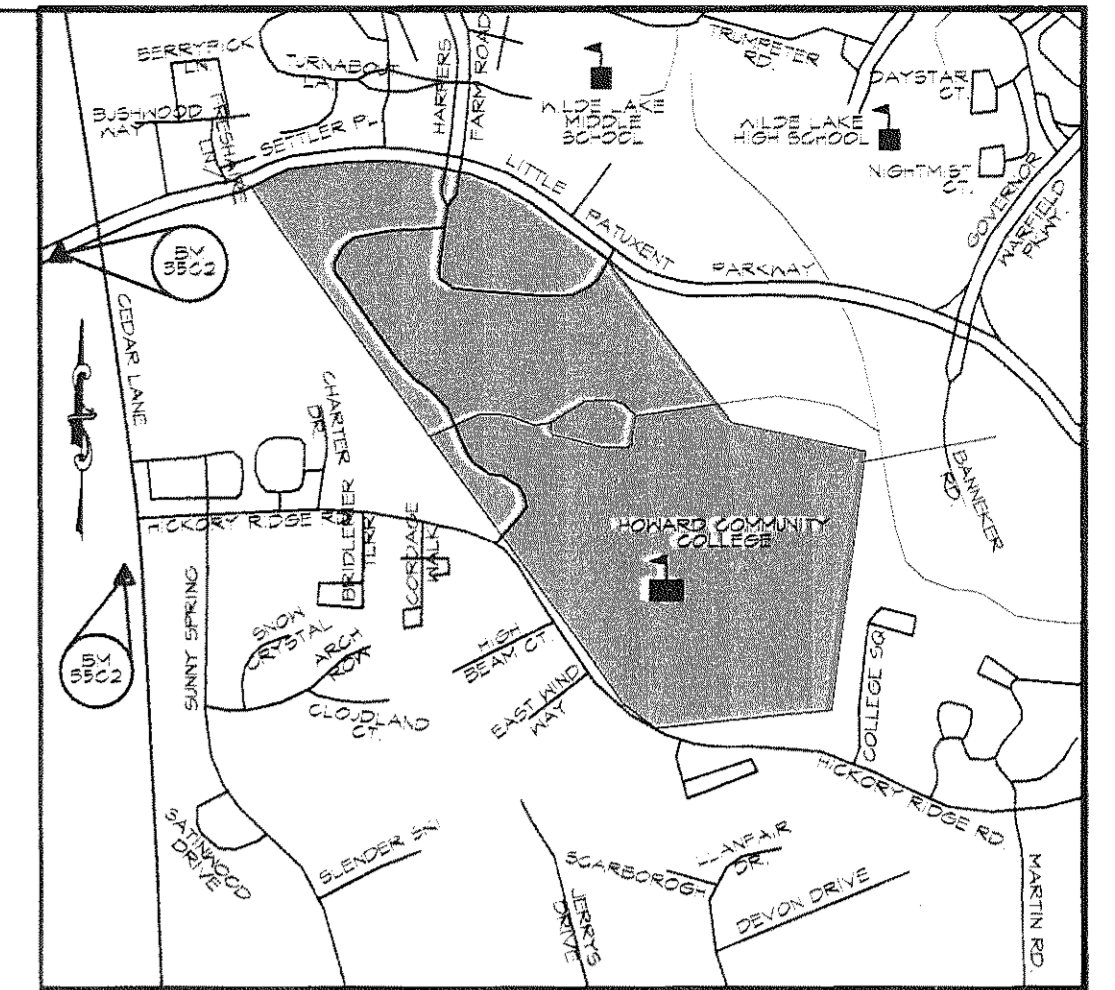


ENVIRONMENTAL CONCEPT PLAN HOWARD COMMUNITY COLLEGE PROPOSED HEALTH SCIENCE BUILDING 5TH ELECTION DISTRICT HOWARD COUNTY, MD

BENCHMARK DATA
HORIZONTAL, VERTICAL AND VERTICAL ANGLE CONTROL BASED ON
GPS OBSERVATIONS HOWARD COUNTY DEPT OF PLANNING

POINT	NORTHING	EASTING	ELEV.
8623	104188.10N	562768.48E	442.04
8624	104188.10N	562768.48E	442.04



VICINITY MAP
SCALE 1" = 1000'
ADC MAP COORDINATES: 15-D6

INDEX OF DRAWINGS

- ECP-1 - TITLE SHEET
- ECP-2 - OVERALL EXISTING IMPERVIOUS AREA MAP
- ECP-3 - EXISTING CONDITIONS SITE LOD / IMPERVIOUS AREA MAP
- ECP-4 - PROPOSED CONDITIONS SITE LOD / IMPERVIOUS AREA MAP
- ECP-5 - CONCEPTUAL ENVIRONMENTAL SITE DESIGN PLAN
- ECP-6 - CONCEPTUAL EROSION & SEDIMENT CONTROL PLAN

SITE ANALYSIS DATA SHEET

1. SITE ADDRESS: 10901 LITTLE PATUXENT PKY, COLUMBIA, MD 21044
2. OWNER/APPLICANT: BOARD OF TRUSTEES OF HOWARD COUNTY COMMUNITY COLLEGE
3. TAX ACCOUNT NO.: 15-045868
4. PROPERTY REFERENCE: MAP 35, PLAT 16125, BLOCK 6, LOT 47, PARCEL B, ELECTION DISTRICT NO. 5
5. ZONING: NT POR, EXISTING USE: PARKING LOT, PROPOSED USE: EDUCATIONAL BUILDING
6. AREA OF TOTAL SITE: 17.83 ACRES
7. TOTAL PROJECT AREA: 6.54 ACRES
8. PROPOSED IMPERVIOUS AREA WITHIN THE LOD = 3.93 AC.
9. PROPOSED OPEN SPACE WITHIN THE LOD = 2.99 AC.
10. THERE ARE NO WETLANDS, FLOOD PLAINS, FOREST CONSERVATION, STEEP SLOPES OR ERODIBLE SOILS WITHIN THE SITE LOD.
11. FOREST CONSERVATION OBLIGATIONS FOR THE ENTIRE COMMUNITY COLLEGE CAMPUS WERE ADDRESSED UNDER SDP-01-86 AND REVISED UNDER SDP-08-196 (PLAT NO'S 16125, AND 16126; DELETING FOREST CONSERVATION EASEMENT 'S'). PARTS OF FOREST CONSERVATION EASEMENTS 'A', 'B', 'C' AND 'J' WERE ABANDONED (56,750 SQ. FT.) AND PAYMENT OF ABANDONMENT FEE MADE UNDER F-07-10 (PLAT NO'S 14049, 14050 AND 14051).
12. APPROVAL OF THIS PLAN IS FOR EROSION & SEDIMENT CONTROL MEASURES ONLY. ALL COUNTY AND STATE REQUIREMENTS FOR DEVELOPMENT ON THIS SITE AND COMPLIANCE WITH APPLICABLE SUBDIVISION AND ZONING REGULATIONS WILL BE FURTHER REVIEWED UNDER THE APPROPRIATE SUBDIVISION AND/OR SITE DEVELOPMENT PLAN SUBMISSION.

LEGEND

- EX SANITARY MANHOLE
- EX STORM DRAIN MANHOLE
- EX ELECTRIC MANHOLE
- EX LIGHT POLE
- EX WATER METER
- EX SIGN
- EX UTILITY POLE
- EX BOLLARD POST
- EX DECIDUOUS TREE
- EX CONIFEROUS TREE
- EX GAS VALVE
- EX GUY WIRE
- EX WATER VALVE
- EX FIRE HYDRANT
- EX CLEANOUT
- EX PLANTING AREA
- EX ELECTRIC BOX
- EX SANITARY PIPE
- EX STORM PIPE
- SFB SOILS LINES
- SFC SOILS LINES
- FOREST CONSERVATION EASEMENT AREA
- ENVIRONMENTAL BUFFER AREAS
- PROPERTY LINE



STORMWATER MANAGEMENT APPROACH

THE "STORMWATER MANAGEMENT ACT OF 2001" REQUIRES THE IMPLEMENTATION OF AN ENVIRONMENTAL SITE DESIGN TO THE MAXIMUM EXTENT PRACTICAL. ENVIRONMENTAL SITE DESIGN TECHNIQUES PROMOTE GROUNDWATER RECHARGE BY TARGETING RUNOFF CHARACTERISTICS TO MIMIC WOODS IN A GOOD CONDITION AFTER DEVELOPMENT OF THE SITE.

