

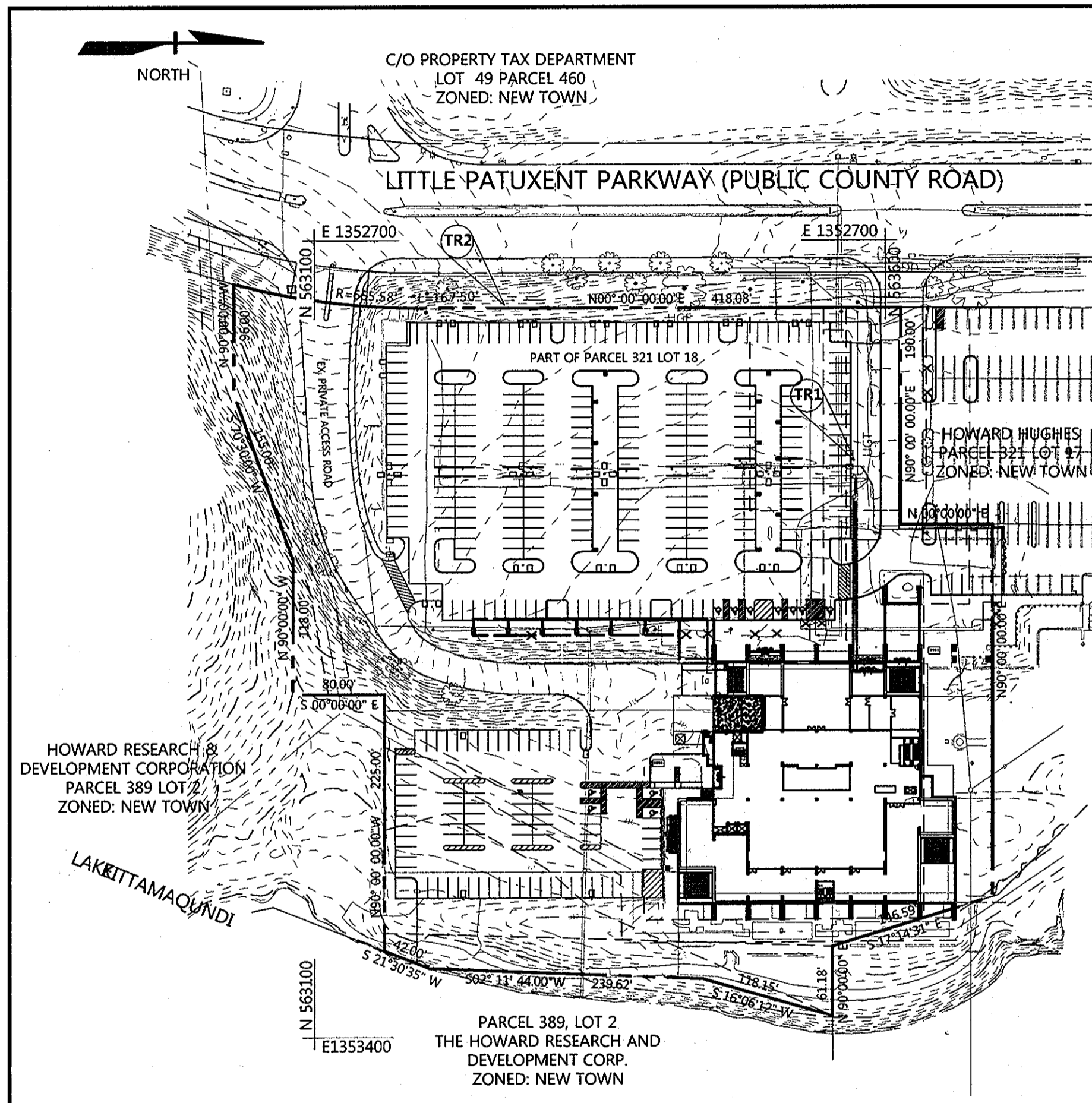
GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- EXISTING TOPOGRAPHIC INFORMATION SHOWN HEREON REFLECTS THE TOPOGRAPHIC SURVEY PERFORMED BY DMW, INC. ON JULY 24, 2012. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH ONE FOOT CONTOUR INTERVALS PREPARED BY DMW, INC. ON JULY 24, 2012.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NO'S 36AA, 30GA, 36DB & 30GA.
- WATER IS PUBLIC. CONTRACT NO. 167-W. TOWN CENTER ZONE I.
- SEWER IS PUBLIC. CONTRACT NO. C-169-S.
- PROPOSED STORMWATER MANAGEMENT BY MEANS OF MICRO-BIORETENTION WILL BE PRIVATE AND THE MAINTENANCE RESPONSIBILITY WILL BE THE OWNERS. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME I, STORM DRAINAGE, AND REVISED MAY 3, 2010. THIS REVISION TO THE DESIGN MANUAL (CHAPTER 5 - STORM WATER MANAGEMENT) AMENDS HOWARD COUNTY'S STANDARD FOR DESIGN AND CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES IN ACCORDANCE WITH THE STATE'S STORMWATER MANAGEMENT ACT OF 2007.
- EXISTING UTILITIES ARE BASED ON FIELD LOCATIONS BY EDWARDS UTILITY MAPPING AND SUPPLEMENTED WITH OBSERVABLE EVIDENCE DMW, INC. FIELD CREWS.
- THE FLOODPLAIN STUDY FOR THIS PROJECT IS ON FILE AT HOWARD COUNTY DPW STORMWATER MANAGEMENT DIVISION. FOR FLOOD INSURANCE REQUIREMENTS, CONTACT THE BUREAU OF ENVIRONMENTAL SERVICES AT (410) 313-6444.
- THERE ARE NO WETLANDS ON THIS SITE.
- THE COUNTY APPROVED THE TRAFFIC SIGNAL WARRANT STUDY THAT CONCLUDED A TRAFFIC SIGNAL SHALL BE INSTALLED, AT THE TIME OF THE PROPOSED IMPROVEMENTS SIGNAL PLANS AND A DEVELOPER'S AGREEMENT SHALL BE SUBMITTED FOR COUNTY APPROVAL.
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF A 2.0 FOOT PROTECTIVE COVER OVER ALL UTILITIES DURING CONSTRUCTION.
- ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134. ALL EXTERIOR LIGHT FIXTURES SHALL BE ORIENTED TO DIRECT LIGHT INWARD AND DOWNWARD AND AWAY FROM ALL ADJOINING RESIDENTIAL PROPERTIES AND PUBLIC ROADS IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
- THE SITE HAS BEEN DESIGNED TO BE IN CONFORMANCE WITH ADA REGULATIONS 28 CFR PART 36, REVISED SEPTEMBER 15, 2010. HANDICAP PARKING DETAILS AND SIGNAGE SHALL BE IN ACCORDANCE WITH ADAAG (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES) AND COMAR (CODE OF MARYLAND REGULATIONS) SECTION 5.02.02.
- ANY DAMAGE TO THE COUNTY OWNED RIGHT-OF-WAY SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- ALL SIDEWALKS SHALL BE CROSS SLOPED AT 1/4 INCH PER FOOT.
- TRENCH BEDDING FOR STORM DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH HOWARD COUNTY STANDARD G2.01.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS OR MSHA STANDARDS AS SPECIFIED ON THE STRUCTURE.
- ALL MATERIALS AND CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PROPERTY WHICH MAY OCCUR AS A RESULT OF NEGLIGENCE DURING THE EXECUTION OF WORK.
- ELECTRIC, GAS, CABLE, TELEPHONE AND LIGHTING LINES ARE DESIGNED BY OTHERS.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$6,600.00 FOR 22 SHADE TREES.
- THE SUBJECT PROPERTY IS ZONED NT PER THE 02/02/2004 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING REGULATION AMENDMENTS EFFECTIVE ON 07/28/2006.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREA AND 100-YEAR FLOODPLAIN.
- THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION IN ACCORDANCE WITH SECTION 16.1202(b)(iv) OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL SINCE IT IS PLANNED UNIT. DEVELOPMENT WHICH HAS PRELIMINARY DEVELOPMENT PLAN APPROVAL AND 50% OR MORE OF THE LAND IS RECORDED AND SUBSTANTIALLY DEVELOPED BEFORE DECEMBER 31, 1992.
- THE SETBACKS SHALL BE IN ACCORDANCE WITH APPROVED FDP-95 AND FDP-4-V
- REFER TO TRAFFIC SIGNAL MODIFICATION PLANS FOR TIE-IN OF PROPOSED SIDEWALK TO EXISTING SIDEWALK FOR THE INTERSECTION OF LITTLE PATUXENT PARKWAY AND SOUTHERN SITE DRIVEWAY (MOORE ROAD).
- DISTURBANCE WITHIN THE STEEP SLOPES HAS BEEN ACCEPTED AS NECESSARY IN ACCORDANCE WITH SECTION 16.116(C) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS DUE TO REGRADING AND REPLACING THE EXISTING CURB AND GUTTER TO REVERSE THE DRAINAGE CROSS SLOPE OF THE EXISTING DRIVE AISLE AWAY FROM AN EXISTING RETAINING WALL TO PROTECT ITS INTEGRITY.

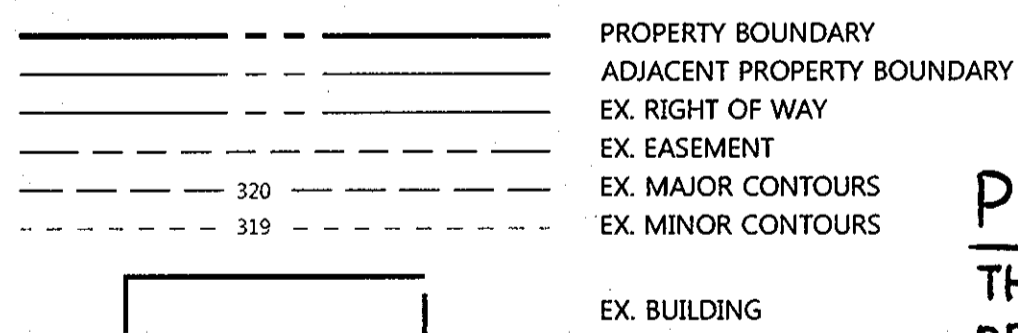
SITE DEVELOPMENT PLAN FOR THE ROUSE BUILDING RENOVATION

10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044

PART OF PARCEL 321 LOT 18
HOWARD COUNTY MARYLAND



LEGEND

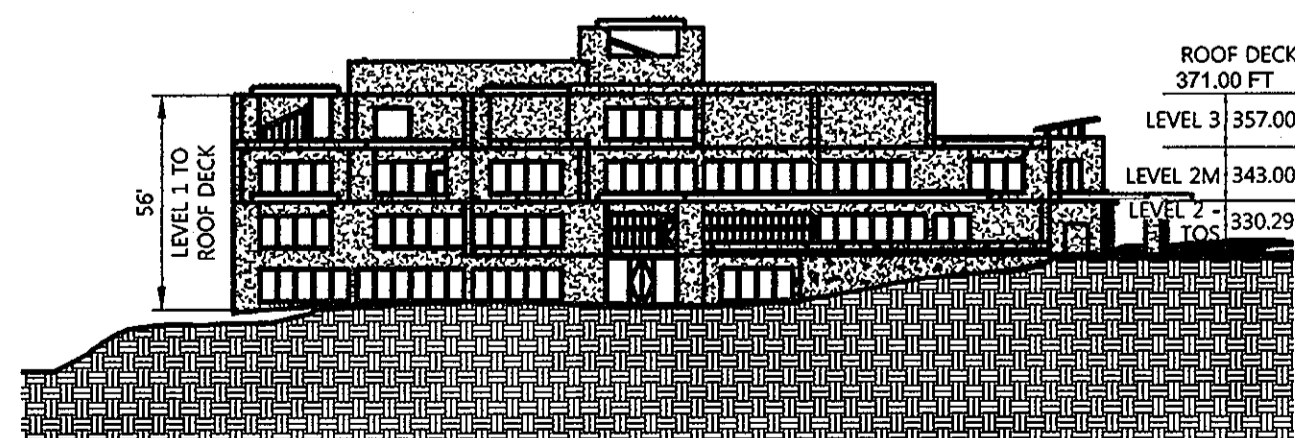


PURPOSE STATEMENT:
THIS SITE DEVELOPMENT PLAN WAS REVISED TO:

- ADD THE TRAFFIC SIGNAL PLANS AS PART OF THIS SDP SET.

SHEET INDEX (CONTINUED)

SHEET	DESCRIPTION
22	EX. RAMP REHABILITATION
23	TRAFFIC SIGNAL - WHOLE FOODS ENTRANCE
24	EQUIPMENT LIST - WHOLE FOODS ENTRANCE
25	TRAFFIC SIGNAL - MOORE CIRCLE
26	EQUIPMENT LIST - MOORE CIRCLE



SITE ANALYSIS DATA CHART

- GENERAL SITE DATA
 - PRESENT ZONING: NT
 - APPLICABLE DPZ FILE REFERENCES: SDP-73-23C, F-72-107, FDP-4-A-V, FDP-095, P823-086
 - PROPOSED USE: HEALTH CLUB (28,385 SF), GROCERY MERCHANT (46,720 SF), OFFICE (19,008 SF)
 - EXISTING USE: OFFICE (133,380± SF)
 - PROPOSED WATER: PUBLIC
 - PROPOSED SEWER: PUBLIC
 - ANY OTHER RELEVANT INFORMATION: N/A
 - AREA OF STEEP SLOPES: 0 ACRES
 - AREA OF FLOODPLAIN: PLAT C.M.P. 23/862, 0.56 AC.
- AREA TABULATION
 - TOTAL SITE AREA: 7,504 AC±
 - LIMIT OF DISTURBED AREA: 100,471 S.F. OR 2.31 AC±
 - TOTAL IMPERVIOUS AREA: 70,000 S.F. OR 1.61 AC±
 - BUILDING COVERAGE OF SITE: N/A
- PARKING SPACE DATA
 - DOWNTOWN REVITALIZATION SHARED PARKING REDUCTION:

SHARED PARKING ANALYSIS SUMMARY (1):	
PARKING REQUIRED	WEEKEND
353 SPACES	353 SPACES
MAX. PARKING REQUIRED	353 SPACES
TOTAL PARKING PROVIDED	356 SPACES
DIFFERENCE (REQ. VS. PROV.)	3 SPACES
PERCENT DIFFERENCE	1%
 - NUMBER OF PARKING SPACES PROVIDED:

UPPER LEVEL PARKING LOT:	
REGULAR (9'X18')	273 SPACES
HANDICAPPED - 7 SPACES (INCLUDED)	
LOWER LEVEL PARKING SPACES PROVIDED:	
REGULAR (9'X18')	83 SPACES
HANDICAPPED - 4 SPACES (INCLUDED)	
TOTAL SPACES PROVIDED: 356 SPACES* (2)	

- SEE TRAFFIC IMPACT STUDY SECTION 8 - SHARED PARKING ANALYSIS FOR DETAILED CALCULATIONS. THE PARKING STUDY WAS APPROVED BY DPZ ON FEBRUARY 8, 2013.
- SHARED PARKING AGREEMENT BETWEEN WINOCOPIN II, INC. (NOW COLUMBIA MALL, INC.) RECORDED IN LIBER CMP NO. 526, FOLIO 136.

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
18	10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044

SHEET INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS
3	DEMOLITION PLAN
4	DEMOLITION PLAN AT ENTRANCE AND LOADING DOCK
5	SITE PLAN
6	SITE DETAILS
7	STORM DRAIN DRAINAGE AREAS AND SOILS MAP
8	GRADING AND UTILITY PLAN
9	GRADING AND UTILITY PLAN AT ENTRANCE AND LOADING DOCK
10	UTILITY PROFILES
11	EXISTING CONDITIONS SEDIMENT AND EROSION CONTROL PLAN
12	PROPOSED CONDITIONS SEDIMENT AND EROSION CONTROL PLAN
13	SEDIMENT AND EROSION CONTROL DRAINAGE AREA MAPS
14	SEDIMENT AND EROSION CONTROL NOTES AND SEQUENCE OF CONSTRUCTION
15	SEDIMENT AND EROSION CONTROL DETAILS
16	MICRO-BIORETENTION PROFILES AND DETAILS
17	ESD PLANTING PLAN & GENERAL & SOIL BORINGS
18	PROPOSED ESD DRAINAGE AREA MAP
19	PLANTING PLAN
20	PLANTING DETAILS
21	SITE LIGHTING

PURPOSE STATEMENT:
THIS SITE DEVELOPMENT PLAN WAS REVISED TO:

- RENOVATE THE EXISTING BUILDING TO ACCOMMODATE A GROCERY STORE, OFFICE SPACE, AND AN ATHLETIC FACILITY.
- MODIFY EXISTING PARKING LOTS, LANDSCAPING, AND UTILITY INFRASTRUCTURE TO APPROPRIATELY SERVE NEW RENOVATION.
- PROVIDE NEW STORMWATER MANAGEMENT ESD'S TO TREAT REQUIRED STORMWATER RUNOFF.

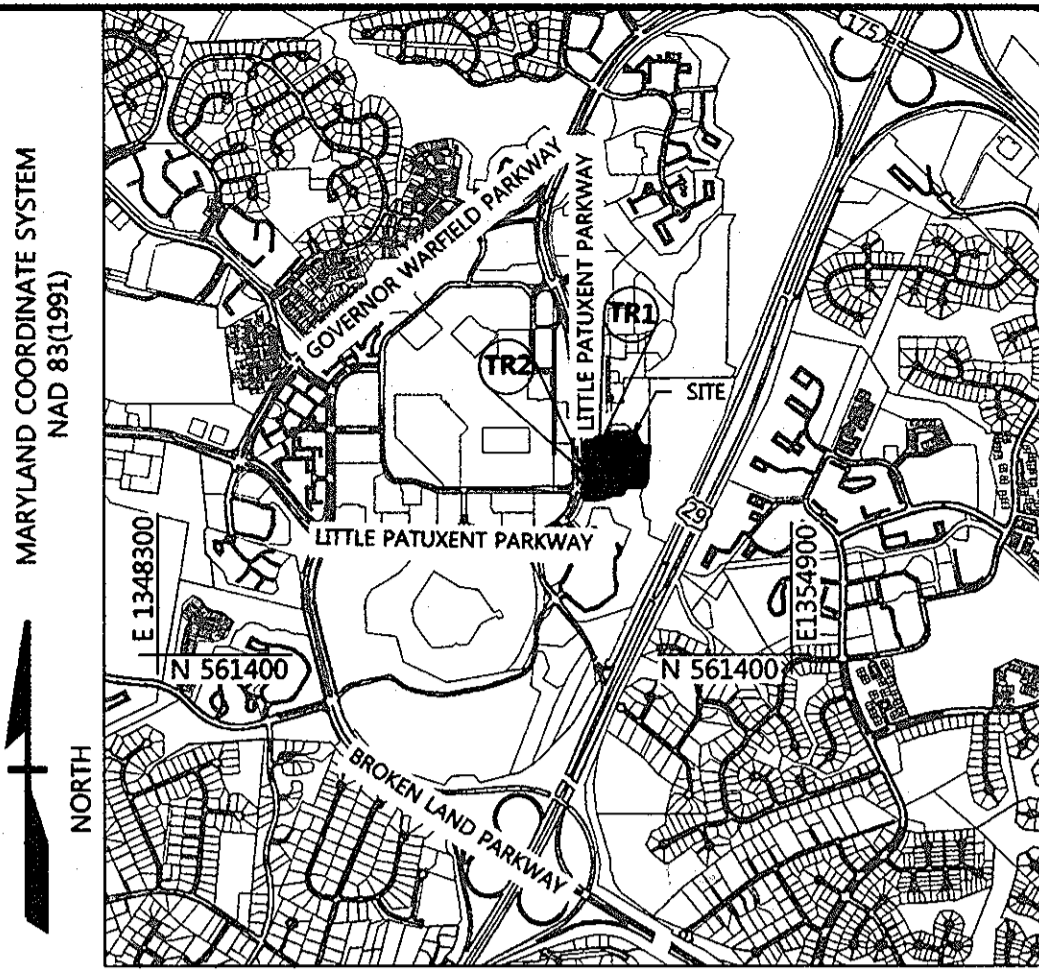
PROFESSIONAL CERTIFICATION

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. 16228 EXPIRATION DATE: 3/13/14

CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S

3/21/13
Date

Professional Engr. No. 16228



BENCHMARK

DESCRIPTION	
TR1	
N	563276.1160
E	1352898.1210
ELEV	=331.740
TR2	
N	563266.5240
E	1352763.6090
ELEV	=336.40

DATA SOURCES:

- EXISTING TOPOGRAPHIC INFORMATION SHOWN HEREON REFLECTS THE RESULT A TOPOGRAPHIC SURVEY PERFORMED BY DMW, INC. ON JULY 24, 2012.
- PROPERTY LINES SHOWN HEREON ARE BASED UPON THE RESULTS OF ALTA SURVEY DATED 08/31/12.
- ADJOINING PROPERTY INFORMATION REFERENCED FROM HOWARD COUNTY, MARYLAND PROPERTY FINDER DATED 2010.

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COLUMBIA, TOWN CENTER	1	PARCEL 321, LOT 18
PB.23, P.86	GRID # 2	ZONING NT
TAX MAP NO. 36	ELECT. DIST. 5TH	CENSUS TRACT 6054.02

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE MARCH 7, 2013

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Kat Beal
CHIEF, DIVISION OF LAND DEVELOPMENT 4/26/13
David Deussen
CHIEF, DEVELOPMENT ENGINEERING DIVISION 4/18/13
Meredith Leight
DIRECTOR 3/26/13

Date	No.	Revision Description
4-1-20-13	1	REDLINE REVISION - ADD SHEETS 22-26
11-28-12		REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C

**REVISED SITE DEVELOPMENT PLAN
THE ROUSE BUILDING
RENOVATION**

OWNER/DEVELOPER:
CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORPORATION
P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
DAFT MCCUNE WALKER INC

200 EAST PENNSYLVANIA TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA		
TAX MAP	36	GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT	5TH	ZONE NT
TITLE		
COVER SHEET		
Des. By	GDT/MCB	Scale AS SHOWN
Proj. No.	11133A	
Drn. By	RLV	Date 3/18/13
1 of 26		
Chk. By	GDT/MCB	Approved

ACRONYMS

- CIP - CAPITAL IMPROVEMENT PROJECT
- CO - COUNTY
- EOP - EDGE OF PAVING
- EX - EXISTING
- ELEV - ELEVATION
- PROP. - PROPOSED
- S.F. - SQUARE FEET
- Typ. - TYPICAL

C/O PROPERTY TAX DEPARTMENT
LOT 49 PARCEL 460
ZONED: NEW TOWN



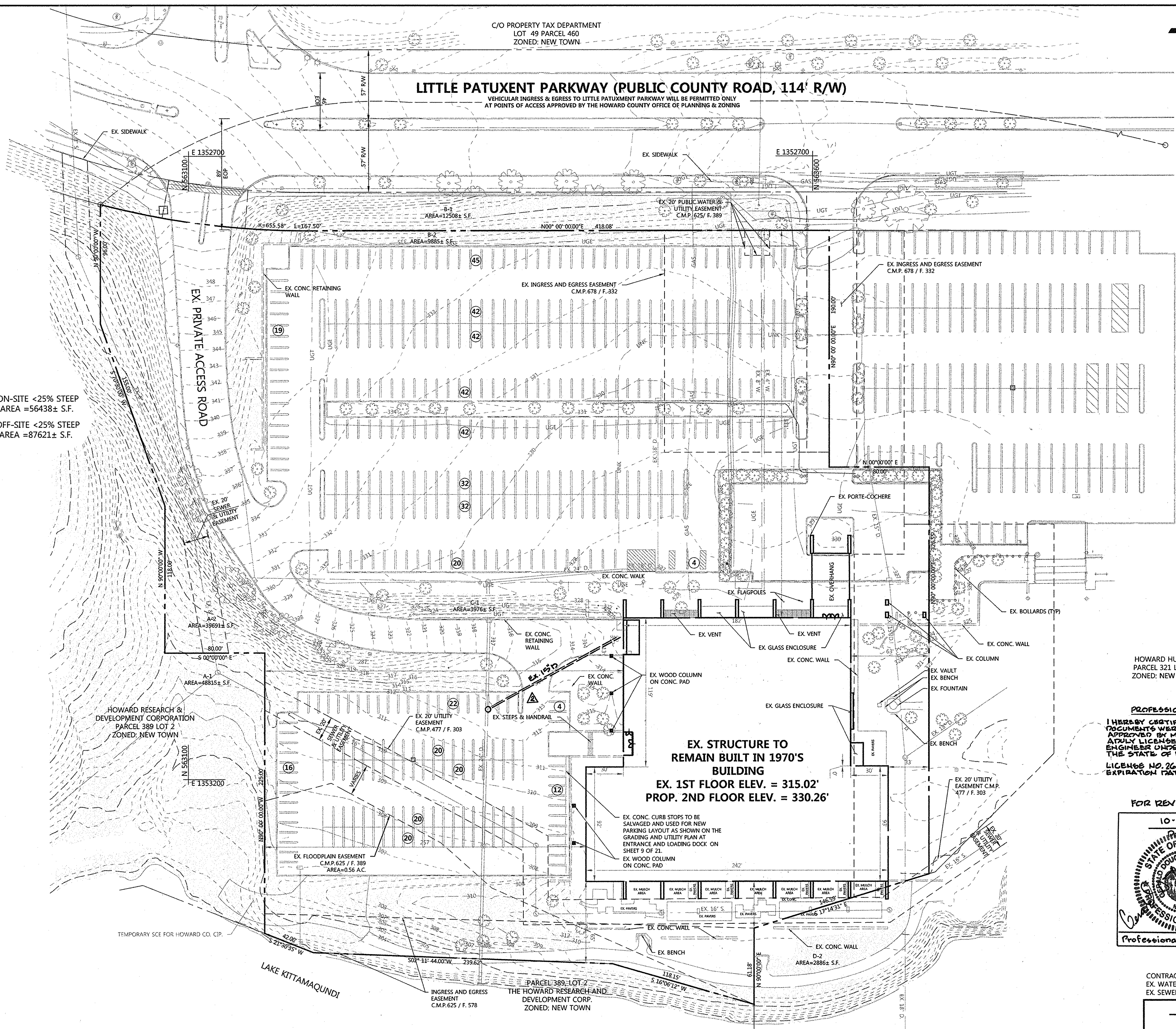
LITTLE PATUXENT PARKWAY (PUBLIC COUNTY ROAD, 114' R/W)

VEHICULAR INGRESS & EGRESS TO LITTLE PATUXENT PARKWAY WILL BE PERMITTED ONLY AT POINTS OF ACCESS APPROVED BY THE HOWARD COUNTY OFFICE OF PLANNING & ZONING

LEGEND

- PROPERTY BOUNDARY
- EX. RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- EX. EASEMENT
- EX. ROADS AND WALKS
- EX. MAJOR CONTOURS
- EX. MINOR CONTOURS
- EX. BUILDING
- EX. TREE
- EX. GROUP LIGHT
- EX. STORM DRAIN
- EX. SANITARY SEWER
- EX. WATER
- EX. UNDERGROUND ELECTRIC
- A-1 AREA=1234 SF
- STEEP SLOPE GREATER THAN 25%

TOTAL ON-SITE <25% STEEP SLOPES AREA =56438± S.F.
TOTAL OFF-SITE <25% STEEP SLOPES AREA =87621± S.F.

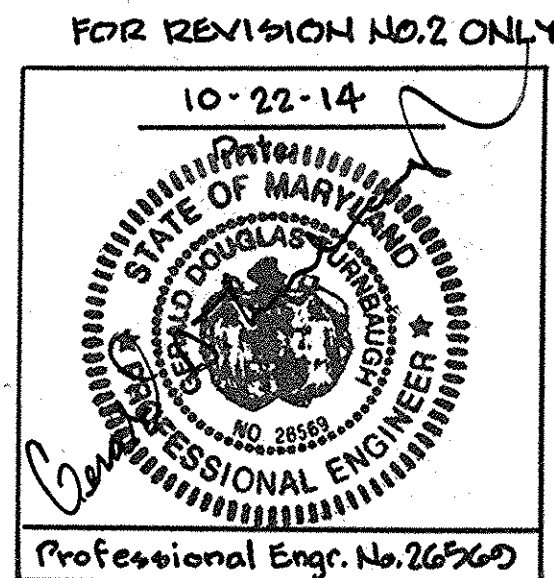


HOWARD RESEARCH & DEVELOPMENT CORPORATION
PARCEL 389 LOT 2
ZONED: NEW TOWN

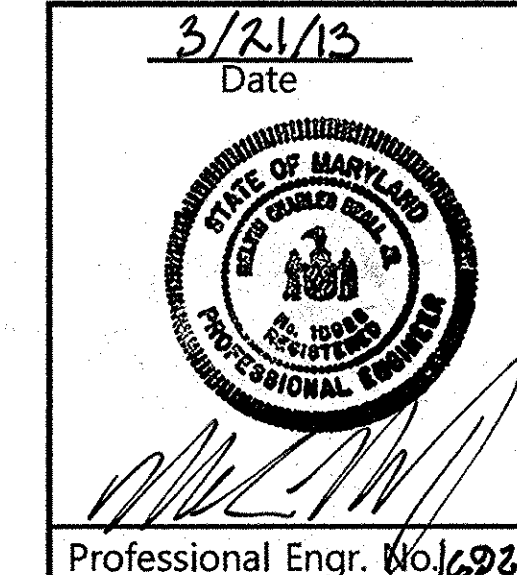
HOWARD HUGHES
PARCEL 321 LOT 17
ZONED: NEW TOWN

EX. STRUCTURE TO REMAIN BUILT IN 1970'S BUILDING
EX. 1ST FLOOR ELEV. = 315.02'
PROP. 2ND FLOOR ELEV. = 330.26'

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. 26260
EXPIRATION DATE 7-18-19



CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S



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. 26260
EXPIRATION DATE: 5/13/14

APPROVED PLANNING BOARD OF HOWARD COUNTY	
DATE	MARCH 7, 2013
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
CHIEF, DIVISION OF LAND DEVELOPMENT	4/26/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION	4/18/13
DIRECTOR	4/26/13
10-22-14	SHOW EX. DRAIN M&E PIPE, UPDATE SHEET #
11-28-12	REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C
Date	No. Revision Description
REVISED SITE DEVELOPMENT PLAN	
THE ROUSE BUILDING RENOVATION	
OWNER/DEVELOPER: CLOVER ACQUISITIONS LLC C/O THE HOWARD HUGHES CORPORATION P.O. BOX 833 COLUMBIA, MD 21044-0833	
DMW DAFT MCCUNE WALKER INC 200 EAST PENNSYLVANIA TOWNSHIP, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS	
AREA	TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT 5TH	ZONE NT
TITLE EXISTING CONDITIONS	
Des. By	GDT/MCB Scale 1"=40'
Drn. By	RLV Date 3/19/13
Proj. No.	11133.A
2 of 24	

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LITTLE PATUXENT PARKWAY (PUBLIC COUNTY ROAD, 114' R/W)

VEHICULAR INGRESS & EGRESS TO LITTLE PATUXENT PARKWAY WILL BE PERMITTED ONLY AT POINTS OF ACCESS APPROVED BY THE HOWARD COUNTY OFFICE OF PLANNING & ZONING

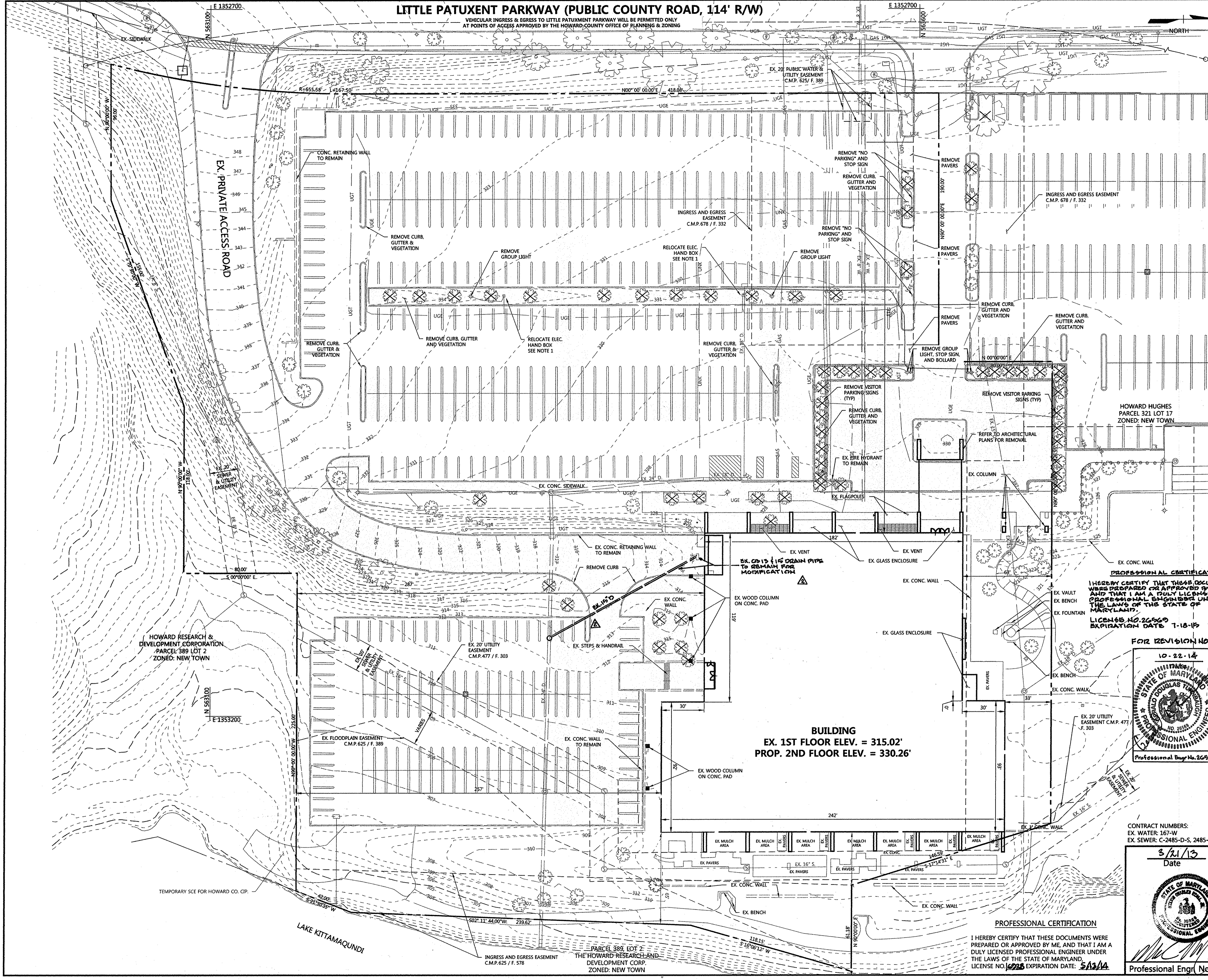
LEGEND

- PROPERTY BOUNDARY
- EX. RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- EX. EASEMENT
- EX. ROADS AND WALKS
- EX. MAJOR CONTOURS
- EX. MINOR CONTOURS
- EX. BUILDING
- REMOVAL LIMITS
- EX. TREE
- EX. GROUP LIGHT
- EX. STORM DRAIN
- EX. SANITARY SEWER
- EX. WATER
- EX. UNDERGROUND ELECTRIC
- EX. STORM DRAIN
- EX. UNDERGROUND GAS
- EX. UNDERGROUND TELEPHONE

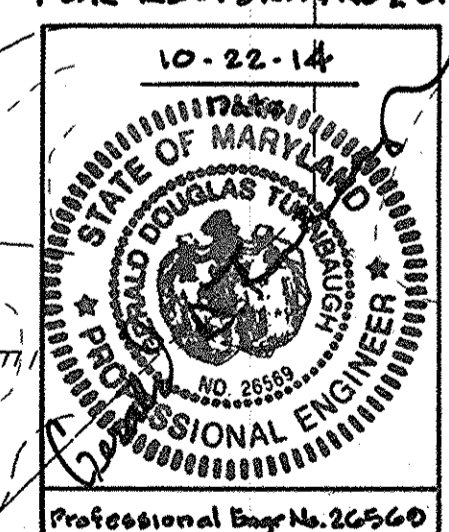
ACRONYMS

- CIP - CAPITAL IMPROVEMENT PROJECT
- CO - COUNTY
- EX. - EXISTING
- TYP. - TYPICAL

NOTES:
1. RELOCATE ELECTRICAL HAND BOXES PER LIGHTING PLAN SHEET 21 OF 21.

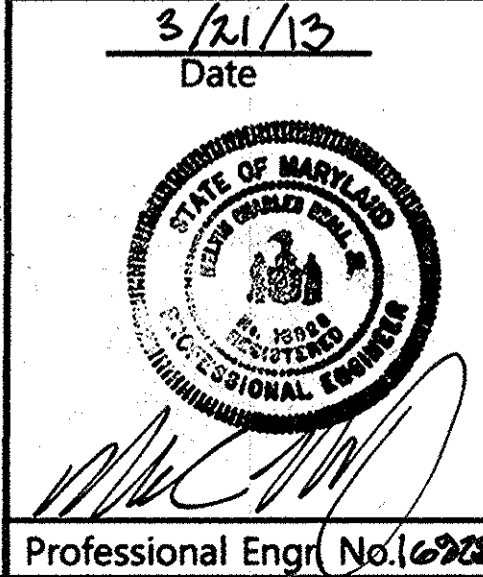


PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 20560
EXPIRATION DATE 7-18-15



BUILDING
EX. 1ST FLOOR ELEV. = 315.02'
PROP. 2ND FLOOR ELEV. = 330.26'

CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S

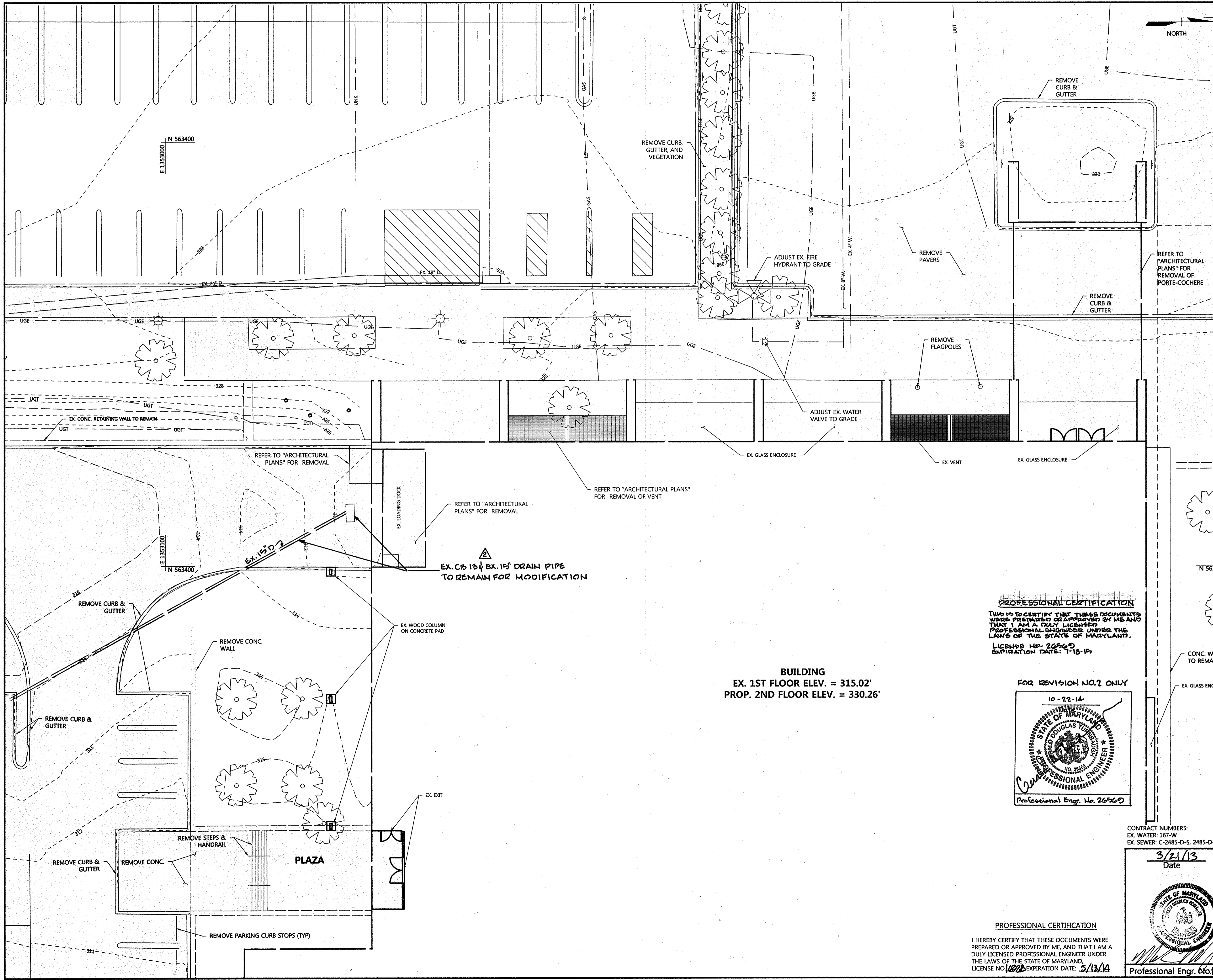


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LICENSE NO. 10228
EXPIRATION DATE: 5/21/14

APPROVED PLANNING BOARD OF HOWARD COUNTY	
DATE	MARCH 7, 2013
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
CHIEF, DIVISION OF LAND DEVELOPMENT	4/24/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION	4/18/13
DIRECTOR	4/24/13
FOR REVISION NO 2 ONLY	
10-22-14	SHOW EX. CO-15 INLET & 18" PIPE TO REMAIN
11-28-12	REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C
Date	No.
Revision Description	
REVISED SITE DEVELOPMENT PLAN	
THE ROUSE BUILDING RENOVATION	
OWNER/DEVELOPER: CLOVER ACQUISITIONS LLC C/O THE HOWARD HUGHES CORPORATION P.O. BOX 833 COLUMBIA, MD 21044-0833	
DMW DAFT MCCUNE WALKER INC 200 EAST PENNSYLVANIA TOWNSHIP, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS	
AREA	TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT 5TH	ZONE NT
TITLE DEMOLITION PLAN	
Des. By	GDT/MCB
Scale	1"=30'
Proj. No.	11133.A
Drn. By	RLV
Date	3/19/13
3 of 24	
Chk. By	GDT/MCB
Approved	

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LEGEND

- PROPERTY BOUNDARY
- - - EX. RIGHT OF WAY
- - - ADJACENT PROPERTY BOUNDARY
- - - EX. EASEMENT
- - - EX. ROADS AND WALKS
- - - 330 EX. MAJOR CONTOURS
- - - 329 EX. MINOR CONTOURS
- EX. BUILDING
- ⊗ EX. TREE
- ⊙ EX. GROUP LIGHT
- ⊕ EX. WATER
- ⊖ EX. UGE
- ⊘ EX. UNDERGROUND ELECTRIC
- ⊙ UNK EX. UNDERGROUND UNKNOWN
- ⊙ EX. 18" D. EX. STORM DRAIN
- ⊙ EX. GAS
- ⊙ EX. UGT EX. UNDERGROUND TELEPHONE

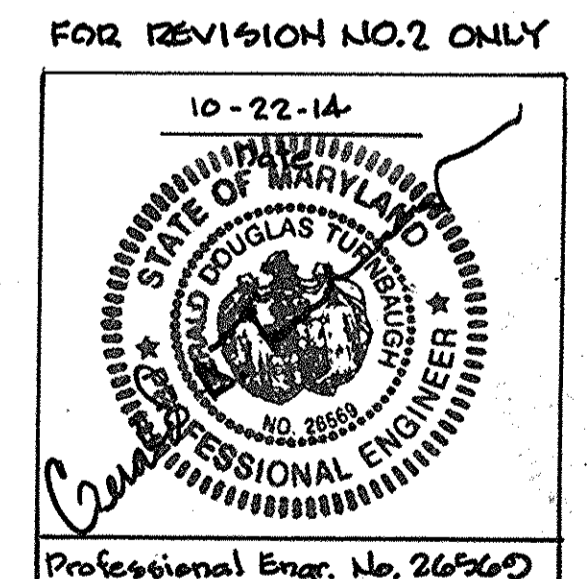
REMOVAL LIMITS

ACRONYMS

- CIP - CAPITAL IMPROVEMENT PROJECT
- CO - COUNTY
- EX - EXISTING
- TYP. - TYPICAL

BUILDING
 EX. 1ST FLOOR ELEV. = 315.02'
 PROP. 2ND FLOOR ELEV. = 330.26'

PROFESSIONAL CERTIFICATION
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 LICENSE NO. 26560
 EXPIRATION DATE: 7-18-15



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 16928 EXPIRATION DATE: 5/13/14

CONTRACT NUMBERS:
 EX. WATER: 167-W
 EX. SEWER: C-2485-D-S, 2485-D-W&S
 3/21/13
 Date



APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE MARCH 7, 2013

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

[Signature] 4/26/13
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 [Signature] 4/18/13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 [Signature] 4/24/13
 DIRECTOR DATE

10-22-14 SHOW EX. CPD INLET & PIPE TO REMAIN
 11-28-12 REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C

Date	No.	Revision Description
		REVISED SITE DEVELOPMENT PLAN

THE ROUSE BUILDING RENOVATION

OWNER/DEVELOPER:
 CLOVER ACQUISITIONS LLC
 C/O THE HOWARD HUGHES CORPORATION
 P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
 DAFT MCCUNE WALKER INC
 200 EAST PENNSYLVANIA TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
 A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA
 TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
 ELECTION DISTRICT 5TH ZONE NT

TITLE
DEMOLITION PLAN AT ENTRANCE AND LOADING DOCK

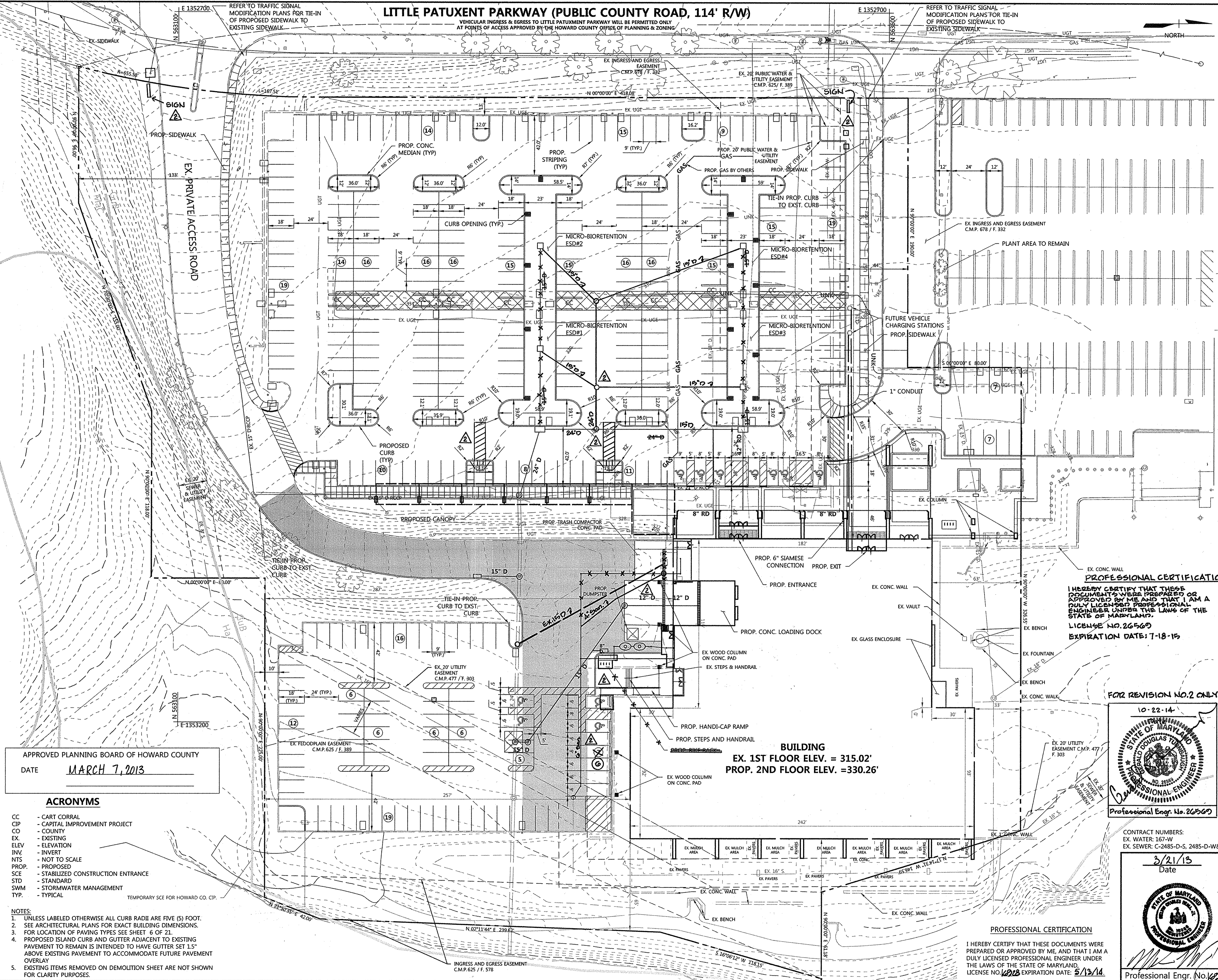
Des. By	GDT/MCB	Scale	1"=10'	Proj. No.	11133.A
Drn. By	RLV	Date	3/19/13		
Professional Engr.	61016928	Chk. By	GDT/MCB	Approved	

4 of 254

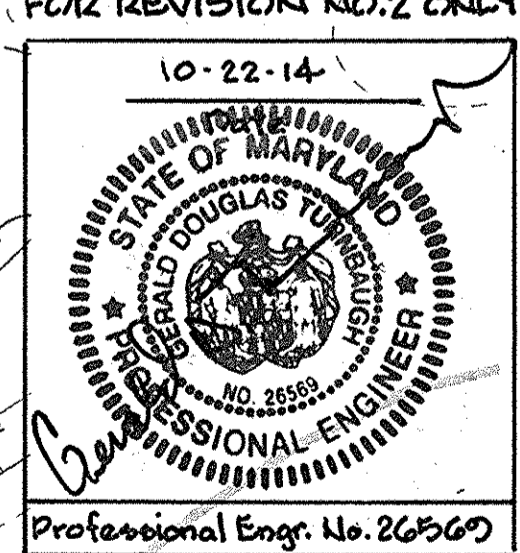
LITTLE PATUXENT PARKWAY (PUBLIC COUNTY ROAD, 114' R/W)

VEHICULAR INGRESS & EGRESS TO LITTLE PATUXENT PARKWAY WILL BE PERMITTED ONLY AT POINTS OF ACCESS APPROVED BY THE HOWARD COUNTY OFFICE OF PLANNING & ZONING

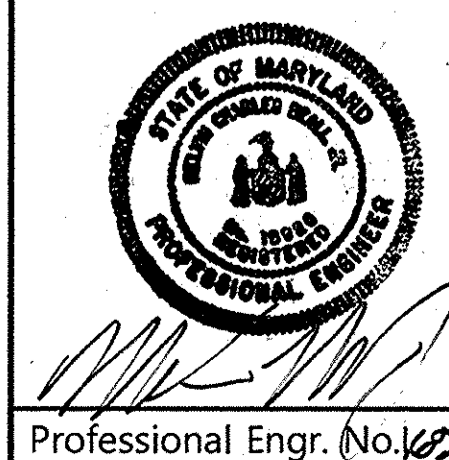
LEGEND	
	PROPERTY BOUNDARY
	EX. RIGHT OF WAY
	ADJACENT PROPERTY BOUNDARY
	EX. EASEMENT
	EX. ROADS AND WALKS
	EX. MAJOR CONTOURS
	EX. MINOR CONTOURS
	EX. SOILS
	EX. BUILDING
	EX. GRAVEL
	EX. TREE
	EX. GROUP LIGHT
	EX. STORM DRAIN
	EX. SANITARY SEWER
	EX. WATER
	EX. UNDERGROUND ELECTRIC
	EX. STORM DRAIN
	EX. UNDERGROUND UNKNOWN
	EX. UNDERGROUND GAS
	EX. UNDERGROUND TELEPHONE
	PROP. MAJOR CONTOURS
	PROP. MINOR CONTOURS
	PROP. CURB/EDGE OF PAVING
	PROP. DEPRESSED CURB
	PROP. REVERSE SLOPE CURB
	PROP. STORM DRAIN
	PROP. SEWER
	PROP. UNDERGROUND GAS
	PROP. PARKING SPACE COUNT
	PROP. HEAVY DUTY PAVING
	PROP. PARKING AREA PAVING
	CART CORRAL
	PROP. LIGHT LUMINARIES REFER TO SITE LIGHTING ON SHEET 21 OF 21



