

GENERAL NOTES

- THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY DESIGN STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL PHOTOGRAPHY DATED APRIL 9, 2005, WITH ONE-FOOT CONTOUR INTERVALS PREPARED BY HRA DATED NOVEMBER 23, 2005. THIS TOPOGRAPHY WAS SUPPLEMENTED BY FIELD RUN SURVEY WITH TWO-FOOT CONTOUR INTERVALS BY CHRISTOPHER CONSULTANTS, LTD. DATED NOVEMBER 2006.
- BASED ON HRA SURVEY MARYLAND COORDINATE SYSTEM NAD 83/91 ESTABLISHED BY GPS AND PREVIOUS TRAVERSE RUNS, NAV '88 ESTABLISHED ELEVATIONS SHOWN CONVENTIONAL METHODS.
- WATER IS PUBLIC. CONTRACT #44-1002-D. HOWEVER, A NEW CONTRACT HAS BEEN SUBMITTED AS PART OF THE DEVELOPMENT OF THIS SITE. THE EXISTING CONTRACT DRAWINGS SHALL BE REDECLINED TO REFLECT ALL CHANGES APPROVED UNDER THIS DEVELOPMENT. A NEW PUBLIC WATER AND UTILITY EASEMENT PLAN SHALL BE RECORDED PRIOR TO SDP APPROVAL ILLUSTRATING THE NEW EASEMENT ALIGNMENT AND THE ABANDONMENT OF THE EXISTING EASEMENT.
- SEWER IS PRIVATE. HOWEVER, A NEW CONTRACT HAS BEEN SUBMITTED AS PART OF THE DEVELOPMENT OF THIS SITE. PUBLIC SEWER TO THE PROPOSED BUILDING WILL BE PROVIDED IN ACCORDANCE WITH SECTION 18.122B OF THE HOWARD COUNTY CODE. PUBLIC SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- EXISTING UTILITIES ARE BASED ON HOWARD COUNTY RECORDS. ALL EXISTING UNDERGROUND UTILITIES TO BE FIELD VERIFIED. UTILITIES CONTRACTOR SHALL VERIFY THE SIZE AND LOCATIONS OF ALL UNDERGROUND UTILITIES AND TEST PIT ALL UTILITIES, INCLUDING PROPOSED TIE IN LOCATIONS, AT LEAST 5 DAYS PRIOR TO STARTING ANY WORK ON THESE DRAWINGS. DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IN ADVANCE OF CONSTRUCTION START.
- THIS SITE IS LOCATED IN THE HAMMOND BRANCH WATERSHED.
- PER FEMA MAP# 24004400388 DATED DECEMBER 04, 1986, THIS SITE IS LOCATED WITHIN THE 100 YR FLOODPLAIN. HOWEVER THE WORK TAKING PLACE ON THIS SITE IS APPROX. 200 FEET AWAY FROM AND APPROXIMATELY 32 FEET ABOVE THE FLOODPLAIN LIMITS. THE WORK ON THIS SITE WILL NOT REQUIRE FEMA LOMA/LOMR REVISIONS. A NON-CRITICAL FLOODPLAIN STUDY HAS BEEN SUBMITTED TO DEED FOR REVIEW AND APPROVAL.
- THERE ARE EXISTING WETLANDS ON SITE AS DETERMINED BY MCCARTHY AND ASSOCIATES, IN A REPORT DATED MAY 2006.
- THERE ARE STEEP SLOPES AND SOME HIGHLY ERODIBLE SOILS ON THIS SITE.
- THERE ARE NO KNOWN CEMETERIES OR BURIAL GROUNDS ON THIS SITE. HOWEVER, UPON DISCOVERY OF ANY EVIDENCE OF BURIAL OR GRAVES, THE DEVELOPER WILL BE SUBJECT TO SECTION 16.1305 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- THE SUBJECT PROPERTY IS ZONED PEC (PLANNED EMPLOYMENT CENTER) PER THE COMPREHENSIVE ZONING PLAN (02/02/2004) AND THE COMP LITE ZONING REGULATION AMENDMENTS EFFECTIVE JULY 28, 2006.
- THE SITE IS SUBJECT TO DEVELOPMENT CRITERIA FOR STORMWATER MANAGEMENT. THE DEVELOPMENT INCLUDES WATER QUALITY MANAGEMENT WHICH WILL BE PROVIDED IN AN EXTENDED DETENTION WET POND (P-3) AND THROUGH THE USE OF VARIOUS SWM CREDITS. REQUIREMENTS WILL BE PROVIDED IN ACCORDANCE WITH THE 2006 "IDE" DESIGN REQUIREMENTS. CHANNEL PROTECTION WILL BE PROVIDED IN THE POND. ALL FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED. 10 YR & 100 YR MANAGEMENT ARE NOT REQUIRED AS POND DISCHARGES TO ESTABLISHED FLOODPLAIN.
- FOREST CONSERVATION OBLIGATION IS BEING FULFILLED BY RETAINING 5.64 ACRES OF EXISTING FOREST AND PLANTING 9.51 ACRES.
- THE LANDSCAPE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE, AND THE LANDSCAPE MANUAL.
- THE EXISTING BUILDINGS ON SITE WILL BE DEMOLISHED UNDER WP-09-039.
- UNLESS OTHERWISE NOTED, DIMENSIONS FROM CURB ARE MEASURED AT FACE OF CURB.
- THE TRAFFIC STUDY WAS PREPARED BY HRA, ON OCTOBER 6, 2006.
- THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY HILLS CARNES BASED ON A FIELD EXPLORATION COMPLETED IN JAN-2009.
- NO NOISE STUDY IS REQUIRED FOR THIS SITE.
- FOREST STAND DELINEATION WAS PREPARED BY CPJ ENVIRONMENTAL SERVICES.
- PREVIOUS CASE FILES:

WP-09-039 - APPROVED NOVEMBER 10, 2006 TO WAIVE SECTION 16.155(a)(1) FOR WAIVER OF SITE DEVELOPMENT PLAN REQUIREMENT TO REMOVE EXISTING BUILDINGS AND PREPARE THE SITE FOR NEW CONSTRUCTION ON THE SUBJECT PROPERTY PRIOR TO THE ISSUANCE OF A GRADING PERMIT.

SDP-04-060 APPROVED 1/20/09 FOR THE CONSTRUCTION OF THE EXISTING BUILDING AND FACILITIES ON THE SUBJECT SITE.

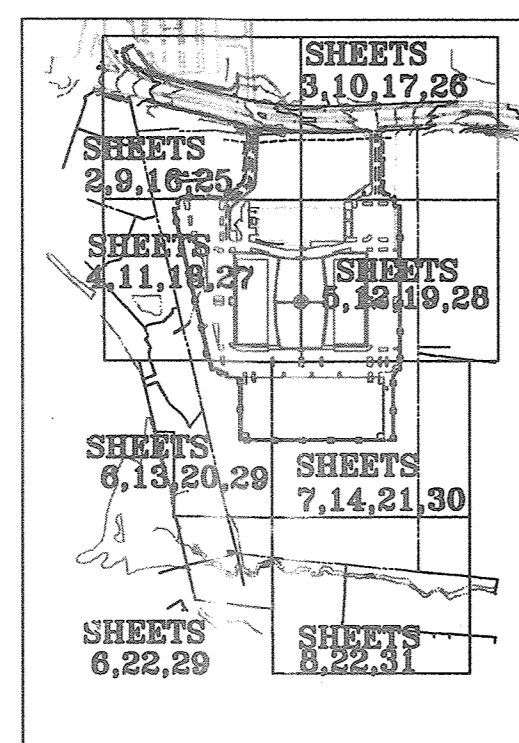
23. A KNOX BOX FOR FIRE DEPARTMENT ACCESS IS REQUIRED TO BE PLACED ON THE FRONT OF THE BUILDING AND AT EACH GATE. IT SHALL BE PLACED TO THE RIGHT OF THE MAIN ENTRANCE APPROXIMATELY 4'-5" IN HEIGHT AND NO MORE THAN 6' Laterally FROM THE DOOR. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED. ALL GATES SHALL BE REQUIRED TO HAVE KNOX BOX (FIRE DEPARTMENT ACCESS BOX) OR KNOX BOX KEY OVERRIDE CONTROL TO INSURE TIMELY FIRE DEPARTMENT ACCESS.

SITE ANALYSIS DATA CHART

SITE ADDRESS: 11101 JOHNS HOPKINS ROAD, LAUREL, MD 20723
 LEGAL DESCRIPTION: 34.85 AC. (1,517,866.25 SQ FT) JOHNS HOPKINS ROAD, LAUREL, MD 20723
 TAX MAP: 41, GRID: 22, PARCEL: 300
 LIBER: 10412 FOLIO: 396
 TAX ACCOUNT: 337867
 ELECTION DISTRICT: 05
 PROPERTY AREA: 34.85 AC. (1,517,866.25 SQ FT)
 EXISTING ZONING: PLANNED EMPLOYMENT CENTER (PEC) DISTRICT
 PROPOSED ZONING: PLANNED EMPLOYMENT CENTER (PEC) DISTRICT
 CURRENT USE: RESEARCH AND DEVELOPMENT CENTER (USE BY RIGHT)
 PROPOSED USE: RESEARCH AND DEVELOPMENT CENTER (USE BY RIGHT)
 BULK REGULATIONS:
 -AT LEAST 25% OF THE GROSS AREA OF THE PEC SHALL BE OPEN SPACE
 -LOT COVERAGE: 64,675 S.F. (14.11 AC.)
 -OPEN SPACE PROVIDED: 902,350 SF (20.77 AC.)
 HEIGHT LIMITATIONS:
 -STRUCTURE WITH MINIMUM SETBACK FROM A PUBLIC STREET: 80'
 -STRUCTURE WITH MINIMUM SETBACK FROM A RESIDENTIAL DISTRICT: 50'
 -STRUCTURE WITH AN ADDITIONAL ONE FOOT IN HEIGHT FOR EVERY 2' OF SETBACK ABOVE THE MINIMUM FROM A RESIDENTIAL DISTRICT: 80'
 MINIMUM LOT AREA: 50 CONTIGUOUS ACRES, HOWEVER AREAS LESS THAN 50 ACRES ARE PERMITTED IF CONTIGUOUS TO AN EXISTING PLANNED EMPLOYMENT CENTER.
 STRUCTURES & USE SETBACKS:
 1.) FROM RESIDENTIAL DISTRICT, EXCEPT FOR RESIDENTIAL DISTRICT WITHIN A SITE PLAN APPROVED UNDER SECTION 100.6.2: 75'
 2.) FROM ALL OTHER DISTRICTS, EXCEPT NON-RESIDENTIAL DISTRICT WITHIN THE SAME PROJECT: 30'
 3.) FROM A PUBLIC STREET RIGHT OF WAY: 30'
 EXCEPT PARKING USES: 10'

PARKING:
 OFFICE SPACE: 3.3 SPACES / 1000 SQFT
 PARKING REQUIRED: 600,000 / 1,000 X 3.3 = 1,980 SPACES
 SURFACE PARKING PROVIDED: 751 SPACES
 GARAGE PARKING PROVIDED (GROUND FLOOR): 301 SPACES
 GARAGE PARKING PROVIDED (OTHER 3 FLOORS): 301 SPACES/FLOOR = 1,143 SPACES
 TOTAL SPACES PROVIDED: 2,275 SPACES
 HANDICAP PARKING REQUIRED: 20 SPACES PER FIRST 1,001 SPACES
 + 1 SPACE / 100 SPACES OVER 1,001 = 20 + (1,504/100) = 46 SPACES
 HANDICAP PARKING PROVIDED: 47 SPACES

OPEN SPACE CALCULATIONS:
 OPEN SPACE 1: 160,501 S.F.
 OPEN SPACE 2: 170,121 S.F.
 OPEN SPACE 3: 119,124 S.F.
 TOTAL: 450,746 S.F. (10.71 AC.) / 5% OF GROSS AREA (34.85 AC.)