NATURAL RESOURCES:
THE PROPOSED HEALTH SCIENCES BUILDING, ON THE HOWARD COMMUNITY COLLEGE CAMPUS WILL BE PLACED IN A PRE-DEVELOPED AREA THAT IS CURRENTLY BEING USED AS A PAVED PARKING LOT. SELECTION OF THIS SITE FOR THE PROPOSED IMPROVEMENTS PRESERVES NATURAL FEATURES SUCH AS STREAMS AND WOODLANDS THAT EXIST ON THE CAMPUS. ALTHOUGH THE PROJECT PROPOSES MINIMAL ENCROACHMENT INTO A WOODED AREA, PROTECTIVE MEASURES ARE BEING PROPOSED TO PRESERVE THE EXISTING WOODS. INDIVIDUAL TREES HERE LOCATED AND IDENTIFIED. TREE REMOVAL WILL ONLY OCCUR IN AREAS WHERE IT IS ABSOLUTELY NECESSARY FOR THE EFFECTIVE DEVELOPMENT OF THE SITE. RETAINING WALLS ARE BEING PROPOSED AS A PROTECTIVE MEASURE TO PRESERVE THE WOODED AREA. NO STEEP SLOPES, WETLANDS, FLOODPLAINS, STREAMS, ETC. WILL BE IMPACTED BY THIS PROJECT.

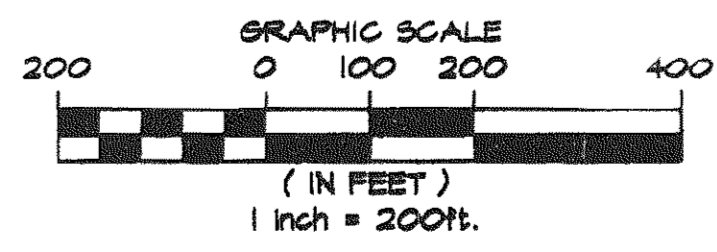
NATURAL FLOW PATTERNS:
EXISTING DRAINAGE PATTERNS WILL REMAIN UNCHANGED IN THE PROPOSED CONDITION. A CLOSED STORM DRAIN SYSTEM CURRENTLY CONVEYS FLOWS THROUGH THE SITE TO AN EXISTING STREAM NEAR THE SITE. A PORTION OF THIS STORM DRAIN WILL BE RELOCATED TO ACCOMMODATE THE NEW BUILDING FOOTPRINT. HOWEVER THE EXISTING OUTFALL WILL REMAIN UNDISTURBED. SINCE THE OVERALL DRAINAGE AREA TO THE CLOSED SYSTEM REMAINS UNCHANGED AND THE PROPOSED IMPROVEMENTS REDUCE THE EXISTING IMPERVIOUS AREA WITHIN THE LOD, FOR THE PROJECT BY APPROXIMATELY 1 PERCENT, DISCHARGES AT THE OUTFALL TO THE EXISTING STREAM WILL DECREASE.

SITE DESIGN:
SHEET FLOW FROM OPEN SECTION WALKWAYS, GRASS BUFFER AREAS AND ALTERNATIVE SURFACES ARE ELEMENTS THAT HAVE BEEN INCLUDED IN THE SITE DESIGN TO ENHANCE WATER QUALITY TREATMENT. REQUIREMENTS FOR THE NON-ROOFTOP DISCONNECT CREDIT HAVE BEEN MET BY APPROXIMATELY 19,000 SQUARE FEET OF IMPERVIOUS WALKWAY AREA. POROUS CONCRETE PAVEMENT IS BEING PROPOSED FOR USE IN A LOADING AREA, TRAFFIC CIRCLE AND A WALKWAY AT THE EASTERN LOT STUDENT DROP OFF AREA, ALL TOTALING 6038 S.F. APPROXIMATELY 9,448 S.F. OF IMPERVIOUS AREA IS BEING PROPOSED FOR TREATMENT BY THIS PRACTICE AND ANOTHER 4,193 S.F. IS BEING TREATED BY SIMILAR MEANS OF FILTERING THROUGH A LAYER OF PLANTING MEDIUM TO A STORE RESERVOIR. ALTHOUGH THE SOILS SHOWN WITHIN THE POROUS PAVEMENT AREAS ARE MOSTLY H56 'D', THESE AREAS ARE LOCATED NEAR THE DIVIDING LINE BETWEEN H56 'B' & 'C' SOILS. ADDITIONAL SOIL TESTING WILL BE REQUIRED TO DETERMINE IF ADEQUATE INFILTRATABLE MATERIAL IS AVAILABLE BENEATH THE PROPOSED POROUS CONCRETE AREAS TO SUPPORT THIS ALTERNATIVE SURFACE PRACTICE.

EROSION & SEDIMENT CONTROL:
A CONCEPTUAL EROSION & SEDIMENT CONTROL PLAN IS BEING PROVIDED TO DEMONSTRATE THAT SEDIMENT CONTROL PRACTICES WILL BE PROVIDED TO EFFECTIVELY TREAT SEDIMENT LADEN RUNOFF DURING CONSTRUCTION WITHOUT IMPACTING THE MICRO-SCALE FACILITIES THAT ARE BEING PROPOSED FOR PERMANENT RUNOFF TREATMENT.

ESD PLANNING TECHNIQUES:
ENVIRONMENTAL SITE DESIGN IS BEING ACHIEVED THROUGH THE APPLICATION OF ALTERNATIVE SURFACES, NON-STRUCTURAL PRACTICES AND MICRO-SCALE PRACTICES. MICRO-BIO-RETENTION FACILITIES ARE BEING PROPOSED TO CONTRIBUTE TO MEETING ESQ VOLUME REQUIREMENTS FOR THE SITE. HYDROLOGIC SOIL GROUP 'D' SOILS LIMITED THE SELECTION OF MICRO-SCALE PRACTICES THAT COULD BE USED. BIO-RETENTION FACILITIES WERE SELECTED DUE TO THE UNDER DRAIN SYSTEM THAT PROVIDES SOME ASSURANCE THAT THE FACILITIES WILL NOT RETAIN WATER AND BECOME A NUISANCE.

LOCATION MAP
SCALE: 1" = 200'



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. 91084, EXPIRATION DATE: 11/21/12.

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PHONE: 410-792-8986
FAX: 410-792-7697

AYERS SAINT GROSS ARCHITECTS + PLANNERS
100 Hill Street, Suite 100
Baltimore, MD 21201
P: 410-547-8800 F: 410-547-8418

APPROVED: Howard County Department of Planning & Zoning

Michael J. DeLoach 12/15/10
Chief, Division of Land Development

Michael J. DeLoach 12/15/10
Chief, Development Engineering Division

Rev:	Date:	Description:	By:	Prepared For and Owner:
1				Howard Community College 10901 Little Patuxent Parkway Columbia, Maryland 21044 (410) 772-4820

Project Name: **Howard Community College Health Sciences Building ENVIRONMENTAL CONCEPT PLAN**

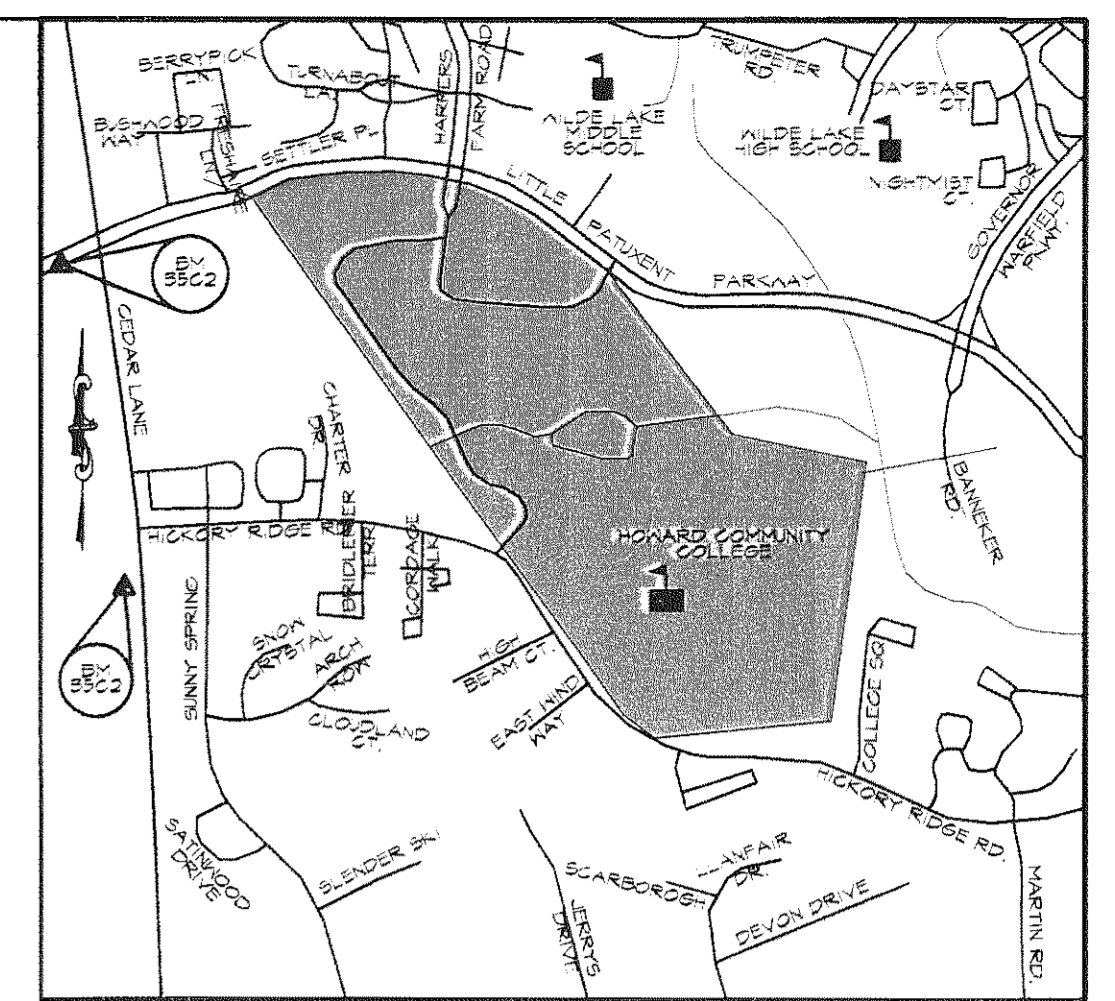
ELECTION DISTRICT NO. 5
PARCEL 47, TAX MAP 35, GRID 6
TAX ACCOUNT # 045868
HOWARD COUNTY, MARYLAND

