



# HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

3430 Courthouse Drive ■ Ellicott City, Maryland 21043 ■ 410-313-2350

Voice/Relay

Valdis Lazdins, Director

FAX 410-313-3467

## TECHNICAL STAFF REPORT

### Planning Board Meeting of October 17, 2019

#### Case No./Petitioner: SDP-18-005, The Howard Research and Development Company

Project: Downtown Columbia, Crescent Neighborhood Phase 1, Area 3 - Phase 2 (Revision)

Planner: Jill Manion, Planning Supervisor, Division of Land Development  
(410) 313-4338; [jmanion@howardcountymd.gov](mailto:jmanion@howardcountymd.gov)

Request: For the Planning Board to approve a revised Site Development Plan for Downtown Revitalization, Downtown Columbia, Crescent Neighborhood, Phase 1, Area 3-Phase 2. The plan replaces a proposed retail building with a 250-room hotel and increases residential units within a previously approved mixed-use building from 423 to 436 units. It also alters the amount of ground-floor retail space. In accordance with Sections 125.0.G. of the Howard County Zoning Regulations, the Planning Board shall evaluate and approve, approve with conditions, or disapprove the Site Development Plan at a Public Meeting.

Location: The subject parcels are identified as a portion of Tax Map 36, Parcel 527, Parcel D-7 and D-8; located on the south side of Mango Tree Road, between Dove Sail Lane and Sky Ribbon Road. The site is zoned New Town (NT) and designated Downtown Mixed-Use Area on FDP-DC-Crescent-1A.

Recommendation: **Approval**, subject to complying with Subdivision Review Committee (SRC) comments and any conditions by the Planning Board.

#### Vicinal

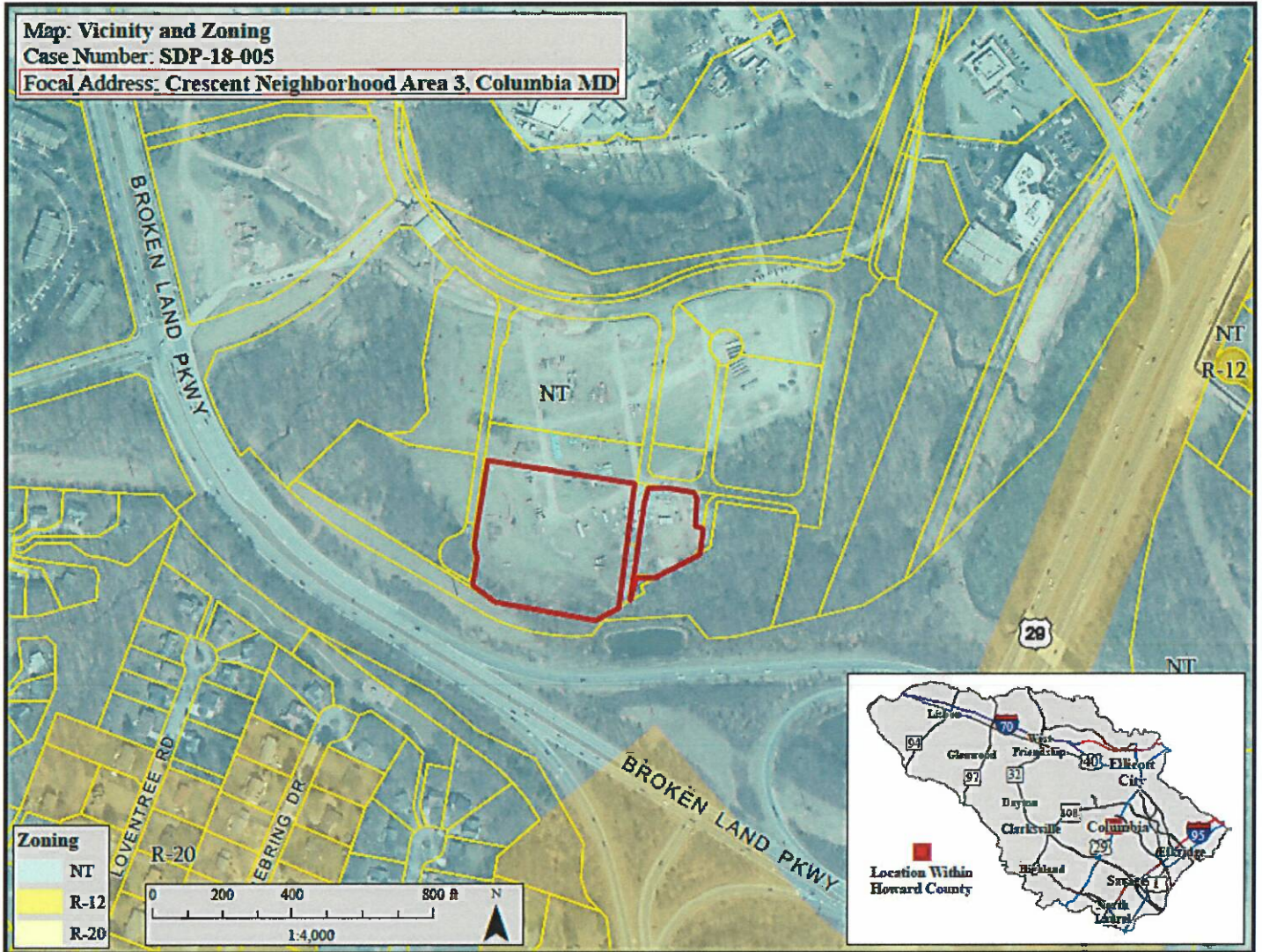
Properties: Surrounding properties are zoned NT and include:

North: Land owned by the developer and designated mixed-use - including a mixed-used residential building currently under construction and a future two story restaurant to be located on the north side of Mango Tree Drive. A neighborhood park is part of the development, approved with SDP-17-027.

South: Broken Land Parkway is immediately south and on the opposite side is residential land in the Village of Hickory Ridge.

East: NT Open Space Lot 11.

West: Immediately west is Downtown Parkland, identified as Crescent Neighborhood Lot 3, and farther west is Hickory Ridge Road extended.



**Legal Notice:** The property was properly posted and verified by DPZ in accordance with legal requirements.

**I. General Information:**

**Relevant**

**Site History:** Parcels D-7 and D-8, part of Crescent Neighborhood Area 3, as shown on Crescent Neighborhood Phase 1 Final Development Plan (FDP-DC-Crescent-1A) for Downtown Revitalization. Recent file history follows:

- **FDP-DC-Crescent-1** encompasses most of the Crescent Neighborhood and includes four development areas (including “Area 3”), a network of streets that expands the Downtown road system, and land designated for environmental restoration and Downtown Parkland. The FDP was approved by the Planning Board March 19, 2015, and the submittal included the Crescent Neighborhood Concept Plan, the Crescent Neighborhood Design Guidelines, and the Crescent Neighborhood Implementation Plan. The Decision and Order was signed April 16, 2015, and the plans and documents were recorded July 2, 2015.

- **FDP-DC-Crescent-1A** is an amendment to the previously approved FDP for Phase 1, Crescent Neighborhood and identifies the street and block structure for Area 3. It was approved by the Planning Board September 15, 2016, the Decision and Order was signed October 14, 2016, and the amended FDP was recorded February 24, 2017, as Plat #24102-24110.
- **ECP-16-042** (Environmental Concept Plan) for Area 3 was approved July 1, 2016.
- **SP-16-009** (Preliminary Equivalent Sketch Plan) provides initial information on the road network, utilities, and land uses for Area 3 and was signed by the Planning Director May 9, 2017.
- **F-17-059** (Final Plan and plat for Area 3) divides Parcel D into blocks and establishes public roads (a portion of Valencia Lane, Mango Tree Road and Sky Ribbon Road). It was approved January 19, 2018, and the plat was recorded May 11, 2018.
- **WP-16-100** was approved March 17, 2016. It updated residential allocation phasing for the Crescent Neighborhood to better match the timing of initial plans with residential units.
- **WP-19-088** was approved May 14, 2019. It granted a 61-day extension for the April 1, 2019, APFO SDP submission milestone to revise SDP-18-005 to show 13 additional units within Building C.
- **SDP-18-005** (Site Development Plan) was approved by the Planning Board November 8, 2018. The plan shows a mixed-use building with 423 dwelling units, 36,100 SF of retail and 6,260 SF of restaurant space, and an 18,190 SF retail building. A revision to the SDP was submitted August 1, 2019, which added 13 dwelling units to the mixed-use building, reconfigured retail space and replaced the free-standing retail building with a 250-room hotel.

Regulatory Compliance: Site Development Plans for Downtown Revitalization are subject to the following:

- (1) The Downtown Columbia Plan: CB 58-2009, an amendment to the Howard County General Plan and further amended November 9, 2016, with CB 52-2016.
- (2) The Zoning Regulations: including sections amending the Zoning Regulations through Council Bill No. 59-2009 (ZRA 113).
- (3) Downtown-Wide Design Guidelines passed as Council Resolution 138-2010.
- (4) The Adequate Public Facilities Act amended for Downtown Columbia as Council Bill 47-2010.
- (5) The Sign Ordinance amended for Downtown Columbia as Council Bill 56-2010.

***In addition, the petitioner met the following pre-submission requirements:***

- (6) A Pre-Submission Community Meeting was held to present the updated development plan on March 7, 2019, in accordance with Section 125.0.H.1.a. of the Zoning Regulations and Section 16.128(b)-(g), of the Subdivision and Land Development Regulations.
- (7) The Design Advisory Panel (DAP) reviewed architectural and site plans for the hotel and residential building on February 27, 2019, based on the approved Neighborhood Specific Design Guidelines, Section 125.0.H.1.b. of the Zoning Regulations and Title 16, Subtitle 15 of the County Code. Per Section 16.1504(f) of the Howard County Code, the Planning Board may consider DAP recommendations when making a final decision on a Site Development Plan for Downtown Revitalization. **See Attachment B for a summary of recommendations and the applicant's response for the recommendations.**

Definitions:

**Downtown Columbia Definitions:** Please refer to the attached definitions (**Attachment ‘D’**) of terms relating to Downtown Columbia revitalization, as excerpted from Section 103.0.A.38-60 of the Zoning Regulations.

**Crescent Neighborhood Definitions:** See also Section 7.0 (“Definitions”) of The Crescent Neighborhood Design Guidelines.

**II. Description of the Site Development Plan Proposal:**

Proposed Site Improvements: The previously approved plans have been revised as follows:

- Parcel D-7: a 250-room hotel with 6,636 SF of restaurant and 11,150 SF of conference space
- Parcel D-8: 436 Dwelling Units and 26,685 SF of retail and 21,055 SF of restaurant space

For restaurants, 13,054 SF will be standard sit-down restaurant space and 8,001 SF will be fast, casual restaurant space, along with a 6,636 SF restaurant in the hotel. Of the 436 dwelling units 324 will be studio or one-bedroom units and 112 units will have two or more bedrooms. Of the total, 28 units will be affordable per the Development Rights and Responsibilities Agreement (DRRA).

Roads: The development will be served by public and private roads, including Dove Sail Lane, Mango Tree Road, Valencia Road, and Sky Ribbon Road.

Pedestrian and Bicycle Connectivity: In accordance with the Crescent Neighborhood Design Guidelines, streetscape enhancements in Area 3 will be extensive. A typical street will contain a 15’-25’ wide pedestrian zone and accommodate sidewalks that are at least 6’ wide. The remaining area accommodates street trees, micro-bioretenion, street furniture, outdoor dining, and other public amenities. Because streets are short, with low travel speeds, bicycles will share travel lanes with vehicles. Area 3 will be connected to the rest of the neighborhood with sidewalks and a multi-use pathway along Merriweather Drive. In addition, a future pathway/boardwalk through the environmental area on the open space lot between Hickory Ridge Road and Area 3 is planned.

Downtown Community Commons: Downtown Community Commons are not proposed since they were provided for Area 3 with SDP-17-027.

Parking: Applying the Downtown Revitalization Trip Reduction option for Area 3, per Section 133.0.E.3 of the Zoning Regulations, the parking needs analysis indicates 1,824 parking spaces are required for all commercial uses and 1,085 parking spaces for all residential uses. The plan proposes 2,196 commercial parking spaces and 1,088 residential spaces for both Area 3 phases. Consequently, parking requirements will be exceeded by 375 spaces at buildout. Parking is provided in a 1,349 space free-standing parking garage, in garages within Building B and C, temporary surface lots located off Valencia Road, Mango Tree Road, and Dove Sail Lane, and limited on-street parking (which is not included in the parking totals).

This SDP displaces approximately 1,919 parking spaces used by the Merriweather Post Pavilion. The loss will be mitigated by 1,524 spaces in Area 3 and by other parking outside the area, in accordance with a Permanent Parking Agreement.

Building Height: Building C will be 7 stories, or 84.34 feet, while the hotel will be 15 stories and 169’10” tall.

**Setback Requirements:** The Crescent Neighborhood Design Guidelines recommend a 15-25’ setback from a public or private right of way to allow adequate room for streetscaping. The proposed buildings on SDP-18-005 comply.

**Landscaping:** Landscaping is proposed throughout the site in accordance with the Crescent Neighborhood Design Guidelines. Included are microbioretention planters, street trees and other planting areas. Street furniture and hardscape materials are coordinated throughout the site.

**Stormwater Management:** Stormwater management calculations are based on a combination of redevelopment and new development requirements. For redevelopment, water quality is provided using Stormceptors, which is a type of stormwater quality improvement device. The remainder of the site will use structural and non-structural micro-bioretention facilities (M-6) for water quality, along with Stormfilters, which is another type of stormwater treatment. Channel protection will be provided in underground structural facilities throughout the site. All Stormceptors will be privately owned, but publicly maintained. All others will be privately owned and privately maintained.

**Environmental Considerations:** The site has been previously graded and used as a gravel parking lot for the Merriweather Post Pavilion. It does not contain any regulated environmental features.

**Forest Conservation:** The property is exempt from Section 16.1200 of the Howard County Code for Forest Conservation because the property is zoned NT and it received preliminary plan approval prior to December 31, 1992, per Section 16.1202(b)(1)(iv).

### **III. Planning Board Criteria:**

In accordance with Section 125.0.H.3. of the Howard County Zoning Regulations, the Planning Board must evaluate and approve, approve with conditions, or deny a Site Development Plan that proposes Downtown Revitalization, based on whether the petition satisfies the following:

#### **A. The development conforms with the adopted Downtown Columbia Plan.**

Conformance is specifically interpreted in Section 125.0.A.2.b of the Zoning Regulations:

*“When a provision in this section requires that an action “will conform”, “conform with”, “conforms with” or “conforms to”, the Downtown Columbia Plan or any part of the plan, the action being taken shall further, and not be contrary to, the following items in the Downtown Columbia Plan:*

- (1) Policies;*
- (2) Timing and implementation of the plan;*
- (3) Timing of development;*
- (4) Development patterns*
- (5) Land uses; and*
- (6) Densities and intensities.”*

The Downtown Columbia Plan envisioned the Crescent Neighborhood as a mixed-use, live-work neighborhood and employment center. It was to be a densely populated, urban place, located adjacent to environmentally sensitive areas. The proposal for Area 3 fulfills this vision and this first site development plan is consistent as it proposes office, residential and retail uses; providing a well-rounded neighborhood with amenities for residents and all users.

**Downtown Phasing** - This project falls within Phase I of the Downtown Revitalization Phasing Plan. It states that Downtown Columbia cannot proceed to Phase II until there are between 656 and 2,296 new residential units, between 100 and 640 new hotel rooms, between 1 million

and 1.5 million square feet of new office and conference space and between 300,000 and 676,466 square feet of new retail space. (See following chart)

With this Site Development Plan, a cumulative 1,635 residential units (not including New Cultural Center units), 672,116 SF of office and 11,150 SF of hotel conference space, 250 hotel rooms and 240,196 SF of retail (including restaurants) space would either have been approved for development or already constructed under the Downtown Revitalization provisions.

The existing development approved to date in Downtown does not exceed the maximums for Phase 1 use categories.

DOWNTOWN REVITALIZATION PHASING PROGRESSION													
PHASE I				PHASE II CUMMULATIVE						PHASE III COMPLETION		TOTAL	
Use Type	Min		Max		Use Type	Min		Max		Use Type	Up To		
	Units	SF	Units	SF		Units	SF	Units	SF		Units		SF
Retail		300,000		676,446	Retail		429,270		1,100,000	Retail		820,730	1,250,000
Office/ Conf*		1,000,000		1,513,991	Office/ Conf*		1,868,956		2,756,375	Office/ Conf*		2,431,044	4,300,000
Hotel Rms**	100		640		Hotel Rms**	200***		540***		Hotel Rms**	440		640
Residential**	656		2,296		Residential**	1,442		4,700		Residential**	4,058		5,500

(\* , \*\* , \*\*\*: See Page 73 of Downtown Columbia Plan for Chart and Notes)

This development meets the Downtown Columbia Plan conformance criteria.

CEPPAs: The Department of Planning and Zoning has also evaluated the SDP for conformance with all applicable Community Enhancements, Program and Public Amenities (CEPPA) Requirements. See the attached CEPPA Conformance Chart (Attachment C).

CEPPA Tracking*			
	Parcel/Project	Block	Square Footage
<b>Project Approved - Issued Building Permits</b>			
SDP-13-007	Parcel D/Metropolitan	W-1	454,328 SF
SDP-13-016	Mall	M-1	33,289 SF
SDP-14-024	Parcel C-2/Warfield	W-2	247,903 SF
SDP-14-024	Parcel C-1/Warfield	W-5	188,765 SF
SDP-15-068	Parcel A-1/Crescent/Bldg A	C-1.1	217,123 SF
SDP-15-068	Parcel A-1/Crescent/Bldg B	C-1.1	129,451 SF
SDP-17-027	Crescent Area 3/Parcel D/Building B	C-3.2	438,619 SF
	Crescent Area 3/Parcel D/Building A-1	C-3.3	342,146 SF
<b>SUBTOTAL</b>			<b>2,051,624 SF</b>
<b>Project Approved – No Pending Building Permits</b>			
None			0 SF
<b>SUBTOTAL</b>			<b>0 SF</b>
<b>Projects Approved - Pending Building Permits</b>			
SDP-17-027	Building E-2	C-3.6	16,040 SF
	Building E-3	C-3.10	2,405 SF
<b>SUBTOTAL</b>			<b>18,445 SF</b>

<b>New Projects</b>			
SDP-18-005	Building C	C-3.8	415,611 SF
	Hotel	C-3.7	175,911 SF
<b>SUBTOTAL</b>			<b>591,522 SF</b>
<b>CUMULATIVE TOTAL – INCLUDING SDP-18-005 proposed improvements</b>			<b>2,661,593SF**</b>
* Only tracks projects not exempt from CEPPA requirements			
** Building permit SF is estimated except for issued building permits; square footage may change prior to issuance.			

**B. The development implements and conforms to the approved Final Development Plan or Final Development Plan Amendment including all applicable Final Development Plan approval criteria and conditions.**

The Amended FDP envisions Crescent Area 3 to contain all the primary uses in the Downtown Columbia Plan – office, residential, retail and hotel. This mix helps ensure street level activity throughout the day and year. Since the SDP includes additional residential and retail uses, and a new hotel, it conforms with the development permitted by the FDP.

PARCELS			USES									
Parcel	Area (SF)	Acres (Acres)	New/			Hotel		Residential*		Total Development (GFA in SF)		
			Restaurant (SF)	Office (SF)	Cultural/Community (SF)	Rooms	GFA (SF)	DU	GFA (SF)	Demolition	New	Net New
A-1, A-2, A-3 & B (Area 1) (Blocks C 1.1 & C 1.2)	264,875	6.08	49,772	322,036	25,000	0	0	350	413,900	0	809,808	809,808
C (Area 2) (Blocks C 2.1 & C 2.2)	282,584	6.49	40,907	0	50,000	0	0	888	1,047,840	0	1,138,747	1,138,747
D-1 thru D-11 (Area 3) (Blocks C 3.1 thru C 3.11)	904,475	20.76	189,321	1,152,964	150,000	250	150,000	882	1,040,760	0	2,679,045	2,679,045
E (Area 4) (Block C 4)	90,012	2.07	37,500	0	0	0	0	180	212,400	0	249,900	249,900
<b>Crescent Total This FDP</b>	<b>1,541,946</b>	<b>35.40</b>	<b>319,300</b>	<b>1,475,000</b>	<b>225,000</b>	<b>250</b>	<b>150,000</b>	<b>2,800</b>	<b>2,714,000</b>	<b>0</b>	<b>4,877,500</b>	<b>4,877,500</b>

**C. The development is well-organized in terms of location of buildings and structures, downtown community commons, landscaping, pedestrian and vehicular circulation systems and other Downtown Revitalization features.**

The block and road network conform with the amended FDP. Development is organized around a park that will be anchored by retail and residential uses to the north and south and restaurants to the east and west. The short, urban blocks, which promote walking, and connections to the Downtown Community Commons will enhance the pedestrian experience. Surface lots will provide additional parking on nights and weekends and for events at Merriweather Post Pavilion and Symphony Woods. A porte cochere on the west side of the hotel will provide protected cover for guests and loading and unloading. The dual driveway will be separate from the adjacent street and sidewalk.

**D. If the development provides Downtown Community Commons and/or Downtown Parkland, they are reasonable and appropriate given the location, scale and anticipated intensity of adjacent uses in accordance with the Downtown Columbia Plan.**

No Downtown Community Commons are proposed with this Site Development Plan

**E. The maximum permitted building heights will conform to the Final Development Plan.**

Per the Downtown Columbia Plan, the Final Development Plan and Crescent Neighborhood Concept Plan, buildings as tall as 15 stories, or 170 feet, on Parcel D-8 and 20 stories, or 250 feet, on Parcel D-7 are permitted in this area of the Crescent Neighborhood. Building C is 7 stories, or 84.26 feet and the hotel is 15 stories, or 170' tall.

**F. The development satisfies the Downtown Public Art Program approved with the Final Development Plan or Final Development Plan Amendment approval.**

Several locations for public art are identified on this SDP to satisfy the 1% requirement. Per Policy, the initial details for public art will be submitted with, or prior to the submission of the building permit.

**G. The Site Development Plan satisfies the affordable housing requirements in accordance with the Final Development Plan.**

This SDP is subject to the DRRA, recorded in the Howard County Land Records, Book 17457, Page 265. In accordance with this agreement, Building B will contain 14 Very Low-Income and 14 Middle Income residential units. A note addressing this is on the SDP cover sheet and the number of affordable homes has increased by two since the total number of units was increased.

**H. The development satisfies the Adequate Public Facilities Ordinance, if applicable.**

**SCHOOLS:** The project meets the tentative school allocations approved with the Crescent Neighborhood FDP.

**ROADS:** Transportation facilities for the project were tested in accordance with the Adequate Public Facilities Ordinance (Title 16, Subtitle 11 of the Howard County Code). Transportation improvements are coordinated with the construction of both public and private roads, as described in the traffic study. With the proposed road network in place (Dove Sail Lane, Mango Tree Road, Valencia Road and Sky Ribbon Road) and considering the existing road network, the SRC found that the traffic study complies with the Downtown Columbia provisions of the Adequate Public Facility Ordinance.

**I. The development indicates the manner in which any land intended for common or quasi-public use, but not proposed to be in public ownership, will be held, owned and maintained in perpetuity for the indicated purposes.**

Easements and Maintenance Agreements are required for areas intended for common or quasi-public use with the approval of this SDP.


**J. The petition is accompanied by documentation demonstrating membership in the Downtown Columbia Partnership including the required annual charges.**

Payments to include membership in the Downtown Partnership will be made according to CEPPAs #25 and #27.

**SRC Action:** The Subdivision Review Committee recommended approval, subject to comments issued in their letter dated August 9, 2018. Additional drafting changes may be generated when paper copies are reviewed, before the mylar originals are submitted, or when the original mylars are reviewed.



**Recommendation: Approval**, subject to complying with remaining Subdivision Review Committee comments and any conditions by the Planning Board.

 10-3-19  
Valdis Lazdins, Director Date  
Department of Planning & Zoning

**Please note that this file is available for public review by appointment at the Department of Planning and Zoning's public service counter, Monday through Thursday, 8:00 a.m. to 5:00 p.m. and Friday, 8:00 a.m. to 3:00 p.m.**

VL/KS: jam(jmf)

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**ATTACHMENT A**  
**SUBDIVISION REVIEW COMMITTEE COMMENTS**

**ATTACHMENT B**  
**DAP RECOMMENDATIONS**

**ATTACHMENT C**  
**CEPPA STATUS**

**ATTACHMENT D**  
**DOWNTOWN COLUMBIA DEFINITIONS**

**ATTACHMENT A**  
**SUBDIVISION REVIEW COMMITTEE COMMENTS**



September 20, 2019

Mr. Kent Sheubrooks  
Howard County Department of Planning and Zoning  
Division of Land Development  
3430 Courthouse Drive  
Ellicott City, MD 21043

**Re: SDP-18-005, D Crescent Area 3, Phase 2  
Redline Revision #1  
Response to September 9, 2019 Approval Letter Comments  
DMW Project No. 04038.B0**

Dear Mr. Sheubrooks:

Daft-McCune-Walker, Inc. (DMW) has received the comments based on the review by various Howard County agencies of the aforementioned project, included in the Howard County Approval letter dated September 9, 2019. We have revised the design documents accordingly and provide the following in response to the comments:

**Division of Land Development (DLD) – Jill Manion**

General Comment:

1. This plan is approvable; however, Planning Board is required to approve the new hotel and the additional dwelling units in Building C prior to signature approval of the redline sheets.

**RESPONSE: A meeting with the Planning Board has been scheduled for October 17, 2019 at 7:00 pm.**

Sheet 4 - 5:

1. Please add a note by the graphic symbol legend that retail and hotel parking will not be reserved/dedicated.

**RESPONSE: Note 3 “Parking for Retail and Hotel will not be reserved/dedicated” has been added to Sheet 4. The same note has been added as Note 2 on Sheet 5.**

2. Vehicle Charging Stations: It is difficult to decipher which spaces have access to the charging stations. I only see two labels for charging stations and the spaces are not marked. Please clearly depict. Confirm with DILP the required number of charging stations. It is recommended they are distributed on multiple levels of the garage.

**RESPONSE: Labeling for the charging stations has been added to Sheets 4 and 5. Charging stations are located on Levels 0.5, 1.5, 2, 3, 4, 5, and 6. The parking summary on Sheet 5 has been updated to include the EV and LEV/FEV spaces for the hotel and residential.**

3. On the "clean sheet", there are some line weight issues that make the plan very difficult to read. Please correct.

**RESPONSE: The presentation has been cleaned up for clarity on Sheets 4 and 5.**

4. Please resolve any comments regarding handicap parking requirements and charging station parking with DILP prior to the submission of Planning Board materials. An indication of approval from DILP will be required prior to accepting the Planning Board materials.

**RESPONSE: The comments related to handicap parking and charging station parking have been addressed on the sheets 4 and 5. The revised quantities of spaces are now based on each building use, rather than the overall total parking. We will coordinate with Howard County DILP, in order to obtain approval, as part of this submittal package.**

Sheet 11:

5. Label the concrete walk on the east side of Building C. It is preferred that a minimum 6' pedestrian zone (excluding the curb step off, planting zone, building frontage zone and any amenity zone) is shown. However, for consistency with the previously approved plan, the label "concrete walk" is acceptable.

**RESPONSE: A "Conc. Walk" label has been added on the east side of Building C on Sheet 11.**

6. Add revised plat information for the revised and new SWM easements once the associated Originals Only plats have been recorded.

**RESPONSE: Plat information will be revised on the appropriate sheets within SDP 18005 accordingly, once the Originals Only plats have been recorded.**

Sheet 12:

7. Please ensure there is a 6' pedestrian path on the west side of the building considering door swing clearance.

**RESPONSE: The door(s) in question do not swing. They are sliding doors and have been labeled on Sheet 12.**

Sheet 17:

8. Please add a note to see Sheet 48 for paving details for the hotel drive.

**RESPONSE: A callout and label has been added (on Sheet 17) to "see Sheet 48 for hotel drive paving detail".**

Sheet 47:

9. There is labeling and leader lines for benches under the Mango Tree Road label, but no benches are depicted.



**RESPONSE: The labeling and leader lines along Mango Tree Road on Sheet 47 have been coordinated and revised in order to improve presentation of the sheet.**

10. Add a leader line and label to benches on the Dove Sail Lane side. There are 4 benches unlabeled.

**RESPONSE: A leader and label has been added for the benches along Dove Sail Lane on Sheet 47.**

11. Please label as screen wall and dimension/label the width of the passable pedestrian path between the screen wall and the planting area on this sheet and the site plan sheet.

**RESPONSE: There are two building columns that extend to the sidewalk in the vicinity of the mechanical room on the south east side of Building C. These have been labeled as screen walls and the dimension from building to screen wall and screen wall to esd/planter have been added and coordinated on sheet 47.**

Dept. <sup>DILP</sup> Inspections, Licenses, Permits (E---) - James D. Hobson

General Comments:

1. The retail provided parking, 133 spaces, requires not less than 5 handicapped spaces. Please revise the parking count on Sheet 5 to show compliance.

**RESPONSE: The parking summary (on Sheet 5) has been updated to address the retail parking handicap space requirement.**

2. The residential parking, 545 spaces, will require not less than 2 van accessible parking spaces. Please revise the parking count on Sheet 5 to show compliance.

**RESPONSE: The parking summary (on Sheet 5) has been updated to address the residential parking handicap space requirement.**

3. The Hotel and Residential uses will require not less than one electric vehicle charging station for every 25 residential spaces. Hotel with 191 spaces will require 8 charging stations. Residential with 545 spaces will require 22 charging stations (County Council Bill37-2019)

**RESPONSE: The parking summary (on Sheet 5) has been updated to address the hotel and residential electric vehicle charging stations requirement.**

4. Provide a large-scale drawing of the hotel's passenger loading area. Please show spot elevations, slopes, vehicle standing space, access aisle and dimensions. Detail on Sheet 56 is not acceptable.

**RESPONSE: A enlargement of the passenger loading area, including**

DILP



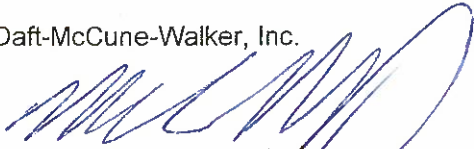
Mr. Kent Sheubrooks  
Page 4 of 4  
September 19, 2019

**elevations, slopes, dimensions and labels has been added to Sheet 56.**

We trust the above responses address your comments. Should you have any questions please do not hesitate to contact us.

Sincerely,

Daft-McCune-Walker, Inc.

A handwritten signature in blue ink, appearing to read 'M. C. Beall, Jr.', written in a cursive style.

Melvin C. (Chuck) Beall, Jr., P.E.  
Senior Vice President | Director of Government Services

MCB/bah

**ATTACHMENT B**  
**DAP RECOMMENDATIONS**

**ATTACHMENT C**  
**CEPPA STATUS**

**Attachment C**  
**CEPPA Status Summary**  
**SDP-18-005, Downtown Columbia, Crescent Neighborhood, Area 3 - Phase 1**

<b>PRIOR TO SUBMISSION OF THE FIRST FINAL DEVELOPMENT PLAN</b>		
1	HHC completed at its expense an environmental assessment of the three sub-watersheds of Symphony Stream, Wilde Lake and Lake Kittamaqundi located upstream of the Merriweather & Crescent Environmental Enhancements Study area.	Complete
2	HHC will commission at HHC's expense (i) the preparation of the Land Framework component of the Downtown Columbia Sustainability Program and (ii) a detailed outline for the Community Framework component of the Sustainability Program.	Complete
3	HHC will commission at HHC's expense in consultation with Howard County a study evaluating a new Downtown Columbia Route 29 interchange between Route 175 and Broken Land Parkway and options for a connection over Route 29 connecting Downtown Columbia to Oakland Mills, including potential bicycle, transit and multimodal improvements.	Complete
4	HHC will prepare at its expense Downtown-wide Design Guidelines.	Complete
<b>PRIOR TO APPROVAL OF THE FIRST FINAL DEVELOPMENT PLAN</b>		
5	HHC will commission at HHC's expense and in consultation with Howard County one or more feasibility studies for the following: (i) a new Broken Land Parkway/Route 29 north/south collector road connection to Little Patuxent Parkway and (ii) a new Downtown transit center and Downtown Circulator Shuttle.	Complete
6	HHC and Howard County will jointly determine the functions, organizational structure, implementation phasing schedule consistent with the redevelopment phasing schedule, potential funding sources and projected funding needs of the Downtown Columbia Partnership, prior to HHC's establishment of this Partnership. As such, at least fifty percent (50%) of the revenue collected pursuant to CEPPA No. 25 shall be utilized for the implementation of transportation initiatives in the shuttle feasibility study or other direct transit services downtown.	Complete
<b>PRIOR TO APPROVAL OF THE FIRST SITE DEVELOPMENT PLAN</b>		
7	HHC will submit a phasing schedule for implementation of the restoration work on HHC's property and a Site Development Plan for the first phase of the environmental restoration work as described in CEPPA No. 15.	Complete
8	HHC, in collaboration with the County, will establish the Downtown Arts and Culture Commission, an independent nonprofit organization, to promote and support Merriweather Post Pavilion's revitalization in accordance with this Plan and the development of Downtown Columbia as an artistic and cultural center.	Complete
<b>PRIOR TO ISSUANCE OF THE FIRST BUILDING PERMIT</b>		
9	To facilitate the renovation of the Banneker Fire Station, HHC and the County shall cooperate to identify a site for the development of a temporary fire station while the Banneker Fire station is being renovated.	Complete
<b>UPON ISSUANCE OF THE FIRST BUILDING PERMIT</b>		
10	HHC shall contribute \$1.5 million in initial funding for the Downtown Columbia Community Housing Fund. Payment will be contingent upon the expiration of all applicable appeal periods associated with each building permit without an appeal being filed, or if an appeal is filed upon the issuance of a final decision of the courts upholding the issuance of the permit.	Complete
<b>UPON ISSUANCE OF THE BUILDING PERMIT FOR THE 400<sup>th</sup> RESIDENTIAL UNIT</b>		
11	HHC shall contribute \$1.5 million in additional funding for the Downtown Columbia Community Housing Fund. Payment will be contingent upon the expiration of all applicable appeal periods associated with each building permit without an appeal being filed, or if an appeal is filed upon the issuance of a final decision of the courts upholding the issuance of the permit.	Complete
<b>PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE 500,000<sup>th</sup> SF OF DEVELOPMENT</b>		
12	HHC will complete at its expense the pedestrian and bicycle pathway from the Howard County General Hospital to Blandair Park. In addition, HHC along with the County and community will develop a scope of work for renovation of the existing Route 29 pedestrian bridge. HHC will contribute up to \$500,000 towards the implementation of the selected improvements.	Complete

13	HHC will enter into and record in the land records of Howard County, Maryland, a declaration of restrictive covenants that shall prohibit the demolition or major exterior alteration of the former Rouse Company Headquarters building.	Complete
<b>PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE 1,300,000<sup>th</sup> SF OF DEVELOPMENT</b>		
14	HHC in cooperation with Howard Transit shall identify a location in Downtown Columbia for a new Howard County Transit Center and shall provide a location either by fee transfer at no cost or a long-term lease for a nominal sum subject to all applicable laws and regulations.	<i>Alternative Compliance approved with SDP-17-027. See report</i>
15	HHC will complete environmental restoration projects in the Merriweather-Symphony Woods and Crescent areas.	<i>PENDING – Revised timing approved with FDP-DC-Crescent-1A to time completion of sections of environmental restoration with grading of development areas in the Crescent. Neighborhood.</i>
16	HHC will complete Phase I of the Merriweather Post Pavilion redevelopment program.	Complete
<b>PRIOR TO APPROVAL OF THE SITE DEVELOPMENT PLAN FOR THE 1,375<sup>th</sup> NEW RESIDENTIAL UNIT</b>		
17	HHC shall, if deemed necessary by the Board of Education, reserve an adequate school site or provide an equivalent location within Downtown Columbia.	<i>Alternative Compliance approved with SDP-18-005. Agreement for land between BOE and HHC has been met and CEPPA is satisfied</i>
<b>PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE 2,600,000<sup>th</sup> SF OF DEVELOPMENT</b>		
18	HHC will construct at its expense, the Wilde Lake to Downtown Columbia pedestrian and bicycle pathway.	<i>SDP for pathway approved by Planning Board; awaiting SDP for signature approval</i>
19	HHC will construct at its expense the Lakefront Terrace (steps to the Lake) amenity space and pedestrian promenade.	<i>Per alternative compliance approved with FDP-DC-L-1, this CEPPA must be met prior to the building permit issuance for the 3.9 MSF of development.</i>
20	HHC will complete Phase II of Merriweather Post Pavilion redevelopment program.	<i>Complete – Alternative Compliance 11/3/16</i>
<b>PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE 3,900,000<sup>th</sup> SF OF DEVELOPMENT</b>		
21	HHC will complete Phase III of Merriweather Post Pavilion redevelopment program.	<i>PENDING – Alternative Compliance 11/3/16</i>
22	At least one Downtown Neighborhood Square shall be completed and deeded to Howard County for public land.	<i>Construction soon to commence. This CEPPA must now be met with the issuance of a building permit for the 2.6 MSF of development in accordance with alternative compliance approved with FDP-DC-L-1</i>
<b>PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE 5,000,000<sup>th</sup> SF OF DEVELOPMENT</b>		
23	HHC will provide \$1,000,000 towards the initial funding of a Downtown Circulator Shuttle.	<i>PENDING</i>
24	Transfer of Merriweather Post Pavilion to the Downtown Arts and Culture Commission for zero-dollar consideration.	Complete
<b>PRIOR TO THE APPROVAL OF EACH FINAL DEVELOPMENT PLAN</b>		
25	Each owner of property developed with commercial uses shall pay an annual fee of twenty-five cents (\$0.25) per square foot of Gross Leasable Area for office and retail uses and twenty-five cents (\$0.25) per square foot of net floor area for hotels to the Downtown Columbia	On-going

	Partnership.	
<b>UPON ISSUANCE OF ANY BUILDING PERMIT FOR A BUILDING CONTAINING DWELLING UNITS</b>		
26	To fulfill an affordable housing obligation, each developer will pay a per unit fee to the DCCHF in the following amounts: \$2,000/unit for each unit up to and including the 1,500th unit; \$7,000/unit for each unit between the 1,501th unit up to and including the 3,500th unit; \$9,000/unit for each unit between the 3,501st unit up to and including the 5,500th unit.	<i>N/A – REPLACED WITH AFFORDABLE HOUSING REQUIREMENTS IN DRRA</i>
<b>ADDITIONAL CEPPA CONTRIBUTION</b>		
27	Each owner of property developed with commercial uses pursuant to the Downtown Revitalization Zoning Regulations shall provide an annual payment to the DCCHF in the amount of five cents (\$0.05) per square foot of Gross Leasable Area for office and retail uses, and five cents (\$0.05) per square foot of net floor area for hotels. The payment will be made annually by the property owner, with the initial payment being made prior to the issuance of an occupancy permit for net new commercial development on the property. The amount of the charge will be subject to annual adjustment based on a builder's index, land value, or other index provided in the implementing legislation.	On-going

**ATTACHMENT D**  
**DOWNTOWN COLUMBIA DEFINITIONS**



**Attachment 'D'**  
**Relevant Definitions Relating to Downtown Columbia Revitalization**  
**For SDP-18-005**  
**Site Development Plans for Downtown Columbia Revitalization**  
(Excerpted from Section 103.0.A. of the Zoning Regulations)

*[Council Bill 59-2009 (ZRA-113) Effective April 6, 2010]*

Downtown Arts, Cultural and Community Use: Land areas, uses and facilities established for cultural, civic, recreation, educational, environmental, entertainment or community use or benefit, whether or not enclosed and whether publicly or privately owned or operated for profit, including, but not limited to, libraries, fire stations, schools, museums, galleries, artistic work, and transit facilities. Eating, seating and gathering areas that are accessory to these uses are permitted.

Downtown Arts and Entertainment Park: A contiguous area including a large outdoor amphitheater which may be surrounded by a variety of smaller indoor or outdoor artistic and performance spaces, museums, galleries and similar cultural or educational uses in a park-like setting. Ancillary uses such as food vendors, gift shops, small restaurants and supporting infrastructure such as utilities, public and private roadways, multi-modal circulation systems adjacent to public and private roadways, surface parking lots, parking structures, and underground parking are also permitted.

Downtown CEPPA Implementation Chart: The chart and associated text and flexibility provisions contained in the Downtown Columbia Plan which identify the phasing for Downtown Community Enhancements, Programs and Public Amenities.

Downtown Columbia: The following recorded Final Development Plan Phases: Phase 4, Phase 4-A-5, Phase 21, Phase 47-A-7, Phase 52, Phase 62-A-1, Phase 95, Phase 101-A, Phase 105, Phase 111-A-1, Phase 115, Phase 121, Phase 122-A, Phase 139-A-3, Phase 140-A-1, Phase 192-A, Phase 211, Phase 217-A-1, Phase 219, Phase 234, and the area within the described limits included in exhibit A of the Appendix in these regulations.

Downtown Columbia Plan: The General Plan Amendment for Downtown Columbia approved by County Council Bill No. 58-2009.

Downtown Community Commons: Amenity spaces such as plazas, promenades, greens, gardens, squares and other pedestrian-oriented areas, whether publicly or privately owned, that are intended for community interaction and may include spaces for seating, walking, eating, gathering, fountains, public art, way-finding signage, kiosks, or other similar public amenities. Downtown Community Commons can also include walkways that are designed to enhance and be an integral part of the adjacent amenity space, but shall not include any drive lane for vehicular traffic such as private streets, alleys and public roadways for automotive use. Downtown Community Commons must be generally accessible by the public without charge. Included in this category are Downtown Neighborhood Squares. Downtown Community Commons may be integrated into or developed as a part of other uses and may include underground parking, utilities and other infrastructure supporting downtown revitalization.

Downtown Community Enhancements, Programs and Public Amenities (CEPPA): The specific feasibility studies, improvement and management organizations, environmental enhancement programs, and physical improvements identified in the Downtown CEPPA implementation chart contained in the Downtown Columbia Plan.

Downtown Environmental Restoration: Projects within Downtown Columbia that are identified in Columbia Towncenter Merriweather and Crescent Environmental Enhancements Study or Best Management Practices for Symphony Stream and Lake Kittamaqundi Watersheds involving forest restoration and enhancement, reforestation and afforestation, wetland enhancement, and stream restoration activities.

Downtown Environmentally Sensitive Land Area: An area within Downtown Columbia meeting the definition in the Howard County Land Development Regulations of either a floodplain, steep slope, stream or wetland buffers.

Downtown Maximum Building Height Plan: The plan which graphically represents the maximum building height requirements for all Downtown revitalization, as depicted in the Downtown Columbia Plan.

Downtown Mixed-Use: A land-use designation that permits any use or combination of uses permitted under Section 125.A.9.B., including supporting infrastructure, such as utilities, public and private roadways, multi-modal circulation systems adjacent to public and private roadways, surface parking lots, parking structures, and underground parking.

Downtown Neighborhood Concept Plan: A concept plan showing an individual neighborhood identified in the Downtown Columbia Plan that depicts a general layout for proposed public and private streets, block sizes and configurations, maximum building heights and proposed Downtown Community Commons as context for the evaluation of the Final Development Plans.

Downtown Neighborhood Design Guidelines: Urban design guidelines for an individual neighborhood identified in the Downtown Columbia Plan.

Downtown Neighborhood Square: An outdoor amenity space comprised of not less than 25,000 contiguous square feet, exclusive of bike paths and required sidewalks that might be located along its perimeter. A Downtown Neighborhood Square may be covered or partially covered.

Downtown Net New: As applicable, the number of dwellings, hotel and motel rooms, and the amount of gross floor area of commercial office and commercial retail uses that are permitted under the Downtown Revitalization Approval Process after April 6, 2010 in excess of the number of dwellings, hotel and motel rooms, and gross floor area of commercial office and commercial retail uses that are shown on a Site Development Plan for property located within Downtown Columbia that was approved prior to April 6, 2010.

Downtown Open Space Preservation Plan: A plan included in the Downtown Columbia Plan delineating all land in Downtown Columbia designated as open space on a Final Development Plan recorded prior to April 6, 2010 that is required to retain its existing character as: Downtown Environmentally Sensitive Land; Downtown Parkland; Downtown Community Commons; or a Downtown Arts and Entertainment park, as specified in Section 125.A.9.H.

Downtown Parkland: An area generally accessible by the public without charge for active and/or passive recreation purposes which consists primarily of vegetated areas with a natural character, more formal lawns, gardens and walks, pedestrian connections, minor active structured recreation uses such as urban playgrounds, public art, fountains and minimal structures such as cafes and outdoor dining areas, gazebos, pavilions, outdoor stages, and kiosks.

Downtown Primary Amenity Space Framework Diagram: A plan and associated text included in the Downtown Columbia Plan depicting existing and proposed primary amenity and natural spaces in Downtown Columbia.

Downtown Public Art: Original outdoor artwork which is accessible to the public.

Downtown Revitalization: A form of development required in Downtown Columbia after April 6, 2010 in compliance with the applicable provisions of Section 125 that must conform with the recommendations of the Downtown Columbia Plan.

Downtown Revitalization Phasing Plan: A phasing plan included in the Downtown Columbia Plan identifying additional development rights by phase for Downtown Revitalization.

Downtown Signature Building: An existing or proposed structure which requires premiere attention to its architectural design because of its cultural significance or prominent location in relationship to the public realm, such as its position on a street or open space, or as the terminus of a vista.

Downtown-wide Design Guidelines: General urban design guidelines for Downtown Revitalization adopted by the Howard County Council.

***Additional definitions pertinent to The Crescent Neighborhood can be found on pages 173-178 (Chapter 7) of The Crescent Neighborhood Design Guidelines.***

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST 48 HOURS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY 'MISS UTILITY' AT 1-800-257-7771 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
4. THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES AT (410) 313-4900 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
5. PROJECT BACKGROUND:
LOCATION: TAX MAP 36
ZONING: PROPERTY IS ZONED 'NEW TOWN' PER THE 2013 COMPREHENSIVE ZONING PLAN AND IS DESIGNATED AS DOWNTOWN MIXED USE AREA. ADDITIONALLY, THE PROJECT AREA IS SUBJECT TO THE DOWNTOWN COLUMBIA PLAN - A GENERAL PLAN AMENDMENT EFFECTIVE NOVEMBER 9, 2016.

Table with 2 columns: ELECTION DISTRICT, AREA OF PARCELS D-1, D-7, D-9, D-11, D-13; and FIFTH ELECTION DISTRICT, 10-06 AC, F-17-059 #24623 THRU 24630 [F-18-017 #24814 THRU 24820]

- 6. SITE AREA FALLS WITHIN HOWARD COUNTY SCD SOL MAP #8-01.
7. THERE ARE HIGHLY ERODIBLE SOILS ON SITE. MORE STRINGENT SEEDING AND STABILIZATION METHODS MAY BE EXPECTED. SOIL TABLE PROVIDED ON SHEET 62.
8. SPT ELEVATIONS SHOWN FOR CURB ARE BOTTOM OF CURB UNLESS OTHERWISE NOTED.
9. ALL PLAN DIMENSIONS ARE TO THE FACE OF BUILDING OR CURB UNLESS OTHERWISE NOTED. DIMENSIONS ARE MEASURED PERPENDICULAR OR RADIAL BETWEEN ITEMS UNLESS NOTED OTHERWISE.
10. THERE ARE NO KNOWN GRAVE SITES, CEMETERIES, FLOODPLAINS OR WETLANDS ON SITE. WETLANDS AND FLOODPLAIN ARE PRESENT ADJACENT TO THIS SITE, BUT ARE NOT BEING DISTURBED UNDER THIS PLAN.
11. THE PROJECT IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE SECTION 16.1202(B)(6)(V) (PUD) WITH A PDP APPROVED PRIOR TO 12/31/2022.

- 12. THE CONTRACTOR SHALL TEST PIT ALL EXISTING UTILITIES AT LEAST (5) DAYS PRIOR TO STARTING ANY WORK SHOWN ON THESE DRAWINGS AND NOTIFY THE ENGINEER IMMEDIATELY IF THE LOCATION IS DIFFERENT THAN SHOWN.
13. APPROXIMATE LOCATION OF EXISTING UTILITIES IS SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICES. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
14. IN CASE OF DISCREPANCIES BETWEEN THE PLAT AND THE PLANS, THE PLAT SHALL GOVERN.
15. ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134. ALL EXTERIOR LIGHTS TO BE ORIENTED TO DIRECT LIGHT INWARDS AND DOWNWARDS ON-SITE AND AWAY FROM ALL ADJOINING PUBLIC ROADS AND IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
16. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. LANDSCAPING SHALL BE PROVIDED IN ACCORDANCE WITH THE LANDSCAPE PLAN AND FINANCIAL SURETY SHALL BE PAID WITH THE PDP. DEVELOPERS AGREEMENT IN THE AMOUNT OF \$1,271,093.00 FOR THE 23 SHADE TREES (\$300 EA), 10 PERMANENT/EVERGREEN TREES (\$150 EA), AND 140 FOR THE SHRUBS (\$30). LANDSCAPING WITHIN THE MICRO-BIOTENION FACILITIES WILL BE ASSESSED AS PART OF THE DEPARTMENT OF PUBLIC WORKS BIO-RETENTION SURETY.

- 17. THIS PROPERTY IS SUBJECT TO THE CRESCENT NEIGHBORHOOD SPECIFIC DESIGN GUIDELINES (NSDG), RECORDED IN L. 16305, F. 415, THE CRESCENT NEIGHBORHOOD SPECIFIC IMPLEMENTATION PLAN (NSPI), RECORDED IN L. 16306, F. 1, THE CRESCENT NEIGHBORHOOD CONCEPT PLAN (NCP) RECORDED AS PLAT NOS. 23397 THRU 23402 AND THE CRESCENT FINAL DEVELOPMENT PLAN (FDP-DC-CRESCENT-1A), RECORDED AS PLAT NOS. 24102 THRU 24110.
18. FOOD SERVICE ESTABLISHMENTS MUST BE PROVIDED WITH A GREASE INTERCEPTOR. WASTEWATER DRAINS CONTAINING CONCENTRATIONS OF FATS, OILS AND GREASES MUST BE ISOLATED FROM OTHER SOURCES OF WASTEWATER AND SHALL PASS THROUGH A GREASE INTERCEPTOR PRIOR TO ENTERING THE SANITARY SEWER. WASTEWATER FROM RESTROOMS AND GARBAGE GRINDERS SHALL BYPASS THE GREASE INTERCEPTOR. THE GREASE INTERCEPTOR SHALL BE DESIGNED FOR EFFICIENT REMOVAL OF GREASE AT THE MAXIMUM FLOW RATE. GREASE INTERCEPTORS THAT ARE LOCATED OUTSIDE THE BUILDING SHALL BE PLACED IN AN AREA ACCESSIBLE FOR CLEANING THE GREASE BY MOTOR VEHICLE WASTE HAULERS AND SHALL HAVE A MINIMUM SIZE OF 750 GALLONS. GREASE INTERCEPTORS LOCATED INSIDE THE FOOD SERVICE FACILITY MUST BE ISOLATED FROM FOOD PREPARATION AREAS AND MUST BE APPROVED BY THE HOWARD COUNTY HEALTH DEPARTMENT. APPROVAL FOR AN EXTERIOR GREASE INTERCEPTOR IS NOT GRANTED BY THE HOWARD COUNTY HEALTH DEPARTMENT. THEN AN EXTERIOR GREASE INTERCEPTOR WILL BE REQUIRED.

- 19. HEALTH DEPARTMENT APPROVAL OF THIS SITE DEVELOPMENT PLAN (SDP) DOES NOT ENSURE APPROVAL OF BUILDING PERMIT APPLICATIONS ASSOCIATED WITH THIS PLAN. PERMIT PLANS FOR CERTAIN FACILITIES TO BE CONSTRUCTED WITHIN THE LIMITS DESCRIBED BY THIS SDP WILL REQUIRE REVIEW AND APPROVAL BY THE HEALTH DEPARTMENT. SUCH FACILITIES MAY INCLUDE, BUT ARE NOT LIMITED TO, THOSE WHICH HAVE SWIMMING POOLS, OR THAT SELL PREPARED OR PACKAGED FOODS, OR THAT MAY HAVE EQUIPMENT THAT EMITS RADIIATION.
20. AT THE TIME OF SDP APPROVAL, THE SITE IS UNDER PHASE 1 OF THE DOWNTOWN REVITALIZATION PHASING PROGRESSION.
21. CUMULATIVE AMOUNT OF AREA 3 PART I DEVELOPMENT APPROVED AT THE TIME OF THIS SDP APPROVAL IS 1,271,093 SF (EST). SEE DOWNTOWN COLUMBIA DATABASE MAINTAINED BY THE COUNTY, AS PER SECTION 125.04.C OF THE ZONING REGULATIONS. CUMULATIVE AMOUNT OF DOWNTOWN REVITALIZATION DEVELOPMENT APPROVED AND BUILT IS APPROXIMATELY 1,271,093 SF. THIS CUMULATIVE AMOUNT OF DEVELOPMENT DOES NOT INCLUDE DEVELOPMENT TO RECEIVE BUILDING PERMITS WITH THIS SDP.
22. THE PUBLIC ART REQUIREMENT WILL BE SATISFIED BY INCORPORATING ART INTO THE DEVELOPMENT EQUIVALENT IN VALUE TO 1% OF THE BUILDING CONSTRUCTION COST AND MAY INCLUDE SCULPTURAL OR OTHER FREESTANDING ART ELEMENTS. THE PUBLIC ART ELEMENTS WILL HELP FURTHER PROTECT COMPATIBILITY AND WILL HELP ESTABLISH PARTICULAR AREAS AS GATHERING PLACES, ADD COLOR, TEXTURE, AND VARIETY TO THE BUILDING ENVIRONMENT, AND ENHANCE THE OVERALL EXPERIENCE OF THE PROJECT. PER SECTION 125.04.B.F.(8), ART MAY BE PROVIDED IN COMBINATION WITH OTHER DOWNTOWN REVITALIZATION DEVELOPMENTS. SEE SHEET 2 FOR PROPOSED LOCATION.

- 23. A TRAFFIC STUDY, PARKING ANALYSIS, AND PARKING WAIVER FOR THIS PROJECT WAS PREPARED BY WELLS AND ASSOCIATES AND UPDATED ON NOVEMBER 10, 2017. SEE SHEET 2 FOR PROPOSED LOCATIONS.
24. A MINIMUM OF 5,000 PARKING SPACES WILL BE PROVIDED WITHIN EXISTING OR PROPOSED PARKING AREAS LOCATED ON THE MERRIWEATHER POST PAVILION (MPP) PROPERTY WITHIN THE CRESCENT NEIGHBORHOOD VIA A PERMANENT EASEMENT RECORDED IN THE LAND RECORDS AND WITHIN ANY PUBLIC GARAGES, AND ON OTHER DOWNTOWN PROPERTIES VIA A TEMPORARY EASEMENT RECORDED IN THE LAND RECORDS FOR HOWARD COUNTY, MARYLAND, TO SERVE MPP EVENTS. THE 5,000 PARKING SPACES SHALL BE NON-EXCLUSIVE, AND THE AVAILABILITY THEREOF SHALL BE DETERMINED BY EVALUATING NON-MPP PARKING DEMAND IN ACCORDANCE WITH THE DOWNTOWN REVITALIZATION SHARED PARKING METHODOLOGY.
PRIOR TO DEVELOPMENT WITHIN THE CRESCENT NEIGHBORHOOD, THE EXISTING BASELINE OF AVAILABLE SURFACE PARKING IS AS FOLLOWS:

Table with 2 columns: MPP ON-SITE, CRESCENT AREA 1, AREA 2, AREA 3, CRESCENT SUBTOTAL, TOTAL CRESCENT AND MPP ON-SITE, OTHER DOWNTOWN PROPERTIES; and 350 PARKING SPACES, 500 PARKING SPACES, 730 PARKING SPACES, 2100 PARKING SPACES, 3330 PARKING SPACES, 3680 PARKING SPACES, 1320 PARKING SPACES, 5000 TOTAL PARKING SPACES.

IF AND WHEN SUCH SURFACE SPACES ARE DISPLACED BY DEVELOPMENT ACTIVITIES OR CONSTRUCTION STAGING, PARKING MAY BE PROVIDED IN OTHER DOWNTOWN PROPERTIES VIA THE TEMPORARY EASEMENT RECORDED IN THE LAND RECORDS FOR HOWARD COUNTY SO AS TO APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
3-20-19 DATE
Chief, Development Engineering Division
4-24-19 DATE
Chief, Division of Land Development
4-24-19 DATE
Director, Division of Land Development

MAINTAIN THE MINIMUM 5,000 TOTAL REQUIRED SPACES SPECIFICALLY FOR EACH SDP OR FINAL ROAD PLAN PROPOSING DISPLACEMENT OR DEMOLITION OF EXISTING MPP PARKING SPACES IN THE CRESCENT NEIGHBORHOOD, THE PETITIONER MUST SUBMIT A PARKING ANALYSIS IN ACCORDANCE WITH THE DOWNTOWN REVITALIZATION SHARED PARKING METHODOLOGY TO DEMONSTRATE WHERE THE DISPLACED SPACES WILL BE RELOCATED PURSUANT TO THE PERMANENT AND/OR TEMPORARY PARKING EASEMENTS REFERRED TO ABOVE.

AS PUBLIC AND PRIVATE PARKING SPACES ARE MADE AVAILABLE WITHIN THE CRESCENT NEIGHBORHOOD TO SERVE MPP EVENTS, THE NUMBER OF PARKING SPACES THAT WERE TEMPORARILY REQUIRED IN OTHER DOWNTOWN PROPERTIES IN ORDER TO PROVIDE THE TOTAL REQUIRED, CALCULATED IN ACCORDANCE WITH THE DOWNTOWN REVITALIZATION SHARED PARKING METHODOLOGY, SHALL BE CORRESPONDINGLY REDUCED. IN ADDITION, PETITIONER MAY RECORD A CORRESPONDING RELEASE OF THE TEMPORARY EASEMENT FROM ONE OR MORE OF SUCH OTHER DOWNTOWN PROPERTIES THAT ARE NO LONGER NECESSARY TO PROVIDE THE REQUIRED TOTAL.

WHEN AT LEAST 5,000 PARKING SPACES ARE AVAILABLE WITHIN THE CRESCENT NEIGHBORHOOD TO SERVE MERRIWEATHER POST PAVILION EVENTS, CALCULATED IN ACCORDANCE WITH THE DOWNTOWN REVITALIZATION SHARED PARKING METHODOLOGY, PETITIONER MAY RECORD A FULL RELEASE OF THE TEMPORARY EASEMENT FROM ALL OF THE OTHER DOWNTOWN PROPERTIES.

AS WITH PAST PRACTICES, THE MPP OPERATOR SHALL SECURE ADDITIONAL PARKING SPACES LOCATED BOTH WITHIN AND OUTSIDE THE DOWNTOWN AREA FOR ANY EVENTS REQUIRING MORE THAN 5,000 PARKING SPACES. ANY REQUIREMENT FOR SUCH ADDITIONAL PARKING SPACES SHALL BE DETERMINED ON A CASE-BY-CASE BASIS PRIOR TO ISSUANCE OF AN EVENT PERMIT BY THE COUNTY.

THE MERRIWEATHER POST PAVILION PARKING DISPLACEMENT SOLUTION

Table with 3 columns: Existing Spaces, Available Spaces, Net Spaces Available for Merrivether Events; and 2018, 2019, 2020. Total Spaces Provided to MPP: 5,000, 5,000.

- 1. See Sheet 2 for detailed information on required or proposed parking. Parking calculations may be updated based on specific tenancies.
2. Net spaces available for Merrivether Events exclude (i) 325 spaces located within the parking garage (Parcel D-1) to serve other uses based on shared parking methodology, and (ii) 12,817 spaces (Parcel D-4). Also excluded are 44 commercial parking spaces located within mixed-use residential Building B (Parcel D-2) and C (Parcel D-3).
3. 3,228 spaces (at buildout of SDP-18-005) must be provided outside the limits of Building C (Parcel D-8) to within 5,000 total parking spaces required for Merrivether Post Pavilion events (5,000 - 1,772) = 3,228.
The spaces are available in the following areas up to the number shown below, as needed:
See Permanent Parking Easement:
Up To:
Merrivether Post Pavilion Property: 350 spaces
Crescent Area 1 Block: 805 spaces
Crescent Area 1 - Parcel B: 181 spaces
Crescent Area 1 - Parcel A: 162 spaces
Crescent Area 2 (Reduced by SWM pond): 300 spaces
See Temporary Parking Easement:
40-70 Corporate Center: 1,400 spaces
Laketown: 1,090 spaces
555 Parkway: 555 spaces
Total Available: 4,843 spaces

\*See Howard County Land Records, Book 17281, page 131, as may be amended from time to time.

- 26. THE TIMING FOR CONSTRUCTION OF THE FUTURE SYMPHONY WOODS ROAD WILL BE DETERMINED BY FUTURE PLAN APPROVALS AND CONDITIONS, INCLUDING TRAFFIC IMPACT ANALYSES AT THE TIME OF THE SITE DEVELOPMENT PLAN PHASE, BASED UPON FINAL USES AND TRIP GENERATION.
27. VOLUME II DESIGN MANUAL WAIVER
ON DECEMBER 30, 2016, THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS GRANTED A DESIGN MANUAL WAIVER TO SECTIONS 3.3.2.3, 4.3.3.2.2 AND 5.4.8.1 OF THE HOWARD COUNTY DESIGN MANUAL, VOL. II WITH THE FOLLOWING UNDERSTANDING:
"SHOULD CIRCUMSTANCES CHANGE AS THE DESIGN PROCEEDS FORWARD, AND THESE MINIMUM CLEARANCES BETWEEN:
A. WATER AND SEWER OF NO LESS THAN 10 FEET HORIZONTALLY (CENTER-TO-CENTER); OR
B. NO LESS THAN 6 FOOT VERTICAL CLEARANCE OF WATER ABOVE SEWER WHEN NECESSARY AND/OR;
C. NO LESS THAN 5 FEET HORIZONTALLY TO ANY OTHER UTILITY [OUTSIDE TO OUTSIDE] ARE FOUND TO NOT BE ACHIEVABLE, THEN RENEWED REVIEW AND APPROVAL IS REQUIRED."

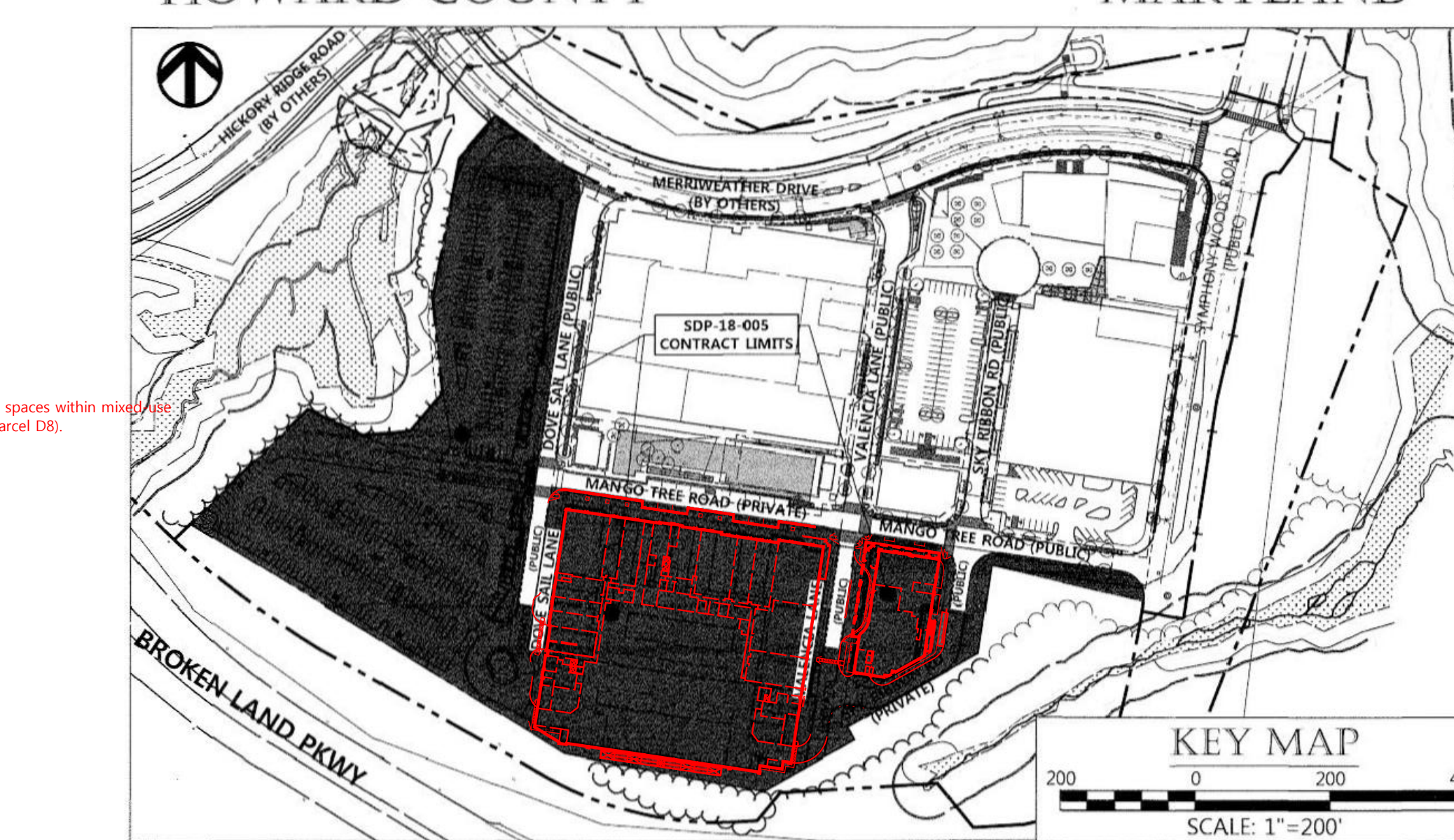
- 28. VOLUME II DESIGN MANUAL WAIVER
ON OCTOBER 26, 2017, THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS GRANTED A DESIGN MANUAL WAIVER TO SECTION 5.4.8.4 OF THE HOWARD COUNTY DESIGN MANUAL, VOL. II, ALLOWING THE MINIMUM CLEARANCE BETWEEN WATERSEWER AND OTHER UTILITIES FROM 5 FEET TO 3 FEET. THE WAIVER CAME WITH THE FOLLOWING UNDERSTANDING: THE CONDITIONED APPROVAL PROVIDED HEREIN IS APPLICABLE TO THE "PINCH" POINTS DESCRIBED AND SHOWN ON THE ACCOMPANYING EXHIBIT ONLY (EXHIBIT A WAS SUBMITTED AS PART OF THE DESIGN MANUAL WAIVER REQUEST). THE CONDITIONED APPROVAL SHALL NOT BE CONSIDERED A WAIVER TO THE REQUIREMENTS OF DESIGN MANUAL VOLUME II - WATER AND SEWER SECTION 5.4.8.4 FOR THE "ENTIRE" LIMITS OF THE SUBJECT CONTRACT PLANS.
A. "PINCH POINTS": EXCEPT 24 AND 25:
THE WAIVER REQUEST FOR THESE "PINCH POINTS" IS CONDITIONALLY APPROVED BECAUSE IN MOST OF THESE INSTANCES, THE REQUESTED REDUCTION IN CLEARANCE REQUIREMENTS IS FROM PROPOSED WATER MAINS, WHICH ARE SHALLOWER AND THEREFORE MORE READILY ACCESSED THAN SEWER. IF IN ANY CASE THE STORM SEWER IS LESS THAN 12" BELOW THE WATER MAIN, WATER TIGHT STORM DRAINAGE PIPING AND CONNECTIONS SHALL BE PROVIDED AND SPECIFIED ON THE PLANS.
B. "PINCH POINTS": 24 AND 25:
THE WAIVER REQUEST FOR "PINCH POINTS" 24 AND 25 IS DENIED. WHEN SCALED TRUE SIZE, THE 48" STORM DRAIN FROM THE STORMWATER MANAGEMENT WAIVER HAS LESS THAN 4" HORIZONTAL CLEARANCE FROM THE LONGITUDINAL ALIGNMENT OF THE ADJACENT WATERSEWER MAINS. ADDITIONALLY, THE 48" STORM DRAIN IS BETWEEN THE WATER AND SEWER MAINS, CONTRICTING UTILITY ACCESS, PARTICULARLY THE SEWER MAIN, WHICH CROSSES THE STORM DRAIN TWICE. IN CONSIDERATION OF THESE CONSTRAINTS, IT IS RECOMMENDED THAT THE STORM DRAIN BE REDESIGNED WITH ITS NEW LOCATION EAST OF THE WATER MAIN AND PLACING A SHORT SECTION OF STORM DRAIN UNDER THE SIDEWALK.

- 29. VOLUME II DESIGN MANUAL WAIVER
ON JANUARY 19, 2017, THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING, ALONG WITH THE DEPARTMENT OF PUBLIC WORKS ISSUED ITS CONCLUSION ON A DESIGN MANUAL WAIVER TO THE FOLLOWING SECTIONS OF THE HOWARD COUNTY DESIGN MANUAL, VOL. II:
A. SECTION 2.5.B.4 "REDUCE THE CURB FILET RADIUS OF A NON-RESIDENTIAL AREA"
B. HOWARD COUNTY ASKED THAT 35" BE PROVIDED FOR ALL PUBLIC ROAD FILETS AND 25" BE PROVIDED FOR ALL COMMERCIAL ENTRANCES ONTO PUBLIC ROADS. OTHER CURB FILET RADIUS WOULD BE SUBJECT TO APPROVAL OF A TURNING ANALYSIS. THIS ANALYSIS WOULD HAVE TO TAKE LANDSCAPING AND EMERGENCY VEHICLE OVERHANG INTO CONSIDERATION. ALSO REQUESTED WAS THE USE OF REINFORCED TURN DOWN CURBS WHERE EMERGENCY VEHICLES MAY HAVE TO RIDE OVER THE CURB LINES.
B. SECTION 2.4.K "UTILITY LOCATIONS"
HOWARD COUNTY ASKED THAT THE DESIGN BE PROVIDED IN ACCORDANCE WITH THE DECEMBER 30, 2016 APPROVAL OF A WAIVER REQUEST TO DESIGN MANUAL WAIVER VOL. II.
C. SECTION 2.5.B "MINIMUM INTERSECTION SPACING"
HOWARD COUNTY HAS NO OBJECTION TO REDUCING THE SPACE FROM 500' TO 400' AS LONG AS THE PEAK HOUR TRAFFIC TO DRIVEWAY #1 IS MAINTAINED TO 200 VPH OR LESS.
D. SECTION 2.6.D "INTERSECTION SPACING AND CORNER CLEARANCE"
THE COUNTY ACKNOWLEDGES THAT THE GARAGE ON PARCEL D-4 IS STILL BEING DESIGNED AND COULD BE SOME TIME UNTIL ITS FINAL DESIGN IS KNOWN. THEREFORE, THE COUNTY HAS DEFERRED A FINAL DECISION UNTIL THE SITE DEVELOPMENT PLAN AND FINAL PLAN SET.
E. SECTION 2.8 "THE USE OF PRIVATE ROADS"
THE COUNTY CONCLUDED THAT ALL OF THE ROADS CAN BE PRIVATE WITH THE EXCEPTION OF VALENCIA LANE, FROM MERRIWEATHER DRIVE DOWN TO MANGO TREE ROAD, AND MANGO TREE ROAD FROM VALENCIA LANE TO SYMPHONY WOODS ROAD.
F. SECTION 2. APPENDIX A "PUBLIC ROADWAY DESIGN CRITERIA"
THE COUNTY CONCLUDED THE POSTED SPEED COULD BE 25 MPH.

- 30. VOLUME II DESIGN MANUAL WAIVER
ON NOVEMBER 06, 2017, THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING GRANTED A DESIGN MANUAL WAIVER TO DETAIL R-609-COMMERCIAL INDUSTRIAL-APARTMENT ENTRANCE ON A CLOSED SECTION ROADWAY OF THE HOWARD COUNTY DESIGN MANUAL VOLUME IV TO ALLOW A 15' CURB RADIUS IN U1U 25' CURB RADIUS.
31. VOLUME IV DESIGN MANUAL WAIVER
ON NOVEMBER 15, 2017, THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING GRANTED A DESIGN MANUAL WAIVER TO SECTION 2.9 AND APPENDIX G OF THE HOWARD COUNTY DESIGN MANUAL VOLUME III TO ALLOW 70 DEGREE ANGLE PARKING SPACES IN THE PARKING GARAGE LOCATED ON PARCEL D.4.

SITE DEVELOPMENT PLAN
DOWNTOWN COLUMBIA
CRESCENT NEIGHBORHOOD
PHASE 1 AREA 3, PHASE 2

PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING
PARCEL 527 & HOTEL
SDP-18-005
HOWARD COUNTY
MARYLAND



Community Enhancements, Programs and Public Amenies (CEPPA) Tracking Table. Columns: Downtown Element, CEPPA, Trigger, Status, Notes.

- 32. VOLUME IV DESIGN MANUAL WAIVER
ON JANUARY 3, 2017 THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING GRANTED THE USE OF THE STORM DRAIN STRUCTURES SHOWN AS DETAIL D4.32 AND D4.35 IN THE HOWARD COUNTY DESIGN MANUAL, VOL. IV FOR THE CRESCENT NEIGHBORHOOD, AREA 3, AND OFFERED THE FOLLOWING:
A. ONLY USE THE GRATE INLETS WHEN THE TYPICAL TYPE 'A' INLET CANNOT BE USED DUE TO SPACE CONSTRAINTS.
B. WHEN A GRATE INLET IS USED, A CONCRETE COLLAR IS TO BE PROVIDED TO REDUCE THE CHANCE OF FAILURE DUE TO SETTLEMENT.
C. IT IS STILL THE COUNTY'S PREFERENCE TO USE THE TYPICAL TYPE 'A' INLET IN THE PUBLIC ROADS.
33. ON AUGUST 25, 2016 WP 17-1010 WAS GRANTED FOR THE FOLLOWING:
A. SECTION 16.144 (d)(2) AND SECTION 16.144 (d)(3) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, TO ALLOW AN EXTENSION OF 45 DAYS TO THE DEADLINE FOR ADDITIONAL INFORMATION.
APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
I. THE PRELIMINARY EQUIVALENT SKETCH PLAN MUST BE SUBMITTED ON OR BEFORE SEPTEMBER 15, 2016.
34. ON DECEMBER 9, 2016 WP 17-049 WAS GRANTED FOR THE FOLLOWING:
A. SECTION 16.144 (d)(2) AND SECTION 16.144 (d)(3) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, TO ALLOW AN EXTENSION OF 45 DAYS TO THE DEADLINE FOR ADDITIONAL INFORMATION.
APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
I. THE PLAT ORIGINALS FOR F 16-1077 MUST BE SUBMITTED ON OR BEFORE NOVEMBER 5, 2017.
35. ON MAY 19, 2017 WP 17-115 WAS GRANTED FOR THE FOLLOWING:
A. SECTION 16.144 (d)(2) AND SECTION 16.144 (d)(3) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, TO ALLOW AN EXTENSION OF 45 DAYS TO THE DEADLINE FOR ADDITIONAL INFORMATION.
APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
I. F 17-059 MUST BE SUBMITTED ON OR BEFORE MAY 22, 2017.
36. ON SEPTEMBER 8, 2017 WP 18-020 WAS GRANTED FOR THE FOLLOWING:
A. SECTION 16.144 (d)(2) AND SECTION 16.144 (d)(3) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
I. SDP 17-027 MUST BE SUBMITTED ON OR BEFORE OCTOBER 2, 2017.
37. ON SEPTEMBER 11, 2017 WP 18-021 WAS GRANTED FOR THE FOLLOWING:
A. SECTION 16.144 (d)(2) AND SECTION 16.144 (d)(3) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
I. SDP 17-027 MUST BE SUBMITTED ON OR BEFORE OCTOBER 2, 2017.
38. ON JANUARY 31, 2017 WP 17-052 WAS GRANTED FOR THE FOLLOWING:
A. SECTION 16.119(a)(5) - TO ALLOW PUBLIC RIGHT-OF-WAY LINES ON CORNER LOTS AT INTERSECTIONS TO BE TRUNCATED BY STRAIGHT LINES JOINING POINTS 25 FEET BACK FROM THE THEORETICAL PROPERTY LINE INTERSECTION IN EACH QUADRANT (A WAIVER FROM SECTION 16.119(a)(5)).
THE APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
I. A SIGHT DISTANCE ANALYSIS MUST BE SUBMITTED FOR ALL SITE DEVELOPMENT PLANS PROPOSED AT PUBLIC AND PRIVATE STREET INTERSECTIONS IN DOWNTOWN COLUMBIA (ALL SIX NEIGHBORHOODS).

- 39. PAYMENTS REQUIRED BY CEPPAS #25 AND #27 ARE TO BE MADE UNDER THIS SDP. CHARGES WILL BE CALCULATED IN ACCORDANCE WITH SECTIONS 28.115.E) AND (G) OF THE HOWARD COUNTY CODE, RESPECTIVELY.
40. 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.
41. DOWNTOWN COMMUNITY COMMONS TO BE PROVIDED WITH THIS SDP SHALL BE IN COMPLIANCE WITH AGREED UPON PARAMETERS SET FORTH BY HOWARD COUNTY AND HOWARD HIGHER RESEARCH & DEVELOPMENT CORPORATION.
42. THE PROPOSED BUILDINGS WILL HAVE AN AUTOMATIC FIRE SUPPRESSION SPRINKLER SYSTEM.
43. THE SCHEMATIC BUILDING ELEVATIONS ARE FOR ARCHITECTURAL INTENT ONLY. FINAL ARCHITECTURAL DESIGN WILL BE REVIEWED WITH THE BUILDING PERMIT PLAN SET FOR COMPLIANCE WITH THE NEIGHBORHOOD SPECIFIC DESIGN GUIDELINES.
44. TRASH SERVICE WILL BE PRIVATE. TRASH STORAGE FOR EACH BUILDING WILL BE WITHIN THE BUILDINGS LOADING DOCK AREA.

- 45. ALTERNATIVE COMPLIANCE OF SECTION 16.120(a)(5) IS APPROVED ONLY FOR CRESCENT NEIGHBORHOOD PARCELS D-8 THROUGH PARCELS D-9 AS SHOWN ON THE ASSOCIATED PLAN EXHIBIT IF THE DEPARTMENT OF PUBLIC WORKS REQUIRES ALL ROAD PROVIDING FRONTAGE TO THESE PROPERTIES BE PRIVATE DUE TO ENHANCED DESIGN FEATURES AND MATERIALS.

BUILDING BUILDING 'C' 6200 MANGO TREE ROAD
BUILDING E-1 6250 MANGO TREE ROAD

Land Use & Density Summary table with columns: Land Use Type, Phase 2 Total, Phase 3 Total. Includes categories like Retail, Restaurant - Standard, Office, Residential, etc.

SHEET INDEX table with columns: SHEET NUMBER, SHEET TITLE. Lists sheets 1 through 77 including COVER SHEET, GENERAL NOTES, BUILDING C-1 FLOOR PLANS, etc.

TENTATIVE ALLOCATIONS table with columns: Annual Phase, No. Tentative Allocations, Allocation Year, SDP Submission Due Date. Lists phases 1 through 8 with dates from 2019 to 2025.

HOWARD COUNTY GEODETIC COORDINATES
BENCH MARK ID: 36DB BENCH MARK ID: 36DA
NORTHING: 170670.302 NORTHING: 170947.216
EASTING: 105.05 EASTING: 1140.84

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. 000000, EXPIRATION DATE: 00/00/0000.

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.

PROFESSIONAL ENGR. NO. 26569
APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 11/8/18

APPROVED: FOR PUBLIC WATER AND SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT
DATE: 4/8/2019
COUNTY HEALTH OFFICER

Table with columns: Land Use Type, Phase 2 Total, Phase 3 Total. Includes categories like Retail, Restaurant - Standard, Office, Residential, etc.

SHEET INDEX table with columns: SHEET NUMBER, SHEET TITLE. Lists sheets 1 through 77 including COVER SHEET, GENERAL NOTES, BUILDING C-1 FLOOR PLANS, etc.

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DATE: 4/8/2019
COUNTY HEALTH OFFICER

COVER SHEET
Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.80
Dwn. By MCJ Date 02/15/19
Chk. By MCB Approved MCB 1 of 77
SDP-18-005

SITE ANALYSIS DATA CHART

- 1. GENERAL SITE DATA
a. TOTAL SITE AREA: 21.39 AC.±
b. TOTAL LIMIT OF DISTURBED AREA: 11.37 AC.±
c. ONSITE LIMIT OF DISTURBED AREA: 13.71 AC.±
d. OFFSITE LIMIT OF DISTURBED AREA: 1.28 AC.±
e. TOTAL IMPERVIOUS AREA: 815 AC.±
f. BUILDING COVERAGE OF SITE: 150,618 SQ FT
g. GREEN OPEN AREA: 1.10 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: 0.76 AC.
n. AREA OF HIGHLY ERODIBLE SOIL: 1.52 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: 1.90 AC.
r. AREA OF ERODIBLE SOILS: 2.24 AC.±
s. FDP-DC-CRESCENT-1A

2. FLOOR SPACE

Table with columns: Land Use Type, SDP 17-027, Units, SDP 18-005, Units, Totals, Units. Rows include Building A1, B, C, E1, E2, E3, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E33, E34, E35, E36, E37, E38, E39, E40, E41, E42, E43, E44, E45, E46, E47, E48, E49, E50, E51, E52, E53, E54, E55, E56, E57, E58, E59, E60, E61, E62, E63, E64, E65, E66, E67, E68, E69, E70, E71, E72, E73, E74, E75, E76, E77, E78, E79, E80, E81, E82, E83, E84, E85, E86, E87, E88, E89, E90, E91, E92, E93, E94, E95, E96, E97, E98, E99, E100.

3. PARKING REQUIREMENTS:

Table with columns: Use, Minimum Required, Phase 1 Building, Phase 2 Building, Total. Rows include Retail, Restaurant, Office, Hotel, etc.

4. PARKING PROVIDED:

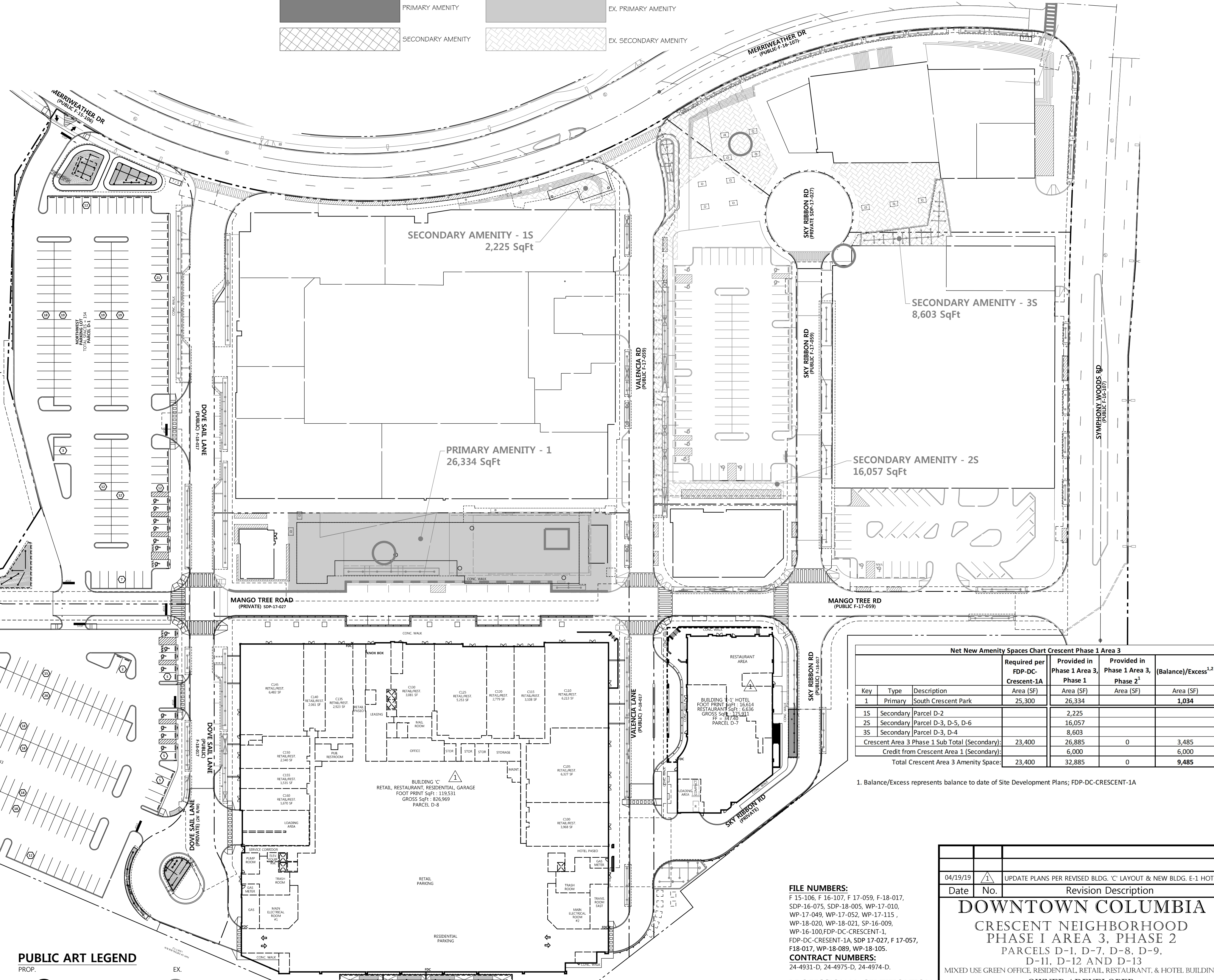
Table with columns: LEVEL, TOTAL SPACES, HANDICAP (STD), HANDICAP (VAN), LOW EMISSIONS. Rows include a. BUILDING C, b. NORTHWEST PARKING LOT, c. SOUTHWEST PARKING LOT, d. ON-STREET PARKING, e. OVERALL PARKING SUPPLY SUMMARY.

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

GENERAL NOTES: CONTINUED FROM SHEET 1

- 45. FOR INFORMATION ON THE POTENTIAL TRANSIT ROUTE CIRCULATION...
46. A GEOTECHNICAL REPORT WAS PREPARED BY THE BALTER COMPANIES DATED JULY 12, 2016 AND APPROVED JANUARY 9, 2017.
47. ENVIRONMENTAL RESTORATION ACTIVITIES PURSUANT TO CEPPA 15 WILL BE COMPLETED IN ACCORDANCE WITH THE PLANNING BOARD'S DECEMBER 2, 2016 APPROVAL OF CEPPA ALTERNATIVE COMPLIANCE.
48. SIGHT DISTANCE ANALYSIS PROVIDED UNDER SP 16-009 FOR THE INTERSECTION OF MANGO TREE ROAD WITH THE SYMPHONY WOODS ROAD...
49. 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...
50. ALL PUBLIC CROSSWALK INSTALLATIONS ARE SUBJECT TO APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
51. A NOISE STUDY FOR THIS PROJECT WAS PREPARED BY HUSH ACOUSTICS, LLC DATED OCTOBER 31, 2016 AND WAS APPROVED ON JANUARY 9, 2017.
52. 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...
53. THIS SDP (PHASE 1 AREA 3, PHASE 2) USES 436 ADDITIONAL HOUSING ALLOCATIONS FOR A TOTAL OF 818 HOUSING ALLOCATIONS IN PHASE 1 AREA 3, PHASE 1 AND PHASE 1 AREA 3, PHASE 2.
54. BUILDING ENTRANCE LOCATIONS ARE PRELIMINARY AND MAY CHANGE TO ADDRESS TENANT NEEDS.
55. PER HOWARD COUNTY GREEN BUILDING LAW (CB14-2010), ALL NEW CONSTRUCTION 10,000 SQUARE FEET OR LARGER SHALL ACHIEVE LEED CERTIFICATION FROM THE US GREEN BUILDING BEN OBTAINED:
- RESIDENTIAL C - #1000070651
- RETAIL E1 - #1000078234
56. REFER TO TABLE 1.1 ON THIS SHEET FOR OWNERSHIP AND MAINTENANCE RESPONSIBILITIES WITHIN EASEMENTS INFORMATION.
57. SEE SHEET 9 FOR LOCATION OF VEHICLE TRANSIT STOP.
58. PROPERTY WITHIN THE AREA OF THIS SITE DEVELOPMENT PLAN IS NOW SUBJECT TO THE TERMS OF THE RECIPROCAL EASEMENT AGREEMENT DATED OCTOBER 19, 2017 RECORDED AMONG THE HOWARD COUNTY LAND RECORDS 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 STORM WATER 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...
59. THE PUBLIC AND PRIVATE MULTI-PURPOSE AND UTILITY EASEMENTS AND PRIVATELY MAINTAINED STORMWATER EASEMENTS ARE SHOWN ON SHEETS 9-19, 21-22, 27-32 AND 35-38. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTE 58 ON THIS SHEET.
60. WP-18-105 WAS ON APPROVED ON MAY 24, 2018 GRANTING ALTERNATE COMPLIANCE OF SECTION 16.1106(A)(1) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WHICH PROHIBITS THE GRADING, REMOVAL OF VEGETATION COVER AND TREES, PAVING AND NEW STRUCTURES WITHIN 25 FEET OF A WETLAND TO PROVIDE A RETAINING WALL MAINTENANCE EASEMENT WITHIN A SMALL PORTION (APPROXIMATELY 195 SF) OF THE BUFFER AREA.
APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
1. ENCROACHMENT INTO THE WETLAND BUFFER SHALL NOT EXTEND BEYOND THE APPROXIMATELY 195 SF AREA IMPACTED BY THE 10' MAINTENANCE EASEMENT SHOWN ON THE EXHIBIT AND ON SDP-18-005. ANY DISTURBANCE SHALL BE LIMITED TO WALL ACCESS AND MAINTENANCE.
2. THE ORIGINAL'S ONLY PLAT SHALL BE RECORDED SHOWING THE 10' PRIVATE RETAINING WALL MAINTENANCE EASEMENT ON OPEN SPACE LOT 3, AS APPROVED FOR SUBMISSION IN A LETTER TO LG DATED MAY 18, 2018.
3. SHOULD THERE BE ANY IMPACTS TO ENVIRONMENTAL RESTORATION PLANTINGS DUE TO WALL ACCESS OR MAINTENANCE, OR ANY OTHER USE OF THE WALL MAINTENANCE EASEMENT AREA, REPLANTING SHALL OCCUR IN ACCORDANCE WITH THE PLANTING PLAN AS APPROVED WITH F-15-106.
4. CONDITIONS OF APPROVAL OF THIS ALTERNATIVE COMPLIANCE SHALL BE ADDED TO RELEVANT PLANS.
61. WP-18-089 WAS APPROVED ON APRIL 10, 2018 GRANTING ALTERNATE COMPLIANCE OF SECTION 16.1106(G) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WHICH STATES THAT FOR NONRESIDENTIAL PROJECTS AND ALL DOWNTOWN COLUMBIA REVITALIZATION, EACH MILESTONE OCCURS NINE MONTHS AFTER THE STARTING DATE.
APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
1. AN SDP SUBMISSION FOR THE REMAINING 95 ALLOCATIONS GRANTED AS PART OF FDP-DC-CRESCENT-1A, DOWNTOWN COLUMBIA, CRESCENT NEIGHBORHOOD, ALLOCATION PHASE 3 (ALLOCATION YEAR 2020) MUST BE SUBMITTED ON OR BEFORE JULY 1, 2018.
2. ALTERNATIVELY, THE REMAINING 95 ALLOCATIONS GRANTED AS PART OF FDP-DC-CRESCENT-1A, DOWNTOWN COLUMBIA, CRESCENT NEIGHBORHOOD, ALLOCATION PHASE 3 (ALLOCATION YEAR 2020) MAY BE REDISTRIBUTED IN ACCORDANCE WITH SECTION 16.1102(B)(6) AS AMENDED BY CB 1-2018 (EFFECTIVE APRIL 16, 2018) AS PART OF A COMPREHENSIVE REDISTRIBUTION OF APPROVAL HOUSING UNIT ALLOCATIONS ON OR BEFORE JULY 1, 2018.
62. WP-19-088 WAS APPROVED ON MAY 14, 2019 GRANTING ALTERNATIVE COMPLIANCE OF SECTION 16.1106(F) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WHICH STATES THAT FOR NONRESIDENTIAL PROJECTS AND ALL DOWNTOWN COLUMBIA REVITALIZATION, EACH MILESTONE OCCURS NINE MONTHS AFTER THE STARTING DATE. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
1. A MAJOR REUSE REVISION TO SDP-18-005 MUST BE SUBMITTED THAT SHOWS MIXED-USE RESIDENTIAL BUILDING C WITH THE ADDITIONAL 13 UNITS WITHIN 122-DAYS FROM THE APRIL 1, 2019 DEADLINE SHOWN IN THE PHASING CHART FOR ALLOCATION YEAR 2021 (ON OR BEFORE AUGUST 1, 2019).

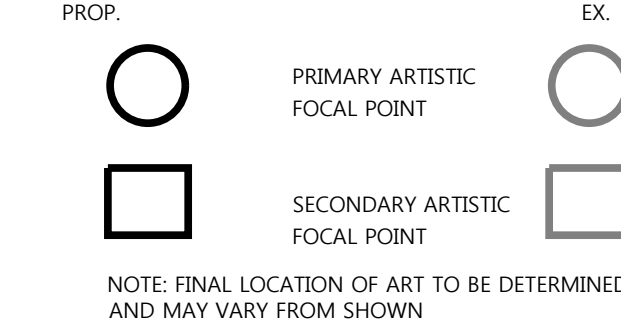
LEGEND



Net New Amenity Spaces Chart Crescent Phase 1 Area 3. Table with columns: Key, Type, Description, Required FDP-DC-Crescent-1A Area (SF), Provided in Phase 1 Area 3, Phase 1 Area 3, Provided in Phase 2, Phase 2, (Balance)/Excess. Total Crescent Area 3 Amenity Space: 23,400.

1. Balance/Excess represents balance to date of Site Development Plans; FDP-DC-CRESCENT-1A

PUBLIC ART LEGEND



DOWNTOWN COMMUNITY COMMONS AND PUBLIC ART PLAN

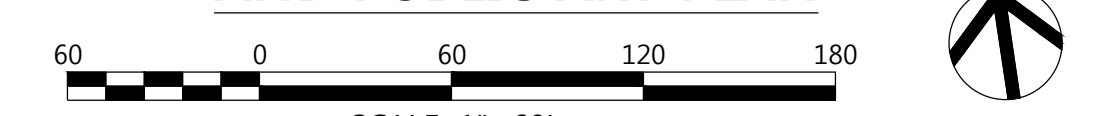


TABLE 1.1: OWNERSHIP AND MAINTENANCE RESPONSIBILITIES WITHIN EASEMENTS

Table with columns: Infrastructure Item, Ownership, Maintenance, Associated County File Number. Rows include Public Storm Drains, Public Street Trees, Public Street Lights, etc.

(1) 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...
(2) THIS WOULD INCLUDE, BUT ARE NOT LIMITED TO ITEMS SUCH AS THE CURB OPENINGS THAT CONVEY THE RUNOFF FROM THE CURB TO THE ESD DEVICES, STRUCTURES THAT PROVIDE CHANNEL PROTECTION, ETC.
(3) THE LIMITS OF PRIVATE AND PUBLIC WATER AND SEWER CONNECTIONS HAVE BEEN PROVIDED WITH CONT. #24-4974-D.
(4) THE LIMITS OF THE PRIVATE AND PUBLIC STORM DRAIN CONNECTIONS HAVE BEEN PROVIDED WITH F 17-059 AND F 18-017.
(5) PRIVATE DRY UTILITIES AND CONDUITS MAY INCLUDE, BUT ARE NOT LIMITED TO ELECTRIC LINES, GAS MAINS, CABLE, FIBER OPTICS, AND TELEPHONE.
(6) 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.
(7) 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-CRESCENT-1A, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.
CONTRACT NUMBERS:
24-4933-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: 05/31/20.
05/31/19
DATE

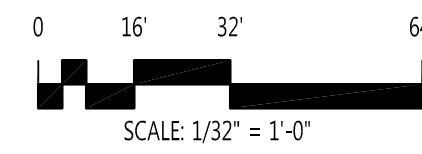
Project information block including date (04/19/19), revision description, project name (DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE 1 AREA 3, PHASE 2), owner/developer (THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION), address (10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044), and logo for DWM (DAFT MCUNE WALKER INC).



NORTH

**GLAZED OPENING ANALYSIS:**  
RESIDENTIAL = 34% TOTAL GLAZING

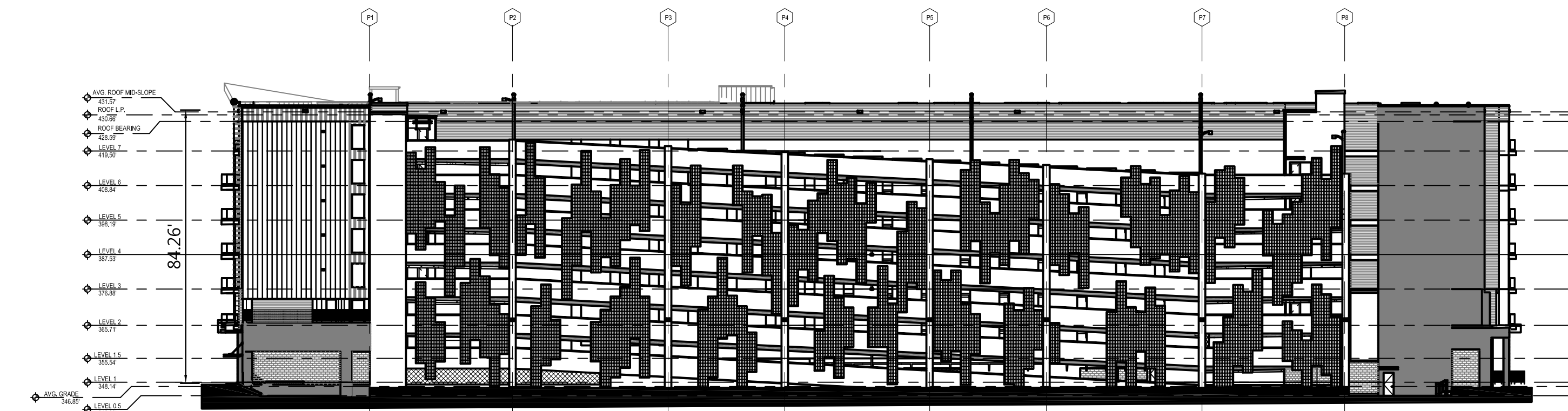
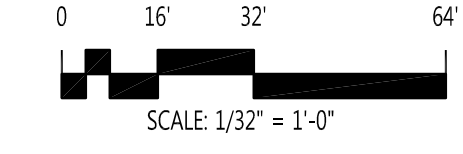
BUILDING C	ELEVATION	FACADE LENGTH	RETAIL STOREFRONT	%
	NORTH	386'-9"	319'-11"	83%



EAST

**GLAZED OPENING ANALYSIS:**  
RESIDENTIAL = 33% TOTAL GLAZING

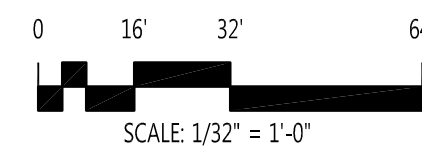
BUILDING C	ELEVATION	FACADE LENGTH	RETAIL STOREFRONT	%
	EAST	336'-1"	209'-5"	62%



SOUTH

**GLAZED OPENING ANALYSIS:**  
RESIDENTIAL = 0.02% TOTAL GLAZING

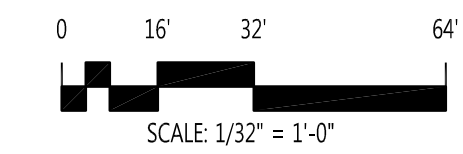
BUILDING C	ELEVATION	FACADE LENGTH	RETAIL STOREFRONT	%
	SOUTH	386'-9"	0'	0%



WEST

**GLAZED OPENING ANALYSIS:**  
RESIDENTIAL = 30% TOTAL GLAZING

BUILDING C	ELEVATION	FACADE LENGTH	RETAIL STOREFRONT	%
	WEST	346'-4"	169'-10"	49%



**BUILDING C - ELEVATIONS**

**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.

- THIS BUILDING IS TO COMPLY WITH THE CRESCENT NEIGHBORHOOD DESIGN GUIDELINE.
- 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.

**FILE NUMBERS:**  
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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**  
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FOR REVISION ONLY

04-22-2019  
DATE

PROFESSIONAL ARCHITECT NO.

PROFESSIONAL CERTIFICATION

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EXPIRATION DATE: \_\_\_\_\_

PROFESSIONAL ENGR. NO.

DATE

APPROVED:

PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_

Approved MCB


APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

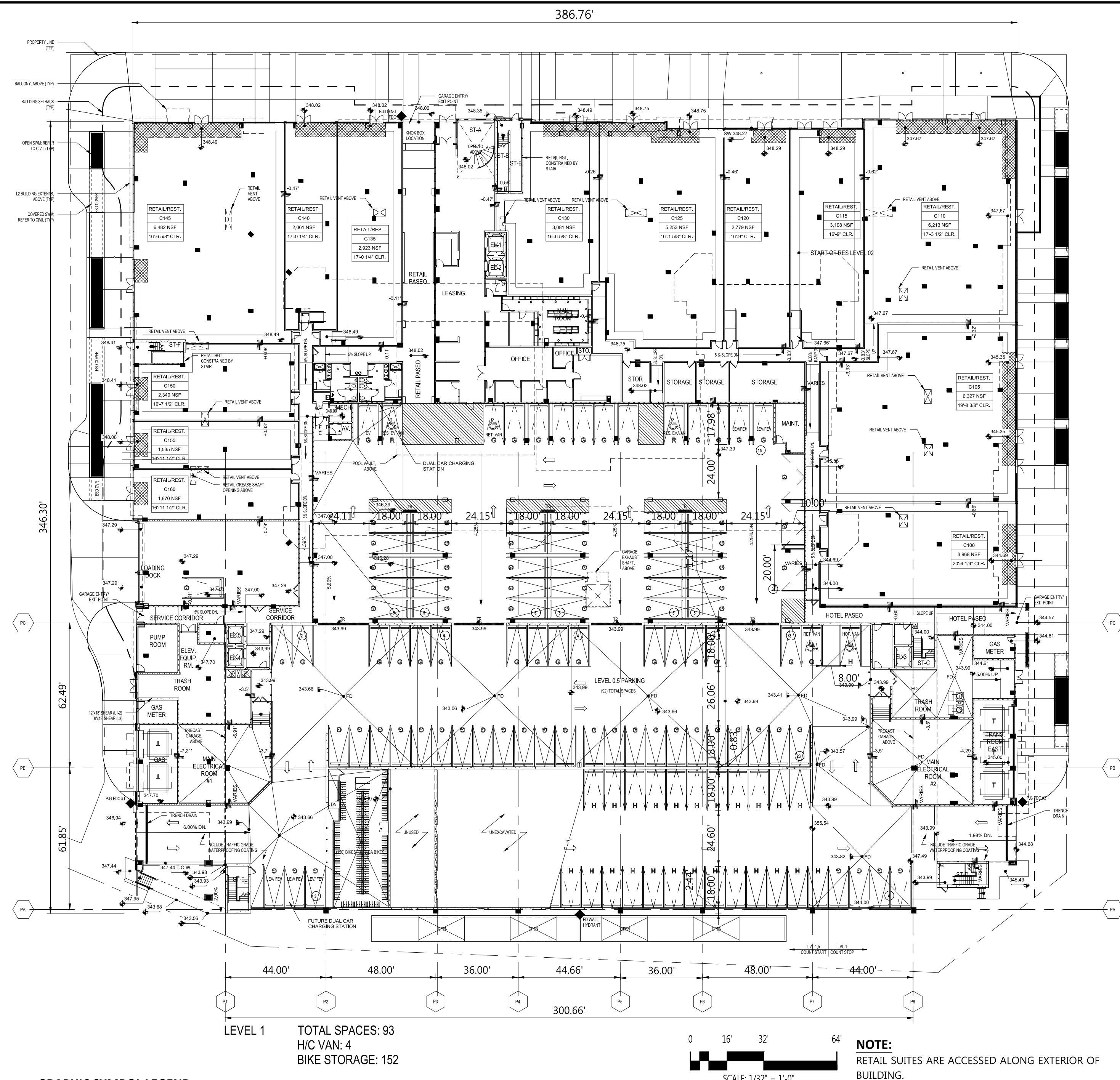
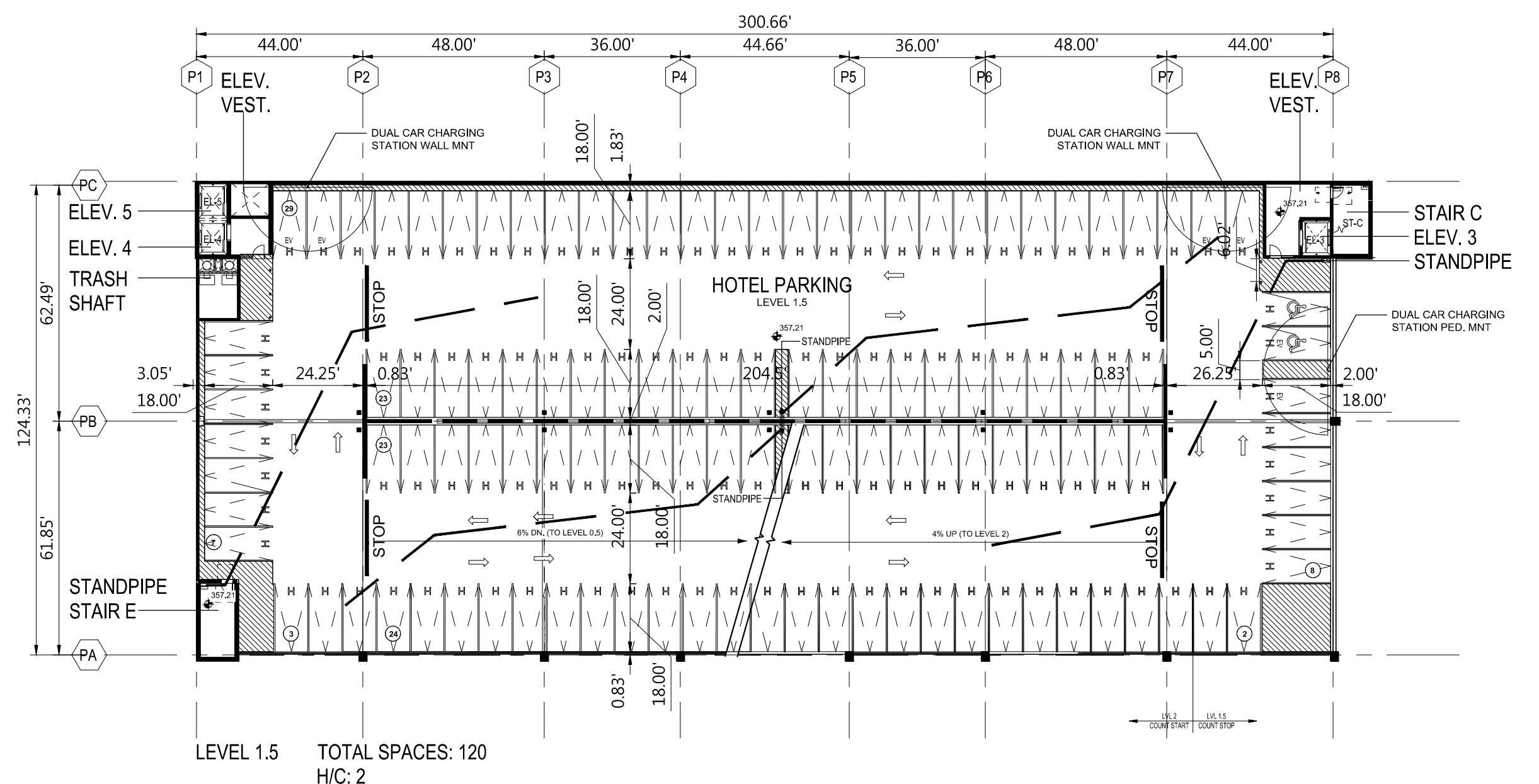
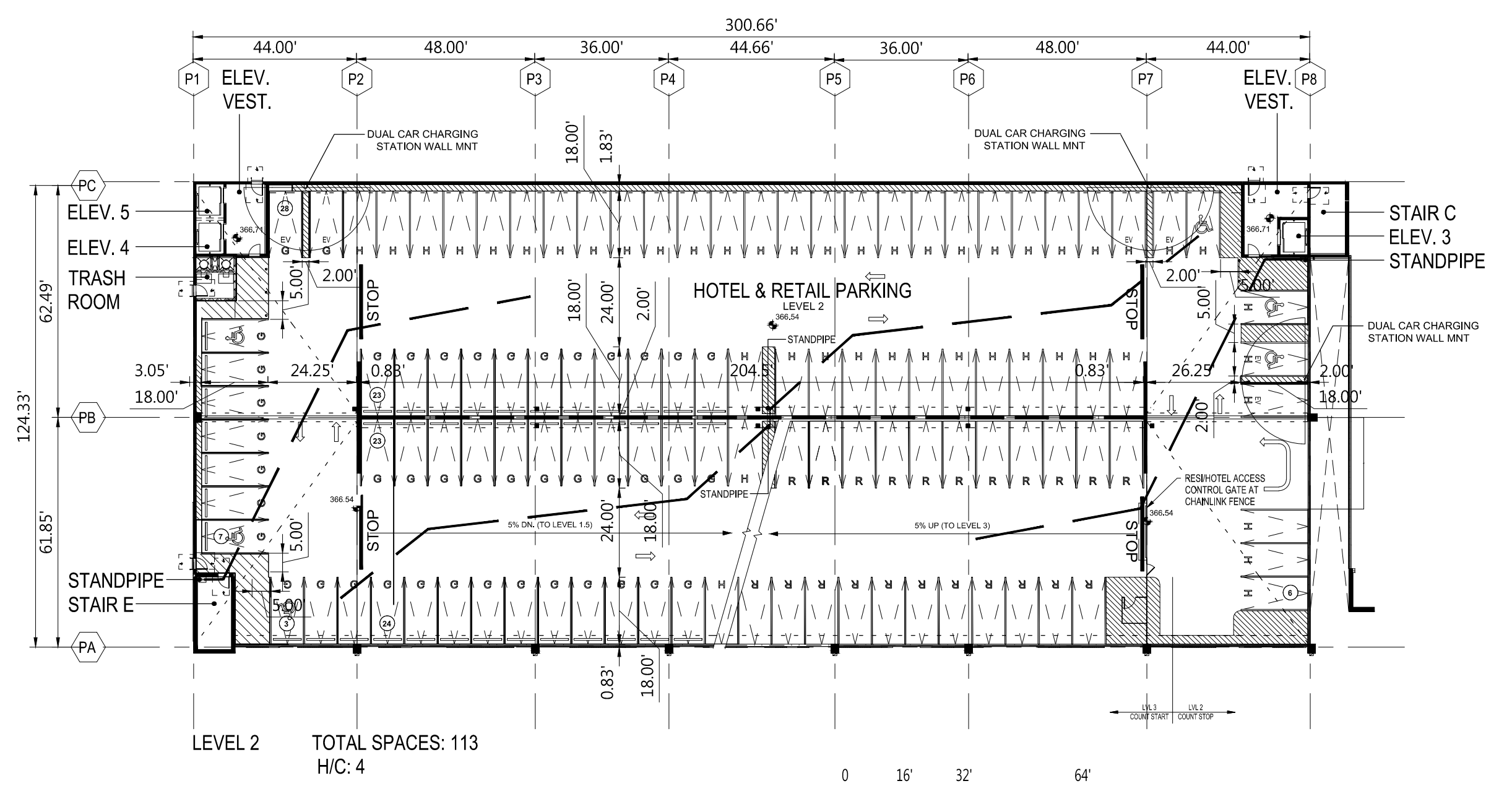
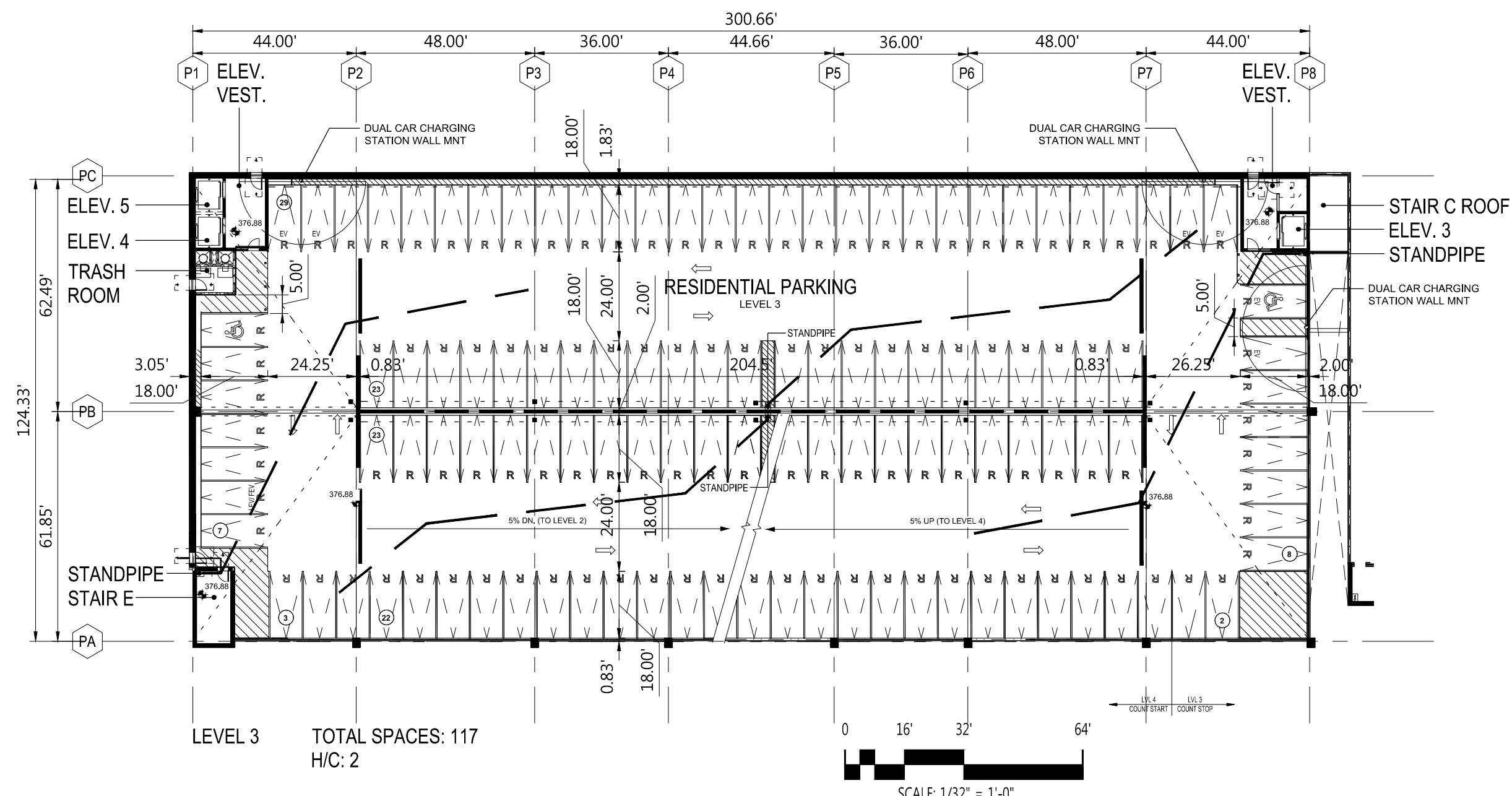
CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

SCALE: 1" = 50'

04/22/19	1	BLDG C ELEVATIONS, AND INTERIOR LAYOUT
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b>		
<b>CRESCENT NEIGHBORHOOD</b>		
<b>PHASE I AREA 3, PHASE 2</b>		
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
 DAFT MCCUNE WALKER INC		
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410.296.3333 F: 410.296.4705 WWW.DMW.COM		
PLANNING DISTRICT DOWNTOWN COLUMBIA	REVISIONS 36	SD/PARCEL # PARCEL D
PLANNING DISTRICT DOWNTOWN COLUMBIA	TAX ZONING MAP 7	REVISIONS 5
PLANNING DISTRICT DOWNTOWN COLUMBIA	SWHY CODE 550	REVISIONS 1
<b>BUILDING C - ELEVATIONS</b>		
Des. By	GDT/DM	SCALE AS SHOWN
Dm. By	MCJ	Date 02/15/19
Chk. By	MCB	Approved MCB
		Proj. No. 04038.80
		3 of 77



**NOTE:**  
SEE SHEET 5 FOR PROVIDED PARKING COUNT MATRIX FOR BUILDING C.

**GRAPHIC SYMBOL LEGEND:**

- (X) NUMBER OF STALLS PER ROW
- (R) PARKING STALL, 9'x18' RESIDENTIAL (R)
- (G) PARKING STALL, 9'x18' RETAIL/ REST. GUEST (G)
- (H) PARKING STALL, 9'x18' HOTEL (H)
- (W) ACCESSIBLE PARKING STALL, 9'x18' W/ 5' AISLE
- (V) ACCESSIBLE PARKING STALL, VAN - 9'x18' W/ 8' AISLE
- (P) PARALLEL PARKING STALL, 20'x10'
- (A) TRAFFIC DIRECTION ARROWS
- (E) ELECTRICAL TRANSFORMER
- (S) LINE OF SPRINKLER HOSE (MAX. DIST. OF 130'-0"; 100'-0" HOSE PULL AND MAX. 30'-0" HOSE SPRAY LENGTH)

**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-17-027, 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.

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FOR REVISION NO. 1 ONLY  
DATE: 04-22-2019

DATE

PROFESSIONAL ENGR. NO.