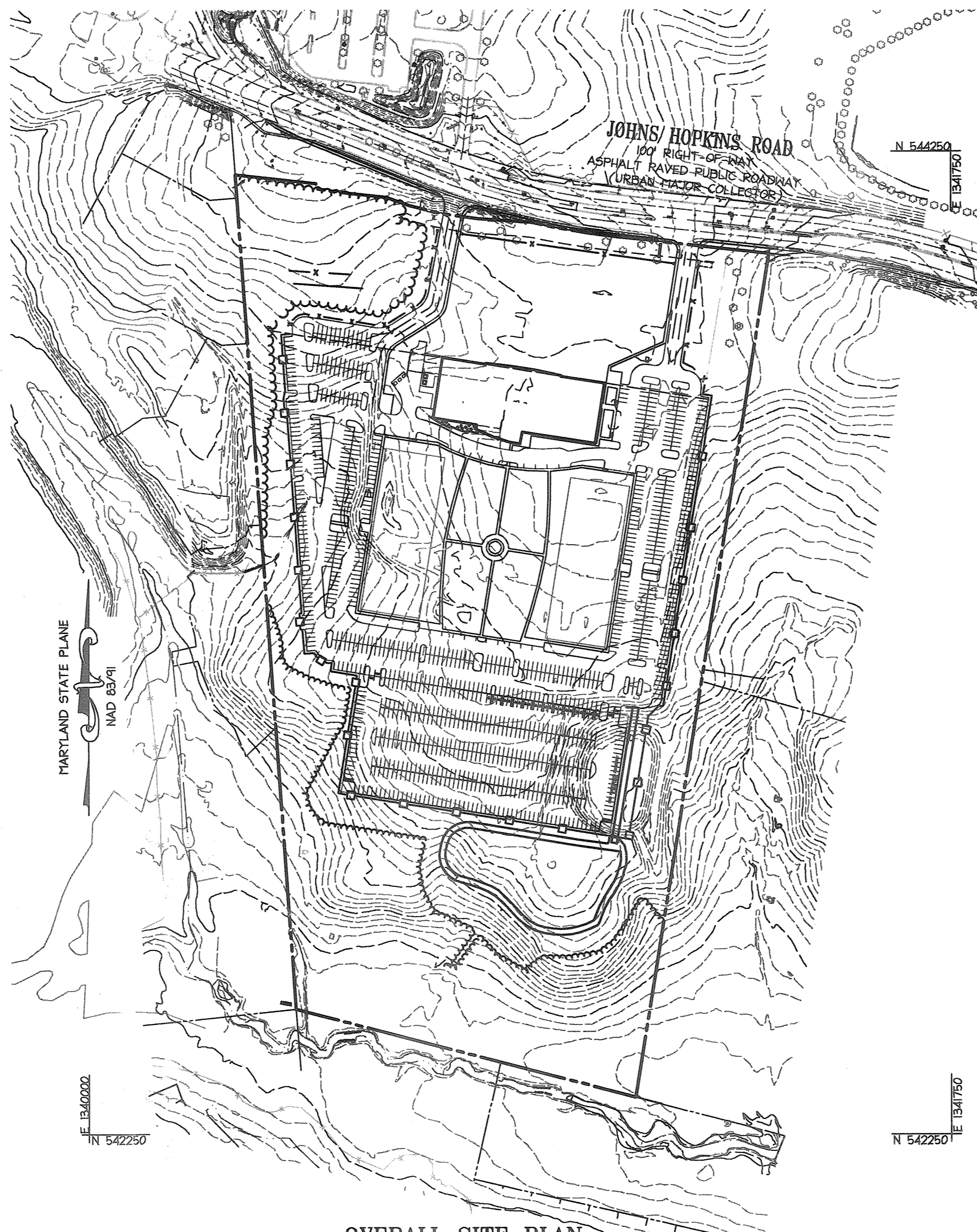
OVERALL KEY PLAN

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
 [Signature] 5/14/09
 PLANNING DIRECTOR DATE

PRELIMINARY EQUIVALENT SKETCH PLAN

JHU/APL SOUTH CAMPUS

11101 JOHNS HOPKINS ROAD
 LAUREL MARYLAND 20723-2608



OVERALL SITE PLAN

SCALE: 1" = 200'

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6	SITE, GRADING AND UTILITY PLAN	26	FOREST CONSERVATION PLAN
7	SITE, GRADING AND UTILITY PLAN	27	FOREST CONSERVATION PLAN
8	SITE, GRADING AND UTILITY PLAN	28	FOREST CONSERVATION PLAN
9	SEDIMENT AND EROSION CONTROL PLAN	29	FOREST CONSERVATION PLAN
10	SEDIMENT AND EROSION CONTROL PLAN	30	FOREST CONSERVATION PLAN
11	SEDIMENT AND EROSION CONTROL PLAN	31	FOREST CONSERVATION PLAN
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13	SEDIMENT AND EROSION CONTROL PLAN		
14	SEDIMENT AND EROSION CONTROL PLAN		
15	SEDIMENT AND EROSION NOTES & DETAILS		
16	LANDSCAPE PLAN		
17	LANDSCAPE PLAN		
18	LANDSCAPE PLAN		
19	LANDSCAPE PLAN		
20	LANDSCAPE PLAN		

DEVELOPER'S CERTIFICATE

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.

[Signature] 5/7/09
 DATE
 SIGNATURE OF DEVELOPER
 Richard T. Roca
 PRINT NAME BELOW SIGNATURE

ENGINEER'S CERTIFICATE

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.

[Signature] 5.6.09
 DATE
 SIGNATURE OF ENGINEER
 JOHN M. HOUSEHOLDER, P.E.
 PRINT NAME BELOW SIGNATURE

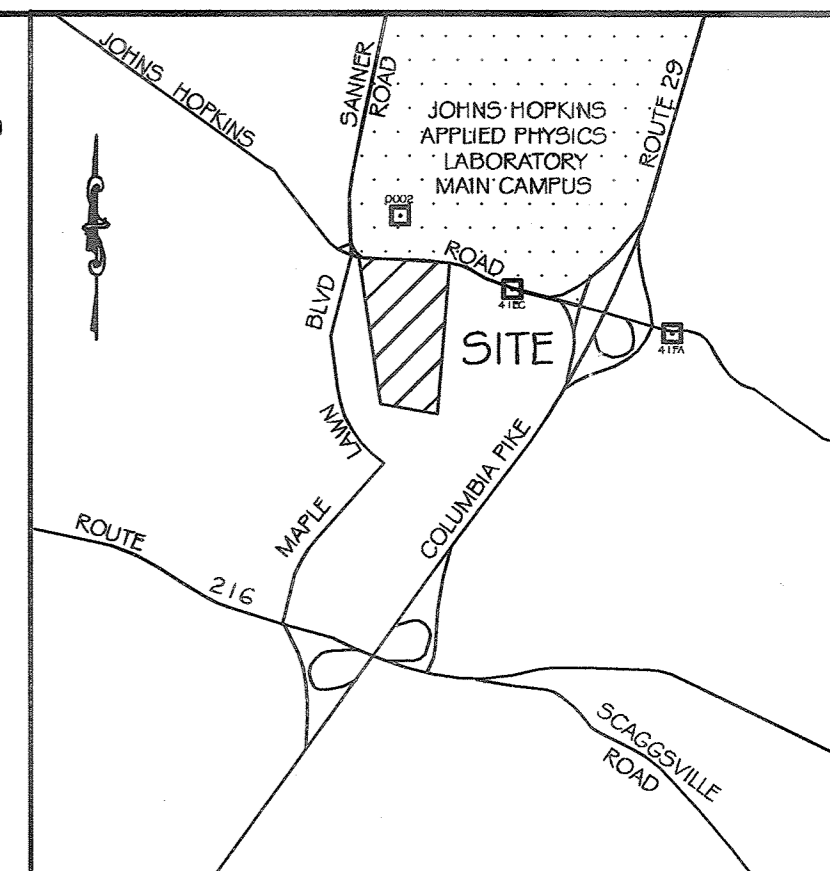
PROFESSIONAL CERTIFICATION

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.

[Signature] 5.6.09
 DATE
 SIGNATURE OF ENGINEER
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010

BENCHMARK

HORIZONTAL: MARYLAND NAD83 (ADJ 1991)
 VERTICAL: NAVD88
 GEODETIC SURVEY CONTROL: 0002
 NORTHING: 544836.517
 EASTING: 1340825.327
 ELEVATION: 444.835
 GEODETIC SURVEY CONTROL: 4IEC
 NORTHING: 543580.917
 EASTING: 1342628.748
 ELEVATION: 430.262
 GEODETIC SURVEY CONTROL: 4IFA
 NORTHING: 543104.896
 EASTING: 1344797.481
 ELEVATION: 407.532
 DESCRIPTIONS:
 STAMPED DISC SET ON 3" DEEP COLUMN OF CONCRETE



VICINITY MAP
 SCALE 1"=2000'
 ADC# 20807164
 HOWARD COUNTY MAP PAGE 19 - GRID A-3 & B-3

ADDRESS CHART

PARCEL NO.	ADDRESS
300	11101 JOHNS HOPKINS ROAD

Date	No.	Revision Description

JHU/APL
 11100 JOHNS HOPKINS ROAD
 LAUREL, MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5364 FAX 443.778.6122

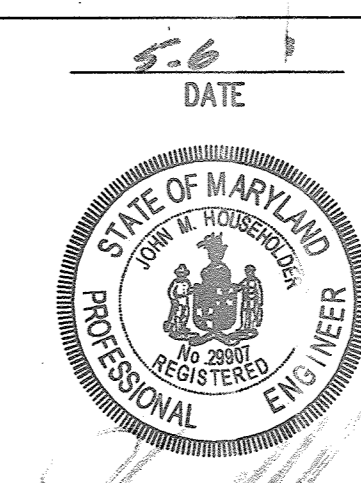
christopher consultants
 engineering, surveying, land planning
 christopherconsultants, inc.
 7172 columbia gateway drive suite 100 | coltsville, md 21046-2980
 410.928.6600 fax: 410.928.6601

