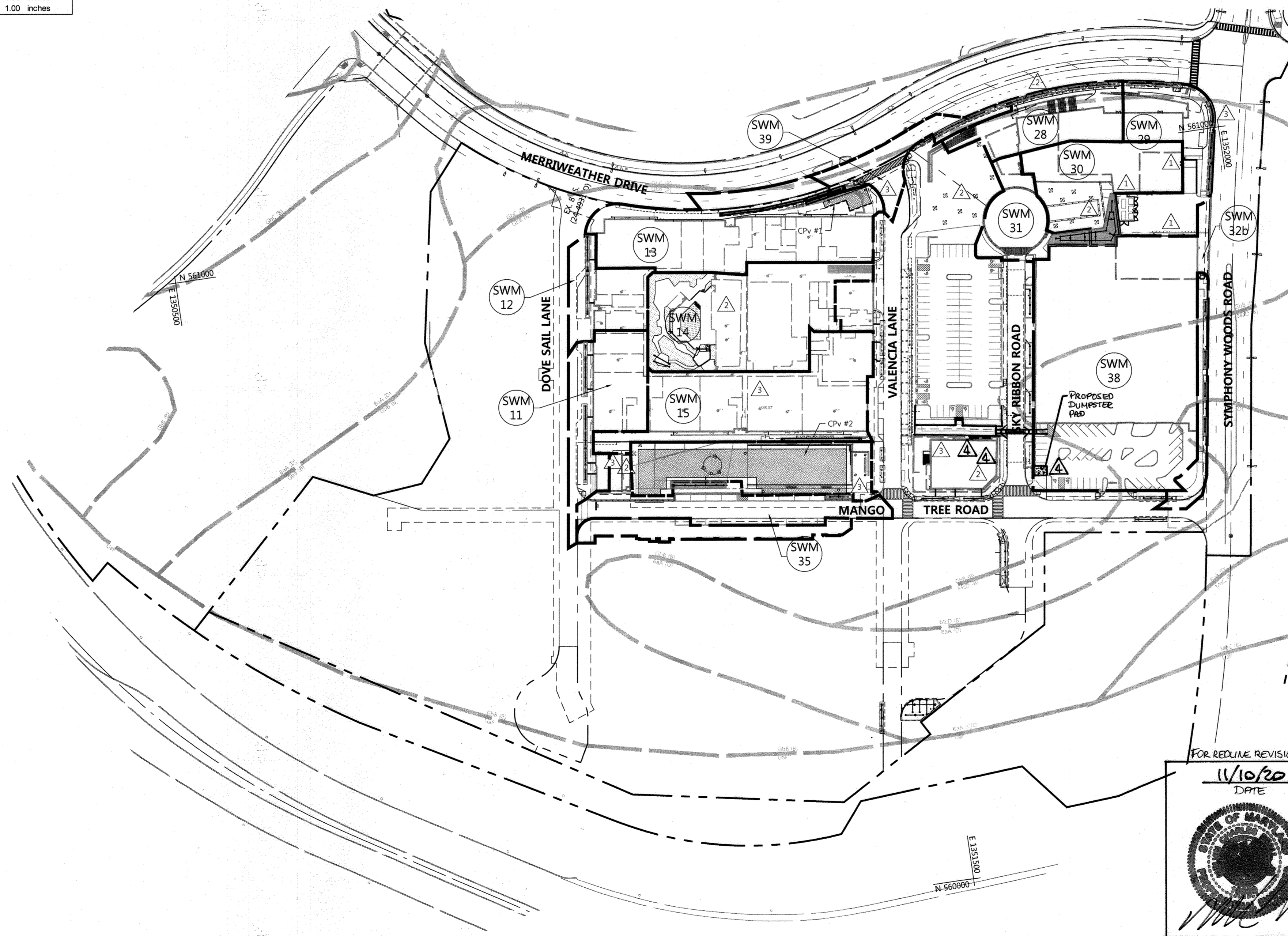
MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE APPENDIX A, TABLE A.4	N/A	PLANTINGS ARE SITE-SPECIFIC
PLANTING SOIL (2" TO 4" DEEP)	LOAMY SAND (60 - 65%) & COMPOST (35 - 40%) OR SANDY LOAM (30%), COARSE SAND (30%) & COMPOST (40%)	N/A	
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM D 2974)		
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
PEA GRAVEL DIAPHRAGM	PEA GRAVEL: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
CURTAIN DRAIN	ORNAMENTAL STONE: WASHED COBBLES	STONE: 2" TO 5"	
GEOTEXTILE		N/A	PE TYPE 1 NONWOVEN
GRAVEL (UNDERDRAINS AND INFILTRATION BERMS)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" TO 3/4")	
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR AASHTO M-278	6" RIGID SCHEDULE 40 PVC OR SDR35 UNLESS OTHERWISE NOTED	
POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 6 F'c = 4500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND - DESIGN TO INCLUDE MEETING ACI CODE 350.8/89; VERTICAL LOADING [H-10 OR H-20]; ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
SAND	AASHTO-M-6 OR ASTM-C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

LEGEND

- LIMIT OF DISTURBANCE
- - - - - PROPERTY LINE
- - - - - PARCEL LINE
- - - - - EX. CONTOURS
- - - - - EX. SEWER
- - - - - EX. STORM DRAIN
- - - - - EX. WATER
- - - - - EX. TREELINE
- - - - - PROP. BUILDING
- - - - - PROP. CURB
- - - - - PROP. CONTOURS
- - - - - PROP. EASEMENT
- - - - - PROP. SEWER
- - - - - PROP. STORM DRAIN
- - - - - PROP. WATER
- - - - - SOILS
- - - - - PROP. 100 YEAR FLOODPLAIN
- - - - - 2014/2015 RESTORATION BOUNDARY
- - - - - 2014/2015/2016 RESTORATION BOUNDARY
- - - - - PROP STREET LIGHT
- - - - - FIRE HYDRANT
- - - - - (M6) WATER QUALITY TREATMENT FACILITY
- - - - - EX (M6) WATER QUALITY TREATMENT FACILITY

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A-1.1 AND 2.
- THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED. THE OWNER SHALL INSPECT CONCRETE CONTAINMENT WALLS ANNUALLY. REPAIR AND PATCH CONTAINMENT WALLS AS NEEDED PER HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.
- PERIODICALLY REMOVE TRASH & DEBRIS AS IT ACCUMULATES.
- REMOVE AND REPLACE TOP FEW INCHES OF FILTER MEDIA WHEN WATER PONDS FOR MORE THAN 48 HRS.
- PRUNE AND REPLACE DEAD VEGETATION AS NECESSARY.
- WATER VEGETATION DURING DRY PERIODS.

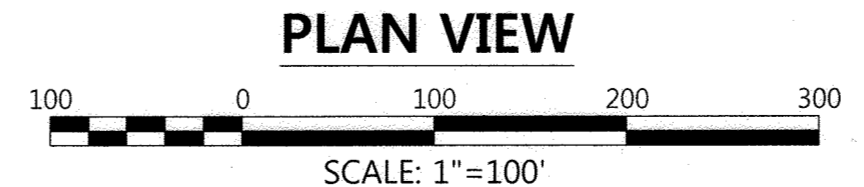


(M-6) MODULAR SWM FACILITY'S COVERED PANEL W/ LIGHTPOLE DETAIL
NOT TO SCALE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 2-28-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 3/6/2020
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 3-10-2020
 DIRECTOR DATE



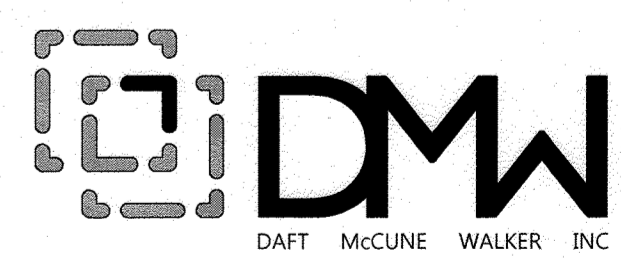
FOR REVIEW REVISION 4 ONLY
 11/10/20
 DATE
 [Signature]
 PROFESSIONAL ENGR. No. 16928
 PROFESSIONAL CERTIFICATION

2/10/20
 DATE
 [Signature]
 PROFESSIONAL ENGR. NO. 16928

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

Date	No.	Revision Description
11/18/19	1	UPDATE BLDG. #1 USAGES, SOILS, AND NOTES & PARCEL BOUNDARIES. ADD BLDG. #2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
03/06/19	2	BLDG E2, E3, PLAZA HARDSCAPE & GRADING
12/03/18	3	BLDG A1 LOADING DOCK RECONFIGURATION & GARAGE

DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14
 OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800



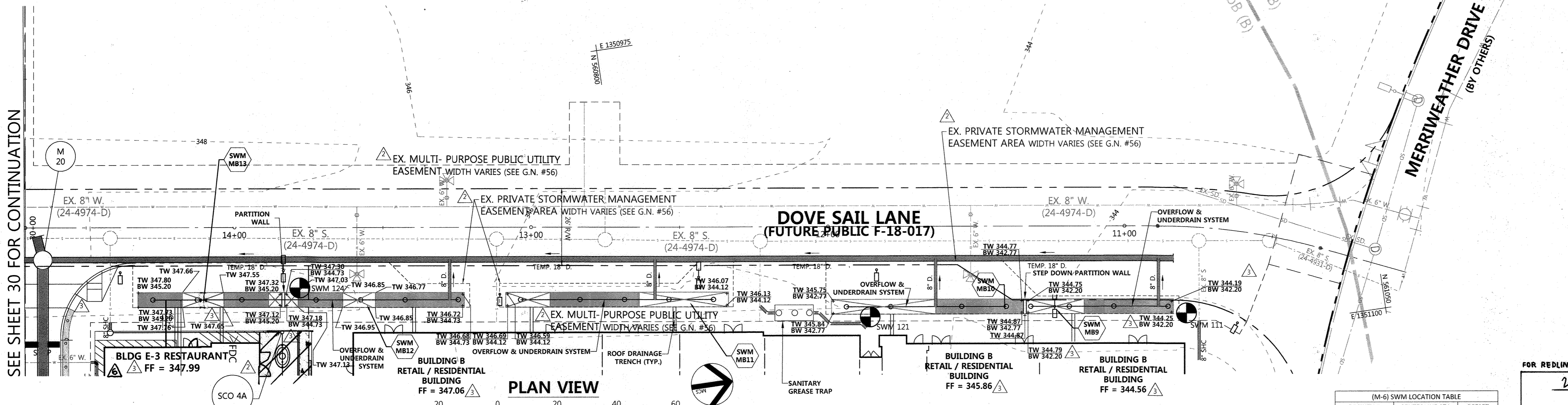
SUBDIVISION NAME	SECTION/AREA	OWNER/DEVELOPER	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION	PARCEL D
PLAT FOR DEED	TAX ZONING MAP	ELECT. DISTRICT	PERMIT NO.
24623-24630	7	36	5
WATER CODE	SEWER CODE	STAGE	605602
550	LITTLE PATUXENT	1	

TITLE: (WQv) STORMWATER MANAGEMENT
 DRAINAGE AREA MAP AND O&M SCHEDULES
 REVISED SITE DEVELOPMENT PLAN 3
 Des. By GDT/JM SCALE AS SHOWN Proj. No. 04038.B0
 Dwn. By MCB Date 5-10-18
 Chk. By MCB Approved MCB 28 of 94

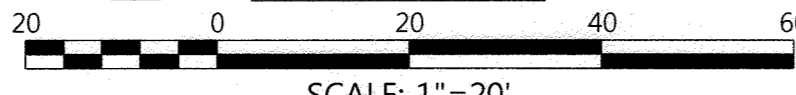
LEGEND

- LIMIT OF DISTURBANCE
- - - - - PROPERTY LINE
- - - - - PARCEL LINE
- - - - - EX. CONTOURS
- - - - - EX. SEWER
- - - - - EX. STORM DRAIN
- - - - - EX. WATER
- - - - - EX. TREELINE
- - - - - PROP. BUILDING
- - - - - PROP. CURB
- - - - - PROP. CONTOURS
- - - - - PROP. EASEMENT
- - - - - PROP. SEWER
- - - - - PROP. STORM DRAIN
- - - - - PROP. WATER
- - - - - SOILS
- - - - - PROP. 100 YEAR FLOODPLAIN
- - - - - PROP STREET LIGHT
- - - - - FIRE HYDRANT
- - - - - (M-6) WATER QUALITY TREATMENT FACILITY
- - - - - SOIL BORING
- - - - - PLANTER (NON-SWM)

SEE SHEET 30 FOR CONTINUATION



PLAN VIEW



(M-6) SWM LOCATION TABLE

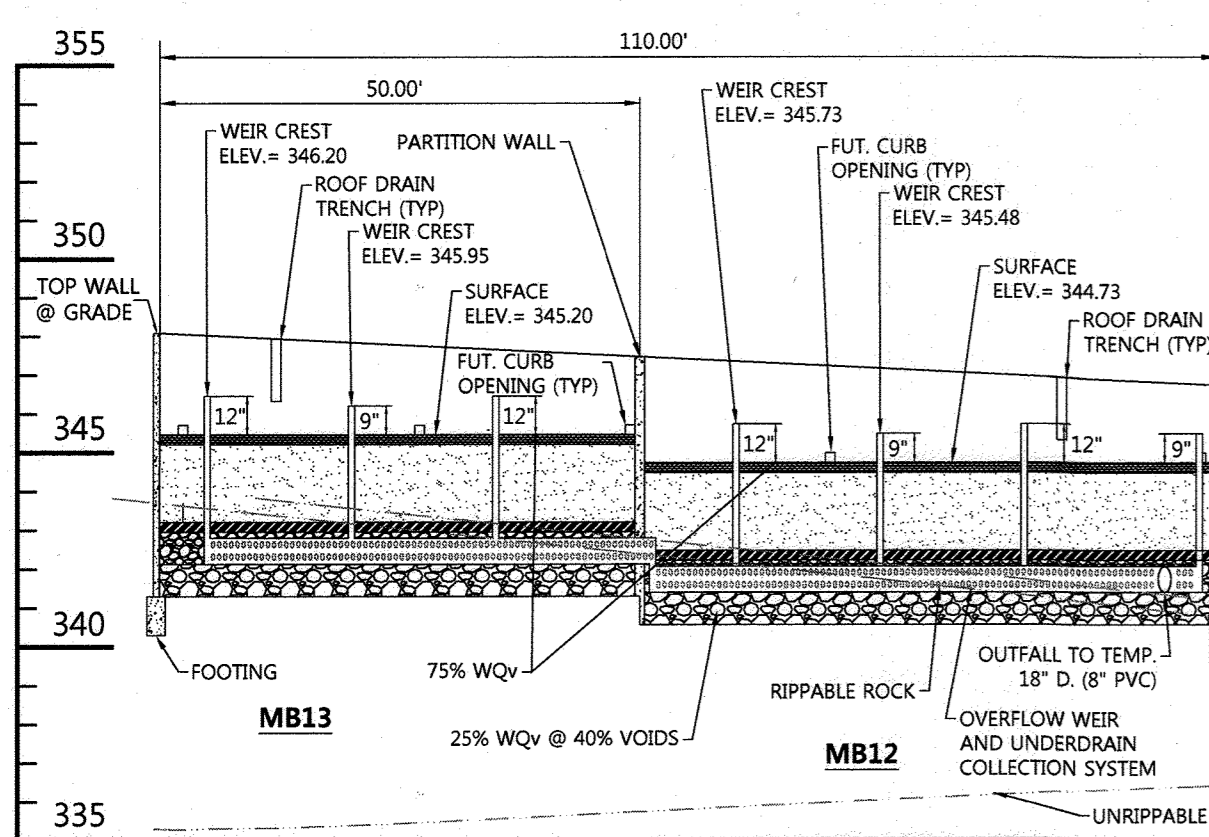
FACILITY #	CENTERLINE STA.	OFFSET
MB9 TO MB10	10+82.90	24.6'
MB9 TO MB10	10+82.90	29.6'
MB9 TO MB10	11+98.80	24.6'
MB9 TO MB10	11+98.80	29.6'
MB11	12+33.60	22'
MB11	12+33.60	27'
MB11	13+08.60	22'
MB11	13+08.60	27'
MB12 TO MB13	13+22.60	22'
MB12 TO MB13	13+22.60	27'
MB12 TO MB13	14+32.50	22'
MB12 TO MB13	14+32.50	27'

FOR REDLINE REVISION 6 ONLY

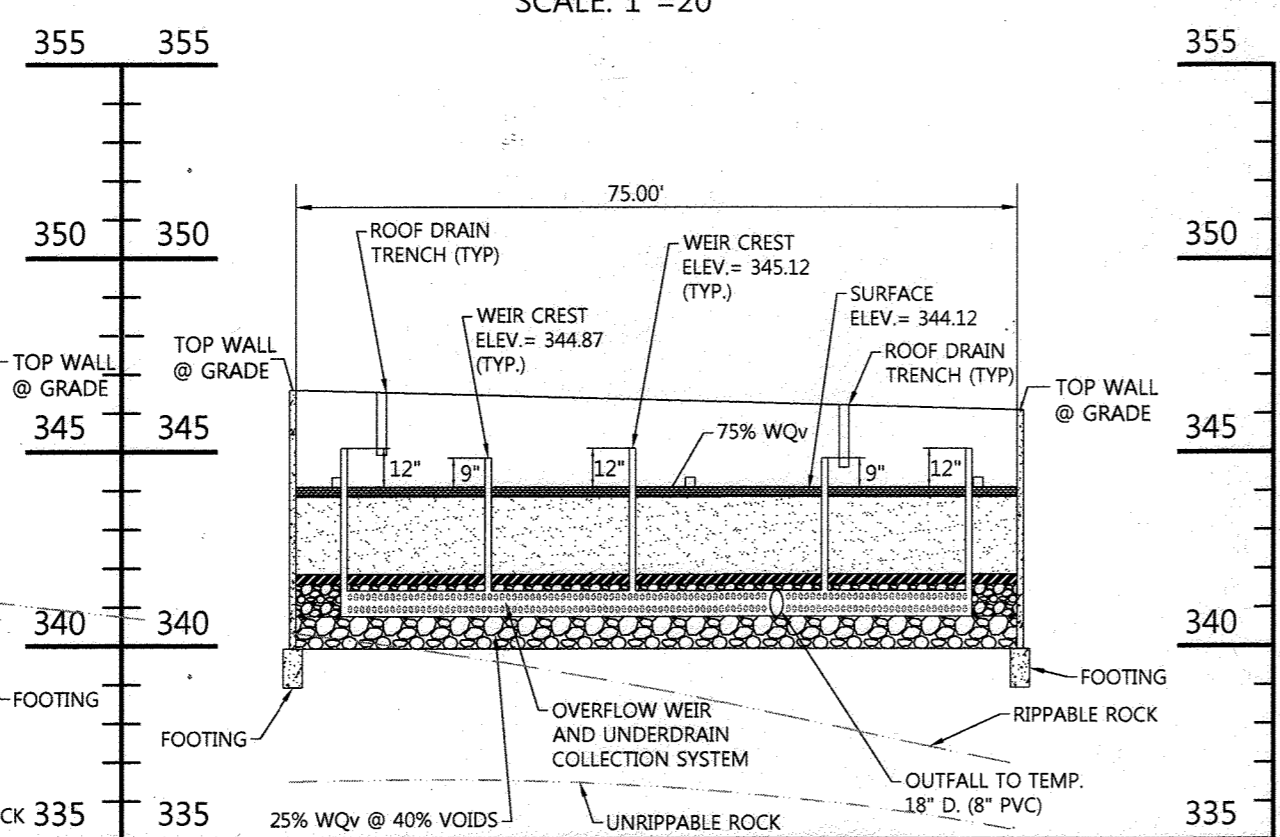
2-21-22
DATE

PROFESSIONAL ENGR. NO. 26364

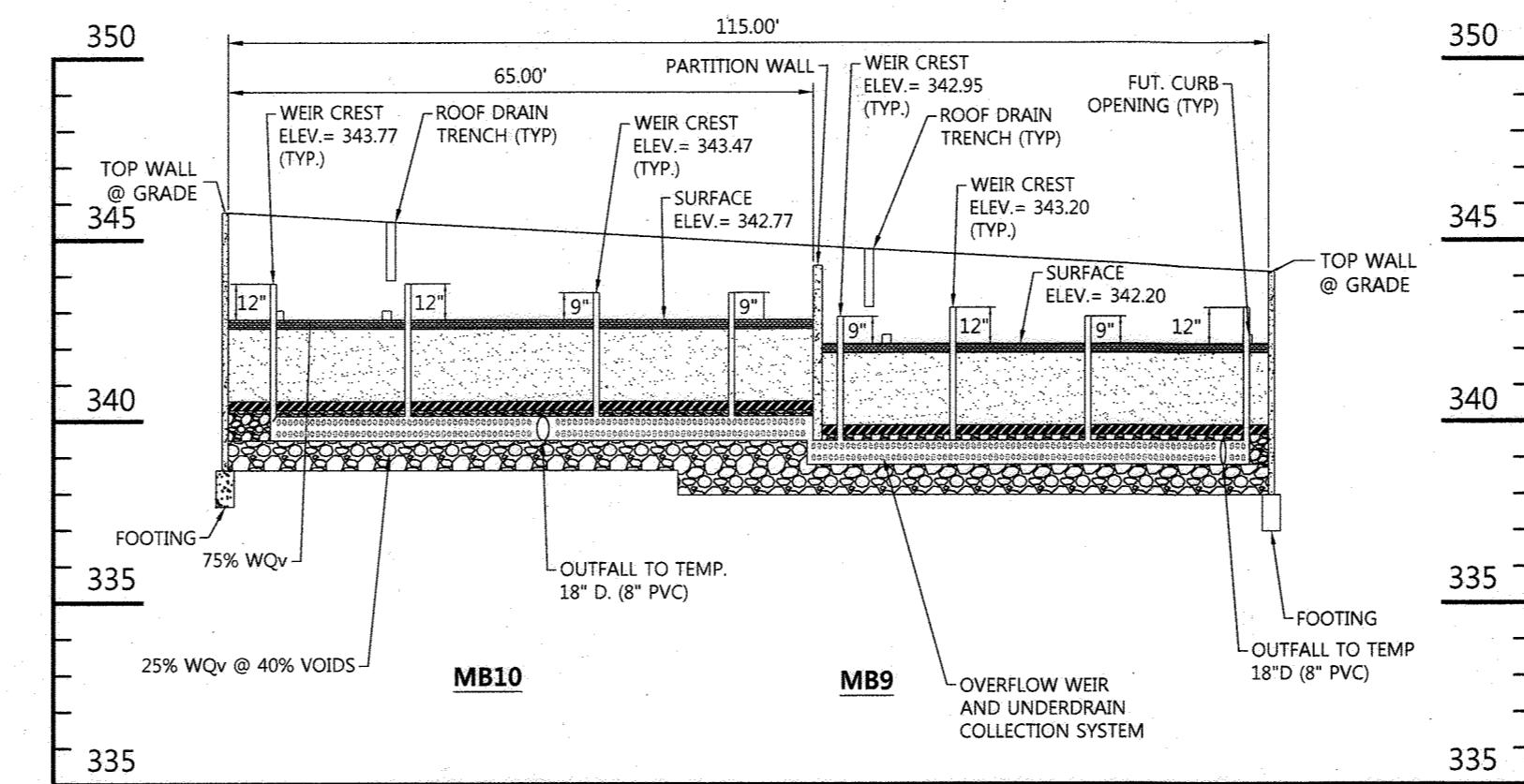
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 26364, EXPIRATION DATE: 07/19/2023



(M-6) MB13 & MB12 SWM PROFILE

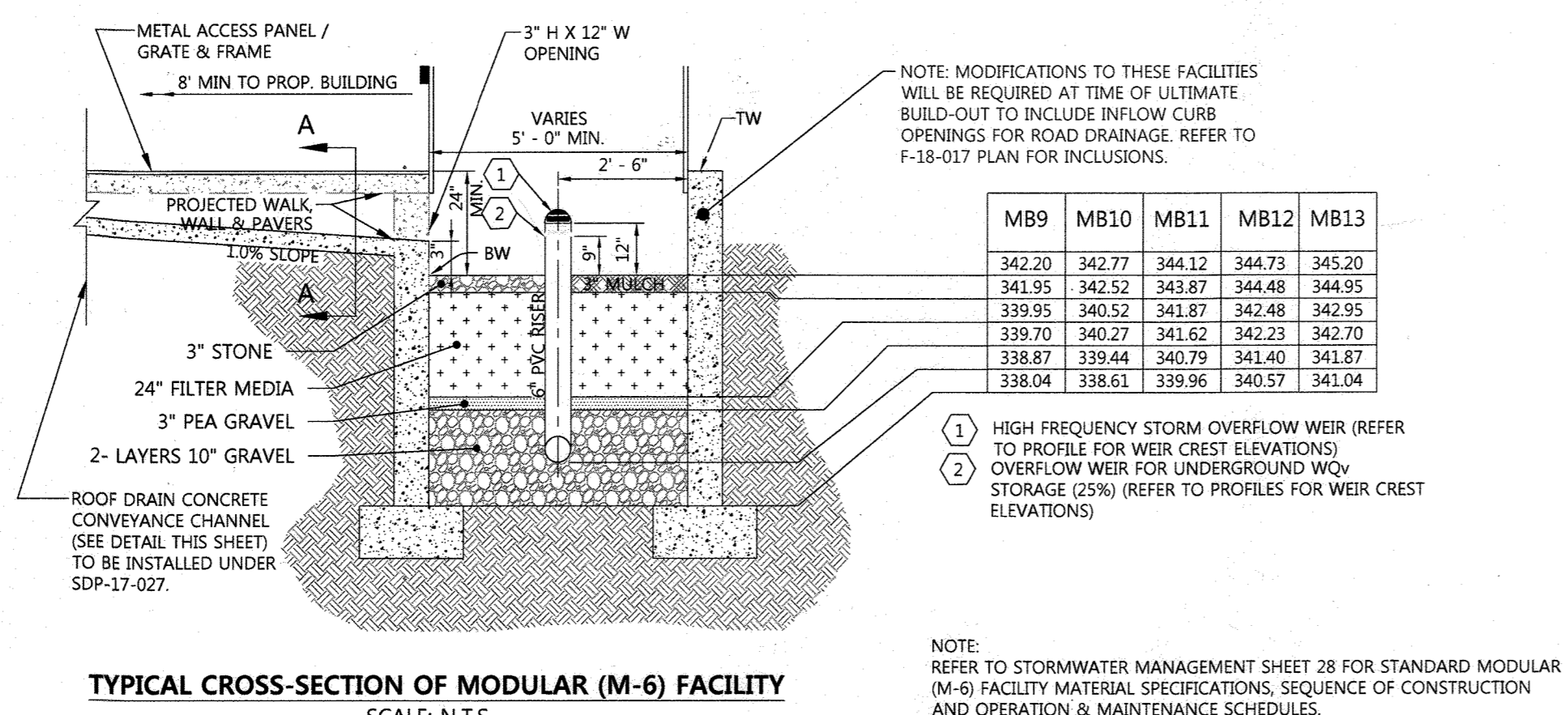


(M-6) MB11 SWM PROFILE



(M-6) MB9 & MB10 SWM PROFILE

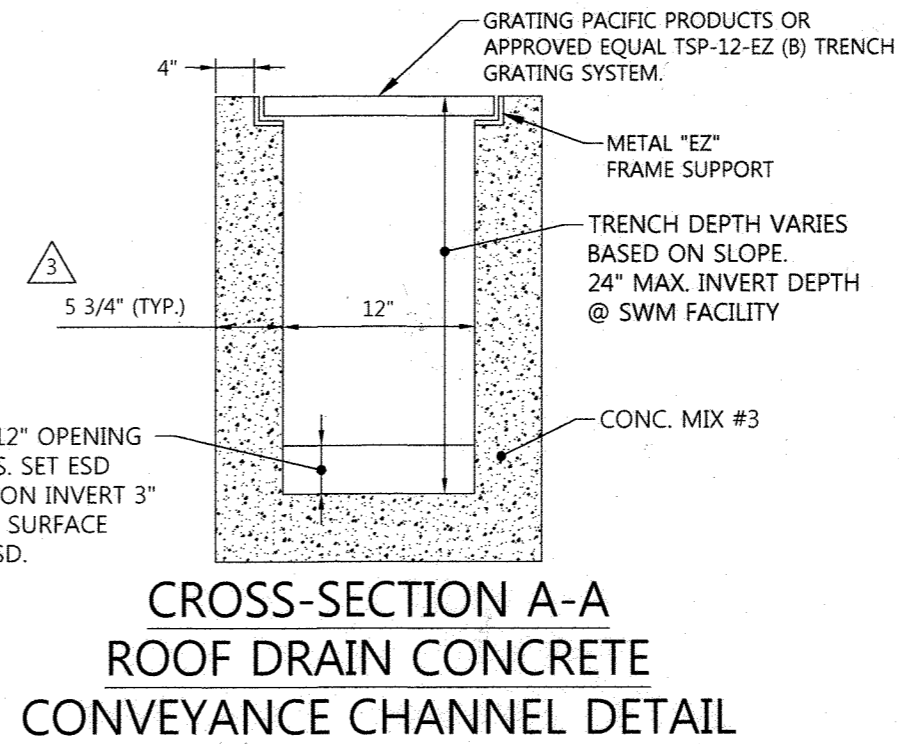
- NOTE:**
- FOR DETAIL ON THE TYPE OF COVER OVER THE WATER QUALITY FACILITIES SEE HARDSCAPE PLANS
 - SEE STRUCTURAL SHEET 83 FOR MODULAR (M-6) FACILITY AND SUPPORT DETAIL OF SWM HARDSCAPE COVER
 - ESD MODULAR (M-6) FACILITIES ARE 5' WIDTH UNLESS OTHER WISE NOTED. SEE ESD PROFILES FOR LENGTH
 - REFER TO STORMWATER MANAGEMENT DRAINAGE AREA SHEET 28 FOR (M-6) MICROBIORETENTION MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION AND OPERATION AND MAINTENANCE SCHEDULES.



TYPICAL CROSS-SECTION A-A OF MODULAR (M-6) FACILITY

	MB9	MB10	MB11	MB12	MB13
WEIR CREST ELEV.	342.20	342.77	344.12	344.73	345.20
WEIR CREST ELEV.	341.95	342.52	343.87	344.48	344.95
WEIR CREST ELEV.	339.95	340.52	341.87	342.48	342.95
WEIR CREST ELEV.	339.70	340.27	341.62	342.23	342.70
WEIR CREST ELEV.	338.87	339.44	340.79	341.40	341.87
WEIR CREST ELEV.	338.04	338.61	339.96	340.57	341.04

- EASEMENT NOTE:**
- MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
- WATER
 - SEWER
 - STREET LIGHTING
 - STORM WATER MANAGEMENT
 - STORM DRAIN
 - UTILITY



CROSS-SECTION A-A ROOF DRAIN CONCRETE CONVEYANCE CHANNEL DETAIL

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chad Chubb
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 2-23-20

J. L. [Signature]
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 3/6/2020

Angie [Signature]
DIRECTOR
DATE: 3-10-2020

FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.

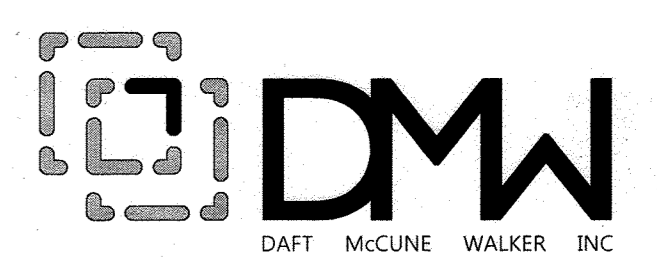
2/16/20
DATE

PROFESSIONAL ENGR. NO. 16928

Date	No.	Revision Description
11/15/21	1	UPDATE BUILDING E-3 FLOOR SPACE + HARDSCAPE
11/18/19	2	UPDATE HANDICAP RAMP, SHC AND WHC FOR BUILDING E-3
03/06/19	3	BLDG. E-2, E-3, PLAZA HARDSCAPE AND GRADING

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION/AREA	CROSSING/NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD		PARCEL D
PROPERTY ID	TAX ZONING MAP	ELECT. DISTRICT	CENSUS TRACT
24632-24630	7	36	5
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT		

TITLE (M-6) WQv STORMWATER MANAGEMENT PLAN
REVISED SITE DEVELOPMENT PLAN

Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.B0
Drn. By MCJ Date 5-10-18
Chk. By MCB Approved MCB

29 of 94

2/16/20

SEE SHEET 29 FOR CONTINUATION

BUILDING B
RETAIL / RESIDENTIAL
BUILDING
FF = 347.06

EX. PRIVATE STORMWATER MANAGEMENT
EASEMENT AREA WIDTH VARIES (SEE G.N. #56)

BUILDING B
RETAIL / RESIDENTIAL
BUILDING
FF = 346.37

BUILDING B
RETAIL / RESIDENTIAL
BUILDING
FF = 346.39

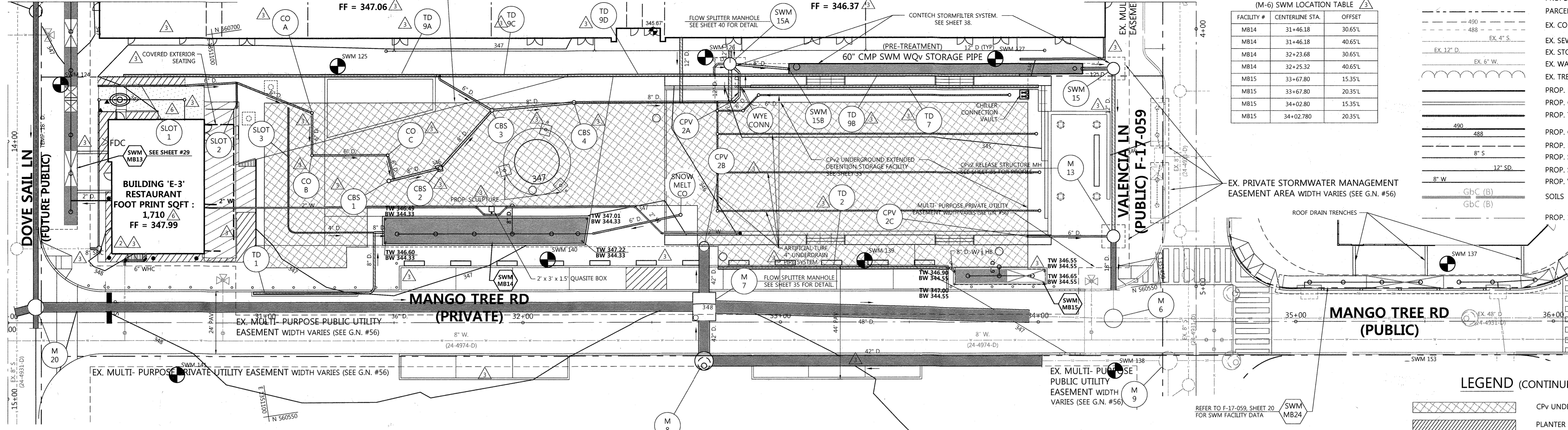
SEE PUBLIC PLANS F-17-059
FOR CONTINUATION

LEGEND

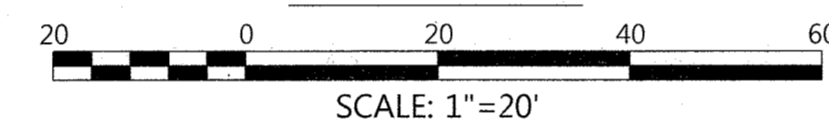
[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	PROPERTY LINE
[Symbol]	PARCEL LINE
[Symbol]	EX. CONTOURS
[Symbol]	EX. SEWER
[Symbol]	EX. STORM DRAIN
[Symbol]	EX. WATER
[Symbol]	EX. TREELINE
[Symbol]	PROP. BUILDING
[Symbol]	PROP. CURB
[Symbol]	PROP. TRENCH DRAIN
[Symbol]	PROP. CONTOURS
[Symbol]	PROP. EASEMENT
[Symbol]	PROP. SEWER
[Symbol]	PROP. STORM DRAIN
[Symbol]	PROP. WATER
[Symbol]	SOILS
[Symbol]	PROP. 100 YEAR FLOODPLAIN

(M-6) SWM LOCATION TABLE

FACILITY #	CENTERLINE STA.	OFFSET
MB14	31+46.18	30.65'L
MB14	31+46.18	40.65'L
MB14	32+23.68	30.65'L
MB14	32+25.32	40.65'L
MB15	33+67.80	15.35'L
MB15	33+67.80	20.35'L
MB15	34+02.80	15.35'L
MB15	34+02.780	20.35'L



PLAN VIEW



LEGEND (CONTINUED)

[Symbol]	CPV UNDERGROUND STORAGE
[Symbol]	PLANTER (NON-SWM)
[Symbol]	PROP. PLANTING
[Symbol]	PROP. SEATING AREA
[Symbol]	PROP. HARDSCAPE
[Symbol]	EX (M-6) WATER QUALITY TREATMENT FACILITY
[Symbol]	PROP STREET LIGHT
[Symbol]	FIRE HYDRANT
[Symbol]	(M-6) WATER QUALITY TREATMENT FACILITY
[Symbol]	SOIL BORING
[Symbol]	PROP. BOLLARD
[Symbol]	RAISED METAL PLANTERS (TYP. 12) REFER TO SHEET 55

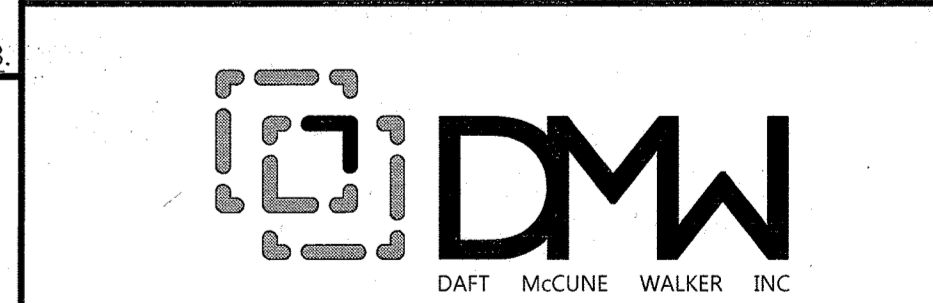
NOTES:

- FOR DETAIL ON THE TYPE OF COVER OVER THE WATER QUALITY FACILITIES SEE HARDSCAPE PLANS
- SEE STRUCTURAL SHEET 83 FOR MODULAR (M-6) FACILITY AND SUPPORT DETAIL OF SWM HARDSCAPE COVER
- ESD MODULAR (M-6) FACILITIES ARE 5' WIDTH UNLESS OTHERWISE NOTED. SEE ESD PROFILES FOR LENGTH
- REFER TO STORMWATER MANAGEMENT DRAINAGE AREA SHEET 28 FOR (M-6) MICROBIOTRETENTION MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION AND OPERATION AND MAINTENANCE SCHEDULES.

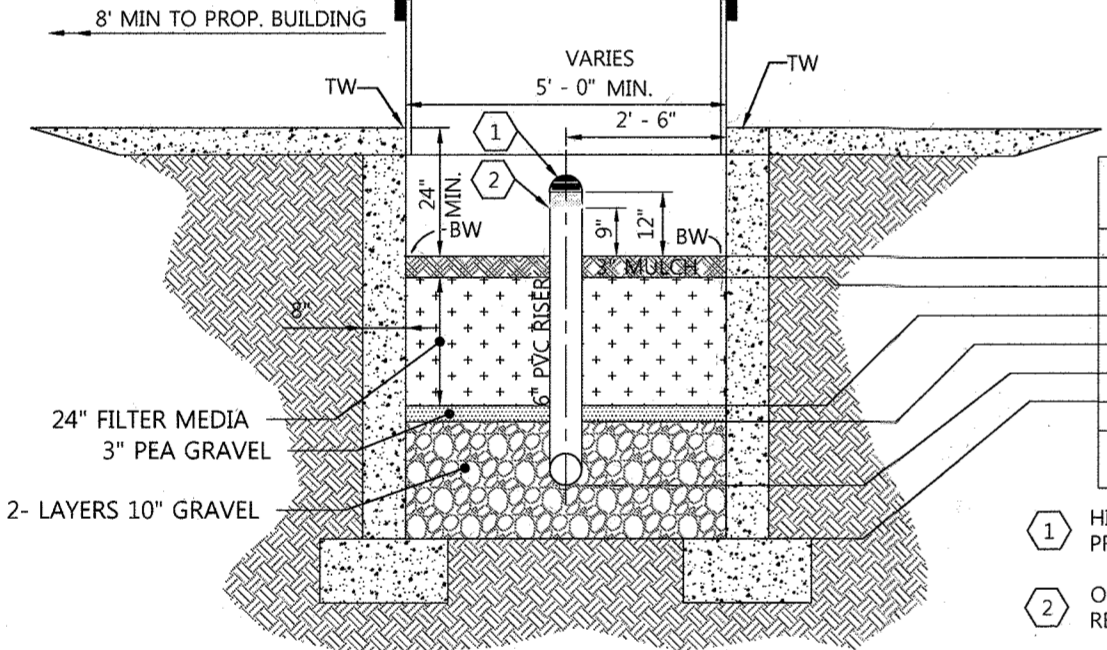
Date	No.	Revision Description
11/15/21	1	UPDATE BUILDING E-3 FLOOR SPACE AND HARDSCAPE
11/18/19	2	RELOCATE MB15 TO 5' NORTH, SHOW NEW 2" W. & 6" SNOW MELT PIPE. UPDATE MB14 & MB15 PROFILES
03/06/19	3	BLDG E-2, E-3 PLAZA HARDSCAPE & GRADING

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-1800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBDIVISION NAME: DOWNTOWN COLUMBIA	SECTION/AREA: CRESCENT NEIGHBORHOOD
PLAT OR LOT: 24623-24630	BLOCK #/ZONE: 7/DMA
WATER CODE: 550	SEWER CODE: LITTLE PATUXENT
TITLE: (M-6) WQV STORMWATER MANAGEMENT PLAN	REVISED SITE DEVELOPMENT PLAN
Des. By: GDT/DM	SCALE: AS SHOWN
Drn. By: MCJ	Date: 11-15-21
Chk. By:	Approved: MCB



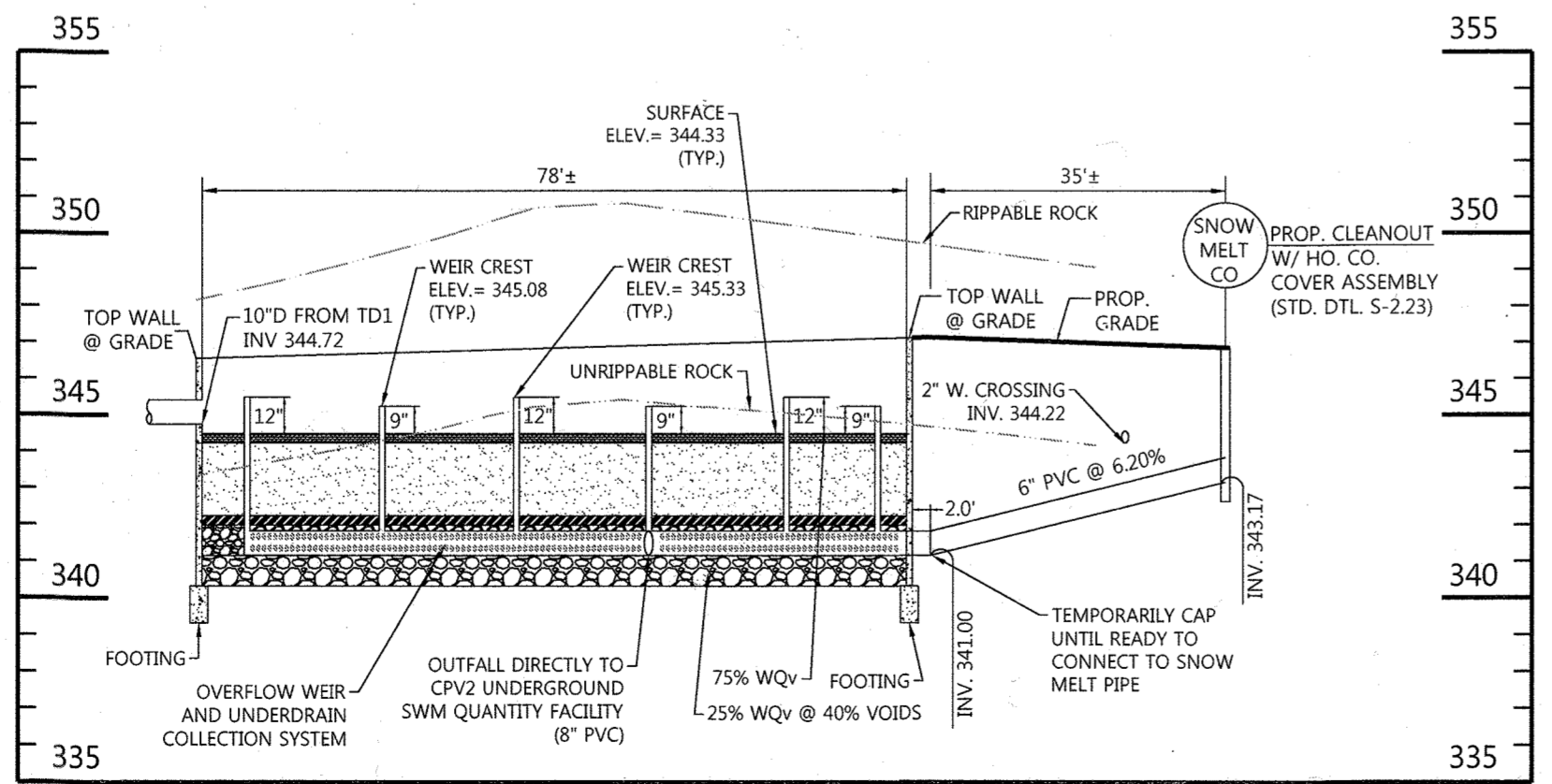
TYPICAL CROSS-SECTION OF MODULAR (M-6) FACILITY
SCALE: N.T.S.

MB14	MB15	WIDTH (FT)	STRUCTURE DETAIL #
344.33	344.55	5	4A8/4B/5-3
344.08	344.30	5	2A8/2B/5-3
342.08	342.30		
341.83	342.05		
341.00	341.22		
340.17	340.39		

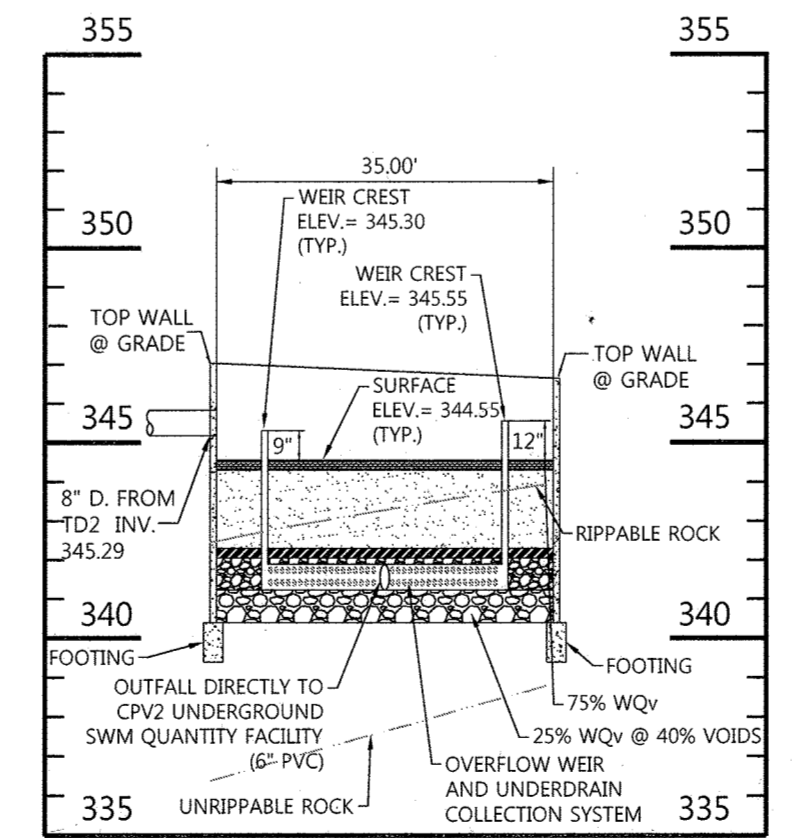
- HIGH FREQUENCY STORM OVERFLOW WEIR (REFER TO PROFILE FOR WEIR CREST ELEVATIONS)
 - OVERFLOW WEIR FOR UNDERGROUND WQV STORAGE (25%) REFER TO PROFILES FOR WEIR CREST ELEVATIONS
- NOTE:
REFER TO STORMWATER MANAGEMENT SHEET 28 FOR STANDARD MODULAR (M-6) FACILITY MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION AND OPERATION & MAINTENANCE SCHEDULES.

(M-6) SWM LOCATION TABLE

FACILITY #	CENTERLINE STA.	OFFSET
MB14	31+46.18	30.65'L
MB14	31+46.18	40.65'L
MB14	32+23.68	30.65'L
MB14	32+25.32	40.65'L
MB15	33+67.80	15.35'L
MB15	33+67.80	20.35'L
MB15	34+02.80	15.35'L
MB15	34+02.780	20.35'L



(M-6) MB14 SWM PROFILE
SCALE: HORIZ. 1"=20'; VERT. 1"=5'



(M-6) MB15 SWM PROFILE
SCALE: HORIZ. 1"=20'; VERT. 1"=5'

EASEMENT NOTE:
MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
• WATER
• SEWER
• STREET LIGHTING
• STORM WATER MANAGEMENT
• STORM DRAIN
• UTILITY

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
3/14/22
CHIEF, DEVELOPMENT ENGINEERING DIVISION

3/21/22
CHIEF, DIVISION OF LAND DEVELOPMENT

3-21-22
DIRECTOR

FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-2A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE: 07/18/2023.

2-16-2022
DATE

PROFESSIONAL ENGR. NO. 26569

APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: Nov 16, 2017

SEE SHEET 29 FOR CONTINUATION

**BUILDING B
RETAIL / RESIDENTIAL
BUILDING
FF = 347.06**

**BUILDING B
RETAIL / RESIDENTIAL
BUILDING
FF = 346.37**

**BUILDING B
RETAIL / RESIDENTIAL
BUILDING
FF = 346.39**

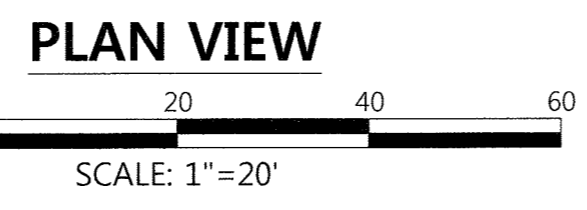
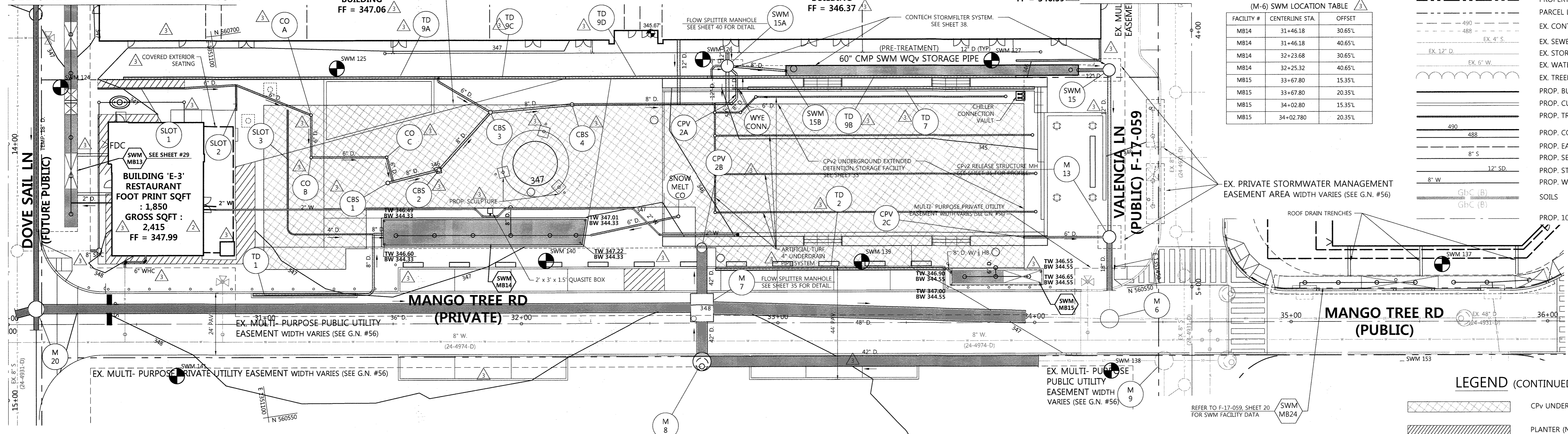
SEE PUBLIC PLANS F-17-059
FOR CONTINUATION

LEGEND

[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	PROPERTY LINE
[Symbol]	PARCEL LINE
[Symbol]	EX. CONTOURS
[Symbol]	EX. SEWER
[Symbol]	EX. STORM DRAIN
[Symbol]	EX. WATER
[Symbol]	EX. TREELINE
[Symbol]	PROP. BUILDING
[Symbol]	PROP. CURB
[Symbol]	PROP. TRENCH DRAIN
[Symbol]	PROP. CONTOURS
[Symbol]	PROP. EASEMENT
[Symbol]	PROP. SEWER
[Symbol]	PROP. STORM DRAIN
[Symbol]	PROP. WATER
[Symbol]	SOILS
[Symbol]	PROP. 100 YEAR FLOODPLAIN

(M-6) SWM LOCATION TABLE

FACILITY #	CENTERLINE STA.	OFFSET
MB14	31+46.18	30.65'L
MB14	31+46.18	40.65'L
MB14	32+23.68	30.65'L
MB14	32+25.32	40.65'L
MB15	33+67.80	15.35'L
MB15	33+67.80	20.35'L
MB15	34+02.80	15.35'L
MB15	34+02.780	20.35'L

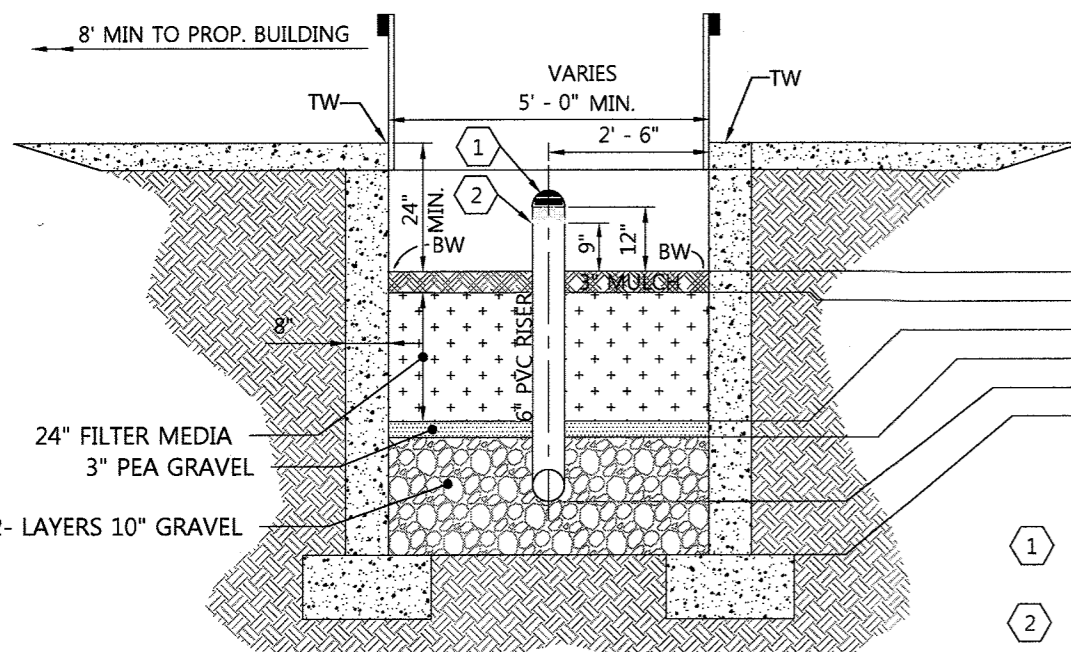


LEGEND (CONTINUED)

[Symbol]	CPV UNDERGROUND STORAGE
[Symbol]	PLANTER (NON-SWM)
[Symbol]	EX (M-6) WATER QUALITY TREATMENT FACILITY
[Symbol]	PROP STREET LIGHT
[Symbol]	FIRE HYDRANT
[Symbol]	(M-6) WATER QUALITY TREATMENT FACILITY
[Symbol]	SOIL BORING
[Symbol]	PROP. BOLLARD
[Symbol]	RAISED METAL PLANTERS (TYP. 12) REFER TO SHEET 55

NOTES:

- FOR DETAIL ON THE TYPE OF COVER OVER THE WATER QUALITY FACILITIES SEE HARDSCAPE PLANS
- SEE STRUCTURAL SHEET 83 FOR MODULAR (M-6) FACILITY AND SUPPORT DETAIL OF SWM HARDSCAPE COVER
- ESD MODULAR (M-6) FACILITIES ARE 5' WIDTH UNLESS OTHER WISE NOTED. SEE ESD PROFILES FOR LENGTH
- REFER TO STORMWATER MANAGEMENT DRAINAGE AREA SHEET 28 FOR (M-6) MICROBIORETENTION MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION AND OPERATION AND MAINTENANCE SCHEDULES.



TYPICAL CROSS-SECTION OF MODULAR (M-6) FACILITY
SCALE: N.T.S.

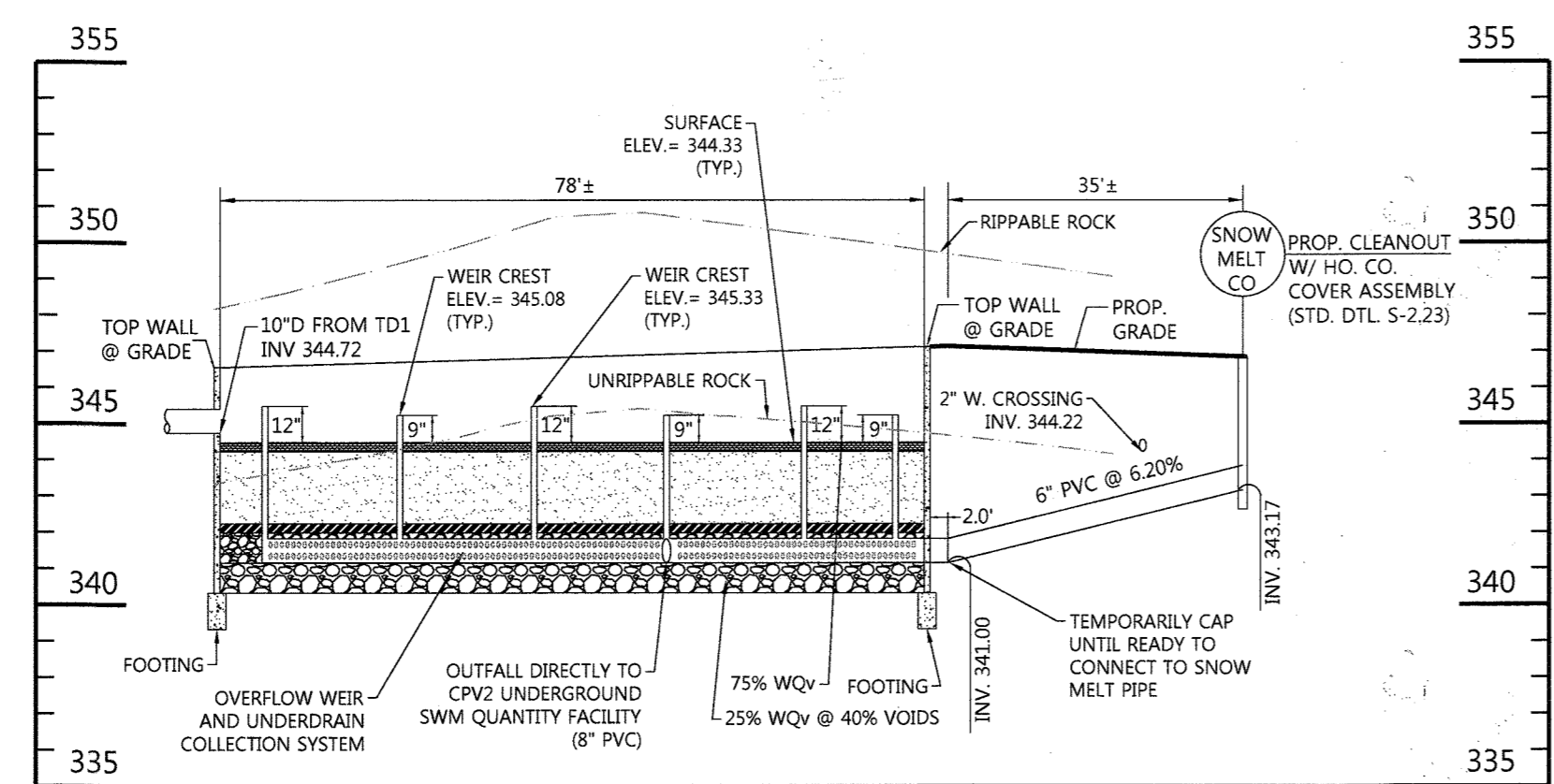
MB14	MB15	WIDTH (FT)	STRUCTURE DETAIL #
344.33	344.55	5	4A&4B/S-3
344.08	344.30	5	2A&2B/S-3
342.08	342.30		
341.83	342.05		
341.00	341.22		
340.17	340.39		

- HIGH FREQUENCY STORM OVERFLOW WEIR (REFER TO PROFILE FOR WEIR CREST ELEVATIONS)
 - OVERFLOW WEIR FOR UNDERGROUND WQV STORAGE (25%) REFER TO PROFILES FOR WEIR CREST ELEVATIONS)
- NOTE:
REFER TO STORMWATER MANAGEMENT SHEET 28 FOR STANDARD MODULAR (M-6) FACILITY MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION AND OPERATION & MAINTENANCE SCHEDULES.

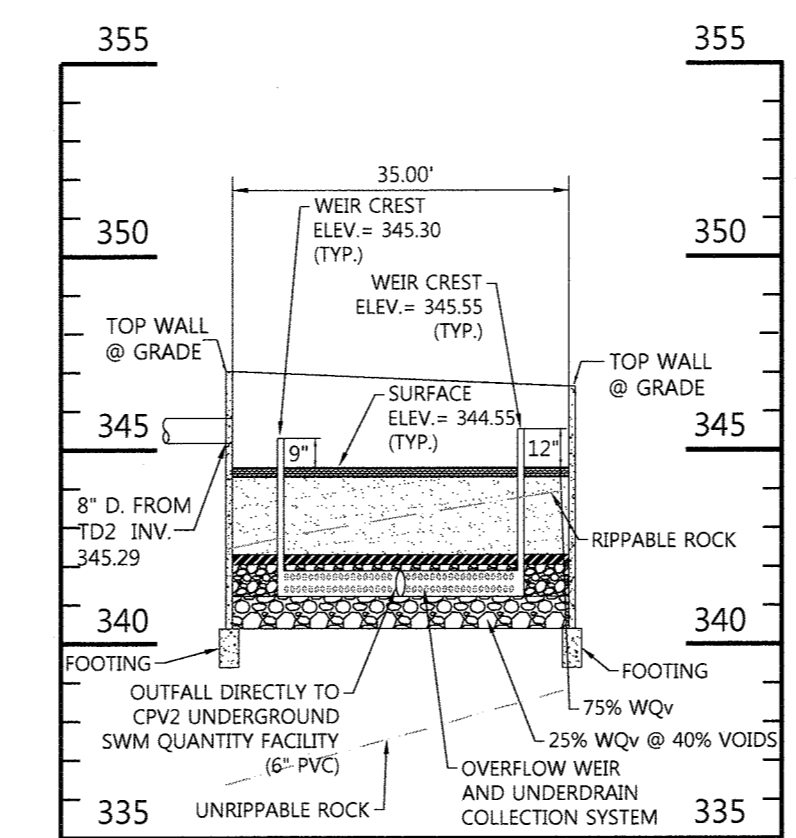
(M-6) SWM LOCATION TABLE

FACILITY #	CENTERLINE STA.	OFFSET
MB14	31+46.18	30.65'L
MB14	31+46.18	40.65'L
MB14	32+23.68	30.65'L
MB14	32+25.32	40.65'L
MB15	33+67.80	15.35'L
MB15	33+67.80	20.35'L
MB15	34+02.80	15.35'L
MB15	34+02.78	20.35'L

- EASEMENT NOTE:**
- MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
- WATER
 - SEWER
 - STREET LIGHTING
 - STORM WATER MANAGEMENT
 - STORM DRAIN
 - UTILITY



(M-6) MB14 SWM PROFILE
SCALE: HORIZ. 1" = 20'; VERT. 1" = 5'



(M-6) MB15 SWM PROFILE
SCALE: HORIZ. 1" = 20'; VERT. 1" = 5'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 2-28-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

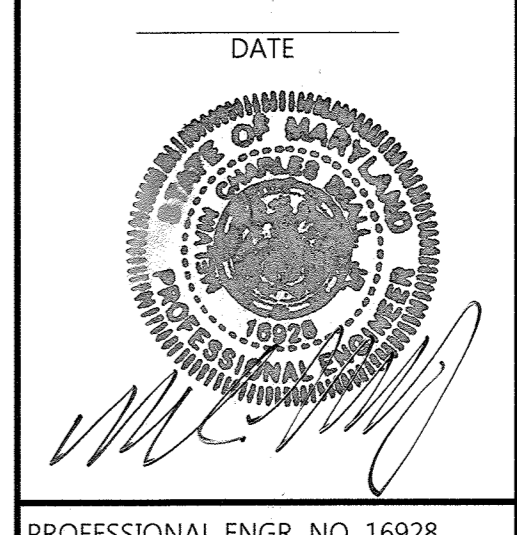
CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 3/6/2020
 DATE

DIRECTOR
[Signature] 3-10-2020
 DATE

FILE NUMBERS:
 F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESENT-1, FDP-DC-CRESENT-1A

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

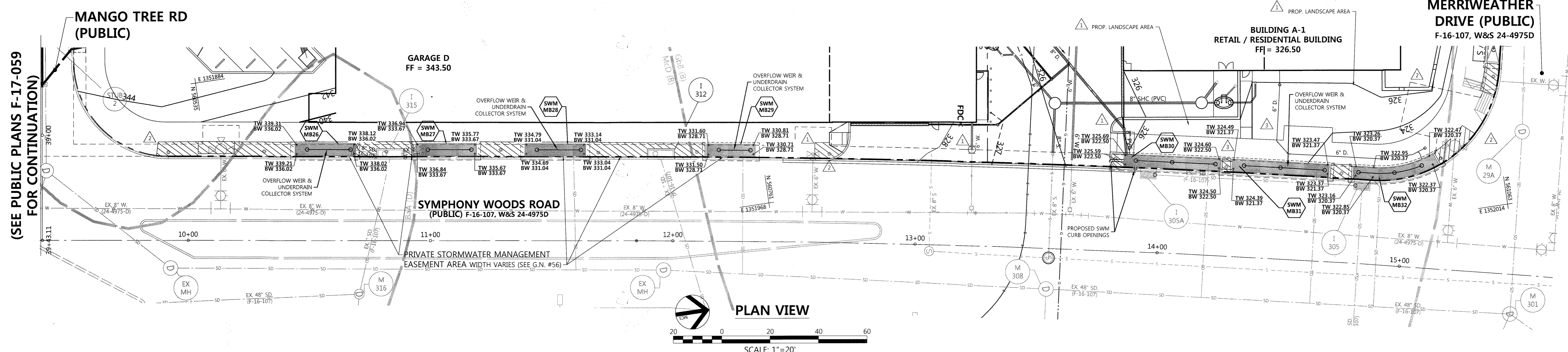
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.



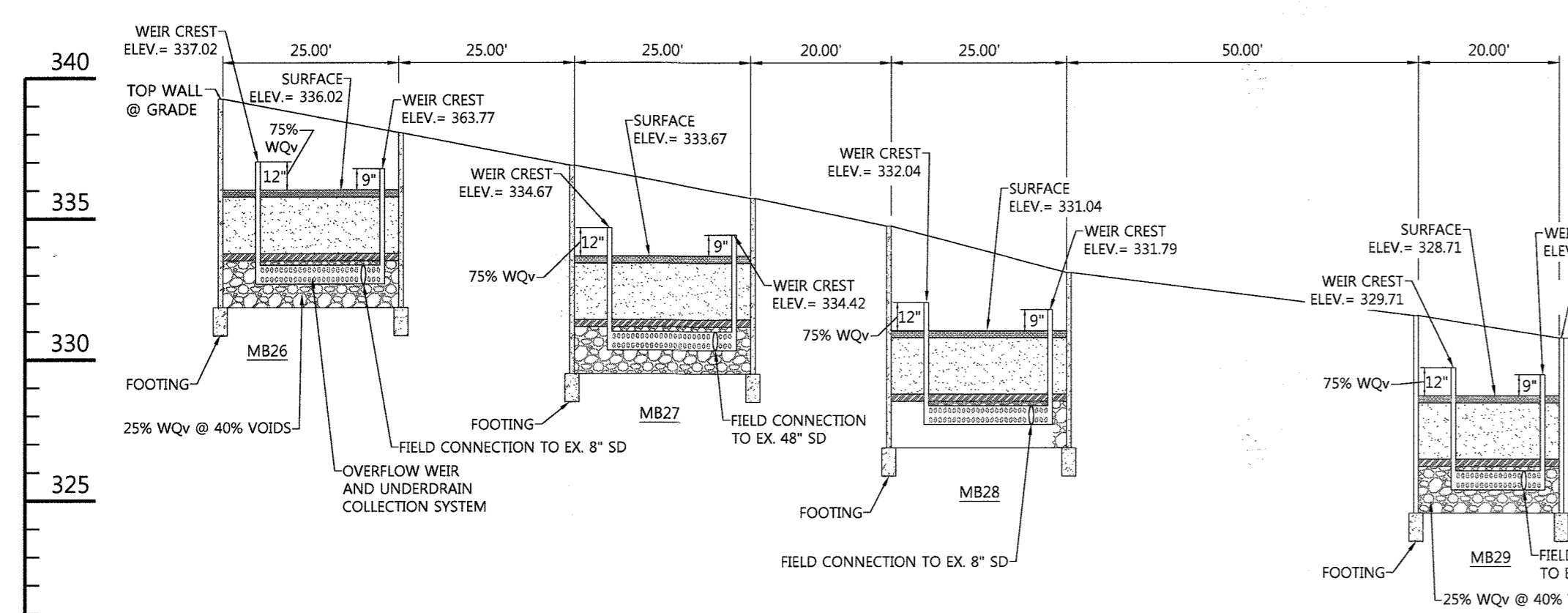
PROFESSIONAL ENGR. NO. 16928

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

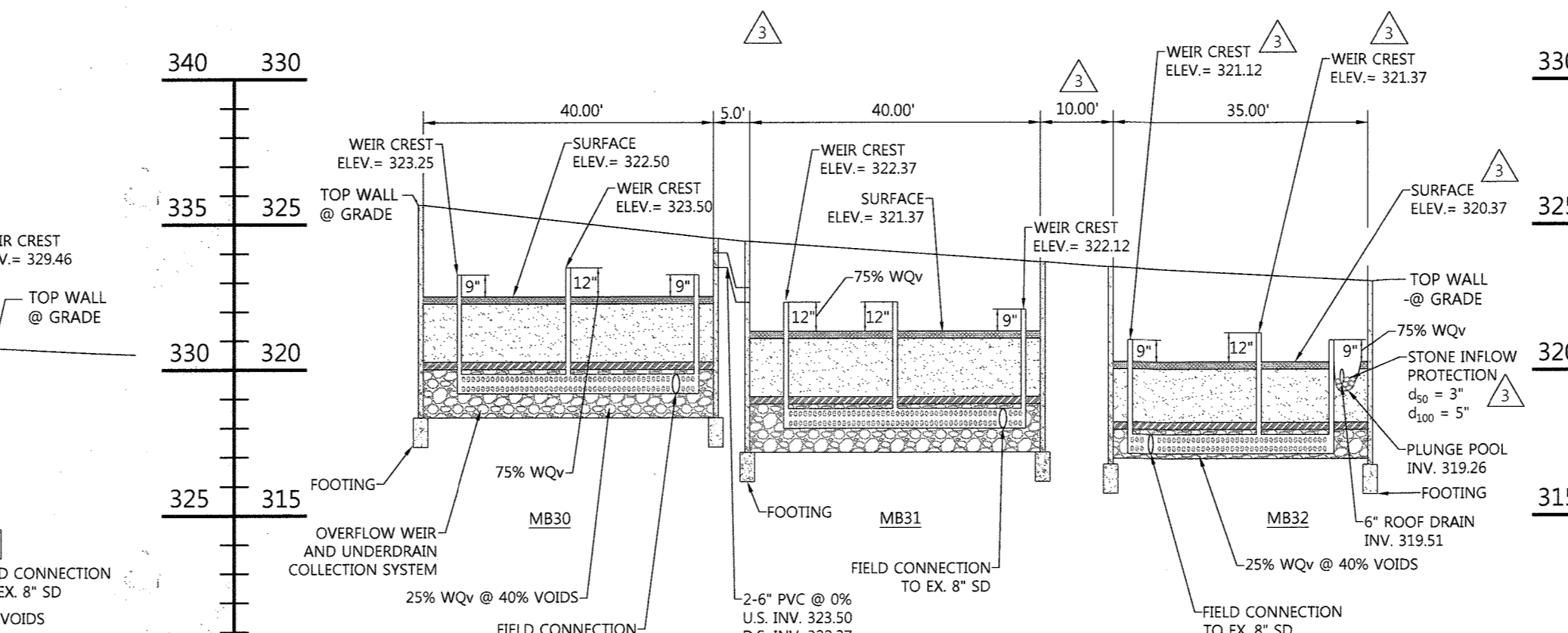
11/18/19		RELocate MB15 105' NORTH SHOW NEW 2' W. & 6' SNOW MELT PIPE UPDATE MB14 & MB15 PROFILES
03/06/19		BLDG E-2, E-3 PLAZA HARDSCAPE & GRADING
Date	No.	Revision Description
DOWNTOWN COLUMBIA		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE I		
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD PHASE I AREA 3	
PLAT/ OR IF BLOCK #	TAX LOT/TRACT #	ELECT. DISTRICT
24623-24630	7	5
WATER CODE	SEWER CODE	CENSUS TRACT
550	LITTLE PATUXENT	605602
TITLE (M-6) WQV STORMWATER MANAGEMENT PLAN		
REVISED SITE DEVELOPMENT PLAN		
Des. By	GDT/DM	SCALE AS SHOWN
Drn. By	MCJ	Scale 5-10-18
Chk. By	MCB	Approved MCB
		Proj. No. 04038.80
		30 of 94



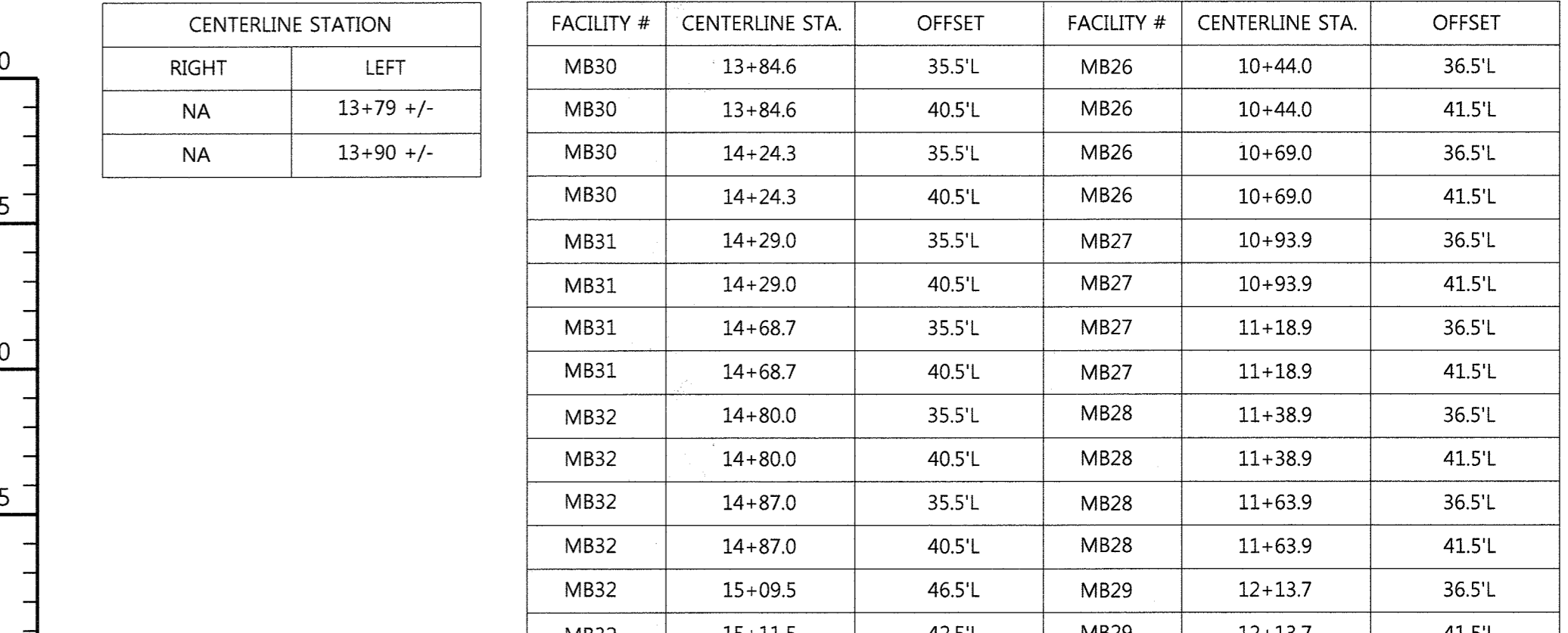
PLAN VIEW
SCALE: 1"=20'



(M-6) MB26 - MB27 SWM PROFILE
SCALE: HORIZ. 1" = 20'; VERT. 1" = 5'



(M-6) MB28 - MB29 SWM PROFILE
SCALE: HORIZ. 1" = 20'; VERT. 1" = 5'



(M-6) MB30 - MB32 SWM PROFILE
SCALE: HORIZ. 1" = 20'; VERT. 1" = 5'

CURB OPENINGS

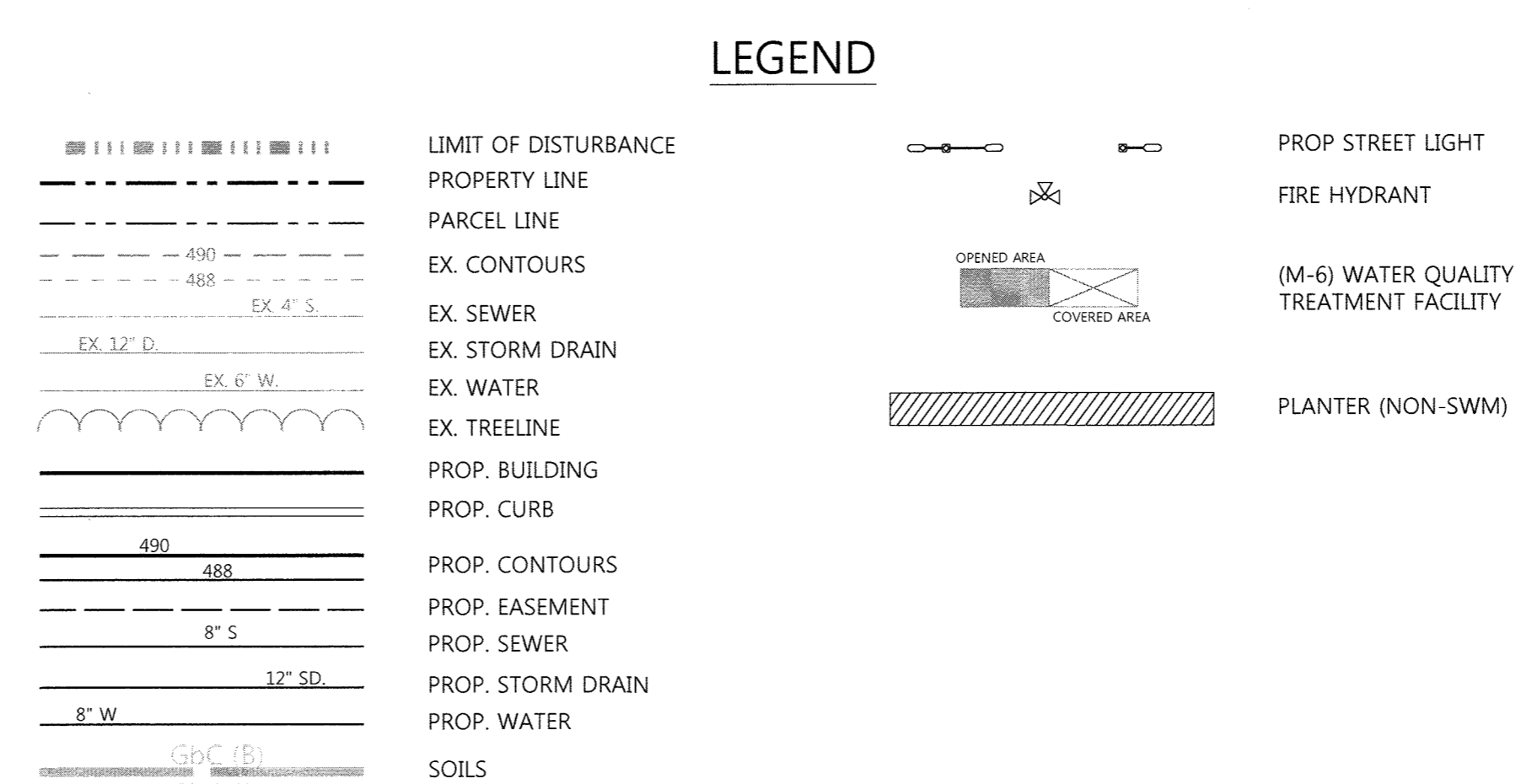
CENTERLINE STATION	RIGHT	LEFT
	NA	13+79 +/-

(M-6) SWM LOCATION TABLE

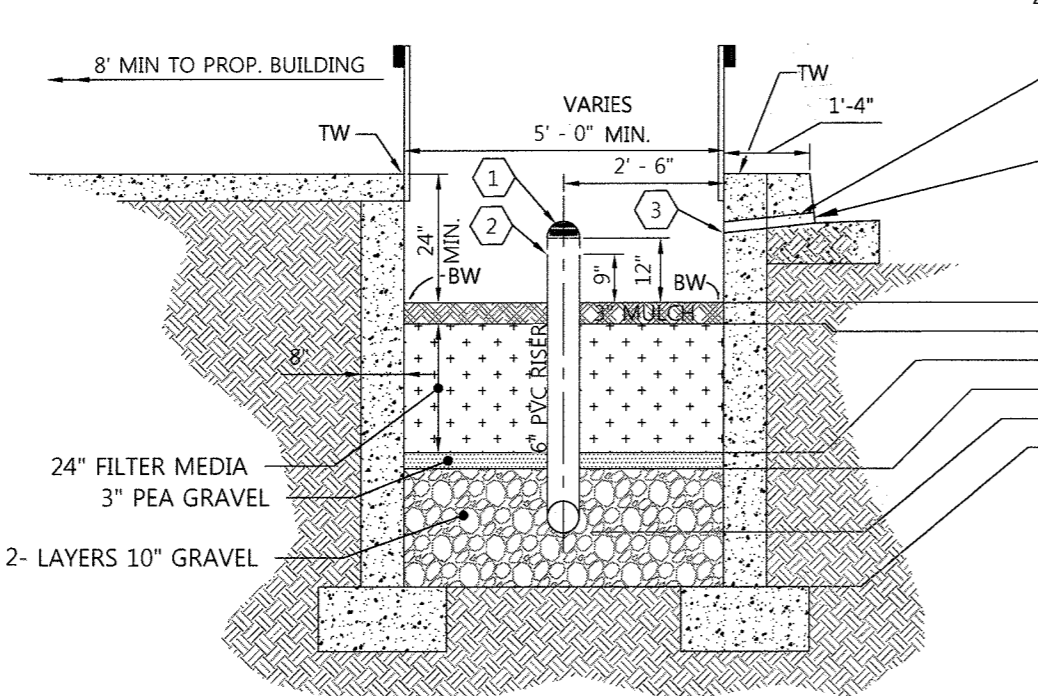
FACILITY #	CENTERLINE STA.	OFFSET	(M-6) SWM LOCATION TABLE		
			FACILITY #	CENTERLINE STA.	OFFSET
MB30	13+84.6	35.5'L	MB26	10+44.0	36.5'L
MB30	13+84.6	40.5'L	MB26	10+44.0	41.5'L
MB30	14+24.3	35.5'L	MB26	10+69.0	36.5'L
MB30	14+24.3	40.5'L	MB26	10+69.0	41.5'L
MB31	14+29.0	35.5'L	MB27	10+93.9	36.5'L
MB31	14+29.0	40.5'L	MB27	10+93.9	41.5'L
MB31	14+68.7	35.5'L	MB27	11+18.9	36.5'L
MB31	14+68.7	40.5'L	MB27	11+18.9	41.5'L
MB32	14+80.0	35.5'L	MB28	11+38.9	36.5'L
MB32	14+80.0	40.5'L	MB28	11+38.9	41.5'L
MB32	14+87.0	35.5'L	MB28	11+63.9	36.5'L
MB32	14+87.0	40.5'L	MB28	11+63.9	41.5'L
MB32	15+09.5	46.5'L	MB29	12+13.7	36.5'L
MB32	15+11.5	42.5'L	MB29	12+13.7	41.5'L
			MB29	12+33.5	36.5'L
			MB29	12+33.5	41.5'L

ESD INFLOW PIPE LOCATION TABLE

FACILITY NO.	STATION	OFFSET	INVERT	PIPE DIA. (IN.)
MB30	13+85.57	39.83 LT	--	8"
MB32	15+06.35	44.52' LT		6"
	14+97.08	41.06' LT		
	14+83.53	39.83' LT		



NOTE: SEE SHEET 27, FOR CURB OPENING DETAILS.



TYPICAL CROSS-SECTION OF MODULAR (M-6) FACILITY
SCALE: N.T.S.

(M-6) MB26	(M-6) MB27	(M-6) MB28	(M-6) MB29	(M-6) MB30	(M-6) MB31	(M-6) MB32
336.02	333.67	331.04	328.71	322.50	321.37	320.37
335.77	333.42	330.79	328.46	322.25	321.12	320.12
333.77	331.42	328.79	326.46	320.25	319.12	318.20
333.52	331.17	328.54	326.21	320.00	318.37	317.95
332.69	330.34	327.71	325.38	319.17	318.04	317.11
331.86	329.51	326.88	324.55	318.34	317.21	316.95
5	5	5	5	5	5	5

- HIGH FREQUENCY STORM OVERFLOW WEIR (REFER TO PROFILE FOR RIM ELEVATION.)
- OVERFLOW WEIR FOR UNDERGROUND WQV (REFER TO PROFILE FOR RIM ELEVATION.) STORAGE (25%)
- SEE CURB ESD OPENING TABLE FOR INVERT AND LOCATION.

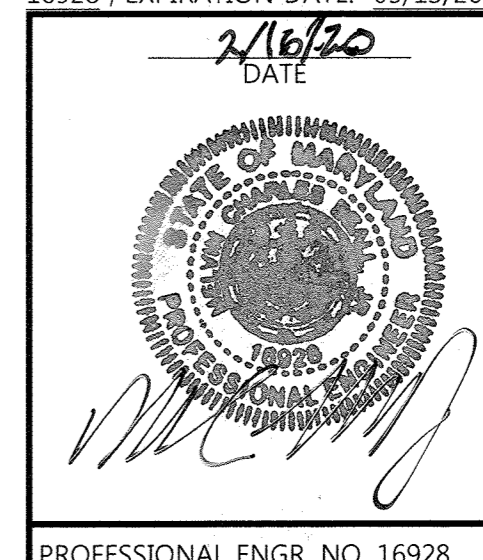
NOTE: REFER TO STORMWATER MANAGEMENT SHEET 28 FOR STANDARD MODULAR (M-6) FACILITY MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION AND OPERATION & MAINTENANCE SCHEDULES.

EASEMENT NOTE:
MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
• WATER
• SEWER
• STREET LIGHTING
• STORM WATER MANAGEMENT
• STORM DRAIN
• UTILITY

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION *[Signature]* 2-28-20
CHIEF, DIVISION OF LAND DEVELOPMENT *[Signature]* 3/6/2020
DIRECTOR *[Signature]* 5-10-2020

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

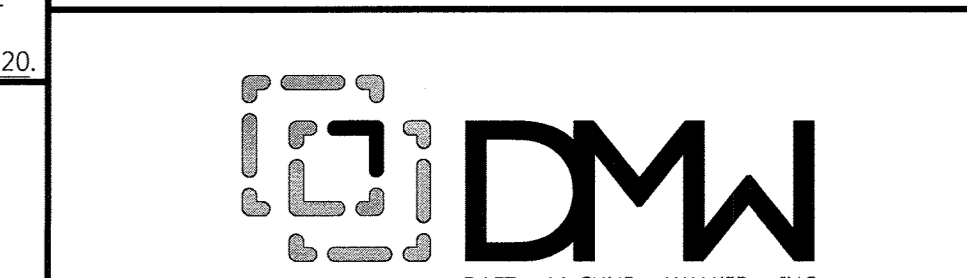
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.



PROFESSIONAL ENGR. NO. 16928
APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

Date	No.	Revision Description
11/18/19	3	RELOCATE MB15 10.5' NORTH, SHOW NEW 2" W. & 6" SNOW MELT PIPE UPDATE MB14, MB15, MB30, MB31, & MB32 PROFILES
03/06/19	2	BLDG E2, PLAZA HARDSCAPE AND GRADING
12/03/18	1	BUILDING A1 LOADING DOCK RECONFIGURATION AND GARAGE

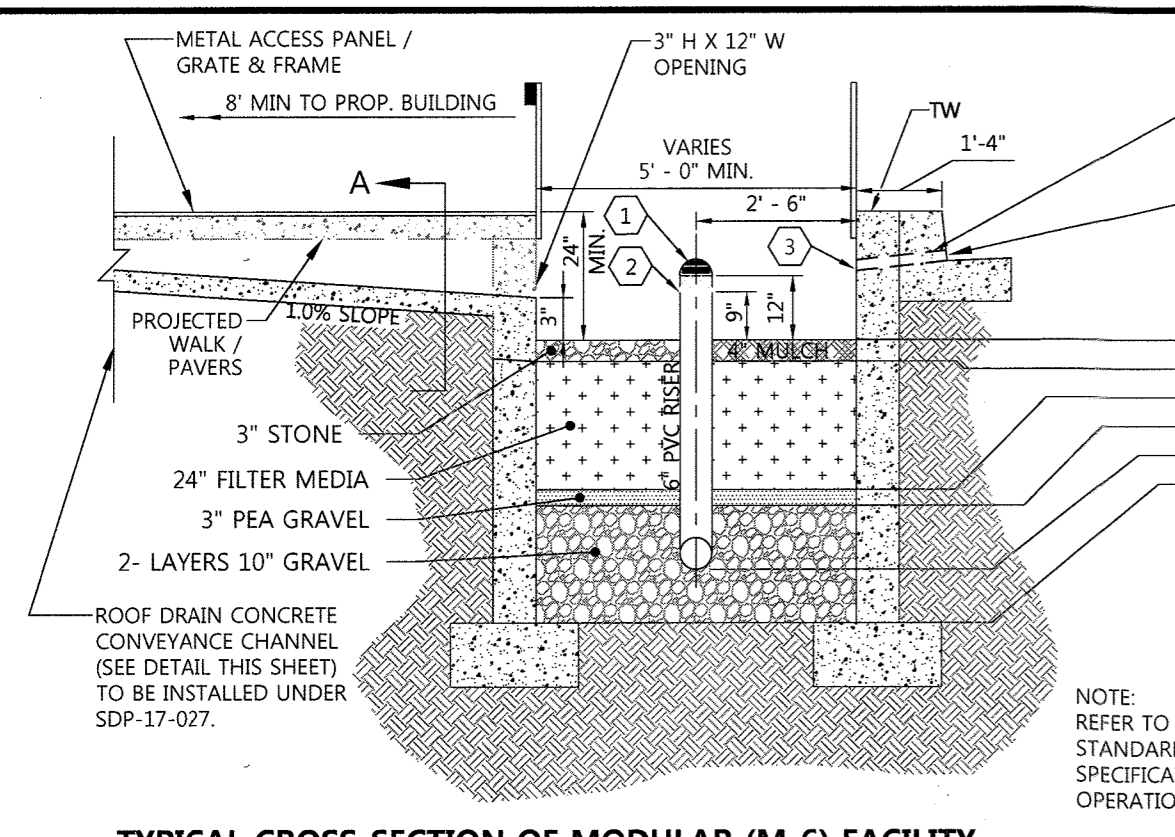
DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14
OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION/AREA	CHUCK #	NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	PHASE I AREA 3	288A			
24623-24630	7	36	5	605602	

TITLE	SCALE	DATE	APPROVED
(M-6) WQV STORMWATER MANAGEMENT PLAN	AS SHOWN	5-10-18	MCB
Des. By	GDT/DM	DATE	5-10-18
Drn. By	MCJ	DATE	5-10-18
Chk. By	MCB	DATE	5-10-18



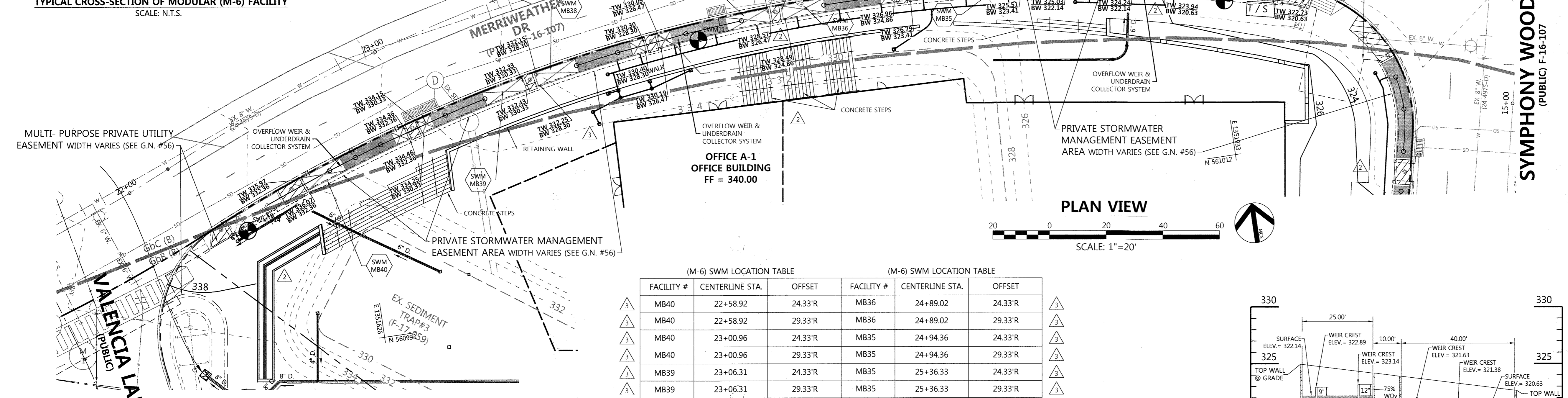
(M-6) MB40	(M-6) MB39	(M-6) MB38	(M-6) MB37	(M-6) MB36	(M-6) MB35	(M-6) MB34	(M-6) MB33
332.36	330.33	328.30	326.27	324.24	322.21	320.18	318.15
332.11	330.08	328.05	326.02	323.99	321.96	319.93	317.90
330.11	328.08	326.05	324.02	321.99	319.96	317.93	315.90
329.86	327.83	325.80	323.77	321.74	319.71	317.68	315.65
329.63	327.60	325.57	323.54	321.51	319.48	317.45	315.42
328.20	326.17	324.14	322.11	320.08	318.05	316.02	313.99
5	5	5	5	5	5	5	5

- HIGH FREQUENCY STORM OVERFLOW WEIR (REFER TO PROFILE FOR RIM ELEVATION)
- OVERFLOW WEIR FOR UNDERGROUND WQV (REFER TO PROFILE FOR RIM ELEVATION)
- SEE CURB ESD OPENING TABLE FOR INVERT AND LOCATION.

NOTE: REFER TO STORMWATER MANAGEMENT SHEET 28 FOR STANDARD MODULAR (M-6) FACILITY MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION AND OPERATION & MAINTENANCE SCHEDULES.

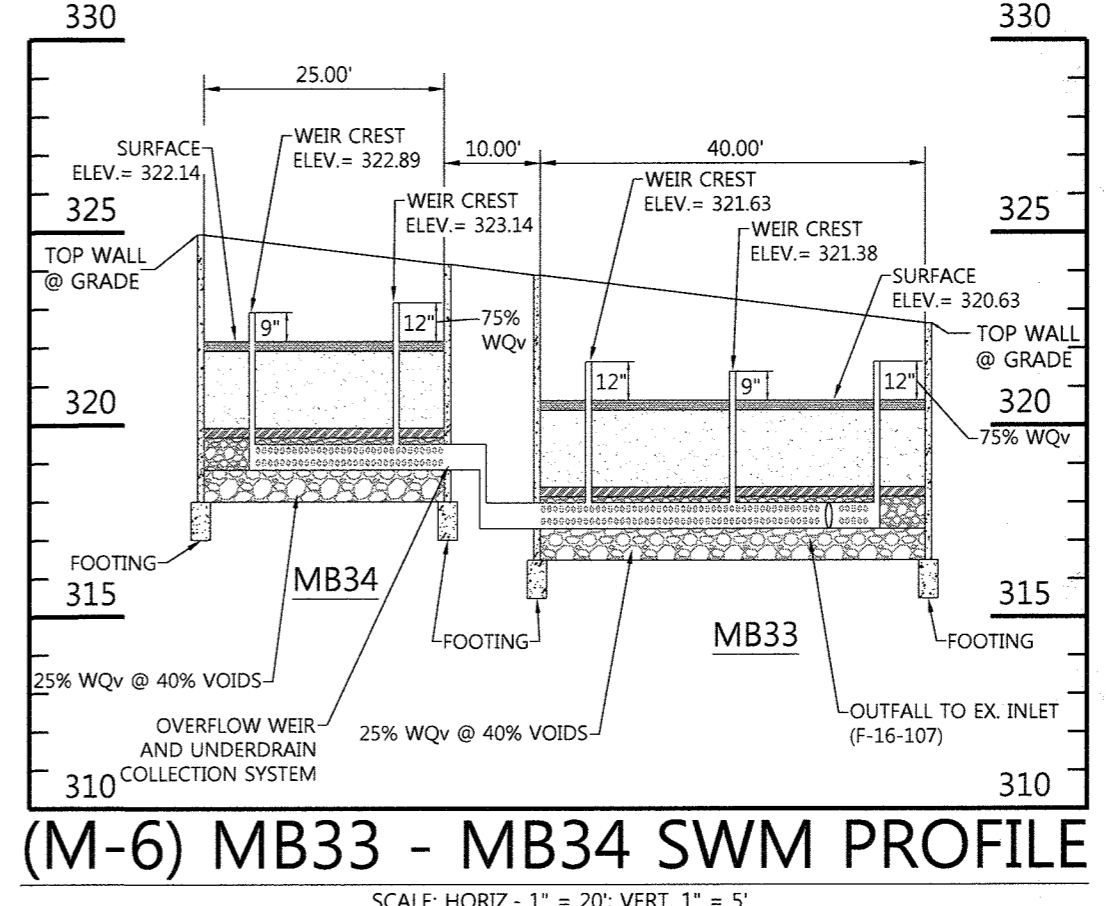
LEGEND

- LIMIT OF DISTURBANCE
- - - - - PROPERTY LINE
- - - - - PARCEL LINE
- - - - - EX. CONTOURS
- - - - - EX. SEWER
- - - - - EX. STORM DRAIN
- - - - - EX. WATER
- - - - - EX. TREE LINE
- - - - - PROP. BUILDING
- - - - - PROP. CURB
- - - - - PROP. CONTOURS
- - - - - PROP. EASEMENT
- - - - - PROP. SEWER
- - - - - PROP. STORM DRAIN
- - - - - PROP. WATER
- - - - - PROP. WATER
- - - - - SOILS
- - - - - PROP. 100 YEAR FLOODPLAIN
- - - - - PROP STREET LIGHT
- - - - - FIRE HYDRANT
- - - - - (M-6) WATER QUALITY TREATMENT FACILITY
- - - - - OPENED AREA
- - - - - COVERED AREA
- - - - - SOIL BORING
- - - - - TRANSIT STOP

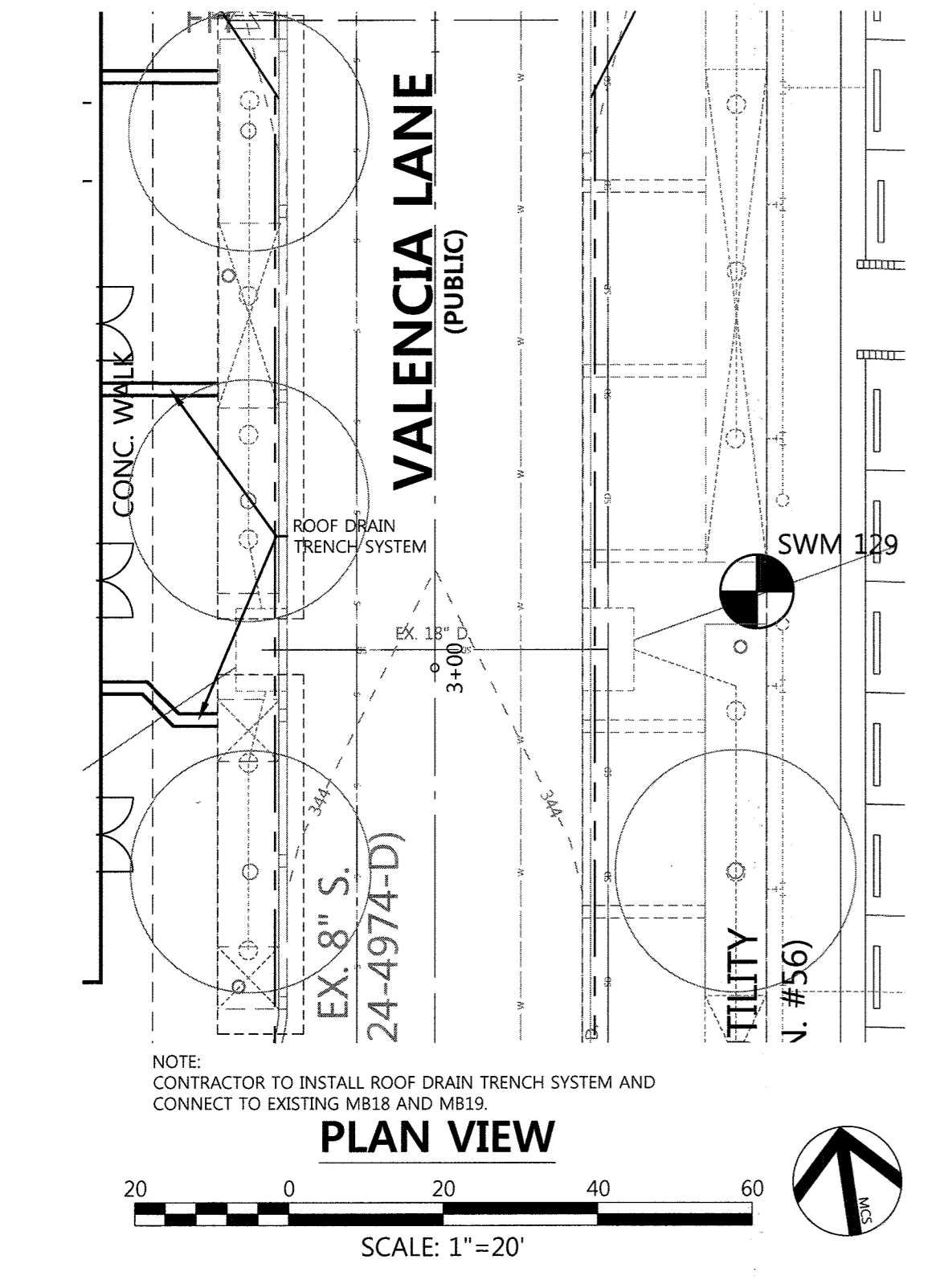


(M-6) SWM LOCATION TABLE			(M-6) SWM LOCATION TABLE		
FACILITY #	CENTERLINE STA.	OFFSET	FACILITY #	CENTERLINE STA.	OFFSET
MB40	22+58.92	24.33'R	MB36	24+89.02	24.33'R
MB40	22+58.92	29.33'R	MB36	24+89.02	29.33'R
MB40	23+00.96	24.33'R	MB35	24+94.36	24.33'R
MB40	23+00.96	29.33'R	MB35	24+94.36	29.33'R
MB39	23+06.31	24.33'R	MB35	25+36.33	24.33'R
MB39	23+06.31	29.33'R	MB35	25+36.33	29.33'R
MB39	23+48.28	24.33'R	MB34	25+52.03	24.33'R
MB39	23+48.28	29.33'R	MB34	25+52.03	29.33'R
MB38	23+52.86	24.33'R	MB34	25+78.12	24.33'R
MB38	23+52.86	29.33'R	MB34	25+78.12	29.33'R
MB38	23+94.88	24.33'R	MB33	25+88.47	24.33'R
MB38	23+94.88	29.33'R	MB33	25+88.47	29.33'R
MB37	24+00.23	24.33'R	MB33	26+28.97	24.33'R
MB37	24+00.23	29.33'R	MB33	26+28.97	29.33'R
MB37	24+42.25	24.33'R			
MB37	24+42.25	29.33'R			
MB36	24+47.02	24.33'R			
MB36	24+47.02	29.33'R			

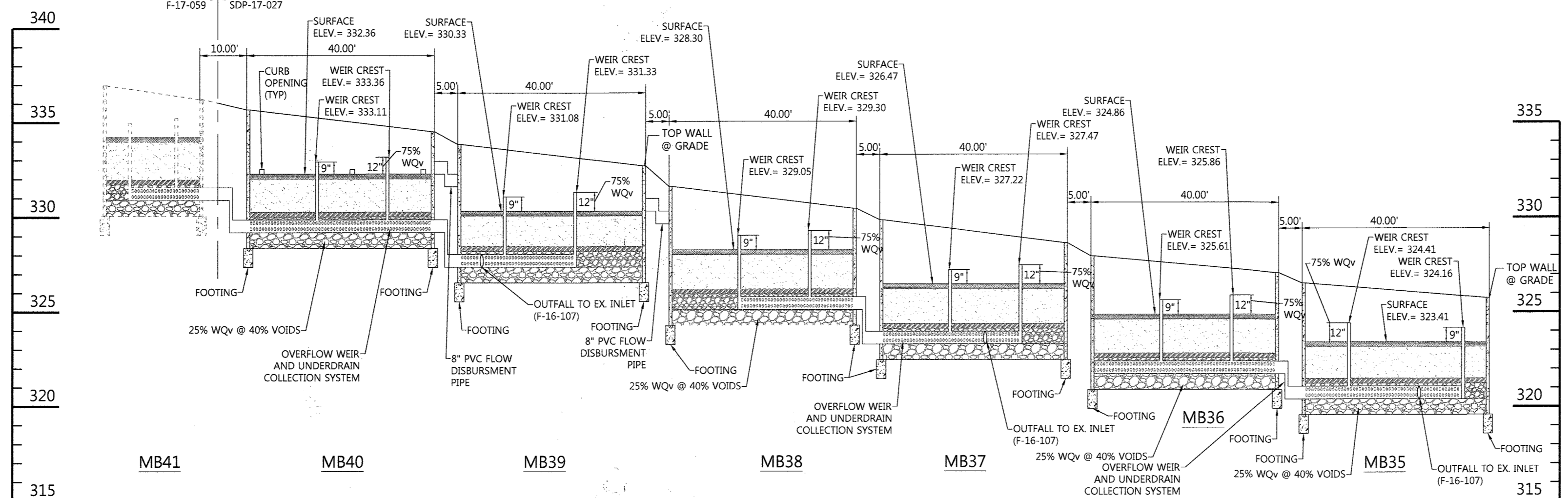
CURB OPENINGS		
CENTERLINE STATION		
RIGHT	LEFT	
22+61.53	NA	
22+79.94	NA	
22+98.35	NA	



- EASEMENT NOTE:**
- MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
- WATER
 - SEWER
 - STREET LIGHTING
 - STORM WATER MANAGEMENT
 - STORM DRAIN
 - UTILITY
- NOTE:**
- FOR DETAIL ON THE TYPE OF COVER OVER THE WATER QUALITY FACILITIES SEE HARDSCAPE PLANS
 - SEE STRUCTURAL SHEET 83 FOR MODULAR (M-6) FACILITY AND SUPPORT DETAIL OF SWM HARDSCAPE COVER
 - ESD MODULAR (M-6) FACILITIES ARE 5' WIDE UNLESS OTHERWISE NOTED, SEE ESD PROFILES FOR LENGTH
 - PRIVATE SWM MB40, MB39 AND PART OF MB38 PROVIDE QUALITY STORMWATER MANAGEMENT FOR PORTIONS OF MERRIMWEATHER DRIVE.



NOTE: SWM (M-6) MODULAR MICRO-BIORETENTION FACILITIES MB40, MB39 AND PART OF MB38 TREATS SPECIFIC IMPERVIOUS RUNOFF WITHIN MERRIMWEATHER DRIVE PUBLIC R/W.

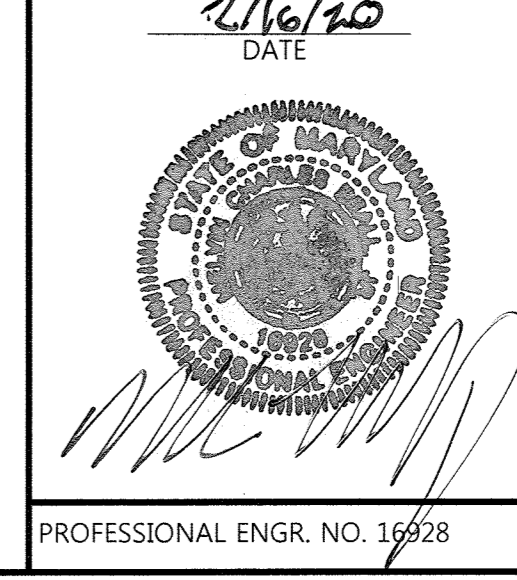


(M-6) MB35 - MB40 SWM PROFILE
SCALE: HORIZ. 1" = 20'; VERT. 1" = 5'

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.



Date	No.	Revision Description
08/20/19	1	SWM UNDERDRAINS, SWM FACILITY LOCATIONS, CURB OPENING STATIONS & OFFSETS
03/06/19	2	BLDG EZ, PLAZA HARDSCAPE AND GRADING

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

DW
DAFT MCCUNE WALKER INC.

