

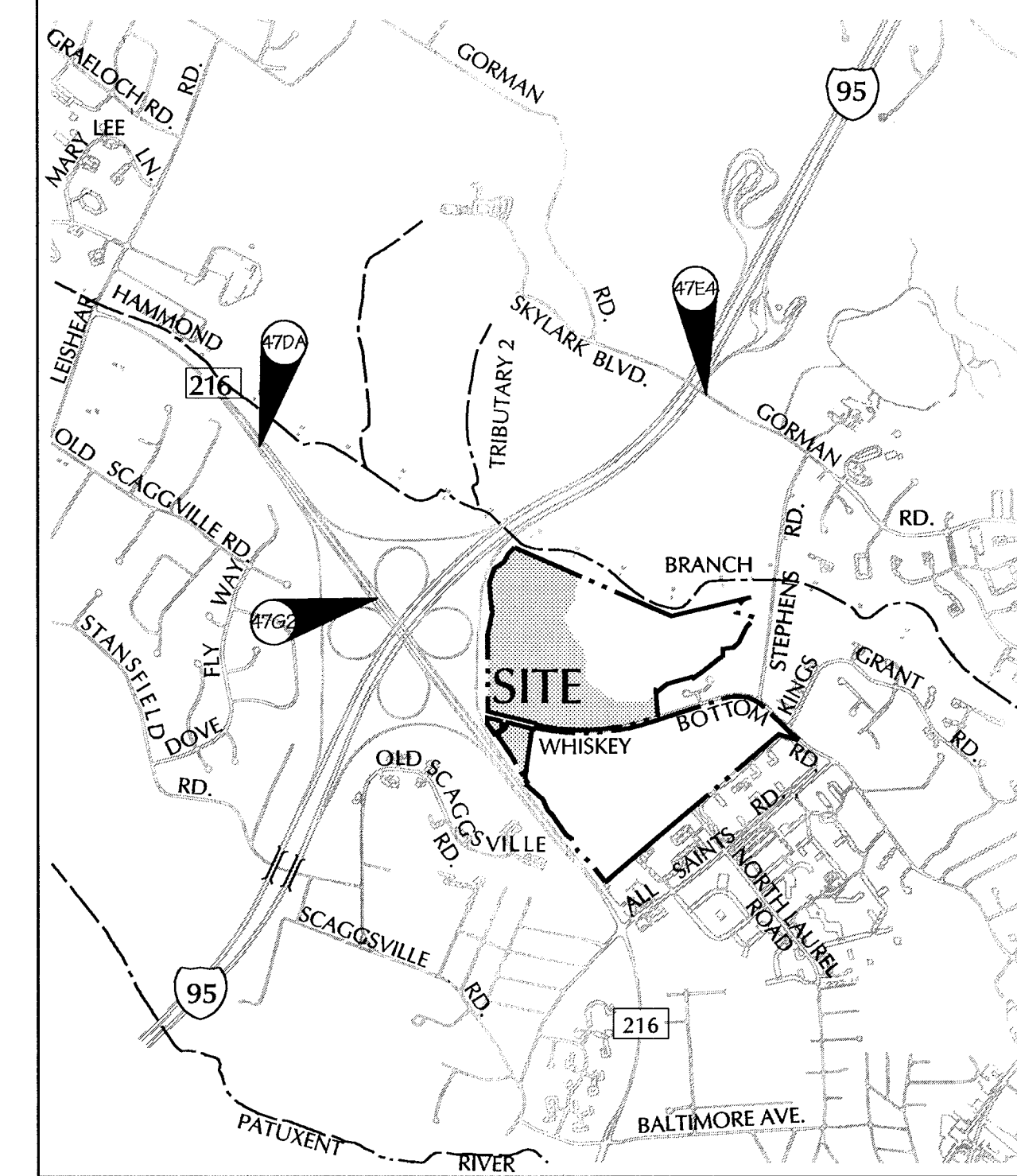
**General Notes**

- Open space areas may contain active recreation facilities as allowed in the approved development criteria.
- Stephens Road is a designated transit route.
- Topographical information was obtained through aerial photography during the summer of 1990.
- Boundary shown is survey by DMW, June, 1999
- Wetland limits were field located in September, 1990 and January, 2000 by DMW.
- The 100 year flood plain shown is per Howard County's Hammond Branch Floodplain Study by DRP, dated 1996.
- The project is in conformance with the latest Howard County standards unless waivers have been approved.
- Proposed water system is public.
- Proposed sewer system is public.
- Existing utilities are based on plans of record.
- There are no known cemeteries or grave sites on this property.
- Stream buffers are determined by land use adjoining the open space employment use = 50' buffer from any stream.
- The stormwater management facilities shown on sheet 3 are schematic only. Actual size and location of the facilities may change prior to construction. The developer acknowledges that these facilities must meet current Howard County design criteria or as approved by waiver.
- All lots will be owned by the Homeowners Association. Open space lots will be owned by the DRP.
- There are no known wells or septic systems within the limits of the project.

# Preliminary Subdivision Plan for Emerson Section 3, Area 1 (Formerly the Key Property)

Howard County

Maryland



NORTH  
Vicinity Map  
SCALE: 1"=2000'