PERMIT INFORMATION CHART

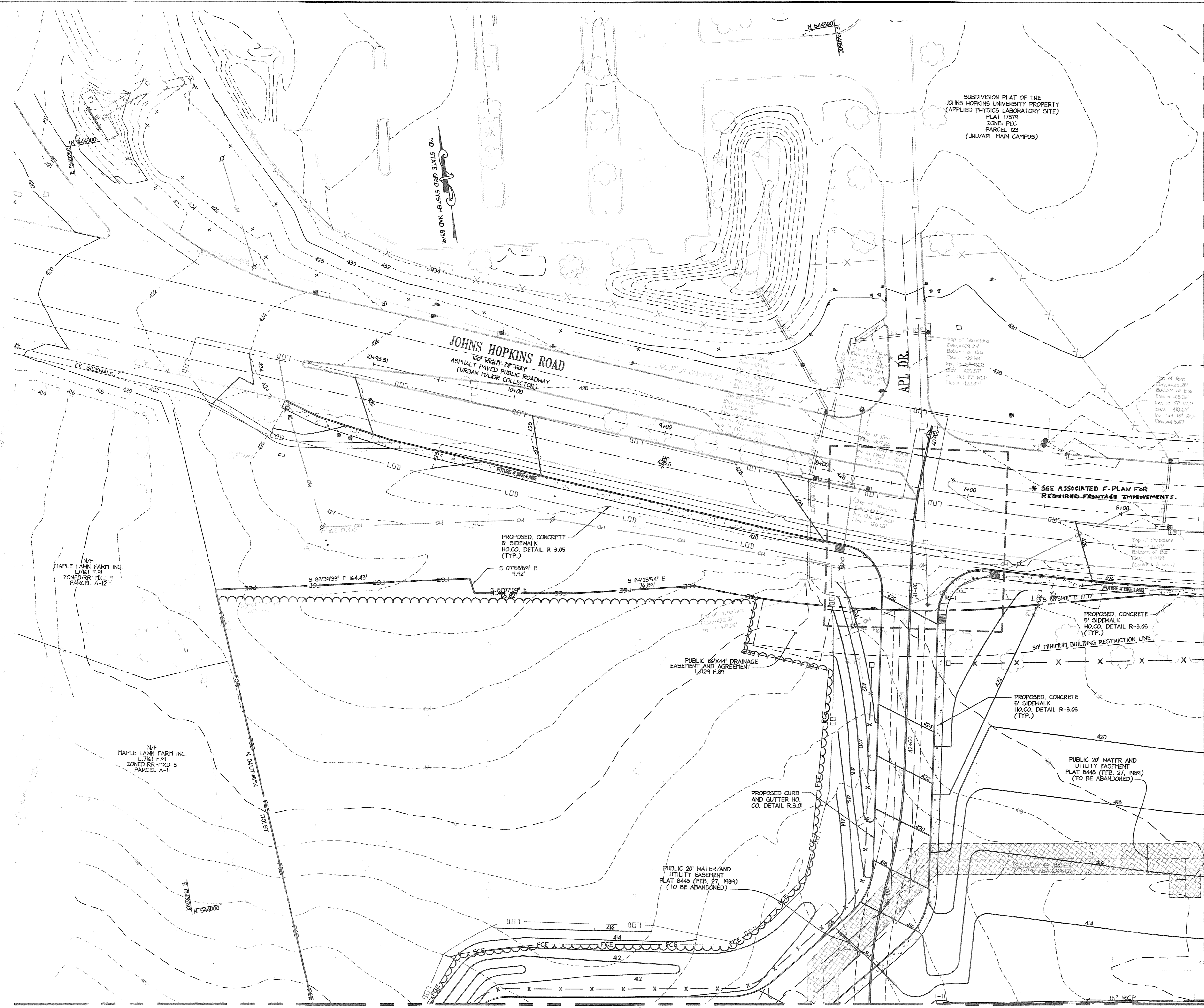
PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.398	GRID NO./ZONE 22 PEC	TAX MAP 41
ELECTION DISTRICT 5th		

TITLE:
COVER SHEET

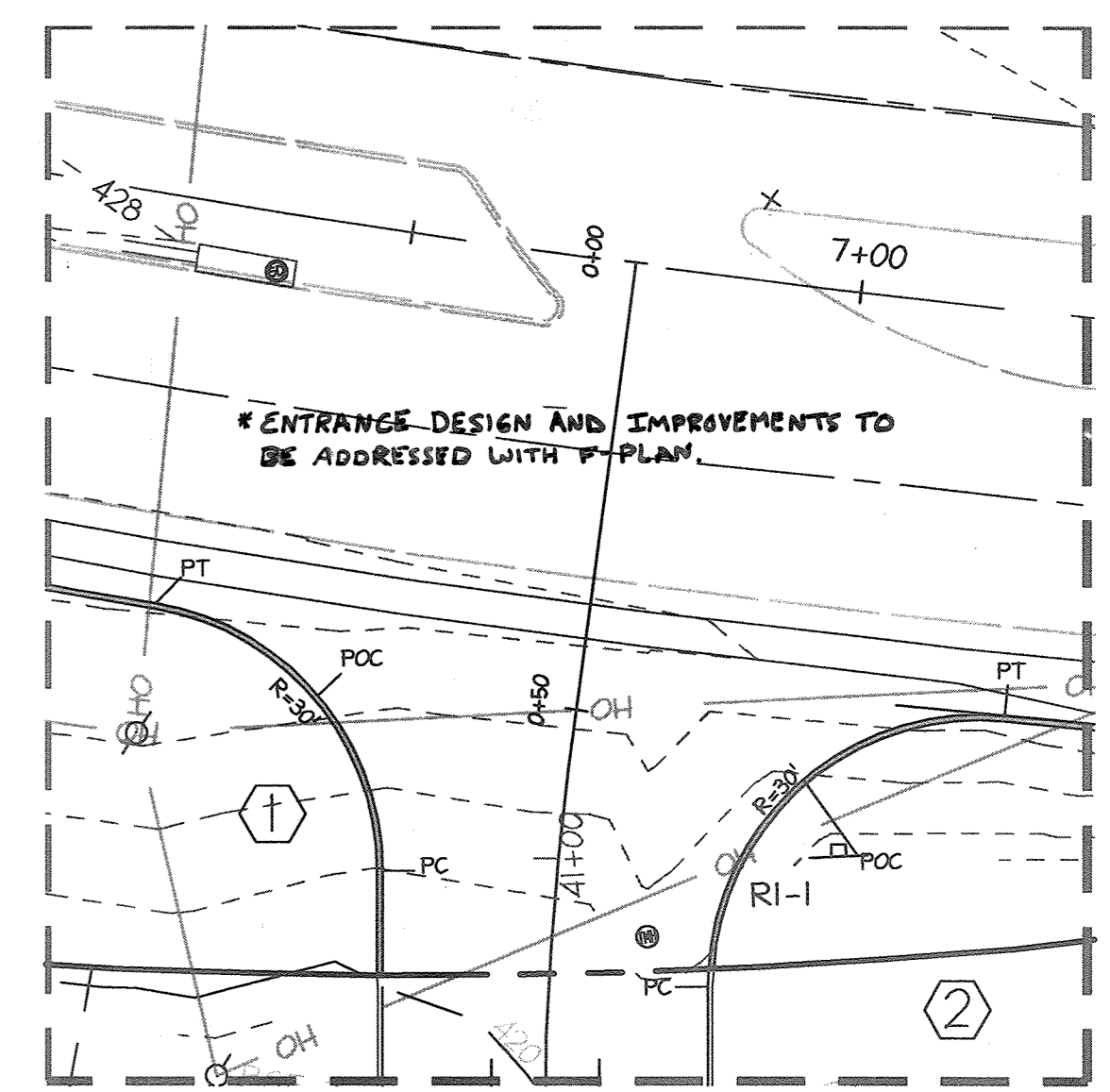
DESIGN: ENJ	SCALE: AS SHOWN	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	01 of 31



MDC-932 (PESP)



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.
 SIGNATURE OF ENGINEER: *John M. Householder* DATE: 5.6.09
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010



DRIVEWAY ENTRANCE #1
 SCALE: 1" = 20'

FILLET TABLE

DRIVEWAY ENTRANCE #1	STATIONING	OFFSET DRIVEWAY CL
FILLET #1 RADIUS = 30'	PT 0+43.45	34.08' OFFSET WEST
	POC 0+51.05	20.23' OFFSET WEST
	PC 0+68.94	12.08' OFFSET WEST
FILLET #2 RADIUS = 30'	PC 0+83.78	12.00' OFFSET EAST
	POC 0+56.76	21.22' OFFSET EAST
	PT 0+45.97	43.49' OFFSET EAST

MATCHLINE - FOR CONTINUATION SEE SHEET 3 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 4 OF 31

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
Monica E. Siddle 5/14/09
 PLANNING DIRECTOR DATE

Date No. Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 LAUREL MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5834 FAX 443.778.6122

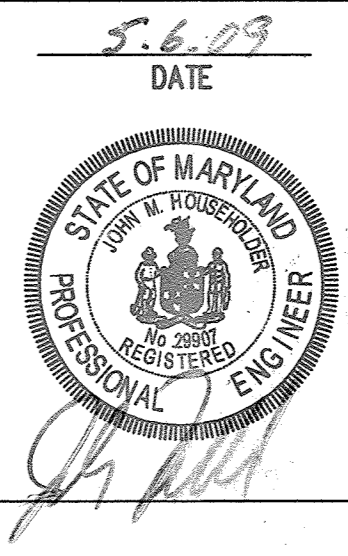
christopher consultants
 engineering - surveying - land planning
 christopher consultants, inc.
 7112 Columbia Gateway Drive Suite 100 Columbia, MD 21046-2860
 410.822.0000 www.cpc.com (in MD 410.822.0000)

PERMIT INFORMATION CHART

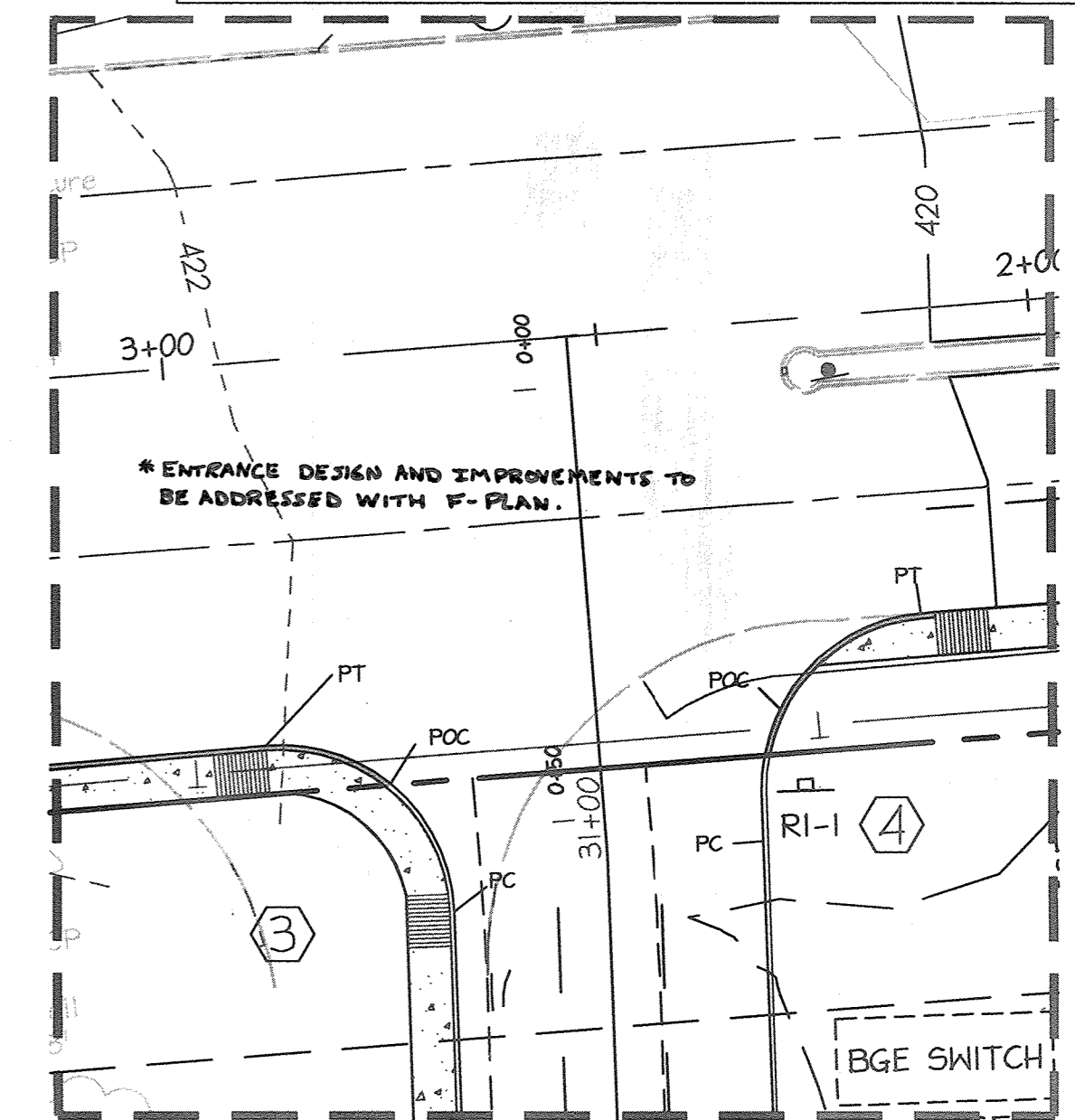
PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41
		ELECTION DISTRICT 5th