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 26560
 EXPIRATION DATE: 7-18-15



CONTRACT NUMBERS:
 EX. WATER: 167-W
 EX. SEWER: C-2485-D-S, 2485-D-W&S
 Date: 3/21/13



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. 10218 EXPIRATION DATE: 5/13/14

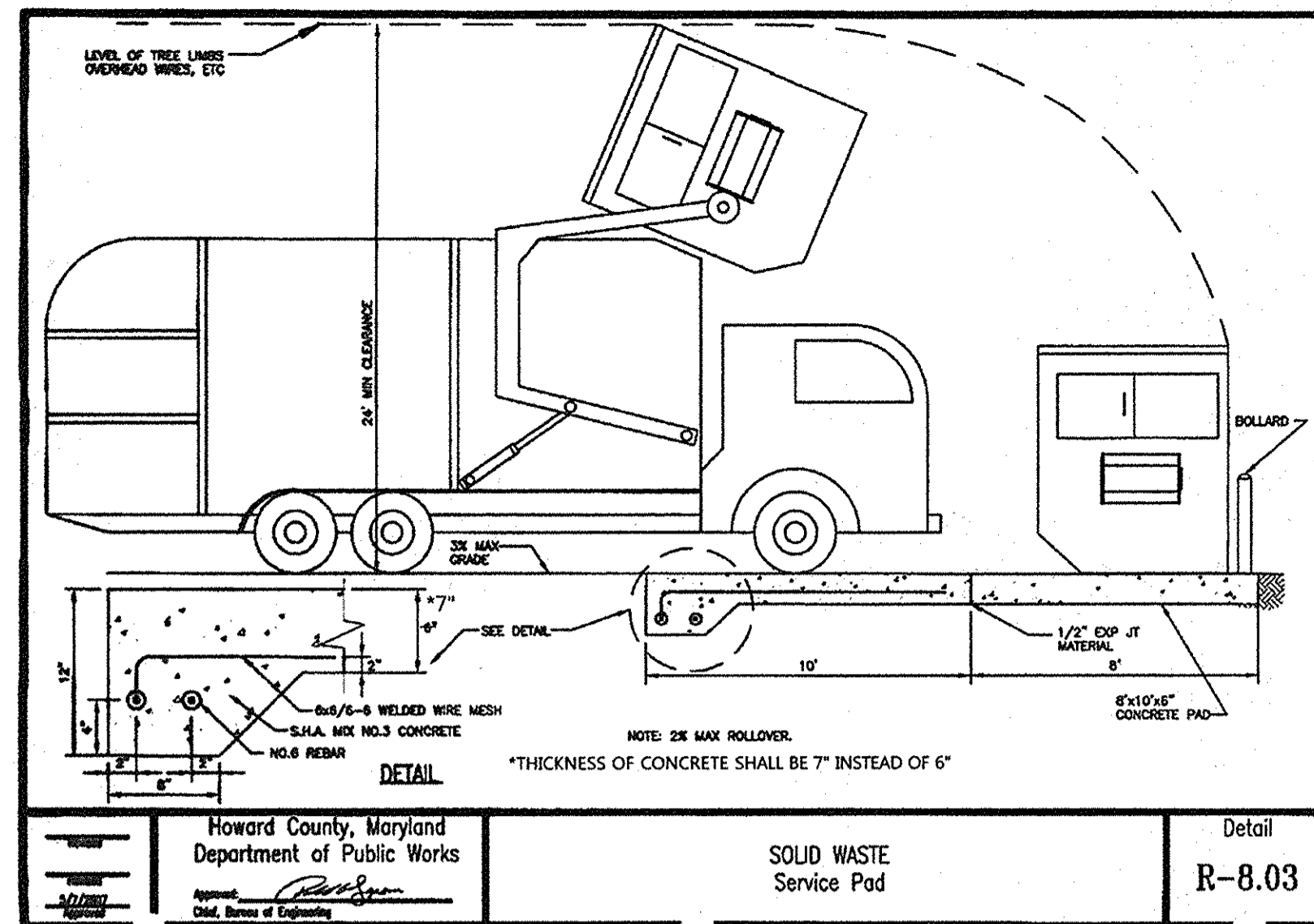
APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE: MARCH 7, 2013

- ACRONYMS**
- CC - CART CORRAL
 - CIP - CAPITAL IMPROVEMENT PROJECT
 - CO - COUNTY
 - EX - EXISTING
 - ELEV - ELEVATION
 - INV - INVERT
 - NTS - NOT TO SCALE
 - PROP. - PROPOSED
 - SCE - STABILIZED CONSTRUCTION ENTRANCE
 - STD - STANDARD
 - SWM - STORMWATER MANAGEMENT
 - TYP. - TYPICAL

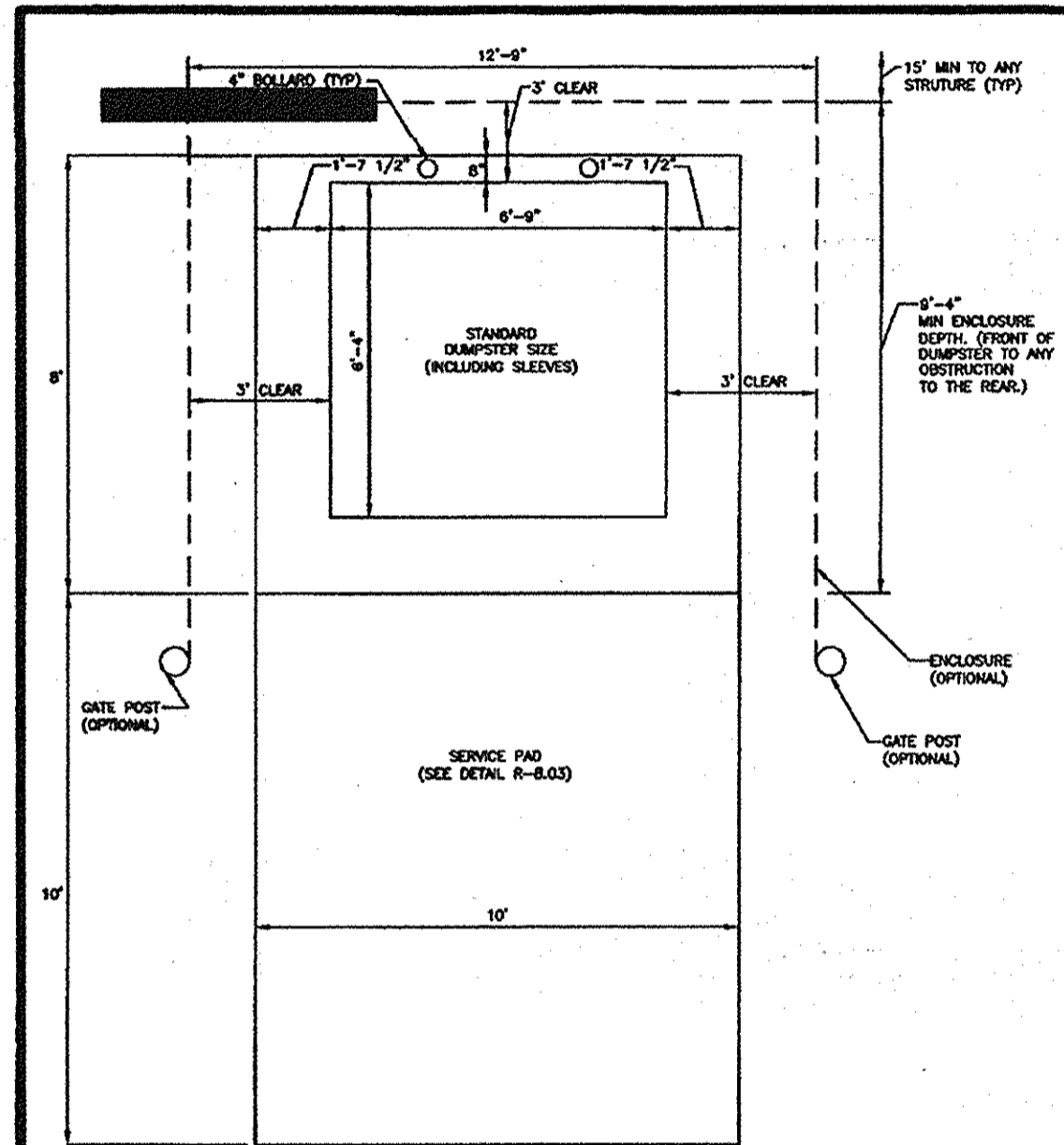
- NOTES:**
- UNLESS LABELED OTHERWISE ALL CURB RADII ARE FIVE (5) FOOT.
 - SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
 - FOR LOCATION OF PAVING TYPES SEE SHEET 6 OF 21.
 - PROPOSED ISLAND CURB AND GUTTER ADJACENT TO EXISTING PAVEMENT TO REMAIN IS INTENDED TO HAVE GUTTER SET 1.5" ABOVE EXISTING PAVEMENT TO ACCOMMODATE FUTURE PAVEMENT OVERLAY
 - EXISTING ITEMS REMOVED ON DEMOLITION SHEET ARE NOT SHOWN FOR CLARITY PURPOSES.

10-22-14		Also Show Revised Cart Bays, Ex. Signs & Parking Spaces	
Date	No.	Revision	Description
			APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
			CHIEF, DIVISION OF LAND DEVELOPMENT
			CHIEF, DEVELOPING ENGINEERING DIVISION
			DIRECTOR
10-22-14			SHOW REVISED DRAINS, SANITARY SEWER
11-28-12			REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C
REVISED SITE DEVELOPMENT PLAN			
THE ROUSE BUILDING RENOVATION			
OWNER/DEVELOPER: CLOVER ACQUISITIONS LLC C/O THE HOWARD HUGHES CORPORATION P.O. BOX 833 COLUMBIA, MD 21044-0833			
DMW DAFT MCCUNE WALKER INC 200 EAST PENNSYLVANIA TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS			
AREA TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18 ELECTION DISTRICT 5TH ZONE NT			
TITLE SITE PLAN			
Des. By	GDT/MCB	Scale	1"=30'
Drn. By	RLV	Date	3/19/13
Chk. By	GDT/MCB	Approved	
Professional Engr. (No. 10218)		Proj. No. 11133.A	
		5 of 24	

A:\11133\11133.A0\ENGR\CAD FILES\SHEET FILES\11133_SF01.DWG Tue, Mar 19, 2013



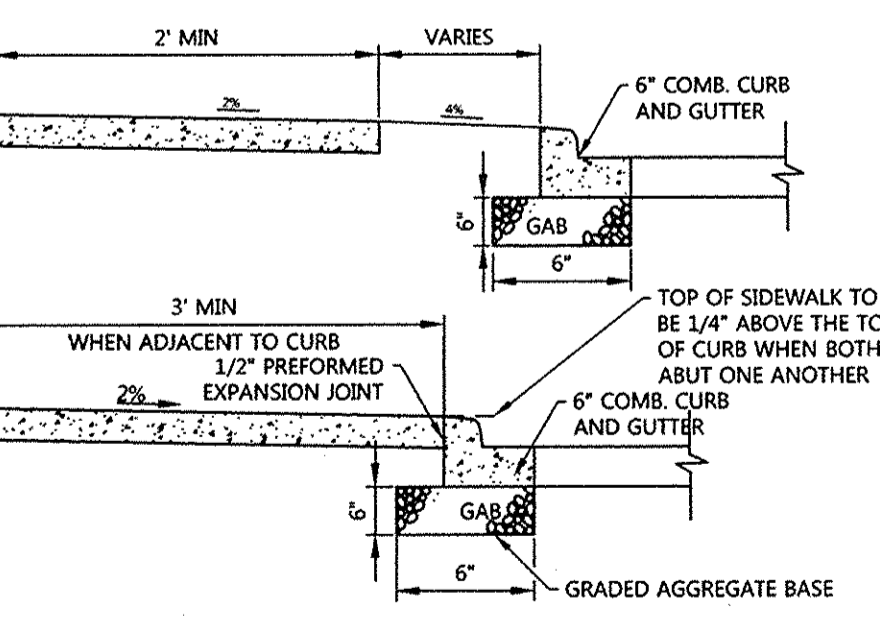
Howard County, Maryland
Department of Public Works
SOLID WASTE
Service Pad
Detail
R-8.03



NOTES:
1. ENCLOSURE GATES ARE NOT RECOMMENDED.
2. IF ENCLOSURE GATES ARE INSTALLED, MINIMUM OPENING OF 12'-0" MUST BE MAINTAINED WHEN GATES ARE SECURED OPEN.
3. A MINIMUM OF 15' CLEAR SPACE SHALL BE PROVIDED FROM THE ENCLOSURE TO ANY STRUCTURE.

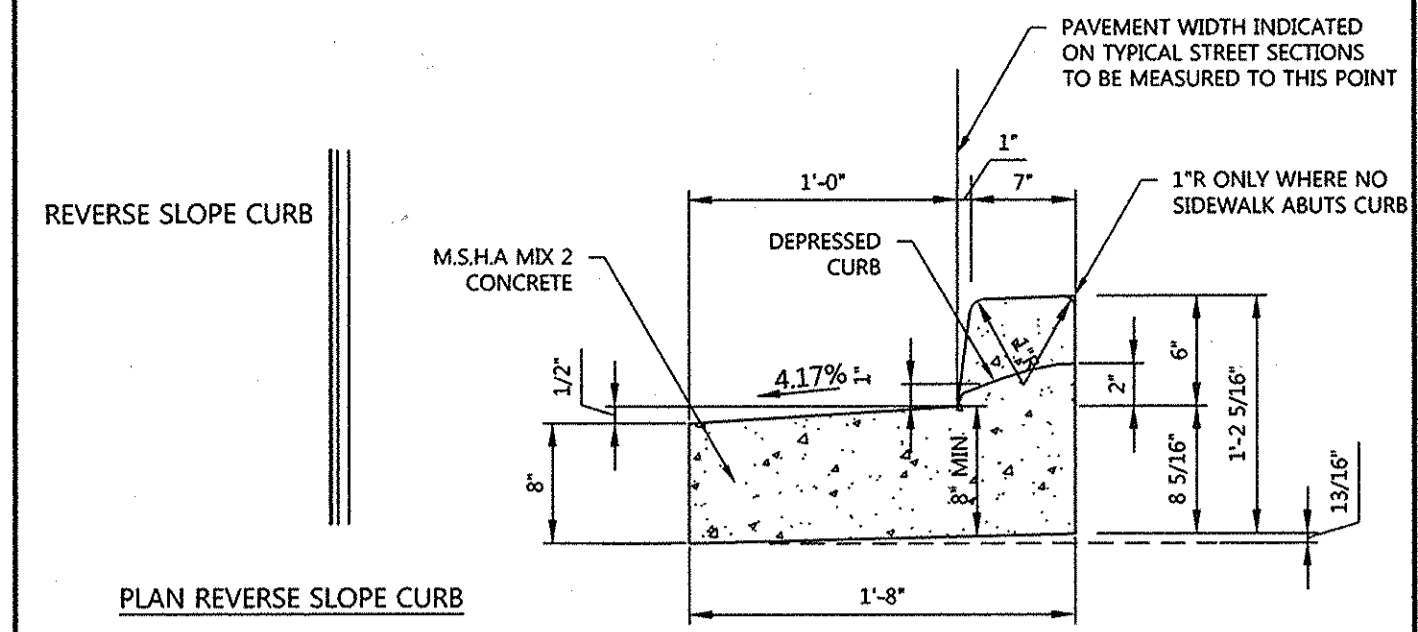
Howard County, Maryland
Department of Public Works
SOLID WASTE
Single Container Enclosure
Detail
R-8.04

A 6 **LOADING DOCK, SERVICE PAD AND DUMPSTER BIN**
NOT TO SCALE

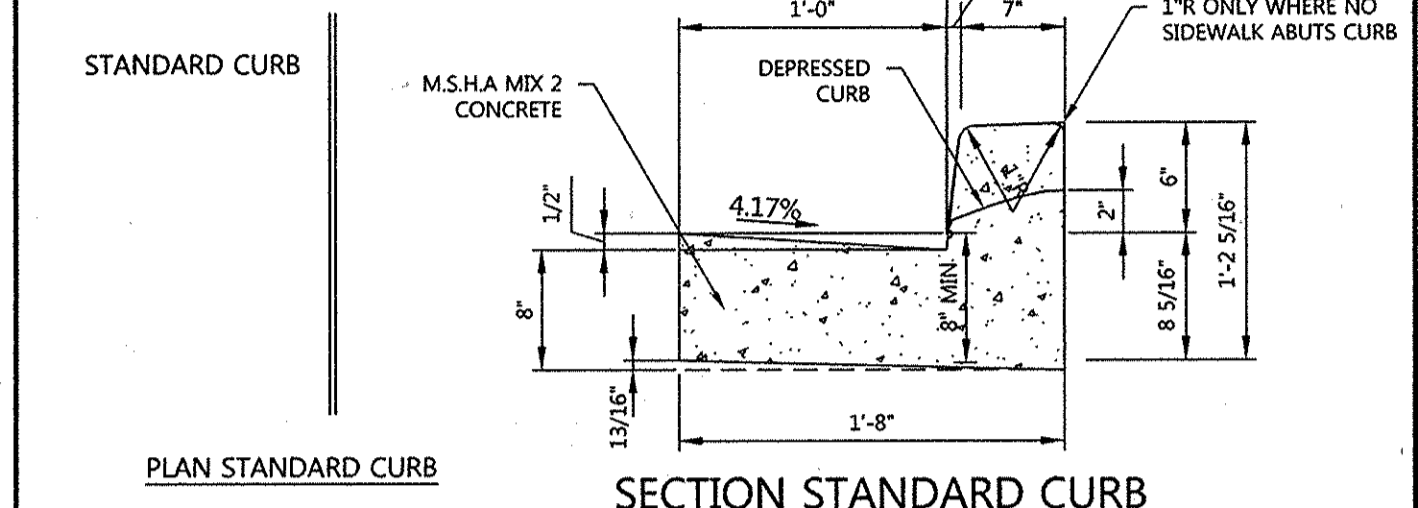


NOTES:
1. SIDEWALK TO BE SCRIBED IN 5'-0" MAXIMUM SQUARES.
2. EXPANSION JOINTS ACROSS SIDEWALK NOT TO BE MORE THAN 15' APART.
3. 1/2" PREFORMED EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 3/4" BELOW SURFACE OF SIDEWALK.
4. CONCRETE TO BE MIX NO.3
5. WHEN SIDEWALK ABUTS CURB, SIDEWALK SHALL BE 1/2" ABOVE CURB WITH 1/2" PREFORMED EXPANSION JOINT BETWEEN SIDEWALK AND CURB.
6. ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 48 FEET. THE HEADERS SHALL BE PLACED AT THE EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.
7. 4" SIDEWALK REQUIRES A PASSING AREA (SEE HO.CO.STD. DETAIL R-4-01)
8. SEE SITE PLAN FOR PROPOSED SIDEWALK WIDTHS.

I 6 **CONCRETE SIDEWALK**
NOT TO SCALE

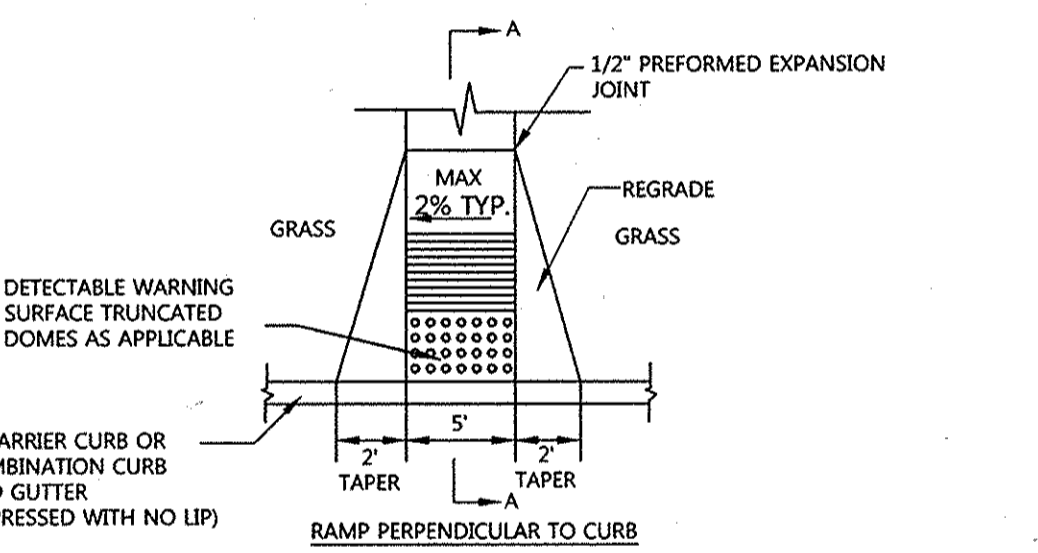
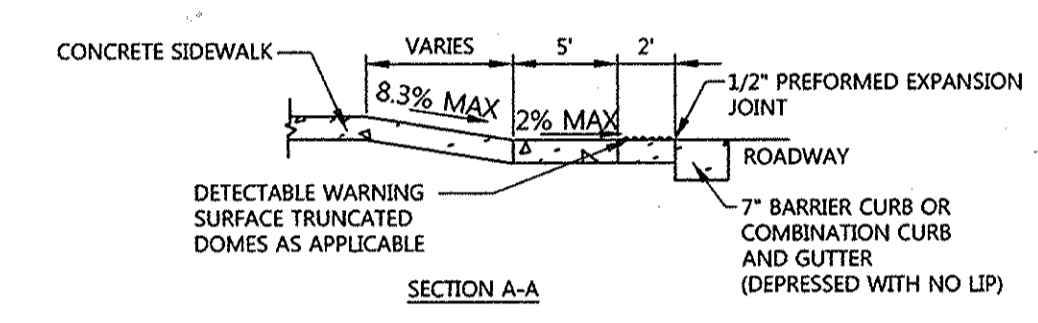


SECTION REVERSE CURB



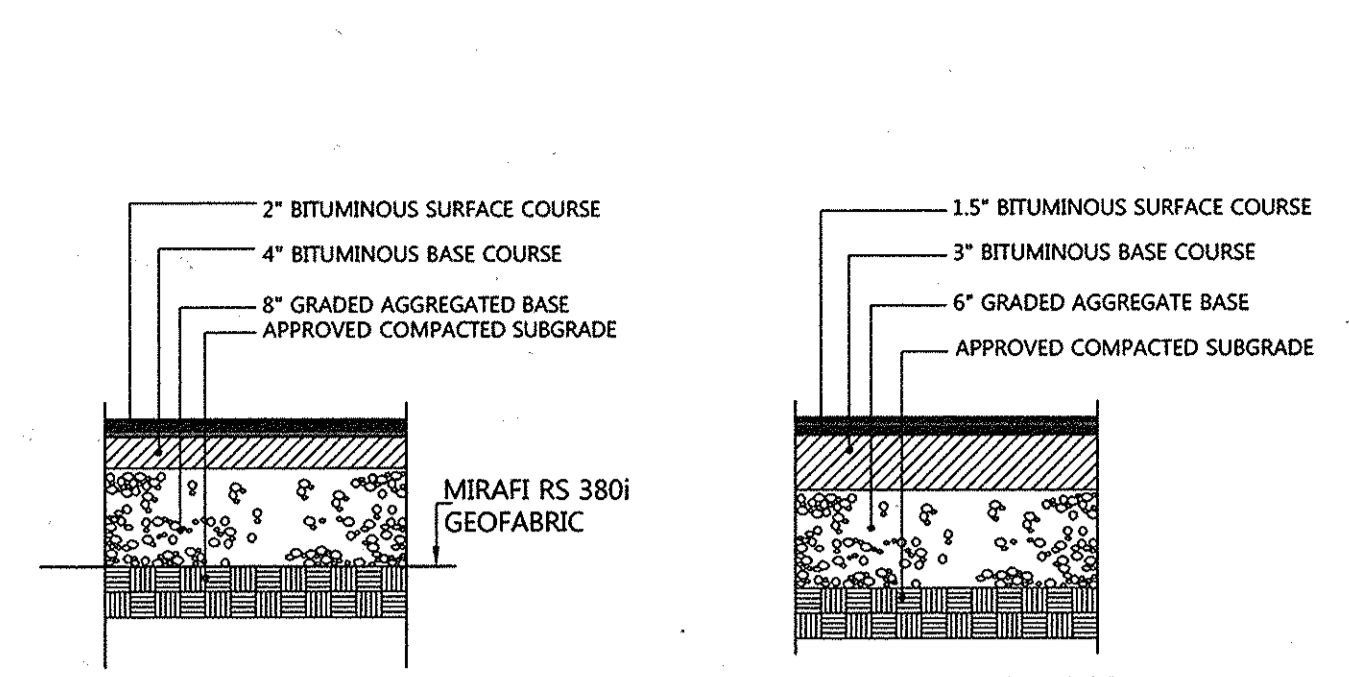
SECTION STANDARD CURB

B 6 **6" COMBINATION CURB & GUTTER**
NOT TO SCALE



NOTES:
1. ALL RAMPS SHALL HAVE A WARNING TEXTURE EXTENDING THE FULL WIDTH AND DEPTH OF RAMP (SEE HO. CO. STD. DETAIL R-4-07).
2. GRASS AREA ADJACENT TO SIDEWALK MUST BE SLOPED TO MEET RAMP.
3. 4" SIDEWALK REQUIRES PASSING AREA (SEE HO. CO. STD. DETAIL R-4-07).
4. SEE PLAN FOR SPECIFIC SPOT GRADES.

G 6 **SIDEWALK RAMP - TYPE 'A'**
NOT TO SCALE

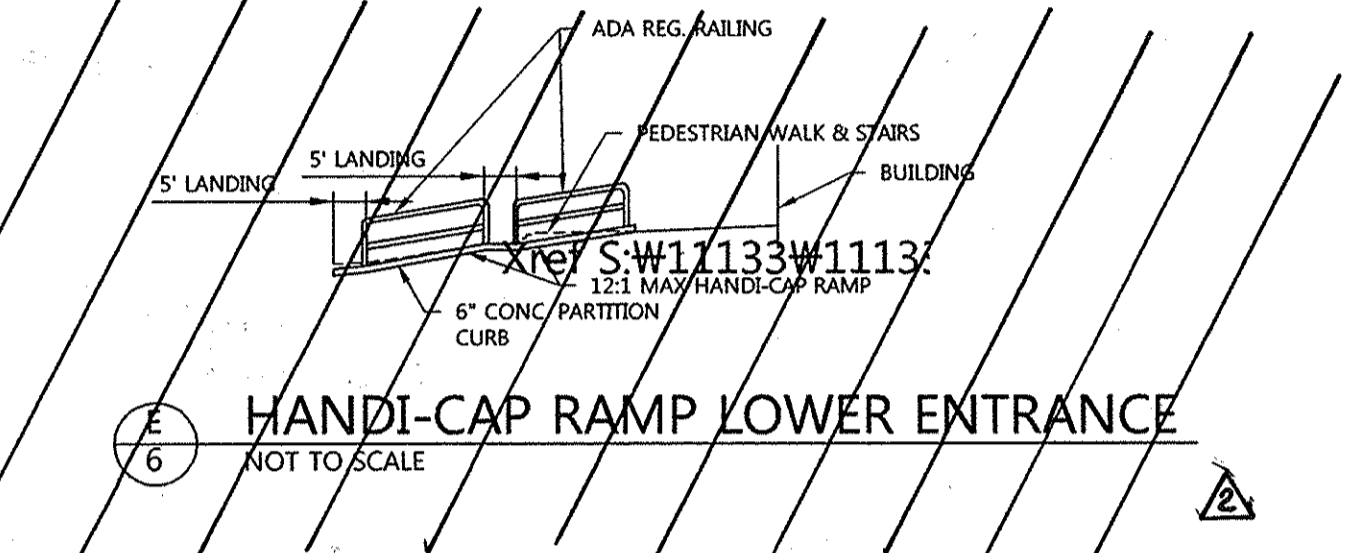


HEAVY DUTY PAVING
(FOR THE ENTRANCEWAYS AND TRAVEL LANES SUBJECT TO REGULAR HEAVY TRUCK TRAFFIC)

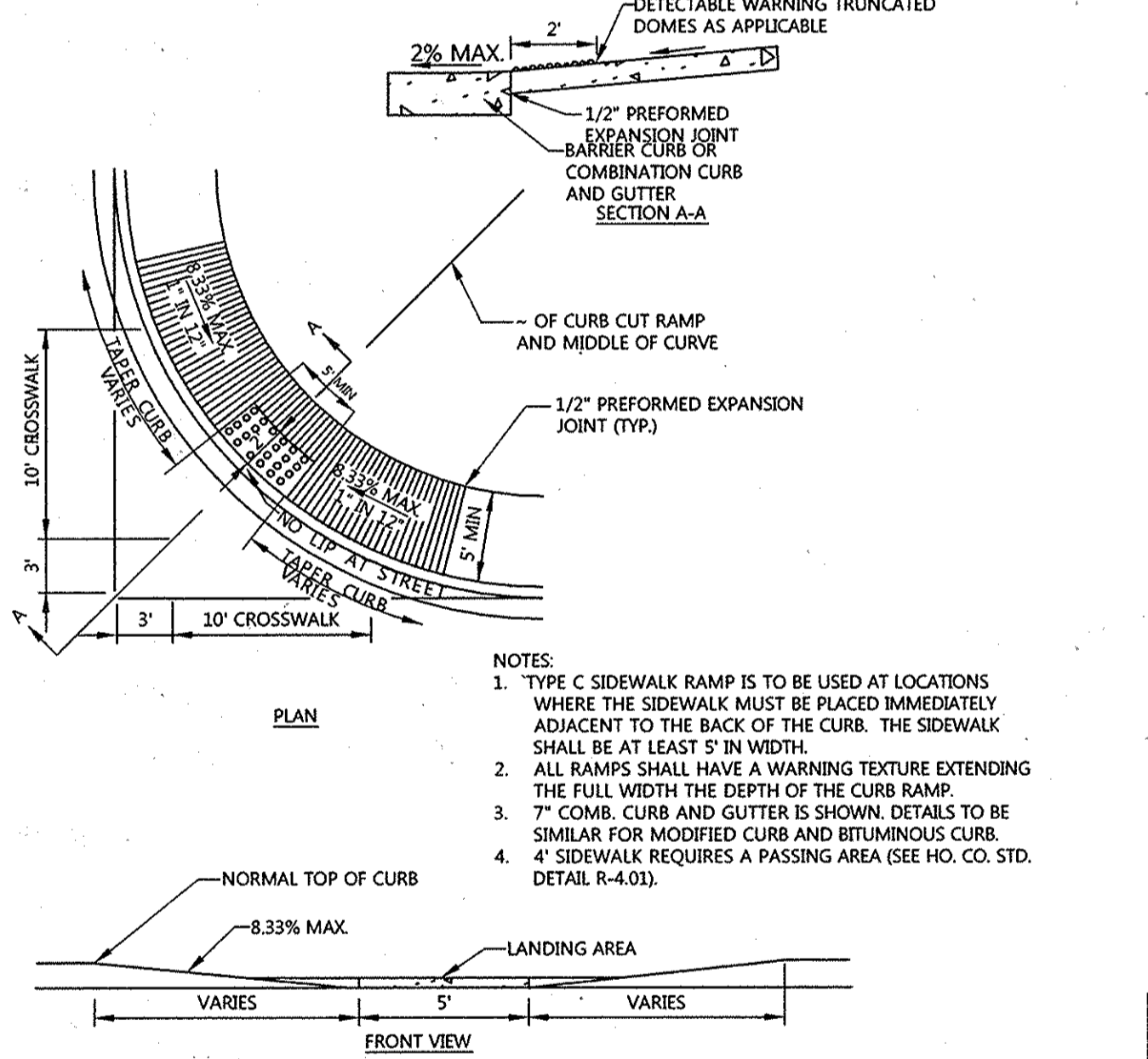
PARKING AREA PAVING
(DRIVE AISLES AND ENTRANCEWAYS SUBJECT TO PASSENGER VEHICLE TRAFFIC, PLUS OCCASIONAL BUS OR DELIVERY BOX TRUCK TRAFFIC)

NOTE:
1. PAVING SECTIONS WERE DESIGNED BY CITI CONSULTING, INC., 7605-D AIRPARK ROAD, GAITHERSBURG, MD, 20879
2. CONTRACTOR TO VERIFY WITH GEOTECHNICAL ENGINEER ON-SITE PRIOR TO PAVING.
3. FOR LOCATION OF PAVING TYPES SEE SITE PLAN.

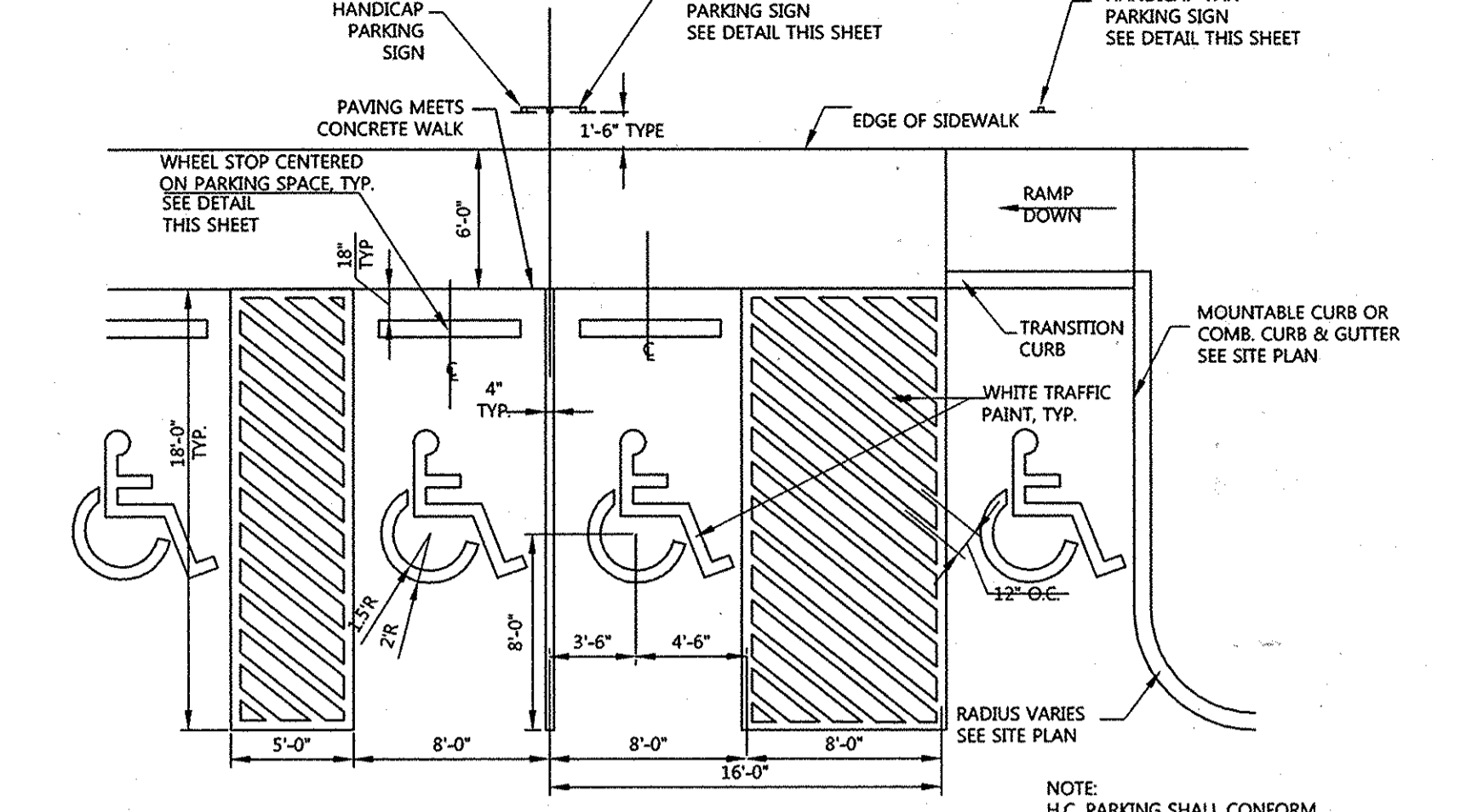
C 6 **PAVING DETAILS**
NOT TO SCALE



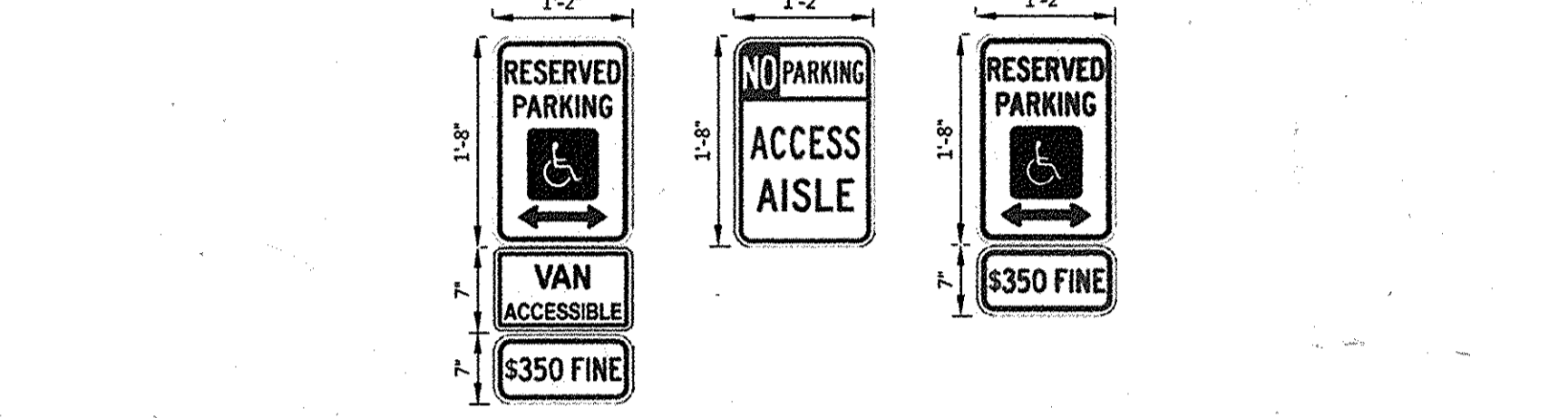
E 6 **HANDI-CAP RAMP LOWER ENTRANCE**
NOT TO SCALE



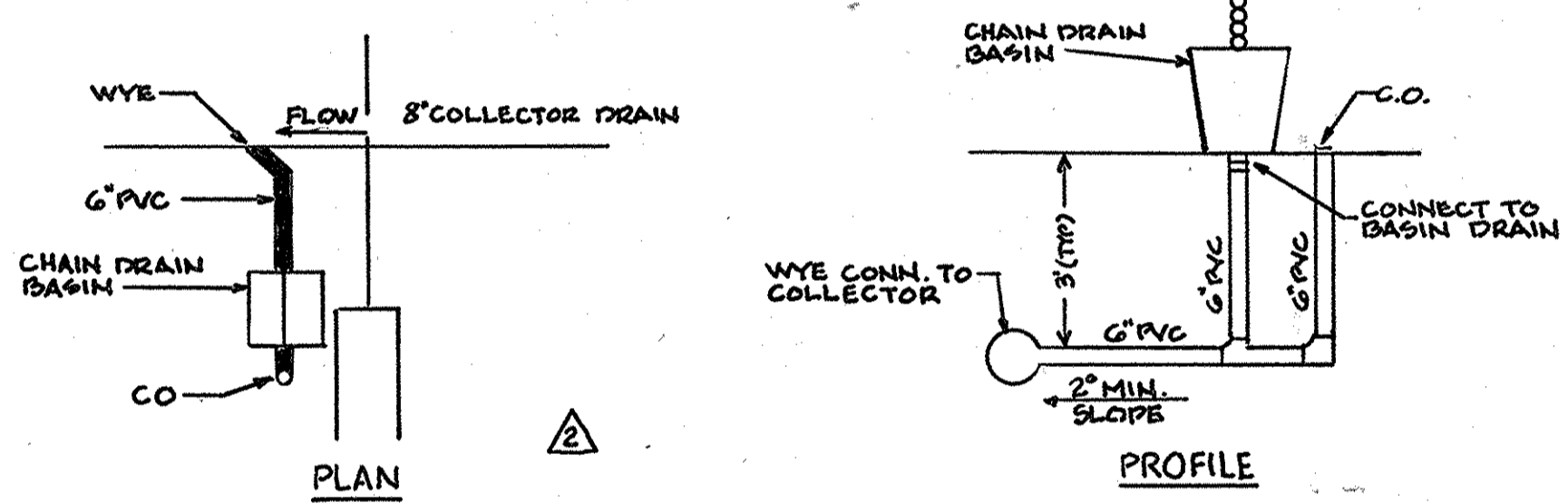
H 6 **SIDEWALK RAMP - TYPE 'C'**
NOT TO SCALE



D 6 **HANDICAP PARKING: VAN & STANDARD**
NOT TO SCALE



F 6 **HANDICAP PARKING SIGN DETAILS**
NOT TO SCALE



N 6 **ROOF DRAIN CHAIN DRAIN DETAIL**
NOT TO SCALE

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 26560
EXPIRATION DATE: 7-18-15

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE MARCH 7, 2013

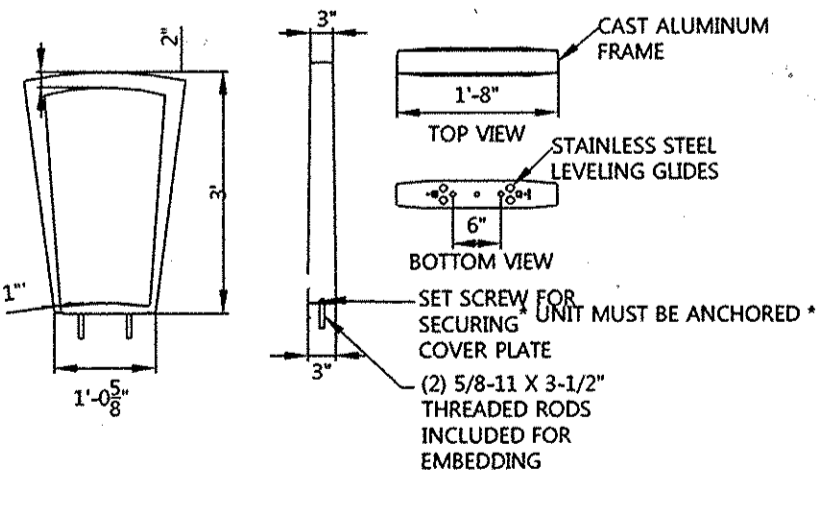
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT 4/26/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION 4/26/13
DIRECTOR 4/26/13

CELESTE DETAILS AND CHAIN DRAIN DETAIL
REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C
Date No. Revision Description

REVISED SITE DEVELOPMENT PLAN
THE ROUSE BUILDING RENOVATION
OWNER/DEVELOPER:
CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORPORATION
P.O. BOX 833 COLUMBIA, MD 21044-0833

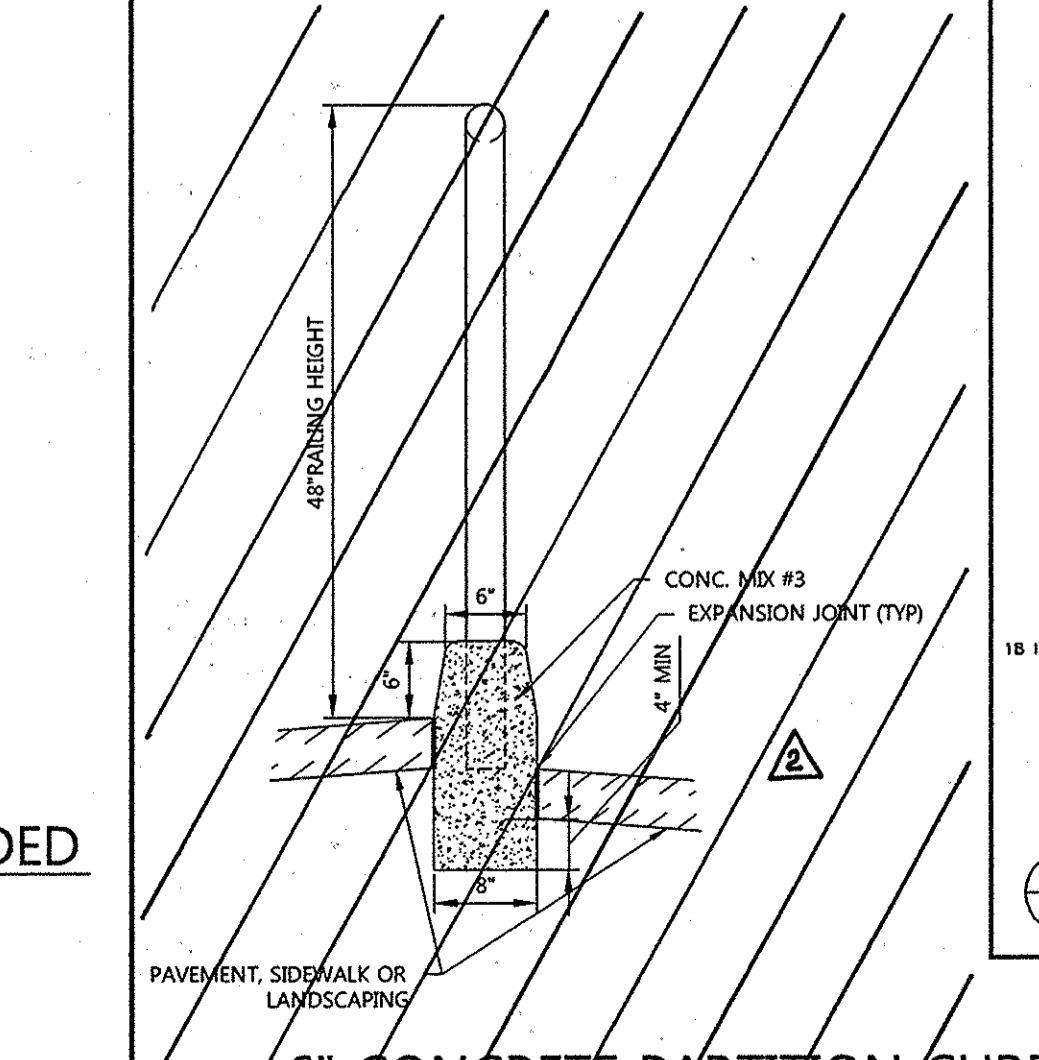
DMW
DAFT MCCUNE WALKER INC
200 EAST PENNSYLVANIA TOWNSHIP, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA
TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT 5TH ZONE NT
TITLE **SITE DETAILS**
Des. By GDT/MCB Scale NTS Proj. No. 11133.A
Drn. By RLV Date 3/21/13
Chk. By GDT/MCB Approved 6 of 264

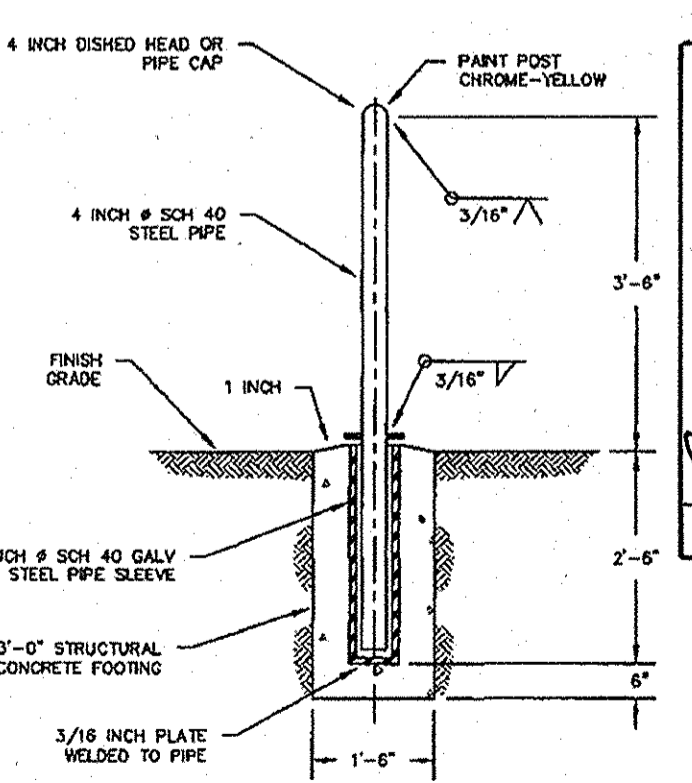


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K 6 **EMERSON BIKE RACK, EMBEDDED**
NOT TO SCALE



L 6 **6" CONCRETE PARTITION CURB**
NOT TO SCALE



M 6 **REMOVABLE BOLLARD**
NOT TO SCALE

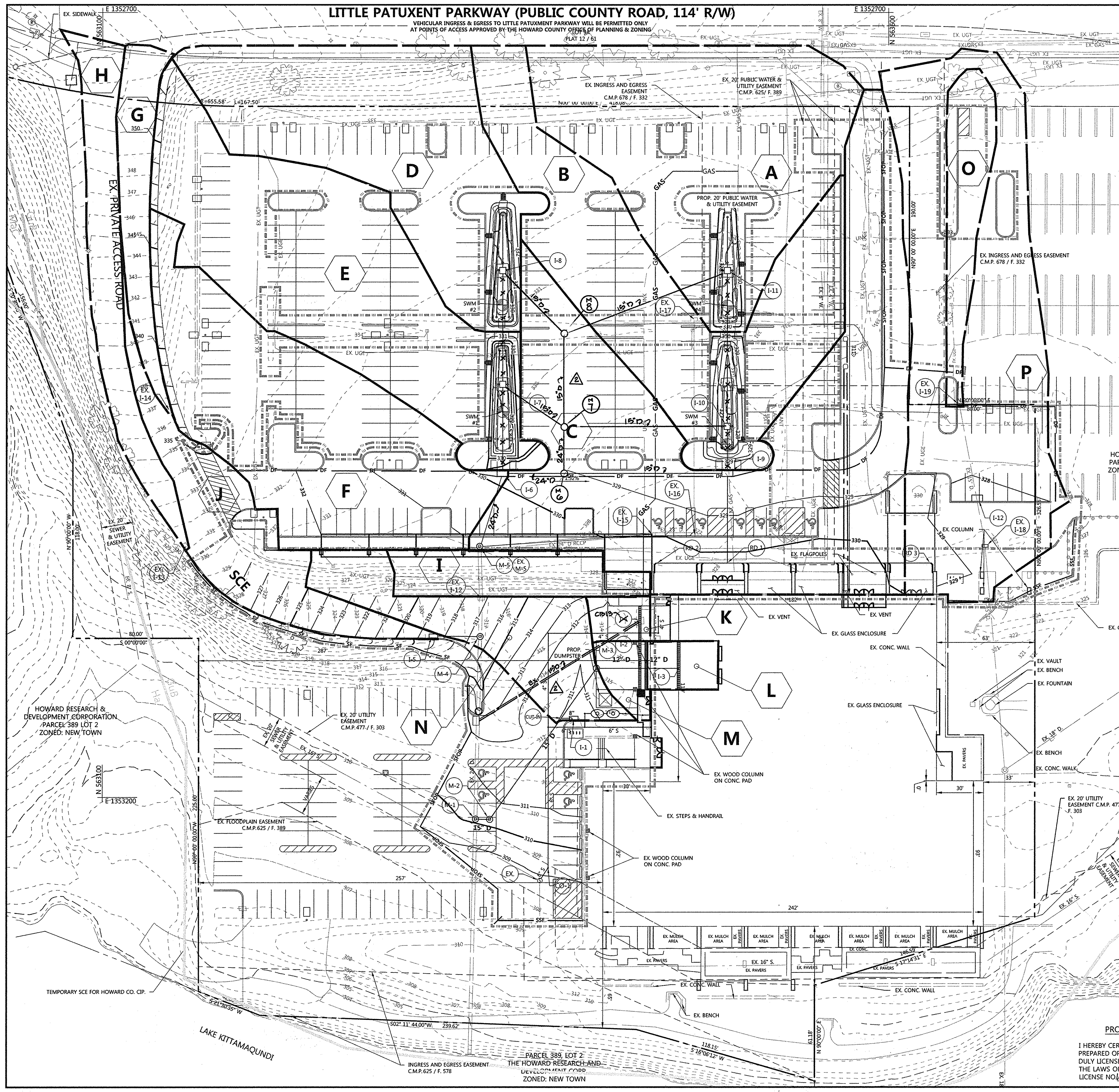
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 26560 EXPIRATION DATE: 5/13/14