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

PROJECT NAME: DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I
PLAN OR REF: 24623-24610 BLOCK # 7 NO. 12000 TAX ZONING MAP: D-5 DISTRICT: 5
WATER CODE: 550 SEWER CODE: LITTLE PATUXENT STAGE: 605602

TITLE: (M-6) WQV STORMWATER MANAGEMENT PLAN
REVISED SITE DEVELOPMENT PLAN

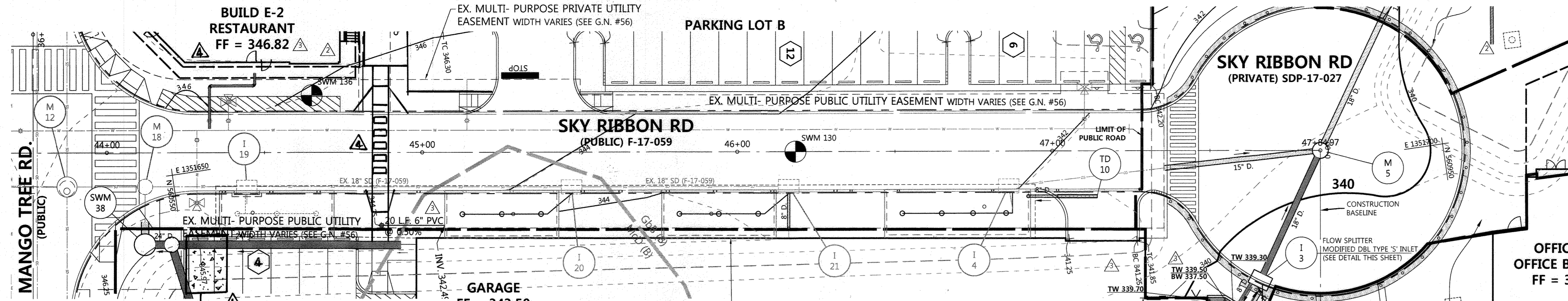
DESIGNER: GDT/DM SCALE: AS SHOWN Proj. No. 04038.B0
DATE: 11/16/17 Date: 5-10-18
CHK. BY: MCB Approved: MCB 32 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 2-28-20

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 3/6/2020

DIRECTOR
DATE: 3-10-2020

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

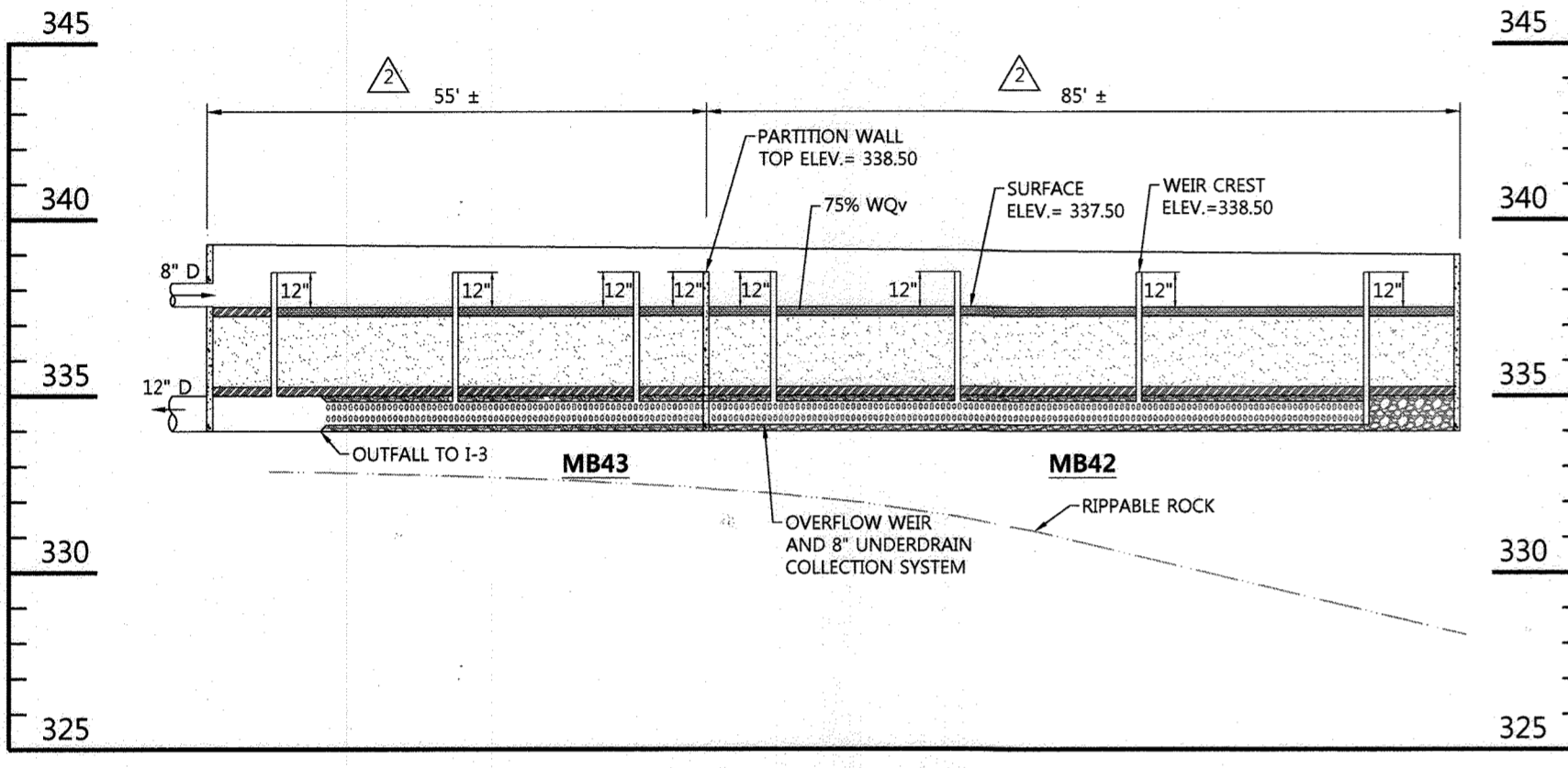


LEGEND

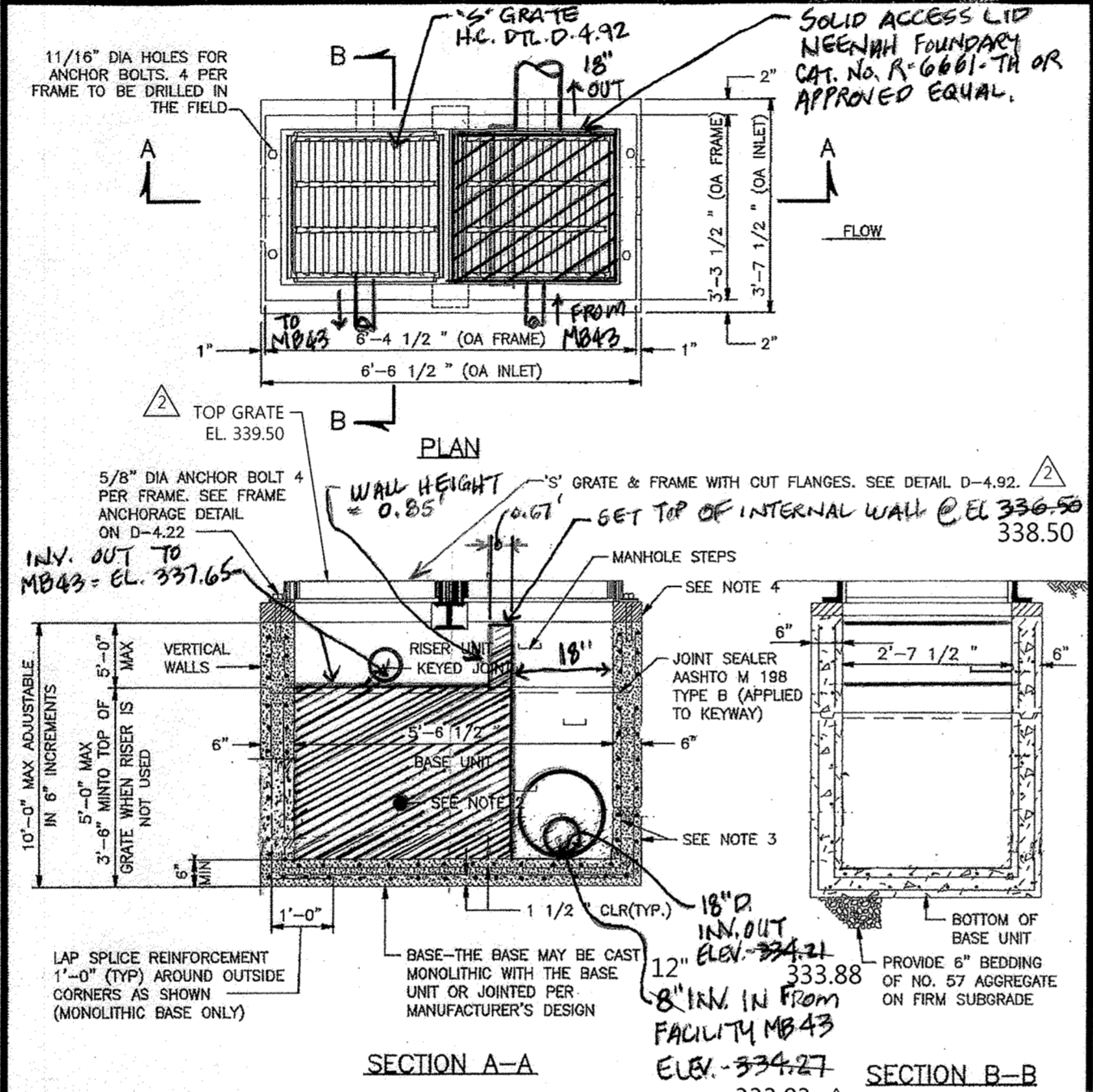
- LIMIT OF DISTURBANCE
- PROPERTY LINE
- PARCEL LINE
- EX. CONTOURS
- EX. SEWER
- EX. STORM DRAIN
- EX. WATER
- EX. TREELINE
- PROP. BUILDING
- PROP. CURB
- PROP. CONTOURS
- PROP. EASEMENT
- PROP. SEWER
- PROP. STORM DRAIN
- PROP. WATER
- SOILS
- PROP. 100 YEAR FLOODPLAIN
- PROP. STREET LIGHT
- FIRE HYDRANT
- (M-6) WATER QUALITY TREATMENT FACILITY
- SOIL BORING
- PLANTER (NON-SWM)
- EX. (M-6) WATER QUALITY TREATMENT FACILITY

(M-6) SWM LOCATION TABLE

FACILITY #	CENTERLINE STA.	OFFSET
MB43 TO MB42	0+46.26	35.88RT
MB43 TO MB42	0+46.26	30.26RT
MB43 TO MB42	0+51.16	20.95RT
MB43 TO MB42	1+24.44	11.58RT
MB43 TO MB42	1+33.94	36.42LT
MB43 TO MB42	1+38.96	36.42LT



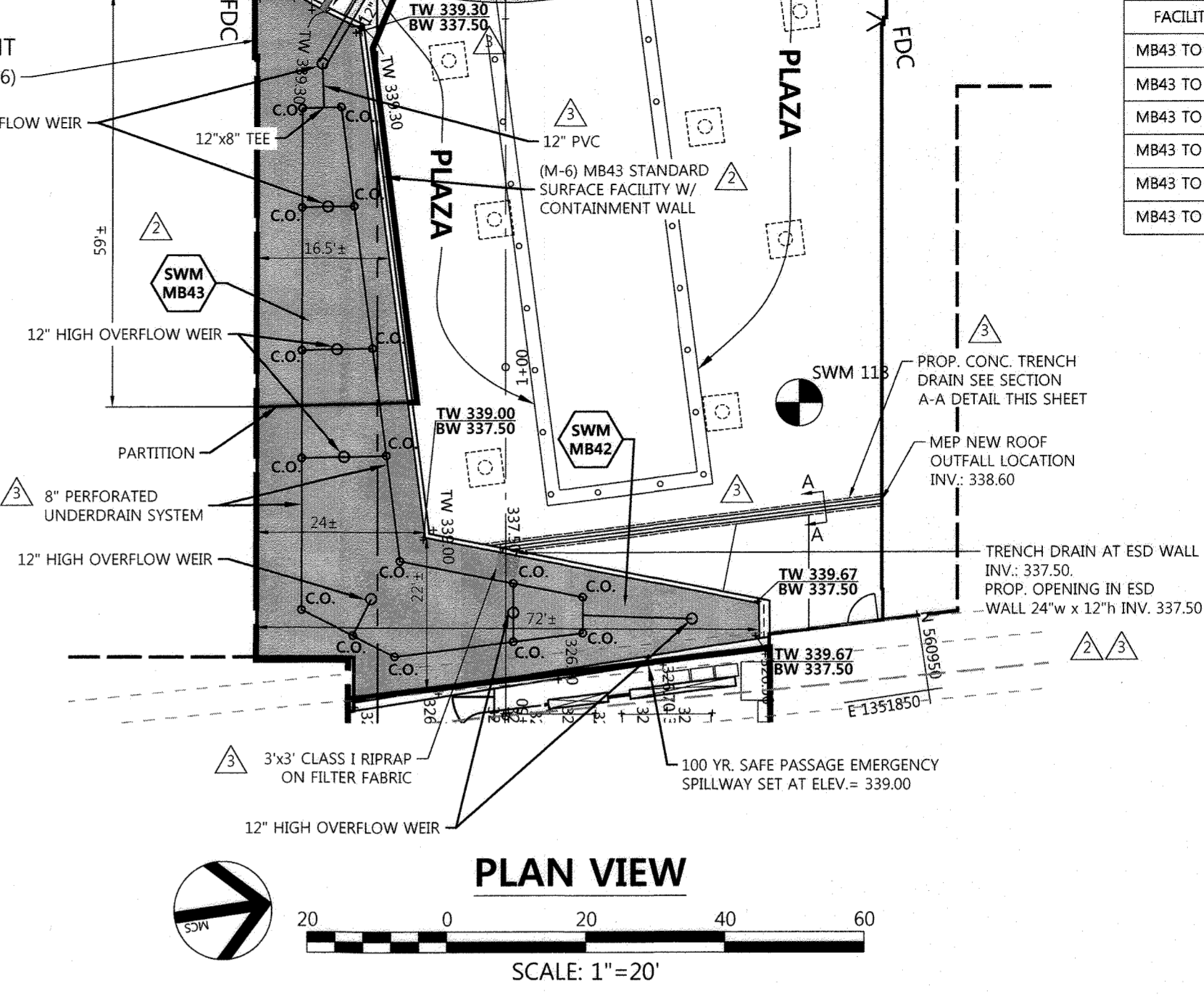
(M-6) MB42, MB43 SWM PROFILE
SCALE: HORIZ. 1" = 20'; VERT. 1" = 5'



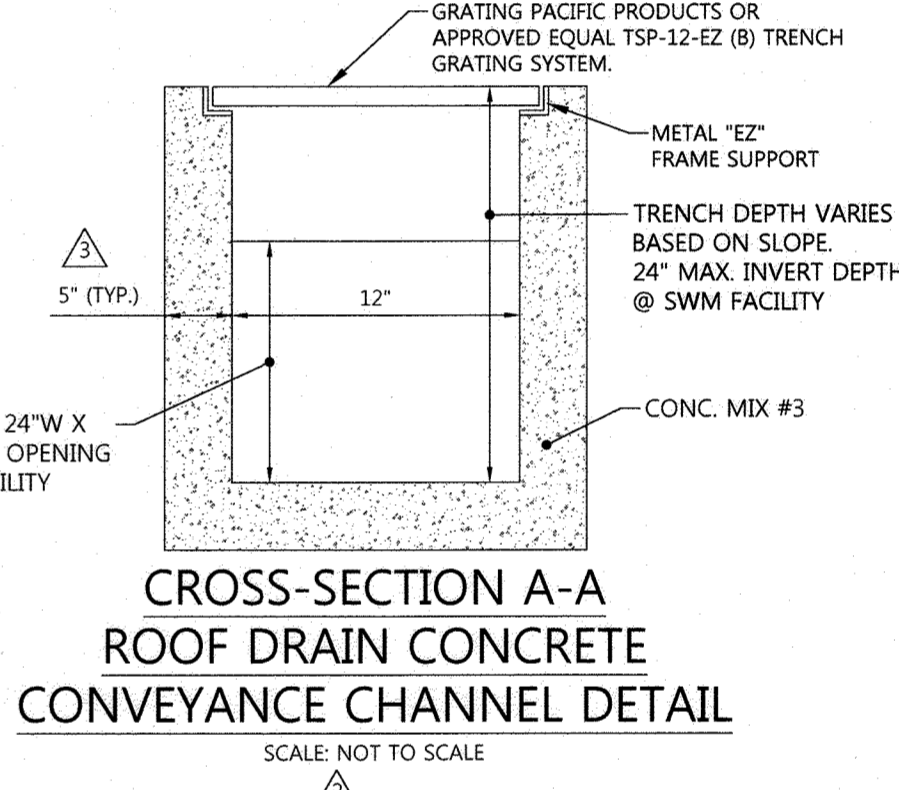
NOTES

- SLAB SHALL BE MIX NO.3 CONCRETE.
- INVERTS SHALL BE APPROVED PRECAST, PLAIN MIX NO.3 CONCRETE OR BRICK LAID ON EDGE. INVERT TO SLOPE DOWN TOWARD OUTLET AT THE RATE OF 1/2" PER FOOT, OR AS SHOWN ON PLAN OR AS DIRECTED. INVERT BRICK SHALL BE ASTM C32-01 GRADE 5S.
- REINFORCEMENT- 2 LAYERS OF 4 x 4-W4.0 x W4.0 WELDED WIRE FABRIC.
- TOP 4" OF WALLS SHALL BE BRICK MASONRY. ADDITIONAL BRICK SHALL BE USED TO BRING THE GRADE TO EXISTING GRADE IF REQUIRED.
- WHERE A IS 3'-6" OR GREATER STANDARD MANHOLE STEPS SHALL BE INSTALLED.

Howard County, Maryland Department of Public Works	MODIFIED Double Type 'S' Inlet	Detail D-4.23
---	-----------------------------------	------------------

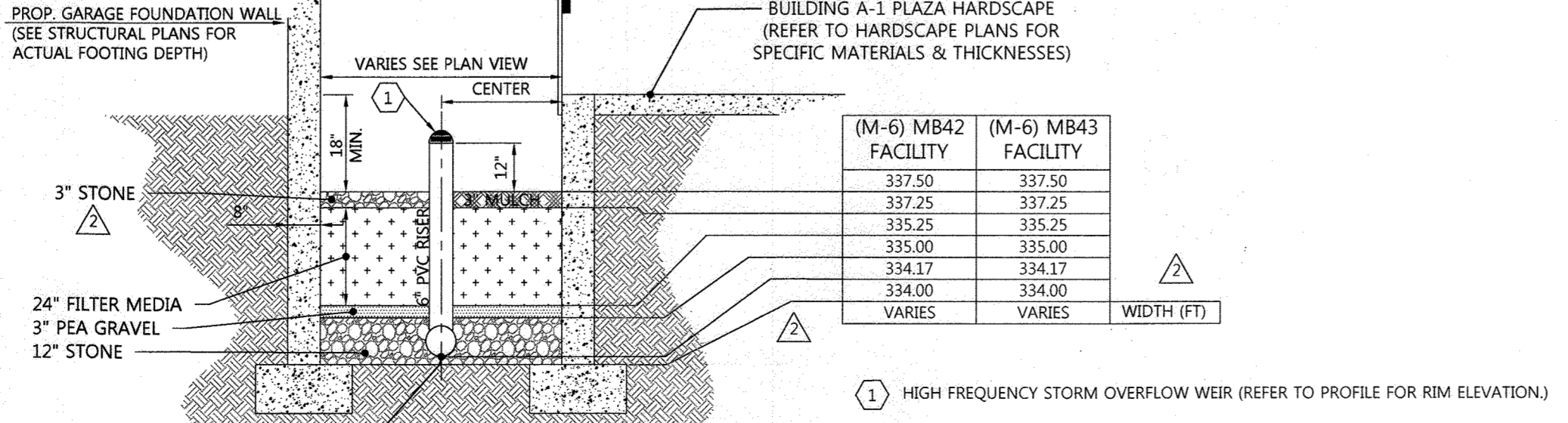


PLAN VIEW
SCALE: 1" = 20'



CROSS-SECTION A-A
ROOF DRAIN CONCRETE
CONVEYANCE CHANNEL DETAIL
SCALE: NOT TO SCALE

EASEMENT NOTE:
MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
• WATER
• SEWER
• STREET LIGHTING
• STORM WATER MANAGEMENT
• STORM DRAIN
• UTILITY



(M-6) MB42 FACILITY	(M-6) MB43 FACILITY	WIDTH (FT)
337.50	337.50	
337.25	337.25	
335.25	335.25	
335.00	335.00	
334.17	334.17	
334.00	334.00	
VARIES	VARIES	

NOTE:
REFER TO STORMWATER MANAGEMENT SHEET 28 FOR STANDARD MODULAR (M-6) FACILITY MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION AND OPERATION & MAINTENANCE SCHEDULES.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 2/28/20
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 3/10/2020
CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 3-10-2020
DIRECTOR

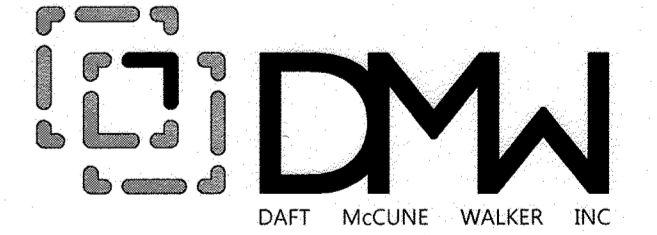
FOR REDLINE REVISION 4 ONLY
11/10/20
DATE
[Signature]
PROFESSIONAL ENGR. NO. 16928
PROFESSIONAL CERTIFICATION

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.
2/16/20
DATE
[Signature]
PROFESSIONAL ENGR. NO. 16928

7/31/2020
11/7/19
03/06/19
Date No. Revision Description

UPDATE BLDG. USAGES, SQUARE FOOTAGES & PARKING REQUIREMENTS AND BLDG. DOORS, HARDSCAPE & DUMPSTER LOCATION.
REV. CHANNEL DETL. & SWM LOC. TAB. ADD SWALE/UPDATE GRADING BY GARAGE BLDG
BLDG. E-2, E-3, PLAZA HARDSCAPE AND GRADING

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14
OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

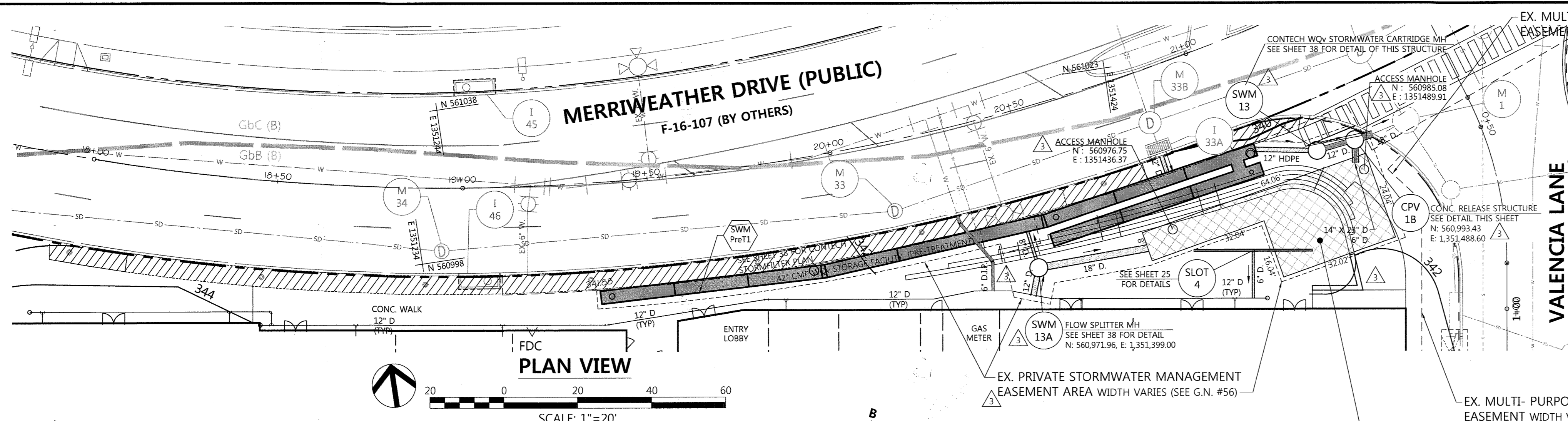


501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION/AREA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE I AREA 3		
24623-24630	7	36	5
WATER CODE	550	SEWER CODE	LITTLE PATUXENT
TITLE	(M-6) WQv STORMWATER MANAGEMENT PLAN REVISED SITE DEVELOPMENT PLAN		
Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	MCJ	Date 5-10-18	
Chk. By	MCB	Approved MCB	33 of 94

NOTE:

- FOR DETAIL ON THE TYPE OF COVER OVER THE WATER QUALITY FACILITIES SEE HARDSCAPE PLANS
- SEE STRUCTURAL SHEET 82 - 83 FOR MODULAR (M-6) FACILITIES AND SUPPORT DETAIL OF REMOVABLE SWM HARDSCAPE COVER
- ESD MODULAR (M-6) FACILITIES ARE 5' WIDTH UNLESS OTHER WISE NOTED, SEE ESD PROFILES FOR LENGTH



EX. MULTI- PURPOSE PRIVATE UTILITY EASEMENT WIDTH VARIES (SEE G.N. #56)

EX. PRIVATE STORMWATER MANAGEMENT EASEMENT AREA WIDTH VARIES (SEE G.N. #56)

EX. MULTI- PURPOSE PUBLIC UTILITY EASEMENT WIDTH VARIES (SEE G.N. #56)

CPV #1 UNDERGROUND STORAGE FACILITY

LEGEND

- LIMIT OF DISTURBANCE
- - - - - PROPERTY LINE
- - - - - PARCEL LINE
- - - - - EX. CONTOURS
- - - - - EX. SEWER
- - - - - EX. STORM DRAIN
- - - - - EX. WATER
- - - - - EX. TREE LINE
- - - - - PROP. BUILDING
- - - - - PROP. CURB
- - - - - PROP. CONTOURS
- - - - - PROP. EASEMENT
- - - - - PROP. SEWER
- - - - - PROP. STORM DRAIN
- - - - - PROP. WATER
- - - - - SOILS
- - - - - PROP STREET LIGHT
- - - - - FIRE HYDRANT
- - - - - CPV UNDERGROUND STORAGE
- - - - - PLANTER (NON-SWM)

CRESCENT NEIGHBORHOOD PHASE 1 AREA 3, PHASE 1

CPV #1 Underground Storage Sequence of Construction

- EXCAVATION**
- Excavation size shall be large enough to allow access around the structure for backfilling and compaction equipment and in accordance with the latest Storm Capture Installation Manual.
 - Trench sloping shall follow OSHA requirements.
 - To prevent excessive water pressure build up on the outside of the modules, the site must be prepared and graded for proper drainage around the Storm Capture system.
 - Dewatering is required when water level is above bottom of subgrade.
- SUBGRADE**
- Native soil shall be level and compacted adequately to allow for required bearing capacity as noted on design documents.
 - Add 2" of sand for leveling purposes, (closed bottom configurations).
 - Geotextile fabric & containment membrane liner.
 - An 8 oz. non-woven geotextile fabric must be used as a separation layer around the Storm Capture system.
 - When the project requires a containment membrane liner, a layer of 8 oz. non-woven geotextile fabric must be used on both the inside and outside face of the liner.
 - Install containment membrane liner per manufacturer's recommendations.
 - Aggregate bearing layer.
 - Open-bottom modules only are required to be placed on a crushed aggregate bearing layer to a depth in accordance with Storm Capture Tech Note SC-01. Material shall be clean, durable crushed aggregate compacted as directed by the engineer of record. Oldcastle recommends size 5, 56, or 57 (per ASTM C33).
 - Extend aggregate bearing layer a minimum of 1' around system perimeter.
 - Aggregate bearing layer must be level and compacted prior to module placement.
 - An 8 oz. non-woven geotextile fabric must be used as a separation layer around the aggregate material and Storm Capture system.
- Note:** Further investigation by a geotechnical engineer may be required where there are concerns with seasonally high water table, and/or poor soil conditions such as low allowable bearing capacity, permafrost, and seasonal freeze/thaw cycles.
- Storm Capture modules are to be installed in accordance with ASTM C891-90, Installation of Underground Precast Utility Structures. Project plan and specifications must be followed along with any applicable regulations.
- PLACEMENT**
- Use the plan line, grade and elevations shown on the construction documents to install the modules. The sand bedding or aggregate bearing layer must be level.
 - Modules shall be placed with 1/4" minimum and 3/4" maximum gaps between modules.
 - All vertical & top joints shall be covered with an 8" minimum width selfadhesive joint wrap.
 - Horizontal joints between modules or slabs shall be sealed with Con Seal CS-102 butyl rubber sealant.
 - Seal pipe penetrations to containment membrane liner with pipe boots per liner manufacturer's recommendations.

KEYWAYS must be free of dirt, rocks, and water. Rocks and dirt prevent the vault sections from seating and sealing properly. Remove all protective paper from rubber sealant material. Splice rubber sealant material with a "side by side" joint, away from corners, corner splicing will not seal properly.

LINK SLAB PROCEDURE

Maintaining proper line and grade is critical to installation. A qualified surveyor on the site with proper equipment is recommended to ensure a square, level, and straight layout. Subgrade must be compacted.

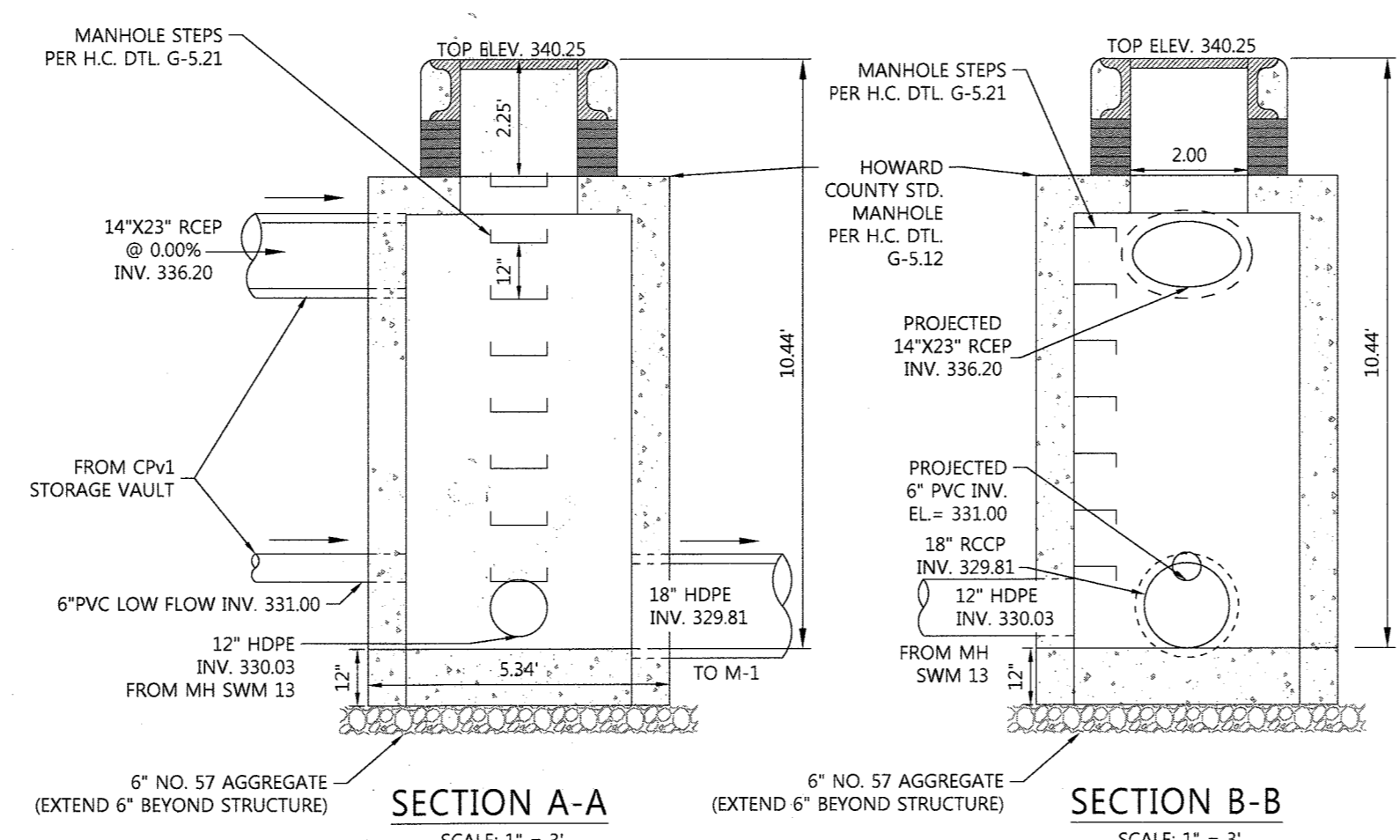
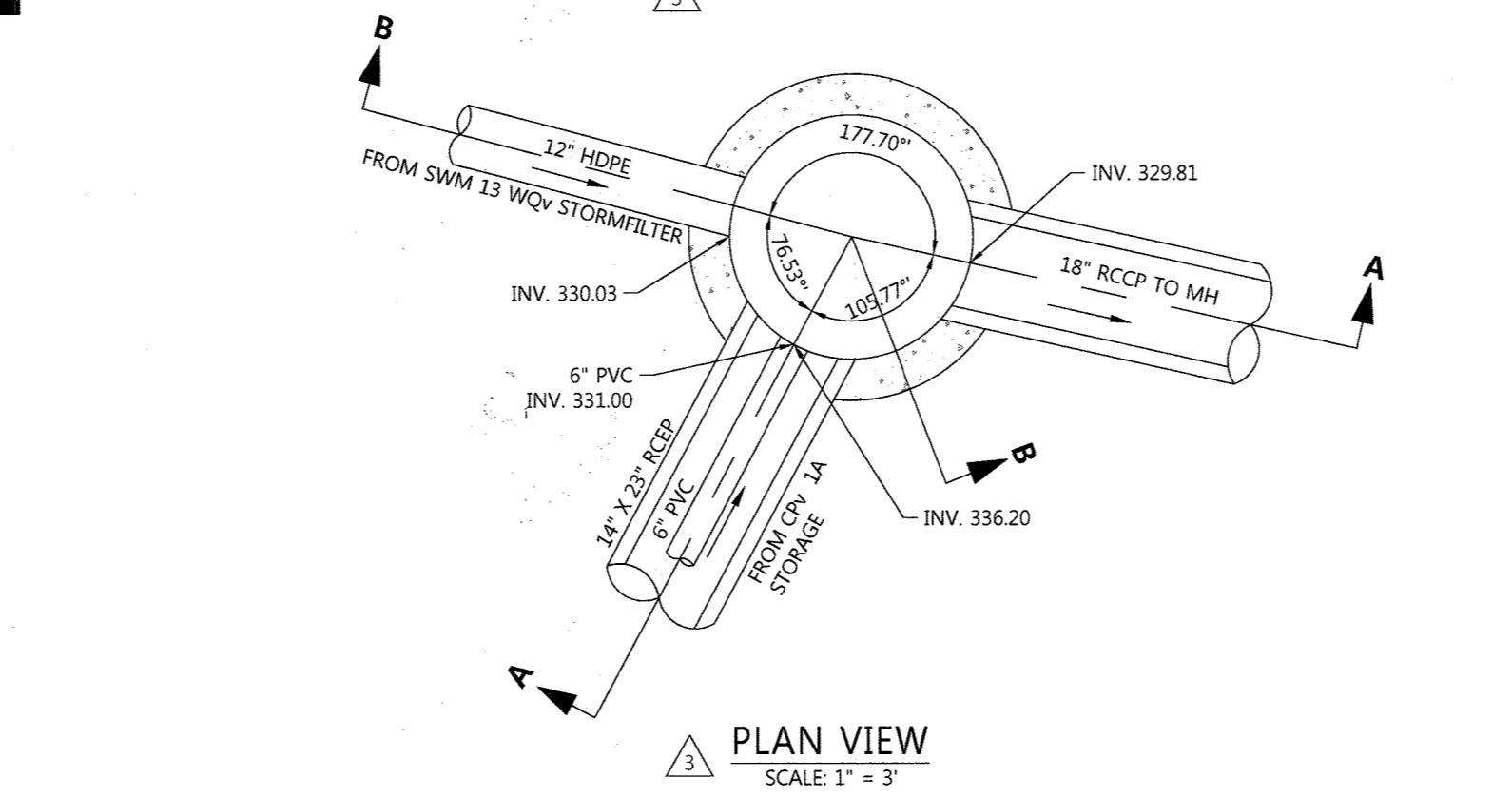
- Start in the corner of the layout and place the first bottom module.
- Place adjacent bottom modules. Be sure to set the corners square and straight.
- Where called out on plans, place reinforcement beams between the modules at grade level below where the link slab will sit. Reinforcement beams may not be required at all locations, so refer to the project specific configuration.
- Place interior bottom modules.
- Check the distance between pieces when there is a gap for a link slab. Both bottom corners should be between 8" and 8'-1 1/4".
- Place top modules.
- Check the distance between pieces when there is a gap for a link slab. Both top corners should be 8" and 8'-1 1/4".
- Place Con Seal CS-102 along the top module edges for the horizontal link slab joints.
- Place the link slab. Ensure that it fits tightly between all adjacent modules. The drop key should fit inside the adjacent modules. Do not allow the link slab to rest on the drop key.
- Ensure surface contact with the bottom of the link slab and the top of the adjacent modules. Reset adjacent modules as necessary to correct the problem.
- Continue placing adjacent modules and link slabs.
- Oldcastle Precast recommends placing each link slab as soon as the supporting modules are in place to ensure proper fit.
- Continue installation procedure as recommended in the Storm Capture Installation Manual.

BACKFILL

Once all modules are in place, with joints sealed, and geotextile fabric wrapped, the Storm Capture system shall be inspected by the engineer of record or an accepted representative. Upon approval, backfilling can begin.

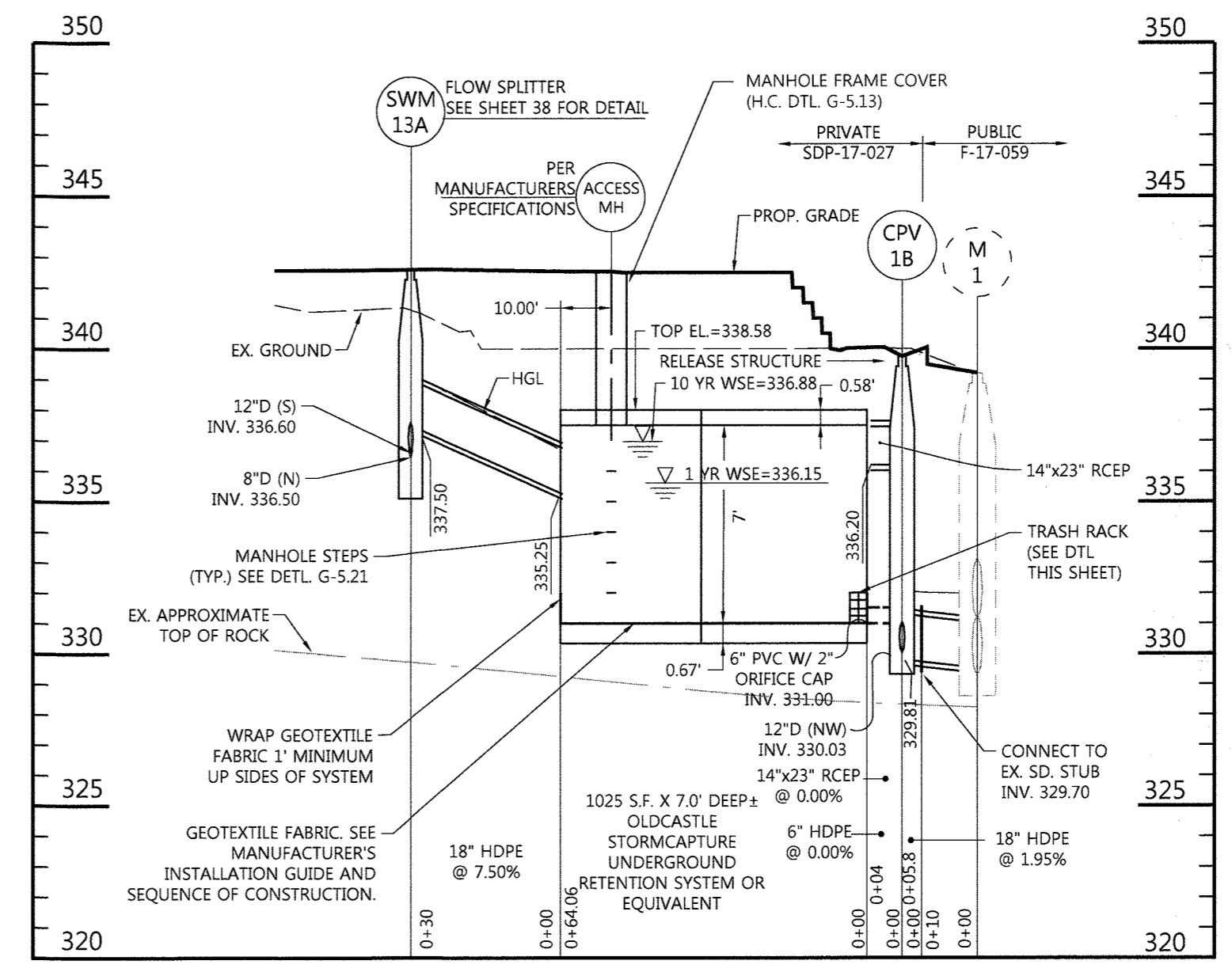
- Do not compact within 6" of module to avoid damaging the system. Care shall be taken during placement of backfill not to displace modules. Joint wrap, containment membrane liner, or geotextile fabric.
- Backfilling shall be in 1' lifts with proper compaction between lifts. Typical backfill shall be compacted to 95% standard proctor density or as specified.
- Expansive soil material shall not be used as backfill around the structure.
- Compaction shall be adequate to support expected loads on top of the system and surrounding area. Consult the geotechnical engineer for the project.
- Once installed, Storm Capture modules are ready for paving or overburden material.
- Finished grading, paving, and landscaping shall be per construction documents.
- Construction equipment exceeding design loading shall not be allowed on structure. Consult Oldcastle Precast if unsure.
- Contact Oldcastle Precast and the engineer of record if the live loads are greater than HS-20.
- Track vehicles including D-4 type dozers or lighter are permitted.

1>Note: Refer to the Oldcastle Storm Capture Installation Manual for detailed installation information.



CPV-1B: CPV #1 RELEASE STRUCTURE DETAIL

SCALE: 1" = 3"
NOTE: SEE HOWARD COUNTY STANDARD DETAIL G-5.12



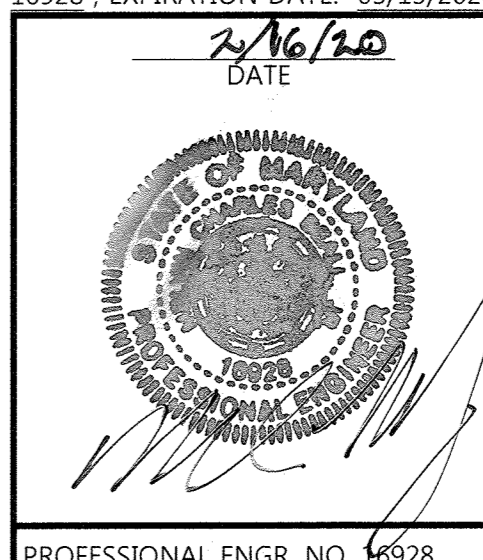
CPV #1 UNDERGROUND STORAGE PROFILE

SCALE: HORZ. 1" = 30', VERT. 1" = 5'

CPV1 STATION LOCATION		
STA.	OFFSET	DESCRIPTION
20+74.00	41.84 R	NW CORNER
21+33.66	43.26 R	NE CORNER
21+32.07	67.24 R	SE CORNER

MANUFACTURER:
OLDCASTLE PRECAST
7921 SOUTHPARK PLAZA
SUITE 200
LITTLETON, CO 80120
PH: 1-800-579-8819
WWW.OLDCASTLESTORMWATER.COM

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928. EXPIRATION DATE: 05/13/2020.



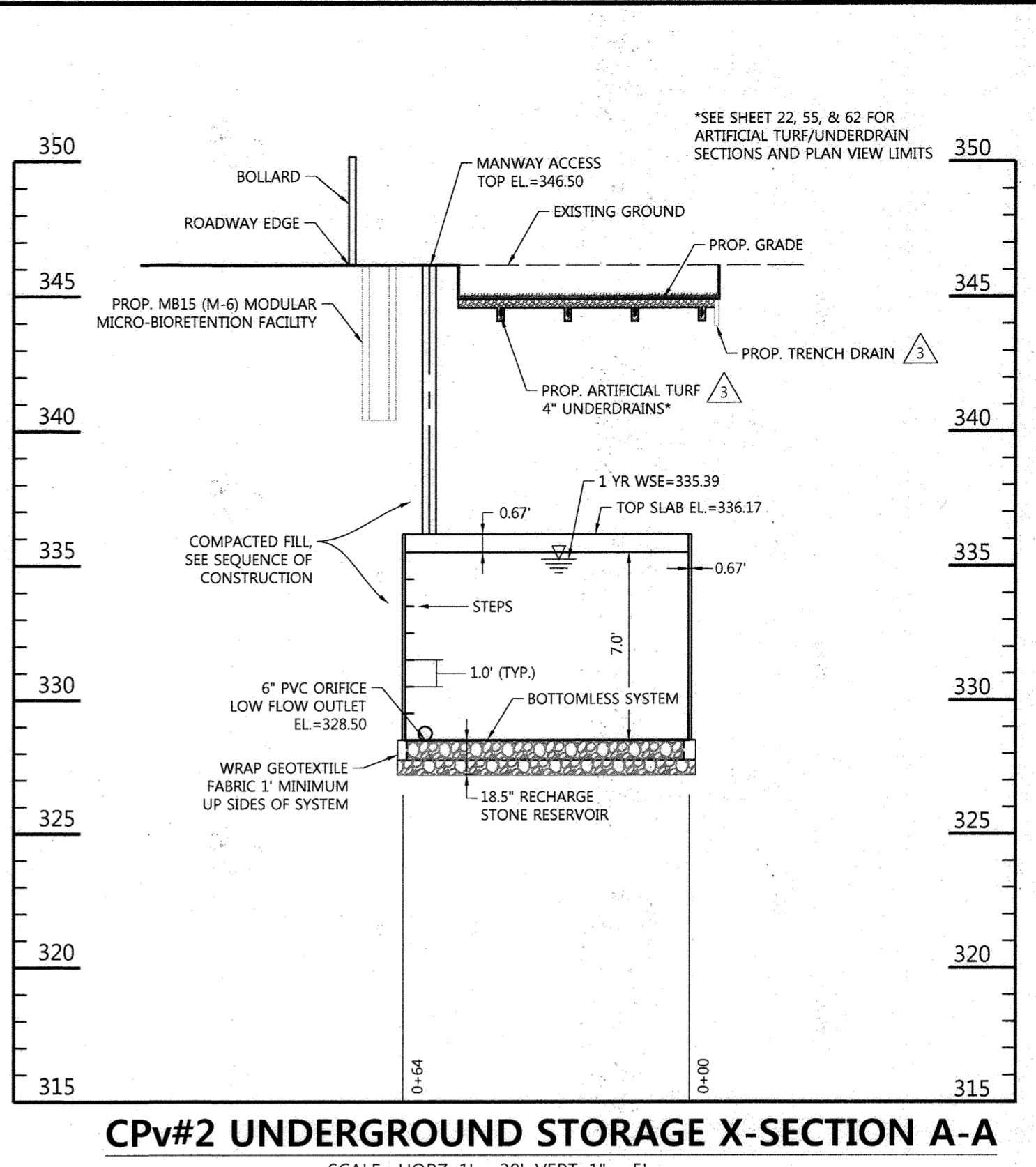
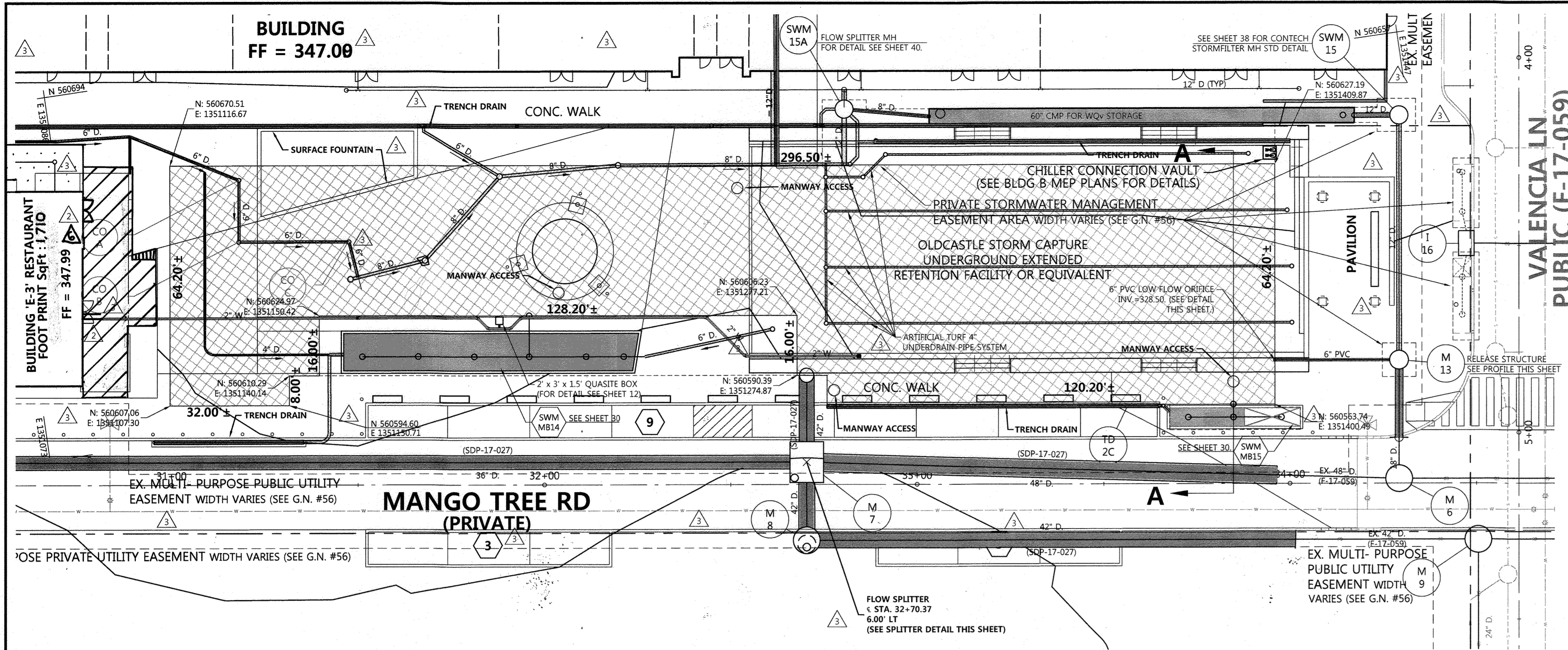
PROFESSIONAL ENGR. NO. 16928
APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION
CHIEF, DIVISION OF LAND DEVELOPMENT
DIRECTOR

DATE: 2-18-20
DATE: 3/6/2020
DATE: 5-10-2020

EASEMENT NOTE:
MULTI- PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
• WATER
• SEWER
• STREET LIGHTING
• STORM WATER MANAGEMENT
• STORM DRAIN
• UTILITY

11/18/19	REV. STEPS ABOVE BLDG 8, CPV1 STORAGE FACILITY & PROFILE, & UTIL. EASEMENTS
Date	Revision Description
DOWNTOWN COLUMBIA	
CRESCENT NEIGHBORHOOD	
PHASE I AREA 3, PHASE I	
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14	
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800	
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBDIVISION NAME	SECTION/AREA
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD PHASE I AREA 3
PLAT OR REF. BLOCK & SHEET	TRACT, DISTRICT
24623-24630 7 1/2 DMW	36 5
WATER CODE	SEWER CODE
550	LITTLE PATUXENT
STAGE	605602
TITLE UNDERGROUND CPV#1 STORMWATER MANAGEMENT PLAN REVISED SITE DEVELOPMENT PLAN	
Des. By	GDT/DM
Scale	AS SHOWN
Proj. No.	04038.80
Chk. By	MCB
Approved	MCB
34 of 94	



LEGEND

[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	PROPERTY LINE
[Symbol]	PARCEL LINE
[Symbol]	EX. CONTOURS
[Symbol]	EX. SEWER
[Symbol]	EX. STORM DRAIN
[Symbol]	EX. WATER
[Symbol]	EX. TREELINE
[Symbol]	PROP. BUILDING
[Symbol]	PROP. CURB
[Symbol]	PROP. CONTOURS
[Symbol]	PROP. EASEMENT
[Symbol]	PROP. SEWER
[Symbol]	PROP. STORM DRAIN
[Symbol]	PROP. WATER
[Symbol]	SOILS
[Symbol]	PROP. STREET LIGHT
[Symbol]	FIRE HYDRANT
[Symbol]	(M-6) WATER QUALITY TREATMENT FACILITY
[Symbol]	UNDERGROUND CPv FOOTPRINT
[Symbol]	RAISED METAL PLANTERS (TYP 12) REFER TO SHEET 55

CRESCENT NEIGHBORHOOD PHASE 1 AREA 3, PHASE 1
CPv #2 Underground Storage Sequence of Construction

EXCAVATION

- Excavation size shall be large enough to allow access around the structure for backfilling and compaction equipment and in accordance with the latest Storm Capture Installation Manual.
- Trench sloping shall follow OSHA requirements.
- To prevent excessive water pressure build up on the outside of the modules, the site must be prepared and graded for proper drainage around the Storm Capture system.
- Dewatering is required when water level is above bottom of subgrade.

SUBGRADE

- Native soil shall be level and compacted adequately to allow for required bearing capacity as noted on design documents.
- Add 2" of sand for leveling purposes, (closed bottom configurations).
- Geotextile fabric & containment membrane liner
- An 8 oz. non-woven geotextile fabric must be used as a separation layer around the Storm Capture system.
- When the project requires a containment membrane liner, a layer of 8 oz. non-woven geotextile fabric must be used on both the inside and outside face of the liner.
- Install containment membrane liner per manufacturer's recommendations.
- Aggregate bearing layer
- Queen-bottom modules only are required to be placed on a crushed aggregate bearing layer to a depth in accordance with Storm Capture Tech Note SC-01. Material shall be clean, durable crushed aggregate compacted as directed by the engineer of record. Oldcastle recommends size 5, 56, or 57 (per ASTM C33).
- Extend aggregate bearing layer a minimum of 1' around system perimeter.
- Aggregate bearing layer must be level and compacted prior to module placement.
- An 8 oz. non-woven geotextile fabric must be used as a separation layer around the aggregate material and Storm Capture system.

Note: Further investigation by a geotechnical engineer may be required where there are concerns with seasonally high water table, and/or poor soil conditions such as low allowable bearing capacity, permafrost, and seasonal freeze/thaw cycles.

Storm Capture modules are to be installed in accordance with ASTM C891-90, Installation of Underground Precast Utility Structures. Project plan and specifications must be followed along with any applicable regulations.

PLACEMENT

- Use the plan line, grade and elevations shown on the construction documents to install the modules. The sand bedding or aggregate bearing layer must be level.
- Modules shall be placed with 1/4" minimum and 3/4" maximum gaps between modules.
- All vertical & top joints shall be covered with an 8" minimum width selfadhesive joint wrap.
- Horizontal joints between modules or slabs shall be sealed with Consel CS-102 butyl rubber sealant.
- Seal pipe penetrations to containment membrane liner with pipe boots per liner manufacturer's recommendations.

Keyways must be free of dirt, rocks, and water. Rocks and dirt prevent the vault sections from seating and sealing properly. Remove all protective paper from rubber sealant material. Splice rubber sealant material with a "side by side" joint, away from corners, corner splicing will not seal properly.

LINK SLAB PROCEDURE

Maintaining proper line and grade is critical to installation. A qualified surveyor on the site with proper equipment is recommended to ensure a square, level, and straight layout. Subgrade must be compacted.

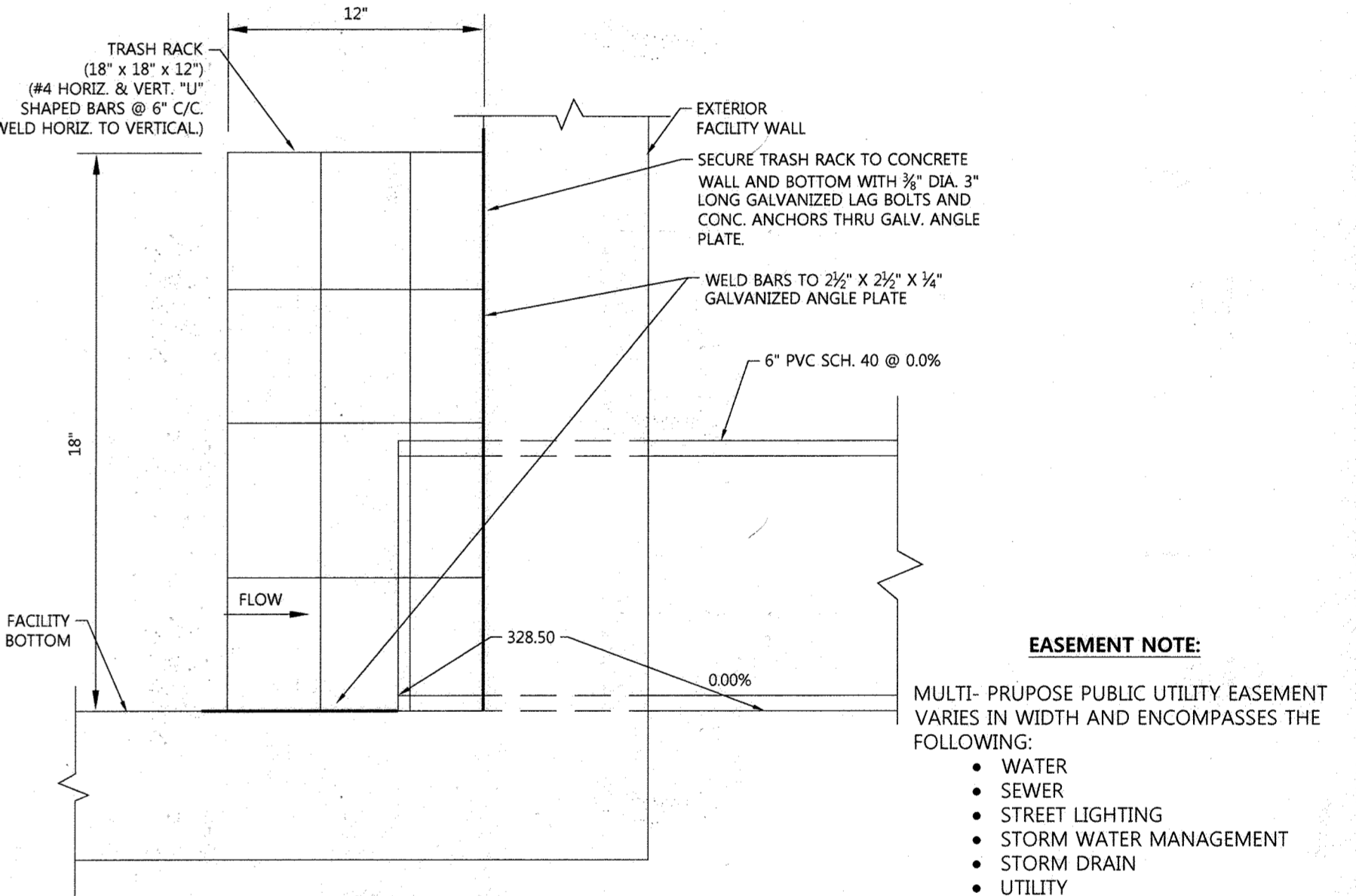
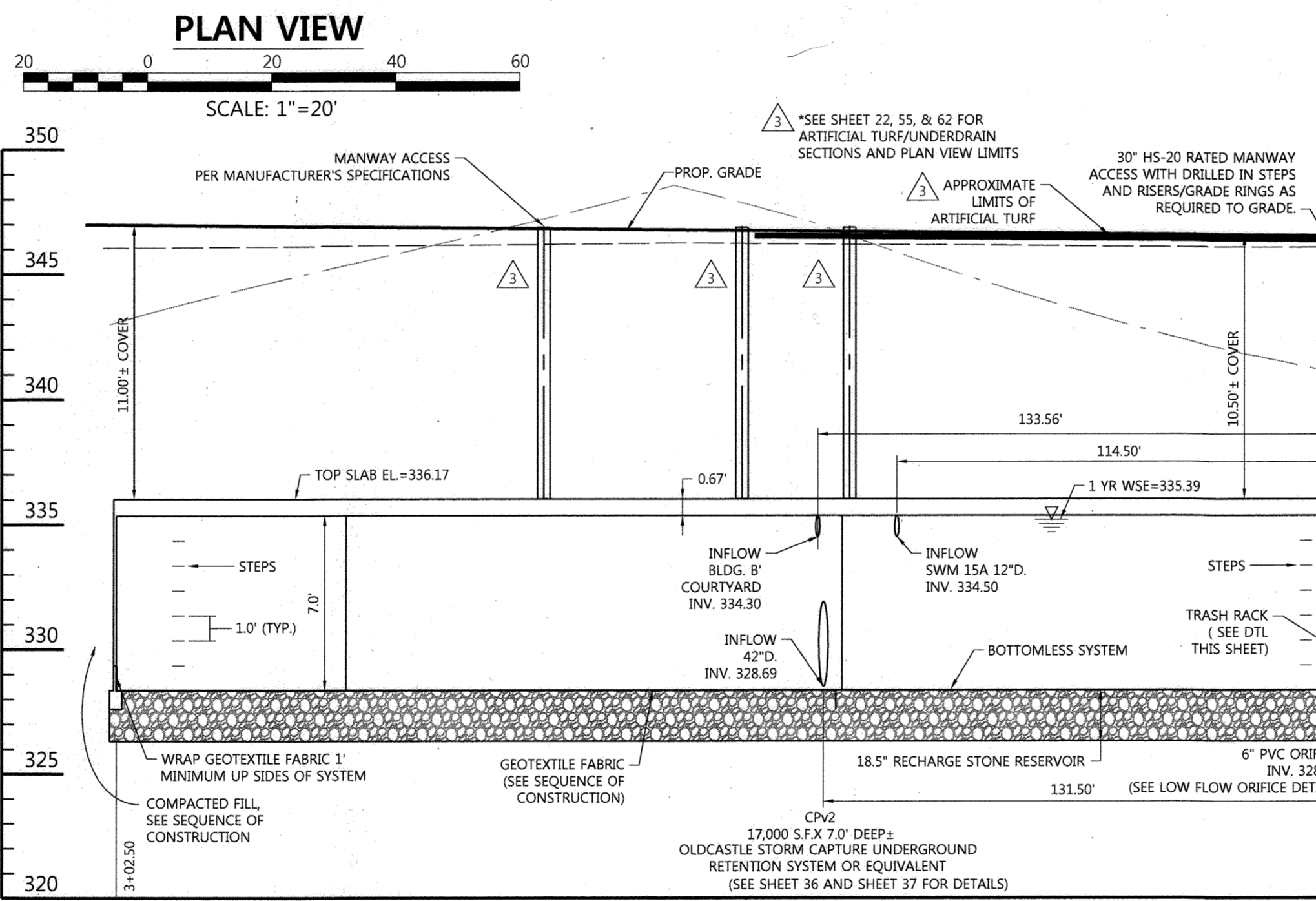
- Start in the corner of the layout and place the first bottom module.
- Place adjacent bottom modules. Be sure to set the corners square and straight.
- Where called out on plans, place reinforcement beams between the modules at grade level below where the link slab will sit. Reinforcement beams may not be required at all locations, so refer to the project specific configuration.
- Place interior bottom modules.
- Check the distance between pieces when there is a gap for a link slab. Both bottom corners should be between 8" and 8'-1 1/4".
- Place Consel CS-102 at the horizontal joints between module tops and bottoms.
- Place top modules.
- Check the distance between pieces when there is a gap for a link slab. Both top corners should be 8" and 8'-1 1/4".
- Place Consel CS-102 along the top module edges for the horizontal link slab joints.
- Place the link slab. Ensure that it fits tightly between all adjacent modules. The drop key should fit inside the adjacent modules. Do not allow the link slab to rest on the drop key.
- Ensure surface contact with the bottom of the link slab and the top of the adjacent modules. Reset adjacent modules as necessary to correct the problem.
- Continue placing adjacent modules and link slabs.
- Oldcastle Precast recommends placing each link slab as soon as the supporting modules are in place to ensure proper fit.
- Continue installation procedure as recommended in the Storm Capture Installation Manual.

BACKFILL

Once all modules are in place, with joints sealed, and geotextile fabric wrapped, the Storm Capture system shall be inspected by the engineer of record or an accepted representative. Upon approval, backfilling can begin.

- Do not compact within 6" of module to avoid damaging the system. Care shall be taken during placement of backfill not to displace modules, joint wrap, containment membrane liner, or geotextile fabric.
- Backfilling shall be in 1' lifts with proper compaction between lifts. Typical backfill shall be compacted to 95% standard proctor density or as specified.
- Expansive soil material shall not be used as backfill around the structure.
- Compaction shall be adequate to support expected loads on top of the system and surrounding area. Consult the geotechnical engineer for the project.
- Once installed, Storm Capture modules are ready for paving or overburden material.
- Finished grading, paving, and landscaping shall be per construction documents.
- Construction equipment exceeding design loading shall not be allowed on structure. Consult Oldcastle Precast if unsure.
- Contact Oldcastle Precast and the engineer of record if the live loads are greater than H5-20.
- Track vehicles including D-4 type dozers or lighter are permitted.

Note: Refer to the Oldcastle Storm Capture Installation Manual for detailed installation information.



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

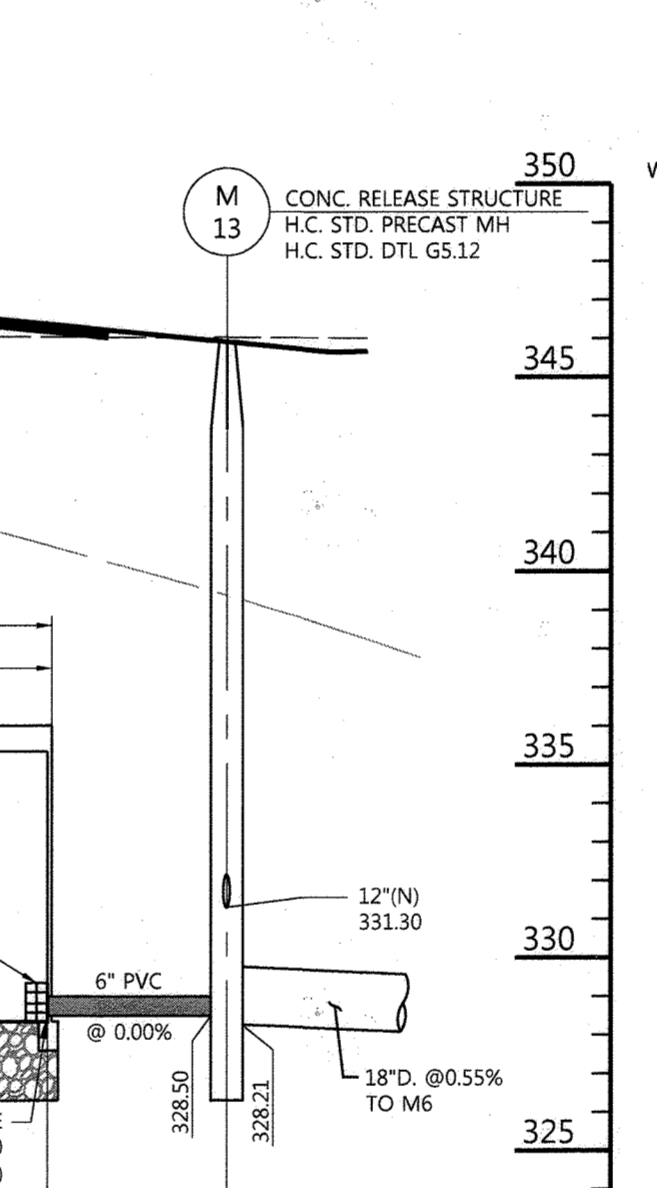
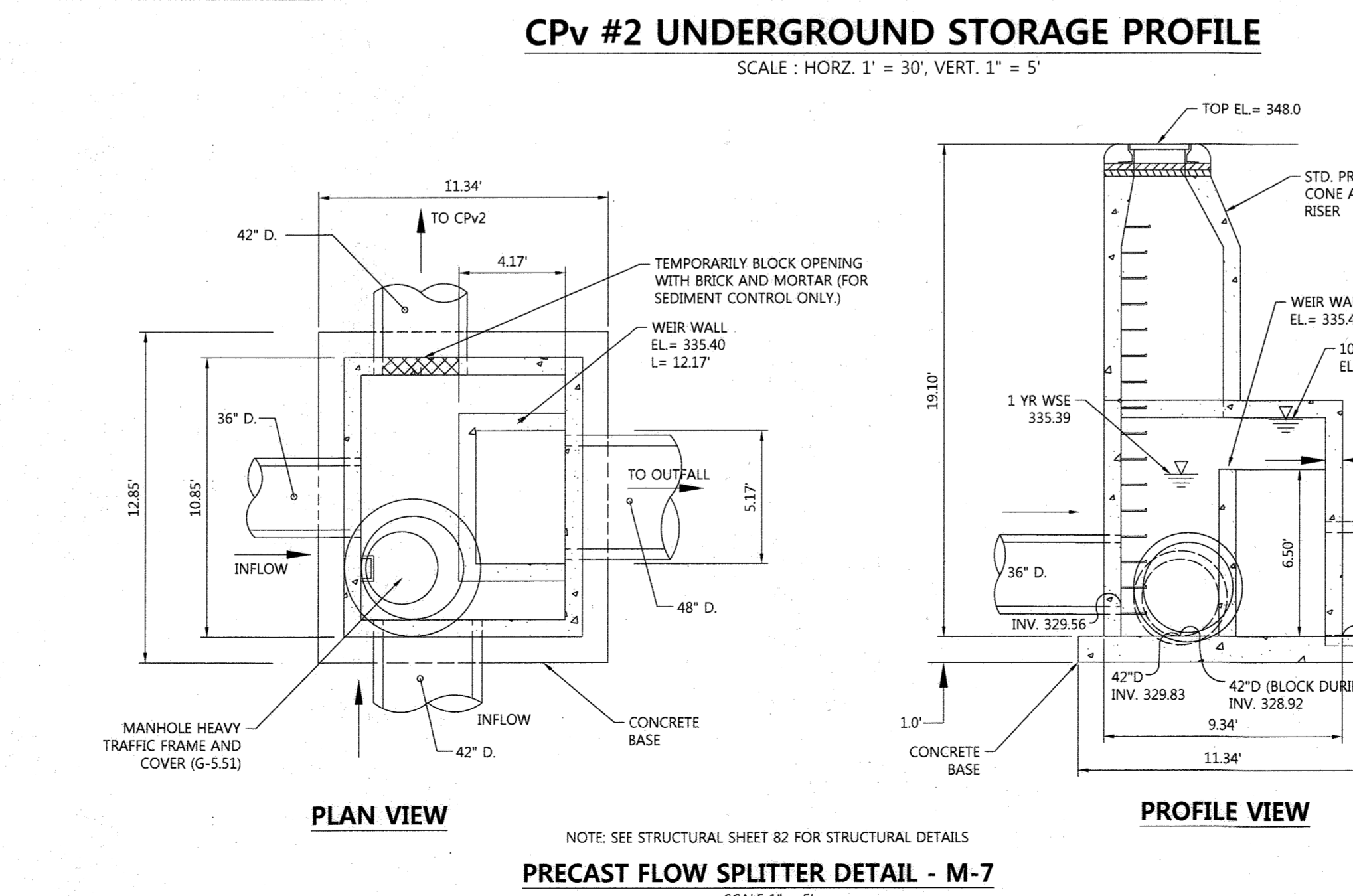
[Signature] **2-28-20**
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] **3/6/20**
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] **3-10-2020**
 DIRECTOR DATE

NOTES:

- REFER TO STORMWATER MANAGEMENT SHEET 34 FOR STORMCAPTURE INSPECTION AND MAINTENANCE SCHEDULE.
- SEE SHEET 38 FOR OPERATION AND MAINTENANCE AND FOR DETAIL OF SWM'S.



MANUFACTURER:
 OLDCASTLE PRECAST
 7921 SOUTHPARK PLAZA
 SUITE 200
 LITTLETON, CO 80120
 PH: 1-800-579-8819
 WWW.OLDCASTLESTORMWATER.COM

FOR REDLINE REVISION 6 ONLY

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE: 07/18/2023.

PROFESSIONAL ENGR. NO. 26569

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESENT-1, FDP-DC-CRESENT-1A

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.

PROFESSIONAL ENGR. NO. 16928

DATE	NO.	REVISION DESCRIPTION
11/18/21	1	UPDATE BUILDING 6-F FLOOR STAGE 4 HARDSCAPE
11/18/19	2	UPDATE PARK AND PAVILION LAYOUT
03/06/19	3	BLDG E2, E3, PLAZA HARDSCAPE, AND GRADING

DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

DAFT MCCLINE WALKER INC.

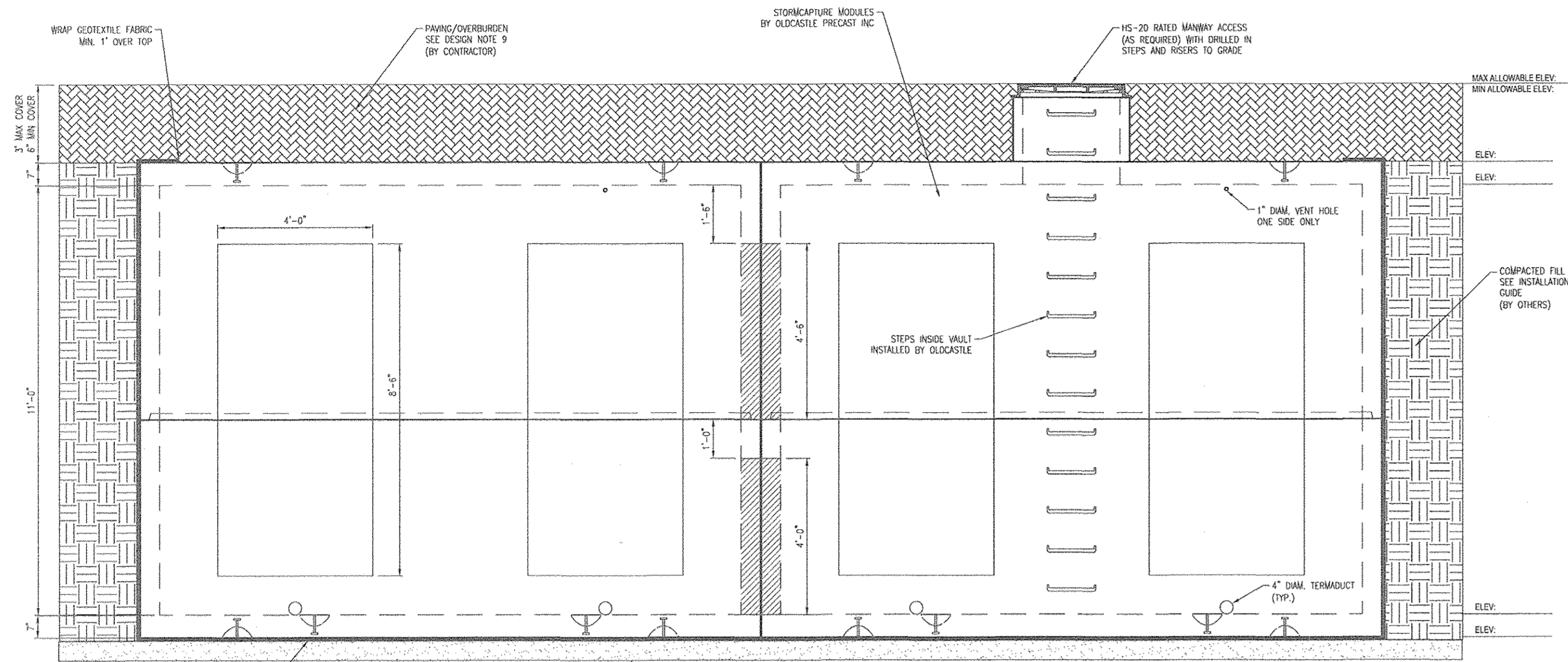
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION/AREA	CRS/BLK/BLD	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	7	36	5	605602
PLAT/CR/CL	2652/2650	7	36	5
WATER CODE	SSO	SEWER CODE	LITTLE PATUXENT	STAGE

TITLE UNDERGROUND CPv#2 & Rev STORMWATER MANAGEMENT PLAN
 REVISED SITE DEVELOPMENT PLAN

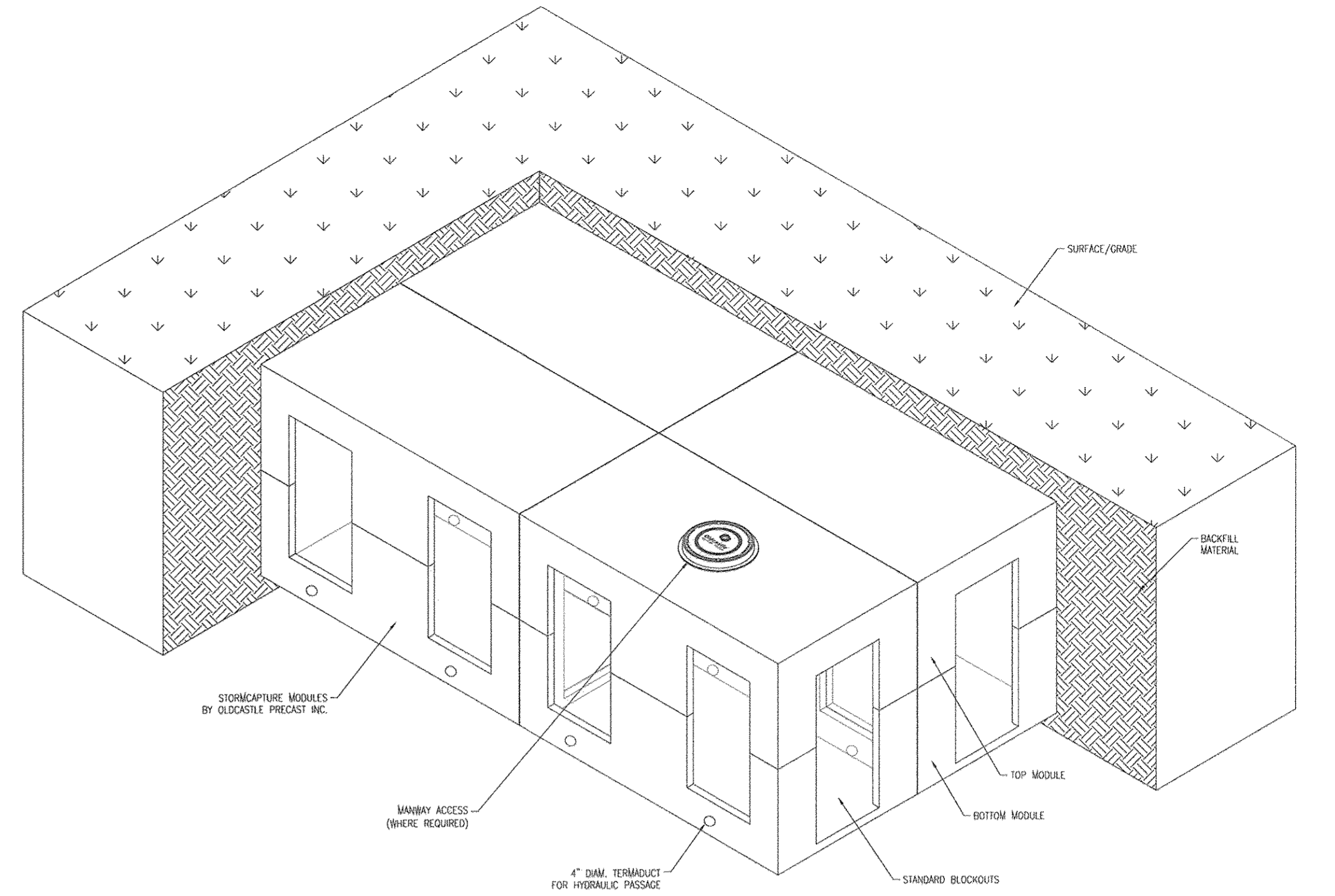
Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.B0
 Drn. By MCB Date 5-10-18
 Chk. By MCB Approved MCB

35 of 94



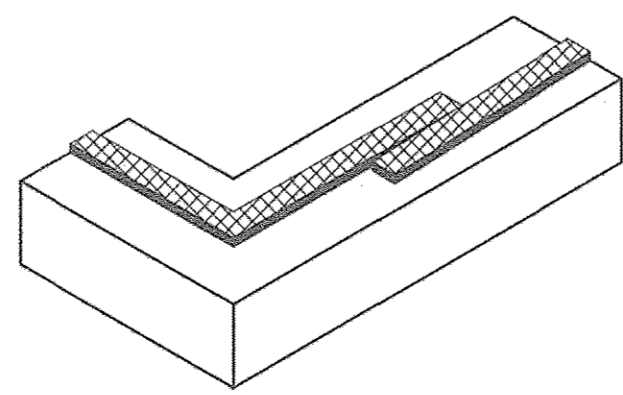
TYPICAL ELEVATION
SCALE: 3/8" = 1'-0"

NOTE:
TERMINALTS IS TO BE ANCHORED OUT AT SPECIFIED LOCATIONS ONLY (BY OTHERS).

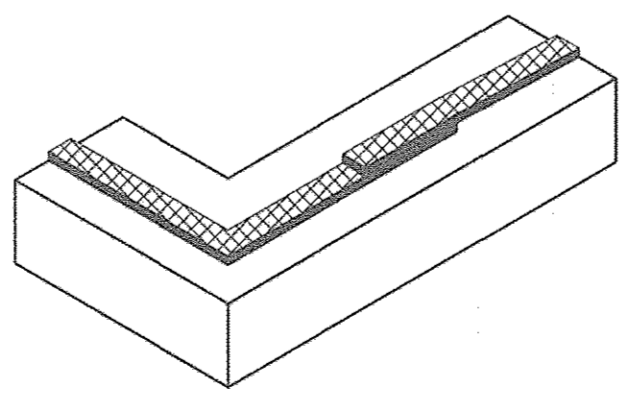


TYPICAL ISO VIEW
N.T.S.

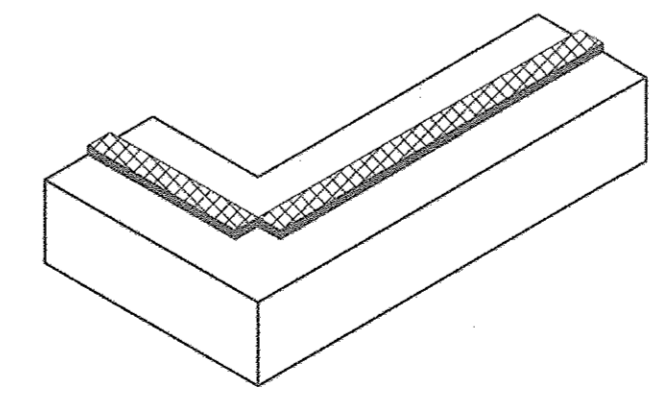
KEYWAYS MUST BE FREE OF DIRT, ROCKS, AND WATER. ROCKS AND DIRT PREVENT THE VAULT SECTIONS FROM SEATING AND SEALING PROPERLY. REMOVE ALL PROTECTIVE PAPER FROM RUBBER SEALANT MATERIAL. SPLICE RUBBER SEALANT MATERIAL WITH A "SIDE BY SIDE" JOINT, AWAY FROM CORNERS. CORNER SPLICING WILL NOT SEAL PROPERLY.



CORRECT - INSTALL RUBBER SEALANT MATERIAL AT THE OUTER EDGE OF THE KEYWAY. RUBBER SEALANT SHOULD BE CONTINUOUS AROUND CORNERS.



INCORRECT - DO NOT OVERLAP THE RUBBER SEALANT MATERIAL AT SPLICE.



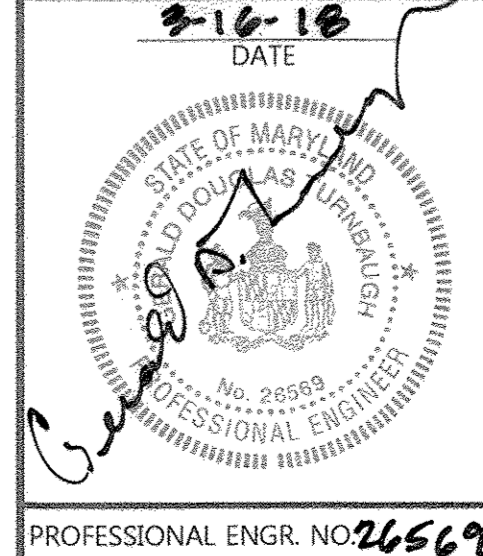
INCORRECT - DO NOT SPLICE RUBBER SEALANT MATERIAL AT A CORNER. RUBBER SEALANT SHOULD BE CONTINUOUS AROUND CORNERS.

CONSEAL CS-102 BUTYL RUBBER SEALANT
PLACEMENT DETAIL
N.T.S.

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESENT-1, FDP-DC-CRESENT-1A, 24-4931-D, 24-4975-D, 24-4974-D.

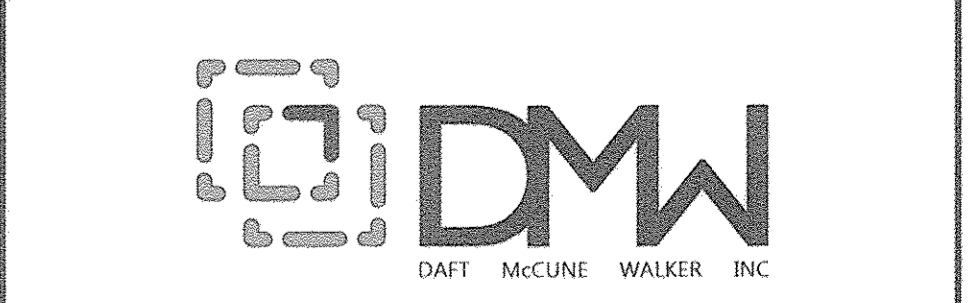
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE: 07/18/29



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

Date	No.	Revision Description
DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14 OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-3800		



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286		P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBDIVISION NAME	SECTION/AREA	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PHASE I AREA 3	PARCEL D
PLAT OR LOT	BLOCK #	TAX ZONE/PROP. ELEC. DISTRICT	CENSUS TRACT
N/A	7	36	5
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT		605602

TITLE UNDERGROUND CPV STORMWATER MANAGEMENT DETAILS			
Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	MCJ	Date 1-18-18	
Chk. By	MCB	Approved MCB	36 of 94

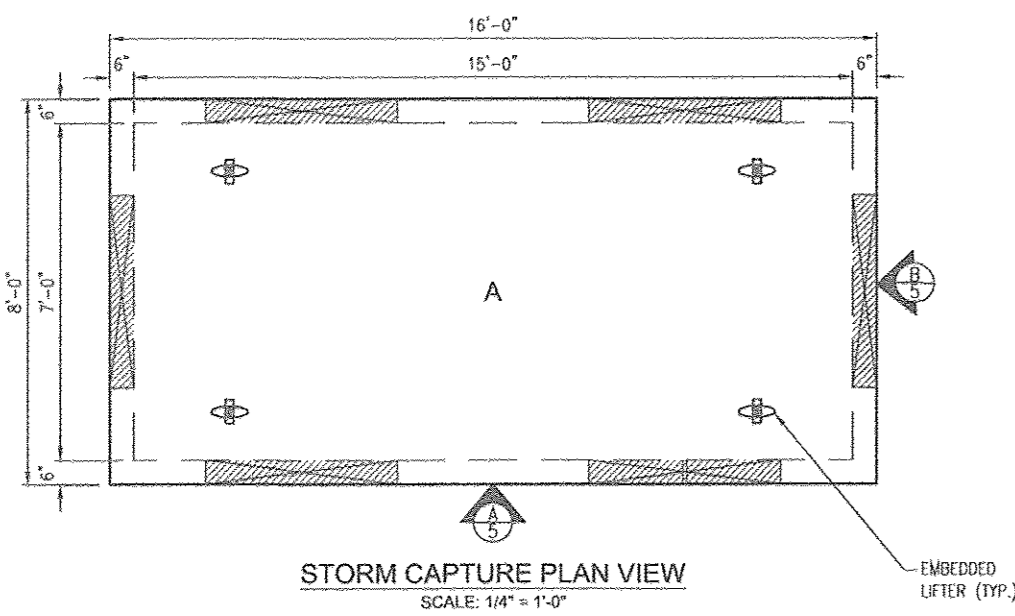
A:\2018\20180203 DOWNTOWN COLUMBIA PHASE I AREA 3\DWG\011.DWG 01/18/18 3:13 PM

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

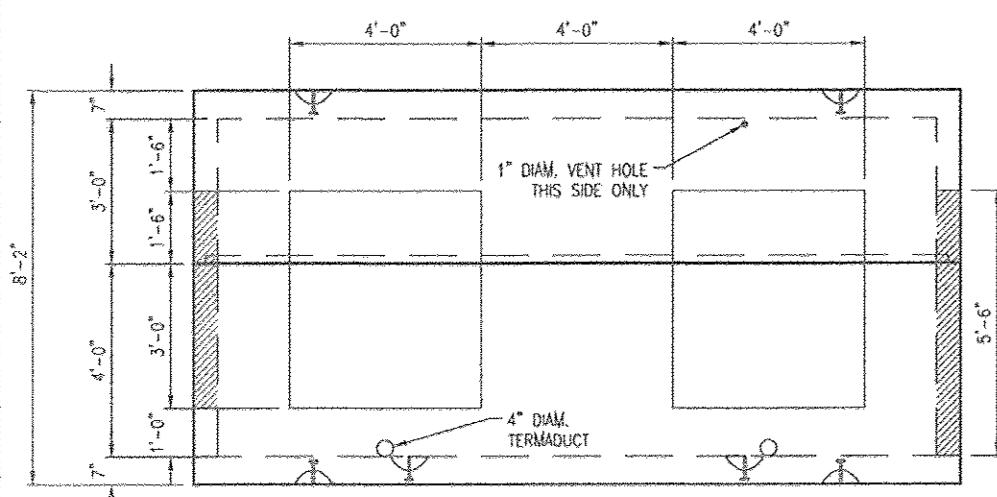
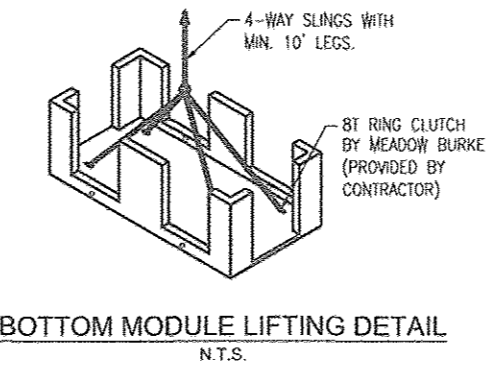
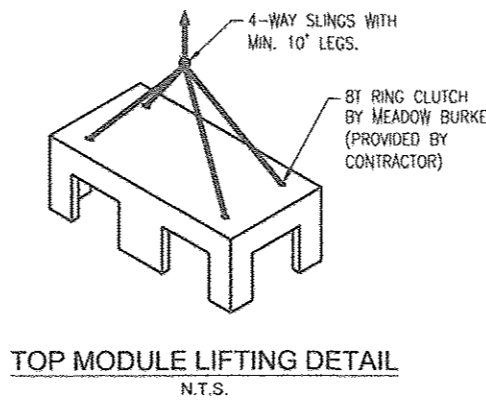
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 4-2-18

 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 6-15-18

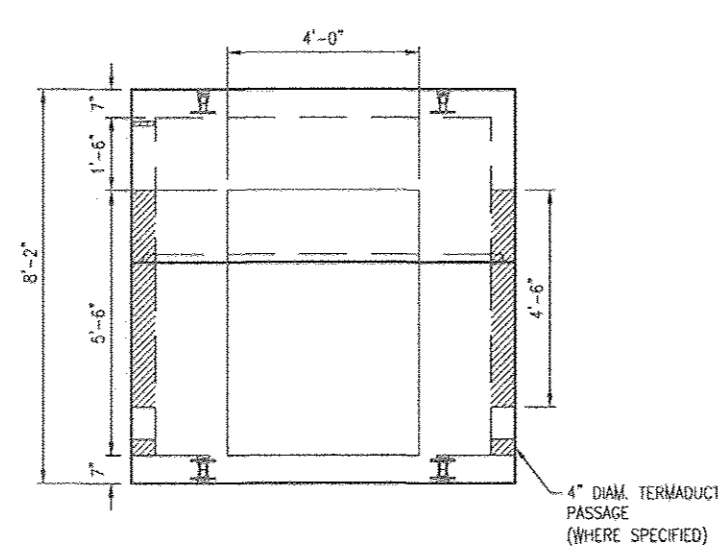
 DIRECTOR, DIVISION OF LAND DEVELOPMENT
 DATE: 6-15-18



HEAVIEST PICK
WEIGHT = 24,500 LBS

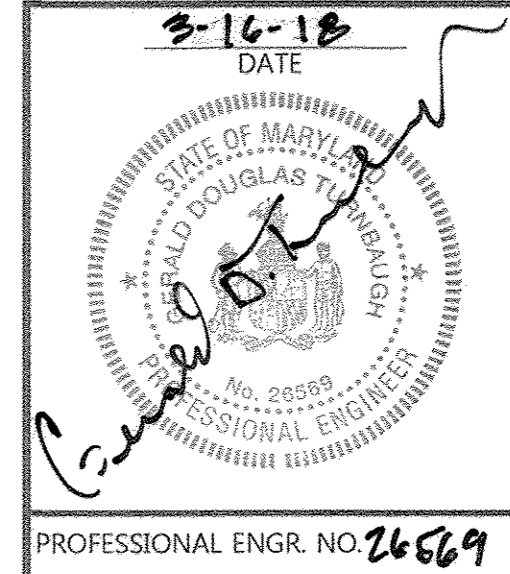


VIEW A
SCALE: 1/4" = 1'-0"



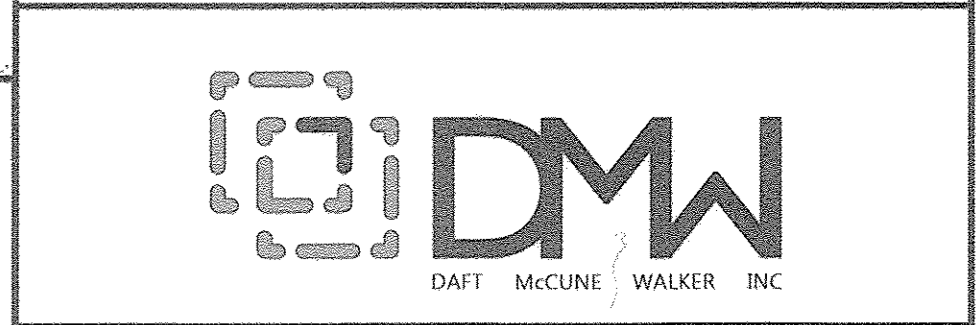
VIEW B
SCALE: 1/4" = 1'-0"

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017,
SDP-16-075, SDP-18-005, WP-17-010,
WP-17-049, WP-17-052, WP-17-115,
WP-18-020, WP-18-021, SP-16-009,
WP-16-100, FDP-DC-CRESCENT-1,
FDP-DC-CRESENT-1A
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE
DOCUMENTS WERE PREPARED OR
APPROVED BY ME AND THAT I AM A
DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE
STATE OF MARYLAND, LICENSE NO.
26569, EXPIRATION DATE: 07/18/19



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 4/14/18

Date	No.	Revision Description
DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14 OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-961-4800		



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286			
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM			
SUBDIVISION NAME	SECTION/AREA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT AREA		PARCEL D
PLANNING BOARD	7	36	5
WATER CODE	550	LITTLE PATUXENT	STAGE
TITLE			
UNDERGROUND CPV STORMWATER MANAGEMENT DETAILS			
Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Dwn. By	MCJ	Date 1-18-18	37 of 94
Chk. By	MCB	Approved MCB	

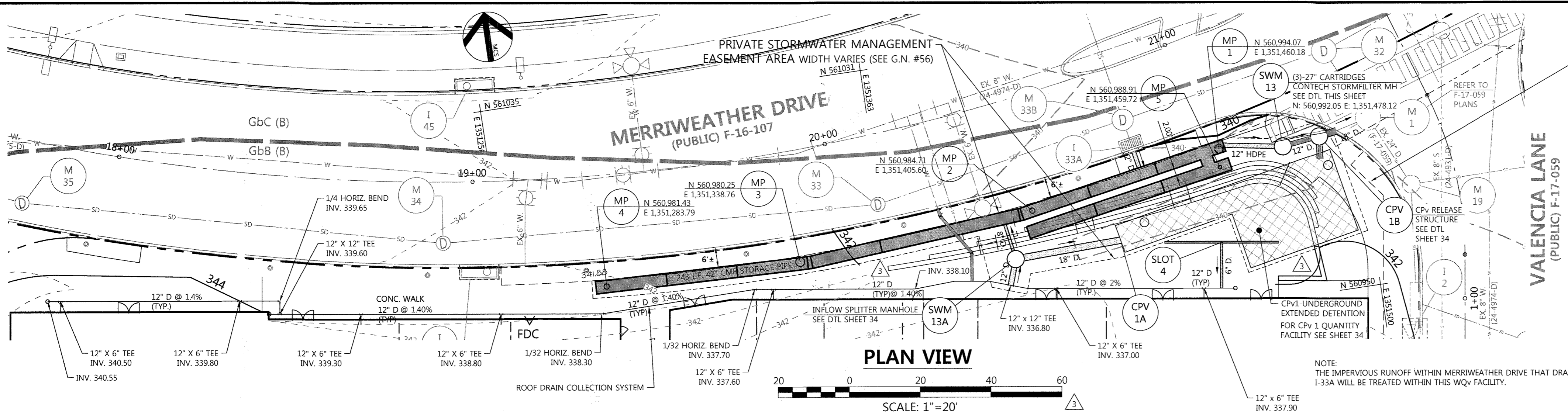
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 4-2-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 4/2/18
 CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 4-15-18
 DIRECTOR, DIVISION OF LAND DEVELOPMENT

LEGEND

	LIMIT OF DISTURBANCE
	PROPERTY LINE
	PARCEL LINE
	EX. CONTOURS
	EX. SEWER
	EX. STORM DRAIN
	EX. WATER
	EX. TREELINE
	PROP. BUILDING
	PROP. CURB
	PROP. CONTOURS
	PROP. EASEMENT
	PROP. SEWER
	PROP. STORM DRAIN
	PROP. WATER
	SOILS
	PROP. 100 YEAR FLOODPLAIN
	CPV UNDERGROUND STORAGE
	PROP STREET LIGHT
	FIRE HYDRANT

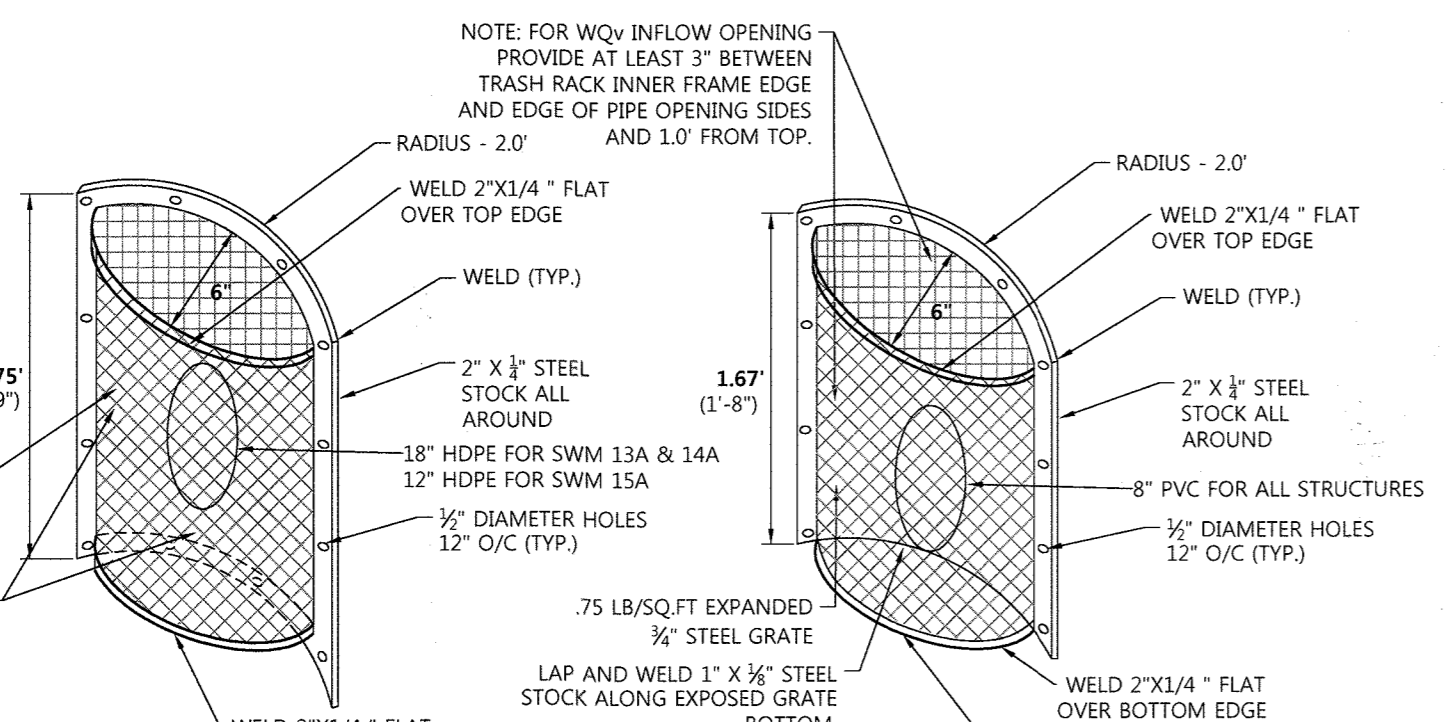
42" CMP STATION LOCATION

STA.	OFFSET	DESCRIPTION
19+35.39	31.06 R	TEE
21+02.71	30.61 R	TEE
21+08.17	30.83 R	END
20+51.50	36.68 R	BEGIN
21+02.54	36.11 R	TEE
21+07.93	36.46 R	END



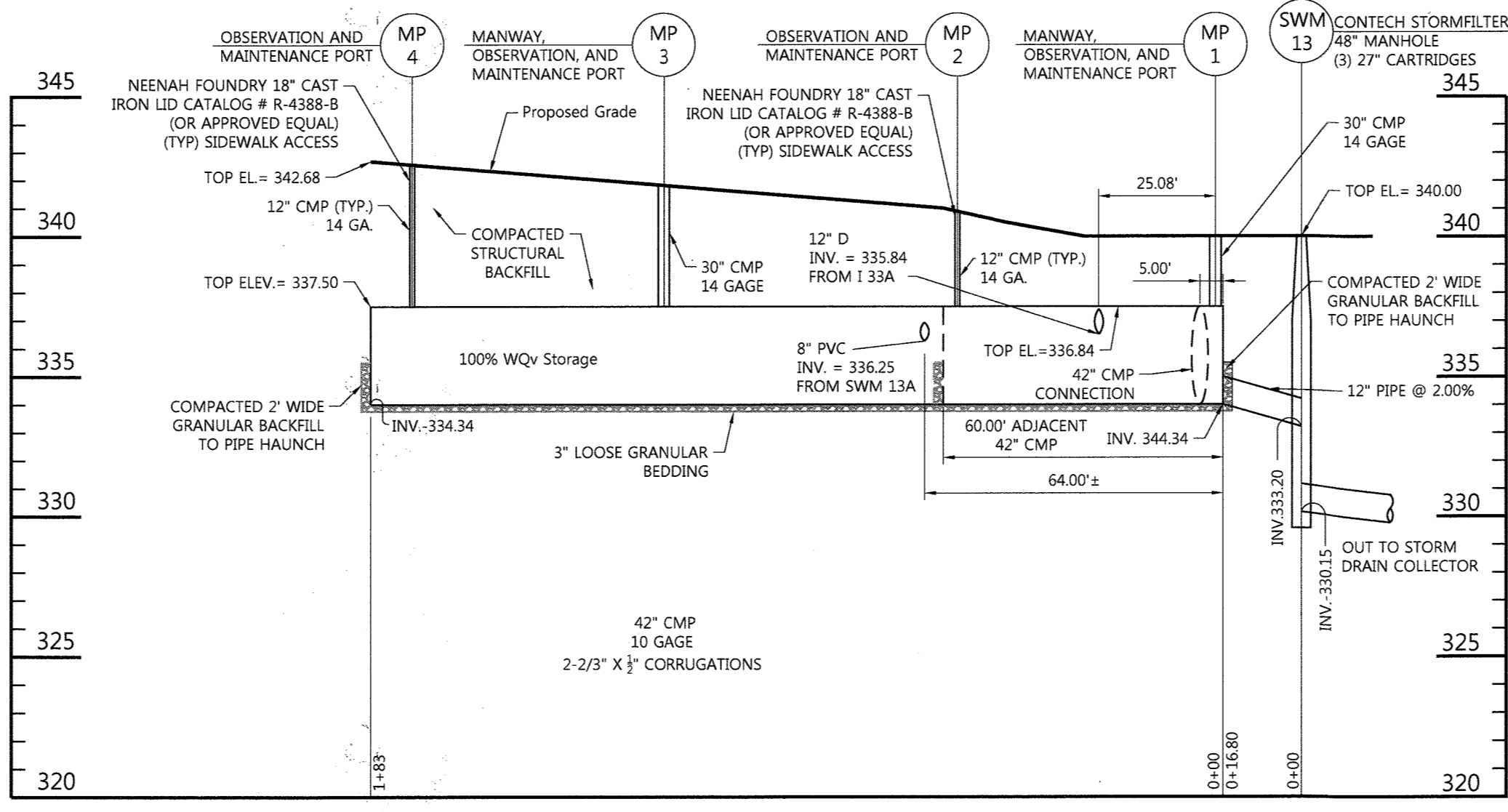
PLAN VIEW

SCALE: 1" = 20'



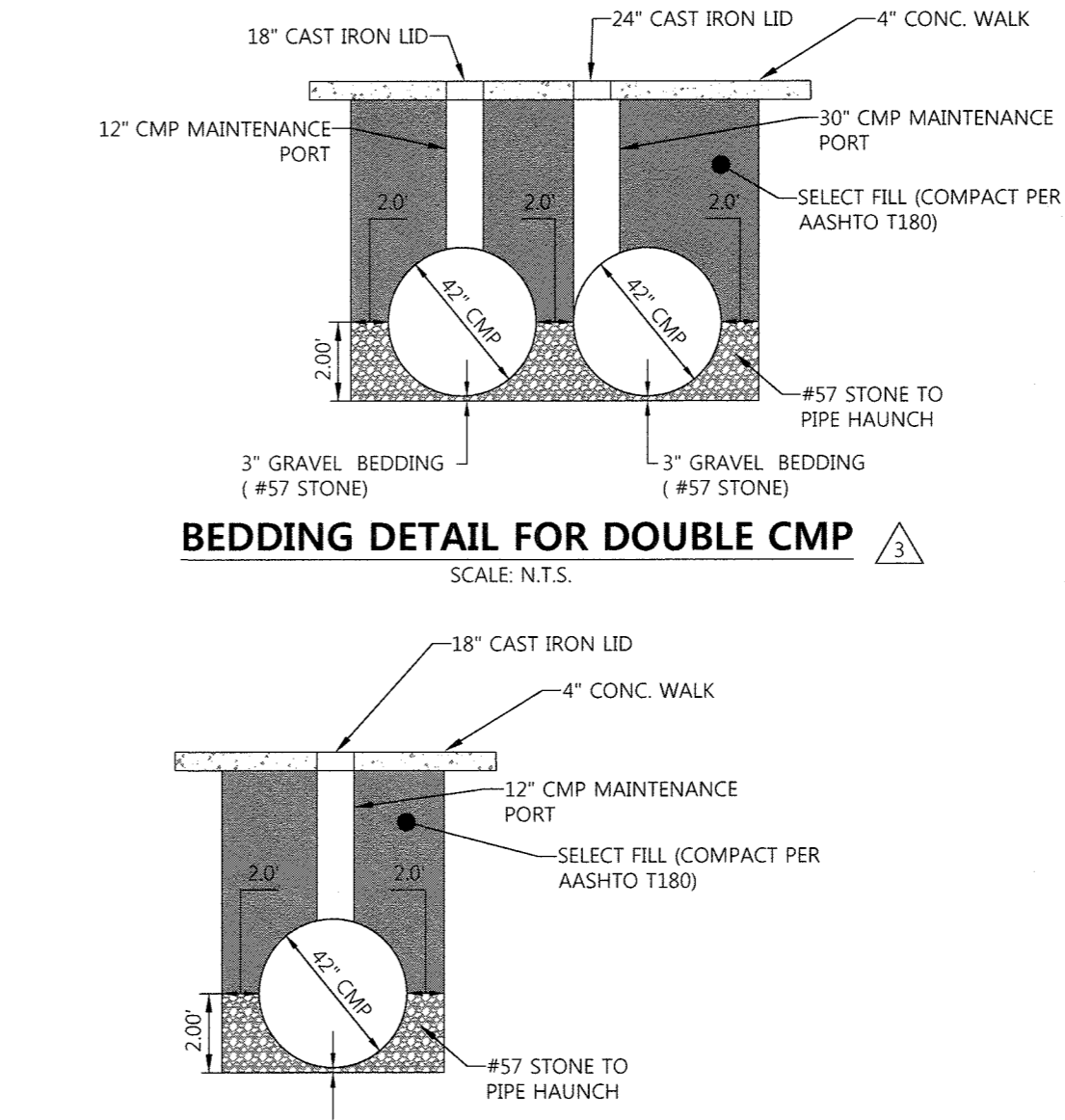
TRASH RACK FOR INFLOW PIPE TO CPV STORAGE FOR SPLITTER STRUCTURES SWM 13A, SWM 14A & SWM 15A

- NOTES FOR TRASH RACK
- TRASH RACK TO BE CENTERED OVER OPENING EXCEPT WHERE NOTED.
 - ALL SURFACES TO BE COATED WITH ZRC COLD GALVANIZING COMPOUND AFTER WELDING.
 - TRASH RACK TO BE FASTENED TO THE WALL WITH 1/2" MASONRY ANCHORS.
 - TRASH RACK TO BE REMOVABLE.



STORMFILTER PROFILE - SWM D.A. #13 (WQV FACILITY)

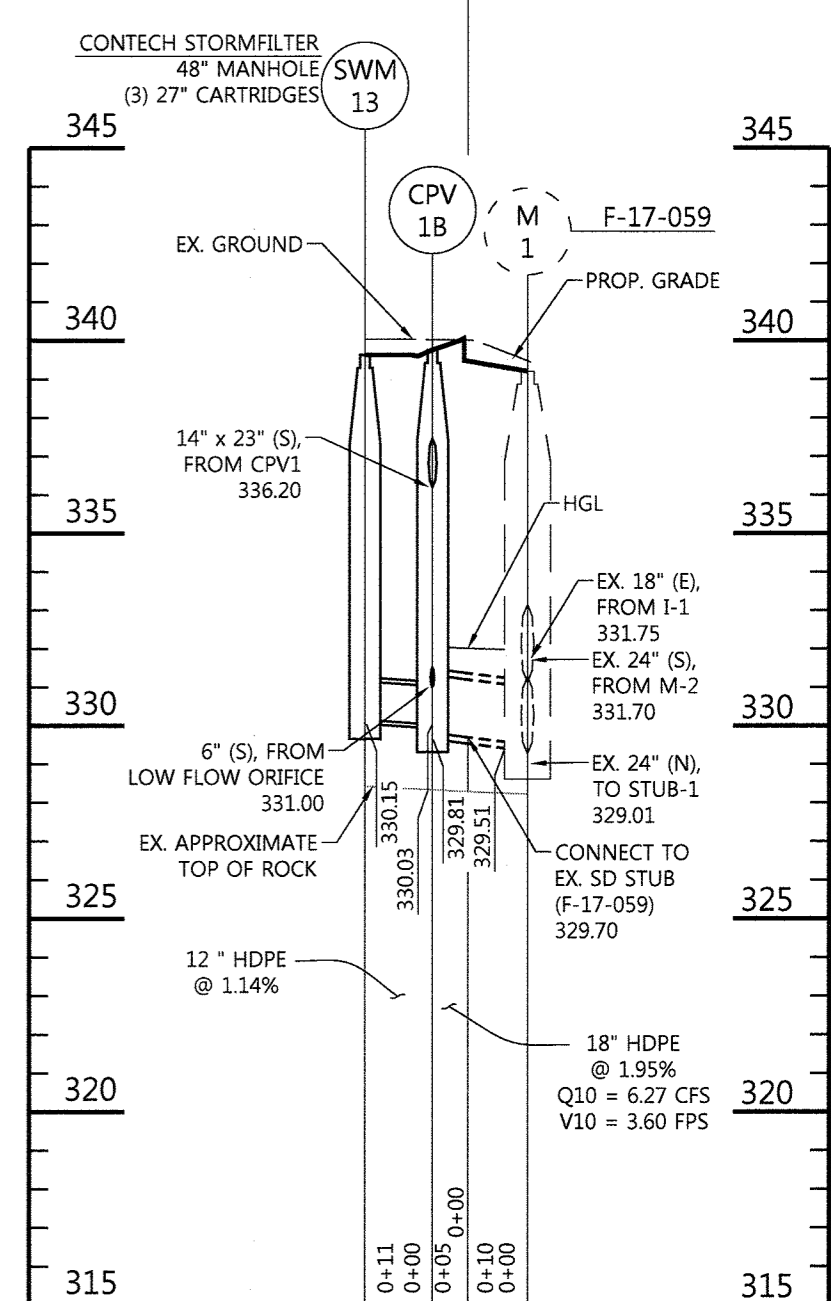
SCALE: Horiz. 1" = 30' Vert. 1" = 5'



BEDDING DETAIL FOR DOUBLE CMP

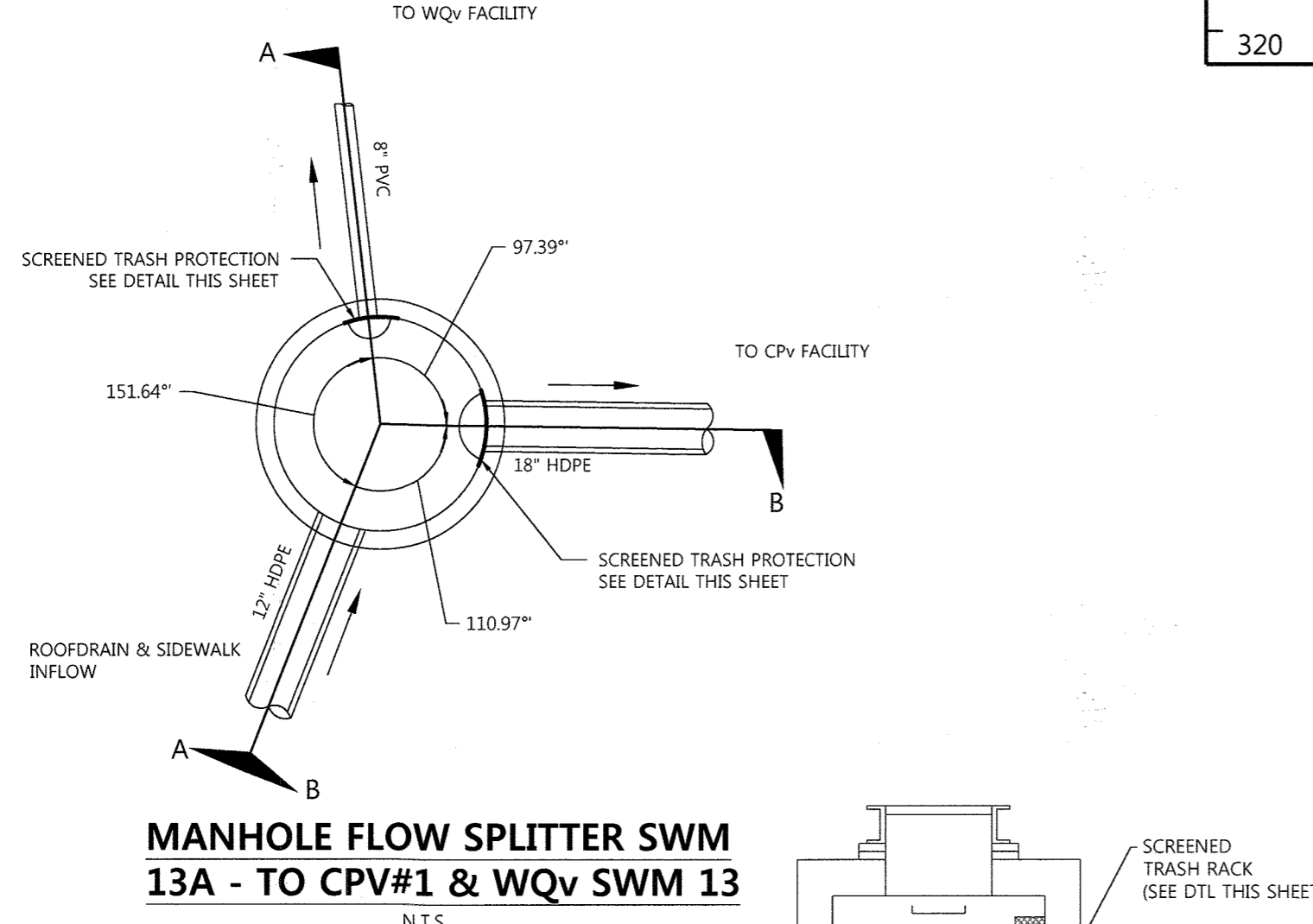
BEDDING DETAIL FOR SINGLE CMP

NOTE: STORM FILTERS 1, 2, & 3 ON SHEETS 38, 39, & 40 ARE PRIVATELY OWNED AND MAINTAINED.



SWM13-M1

SCALE: HOR. 1" = 30' VERT. 1" = 5'



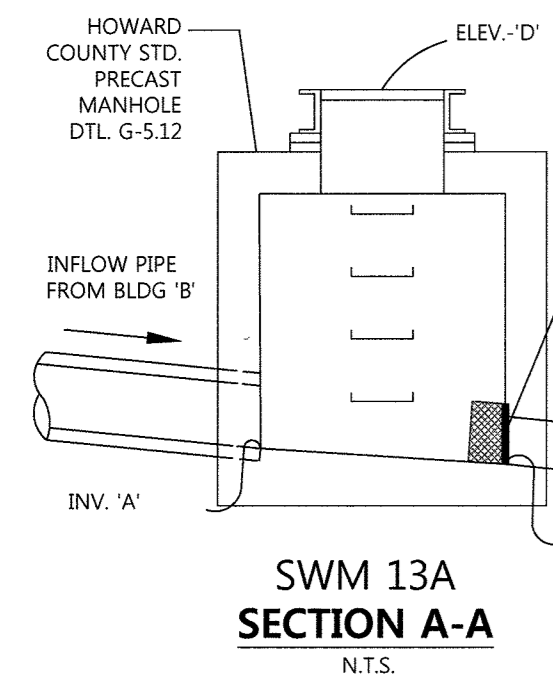
MANHOLE FLOW SPLITTER SWM 13A - TO CPV#1 & WQV SWM 13

SPLITTER TABLE

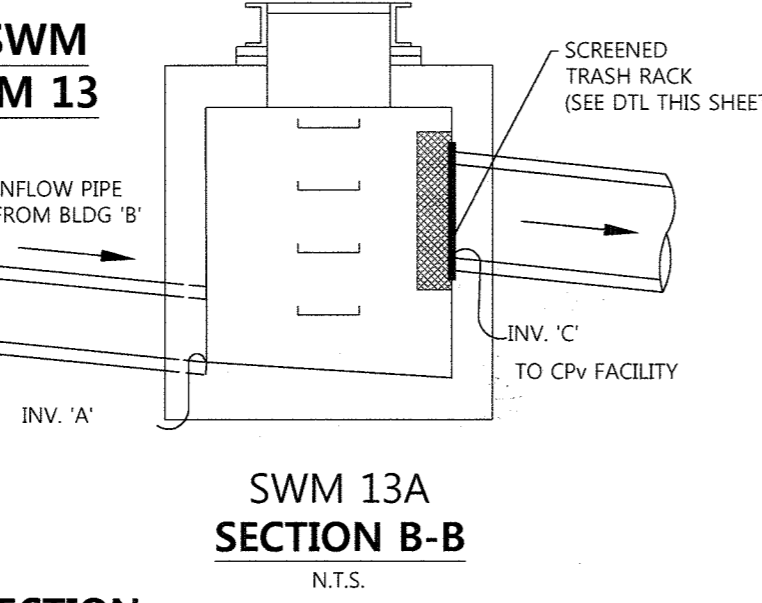
INVERT	ELEVATION
INV. A	336.60
INV. B	336.50
INV. C	337.50
ELEV. D	342.54

MH SWM-13A FLOW SPLITTER CROSS-SECTION

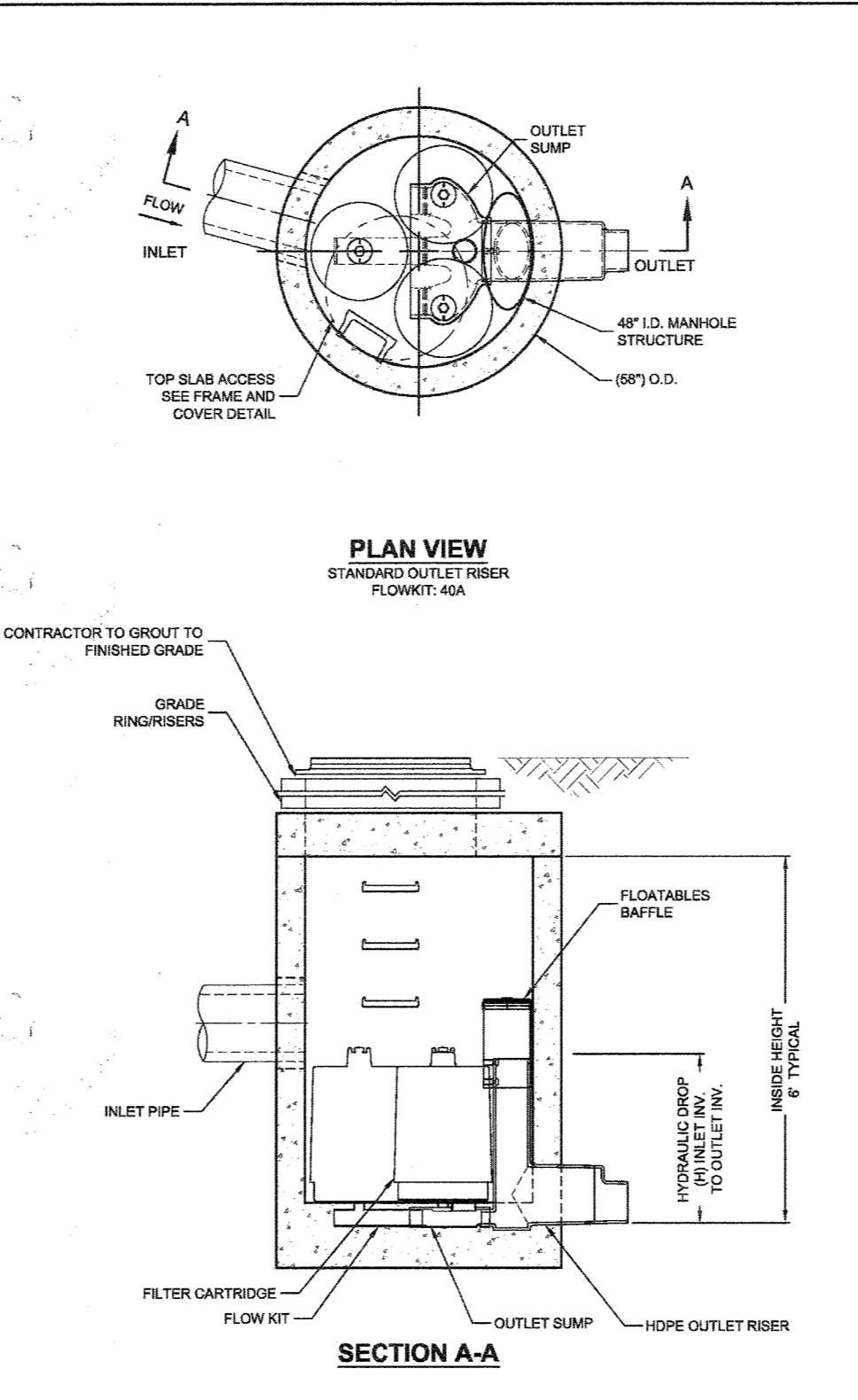
NOTE: SEE HOWARD COUNTY STD DETAIL G-5.12



SWM 13A SECTION A-A



SWM 13A SECTION B-B



FRAME AND COVER (DIAMETER VARIES) N.T.S.

STORMFILTER DESIGN NOTES

STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN WITH THE MAXIMUM NUMBER OF CARTRIDGES (3). VOLUME SYSTEM IS ALSO AVAILABLE WITH MAXIMUM 3 CARTRIDGES. 84" MANHOLE STORMFILTER PEAK HYDRAULIC CAPACITY IS 1.0 CFS. IF THE SITE CONDITIONS EXCEED 1.0 CFS AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION	27"	18"	LOW DROP
CARTRIDGE HEIGHT	3.00"	2.3"	1.8"
RECOMMENDED HYDRAULIC DROP (ft)	2.00"	1.50"	1.00"
SPECIFIC FLOW RATE (gpm/ft²)	29.5	11.25	7.5
CARTRIDGE FLOW RATE (gpm)	29.5	11.25	7.5

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	WATER QUALITY FLOW RATE (cfs)	PEAK FLOW RATE (cfs)	RETURN PERIOD OF PEAK FLOW (yrs)	# OF CARTRIDGES REQUIRED	CARTRIDGE FLOW RATE	MEDIA TYPE (CSF, PERLITE, ZPG, GAG, PHS)
INLET PIPE #1						
INLET PIPE #2						
OUTLET PIPE						

- GENERAL NOTES**
- CONTRACTOR TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - DIMENSIONS MARKED WITH (A) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED VAULT DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE.
 - STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 - STRUCTURE SHALL MEET ASHRAE 90.1 LOAD RATING, ASSUMING EARTH COVER OF 0' ± AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CARTRIDGES SHALL MEET ASHRAE 90.1 AND BE CAST WITH THE CONTECH LOGO.
 - FILTER CARTRIDGES SHALL BE MEDIUM DENSITY POLYPROPYLENE (MDPP) WITH SELF-CLEANING, RADIAL MEDIA DEPTH SHALL BE 7" ±. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 30 SECONDS.
 - SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (ft²).
- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL, DEPTH, AND/OR ANTI-FLOTTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY DIVISION OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLY STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET PIPE(S).
 - CONTRACTOR TO PROVIDE AND INSTALL CONNECTOR TO THE OUTLET RISER STUB. STORMFILTER EQUIPPED WITH A DUAL DIAMETER HDPE OUTLET STUB AND SAND COLLAR. IF OUTLET PIPE IS LARGER THAN 8" INCHES, CONTRACTOR TO REMOVE THE 8" INCH OUTLET STUB AT MOLDED IN OUTLINE, COUPLING BY FIELD OR EQUAL, AND PROVIDED BY CONTRACTOR.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 2-28-20

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 3-10-2020

EASEMENT NOTE:

MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:

- WATER
- SEWER
- STREET LIGHTING
- STORM WATER MANAGEMENT
- STORM DRAIN
- UTILITY

NOTE: REFER TO STORMWATER MANAGEMENT SHEET 39 FOR STORMFILTER INSPECTION AND MAINTENANCE SCHEDULE.