TITLE: **SITE, GRADING & UTILITY PLAN**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	02 of 31



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.
 SIGNATURE OF ENGINEER: *J. M. Householder* DATE: 5.6.09
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010

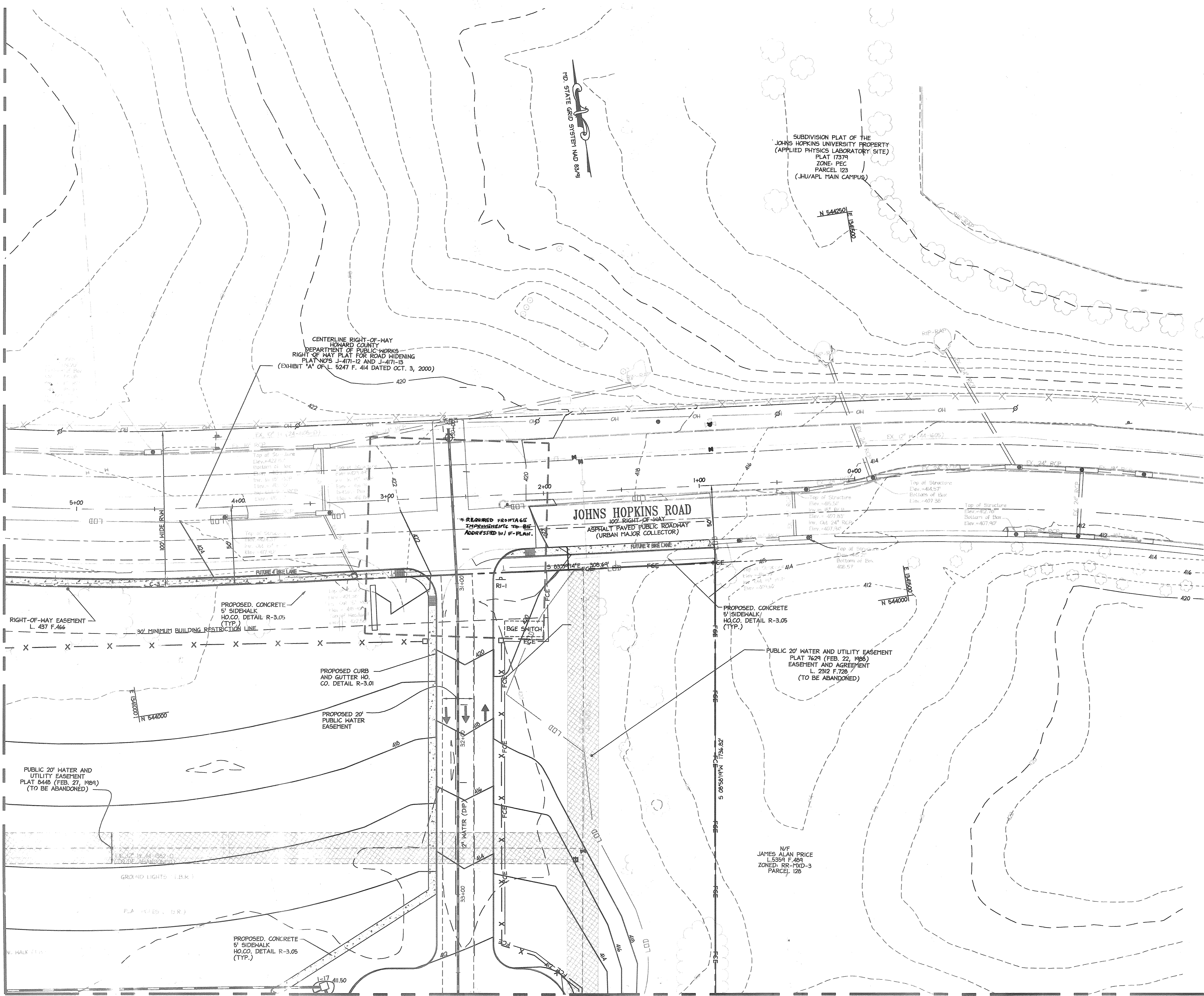


DRIVEWAY ENTRANCE #2
 SCALE: 1" = 20'

FILLET TABLE

DRIVEWAY ENTRANCE #2	FILLET #3 RADIUS = 25'	STATIONING	OFFSET DRIVEWAY CL
		PT	0+45.43
	POC	0+51.23	17.19' OFFSET WEST
	PC	0+65.81	12.00' OFFSET WEST
	PC	0+54.36	17.41' OFFSET EAST
	POC	0+40.76	30.61' OFFSET EAST
	PT	0+34.45	

MATCHLINE - FOR CONTINUATION SEE SHEET 03 OF 31



MATCHLINE - FOR CONTINUATION SEE SHEET 5 OF 31

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
Thomas J. Buttle
 PLANNING DIRECTOR DATE: 5/4/09

Date	No.	Revision Description
 JHU/APL 1100 JOHNS HOPKINS ROAD LAUREL MARYLAND 20723-6099 ATTN: JAMES LOESCH, P.E., CFM PHONE: 443.778.5134 FAX 443.778.6122		
 christopher consultants engineering - surveying - land planning christopher consultants, inc. 7172 Columbia Gateway Drive Suite 103 Columbia, MD 21046-2880 410.322.0000 www.cpc.com fax 410.322.0000		

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO./ZONE 22 PEC	TAX MAP 41
		ELECTION DISTRICT 50h

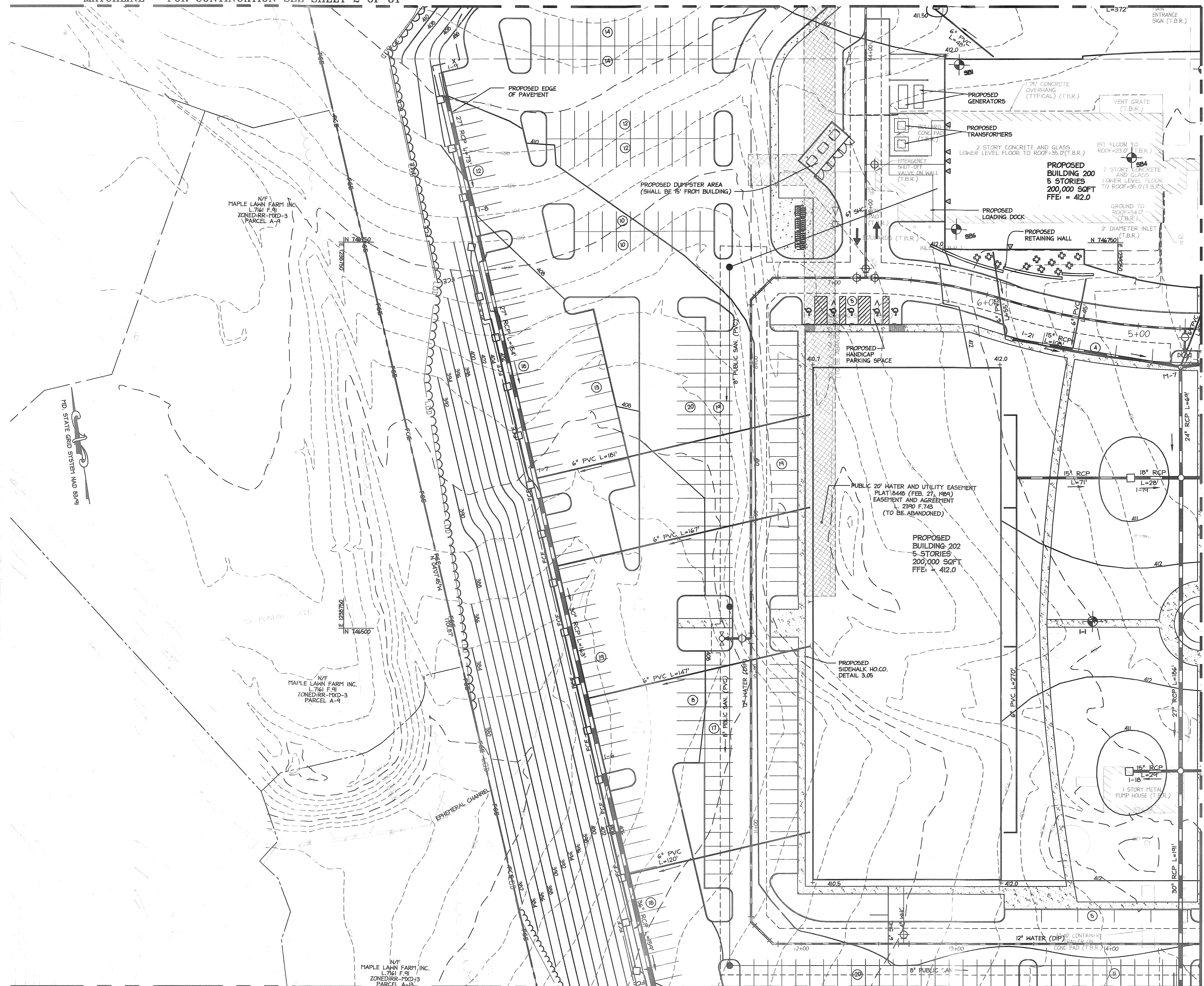
5.6.09 DATE

STATE OF MARYLAND
 JOHN W. HOUSEHOLDER
 PROFESSIONAL ENGINEER

TITLE: SITE, GRADING & UTILITY PLAN

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DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	03 of 31