FOR REVISION NO. 2 ONLY
10-22-14
STATE OF MARYLAND
PROFESSIONAL ENGINEER
Professional Engr. No. 26560
CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S
3/21/13
Date

Professional Engr. No. 16922

LITTLE PATUXENT PARKWAY (PUBLIC COUNTY ROAD, 114' R/W)

VEHICULAR INGRESS & EGRESS TO LITTLE PATUXENT PARKWAY WILL BE PERMITTED ONLY AT POINTS OF ACCESS APPROVED BY THE HOWARD COUNTY OFFICE OF PLANNING & ZONING PLAT 12 / 61



SOILS CLASSIFICATION

Symbol	Soil Type	Slope	Hydraulic Group
UuB	Urban land	0-8%	D

DRAINAGE AREAS

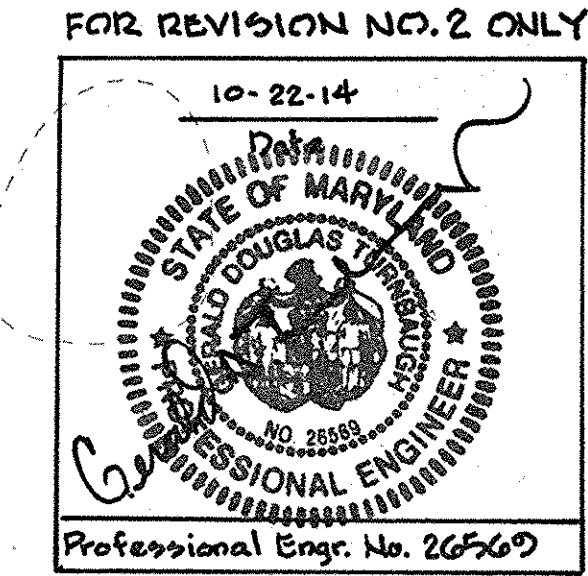
D.A. LABEL	D.A. SIZE (AC.)	COEFF. C	IMP. (%)
A	0.55	0.53	47%
B	0.51	0.73	78%
C	0.89	0.76	83%
D	0.48	0.57	46%
E	0.56	0.70	75%
F	0.51	0.72	76%
G	0.10	0.86	95%
H	0.15	0.86	95%
I	0.10	0.24	0%
J	0.20	0.79	86%
K	0.03	0.86	95%
L	0.03	0.86	95%
M	0.03	0.86	95%
N	0.18	0.75	85%
O	0.01	0.86	95%
P	0.57	0.86	95%

LEGEND

- EX. ROADS AND WALKS
- EX. MAJOR CONTOURS
- EX. MINOR CONTOURS
- EX. BUILDING
- EX. TREE
- EX. STORM DRAIN
- EX. WATER
- EX. UNDERGROUND ELECTRIC
- EX. STORM DRAIN
- EX. UNDERGROUND GAS
- EX. UNDERGROUND TELEPHONE
- PROP. MAJOR CONTOURS
- PROP. MINOR CONTOURS
- PROP. CURB/EDGE OF PAVING
- PROP. DEPRESSED CURB
- PROP. REVERSE CURB
- PROP. STORM DRAIN
- PROP. SEWER
- PROP. UNDERGROUND GAS
- DRAINAGE DIVIDES
- PROP. DIVERSION FENCE
- PROP. SILT FENCE ON PAVEMENT
- LIMIT OF DISTURBANCE
- EX. SOILS
- PROP. INLET PROTECTION
- PROP. LIGHT LUMINARIES REFER TO SITE LIGHTING ON SHEET 21 OF 21

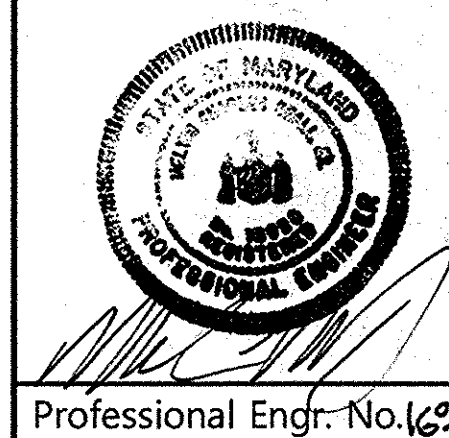
- ACRONYMS**
- CC - CART CORRAL
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 - Typ. - TYPICAL

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: 7-18-15



CONTRACT NUMBERS:
 EX. WATER: 167-W
 EX. SEWER: C-2485-D-S, 2485-D-W&S
 Date: 3/21/13

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. 6228 EXPIRATION DATE: 5/13/14



APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE: MARCH 7, 2013

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 Chief, Division of Land Development: [Signature] 4/26/13
 Chief, Development Engineering Division: [Signature] 4/18/13
 Director: [Signature] 4/26/13

FOR REVISION NO. 2 ONLY
 10-22-14
 11-28-12
 Date No. Revision Description

REVISED SITE DEVELOPMENT PLAN
THE ROUSE BUILDING RENOVATION

OWNER/DEVELOPER:
 CLOVER ACQUISITIONS LLC
 C/O THE HOWARD HUGHES CORPORATION
 P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
 DAFT MCCUNE WALKER INC
 200 EAST PENNSYLVANIA TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
 A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA: TAX MAP 36 GRID 2 PART OF PARCEL 321 LOT 18
 ELECTION DISTRICT 5TH ZONE NT
 TITLE: **STORM DRAIN DRAINAGE AREAS AND SOILS MAP**

Des. By	GDT/MCB	Scale	1"=30'	Proj. No.	11133.A
Drn. By	RLV	Date	3/19/13		
Chk. By	GDT/MCB	Approved			7 of 264

SDP 73-23C

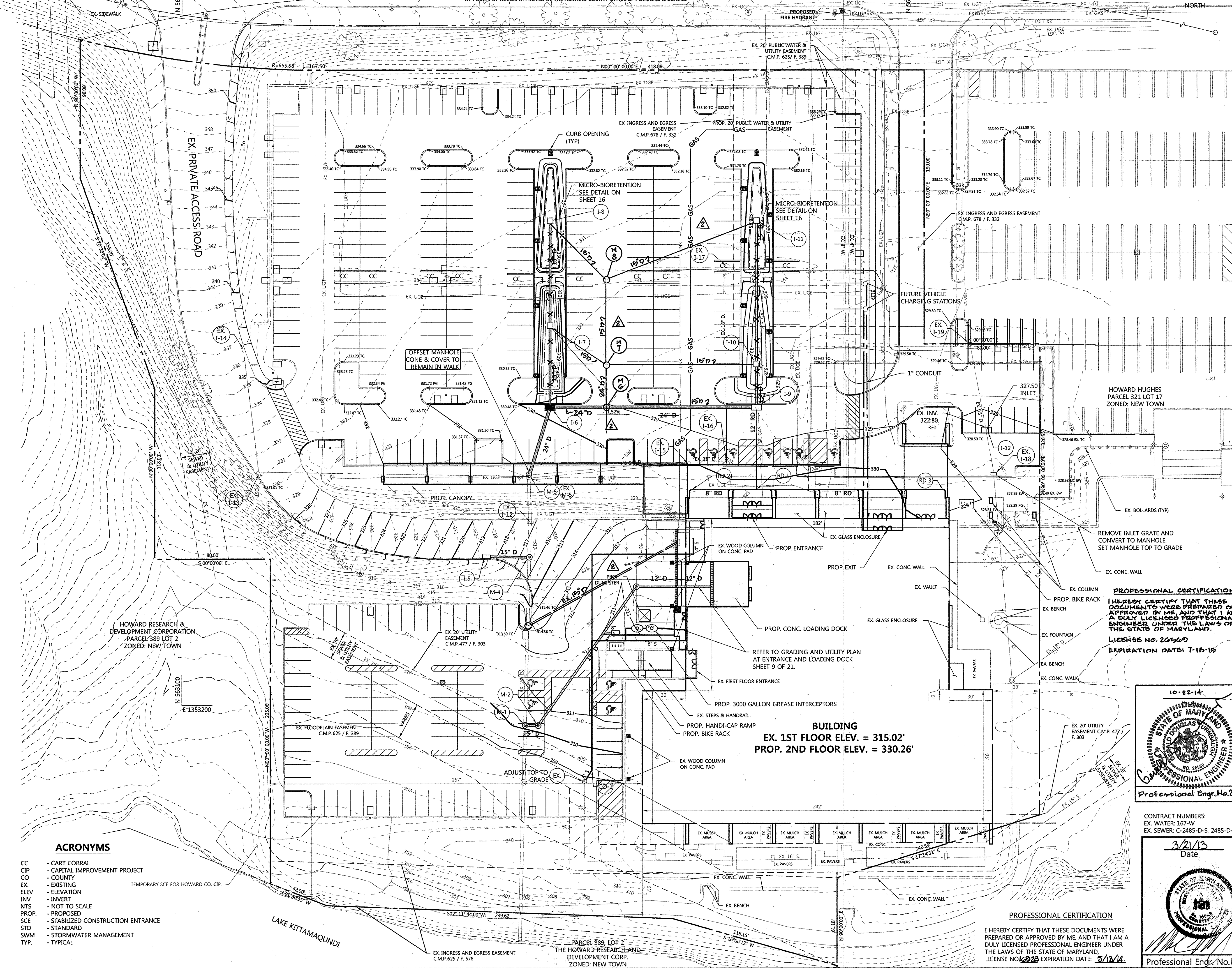
A: 11133\11133.A0\DWG\CAO FILES\SHEET FILES\11133_SWM02.DWG Thu, Mar 19, 2013

LITTLE PATUXENT PARKWAY (PUBLIC COUNTY ROAD, 114' R/W)
 VEHICULAR INGRESS & EGRESS TO LITTLE PATUXENT PARKWAY WILL BE PERMITTED ONLY AT POINTS OF ACCESS APPROVED BY THE HOWARD COUNTY OFFICE OF PLANNING & ZONING

LEGEND

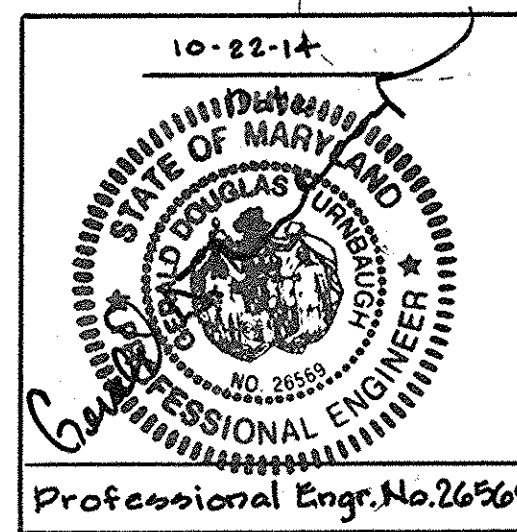
- PROPERTY BOUNDARY
- EX. RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
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- EX. UNDERGROUND TELEPHONE
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- PROP. MINOR CONTOURS
- PROP. CURB/EDGE OF PAVING
- PROP. DEPRESSED CURB
- PROP. REVERSE CURB
- PROP. STORM DRAIN
- PROP. SEWER
- PROP. UNDERGROUND GAS
- PROP. LIGHT LUMINARIES REFER TO SITE LIGHTING ON SHEET 21 OF 21

NOTES:
REFER TO SHEET 10 OF 21 FOR UTILITY PROFILES

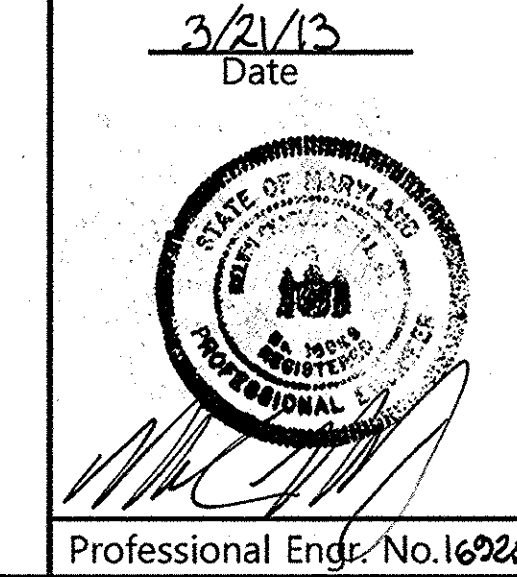


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 LICENSE NO. 26560
 EXPIRATION DATE: 7-18-15



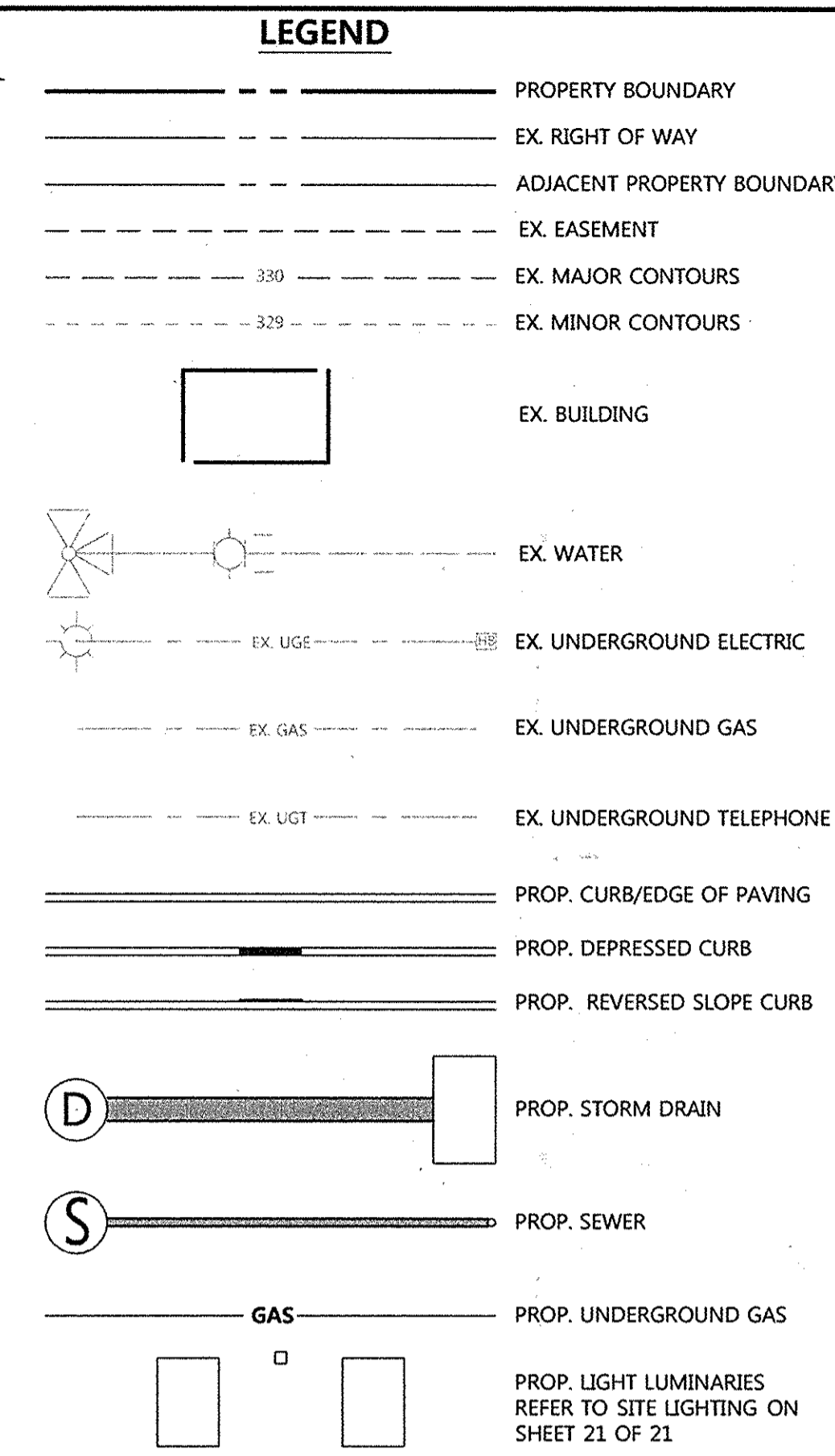
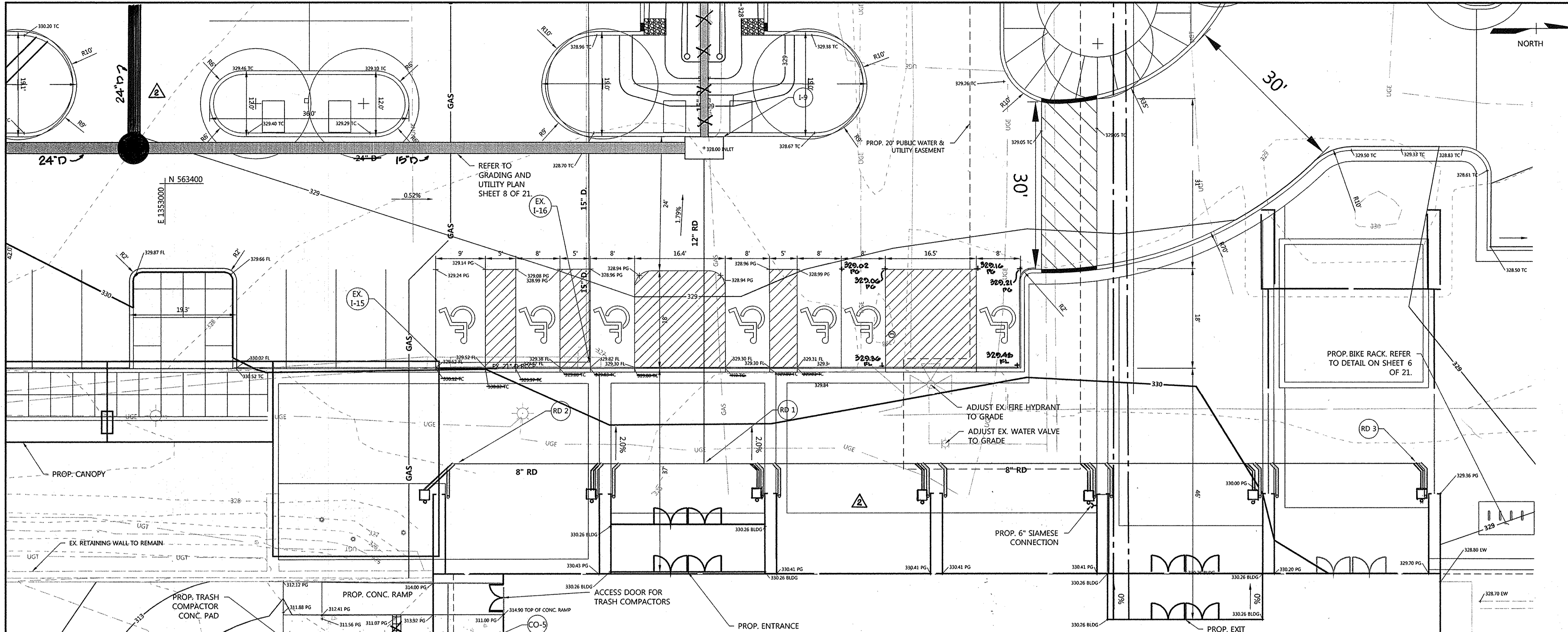
CONTRACT NUMBERS:
 EX. WATER: 167-W
 EX. SEWER: C-2485-D-S, 2485-D-W&S



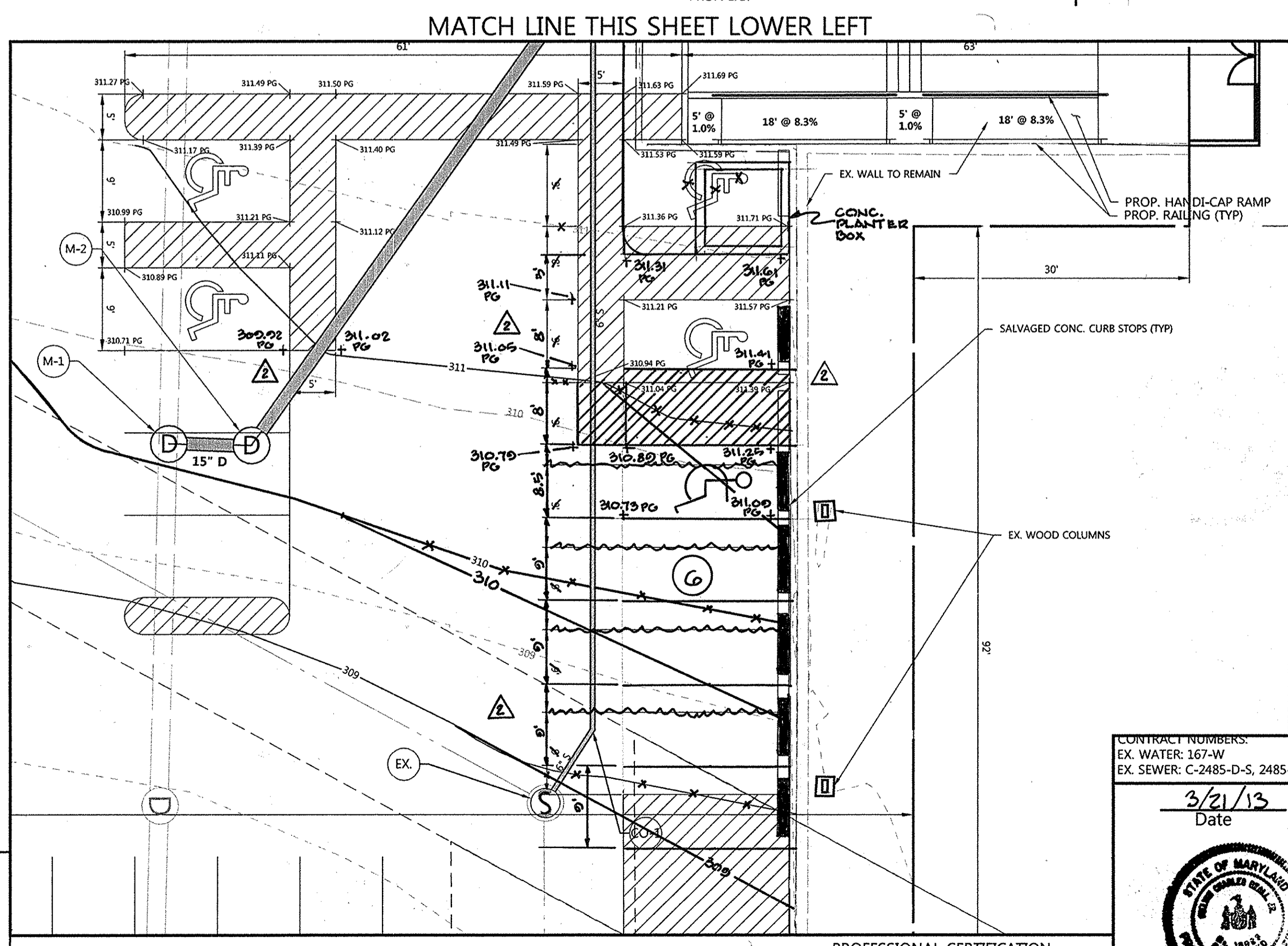
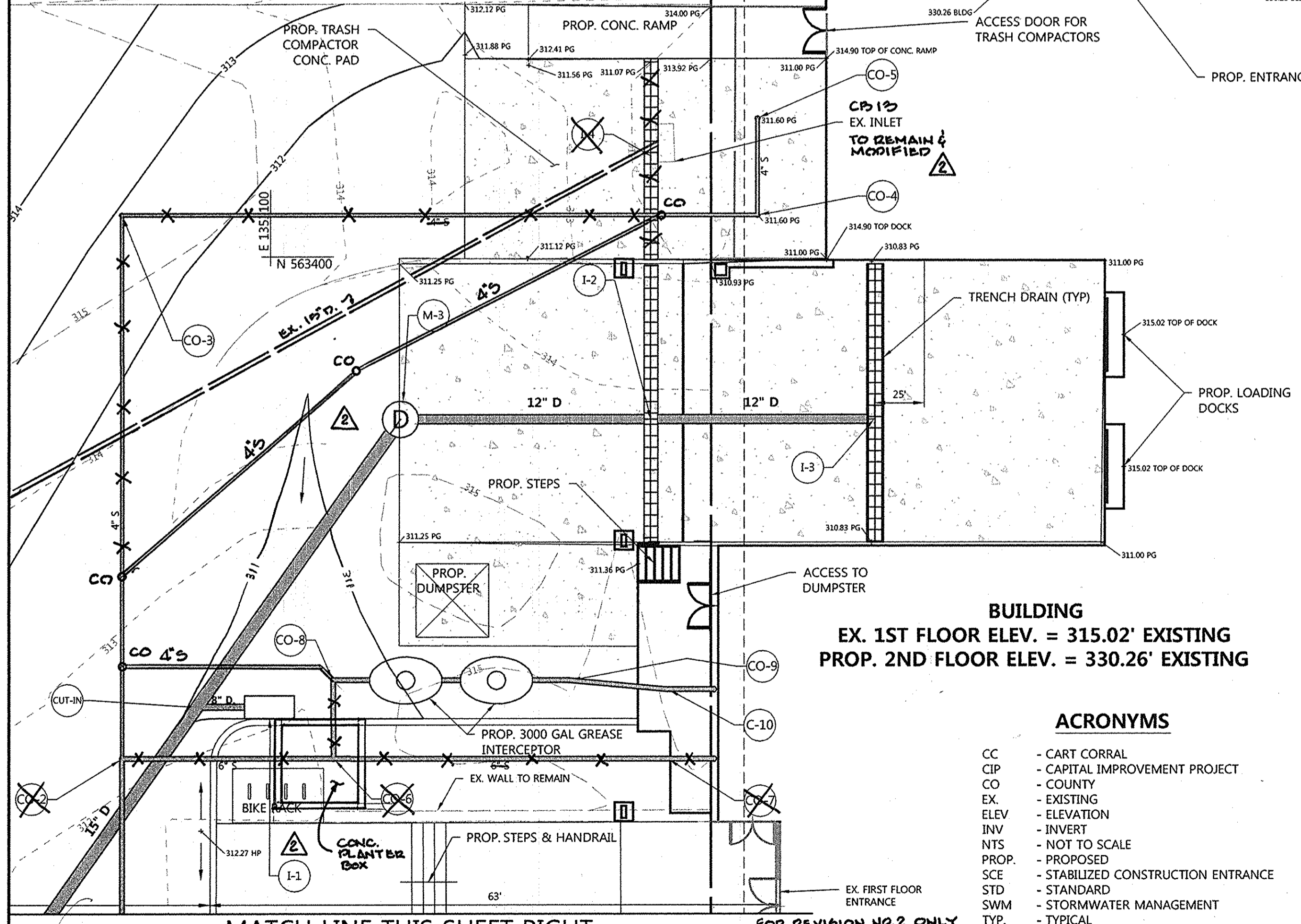
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 16928 EXPIRATION DATE: 5/12/14

APPROVED PLANNING BOARD OF HOWARD COUNTY	
DATE	MARCH 7, 2013
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
CHIEF, DIVISION OF LAND DEVELOPMENT	4/26/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION	4/18/13
DIRECTOR	4/26/13
10-22-14 SHOW REVISED DRAIN SYSTEM	
REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C	
Date	No.
REVISED SITE DEVELOPMENT PLAN	
THE ROUSE BUILDING RENOVATION	
OWNER/DEVELOPER: CLOVER ACQUISITIONS LLC C/O THE HOWARD HUGHES CORPORATION P.O. BOX 833 COLUMBIA, MD 21044-0833	
DMW DAFT MCCUNE WALKER INC 200 EAST PENNSYLVANIA TOWNSHIP, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS	
AREA	TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT	STH ZONE NT
TITLE GRADING AND UTILITY PLAN	
Des. By	GDT/MCB Scale 1"=30'
Drn. By	RLV Date 3/19/13
Proj. No.	11133.A
8 of 26A	
SDP 73-23C	

A:\11133\11133_A01\ENGR\CAD FILES\SHEET FILES\11133_001.DWG Thu, Mar 19, 2013



NOTE:
REFER TO SHEET 10 OF 21 FOR UTILITY PROFILES.



BUILDING
EX. 1ST FLOOR ELEV. = 315.02' EXISTING
PROP. 2ND FLOOR ELEV. = 330.26' EXISTING

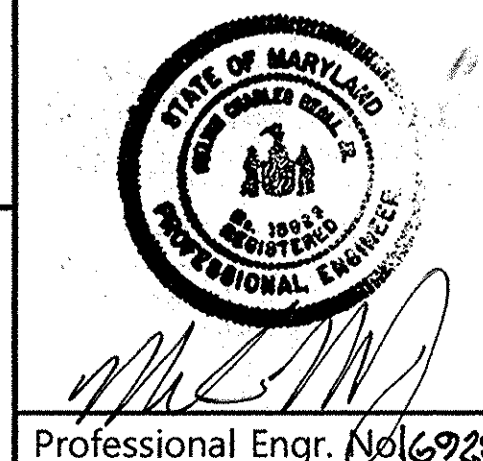
- ACRONYMS**
- CC - CART CORRAL
 - CIP - CAPITAL IMPROVEMENT PROJECT
 - CO - COUNTY
 - EX - EXISTING
 - ELEV - ELEVATION
 - INV - INVERT
 - NTS - NOT TO SCALE
 - PROP. - PROPOSED
 - SCE - STABILIZED CONSTRUCTION ENTRANCE
 - STD - STANDARD
 - SWM - STORMWATER MANAGEMENT
 - TYP. - TYPICAL

FOR REVISION NO. 2 ONLY
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 26560
EXPIRATION DATE: 7-18-15



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 16928 EXPIRATION DATE: 5/13/14

CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S
Date: 3/21/13



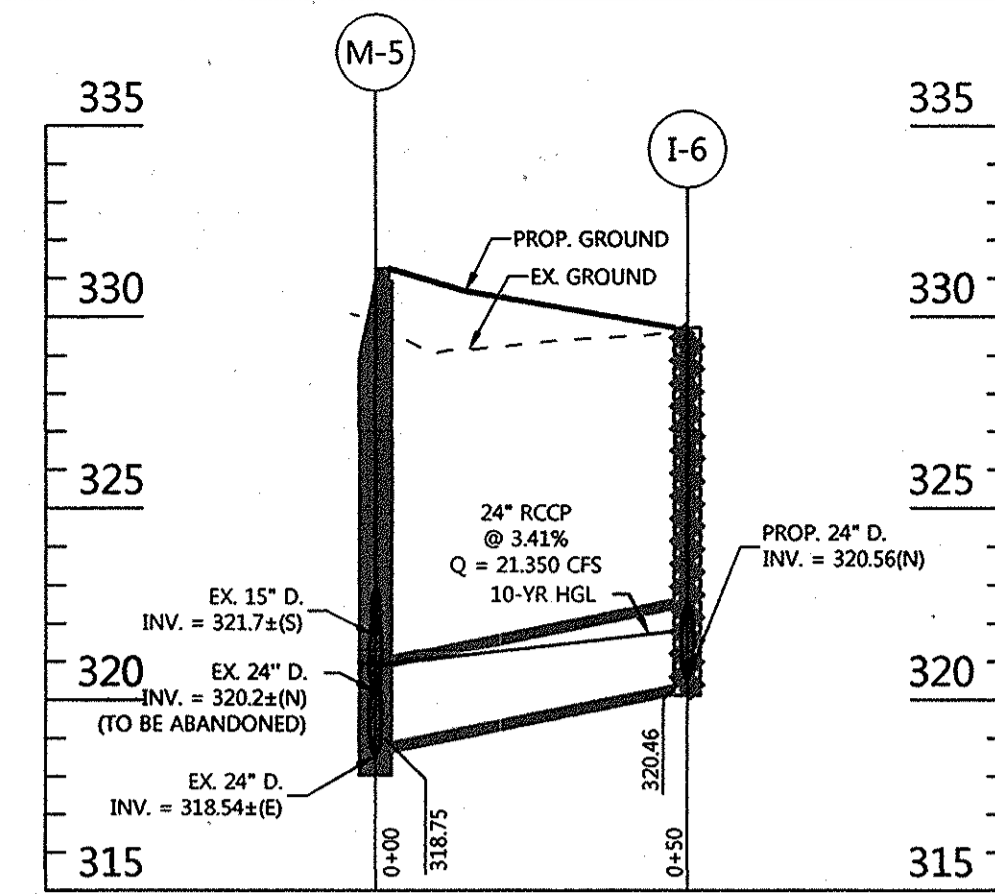
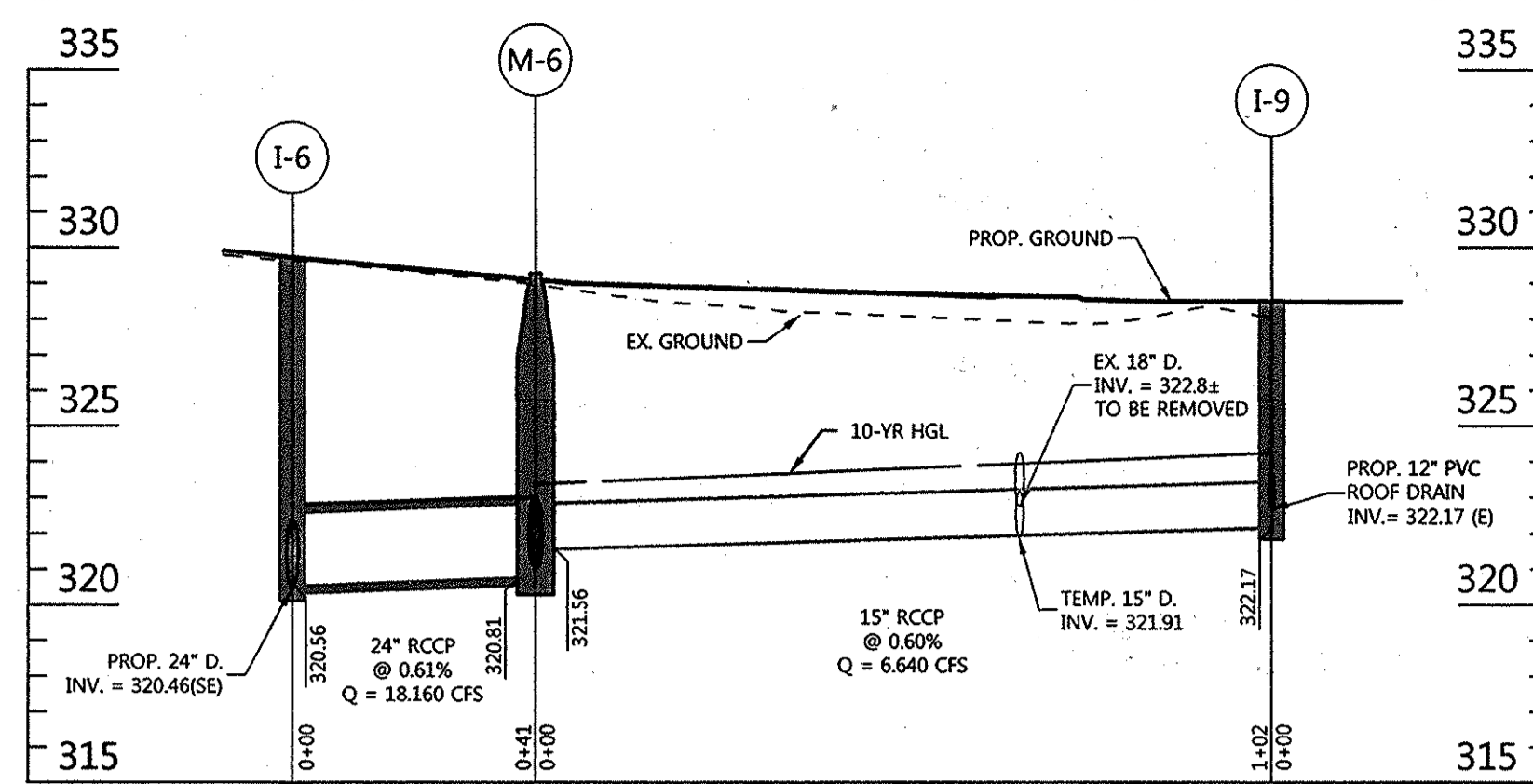
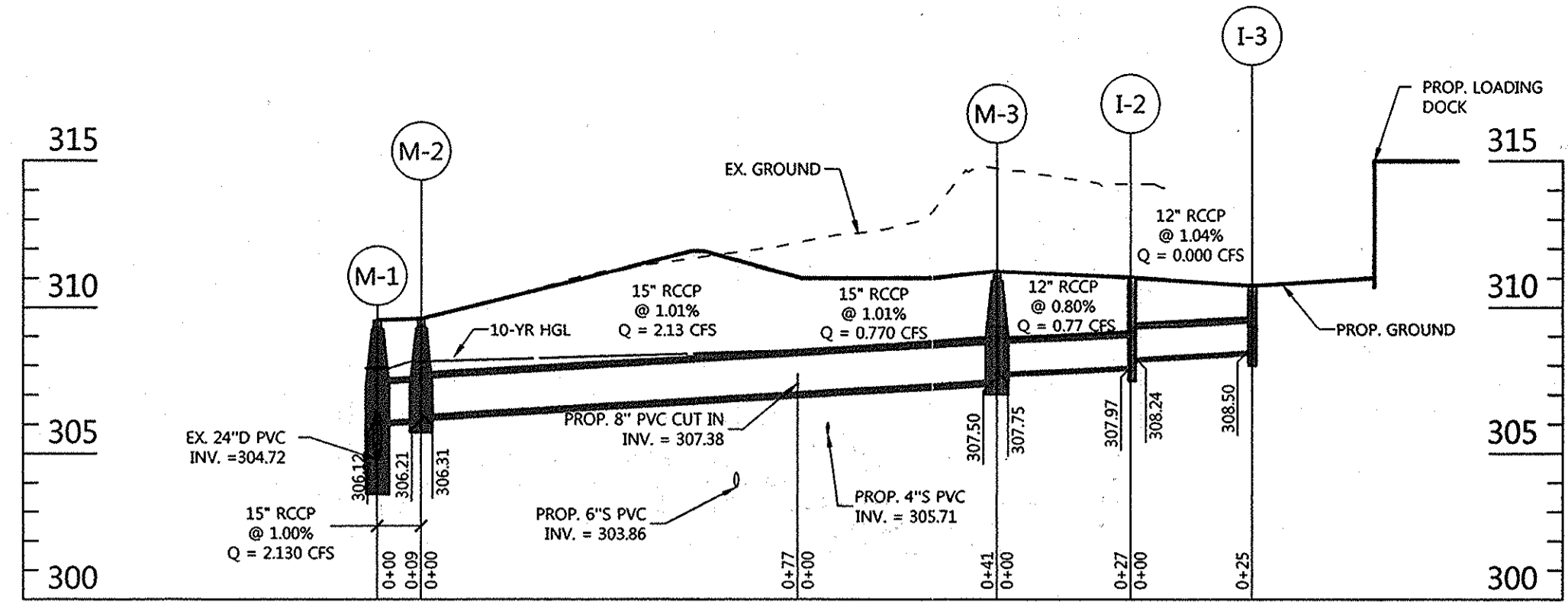
APPROVED PLANNING BOARD OF HOWARD COUNTY	
DATE	MARCH 7, 2013
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
CHIEF, DIVISION OF LAND DEVELOPMENT	4/26/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION	4/10/13
DIRECTOR	3/26/13
10-22-14	SHOW REVERSED PAVING & DRAINAGE & SAN.
11-28-12	REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C
Date	No.
Revision Description	

REVISED SITE DEVELOPMENT PLAN
THE ROUSE BUILDING RENOVATION
OWNER/DEVELOPER:
CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORPORATION
P.O. BOX 833 COLUMBIA, MD 21044-0833

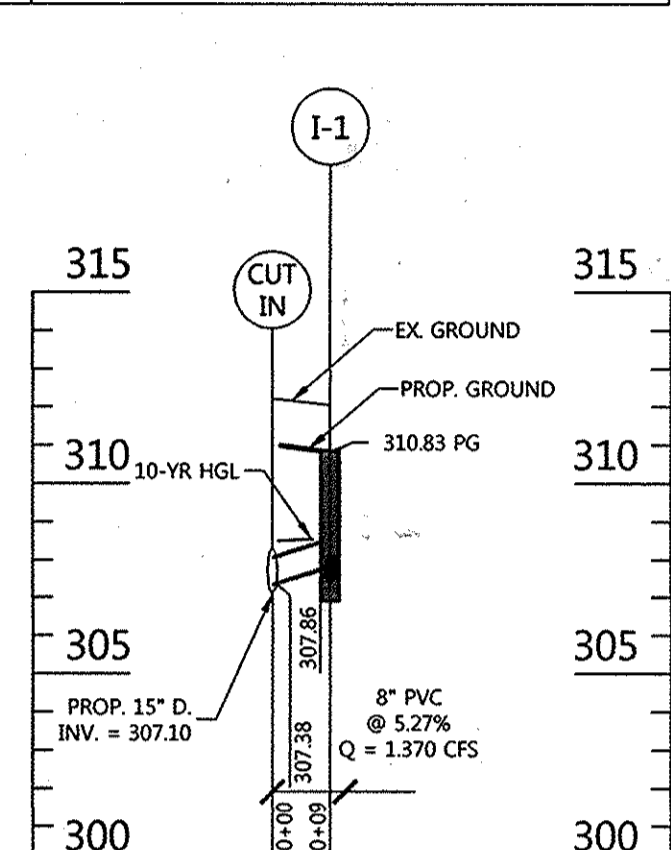
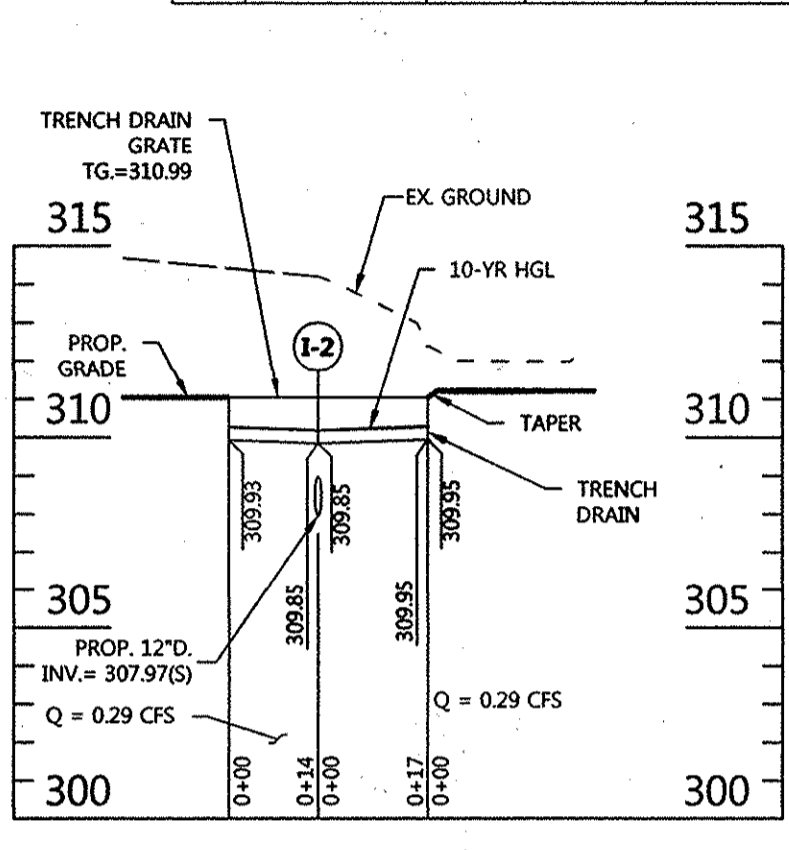
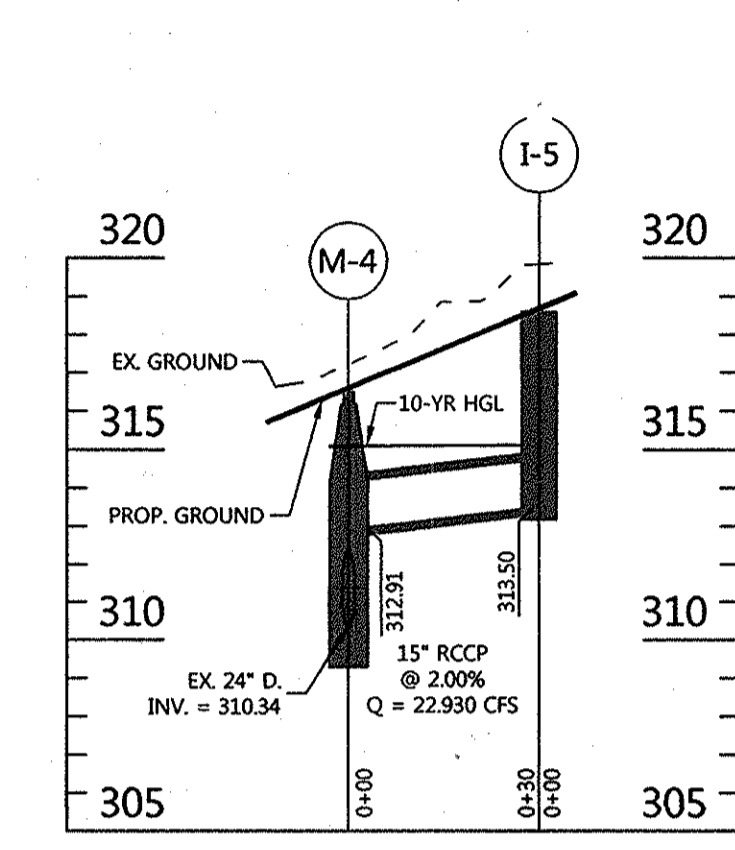
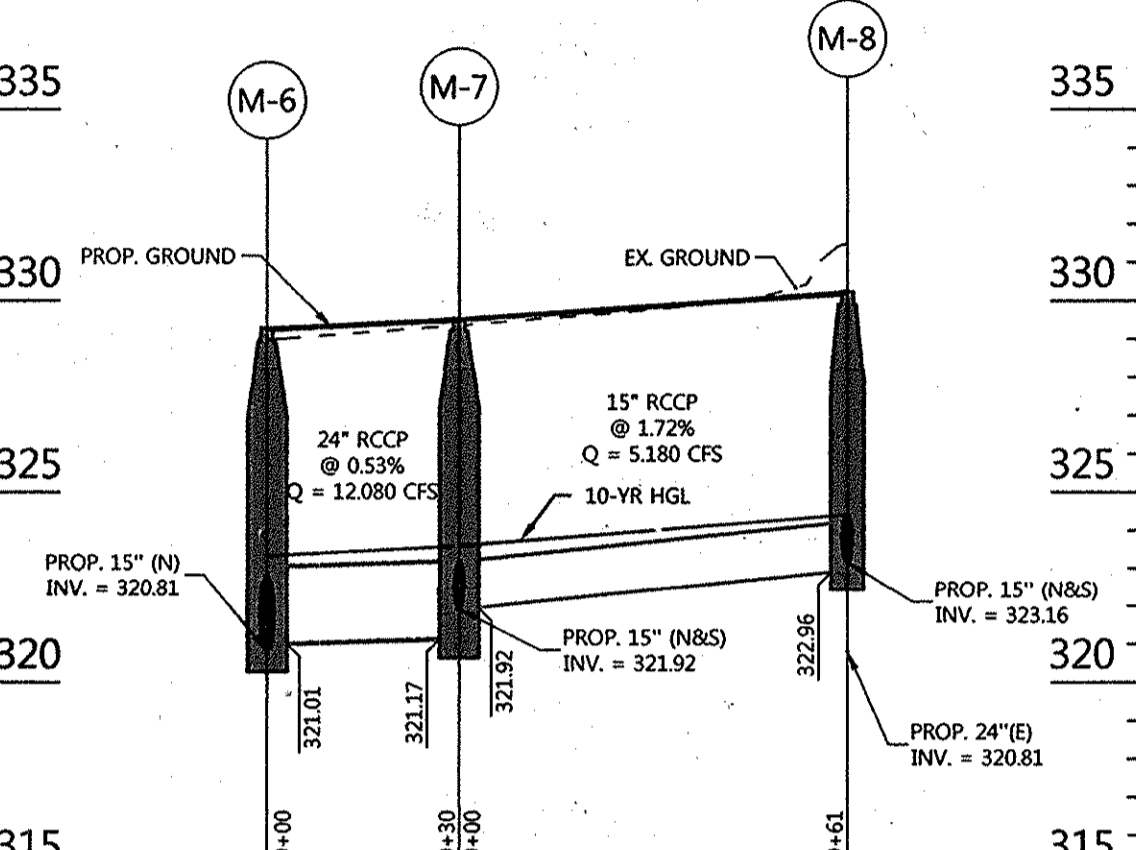
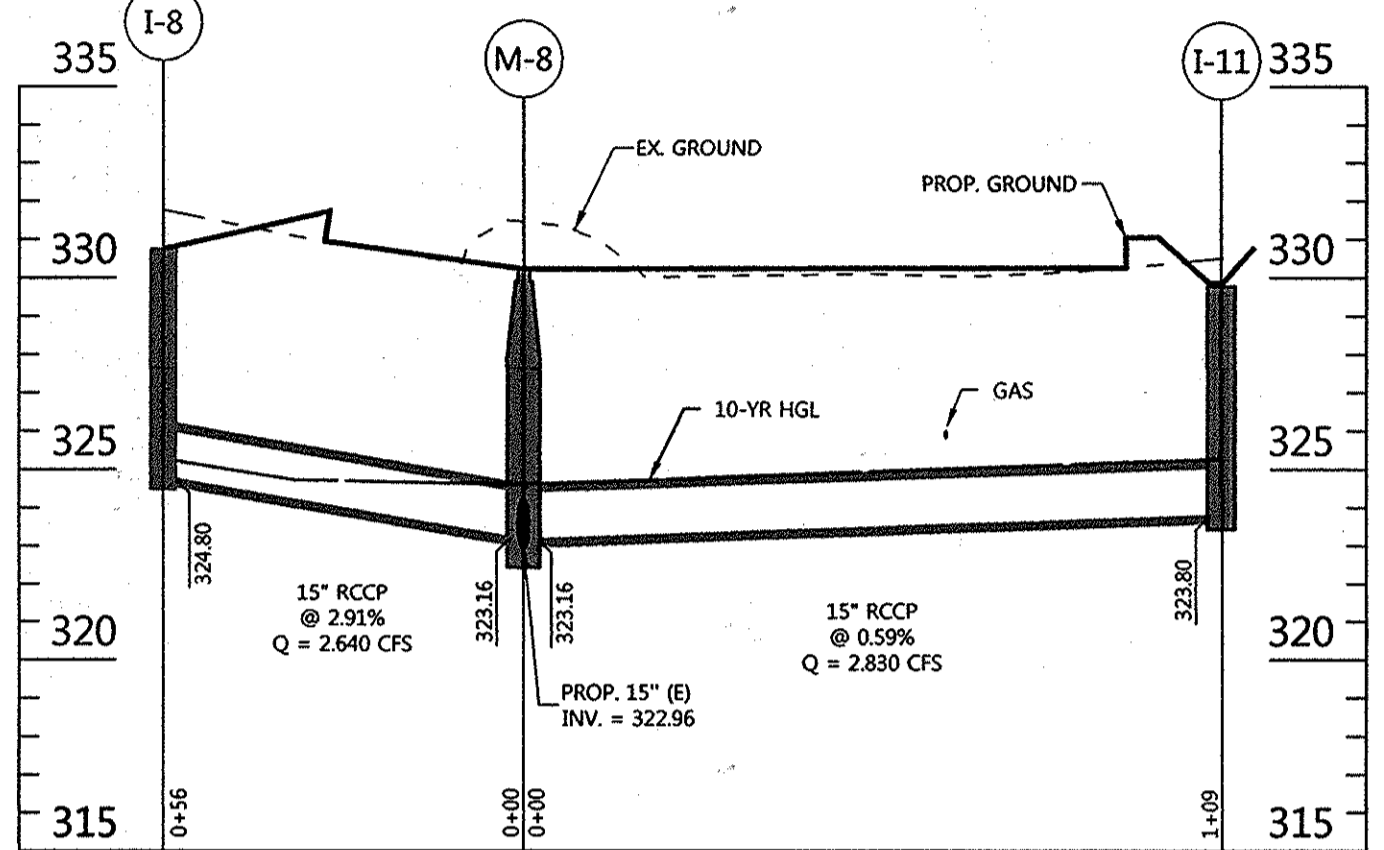
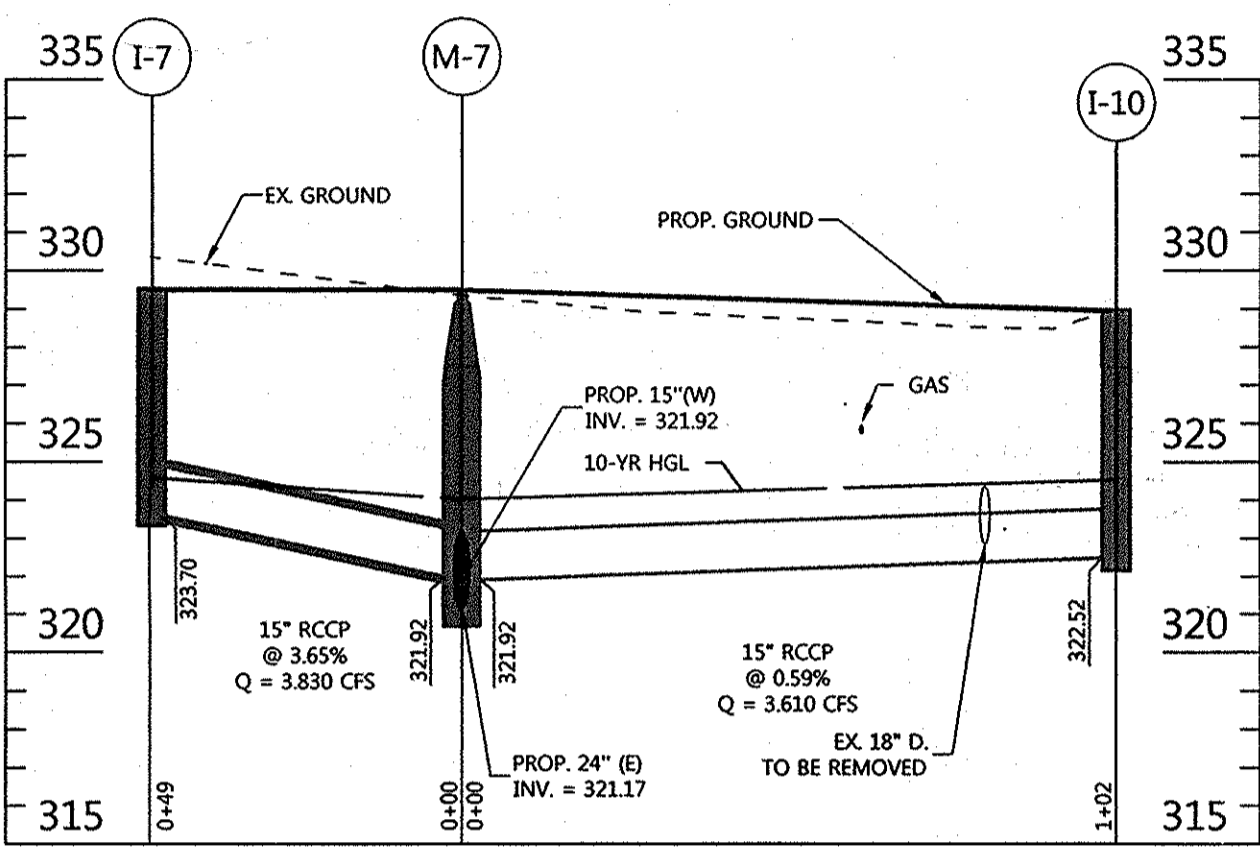
DMW
DAFT MCCUNE WALKER INC
200 EAST PENNSYLVANIA TOWNSHIP, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA	TAX MAP 36 GRID 2 PART OF PARCEL 321 LOT 18
ELECTION DISTRICT	5TH ZONE NT
TITLE	GRADING AND UTILITY PLAN AT ENTRANCE AND LOADING DOCK
Des. By	GDT/MCB Scale 1"=10'
Drn. By	RLV Date 3/19/13
Proj. No.	11133.A
9 of 26	4

