

SOILS LEGEND			
SYMBOL	NAME/DESCRIPTION	K VALUE	GROUP
RuB	RUSSETT AND BELTSVILLE SOIL, 2 TO 5 PERCENT SLOPES	0.37	C
UA	URBAN LAND-FALLSINGTON COMPLEX, 0 TO 5 PERCENT SLOPES	0.20	D
UD	URBAN LAND-UDORTHERTS COMPLEX, 0 TO 15 PERCENT SLOPES	0.28	D

BASED ON USDA NRCS WEB SOIL NATIONAL COOPERATIVE SOIL SURVEY. SEE HOWARD COUNTY SOIL SURVEY MAP NO. 25.

ENVIRONMENTAL CONCEPT PLAN DORSEY CENTER, PARCEL R

APARTMENT BUILDING 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

NOTE:
APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN, SITE DEVELOPMENT PLAN, OR GRADING OR BUILDING PERMIT PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION, SITE DEVELOPMENT PLAN, OR GRADING AND BUILDING PERMIT STAGES.



ECP Site Analysis Data Sheet	
Gross Area	4.43 ac
100yr Floodplain	0.75 ac
Slopes 15% or Greater	0.00 ac
Wetlands	0.00 ac
Wetlands Buffer	0.00 ac
Stream	616 lf
Stream Buffer	1.27 ac
Forested Area(Excluding Floodplain)	0.64 ac
Erodible Soils(DS/Sl)	1.84 ac
Limit of Disturbance	4.10 ac
Impervious Area	2.30 ac
Green Space(Within LOD)	1.80 ac

*All areas are approximate.

VICINITY MAP
SCALE: 1" = 2000'
ADC MAP NO. 17 GRID C-11

BENCH MARKS--(NAD'83)
TRAV. PT. 1 EL 157.73
TRY MAG: 18.0' NORTHEAST OF CONC. CURB OF SOUTHEASTBOUND LANE OF DEERPARK ROAD; 20.3' NORTH OF EX. INLET N 553.149.12 E 1,351.644.44
TRAV. PT. 2 EL 154.64
TRY MAG: 3.1' NORTHEAST OF CONC. CURB OF SOUTHEASTBOUND LANE OF DEERPARK ROAD; 20.3' NORTH OF EX. INLET N 553.037.81 E 1,351.653.46

DESIGN NARRATIVE

The Dorsey Center Parcel "R" is an approximately 4.43 acres parcel of land located in the southeast quadrant of the intersection of U.S. Route 1 and Maryland Route 100. It is located between Deerpark Road and Dorsey Road, at the west end of Deerpark Road. The property is zoned TOD (Transit Oriented District) and is within the Route 1 Manual area. The property currently contains an existing floodplain that terminates at the property boundaries. Existing streams enter the site at two locations, from under Dorsey Road via an underground culvert and from the neighboring property (i.e., a Best Western Hotel) via an underground culvert. These two intermittent streams converge to form a Y-shape in the western portion of the site and exit the site as a single intermittent via an underground culvert. The site is mostly wooded with an existing house and barn on the area of the property fronting Dorsey Road. The site is classified as both Hydrologic Group C & D soils.

The proposed development is for an apartment building consisting of approximately 150 to 200 units. The parking for the building will be located below the building. The existing stream is to be diverted around the site via a storm drain bypass system. Stormwater management (SWM) for this site impervious area is to be controlled by Bio-retention. The facilities are located along the north entrance of the site adjacent to Deerpark Road. The facilities will outfall at the eastern bypass discharge. In addition to the required ESD management of the 10 year and 100 year is required since this site drains to a tributary to the Deep Run above a railroad stream crossing per the Design Manual Volume I, Section 5.2.1. This is proposed by means of underground storage pipe. This site falls within the Patapsco River Lower North Branch (2130906) watershed designation 02-13-09.

As a result of addressing the stormwater management by use of ESDs to the MEP the land conditions have theoretically been returned to woods in good condition and therefore reduced the overall run-off for the 1-year storm. A reduction in impervious area with the use of bio-retention practices makes for a better site design as well as maintaining the original drainage patterns.