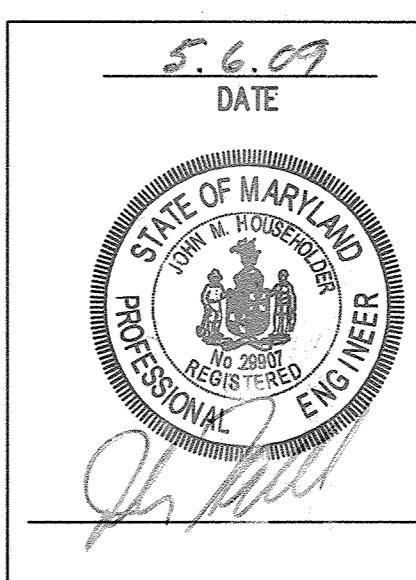
MDC-032(PESP)



MATCHLINE - FOR CONTINUATION SEE SHEET 5 OF 31

PROFESSIONAL CERTIFICATION
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 SIGNATURE OF ENGINEER: *[Signature]* DATE: 5.6.09
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
[Signature] 5/6/09
 PLANNING DIRECTOR DATE



Date	No.	Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 LAUREL MARYLAND 20723-8099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5134 FAX 443.778.6122

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 christopher consultants, inc.
 7172 Columbia Gateway Drive Suite 103 Columbia, MD 21046-2666
 410.525.9900 ext. 201 410.525.1832 fax

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO./ZONE 22 PEC	TAX MAP 41
ELECTION DISTRICT 5th		

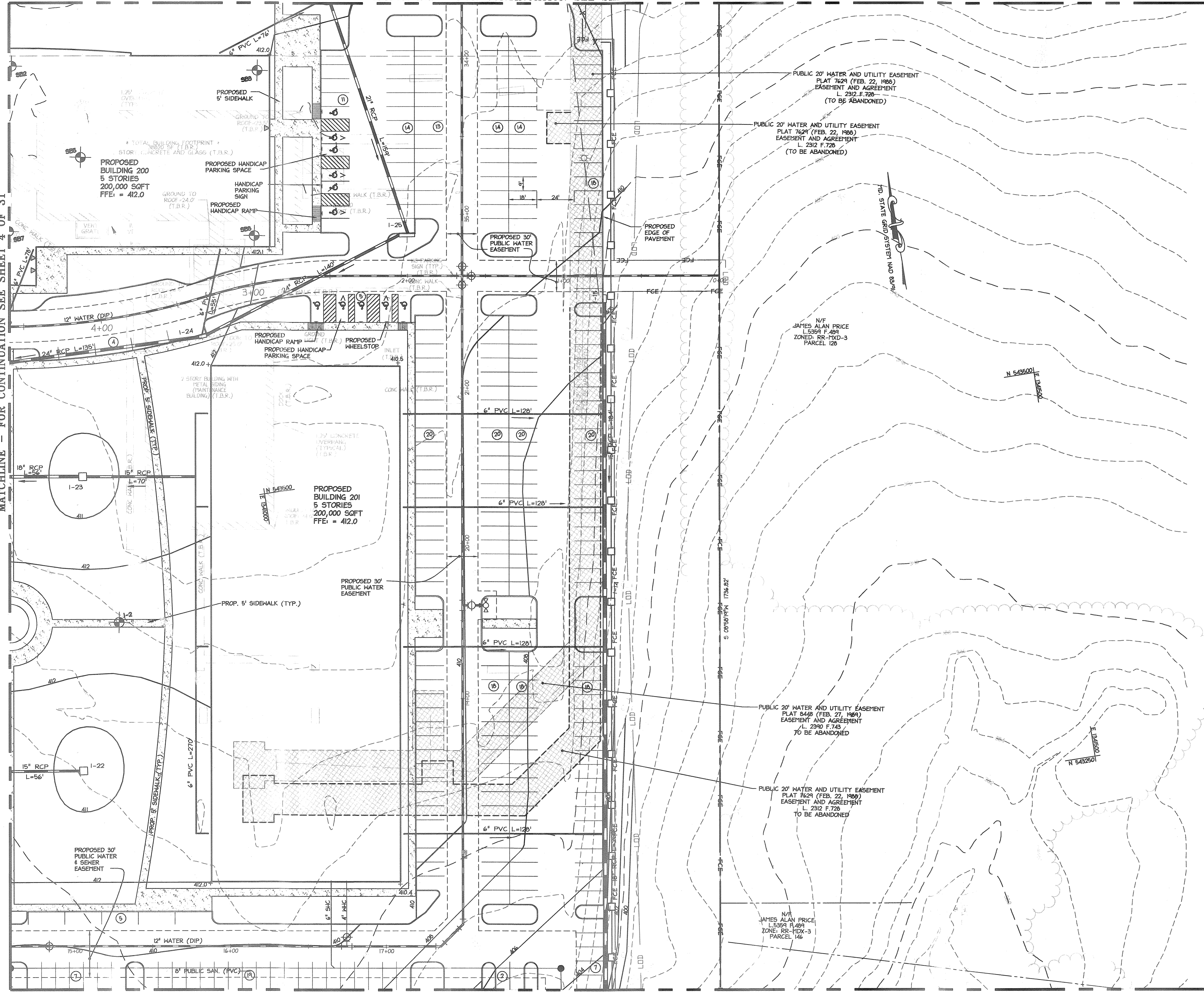
TITLE: **SITE, GRADING & UTILITY PLAN**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	04 of 31

MDC-932(PESP)

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.
John M. Householder
 SIGNATURE OF ENGINEER
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010
 5-6-09
 DATE

MATCHLINE - FOR CONTINUATION SEE SHEET 4 OF 31



TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
Thomas E. Suttler
 PLANNING DIRECTOR
 5/14/09
 DATE

Date	No.	Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 LAUREL MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5134 FAX: 443.778.6122

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 7172 old miller gateway drive suite 100, cummings, md. 21046-2880
 410.822.8880 · fax: 410.822.8883

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41
ELECTION DISTRICT 5th		

5-6-09
 DATE

 JOHN M. HOUSEHOLDER
 REGISTERED PROFESSIONAL ENGINEER

TITLE: **SITE, GRADING & UTILITY PLAN**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	05 of 31

MDC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 4 OF 31

N/F
MAPLE LAWN FARM INC.
L. 213 F. 597
L. 213 F. 600
L. 7161 F. 91
ZONE: RR-MXD-3
PARCEL A-13

N 543250
E 132000

N 543250
E 132000

LIMITS OF GARAGE

LIMITS OF GARAGE

RECHARGE AREA

MATCHLINE - FOR CONTINUATION SEE THIS SHEET



N/F
MAPLE LAWN FARM INC.
L. 213 F. 597
L. 213 F. 600
L. 7161 F. 91
ZONE: RR-MXD-3

C/L DITCH (NATURAL FEATURE)
NO FLOWING WATER AT
TIME OF FIELD SURVEY

N 15°28'05"W 712.67'

MATCHLINE - FOR CONTINUATION SEE SHEET 8 OF 31



N/F
MAPLE LAWN FARM INC.
L. 213 F. 597
L. 213 F. 600
L. 7161 F. 91
ZONE: RR-MXD-3

N 542750
E 105900

MATCHLINE - FOR CONTINUATION SEE THIS SHEET

MATCHLINE - FOR CONTINUATION SEE SHEET 7 OF 31

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.
SIGNATURE OF ENGINEER: *[Signature]* DATE: 5.1.09
JOHN M. HOUSEHOLDER
MD LICENSE NUMBER: 29907
EXPIRATION DATE: 1-27-2010



Date	No.	Revision Description

JHU/APL
1100 JOHNS HOPKINS ROAD
CLARKSVILLE MARYLAND 20723-6099
ATTN: JAMES LOESCH, P.E., CFM
PHONE: 443.778.5334 FAX 443.778.6122

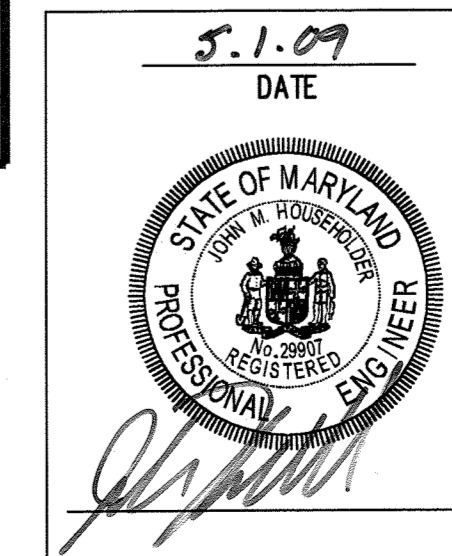
christopher consultants
engineering · surveying · land planning
christopher consultants, inc.
7172 columbia gateway drive (suite 100) · columbia, md 21046-2999
410.737.8800 · md: 201.881.0146 · tx: 410.737.8800

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF: L10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41
		ELECTION DISTRICT 5th

TITLE: **SITE, GRADING & UTILITY PLAN**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	06 of 31

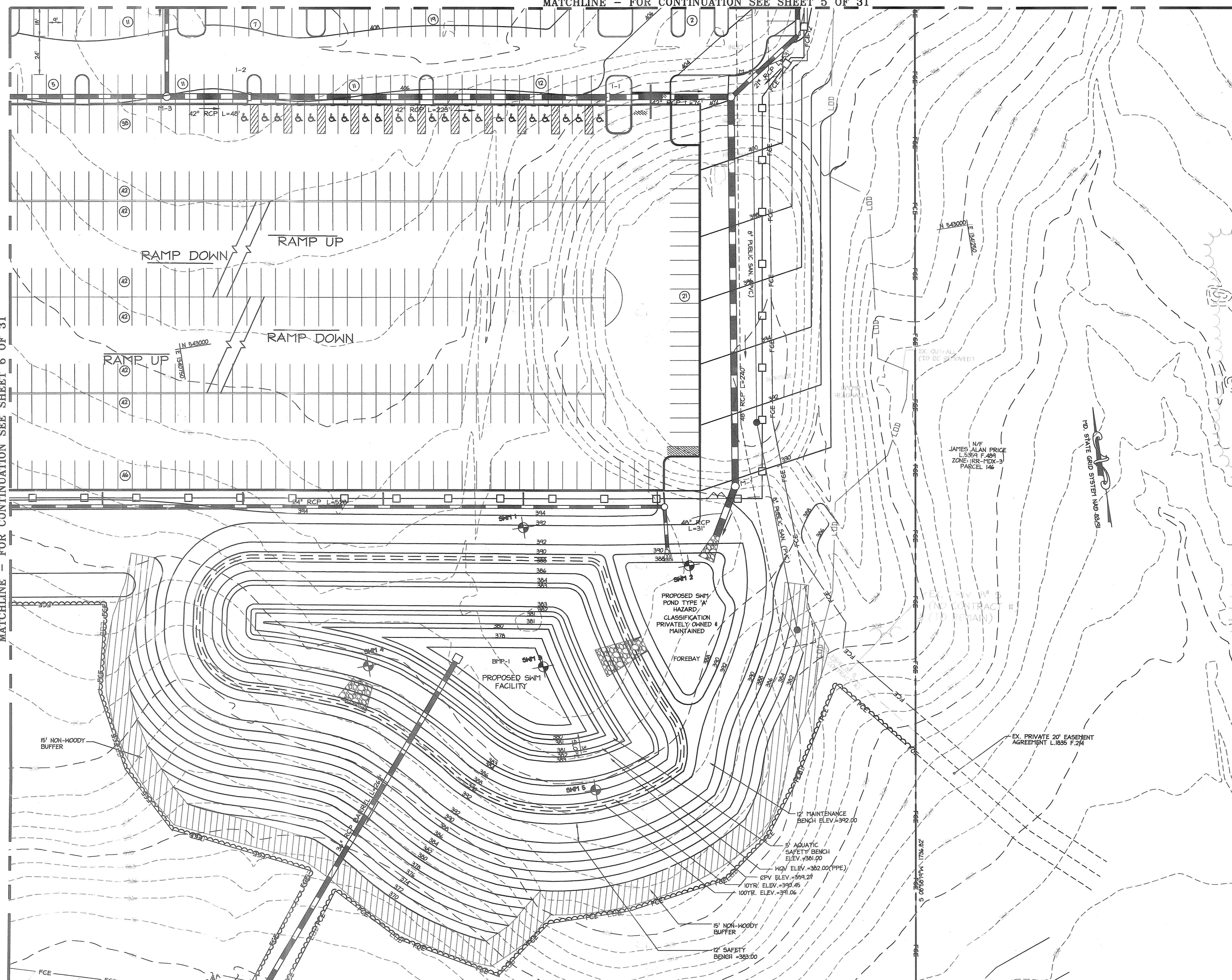


TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
[Signature]
PLANNING DIRECTOR
DATE: 5/1/09