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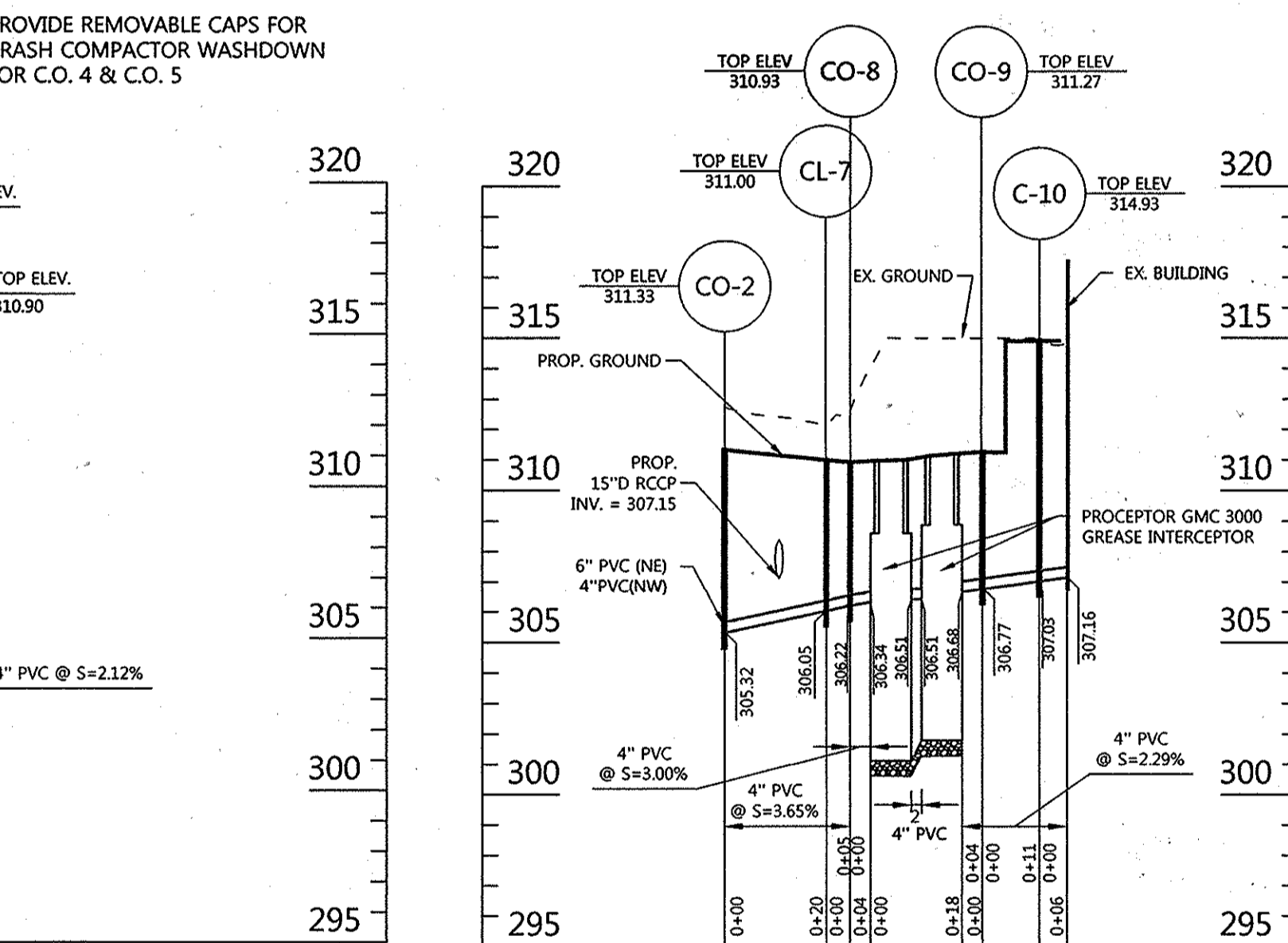
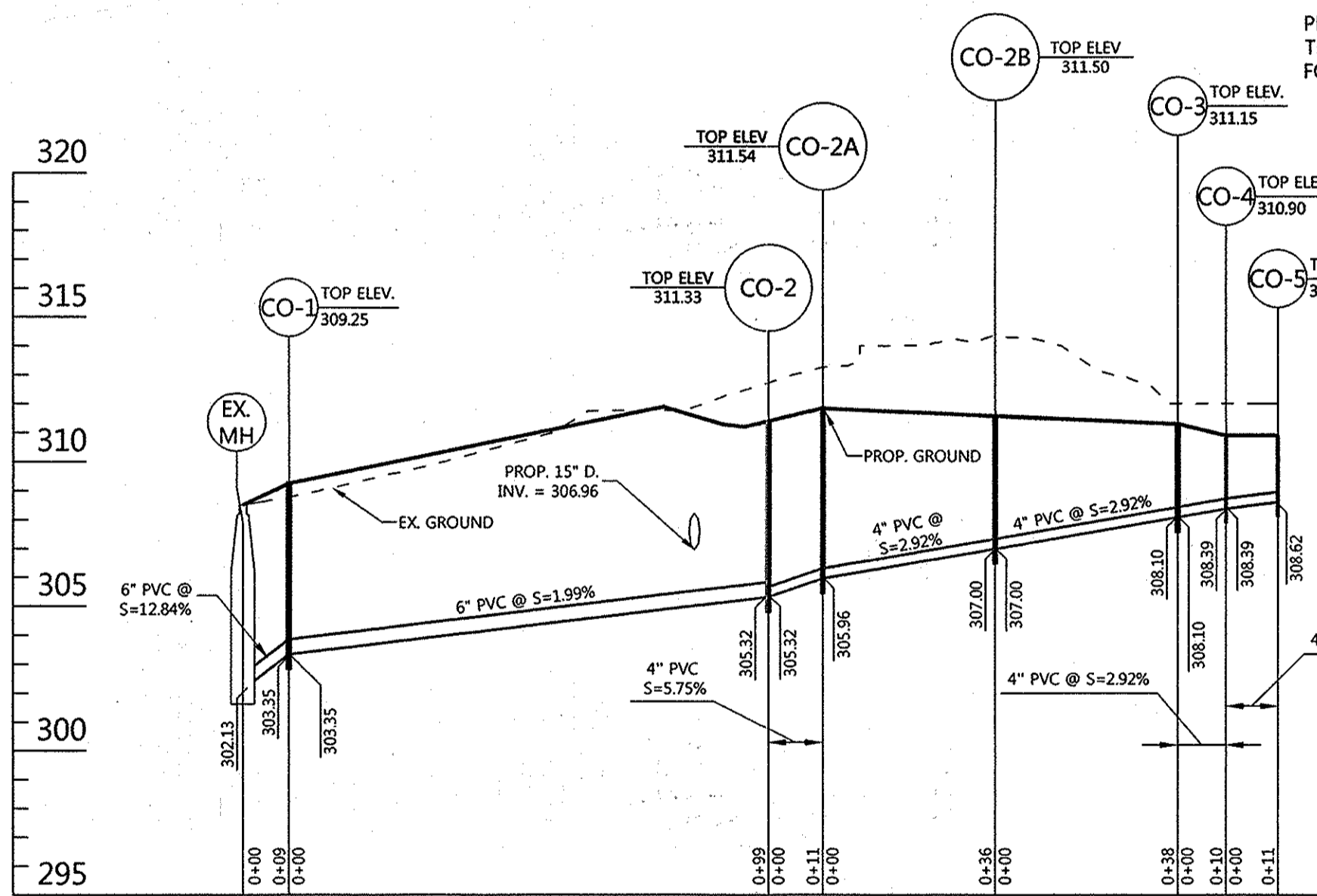
INLET SCHEDULE					
NO.	TYPE	INV. IN	INV. OUT	GRATE/THROAT ELEV.	REMARKS
I-1	TYPE 'S'		307.86	310.83	HOWARD CO. STD. DTL. D.4.22
I-2	TRENCH DRAIN	308.24 307.97		310.99	ACO DRAIN-POWER 3300K (SLOTTED DUCTILE IRON-CLASS F)
I-3	TRENCH DRAIN		308.50	310.75	ACO DRAIN-POWER 3300K (SLOTTED DUCTILE IRON-CLASS F)
I-5	TYPE 'S' COMB.		313.50	318.60	HOWARD CO. STD. DTL. D.4.32
I-6	DOUBLE 'WR'	322.60 320.56	320.46	329.72	HOWARD CO. STD. DTL. D.4.35
I-7	TYPE 'D'	323.30	323.20	329.50	HOWARD CO. STD. DTL. D.4.10
I-8	TYPE 'D'		324.80	330.75	HOWARD CO. STD. DTL. D.4.10
I-9	DOUBLE 'WR'	322.17	321.42	328.00	HOWARD CO. STD. DTL. D.4.35
I-10	TYPE 'D'	322.84	322.74	328.00	HOWARD CO. STD. DTL. D.4.10
I-11	TYPE 'D'		323.80	329.75	HOWARD CO. STD. DTL. D.4.10
CUT-IN	CUT-IN	307.38	N/A	N/A	FIELD CONNECTION CUT-IN
I-12	DOUBLE 'WR'	322.80		327.50	HOWARD CO. STD. DTL. D.4.35
EX. CB13	EX. TYPE 'E'	EX. 308.10		311.00	EX. HOWARD CO. STD. DTL. D.4.21 (TO BE MODIFIED)



STORM DRAIN PROFILE

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

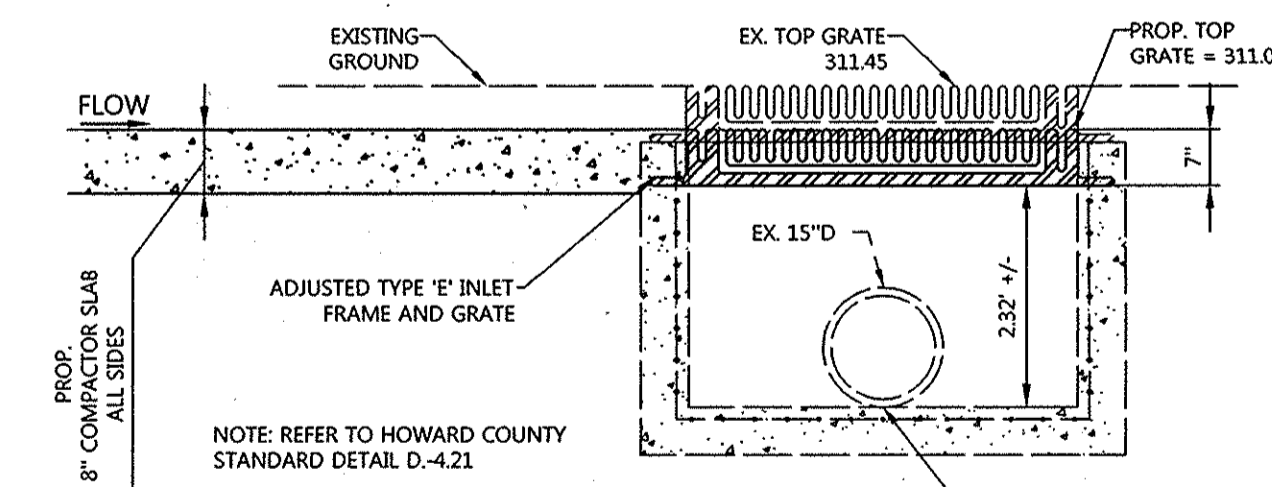
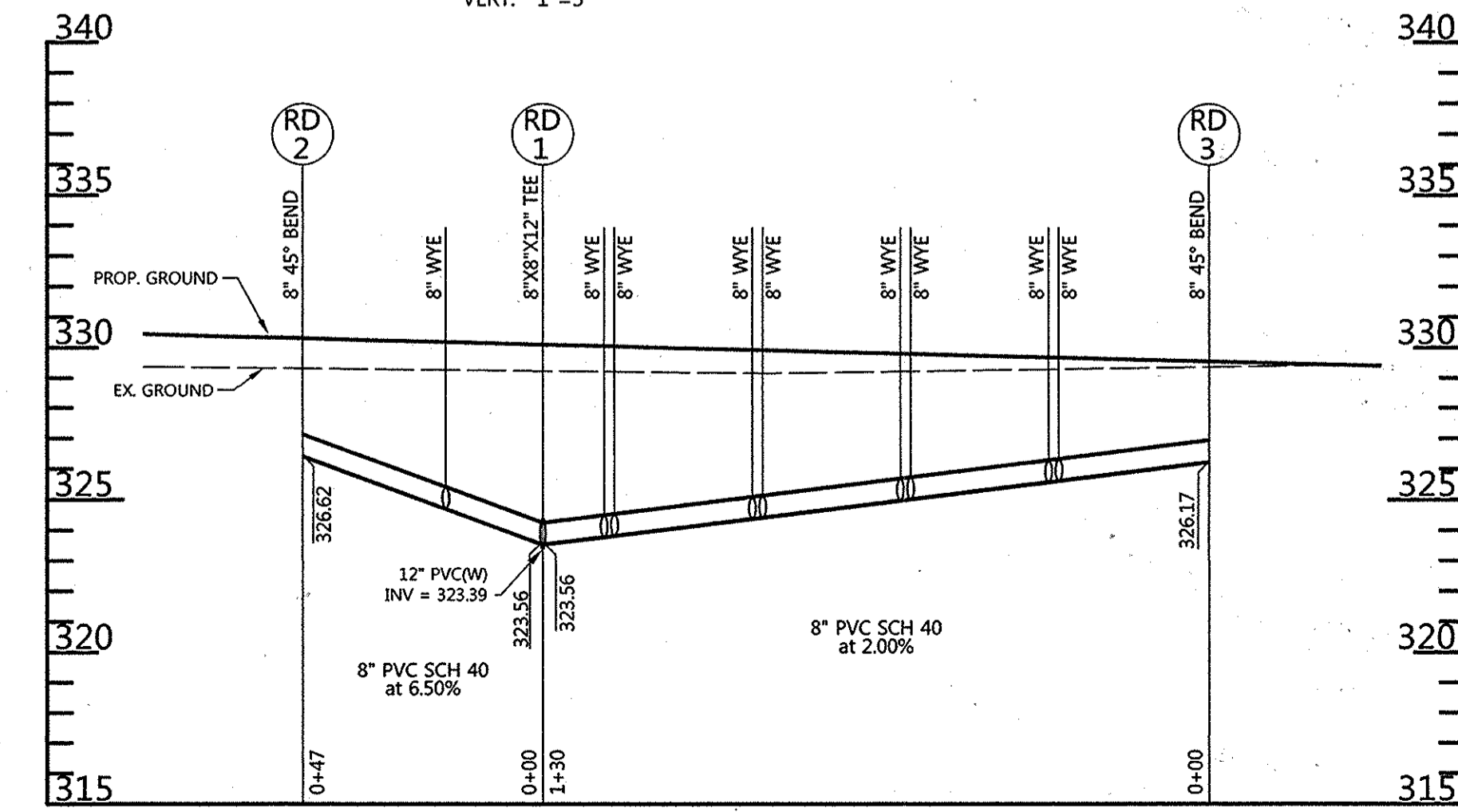
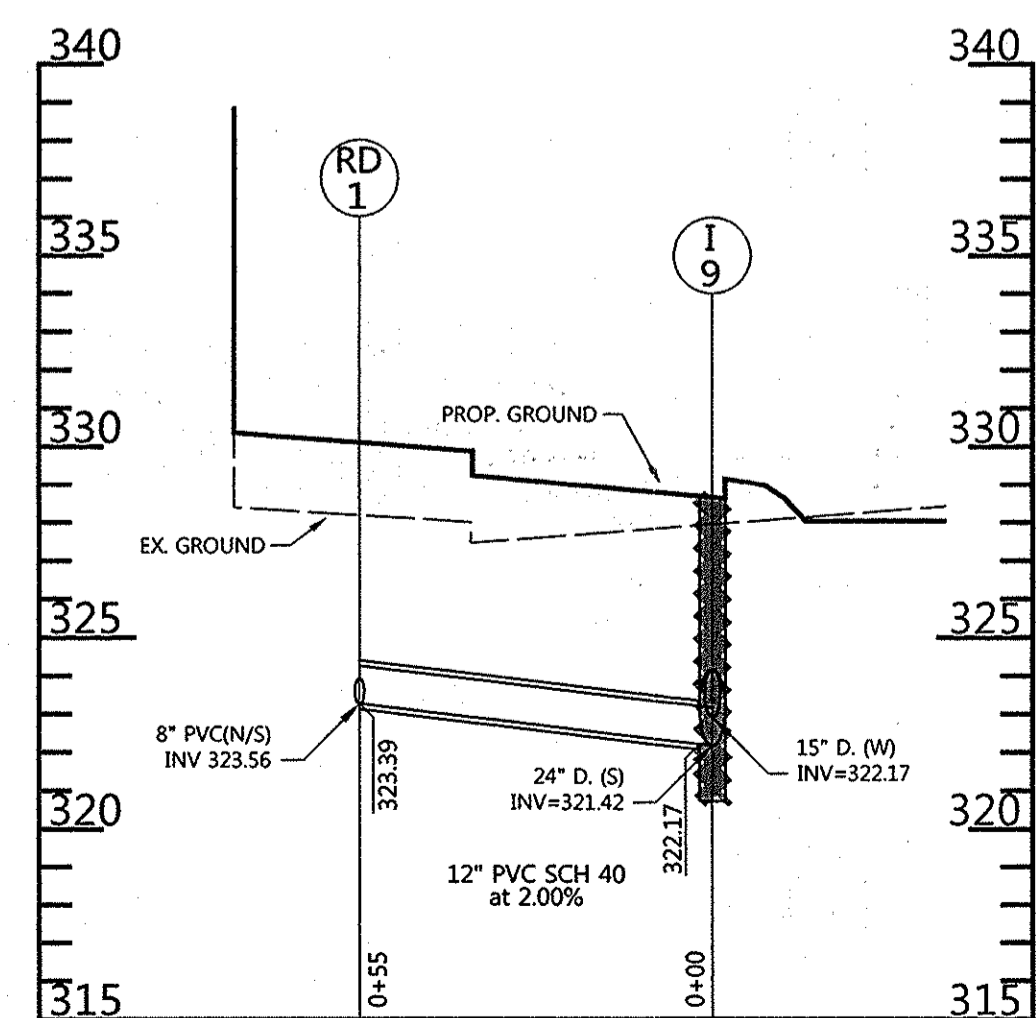
NOTE: MAINTAIN MINIMUM 2' COVER OVER ALL PIPES DURING CONSTRUCTION.



MANHOLE SCHEDULE						
NO.	TYPE	INTERNAL DIAMETER	INV. IN	INV. OUT	RIM. ELEV.	REMARKS
M-1	DOG HOUSE MANHOLE	48"	306.12		310.20	HOWARD CO. STD. DETAIL PLATE G-5.14
M-2	STD. MANHOLE	48"	306.31	306.21	310.25	HOWARD CO. STD. DETAIL PLATE G-5.12
M-3	STD. MANHOLE	48"		307.75 307.50	311.25	HOWARD CO. STD. DETAIL PLATE G-5.12
M-4	DOG HOUSE MANHOLE	60"	312.81 312.91		316.51	HOWARD CO. STD. DETAIL PLATE G-5.14
M-5	STD. MANHOLE	48"	318.75 320.20	321.70 318.54	331.26	HOWARD CO. STD. DETAIL PLATE G-5.13 CONICAL TOP SECTION TO BE ROTATED SO MANHOLE FRAME AND COVER IS WHOLLY WITHIN SIDEWALK
EX. M-33	STD. MANHOLE	48"			314.40	ADJUST TOP TO PROPOSED GRADING
M-6	STD. MANHOLE	60"	321.01 321.56	320.81	329.25	HOWARD CO. STD. DETAIL PLATE G-5.12
M-7	STD. MANHOLE	60"	321.92	321.17	329.50	HOWARD CO. STD. DETAIL PLATE G-5.12
M-8	STD. MANHOLE	48"	323.16	322.96	330.20	HOWARD CO. STD. DETAIL PLATE G-5.12

SANITARY SEWER PROFILE

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



MODIFIED TYPE 'E' INLET EX. CB-13

SCALE: 1"=2'

WESTERN ROOF DRAIN

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

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. 16524 EXPIRATION DATE: 7-18-12

CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S

12-11-14
Date

Professional Engr. No. 16524

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: MARCH 7, 2013

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Veronica... 1-05-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paul... 12-21-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Maria... 1/5/15
DIRECTOR DATE

REVISED SITE DEVELOPMENT PLAN
THE ROUSE BUILDING RENOVATION

OWNER/DEVELOPER:
CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORPORATION
P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
DAFT MCCUNE WALKER INC
200 EAST PENNSYLVANIA TOWNSHIP, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA: TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT 5TH ZONE NT

TITLE: **UTILITY PROFILES**

Des. By	GDT/MCB	Scale	AS SHOWN	Proj. No.	11133.A
Drn. By	RLV	Date	12/5/14		
Chk. By	GDT/MCB	Approved			10 of 24

LITTLE PATUXENT PARKWAY (PUBLIC COUNTY ROAD, 114' R/W)
 VEHICULAR INGRESS & EGRESS TO LITTLE PATUXENT PARKWAY WILL BE PERMITTED ONLY AT POINTS OF ACCESS APPROVED BY THE HOWARD COUNTY OFFICE OF PLANNING & ZONING

LEGEND

[Symbol]	PROPERTY BOUNDARY
[Symbol]	EX. RIGHT OF WAY
[Symbol]	EX. EASEMENT
[Symbol]	EX. ROADS AND WALKS
[Symbol]	EX. MAJOR CONTOURS
[Symbol]	EX. MINOR CONTOURS
[Symbol]	EX. BUILDING
[Symbol]	EX. GRAVEL
[Symbol]	EX. TREE
[Symbol]	EX. GROUP LIGHT
[Symbol]	EX. STORM DRAIN
[Symbol]	EX. SANITARY SEWER
[Symbol]	EX. WATER
[Symbol]	EX. UNDERGROUND ELECTRIC
[Symbol]	EX. STORM DRAIN
[Symbol]	EX. UNDERGROUND GAS
[Symbol]	EX. UNDERGROUND TELEPHONE
[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	SILT FENCE
[Symbol]	SUPER SILT FENCE
[Symbol]	DIVERSION FENCE
[Symbol]	SILT FENCE ON PAVEMENT
[Symbol]	INLET PROTECTION

DEVELOPERS CERTIFICATION:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

Robert Jenkins 3/14/13
 SIGNATURE OF DEVELOPER DATE
 Robert Jenkins
 PRINT NAME

ENGINEER'S CERTIFICATION:
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Malvin C. Beally, Jr., P.E. 3/14/13
 SIGNATURE OF ENGINEER DATE
 Malvin C. Beally, Jr., P.E.
 PRINT NAME

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 Howard Soil Conservation District 4/19/13
 DATE

LOD = 103,977 SF OR 2.39 AC ±
 APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

FOR REVISION NO. 2 ONLY
 PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 200909 EXPIRATION DATE: 7-18-19

10-22-14 / 11-28-12
 SHOW ADDITIONAL SFF/LOD & REVISED DRAINS
 REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C

Date	No.	Revision Description

REVISOR'S 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. 200909 EXPIRATION DATE: 7-18-19

10-22-14 / 11-28-12
 SHOW ADDITIONAL SFF/LOD & REVISED DRAINS
 REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C

Date	No.	Revision Description

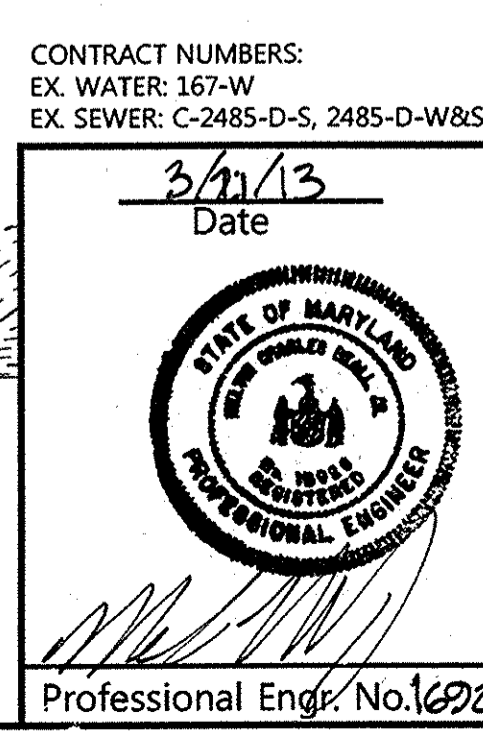
OWNER/DEVELOPER:
 CLOVER ACQUISITIONS LLC
 C/O THE HOWARD HUGHES CORPORATION
 P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
 DAFT MCCUNE WALKER INC
 280 EAST PENNSYLVANIA TOWSON, MD 21286
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
 A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA
 TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
 ELECTION DISTRICT 5TH ZONE NT

TITLE
EXISTING CONDITIONS SEDIMENT AND EROSION CONTROL PLAN

Des. By	GDT/MCB	Scale	1"=30'	Proj. No.	11133A
Drn. By	RLV	Date	3/14/13		
Chk. By	GDT/MCB	Approved			11 of 24

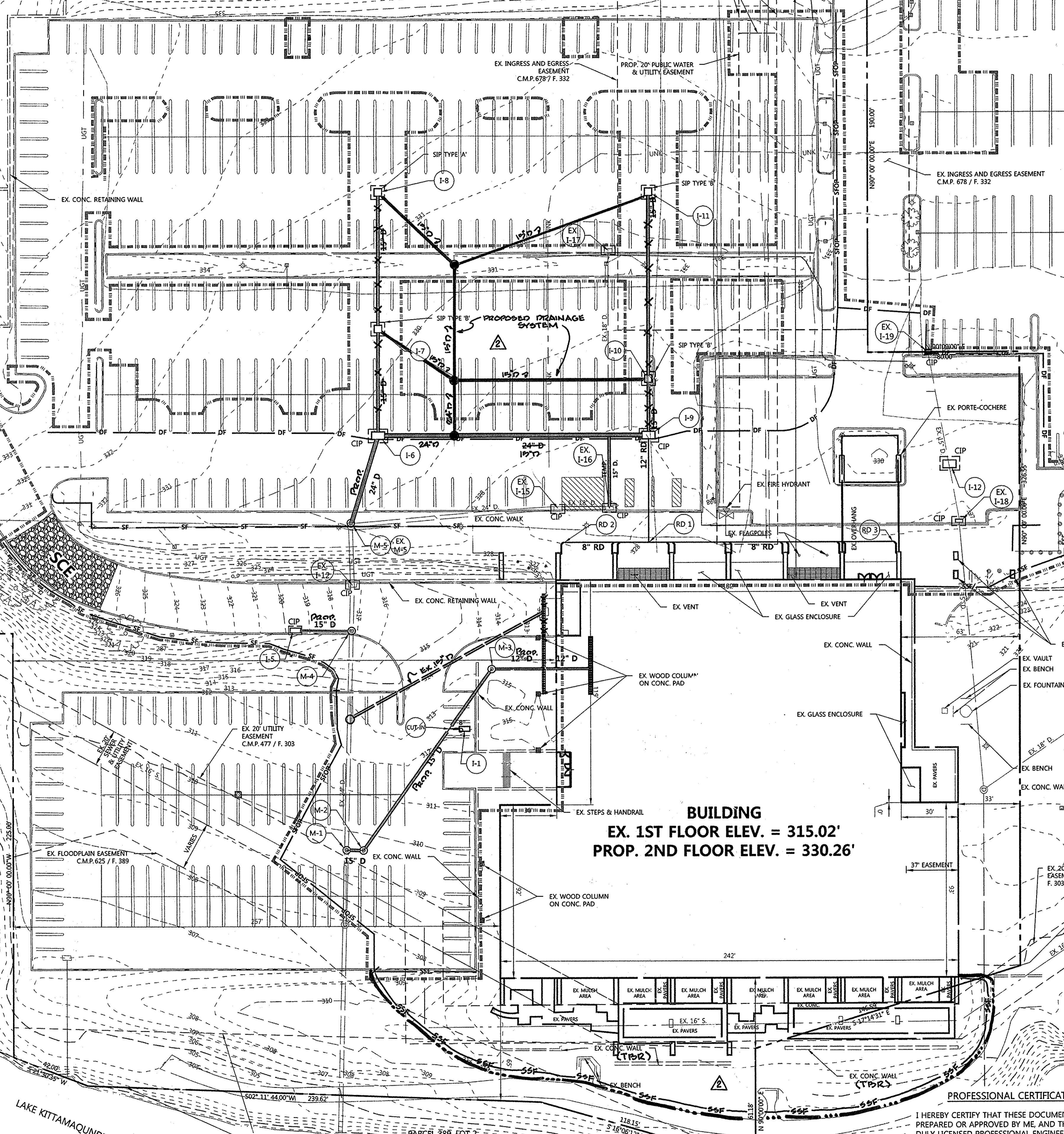


- ACRONYMS**
- CC - CART CORRAL
 - CIP - CURB INLET PROTECTION
 - CO - COUNTY
 - EX - EXISTING
 - ELEV - ELEVATION
 - INV - INVERT
 - NTS - NOT TO SCALE
 - PROP. - PROPOSED
 - SCE - STABILIZED CONSTRUCTION ENTRANCE
 - SIP - STANDARD INLET PROTECTION
 - STD - STANDARD
 - SWM - STORMWATER MANAGEMENT
 - TYP. - TYPICAL

APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE MARCH 7, 2013

NOTE: ADDITIONAL SILT FENCE AND/OR "SUPER" SILT FENCE IS TO BE INSTALLED IN THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

- UTILITY CONSTRUCTION OUTSIDE OF SEDIMENT CONTROL PRACTICES
- EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON UPSTREAM SIDE OF TRENCH.
 - IMMEDIATELY FOLLOWING PIPE INSTALLATION THE TRENCH SHALL BE BACKFILLED, COMPACTED AND STABILIZED WITH STONE AT THE END OF EACH WORK DAY.
 - SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE (1) WORKING DAY. (SILT FENCE AS PER SCS STANDARD DRAWING - E-15-3)
 - THE CONTRACTOR SHALL DISTURB AND OPEN TRENCH THE MINIMUM PRACTICAL AREA REQUIRED TO ACCOMPLISH THE WORK DESIGNATED FOR EACH DAY.
 - ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS". ANY EROSION AND SEDIMENT CONTROL PRACTICES DAMAGED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.



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. 200909 EXPIRATION DATE: 5/13/14

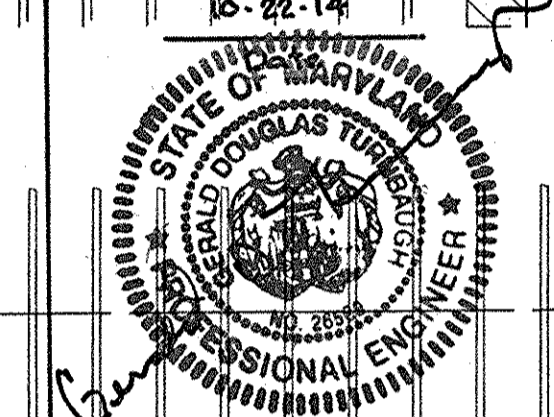
A: \\1133\11133-AO\ENGR\CAD FILES\SHEET FILES\11133_SDC03.DWG Thu, Mar 14, 2013

LITTLE PATUXENT PARKWAY (PUBLIC COUNTY ROAD, 114' R/W)

VEHICULAR INGRESS & EGRESS TO LITTLE PATUXENT PARKWAY WILL BE PERMITTED ONLY AT POINTS OF ACCESS APPROVED BY THE HOWARD COUNTY OFFICE OF PLANNING & ZONING

LEGEND


- — — — — PROPERTY BOUNDARY
- — — — — EX. RIGHT OF WAY
- — — — — EX. EASEMENT
- — — — — EX. ROADS AND WALKS
- — — — — EX. MAJOR CONTOURS
- — — — — EX. MINOR CONTOURS
- — — — — EX. BUILDING
- — — — — EX. GRAVEL
- — — — — EX. TREE
- — — — — EX. GROUP LIGHT
- — — — — EX. STORM DRAIN
- — — — — EX. SANITARY SEWER
- — — — — EX. WATER
- — — — — EX. UNDERGROUND ELECTRIC
- — — — — EX. STORM DRAIN
- — — — — EX. UNDERGROUND GAS
- — — — — EX. UNDERGROUND TELEPHONE
- — — — — PROP. MAJOR CONTOURS
- — — — — PROP. MINOR CONTOURS
- — — — — PROP. CURB/EDGE OF PAVING
- — — — — PROP. STORM DRAIN
- — — — — PROP. SEWER
- — — — — PROP. UNDERGROUND GAS
- — — — — SILT FENCE
- — — — — SUPER SILT FENCE
- — — — — DIVERSION FENCE
- — — — — PROP. STABILIZED CONSTRUCTION ENTRANCE
- — — — — INLET PROTECTION
- — — — — SILT FENCE ON PAVEMENT
- — — — — LIMIT OF DISTURBANCE
- — — — — PROP. LIGHT LUMINAIRES

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. 20500
 EXPIRATION DATE: 7-18-15
 FOR REVISION NO. 2 ONLY
 10-22-14

 Professional Engr. No. 20500

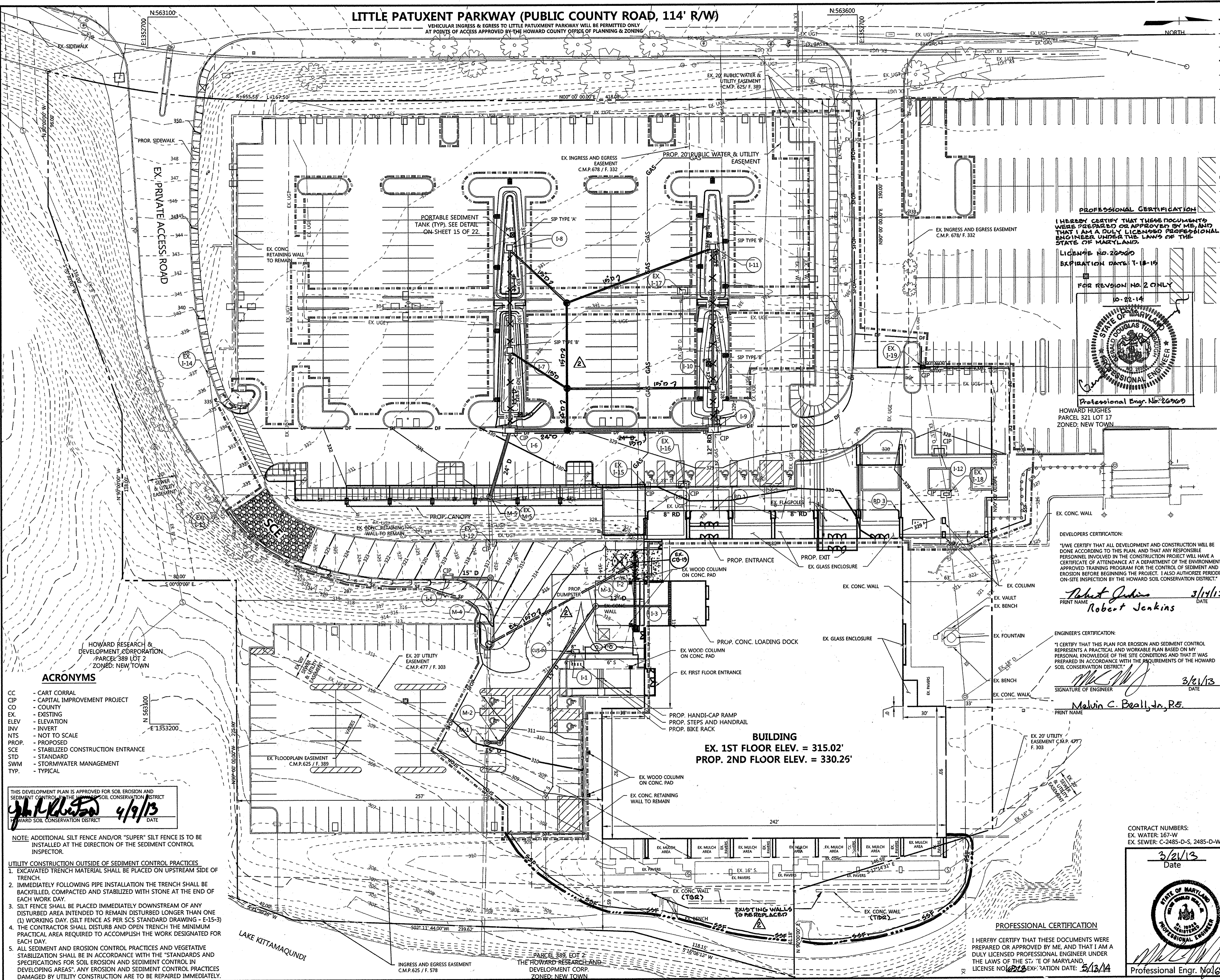
DEVELOPERS CERTIFICATION:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
 Robert Jenkins 3/14/13
 PRINT NAME DATE
 Robert Jenkins
ENGINEER'S CERTIFICATION:
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 Malvin C. Beall, Jr., P.E. 3/21/13
 SIGNATURE OF ENGINEER DATE
 Malvin C. Beall, Jr., P.E.
 PRINT NAME

APPROVED PLANNING BOARD OF HOWARD COUNTY	
DATE	MARCH 7, 2013
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
CHIEF, DIVISION OF LAND DEVELOPMENT	4/26/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION	4/18/13
DIRECTOR	7/24/13
10-22-14 / 11-28-12 / 11-28-12	
Date	No.
REVISIONS	
10-22-14	1
11-28-12	2
REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C	
REVISED SITE DEVELOPMENT PLAN	
THE ROUSE BUILDING RENOVATION	
OWNER/DEVELOPER:	
CLOVER ACQUISITIONS LLC	
C/O THE HOWARD HUGHES CORPORATION	
P.O. BOX 833 COLUMBIA, MD 21044-0833	
DMW	
DAFT MCCUNE WALKER INC	
300 EAST PENNSYLVANIA TOWNSHIP, MD 21286	
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM	
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS	
AREA	TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT 5TH	ZONE NT
TITLE	
PROPOSED CONDITIONS SEDIMENT AND EROSION CONTROL PLAN	
Des. By	GDT/MCB
Scale	1"=30'
Proj. No.	11133.A
Drn. By	RLV
Date	3/13/13
Chk. By	GDT/MCB
Approved	12 of 204


- ACRONYMS**
- CC - CART CORRAL
 - CIP - CAPITAL IMPROVEMENT PROJECT
 - CO - COUNTY
 - EX - EXISTING
 - ELEV - ELEVATION
 - INV - INVERT
 - NTS - NOT TO SCALE
 - PROP. - PROPOSED
 - SCF - STABILIZED CONSTRUCTION ENTRANCE
 - STD - STANDARD
 - SWM - STORMWATER MANAGEMENT
 - TYP. - TYPICAL

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

 4/9/13 DATE

- NOTE:** ADDITIONAL SILT FENCE AND/OR "SUPER" SILT FENCE IS TO BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR
- UTILITY CONSTRUCTION OUTSIDE OF SEDIMENT CONTROL PRACTICES**
- EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON UPSTREAM SIDE OF TRENCH.
 - IMMEDIATELY FOLLOWING PIPE INSTALLATION THE TRENCH SHALL BE BACKFILLED, COMPACTED AND STABILIZED WITH STONE AT THE END OF EACH WORK DAY.
 - SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE (1) WORKING DAY. (SILT FENCE AS PER SCS STANDARD DRAWING - E-15-3)
 - THE CONTRACTOR SHALL DISTURB AND OPEN TRENCH THE MINIMUM PRACTICAL AREA REQUIRED TO ACCOMPLISH THE WORK DESIGNATED FOR EACH DAY.
 - ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS". ANY EROSION AND SEDIMENT CONTROL PRACTICES DAMAGED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

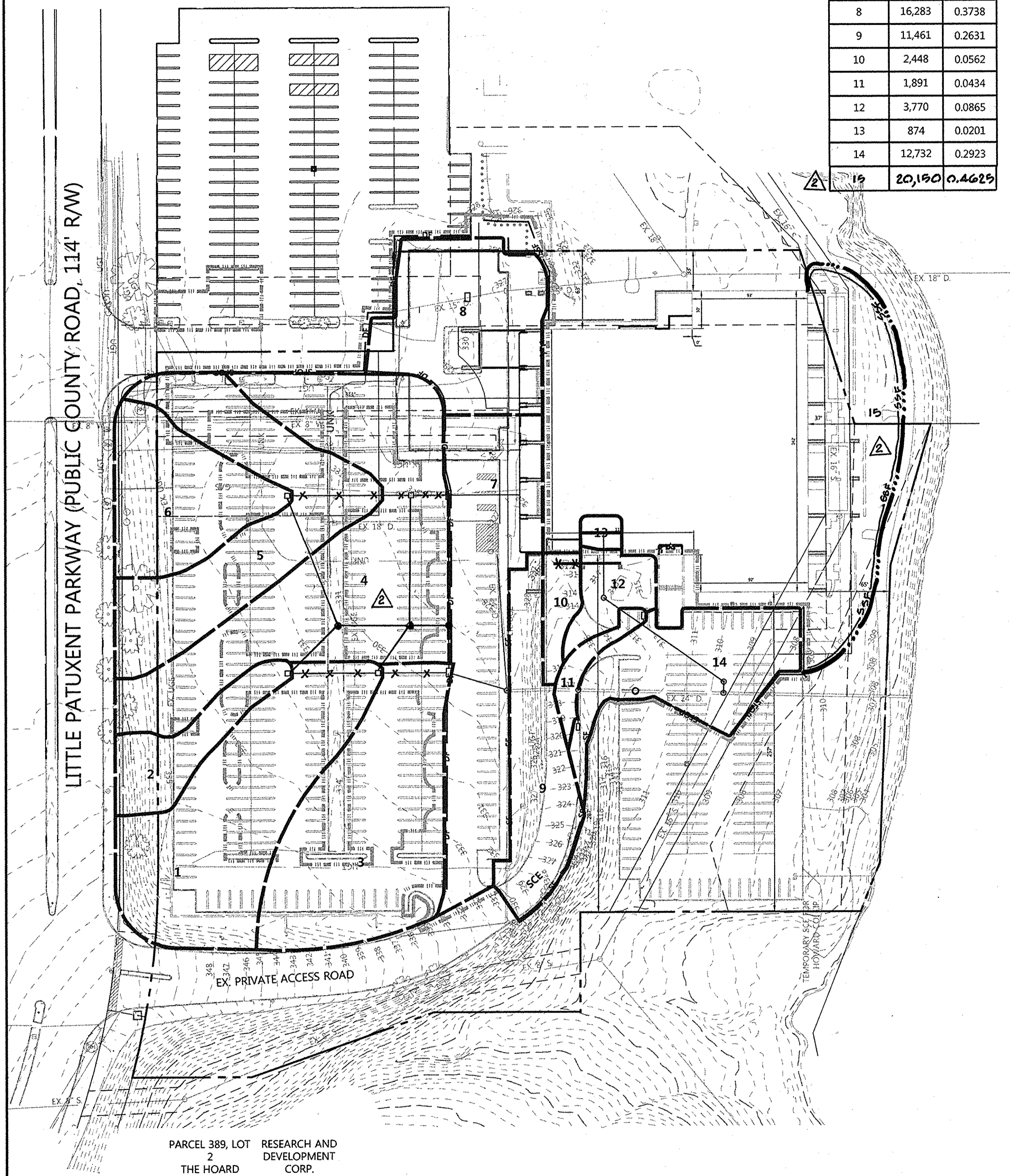


PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 20500 EXPIRATION DATE: 5/13/14


 Professional Engr. No. 20500

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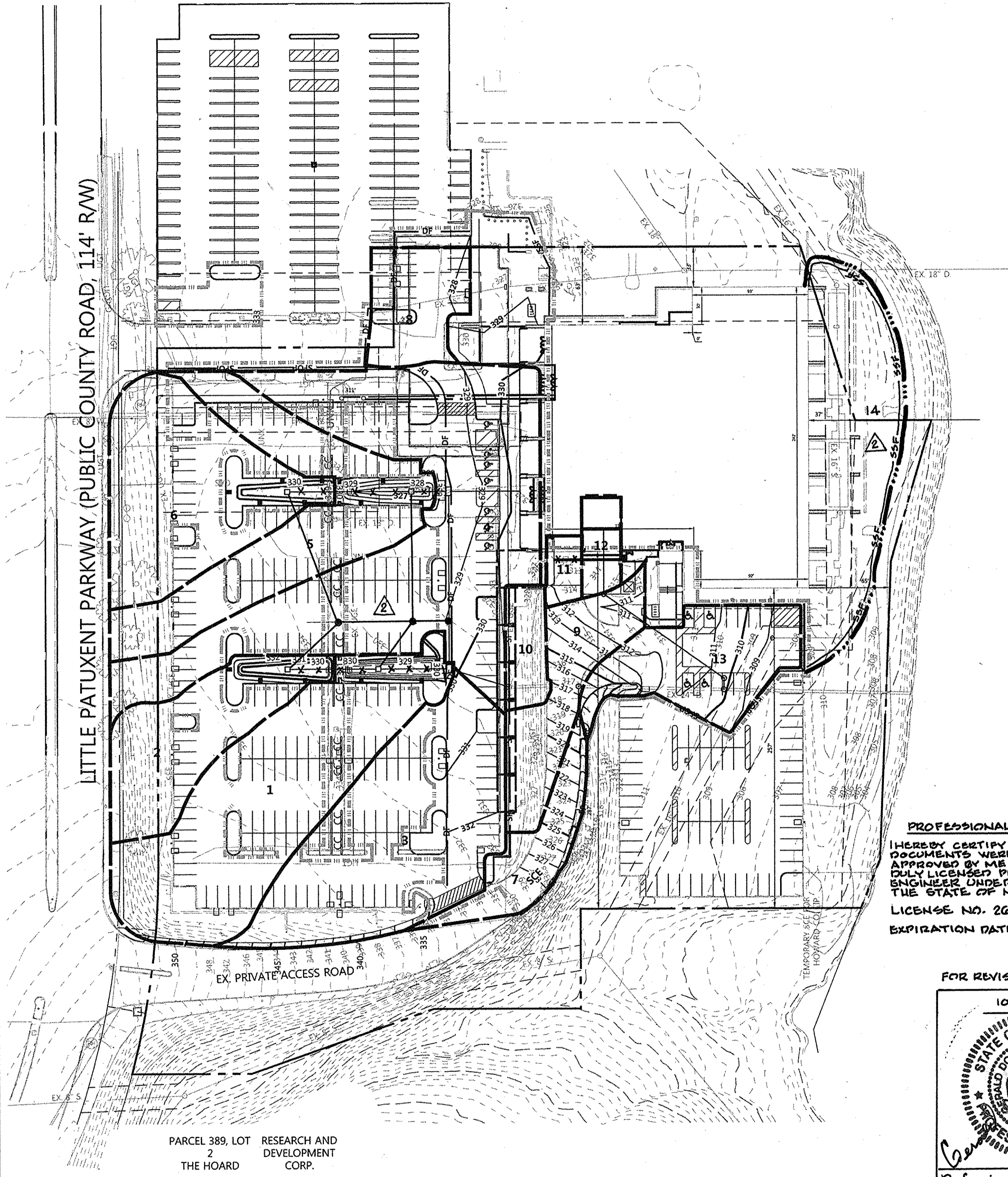
A:\11133\11133-AD\ENGR\CAD FILES\SHEET FILES\11133_SECS05.DWG Tue, Mar 19, 2013



EX. DRAINAGE AREA		
DA NO.	SF	AC
1	24,308	0.5580
2	6,340	0.1456
3	24,014	0.5513
4	33,411	0.7670
5	20,177	0.4632
6	12,581	0.2888
7	22,510	0.5168
8	16,283	0.3738
9	11,461	0.2631
10	2,448	0.0562
11	1,891	0.0434
12	3,770	0.0865
13	874	0.0201
14	12,732	0.2923
15	20,150	0.4625

PARCEL 389, LOT 2 THE HOARD RESEARCH AND DEVELOPMENT CORP.