Date:	15 NOV 2010	Scale:	1" = 200'
Drawn By:	GAH / FTK	Designed By:	SMC
Approved By:	RLB	Project No.:	20961
Tax Map-Grid:	35-6	Zoning:	NT / POR

ENVIRONMENTAL CONCEPT PLAN TITLE SHEET

SHEET 1 OF 6
ECP-1

SDP 00-000



VICINITY MAP
SCALE 1" = 1000'

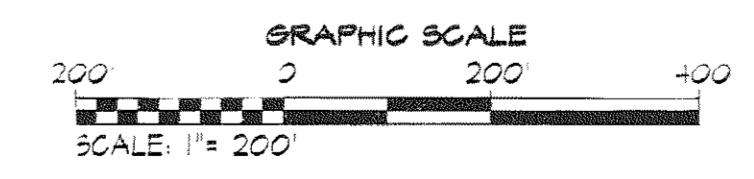


OVERALL EXISTING IMPERVIOUS AREA MAP
SCALE: 1" = 200'

LEGEND

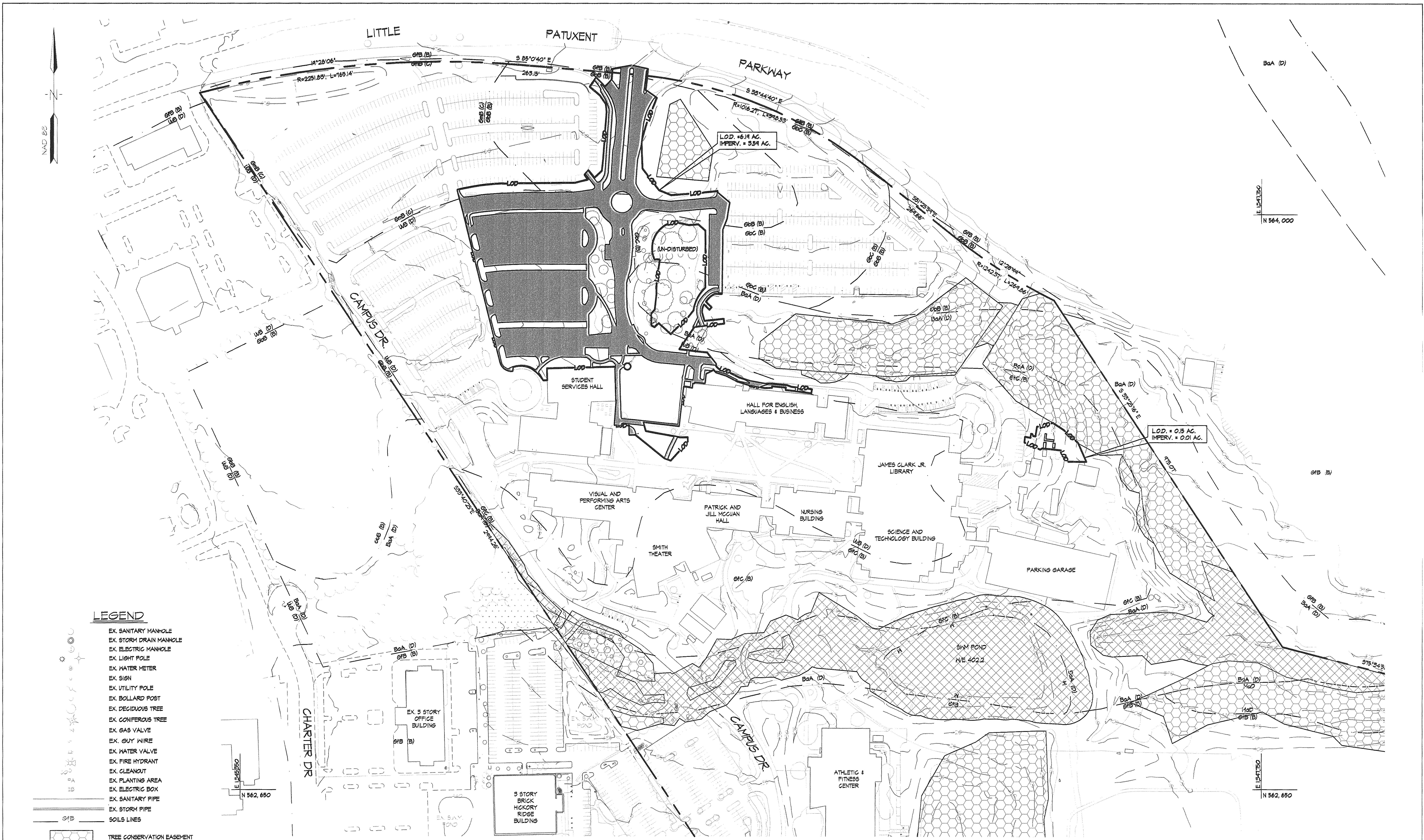
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- EX. STORM DRAIN MANHOLE
- EX. ELECTRIC MANHOLE
- EX. LIGHT POLE
- EX. WATER METER
- EX. SIGN
- EX. UTILITY POLE
- EX. BOLLARD POST
- EX. DECIDUOUS TREE
- EX. CONIFEROUS TREE
- EX. GAS VALVE
- EX. GUY WIRE
- EX. WATER VALVE
- EX. FIRE HYDRANT
- EX. CLEANOUT
- EX. PLANTING AREA
- EX. ELECTRIC BOX
- EX. SANITARY PIPE
- EX. STORM PIPE
- SOILS LINES
- LIMITS OF EXISTING IMPERVIOUS AREA
- ENVIRONMENTAL BUFFER AREA
- PROPERTY LINE

NOTE:
 TOTAL PROPERTY AREA = 5,522,142.00 SQ. FT. (126.55 ACRES)
 ENVIRONMENTAL EASEMENT/BUFFER AREA = 1,364,244.20 SQ. FT. (31.22 ACRES)
 TOTAL DEVELOPABLE AREA = 3,768,375.60 SQ. FT. (86.51 ACRES)
 EXISTING IMPERVIOUS AREA = 1,666,930.60 SQ. FT. (38.21 ACRES)
 EXISTING PERVIOUS AREA = 3,465,716.80 SQ. FT. (79.56 ACRES)
 SITE IMPERVIOUSNESS = IMPERVIOUS AREA/DEVELOPABLE AREA = 44.24%
 SITE QUALIFIES FOR RE-DEVELOPMENT



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		APPROVED: Howard County Department of Planning & Zoning	Rev: <input type="checkbox"/>	Date: <input type="checkbox"/>	Description: <input type="checkbox"/>	By: <input type="checkbox"/>	Prepared For and Owner:	Project Name:	Date:	Scale:	Sheet Title:	Seal:	Sheet Number:
		 Chief, Division of Land Development	 Chief, Development Engineering Division	12/15/10 Date	12.15.10 Date	Howard Community College 10801 Little Patuxent Parkway Columbia, Maryland 21044 (410) 772-4820	Howard Community College Health Sciences Building ENVIRONMENTAL CONCEPT PLAN PARCEL 47, TAX MAP 35, GRID 6 TAX ACCOUNT # 045688 HOWARD COUNTY, MARYLAND	15 NOV 2010 1" = 200' Drawn By: GAH / FTK Designed By: SMC Approved By: RLB Project No: 20981 Tax Map-Grid: 35-6 Zoning: NT / POR	OVERALL EXISTING SITE IMPERVIOUS AREA MAP	 RICHARD L. GALT No. 031098 PROFESSIONAL ENGINEER 12-8-10	SHEET 2 OF 8 ECP-2		