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION:
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.

DATE: 2/16/20

PROFESSIONAL ENGR. NO. 16928

11/18/19
 Date No. Revision Description

DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

DW
 DAFT MCCUNE WALKER INC.

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D

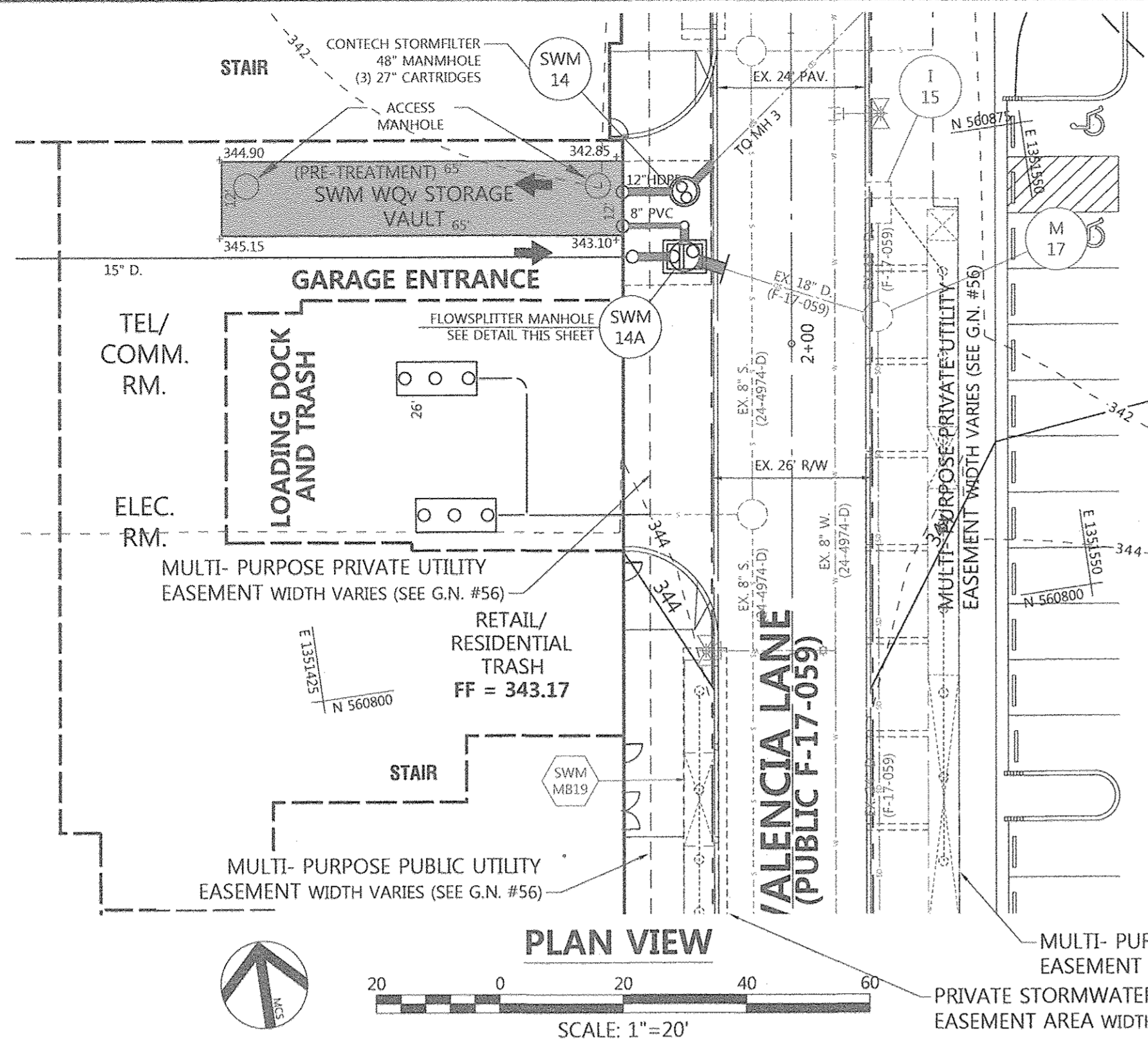
PLAN OR LOT BLOCK # ZONE TAX ZONE/MAP ELEC. DISTRICT CENSUS TRACT
 24623-24630 7 1 (NAI) 36 2 605602

POWER CODE 550 SEWER CODE LITTLE PATUXENT STAGE

TITLE **STORMFILTER #1 WQV**
STORMWATER MANAGEMENT PLAN
 REVISED SITE DEVELOPMENT PLAN

Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.B0
 Dwn. By MCJ Date 5-10-18
 Chk. By MCB Approved MCB

38 of 94

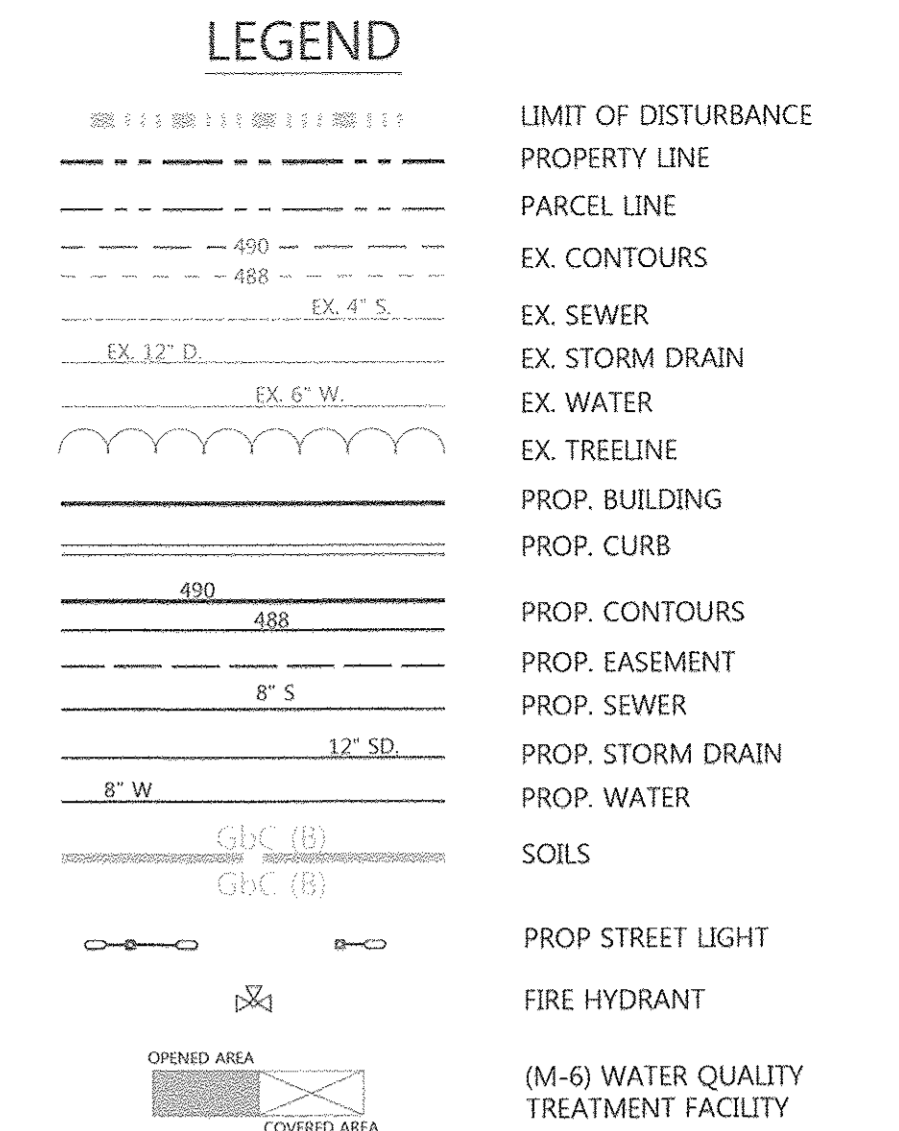


CONTECH STORMFILTER WQV TREATMENT SYSTEM

STRUCTURE	CENTERLINE STA.	OFFSET
SWM14	1+75.5	17.3'L
SWM14A	1+86.0	17.3'L
VAULT	1+70.4	92.3'L
VAULT	1+70.5	27.3'L
VAULT	1+82.4	92.3'L
VAULT	1+82.5	27.3'L

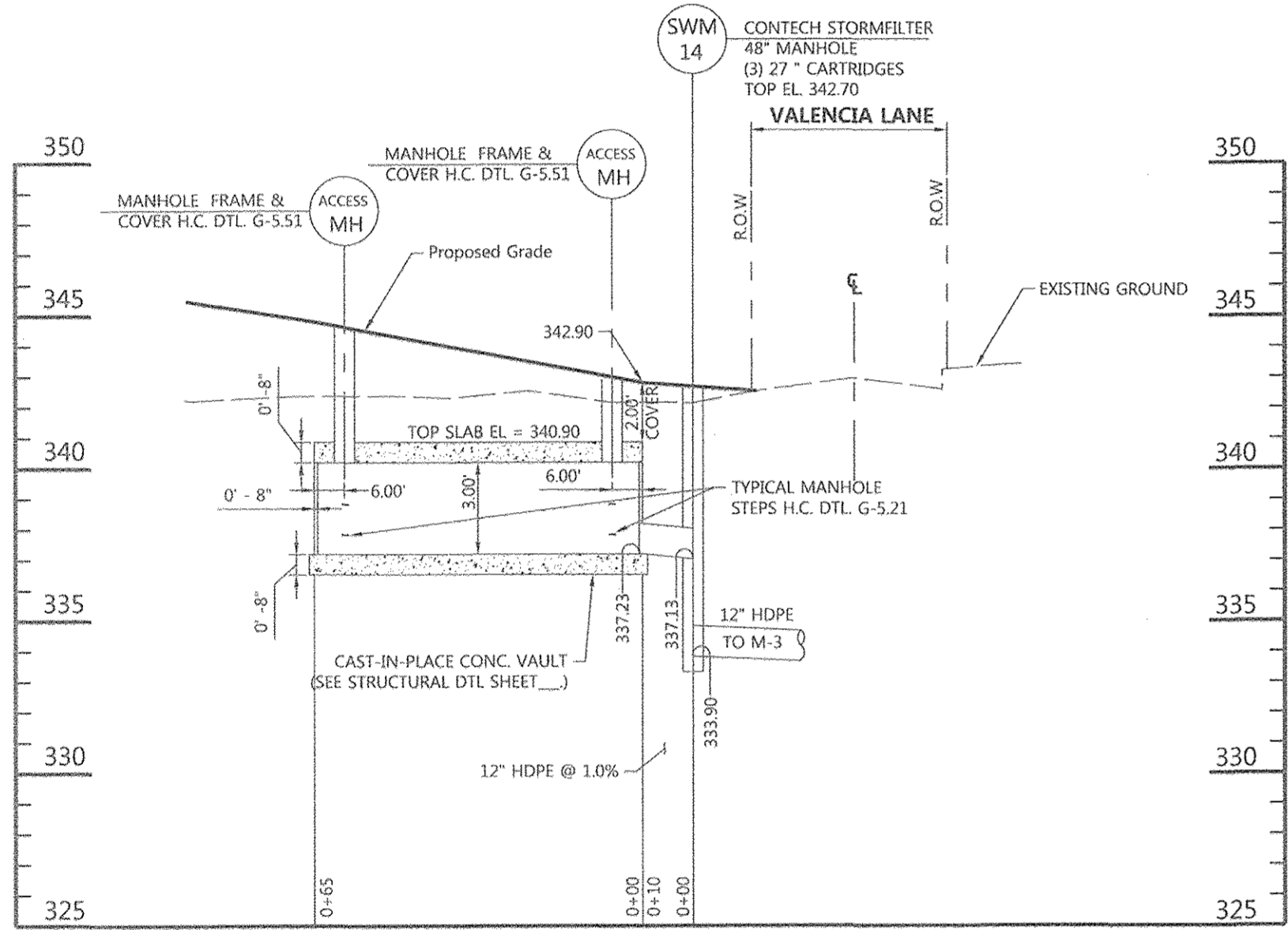
- STORMFILTER INSPECTION AND MAINTENANCE SCHEDULE**
- AT LEAST ONE SCHEDULED INSPECTION SHOULD TAKE PLACE PER YEAR WITH MAINTENANCE FOLLOWING AS WARRANTED.
 - FIRST INSPECTION TO BE DONE PRIOR TO WINTER SEASON. DETERMINE IF MAINTENANCE IS NECESSARY, AS WELL AS, DETERMINATION IF DISPOSAL DURING MAINTENANCE IS NECESSARY. OBTAIN SAMPLES OF THE ACCUMULATED SEDIMENTS AND MEDIA.
 - SECOND, IF WARRANTED, A MAINTENANCE (REPLACEMENT OF THE FILTER CARTRIDGES AND REMOVAL OF ACCUMULATED SEDIMENTS) SHOULD BE PERFORMED DURING PERIODS OF DRY WEATHER.
 - CHECK CONDITION OF THE STORMFILTER UNIT AFTER MAJOR STORMS FOR POTENTIAL DAMAGE BY HIGH WATER FLOWS AND FOR HIGH SEDIMENT ACCUMULATION.
 - MAINTENANCE FREQUENCY SHALL BE DETERMINED BY UNITS SEDIMENT LOADING.
 - INSPECTION PROCEDURES, IMPORTANT - INSPECTION SHOULD BE PERFORMED BY A PERSON WHO IS FAMILIAR WITH THE OPERATION AND CONFIGURATION OF THE STORMFILTER TREATMENT UNIT.
 - IF APPLICABLE, SET UP SAFETY EQUIPMENT TO PROTECT AND NOTIFY SURROUNDING VEHICLE AND PEDESTRIAN TRAFFIC.
 - VISUALLY INSPECT THE EXTERNAL CONDITION OF THE UNIT AND TAKE NOTES CONCERNING DEFECTS/PROBLEMS.
 - OPEN ACCESS PORTALS TO THE VAULT TO ALLOW THE SYSTEM TO VENT.
 - WITHOUT ENTERING THE VAULT, VISUALLY INSPECT THE INSIDE OF THE UNIT, AND NOTE ACCUMULATIONS OF LIQUIDS AND SOLIDS.
 - BE SURE TO RECORD THE LEVEL OF SEDIMENT BUILD-UP ON THE FLOOR OF THE VAULT, IN THE FOREBAY, AND ON TOP OF THE CARTRIDGES. IF FLOW IS OCCURRING, NOTE THE FLOW OF WATER PER DRAINAGE PIPE. RECORD ALL OBSERVATIONS. DIGITAL PICTURES ARE VALUABLE FOR HISTORIC DOCUMENTATION.
 - CLOSE AND FASTEN THE ACCESS PORTALS.
 - REMOVE SAFETY EQUIPMENT.
 - IF APPROPRIATE, MAKE NOTES ABOUT THE LOCAL DRAINAGE AREA RELATIVE TO ONGOING CONSTRUCTION, EROSION PROBLEMS, OR HIGH LOADING OF OTHER MATERIALS TO THE SYSTEM.

- METHOD 1:**
- THIS ACTIVITY WILL REQUIRE THAT THE MAINTENANCE PERSONNEL ENTER THE VAULT TO REMOVE THE CARTRIDGES FROM UNDER THE DRAIN MANIFOLD AND PLACE THEM UNDER THE VAULT OPENING FOR LIFTING (REMOVAL). DISCONNECT EACH FILTER CARTRIDGE FROM THE UNDERDRAIN CONNECTOR BY ROTATION COUNTERCLOCKWISE ¼ OF A TURN. ROLL THE LOOSE CARTRIDGE, ON EDGE, TO A CONVENIENT SPOT BENEATH THE VAULT ACCESS. USING THE APPROPRIATE HOISTING EQUIPMENT, ATTACH A CABLE FROM THE BOOM, CRANE, OR TRIPOD TO THE LOOSE CARTRIDGE. CONTACT CONTECH ENGINEERED SOLUTIONS FOR SUGGESTED ATTACHMENT DEVICES.
 - REMOVE THE USED CARTRIDGES (UP TO 250 LBS. EACH) FROM THE VAULT.
 - SET THE USED CARTRIDGE ASIDE OR LOAD ONTO HAULING TRUCK.
 - CONTINUE STEPS 1 THRU 3 UNTIL ALL CARTRIDGES HAVE BEEN REMOVED.
- METHOD 2:**
- THIS ACTIVITY WILL REQUIRE THAT THE MAINTENANCE PERSONNEL ENTER THE VAULT TO REMOVE THE CARTRIDGES FROM UNDER THE DRAIN MANIFOLD AND PLACE THEM UNDER THE VAULT OPENING FOR LIFTING (REMOVAL). DISCONNECT EACH FILTER CARTRIDGE FROM THE UNDERDRAIN CONNECTOR BY ROTATION COUNTERCLOCKWISE ¼ OF A TURN. ROLL THE LOOSE CARTRIDGE, ON EDGE, TO A CONVENIENT SPOT BENEATH THE VAULT ACCESS. USING THE APPROPRIATE HOISTING EQUIPMENT, ATTACH A CABLE FROM THE BOOM, CRANE, OR TRIPOD TO THE LOOSE CARTRIDGE. CONTACT CONTECH ENGINEERED SOLUTIONS FOR SUGGESTED ATTACHMENT DEVICES.
 - UNSCREW THE CARTRIDGE CAP.
 - REMOVE THE CARTRIDGE HOOD AND FLOAT.
 - AT LOCATION UNDER STRUCTURE ACCESS, TIP THE CARTRIDGE ON ITS SIDE.
 - EMPTY THE CARTRIDGE ONTO THE VAULT FLOOR. REASSEMBLE THE EMPTY CARTRIDGE.
 - SET THE EMPTY, USED CARTRIDGE ASIDE OR LOAD ONTO THE HAULING TRUCK.
 - CONTINUE STEPS 1 THRU 5 UNTIL ALL CARTRIDGES HAVE BEEN REMOVED.
 - REMOVE ACCUMULATED SEDIMENT FROM THE FLOOR OF THE VAULT AND FROM THE FOREBAY. THIS CAN MOST EFFECTIVELY BE ACCOMPLISHED BY USE OF A VACUUM TRUCK.
 - ONCE THE SEDIMENTS ARE REMOVED, ASSESS THE CONDITION OF THE VAULT AND THE CONDITION OF THE CONNECTORS.
 - USING THE VACUUM TRUCK BOOM, CRANE, OR TRIPOD, LOWER AND INSTALL THE NEW CARTRIDGES. TAKE CARE NOT TO DAMAGE CONNECTIONS.
 - CLOSE AND FASTEN THE DOOR.
 - REMOVE SAFETY EQUIPMENT.
 - FINALLY, DISPOSE OF THE ACCUMULATED MATERIALS IN ACCORDANCE WITH APPLICABLE REGULATIONS. MAKE ARRANGEMENTS TO RETURN THE EMPTY CARTRIDGES TO CONTECH ENGINEERED SOLUTIONS.

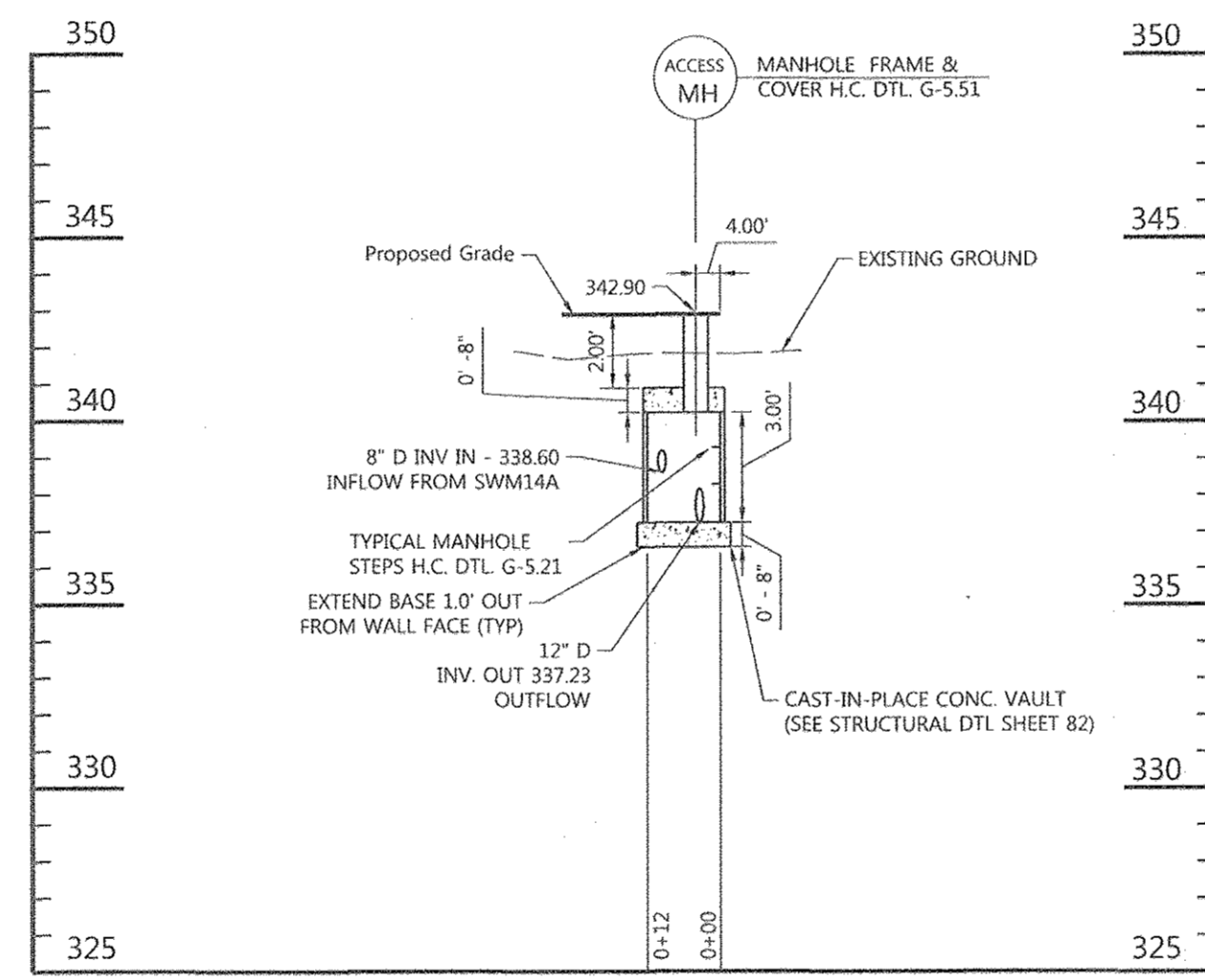


- NOTE: FILTER CARTRIDGE REPLACEMENT SHOULD OCCUR DURING DRY WEATHER. IT MAY BE NECESSARY TO PLUG THE FILTER INLET PIPE IF BASE FLOW IS OCCURRING.**
- NOTE: REPLACEMENT CARTRIDGES CAN BE DELIVERED TO THE SITE OR CUSTOMERS FACILITY. INFORMATION CONCERNING HOW TO OBTAIN REPLACEMENT CARTRIDGES IS AVAILABLE FROM CONTECH ENGINEERING SOLUTIONS.**
- WARNING: IN THE CASE OF A SPILL, THE MAINTENANCE PERSONNEL SHOULD ABORT MAINTENANCE ACTIVITIES UNTIL THE PROPOER GUIDANCE IS OBTAINED. NOTIFY THE LOCAL HAZARD CONTROL AGENCY AND CONTECH ENGINEERED SOLUTIONS IMMEDIATELY.**
- TO CONDUCT CARTRIDGE REPLACEMENT AND SEDIMENT REMOVAL MAINTENANCE:**
- IF APPLICABLE, SET UP SAFETY EQUIPMENT TO PROTECT MAINTENANCE PERSONNEL AND PEDESTRIANS FROM SITE HAZARDS.
 - VISUALLY INSPECT THE EXTERNAL CONDITION OF THE UNIT AND TAKE NOTES CONCERNING DEFECTS/PROBLEMS.
 - OPEN THE DOORS (ACCESS PORTALS) TO THE VAULT/MANHOLE AND ALLOW SYSTEM TO VENT.
 - WITHOUT ENTERING THE VAULT, GIVE THE INSIDE OF UNIT, INCLUDING COMPONENTS, A GENERAL CONDITION INSPECTION.
 - MAKE NOTES ABOUT THE EXTERNAL AND INTERNAL CONDITION OF THE VAULT. GIVE PARTICULAR ATTENTION TO RECORDING THE LEVEL OF SEDIMENT BUILD-UP ON THE FLOOR OF THE VAULT, IN THE FOREBAY, AND ON TOP OF THE INTERNAL COMPONENTS.
 - USING THE APPROPRIATE EQUIPMENT OFFLOAD THE REPLACEMENT CARTRIDGES (UP TO 150 LBS. EACH) AND SET ASIDE.
 - REMOVE USED CARTRIDGES FROM THE VAULT USING ONE OF THE FOLLOWING METHODS:

- DISCUSS CONDITIONS THAT SUGGEST MAINTENANCE AND MAKE DECISIONS WHETHER OR NOT MAINTENANCE IS NEEDED.
- DISPOSAL - SEDIMENTS AND WATER MUST BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE WASTE DISPOSAL REGULATIONS. WHEN SCHEDULING MAINTENANCE, CONSIDERATION MUST BE MADE FOR THE DISPOSAL OF SOLID AND LIQUID WASTES. THIS TYPICALLY REQUIRES COORDINATION WITH THE LOCAL LANDFILL FOR SOLID WASTE DISPOSAL. FOR LIQUID WASTE DISPOSAL A NUMBER OF OPTIONS ARE AVAILABLE INCLUDING A MUNICIPAL VACUUM TRUCK DECANT FACILITY, LOCAL WASTE WATER TREATMENT PLANT OR ON-SITE TREATMENT AND DISCHARGE.

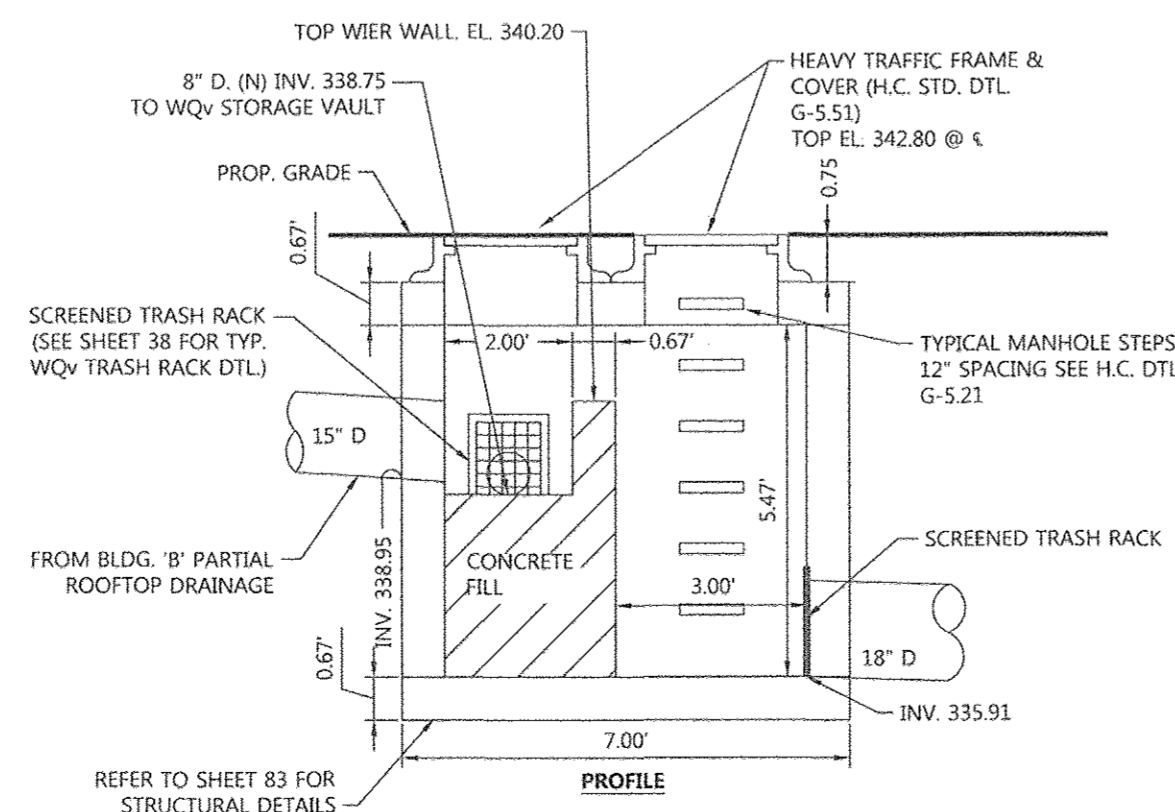


CONTECH STORMFILTER PROFILE - D.A.
SCALE: Horiz. - 1" = 30'
Vert. - 1" = 5'

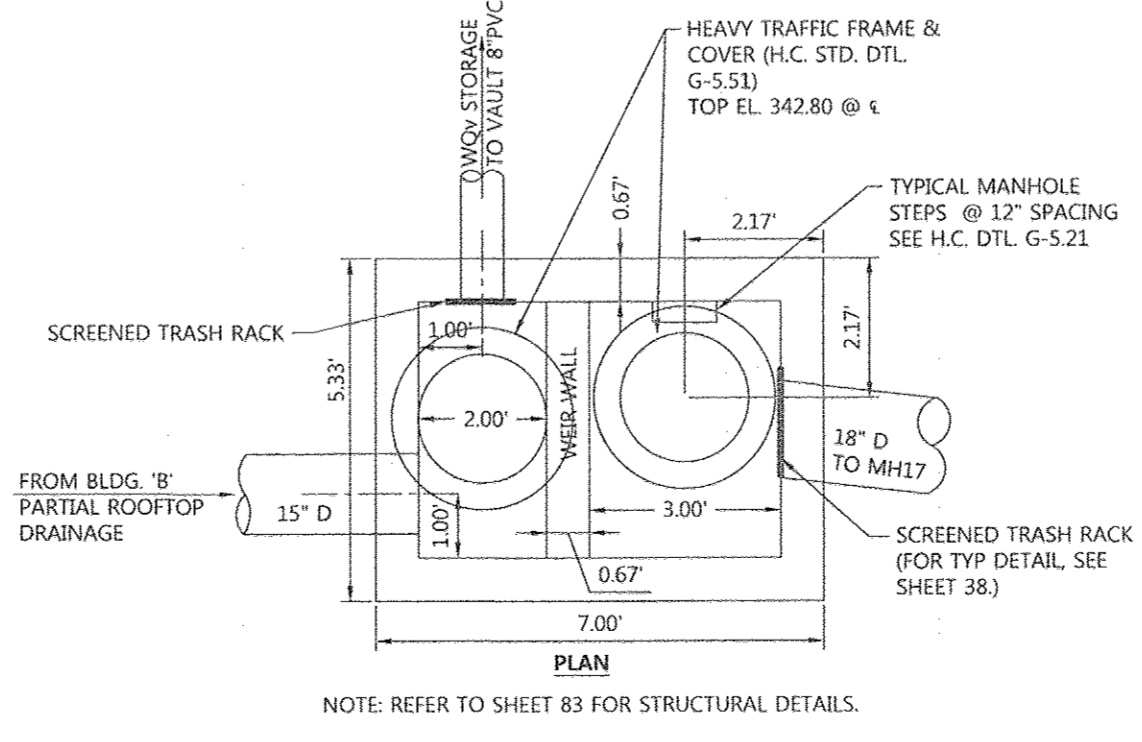


CONTECH STORMFILTER STORAGE CROSS SECTION A-A
SCALE: Horiz. - 1" = 30'
Vert. - 1" = 5'

- NOTE:**
- REFER TO MANUFACTURERS INSTALLATION GUIDE FOR BEDDING PREPARATION AND SEQUENCE OF CONSTRUCTION.
 - FOR THE STANDARD CONTECH STORMFILTER MANHOLE AND SPLITTER TRASH RACK DETAILS. SEE SHEET 38.



SWM 14A FLOW SPLITTER MANHOLE
SCALE: 1" = 3"
NOTE: SEE HOWARD COUNTY STD DETAIL G-5.12



NOTE: REFER TO SHEET 83 FOR STRUCTURAL DETAILS.

- EASEMENT NOTE:**
- MULTI-PRUPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
- WATER
 - SEWER
 - STREET LIGHTING
 - STORM WATER MANAGEMENT
 - STORM DRAIN
 - UTILITY

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chad E. ... 4-7-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kate ... 6-14-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Nancy ... 6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESENT-1, FDP-DC-CRESENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE: 07/18/19

DATE: 3-16-18

PROFESSIONAL ENGR. NO. 26569

APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

Date	No.	Revision Description

**DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10180 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-961-1800

DW
DAFT MCCUNE WALKER INC

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

PLAT OR L.P.	RECORD #	ZONE	TAX ZONE/MAP	ELECT. DISTRICT	CENSUS TRACT	PARCEL #
N/A	7	DMWU	36	5		605602

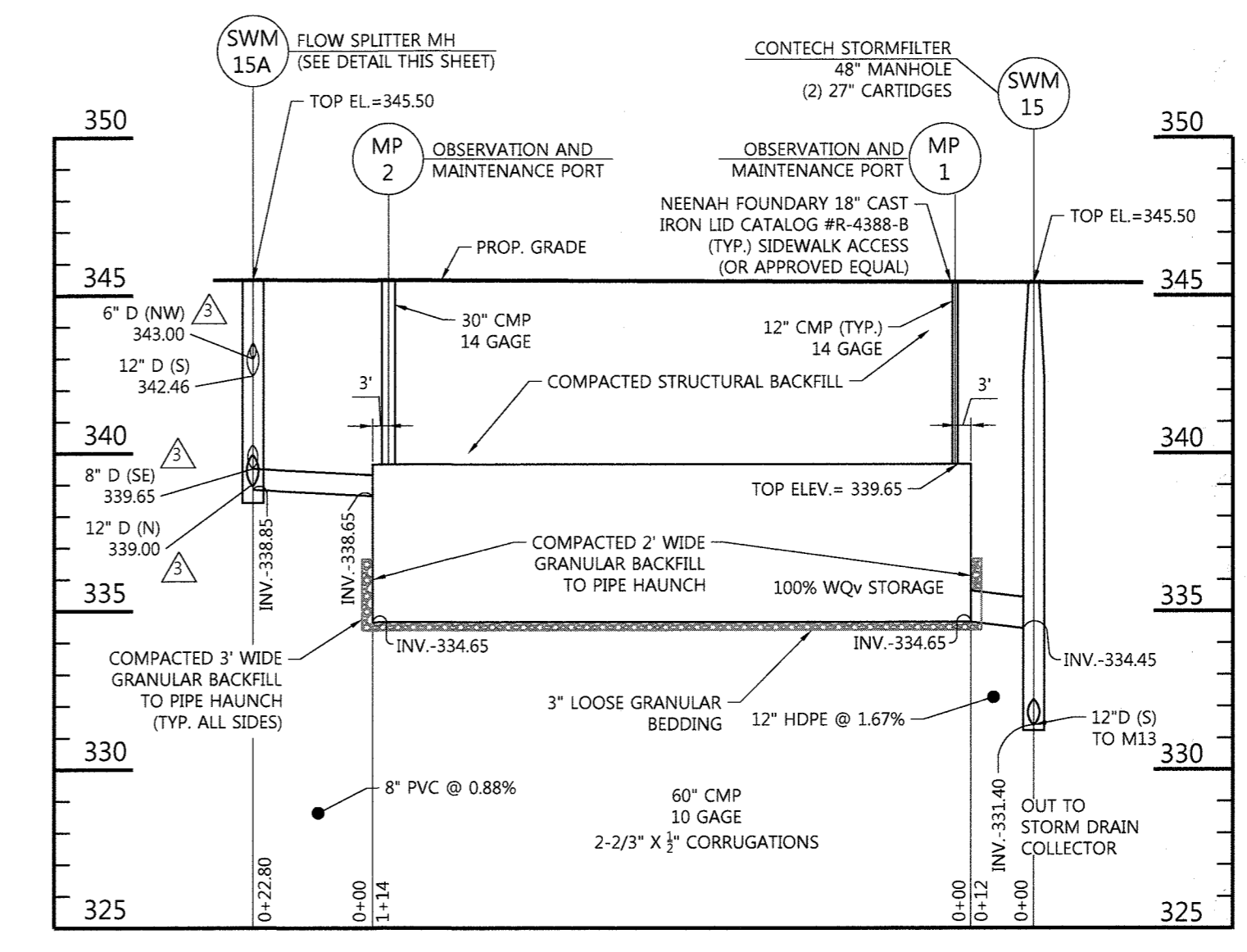
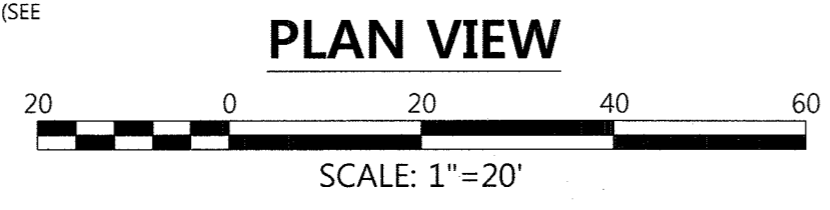
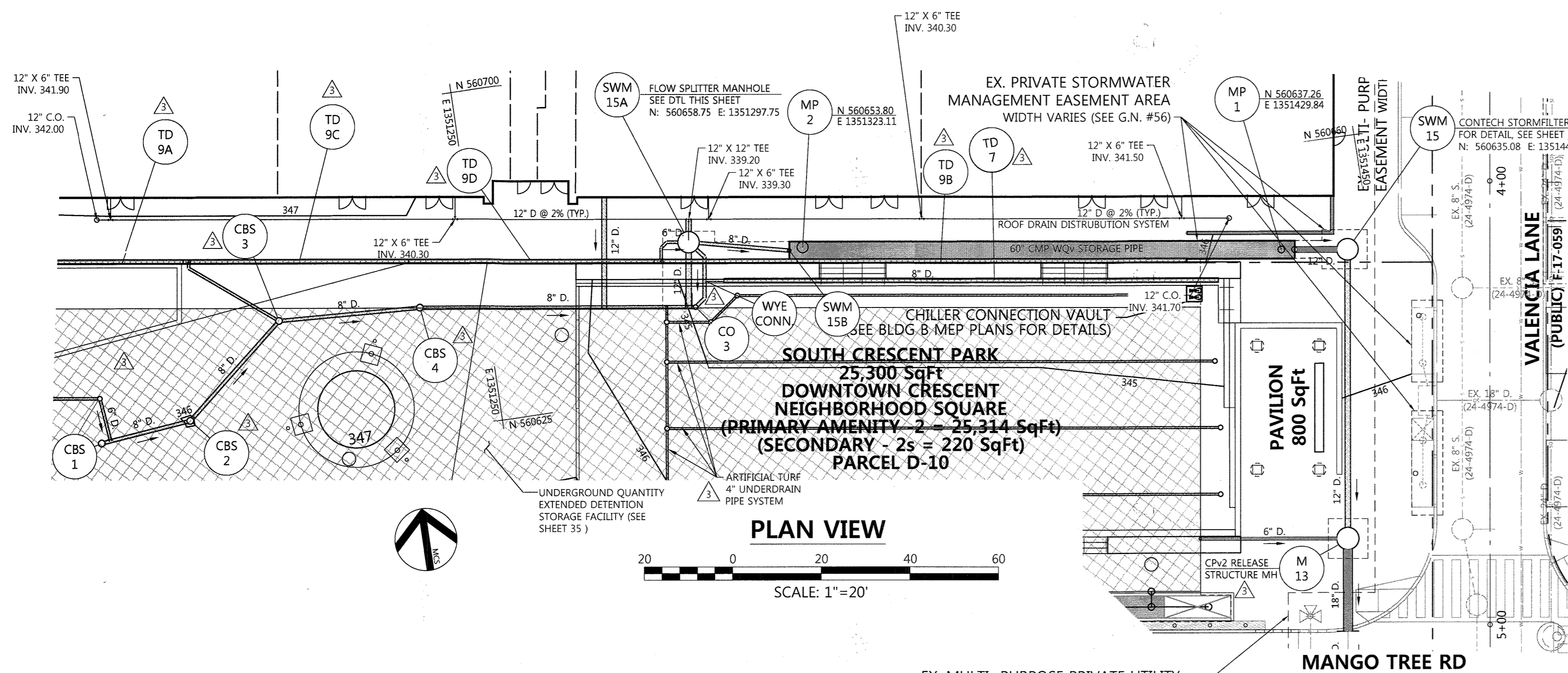
**TITLE: STORMFILTER #2 WQV
STORMWATER MANAGEMENT PLAN**

Des. By	GDT/DM	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	MCJ	Date	1-18-18		
Chk. By	MCB	Approved	MCB		39 of 94

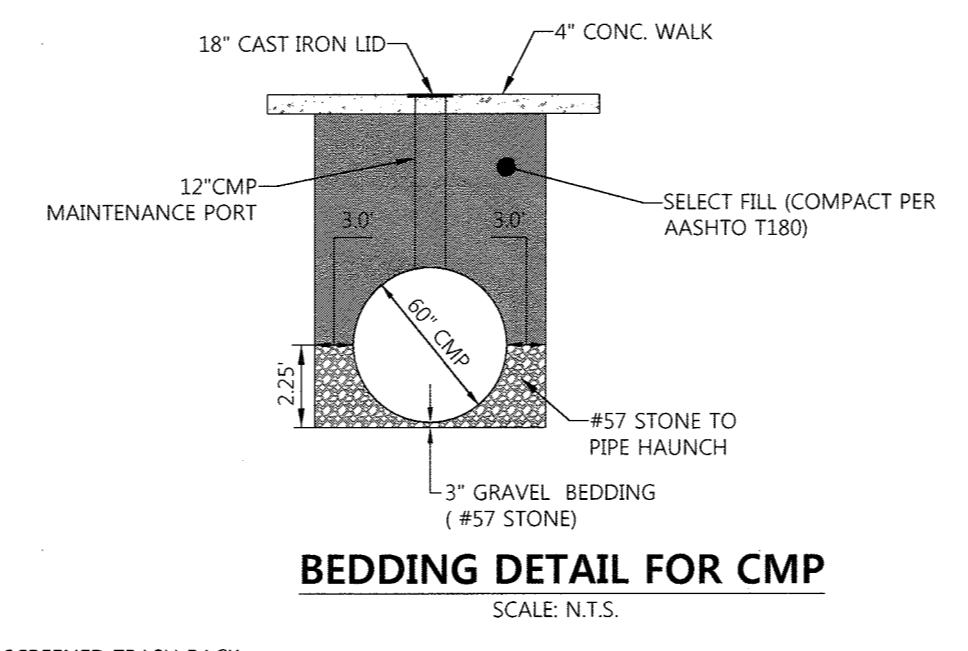
SDP-17-027

LEGEND

- LIMIT OF DISTURBANCE
- PROPERTY LINE
- PARCEL LINE
- - - EX. CONTOURS
- - - EX. SEWER
- - - EX. STORM DRAIN
- - - EX. WATER
- - - EX. TREELINE
- - - PROP. BUILDING
- - - PROP. CURB
- - - PROP. CONTOURS
- - - PROP. EASEMENT
- - - PROP. SEWER
- - - PROP. STORM DRAIN
- - - PROP. WATER
- - - SOILS
- - - PROP. 100 YEAR FLOODPLAIN
- - - PROP STREET LIGHT
- - - FIRE HYDRANT
- - - (M-6) WATER QUALITY TREATMENT FACILITY
- - - CPv UNDERGROUND STORAGE
- - - EX. (M-6) WATER QUALITY TREATMENT FACILITY



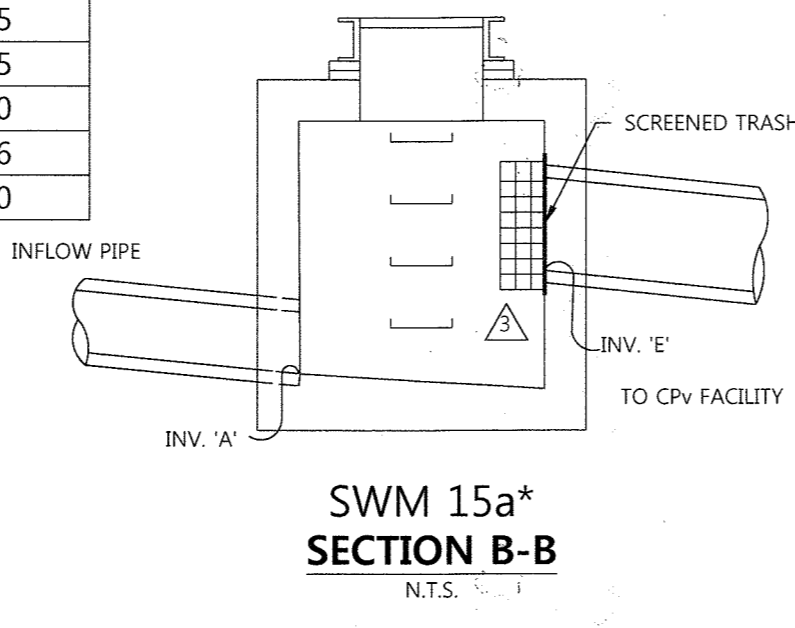
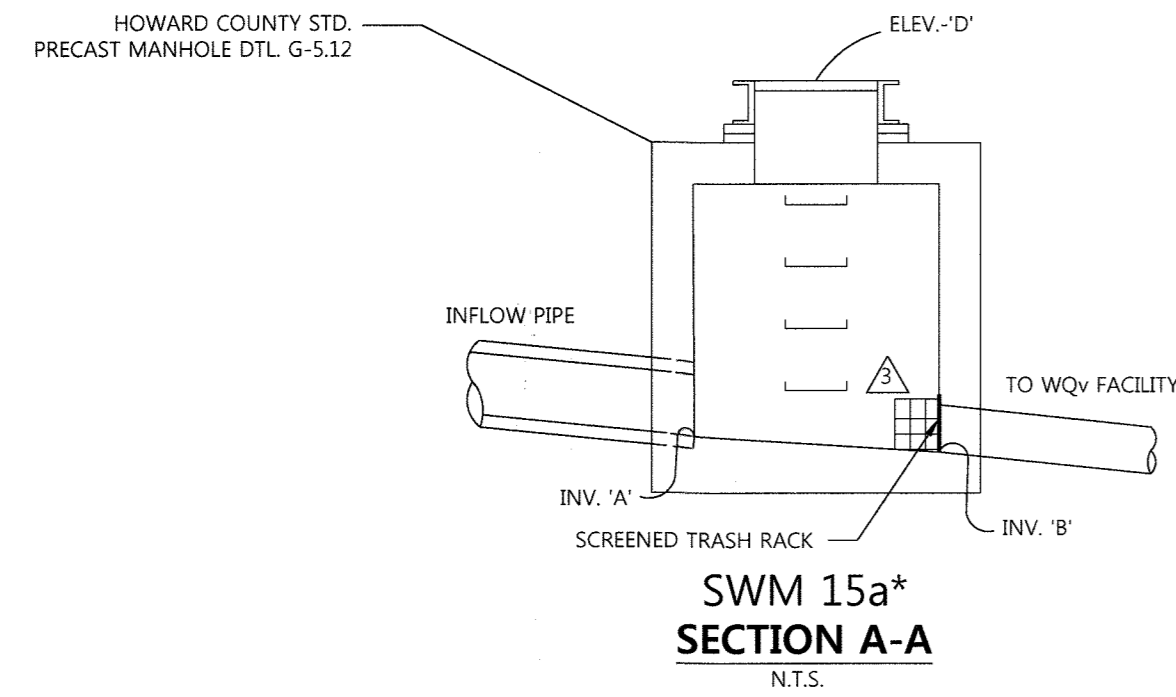
STORMFILTER PROFILE - SWM D.A. #15 (WQv FACILITY)
SCALE: Horiz. - 1" = 30"
Vert. - 1" = 5"



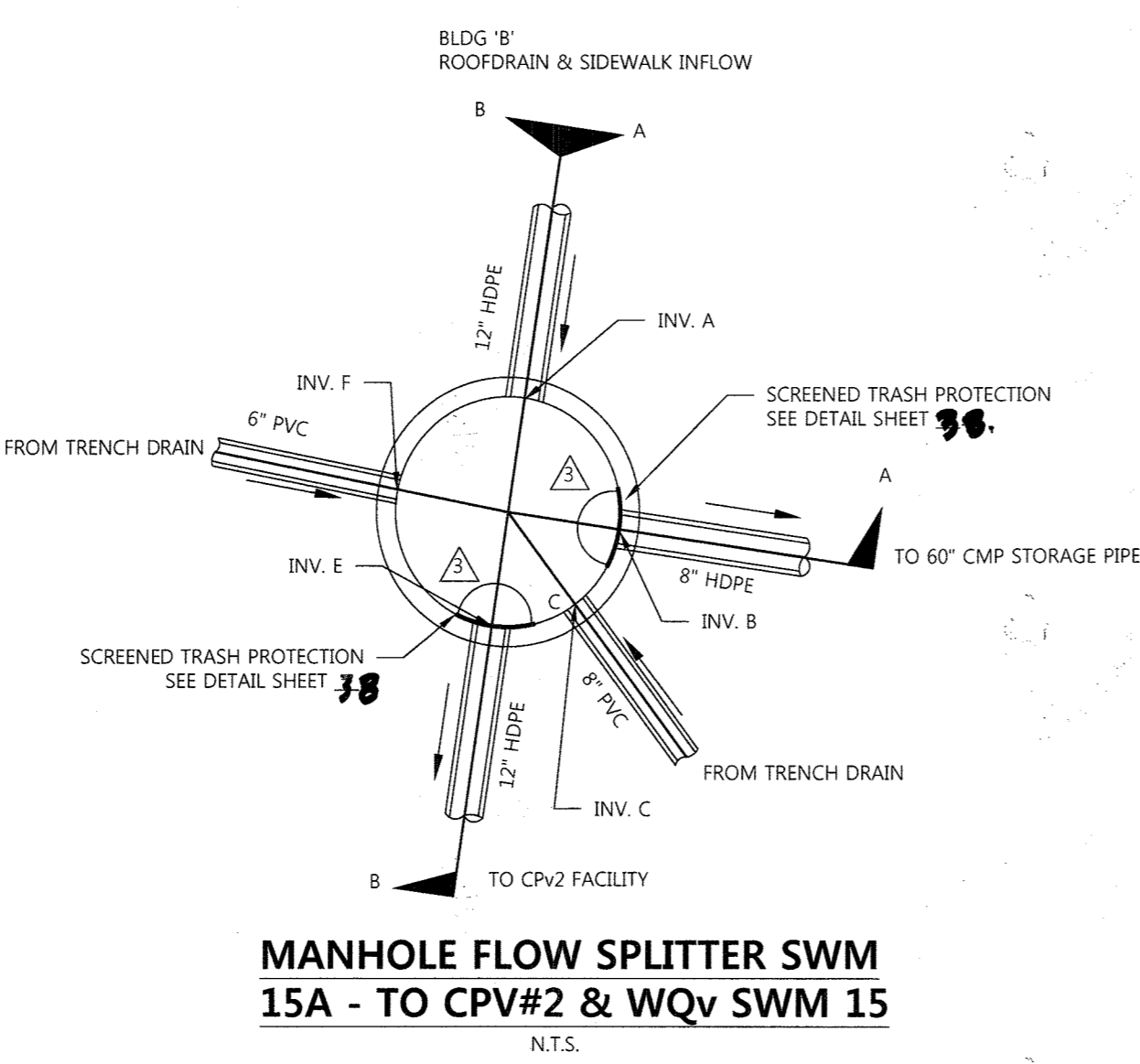
BEDDING DETAIL FOR CMP
SCALE: N.T.S.

- NOTES**
- REFER TO MANUFACTURERS INSTALLATION GUIDELINES FOR TRENCH AND BEDDING PREPARATION AND SEQUENCE OF CONSTRUCTION.
 - FOR STANDARD CONTECH DETAILS AND SPLITTER TRASH RACK DETAILS, SEE SHEET 38.
 - REFER TO STORMWATER MANAGEMENT SHEET 39 FOR STORMFILTER INSPECTION AND MAINTENANCE SCHEDULE.

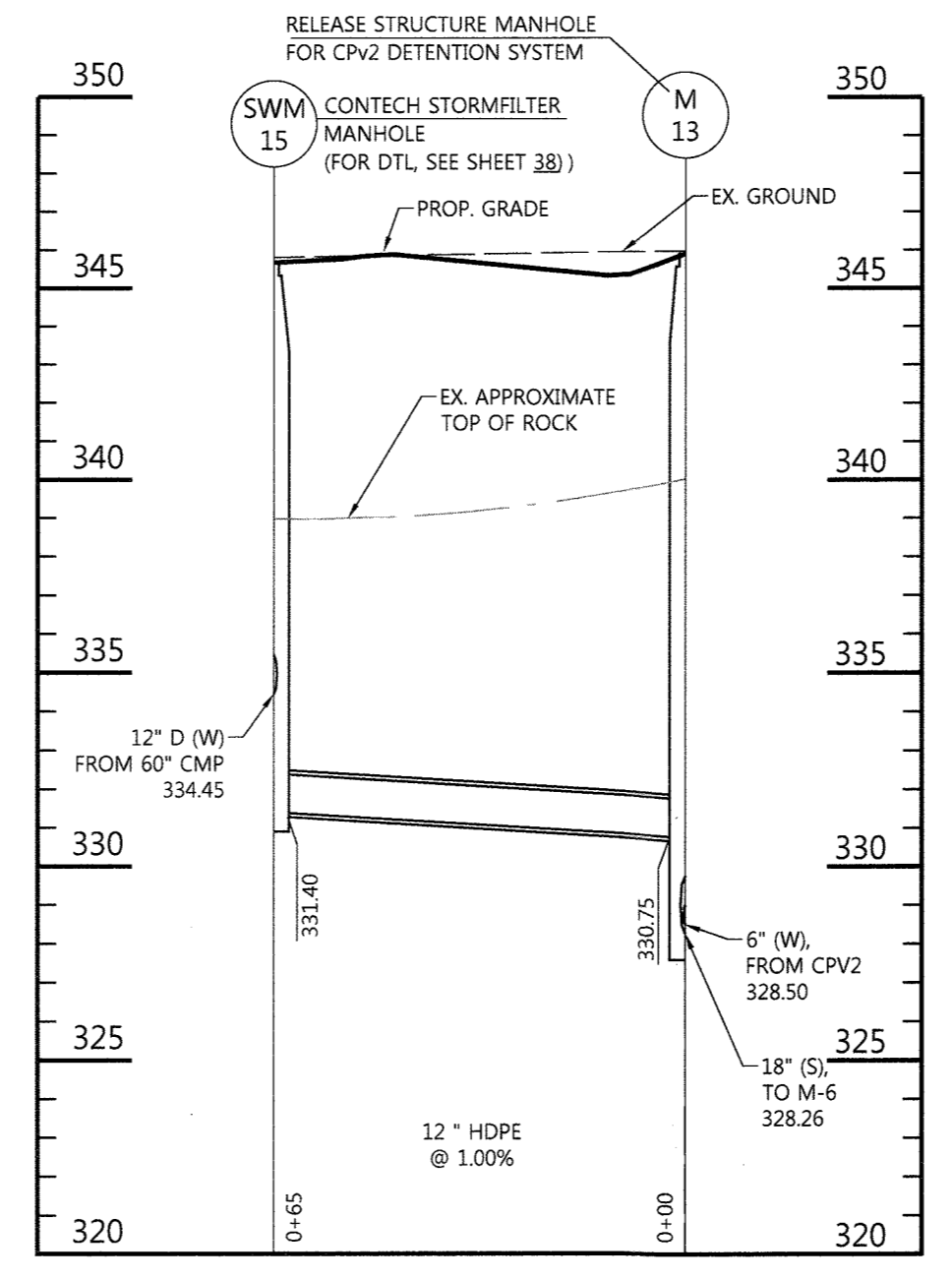
SPLITTER TABLE	
	ELEVATION
INV. A	339.00
INV. B	338.85
INV. C	339.65
ELEV. D	345.50
INV. E	342.46
INV. F	343.00



SWM MH 15A FLOW SPLITTER CROSS-SECTION
* NOTE: SEE HOWARD COUNTY STANDARD DETAIL G-5.12



MANHOLE FLOW SPLITTER SWM 15A - TO CPV#2 & WQv SWM 15
N.T.S.



SWM15-M13
SCALE: HOR. 1" = 30"
VERT. 1" = 5"

EASEMENT NOTE:
MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
• WATER
• SEWER
• STREET LIGHTING
• STORM WATER MANAGEMENT
• STORM DRAIN
• UTILITY

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 2-28-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

APPROVED: *[Signature]* 3/16/2020
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

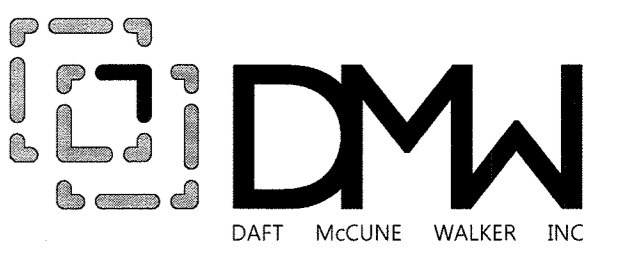
APPROVED: *[Signature]* 3-10-2020
DIRECTOR
DATE

FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.

2/16/20
DATE
[Signature]
PROFESSIONAL ENGR. NO. 16928

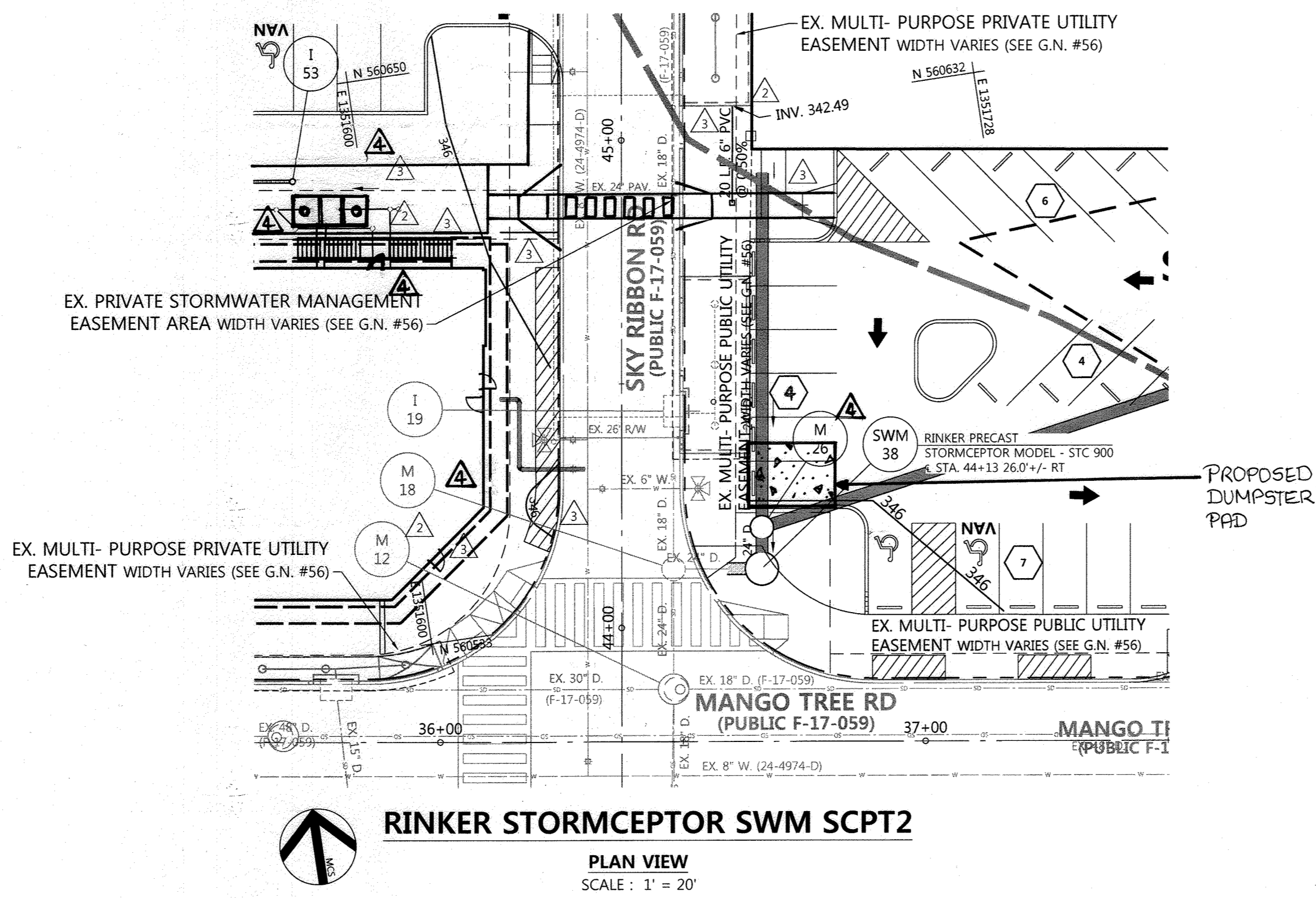
11/18/19	UPDATE PARK UTILITIES, GRADING, SWM MB14 & MB15 LOCATION
Date	Revision Description
DOWNTOWN COLUMBIA	
CRESCENT NEIGHBORHOOD	
PHASE I AREA 3, PHASE I	
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14	
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800	



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286	P: 410.296.3333 F: 410.296.4705 WWW.DMW.COM
STATION/PROJECT: DOWNTOWN COLUMBIA	SECTION/AREA: CRESCENT NEIGHBORHOOD PHASE I AREA 3
LOT/PARCEL #	PARCEL D
PLAT OR L.P. #	TAX ZONING
24623-24630	7
WATER CODE	550
SEWER CODE	5
	STAGE
	LITTLE PATUXENT

TITLE: **STORMFILTER #3 WQv**
STORMWATER MANAGEMENT PLAN
REVISED SITE DEVELOPMENT PLAN

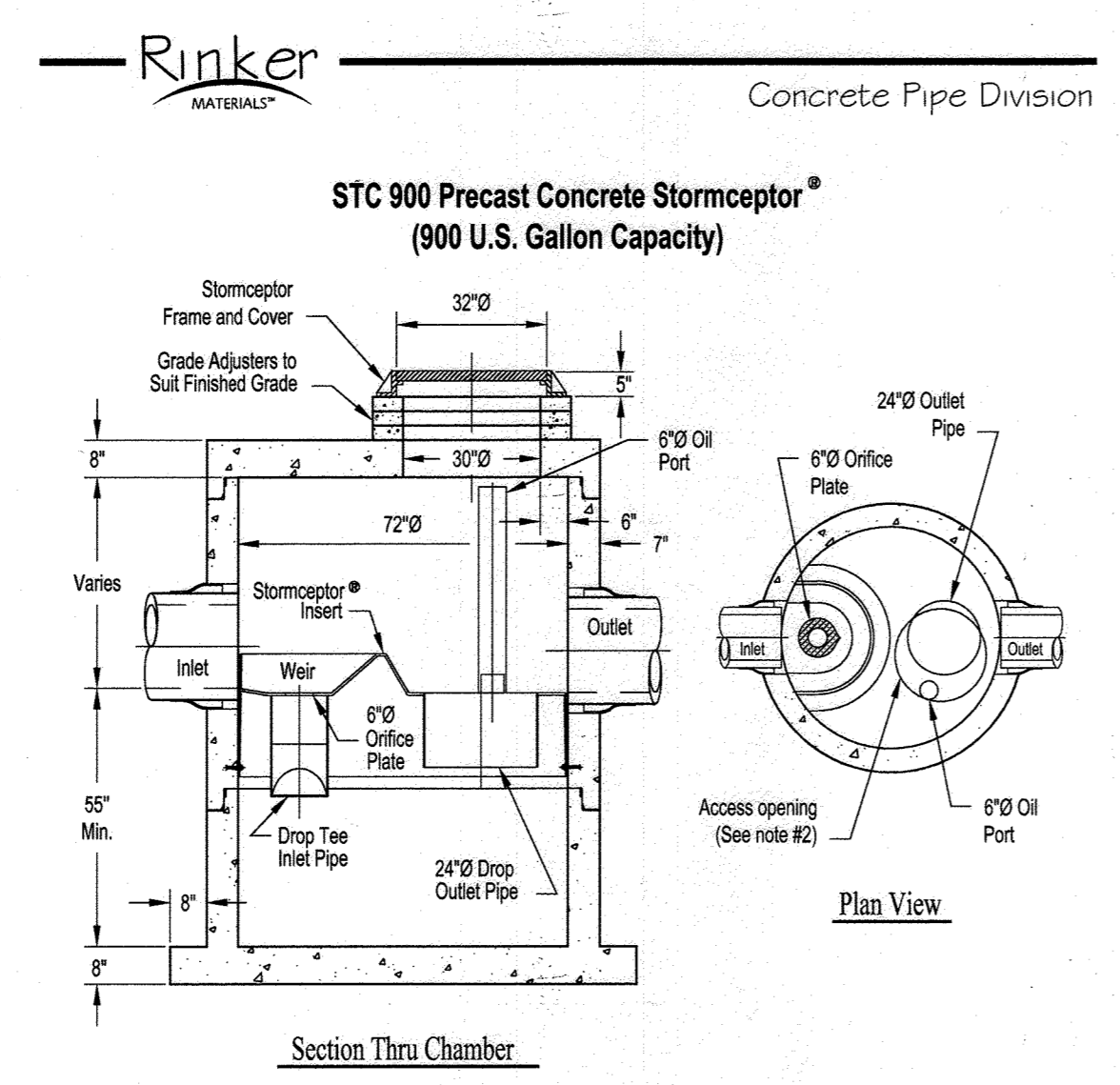
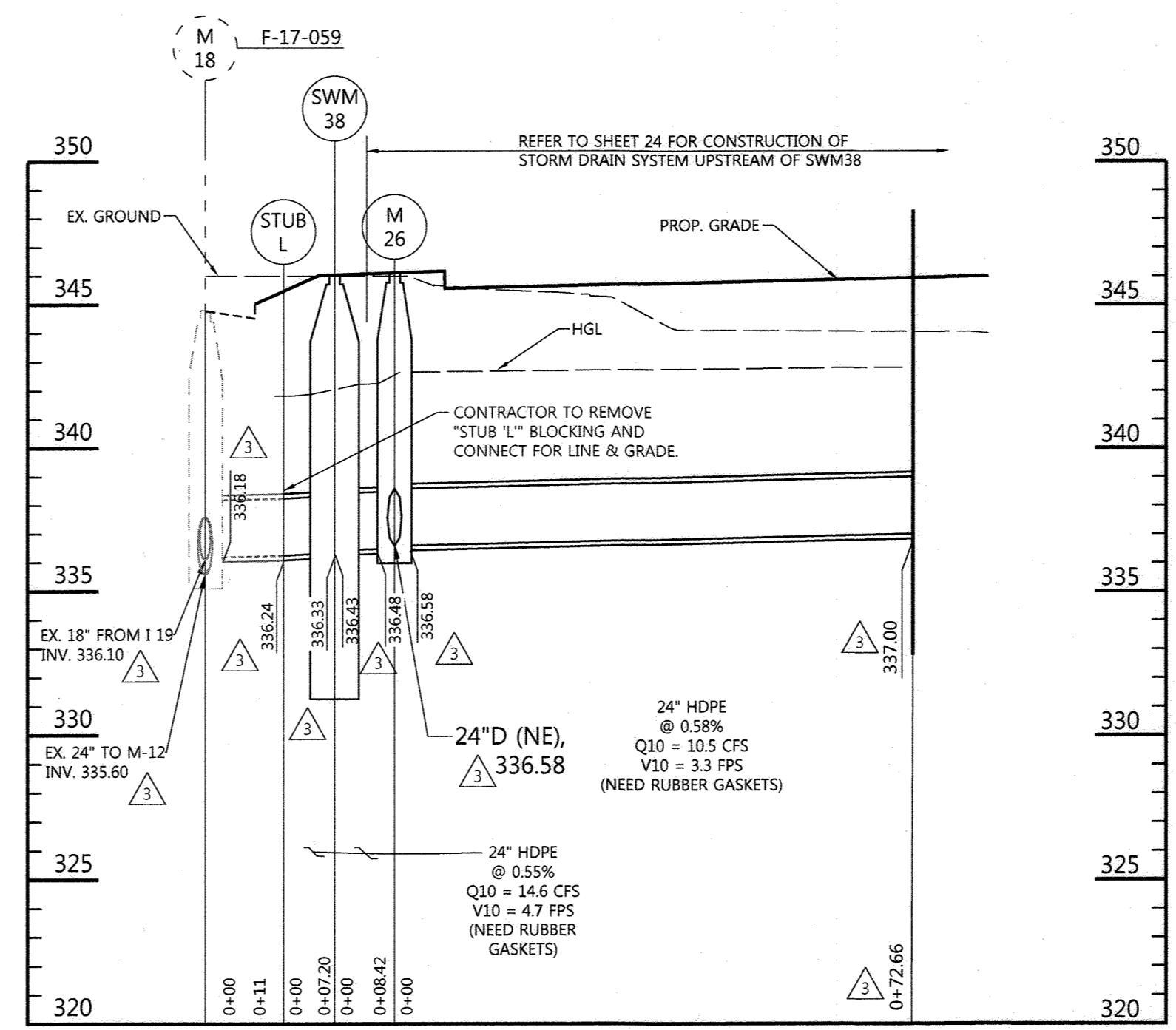
Des. By: GDT/DM SCALE: AS SHOWN Proj. No. 04038.80
Drn. By: MCJ Date: 5-10-18
Chk. By: MCB Approved: MCB



LEGEND

[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	PROPERTY LINE
[Symbol]	PARCEL LINE
[Symbol]	EX. CONTOURS
[Symbol]	EX. SEWER
[Symbol]	EX. STORM DRAIN
[Symbol]	EX. WATER
[Symbol]	EX. TREETLINE
[Symbol]	PROP. BUILDING
[Symbol]	PROP. CURB
[Symbol]	PROP. CONTOURS
[Symbol]	PROP. EASEMENT
[Symbol]	PROP. SEWER
[Symbol]	PROP. STORM DRAIN
[Symbol]	PROP. WATER
[Symbol]	SOILS
[Symbol]	PROP STREET LIGHT
[Symbol]	FIRE HYDRANT
[Symbol]	CPV UNDERGROUND STORAGE
[Symbol]	PLANTER (NON-SWM)
[Symbol]	(M-6) WATER QUALITY TREATMENT FACILITY
[Symbol]	EX. (M-6) WATER QUALITY TREATMENT FACILITY
[Symbol]	SOIL BORING

- OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND PUBLICLY MAINTAINED STORMCEPTOR WATER QUALITY DEVICE**
- THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE PERIODICALLY INSPECTED AND CLEANED TO MAINTAIN OPERATION AND FUNCTION. THE OWNER SHALL INSPECT THE STORMCEPTOR UNIT YEARLY AT A MINIMUM, UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS SHALL BE DONE BY USING A CLEAR PLEXIGLASS TUBE ("SLUDGE JUDGE") TO EXTRACT A WATER COLUMN SAMPLE. WHEN THE SEDIMENT DEPTHS EXCEED THE LEVEL SPECIFIED IN TABLE 6 OF THE STORMCEPTOR TECHNICAL MANUAL, THE UNIT MUST BE CLEANED.
 - THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES.
 - THE MAINTENANCE OF THE STORMCEPTOR UNIT SHALL BE DONE USING A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN THE UNIT. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
 - THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX MONTHS. IF OBSTRUCTIONS ARE FOUND, THE OWNER SHALL HAVE THEM REMOVED. STRUCTURAL PARTS OF THE STORMCEPTOR UNIT SHALL BE REPAIRED AS NEEDED.
 - THE OWNER SHALL RETAIN AND MAKE THE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO THE HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.



- EASEMENT NOTE:**
- MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
- WATER
 - SEWER
 - STREET LIGHTING
 - STORM WATER MANAGEMENT
 - STORM DRAIN
 - UTILITY

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chief *[Signature]* **2-28-20**
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE

APPROVED: **3/16/2020**
Chief *[Signature]*
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE

APPROVED: **3-10-2020**
Director *[Signature]*
 DIRECTOR
 DATE

- Notes:
- The Use Of Flexible Connection is Recommended at The Inlet and Outlet Where Applicable.
 - The Cover Should be Positioned Over The Outlet Drop Pipe and The Oil Port.
 - The Stormceptor System is protected by one or more of the following U.S. Patents: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
 - Contact a Concrete Pipe Division representative for further details not listed on this drawing.

NOTE:
 STORMCEPTOR ON THIS SHEET ARE PRIVATELY OWNED AND PUBLICLY MAINTAINED.

FOR REDLINE REVISION 4 ONLY

11/10/20
 DATE

[Signature]
 PROFESSIONAL ENGR. No. 16928
 PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16928. EXPIRATION DATE 05/13/22.

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F-18-017, SDR-16-075, SDR-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D.

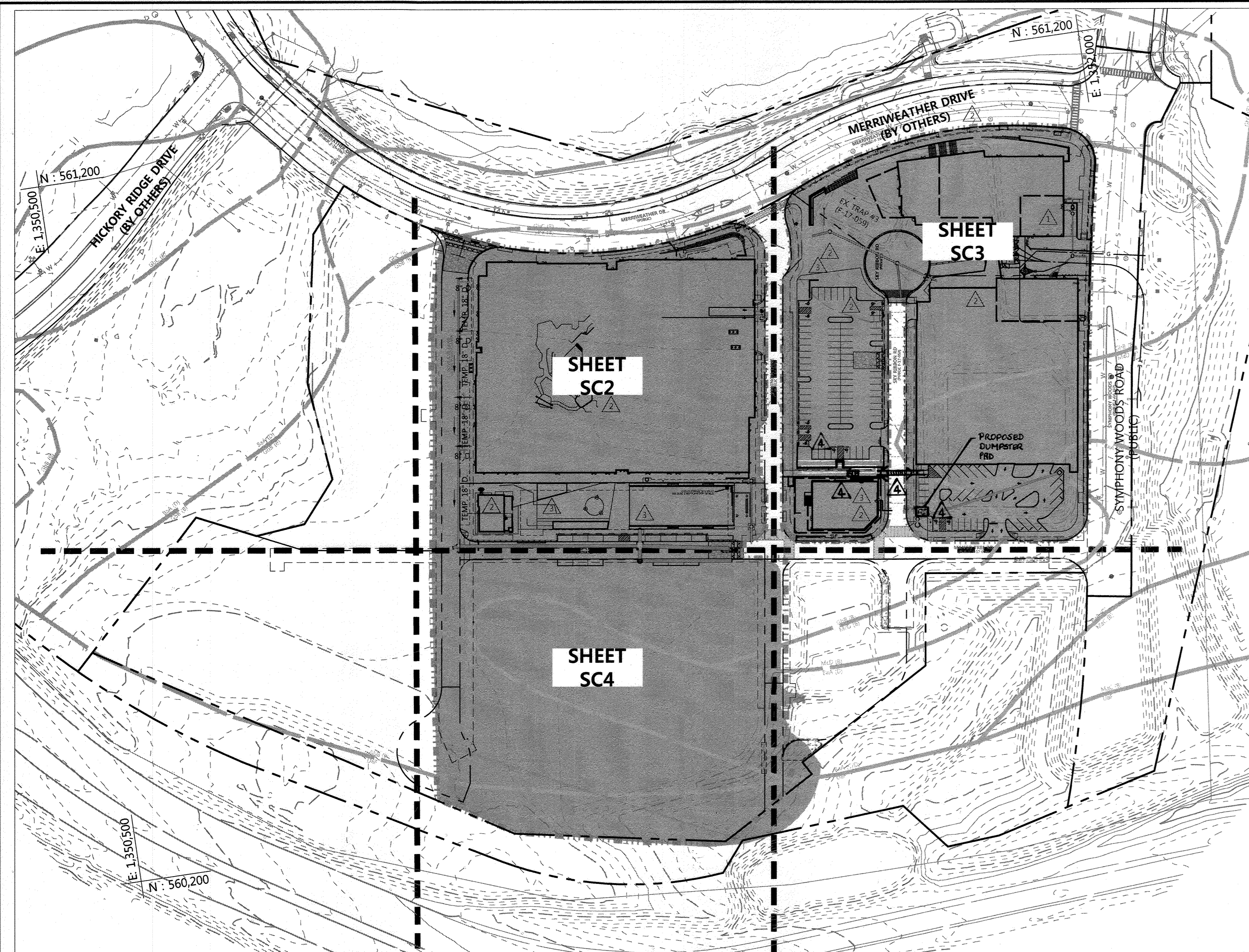
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16928. EXPIRATION DATE: 05/13/2020.

DATE **2/16/20**
 DATE

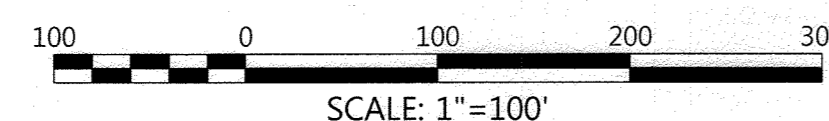
[Signature]
 PROFESSIONAL ENGR. NO. 16928

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

7/31/2020	UPDATE BLDG 'B' USAGES, SOILS, PROFILES & PARKING DESIGNATIONS, BLDG BLDG 'E-2' COORS, HARDSCAPE & DUMPSTER LOCATION	
11/18/19	UPDATE BLDG. E2, UTILITIES LAYOUT, AND DETAILS	
03/01/19	BLDG E2, E3, PLAZA HARDSCAPE, AND GRADING	
Date	No.	Revision Description
DOWNTOWN COLUMBIA		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE I		
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
DW DAFT MCCUNE WALKER INC.		
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D
PLAT OR LIT.	BLOCK #	TAX ZONE/MAP
24621-24620	7	5
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	605602
TITLE STORMWATER MANAGEMENT PLAN		
STORMCEPTOR WQv PLAN		
REVISED SITE DEVELOPMENT PLAN		
Des. By	GDT/DM	SCALE AS SHOWN
Dwn. By	MJC	Date 5-10-18
Chk. By	MCB	Approved MCB
Proj. No. 04038.B0		41 of 94



EROSION & SEDIMENT CONTROL KEY PLAN



SEQUENCE OF CONSTRUCTION

- OBTAIN A GRADING PERMIT FOR THE PROPOSED WORK.
- NOTIFY THE HOWARD COUNTY DEPARTMENT OF PERMITS AND LICENSES (DPL) AT LEAST 48 HOURS PRIOR TO BEGINNING WORK. (2 DAYS)

NOTE: EXISTING SEDIMENT TRAP # 3, AS SHOWN ON F-17-059 APPROVED SEDIMENT CONTROL PLANS, IS TO BE REMOVED IN ACCORDANCE WITH F-17-059 SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR.

NOTE: THE STONE OUTLET SEDIMENT TRAP # 2 LEFT IN-TACK FROM SDP-16-075 MASS GRADING OPERATIONS IS TO BE USED FOR SEC PRACTICES UNDER THIS PLAN. SHALL BE INSPECTED FOR STABILITY AND FREE OF ACCUMULATED SEDIMENT. PRIOR TO UTILIZATION OF TRAP # 2, IT SHALL BE PREPARED FOR SPOIL AND TAKEN TO A SITE WITH AN OPEN GRADING PERMIT AND AN APPROVED SEDIMENT CONTROL PLAN. (2 DAYS)
- CLEAR AND GRUB FOR ALL THE EROSION AND SEDIMENT CONTROL DEVICES AND MEASURES ONLY. (1 WEEK)
- UPON APPROVAL BY THE SEDIMENT CONTROL INSPECTOR, BEGIN INSTALLATION OF THE FOLLOWING SEDIMENT CONTROL DEVICES AND MEASURES:
 - THREE STABILIZED CONSTRUCTION ENTRANCES (SCE) WITH A MOUNTABLE BERM
 - SUPER SILT FENCE (SSF)
 - TEMPORARY STOCKPILE AREA FOR PHASE 1
 - STAGING AREA FOR PHASE 1

NOTE: ENSURE ALL SEDIMENT CONTROL TRANSITIONS ARE SECURELY TIED IN TO PREVENT THE ESCAPE OF

- ONCE PERIMETER CONTROLS ARE INSTALLED AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR BEGIN CONSTRUCTION OPERATIONS.
 - ROUGH-IN BUILDING PADS AND BRING ROADS TO SUB-GRADE. (1 WEEK)
 - BEGIN CONSTRUCTION OF NEW BUILDINGS AND PARKING GARAGES WITHIN THE LOD. (1 YEAR MIN.)
 - BEGIN CONSTRUCTION OF UNDERGROUND CPV 1 & 2 STORMWATER MANAGEMENT STORAGE VAULTS. TEMPORARILY BLOCK INFLOW/OUTFLOW OPENINGS AND ANY OTHER OPEN AREAS TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING STORAGE VAULTS UNTIL THE SITE HAS BEEN STABILIZED WITH ESTABLISHED VEGETATION AND/OR AS DEEMED STABILIZED PRIOR TO MAKING FACILITIES ACTIVE. PROVIDE (DF) DIVERSION FENCE AROUND NEWLY CONSTRUCTED STORAGE VAULTS. (3 WEEKS)
 - INSTALL PROPOSED UTILITIES. INSTALL INLET PROTECTION AROUND ALL STORM DRAIN INLETS AS SHOWN ON PLAN. (1 WEEK)
 - INSTALL ALL (M-6) MODULAR SWM FACILITIES & ASSOCIATED COMPONENTS, CONTECH STORMFILTERS AND RINKER STORMCEPTORS. TEMPORARILY BLOCK UNITS UNTIL SITE HAS BEEN ESTABLISHED WITH VEGETATION OR HAS BEEN DEEMED STABILIZED PRIOR TO FACILITIES MAKING ACTIVE. (3 WEEKS)

NOTE: THE SUMP PITS ARE TO BE USED TO DEWATER FACILITIES IN THE EVENT OF MAINTENANCE.
- INSTALL PROPOSED ROADWAYS, SIDEWALK & CURB AND GUTTER. PROVIDE CURB OPENINGS FOR (M-6) MODULAR SWM FACILITIES. (3 WEEKS)
- FINE GRADE ALL OTHER DISTURBED AREAS NOT BEING PAVED AND PERMANENTLY STABILIZE THESE AREAS. (1 WEEK)
- MAKE ALL SWM FACILITIES ACTIVE. (2 DAYS)
- UPON STABILIZATION OF THE SITE WITH ESTABLISHED VEGETATION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR REMOVE SEDIMENT CONTROL MEASURES AND STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS. (1 WEEK)

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 2-28-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 3-16-20
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 3-10-20
 DIRECTOR

HOWARD COUNTY SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOD AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES:
 - PRIOR TO THE START OF EARTH DISTURBANCE.
 - UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING.
 - PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT.
 - PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES.

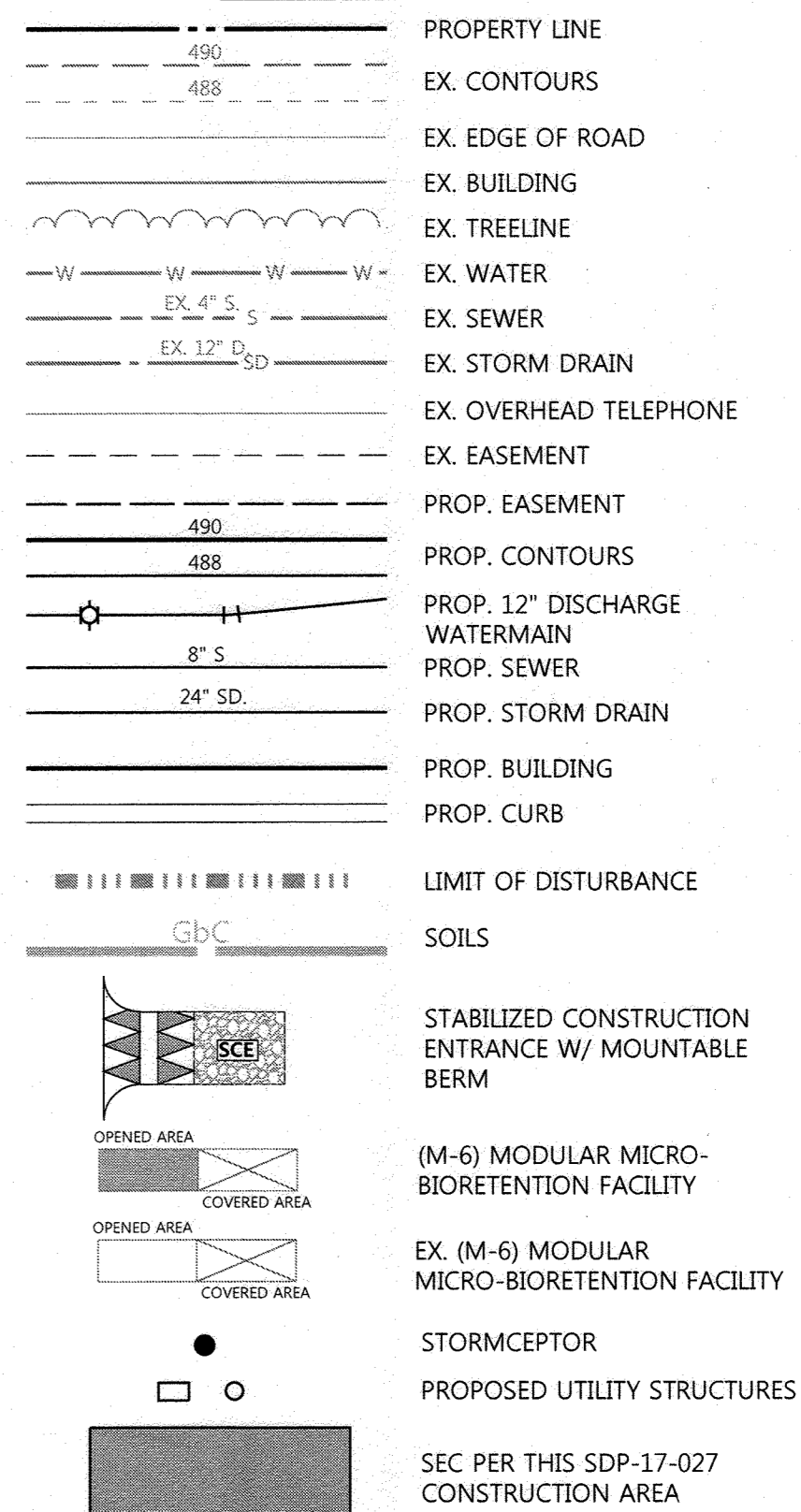
OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS PLAN.
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE GRADING.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH >15 FT. OF CUT AND/OR FILL STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST BE BENCHED WITH STABLE OUTLET. ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6).
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE CID.
- SITE ANALYSIS:

TOTAL AREA OF SITE:	21.39 ACRES
LIMIT OF DISTURBANCE:	652,139 SQFT / 14.97 AC±
AREA TO BE ROOFED OR PAVED:	10.28 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	4.69 ACRES
TOTAL CUT:	43,625.30 CU. YDS.
TOTAL FILL:	75,672.56 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION:	TO BE DETERMINED: (SITE WITH AN ACTIVE GRADING PERMIT)
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE CID. THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY; AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE:
 - INSPECTION DATE
 - INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT)
 - NAME AND TITLE OF INSPECTOR
 - WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION)
 - BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES
 - EVIDENCE OF SEDIMENT DISCHARGES
 - IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE
 - IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS
 - COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS
 - PHOTOGRAPHS
 - MONITORING/SAMPLING
 - MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED
 - OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (MPDES, MDE).
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
- ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISIONS MAY BE ALLOWED BY THE CID PER THE LIST OF HSCD APPROVED FIELD CHANGES.
- DISTURBANCE SHALL NOT OCCUR OUTSIDE THE LOD. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE HSCD, UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE HSCD, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.
- WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.
- TOPSOIL SHALL BE STOCKPILED OR PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE.
- ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE IMBRICATED AT 2' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2' IN ELEVATION.
- STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE):
 - USE I AND IP MARCH 1 - JUNE 15
 - USE III AND IIIA OCTOBER 1 - APRIL 30
 - USE IV MARCH 1 - MAY 31
- A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND ASSOCIATED PERMITS SHALL BE ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE.

UTILITY NOTE

- CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY. IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY, SILT FENCE SHALL BE PLACED BELOW (DOWNSLOPE OF) THE TRENCH.
- PLACE ALL EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH.
- ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

LEGEND



OWNERS/DEVELOPER CERTIFICATION:

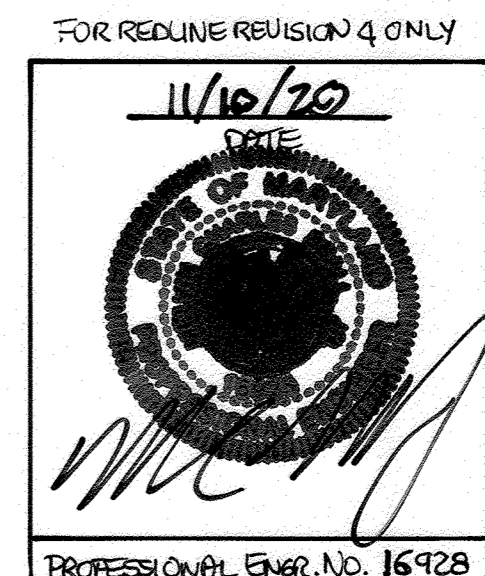
"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND/OR MDE."

[Signature] 2-11-2020
 OWNER'S/DEVELOPER'S SIGNATURE DATE
 [Signature] Wm J. Rowe SVP
 PRINTED NAME & TITLE

DESIGN CERTIFICATION:

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."

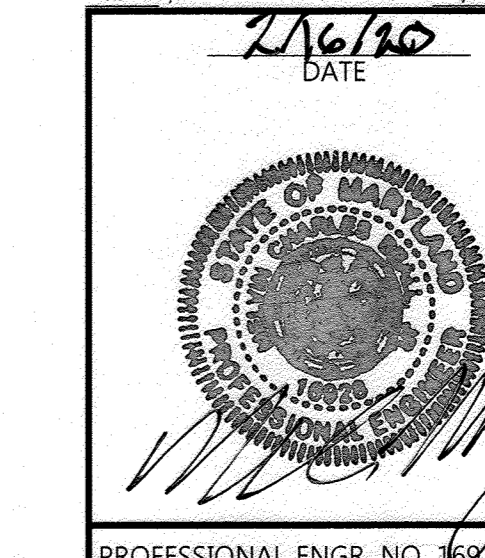
[Signature] 2/16/20
 DESIGNER'S SIGNATURE DATE
 [Signature] Melvin C. Baugh Jr.
 PRINTED NAME
 [Signature] MD REGISTRATION NO. 16928
 (P.E., R.L.S., OR R.L.A. (CIRCLE ONE))



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR PREPARED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16928, EXPIRATION DATE: 05/13/2022.

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.



APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

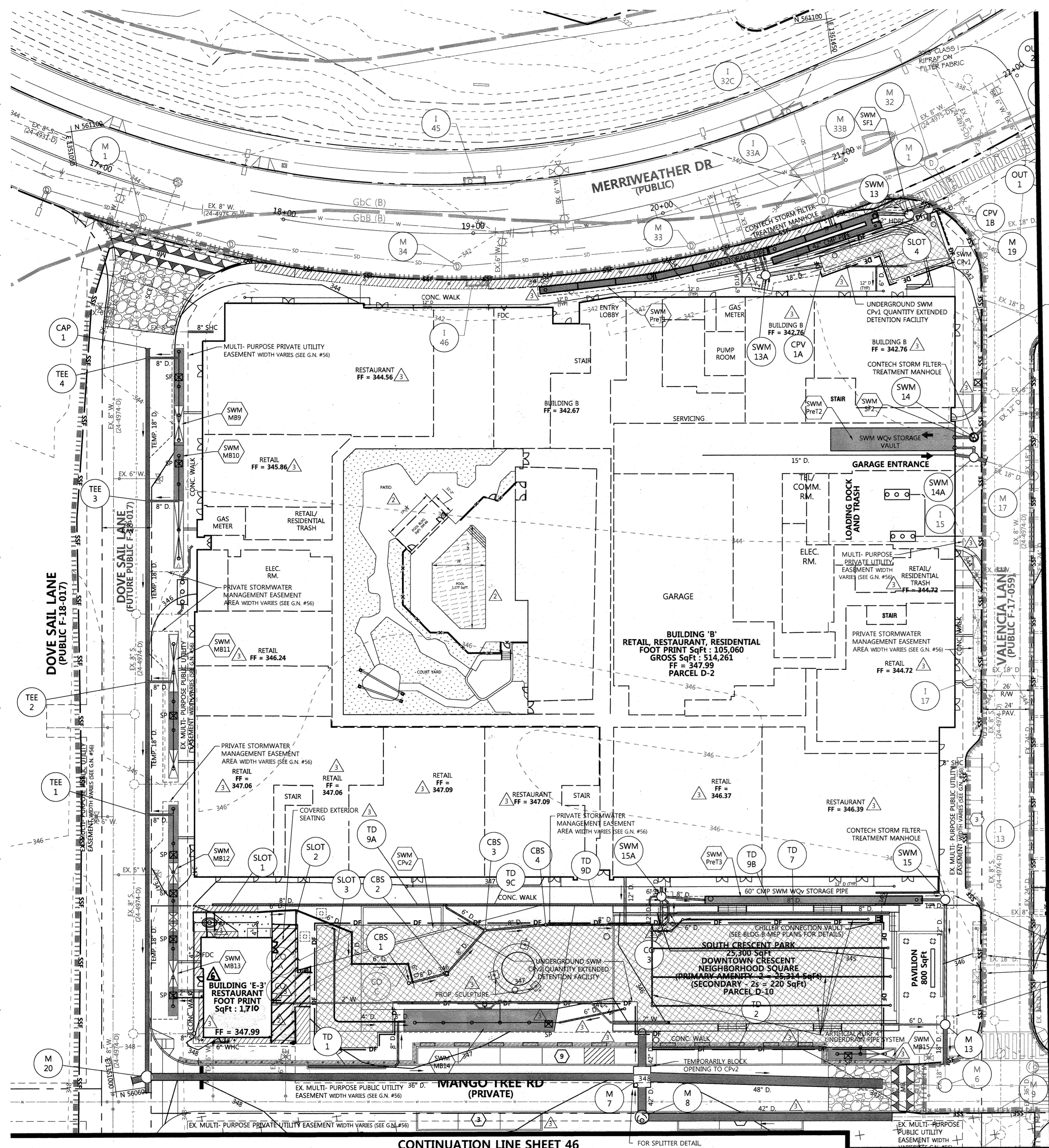
Date	No.	Revision Description
11/18/19	1	UPDATE BLDG. #2 UTILITIES LAYOUT, AND DETAILS
03/06/19	2	BLDG. #2, #3, #4 HARDSCAPE, AND GRADING
12/03/18	3	BUILDING AT LOADING DOCK RECONFIGURATION AND GARAGE

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14
 OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION/AREA CRESCENT NEIGHBORHOOD
PLAT OR L.P. 24623-24630	TAX ZONE/MAP 7
LOT/PARCEL # 550	BLDG. DISTRICT 5
STAGE LITTLE PATUXENT	STAGE 605602

SEDIMENT EROSION CONTROL KEY SHEET
 REVISED SITE DEVELOPMENT PLAN
 Des. By GDT/SLAJ SCALE AS SHOWN Proj. No. 04038.B0
 Drn. By MCJ Date 5-10-18
 Chk. By MCB/GDT Approved MCB 43 of 94

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT
 [Signature] 2/16/20
 HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE



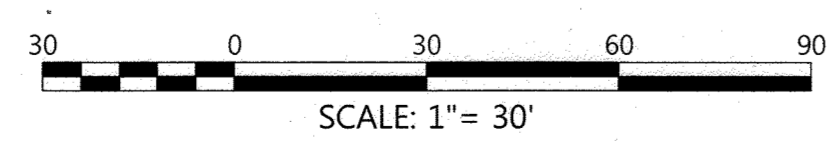
LEGEND

- 490 --- PROPERTY LINE
- 488 --- EX. CONTOURS
- EX. EDGE OF ROAD
- EX. BUILDING
- EX. TREELINE
- W --- EX. WATER
- EX. 4" S --- EX. SEWER
- EX. 12" SD --- EX. STORM DRAIN
- EX. OVERHEAD TELEPHONE
- EX. EASEMENT
- 490 --- PROP. EASEMENT
- 488 --- PROP. CONTOURS
- PROP. CURB
- PROP. WATER
- 8" S --- PROP. SEWER
- 18" SD --- PROP. STORM DRAIN
- PROP. BUILDING
- LIMIT OF DISTURBANCE
- GbC --- SOILS
- SCE --- STABILIZED CONSTRUCTION ENTRANCE W/ MOUNTABLE BERM
- SURFACE PLANTING BED
- (M-6) MODULAR MICRO-BIORETENTION FACILITY
- EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
- PROPOSED UTILITY STRUCTURES
- SIP-A --- STANDARD INLET PROTECTION
- SIP-B --- AT GRADE INLET PROTECTION
- AGIP --- SUMP PIT
- SP --- SUPER SILT FENCE
- DF --- DIVERSION FENCE
- RAISED METAL PLANTERS (TYP. 12) REFER TO SHEET 55

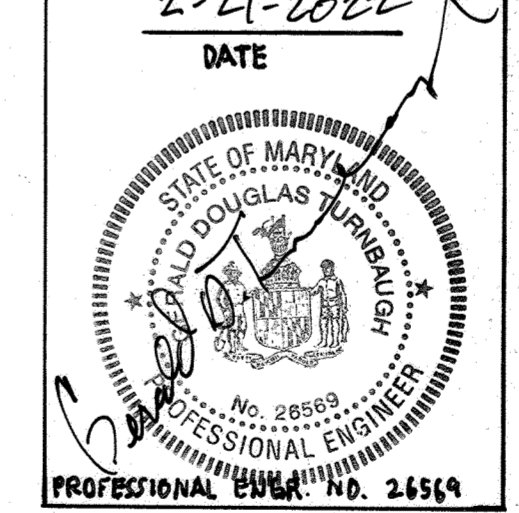
CONTINUATION LINE SHEET 45

CONTINUATION LINE SHEET 46

SEC - PARTIAL PLAN



FOR REDLINE REVISION 6 ONLY



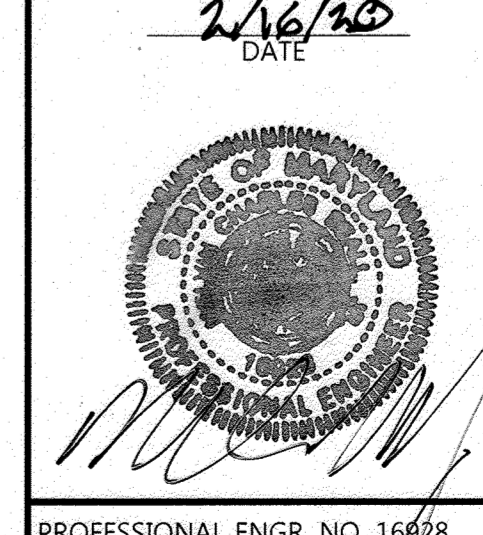
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 26569. EXPIRATION DATE: 07/18/2023

EASEMENT NOTE:

- MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
- WATER
 - SEWER
 - STREET LIGHTING
 - STORM WATER MANAGEMENT
 - STORM DRAIN
 - UTILITY

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-2A
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.



PROFESSIONAL ENGR. NO. 16928

OWNERS/DEVELOPER CERTIFICATION:

"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."

OWNER'S/DEVELOPER'S SIGNATURE: *Wm. Rowe SVP* DATE: 2-11-2020
 PRINTED NAME & TITLE: **Wm. Rowe SVP**

DESIGN CERTIFICATION:

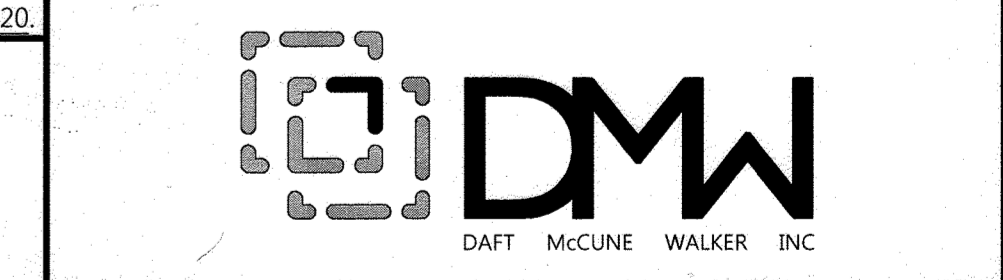
"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

DESIGNER'S SIGNATURE: *Melvin C. Boely, Jr.* DATE: 2/16/20
 PRINTED NAME: **Melvin C. Boely, Jr.** MD REGISTRATION NO. 28559

Date	No.	Revision Description
11/18/21	1	UPDATE BUILDING E-3 FLOOR SPACE + HARDSCAPE
11/18/21	2	UPDATE PARK UTILITIES AND SEC LAYOUT
03/06/19	3	BLDG. E-2, E-3, PLAZA HARDSCAPE AND GRADING

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM															
<table border="1"> <tr> <th>SECTION/AREA</th> <th>SUBDIVISION</th> <th>LOT/PARCEL #</th> </tr> <tr> <td>DOWNTOWN COLUMBIA</td> <td>CRESCENT NEIGHBORHOOD</td> <td>PARCEL D</td> </tr> <tr> <td>24623-24630</td> <td>TAX ZONE/STREET</td> <td>36 5</td> </tr> <tr> <td>WATER CODE</td> <td>SEWER CODE</td> <td>STAGE</td> </tr> <tr> <td>550</td> <td>LITTLE PATUXENT</td> <td>605602</td> </tr> </table>	SECTION/AREA	SUBDIVISION	LOT/PARCEL #	DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D	24623-24630	TAX ZONE/STREET	36 5	WATER CODE	SEWER CODE	STAGE	550	LITTLE PATUXENT	605602
SECTION/AREA	SUBDIVISION	LOT/PARCEL #													
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D													
24623-24630	TAX ZONE/STREET	36 5													
WATER CODE	SEWER CODE	STAGE													
550	LITTLE PATUXENT	605602													

SEDIMENT EROSION CONTROL PLAN
 REVISED SITE DEVELOPMENT PLAN

Des. By GDT/SLAJ	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By MCJ	Date 5-10-18	
Chk. By MCB	Approved MCB	44 of 94

SDP-17-027

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 2-28-20 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 2/16/2020 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 3-10-2020 DATE
 DIRECTOR

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

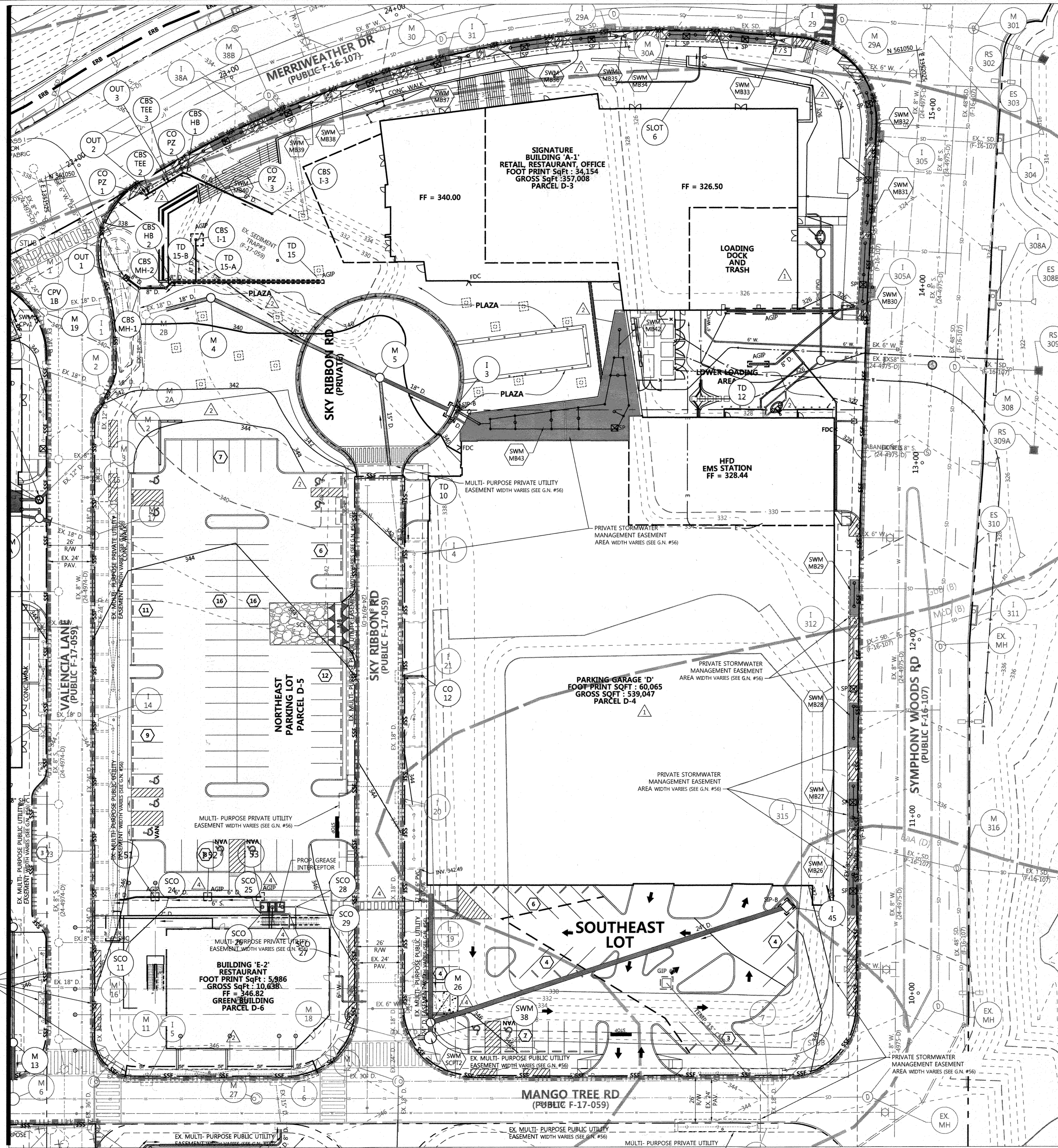
[Signature] 2/26/20 DATE
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

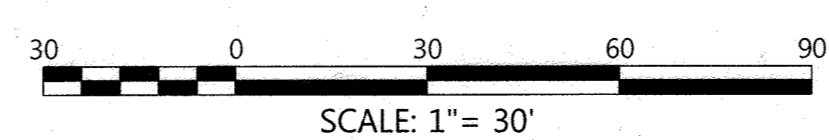
LEGEND

- PROPERTY LINE
 - - - EX. CONTOURS
 - EX. EDGE OF ROAD
 - EX. BUILDING
 - EX. TREELINE
 - EX. WATER
 - EX. SEWER
 - EX. STORM DRAIN
 - EX. OVERHEAD TELEPHONE
 - EX. EASEMENT
 - PROP. EASEMENT
 - PROP. CONTOURS
 - PROP. CURB
 - PROP. WATER
 - PROP. SEWER
 - PROP. STORM DRAIN
 - PROP. BUILDING
 - LIMIT OF DISTURBANCE
 - SOILS
-
- STABILIZED CONSTRUCTION ENTRANCE W/ MOUNTABLE BERM
 - SURFACE PLANTING BED
 - (M-6) MODULAR MICRO-BIORETENTION FACILITY
 - EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
 - STORMCEPTOR
 - PROPOSED UTILITY STRUCTURES
 - STANDARD INLET PROTECTION
 - GABION INLET PROTECTION
 - SUMP PIT
 - SUPER SILT FENCE
 - BAFFLE BOARDS

CONTINUATION LINE SHEET 44



SEC - PARTIAL PLAN



EXISTING PIPE OUTLET SEDIMENT TRAP #1 (SDP-10-075)		STANDARD SYMBOL
		ST-1
PIPE OUTLET SEDIMENT TRAP ST-1 TRAP NO. #1		
DRAINAGE AREA - INITIAL	5.0	ACRES
DRAINAGE AREA - INTERIM	N/A	ACRES
DRAINAGE AREA - FINAL	5.0	ACRES
TOTAL STORAGE REQUIRED	18,000	CF
TOTAL STORAGE PROVIDED	18,140	CF
WET STORAGE REQUIRED	9,000	CF
WET STORAGE PROVIDED	9,140	CF
DRY STORAGE REQUIRED	9,000	CF
DRY STORAGE PROVIDED	9,000	CF
TRAP BOTTOM ELEVATION	324.0	FT
TRAP BOTTOM DIMENSIONS	11'0" X 6'0"	FT X FT
RISER CREST (DRY STORAGE) ELEVATION	326.25	FT
OUTLET (WET STORAGE) ELEVATION	326.25	FT
CLEANOUT ELEVATION	324.60	FT
TOP OF EMBANKMENT ELEVATION	328.00	FT
SIDE SLOPE	2:1	H:V RATIO
EMBANKMENT TOP WIDTH	4'	FT
PRINCIPAL SPILLWAY MATERIAL (BARREL RISER, ANTI-SEEP COLLAR)	CMP	
RISER DIAMETER	42"	IN
BARREL DIAMETER	30"	IN
TRASH RACK DIAMETER	60"	IN
TRASH RACK HEIGHT	27"	IN
ANTI-SEEP COLLAR DIMENSIONS	2-7.75" X 7.75"	FT
OUTLET PROTECTION - LENGTH	N/A	FT
OUTLET PROTECTION - WIDTH	N/A	FT
OUTLET PROTECTION - DEPTH	N/A	IN

OWNERS/DEVELOPER CERTIFICATION:

"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."

OWNER'S DEVELOPER'S SIGNATURE: *Wm I Rowe 3VP* DATE: 11-11-2020
 PRINTED NAME & TITLE: Wm I Rowe 3VP

DESIGN CERTIFICATION:

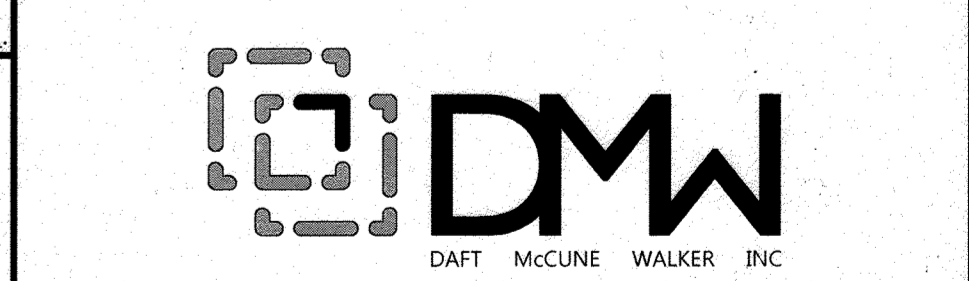
"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

DESIGNER'S SIGNATURE: *Melvin C. Beecher* DATE: 11/10/20
 PRINTED NAME: Melvin C. Beecher MD REGISTRATION NO. 16928 (PE) RLS, OR R.L.A. (CIRCLE ONE)

Date	No.	Revision Description
07/31/20	A	UPDATE BLDG. 'B' USAGES, SQUARE FOOTAGES & PARKING REQUIREMENTS AND BLDG. 'E-2' DOORS, HARDSCAPE & DUMPSTER LOCATION.
03/06/19	A	BLDG. EX. PLAZA HARDSCAPE, AND GRADING
12/03/18	A	BUILDING ALL LOADING DOCK RECONFIGURATION GARAGE

DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10960 GRANTCHESTER WAY SUITE 110
 COLUMBIA, MD 21044
 410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D
PLAN OR LOT	TRUCK & TRAILER	24623-24630
WATER CODE	SEWER CODE	STAGE
550	TITLE PATULXENT	605602

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION:
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/22

PROFESSIONAL ENGR. NO. 16928

APPROVED: *Alexander Bratchie* DATE: 11/25/2020
 PLANNING BOARD OF HOWARD COUNTY

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

APPROVED: *Alexander Bratchie* DATE: 11/25/2020
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 11-30-20

CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 12/1/20

DIRECTOR: *[Signature]* DATE: 12-16-20

CONTINUATION LINE SHEET 44



LEGEND

- PROPERTY LINE
- EX. CONTOURS
- EX. EDGE OF ROAD
- EX. BUILDING
- EX. TREELINE
- EX. WATER
- EX. SEWER
- EX. STORM DRAIN
- EX. OVERHEAD TELEPHONE
- EX. EASEMENT
- PROP. EASEMENT
- PROP. CONTOURS
- TEMPORARY CONTOUR
- PROP. CURB
- PROP. WATER
- PROP. SEWER
- PROP. STORM DRAIN
- PROP. BUILDING
- LIMIT OF DISTURBANCE
- SOILS
- SCE
- (M-6) MODULAR MICRO-BIORETENTION FACILITY
- EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
- PROPOSED UTILITY STRUCTURES
- STANDARD INLET PROTECTION
- AT GRADE INLET PROTECTION
- SUMP PIT
- SUPER SILT FENCE
- STAGING AREA FOR THIS SDP-17-027
- TEMPORARY SOIL STABILIZATION MATTING
- RAISED METAL PLANTERS (TYP. 12) REFER TO SHEET 55

OWNERS/DEVELOPER CERTIFICATION:

"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."

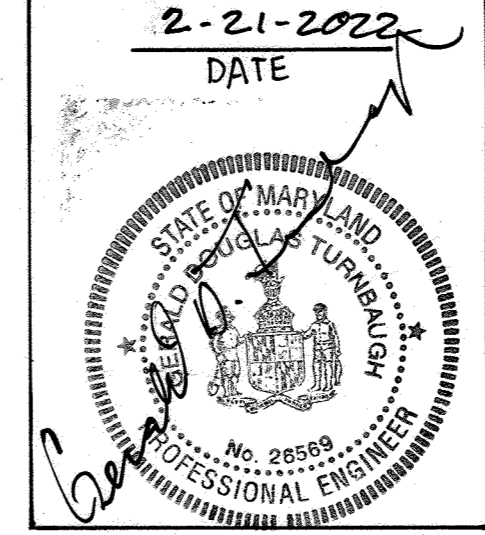
OWNER'S/DEVELOPER'S SIGNATURE: *Wm T Rowe* DATE: 2/16/20
 PRINTED NAME & TITLE: Wm T Rowe JVP

DESIGN CERTIFICATION:

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, AND THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

DESIGNER'S SIGNATURE: *Melvin C. Bault Jr.* DATE: 2/16/20
 PRINTED NAME: Melvin C. Bault Jr. MD REGISTRATION NO. 16928
 P.E., R.L.S., OR R.L.A. (CIRCLE ONE)

FOR REDLINE REVISION 6 ONLY



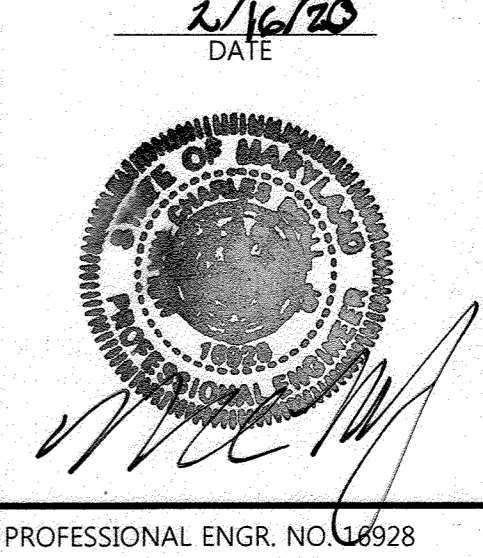
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.

EASEMENT NOTE:

- MULTI-PURPOSE PUBLIC UTILITY EASEMENT VARIES IN WIDTH AND ENCOMPASSES THE FOLLOWING:
- WATER
 - SEWER
 - STREET LIGHTING
 - STORM WATER MANAGEMENT
 - STORM DRAIN
 - UTILITY

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
 CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/2020.