**Site Analysis Data Chart**

**1. General Site Data**

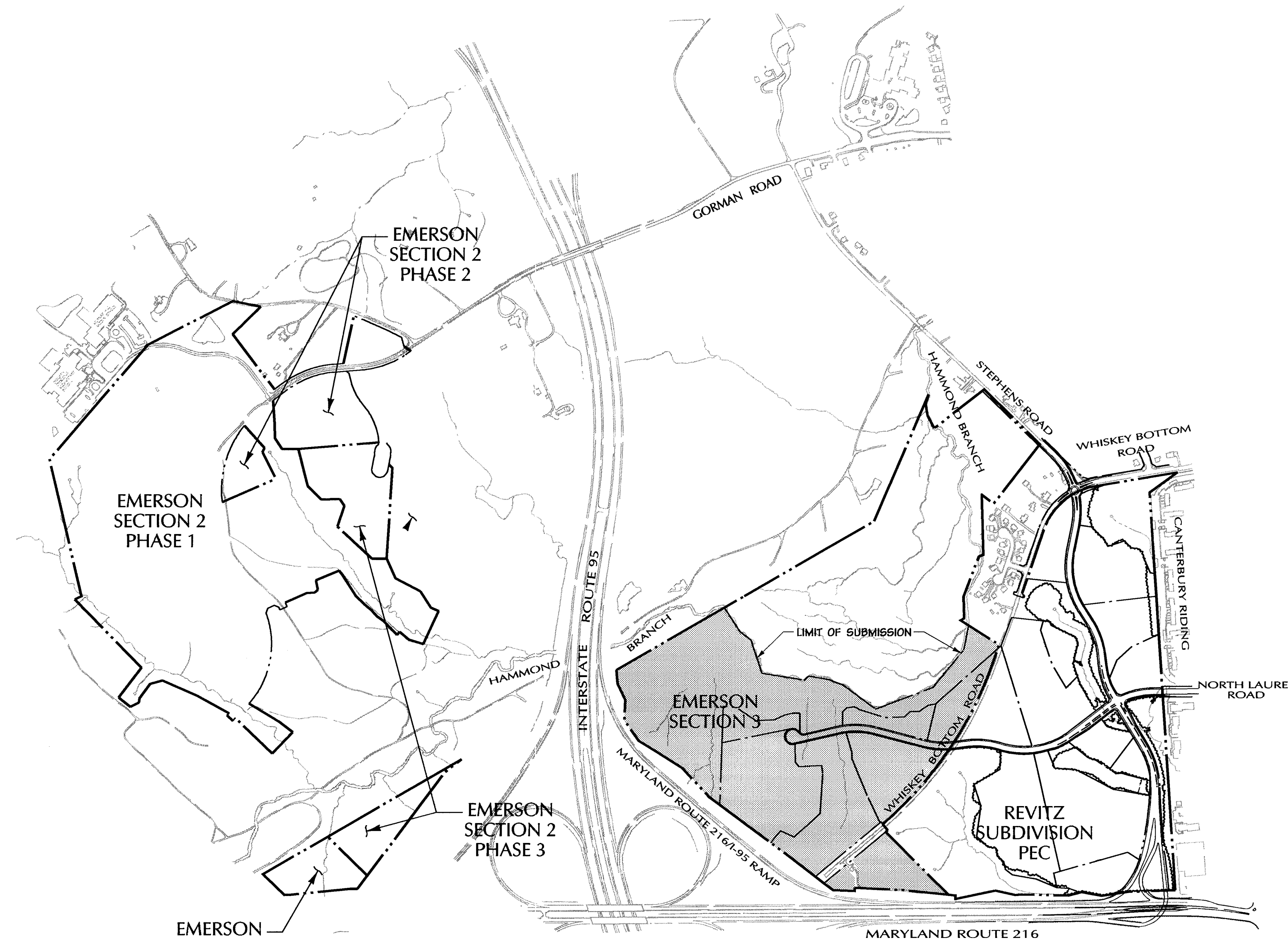
- a. Present Zoning: PEC - MVD - 3 AND PEC
- b. Applicable DPZ File Reference: 5-98-12 PB 330, 78, 979, M
- c. Proposed Use of Site or Structure(s): Employment
- Proposed Water and Sewer Systems: Public
- Any Other Relevant Information:

**2. Area Tabulation**

- a. Gross site area for Phase 3: 70.9 Acres.
- b. Approximate Area of 100 Year Floodplain: 16.92 Acres.
- c. Approximate Area of Steep Slopes (25% or Greater): 1.92 Acres.
- e. Net Site Area: 54.0 Acres.
- f. Area of Employment Lots/Parcels: 20.4 Acres.
- g. Proposed Open Space Lots: 48.62 Acres.  
Proposed POA Open Space Lots: 41.1 Acres.  
Proposed DRP Open Space Lots: 44.52 Acres.
- h. Area of Proposed Public Roads: 1.92 Acres.

**3. Open Space Data**

- a. Number of Open Space Parcels proposed: 4
- b. Open Space Required: 25.1 Acres (35.4% of gross acreage)
- c. Open Space Provided: 48.6 Credited Acres (69%)
- d. Excess Open Space available for credits in other phases: 23.5 Ac.
- e. No Recreational Open Space is Required for the Emerson Section 3 Development



Overall Property Outline  
Scale: 1"=600'



**BENCHMARK DESCRIPTION**

COORDINATES IN MARYLAND NAD83(91) (HORIZONTAL) AND NGVD29 (VERTICAL) DATUMS.

47DA NORTHING: 163191.9104  
EASTING: 411286.5769  
ELEVATION: 315.905 ft.

47E4 NORTHING: 163326.2295  
EASTING: 413136.2560  
ELEVATION: 330.909ft.

47G2 NORTHING: 162440.1212  
EASTING: 411053.9279  
ELEVATION: 364.210ft.

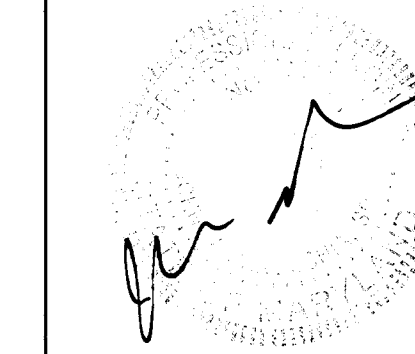
**Sheet Index**

SHEET	DESCRIPTION
1	COVER SHEET
2	PRELIMINARY PLAN
3	SCHEMATIC SEDIMENT CONTROL AND PRELIMINARY GRADING
4	PRELIMINARY FOREST CONSERVATION PLAN
5	PRELIMINARY FOREST CONSERVATION PLAN
6	PRELIMINARY LANDSCAPE PLAN

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND ZONING OF  
HOWARD COUNTY