EXISTING DRAINAGE AREAS
SCALE: 1"=60'



PR. DRAINAGE AREA		
DA NO.	SF	AC
1	27,864	0.6397
2	12,581	0.2888
3	25,987	0.5966
4	42,202	0.9688
5	19,328	0.4437
6	19,935	0.4576
7	6,280	0.1442
8	6,890	0.1582
9	9,344	0.2145
10	3,223	0.0740
11	1,547	0.0355
12	2,420	0.0556
13	11,222	0.2576
14	20,150	0.4625

PARCEL 389, LOT 2 THE HOARD RESEARCH AND DEVELOPMENT CORP.

PROPOSED DRAINAGE AREAS
SCALE: 1"=60'

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY DEPT. OF PLANNING AND ZONING
J. Paul Blute 4/9/13
HOWARD COUNTY DEPT. OF PLANNING AND ZONING

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 26560
EXPIRATION DATE: 7-18-15

FOR REVISION NO. 2 ONLY



CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S

3/21/13
Date
Professional Engr. No. 16228

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. 16228 EXPIRATION DATE: 3/13/14

APPROVED PLANNING BOARD OF HOWARD COUNTY	
DATE	MARCH 7, 2013
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
<i>Victor S. ...</i>	4/26/13
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>...</i>	4/10/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>...</i>	4/26/13
DIRECTOR	DATE
10-22-14	ADD 400' LOT & SHOW REVISED MAINS
11-28-12	REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C
Date	No. Revision Description
	REVISED SITE DEVELOPMENT PLAN
THE ROUSE BUILDING RENOVATION	
OWNER/DEVELOPER: CLOVER ACQUISITIONS LLC C/O THE HOWARD HUGHES CORPORATION P.O. BOX 833 COLUMBIA, MD 21044-0833	
DMW DAFT MCCUNE WALKER INC 200 EAST PENNSYLVANIA TOWNSHIP, MD 21286 P: 410 286 3333 F: 410 236 4705 WWW.DMW.COM A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS	
AREA	TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18 ELECTION DISTRICT 5TH ZONE NT
TITLE	SEDIMENT AND EROSION CONTROL DRAINAGE AREA MAPS
Des. By	GDT/MCB Scale 1"=60' Proj. No. 11133.A
Drn. By	RLV Date 3/19/13
Chk. By	GDT/MCB Approved
13 of 264	

STANDARD SEDIMENT CONTROL NOTES

- 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT 'MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL' AND REVISIONS THERETO.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
A. SEVEN (7) CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
B. FOURTEEN (14) DAYS AS TO ALL OTHER DISTURBED OF GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASIN SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12 OF THE 'HOWARD COUNTY DESIGN MANUAL', STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE '1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL' FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
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 HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:
TOTAL AREA OF SITE: 7,504 ACRES +/- 119,837 SF or 2.75 AC +/-
TOTAL AREA DISTURBED: 400,475 SF OR 0.92 AC +/-
AREA TO BE ROOFED OR PAVED: 70,000 S.F. OR 1.61 ACRES +/-
AREA TO BE VEGETATIVELY STABILIZED: 34,175 SF OR 0.78 ACRES +/-
TOTAL CUT AND FILL: 49,857 SF or 1.14 AC +/-
TOTAL FILL N/A
OFF-SITE WASTE/BORROW AREA LOCATION:
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROL MEASURES MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. TRENCHING FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN A GRADING PERMIT FOR THE PROPOSED WORK. NOTIFY THE HOWARD COUNTY DEPARTMENT OF PERMITS AND LICENSES (DLP) AT LEAST 48 HOURS PRIOR TO BEGINNING WORK. (2 DAYS)
2. INSTALL THE STABILIZED CONSTRUCTION ENTRANCE (SCE) AND PERIMETER CONTROLS; SUPER SILT FENCE (SSF) AND SOD MATS AND INITIAL PROTECTION ON EXISTING DIKES AS SHOWN ON THE PLANS. (5 DAYS)
IF NECESSARY, AN ON-SITE STOCKPILE AREA WILL BE LOCATED WITHIN THE LIMIT OF DISTURBANCE WITH THE COORDINATION AND DISCRETION OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR AND THE GENERAL CONTRACTOR.
3. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, INSTALL PROPOSED STORM DRAIN SYSTEM IN UPPER BUILDING FRONTAGE, PARKING, AND PRIMARY DRIVE ISLE TO GRADE. DURING THIS GRADING OPERATION PROVIDE POSITIVE DRAINAGE TO EX. I-16 & EX. I-18 UNTIL RUNOFF CAN BE REDIRECTED TO I-16, I-19 & I-12. INSTALL I-12 AND PROVIDE INLET PROTECTION. ONCE RUNOFF IS DIRECTED TO I-16, I-19 & I-12 AND PRIOR TO THE PLACEMENT OF STONE SUB-BASE IN THIS AREA, CONVERT EX. I-18 TOP GRATE TO A MANHOLE FRAME & COVER. ALSO, REMOVE/ABANDON EX. I-16 AND TEMPORARY 15" PIPE. REMOVE SUPER FENCE DIVERSION CONVEYING RUNOFF TO I-16 & I-19. (2 WEEKS)
4. BEGIN FINAL PAVING WITH THE UPPER PARKING LOT AREA. (4 DAYS)
5. INSTALL NEW CURB AND GUTTER, AS WELL AS, LOADING DOCK AND DUMPSTER PAD CONCRETE SLABS. FINALIZE TRENCH DRAIN GRATE INSTALLATION, INLETS I-2, I-3 AND I-4. REFER TO STORM DRAIN PROFILE SHEET 10 OF 21. (1 WEEK)
6. BEGIN FINAL PAVING OPERATIONS IN LOWER LEVEL AREAS WITHIN LIMIT OF DISTURBANCE. FINE GRADE OVERALL SITE AND INSTALL PERMANENT SEED AND MULCH ON LAWN AND LANDSCAPE ISLAND AREAS. (1 WEEK)
7. INSTALL BIO-RETENTION FACILITIES. REFER TO APPROVED STORMWATER MANAGEMENT PLANS AND ESD SPECIFIC CONSTRUCTION SEQUENCE. PRIOR TO BECOMING ACTIVE, IT MAY BE NECESSARY TO DEWATER SEDIMENT LADEN PONDING AREAS. UTILIZE PORTABLE SEDIMENT TANK AND DISCHARGE TO A STABILIZED OUTLET IN A NON-ERODIBLE SEDIMENT (SPILL) AND TAKE TO A SITE WITH AN APPROVED OPEN GRADING PERMIT AND AN APPROVED SEDIMENT CONTROL PLAN. (2 WEEKS)
8. INSTALL PARKING SPACE STRIPS (2 DAYS)
9. UPON STABILIZATION OF THE SITE AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES AND STABILIZE THOSE AREAS DISTURBED BY THIS PRACTICE. (2 DAYS)

B-4 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

DEFINITION USING VEGETATION AS COVER TO PROTECT EXPOSED SOIL FROM EROSION.

PURPOSE TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL.

CONDITIONS WHERE PRACTICE APPLIES ON ALL DISTURBED AREAS NOT STABILIZED BY OTHER METHODS. THIS SPECIFICATION IS DIVIDED INTO SECTIONS ON INCREMENTAL STABILIZATION; SOIL PREPARATION, SOIL AMENDMENTS AND TOPSOILING; SEEDING AND MULCHING; TEMPORARY STABILIZATION; AND PERMANENT STABILIZATION.

EFFECTS ON WATER QUALITY AND QUANTITY

STABILIZATION PRACTICES ARE TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL WHEN SOIL IS STABILIZED WITH VEGETATION, THE SOIL IS LESS LIKELY TO ERODE AND MORE LIKELY TO ALLOW INFILTRATION OF RAINFALL, THEREBY REDUCING SEDIMENT LOADS AND RUNOFF TO DOWNSTREAM AREAS. PLANTING VEGETATION IN DISTURBED AREAS WILL HAVE AN EFFECT ON THE WATER BUDGET, ESPECIALLY ON VOLUMES AND RATES OF RUNOFF, INFILTRATION, EVAPORATION, TRANSPARATION, PERCOLATION, AND GROUNDWATER RECHARGE. OVER TIME, VEGETATION WILL INCREASE ORGANIC MATTER CONTENT AND IMPROVE THE WATER HOLDING CAPACITY OF THE SOIL AND SUBSEQUENT PLANT GROWTH. VEGETATION WILL HELP REDUCE THE MOVEMENT OF SEDIMENT, NUTRIENTS, AND OTHER CHEMICALS CARRIED BY RUNOFF TO RECEIVING WATERS. PLANTS WILL ALSO HELP PROTECT GROUNDWATER SUPPLIES BY ASSIMILATING THOSE SUBSTANCES PRESENT WITHIN THE ROOT ZONE. SEDIMENT CONTROL PRACTICES MUST REMAIN IN PLACE DURING GRADING, SEEDBED PREPARATION, SEEDING, MULCHING, AND VEGETATIVE ESTABLISHMENT.

ADEQUATE VEGETATIVE ESTABLISHMENT INSPECT SEEDED AREAS FOR VEGETATIVE ESTABLISHMENT AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANTING SEASON.

- 1. ADEQUATE VEGETATIVE STABILIZATION REQUIRES 95 PERCENT GROUND COVER.
2. IF AN AREA HAS LESS THAN 40 PERCENT GROUND COVER, RESTABILIZE FOLLOWING THE ORIGINAL RECOMMENDATIONS FOR LIME, FERTILIZER, SEEDBED PREPARATION, AND SEEDING.
3. IF AN AREA HAS BETWEEN 40 AND 94 PERCENT GROUND COVER, OVER-SEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY SPECIFIED.
4. MAINTENANCE FERTILIZER RATES FOR PERMANENT SEEDING ARE SHOWN IN TABLE B.6.

TABLE B.6: MAINTENANCE FERTILIZATION FOR PERMANENT SEEDING

Table with 6 columns: SEEDING MIXTURE, TYPE, LB/AC, LB/1000 SF, TIME, MOWING. Rows include TALL FESCUE MAKES UP TO 70 PERCENT OR MORE OF COVER, BIRDSFOOT TREFLOID, FAIRLY UNIFORM STAND OF TALL FESCUE OR BIRDSFOOT TREFLOID, WEEPING LOVEGRASS FAIRLY UNIFORM PLANT DISTRIBUTION, RED & CHEWINGS FESCUE, KENTUCKY BLUEGRASS, HARD FESCUE MIXTURES.

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

DEFINITION THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

PURPOSE TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

CRITERIA A. SOIL PREPARATION 1. TEMPORARY STABILIZATION

- A. 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, PLUMS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
C. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
2. PERMANENT STABILIZATION
A. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
I. SOIL PH BETWEEN 6.0 AND 7.0
II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM)
III. 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 THAT MIXTURE IS PHYTO TOXIC, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.

- B. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
C. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
E. 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 FRABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

B. TOPSOILING

- 1. 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 BIODIVERSITY.
2. 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.
3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
B. 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.
C. THE ORIGINAL SOIL IS TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.

SOIL SPECIFICATIONS: TOPSOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:
A. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2 INCHES IN DIAMETER.
B. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERNARDIA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
C. 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.

PURPOSE TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

CRITERIA

- 1. 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).
2. 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.
3. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
4. WHEN STABILIZATION IS REQUIRED DURING A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3-1.5 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY

Table with 6 columns: NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING-DEPTHS, FERTILIZER RATE (10-20-20), LIME RATE. Rows include ANNUAL RYEGRASS and FOXTAIL MILLET.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

PURPOSE TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.

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

CRITERIA

CONDITIONS WHERE PRACTICE APPLIES TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

CRITERIA A. SEEDING

- 1. SPECIFICATIONS
A. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
B. 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.
C. INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA SPECIALLY 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.
D. 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.

2. APPLICATION

- I. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1, PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES.
II. 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.
B. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
I. CULTIPACKING 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.
II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
C. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).
I. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL, OR SOLUBLE NITROGEN, P205 (PHOSPHOROUS), 200 POUNDS PER ACRE; K20 (POTASSIUM), 200 POUNDS PER ACRE.
II. 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 BURNT OR HYDRATED LIME WHEN HYDROSEEDING.
III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.
IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

B. MULCHING

- 1. MULCH MATERIALS (IN ORDER OF PREFERENCE)
A. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOIST, OR HEAVY WITH DIRT. STRAW IS TO BE CLEAN AND FREE OF ANY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.
B. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.
I. WCFFM 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 UNIFORM SPREAD SLURRY.
II. WCFFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
III. WCFFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BUTTER-LIKE GROUND COVER. ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEEDS IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDINGS.
IV. WCFFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.
V. WCFFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.
2. APPLICATION
A. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.
B. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXCESSIVELY DUSTY. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.
C. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
3. ANCHORING
A. 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:
I. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE TO A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO MATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR.
II. 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.
III. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSEET, TERRA TACK II, TERRA TACK AR 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 NETTING IS STRICTLY PROHIBITED.
IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

PURPOSE TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

CRITERIA

- 1. 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).
2. 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.
3. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
4. WHEN STABILIZATION IS REQUIRED DURING A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3-1.5 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY

Table with 6 columns: NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING-DEPTHS, FERTILIZER RATE (10-20-20), LIME RATE. Rows include ANNUAL RYEGRASS and FOXTAIL MILLET.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

PURPOSE TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.

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

CRITERIA

- 1. 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).
2. 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.
3. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
4. WHEN STABILIZATION IS REQUIRED DURING A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3-1.5 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY

Table with 6 columns: NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING-DEPTHS, FERTILIZER RATE (10-20-20), LIME RATE. Rows include ANNUAL RYEGRASS and FOXTAIL MILLET.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

A. SEED MIXTURES

- 1. GENERAL USE
A. 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 CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THIS SUMMARY IS TO BE PLACED ON THE PLAN.
B. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING.
C. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.
D. 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.
2. TURFGRASS MIXTURES
A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.
B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
I. 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.
II. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE. FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY 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.
III. 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 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE USED.
IV. 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 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1 1/2 TO 3 POUNDS PER 1000 SQUARE FEET.
NOTES:
SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND" CHOICE 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.
C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES
WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 15 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A)
CENTRAL MARYLAND: MARCH 15 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 6B)
SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 7A, 7B)
D. 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 1/4 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.
E. 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.

PERMANENT SEEDING SUMMARY

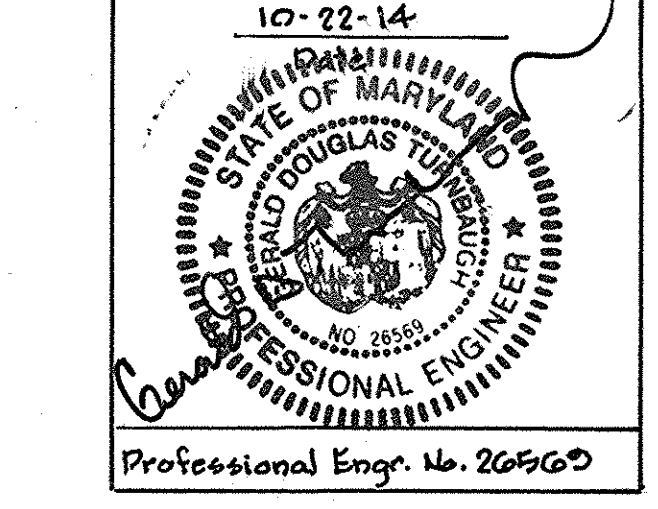
Table with 10 columns: HARDINESS ZONE (FROM FIGURE B.3): 6B, SEED MIXTURE (FROM TABLE B.1): 9, NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING DEPTHS, N, P205, K20, LIME RATE. Rows include TALL FESCUE, KENTUCKY BLUEGRASS, PERENNIAL RYEGRASS.

B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

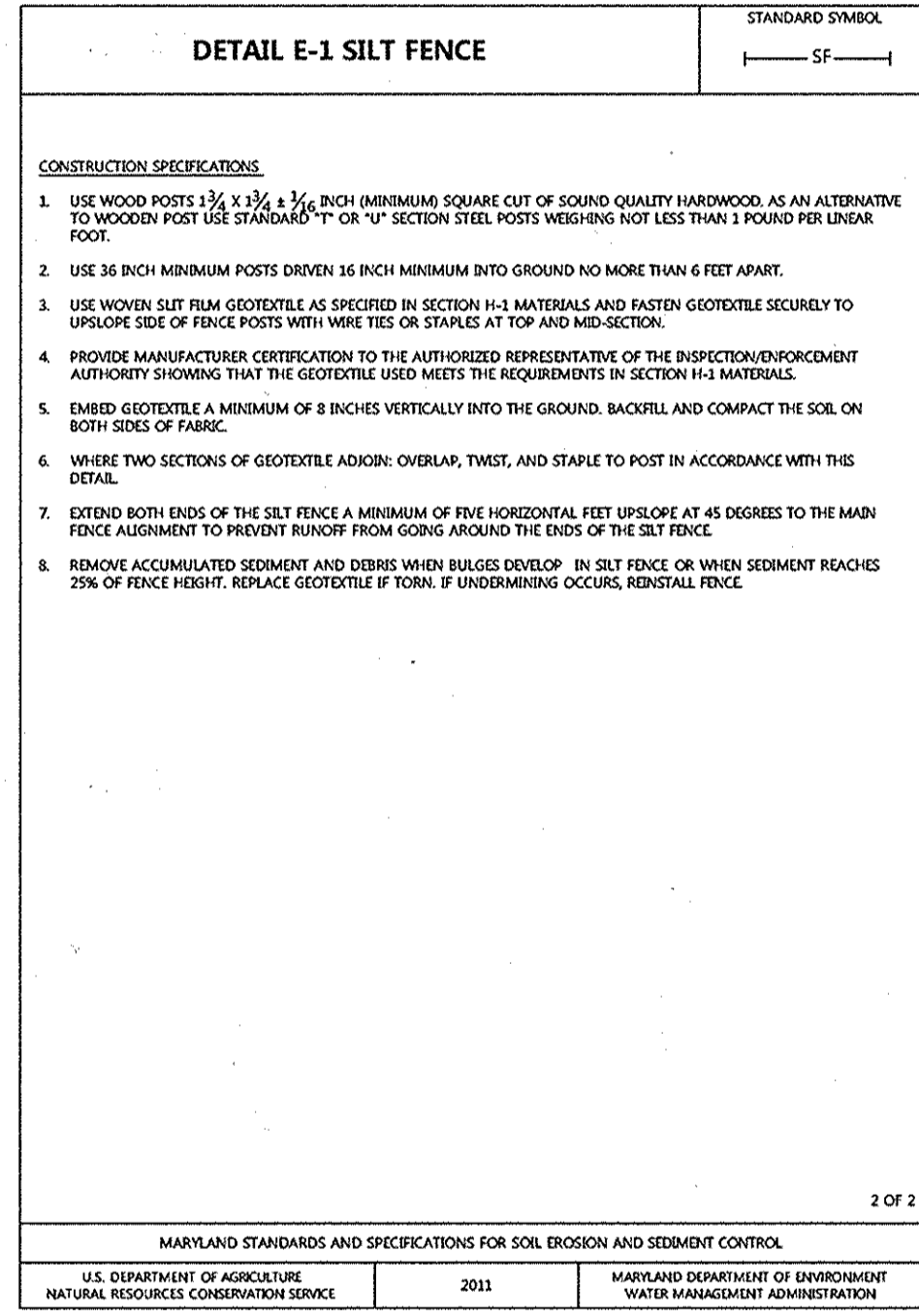
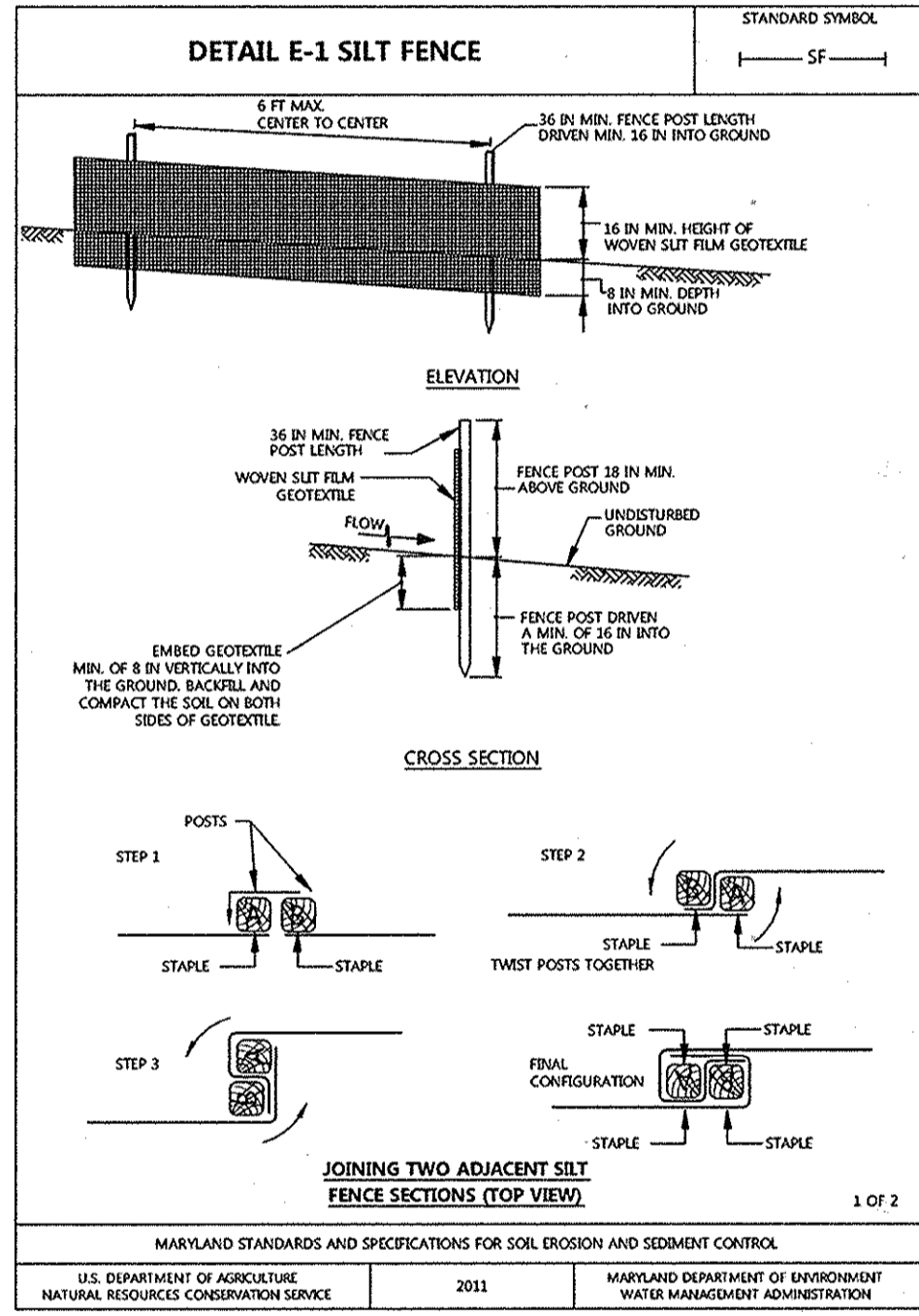
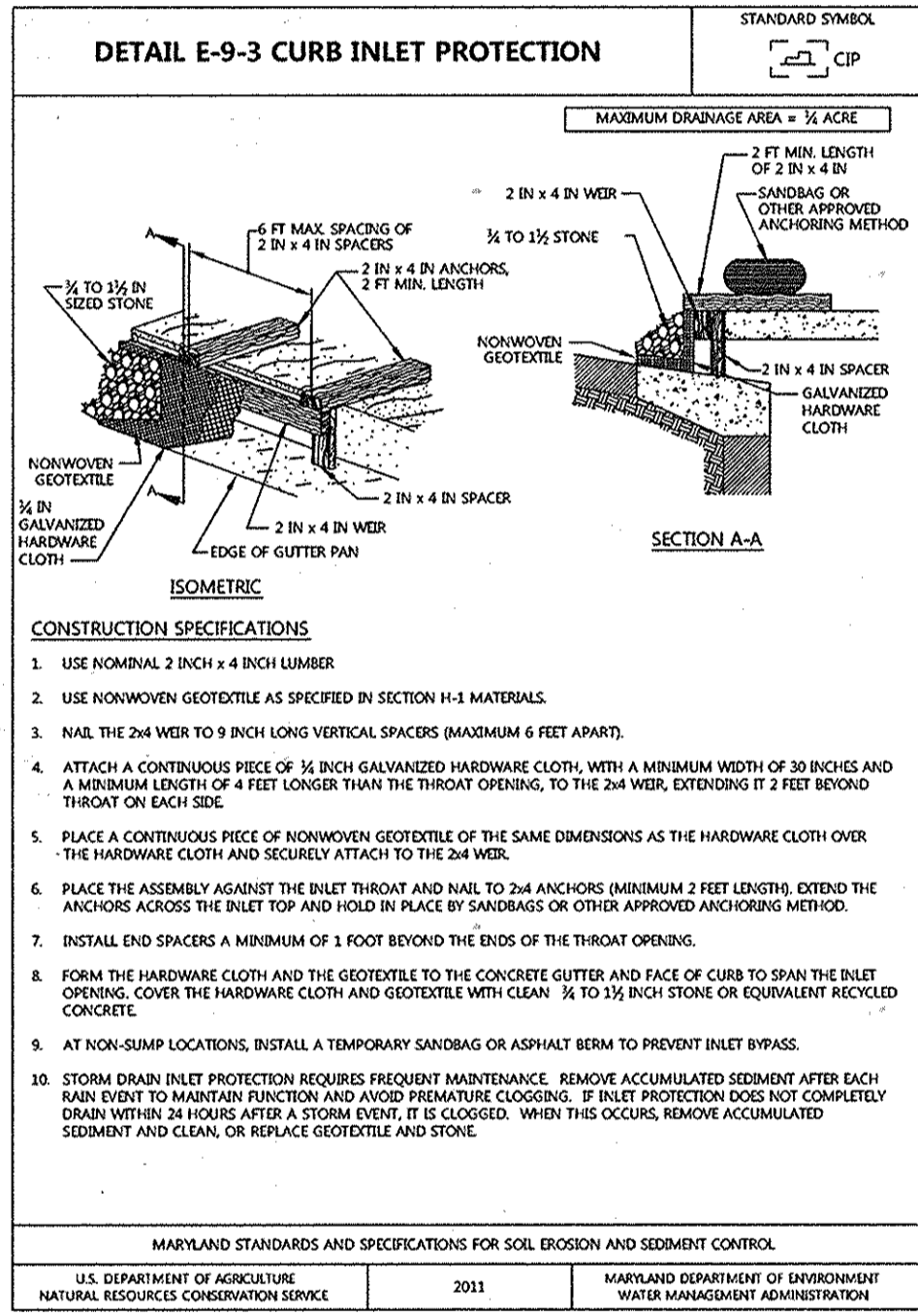
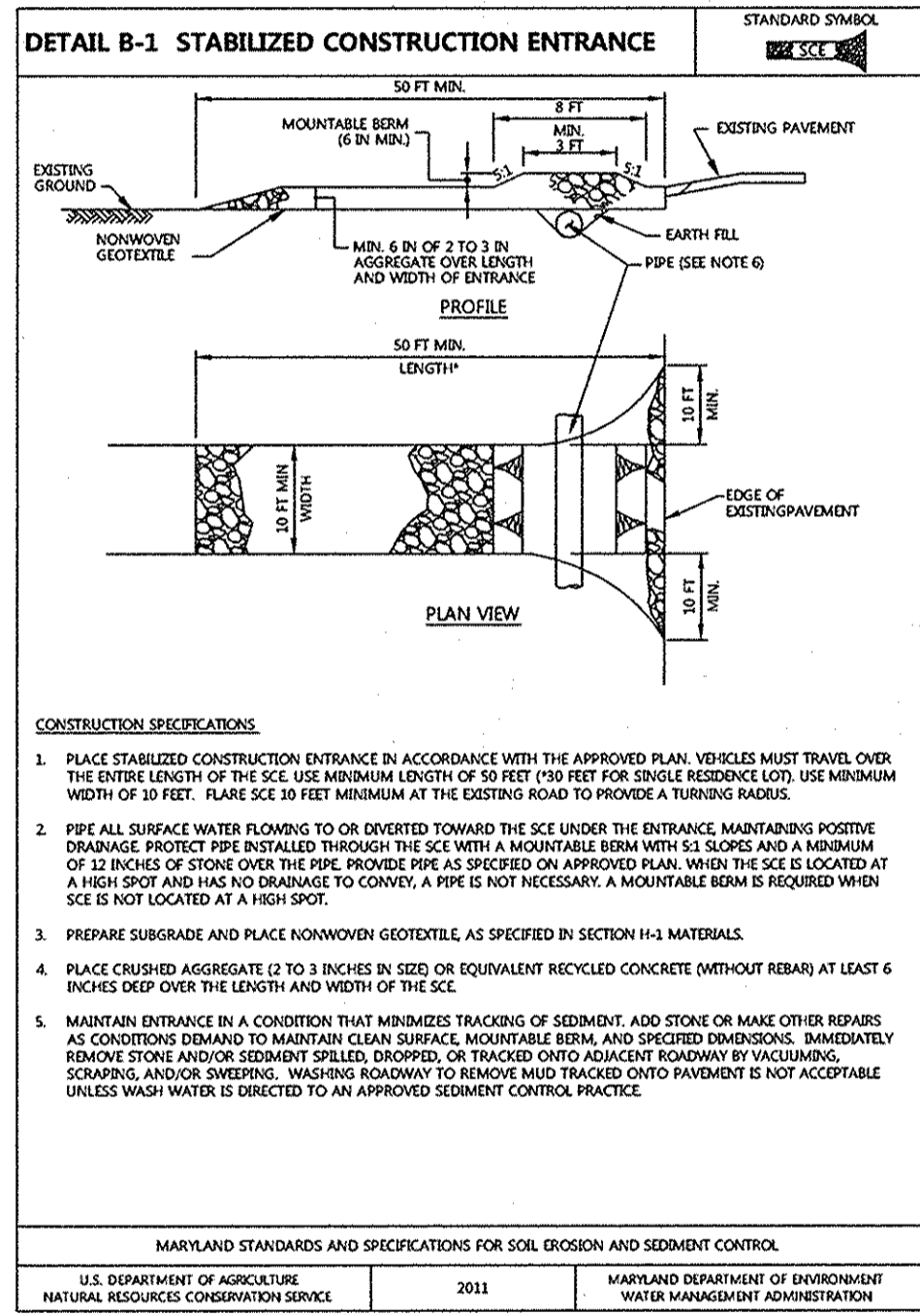
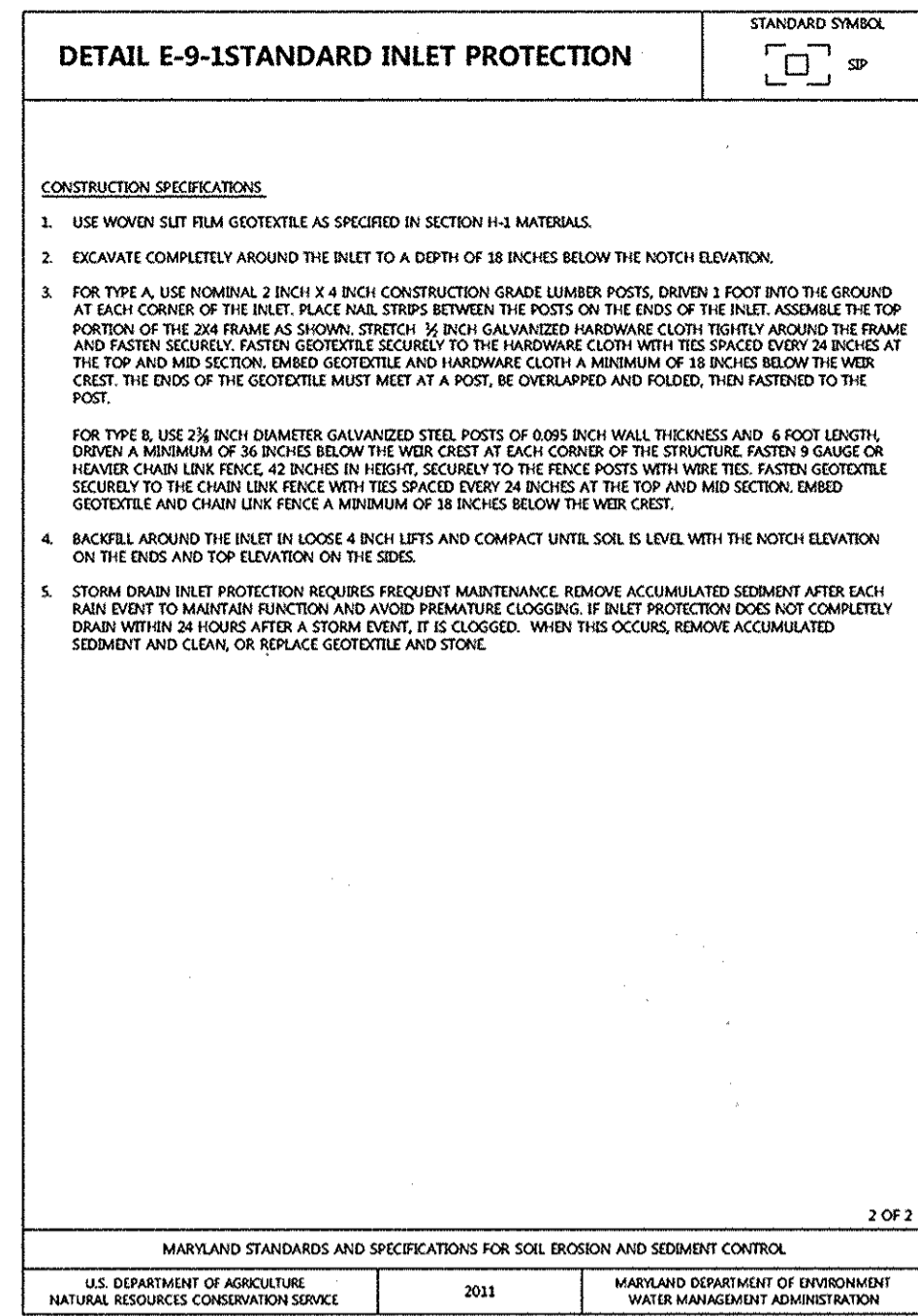
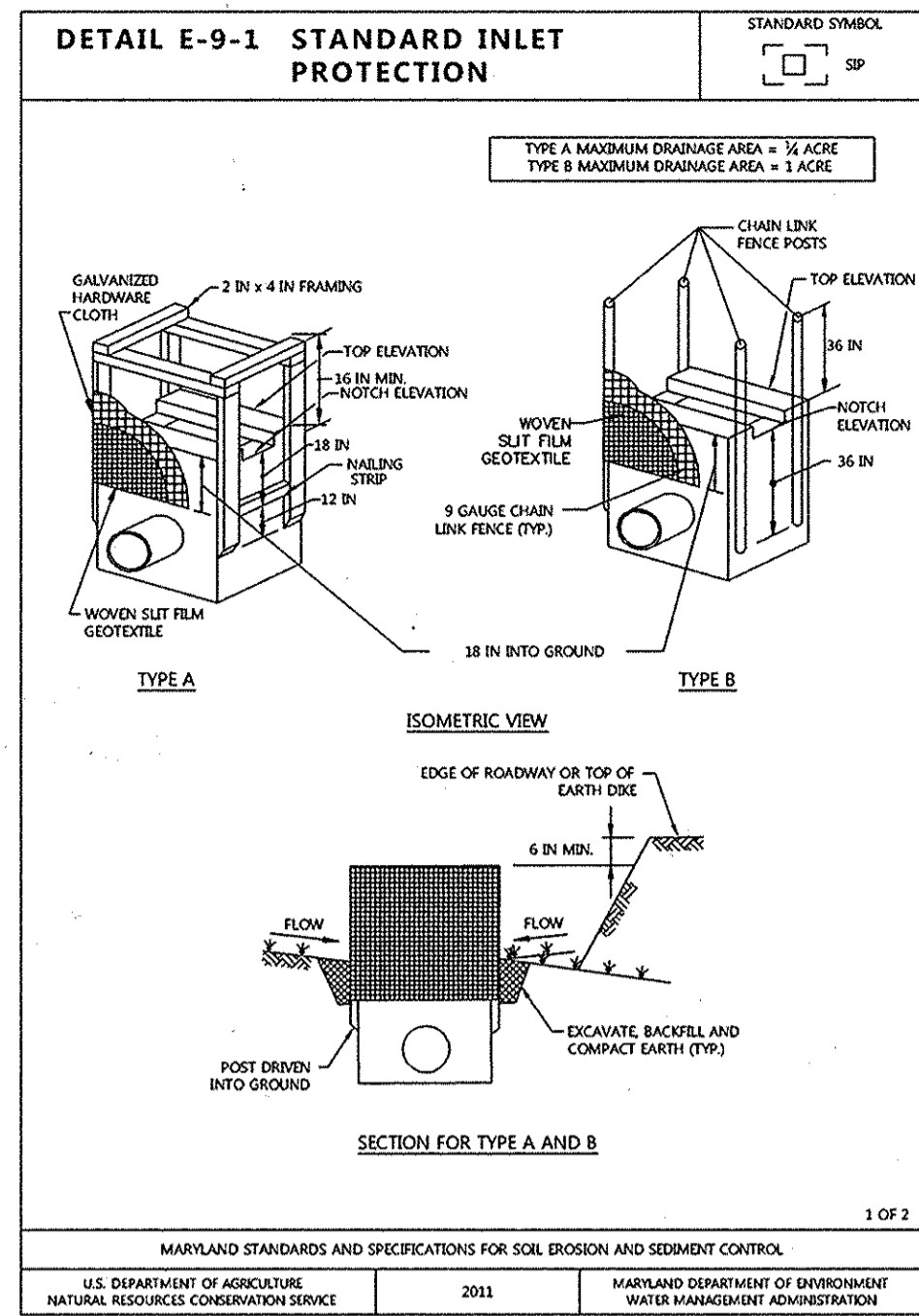
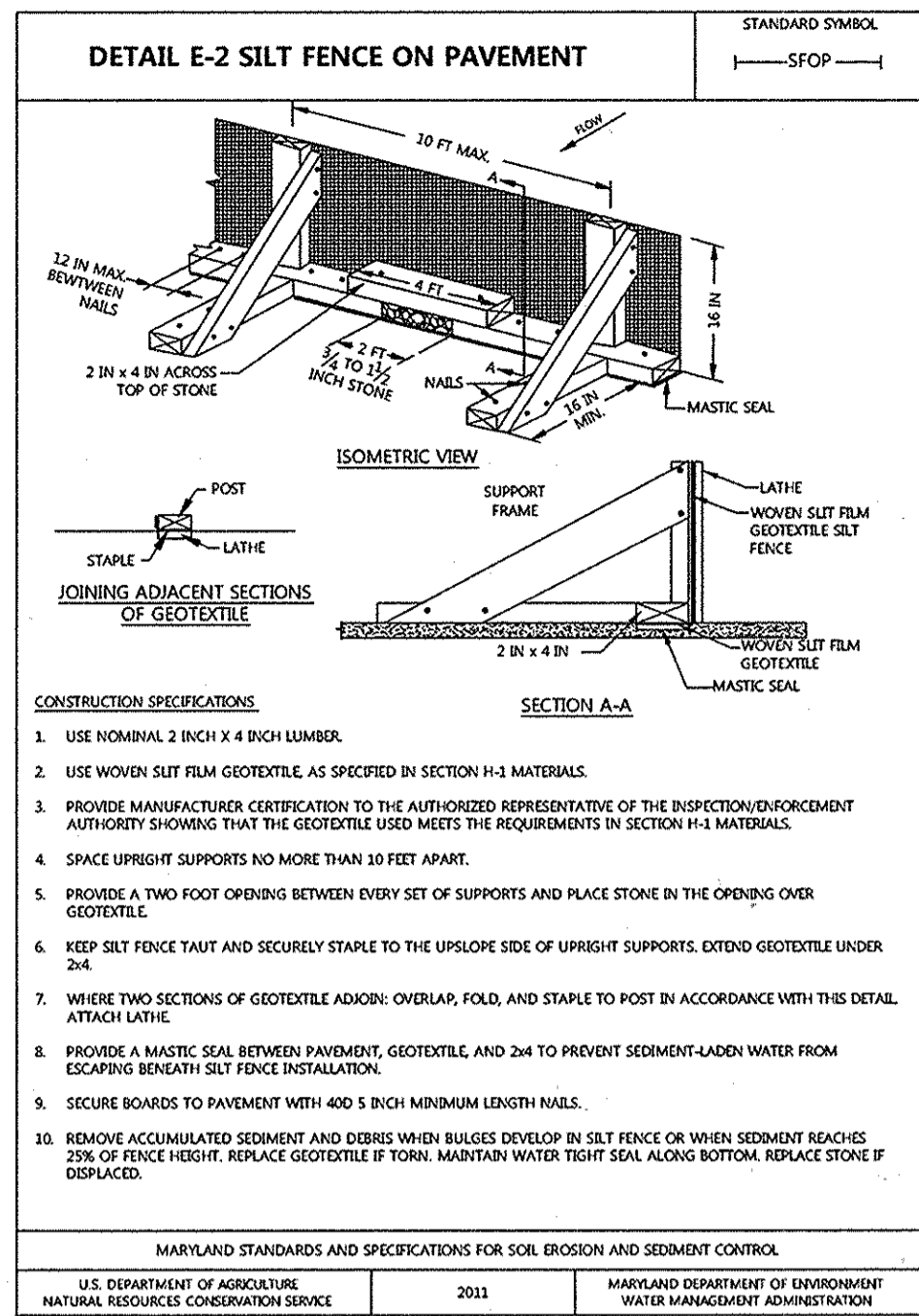
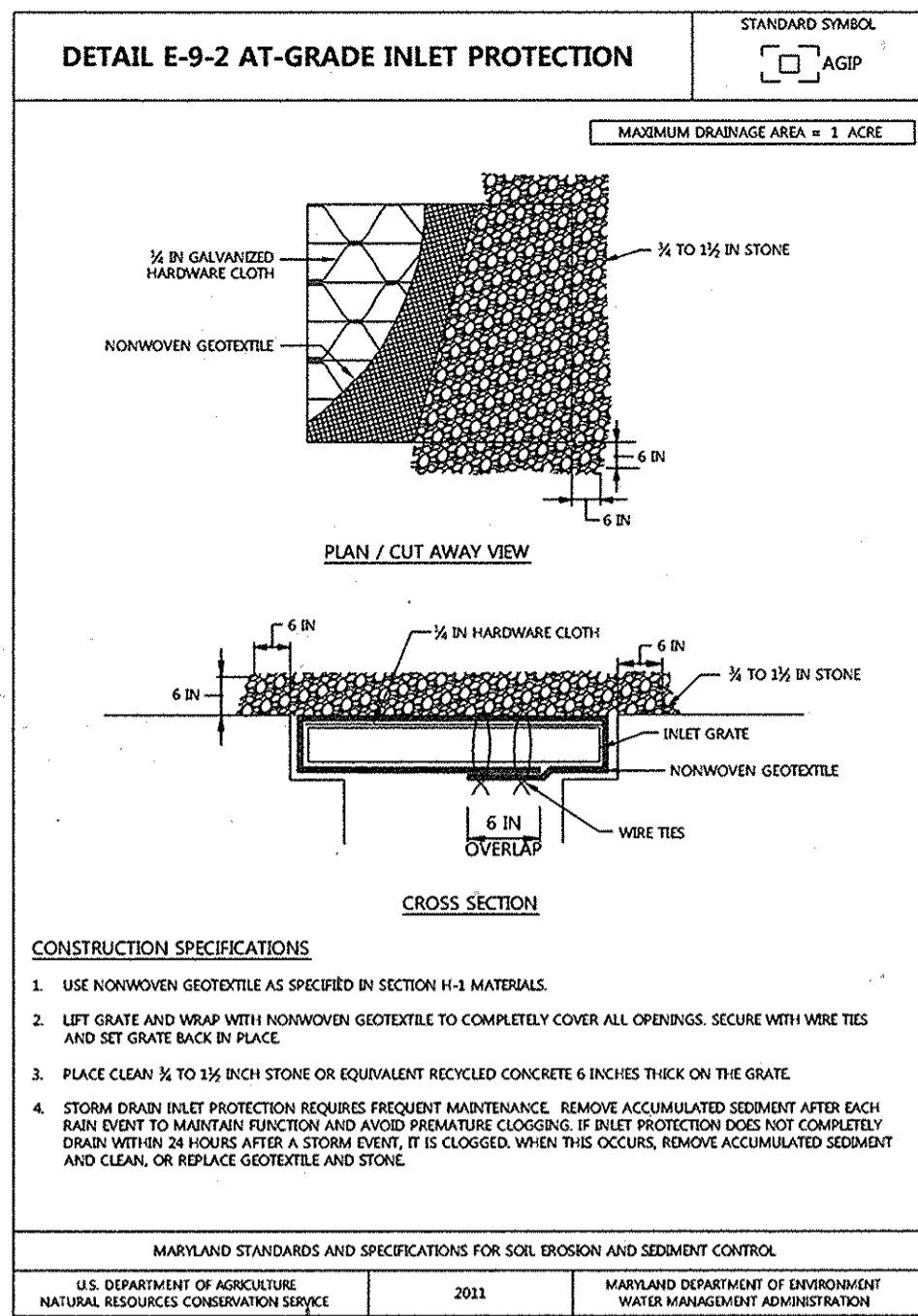
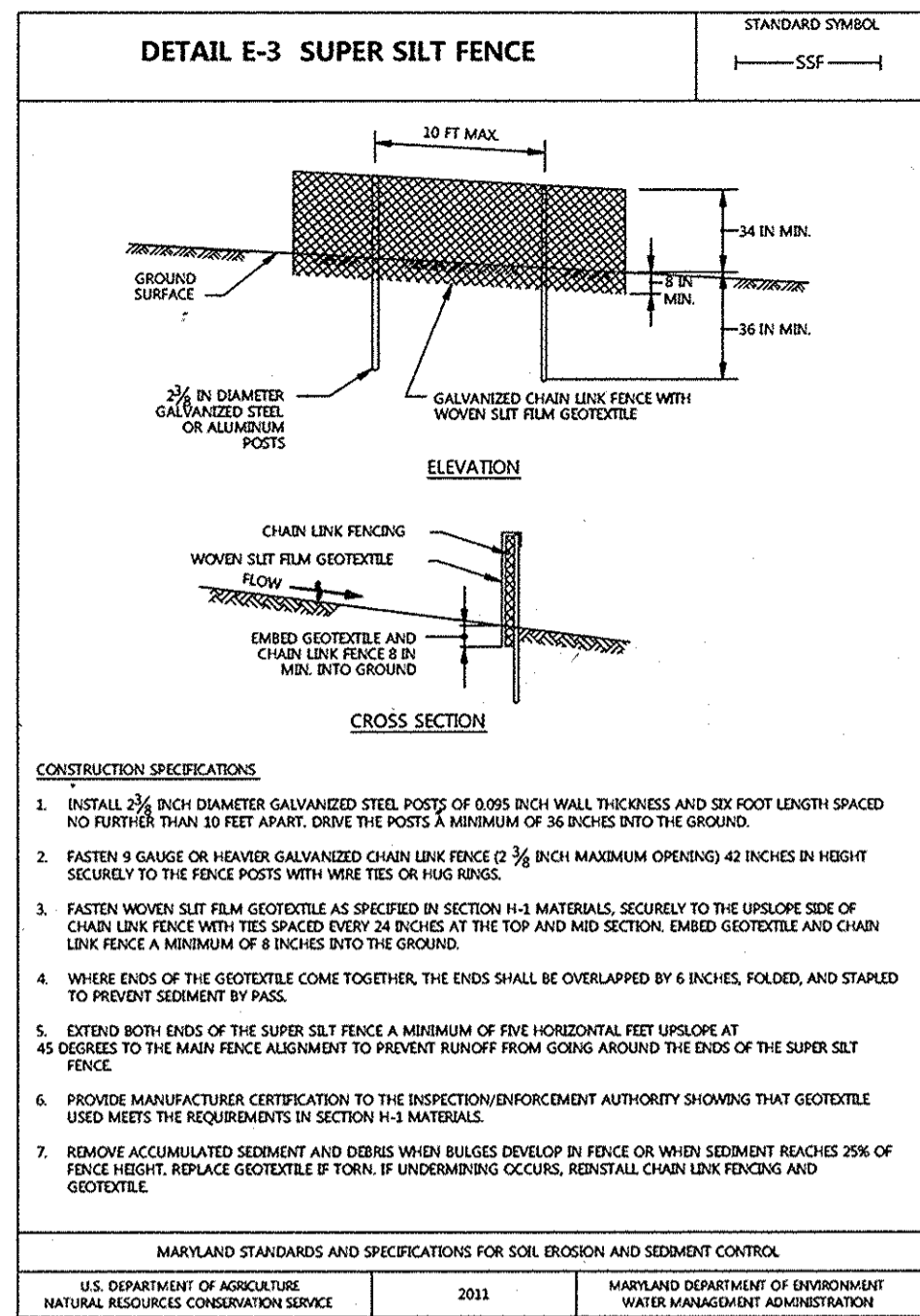
- 1. GENERAL SPECIFICATIONS
A. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
B. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 1/4 INCH, PLUS OR MINUS 1/8 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN EDGES WILL NOT BE ACCEPTABLE.
C. 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.
D. SOD MUST NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
E. 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.
2. SOD INSTALLATION
A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
B. 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 SOD 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.
C. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH TAGGING JOINTS. ROLL AND TAMP. PEG OR OTHERWISE SECURE THE SOD TO PREVENT SURPGE ON SLOPES. ENSURE SOILD CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
D. 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.
3. SOD MAINTENANCE
A. 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.
B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
C. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/4 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.