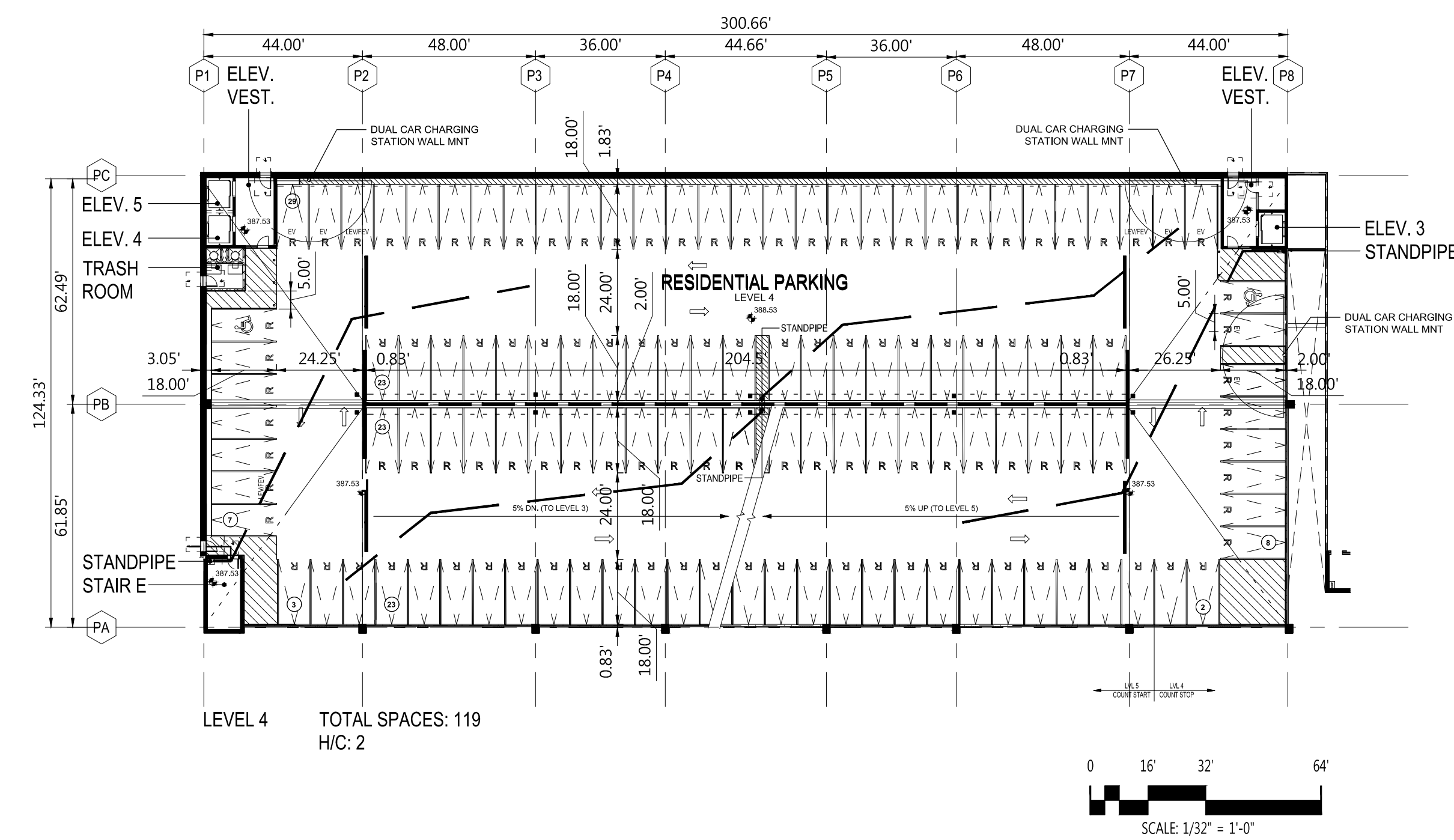
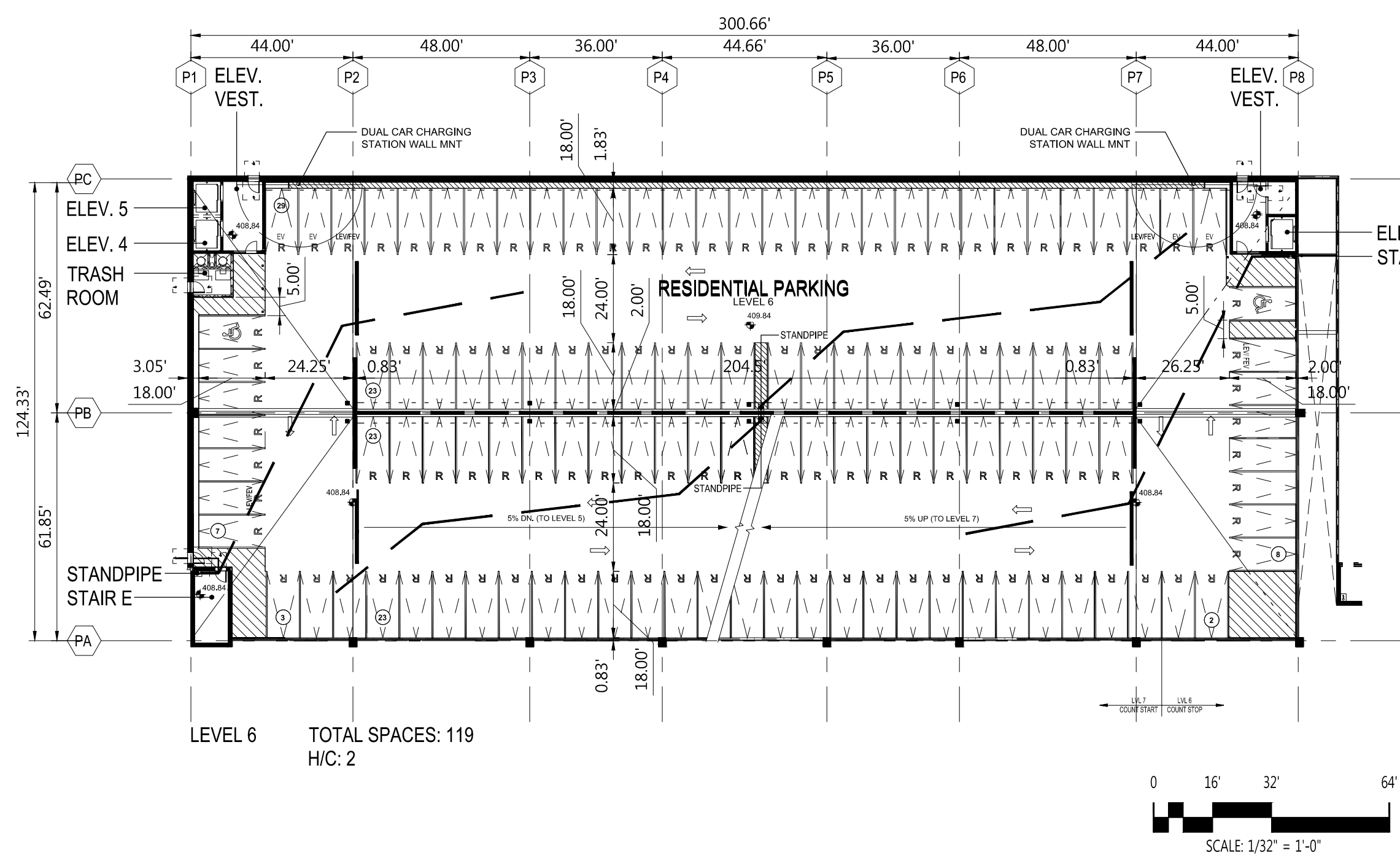
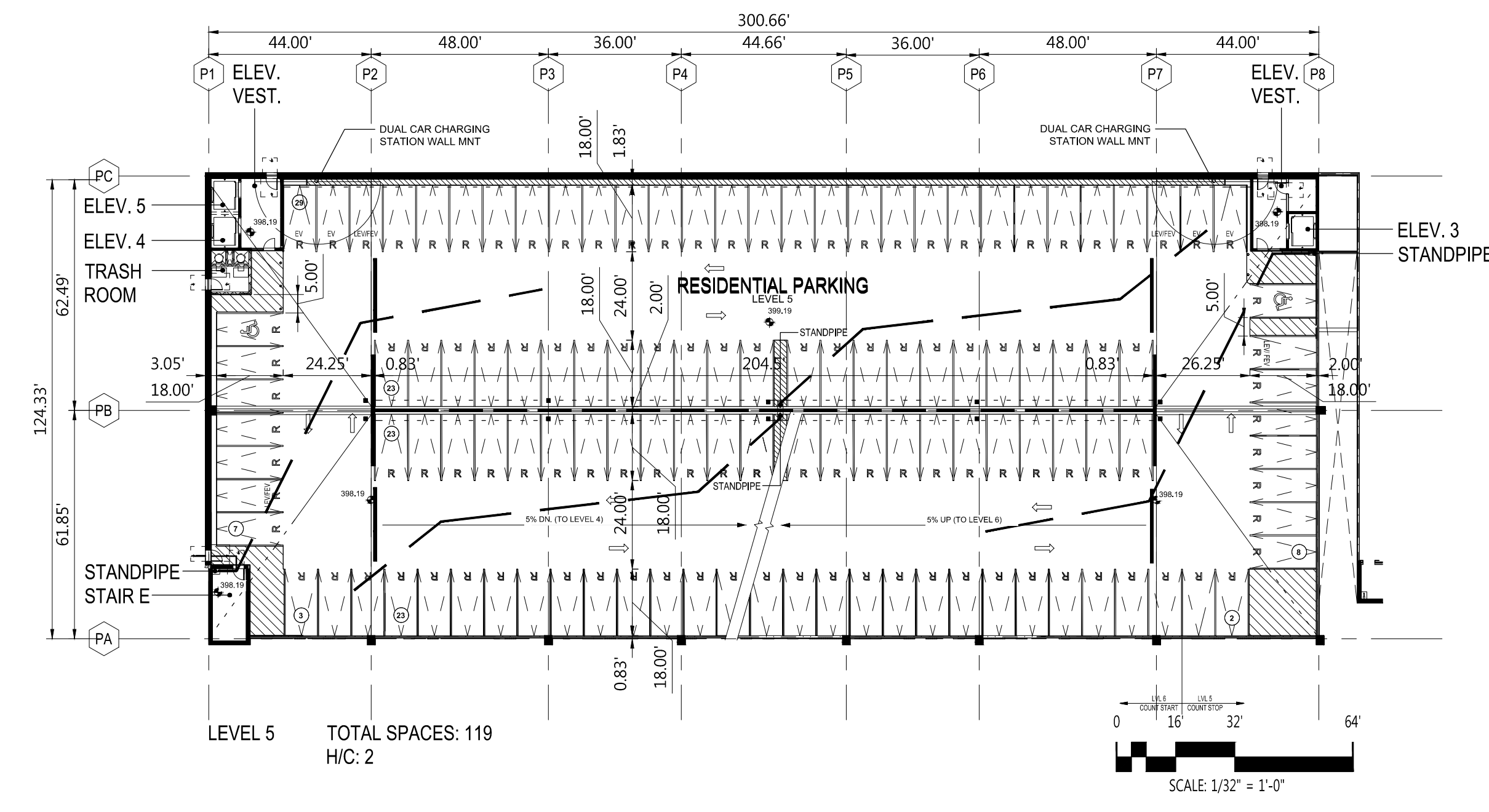
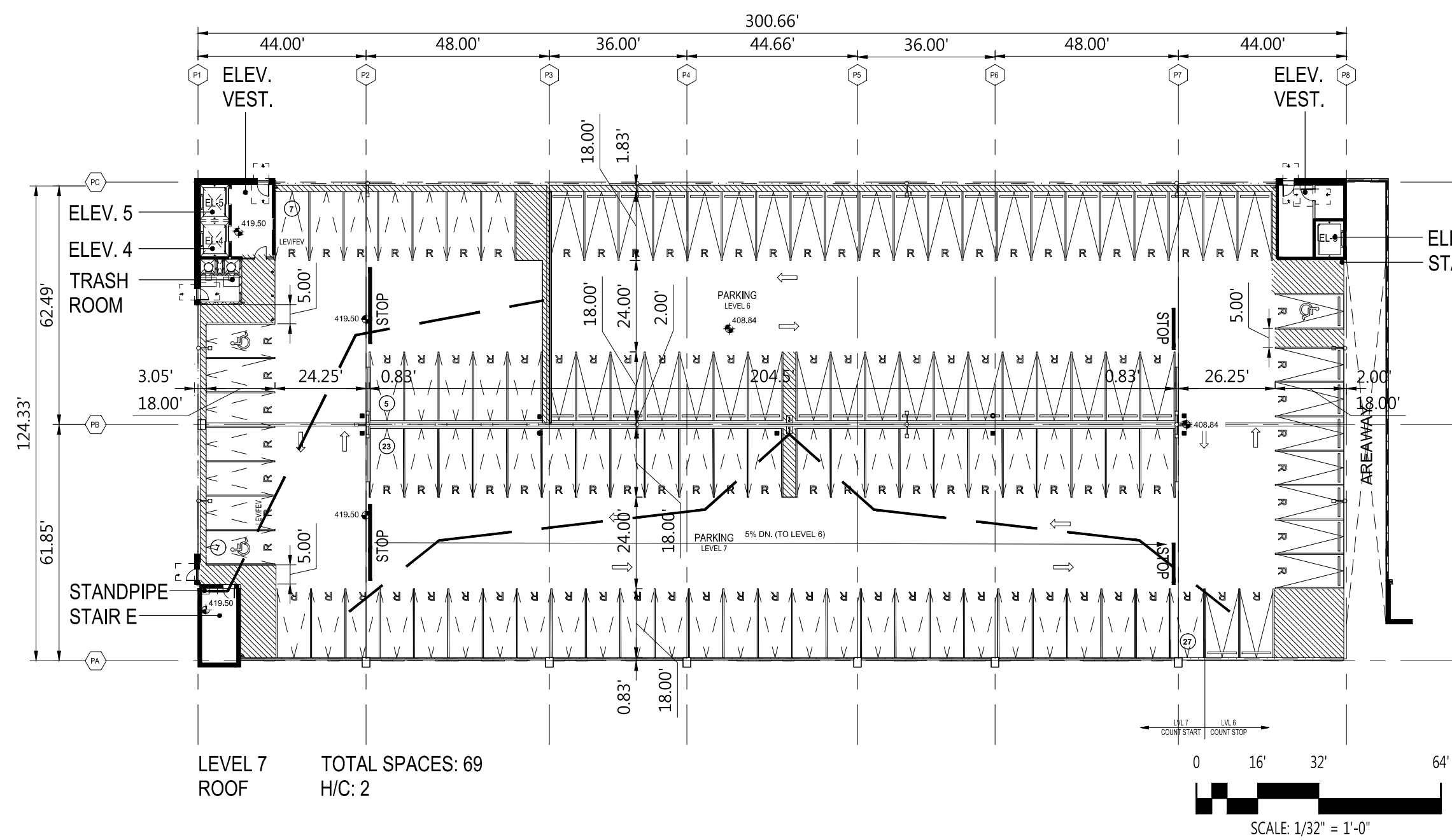
APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE:

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

04/22/19	BLDG C ELEVATIONS, AND INTERIOR LAYOUT
Date	Revision Description
<b>DOWNTOWN COLUMBIA</b>	
CRESCENT NEIGHBORHOOD	
PHASE I AREA 3, PHASE 2	
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13	
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800	
 DAFT MCUNE WALKER INC	
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBMISSION NAME: DOWNTOWN COLUMBIA	SECTION: CRESCENT NEIGHBORHOOD PHASE I AREA 3
DATE OF SUBMISSION: 04/22/19	TAX ZONING MAP: 7
WATER CODE: S50	SEWER CODE: 36
LOT/PARCEL #: PARCEL D	CENSUS TRACT: 605602
TITLE: <b>BUILDING C 1ST FLR. PLN. &amp; GARAGE PLANS</b>	
Des. By: GDT/DM	SCALE: AS SHOWN
Drn. By: MCJ	Date: 02/15/19
Chk. By: MCB	Approved: MCB

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

**BUILDING C GARAGE SPACE LAYOUT**



**BUILDING C GARAGE SPACE LAYOUT**

TIER	TYPE	STALLS
TIER 1 (LVL 0-5)	9' X 18' STANDARD (RET.)	82
	9' X 18' ACCESSIBLE VAN (RET.)	2
	9' X 18' ACCESSIBLE VAN (HOT.)	1
	9' X 18' EV ACCESSIBLE VAN (RES.)	2
	9' X 18' LEV. FEV STANDARD (RET.)	5
	9' X 18' EV (RET.)	1
		<b>93</b>
TIER 2 (LVL 1-5)	9' X 18' STANDARD (HOTEL)	113
	9' X 18' ACCESSIBLE EV (HOTEL)	1
	9' X 18' ACCESSIBLE (HOTEL)	1
	9' X 18' EV	5
	9' X 18' EV (HOTEL)	1
		<b>120</b>
TIER 3 (LVL 2)	9' X 18' STANDARD (HOTEL)	54
	9' X 18' STANDARD (RET.)	38
	9' X 18' EV (RET.)	2
	9' X 18' ACCESSIBLE (HOTEL)	2
	9' X 18' ACCESSIBLE (RET.)	3
	9' X 18' ACCESSIBLE EV (HOTEL)	1
		<b>113</b>
TIER 4 (LVL 3)	9' X 18' STANDARD (RESID.)	109
	9' X 18' ACCESSIBLE EV (RESID.)	1
	9' X 18' ACCESSIBLE (RESID.)	1
	9' X 18' EV STANDARD (RESID.)	5
	9' X 18' LEV. FEV STANDARD (RESID.)	1
		<b>117</b>
TIER 5 (LVL 4)	9' X 18' STANDARD (RESID.)	109
	9' X 18' ACCESSIBLE (RESID.)	2
	9' X 18' EV STANDARD (RESID.)	4
	9' X 18' LEV. FEV STANDARD (RESID.)	4
	9' X 18' LEV. FEV STANDARD (RESID.)	1
		<b>119</b>
TIER 6 (LVL 5)	9' X 18' STANDARD (RESID.)	109
	9' X 18' ACCESSIBLE (RESID.)	2
	9' X 18' EV STANDARD (RESID.)	4
	9' X 18' LEV. FEV STANDARD (RESID.)	4
	9' X 18' LEV. FEV STANDARD (RESID.)	1
		<b>119</b>
TIER 7 (LVL 6)	9' X 18' STANDARD (RESID.)	109
	9' X 18' ACCESSIBLE (RESID.)	2
	9' X 18' EV STANDARD (RESID.)	4
	9' X 18' LEV. FEV STANDARD (RESID.)	4
		<b>119</b>
TIER 8 (LVL 7)	9' X 18' STANDARD (RESID.)	66
	9' X 18' LEV. FEV STANDARD (RESID.)	1
	9' X 18' ACCESSIBLE (RESID.)	2
		<b>69</b>
<b>TOTAL</b>		<b>869</b>

- GRAPHIC SYMBOL LEGEND:**
- (X) NUMBER OF STALLS PER ROW
  - (R) PARKING STALL, 9'X18' RESIDENTIAL (R)
  - (G) PARKING STALL, 9'X18' RETAIL/ REST. GUEST (G)
  - (V) PARKING STALL, 9'X18' RESIDENTIAL VISITOR (V)
  - (A) ACCESSIBLE PARKING STALL, 9'X18' W/ 5' AISLE
  - (B) ACCESSIBLE PARKING STALL, VAN - 9'X18' W/ 8' AISLE
  - (P) PARALLEL PARKING STALL, 20'X10'
  - (T) TRAFFIC DIRECTION ARROWS
  - (E) ELECTRICAL TRANSFORMER
  - (S) LINE OF SPRINKLER HOSE (MAX. DIST. OF 130'-0\"/>

**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-17-027, 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.

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FOR REVISION NO. 1 ONLY  
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PROFESSIONAL ARCHITECT NO.  
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DATE: \_\_\_\_\_  
APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: \_\_\_\_\_

04/22/19  
Date No. BLDG C ELEVATIONS, AND INTERIOR LAYOUT  
Revision Description

**DOWNTOWN COLUMBIA**  
CRESCENT NEIGHBORHOOD  
PHASE I AREA 3, PHASE 2  
PARCELS D-1, D-7, D-8, D-9,  
D-11, D-12 AND D-13

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

SUBMISSION NAME: DOWNTOWN COLUMBIA SECTION: CRESCENT NEIGHBORHOOD LOT/PARCEL # PARCEL D  
DATE FOR SET: 04/22/2019 SHEET NO.: 7 TOTAL SHEETS: 26 TAX ZONING/MAP: 36 ELEC. DISTRICT: 5 CENSUS TRACT: 605602  
WATER CODE: S50 SEWER CODE: LITTLE PATUXENT STAGE: 1

TITLE: **BUILDING C GARAGE PLANS**

Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.B0  
Drn. By MCJ Date 02/15/19  
Chk. By MCB Approved MCB 5 of 77

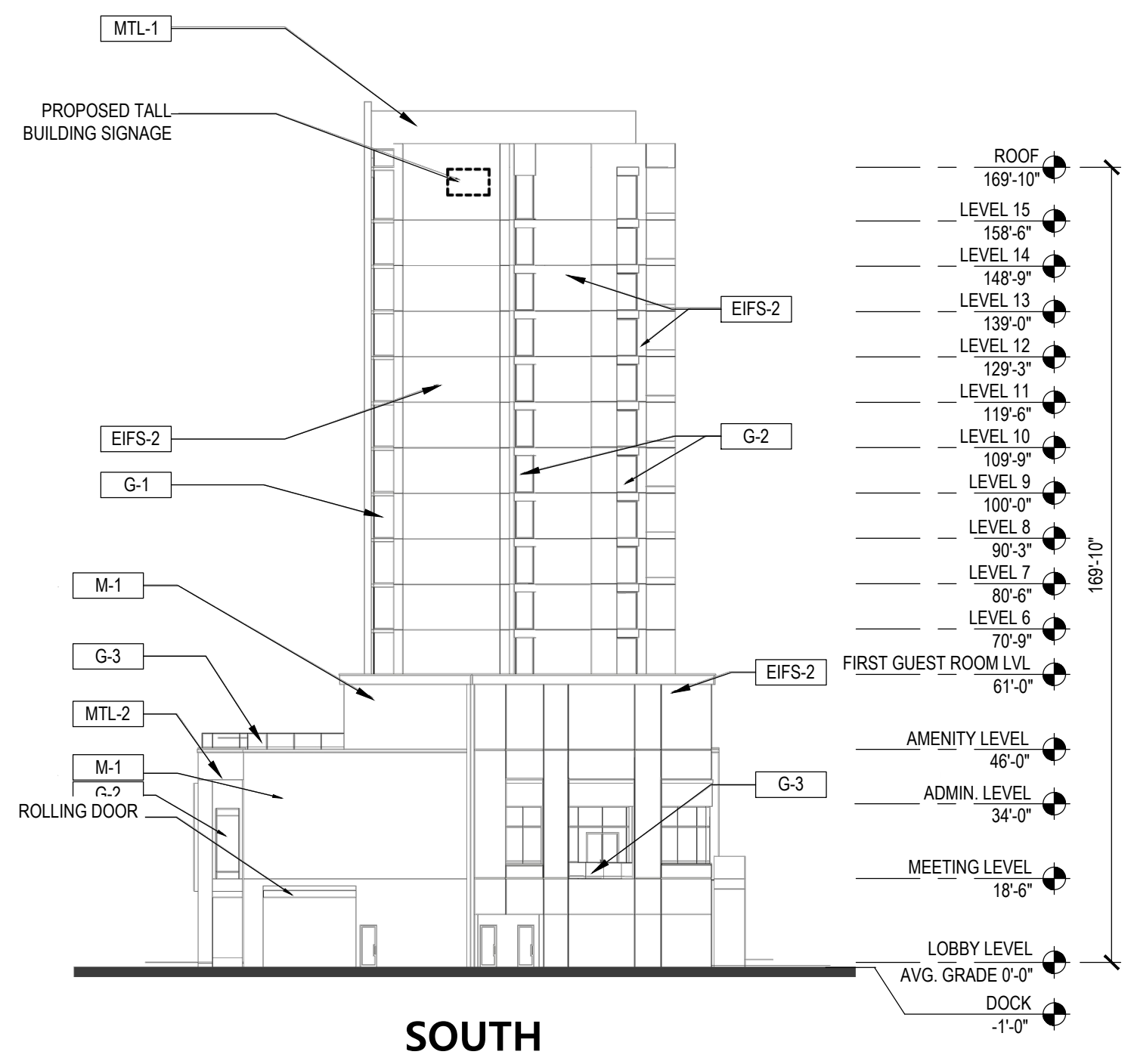
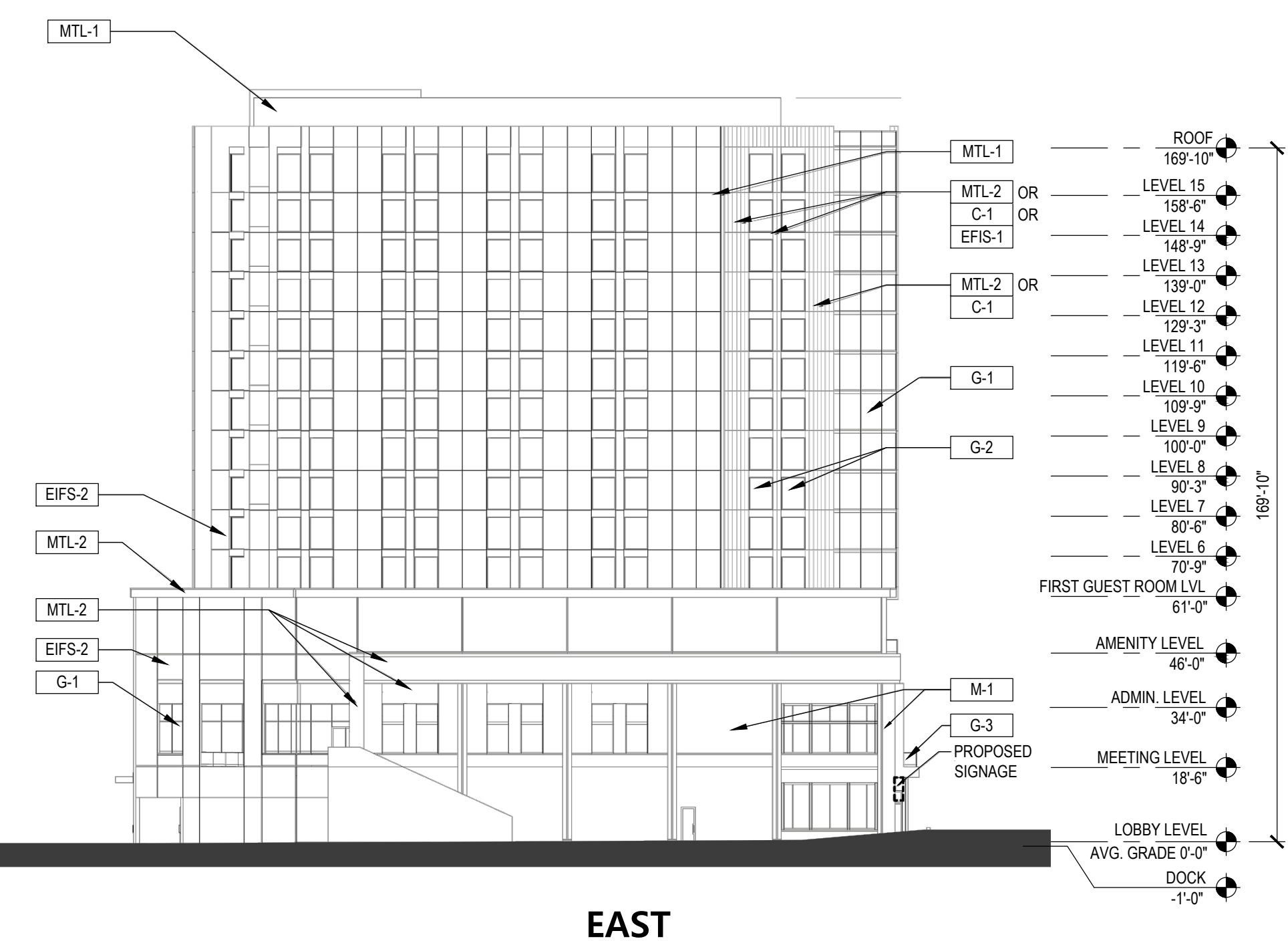
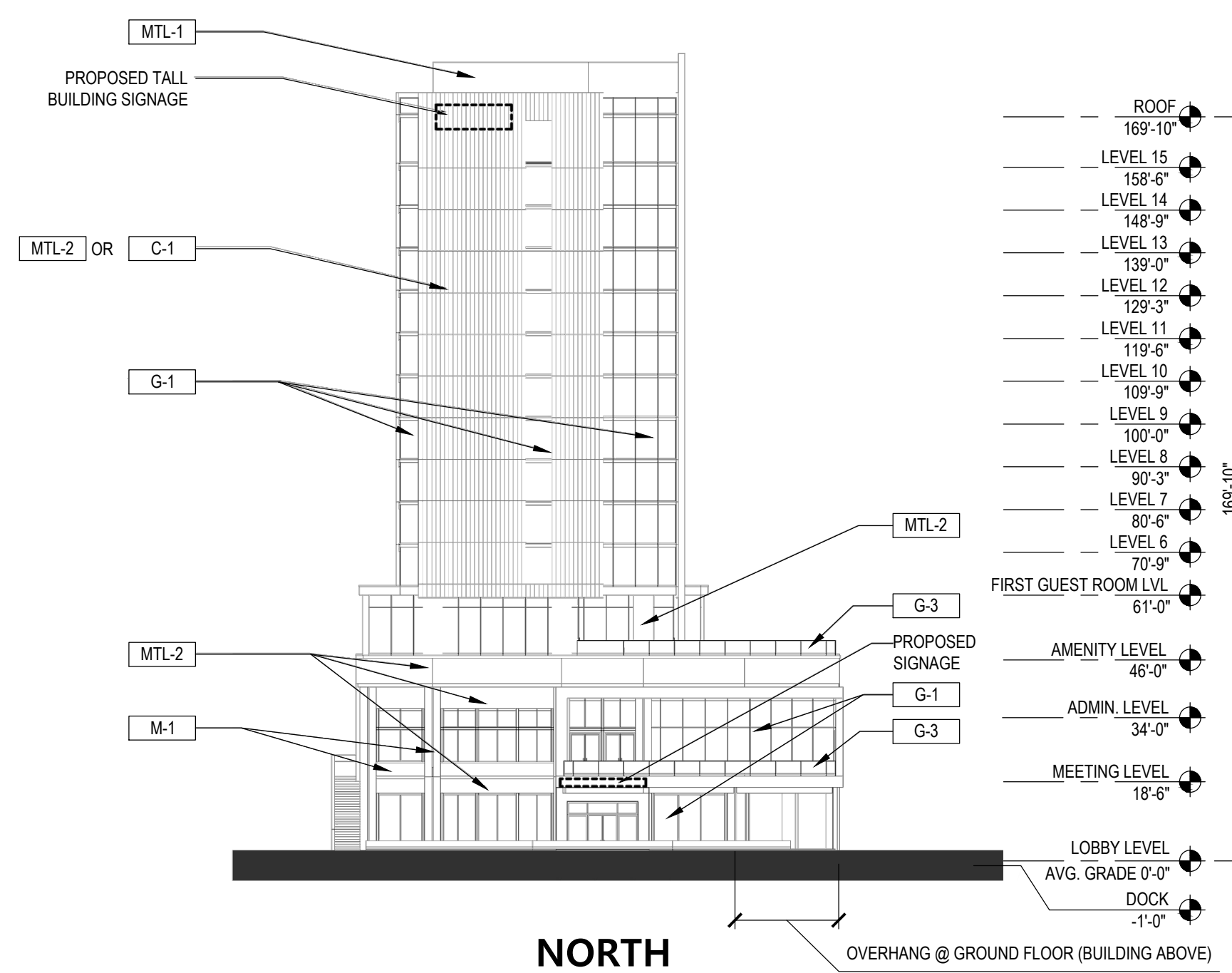
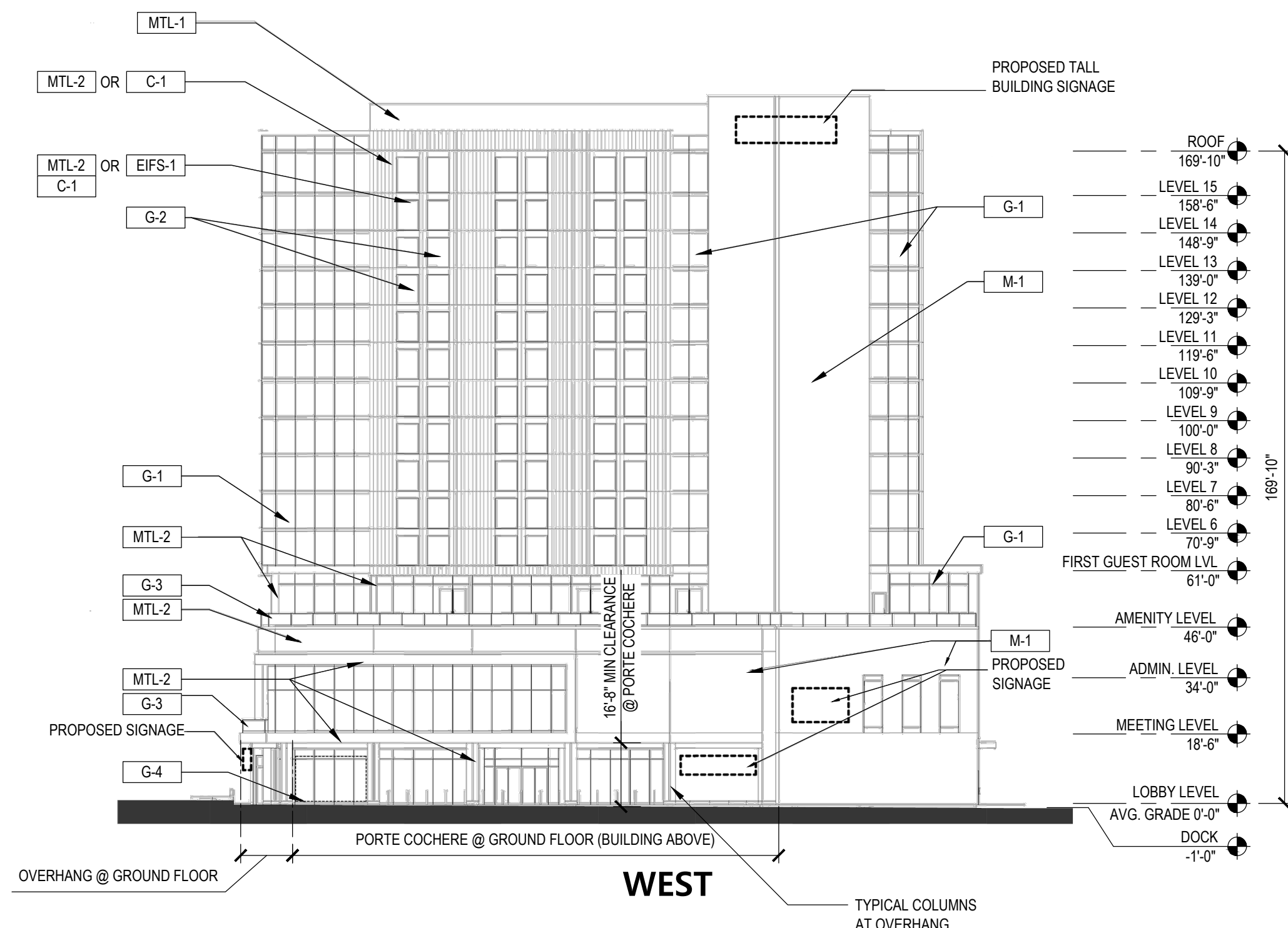
SDP-18-005

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT DATE \_\_\_\_\_

DIRECTOR DATE \_\_\_\_\_



EXTERIOR FINISH LEGEND	
DESIG.	
MTL-1	CORRUGATED METAL
MTL-2	COMPOSITE METAL PANEL
MTL-3	ROLLING DOOR
M-1	BRICK
C-1	CEMENTITIOUS PANEL
EIFS-1	EIFS
EIFS-2	EIFS (MEDIUM FINISH)
G-1	GLAZING SYSTEM
G-2	VISION GLASS
G-3	GLASS GUARDRAIL
G-4	OPERABLE GLASS WALL SYSTEM

**BUILDING E-1 - HOTEL**

**GENERAL NOTES:**

1. THE SCHEMATIC DESIGN 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.

**GLAZING ANALYSIS:**

HOTEL	ELEVATION	PODIUM / TOWER	% GLAZING
	WEST	TOWER	46%
	WEST	PODIUM	32%
	NORTH	TOWER	39%
	NORTH	PODIUM	46%
	EAST	TOWER	34%
	EAST	PODIUM	15%
	SOUTH	TOWER	15%
	SOUTH	PODIUM	10%


**FILE NUMBERS:**  
 F 15-106, F 16-107, F 17-059, F 18-017,  
 SDP-16-075, SDP-17-027, 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.

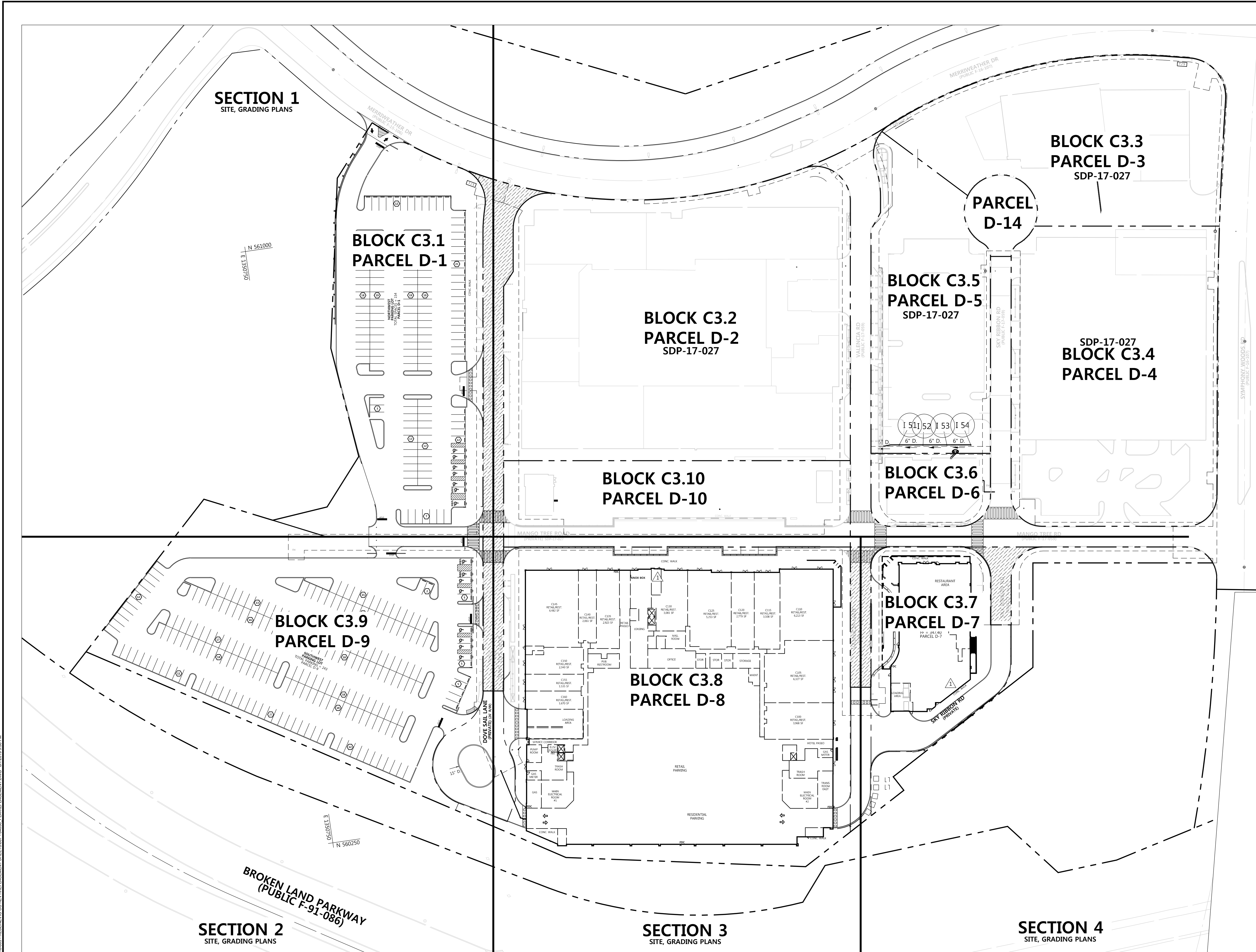
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DATE \_\_\_\_\_  
 PROFESSIONAL ENGR. NO. 16928

APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE: \_\_\_\_\_

09/09/19		UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT AND NEW BUILDING E-1 HOTEL	
Date	No.	Revision Description	
<b>DOWNTOWN COLUMBIA</b> CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE 2 PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13			
OWNER / DEVELOPER:		THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800	
 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	RECORDING JURISDICTION	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	COLUMBIA	CRESCENT	PARCEL D
PLAT OR REF. MAP	BLOCK #	TAX ZONING MAP	ECT. DISTRICT
24381-24450	7	36	5
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
S50			1
<b>TITLE</b> <b>BUILDING E-1 ELEVATION</b> REVISED SITE DEVELOPMENT PLAN			
Des. By	GDT/DM	SCALE	AS SHOWN
Drn. By	MCJ	Date	02/15/19
Chk. By	MCB	Approved	MCB
		Proj. No.	04038.B0
		6 of 77	





**LEGEND**

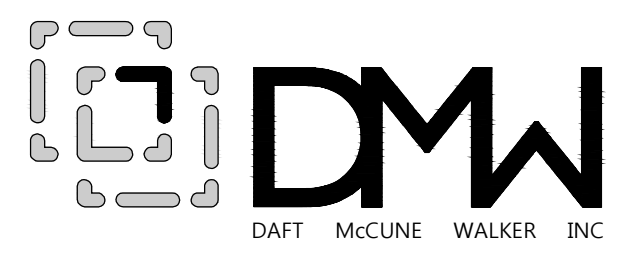
	PROPERTY LINE
	PROP. EASEMENT
	EX. CURB
	EX. BUILDING
	PUBLIC ROAD

**FILE NUMBERS:**  
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 SDP-16-075, SDP-18-005, WP-17-010,  
 WP-17-048, 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, SDP 17-027, F 17-057,  
 F 18-017, WP-18-089, WP-18-105.

**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: 05/31/20.

04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	Revision Description
<b>DOWNTOWN COLUMBIA</b>	
<b>CRESCENT NEIGHBORHOOD</b>	
<b>PHASE I AREA 3, PHASE 2</b>	
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13	
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING	
<b>OWNER / DEVELOPER:</b> 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	SECTION 3
LOT/PARCEL #	PARCEL D
PLAT FOR REF.	24-4931-2450
BLOCK #	7
LOT #	1
WATER CODE	S50
SEWER CODE	LITTLE PATUXENT
STAGE	1

<b>BOUNDARY PLAN AND KEY SHEET</b>	
REVISED SITE DEVELOPMENT PLAN	
Des. By	GDT/DM
Drn. By	MCJ
Chk. By	MCB
SCALE	AS SHOWN
Date	02/15/19
Approved	MCB
Proj. No.	04038.B0
Page	7 of 77

05/31/19  
DATE

PROFESSIONAL ENGR. NO. 16928

APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY

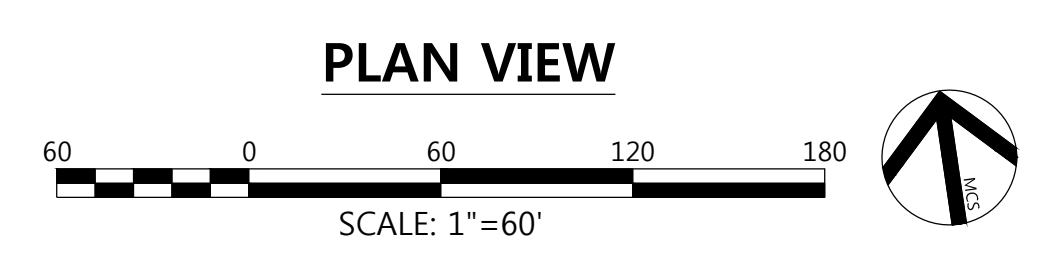
DATE :

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

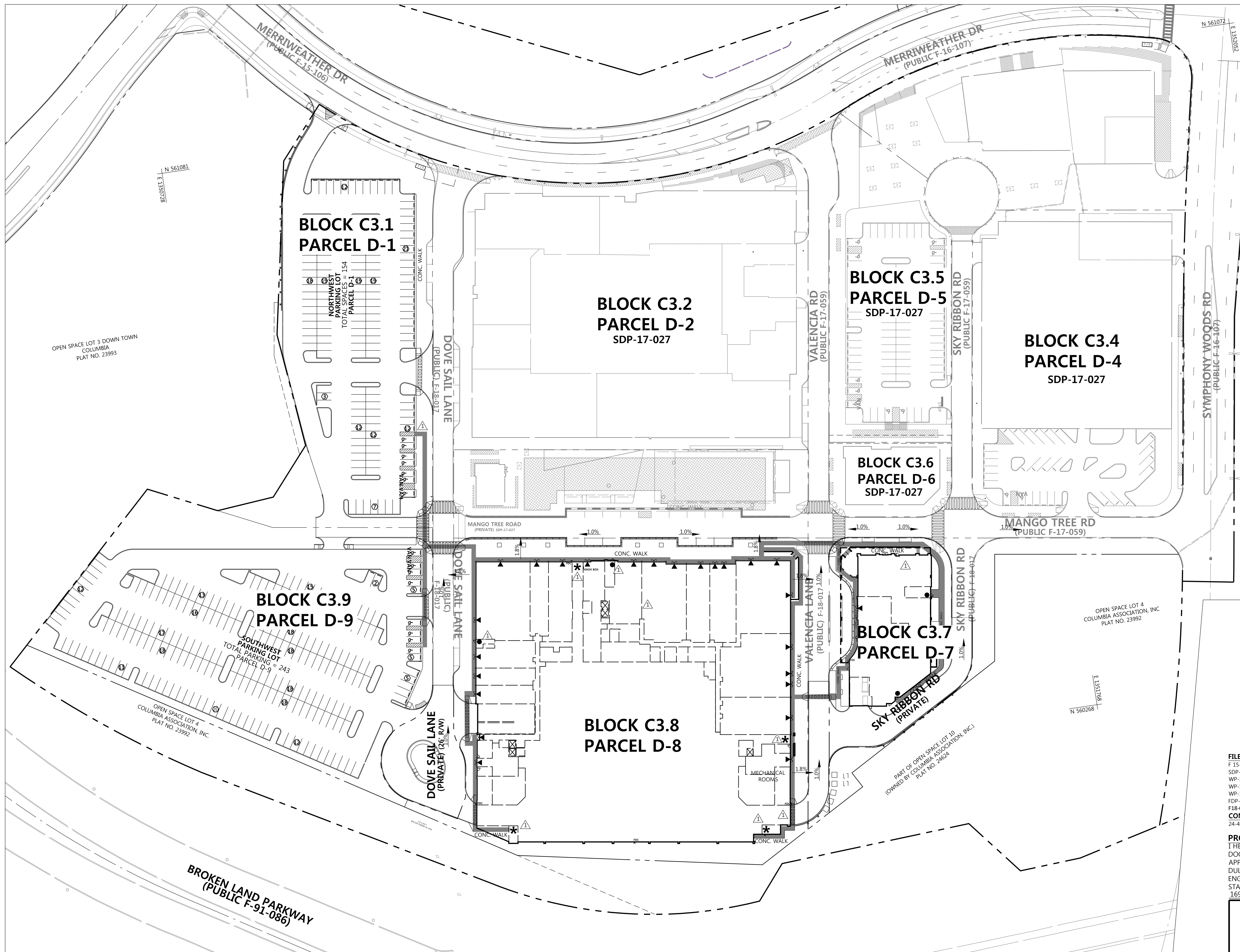
CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_



A:\DWG\2018\180505SDP-18005-SDP-18-005-REVISED SITE DEVELOPMENT PLAN.DWG: JACOB BLANKENHORN 02/15/19 10:38 AM



- LEGEND**
- ▲ BUILDING ENTRANCE
  - SECONDARY MEANS OF EGRESS
  - \* PEDESTRIAN ACCESS TO GARAGE
  - ACCESSIBLE ROUTE

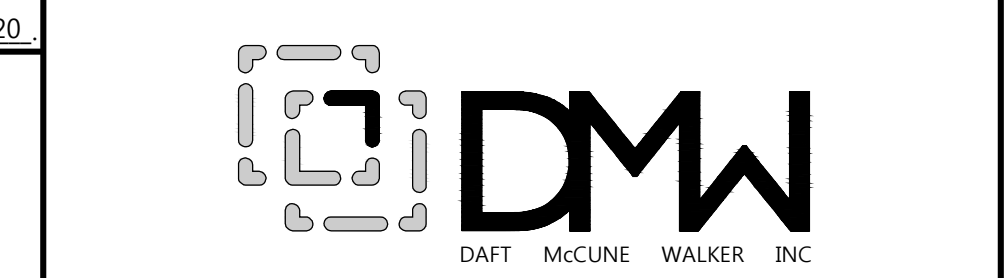
- NOTES:**
1. THE CROSS SLOPE SHALL NOT EXCEED 1.8%. 5X5 LEVEL LANDINGS AND ENTRANCE AND EXIT DOORS. THE SLOPE IN THE LINE OF TRAVEL SHALL NOT BE .5% OR MORE UNLESS RAMPS ARE PROVIDED.
  2. WHEN BUILDING OR TENANT SPACES ARE REQUIRED TO HAVE A SECOND MEANS OF EGRESS, THIS SECOND MEANS OF EGRESS SHALL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

**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

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

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Date	Revision Description
<b>DOWNTOWN COLUMBIA</b>	
<b>CRESCENT NEIGHBORHOOD</b>	
<b>PHASE I AREA 3, PHASE 2</b>	
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13	
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING	
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	CRESCENT NEIGHBORHOOD PHASE I AREA 3
LOT/PARCEL #	PARCEL D
PLAT FOR REF.	24-4931-24-50
BLOCK #	7
TAX ZONE/MAP	36
ELECT. DISTRICT	5
CENSUS TRACT	605602
WATER CODE	SSD
SEWER CODE	LITTLE PATUXENT
STAGE	1

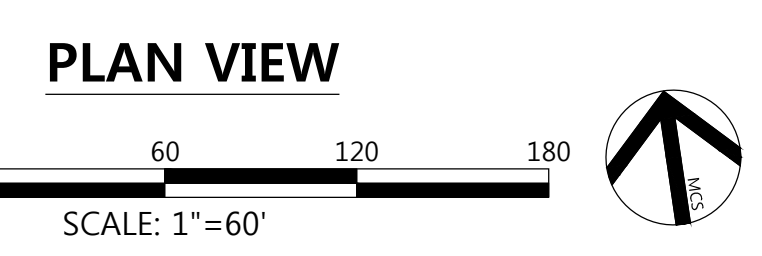
05/31/19  
DATE

PROFESSIONAL ENGR. NO. 16928

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY

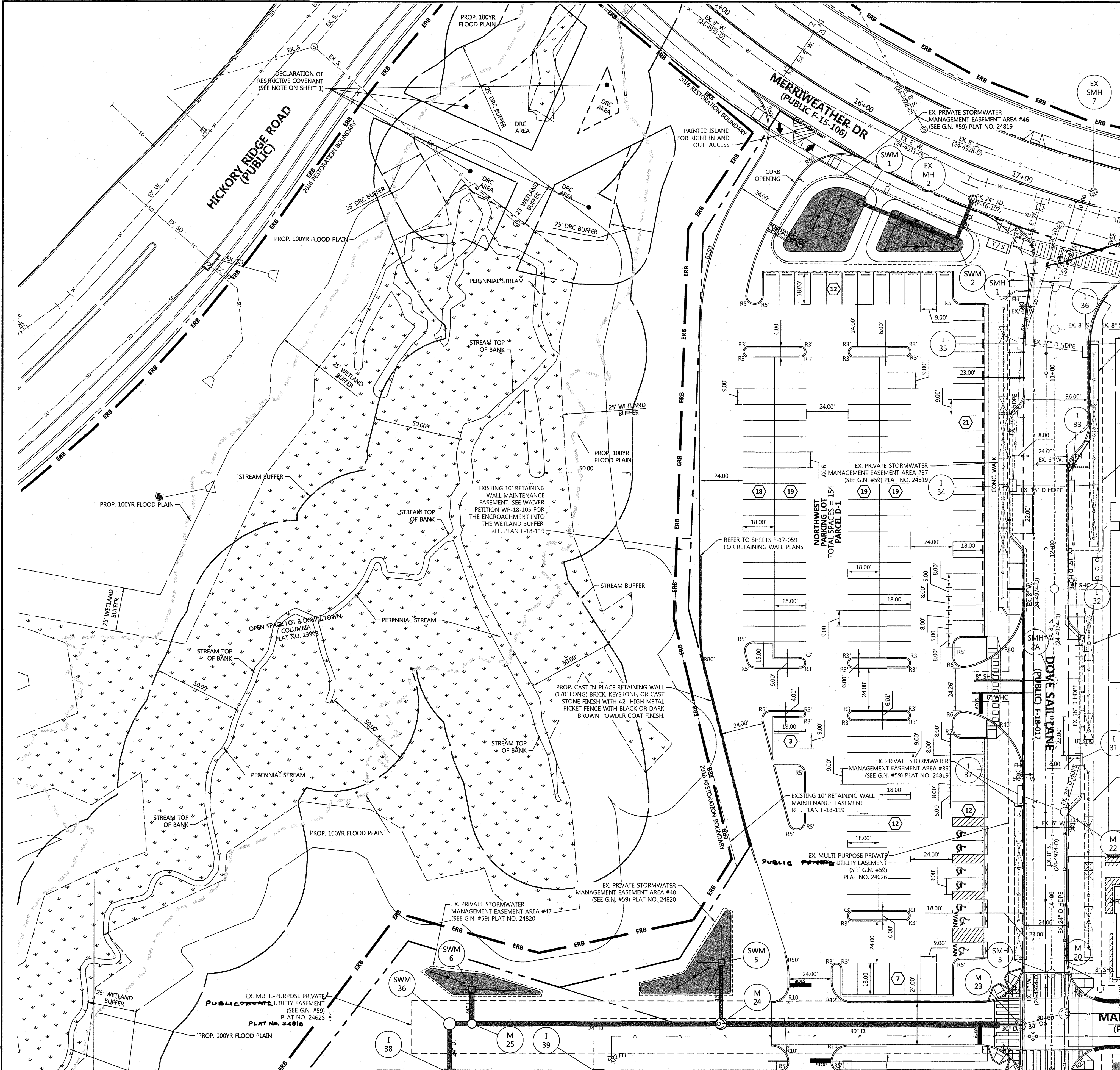
DATE :

<b>ACCESSIBLE ROUTE PLAN</b>	
REVISED SITE DEVELOPMENT PLAN	
Des. By	GDT/DM
Drn. By	MCJ
Chk. By	MCB
SCALE	AS SHOWN
Date	02/15/19
Approved	MCB
Proj. No.	04038.B0
8	of 77



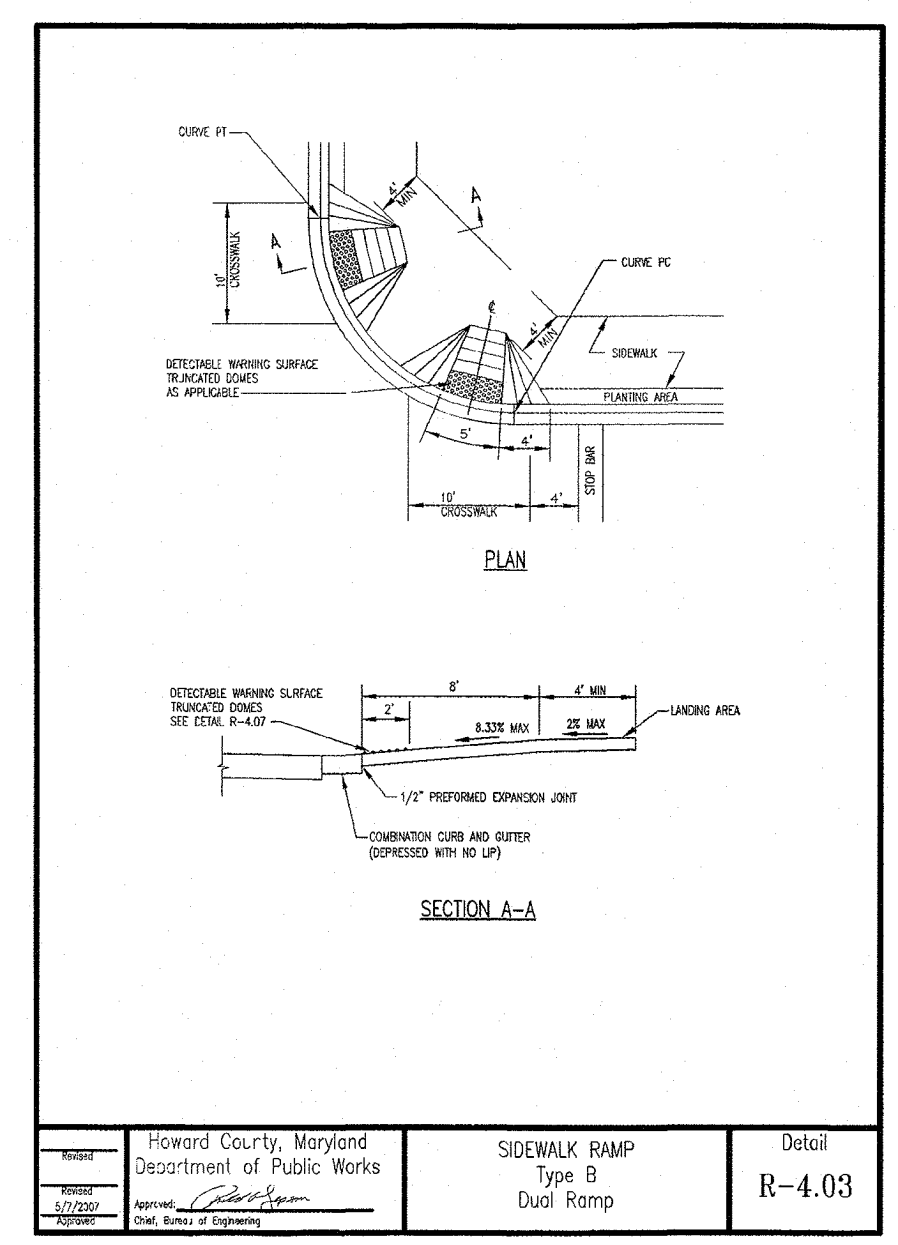
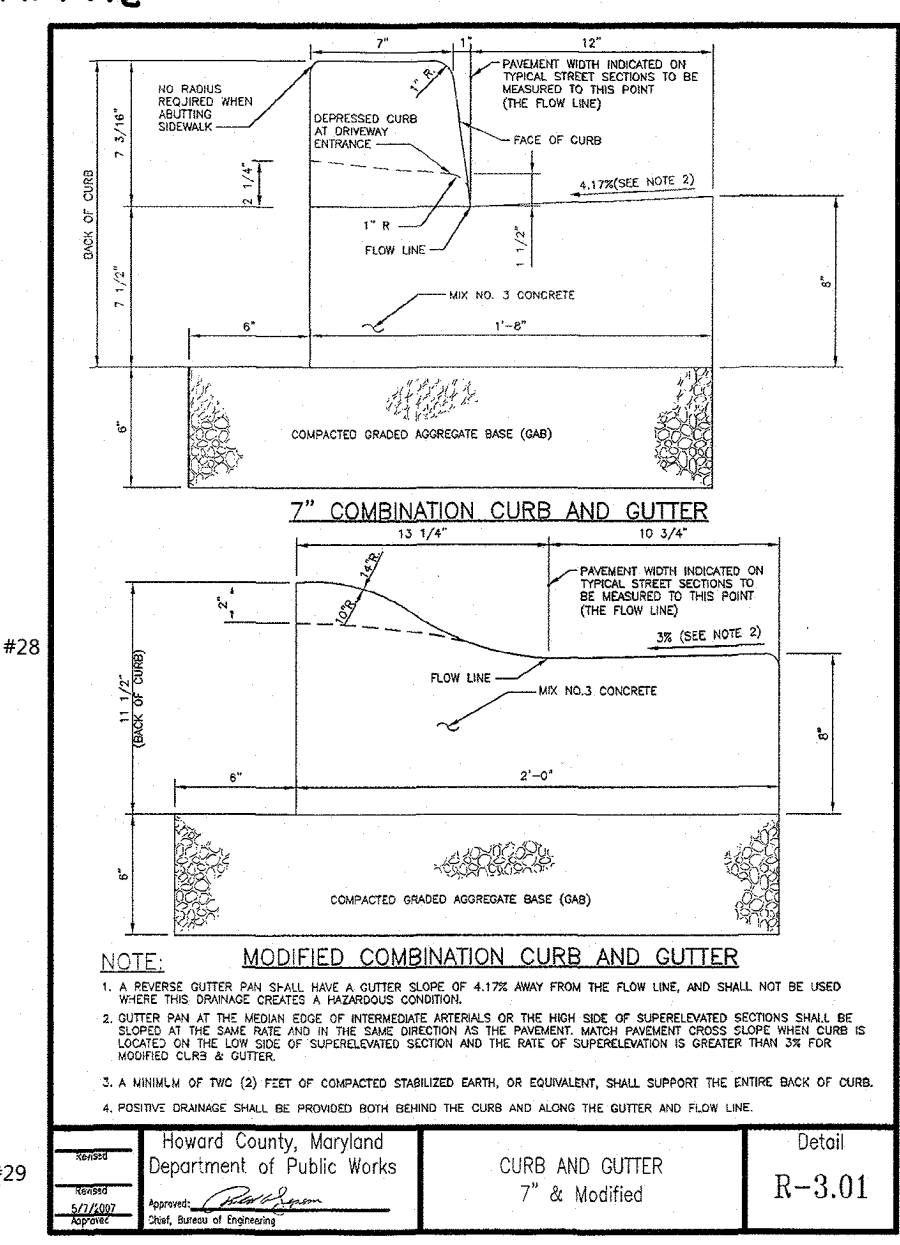
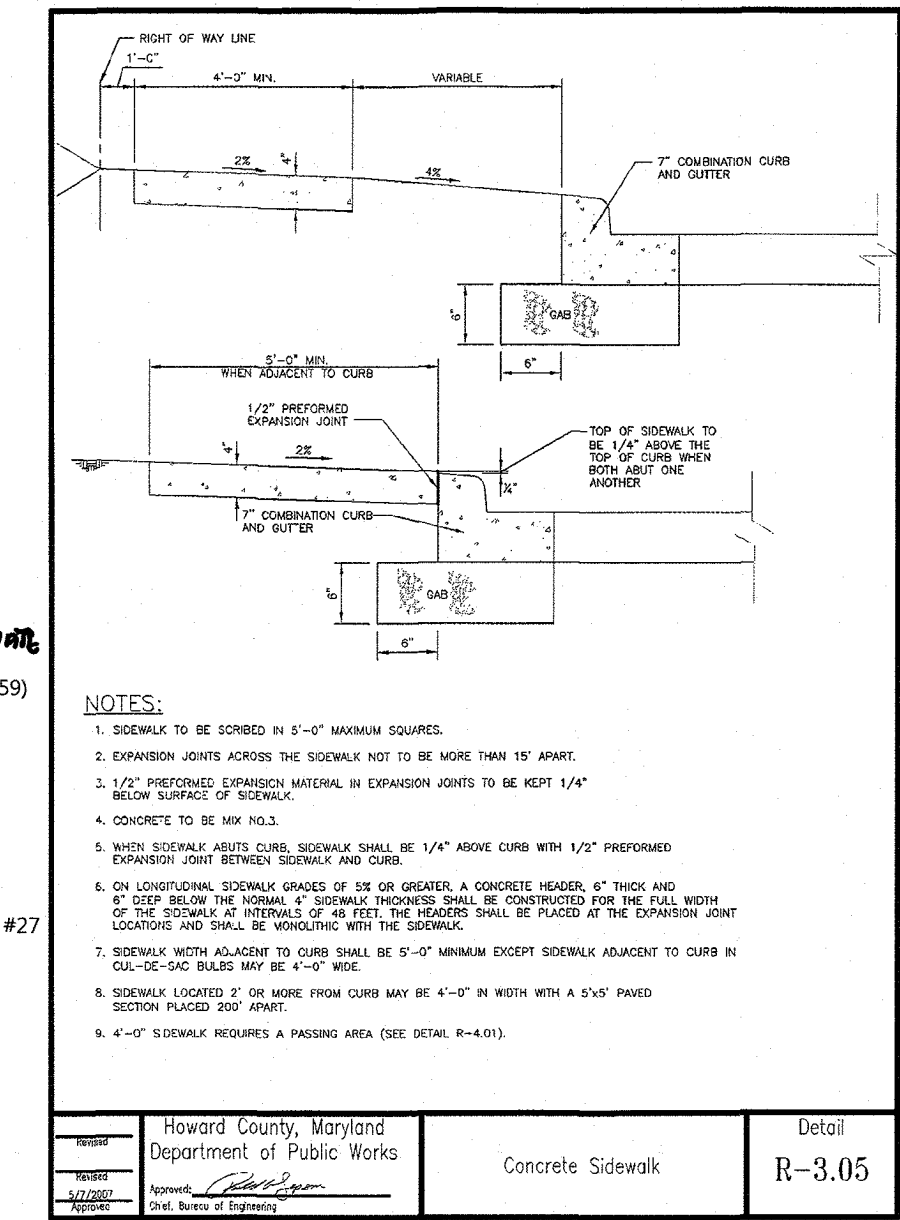
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE

A:\DOWNTOWN COLUMBIA\CRESCENT NEIGHBORHOOD PHASE I AREA 3\SDP-18-005-REVISED SITE DEVELOPMENT PLAN SHEET 008.DWG: 05/31/19 10:37 AM



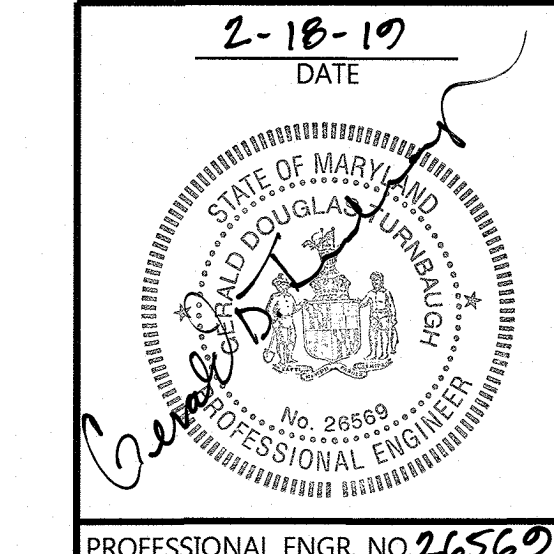
**LEGEND**

	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 PLANTING BED
	(M-6) TREE PIT MICRO-BIORETENTION FACILITY
	EX. (M-6) MODULAR MICRO-BIORETENTION FACILITY
	UNDERGROUND CPV STORMWATER MANAGEMENT
	TRANSIT SHELTER



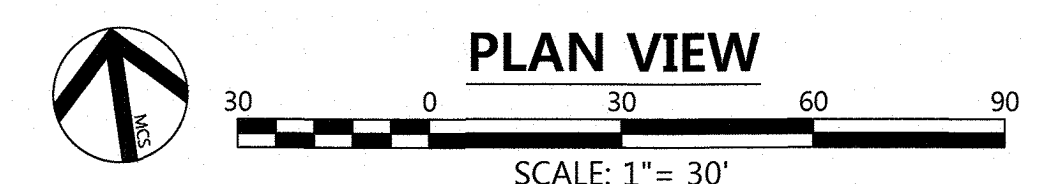
**FILE NUMBERS:**  
 F 15-106, F 16-107, F 17-059, F 18-017,  
 SDP-16-075, SDP-18-005, WP-17-010,  
 WP-17-049, WP-17-052, WP-17-115,  
 WP-18-020, WP-18-021, SP-16-009,  
 WP-16-100, FDP-DC-CRESCENT-1,  
 FDP-DC-CRESENT-1A, SDP 17-027, F 17-057,  
 F18-017, WP-18-089, WP-18-105.  
**CONTRACT NUMBERS:**  
 24-4931-D, 24-4975-D, 24-4974-D.

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 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: 11/3/18

**CONTINUATION LINE SHEET 10**



- NOTES:**
- HARDSCAPE AND LANDSCAPE ARCHITECTURE PLAN SHEETS SHALL REGULATE DESIGN PARAMETERS, DETAIL, LAYOUT AND INTENT OF PROPOSED HARDSCAPE AND LANDSCAPE FEATURES (I.E. PROPOSED SHOWWALKS, OPEN SPACE FEATURES, PROMENADES), DEPICED FOUNTAINS, PLANTINGS, ETC.) THIS INFORMATION IS SHOWN SOLELY FOR THE-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.
  - FOR PRIVATE ROAD PLAN AND PROFILE SEE SHEETS 18 THRU 19.
  - SEE GENERAL NOTE #52 REGARDING STORMWATER MANAGEMENT OWNERSHIP AND MAINTENANCE.
  - SEE GENERAL NOTE #44 REGARDING TRASH SERVICE.
  - SEE GENERAL NOTE #59 REGARDING EASEMENTS.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*[Signature]* 3-20-19  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 4-24-19  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 4-24-19  
 DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

Date	No.	Revision Description

**DOWNTOWN COLUMBIA**  
**CRESCENT NEIGHBORHOOD**  
**PHASE 1 AREA 3, PHASE 2**  
**PARCELS D-1, D-7, D-8, D-9,**  
**D-11, D-12 AND D-13**  
 MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING

OWNER / DEVELOPER:  
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
 COLUMBIA REGIONAL OFFICE  
 10480 LITTLE PATUXENT PARKWAY SUITE 400  
 COLUMBIA, MD 21094  
 410-964-4800

**DMW**  
 DAFT McCUNE WALKER INC.

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

PROJECT NAME	DOWNTOWN COLUMBIA	SECTION	CRESCENT NEIGHBORHOOD	LOT/PARCEL #	
PLAT OR LOT	24493-D	BLOCK	36	CENSUS TRACT	605602
WATER CODE	550	SEWER CODE	LITTLE PATUXENT	STAGE	1

TITLE: **SITE PLAN SECTION 1**

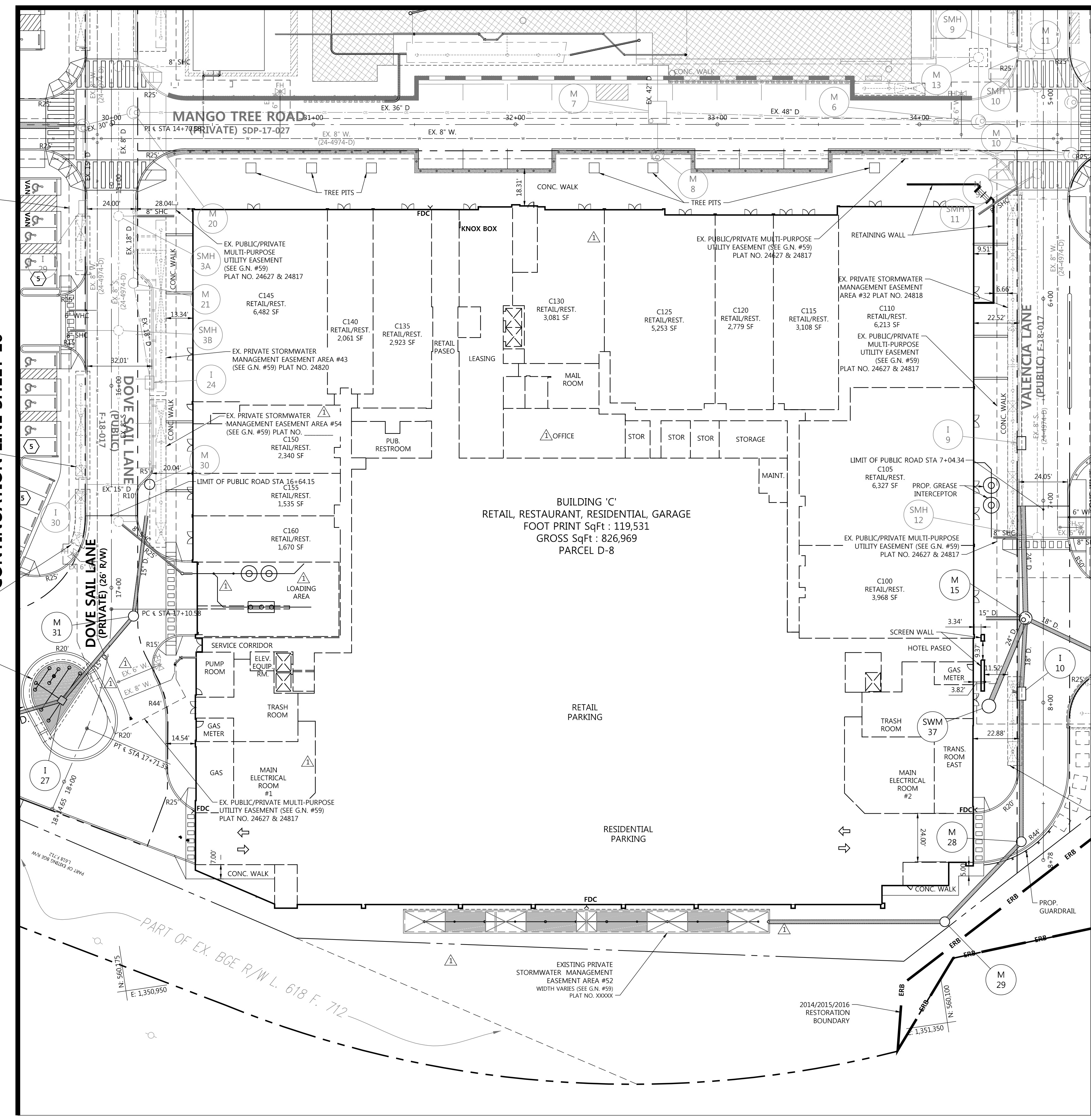
Des. By	GDT/DM	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	MCI	Date	02/15/19		
Chk. By	MCB	Approved	MCB		9 of 77

SDP-18-005



**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 PLANTING BED
	(M-6) TREE PIT MICRO-BIORETENTION FACILITY



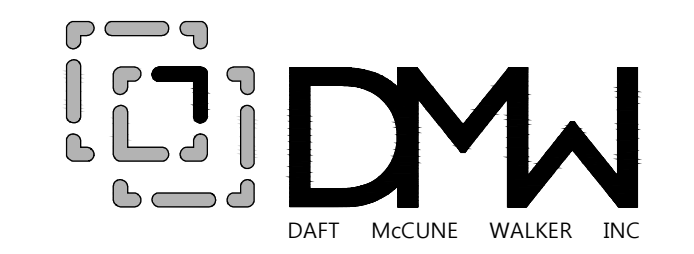
CONTINUATION LINE SHEET 10

CONTINUATION LINE SHEET 12

- 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.
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  5. SEE GENERAL NOTE #44 REGARDING TRASH SERVICE.
  6. SEE GENERAL NOTE #59 REGARDING EASEMENTS

**FILE NUMBERS:**  
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**CONTRACT NUMBERS:**  
 24-4931-D, 24-4975-D, 24-4974-D.  
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04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	No. Revision Description
<b>DOWNTOWN COLUMBIA</b>	
<b>CRESCENT NEIGHBORHOOD</b>	
<b>PHASE I AREA 3, PHASE 2</b>	
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13	
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING	
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800	



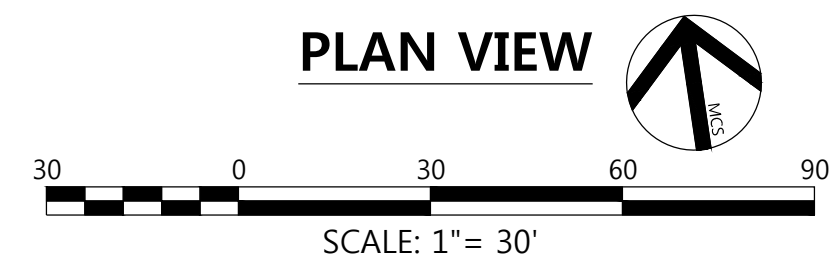
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286	
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBMISSION NAME: DOWNTOWN COLUMBIA	SECTION: 36
NEIGHBORHOOD: CRESCENT AREA 3	LOT/PARCEL #: PARCEL D
TAX ZONING: 36	ELECT. DISTRICT: 5
CENSUS TRACT: 605602	
WATER CODE: S50	SEWER CODE: LITTLE PATUXENT
	STAGE: 1

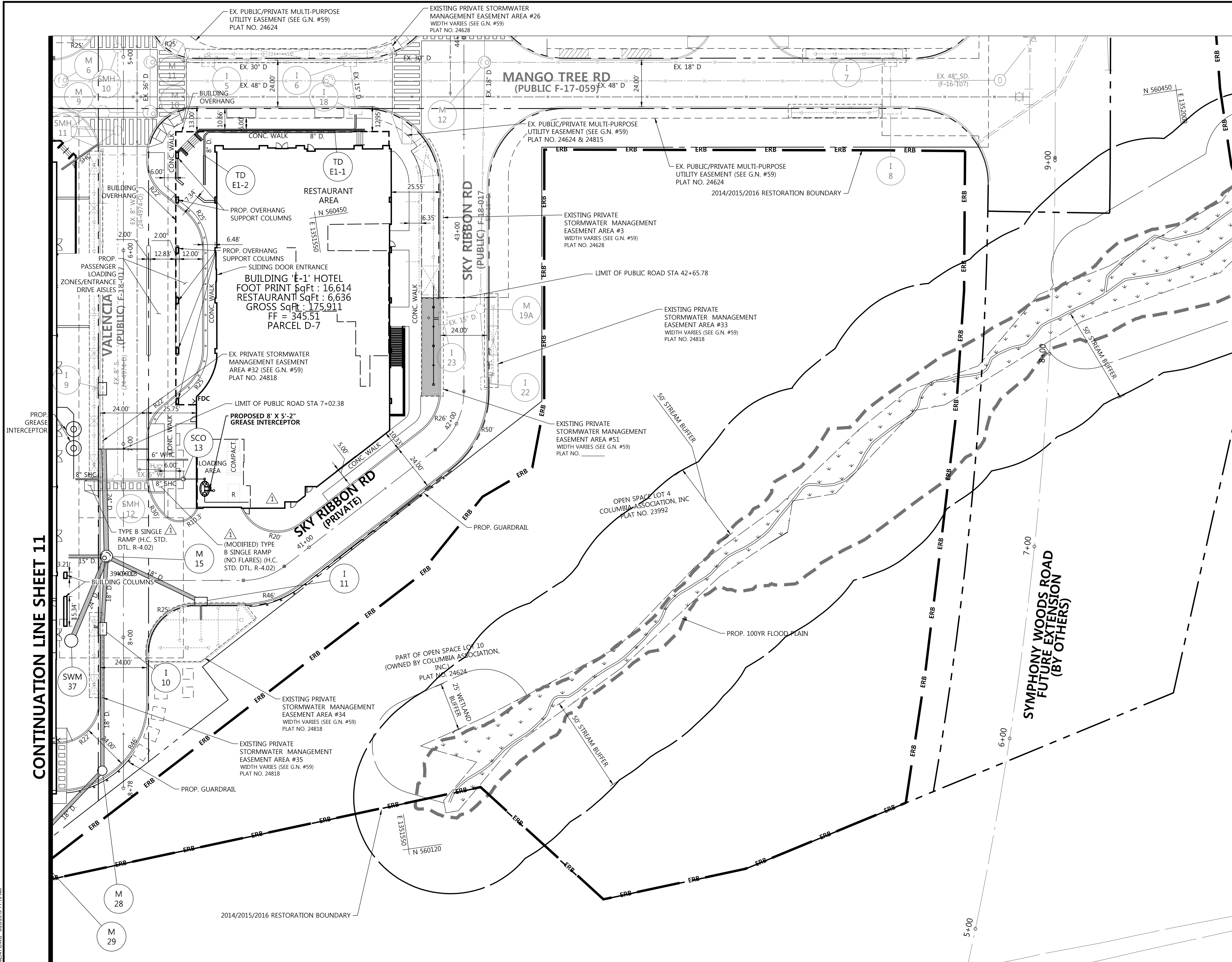
TITLE: <b>SITE PLAN SECTION 3</b>	
REVISED SITE DEVELOPMENT PLAN	
Des. By: GDT/DM	SCALE AS SHOWN
Drn. By: MCJ	Date: 02/15/19
Chk. By: MCB	Approved: MCB
11 of 77	

DATE: \_\_\_\_\_  
 PROFESSIONAL ENGR. NO. 16928  
 APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE: \_\_\_\_\_

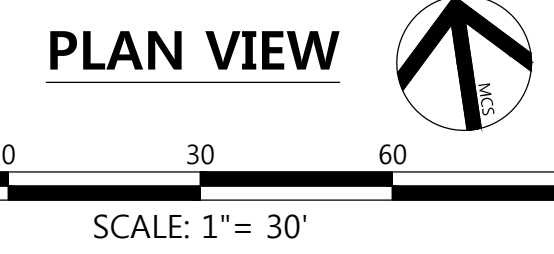
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE





CONTINUATION LINE SHEET 11



**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 PLANTING BED
	OPENED AREA
	COVERED AREA
	(M-6) TREE PIT MICRO-BIORETENTION FACILITY

- 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, PROMENADES), 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.
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  4. SEE GENERAL NOTE #52 REGARDING STORMWATER MANAGEMENT OWNERSHIP AND MAINTENANCE.
  5. SEE GENERAL NOTE #44 REGARDING TRASH SERVICE.
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**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

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

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04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL	
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b>		
<b>CRESCENT NEIGHBORHOOD</b>		
<b>PHASE I AREA 3, PHASE 2</b>		
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13		
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING		
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	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE I	CRESCENT AREA 3	PARCEL D
PLAT OR REF. NO.	BLOCK #	TAX ZONING MAP NO.	ELECT. DISTRICT
2481-2485	7	36	5
CENSUS TRACT	WATER CODE	SEWER CODE	STAGE
605602	S50	LITTLE PATUXENT	1

DATE: \_\_\_\_\_

PROFESSIONAL ENGR. NO. 16928

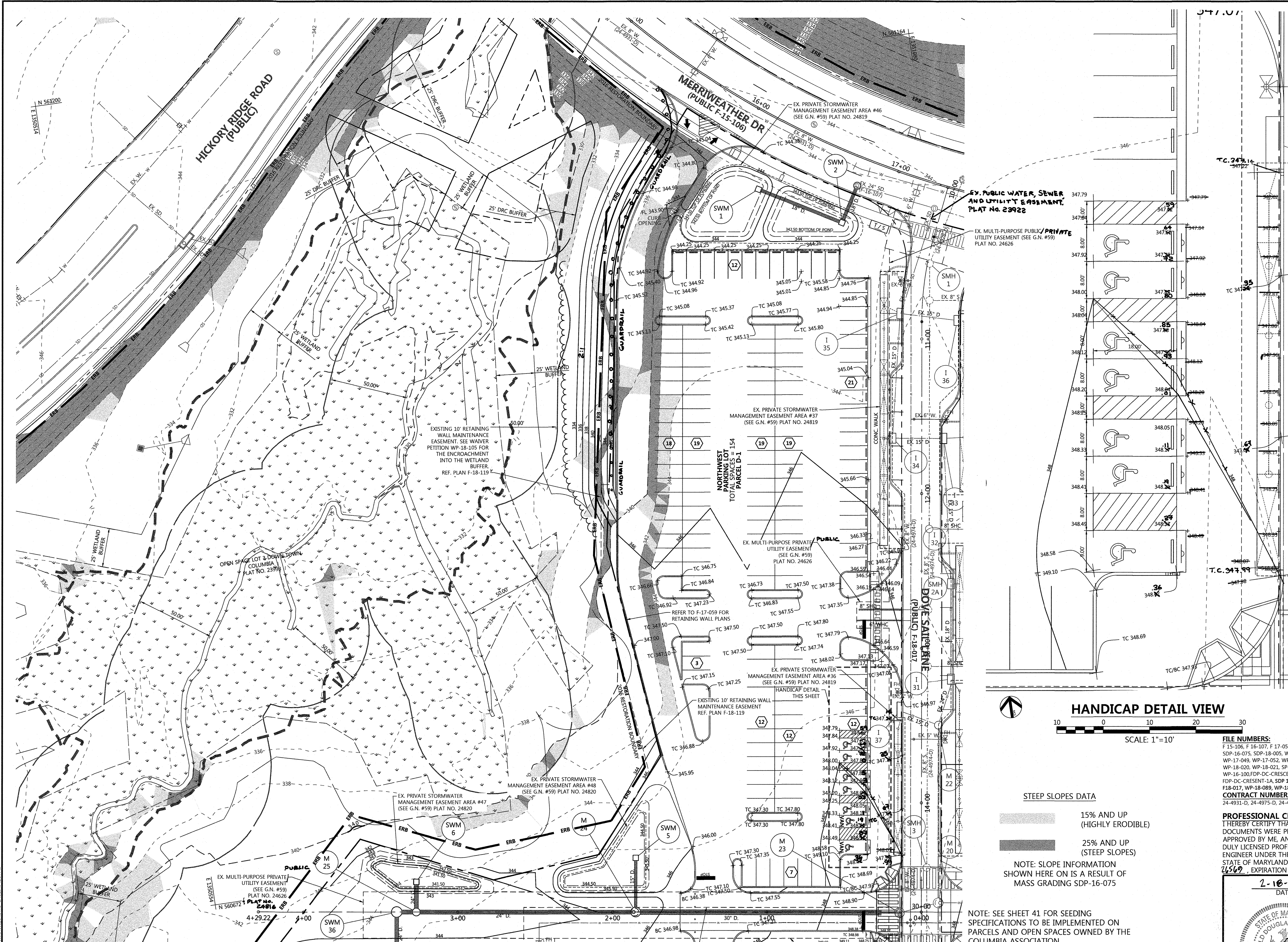
APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_

Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	MCJ	Date 02/15/19	
Chk. By	MCB	Approved MCB	12 of 77

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE

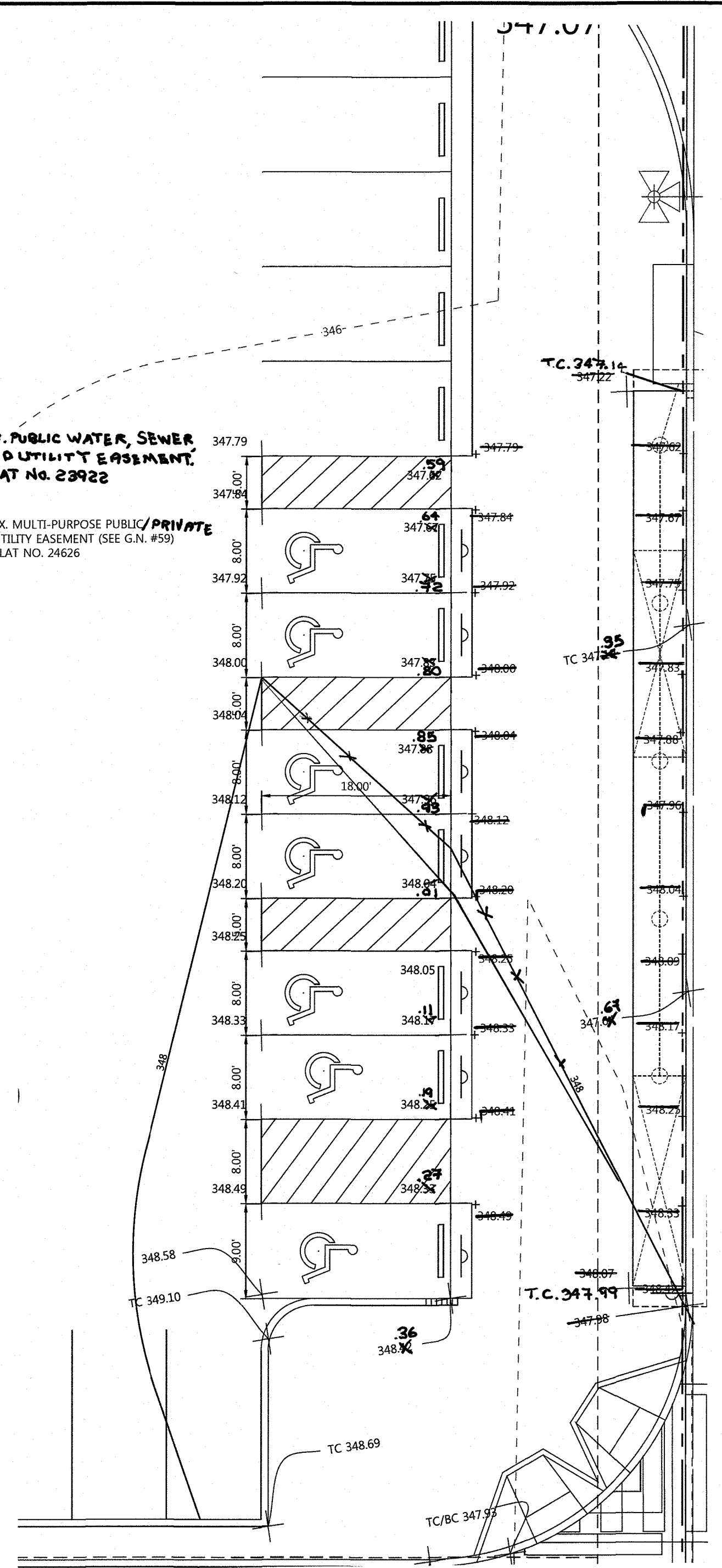


**LEGEND**

- 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 PLANTING BED
- (M-6) TREE PIT MICRO-BIORETENTION FACILITY

EX. PUBLIC WATER, SEWER AND UTILITY EASEMENT, PLAT NO. 23922

EX. MULTI-PURPOSE PUBLIC/PRIVATE UTILITY EASEMENT (SEE G.N. #59) PLAT NO. 24626



**HANDICAP DETAIL VIEW**

SCALE: 1"=10'

**STEEP SLOPES DATA**

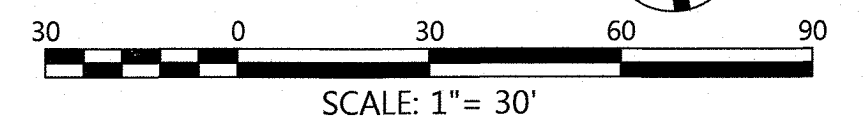
- 15% AND UP (HIGHLY ERODIBLE)
- 25% AND UP (STEEP SLOPES)

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

NOTE: SEE SHEET 41 FOR SEEDING SPECIFICATIONS TO BE IMPLEMENTED ON PARCELS AND OPEN SPACES OWNED BY THE COLUMBIA ASSOCIATION.

**CONTINUATION LINE SHEET 14**

**PLAN VIEW**



SCALE: 1"=30'

7. FOR GUARDRAIL SEE MD SHA TRAFFIC BARRIER W BEAM SINGLE FACE STANDARD DETAIL NO. MD. 605.22.
8. GUARDRAIL TO BE POWDER COATED BRASS, COLOR TO BE SPECIFIED BY GRAPHIC DESIGNER PRIOR TO FABRICATION.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*[Signature]* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT

NOTE: APPROVED EROSION AND SEDIMENT CONTROLS WILL BE INSTALLED AND MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION TO MINIMIZE IMPACTS ON ADJACENT RESOURCES AND RESTORATION AREAS. ANY REFORESTATION OR MITIGATION PLANTINGS DISTURBED DURING CONSTRUCTION WILL BE REPLACED/RE-PLANTED IN ACCORDANCE WITH THE PLANS AS APPROVED WITH F-15-106, AS WELL AS SUPPLEMENTAL PLANTING AS PER BIOHABITATS SKETCH PLAN 'CRESCENT NEIGHBORHOOD' PHASE 1, AREA 3, PHASE 2 PARCEL D' SHEETS 1-3 DATED 12/20/17.

EX. MULTI-PURPOSE PUBLIC/PRIVATE UTILITY EASEMENT (SEE G.N. #59) PLAT NO. 24626

EX. MULTI-PURPOSE PRIVATE UTILITY EASEMENT (SEE G.N. #59) PLAT NO. 24626

EX. MULTI-PURPOSE PUBLIC/PRIVATE UTILITY EASEMENT (SEE G.N. #59) PLAT NO. 24626

NOTE: 1. 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.

2. FOR PRIVATE ROAD PLAN AND PROFILE SEE SHEETS 18 THRU 19.

3. SEE GENERAL NOTE #52 REGARDING STORMWATER MANAGEMENT OWNERSHIP AND MAINTENANCE.

4. SEE GENERAL NOTE #44 REGARDING TRASH SERVICE.

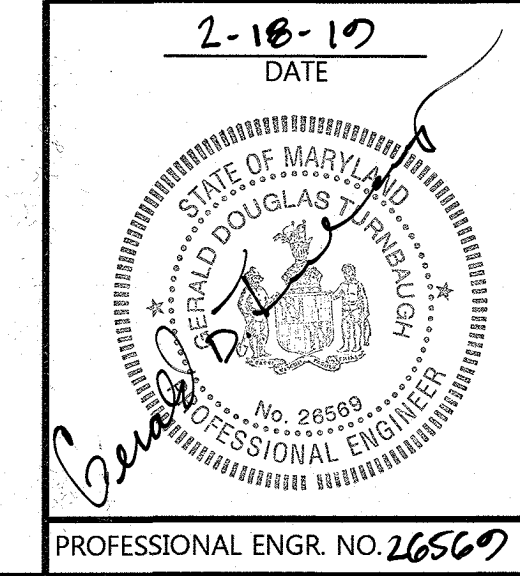
5. SEE GENERAL NOTE #59 REGARDING EASEMENTS

6. FOR GUARDRAIL SEE MD SHA TRAFFIC BARRIER W BEAM W WOOD OFFSET BLOCK STANDARD DETAIL NO. MD. 605.21.

**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-18-022, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105, 24-4931-D, 24-4975-D, 24-4974-D.

**CONTRACT NUMBERS:**

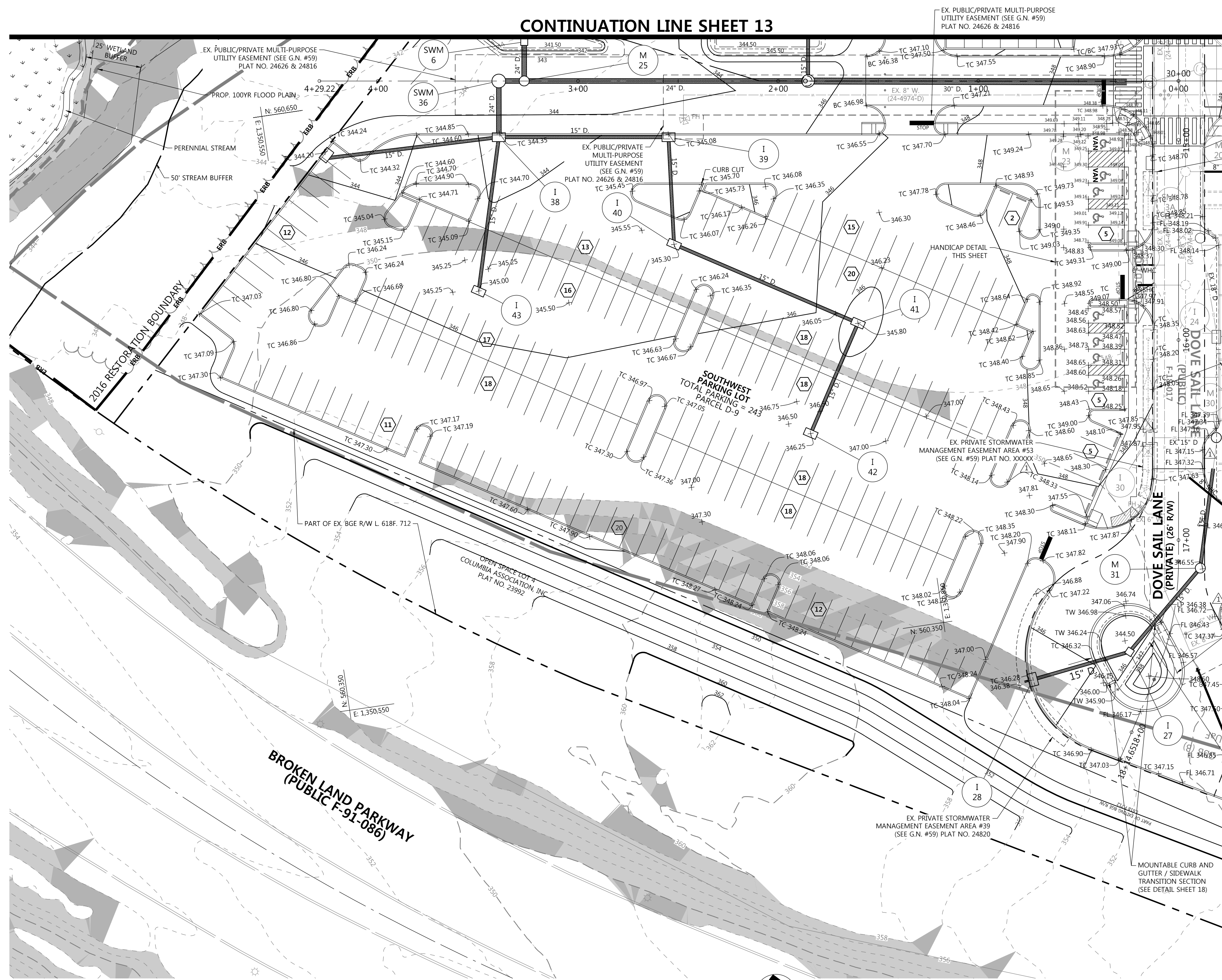
**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 216569, EXPIRATION DATE: 7-18-19



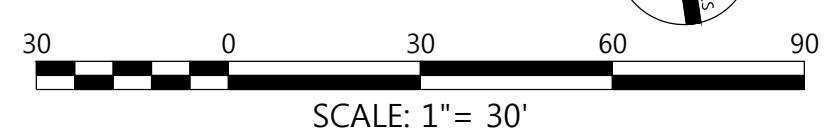
APPROVED: PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/21/18

Date	No.	Revision Description
		<b>DOWNTOWN COLUMBIA</b> <b>CRESCENT NEIGHBORHOOD</b> <b>PHASE I AREA 3, PHASE 2</b> <b>PARCELS D-I, D-7, D-8, D-9,</b> <b>D-II, D-12 AND D-13</b> MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
DAFF MCCUNE WALKER INC		
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM		
INDIVIDUAL NAME	SECTION NAME	LOT/PARCELS
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D
PLAT OR LOT	BLOCK #	ZONE
23922-23928	7	RMAL
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	1
TITLE: <b>GRADING PLAN SECTION 1</b>		
Des. By	GDT/DM	SCALE AS SHOWN
Drn. By	MCJ	Date 02/15/19
Chk. By	MCB	Approved MCB
		Proj. No. 04038.B0
		13 of 77
SDP-18-005		

CONTINUATION LINE SHEET 13



PLAN VIEW



LEGEND

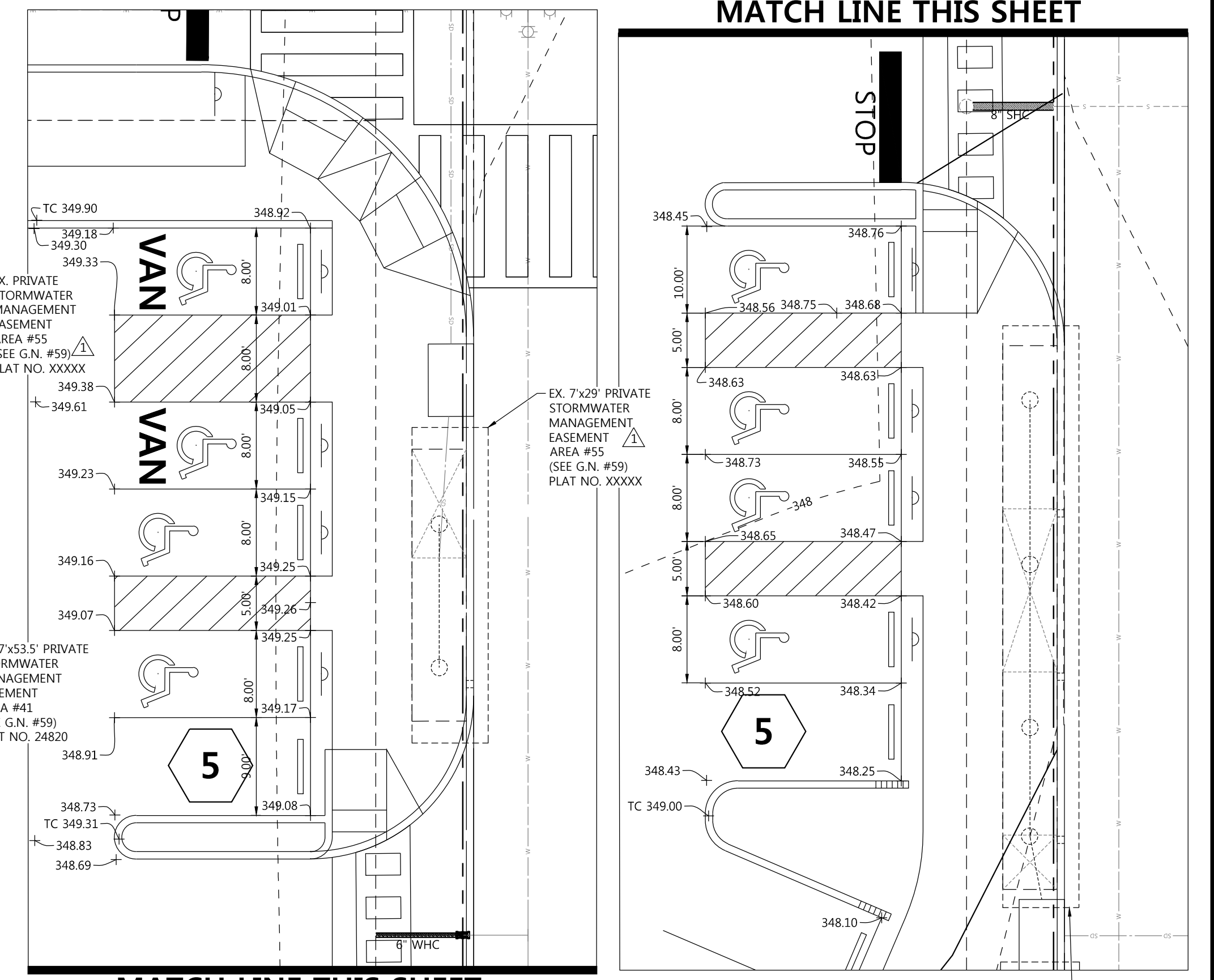
	BOLLARD		PROP. EASEMENT
	PROPERTY LINE		PROP. CONTOURS
	EX. CONTOURS		PROP. WATER
	EX. CURB		PROP. SEWER
	EX. BUILDING		PROP. STORM DRAIN
	EX. TREELINE		PROP. BUILDING
	EX. WATER		PROP. CURBS
	EX. SEWER		PROP. TREE LINE
	EX. STORM DRAIN		SURFACE PLANTING BED
	EX. OVERHEAD TELEPHONE		OPENED AREA
	EX. EASEMENT		COVERED AREA
	EX. UTILITY POLE		(M-6) TREE PIT MICRO-BIORETENTION FACILITY

- NOTE:**
- SPOT GRADES AND DETAILED GRADING BETWEEN THE CURBS AND BUILDING, INCLUDING BUT NOT LIMITED TO HARDSCAPE FEATURES SUCH AS PROPOSED SIDEWALKS, OPEN SPACE FEATURES, PROMENADE(S), 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.
  - FOR PRIVATE ROAD PLAN AND PROFILE SEE SHEETS 18 THRU 19.
  - SEE GENERAL NOTE #52 REGARDING STORMWATER MANAGEMENT OWNERSHIP AND MAINTENANCE.
  - SEE GENERAL NOTE #44 REGARDING TRASH SERVICE.
  - SEE GENERAL NOTE #59 REGARDING EASEMENTS

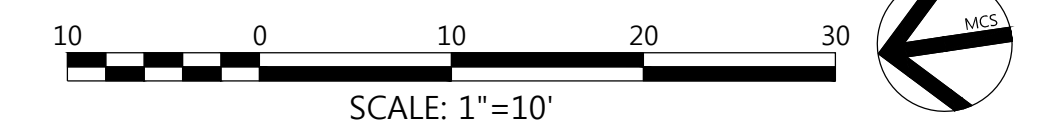
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE

CONTINUATION LINE SHEET 15



HANDICAP DETAIL VIEW



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

EX. PRIVATE STORMWATER MANAGEMENT EASEMENT AREA #38 (SEE G.N. #59) PLAT NO. 24820

**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

**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: 05/31/20.

05/31/19  
 DATE

PROFESSIONAL ENGR. NO. 16928

APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY

DATE:

04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	Revision Description
<b>DOWNTOWN COLUMBIA</b>	
<b>CRESCENT NEIGHBORHOOD</b>	
<b>PHASE I AREA 3, PHASE 2</b>	
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13	
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING	
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 NAME CRESCENT NEIGHBORHOOD PHASE I AREA 3
PLAT OR REF. NO. 2481-2485	TAX ZONE/MAP NO. 7
WATER CODE 550	SEWER CODE LITTLE PATUXENT
LOT/PARCEL # PARCEL D	CENSUS TRACT 605602
<b>GRADING PLAN SECTION 2</b>	
REVISED SITE DEVELOPMENT PLAN	
Des. By GDT/DM	SCALE AS SHOWN
Drn. By MCJ	Date 02/15/19
Chk. By MCB	Approved MCB
Proj. No. 04038.B0	
14 of 77	



**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 PLANTING BED
	(M-6) TREE PIT MICRO-BIORETENTION FACILITY

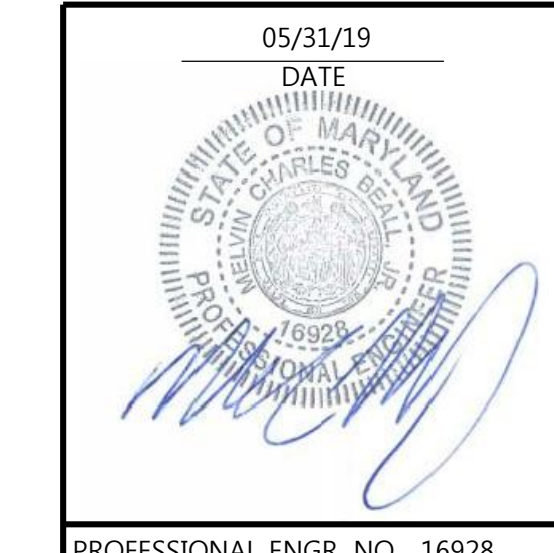
**STEEP SLOPES DATA**

	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

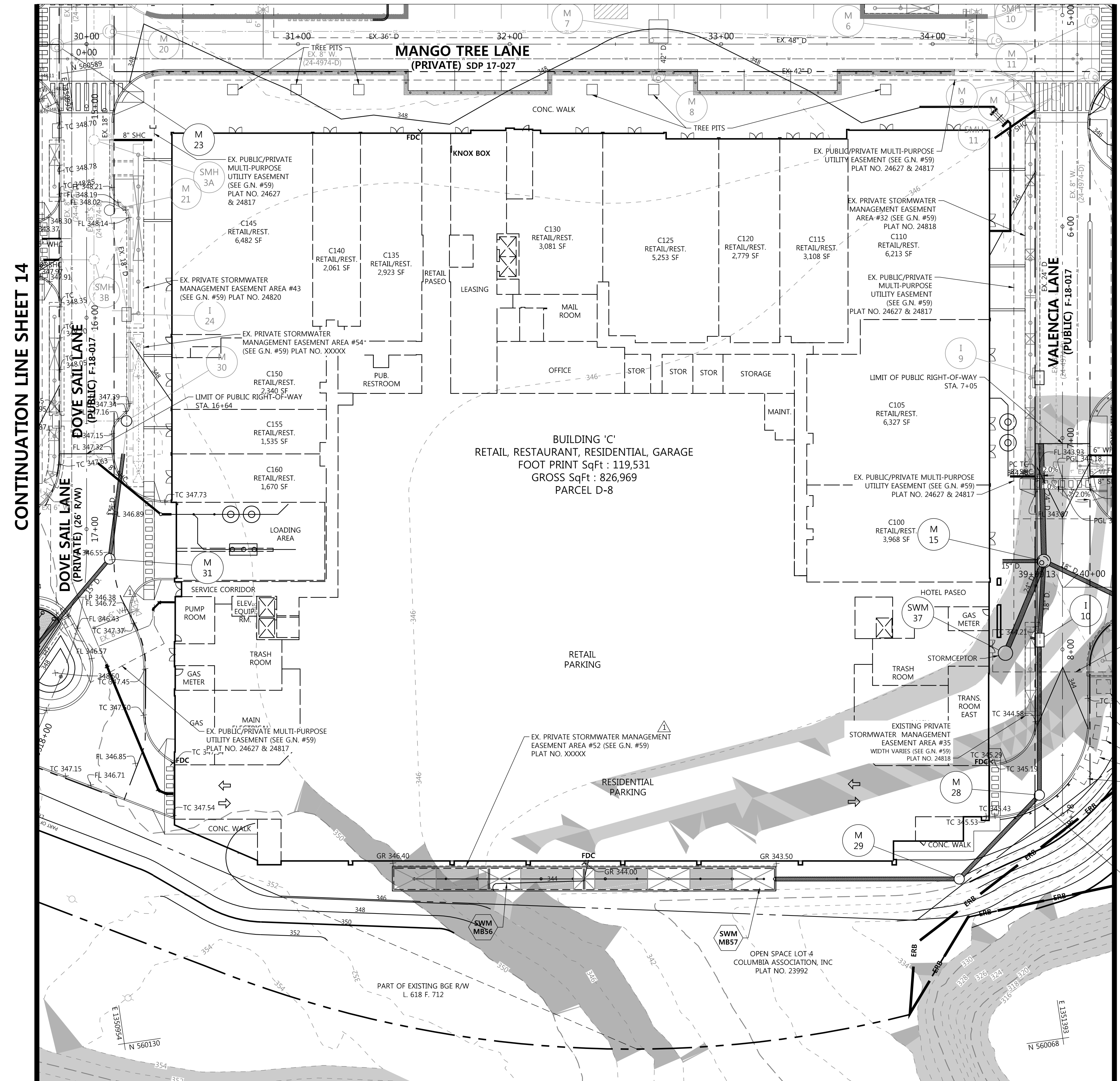
**FILE NUMBERS:**  
 F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-18-005, WP-17-010, WP-17-048, WP-17-052, WP-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.  
**CONTRACT NUMBERS:**  
 24-4931-D, 24-4975-D, 24-4974-D.

