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# PRELIMINARY PLAN & PERCOLATION CERTIFICATION PLAN

## PHEASANT RUN EAST

LOTS 1 THRU 14, CEMETERY OPEN SPACE LOT 15, BUILDABLE PRESERVATION PARCEL "A" AND NON-PRESERVATION PARCELS "B" THRU "D"

ZONING: RC-DEO

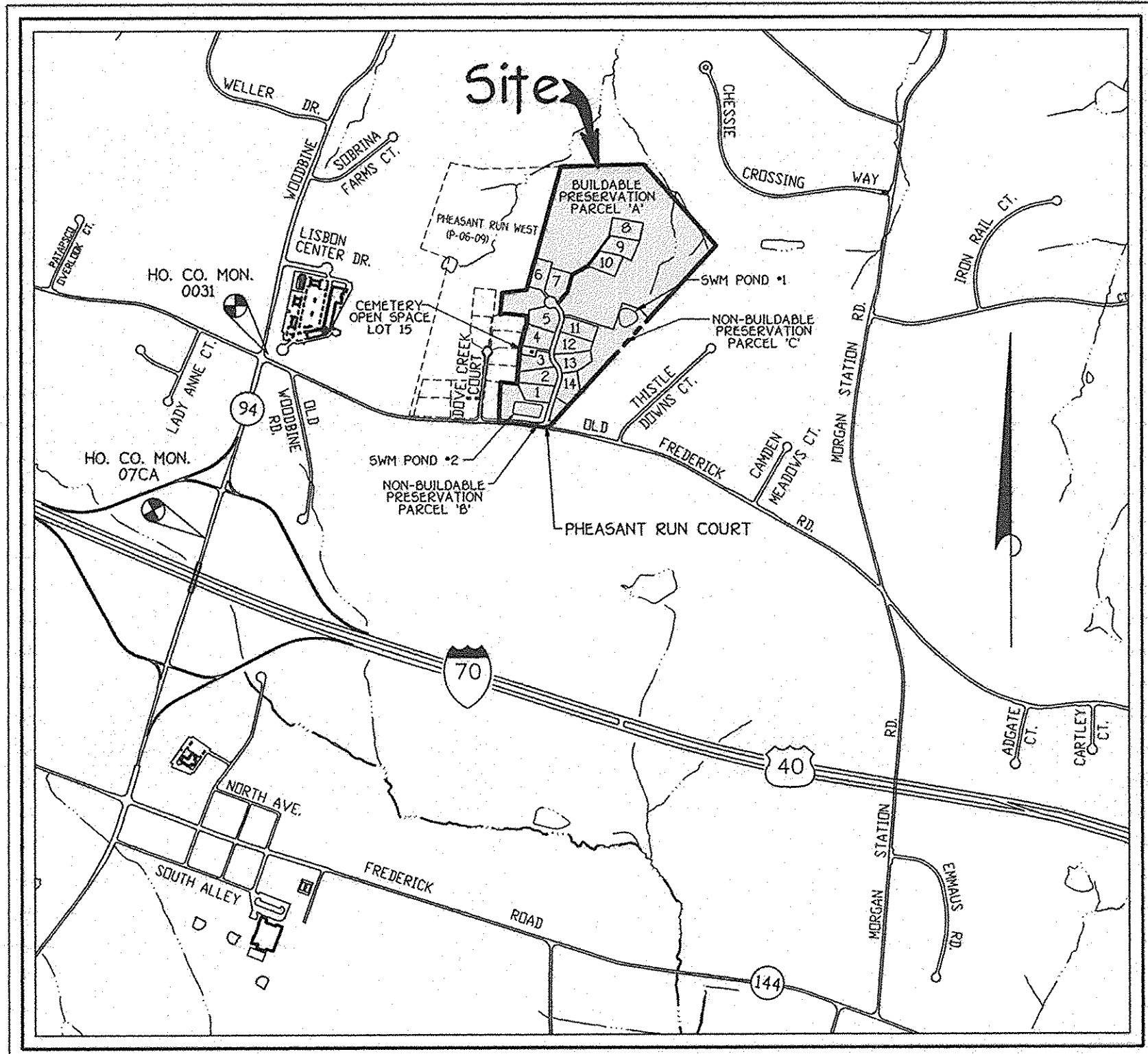
TAX MAP NO. 3 GRID No. 19 PARCEL No. 29

COORDINATE TABLE		
POINT	NORTH	EAST
1126	N 614094.3156	E 1295360.084215
1121	N 613335.357465	E 1297003.917575
96	N 611708.040473	E 1295432.402473
99	N 611757.974237	E 1295089.014035
1700	N 611765.00	E 1294984.63
1702	N 612135.88	E 1295009.59
1703	N 612144.45	E 1295156.02
1705	N 612139.97	E 1295195.95
1706	N 612586.44	E 1295234.24
1707	N 612666.85	E 1295295.56
1708	N 612738.46	E 1295263.87
1709	N 612766.00	E 1295061.73
1710	N 612756.99	E 1295020.28
1711	N 612956.86	E 1295047.51
1712	N 612975.55	E 1295266.55
1713	N 613268.33	E 1295358.38
1715	N 614091.94	E 1295610.04

MINIMUM LOTS SIZE CHART			
LOT No.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
LOT 6	44,690 SQ.FT.	1,515 SQ.FT.	43,175 SQ.FT.
LOT 8	53,366 SQ.FT.	6,463 SQ.FT.	46,903 SQ.FT.
LOT 9	53,354 SQ.FT.	5,168 SQ.FT.	48,186 SQ.FT.
LOT 10	47,406 SQ.FT.	3,775 SQ.FT.	43,631 SQ.FT.

ROADWAY INFORMATION CHART			
ROAD NAME	CLASSIFICATION	DESIGN SPEED	R/W WIDTH
PHEASANT RUN COURT	PUBLIC ACCESS PLACE	25 MPH.	40'

TRAFFIC CONTROL SIGNAGE				
ROAD NAME	STATION	OFFSET	POSTED SIGN	SIGN CODE
PHEASANT RUN COURT	0+39	11'L	STOP	R1-1
PHEASANT RUN COURT	2+00	11'R	SPEED LIMIT 25	R2-1
PHEASANT RUN COURT	3+50	11'L	STOP AHEAD	W3-1a



VICINITY MAP  
SCALE: 1" = 1200'

## FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

- GENERAL NOTES:**
- SUBJECT PROPERTY ZONED "RC-DEO" PER 10/18/1993 COMPREHENSIVE ZONING.
  - AREA TABULATION:
    - A. GROSS AREA OF TRACT: 60.051 AC +/-
    - B. AREA OF FLOODPLAIN: 565 AC +/-
    - C. NET AREA OF TRACT: 54.401 AC +/-
    - D. AREA OF PUBLIC ROAD R/W: 1.678 AC +/-
    - E. NUMBER OF PROPOSED BUILDABLE LOTS: 14
    - F. NUMBER OF CEMETERY OPEN SPACE LOTS: 1
    - G. NUMBER OF BUILDABLE PRESERVATION PARCELS: 1
    - H. NUMBER OF NON-BUILDABLE PRESERVATION PARCELS: 3
    - I. AREA OF BUILDABLE LOTS: 15,339 AC +/-
    - J. AREA OF CEMETERY OPEN SPACE LOTS: 0.302 AC +/-
    - K. AREA OF BUILDABLE PRESERVATION PARCELS: 33,496 AC +/-
    - L. AREA OF NON-BUILDABLE PRESERVATION PARCELS: 9,245 AC +/-
  - OPEN SPACE IS NOT REQUIRED FOR THIS SUBDIVISION SINCE IT IS ZONED "RC" AND IS A CLUSTER SUBDIVISION IN ACCORDANCE WITH SECTION 16121A.2. OF THE HOWARD COUNTY SUBDIVISION REGULATIONS.
  - ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS.
  - PRIVATE WATER AND SEWER WILL BE USED WITHIN THE PROJECT
  - THE SUBJECT PROPERTY IS LOCATED OUTSIDE OF THE METROPOLITAN DISTRICT.
  - TOPOGRAPHIC INFORMATION ESTABLISHED AT TWO FOOT INTERVALS BASED ON HOWARD COUNTY 5' CONTOURS.
  - NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN WETLANDS AND/OR STREAM BUFFER.
  - THIS AREA DESIGNATED A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWER DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
  - THE LOTS HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
  - BOUNDARY OUTLINE IS BASED ON FIELD SURVEY BY FISHER, COLLINS & CARTER, INC.
  - B.R.L. DENOTES BUILDING RESTRICTION LINE.
  - DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
    - A) WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENCE)
    - B) SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING
    - C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45 FOOT TURNING RADIUS
    - D) STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (#25 LOADING)
    - E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
    - F) STRUCTURE CLEARANCES - MINIMUM 12 FEET
    - G) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE
  - ALL AREAS ARE MORE OR LESS (±)
  - REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE TO BE PROVIDED AT THE JUNCTION OF THE PIPE/FLAG STEM AND THE ROAD R/W AND NOT ONTO THE PIPE/FLAG STEM DRIVEWAY.
  - STORMWATER MANAGEMENT WILL BE PROVIDED IN ACCORDANCE WITH HOWARD COUNTY AND MARYLAND 378 SPECIFICATIONS. WATER QUALITY WILL BE PROVIDED BY TWO MICRO-POOL FACILITIES, LEVEL SPREADERS & DRIVEWAY DISCONNECTION (PARCEL "A"). CPV IS BEING PROVIDED WITHIN THE MICRO-POOL FACILITIES (BMP NO. 1 & 2).
  - THE WETLANDS DELINEATION STUDY AND FOREST STAND DELINEATION STUDY WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED MAY, 2001 AND APPROVED UNDER 5-01-34.
  - THE TRAFFIC STUDY WAS PREPARED BY THE TRAFFIC GROUP DATED MAY, 2001 AND APPROVED UNDER 5-01-34.
  - SOILS INFORMATION TAKEN FROM SOIL MAP NO. 2. SOIL SURVEY, HOWARD COUNTY, MARYLAND, JULY, 1969 ISSUE.
  - AS A CONSEQUENCE OF THIS SKETCH PLAN BEING SUBMITTED BEFORE NOVEMBER 15, 2001, IT WILL BE SUBJECT TO THE 4TH EDITION OF THE HOWARD COUNTY SUBDIVISION REGULATIONS. IN ADDITION, SINCE NO PRELIMINARY PLAN WAS APPROVED PRIOR TO NOVEMBER 1, 2001, THIS PLAN MUST COMPLY WITH THE HOWARD COUNTY ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 50-2001.
  - HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS:
    - HOWARD COUNTY MONUMENT 0031 N 612408.142 ELEV. = 632.961
    - E 1,292,800.708
    - HOWARD COUNTY MONUMENT 07CA N 610,731.306 ELEV. = 620.071
    - E 1,292,224.320
  - THE LANDSCAPE SURETY IS PART OF THE DEVELOPERS AGREEMENT.

**DENSITY CALCULATIONS**

- NUMBER OF CLUSTER LOTS ALLOWED BY RIGHT = 60.051 / 4.25 = 14 UNITS
- NUMBER OF PROPOSED UNITS = 14 UNITS
- IN ACCORDANCE WITH SECTION 10A.F.I.C. OF THE ZONING REGULATIONS (AS AMENDED BY COUNCIL BILL 50-2001) THE BUILDABLE PRESERVATION PARCEL "A" IS A BONUS UNIT IN ADDITION TO THE 14 UNITS ABOVE.

TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

*Mark M. Luger* 4/9/07  
PLANNING DIRECTOR DATE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT.