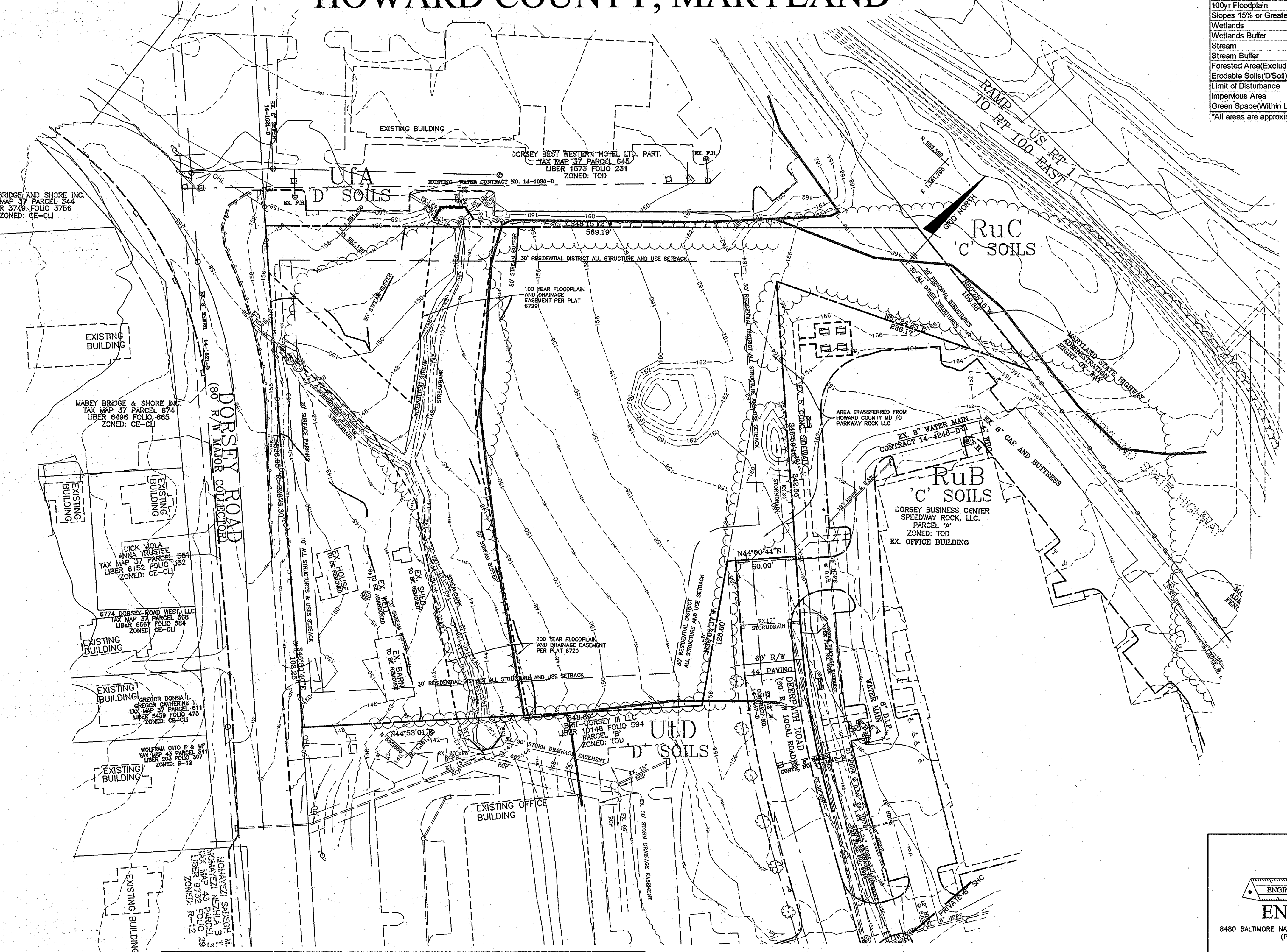
Sediment and erosion control shall comply with the latest edition of the MDE Standards and Specifications for Sediment Control and has been limited to the areas necessary to conduct ESD practices and ensure functionality.

It is concluded that all ESD to the MEP requirements as defined in the Stormwater Management Act of 2007 have been met for the proposed development. The Water Quality has been provided by the implementation bio-retention facilities (M-6) to treat all of the proposed impervious onsite.

Implementation of the proposed development would require piping of the existing onsite stream. The piping would have minimal impact on aquatic resources given the limited opportunity that the stream currently provides. It is reasonable to conclude that piping the stream channel will have little to no negative resource impact and in some cases may actually help improve overall water quality of the system. This work, combined with a mitigation program could certainly enhance the water quality and aquatic resources of the area.