*Angela P. Ruff* 11/30/01  
PLANNING DIRECTOR DATE

11/15/01  
Date



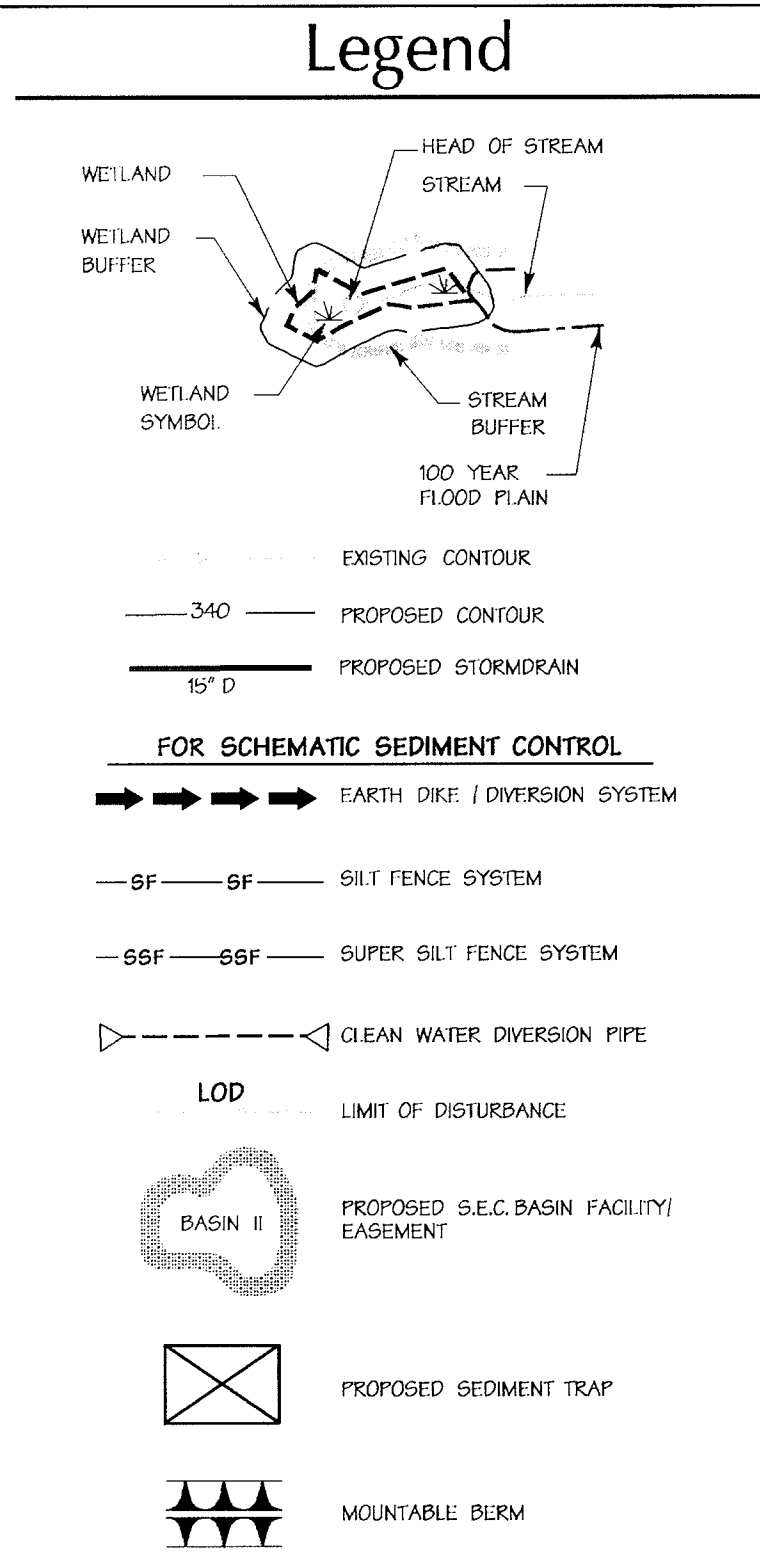
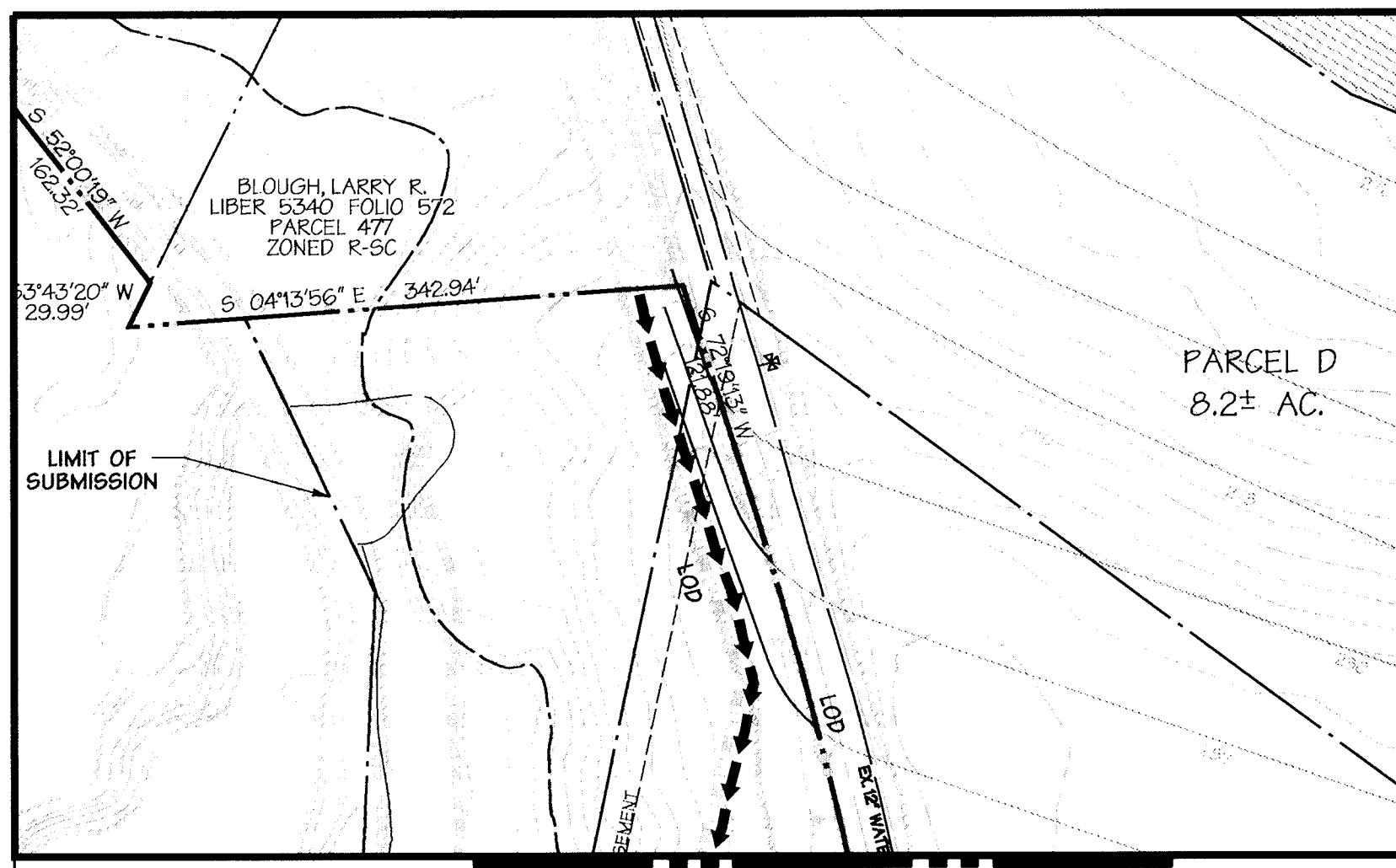
Professional Engr. No. 10551

Date	No.	Revision Description
<b>EMERSON SECTION 3 AREA 1</b>		
OWNER /DEVELOPER: THE HOWARD RESEARCH & DEVELOPMENT CORPORATION 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044		
<b>DMW</b> Draft-McCune-Walker, Inc. 200 East Pennsylvania Avenue Towson, Maryland 21286 (410) 296-3533 Fax: 296-4708		
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals		
SUBDIVISION NAME EMERSON SECTION 3	SECTION/AREA SECTION 3	LOT/PARCEL # 837
PLAT # OR L.P. 5285-330	BLOCK # 20	TOWNSHIP MAP MVD
WATER CODE	SEWER CODE	SEWER TRACT 6 th
<b>TITLE</b> <b>COVER SHEET</b>		
Des By RBW	Scale 1" = 600'	Proj. No. 01011
Drn By WDE	Date 11/9/01	1 OF 6
Chk By	Approved	









- NOTES:**
- SEDIMENT CONTROL MEASURES ARE SHOWN FOR MASS GRADING ONLY.
  - ANY SILT FENCE SYSTEMS PLACED SHALL CONFORM TO THE MOST CURRENT M.D.E. SPECIFICATIONS FOR SLOPE STEEPNESS, MAX SLOPE LENGTH, AND MAX SILT FENCE LENGTH.
  - CLEAN WATER DIVERSION PIPES SHALL ONLY DISCHARGE CLEAN WATER ONTO A STABLE OUTLET. STORM DRAIN PIPES TO DISCHARGE DIRTY WATER INTO SEDIMENT BASINS.