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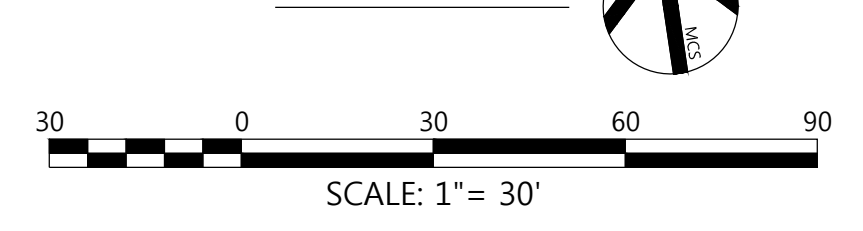


APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE: \_\_\_\_\_

04/19/19	No.	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b>		
<b>CRESCENT NEIGHBORHOOD</b>		
<b>PHASE I AREA 3, PHASE 2</b>		
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13		
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING		
OWNER / DEVELOPER:		THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
		COLUMBIA REGIONAL OFFICE
		10480 LITTLE PATUXENT PARKWAY SUITE 400
		COLUMBIA, MD 21044
		410-964-4800
DAFT McCUNE WALKER INC		
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286		
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM		
SUBMISSION NAME	SECTION/AREA	REVISION/PHASE
DOWNTOWN COLUMBIA	PHASE I AREA 3	PARCEL D
DATE FOR EIP	REVISION #	NO. / DATE
04/19/19	7	7/1/2019
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	1
<b>GRADING PLAN</b>		
<b>SECTION 3</b>		
REVISED SITE DEVELOPMENT PLAN		
Des. By	GDT/DM	SCALE AS SHOWN
Drn. By	MCJ	Date 02/15/19
Chk. By	MCB	Approved MCB
		15 of 77



**PLAN VIEW**



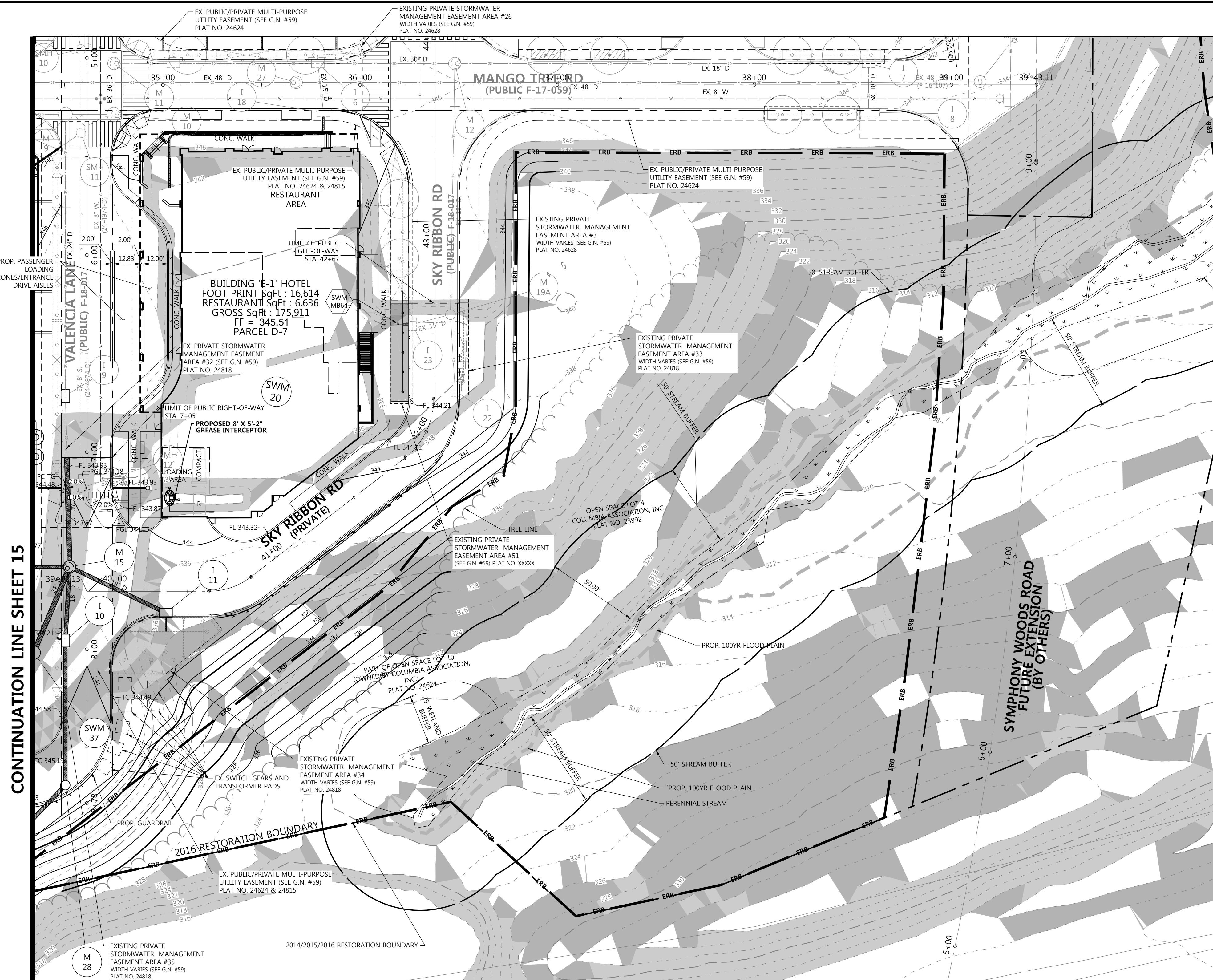
NOTE: SEE SHEET 41 FOR SEEDING SPECIFICATIONS TO BE IMPLEMENTED ON PARCELS AND OPEN SPACES OWNED BY THE COLUMBIA ASSOCIATION.

**NOTE:**

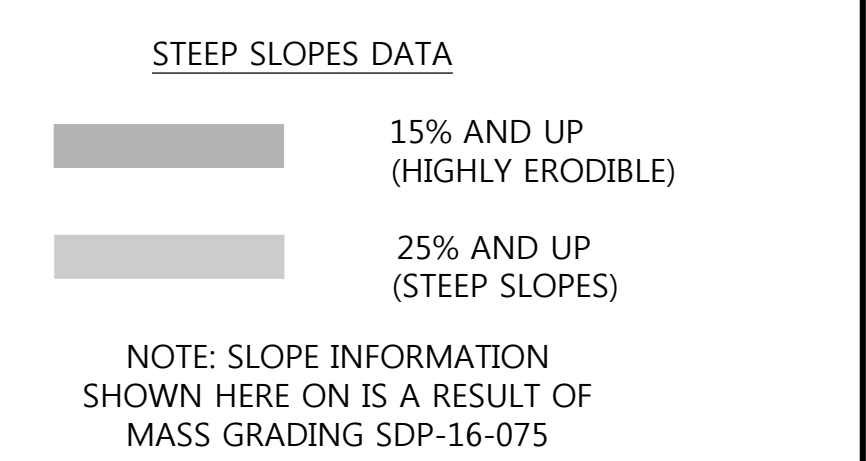
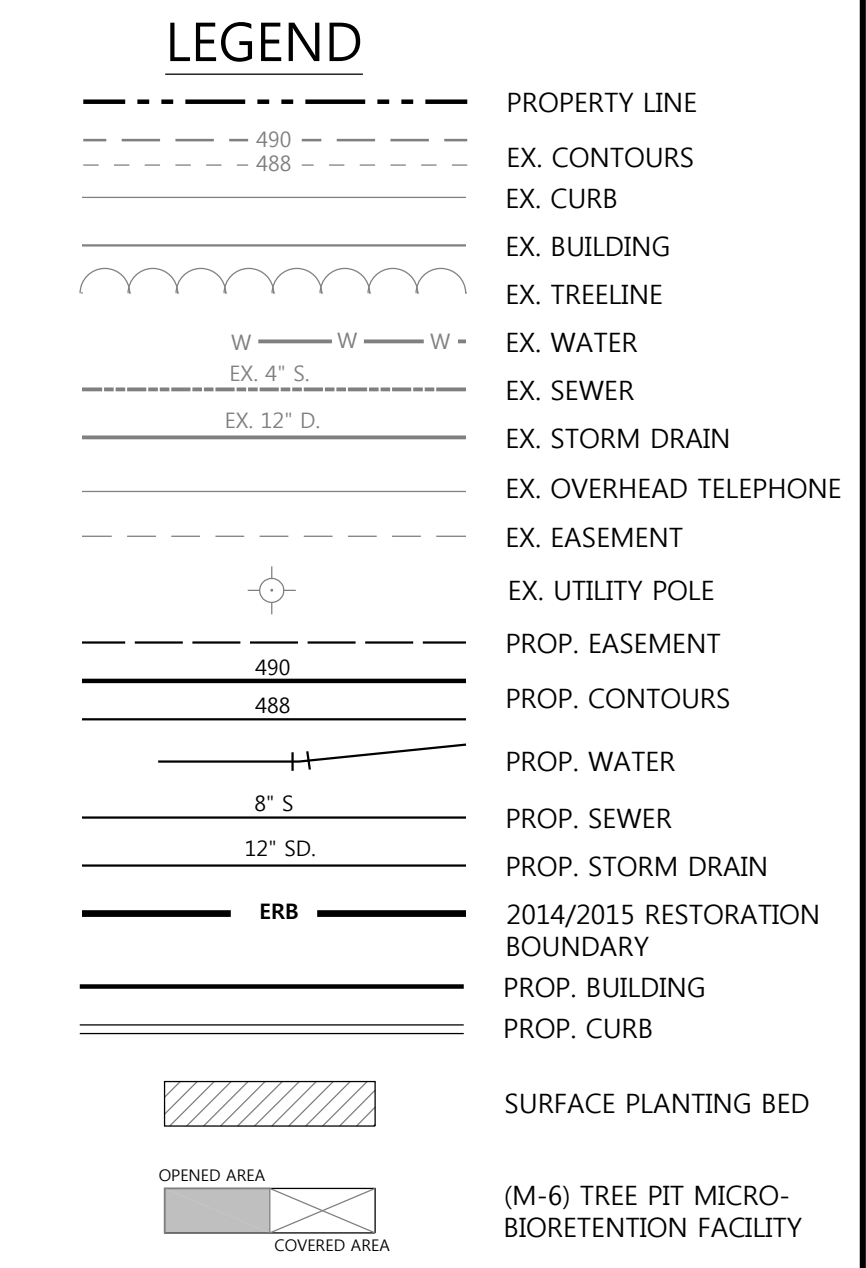
- SPOT GRADES AND DETAILED GRADING BETWEEN THE CURB AND BUILDING, INCLUDING BUT NOT LIMITED TO HARDSCAPE FEATURES SUCH AS PROPOSED SIDEWALKS, OPEN SPACE FEATURES, PROMENADE(S), PROPOSED FOUNTAINS, ETC., HAVE BEEN DESIGNED BY THE LANDSCAPE ARCHITECT. SEE THE LANDSCAPE AND HARDSCAPE PLAN FOR ADDITIONAL DETAIL. THE CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE ARCHITECT CONCERNING ANY CHANGE, DEVIATION OR MODIFICATION OF SUCH FEATURES SHOWN AND/OR ILLUSTRATED.
- FOR PRIVATE ROAD PLAN AND PROFILE SEE SHEETS 18 THRU 19.
- SEE GENERAL NOTE #52 REGARDING STORMWATER MANAGEMENT OWNERSHIP AND MAINTENANCE.
- SEE GENERAL NOTE #44 REGARDING TRASH SERVICE.
- SEE GENERAL NOTE #59 REGARDING EASEMENTS.
- FOR GUARDRAIL SEE MD SHA TRAFFIC BARRIER W BEAM WITH WOOD OFFSET BLOCK STANDARD DETAIL NO. MD 605.21.
- FOR GUARDRAIL SEE MD SHA BARRIER W BEAM SINGLE FACE STANDARD DETAIL NO. MD 605.22.
- GUARDRAIL TO BE POWDER COATED BRONZE. COLOR TO BE SPECIFIED BY GRAPHIC DESIGNER PRIOR TO FABRICATION.

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

A:\DOWNTOWN COLUMBIA\FILES\SDP-16-075\SDP-16-075-0005-0005-REVISION 00 REV\REPLACEMENT SHEETS\016 - GRADING PLAN - REPLACEMENT SHEET 016.DWG 05/20/19 10:18 PM

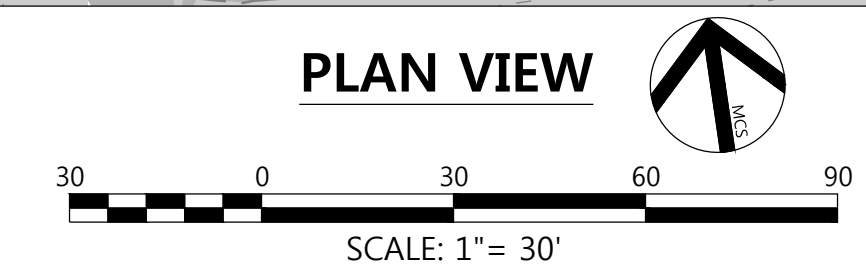


CONTINUATION LINE SHEET 15



NOTE: APPROVED EROSION AND SEDIMENT CONTROLS WILL BE INSTALLED AND MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION TO MINIMIZE IMPACTS ON ADJACENT RESOURCES AND RESTORATION AREAS. ANY REFORESTATION OR MITIGATION PLANTINGS DISTURBED DURING CONSTRUCTION WILL BE REPLACED/RE-PLANTED IN ACCORDANCE WITH THE PLANS AS APPROVED WITH F-15-106, AS WELL AS SUPPLEMENTAL PLANTINGS AS PER BIOHABITATS SKETCH PLAN 'CRESCENT NEIGHBORHOOD PHASE 1, AREA 3, PHASE 2 PARCEL D' SHEETS 1-3 DATED 12/20/17.

NOTE: SEE SHEET 41 FOR SEEDING SPECIFICATIONS TO BE IMPLEMENTED ON PARCELS AND OPEN SPACES OWNED BY THE COLUMBIA ASSOCIATION.



**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

**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: 05/31/20.

05/31/19  
DATE

PROFESSIONAL ENGR. NO. 16928

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_

04/19/19	A	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b>		
<b>CRESCENT NEIGHBORHOOD</b>		
<b>PHASE I AREA 3, PHASE 2</b>		
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13		
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
 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 PHASE I AREA 3	PARCEL D
PLAT OR REF. MAP	TAX ZONING/MAP	ELECT. DISTRICT
24812-24815	7	5
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	1

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

\_\_\_\_\_  
CHIEF, DEVELOPMENT ENGINEERING DIVISION      DATE

\_\_\_\_\_  
CHIEF, DIVISION OF LAND DEVELOPMENT      DATE

\_\_\_\_\_  
DIRECTOR      DATE

**NOTE:**

1. 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.
2. FOR PRIVATE ROAD PLAN AND PROFILE SEE SHEETS 18 THRU 19.
3. SEE GENERAL NOTE #52 REGARDING STORMWATER MANAGEMENT OWNERSHIP AND MAINTENANCE.
4. SEE GENERAL NOTE #44 REGARDING TRASH SERVICE.
5. SEE GENERAL NOTE #59 REGARDING EASEMENTS

**GRADING PLAN**  
**SECTION 4**  
REVISED SITE DEVELOPMENT PLAN

Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.B0

Drn. By MCJ Date 02/15/19

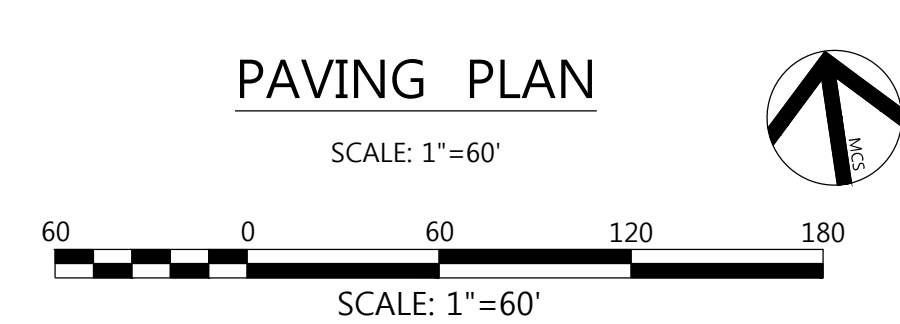
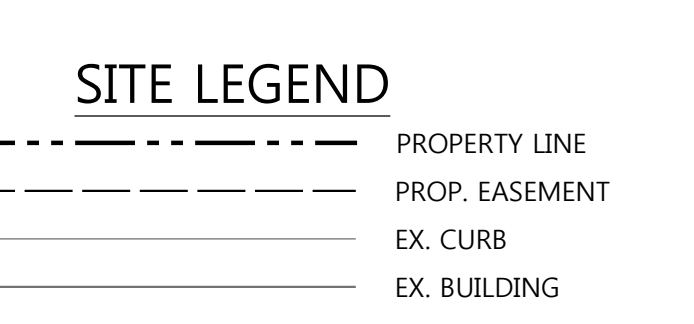
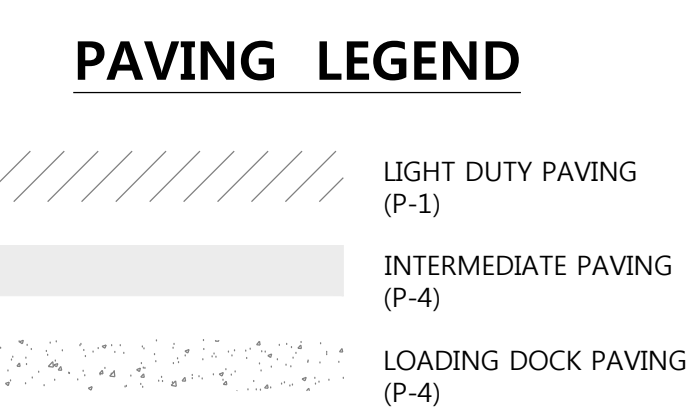
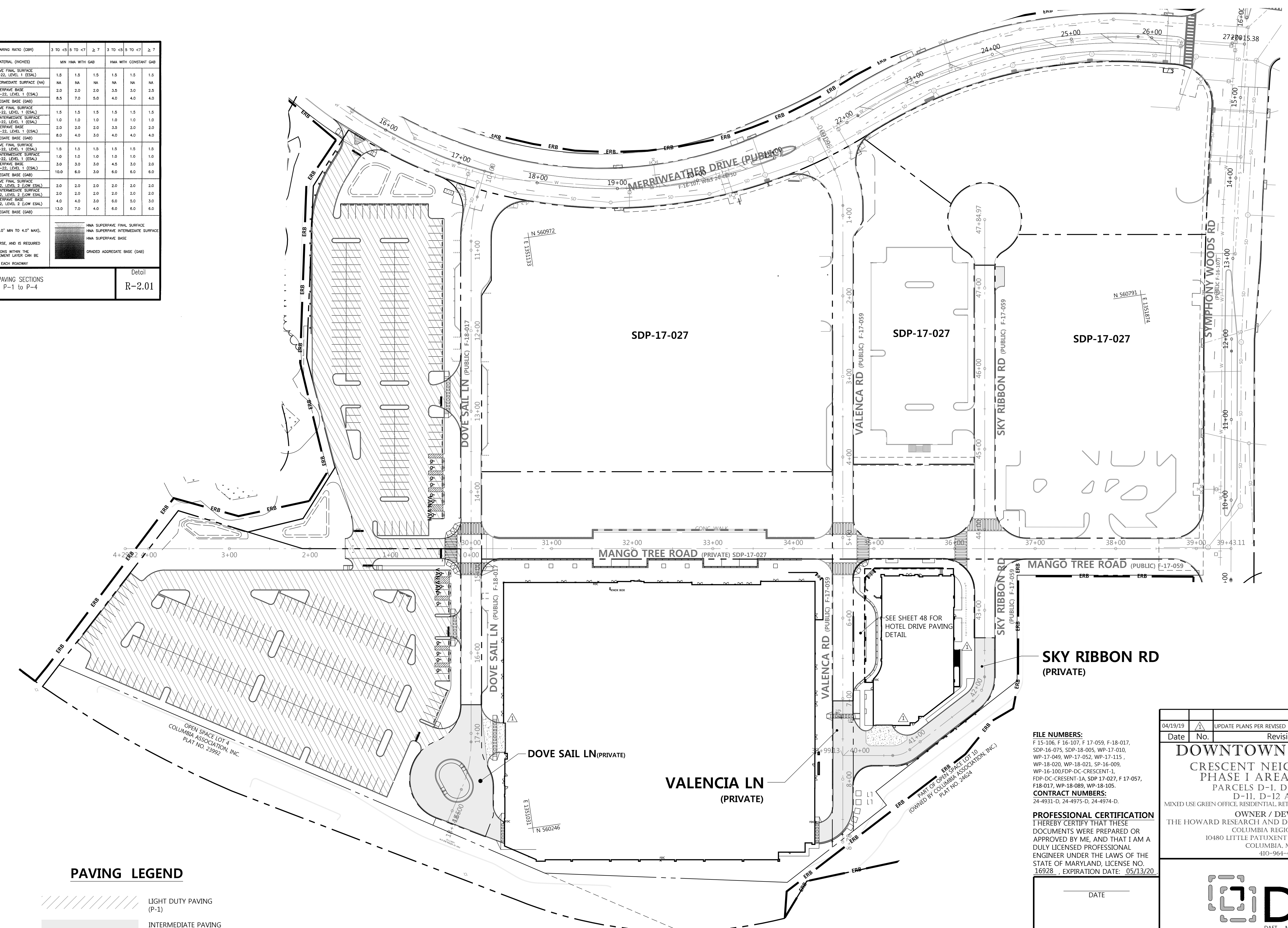
Chk. By MCB Approved MCB 16 of 77

SDP-18-005

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)	3 TO <S>			5 TO <T>			≥ 7			
			MIN	HMA WITH GAB	HMA WITH CONSTANT GAB	MIN	HMA WITH GAB	HMA WITH CONSTANT GAB	MIN	HMA WITH GAB	HMA WITH CONSTANT GAB	
P-1	PARKING DRIVE ANGLES RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	HMA SUPERPAVE FINAL SURFACE 9.5 MM PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
			2.0	2.0	2.0	3.5	3.0	2.5	2.0	2.0	2.0	
			2.0	2.0	2.0	3.5	3.0	2.5	2.0	2.0	2.0	2.0
			8.5	7.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	
P-2	PARKING DRIVE ANGLES RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS ACCESS PLAZA, ACCESS STREET CUL-DE-SACS, ACCESS STREET RESIDENTIAL	HMA SUPERPAVE FINAL SURFACE 9.5 MM PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
			1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
			2.0	2.0	2.0	3.5	3.0	2.5	2.0	2.0	2.0	2.0
			8.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	
P-3	PARKING DRIVE ANGLES RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS ACCESS PLAZA, ACCESS STREET CUL-DE-SACS NON-RESIDENTIAL MINOR COLLECTORS	HMA SUPERPAVE FINAL SURFACE 9.5 MM PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
			1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
			3.0	3.0	3.0	4.5	3.0	2.0	2.0	2.0	2.0	2.0
			10.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0	6.0	
P-4	MINOR COLLECTORS NON-RESIDENTIAL MAJOR COLLECTORS	HMA SUPERPAVE FINAL SURFACE 12.5 MM PG 64-22, LEVEL 2 (LOW ESAL)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
			4.0	4.0	3.0	6.0	5.0	3.0	2.0	2.0	2.0	2.0
			13.0	7.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	

Notes:  
 1) HEAVY TRUCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING GARBAGE TRUCKS.  
 2) HMA SUPERPAVE LAYERS SHALL BE PLACED IN APPROPRIATE COMPACTED LIFT THICKNESS: 150 MM BASE (2.0" MIN TO 4.0" MAX), 12.5 MM SURFACE (1.0" MIN TO 3.0" MAX), AND 9.5 MM SURFACE (1.0" MIN TO 2.0" MAX).  
 3) GRADED AGGREGATE BASE (GAB) TO BE PLACED AND COMPACTED IN 4" MAX COMPACTED THICKNESS LAYERS.  
 4) THE INTERMEDIATE SURFACE COURSE LAYER MUST BE PLACED WITHIN 2 WEEKS OF PLACEMENT OF BASE COURSE, AND IS REQUIRED PRIOR TO SUBSTANTIAL COMPLETION INSPECTION AND ROAD RECEPTION.  
 5) IN LIEU OF PLACING THE INTERMEDIATE SURFACE COURSE LAYER FOR COMMERCIAL/INDUSTRIAL ENTRANCE AREAS WITHIN THE COUNTY FRONT-OF-WAY WHERE ADJUTANT LINES ARE NOT REQUIRED, THE THICKNESS OF THE INTERMEDIATE PAVEMENT LAYER CAN BE ADDED TO THE REQUIRED THICKNESS OF THE BASE COURSE LAYER.  
 6) THE CONSTRUCTION DRAWINGS SHALL SHOW THE PAVING SECTION, ROAD CLASSIFICATION AND CBR VALUE FOR EACH ROADWAY.

Project	Howard County, Maryland Department of Public Works	Paving Sections P-1 to P-4	Detail R-2.01
Drawn	Approved: <i>[Signature]</i> Chief, Bureau of Engineering		



**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.  
**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.

04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL		
Date	Revision Description		
<b>DOWNTOWN COLUMBIA</b>			
<b>CRESCENT NEIGHBORHOOD</b>			
<b>PHASE I AREA 3, PHASE 2</b>			
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13			
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING			
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 OR REF. MAP NO.	TAX ZONING MAP NO.	ELECT. DISTRICT NO.	CENSUS TRACT NO.
24481-24482	7	5	605602
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
S50			1
<b>TITLE</b>			
<b>PAVING PLAN AND DETAILS</b>			
REVISED SITE DEVELOPMENT PLAN			
Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Dwn. By	MCJ	Date 02/15/19	
Chk. By	MCB	Approved MCB	17 of 77

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

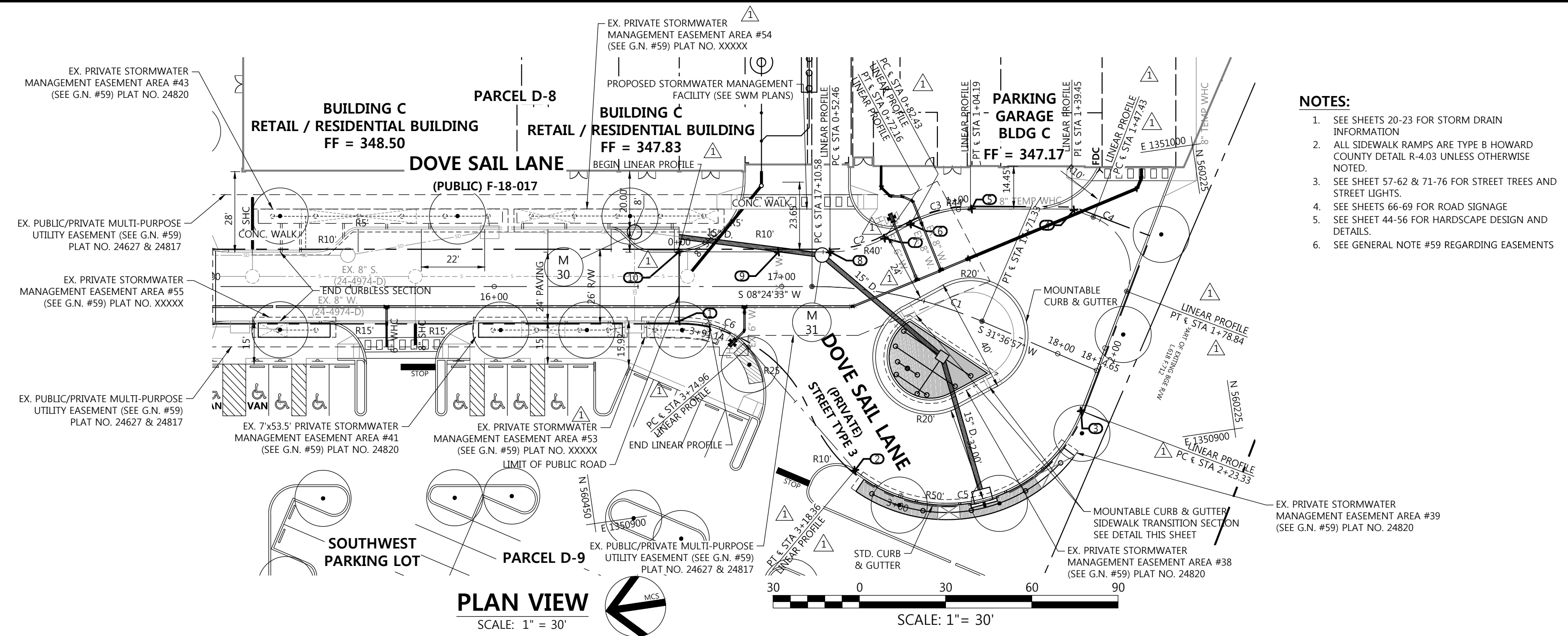
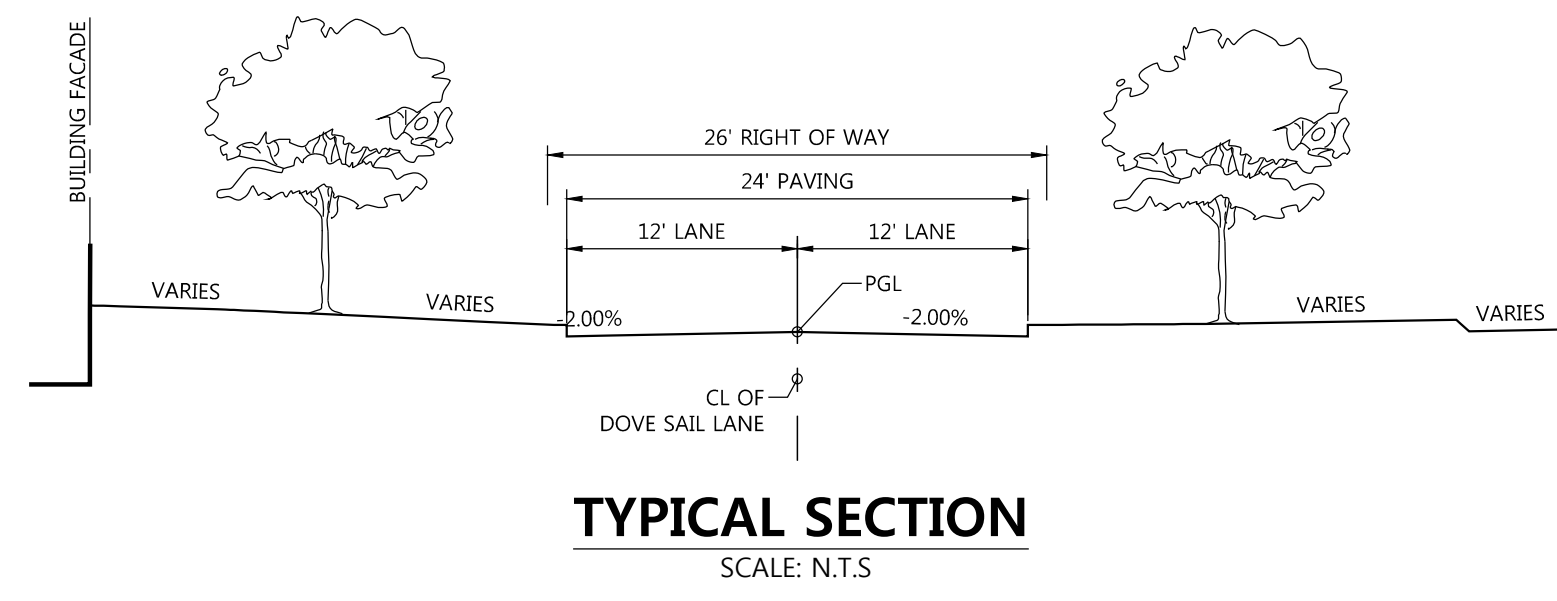
DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

DATE \_\_\_\_\_

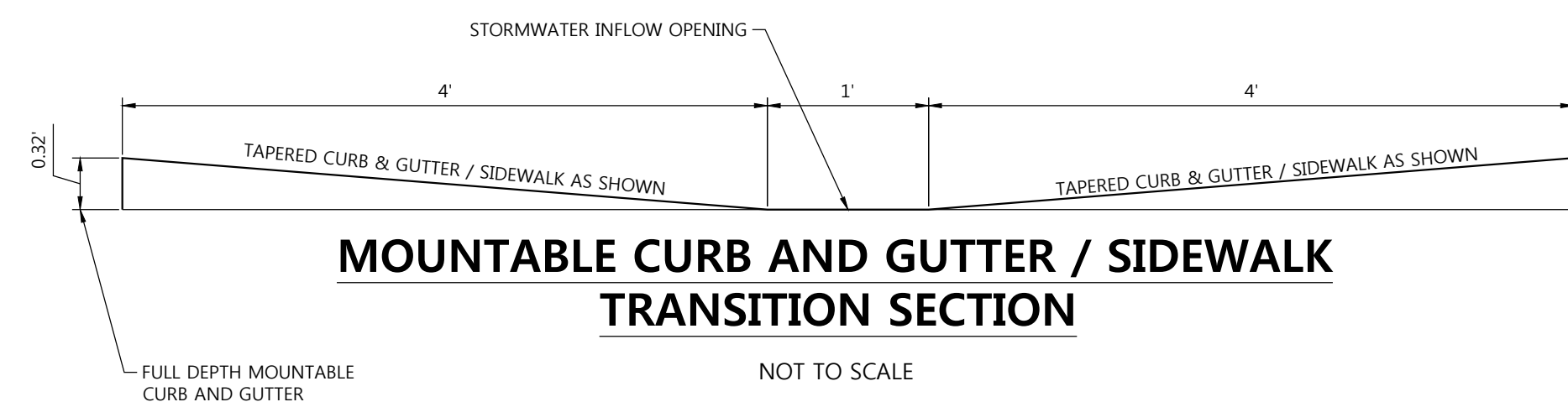
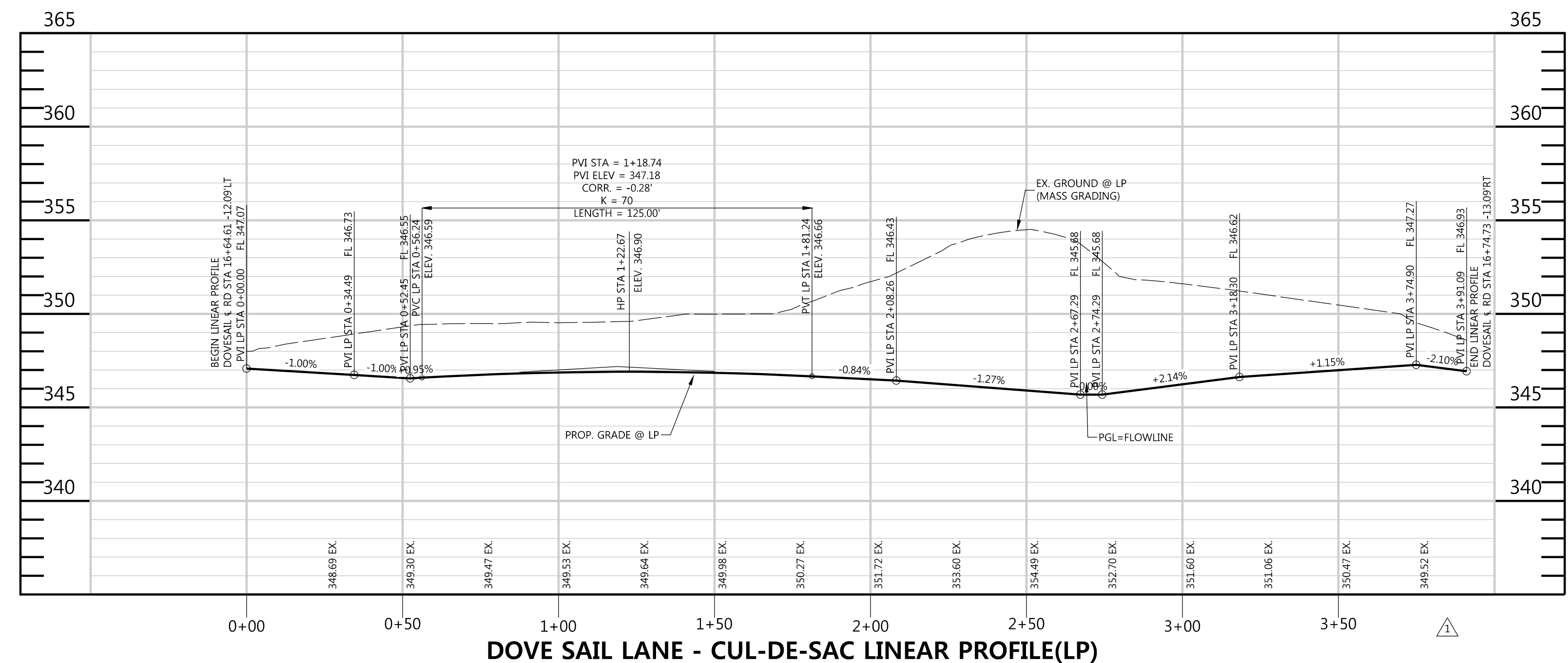
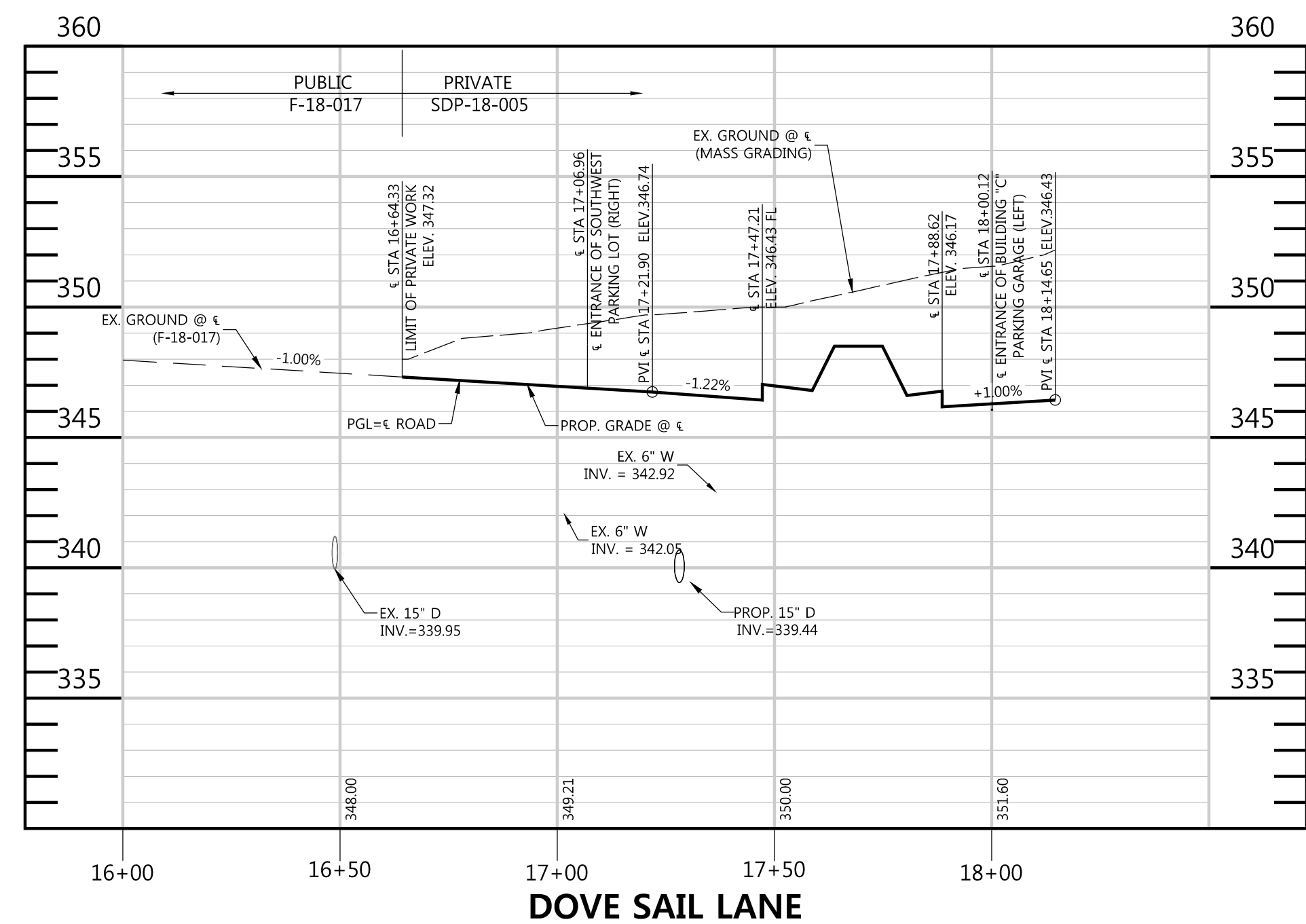
PROFESSIONAL ENGR. NO. 16928

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_



- NOTES:**
- SEE SHEETS 20-23 FOR STORM DRAIN INFORMATION
  - ALL SIDEWALK RAMP ARE TYPE B HOWARD COUNTY DETAIL R-403 UNLESS OTHERWISE NOTED.
  - SEE SHEET 57-62 & 71-76 FOR STREET TREES AND STREET LIGHTS.
  - SEE SHEETS 66-69 FOR ROAD SIGNAGE
  - SEE SHEET 44-56 FOR HARDSCAPE DESIGN AND DETAILS
  - SEE GENERAL NOTE #59 REGARDING EASEMENTS



DOVE SAIL LANE CURB FLOW LINE ELEVATION TABLE			
PT. NO.	STATION	OFFSET	ELEV.
①	16+64.61	12.00' R.	347.06'
②	17+36.32	62.67' R.	346.62'
③	18+14.65	15.00' R.	346.24'
④	17+85.46	48.29' L.	346.88'
⑤	17+56.13	35.46' L.	346.88'
⑥	17+40.07	25.08' L.	346.79'
⑦	17+33.03	18.71' L.	346.72'
⑧	17+16.37	12.15' L.	346.55'
⑨	16+98.87	12.00' L.	346.73'
⑩	16+64.61	12.09' L.	347.06'

C CURVE DATA CHART										
CURVE	STREET NAME	PC STA.	PT STA.	RADIUS	TANGENT	ARC	CHORD	BEARING	DELTA	
C1	DOVE SAIL LANE	17+10.58	17+71.33	150.00'	30.80'	60.75'	60.34'	S20°00'45"W	23°12'24"	
C2	DOVE SAIL LANE - CUL-DE-SAC	0+52.46	0+72.16	40.00'	10.05'	19.70'	19.50'	S05°49'17"E	28°13'08"	
C3	DOVE SAIL LANE - CUL-DE-SAC	0+82.43	1+04.19	44.00'	11.11'	21.76'	21.54'	S05°45'43"E	28°20'15"	
C4	DOVE SAIL LANE - CUL-DE-SAC	1+47.43	1+78.84	20.00'	20.00'	31.42'	28.28'	S74°13'06"W	90°00'00"	
C5	DOVE SAIL LANE - CUL-DE-SAC	2+23.33	3+18.36	50.00'	69.95'	95.02'	81.35'	N06°20'18"W	108°53'12"	
C6	DOVE SAIL LANE - CUL-DE-SAC	3+74.96	3+91.14	25.00'	8.39'	16.18'	15.90'	N38°57'32"E	37°05'10"	

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

**FILE NUMBERS:**  
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05/31/19  
DATE

PROFESSIONAL ENGR. NO. 16928

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_

**DATE:** 02/15/19

**SCALE AS SHOWN**

**PROJECT NO. 04038.B0**

**18 of 77**

**SDP-18-005**

04/19/19  
Date

UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL

Revision Description

**DOWNTOWN COLUMBIA**  
CRESCENT NEIGHBORHOOD  
PHASE I AREA 3, PHASE 2  
PARCELS D-1, D-7, D-8, D-9,  
D-11, D-12 AND D-13

MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING

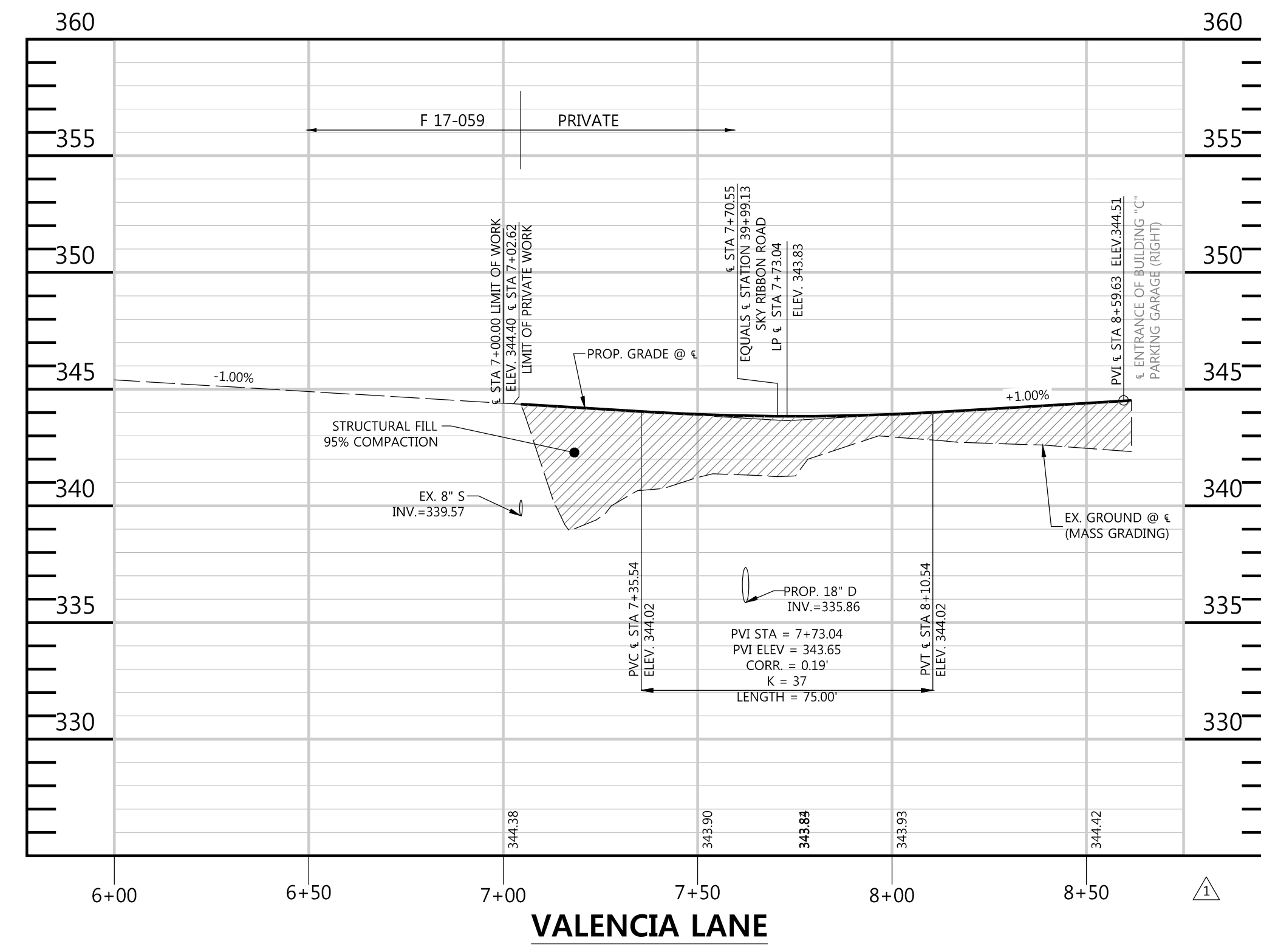
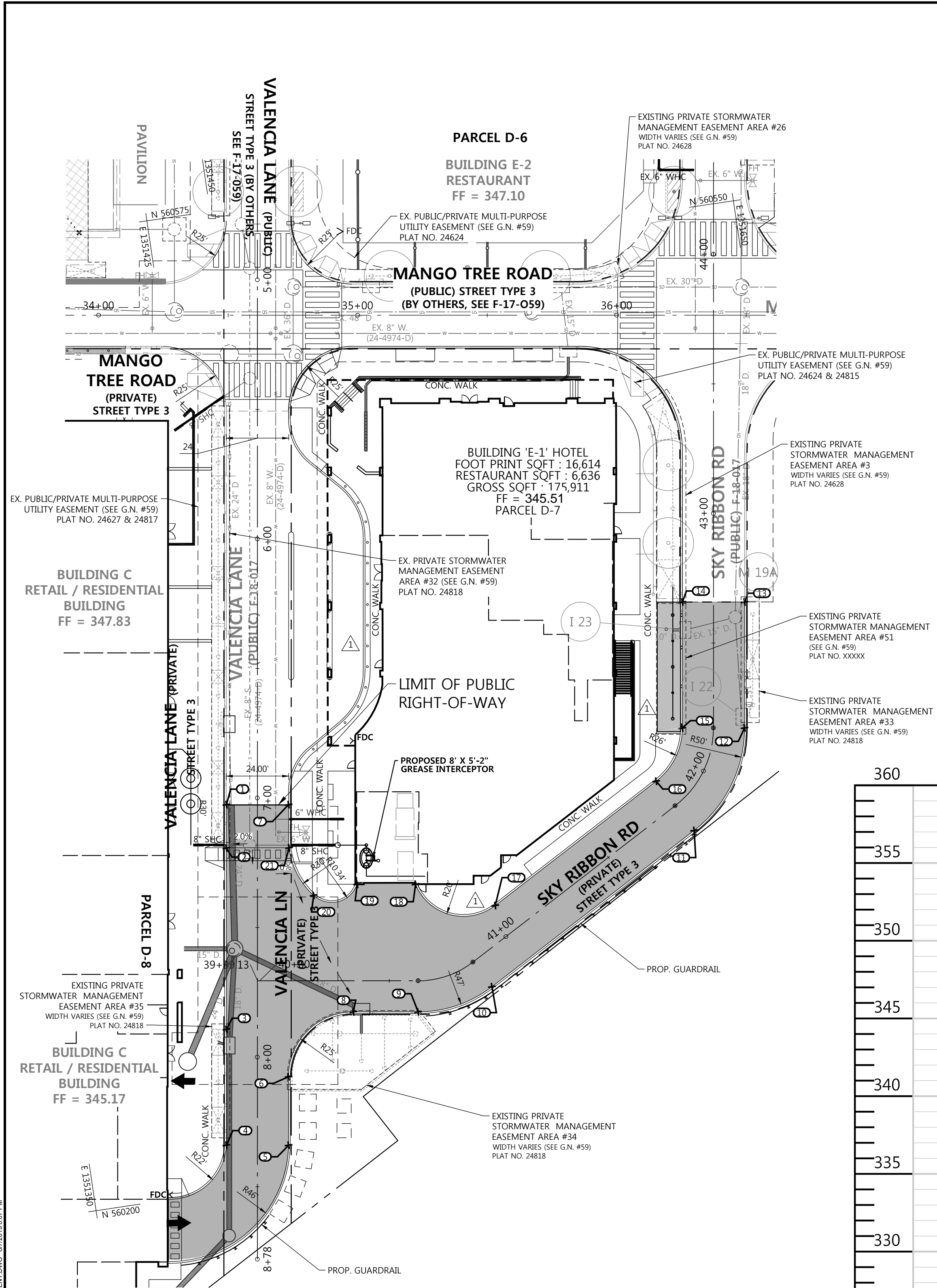
OWNER / DEVELOPER:  
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
COLUMBIA REGIONAL OFFICE  
10480 LITTLE PATUXENT PARKWAY SUITE 400  
COLUMBIA, MD 21044  
410-964-4800

**DMW**  
DAFT MCCLUNE 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: CRESCENT NEIGHBORHOOD LOT/PARCEL #: PARCEL D

PLAT OR REF. MAP: 2481-2482-2483-2484-2485-2486-2487-2488-2489-2490-2491-2492-2493-2494-2495-2496-2497-2498-2499-2500-2501-2502-2503-2504-2505-2506-2507-2508-2509-2510-2511-2512-2513-2514-2515-2516-2517-2518-2519-2520-2521-2522-2523-2524-2525-2526-2527-2528-2529-2530-2531-2532-2533-2534-2535-2536-2537-2538-2539-2540-2541-2542-2543-2544-2545-2546-2547-2548-2549-2550-2551-2552-2553-2554-2555-2556-2557-2558-2559-2560-2561-2562-2563-2564-2565-2566-2567-2568-2569-2570-2571-2572-2573-2574-2575-2576-2577-2578-2579-2580-2581-2582-2583-2584-2585-2586-2587-2588-2589-2590-2591-2592-2593-2594-2595-2596-2597-2598-2599-2600-2601-2602-2603-2604-2605-2606-2607-2608-2609-2610-2611-2612-2613-2614-2615-2616-2617-2618-2619-2620-2621-2622-2623-2624-2625-2626-2627-2628-2629-2630-2631-2632-2633-2634-2635-2636-2637-2638-2639-2640-2641-2642-2643-2644-2645-2646-2647-2648-2649-2650-2651-2652-2653-2654-2655-2656-2657-2658-2659-2660-2661-2662-2663-2664-2665-2666-2667-2668-2669-2670-2671-2672-2673-2674-2675-2676-2677-2678-2679-2680-2681-2682-2683-2684-2685-2686-2687-2688-2689-2690-2691-2692-2693-2694-2695-2696-2697-2698-2699-2700-2701-2702-2703-2704-2705-2706-2707-2708-2709-2710-2711-2712-2713-2714-2715-2716-2717-2718-2719-2720-2721-2722-2723-2724-2725-2726-2727-2728-2729-2730-2731-2732-2733-2734-2735-2736-2737-2738-2739-2740-2741-2742-2743-2744-2745-2746-2747-2748-2749-2750-2751-2752-2753-2754-2755-2756-2757-2758-2759-2760-2761-2762-2763-2764-2765-2766-2767-2768-2769-2770-2771-2772-2773-2774-2775-2776-2777-2778-2779-2780-2781-2782-2783-2784-2785-2786-2787-2788-2789-2790-2791-2792-2793-2794-2795-2796-2797-2798-2799-2800-2801-2802-2803-2804-2805-2806-2807-2808-2809-2810-2811-2812-2813-2814-2815-2816-2817-2818-2819-2820-2821-2822-2823-2824-2825-2826-2827-2828-2829-2830-2831-2832-2833-2834-2835-2836-2837-2838-2839-2840-2841-2842-2843-2844-2845-2846-2847-2848-2849-2850-2851-2852-2853-2854-2855-2856-2857-2858-2859-2860-2861-2862-2863-2864-2865-2866-2867-2868-2869-2870-2871-2872-2873-2874-2875-2876-2877-2878-2879-2880-2881-2882-2883-2884-2885-2886-2887-2888-2889-2890-2891-2892-2893-2894-2895-2896-2897-2898-2899-2900-2901-2902-2903-2904-2905-2906-2907-2908-2909-2910-2911-2912-2913-2914-2915-2916-2917-2918-2919-2920-2921-2922-2923-2924-2925-2926-2927-2928-2929-2930-2931-2932-2933-2934-2935-2936-2937-2938-2939-2940-2941-2942-2943-2944-2945-2946-2947-2948-2949-2950-2951-2952-2953-2954-2955-2956-2957-2958-2959-2960-2961-2962-2963-2964-2965-2966-2967-2968-2969-2970-2971-2972-2973-2974-2975-2976-2977-2978-2979-2980-2981-2982-2983-2984-2985-2986-2987-2988-2989-2990-2991-2992-2993-2994-2995-2996-2997-2998-2999-3000-3001-3002-3003-3004-3005-3006-3007-3008-3009-3010-3011-3012-3013-3014-3015-3016-3017-3018-3019-3020-3021-3022-3023-3024-3025-3026-3027-3028-3029-3030-3031-3032-3033-3034-3035-3036-3037-3038-3039-3040-3041-3042-3043-3044-3045-3046-3047-3048-3049-3050-3051-3052-3053-3054-3055-3056-3057-3058-3059-3060-3061-3062-3063-3064-3065-3066-3067-3068-3069-3070-3071-3072-3073-3074-3075-3076-3077-3078-3079-3080-3081-3082-3083-3084-3085-3086-3087-3088-3089-3090-3091-3092-3093-3094-3095-3096-3097-3098-3099-3100-3101-3102-3103-3104-3105-3106-3107-3108-3109-3110-3111-3112-3113-3114-3115-3116-3117-3118-3119-3120-3121-3122-3123-3124-3125-3126-3127-3128-3129-3130-3131-3132-3133-3134-3135-3136-3137-3138-3139-3140-3141-3142-3143-3144-3145-3146-3147-3148-3149-3150-3151-3152-3153-3154-3155-3156-3157-3158-3159-3160-3161-3162-3163-3164-3165-3166-3167-3168-3169-3170-3171-3172-3173-3174-3175-3176-3177-3178-3179-3180-3181-3182-3183-3184-3185-3186-3187-3188-3189-3190-3191-3192-3193-3194-3195-3196-3197-3198-3199-3200-3201-3202-3203-3204-3205-3206-3207-3208-3209-3210-3211-3212-3213-3214-3215-3216-3217-3218-3219-3220-3221-3222-3223-3224-3225-3226-3227-3228-3229-3230-3231-3232-3233-3234-3235-3236-3237-3238-3239-3240-3241-3242-3243-3244-3245-3246-3247-3248-3249-3250-3251-3252-3253-3254-3255-3256-3257-3258-3259-3260-3261-3262-3263-3264-3265-3266-3267-3268-3269-3270-3271-3272-3273-3274-3275-3276-3277-3278-3279-3280-3281-3282-3283-3284-3285-3286-3287-3288-3289-3290-3291-3292-3293-3294-3295-3296-3297-3298-3299-3300-3301-3302-3303-3304-3305-3306-3307-3308-3309-3310-3311-3312-3313-3314-3315-3316-3317-3318-3319-3320-3321-3322-3323-3324-3325-3326-3327-3328-3329-3330-3331-3332-3333-3334-3335-3336-3337-3338-3339-3340-3341-3342-3343-3344-3345-3346-3347-3348-3349-3350-3351-3352-3353-3354-3355-3356-3357-3358-3359-3360-3361-3362-3363-3364-3365-3366-3367-3368-3369-3370-3371-3372-3373-3374-3375-3376-3377-3378-3379-3380-3381-3382-3383-3384-3385-3386-3387-3388-3389-3390-3391-3392-3393-3394-3395-3396-3397-3398-3399-3400-3401-3402-3403-3404-3405-3406-3407-3408-3409-3410-3411-3412-3413-3414-3415-3416-3417-3418-3419-3420-3421-3422-3423-3424-3425-3426-3427-3428-3429-3430-3431-3432-3433-3434-3435-3436-3437-3438-3439-3440-3441-3442-3443-3444-3445-3446-3447-3448-3449-3450-3451-3452-3453-3454-3455-3456-3457-3458-3459-3460-3461-3462-3463-3464-3465-3466-3467-3468-3469-3470-3471-3472-3473-3474-3475-3476-3477-3478-3479-3480-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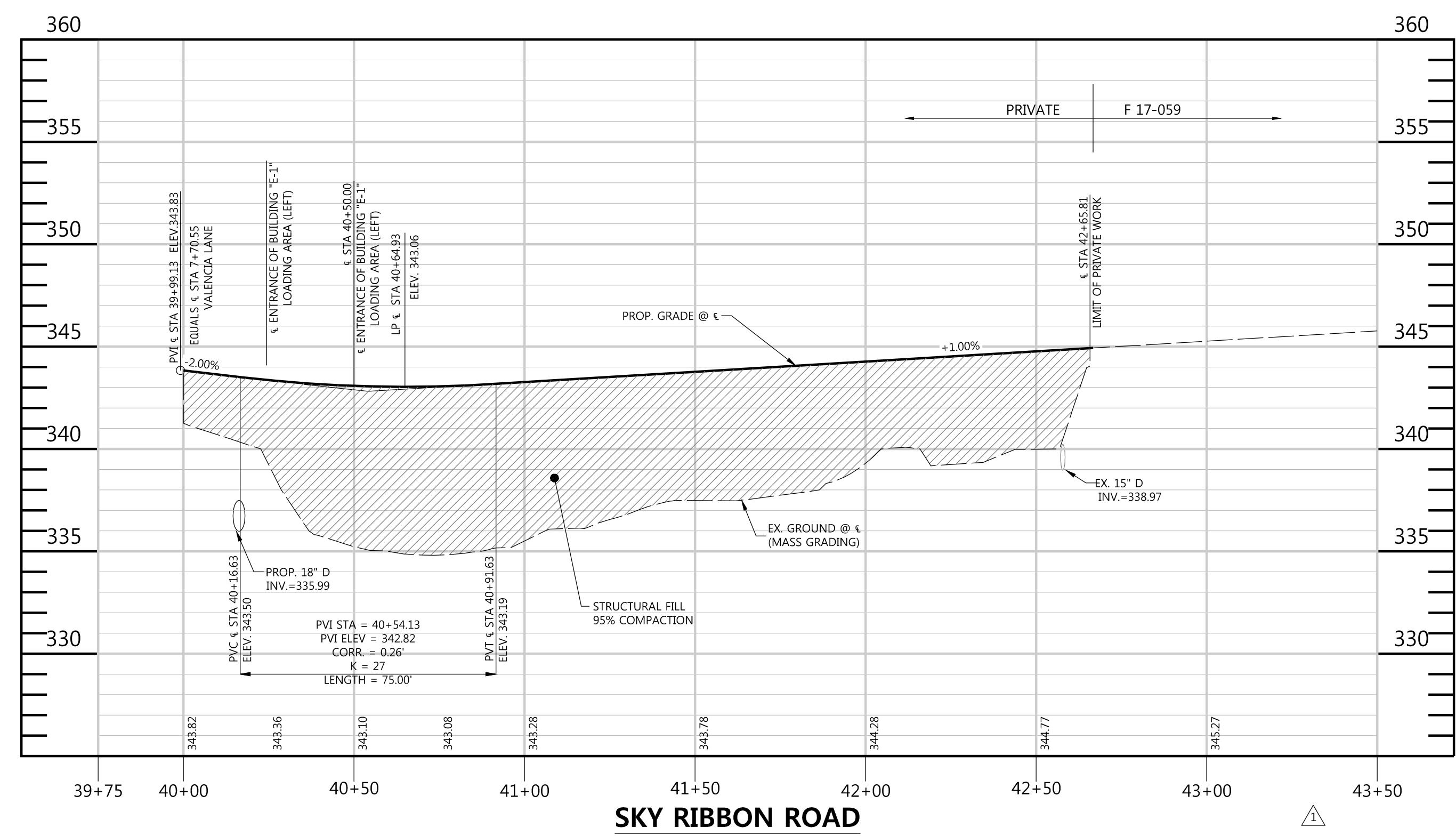


**VALENCIA LANE CURB FLOW LINE ELEVATION TABLE**

NO.	STATION	OFFSET	ELEV.
1	7+02.63	12.00' R.	344.11'
2	7+15.55	12.00' R.	343.93'
3	7+89.30	12.00' R.	343.92'
4	8+32.93	12.00' R.	344.02'
5	8+32.93	12.00' L.	344.02'
6	8+07.55	12.00' L.	344.76'
7	7+02.63	12.00' L.	344.11'
21	7+15.55	12.00' L.	343.93'

**SKY RIBBON ROAD CURB FLOW LINE ELEVATION TABLE**

NO.	STATION	OFFSET	ELEV.
8	40+37.00	12.00' R.	343.25'
9	40+62.00	12.00' R.	342.80'
10	40+84.77	12.00' R.	342.88'
11	41+83.43	12.00' R.	343.76'
12	42+18.12	12.00' R.	344.21'
13	42+66.68	12.00' R.	344.69'
14	42+66.68	12.00' L.	344.69'
15	42+17.24	12.00' L.	344.21'
16	41+82.55	12.00' L.	343.86'
17	41+04.03	12.00' L.	343.70'
18	40+60.14	37.30' L.	344.28'
19	40+37.60	37.28' L.	344.28'
20	40+20.78	32.95' L.	343.73'



**ε CURVE DATA CHART**

CURVE	STREET NAME	PC STA.	PT STA.	RADIUS	TANGENT	ARC	CHORD	BEARING	DELTA
C1	SKY RIBBON ROAD	40+61.13	40+83.89	3461'	11.81'	22.77'	22.36'	N79°33'52"E	37°41'33"
C2	SKY RIBBON ROAD	41+82.55	42+17.24	3800'	18.66'	34.69'	33.50'	N34°33'53"E	52°18'25"

**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

**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: 05/31/2020.

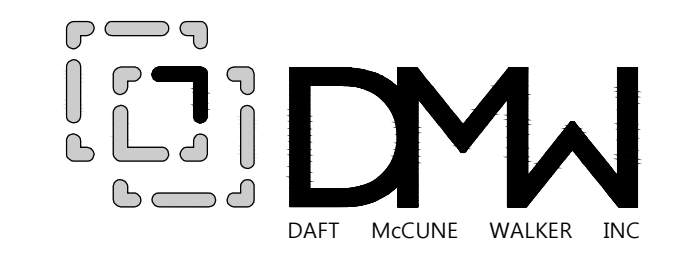
05/31/19  
DATE

04/19/19  
Date No. UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL

Revision Description

**DOWNTOWN COLUMBIA**  
CRESCENT NEIGHBORHOOD  
PHASE I AREA 3, PHASE 2  
PARCELS D-1, D-7, D-8, D-9,  
D-11, D-12 AND D-13  
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING

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

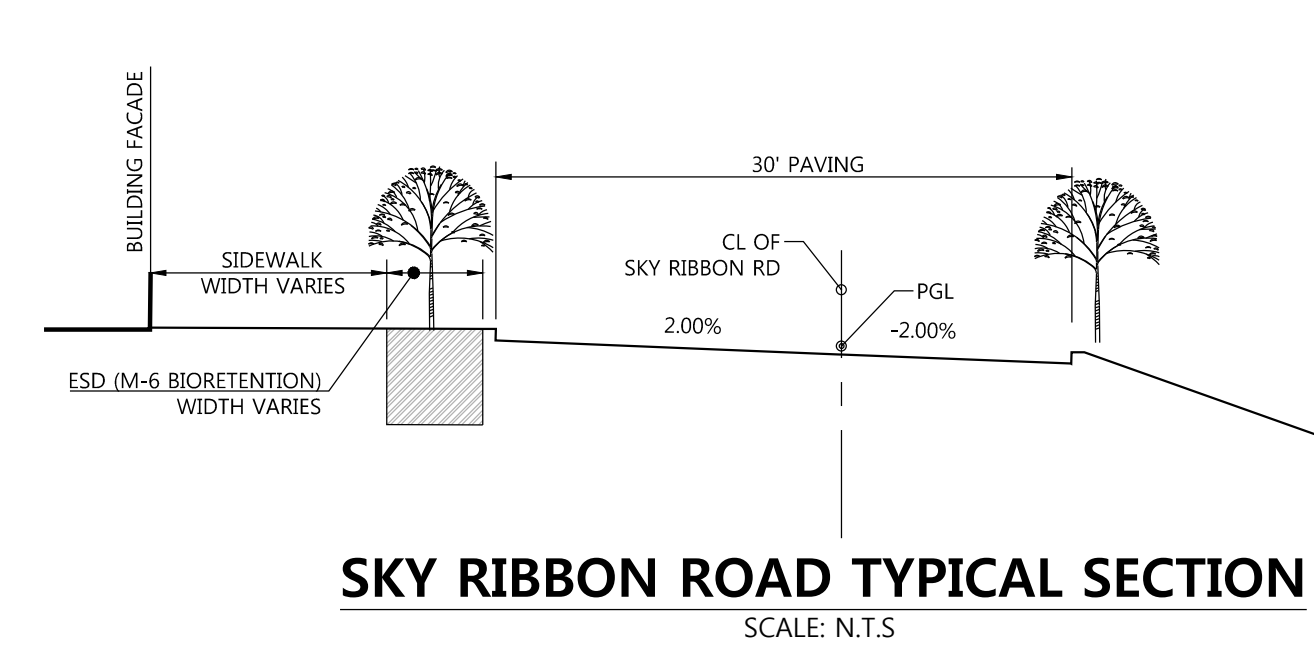
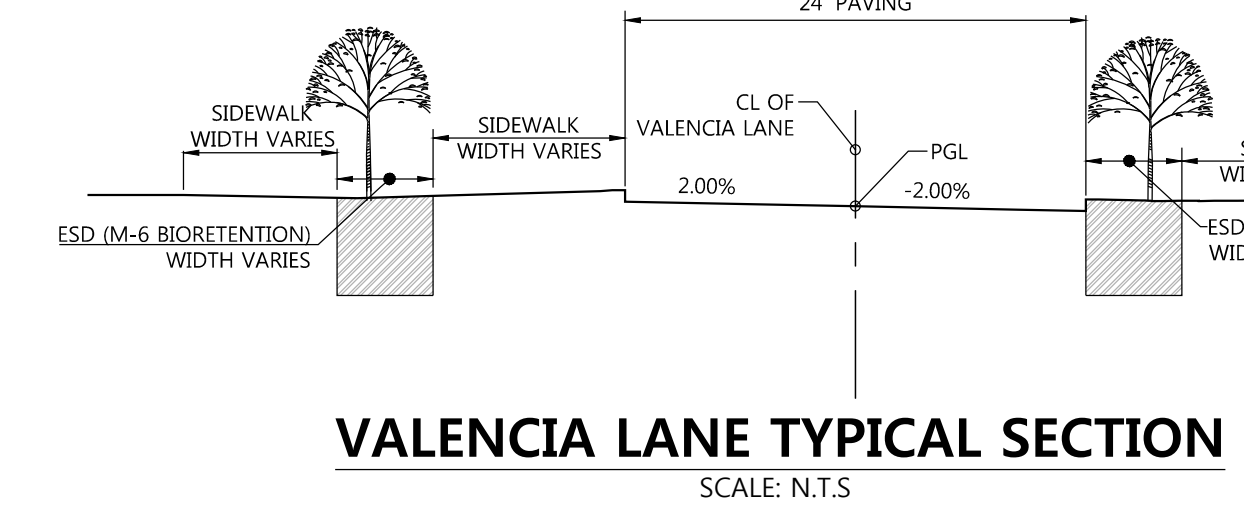


501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286  
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	DOWNTOWN COLUMBIA	SECTION/AREA	CRESCENT NEIGHBORHOOD PHASE I AREA 3	LOT/PARCEL #	PARCEL D
PLAT FOR REF.	24-4931-2450	RECORD #	7	TAX ZONING MAP	5
DATE FOR REF.	04/15/19	SEWER CODE	36	ELECT. DISTRICT	5
WATER CODE	SS0	SEWER CODE	LITTLE PATUXENT	CENSUS TRACT	605602
		STAGE	1		

TITLE  
**ROAD PLAN (VALENCIA AND SKY RIBBON)**  
REVISED SITE DEVELOPMENT PLAN

Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.B0  
Drn. By MCJ Date 02/15/19  
Chk. By MCB Approved MCB 19 of 77



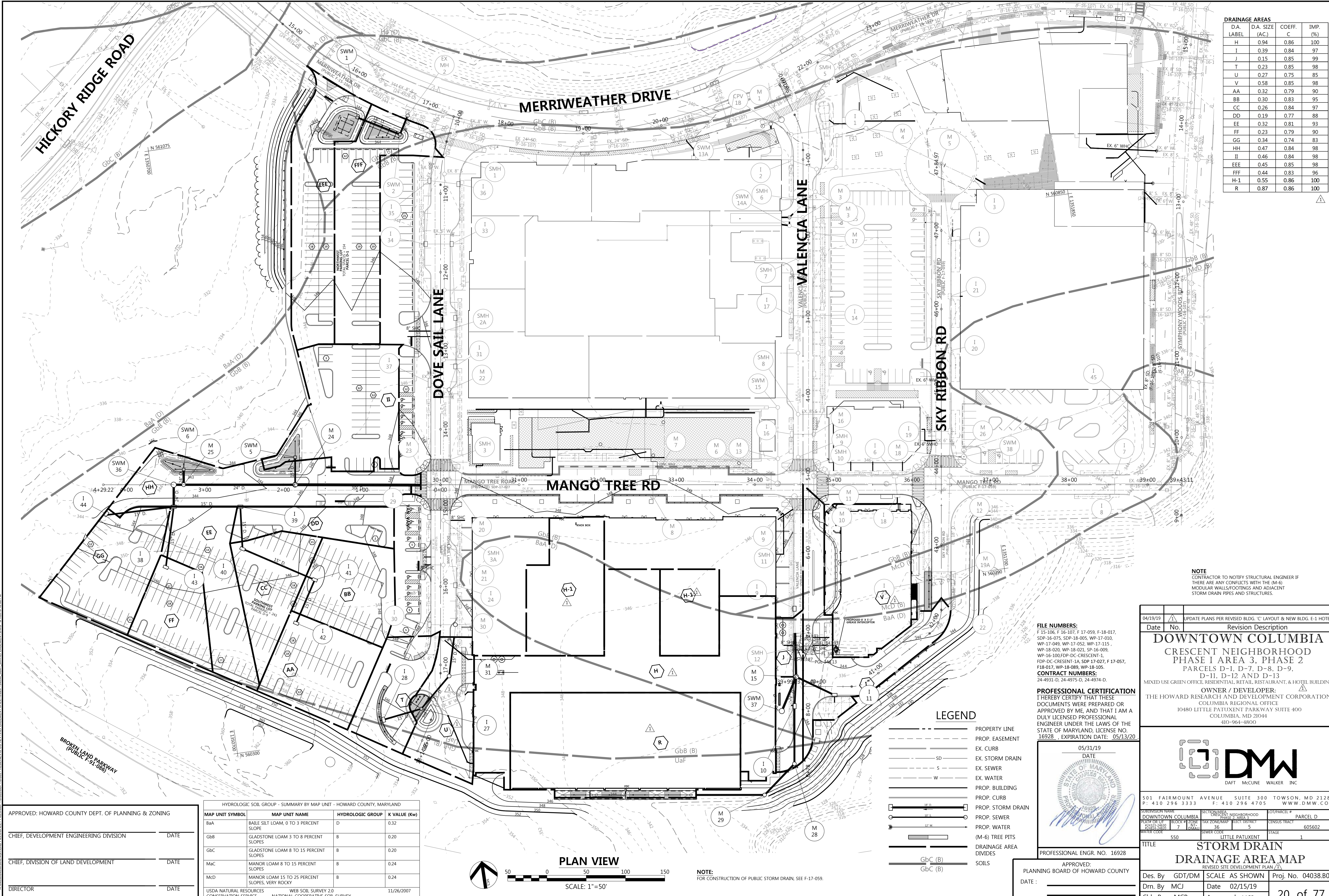
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR DATE

- NOTES:**
- SEE SHEETS 20-23 FOR STORM DRAIN INFORMATION
  - ALL SIDEWALK RAMPS ARE TYPE B HOWARD COUNTY DETAIL R-4-03 UNLESS OTHERWISE NOTED.
  - SEE SHEET 57-62 & 71-76 FOR STREET TREES AND STREET LIGHTS.
  - SEE SHEETS 66-69 FOR ROAD SIGNAGE
  - SEE SHEET 44-56 FOR HARDSCAPE DESIGN AND DETAILS.
  - SEE GENERAL NOTE #59 REGARDING EASEMENTS

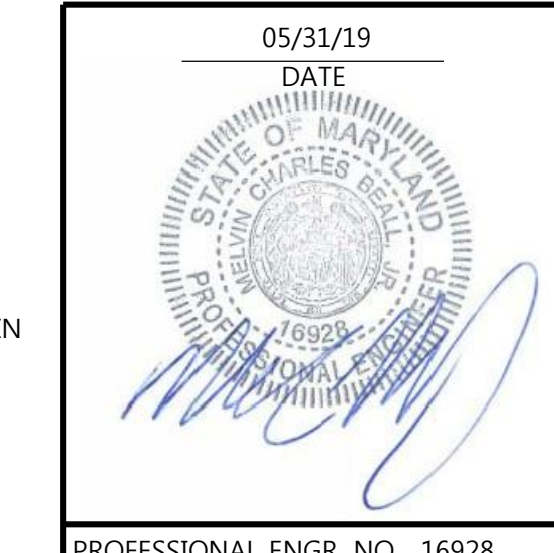


DRAINAGE AREAS			
D.A. LABEL	D.A. SIZE (AC)	COEFF. C	IMP. (%)
H	0.94	0.86	100
I	0.39	0.84	97
J	0.15	0.85	99
T	0.23	0.85	98
U	0.27	0.75	85
V	0.58	0.85	98
AA	0.32	0.79	90
BB	0.30	0.83	95
CC	0.26	0.84	97
DD	0.19	0.77	88
EE	0.32	0.81	93
FF	0.23	0.79	90
GG	0.34	0.74	83
HH	0.47	0.84	98
II	0.46	0.84	98
EEE	0.45	0.85	98
FFF	0.44	0.83	96
H-1	0.55	0.86	100
R	0.87	0.86	100

**NOTE**  
 CONTRACTOR TO NOTIFY STRUCTURAL ENGINEER IF THERE ARE ANY CONFLICTS WITH THE (M-6) MODULAR WALLS/FOOTINGS AND ADJACENT STORM DRAIN PIPES AND STRUCTURES.

**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.  
**CONTRACT NUMBERS:**  
 24-4931-D, 24-4975-D, 24-4974-D.

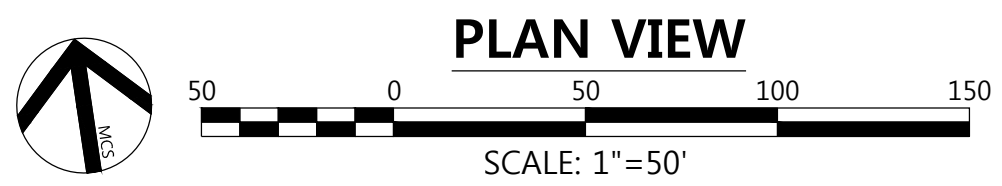
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APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE: \_\_\_\_\_

**LEGEND**

---	PROPERTY LINE
- - - -	PROP. EASEMENT
---	EX. CURB
SD	EX. STORM DRAIN
S	EX. SEWER
W	EX. WATER
---	PROP. BUILDING
---	PROP. CURB
---	PROP. STORM DRAIN
---	PROP. SEWER
---	PROP. WATER
---	(M-6) TREE PITS
---	DRAINAGE AREA DIVIDES
GbC (B)	SOILS
GbC (B)	SOILS



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

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

MAP UNIT SYMBOL	MAP UNIT NAME	HYDROLOGIC GROUP	K VALUE (Kw)
BaA	BAILL 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

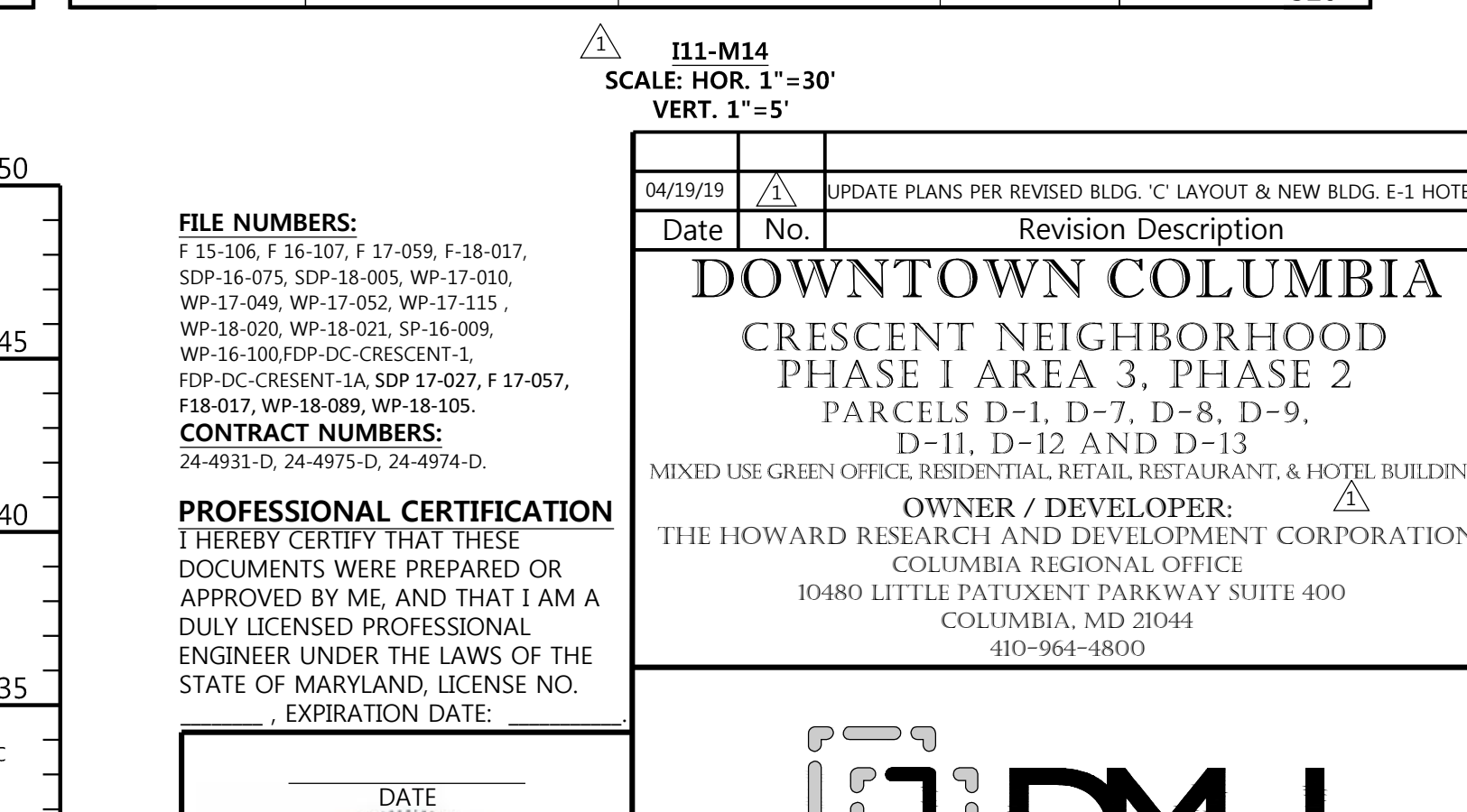
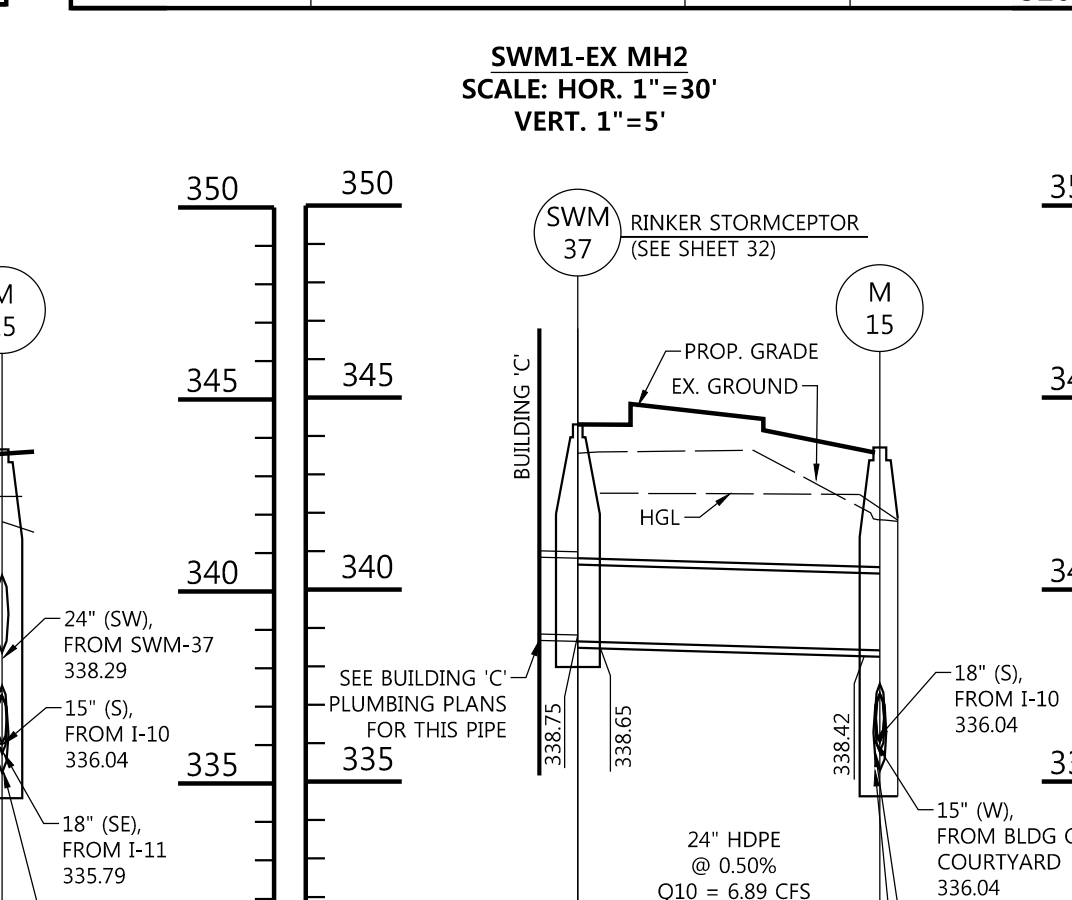
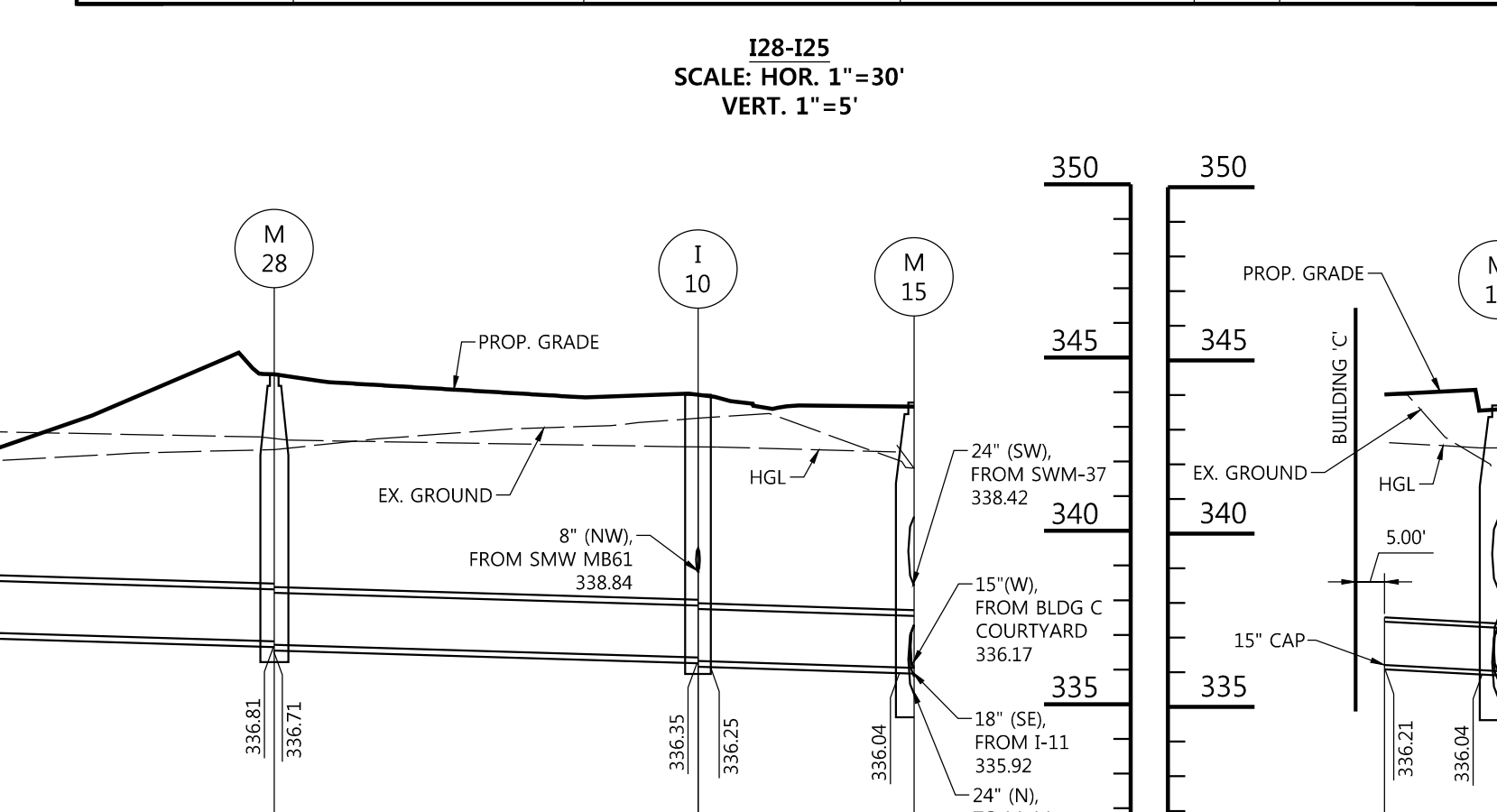
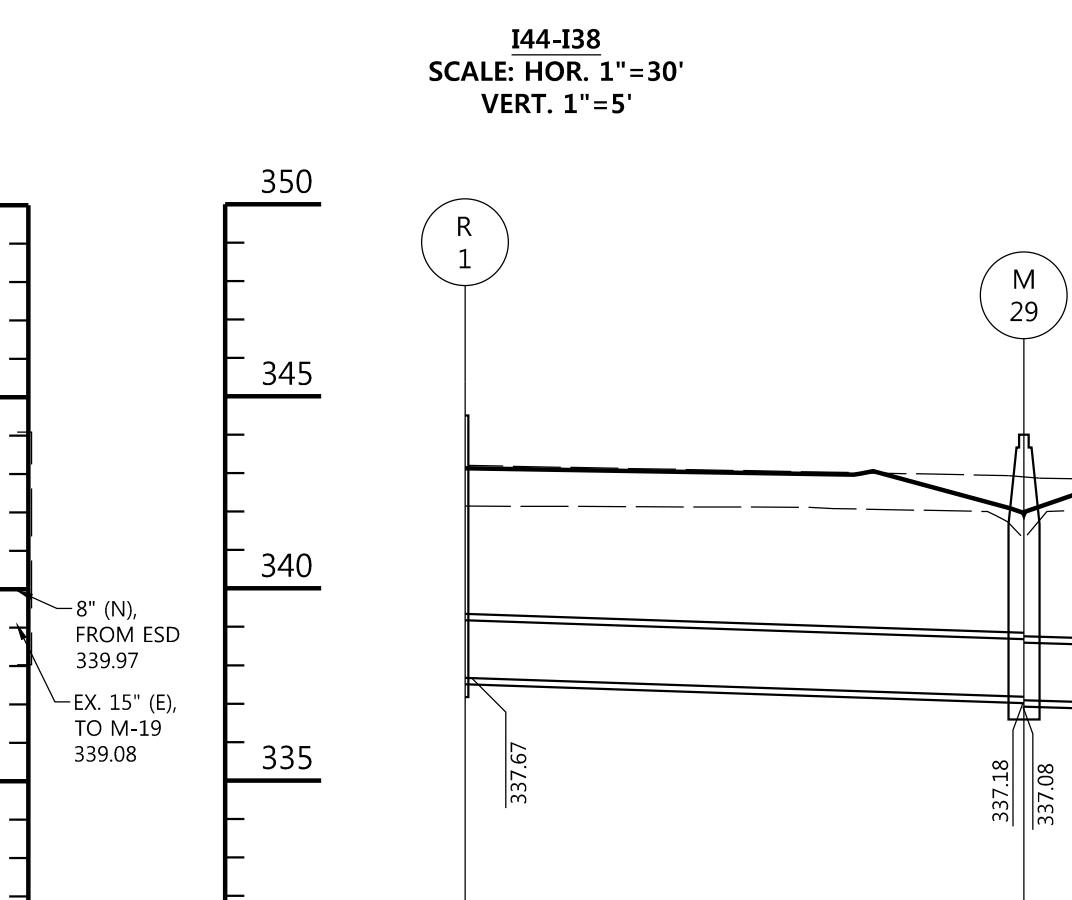
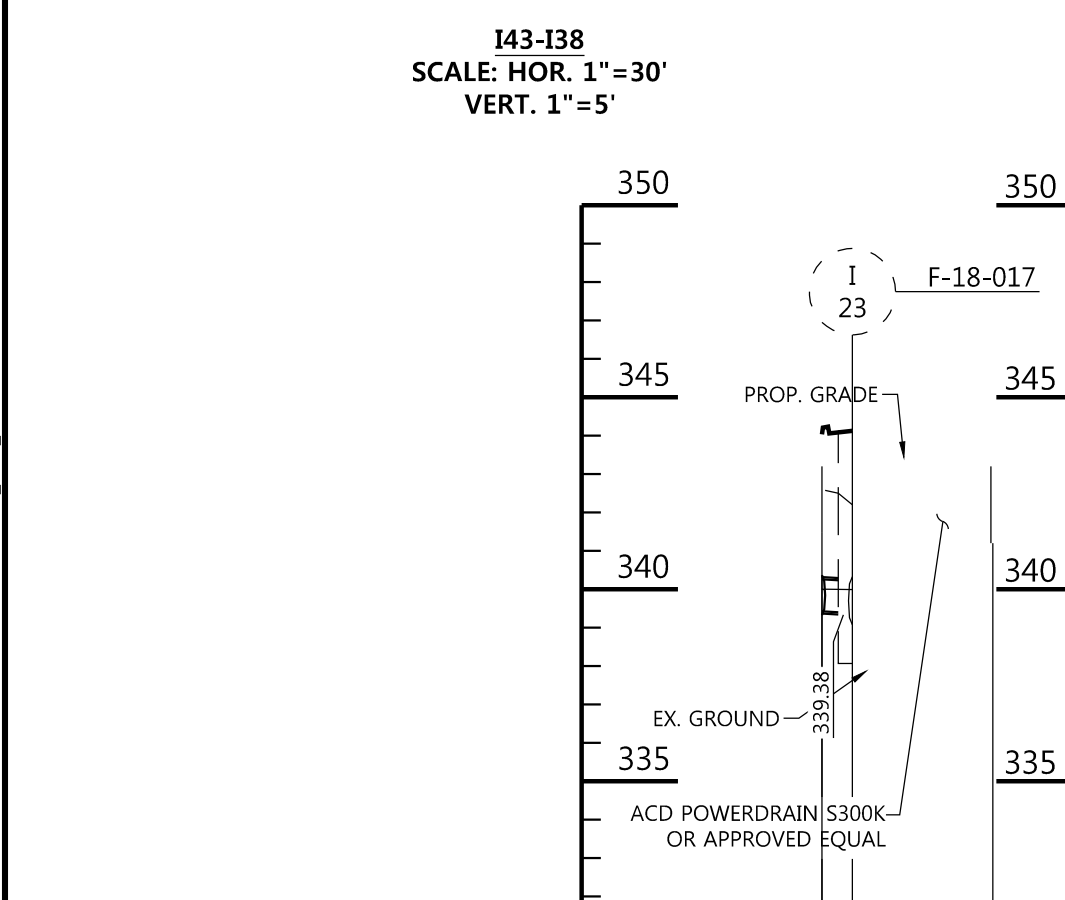
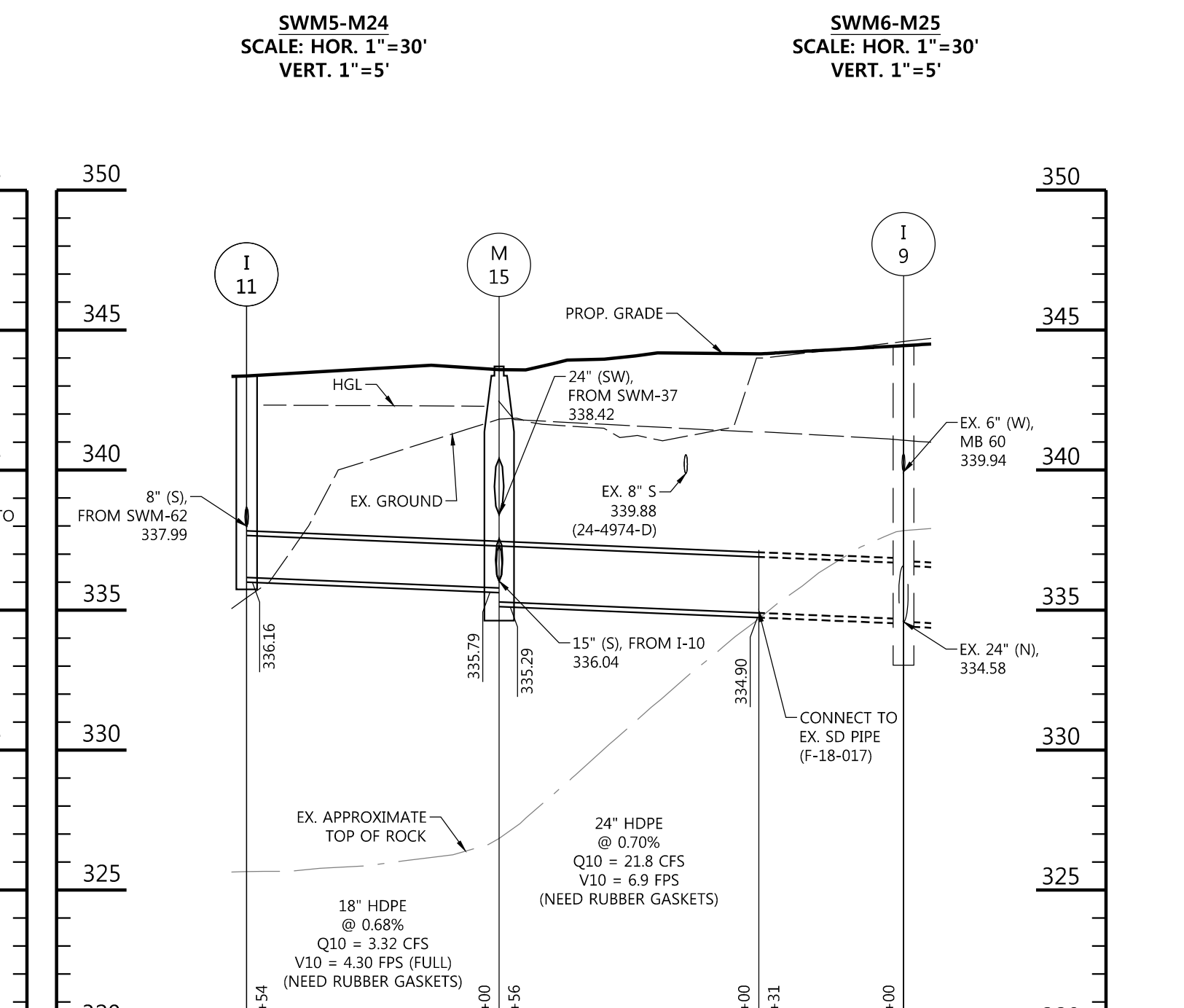
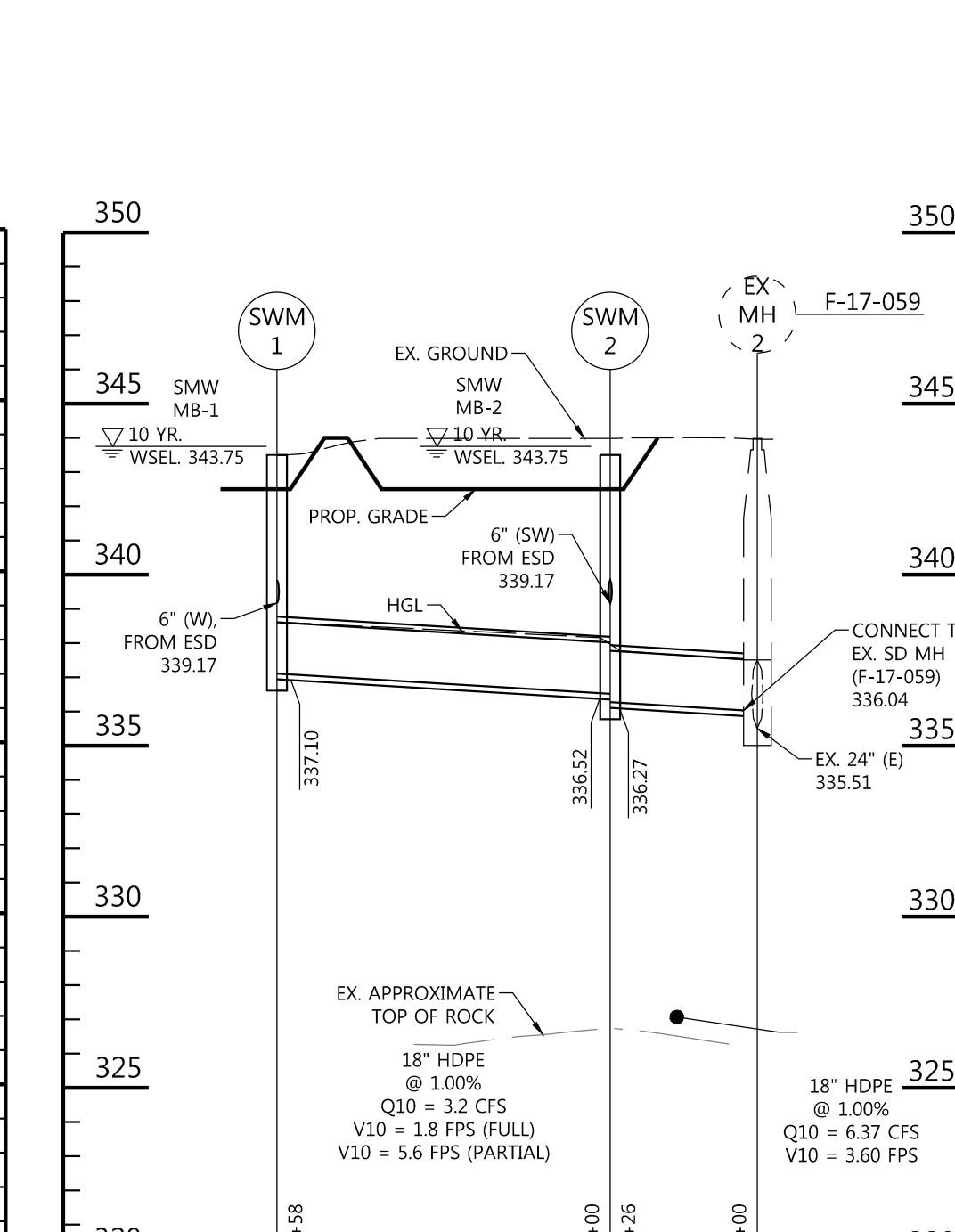
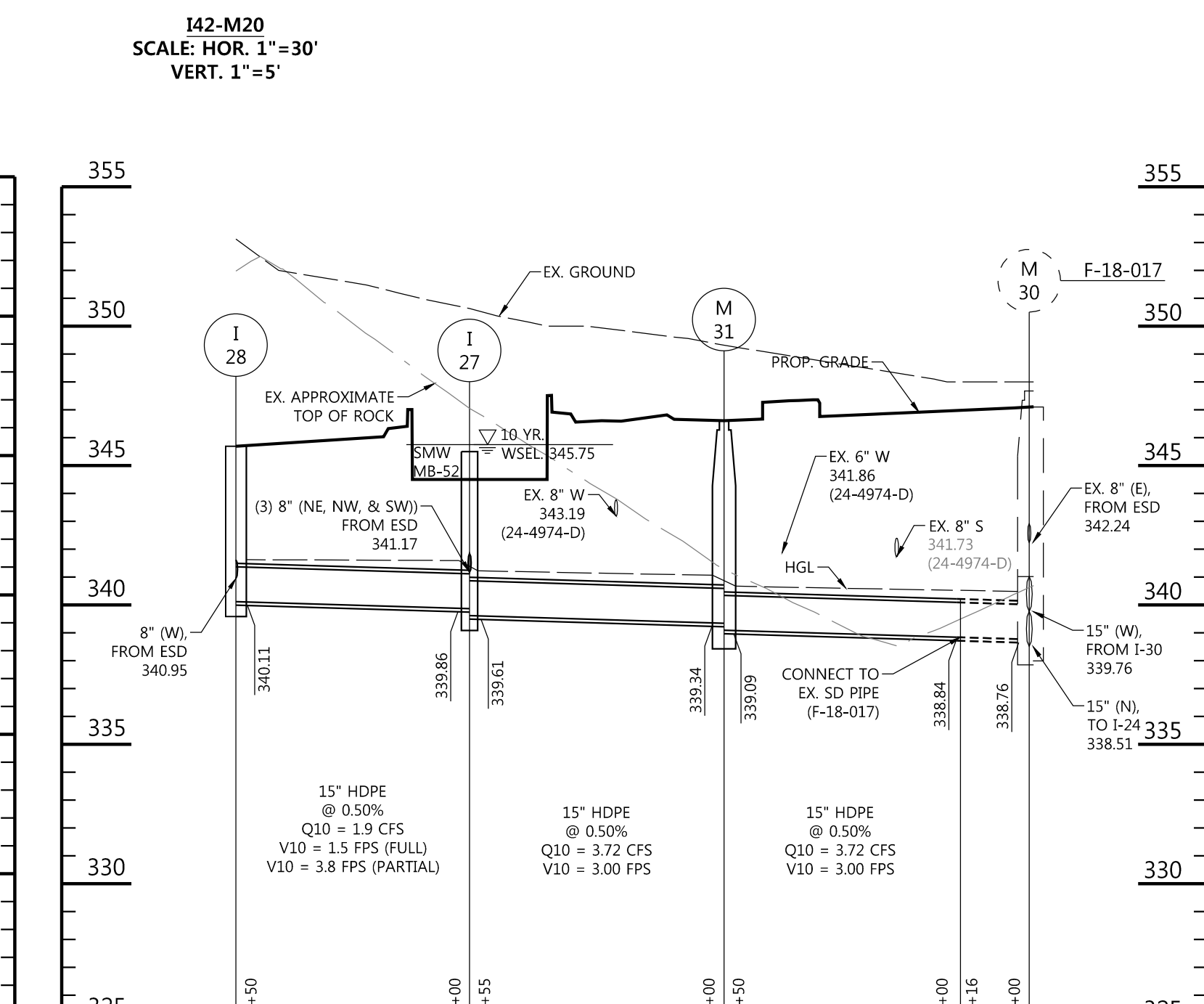
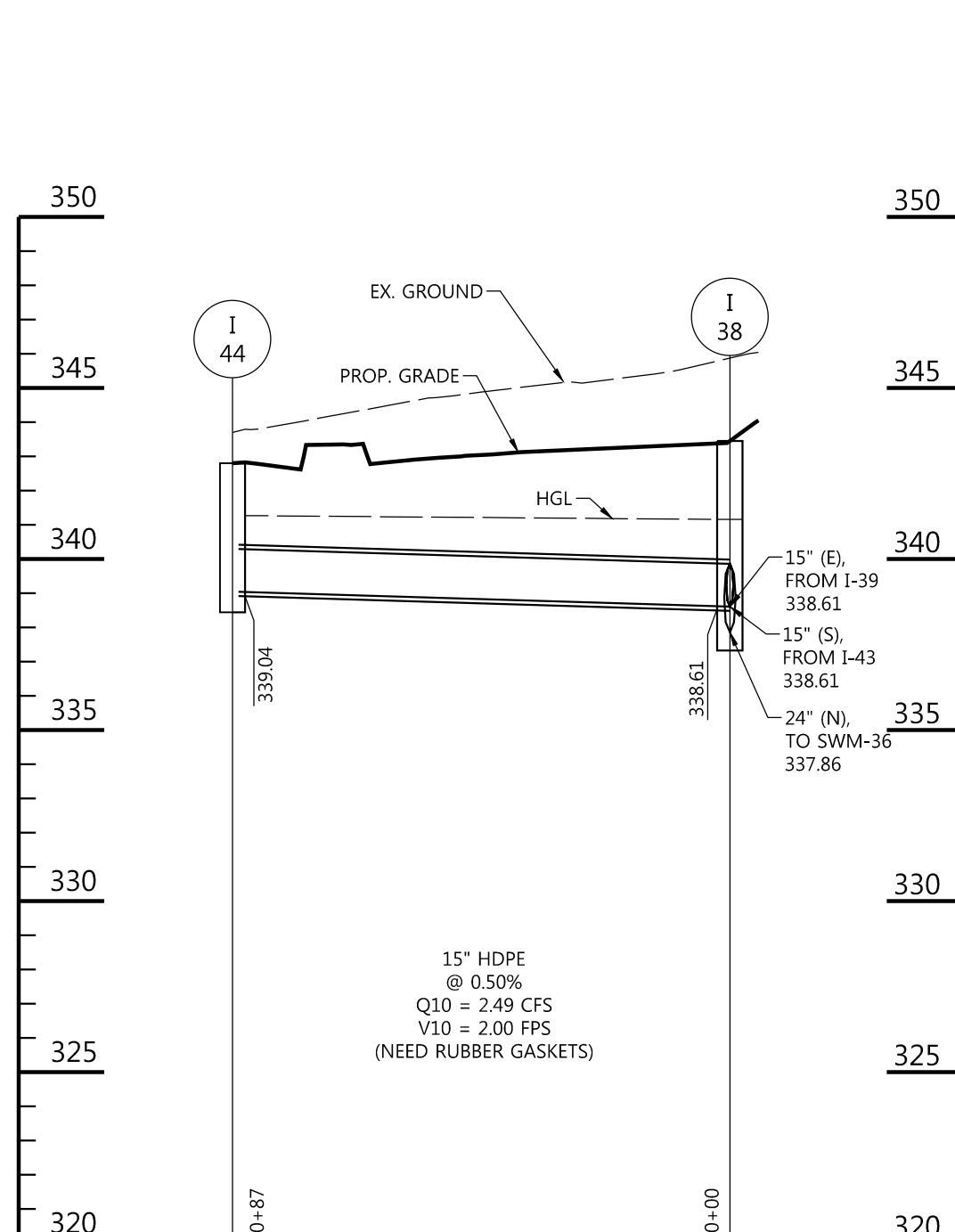
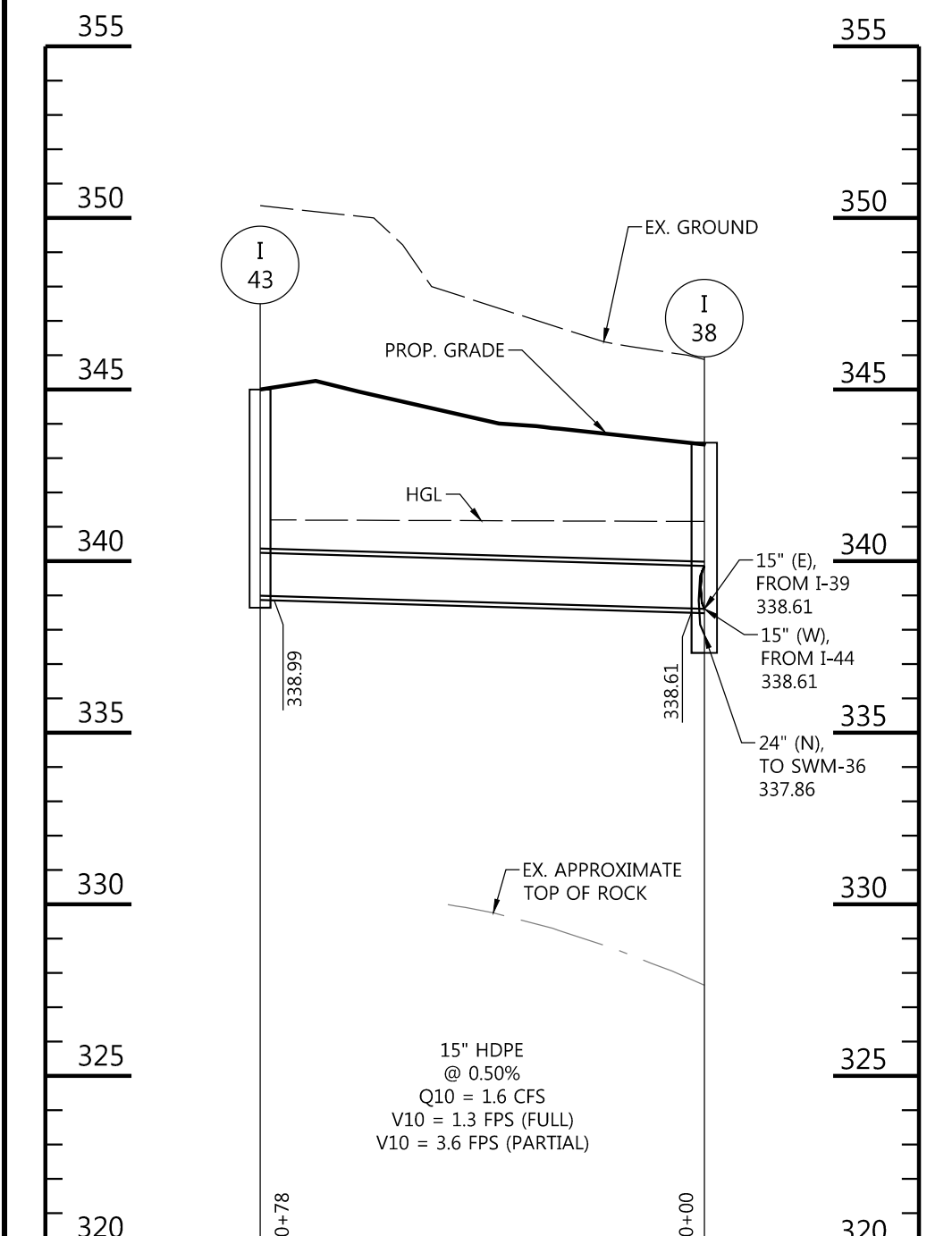
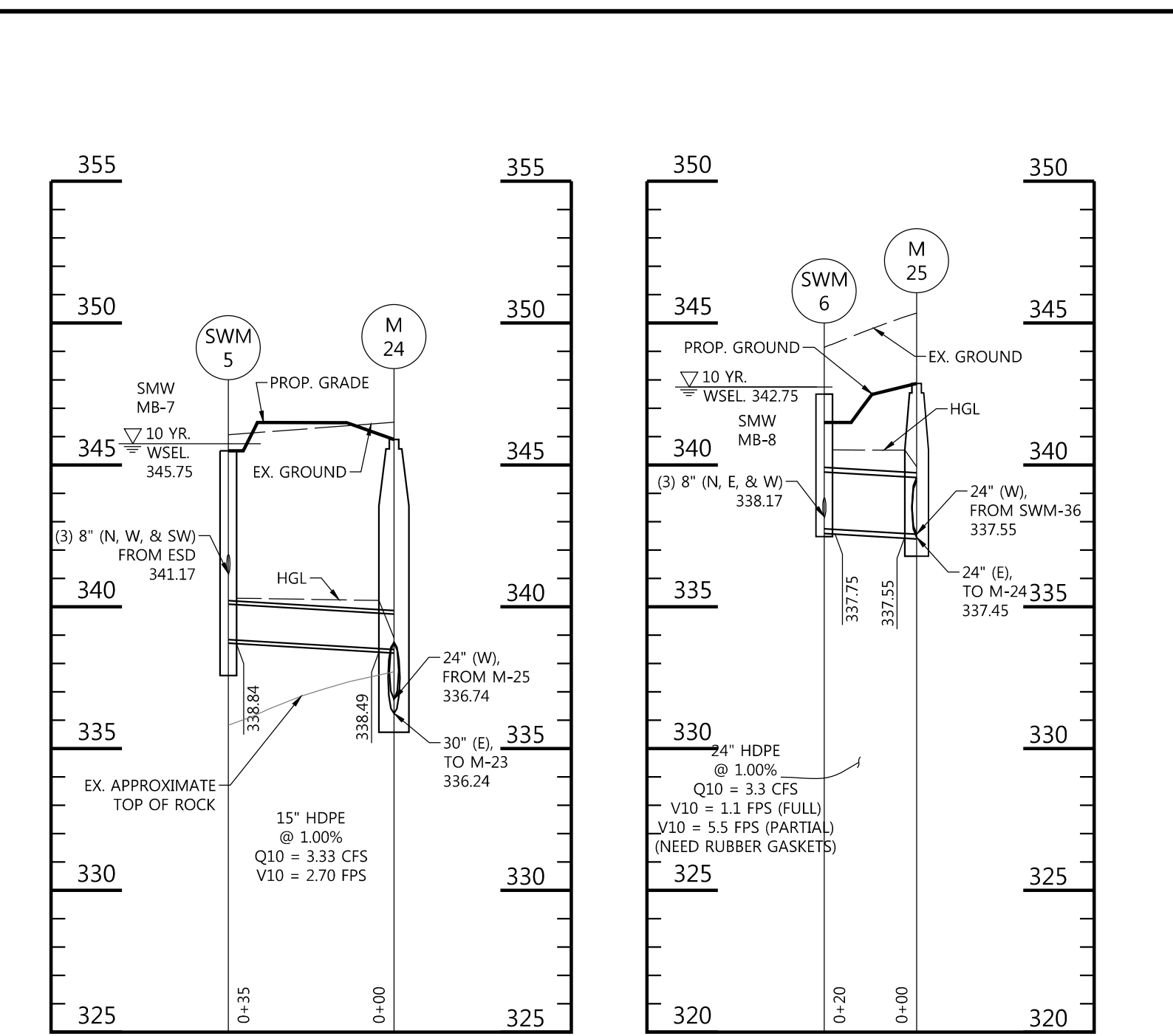
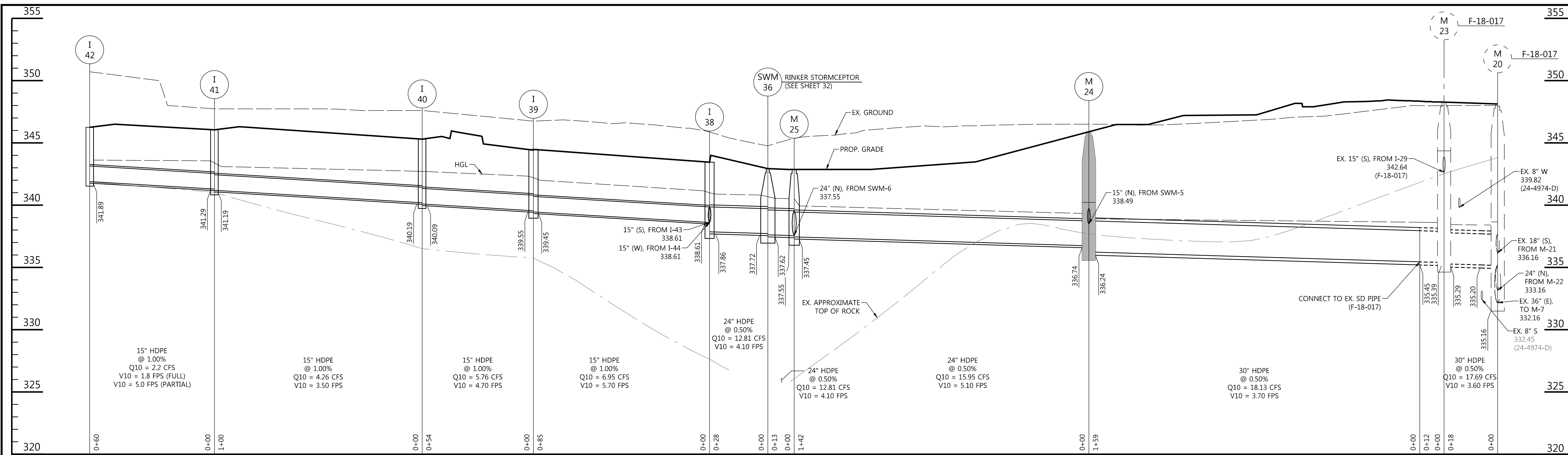
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE

04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	No.
Revision Description	
<b>DOWNTOWN COLUMBIA</b>	
<b>CRESCENT NEIGHBORHOOD</b>	
<b>PHASE I AREA 3, PHASE 2</b>	
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13	
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING	
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
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD
PARCEL #	PARCEL D
DATE FOR SET	7/1/19
REVISION	36
TAX ZONING MAP	5
ELECT. DISTRICT	605602
WATER CODE	SSD
SEWER CODE	LITTLE PATUXENT
STAGE	1
TITLE	
<b>STORM DRAIN</b>	
<b>DRAINAGE AREA MAP</b>	
REVISED SITE DEVELOPMENT PLAN	
Des. By	GDT/DM
SCALE	AS SHOWN
Proj. No.	04038.B0
Drn. By	MCJ
Date	02/15/19
Chk. By	MCB
Approved	MCB
20 of 77	









**NOTE**  
CONTRACTOR TO NOTIFY STRUCTURAL ENGINEER IF THERE ARE ANY CONFLICTS WITH THE (M-6) MODULAR WALLS/FOOTINGS AND ADJACENT STORM DRAIN PIPES AND STRUCTURES.