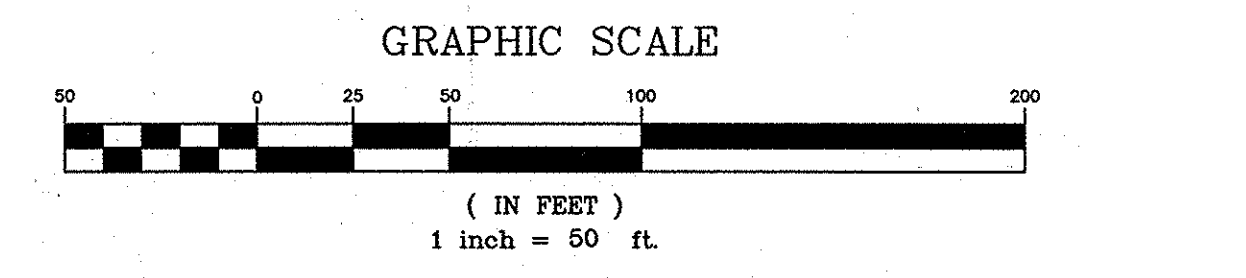
LEGEND

- EXISTING CONTOURS 452
- EXISTING TREELINE 450
- PROPOSED TREELINE
- EXISTING STREAM
- EXISTING STREAM BUFFER
- APPROXIMATE 100 YEAR FLOODPLAIN LIMITS
- EXISTING STRUCTURE



GENERAL NOTES

- THE SUBJECT PROPERTY IS ZONED TOD PER THE 10/06/13 COMPREHENSIVE ZONING PLAN.
- THERE IS A FLOODPLAIN ON THIS SITE AND IS SHOWN AS RECORDED PER-PLAT 6729.
- THERE ARE NO WETLANDS ON THIS SITE. THIS IS BASED ON THE WETLAND STUDY PROVIDED BY HILLIS-CARNES ENGINEERING ASSOCIATES, INC. DATED JULY 12, 2004 AND VERIFIED BY ECO-SCIENCE PROFESSIONALS, INC. DATED AUGUST 2014. 1,351.644.44
- THE CONTOURS SHOWN HEREON HAVE BEEN TAKEN FROM FIELD RUN TOPOGRAPHIC SURVEYS AT 2' INTERVALS PREPARED BY BENCHMARK ENGINEERING, INC. ON OR ABOUT JUNE, 2006.
- VERTICAL CONTROL AND HORIZONTAL CONTROL BASED UPON HOWARD COUNTY NAD '83 CONTROL. THIS PROPERTY IS WITHIN THE METROPOLITAN WATER AND SEWER DISTRICT.
- WATER AND SEWER SERVICE FOR THIS SUBDIVISION IS PUBLIC. THE PUBLIC SEWER IS PROVIDED BY CONTRACT 14-1521-D. THE PUBLIC WATER IS PROVIDED BY CONTRACT 14-1447-D. THIS SUBDIVISION FALLS WITHIN THE PATAPSCO DRAINAGE AREA.
- EXISTING UTILITIES SHOWN WERE LOCATED BY RECORD DRAWINGS AND FIELD LOCATIONS.
- THE BOUNDARY SHOWN HEREON IS TAKEN FROM THE BOUNDARY SURVEY PREPARED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JUNE, 2006.
- PREVIOUS DEPARTMENT OF PLANNING AND ZONING REFERENCE NUMBERS: SDP-05-29, F-98-109 & F-07-80, SDP-07-016, WP-15-151
- THE FOREST CONSERVATION ACT REQUIREMENTS FOR 1.09 ACRES OF REQUIRED REFORESTATION HAVE BEEN MET THROUGH THE PAYMENT OF A FEE-IN-LIEU. THE AMOUNT FEE OF \$35,610.30 HAS BEEN PAID UNDER SDP-07-016.
- THIS PLAN IS SUBJECT TO WP-15-131 APPROVED MAY 21, 2015 TO SECTION 16.116(a)(2)(i) PROHIBITING GRADING, REMOVAL OF VEGETATIVE COVER AND TREES, PAVING AND NEW CONSTRUCTION WITHIN 50' OF AN INTERMITTENT STREAM BANK BUFFER, AND SECTION 16.115(c)(2) PROHIBITING CLEARING, EXCAVATION, FILLING, ALTERING DRAINAGE OR IMPROVING PAVING IN A FLOODPLAIN, FOR CONSTRUCTION OF A 65,000 SQ. FT. APARTMENT BUILDING, RELATED PARKING AND AMENITIES AREA. APPROVAL OF THE REQUESTED WAIVERS IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - MARYLAND DEPARTMENT OF THE ENVIRONMENT AND ARMY CORP. OF ENGINEER PERMIT APPROVALS ARE REQUIRED FOR THE DISTURBANCE OF THE INTERMITTENT STREAMS, 50' INTERMITTENT STREAM BANK BUFFERS AND FILLING OF THE 100 YEAR FLOOD PLAIN AREA ON PARCEL R OF THE DORSEY CENTER SUBDIVISION. ALL OTHER COUNTY AND STATE PERMITS ARE REQUIRED AS APPLICABLE. A NOTE SHALL BE ADDED TO THE SITE DEVELOPMENT PLAN INDICATING ALL PERMIT NUMBERS, DATE AND ACTION TAKEN.
 - PROVIDING SAFE CONVEYANCE, WITHOUT ADVERSELY IMPACTING DOWNSTREAM PROPERTIES, OF THE 100 YEAR DISCHARGE OF 397.3 CFS TO THE EXISTING DOWNSTREAM STORMWATER MANAGEMENT SYSTEM. THE 100 YEAR CFS IS BASED ON THE COMPUTATIONS RECEIVED AT THE ENVIRONMENTAL CONCEPT PLAN. Q=CA=0.89x12.75x35=397.2
 - COMPLIANCE WITH THE COMMENTS DATED MAY 20, 2015 FROM THE DEVELOPMENT ENGINEERING DIVISION.
 - ALL CONSTRUCTION ON PARCEL R SHALL BE SUBJECT TO REQUIREMENTS OF THE HOWARD COUNTY BUILDING CODE. MITIGATION OF THE WAIVER REQUESTS FOR THE PROPOSED ON-SITE STREAM DIVERSION VIA A STORM DRAIN BYPASS SYSTEM WILL REQUIRE THE RESTORATION OF THE SECTION OF DEEP RUN STREAM SEGMENT BY THE APPLICANT AS INDICATED IN THE WAIVER PETITION APPLICATION JUSTIFICATION. A SITE DEVELOPMENT PLAN SHALL BE SUBMITTED FOR THE OFF-SITE STREAM RESTORATION PROJECT PRIOR TO FINAL SIGNATURE APPROVAL OF THE SITE DEVELOPMENT PLAN FOR PARCEL R.