Date	No.	Revision Description

**EMERSON SECTION 3 AREA 1**

OWNER /DEVELOPER:  
THE HOWARD RESEARCH & DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044

**DMW**  
Duff MacCann-Walker, Inc.  
200 East Pennsylvania Avenue  
Towson, Maryland 21286  
(410) 296-3333  
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME	EMERSON SECTION 3	SECTION AREA	LOT/PARCEL #	837
PLAT # OR LP	5289230	BLOCK #	TRACED MAP	TRACT DISTRICT
WATER CODE	20	SEWER CODE		

TITLE  
**SCHEMATIC SEDIMENT AND EROSION CONTROL AND PRELIMINARY GRADING PLAN**

Des By	RBW	Scale	1" = 100'	Proj. No.	01011
Drn By	WDE	Date	11/30/01		
Chk By		Approved			3 OF 6

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND ZONING OF  
HOWARD COUNTY

*David R. Rott*  
PLANNING DIRECTOR

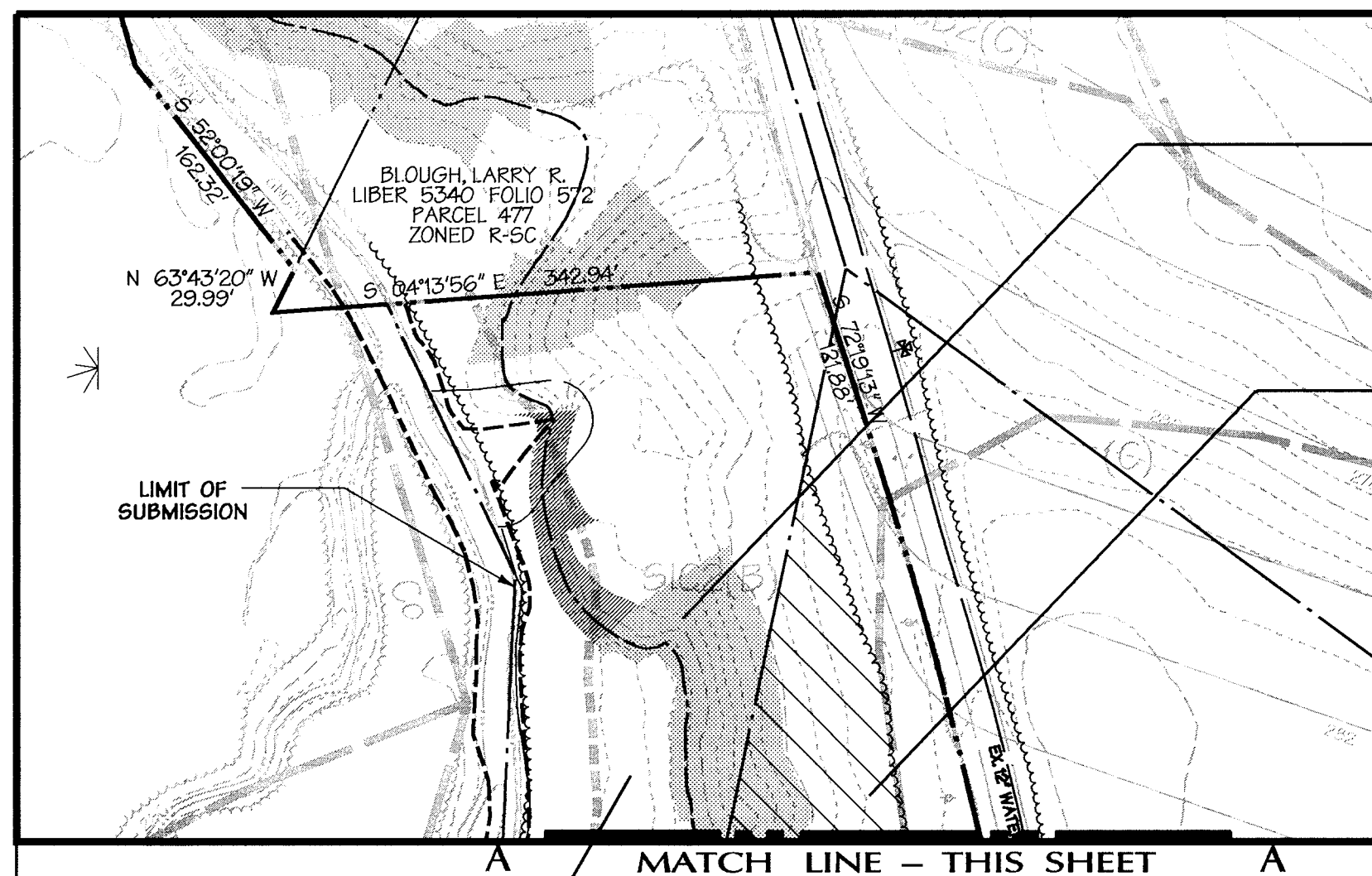
11/30/01  
DAFF

11/15/01  
Date

*[Signature]*

Professional Engr. No. 10551





0.7± ACRES  
RETENTION  
(EXCLUD. FLOODPLAIN)

0.3± ACRES  
CLEARING

16.3± ACRES  
EXISTING FLOODPLAIN

50.6± ACRES  
TOTAL FOREST  
(EXCLUDING FLOODPLAIN)

0.6± ACRES  
EXISTING FLOODPLAIN

10.5± ACRES  
RETENTION  
(EXCLUD. FLOODPLAIN)

26.1± ACRES  
CLEARING  
(EXCLUD. FLOODPLAIN)

8.9± ACRES  
RETENTION  
(EXCLUD. FLOODPLAIN)