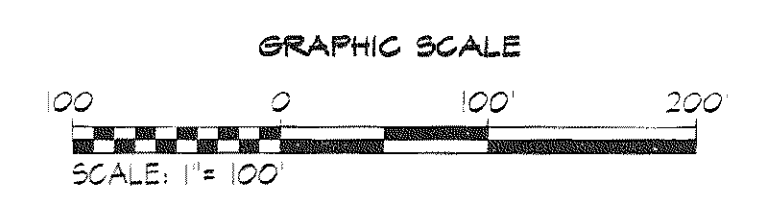
LEGEND

- EX. SANITARY MANHOLE
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- EX. CLEANOUT
- EX. PLANTING AREA
- EX. ELECTRIC BOX
- EX. SANITARY PIPE
- EX. STORM PIPE
- SOILS LINES
- TREE CONSERVATION EASEMENT
- ENVIRONMENTAL BUFFER AREAS
- PROPERTY LINE
- LIMIT OF DISTURBANCE

NOTE
 TOTAL AREA INSIDE L.O.D. = 276,319 SQ. FT. (6.34 ACRES)
 TOTAL EXISTING IMPERVIOUS AREA INSIDE L.O.D. = 156,696 SQ. FT. (3.60 ACRES)
 TOTAL EXISTING OPEN SPACE/PERVIOUS AREA INSIDE L.O.D. = 119,619 SQ. FT. (2.75 ACRES)

EXISTING CONDITIONS SITE / L.O.D. IMPERVIOUS AREA MAP

SCALE: 1"=100'



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 Baltimore, MD 21202
 410-341-8800 410-341-8478

APPROVED: Howard County Department of Planning & Zoning

Neil Shindler 12/15/10
 Chief, Division of Land Development

Neil Shindler 12.15.10
 Chief, Development Engineering Division

Rev:	Date:	Description:	By:
1			
2			
3			
4			

Prepared For and Owner:
 Howard Community College
 10901 Little Patuxent Parkway
 Columbia, Maryland 21044
 (410) 772-4820

Project Name:
**Howard Community College
 Health Sciences Building
 ENVIRONMENTAL CONCEPT PLAN**

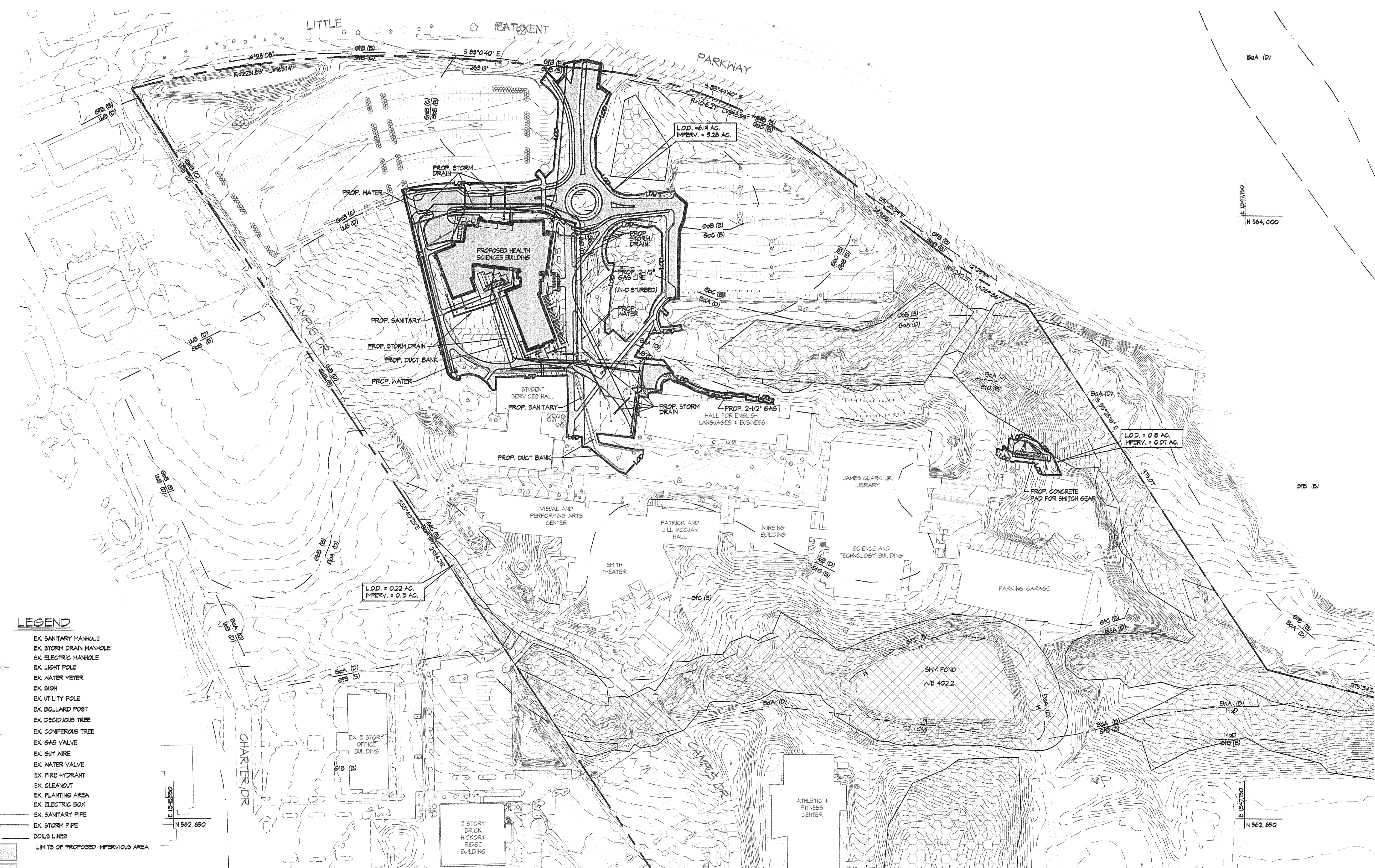
ELECTION DISTRICT NO. 5
 PARCEL 47, TAX MAP 35, GRID 6
 TAX ACCOUNT # 045888
 HOWARD COUNTY, MARYLAND

Date:	15 NOV 2010	Scale:	1" = 100'
Drawn By:	GAH / FTK	Designed By:	SMC
Approved By:	RLB	Project No.:	20961
Tax Map-Grid:	35-6	Zoning:	NT / POR

Sheet Title:
**EXISTING SITE / L.O.D.
 IMPERVIOUS AREA MAP**

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 License No. 91084
 EXPIRATION DATE: 11-21-12

Sheet Number:
 SHEET 3 OF 8
ECP-3

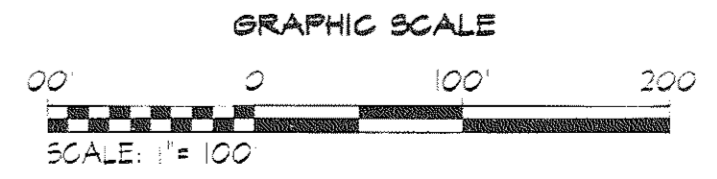


LEGEND

- EX. SANITARY MANHOLE
- EX. STORM DRAIN MANHOLE
- EX. ELECTRIC MANHOLE
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- EX. WATER METER
- EX. SIGN
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- EX. CLEANOUT
- EX. PLANTING AREA
- EX. ELECTRIC BOX
- EX. SANITARY PIPE
- EX. STORM PIPE
- SOILS LINES
- LIMITS OF PROPOSED IMPERVIOUS AREA
- TREE CONSERVATION EASEMENT
- ENVIRONMENTAL BUFFER AREAS
- PROPERTY LINE
- LIMIT OF DISTURBANCE

NOTE
 TOTAL AREA INSIDE L.O.D. = 216,375 SQ.FT. (6.34 ACRES)
 TOTAL PROPOSED IMPERVIOUS AREA INSIDE L.O.D. = 145,657 SQ.FT. (3.35 ACRES)
 TOTAL OPEN SPACE/PERVIOUS AREA INSIDE L.O.D. = 130,318 SQ. FT. (2.99 ACRES)

PROPOSED CONDITIONS SITE/L.O.D. IMPERVIOUS AREA MAP
 SCALE: 1"=100'



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 Baltimore, MD 21202
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APPROVED: Howard County Department of Planning & Zoning

Kevin J. DeLuca 12/15/10
 Chief, Division of Land Development

Shed Adams 12.15.10
 Chief, Development Engineering Division

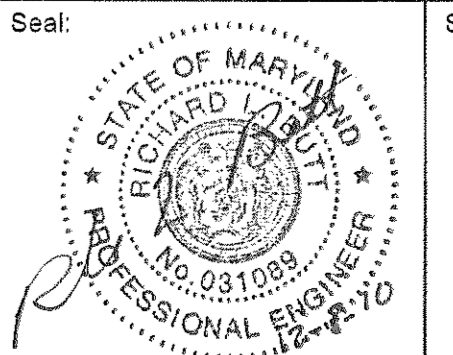
Rev:	Date:	Description:	By:	Prepared For and Owner:
1				Howard Community College 10901 Little Patuxent Parkway Columbia, Maryland 21044 (410) 772-4820