PROFESSIONAL ENGR. NO. 16928
 APPROVED: *Melvin C. Bault Jr.* DATE: 2/16/20
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

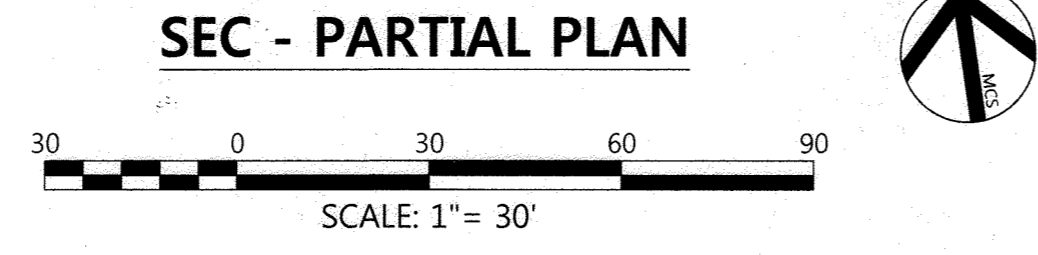
Date	No.	Revision Description
11/18/19	1	UPDATE BUILDING E-3 FLOOR SPACE + HARDSCAPE
11/18/19	2	UPDATE PARK, UTILITIES, SEC LAYOUT, & EX SWM FACILITIES

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

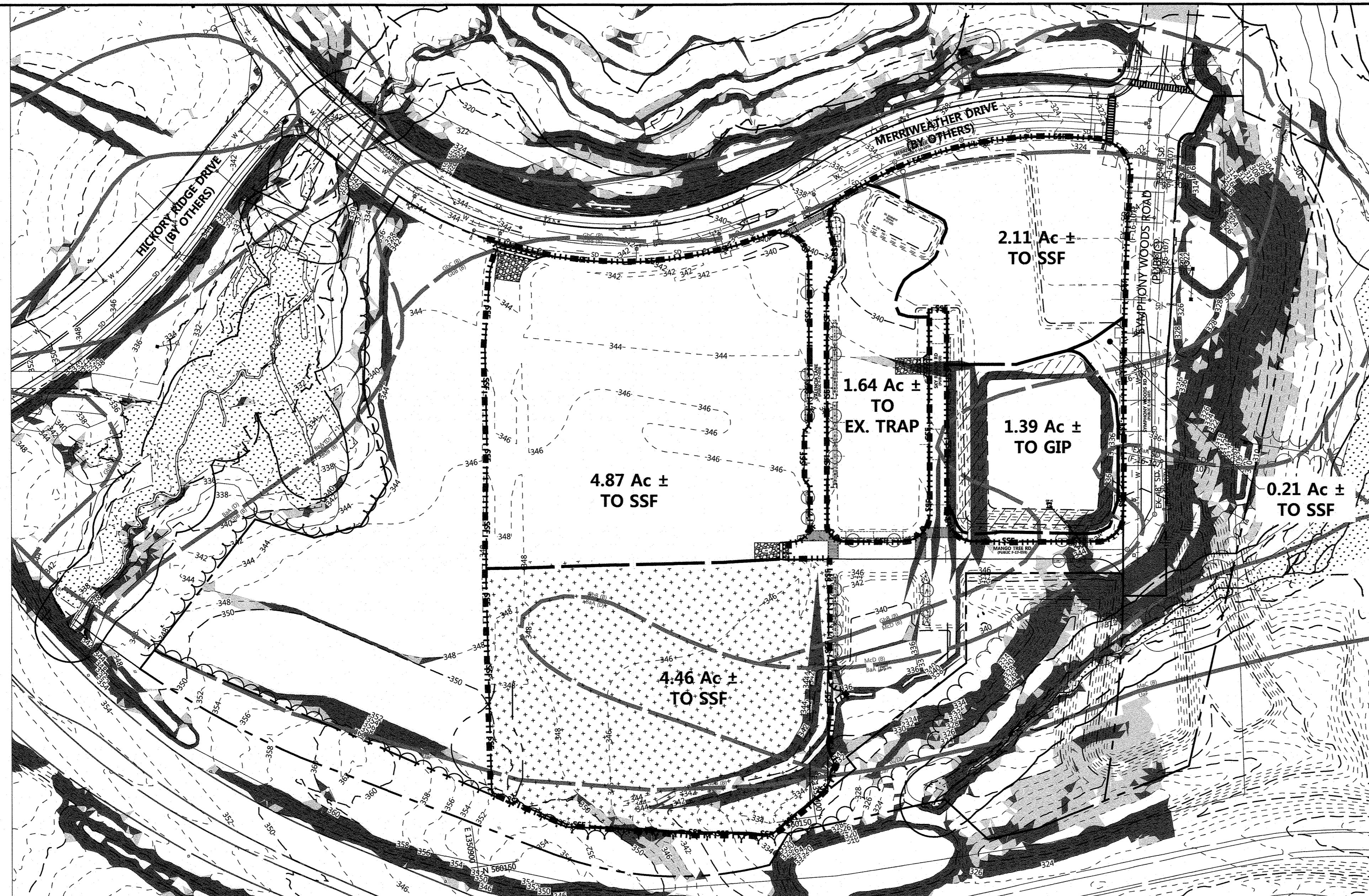
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #	
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD		
PLAT FOR LPT	TAX ZONE/MAP	ELECT. DISTRICT	PARCEL D
24929-24930	7	5	605602
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT		
TITLE: SEDIMENT EROSION CONTROL PLAN			
REVISED SITE DEVELOPMENT PLAN			
Des. By	GDT/SLAJ	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By	M/CJ	Date 5-10-18	
Chk. By	MCB/GDT	Approved MCB	46 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chie DATE: 2-28-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
gaw DATE: 3/16/2020
 CHIEF, DIVISION OF LAND DEVELOPMENT
gaw DATE: 3-11-2020
 DIRECTOR



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
J. K. Blunt DATE: 2/26/20
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17



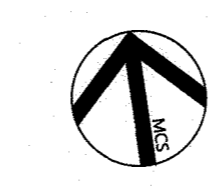
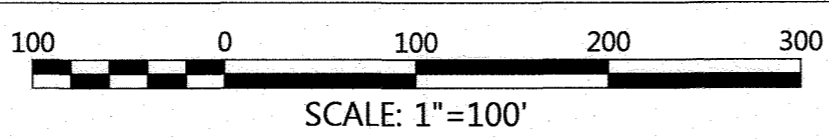
- LEGEND**
- 490 --- PROPERTY LINE
 - 488 --- EX. CONTOURS
 - EX. EDGE OF ROAD
 - EX. BUILDING
 - EX. TREELINE
 - W --- W --- EX. WATER
 - EX. 4" S --- EX. SEWER
 - EX. 12" D₅₀ --- EX. STORM DRAIN
 - EX. OVERHEAD TELEPHONE
 - EX. EASEMENT
 - LIMIT OF DISTURBANCE
 - GbC --- SOILS
 - DRAINAGE DIVIDES
 - SCE STABILIZED CONSTRUCTION ENTRANCE W/ MOUNTABLE BERM
 - GIP GABION INLET PROTECTION
 - SSF --- SUPER SILT FENCE
 - EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
 - EX. (M-6) STANDARD MICRO-BIORETENTION FACILITY

EXISTING CONDITIONS - DRAINAGE AREA MAP

STEEP SLOPES DATA

15% AND UP (HIGHLY ERODIBLE)

20% AND UP (STEEP SLOPES)



NOTE: SLOPE INFORMATION SHOWN HERE ON IS A RESULT OF MASS GRADING SDP-16-075

HYDROLOGIC SOIL GROUP - SUMMARY BY MAP UNIT - HOWARD COUNTY, MARYLAND

MAP UNIT SYMBOL	MAP UNIT NAME	HYDROLOGIC GROUP	K VALUE (Kw)
BaA	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPE	D	0.32
GbB	GLADSTONE LOAM 3 TO 8 PERCENT SLOPES	B	0.20
GbC	GLADSTONE LOAM 8 TO 15 PERCENT SLOPES	B	0.20
MaC	MANOR LOAM 8 TO 15 PERCENT SLOPES	B	0.24
McD	MANOR LOAM 15 TO 25 PERCENT SLOPES, VERY ROCKY	B	0.24

USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY 2.0 NATIONAL COOPERATIVE SOIL SURVEY 11/26/2007 HOWARD COUNTY SOIL MAP #18

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

DATE: 4-2-18

DATE: 6-15-18

DATE: 6-15-18

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

DATE: 3/23/18

HOWARD SOIL CONSERVATION DISTRICT

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE: 07/18/19

DATE: 3-23-18

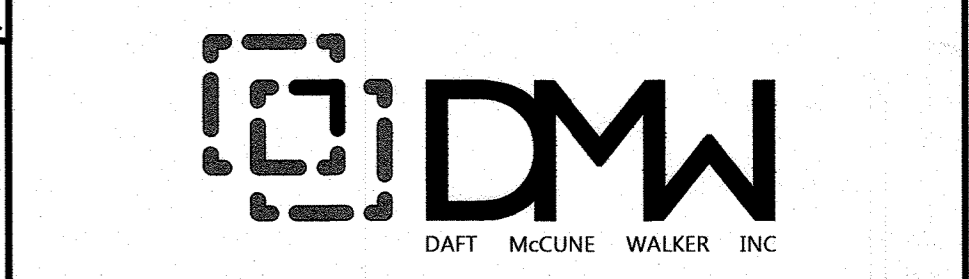
PROFESSIONAL ENGR. NO. 26569

APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE: 11/16/17

Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

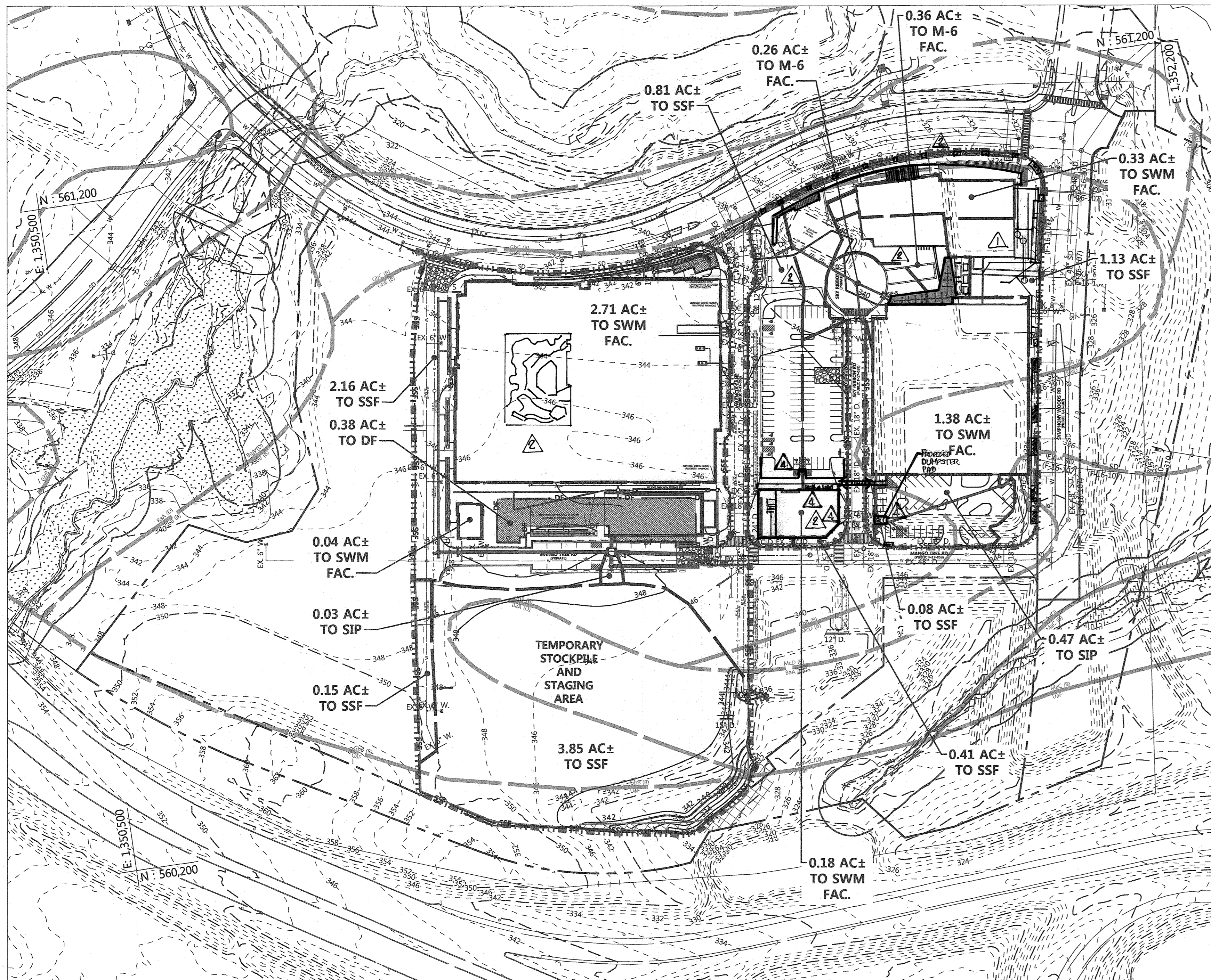
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D

PLAT FOR L.P.	BLOCK #	PLAT #	TAX ZONE/MAP	ELECT. DISTRICT	CENSUS TRACT
N/A	7	1200	36	5	605602

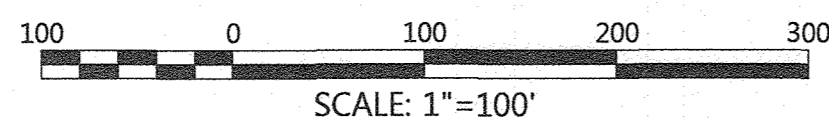
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			

TITLE: **SEDIMENT EROSION CONTROL EX. CONDITIONS DA MAP**

Des. By	GDT/SLAJ	SCALE AS SHOWN	Proj. No.
Drn. By	MCJ	Date 1-18-18	04038.B0
Chk. By	MCB/GDT	Approved MCB	47 of 94



PROPOSED CONDITIONS - DRAINAGE AREA MAP

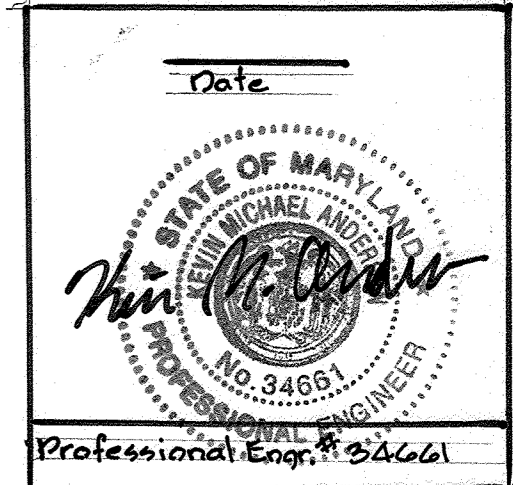


LEGEND

- PROPERTY LINE
- EX. CONTOURS
- EX. EDGE OF ROAD
- EX. BUILDING
- EX. TREELINE
- EX. WATER
- EX. SEWER
- EX. STORM DRAIN
- EX. OVERHEAD TELEPHONE
- EX. EASEMENT
- PROP. EASEMENT
- PROP. CONTOURS
- PROP. CURB
- PROP. 12" DISCHARGE WATERMAIN
- PROP. SEWER
- PROP. STORM DRAIN
- PROP. BUILDING
- LIMIT OF DISTURBANCE
- SOILS
- DRAINAGE DIVIDES
- SCE (Stabilized Construction Entrance w/ Mountable Berm)
- (M-6) MODULAR MICRO-BIORETENTION FACILITY
- EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
- STORMCEPTOR
- PROPOSED UTILITY STRUCTURES
- SIP (Inlet Protection)
- SP (Sump Pit)
- SSF (Super Silt Fence)
- DF (Diversion Fence)
- TEMPORARY STOCKPILE & STAGING AREA
- TEMPORARY SOIL STABILIZATION MATTING

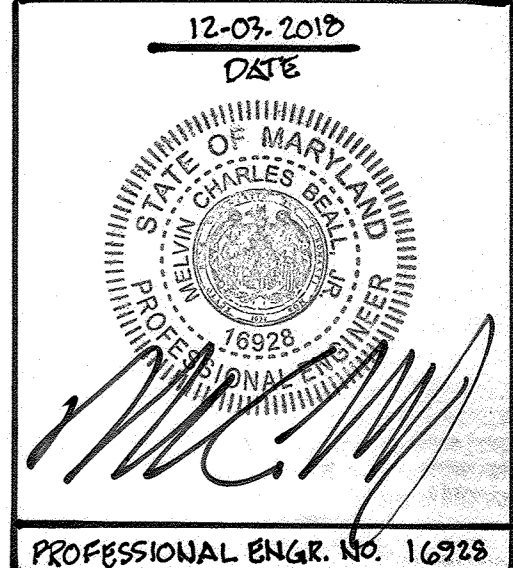
NOTE: ROOF AND PARKING GARAGE AREAS DRAIN UNDERGROUND INTO STORM DRAIN SYSTEM AND/OR STORMCEPTORS.

FOR REVISION NO. 2 ONLY



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16928, Expiration Date: 7-10-2019

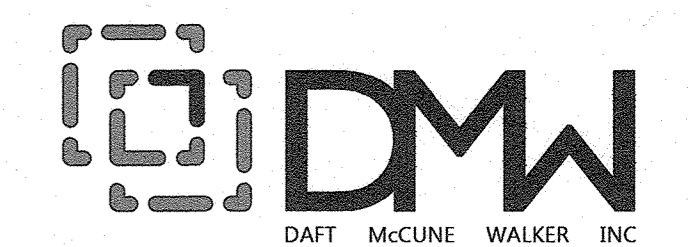
FOR REVISION NO. 1 ONLY



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16928, Expiration Date: 5/13/18

Date	No.	Revision Description
01/06/19	1	Build E2, E3 PLAZA Hardscape & Grading
12/03/18	2	BUILDING AT LOADING DOCK RECONFIGURATION AND GARAGE

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14
 OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM			
SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION/AREA CRESCENT NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
PLAT/REF L/P N/A	BLOCK # 7	TAX ZONE/ADP D-3	ELECT. DISTRICT 5
WATER CODE SSO	SEWER CODE LITTLE PATUXENT	STAGE	605602

TITLE
SEDIMENT EROSION CONTROL
PROP. CONDITIONS DA MAP

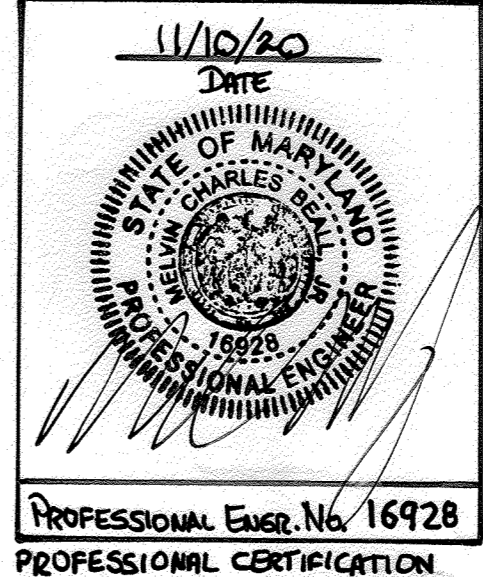
Des. By	GDT/SLAJ	SCALE	AS SHOWN	Proj. No.	04038.00
Dwn. By	MCJ	Date	1-18-18		
Chk. By	MCB/GDT	Approved	MCB		48 of 94

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-115,
 WP-18-020, WP-18-021, SP-16-009,
 WP-16-100, FDP-DC-CRESCENT-1,
 FDP-DC-CRESCENT-1A
 CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D



PROFESSIONAL ENGR. NO. 26569
 DATE: 1/16/17

FOR REDLINE REVISION 4 ONLY



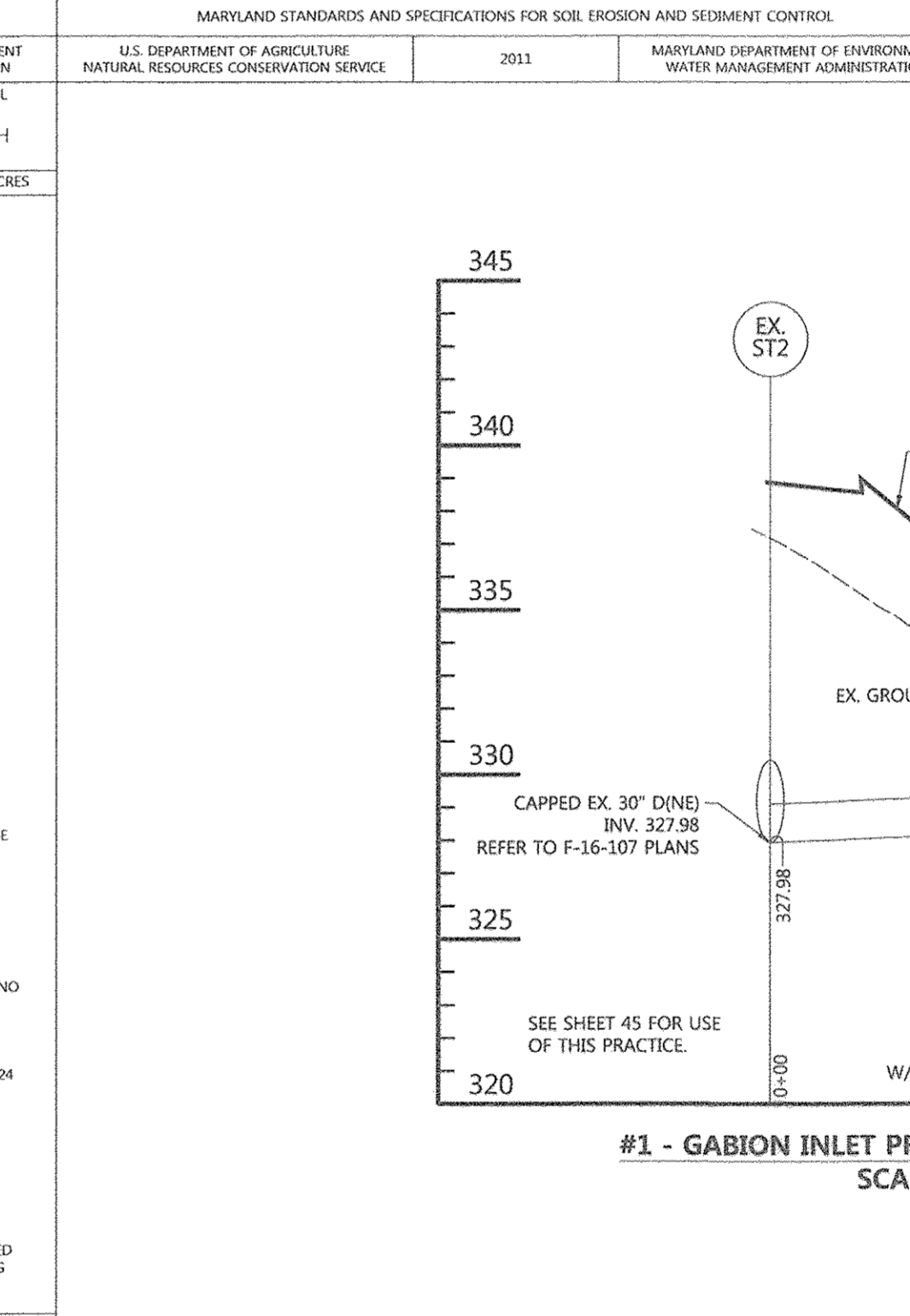
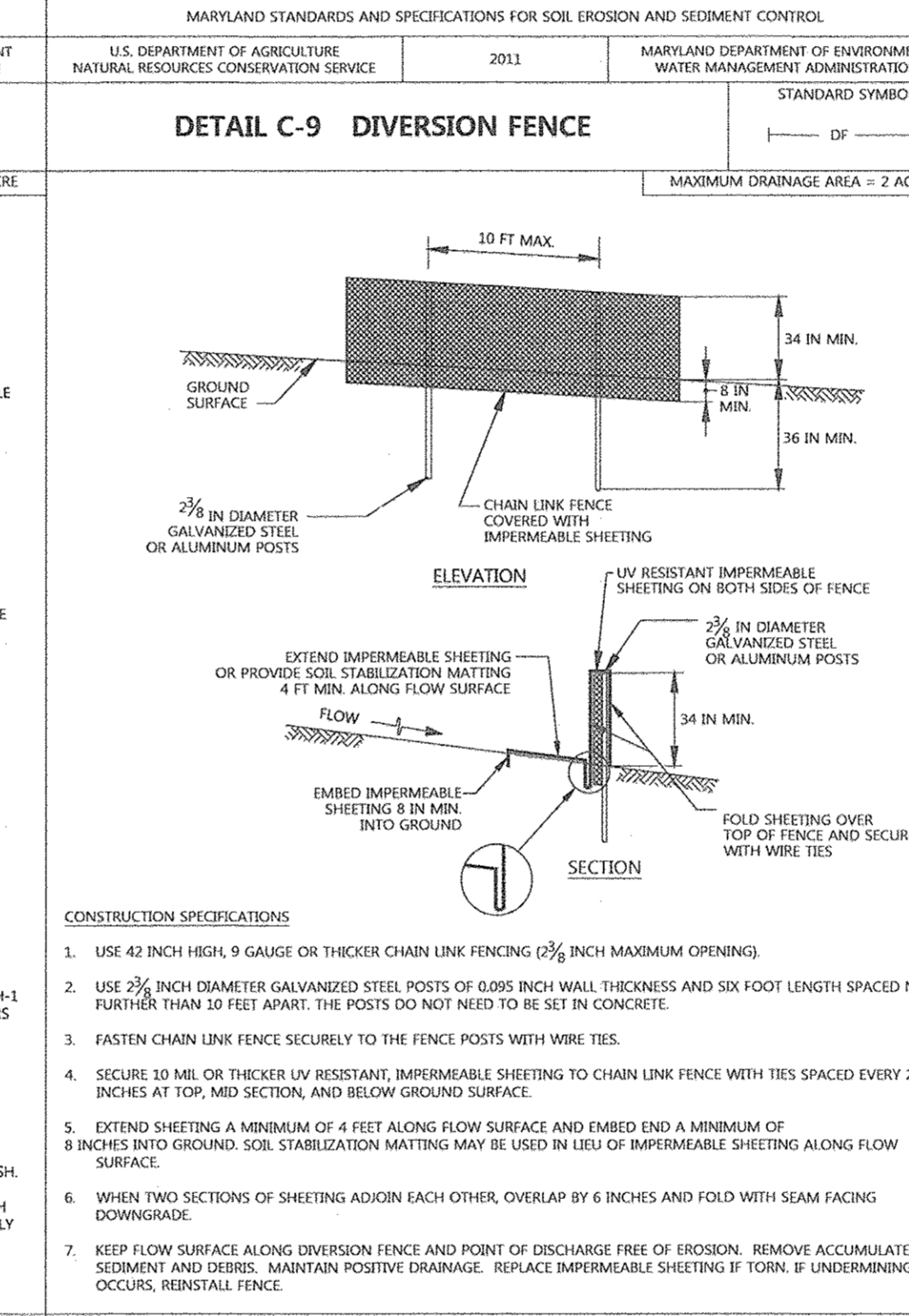
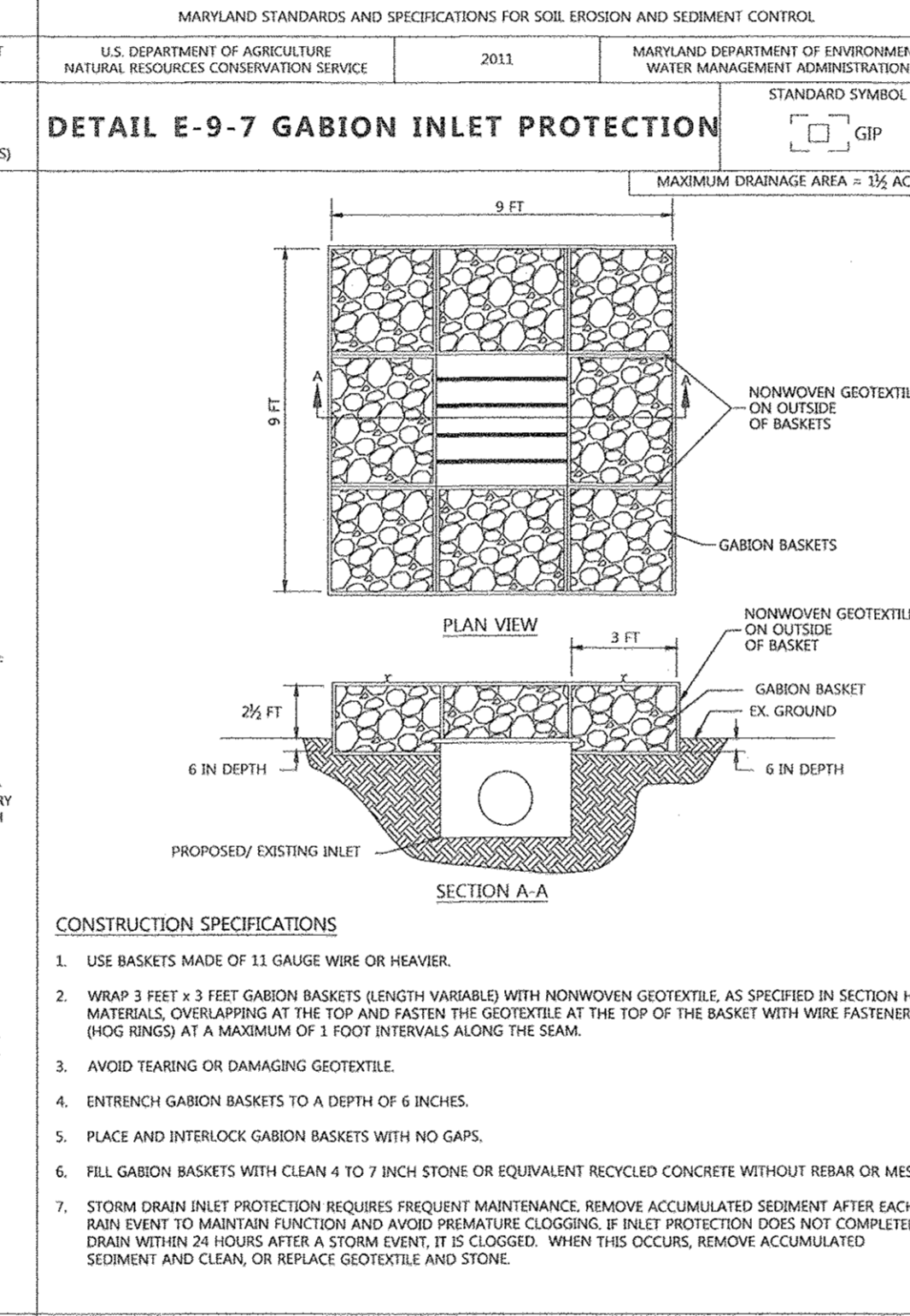
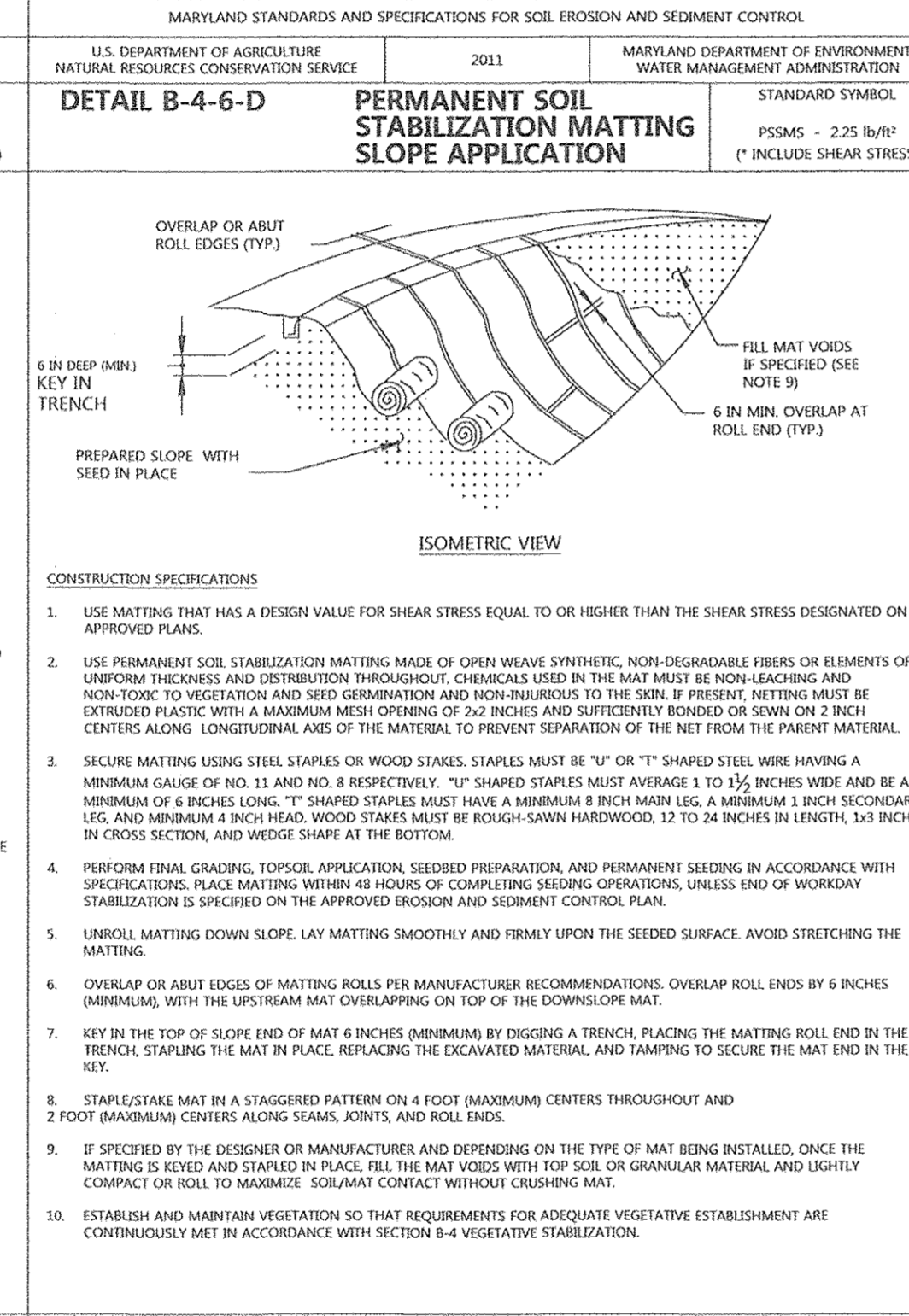
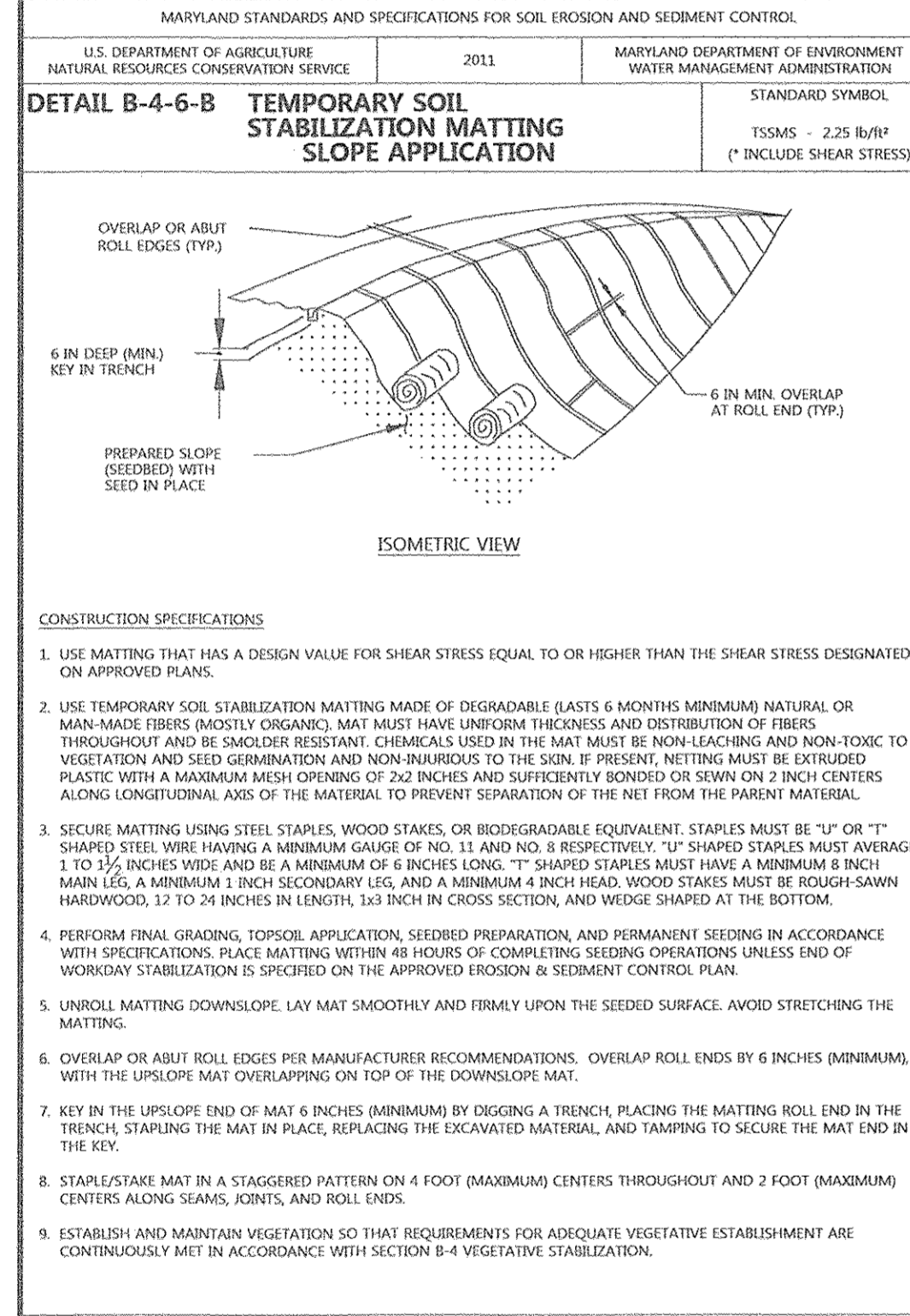
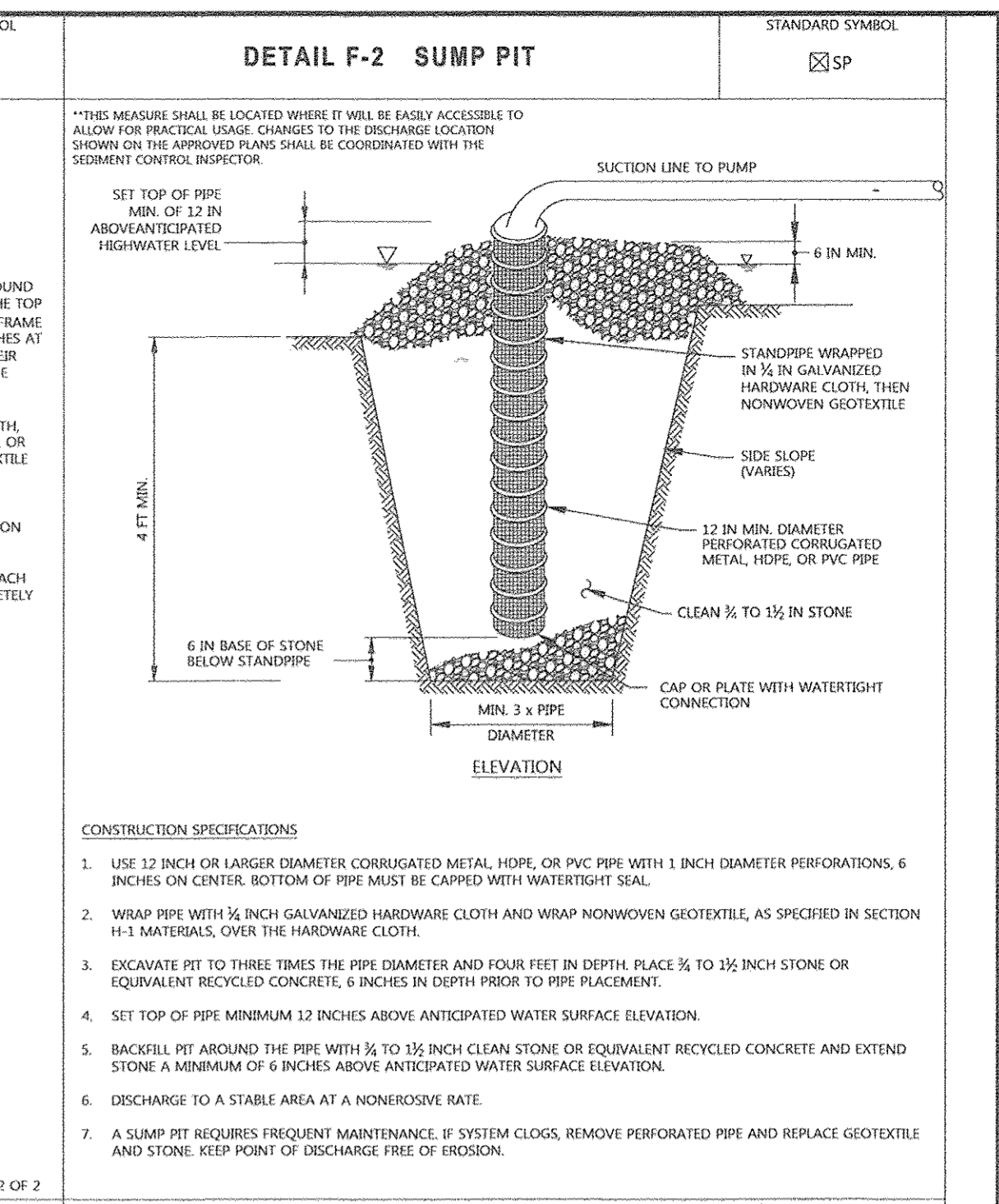
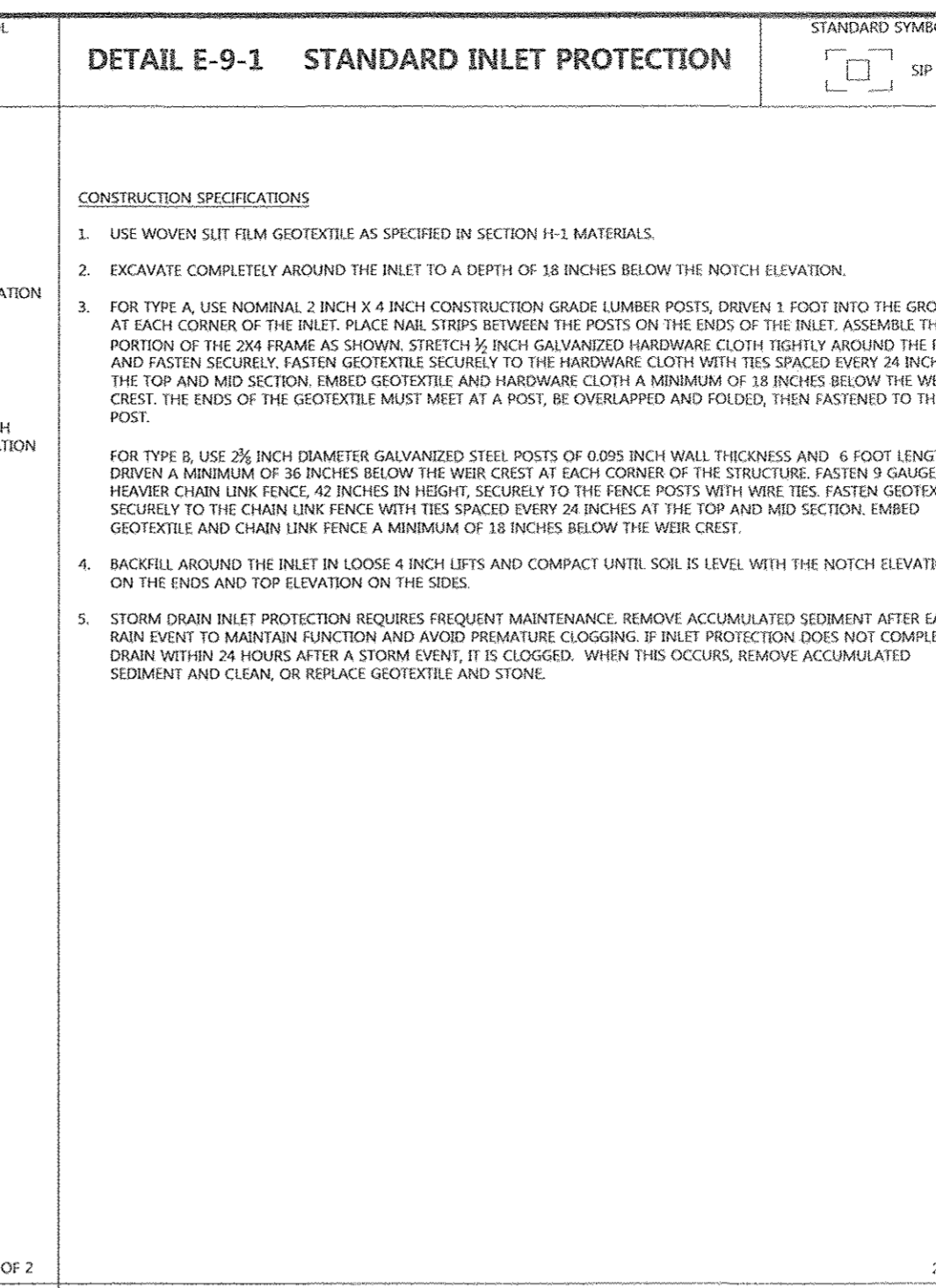
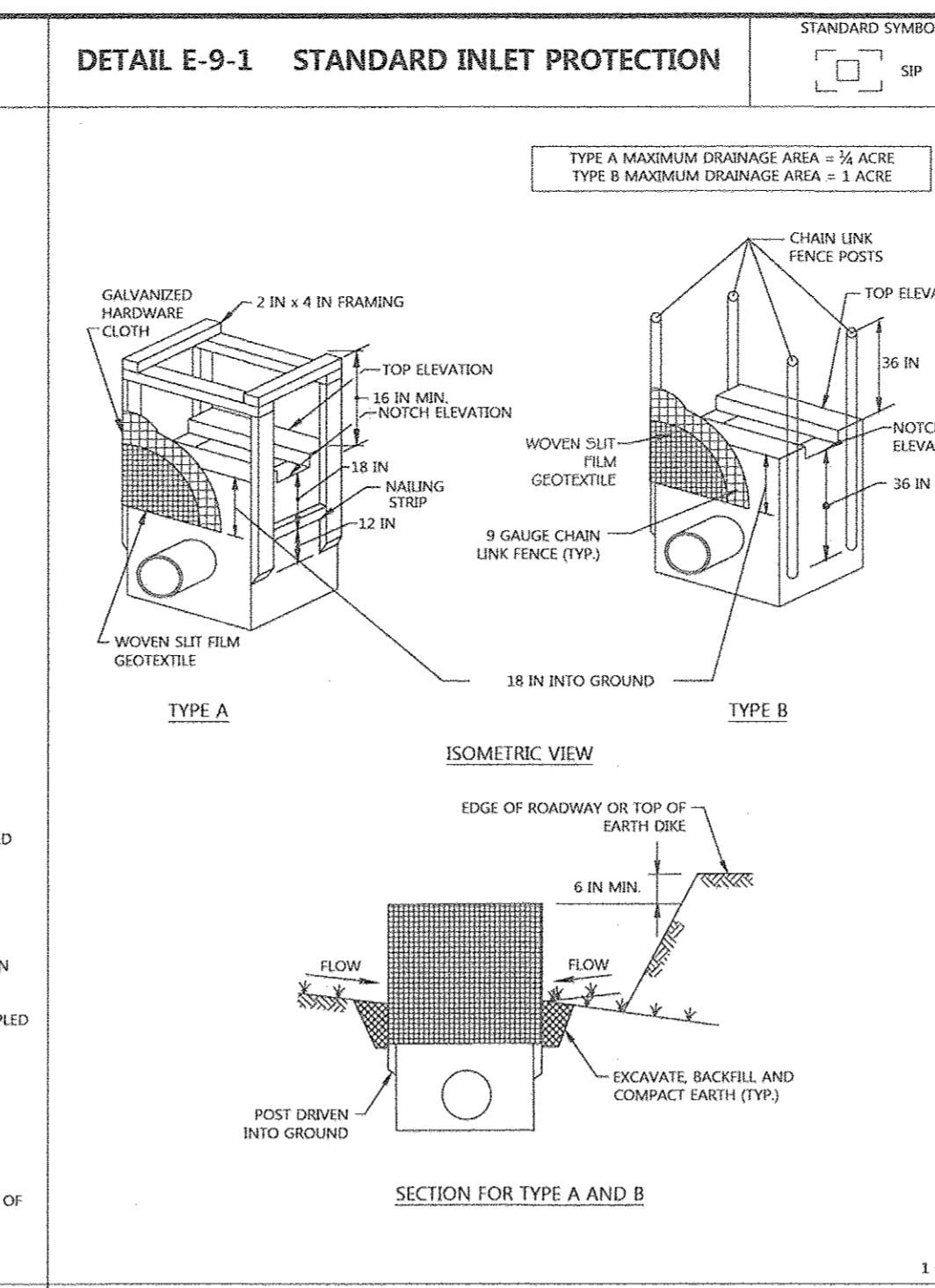
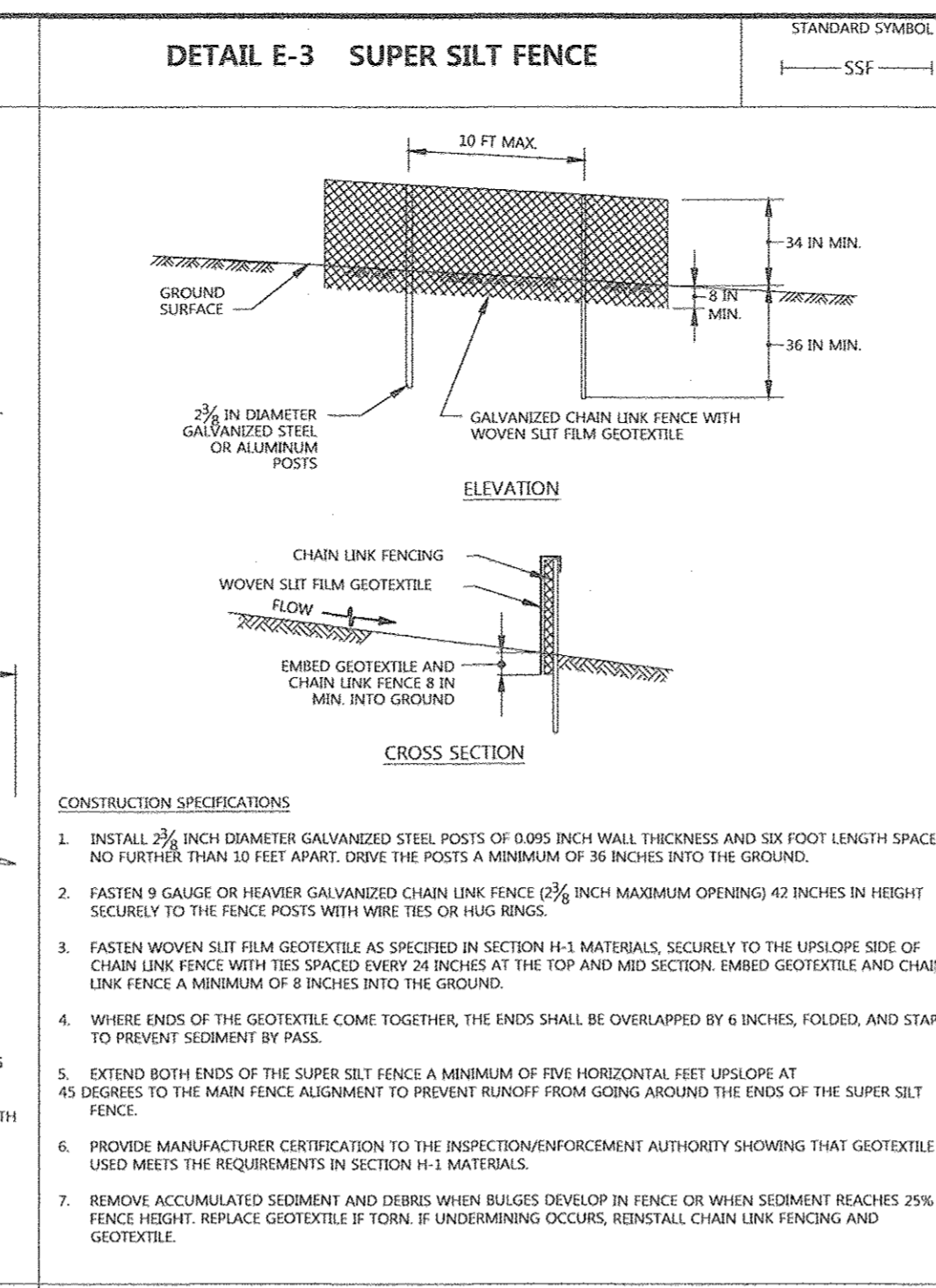
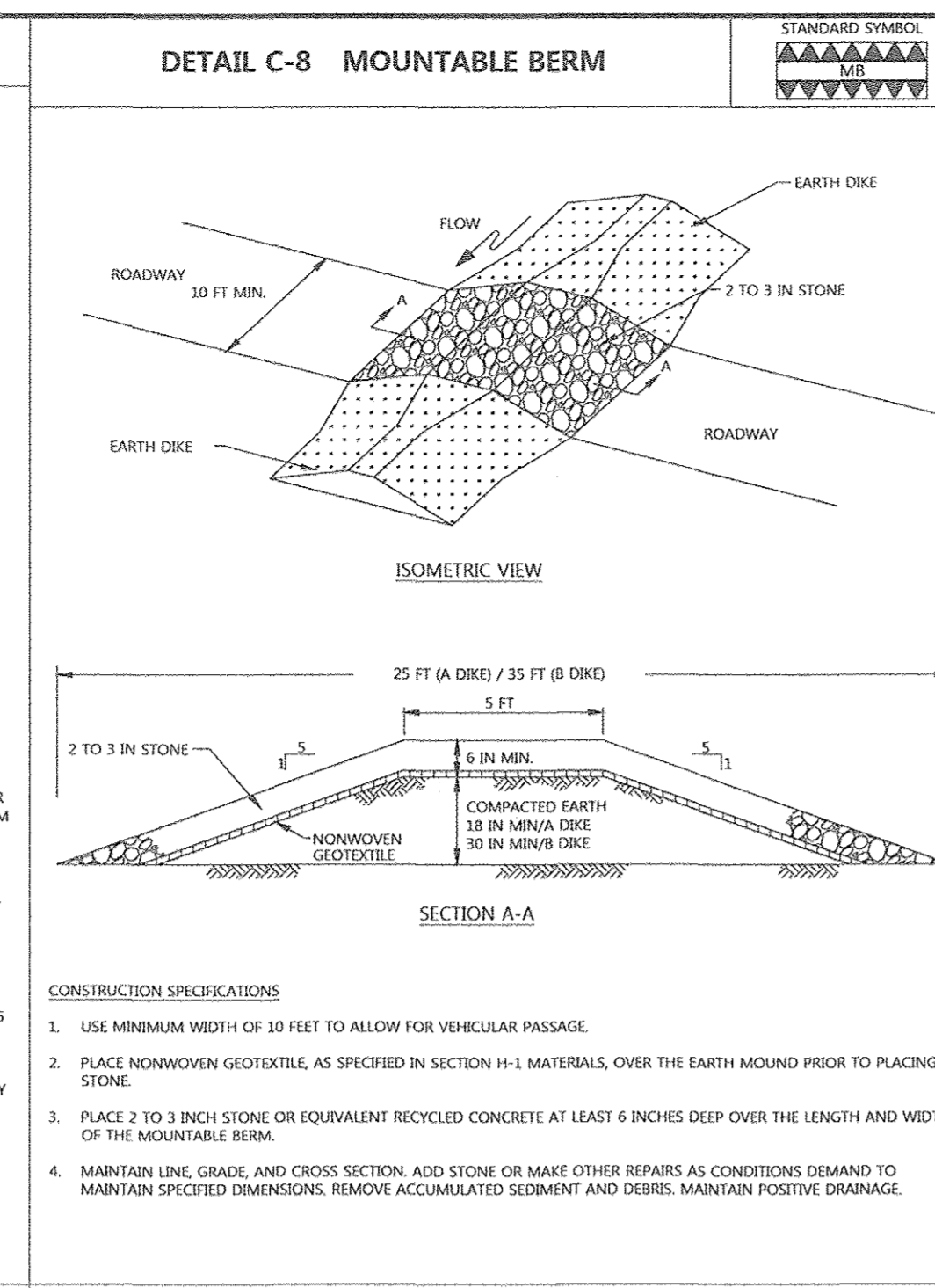
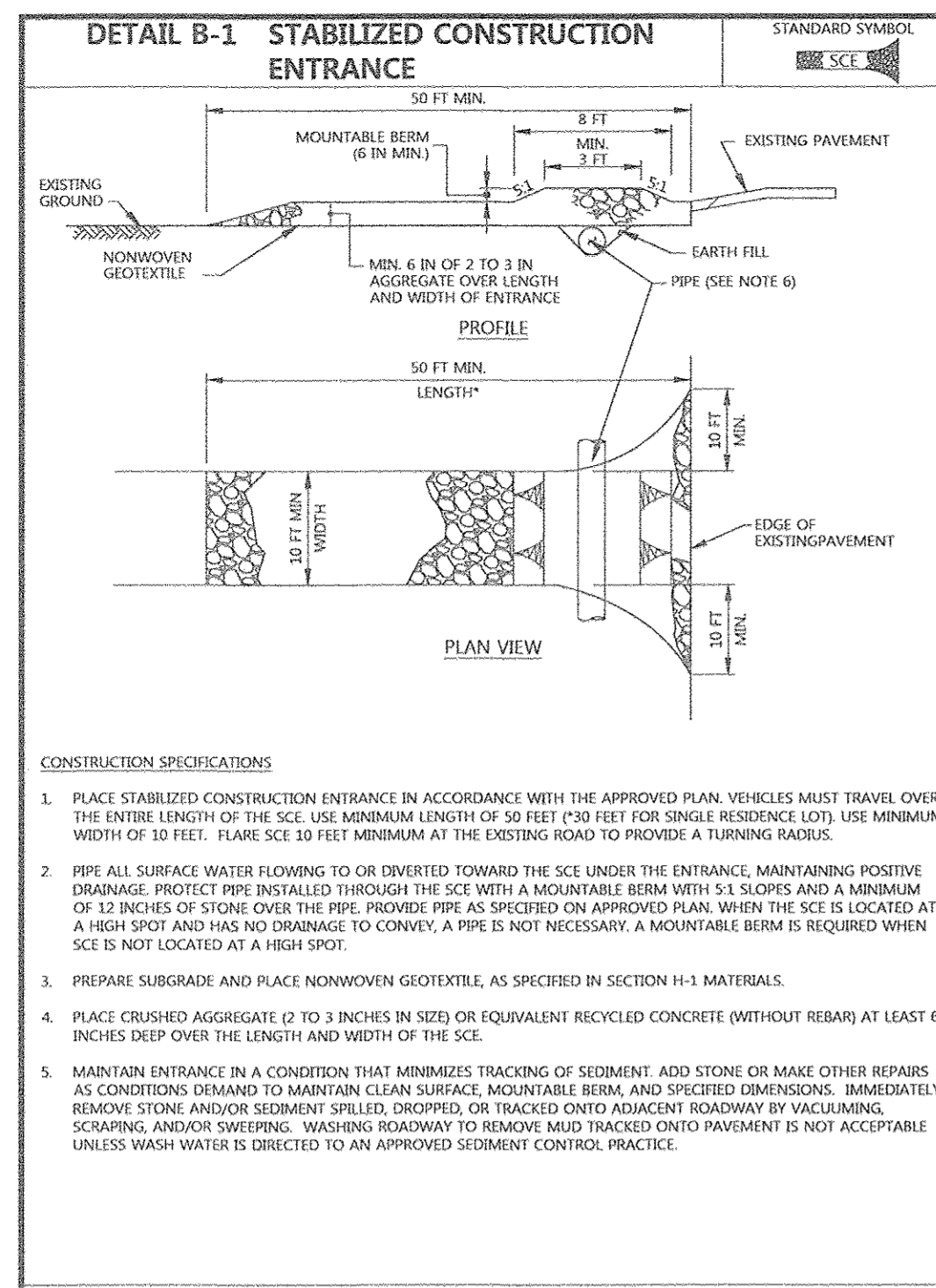
PROFESSIONAL ENGR. NO. 16928
 DATE: 11/10/20

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/13/22

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 John R. Robertson/KRM 3/23/18
 HOWARD SOIL CONSERVATION DISTRICT

7/31/2020 UPDATE BLDG 1st USAGES, SQUARE FOOTAGES & PARKING REQMENTS, AND BLDG 6-2' DOORS, HARDSCAPE & DUMPSTER LOCATION.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Chief, Development Engineering Division 4/2/18
 Chief, Division of Land Development 6/7/18
 Director, Division of Land Development 6-15-18



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DATE: 4-2-18

CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: DATE: 6-15-18

CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: DATE: 6-15-18

DIRECTOR, DIVISION OF LAND DEVELOPMENT

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 11/11/17

PROFESSIONAL ENGR. NO. 16928

Date	No.	Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10180 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-1800

DMW
DAFT McCUNE WALKER INC

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION/ZONE	LOT/AREA #	LOT/AREA #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PHASE I AREA 3	PARCEL D
PLAT/LOT #	BLOCK #	LOT #	ELECT. DISTRICT
N/A	7	36	5
WATER COLOR	SEWER COLOR	STAGE	CLASS
550	LITTLE PATUXENT		605602

TITLE: **SEDIMENT EROSION CONTROL DETAILS**

Des. By: GDT/SLAJ SCALE: AS SHOWN Proj. No. 04038.B0
 Dm. By: MCJ Date: 1-18-18
 Chk. By: MCB/GDT Approved: MCB 49 of 94

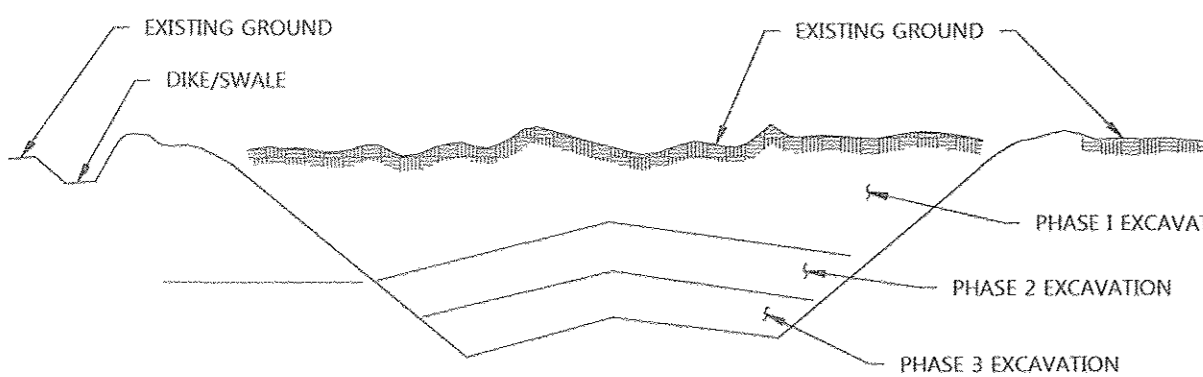
SDP-17-027

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

(B-4-1) SECTION 1 - INCREMENTAL STABILIZATION

- INCREMENTAL STABILIZATION - CUT SLOPES
 - EXCAVATE AND STABILIZE CUT SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL CUT SLOPES AS THE WORK PROGRESSES.
- CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.1):
 - CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO CONVEY RUNOFF AROUND THE EXCAVATION.
 - PERFORM PHASE 1 EXCAVATION, PREPARE SEEDBED, AND STABILIZE.
 - PERFORM PHASE 2 EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PHASE 1 AREAS AS NECESSARY.
 - PERFORM FINAL PHASE EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSARY.

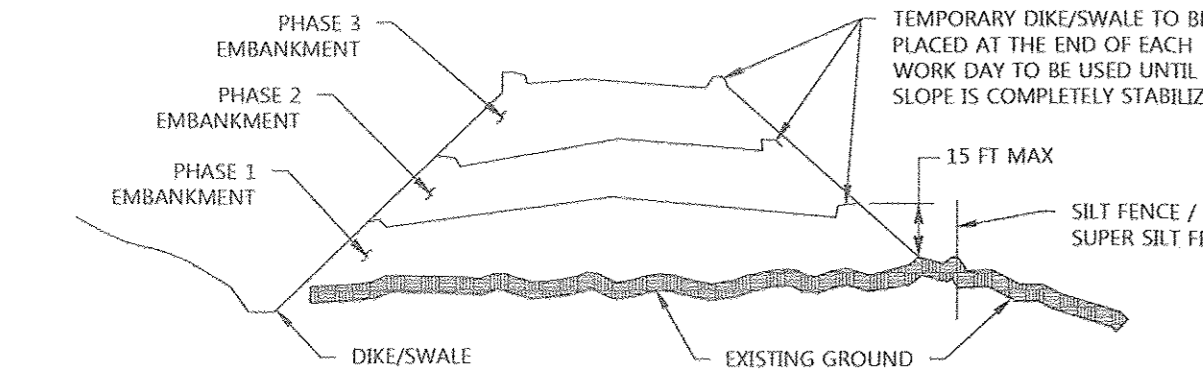
NOTE: ONCE EXCAVATION HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.



B. INCREMENTAL STABILIZATION - FILL SLOPES

- CONSTRUCT AND STABILIZE FILL SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL SLOPES AS THE WORK PROGRESSES.
- STABILIZE SLOPES IMMEDIATELY WHEN THE VERTICAL HEIGHT OF A LIFT REACHES 15 FEET, OR WHEN THE GRADING OPERATION CEASES AS DESCRIBED IN THE PLANS.
- AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICES, AS NECESSARY, TO INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER.
- CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.2):
 - CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO DIVERT RUNOFF AROUND THE FILL. CONSTRUCT SILT FENCE ON LOW SIDE OF FILL UNLESS OTHER METHODS SHOWN ON THE PLANS ADDRESS THIS AREA.
 - AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICES, AS NECESSARY, TO INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER.
 - PLACE PHASE 1 FILL, PREPARE SEEDBED, AND STABILIZE.
 - PLACE PHASE 2 FILL, PREPARE SEEDBED, AND STABILIZE.
 - PLACE FINAL PHASE FILL, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSARY.

NOTE: ONCE THE PLACEMENT OF FILL HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.



(B-4-2) SECTION 2 - SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

- SOIL PREPARATION
 - TEMPORARY STABILIZATION
 - SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
 - APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
 - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- PERMANENT STABILIZATION
 - A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
 - SOIL PH BETWEEN 6.0 AND 7.0.
 - SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
 - SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF FLOVGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
 - SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
 - SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
 - APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
 - GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
 - APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
 - MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE TOP 1 TO 3 INCHES OF SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.
- TOPSOILING
 - TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.
 - TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.
 - TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
 - THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
 - THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
 - THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
 - THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
 - AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.
 - TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:
 - TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURES AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CONCRETE, STONES, SLAG, COARSE FRACTIONS, GRAVEL, STICKS, ROOTS, TRASH OR OTHER MATERIALS LARGER THAN 1 1/2 INCHES IN DIAMETER.

- TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
- TOPSOIL APPLICATION
 - EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.
 - TOPSOIL DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 - TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.
 - SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)
 - SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.
 - FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. FERTILIZER MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.
 - LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.
 - LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
 - WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

(B-4-3) SECTION 3 - SEEDING AND MULCHING

- SEEDING
 - SPECIFICATIONS
 - ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
 - MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS.
 - INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING.
 - APPLICATION
 - SOIL AND SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL, UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
 - DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.
 - INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1, PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES.
 - APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER, APPLY HALF THE SEEDING RATE IN EACH DIRECTION ROLL THE SEEDER AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.
 - DRILL OR CULTRIPACKER SEEDING: RECOMMENDED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
 - CULTRIPACKER SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.
 - APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER, APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
 - HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).
 - IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHORUS), 200 POUNDS PER ACRE; K2O (POTASSIUM), 200 POUNDS PER ACRE.
 - LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE GPO TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING. NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.
 - MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.
 - WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.
- MULCHING
 - MULCH MATERIALS (IN ORDER OF PREFERENCE)
 - STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.
 - WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.
 - WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.
 - WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
 - WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BUTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.
 - WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.
 - WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.
 - APPLICATION
 - APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.
 - WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.
 - WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
 - ANCHORING
 - PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS LISTED BY PREFERENCE, DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD:
 - A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR.
 - WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
 - SYNTHETIC BINDERS SUCH AS ACRYLIC, DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED FOR LOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.
 - LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

Seed Mixture No. 9 (Hardiness Zone 6b)		** Fertilizer Rate (10-20-20)	** Lime Rate
No.	Species	Application Rate (Lb./Sq.Ft.)	Seeding Dates***
9	*Tall Fescue Kentucky Bluegrass	6-8 Lb./1000 Sq.Ft.	3/1 - 5/15 8/15 - 10/15
			Seeding Depths
			1/2" - 3/4"

- BLEND 3 CULTIVARS OF ANY CULTIVAR LISTED ON PAGE B.32 OF THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 - AT TIME OF FINE GRADING, FERTILIZER AND LIME RATES WILL BE BASED ON SOIL TEST RESULTS. (SEE SECTION 2.C). COPY OF RECOMMENDED RATES TO BE SUPPLIED TO THE SEDIMENT CONTROL INSPECTOR.
 - FOR SEEDING DATES 5/1-8/14 ADD 6 LB/AC OF EITHER FOXTAIL MILLET OR PEARL MILLET TO PERMANENT SEED MIXTURE #9 ABOVE.
- NOTE: ALL SEED MUST COMPLY WITH THE MARYLAND STATE SEED LAW. SEED MUST BE FREE OF PROHIBITED OR RESTRICTED NOXIOUS WEEDS, AS CURRENTLY LISTED BY THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION.
- SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).
 - GENERAL SPECIFICATIONS
 - CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
 - SOD MUST BE MACHINED CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH PLUS OR MINUS 1/4 INCH. AT THE TIME OF CUTTING, MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.
 - STANDARD SIZE SECTIONS OF SOD 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.
 - SOD MUST NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
 - SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPORTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.
 - SOD INSTALLATION
 - DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
 - LAY THE FIRST ROW OF SOD 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. INSURE THAT SOIL IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
 - WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP. PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
 - WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND BRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS.
 - SOD MAINTENANCE
 - IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.
 - AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
 - DO NOT MOW UNTIL THE SOD 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.

(B-4-4) SECTION 4 - TEMPORARY STABILIZATION

- 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.
- CRITERIA:
- SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS 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.
 - FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
 - WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

Seed Mixture (Hardiness Zone 6b)		Fertilizer Rate (10-10-10)	Lime Rate
Season	Species	Application ¹ Rate (Lb./Ac.)	Seeding ² Dates
Cool	Annual Ryegrass	3/1-5/15	8/1-10/15
Warm	Pearl Millet	5/16-7/31	1/2"
			436 Lbs./Ac. (10 Lbs./1000 Sq.Ft.)
			2 Tons/Ac. (1000 Lbs./1000 Sq.Ft.)

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 4/2/18
 CHIEF, DIVISION OF ENGINEERING DIVISION H&P DATE
 [Signature] 6/15/18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 [Signature] 6/15/18
 DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

(H-1) STANDARDS AND SPECIFICATIONS FOR MATERIALS

TABLE H.1: GEOTEXTILE FABRICS

PROPERTY	TEST METHOD	MINIMUM AVERAGE ROLL VALUE ¹			
		WOVEN SLIT FILM GEOTEXTILE		WOVEN MONOFILAMENT GEOTEXTILE	
		MD	CD	MD	CD
Grab Tensile Strength	ASTM D-4632	200 lb	200 lb	370 lb	250 lb
Grab Tensile Elongation	ASTM D-4632	15%	10%	15%	50%
Trapezoidal Tear Strength	ASTM D-4583	75 lb	75 lb	100 lb	80 lb
Puncture Strength	ASTM D-6241	450 lb		900 lb	
Apparent Opening Size ²	ASTM D-4751	U.S. Sieve 30 (0.59 mm)		U.S. Sieve 70 (0.21 mm)	
Permittivity	ASTM D-4491	0.05 sec -1		0.28 sec -1	
Ultraviolet Resistance Retained at 500 hours	ASTM D-4355	70% strength		70% strength	

NOTE: NUMERIC VALUES EXCEPT APPARENT OPENING SIZE (AOS) REPRESENT MINIMUM AVERAGE ROLL VALUES (MARV). MARV IS CALCULATED AS THE TYPICAL MINUS TWO STANDARD DEVIATIONS. MD IS MACHINE DIRECTION, CD IS CROSS DIRECTION.

GEOTEXTILES MUST BE EVALUATED BY THE NATIONAL TRANSPORTATION PRODUCT EVALUATION PROGRAM (NTPPE) AND CONFORM TO THE VALUES IN TABLE H.1.

THE GEOTEXTILE MUST BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS AND MUST BE ROLM AND MILDWEY RESISTANT. THE GEOTEXTILE MUST BE MANUFACTURED FROM FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS AND COMPOSED OF A MINIMUM OF 95 PERCENT BY WEIGHT OF POLYOLEFINS OR POLYESTERS, AND FORMED INTO A STABLE NETWORK SO THE FILAMENTS OR YARNS RETAIN THEIR DIMENSIONAL STABILITY RELATIVE TO EACH OTHER, INCLUDING SELVAGES.

WHEN MORE THAN ONE SECTION OF GEOTEXTILE IS NECESSARY, OVERLAP THE SECTIONS BY AT LEAST ONE FOOT. THE GEOTEXTILE MUST BE PULLED TAUT OVER THE APPLIED SURFACE. EQUIPMENT MUST NOT RUN OVER EXPOSED FABRIC. WHEN PLACING RIPRAP ON GEOTEXTILE, DO NOT EXCEED A ONE FOOT DROP HEIGHT.

TABLE H.2: STONE SIZES

NUMBER	SIZE RANGE	d50	d100	AASHTO	MIDSIZE WEIGHT
NUMBER 1	2 to 3 in	2 1/2 in	3 in	M-43	N/A
RIPRAP ² (CLASS 0)	4 to 7 in	5 1/2 in	7 in	N/A	N/A
CLASS I	N/A	9 1/2 in	15 in	N/A	40 lb
CLASS II	N/A	16 in	24 in	N/A	200 lb
CLASS III	N/A	23 in	34 in	N/A	600 lb

- THIS CLASSIFICATION IS TO BE USED ON THE UPSTREAM FACE OF STONE OUTLETS AND CHECK DAMS.
- THIS CLASSIFICATION IS TO BE USED FOR GABIONS.
- OPTIMUM GRADATION IS 50 PERCENT OF THE STONE BEING ABOVE AND 50 PERCENT BELOW THE MIDSIZE.

STONE MUST BE COMPOSED OF A WELL GRADED MIXTURE OF STONE SIZED SO THAT FIFTY (50) PERCENT OF THE PIECES BY WEIGHT ARE LARGER THAN THE SIZE DETERMINED BY USING THE CHARTS. A WELL GRADED MIXTURE, AS USED HEREIN, IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF LARGER STONE SIZES BUT WITH A SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE SMALLER VOIDS BETWEEN THE STONES. THE DIAMETER OF THE LARGEST STONE IN SUCH A MIXTURE MUST NOT EXCEED THE RESPECTIVE D₁₀ SELECTED FROM TABLE H.2. THE D₅₀ REFERS TO THE MEDIAN DIAMETER OF THE STONE. THIS IS THE SIZE FOR WHICH 50 PERCENT, BY WEIGHT, WILL BE SMALLER AND 50 PERCENT WILL BE LARGER.

NOTE: RECYCLED CONCRETE EQUIVALENT MAY BE SUBSTITUTED FOR ALL STONE CLASSIFICATIONS FOR TEMPORARY CONTROL MEASURES ONLY. CONCRETE BROKEN INTO THE SIZES MEETING THE APPROPRIATE CLASSIFICATION, CONTAINING NO STEEL REINFORCEMENT, AND HAVING A MINIMUM DENSITY OF 150 POUNDS PER CUBIC FOOT MAY BE USED AS AN EQUIVALENT.

TABLE H.3: COMPOST

PARAMETERS ¹	ACCEPTABLE RANGE
pH	5.0 - 8.5
Moisture content	30% - 60%, wet weight basis
Organic matter content	25% - 65%, dry weight basis
Particle size	% passing a selected mesh size, dry weight basis
	3 in (75 mm), 100% passing
	1 in (25 mm), 90 - 100% passing
	0.75 in (19 mm), 70 - 100% passing
	0.25 in (6.4 mm), 30 - 60% passing
	0.04 in (1 mm), 30% min. passing
Physical contaminants (manmade inerts)	<1% dry weight basis

ADAPTED FROM AASHTO STANDARDS SPECS FOR COMPOST FILTER SOCKS AND EPA EXAMPLE COMPOST FILTER PARAMETERS.

- RECOMMENDED TEST METHODOLOGIES ARE PROVIDED IN TEST METHODS FOR THE EXAMINATION OF COMPOSTING AND COMPOST (IMC, THE U.S. COMPOSTING COUNCIL).

(B-4-8) STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

DEFINITION:
 A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES.
 PURPOSE:
 TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS.
 CONDITIONS WHERE PRACTICE APPLIES:
 STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE.
 CRITERIA:

- THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
- THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3-LAND GRADING.
- RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE.
- ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE.
- CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER.
- WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE.
- STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION.
- IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING.

MAINTENANCE
 THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN A 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING

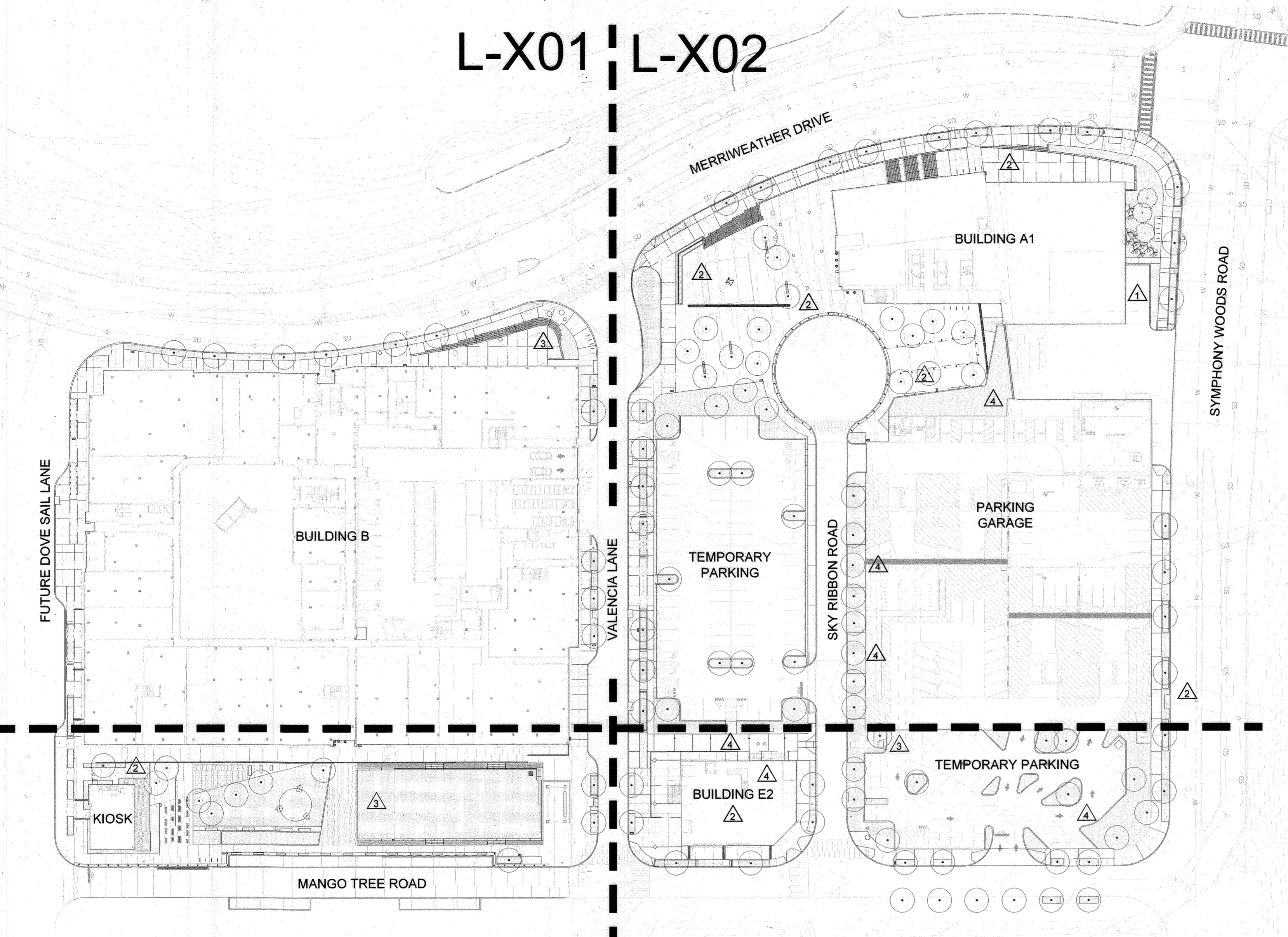
L-X01 | L-X02

LANDSCAPE SHEET LIST

L-000	LANDSCAPING & HARDSCAPE KEY SHEET
L-100	HARDSCAPE MATERIALS SCHEDULE & NOTES
L-101	HARDSCAPE PLAN
L-102	HARDSCAPE PLAN
L-103	HARDSCAPE PLAN
L-104	HARDSCAPE PLAN
L-110	SECTIONS
L-111	SECTIONS
L-201	HARDSCAPE DETAILS
L-202	HARDSCAPE DETAILS
L-203	HARDSCAPE DETAILS
L-204	HARDSCAPE DETAILS
L-205	HARDSCAPE DETAILS
L-211	SITE AMENITY DETAILS
L-221	FOUNTAIN DETAILS
L-222	FOUNTAIN DETAILS
L-301	HARDSCAPE GRADING + DRAINAGE PLAN
L-302	HARDSCAPE GRADING + DRAINAGE PLAN
L-303	HARDSCAPE GRADING + DRAINAGE PLAN
L-304	HARDSCAPE GRADING + DRAINAGE PLAN
L-400	LANDSCAPE PLANT SCHEDULE & NOTES
L-401	LANDSCAPE PLANTING PLAN - TREES
L-402	LANDSCAPE PLANTING PLAN - TREES
L-403	LANDSCAPE PLANTING PLAN - TREES
L-404	LANDSCAPE PLANTING PLAN - TREES
L-405	LANDSCAPE PLANTING PLAN - UNDERSTORY
L-406	LANDSCAPE PLANTING PLAN - UNDERSTORY
L-407	LANDSCAPE PLANTING PLAN - UNDERSTORY
L-408	LANDSCAPE PLANTING PLAN - UNDERSTORY
L-500	LANDSCAPE PLANTING DETAILS
L-600	IRRIGATION PLAN

CERTIFICATION NOTE:
 1. I/WE 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 LANDSCAPE MANUAL FOR ALTERNATIVE COMPLIANCE AND THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

[Signature] 11-11-2020
 DEVELOPER'S/OWNER'S NAME
Wm T Rowe 3VP
 DEVELOPER'S/OWNER'S NAME



L-X03 | L-X04

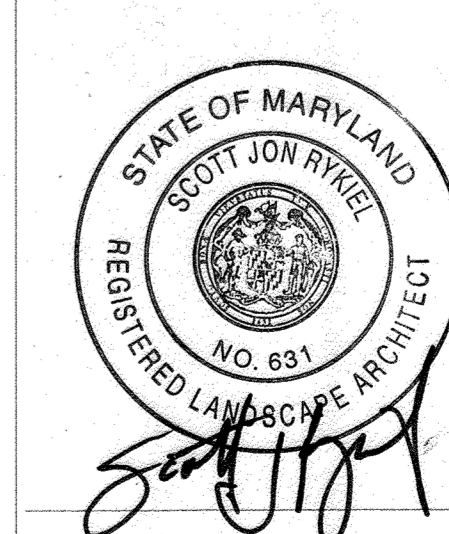
▲▲▲▲ REVISED SITE DEVELOPMENT PLAN

7/31/2020	▲	DUMPSTER AND E2 DESIGN
11/18/2019	▲	HARDSCAPE AND PLANTING REVISIONS
3/6/2019	▲	HARDSCAPE AND BLDG REVISIONS
	▲	PLANTING AND PATHWAY REVISIONS
Date	No.	Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14
 OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

FILE NUMBERS:
 F-15-106, F-16-107, F-17-059, F-18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-059,
 WP-17-115, WP-18-020, WP-18-021,
 SP-16-009, WP-17-100
CONTRACT NUMBERS:
 24-4951-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



MAHAN RYKIEL ASSOCIATES INC

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

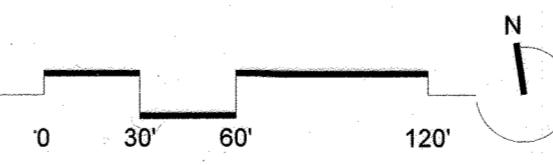
SUBDIVISION NAME	SECTION/AREA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE I AREA 3		PARCEL D
PLAT/CR/LF	BLOCK #	TAX ZONING/DISTRICT	CENSUS TRACT
N/A	36	5	605602
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			

L-000 - LANDSCAPING & HARDSCAPE KEY SHEET

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	51 of 94

1 SITE KEY PLAN
 1"=60'-0"



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 11-30-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 12/11/20
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 12-16-20
 DIRECTOR DATE

HARDSCAPE KEY

PAVING

- P1** (3) PEDESTRIAN CONCRETE UNIT
PAVER 1A (LIGHT)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO FINISH
COLOR: WINTER MARVEL
SIZE: 6"x 18"x 2 1/2"
- P1** (3) PEDESTRIAN CONCRETE UNIT
PAVER 1B (DARK)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO
COLOR: FRENCH GREY
SIZE: 6"x 18"x 2 1/2"
- P2** (4) VEHICULAR CONCRETE UNIT
PAVER 2A (LIGHT)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO FINISH
COLOR: WINTER MARVEL
SIZE: 6"x 18"x 3 1/2"
- P2** (4) VEHICULAR CONCRETE UNIT
PAVER 2B (DARK)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO
COLOR: FRENCH GREY
SIZE: 6"x 18"x 3 1/2"
- P3** (1) PEDESTRIAN EXPOSED AGGREGATE
COLOR CONCRETE
- P3** (1) VEHICULAR EXPOSED AGGREGATE
COLOR CONCRETE
- P4** (1) PEDESTRIAN CAST-IN-PLACE
CONCRETE PAVING
- P4** (1) VEHICULAR CAST-IN-PLACE
CONCRETE PAVING
- P5** (5) PEDESTRIAN COBBLESTONE
- P6** (6) DETECTABLE WARNING PAVER

STRUCTURE

- C1** (8) C.I.P. CONCRETE PLANTER
CURB
- MB** (2) METAL GRATE BRIDGE
@ BIO-RETENTION
- S1** (1) C.I.P. CONCRETE STAIRS
- S2** (6) CONCRETE STEPS
- S3** (7) SINGLE CONCRETE STAIR
- W1** (6) C.I.P. CONCRETE WALL
@ PLANTING
- W2** (3-5) C.I.P. CONCRETE WALL
- W3** (5) C.I.P. CONCRETE SEAT WALL
- W4** (1) C.I.P. CONCRETE SEAT WALL
@ BIORETENTION

TREE PITS & TREE ACCESSORIES

- EE** EXISTING ESD, SEE F-PLAN 17-059,
STRUCTURAL, AND CIVIL DRAWINGS
FOR ADDITIONAL INFORMATION
 - E** (1-3) ESD, SIZE VARIES, REFER TO
STRUCTURAL+CIVIL DRAWINGS FOR
ADDITIONAL INFORMATION
 - TG** (7) TREE PAVER GRATE
- NOTE: TYPICAL ESD'S ARE
REPRESENTED WITH A PAVING
HATCH AND PLANTING AREA
HATCH TO SHOW OPEN PLANTING
AREAS VS COVERED AREAS
WITHIN THE SAME ESD, REFER TO
STRUCTURAL+CIVIL DRAWINGS
FOR ADDITIONAL INFORMATION

SITE AMENITIES

- B1** (1) BENCH
- BO** (4) BOLLARD
- BO** (4) REMOVABLE BOLLARD
- BR** (3) BIKE RACK
- HR** (2) HANDRAIL
- LF** (7) LOUNGE FURNITURE
- LR** (2) LITTER/RECYCLING RECEPTACLE
- PP** (5) PLANTER
- TC** (6) TABLE & CHAIRS

**DOWNTOWN COMMUNITY COMMONS
PUBLIC ART (RECOMMENDED LOCATIONS)**

- A** PRIMARY ARTISTIC FOCAL POINT
(BY OTHERS)
- A** SECONDARY ARTISTIC FOCAL POINT
(BY OTHERS)

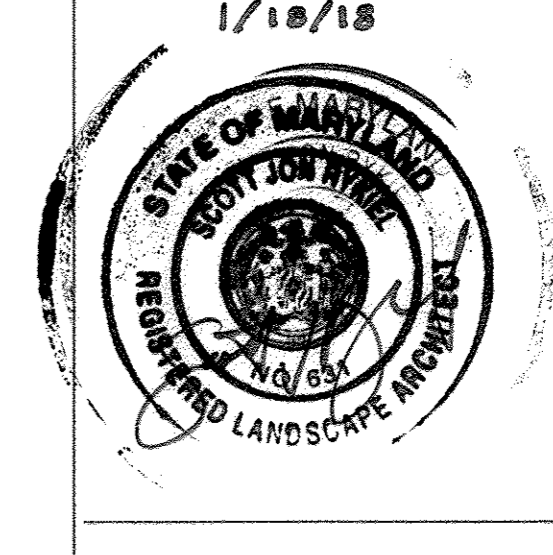
GENERAL HARDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-300 TO L-310 FOR PROPOSED PLANTINGS.
- SITE LIGHTING SHOWN ON PLANS FOR COORDINATION ONLY. REFER TO LIGHTING PLANS FOR FINAL LOCATION, FIXTURE SELECTION, MEP REQUIREMENTS, ETC.
- REFER TO CIVIL DRAWINGS FOR ALL UTILITY AND STORM WATER MANAGEMENT INFORMATION.
- REFER TO CIVIL DRAWINGS FOR ROADWAY AND CURB ALIGNMENT.
- SITE SIGNS SHOWN ON PLANS FOR COORDINATION ONLY. REFER TO SIGNAGE PLANS FOR FINAL LOCATIONS & SIGNAGE DESIGN.
- REFER TO SITE PLANS FOR ALL SITE DIMENSIONS.

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017,
SDP-16-075, SDP-18-005, WP-17-010,
WP-17-049, WP-17-052, WP-17-059,
WP-17-115, WP-18-020, WP-18-021,
SP-16-009, WP-17-100

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE
DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM A
DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE
STATE OF MARYLAND, LICENSE NO. 631,
EXPIRATION DATE: 9/21/2019.



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/14/17

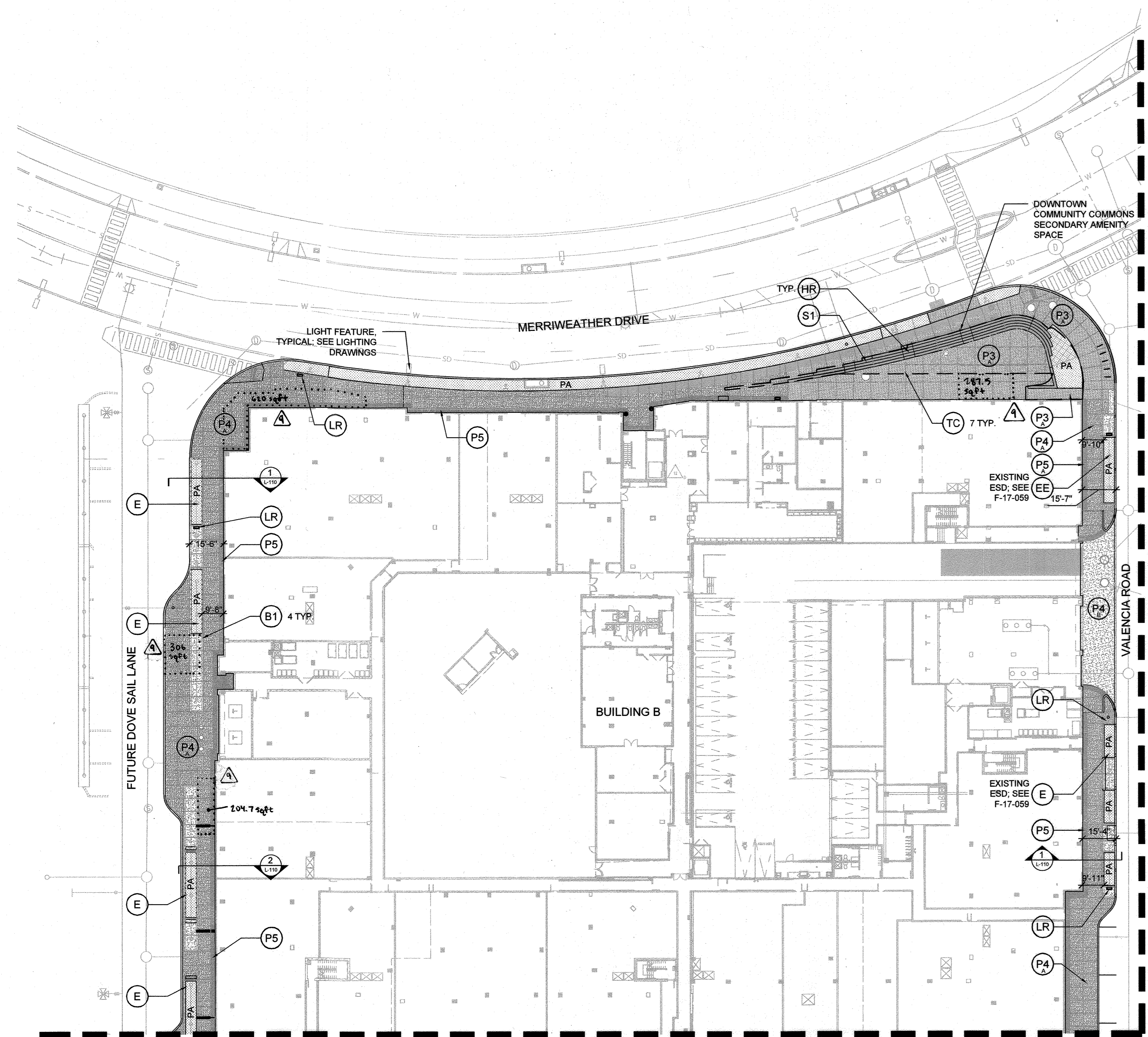
Date	No.	Revision Description
DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
MAHAN RYKIEL ASSOCIATES INC		
WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200 410-235-6001 - WWW.MAHANRYKIEL.COM		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D
PLAT OR L.P.	BLOCK & LOT	TAX ZONE/AMAP
N/A	107	36
WATER CODE	SEWER CODE	CENSUS TRACT
550	LITTLE PATUXENT	605602
TITLE L-100 - HARDSCAPE MATERIALS SCHEDULE & NOTES		
Des. By JK	SCALE AS SHOWN	Proj. No. 04038.00
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	52 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Phil Edwards 4-2-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION HSE DATE

Kevin Schaefer 6-7-18
CHIEF, DIVISION OF LAND DEVELOPMENT GMP DATE

Nancy J. Miller 6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE



HARDSCAPE KEY

PAVING

- (P1) (3) PEDESTRIAN CONCRETE UNIT PAVER 1A (LIGHT)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO FINISH
COLOR: WINTER MARVEL
SIZE: 6"x 18"x 2 1/2"
- (P1) (3) PEDESTRIAN CONCRETE UNIT PAVER 1B (DARK)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO
COLOR: FRENCH GREY
SIZE: 6"x 18"x 2 1/2"
- (P2) (4) VEHICULAR CONCRETE UNIT PAVER 2A (LIGHT)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO FINISH
COLOR: WINTER MARVEL
SIZE: 6"x 18"x 3 1/2"
- (P2) (4) VEHICULAR CONCRETE UNIT PAVER 2B (DARK)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO
COLOR: FRENCH GREY
SIZE: 6"x 18"x 3 1/2"
- (P3) (1) PEDESTRIAN EXPOSED AGGREGATE COLOR CONCRETE
- (P3) (1) VEHICULAR EXPOSED AGGREGATE COLOR CONCRETE
- (P4) (1) PEDESTRIAN CAST-IN-PLACE CONCRETE PAVING
- (P4) (1) VEHICULAR CAST-IN-PLACE CONCRETE PAVING
- (P5) (5) PEDESTRIAN COBBLESTONE
- (P6) (6) DETECTABLE WARNING PAVER

TREE PITS & TREE ACCESSORIES

- (EE) EXISTING ESD, SEE F-PLAN 17-059, STRUCTURAL, AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
- (E) (1-3) ESD, SIZE VARIES, REFER TO STRUCTURAL+CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
- (TG) (7) TREE PAVER GRATE

NOTE: TYPICAL ESD'S ARE REPRESENTED WITH A PAVING HATCH AND PLANTING AREA HATCH TO SHOW OPEN PLANTING AREAS VS COVERED AREAS WITHIN THE SAME ESD. REFER TO STRUCTURAL+CIVIL DRAWINGS FOR ADDITIONAL INFORMATION

SITE AMENITIES

- (B1) (1) BENCH
- (B2) (4) BOLLARD
- (B3) (4) REMOVABLE BOLLARD
- (BR) (3) BIKE RACK
- (HR) (2) HANDRAIL
- (LF) (7) LOUNGE FURNITURE
- (LR) (2) LITTER/RECYCLING RECEPTACLE
- (PP) (5) PLANTER
- (TC) (6) TABLE & CHAIRS

DOWNTOWN COMMUNITY COMMONS PUBLIC ART (RECOMMENDED LOCATIONS)

- (A) PRIMARY ARTISTIC FOCAL POINT (BY OTHERS)
- (A) SECONDARY ARTISTIC FOCAL POINT (BY OTHERS)

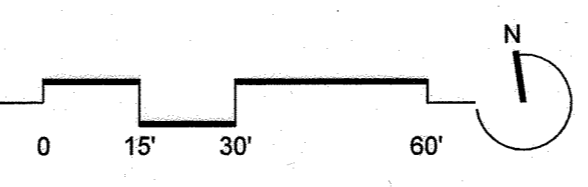
STRUCTURE

- (C1) (8) C.I.P. CONCRETE PLANTER CURB
- (MB) (2) METAL GRATE BRIDGE @ BIO-RETENTION
- (S1) (1) C.I.P. CONCRETE STAIRS
- (S2) (3) CONCRETE STEPS
- (S3) (7) SINGLE CONCRETE STAIR
- (W1) (6) C.I.P. CONCRETE WALL @ PLANTING
- (W2) (3-5) C.I.P. CONCRETE WALL
- (W3) (2) C.I.P. CONCRETE SEAT WALL
- (W4) (1) C.I.P. CONCRETE SEAT WALL @ BIOTENTION

GENERAL HARDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-300 TO L-310 FOR PROPOSED PLANTINGS.
- SITE LIGHTING SHOWN ON PLANS FOR COORDINATION ONLY. REFER TO LIGHTING PLANS FOR FINAL LOCATION, FIXTURE SELECTION, MEP REQUIREMENTS, ETC.
- REFER TO CIVIL DRAWINGS FOR ALL UTILITY AND STORM WATER MANAGEMENT INFORMATION.
- REFER TO CIVIL DRAWINGS FOR ROADWAY AND CURB ALIGNMENT.
- SITE SIGNS SHOWN ON PLANS FOR COORDINATION ONLY. REFER TO SIGNAGE PLANS FOR FINAL LOCATIONS & SIGNAGE DESIGN.
- REFER TO SITE PLANS FOR ALL SITE DIMENSIONS.

1 HARDSCAPE PLAN
1"=30'



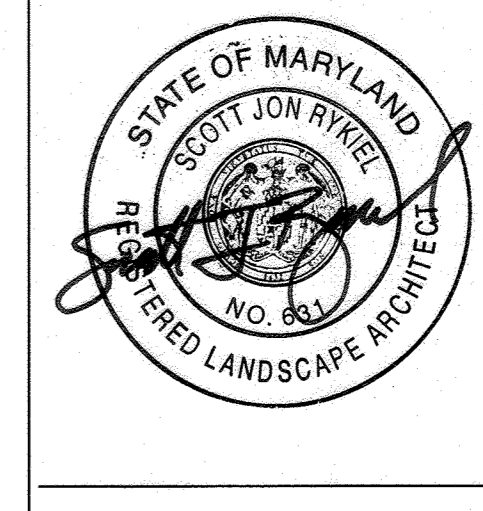
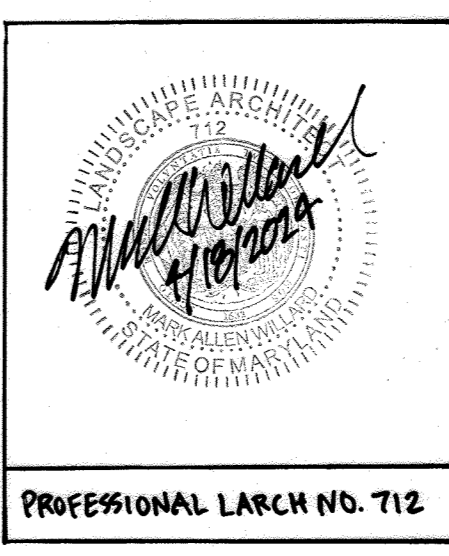
LEGEND

(Symbol) 287.5 sq ft OUTDOOR SEATING AREA

SHEET NOTES:

- LIGHTING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD HAVE BEEN INSTALLED IN ACCORDANCE WITH F-15-106 AND F-16-107
- ESDs FOUND ON F-17-059 ARE NOTED AS "EE."
- ESD SECTION CALLOUTS CONVEY A DIFFERENCE BETWEEN A COVERED AND OPEN CONDITION. SEE L-110 FOR TYPICAL ESD SECTIONS. SEE CIVIL DRAWINGS FOR ESD DETAILS.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 712, EXPIRATION DATE 11/10/2025



FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Chief, Development Engineering Division: *[Signature]* 2-28-20
 Chief, Division of Land Development: *[Signature]* 3/6/2020
 Director: *[Signature]* 3-16-2020

3/7/24 **ADD OUTDOOR DINING PATIO AREAS**
 REVISED SITE DEVELOPMENT PLAN

Date	No.	Revision Description
11/18/2019		HARDSCAPE AND PLANTING REVISIONS

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14
 OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

MAHAN RYKIEL ASSOCIATES INC

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

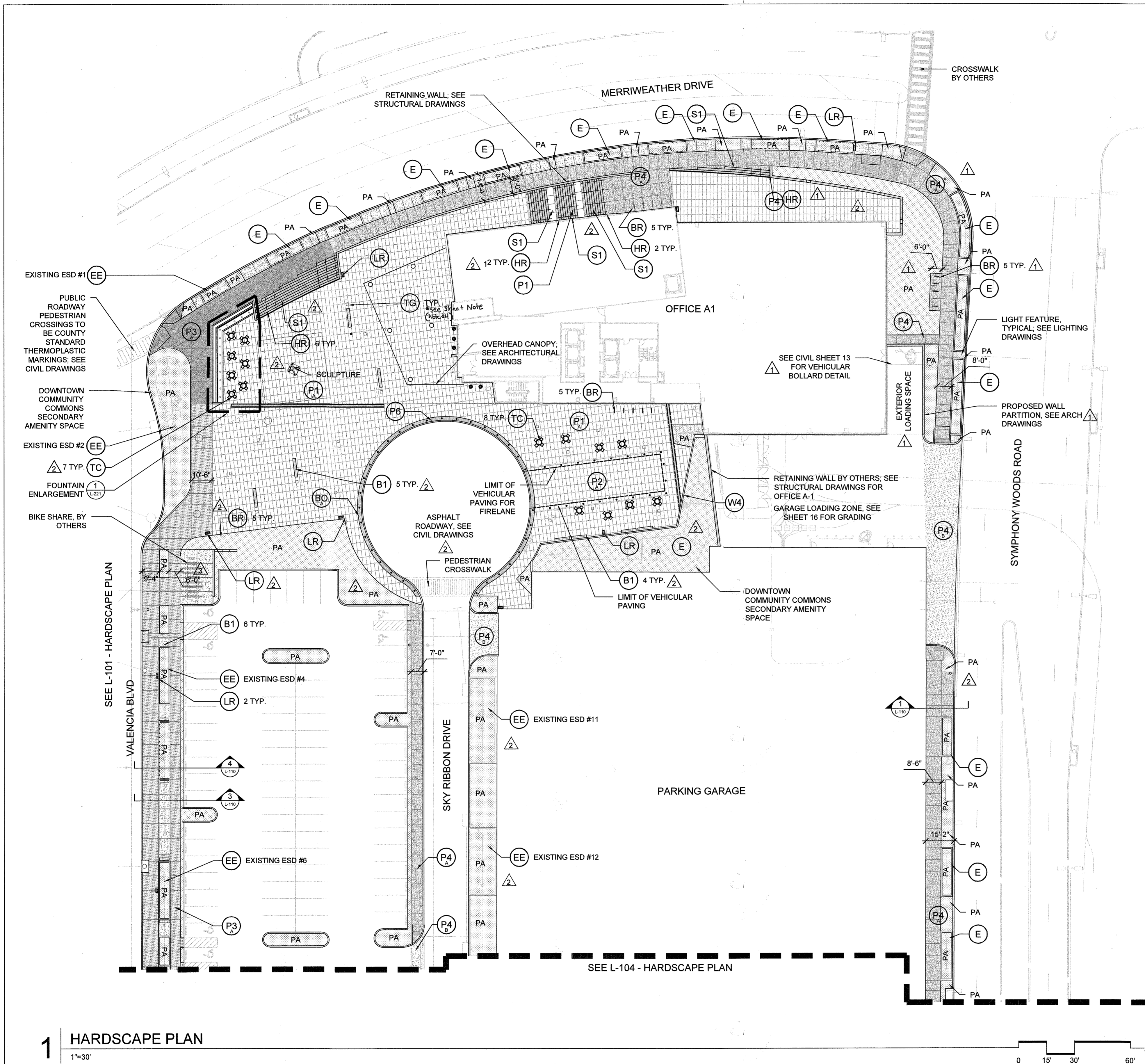
SUBDIVISION NAME	SECTION/AREA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	PHASE I AREA 3			
PLAT/LOT REF	BLOCK #	TAX ZONE/ZIP	PLAT DISTRICT	CENSUS TRACT
N/A	N/A	36	5	605602
WATER CODE	SEWER CODE	LITTLE PATUXENT STAGE		
550				

L-101 - HARDSCAPE PLAN

Des. By JK SCALE AS SHOWN Proj. No. 04038.B0
 Drn. By BB Date 1-18-18
 Chk. By JK/MP Approved 53 of 94

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

SDP-17-027



HARDSCAPE KEY

- PAVING**
- P1 (3) PEDESTRIAN CONCRETE UNIT PAVEMENT 1A (LIGHT)
MANUFACTURER: UNILOK
STYLE: UMBRIANO FINISH
COLOR: WINTER MARVEL
SIZE: 6"x 18"x 2 1/2"
 - P1 (3) PEDESTRIAN CONCRETE UNIT PAVEMENT 1B (DARK)
MANUFACTURER: UNILOK
STYLE: UMBRIANO
COLOR: FRENCH GREY
SIZE: 6"x 18"x 2 1/2"
 - P2 (4) VEHICULAR CONCRETE UNIT PAVEMENT 2A (LIGHT)
MANUFACTURER: UNILOK
STYLE: UMBRIANO FINISH
COLOR: WINTER MARVEL
SIZE: 6"x 18"x 3 1/2"
 - P2 (4) VEHICULAR CONCRETE UNIT PAVEMENT 2B (DARK)
MANUFACTURER: UNILOK
STYLE: UMBRIANO
COLOR: FRENCH GREY
SIZE: 6"x 18"x 3 1/2"
 - P3 (1) PEDESTRIAN EXPOSED AGGREGATE COLOR CONCRETE
 - P3 (1) VEHICULAR EXPOSED AGGREGATE COLOR CONCRETE
 - P4 (1) PEDESTRIAN CAST-IN-PLACE CONCRETE PAVING
 - P4 (1) VEHICULAR CAST-IN-PLACE CONCRETE PAVING
 - P5 (5) PEDESTRIAN COBBLESTONE
 - P6 (6) DETECTABLE WARNING PAVEMENT

- STRUCTURE**
- C1 (8) C.I.P. CONCRETE PLANTER CURB
 - MB (2) METAL GRATE BRIDGE @ BIO-RETENTION
 - S1 (1) C.I.P. CONCRETE STAIRS
 - S2 (3) CONCRETE STEPS
 - S3 (7) SINGLE CONCRETE STAIR
 - W1 (6) C.I.P. CONCRETE WALL @ PLANTING
 - W2 (3-5) C.I.P. CONCRETE WALL
 - W3 (2) C.I.P. CONCRETE SEAT WALL
 - W4 (1) C.I.P. CONCRETE SEAT WALL @ BIORETENTION

- TREE PITS & TREE ACCESSORIES**
- EE EXISTING ESD, SEE F-PLAN 17-059, STRUCTURAL, AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
 - E ESD, SIZE VARIES, REFER TO STRUCTURAL-CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
 - TG TREE PAVER GRATE *See Sheet Note #14.

NOTE: TYPICAL ESD'S ARE REPRESENTED WITH A PAVING HATCH AND PLANTING AREA HATCH TO SHOW OPEN PLANTING AREAS VS COVERED AREAS WITHIN THE SAME ESD. REFER TO STRUCTURAL-CIVIL DRAWINGS FOR ADDITIONAL INFORMATION

- SITE AMENITIES**
- B1 (1) BENCH
 - BO (4) BOLLARD
 - BO (4) REMOVABLE BOLLARD
 - BR (3) BIKE RACK
 - HR (2) HANDRAIL
 - LF (7) LOUNGE FURNITURE
 - LR (2) LITTER/RECYCLING RECEPTACLE
 - PP (5) PLANTER
 - TC (2) TABLE & CHAIRS

- DOWNTOWN COMMUNITY COMMONS PUBLIC ART (RECOMMENDED LOCATIONS)**
- A PRIMARY ARTISTIC FOCAL POINT (BY OTHERS)
 - A SECONDARY ARTISTIC FOCAL POINT (BY OTHERS)

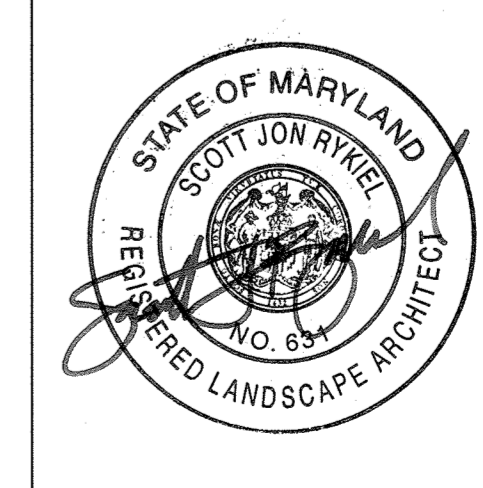
- GENERAL HARDSCAPE NOTES:**
- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
 - REFER TO SHEETS L-300 TO L-310 FOR PROPOSED PLANTINGS.
 - SITE LIGHTING SHOWN ON PLANS FOR COORDINATION ONLY. REFER TO LIGHTING PLANS FOR FINAL LOCATION, FIXTURE SELECTION, MIEP REQUIREMENTS, ETC.
 - REFER TO CIVIL DRAWINGS FOR ALL UTILITY AND STORM WATER MANAGEMENT INFORMATION.
 - REFER TO CIVIL DRAWINGS FOR ROADWAY AND CURB ALIGNMENT.
 - SITE SIGNS SHOWN ON PLANS FOR COORDINATION ONLY. REFER TO SIGNAGE PLANS FOR FINAL LOCATIONS & SIGNAGE DESIGN.
 - REFER TO SITE PLANS FOR ALL SITE DIMENSIONS.

1 HARDSCAPE PLAN
1"=30'

- SHEET NOTES:**
- LIGHTING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD HAVE BEEN INSTALLED IN ACCORDANCE WITH F-15-106 AND F-16-107
 - ESDS FOUND ON F-17-059 ARE NOTED AS "EE"
 - ESD SECTION CALLOUTS CONVEY A DIFFERENCE BETWEEN A COVERED AND OPEN CONDITION. SEE L-110 FOR TYPICAL ESD SECTIONS. SEE CIVIL DRAWINGS FOR ESD DETAILS.
 - Tree gates/paving grid and electrical outlets will be adjusted periodically to increase growing area for trees.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 2.28.20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 3/6/2020
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 3-10-2020
 DIRECTOR

FILE NUMBERS:
 F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

REVISED SITE DEVELOPMENT PLAN
 11/18/2019 PLANT BED AND BIKE SHARE REVISION
 3/6/2019 WATER FEATURE, PLANTING, AND WALL REVISIONS
 PLANTING AND PATHWAY REVISIONS
DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14
 OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

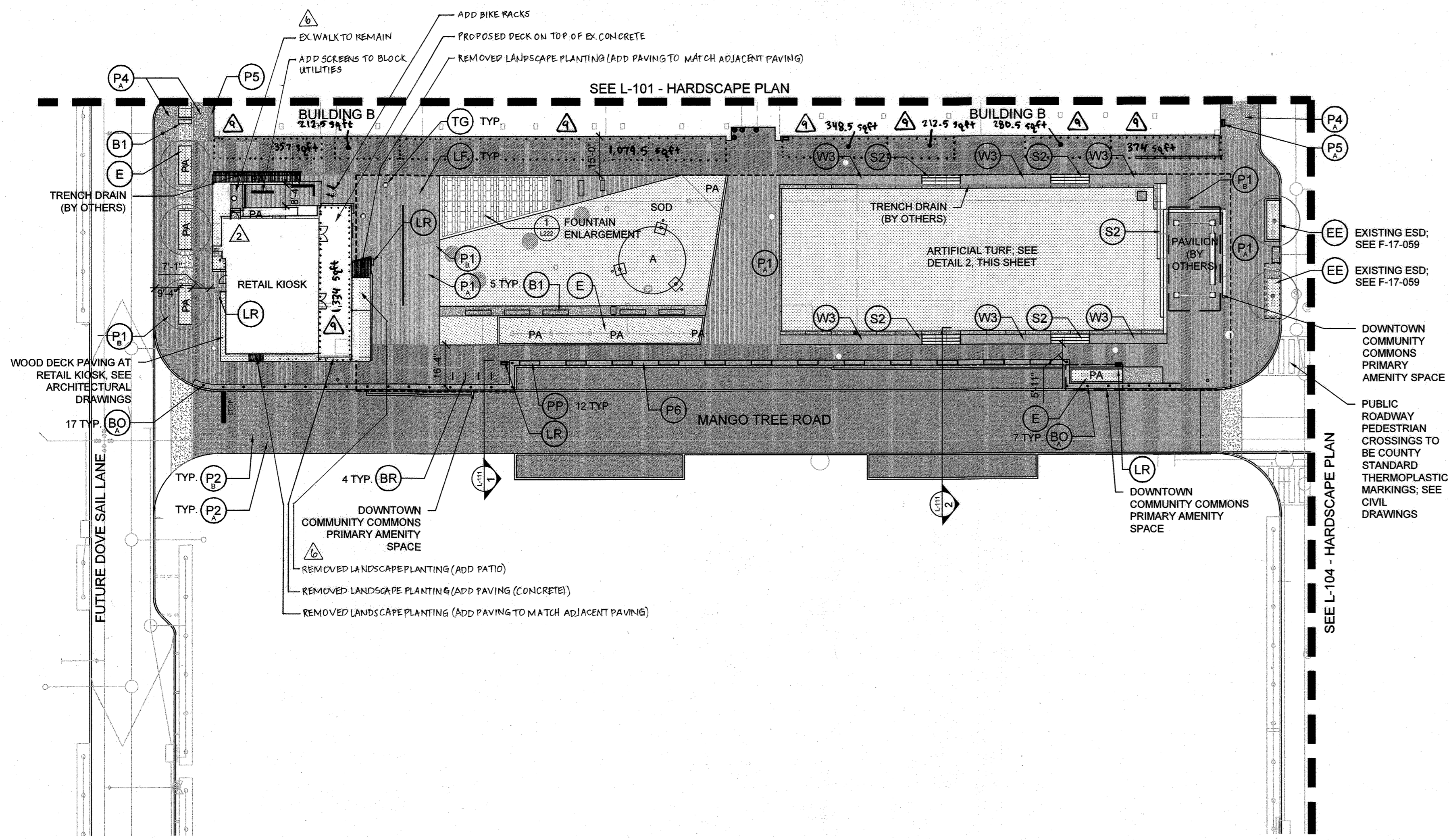
MAHAN RYKIEL ASSOCIATES INC
 WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT AREA	PHASE I AREA 3	PARCEL D
PLAT OR L.P.	BLOCK #	TOWNSHIP	CENSUS TRACT
N/A	N/A	36	605602
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT		

L-102 - HARDSCAPE PLAN

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved	54 of 94

SDP-17-027



HARDSCAPE KEY

PAVING

- (P1) PEDESTRIAN CONCRETE UNIT PAVER 1A (LIGHT)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO FINISH
COLOR: WINTER MARVEL
SIZE: 6" x 18" x 2"
- (P1) PEDESTRIAN CONCRETE UNIT PAVER 1B (DARK)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO
COLOR: FRENCH GREY
SIZE: 6" x 18" x 2"
- (P2) VEHICULAR CONCRETE UNIT PAVER 2A (LIGHT)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO FINISH
COLOR: WINTER MARVEL
SIZE: 6" x 18" x 3"
- (P2) VEHICULAR CONCRETE UNIT PAVER 2B (DARK)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO
COLOR: FRENCH GREY
SIZE: 6" x 18" x 3"
- (P3) PEDESTRIAN EXPOSED AGGREGATE COLOR CONCRETE
- (P3) VEHICULAR EXPOSED AGGREGATE COLOR CONCRETE
- (P4) PEDESTRIAN CAST-IN-PLACE CONCRETE PAVING
- (P4) VEHICULAR CAST-IN-PLACE CONCRETE PAVING
- (P5) PEDESTRIAN COBBLESTONE
- (P6) DETECTABLE WARNING PAVER

STRUCTURE

- (C1) C.I.P. CONCRETE PLANTER CURB
- (MB) METAL GRATE BRIDGE @ BIO-RETENTION
- (S1) C.I.P. CONCRETE STAIRS
- (S2) CONCRETE STEPS
- (S3) SINGLE CONCRETE STAIR
- (W1) C.I.P. CONCRETE WALL @ PLANTING
- (W2) C.I.P. CONCRETE WALL
- (W3) C.I.P. CONCRETE SEAT WALL
- (W4) C.I.P. CONCRETE SEAT WALL @ BIORETENTION

TREE PITS & TREE ACCESSORIES

- (EE) EXISTING ESD, SEE F-PLAN 17-059, STRUCTURAL, AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
- (E) ESD, SIZE VARIES, REFER TO STRUCTURAL+CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
- (TG) TREE PAVER GRATE

NOTE: TYPICAL ESD'S ARE REPRESENTED WITH A PAVING HATCH AND PLANTING AREA HATCH TO SHOW OPEN PLANTING AREAS VS COVERED AREAS WITHIN THE SAME ESD. REFER TO STRUCTURAL+CIVIL DRAWINGS FOR ADDITIONAL INFORMATION

SITE AMENITIES

- (B1) BENCH
- (BO) BOLLARD
- (BO) REMOVABLE BOLLARD
- (BR) BIKE RACK
- (HR) HANDRAIL
- (LF) LOUNGE FURNITURE
- (LR) LITTER/RECYCLING RECEPTACLE
- (PP) PLANTER
- (TC) TABLE & CHAIRS

DOWNTOWN COMMUNITY COMMONS PUBLIC ART (RECOMMENDED LOCATIONS)

- (A) PRIMARY ARTISTIC FOCAL POINT (BY OTHERS)
- (A) SECONDARY ARTISTIC FOCAL POINT (BY OTHERS)

GENERAL HARDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-300 TO L-310 FOR PROPOSED PLANTINGS.
- SITE LIGHTING SHOWN ON PLANS FOR COORDINATION ONLY. REFER TO LIGHTING PLANS FOR FINAL LOCATION, FIXTURE SELECTION, MEP REQUIREMENTS, ETC.
- REFER TO CIVIL DRAWINGS FOR ALL UTILITY AND STORM WATER MANAGEMENT INFORMATION.
- REFER TO CIVIL DRAWINGS FOR ROADWAY AND CURB ALIGNMENT.
- SITE SIGNS SHOWN ON PLANS FOR COORDINATION ONLY. REFER TO SIGNAGE PLANS FOR FINAL LOCATIONS & SIGNAGE DESIGN.
- REFER TO SITE PLANS FOR ALL SITE DIMENSIONS.

1 HARDSCAPE PLAN



SHEET NOTES:

- LIGHTING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD HAVE BEEN INSTALLED IN ACCORDANCE WITH F-15-106 AND F-16-107
- ESDs FOUND ON F-17-059 ARE NOTED AS "EE"
- ESD SECTION CALLOUTS CONVEY A DIFFERENCE BETWEEN A COVERED AND OPEN CONDITION. SEE L-110 FOR TYPICAL ESD SECTIONS. SEE CIVIL DRAWINGS FOR ESD DETAILS.