3.5± ACRES  
RETENTION

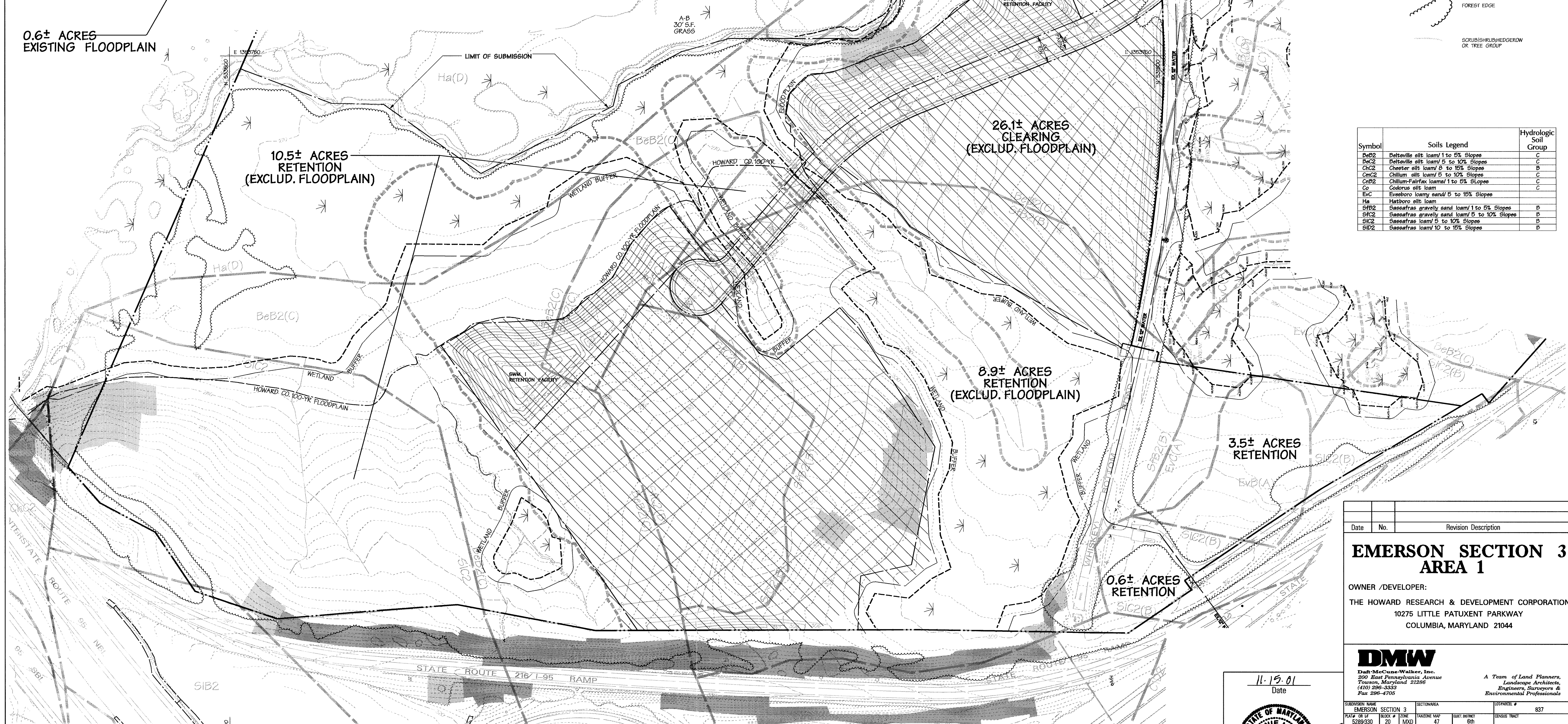
0.6± ACRES  
RETENTION

### Legend

WETLAND  
WETLAND BUFFER  
WETLAND SYMBOL  
HEAD OF STREAM  
STREAM  
STREAM BUFFER  
100-YEAR FLOOD PLAIN

SOIL LABEL  
SOIL BOUNDARY  
SLOPES >25%  
SLOPES 15%-25%  
FOREST CLEARING  
FOREST EDGE  
SCURVISH/SHUBHEDGERON OR TREE GROUP

Symbol	Soils Legend	Hydrologic Soil Group
BeB2	Beltville silt loam/ 1 to 5% Slopes	C
BeC2	Beltville silt loam/ 5 to 10% Slopes	C
ChC2	Chester silt loam/ 8 to 15% Slopes	B
CmC2	Chillum silt loam/ 5 to 10% Slopes	C
CmB2	Chillum-Fairfax loam/ 1 to 5% Slopes	C
Co	Codorus silt loam	C
EcC	Evesboro loamy sand/ 5 to 15% Slopes	B
Ha	Hatzboro silt loam	B
SfB2	Sassafras gravelly sand loam/ 1 to 5% Slopes	B
SfC2	Sassafras gravelly sand loam/ 5 to 10% Slopes	B
SfC2	Sassafras loam/ 5 to 10% Slopes	B
SfD2	Sassafras loam/ 10 to 15% Slopes	B



Phase No.	Gross Ac.	Floodplain Ac.	Net Tract area	Ex. Forest Ac.	Forest Cleared	Forest Ret.	Ref/Aff. Ret/d	Ref/Aff. Prov.	Excess Ref/Aff.	Future For. Clearing	Future Refor/Affor.	Comments
2.1	106	3.5	102.5	24.7	7.85	16.85	0.51	4.98	4.47	4.25	3.44	
2.2	118.8	3.5	115.3	24.8	7.95	16.85	2.77	4.98	2.21	4.25	3.44	
2.3	137.3	4.0	133.3	34.4	12.45	21.96	1.16	4.98	3.82	4.25	3.97	
3	208.2	20.9	187.3	85.0	38.85	46.16	0.0	4.98	4.98	4.25	3.97	

FOREST CONSERVATION TRACKING CHART

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY

*[Signature]*  
PLANNING DIRECTOR

11/30/01  
DATE

11.15.01  
Date

LANDSCAPE ARCHITECT

Date	No.	Revision Description

## EMERSON SECTION 3 AREA 1

OWNER /DEVELOPER:  
THE HOWARD RESEARCH & DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044

**DMW**  
Dan MacCann Walker, Inc.  
300 East Pennsylvania Avenue  
Towson, Maryland 21286  
(410) 296-3333  
Fax 296-4705

A Team of Land Planners,  
Landscape Architects,  
Engineers, Surveyors &  
Environmental Professionals