STORAGE CHART				
STORM	EXISTING RUNOFF	PROPOSED RUNOFF	STORAGE REQUIRED	STORAGE PROVIDED
10 YEAR	10.81 cfs	25.46 cfs	18,295 cf	18,295 cf
100 YEAR	22.29 cfs	39.33 cfs	24,394 cf	24,394 cf

ESD SUMMARY TABLE														
FACILITY	D.A.	MDE Type	Total DA	Impervious Area	Qe	A1 (SF)		Depth/Gal	ESDv (CF)		REV		Ownership	
						Required	Provided		Required	Provided	Required	Provided		
MBR-1		M-6	33,500	33,500	1.81	4243	4307	PASS	1.00	5039	5743	2.2		
MBR-2		M-6	33,500	33,500	1.81	4243	4342	PASS	1.00	5039	5789	2.2		
MBR-3		M-6	33,500	33,500	1.81	4243	4313	PASS	1.00	5039	5751	2.2		
TOTAL TREATED			100,500	100,500		12,730	12,962			15,849	17,283	2.1		
SITE TOTAL			192,970	100,500										

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 6-19-15

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 6-19-15

PLAN
SCALE: 1" = 50'

BENCHMARK ENGINEERING, INC.
 ENGINEERS • LAND SURVEYORS • PLANNERS
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6644
 WWW.BEI-CIVILENGINEERING.COM

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. 22390, Expiration Date: 6-30-17.