SP-09-007

MDC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 5 OF 31



MATCHLINE - FOR CONTINUATION SEE SHEET 6 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 8 OF 31

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.
 Signature: *J. M. Householder*
 SIGNATURE OF ENGINEER: JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010
 DATE: 5.6.09

POND SUMMARY TABLE

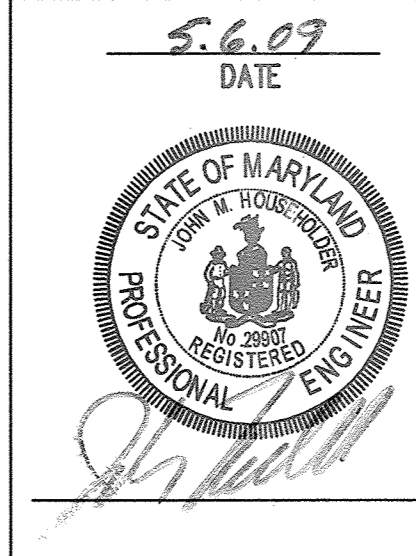
BMP #1	ELEVATION
POND BOTTOM	374.00
NORMAL POOL	382.75
CPV	389.27
SPILLWAY	389.50
10-YEAR	390.45
100-YEAR	391.06
TOP OF POND	391.50

WATER QUALITY/QUANTITY SUMMARY TABLE

QUANTITY	WQY (AC-FT)	REV (AC-FT)	CPV (AC-FT)	COMMENTS
BMP #1	1.10	0.39	2.18	NATURAL AREA CONSERVATION CREDIT = 12.80

- NOTES:**
1. DUE TO THE INFILTRATION RATE AND THE PRESENCE OF FRACTURED ROCK NEAR THE BOTTOM ELEVATION OF THE POND, A 2' CLAY LINER SHALL BE PROVIDED UP TO THE PERMANENT POOL ELEVATION TO HELP MAINTAIN A CONSTANT NET POOL.
 2. WITH FINAL DESIGN, THE SWM POND MUST MEET APPROPRIATE MD-378 STANDARDS.
 3. STORMWATER MANAGEMENT FOR THE SDP WILL BE IN GENERAL CONFORMANCE WITH THIS PLAN.

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
 Signature: *M. S. ...*
 PLANNING DIRECTOR
 DATE: 5/14/09



Date No. Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 LAUREL, MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5134 FAX 443.778.6122

christopher consultants
 engineering - surveying - land planning
 christopher consultants, inc.
 7172 southside gateway drive suite 100, coltsville, nc 27046-2800
 435.672.0000, 435.672.0001, fax 435.672.0002

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. 22, ZONE PEC	TAX MAP 41, ELECTION DISTRICT 5th

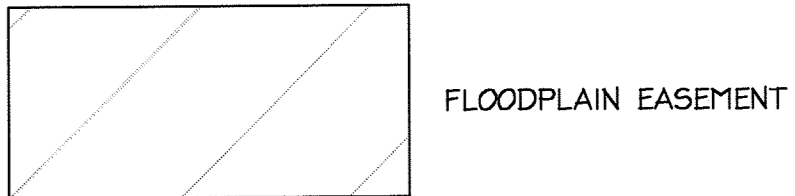
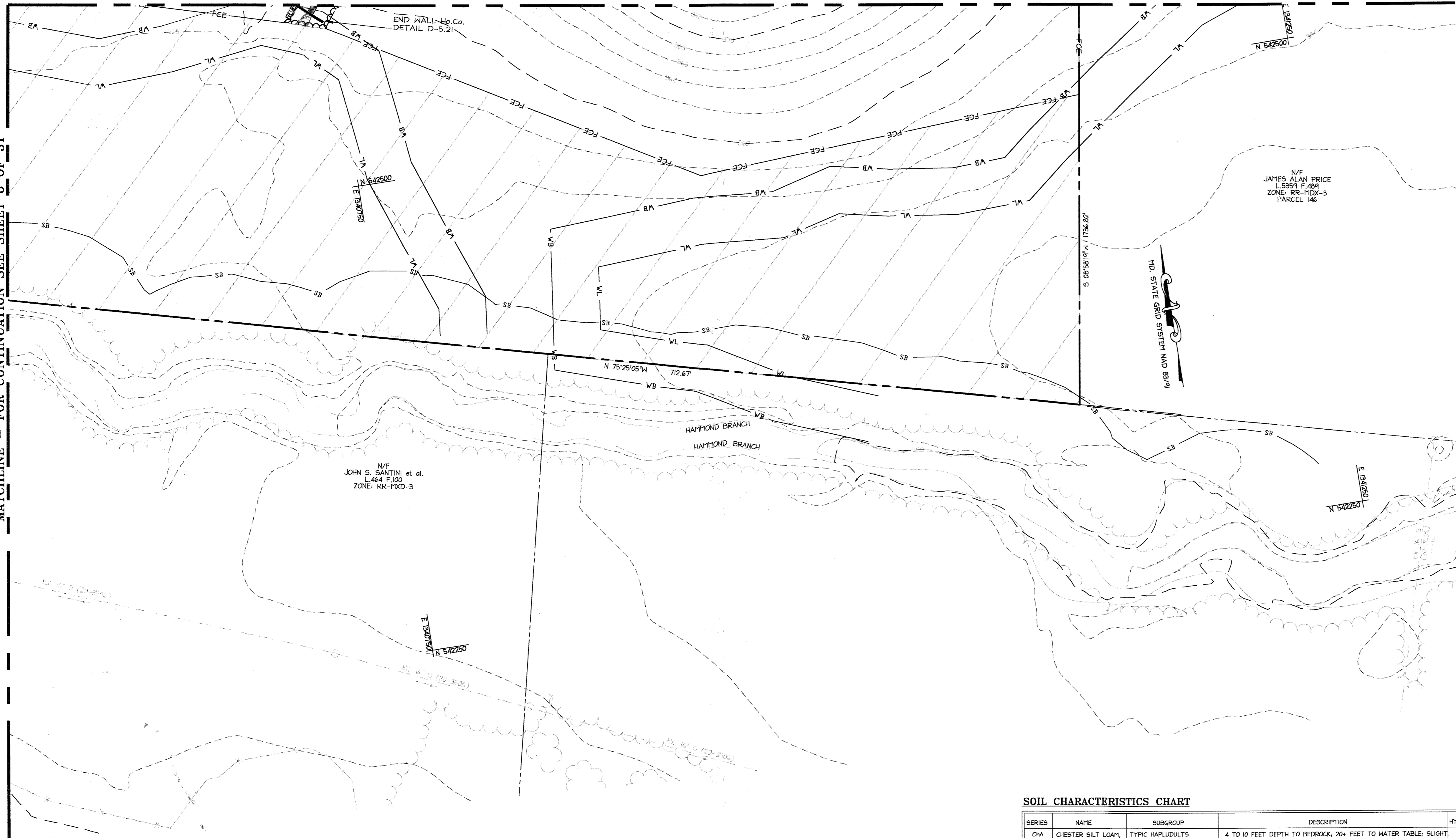
TITLE: **SITE, GRADING & UTILITY PLAN**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A201.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	07 of 31

MDC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 7 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 6 OF 31



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.
 SIGNATURE OF ENGINEER: *[Signature]* DATE: 5.1.09
 JOHN M. HOUSEHOLDER 29907
 MID LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010

SOIL CHARACTERISTICS CHART

SERIES	NAME	SUBGROUP	DESCRIPTION	HYDRIC	K-FACTOR
GhA	CHESTER SILT LOAM, 0-3x	TYPIC HAPLUDULTS	4 TO 10 FEET DEPTH TO BEDROCK; 20+ FEET TO WATER TABLE; SLIGHT TO MODERATE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPE; EROSION HAZARD.	N	0.32
Co	CODURUS SILT LOAM	FLUVENTIC DYSTROCHREPTS	-	N	0.37
GhA	GLENELG LOAM, 0-3x	TYPIC HAPLUDULTS	4 TO 10 FEET TO BEDROCK; 10+ FEET TO WATER TABLE; SLIGHT TO SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPE; EROSION HAZARD.	N	0.20
GhB	GLENELG LOAM, 3-8x	TYPIC HAPLUDULTS	4 TO 10 FEET TO BEDROCK; 10+ FEET TO WATER TABLE; SLIGHT TO SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPE; EROSION HAZARD.	N	0.20
GhC	GLENELG LOAM, 8-15x	TYPIC HAPLUDULTS	4 TO 10 FEET TO BEDROCK; 10+ FEET TO WATER TABLE; SLIGHT TO SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPE; EROSION HAZARD.	N	0.20
GhB	GLENVILLE-BAILE SILT LOAM, 0-8x	TYPIC HAPLUDULTS	4 TO 10 FEET TO BEDROCK; 10+ FEET TO WATER TABLE; SLIGHT TO SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPE; EROSION HAZARD.	N	0.20
Ho	HATBORO SILT LOAM	FLUVENTIC HAPLUDULTS	-	Y	0.37
Mgb2	MANOR GRAVELLY LOAM, 3-8x	TYPIC DYSTROCHREPTS	6 TO 10 FEET TO BEDROCK; 20+ FEET TO WATER TABLE; SLIGHT TO SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPE; EROSION HAZARD.	N	0.43

WARNING: ALL SOILS HAVE LIMITATIONS, RANGING FROM SLIGHT TO SEVERE, FOR BUILDING HOMES, CONSTRUCTING ROADS AND PONDS AND VARIOUS OTHER USES. PLEASE CONSULT THE SOIL SURVEY OF HOWARD COUNTY FOR DETERMINING SOIL TYPES AND THEIR SUITABILITY FOR DEVELOPMENT, ENGINEERING AND BUILDING.