Project Name: **Howard Community College Health Sciences Building ENVIRONMENTAL CONCEPT PLAN**

PARCEL 47, TAX MAP 35, GRID 6
 TAX ACCOUNT # 045688
 HOWARD COUNTY, MARYLAND

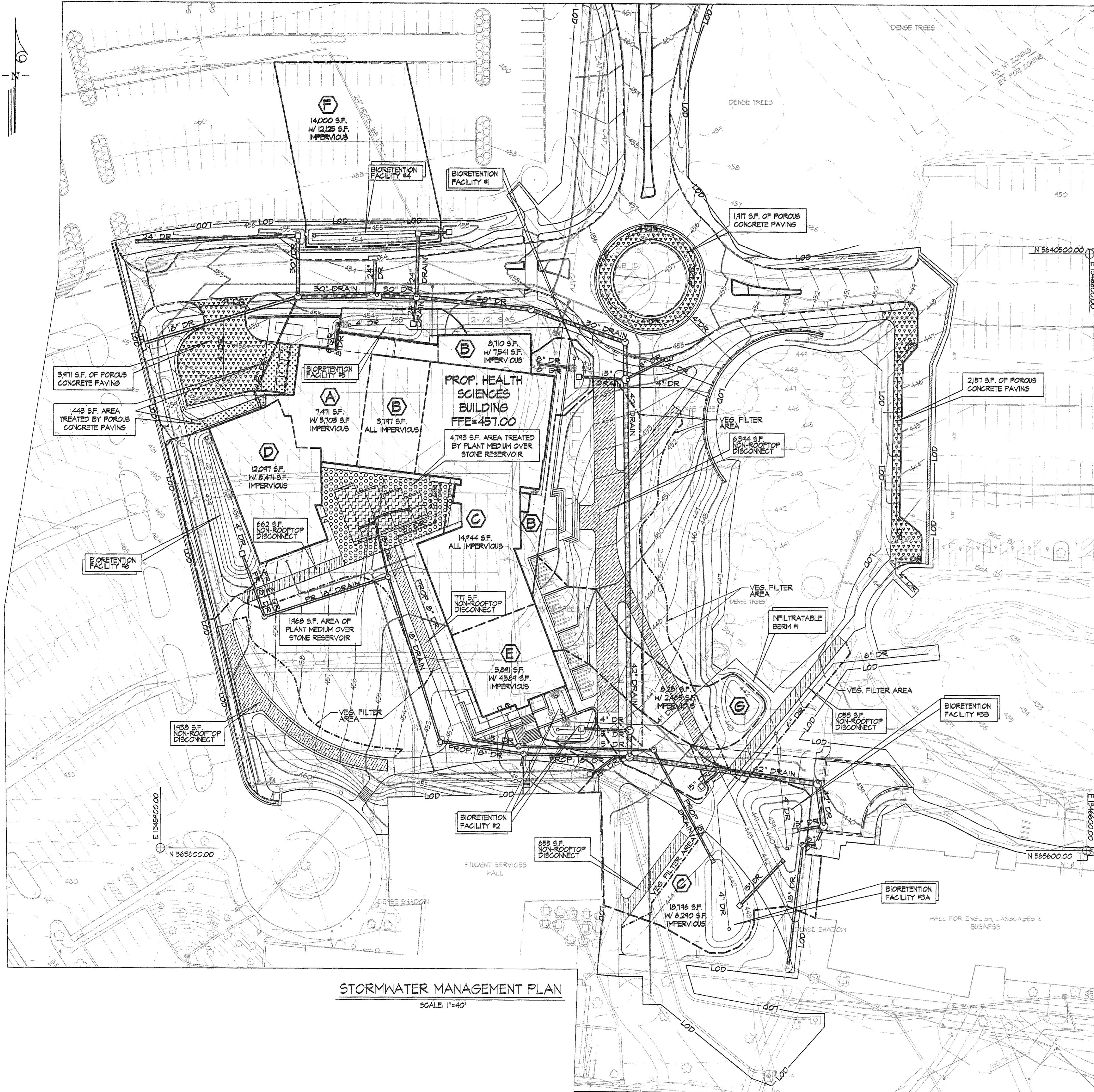
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Drawn By:	GAH / FTK	Designed By:	SMC
Approved By:	RLB	Project No.:	20991
Tax Map-Grid:	35-6	Zoning:	NT / POR

Sheet Title: **PROPOSED SITE / L.O.D. IMPERVIOUS AREA MAP**

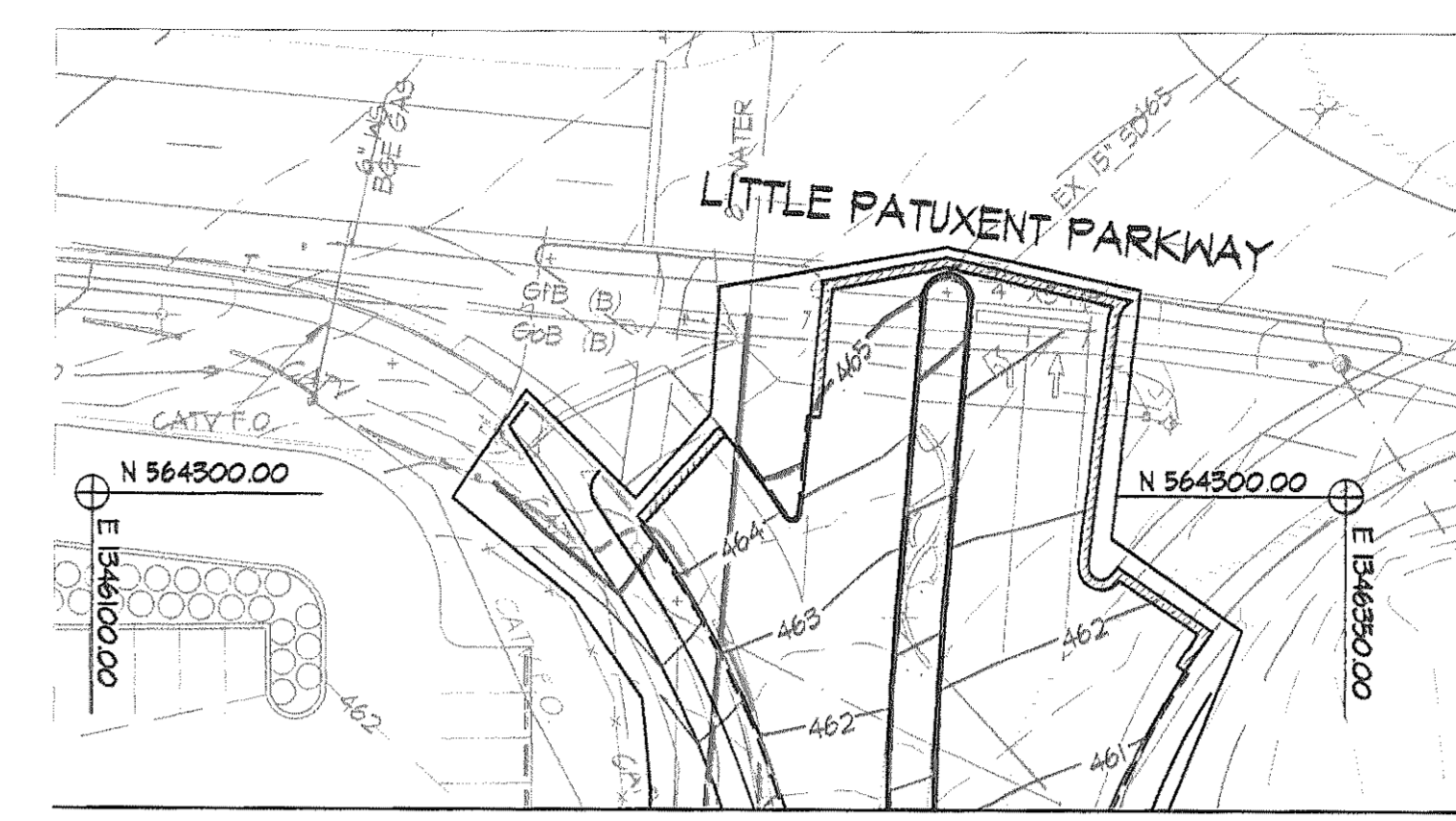


Sheet Number: **SHEET 4 OF 6**
ECP-4

MATCH LINE SEE THIS SHEET



STORMWATER MANAGEMENT PLAN
SCALE: 1"=40'