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

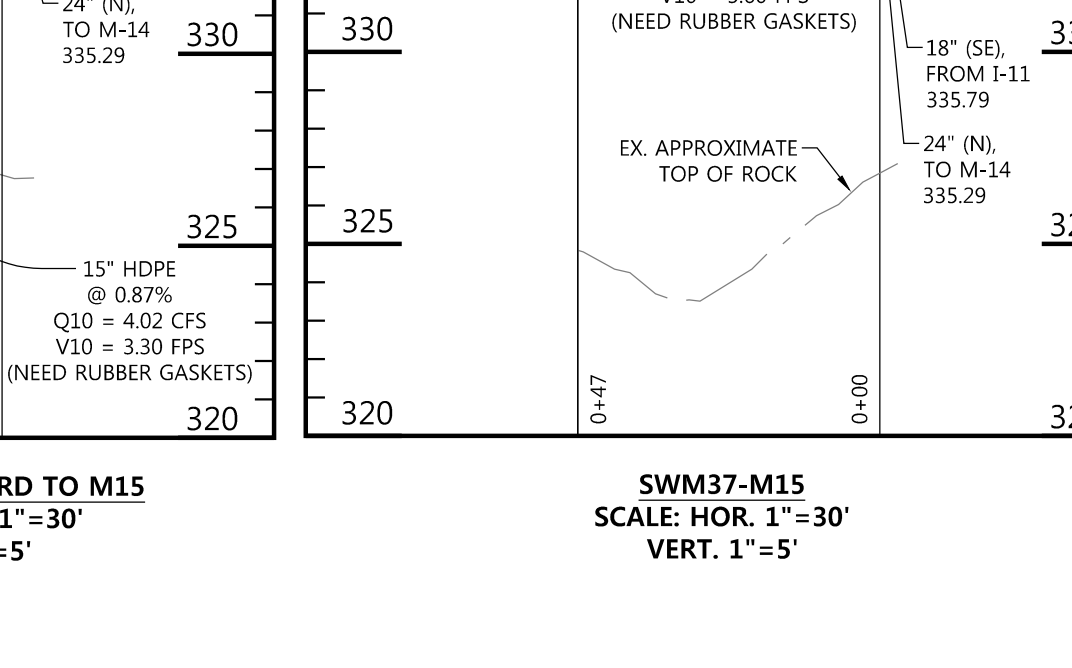
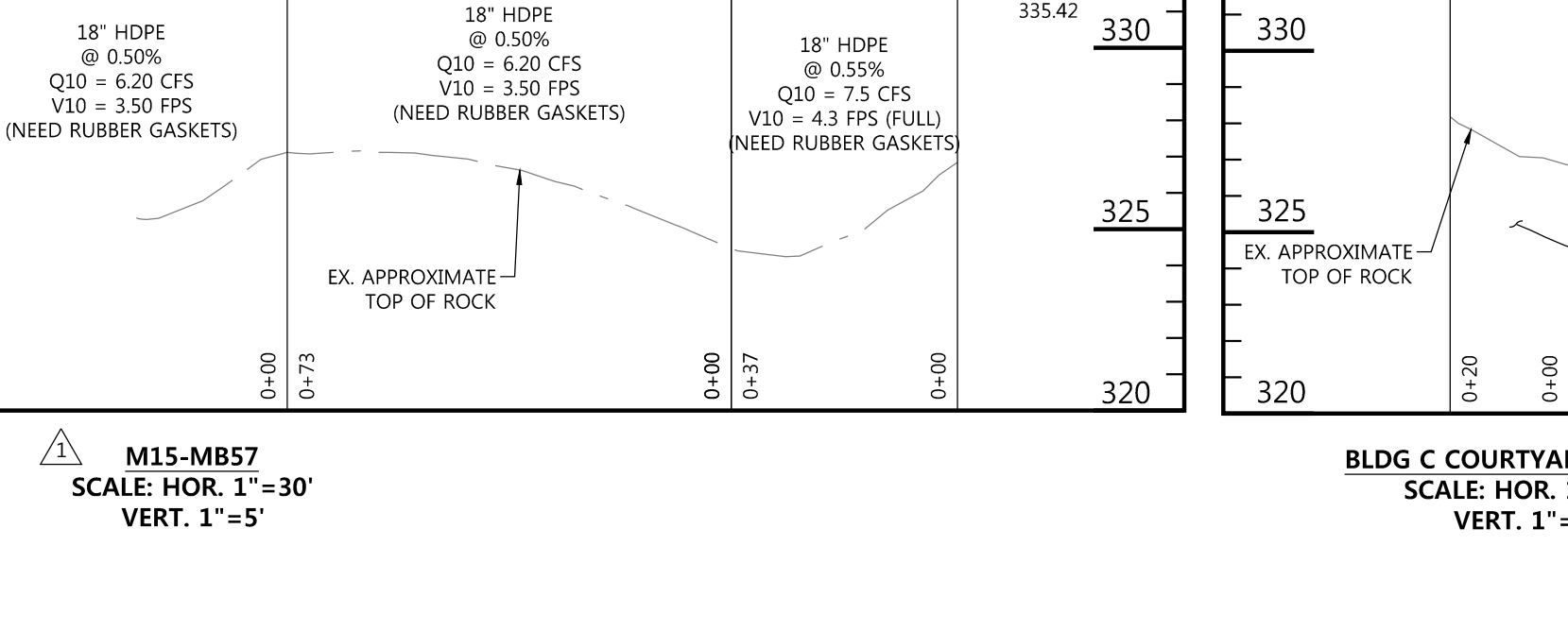
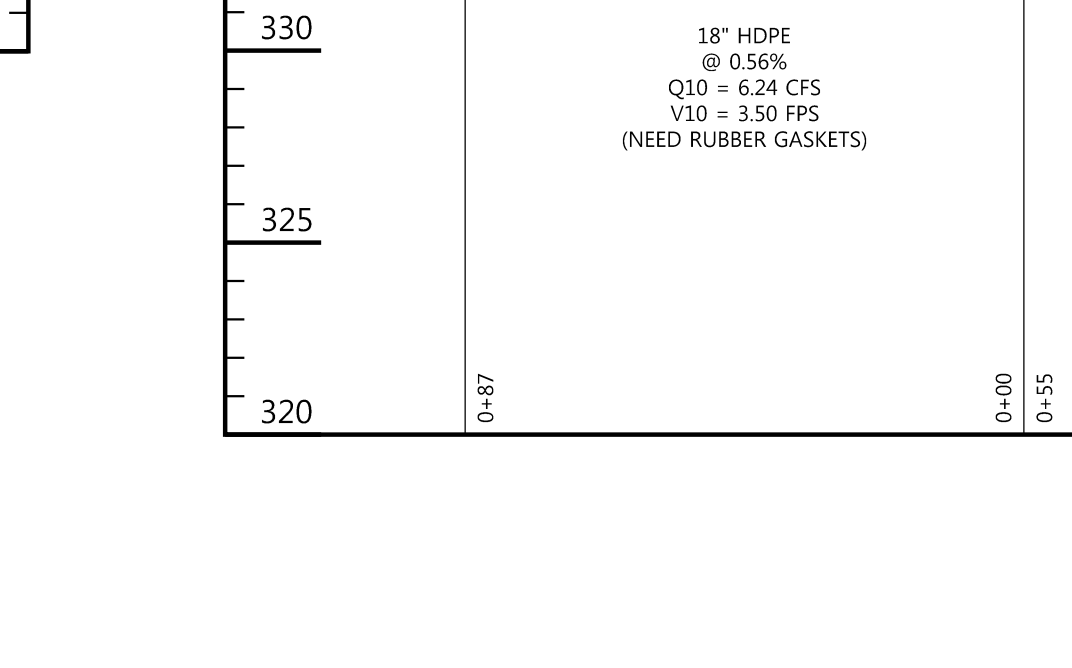
ACD POWERDRAIN S3000 OR APPROVED EQUAL

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

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DATE: \_\_\_\_\_

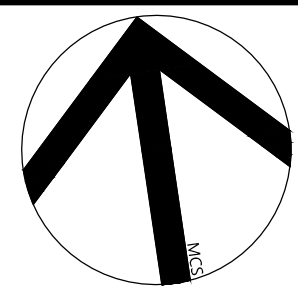
PROFESSIONAL ENGR. NO. \_\_\_\_\_

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_

DATE	04/19/19	REVISION	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	By	Description	Revision
<b>DOWNTOWN COLUMBIA</b>			
<b>CRESCENT NEIGHBORHOOD</b>			
<b>PHASE I AREA 3, PHASE 2</b>			
<b>PARCELS D-1, D-7, D-8, D-9,</b>			
<b>D-11, D-12 AND D-13</b>			
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING			
<b>OWNER / DEVELOPER:</b>			
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION			
COLUMBIA REGIONAL OFFICE			
10480 LITTLE PATUXENT PARKWAY SUITE 400			
COLUMBIA, MD 21044			
410-964-4800			
DAFT MCCUNE WALKER INC			
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286		P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBMISSION NAME	DOWNTOWN COLUMBIA	SECTION/AREA	NEIGHBORHOOD PHASE 1 AREA 3
DATE FOR PLAN	04/18/19	TAX ZONING/MAP	5
WATER CODE	SSD	SEWER CODE	LITTLE PATUXENT
TITLE	STORM DRAIN PROFILES		
Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	MCJ	Date	02/15/19
Chk. By	MCB	Approved	MCB

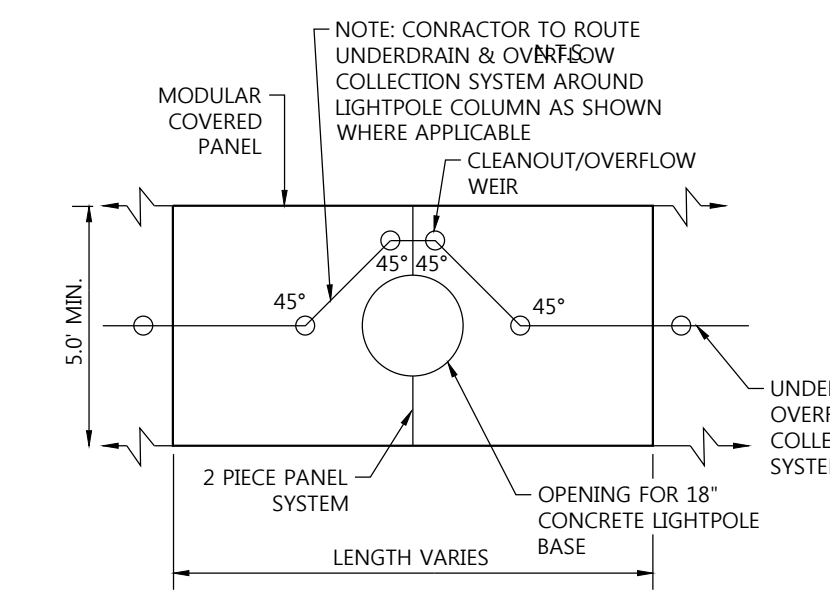




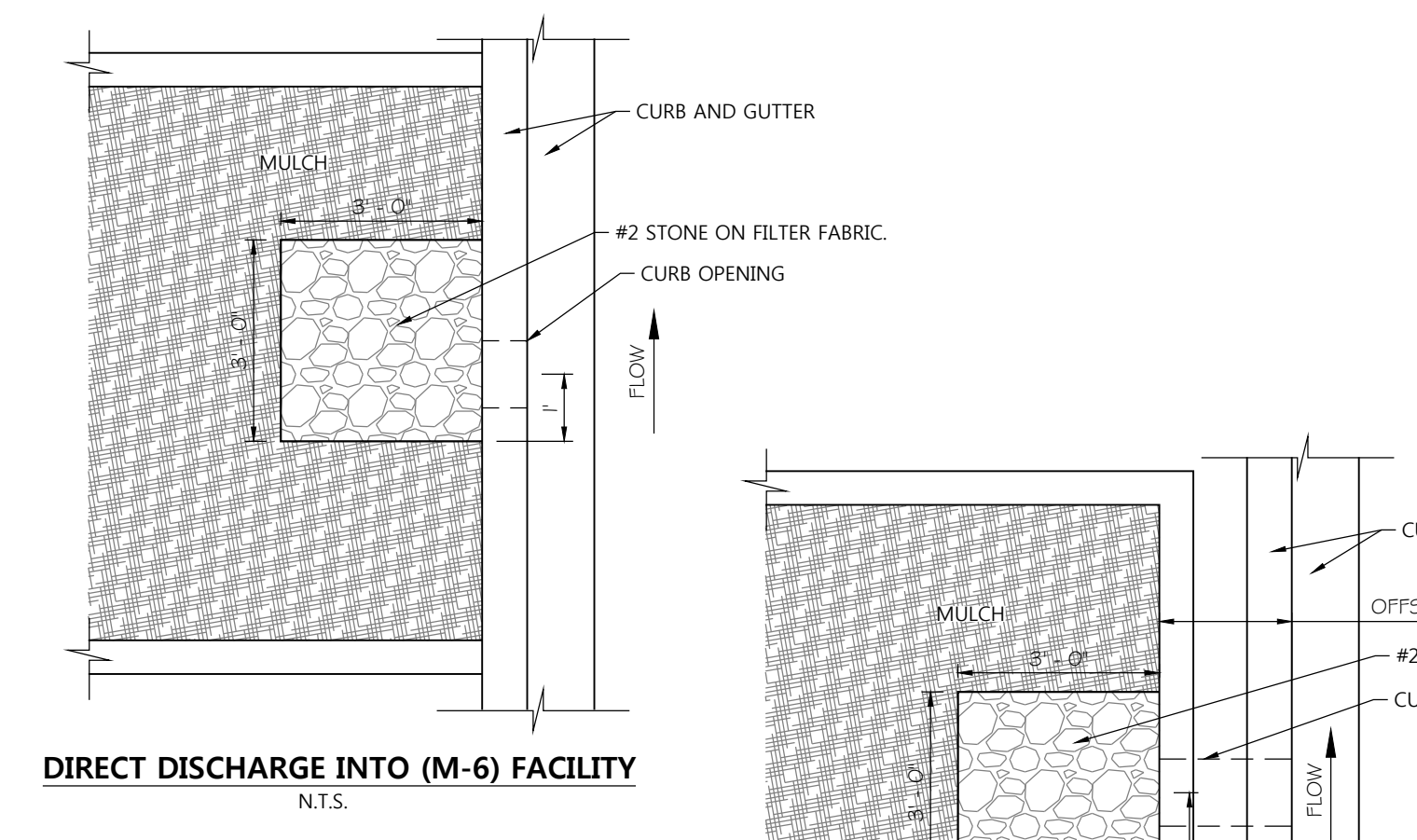
LEGEND

- 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 CPv2

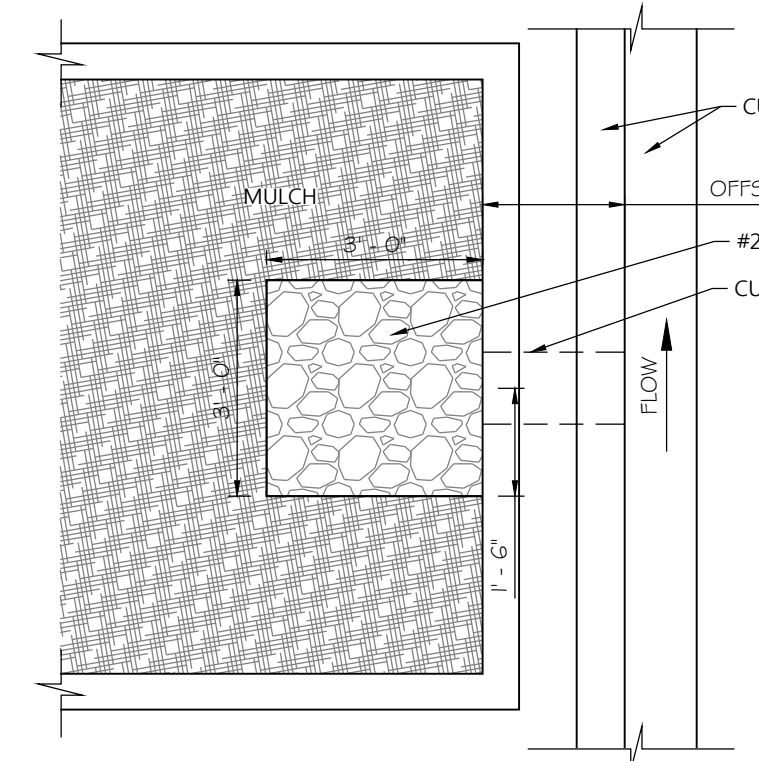
- PROP STREET LIGHT
- FIRE HYDRANT



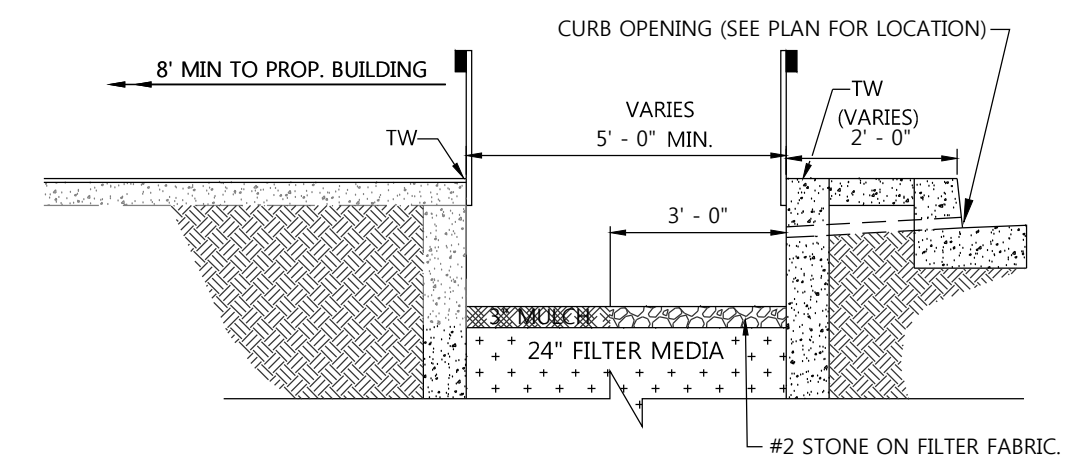
(M-6) MODULAR SWM FACILITY'S COVERED PANEL W/ LIGHTPOLE DETAIL  
NOT TO SCALE



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

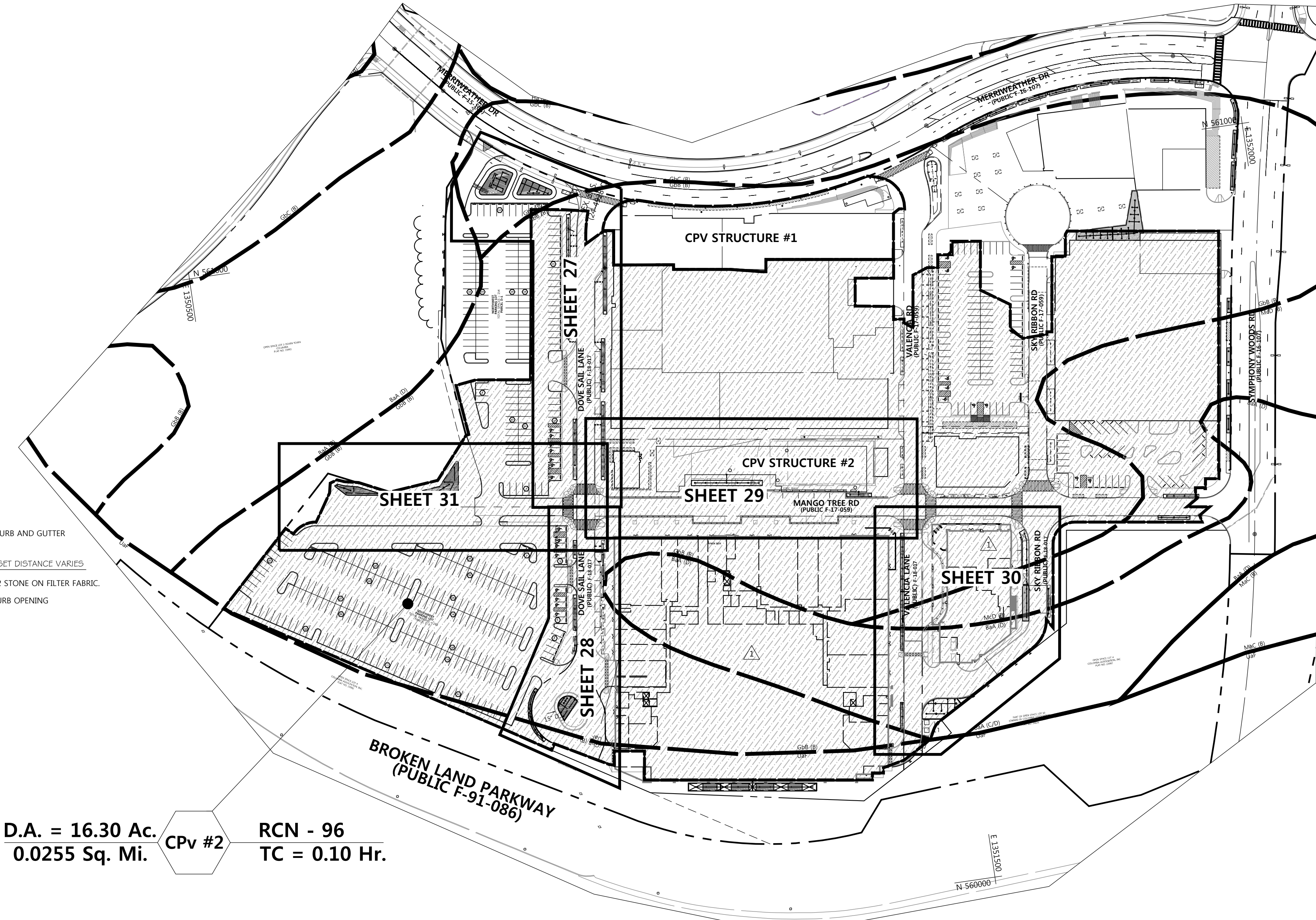


OFFSET DISCHARGE INTO (M-6) FACILITY  
N.T.S.

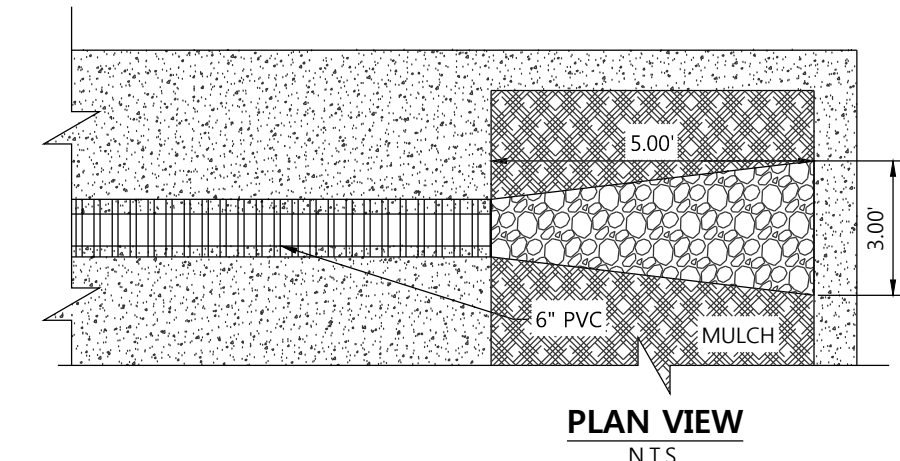
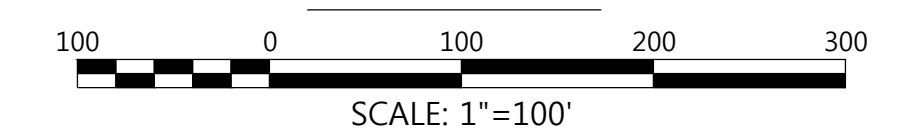


CURB OPENING DETAIL  
N.T.S.

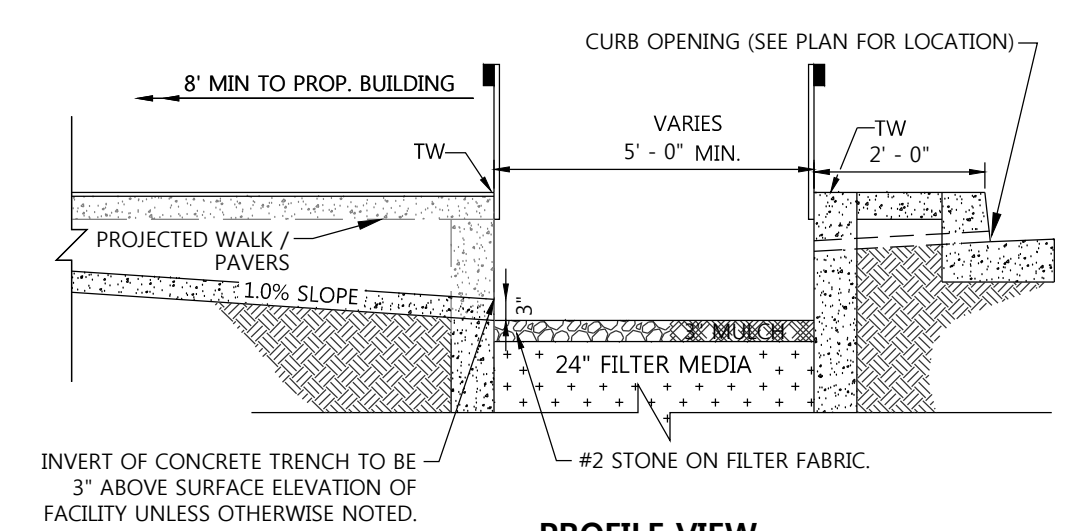
D.A. = 16.30 Ac.  
0.0255 Sq. Mi. CPv #2 RCN - 96  
TC = 0.10 Hr.



PLAN VIEW

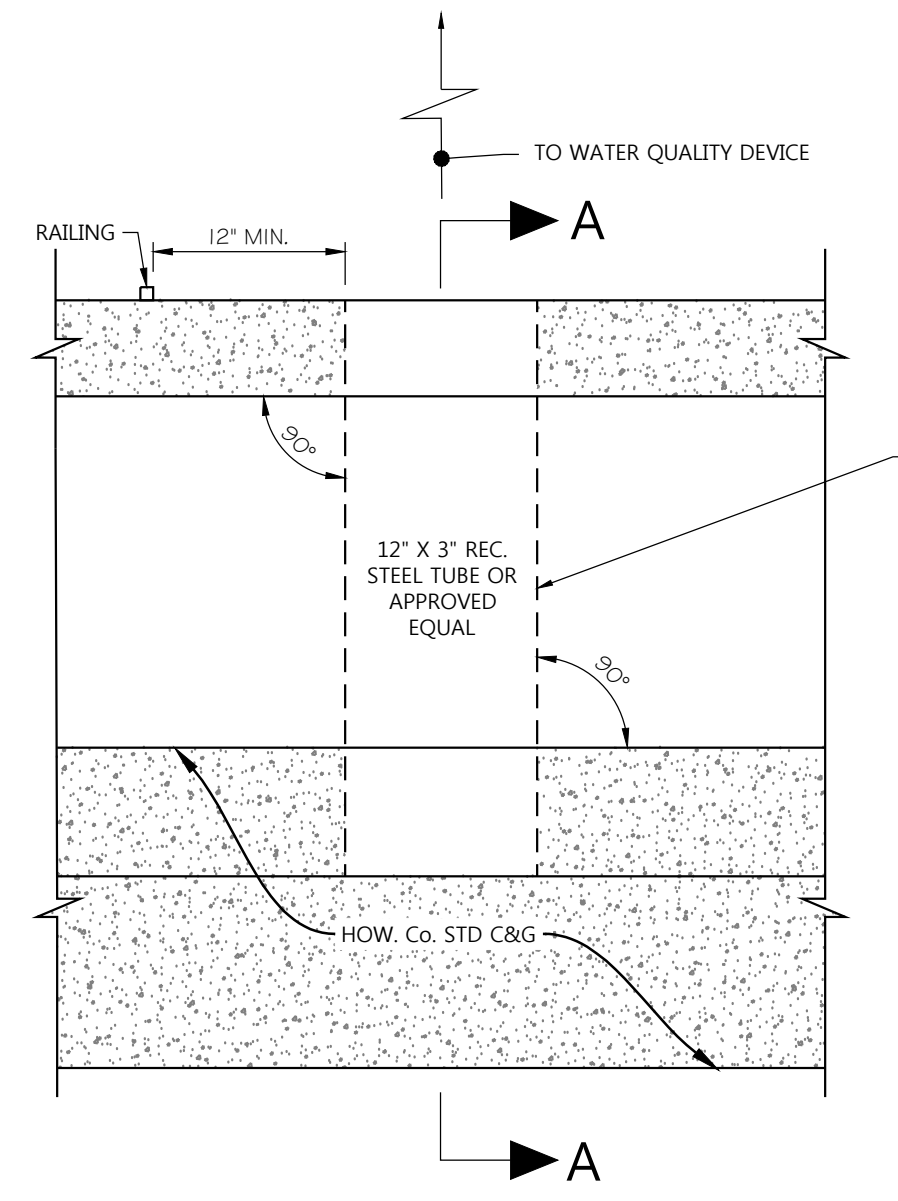


PLAN VIEW  
N.T.S.

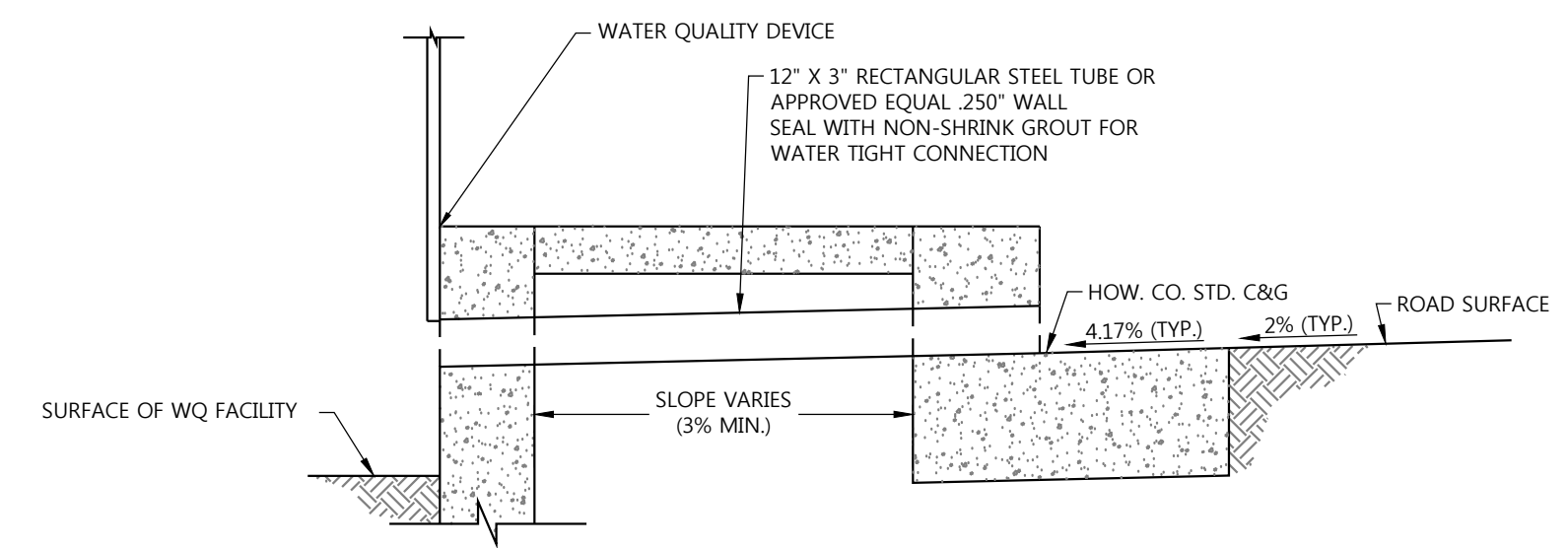


PROFILE VIEW  
N.T.S.

ROOF DRAIN INFLOW PROTECTION DETAIL



SECTION A-A  
N.T.S.



SECTION A-A  
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-CRESCENT-1, FDP-DC-CRESCENT-1A, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

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PROFESSIONAL ENGR. NO. 16928  
DATE: 05/31/19

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: \_\_\_\_\_

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Date	No.
Revision Description	
<b>DOWNTOWN COLUMBIA</b>	
<b>CRESCENT NEIGHBORHOOD</b>	
<b>PHASE I AREA 3, PHASE 2</b>	
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13	
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DAFT MCUNE WALKER INC	
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
SUBDIVISION NAME	SECTION
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD PHASE I AREA 3
PARCEL #	LOT/PARCEL #
2481-2482	5
605602	605602
WATER CODE	SEWER CODE
S50	LITTLE PATUXENT
TITLE	
STORMWATER MANAGEMENT KEY SHEET	
(CPv) CHANNEL PROTECTION DRAINAGE AREA MAP	
REVISED SITE DEVELOPMENT PLAN	
Des. By	GDT/DM
Drn. By	MCJ
Chk. By	MCB
SCALE AS SHOWN	Proj. No. 04038.B0
Date	02/15/19
Approved	MCB
25 of 77	

ESD TYPES: (M-6) MICRO-BIORETENTION			
(M-6)-DA 1 Facility MB1	Drainage Area: SWM1 WQv = 1,160 s.f. Surface Area AI = 1,293 c.f. Treated 18,551 s.f. Treated	Required WQv PE: 1.00 inches Provided WQv PE: 1.16 inches	
(M-6)-DA 2 Facility MB2	Drainage Area: SWM2 WQv = 928 s.f. Surface Area AI = 1,172 c.f. Treated 18,041 s.f. Treated	Required WQv PE: 1.00 inches Provided WQv PE: 1.08 inches	
(M-6)-DA 5 Facility MB7	Drainage Area: SWM5 WQv = 1,343 s.f. Surface Area AI = 1,594 c.f. Treated 18,041 s.f. Treated	Required WQv PE: 1.00 inches Provided WQv PE: 1.55 inches	
(M-6)-DA 6 Facility MB8	Drainage Area: SWM6 WQv = 775 s.f. Surface Area AI = 959 c.f. Treated 13,690 s.f. Treated	Required WQv PE: 1.00 inches Provided WQv PE: 1.16 inches	
(M-6)-DA 7a Facility MB51	Drainage Area: SWM7a WQv = 400 s.f. Surface Area AI = 533 c.f. Treated 7,518 s.f. Treated	Required WQv PE: 1.00 inches Provided WQv PE: 1.18 inches	
(M-6)-DA 8 Facility MB52	Drainage Area: SWM8 WQv = 528 s.f. Surface Area AI = 704 c.f. Treated 10,076 s.f. Treated	Required WQv PE: 1.00 inches Provided WQv PE: 1.16 inches	
(M-6)-DA 9a, 10 & 17 Facility MB56 & MB57	Drainage Area: SWM9a, 10 & 17 WQv = 2,400 s.f. Surface Area AI = 2,400 c.f. Treated 37,000 s.f. Treated	Required WQv PE: 1.00 inches Provided WQv PE: 1.08 inches	
(M-6)-DA 20 Facility MB64	Drainage Area: SWM20 WQv = 450 s.f. Surface Area AI = 630 c.f. Treated 10,384 s.f. Treated	Required WQv PE: 1.00 inches Provided WQv PE: 1.01 inches	

NOTE: SWM-15 WQV NOT REQUIRED. AREA OF 23,982 S.F. BYPASSES TO CPV.

ESD TYPES: (M-6) MICRO-BIORETENTION - STORMCEPTORS			
Stormceptor #1: PRIVATE SDP-18-005	Drainage Area: SWM36 WQv = 3,308 c.f. Treated AI = 41,787 s.f. Treated	Required WQv PE: 1.00 inches Provided WQv PE: 1.00 inches	
Stormceptor #2: PRIVATE SDP-18-005	Drainage Area: SWM37 WQv = 3,251 c.f. Treated AI = 41,067 s.f. Treated	Required WQv PE: 1.00 inches Provided WQv PE: 1.00 inches	



(M-6) MODULAR MICRO-BIORETENTION 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. 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.

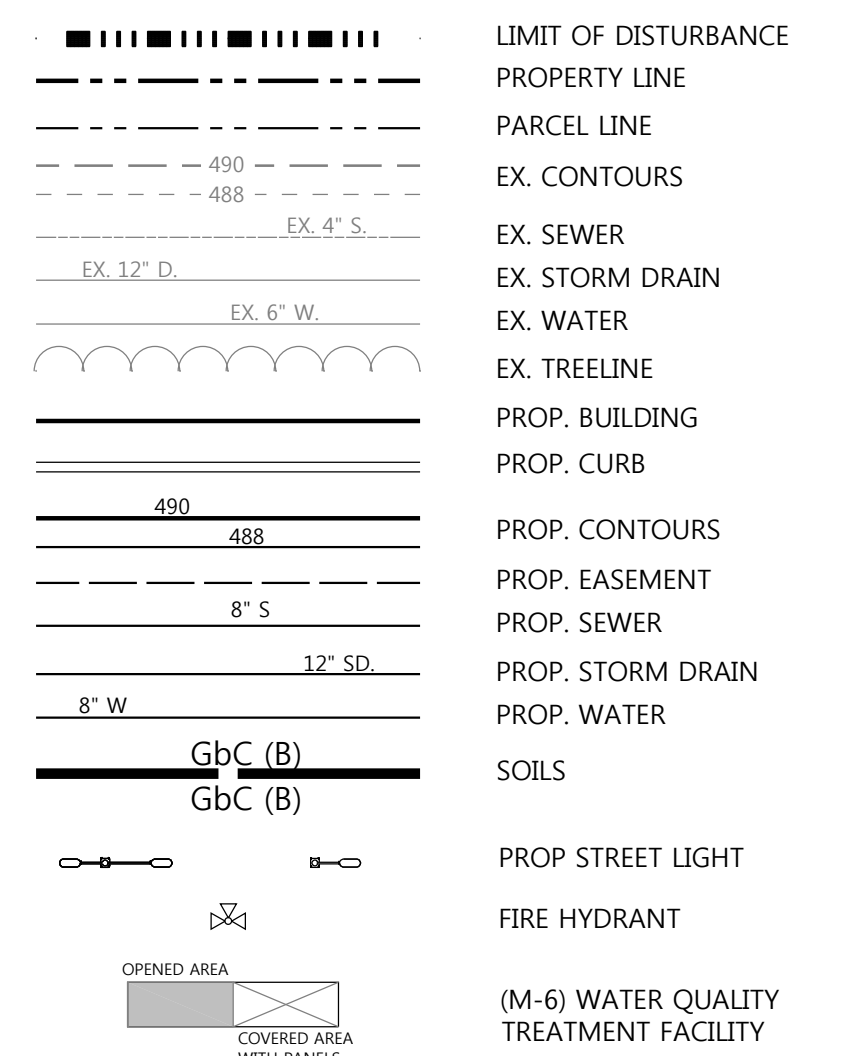
(M-6) STANDARD MICRO-BIORETENTION SEQUENCE OF CONSTRUCTION

- 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, PLACE REQUIRED DEPTH OF GRAVEL JACKET OF NO.57 OR NO. 6 AGGREGATE IN BOTTOM OF EXCAVATION UP TO INVERT OF UNDERDRAIN & OVERFLOW PIPES.
- PLACE 3" WIDE STRIPS OF FILTER FABRIC DOWN ON 3" GRAVEL LAYER TO SUPPORT UNDERDRAIN SYSTEM. PLACE UNDERDRAINS IN CENTER OF FABRIC & TIE PIPES TO INLET WALLS AT THEIR PRESCRIBED INVERT ELEVATIONS.
- PLACE REMAINDER (10") OF THE 20" GRAVEL JACKET. 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 INFLOW POINTS.
- SEED OR SOD 3:1 SIDE SLOPES. ADD 3" MULCH 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 NOTED OTHERWISE.	SLOTTED OR PERFORATED PIPE: 3/8" PERF. @ 6", 6 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4-INCH GALVANIZED HARDWARE CLOTH
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



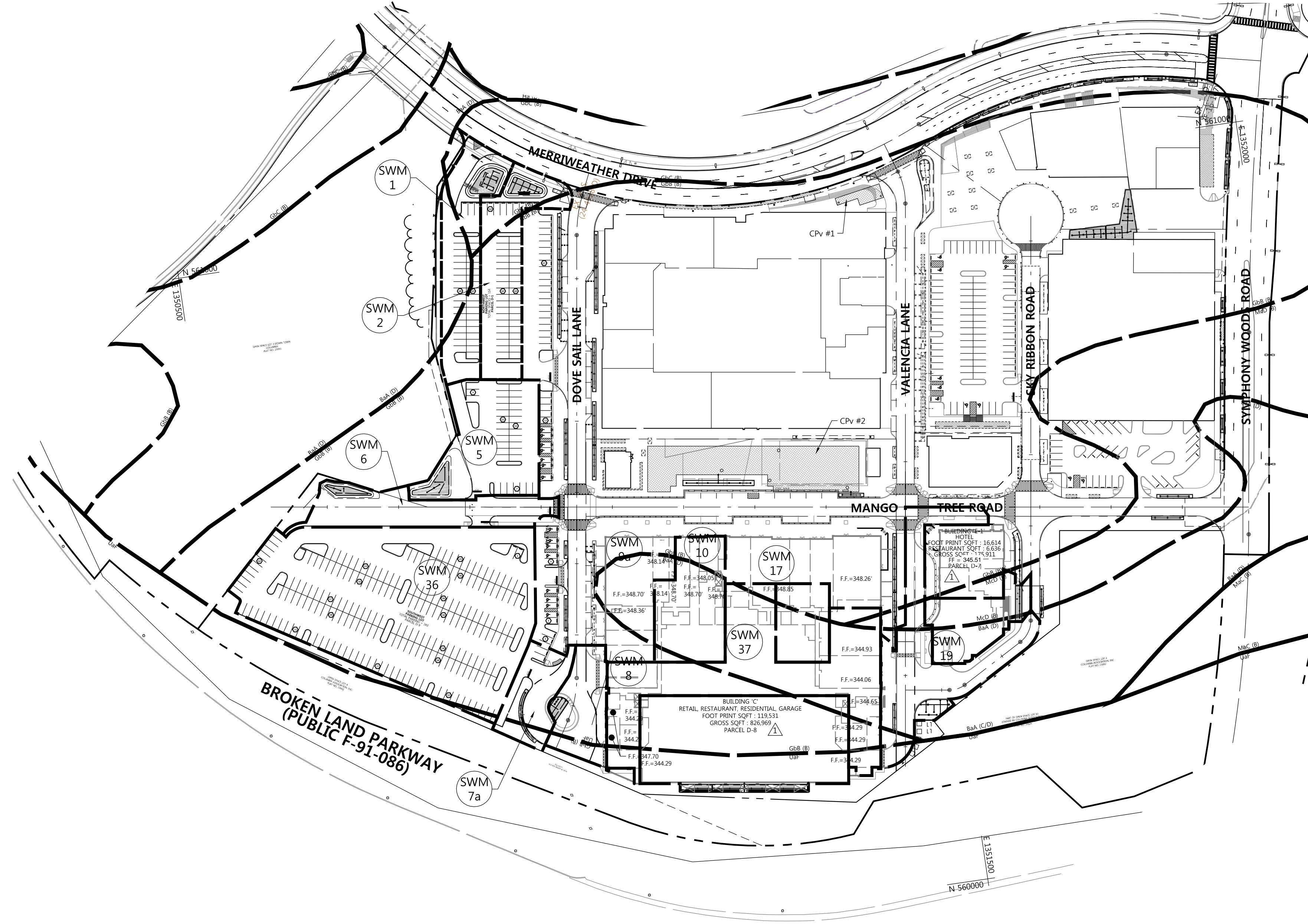
OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

- 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-4.1 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.

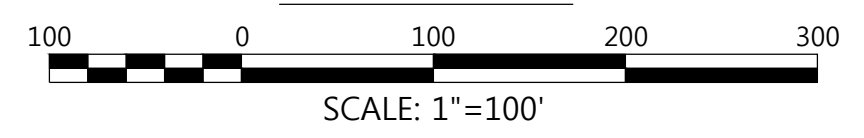
- NOTE:
- THE (M-6) MICRO-BIORETENTION FACILITIES SHOWN ON THESE PLANS WILL BE PRIVATELY OWNED AND MAINTAINED.
  - (REV) GROUNDWATER RECHARGE VOLUME AND (CPV) CHANNEL PROTECTION VOLUME MANAGEMENT ARE BEING PROVIDED IN SDP-17-027.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE



PLAN VIEW



**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

**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: 05/31/20

05/31/19  
DATE

PROFESSIONAL ENGR. NO. 16928

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY

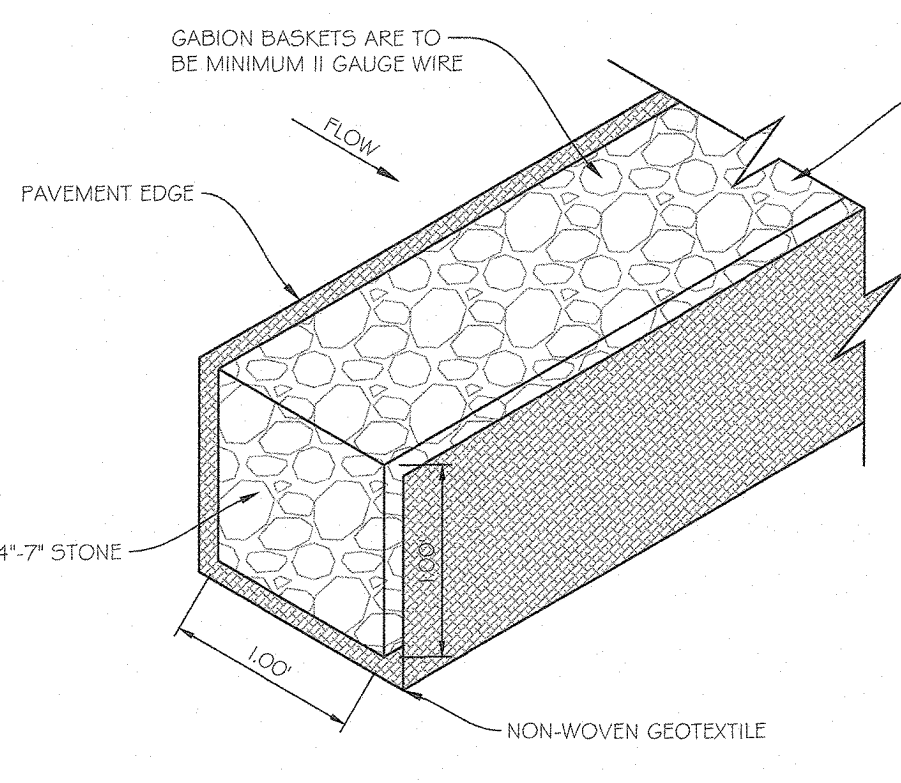
DATE: \_\_\_\_\_

04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL		
Date	No.		
Revision Description			
<b>DOWNTOWN COLUMBIA</b>			
<b>CRESCENT NEIGHBORHOOD</b>			
<b>PHASE 1 AREA 3, PHASE 2</b>			
<b>PARCELS D-1, D-7, D-8, D-9,</b>			
<b>D-11, D-12 AND D-13</b>			
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING			
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	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE 1	CRESCENT NEIGHBORHOOD	PARCEL D
DATE OF MAP	REVISION	TAX ZONING MAP	ELECT. DISTRICT
04/15/19	7	36	5
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			1
TITLE <b>(WQV) STORMWATER MANAGEMENT DRAINAGE AREA MAP &amp; O&amp;M</b>			
REVISED SITE DEVELOPMENT PLAN			
Des. By	GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	MCJ	Date 02/15/19	
Chk. By	MCB	Approved MCB	26 of 77

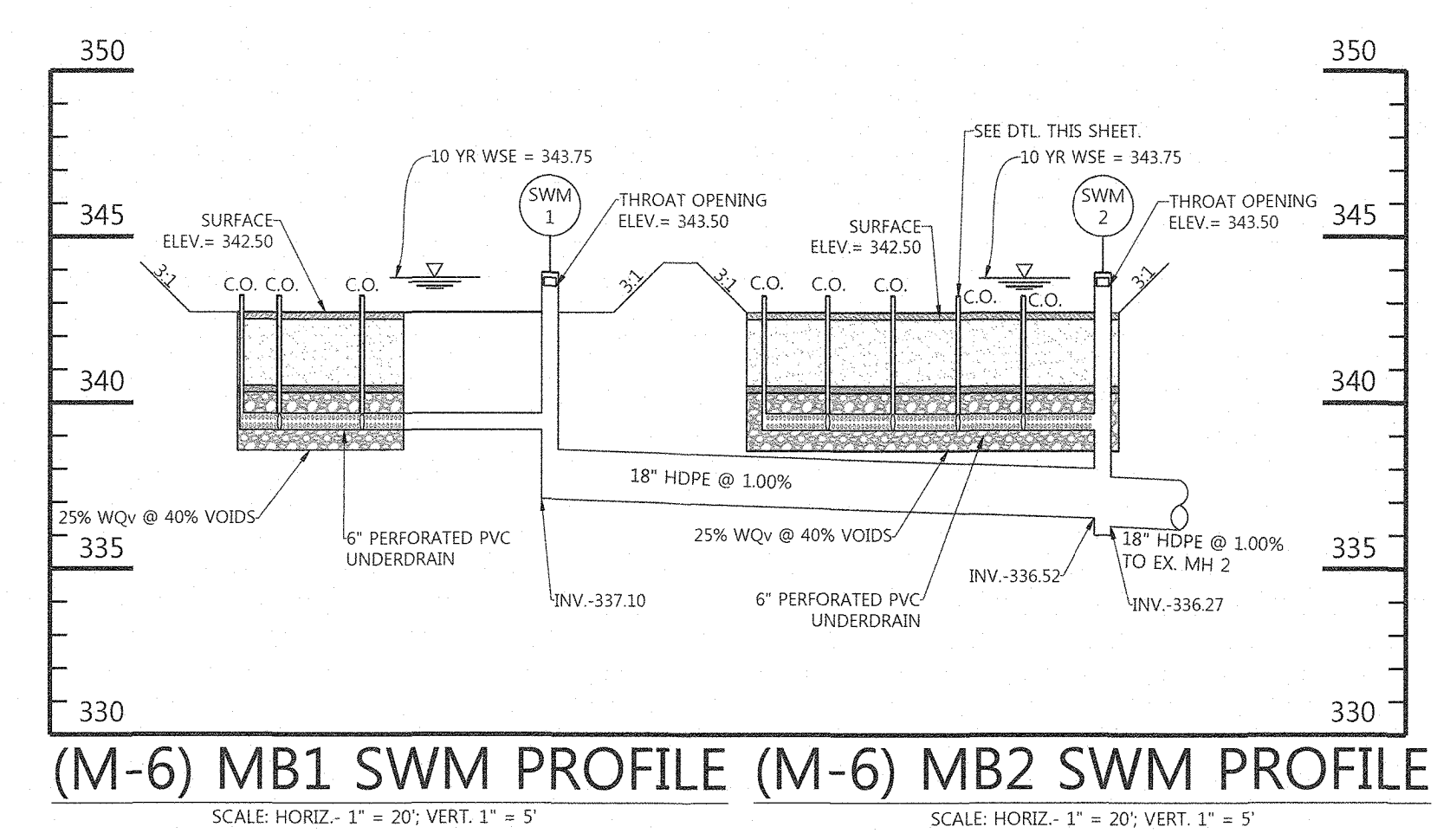
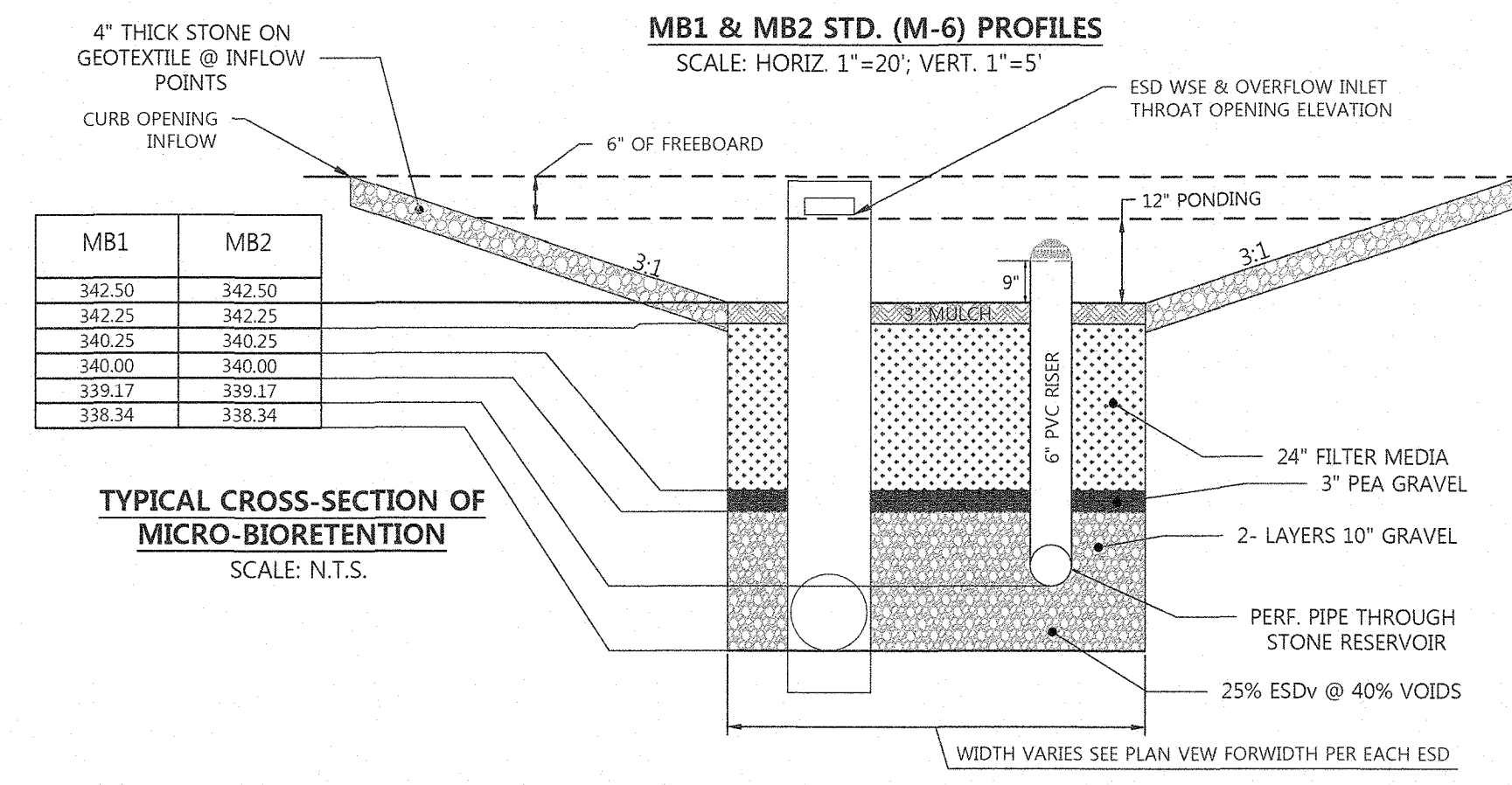
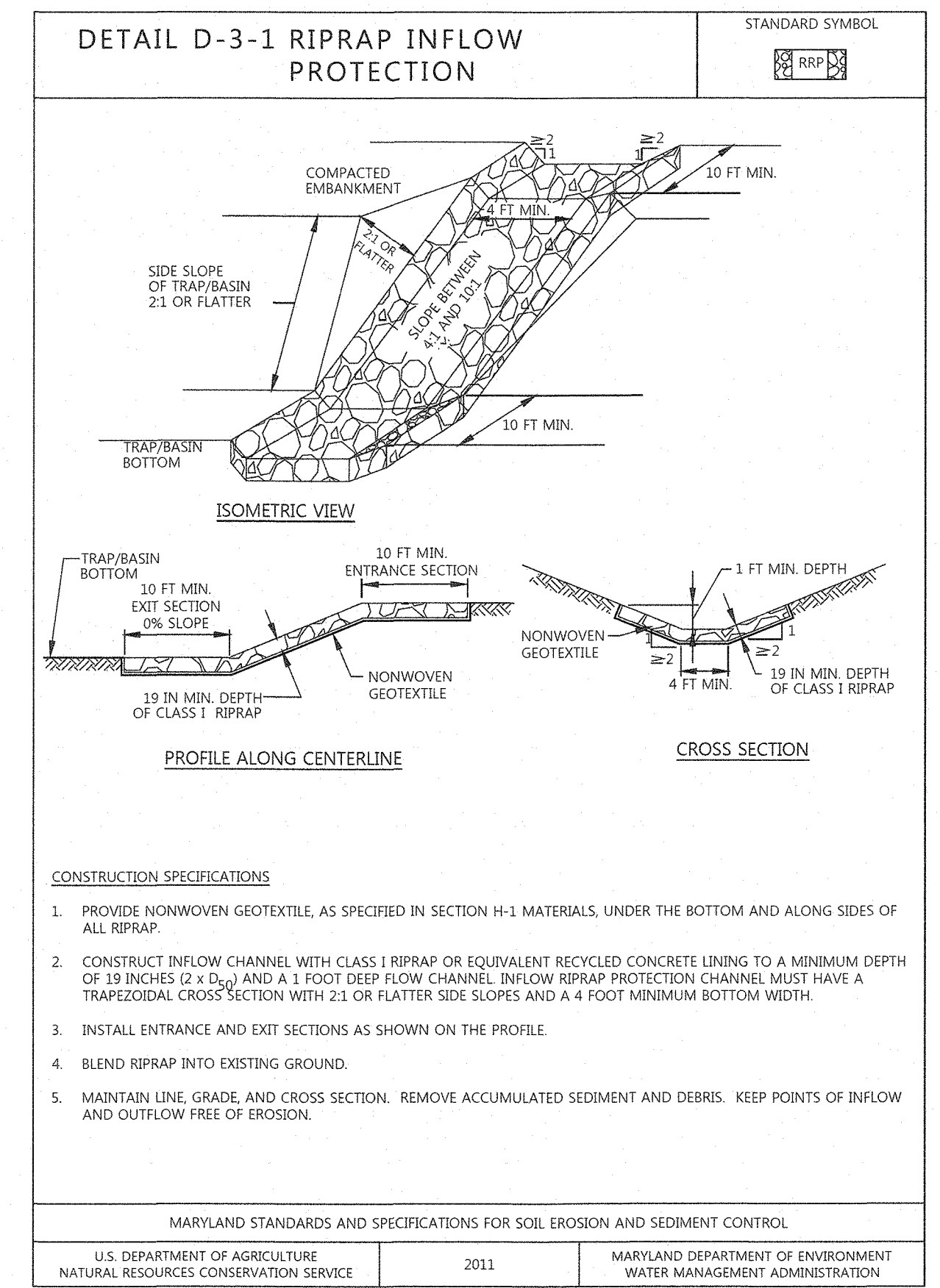
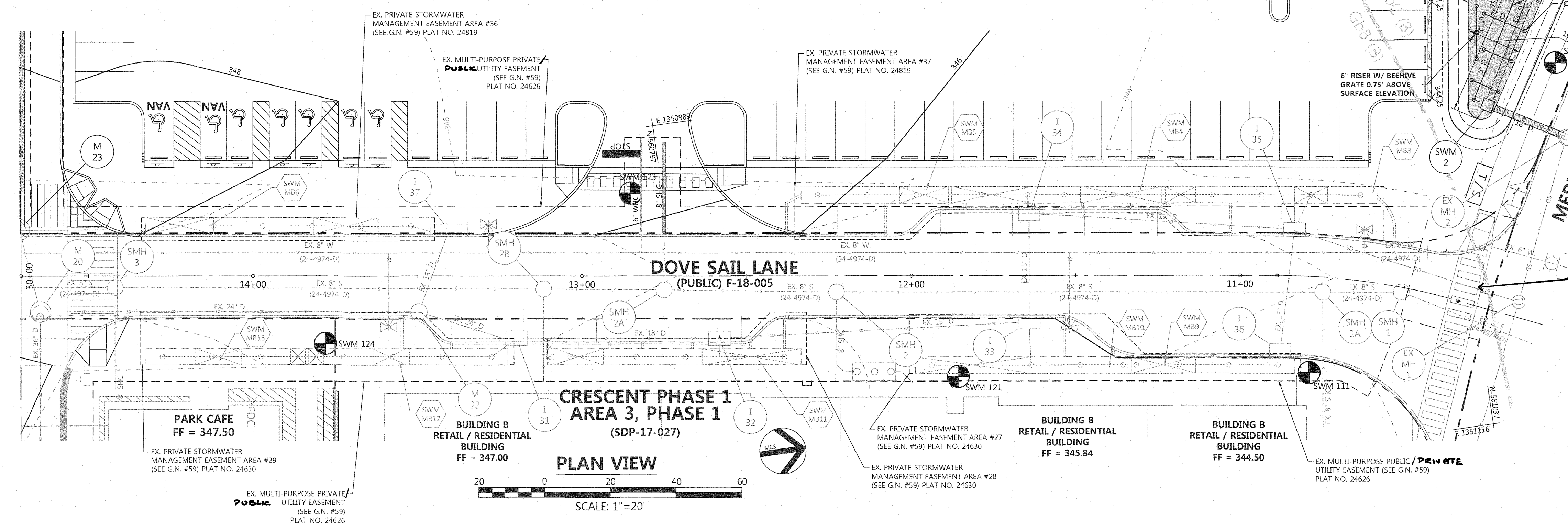
**LEGEND**

- 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 STREET LIGHT
- FIRE HYDRANT
- (M-6) WATER QUALITY TREATMENT FACILITY
- SOIL BORING

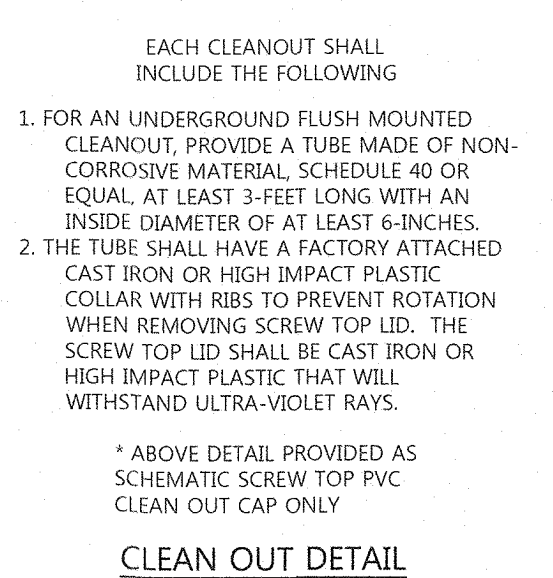
**NOTE**  
CONTRACTOR TO NOTIFY STRUCTURAL ENGINEER IF THERE ARE ANY CONFLICTS WITH THE (M-6) MODULAR WALLS/FOOTINGS AND ADJACENT STORM DRAIN PIPES AND STRUCTURES.



**GABION ENERGY DISSIPATOR**  
N.T.S.



- NOTE:**
- FOR DETAIL ON THE COVER OVER THE WATER QUALITY FACILITIES SEE HARDSCAPE PLANS.
  - SEE STRUCTURAL SHEET 65 FOR MODULAR (M-6) FACILITY AND SUPPORT DETAIL OF SWM HARDSCAPE PANEL.
  - ESD MODULAR (M-6) FACILITIES ARE 5' WIDTH UNLESS OTHER WISE NOTED. SEE ESD PROFILES FOR LENGTH.
  - REFER TO STORMWATER MANAGEMENT SHEET 26 FOR STANDARD MODULAR (M-6) FACILITY MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION AND OPERATION & MAINTENANCE SCHEDULES.
  - SEE GENERAL NOTE #59 REGARDING EASEMENTS



**APPROVED:** HOWARD COUNTY DEPT. OF PLANNING & ZONING

*Chad Smith* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*Kevin Devel* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT

*Nancy J. Jolin* 4-24-19  
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-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A, SDP 17-027, F 17-057, F18-017, WP-18-089, WP-18-105.

**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. 16569, EXPIRATION DATE: 7-18-19

2-18-19  
DATE

PROFESSIONAL ENGR. NO. 26560

Date	No.	Revision Description

**DOWNTOWN COLUMBIA**  
**CRESCENT NEIGHBORHOOD**  
**PHASE 1 AREA 3, PHASE 2**  
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13  
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING

OWNER / DEVELOPER:  
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
COLUMBIA REGIONAL OFFICE  
10480 LITTLE PATUXENT PARKWAY SUITE 400  
COLUMBIA, MD 21094  
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

PLAT OR LOT	BLOCK	TAX ZONING	TRACT	RECORD DISTRICT	CENSUS TRACT	PARCEL D
24-4931-D	7	INDV	36	5	605602	

WATER CODE: 550  
SEWER CODE: LITTLE PATUXENT  
STAGE: 1

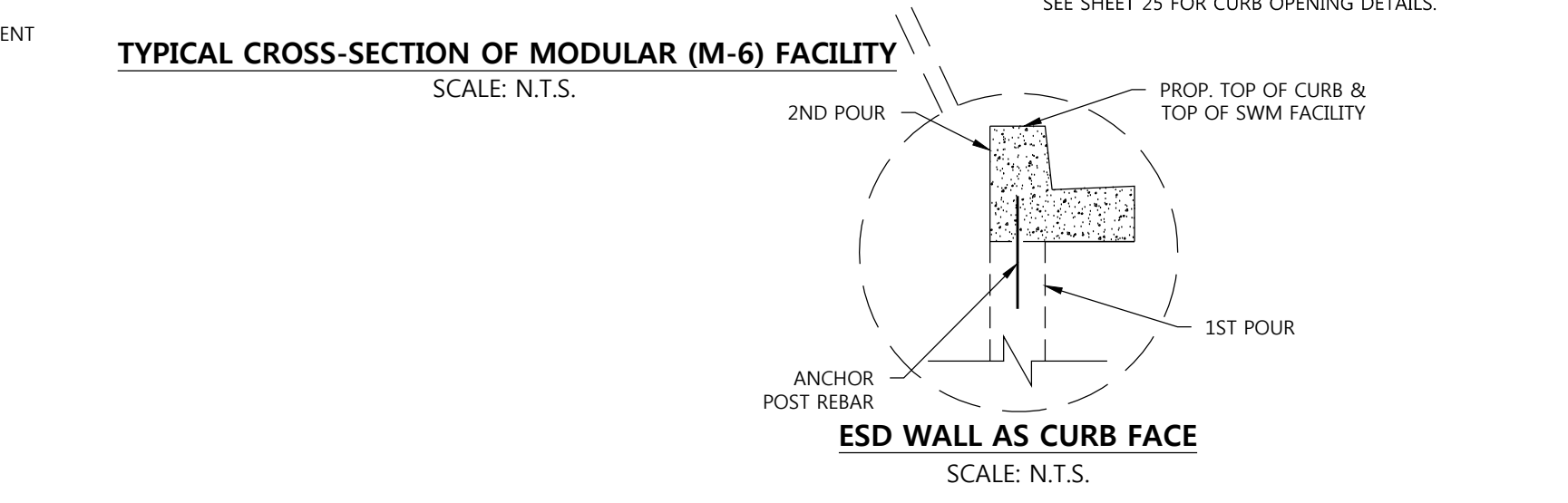
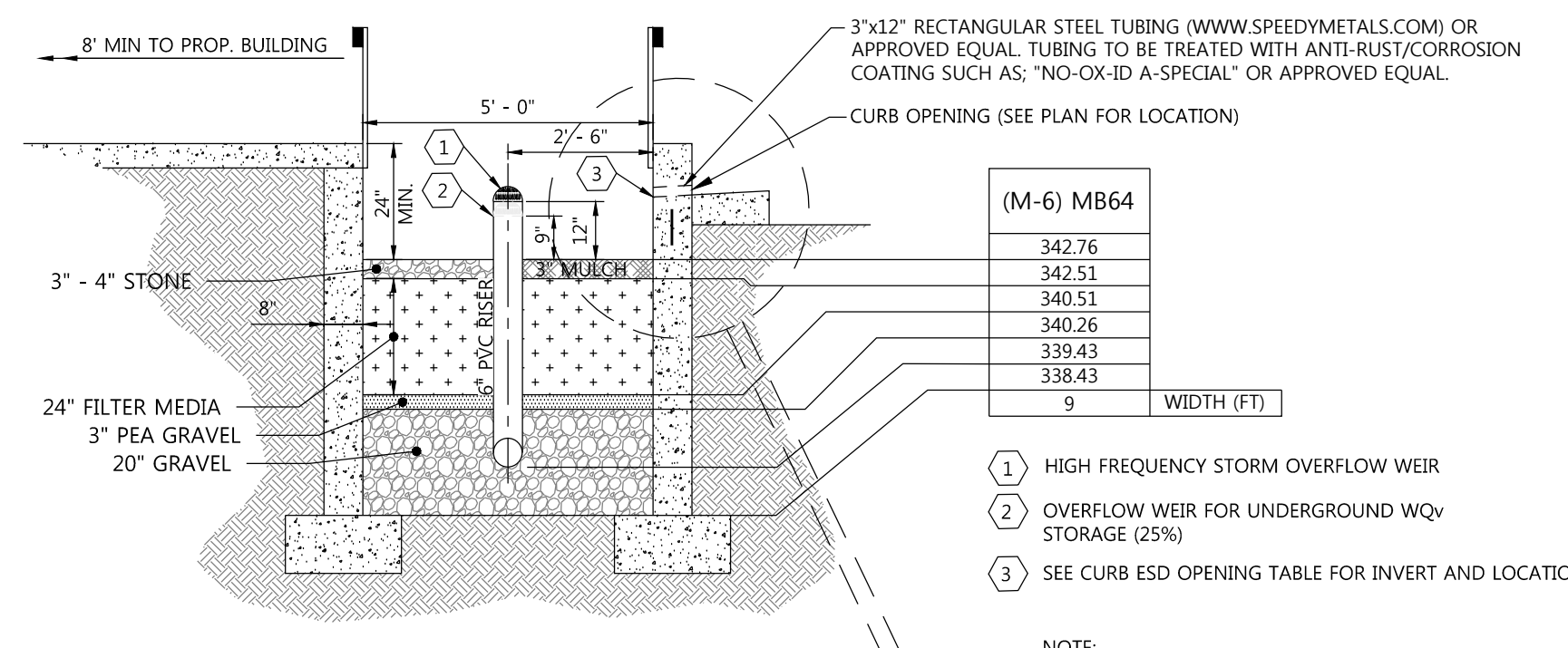
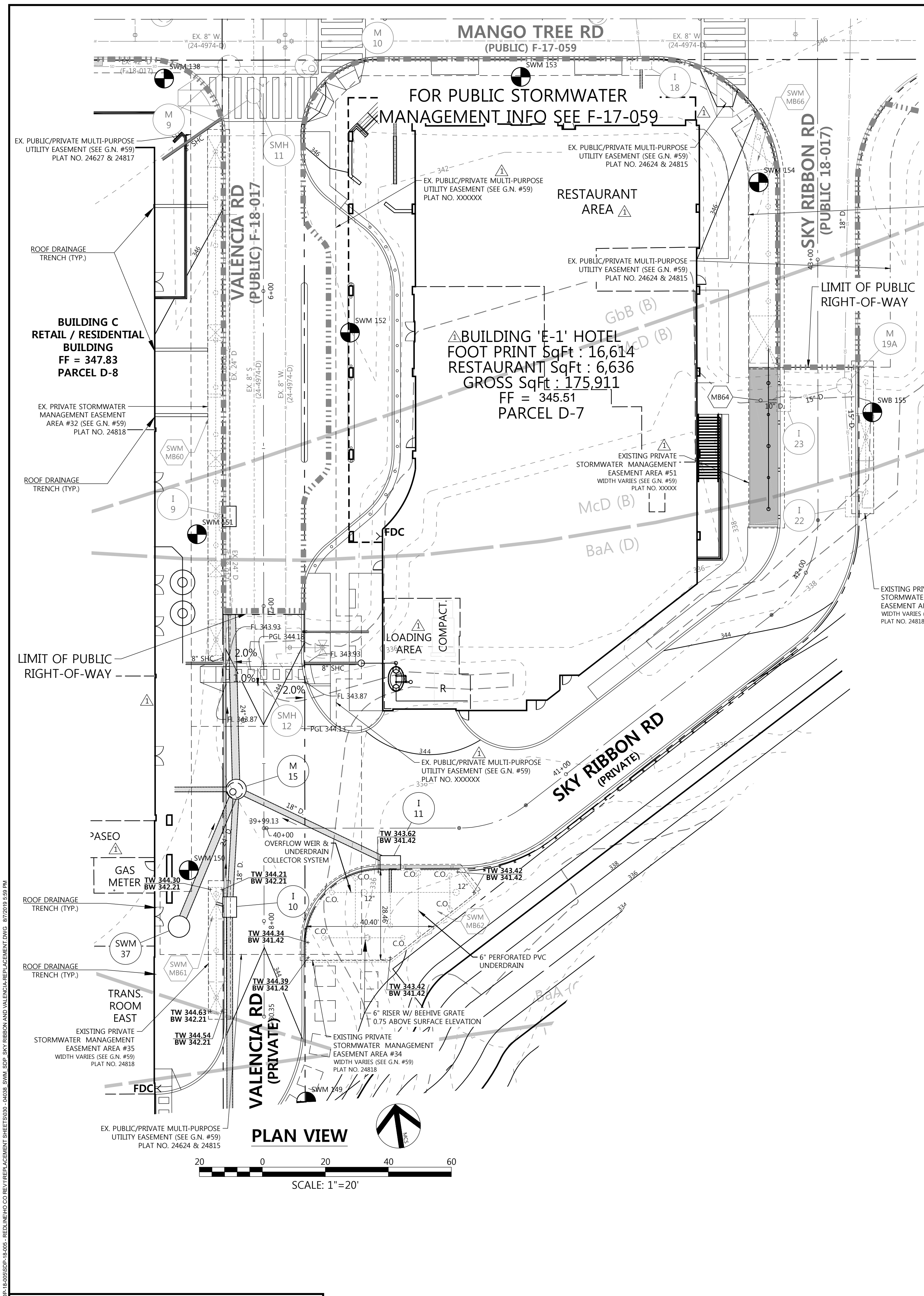
**TITLE (M-6) WQv STORMWATER MANAGEMENT PLAN**

Des. By	GDT/DM	SCALE	AS SHOWN	Proj. No.	04038.80
Drn. By	MCJ	Date	02/15/19		
Chk. By	MCB	Approved	MCB		27 of 77

SDP-18-005

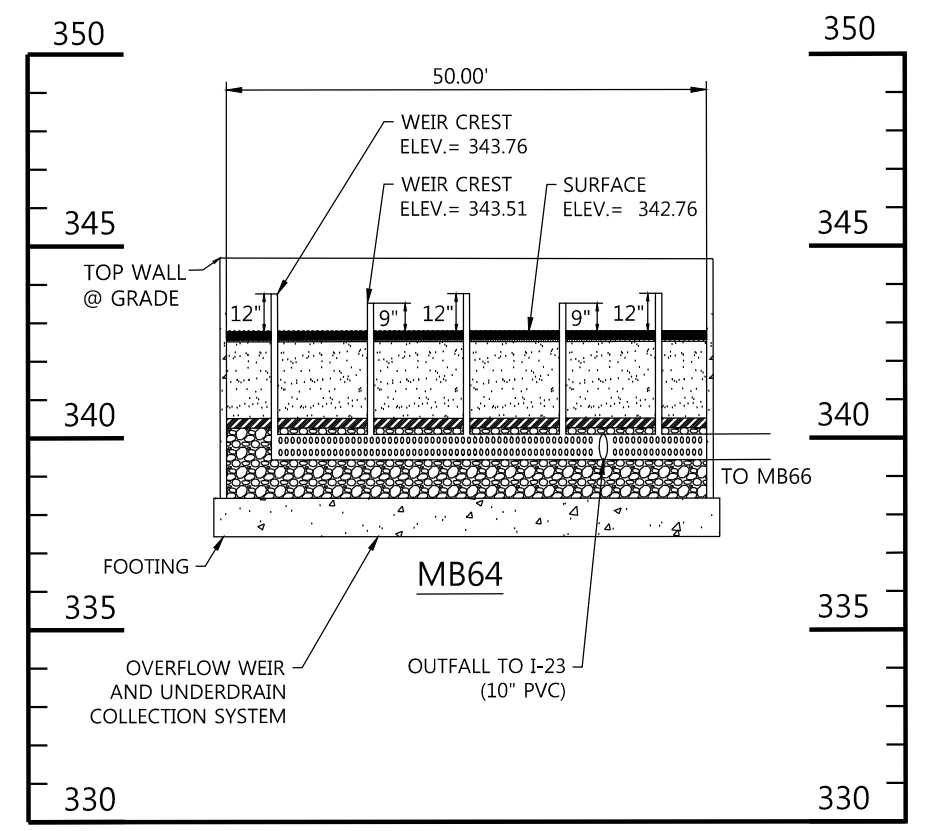






**LEGEND**

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



**(M-6) MB64 SWM PROFILE**  
SCALE: HORIZ - 1" = 20'; VERT. 1" = 5'  
NOTE: SEE SHT 27 FOR TYPICAL CLEANOUT DETAIL

**NOTE**  
CONTRACTOR TO NOTIFY STRUCTURAL ENGINEER IF THERE ARE ANY CONFLICTS WITH THE (M-6) MODULAR WALLS/FOOTINGS AND ADJACENT STORM DRAIN PIPES AND STRUCTURES.

- NOTE:**
- FOR DETAIL ON THE COVER OVER THE WATER QUALITY FACILITIES SEE HARDSCAPE PLANS.
  - SEE STRUCTURAL SHEET 65 FOR MODULAR (M-6) FACILITY AND SUPPORT DETAIL OF SWM HARDSCAPE PANEL.
  - ESD MODULAR (M-6) FACILITIES ARE 5' WIDTH UNLESS OTHERWISE NOTED. SEE ESD PROFILES FOR LENGTH.
  - REFER TO STORMWATER MANAGEMENT SHEET 26 FOR STANDARD MODULAR (M-6) FACILITY MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION AND OPERATION & MAINTENANCE SCHEDULES.
  - SEE GENERAL NOTE #59 REGARDING EASEMENTS

**(M-6) SWM LOCATION TABLE**

FACILITY #	CENTERLINE STA.	OFFSET
MB64	42+65.81	12.67 LT
MB64	42+65.81	21.67 LT
MB64	42+15.09	12.67 LT
MB64	42+13.91	21.61 LT

**ESD OUTFLOW PIPE LOCATION TABLE**

FACILITY #	CENTERLINE STA.	OFFSET	INVERT @ ESD WALL	PIPE DIA. (IN)
MB64	42+55.04	13.12 LT	339.38	10"

NOTE: FOR FLOWLINE STATIONS AND ELEVATION ROAD PLAN, SEE SHEET 19.

**CURB OPENING TABLE**

CENTERLINE STATIONS		FACILITY
LEFT	RIGHT	
42+18.31	N/A	MB64
42+33.31	N/A	
42+48.31	N/A	
42+60.81	N/A	
N/A	42+26.53	MB67
N/A	42+35.78	
N/A	42+50.78	
N/A	42+65.81	

**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-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

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

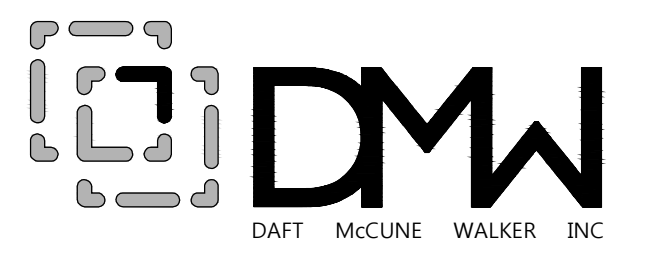
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I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 05/31/20.

05/31/19  
DATE

04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
----------	---

**DOWNTOWN COLUMBIA**  
CRESCENT NEIGHBORHOOD  
PHASE I AREA 3, PHASE 2  
PARCELS D-1, D-7, D-8, D-9,  
D-11, D-12 AND D-13  
MIXED USE GREEN OFFICE, RETAIL, RESTAURANT, & HOTEL BUILDING

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 3	NEIGHBORHOOD	PHASE 1	LOT/PARCEL #	PARCEL D
PLAT OR REF. FILE NO.	24812-24810	RECORD #	7	TAX ZONING MAP	RECT. DISTRICT	CENSUS TRACT	605602
WATER CODE	550	SEWER CODE	LITTLE PATUXENT	STAGE	1		

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

PROFESSIONAL ENGR. NO. 16928

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE:

Des. By GDT/DM SCALE AS SHOWN Proj. No. 04038.B0  
Dwn. By MCJ Date 02/15/19  
Chk. By MCB Approved MCB 30 of 77

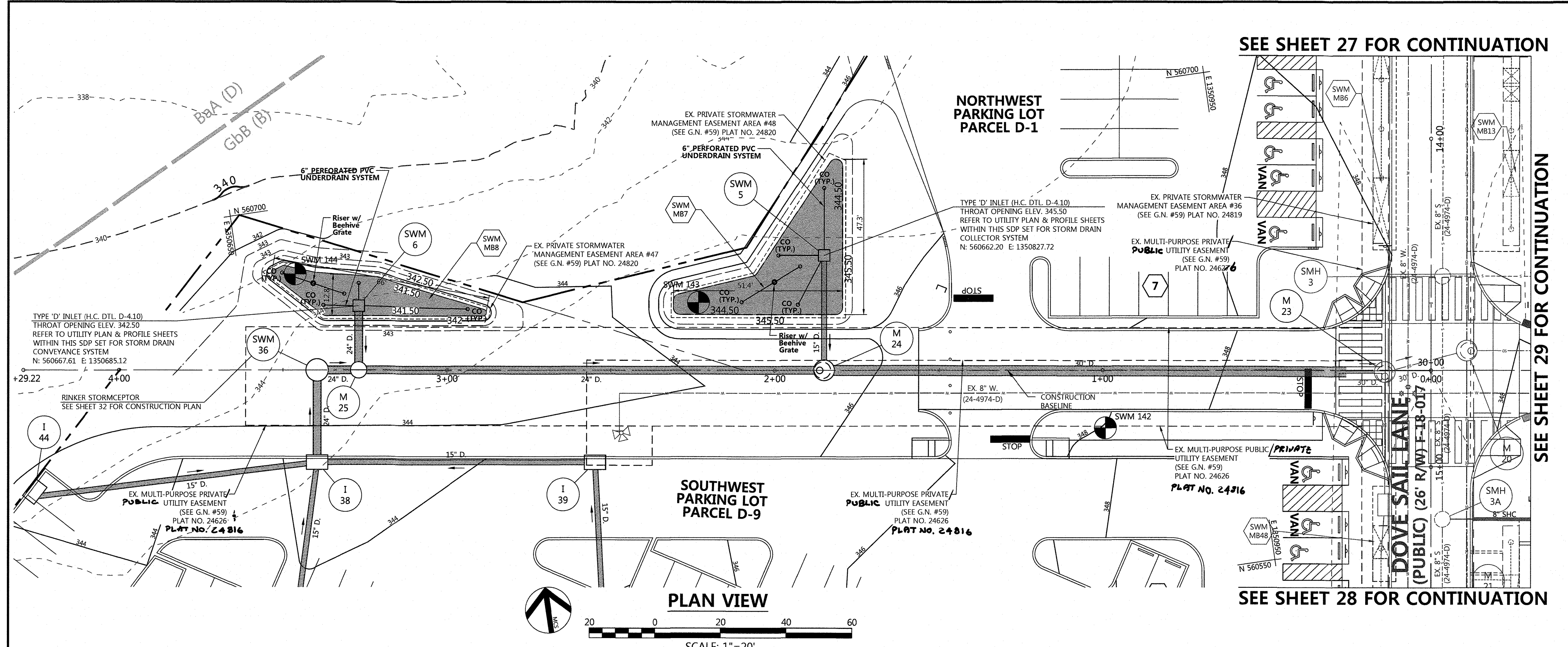
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

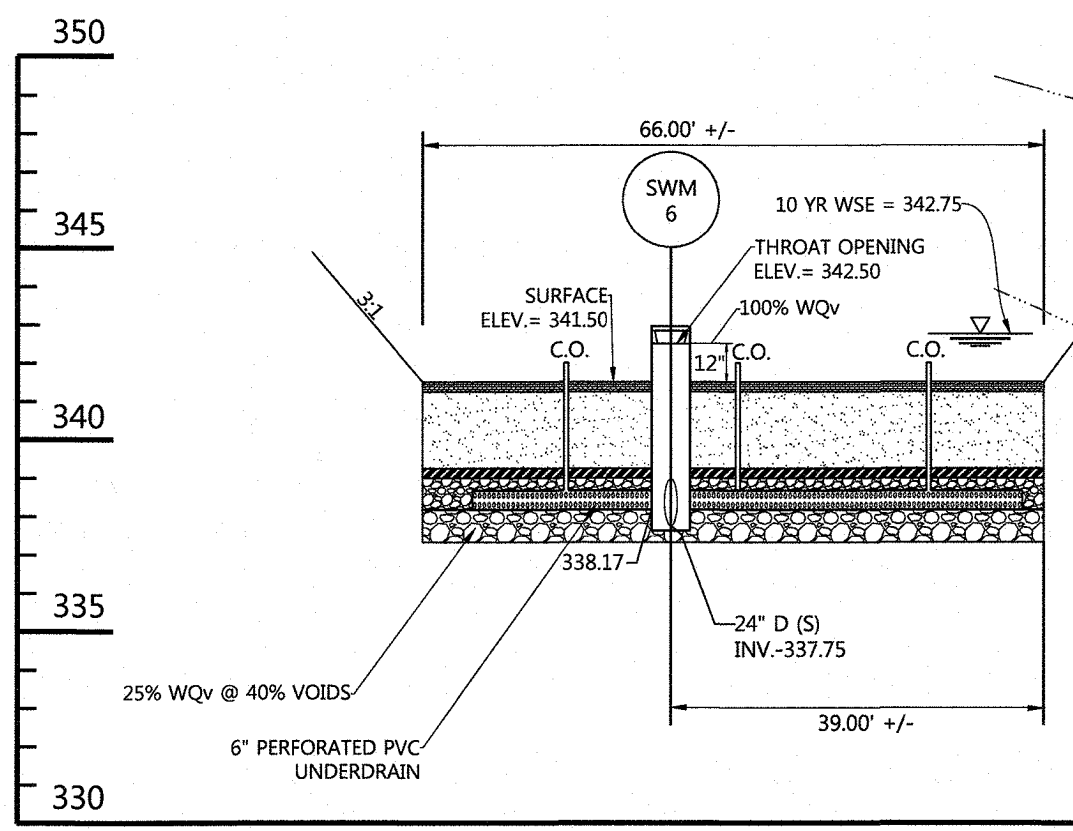
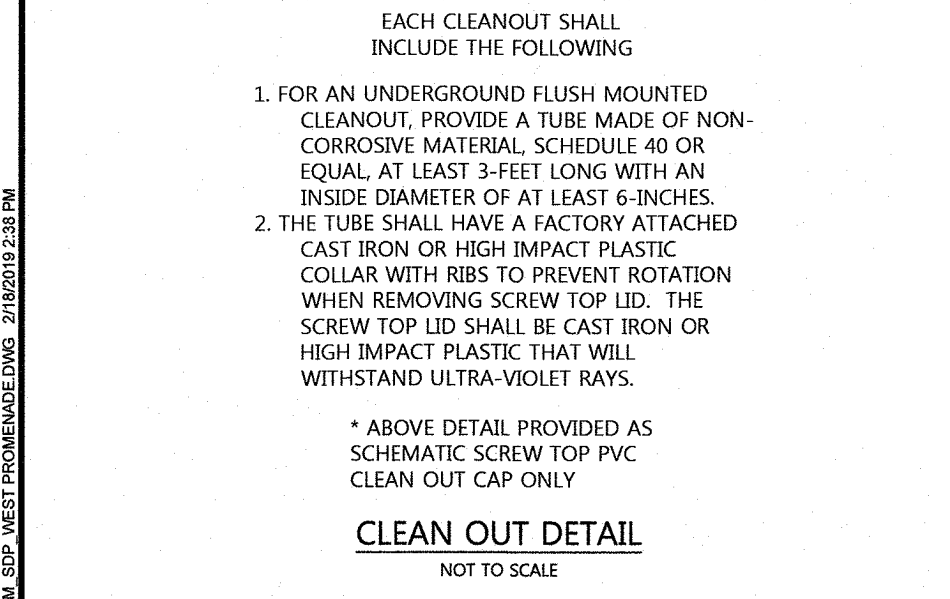
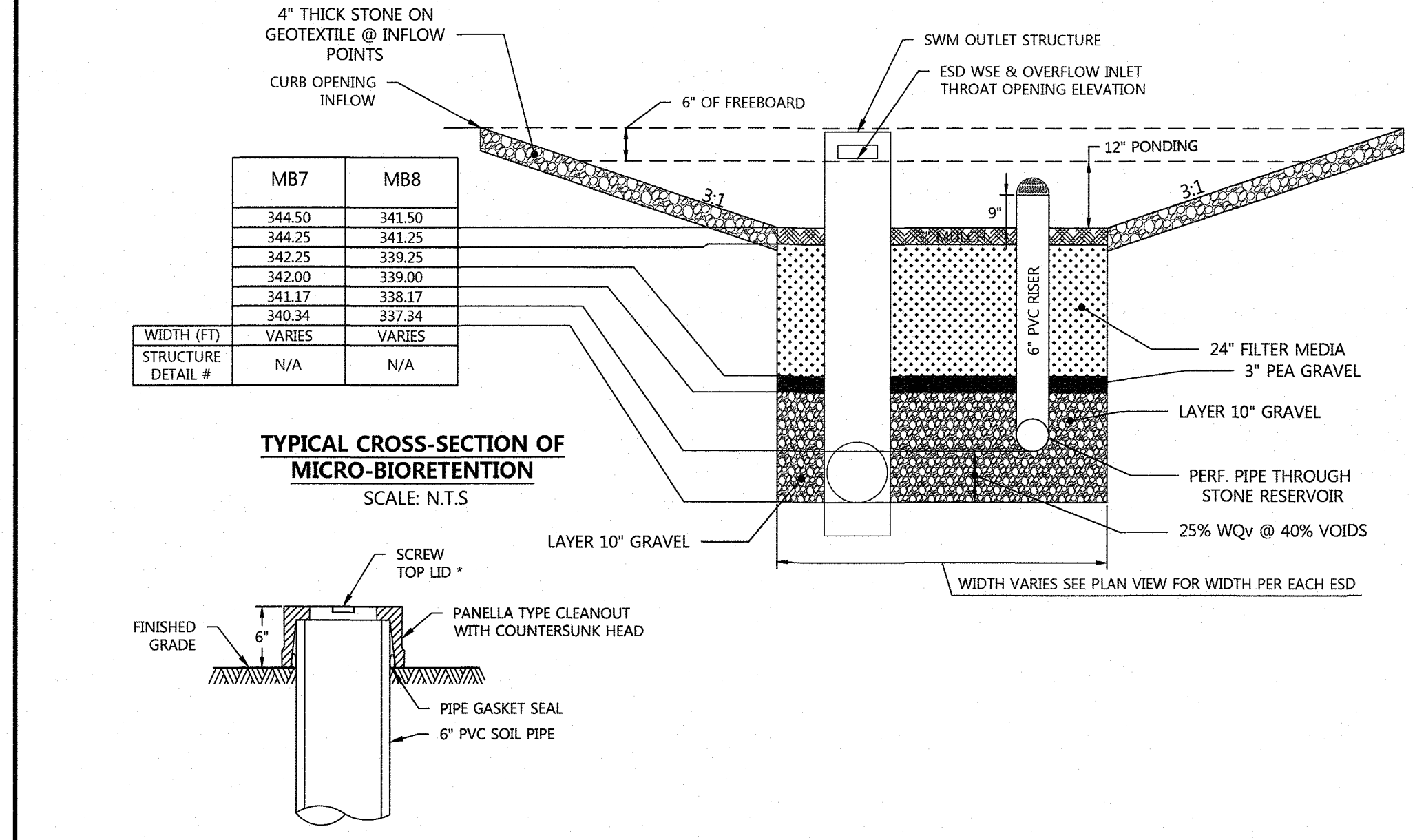
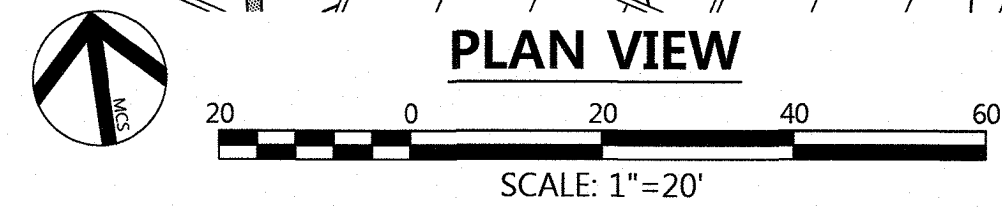
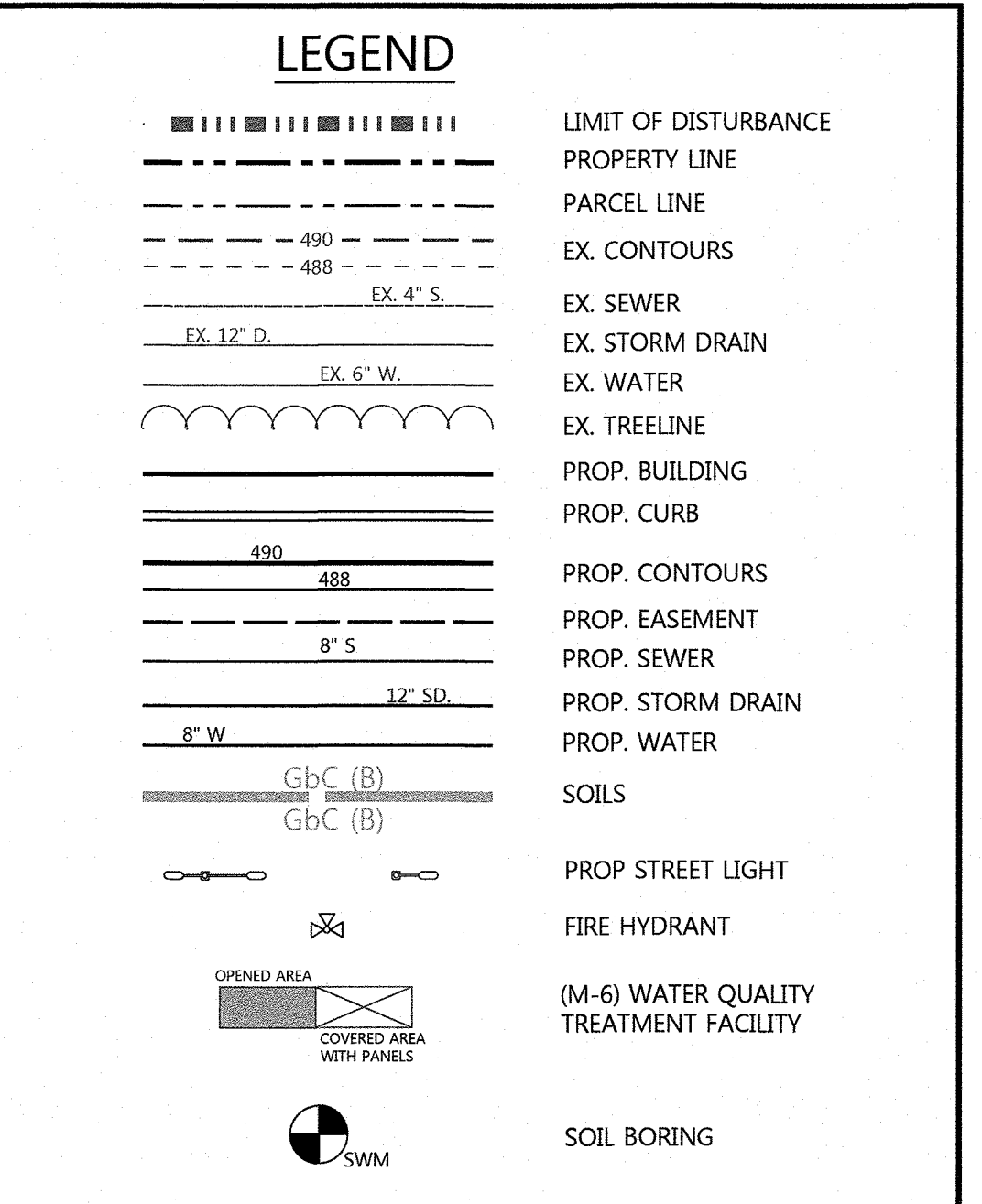
DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_



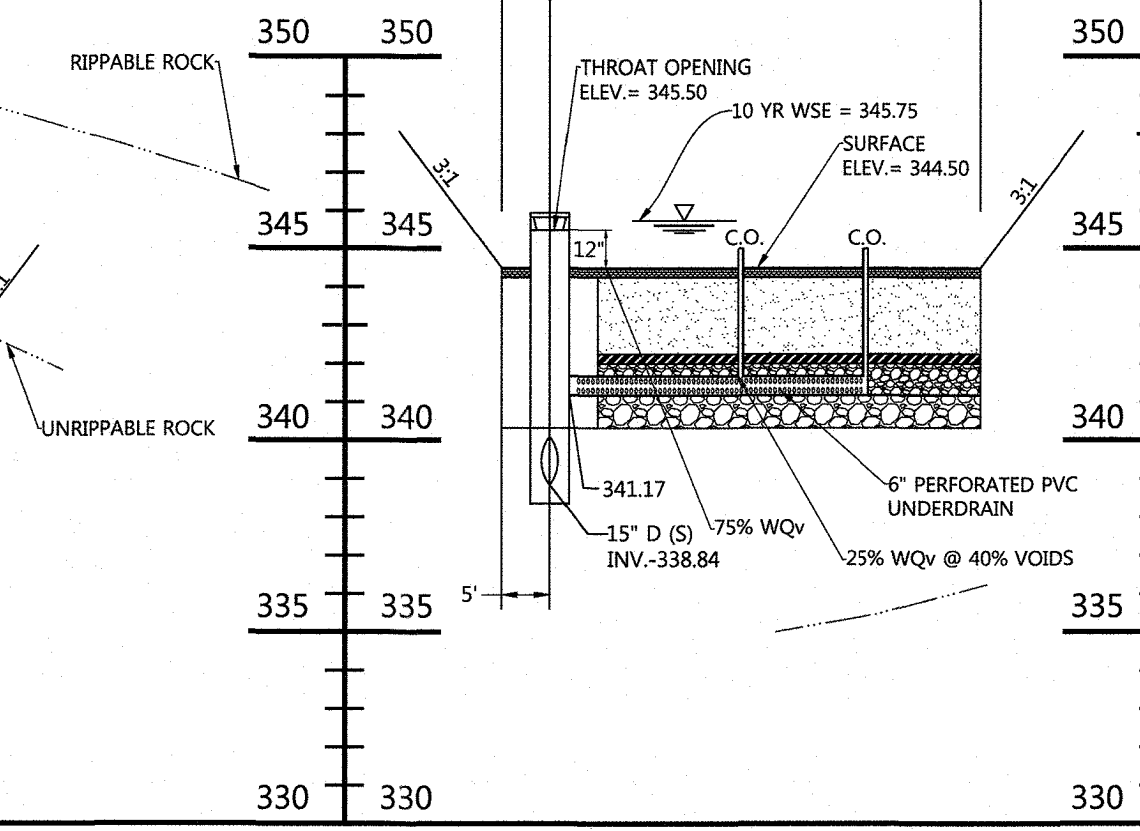


(M-6) SWM LOCATION TABLE

FACILITY #	BASELINE OF CONSTRUCTION STA.	OFFSET
MB7	1+79.49	62.34'R
MB7	1+80.0	17.61'R
MB7	1+83.16	63.44'R
MB7	2+05.94	29.06'R
MB7	2+30.34	17.62'R
MB7	2+30.50	22.47'R
MB8	2+88.07	17.39'R
MB8	3+20.75	28.23'R
MB8	3+36.75	16.54'R
MB8	3+40.25	29.73'R
MB8	3+49.51	31.76'R
MB8	3+52.93	31.76'R



MB8 SWM PROFILE  
SCALE: HORIZ. 1" = 20'; VERT. 1" = 5'



MB7 SWM PROFILE  
SCALE: HORIZ. 1" = 20'; VERT. 1" = 5'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*[Signature]* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

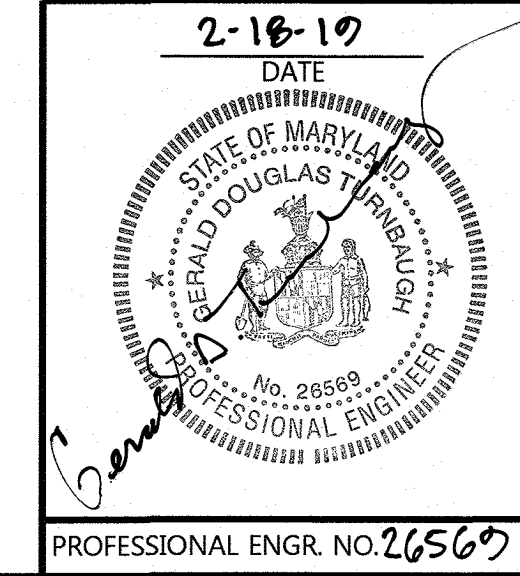
*[Signature]* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 4-24-19  
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-CRESCENT-1, FDP-DC-CRESENT-1A, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105, 24-4951-D, 24-4975-D, 24-4974-D.