*Robert W. Wain* 3/29/07  
COUNTY HEALTH OFFICER DATE

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLICOTT CITY, MARYLAND 21042  
410-461-2995

**OWNERS**  
MARIO MANNARELLI, SR. & SERAFINA MANNARELLI AND  
MARIO MANNARELLI, JR. & RAYMOND MANNARELLI  
2929 SUMMIT CIRCLE  
ELLICOTT CITY, MARYLAND 21043  
(410) 461-2278

**DEVELOPER**  
HERITAGE LAND DEVELOPMENT, INC.  
3060 WASHINGTON ROAD  
ROUTE 97, SUITE 220  
GLENWOOD, MD. 21738  
(410) 489-7900

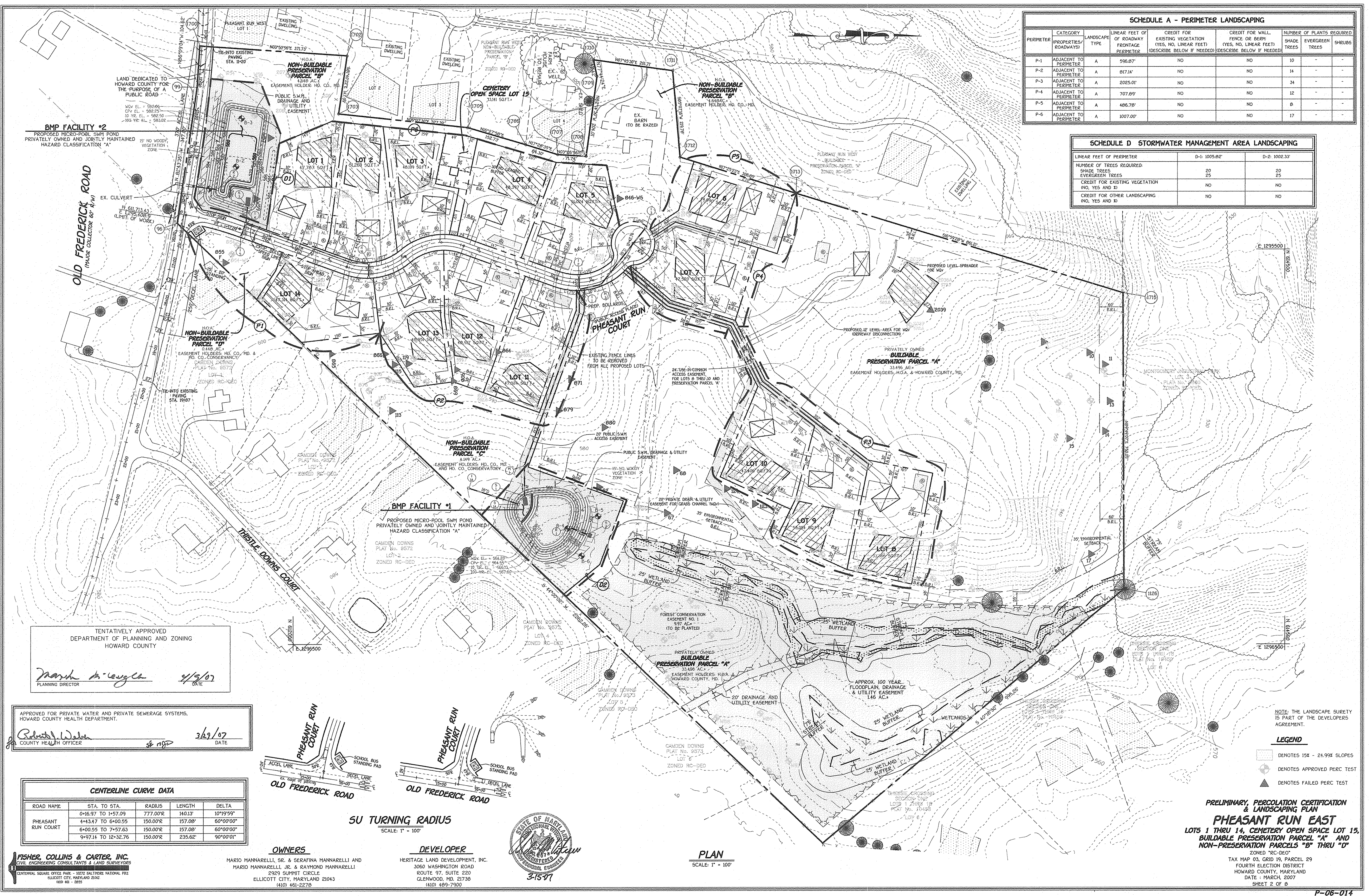
STATE OF MARYLAND  
ALDO H. VITTORE, P.E.  
3/15/07  
DATE

**TITLE SHEET**  
**PHEASANT RUN EAST**  
LOTS 1 THRU 14, CEMETERY OPEN SPACE LOT 15,  
BUILDABLE PRESERVATION PARCEL "A" AND  
NON-PRESERVATION PARCELS "B" THRU "D"  
ZONED "RC-DEO"  
TAX MAP 03, GRID 19, PARCEL 29  
FOURTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
DATE: MARCH, 2007  
SHEET 1 OF 8



SCHEDULE A - PERIMETER LANDSCAPING						
PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR WALL, FENCE OR BURY (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NUMBER OF PLANTS REQUIRED
				SHADE TREES	EVERGREEN TREES	SHRUBS
P-1	ADJACENT TO PERIMETER	A	596.87'	NO	NO	10
P-2	ADJACENT TO PERIMETER	A	817.14'	NO	NO	14
P-3	ADJACENT TO PERIMETER	A	2025.01'	NO	NO	34
P-4	ADJACENT TO PERIMETER	A	707.89'	NO	NO	12
P-5	ADJACENT TO PERIMETER	A	486.78'	NO	NO	8
P-6	ADJACENT TO PERIMETER	A	1007.00'	NO	NO	17

SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING		
LINEAR FEET OF PERIMETER	D-1: 1005.82'	D-2: 1002.33'
NUMBER OF TREES REQUIRED:		
SHADE TREES	20	20
EVERGREEN TREES	25	25
CREDIT FOR EXISTING VEGETATION (NO, YES AND \$)	NO	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND \$)	NO	NO



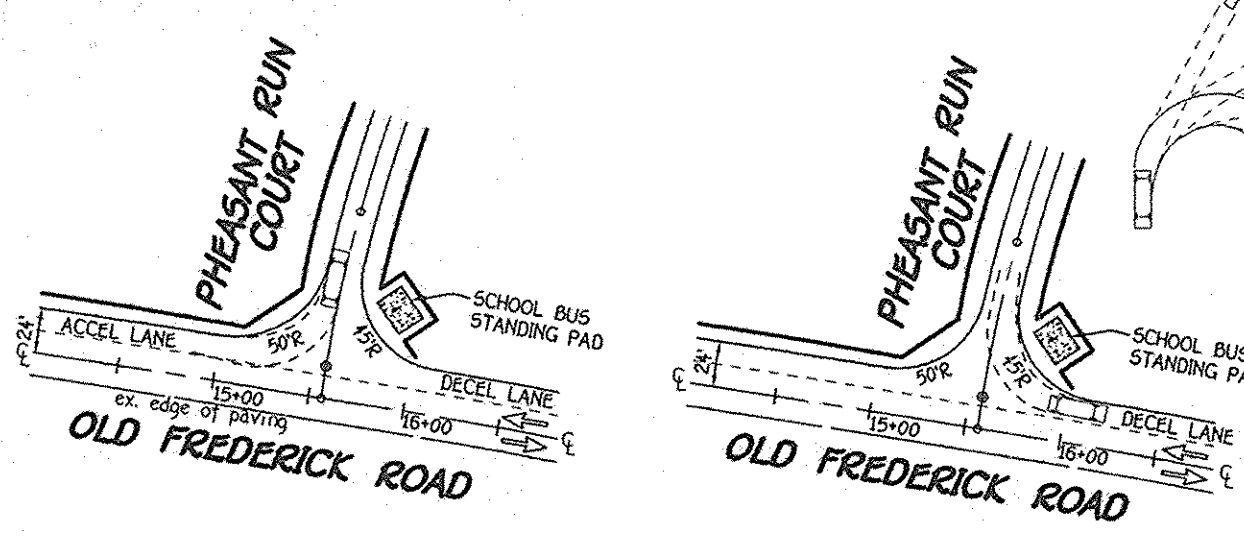
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HOWARD COUNTY

*Martha M. Leagle* 4/9/07  
PLANNING DIRECTOR DATE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT.

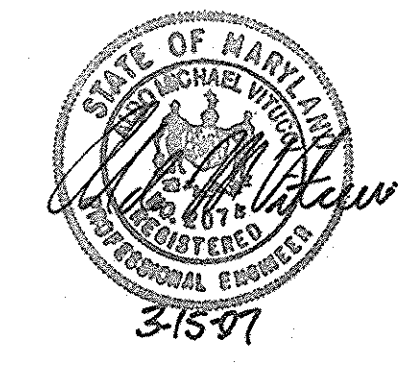
*Robert J. Walker* 3/29/07  
COUNTY HEALTH OFFICER DATE

CENTERLINE CURVE DATA				
ROAD NAME	STA. TO STA.	RADIUS	LENGTH	DELTA
PHEASANT RUN COURT	0+16.97 TO 1+57.09	777.00'R	140.13'	107°19'59"
	4+43.47 TO 6+00.55	150.00'R	157.08'	60°00'00"
	6+00.55 TO 7+57.63	150.00'R	157.08'	60°00'00"
	9+97.14 TO 12+32.76	150.00'R	235.62'	90°00'01"



**OWNERS**  
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(410) 461-2278

**DEVELOPER**  
HERITAGE LAND DEVELOPMENT, INC.  
3060 WASHINGTON ROAD  
ROUTE 97, SUITE 220  
GLENWOOD, MD. 21738  
(410) 489-7900



**PLAN**  
SCALE: 1" = 100'

NOTE: THE LANDSCAPE SURETY IS PART OF THE DEVELOPERS AGREEMENT.

**LEGEND**

- DENOTES 15% - 24.99% SLOPES
- DENOTES APPROVED PERC TEST
- ▲ DENOTES FAILED PERC TEST

**PRELIMINARY, PERCOLATION CERTIFICATION & LANDSCAPING PLAN**  
**PHEASANT RUN EAST**  
LOTS 1 THRU 14, CEMETERY OPEN SPACE LOT 15,  
BUILDABLE PRESERVATION PARCEL "A" AND  
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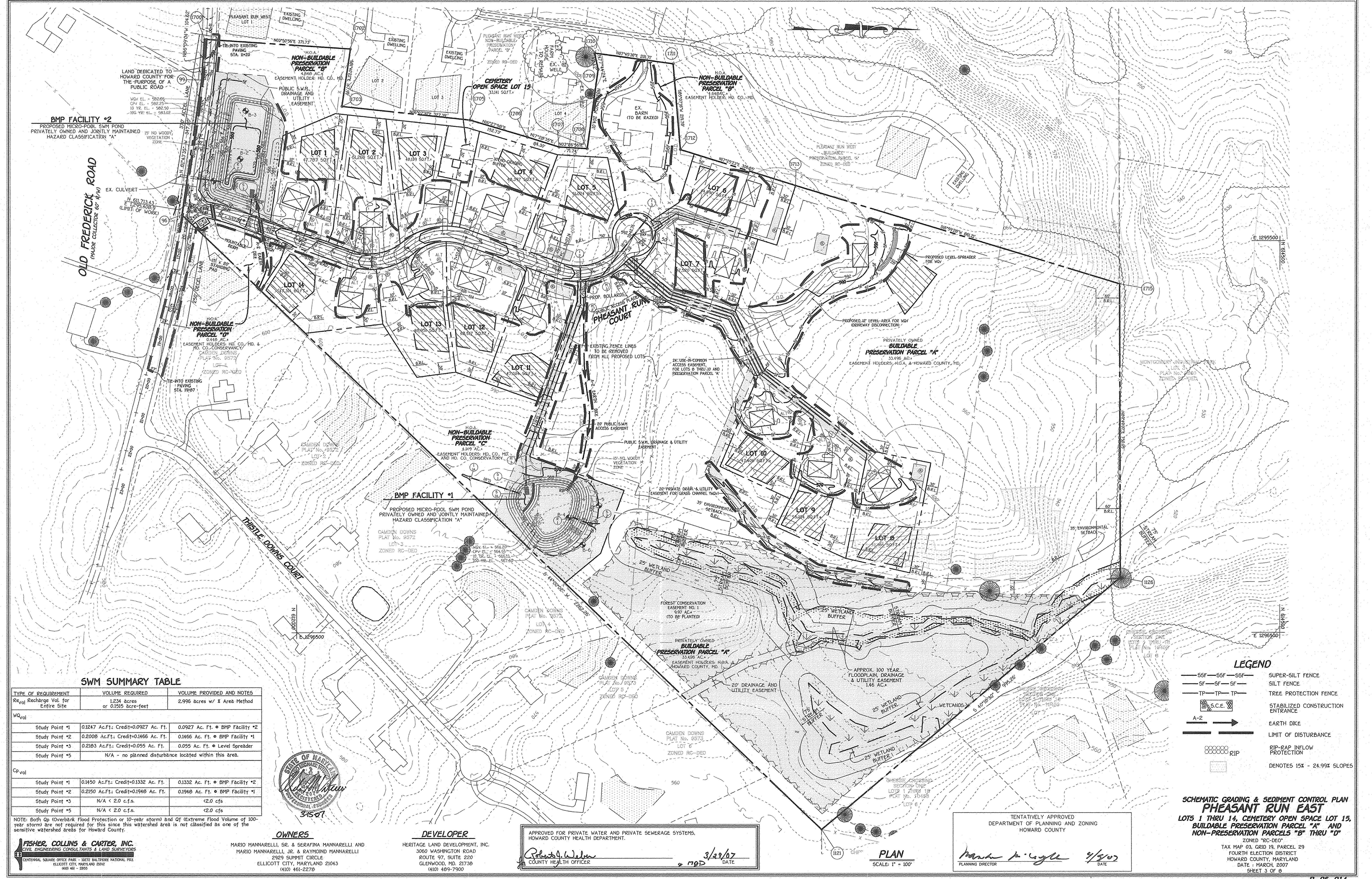
ZONED "RC-DEO"  
TAX MAP 03, GRID 19, PARCEL 29  
FOURTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
DATE: MARCH, 2007  
SHEET 2 OF 8

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10725 EASTHURST NATIONAL FEE  
ELLCOTT CITY, MARYLAND 21116  
(410) 461-2895



**BMP FACILITY #2**  
 PROPOSED MICRO-POOL SWM POND  
 PRIVATELY OWNED AND JOINTLY MAINTAINED  
 HAZARD CLASSIFICATION "A"