Date	No.	Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 CLARKSVILLE MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5134 FAX 443.778.6122

christopher consultants
 engineering · surveying · land planning
 christopher consultants, inc.
 11175 central greenway drive suite 100, coxscrova, md 21045-0800
 410.872.8600 · fax 410.872.8600

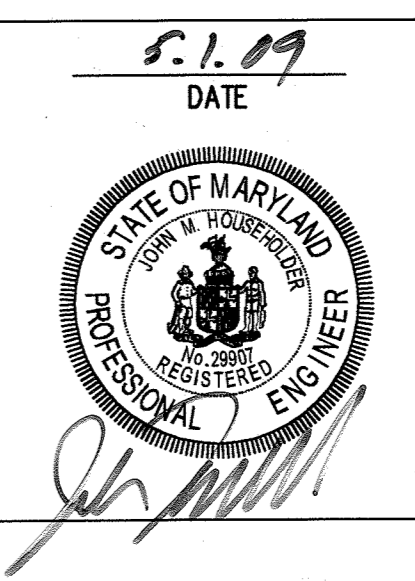
PERMIT INFORMATION CHART

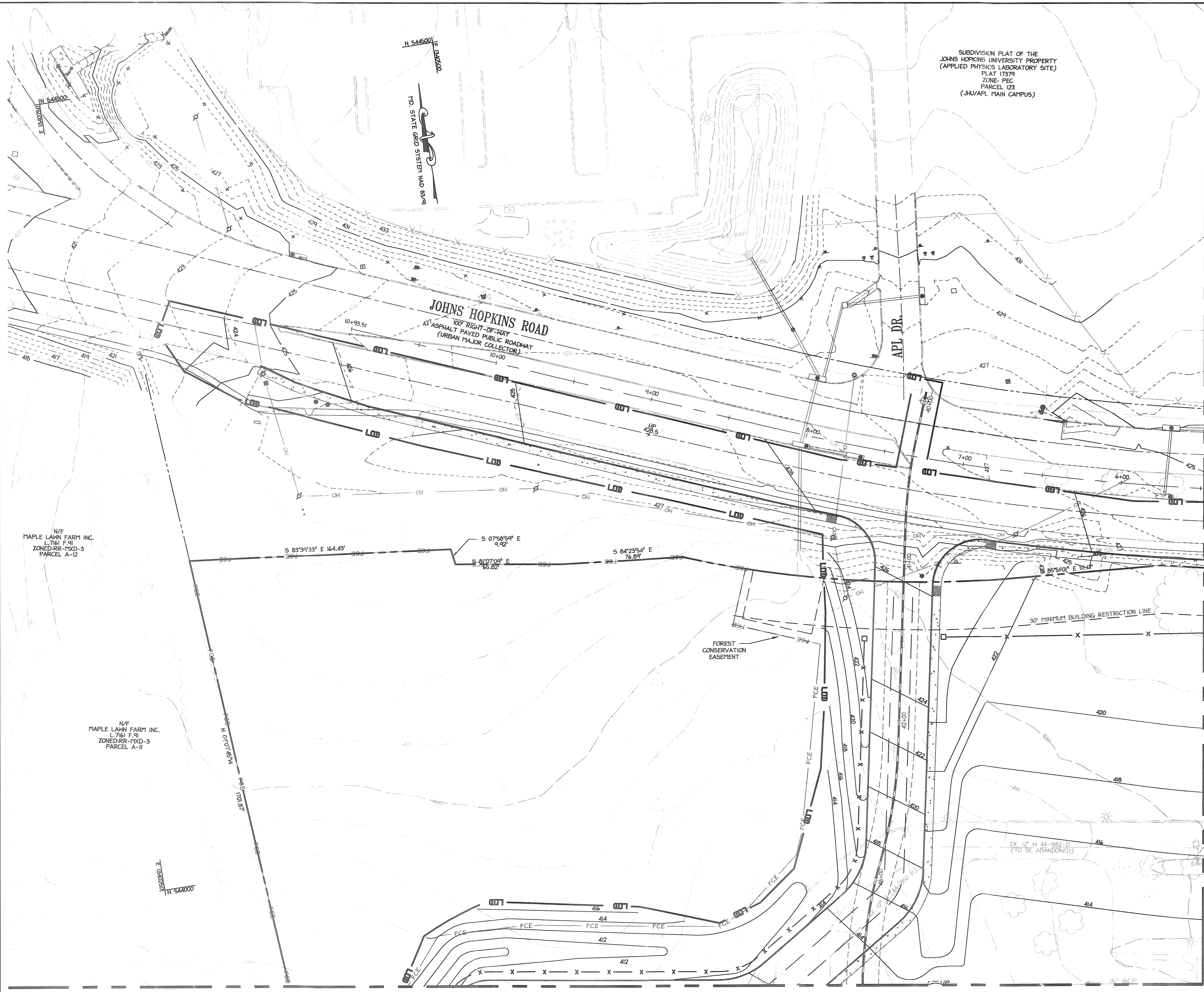
PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. 22 ZONE PEC	TAX MAP 41 ELECTION DISTRICT 5th

TITLE: **SITE, GRADING & UTILITY PLAN**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	08 OF 31
CHECKED: ENJ/JMH	APPROVED: JMH	

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
[Signature] 5/14/09
 PLANNING DIRECTOR DATE





SUBDIVISION PLAT OF THE
JOHNS HOPKINS UNIVERSITY PROPERTY
(APPLIED PHYSICS LABORATORY SITE)
PLAT 17374
ZONE: PEC
PARCEL 123
(JHU/APL MAIN CAMPUS)

SERIES	NAME	SUBGROUP	DESCRIPTION	HYDRIC	K-FACTOR
ChA	CHESTER SILT LOAM, 0-3E	TYPIC HAPLUDULTS	4 TO 10 FEET DEPTH TO BEDROCK; 20+ FEET TO WATER TABLE; SLIGHT TO MODERATE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPES; EROSION HAZARD.	N	0.32
Cc	CODRUS SILT LOAM	FLUVENTIC DYSTRICREPTS	-	N	0.37
GqA	GLENELG LOAM, 0-3E	TYPIC HAPLUDULTS	4 TO 10 FEET TO BEDROCK; 10+ FEET TO WATER TABLE; SLIGHT TO SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPES; EROSION HAZARD.	N	0.20
GqB	GLENELG LOAM, 3-6E	TYPIC HAPLUDULTS	4 TO 10 FEET TO BEDROCK; 10+ FEET TO WATER TABLE; SLIGHT TO SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPES; EROSION HAZARD.	N	0.20
GqC	GLENELG LOAM, 8-15E	TYPIC HAPLUDULTS	4 TO 10 FEET TO BEDROCK; 10+ FEET TO WATER TABLE; SLIGHT TO SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPES; EROSION HAZARD.	N	0.10
GrB	GLENVILLE-DAILE SILT LOAM, 0-3E	TYPIC HAPLUDULTS	4 TO 10 FEET TO BEDROCK; 10+ FEET TO WATER TABLE; SLIGHT TO SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPES; EROSION HAZARD.	N	0.20
Hs	HATBORO SILT LOAM	FLUVENTIC HAPLUDULTS	-	Y	0.37
HqB2	HANOR GRAVELLY LOAM, 3-6E	TYPIC DYSTRICREPTS	4 TO 10 FEET TO BEDROCK; 20+ FEET TO WATER TABLE; SLIGHT TO SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPES; EROSION HAZARD.	N	0.48

WARNING: ALL SOILS HAVE LIMITATIONS, RANGING FROM SLIGHT TO SEVERE, FOR BUILDING HOMES, CONSTRUCTING ROADS AND PONDS AND VARIOUS OTHER USES. PLEASE CONSULT THE SOIL SURVEY OF HOWARD COUNTY FOR DETERMINING SOIL TYPES AND THEIR SUITABILITY FOR DEVELOPMENT, ENGINEERING AND BUILDING.

LEGEND

EXISTING CONTOURS	---
EXISTING STORMDRAIN	--- 12" RCP ---
EXISTING SANITARY SEWER	--- 8" SAN ---
EXISTING FENCE	X
PROPERTY LINE	---
TREELINE	~~~~~
PROPOSED SETBACK LINES	---
METLANDS	ML
METLANDS BUFFER	MB
FLOODPLAIN	FP
PROPOSED SIDEWALK HATCH	
SILT FENCE	SF SF
SILT FENCE / TREE PROTECTION COMBINATION	SF/TP
LIMIT OF DISTURBANCE	LOD
PROPOSED CONTOUR	416
CURB INLET PROTECTION	CIP
BORING LOCATION	SMH
FOREST CONSERVATION	FCE

MATCHLINE - FOR CONTINUATION SEE SHEET 10 OF 31

DEVELOPER'S CERTIFICATE
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.

Signature of Developer: *Richard T. Roca* Date: 5/16/09
Print name below signature: Richard T. Roca

ENGINEER'S CERTIFICATE
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.

Signature of Engineer: *John M. Householder* Date: 5.6.09
Print name below signature: JOHN HOUSEHOLDER, P.E.

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

This development plan is approved for soil erosion and sediment control by The HOWARD SOIL CONSERVATION DISTRICT.

Howard SCD Date:

Date No. Revision Description

JHU/APL
1100 JOHNS HOPKINS ROAD
LAUREL MARYLAND 20723-8099
ATTN: JAMES LOESCH, P.E., CFM
PHONE: 443.778.5134 FAX 443.778.6122

christopher consultants
engineering · surveying · land planning
christopher consultants, inc.
712 Columbia Gateway Drive Suite 100 Columbia, MD 21046-2890
410.321.8880 ext. 101 fax 410.321.8882

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41
		ELECTION DISTRICT 5h

TITLE: **SEDIMENT AND EROSION CONTROL PLAN**

DESIGN: ENJ SCALE: 1" = 30'
DRAWN: DAM DATE: MAY, 2009
CHECKED: ENJ/JMH APPROVED: JMH

PROJECT: 08A901.00

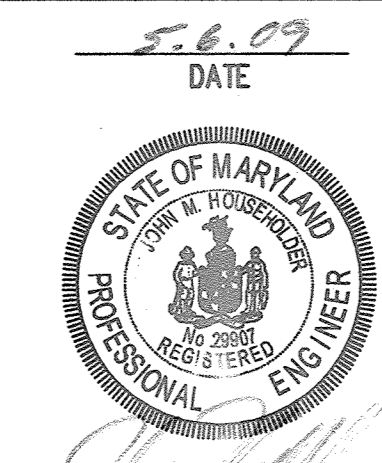
09 of 31

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY

Mona S. Suttler 5/14/09
PLANNING DIRECTOR 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.