OWNER: MARK LEVY PARKWAY ROCK LLC, 6800 DEERPARK ROAD, SUITE 100, ELK RIDGE, MARYLAND 21075, 410.579.2242

DEVELOPER: MARK LEVY PARKWAY ROCK LLC, 6800 DEERPARK ROAD, SUITE 100, ELK RIDGE, MARYLAND 21075, 410.579.2242

PROJECT: DORSEY CENTER PARCEL R

LOCATION: TAX MAP 37, PARCEL 24, 1ST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: ENVIRONMENTAL CONCEPT PLAN EXISTING CONDITIONS PLAN

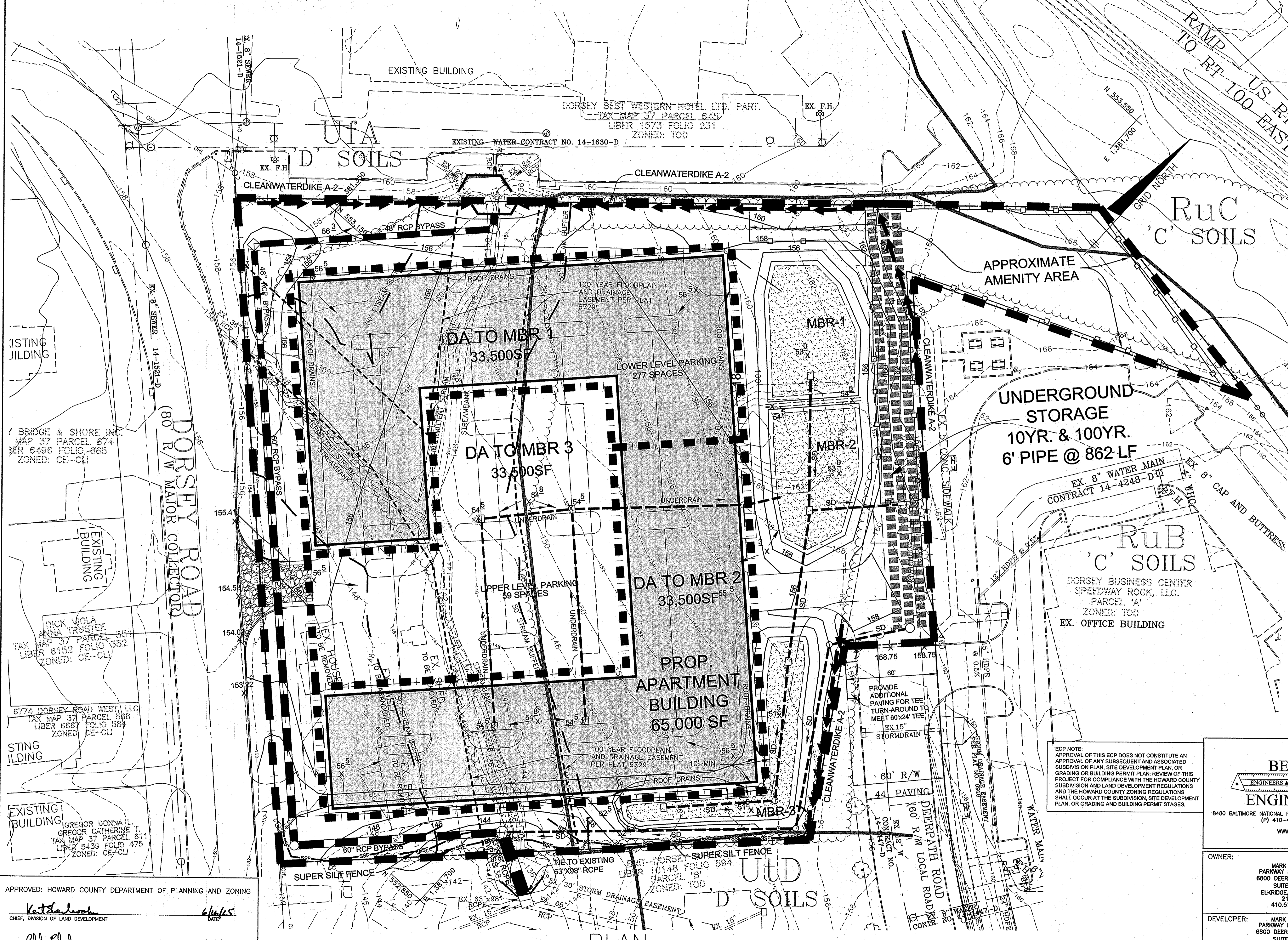
DATE: AUGUST 2014, JUNE 2015

PROJECT NO. 1959

Design: JCO Draft: JCO Check: CAM SCALE: AS SHOWN DRAWING 1 OF 2

SOILS LEGEND			
SYMBOL	NAME/DESCRIPTION	K VALUE	GROUP
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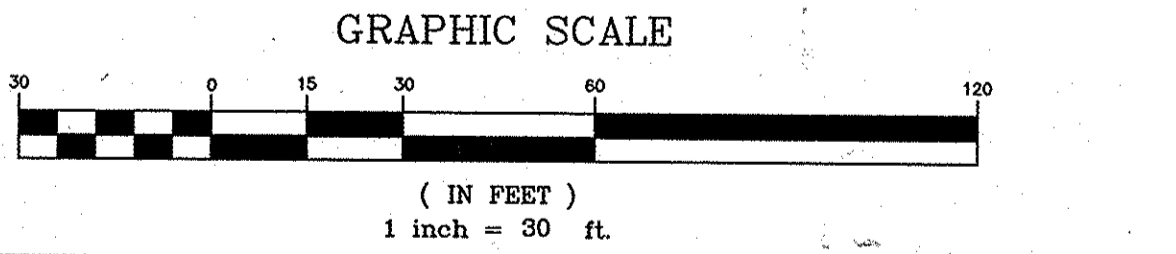
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LEGEND

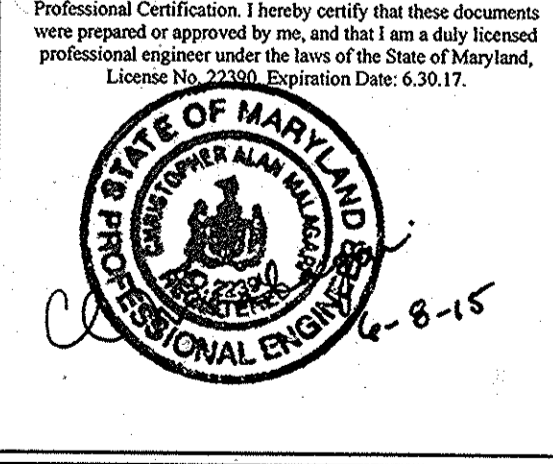
- EXISTING CONTOURS: 452, 450
- EXISTING TREELINE: [Symbol]
- PROPOSED TREELINE: [Symbol]
- EXISTING STREAM: [Symbol]
- EXISTING STREAM BUFFER: [Symbol]
- APPROXIMATE 100 YEAR FLOODPLAIN LIMITS: [Symbol]
- EXISTING STRUCTURE: [Symbol]
- PROPOSED STRUCTURE: [Symbol]
- SOIL DELINEATION: [Symbol]
- SOILS DELINEATION: RuA
- ESD DRAINAGE AREA: [Symbol]
- BMP DRAINAGE AREA: [Symbol]
- STORM DRAIN: [Symbol]
- PROP. MICRO-BIORETENTION FACILITY: MBR-6
- SUPER SILT FENCE: SSF
- CLEANWATER DIVERSION: CLEANWATERDIKE A-2
- AMENITIES AREA: [Symbol]