MATCH LINE SEE THIS SHEET

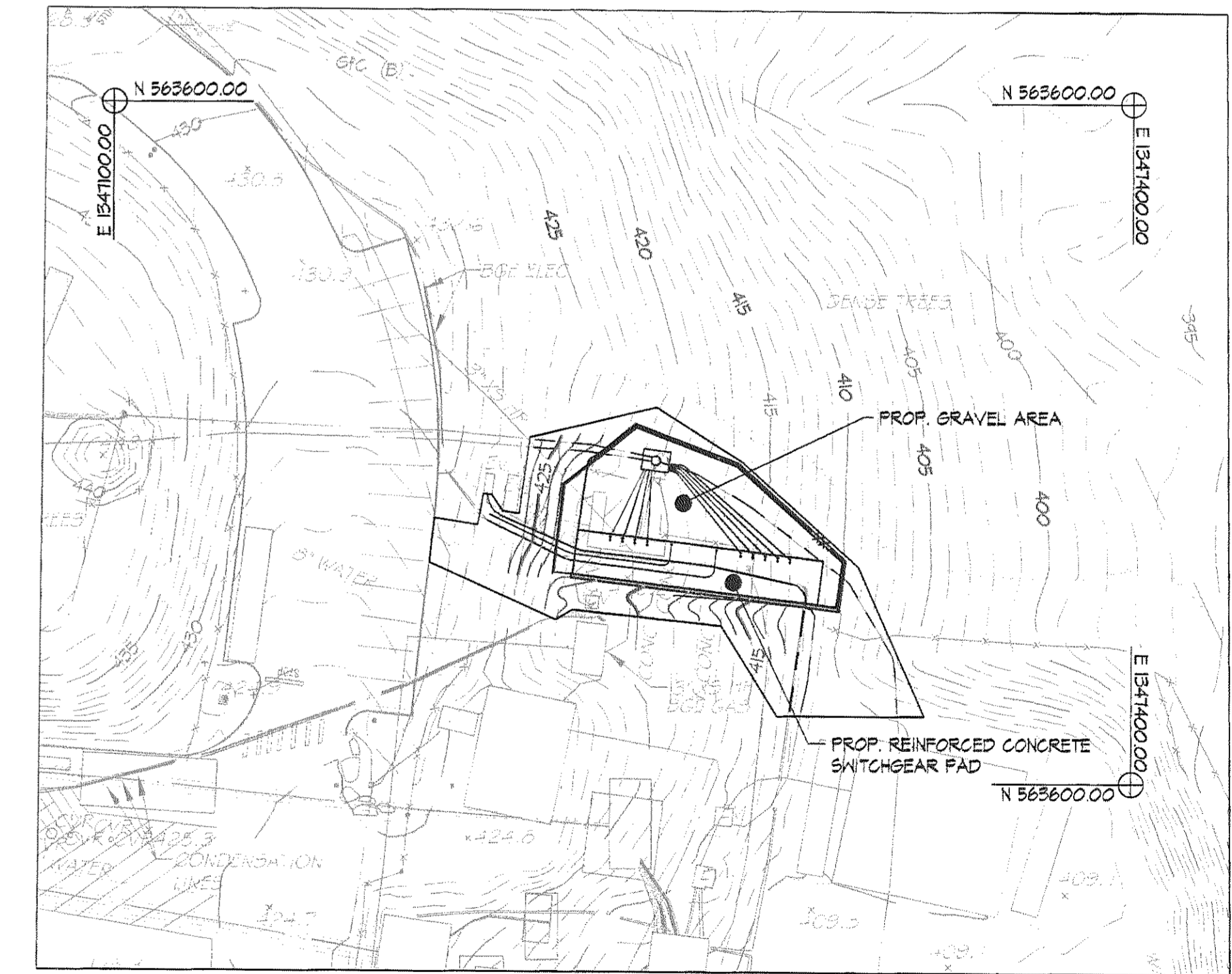
- LEGEND**
- AREAS TREATED BY NON-ROOFTOP DISCONNECT
 - PERVIOUS CONCRETE
 - AREAS TREATED BY PERVIOUS PAVEMENT
 - PLANTING BED WITH STONE RESERVOIR BENEATH
 - AREAS TREATED BY STONE RESERVOIR
 - REINFORCED CONCRETE
 - VEGETATIVE FILTER AREA
 - LOD
 - LIMIT OF DISTURBANCE
 - DRAINAGE AREA
 - PROP. TEE CONNECTION
 - PROP. WATER VALVE
 - PROP. FIRE HYDRANT
 - PROP. MAJOR CONTOUR
 - PROP. MINOR CONTOUR
 - PROP. BUILDING
 - PROP. EDGE OF PAVEMENT
 - EX. MINOR CONTOUR
 - EX. MAJOR CONTOUR
 - EX. FIRE HYDRANT
 - EX. CLEANOUT
 - EX. PLANTING AREA
 - EX. ELECTRIC BOX
 - EX. SANITARY PIPE
 - EX. STORM PIPE
 - EX. ELECTRIC
 - EX. CABLE TV
 - EX. SANITARY MANHOLE
 - EX. STORM DRAIN MANHOLE
 - EX. ELECTRIC MANHOLE
 - EX. LIGHT POLE
 - EX. WATER METER
 - EX. SIGN EX. UTILITY POLE
 - EX. BOLLARD POST
 - EX. DECIDUOUS TREE
 - EX. CONIFEROUS TREE
 - EX. GAS VALVE
 - EX. GUY WIRE
 - EX. WATER VALVE

Project: Howard Community College - Health Sciences Building
J.O. 21-100383
By: SVM Date: 11/18/2010
Checked: Date:

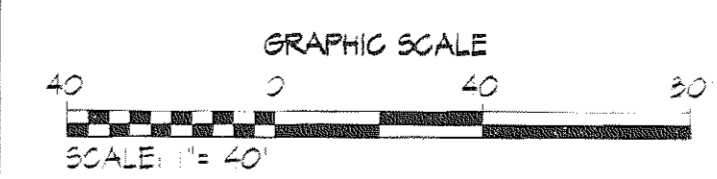
ESD Summary Table

Facility	Drainage Area (S.F.)	Area (S.F.)	% Impervious	P _t	ESD _v (C.F.)	P _t	ESD _v (C.F.)	Treated ESD _v (C.F.)	Required ESD _v (C.F.)
Non-Rooftop Disconnect	-	11,478	100	-	-	1.00	809	809	-
Permeable Pavement	-	14,278	100	-	-	1.70	1,821	1,821	-
Micro-Bioretention Facility No. 1	B	8,710	87	0.33	200	0.51	307	409	-
Micro-Bioretention Facility No. 2	E	5,881	78	1.16	425	1.40	518	691	-
Micro-Bioretention Facility No. 3	C	33,742	83	0.44	768	1.24	2,144	2,939	-
Micro-Bioretention Facility No. 4	F	14,000	87	0.52	805	0.60	598	785	-
Micro-Bioretention Facility No. 5	A	7,471	75	1.42	848	0.88	424	539	-
Micro-Bioretention Facility No. 5	D	12,097	70	0.81	418	1.33	693	1,271	-
Infiltrable Berm No. 1	G	8,281	90	-	-	1.58	350	350	-
Total							8,072	9,704	8,842

Conclusion: The treated ESD_v (8,704 C.F.) is greater than the required ESD_v (8,842 C.F.), therefore, Environmental Site Design has been achieved.



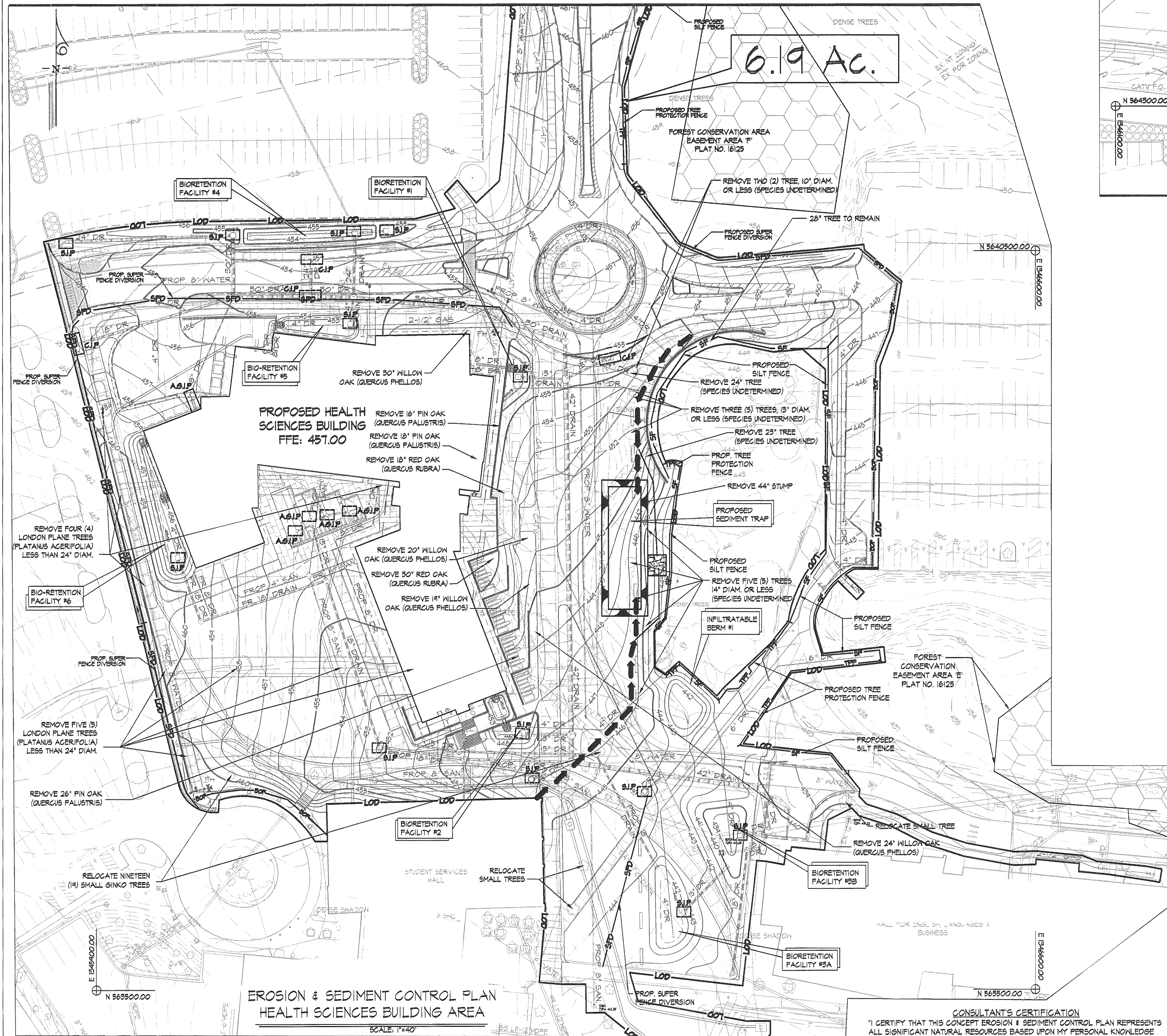
SWITCHGEAR AREA
SCALE: 1"=40'