**OLD FREDERICK ROAD**  
 (MAJOR COLLECTOR 60' R/W)



**SWM SUMMARY TABLE**

TYPE OF REQUIREMENT	VOLUME REQUIRED	VOLUME PROVIDED AND NOTES
Revol Recharge Vol for Entire Site	1.234 acres or 0.1515 acre-feet	2.996 acres w/ X Area Method
WQvol		
Study Point #1	0.1247 Ac.Ft.; Credit=0.0927 Ac. Ft.	0.0927 Ac. Ft. • BMP Facility #2
Study Point #2	0.2008 Ac.Ft.; Credit=0.1466 Ac. Ft.	0.1466 Ac. Ft. • BMP Facility #1
Study Point #3	0.2183 Ac.Ft.; Credit=0.055 Ac. Ft.	0.055 Ac. Ft. • Level Spreader
Study Point #5	N/A - no planned disturbance located within this area.	
CPvol		
Study Point #1	0.1450 Ac.Ft.; Credit=0.1332 Ac. Ft.	0.1332 Ac. Ft. • BMP Facility #2
Study Point #2	0.2150 Ac.Ft.; Credit=0.1948 Ac. Ft.	0.1948 Ac. Ft. • BMP Facility #1
Study Point #3	N/A < 2.0 c.f.s.	<2.0 cfs
Study Point #5	N/A < 2.0 c.f.s.	<2.0 cfs



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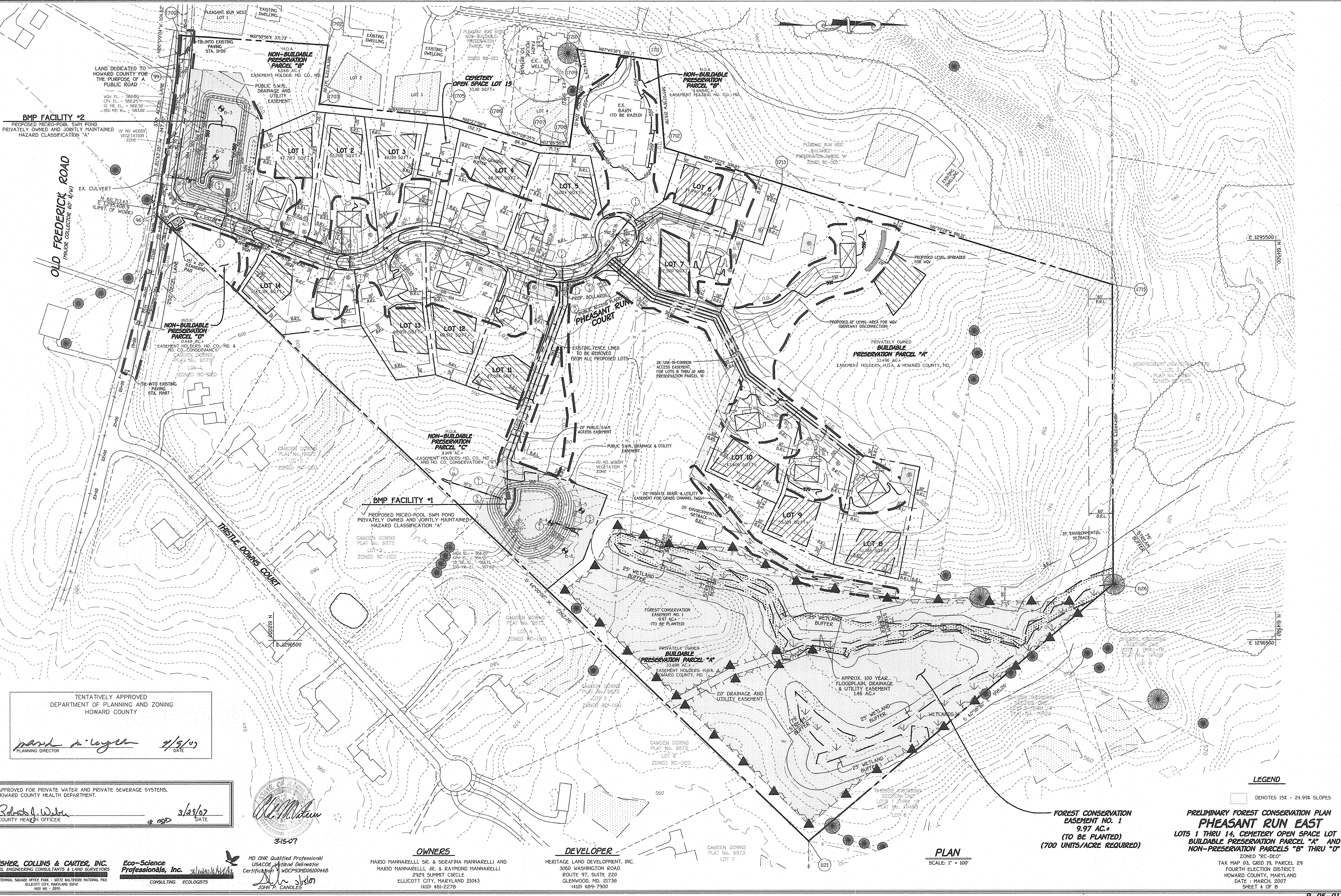
APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,  
 HOWARD COUNTY HEALTH DEPARTMENT.  
 Robert J. Weber  
 COUNTY HEALTH OFFICER  
 3/29/07  
 DATE

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY  
 Mark P. Doyle  
 PLANNING DIRECTOR  
 3/30/07  
 DATE

- LEGEND**
- SSF—SSF—SSF— SUPER-SILT FENCE
  - SF—SF—SF— SILT FENCE
  - TP—TP—TP— TREE PROTECTION FENCE
  - S.C.E.— STABILIZED CONSTRUCTION ENTRANCE
  - A-2 → EARTH DIKE
  - — — — — LIMIT OF DISTURBANCE
  - ○ ○ ○ ○ RIP RIP-RAP INFLOW PROTECTION
  - DENOTES 15% - 24.9% SLOPES

**SCHEMATIC GRADING & SEDIMENT CONTROL PLAN**  
**PHEASANT RUN EAST**  
 LOTS 1 THRU 14, CEMETERY OPEN SPACE LOT 15,  
 BUILDABLE PRESERVATION PARCEL "A" AND  
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 ZONED "RC-DEO"  
 TAX MAP 03, GRID 19, PARCEL 29  
 FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 DATE: MARCH, 2007  
 SHEET 3 OF 8





**BMP FACILITY #2**  
 PROPOSED MICRO-POOL SWM POND  
 PRIVATELY OWNED AND JOINTLY MAINTAINED  
 HAZARD CLASSIFICATION "A"

**BMP FACILITY #1**  
 PROPOSED MICRO-POOL SWM POND  
 PRIVATELY OWNED AND JOINTLY MAINTAINED  
 HAZARD CLASSIFICATION "A"

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*Handwritten signature* 4/9/07  
 PLANNING DIRECTOR DATE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS.  
 HOWARD COUNTY HEALTH DEPARTMENT.

*Handwritten signature* 3/29/07  
 COUNTY HEALTH OFFICER DATE

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 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 3072 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2895

**Eco-Science Professionals, Inc.**  
 CONSULTING ECOLOGISTS

MD DNR Qualified Professional  
 USACOE Wetland Delineator  
 Certification WDCP93MD06100448  
*Handwritten signature*  
 JOHN P. CANOLE

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CAMDEN DOWNS  
 PLAT NO. 8575  
 LOT 7

**PLAN**  
 SCALE: 1" = 100'

**FOREST CONSERVATION EASEMENT NO. 1**  
 9.97 AC.±  
 (TO BE PLANTED)  
 (700 UNITS/ACRE REQUIRED)

**LEGEND**

□ DENOTES 15% - 24.99% SLOPES

**PRELIMINARY FOREST CONSERVATION PLAN**  
**PHEASANT RUN EAST**  
 LOTS 1 THRU 14, CEMETERY OPEN SPACE LOT 15,  
 BUILDABLE PRESERVATION PARCEL "A" AND  
 NON-PRESERVATION PARCELS "B" THRU "D"

ZONED "RC-DEO"  
 TAX MAP 03, GRID 19, PARCEL 29  
 FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 DATE: MARCH 2007  
 SHEET 4 OF 8



**FCP NOTES**

1. ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.
2. FORESTED AREAS OCCURRING OUTSIDE OF THE FCE SHALL NOT BE CONSIDERED PART OF THE FCE AND SHALL NOT BE SUBJECT TO PROTECTIVE LAND COVENANTS.
3. LIMITS OF DISTURBANCE SHALL BE RESTRICTED TO AREAS OUTSIDE THE LIMIT OF TEMPORARY FENCING OR THE FCE BOUNDARY, WHICHEVER IS GREATER.
4. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENT, EXCEPT AS PERMITTED BY HOWARD COUNTY DPZ.
5. NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS FOREST CONSERVATION EASEMENTS.
6. TEMPORARY FENCING SHALL BE USED TO PROTECT FOREST RESOURCES DURING CONSTRUCTION. THE FENCING SHALL BE PLACED ALONG ALL FCE BOUNDARIES WHICH OCCUR WITHIN 15 FEET OF THE PROPOSED LIMITS OF DISTURBANCE.
7. PERMANENT SIGNAGE SHALL BE PLACED 50' - 100' APART ALONG BOUNDARIES OF ALL AREAS INCLUDED IN FOREST CONSERVATION EASEMENTS.
8. THE FOREST CONSERVATION ACT REQUIREMENTS FOR THIS PROJECT WILL BE MET THROUGH THE FORESTATION OF 9.97 ACRES PLACED WITHIN A FOREST CONSERVATION EASEMENT IN A PRIORITY PLANTING AREA.

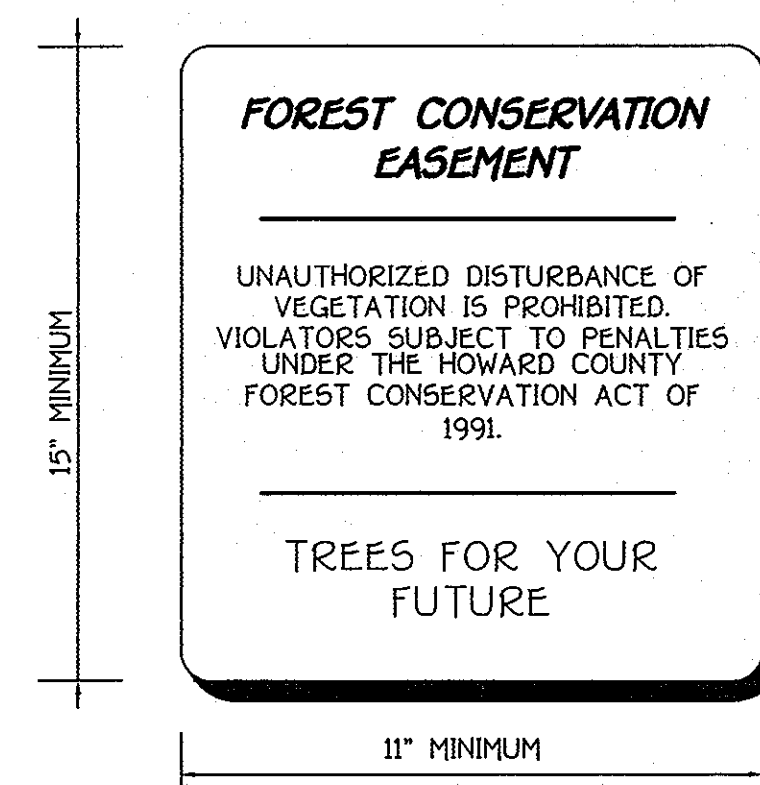
**PLANTING SCHEDULE**

FCE = 1 - 9.97 acres  
 Planting Units Required: 6979 = 9.97 ACRES x 700 SEEDLINGS/WHIPS WITHOUT SHELTERS.  
 Planting Units Provided: 6980

Qty	Species	Size	Spacing	Total FCA Units
24	Acer rubrum - Red maple	1" cal.	15' o.c.	
24	Liriodendron tulipifera - Tulip poplar **	1" cal.	15' o.c.	
20	Platanus occidentalis - Sycamore	1" cal.	15' o.c.	
20	Quercus alba - White oak **	1" cal.	15' o.c.	
00	Total 1" caliper trees		Total 1" caliper tree x 3.5 units/tree = FCA unit credit	308
500	Acer rubrum - Red maple	2-3' whip	11' o.c.	
180	Diospyros virginiana - Persimmon **	2-3' whip	11' o.c.	
650	Liriodendron tulipifera - Tulip poplar **	2-3' whip	11' o.c.	
200	Nyssa sylvatica - Black gum	2-3' whip	11' o.c.	
600	Platanus occidentalis - Sycamore	2-3' whip	11' o.c.	
280	Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
280	Quercus alba - White oak	2-3' whip	11' o.c.	
280	Quercus palustris - Pin oak	2-3' whip	11' o.c.	
190	Ulmus rubra - Slippery Elm	2-3' whip	11' o.c.	
180	Viburnum prunifolium - Blackhaw **	2-3' whip	11' o.c.	
3340	total whips with shelters		Total whip plantings x 2 units / tree = FCA unit credit	6680
			Total Unit Credit	6980

Planting Notes:  
 Planting units defined by the spacing requirements established in the FCA Manual. One plant unit is defined as 1 seedling or whip without shelter. The Manual states that 700 seedlings/whips without shelters are required per acre, or 350 whips w/shelters, or 200 1" caliper trees, or 100 2" caliper trees. By conversion it has been determined that a seedling or whip without shelter = 1 unit, whip with shelter = 2 units, 1" caliper tree = 3.5 units and 2" caliper tree = 7 units. The use of plant units simplifies the plant density calculations when mixing stock size.  
 \*\* - These species should not be planted within the wetland limits.  
 1" caliper trees should be staggered along the outer perimeter of the planting area to serve as demarcation of the boundary. The trees should be no closer than 15 foot spacing.  
 Planting shall be made in a curvilinear fashion along contour. The planting should avoid a grid appearance but should be spaced to facilitate maintenance.  
 Multiflora rose/heavy brush removal/control may be required prior to installation of planting.  
 All whips are required to be installed with tree shelters per Howard County FCA requirements.