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. 26569, EXPIRATION DATE: 07/18/19.



APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/19

NOTE:  
CONTRACTOR TO NOTIFY STRUCTURAL ENGINEER IF THERE ARE ANY CONFLICTS WITH THE (M-6) MODULAR WALLS/GROUTINGS AND ADJACENT STORM DRAIN PIPES AND STRUCTURES.

NOTE:  
1. FOR DETAIL ON THE COVER OVER THE WATER QUALITY FACILITIES SEE HARDSCAPE PLANS.  
2. SEE STRUCTURAL SHEET 65 FOR MODULAR (M-6) FACILITY AND SUPPORT DETAIL OF SWM HARDSCAPE PANEL.  
3. ESD MODULAR (M-6) FACILITY ARE 5' WIDTH UNLESS OTHERWISE NOTED, SEE ESD PROFILES FOR LENGTH.  
4. REFER TO STORMWATER MANAGEMENT SHEET 26 FOR STANDARD MODULAR (M-6) FACILITY MATERIAL SPECIFICATIONS, SEQUENCE OF CONSTRUCTION, AND OPERATION & MAINTENANCE SCHEDULES.  
5. SEE GENERAL NOTE #59 REGARDING EASEMENTS

Date	No.	Revision Description

**DOWNTOWN COLUMBIA**  
CRESCENT NEIGHBORHOOD  
PHASE I AREA 3, PHASE 2  
PARCELS D-1, D-7, D-8, D-9,  
D-11, D-12 AND D-13  
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING

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410-964-4800

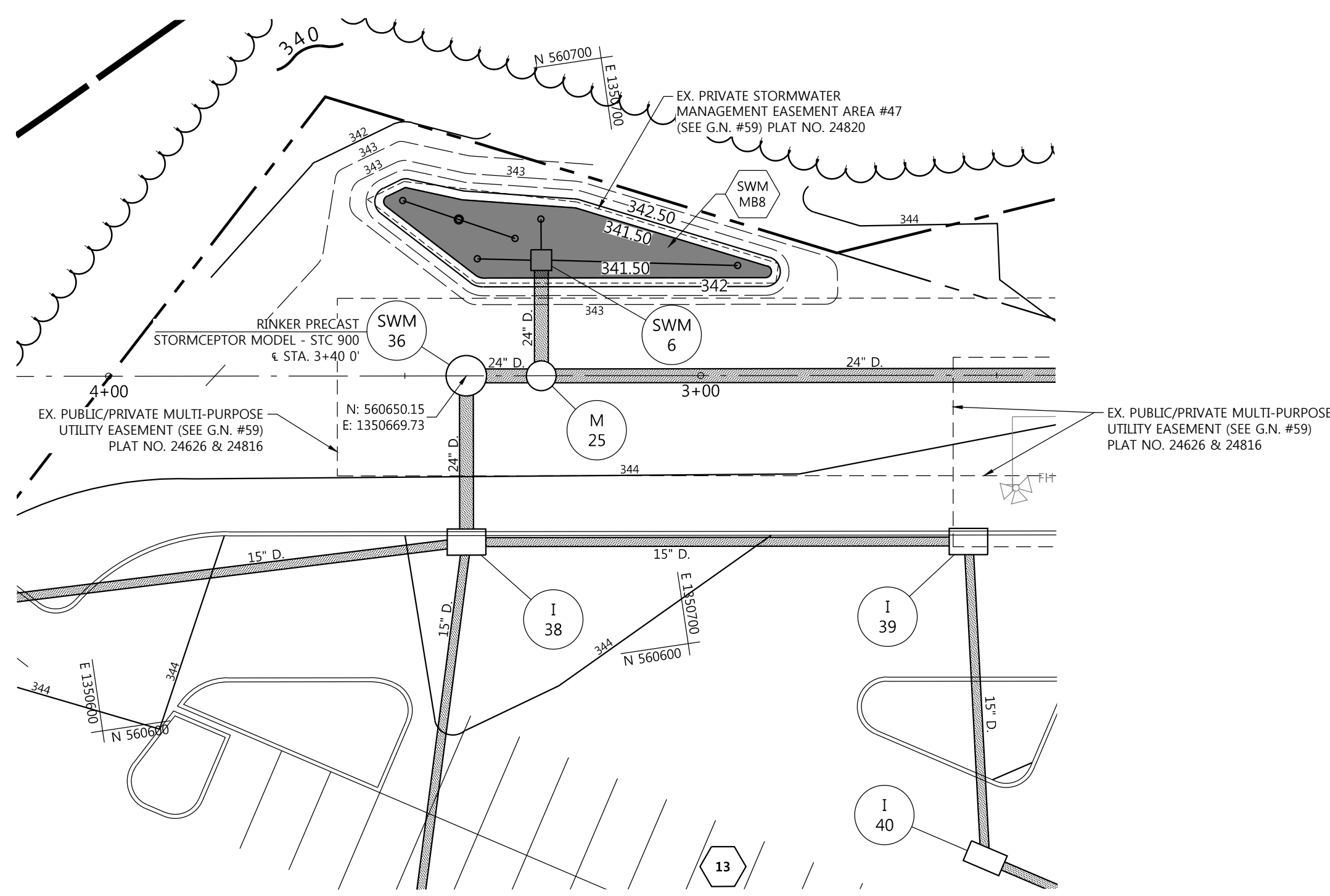
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286  
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION NUMBER 7	CRESCENT NEIGHBORHOOD	LOT/PARCEL # PARCEL D
PLAT OR LOT # 25812-2008	BLOCK # 36	TAX ZONE/MAP 7	ELECT. DISTRICT 5
WATER CODE 550	SEWER CODE LITTLE PATUXENT	STAGE 1	

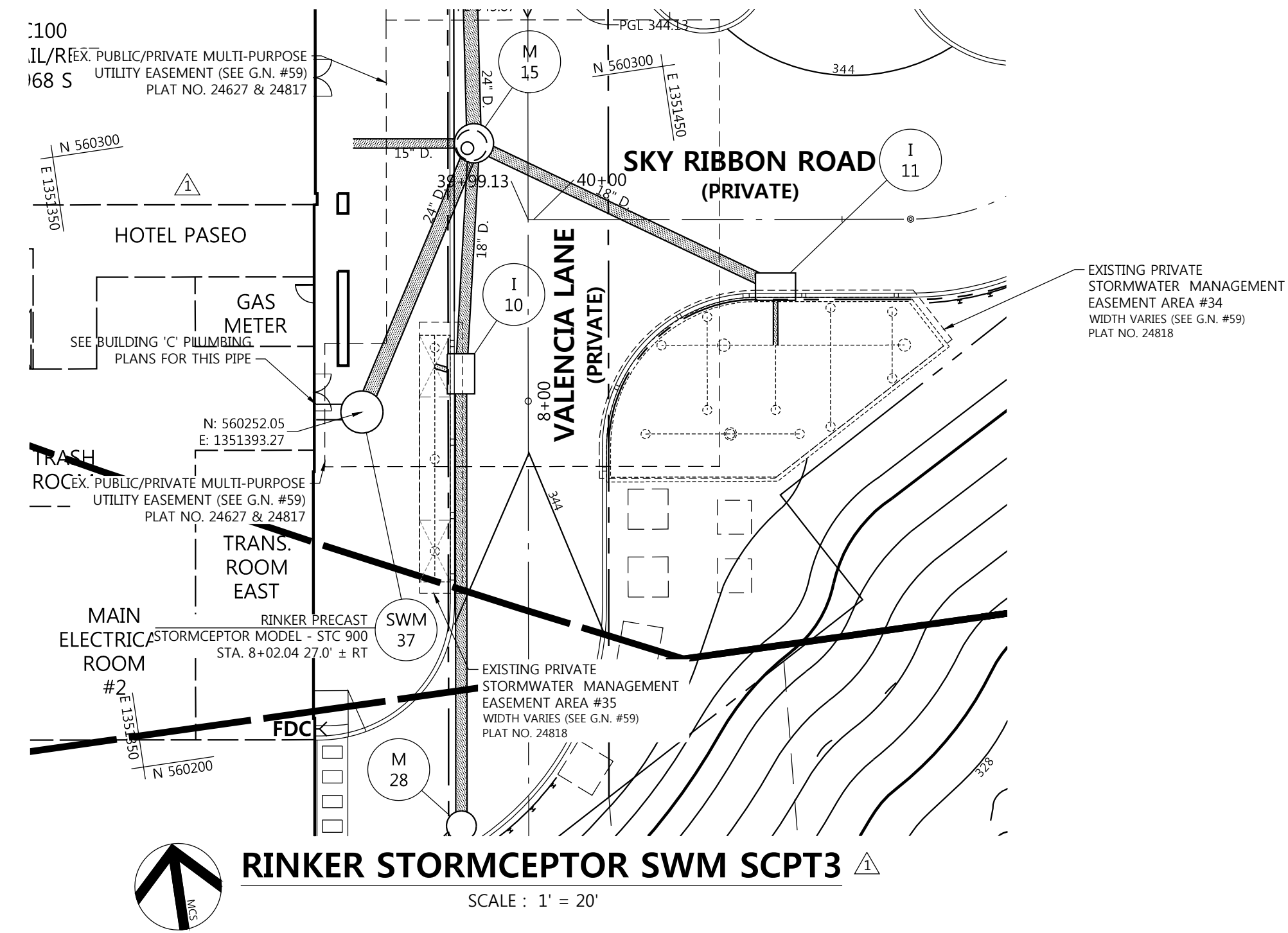
TITLE  
**(M-6) WQv STORMWATER MANAGEMENT PLAN**

Des. By GDT/DM	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By MCI	Date 02/15/19	
Chk. By MCB	Approved MCB	31 of 77

SDP-18-005



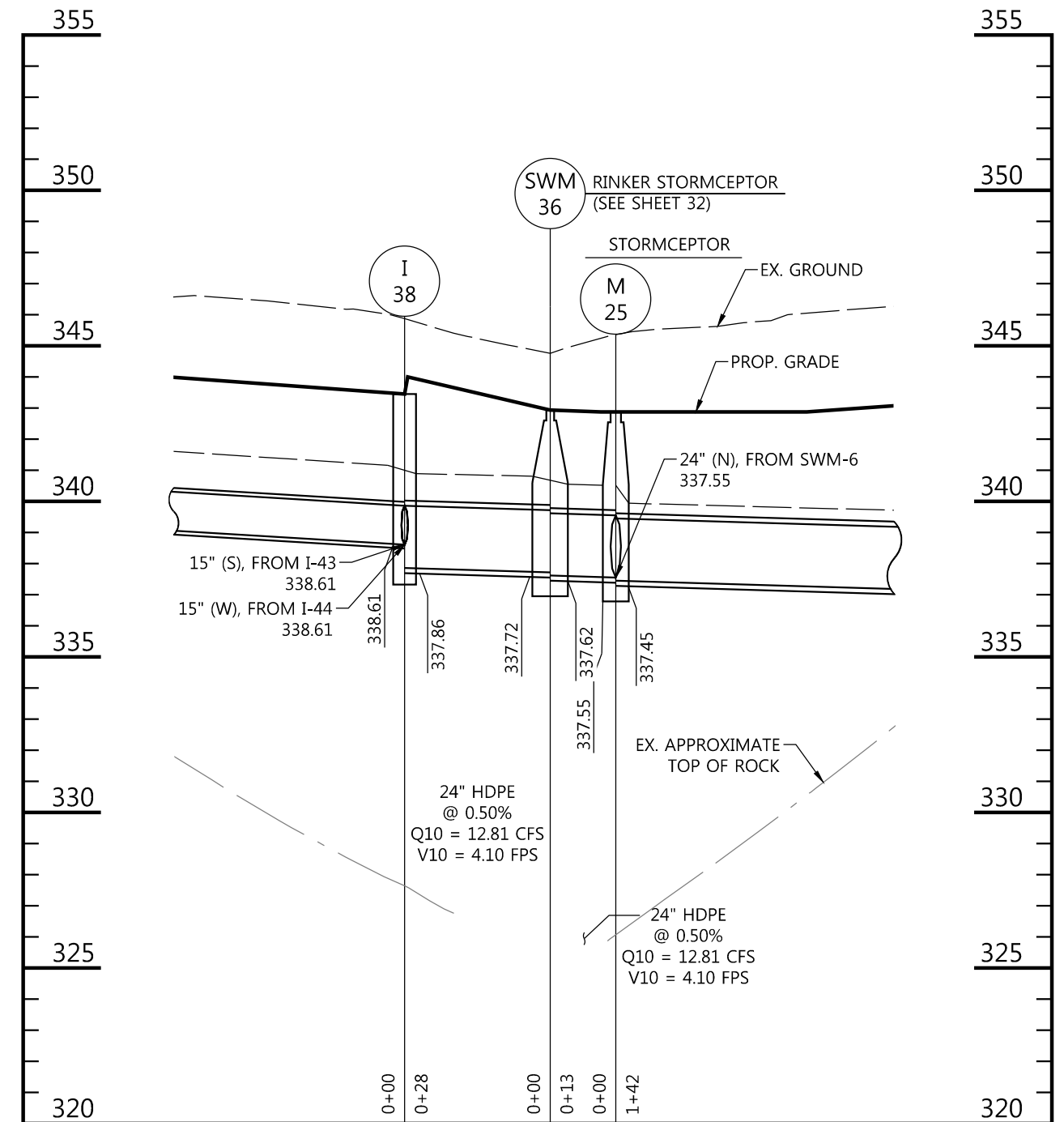
**RINKER STORMCEPTOR SWM SCPT1**  
SCALE: 1" = 20'



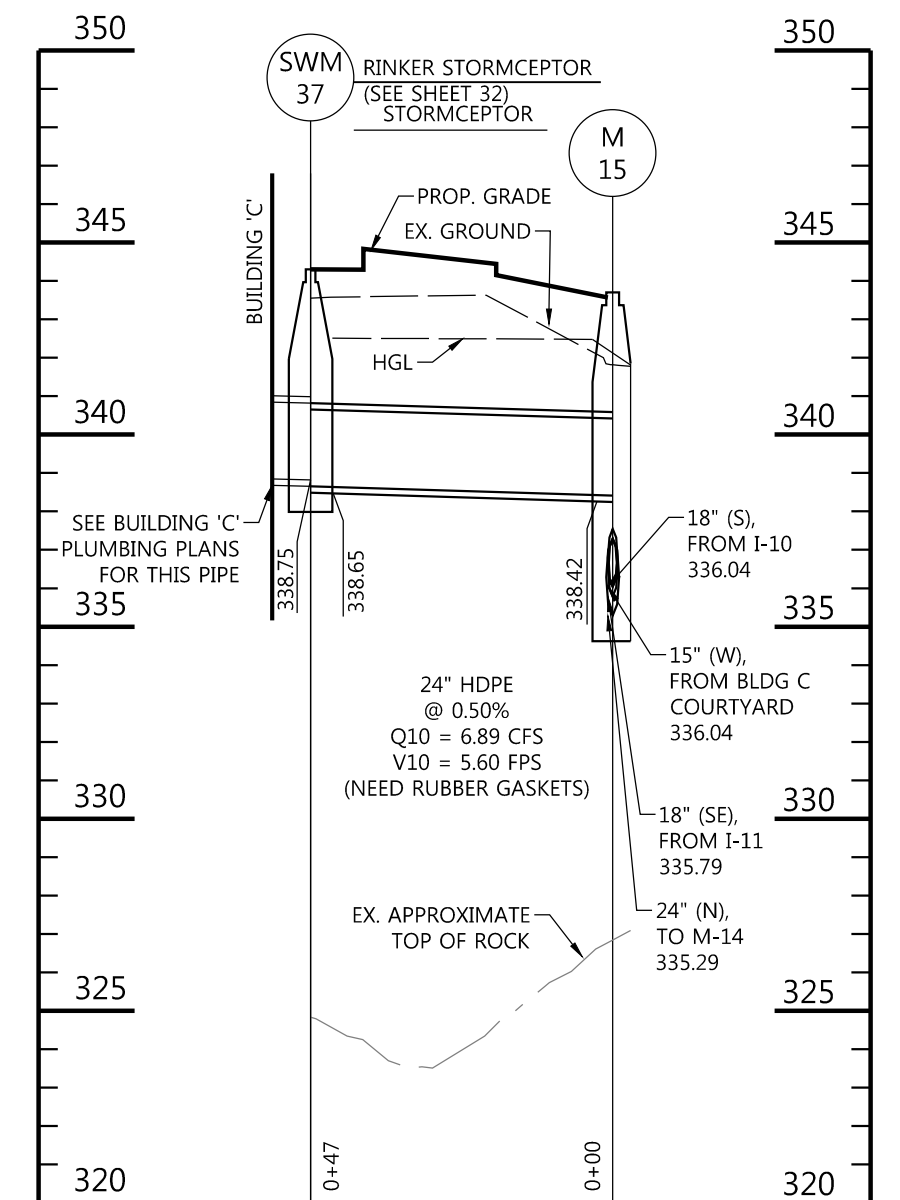
**RINKER STORMCEPTOR SWM SCPT3**  
SCALE: 1" = 20'

**LEGEND**

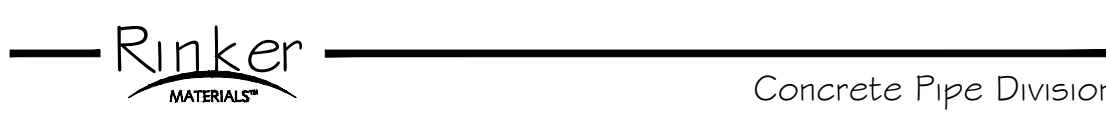
	LIMIT OF DISTURBANCE
	PROPERTY LINE
	PARCEL LINE
	EX. CONTOURS
	EX. SEWER
	EX. STORM DRAIN
	EX. WATER
	EX. TREELINE
	PROP. BUILDING
	PROP. CURB
	PROP. CONTOURS
	PROP. EASEMENT
	PROP. SEWER
	PROP. STORM DRAIN
	PROP. WATER
	SOILS
	PROP. STREET LIGHT
	FIRE HYDRANT
	(M-6) WATER QUALITY TREATMENT FACILITY



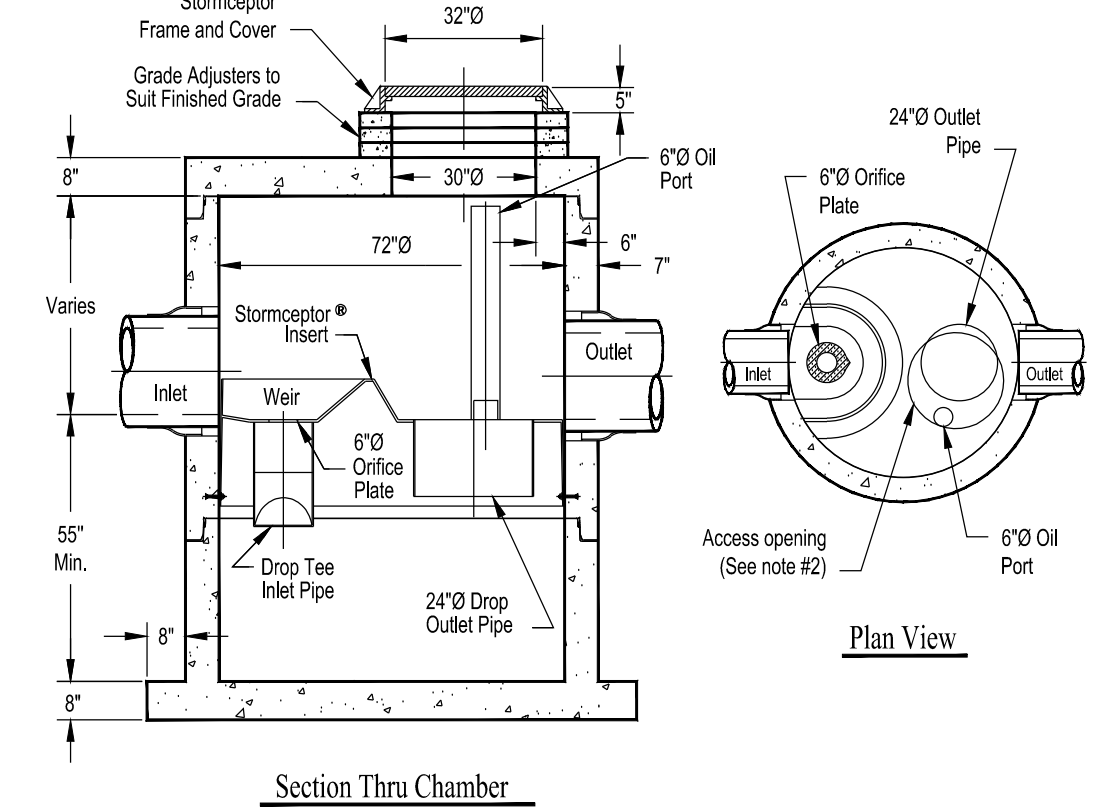
**RINKER STORMCEPTOR DA #36 PROFILE**  
SCALE: HORZ. 1" = 30', VERT. 1" = 5'



**RINKER STORMCEPTOR DA #37 PROFILE**  
SCALE: HORZ. 1" = 30', VERT. 1" = 5'



**STC 900 Precast Concrete Stormceptor®**  
(900 U.S. Gallon Capacity)



- 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.

Rinker 028

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

- OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND 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.

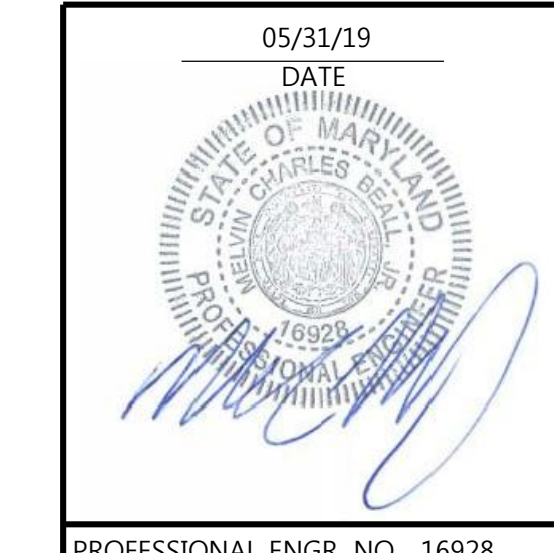
**NOTE:**  
CONTRACTOR TO NOTIFY STRUCTURAL ENGINEER IF THERE ARE ANY CONFLICTS WITH THE (M-6) MODULAR WALLS/FOOTINGS AND ADJACENT STORM DRAIN PIPES AND STRUCTURES.

- NOTE:**  
1. SEE GENERAL NOTE #56 & 59 REGARDING EASEMENTS

**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

**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: 05/31/20.



PROFESSIONAL ENGR. NO. 16928

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY

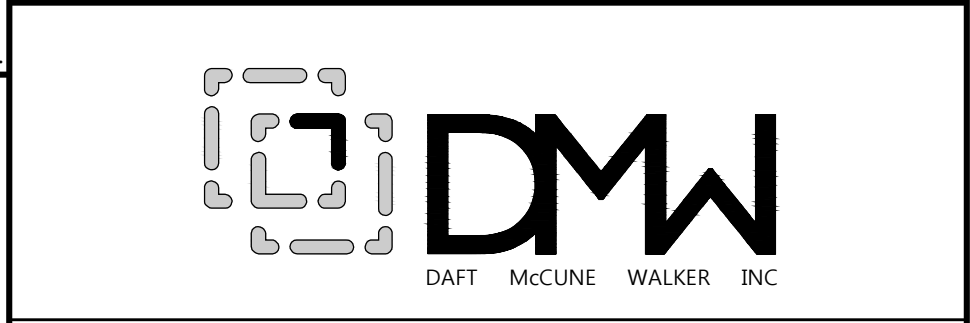
DATE: \_\_\_\_\_

04/19/19  
Date No. UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL

**Revised Description**

**DOWNTOWN COLUMBIA**  
CRESCENT NEIGHBORHOOD  
PHASE I AREA 3, PHASE 2  
PARCELS D-1, D-7, D-8, D-9,  
D-11, D-12 AND D-13  
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING

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

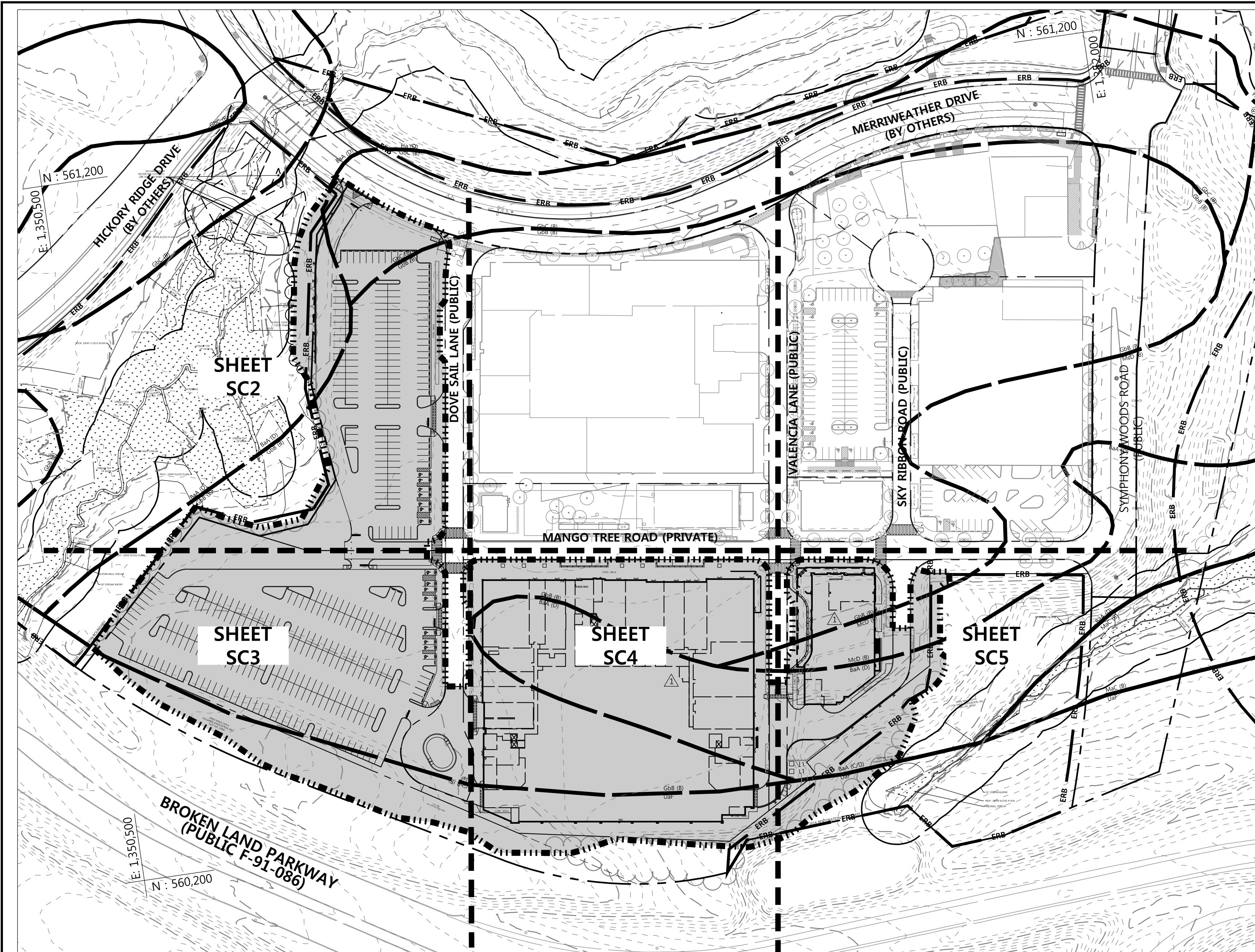
SUBMISSION NAME	SECTION AREA	REVISION	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD PHASE I AREA 3		PARCEL D
DATE OF E.P.	REVISION	TAX ZONING	ELECT. DISTRICT
04/19/19	7	36	5
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			1

**TITLE: STORMWATER MANAGEMENT STORMCEPTOR WQV PLAN**

REVISED SITE DEVELOPMENT PLAN

Des. By	GDT/DM	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	MCJ	Date	02/15/19		
Chk. By	MCB	Approved	MCB		32 of 77





**EROSION & SEDIMENT CONTROL KEY PLAN**  
 SCALE: 1"=100'

**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)
- 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:
  - TWO STABILIZED CONSTRUCTION ENTRANCES (SCE) WITH A MOUNTABLE BERM
  - SUPER SILT FENCE (SSF)
 NOTE: ENSURE ALL SEDIMENT CONTROL TRANSITIONS ARE SECURELY TIED IN TO PREVENT THE ESCAPE OF SEDIMENT. (1 WEEK)
- ONCE PERIMETER CONTROLS ARE INSTALLED AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR BEGIN CONSTRUCTION OPERATIONS. REMOVE THE EXISTING STONE OUTLET SEDIMENT TRAP IN THE FOLLOWING ORDER:
  - REMOVE ALL SEDIMENT FROM TRAP INCLUDING SOFT SUB-BASE SOILS. FINAL TRAP DREDGE SPOIL TO BE TAKEN TO A SITE WITH AN APPROVED OPEN GRADING PERMIT AND AN APPROVED SEDIMENT CONTROL PLAN.
  - FILL-IN CONVEYANCE SWALE AND RIP RAP INFLOW PROTECTION.
  - REMOVE BAFFLE, REMOVABLE PUMPING STATION/SUMP PIT AND ANY REMAINING TRAP COMPONENTS.
  - FILL-IN TRAP AND PROVIDE POSITIVE DRAINAGE TO NEWLY INSTALLED OR REFURBISHED PERIMETER SEDIMENT CONTROL PRACTICES.
- WITH THE PERMISSION 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.)
  - INSTALL PROPOSED UTILITIES. INSTALL INLET PROTECTION, SIP TYPE A OR B, AROUND ALL STORM DRAIN INLETS AS SHOWN ON PLAN. (3 DAYS)
  - INSTALL ALL (M-6) MODULAR SWM FACILITIES, STORMCEPTORS & ASSOCIATED COMPONENTS. TEMPORARILY BLOCK UNITS UNTIL SITE HAS BEEN ESTABLISHED WITH VEGETATION OR HAS BEEN DEEMED STABILIZED PRIOR TO FACILITIES MAKING ACTIVE. (2 WEEKS)
 NOTE: THE SUMP PITS ARE TO BE USED TO DEWATER FACILITIES IN THE EVENT OF MAINTENANCE.
- INSTALL PROPOSED ROADWAYS, SIDEWALKS & CURB AND GUTTER. PROVIDE CURB OPENINGS FOR (M-6) MODULAR SWM FACILITIES.
  - INSTALL INLET BLOCKING, IB, TO CURB OPENINGS. (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

CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

**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:
 

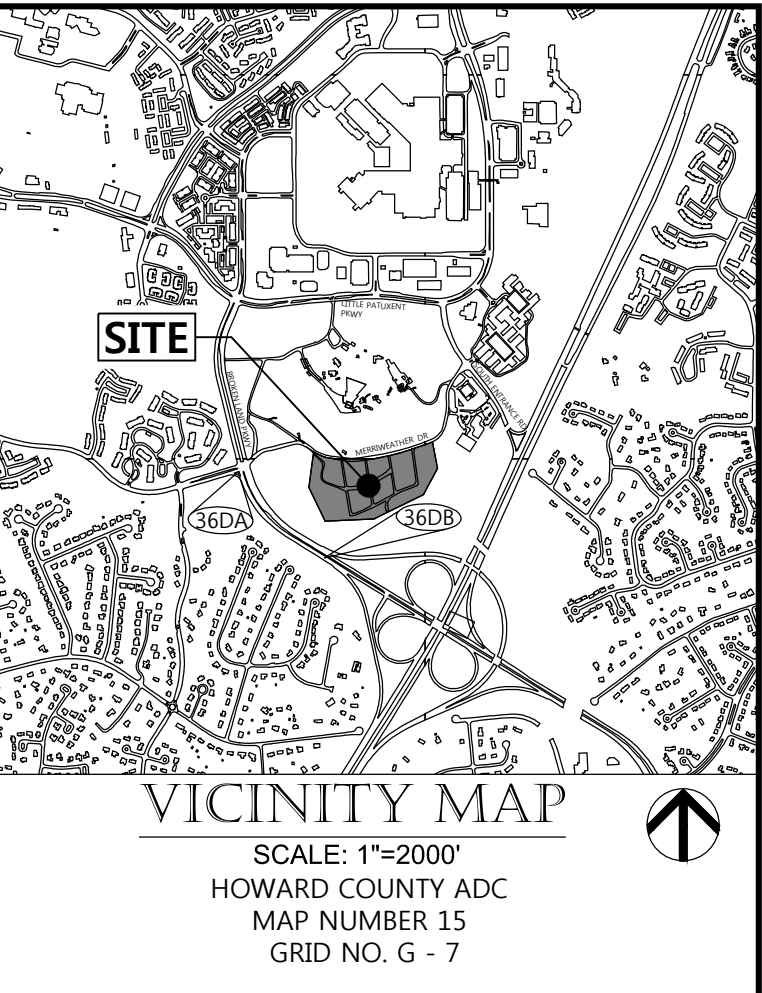
TOTAL AREA OF SITE	21.39 ACRES
LIMIT OF DISTURBANCE	495,293 SQ.FT./ 11.37 AC±
AREA TO BE ROOFED OR PAVED	8.64 ACRES
AREA TO BE VEGETATIVELY STABILIZED	2.73 ACRES
TOTAL CUT	22,284 CU. YDS.
TOTAL FILL	21,872 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED 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 (NPDES, 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 AND 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 25' 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 IIP 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 DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

**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. 12" DISCHARGE WATERMAIN
	PROP. SEWER
	PROP. STORM DRAIN
	PROP. BUILDING
	PROP. CURB
	LIMIT OF DISTURBANCE
	SOILS
	STABILIZED CONSTRUCTION ENTRANCE W/ MOUNTABLE BERM
	(M-6) TREE PIT MICRO-BIORETENTION FACILITY
	STORMCEPTOR
	PROPOSED UTILITY STRUCTURES
	SEC PHASE 2 CONSTRUCTION AREA



**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 \_\_\_\_\_ DATE \_\_\_\_\_

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 SOIL CONSERVATION DISTRICT."

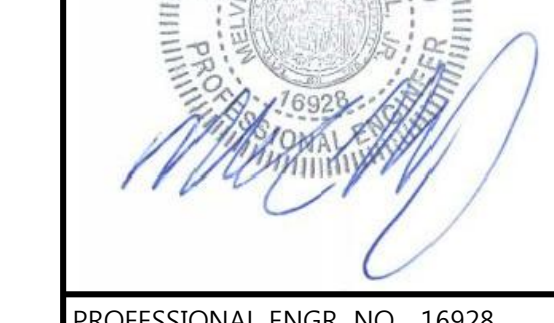
DESIGNER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

PRINTED NAME \_\_\_\_\_ MD REGISTRATION NO. \_\_\_\_\_  
 P.E., R.L.S., OR R.L.A. (CIRCLE ONE)

**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.  
**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: 05/31/20



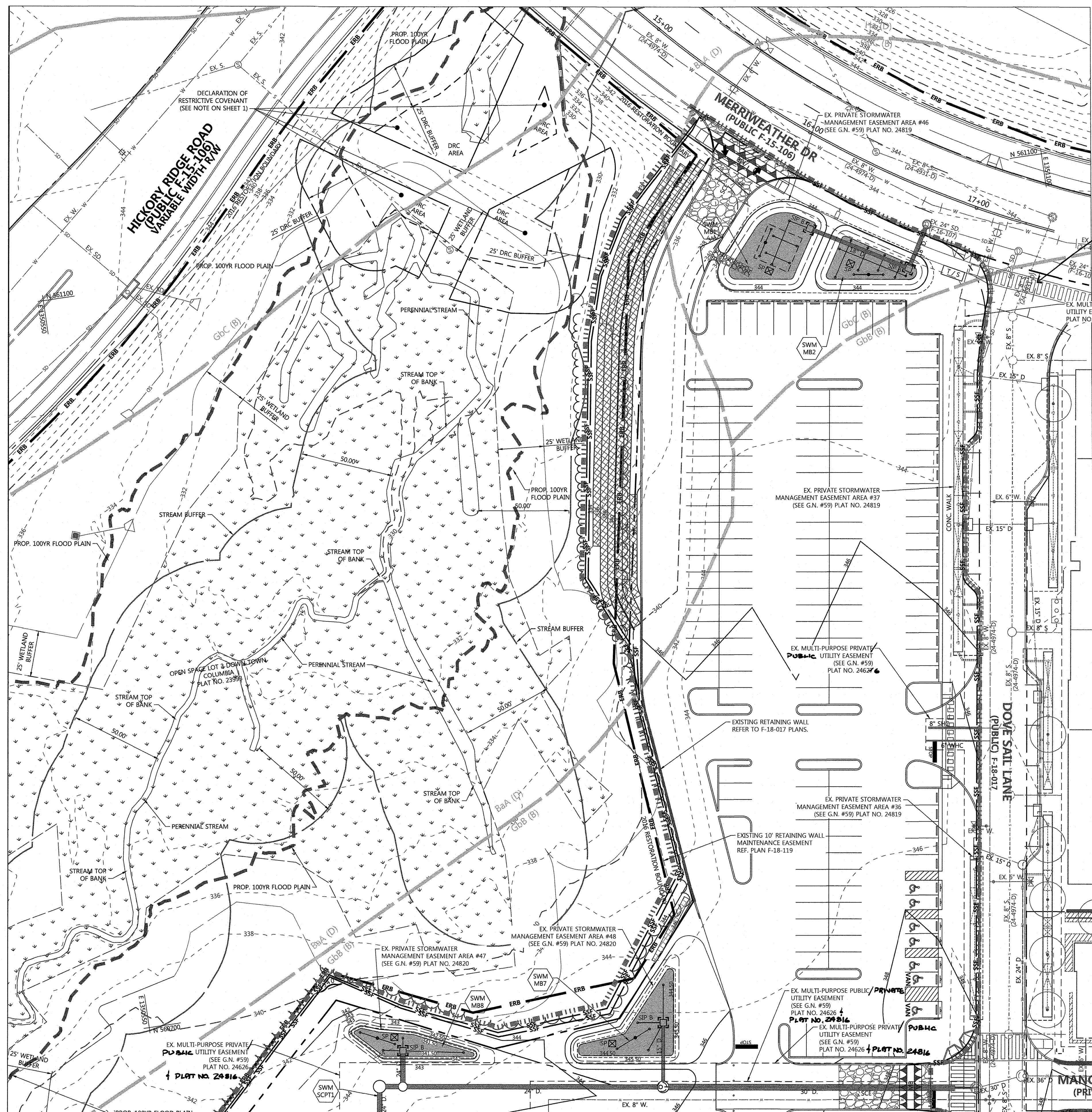
PROFESSIONAL ENGR. NO. 16928

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

APPROVED: PLANNING BOARD OF HOWARD COUNTY  
 DATE: \_\_\_\_\_

HOWARD SOIL CONSERVATION DISTRICT \_\_\_\_\_ DATE \_\_\_\_\_

04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL		
Date	Revision Description		
<b>DOWNTOWN COLUMBIA</b>			
<b>CRESCENT NEIGHBORHOOD</b>			
<b>PHASE I AREA 3, PHASE 2</b>			
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13			
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING			
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 FOR REF.	RECORD #	TAX ZONING/MAP	ELECT. DISTRICT
24-4931-D	7	36	5
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
SSD			1
<b>TITLE</b>			
<b>SEDIMENT AND EROSION CONTROL KEY SHEET</b>			
REVISED SITE DEVELOPMENT PLAN			
Des. By	SLAJ	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	SLAJ	Date 02/15/19	
Chk. By	MCB/GDT	Approved MCB	34 of 77



**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
	PERMANENT SOIL STABILIZATION MATTING SOIL (PSSMS)
	OPENED AREA
	COVERED AREA
	(M-G) TREE PIT MICRO- BIORETENTION FACILITY
	STORMCEPTOR
	PROPOSED UTILITY STRUCTURES
	STANDARD INLET PROTECTION
	SUMP PIT
	SUPER SILT FENCE
	DIVERSION FENCE
	INLET BLOCKING

EX. PUBLIC WATER, SEWER, AND UTILITY EASEMENT, PLAT NO. 28992

EX. MULTI-PURPOSE PUBLIC/PRIVATE UTILITY EASEMENT (SEE G.N. #59) PLAT NO. 24626

EX. MULTI-PURPOSE PRIVATE UTILITY EASEMENT (SEE G.N. #59) PLAT NO. 24626

EX. PRIVATE STORMWATER MANAGEMENT EASEMENT AREA #36 (SEE G.N. #59) PLAT NO. 24819

EX. MULTI-PURPOSE PUBLIC/PRIVATE UTILITY EASEMENT (SEE G.N. #59) PLAT NO. 24626

EX. MULTI-PURPOSE PRIVATE UTILITY EASEMENT (SEE G.N. #59) PLAT NO. 24626

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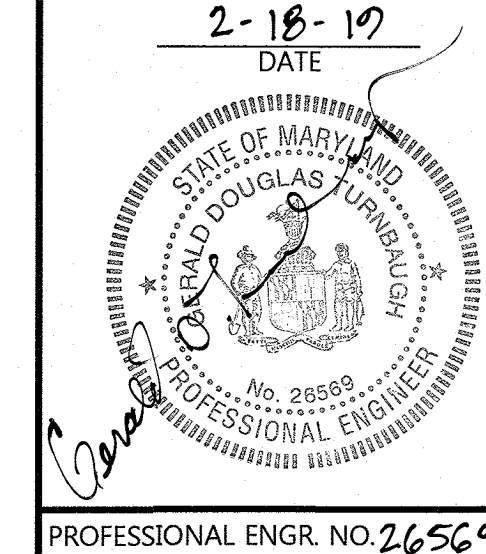
EX. MULTI-PURPOSE PRIVATE UTILITY EASEMENT (SEE G.N. #59) PLAT NO. 24626

**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."  
 2-18-19  
 OWNER'S/DEVELOPER'S SIGNATURE DATE  
 Wm. T. Rowe SVR

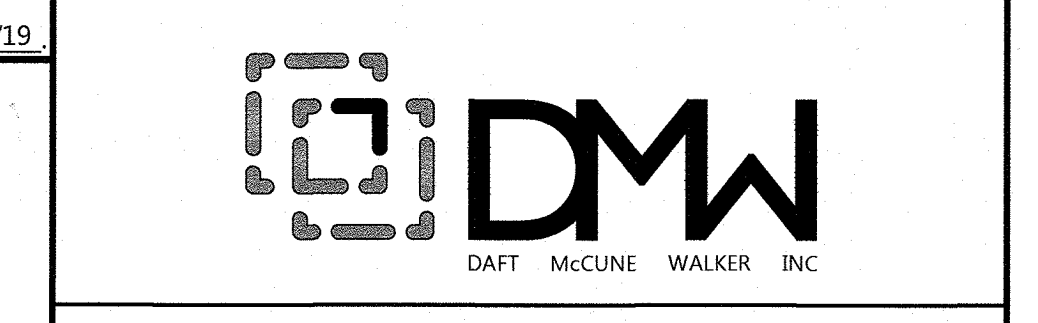
**DESIGN CERTIFICATION:**  
 "I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."  
 2-18-19  
 DESIGNER'S SIGNATURE DATE  
 Gerald D. Turnbaugh  
 PRINTED NAME M.D. REGISTRATION NO. (P.E. R.L.S. OR R.L.A. (CIRCLE ONE))

**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, SDP 17-027, F 17-057, F18-017, WP-18-089, WP-18-105.  
**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	No.	Revision Description
		<b>DOWNTOWN COLUMBIA</b> <b>CRESCENT NEIGHBORHOOD</b> <b>PHASE I AREA 3, PHASE 2</b> <b>PARCELS D-1, D-7, D-8, D-9,</b> <b>D-11, D-12 AND D-13</b> MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING



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	PHASE I AREA 3		PARCEL D
PORTAL NO.	TAX ZONING MAP	ELECT. DISTRICT	CENSUS TRACT
24819-2000	7	36	605602
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT	1	

**TITLE**  
**SEDIMENT AND EROSION CONTROL PLAN**

Des. By	SLAJ	SCALE AS SHOWN	Proj. No.	04038.B0
Drn. By	SLAJ	Date	02/15/19	
Chk. By	MCB/GDT	Approved	MCB	35 of 77

SDP-18-005

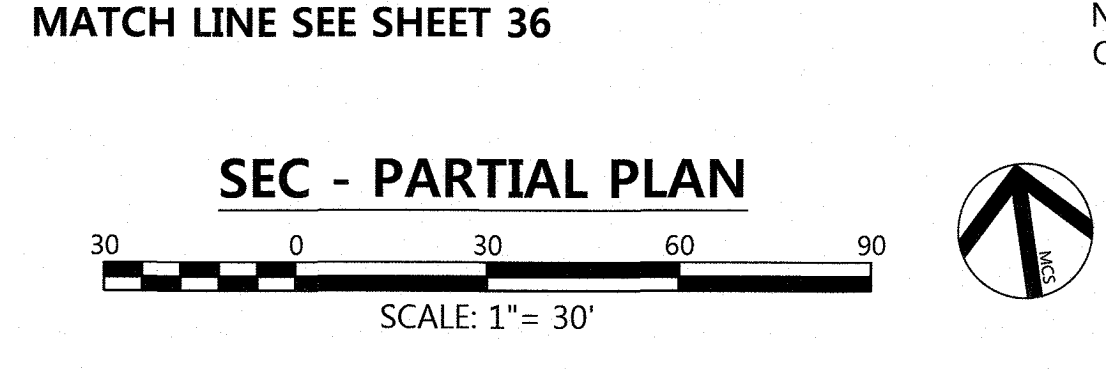
**APPROVED:** HOWARD COUNTY DEPT. OF PLANNING & ZONING

*Chilchuk* 3-20-19  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Walt Seidman* 4-24-19  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Walker* 4-24-19  
 DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

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



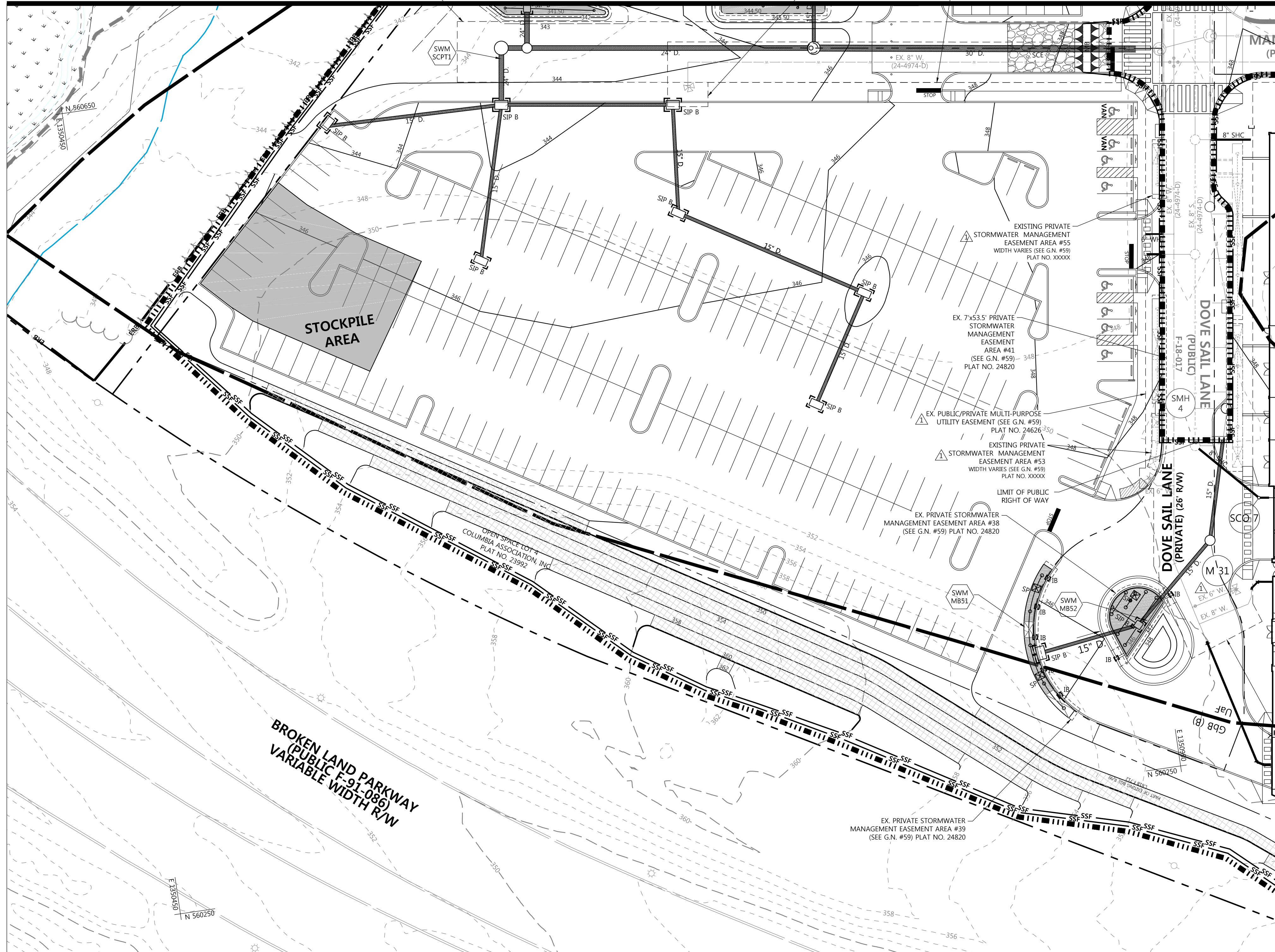
NOTE: SEE SHEET 41 FOR SEEDING SPECIFICATIONS TO BE IMPLEMENTED ON PARCELS AND OPEN SPACES OWNED BY THE COLUMBIA ASSOCIATION.

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

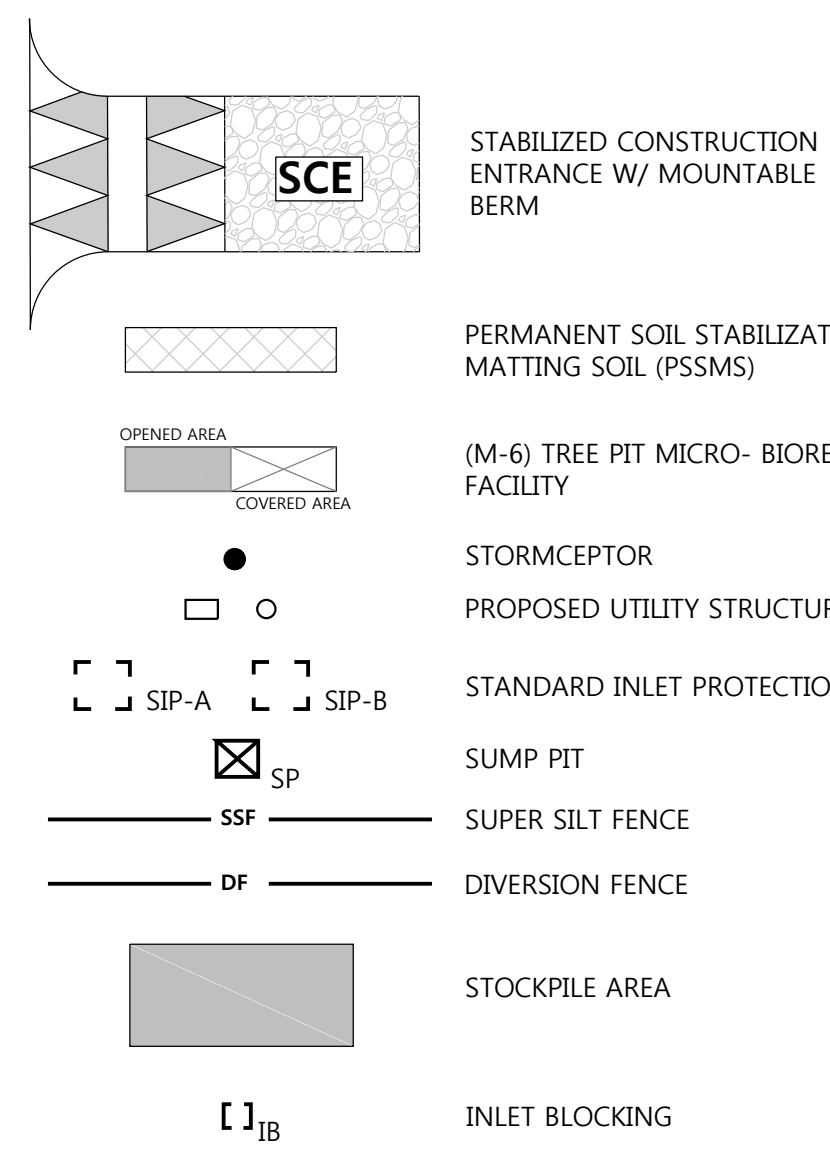
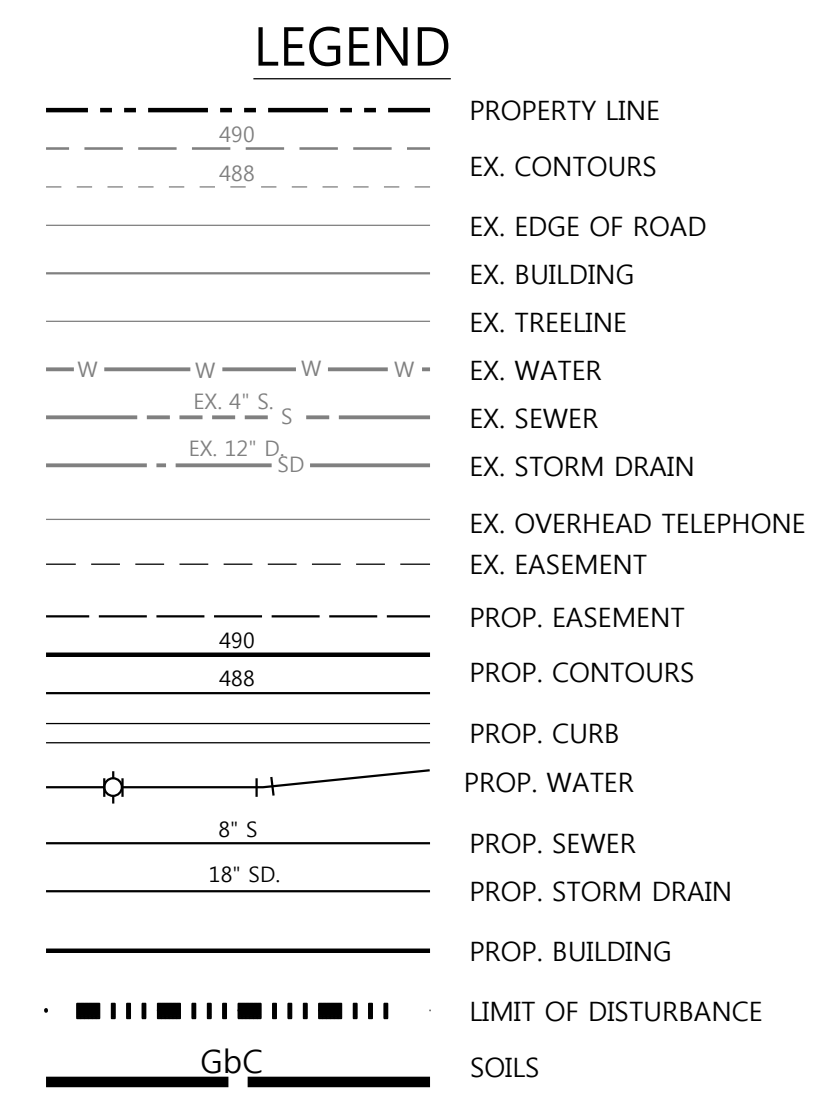
*John R. Robertson* 3/6/19  
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE: 11/8/18

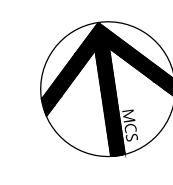
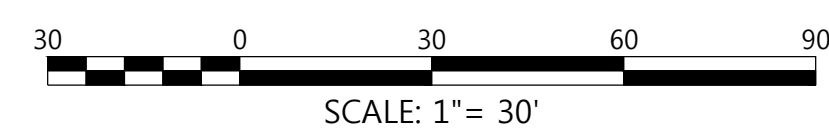
CONTINUATION LINE SHEET 35



CONTINUATION LINE SHEET 37



SEC - PARTIAL PLAN



**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 \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

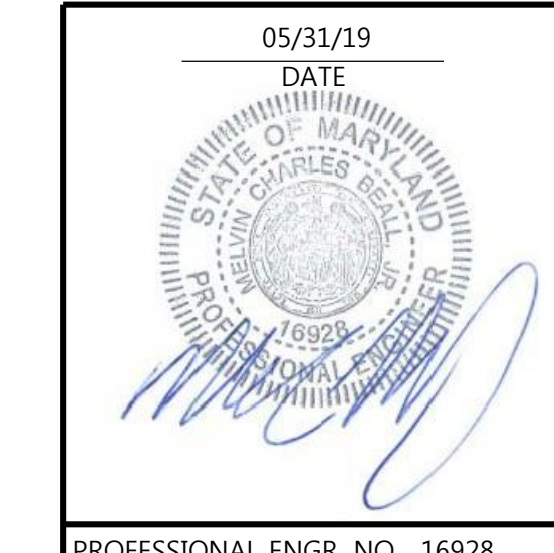
DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

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

HOWARD SOIL CONSERVATION DISTRICT \_\_\_\_\_ 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, SDP 17-027, F 17-057, F18-017, WP-18-089, WP-18-105.  
**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.



PROFESSIONAL ENGR. NO. 16928

APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_

**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 \_\_\_\_\_ DATE \_\_\_\_\_

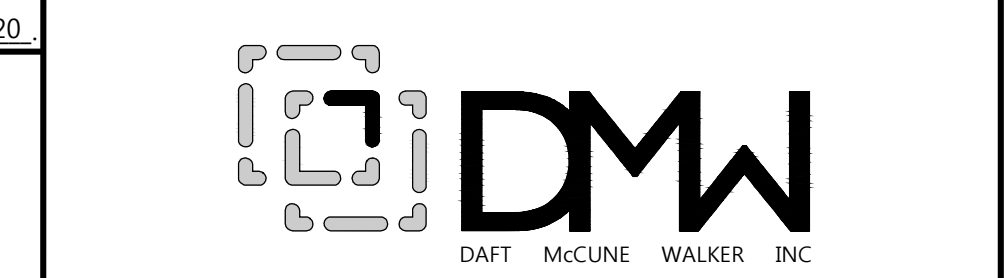
PRINTED NAME & TITLE \_\_\_\_\_

**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 SOIL CONSERVATION DISTRICT."

DESIGNER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

PRINTED NAME \_\_\_\_\_ MD REGISTRATION NO. \_\_\_\_\_  
 P.E., R.L.S., OR R.L.A. (CIRCLE ONE)

04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	Revision Description
<b>DOWNTOWN COLUMBIA</b>	
<b>CRESCENT NEIGHBORHOOD</b>	
<b>PHASE I AREA 3, PHASE 2</b>	
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13	
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING	
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800	

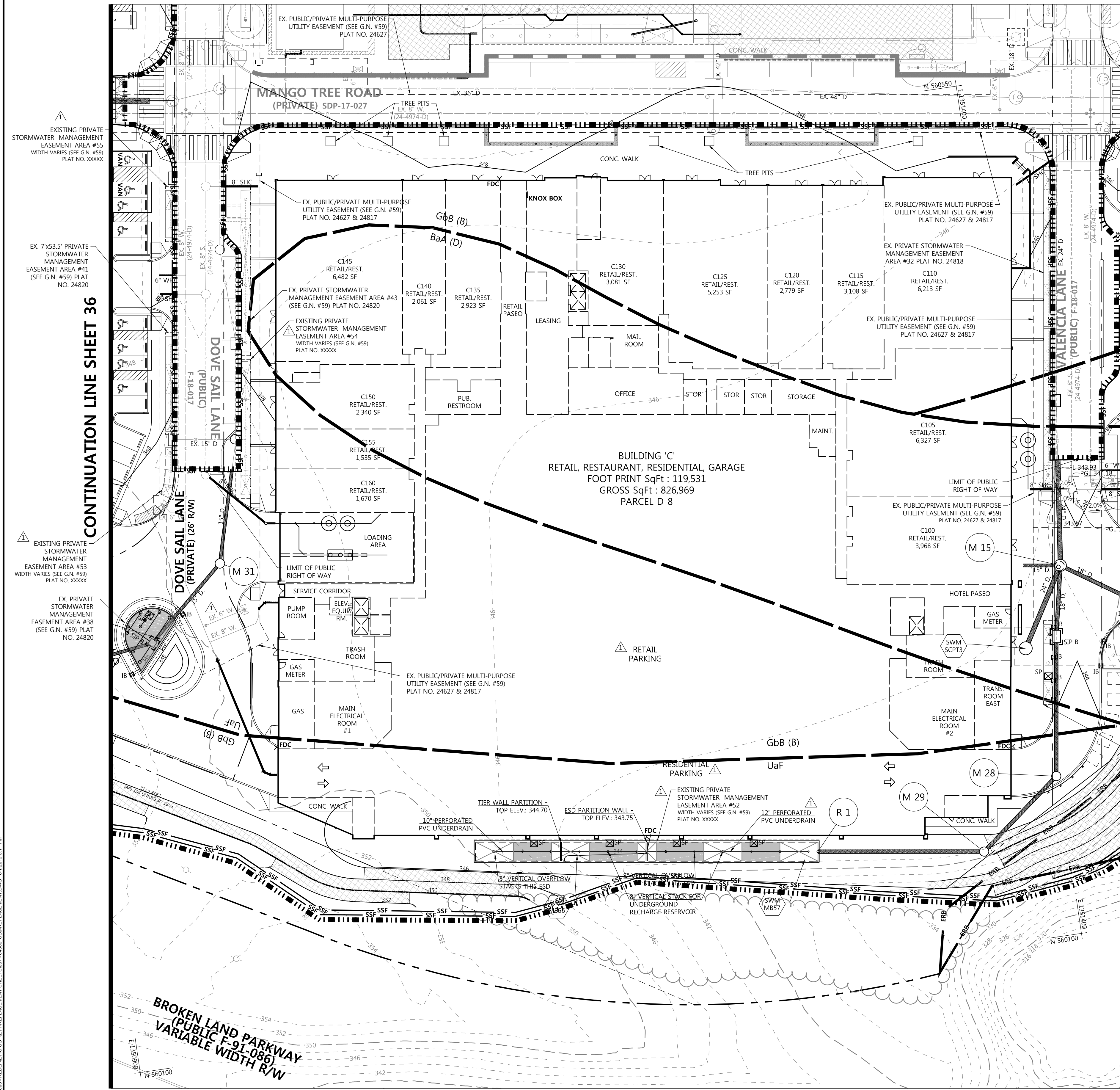


501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286  
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	7	CRESCENT AREA 3	PARCEL D
PLAT NO. 2481	TAX ZONING MAP	ELECT. DISTRICT	CENSUS TRACT
2481	7	5	605602
WATER CODE	SEWER CODE	STAGE	
S50	LITTLE PATUXENT	1	

TITLE: **SEDIMENT AND EROSION CONTROL PLAN**  
 REVISED SITE DEVELOPMENT PLAN

Des. By	SLAJ	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	SLAJ	Date 02/15/19	
Chk. By	MCB/GDT	Approved MCB	36 of 77



**LEGEND**

- 490 --- PROPERTY LINE
  - 488 --- EX. CONTOURS
  - EX. EDGE OF ROAD
  - EX. BUILDING
  - EX. TREELINE
  - W --- W --- W --- 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
  - SOILS
- 
- SCE STABILIZED CONSTRUCTION ENTRANCE W/ MOUNTABLE BERM
  - PERMANENT SOIL STABILIZATION MATTING SOIL (PSSMS)
  - SURFACE PLANTING BED
  - (M-6) TREE PIT MICRO-BIORETENTION FACILITY
  - STORMCEPTOR
  - PROPOSED UTILITY STRUCTURES
  - SIP-A SIP-B STANDARD INLET PROTECTION
  - SP SUMP PIT
  - SSF SUPER SILT FENCE
  - DF DIVERSION FENCE
  - IB INLET BLOCKING

**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 \_\_\_\_\_ DATE \_\_\_\_\_

PRINTED NAME & TITLE \_\_\_\_\_

**DESIGN CERTIFICATION:**

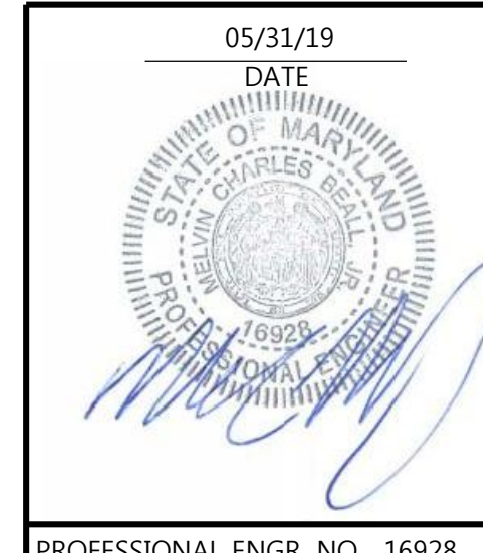
"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS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

DESIGNER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

PRINTED NAME \_\_\_\_\_ MD REGISTRATION NO. \_\_\_\_\_ P.E., R.L.S., OR R.L.A. (CIRCLE ONE)

**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.  
**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. 16928, EXPIRATION DATE: 05/31/20.



PROFESSIONAL ENGR. NO. 16928

04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	Revision Description
<b>DOWNTOWN COLUMBIA</b>	
<b>CRESCENT NEIGHBORHOOD</b>	
<b>PHASE I AREA 3, PHASE 2</b>	
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13	
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING	
OWNER / DEVELOPER:	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800	

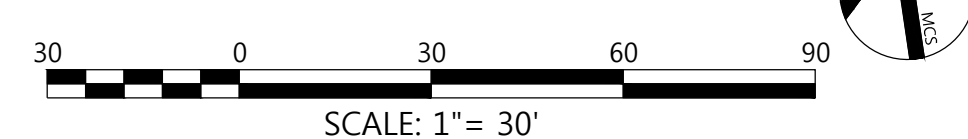
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286  
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

SUBDIVISION NAME	SECTION	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PHASE I AREA 3	PARCEL D
PLAT NO. 24627	TAX ZONING MAP	ELECT. DISTRICT	CENSUS TRACT
7	36	5	605602
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
SSD	LITTLE PATUXENT		1

**TITLE**  
**SEDIMENT AND EROSION CONTROL PLAN**  
 REVISED SITE DEVELOPMENT PLAN

Des. By	SLAJ	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	SLAJ	Date	02/15/19		
Chk. By	MCB/GDT	Approved	MCB		37 of 77

**SEC - PARTIAL PLAN**



NOTE: SEE SHEET 41 FOR SEEDING SPECIFICATIONS TO BE IMPLEMENTED ON PARCELS AND OPEN SPACES OWNED BY THE COLUMBIA ASSOCIATION.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

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

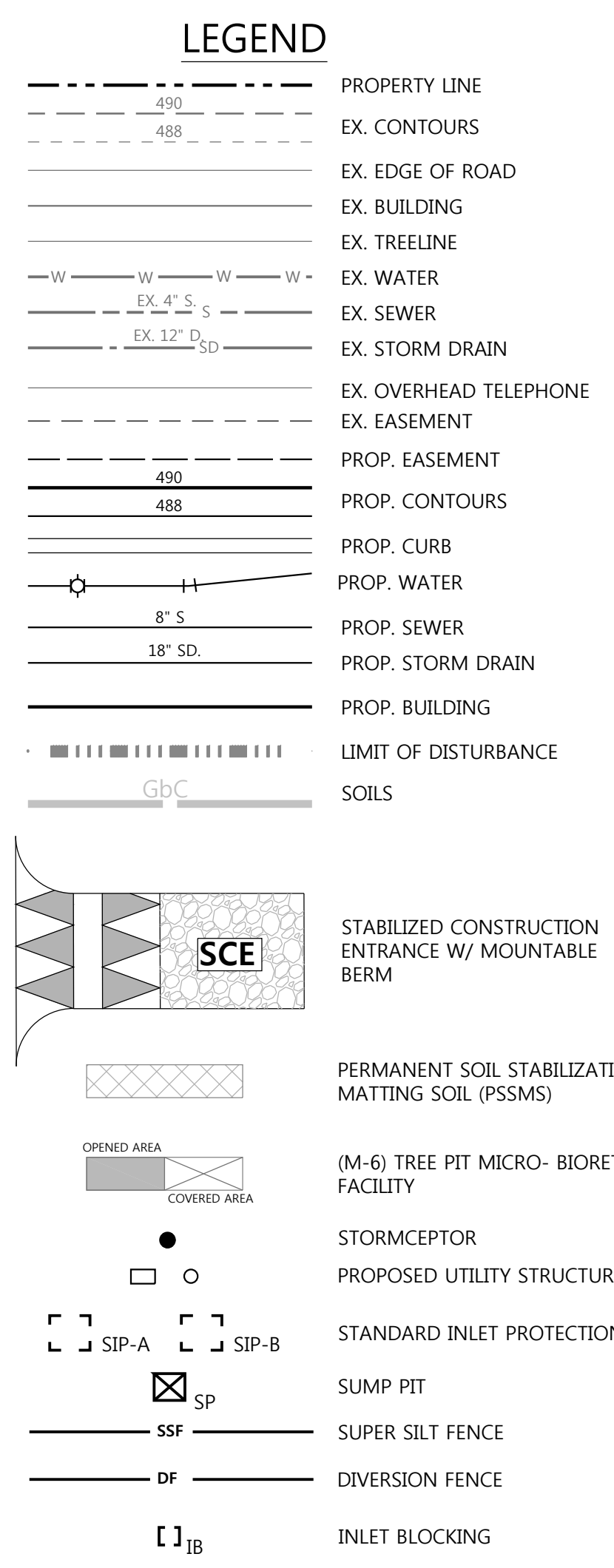
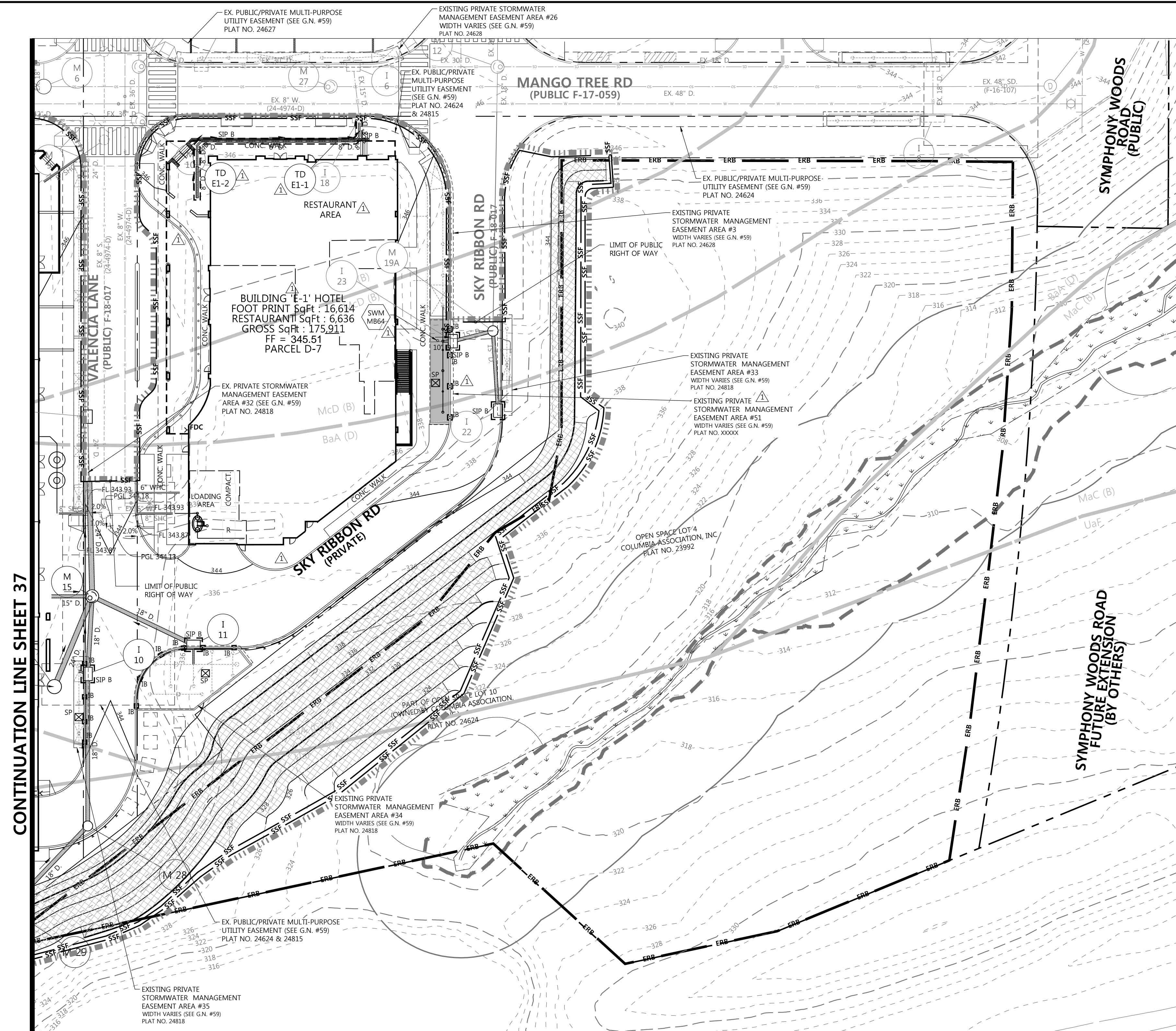
- WATER
- SEWER
- STREET LIGHTING
- STORM WATER MANAGEMENT
- STORM DRAIN
- UTILITY

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

HOWARD SOIL CONSERVATION DISTRICT \_\_\_\_\_ DATE \_\_\_\_\_

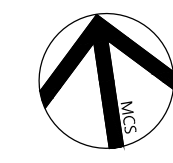
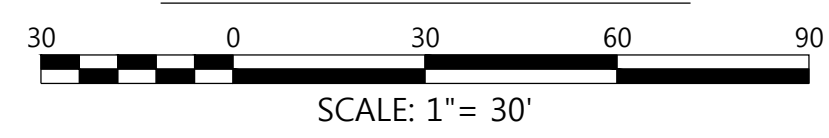
APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_



CONTINUATION LINE SHEET 37

**SEC - PARTIAL PLAN**



NOTE: SEE SHEET 41 FOR SEEDING SPECIFICATIONS TO BE IMPLEMENTED ON PARCELS AND OPEN SPACES OWNED BY THE COLUMBIA ASSOCIATION.

- 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	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.

**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.

05/31/19  
 DATE

PROFESSIONAL ENGR. NO. 16928

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

APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_

HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_

**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."

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PRINTED NAME & TITLE \_\_\_\_\_

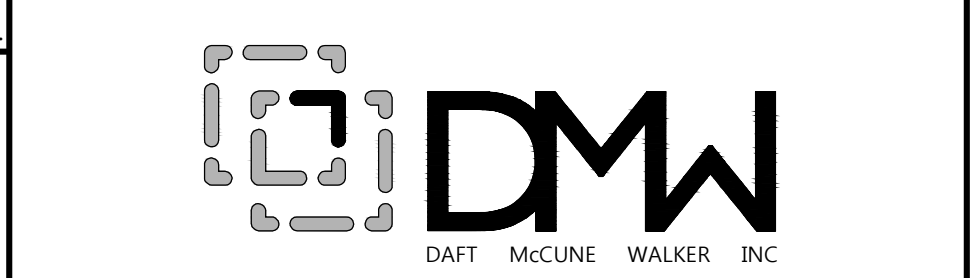
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DESIGNER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

PRINTED NAME \_\_\_\_\_ MD REGISTRATION NO. P.E., R.L.S., OR R.L.A. (CIRCLE ONE)

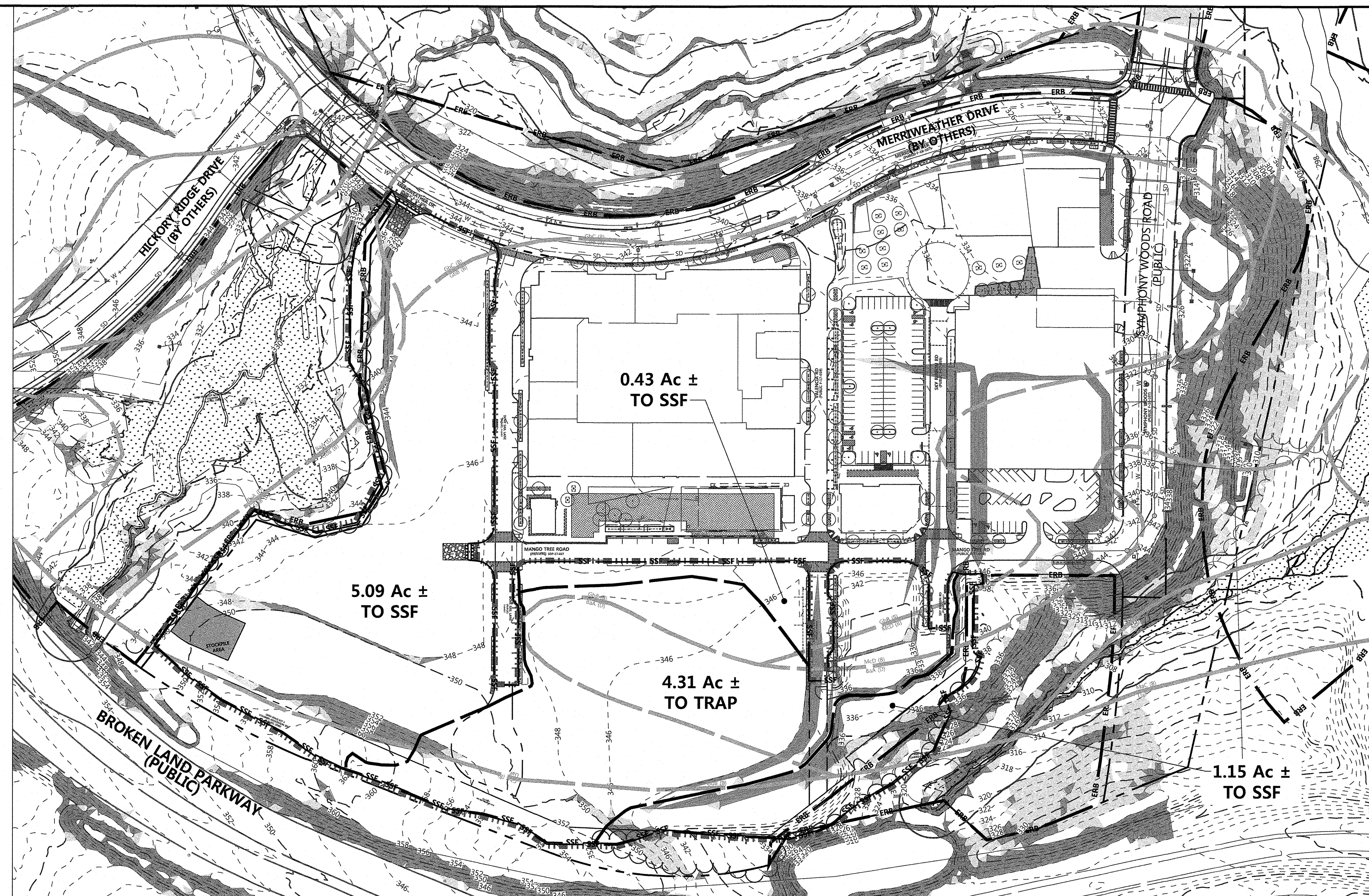
04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	Revision Description
<b>DOWNTOWN COLUMBIA</b>	
<b>CRESCENT NEIGHBORHOOD</b>	
<b>PHASE I AREA 3, PHASE 2</b>	
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13	
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING	
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/REF. SHEET	TAX ZONING/MAP
24812-24810	7
DATE	ELECT. DISTRICT
05/13/20	5
WATER CODE	SEWER CODE
S50	LITTLE PATUXENT
	STAGE
	1

<b>TITLE</b>			
<b>SEDIMENT AND EROSION CONTROL PLAN</b>			
REVISED SITE DEVELOPMENT PLAN			
Des. By	SLAJ	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	SLAJ	Date 02/15/19	
Chk. By	MCB/GDT	Approved MCB	38 of 77

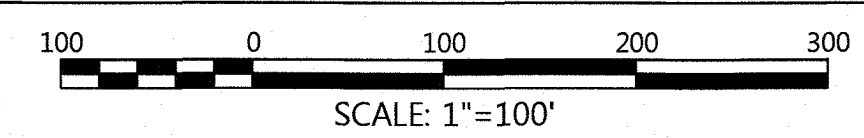




- ### LEGEND
- PROPERTY LINE
  - EX. CONTOURS
  - EX. EDGE OF ROAD
  - EX. BUILDING
  - EX. TREELINE
  - EX. WATER
  - EX. SEWER
  - EX. STORM DRAIN
  - EX. OVERHEAD TELEPHONE
  - EX. EASEMENT
  - LIMIT OF DISTURBANCE
  - SOILS
  - DRAINAGE DIVIDES
  - STABILIZED CONSTRUCTION ENTRANCE W/ MOUNTABLE BERM
  - (M-6) MODULAR MICRO-BIORETENTION FACILITY
  - PROPOSED UTILITY STRUCTURES
  - SIP-A,B STANDARD INLET PROTECTION
  - SUMP PIT
  - SUPER SILT FENCE
  - DIVERSION FENCE
  - STOCKPILE AREA

### 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

*[Signature]* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

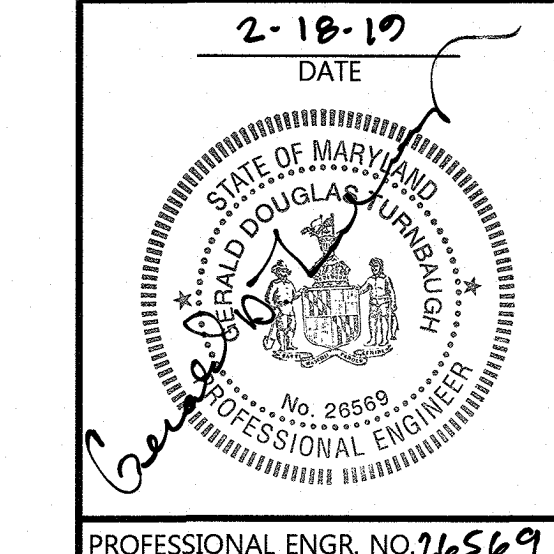
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

*[Signature]* 3/16/19  
HOWARD SOIL CONSERVATION DISTRICT 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, SDP 17-027, F 17-057, F18-017, WP-18-089, WP-18-105.

**CONTRACT NUMBERS:**  
24-4931-D, 24-4973-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: 11/8/18

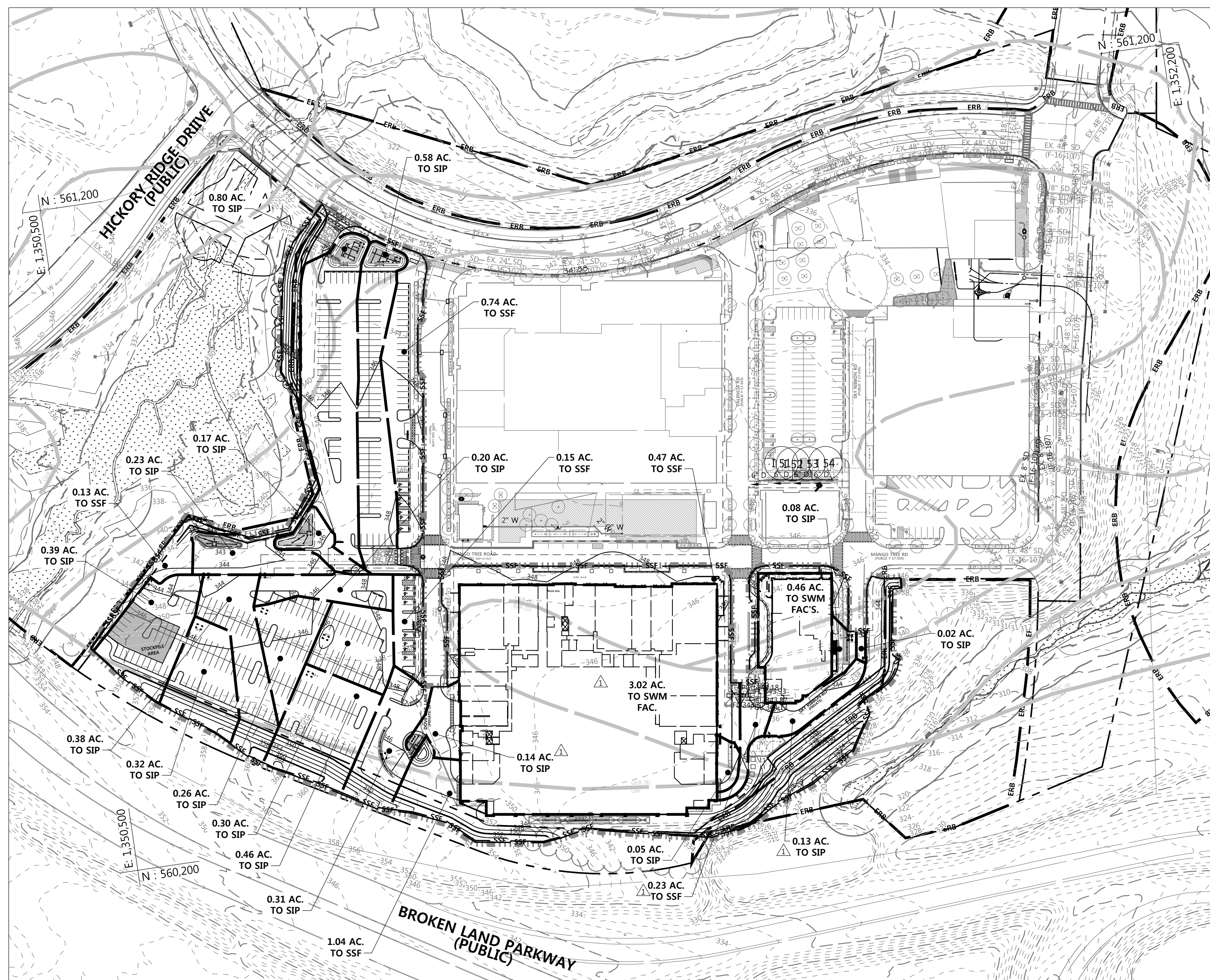
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b> <b>CRESCENT NEIGHBORHOOD</b> <b>PHASE I AREA 3, PHASE 2</b> PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13 MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA 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

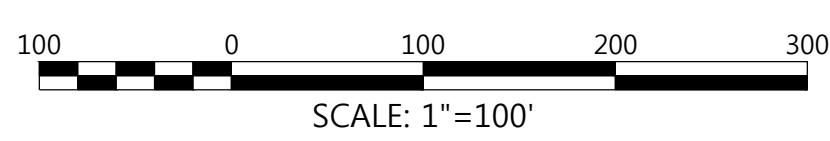
SECTION	CRESCENT NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA		
PLAT FOR LOT	BLOCK # 7	ZONE
2018-009	7	INDIAL
WATER CODE	550	SEWER CODE
		LITTLE PATUXENT
		STAGE
		1

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

Des. By	SLAJ	SCALE	AS SHOWN	Proj. No.	04038.80
Drn. By	SLAJ	Date	02/15/19		
Chk. By	MCB/GDT	Approved	MCB		39 of 77



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
	STABILIZED CONSTRUCTION ENTRANCE W/ MOUNTABLE BERM
	STOCKPILE AREA
	(M-6) MODULAR MICRO-BIORETENTION FACILITY
	STORMCEPTOR
	PROPOSED UTILITY STRUCTURES
	INLET PROTECTION
	SUMP PIT
	SUPER SILT FENCE
	DIVERSION FENCE

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

**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, SDP 17-027, F 17-057, F 18-017, WP-18-089, WP-18-105.  
**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.

04/19/19	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT & NEW BLDG. E-1 HOTEL
Date	No.
<b>Revised Description</b>	
<b>DOWNTOWN COLUMBIA</b>	
<b>CRESCENT NEIGHBORHOOD</b>	
<b>PHASE I AREA 3, PHASE 2</b>	
<b>PARCELS D-1, D-7, D-8, D-9,</b>	
<b>D-11, D-12 AND D-13</b>	
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT, & HOTEL BUILDING	
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
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD PHASE I AREA 3
PLAT FOR REF.	TAX ZONING MAP
24-4931-2410	7
WATER CODE	SEWER CODE
550	LITTLE PATUXENT
LOT/PARCEL #	STAGE
PARCEL D	1
CENSUS TRACT	
605602	
<b>TITLE</b>	
<b>SEDIMENT AND EROSION CONTROL</b>	
<b>PROP. CONDITONS DA MAP</b>	
REVISED SITE DEVELOPMENT PLAN	
Des. By	SLAJ
Drn. By	SLAJ
Chk. By	MCB/GDT
SCALE AS SHOWN	Proj. No. 04038.B0
Date	02/15/19
Approved	MCB
40	of 77

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

\_\_\_\_\_  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION      DATE

\_\_\_\_\_  
 CHIEF, DIVISION OF LAND DEVELOPMENT      DATE

\_\_\_\_\_  
 DIRECTOR      DATE

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

HOWARD SOIL CONSERVATION DISTRICT      DATE

PROFESSIONAL ENGR. NO. 16928

APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_



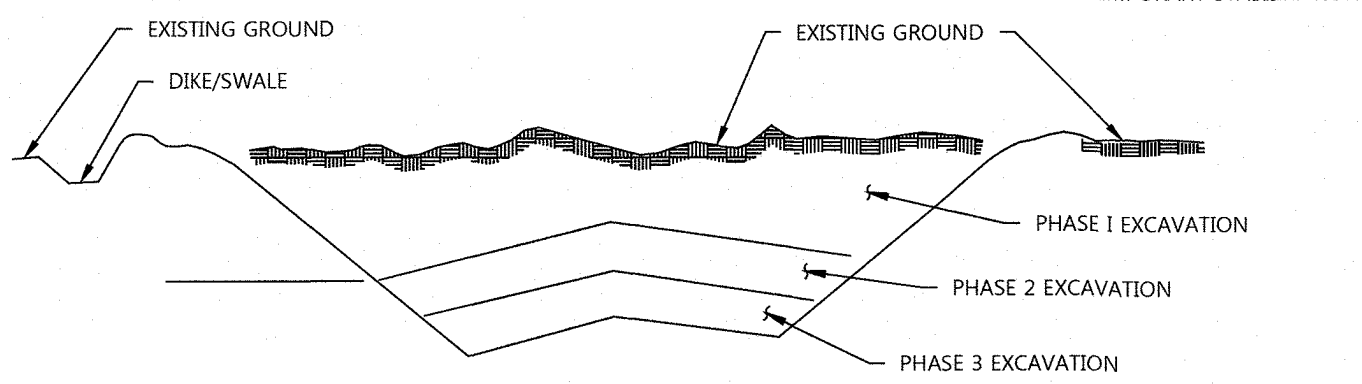
**STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION**

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

**A. 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.

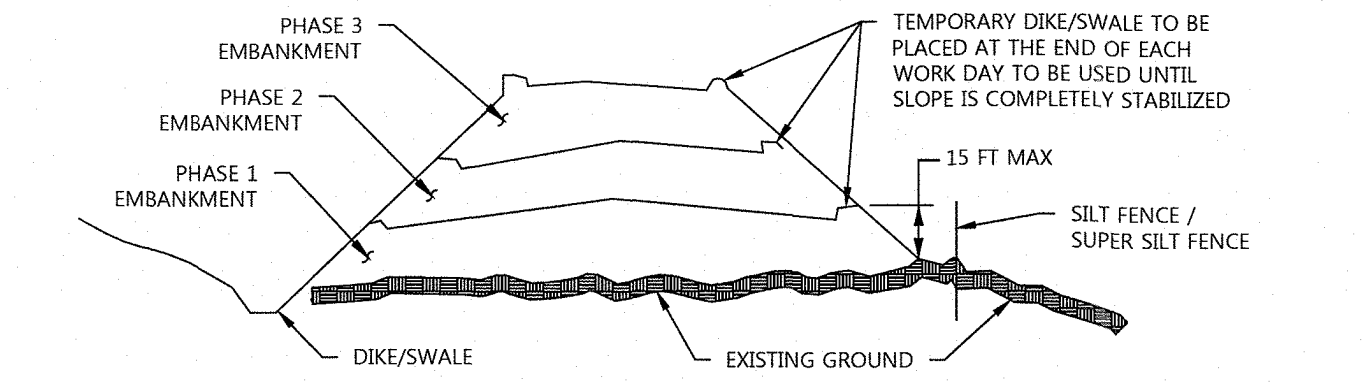
NOTE: EXCAVATION HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION 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 PRACTICE(S), 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. USE OTHER METHODS SHOWN ON THE PLANS ADDRESS THIS AREA.
  - AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), 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 LOOSENEED, 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 LOVEGRASS 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 LOOSENEED 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 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 FRAGILE. 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 OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CNIDERS, STONES, SLAG, COARSE FRAGMENTS, 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.
- 6. TOPSOIL APPLICATION**
- EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.
  - UNIFORMLY 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. MANURE 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 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**

**A. 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 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.

NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.

- SOD OR 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.
- APPLICATION**
  - DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.
  - INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON PERMANENT SEEDING TABLE B.1, PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUBPARTS.

- APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.
- DRILL OR CULTPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
- CULTPACKING 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).

- 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; P2O5 (PHOSPHOROUS), 200 POUNDS PER ACRE; K2O (POTASSIUM), 200 POUNDS PER ACRE.
- LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP 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 BURNED 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.

**B. 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 PLANTS AND SEEDS AS SPECIFIED IN THE MARYLAND STATE SEED LAW AND NOT MUSTY, MOLLY, CAKED, 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 BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND WATER CAPACITY 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, RANGE OF 4:0 TO 1:5, 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 UNIFORMLY AND DEPTLY 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 50 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:
      - 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 TACK OR TERRA TACK OR OTHER APPROVED EQUIPMENT MAY BE USED. FOLLOW 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.

**(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-4-3 A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

Seed Mixture (Hardiness Zone 6b)				Fertilizer Rate (10-10-10)	Lime Rate
Season	Species	Application Rate (Lb./Ac.)	Seeding Dates		
Cool	Annual Ryegrass	40	3/15-4/15 8/1-10/15	436 Lbs./Ac. (10 1000 Sq.Ft.)	2 Tons/Ac. (1000 Sq.Ft.)
Warm	Pearl Millet	20	5/16-7/31	1/2"	

- SEEDING RATES FOR THE WARM-SEASON GRASSES ARE IN POUNDS OF PURE LIVE SEED (PLS). ACTUAL PLANTING RATES SHALL BE ADJUSTED TO REFLECT PERCENT SEED GERMINATION AND PURITY, AS TESTED. ADJUSTMENTS ARE USUALLY NOT NEEDED FOR THE COOL-SEASON GRASSES.
 

SEEDING RATES LISTED ABOVE ARE FOR TEMPORARY SEEDINGS, WHEN PLANTED ALONE. WHEN PLANTED AS A NURSE CROP WITH PERMANENT SEED MIXES, USE 1/3 OF THE SEEDING RATE LISTED ABOVE FOR BARLEY, OATS, AND WHEAT. FOR SMALLER SEEDING GRASSES (ANNUAL RYEGRASS, PEARL MILLET, FOXTAIL MILLET), DO NOT EXCEED MORE THAN 5% (BY WEIGHT) OF THE OVERALL PERMANENT SEEDING MIX. CERIAL RYE GENERALLY SHOULD NOT BE USED AS A NURSE CROP UNLESS PLANTING WILL OCCUR IN VERY LATE FALL. BEYOND THE SEEDING DATES FOR OTHER TEMPORARY SEEDINGS, CERIAL RYE HAS ALLELOPATHIC PROPERTIES THAT INHIBIT THE GERMINATION AND GROWTH OF OTHER PLANTS. IF IT MUST BE USED AS A NURSE CROP, SEED AT 1/3 OF THE RATE LISTED ABOVE.

OATS ARE THE RECOMMENDED NURSE CROP FOR WARM-SEASON GRASSES.
- FOR SANDY SOILS, PLANT SEEDS AT TWICE THE DEPTH LISTED ABOVE.
- THE PLANTING DATES LISTED ARE AVERAGES FOR EACH ZONE AND MAY REQUIRE ADJUSTMENT TO REFLECT LOCAL CONDITIONS, ESPECIALLY NEAR THE BOUNDARIES OF THE ZONE.

**(B-4-5) SECTION 5 - PERMANENT STABILIZATION**

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

- SEED MIXTURES**
  - GENERAL USE
    - SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITIONS OR PURPOSE FOUND ON TABLE B.2, ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
    - ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING.
    - FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.
    - FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.
  - TURFGRASS MIXTURES
    - AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.
    - SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
      - KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
      - KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS REQUIRED AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
      - TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 5 TO 5 PERCENT, SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.
      - KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 50 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1 1/2 TO 3 POUNDS PER 1000 SQUARE FEET.

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

- IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES
  - WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A)
  - CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B)
  - SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 7A, 7B)
- TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOVING OF GRASSES WILL POSE NO DIFFICULTY.
- IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

Seed Mixture No. 9 (Hardiness Zone 6b)				** Fertilizer Rate (10-20-20)	** Lime Rate
No.	Species	Application Rate (Lb./Sq.Ft.)	Seeding Dates**	Seeding Depths	
9	*Tall Fescue *Kentucky Bluegrass	6-8 Lb./1000 Sq.Ft.	3/1 - 5/15 8/15 - 10/15	1/2" - 3/4"	1.0 Lb/1000 Sq.Ft. (45 Lb./Ac.) 90 Lb./1000 Sq.Ft.

- BLENDED 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 MACHINE 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.

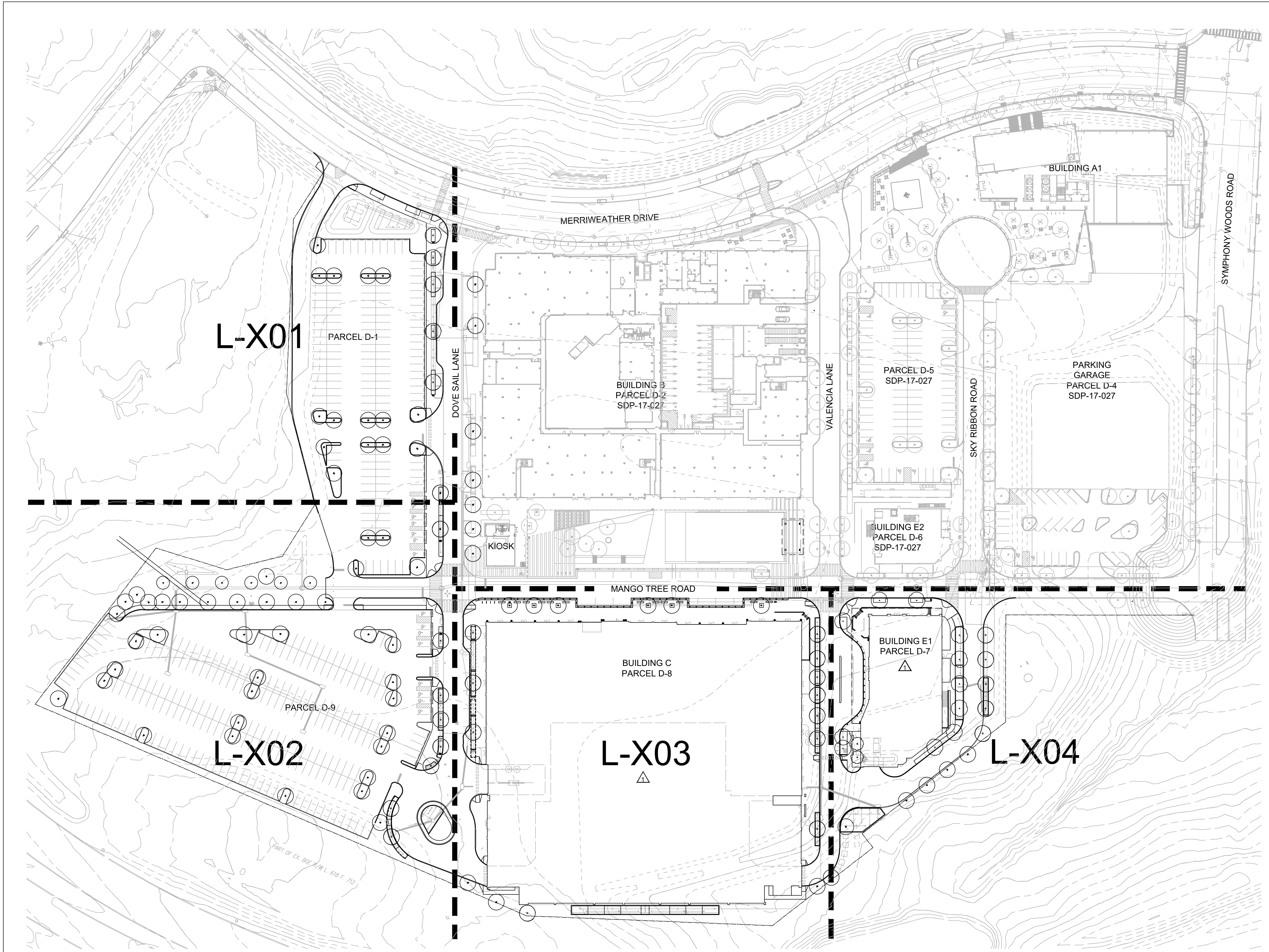
- SOD INSTALLATION**
  - DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
  - LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE 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 SOIL 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 IRRIGATING 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.

**(H-1) STANDARDS AND SPECIFICATIONS FOR MATERIALS**

TABLE H.1: GEOTEXTILE FABRICS

PROPERTY	TEST METHOD	WOVEN SPLIT FILM GEOTEXTILE		WOVEN MONOFLAMENT GEOTEXTILE		NONWOVEN GEOTEXTILE	
		MD	CD	MD	CD	MD	CD
Grab Tensile Strength	ASTM D-4632	200 lb	200 lb	370 lb	250 lb	200 lb	200 lb
Grab Tensile Elongation	ASTM D-4632	15%	10%	15%	15%	50%	50%
Trapezoidal Tear Strength	ASTM D-4533	75 lb	75 lb	100 lb	60 lb	80 lb	80 lb
Puncture Strength	ASTM D-6241	450 lb		900 lb		450 lb	
Apparent Opening Size <sup>2</sup>	ASTM D-4751	U.S. Sieve 30 (0.9 mm)		U.S. Sieve 70 (0.21 mm)		U.S. Sieve 70 (0.21 mm)	
Permittivity	ASTM D-4491	0.25 sec -1		0.28 sec -1		1.1 sec -1	
Ultraviolet Resistance Retained at 500 hours	ASTM D-4355	70% strength		70% strength		70% strength	

- ALL NUMERIC VALUES EXCEPT APP

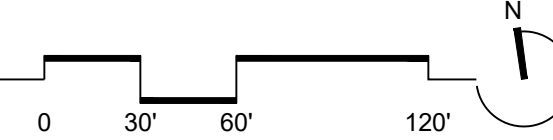


1 SITE KEY PLAN  
1"=60'-0"

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

LANDSCAPE TYPE	SCHEDULE A - PERIMETER LANDSCAPE EDGE		SCHEDULE A - PERIMETER LANDSCAPE EDGE	
	ROADWAY	PERIMETER PROPERTY	ROADWAY	PERIMETER PROPERTY
LINEAR FEET OF ROADWAY FRONTAGE / PERIMETER	0	2253	190	0
CREDIT FOR EXISTING VEGETATION	0	0	0	0
CREDIT FOR WALL FENCE OR BERM	0	0	0	0
NUMBER OF PLANTS REQUIRED: (SHADE TREES, SHRUBS, EVERGREEN TREES)	0	38,0,0	38,0,48	0
NUMBER OF PLANTS PROVIDED: (SHADE TREES, SHRUBS, EVERGREEN TREES)	0	38,0,0	38,0,527	0

SCHEDULE B - PARKING LOT INTERNAL LANDSCAPE	
NUMBER OF PARKING SPACES	568
NUMBER OF TREES REQUIRED	29
NUMBER OF TREES PROVIDED (SHADE TREES, OTHER TREES (2:1 SUBSTITUTION))	38 / 38 / 0



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-201	HARDSCAPE DETAILS
L-202	HARDSCAPE DETAILS
L-211	SITE AMENITY 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
L-402	LANDSCAPE PLANTING PLAN
L-403	LANDSCAPE PLANTING PLAN
L-404	LANDSCAPE PLANTING PLAN
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.

DEVELOPER'S/OWNER'S NAME

DEVELOPER'S/OWNER'S NAME

- 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 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.