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 ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS 1000 N. ... BALTIMORE, MD 21202 TEL: 410-276-5995 FAX: 410-276-7419	 ARCHITECTS + PLANNERS 1000 N. ... BALTIMORE, MD 21202 TEL: 410-247-8000 FAX: 410-247-8419	APPROVED: Howard County Department of Planning & Zoning Chief, Division of Land Development Date: 12/18/10	Rev: Date: 12-15-10 Description:	By: Prepared For and Owner: Howard Community College 10901 Little Patuxent Parkway Columbia, Maryland 21044 (410) 772-4820	Project Name: Howard Community College Health Sciences Building ENVIRONMENTAL CONCEPT PLAN PARCEL 47, TAX MAP 35, GRID 6 TAX ACCOUNT # 045868 HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 5	Date: 15 NOV 2010 Scale: 1" = 40' Sheet Title: STORMWATER MANAGEMENT PLAN SHEET	Drawn By: GAH / FTK Designed By: SMC Project No: 20961 Zoning: NT / POR	Approved By: RLB Tax Map-Grid: 35-6	Seal: SHEET 5 OF 6 ECP-5
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MATCH LINE - SEE THIS SHEET

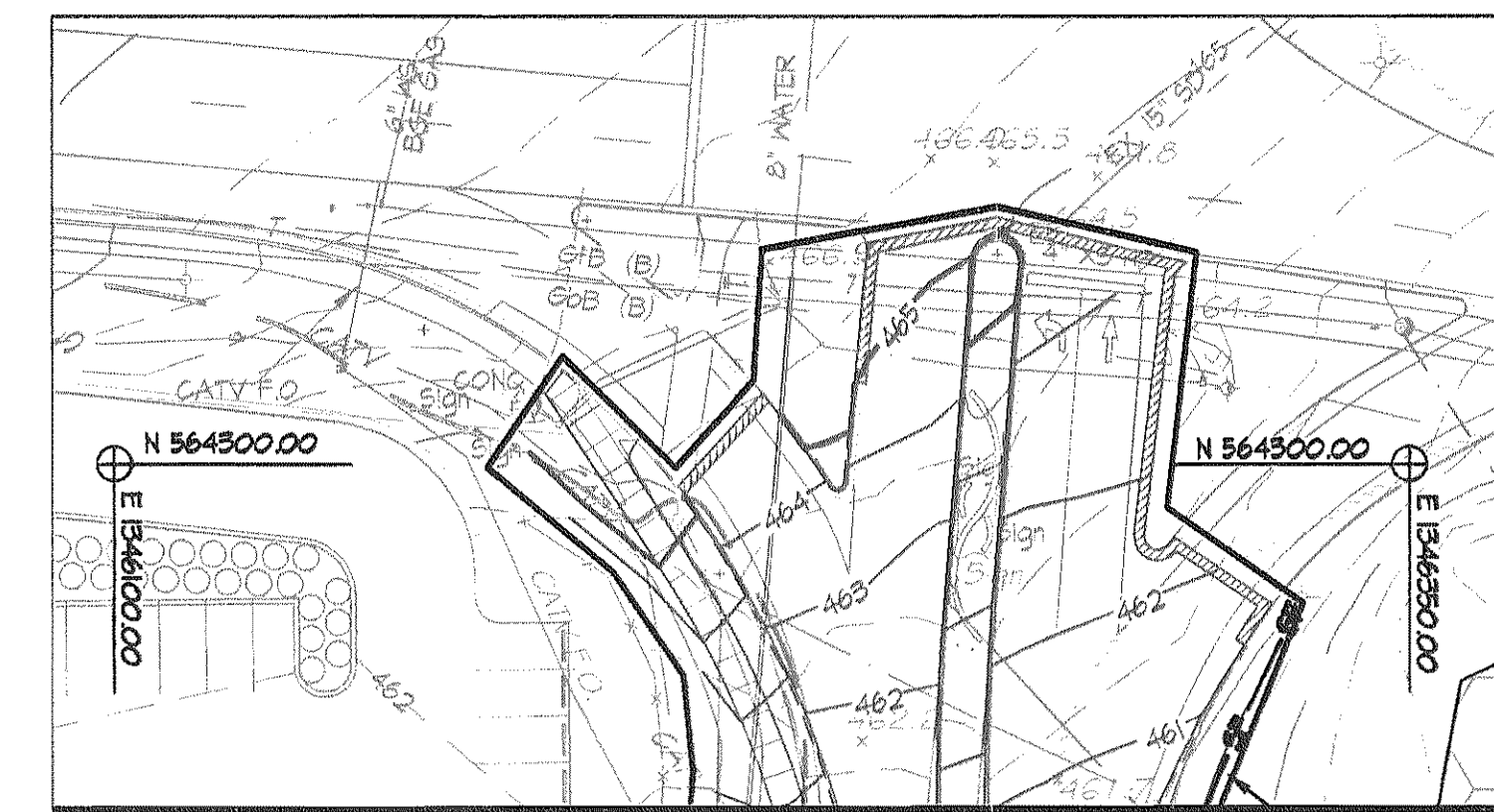


EROSION & SEDIMENT CONTROL PLAN
HEALTH SCIENCES BUILDING AREA
SCALE: 1"=40'

ECP APPROVED
REVIEWER: _____ DATE: _____
PROCEED TO DEVELOPMENT PHASE: YES (APPROVAL SUBJECT TO ADDRESSING COMMENTS ON NEXT PLAN PHASE)
NO (ADDRESS COMMENTS AND RESUBMIT PLANS)

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. 31089 EXPIRATION DATE: 11/21/12.

CONSULTANT'S CERTIFICATION
"I CERTIFY THAT THIS CONCEPT EROSION & SEDIMENT CONTROL PLAN REPRESENTS ALL SIGNIFICANT NATURAL RESOURCES BASED UPON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY CONSERVATION DISTRICT AND 'STANDARDS & SPECIFICATIONS FOR SOIL EROSION & SEDIMENT CONTROL'. I HAVE REVIEWED THIS CONCEPT EROSION & SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.
SIGNATURE: *Richard L. Butt* MD LICENSE # 31089
PRINT NAME: RICHARD L. BUTT DATE: 12-8-10