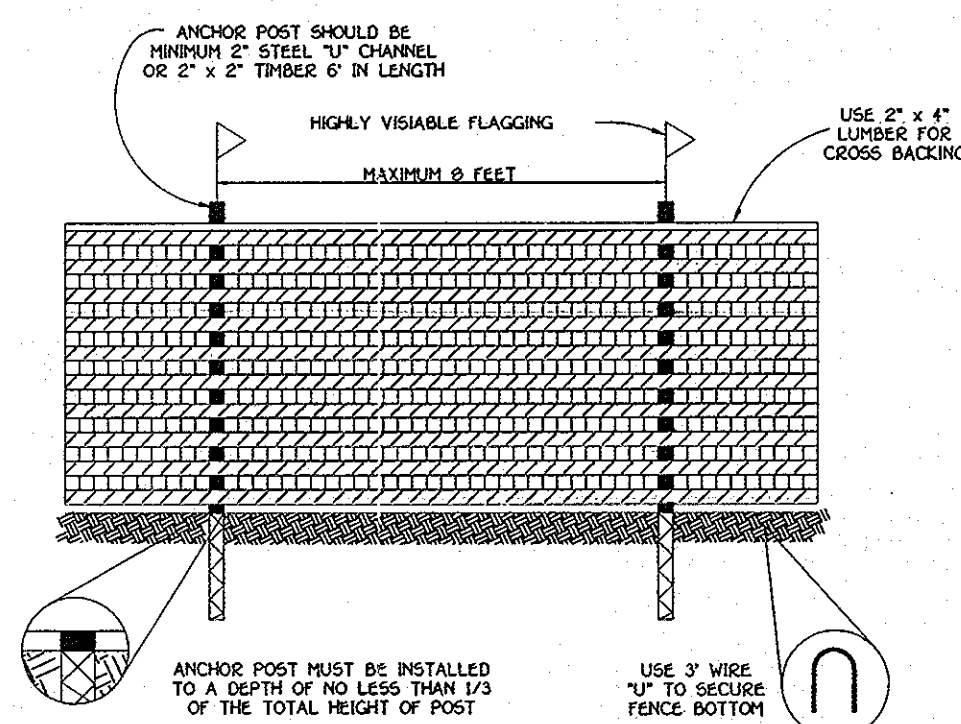
**ON-SITE SIGNAGE**



**FOREST CONSERVATION WORKSHEET**

NET TRACT AREA	ACRES
total tract area	60.1
area within 100 year floodplain	1.46
area to remain in agricultural production - Pres. Parcels B and C	8.79
net tract area	49.85
LAND USE CATEGORY: (from table 3.2.1, page 40, manual)	
ARA MDR IDA HDR MPD CIA	X X X X X X
afforestation threshold (PERCENTAGE)	20% 9.97
conservation threshold (PERCENTAGE)	25% 12.46
EXISTING FOREST COVER	
existing forest on NTA	0.00
area of forest above afforestation threshold	0.00
area of forest above conservation threshold	0.00
BREAK EVEN POINT	
forest retention above threshold with no mitigation	
BREAK EVEN POINT	
clearing permitted without mitigation	
PROPOSED FOREST CLEARING	
total area of forest to be cleared or retained outside FCE	0.00
total area of forest to be retained in FCE	0.00
PLANTING REQUIREMENTS	
reforestation for clearing above conservation threshold	0.00
reforestation for clearing below conservation threshold	0.00
credit for retention above conservation threshold	0.00
total reforestation required	0.00
total afforestation required	9.97
total reforestation and afforestation required	9.97

**BLAZE ORANGE PLASTIC MESH**



- NOTES:
1. FOREST PROTECTION DEVICE ONLY.
  2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
  3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
  4. ROOT DAMAGE SHOULD BE AVOIDED.
  5. PROTECTIVE SIGNAGE MAY ALSO BE USED.
  6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

**TREE PROTECTION DETAIL**

NOT TO SCALE

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*David M. Wright* 2/5/12  
 PLANNING DIRECTOR DATE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,  
 HOWARD COUNTY HEALTH DEPARTMENT.

*Robert G. Walker* 3/23/12  
 COUNTY HEALTH OFFICER DATE

**PRELIMINARY FOREST CONSERVATION NOTES & DETAILS**  
**PHEASANT RUN EAST**  
 LOTS 1 THRU 14, CEMETERY OPEN SPACE LOT 15,  
 BUILDABLE PRESERVATION PARCEL "A" AND  
 NON-PRESERVATION PARCELS "B" THRU "D"

ZONED "RC-BE0"  
 TAX MAP 03, GRID 19, PARCEL 29  
 FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 DATE: MARCH, 2007  
 SHEET 5 OF 8

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARES OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELLICOTT CITY, MARYLAND 21114  
 (410) 461-2275

**Eco-Science Professionals, Inc.**  
 CONSULTING ECOLOGISTS

MD DNR Qualified Professional  
 USACOE Wetland Delineator  
 Certification: MDCP93MD06100448  
*John P. Canoles* 3/16/12  
 JOHN P. CANOLES

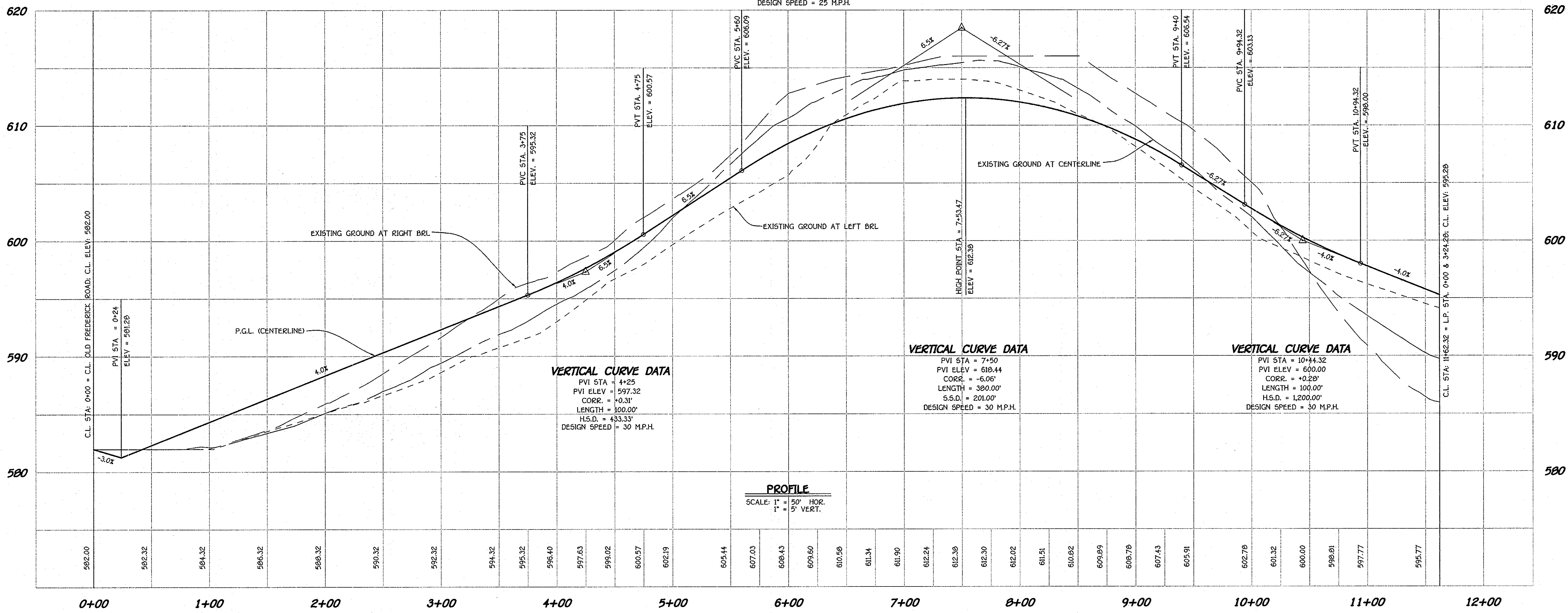
**OWNERS**  
 MARIO MANNARELLI, SR. & SERAFINA MANNARELLI AND  
 MARIO MANNARELLI, JR. & RAYMOND MANNARELLI  
 2929 SUMMIT CIRCLE  
 ELLICOTT CITY, MARYLAND 21043  
 (410) 461-2278

**DEVELOPER**  
 HERITAGE LAND DEVELOPMENT, INC.  
 3050 WASHINGTON ROAD  
 ROUTE 97, SUITE 220  
 GLENWOOD, MD. 21738  
 (410) 489-7900

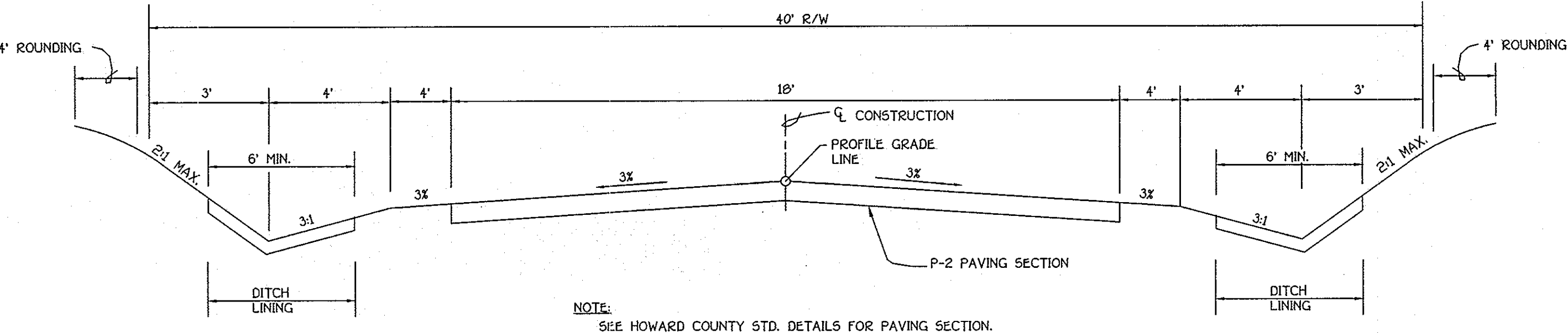
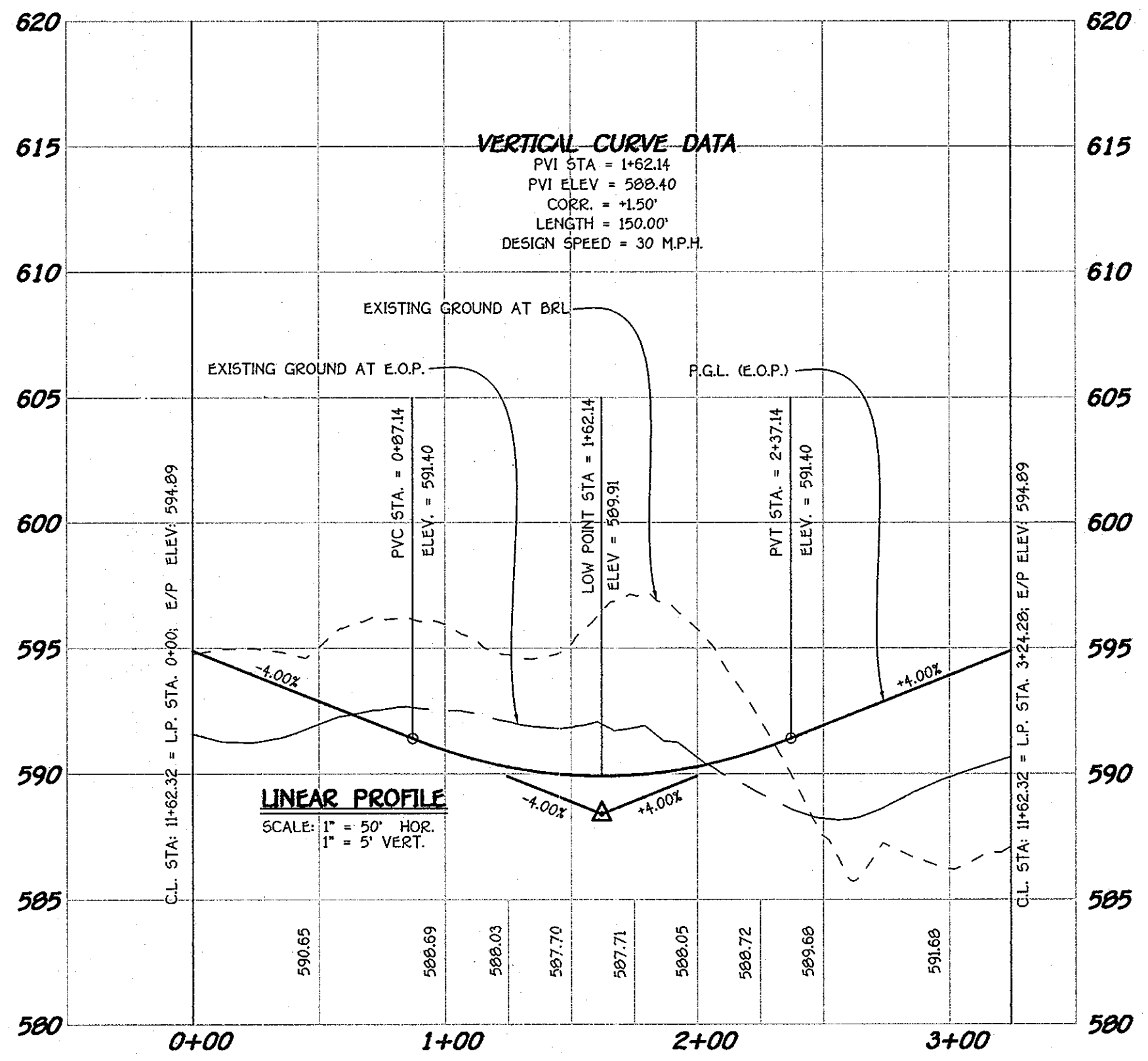
TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*Frank D. Leight* 4/9/07  
 PLANNING DIRECTOR DATE