LEGEND

(Symbol) OUTDOOR SEATING AREA

2 ARTIFICIAL TURF

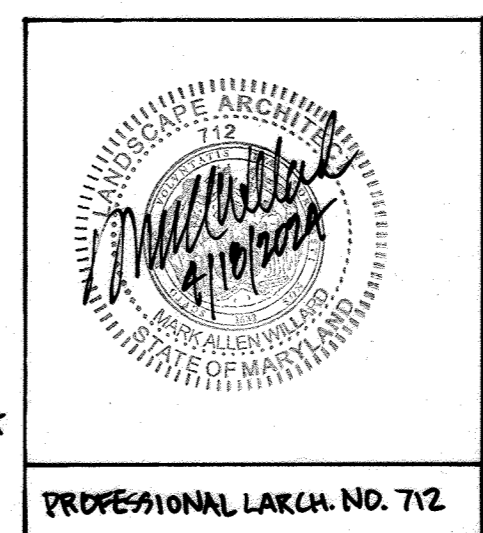
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION *[Signature]* 2-28-20 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT *[Signature]* 3/6/20 DATE

DIRECTOR *[Signature]* 3-10-2020 DATE

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 712; EXPIRATION DATE 11/10/2025



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

FOR REVISION NO. 3 ONLY

PROFESSIONAL NUMBER - 3458

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3458, OPERATION DATE 11/19/2021.

9/7/24	ADD OUTDOOR DINING PATIO AREAS
11/15/21	ADD 2 BIKE RACKS
11/15/21	ADD COMPOSITE WOOD DECK
11/15/21	ADD 3 SCREENS
11/15/21	HARDSCAPE REVISIONS

REVISD SITE DEVELOPMENT PLAN

11/18/2019	3	HARDSCAPE AND PLANTING REVISIONS
3/6/2019	2	BUILDING REVISIONS
Date	No.	Revision Description

**DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

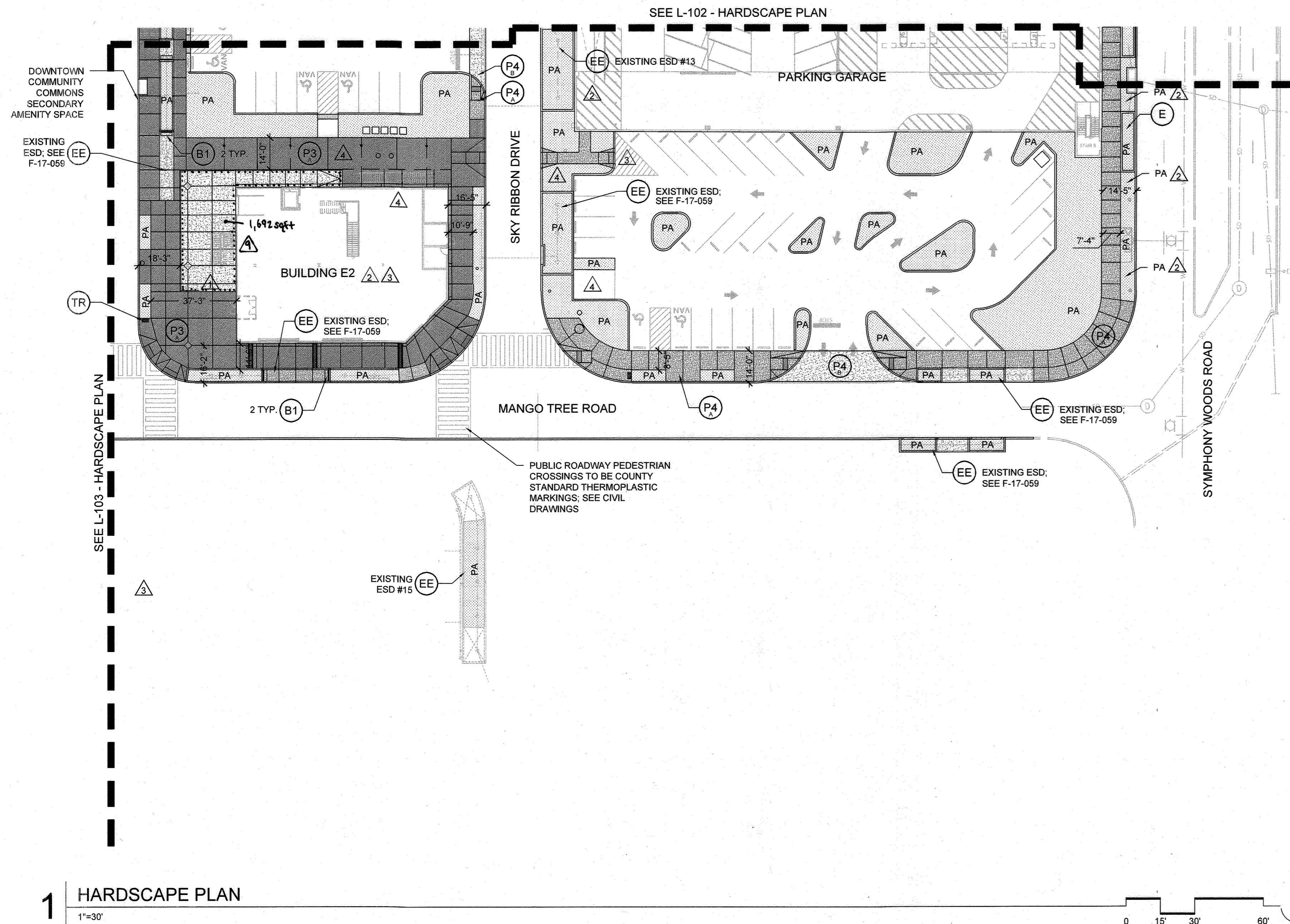
**MAHAN RYKIEL
ASSOCIATES INC**

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD PHASE I AREA 3	PARCEL D
PLAT OR REF	BLOCK # ZONE	TAX DISTRICT
N/A	36	5
WATER CODE	SEWER CODE	CENSUS TRACT
550	LITTLE PATUXENT	605602

L-103 - HARDSCAPE PLAN

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	55 of 94



HARDSCAPE KEY

PAVING

- P1 (3/1.201) PEDESTRIAN CONCRETE UNIT PAVER 1A (LIGHT)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO FINISH
COLOR: WINTER MARVEL
SIZE: 6"x 18"x 2 1/2"
- P1 (3/1.201) PEDESTRIAN CONCRETE UNIT PAVER 1B (DARK)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO
COLOR: FRENCH GREY
SIZE: 6"x 18"x 2 1/2"
- P2 (4/1.201) VEHICULAR CONCRETE UNIT PAVER 2A (LIGHT)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO FINISH
COLOR: WINTER MARVEL
SIZE: 6"x 18"x 3 1/2"
- P2 (4/1.201) VEHICULAR CONCRETE UNIT PAVER 2B (DARK)
MANUFACTURER: UNILOCK
STYLE: UMBRIANO
COLOR: FRENCH GREY
SIZE: 6"x 18"x 3 1/2"
- P3 (1/1.201) PEDESTRIAN EXPOSED AGGREGATE COLOR CONCRETE
- P3 (1/1.201) VEHICULAR EXPOSED AGGREGATE COLOR CONCRETE
- P4 (1/1.201) PEDESTRIAN CAST-IN-PLACE CONCRETE PAVING
- P4 (1/1.201) VEHICULAR CAST-IN-PLACE CONCRETE PAVING
- P5 (5/1.201) PEDESTRIAN COBBLESTONE
- P6 (6/1.201) DETECTABLE WARNING PAVER

STRUCTURE

- C1 (8/1.204) C.I.P. CONCRETE PLANTER CURB
- MB (2/1.205) METAL GRATE BRIDGE @ BIO-RETENTION
- S1 (1/1.205) C.I.P. CONCRETE STAIRS
- S2 (3/1.204) CONCRETE STEPS
- S3 (7/1.204) SINGLE CONCRETE STAIR
- W1 (6/1.205) C.I.P. CONCRETE WALL @ PLANTING
- W2 (3.5/1.205) C.I.P. CONCRETE WALL
- W3 (2/1.204) C.I.P. CONCRETE SEAT WALL
- W4 (1/1.205) C.I.P. CONCRETE SEAT WALL @ BIORETENTION

TREE PITS & TREE ACCESSORIES

- EE (1.3/1.205) EXISTING ESD, SEE F-PLAN 17-059, STRUCTURAL, AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
- E (1.3/1.205) ESD, SIZE VARIES, REFER TO STRUCTURAL-CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
- TG (7/1.201) TREE PAVER GRATE

NOTE: TYPICAL ESD'S ARE REPRESENTED WITH A PAVING HATCH AND PLANTING AREA HATCH TO SHOW OPEN PLANTING AREAS VS COVERED AREAS WITHIN THE SAME ESD. REFER TO STRUCTURAL-CIVIL DRAWINGS FOR ADDITIONAL INFORMATION

SITE AMENITIES

- B1 (1/1.211) BENCH
- BO (4/1.211) BOLLARD
- BO (4/1.211) REMOVABLE BOLLARD
- BR (3/1.211) BIKE RACK
- HR (2/1.205) HANDRAIL
- LF (7/1.211) LOUNGE FURNITURE
- LR (2/1.211) LITTER/RECYCLING RECEPTACLE
- PP (5/1.211) PLANTER
- TC (6/1.211) TABLE & CHAIRS

DOWNTOWN COMMUNITY COMMONS PUBLIC ART (RECOMMENDED LOCATIONS)

- A (1) PRIMARY ARTISTIC FOCAL POINT (BY OTHERS)
- AA (1) SECONDARY ARTISTIC FOCAL POINT (BY OTHERS)

GENERAL HARDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-300 TO L-310 FOR PROPOSED PLANTINGS.
- SITE LIGHTING SHOWN ON PLANS FOR COORDINATION ONLY. REFER TO LIGHTING PLANS FOR FINAL LOCATION, FIXTURE SELECTION, MEP REQUIREMENTS, ETC.
- REFER TO CIVIL DRAWINGS FOR ALL UTILITY AND STORM WATER MANAGEMENT INFORMATION.
- REFER TO CIVIL DRAWINGS FOR ROADWAY AND CURB ALIGNMENT.
- SITE SIGNS SHOWN ON PLANS FOR COORDINATION ONLY. REFER TO SIGNAGE PLANS FOR FINAL LOCATIONS & SIGNAGE DESIGN.
- REFER TO SITE PLANS FOR ALL SITE DIMENSIONS.

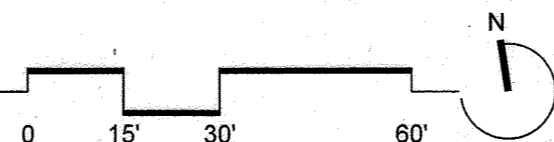
1 HARDSCAPE PLAN

SHEET NOTES:

- LIGHTING ALONG MERRIMETHER DRIVE AND SYMPHONY WOODS ROAD HAVE BEEN INSTALLED IN ACCORDANCE WITH F-15-106 AND F-16-107
- ESDs FOUND ON F-17-059 ARE NOTED AS "EE."
- ESD SECTION CALLOUTS CONVEY A DIFFERENCE BETWEEN A COVERED AND OPEN CONDITION. SEE L-110 FOR TYPICAL ESD SECTIONS. SEE CIVIL DRAWINGS FOR ESD DETAILS.

LEGEND

AA (1.692 sqft) OUTDOOR SEATING AREA



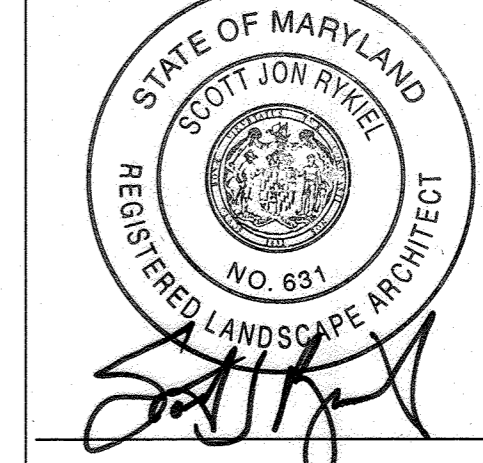
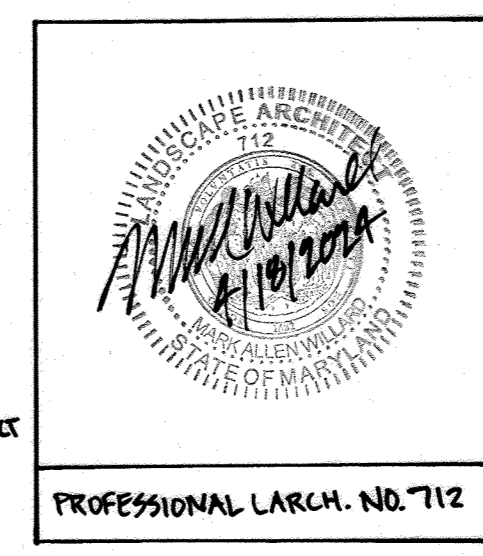
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chief, Development Engineering Division: *[Signature]* 11-30-20

Chief, Division of Land Development: *[Signature]* 12/1/20

Director: *[Signature]* 12-16-20

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 712; EXPIRATION DATE 11/10/2025



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

3/7/24	ADD OUTDOOR DINING PATIO AREAS
7/31/2020	REVISED SITE DEVELOPMENT PLAN DUMPSTER AND E2 DESIGN
11/18/2019	HARDSCAPE AND PLANTING REVISIONS
3/6/2019	BUILDING AND PLANTING REVISIONS
Date	No. Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14
OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

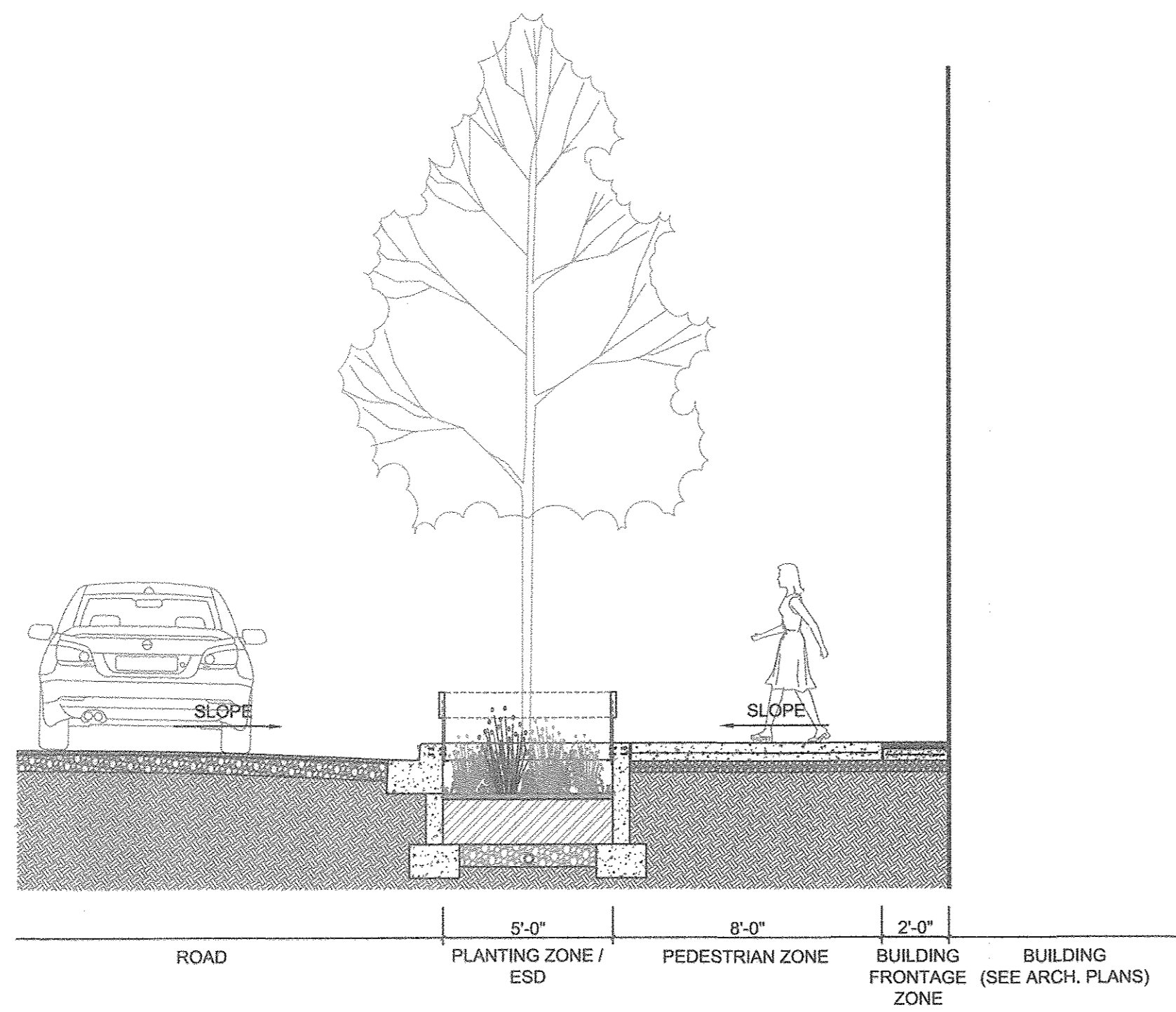
MAHAN RYKIEL ASSOCIATES INC

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
410-235-6001 - WWW.MAHANRYKIEL.COM

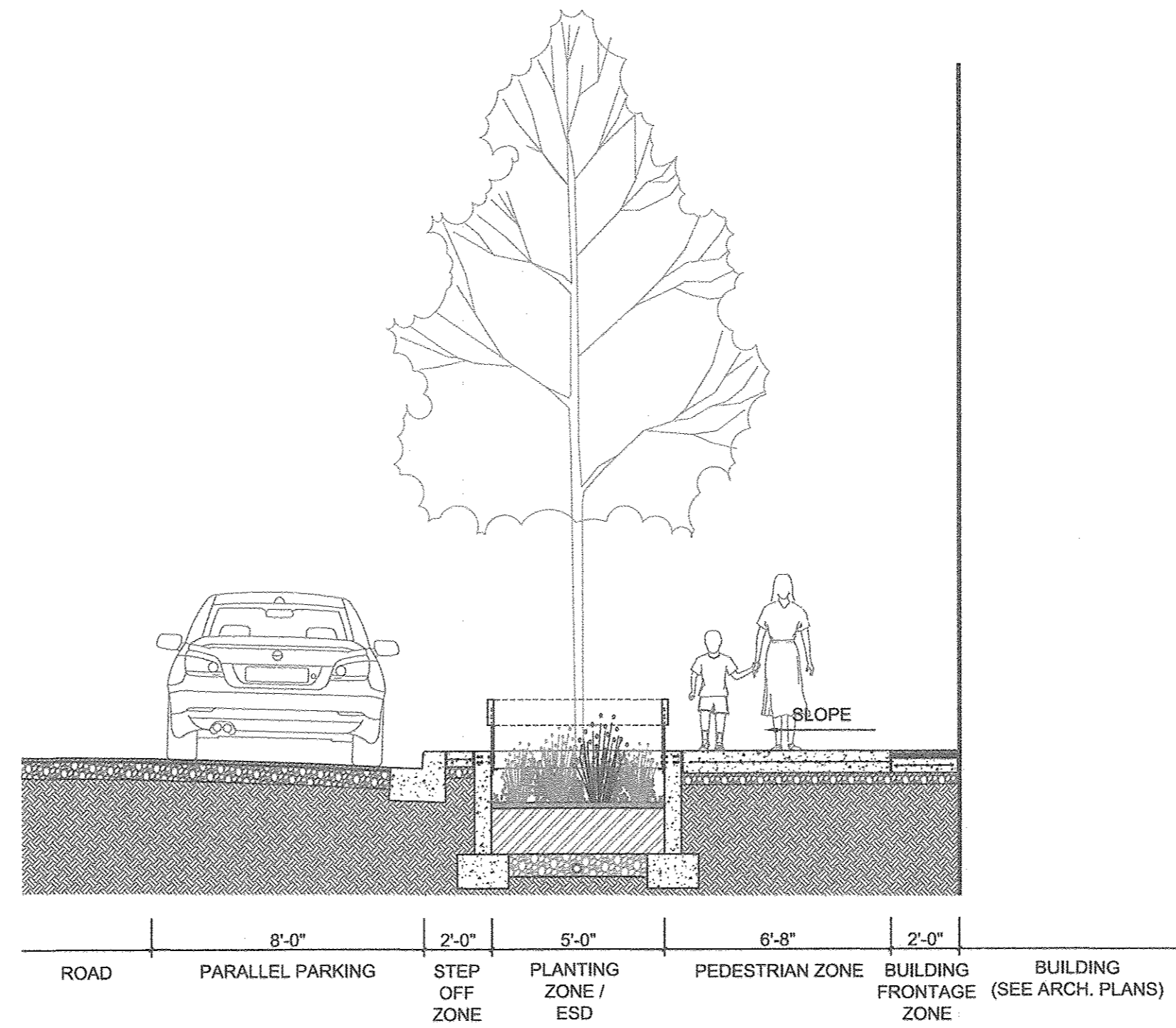
SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PHASE I AREA 3	PARCEL D
PLAT/LOT/PL	RECORD #	TAX ZONING MAP	ELECT DISTRICT
N/A	N/A	36	5
WATER CODE	SEWER CODE	STAGE	605602
550	LITTLE PATUXENT		

L-104 - HARDSCAPE PLAN

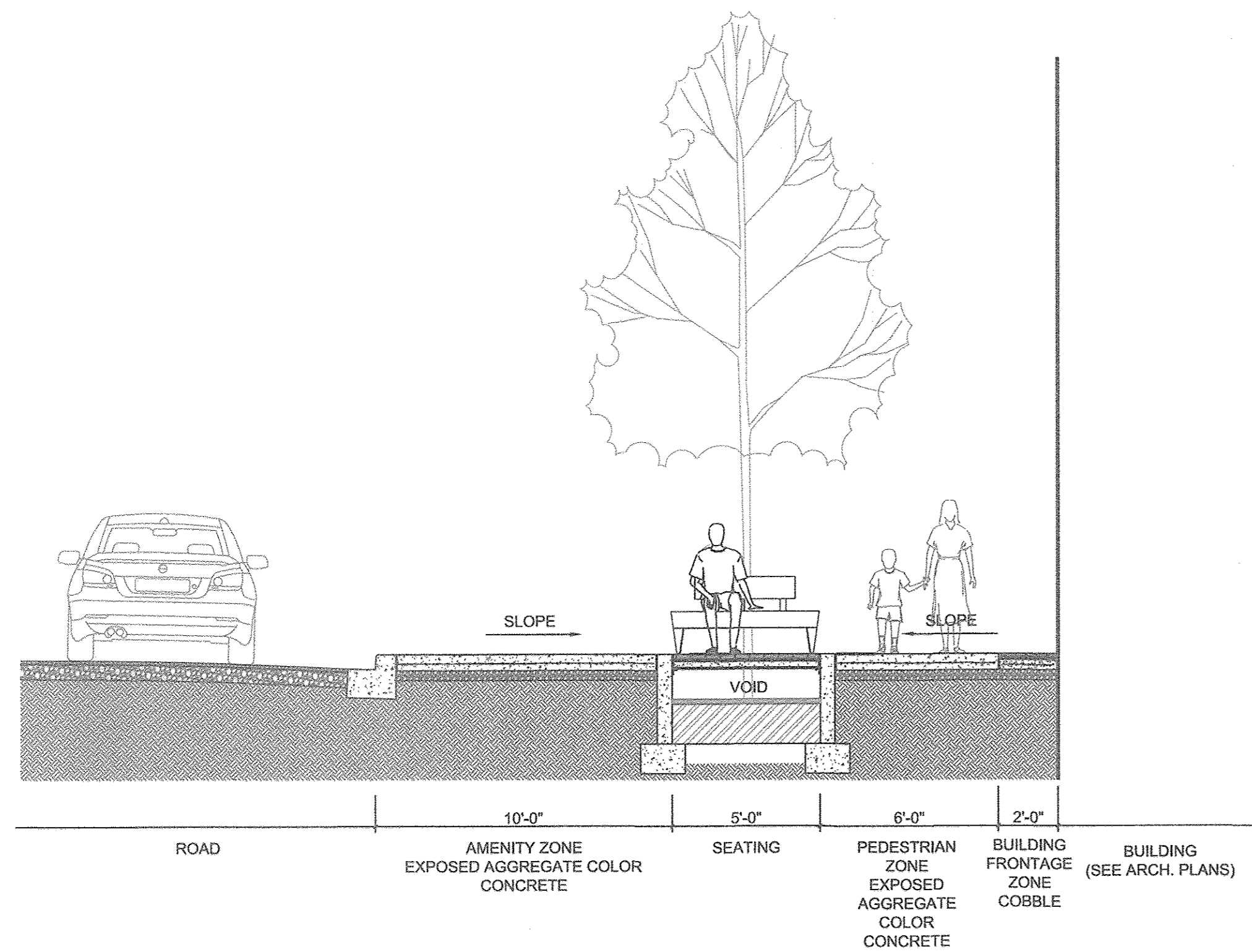
Des. By JK SCALE AS SHOWN Proj. No. 04038B 00
 Drn. By BB Date 1-18-18
 Chk. By JK/MP Approved 56 of 94



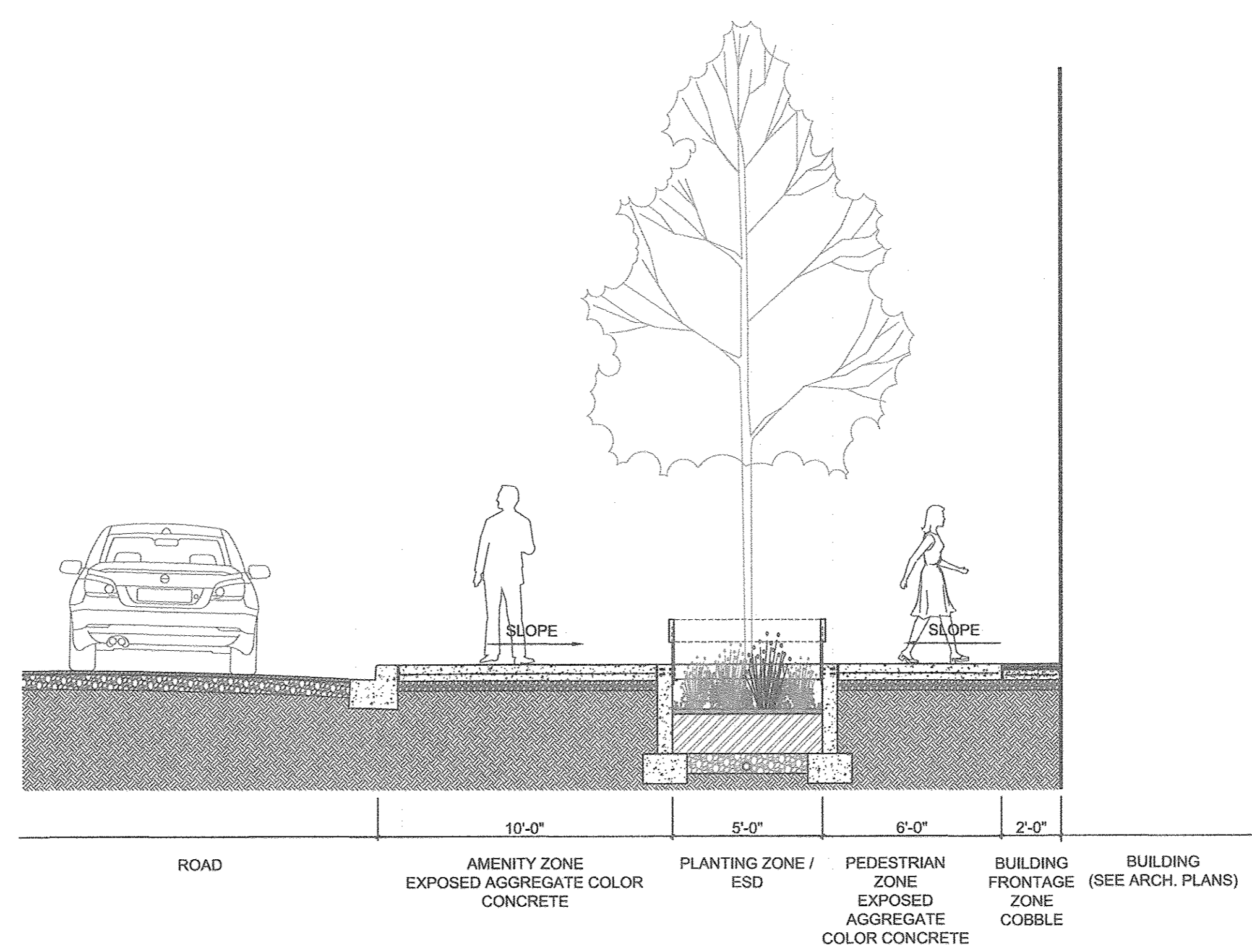
1 SECTION - TYPICAL STREETScape
1/4"=1'-0"



2 SECTION - TYPICAL STREETScape WITH PARKING
1/4"=1'-0"



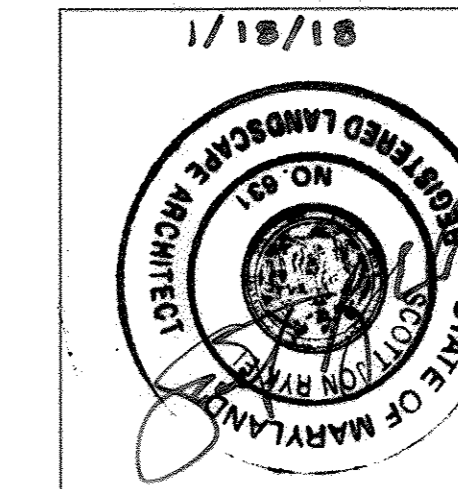
3 SECTION - TYPICAL STREETScape THROUGH COVERED ESD
1/4"=1'-0"



4 SECTION - TYPICAL STREETScape THROUGH OPEN ESD
1/4"=1'-0"

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017,
SDP-16-075, SDP-18-005, WP-17-010,
WP-17-049, WP-17-052, WP-17-059,
WP-17-115, WP-18-020, WP-18-021,
SP-16-009, WP-17-100
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



Date	No.	Revision Description
DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		

MAHAN RYKIEL
ASSOCIATES INC

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
410-235-6001 - WWW.MAHANRYKIEL.COM

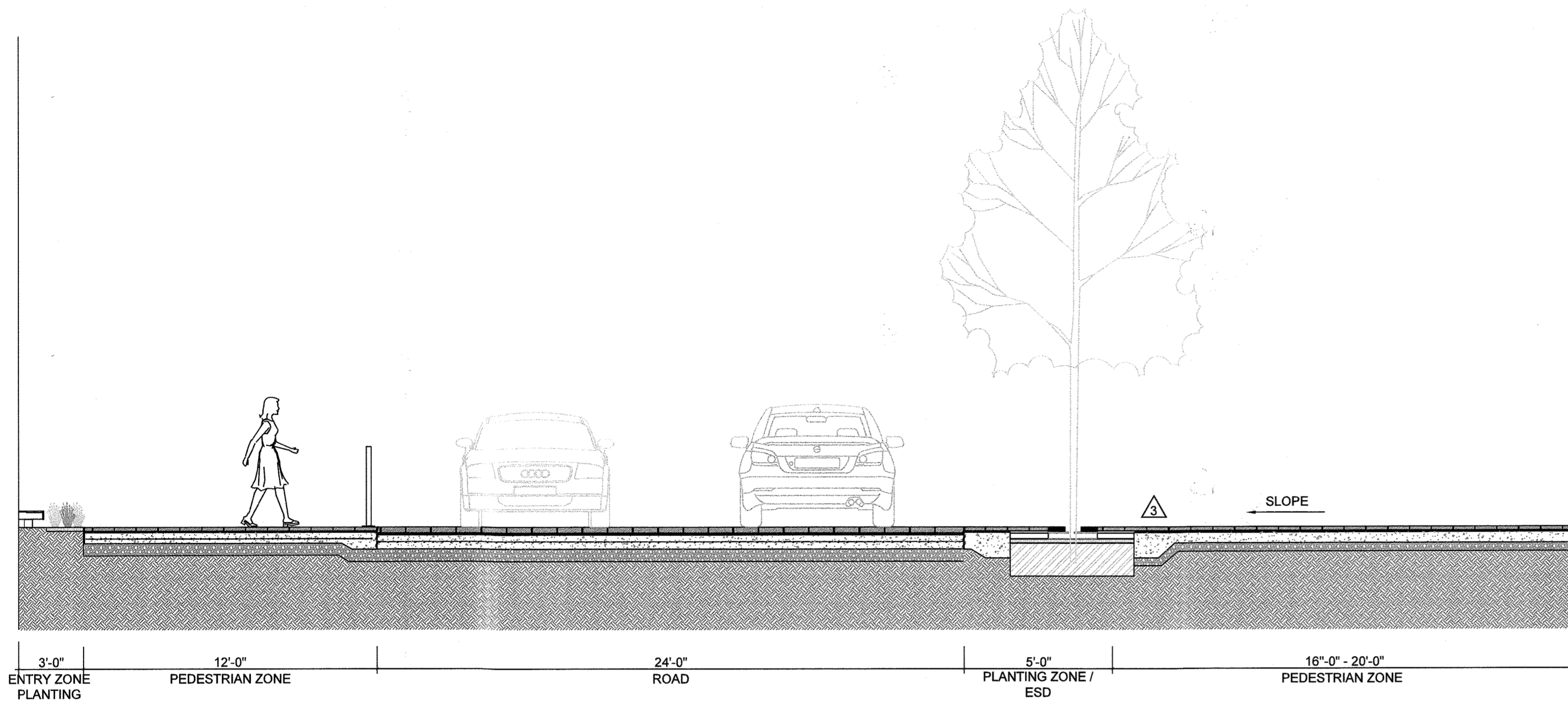
SUBDIVISION NAME	SECTION AREA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA			PARCEL D
PLAT/FILE NO.	BLOCK #	TAX ZONE/AMAP	ELECT. DISTRICT
N/A	10480	36	5
WATER CODE	SEWER CODE	STAGE	CENSUS TRACT
550	LITTLE PATUXENT		605602

L-110 - SECTIONS

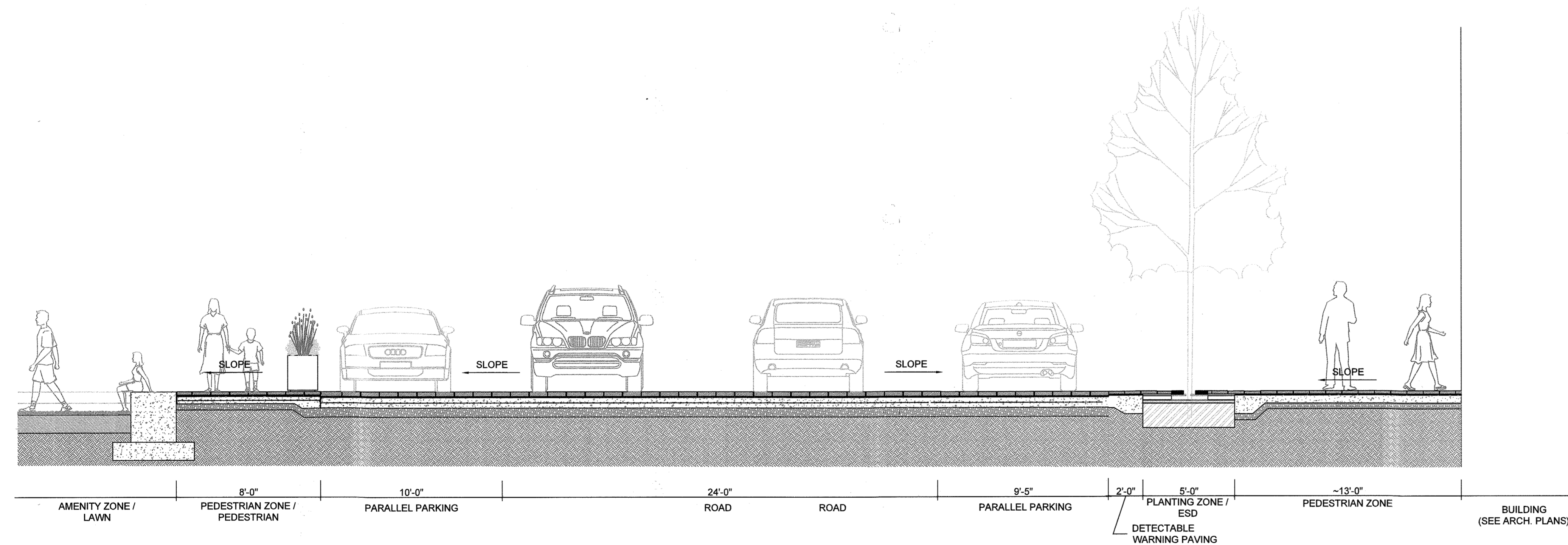
Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	57 of 94
Chk. By JK/MP	Approved ..	

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
<i>[Signature]</i>	4-2-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	6-7-18
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>[Signature]</i>	6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT	DATE

APPROVED:	
PLANNING BOARD OF HOWARD COUNTY	
DATE: 11/16/17	



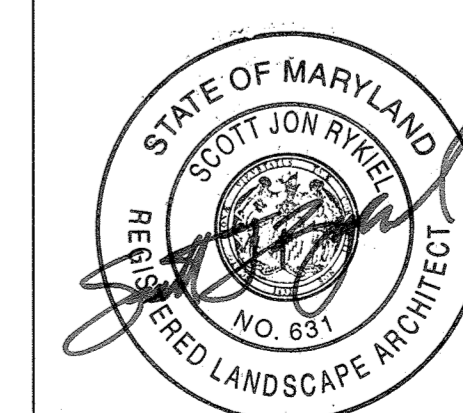
1 SECTION - MANGO TREE ROAD STREETScape
1/4"=1'-0"



2 SECTION - MANGO TREE STREETScape WITH PARKING
1/4"=1'-0"

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 2-28-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT 3-16-20
 DATE
 DIRECTOR *[Signature]* 3-10-2020
 DATE

FILE NUMBERS:
 F-15-106, F-16-107, F-17-059, F-18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-059,
 WP-17-115, WP-18-020, WP-18-021,
 SP-16-009, WP-17-100
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE
 DOCUMENTS WERE PREPARED OR
 APPROVED BY ME, AND THAT I AM A
 DULY LICENSED PROFESSIONAL
 ENGINEER UNDER THE LAWS OF THE
 STATE OF MARYLAND, LICENSE NO. 631.
 EXPIRATION DATE: 9/21/2019.



APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

REVISED SITE DEVELOPMENT PLAN

Date	No.	Revision Description
1/18/2019	3	HARDSCAPE AND PLANTING REVISIONS

**DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I**
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

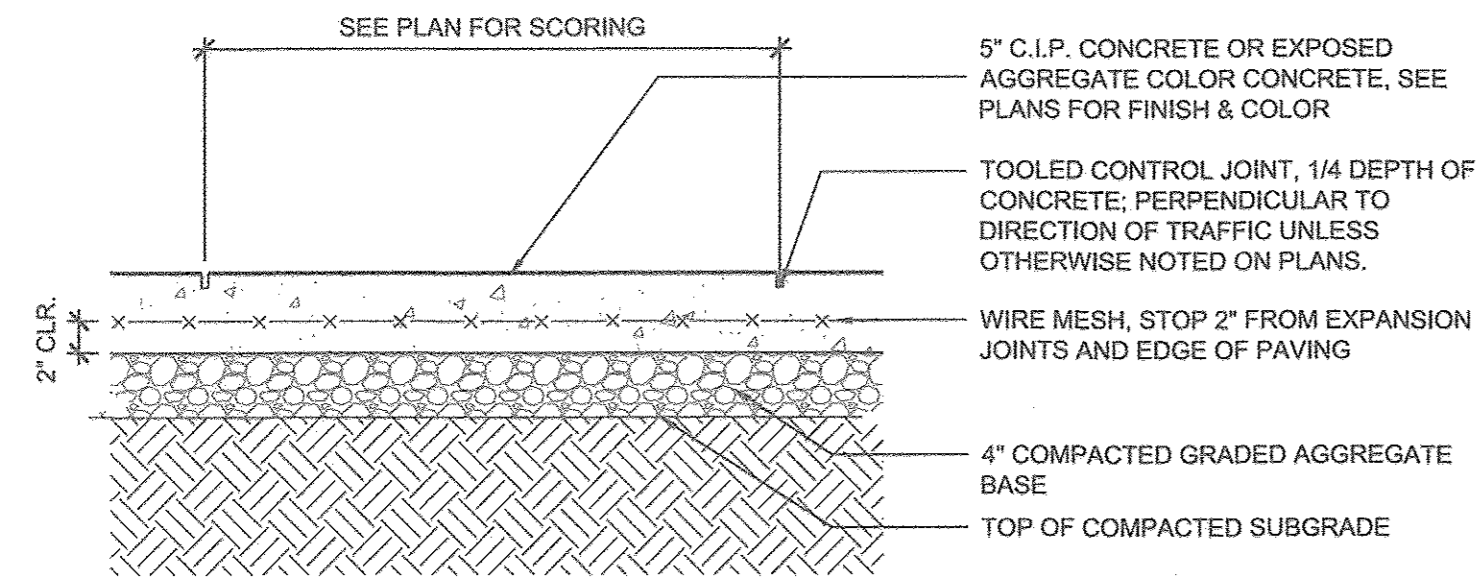
**MAHAN RYKIEL
 ASSOCIATES INC**

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PHASE I AREA 3		
PLAT # OR L.P.	BLOCK # ZONE	TAX ZONE/AMAP	ELECT DISTRICT	CENSUS TRACT
N/A	D/MAH	36	5	605602
WATER CODE	SEWER CODE	STAGE		
550	LITTLE PATUXENT			

L-111 - SECTIONS

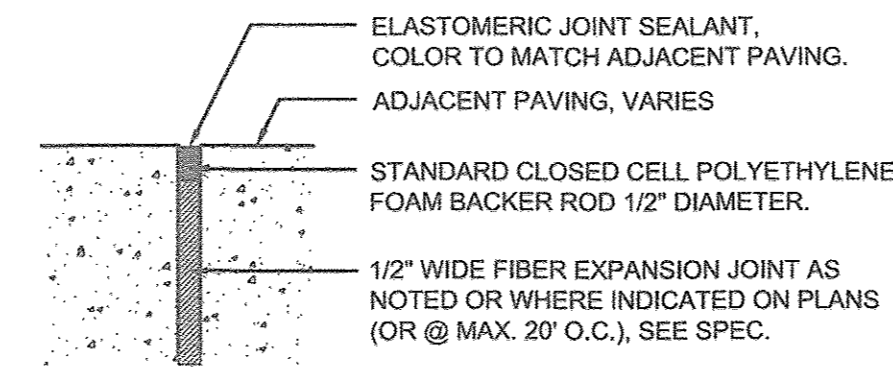
Des. By JK	SCALE AS SHOWN	Proj. No. 04038.00
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved ..	58 of 94



- NOTES:**
- REFER TO CIVIL DRAWINGS FOR VEHICULAR PAVING DETAIL.
 - REFER TO PLAN FOR COLOR & FINISH.

1 CONCRETE PAVEMENT (PEDESTRIAN)

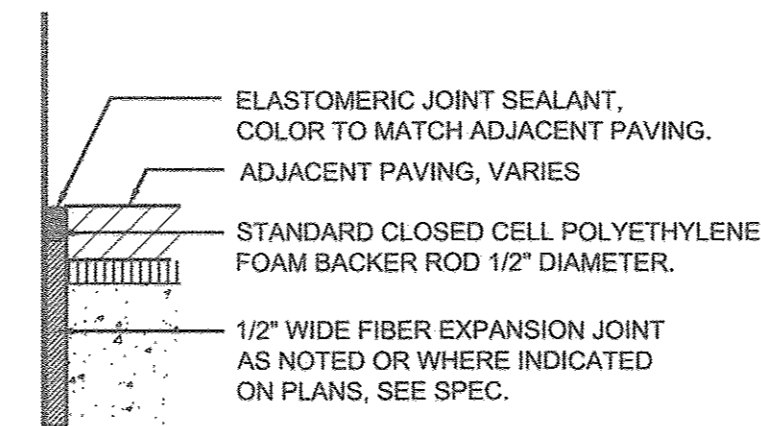
1"=1'-0"



@ CONCRETE PAVING

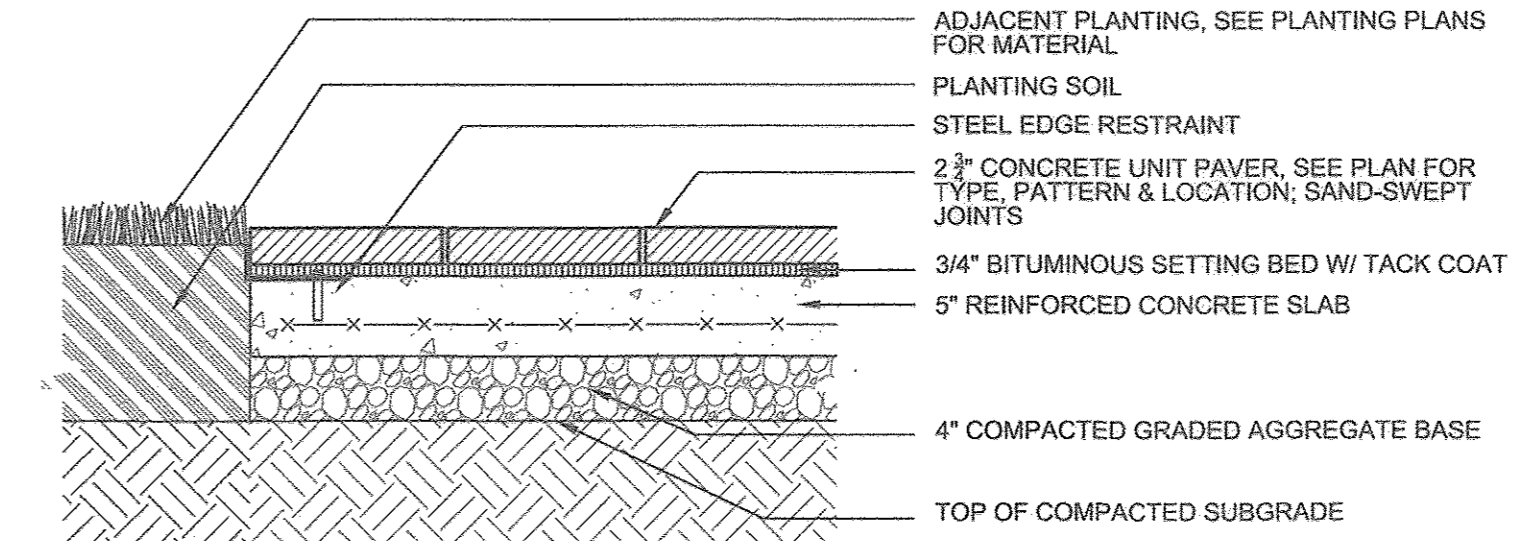
2 EXPANSION JOINT

1"=1'-0"



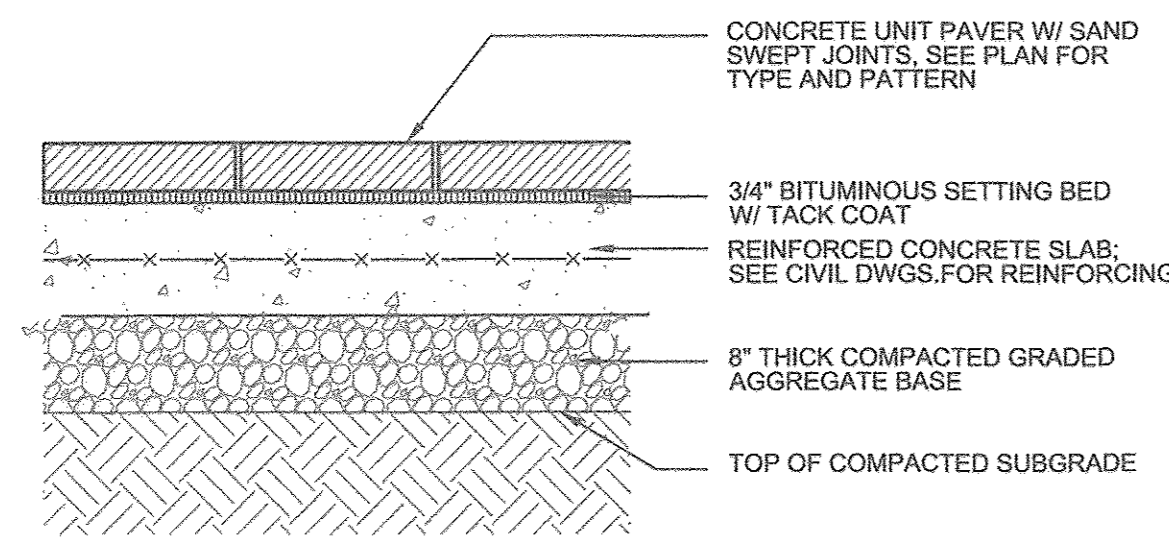
@ WALLS OR CURBS

- NOTES:**
- SUBMIT MANUFACTURER'S FULL COLOR RANGE OF SEALANTS FOR APPROVAL.
 - CONFORM TO ALL SEALANT MANUFACTURER'S REQUIREMENTS FOR CLEANING, PRIMING, APPLICATION, ETC. FOR BEST SURFACE ADHESION.



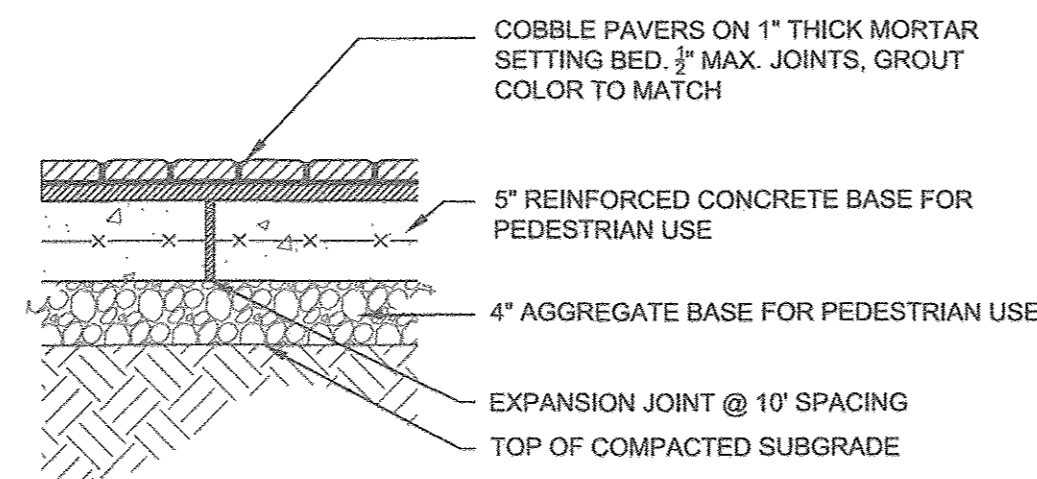
3 CONCRETE UNIT PAVERS (PEDESTRIAN)

1"=1'-0"



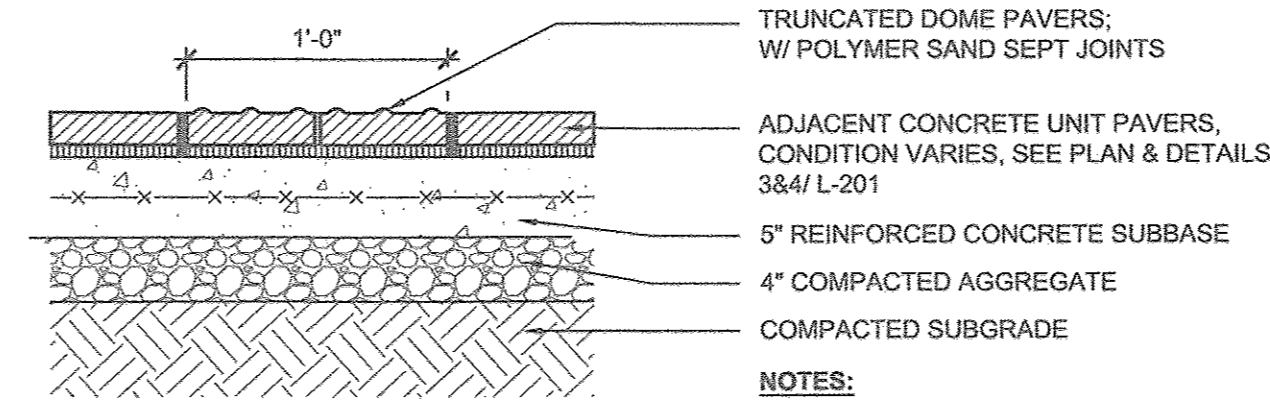
4 CONCRETE UNIT PAVERS (VEHICULAR)

1"=1'-0"



5 COBBLE STONE PAVERS (PEDESTRIAN)

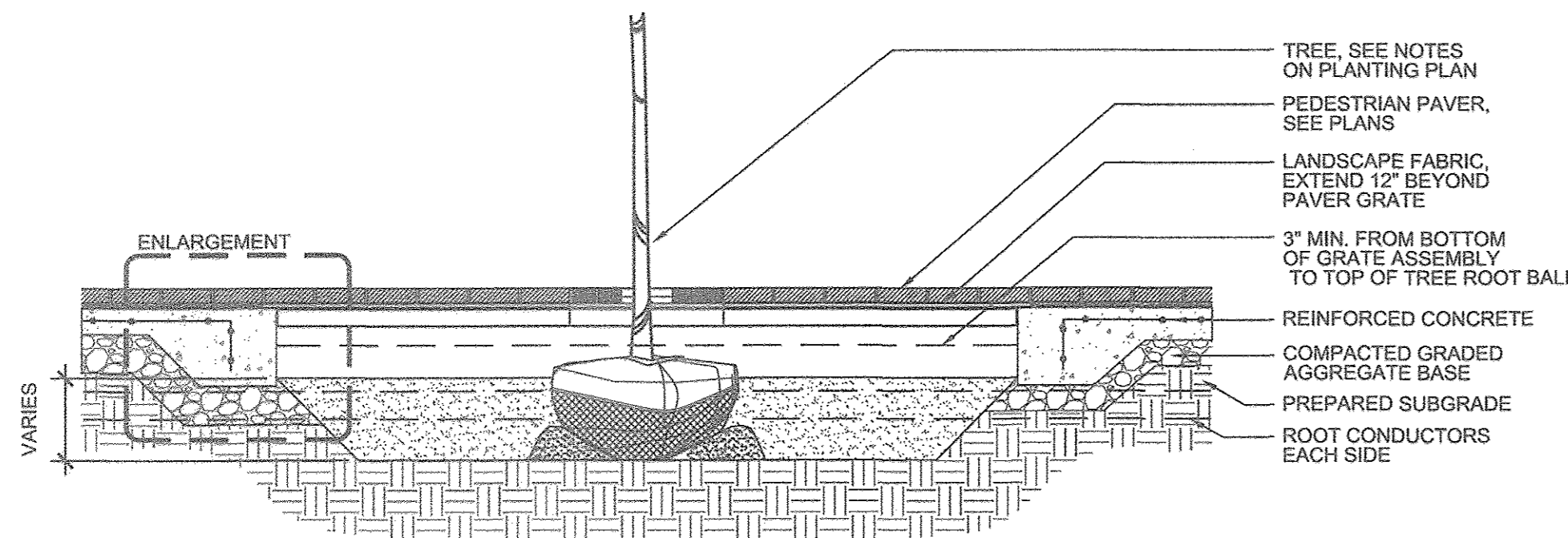
1"=1'-0"



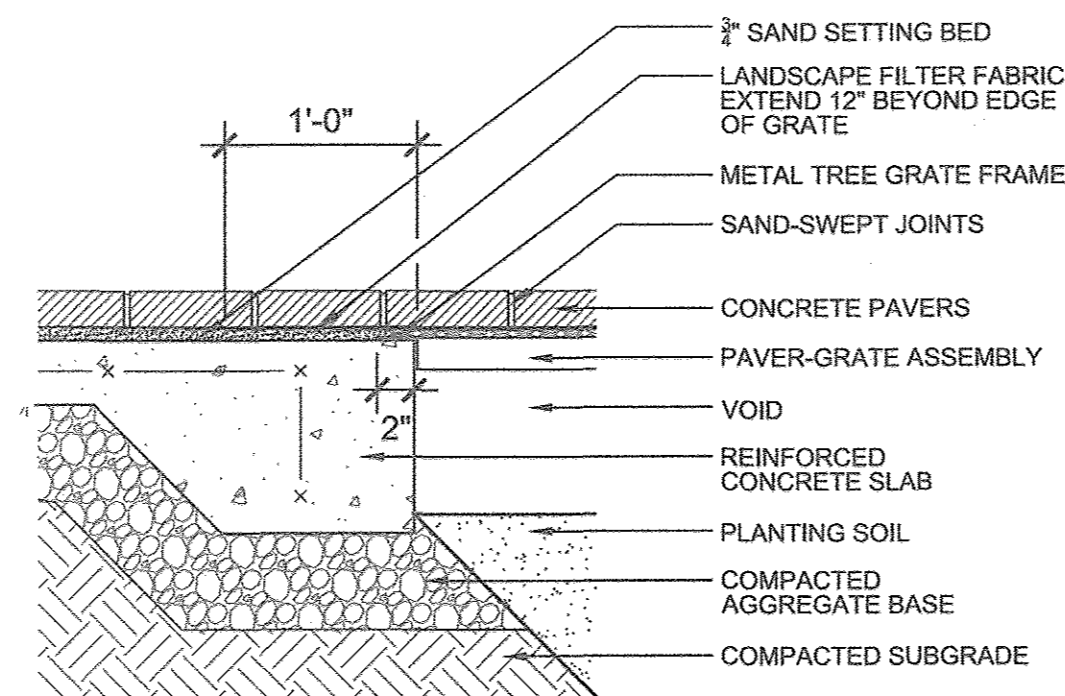
6 DETECTABLE WARNING PAVERS

1"=1'-0"

- NOTES:**
- SEE CIVIL DRAWINGS FOR ADDITIONAL PEDESTRIAN RAMP DETAILS.



SECTION



ENLARGEMENT
SCALE 1'-0" = 1"

- NOTES:**
- PAVER-GRATE TREE GRATE IS DESIGNED TO SUPPORT PAVERS ABOVE THE TREE WELL.
 - SUBFRAME IS FULLY WELDED FROM STEEL ANGLE
 - GRATING NUMBER IS 3 EXPANDED STEEL STRUCTURAL GRATING
 - OPENING SIZES SPECIFIED 12" X 12"
 - GRATES ARE DESIGNED FOR HEAVY PEDESTRIAN TRAFFIC STANDARD FINISH GALVANIZED HOT SPRAY ZINC.

7 TREE PAVER GRATE

1/2" = 1'-0"

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chad Edmund 4-2-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

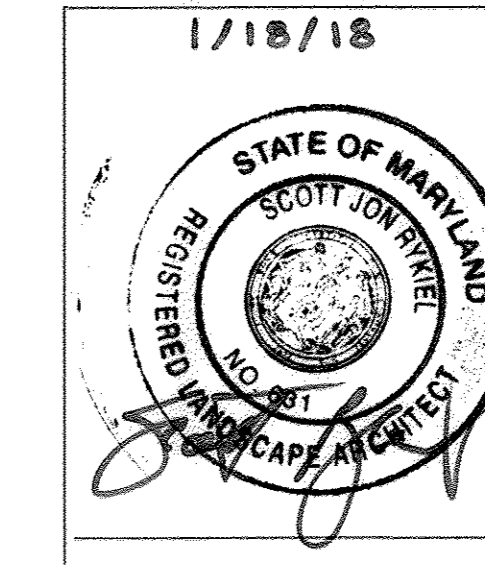
West Slabach 6-7-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Walter J. J. J. 6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100

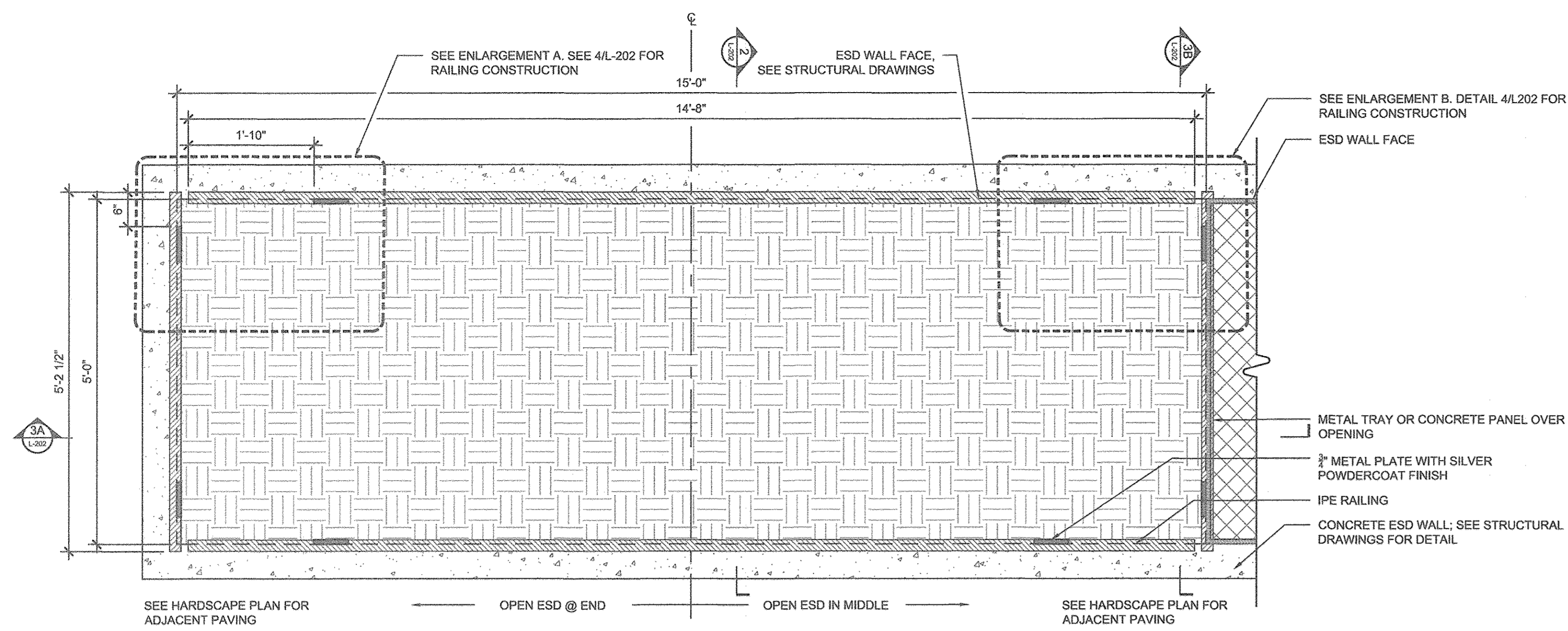
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



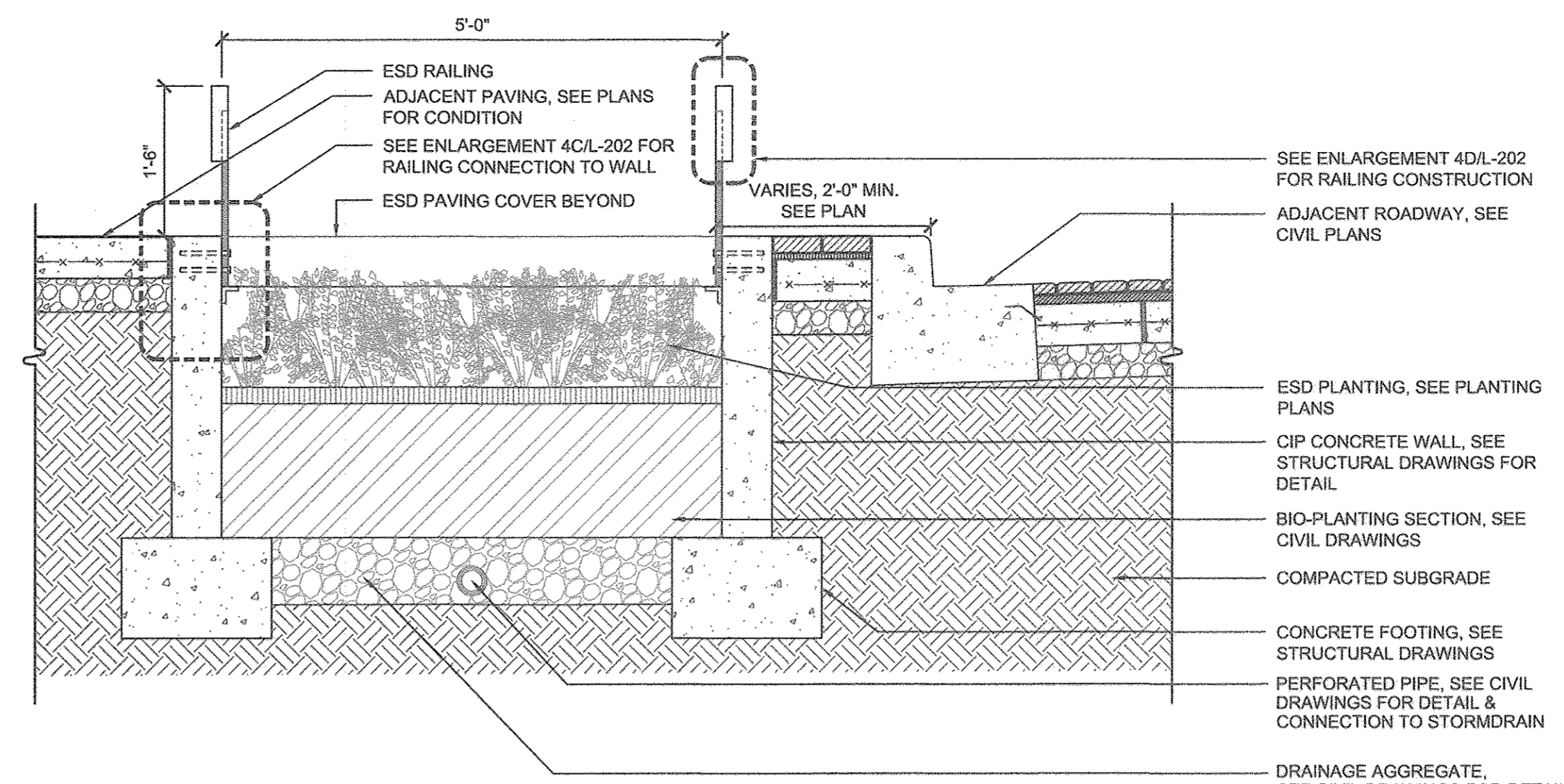
APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14
		OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800
MAHAN RYKIEL ASSOCIATES INC		
WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200 410-235-6001 - WWW.MAHANRYKIEL.COM		
SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION/AREA CRESCENT NEIGHBORHOOD PHASE I AREA 3	LOT/PARCEL # PARCEL D
PLAT# OR LUT N/A	BLOCK # 36	TAX ZONE/AMP 5
WATER CODE 550	SEWER CODE LITTLE PATUXENT	STAGE 605602
TITLE L-201 - HARDSCAPE DETAILS		
Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved ..	59 of 94



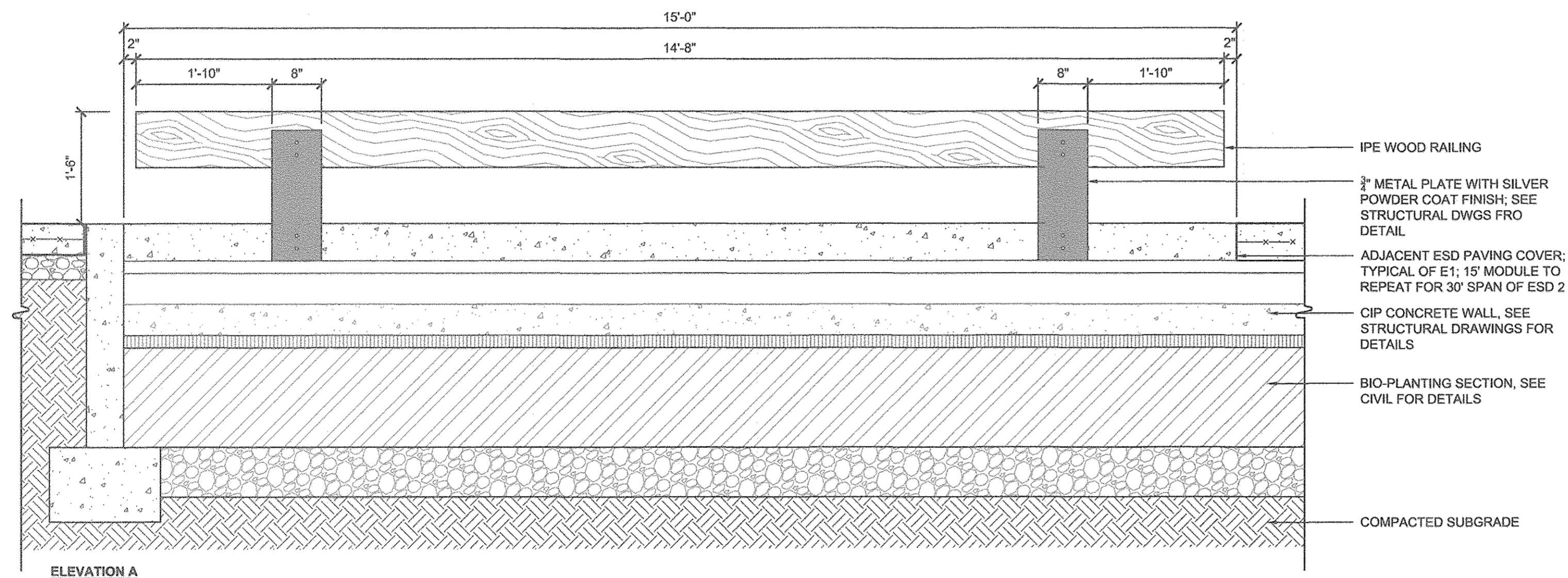
1 ESD - RAILING LAYOUT PLAN

3/4"=1'-0"



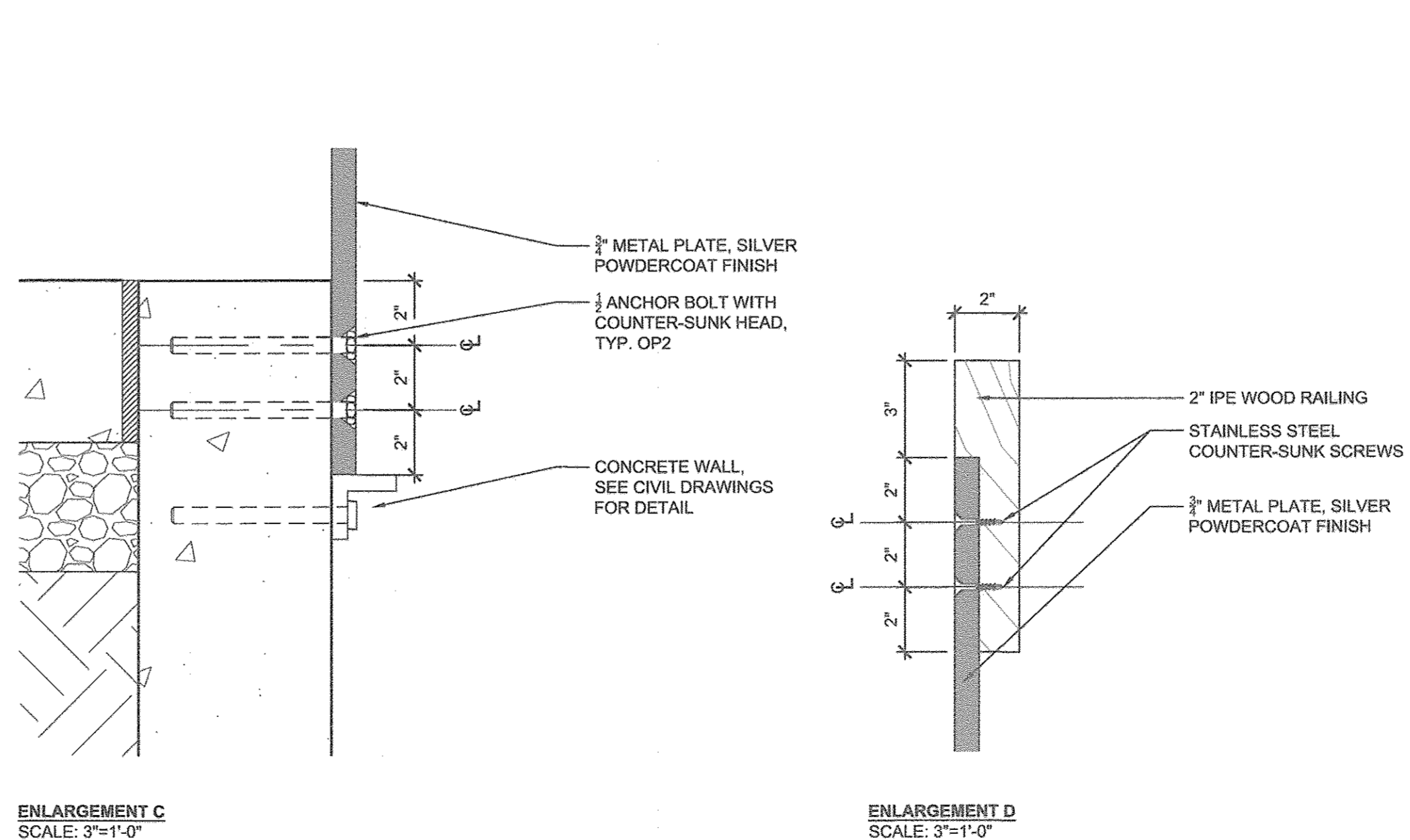
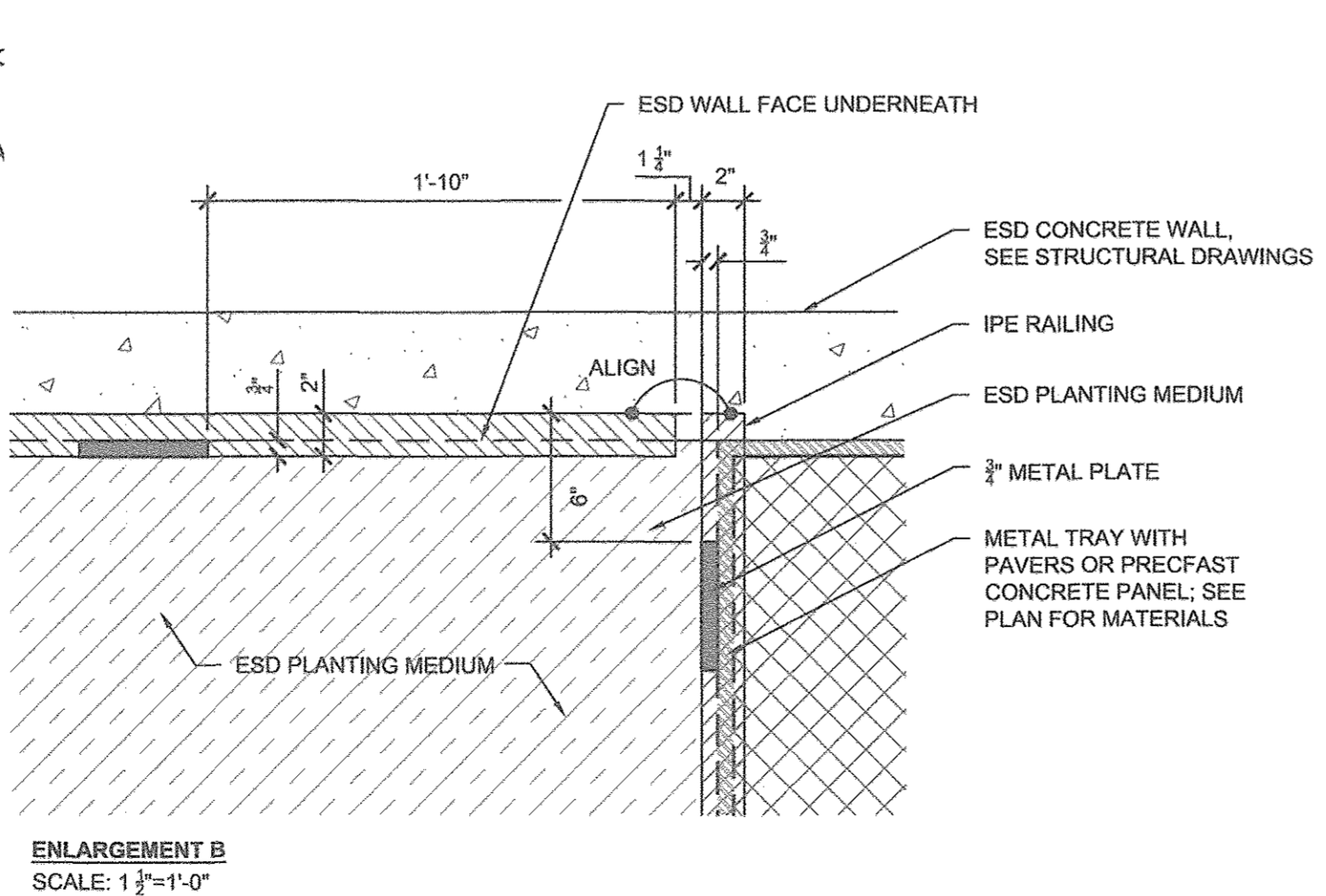
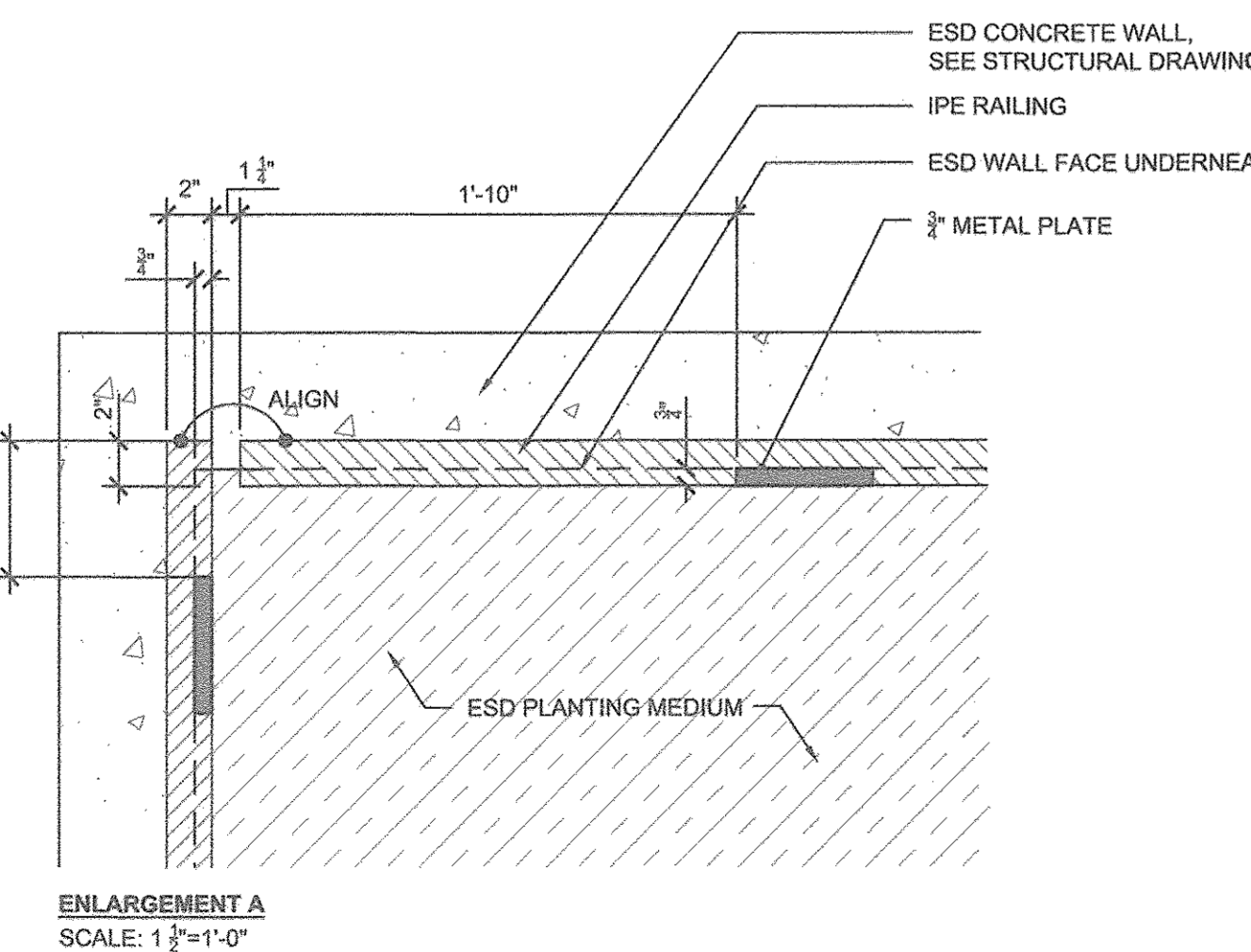
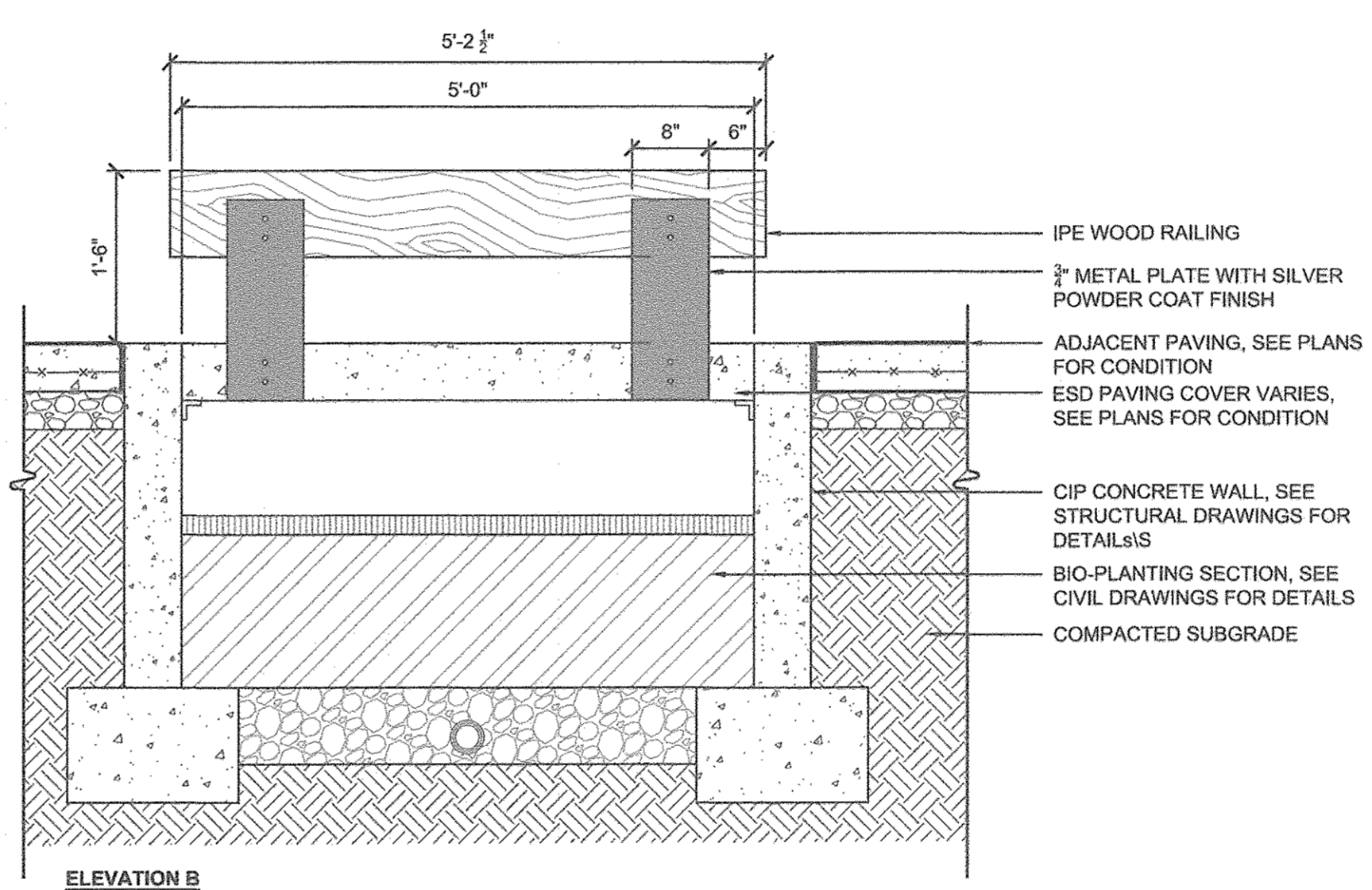
2 ESD RAILING - SECTION @ ON STREET PARKING

3/4"=1'-0"



3 ESD RAILING - ELEVATIONS

3/4"=1'-0"

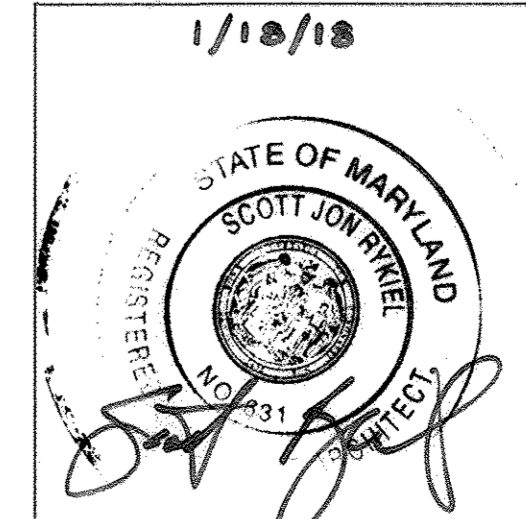


APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 4-2-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 6-7-18
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 6-15-18
 DIRECTOR, DIVISION OF LAND DEVELOPMENT

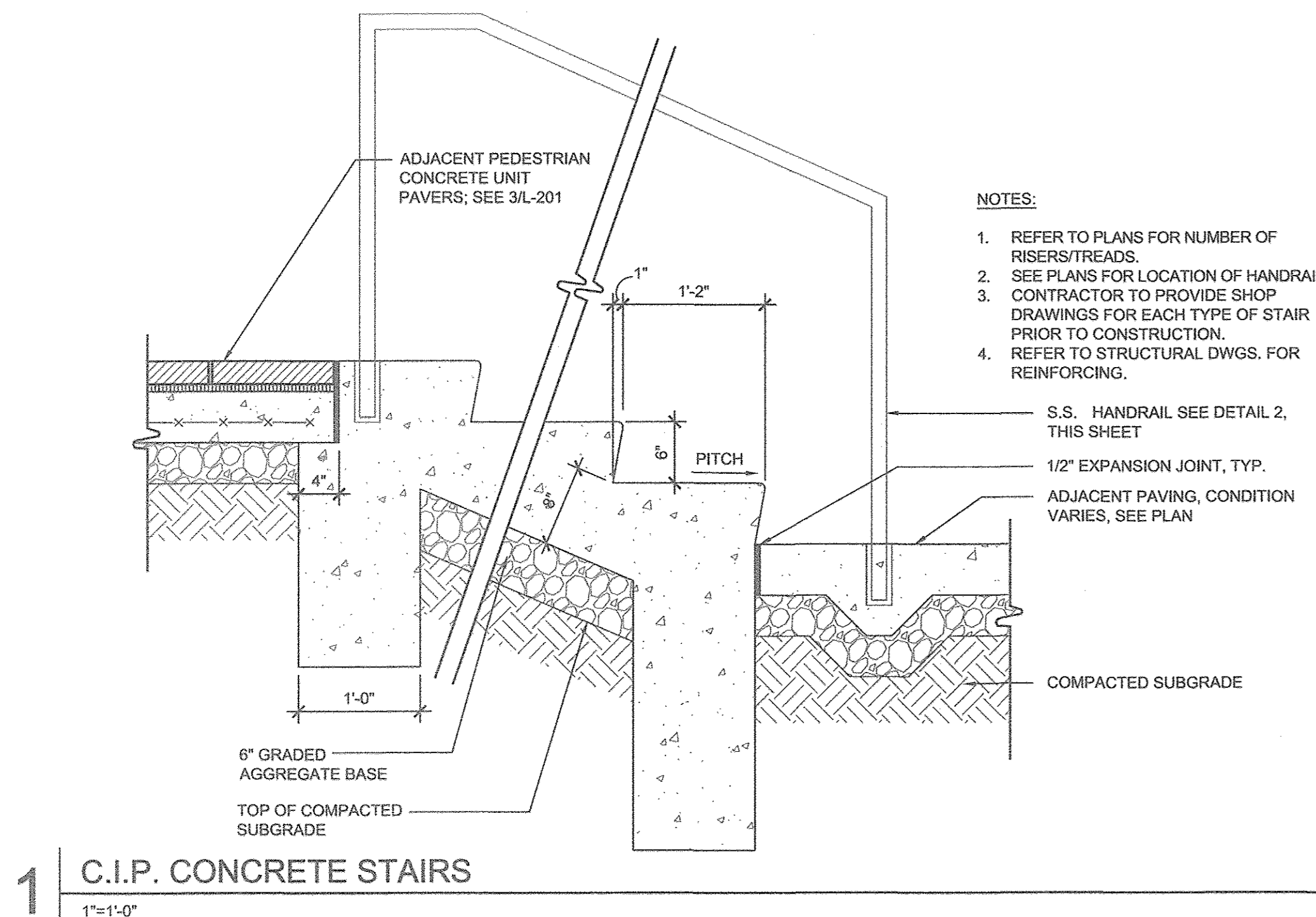
4 ESD - RAILING ENLARGEMENTS

SCALE: AS SHOWN

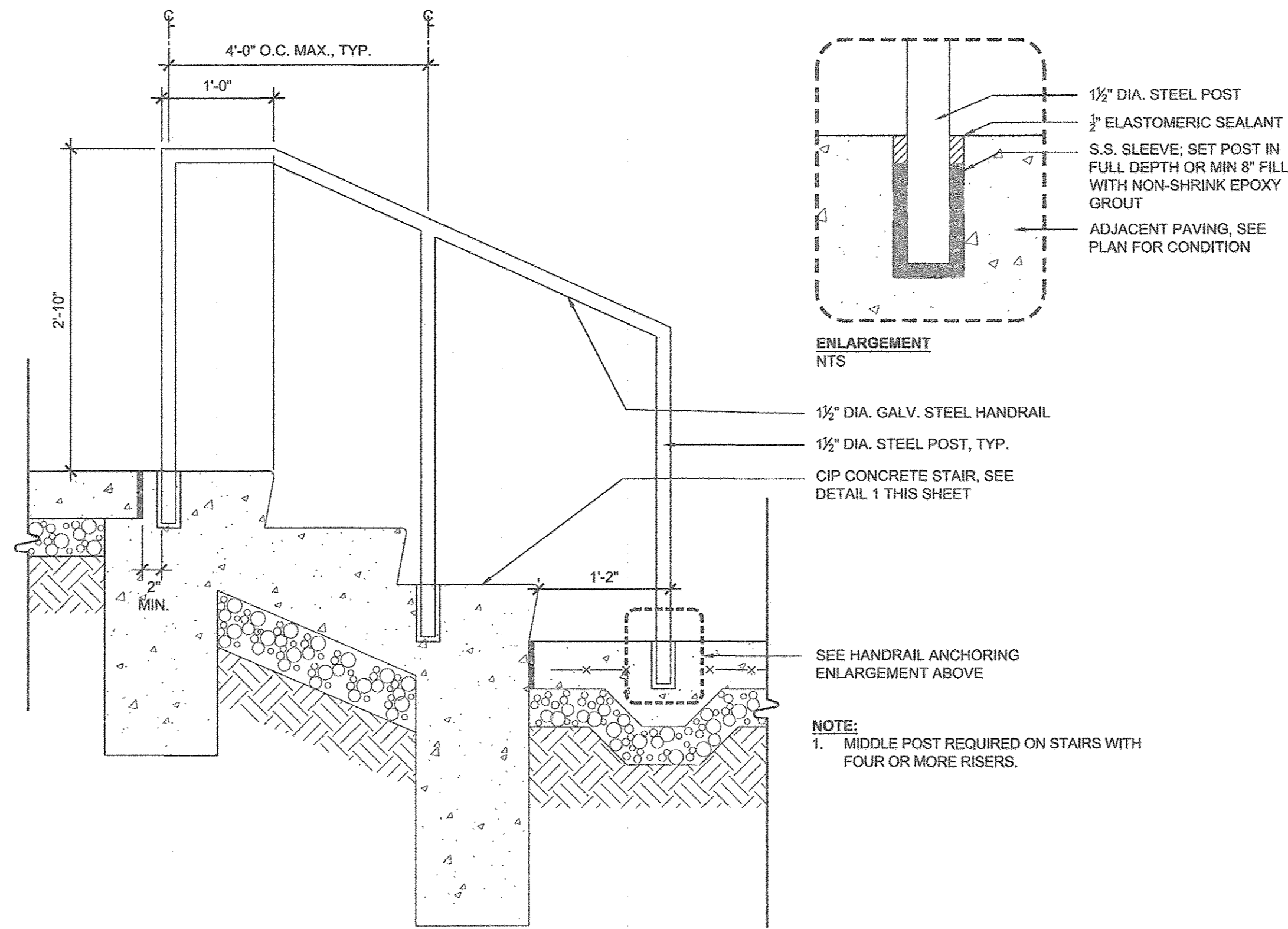
FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



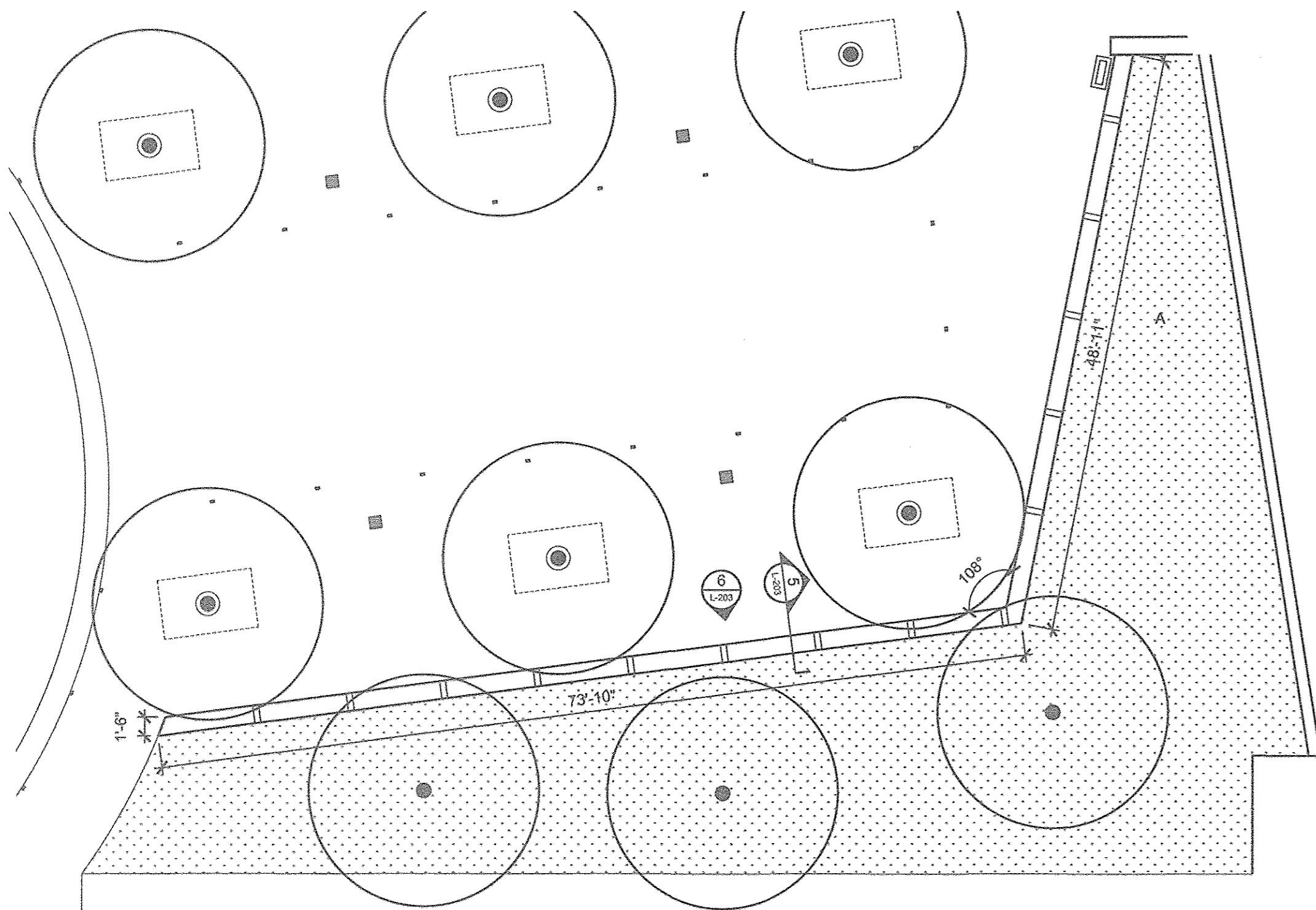
Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14
		OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800
MAHAN RYKIEL ASSOCIATES INC		
WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200 410-235-6001 - WWW.MAHANRYKIEL.COM		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D
PLAT# OR L/P	BLOCK #	ZONE
N/A	36	5
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	
TITLE		
L-202 - HARDSCAPE DETAILS		
Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	60 of 94



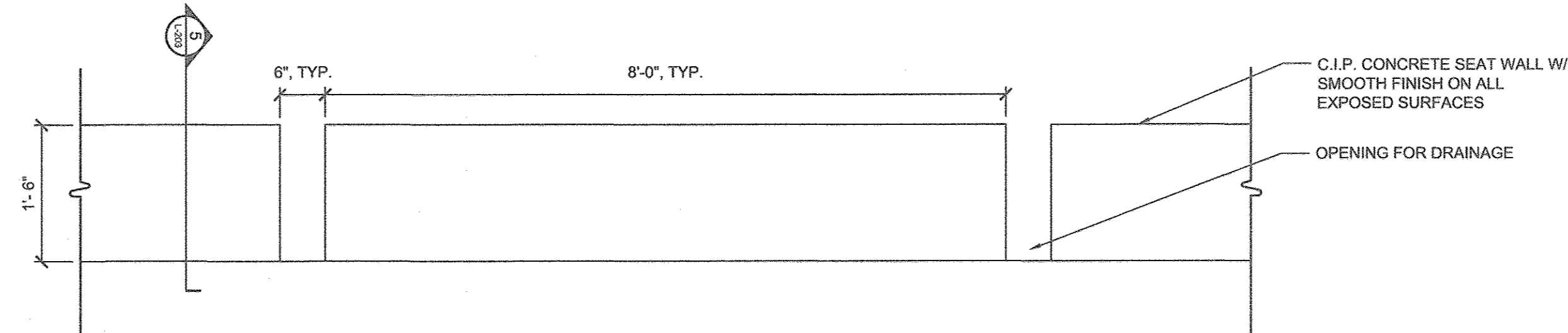
1 C.I.P. CONCRETE STAIRS
1"=1'-0"



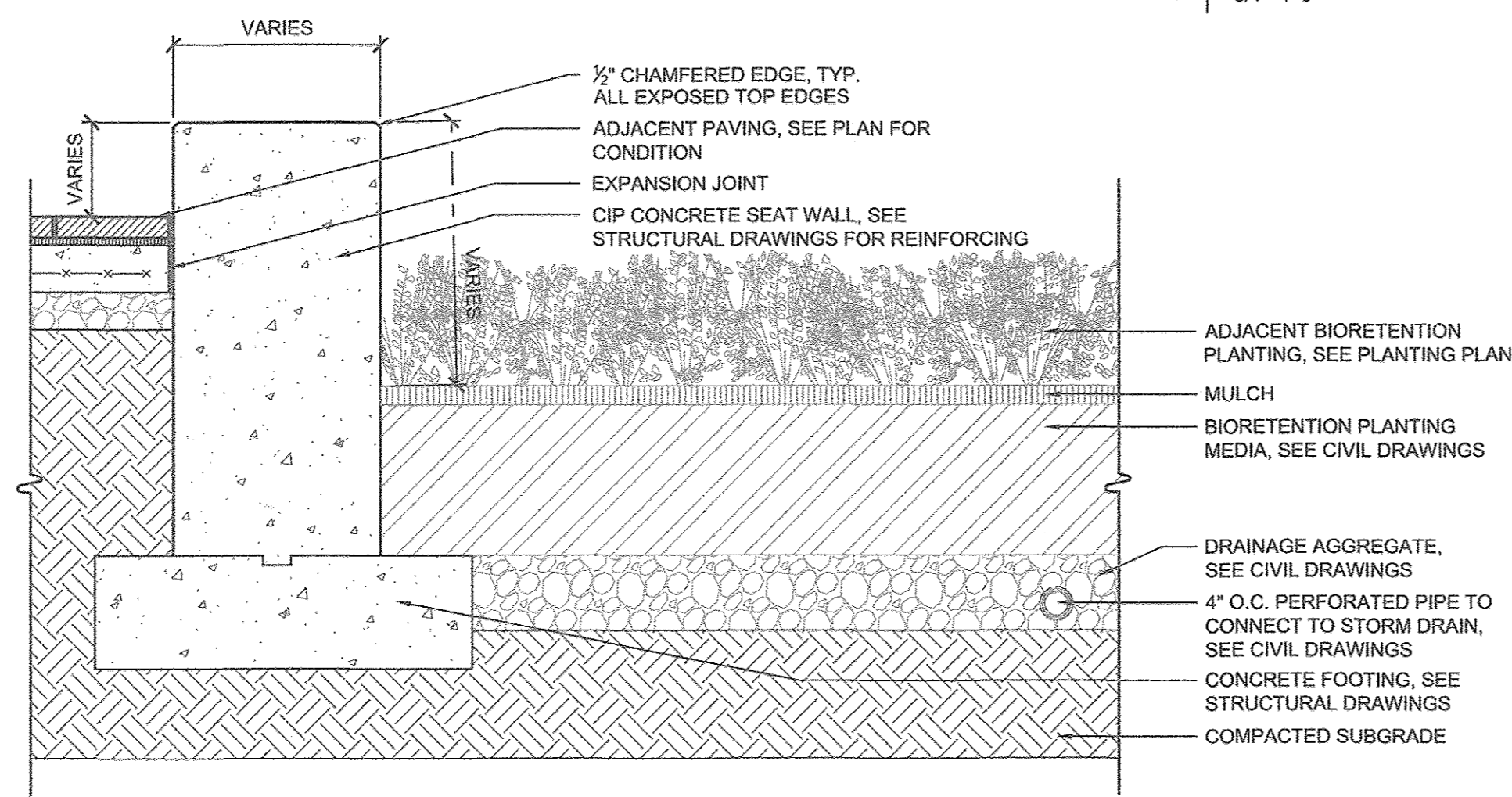
2 HANDRAIL
1"=1'-0"



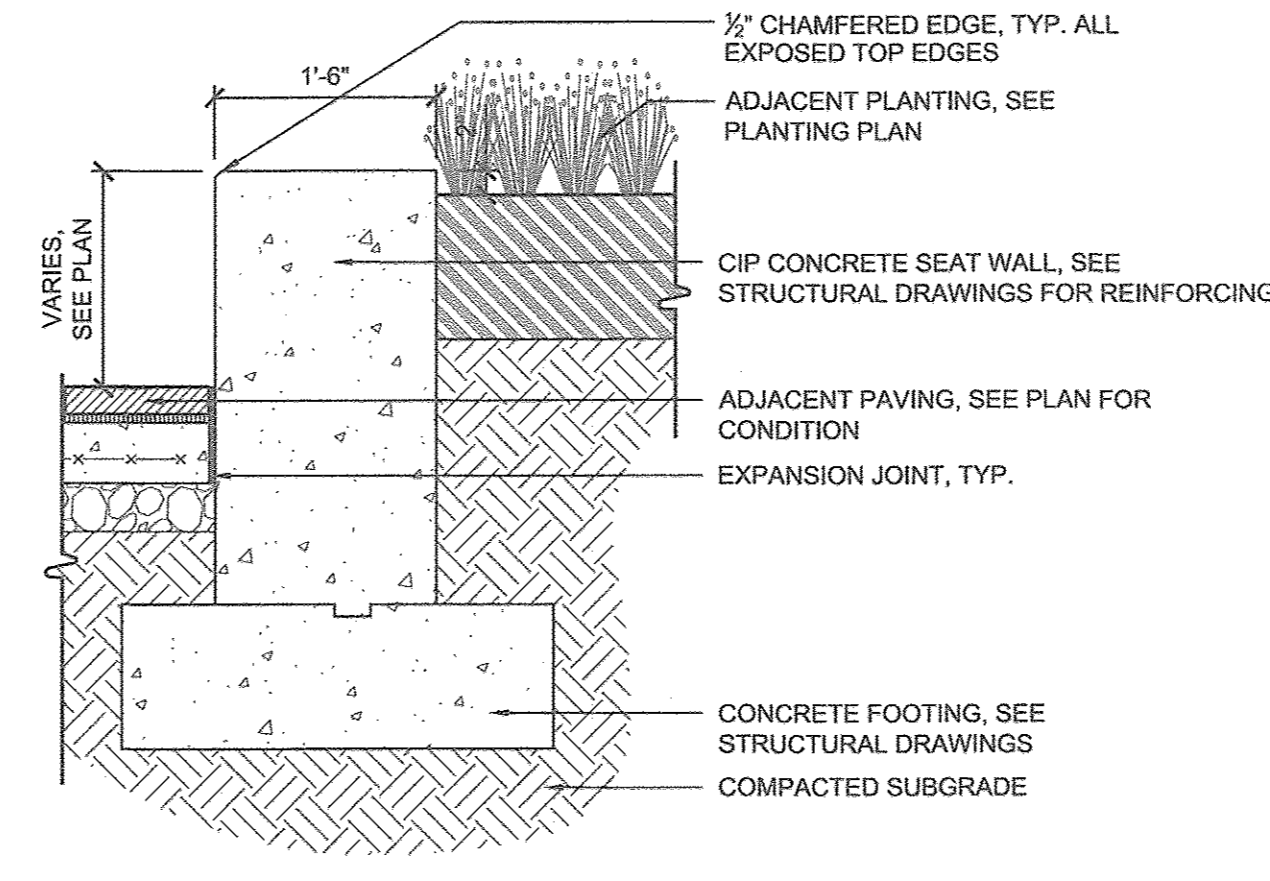
3 C.I.P. CONCRETE PLANTER WALL - ENLARGEMENT PLAN
1/8"=1'-0"



4 C.I.P. CONCRETE PLANTER WALL - ELEVATION
3/4"=1'-0"



5 C.I.P. CONCRETE PLANTER WALL - SECTION
3/4"=1'-0"



6 C.I.P. CONCRETE SEAT WALL @ PLANTING
3/4"=1'-0"

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chad Clark 4-2-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

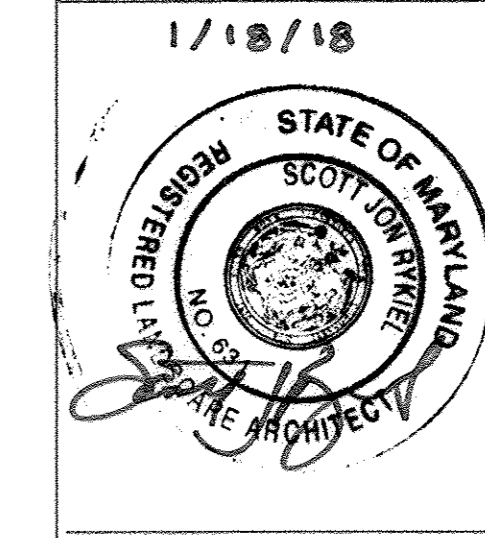
Kathleen 6-7-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Nadine 6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100

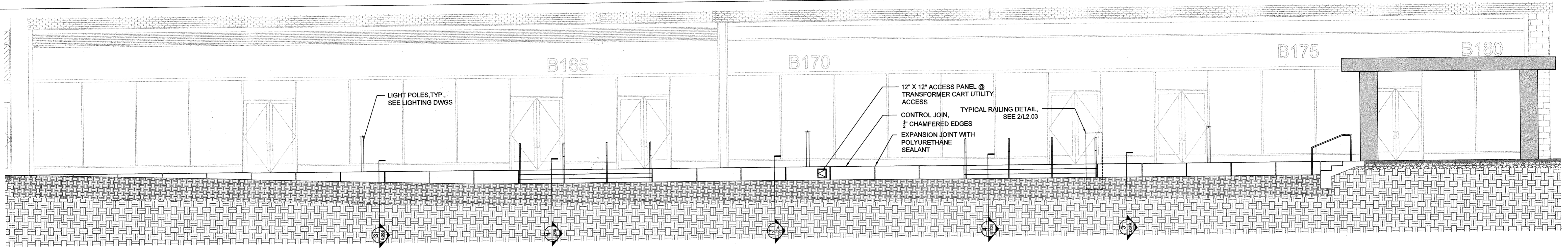
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.