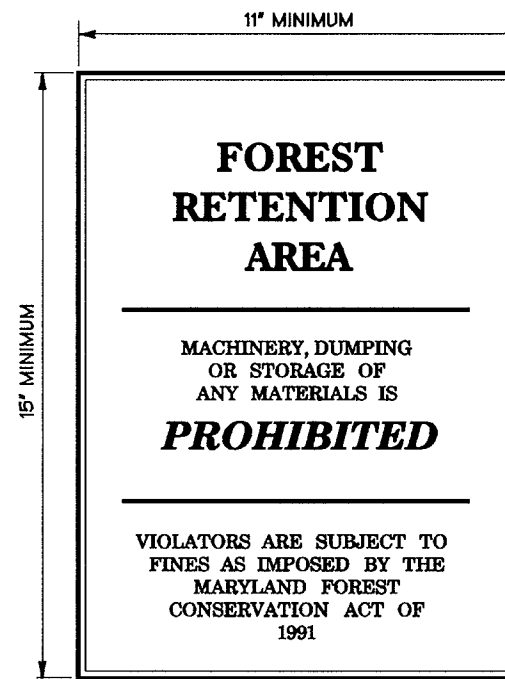
PROVISION NAME	SECTION/AREA	OFF/PROJECT #
EMERSON SECTION 3		837

TITLE  
**PRELIMINARY FOREST CONSERVATION PLAN**

Des By	Scale 1" = 100'	Proj. No. 01011
Drn By	Date 11/30/01	
Chk By	Approved	4 OF 6

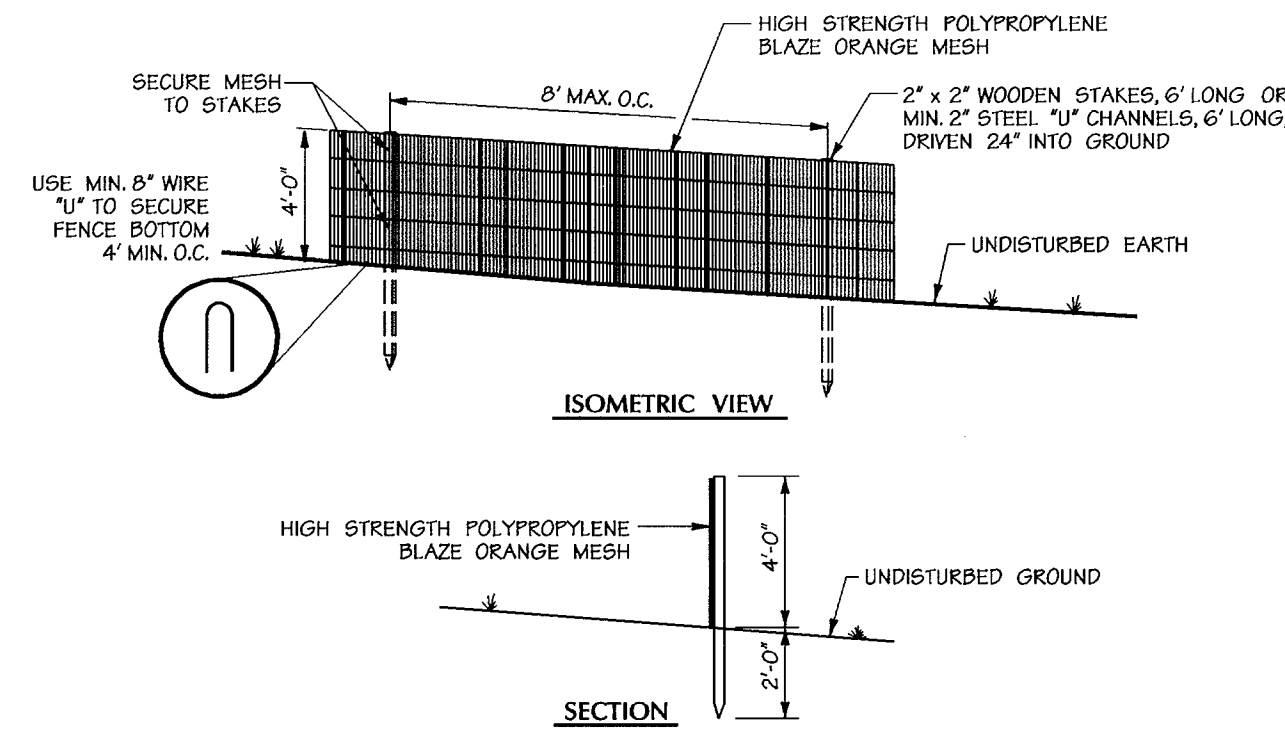
Landscape Architect No.





Not To Scale

Forest Retention Area Signage



- NOTES:
1. THIS DETAIL IS FOR FOREST PROTECTION DEVICE ONLY.
  2. FOREST RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
  3. BOUNDARIES OF FOREST RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING THE DEVICE.
  4. ROOT DAMAGE SHALL BE AVOIDED.
  5. PROTECTION SIGNAGE MAY ALSO BE USED.
  6. FOREST PROTECTION FENCE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
  7. INSTALLATION OF FOREST PROTECTION FENCE MUST BE APPROVED BY BALTIMORE COUNTY EIR (410-387-3580) PRIOR TO ISSUANCE OF BUILDING OR GRADING PERMITS.

Not To Scale

Forest Protection Fence

**SCHEDULE A  
PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT to ROADWAYS		ADJACENT to PERIMETER PROPERTIES		
	P1	P2	P3	P4	P5
PERIMETER #					
BUFFER TYPE	A	A	C	A	A
LINEAR FEET OF PERIMETER	3372 LF.	937 LF.	271 LF.	1661 LF.	717 LF.
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)	2845 LF.	937 LF.	230 LF.	N/A	717 LF.
CREDIT FOR BERM (DESCRIBE BELOW IF NEEDED)	N/A	N/A	N/A	N/A	N/A
NUMBER OF PLANTS REQUIRED					
SHADE TREES	7	0	1	2B	0
EVERGREEN TREES	0	0	2	0	0
SHRUBS	0	0	0	0	0
NUMBER OF PLANTS PROVIDED					
SHADE TREES					
EVERGREEN TREES					
OTHER TREES (2-1 SUBSTITUTION)					
SHRUBS (10-1 SUBSTITUTION)					
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)					

\* NOTE: STREET TREES WILL BE PROVIDED @ 1/40 LF.

**SCHEDULE D  
STORMWATER MANAGEMENT  
AREA LANDSCAPING**

POND #	I	II
LINEAR FT OF PERIMETER (TYPE 'B')	1211 LF	1728 LF
NUMBER OF TREES REQUIRED		
SHADE TREES @ 1/50 LF.	10	19
EVERGREEN TREES @ 1/40 LF.	13	24
CREDIT FOR EXISTING VEGETATION	696 LF	777 LF
CREDIT FOR OTHER LANDSCAPING	NA	NA
NUMBER OF TREES PROVIDED		
SHADE TREES		
EVERGREEN TREES		
SHRUBS		

\* THE DEVELOPER WILL PROVIDE ALL SWM LANDSCAPE OBLIGATIONS

**GOALS AND OBJECTIVES**

Development of Emerson Section 3 under the current Forest Conservation Act entails clearing 26.4 Acres of forest and retaining 24.2 Acres of forest. The "Break Even Point" of 16.6 Acres of forest is being retained on-site, along with an additional excess forest retention of 7.6± Acres; therefore, no reforestation is required.