### PHEASANT RUN COURT



### PHEASANT RUN COURT



TYPICAL ROADWAY SECTION  
 NO SCALE

ROADWAY INFORMATION CHART

ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	STATION LIMITS	PAVING SECTION
PHEASANT RUN COURT	PUBLIC ACCESS PLACE	25 M.P.H.	RC-0EO	0+00 TO 12+42.76	P-2



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 (410) 461-2278

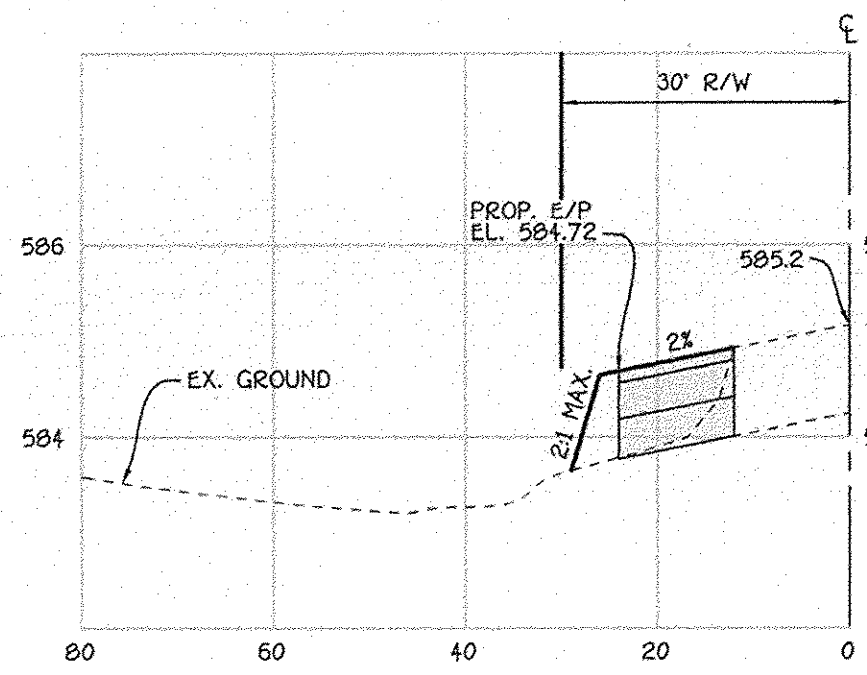
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 ELLICOTT CITY, MARYLAND 21043  
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 HERITAGE LAND DEVELOPMENT, INC.  
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 ROUTE 97, SUITE 220  
 GLENWOOD, MD. 21738  
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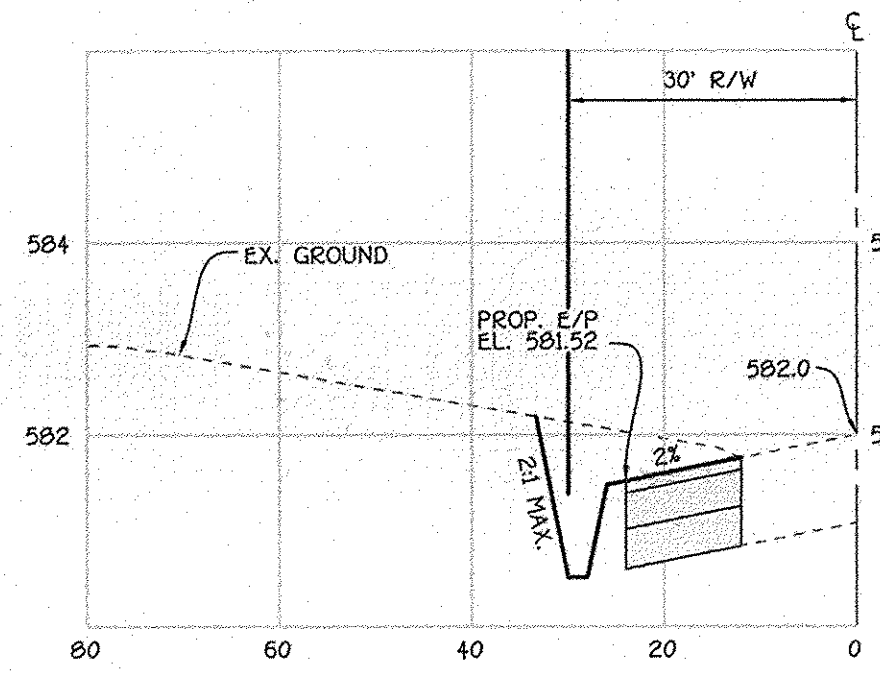
PRELIMINARY ROAD PROFILES  
**PHEASANT RUN EAST**  
 LOTS 1 THRU 14, CEMETERY OPEN SPACE LOT 15,  
 BUILDABLE PRESERVATION PARCEL "A" AND  
 NON-PRESERVATION PARCELS "B" THRU "D"

ZONED "RC-0EO"  
 TAX MAP 03, GRID 19, PARCEL 29  
 FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 DATE: MARCH 8, 2007  
 SHEET 6 OF 8