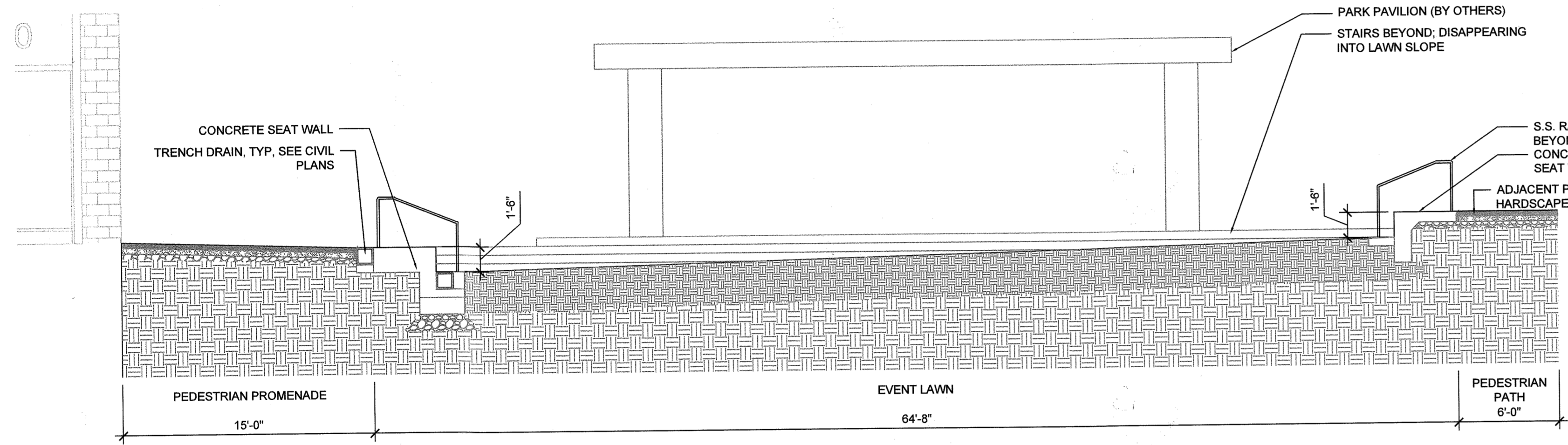


Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
MAHAN RYKIEL ASSOCIATES INC		
WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200 410-235-6001 - WWW.MAHANRYKIEL.COM		
SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION/AREA CRESCENT NEIGHBORHOOD PHASE I, AREA 3	LOT/PARCEL # PARCEL D
PLAT/ OR L.P. N/A	BLOCK # 36	SELECT DISTRICT 5
WATER CODE 550	SEWER CODE LITTLE PATUXENT	CENSUS TRACT 605602
TITLE L-203 - HARDSCAPE DETAILS		
Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	61 of 94
Chk. By JK/MP	Approved --	

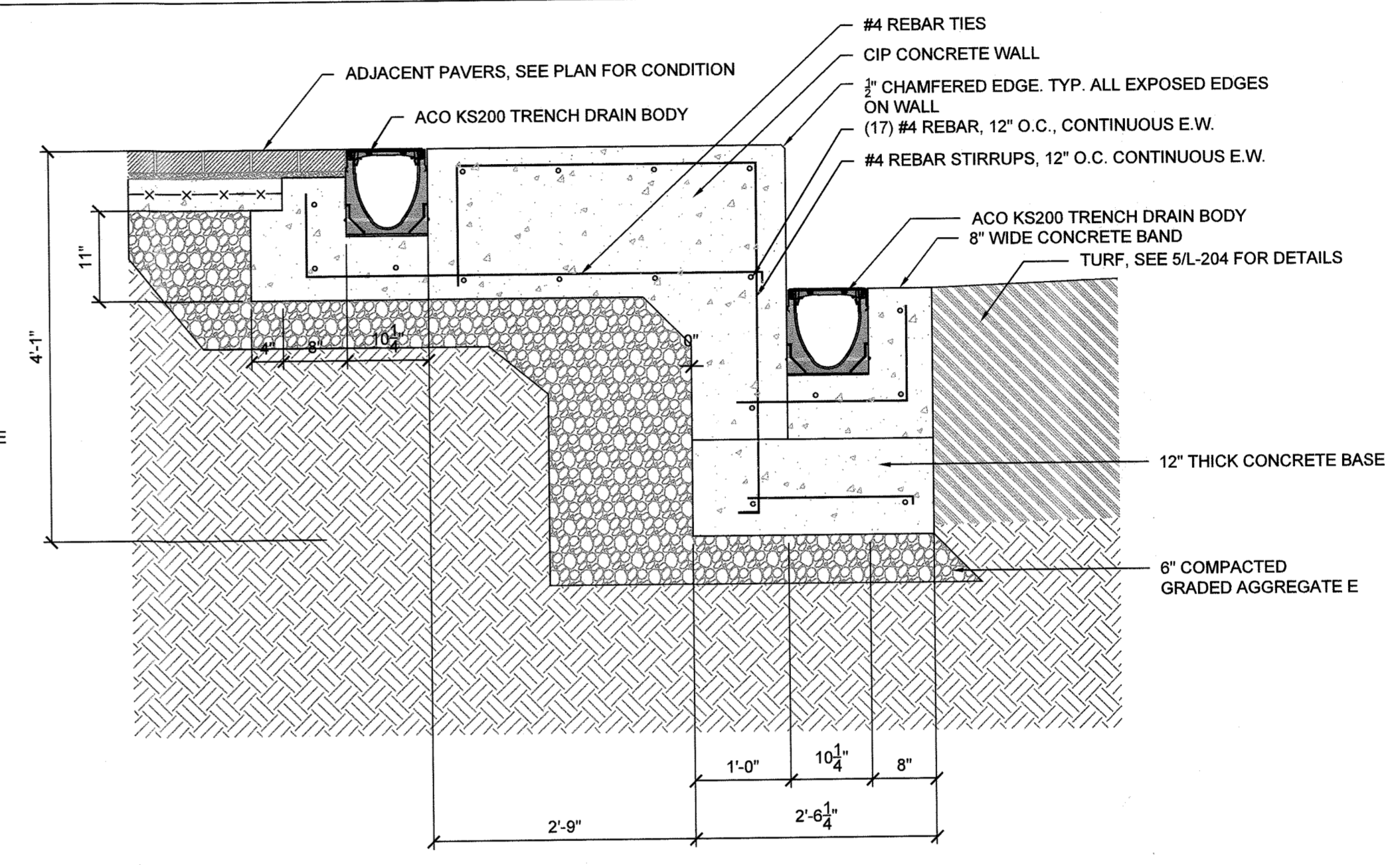
APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 1/16/17



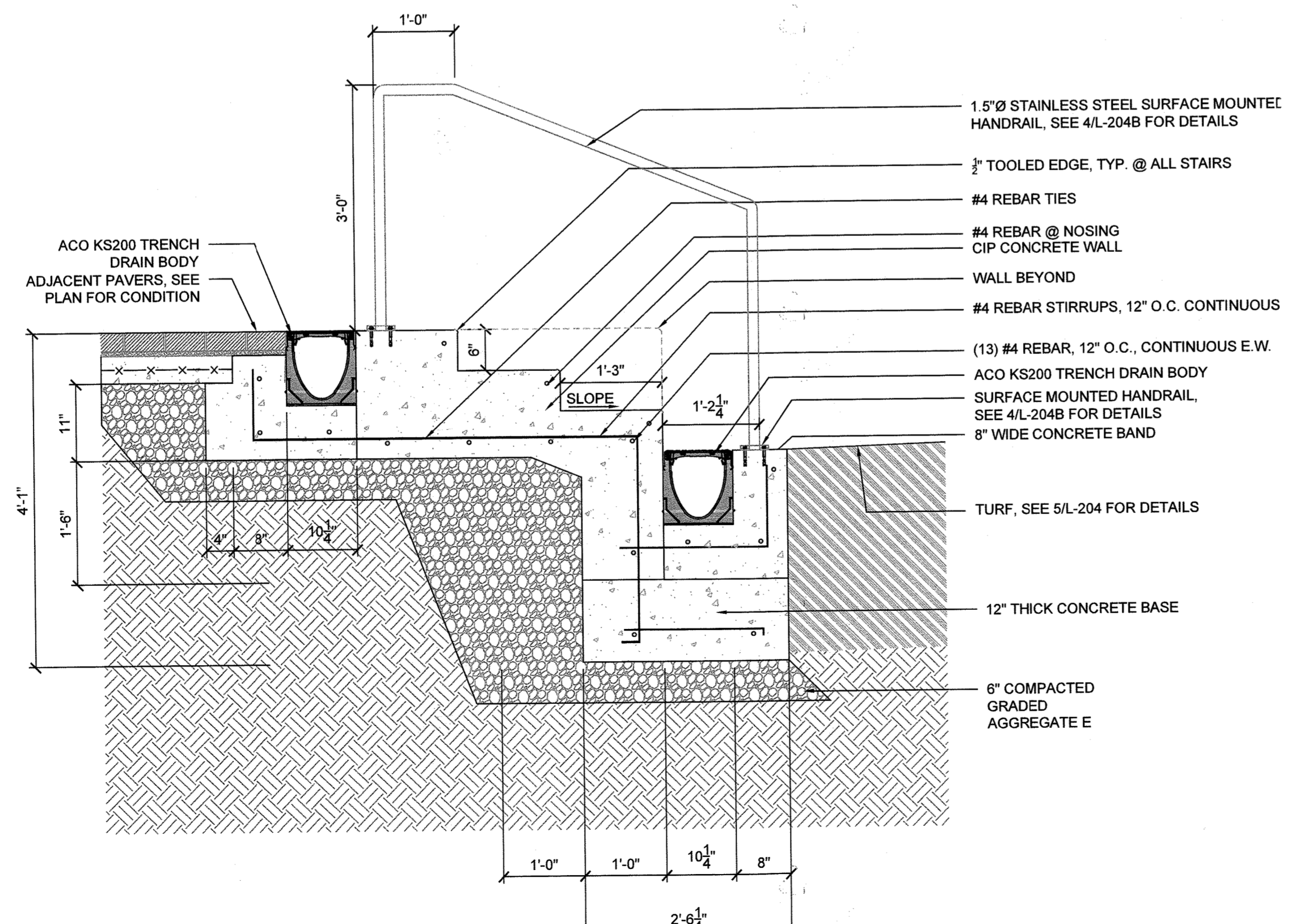
1 PARK LAWN ELEVATION A-A'
3/16"=1'-0"



2 PARK LAWN SECTION B-B'
3/16"=1'-0"



3 C.I.P. CONCRETE SEAT WALL
3/4"=1'-0"



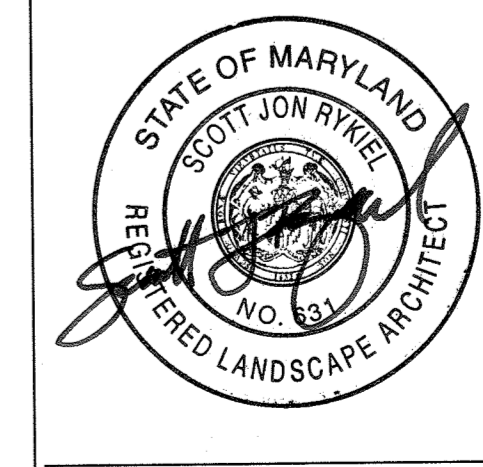
4 C.I.P. CONCRETE STEPS (3 RISERS)
3/4"=1'-0"

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 2-28-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE

APPROVED: CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 3/6/2020
 DATE

APPROVED: DIRECTOR
[Signature] 3-10-2020
 DATE

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-048, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

REVISSED SITE DEVELOPMENT PLAN

Date	No.	Revision Description
11/18/2019	1	HARDSCAPE AND PLANTING REVISIONS

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14
 OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

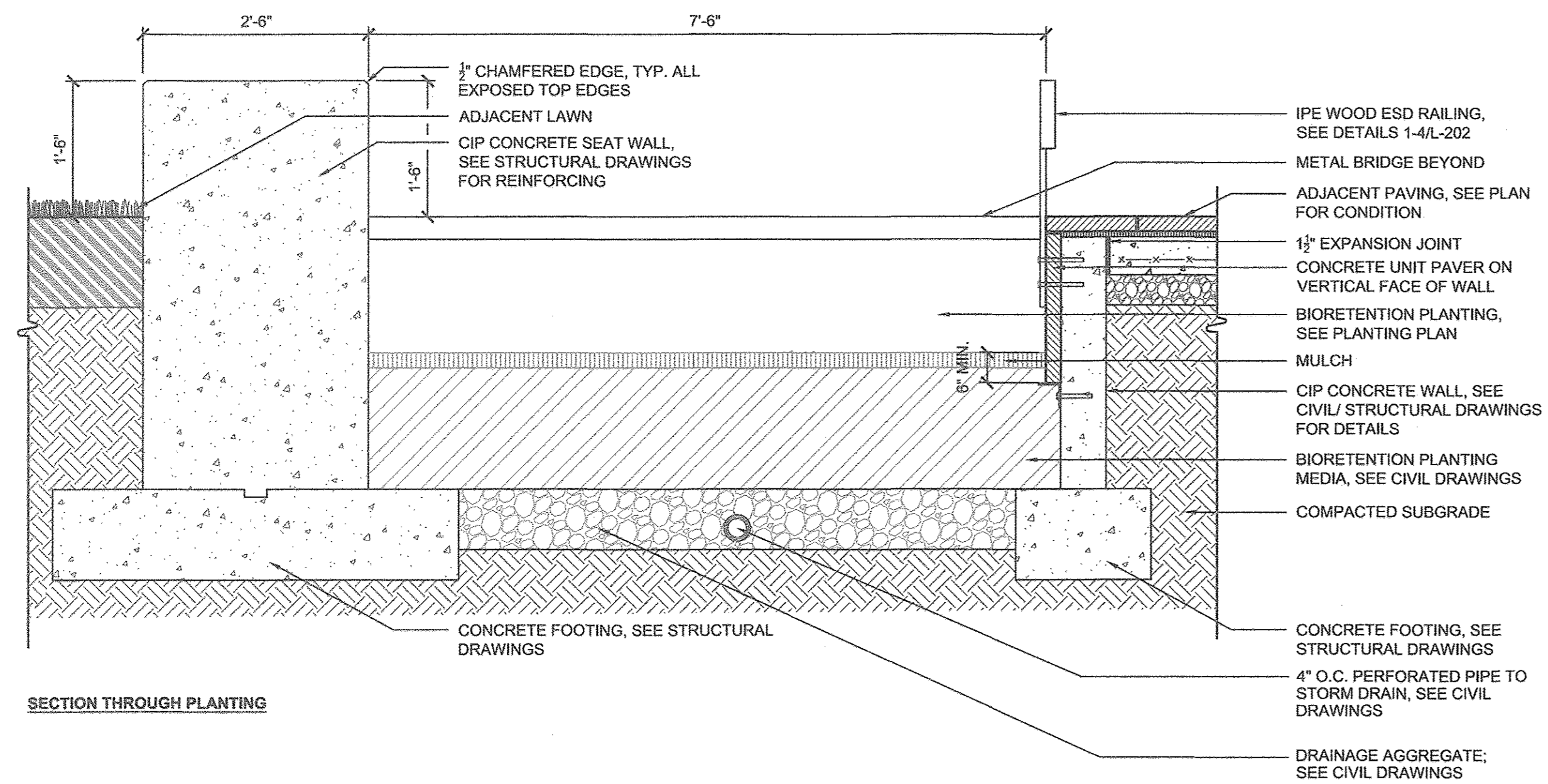
MAHAN RYKIEL ASSOCIATES INC

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

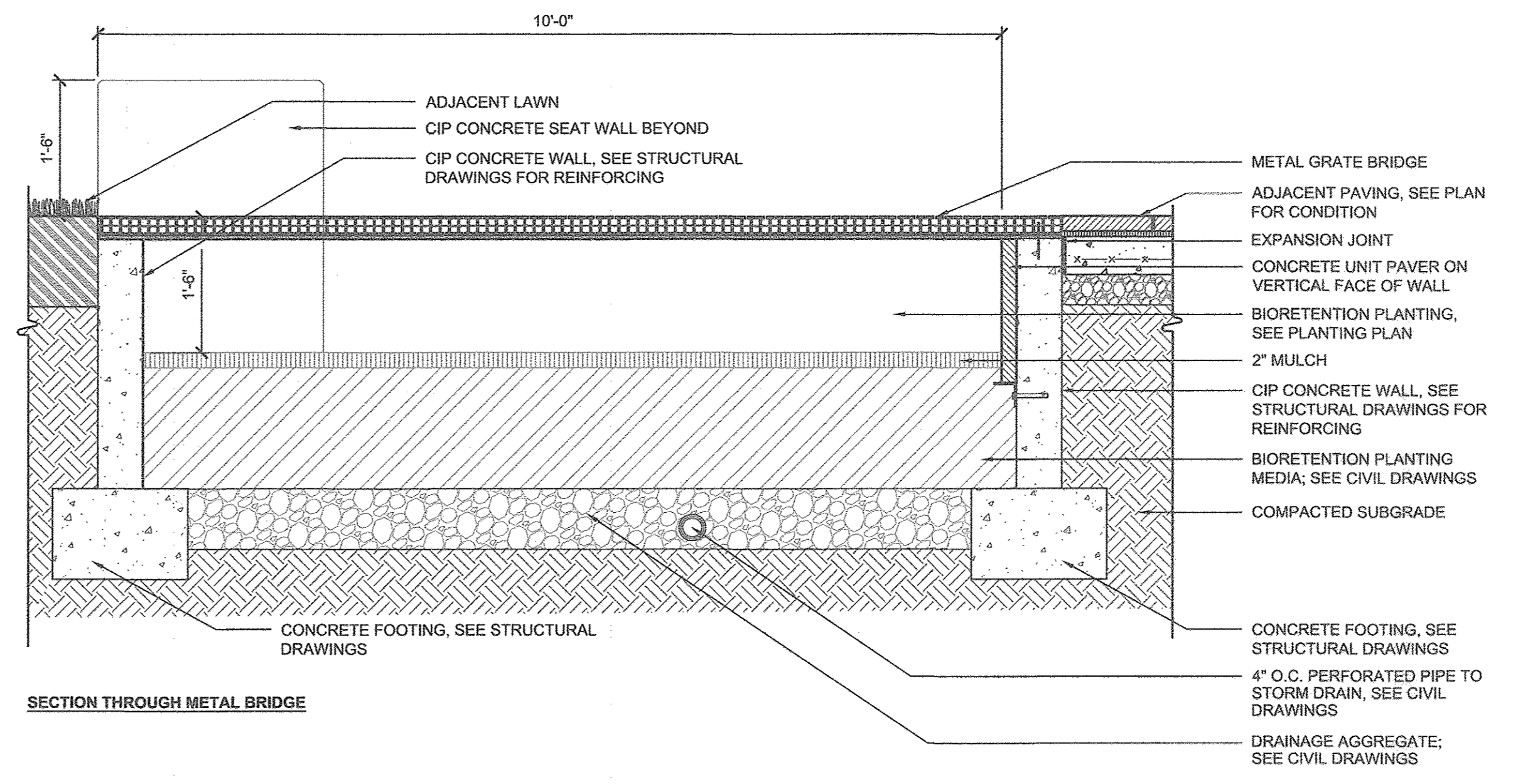
SUBDIVISION NAME	SECTION/AREA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA				
PLAT/ OR. I/P	BLOCK #	ZONE	TAX ZONING MAP	ELECT. DISTRICT
N/A		D204	36	5
WATER CODE	SEWER CODE			CENSUS TRACT
550				605602
				STAGE
				LITTLE PATUXENT

L-204 - HARDSCAPE DETAILS

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved ..	62 of 94



1 C.I.P. CONCRETE SEAT WALL @ BIO-RETENTION
3/4"=1'-0"

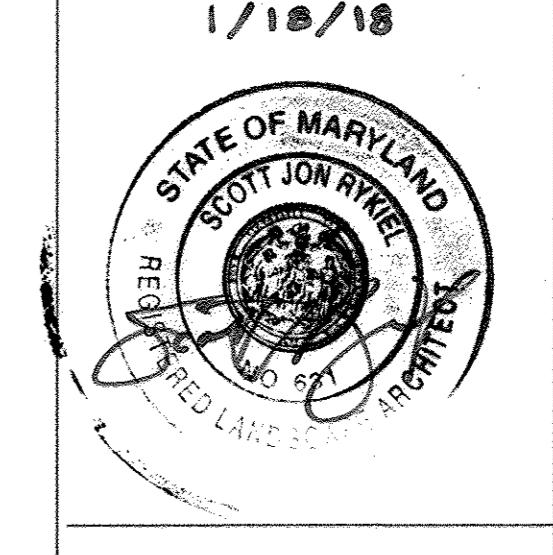


2 METAL GRATE BRIDGE @ BIORETENTION
3/4"=1'-0"

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chad Ghosh 4-2-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
Kent Selwood 6-7-18
 CHIEF, DIVISION OF LAND DEVELOPMENT
Naldin Rykiel 6-15-18
 DIRECTOR, DIVISION OF LAND DEVELOPMENT

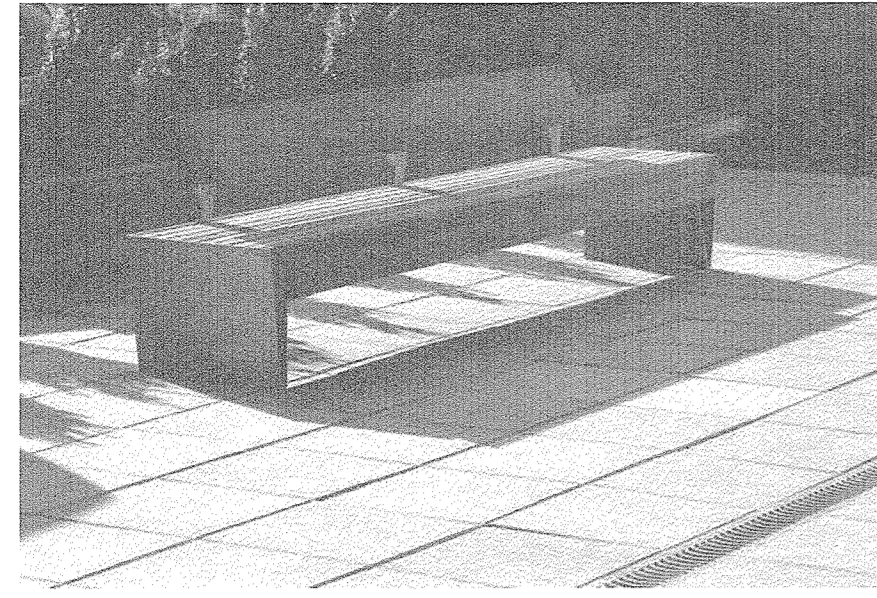
FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F-18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-059,
 WP-17-315, WP-18-020, WP-18-021,
 SP-16-009, WP-17-100
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.

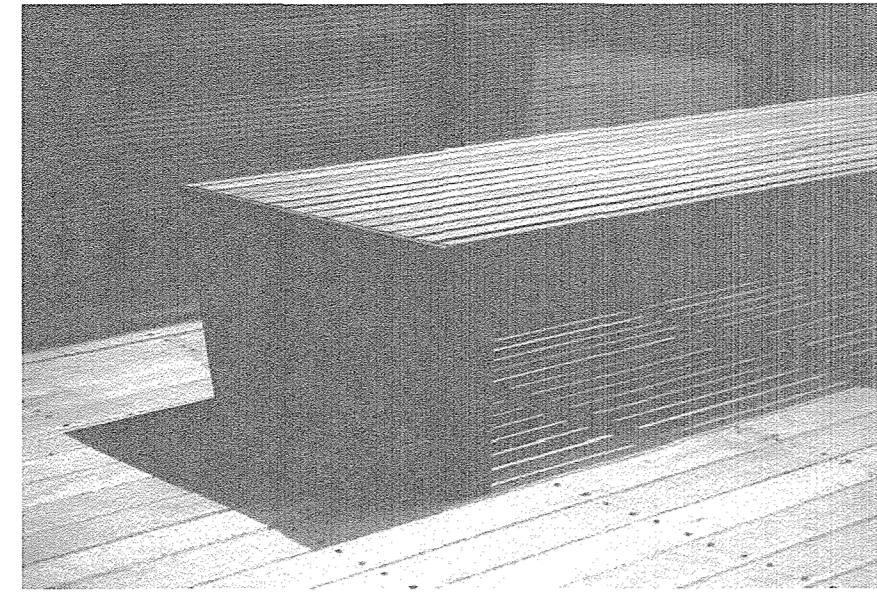


APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14
		OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800
MAHAN RYKIEL ASSOCIATES INC		
WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200 410-235-6001 - WWW.MAHANRYKIEL.COM		
SUBDIVISION NAME	DOWNTOWN COLUMBIA	SECTION/AREA
PLAT# OR L/P	N/A	CRESCENT NEIGHBORHOOD PHASE I AREA 3
WATER CODE	550	LOT/PARCEL #
		PARCEL D
		CENSUS TRACT
		605602
TITLE		
L-205 - HARDSCAPE DETAILS		
Des. By	JK	SCALE AS SHOWN
Drn. By	BB	Date 1-18-18
Chk. By	JK/MP	Approved --
		Proj. No. 04038.B0
		63 of 94



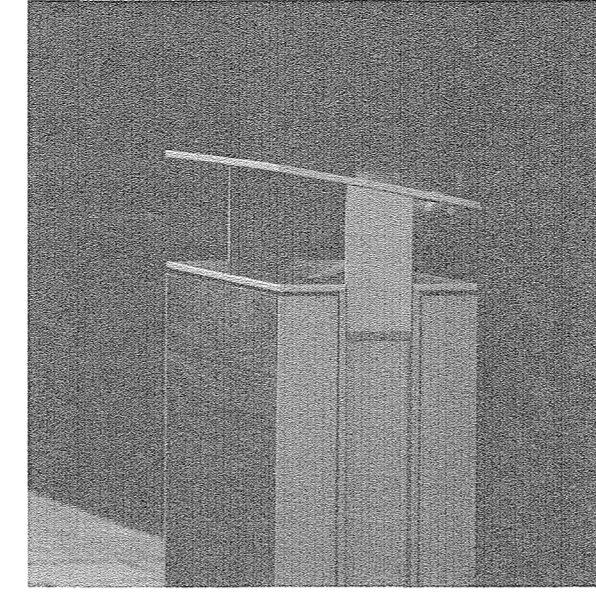
BENCH WITH BACK



BENCH WITHOUT BACK

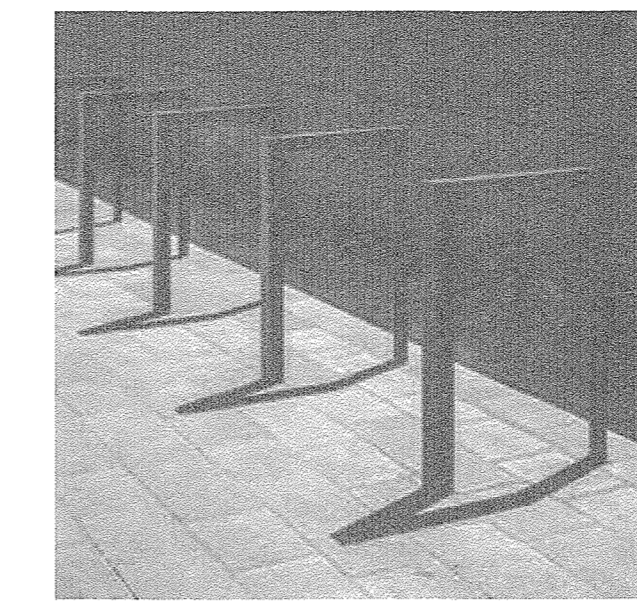
MMCIÉ
BÍLOVICE 519, 687 12 BÍLOVICE
CZECH REPUBLIC
PHONE: +420.572.434.292
WEB: www.mmcte.com

- MODEL: BLOCC
- COLOR: SILVER
- POWDERCOAT FINISH
- SURFACE MOUNT PER MANUFACTURER SPECIFICATIONS



FORMS + SURFACES
30 PINE STREET
PITTSBURGH, PA 15223
PHONE: 800.451.0410
FAX: 412.781.7840
WEB: www.forms-surfaces.com

- MODEL: APEX
- COLOR: SILVER; FSC RECYCLED RECLAIMED TEAK
- POWDERCOAT FINISH
- SURFACE MOUNT PER MANUFACTURER SPECIFICATIONS



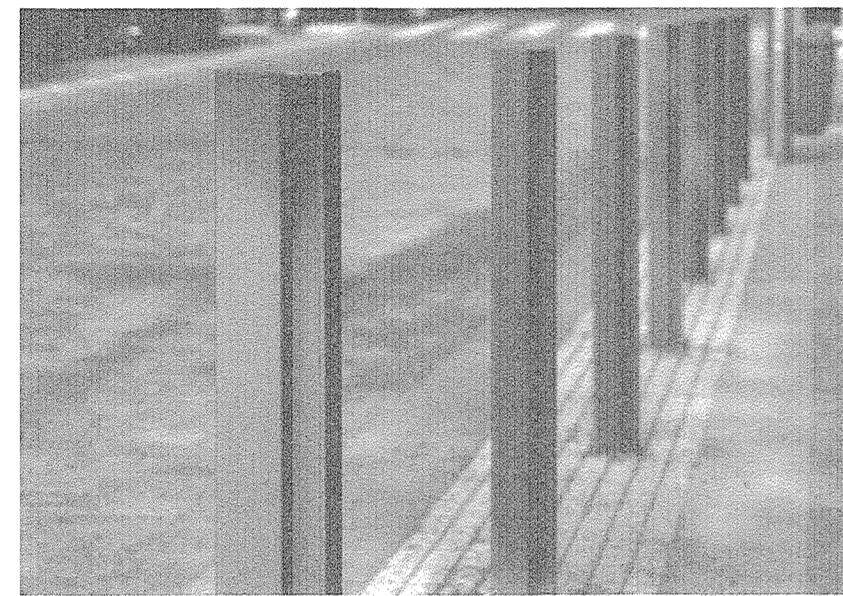
MMCIÉ
BÍLOVICE 519, 687 12 BÍLOVICE
CZECH REPUBLIC
PHONE: +420.572.434.292
WEB: www.mmcte.com

- MODEL: LOTLIMIT
- COLOR: SILVER
- POWDERCOAT FINISH
- SURFACE MOUNT PER MANUFACTURER SPECIFICATIONS

1 BENCH
N.T.S.

2 LITTER/RECYCLING RECEPTACLE
N.T.S.

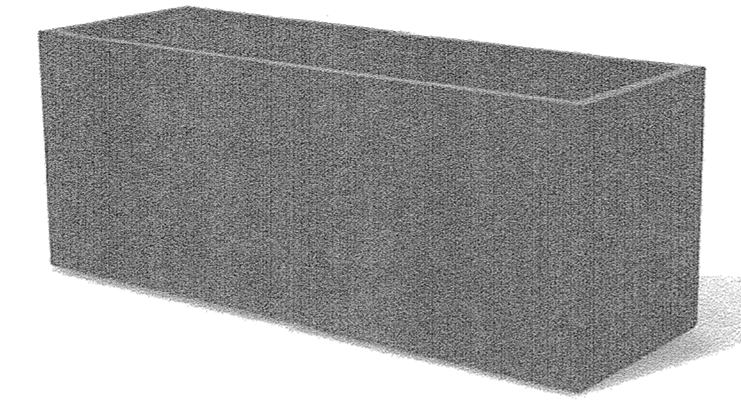
3 BIKE RACK
N.T.S.



MMCIÉ
BÍLOVICE 519, 687 12 BÍLOVICE
CZECH REPUBLIC
PHONE: +420.572.434.292
WEB: www.mmcte.com

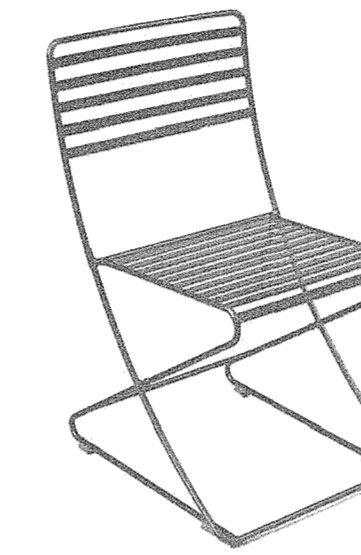
- BO
- MODEL: ELIAS SE101
 - COLOR: SILVER
 - POWDERCOAT FINISH
 - INSTALLATION: SURFACE MOUNT INSTALL PER MANUFACTURER SPECIFICATIONS

- BO
- MODEL: ELIAS SE150
 - COLOR: SILVER
 - POWDERCOAT FINISH
 - INSTALLATION: REMOVABLE INSTALL PER MANUFACTURER SPECIFICATIONS



ORE INC.
130 S. REDWOOD RD., SUITE G
NORTH SALT LAKE, UT 84054
PHONE: 801.936.0499
FAX: 801.284.0590
WEB: www.orecontainers.com

- MODEL: HIGH RECTANGLE
- SIZE: L 60" W 20" H 24"
- COLOR: SILVER
- POWDERCOAT FINISH
- SURFACE MOUNT PER MANUFACTURER SPECIFICATIONS



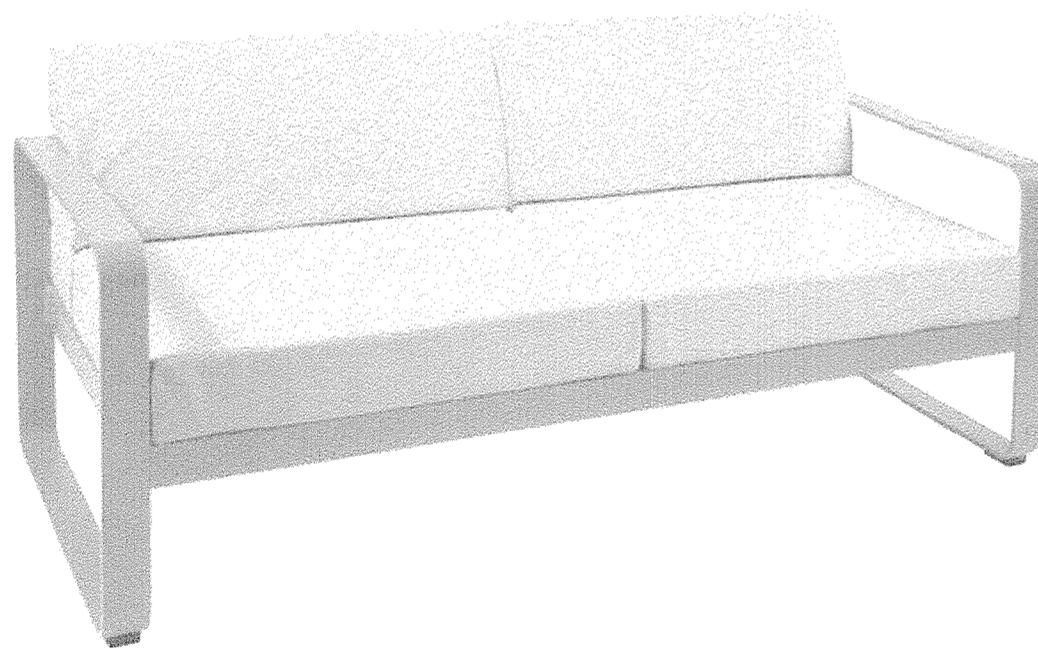
LANDSCAPE FORMS
431 LAWDALE AVENUE
KALAMAZOO, MI 49048
PHONE: 800.521.2548
FAX: 269.381.3455
WEB: www.landscapeforms.com

- MODEL: PARC CENTRE
- COLOR: SILVER
- POWDERCOAT FINISH
- FREESTANDING

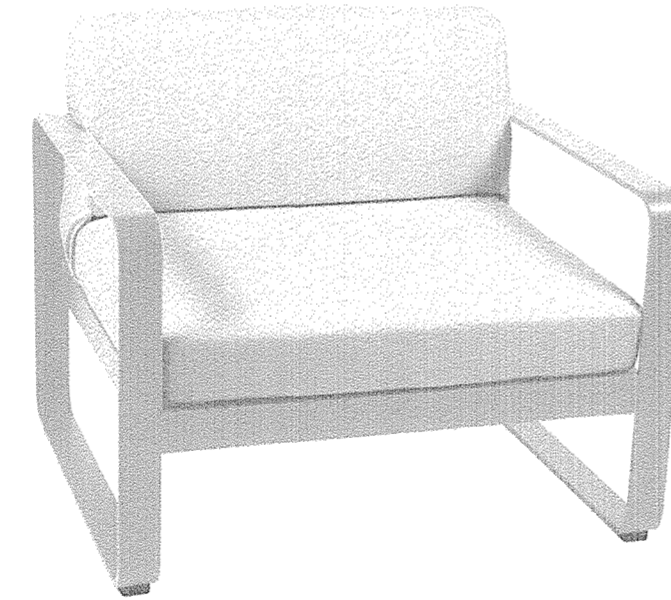
4 BOLLARDS
N.T.S.

5 PLANTER
N.T.S.

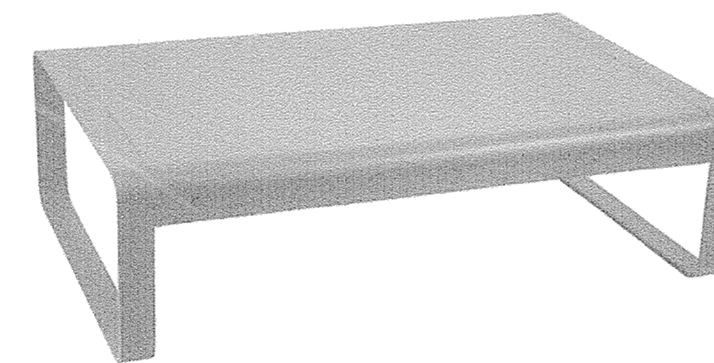
6 TABLE & CHAIRS
N.T.S.



SOFA



ARMCHAIR

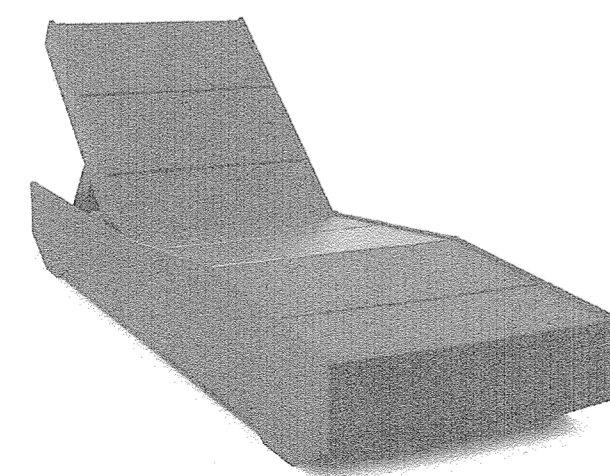


LOW TABLE

FERMOB USA
62 INDUSTRIAL PARK ROAD
DAWSONVILLE, GA 30534
PHONE: 706.216.6600
WEB: www.fermobusa.com

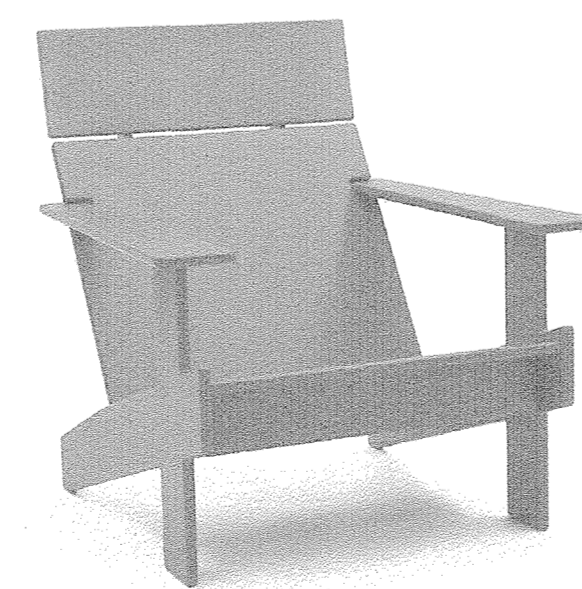
- MODEL: BELLEVIE
- ALUMINUM COLOR: VERBENA
- FABRIC COLOR: FLANNEL GREY
- FREESTANDING

7 LOUNGE FURNITURE
N.T.S.

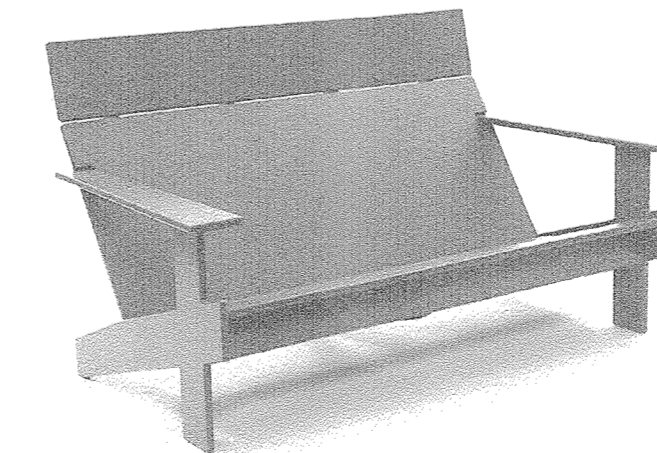


LOLL DESIGNS
5912 WASECA STREET
DULUTH, MN 55807
PHONE: 877.740.3387
FAX: 218.336.8595
WEB: www.lolldesigns.com

- MODEL: THE 405
- COLOR: SKY BLUE
- FREESTANDING



CHAIR



SOFA

LOLL DESIGNS
5912 WASECA STREET
DULUTH, MN 55807
PHONE: 877.740.3387
FAX: 218.336.8595
WEB: www.lolldesigns.com

- MODEL: LOLLYGAGGER
- COLOR: SKY BLUE
- MATERIAL: RECYCLED PLASTIC
- FREESTANDING

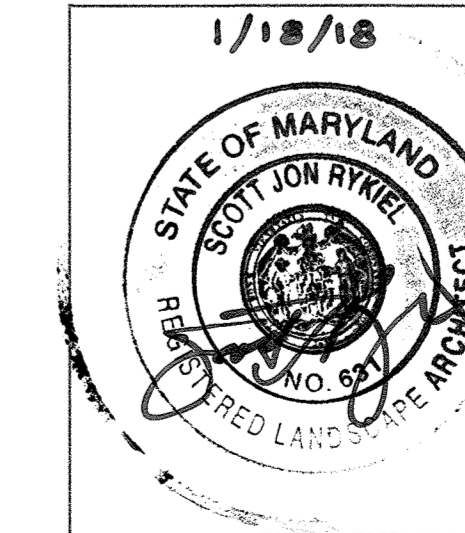
8 LOUNGE SEATING - LAWN
N.T.S.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION
CHIEF, DIVISION OF LAND DEVELOPMENT
DIRECTOR, DIVISION OF LAND DEVELOPMENT

4-2-18
6-7-18
6-15-18

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F-18-017,
SDP-16-075, SDP-18-005, WP-17-010,
WP-17-049, WP-17-052, WP-17-059,
WP-17-115, WP-18-020, WP-18-021,
SP-18-009, WP-17-100
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

Date	No.	Revision Description
11-18-19	3	CHANGE SHEET NUMBER

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

MAHAN RYKIEL ASSOCIATES INC

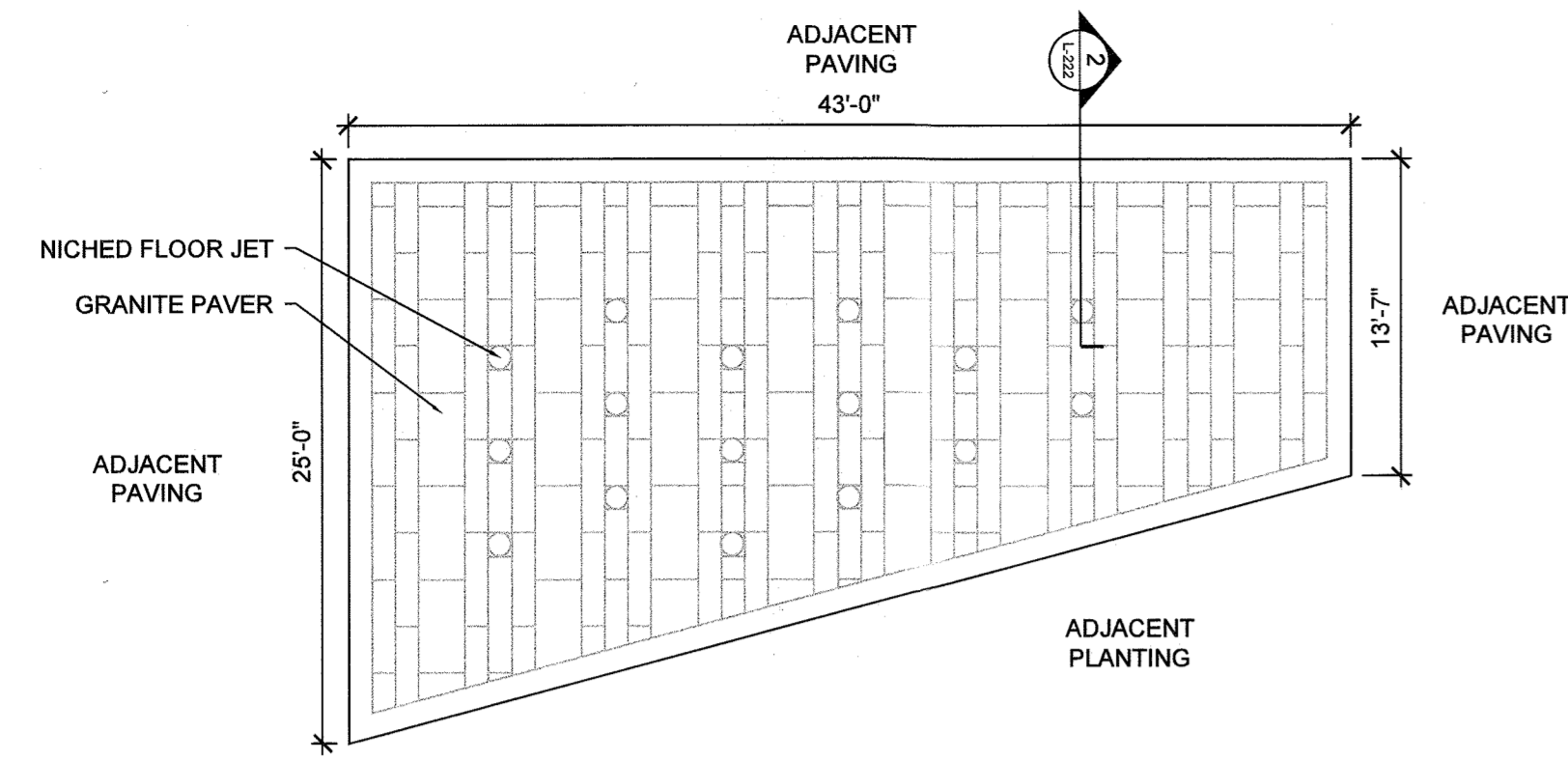
WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION	CENSUS TRACT	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PHASE I AREA 3	PARCEL D
PLAT OR L.P.	BLOCK #	TAX ZONE/MAP	CELSUS TRACT
N/A	N/A	36	5
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			

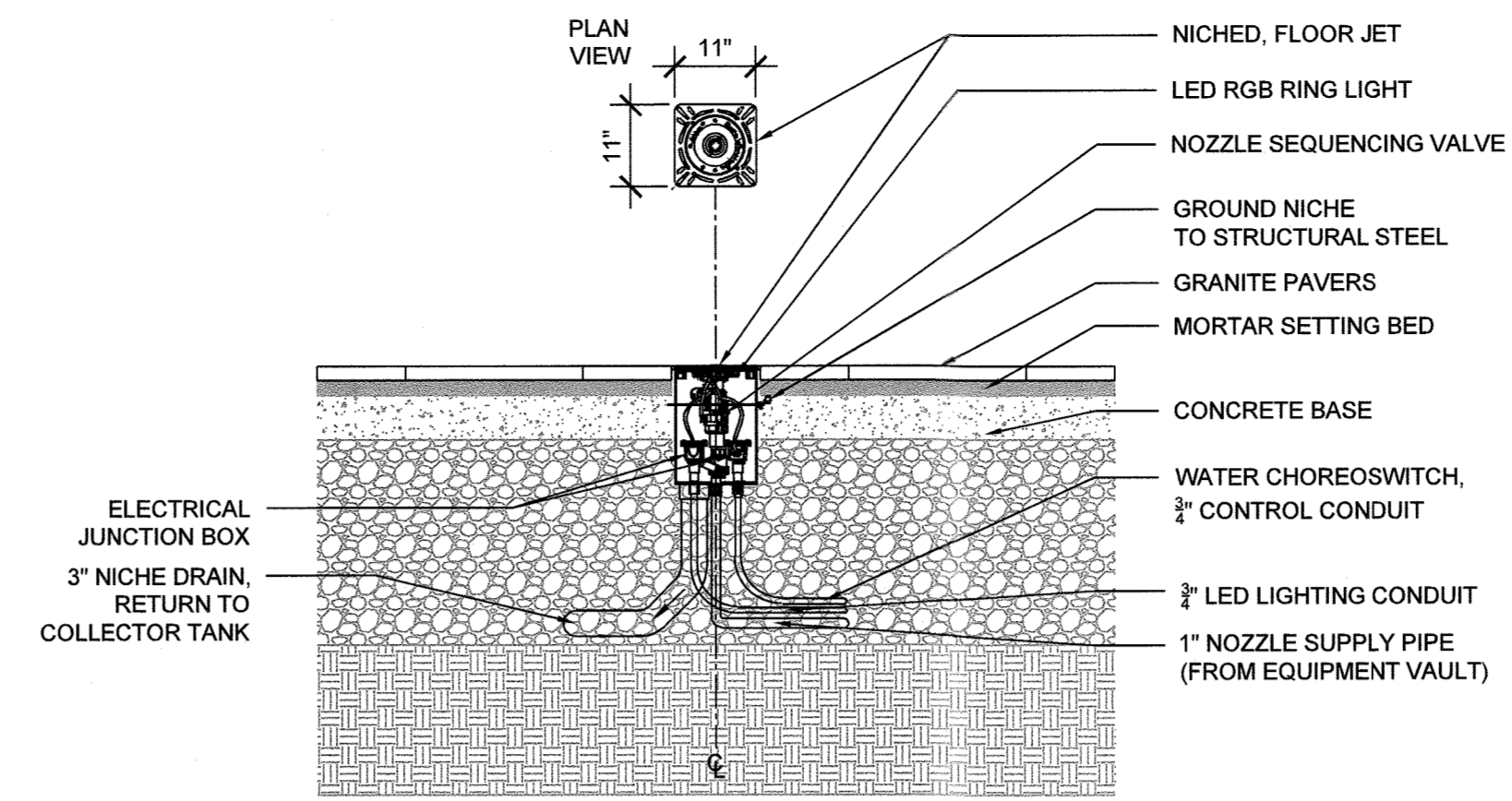
TITLE
L-211 - SITE AMENITY DETAILS

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	63 of 94

SDP-17-027



1 SPLASH FOUNTAIN PLAN
1/8"=1'-0"



2 SPLASH FOUNTAIN PAVING DETAIL
1/2"=1'-0"

REVISD SITE DEVELOPMENT PLAN

Date	No.	Revision Description
11/18/2019	3	HARDSCAPE AND PLANTING REVISIONS

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

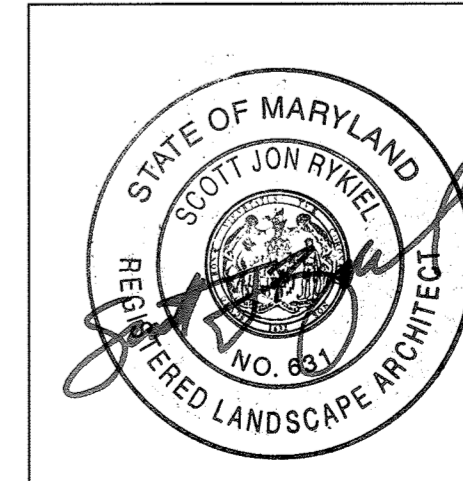
MAHAN RYKIEL
ASSOCIATES INC

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT	AREA 3	PARCEL D
PLAT# OR L.P.	BLOCK #	TAX ZONE/APP	ELECT. DISTRICT
N/A	DMAH	36	5
WATER CODE	SEWER CODE	CENSUS TRACT	
550	LITTLE PATUXENT	605602	

TITLE
L-222 - FOUNTAIN DETAILS

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017,
SDP-16-075, SDP-18-005, WP-17-010,
WP-17-049, WP-17-052, WP-17-059,
WP-17-115, WP-18-020, WP-18-021,
SP-16-009, WP-17-100
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE
DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM A
DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE
STATE OF MARYLAND, LICENSE NO. 631,
EXPIRATION DATE: 9/21/2019.

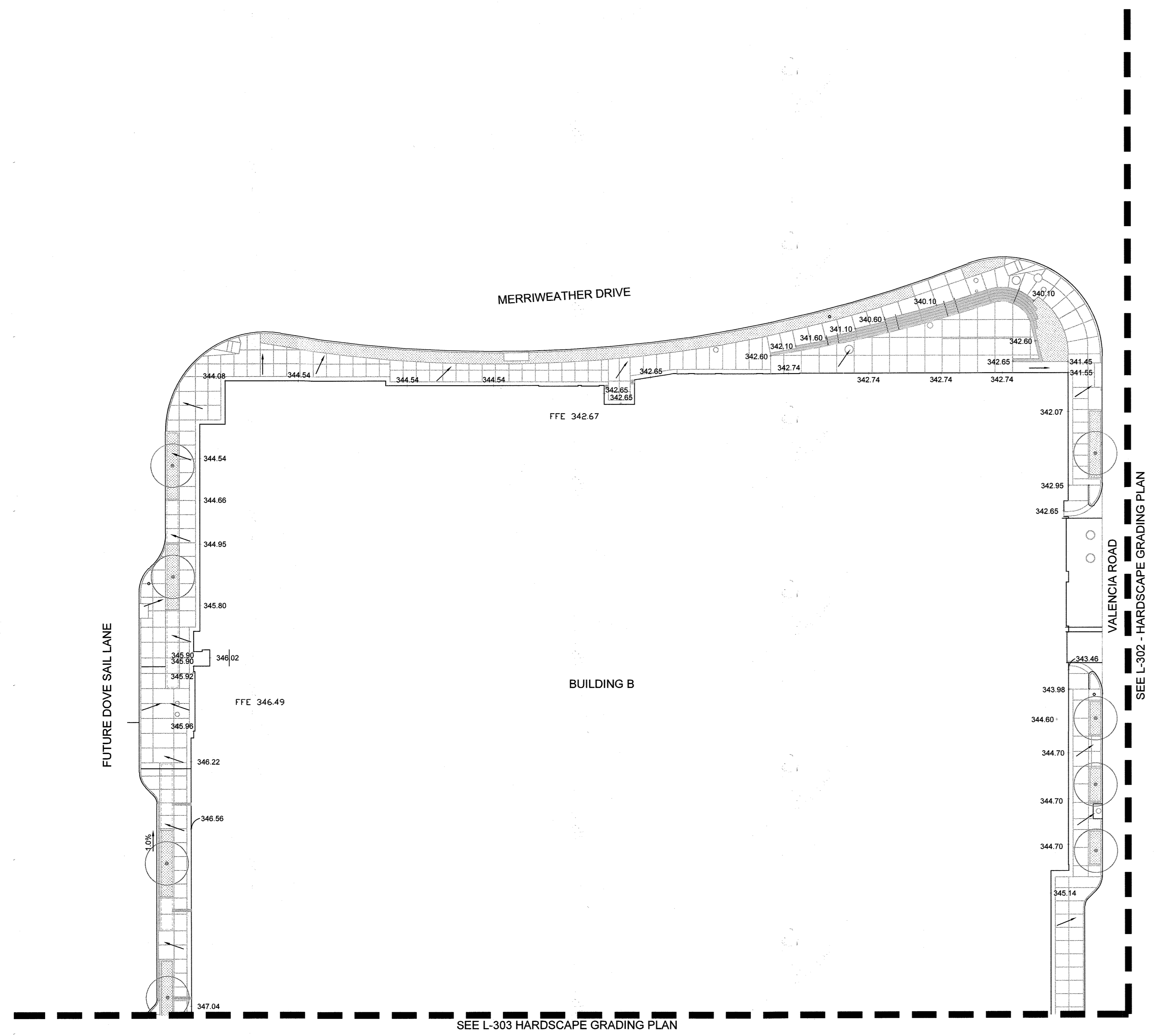


APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved ..	65 of 94

SDP-17-027

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 2/28/20
CHIEF, DEVELOPMENT ENGINEERING DIVISION, DATE
[Signature] 3/6/2020
CHIEF, DIVISION OF LAND DEVELOPMENT, DATE
[Signature] 3-10-2020
DIRECTOR, DATE



GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

SHEET NOTES:

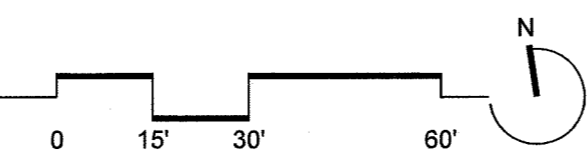
- SEE CIVIL DRAWING SHEETS (16, 28 - 33 OF 94) FOR ALL GRADING IN VEHICULAR AREAS
- GRADING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD ARE PER F-15-106 AND F-16-107.

FILE NUMBERS:
 F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-043, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.

1 HARDSCAPE GRADING PLAN
 1"=30'

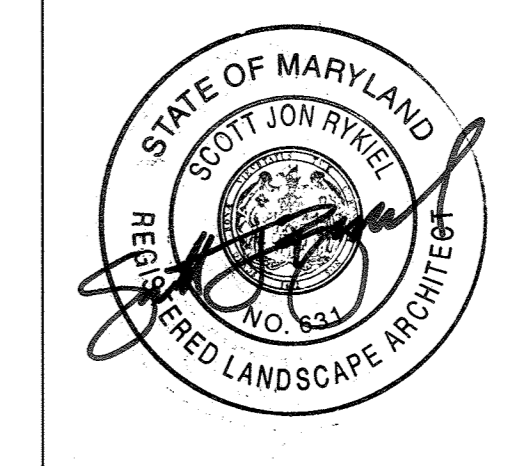


REVISD SITE DEVELOPMENT PLAN

Date	No.	Revision Description
11/18/2018	3	HARDSCAPE AND PLANTING REVISIONS

**DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I**
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800



**MAHAN RYKIEL
 ASSOCIATES INC**

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT	PHASE I AREA 3	PARCEL D
PLAT # OR L.P.	BLOCK # ZONE	TAX ZONE/MAP	DISTRICT
N/A	D/M/A/M	36	5
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			605602

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

TITLE	L-301 - HARDSCAPE GRADING PLAN	
Des. By	JK	SCALE AS SHOWN
Drn. By	BB	Date 1-18-18
Chk. By	JK/MP	Approved --
Proj. No. 04038.B0		66 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

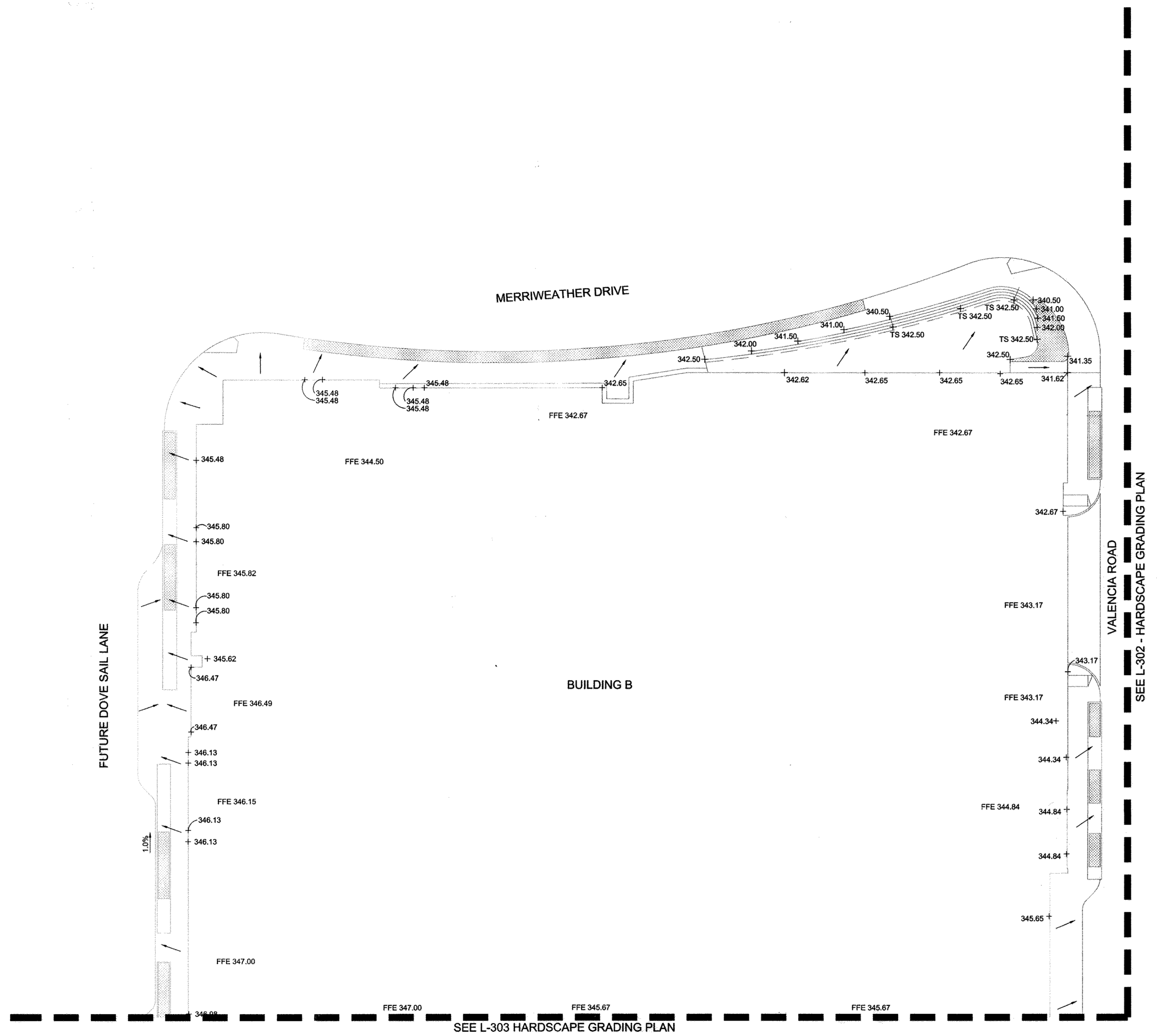
[Signature] 2/28/20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 3/6/2020
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 3-10-2020
 DIRECTOR DATE

GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.



SHEET NOTES:

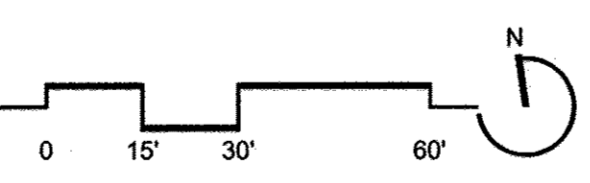
- SEE CIVIL DRAWING SHEETS (16, 28 - 33 OF 94) FOR ALL GRADING IN VEHICULAR AREAS
- GRADING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD ARE PER F-15-108 AND F-16-107.

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.

1 HARDSCAPE GRADING PLAN
 1"=30'

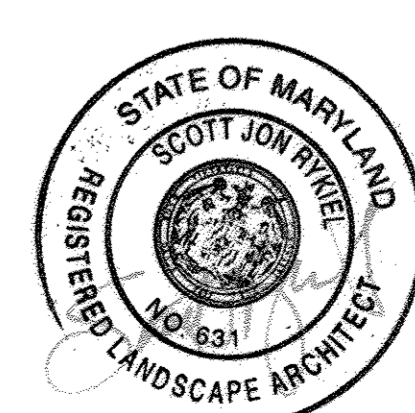


APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 5-30-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 6-7-18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 6-15-18
 DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE



APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

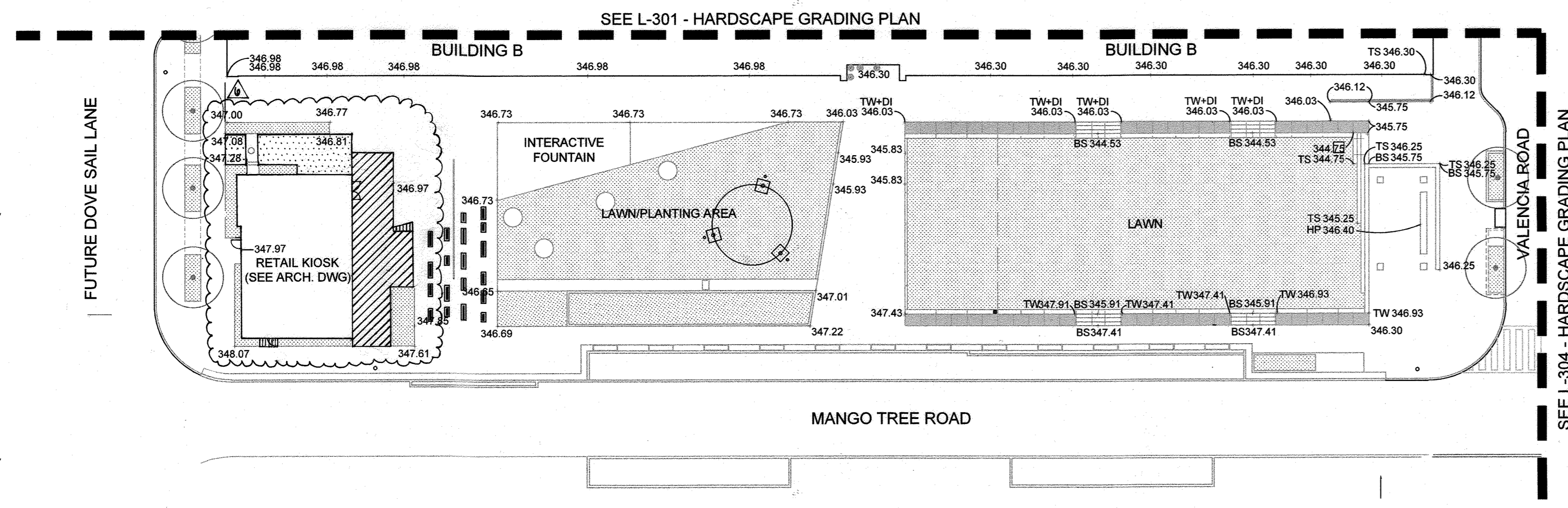
MAHAN RYKIEL ASSOCIATES INC

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD PHASE I AREA 3	PARCEL D
PLAT/ OR L/P	BLOCK #	TAX / OR MAP
N/A	36	5
WATER CODE	SEWER CODE	CENSUS TRACT
550	LITTLE PATUXENT	605602

TITLE
L-302 - HARDSCAPE GRADING PLAN

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.00
Drn. By BB	Date 5-10-18	
Chk. By JK/MP	Approved	67 of 94



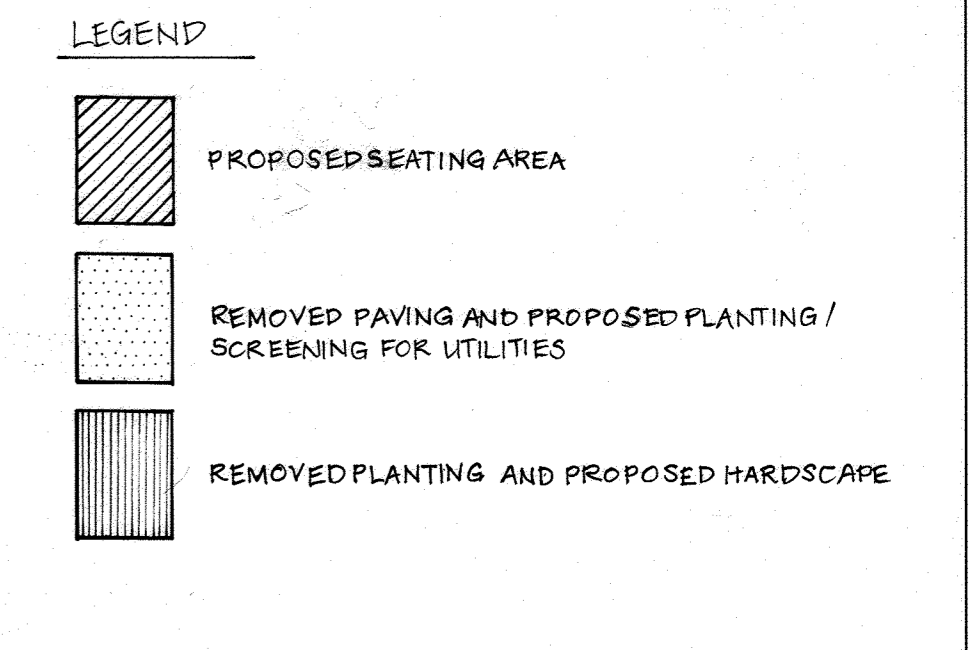
SHEET NOTES:

- SEE CIVIL DRAWING SHEETS (16, 28 - 33 OF 94) FOR ALL GRADING IN VEHICULAR AREAS
- GRADING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD ARE PER F-15-106 AND F-16-107.

GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

1 HARDSCAPE GRADING PLAN
 1"=30'



11/15/21	▲	ADDED SEATING AREA/UPDATED DOOR LOCATIONS
11/16/21	▲	HARDSCAPE REVISIONS

▲ REVISED SITE DEVELOPMENT PLAN

Date	No.	Revision Description
11/18/2019	▲	HARDSCAPE AND PLANTING REVISIONS

**DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I**
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14
OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

FOR REVISION NO. 1 ONLY

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE 9/21/2019.

FILE NUMBERS:
 F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

MAHAN RYKIEL ASSOCIATES INC

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

SECTION	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D
PLAT OR LP	BLOCK # ZONE	TAX ZONE/APP
N/A	36	5
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	

TITLE
L-303 - HARDSCAPE GRADING PLAN

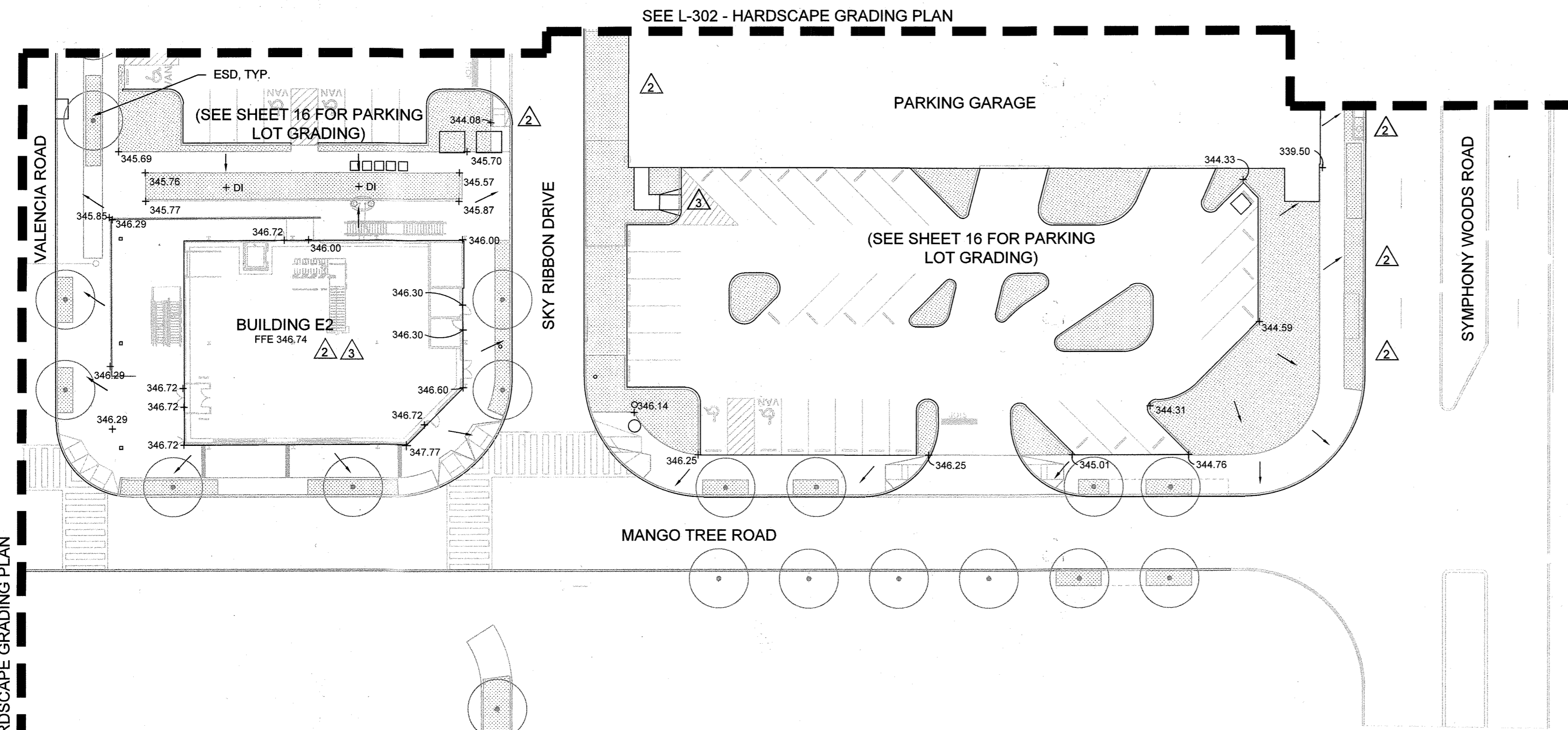
Des. By JK	SCALE AS SHOWN	Proj. No. 04038.00
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	68 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

2-28-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

3/6/2020
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

3-18-2020
 DIRECTOR DATE



SHEET NOTES:

- SEE CIVIL DRAWING SHEETS (16, 28 - 33 OF 94) FOR ALL GRADING IN VEHICULAR AREAS
- GRADING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD ARE PER F-15-106 AND F-16-107.

GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

1 HARDSCAPE GRADING PLAN
 1"=30'

REVISIED SITE DEVELOPMENT PLAN

Date	No.	Revision Description
11/18/2019	1	HARDSCAPE AND PLANTING REVISIONS
3/6/2019	1	BUILDING, GRADING REVISIONS

**DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-059,
 WP-17-115, WP-18-020, WP-18-021,
 SP-16-009, WP-17-100

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



**MAHAN RYKIEL
 ASSOCIATES INC**

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PHASE I AREA 3, PHASE I	PARCEL D
PLAT OR LP	BLOCK #	TAX ZONE/MAP	ELECT DISTRICT
N/A	N/A	36	5
WATER CODE	SEWER CODE	STAGE	PARCEL D
550	LITTLE PATUXENT		605602

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

TITLE
L-304 - HARDSCAPE GRADING PLAN

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	69 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 1-23-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION, DATE

[Signature] 3/6/2020
 CHIEF, DIVISION OF LAND DEVELOPMENT, DATE

[Signature] 3-10-2020
 DIRECTOR, DATE

MASTER PLANT SCHEDULE

QTY.	KEY	BOTANICAL/Common Name	SIZE	ROOT	COMMENTS	QTY.	KEY	BOTANICAL/Common Name	SIZE	ROOT	COMMENTS	
TREES						SEASONAL ROTATION (SPRING / FALL)						
14	AR	Acer rubrum 'October Glory'	3.5" Cal.	B&B	North American Native	50	AGH	Achillea 'Moonshine'	#1	Cont.	North American Native	
		October Glory Red Maple			Central Leader, Full Canopy			Yarrow			18" O.C.	
3	9	Ginkgo biloba 'Princeton Sentry'	3.5" Cal.	B&B	Central Leader, Full Canopy	220	AMS	Amsonia hubrichtii	#1	Cont.	North American Native	
		Princeton Sentry Ginkgo						Threadleaf Bluestar			24" O.C.	
15	GT	Gleditsia triacanthos var. inermis	3.5" Cal.	B&B	Central Leader, Full Canopy	71	ASC	Asclepias tuberosa	SP#4	Cont.	North American Native	
		Thornless Honey Locust						Butterfly Weed			18" O.C.	
8	PA	Platanus x acerifolia 'Bloodgood'	3.5" Cal.	B&B	Central Leader, Full Canopy	75	CAR	Carex pensylvanica	#1	Cont.	North American Native	
		London Planetree						Pennsylvania Sedge			15" O.C.	
3	6	Quercus phellos 'Hightower'	3.5" Cal.	B&B	North American Native	172	CHE	Chelone glabra	#1	Cont.	North American Native	
		Hightower Willow Oak			Central Leader, Full Canopy			White Turtlehead			18" O.C.	
12	QR	Quercus rubra	3.5" Cal.	B&B	North American Native	63	CON	Conoclinium coelestinum	#1	Cont.	North American Native	
		Northern Red Oak			Central Leader, Full Canopy			Perennial Ageratum			18" O.C.	
32	TO	Thuja occidentalis 'Smaragd'	3.5" Cal.	B&B	Full	371	DES	Deschampsia flexuosa	#1	Cont.	North American Native	
		Emerald Green Arborvitae						Wavy Hair Grass				
11	TT	Tilia tomentosa 'Sterling'	3.5" Cal.	B&B	Central Leader	413	ECH	Echinacea purpurea	#1	Cont.	North American Native	
		Silver Linden			Full Canopy, Matched			Purple Coneflower			18" O.C.	
3	20	Ulmus americana 'Princeton'	3.5" Cal.	B&B	North American Native	280	EUR	Euphorbia amygdaloides var. robbiae	#1	Cont.	18" O.C.	
		Princeton American Elm			Full Canopy, Central Leader			Wood Spurge				
3	7	Ulmus parviflora 'Bosque'	3.5" Cal.	B&B	Central Leader, Full Canopy	143	HEM	Hemerocallis 'Hyperion'	#1	Cont.	24" O.C.	
		Bosque Elm						Daylily				
						307	HEU	Heuchera 'Palace Purple'	#1	Cont.	North American Native	
								Coral Bells			18" O.C.	
3	CC	Carpinus caroliniana	3" Cal.	B&B	North American Native	360	HYP	Hypericum calycinum	#1	Cont.	12" O.C.	
		American Hornbeam			Central Leader			St. John's Wort				
3	2	CK	Cladrastis kentuckea 'Perkins Pink'	3" Cal.	B&B	North American Native	63	IRI	Iris versicolor	#1	Cont.	North American Native
		Perkins Pink Yellowwood			Specimen, Full Canopy			Blue Flag Iris			18" O.C.	
15	IN	Ilex x 'Nellie R. Stevens'	8' Ht.	B&B	Full, Heavy	4613	LIR	Liriope muscari	#1	Cont.	12" O.C.	
		Nellie Stevens Holly			Matched, (1) Male			Lilyturf				
						137	NEP	Nepeta x faassenii 'Walker's Low'	#1	Cont.	18" O.C.	
								Catmint				
72	AG	Abelia x grandiflora 'Little Richard'	#3	Cont.		187	OPH	Ophiopogon japonicus	#1	Cont.		
		Little Richard Abelia						Mondo Grass			8" O.C.	
71	AZ	Azalea 'Delaware Valley White'	#5	Cont.	21" Spd.	153	PAN	Panicum virgatum	#1	Cont.	North American Native	
		Delaware Valley White Azalea			Full, Matched			Switchgrass			36" O.C.	
44	CL	Clethra alnifolia 'Sixteen Candles'	#5	Cont.	North American Native	50	PED	Penstemon digitalis	#1	Cont.	18" O.C.	
		Sweet Pepperbush						Beardtongue				
3	CS	Cornus sericea	#7	Cont.	North American Native	565	PEN	Pennisetum alopecuroides 'Hamel'	#1	Cont.	18" O.C.	
		Red Twig Dogwood						Dwarf Fountain Grass				
170	IG	Ilex glabra 'Chamzin'	#5	Cont.	North American Native	68	PYC	Pycnanthemum muticum	#1	Cont.	North American Native	
		Nordic Inkberry						Mountain Mint			18" O.C.	
17	IV	Ilex verticillata 'Red Sprite' /	#3	Cont.	North American Native	24	SED	Sedum 'Autumn Joy'	#1	Cont.	18" O.C.	
		Red Sprite Winterberry			24" HT.			Stonecrop				
302	JC	Juniperus conferta 'Blue Pacific'	#3	Cont.	12" Spd.	749	SPO	Sporobolus heterolepis	#1	Cont.	North American Native	
		Blue Pacific Juniper			18" O.C.			Prairie Dropseed			24" O.C.	
237	PL	Prunus laurocerasus 'Otto Luyken'	30" Spd.	B&B	Full, Matched	586	SYR	Syphitrichum oblongifolius 'Raydon's Favorite'	#1	Cont.	North American Native	
		Cherry Laurel						Aromatic Aster			12" O.C.	
6	PM	Pinus mugo 'Slowmound'	24" Spd.	B&B	Full, Matched							
32	PS	Prunus laurocerasus 'Schipkaensis'	48" Ht., #15	Cont.	Full, Matched	3	IM	Ilex x aquiperry 'Meschick'	8' Ht.	B&B	North American Native	
		Skip Laurel						Dragon Lady Holly				
20	RC	Rhododendron catawbiense 'Roseum Elegans'	42" Spd.	B&B								
		Roseum Elegans Rhododendron										
130	RR	Rosa 'Radrazz'	#5	Cont.	24" Ht.							
		Knock Out Rose			Red Flower							
215	TD	Taxus x media 'Densiflora'	24" Spd.	B&B	Full, Matched							
		Densiflora Yew										
57	VR	Viburnum rhytidophyllum	42" Spd.	B&B	Full, Matched							
		Leatherleaf Viburnum										

LANDSCAPE SURETY QUANTITIES

SHADE TREES	75	△△△
ORNAMENTAL TREES	21	△△△
EVERGREEN TREES	32	
SHRUBS	1333	

WHILE ALL TREES SHOWN HAVE BEEN INCLUDED IN THE MASTER PLAN LIST, TREES CARRIED IN THE SURETY CALCULATIONS FOR F-17-059 AND F-18-017 HAVE NOT BEEN INCLUDED IN THIS SURETY CALCULATION.

FINANCIAL SURETY FOR REQUIRED PLANTING HAS BEEN POSTED IN THE AMOUNT OF \$70,440 FOR THE 75 SHADE TREES (\$300 EA.), 53 ORNAMENTAL AND EVERGREEN TREES (\$150 EA.), AND 1,333 SHRUBS (\$30).

SURETY FOR PUBLIC MICROBIORETENTION PLANTING WILL BE ASSESSED AS A PART OF THE DEPARTMENT OF PUBLIC WORKS MICROBIORETENTION SURETY.

GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

CERTIFICATION NOTE:

- I/WE 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 LANDSCAPE MANUAL FOR ALTERNATIVE COMPLIANCE AND THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

[Signature]
DEVELOPER'S/OWNER'S NAME
[Signature]
DEVELOPER'S/OWNER'S NAME

1 MASTER PLANT SCHEDULE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 2-28-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 3/6/2020
DATE

DIRECTOR
[Signature] 3-10-2020
DATE

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017,
SDP-16-075, SDP-18-005, WP-17-010,
WP-17-049, WP-17-052, WP-17-059,
WP-17-115, WP-18-020, WP-18-021,
SP-16-005, WP-17-100

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

11/18/2019	△△△	REVISED SITE DEVELOPMENT PLAN
3/8/2019	△	PLANTING QUANTITY + SURETY UPDATES
	△	PLANTING QUANTITY + SURETY UPDATES
	△	PLANTING QUANTITY + SURETY UPDATES
Date	No.	Revision Description

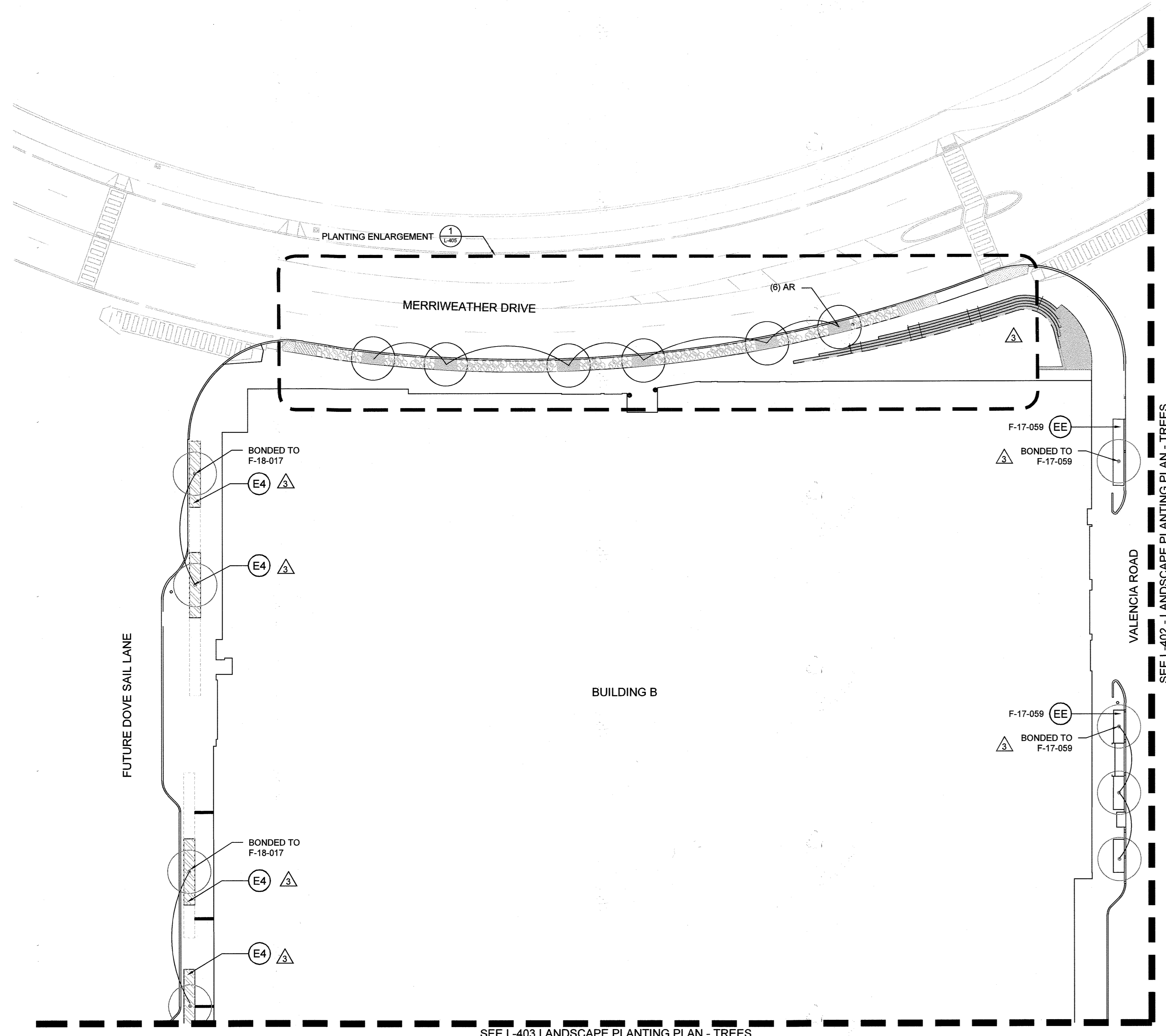
DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14
OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

MAHAN RYKIEL
ASSOCIATES INC

SUBDIVISION NAME: DOWNTOWN COLUMBIA		SECTION/AREA: PHASE I AREA 3	LOT/PARCEL #:
PLAT OR L.P.:	BLOCK #:	TAX ZONE/WARD:	PARCEL D:
N/A	36	5	605602
WATER CODE:	SEWER CODE:	STAGE:	
550	LITTLE PATUXENT		

TITLE: **L-400 - LANDSCAPE PLANT SCHEDULE & NOTES**

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	70 of 94



LANDSCAPE KEY

- T1 (6) TREE PIT PLANTING 1: 5'x15', TYP.
- T2 (7) TREE PIT PLANTING 2: 5'x25', TYP.
- T3 (8) TREE PIT PLANTING 3: 5'x30', TYP.
- E1 (1) ESD PLANTING 1: 5'x15', TYP.
- E2 (2) ESD PLANTING 2: 5'x20', TYP.
- E3 (3) ESD PLANTING 3: 5'x25', TYP.
- E4 (4) ESD PLANTING 4: 5'x30', TYP.
- E5 (5) ESD PLANTING 5: 5'x40', TYP.
- EE EXISTING ESD PLANTING, SEE CIVIL F-PLAN

GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

CERTIFICATION NOTE:

- I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 18.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL FOR ALTERNATIVE COMPLIANCE AND THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Wm. T. Boate
DEVELOPER'S/OWNER'S NAME

Wm. T. Boate
DEVELOPER'S/OWNER'S NAME

REVISED SITE DEVELOPMENT PLAN

Date	No.	Revision Description
11/18/2019	3	HARDSCAPE AND PLANTING REVISIONS

**DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



**MAHAN RYKIEL
ASSOCIATES INC**

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
410-235-6001 - WWW.MAHANRYKIEL.COM

SECTION/AREA	SECTION/AREA	SECTION/AREA	SECTION/AREA
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
PLANT OR LOT	BLOCK # ZONE	FAX ZONE/MAP	BLK CT DISTRICT
N/A	D/MAH	36	5
WATER CODE	SEWER CODE	STAGE	CENSUS TRACT
550	LITTLE PATUXENT		605602

APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

TITLE: **L-401 - LANDSCAPE PLANTING PLAN - TREES**

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	71 of 94

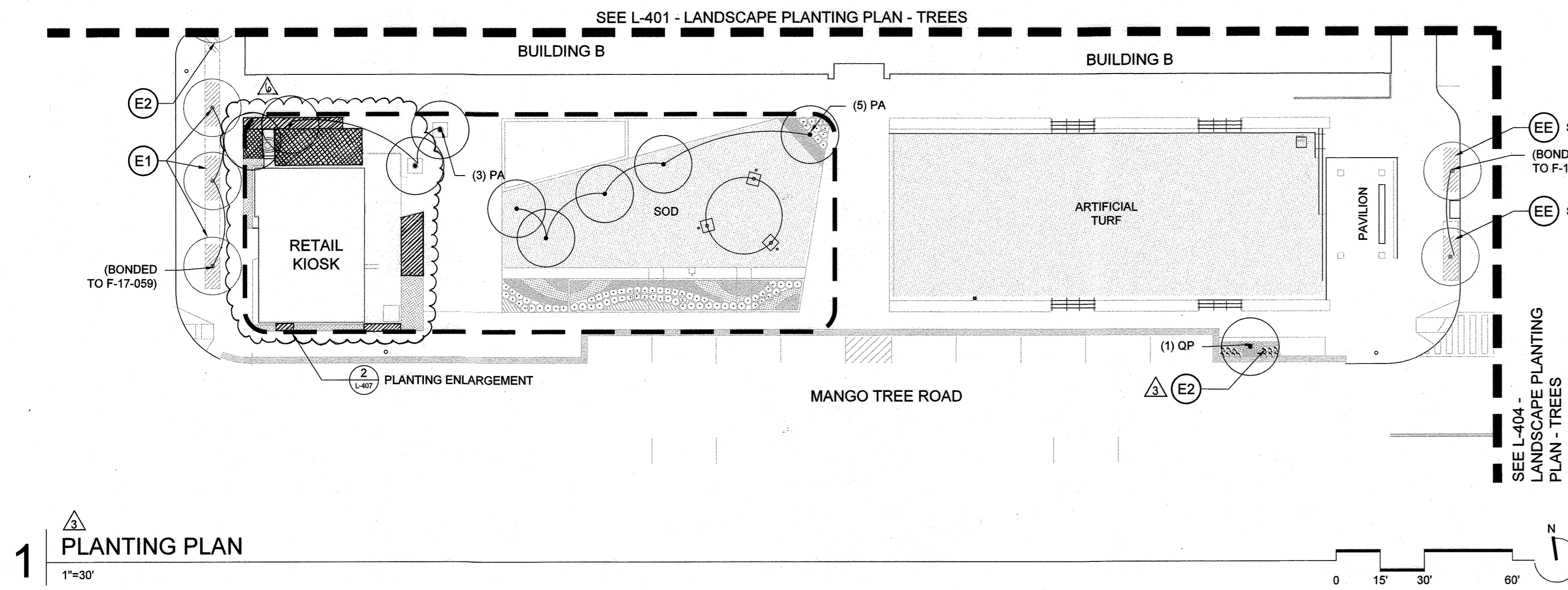
1 PLANTING PLAN
1"=30'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Paul Blumberg 2-28-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Jim 3/6/2020
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Shy Gorn 3-10-2020
DIRECTOR DATE



1 PLANTING PLAN
1"=30'

LANDSCAPE KEY

- T1 TREE PIT PLANTING 1: 5'x15', TYP.
- T2 TREE PIT PLANTING 2: 5'x25', TYP.
- T3 TREE PIT PLANTING 3: 5'x30', TYP.
- E1 ESD PLANTING 1: 5'x15', TYP.
- E2 ESD PLANTING 2: 5'x20', TYP.
- E3 ESD PLANTING 3: 5'x25', TYP.
- E4 ESD PLANTING 4: 5'x30', TYP.
- E5 ESD PLANTING 5: 5'x40', TYP.
- EE EXISTING ESD PLANTING, SEE CIVIL F-PLAN

GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

CERTIFICATION NOTE:

- I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 18.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL FOR ALTERNATIVE COMPLIANCE AND THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER/SOWNER'S NAME
Wm. J. Rowe

DEVELOPER/SOWNER'S NAME
Wm. J. Rowe

FOR REVISION NO. ONLY

PROFESSIONAL NUMBER - 3468

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3458, OPERATION DATE: 11/15/2021.

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



LEGEND

- PROPOSED PLANTING
- REMOVED PLANTING

11/19/21	RELOCATE EXISTING TREE AND PLANTING
11/15/21	PLANTING REVISIONS
REVISED SITE DEVELOPMENT PLAN	
11/18/2019	HARDSCAPE AND PLANTING REVISIONS
3/6/2019	BUILDING REVISIONS
Date	Revision Description

**DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

**MAHAN RYKIEL
ASSOCIATES INC**

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD		PARCEL D
PLAT/ OR L.P.	BLOCK #	TAX ZONE/MAP	BLK. DISTRICT
N/A		36	5
WATER CODE	SEWER CODE		CENSUS TRACT
550	LITTLE PATUXENT		605602

TITLE: **L-403 - LANDSCAPE PLANTING PLAN - TREES**

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.00
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	73 of 94

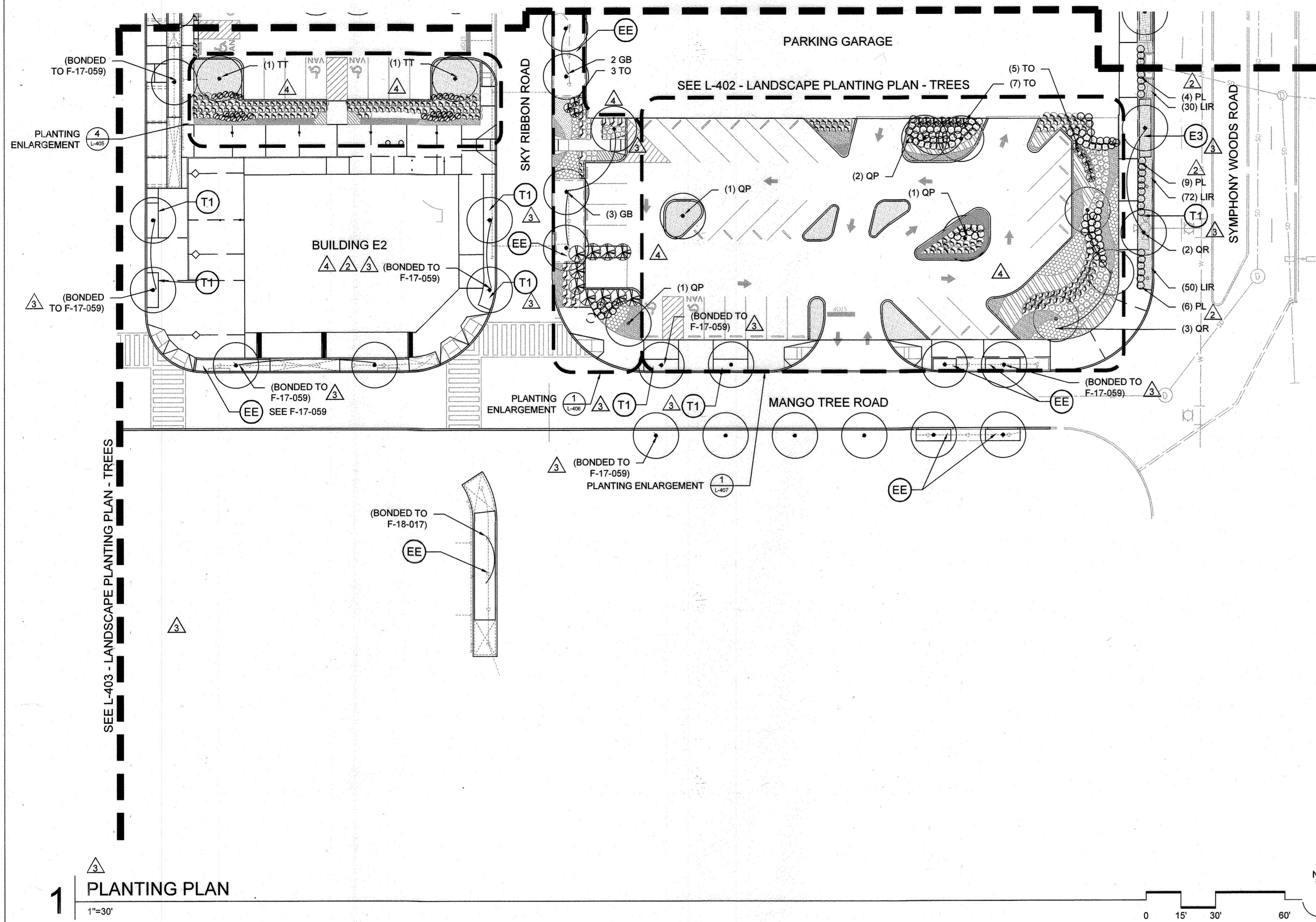
APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Paul Chamberlain 2-28-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

John 3/6/2020
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Colby Gove 3-10-2020
DIRECTOR DATE



- LANDSCAPE KEY**
- T1 (6/408) TREE PIT PLANTING 1: 5'x15', TYP.
 - T2 (7/408) TREE PIT PLANTING 2: 5'x25', TYP.
 - T3 (8/408) TREE PIT PLANTING 3: 5'x30', TYP.
 - E1 (1/408) ESD PLANTING 1: 5'x15', TYP.
 - E2 (2/408) ESD PLANTING 2: 5'x20', TYP.
 - E3 (3/408) ESD PLANTING 3: 5'x25', TYP.
 - E4 (4/408) ESD PLANTING 4: 5'x30', TYP.
 - E5 (5/408) ESD PLANTING 5: 5'x40', TYP.
 - EE EXISTING ESD PLANTING, SEE CIVIL F-PLAN

GENERAL LANDSCAPE NOTES:

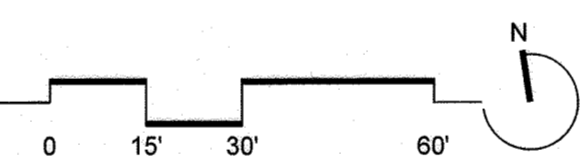
- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

CERTIFICATION NOTE:

- I/WE 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 LANDSCAPE MANUAL FOR ALTERNATIVE COMPLIANCE AND THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Wm T Rowe 11-16-2020
 DEVELOPER'S/OWNER'S NAME
Wm T Rowe
 DEVELOPER'S/OWNER'S NAME

1 PLANTING PLAN
 1"=30'



Date	No.	Revision Description
7/31/2020	1	DUMPSTER AND E2 DESIGN
11/18/2019	2	HARDSCAPE AND PLANTING REVISIONS
3/6/2019	3	BUILDING AND PLANTING REVISIONS

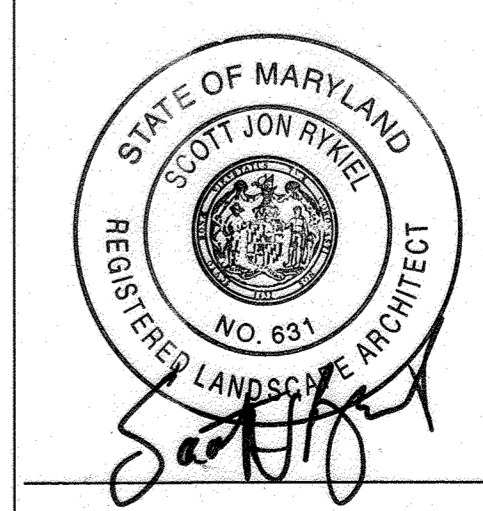
**DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I**
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F-18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-059,
 WP-17-115, WP-18-020, WP-18-021,
 SP-16-009, WP-17-100

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



**MAHAN RYKIEL
 ASSOCIATES INC**

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200 410-235-6001 - WWW.MAHANRYKIEL.COM	
SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION/AREA CRESCENT NEIGHBORHOOD
PLAT OR LOT N/A	LOT/PARCEL # 605602
WATER CODE 550	SEWER CODE LITTLE PATUXENT
STAGE	

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

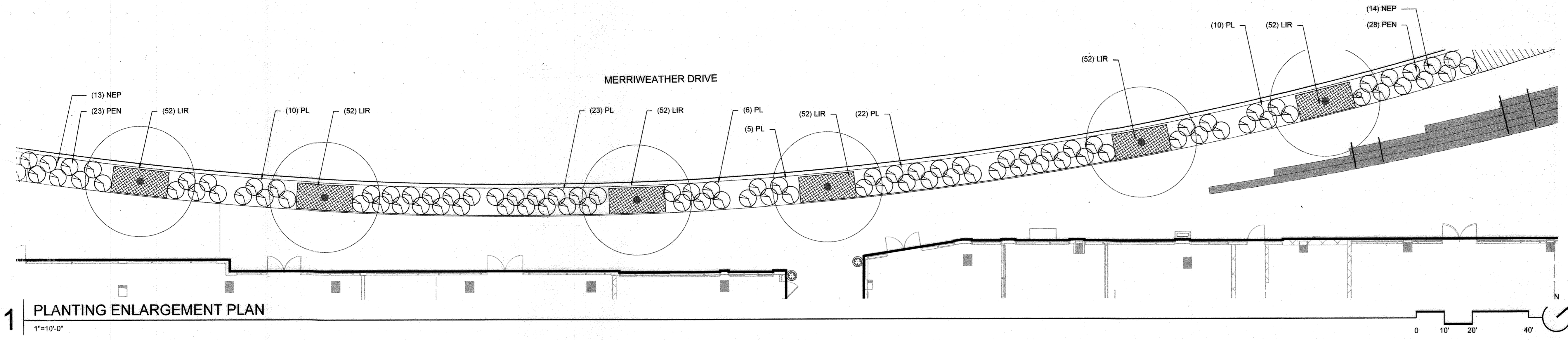
TITLE L-404 - LANDSCAPE PLANTING PLAN - TREES		
Des. By JK	SCALE AS SHOWN	Proj. No. 04038.00
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	74 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 11-30-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

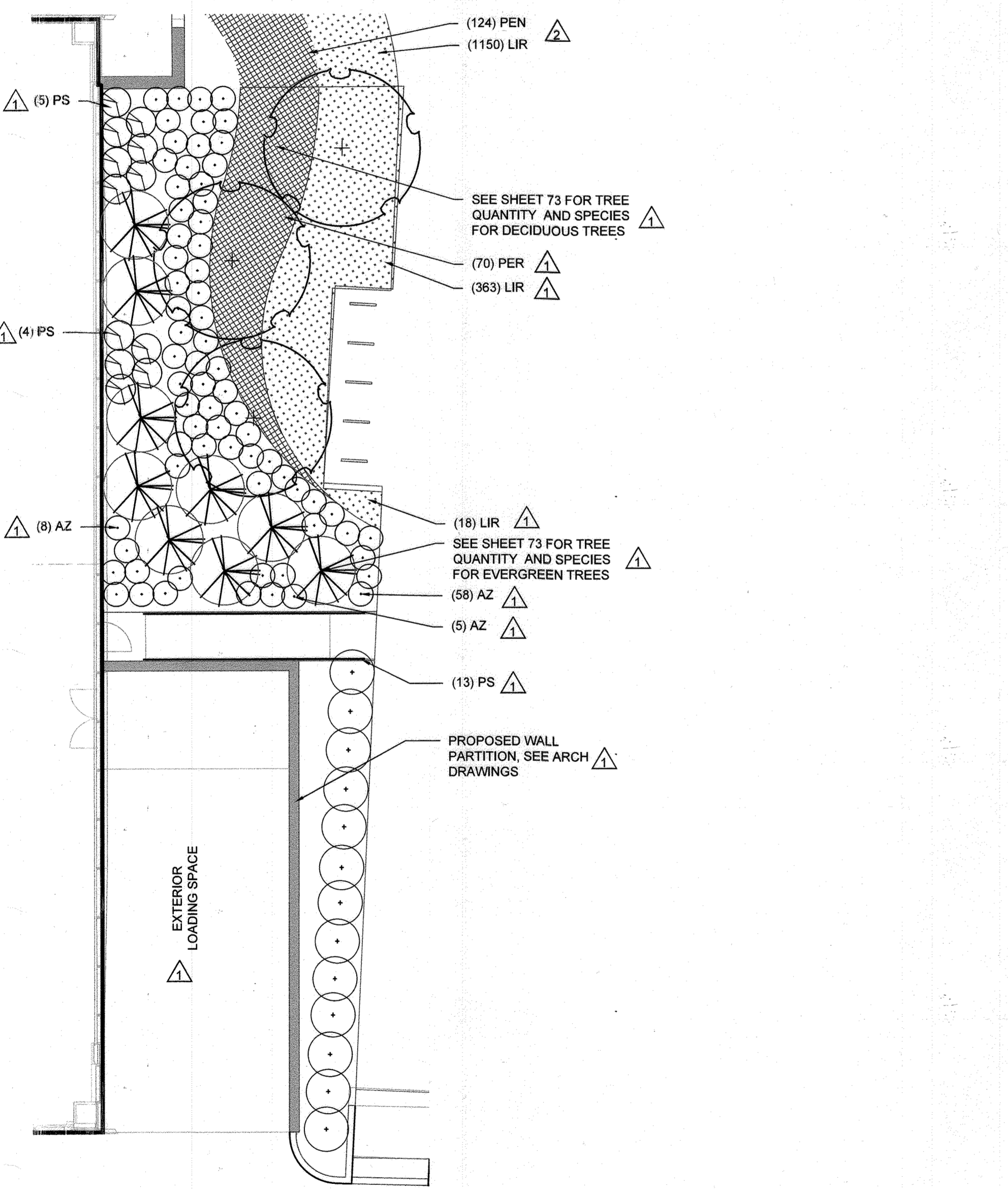
[Signature] 12/14/20
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 12-16-20
 DIRECTOR DATE



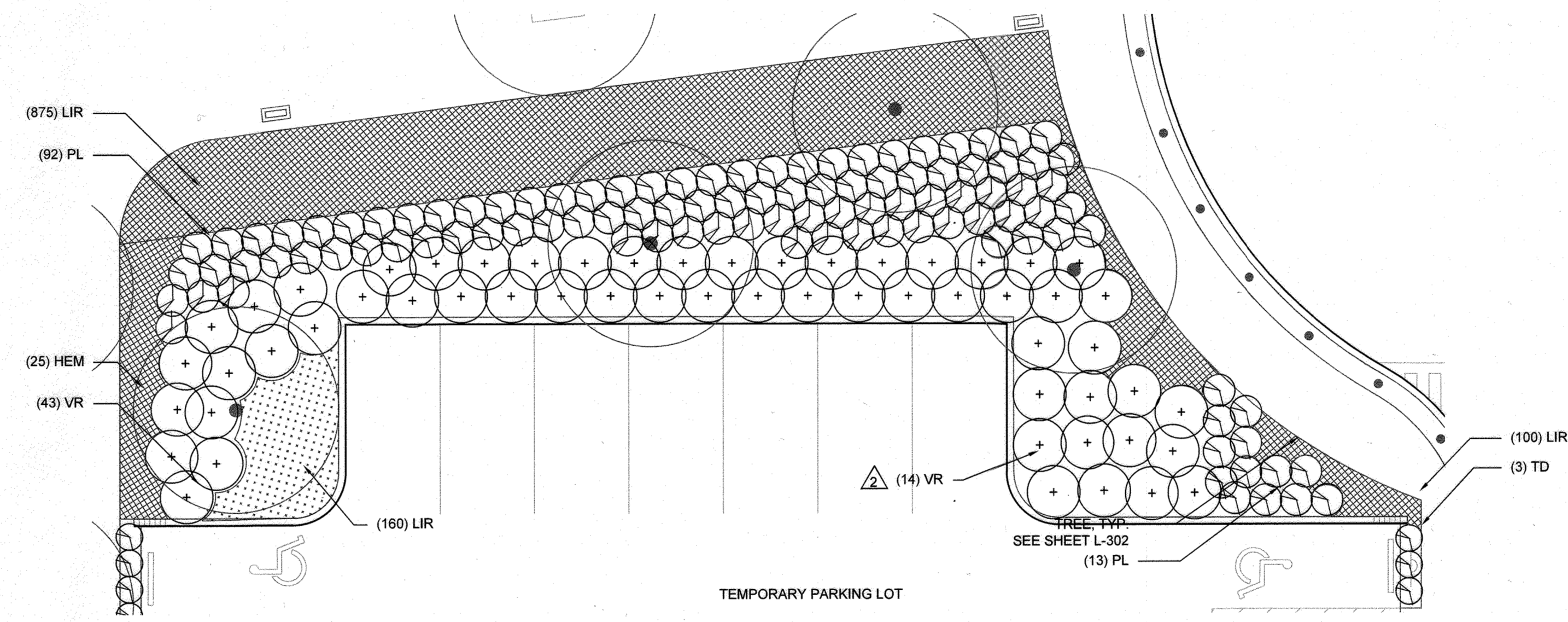
1 PLANTING ENLARGEMENT PLAN
1"=10'-0"

- LANDSCAPE KEY**
- (T1) (6) (L-405) TREE PIT PLANTING 1: 5'x15', TYP.
 - (T2) (7) (L-405) TREE PIT PLANTING 2: 5'x25', TYP.
 - (T3) (8) (L-405) TREE PIT PLANTING 3: 5'x30', TYP.
 - (E1) (1) (L-405) ESD PLANTING 1: 5'x15', TYP.
 - (E2) (2) (L-405) ESD PLANTING 2: 5'x20', TYP.
 - (E3) (3) (L-405) ESD PLANTING 3: 5'x25', TYP.
 - (E4) (4) (L-405) ESD PLANTING 4: 5'x30', TYP.
 - (E5) (5) (L-405) ESD PLANTING 5: 5'x40', TYP.
 - (EE) EXISTING ESD PLANTING, SEE CIVIL F-PLAN

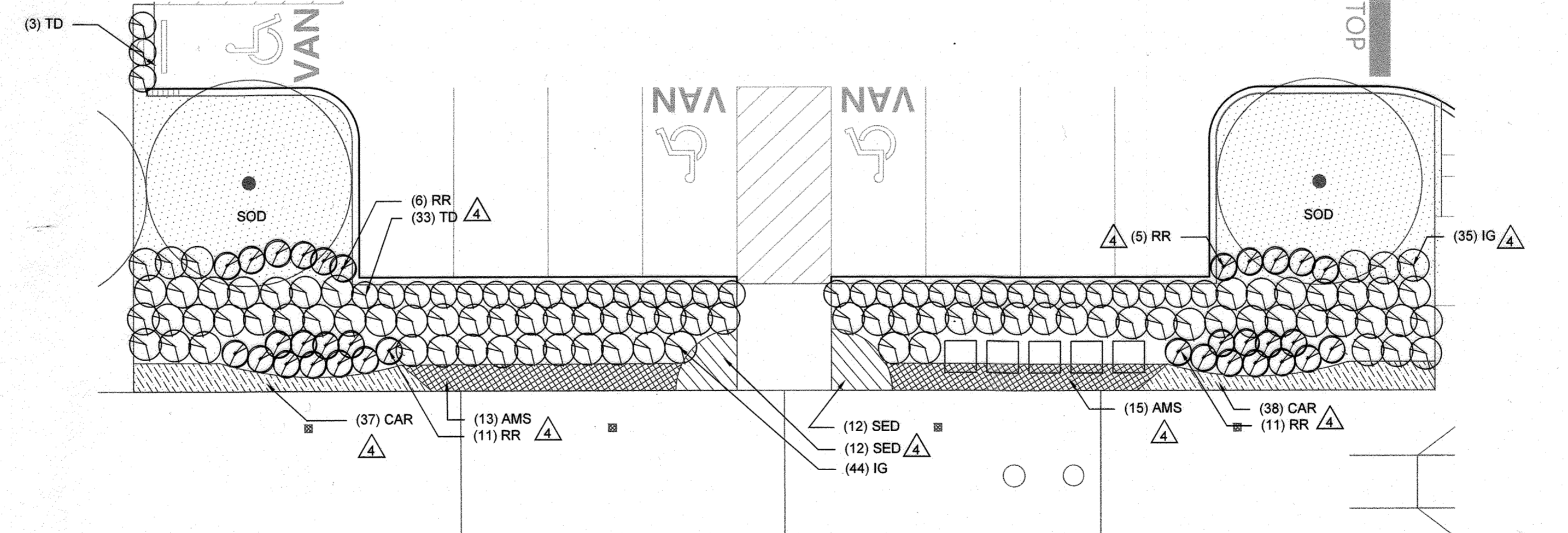


2 PLANTING ENLARGEMENT PLAN
1"=10'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 11/30/20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 12/16/20
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 12-16-20
 DIRECTOR



3 PLANTING ENLARGEMENT PLAN
1"=10'



4 PLANTING ENLARGEMENT PLAN
1"=10'

CERTIFICATION NOTE:

1. I/WE 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 LANDSCAPE MANUAL FOR ALTERNATIVE COMPLIANCE AND THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

[Signature] 11-11-2020
 DEVELOPER'S/OWNER'S NAME
 Wm. I. Rowe Sr.
 DEVELOPER'S/OWNER'S NAME

GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

REVISOR'S SITE DEVELOPMENT PLAN

Date	No.	Revision Description
7/31/2020	1	DUMPSTER AND E2 DESIGN
	2	PARKING LOT AND BLDG REVISIONS
	3	PLANTING AND PATHWAY REVISIONS AND REVISED PLANTING AREA WITH NEW SITE CURB

**DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-059,
 WP-17-115, WP-18-020, WP-18-021,
 SP-16-009, WP-17-100

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

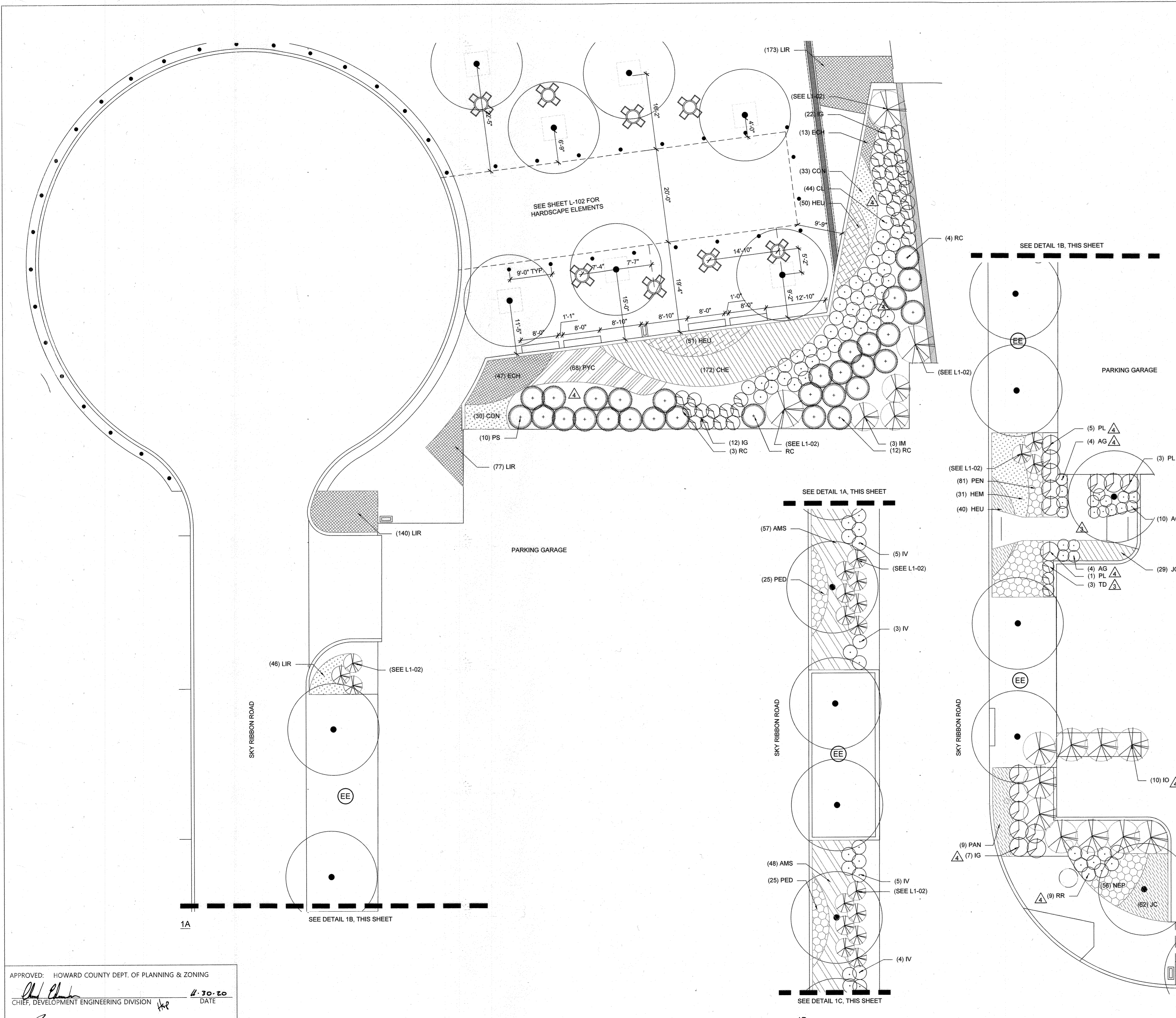
**MAHAN RYKIEL
 ASSOCIATES INC**

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT	NEIGHBORHOOD	PARCEL D
PLAT # OR L.P.	BLOCK #	TAX ZONE/MP	ELECT DISTRICT
N/A	DWAU	36	5
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			605602

TITLE: **L-405 - LANDSCAPE PLANTING PLAN - UNDERSTORY**

Des. By JK	SCALE AS SHOWN	Proj. No. 0403E.10
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	75 of 94



LANDSCAPE KEY
 EE EXISTING ESD PLANTING, SEE CIVIL F-PLAN

GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

CERTIFICATION NOTE:

- I, Wm C Rowe, 11-21-2020, DEVELOPER'S/OWNER'S NAME, 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 LANDSCAPE MANUAL FOR ALTERNATIVE COMPLIANCE AND THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES. I, Wm C Rowe, 11-11-2020, DEVELOPER'S/OWNER'S NAME, FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

REVISOR'S LIST

Date	No.	Revision Description
7/31/2020	1	TREE RELOCATION AND DUMPSTER
11/18/2019	2	HARDSCAPE AND PLANTING REVISIONS
3/6/2019	3	PLANTING AND PATHWAY REVISIONS

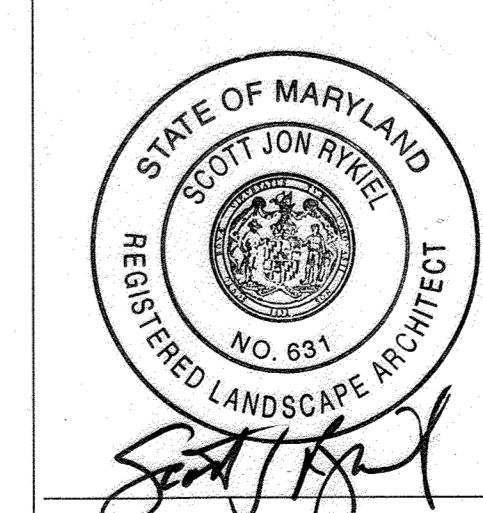
**DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

**MAHAN RYKIEL
 ASSOCIATES INC**

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION	NEIGHBORHOOD	EDTPARCEL	PARCEL D
DOWNTOWN COLUMBIA				
PLAN OR L/R	BLOCK #	TAX ZONE/MAP	ELECT DISTRICT	CENSUS TRACT
N/A		36	5	605602
WATER CODE	SEWER CODE		STAGE	
550	LITTLE PATUXENT			

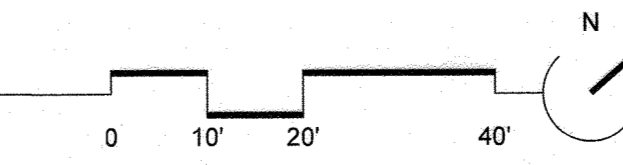
TITLE
**L-406 - LANDSCAPE
 PLANTING PLAN - UNDERSTORY**

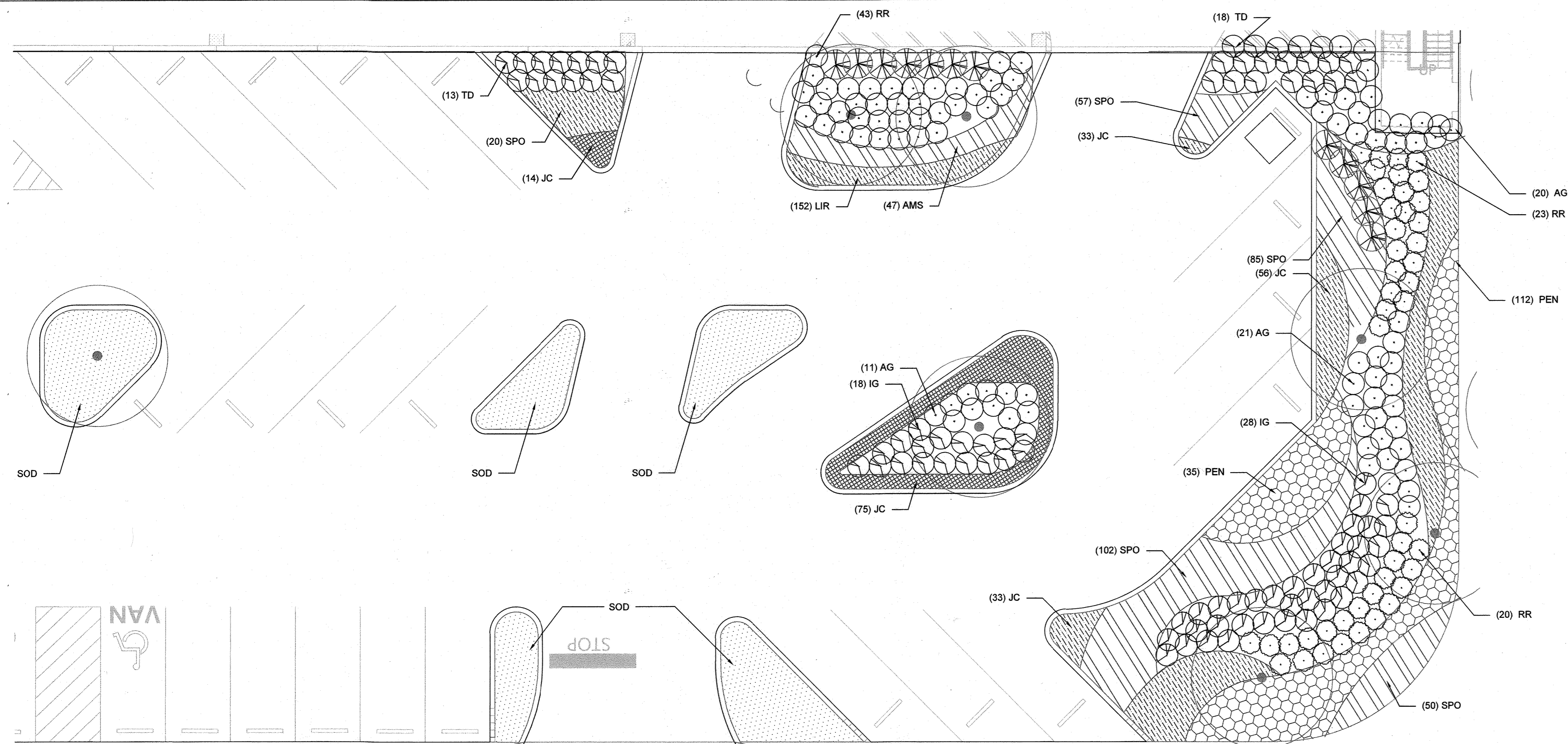
Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved ..	76 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

DATE: 11/30/20
 DATE: 12/14/20
 DATE: 12-16-20

1 PLANTING ENLARGEMENT PLAN
 1"=10'





GENERAL LANDSCAPE NOTES:

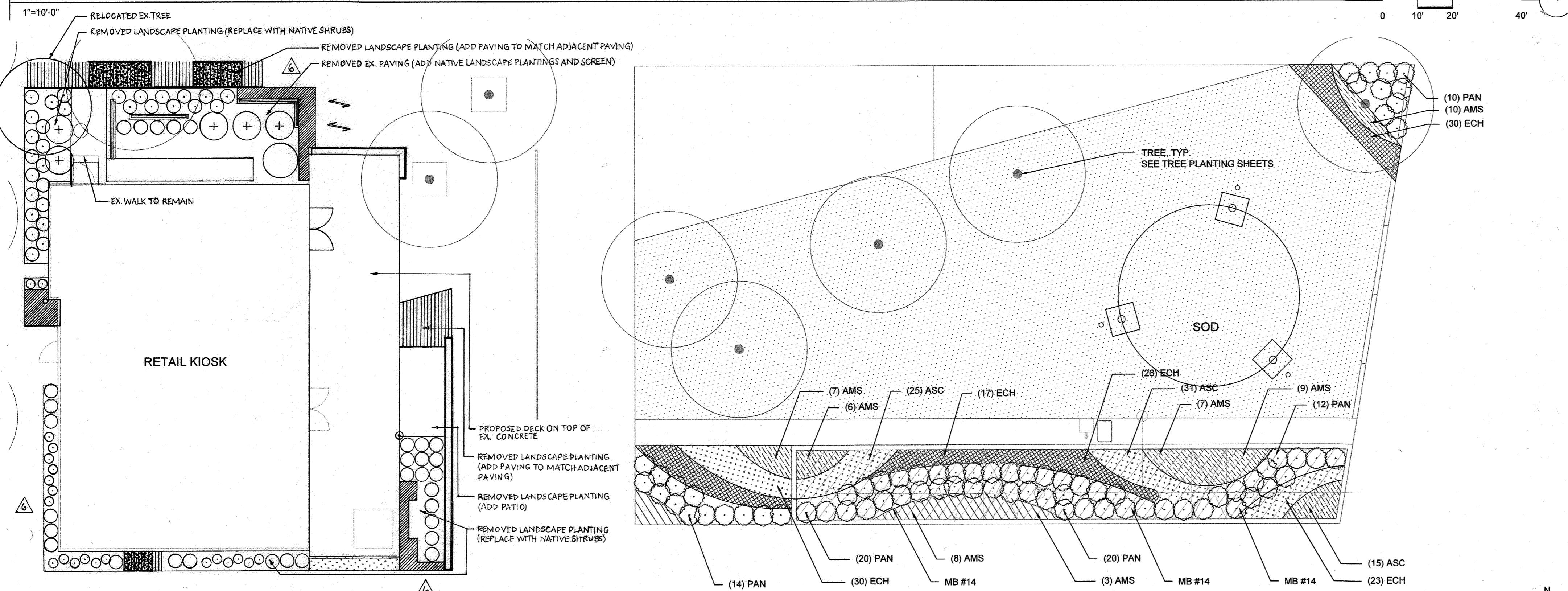
- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

CERTIFICATION NOTE:

- I/WE 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 LANDSCAPE MANUAL FOR ALTERNATIVE COMPLIANCE AND THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER'S/OWNER'S NAME
William S. Rowe
 DEVELOPER'S/OWNER'S NAME
Wm. S. Rowe

1 PLANTING ENLARGEMENT PLAN



2 PLANTING ENLARGEMENT PLAN

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 2-28-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: DIVISION OF LAND DEVELOPMENT
[Signature] 3/6/2020
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: DIRECTOR
[Signature] 3-10-2020
 DATE

FOR REVISION NO. 6 ONLY

STATE OF MARYLAND
 REGISTERED LANDSCAPE ARCHITECT
 PROFESSIONAL NUMBER: 3468
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3468, OPERATION DATE 11/15/2021.

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100
 CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D
 PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.