The goals and objectives of this Preliminary Forest Conservation Plan are to provide for short-term forest retention area protection by identifying those areas and indicating the locations of temporary forest protection fencing and signage. Establishing these short-term protection measures prior to any earth-moving activities will help ensure that these areas will not be disturbed during construction activities. Long-term forest protection measures include establishing a Forest Conservation Easement which will be conveyed to Howard County.

**FOREST CONSERVATION CALCULATIONS**

BASIC SITE DATA	ACRES (1/10)
GROSS SITE AREA	70.9
AREA WITHIN 100' YEAR FLOODPLAIN	16.9
AREA WITHIN AGRICULTURAL USE OR PRESERVATION PARCEL (IF APPLICABLE)	0.0
NET TRACT AREA	54.0
LAND USE CATEGORY	COMMERCIAL/INDUSTRIAL/OFFICE
<b>INFORMATION FOR CALCULATIONS</b>	
A. NET TRACT AREA	54.0
B. REFORESTATION THRESHOLD (15% x A)	8.1
C. AFFORESTATION MINIMUM (15% x A)	8.1
D. EXISTING FOREST ON NET TRACT AREA	50.6
E. FOREST AREAS TO BE CLEARED	26.4
F. FOREST AREAS TO BE RETAINED	24.2
<b>REFORESTATION CALCULATIONS</b>	
A. NET TRACT AREA	54.0
B. REFORESTATION THRESHOLD (15% x A)	8.1
C. EXISTING FOREST ON NET TRACT AREA	50.6
D. FOREST AREAS TO BE CLEARED	26.4
E. FOREST AREAS TO BE RETAINED	24.2
F. FOREST AREAS CLEARED ABOVE REFORESTATION THRESHOLD	26.4
G. FOREST AREAS CLEARED BELOW REFORESTATION THRESHOLD	0.0
H. FOREST AREAS RETAINED ABOVE REFORESTATION THRESHOLD	16.1
<b>CLEARING ABOVE THE THRESHOLD ONLY</b>	
IF FOREST AREAS TO BE RETAINED ARE GREATER THAN THE REFORESTATION THRESHOLD (IF E IS GREATER THAN B), THE FOLLOWING CALCULATIONS APPLY:	
REFORESTATION FOR CLEARING ABOVE THRESHOLD (F x 1/4)	6.6
REFORESTATION FOR CLEARING BELOW THRESHOLD (G x 2)	0.0
TOTAL REFORESTATION REQUIRED (F x 1/4) + (G x 2)	6.6
CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD	16.1
REFORESTATION REQUIRED	0.0 ACRES

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY

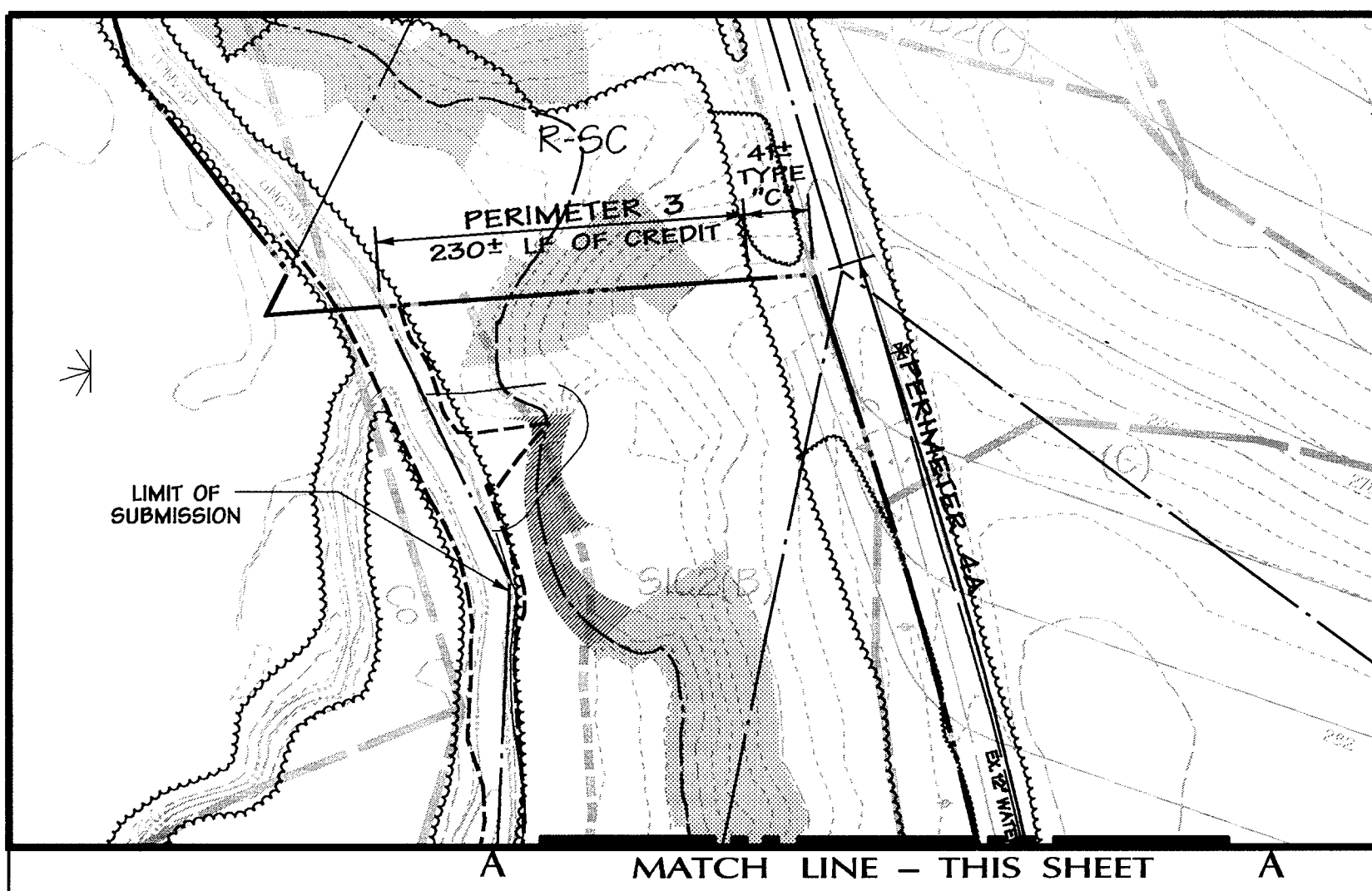
*[Signature]* 11/30/01  
PLANNING DIRECTOR DATE