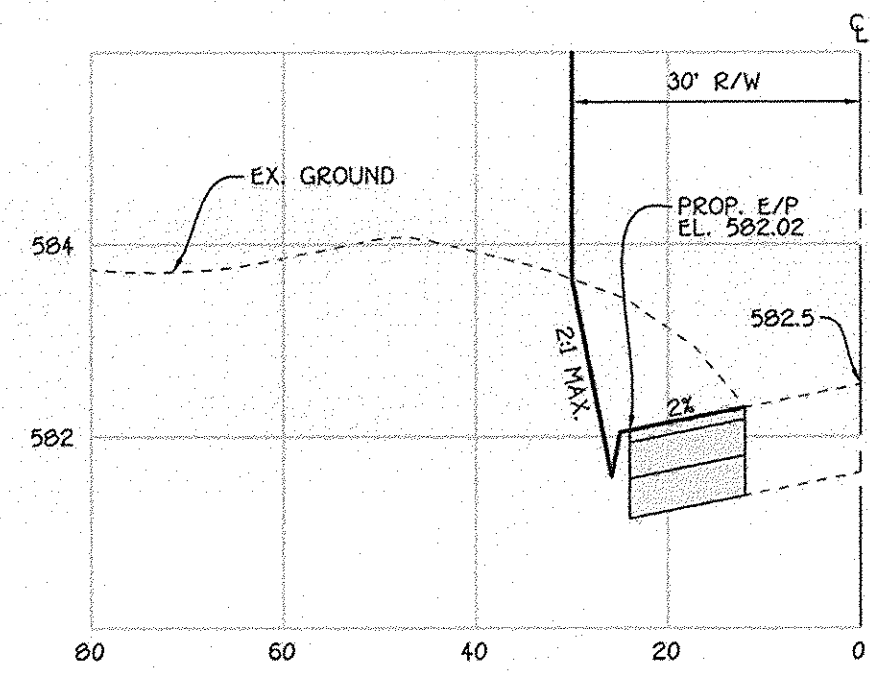




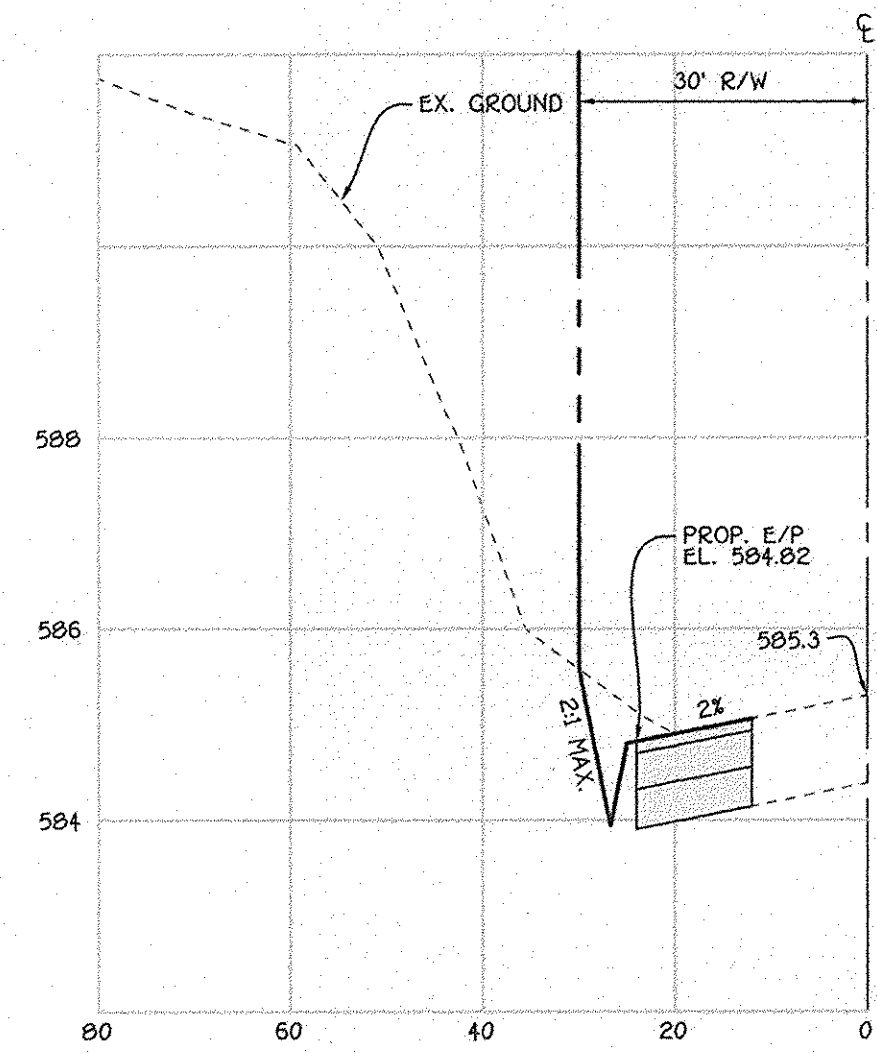
13+00



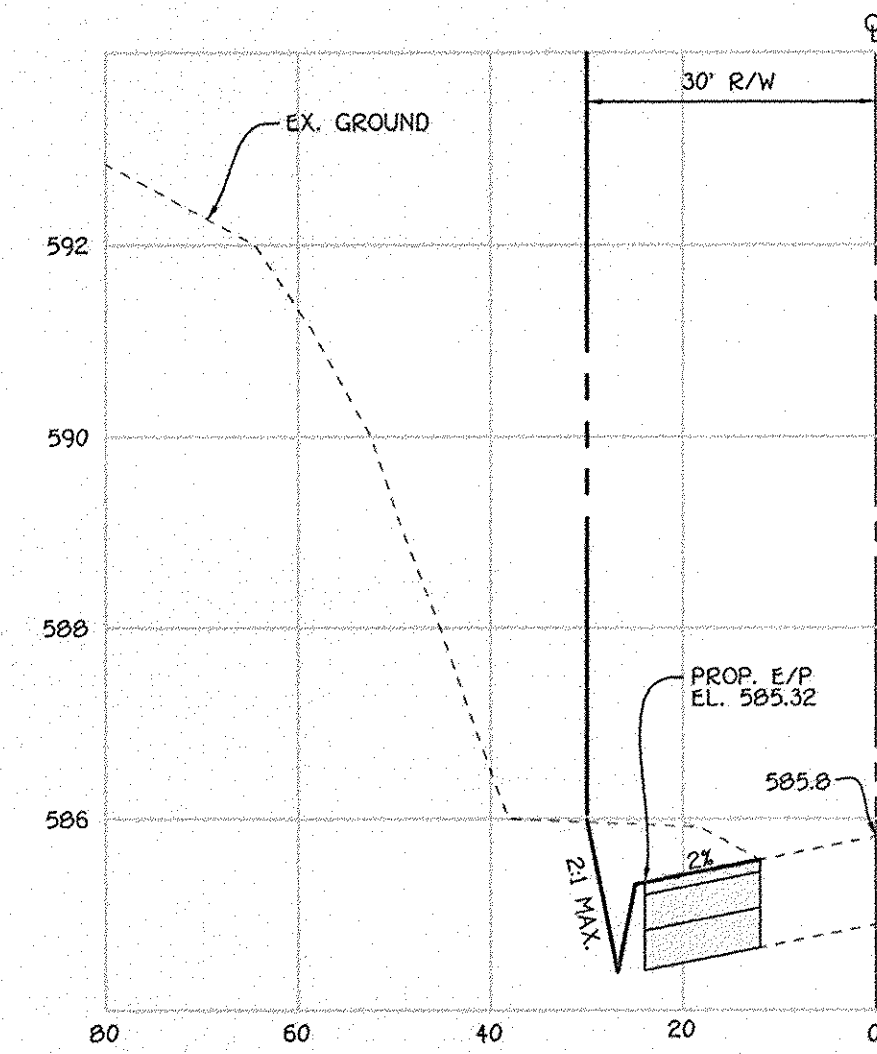
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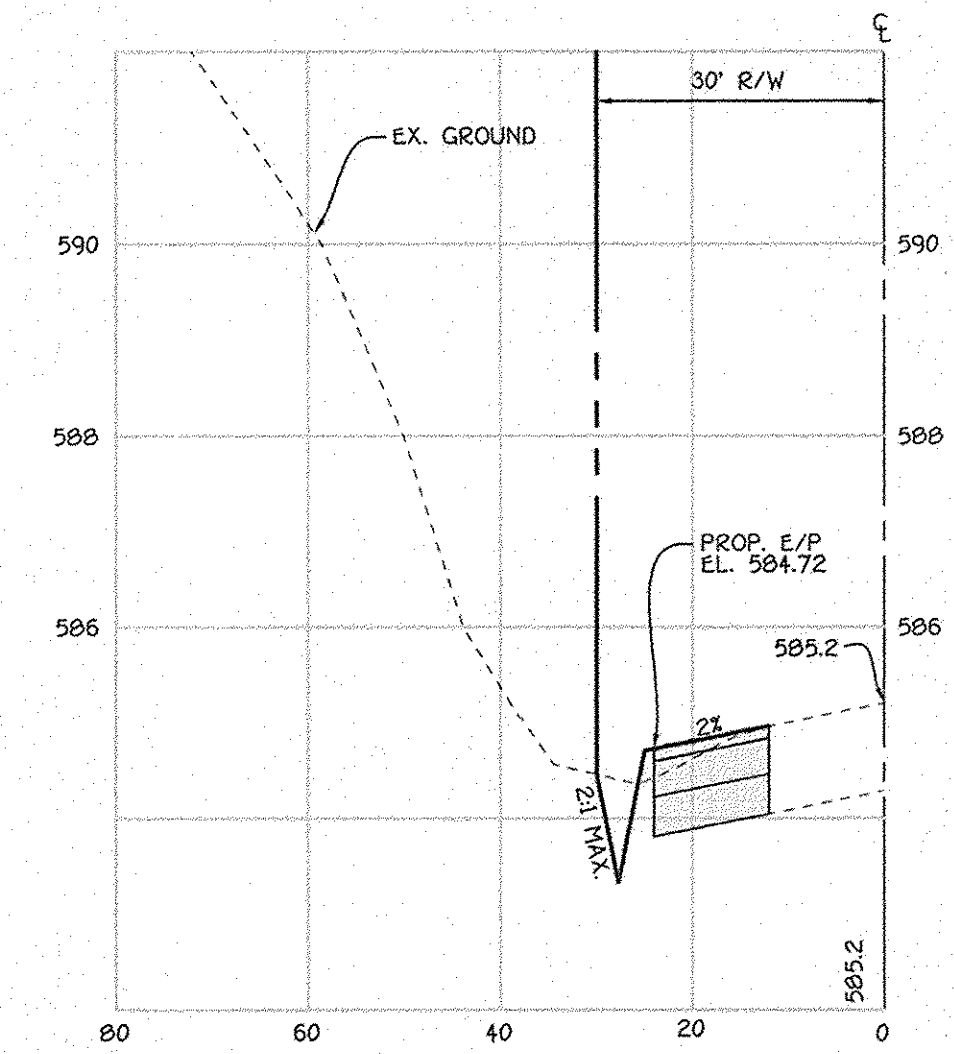
17+00



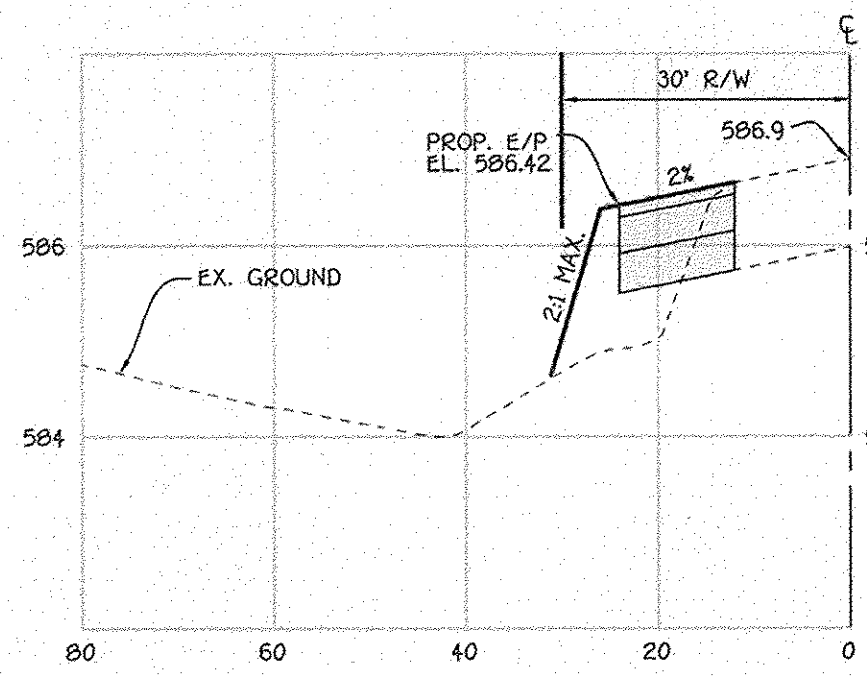
18+50



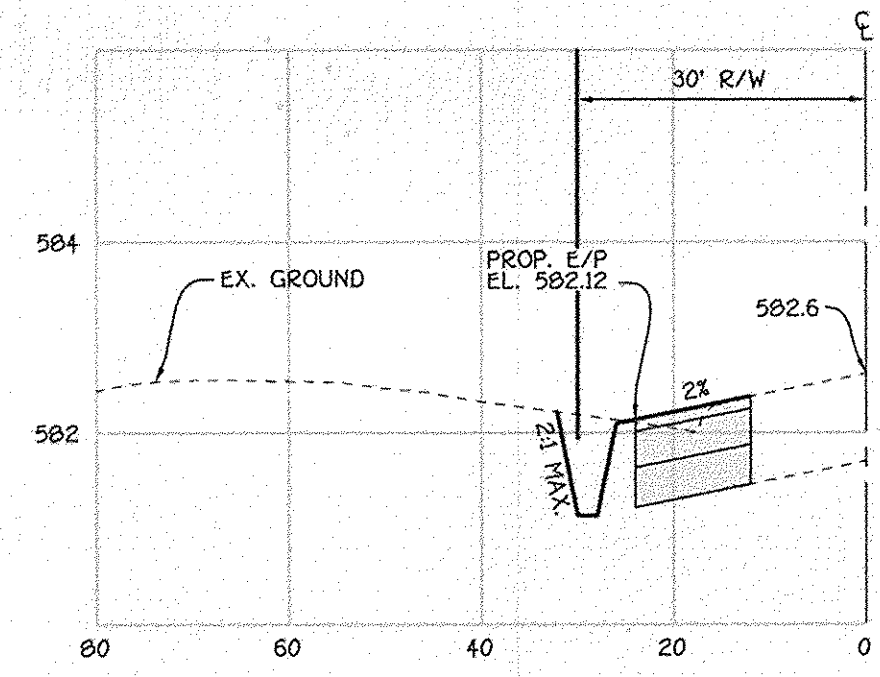
19+00



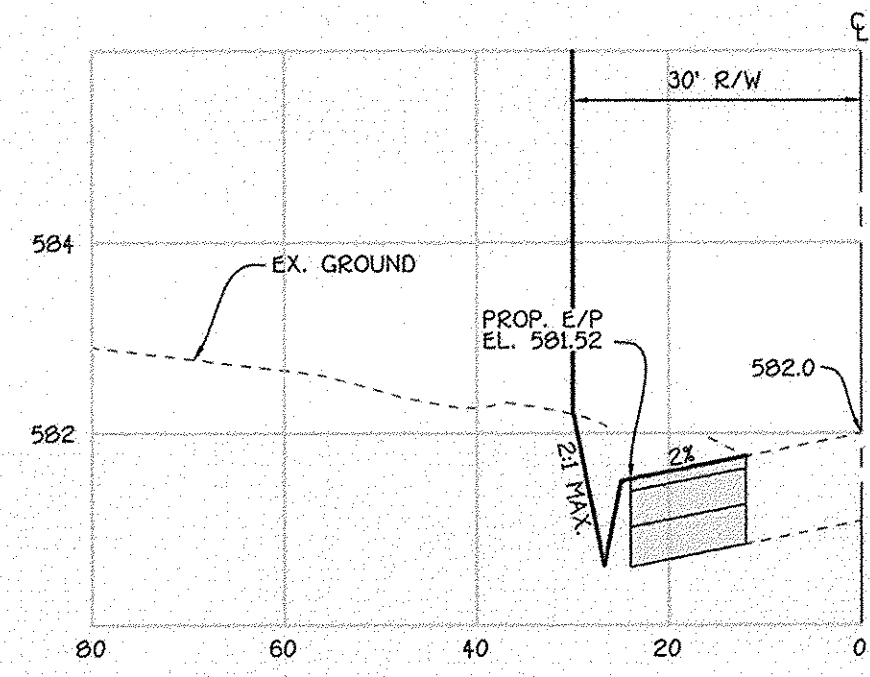
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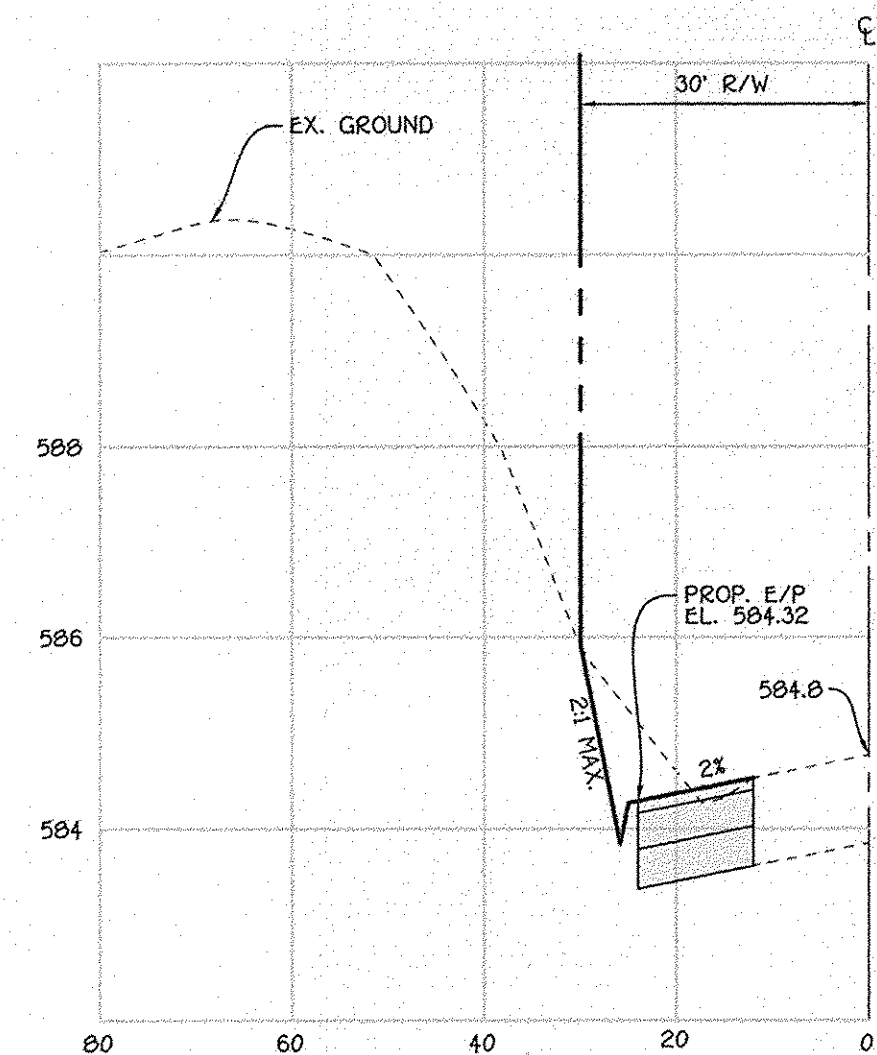
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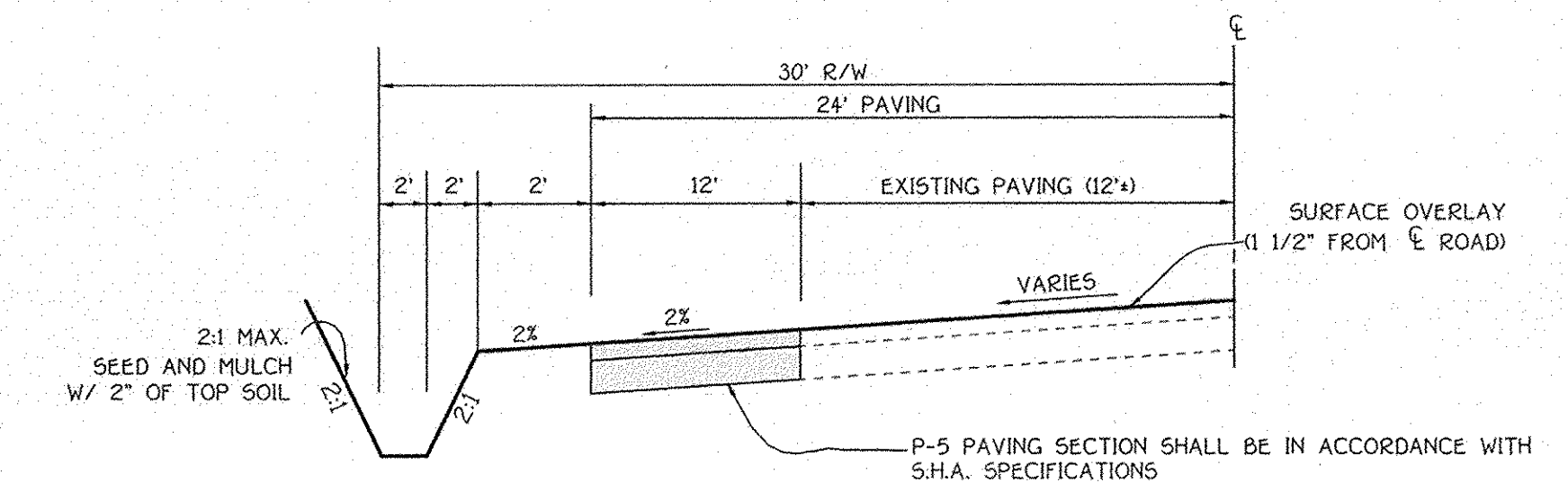
14+50