STATE OF MARYLAND
 REGISTERED LANDSCAPE ARCHITECT
 SCOTT JON RYKIEL
 LICENSE NO. 631

11/15/21	3	REVISED LANDSCAPE PLANTING
11/15/21	3	PLANTING REVISIONS
REVISED SITE DEVELOPMENT PLAN		

HARDSCAPE AND PLANTING REVISIONS		
Date	No.	Revision Description
11/18/2019	3	REVISIONS

**DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

**MAHAN RYKIEL
 ASSOCIATES INC**

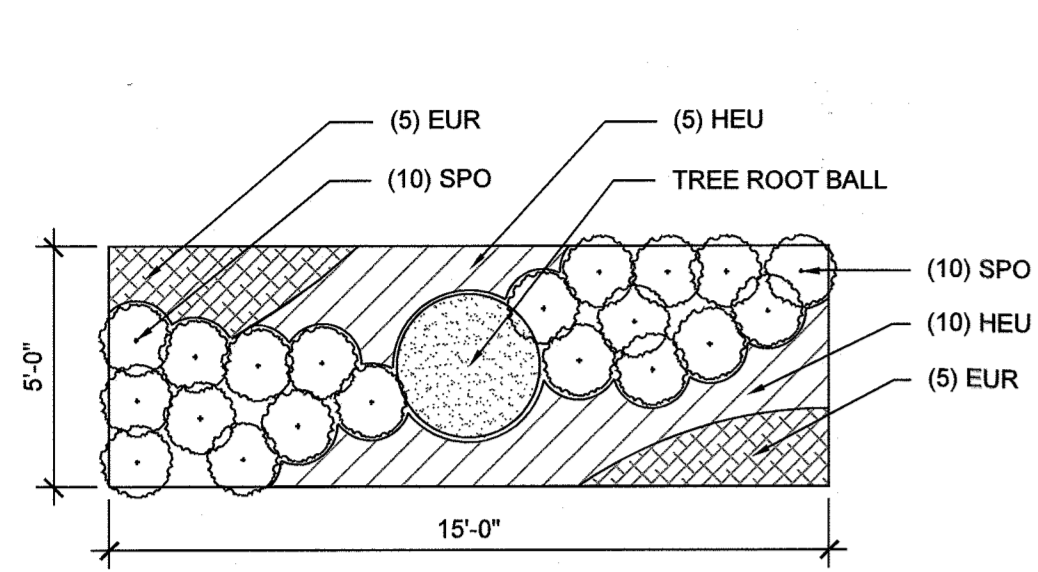
WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
 410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	CRESCENT	CRESCENT		
PLAT OR LP	BLOCK #	TAX ZONE/MAP	BLK #	CENSUS TRACT
N/A	36	36	5	605602
WATER CODE	SEWER CODE	STAGE		
550	LITTLE PATUXENT			

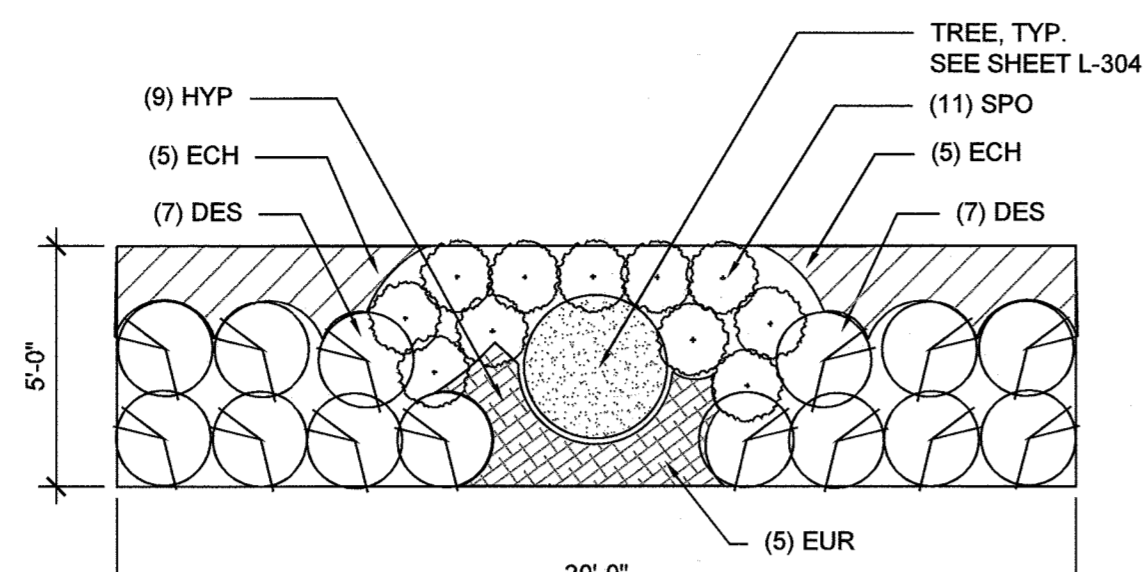
TITLE
**L-407 - LANDSCAPE
 PLANTING PLAN - UNDERSTORY**

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.00
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved	77 of 94

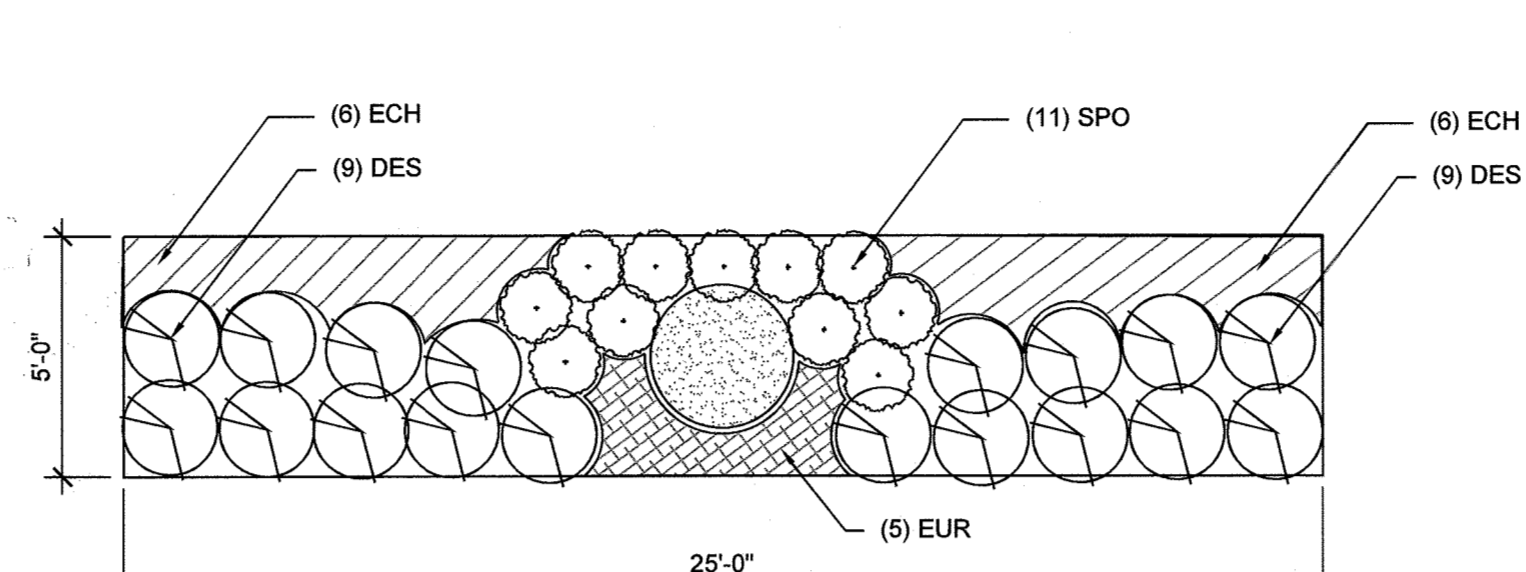
APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 1/16/17



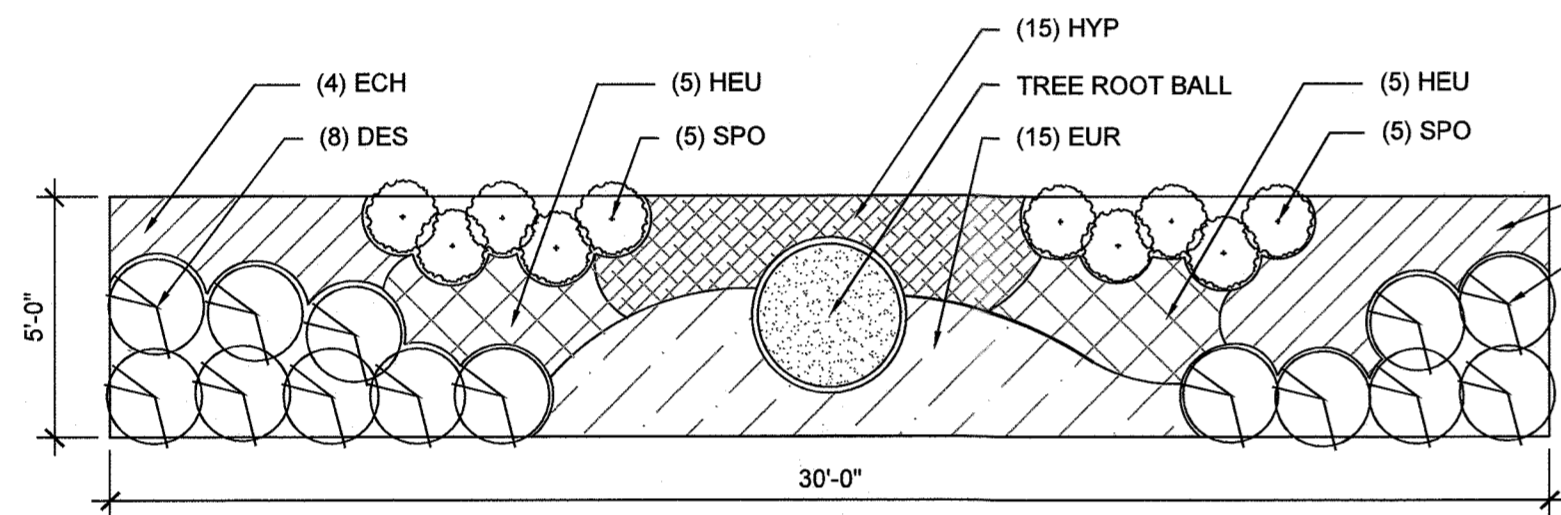
1 E1: ESD PLANTING (5' x 15')
1/4"=1'



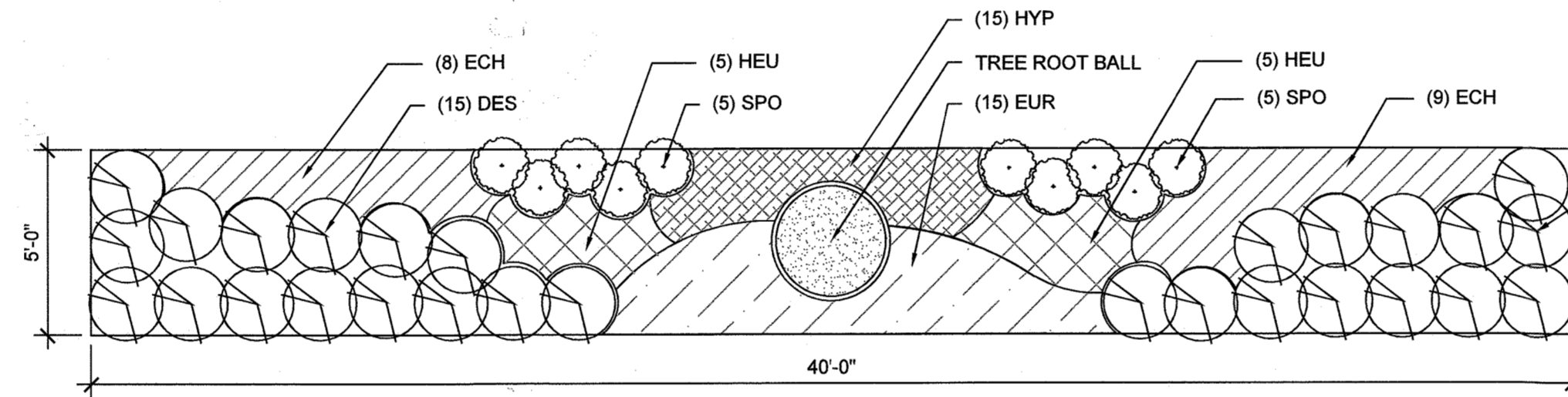
2 E2: ESD PLANTING (5' x 20')
1/4"=1'



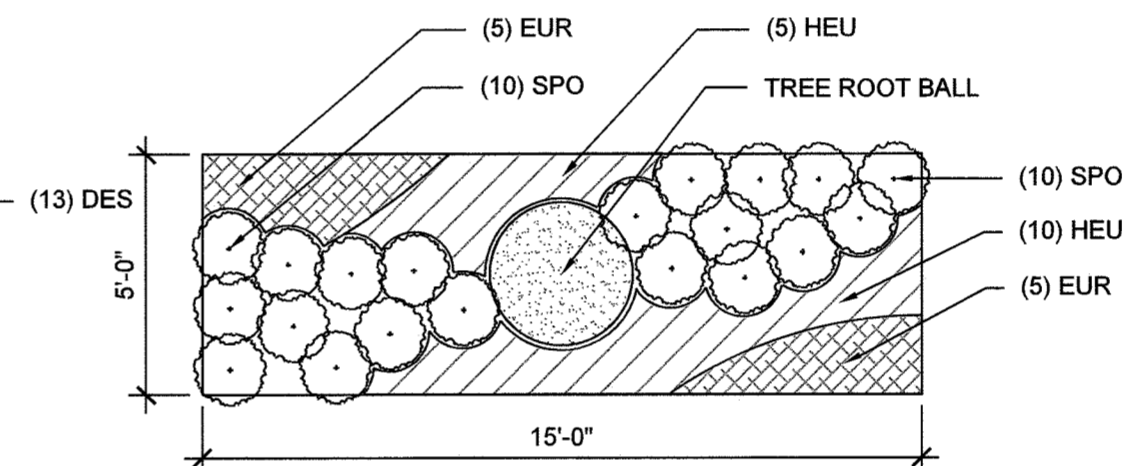
3 E3: ESD PLANTING (5' x 25')
1/4"=1'



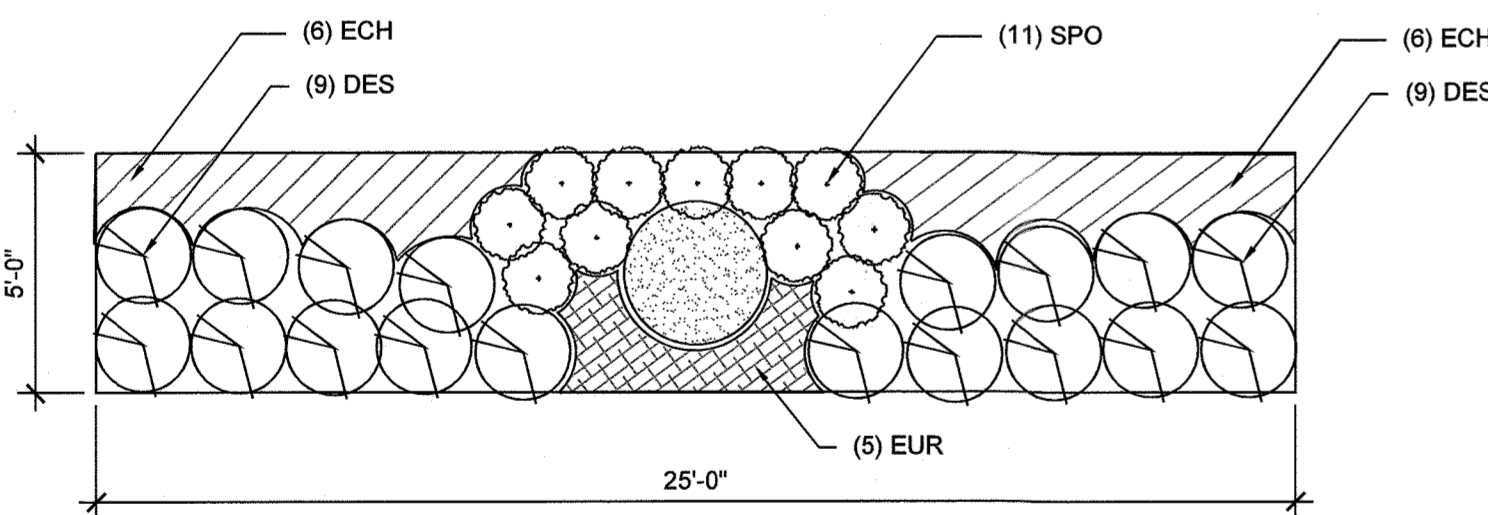
4 E4: ESD PLANTING (5' x 30')
1/4"=1'



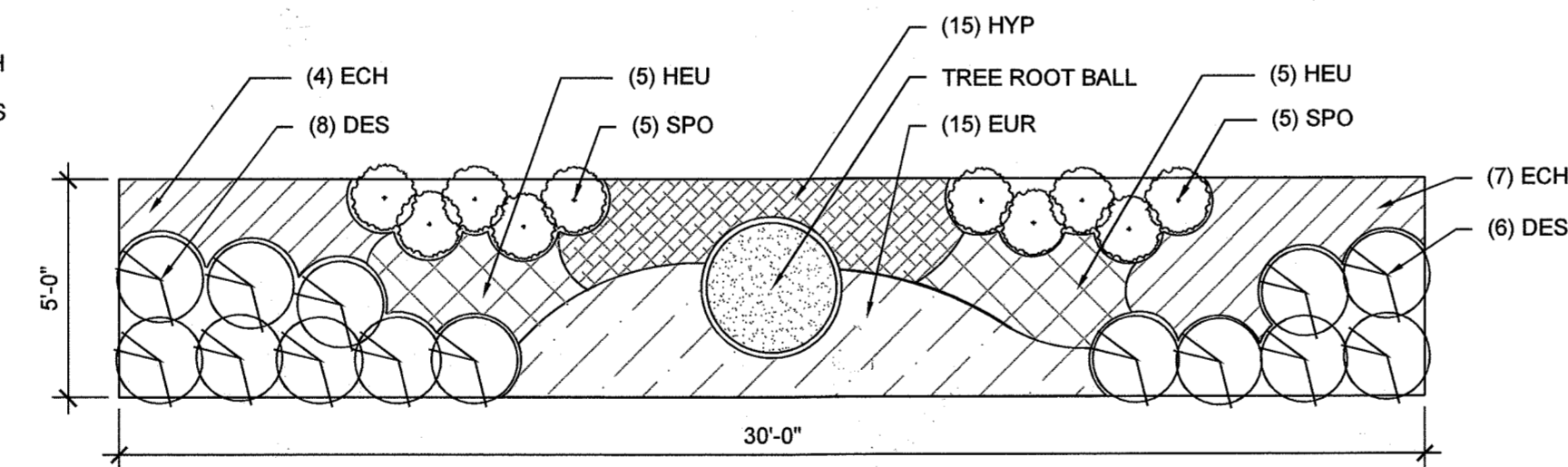
5 E5: ESD PLANTING (5' x 40')
1/4"=1'



6 T1: TREE PIT PLANTING
1/4"=1'-0"



7 T2: TREE PIT PLANTING
1/4"=1'-0"



8 T3: TREE PIT PLANTING
1/4"=1'-0"

GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

CERTIFICATION NOTE:

- I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 18.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL FOR ALTERNATIVE COMPLIANCE AND THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER'S/OWNER'S NAME

[Signature]

DEVELOPER'S/OWNER'S NAME

Wm T Rowe

REVISED SITE DEVELOPMENT PLAN

Date	No.	Revision Description
11/18/2019	3	HARDSCAPE AND PLANTING REVISIONS

**DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017,
SDP-16-075, SDP-18-005, WP-17-010,
WP-17-049, WP-17-052, WP-17-059,
WP-17-115, WP-18-020, WP-18-021,
SP-16-009, WP-17-100
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

**MAHAN RYKIEL
ASSOCIATES INC**

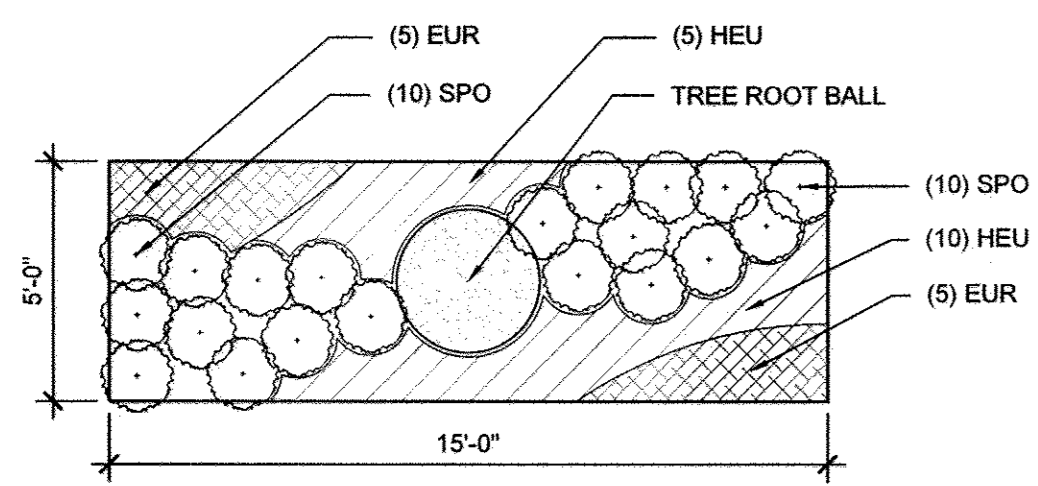
WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	CRESCENT NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE I AREA 3		
PLAT OR L.P.	BLOCK #	TAX ZONE/MAP	ELECT. DISTRICT
N/A	2104	36	5
WATER CODE	SEWER CODE		CENSUS TRACT
550	LITTLE PATUXENT		605602

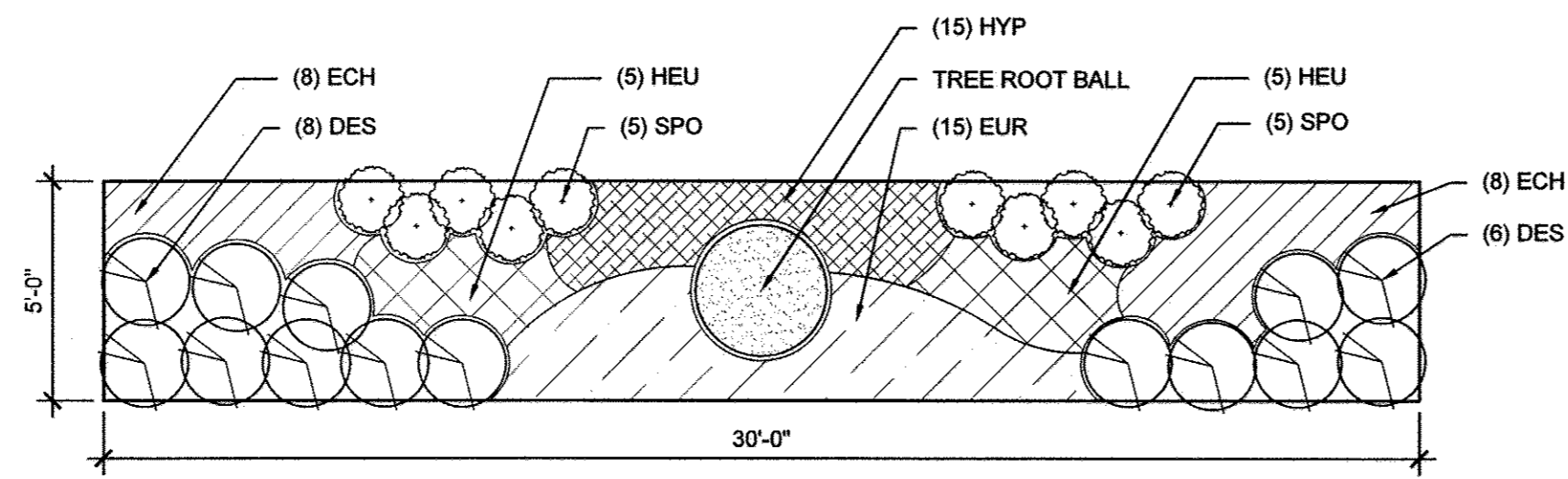
TITLE
**L-408 - LANDSCAPE
PLANTING PLAN - UNDERSTORY**

Des. By JK	SCALE AS SHOWN	Proj. No. 04038.00
Drn. By BB	Date 1-18-18	
Chk. By JK/MP	Approved --	78 of 94

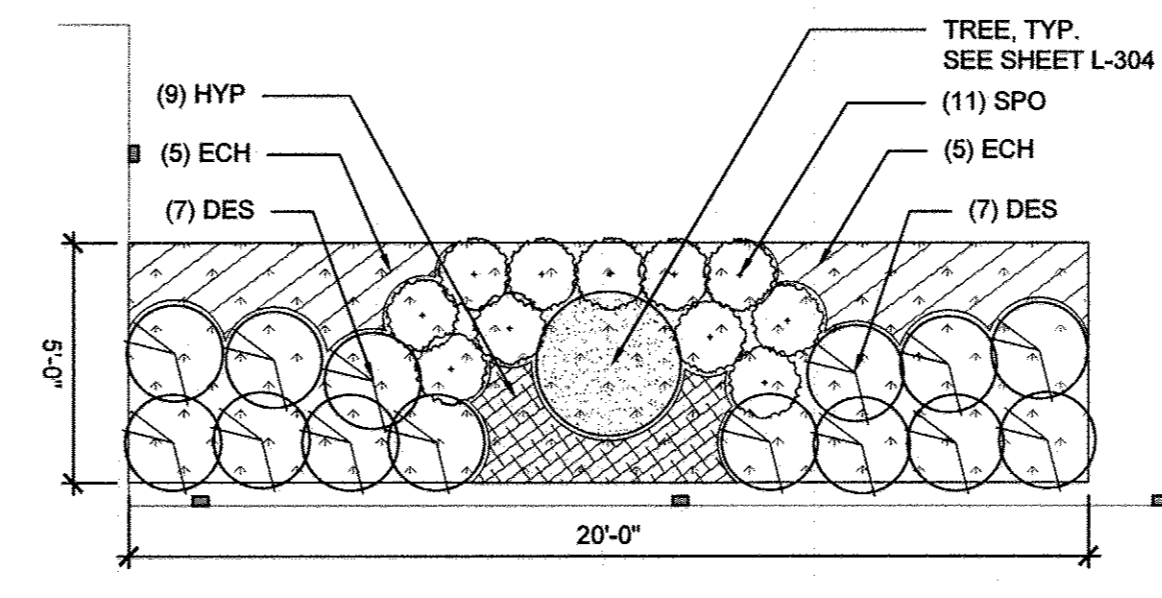
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chad Edwards 2-28-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
CHIEF, DIVISION OF LAND DEVELOPMENT 3/6/2020
DATE
DIRECTOR *Stacy Gorn* 3-10-2120
DATE



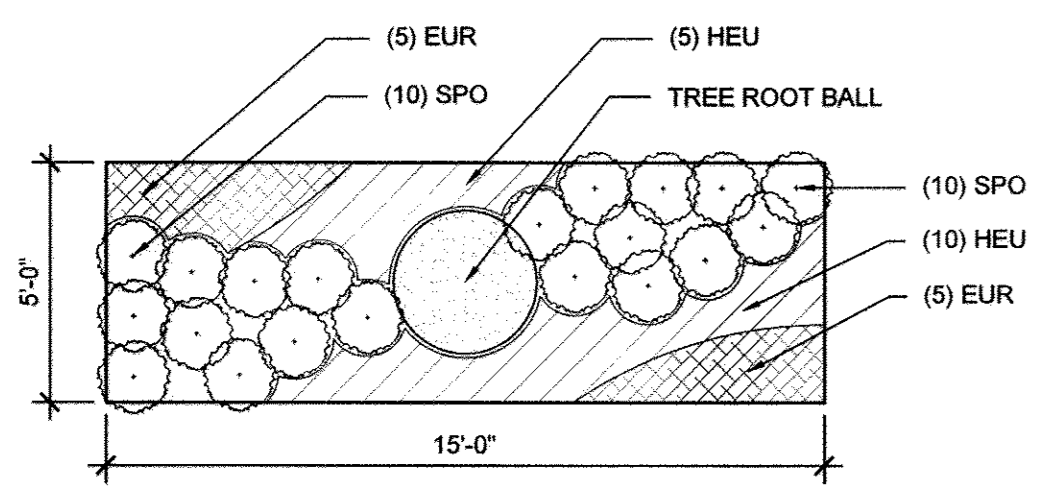
1 E1: ESD PLANTING
1/4"=1'



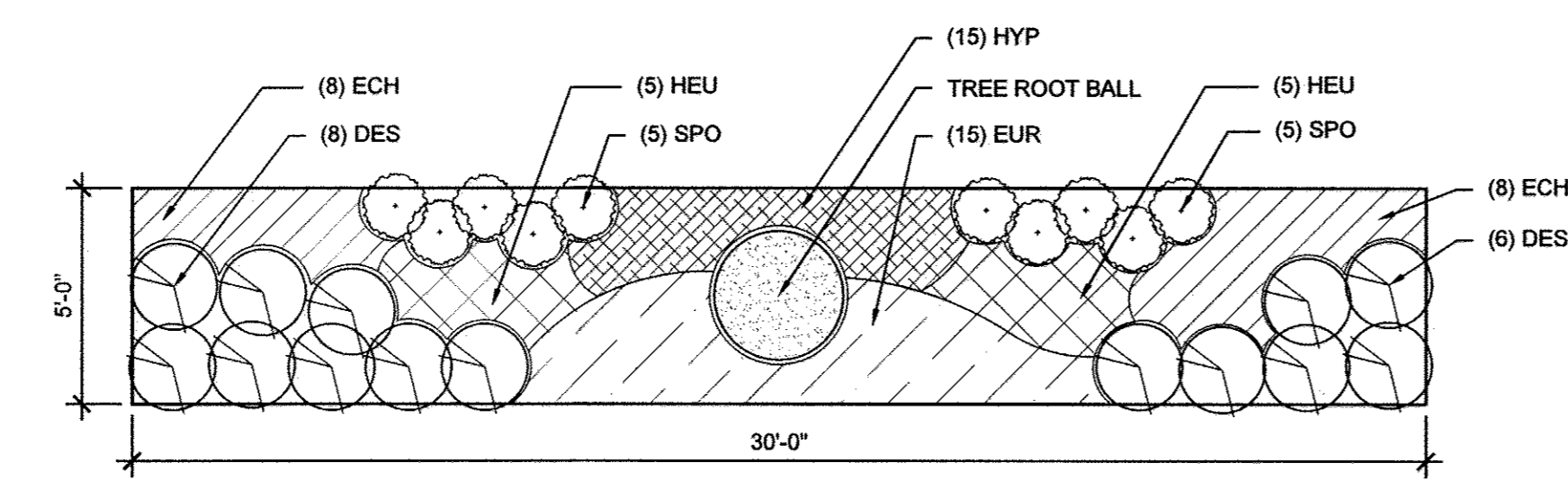
2 E2: ESD PLANTING
1/4"=1'



3 E3: ESD PLANTING
1/4"=1'



4 T2: TREE PIT PLANTING
1/4"=1'-0"



5 T3: TREE PIT PLANTING
1/4"=1'-0"

GENERAL LANDSCAPE NOTES:

- BUILDING ENTRANCES ARE SHOWN FOR REFERENCE ONLY. BUILDING ENTRANCE LOCATIONS MAY BE ADJUSTED BASED ON TENANT NEEDS WITH FINAL REVIEW AT TIME OF PERMIT.
- REFER TO SHEETS L-400 TO L-410 FOR PROPOSED PLANTINGS.
- UTILITY EASEMENTS ARE SHOWN ON PLANTING PLANS FOR REFERENCE ONLY. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION REGARDING UTILITY EASEMENT SIZES & LOCATIONS.

CERTIFICATION NOTE:

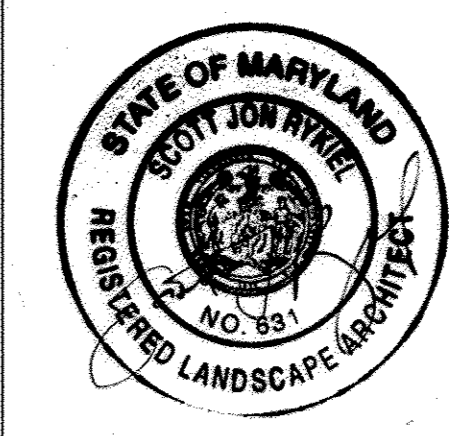
- I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL FOR ALTERNATIVE COMPLIANCE AND THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER'S/OWNER'S NAME
[Signature] 05/24/18
DEVELOPER'S/OWNER'S NAME
RUTH U. HOWARD

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 9/21/2019.



Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

MAHAN RYKIEL ASSOCIATES INC

SUBDIVISION NAME: DOWNTOWN COLUMBIA		SECTION/AREA: CRESCENT NEIGHBORHOOD	LOT/PARCEL #:
PLAT OR L.P.:	BLOCK #:	TAX ZONE/MAP:	PARCEL D:
N/A	1	36	605602
WATER CODE:	SEWER CODE:	STAGE:	
550	LITTLE PATUXENT		

TITLE
L-408 - LANDSCAPE PLANTING PLAN - UNDERSTORY

APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

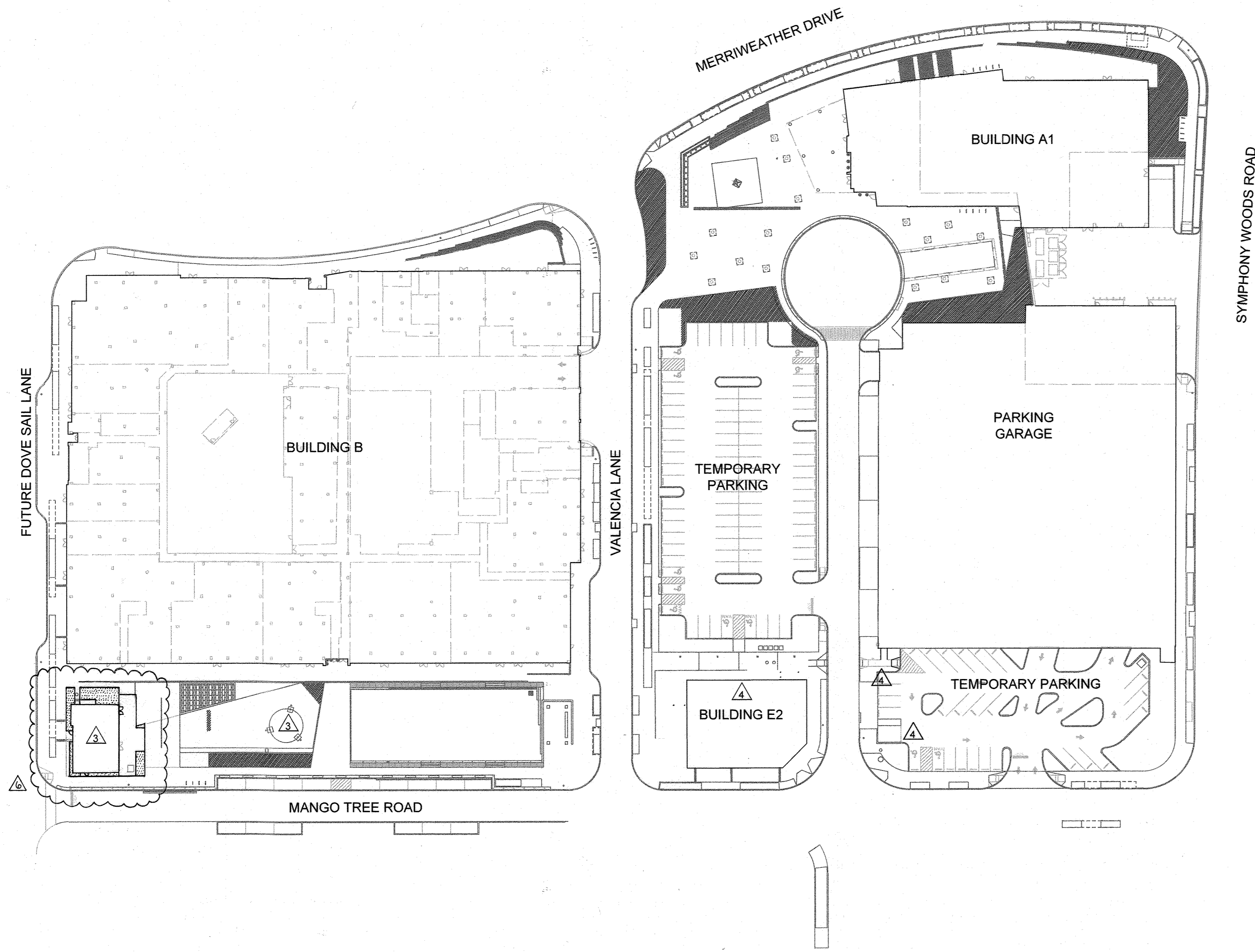
Des. By JK	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By BB	Date 5-10-18	
Chk. By JK/MP	Approved --	79 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

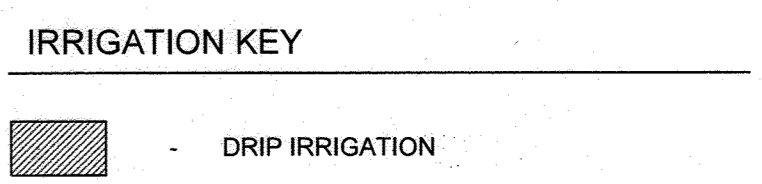
[Signature] 5-30-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 6/7/18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

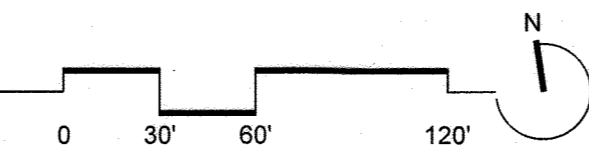
[Signature] 6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE



- NOTES:**
1. THIS PLAN IS SCHEMATIC ONLY. DESIGN OF IRRIGATION SYSTEM BY OTHERS.
 2. AREAS TO BE IRRIGATED USING NON-POTABLE WATER.
 3. IRRIGATED ZONES WILL BE IRRIGATED USING A HIGH-EFFICIENCY AUTOMATIC IRRIGATION SYSTEM, OPERATED BY CONTROLLER(S), LOCATED IN MECHANICAL ROOM(S) AS APPROVED BY LANDSCAPE ARCHITECT.
 4. FLOW CONTROL WILL BE ADDRESSED BY THE USE OF MOISTURE SENSOR AND MASTER VALVE.
 5. DRIP TUBING TO BE INSTALLED TO MEET MANUFACTURER'S REQUIREMENTS FOR SPACING AND FLOW BASED ON PLANT TYPE, SOIL CONDITIONS, ETC. IF NECESSARY, CONTRACTOR SHALL ADJUST SPACING TIGHTER TO ENSURE THAT ADEQUATE WETTING PATTERN OCCURS THROUGHOUT SOIL.
 6. FINAL IRRIGATION DESIGN AND EQUIPMENT LOCATION TO BE APPROVED BY LANDSCAPE ARCHITECT, INCLUDING BACKFLOW PREVENTOR, IRRIGATION CONTROLLER, VALVE BOXES, RAIN SENSORS, HOSE BIBS, ETC.
 7. ALL VALVE BOXES TO BE LOCATED IN PLANTING AREAS AS APPROVED BY LANDSCAPE ARCHITECT.
 8. CONTRACTOR TO ACCOMMODATE IRRIGATION LATERALS AND CONDUITS THROUGH SLEEVING IN PAVING, WALLS AND STAIRS. COORDINATE AS NEEDED.



1 IRRIGATION PLAN
1"=60'-0"



FOR REVISION NO. 1 ONLY

PROFESSIONAL NUMBER - 3458
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3458. OPERATION DATE: 11/15/2021.

LEGEND

DRIP IRRIGATION

11/15/21	REVIS	REVISED AREAS FOR IRRIGATION
11/15/21	HARD	HARDSCAPE REVISIONS
REVIS		
7/31/2020	DUMP	DUMPSTER AND E2 DOOR
11/18/2019	HARD	HARDSCAPE AND PLANTING REVISIONS
Date	No.	Revision Description

FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-17-100

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631. EXPIRATION DATE: 9/21/2019.

REVIS

**DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

**MAHAN RYKIEL
ASSOCIATES INC**

WHITEHALL MILL - 3300 CLIPPER MILL DRIVE - SUITE 200
410-235-6001 - WWW.MAHANRYKIEL.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD		PARCEL D
PLATE OR LOT	BLOCK #	TAX ZONE/MP	CENSUS TRACT
N/A	N/A	36	5
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT		605602

TITLE

L-600 -IRRIGATION PLAN

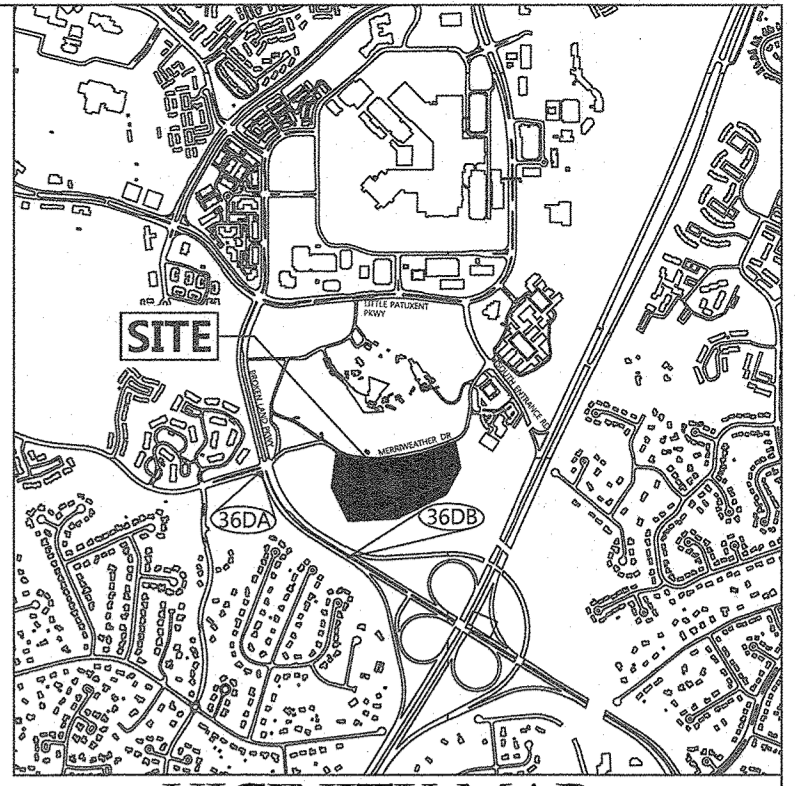
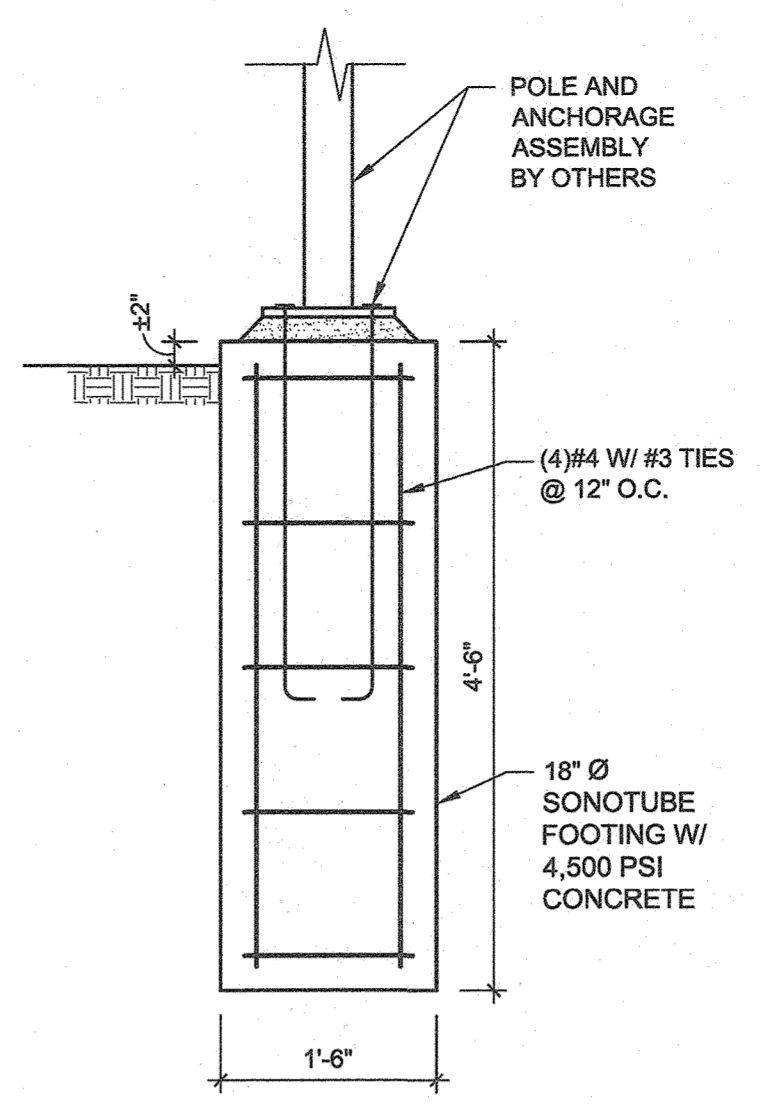
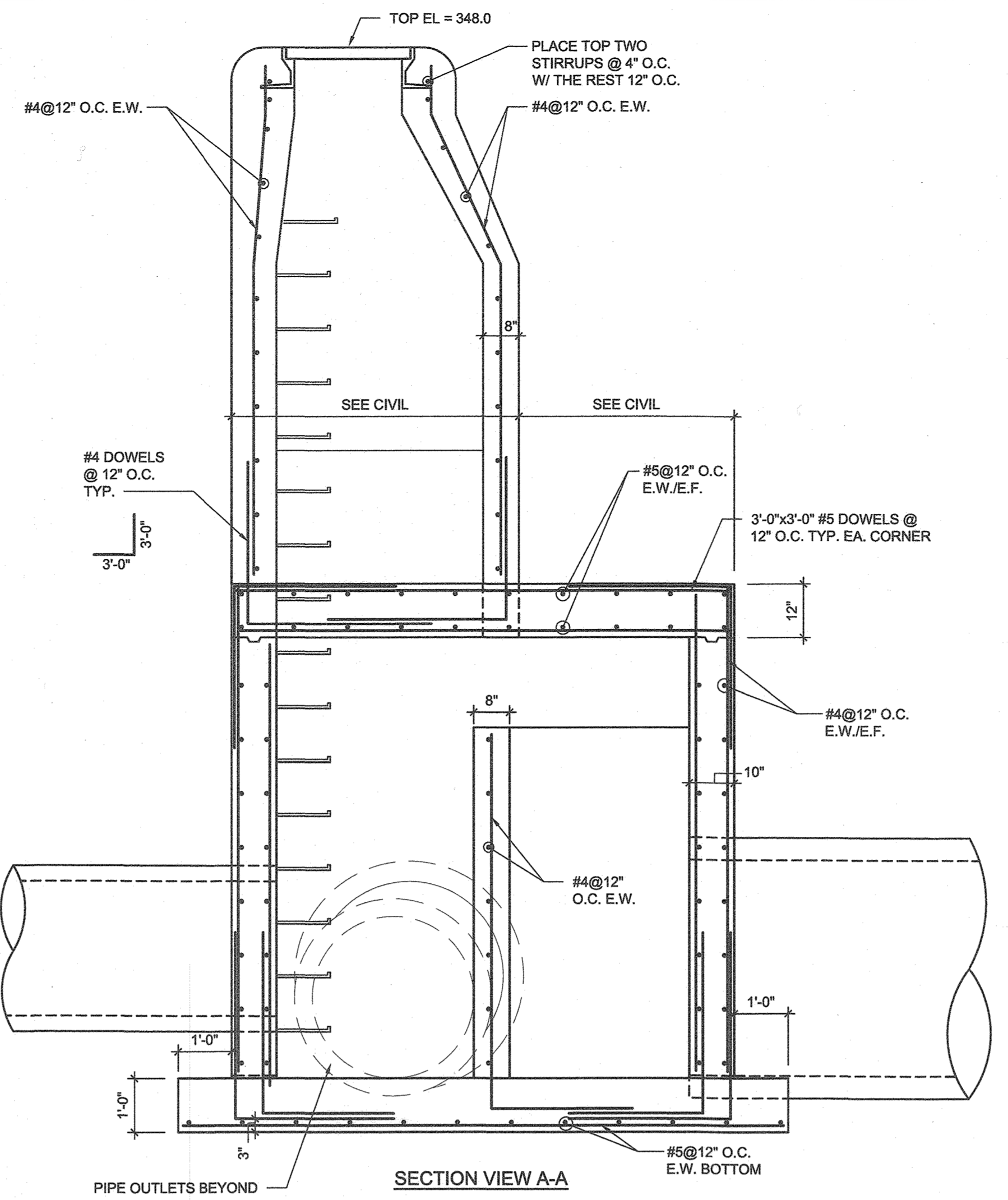
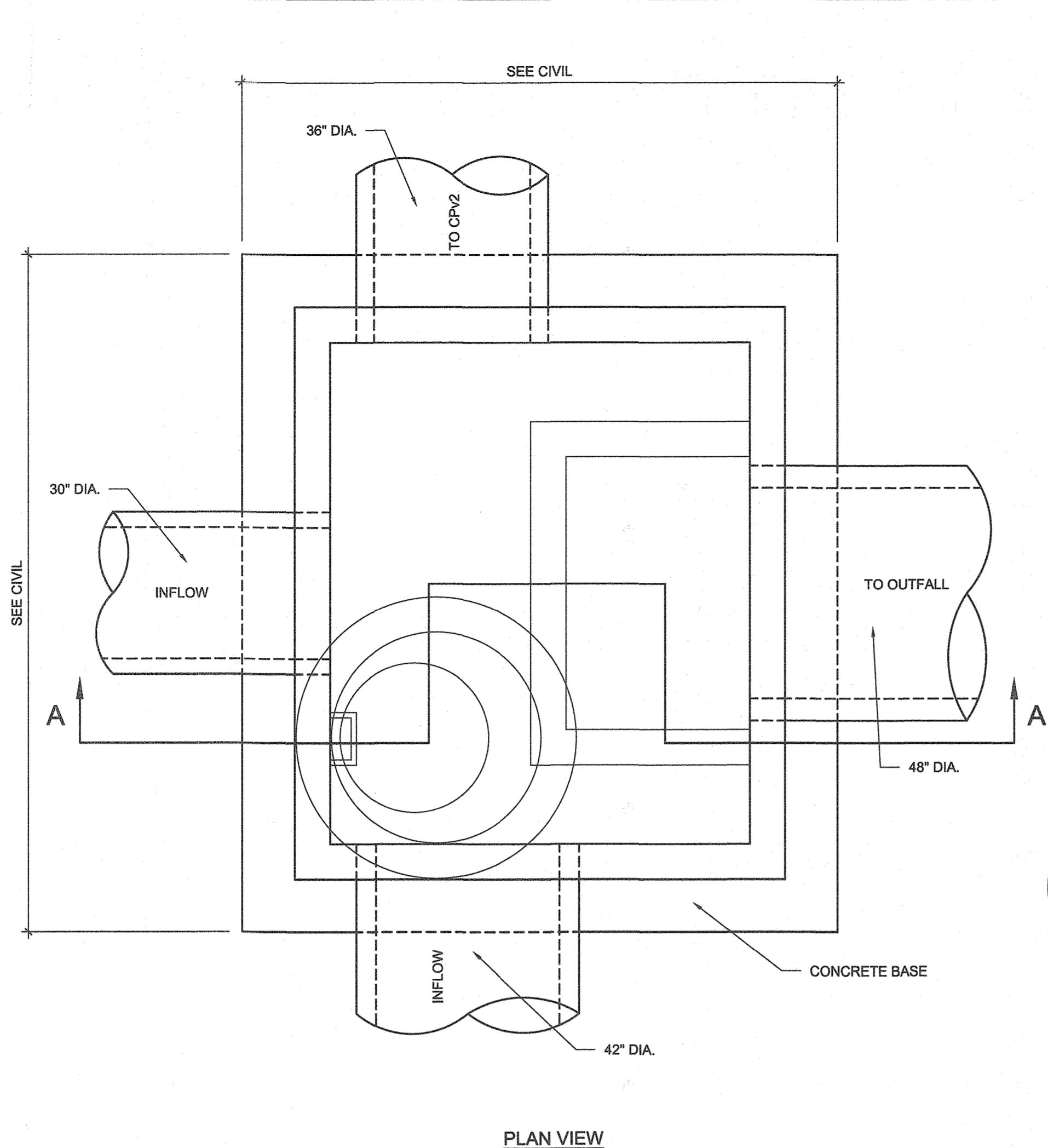
Des. By	JK	SCALE	AS SHOWN	Proj. No.	0403E.00
Drn. By	BB	Date	1-18-18		
Chk. By	JK/MP	Approved	--		80 of 94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

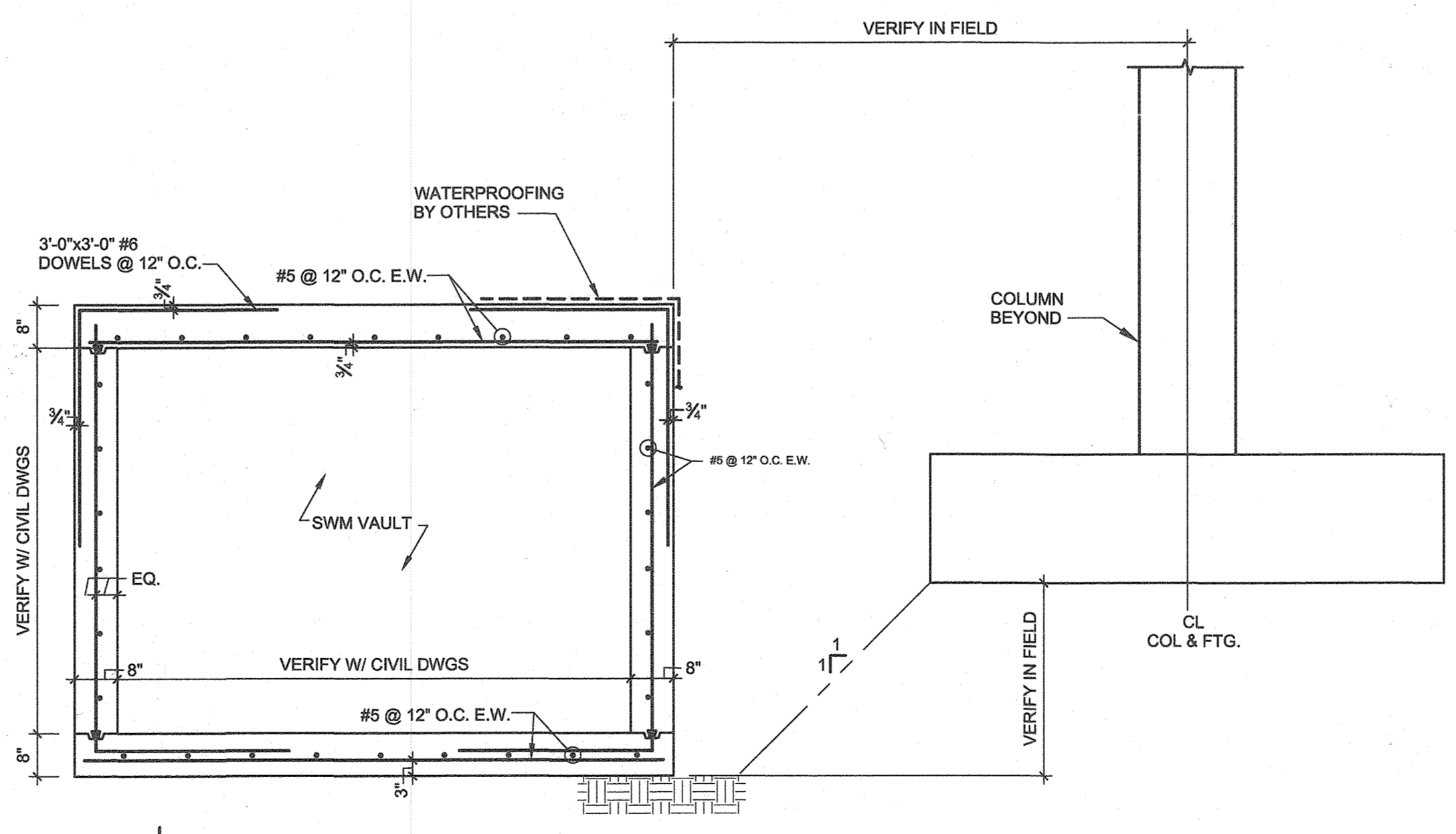
Chad Plumb 11-30-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

John G. ... 12/14/20
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John G. ... 12-16-20
DIRECTOR DATE



FLOW SPLITTER DETAIL M-7
SCALE: 1/2" = 1'-0"



STORAGE VAULT SECTION FOR SWM14 STORMFILTER
SCALE: 1/2" = 1'-0"

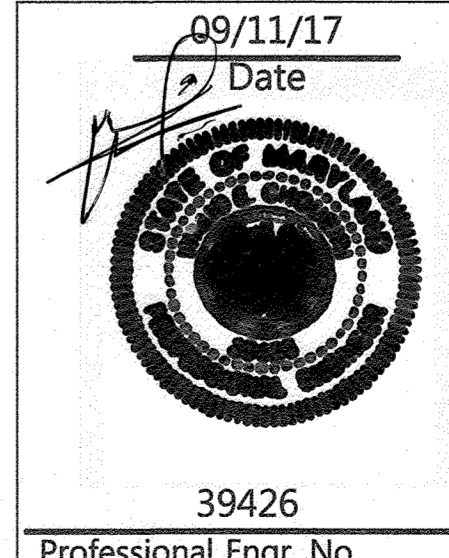
- ENVIRONMENTAL DATA SOURCES**
- FLOODPLAIN INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A STUDY PERFORMED BY BIO-HABITATS DATED 06/18/2015.
 - WETLANDS AND ASSOCIATED ENVIRONMENTAL INFORMATION SHOWN HEREON REFLECT THE RESULT OF AN INVESTIGATION PERFORMED BY DMW DATED MARCH 2015.
 - SOIL SURVEY INFORMATION SHOWN HEREON REFLECTS HOWARD COUNTY SOILS INFORMATION DATED 11/26/2007.
 - DECLARATION OF RESTRICTIVE COVENANT AREAS: ARMY CORPS OF ENGINEERS PERMIT NUMBER 2014-01063, SPECIAL CONDITION #14 REQUIRES THAT ANY WETLAND MITIGATION AREAS BE PROTECTED IN PERPETUITY BY A DECLARATION OF RESTRICTIVE COVENANTS TO BE RECORDED BY JULY 1, 2016. THIS DOCUMENT PROHIBITS ANY DISTURBANCE WITHIN THIS AREA INCLUDED BUT NOT LIMITED TO NEW DEVELOPMENT, INSTALLATION OF UTILITIES, GRADING, REMOVAL OF VEGETATION, ETC. THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE ARMY CORPS OF ENGINEERS HAVE PLACED THESE RESTRICTIVE COVENANTS ON THE AREA TO PROTECT WATER QUALITY, ENVIRONMENTAL RESOURCES AND THE MITIGATION AREA REQUIRED TO OFF-SET IMPACTS TO WETLANDS, STREAMS AND FLOODPLAINS PROPOSED BY THIS DEVELOPMENT.
- DATA SOURCES:**
- EXISTING TOPOGRAPHIC INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A TOPOGRAPHIC SURVEY PERFORMED BY DMW INC. ON 8/27/15 & 12/3/15. AERIAL TOPOGRAPHY FLOWN BY MCKENZIE SNYDER, INC. MARCH, 2007 AND FIELD SURVEY BY GLW ON AUGUST, 2011, GRADES AS SHOWN ON F-15-106 AND F-16-107 PREPARED BY GLW, AND MASS GRADING SDP-16-075 BY DMW.
 - BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

11-18-19	3	CHANGE SHEET NUMBER
Date	No.	Revision Description
DOWNTOWN COLUMBIA		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE I		
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD COUNTY AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-1800		

FILE NUMBERS:
F15-106, F16-107, F17-059,
SDP-16-075, WP-17-052, WP-17-059,
WP-17-048, SP-16-009, WP-17-100

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 39426. EXPIRATION DATE: 8/15/2018.



APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

SK&A MD
Smislova, Kehnemui & Associates, PA
12435 Park Potomac Avenue, Suite 300 • Potomac, MD 20854
P 301.881.1441 F 301.881.8664 W skaeengineers.com

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
SUBDIVISION NAME: COLUMBIA CRESCENT SECTION/AREA: AREA 3 LOT/PARCEL #: PARCEL 527
PLAT/ OR L.P.: N/A BLOCK #/ ZONE/ MAP: 36 TAX ZONE/ MAP: 5-15 CENSUS TRACT: 605602
WATER CODE: 550 SEWER CODE: LITTLE PATUXENT STAGE:

S-1 ESD STRUCTURES		
Des. By	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By	Date 9-11-17	
Chk. By	Approved MCB	81 of 94

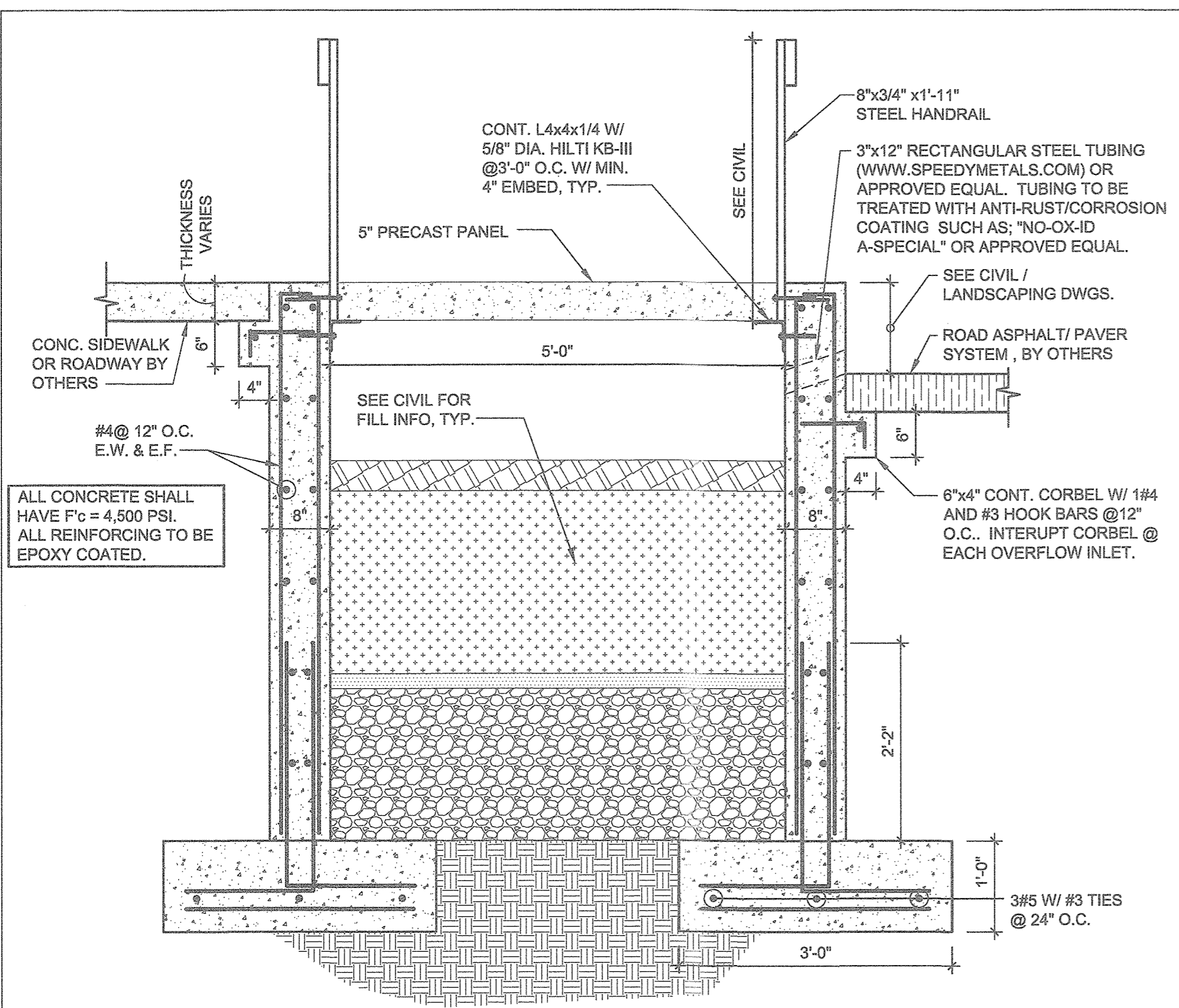
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 4-2-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

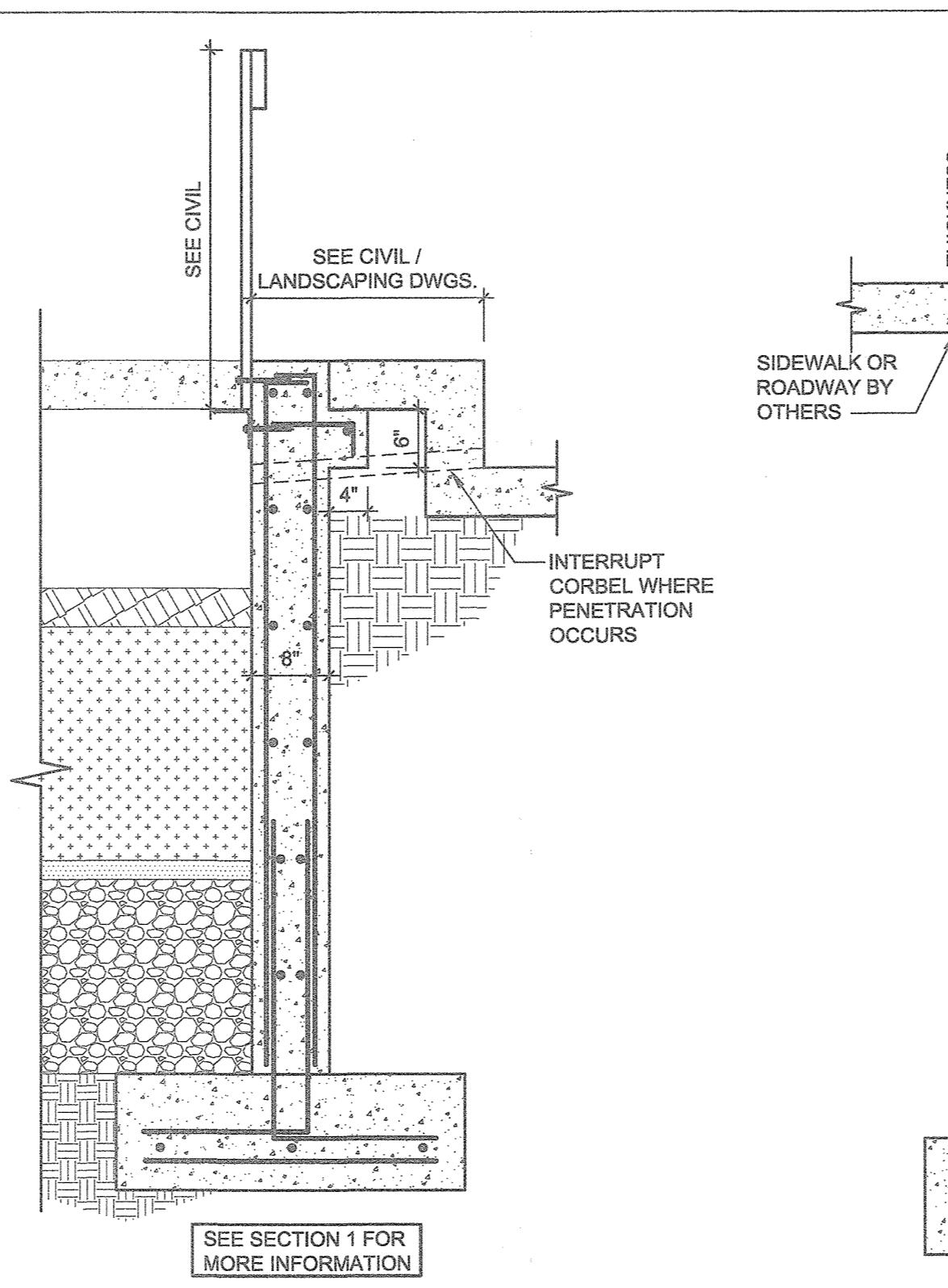
[Signature] 6-17-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

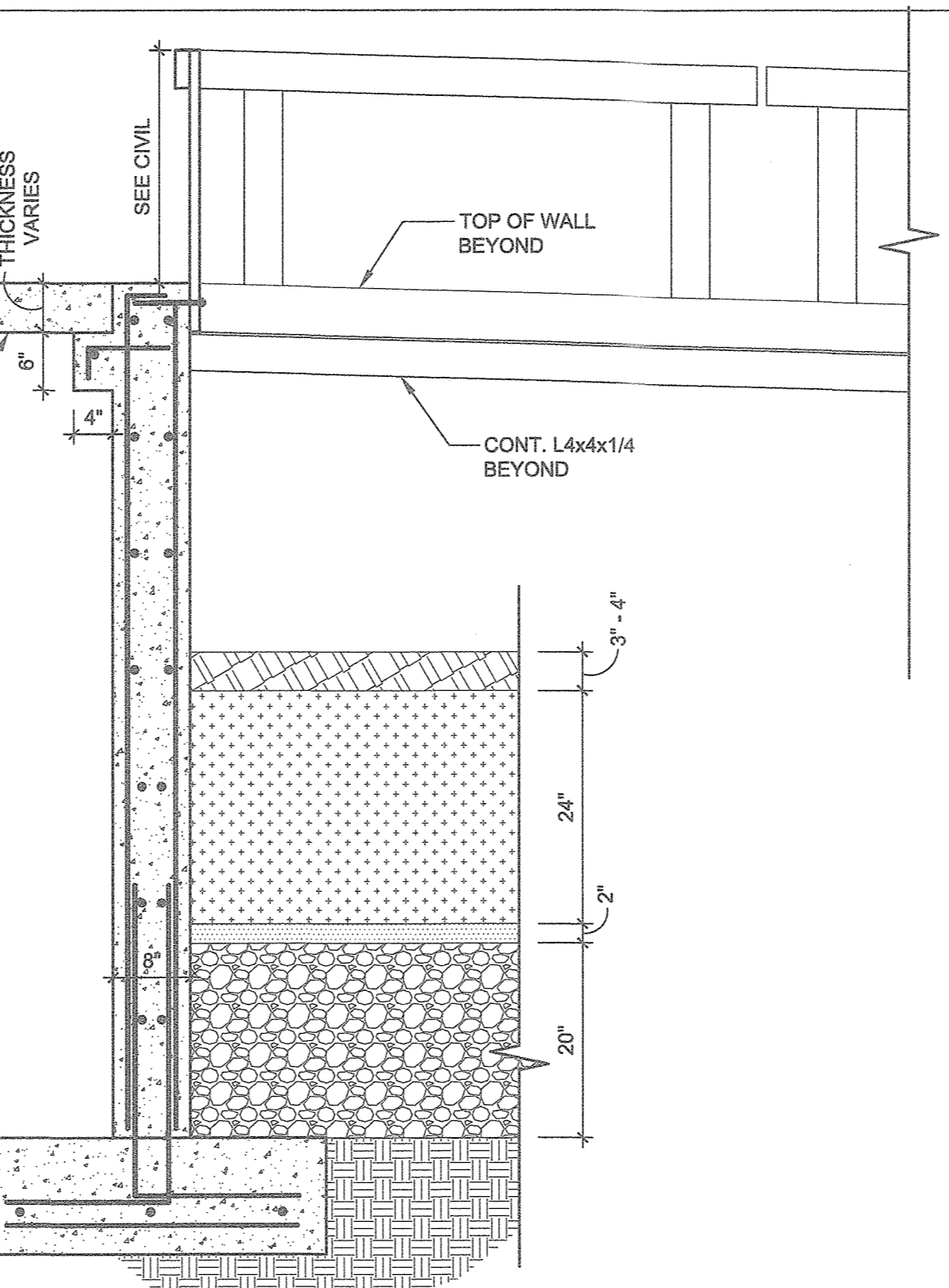
P:\DWG\15-079-3504\DWG\STRUCTURE\DETAILS\M-7.DWG 8/6/2017 2:08 PM



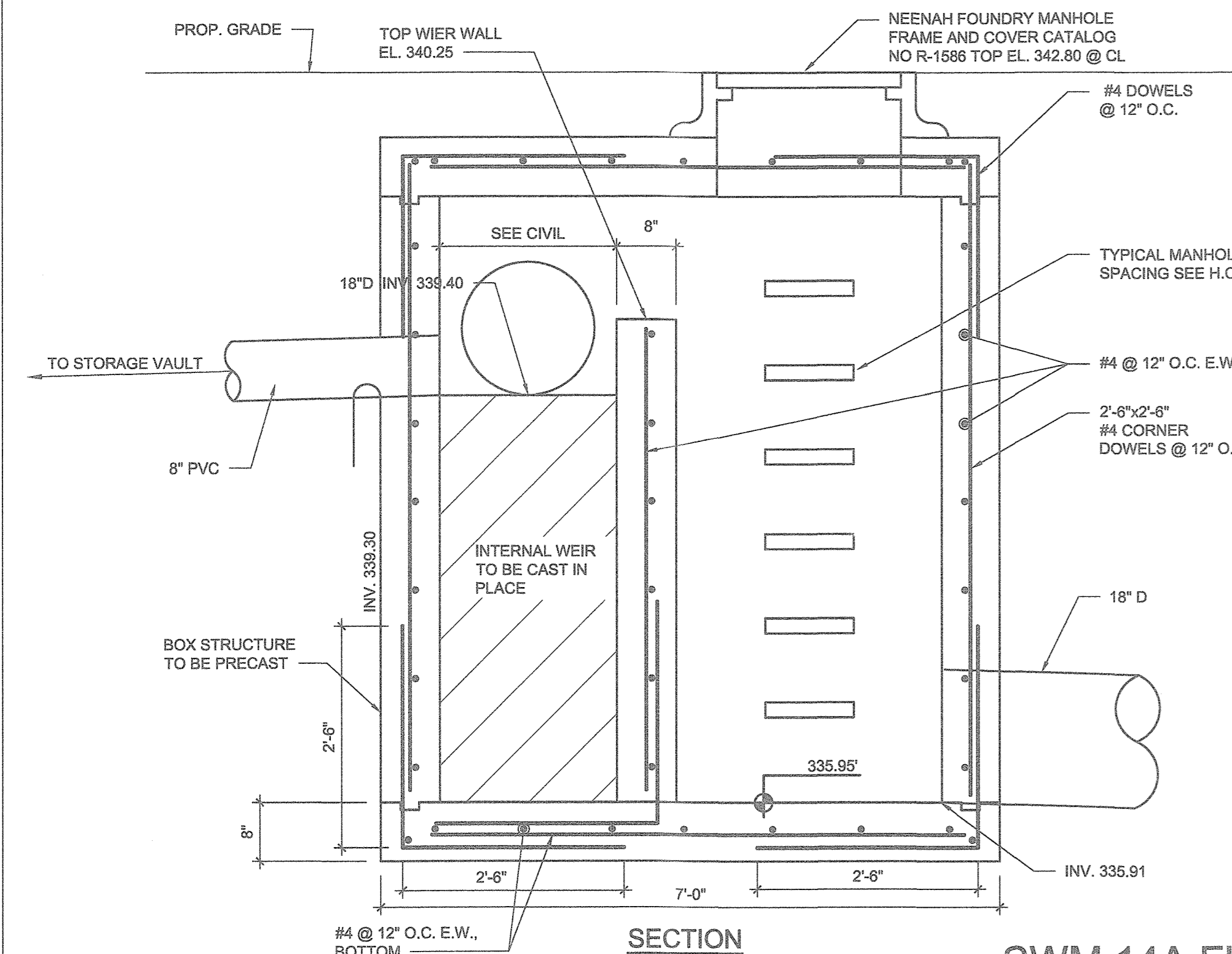
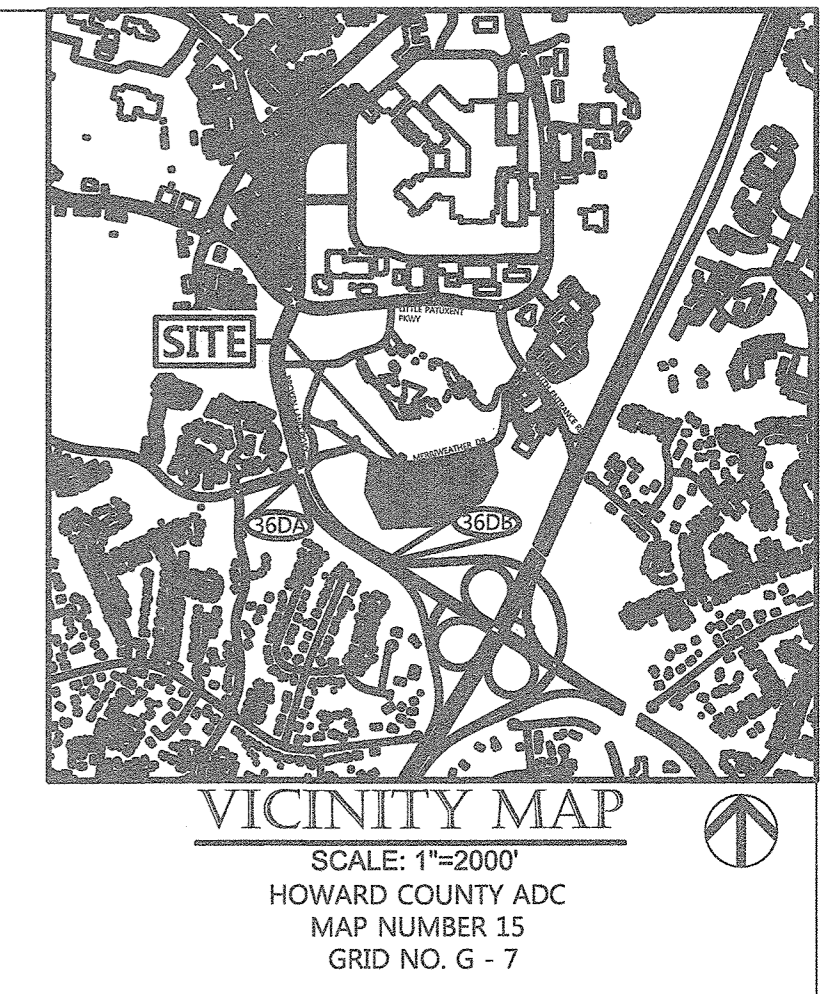
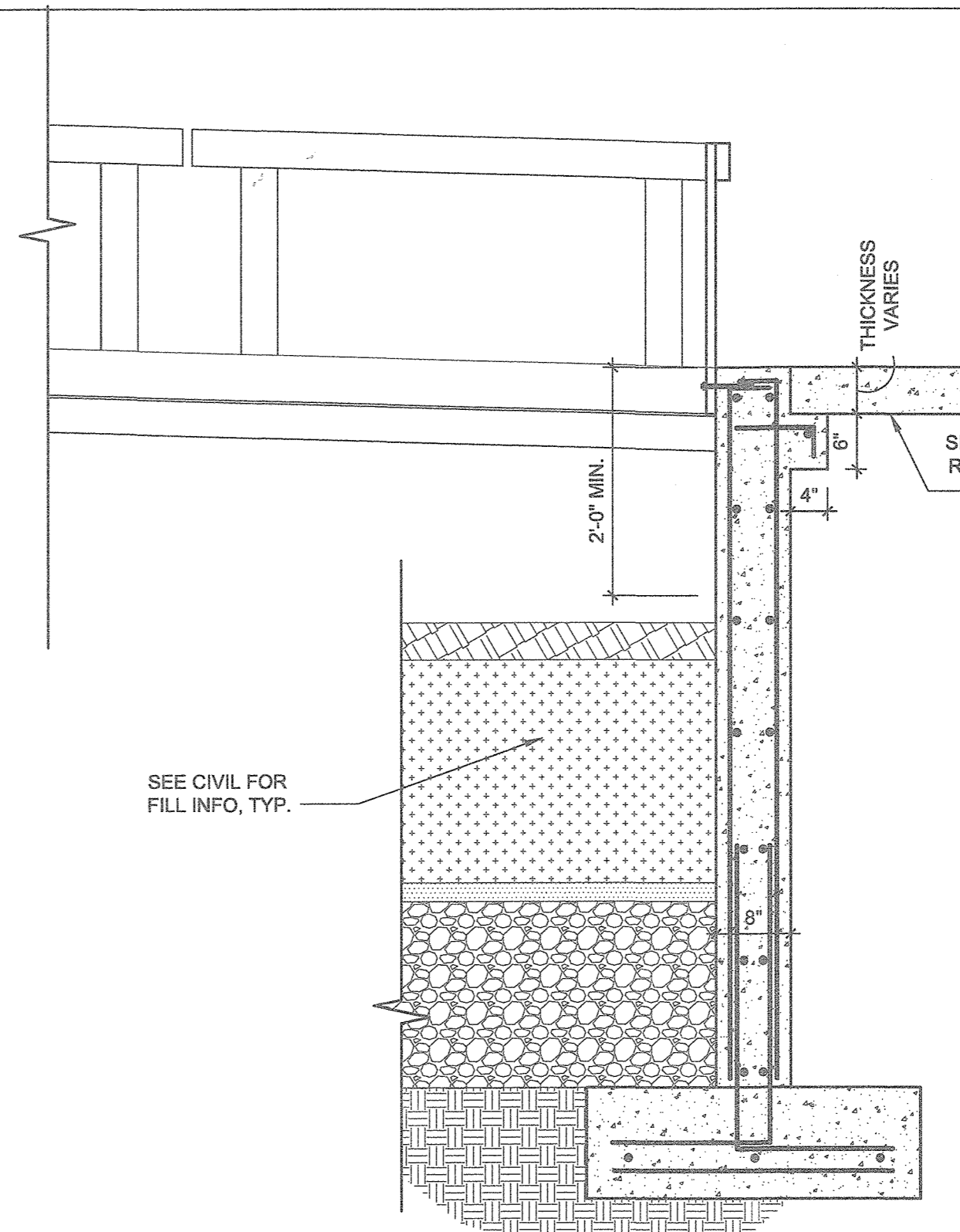
SECTION @ ESD IN OPEN SPACE
SCALE: 3/4" = 1'-0"
1
S-2



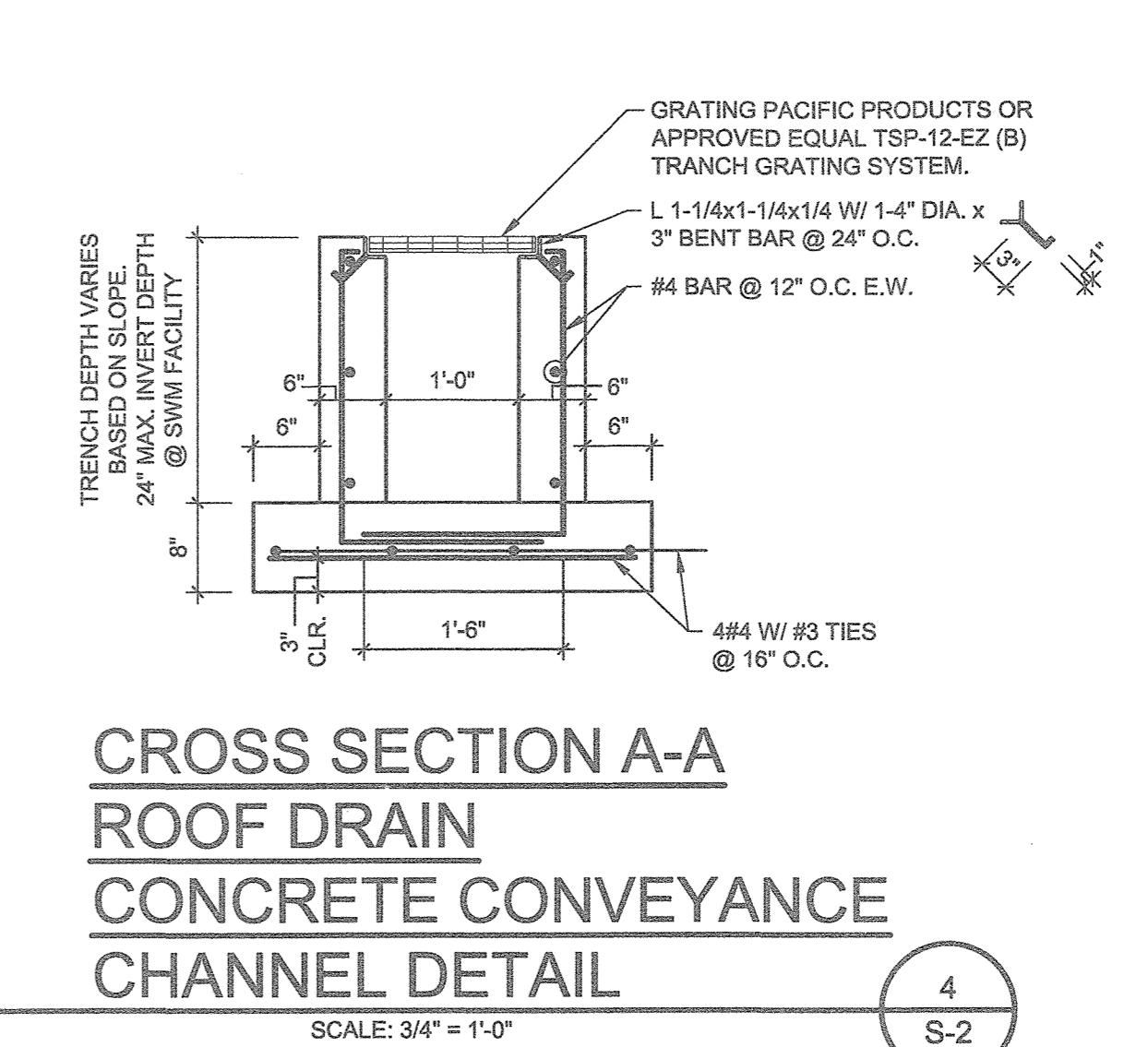
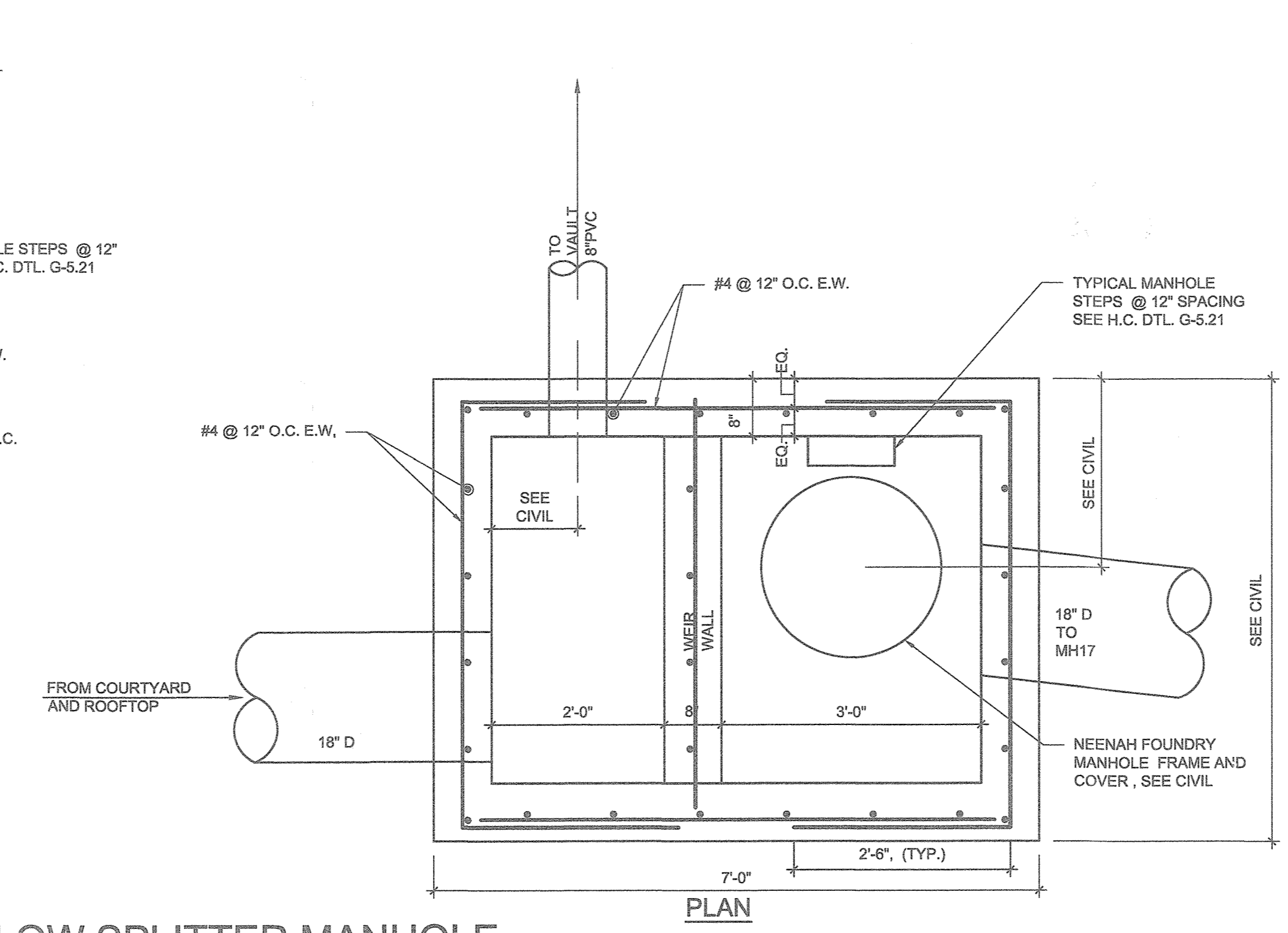
SECTION @ ESD IN CONCRETE PAVING AREA W/ STREET PARKING
SCALE: 3/4" = 1'-0"
2
S-2



SECTION
SCALE: 3/4" = 1'-0"
3
S-2



SECTION SWM 14A FLOW SPLITTER MANHOLE
SCALE: 3/4" = 1'-0"
4
S-2



CROSS SECTION A-A ROOF DRAIN CONCRETE CONVEYANCE CHANNEL DETAIL
SCALE: 3/4" = 1'-0"
4
S-2

ENVIRONMENTAL DATA SOURCES

- FLOODPLAIN INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A STUDY PERFORMED BY BIO-HABITATS DATED 06/18/2015.
- WETLANDS AND ASSOCIATED ENVIRONMENTAL INFORMATION SHOWN HEREON REFLECT THE RESULT OF AN INVESTIGATION PERFORMED BY DMW DATED MARCH 2015.
- SOIL SURVEY INFORMATION SHOWN HEREON REFLECTS HOWARD COUNTY SOILS INFORMATION DATED 11/26/2007.
- DECLARATION OF RESTRICTIVE COVENANT AREAS: ARMY CORPS OF ENGINEERS PERMIT NUMBER 2014-61063. SPECIAL CONDITION #14 REQUIRES THAT ANY WETLAND MITIGATION AREAS BE PROTECTED IN PERPETUITY BY A DECLARATION OF RESTRICTIVE COVENANTS TO BE RECORDED BY JULY 1, 2016. THIS DOCUMENT PROHIBITS ANY DISTURBANCE WITHIN THIS AREA INCLUDED BUT NOT LIMITED TO NEW DEVELOPMENT, INSTALLATION OF UTILITIES, GRADING, REMOVAL OF VEGETATION, ETC. THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE ARMY CORPS OF ENGINEERS HAVE PLACED THESE RESTRICTIVE COVENANTS ON THE AREA TO PROTECT WATER QUALITY, ENVIRONMENTAL RESOURCES AND THE MITIGATION AREA REQUIRED TO OFF-SET IMPACTS TO WETLANDS, STREAMS AND FLOODPLAINS PROPOSED BY THIS DEVELOPMENT.

DATA SOURCES:

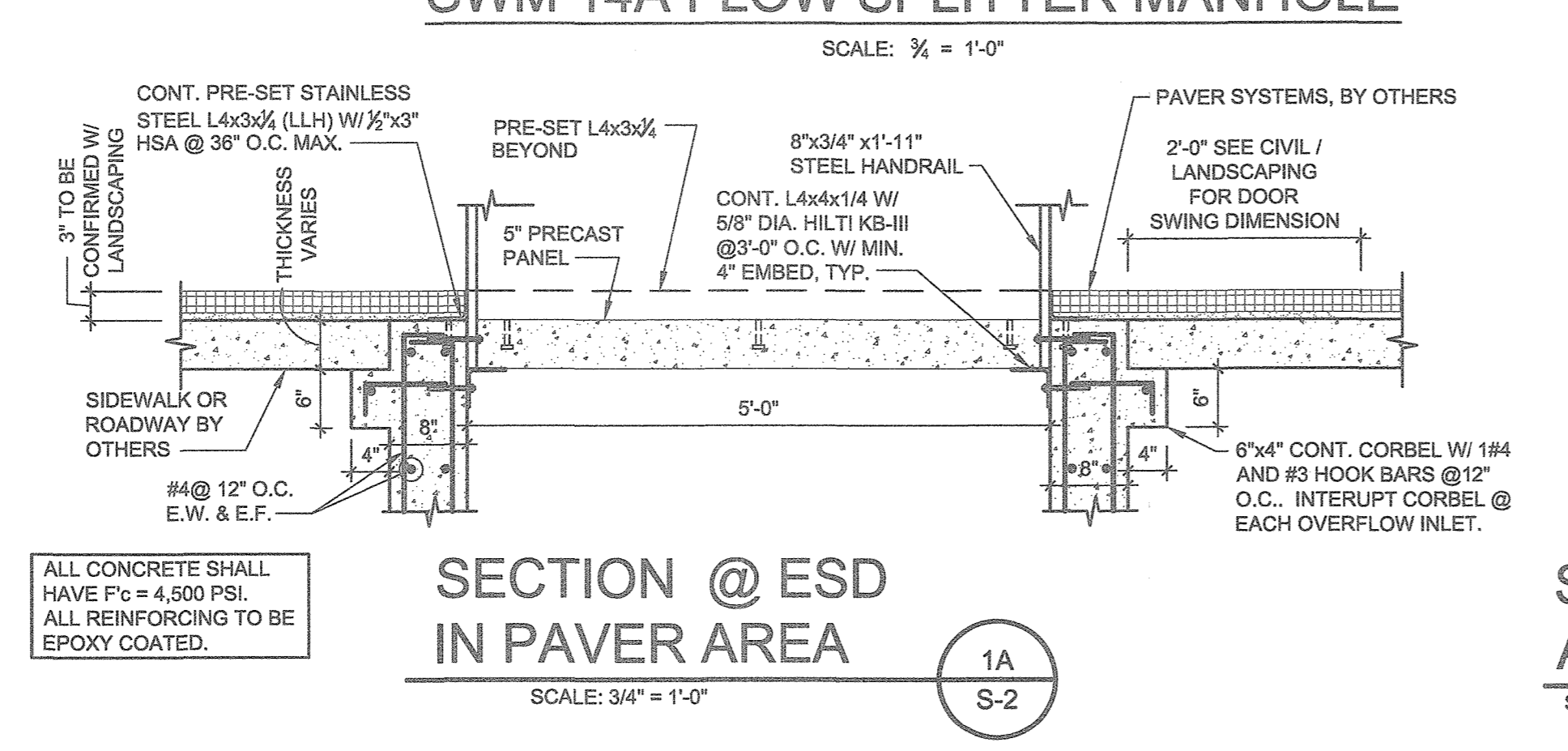
- EXISTING TOPOGRAPHIC INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A TOPOGRAPHIC SURVEY PERFORMED BY DMW INC. ON 8/27/15 & 12/3/15, AERIAL TOPOGRAPHY FLOWN BY MCKENZIE SWYDER, INC. MARCH, 2007 AND FIELD SURVEY BY GLW ON AUGUST, 2011, GRADES AS SHOWN ON F-15-106 AND F-16-107 PREPARED BY GLW, AND MASS GRADING SDP-16-075 BY DMW.
- BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, PA.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

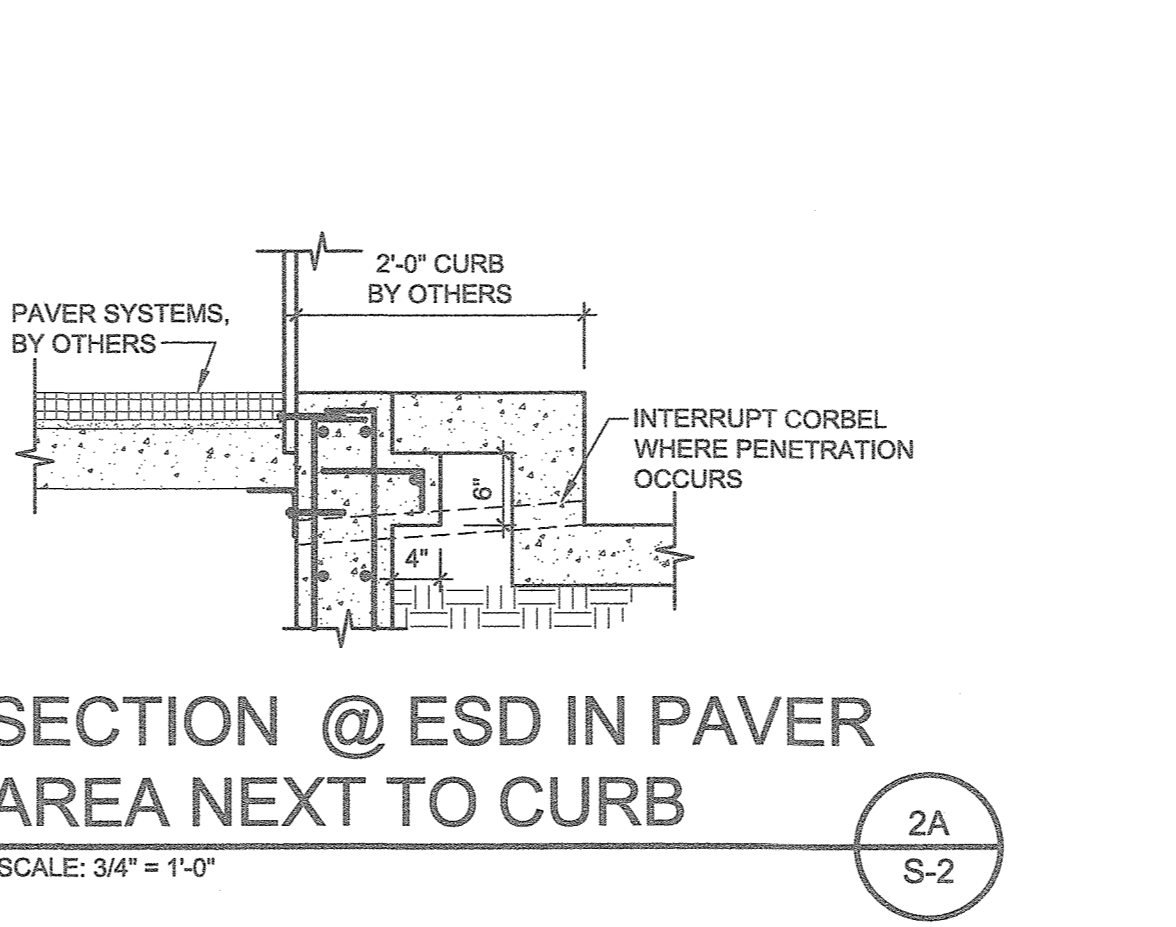
[Signature] 4/2/18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 6/1/18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 6-15-18
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE



SECTION @ ESD IN PAVER AREA
SCALE: 3/4" = 1'-0"
1A
S-2



SECTION @ ESD IN PAVER AREA NEXT TO CURB
SCALE: 3/4" = 1'-0"
2A
S-2

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, SDP-16-075, WP-17-052, WP-17-059, WP-17-049, SP-16-009, WP-17-100

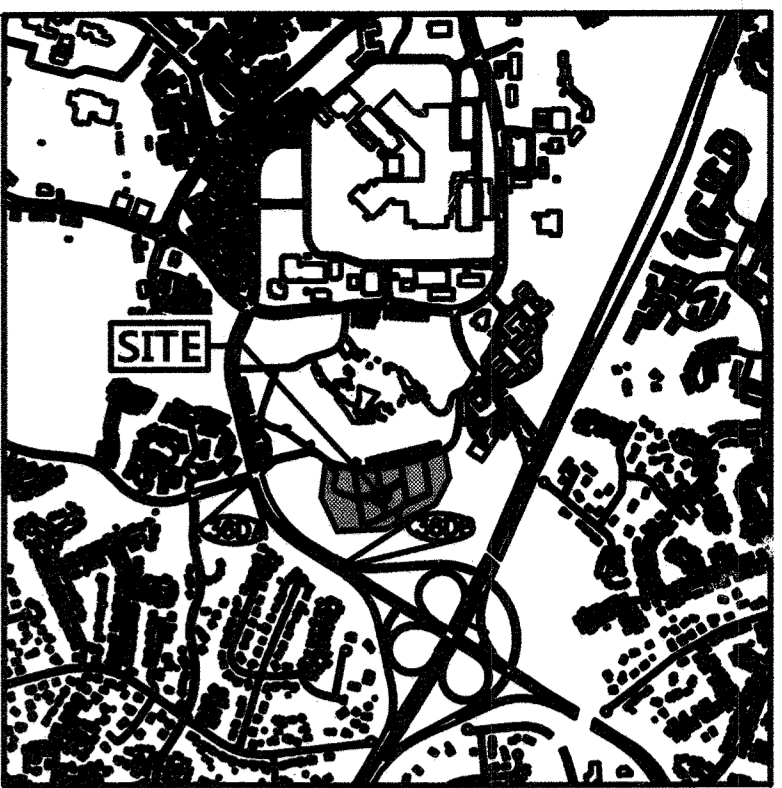
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 39426. EXPIRATION DATE: 8/15/2018.

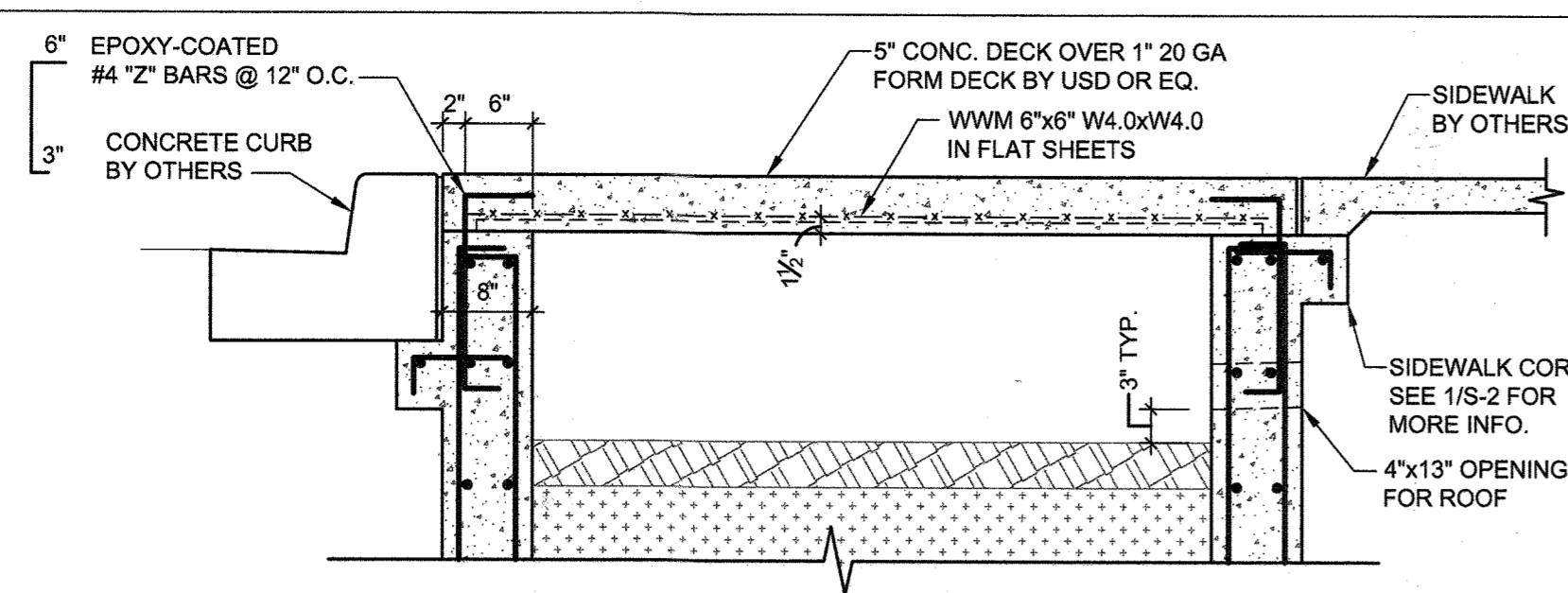
09/11/17 Date
[Signature]
Professional Engr. No. 39426

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

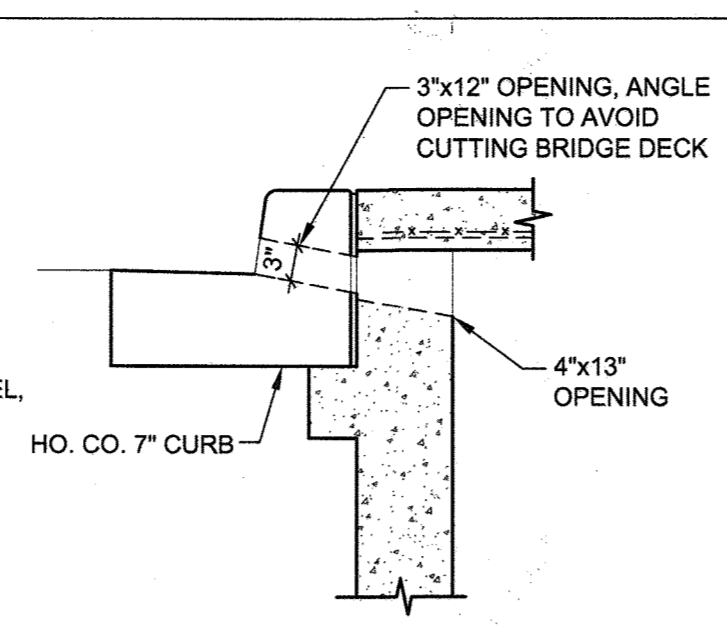
11-18-19	3	CHANGE SHEET NUMBER
Date	No.	Revision Description
DOWNTOWN COLUMBIA		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE I		
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
SK&A MD		
Smislova, Kehnemul & Associates, PA 12435 Park Potomac Avenue, Suite 300 • Potomac, MD 20854 P 301.881.1441 F 301.881.8664 W skaingr.com		
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
COLUMBIA CRESCENT	AREA 3	PARCEL 527
PLAT OR L.P.	TAX ZONE/MAP	ELECT. DISTRICT
N/A	36	5-15
WATER CODE	SEWER CODE	CENSUS TRACT
550	LITTLE PATUXENT	605602
TITLE		
S-2 ESD STRUCTURES		
Des. By	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By	Date 9-11-17	
Chk. By	Approved MCB	82 of 94



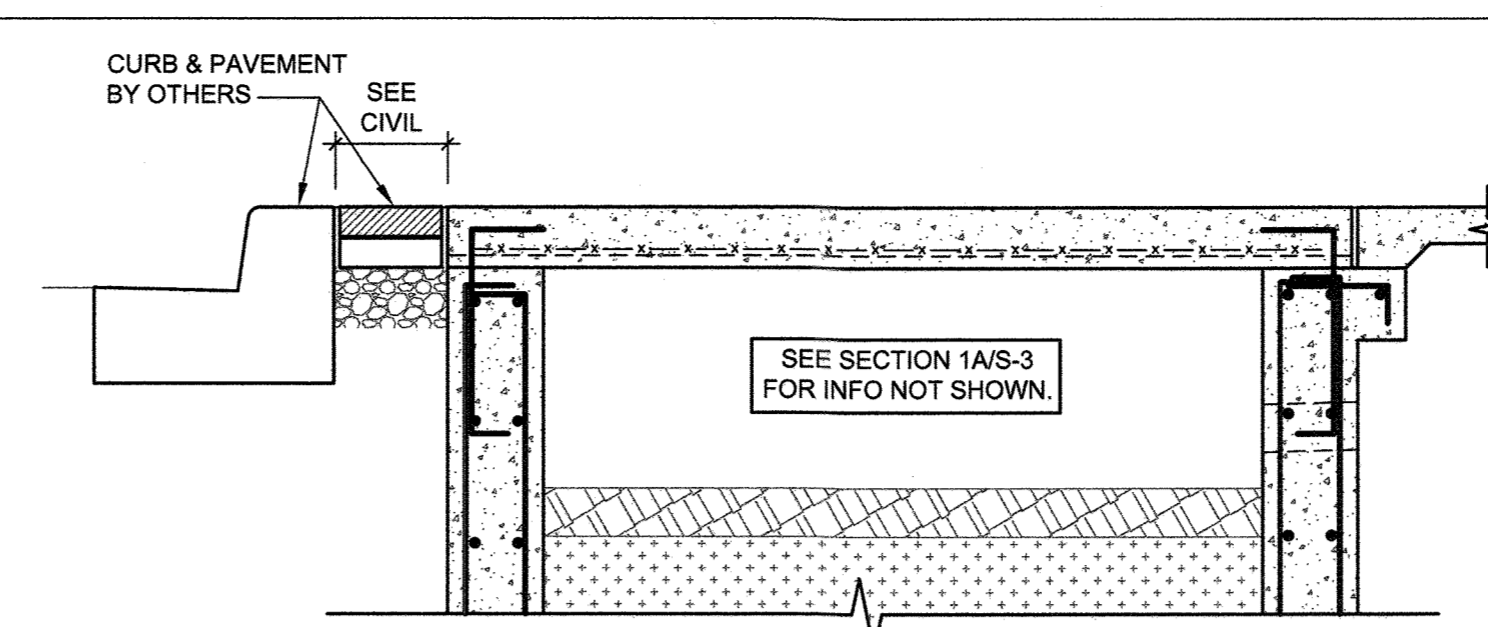
VICINITY MAP
SCALE: 1"=200'
HOWARD COUNTY ADC
MAP NUMBER 15
GRID NO. G-7



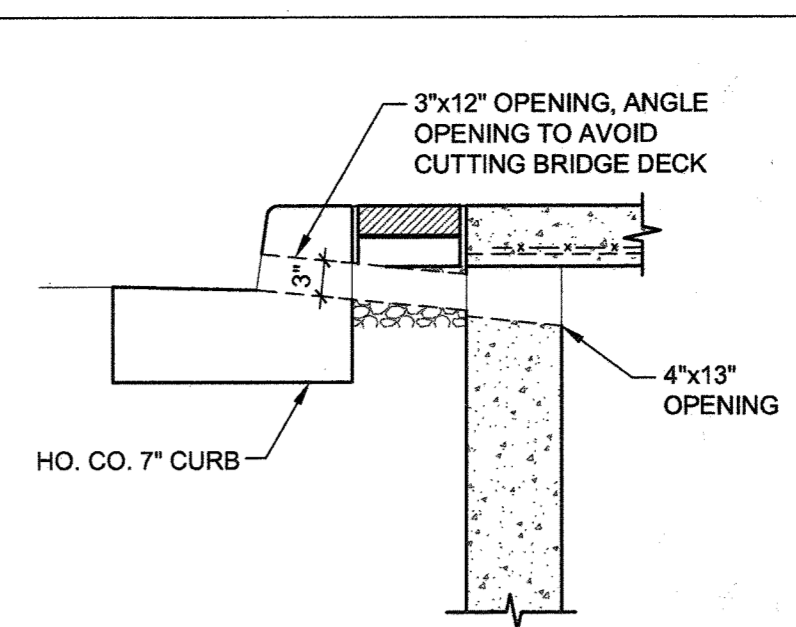
SECTION @ BRIDGE (1A)
SCALE: 3/4" = 1'-0"
SEE SECTION 1A/S-2 FOR INFO NOT SHOWN.