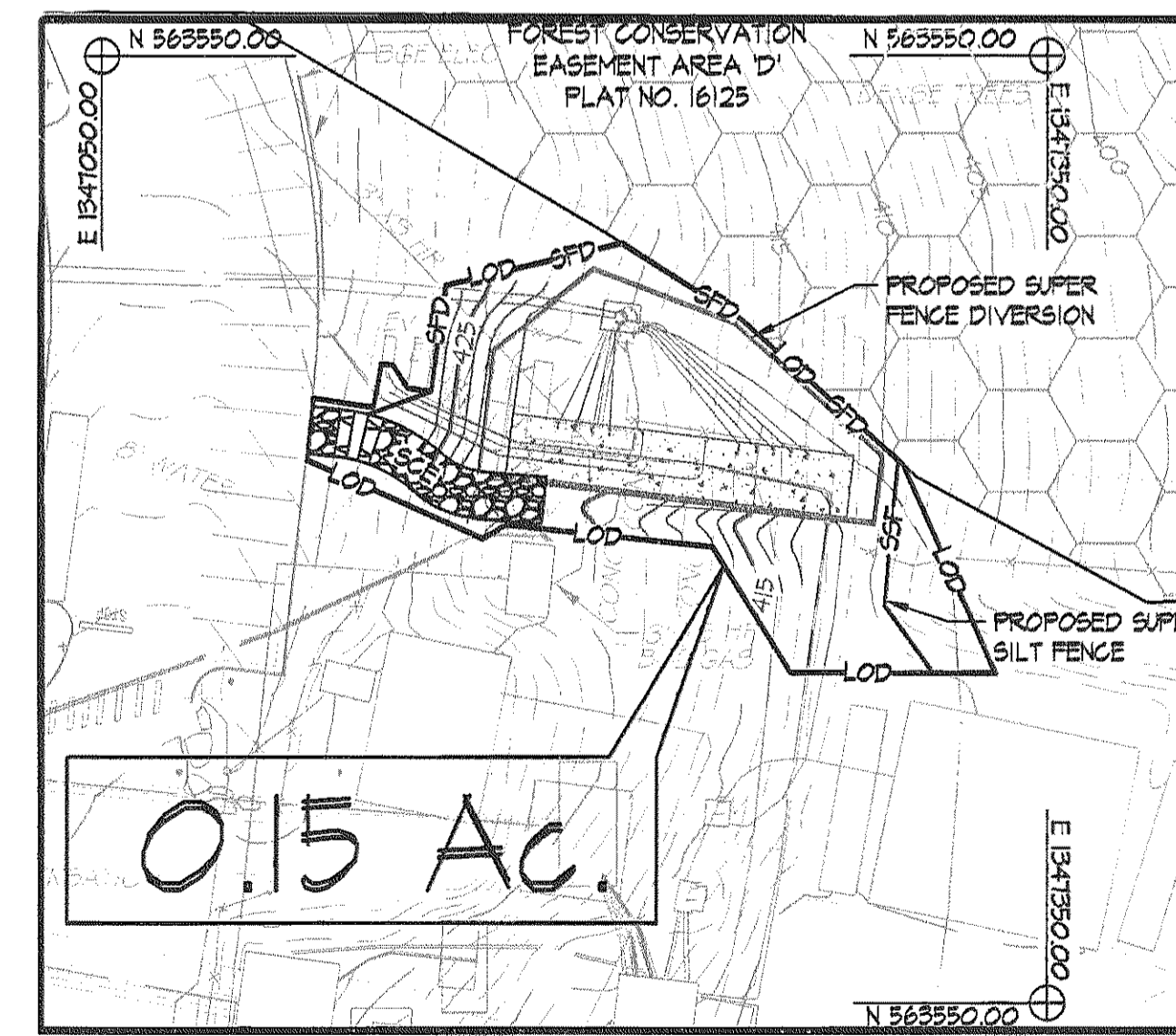
MATCH LINE - SEE THIS SHEET

SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (913-1895).
- 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.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS 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.
- 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.
- 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.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 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.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORK DAY, WHICHEVER IS SHORTER.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT. CONTACT THE MARYLAND DEPARTMENT OF THE ENVIRONMENT INSPECTOR AT 410-221-2589 A MINIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING. THE CONTRACTOR IS TO SUBMIT A SCHEDULE OF WORK ACTIVITIES TO THE DEPARTMENT OF PUBLIC WORKS PRIOR TO INITIATION OF ANY GRADING ACTIVITIES.
- INSTALL STABILIZED CONSTRUCTION ENTRANCES AT LOCATIONS SHOWN AND INSTALL INLET PROTECTION AND BLOCKING WHERE SPECIFIED FOR EXISTING INLETS.
- INSTALL THE PERIMETER SILT FENCE, SUPER SILT FENCE, SAFETY FENCE, AND SUPER FENCE DIVERSIONS AT LOCATIONS SHOWN. PROVIDE RIP-RAP PROTECTION WHERE SHOWN.
- INSTALL SEDIMENT TRAP AND EARTH DIKE.
- STRIP THE TOPSOIL, REMOVE EXISTING PAVING CURBS & GUTTER AND OTHER EXISTING FEATURES AS SPECIFIED ON SHEET 3 OF 9 OR AS DIRECTED BY OWNER.
- BEGIN GRADING TO BRING SITE TO SUB-GRADE WITHIN THE LIMITS OF DISTURBANCE.
- INSTALL UTILITIES. INSTALL SITE STORM DRAIN PROVIDE INLET PROTECTION WHERE INDICATED.
- BRING ROADS, PARKING AREAS AND BUILDING PAD TO SUB-GRADE AND BEGIN CONSTRUCTION OF BUILDING AND RETAINING WALLS. PLACE CR-6 BASE COURSE.
- STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED & MULCH.
- INSTALL SURFACE PAVING & SIDEWALK AND SITE LANDSCAPING. STABILIZE ALL REMAINING DISTURBED AREAS WITH TOPSOIL, SEED & MULCH.
- FLUSH STORM DRAIN PIPES INTO SEDIMENT TRAP AND REMOVE ANY SEDIMENT THAT MAY HAVE COLLECTED IN STORM DRAIN STRUCTURES AND DISPOSE OF IN AN AREA WITH AN APPROVED SEDIMENT AND EROSION CONTROL PLAN AND PERMIT.
- INSTALL MICRO-SCALE STORMWATER MANAGEMENT DEVICES.
- UPON APPROVAL FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT INSPECTOR, REMOVE ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES. REMOVE TEMPORARY DEWATERING DEVICE, COFFER DAMS AND BARRIERS TO CONVERT SEDIMENT BASIN BACK TO PERMANENT STORMWATER MANAGEMENT POND. REPAIR CURBS & GUTTER AND PAVING AS REQUIRED AFTER REMOVAL OF SEDIMENT CONTROL MEASURES. STABILIZE ALL AREAS DISTURBED DURING REMOVAL OF SEDIMENT CONTROL DEVICES. PROVIDE COPY OF HSPD LETTER OF APPROVAL FOR POND AS-BUILT TO INSPECTOR.



EROSION & SEDIMENT CONTROL PLAN
SWITCHGEAR AREA
SCALE: 1"=40'

GRAPHIC SCALE
SCALE: 1"=40'

LEGEND

- SEDIMENT TRAP
- AT GRADE INLET PROTECTION
- CURB INLET PROTECTION
- STANDARD INLET PROTECTION
- LIMIT OF DISTURBANCE
- DIVERSION DIKE
- SUPER FENCE DIVERSION
- SUPER SILT FENCE
- SILT FENCE
- TREE PROTECTION FENCE
- BLAZE ORANGE SAFETY FENCE
- PROP. TEE CONNECTION
- PROP. WATER VALVE
- PROP. FIRE HYDRANT
- PROP. MAJOR CONTOUR
- PROP. MINOR CONTOUR
- PROP. BUILDING
- PROP. EDGE OF PAVEMENT
- EX. MINOR CONTOUR
- EX. MAJOR CONTOUR
- EX. FIRE HYDRANT
- EX. CLEANOUT
- EX. PLANTING AREA
- EX. ELECTRIC BOX
- EX. SANITARY PIPE
- EX. STORM PIPE
- EX. ELECTRIC
- EX. TELEPHONE
- EX. CABLE TV
- PROP. BUILDING
- EX. SANITARY MANHOLE
- EX. STORM DRAIN MANHOLE
- EX. ELECTRIC MANHOLE
- EX. LIGHT POLE
- EX. WATER METER
- EX. SIGN EX. UTILITY POLE
- EX. BOLLARD POST
- EX. DECIDUOUS TREE
- EX. CONIFEROUS TREE
- EX. GAS VALVE
- EX. GUY WIRE
- EX. WATER VALVE

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APPROVED: Howard County Department of Planning & Zoning	Rev:	Date:	Description:	By:	Prepared For and Owner:
<i>K. J. Slone</i> Chief, Division of Land Development	1	12/15/10			Howard Community College 10901 Little Patuxent Parkway Columbia, Maryland 21044 (410) 772-4820
<i>Richard L. Butt</i> Chief, Development Engineering Division	2	12-18-10			

Project Name: **Howard Community College Health Sciences Building ENVIRONMENTAL CONCEPT PLAN**

PARCEL 47, TAX MAP 35, GRID 6
TAX ACCOUNT # 045688

ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND

Date:	15 NOV 2010	Scale:	1" = 40'
Drawn By:	GAH / FTK	Designed By:	SMC
Approved By:	RLB	Project No.:	20981
Tax Map-Grid:	35-6	Zoning:	NT / POR

Sheet Title: **EROSION & SEDIMENT CONTROL PLAN**

Sheet Number: SHEET 8 OF 9
ECP-6

STATE OF MARYLAND
Professional Engineer
Richard L. Butt
No. 31089
Exp. 11/21/12