PROFESSIONAL CERTIFICATION

THIS IS TO 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. 20560 EXPIRATION DATE: 7-18-19



PROFESSIONAL CERTIFICATION



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

John R. [Signature] 4/9/13
HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

APPROVED PLANNING BOARD OF HOWARD COUNTY

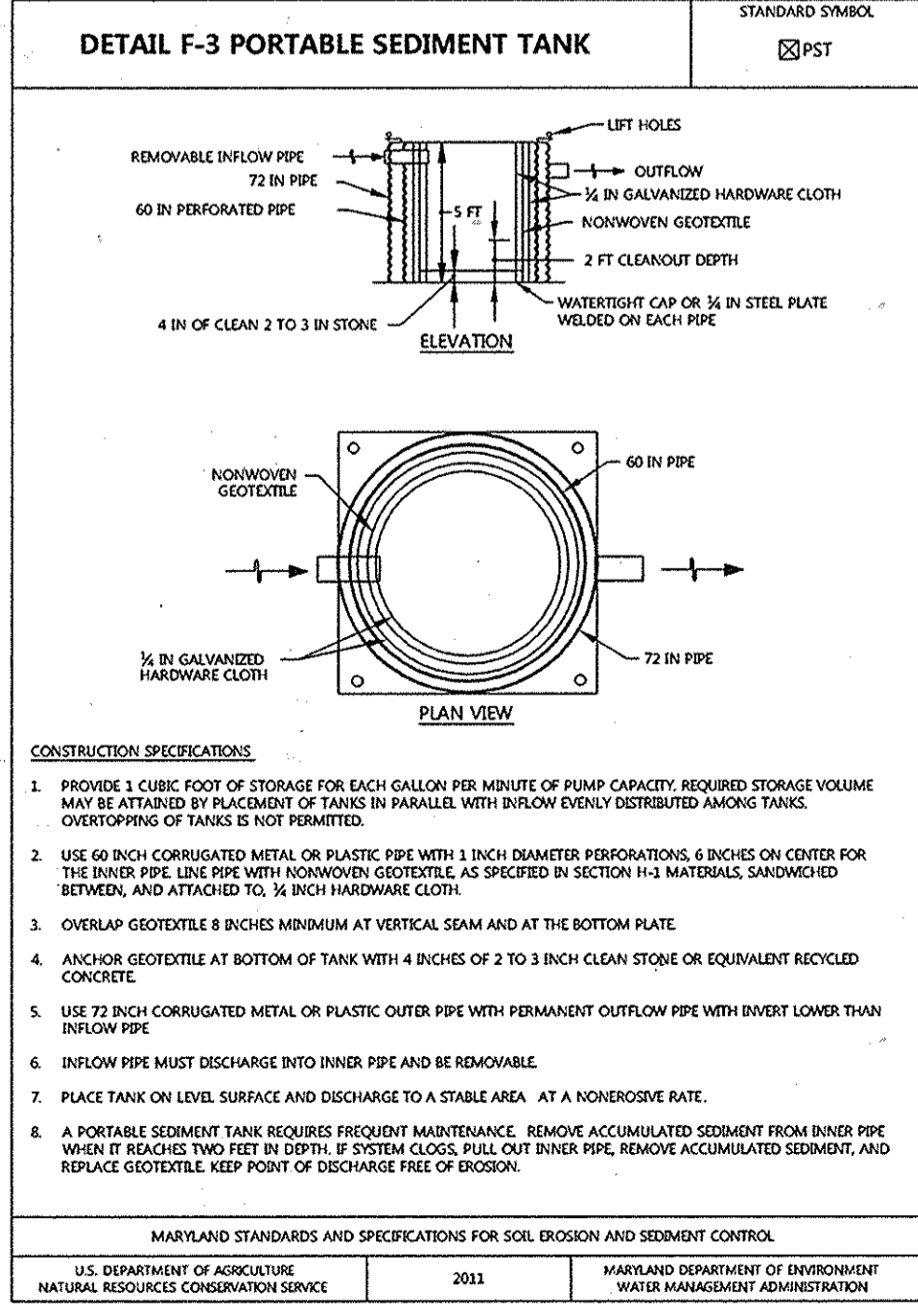
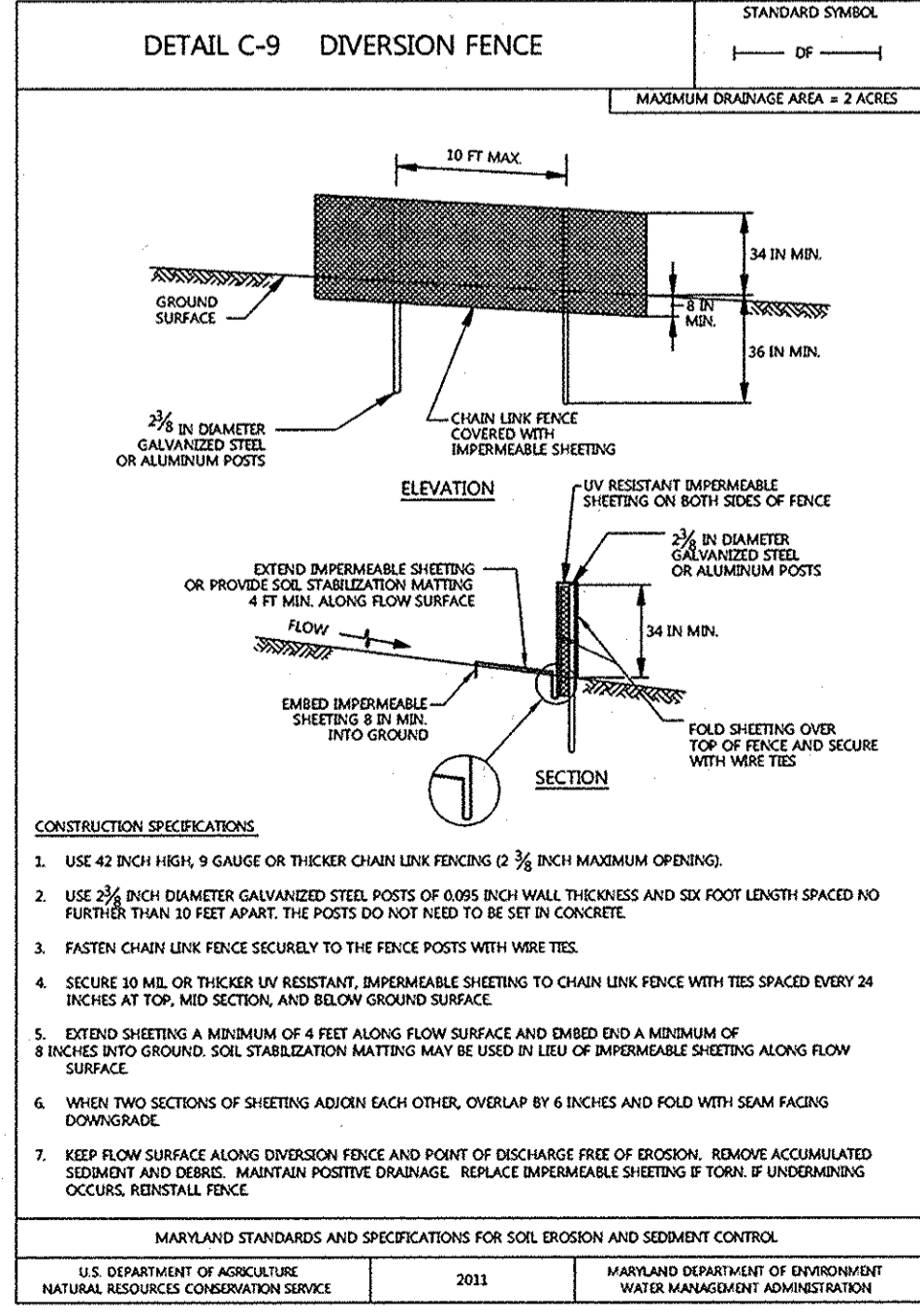
DATE: MARCH 7, 2013

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Vicki [Signature] 4/26/13
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/2/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/26/13
DIRECTOR DATE



(NOTES CONT.)

B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

DEFINITION
A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES.

PURPOSE
TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS.

CONDITIONS WHERE PRACTICE APPLIES
STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE.

CRITERIA

- THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
- THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.
- RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE.
- ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE.
- CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER.
- WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE.
- STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 FOLD STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION.
- IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING.

MAINTENANCE
THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN A 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION

B-3 LAND GRADING.

H-5 STANDARDS AND SPECIFICATIONS FOR DUST CONTROL

DEFINITION
CONTROLLING THE SUSPENSION OF DUST PARTICLES FROM CONSTRUCTION ACTIVITIES.

PURPOSE
TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES TO REDUCE ON AND OFF-SITE DAMAGE INCLUDING HEALTH AND TRAFFIC HAZARDS.

CONDITIONS WHERE PRACTICE APPLIES
AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT.

SPECIFICATIONS

- MULCHES: SEE SECTION B-4-2 SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS, SECTION B-4-3 SEEDING AND MULCHING, AND SECTION B-4-4 TEMPORARY STABILIZATION. MULCH MUST BE ANCHORED TO PREVENT BLOWING.
- VEGETATIVE COVER: SEE SECTION B-4-4 TEMPORARY STABILIZATION.
- TILLAGE: TILL TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT THAT MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION: SPRINKLE SITE WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. THE SITE MUST NOT BE IRRIGATED TO THE POINT THAT RUNOFF OCCURS.
- BARRIERS: SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.
- CHEMICAL TREATMENT: USE OF CHEMICAL TREATMENT REQUIRES APPROVAL BY THE APPROPRIATE PLAN REVIEW AUTHORITY.

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. 1928 EXPIRATION DATE: 5/31/14

Professional Eng. No. 1928

11-28-12 REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C

Date No. Revision Description

REVISED SITE DEVELOPMENT PLAN

THE ROUSE BUILDING RENOVATION

OWNER/DEVELOPER:
CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORPORATION
P.O. BOX 833 COLUMBIA, MD 21044-0833

DAFT MCCUNE WALKER INC
200 EAST PENNSYLVANIA TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA: TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT 5TH ZONE NT

TITLE: SEDIMENT AND EROSION CONTROL NOTES & DETAILS

Des. By: GDT/MCB Scale: N.T.S. Proj. No. 11133.A
Drn. By: RLV Date: 3/19/13
Chk. By: GDT/MCB Approved

15 of 26

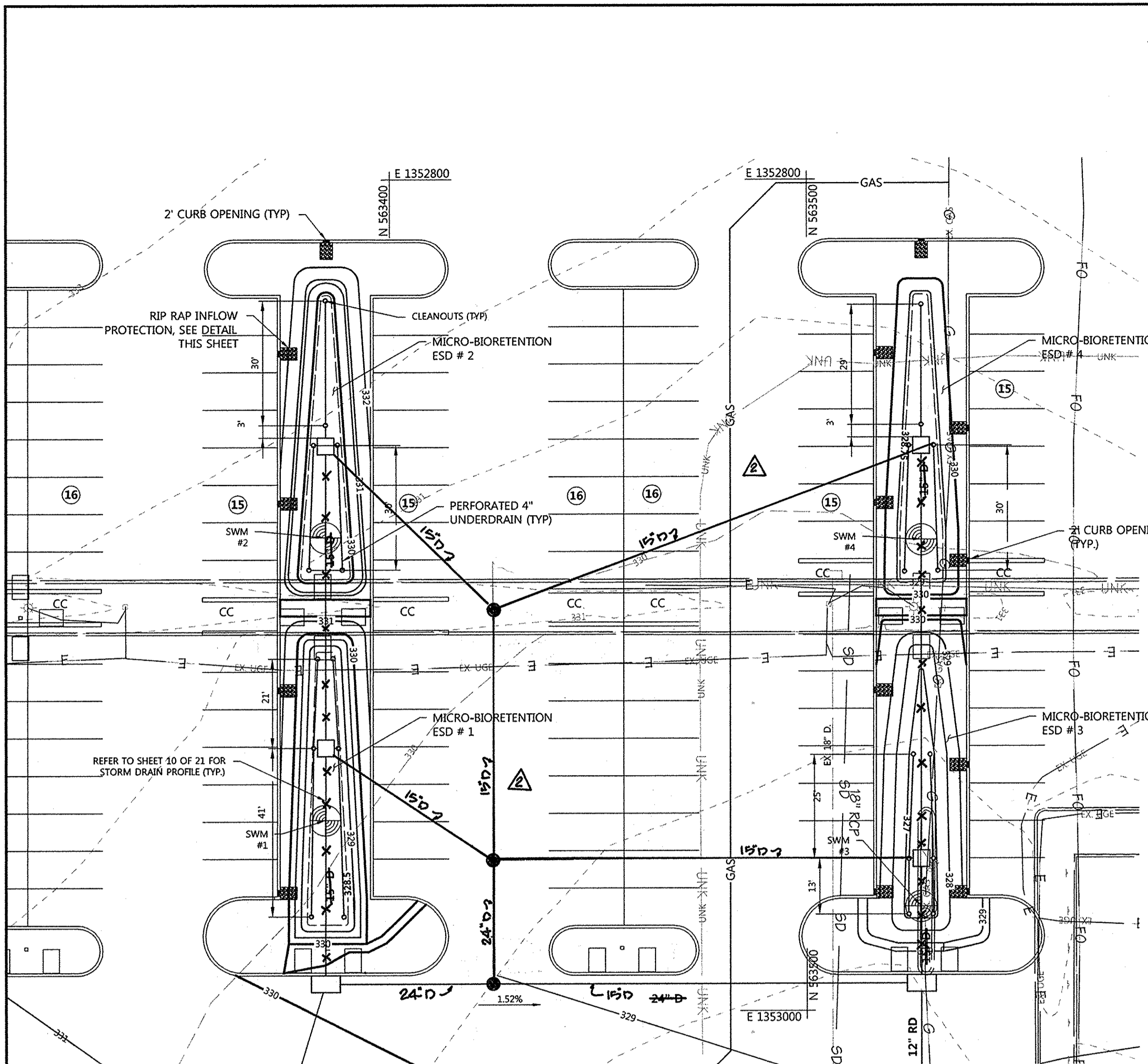
CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S

3/21/13 Date

Professional Engineer

SDP 73-23C

GP-13-040



MICRO-BIORETENTION PLAN
SCALE: 1"=20'



ACRONYMS

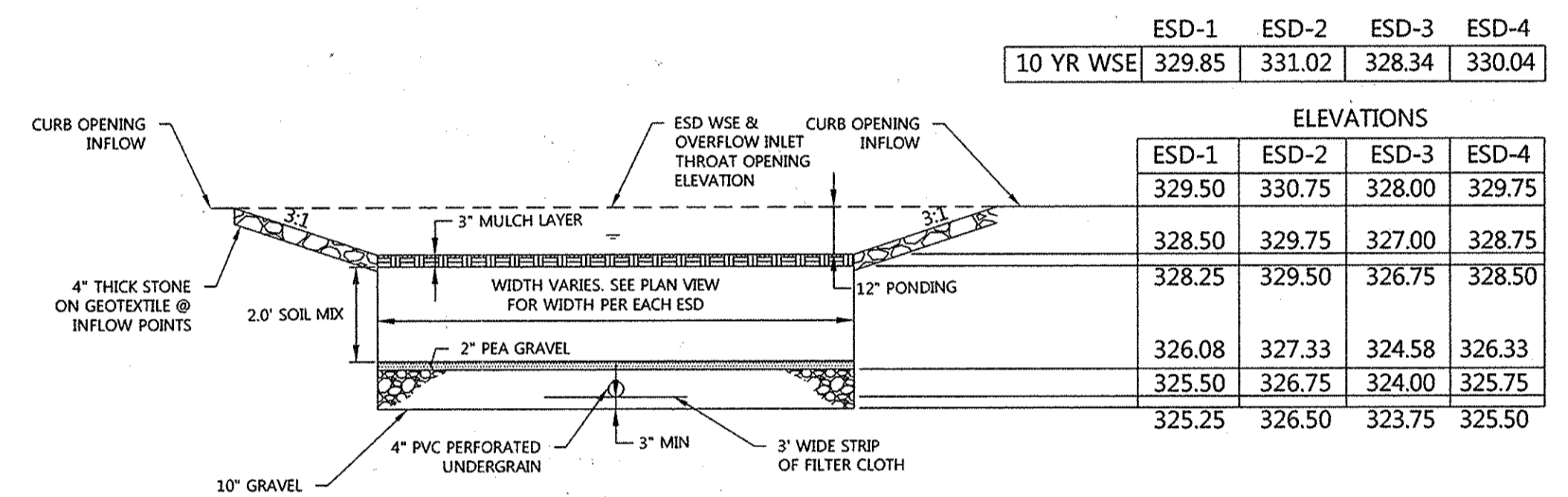
- CC - CART CORRAL
- CIP - CAPITAL IMPROVEMENT PROJECT
- CO - COUNTY
- EX - EXISTING
- ELEV - ELEVATION
- INV - INVERT
- NTS - NOT TO SCALE
- PROP. - PROPOSED
- SCE - STABILIZED CONSTRUCTION ENTRANCE
- STD - STANDARD
- SWM - STORMWATER MANAGEMENT
- TYP. - TYPICAL

OPERATION AND MAINTENANCE SCHEDULE FOR LANDSCAPE INFILTRATION (M-3) MICRO-BIORETENTION (M-6), RAIN GARDENS (M-7), BIORETENTION SWALE (M-8), ENHANCED FILTERS (M-9)

- a. 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.
- b. 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.
- c. 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.
- d. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

MICRO-BIORETENTION SEQUENCE OF CONSTRUCTION

1. 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 INLETS I-7, I-8, I-10 & I-11 AND ASSOCIATED PIPES.
2. ONCE VERIFIED SUB-GRADES HAVE BEEN ESTABLISHED, PLACE 3" OF THE 10" GRAVEL JACKET OR NO. 57 OR NO. 6 AGGREGATE IN BOTTOM OF EXCAVATION.
3. 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.
4. PLACE REMAINDER (7") OF THE 10" GRAVEL JACKET. CHECK FOR LEVELNESS.
5. PLACE 2" PEA GRAVEL LAYER OVER GRAVEL JACKET.
6. BACKFILL TOPSOIL FILTER MEDIA IN LIFTS OF 12" TO 18". DO NOT COMPACT. INSTALL LANDSCAPE PLANTINGS.
7. INSTALL RIP RAP INFLOW PROTECTION AT ALL CURB OPENING INFLOW POINTS.
8. SEED OR SOD 3:1 SIDE SLOPES. ADD 3" MULCH LAYER.



TYPICAL CROSS-SECTION OF MICRO-BIORETENTION
SCALE: 1"=3"

	ESD-1	ESD-2	ESD-3	ESD-4
10 YR WSE	329.85	331.02	328.34	330.04
ELEVATIONS				
ESD-1	ESD-2	ESD-3	ESD-4	
329.50	330.75	328.00	329.75	
328.25	329.50	326.75	328.50	
326.08	327.33	324.58	326.33	
325.50	326.75	324.00	325.75	
325.25	326.50	323.75	325.50	

LEGEND

- 330 --- EX. MAJOR CONTOURS
- 329 --- EX. MINOR CONTOURS
- [Symbol] EX. BUILDING
- [Symbol] EX. STORM DRAIN
- [Symbol] EX. WATER
- [Symbol] EX. UNDERGROUND ELECTRIC
- [Symbol] EX. STORM DRAIN
- [Symbol] EX. UNDERGROUND GAS
- [Symbol] EX. UNDERGROUND TELEPHONE
- 330 --- PROP. MAJOR CONTOURS
- 329 --- PROP. MINOR CONTOURS
- 330 --- PROP. CURB/EDGE OF PAVING
- [Symbol] PROP. STORM DRAIN
- [Symbol] PROP. SEWER
- GAS --- PROP. UNDERGROUND GAS
- [Symbol] BORING LOCATION (SEE SHEET 17 OF 21 FOR LOGS)
- [Symbol] PROP. LIGHT LUMINARIES REFER TO SITE LIGHTING ON SHEET 21 OF 21

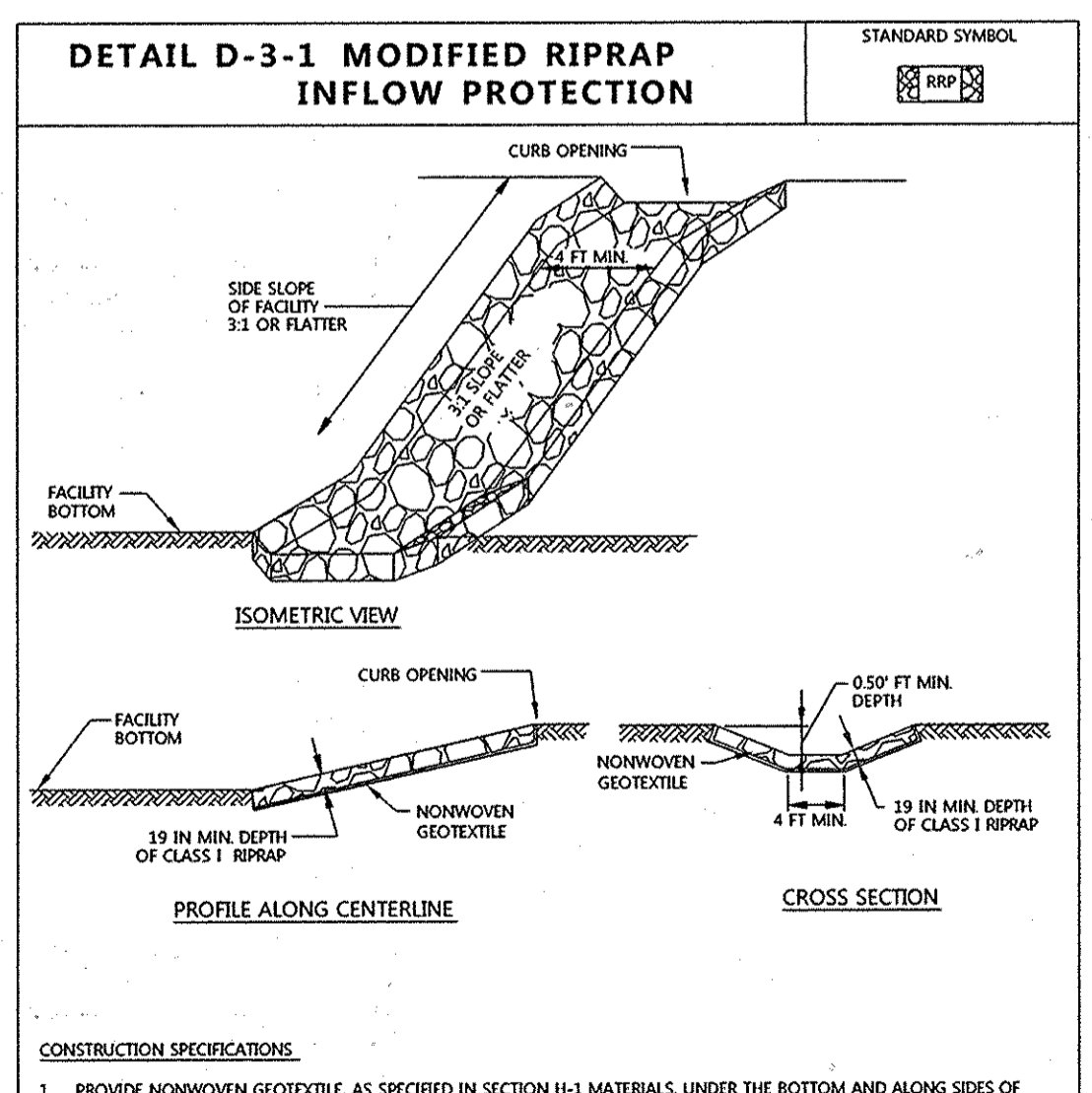
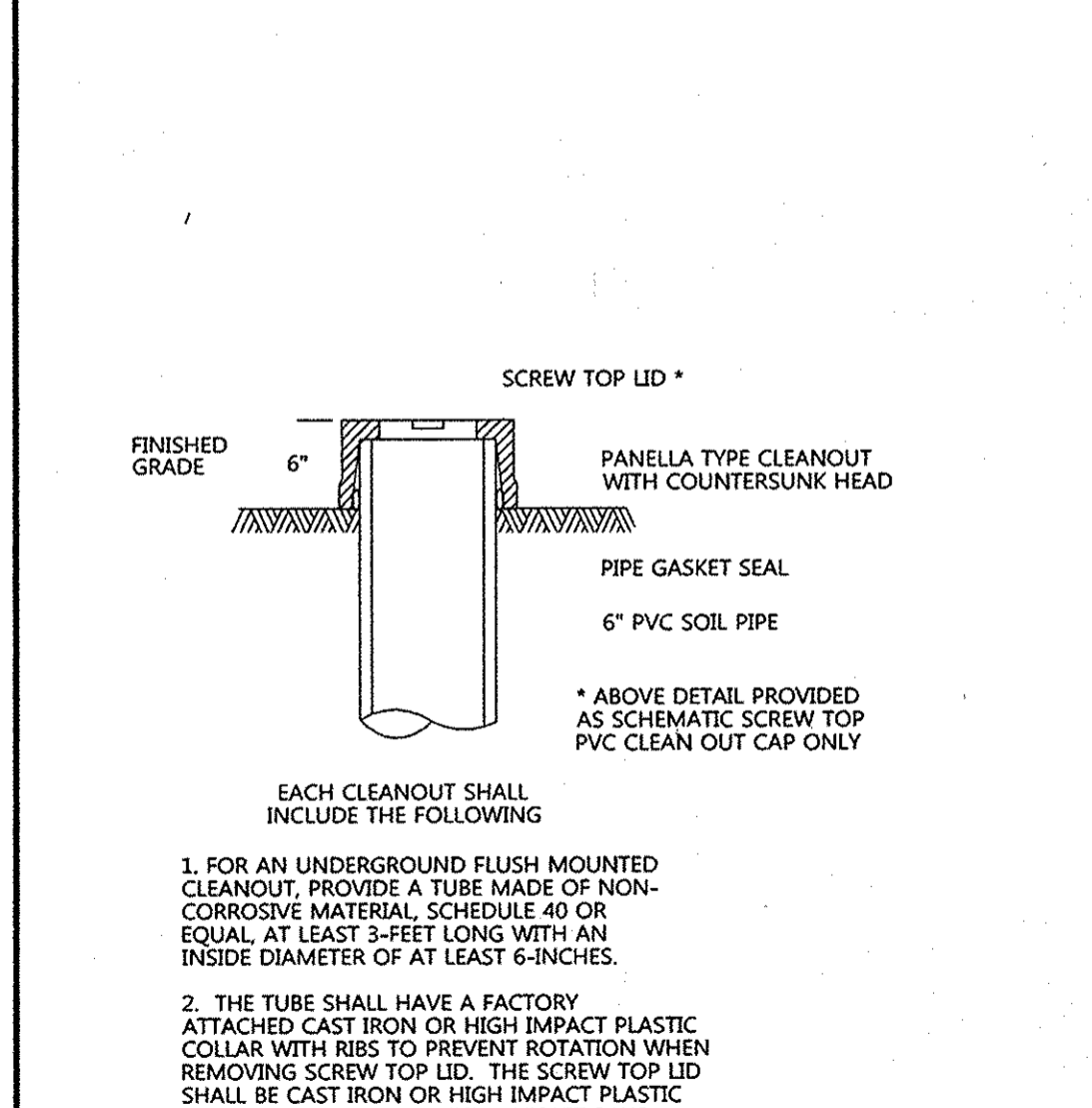
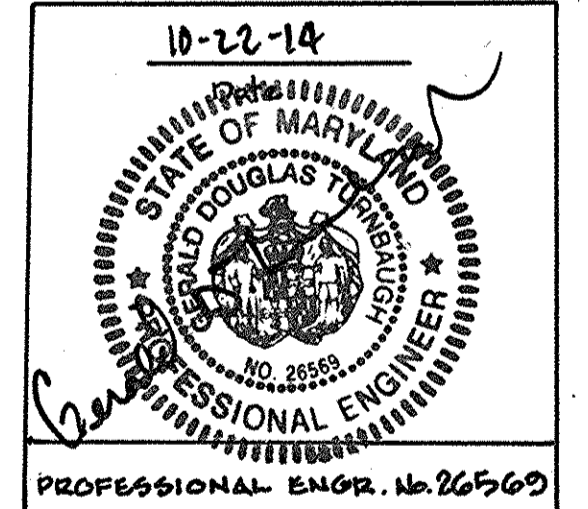


TABLE B.4.1 MATERIALS SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDENS & LANDSCAPE INFILTRATION

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	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR35	SLOTTED OR PERFORATED PIPE; 3/8" PER. @ 6" ON CENTER, 4 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. 3; Fc = 3500 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 308R/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 CARBONATE OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

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: 7-18-15

FOR REVISION NO. 2 ONLY



- MAINTENANCE CRITERIA**
1. PERIODICALLY REMOVE TRASH & DEBRIS AS IT ACCUMULATES.
 2. REMOVE AND REPLACE TOP FEW INCHES OF FILTER MEDIA WHEN WATER PONDS FOR MORE THAN 48 HRS.
 3. PRUNE AND REPLACE DEAD VEGETATION AS NECESSARY.
 4. WATER VEGETATION DURING DRY PERIODS

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 16928
EXPIRATION DATE: 5/18/14

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: MARCH 7, 2013

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 [Signature] 4/26/13
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 4/10/13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 4/26/13
 DIRECTOR

10-22-14 [Signature] **SHOW REVISED DRAIN SYSTEM**
 11-28-12 REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C

Date	No.	Revision Description
		REVISED SITE DEVELOPMENT PLAN

THE ROUSE BUILDING RENOVATION

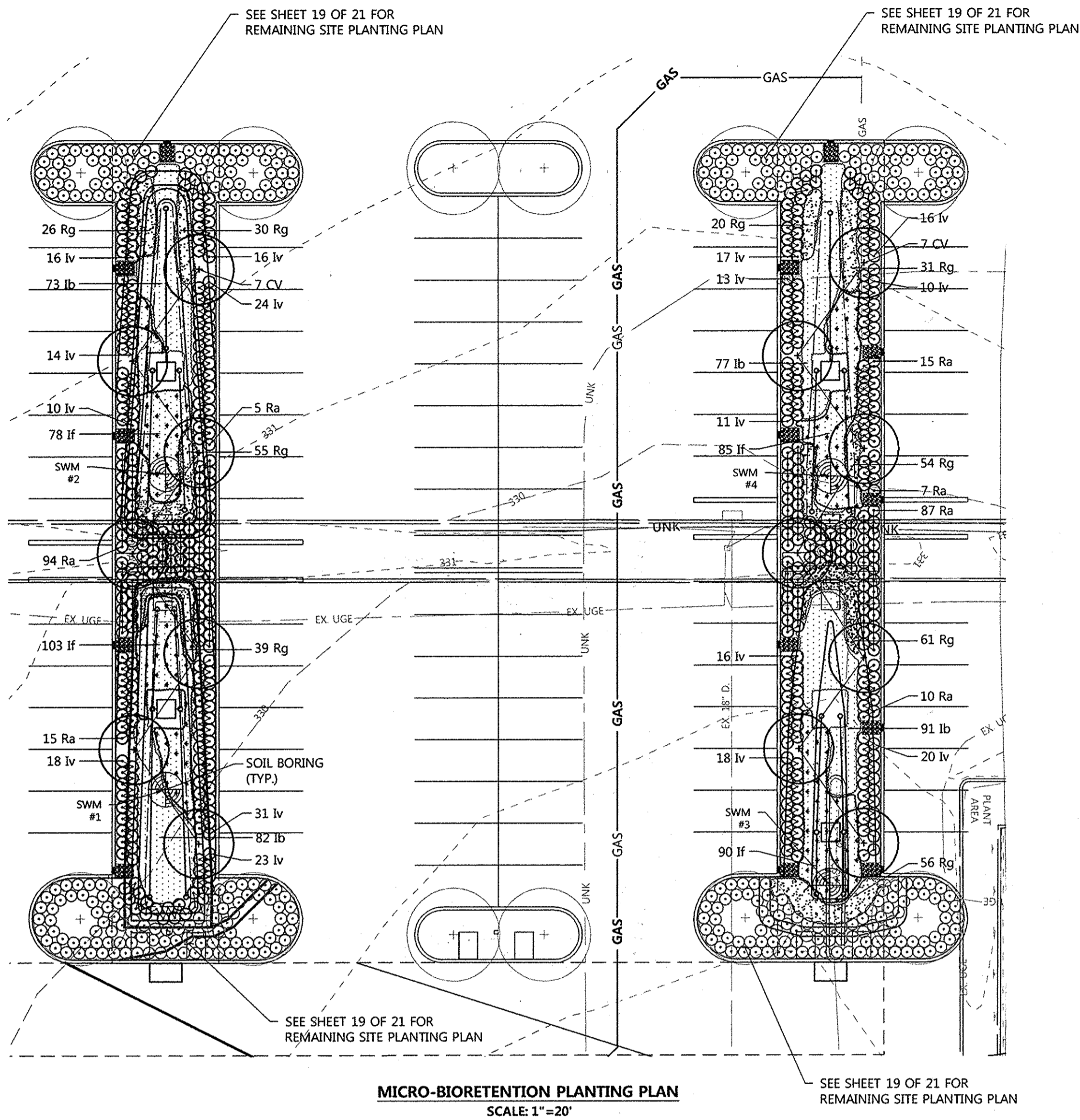
OWNER/DEVELOPER:
CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORPORATION
P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
DAFT MCCUNE WALKER INC
200 EAST PENNSYLVANIA TOWNSHIP, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA: TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT 5TH ZONE NT
TITLE: **MICRO-BIORETENTION PROFILES AND DETAILS**

Des. By	GDT/MCB	Scale	AS SHOWN	Proj. No.	11133.A
Drn. By	RLV	Date	3/21/13		
Chk. By	GDT/MCB	Approved			

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MICRO-BIORETENTION PLANTING PLAN
SCALE: 1"=20'

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

1. MATERIAL SPECIFICATIONS

THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.4.1. SHOWN ON SHEET 16 OF 21.

2. FILTERING MEDIA OR PLANTING SOIL

THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE MICRO-BIORETENTION PRACTICE THAT MAY BE HARMFUL TO PLANT GROWTH OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05.

THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:

- SOIL COMPONENT - LOAMY SAND OR SANDY LOAM (USDA SOIL TEXTURAL CLASSIFICATION)
- ORGANIC CONTENT - MINIMUM 10% BY DRY WEIGHT (ASTM D 2974). IN GENERAL, THIS CAN BE MET WITH A MIXTURE OF LOAMY SAND (60%-65%) AND COMPOST (35% TO 40%) OR SANDY LOAM (30%), COARSE SAND (30%), AND COMPOST (40%).
- CLAY CONTENT - MEDIA SHALL HAVE A CLAY CONTENT OF LESS THAN 5%.
- PH RANGE - SHOULD BE BETWEEN 5.5 - 7.0. AMENDMENTS (E.G., LIME, IRON SULFATE PLUS SULFUR) MAY BE MIXED INTO THE SOIL TO INCREASE OR DECREASE PH.

THERE SHALL BE AT LEAST ONE SOIL TEST PER PROJECT. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, AND ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILED TOPSOIL. IF TOPSOIL IS IMPORTED, THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED.

3. COMPACTION

IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF BIORETENTION PRACTICES AND THE REQUIRED BACKFILL WHEN POSSIBLE. USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL IF PRACTICES ARE EXCAVATED USING A LOADER. THE CONTRACTOR SHOULD USE WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH-PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.

COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS A CHISEL PLOW, RIPPER, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACURE THE SOIL PROFILE THROUGH THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT.

ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACKFILLING THE OPTIONAL SAND LAYER. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE.

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

WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.

4. PLANT MATERIAL

SEE THIS SHEET FOR REQUIRED PLANTINGS.

5. PLANT INSTALLATION

COMPOST IS A BETTER ORGANIC MATERIAL SOURCE, IS LESS LIKELY TO FLOAT, AND SHOULD BE PLACED IN THE INVERT AND OTHER LOW AREAS. MULCH SHOULD BE PLACED IN SURROUNDING TO A UNIFORM THICKNESS OF 2" TO 3". SHREDDED OR CHIPPED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDDED MULCH MUST BE WELL AGED (6 TO 12 MONTHS) FOR ACCEPTANCE.

ROOTSTOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER AFTER INSTALLATION. TREES SHALL BE BRACED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL.

GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS. THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS DEFEATS, OR AT A MINIMUM, IMPEDES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTOTILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.

6. UNDERDRAINS

UNDERDRAINS SHOULD MEET THE FOLLOWING CRITERIA:

- PIPE- SHOULD BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTM F 758, TYPE PS 28, OR AASHTO-M-278) IN A GRAVEL LAYER. THE PREFERRED MATERIAL IS SLOTTED, 4" RIGID PIPE (E.G., PVC OR HDPE).
- PERFORATIONS - IF PERFORATED PIPE IS USED, PERFORATIONS SHOULD BE 3/4" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH A 1/4" (NO. 4 OR 4X4) GALVANIZED HARDWARE CLOTH.
- GRAVEL - THE GRAVEL LAYER (NO. 57 STONE PREFERRED) SHALL BE AT LEAST 3" THICK ABOVE AND BELOW THE UNDERDRAIN.
- THE MAIN COLLECTOR PIPE SHALL BE AT A MINIMUM 0.5% SLOPE.
- A RIGID, NON-PERFORATED OBSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1,000 SQUARE FEET) TO PROVIDE A CLEAN-OUT PORT AND MONITOR PERFORMANCE OF THE FILTER.
- A 4" LAYER OF PEA GRAVEL (3/4" TO 1" STONE) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND UNDERDRAIN TO PREVENT MIGRATION OF FINES INTO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 24".

THE MAIN COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED AT A MINIMUM SLOPE OF 0.5%. OBSERVATION WELLS AND/OR CLEAN-OUT PIPES MUST BE PROVIDED (ONE MINIMUM PER EVERY 1000 SQUARE FEET OF SURFACE AREA).

7. MISCELLANEOUS

THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED

Microbioretention Plant Schedule					
Refer to DMW Sheets 17 of 21					
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES - ORNAMENTAL					
CV	14	Crataegus viridis 'Winter King'	Winter King Hawthorne	2"-2.5" cal. 10-12' ht.	B&B, Full
SHRUBS					
DECIDUOUS					
Iv	270	Itea virginica	Virginia Sweetspire	18-24" ht	Full, 30" o.c.
Ra	228	Rhus aromatica 'Gro-low'	Fragrant Sumac	18-24" ht	Full, 30" o.c.
GROUNDCOVERS/PERENNIALS/GRASSES					
Ib	323	Iris versicolor	Blue Flag Iris	1 gal. container	24" o.c.
If	356	Iris fulva 'Lois Yellow'	Copper Iris	1 gal. container	24" o.c.
Rg	372	Rudbeckia fulgida 'Goldsturm'	Perennial Black-eyed Susan	2 qt. container	18" o.c.

CTI SOIL BORING LOG: SWM-1 (1 OF 1)

Client: Howard Hughes Rouse Building
Project Location: 10275 Little Patuxent Parkway
Boring Location: See Boring Location Plan
Date: 10/24/2012
Inspector: MC

Elv. (Depth) (ft)	DESCRIPTION OF MATERIALS	Soil Depth (ft)	Sample No.	Soil No.	N Value	REMARKS
0.0	2" ASPHALT	0.0	S-1	0-0.6	18	No base aggregate encountered below the asphalt
0.6	gray, mottled	0.6	S-2	0-0.6	11	
1.0		1.0	S-3	0-0.6	18	
1.6		1.6	S-4	0-10-13	23	
2.1		2.1	S-5	0-10-11	21	
15.0	BORING TERMINATED AT 15.0 FEET	15.0				Groundwater not encountered during or upon completion of boring. Boring was backfilled upon completion and cold packed with asphalt.

CTI SOIL BORING LOG: SWM-2 (1 OF 1)

Client: Howard Hughes Rouse Building
Project Location: 10275 Little Patuxent Parkway
Boring Location: See Boring Location Plan
Date: 10/24/2012
Inspector: MC

Elv. (Depth) (ft)	DESCRIPTION OF MATERIALS	Soil Depth (ft)	Sample No.	Soil No.	N Value	REMARKS
0.0	2" ASPHALT	0.0	S-1	0-7-10	17	No base aggregate encountered below the asphalt
0.6	Medium gray, sandy gravel SAND, no plasticity, medium dense, moist	0.6	S-2	0-0-4	74	
1.0	gray weathered rock	1.0	S-3	0-0-1	600	
1.6	AUGER REFUSAL AT 6.0 FEET	1.6	S-4	0-0-1	600	No groundwater encountered during or upon completion of boring. Boring was backfilled upon completion and cold packed with asphalt.

CTI SOIL BORING LOG: SWM-3 (1 OF 1)

Client: Howard Hughes Rouse Building
Project Location: 10275 Little Patuxent Parkway
Boring Location: See Boring Location Plan
Date: 10/24/2012
Inspector: MC

Elv. (Depth) (ft)	DESCRIPTION OF MATERIALS	Soil Depth (ft)	Sample No.	Soil No.	N Value	REMARKS
0.0	2" ASPHALT	0.0	S-1	7-0-0	13	No base aggregate encountered below the asphalt
0.6	Medium gray, sandy gravel SAND, no plasticity, medium dense, slightly moist	0.6	S-2	0-0-0	13	
1.0		1.0	S-3	0-0-0	14	
1.6	gray weathered rock	1.6	S-4	0-0-0	8	
15.0	AUGER REFUSAL AT 14.0 FEET	15.0	S-5	0-0-0	100	No groundwater encountered during or upon completion of boring. Boring was backfilled upon completion and cold packed with asphalt.

CTI SOIL BORING LOG: SWM-4 (1 OF 1)

Client: Howard Hughes Rouse Building
Project Location: 10275 Little Patuxent Parkway
Boring Location: See Boring Location Plan
Date: 10/24/2012
Inspector: MC

Elv. (Depth) (ft)	DESCRIPTION OF MATERIALS	Soil Depth (ft)	Sample No.	Soil No.	N Value	REMARKS
0.0	2" ASPHALT	0.0	S-1	0-0-11	19	No base aggregate encountered below the asphalt
0.6	gray, mottled	0.6	S-2	0-12-11	23	
1.0		1.0	S-3	0-0-1	0	No groundwater encountered during or upon completion of boring. Boring was backfilled upon completion and cold packed with asphalt.

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: MARCH 7, 2013

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
K. J. ... 4/24/13
C. ... 4/16/13
M. ... 4/24/13

11-28-12 REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C
Date No. Revision Description

REVISED SITE DEVELOPMENT PLAN
THE ROUSE BUILDING RENOVATION

OWNER/DEVELOPER:
CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORPORATION
P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
DAFT MCCUNE WALKER INC
200 EAST PENNSYLVANIA TOWNSHIP, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S

3/21/13
Date

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. 16228 EXPIRATION DATE: 5/13/14

Professional Eng. No. 16228

AREA: TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT 5TH ZONE NT
TITLE: ESD PLANTING PLAN & GENERAL & SOIL BORINGS

Des. By: GDT/MCB Scale: 1"=20' Proj. No. 11133.A
Drn. By: RLV Date: 3/19/13
Chk. By: GDT/MCB Approved

17 of 264

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LITTLE PATUXENT PARKWAY (PUBLIC COUNTY ROAD, 114' R/W)

VEHICULAR INGRESS & EGRESS TO LITTLE PATUXENT PARKWAY WILL BE PERMITTED ONLY AT POINTS OF ACCESS APPROVED BY THE HOWARD COUNTY OFFICE OF PLANNING & ZONING

LEGEND

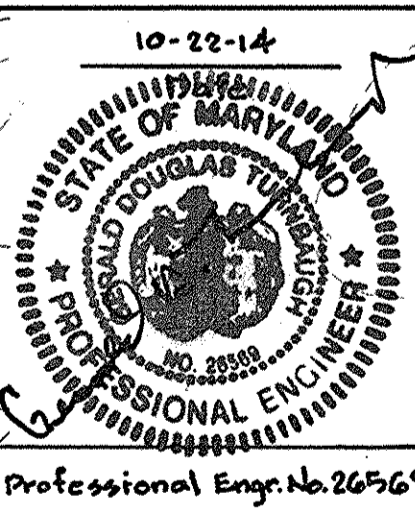
- PROPERTY BOUNDARY
- EX. RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- EX. EASEMENT
- EX. ROADS AND WALKS
- -330 EX. MAJOR CONTOURS
- -329 EX. MINOR CONTOURS
- EX. BUILDING
- EX. GRAVEL
- ☼ EX. TREE
- ☼ EX. TREE TO BE REMOVED
- ☼ EX. GROUP LIGHT
- ☼ EX. STORM DRAIN
- ☼ EX. SANITARY SEWER
- ☼ EX. WATER
- ☼ EX. UNDERGROUND ELECTRIC
- PROP. CURB/EDGE OF PAVING
- PROP. DEPRESSED CURB
- LIMIT OF DISTURBANCE
- DRAINAGE DIVIDES
- OR □ PROP. LIGHT LUMINAIRES REFER TO SITE LIGHTING ON SHEET 21 OF 21

GENERAL INFORMATION	
WATERSHED	DA: A, B, C & D
STREAM CLASSIFICATION	LITTLE PATUXENT
STRUCTURE LOCATION	USE P-1
STRUCTURE CLASSIFICATION	VEGETATED ISLAND
LEVEL OF MANAGEMENT REQUIRED	MICRO-SCALE PRACTICE (M-6): MICRO-BIORETENTION
LEVEL OF MANAGEMENT PROVIDED	ESDv
WATER QUALITY METHOD	ESDv

APPROVED BOARD OF HOWARD COUNTY
DATE MARCH 7, 2013

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 [Signature] 4/24/13
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 4/19/13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 4/24/13
 DIRECTOR

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 26560
 EXPIRATION DATE: 7-18-19



10-22-14
 11-28-12
 SHOW REVISED DRAIN SYSTEM
 REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C

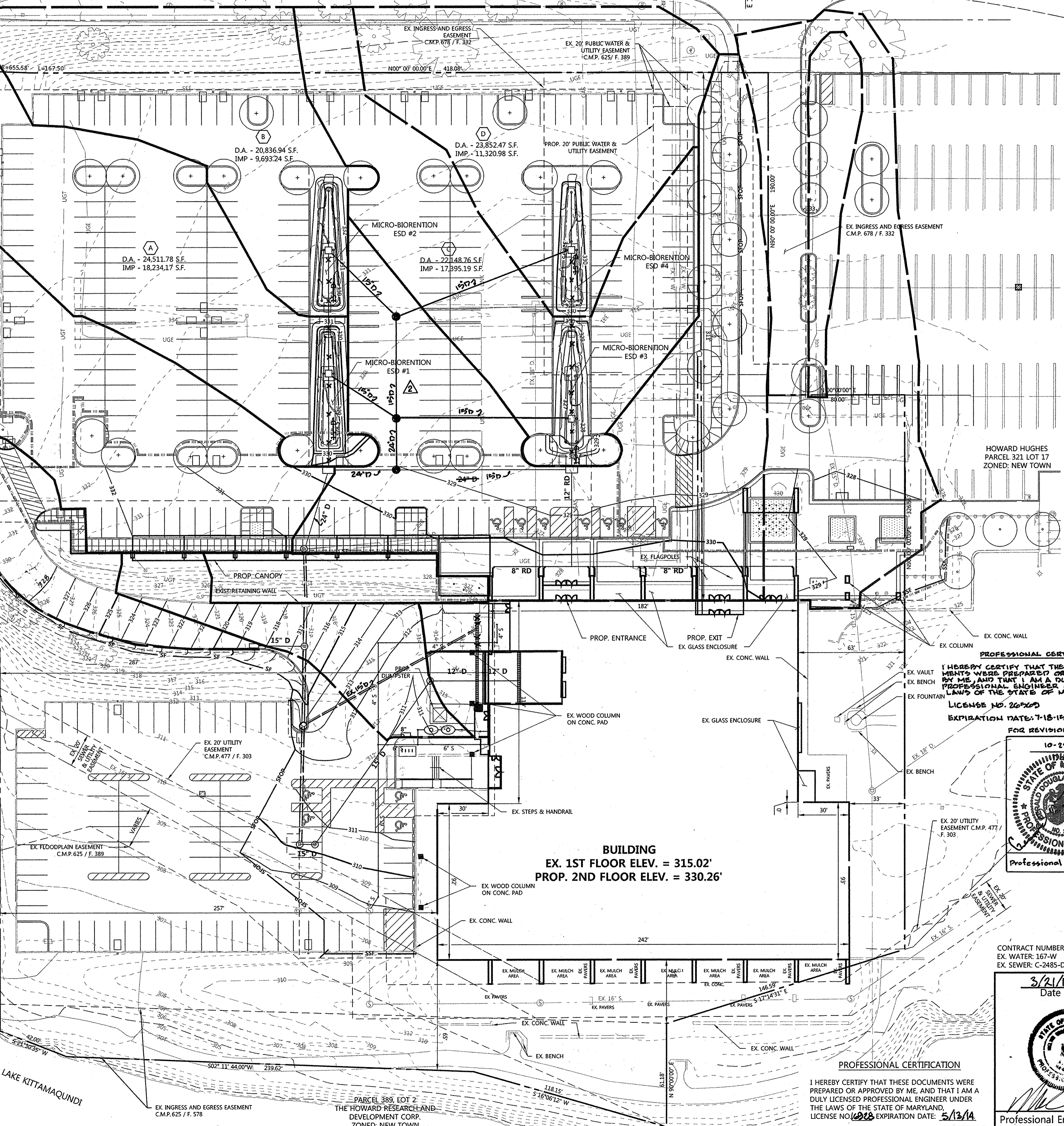
Date No. Revision Description
 11-28-12 1 REVISED SITE DEVELOPMENT PLAN
THE ROUSE BUILDING RENOVATION
 OWNER/DEVELOPER:
 CLOVER ACQUISITIONS LLC
 C/O THE HOWARD HUGHES CORPORATION
 P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
 DAFT MCCUNE WALKER INC
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 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
 A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA
 TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
 ELECTION DISTRICT 5TH ZONE NT
 TITLE **PROPOSED ESD DRAINAGE AREA MAP**
 Des. By GDT/MCB Scale 1"=30' Proj. No. 11133.A
 Drn. By RLV Date 3/19/13
 Chk. By GDT/MCB Approved 18 of 264

CONTRACT NUMBERS:
 EX. WATER: 167-W
 EX. SEWER: C-2485-D-S, 2485-D-W&S

3/21/13
 Date
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. 2628 EXPIRATION DATE: 5/13/14
 Professional Engr. No. 2628



HOWARD RESEARCH & DEVELOPMENT CORPORATION
 PARCEL 389 LOT 2
 ZONED: NEW TOWN

PARCEL 389 LOT 2
 THE HOWARD RESEARCH & DEVELOPMENT CORP.
 ZONED: NEW TOWN

ACRONYMS

- CC - CART CORRAL
- CIP - CAPITAL IMPROVEMENT PROJECT
- CO - COUNTY
- EX - EXISTING
- ELEV - ELEVATION
- INV - INVERT
- NTS - NOT TO SCALE
- PROP. - PROPOSED
- SCE - STABILIZED CONSTRUCTION ENTRANCE
- STD - STANDARD
- SWM - STORMWATER MANAGEMENT
- TYP. - TYPICAL

UNIFIED STORMWATER SIZING CRITERIA

SIZING CRITERIA	Required	Provided
WATER QUALITY VOLUME (WQV) (CF)	3,864 CF TO BE WAIVED	*2,916 CF MET
RECHARGE VOLUME (RV) (CF)		
CHANNEL PROTECTION VOLUME (CPV)		
OVERBANK FLOOD PROTECTION VOLUME (OP)	N/A	N/A
EXTREME FLOOD VOLUME (EFV)	N/A	N/A

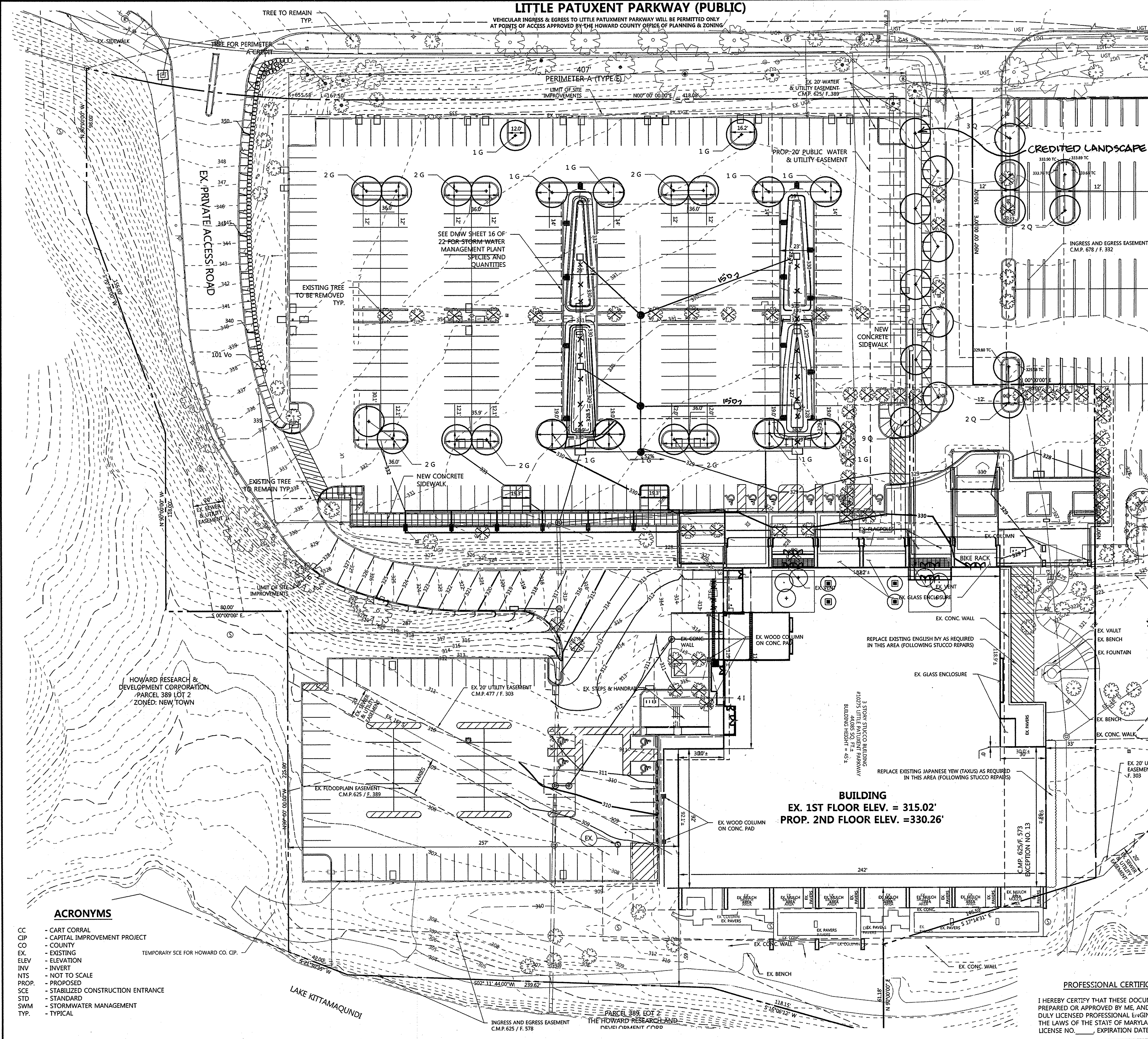
* ESDv REQUIRED: ACCOUNTS FOR 75% OF NEW TREATMENT ESDv FOR MICRO-BIORETENTION

PRACTICE	SITE DEVELOPMENT SUMMARY TABLE DIMENSIONS	DRAINAGE AREA (SF)	VOLUME (ESDv CAPTURED) (CF)
MICRO-BIORETENTION 1 (DA A)	AREA = 23' MEDIA, 0.5' PONDING	24,511.78	696
MICRO-BIORETENTION 2 (DA B)	AREA = 23' MEDIA, 0.5' PONDING	20,836.94	699
MICRO-BIORETENTION 3 (DA C)	AREA = 23' MEDIA, 0.5' PONDING	22,148.76	797
MICRO-BIORETENTION 4 (DA D)	AREA = 23' MEDIA, 0.5' PONDING	23,852.47	724
TOTAL		2,916 CF	
		75% TOTAL ESDv REQ'D	2,899 CF