REVISOR'S SITE DEVELOPMENT PLAN

**FILE NUMBERS:**  
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 09/21/2019.

5/15/2019	△	HARDSCAPE AND BLDG REVISIONS
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b>		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE 2		
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13		
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  
The Stieff Silver Building, 800 Wyman Park Drive, Suite 100, Baltimore, MD 21211 410.235.6001

SUBDIVISION NAME	SECTION	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE I AREA 3	CRESCENT NEIGHBORHOOD	PARCEL D
PLAT OR REF. MAP	BLOCK #	TAX ZONING MAP	ELECT. DIST. #
7	1	36	5
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			1
CENSUS TRACT 605602			

TITLE			
<b>L-000 - LANDSCAPING &amp; HARDSCAPE KEY SHEET</b>			
Des. By	MP	SCALE AS SHOWN	Proj. No. 04038.00
Drn. By	BB	Date 02/15/19	43 of 77
Chk. By	MP	Approved	

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE:

**HARDSCAPE KEY**

**PAVING**

- (P1)** <sup>3</sup>/<sub>(L-201)</sub> PEDESTRIAN CONCRETE UNIT  
PAVER 1A (LIGHT)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO FINISH  
COLOR: WINTER MARVEL  
SIZE: 6"x 18"x 2 1/2"
- (P1)** <sup>3</sup>/<sub>(L-201)</sub> PEDESTRIAN CONCRETE UNIT  
PAVER 1B (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: FRENCH GREY  
SIZE: 6"x 18"x 2 1/2"
- (P2)** <sup>4</sup>/<sub>(L-201)</sub> VEHICULAR CONCRETE UNIT  
PAVER 2A (LIGHT)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO FINISH  
COLOR: WINTER MARVEL  
SIZE: 6"x 18"x 3 1/2"
- (P2)** <sup>4</sup>/<sub>(L-201)</sub> VEHICULAR CONCRETE UNIT  
PAVER 2B (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: FRENCH GREY  
SIZE: 6"x 18"x 3 1/2"
- (P3)** <sup>1</sup>/<sub>(L-201)</sub> PEDESTRIAN EXPOSED AGGREGATE  
COLOR CONCRETE
- (P3)** <sup>1</sup>/<sub>(L-201)</sub> VEHICULAR EXPOSED AGGREGATE  
COLOR CONCRETE
- (P4)** <sup>1</sup>/<sub>(L-201)</sub> PEDESTRIAN CAST-IN-PLACE  
CONCRETE PAVING
- (P4)** <sup>1</sup>/<sub>(L-201)</sub> VEHICULAR CAST-IN-PLACE  
CONCRETE PAVING
- (P5)** <sup>3</sup>/<sub>(L-201)</sub> PEDESTRIAN CONCRETE UNIT PAVEMENT  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: MIDNIGHT SKY  
SIZE: 12"x 12"x 3 1/2"
- (P6)** <sup>5</sup>/<sub>(L-201)</sub> DETECTABLE WARNING PAVEMENT

**STRUCTURE**

- (S1)** <sup>8</sup>/<sub>(L-201)</sub> C.I.P. CONCRETE STAIRS

**TREE PITS & TREE ACCESSORIES**

- (EE)** EXISTING ESD. SEE F-PLAN 18-017,  
STRUCTURAL, AND CIVIL DRAWINGS FOR  
ADDITIONAL INFORMATION
- (E)** <sup>1-3</sup>/<sub>(L-201)</sub> ESD. SIZE VARIES. REFER TO  
STRUCTURAL+CIVIL DRAWINGS FOR  
ADDITIONAL INFORMATION

**SITE AMENITIES**

- (B1)** <sup>1</sup>/<sub>(L-211)</sub> BENCH
- (BO)** <sup>4</sup>/<sub>(L-211)</sub> BOLLARD
- (BO)** <sup>4</sup>/<sub>(L-211)</sub> REMOVABLE BOLLARD
- (BR)** <sup>3</sup>/<sub>(L-211)</sub> BIKE RACK
- (HR)** <sup>2</sup>/<sub>(L-201)</sub> HANDRAIL
- (LR)** <sup>2</sup>/<sub>(L-211)</sub> LITTER/RECYCLING RECEPTACLE

**CERTIFICATION NOTE:**

1. 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 Rowe* 2.18.19  
DEVELOPER'S/OWNER'S NAME

*Wm T Rowe SVP*  
DEVELOPER'S/OWNER'S NAME

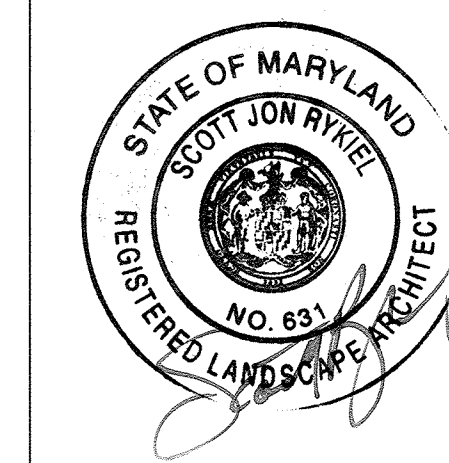
- ENVIRONMENTAL DATA SOURCES**
- FLOODPLAIN INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A STUDY PERFORMED BY BIO-HABITATS DATED 06/18/2015.
  - WETLANDS AND ASSOCIATED ENVIRONMENTAL INFORMATION SHOWN HEREON REFLECT THE RESULT OF AN INVESTIGATION PERFORMED BY DMW DATED MARCH 2015.
  - SOIL SURVEY 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 SWIDER, 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.

**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, SDP 17-027, F 17-057,  
F18-017, WP-18-089, WP-18-105.

**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: 09/21/19.



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

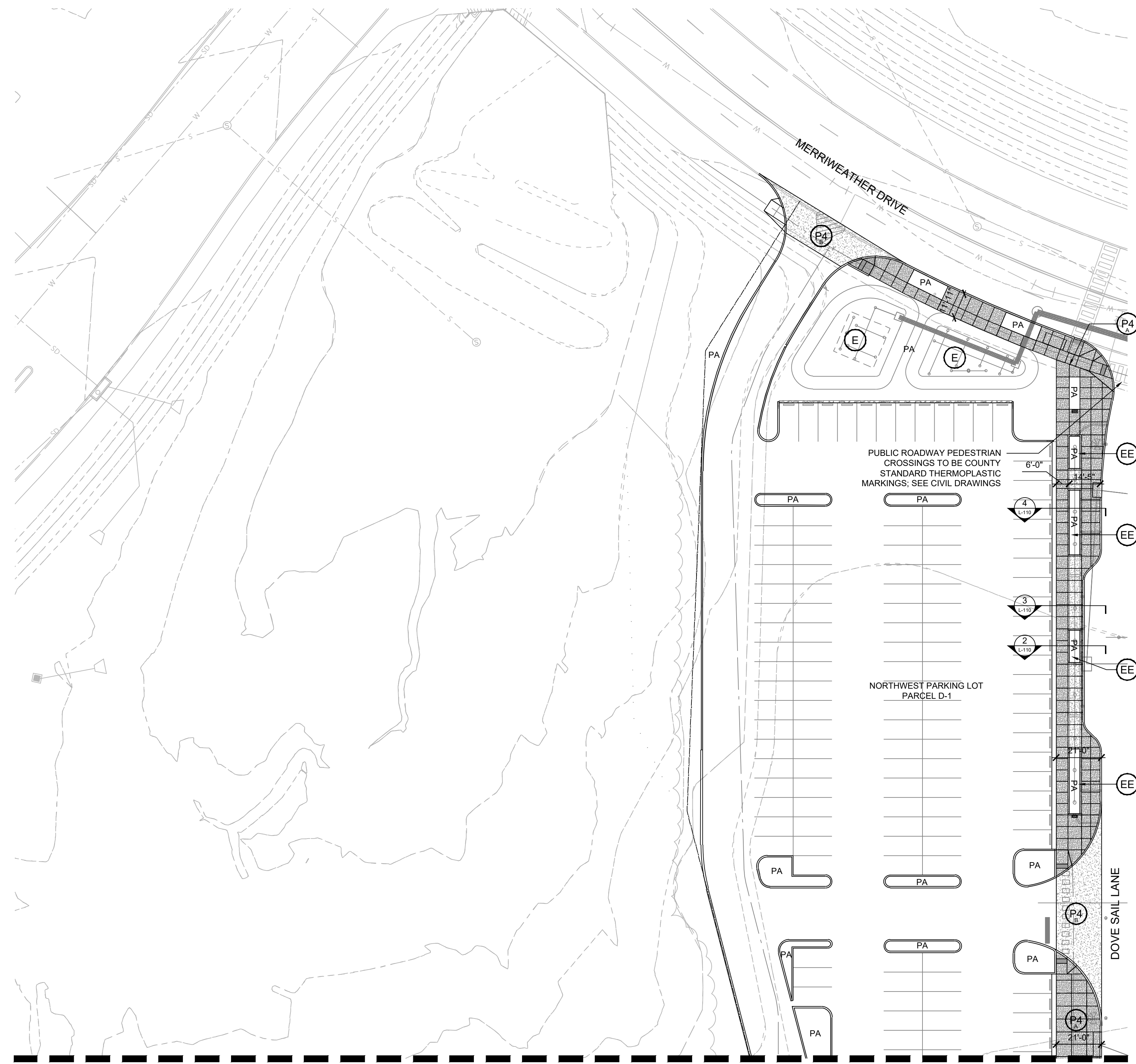
*Chad E. ...* 3.20.19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Kurt ...* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Natalie ...* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/18

Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b>		
<b>CRESCENT NEIGHBORHOOD</b>		
<b>PHASE I AREA 3, PHASE 2</b>		
<b>PARCELS D-1, D-7, D-8, D-9,</b>		
<b>D-11, D-12 AND D-13</b>		
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING		
OWNER / DEVELOPER:		
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION		
COLUMBIA REGIONAL OFFICE		
10480 LITTLE PATUXENT PARKWAY SUITE 400		
COLUMBIA, MD 21044		
410-964-4800		
<b>MAHAN RYKIEL</b>		
<b>A S S O C I A T E S I N C</b>		
The Steiff Silver Building, 800 Wyman Park Drive,		
Suite 100, Baltimore, MD 21211 410.235.6001		
SUBDIVISION NAME	SECTION	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE 1 AREA 3	PARCEL D
PLAT NO.	TAX ZONING MAP	CENSUS TRACT
7	36	605602
WATER CODE	SEWER CODE	STAGE
S50	LITTLE PATUXENT	1
<b>TITLE</b>		
<b>L-100 - HARDSCAPE MATERIALS SCHEDULE &amp; NOTES</b>		
Des. By	SCALE	Proj. No.
MP	AS SHOWN	04038.B0
Drn. By	Date	
BB	02/15/19	
Chk. By	Approved	44 of 77
MP	--	



SEE L-102 HARDSCAPE PLAN

**HARDSCAPE KEY**

**PAVING**

- (P1) <sup>3</sup>/<sub>(3-20)</sub> PEDESTRIAN CONCRETE UNIT PAVER 1A (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO FINISH  
COLOR: MIDNIGHT SKY  
SIZE: 6'x 12'x 2 1/2"
- (P1) <sup>3</sup>/<sub>(3-20)</sub> PEDESTRIAN CONCRETE UNIT PAVER 1B (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: FRENCH GREY  
SIZE: 6'x 12'x 2 1/2"
- (P1) <sup>3</sup>/<sub>(3-20)</sub> PEDESTRIAN CONCRETE UNIT PAVER 1C (LIGHT)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: WINTER MARVEL  
SIZE: 6'x 12'x 2 1/2"
- (P1) <sup>3</sup>/<sub>(3-20)</sub> PEDESTRIAN CONCRETE UNIT PAVER 1D (LIGHT)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: GRENADA WHITE  
SIZE: 6'x 12'x 2 1/2"
- (P2) <sup>4</sup>/<sub>(4-20)</sub> VEHICULAR CONCRETE UNIT PAVER 2A (LIGHT)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO FINISH  
COLOR: WINTER MARVEL  
SIZE: 6'x 18'x 3 1/2"
- (P2) <sup>4</sup>/<sub>(4-20)</sub> VEHICULAR CONCRETE UNIT PAVER 2B (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: FRENCH GREY  
SIZE: 6'x 18'x 3 1/2"
- (P3) <sup>1</sup>/<sub>(1-20)</sub> PEDESTRIAN EXPOSED AGGREGATE COLOR CONCRETE
- (P3) <sup>1</sup>/<sub>(1-20)</sub> VEHICULAR EXPOSED AGGREGATE COLOR CONCRETE
- (P4) <sup>1</sup>/<sub>(1-20)</sub> PEDESTRIAN CAST-IN-PLACE CONCRETE PAVING
- (P4) <sup>1</sup>/<sub>(1-20)</sub> VEHICULAR CAST-IN-PLACE CONCRETE PAVING
- (P5) <sup>3</sup>/<sub>(3-20)</sub> PEDESTRIAN CONCRETE UNIT PAVER 1C  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: MIDNIGHT SKY  
SIZE: 12'x 12'x 3 1/2"
- (P6) <sup>5</sup>/<sub>(5-20)</sub> DETECTABLE WARNING PAVER

**STRUCTURE**

- (S1) <sup>6</sup>/<sub>(6-20)</sub> C.I.P. CONCRETE STAIRS

**TREE PITS & TREE ACCESSORIES**

- (EE) EXISTING ESD, SEE F-PLAN 18-017, STRUCTURAL AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
- (E) <sup>1-3</sup>/<sub>(1-20)</sub> ESD, SIZE VARIES, REFER TO STRUCTURAL+CIVIL DRAWINGS FOR ADDITIONAL INFORMATION

**SITE AMENITIES**

- (B1) <sup>1</sup>/<sub>(1-21)</sub> BENCH
- (BO) <sup>4</sup>/<sub>(4-21)</sub> BOLLARD
- (BO) <sup>4</sup>/<sub>(4-21)</sub> REMOVABLE BOLLARD
- (BR) <sup>3</sup>/<sub>(3-21)</sub> BIKE RACK
- (HR) <sup>2</sup>/<sub>(2-21)</sub> HANDRAIL
- (LR) <sup>2</sup>/<sub>(2-21)</sub> LITTER/RECYCLING RECEPTACLE

**SHEET NOTES:**

- LIGHTING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD HAVE BEEN INSTALLED IN ACCORDANCE WITH F-15-106 AND F-16-107

**REVISED SITE DEVELOPMENT PLAN**

**FILE NUMBERS:**  
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-17-027, 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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 09/21/2019.

- 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.

**CERTIFICATION NOTE:**

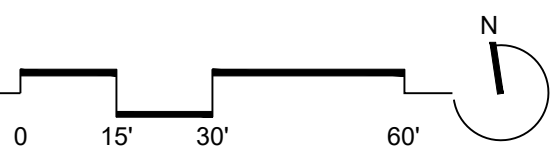
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DEVELOPER'S/OWNER'S NAME  
  
DEVELOPER'S/OWNER'S NAME

- 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 SNYDER, INC. MARCH, 2007 AND FIELD SURVEY BY GUM 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.

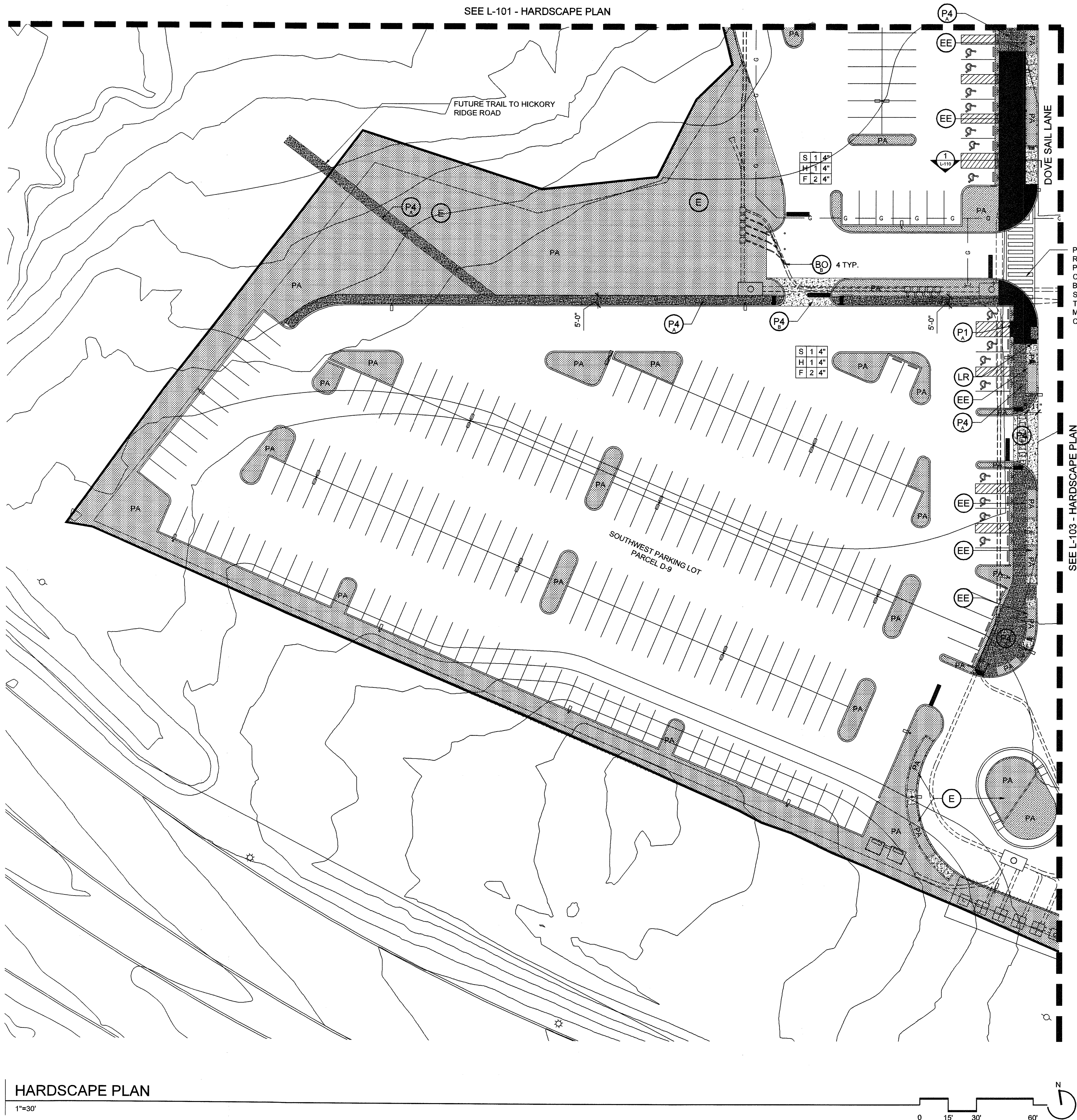
**1 HARDSCAPE PLAN**  
1"=30'



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

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: \_\_\_\_\_

5/15/2019	△	HARDSCAPE AND BUS STOP REVISION
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE 2 PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13</b>		
<b>OWNER / DEVELOPER:</b> THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
<b>MAHAN RYKIEL ASSOCIATES INC</b> The Stieff Silver Building, 800 Wyman Park Drive, Suite 100, Baltimore, MD 21211 410.235.8001		
SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION/AREA CRESCENT NEIGHBORHOOD	LOT/PARCEL # PARCEL D
PLAT/ OR L.P. 7	BLOCK # 7	ZONE DMAL
TAX ZONE/MAP 36	ELECT. DISTRICT 5	CENSUS TRACT 605602
WATER CODE 550	SEWER CODE LITTLE PATUXENT	STAGE 1
<b>TITLE</b> <b>L-101 - MATERIALS PLAN</b>		
Des. By MP	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By BB	Date 02/15/19	<b>45 of 77</b>
Chk. By MP	Approved	



SEE L-101 - HARDSCAPE PLAN

SEE L-103 - HARDSCAPE PLAN

**HARDSCAPE KEY**

**PAVING**

- P1 (3/201) PEDESTRIAN CONCRETE UNIT PAVER 1A (LIGHT)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO FINISH  
COLOR: WINTER MARVEL  
SIZE: 6"x 18"x 2 3/4"
- P1 (3/201) PEDESTRIAN CONCRETE UNIT PAVER 1B (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: FRENCH GREY  
SIZE: 6"x 18"x 2 3/4"
- P2 (4/201) VEHICULAR CONCRETE UNIT PAVER 2A (LIGHT)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO FINISH  
COLOR: WINTER MARVEL  
SIZE: 6"x 18"x 3 1/2"
- P2 (4/201) VEHICULAR CONCRETE UNIT PAVER 2B (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: FRENCH GREY  
SIZE: 6"x 18"x 3 1/2"
- P3 (1/201) PEDESTRIAN EXPOSED AGGREGATE COLOR CONCRETE
- P3 (1/201) VEHICULAR EXPOSED AGGREGATE COLOR CONCRETE
- P4 (1/201) PEDESTRIAN CAST-IN-PLACE CONCRETE PAVING
- P4 (1/201) VEHICULAR CAST-IN-PLACE CONCRETE PAVING
- P5 (3/201) PEDESTRIAN CONCRETE UNIT PAVER 1C  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: MIDNIGHT SKY  
SIZE: 12"x 12"x 3 1/2"
- P6 (5/201) DETECTABLE WARNING PAVER

**STRUCTURE**

- S1 (8/201) C.I.P. CONCRETE STAIRS

**TREE PITS & TREE ACCESSORIES**

- EE EXISTING ESD, SEE F-PLAN 18-017, STRUCTURAL, AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
- E (1-3/201) ESD, SIZE VARIES, REFER TO STRUCTURAL-CIVIL DRAWINGS FOR ADDITIONAL INFORMATION

**SITE AMENITIES**

- B1 (1/201) BENCH
- BO (4/201) BOLLARD
- BO (4/201) REMOVABLE BOLLARD
- BR (3/201) BIKE RACK
- HR (2/201) HANDRAIL
- LR (2/201) LITTER/RECYCLING RECEPTACLE

**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, MEET REQUIREMENTS, ETC.
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- REFER TO CIVIL DRAWINGS FOR ROADWAY AND CURB ALIGNMENT.
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- REFER TO SITE PLANS FOR ALL SITE DIMENSIONS.

**CERTIFICATION NOTE:**

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*W. T. Rowe* 2/18/19  
DEVELOPER'S/OWNER'S NAME  
*Wm. T. Rowe* 2/18/19  
DEVELOPER'S/OWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**

- FLOODPLAIN INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A STUDY PERFORMED BY BIO-HABITATS DATED 06/19/2015.
- WETLANDS AND ASSOCIATED ENVIRONMENTAL INFORMATION SHOWN HEREON REFLECT THE RESULT OF AN INVESTIGATION PERFORMED BY DMW DATED MARCH 2015.
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**DATA SOURCES:**

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- BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

**SHEET NOTES:**

- LIGHTING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD HAVE BEEN INSTALLED IN ACCORDANCE WITH 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-17-049, 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, SDP-17-027, F-17-057, F18-017, WP-18-089, WP-18-105.  
**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: 09/21/19.



Date	No.	Revision Description
		<b>DOWNTOWN COLUMBIA</b> <b>CRESCENT NEIGHBORHOOD</b> <b>PHASE I AREA 3, PHASE 2</b> <b>PARCELS D-1, D-7, D-8, D-9,</b> <b>D-11, D-12 AND D-13</b> MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING <b>OWNER / DEVELOPER:</b> 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**  
The Steiff Silver Building, 800 Wyman Park Drive, Suite 100, Baltimore, MD 21211 410.235.6001

SUBDIVISION NAME	SECTION	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD		
DATA SHEET	BLOCK # ZONE	TAX ZONING	MAP DISTRICT
	7	36	5
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT	4	

**L-102 - HARDSCAPE PLAN**

Des. By	MP	SCALE	AS SHOWN	Proj. No.	04038.80
Drn. By	BB	Date	02/15/19		
Chk. By	MP	Approved	--		46 of 77

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/19

**1 HARDSCAPE PLAN**  
1"=30'

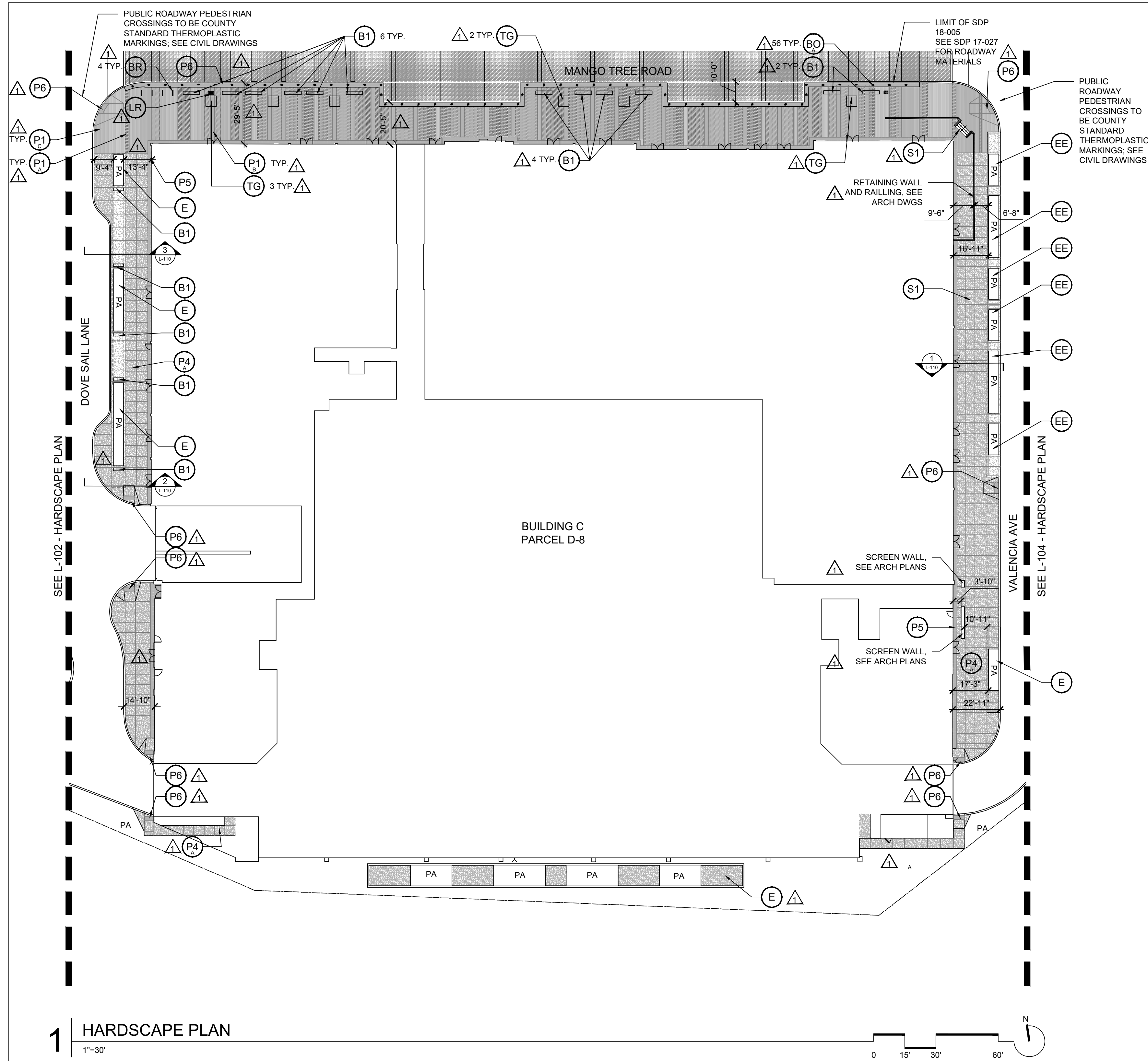
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*Ch. Calhoun* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*V. ...* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*N. ...* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE





**HARDSCAPE KEY**

- PAVING**
- (P1) 3 (L-201) PEDESTRIAN CONCRETE UNIT PAVER 1A (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO FINISH  
COLOR: MIDNIGHT SKY  
SIZE: 6"x 12"x 2 3/8"
  - (P1) 3 (L-201) PEDESTRIAN CONCRETE UNIT PAVER 1B (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: FRENCH GREY  
SIZE: 6"x 12"x 2 3/8"
  - (P1) 3 (L-201) PEDESTRIAN CONCRETE UNIT PAVER 1C (LIGHT)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: WINTER MARVEL  
SIZE: 6"x 12"x 2 3/8"
  - (P1) 3 (L-201) PEDESTRIAN CONCRETE UNIT PAVER 1D (LIGHT)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: GRENADA WHITE  
SIZE: 6"x 12"x 2 3/8"
  - (P2) 4 (L-201) VEHICULAR CONCRETE UNIT PAVER 2A (LIGHT)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO FINISH  
COLOR: WINTER MARVEL  
SIZE: 6"x 18"x 3 3/8"
  - (P2) 4 (L-201) VEHICULAR CONCRETE UNIT PAVER 2B (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: FRENCH GREY  
SIZE: 6"x 18"x 3 3/8"
  - (P3) 1 (L-201) PEDESTRIAN EXPOSED AGGREGATE COLOR CONCRETE
  - (P3) 1 (L-201) VEHICULAR EXPOSED AGGREGATE COLOR CONCRETE
  - (P4) 1 (L-201) PEDESTRIAN CAST-IN-PLACE CONCRETE PAVING
  - (P4) 1 (L-201) VEHICULAR CAST-IN-PLACE CONCRETE PAVING
  - (P5) 3 (L-201) PEDESTRIAN CONCRETE UNIT PAVER 1C  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: MIDNIGHT SKY  
SIZE: 12"x 12"x 3 3/8"
  - (P6) 5 (L-201) DETECTABLE WARNING PAVER
- STRUCTURE**
- (S1) 6 (L-201) C.I.P. CONCRETE STAIRS
- TREE PITS & TREE ACCESSORIES**
- (EE) EXISTING ESD, SEE F-PLAN 18-017, STRUCTURAL, AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
  - (E) 1-3 (L-201) ESD, SIZE VARIES, REFER TO STRUCTURAL+CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
- SITE AMENITIES**
- (B1) 1 (L-211) BENCH
  - (BO) 4 (L-211) BOLLARD
  - (BO) 4 (L-211) REMOVABLE BOLLARD
  - (BR) 3 (L-205) BIKE RACK
  - (HR) 2 (L-205) HANDRAIL
  - (LR) 2 (L-211) LITTER/RECYCLING RECEPTACLE
  - (TG) 8 (L-205) TREE PAVER GRATE

**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.

**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 \_\_\_\_\_

DEVELOPER'S/OWNER'S NAME \_\_\_\_\_

**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.
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**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.

**REVISIED SITE DEVELOPMENT PLAN**

**FILE NUMBERS:**  
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 09/21/2019.

**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
- A 2' BUILDING FRONTAGE ZONE 6' CLEAR PEDESTRIAN ZONE MUST BE MAINTAINED ALONG THE FRONT OF BUILDING C.

HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

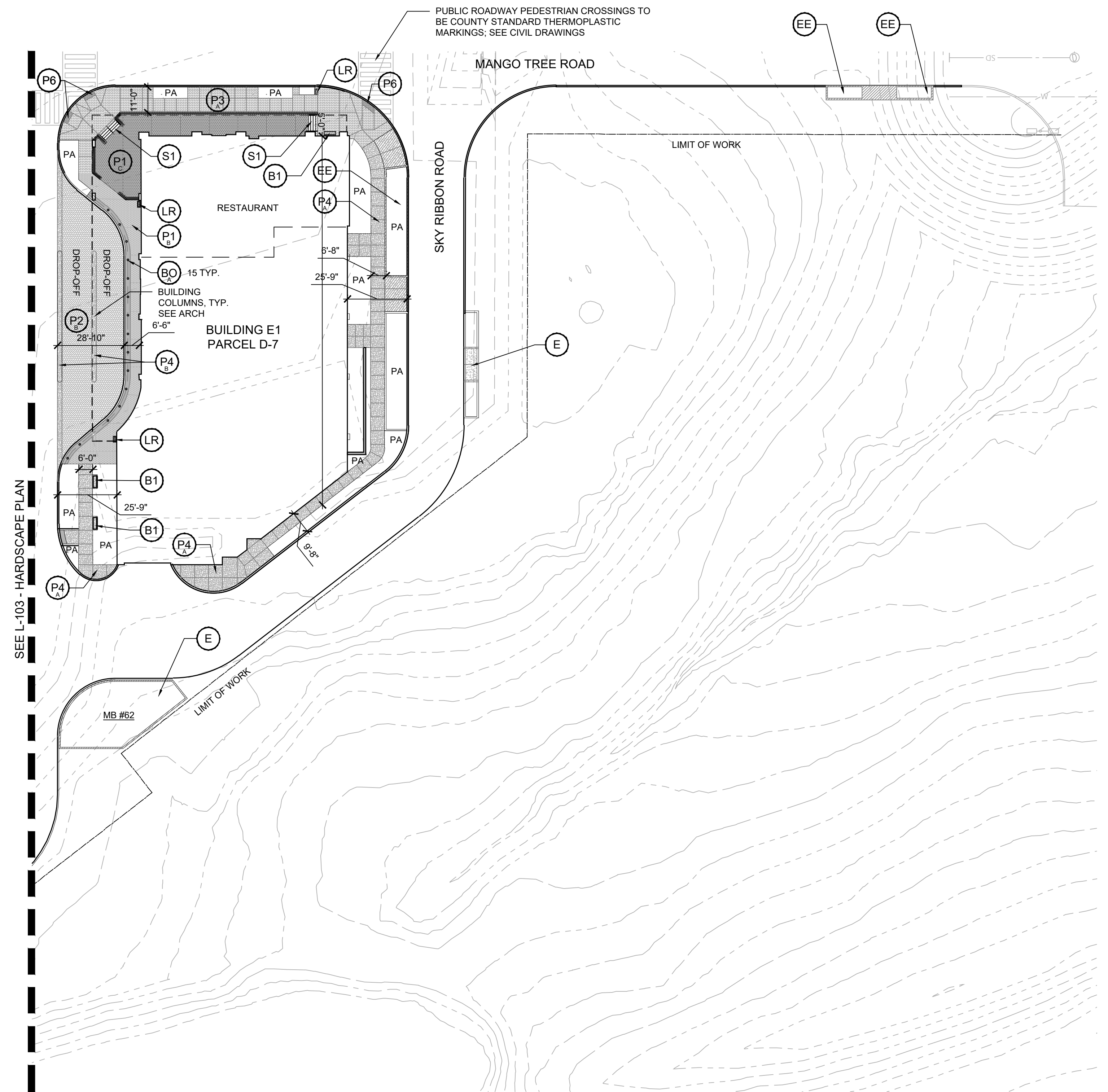
CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY

DATE : \_\_\_\_\_

5/15/2019	△	HARDSCAPE AND BLDG REVISIONS
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b>		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE 2		
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13		
OWNER / DEVELOPER:		
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
<b>MAHAN RYKIEL</b>		
ASSOCIATES INC		
The Stieff Silver Building, 800 Wyman Park Drive, Suite 100, Baltimore, MD 21211 410.235.6001		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE 2 AREA 3	PARCEL D
PLAT # OR L.P. #	BLOCK #	TAX ZONE/MAP
4450	7	36
WATER CODE	SEWER CODE	ELECT. DISTRICT
550	LITTLE PATUXENT	5
STAGE		
1		
TITLE		
<b>L-103 - HARDSCAPE PLAN</b>		
Des. By	MP	SCALE AS SHOWN
Drn. By	BB	Date 02/15/19
Chk. By	MP	Approved
		Proj. No. 04038.B0
		47 of 77



SEE L-103 - HARDSCAPE PLAN

PUBLIC ROADWAY PEDESTRIAN CROSSINGS TO BE COUNTY STANDARD THERMOPLASTIC MARKINGS; SEE CIVIL DRAWINGS

MANGO TREE ROAD

SKY RIBBON ROAD

LIMIT OF WORK

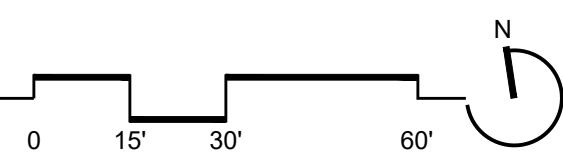
RESTAURANT

BUILDING E1 PARCEL D-7

BUILDING E1 PARCEL D-7

**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

**HARDSCAPE KEY**

**PAVING**

- P1** (3) PEDESTRIAN CONCRETE UNIT PAVER 1A (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO FINISH  
COLOR: MIDNIGHT SKY  
SIZE: 6"x 12"x 2 3/4"
- P1** (3) PEDESTRIAN CONCRETE UNIT PAVER 1B (DARK)  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: FRENCH GREY  
SIZE: 6"x 12"x 2 3/4"
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MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: GRENADA WHITE  
SIZE: 6"x 12"x 2 3/4"
- 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** (3) PEDESTRIAN CONCRETE UNIT PAVER 1C  
MANUFACTURER: UNILOCK  
STYLE: UMBRIANO  
COLOR: MIDNIGHT SKY  
SIZE: 12"x 12"x 3 1/2"
- P6** (5) DETECTABLE WARNING PAVER

**STRUCTURE**

- S1** (6) C.I.P. CONCRETE STAIRS

**TREE PITS & TREE ACCESSORIES**

- EE** EXISTING ESD. SEE F-PLAN 18-017, STRUCTURAL, AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
- E** (1-3) ESD. SIZE VARIES. 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
- LR** (2) LITTER/RECYCLING RECEPTACLE

**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.
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DEVELOPER'S/OWNER'S NAME

DEVELOPER'S/OWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**

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**DATA SOURCES:**

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- BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

**REVISED SITE DEVELOPMENT PLAN**

**FILE NUMBERS:**  
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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

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Date	No.	Revision Description
4/22/2019	1	HARDSCAPE AND BLDG REVISIONS

**DOWNTOWN COLUMBIA  
CRESCENT NEIGHBORHOOD  
PHASE I AREA 3, PHASE 2  
PARCELS D-1, D-7, D-8, D-9,  
D-11, D-12 AND D-13**

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

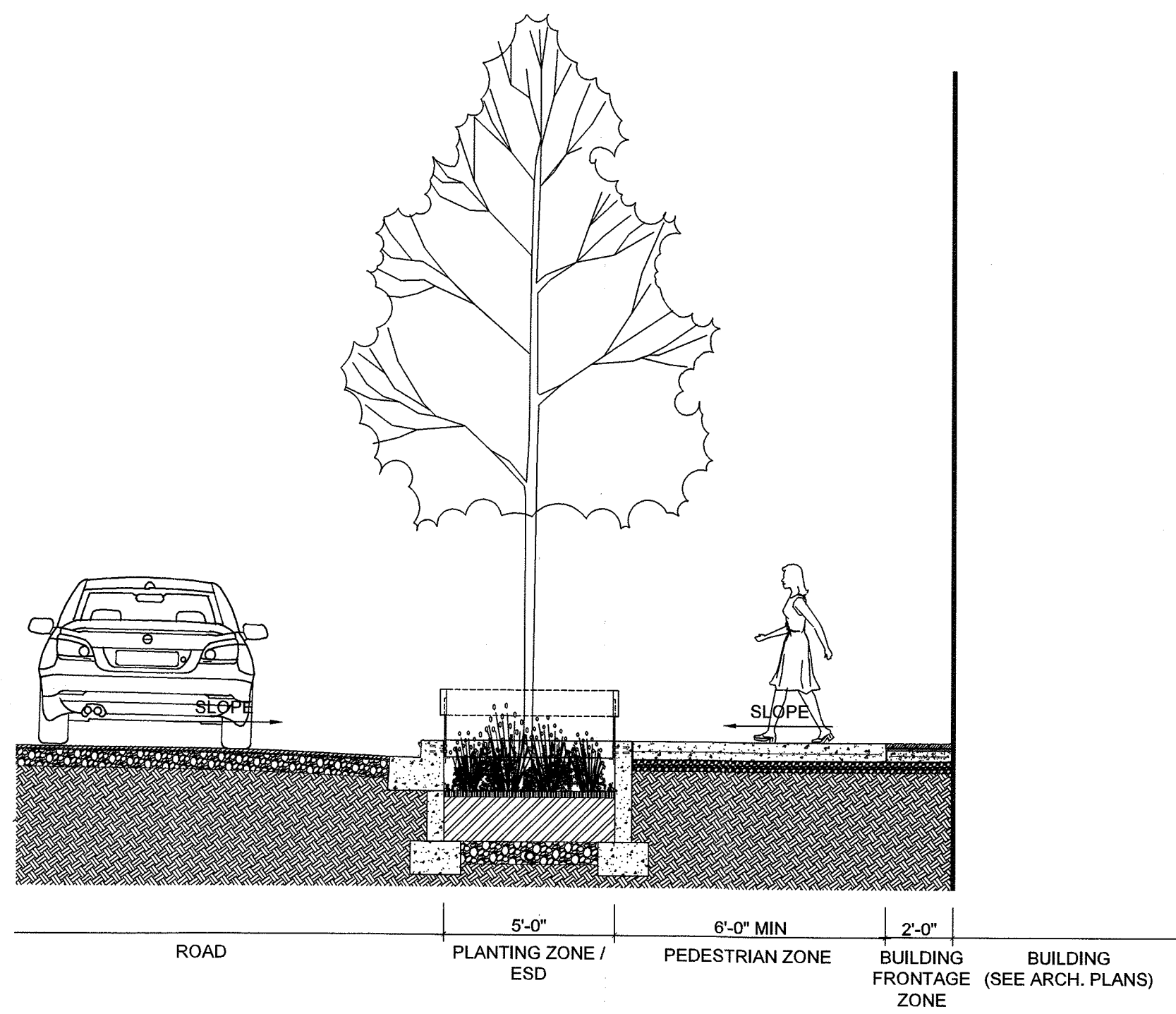
**MAHAN RYKIEL  
ASSOCIATES INC**  
The Stieff Silver Building, 800 Wyman Park Drive,  
Suite 100, Baltimore, MD 21211 410.235.6001

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE I AREA 3	PHASE I AREA 3	PARCEL D
PLAT #	BLOCK #	TAX ZONE/MAP	ELECT. DISTRICT
7	7	26	5
WATER CODE	SEWER CODE	STAGE	CENSUS TRACT
550	LITTLE PATUXENT	1	605602

**L-104 - HARDSCAPE PLAN**

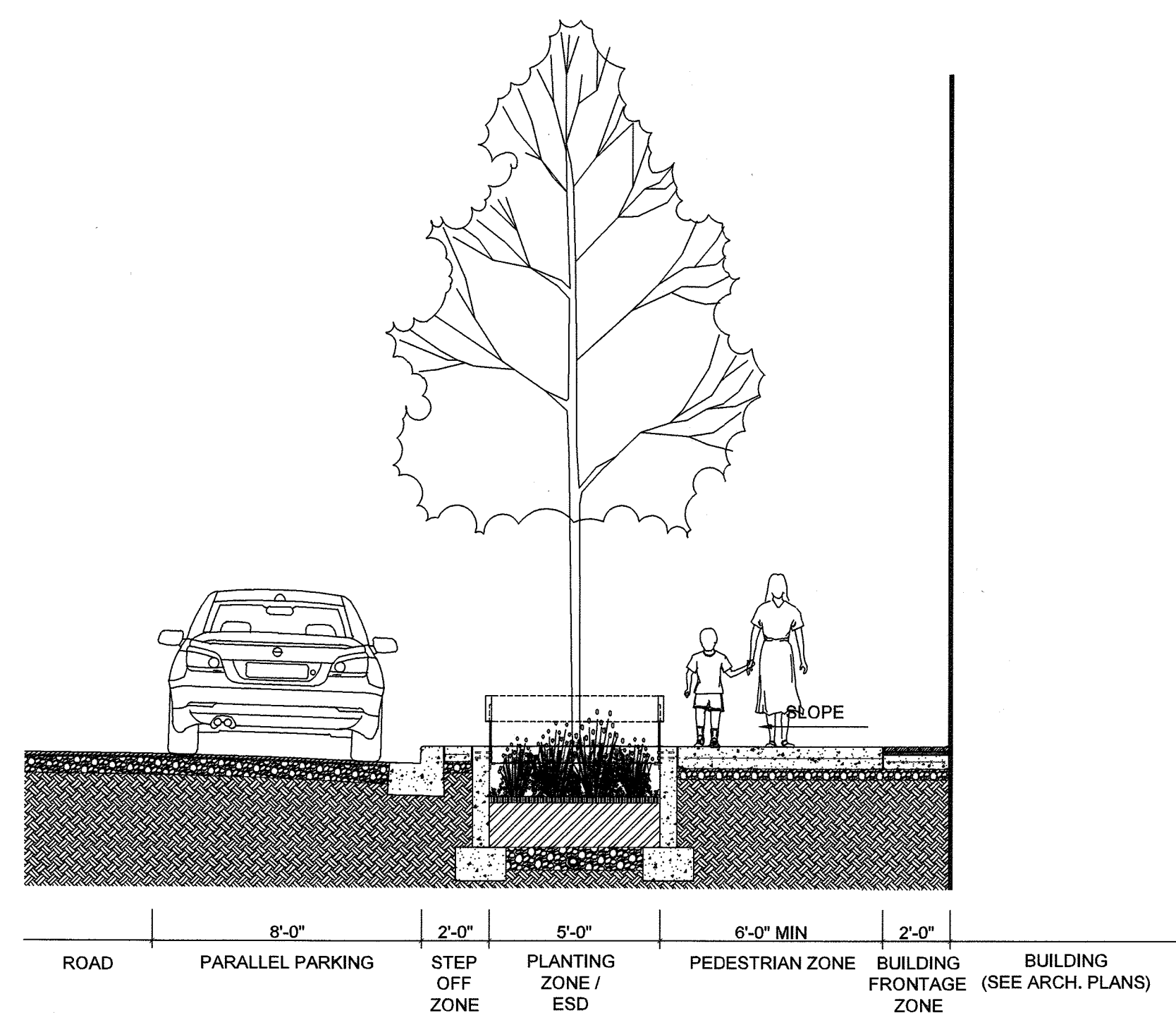
APPROVED: PLANNING BOARD OF HOWARD COUNTY	SCALE AS SHOWN	Proj. No. 04038.80
DATE :	Date 02/15/19	48 of 77
	Approved	

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



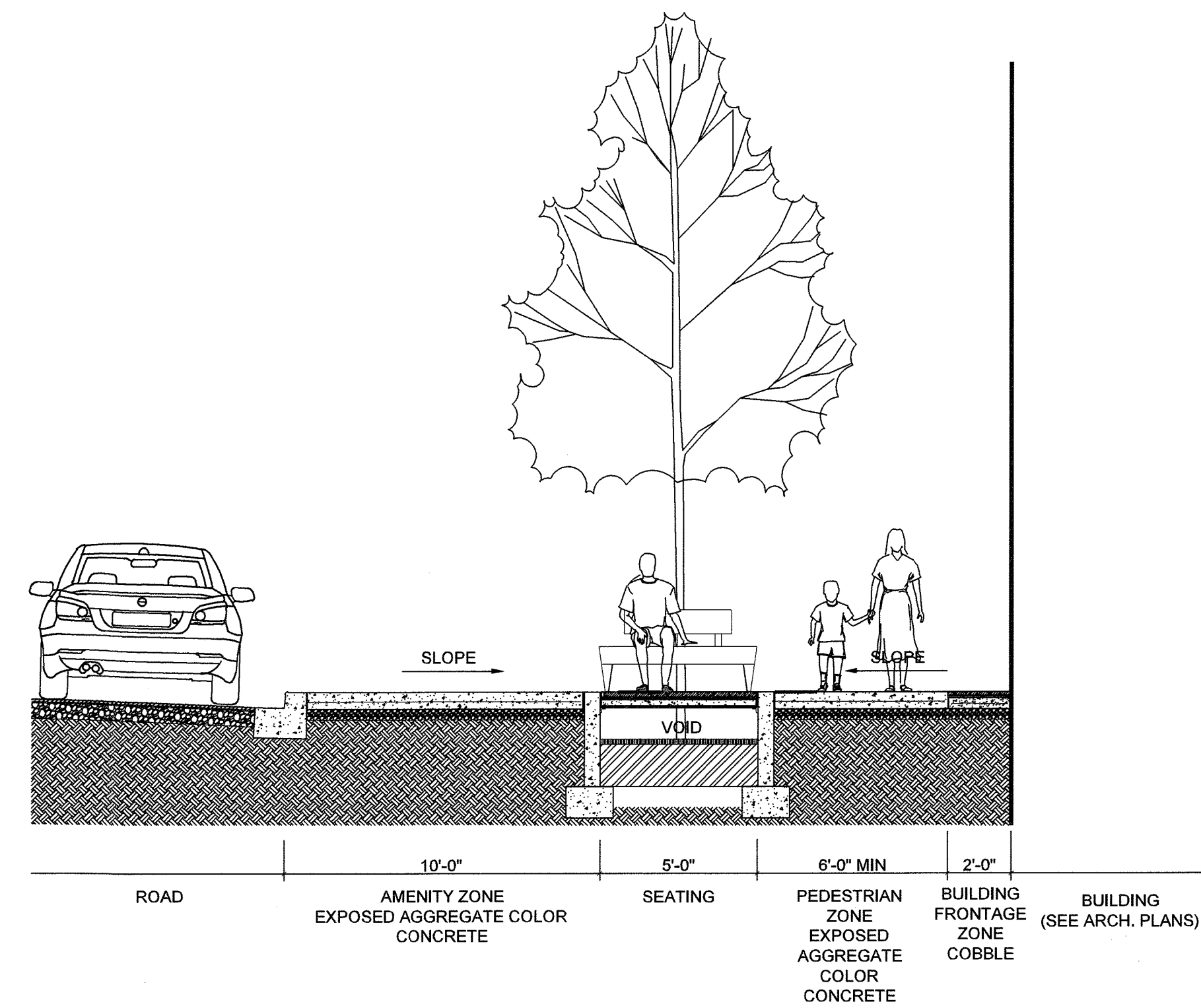
1 SECTION - TYPICAL STREETSCAPE

1/4"=1'-0"



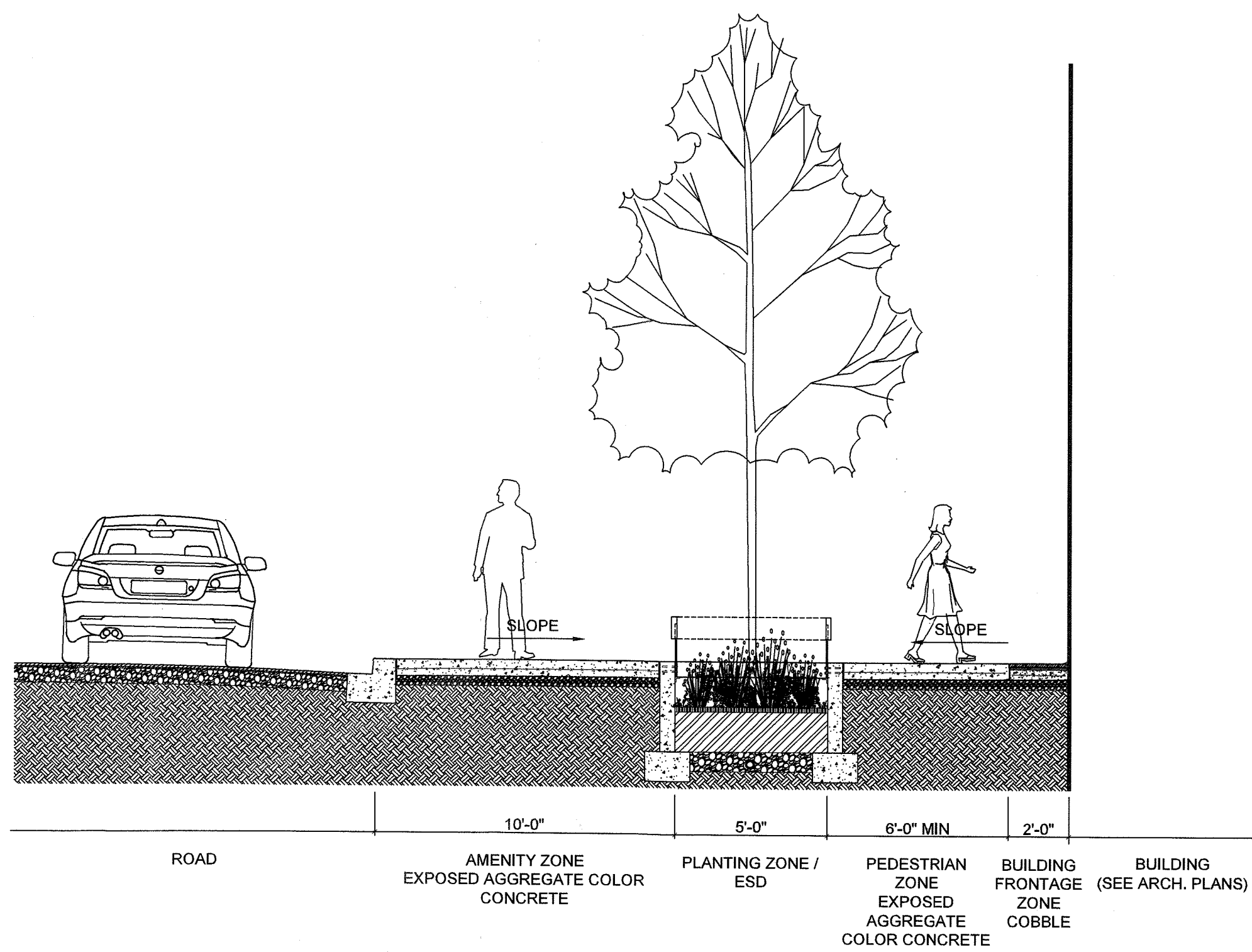
2 SECTION - TYPICAL STREETSCAPE WITH PARKING

1/4"=1'-0"



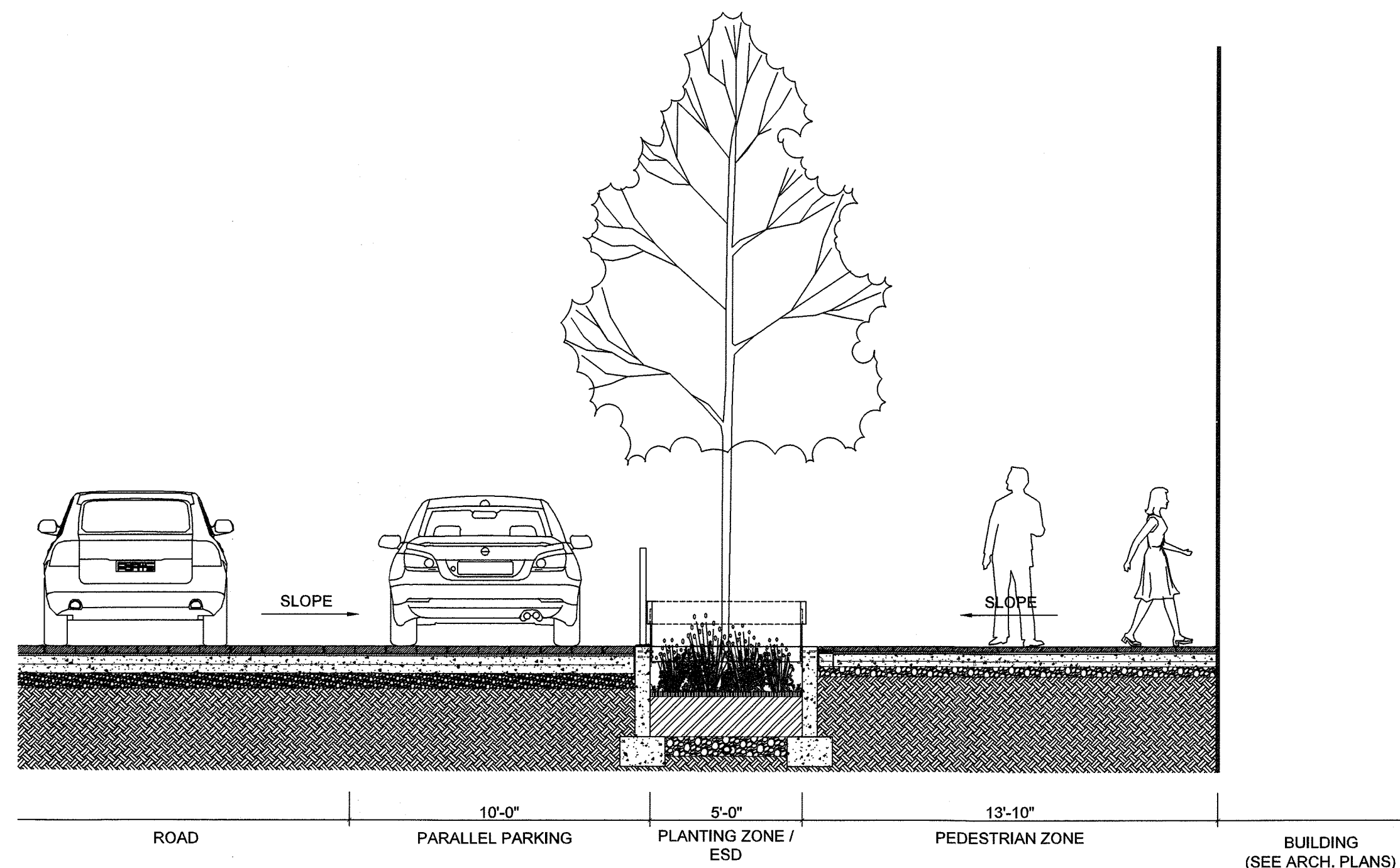
3 SECTION - TYPICAL STREETSCAPE THROUGH COVERED ESD

1/4"=1'-0"



4 SECTION - TYPICAL STREETSCAPE THROUGH OPEN ESD

1/4"=1'-0"



5 SECTION - MANGO STREE STREETSCAPE WITH PARKING

1/4"=1'-0"

**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.

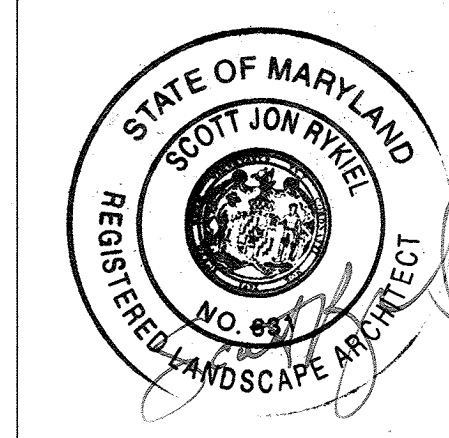
*Wm. T. Rowe* 2.18.19  
DEVELOPER'S/OWNER'S NAME  
*Wm. T. Rowe* 3/2  
DEVELOPER'S/OWNER'S NAME

- ENVIRONMENTAL DATA SOURCES**
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  - BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

**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, SDP 17-027, F 17-057, F18-017, WP-18-089, WP-18-105.

**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: 09/21/19.



Date	No.	Revision Description
		<b>DOWNTOWN COLUMBIA</b> <b>CRESCENT NEIGHBORHOOD</b> <b>PHASE 1 AREA 3, PHASE 2</b> PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13 MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING

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**  
The Steiff Silver Building, 800 Wymen Park Drive, Suite 100, Baltimore, MD 21211 410.235.8001

Subdivision Name	Section/Area	Lot/Parcel #	Parcel D
DOWNTOWN COLUMBIA	PHASE 1 AREA 3		
Tract No. 7	Block 36	Lot 5	605602
Water Code 550	Sewer Code LITTLE PATUXENT	Stage 1	

TITLE			
<b>L-110 - SECTIONS</b>			
Des. By	MP	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By	BB	Date 02/15/19	
Chk. By	MP	Approved --	49 of 77

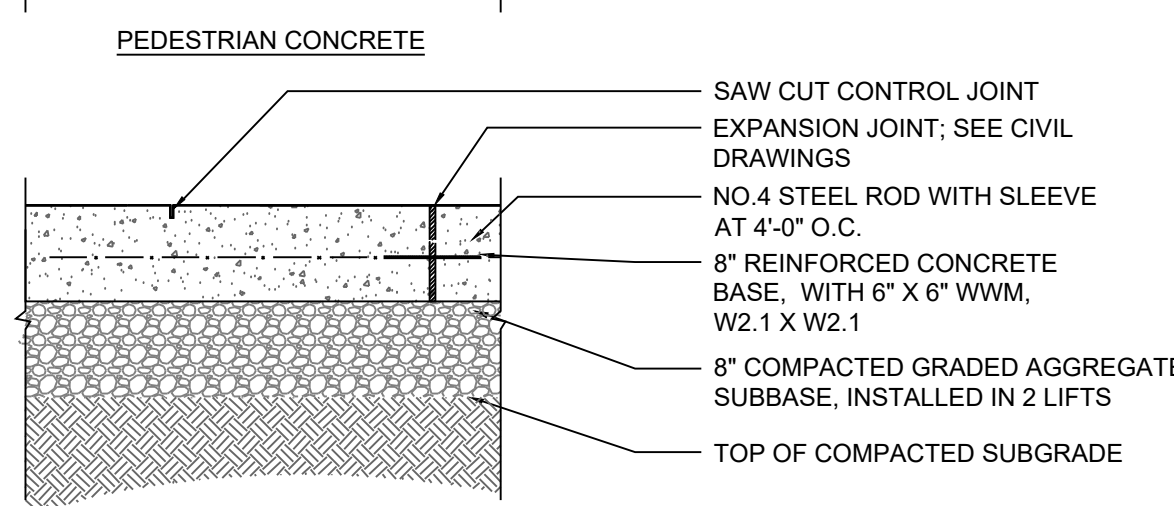
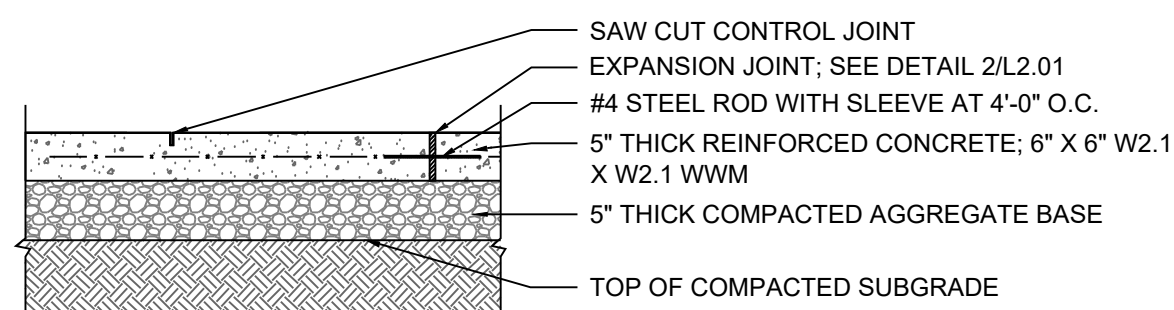
APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 1/27/18

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*[Signature]* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION HSP DATE

*[Signature]* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT gnm DATE

*[Signature]* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

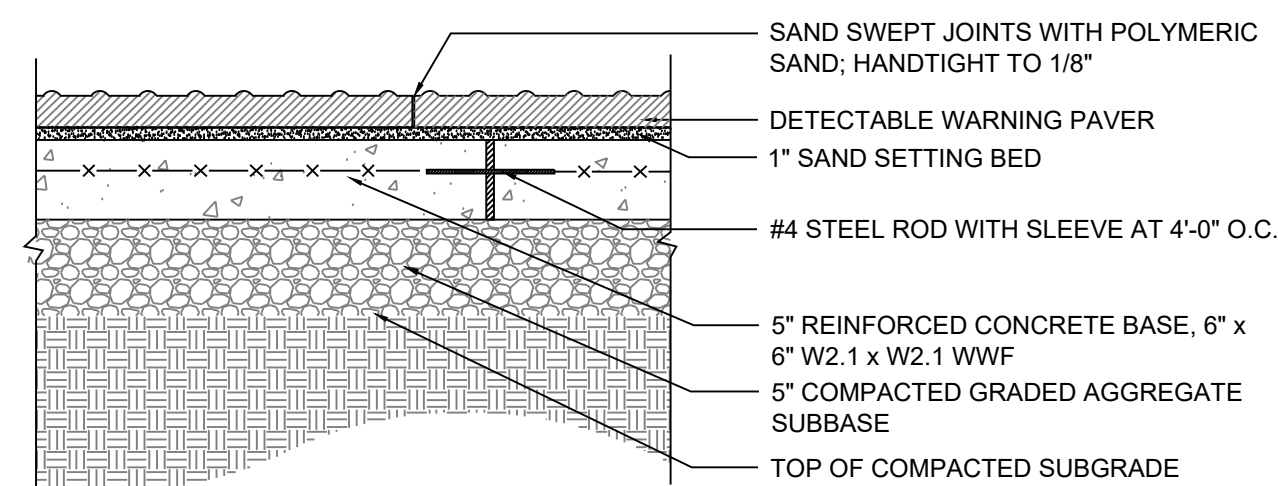


- NOTES:
- 1/2" EXPANSION JOINTS AT 15' O.C. AND WHEN CONCRETE ABUTS A RIGID SURFACE SUCH AS BUILDINGS, WALLS, OR CHANGES IN MATERIAL OR CONCRETE DEPTH.
  - SEE CIVIL ENGINEER'S SPECIFICATIONS FOR CONCRETE.
  - SEE CIVIL DRAWINGS FOR ALL VEHICULAR CONCRETE DESIGN AND SPECIFICATIONS.

**1 CONCRETE PAVEMENT**  
1"=1'-0"

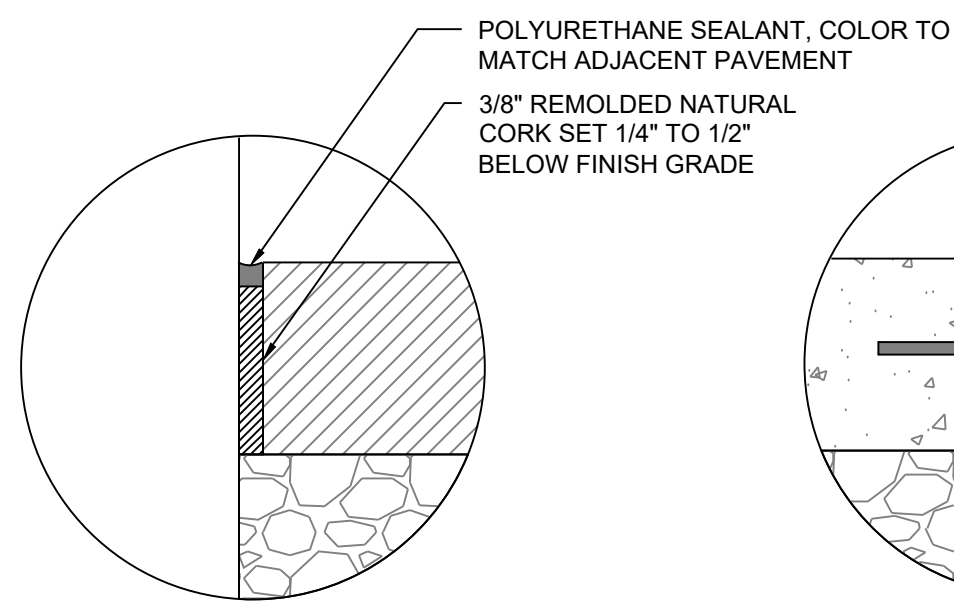
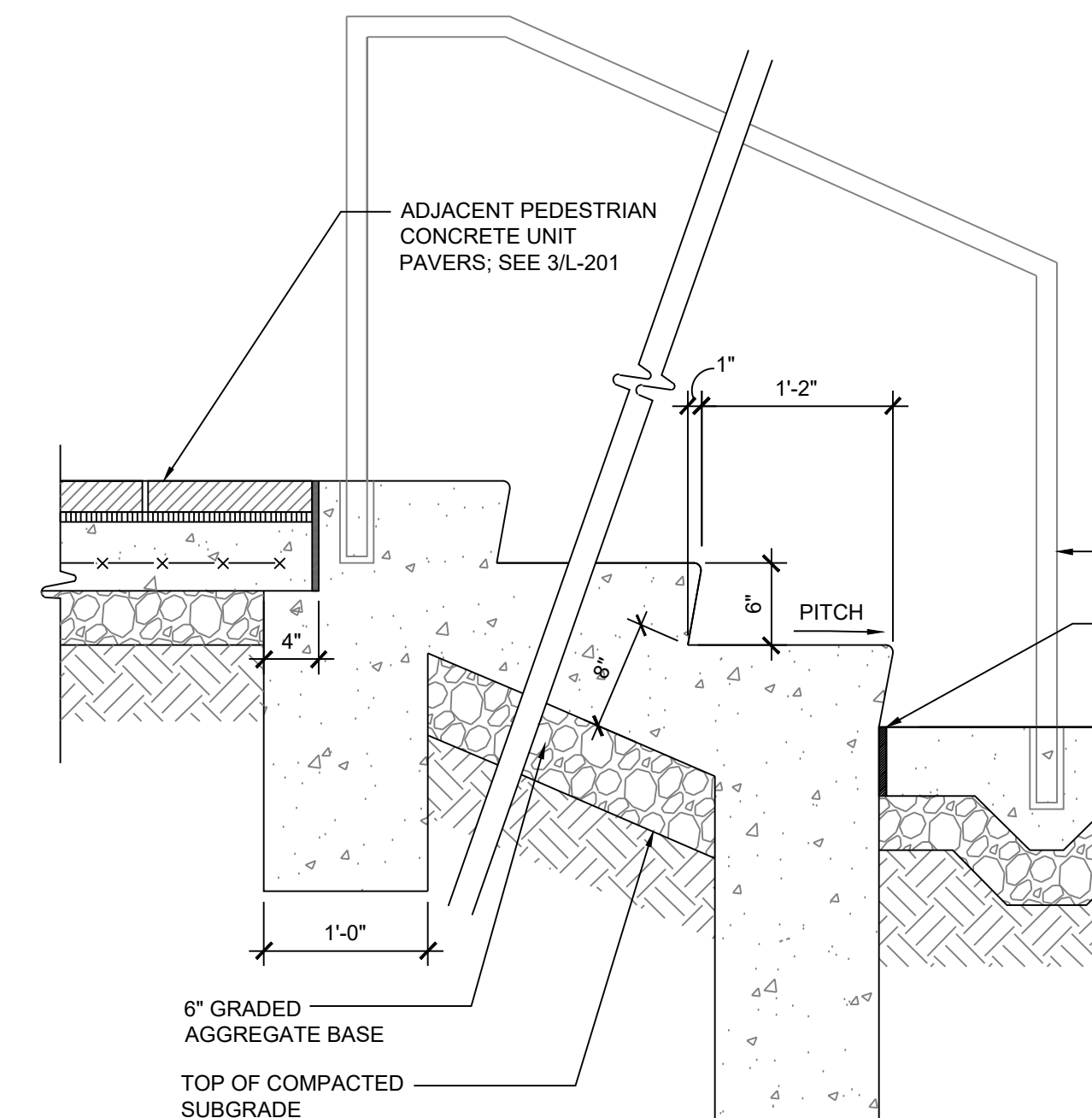
NOT USED

**4 COBBLE STONE PAVERS (PEDESTRIAN)**  
1"=1'-0"

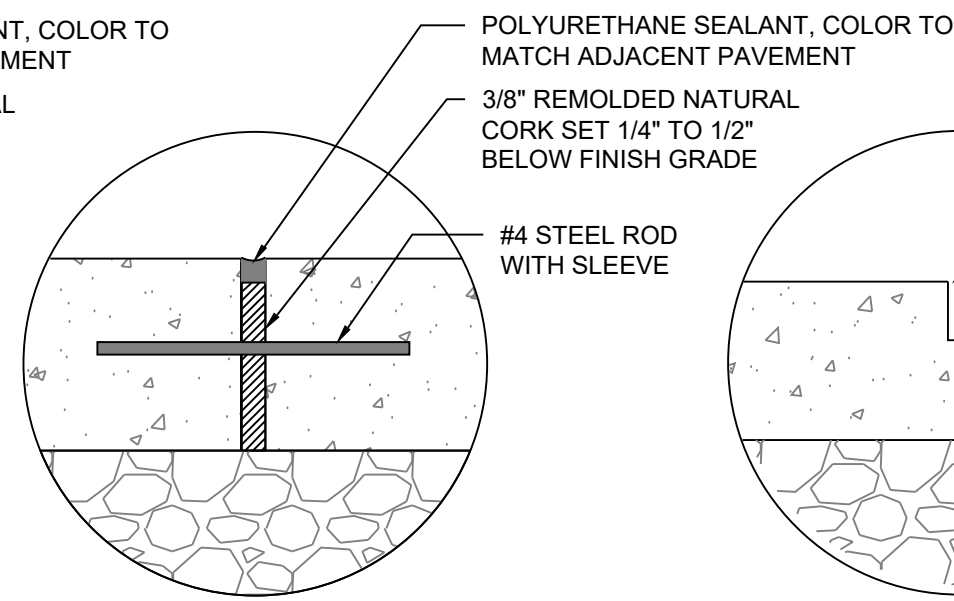


- NOTES:
- PROVIDE EXPANSION JOINT IN CONCRETE BASE @ 10' O.C. MAX.
  - EXPANSION JOINT TO GO THROUGH CONCRETE BASE ONLY.

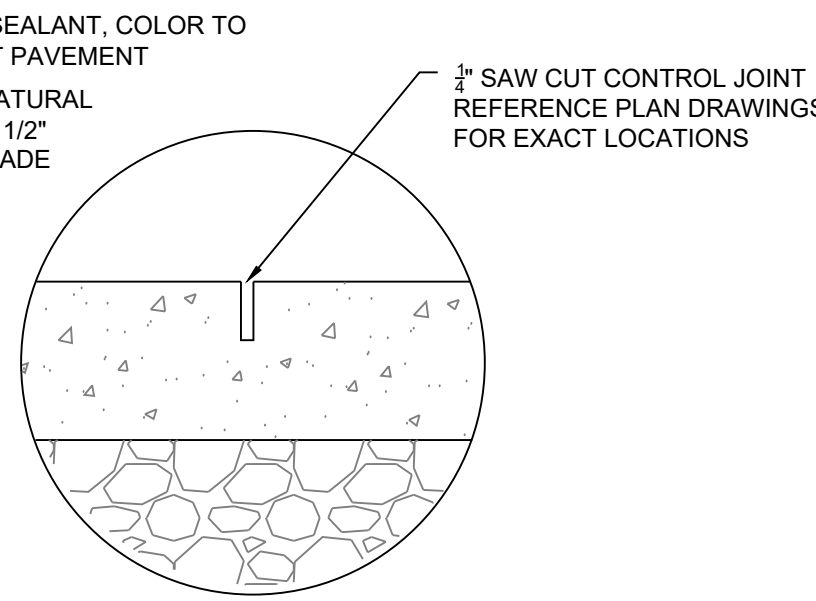
**5 DETECTABLE WARNING PAVERS**  
1"=1'-0"



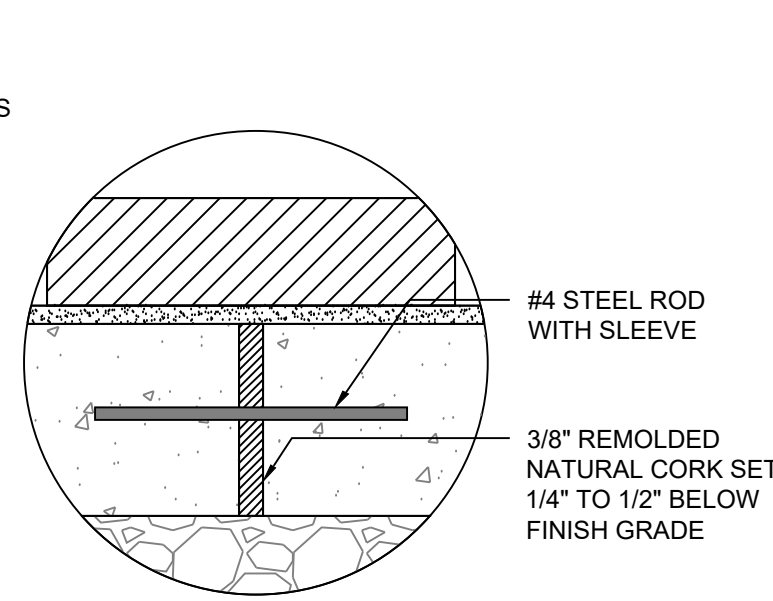
EXPANSION JOINT @ VERTICAL FACE (WALLS, CURBS, BUILDINGS & STRUCTURES)



EXPANSION JOINT @ CONCRETE

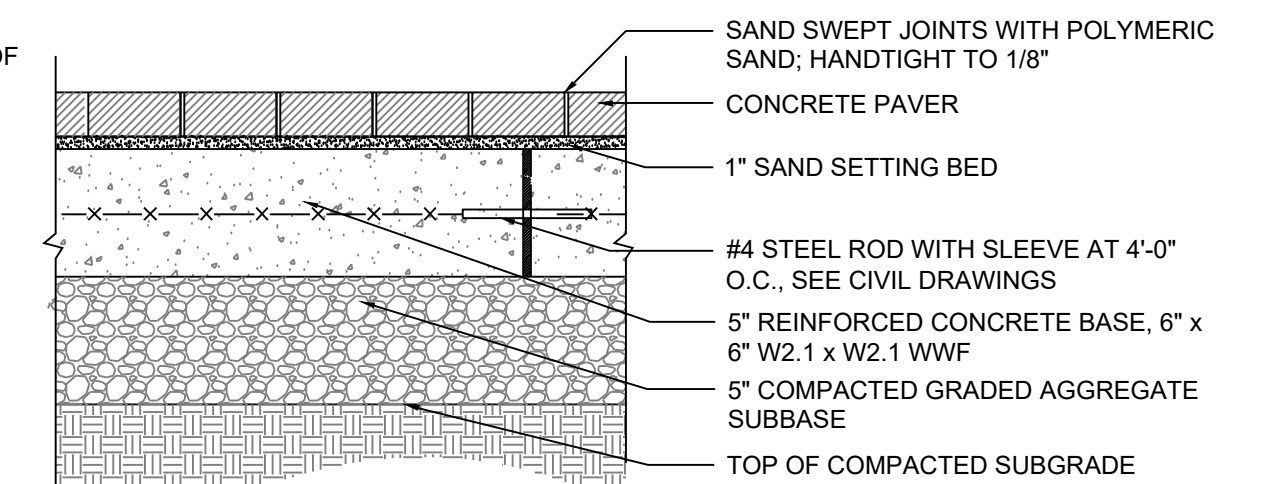


CONTRACTION JOINT @ CONCRETE

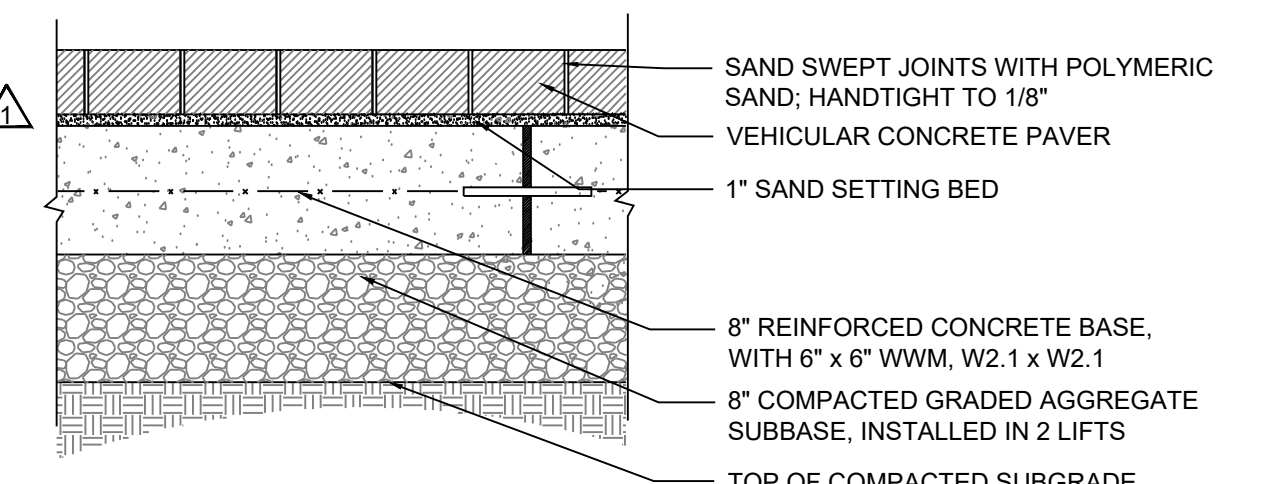


EXPANSION JOINT @ CONCRETE PAVES

- NOTES:
- PROVIDE EXPANSION JOINT IN CONCRETE BASE OF THE UNIT PAVERS @ 20' O.C. MAX.
  - EXPANSION JOINT TO GO THROUGH CONCRETE BASE ONLY.
  - GEOTECH ENGINEER TO DETERMINE REINFORCEMENT AND THICKNESS OF CONCRETE BASE IN VEHICULAR CONDITIONS.



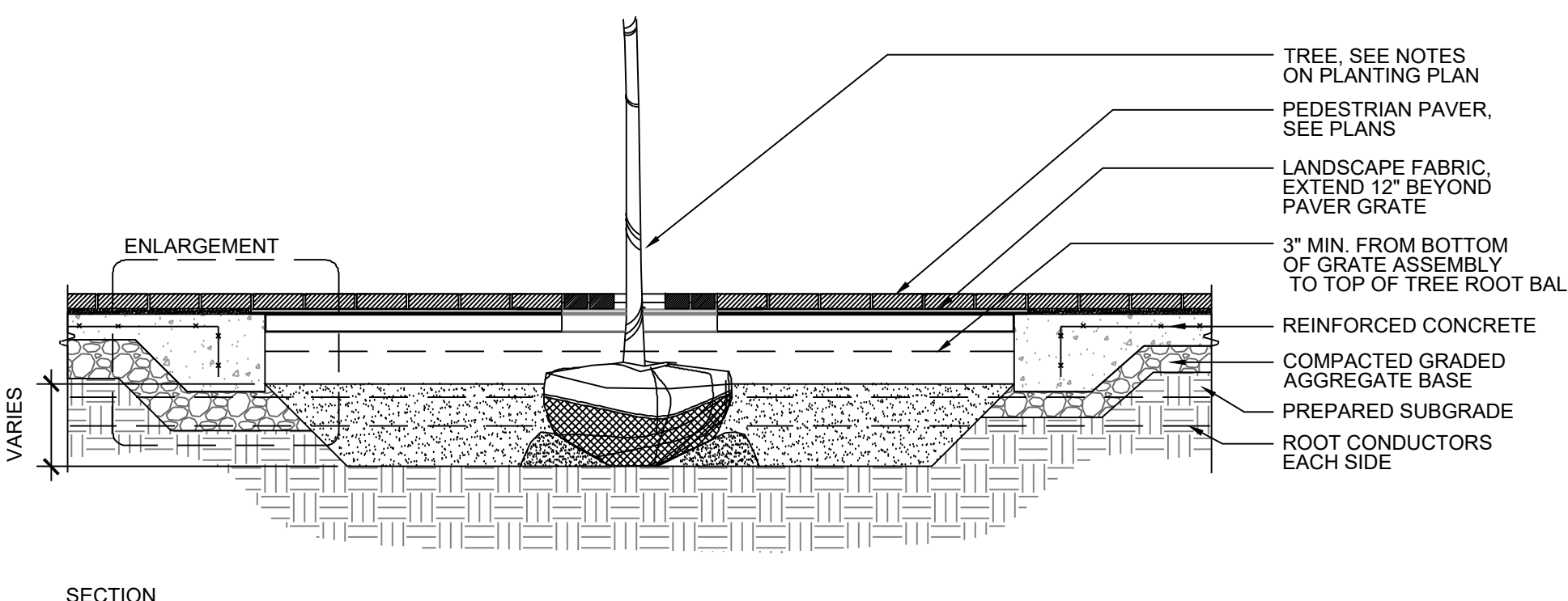
PEDESTRIAN UNIT PAVERS



VEHICULAR UNIT PAVERS

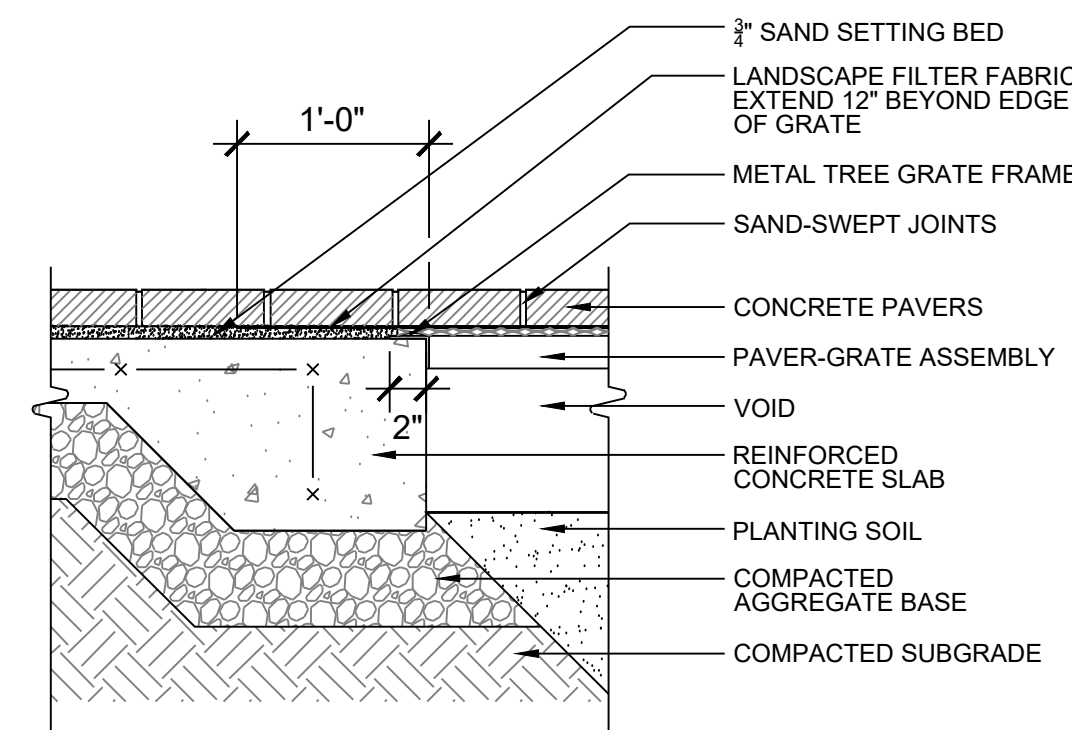
**3 CONCRETE UNIT PAVERS**  
1"=1'-0"

**2 EXPANSION JOINT**  
1"=1'-0"



SECTION

**8 TREE PAVES GRATE**  
1/2"=1'-0"



ENLARGEMENT  
SCALE 1'-0" = 1"

- NOTES:
- PAVES-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.

**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

DEVELOPER'S/OWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**

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- BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE AND WEBER, P.A.

**REVISED SITE DEVELOPMENT PLAN**

**FILE NUMBERS:**  
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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**

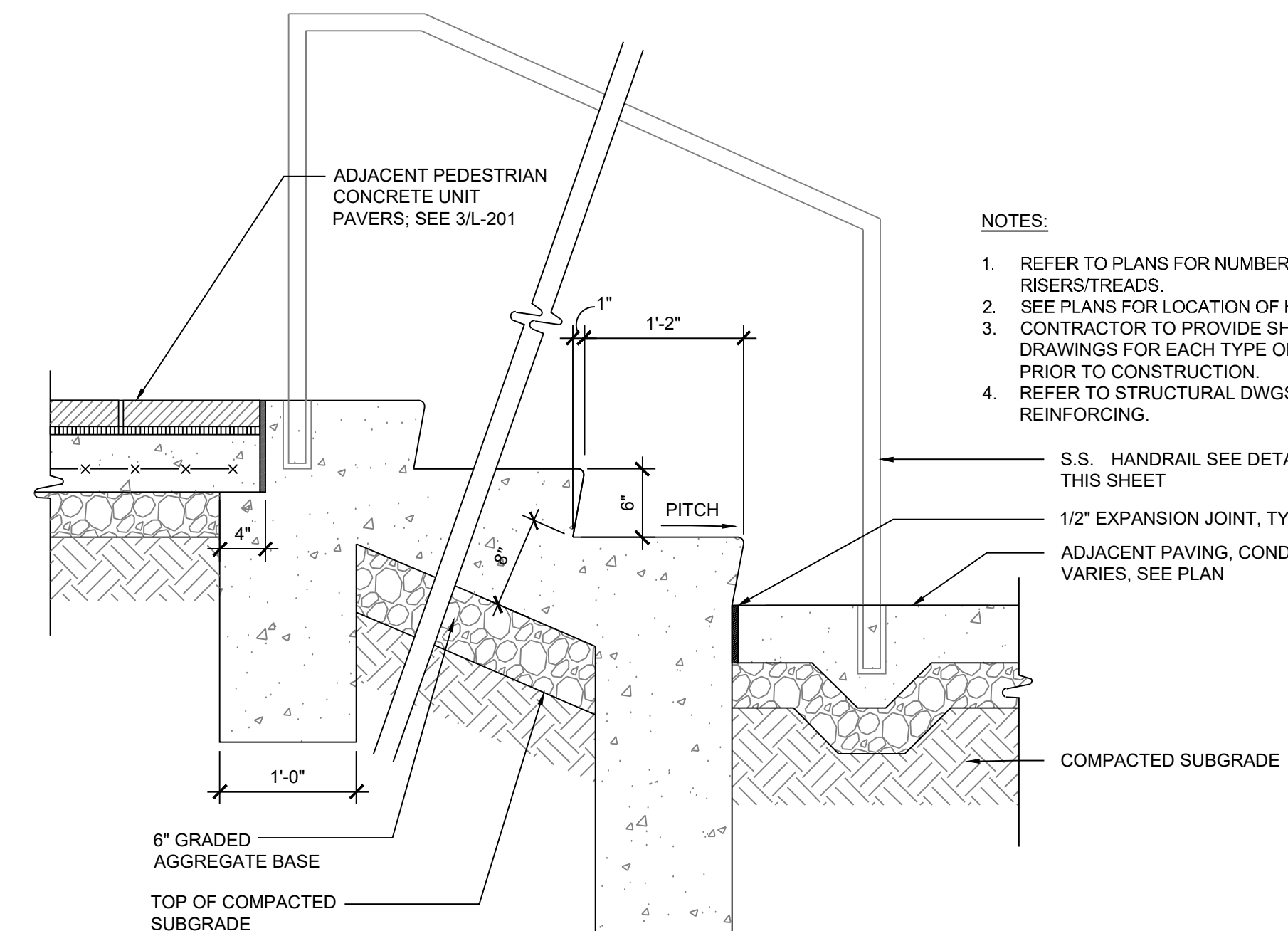
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 09/21/2019.

**APPROVED:**

PLANNING BOARD OF HOWARD COUNTY

DATE: \_\_\_\_\_

**6 C.I.P. CONCRETE STAIRS**  
1"=1'-0"

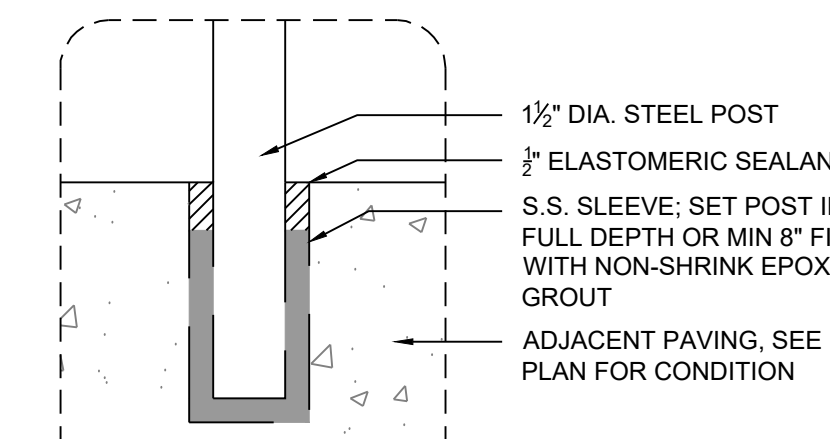
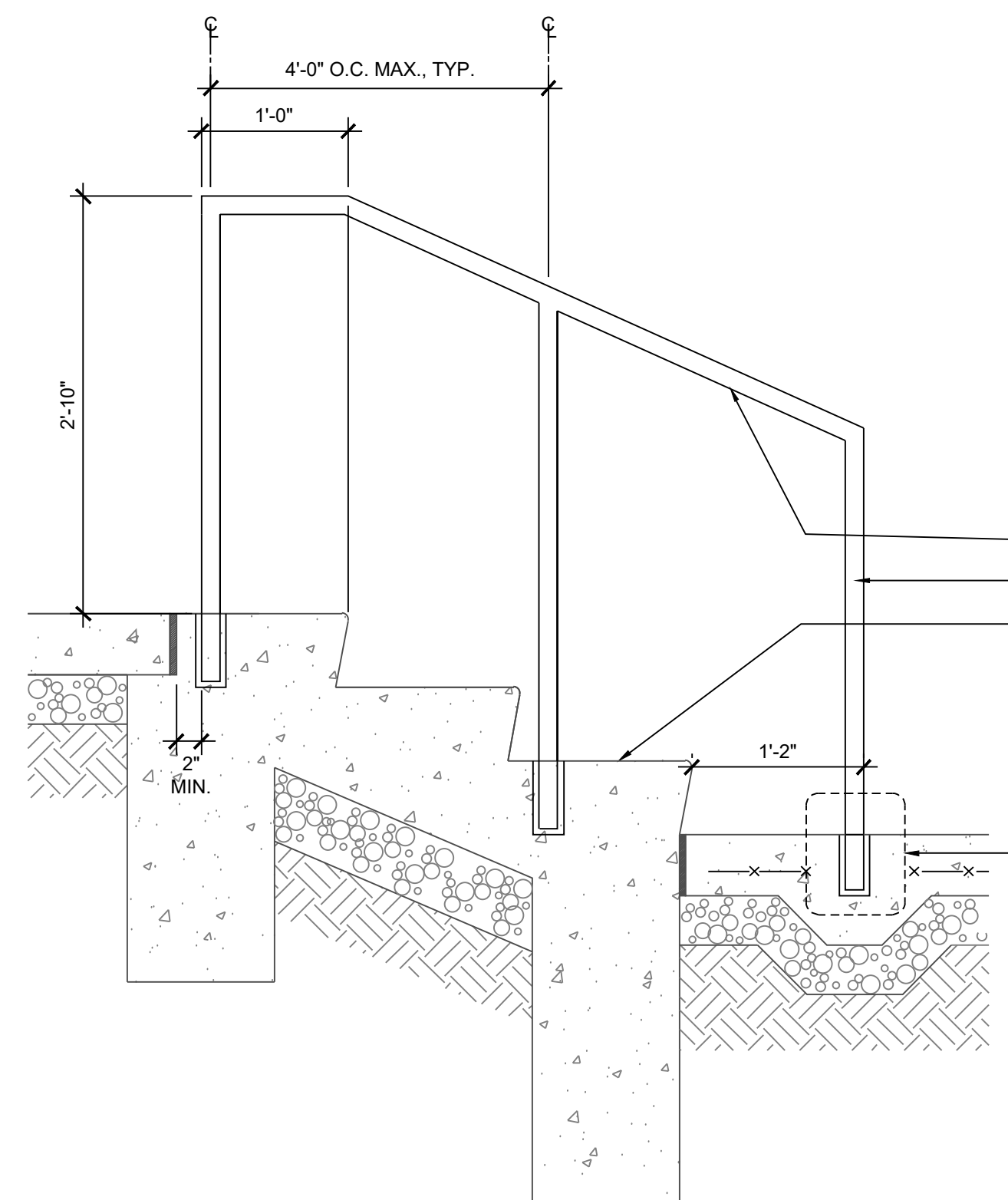


**NOTES:**

- REFER TO PLANS FOR NUMBER OF RISERS/TREADS.
- SEE PLANS FOR LOCATION OF HANDRAIL.
- CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR EACH TYPE OF STAIR PRIOR TO CONSTRUCTION.
- REFER TO STRUCTURAL DWGS. FOR REINFORCING.

S.S. HANDRAIL SEE DETAIL 2, THIS SHEET  
1/2" EXPANSION JOINT, TYP.  
ADJACENT PAVING, CONDITION VARIES, SEE PLAN

COMPACTED SUBGRADE



ENLARGEMENT

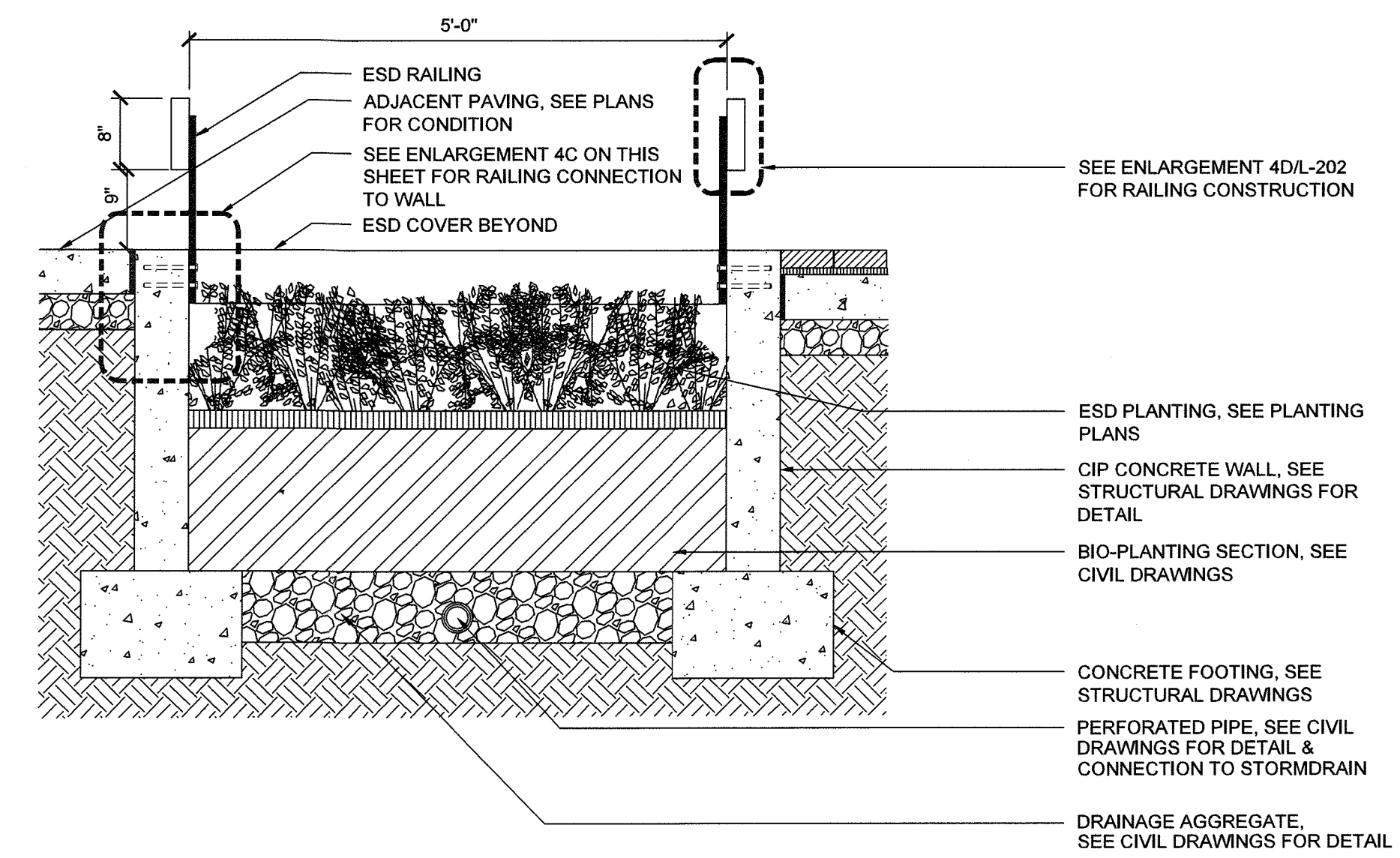
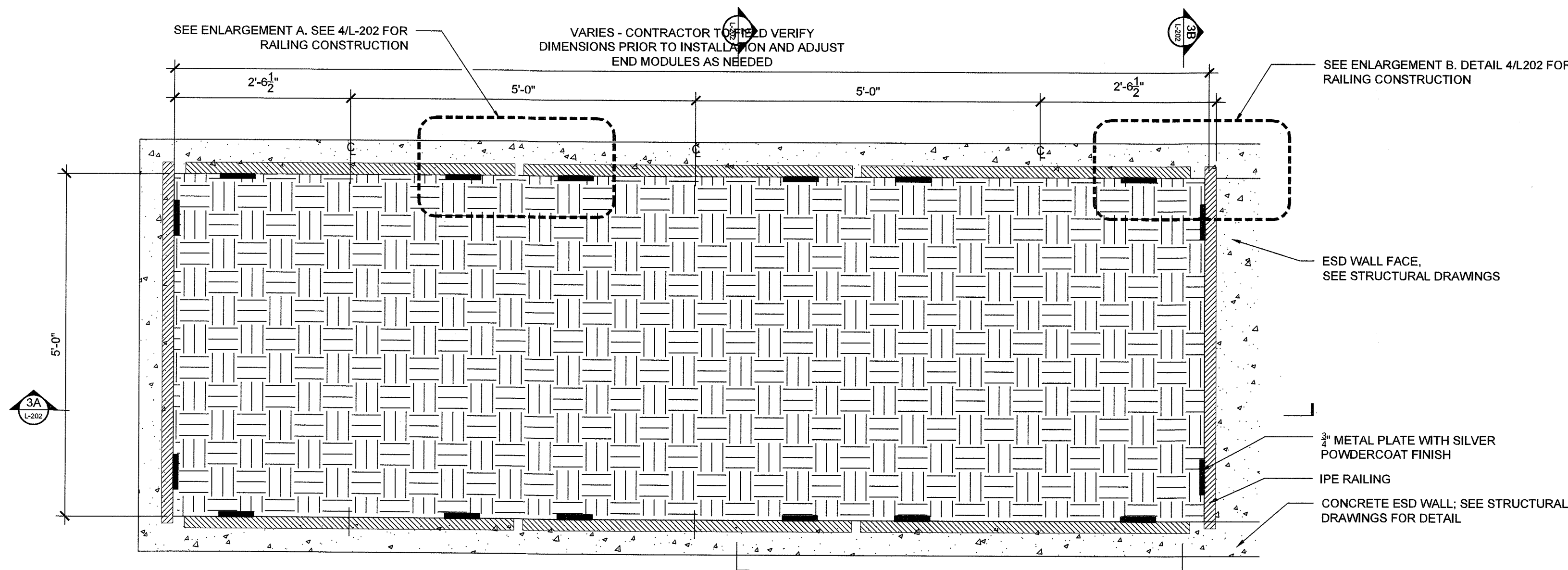
1/2" DIA. GALV. STEEL HANDRAIL  
1/2" DIA. STEEL POST, TYP.  
CIP CONCRETE STAIR, SEE DETAIL 1 THIS SHEET

- NOTE:
- MIDDLE POST REQUIRED ON STAIRS WITH FOUR OR MORE RISERS.