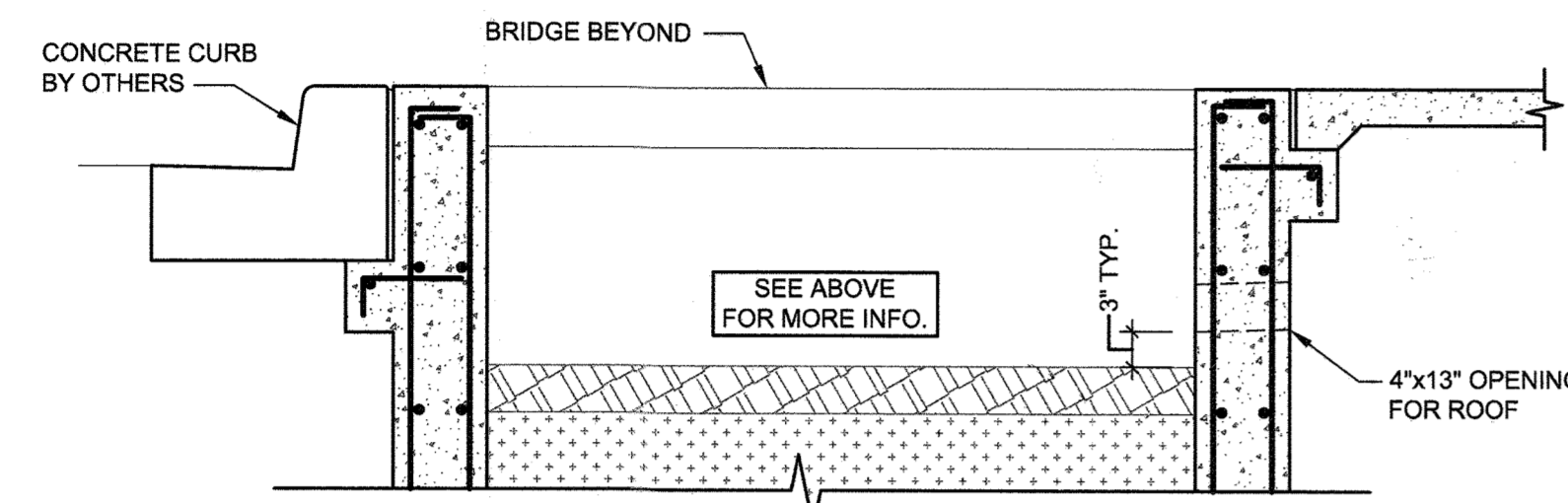
SECTION @ 1A W/ STEEL FLUME (1C)
SCALE: 3/4" = 1'-0"



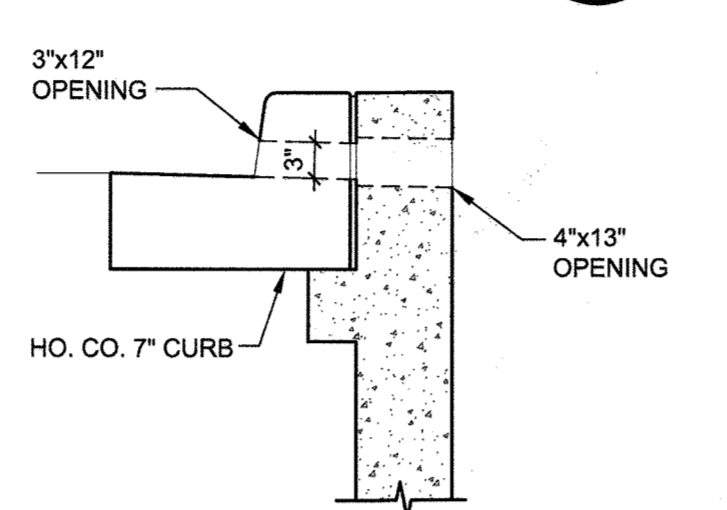
SECTION @ BRIDGE (2A)
SCALE: 3/4" = 1'-0"



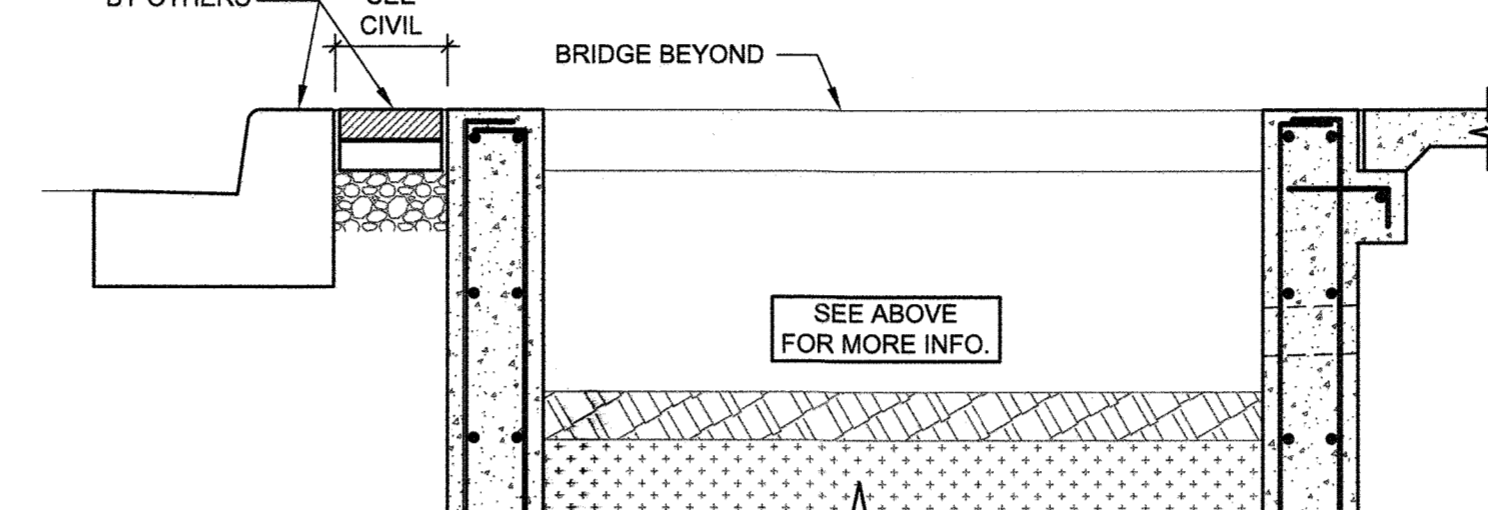
SECTION @ 2A W/ STEEL FLUME (2C)
SCALE: 3/4" = 1'-0"



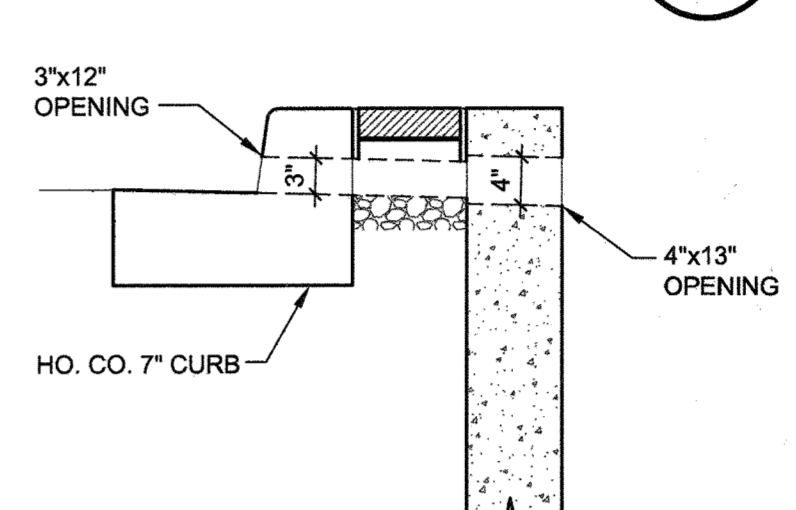
SECTION @ OPEN AREA (1B)
SCALE: 3/4" = 1'-0"



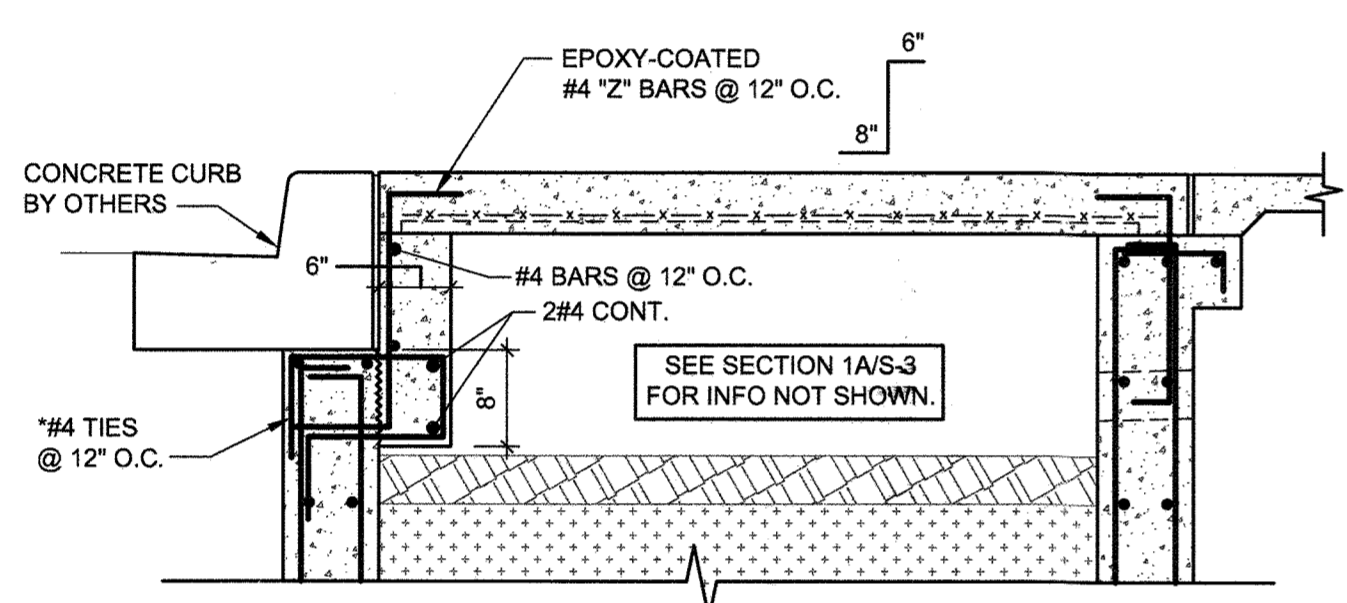
SECTION @ 1B W/ STEEL FLUME (1D)
SCALE: 3/4" = 1'-0"



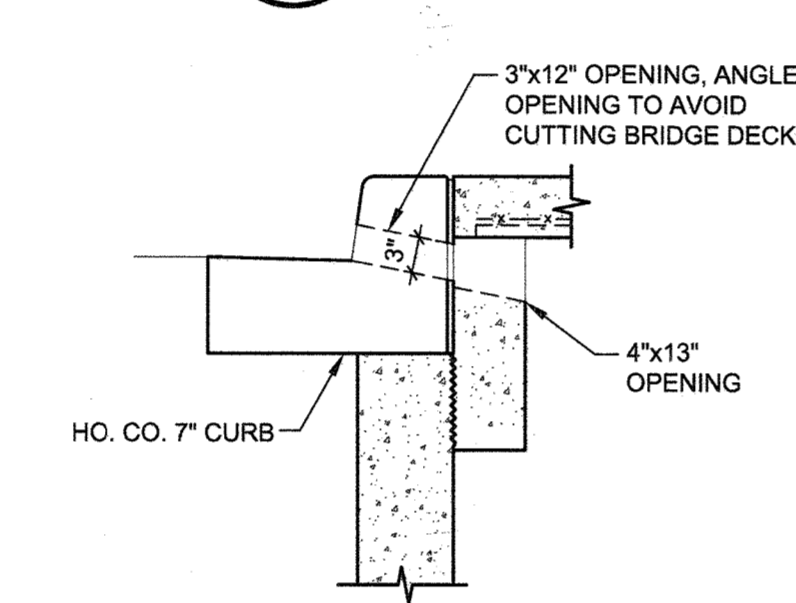
SECTION @ OPEN AREA (2B)
SCALE: 3/4" = 1'-0"



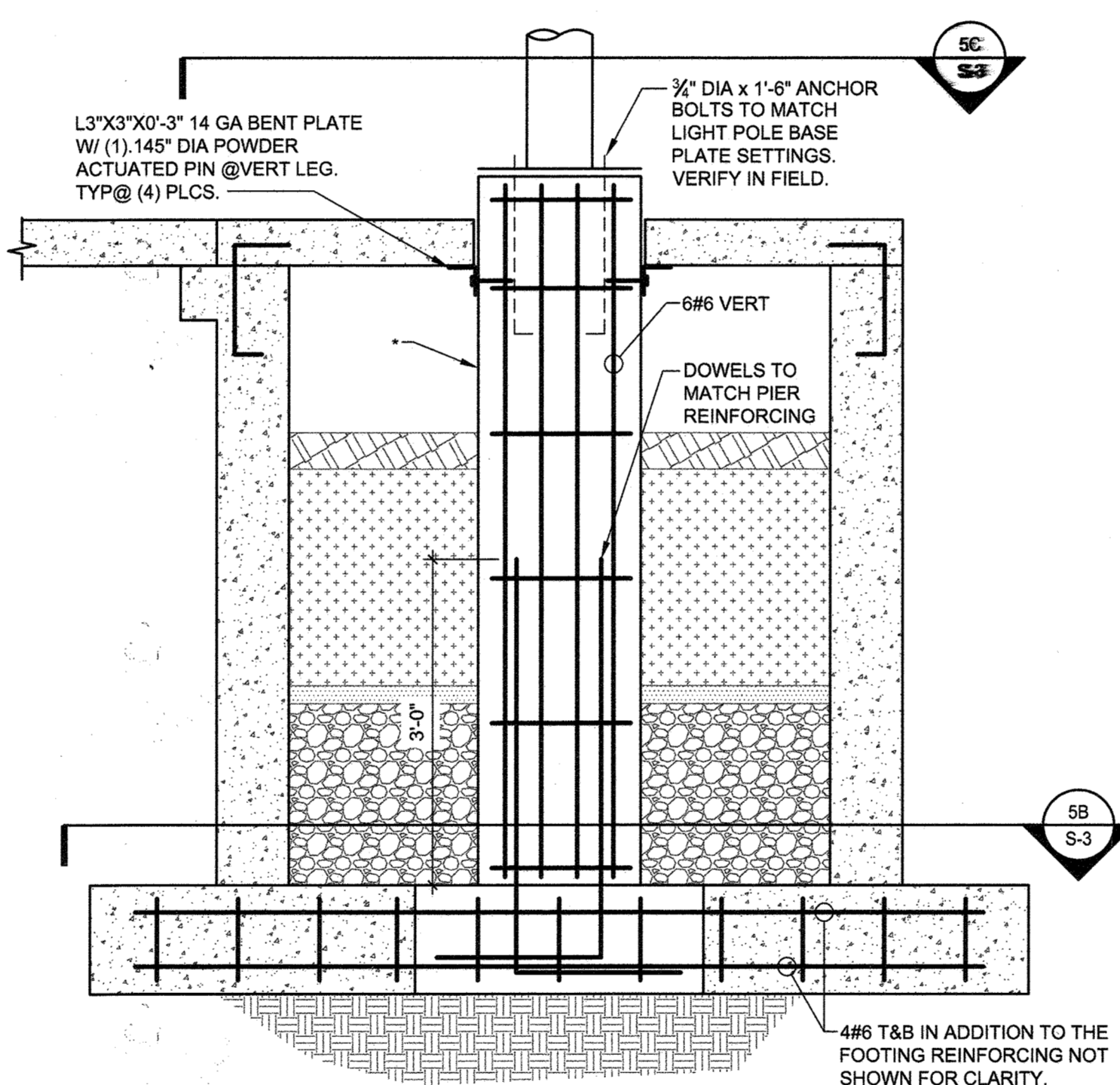
SECTION @ 2B W/ STEEL FLUME (2D)
SCALE: 3/4" = 1'-0"



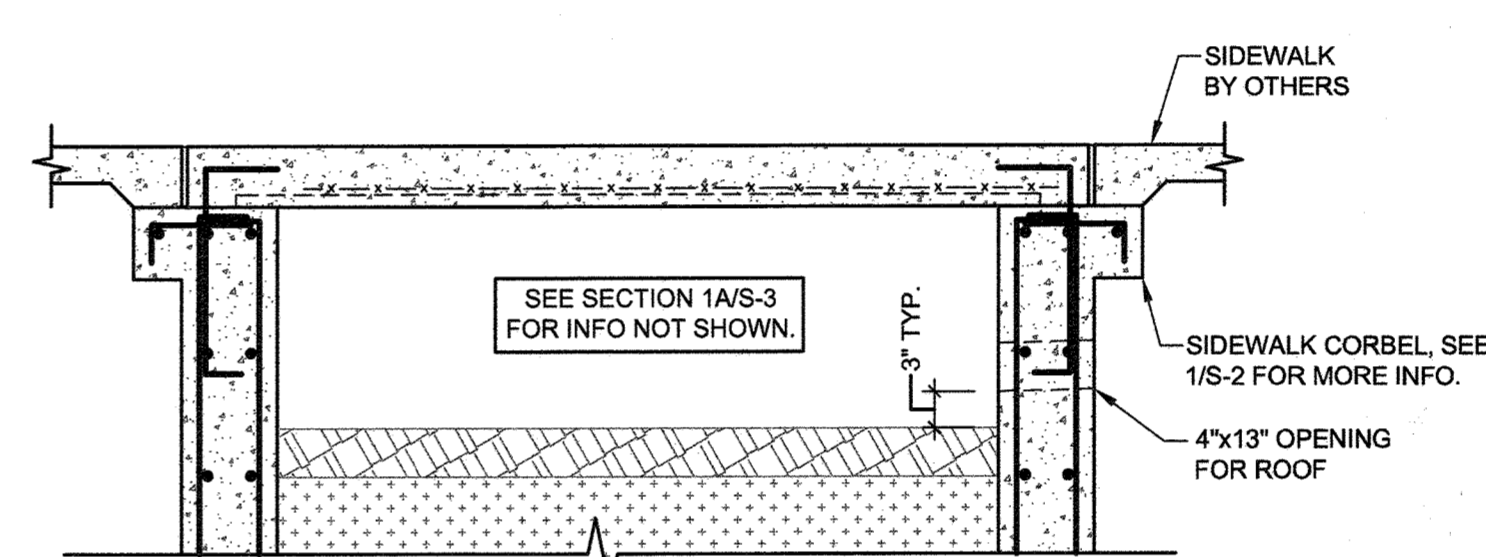
SECTION @ BRIDGE (3A)
SCALE: 3/4" = 1'-0"



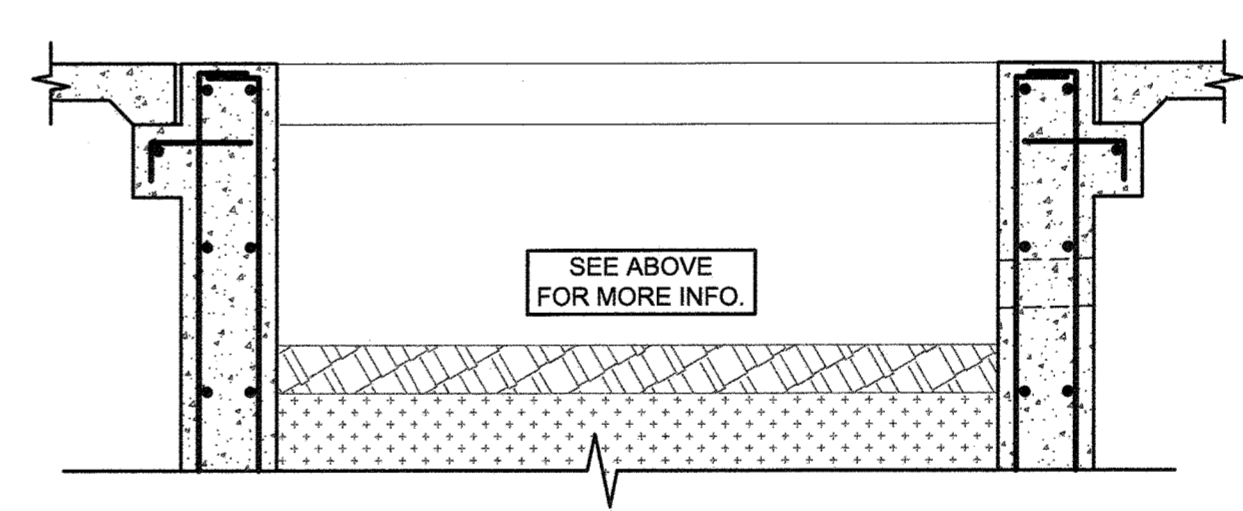
SECTION @ 3A W/ STEEL FLUME (3C)
SCALE: 3/4" = 1'-0"



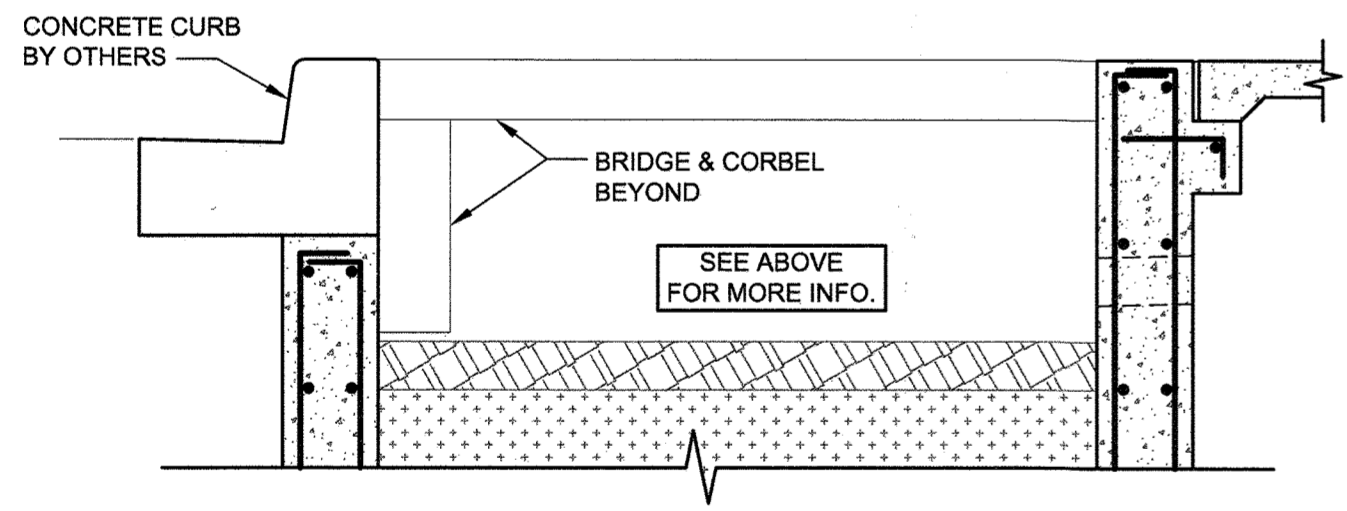
SECTION @ LIGHT POLE IN BRIDGE (5A)
SCALE: 3/4" = 1'-0"



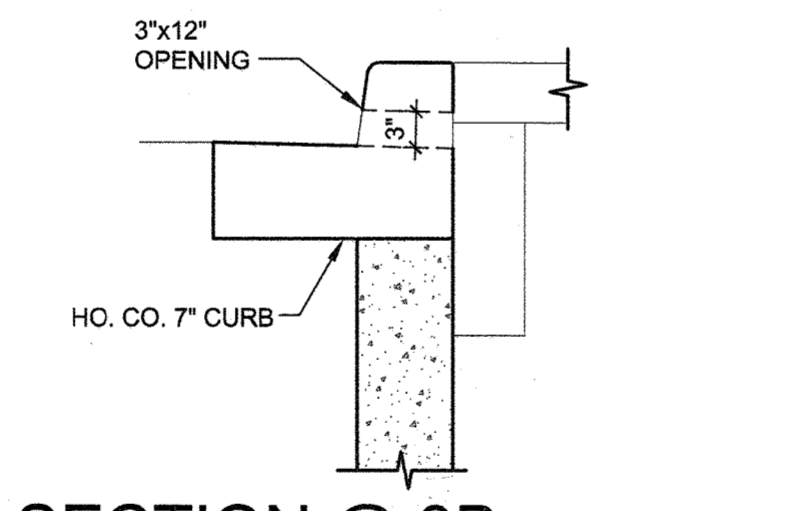
SECTION @ BRIDGE (4A)
SCALE: 3/4" = 1'-0"



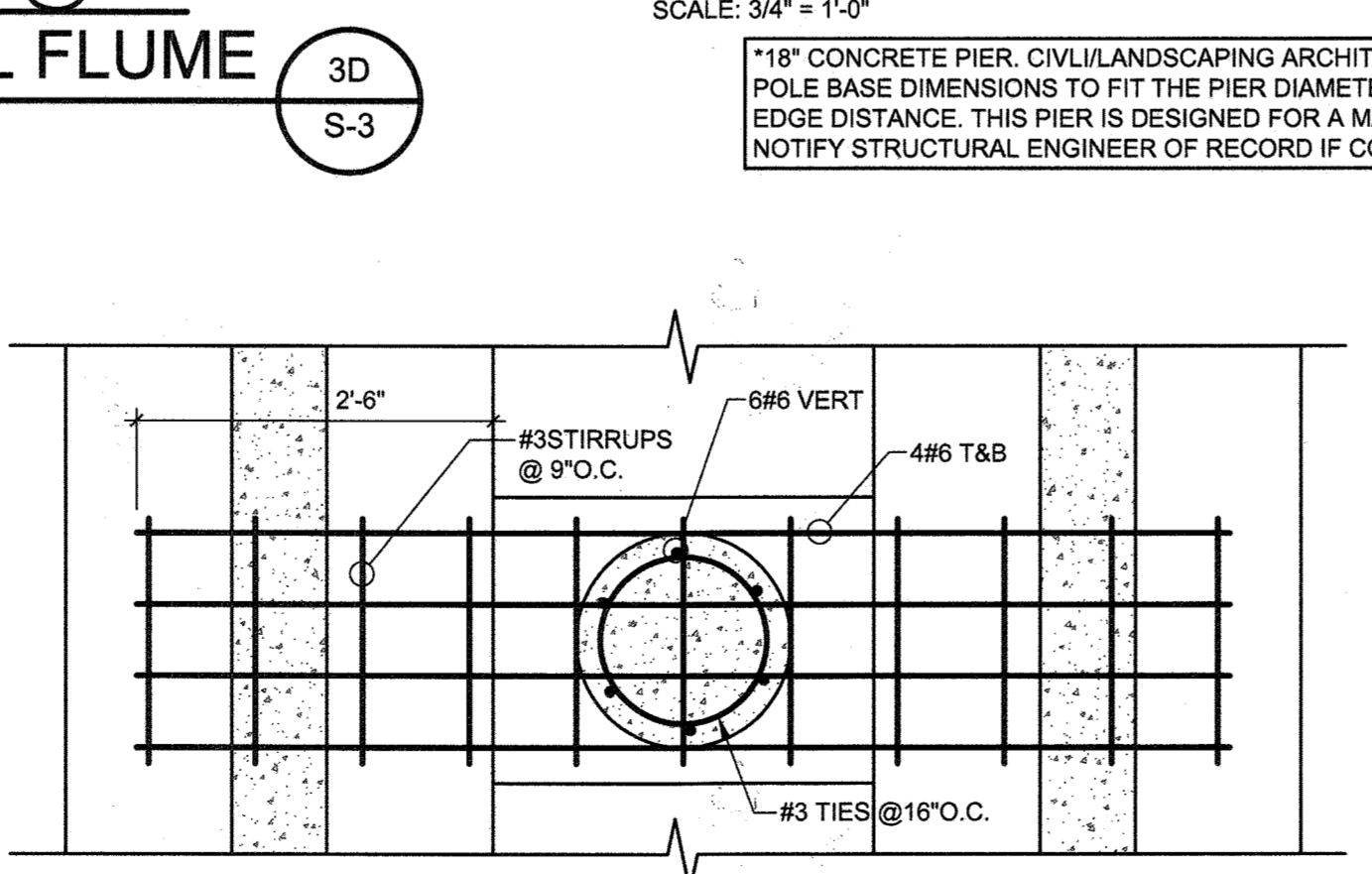
SECTION @ OPEN AREA (4B)
SCALE: 3/4" = 1'-0"



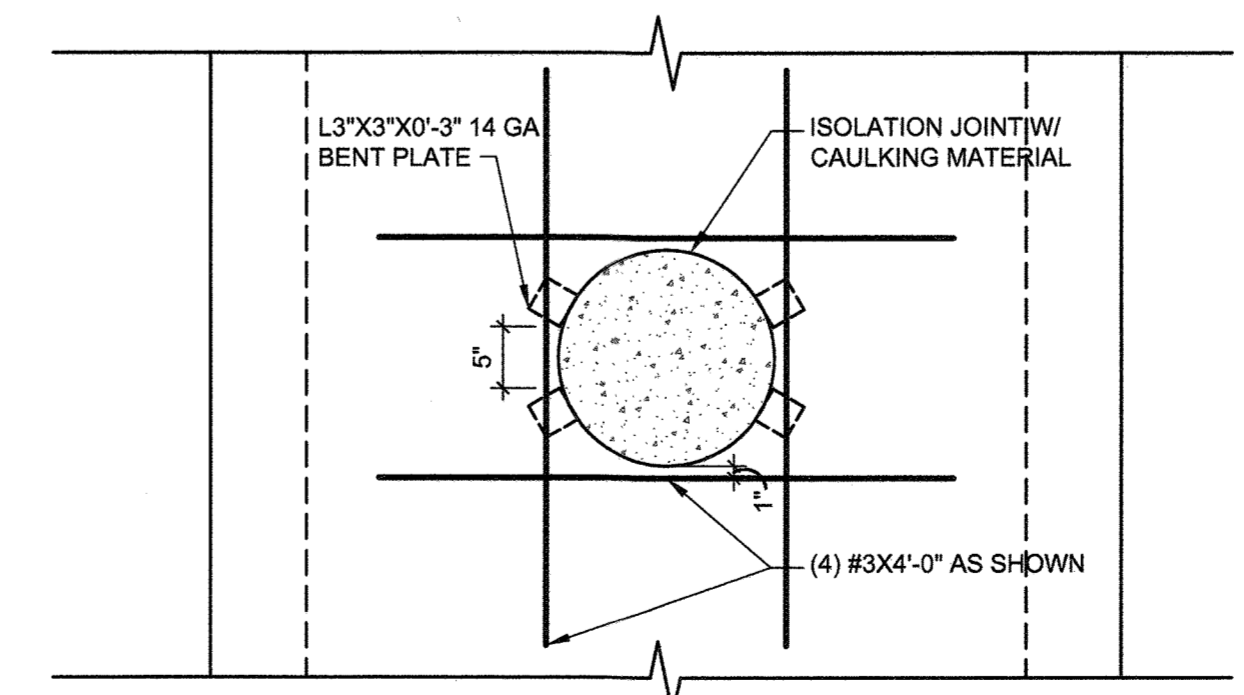
SECTION @ OPEN AREA (3B)
SCALE: 3/4" = 1'-0"



SECTION @ 3B W/ STEEL FLUME (3D)
SCALE: 3/4" = 1'-0"



LIGHT POLE FOOTER PLAN (5B)
SCALE: 3/4" = 1'-0"



PLAN @ LIGHT POLE IN BRIDGE (5C)
SCALE: 3/4" = 1'-0"

*THE #4 STIRRUPS IN THE 8" DEEP CORBEL CAN BE REPLACED BY POST-INSTALLED #4 BARS W/ MIN 7" EMBEDMENT IN EPOXY GROUT. ROUGHEN THE PORTION OF CONCRETE WALL TO RECEIVE THE CORBEL WHICH IS TO BE POURED SEPARATELY. THE #4 DOWELS SHALL BE PLACED W/ MIN. 3" EDGE DISTANCE IN A STAGGER PATTERN.

*18" CONCRETE PIER. CIVIL/LANDSCAPE ARCHITECT TO CONFIRM LIGHTING POLE BASE DIMENSIONS TO FIT THE PIER DIAMETER WITH MIN 4" ANCHOR BOLT EDGE DISTANCE. THIS PIER IS DESIGNED FOR A MAXIMUM POLE HEIGHT OF 22'-0". NOTIFY STRUCTURAL ENGINEER OF RECORD IF CONDITION IS CHANGED.

- ENVIRONMENTAL DATA SOURCES**
- FLOODPLAIN INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A STUDY PERFORMED BY BIO-HABITATS DATED 09/18/2015.
 - WETLANDS AND ASSOCIATED ENVIRONMENTAL INFORMATION SHOWN HEREON REFLECT THE RESULT OF AN INVESTIGATION PERFORMED BY DMW DATED MARCH 2015.
 - SOIL SURVEY INFORMATION SHOWN HEREON REFLECTS HOWARD COUNTY SOILS INFORMATION DATED 11/26/2007.
 - DECLARATION OF RESTRICTIVE COVENANT AREAS: ARMY CORPS OF ENGINEERS PERMIT NUMBER 2014-61063, SPECIAL CONDITION #14 REQUIRES THAT ANY WETLAND MITIGATION AREAS BE PROTECTED IN PERPETUITY BY A DECLARATION OF RESTRICTIVE COVENANTS TO BE RECORDED BY JULY 1, 2016. THIS DOCUMENT PROHIBITS ANY DISTURBANCE WITHIN THIS AREA INCLUDED BUT NOT LIMITED TO NEW DEVELOPMENT, INSTALLATION OF UTILITIES, GRADING, REMOVAL OF VEGETATION, ETC. THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE ARMY CORPS OF ENGINEERS HAVE PLACED THESE RESTRICTIVE COVENANTS ON THE AREA TO PROTECT WATER QUALITY, ENVIRONMENTAL RESOURCES AND THE MITIGATION AREA REQUIRED TO OFF-SET IMPACTS TO WETLANDS, STREAMS AND FLOODPLAINS PROPOSED BY THIS DEVELOPMENT.
- DATA SOURCES:**
- EXISTING TOPOGRAPHIC INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A TOPOGRAPHIC SURVEY PERFORMED BY DMW INC. ON 8/27/15 & 12/3/15. AERIAL TOPOGRAPHY FLOWN BY MCKENZIE SWYDER, INC. MARCH, 2007 AND FIELD SURVEY BY GLW ON AUGUST, 2011. GRADES AS SHOWN ON F-15-106 AND F-16-107 PREPARED BY GLW, AND MASS GRADING SDP-16-075 BY DMW.
 - BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

EXISTING TOPOGRAPHIC INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A TOPOGRAPHIC SURVEY PERFORMED BY DMW INC. ON 8/27/15 & 12/3/15. AERIAL TOPOGRAPHY FLOWN BY MCKENZIE SWYDER, INC. MARCH, 2007 AND FIELD SURVEY BY GLW ON AUGUST, 2011. GRADES AS SHOWN ON F-15-106 AND F-16-107 PREPARED BY GLW, AND MASS GRADING SDP-16-075 BY DMW.

Date	No.	Revision Description
11/18/19	3	ADD DETAIL SHEET

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14
OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-1800

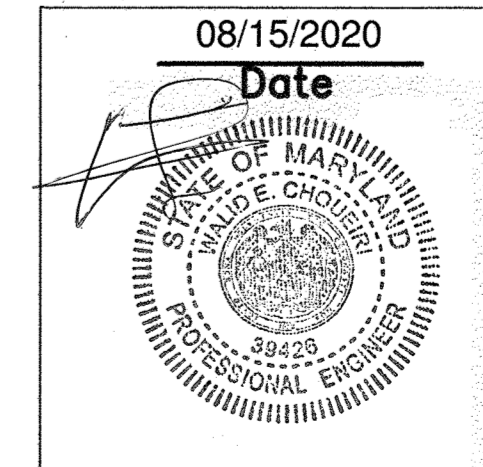
SK&A MD
Smislova, Kehnemui & Associates, PA
12435 Park Potomac Avenue, Suite 300 • Potomac, MD 20854
P 301.881.1441 F 301.881.8664 W sikaengineers.com

Subdivision Name	Block	Parcel No.
COLUMBIA CRESCENT	26	527
PLAN OF	26	527
WATER CODE	550	605802

FILE NUMBERS:
F 15-106, F 16-107, F 17-059,
SDP-16-075, WP-17-052, WP-17-059,
WP-17-049, SP-16-009, WP-17-100

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 39426, EXPIRATION DATE: 08/15/2020

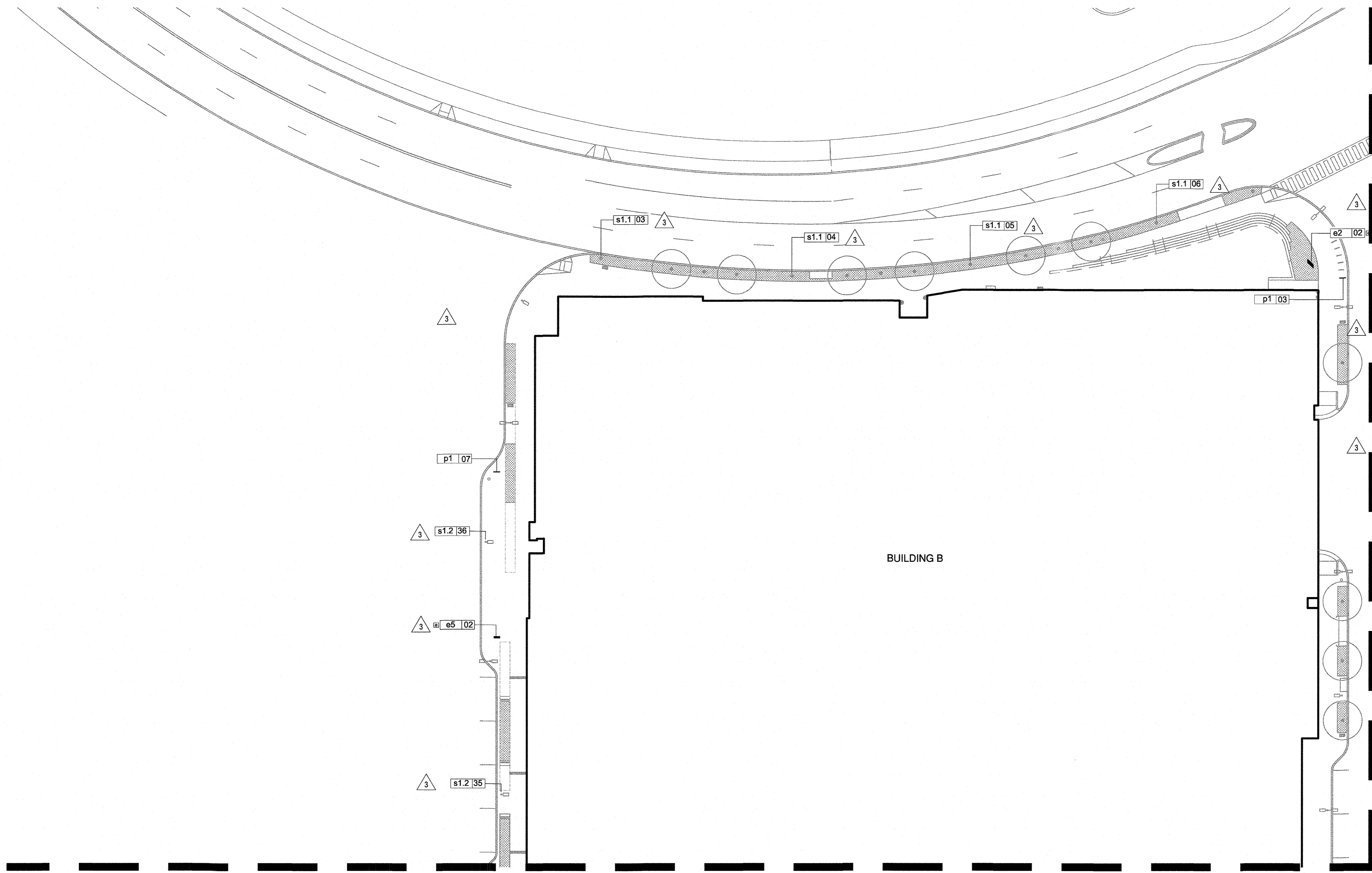
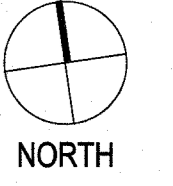
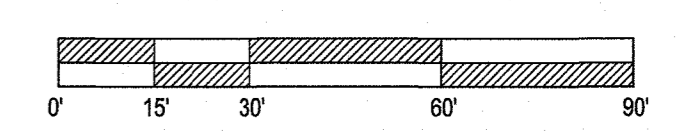


39426
Professional Engr. No.
APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

Des. By	SCALE AS SHOWN	Proj. No.
DM	AS SHOWN	04038.B0
Dn. By	9-11-17	
Chk. By	Approved MCB	83 of 94

POSTED TO PUBLIC ACCESS STRUCTURAL ENGINEERING WEBSITE: 08/09/2018 10:11 AM

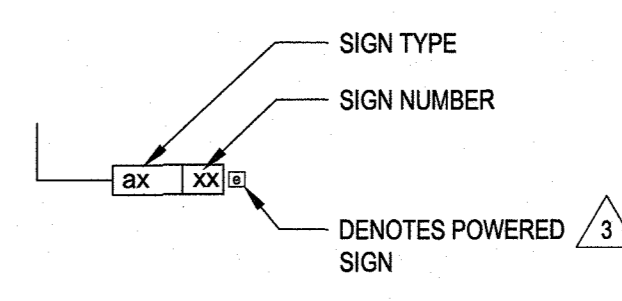
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 2-25-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 3/16/2020
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 3-10-2020
 DIRECTOR DATE



Sign Legend

- e1.2 Landscape Letterforms (Alternate)
- e2 Primary Project Identification
- e3 Secondary Project Identification
- e4 Pedestrian Directional
- e5 Project Directory or Other Digital Signage
- p1 Vehicular Directional
- p2/p2.1/p2.2 DELETED
- p3 Building Mounted Parking Directional
- p4 No Parking Overnight
- p5 Reserved Rideshare Parking
- s1.1/s1.2 District Banners

SIGNAGE DESIGN SHALL COMPLY WITH THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES AND THE HOWARD COUNTY MARYLAND SIGN CODE FOR DOWNTOWN COLUMBIA.



MATCH SP-001B

FILE NUMBERS:
 F-15-106, F-16-107, F-17-059, F-18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-115,
 WP-18-020, WP-18-021, SP-16-009,
 WP-16-100, FDP-DC-CRESCENT-1,
 FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/2020.

7/12/2020
 DATE

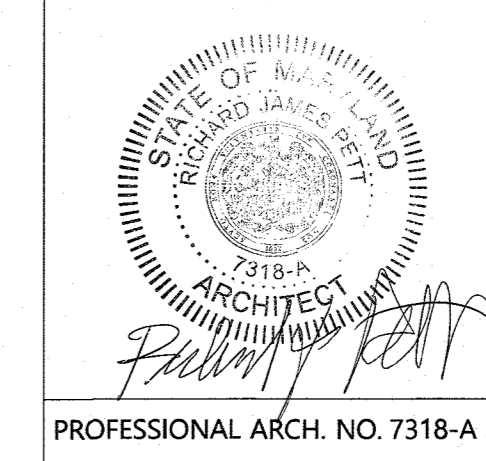
Date	No.	Revision Description
11/18/19	1	SITE SIGNAGE LOCATION/NUMBERING UPDATES

**DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I**
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800



PLAT# OR L/P	BLOCK #	ZONE	TAX ZONE/MAP	SEWER CODE	LOT/PARCEL #	PARCEL D
4623-24630	7	DMAM	36	5		605602



APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

Des. By	JGB/RJP	SCALE	AS SHOWN	Proj. No.	04038.80
Drn. By	JGB	Date	5-10-18		
Chk. By	RJP	Approved	MCB		84 of 94

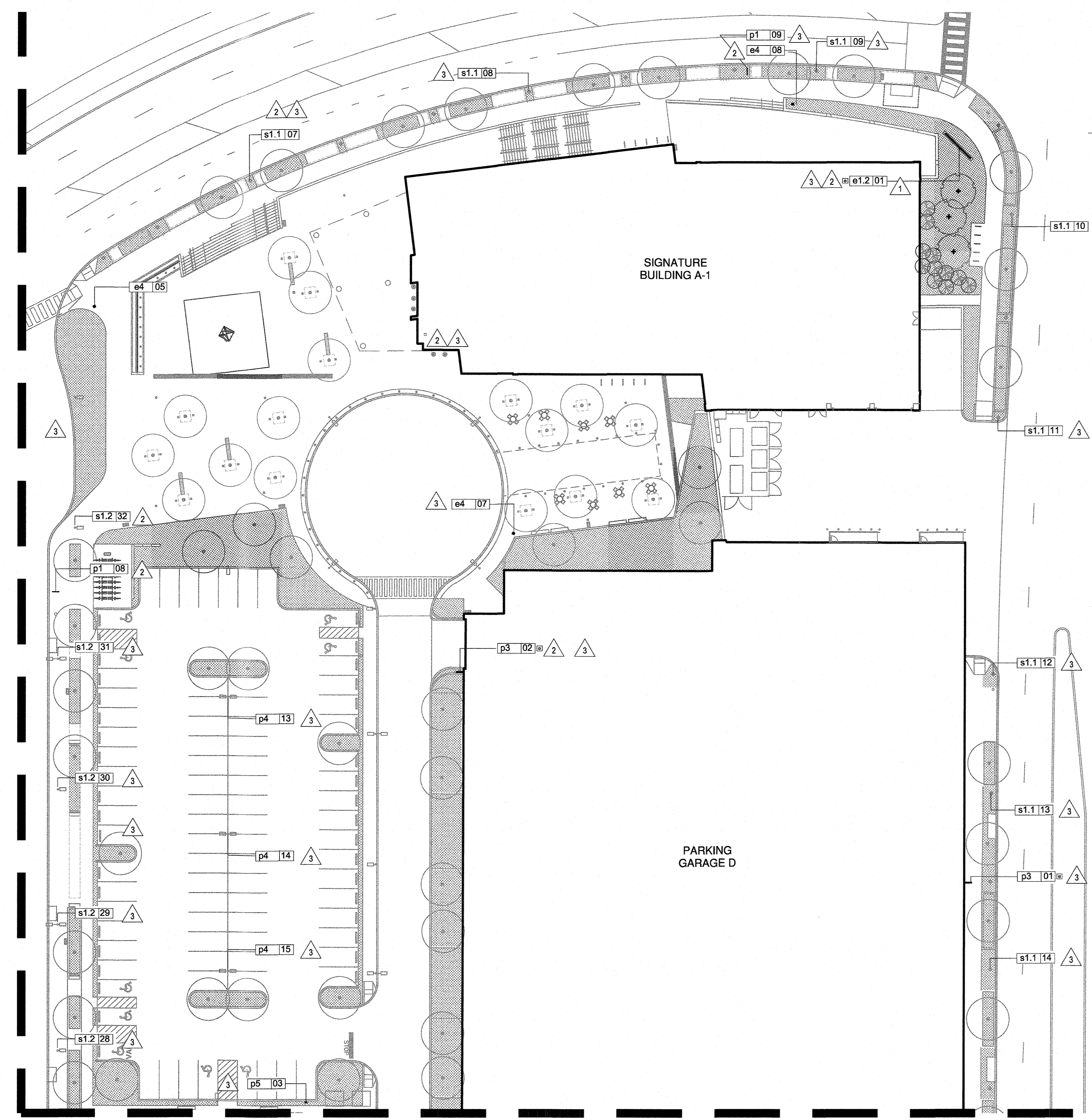
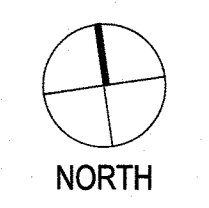
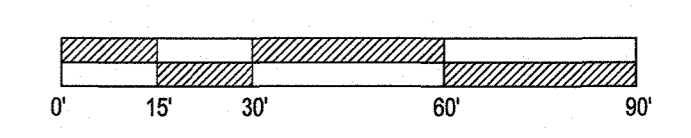
1 PARTIAL SIGNAGE PLAN
 SCALE: 1" = 30'-0"

MATCH SP-001D

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

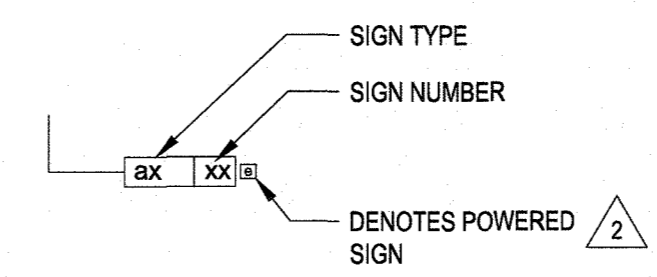
<i>[Signature]</i>	2-28-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	3/6/2020
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>[Signature]</i>	3-10-2020
DIRECTOR	DATE

J:\04038-02\04038-02\CONCEPTS\ASHTON\ASHTON_SIGNAGE_SHEET_FILES\DWG_11182019.dwg 11/18/2019 8:50 AM



- Sign Legend**
- e1.2 Landscape Letterforms (Alternate)
 - e2 Primary Project Identification
 - e3 Secondary Project Identification
 - e4 Pedestrian Directional
 - e5 Project Directory or Other Digital Signage
 - p1 Vehicular Directional
 - p2/p2.1/p2.2 DELETED
 - p3 Building Mounted Parking Directional
 - p4 No Parking Overnight
 - p5 Reserved Rideshare Parking
 - s1.1/s1.2 District Banners

SIGNAGE DESIGN SHALL COMPLY WITH THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES AND THE HOWARD COUNTY MARYLAND SIGN CODE FOR DOWNTOWN COLUMBIA.



MATCH SP-001A

MATCH SP-001E

1 PARTIAL SIGNAGE PLAN
SCALE: 1" = 30'-0"

J:\SP\18-027\CRESCENT\CONCEPTS\CONCEPTS\SP-001A\DWG\SP-001A.DWG 11/18/2019 8:59 AM

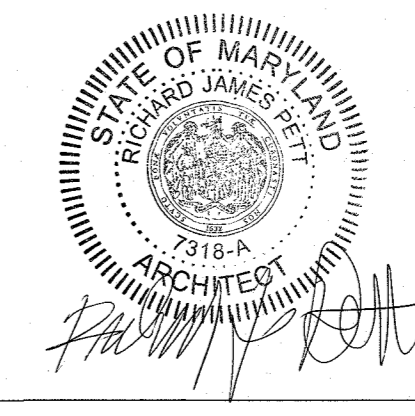
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 2-28-20 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 3/6/2020 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 2-10-2020 DATE
 DIRECTOR

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F-18-017,
 SDP-16-075, SDP-18-025, WP-17-010,
 WP-17-049, WP-17-052, WP-17-115,
 WP-18-020, WP-18-021, SP-16-009,
 WP-16-100, FDP-DC-CRESCENT-1,
 FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/2020.

2/12/2020
 DATE

PROFESSIONAL ARCH. NO. 7318-A



Date	No.	Revision Description
11/18/19	1	SITE SIGNAGE LOCATION/NUMBERING UPDATES
03/06/19	2	SITE SIGNAGE LOCATION UPDATES
09/06/18	3	BUILDING A1 LOADING DOCK RECONFIGURATION

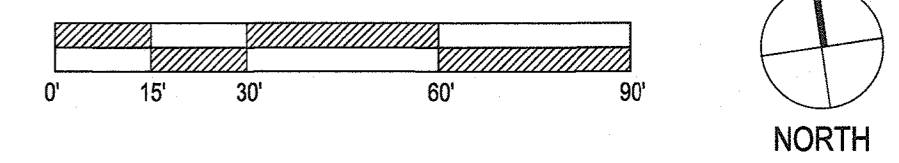
DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

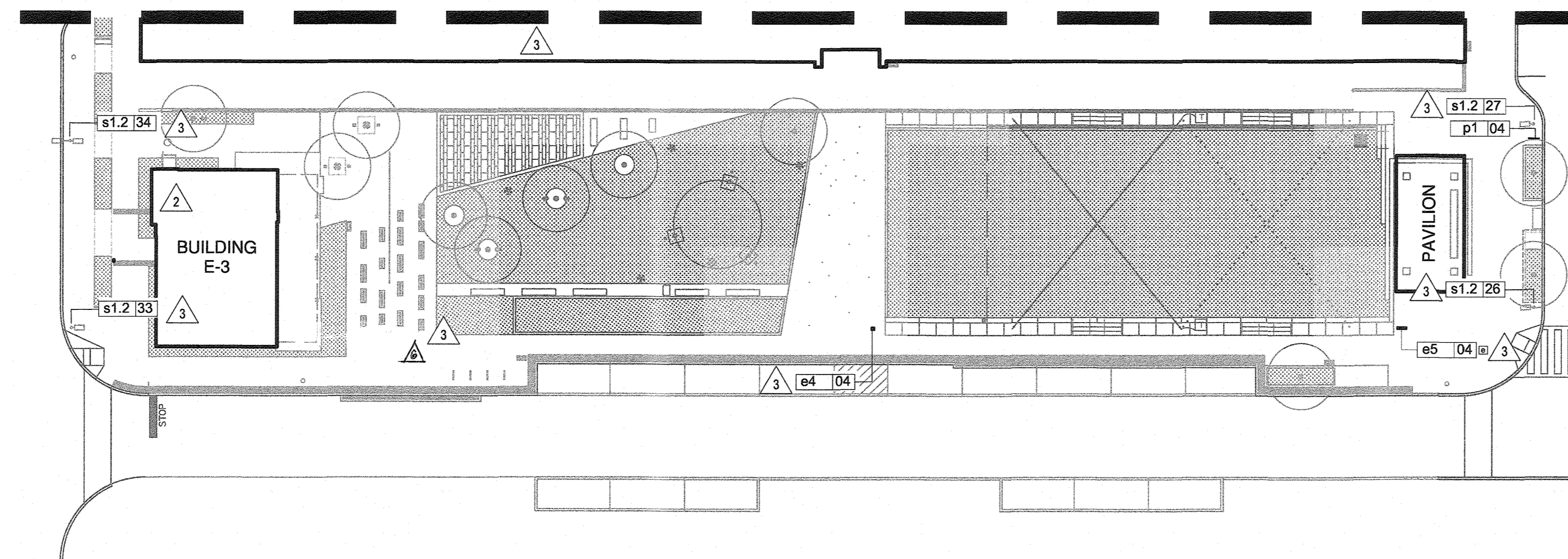


PLAT/LOT/LIP	BLOCK #	ZONE	TAX ZONE/MAP	ELECT. DISTRICT	CENSUS TRACT	PARCEL D
DOWNTOWN COLUMBIA	7	DMAU	36	5		605602
WATER CODE			550		LITTLE PATUXENT	STAGE

TITLE		SCALE		Proj. No.	
SP-001B SITE SIGNAGE SHEET B		AS SHOWN		04038.80	
REVISED SITE DEVELOPMENT PLAN					
Des. By	JGB/RJP	Date	5-10-18	Proj. No.	04038.80
Drn. By	JGB	Approved	MCB	85 of 94	
Chk. By	RJP				

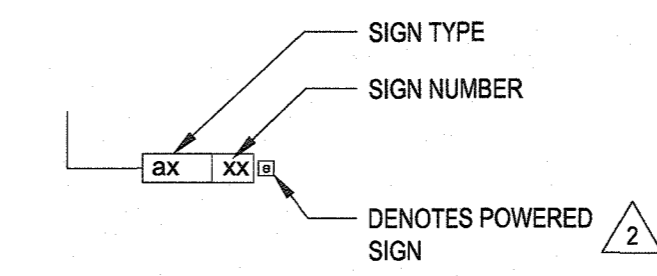


MATCH SP-001A



- Sign Legend**
- e1.2 Landscape Letterforms (Alternate)
 - e2 Primary Project Identification
 - e3 Secondary Project Identification
 - e4 Pedestrian Directional
 - e5 Project Directory or Other Digital Signage
 - p1 Vehicular Directional
 - p2/p2.1/p2.2 DELETED
 - p3 Building Mounted Parking Directional
 - p4 No Parking Overnight
 - p5 Reserved Rideshare Parking
 - s1.1/s1.2 District Banners

SIGNAGE DESIGN SHALL COMPLY WITH THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES AND THE HOWARD COUNTY MARYLAND SIGN CODE FOR DOWNTOWN COLUMBIA.



MATCH SP-001E

J:\01\DC\CRESCENT\CONSULTANTS\DESIGN\SP-001_SIGNAGE_SHEET_FILES\11/18/2019 8:28 AM

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 2.28.20 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 3/6/2020 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 3-10-2020 DATE
 DIRECTOR

1 PARTIAL SIGNAGE PLAN
 SCALE: 1" = 30'-0"

FOR REVISION NO. ONLY

PROFESSIONAL ARCH NO. 16605
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16605, EXPIRATION DATE 6/28/2023.

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/2020.

2/12/2020 DATE

PROFESSIONAL ARCH. NO. 7318-A

11/18/21	△	REMOVE SIGNAGE
11/18/19	△	SITE SIGNAGE LOCATION/NUMBERING UPDATES
03/06/19	△	BUILDING E3 FOOTPRINT UPDATE
Date	No.	Revision Description

DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

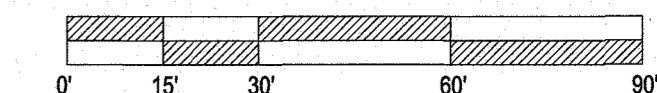
ashton △

SUBDIVISION NAME	SECTION/AREA	ALTERNATE NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	7318-A			
PLAT# OR LFP	BLOCK #	ZONE	TAX ZONE/MAP	ELECT. DISTRICT
	7		36	5
WATER CODE	SEWER CODE			CENSUS TRACT
550				605602
				STAGE
				LITTLE PATUXENT

TITLE
 SP-001D SITE SIGNAGE SHEET D
 △ REVISED SITE DEVELOPMENT PLAN

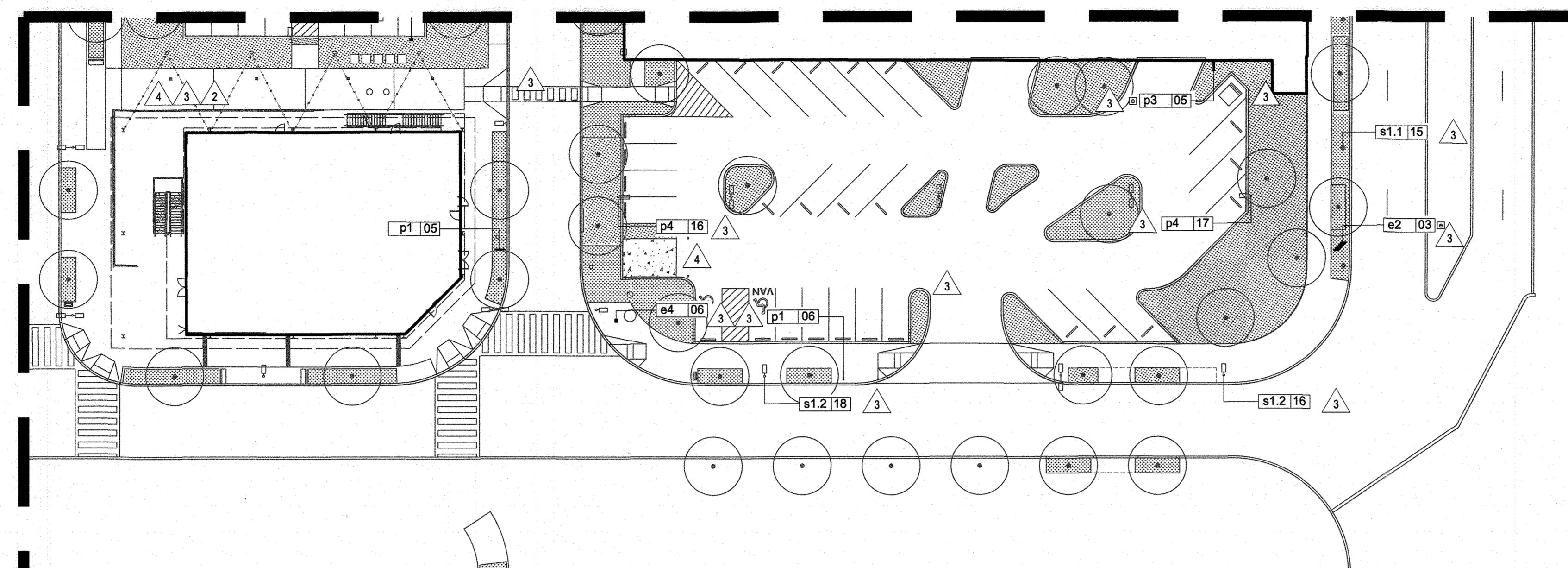
APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

Des. By	JGB/RJP	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	JGB	Date	5-10-18		
Chk. By	RJP	Approved	MCB		86 of 94



MATCH SP-001B

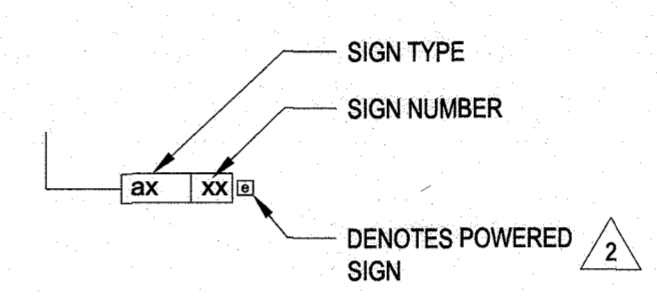
MATCH SP-001D



Sign Legend

- e1.2 Landscape Letterforms (Alternate)
- e2 Primary Project Identification
- e3 Secondary Project Identification
- e4 Pedestrian Directional
- e5 Project Directory or Other Digital Signage
- p1 Vehicular Directional
- p2/p2.1/p2.2 DELETED
- p3 Building Mounted Parking Directional
- p4 No Parking Overnight
- p5 Reserved Rideshare Parking
- s1.1/s1.2 District Banners

SIGNAGE DESIGN SHALL COMPLY WITH THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINES AND THE HOWARD COUNTY MARYLAND SIGN CODE FOR DOWNTOWN COLUMBIA.



1 PARTIAL SIGNAGE PLAN
SCALE: 1" = 30'-0"

3/20/19 HIC CRESCENT NEIGHBORHOOD CONSULTANTS SIGNAGE SHEET SP-001 SIGNAGE SHEET FILED NO. 1/31/2020 1:08 PM

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chad Clark
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 11-30-20
 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature]
 DATE 12/14/20

DIRECTOR
[Signature]
 DATE 12-16-20

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-115,
 WP-18-020, WP-18-021, SP-16-009,
 WP-16-100, FDP-DC-CRESCENT-1,
 FDP-DC-CRESENT-1A
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/2020.

10-19-20
 DATE

PROFESSIONAL ARCH. NO. 7318-A

Date	No.	Revision Description
07/31/20	1	DUMPSTER AND PASEO DESIGN
11/18/19	2	SITE SIGNAGE LOCATION/NUMBERING UPDATES
03/06/19	3	SITE SIGNAGE LOCATION UPDATES

DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

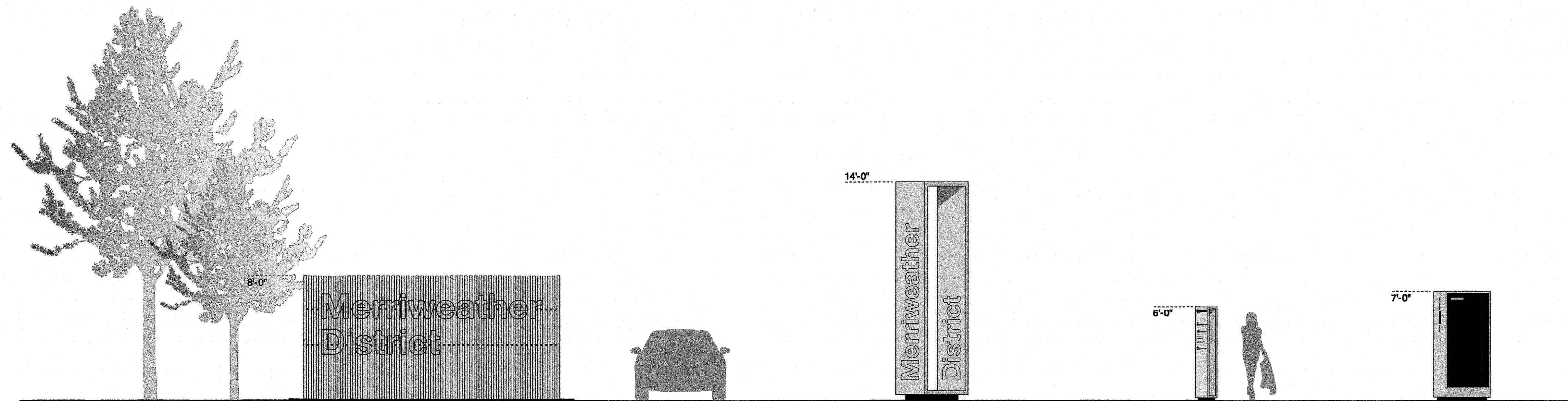
ashton

SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION/AREA CRESCENT NEIGHBORHOOD PHASE I AREA 3	LOT/PARCEL # PARCEL D
PLAT# OR L/F 24623-24630	BLOCK # 7	TAX ZONE/MAP 36
WATER CODE 550	SEWER CODE LITTLE PATUXENT	CENSUS TRACT 605602

TITLE: SP-001E SITE SIGNAGE SHEET E
 REVISED SITE DEVELOPMENT PLAN

Des. By: JGB/RJP SCALE: AS SHOWN Proj. No. 04038.80
 Drn. By: JGB Date: 5-10-18
 Chk. By: RJP Approved: MCB

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

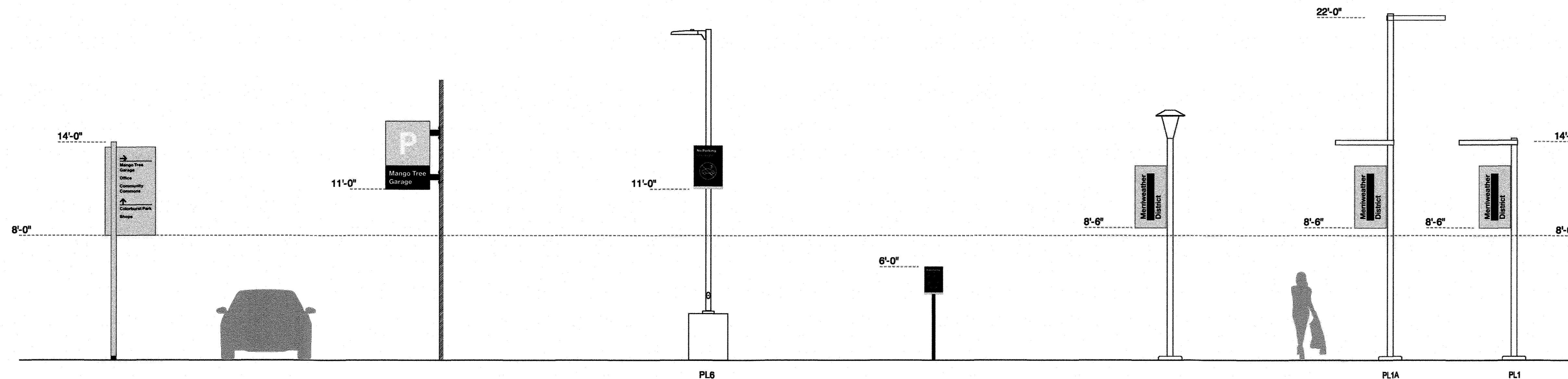


E1.1 PRIMARY PROJECT ID SIGN
E1.2

E2 SECONDARY PROJECT ID SIGN

E4 PEDESTRIAN DIRECTIONAL SIGN

E5 PROJECT DIRECTORY



P1 VEHICULAR DIRECTIONAL SIGN

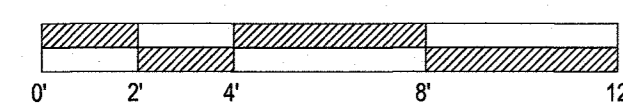
P3 BUILDING MOUNTED PARKING ID

P4 INFORMATION SIGN MOUNTED ON PL6 POLE

P5 INFORMATION SIGN

S1.1 DISTRICT BANNERS

S1.2 DISTRICT BANNERS

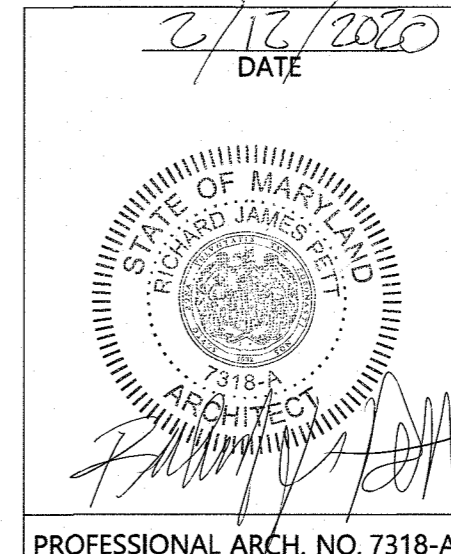


1 GRAPHIC SIGN TYPES
SCALE: 1/4" = 1'-0"

FILE NUMBERS:
F 15-106, F 16-107, F 17-059, F 18-017,
SDP-16-075, SDP-18-005, WP-17-010,
WP-17-049, WP-17-052, WP-17-115,
WP-18-020, WP-18-021, SP-16-009,
WP-16-100, FDP-DC-CRESCENT-1,
FDP-DC-CRESENT-1A
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/2020.

DATE: 2/16/2020



11/18/19	△	SITE SIGNAGE DESIGN UPDATES
Date	No.	Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
PARCELS D-2, D-3, D-4,
D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
COLUMBIA REGIONAL OFFICE
10480 LITTLE PATUXENT PARKWAY SUITE 400
COLUMBIA, MD 21044
410-964-4800

ashton △

SECTION/AREA	SECTION/AREA	SECTION/AREA	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PHASE I AREA 3		
PLAT # OR L.P.	BLOCK #	ZONE	TAX ZONE/MAP	SELECT DISTRICT
2423-24630	7	DMAU	36	5
WATER CODE	SEWER CODE			CENSUS TRACT
550	LITTLE PATUXENT			605602
				STAGE

TITLE: SP-701 GRAPHIC SIGN TYPES
REVISED SITE DEVELOPMENT PLAN

APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

Des. By	JGB/RJP	SCALE	AS SHOWN	Proj. No.	04038.80
Dwn. By	JGB	Date	5-10-18		
Chk. By	RJP	Approved	MCB		88 of 94

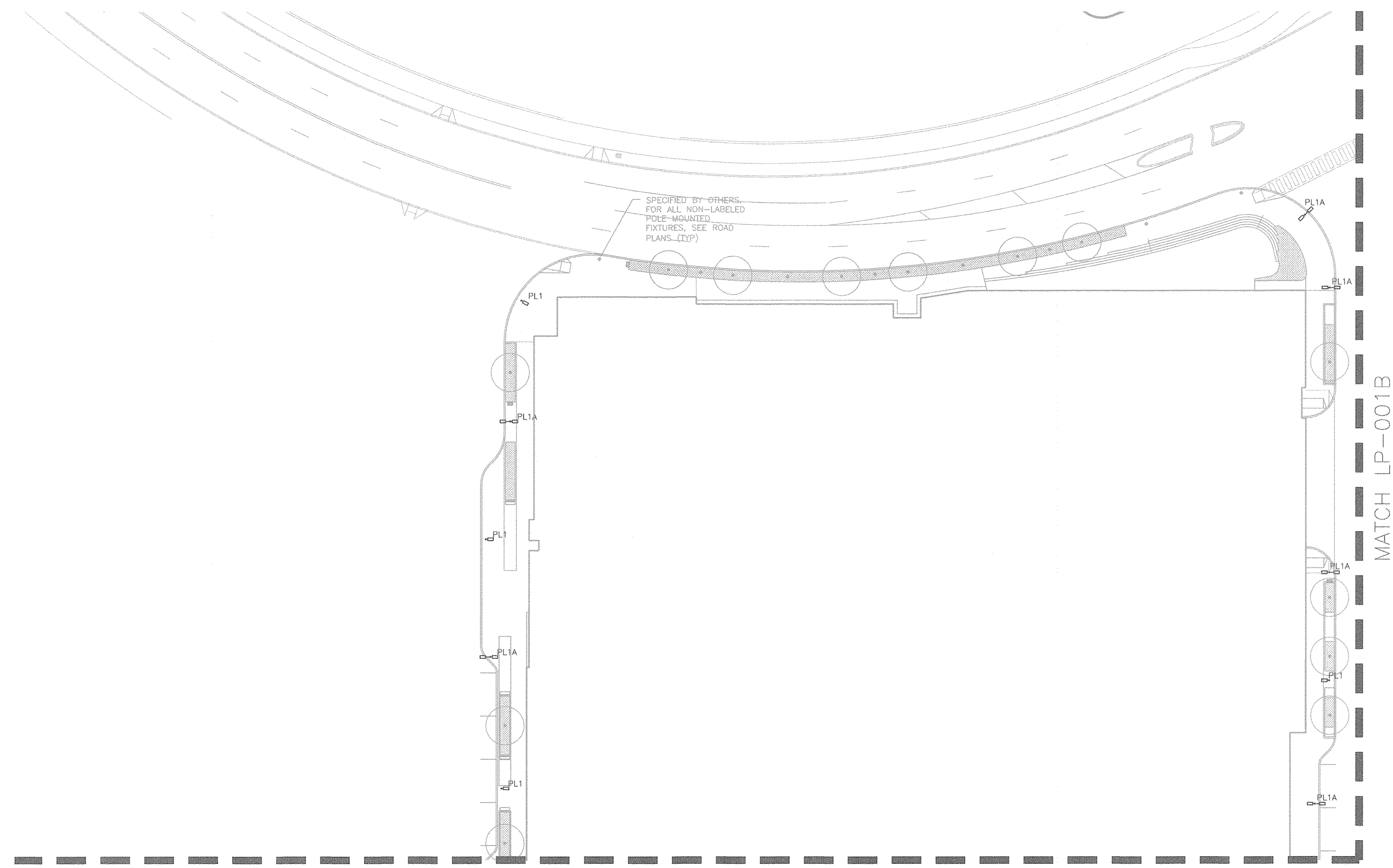
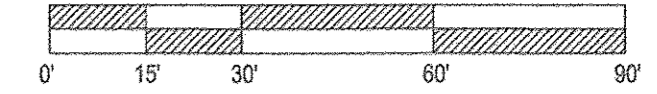
J:\SP\17\SDP-17-027\CONSULTANTS\HOWARD\SDP-17-027\GRAPHIC SIGNAGE\TYPE SHEET FILE.DWG, 11/15/2019 1:48 PM

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Richard James Peck 2-28-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Janet M. Gorman 3-16-2020
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

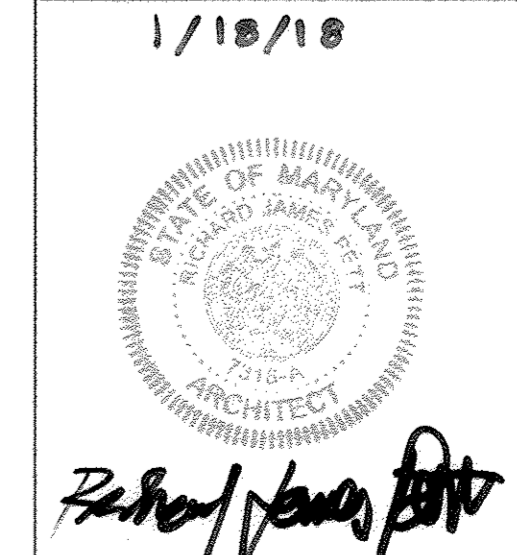
Walter G. Gorman 3-11-2020
DIRECTOR DATE



1 PARTIAL LIGHTING PLAN
SCALE: 1" = 30'-0"

MATCH LP-001D

FILE NUMBERS:
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A
CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/18.



Date	No.	Revision Description
DOWNTOWN COLUMBIA		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE I		
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		

the lighting practice

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D
PLAT/LOT #	TRIGGER #	TRACT
N/A	7	5
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	

TITLE		
LP-001A SITE LIGHTING SHEET A		
Des. By	JEW/JDC	SCALE AS SHOWN
Drn. By	JDC	Date 1-18-18
Chk. By	JEW	Approved MCB

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE 10/21/18.

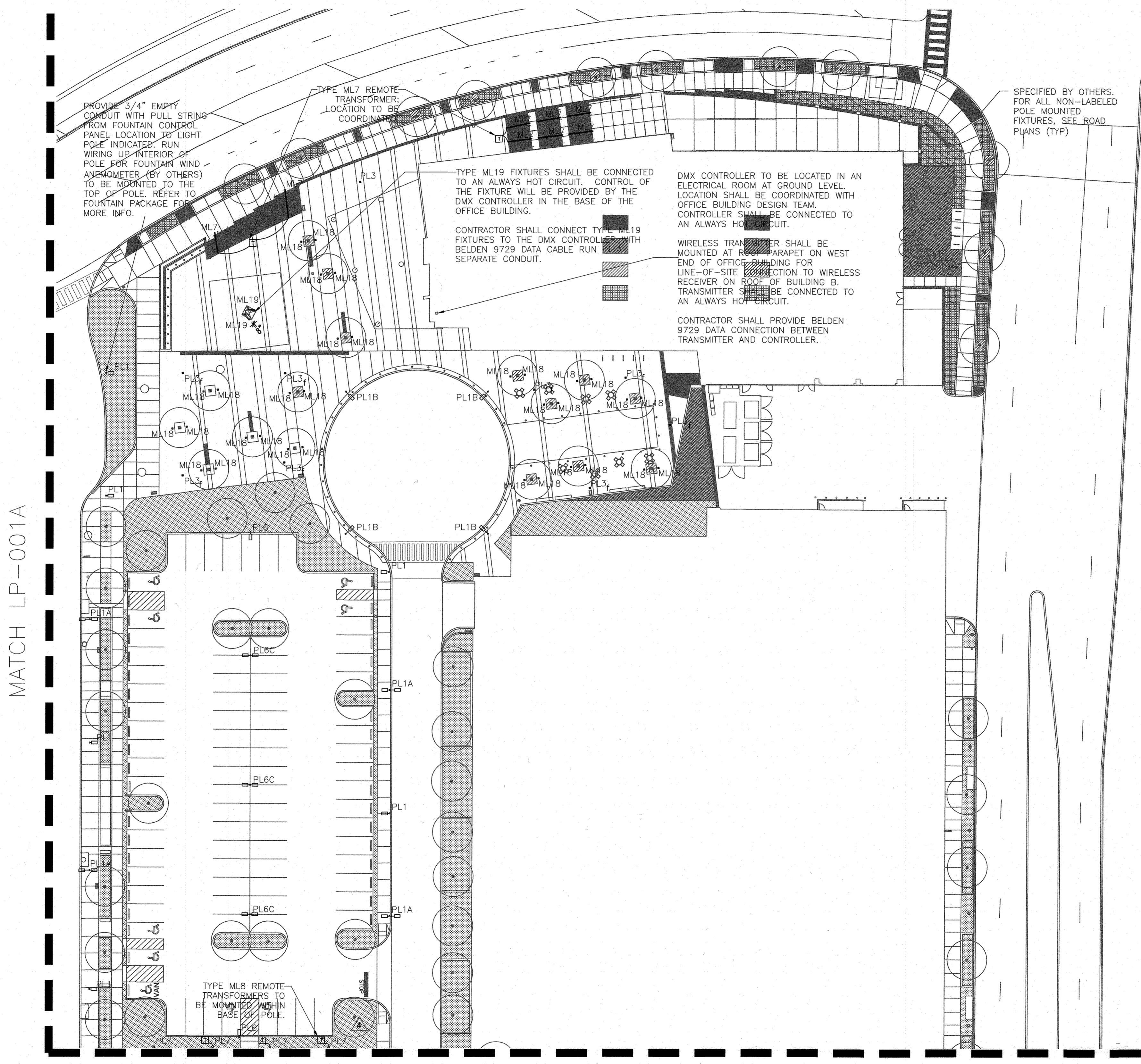
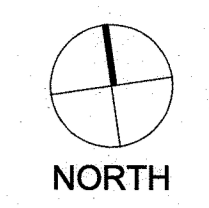
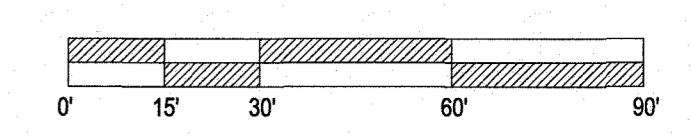
APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 1/16/18

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 4-2-18
DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 6-7-18
DATE
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 6-15-18
DATE
DIRECTOR, DIVISION OF LAND DEVELOPMENT



MATCH LP-001A

MATCH LP-001E

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chad E. ...
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 11-30-20
 DATE

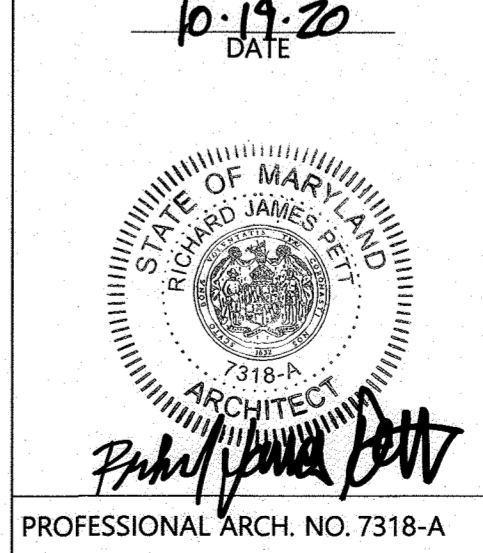
...
 CHIEF, DIVISION OF LAND DEVELOPMENT 12/1/20
 DATE

...
 DIRECTOR 12-16-20
 DATE

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-115,
 WP-18-020, WP-18-021, SP-16-009,
 WP-16-100, FDP-DC-CRESCENT-1,
 FDP-DC-CRESENT-1A

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE
 DOCUMENTS WERE PREPARED OR
 APPROVED BY ME, AND THAT I AM A
 DULY LICENSED PROFESSIONAL
 ENGINEER UNDER THE LAWS OF THE
 STATE OF MARYLAND, LICENSE NO.
 7318-A, EXPIRATION DATE: 10/21/20.



APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

Date	No.	Revision Description
07/31/20	1	SITE LIGHTING LOCATION UPDATES

**DOWNTOWN COLUMBIA
 CRESCENT NEIGHBORHOOD
 PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14**

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-1800

the lighting practice

600 CHESTNUT STREET SUITE 772 PHILADELPHIA, PA 19106
 P: 215 238 1644 WWW.THELIGHTINGPRACTICE.COM

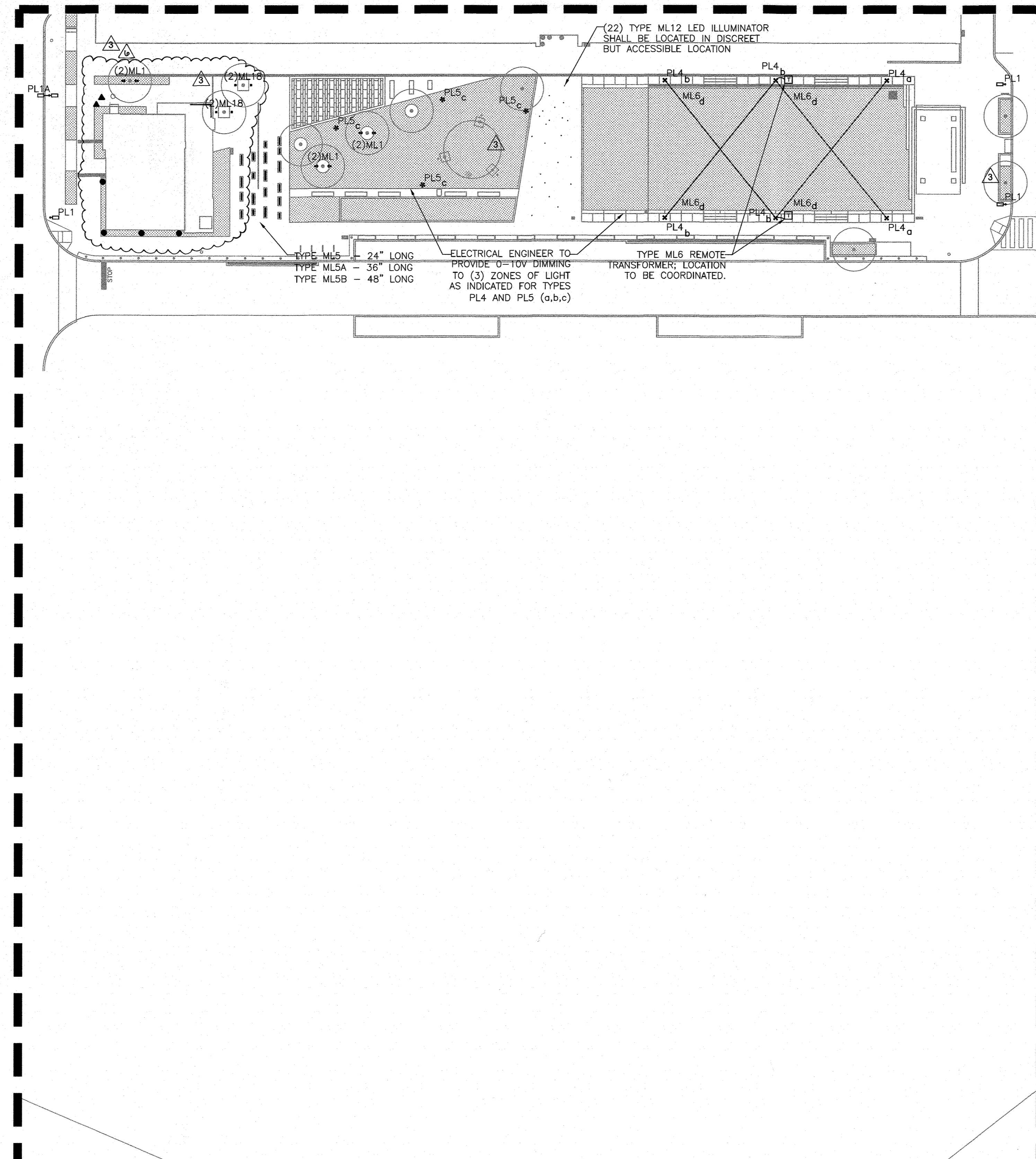
SUBDIVISION NAME	SECTION/AREA	CENSUS TRACT	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	5	
PLAT# OR L.P.	BLOCK #	TAX ZONE/MAP	ELECT. DISTRICT
24623-24630	7	36	5
WATER CODE	SEWER CODE	CENSUS TRACT	PARCEL D
550	LITTLE PATUXENT	5	605602

TITLE: LP-001B SITE LIGHTING SHEET B
 REPLACEMENT SHEET

Des. By	JEW/JDC	SCALE	AS SHOWN	Proj. No.	04038.80
Drn. By	JDC	Date	11-18-19		
Chk. By	JEW	Approved	MCB		90 of 94

SDP-17-027

MATCH LP-001A



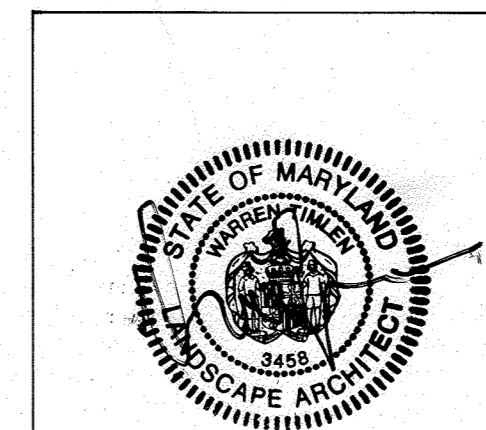
MATCH LP-001C

MATCH LP-001E

LEGEND

- LINEAR LED LIGHT UNDER PROPOSED BENCH
- RELOCATED LANDSCAPE LIGHT (FINAL LOCATION TO RELOCATED TREE)
- PROPOSED LANDSCAPE LIGHT

FOR REVISION NO. 6 ONLY



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3458, OPERATION DATE 11/15/2021.

FILE NUMBERS:
F15-106, F16-107, F17-059, F18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESENT-1, FDP-DC-CRESENT-1A

CONTRACT NUMBERS:
24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/2020.

2/16/2020
DATE

PROFESSIONAL ARCH. NO. 7318-A

APPROVED:
PLANNING BOARD OF HOWARD COUNTY
DATE: 11/16/17

11/15/21	ADD & RELOCATE LANDSCAPE LIGHTING
11/15/21	LANDSCAPE LIGHTING REVISIONS
11/18/19	SITE LIGHTING LOCATION UPDATES

Date	No.	Revision Description
DOWNTOWN COLUMBIA		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE I		
PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		



SUBDIVISION NAME	SECTION/AREA	ORIG. DATE	NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	CRESCENT	11/15/21	PHASE I		
PLAT/ OR LOT	BLOCK #	ZONE	TAX ZONE/MAP	ELECT. DISTRICT	CENSUS TRACT
7	7	DWELL	36	5	605602
SEWER CODE	550	SEWER CODE			STAGE

TITLE	LP-001B SITE LIGHTING SHEET D REPLACEMENT SHEET
Des. By	JEW/JDC
SCALE	AS SHOWN
Proj. No.	04038.B0
Drn. By	JDC
Date	11-18-19
Chk. By	JEW
Approved	MCB
91 of 94	

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

DATE: 2-28-20

CHIEF, DEVELOPMENT ENGINEERING DIVISION

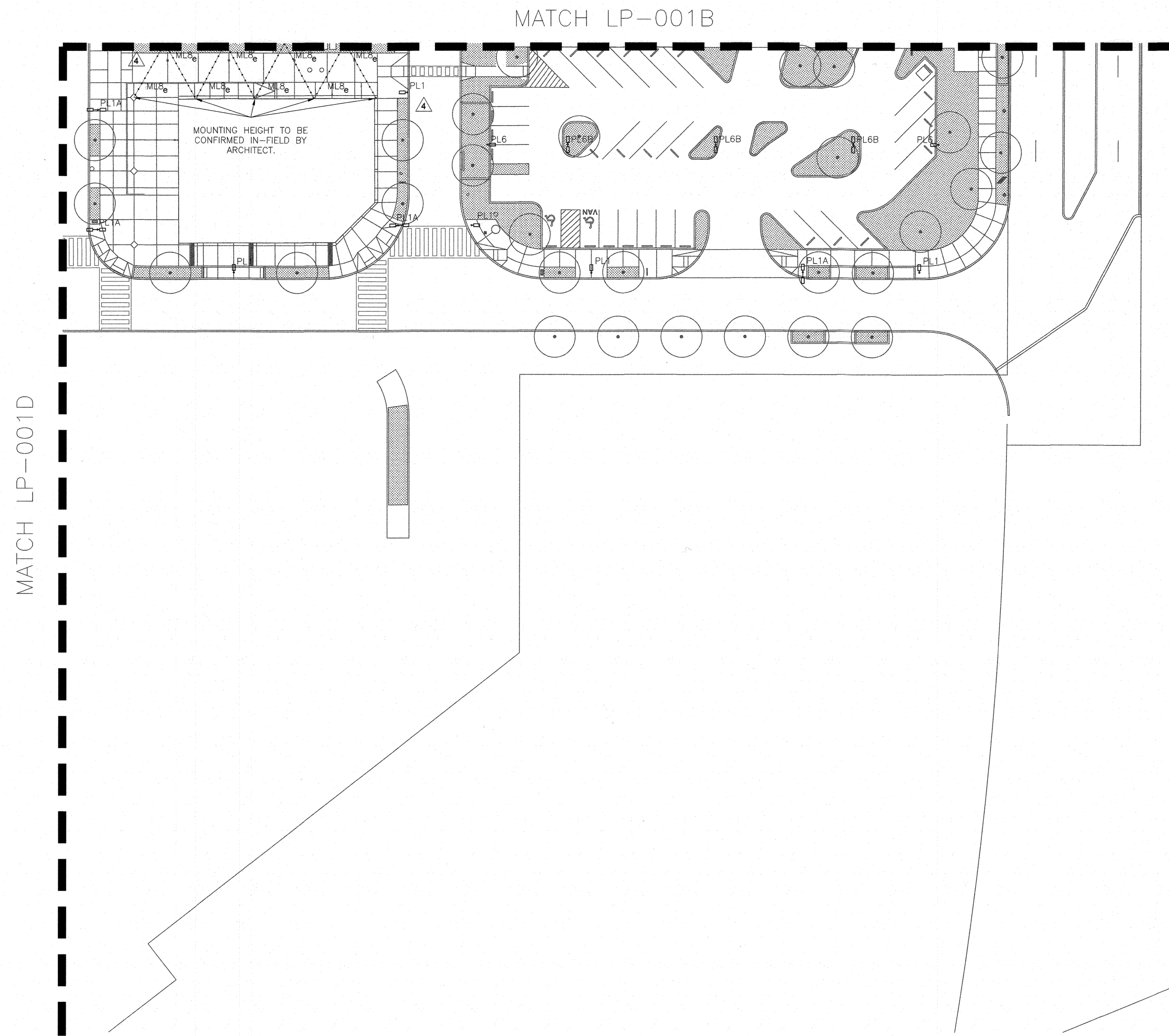
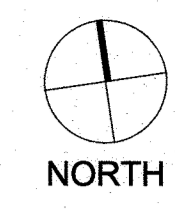
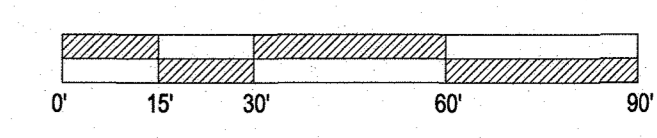
DATE: 3/16/2020

CHIEF, DIVISION OF LAND DEVELOPMENT

DATE: 3-16-2020

DIRECTOR

FILED 20181020 10:00 AM SDP PH1 REGDLINE REVISION 3 UPDATED 0609 TLP LIGHTING PH1-REGDLINE 11/15/2021 8:54 PM



P:\PROJECTS\HOWARD\SDP\1711\REVISED\1711 SITE LIGHTING PHASE I.DWG 11/20/20 10:47 AM

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
	11.30.20
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
	12/14/20
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
	12-16-20
DIRECTOR	DATE

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-115,
 WP-18-020, WP-18-021, SP-16-009,
 WP-16-100, FDP-DC-CRESCENT-1,
 FDP-DC-CRESENT-1A
CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/20

10.19.20
DATE

Richard James Bell
PROFESSIONAL ARCH. NO. 7318-A

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

07/31/20	4	SITE LIGHTING LOCATION UPDATES
Date	No.	Revision Description
DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE I PARCELS D-2, D-3, D-4, D-5, D-6, D-10 & D-14		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
600 CHESTNUT STREET SUITE 772 PHILADELPHIA, PA 19106 P: 215 238 1644 WWW.THELIGHTINGPRACTICE.COM		
SUBDIVISION NAME: DOWNTOWN COLUMBIA		SECTION/AREA: CRESCENT NEIGHBORHOOD
PLAT# OR L.P. #	BLOCK #	TAX ZONE/MAP DISTRICT
24623-24630	7	36
WATER CODE	DIMAU	SEWER CODE
		LITTLE PATUXENT
550		
TITLE: LP-001B SITE LIGHTING SHEET E		
REPLACEMENT SHEET		
Des. By	JEW/JDC	SCALE AS SHOWN
Drn. By	JDC	Date 11-18-19
Proj. No.	04038.80	92 of 94
Chk. By	JEW	Approved MCB

MERRWEATHER DISTRICT: AREA 3 PUBLIC REALM				TLP PROJECT NUMBER: 16099.00	TLP ISSUE DATE: 01/18/18						
LIGHTING FIXTURE SCHEDULE											
SYMBOL	FIXTURE IMAGES	TYPE	MTC.	DESCRIPTION	FINISH	LAMPING		LOAD (W)	VOLTS	MANUFACTURER	CATALOG NUMBER
						QTY.	LAMP DESIGNATION				
○		LL5	SURF	SURFACE MOUNTED LED CYLINDER, NOMINAL 3-1/2 INCH DIAMETER X 5 INCH TALL ALUMINUM HOUSING, HOUSING FINISH TO BE SELECTED BY DESIGN PROFESSIONAL, DEEP CANOPY FOR LED DRIVER NOMINAL 5 INCH DIAMETER X 2-1/2 INCH TALL, 0-10V DIMMING FROM 100% TO 10% LIGHT OUTPUT, 40° BEAM DISTRIBUTION, U.L. WET LOCATION RATED. LED REQUIREMENTS: NOMINAL 1300 INITIAL LUMINAIRE LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	-	-	LEDS BY MANUFACTURER	11.7	-	V2 LIGHTING	C25M-D-V-W-13-83-35-40-[COLOR]
○		LL8	SURF	COLOR CHANGING DECORATIVE LED DOME FIXTURE NOMINAL 4-1/8 INCH DIAMETER X 2-1/2 INCH ALUMINUM HOUSING WITH 1-7/8 INCH DIAMETER X 1-1/8 INCH TALL DOME LENS, DMX CONTROLLABLE COLOR CHANGING AND DIMMING, IP66 WET LOCATION RATED. LED REQUIREMENTS: RGB LEDS, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	-	-	LEDS BY MANUFACTURER	-	-	LUMENPULSE	LUMINAIRE: LMDN-[VOLT]-RGB-[FINISH]-DMX/RDM-CN POWER/DATA SUPPLY: CBX-100-277-48V-DMX/RGB-[FINISH] DMX CONTROLLER: LT02
⦿		ML1	GRND	GROUND-MOUNTED LED LANDSCAPE ACCENT LIGHT, NOMINAL 8 INCH TALL X 3 INCH DIAMETER SPUN ALUMINUM HOUSING WITH REGRESSED CLEAR TEMPERED GLASS LENS, PROVIDE SOFT FOCUS LENS ACCESSORY, NOMINAL 35° FLOOD BEAM DISTRIBUTION, FINISH TO BE SATIN BRONZE. LED REQUIREMENTS: NOMINAL 1300 INITIAL LUMINAIRE LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	BRZ	-	LEDS BY MANUFACTURER	12	-	B-K LIGHTING	DE-LED-X59-FL-BZP-12-B DRIVER: PPH-J12-D12INC-B-MF-SF
▬		ML2	REC	LED STEPLIGHT, NOMINAL 11-3/4 INCH WIDE X 2-1/2 INCH TALL FACEPLATE WITH 4-1/4 INCH DEEP ALUMINUM HOUSING AND CLEAR GLASS LENS WITH TRANSLUCENT WHITE CERAMIC COATING, INTEGRAL LED DRIVER, FIXTURE MOUNTED NOMINAL 18 INCHES ABOVE FINISHED GRADE, OVERALL FINISH SHALL BE SELECTED BY DESIGN PROFESSIONAL, U.L. WET LOCATION RATED. LED REQUIREMENTS: NOMINAL 100 INITIAL DELIVERED LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	-	-	LEDS BY MANUFACTURER	9	-	BEGA	22 192-[VOLT]-[FINISH]
▬		ML5	IN-GRADE	LINEAR LED INGRADE FIXTURE, NOMINAL 4-1/2 INCH WIDE X 5-1/2 INCH DEEP X 24 INCHES LONG EXTRUDED ALUMINUM HOUSING, FROSTED DIFFUSE GLASS LENS WITH WALKOVER RATING, IP67 WET LOCATION RATED. LED REQUIREMENTS: NOMINAL 400 INITIAL DELIVERED LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	-	-	LEDS BY MANUFACTURER	10	-	LUMENPULSE	LUMINAIRE: LOID-100/277-24-30K-NO-ASL
▬		ML5A	IN-GRADE	SAME AS ML5 EXCEPT 36 INCHES LONG AND 600 INITIAL DELIVERED LUMENS.	-	-	LEDS BY MANUFACTURER	15	-	LUMENPULSE	LUMINAIRE: LOID-100/277-36-30K-NO-ASL
▬		ML5B	IN-GRADE	SAME AS ML5 EXCEPT 48 INCHES LONG AND 800 INITIAL DELIVERED LUMENS.	-	-	LEDS BY MANUFACTURER	20	-	LUMENPULSE	LUMINAIRE: LOID-100/277-48-30K-NO-ASL
○		ML12	IN-GRADE	INGRADE LED ACCENT LIGHT WITH REMOTE LED ILLUMINATOR, LUMINAIRE IS NOMINAL 1 INCH DIAMETER X 1 INCH DEEP CAST STAINLESS STEEL HOUSING WITH OPAL GLASS LENS, CHAMFERED FACEPLATE, LUMINAIRE SHALL BE SEATED FLUSH WITHIN LANDSCAPE PAVER. LED REQUIREMENTS: 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	-	-	LEDS BY MANUFACTURER	24 PER ILLUMINATOR	-	VISUAL LIGHTING TECHNOLOGIES	HEADS: SR-00-S-25-0P-SS FIBER: F-MF-EL-PM-6-14 TALS ILLUMINATOR: FL-1000-XI-B-US-28mm + FL1000-B-2-US
		ML13	DELETED								

MERRWEATHER DISTRICT: AREA 3 PUBLIC REALM				TLP PROJECT NUMBER: 16099.00	TLP ISSUE DATE: 01/18/18						
LIGHTING FIXTURE SCHEDULE											
SYMBOL	FIXTURE IMAGES	TYPE	MTC.	DESCRIPTION	FINISH	LAMPING		LOAD (W)	VOLTS	MANUFACTURER	CATALOG NUMBER
						QTY.	LAMP DESIGNATION				
○		ML18	IN-GRADE	INGRADE LED ACCENT LIGHT NOMINAL 8 INCH DIAMETER X 10-5/8 INCH DEPTH STAINLESS STEEL HOUSING, TEMPERED CLEAR GLASS LENS, INTEGRAL 0-10V LED DIMMING DRIVER, IP67 WET LOCATION RATED. LED REQUIREMENTS: NOMINAL 940 INITIAL LUMINAIRE LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	-	-	LEDS BY MANUFACTURER	10.5	-	BEGA	77006-K3
○		ML20	IN-GRADE	COLOR CHANGING INGRADE FOUNTAIN LED ACCENT LIGHT NOMINAL 7-1/2 INCH DIAMETER X 5-7/8 INCH DEPTH BRONZE HOUSING WITH 7-1/2 INCH X 7 INCH ATTACHED ENCLOSED POWER SUPPLY, TEMPERED CLEAR GLASS LENS, MEDIUM FLOOD BEAM DISTRIBUTION, DMX CONTROLLABLE LED DIMMING DRIVER DIMMING FROM 100% TO 0% LIGHT OUTPUT, IP68 WET LOCATION RATED. LED REQUIREMENTS: 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	BRZ	-	LEDS BY MANUFACTURER	47	-	HYDREL	LUMINAIRE: 4426-B-18LED-RGB-120-MFL-FLC-BM-R-DM-CSL DMX CONTROLLER: EZTOUCH-BK-120/277
⦿		PL1	POLE 14 FT	LED POLE MOUNTED LUMINAIRE, NOMINAL 41 INCH LONG X 3-1/2 INCH TALL ALUMINUM HOUSING MOUNTED AT 14 FEET A.F.F. ON 14 FOOT 4-1/2 INCH DIAMETER STRAIGHT ROUND POLE, CLEAR GLASS LENS, LED PROVIDE A TYPE-II IES DISTRIBUTION, DARK SKY COMPLIANT, INTEGRAL LED DRIVER, OVERALL FINISH SHALL BE BLACK, U.L. WET LOCATION RATED. LED REQUIREMENTS: NOMINAL 3000 INITIAL DELIVERED LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	BLACK	-	LEDS BY MANUFACTURER	55	-	LIGMAN LIGHTING	DE-20001-T2-W30-120/277V-14'-HGT-01
⦿		PL1A	POLE 22 FT	LED POLE MOUNTED DOUBLE HEAD LUMINAIRE, NOMINAL 41 INCH LONG X 3-1/2 INCH TALL ALUMINUM HOUSING MOUNTED AT 14 FEET A.F.F. ON SIDEWALK SIDE AND AT 22 FEET A.F.F. ON STREET SIDE, 22 FOOT 4-1/2 INCH DIAMETER STRAIGHT ROUND POLE, CLEAR GLASS LENS, LED PROVIDE A TYPE-II IES DISTRIBUTION FOR SIDEWALK SIDE AND TYPE-III DISTRIBUTION FOR STREET SIDE, DARK SKY COMPLIANT, INTEGRAL LED DRIVER, OVERALL FINISH SHALL BE BLACK, U.L. WET LOCATION RATED. LED REQUIREMENTS: NOMINAL 3000 INITIAL DELIVERED LUMENS ON SIDEWALK SIDE AND 7500 INITIAL DELIVERED LUMENS ON STREET SIDE, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	BLACK	-	LEDS BY MANUFACTURER	165	-	LIGMAN LIGHTING	DE-2002# (1) 55W-T2-W30-120/277V-14'-HGT-01 + (1) 110W-T3-W30-120/277V-22'HGT-01
⦿		PL1B	POLE 22 FT	LED POLE MOUNTED LUMINAIRE, NOMINAL 41 INCH LONG X 3-1/2 INCH TALL ALUMINUM HOUSING MOUNTED AT 22 FEET A.F.F. ON 22 FOOT 4-1/2 INCH DIAMETER STRAIGHT ROUND POLE, CLEAR GLASS LENS, LED PROVIDE A TYPE-III IES DISTRIBUTION, DARK SKY COMPLIANT, INTEGRAL LED DRIVER, OVERALL FINISH SHALL BE BLACK, U.L. WET LOCATION RATED. LED REQUIREMENTS: NOMINAL 7500 INITIAL DELIVERED LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	BLACK	-	LEDS BY MANUFACTURER	110	-	LIGMAN LIGHTING	DE-20003-T3-W30-120/277V-22'HGT-01

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION 4-2-18
 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT 6-7-18
 DATE

DIRECTOR, DIVISION OF LAND DEVELOPMENT 6-15-18
 DATE

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F-18-017,
 SDP-16-075, SDP-18-005, WP-17-010,
 WP-17-049, WP-17-052, WP-17-115,
 WP-18-026, WP-18-022, SP-16-009,
 WP-16-100, FDP-DC-CRESCENT-1,
 FDP-DC-CRESENT-1A
 CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D.
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE
 DOCUMENTS WERE PREPARED OR
 APPROVED BY ME, AND THAT I AM A
 DULY LICENSED PROFESSIONAL
 ENGINEER UNDER THE LAWS OF THE
 STATE OF MARYLAND, LICENSE NO.
 7318-A, EXPIRATION DATE: 10/21/18.

1/18/18

 ARCHITECT

APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

Date	No.	Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14
 OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD		PARCEL D
PLANNING BOARD	TAX ZONE/MAP	RELET DISTRICT	CENSUS TRACT
N/A	7	36	5
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT		605602

TITLE
 LP-700 LIGHTING FIXTURE SCHEDULE

Des. By	JEW/JDC	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	JDC	Date	1-18-18		
Chk. By	JEW	Approved	MCB		93 of 94

SDP-17-027

MERRWEATHER DISTRICT AREA 3 PUBLIC REALM				TLP PROJECT NUMBER: 16099.00	TLP ISSUE DATE: 01/18/18						
LIGHTING FIXTURE SCHEDULE											
SYMBOL	FIXTURE IMAGES	TYPE	MTG.	DESCRIPTION	FINISH	LAMPING		LOAD (W)	VOLTS	MANUFACTURER	CATALOG NUMBER
						QTY.	LAMP DESIGNATION				
		PL2	POLE 12 FT	LED POLE TOP LUMINAIRE, NOMINAL 40 INCH DIAMETER REFLECTOR DISK MOUNTED ABOVE LED SOURCE FOR A MAXIMUM HEIGHT OF 24 INCHES, 3 INCH TENON MOUNTED TO 12 FOOT TALL STRAIGHT ROUND ALUMINUM POLE WITH A DIAMETER OF 5 INCHES, 3/4 INCH CLEAR GLASS LENS WITH SILICON GASKET, INTEGRAL LED DRIVER LOCATED IN THE BASE OF THE POLE, OVERALL FINISH SHALL BE BLACK, U.L. WET LOCATION RATED. LED REQUIREMENTS: NOMINAL 2200 INITIAL DELIVERED LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	BLACK	--	LEDS BY MANUFACTURER	56	--	BECA	88 309-K3-906HR 5"-BLK
		PL3	POLE 14 FT	LED LIGHT COLUMN, NOMINAL 14 FEET 3 INCHES TALL X 8-1/2 INCH SQUARE ALUMINUM HOUSING WITH FOUR SQUARE ALUMINUM EXTRUSION POSTS AT THE FOUR CORNERS, LAMP ENCLOSURE INCLUDES TEMPERED GLASS LENS AND STAINLESS STEEL HARDWARE, LUMINAIRE SHALL MOUNT TO GRADE WITH STAINLESS STEEL HARDWARE THROUGH BASE PLATE, LUMINAIRE TO MOUNT VERTICALLY PLUMB ON GRADE, CONTRACTOR TO PROVIDE GROUT FILL AS REQUIRED, OVERALL PAINT FINISH TO BE BLACK, U.L. WET LOCATION RATED. LED REQUIREMENTS: NOMINAL 1100 INITIAL DELIVERED LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	BLACK	--	LEDS BY MANUFACTURER	40	--	BECA	77 844-K3-BLK
		PL4	POLE 24 FT	HEADS: LED POLE MOUNTED LUMINAIRE, NOMINAL 8 INCH DIAMETER X 13 INCH DEEP BULB SHAPED ALUMINUM HOUSING, CLEAR GLASS LENS, CAST ALUMINUM MOUNTING ARMS WITH TILT-SWIVEL RANGE OF 0 TO 175 DEGREES AND A 360 DEGREE ROTATION, 44 DEGREE FLOOD OPTIC, INTEGRAL LED DRIVER, OVERALL PAINT FINISH TO BE BLACK, U.L. WET LOCATION RATED. POLE: ROUND TAPERED ALUMINUM POLE WITH FOUR HEADS MOUNTED TO NOMINAL 24 FOOT TALL POLE WITH 7 INCH DIAMETER BASE X 4 INCH DIAMETER TOP, .188 INCH WALL THICKNESS, HEADS TO BE MOUNTED 90 DEGREES APART, TOP HEAD TO BE 24 INCHES FROM TOP OF POLE AND CONSECUTIVE HEADS TO BE MOUNTED BELOW AT 18 INCH INTERVALS, OVERALL PAINT FINISH TO BE BLACK. LED REQUIREMENTS PER HEAD: NOMINAL 2200 INITIAL DELIVERED LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	BLACK	--	LEDS BY MANUFACTURER	--	--	SELUX	HEAD: (4)JQLG-F40-SB4(U-1P-2V-30)-L28-30-BK-[VOLT]-[OPTIONS] POLE: O-AT74-156-24-BK-RN4-[OPTIONS]
		PL5	POLE 24 FT	SAME AS PL4 EXCEPT 5 LUMINAIRES AT NEW MOUNTING DESIGNATIONS.	BLACK	--	LEDS BY MANUFACTURER	--	--	SELUX	HEAD: (5)JQLG-F40-SB5(OB-1G-2L-30-4U)-L28-30-BK-[VOLT]-[OPTIONS] POLE: O-AT74-156-24-BK-RN5-[OPTIONS]
		PL6	POLE 20 FT	LED POLE MOUNTED LUMINAIRE, NOMINAL 17-1/2 INCH LONG X 17-1/2 INCH WIDE X 7 INCH TALL ALUMINUM HOUSING MOUNTED AT 20 FEET A.F.F ON 20 FOOT 4 INCH SQUARE STRAIGHT POLE, CLEAR GLASS LENS, LED PROVIDE A TYPE-II IES DISTRIBUTION, INTEGRAL LED DRIVER, OVERALL FINISH TO BE BLACK, U.L. WET LOCATION RATED. LED REQUIREMENTS: NOMINAL 7800 INITIAL DELIVERED LUMENS, 3000K CCT, 80+ CRI, L70 RATED LIFE OF 50,000 HOURS, AND 5-YEAR WARRANTY.	BLACK	--	LEDS BY MANUFACTURER	69	--	LITHONIA LIGHTING	HEAD: KAD LED-30C-700-30K-R2-[VOLT]-[MOUNTING]-[OPTIONS]-DBLXD POLE: SSA-20-4G-DM19-[OPTIONS]-DBL
		PL6A	POLE 20 FT	SAME AS PL6 EXCEPT IES TYPE V DISTRIBUTION.	BLACK	--	LEDS BY MANUFACTURER	69	--	LITHONIA LIGHTING	HEAD: KAD LED-30C-700-30K-R5-[VOLT]-[MOUNTING]-[OPTIONS]-DBLXD POLE: SSA-20-4G-DM19-[OPTIONS]-DBL
		PL6B	POLE 20 FT	SAME AS PL6A EXCEPT WITH TWO HEADS MOUNTED 180 DEGREES APART.	BLACK	--	LEDS BY MANUFACTURER	138	--	LITHONIA LIGHTING	HEAD: (2)KAD LED-30C-700-30K-R5-[VOLT]-[MOUNTING]-[OPTIONS]-[FINISH] POLE: SSA-20-4G-DM28-[OPTIONS]-[FINISH]

GENERAL NOTES:

- THIS PROJECT COMPLIES WITH SECTION 134 OF THE ZONING REGULATIONS.
- ALL LIGHTING FIXTURES, LAMPS AND RELATED DEVICES FURNISHED UNDER THIS CONTRACT SHALL CARRY THE APPROVAL LABEL OF UL OR ETL FOR THE SPECIFIC APPLICATION IN WHICH THEY ARE USED.
- THE STATEMENT "FINISH TO BE SELECTED BY DESIGN PROFESSIONAL" SHALL BE INTERPRETED TO MEAN THAT THE FINISH OF THE LUMINAIRE SHALL MATCH THE APPEARANCE OF A PAINT CHIP, COLOR NUMBER, OR METAL SWATCH FURNISHED BY THE DESIGN PROFESSIONAL DURING THE SUBMITTAL REVIEW PROCESS.
- WHITE L.E.D.'S SHALL MEET, AT A MINIMUM, CHROMATICITY STANDARDS SET BY ANSI/NEMA/ANSLG C79.377-2011. L.E.D. LUMEN MAINTENANCE SHALL BE MEASURED IN ACCORDANCE WITH IESNA LM-80 STANDARDS. PHOTOMETRIC TESTING FOR SOLID STATE LUMINAIRES SHALL BE IN ACCORDANCE WITH IESNA LM-79 STANDARDS.
- CONTRACTOR SHALL CONFIRM FIXTURE VOLTAGES, CEILING TRIMS, AND MOUNTING HARDWARE ARE COMPATIBLE WITH THEIR APPLICATION AS DETERMINED BY THE DESIGN PROFESSIONAL PRIOR TO ORDERING FIXTURES.
- CONTRACTOR SHALL SELECT, FURNISH AND INSTALL THE CORRECT SIZE OF SECONDARY WIRING FROM REMOTE TRANSFORMERS AND/OR REMOTE BALLASTS AS REQUIRED TO KEEP VOLTAGE DROP IN THE SECONDARY WIRING BELOW 3% OF RATED VOLTAGE.
- ALL DIMMABLE FLUORESCENT, CERAMIC METAL HALIDE, AND L.E.D. LAMPS SHALL BE BURNED CONTINUOUSLY FOR 100 HOURS AT FULL OUTPUT PRIOR TO FOCUSING OF FIXTURES AND COMMISSIONING OF CONTROL SYSTEMS.
- CONTRACTOR SHALL PROVIDE LABOR AND EQUIPMENT FOR FOCUSING OF ADJUSTABLE FIXTURES AND PRESETTING OF LIGHTING CONTROL SYSTEMS. FOCUSING AND PRESETTING SHALL BE DONE IN THE PRESENCE OF THE DESIGN PROFESSIONAL. CONTRACTOR SHALL FOCUS LIGHTING AFTER DARK IF DIRECTED BY THE OWNER'S REPRESENTATIVE. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL PROVIDE, AT LEAST ONE DAY OF A FACTORY-TRAINED AND CERTIFIED TECHNICIAN TO PROVIDE WARRANTY START UP AND PROGRAMMING FOR ALL LIGHTING CONTROL SYSTEMS AND PROGRAMMABLE LIGHTING FIXTURES.
- CONTRACTOR SHALL PROVIDE THE FOLLOWING WITH THEIR BID:
 - THE UNIT PRICE, WITHOUT LAMP, FOR EACH LIGHTING FIXTURE TYPE LISTED WITHIN THE LIGHTING FIXTURE SCHEDULE. THE UNIT PRICE SHALL BE FOR ONE OF THE LISTED MANUFACTURER'S FOR THAT PARTICULAR FIXTURE. THE MANUFACTURER SHALL BE IDENTIFIED. SUBSTITUTIONS FOR FIXTURES PROVIDED BY MANUFACTURERS NOT LISTED IN THE SCHEDULE ARE NOT ACCEPTABLE. SEE BELOW FOR REQUIREMENTS ASSOCIATED WITH SUBMITTING LIGHTING FIXTURE SUBSTITUTIONS.
 - THE TOTAL QUANTITY OF EACH FIXTURE TYPE WITH THE EXTENDED COST FOR THAT QUANTITY.
 - THE UNIT PRICE, TYPE, AND QUANTITY OF LAMPS.
- WITHIN 21 DAYS OF CONTRACT AWARD, THE CONTRACTOR SHALL FURNISH SUBMITTALS FOR ALL SPECIFIED LIGHTING FIXTURES FOR REVIEW BY THE DESIGN PROFESSIONAL. THE SUBMITTALS SHALL INCLUDE LUMINAIRE CATALOG CUTS, SUBMITTAL SHEETS, OR MANUFACTURERS SHOP DRAWINGS INDICATING THE FOLLOWING:
 - MANUFACTURER'S NAME AND COMPLETE CATALOG NUMBER
 - FIXTURE TYPE, DIMENSIONS AND FINISHES
 - FIXTURE PHOTOMETRIC TEST DATA FROM AN INDEPENDENT TEST LABORATORY
 - FIXTURE ACCESSORIES, COMPONENTS, AND HARDWARE WHEN SPECIFIED
 - LAMP TYPE, QUANTITY, WATTAGE, LUMEN OUTPUT, RATED LIFE, COLOR TEMPERATURE, COLOR RENDERING INDEX AND BEAM SPREAD AS APPLICABLE
 - BALLAST TYPE AND FIXTURE VOLTAGE

SUBMITTALS FOR LIGHTING FIXTURES MOUNTED WITHIN ARCHITECTURAL COVES OR CASEWORK, VARIABLE LENGTH FIXTURES, AND FOR NON-STANDARD, OR CUSTOM FIXTURES, SHALL ALSO INCLUDE SCALED DRAWINGS SHOWING THE LAYOUT AND DIMENSIONS OF ALL FIXTURE COMPONENTS AND ACCESSORIES, THE METHOD OF INSTALLATION, AND A COMPLETE BILL OF MATERIALS.

11. LIGHTING FIXTURE SUBSTITUTION REQUESTS MUST BE SENT TO AND RECEIVED BY THE LIGHTING DESIGNER FOR REVIEW 14 DAYS PRIOR TO BID DATE. FAILURE TO SUBMIT WITHIN THIS DEADLINE SHALL CONSTITUTE A GUARANTEE THAT THE SPECIFIED FIXTURES WILL BE SUPPLIED. THE SUBMITTAL SHALL INCLUDE THE FOLLOWING:

- SIX HARD COPIES OF THE SUBMITTALS REQUIRED ABOVE FOR BOTH THE SPECIFIED FIXTURE AND THE PROPOSED SUBSTITUTION.
- ONE NON-RETURNABLE WORKING SAMPLE OF THE PROPOSED SUBSTITUTE FIXTURE WITH CORD & PLUG CONNECTION FOR 120 VOLT OPERATION, AND SPECIFIED LAMP(S).
- CONTRACTOR'S STATEMENT INDICATING THE EFFECT OF THE SUBSTITUTION ON THE CONSTRUCTION SCHEDULE COMPARED TO THE SCHEDULE WITHOUT THE APPROVAL OF THE PROPOSED SUBSTITUTION.
- CONTRACTOR'S CERTIFICATION STATING THAT THE PROPOSED SUBSTITUTION CONFORMS TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS IN EVERY RESPECT AND IS APPROPRIATE FOR THE APPLICATIONS INDICATED IN THE DOCUMENTS.
- CONTRACTOR'S CERTIFICATION STATING THAT ANY MODIFICATIONS TO ANY BUILDING SYSTEM OR EQUIPMENT THAT MAY RESULT FROM THE PROPOSED LIGHTING FIXTURE SUBSTITUTION WILL BE DESIGNED AND CONSTRUCTED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR'S WAIVER OF RIGHTS TO ADDITIONAL PAYMENT OR TIME THAT MAY BECOME NECESSARY SHOULD THE PROPOSED SUBSTITUTION FAIL TO PERFORM IN A MANNER THAT MATCHES THE SPECIFIED FIXTURE.
- CONTRACTOR-NET UNIT PRICE FOR THE SPECIFIED FIXTURE AND FOR THE PROPOSED SUBSTITUTE FIXTURE.

THE LIGHTING DESIGNER SHALL BE REIMBURSED BY THE CONTRACTOR FOR ALL OF THE DESIGNER'S TIME ASSOCIATED WITH THE REVIEW OF THE PROPOSED FIXTURE SUBSTITUTION(S). PAYMENT SHALL BE MADE IN ADVANCE OF THE REVIEW, BASED ON THE DESIGNER'S ESTIMATE OF THE REQUIRED TIME. THE PAYMENT SHALL BE BASED ON THE DESIGNER'S STANDARD HOURLY RATES FOR THE PERSONNEL INVOLVED IN THE REVIEW.

DEFINITIONS:

- CORRELATED COLOR TEMPERATURE (CCT): THE ABSOLUTE TEMPERATURE, MEASURED IN DEGREES KELVIN, OF A BLACKBODY RADIATOR HAVING CHROMATICITY RESEMBLING THAT OF AN ELECTRIC LIGHT SOURCE. FOR LED SOURCES CCT SHALL NOT DEVIATE FROM THE REFERENCE COLOR TEMPERATURE BY NO MORE THAN THREE MACADAM ELLIPSES, AS DEFINED BY NEMA/ANSI/ANSLG C38.377-2011
- COLOR RENDERING INDEX (CRI): MEASURE OF COLOR SHIFT OBJECTS UNDERGO WHEN ILLUMINATED BY AN ELECTRIC LIGHT SOURCE AS COMPARED WITH THE COLOR OF THE SAME OBJECTS ILLUMINATED BY A REFERENCE SOURCE AT THE SAME COLOR TEMPERATURE. CRI VALUES FOR ELECTRIC LIGHT SOURCES RANGE FROM APPROXIMATELY 20 (LOW PRESSURE SODIUM) TO 99 (HALOGEN). CRI VALUES FOR LED SOURCES SHALL BE MEASURED AFTER 6000 HOURS AND SHALL NOT DEVIATE MORE THAN 3 POINTS FROM THE RATED VALUE.
- LED LIGHT ENGINE: THE COMBINED LED LIGHT SOURCE AND ITS ASSOCIATED ELECTRONIC DRIVER. THE LED LIGHT ENGINE MAY HAVE AN INTEGRAL DRIVER OR THE DRIVER MAY BE HOUSED IN A SEPARATE ENCLOSURE.
- LED DRIVER: CONTROL DEVICE THAT MAINTAINS CONSTANT AMOUNT OF CURRENT TO THE LED LIGHT SOURCE. LED DRIVERS GENERALLY OPERATE AT 12VDC OR 24VDC. SOME DRIVERS ARE DESIGNED TO ACCEPT BRANCH CIRCUIT VOLTAGE RANGING FROM 120VAC THROUGH 277VAC OR MAY REQUIRE A SEPARATE TRANSFORMER.
- TRANSFORMER: ELECTROMAGNETIC OR ELECTRONIC DEVICE THAT STEPS DOWN PRIMARY VOLTAGE TO A LOWER SECONDARY VOLTAGE. GENERALLY SECONDARY VOLTAGE WILL BE 12V OR 24V
- DIMMING: THE REDUCTION OF LIGHT INTENSITY OF A LIGHT SOURCE. ALL SOURCES SHALL HAVE A SMOOTH, FLICKER-FREE AND CONTINUOUS DIMMING CURVE FROM FULL-OFF TO 100% OUTPUT. LED SOURCES MAY BE DIMMED BY EITHER CONSTANT CURRENT REDUCTION (CCR) OR BY PULSE WIDTH MODULATION (PWM) DIMMING FOR CONSTANT CURRENT DRIVERS.
- RATED LUMEN MAINTENANCE LIFE: THE ELAPSED OPERATING TIME OVER WHICH AN LED LIGHT SOURCE WILL MAINTAIN THE PERCENTAGE OF ITS INITIAL LUMEN OUTPUT
L70: TIME, IN HOURS, TO 70% LUMEN MAINTENANCE
L50: TIME, IN HOURS, TO 50% LUMEN MAINTENANCE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 4/2/18

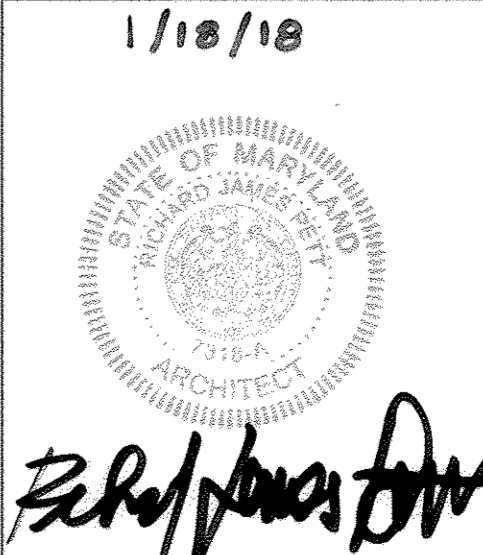
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 6/7/18

 DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE: 6/15/18

FILE NUMBERS:
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-049, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A, 24-4931-D, 24-4975-D, 24-4974-D.

CONTRACT NUMBERS:
 24-4931-D, 24-4975-D, 24-4974-D.

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/18.



APPROVED:
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 11/16/17

Date	No.	Revision Description

DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE I AREA 3, PHASE I
 PARCELS D-2, D-3, D-4,
 D-5, D-6, D-10 & D-14

OWNER / DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 COLUMBIA REGIONAL OFFICE
 10480 LITTLE PATUXENT PARKWAY SUITE 400
 COLUMBIA, MD 21044
 410-964-4800

501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PHASE I AREA 3	PARCEL D
PLAT/CRIT	TRUCKET CODE	TAX ZONE/APP	ELECT DISTRICT
N/A	7	36	5
WATER CODE	SEWER CODE	STAGE	PARCEL ID
550	LITTLE PATUXENT		605602

TITLE
 LP-701 LIGHTING FIXTURE SCHEDULE AND GENERAL NOTES

Des. By	JEW/JDC	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	JDC	Date	1-18-18		
Chk. By	JEW	Approved	MCB		94 of 94

SDP-17-027