16+50

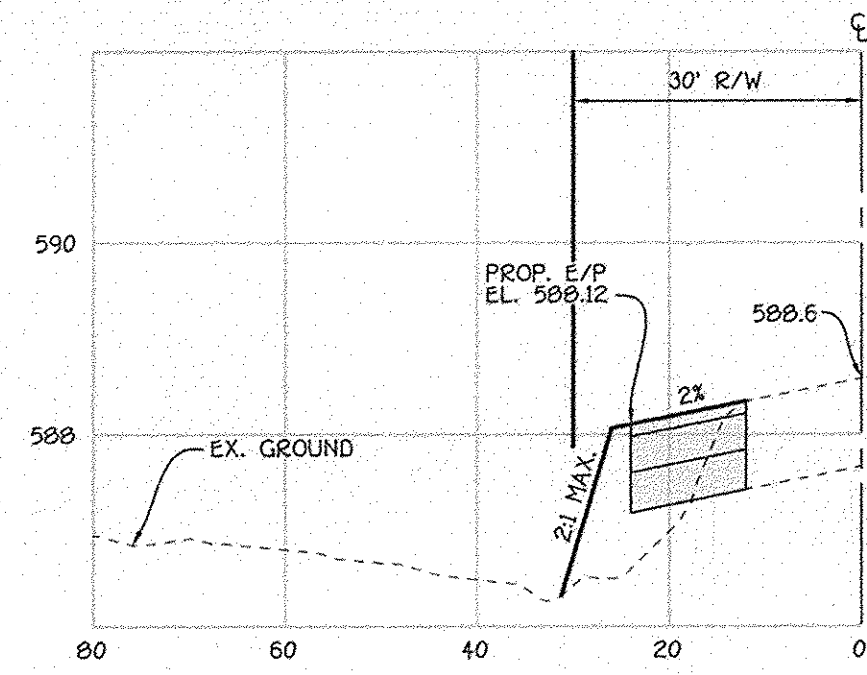


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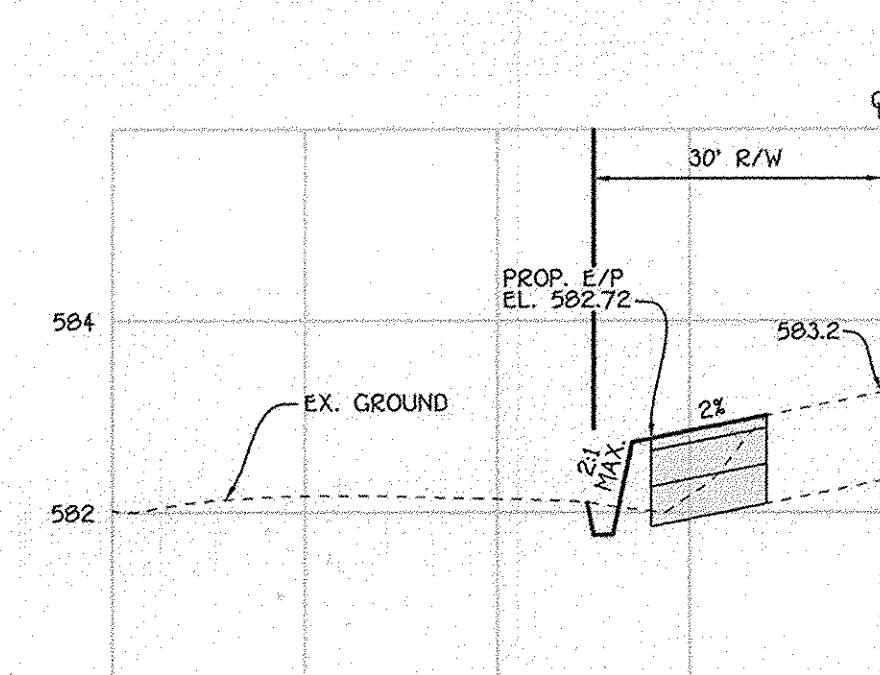


STA. 11+20 TO STA. 15+56  
TYPICAL WIDENING (OLD FREDERICK ROAD)