11-16-01  
Date

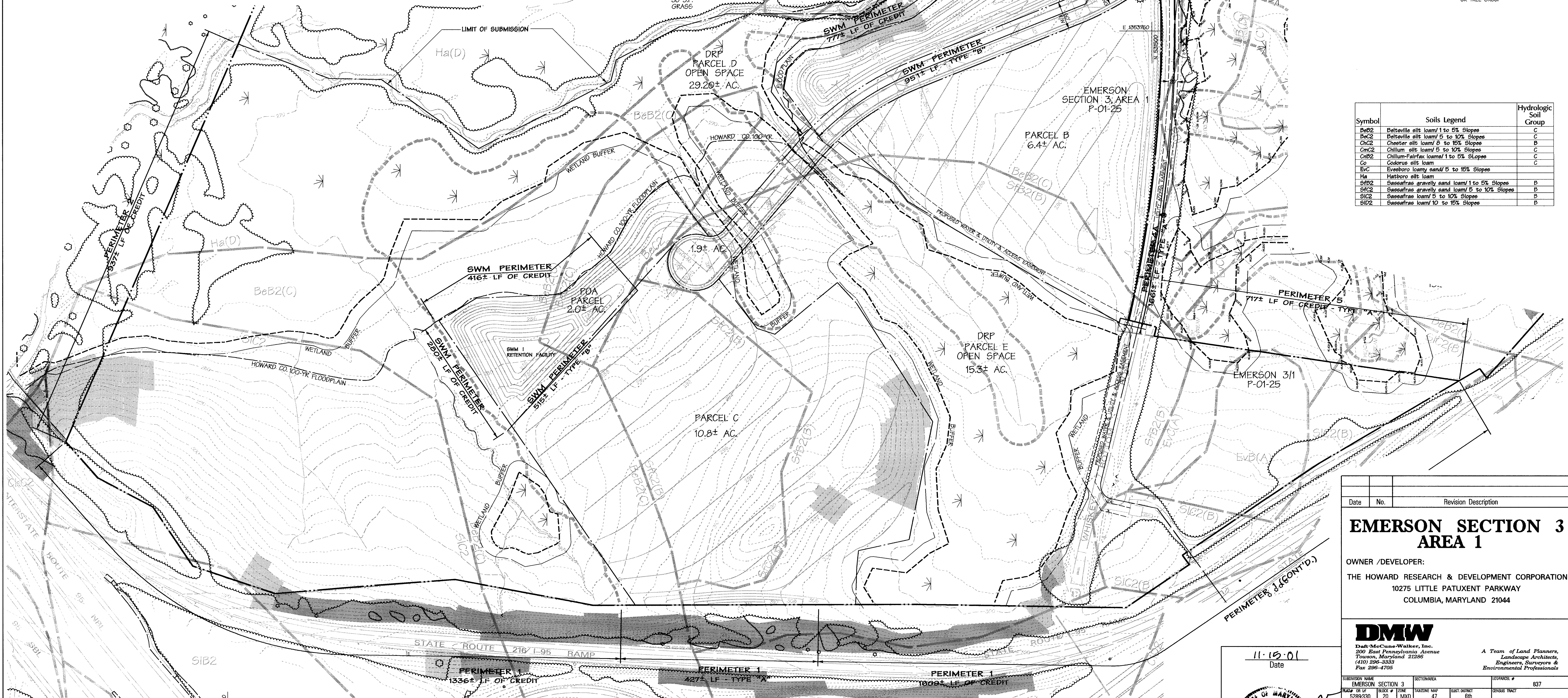
Landscape Architect No.

Date	No.	Revision Description
<b>EMERSON SECTION 3 AREA 1</b>		
OWNER / DEVELOPER: THE HOWARD RESEARCH & DEVELOPMENT CORPORATION 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044		
<b>DMW</b> Duff-McCune-Walker, Inc. 3910 East Pennsylvania Avenue Towson, Maryland 21286 (410) 296-3350 Fax 296-4705		
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals		
PROVISION NAME EMERSON SECTION 3	SECTION/AREA SECTION 3	OFFICE # 837
PLAT # OR LOT 5289-930	BLOCK # 20	ZONE MXD
TAX MAP # 47	ELECT DISTRICT 8th	CENSUS TRACT
WATER CODE	SEWER CODE	
TITLE <b>PRELIMINARY FOREST CONSERVATION AND LANDSCAPE NOTES AND SCHEDULES</b>		
Des By	Scale 1" = 100'	Proj. No. 01011
Drn By WDE	Date 11/30	
Chk By	Approved	5 OF 6





MATCH LINE - THIS SHEET



### Legend

- WETLAND
- WETLAND BUFFER
- WETLAND SYMBOL
- HEAD OF STREAM
- STREAM
- STREAM BUFFER
- 100 YEAR FLOOD PLAN
- M1C2 SOIL LABEL
- SOIL BOUNDARY
- SLOPES >25%
- SLOPES 15%-25%
- FOREST EDGE
- SCRUB/SHRUB/HEDGEROW OR TREE GROUP

Symbol	Soils Legend	Hydrologic Soil Group
BaB2	Deltaville silt loam/ 1 to 5% Slopes	C
BaC2	Deltaville silt loam/ 5 to 10% Slopes	C
ChC2	Chester silt loam/ 5 to 15% Slopes	B
ChC2	Chillum silt loam/ 5 to 10% Slopes	C
ChB2	Chillum-Fairfax loam/ 1 to 5% Slopes	C
Co	Codorus silt loam	C
EcC	Everboro loamy sand/ 5 to 15% Slopes	C
Ha	Hatboro silt loam	B
SF22	Sassafras gravelly sand loam/ 1 to 5% Slopes	B
SF22	Sassafras gravelly sand loam/ 5 to 10% Slopes	B
SIC2	Sassafras loam/ 5 to 10% Slopes	B
SID2	Sassafras loam/ 10 to 15% Slopes	B

Date	No.	Revision Description
<b>EMERSON SECTION 3 AREA 1</b>		
OWNER /DEVELOPER:		
THE HOWARD RESEARCH & DEVELOPMENT CORPORATION		
10275 LITTLE PATUXENT PARKWAY		
COLUMBIA, MARYLAND 21044		

**DMW**  
 Draft: McCune-Walker, Inc.  
 200 East Pennsylvania Avenue  
 Towson, Maryland 21286  
 (410) 296-3333  
 Fax 296-4705

*A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals*

SUBMISSION NAME	EMERSON SECTION 3	SECTION/AREA	DESIGNER #
PLAN # OR LF	5289/330	TAXIDONE MAP	47
BRICK #	20	ELECT. OFFSET	6th
WATER CODE		DESIGN TRACT	

TITLE: **PRELIMINARY LANDSCAPE PLAN**

Des By	Scale	1" = 100'	Proj. No.	01011
Dm By	BKC	Date	11/30/01	
Chk By	Approved			6 OF 6

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY

*[Signature]*  
 PLANNING DIRECTOR

11/30/01  
 DATE