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LITTLE PATUXENT PARKWAY (PUBLIC)

VEHICULAR INGRESS & EGRESS TO LITTLE PATUXENT PARKWAY WILL BE PERMITTED ONLY AT POINTS OF ACCESS APPROVED BY THE HOWARD COUNTY OFFICE OF PLANNING & ZONING



Plant Schedule

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES - DECIDUOUS SHADE					
G	22	Gleditsia triacanthos var. inermis	Thornless Honey Locust	2.5"-3" Cal 12'-14' ht.	B&B, Full
Q	16	Quercus phellos	Willow Oak	2.5"-3" Cal 12'-14' ht.	B&B, Full
SHRUBS					
Vo	101	Viburnum opulus var. Americanum	American Cranberry Bush	24"-30" ht.	Full, 30" o.c.
Tw	TBD	Taxus media 'Ward'	Ward's Yew	30" ht, Full, 30" o.c.	Replace damaged plants
GROUNDCOVERS/PERENNIALS/GRASSES					
Hx	TBD	Hedera helix	English Ivy	4" Peat Pot	Replace damaged plants

Schedule A	Schedule B
Perimeter Landscape: Edge Adjacent to Roadway	Parking Lot Internal Landscaping
Landscape Type	E
Linear Feet of Roadway Frontage/Perimeter	407 LF.
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe Below if Needed)	Yes
Credit for Wall, Fence, or Berm (Yes, No, Linear Feet) (Describe Below if Needed)	No
Number of Plants Required	
Shade Trees	407/40=11
Evergreen Trees	0
Shrubs	407/4=101.75
Number of Plants Provided	
Shade Trees	7 (Existing)* + 1 NEW
Evergreen Trees	6 (Existing)*
Other Trees (2:1 Substitution)	0
Shrubs (10:1 Substitution)	0
Total - Per Howard County Landscape Manual	13 (Existing)* + 1 NEW

LEGEND

- EXISTING TREE (TO REMAIN)
- NEW EXISTING TREE (PERIMETER A CREDIT)
- EXISTING TREE (TO BE REMOVED)
- NEW PROPOSED SHADE TREE
- PROPOSED SHRUB

NOTES:

- SEE DMW SHEET 16 OF 22 (MICRO-BIORETENTION PROFILES AND DETAILS) FOR STORM WATER MANAGEMENT PLANT SPECIES & QUANTITIES.
- DEVELOPER'S/BUILDER'S CERTIFICATE I/W CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. I/W FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF NOTICE, ACCOMPANIED BY AN EXECUTED ONE GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER: *Robert G. J...* DATE: 3/14/13

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: MARCH 7, 2013

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Robert G. J... CHIEF, DIVISION OF LAND DEVELOPMENT 4/26/13 DATE
John P. ... CHIEF, DEVELOPMENT ENGINEERING DIVISION 4/10/13 DATE
Paul L. ... DIRECTOR 4/6/13 DATE

11-28-12 REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C
Date No. Revision Description

REVISED SITE DEVELOPMENT PLAN
THE ROUSE BUILDING RENOVATION

OWNER/DEVELOPER:
CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORPORATION
P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
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P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

AREA: TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT 5TH ZONE NT
TITLE: **PLANTING PLAN**

Des. By	HWA	Scale	1"=30'	Proj. No.	11133A
Drn. By	ZL	Date	3/14/13		
Professional Engr. No.	905	Chk. By	HWA	Approved	19 of 264

CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S

3/20/13 Date

STATE OF MARYLAND
LANDSCAPE ARCHITECT
NO. 606

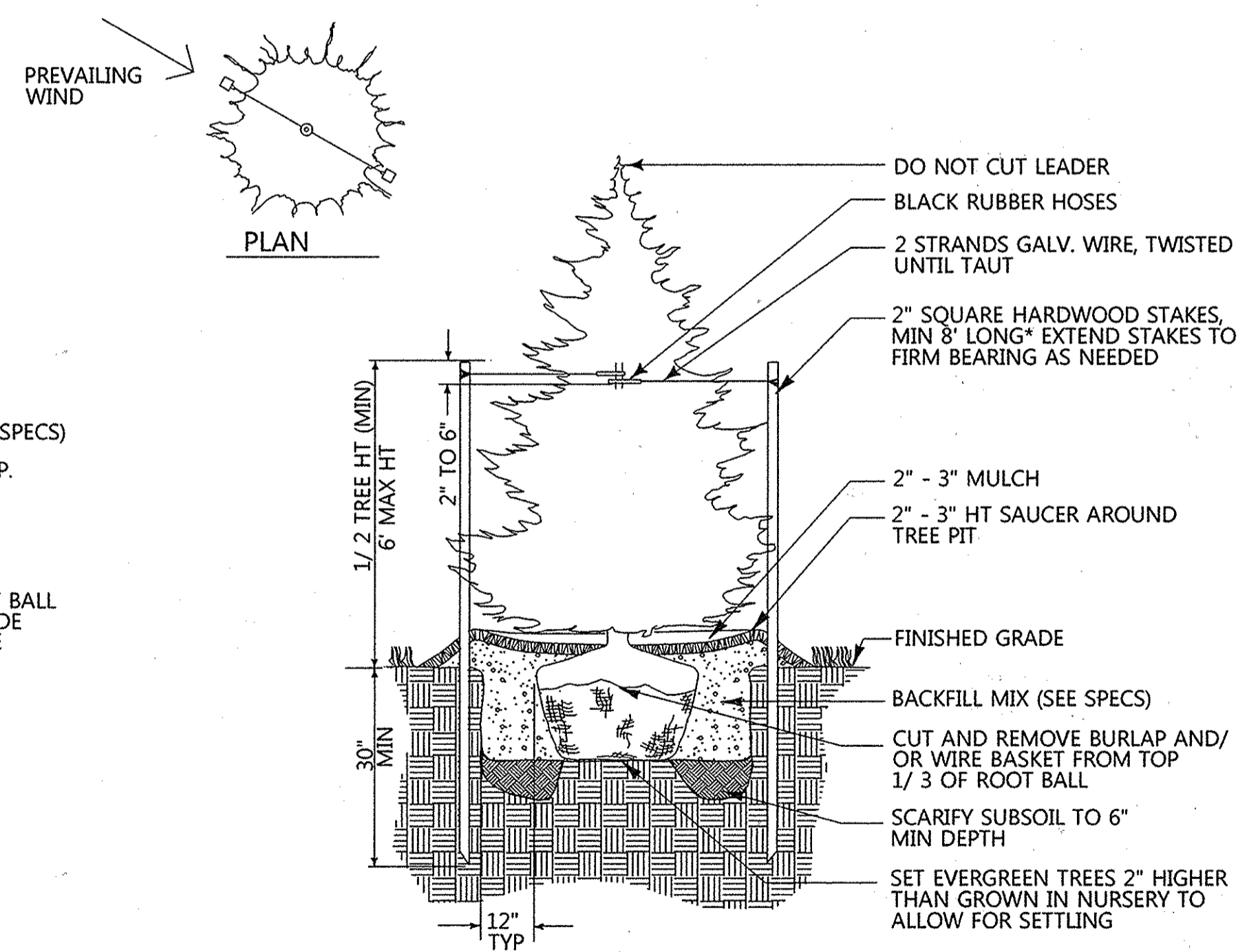
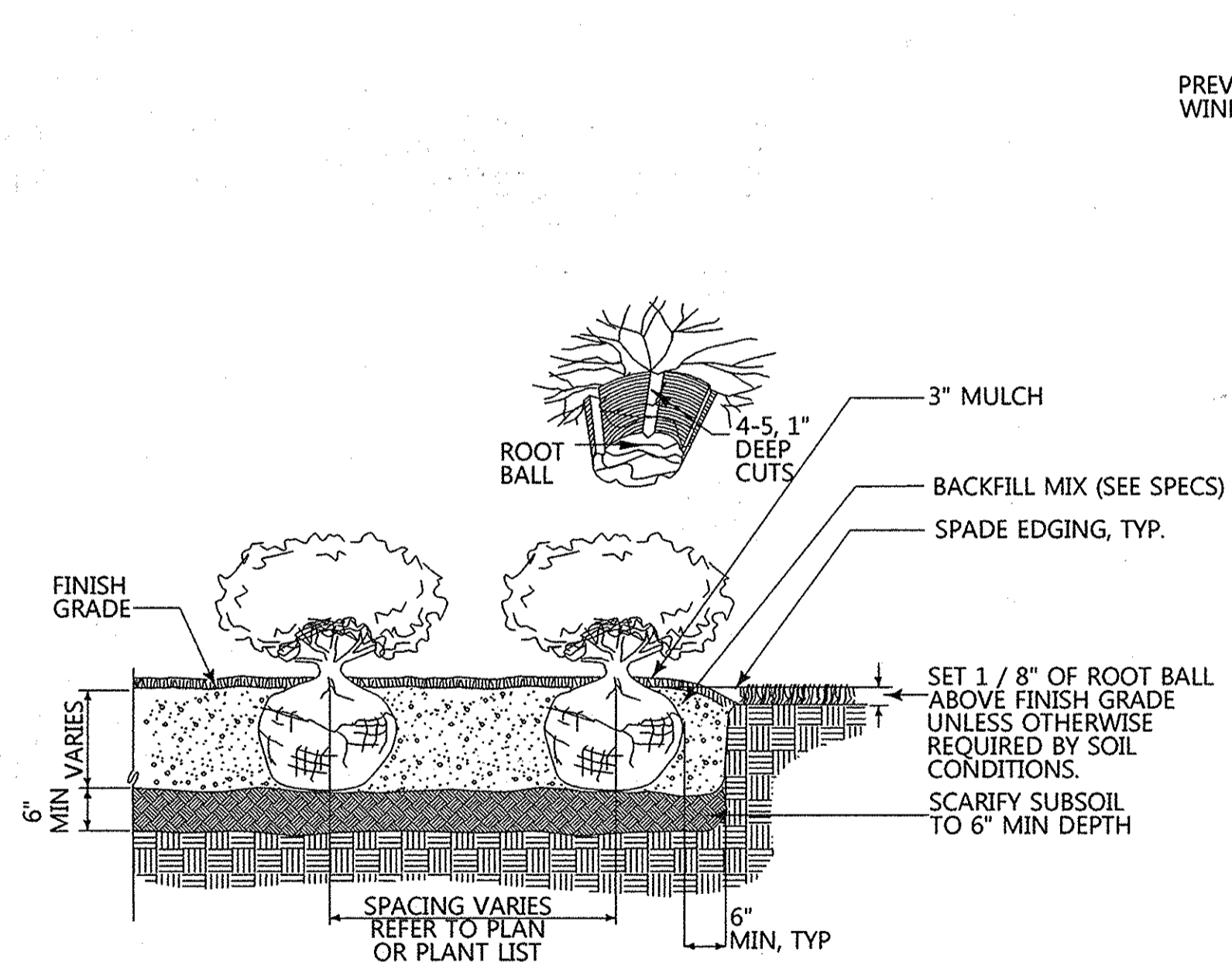
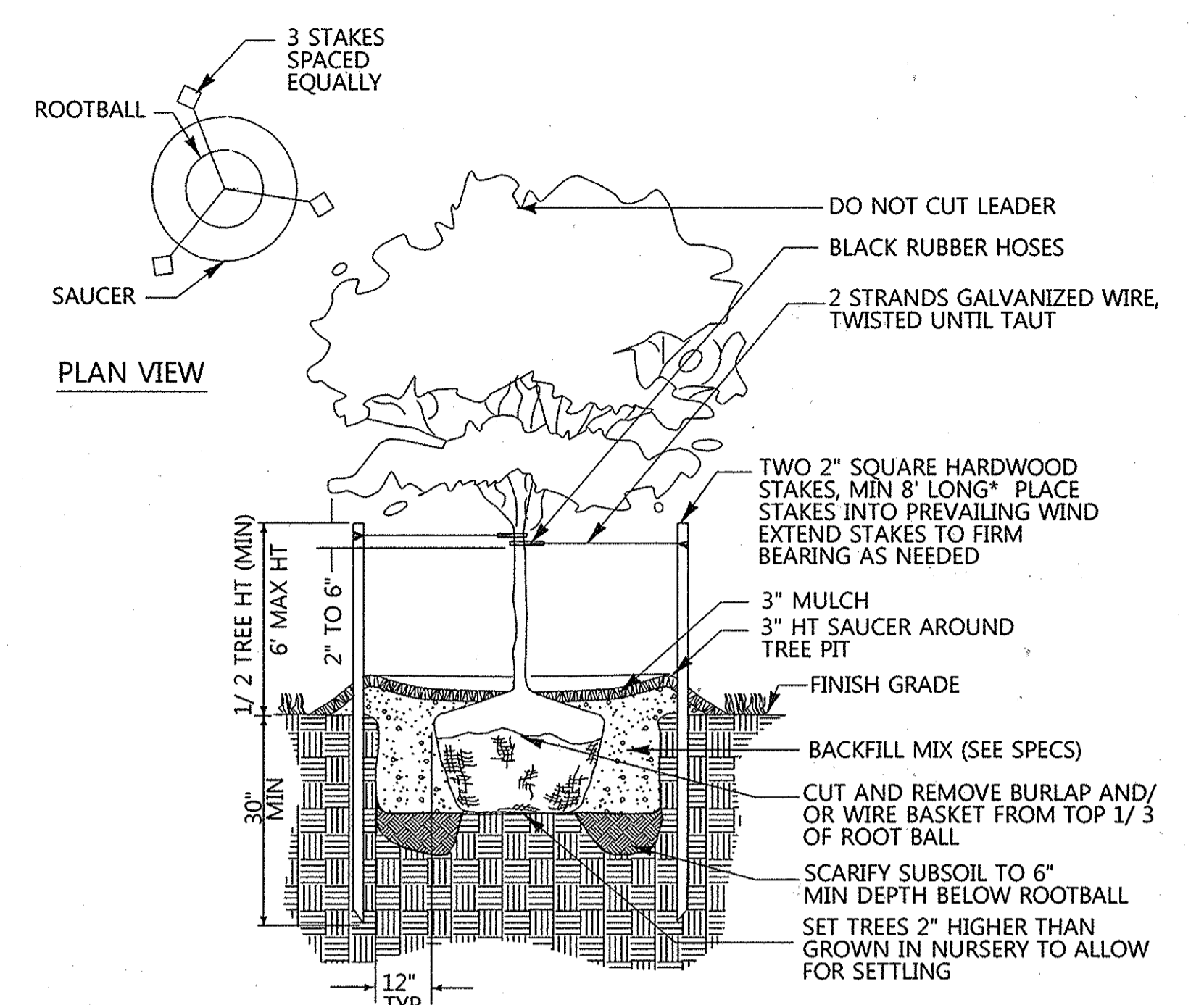
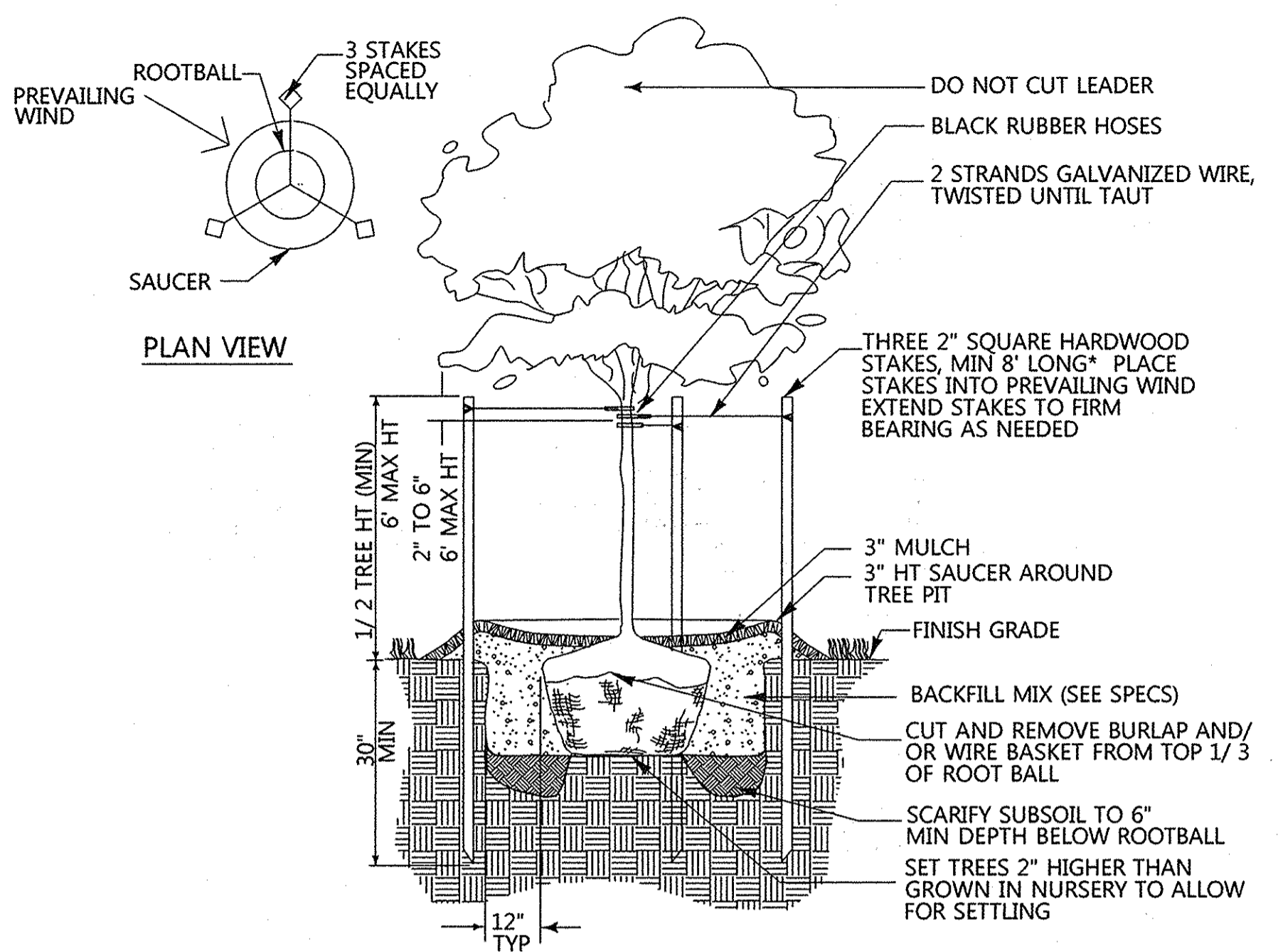
PROFESSIONAL CERTIFICATION
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- ACRONYMS**
- CC - CART CORRAL
 - CI - CAPITAL IMPROVEMENT PROJECT
 - CO - COUNTY
 - EX - EXISTING
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 - TYP. - TYPICAL
- TEMPORARY SCE FOR HOWARD CO. CIP.

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PLANTING SPECIFICATIONS

- MAINTAIN POSITIVE DRAINAGE OUT OF PLANTING BEDS AT A MINIMUM 2% SLOPE. ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE RECONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT OR OWNER.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY (800-257-7777) A MINIMUM OF THREE WORKING DAYS PRIOR TO PLANTING AND CONSTRUCTION.
- THE CONTRACTOR IS ADVISED OF THE EXISTENCE OF UNDERGROUND UTILITIES ON THE SITE. THEIR EXACT LOCATION SHALL BE VERIFIED IN THE FIELD WITH THE OWNER OR GENERAL CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY DIGGING OR OPERATIONS. IN THE EVENT THEY ARE UNCOVERED, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE TO UTILITIES AND SUCH DAMAGE SHALL NOT RESULT IN ANY ADDITIONAL EXPENSES TO THE OWNER.
- IF UTILITY LINES ARE ENCOUNTERED IN EXCAVATION OF TREE PITS, OTHER LOCATIONS FOR TREES SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION. NO CHANGES OF LOCATION SHALL BE MADE WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
- PLANT MATERIAL SUBSTITUTIONS WILL NOT BE ACCEPTED WITHOUT WRITTEN CONSENT OF THE OWNER OR LANDSCAPE ARCHITECT.
- PLANT QUANTITIES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES PRIOR TO THE COMMENCEMENT OF WORK. SOD QUANTITY TAKE-OFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO BIDDING. THE CONTRACTOR SHALL FURNISH PLANT MATERIAL IN SIZES AS SPECIFIED IN PLANT LIST.
- ALL PLANTS (B&B OR CONTAINER) SHALL BE PROPERLY IDENTIFIED BY WEATHER-PROOF LABELS SECURELY ATTACHED TO THE PLANT SITE. LABELS SHALL IDENTIFY PLANTS BY NAME, SPECIES, AND SIZE. LABELS SHALL NOT BE REMOVED UNTIL THE FINAL INSPECTION BY THE LANDSCAPE ARCHITECT OR AGENT IN CHARGE.
- ANY MATERIAL AND/OR WORK MAY BE REJECTED BY THE LANDSCAPE ARCHITECT IF IT DOES NOT MEET THE REQUIREMENTS OF THE SPECIFICATIONS. ALL REJECTED MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- THE LANDSCAPE CONTRACTOR SHALL STAKE ALL MATERIAL LOCATED ON THE SITE FOR REVIEW AND POSSIBLE ADJUSTMENTS BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING. ALL LOCATIONS ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT BEFORE EXCAVATION.
- THE LANDSCAPE ARCHITECT OR OWNER SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATIONS, TO REJECT ANY AND ALL WORK AND MATERIAL WHICH, IN HIS OPINION, DOES NOT MEET THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR STABILITY AND CONDITIONS OF ALL TREES AND SHRUBS AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS.
- ALL PROPOSED TREES TO BE INSTALLED EITHER ENTIRELY IN OR ENTIRELY OUT OF PLANTING BEDS. PLANTING BED LINES ARE NOT TO BE OBSTRUCTED. ALL SHRUBS AND GROUND COVER AREAS SHALL BE PLANTED IN CONTINUOUS PREPARED BED AND TOP DRESSED WITH 3-INCH SHREDDED HARDWOOD MULCH. MULCH SHALL HAVE BEEN SHREDDED WITHIN THE LAST SIX MONTHS.
- ALL PLANTING BEDS ADJACENT TO LAWN, SOD, OR SEEDING AREAS SHALL BE SPADE EDGED.
- ALL SOD SHALL BE OBTAINED FROM AREAS HAVING GROWING CONDITIONS FAMILIAR TO AREAS TO BE COVERED. AREAS TO BE SODDED SHALL BE RAKED OF STONES AND DEBRIS. DEBRIS AND STONES OVER 1 INCH IN DIAMETER SHALL BE REMOVED FROM THE SITE. ALL DAMAGED SOD WILL BE REJECTED. ALL SOD MUST BE PLACED WITH STAGGERED JOINTS, TIGHTLY BUTTED, WITH NO IRREGULARITIES IN GRADE. PLACE ALL SOD IN ROWS AT RIGHT ANGLES TO SLOPES (WHERE APPLICABLE).
- MAINTENANCE SHALL BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE UNTIL 90 DAYS AFTER FINAL ACCEPTANCE BY THE ARCHITECT OR OWNER REPRESENTATIVE. MAINTENANCE INCLUDES MOWING OF TURF, WATERING, PRUNING, WEEDING, FERTILIZING, MULCHING, REPLACEMENT OF SICK OR DEAD PLANTS, AND ANY OTHER CARE NECESSARY FOR THE PROPER GROWTH OF THE PLANT MATERIAL. THE CONTRACTOR MUST BE ABLE TO PROVIDE CONTINUED MAINTENANCE IF REQUESTED BY THE OWNER.
- UPON COMPLETION OF ALL LANDSCAPING, AN ACCEPTANCE OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR OWNER FOR SCHEDULING THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
- THE LIFE AND ROBUST HEALTH OF ALL TREES, SHRUBS AND GROUND COVER SHALL BE GUARANTEED FOR 12 MONTHS FROM THE DATE OF ACCEPTANCE.
- MAINTAIN POSITIVE DRAINAGE OUT OF PLANTING BEDS AT A MINIMUM 2% SLOPE. ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE RECONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT OR OWNER.
- THE CONTRACTOR SHALL INSURE THAT HIS WORK DOES NOT INTERRUPT ESTABLISHED OR PROJECTED DRAINAGE PATTERNS.
- THE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS.
- THE CONTRACTOR SHALL REVIEW ARCHITECTURAL/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH GRADING AND SURFACE UTILITIES.
- ALL EQUIPMENT AND TOOLS SHALL BE PLACED SO AS NOT TO INTERFERE OR HINDER THE PEDESTRIAN AND VEHICULAR TRAFFIC FLOW.
- THE CONTRACTOR SHALL COORDINATE WITH LIGHTING AND IRRIGATION CONTRACTORS REGARDING TIMING OF INSTALLATION OF PLANT MATERIAL.
- DURING PLANTING OPERATIONS, EXCESS WASTE MATERIALS SHALL BE PROMPTLY AND FREQUENTLY REMOVED FROM THE SITE.
- THE CONTRACTOR SHALL DISPOSE OF STUMPS AND MAJOR ROOTS OF ALL PLANTS TO BE REMOVED. ANY DEPRESSIONS CAUSED BY REMOVAL OPERATIONS SHALL BE REFILLED WITH FERTILE, FRABLE SOIL PLACED AND COMPACTED SO AS TO REESTABLISH PROPER GRADE FOR NEW PLANTING AND/OR LAWN AREAS.
- ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTINGS AND MULCH SHALL BE FINE GRADED AND SEEDED IN ACCORDANCE WITH PLANTING AND CONSTRUCTION SPECIFICATIONS.
- EVERY POSSIBLE SAFEGUARD SHALL BE TAKEN TO PROTECT BUILDING SURFACES, EQUIPMENT, AND FURNISHING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSONS OR PROPERTY WHICH MAY OCCUR AS A RESULT OF HIS NEGLIGENCE IN THE EXECUTION OF THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR TESTING PROJECT SOILS. THE CONTRACTOR IS TO PROVIDE A CERTIFIED SOILS REPORT TO THE OWNER. THE CONTRACTOR SHALL VERIFY THAT THE SOILS ON SITE ARE ACCEPTABLE FOR THE PROPER GROWTH OF THE PROPOSED PLANT MATERIAL. SHOULD THE CONTRACTOR FIND POOR SOIL CONDITIONS, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE SOIL AMENDMENTS AS NECESSARY. THESE AMENDMENTS SHALL INCLUDE, BUT NOT BE LIMITED TO, FERTILIZERS, LIME, AND TOPSOIL. PROPER PLANTING SOILS MUST BE VERIFIED PRIOR TO PLANTING OF MATERIALS.



- NOTES:**
- FOR CONTAINER SHRUBS, COMPLETELY REMOVE ALL NON-BIODEGRADABLE CONTAINERS AND SCARIFY ROOTBALL BY USING A SHARP BLADE AND MAKING 4 TO 5 ONE INCH CUTS THE LENGTH OF THE ROOTBALL.
 - FOR B&B SHRUBS, CUT AND REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL.

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. _____, EXPIRATION DATE: _____

CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S

3/20/13
Date



Professional Engr. No. 505

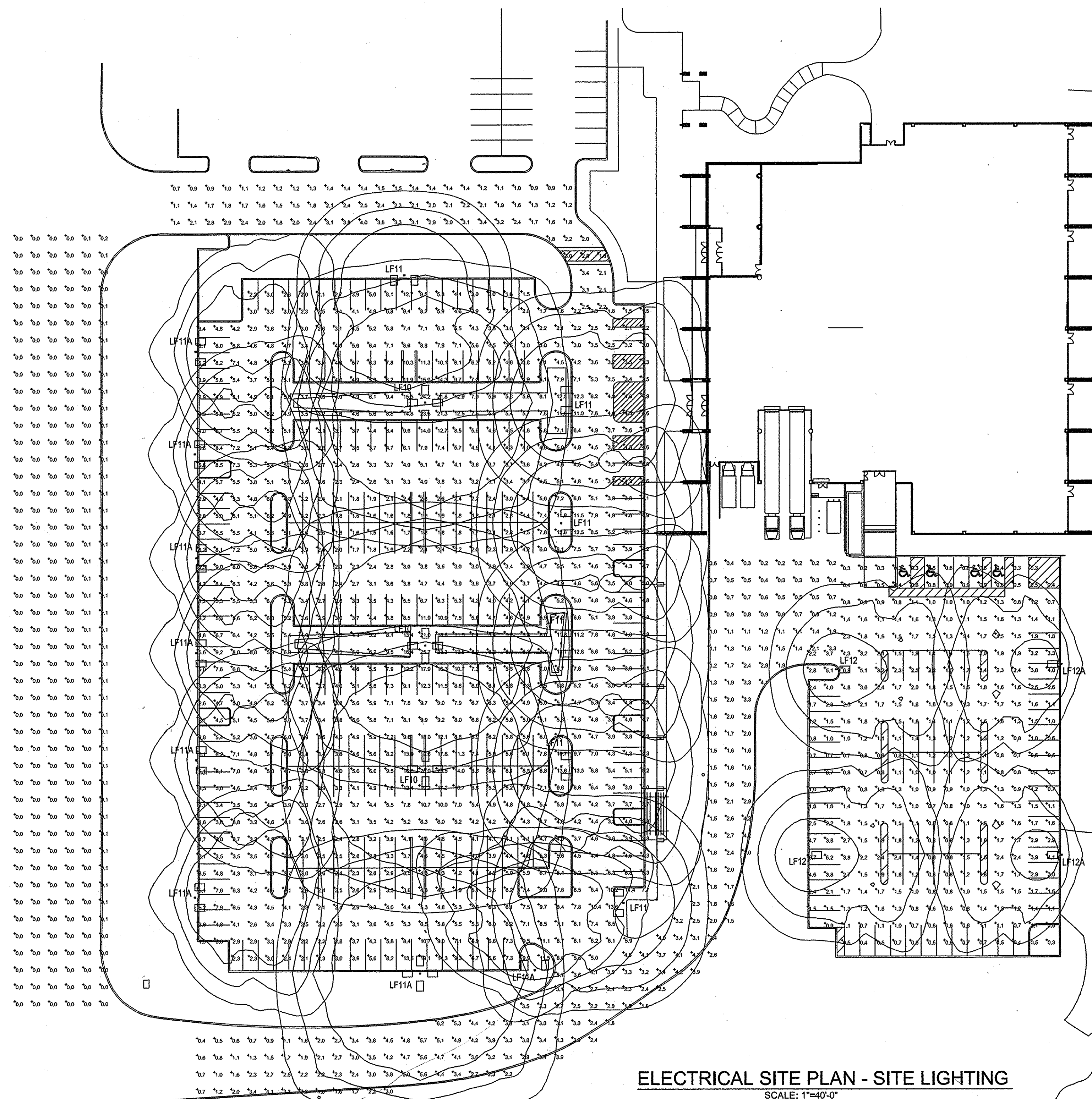
APPROVED PLANNING BOARD OF HOWARD COUNTY	
DATE	MARCH 7, 2013
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
CHIEF, DIVISION OF LAND DEVELOPMENT	4/26/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION	4/18/13
DIRECTOR	4/26/13
11-28-12	REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C
Date	No.
REVISION SITE DEVELOPMENT PLAN	
THE ROUSE BUILDING RENOVATION	
OWNER/DEVELOPER: CLOVER ACQUISITIONS LLC C/O THE HOWARD HUGHES CORPORATION P.O. BOX 833 COLUMBIA, MD. 21044-0833	
DMW DAFT MCCUNE WALKER INC 200 EAST PENNSYLVANIA TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS	
AREA	TAX MAP 36 GRID 2 PART OF PARCEL 321, LOT 18
ELECTION DISTRICT 5TH	ZONE NT
TITLE PLANTING DETAILS	
Des. By HWA	Scale N.T.S.
Drn. By ZL	Date 3/19/13
Chk. By HWA	Approved
20 of 24	

GENERAL NOTES:

- IN ACCORDANCE WITH SECTION B4.D.3 OF THE ZONING REGULATIONS THE LIGHT TRESPASS LIMITS SHALL NOT APPLY TO LAND WITHIN A PUBLIC STREET RIGHT-OF-WAY OR DEVELOPED FOR NON-RESIDENTIAL USES.

STATISTICS					
Description	Symbol	Avg	Max	Min	Avg/Min
Main Entrance	+	2.0 fc	4.0 fc	0.7 fc	5.7:1
Moore Road	+	2.3 fc	6.2 fc	0.1 fc	62.0:1
Large Front Parking Area	+	5.4 fc	26.0 fc	1.5 fc	17.3:1
Main Roadway	+	0.0 fc	0.2 fc	0.0 fc	N/A
South Parking Area	+	1.5 fc	6.8 fc	0.2 fc	34.0:1

LUMINAIRE SCHEDULE							
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Watts
□	LF10	4	AR4400PMH-ED28	ARCHETYPE FULL CUTOFF LUMINAIRE DIE CAST ALUM. REFLECTOR SYSTEM WITH HIGH SPECULAR PANELS DIE CAST ALUM. HOUSING AND LENS FRAME CLEAR FLAT GLASS LENS	400 WATT CLEAR, PMH ED28 LAMP, HORIZONTAL POSITION, RATED AT 40000 INITIAL LUMENS	ar4-400p.jes	1600
□	LF11	6	AR4400PMH-ED28	ARCHETYPE FULL CUTOFF LUMINAIRE DIE CAST ALUM. REFLECTOR SYSTEM WITH HIGH SPECULAR PANELS DIE CAST ALUM. HOUSING AND LENS FRAME CLEAR FLAT GLASS LENS	400 WATT CLEAR, PMH ED28 LAMP, HORIZONTAL POSITION, RATED AT 40000 INITIAL LUMENS	ar4-400p.jes	800
□	LF11A	7	AR4400PMH-ED28HS	ARCHETYPE FULL CUTOFF LUMINAIRE DIE CAST ALUM. REFLECTOR SYSTEM WITH HIGH SPECULAR PANELS DIE CAST ALUM. HOUSING AND LENS FRAME CLEAR FLAT GLASS LENS AND HOUSING SHIELD	400 WATT CLEAR, PMH ED28 LAMP, HORIZONTAL POSITION, RATED AT 40000 INITIAL LUMENS	ar4-400p-hs.jes	800
□	LF12	2	AR4400PMH-ED28	ARCHETYPE FULL CUTOFF LUMINAIRE DIE CAST ALUM. REFLECTOR SYSTEM WITH HIGH SPECULAR PANELS DIE CAST ALUM. HOUSING AND LENS FRAME CLEAR FLAT GLASS LENS	400 WATT CLEAR, PMH ED28 LAMP, HORIZONTAL POSITION, RATED AT 40000 INITIAL LUMENS	ar4-400p.jes	400
□	LF12A	2	AR4400PMH-ED28HS	ARCHETYPE FULL CUTOFF LUMINAIRE DIE CAST ALUM. REFLECTOR SYSTEM WITH HIGH SPECULAR PANELS DIE CAST ALUM. HOUSING AND LENS FRAME CLEAR FLAT GLASS LENS AND HOUSING SHIELD	400 WATT CLEAR, PMH ED28 LAMP, HORIZONTAL POSITION, RATED AT 40000 INITIAL LUMENS	ar4-400p-hs.jes	400
○	LF13	10	GL18-2-130LA-CW	LED GULLWING	(1) LIGHT ARRAY OF 96 LEDS DRIVEN AT 700MA	GL18-2-130LA-CW.JES	126.5



ELECTRICAL SITE PLAN - SITE LIGHTING
SCALE: 1"=40'-0"

TAI ENGINEERS - MANAGERS - TECHNICAL SERVICES
11155 Dolfield Boulevard, Suite 210
Owings Mills, Maryland 21117
tel: 410 356-3108 • fax: 410 356-3109

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE MARCH 7, 2013

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Karl S. ... 4-26-13
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

... 4/18/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

... 4/26/13
DIRECTOR DATE

11-28-12 REPLACES ALL SHEETS OF ORIGINAL SDP 73-23C
Date No. Revision Description

REVISED SITE DEVELOPMENT PLAN
THE ROUSE BUILDING RENOVATION

OWNER/DEVELOPER:
CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORPORATION
P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
DAFT MCCUNE WALKER INC
200 EAST PENNSYLVANIA TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

CONTRACT NUMBERS:
EX. WATER: 167-W
EX. SEWER: C-2485-D-S, 2485-D-W&S

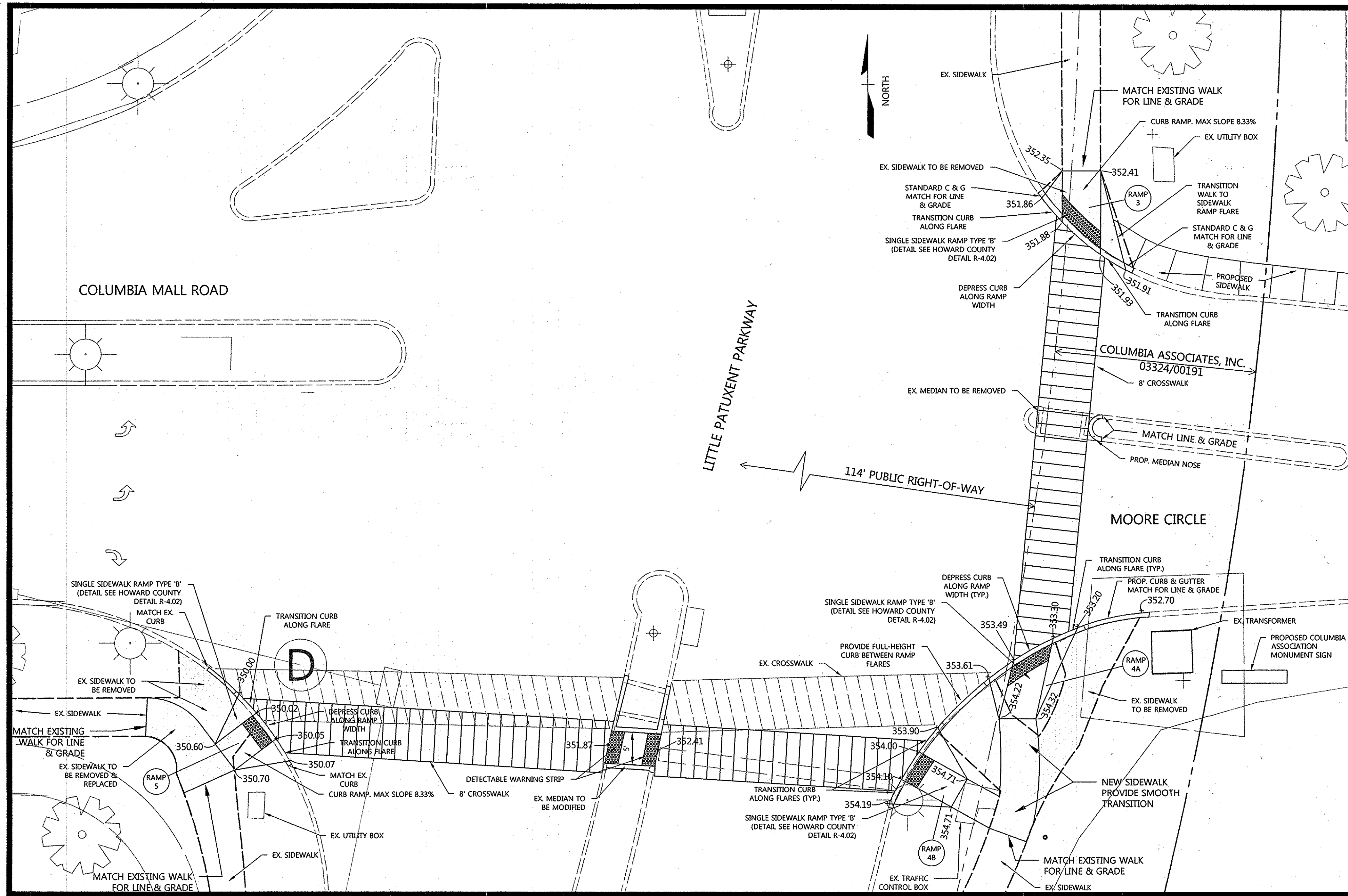
3/18/13
Date



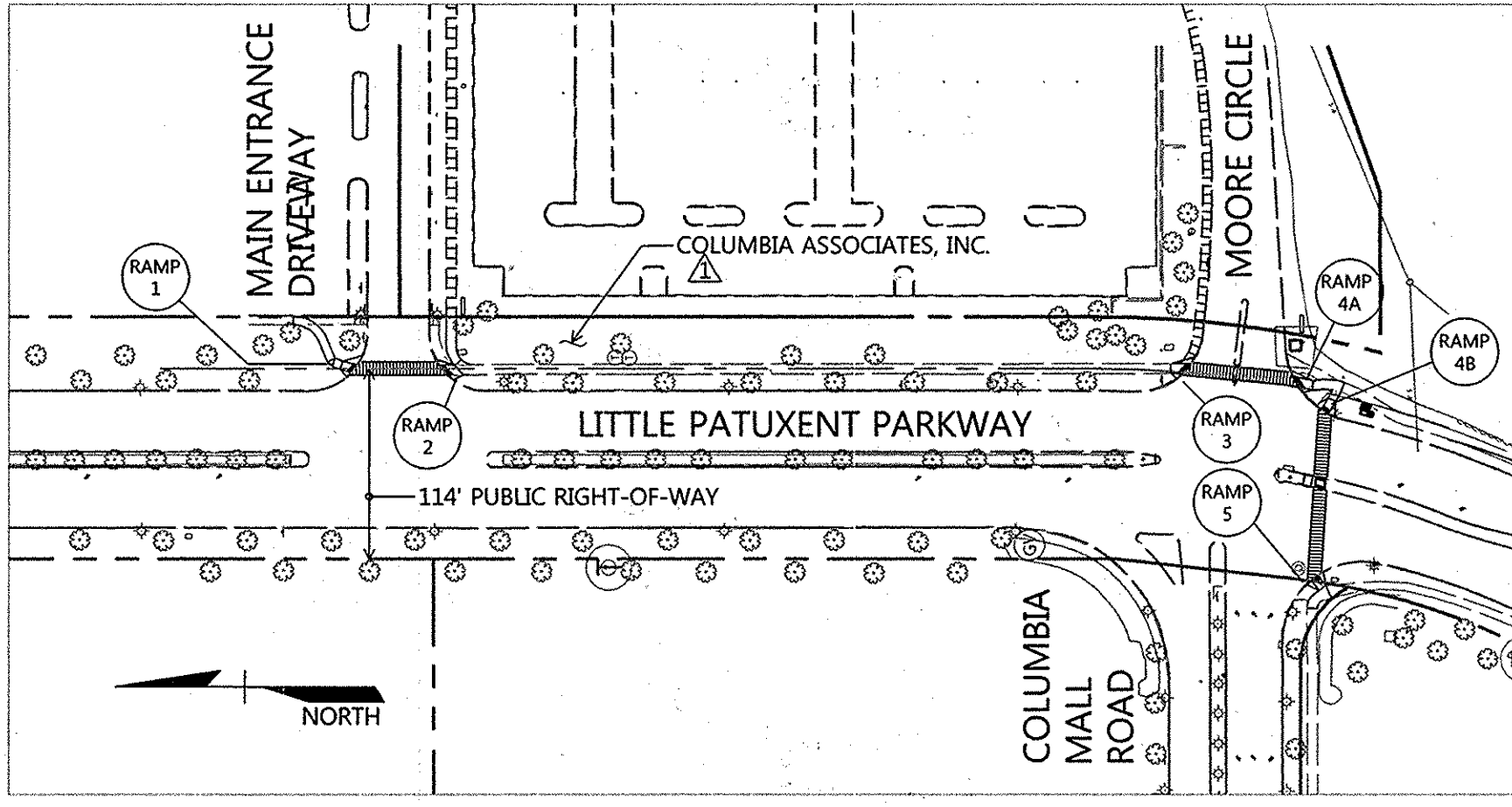
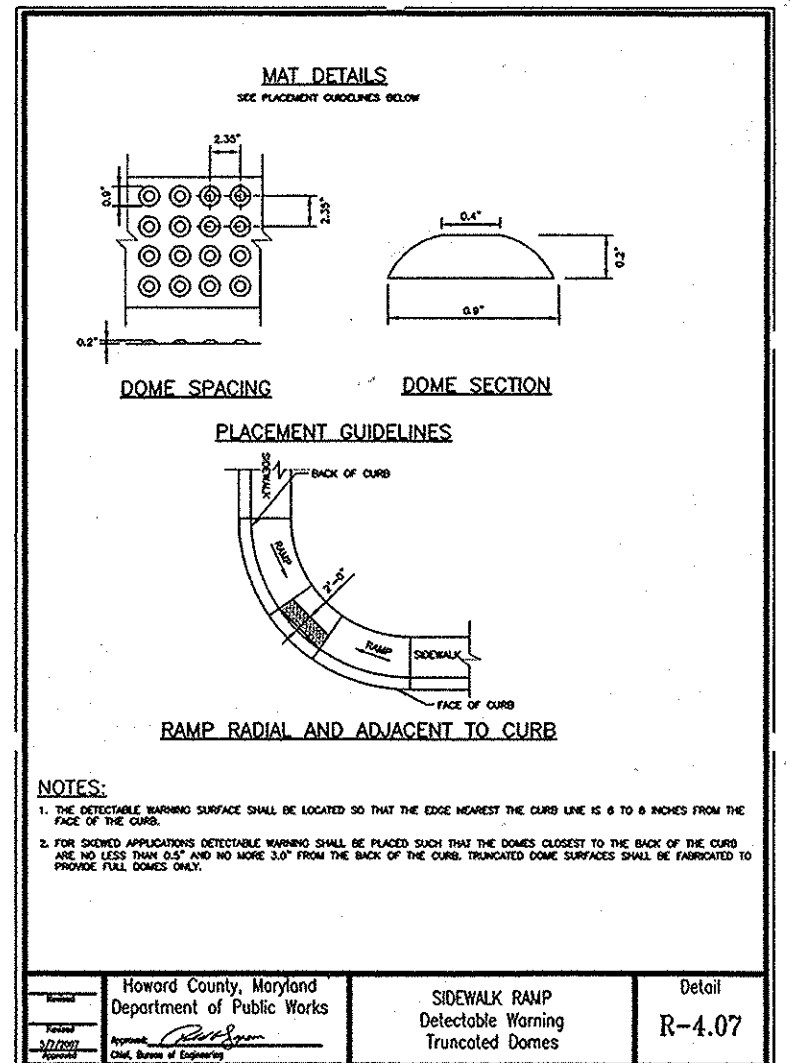
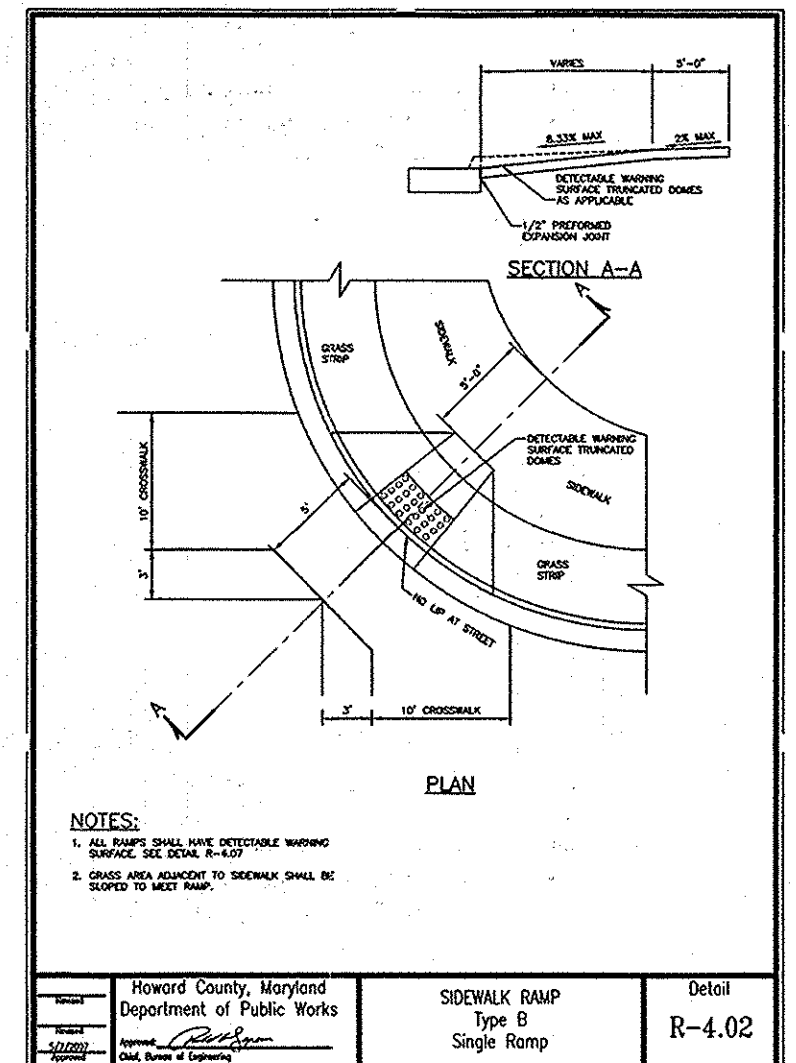
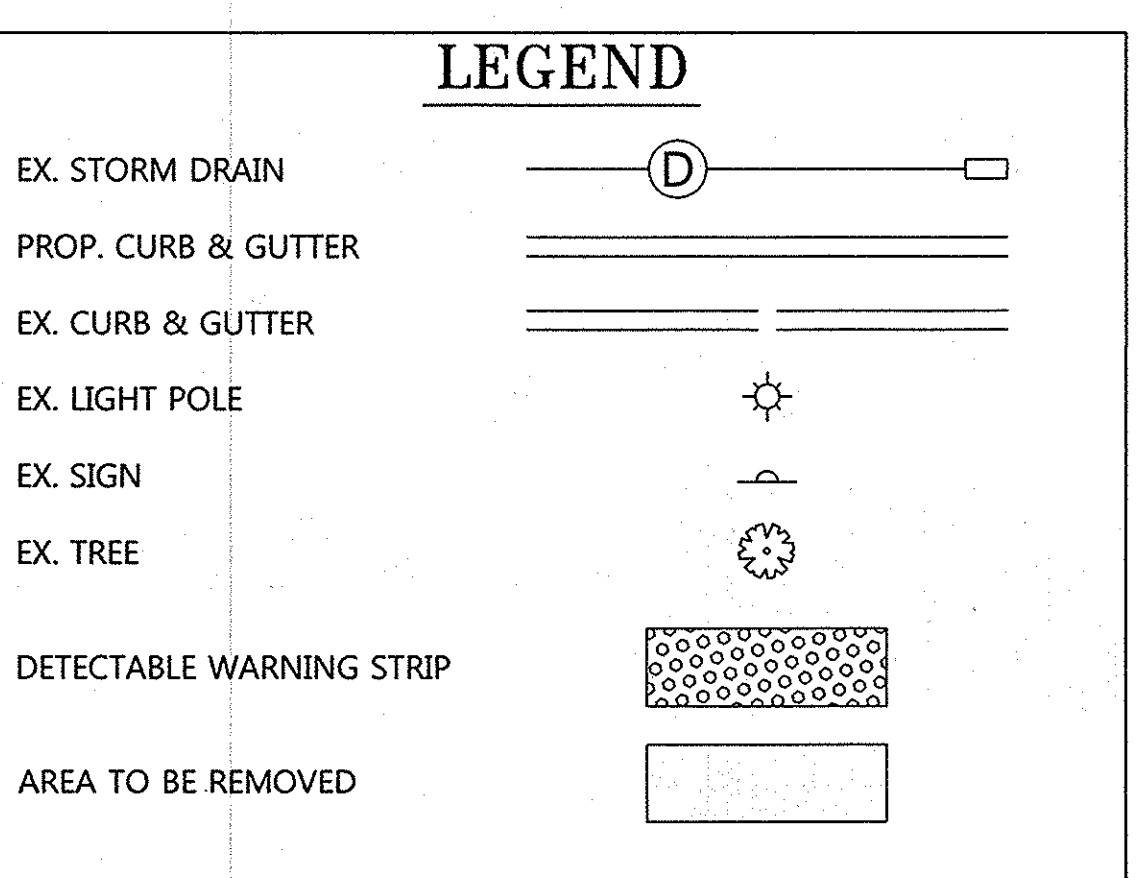
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 11133, EXPIRATION DATE: 3/19/13

Des. By	Scale AS SHOWN	Proj. No. 11133.A
Drn. By	Date 3/19/13	21 OF 264
Professional Engr. No.	Chk. By	

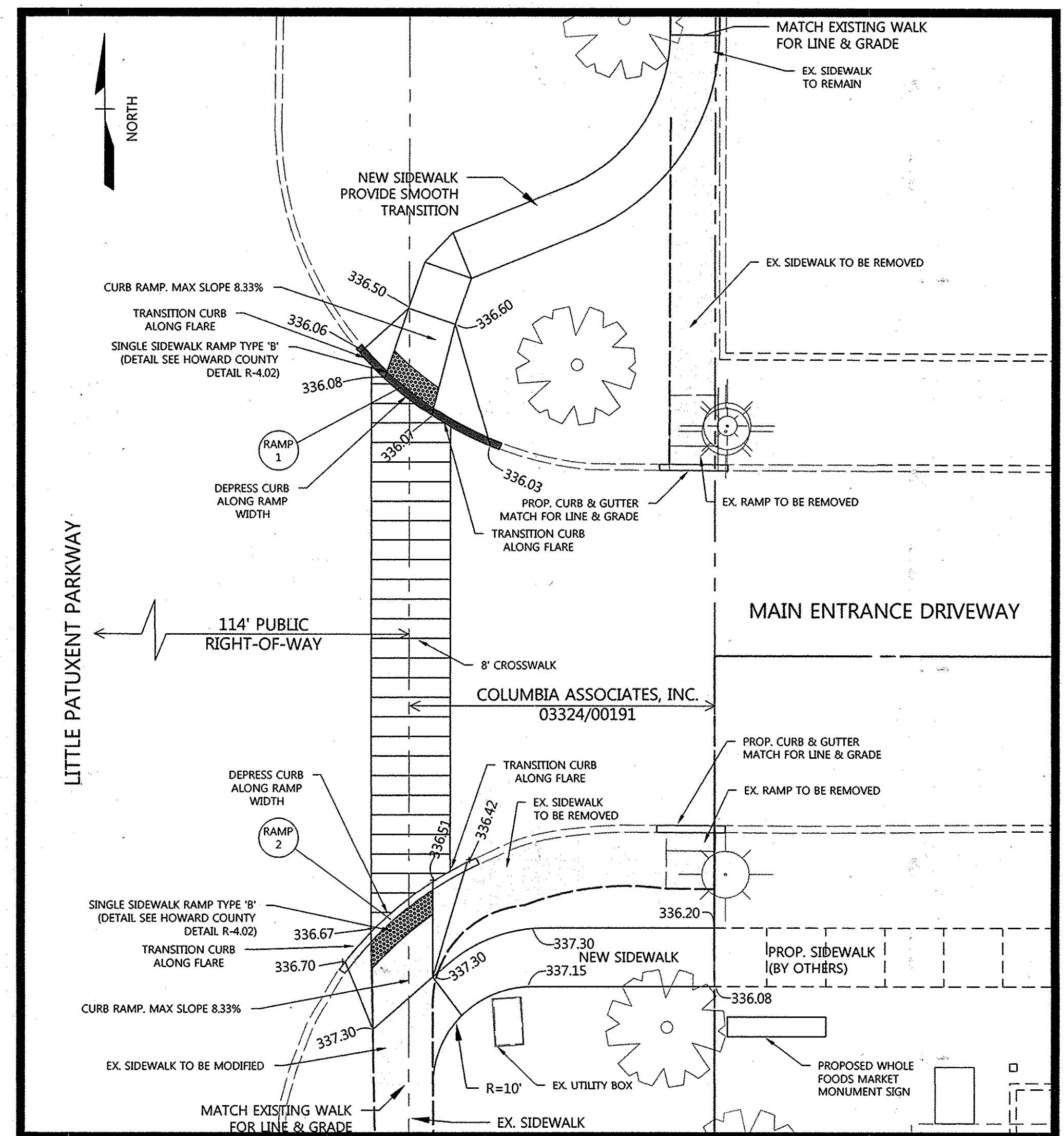
A:\11133\11133_A01\ENGR\CAD FILES\SHEET FILES\11133_LA04.DWG Tue, Mar 19, 2013



EX. RAMP REHABILITATION - MOORE CIRCLE
1" = 10"



EX. RAMP REHABILITATION - OVERALL MAP
1" = 100"



EX. RAMP REHABILITATION - MAIN ENTRANCE
1" = 10"

NOTE:
THE CONTRACTOR WILL USE EXTREME CAUTION DURING EXCAVATION AND/OR INSTALLATION OF ALL WORK SHOWN ON THESE PLANS. ALL UTILITIES WILL BE FULLY PROTECTED FROM DAMAGE OR INTERRUPTION.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
<i>K. Schaefer</i> CHIEF, DIVISION OF LAND DEVELOPMENT	1-05-15 DATE
<i>Charles G. ...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	12-24-14 DATE
<i>Mark ...</i> DIRECTOR	1/15/15 DATE

Date	No.	Revision Description
		REVISED SITE DEVELOPMENT PLAN

THE ROUSE BUILDING RENOVATION

OWNER/DEVELOPER:
CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORPORATION
P.O. BOX 833 COLUMBIA, MD 21044-0833

DMW
DAFT MCCUNE WALKER INC

200 EAST PENNSYLVANIA TOWNSHIP, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

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. 26562 EXPIRATION DATE: 7-18-15

For Revision No. 2 Only.