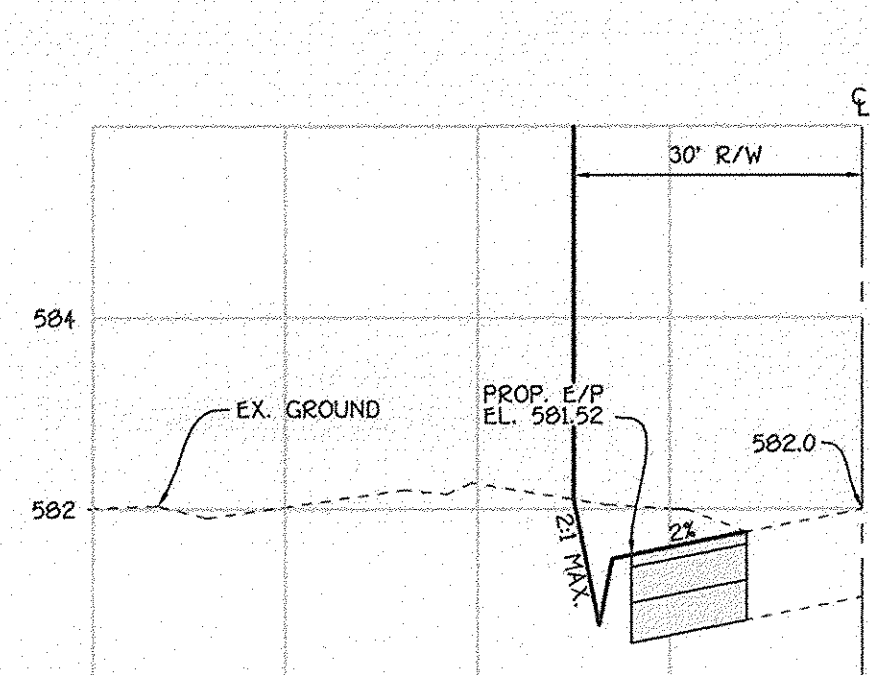
NO SCALE



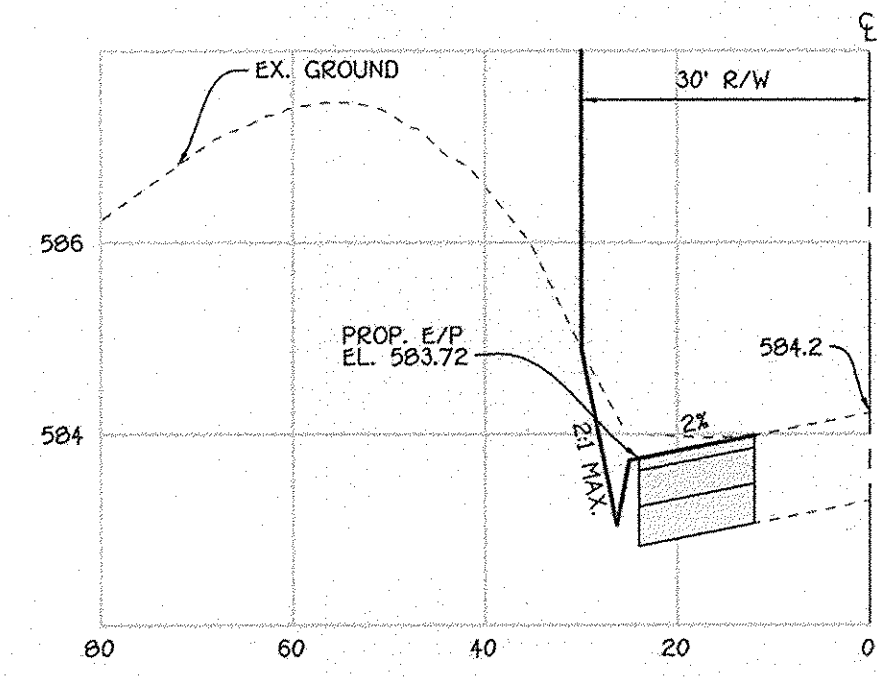
12+00



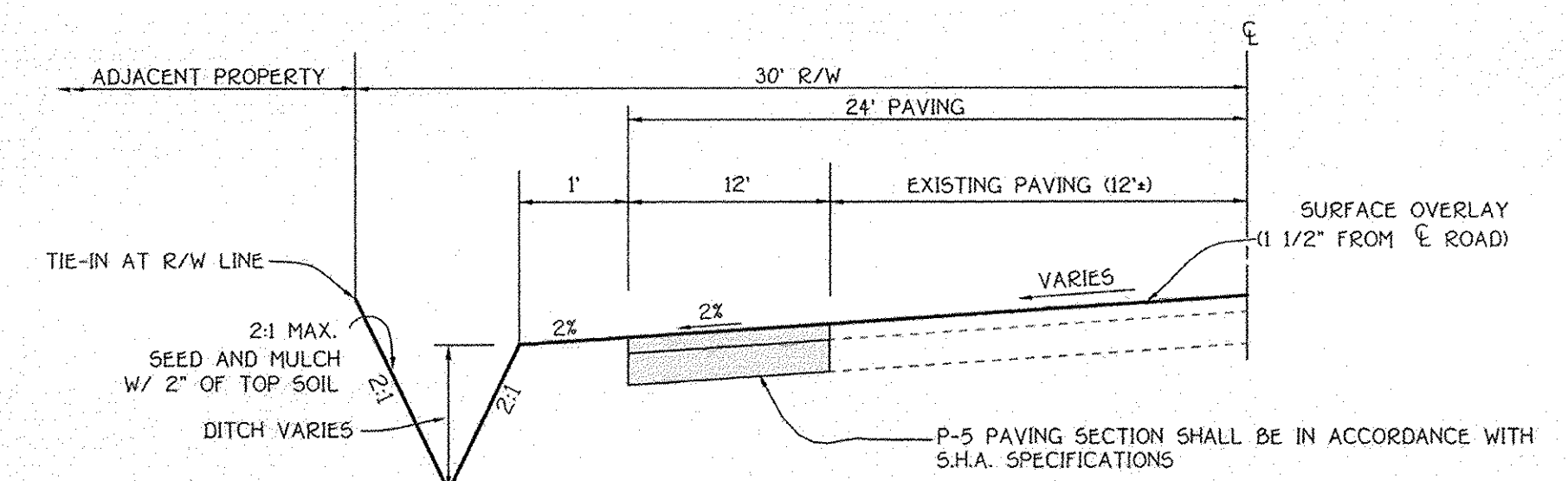
14+00



16+00

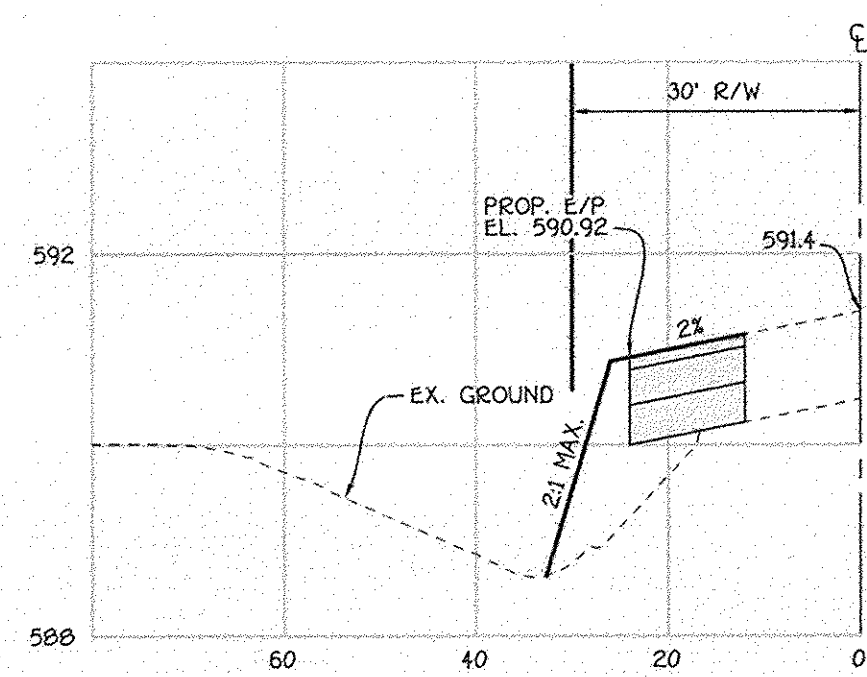


17+50

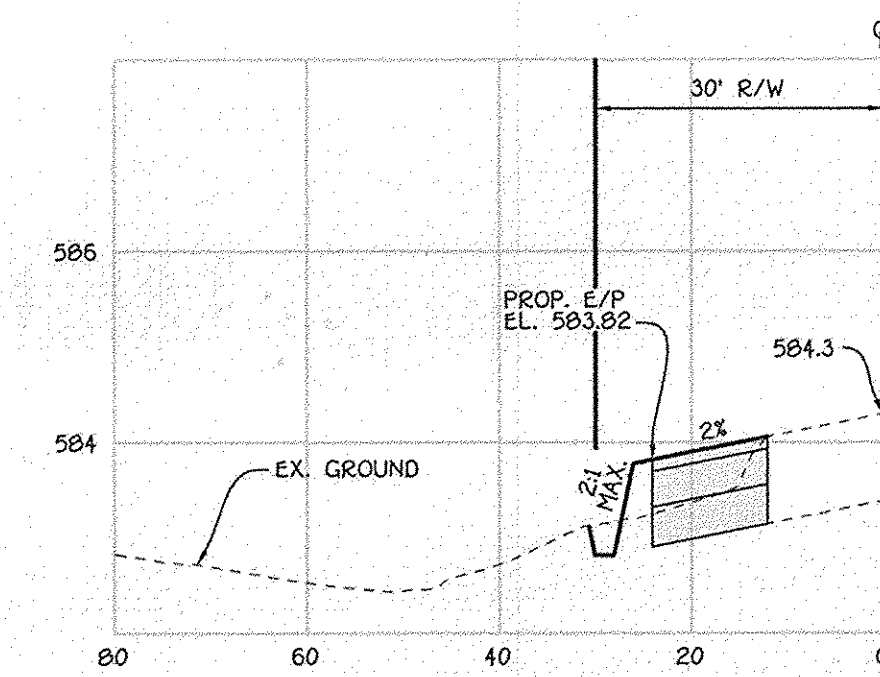


STA. 15+56 TO STA. 19+07  
TYPICAL WIDENING (OLD FREDERICK ROAD)

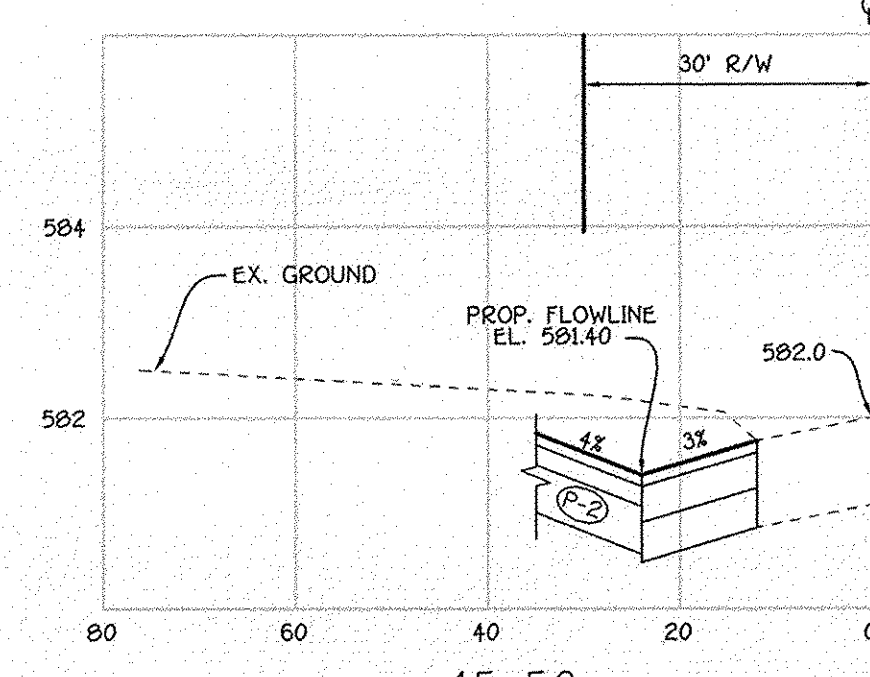
NO SCALE



11+50



13+50



15+50

OLD FREDERICK ROAD CROSS-SECTIONS

SCALE: 1" = 20' HOR.  
1" = 2' VERT.

TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

*Donald P. Leagle*  
PLANNING DIRECTOR

4/9/07  
DATE

OWNERS

MARIO MANNARELLI, SR. & SERAFINA MANNARELLI AND  
MARIO MANNARELLI, JR. & RAYMOND MANNARELLI  
2929 SUMMIT CIRCLE  
ELLICOTT CITY, MARYLAND 21043  
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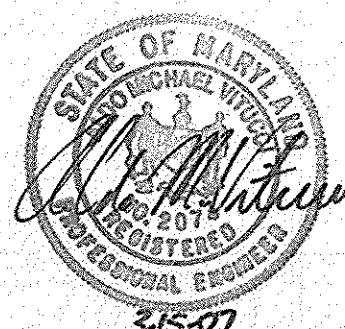
DEVELOPER

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3060 WASHINGTON ROAD  
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GLENWOOD, MD. 21738  
(410) 489-7900

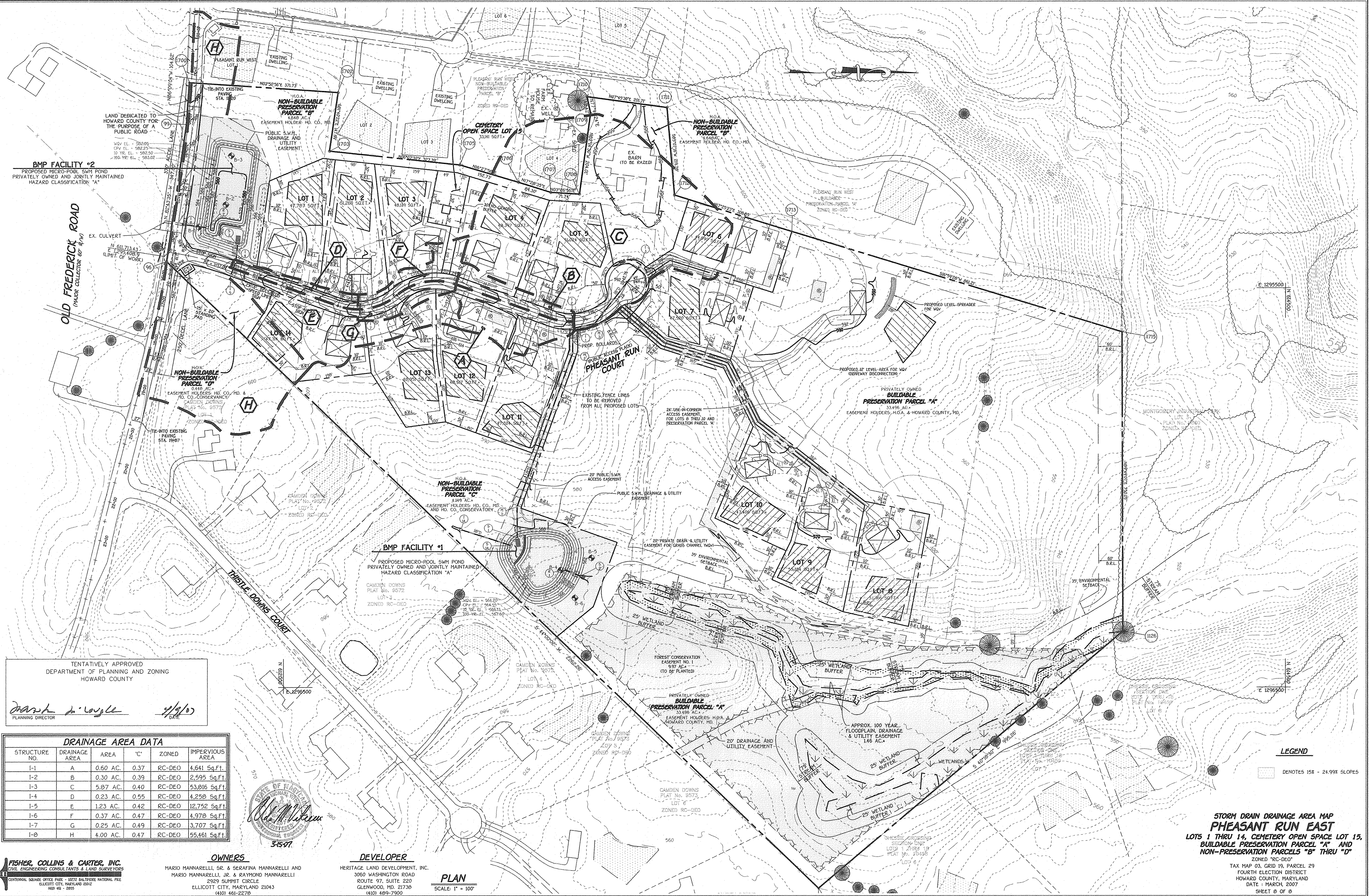
OLD FREDERICK ROAD CROSS-SECTIONS  
PHEASANT RUN EAST  
LOTS 1 THRU 14, CEMETERY OPEN SPACE LOT 15,  
BUILDABLE PRESERVATION PARCEL "A" AND  
NON-PRESERVATION PARCELS "B" THRU "D"

TAX MAP 03, GRID 19, PARCEL 29  
FOURTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
DATE: MARCH, 2007  
SHEET 7 OF 8

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 18722 BALTIMORE NATIONAL FREE  
ELLCOTT CITY, MARYLAND 21042  
410 488-2255







**BMP FACILITY #2**  
 PROPOSED MICRO-POOL SWM POND  
 PRIVATELY OWNED AND JOINTLY MAINTAINED  
 HAZARD CLASSIFICATION "A"

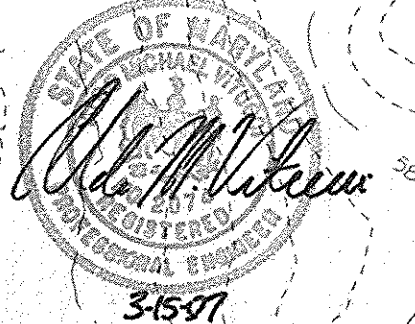
**BMP FACILITY #1**  
 PROPOSED MICRO-POOL SWM POND  
 PRIVATELY OWNED AND JOINTLY MAINTAINED  
 HAZARD CLASSIFICATION "A"

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*Mark A. Lovell*  
 PLANNING DIRECTOR  
 4/4/07  
 DATE

**DRAINAGE AREA DATA**

STRUCTURE NO.	DRAINAGE AREA	AREA	C	ZONED	IMPERVIOUS AREA
I-1	A	0.60 AC.	0.37	RC-DEO	4,641 Sq.Ft.
I-2	B	0.30 AC.	0.39	RC-DEO	2,595 Sq.Ft.
I-3	C	5.87 AC.	0.40	RC-DEO	53,816 Sq.Ft.
I-4	D	0.23 AC.	0.55	RC-DEO	4,258 Sq.Ft.
I-5	E	1.23 AC.	0.42	RC-DEO	12,752 Sq.Ft.
I-6	F	0.37 AC.	0.47	RC-DEO	4,978 Sq.Ft.
I-7	G	0.25 AC.	0.49	RC-DEO	3,707 Sq.Ft.
I-8	H	4.00 AC.	0.47	RC-DEO	55,461 Sq.Ft.



**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE  
 ELLICOTT CITY, MARYLAND 21114  
 (410) 461-2955

**OWNERS**  
 MARIO MANNARELLI, SR. & SERAFINA MANNARELLI AND  
 MARIO MANNARELLI, JR. & RAYMOND MANNARELLI  
 2929 SUMMIT CIRCLE  
 ELLICOTT CITY, MARYLAND 21103  
 (410) 461-2278

**DEVELOPER**  
 HERITAGE LAND DEVELOPMENT, INC.  
 3060 WASHINGTON ROAD  
 ROUTE 97, SUITE 220  
 GLENWOOD, MD. 21738  
 (410) 489-7900

**PLAN**  
 SCALE: 1" = 100'

**LEGEND**

□ DENOTES 15% - 24.99% SLOPES

**STORM DRAIN DRAINAGE AREA MAP**  
**PHEASANT RUN EAST**  
 LOTS 1 THRU 14, CEMETERY OPEN SPACE LOT 15,  
 BUILDABLE PRESERVATION PARCEL "A" AND  
 NON-PRESERVATION PARCELS "B" THRU "D"  
 ZONED "RC-DEO"  
 TAX MAP 03, GRID 19, PARCEL 29  
 FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 DATE - MARCH, 2007  
 SHEET 8 OF 8