**7 HANDRAIL**  
1"=1'-0"

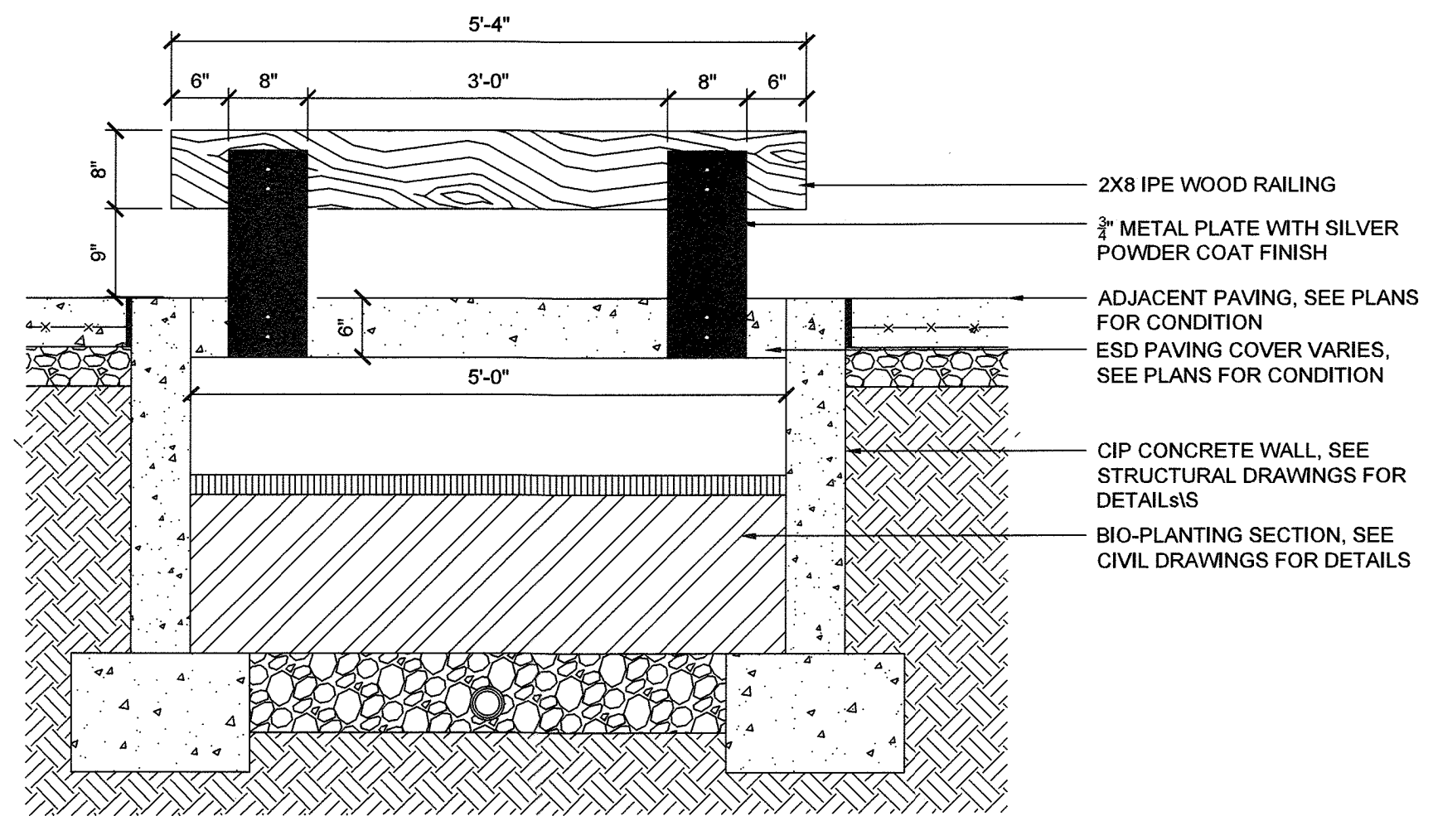
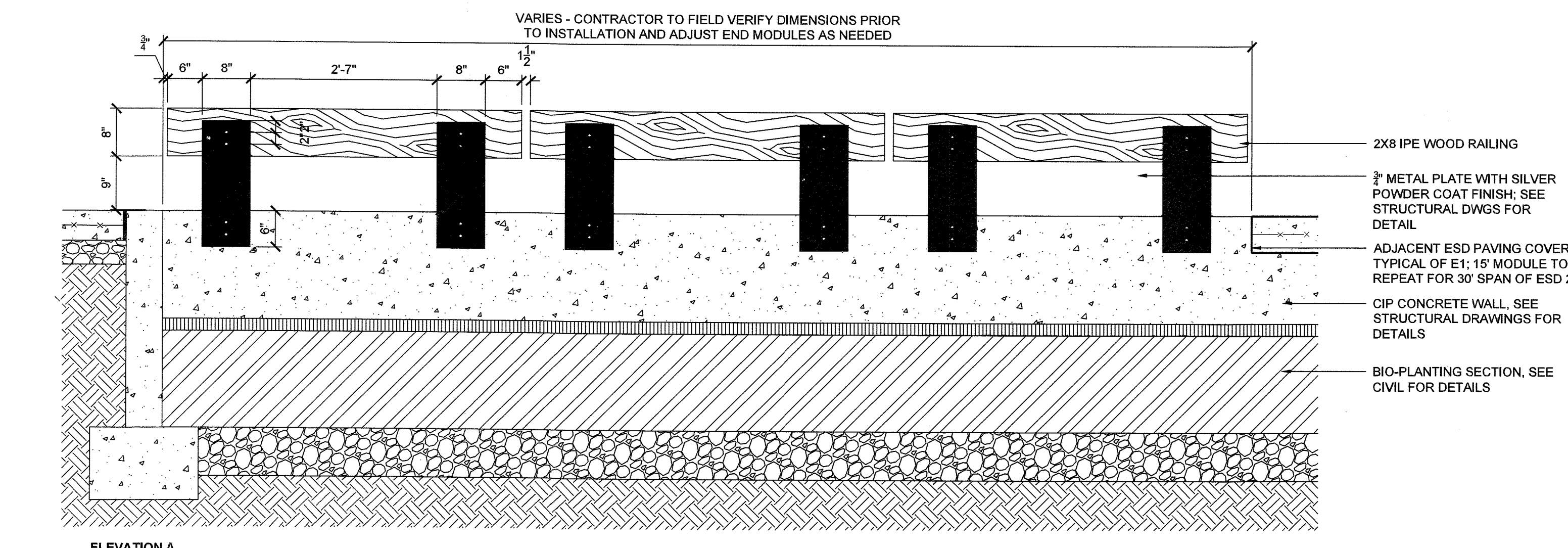
HOWARD COUNTY DEPT. OF PLANNING & ZONING	
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE

5/15/2019	△	TREE PAVES GRATE DETAIL
Date	Revision	Description
<b>DOWNTOWN COLUMBIA</b>		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE 2		
PARCELS D-I, D-7, D-8, D-9, D-11, D-12 AND D-13		
OWNER / DEVELOPER:		
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION		
COLUMBIA REGIONAL OFFICE		
10480 LITTLE PATUXENT PARKWAY SUITE 400		
COLUMBIA, MD 21044		
410-964-4800		
<b>MAHAN RYKIEL</b>		
ASSOCIATES INC		
The Stieff Silver Building, 800 Wyman Park Drive,		
Suite 100, Baltimore, MD 21211 410.235.6001		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD PHASE I AREA 3	PARCEL D
PLAT OR REF. PLAN	TAX ZONE/MAP	ELECT. DISTRICT
7	36	5
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	1
TITLE		
L-201 - HARDSCAPE DETAILS		
Des. By	MP	SCALE AS SHOWN
Drn. By	BB	Date 02/15/19
Chk. By	MP	Approved
		Proj. No. 04038.B0
		50 of 77

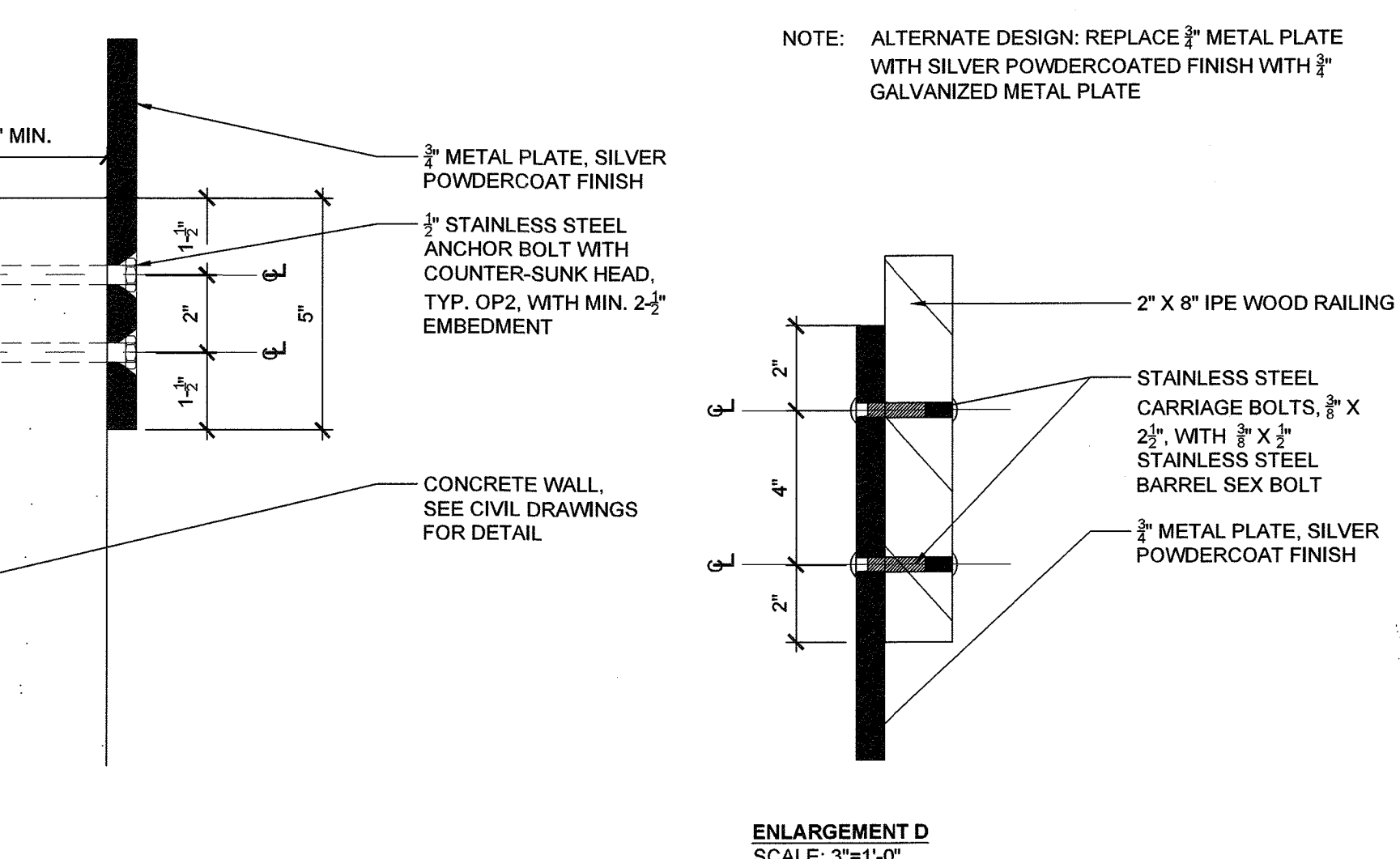
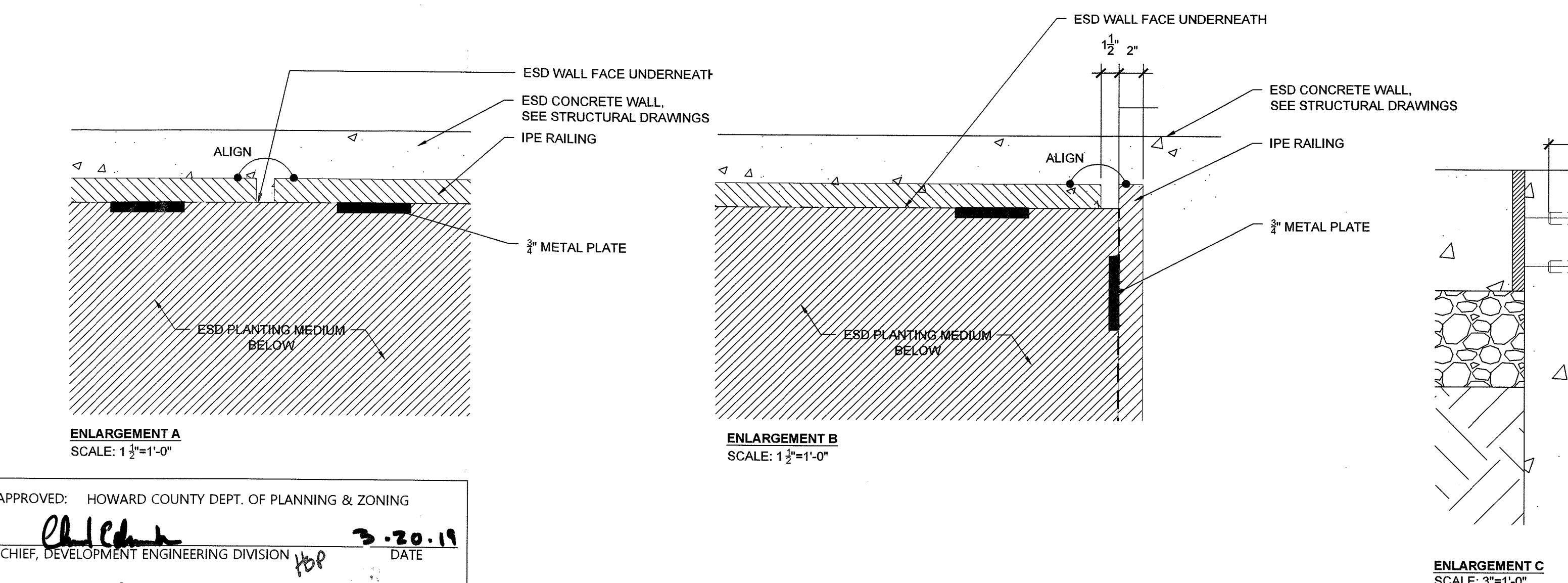


**1 ESD - RAILING LAYOUT PLAN**  
3/4"=1'-0"

**2 ESD RAILING - SECTION @ ON STREET PARKING**  
3/4"=1'-0"



**3 ESD RAILING - ELEVATIONS**  
3/4"=1'-0"



**4 ESD - RAILING ENLARGEMENTS**  
SCALE: AS SHOWN

**CERTIFICATION NOTE:**  
I, *Wm. T. Rowe*, 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. T. Rowe*, 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* 2-18-19  
DEVELOPER'S/OWNER'S NAME  
*Wm. T. Rowe* 3/19  
DEVELOPER'S/OWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**  
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2. BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE AND WEBER, P.A.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING  
*Chick* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*Kat Schuch* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT  
*Nancy Jolin* 4-24-19  
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-17-115, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A, SDP-17-027, F-17-057, F-18-017, WP-18-089, WP-18-305.  
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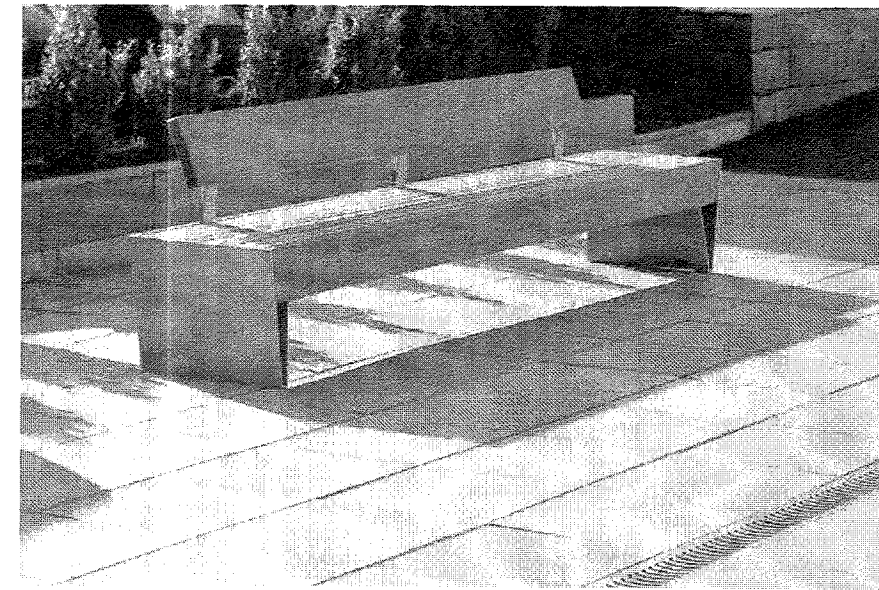


Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE 2 PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13 MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800

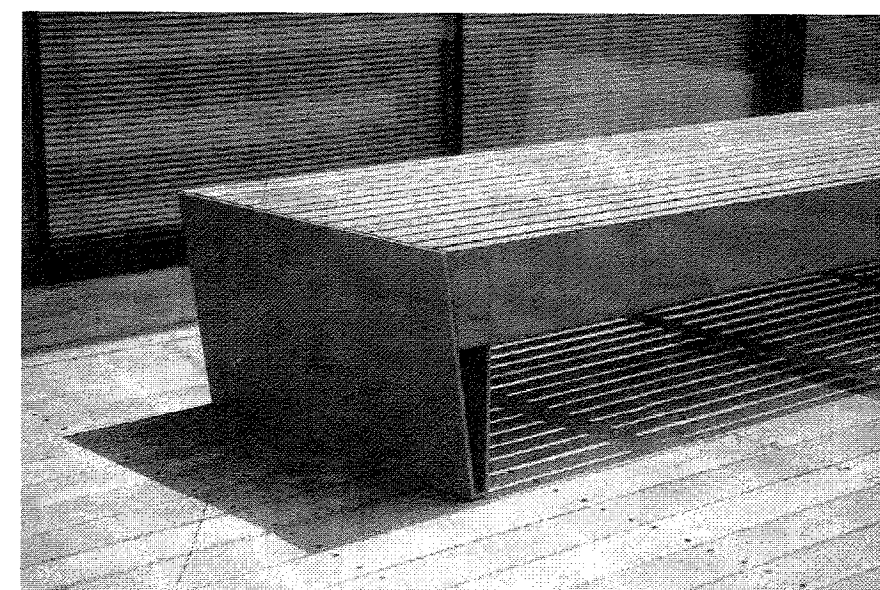
**MAHAN RYKIEL ASSOCIATES INC**  
The Steiff Silver Building, 800 Wymen Park Drive, Suite 100, Baltimore, MD 21211 410.235.8001

SUBDIVISION NAME	SECTION	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD		
PLAT OR LOT	BLOCK #	TAX ZONE/MAP	ELECT DISTRICT
7	36	5	
WATER CODE	SEWER CODE	CENSUS TRACT	
550	LITTLE PATUXENT	STAGE	1

TITLE		
L-202 - HARDSCAPE DETAILS		
Des. By	MP	SCALE AS SHOWN
Drn. By	BB	Date 02/15/19
Chk. By	MP	Approved --
		Proj. No. 04038.80
		51 of 77



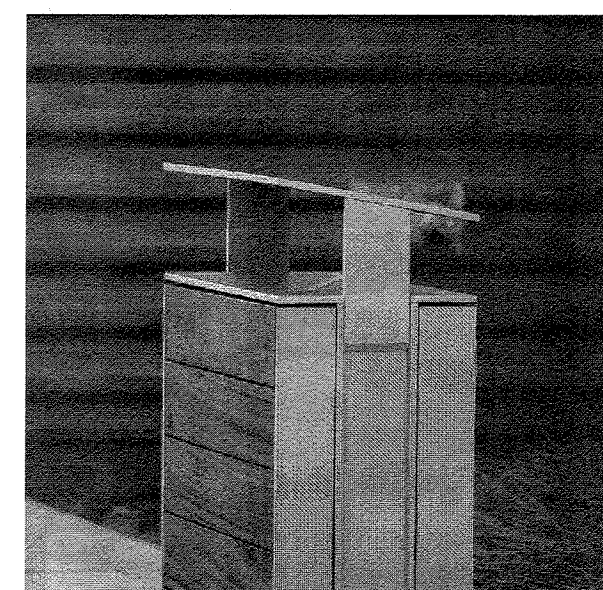
BENCH WITH BACK



BENCH WITHOUT BACK

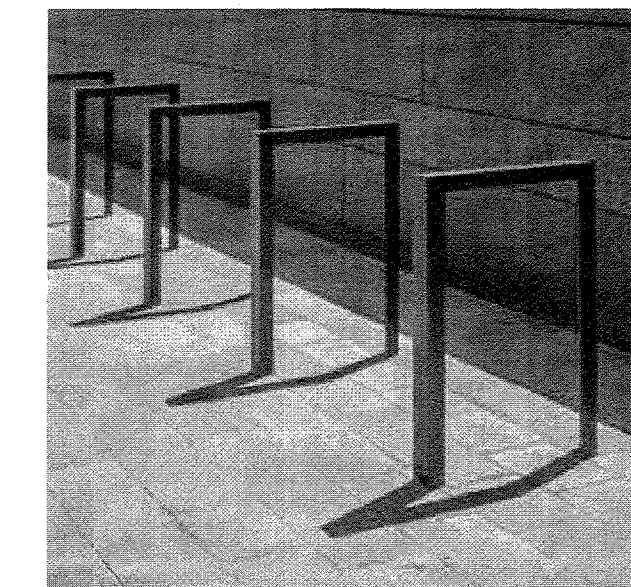
**MMCITÉ**  
 BÍLOVICE 519, 687 12 BÍLOVICE  
 CZECH REPUBLIC  
 PHONE: +420.572.434.292  
 WEB: www.mmcite.com

- MODEL: BLOCO
- 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



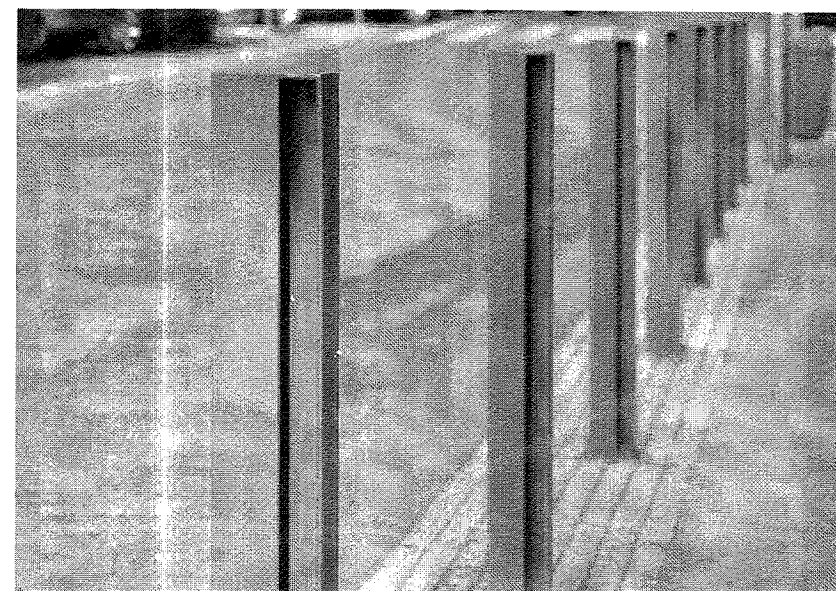
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 BÍLOVICE 519, 687 12 BÍLOVICE  
 CZECH REPUBLIC  
 PHONE: +420.572.434.292  
 WEB: www.mmcite.com

- 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.



**MMCITÉ**  
 BÍLOVICE 519, 687 12 BÍLOVICE  
 CZECH REPUBLIC  
 PHONE: +420.572.434.292  
 WEB: www.mmcite.com



- MODEL: ELIAS SE101
- COLOR: SILVER
- POWDERCOAT FINISH
- INSTALLATION: SURFACE MOUNT PER MANUFACTURER SPECIFICATIONS



- MODEL: ELIAS SE150
- COLOR: SILVER
- POWDERCOAT FINISH
- INSTALLATION: REMOVABLE INSTALL PER MANUFACTURER SPECIFICATIONS

**4 BOLLARDS**  
 N.T.S.

**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.

*W. Rowe* 2-18-19  
 DEVELOPER'S/OWNER'S NAME

*Wm. T. Rowe SVP*  
 DEVELOPER'S/OWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**

1. FLOODPLAIN INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A STUDY PERFORMED BY BIO-HABITATS DATED 06/18/2015.
2. WETLANDS AND ASSOCIATED ENVIRONMENTAL INFORMATION SHOWN HEREON REFLECT THE RESULT OF AN INVESTIGATION PERFORMED BY DMW DATED MARCH 2015.
3. SOIL SURVEY INFORMATION SHOWN HEREON REFLECTS HOWARD COUNTY SOILS INFORMATION DATED 11/26/2007.
4. 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.

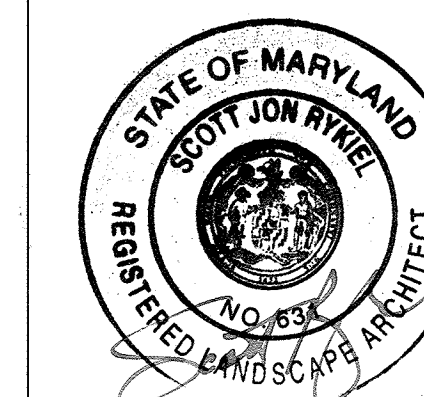
**DATA SOURCES:**

1. 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.
2. BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

**FILE NUMBERS:**  
 F 15-106, F 16-107, F 17-059, F-18-017, SDP-16-075, SDP-17-027, 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: 09/21/19.



Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b>		
<b>CRESCENT NEIGHBORHOOD</b>		
<b>PHASE I AREA 3, PHASE 2</b>		
<b>PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13</b>		
<b>OWNER / DEVELOPER:</b>		
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
<b>MAHAN RYKIEL</b>		
<b>ASSOCIATES INC</b>		
The Stieff Silver Building, 800 Wyman Park Drive, Suite 100, Baltimore, MD 21211 410.235.6001		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	AREA 3	PARCEL D
PLAT #	TAX ZONE/APP	RELECT. DISTRICT
7	36	5
WATER CODE	SEWER CODE	CENSUS TRACT
550	LITTLE PATUXENT	605602
<b>TITLE</b>		
<b>L-211 - SITE AMENITY DETAILS</b>		
Des. By	MP	SCALE AS SHOWN
Drn. By	BB	Date 02/15/19
Chk. By	MP	Approved --
		Proj. No. 04038.B0
		52 of 77

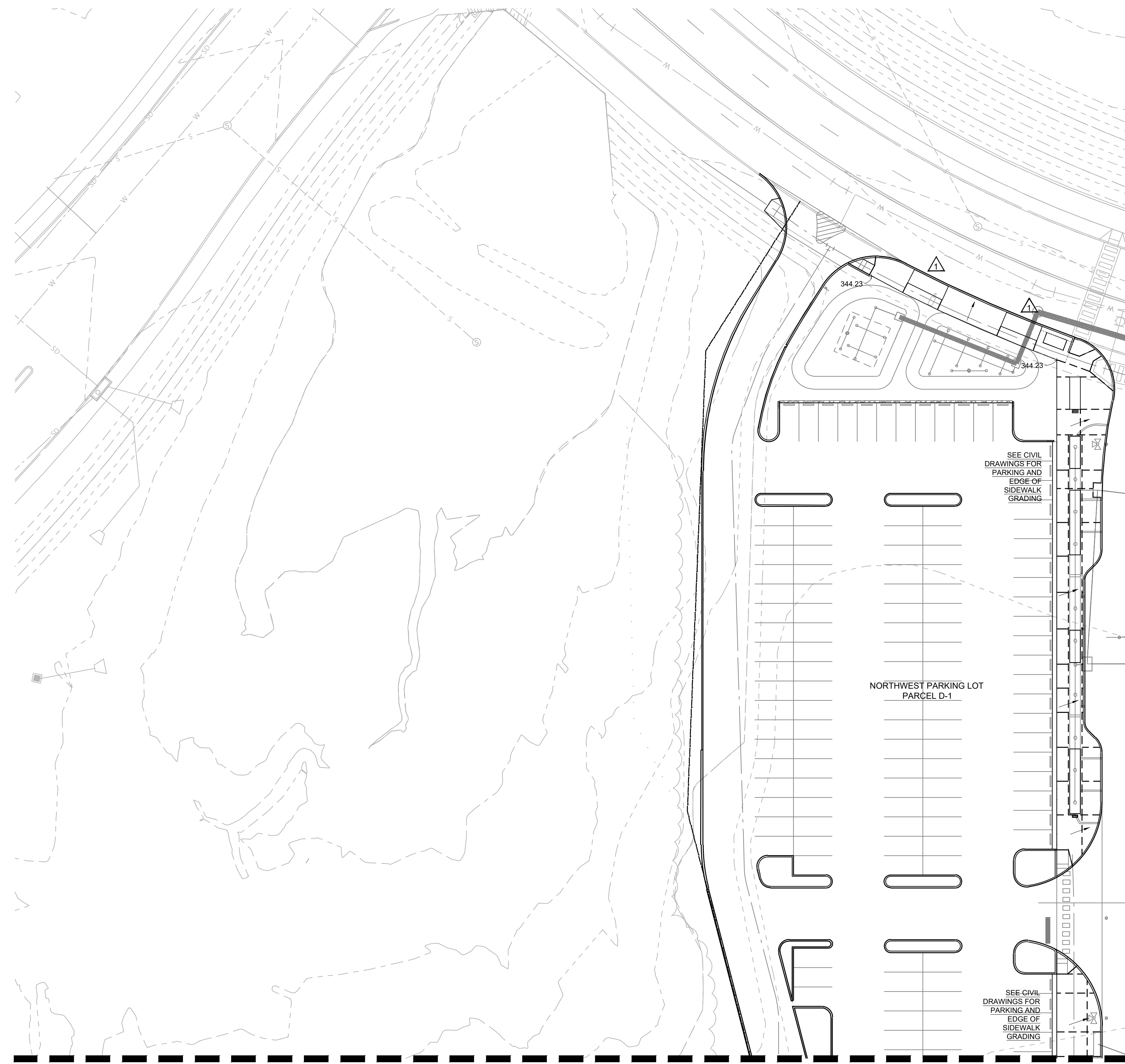
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*[Signature]* 3-20-19  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 4-24-19  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 4-24-19  
 DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE: 11/8/18



**SHEET NOTES:**

- SEE CIVIL DRAWINGS 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.
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DEVELOPER'S/OWNER'S NAME

DEVELOPER'S/OWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**

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- BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

**REVISIED SITE DEVELOPMENT PLAN**

**FILE NUMBERS:**  
 F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 09/21/2019.

Date	No.	Revision Description
5/15/2019	1	HARDSCAPE REVISIONS

**DOWNTOWN COLUMBIA  
 CRESCENT NEIGHBORHOOD  
 PHASE I AREA 3, PHASE 2  
 PARCELS D-1, D-7, D-8, D-9,  
 D-11, D-12 AND D-13**

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

**MAHAN RYKIEL  
 ASSOCIATES INC**  
 The Stieff Silver Building, 800 Wyman Park Drive,  
 Suite 100, Baltimore, MD 21211 410.235.6001

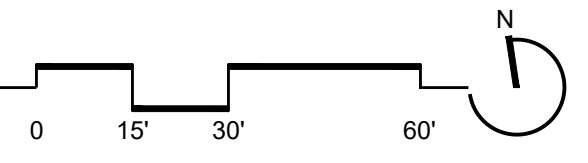
SUBDIVISION NAME	SECTION	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE I AREA 3	PHASE 2 AREA 3	PARCEL D
PLAT FOR L.P. PROJECT NO.	BLOCK #	TAX ZONE/MAP	ELECT. DISTRICT
7	DMW	36	5
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT	1	

**TITLE**  
 L-301 - HARDSCAPE GRADING PLAN

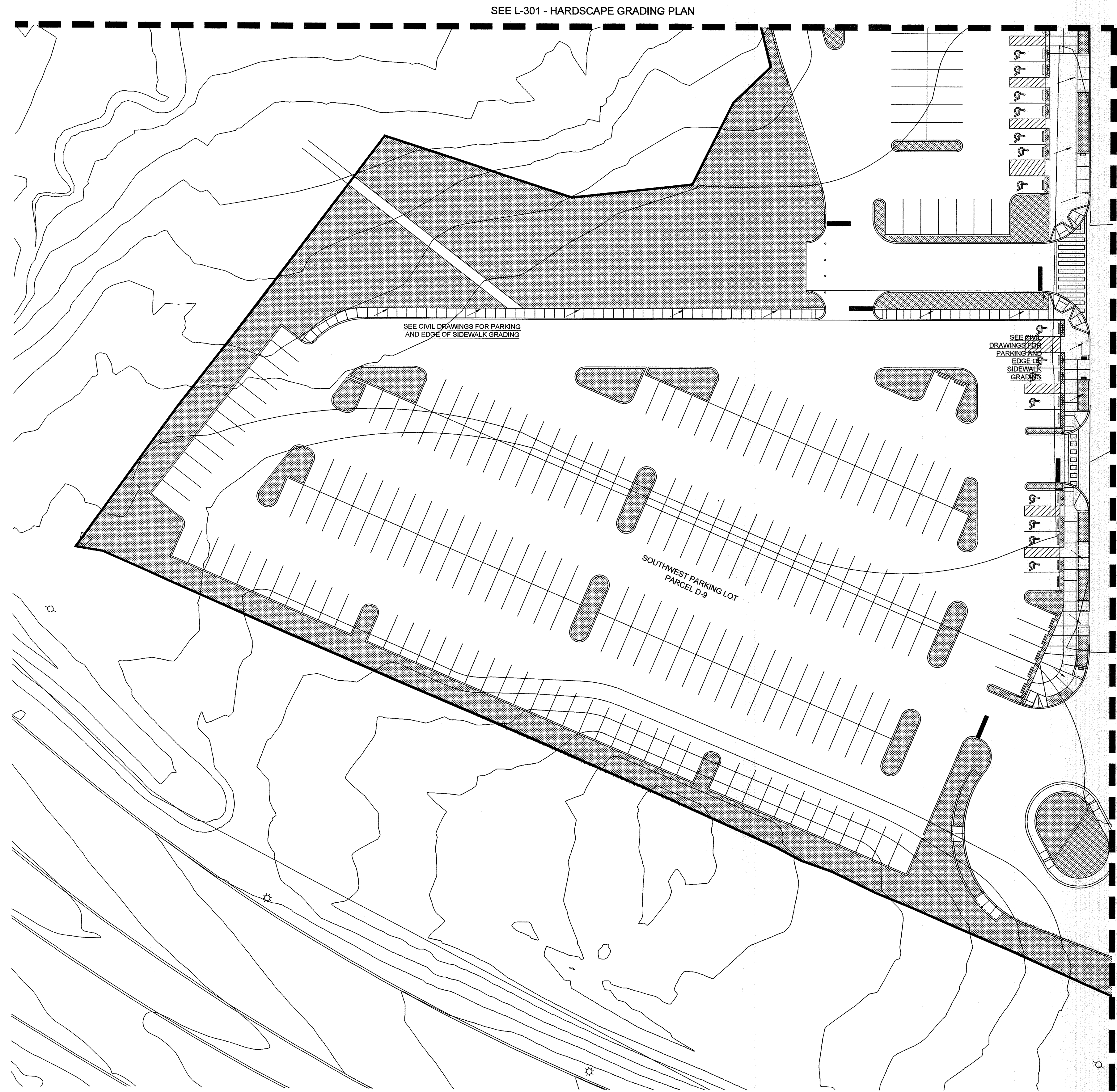
Des. By	MP	SCALE	AS SHOWN	Proj. No.	04038.00
Drn. By	BB	Date	02/15/19	53 of 77	
Chk. By	MP	Approved			

APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE :

**1 HARDSCAPE GRADING PLAN**  
 1"=30'



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



SEE L-303 - HARDSCAPE GRADING 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.
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*Wm T. Rowe* 2-18-19  
DEVELOPER/SOWNER'S NAME

*Wm T. Rowe* 2/18  
DEVELOPER/SOWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**

- FLOODPLAIN INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A STUDY PERFORMED BY BIO-HABITATS DATED 06/18/2015.
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- BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

**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, SDP 17-027, F 17-057, F18-017, WP-18-089, WP-18-105.  
**CONTRACT NUMBERS:**  
24-4951-D, 24-4975-D, 24-4974-D.

**PROFESSIONAL CERTIFICATION**  
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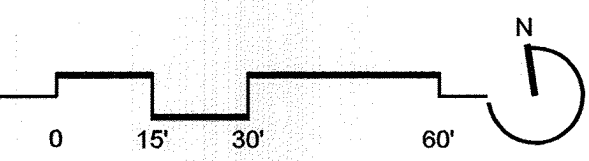
APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/18

Date	No.	Revision Description
		<b>DOWNTOWN COLUMBIA</b> <b>CRESCENT NEIGHBORHOOD</b> <b>PHASE I AREA 3, PHASE 2</b> <b>PARCELS D-1, D-7, D-8, D-9,</b> <b>D-11, D-12 AND D-13</b> MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING <b>OWNER / DEVELOPER:</b> THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-8800

SUBDIVISION NAME	DOWNTOWN COLUMBIA	SECTION/AREA	CRESCENT NEIGHBORHOOD PHASE 2 AREA 3	LOT/PARCEL #	PARCEL D
PLAT OR LOT	7	TAX ZONE/MAP	DM	CENSUS TRACT	605602
WATER CODE	550	SEWER CODE	LITTLE PATUXENT	STAGE	1

<b>TITLE</b> <b>L-302 - HARDSCAPE GRADING PLAN</b>		
Des. By	MP	SCALE AS SHOWN
Drn. By	BB	Date 02/15/19
Chk. By	MP	Approved
		Proj. No. 04038.B0
		54 of 77

**1 HARDSCAPE GRADING PLAN**  
1"=30'



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*W. T. Rowe* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*K. E. Deval* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*N. J. Jolin* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

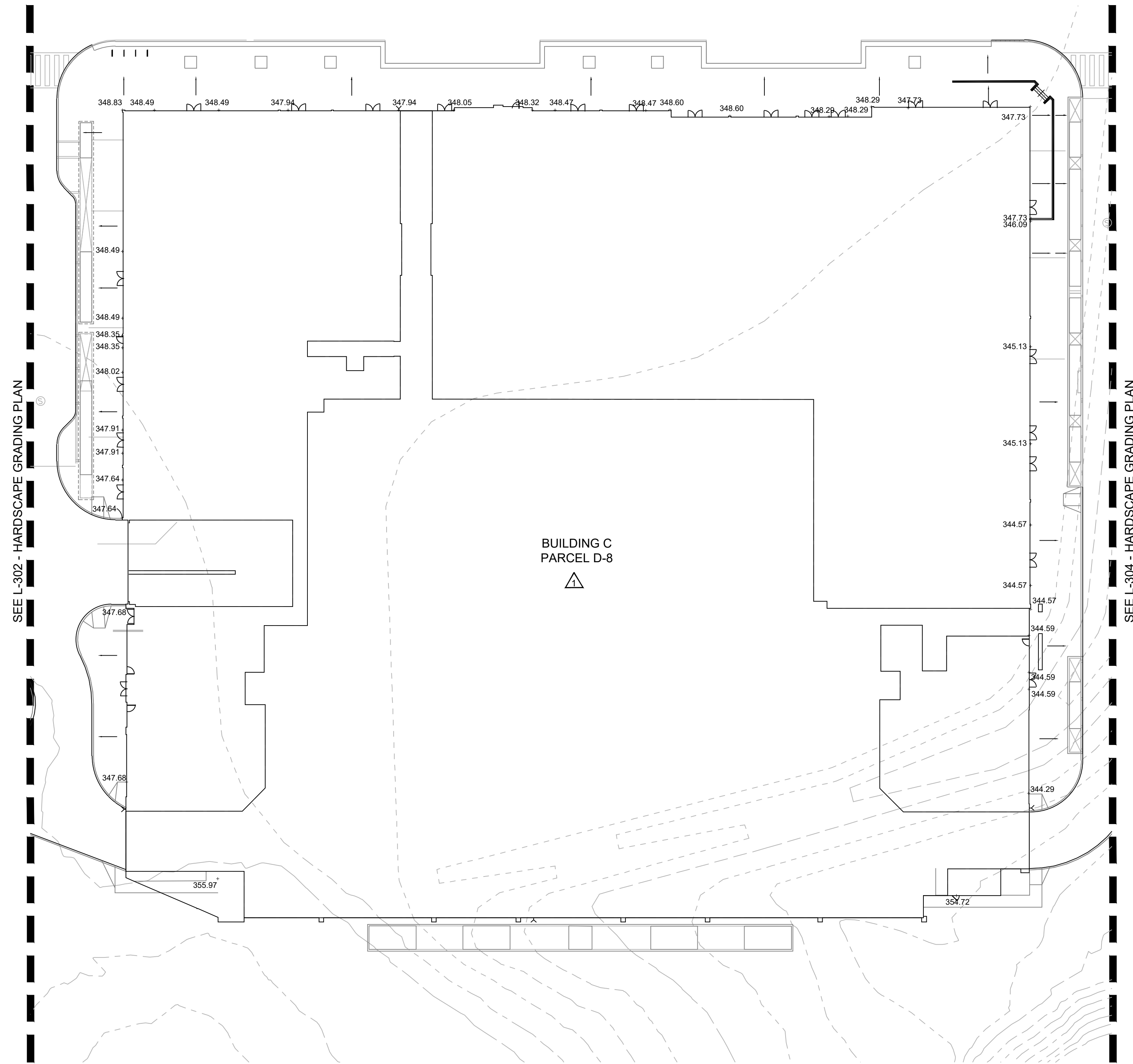
**SHEET NOTES:**

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- GRADING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD ARE PER F-15-106 AND F-16-107.



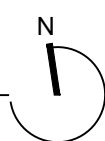
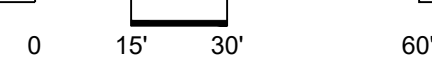
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**1 HARDSCAPE GRADING PLAN**

1"=30'



**GENERAL LANDSCAPE NOTES:**

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DEVELOPER'S/OWNER'S NAME

DEVELOPER'S/OWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**

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**REVISIED SITE DEVELOPMENT PLAN**

**FILE NUMBERS:**

F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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

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Date	No.	Revision Description
5/15/2019	1	HARDSCAPE AND BLDG REVISIONS

**DOWNTOWN COLUMBIA  
CRESCENT NEIGHBORHOOD  
PHASE I AREA 3, PHASE 2  
PARCELS D-1, D-7, D-8, D-9,  
D-11, D-12 AND D-13**

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**  
The Stieff Silver Building, 800 Wyman Park Drive,  
Suite 100, Baltimore, MD 21211 410.235.6001

SUBDIVISION NAME	SECTION	AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE 2	AREA 3		PARCEL D
TRACT OR L.P. #	BLOCK #	ZONE	TAX ZONE/MAP	ELECT. DISTRICT
ASSET #2450	7	DMAU	36	5
WATER CODE	SEWER CODE	STAGE	CENSUS TRACT	
550	LITTLE PATUXENT	1	605602	

TITLE  
**L-303 - HARDSCAPE GRADING PLAN**

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE :

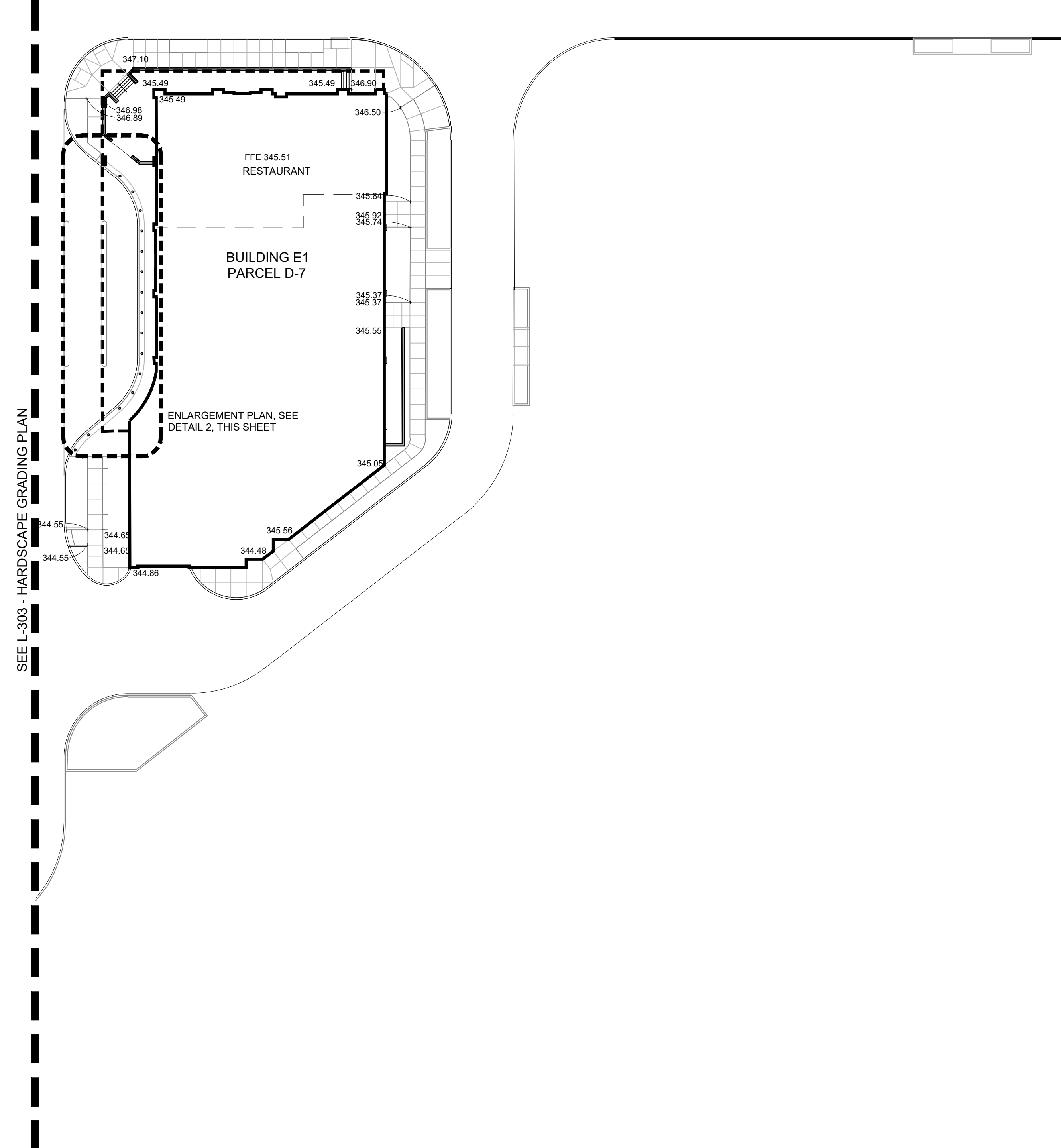
Des. By	MP	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By	BB	Date 02/15/19	
Chk. By	MP	Approved	55 of 77

SDP-18-005

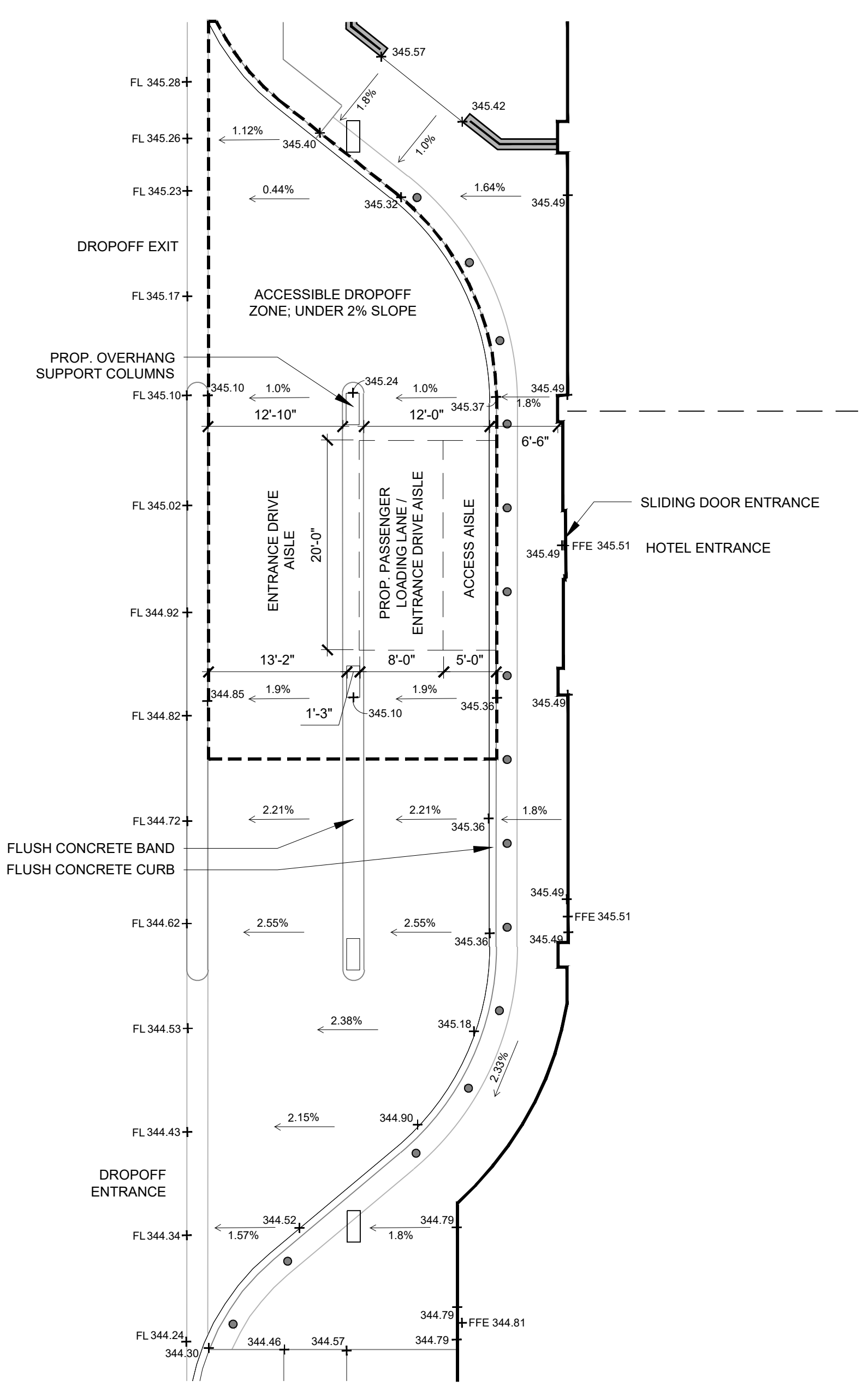
HOWARD COUNTY DEPT. OF PLANNING & ZONING	
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE

**SHEET NOTES:**

- SEE CIVIL DRAWINGS FOR ALL GRADING IN VEHICULAR AREAS
- GRADING ALONG MERRIWEATHER DRIVE AND SYMPHONY WOODS ROAD ARE PER F-15-106 AND F-16-107.



**1 HARDSCAPE GRADING PLAN**  
1"=30'



**1 ENLARGEMENT PLAN**  
1"=10'

**GENERAL LANDSCAPE NOTES:**

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**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

DEVELOPER'S/OWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**

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- WETLANDS AND ASSOCIATED ENVIRONMENTAL INFORMATION SHOWN HEREON REFLECT THE RESULT OF AN INVESTIGATION PERFORMED BY DMW DATED MARCH 2015.
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- 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:**

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- BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

**REVISIED SITE DEVELOPMENT PLAN**

**FILE NUMBERS:**  
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 09/21/2019.

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: \_\_\_\_\_

HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

5/15/2019	△	HARDSCAPE REVISIONS
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE 2 PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13</b>		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
<b>MAHAN RYKIEL ASSOCIATES INC</b> The Stieff Silver Building, 800 Wyman Park Drive, Suite 100, Baltimore, MD 21211 410.235.6001		
SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD
DOWNTOWN COLUMBIA	PHASE 2 AREA 3	PARCEL D
TRACT OR L.P. PARCEL NUMBER	BLOCK #	ZONE
4450	7	DMAU
TAX ZONE/MAP	ELECT. DISTRICT	CENSUS TRACT
36	5	605602
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	1
<b>TITLE</b> <b>L-304 - HARDSCAPE GRADING PLAN</b>		
Des. By	MP	SCALE AS SHOWN
Drn. By	BB	Date 02/15/19
Chk. By	MP	Approved
		Proj. No. 04038.00
		56 of 77

PLANT SCHEDULE

KEY	BOTANICAL/COMMON NAME					
TREES						
6	AR Acer rubrum 'October Glory'	3.5" Cal.	B&B	North American Native		
△ 8	GB October Glory Red Maple	3.5" Cal.	B&B	Central Leader, Full Canopy		
20	QP Ginkgo biloba 'Princeton Sentry'	3.5" Cal.	B&B	Central Leader, Full Canopy		
38	TT Quercus phellos 'Hightower'	3.5" Cal.	B&B	North American Native		
	TT Hightower Willow Oak			Central Leader, Full Canopy		
	TT Tilia tomentosa 'Sterling'	3.5" Cal.	B&B	Central Leader		
	TT Silver Linden			Full Canopy, Matched		
3	UA Ulmus americana 'Jefferson' 'Bosque'	3.5" Cal.	B&B	Central Leader, Full Canopy		
	UA Jefferson American Elm					
3	UP Ulmus parviflora 'Bosque'	3.5" Cal.	B&B	Central Leader, Full Canopy		
	UP Bosque Elm					
ORNAMENTAL TREES						
9	CK Cladrastis kentuckea 'Perkins Pink'	3" Cal.	B&B	North American Native		
	CK Perkins Pink Yellowwood			Specimen, Full Canopy		
3	IN Ilex x 'Nellie R. Stevens'	8' Ht.	B&B	Full, Heavy		
	IN Nellie Stevens Holly			Matched, (1) Male		
△ 8	MV Magnolia virginiana	10' Ht.	B&B	North American Native		
	MV Sweetbay Magnolia			Multi-stem, 3-5 canes, Matched		
SHRUBS						
41	AZ Azalea 'Delaware Valley White'	#5	Cont.	21" Spd.		
	AZ Delaware Valley White Azalea			Full, Matched		
64	CA Ceanothus americanus	#3	Cont.	North American Native		
	CA New Jersey Tea			24" Spd.		
88	IC Ilex crenata 'Chesapeake'	4' Ht.	Cont.	Full, Matched		
	IC Chesapeake Japanese Holly					
155	IG Ilex glabra 'Chamzin'	#5	Cont.	North American Native		
	IG Nordic Inkberry					
199	IV Ilex verticillata 'Red Sprite' /	#3	Cont.	North American Native		
	IV Red Sprite Winterberry			24" HT.		
79	JC Juniperus conferta 'Blue Pacific'	#3	Cont.	12" Spd.		
	JC Blue Pacific Juniper			18" O.C.		
210	JH Juniperus horizontalis 'Plumosa Compacta'	#5	Cont.	18" Spd.		
	JH Andorra Juniper			24" O.C.		
14	MC Myrica cerifera 'Don's Dwarf'	#7	Cont.	North American Native		
	MC Dwarf Wax Myrtle			30" Spd., Full, Matched		
△ 67	PL Prunus laurocerasus 'Otto Luyken'	30" Spd.	B&B	Full, Matched		
	PL Cherry Laurel					
169	RA Rhus aromatica 'Gro Low'	#3	Cont.	North American Native		
	RA Gro Low Fragrant Sumac					
202	TD Taxus x media 'Densiformis'	24" Spd.	B&B	Full, Matched		
	TD Densiformis Yew					
72	VD Viburnum dentatum 'Blue Muffin'	36" Spd.	B&B	North American Native		
	VD Arrowood Viburnum			Full, Matched		
SEASONAL ROTATION (SPRING / FALL)						
38	AMS Amsonia hubrichtii	#1	Cont.	North American Native		
	AMS Threadleaf Bluestar			24" O.C.		
165	ASC Asclepias tuberosa	SP#4	Cont.	North American Native		
	ASC Butterfly Weed			18" O.C.		
△ 169	DES Deschampsia flexuosa	#1	Cont.	North American Native		
	DES Wavy Hair Grass					
△ 273	ECH Echinacea purpurea	#1	Cont.	North American Native		
	ECH Purple Coneflower			18" O.C.		
△ 245	EUP Eutrochium dubium 'Little Joe'	#1	Cont.	North American Native		
	EUP Joe Pye Weed			18" O.C.		
△ 40	EUR Euphorbia amygdaloides var. robbiae	#1	Cont.	18" O.C.		
	EUR Wood Spurge					
70	HEA Heuchera villosa 'Autumn Bride'	#1	Cont.	North American Native		
	HEA Coral Bells			18" O.C.		
△ 408	HEM Hemerocallis 'Hyperion'	#1	Cont.	24" O.C.		
	HEM Daylily					
100	HEU Heuchera 'Palace Purple'	#1	Cont.	North American Native		
	HEU Coral Bells			18" O.C.		
△ 264	HYP Hypericum calycinum	#1	Cont.	12" O.C.		
	HYP St. John's Wort					
529	IRI Iris versicolor	#1	Cont.	North American Native		
	IRI Blue Flag Iris			18" O.C.		
△ 746	LIR Liriope muscari	#1	Cont.	12" O.C.		
	LIR Lilyturf					
217	MON Monarda didyma	#1	Cont.	North American Native		
	MON Bee Balm			18" O.C.		
183	NEP Nepeta x faassenii 'Walker's Low'	#1	Cont.	18" O.C.		
	NEP Catmint					
△ 494	PAN Panicum virgatum	#1	Cont.	North American Native		
	PAN Switchgrass			36" O.C.		
32	RUD Rudbeckia fulgida var. fulgida	#1	Cont.	North American Native		
	RUD Black Eyed Susan			18" O.C.		
△ 448	SPO Sporobolus heterolepis	#1	Cont.	North American Native		
	SPO Prairie Dropseed			24" O.C.		
140	SYM Symphitrichum novi-belgii	#1	Cont.	North American Native		
	SYM New York Aster			18" O.C.		
30	VER Veronicastrum virginiana 'Fascination'	#1	Cont.	North American Native		
	VER Culver's Root			24" O.C.		

LANDSCAPE SURETY QUANTITIES

SHADE TREES	78
ORNAMENTAL TREES	17
EVERGREEN TREES	3
SHRUBS	2135

ONLY TREES IN THIS SDP HAVE BEEN INCLUDED IN THE SURETY CALCULATIONS AND MASTER PLAN LIST. TREES NOTED ON THE PLAN AS BEING ON F-17-059, F-18-017, OR SDP-17-027 HAVE NOT BEEN INCLUDED IN THIS SURETY CALCULATION.

FINANCIAL SURETY FOR REQUIRED PLANTING HAS BEEN POSTED IN THE AMOUNT OF \$90,600 FOR THE 78 SHADE TREES (\$300 EA.), 21 ORNAMENTAL AND EVERGREEN TREES (\$150 EA.), AND 2135 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.
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DEVELOPER'S/OWNER'S NAME

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REVISIED SITE DEVELOPMENT PLAN

Date	No.	Revision Description
5/15/2019	△	PLANTING COUNT REVISIONS

FILE NUMBERS:  
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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

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PROFESSIONAL CERTIFICATION

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PLANTING COUNT REVISIONS				
Date	No.	Revision Description		
5/15/2019	△	PLANTING COUNT REVISIONS		
<b>DOWNTOWN COLUMBIA</b> CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE 2 PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13 OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800				
<b>MAHAN RYKIEL</b> ASSOCIATES INC The Stieff Silver Building, 800 Wyman Park Drive, Suite 100, Baltimore, MD 21211 410.235.6001				
SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #	
DOWNTOWN COLUMBIA	PHASE I AREA 3	PHASE I AREA 3	PARCEL D	
TRACT OR L.P. #	BLOCK #	ZONE	TAX ZONE/MAP	ELECT. DISTRICT
41521-2400	7	DMAU	36	5
WATER CODE	SEWER CODE	STAGE	CENSUS TRACT	
550	LITTLE PATUXENT	1	605602	
TITLE				
<b>L-400 - LANDSCAPE PLANT SCHEDULE &amp; NOTES</b>				
Des. By	MP	SCALE AS SHOWN	Proj. No. 04038.80	
Drn. By	BB	Date 02/15/19	57 of 77	
Chk. By	MP	Approved		

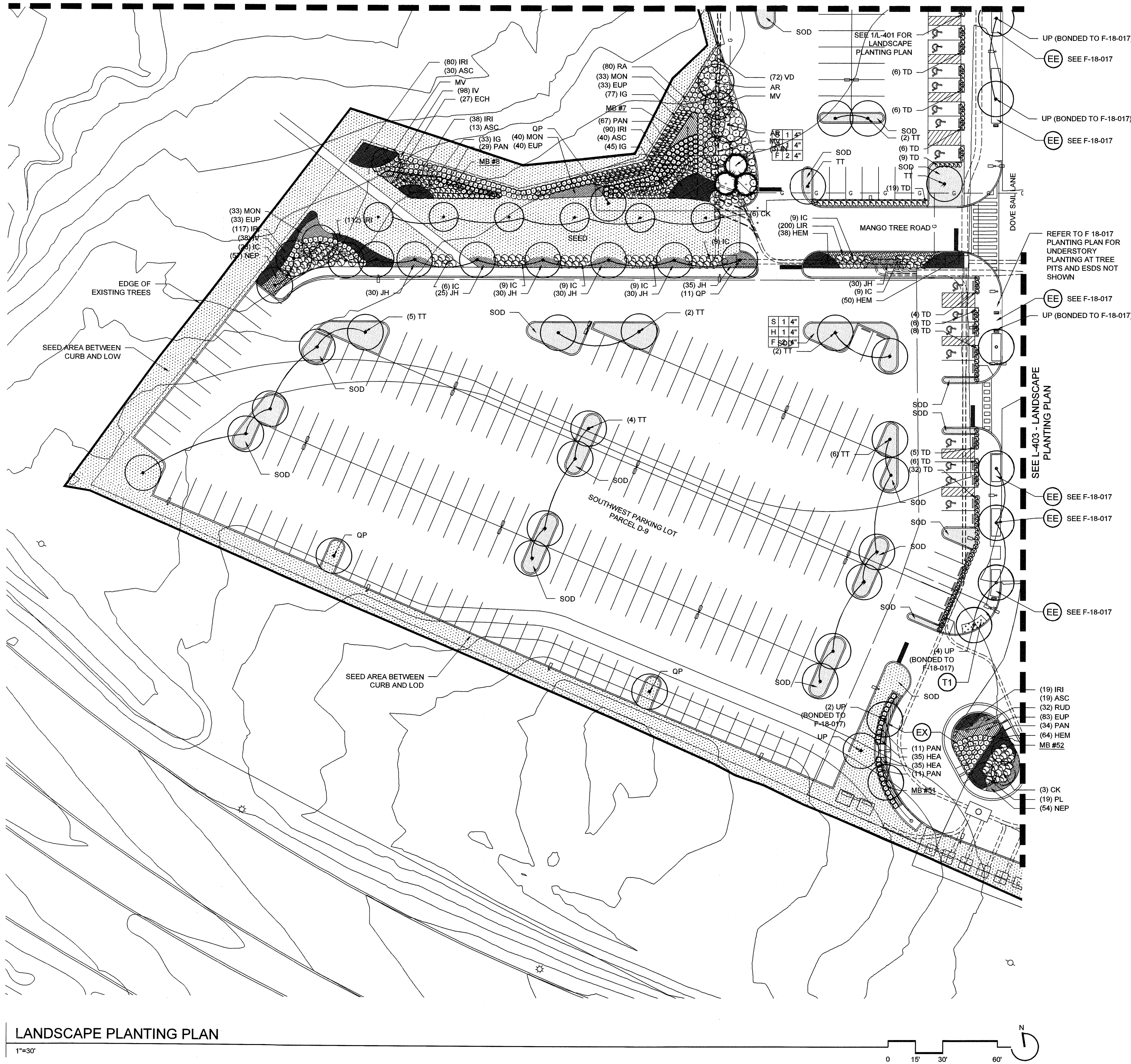
APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE :

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

1 | PLANTING SCHEDULE



SEE L-401 - LANDSCAPE PLANTING PLAN



LANDSCAPE KEY

- (T1) 4 TREE PIT PLANTING 2: 5'x15', TYP.
- (T2) 5 TREE PIT PLANTING 2: 5'x25', TYP.
- (T3) 6 TREE PIT PLANTING 3: 5'x30', TYP.
- (E1) — NOT USED
- (E2) 2 ESD PLANTING 2: 5'x20', TYP.
- (E3) — NOT USED
- (E4) 3 ESD PLANTING 4: 5'x30', TYP.
- (E5) — NOT USED
- (EE) EXISTING ESD OR TREE PLANTING. SEE CIVIL F-18-017, F-17-059, OR SDP-17-027 PLAN FOR UNDERSTORY PLANTING AS NOTED
- (EX) ESD PLANTING; IRREGULAR SIZE, SEE PLANTING LAYOUT PLAN

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*Wm. T. Rowe* 2.18.19  
DEVELOPER'S/OWNER'S NAME  
*Wm. T. Rowe* SVP  
DEVELOPER'S/OWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**

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APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/18

Date	No.	Revision Description																														
		<b>DOWNTOWN COLUMBIA</b> <b>CRESCENT NEIGHBORHOOD</b> <b>PHASE I AREA 3, PHASE 2</b> PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13 MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800																														
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Des. By	MP	SCALE AS SHOWN	Proj. No. 04038.90																													
Drn. By	BB	Date 02/15/19																														
Chk. By	MP	Approved --	59 of 77																													

1 LANDSCAPE PLANTING PLAN  
1"=30'

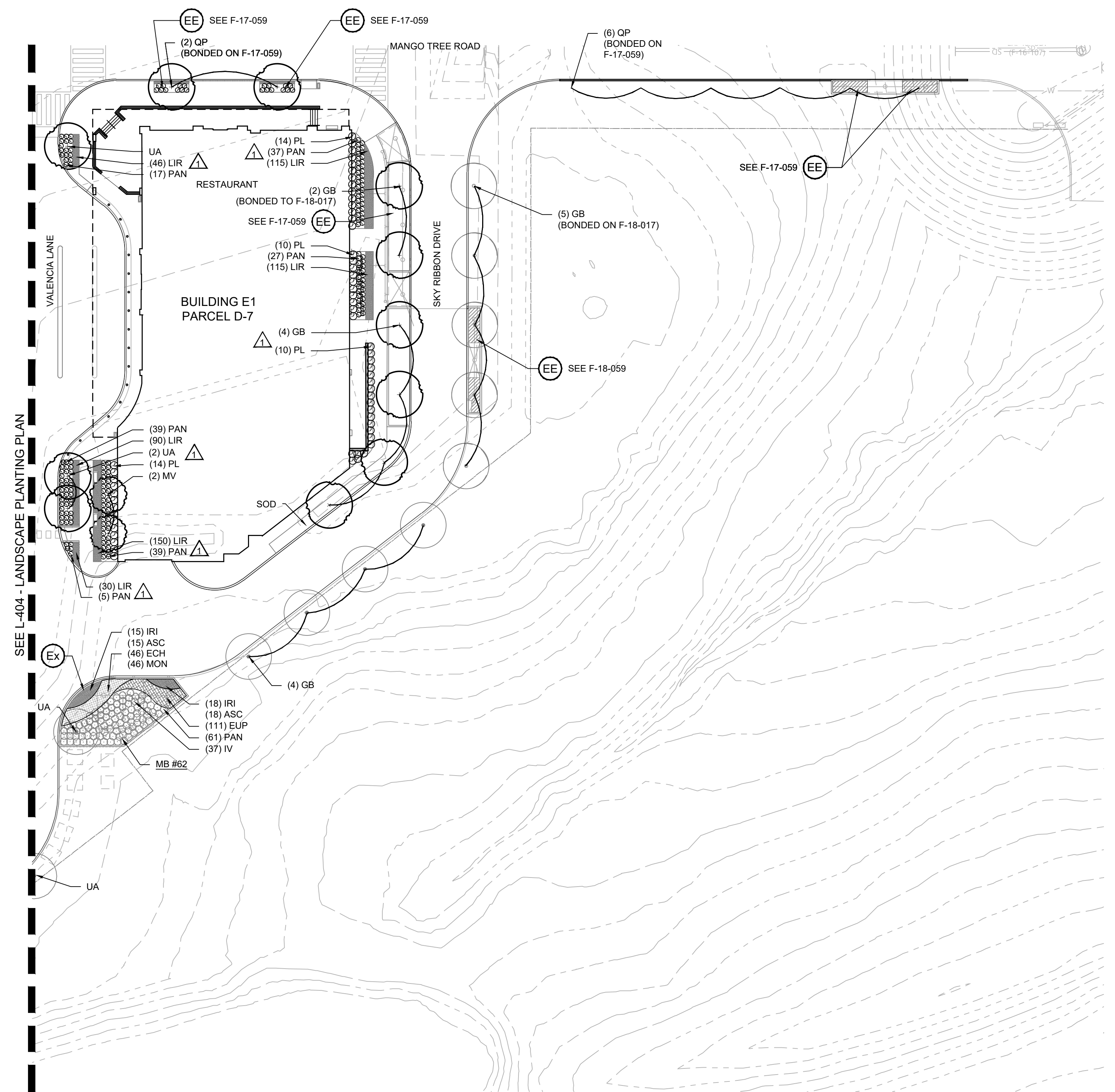
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*Al Chubb* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*W. O. Sheppard* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*N. J. Z. Z. Z.* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE





- LANDSCAPE KEY**
- T1 (4 L-401) TREE PIT PLANTING 2: 5'x15', TYP.
  - T2 (5 L-401) TREE PIT PLANTING 2: 5'x25', TYP.
  - T3 (6 L-401) TREE PIT PLANTING 3: 5'x30', TYP.
  - E1 — NOT USED
  - E2 (2 L-401) ESD PLANTING 2: 5'x20', TYP.
  - E3 — NOT USED
  - E4 (3 L-401) ESD PLANTING 4: 5'x30', TYP.
  - E5 — NOT USED
  - EE EXISTING ESD OR TREE PLANTING, SEE CIVIL F-18-017, F-17-059, OR SDP-17-027 PLAN FOR UNDERSTORY PLANTING AS NOTED
  - EX ESD PLANTING, IRREGULAR SIZE, SEE PLANTING LAYOUT 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.

DEVELOPER'S/OWNER'S NAME

DEVELOPER'S/OWNER'S NAME

**ENVIRONMENTAL DATA SOURCES**

- FLOODPLAIN INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A STUDY PERFORMED BY BIO-HABITATS DATED 06/18/2015.
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- 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:**

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- BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

**REVISIED SITE DEVELOPMENT PLAN**

**FILE NUMBERS:**  
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 631, EXPIRATION DATE: 09/21/2019.

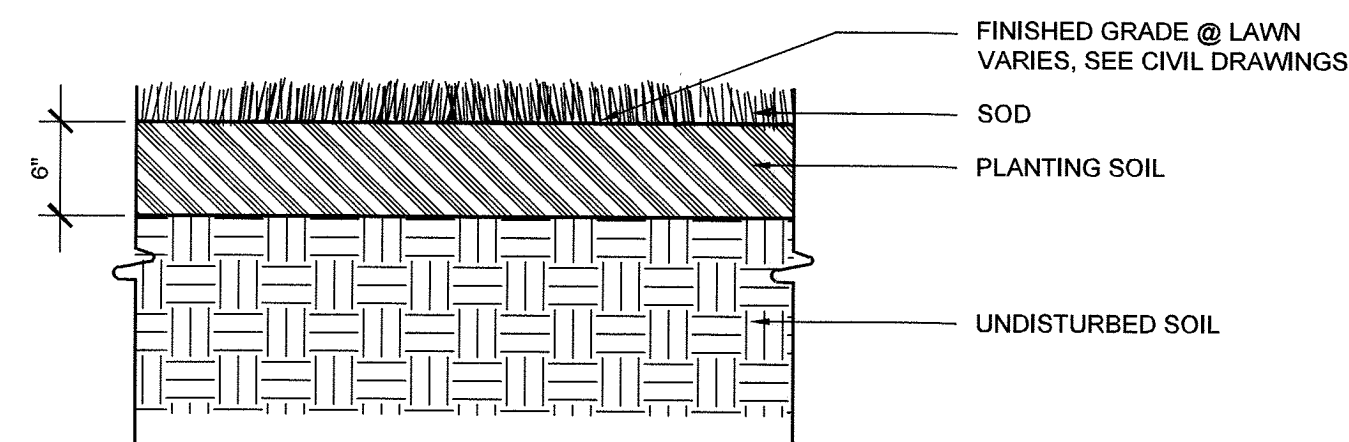
**1 LANDSCAPE PLANTING PLAN**



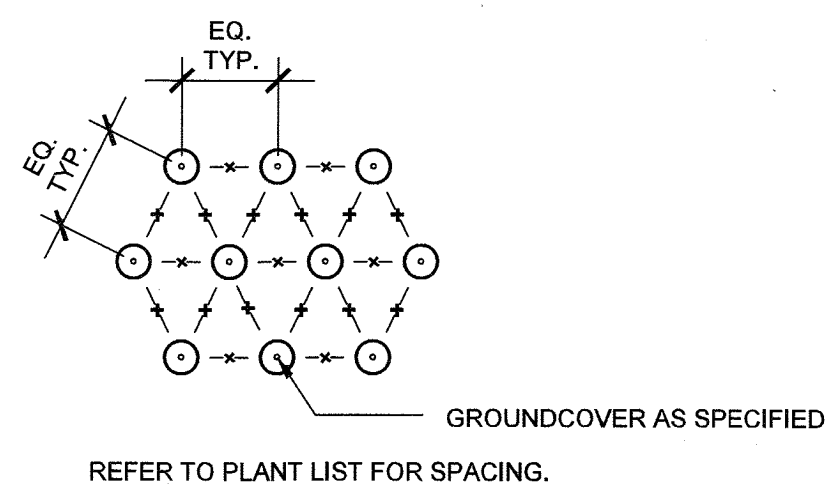
HOWARD COUNTY DEPT. OF PLANNING & ZONING	
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE :

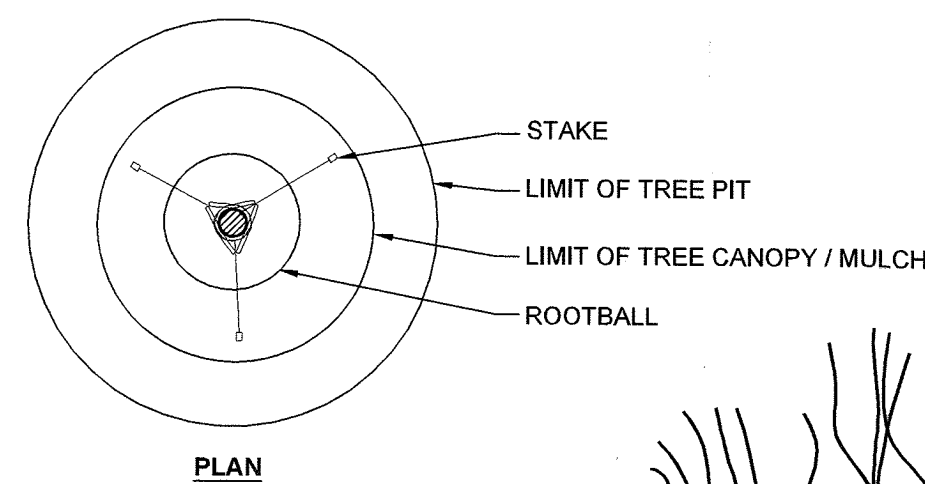
5/15/2019	1	PLANTING AREA REVISION
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b>		
CRESCENT NEIGHBORHOOD		
PHASE I AREA 3, PHASE 2		
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13		
OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
<b>MAHAN RYKIEL</b>		
<b>A S S O C I A T E S I N C</b>		
The Stieff Silver Building, 800 Wyman Park Drive, Suite 100, Baltimore, MD 21211 410.235.6001		
SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD
DOWNTOWN COLUMBIA	PHASE 2 AREA 3	PARCEL D
PLAT FOR L.P.	BLOCK #	LOT #
ASSET 2450	7	DMW
WATER CODE	TAX ZONE/MAP	ELECT. DISTRICT
550	5	5
SEWER CODE	CENSUS TRACT	
LITTLE PATUXENT	605602	
TITLE		
<b>L-404 - LANDSCAPE PLANTING PLAN</b>		
Des. By	MP	SCALE AS SHOWN
Drn. By	BB	Date 02/15/19
Chk. By	MP	Approved
		Proj. No. 04038.00
		61 of 77



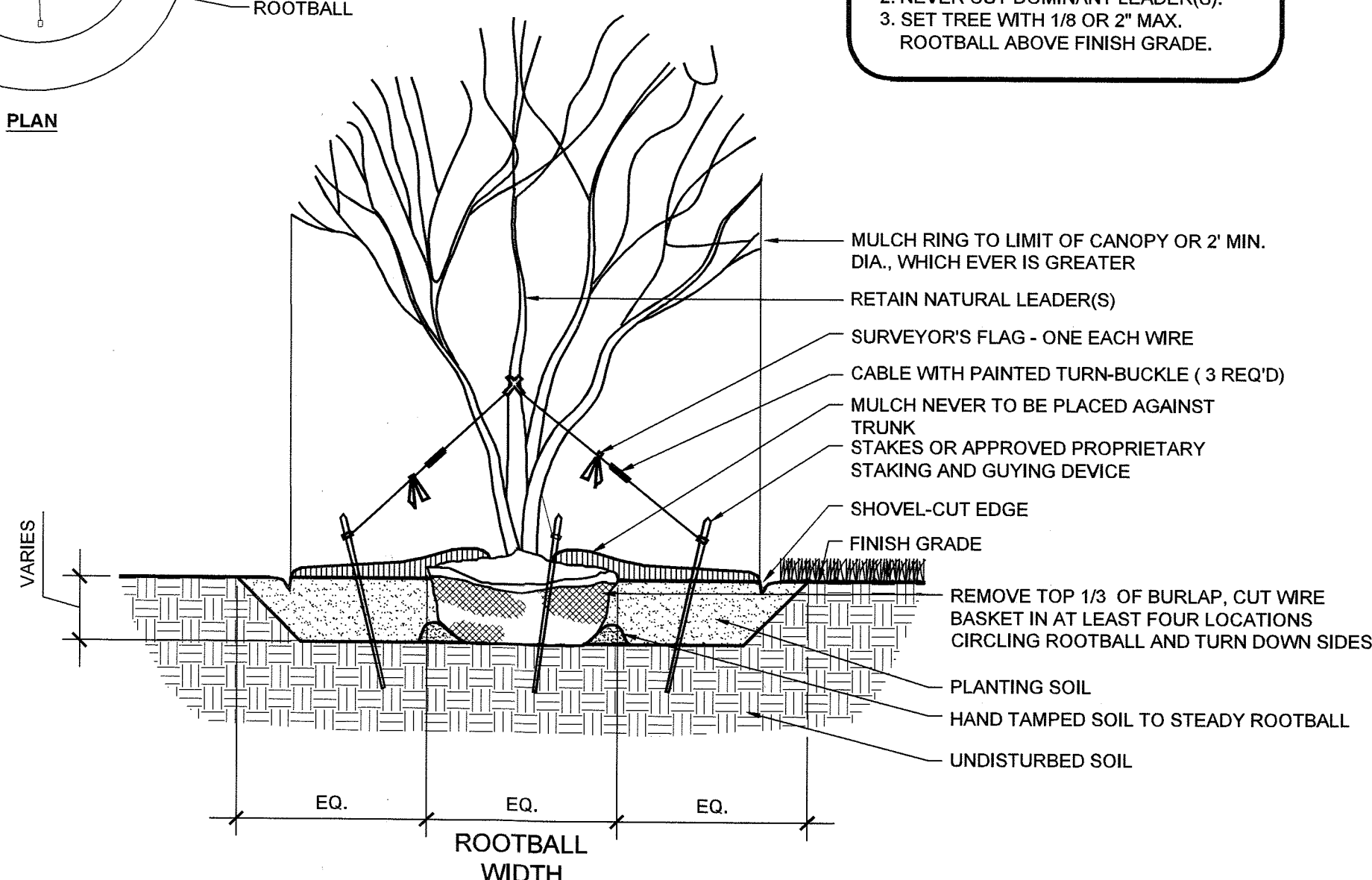
**1** TYPICAL SOD PLANTING  
1"=1'-0"



**2** TYPICAL GROUNDCOVER SPACING  
1"=1'-0"

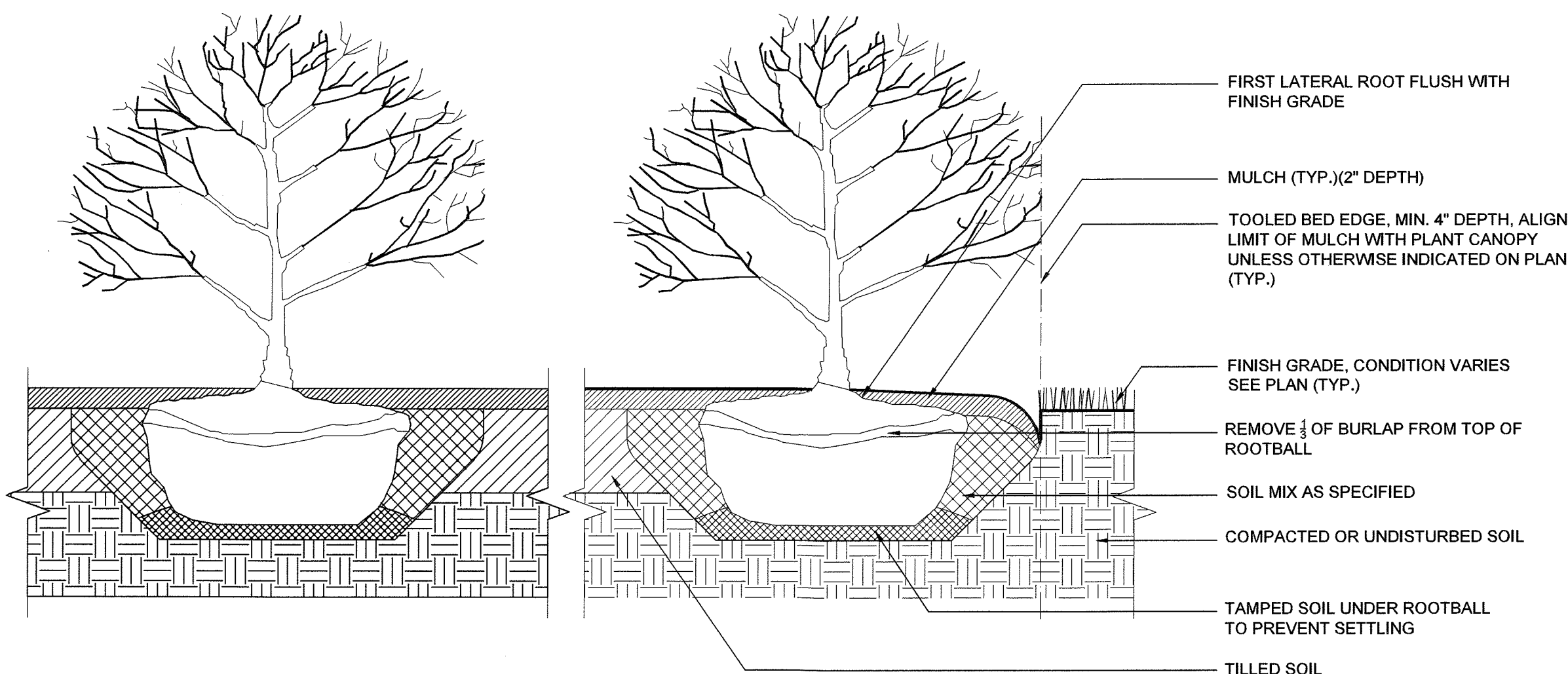


**NOTES:**  
1. REFERENCE PLAN FOR ADJACENT PLANTING CONDITIONS.  
2. NEVER CUT DOMINANT LEADER(S).  
3. SET TREE WITH 1/8 OR 2" MAX. ROOTBALL ABOVE FINISH GRADE.

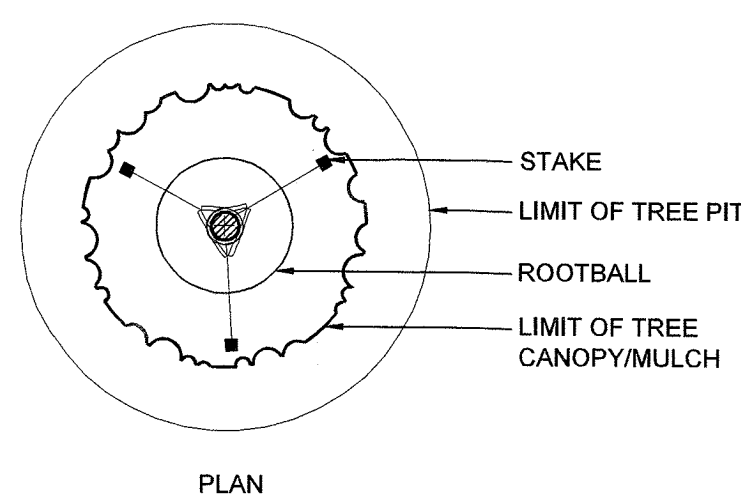


**3** TYPICAL ORNAMENTAL TREE PLANTING; STAKED  
1/2"=1'-0"

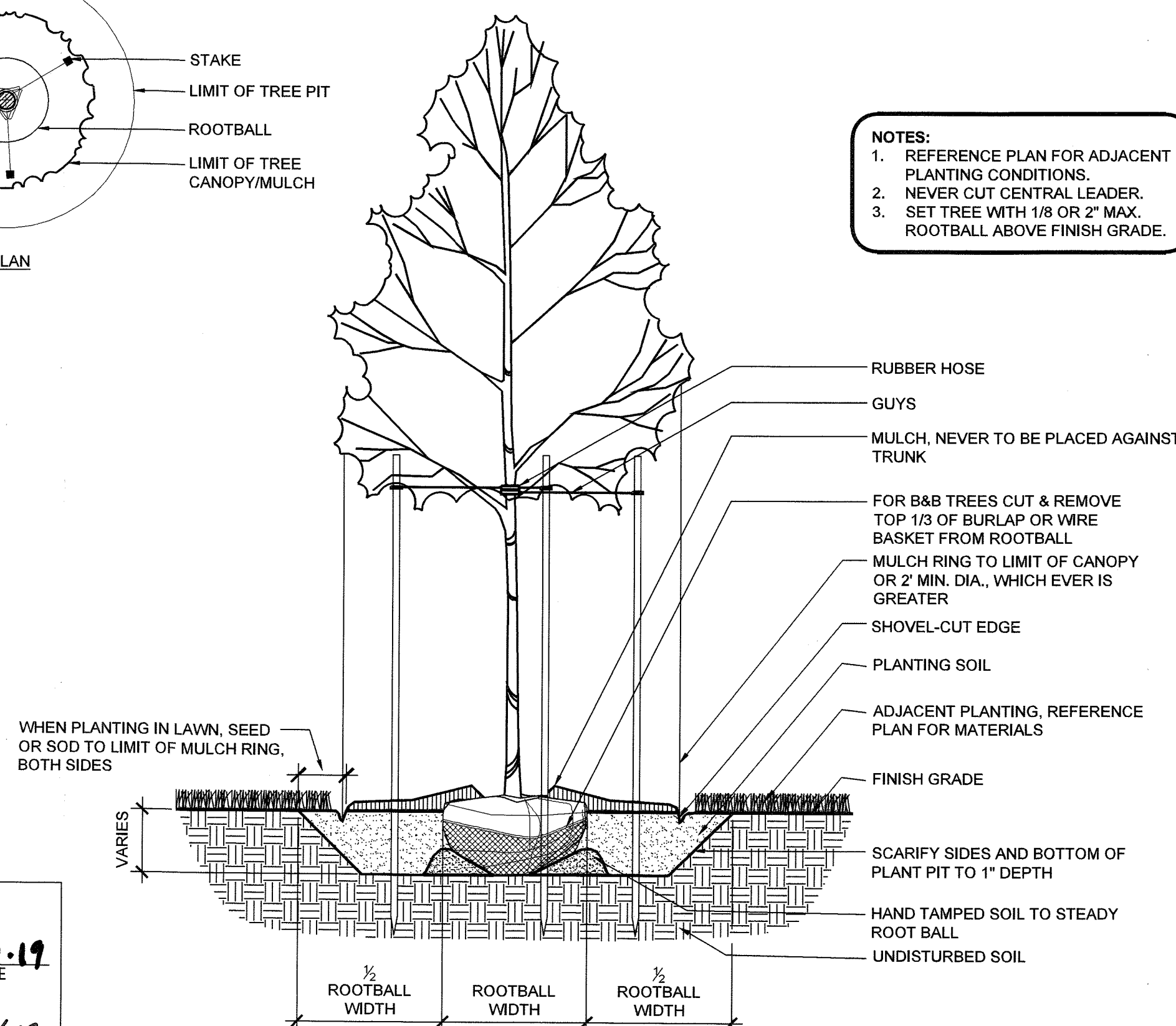
- SEQUENCE OF CONSTRUCTION (GENERAL) REFER TO SPECIFICATIONS**
1. STAKE OUT PLANT/BED LOCATIONS.
  2. CUT EDGE OF PLANT BED
  3. TILL SOIL AND APPLY AMENDMENTS TO ENTIRE PLANTING AREA.
  4. APPLY PRE-EMERGENT HERBICIDE (TWO WEEKS PRIOR TO PLANTING).
  5. INSTALL PLANTS.
  6. INSTALL FERTILIZER TABLETS IN EACH PLANT PIT.
  7. PLACE BACKFILL.
  8. WATER EACH INDIVIDUAL PLANT THOROUGHLY.
  9. PLACE MULCH OVER ENTIRE PLANT BED.
  10. WATER ENTIRE PLANT BED THOROUGHLY.



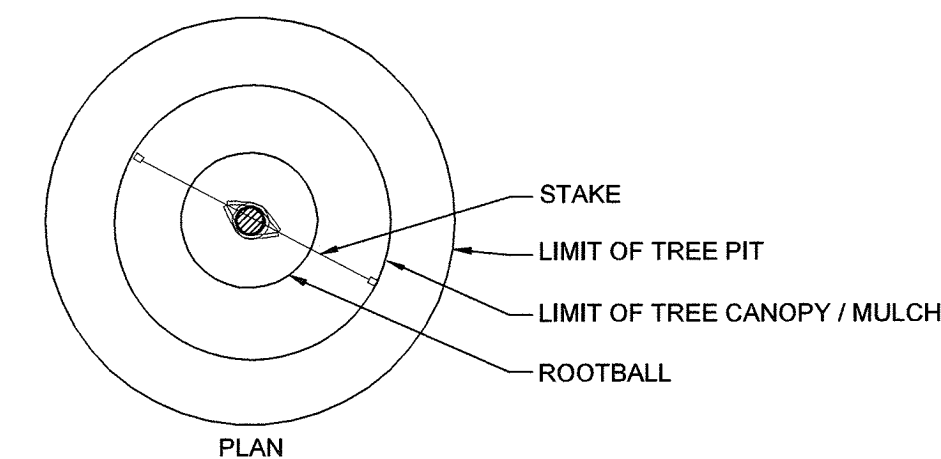
**4** TYPICAL SHRUB PLANTING  
1"=1'-0"



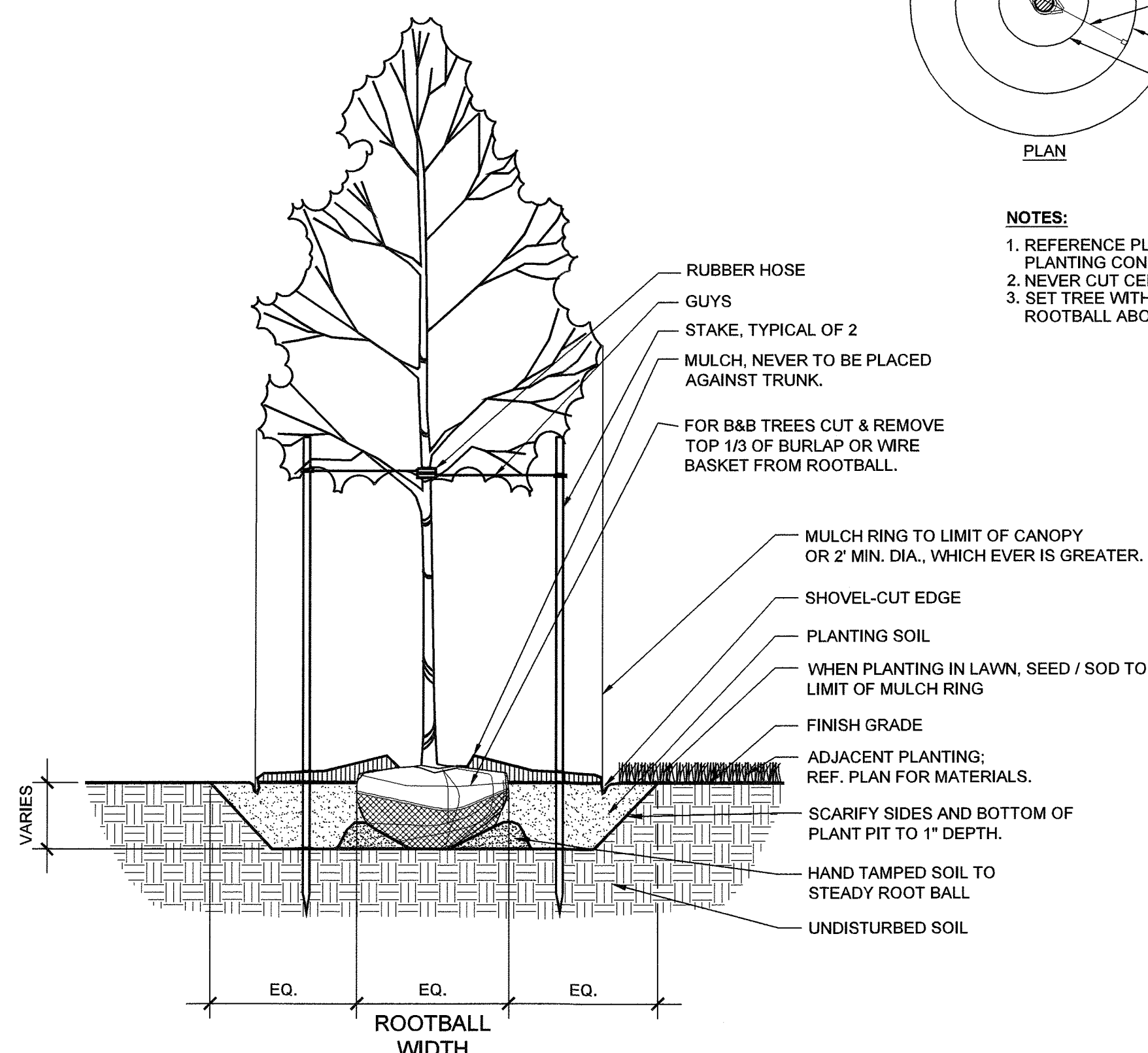
**NOTES:**  
1. REFERENCE PLAN FOR ADJACENT PLANTING CONDITIONS.  
2. NEVER CUT CENTRAL LEADER.  
3. SET TREE WITH 1/8 OR 2" MAX. ROOTBALL ABOVE FINISH GRADE.



**4** TYPICAL TREE PLANTING (2.5" - 4" CAL.; LESS THAN 14' HT.), STAKED  
1"=1/2'-0"



**NOTES:**  
1. REFERENCE PLAN FOR ADJACENT PLANTING CONDITIONS.  
2. NEVER CUT CENTRAL LEADER.  
3. SET TREE WITH 1/8 OR 2" MAX. ROOTBALL ABOVE FINISH GRADE.



**6** TYPICAL TREE PLANTING (LESS THAN 12' HT., 2.5" CAL.); STAKED  
1"=1'-0"

**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.  
*Wm. T. Rowe SVP*  
DEVELOPER'S/OWNER'S NAME  
DEVELOPER'S/OWNER'S NAME

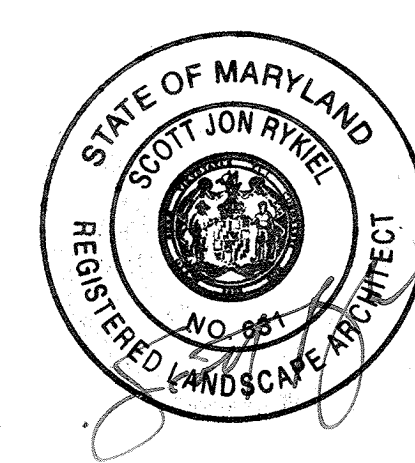
- ENVIRONMENTAL DATA SOURCES**
1. FLOODPLAIN INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A STUDY PERFORMED BY BIO-HABITATS DATED 06/18/2015.
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  3. SOIL SURVEY INFORMATION SHOWN HEREON REFLECTS HOWARD COUNTY SOILS INFORMATION DATED 11/26/2007.
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  2. BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A.

**FILE NUMBERS:**  
F 15-106, F 16-107, F 17-059, F-18-017, SDP-16-075, SDP-17-027, 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: 09/21/19.



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

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING  
*Al Edmund*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 3/20/19  
*Kurt Schell*  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 4-24-19  
*N. J. J. J.*  
DIRECTOR, DIVISION OF LAND DEVELOPMENT  
DATE: 4-24-19

Date	No.	Revision Description

**DOWNTOWN COLUMBIA**  
**CRESCENT NEIGHBORHOOD**  
**PHASE I AREA 3, PHASE 2**  
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13  
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**  
The Stieff Silver Building, 800 Wyman Park Drive, Suite 100, Baltimore, MD 21211 410.235.6001

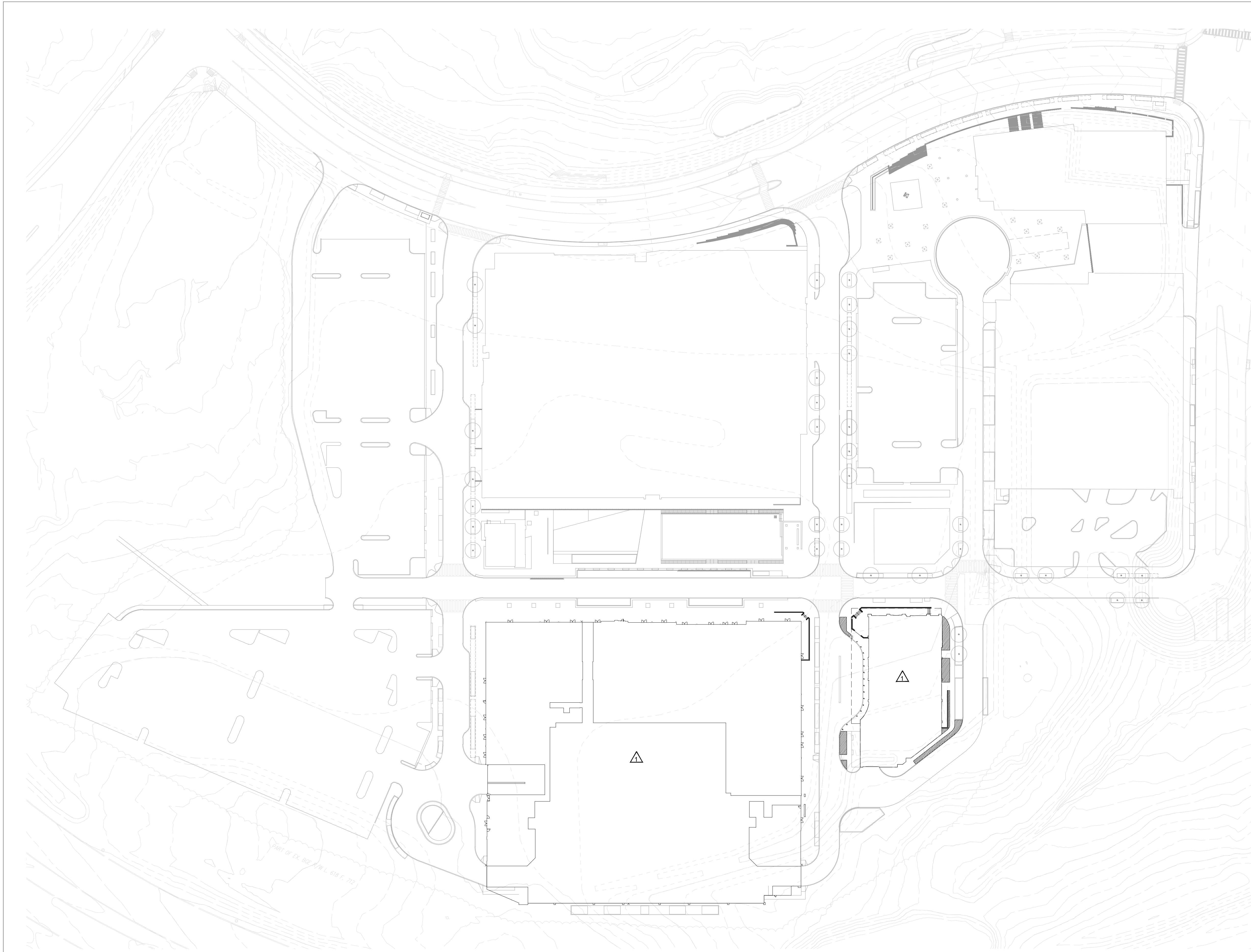
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	AREA 3		
PLAT NO. 35033	TAX ZONING MAP	TRACT/DEPT	CENSUS TRACT
35033-7	36	5	605602
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT	1	

TITLE: **L-500 - LANDSCAPE PLANTING DETAILS**

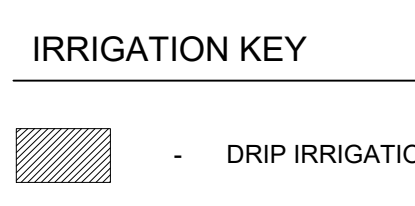
Des. By	MP	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	BB	Date	02/15/19		
Chk. By	MP	Approved	--		62 of 77

SDP-18-005





- 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.



**CERTIFICATION NOTE:**

1. IWE 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. IWE 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

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  2. BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE AND WEBER, P.A.

**REVISIED SITE DEVELOPMENT PLAN**

**FILE NUMBERS:**  
 F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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

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Date	No.	Revision Description
5/15/2019	1	HARDSCAPE AND BLDG REVISIONS

**DOWNTOWN COLUMBIA  
 CRESCENT NEIGHBORHOOD  
 PHASE I AREA 3, PHASE 2  
 PARCELS D-1, D-7, D-8, D-9,  
 D-11, D-12 AND D-13**

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

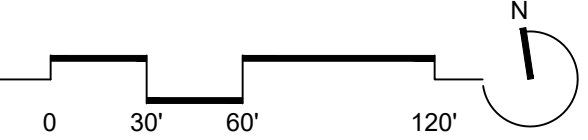
**MAHAN RYKIEL  
 ASSOCIATES INC**  
 The Stieff Silver Building, 800 Wyman Park Drive,  
 Suite 100, Baltimore, MD 21211 410.235.6001

SUBDIVISION NAME	SECTION/AREA	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE 2, AREA 3		PARCEL D
PLAT OR L.P.	BLOCK #	TAX ZONE/MAP	ELECT. DISTRICT
7	1	5	5
WATER CODE	SEWER CODE	STAGE	
550	LITTLE PATUXENT	1	

TITLE  
**L-600 -IRRIGATION PLAN**

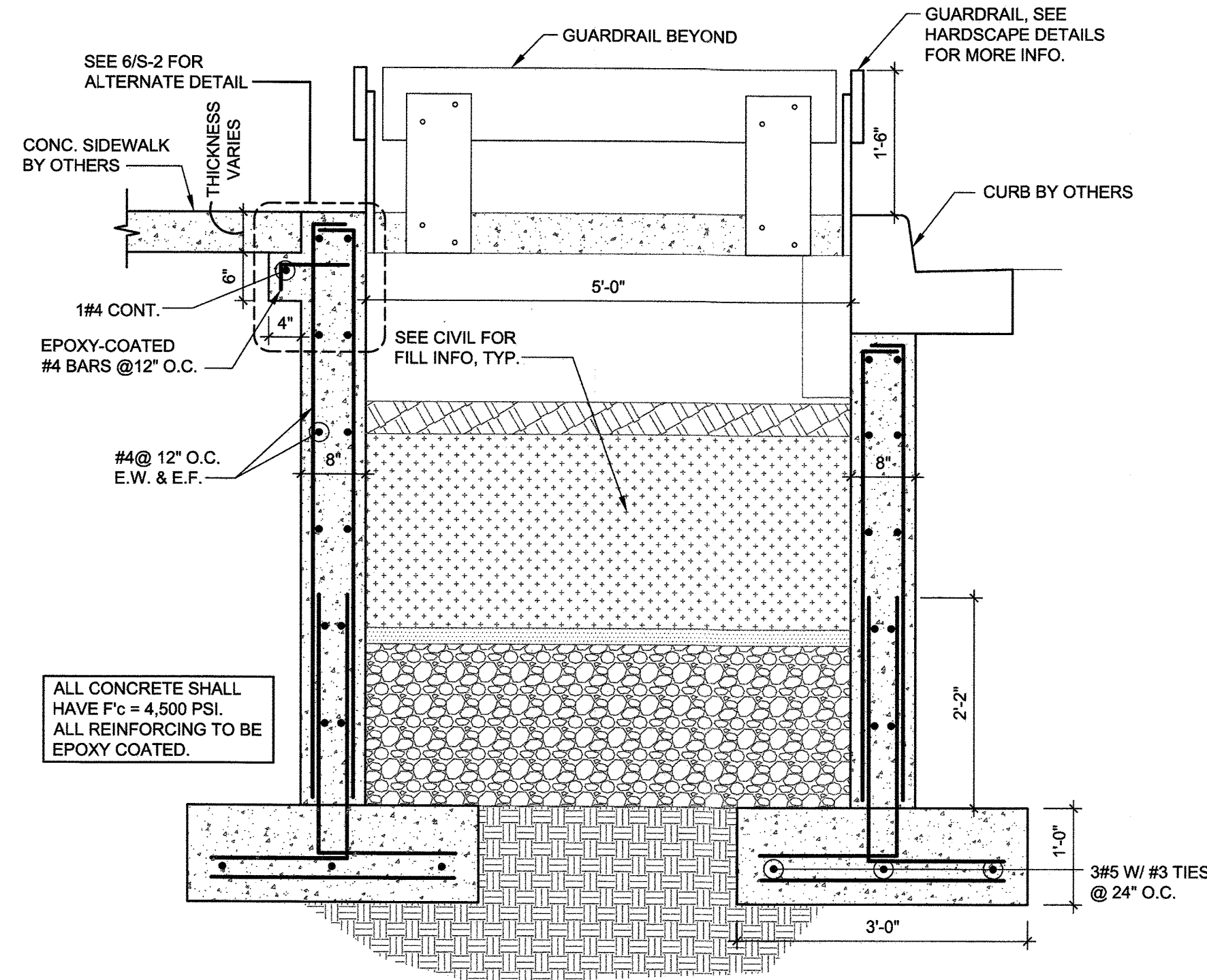
Des. By	MP	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	BB	Date	02/15/19		
Chk. By	MP	Approved			63 of 77

**1 IRRIGATION PLAN**  
 1"=60'-0"



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

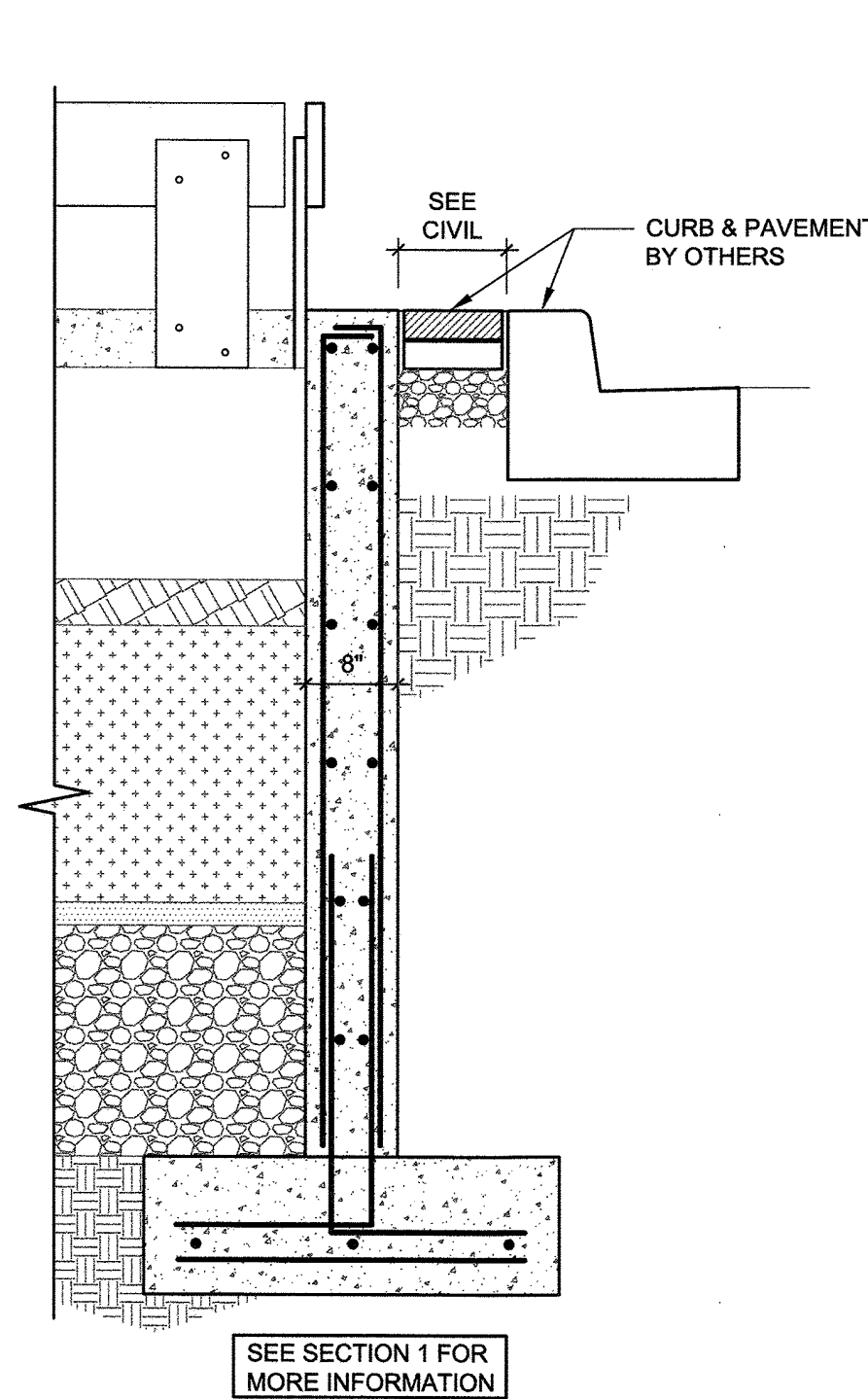
APPROVED:  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE :



SECTION @ ESD IN OPEN SPACE

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

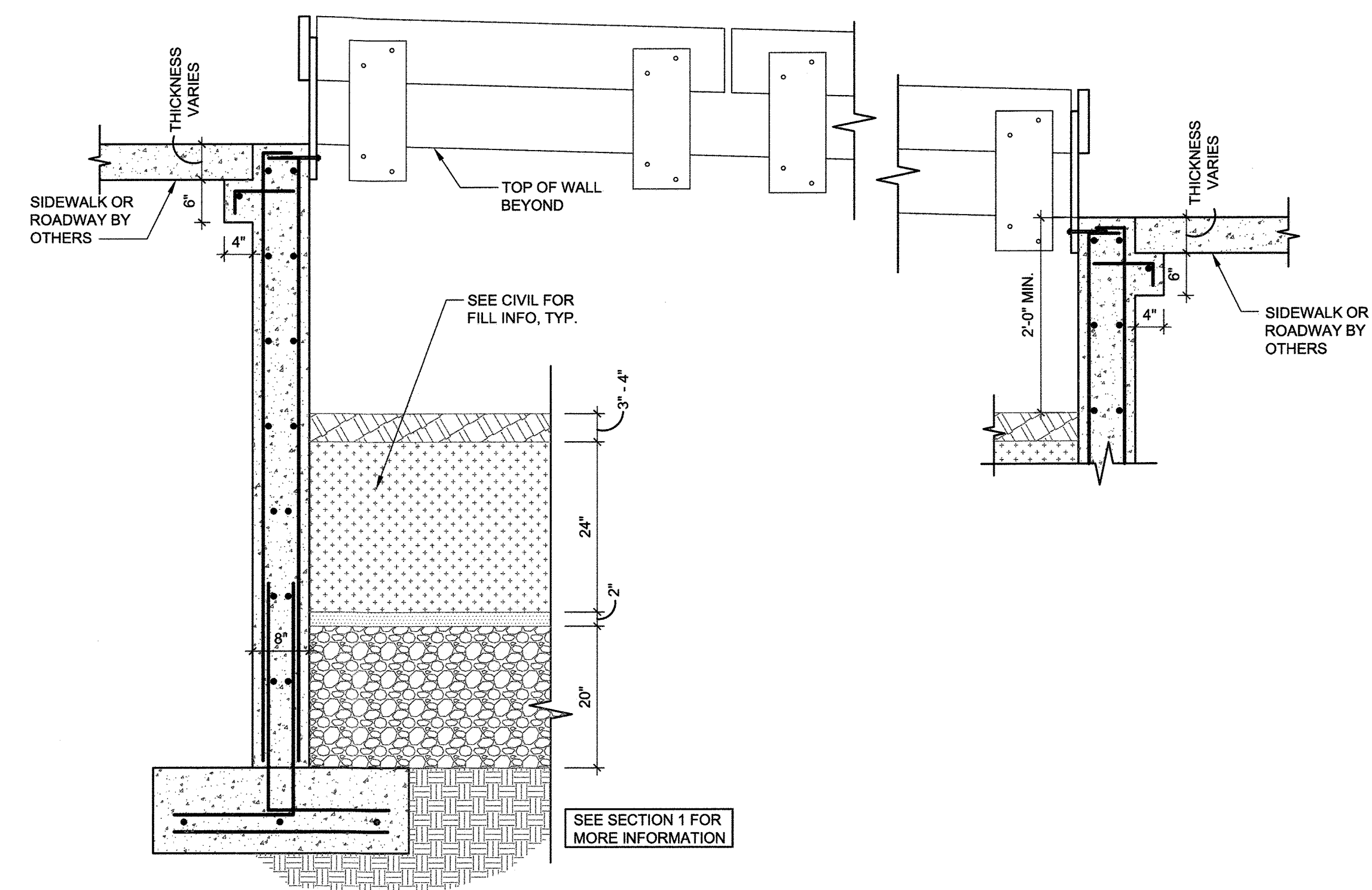
1  
S-2



SECTION @ ESD IN CONCRETE PAVING AREA W/ STREET PARKING

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

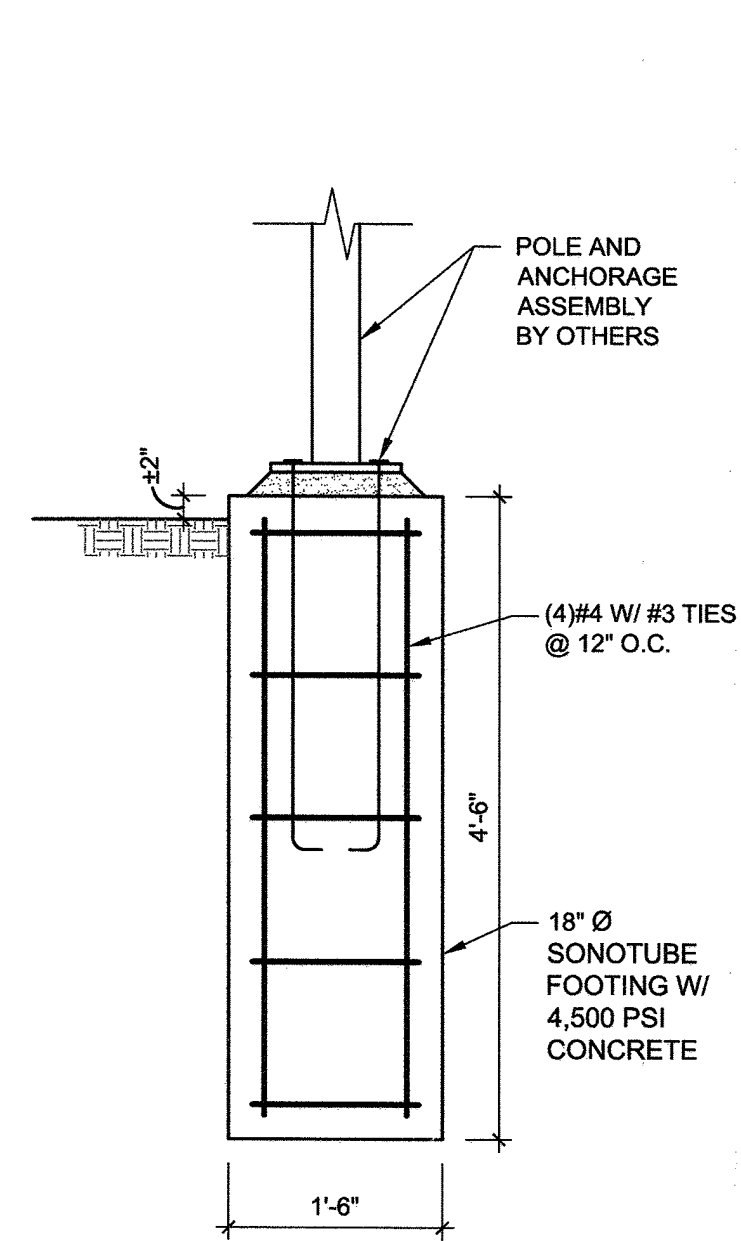
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S-2



SECTION

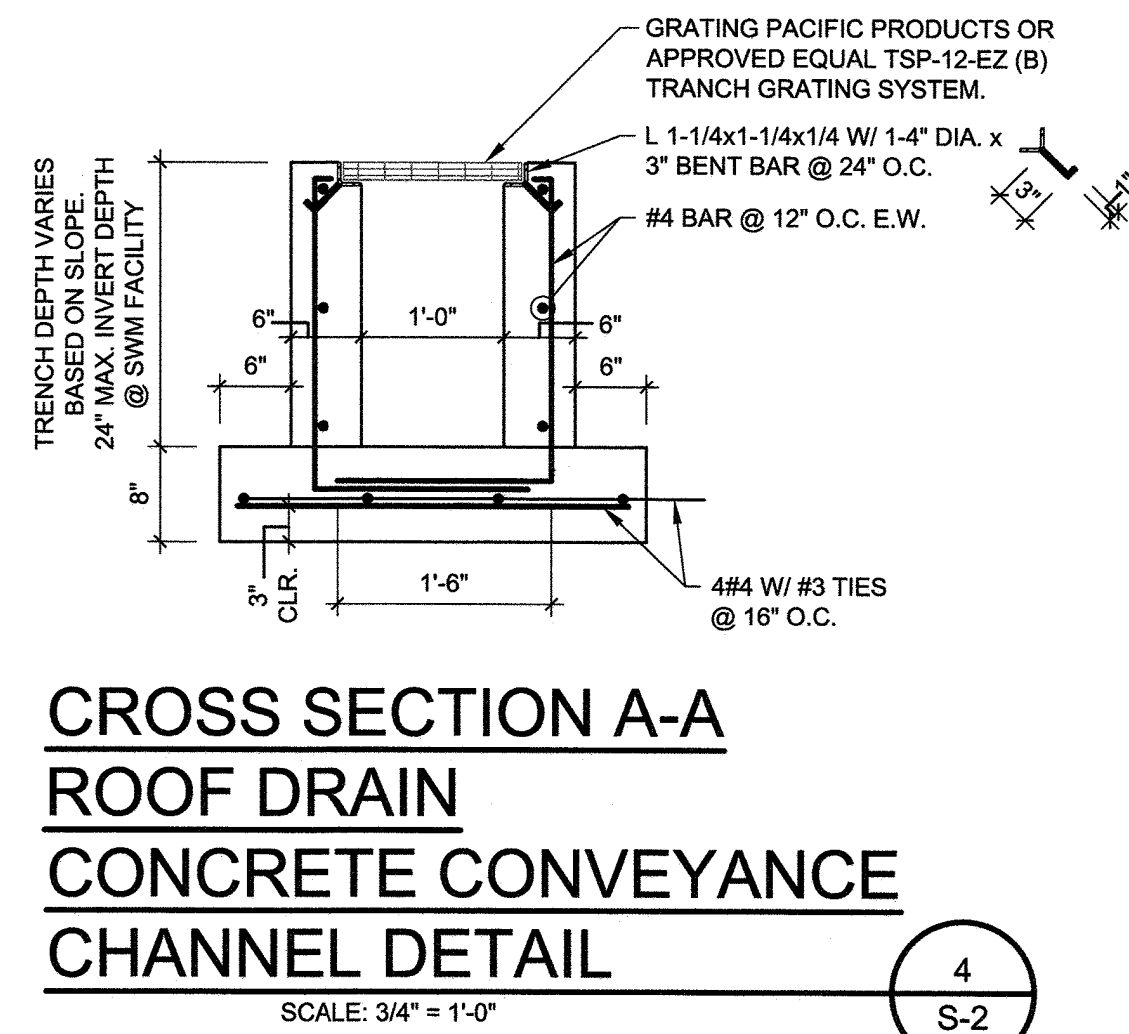
SCALE: 3/4" = 1'-0"

3  
S-2



SECTION

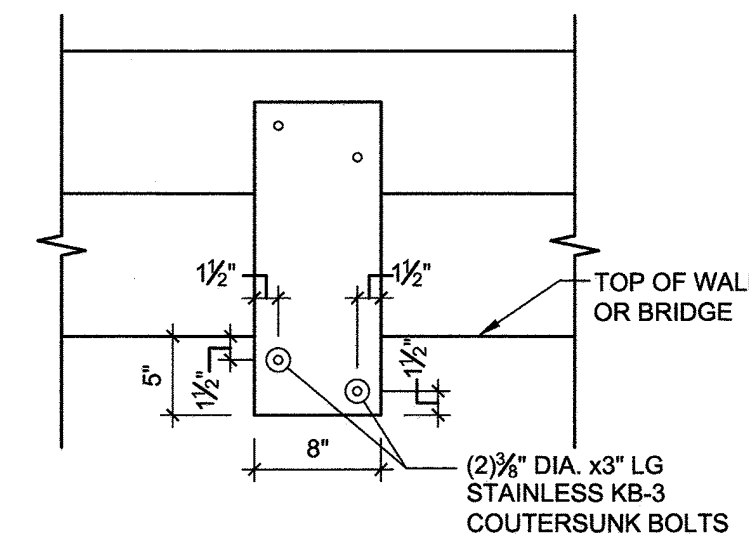
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S-2



CROSS SECTION A-A ROOF DRAIN CONCRETE CONVEYANCE CHANNEL DETAIL

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

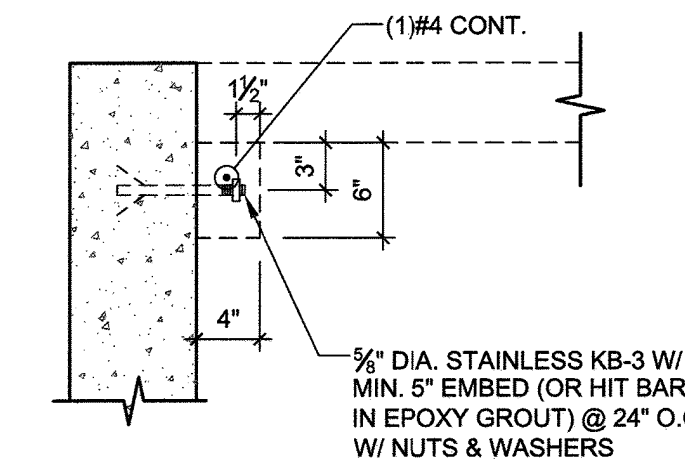
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S-2



RAIL CONNECTION DETAIL

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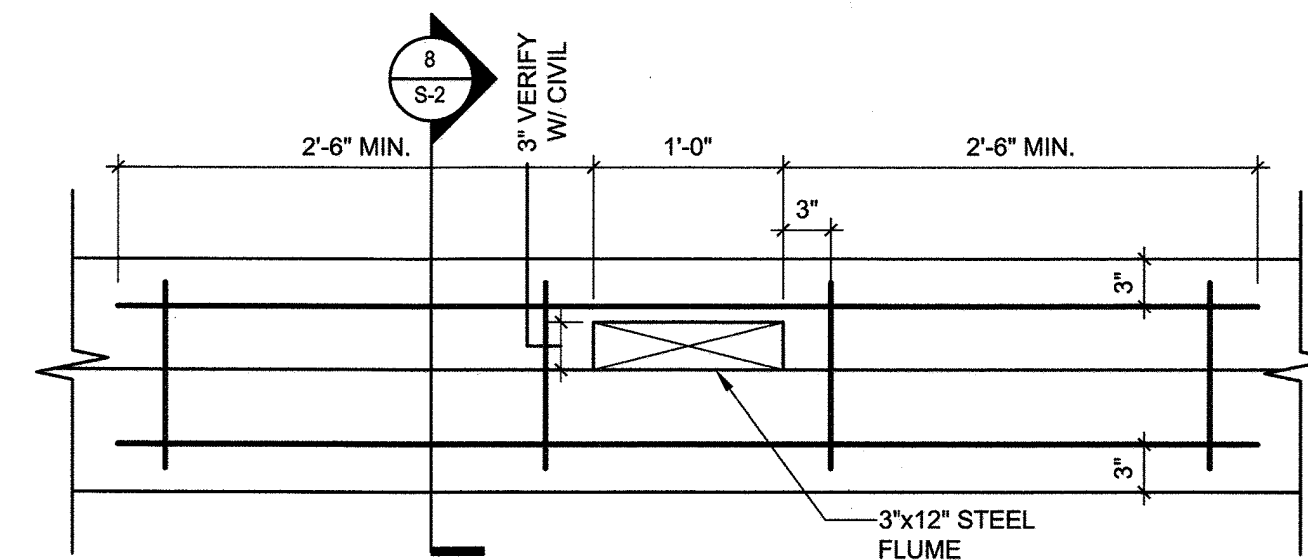
5  
S-2



ALTERNATE HAUNCH OR CORBEL DETAIL

SCALE: 1" = 1'-0"

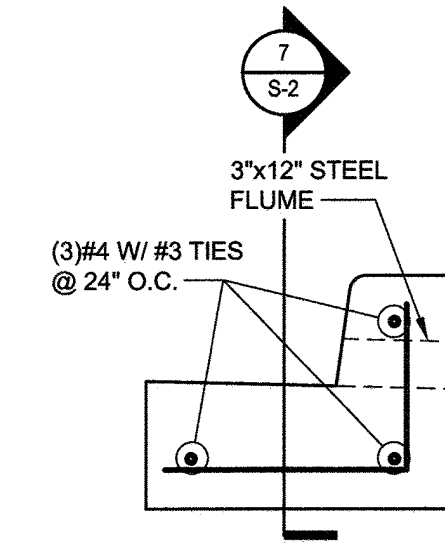
6  
S-2



7" CURB AND GUTTER W/ STEEL FLUME OPENING

SCALE: 1" = 1'-0"

7  
S-2



7" CURB AND GUTTER W/ STEEL FLUME OPENING

SCALE: 1" = 1'-0"

8  
S-2

**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-17-113, WP-18-020, WP-18-021, SP-16-009, WP-16-100, FDP-DC-CRESCENT-1, FDP-DC-CRESCENT-1A, SDP 17-027, F 17-057, F18-017, WP-18-089, WP-18-105.  
**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: 8/15/2020.