12-11-14
Date

Professional Engr. No. 26562

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 12/24/14
DIRECTOR OF PUBLIC WORKS

[Signature] 12-24-2014
CHIEF, BUREAU OF HIGHWAYS

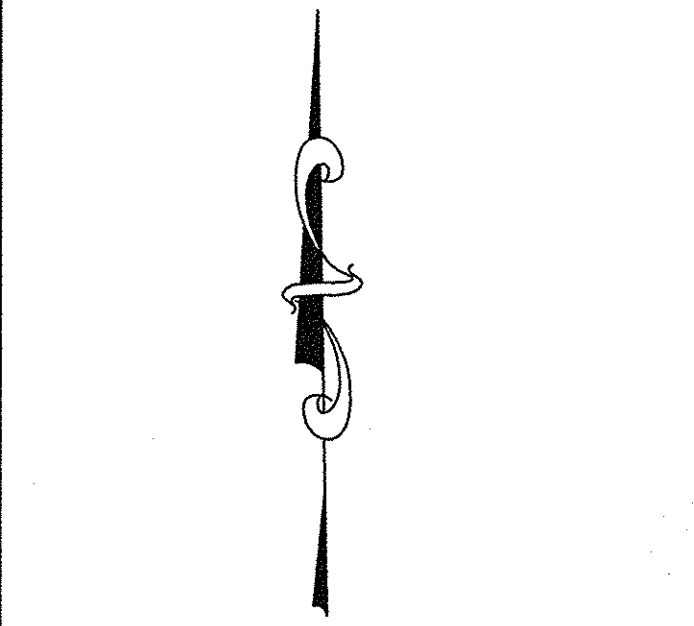
[Signature] 12/23/2014
CHIEF, TRAFFIC ENGINEER DIVISION

WA WELLS + ASSOCIATES, INC

1420 Spring Hill Road, Suite 600, McLean, Virginia 22102
Phone: 703/917-8620 Facsimile: 703/917-0739

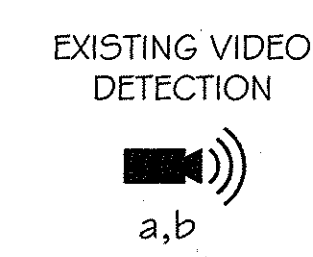
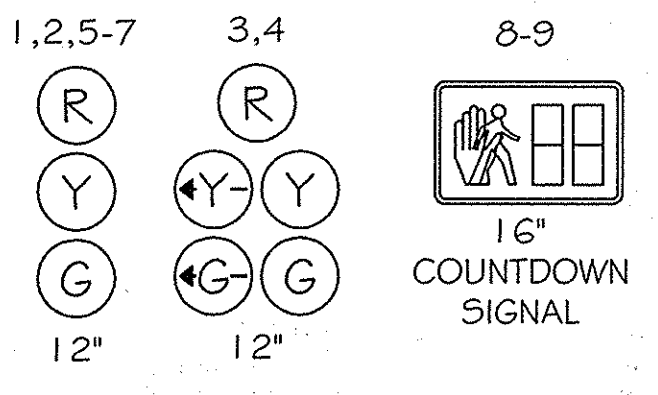
DMW BY	NO.	Redline Revision - Add this sheet	DATE

Des. By	GDT/CZ	Scale	AS SHOWN	Proj. No.	11133.A0
Drn. By	CZ	Date	10-20-14		
Chk. By	MCB	Approved			22 of 24

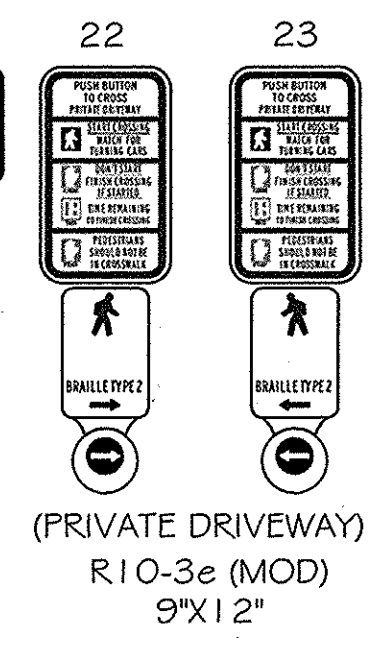
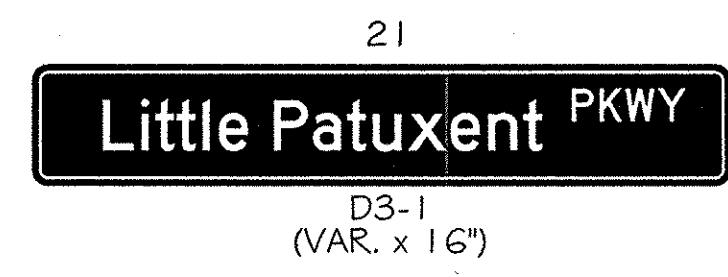
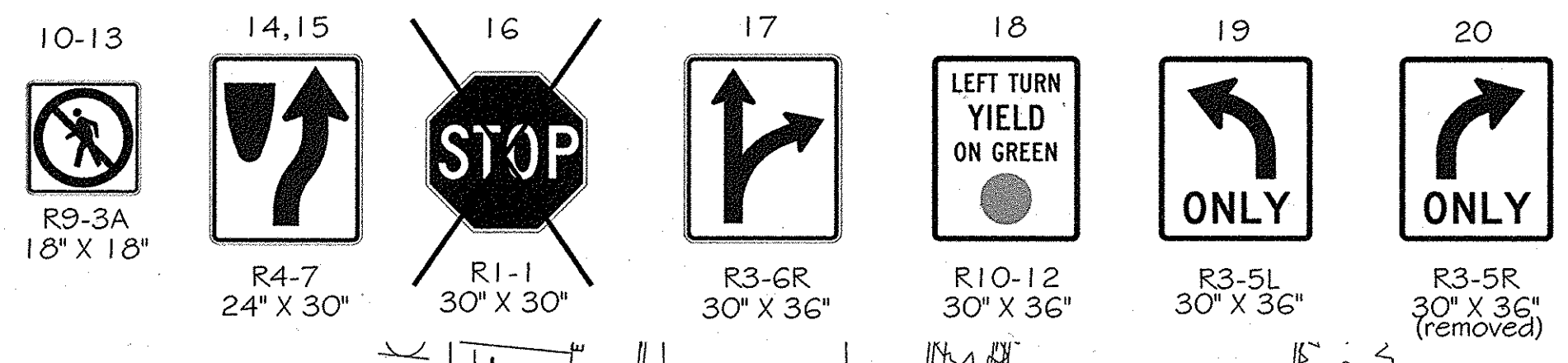


LITTLE PATUXENT PKWY IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

EXISTING SIGNALS

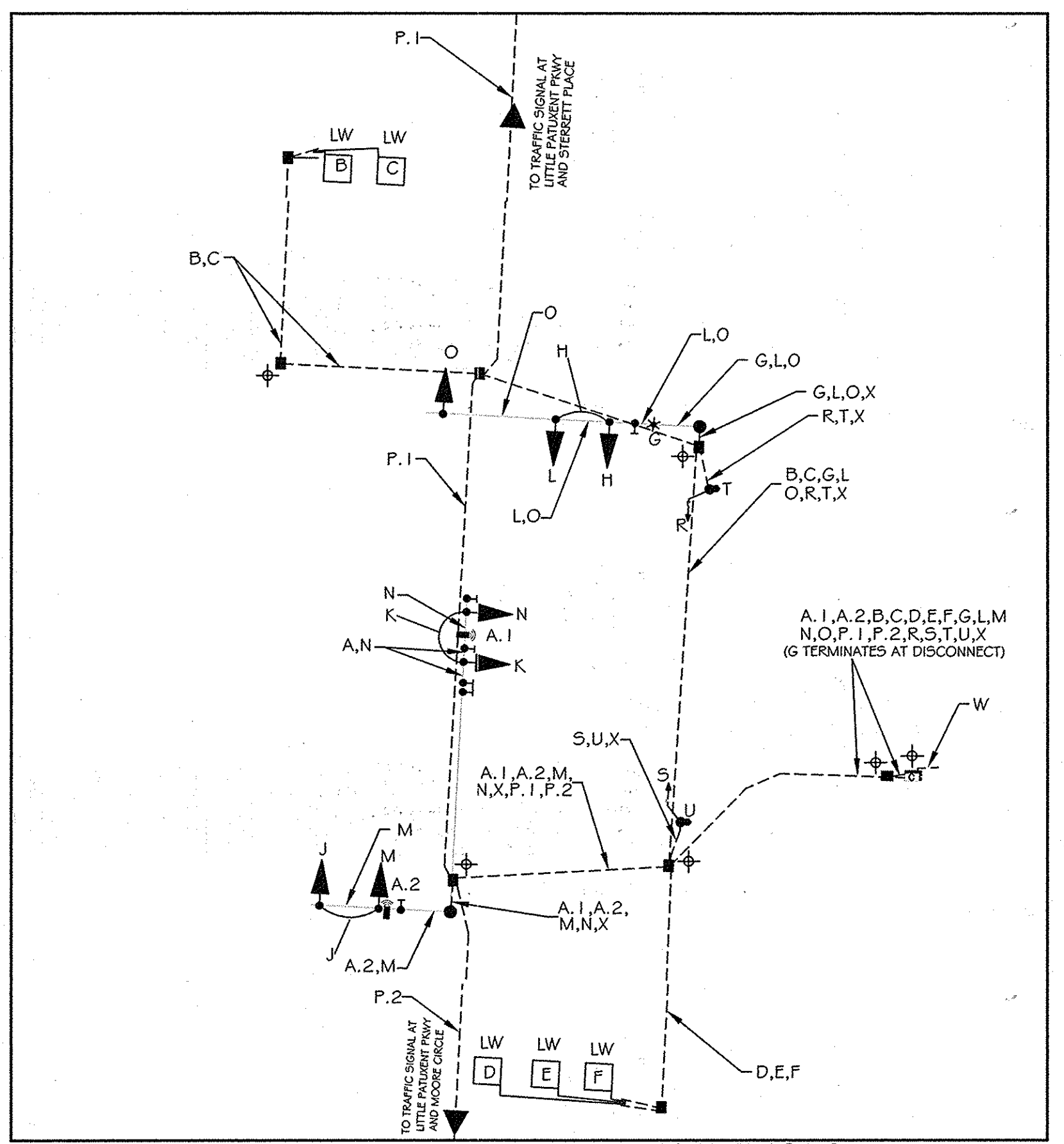


EXISTING SIGNS



- SIGNAL EQUIPMENT**
- (A) BASE MOUNTED CABINET AND CONTROLLER, CONCRETE FOUNDATION, GROUND RODS AND ALL NECESSARY EQUIPMENT FOR AN ELECTRICAL SERVICE, TWO 30 AMP DISCONNECT SWITCH, (TWO 2\"/>
 - (B) CONCRETE FOUNDATION WITH 27\"/>
 - (C) CONCRETE FOUNDATION WITH 27\"/>
 - (D) 8\"/>
 - (E) 4\"/>
 - (F) 3\"/>
 - (J) HANDBOX.

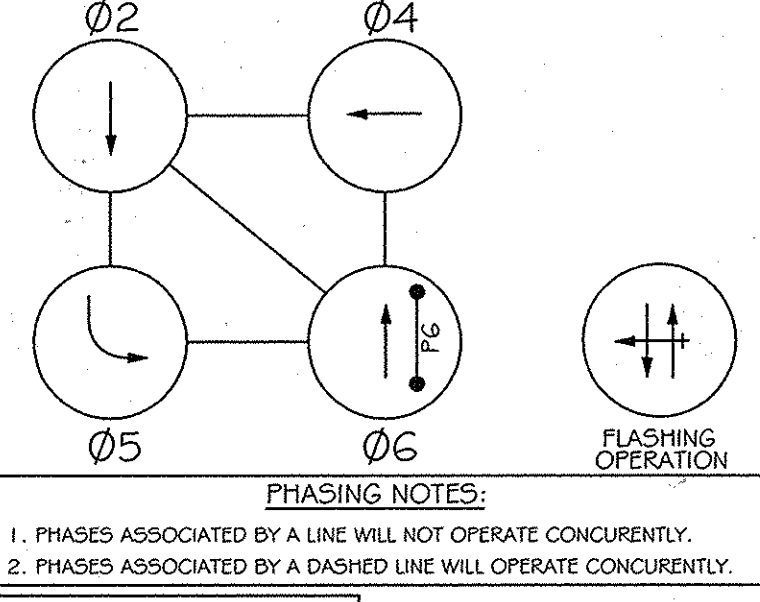
WIRING DIAGRAM



KEY

- A.1 VIDEO DETECTOR CABLE
- A.2 VIDEO DETECTOR CABLE
- B, C 2- CONDUCTOR CABLE (ALUMINUM SHIELDED)
- D, E, F 2- CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
- H, J, K, R, S 5- CONDUCTOR CABLE (NO. 14 A.W.G.)
- L, M, N, O 7- CONDUCTOR CABLE (NO. 14 A.W.G.)
- T, U 2- CONDUCTOR CABLE (NO. 14 A.W.G.)
- W 1- CONDUCTOR ELECTRICAL CABLE, NO. 2 A.W.G.
- X NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- P.1 12-PAIR INTERCONNECT CABLE # 7-CONDUCTOR (NO. 14 A.W.G.) (EXISTING TO BE REUSED)
- P.2 12-PAIR INTERCONNECT CABLE # 7-CONDUCTOR (NO. 14 A.W.G.)
- LW - LOOP WIRE
- ⊕ GROUND ROD

NEMA PHASING



UTILITY LEGEND

- G — G — GAS MAIN
- W — W — WATER MAIN
- S — S — SEWER MAIN
- D — D — STORM DRAIN
- E — E — ELECTRIC CABLE
- FO — FO — FIBER-OPTIC CABLE
- T — T — COMMUNICATION CABLE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

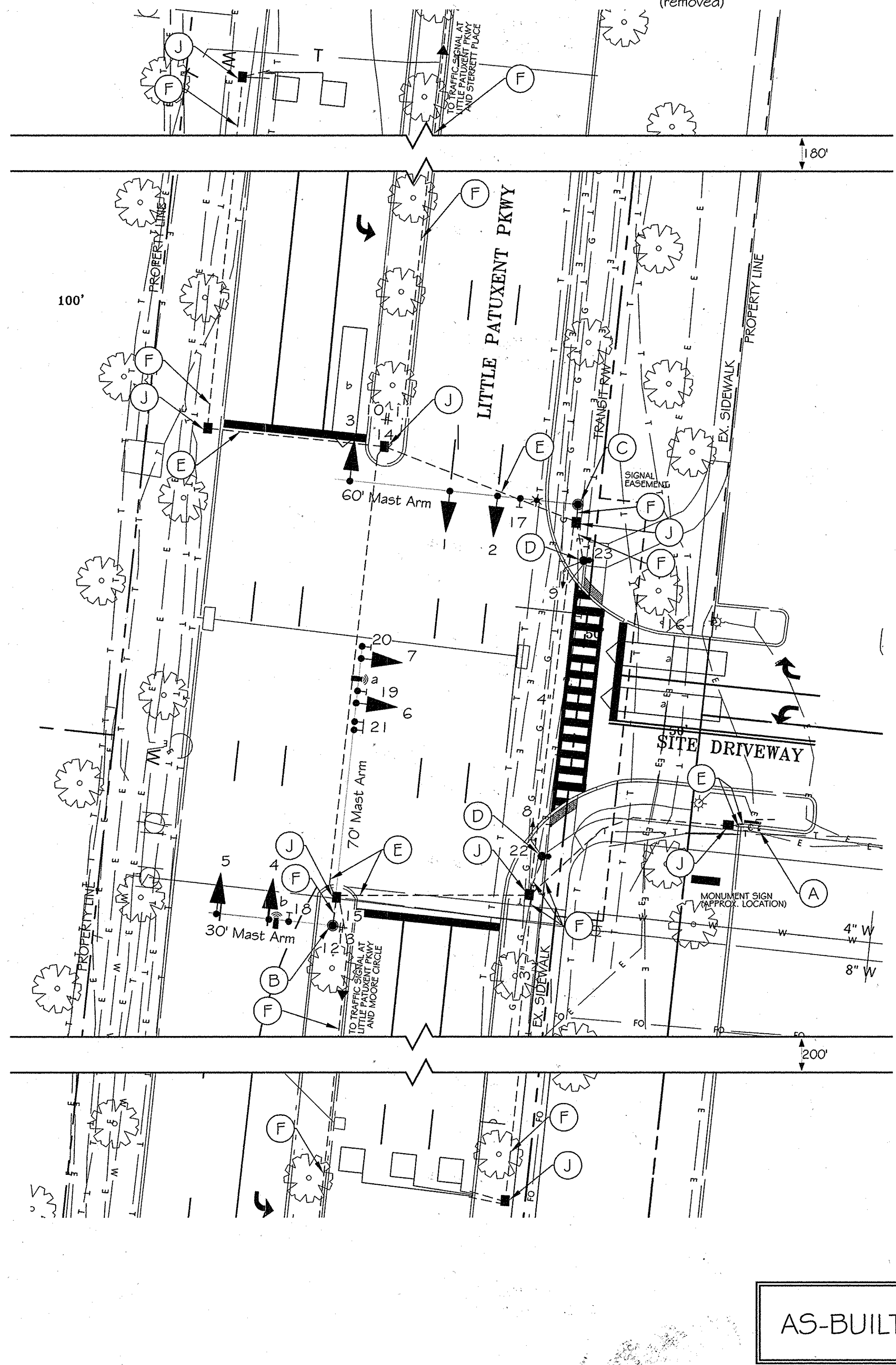
Veronica... 1-05-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chad... 12-24-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

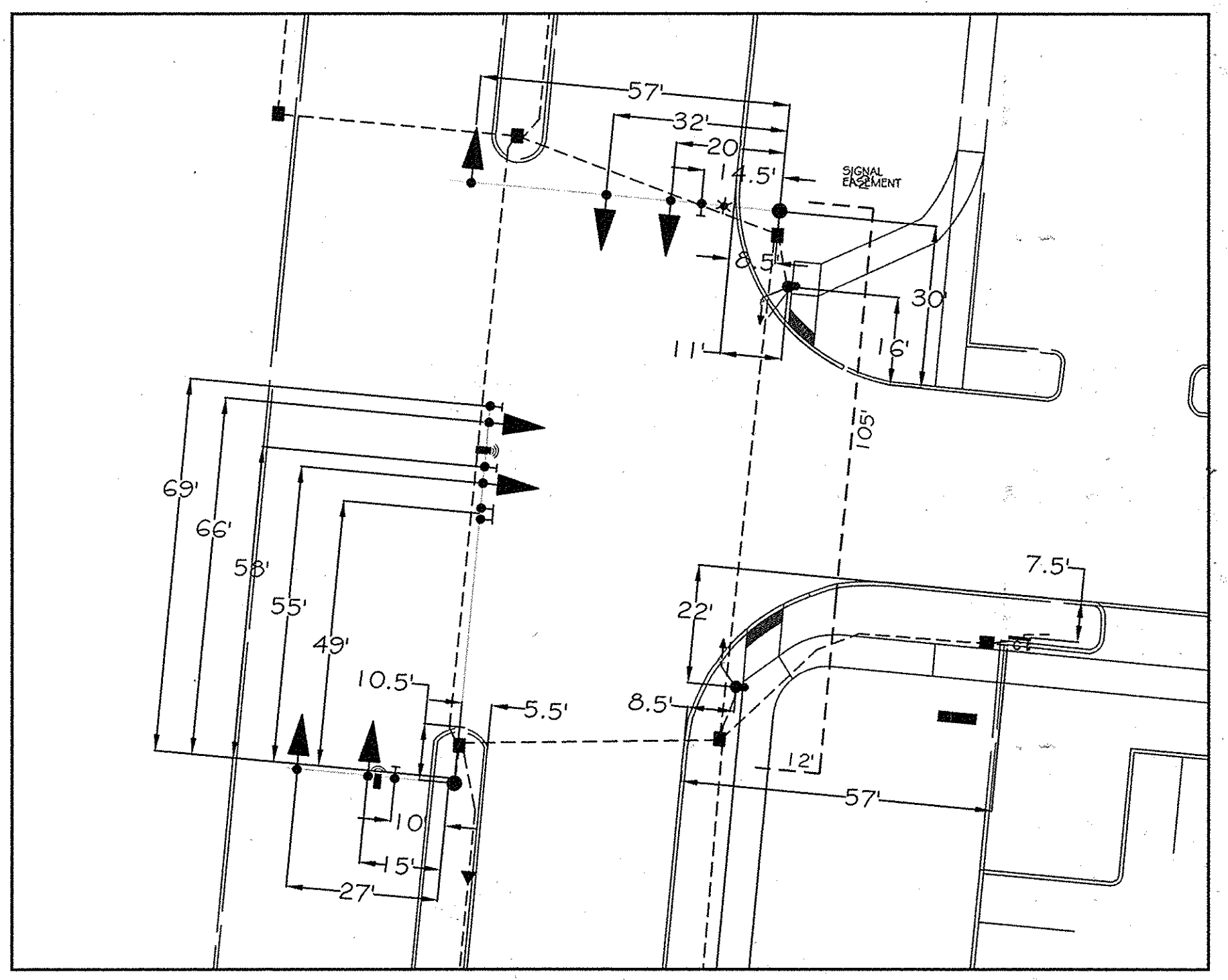
DIRECTOR DATE

DATE	No.	REVISION DESCRIPTION

- LEGEND**
- Existing
 - MAST ARM
 - TRAFFIC SIGNAL HEAD
 - PROPOSED VIDEO DETECTION
 - HAND BOX
 - SIGN
 - CONDUIT
 - LOOP DETECTOR
 - VIDEO DETECTION ZONE
 - CONTROLLER WITH PAD
 - PED POLE/PED HEAD
 - PROPOSED MAST ARM LUMINAIRE



SIGNAL AND SIGN DIMENSIONS



PHASE AND SEQUENCE DIAGRAM	SIGNAL HEADS								
	1	2	3	4	5	6	7	8	9
PHASE 2+5	R	R	G/G	G/G	G	R	R	Hand	Hand
PHASE 2+5 CHANGE	R	R	Y/G	Y/G	G	R	R	Hand	Hand
PHASE 2+6	G	G	G	G	G	R	R	Hand	Hand
PED CLEAR	G	G	G	G	G	R	R	Hand	Hand
PHASE 2+6 CHANGE	Y	Y	Y	Y	Y	R	R	Hand	Hand
PHASE 4	R	R	R	R	R	G	G	Hand	Hand
PHASE 4 CHANGE	R	R	R	R	R	Y	Y	Hand	Hand
FLASH OPER.	FL	FL	FL	FL	FL	FL	FL	DARK	DARK

AS-BUILT 8/20/2014

FOR REVISION No. 2 ONLY

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Jan... 12/24/14
DIRECTOR OF PUBLIC WORKS

Chad... 12-24-2014
CHIEF, BUREAU OF HIGHWAYS

Jan... 12/23/2014
CHIEF, TRAFFIC ENGINEERING DIVISION

Marsha... 1/5/15
DATE

WELLS + ASSOCIATES, INC

1420 Spring Hill Road, Suite 610, Tysons, Virginia 22102
Phone: 703/917-6620 Facsimile: 703/917-0739

210 Wirt Street, SW, Suite 201, Leesburg, Virginia 20175
Phone: 703/443-1442 Facsimile: 703/443-1225

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 142720 EXPIRATION DATE: 11/14/2016

John F. Cavallaro
PROFESSIONAL ENGINEER
12/11/2014

0	20'	40'
SCALE:	1" = 20'	
DATE:	11 DEC 14	
DESIGNED BY:	RAR	
DRAWN BY:	RAR	
CHECKED BY:	LES	
PROJECT NO:	6273	
BY NO.	3	REVISION DESCRIPTION
	2	AS-BUILT PLAN 12/11/14
	1	SIGNAL PLAN APPROVED 11/8/13
		DATE

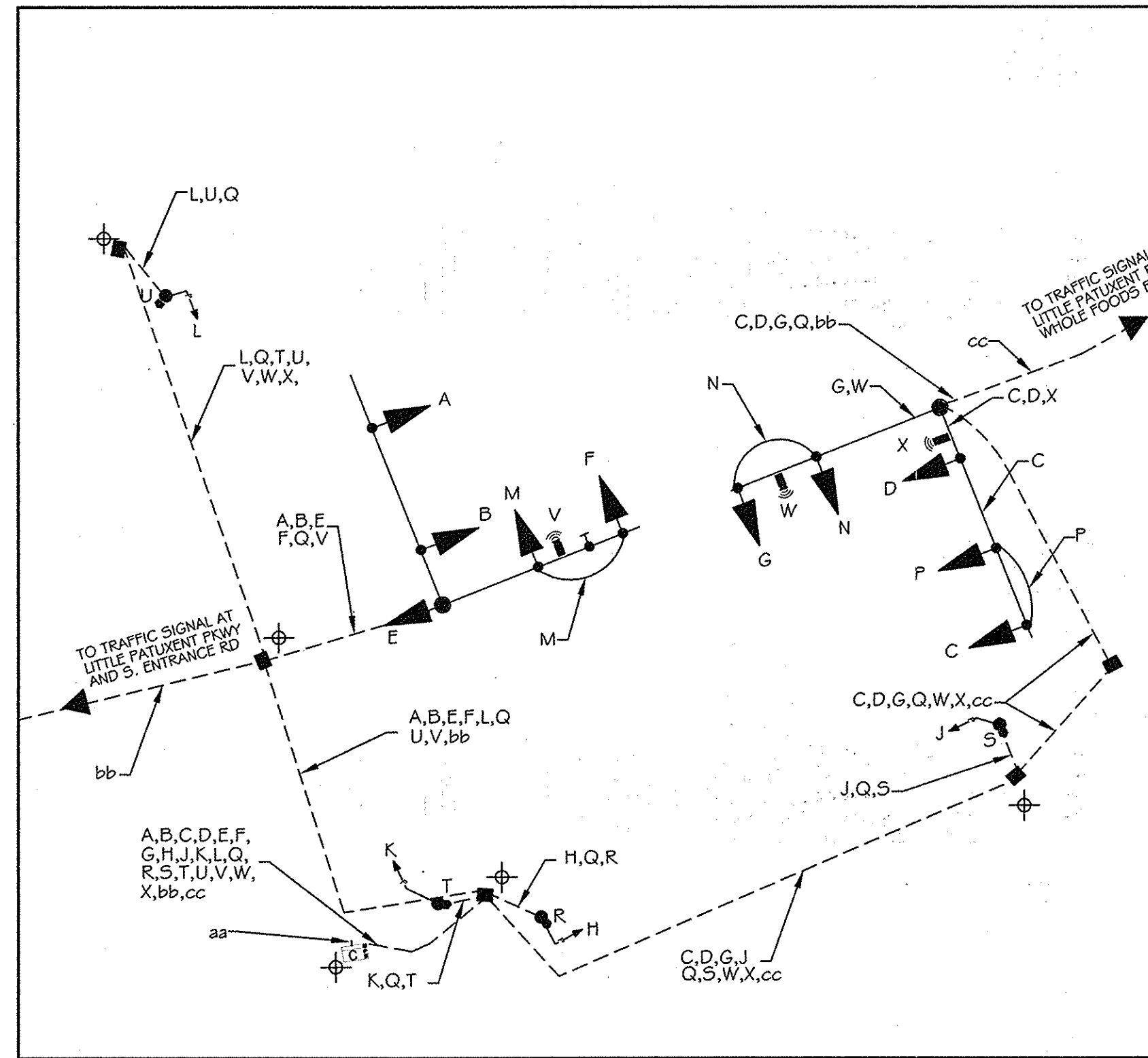
TITLE:
Traffic Signal As-Built
Little Patuxent Pkwy/
Whole Foods Entrance

LOCATION/DESCRIPTION:
Howard County, Maryland

SHEET:
23 of 24

C:\PROJECTS\5001-5500\5336 TRC PARKING STUDY\SIGNAL\AS-BUILT\WHOLE FOODS COLUMBIA AS-BUILT.DWG

WIRING DIAGRAM



KEY

- A B C D E F G H I J K L
- M N O P
- Q
- 2- CONDUCTOR CABLE (NO. 14 A.W.G.)
- 7- CONDUCTOR CABLE (NO. 14 A.W.G.)
- VIDEO DETECTOR CABLE
- 1- CONDUCTOR ELECTRICAL CABLE, NO. 2 A.W.G.
- 12-PAIR INTERCONNECT CABLE # 7-CONDUCTOR (NO. 14 A.W.G.) (EXISTING TO BE REUSED)
- 12-PAIR INTERCONNECT CABLE # 7-CONDUCTOR (NO. 14 A.W.G.) (INSTALLED PER APPROVED LITTLE PATUXENT PKWY AT WHOLE FOODS ENTRANCE SIGNAL PLAN)
- NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- GROUND ROD

- UTILITY LEGEND**
- G — G — GAS MAIN
 - W — W — WATER MAIN
 - S — S — SEWER MAIN
 - D — D — STORM DRAIN
 - E — E — ELECTRIC CABLE
 - FO — FO — FIBER-OPTIC CABLE
 - T — T — COMMUNICATION CABLE

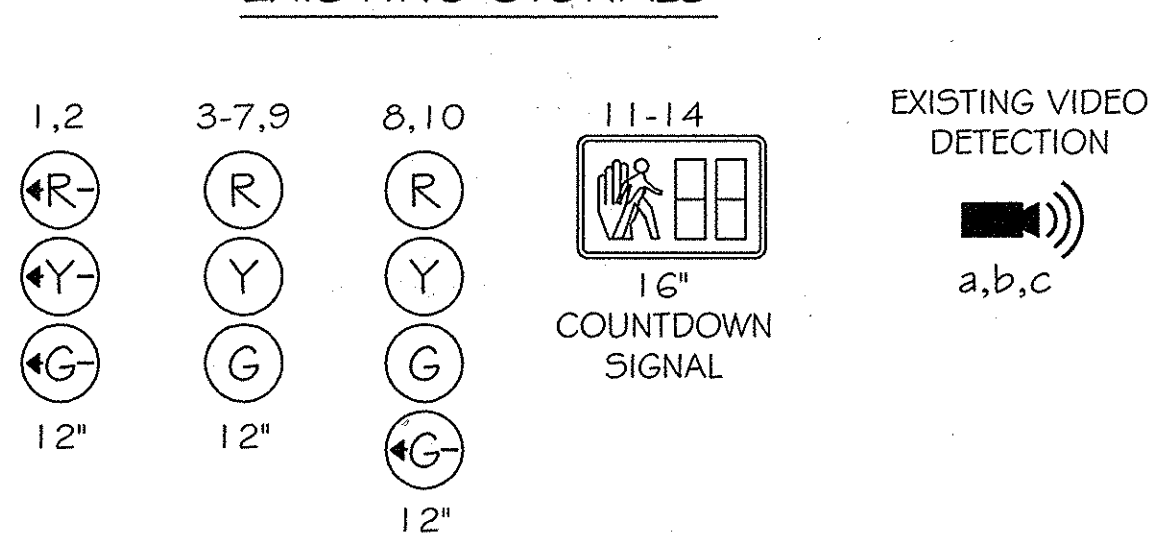
- LEGEND**
- MAST ARM
 - TRAFFIC SIGNAL HEAD
 - HAND BOX
 - SIGN
 - CONDUIT
 - PROPOSED VIDEO DETECTION
 - CONTROLLER WITH PAD
 - APS BUTTON
 - PED POLE/PED HEAD

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

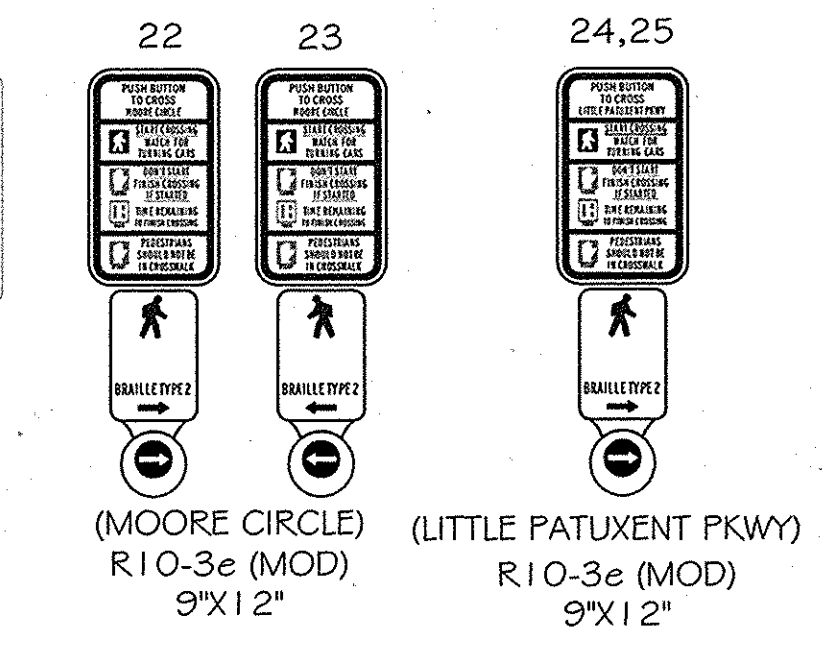
<i>Kevin Deane</i>	1-05-15
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Chief Edm...</i>	12-24-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
DIRECTOR	DATE

DATE	No.	REVISION DESCRIPTION

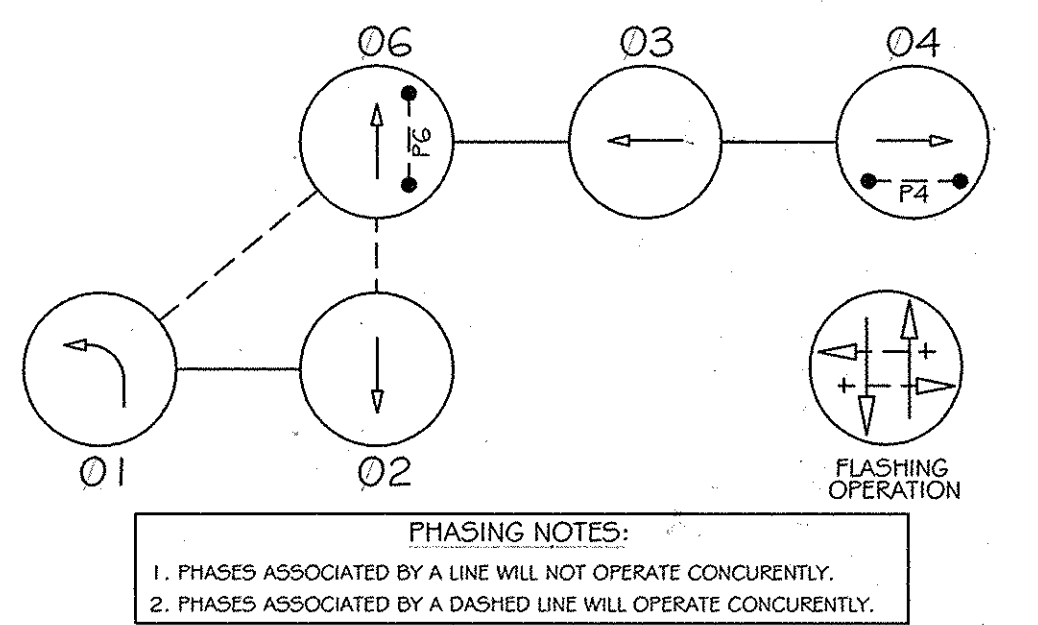
EXISTING SIGNALS



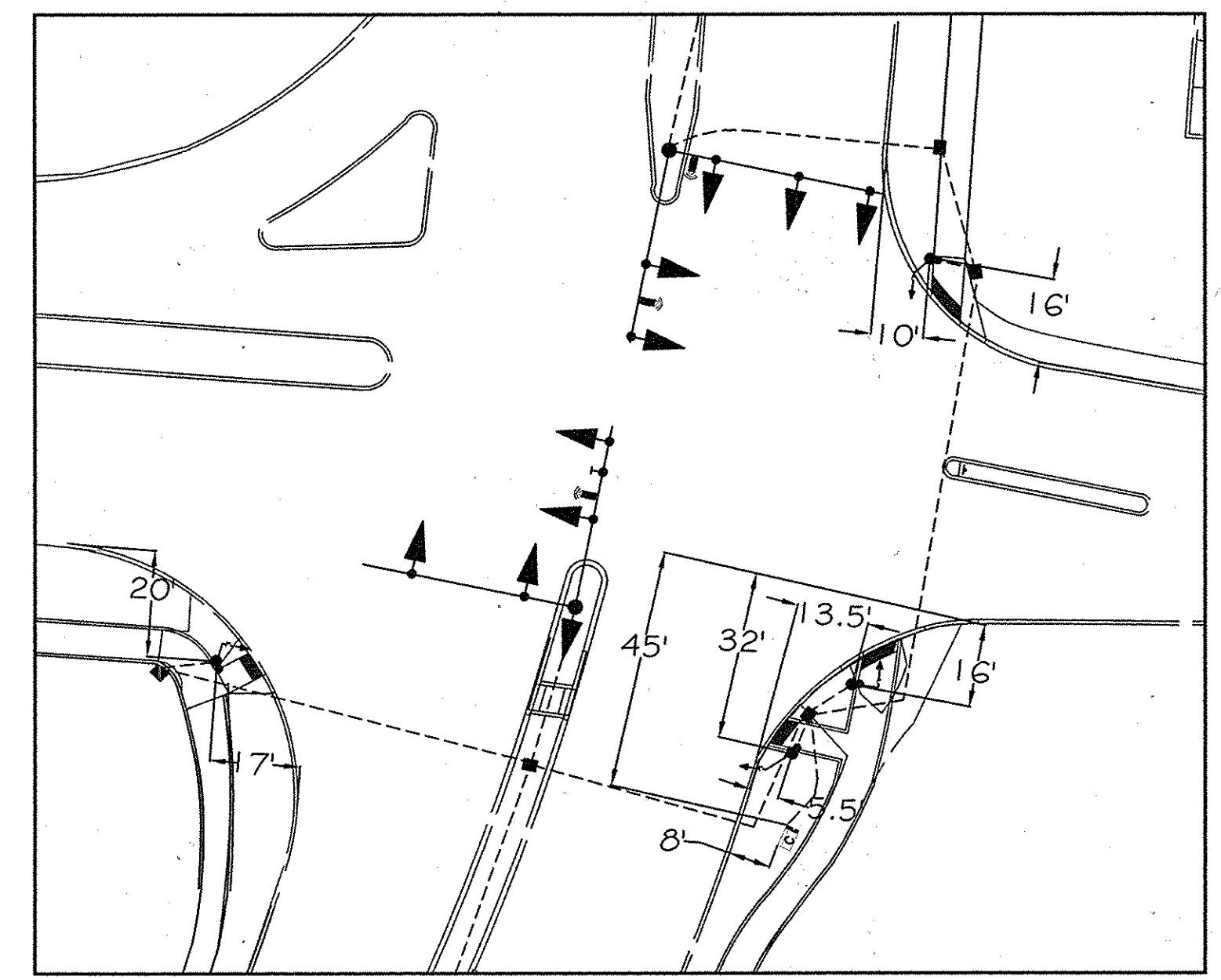
EXISTING SIGNS



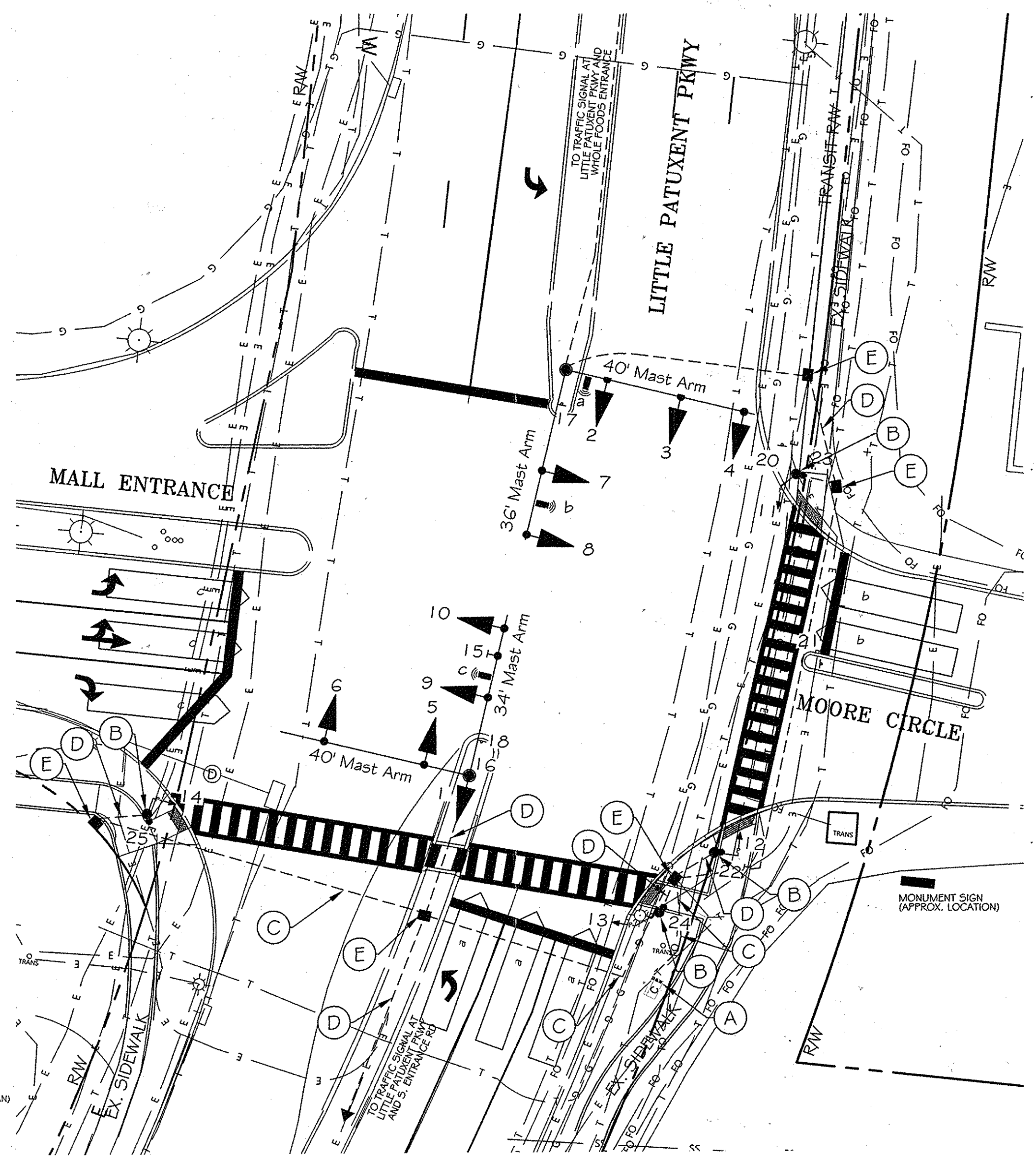
NEMA PHASING



SIGNAL AND SIGN DIMENSIONS



LITTLE PATUXENT PKWY IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.



SIGNAL EQUIPMENT

- (A) BASE MOUNTED CABINET AND CONTROLLER, CONCRETE FOUNDATION, GROUND RODS AND ALL NECESSARY EQUIPMENT FOR AN ELECTRICAL SERVICE, TWO 30 AMP DISCONNECT SWITCH. (TWO 2" AND TWO 4" P.V.C. SCHEDULE 80 CONDUIT BENDS)
- (B) 8' PEDESTAL POLE PAINTED FEDERAL BROWN COMPLETE WITH FOUNDATION, PEDESTRIAN SIGNAL HEAD, APS BUTTON AND SIGN.
- (C) 4" P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT (BORED).
- (D) 3" P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT (TRENCHED).
- (E) HANDBOX.

AS-BUILT 10/9/2014

PHASE AND SEQUENCE DIAGRAM

PHASE AND SEQUENCE DIAGRAM	SIGNAL HEADS													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1+6	—G	—G	G	G	R	R	R	R	R	R	FL	FL	FL	FL
PHASE 1+6 CHANGE	—Y	—Y	G	G	R	R	R	R	R	R	FL	FL	FL	FL
PHASE 2+6	—R	—R	G	G	G	G	R	R	R	R	FL	FL	FL	FL
FED CLEAR	—R	—R	G	G	G	G	R	R	R	R	FL	FL	FL	FL
PHASE 2+6 CHANGE	—R	—R	Y	Y	Y	Y	R	R	R	R	FL	FL	FL	FL
PHASE 3	—R	—R	R	R	R	R	G	—G	R	R	FL	FL	FL	FL
PHASE 3 CHANGE	—R	—R	R	R	R	R	Y	—Y	R	R	FL	FL	FL	FL
PHASE 4	—R	—R	R	R	R	R	R	R	G	—G	FL	FL	FL	FL
FED CLEAR	—R	—R	R	R	R	R	R	R	G	—G	FL	FL	FL	FL
PHASE 4 CHANGE	—R	—R	R	R	R	R	R	R	Y	—Y	FL	FL	FL	FL
FLASH OPER.	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	DARK	DARK	DARK	DARK

FOR REVISION No. 2 ONLY

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

John R... 12/24/14
 DIRECTOR OF PUBLIC WORKS

Michael... 12-24-2014
 CHIEF, BUREAU OF HIGHWAYS

John... 12/23/2014
 CHIEF, TRAFFIC ENGINEERING DIVISION

WA WELLS + ASSOCIATES, INC

1420 Spring Hill Road, Suite 610, Tysons, Virginia 22102
 Phone: 703/917-6620 Facsimile: 703/917-0739

210 Wirt Street, SW, Suite 201, Leesburg, Virginia 20175
 Phone: 703/443-1442 Facsimile: 703/443-1225

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 42720

EXPIRATION DATE: 11/14/2016

John... 12/11/2014
 PROFESSIONAL ENGINEER

SCALE: 1" = 20'

DATE: 11 DEC 14

DESIGNED BY: RAR

DRAWN BY: RAR

CHECKED BY: LES

PROJECT NO: 6273

REVISIONS:

3	REDLINE REVISION#2 - ADD THIS SHEET TO SDP-73-23C	12/11/14
2	AS-BUILT PLAN	10/9/14
1	SIGNAL PLAN APPROVED	11/8/13

TITLE: Signal Modification Plan
 Little Patuxent Pkwy/
 Moore Circle

LOCATION/DESCRIPTION:
 Howard County, Maryland

SHEET: 24 of 24