NOTE:
AS PART OF THE SITE DEVELOPMENT PLAN DESIGN, THE 100-YEAR HGL FOR THE PROPOSED PIPING SHOWN ON THIS PLAN WILL BE CHECKED STARTING AT THE DOWNSTREAM EXISTING POND. ADJUSTMENTS WILL BE MADE WHERE NECESSARY TO ACCOMMODATE THE PASSING 100-YEAR FLOW THROUGH THE STORM DRAIN SYSTEM TO THE EXISTING DOWNSTREAM POND. THE H AND H COEFFICIENTS (C=0.89 FOR RATIONAL METHOD) FOR THE LARGER STORM EVENTS WILL BE USED TO DETERMINE THE Q100. APPROXIMATE Q100=400 CFS TO THE EXISTING 63X98 PIPE WAS ESTABLISHED AT ECP (Q100=0.89x12.75x35AC=397.2 cfs).



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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Kathleen [Signature] 6/16/15
CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 6-19-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION

PLAN
SCALE: 1" = 30'

OWNER: MARK LEVY PARKWAY LLC 6800 DEERPATH ROAD SUITE 100 ELKRIDGE, MARYLAND 21075 410.579.2242		PROJECT: DORSEY CENTER PARCEL R	
DEVELOPER: MARK LEVY PARKWAY LLC 6800 DEERPATH ROAD SUITE 100 ELKRIDGE, MARYLAND 21075 410.579.2242		LOCATION: TAX MAP 37 PARCEL 375 - GRID 24 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
Design: JCO		TITLE: ENVIRONMENTAL CONCEPT PLAN DRAINAGE AREA MAP	
Draft: JCO		DATE: AUGUST 2014 JUNE 2015	
Check: CAM		PROJECT NO.: 1959	
SCALE: AS SHOWN		DRAWING: 2 OF 2	