02/15/2019  
Date  
39426  
Professional Engr. No.

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/2/17

**ENVIRONMENTAL DATA SOURCES**  
1. FLOODPLAIN INFORMATION SHOWN HEREON REFLECTS THE RESULT OF A STUDY PERFORMED BY BIO-HABITATS DATED 06/18/2015.  
2. WETLANDS AND ASSOCIATED ENVIRONMENTAL INFORMATION SHOWN HEREON REFLECT THE RESULT OF AN INVESTIGATION PERFORMED BY DMW DATED MARCH 2015.  
3. SOIL SURVEY INFORMATION SHOWN HEREON REFLECTS HOWARD COUNTY SOILS INFORMATION DATED 11/26/2007.  
4. 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.

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2. BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE AND WEBER, P.A. AS SHOWN ON PLATS F-17-059.

Date	No.	Revision Description
		<b>DOWNTOWN COLUMBIA</b> CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE 2 PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13 MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING 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, Kehnemui & Associates, PA  
12435 Park Potomac Avenue, Suite 300 • Potomac, MD 20854  
P 301.881.1441 F 301.881.8664 W skaengineers.com

SECTION	DATE	BY	CHKD	APP'D
DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE 2	02/15/2019	SKA	SKA	SKA

PLAT OR LOT	BLOCK	ZONE	TAX ZONE/MAP	ELECT DISTRICT	CENSUS TRACT	PARCEL D
550	7	DMAL	36	5-15	605602	

TITLE: S-2 ESD STRUCTURES

Des. By	SCALE AS SHOWN	Proj. No. 040388.80
Drn. By	Date 02/15/19	64 of 77
Chk. By	Approved	

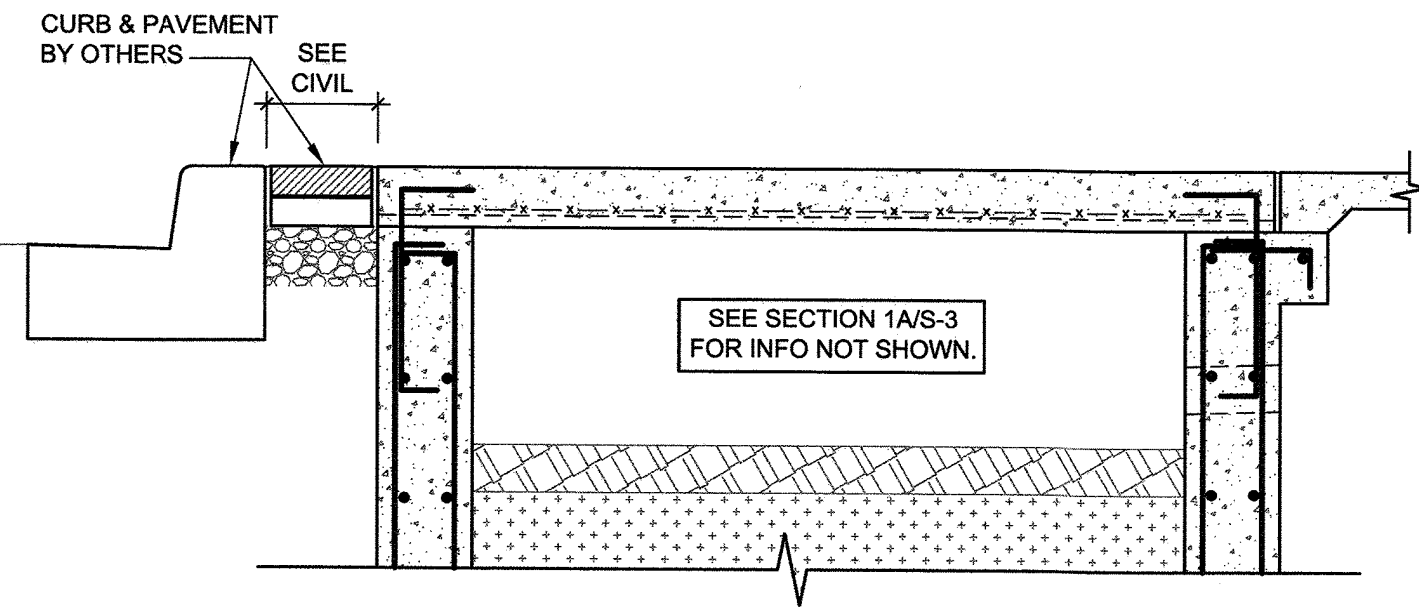
SDP-18-005

P:\2018\18005\SDP-18-005\STRUCTURES\SDP-18-005-01.DWG 2/15/2019 10:47 AM

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING  
3-20-19  
DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
4-24-19  
DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT  
4-24-19  
DATE  
DIRECTOR, DIVISION OF LAND DEVELOPMENT

NOT USED

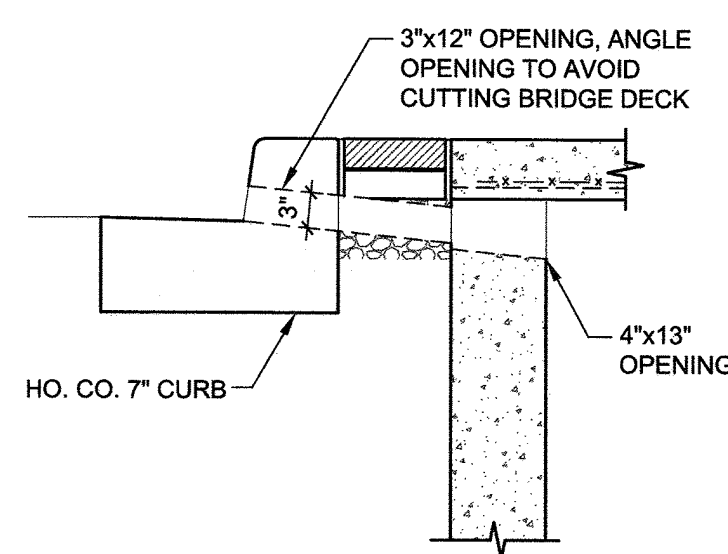
1  
S-3



SECTION @ BRIDGE

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

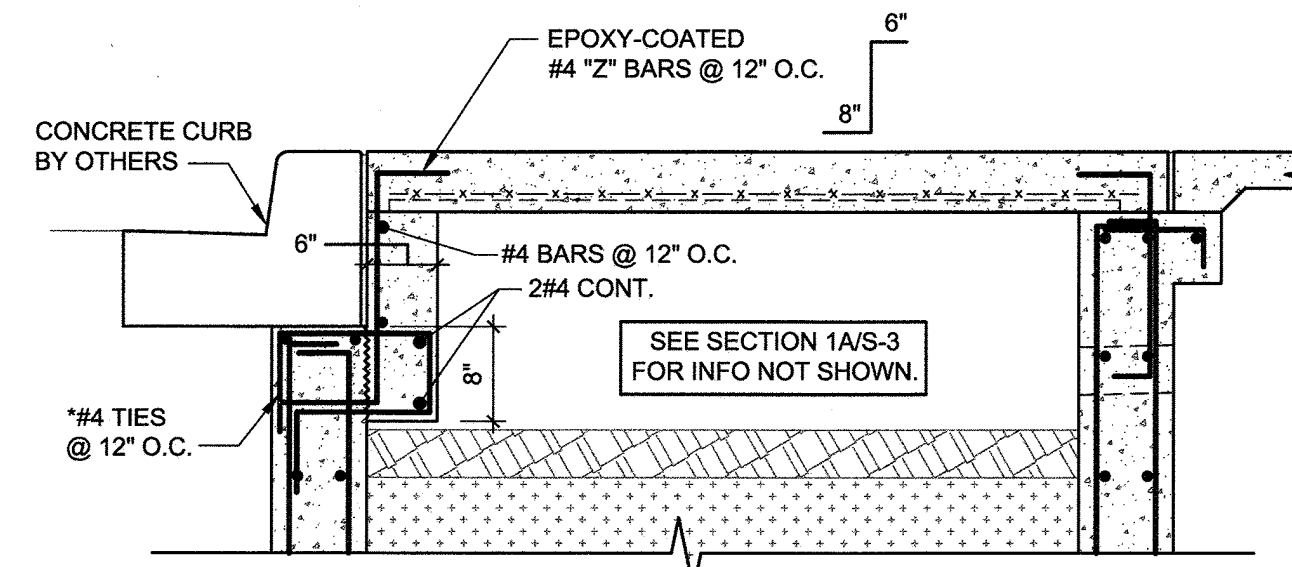
2A  
S-3



SECTION @ 2A  
W/ STEEL FLUME

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

2C  
S-3

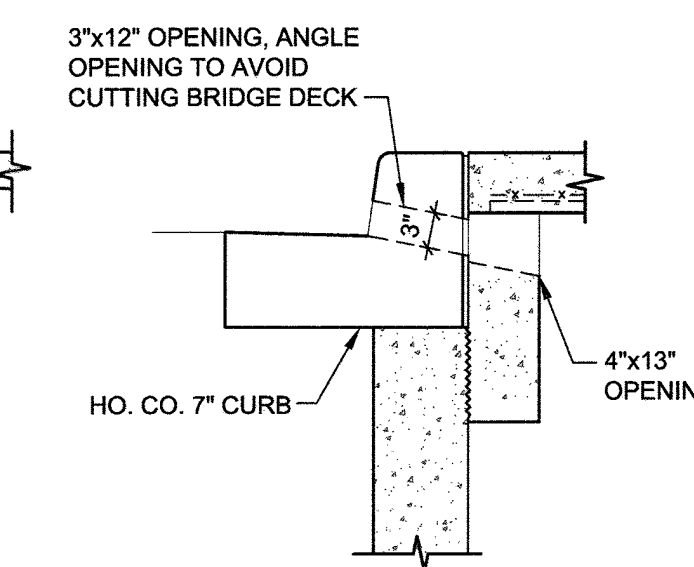


SECTION @ BRIDGE

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

3A  
S-3

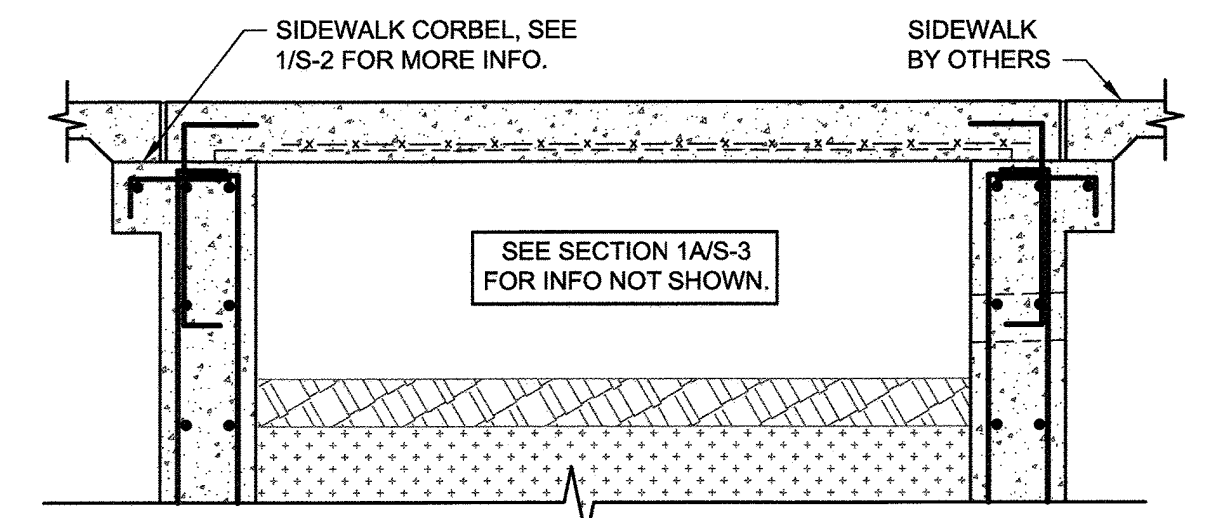
\*THE #4 STIRRUPS IN THE 8" DEEP CORBEL CAN BE REPLACED BY POST-INSTALLED #4 BARS W/ MIN 7" EMBEDMENT IN EPOXY GROUT. ROUGHEN THE PORTION OF CONCRETE WALL TO RECEIVE THE CORBEL WHICH IS TO BE POURED SEPARATELY. THE #4 DOWELS SHALL BE PLACED W/ MIN. 3" EDGE DISTANCE IN A STAGGER PATTERN.



SECTION @ 3A  
W/ STEEL FLUME

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

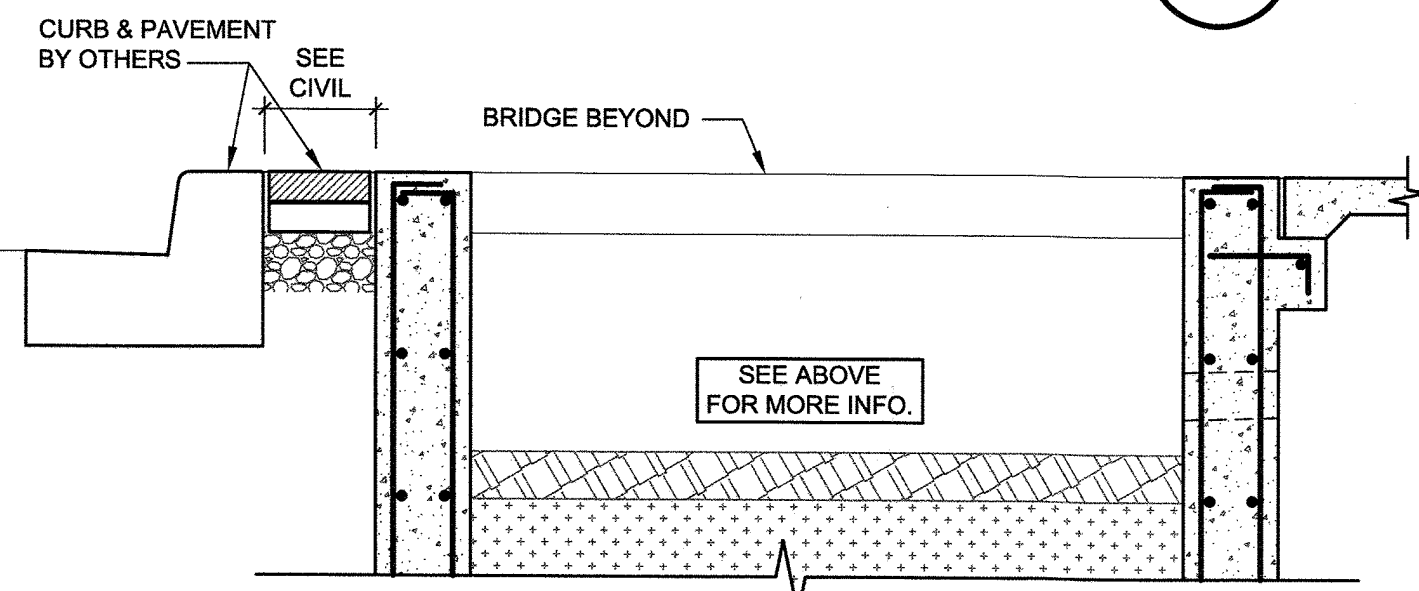
3C  
S-3



SECTION @ BRIDGE

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

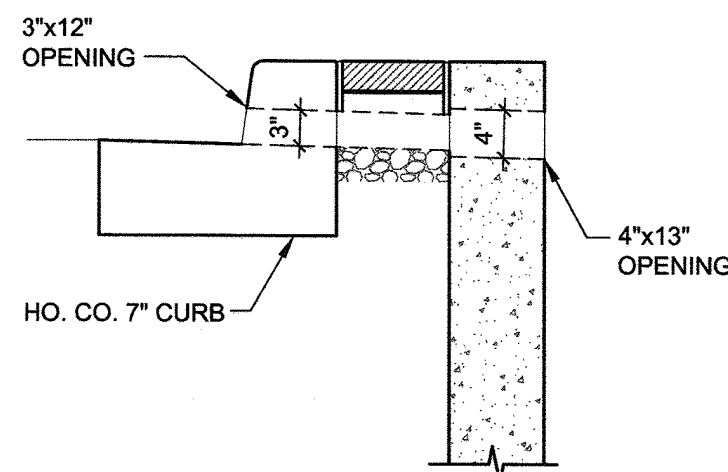
4A  
S-3



SECTION @ OPEN AREA

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

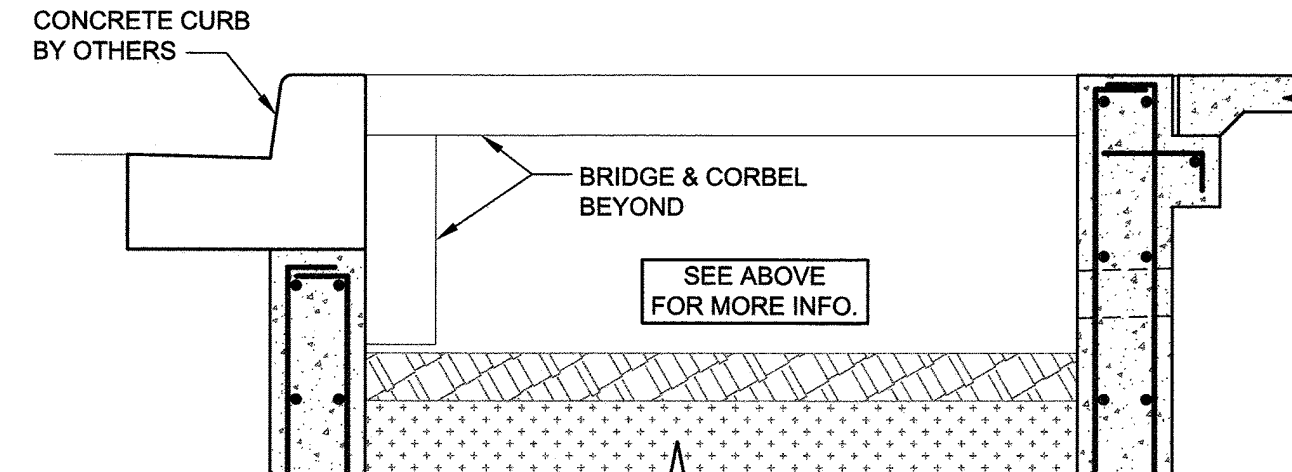
2B  
S-3



SECTION @ 2B  
W/ STEEL FLUME

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

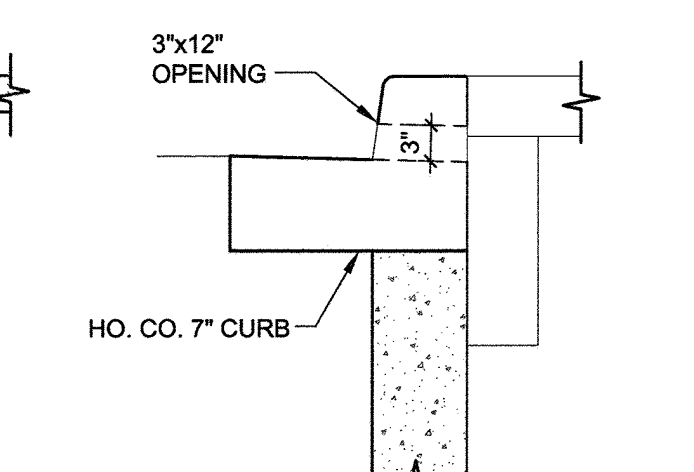
2D  
S-3



SECTION @ OPEN AREA

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

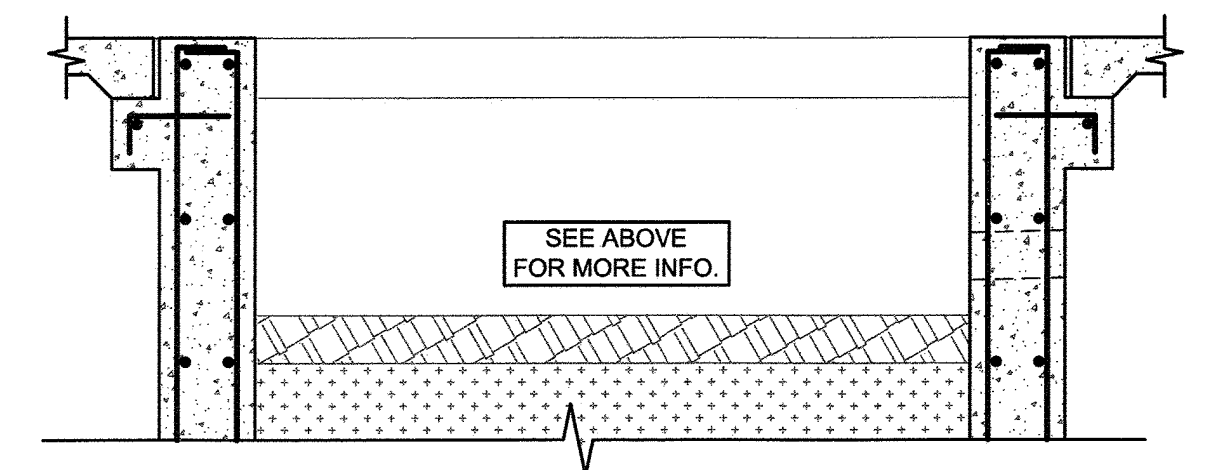
3B  
S-3



SECTION @ 3B  
W/ STEEL FLUME

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

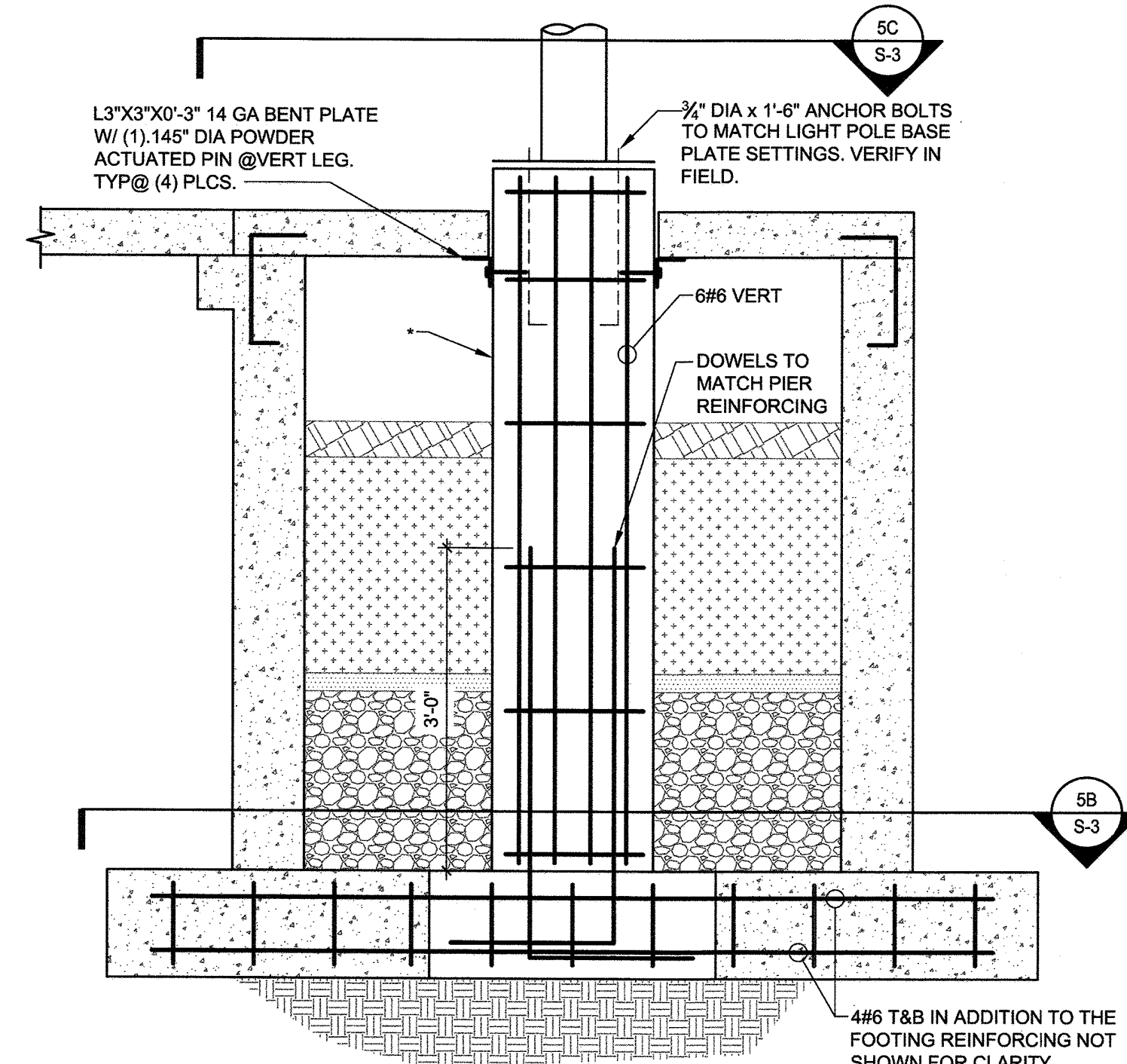
3D  
S-3



SECTION @ OPEN AREA

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

4B  
S-3

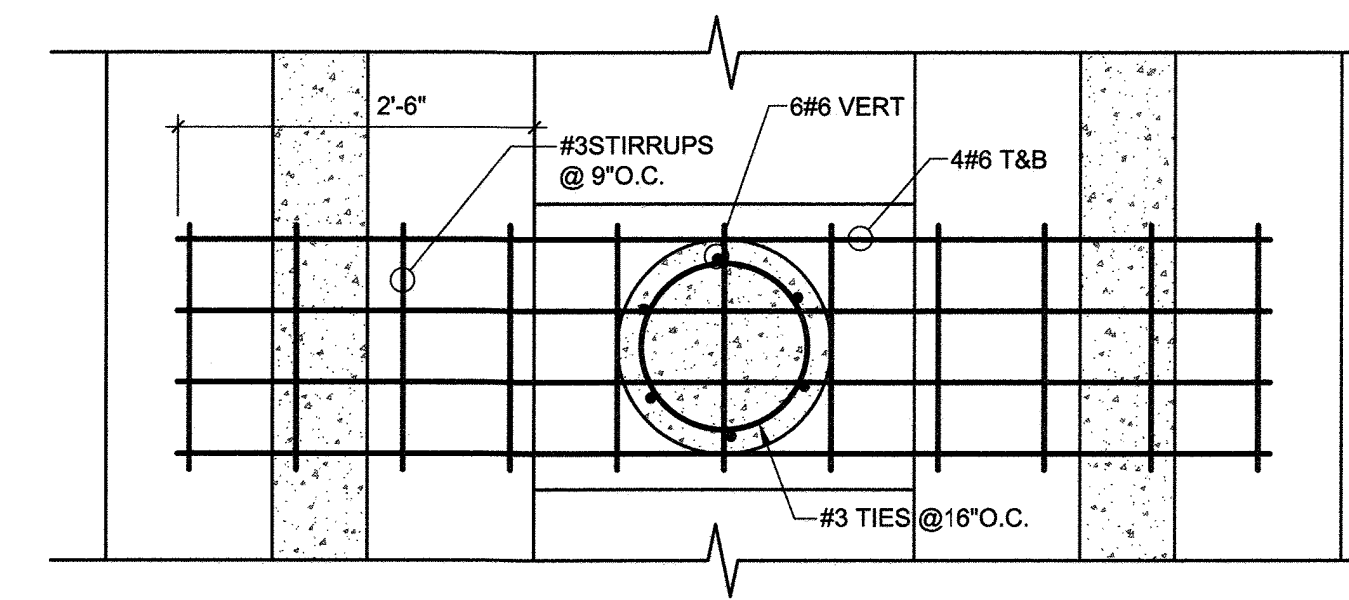


SECTION @ LIGHT POLE IN BRIDGE

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

5A  
S-2

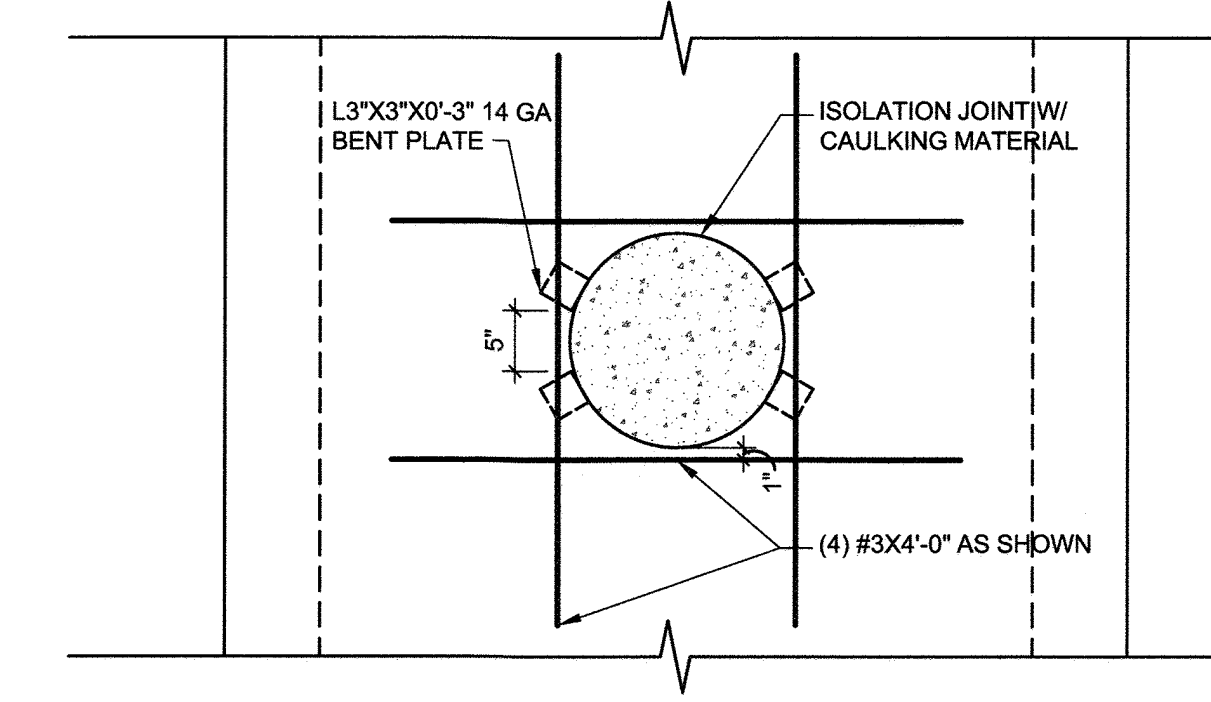
\*18" CONCRETE PIER, CIVIL/LANDSCAPING ARCHITECT TO CONFIRM LIGHTING POLE BASE DIMENSIONS TO FIT THE PIER DIAMETER WITH MIN 4" ANCHOR BOLT EDGE DISTANCE. THIS PIER IS DESIGNED FOR A MAXIMUM POLE HEIGHT OF 22'-0". NOTIFY STRUCTURAL ENGINEER OF RECORD IF CONDITION IS CHANGED.



LIGHT POLE FOOTER PLAN

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

5B  
S-2



PLAN @ LIGHT POLE IN BRIDGE

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

5C  
S-2

- ENVIRONMENTAL DATA SOURCES**
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  - WETLANDS AND ASSOCIATED ENVIRONMENTAL INFORMATION SHOWN HEREON REFLECT THE RESULT OF AN INVESTIGATION PERFORMED BY DMW DATED MARCH 2015.
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  - BOUNDARY AND PARCEL INFORMATION SHOWN HAS BEEN PROVIDED BY GUTSCHICK, LITTLE, AND WEBER, P.A. AS SHOWN ON PLATS F-17-459.

**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, SDP 17-027, F 17-057, F18-017, WP-18-089, WP-18-105.  
**CONTRACT NUMBERS:**  
24-4931-D, 24-4975-D, 24-4974-D.

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02/15/2019  
Date  
39426  
Professional Engr. No.

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/18

Date	No.	Revision Description

**DOWNTOWN COLUMBIA**  
**CRESCENT NEIGHBORHOOD**  
**PHASE I AREA 3, PHASE 2**  
PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13  
MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING  
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, Kehnemui & Associates, PA  
12435 Park Potomac Avenue, Suite 300 • Potomac, MD 20854  
P 301.881.1441 F 301.881.8664 W skaeengineers.com

SUBDIVISION NAME	SECTION	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PARCEL D
PLAT OR LOT	TAX ZONING	ELECT. DISTRICT
7	36	5-15
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	1

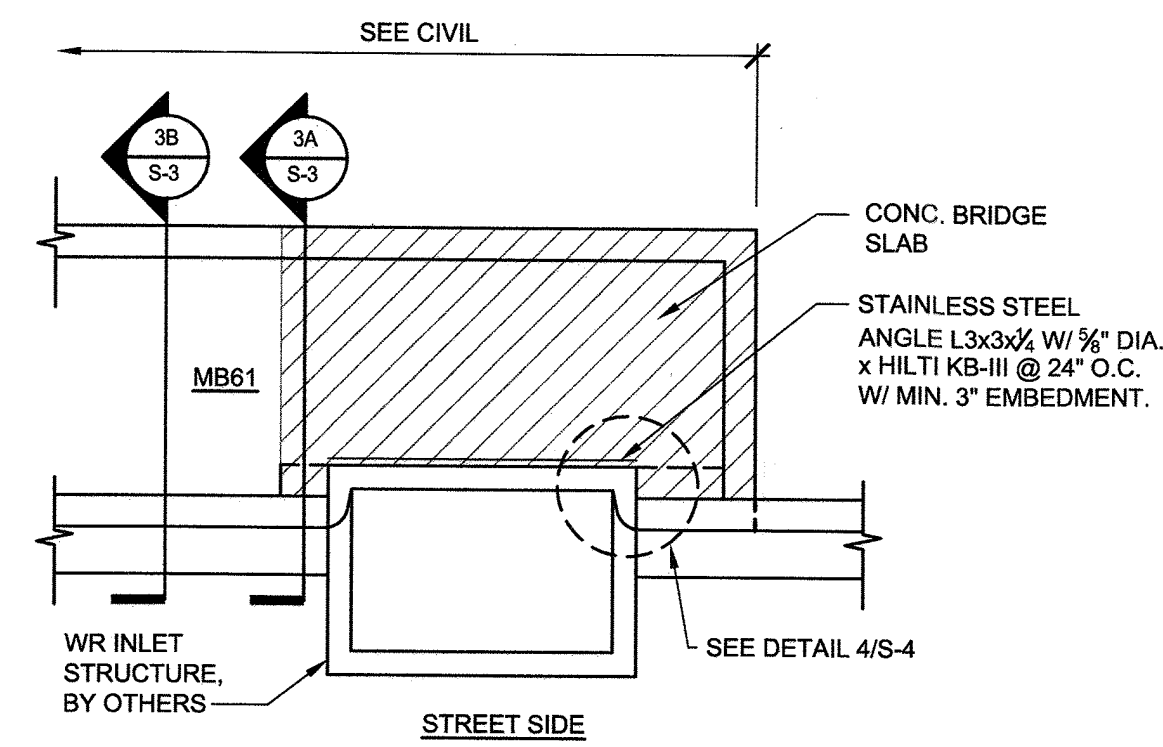
TITLE  
**S-3 ESD STRUCTURES**

Des. By	SCALE	AS SHOWN	Proj. No.
			04038.B0
Drn. By	Date	02/15/19	
	Approved		

65 of 77  
SDP-18-005

P:\2018\18-005\SDP-18-005\STRUCTURAL\ESD\ESD-3.DWG, 2/13/2019 12:46 PM

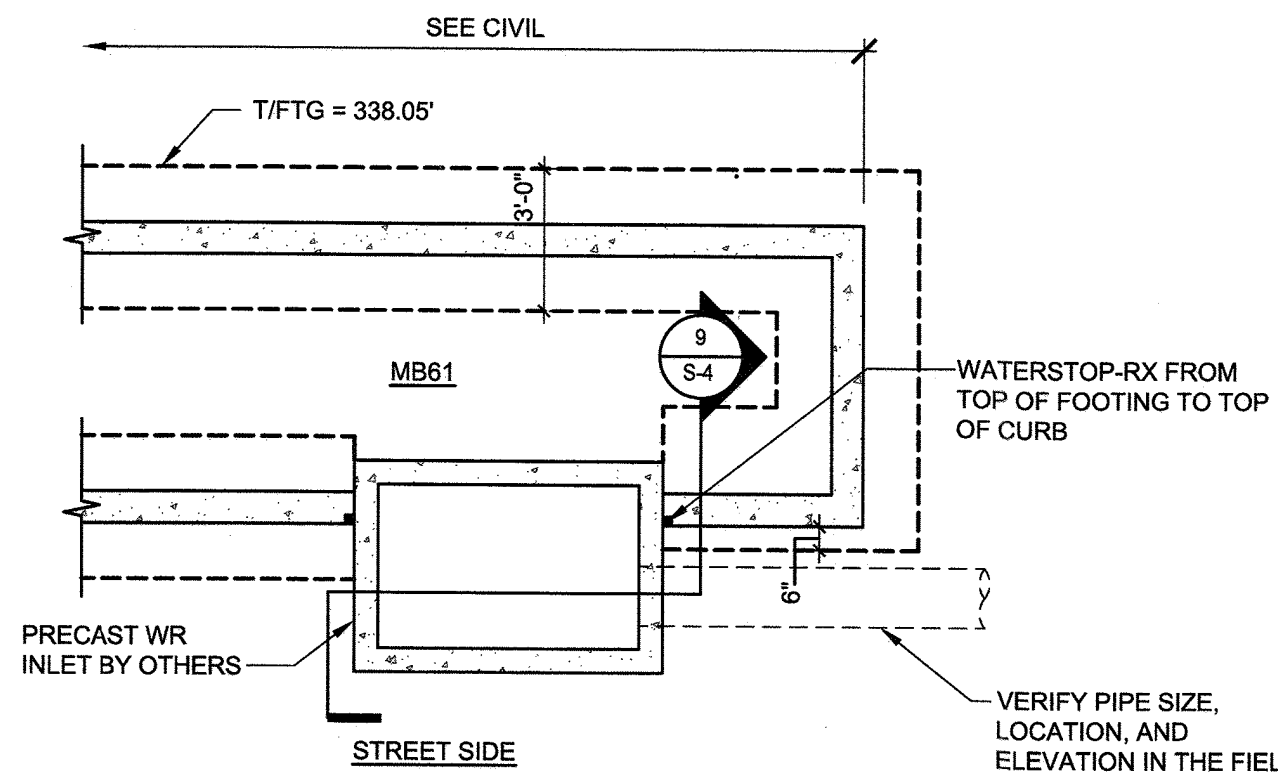
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING  
3-20-19  
DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
4-24-19  
DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT  
4-24-19  
DATE  
DIRECTOR, DIVISION OF LAND DEVELOPMENT



**PARTIAL PLAN TOP OF SWM - MB61**

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

1  
S-4

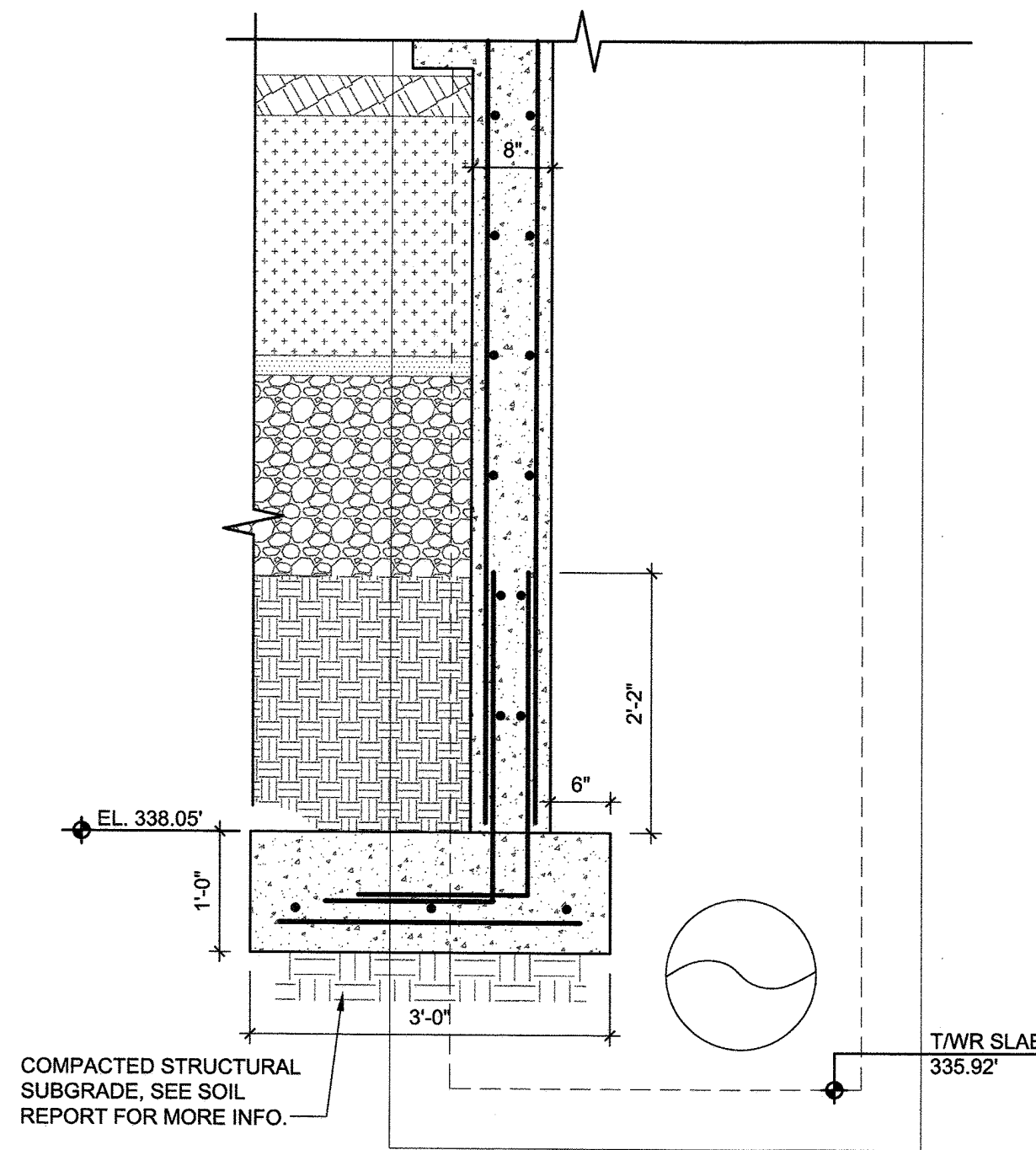


**PARTIAL FOUNDATION PLAN - MB61**

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

2  
S-4

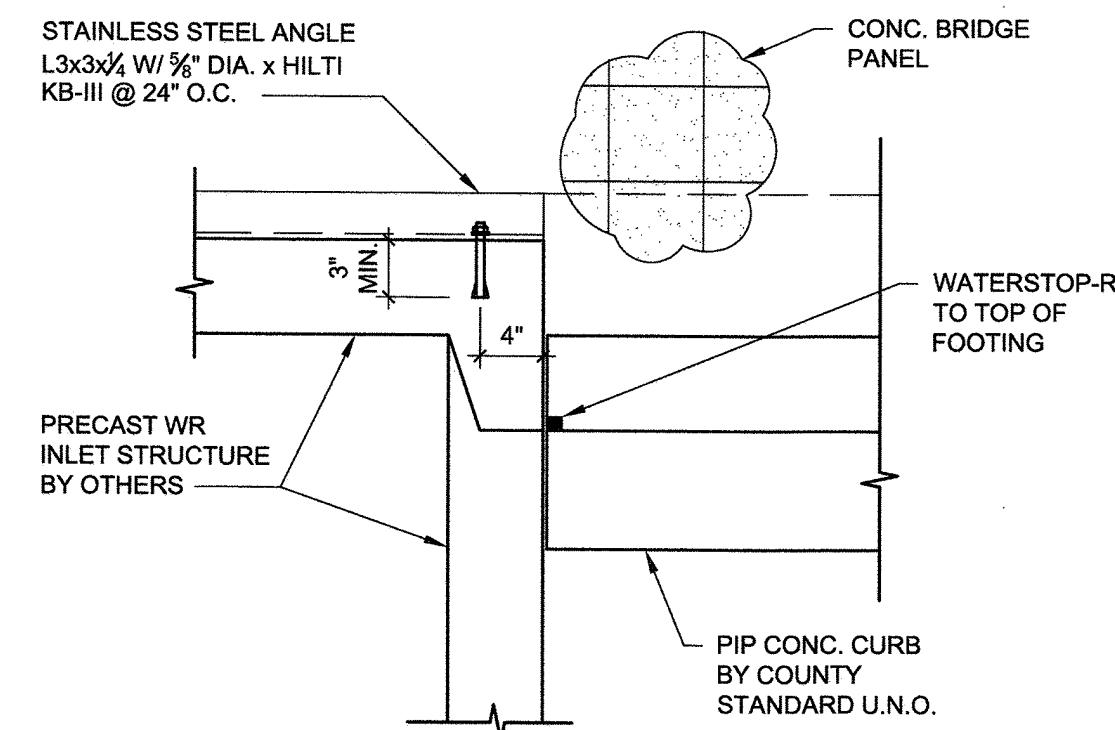
- NOTES:**
1. ALL DIMENSIONS SHALL BE VERIFIED W/ CIVIL DRAWINGS AND IN THE FIELD.
  2. WR INLET STRUCTURE AND PIPES SHALL BE BUILT PRIOR TO CONSTRUCTION OF ESD STRUCTURE.
  3. USE COMPACTED STRUCTURAL SUBGRADE TYPICAL. SEE SOIL REPORT FOR MORE INFORMATION.



**SECTION @ MB61**

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

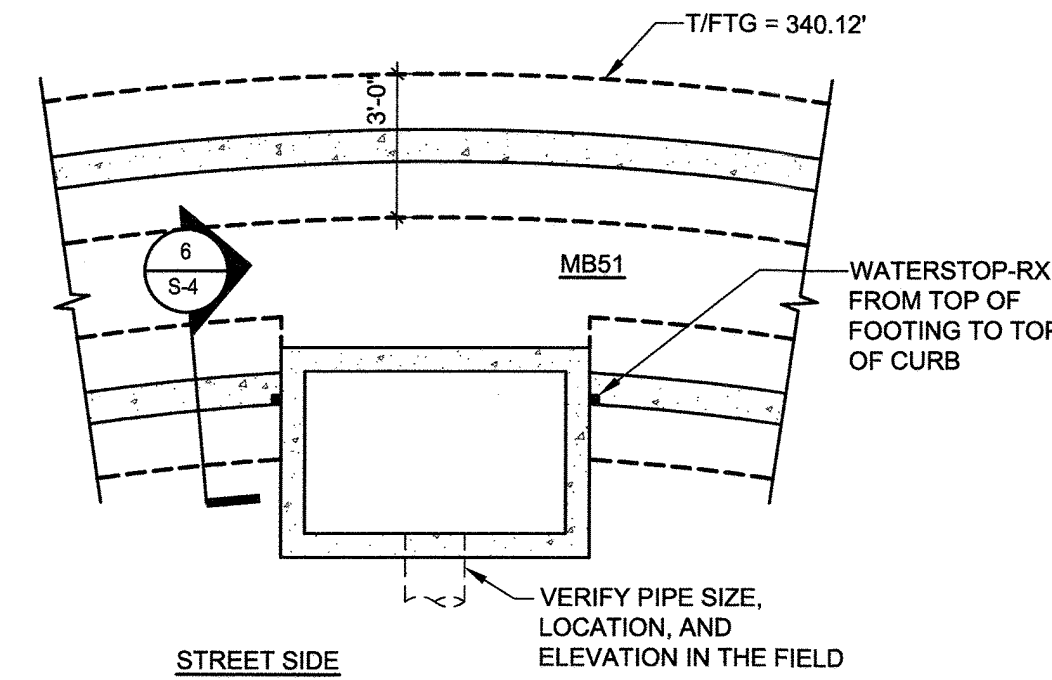
3  
S-4



**PLAN DETAIL**

SCALE: 1" = 1'-0"

4  
S-4

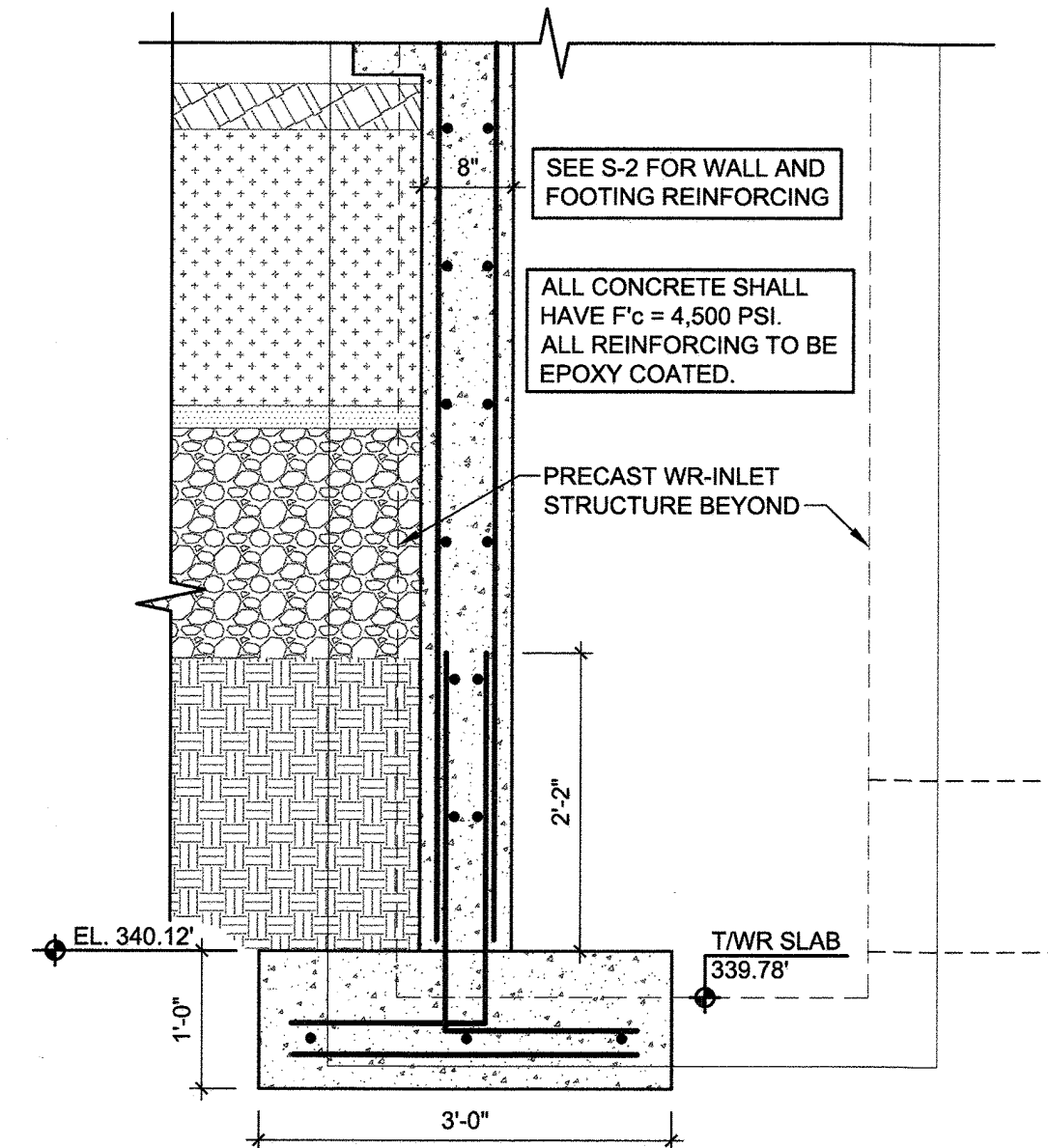


**PARTIAL FOUNDATION PLAN - MB51**

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

5  
S-4

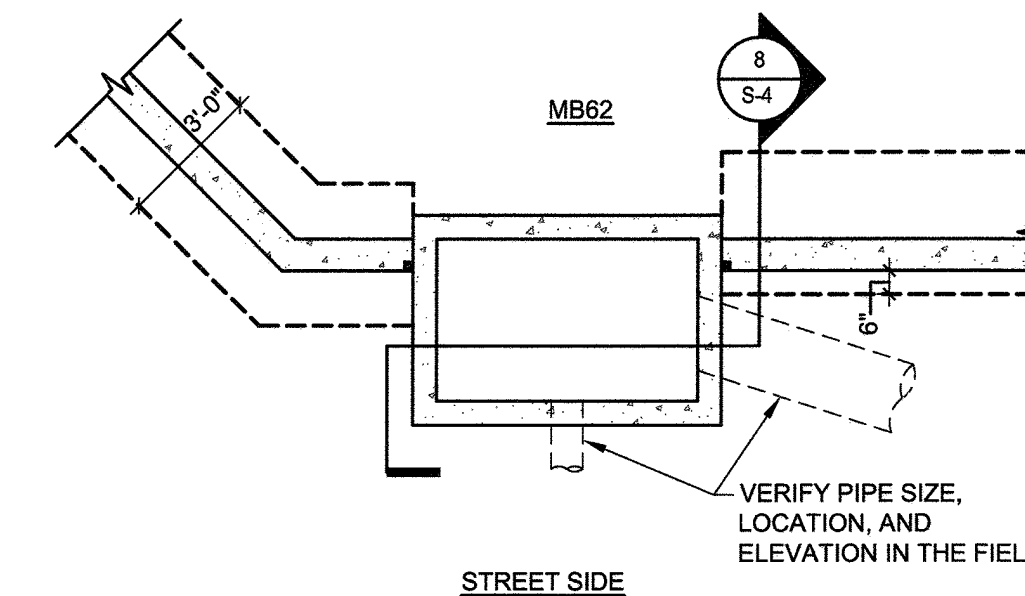
- NOTES:**
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  2. WR INLET STRUCTURE AND PIPES SHALL BE BUILT PRIOR TO CONSTRUCTION OF ESD STRUCTURE.
  3. USE COMPACTED STRUCTURAL SUBGRADE TYPICAL. SEE SOIL REPORT FOR MORE INFORMATION.



**SECTION @ MB51**

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

6  
S-4

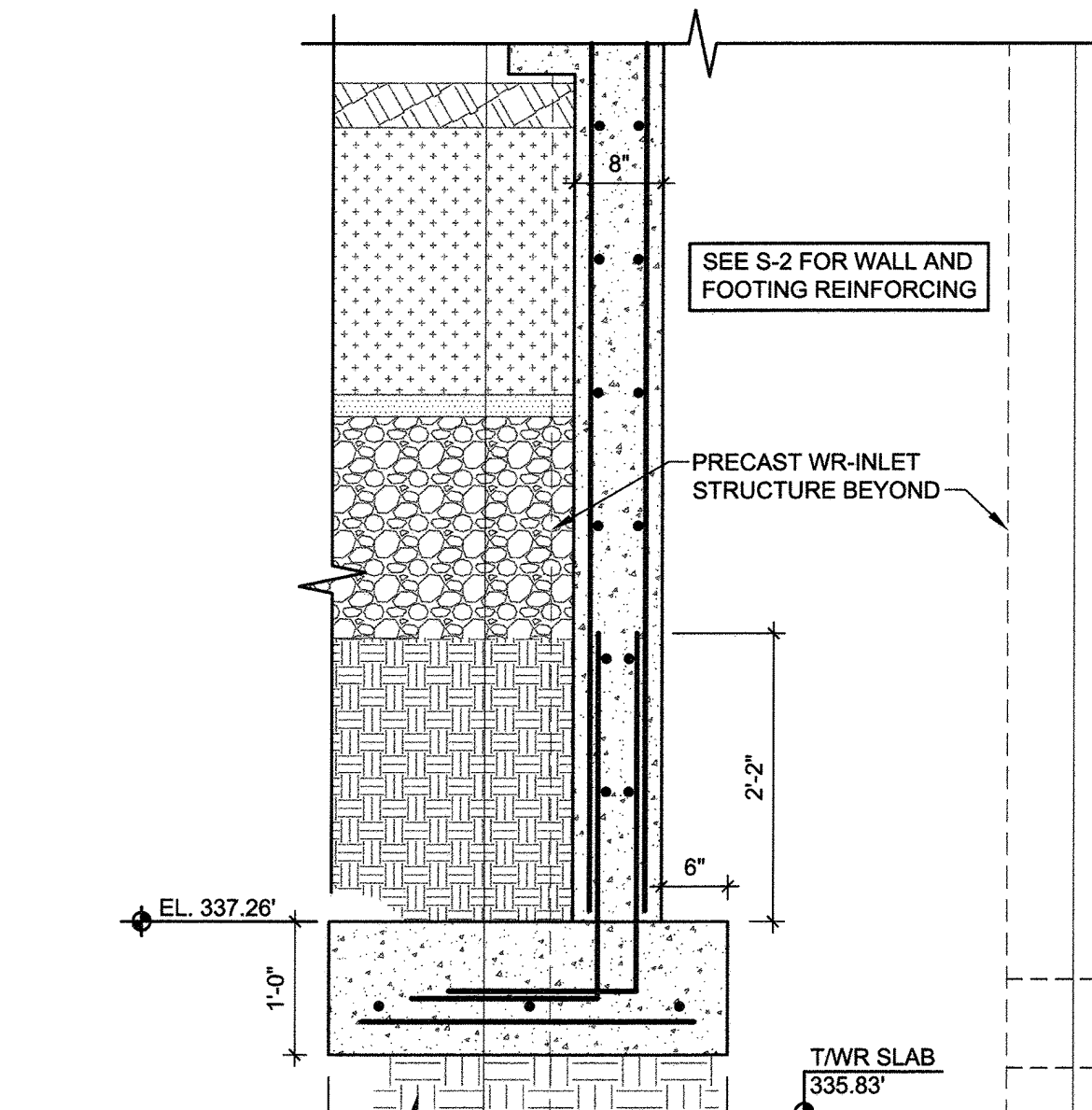


**PARTIAL FOUNDATION PLAN - MB62**

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

7  
S-4

- NOTES:**
1. ALL DIMENSIONS SHALL BE VERIFIED W/ CIVIL DRAWINGS AND IN THE FIELD.
  2. WR INLET STRUCTURE AND PIPES SHALL BE BUILT PRIOR TO CONSTRUCTION OF ESD STRUCTURE.
  3. USE COMPACTED STRUCTURAL SUBGRADE TYPICAL. SEE SOIL REPORT FOR MORE INFORMATION.



**SECTION @ MB62**

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

8  
S-4

- ENVIRONMENTAL DATA SOURCES:**
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**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, SDP 17-027, F 17-057, F18-017, WP-18-089, WP-18-105.

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

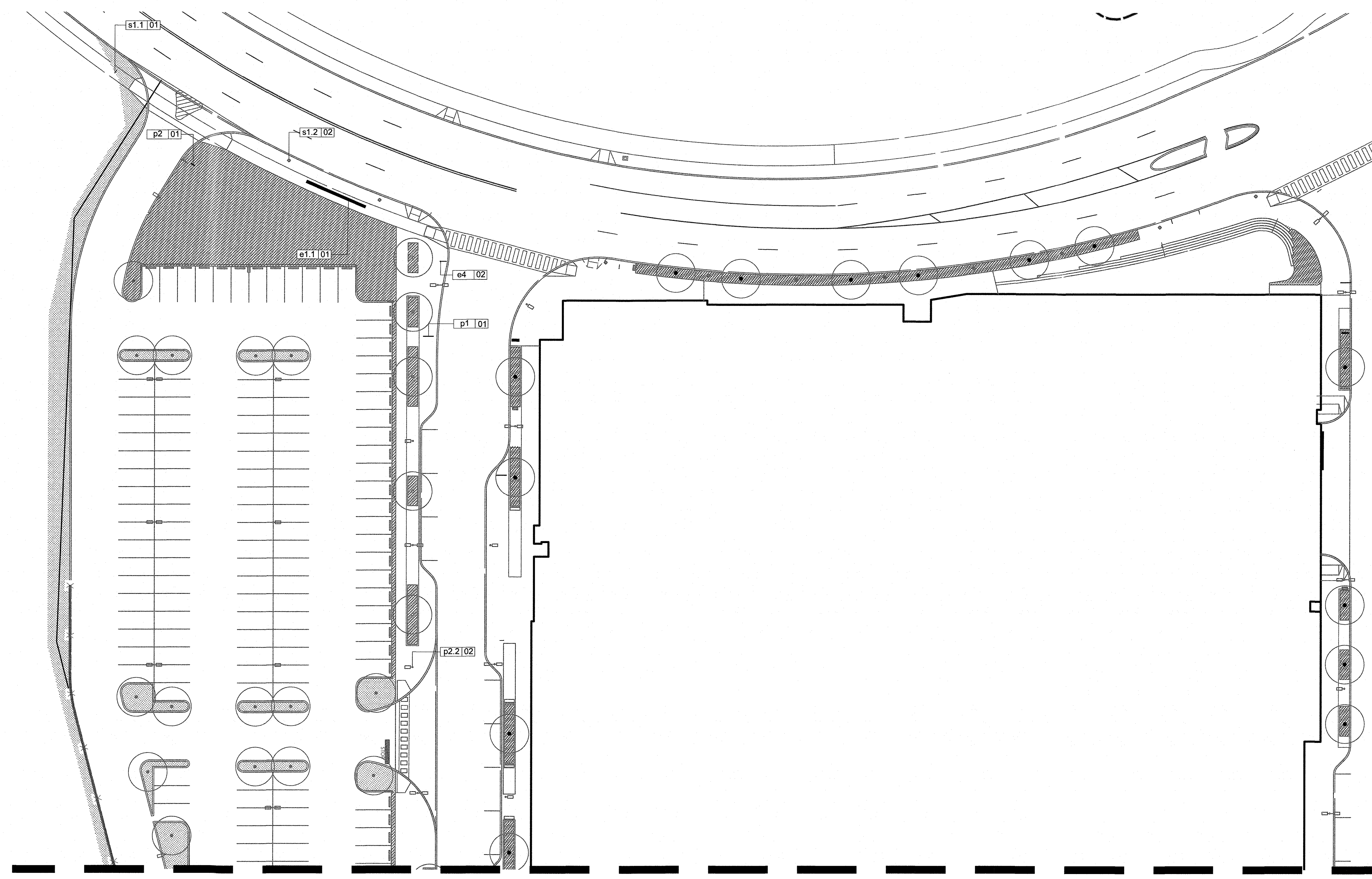
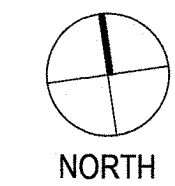
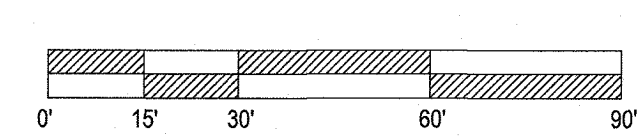
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02/15/2019  
Date  
Professional Engr. No. 39426

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/18

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING  
DATE: 3-20-19  
DATE: 4-24-19  
DATE: 4-24-19

Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b>		
<b>CRESCENT NEIGHBORHOOD</b>		
<b>PHASE I AREA 3, PHASE 2</b>		
<b>PARCELS D-1, D-7, D-8, D-9,</b>		
<b>D-11, D-12 AND D-13</b>		
<b>MIXED USE GREEN OFFICE, RESIDENTIAL, RETAIL, RESTAURANT BUILDING</b>		
<b>OWNER / DEVELOPER:</b>		
<b>THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION</b>		
<b>COLUMBIA REGIONAL OFFICE</b>		
<b>10480 LITTLE PATUXENT PARKWAY SUITE 400</b>		
<b>COLUMBIA, MD 21044</b>		
<b>410-964-4800</b>		
<b>SK&amp;A MD</b>		
<b>Smsilova, Kehnemui &amp; Associates, PA</b>		
<b>12435 Park Potomac Avenue, Suite 300 • Potomac, MD 20854</b>		
<b>P 301.881.1441 F 301.881.8664 W sikaengineers.com</b>		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	NEIGHBORHOOD	PARCEL D
PLAT/ OR L.P.	BLOCK # ZONE	ELECT. DISTRICT
7	206/ MAP 26	5-15
WATER CODE	SEWER CODE	CENSUS TRACT
550	LITTLE PATUXENT	605602
STAGE 1		
<b>TITLE</b>		
<b>S-4 SWM MB61, MB51, &amp; MB62</b>		
<b>W/ WR-INLET STRUCTURES</b>		
Des. By	SCALE AS SHOWN	Proj. No. 04038.B0
Drn. By	Date 02/15/19	66 of 77
Chk. By	Approved	



- Sign Legend**
- e1.1 Landscape Letterforms
  - e4 Pedestrian Directional
  - e5 Project Directory
  - p1 Vehicular Directional
  - p2/p2.1/p2.2 Pole Mounted Parking Directional
  - p3 Building Mounted Parking Directional
  - 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-001C/SP-001D

**1 PARTIAL SIGNAGE PLAN**  
SCALE: 1" = 30'-0"

**FILE NUMBERS:**  
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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

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

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02/15/19  
DATE

Richard James Kelly  
PROFESSIONAL ARCH. NO. 7318-A

Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b> <b>CRESCENT NEIGHBORHOOD</b> <b>PHASE I AREA 3, PHASE 2</b> <b>PARCELS D-1, D-7, D-8, D-9,</b> <b>D-11, D-12 AND D-13</b>		
<small>OWNER / DEVELOPER:</small> 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	CRESCENT NEIGHBORHOOD	LOT/PARCEL #	PARCEL D
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD	PHASE I, AREA 3		
PLAT # OR LOT #	BLOCK #	TAX ZONE/MAP	ELECT. DISTRICT	CENSUS TRACT
550	7	36	5	605602
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE	1

TITLE: SITE SIGNAGE SHEET A

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/18

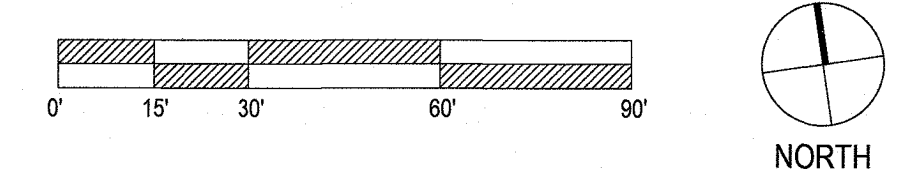
Des. By	JGB/RJP	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	JGB	Date	02/15/19	67 of 77	
Chk. By	RJP	Approved	MCB		

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

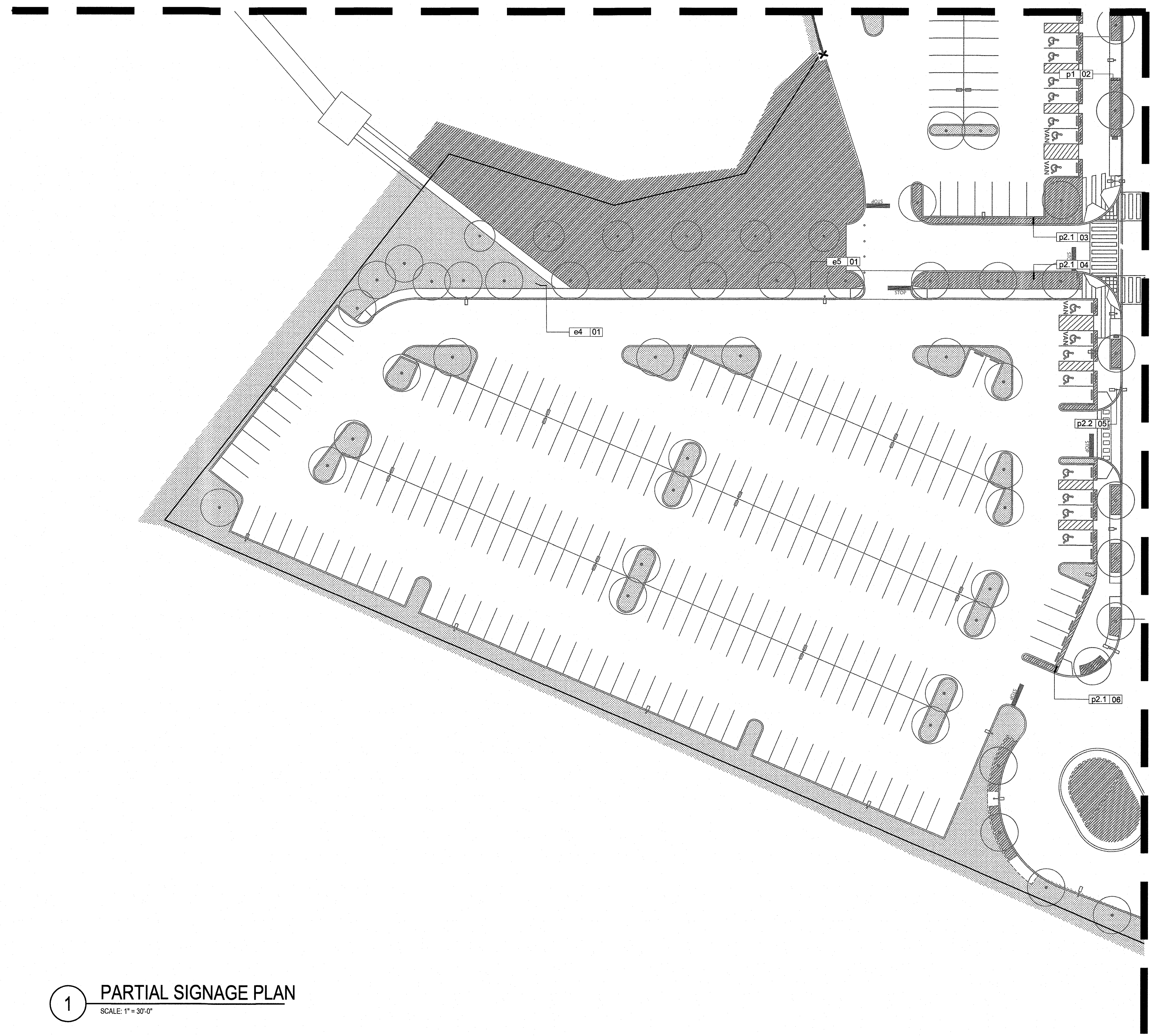
*[Signature]* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE



MATCH SP-001A



- Sign Legend**
- e1.1 Landscape Letterforms
  - e4 Pedestrian Directional
  - e5 Project Directory
  - p1 Vehicular Directional
  - p2/p2.1/p2.2 Pole Mounted Parking Directional
  - p3 Building Mounted Parking Directional
  - 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-001D

**1 PARTIAL SIGNAGE PLAN**  
SCALE: 1" = 30'-0"

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*Chad Plank* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Neil Shalvick* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Nallas Zylla* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

**FILE NUMBERS:**  
F 15-106, F 16-107, F 17-059, F-18-017, SDP-16-075, SDP-17-027, 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 ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/20.

02/15/19  
DATE

*Randy Jones*  
PROFESSIONAL ARCH. NO. 7318-A

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/18

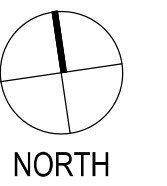
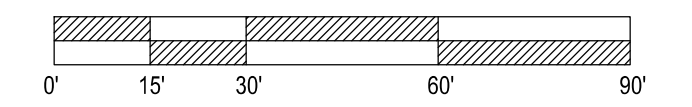
Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE 2 PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13
		OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800

**ashton**

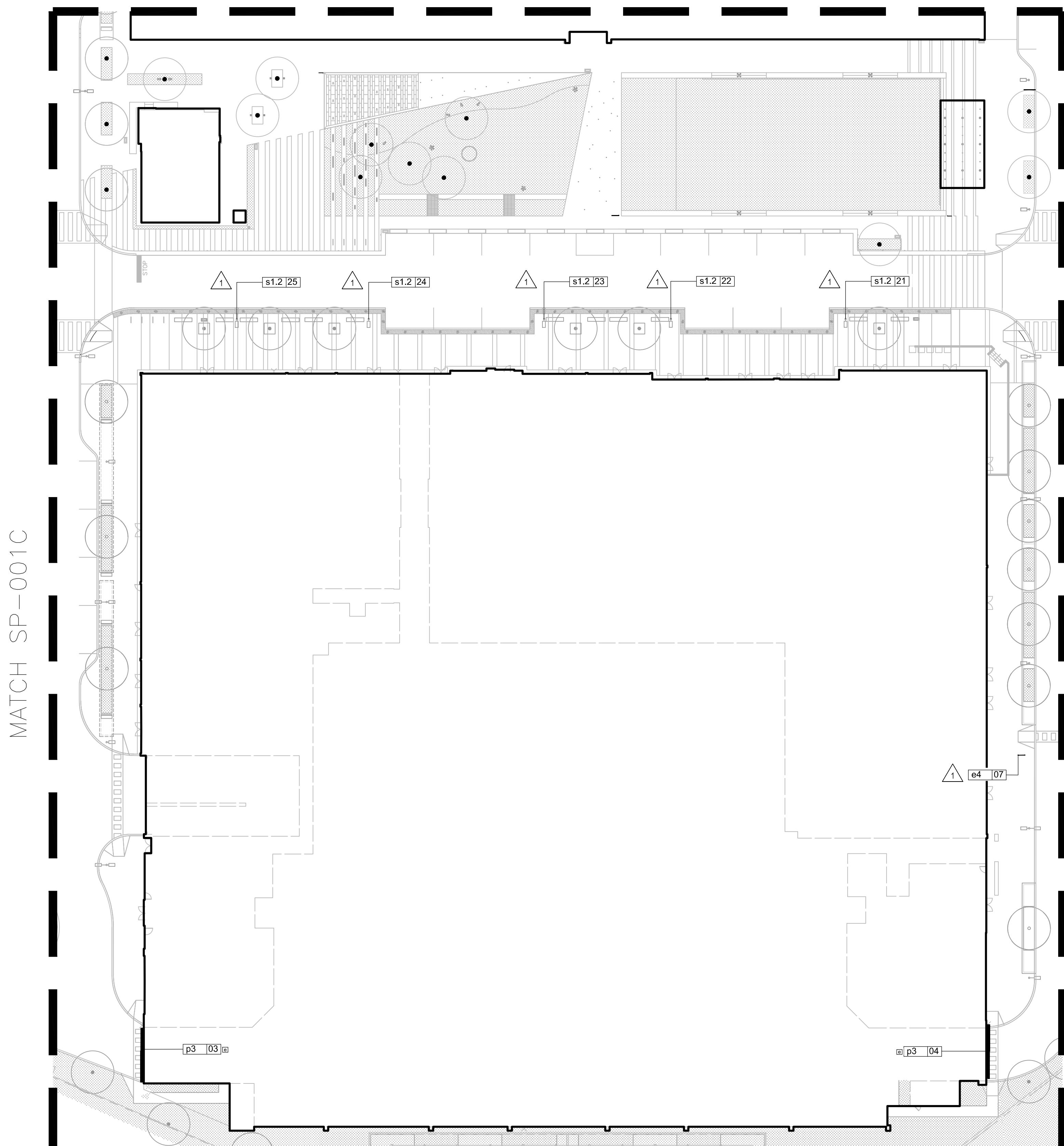
SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION/AREA CRESCENT NEIGHBORHOOD PHASE I AREA 3	LOT/PARCEL # PARCEL D
PLANNING BOARD BLOCK # 7	TAX ZONE/MAP 36	CENSUS TRACT 605602
WATER CODE 550	SEWER CODE LITTLE PATUXENT	STAGE 1

TITLE SITE SIGNAGE SHEET C	Des. By JGB/RJP	SCALE AS SHOWN	Proj. No. 04038.80
Drn. By JGB	Date 02/15/19	68	of 77
Chk. By RJP	Approved MCB		

SDP-18-005

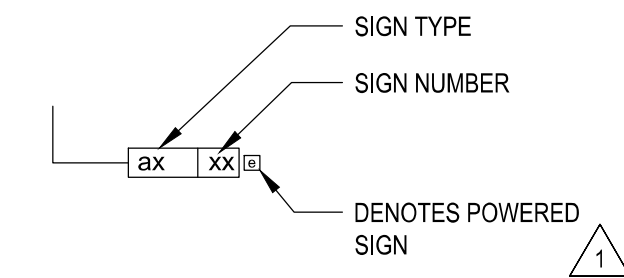


MATCH SP-001A



- Sign Legend**
- e1.1 Landscape Letterforms
  - e4 Pedestrian Directional
  - e5 Project Directory
  - p1 Vehicular Directional
  - p2/p2.1/p2.2 Pole Mounted Parking Directional
  - p3 Building Mounted Parking Directional
  - 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-001C

MATCH SP-001E

**1 PARTIAL SIGNAGE PLAN**  
SCALE: 1" = 30'-0"

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

**FILE NUMBERS:**  
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-17-027, 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 ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/20.

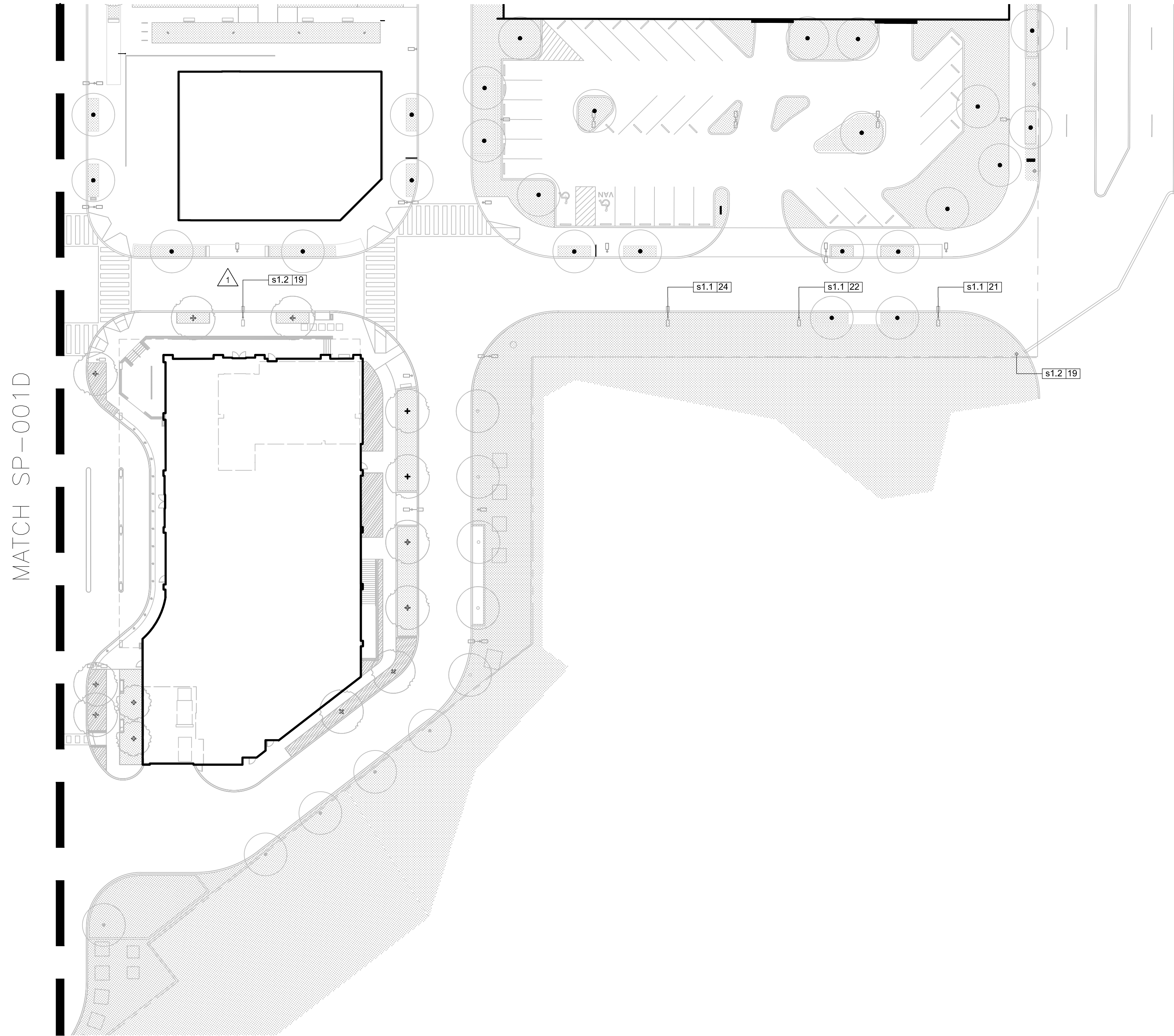
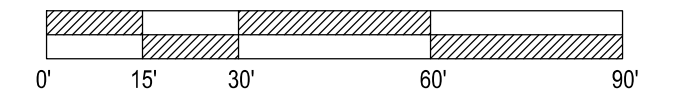
DATE \_\_\_\_\_

PROFESSIONAL ARCH. NO. 7318-A

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: \_\_\_\_\_

07/29/19	△	UPDATE PLANS PER REVISED BLDG. "C" LAYOUT AND NEW BUILDING E-1 HOTEL
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b> CRESCENT NEIGHBORHOOD PHASE 1 AREA 3, PHASE 2 PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13		
OWNER / DEVELOPER:		THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800
<b>ashton</b>		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
DOWNTOWN COLUMBIA	CRESCENT NEIGHBORHOOD PHASE 1 AREA 3	PARCEL D
PLAT # OR L.P. #	TAX ZONE/MAP NO.	ELECT. DISTRICT
42812-2450	7 DMAL	5
WATER CODE	SEWER CODE	STAGE
550	LITTLE PATUXENT	1
TITLE		
SITE SIGNAGE SHEET D		
△ REVISED SITE DEVELOPMENT PLAN		
Des. By	JGB/RJP	SCALE AS SHOWN
Drn. By	JGB	Date 02/15/19
Chk. By	RJP	Approved MCB
		Proj. No. 04038_B0
		69 of 77

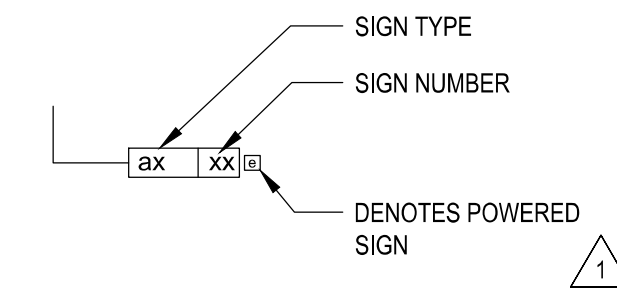
J:\2018\DC CRESCENT\DCS CONDA\INTERCHANGE SHEETS\PHASE 2\SP01 BRONZE SHEET FILED.DWG, 7/29/2019 11:07 AM



**Sign Legend**

- e1.1 Landscape Letterforms
- e4 Pedestrian Directional
- e5 Project Directory
- p1 Vehicular Directional
- p2/p2.1/p2.2 Pole Mounted Parking Directional
- p3 Building Mounted Parking Directional
- 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-001D

**1 PARTIAL SIGNAGE PLAN**  
SCALE: 1" = 30'-0"

**FILE NUMBERS:**  
F 15-106, F 16-107, F 17-059, F 18-017,  
SDP-16-075, SDP-17-027, 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 ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/20.

DATE \_\_\_\_\_  
PROFESSIONAL ARCH. NO. 7318-A

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE : \_\_\_\_\_

Date	No.	Revision Description
07/29/19	1	UPDATE PLANS PER REVISED BLDG. "C" LAYOUT AND NEW BUILDING E-1 HOTEL

**DOWNTOWN COLUMBIA**  
CRESCENT NEIGHBORHOOD  
PHASE 1 AREA 3, PHASE 2  
PARCELS D-1, D-7, D-8, D-9,  
D-11, D-12 AND D-13

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	CRESCENT NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE 1 AREA 3	PHASE 2 AREA 2	PARCEL D
PLAT # OR L.P. #	BLOCK #	ZONE/MAP NO.	ELECT. DISTRICT
42821-2450	7	DMAU	5
WATER CODE	SEWER CODE	LITTLE PATUXENT	STAGE
550			1

TITLE  
SITE SIGNAGE SHEET E  
REVISED SITE DEVELOPMENT PLAN

Des. By	JGB/RJP	SCALE	AS SHOWN	Proj. No.	04038_B0
Drn. By	JGB	Date	02/15/19		
Chk. By	RJP	Approved	MCB		70 of 77

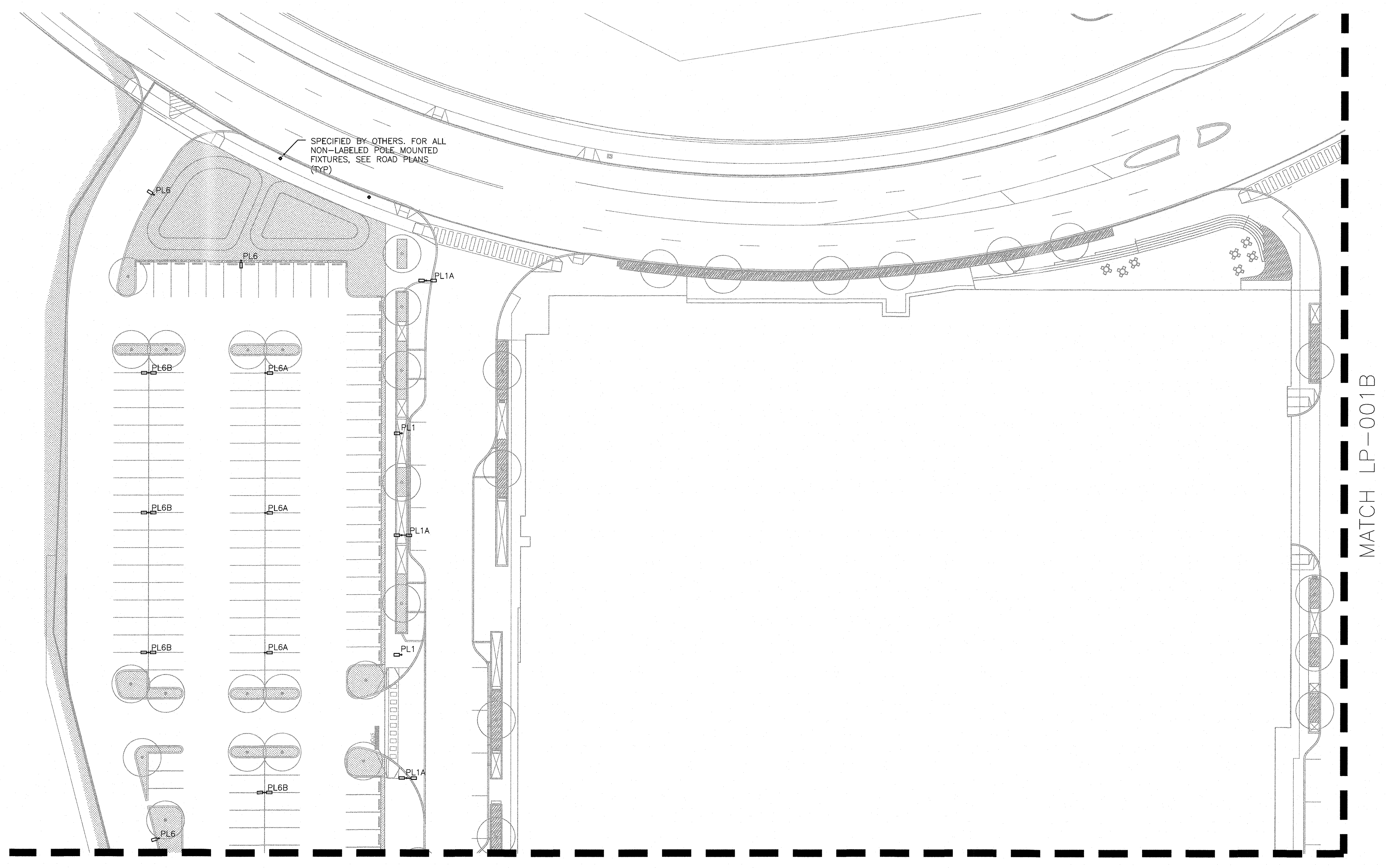
SDP-18-005

J:\2019\HOWARD COUNTY\CRESCENT\HOWARD COUNTY\CRESCENT\PHASE 2\SDP-18-005\SDP-18-005.DWG, 7/29/2019 10:06 AM

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







MATCH LP-001B

MATCH LP-001C/LP-001D

**1 PARTIAL LIGHTING PLAN**  
SCALE: 1" = 30'-0"

**FILE NUMBERS:**  
F-15-106, F-16-107, F-17-059, F-18-017, SDP-16-075, SDP-17-027, 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.

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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: 10/21/20.

Date	No.	Revision Description
		<b>DOWNTOWN COLUMBIA</b> CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE 2 PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13
		OWNER / DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800

02/15/19  
DATE

PROFESSIONAL ARCH. NO. 7318-A



APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/18

SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION/AREA CRESCENT NEIGHBORHOOD PHASE 2, AREA 3	LOT/PARCEL # PARCEL D
PLAT# OR LTR# 7	TAX ZONE/MAP 36	ELECT. DISTRICT 5
WATER CODE 550	SEWER CODE LITTLE PATUXENT	STAGE 1

TITLE  
LP-001A SITE LIGHTING SHEET A

Des. By	JEW/JDC	SCALE	AS SHOWN	Proj. No.	04038.B0
Drn. By	JDC	Date	02/15/19		
Chk. By	JEW	Approved	MCB		72 of 77

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

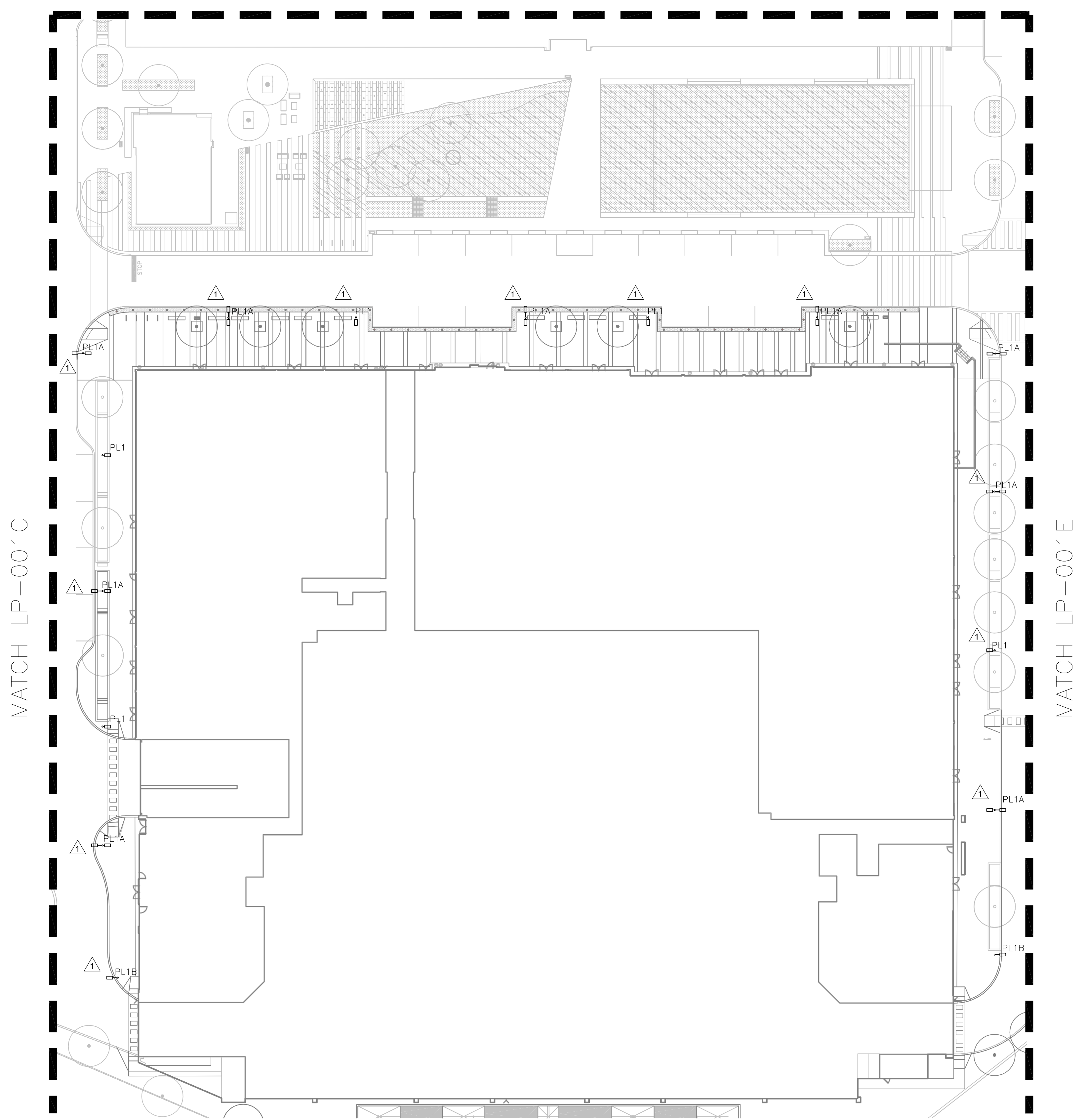
*Robert James J. Jewell* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION HJP DATE

*Kevin J. Kelly* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT JAV DATE

*William J. Kelly* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE



MATCH LP-001A



MATCH LP-001C

MATCH LP-001E

**1 PARTIAL LIGHTING PLAN**  
SCALE: 1" = 30'-0"

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

**FILE NUMBERS:**  
F 15-106, F 16-107, F 17-059, F-18-017, SDP-16-075, SDP-17-027, 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**  
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DATE \_\_\_\_\_

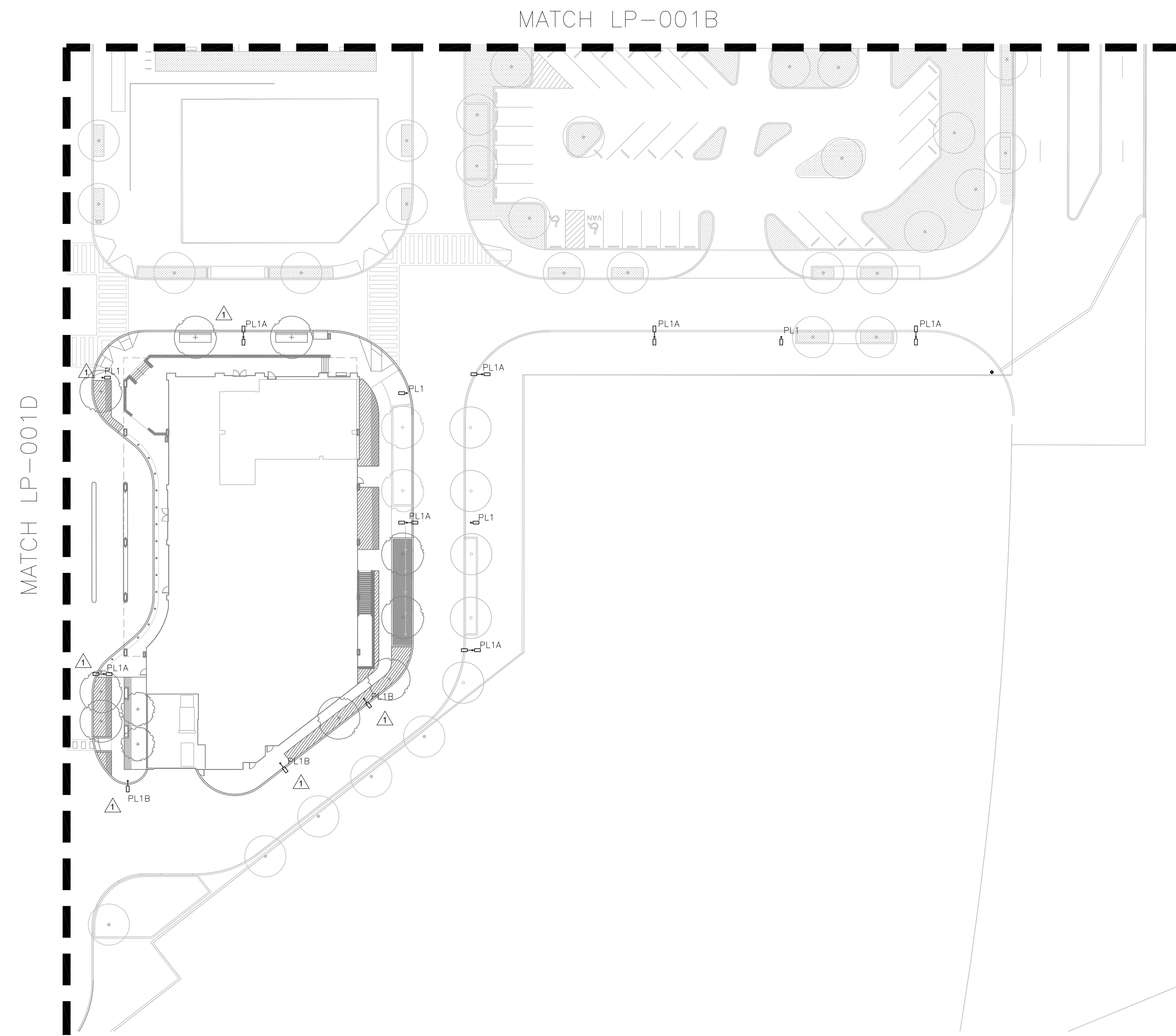
PROFESSIONAL ARCH. NO. 7318-A

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY

DATE : \_\_\_\_\_

Chk. By JEW Approved MCB

07/29/19	1	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT AND NEW BLDG. E-1 HOTEL
Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b> <b>CRESCENT NEIGHBORHOOD</b> <b>PHASE I AREA 3, PHASE 2</b> <b>PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13</b> <b>OWNER / DEVELOPER:</b> THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA REGIONAL OFFICE 10480 LITTLE PATUXENT PARKWAY SUITE 400 COLUMBIA, MD 21044 410-964-4800		
SUBDIVISION NAME DOWNTOWN COLUMBIA	SECTION / AREA CRESCENT NEIGHBORHOOD PHASE 2 AREA 3	LOT / PARCEL # PARCEL D
PLAT # OR L.P. 24-4931-D	BLOCK # 7	ZONE DMAM
WATER CODE 550	TAX ZONING MAP 36	ELECT. DISTRICT 5
SEWER CODE LITTLE PATUXENT	STAGE 1	CENSUS TRACT 605602
TITLE LP-001D SITE LIGHTING SHEET D REVISED SITE DEVELOPMENT PLAN		
Des. By	JEW/JDC	SCALE AS SHOWN
Drn. By	JDC	Date 02/15/19
Chk. By	JEW	Approved MCB
Proj. No. 04038.B0		74 of 77



**1 PARTIAL LIGHTING PLAN**  
SCALE: 1" = 30'-0"

**FILE NUMBERS:**  
F 15-106, F 16-107, F 17-059, F 18-017,  
SDP-16-075, SDP-17-027, 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**  
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DATE \_\_\_\_\_

PROFESSIONAL ARCH. NO. 7318-A

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: \_\_\_\_\_  
Chk. By: \_\_\_\_\_

07/29/19	1	UPDATE PLANS PER REVISED BLDG. 'C' LAYOUT AND NEW BLDG. E-1 HOTEL
Date	No.	Revision Description

**DOWNTOWN COLUMBIA**  
**CRESCENT NEIGHBORHOOD**  
**PHASE I AREA 3, PHASE 2**  
PARCELS D-1, D-7, D-8, D-9,  
D-11, D-12 AND D-13

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



SUBDIVISION NAME DOWNTOWN COLUMBIA		SECTION NUMBER CRESCENT NEIGHBORHOOD PHASE I AREA 3		LOT/PARCEL # PARCEL D
PLAT OR L.P. 24014-2280	BLOCK # 7	ZONE DMAM	TAX ZONE/MAP 36	ELECT. DISTRICT 5
WATER CODE	550	SEWER CODE	LITTLE PATUXENT	STAGE 1

TITLE LP-001E SITE LIGHTING SHEET E REVISED SITE DEVELOPMENT PLAN			
Des. By	JEW/JDC	SCALE	AS SHOWN
Drn. By	JDC	Date	02/15/19
Chk. By	JEW	Approved	MCB
Proj. No.			04038.80
			75 of 77

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

MERRIWEATHER DISTRICT: AREA 3 PUBLIC REALM				TLP PROJECT NUMBER: 16099.00		TLP ISSUE DATE: 06/22/18					
LIGHTING FIXTURE SCHEDULE											
SYMBOL	FIXTURE IMAGES	TYPE	MTG.	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 6 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	C2SM-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/RDB-[FINISH]  DMX CONTROLLER: L702
⦿		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-82P-12-B  DRIVER: PPI-J12-D12INC-B-MT-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 PAVEMENT.  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 TAILS  ILLUMINATOR: FL-1000-XT-B-US-28mm + FL1000-B-2-US
		ML13		DELETED							

MERRIWEATHER DISTRICT: AREA 3 PUBLIC REALM				TLP PROJECT NUMBER: 16099.00		TLP ISSUE DATE: 06/22/18					
LIGHTING FIXTURE SCHEDULE											
SYMBOL	FIXTURE IMAGES	TYPE	MTG.	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 WIDE 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	-	HYREL	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-22HGT-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-22HGT-01

FOR HOWARD COUNTY DEPT. OF PLANNING & ZONING. CONSULT ENGINEER'S SEAL AND SIGNATURE. SHEET FILED IN: 2125016.00.34.M

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*[Signature]* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT DATE

**FILE NUMBERS:**  
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-17-027, 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 ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/20.

02/15/19  
DATE

*[Signature]*  
PROFESSIONAL ARCH. NO. 7318-A

APPROVED:  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 11/8/18

Date	No.	Revision Description
		DOWNTOWN COLUMBIA CRESCENT NEIGHBORHOOD PHASE I AREA 3, PHASE 2 PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13

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	NEIGHBORHOOD	LOT/PARCEL #
DOWNTOWN COLUMBIA	PHASE 2 AREA		PARCEL D
TRACT OR LOT	BLOCK # ZONE	TAX ZONING MAP	PLUCT. DISTRICT
24882-24930	7	36	5
WATER CODE	SEWER CODE		CENSUS TRACT
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	02/15/19		
Chk. By	JEW	Approved	MCB		76 of 77

MERRIWEATHER DISTRICT AREA 3 PUBLIC REALM				TLP PROJECT NUMBER: 16099.00		TLP ISSUE DATE: 06/22/18					
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	-	BEGA	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	-	BEGA	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)0JLGL-F40-SB4(0W-1P-2V-30)-L28-30-BK-[VOLT]-[OPTIONS] POLE: 0-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)0JLGL-F40-SB5(0B-1G-2L-30-4U)-L28-30-BK-[VOLT]-[OPTIONS] POLE: 0-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/ANSI 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/ANSI 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

10/24/2018 10:51:00 AM

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*Chad Edman* 3-20-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*Kevin H. Smith* 4-24-19  
CHIEF, DIVISION OF LAND DEVELOPMENT

*Valerie J. Davis* 4-24-19  
DIRECTOR, DIVISION OF LAND DEVELOPMENT

**FILE NUMBERS:**  
F 15-106, F 16-107, F 17-059, F 18-017, SDP-16-075, SDP-17-027, WP-17-010, WP-17-049, WP-17-052, WP-17-059, WP-17-115, WP-18-030, WP-18-023, 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 ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7318-A, EXPIRATION DATE: 10/21/20.

02/15/19  
DATE

*Paul James*  
PROFESSIONAL ARCH. NO. 7318-A

Date	No.	Revision Description
<b>DOWNTOWN COLUMBIA</b> <b>CRESCENT NEIGHBORHOOD</b> <b>PHASE I AREA 3, PHASE 2</b> PARCELS D-1, D-7, D-8, D-9, D-11, D-12 AND D-13		
		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	NEIGHBORHOOD
DOWNTOWN COLUMBIA	PHASE 1 AREA 3	PARCEL D
PLAT OR LOT	BLOCK #	TOWNSHIP
25821-2400	7	MD
WATER CODE	SEWER CODE	ELECT. DISTRICT
550	LITTLE PATUXENT	5
TITLE		CENSUS TRACT
LP-701 LIGHTING FIXTURE SCHEDULE AND GENERAL NOTES		605602
Des. By		LOT/PARCEL #
JEW/JDC		PARCEL D
Drn. By		JDC
Date		02/15/19
Chk. By		JEW
Approved		MCB
DATE		11/8/18
		77 of 77