Signature of Engineer: *John M. Householder* DATE: 5.6.09
JOHN M. HOUSEHOLDER
MD LICENSE NUMBER: 29907
EXPIRATION DATE: 1-27-2010

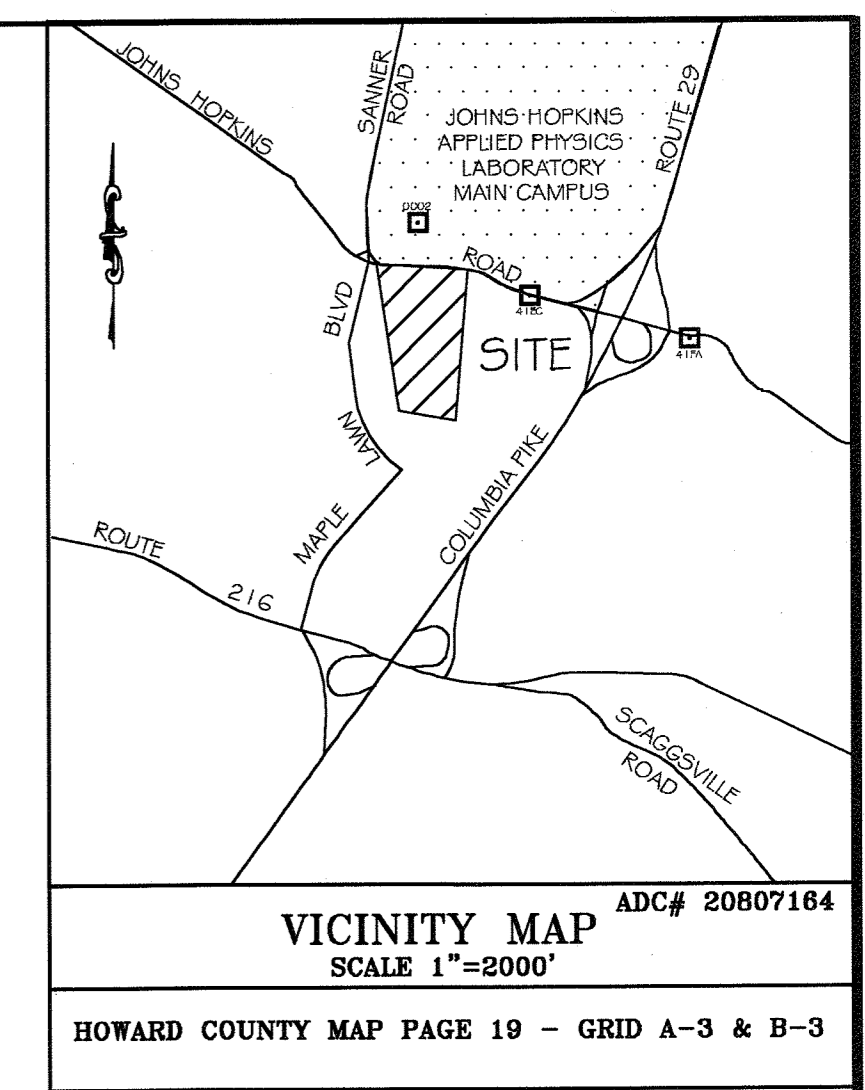


MATCHLINE - FOR CONTINUATION SEE SHEET 11 OF 31

MDC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 9 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 12 OF 31



SUBDIVISION PLAT OF THE
JOHNS HOPKINS UNIVERSITY PROPERTY
(APPLIED PHYSICS LABORATORY SITE)
PLAT 17379
ZONE: PEC
PARCEL 123
(JHU/APL MAIN CAMPUS)

CENTERLINE RIGHT-OF-WAY
HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS
RIGHT OF WAY PLAT FOR ROAD WIDENING
PLAT NOS J-4171-12 AND J-4171-13
(EXHIBIT 'A' OF L. 5247 F. 414 DATED OCT. 3, 2000)

JOHNS HOPKINS ROAD
100' RIGHT-OF-WAY
ASPHALT PAVED PUBLIC ROADWAY
(URBAN MAJOR COLLECTOR)

N/E
JAMES ALAN PRICE
L. 5358 F. 464
ZONED: RR-PXD-3
PARCEL 128

DEVELOPER'S CERTIFICATE
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.

Signature of Developer: *Richard T. Lora* Date: 5/1/09
Print name below signature: Richard T. Lora

ENGINEER'S CERTIFICATE
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.

Signature of Engineer: *J.M. Householder* Date: 5.1.09
Print name below signature: JOHN HOUSEHOLDER, P.E.

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

This development plan is approved for soil erosion and sediment control by The HOWARD SOIL CONSERVATION DISTRICT.

Howard SCD _____ Date _____

Date	No.	Revision Description

JHU/APL
1100 JOHNS HOPKINS ROAD
CLARKSVILLE MARYLAND 20723-6099
ATTN: JAMES LOESCH, P.E., CFM
PHONE: 443.778.5134 FAX 443.778.6122

christopher consultants
engineering · surveying · land planning
christopher consultants, inc.
1712 columbia gateway drive suite 100, columbia, md 21046-2996
410.322.6900 www.c3i.com fax 410.322.6900

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41
		ELECTION DISTRICT 5th

TITLE: **SEDIMENT AND EROSION CONTROL PLAN**

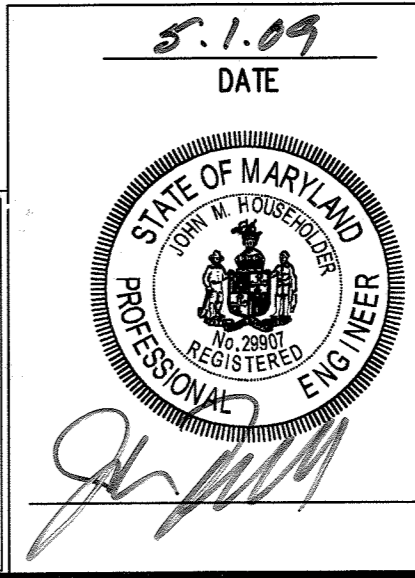
DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	10 of 31

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY

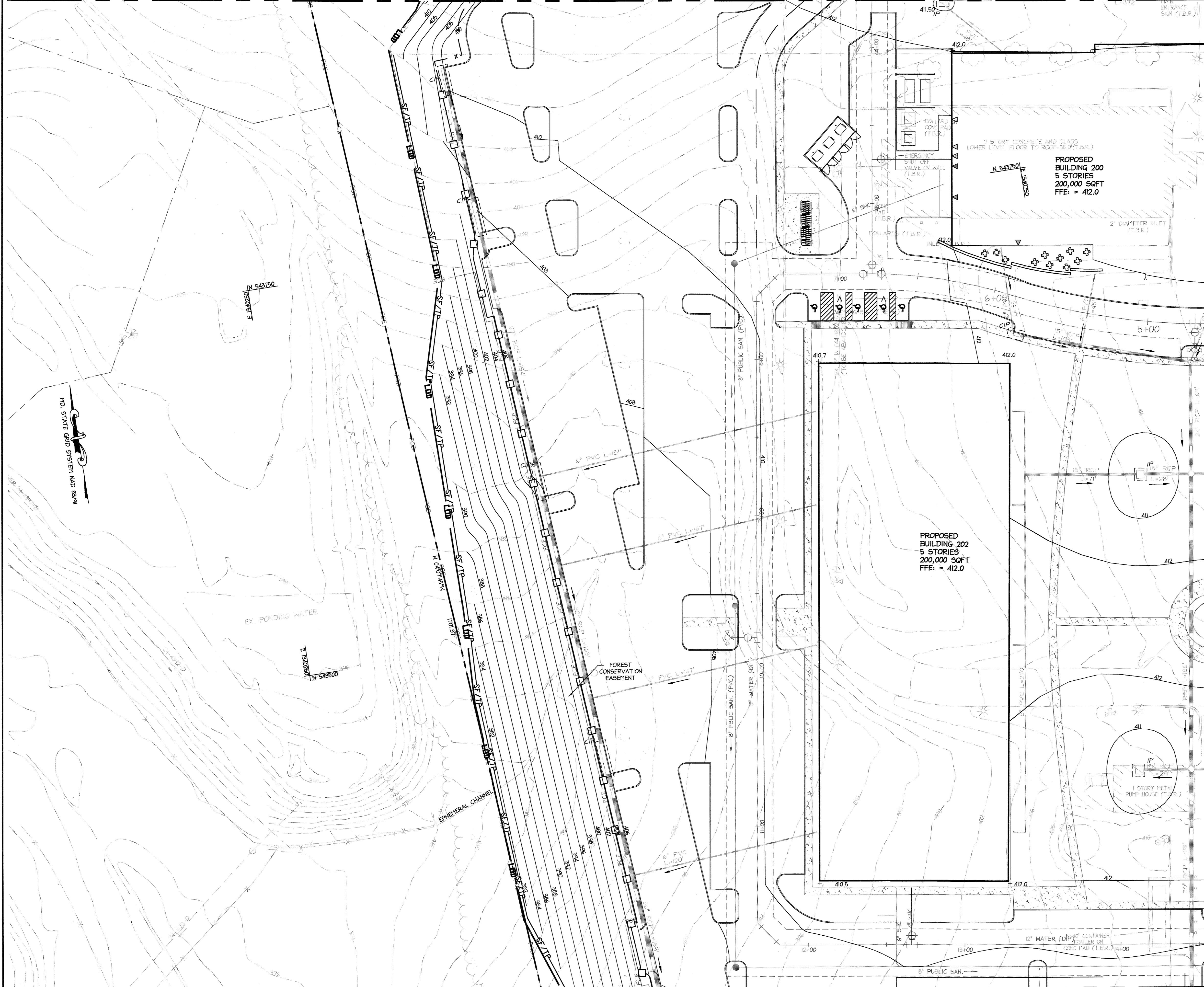
Monica S. Suttler
PLANNING DIRECTOR
DATE: 5/1/09

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.

Signature of Engineer: *J.M. Householder* DATE: 5.1.09
JOHN M. HOUSEHOLDER
MD LICENSE NUMBER: 29907
EXPIRATION DATE: 1-27-2010



MDC-0932(PESP)



MATCHLINE - FOR CONTINUATION SEE SHEET 12 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 13 OF 31

DEVELOPER'S CERTIFICATE
 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.
 Signature of Developer: Richard T. Poca Date: 5/7/09
 Print name below signature: Richard T. Poca

ENGINEER'S CERTIFICATE
 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.
 Signature of Engineer: John M. Householder Date: 5.1.09
 Print name below signature: JOHN HOUSEHOLDER, P.E.

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.
 This development plan is approved for soil erosion and sediment control by The HOWARD SOIL CONSERVATION DISTRICT.
 Howard SCD _____ 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.
 Signature of Engineer: John M. Householder Date: 5.1.09
 Print name below signature: JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010

Date No. Revision Description

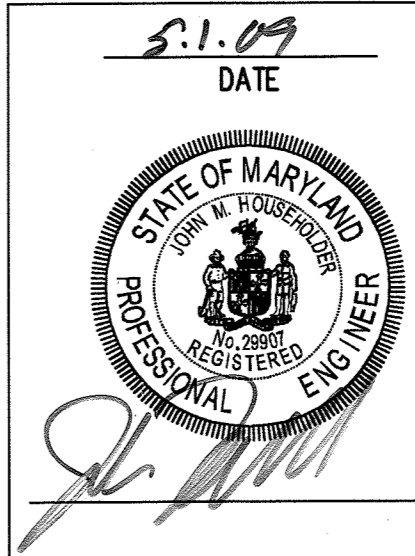
JHU/APL
 1100 JOHNS HOPKINS ROAD
 CLARKSVILLE MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5134 FAX 443.778.6122

christopher consultants
 engineering · surveying · land planning
 christopher consultants, inc.
 7772 columbia gateway drive suite 100 | coltsville, md | 21048-2886
 410.327.8000 · fax: 410.327.8000

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS		LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. 22	TAX MAP 41	ELECTION DISTRICT 5th

TITLE: SEDIMENT AND EROSION CONTROL PLAN		
DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	11 of 31
CHECKED: ENJ/JMH	APPROVED: JMH	

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
 Signature: Miriam E. Suttle DATE: 5/14/09
 PLANNING DIRECTOR

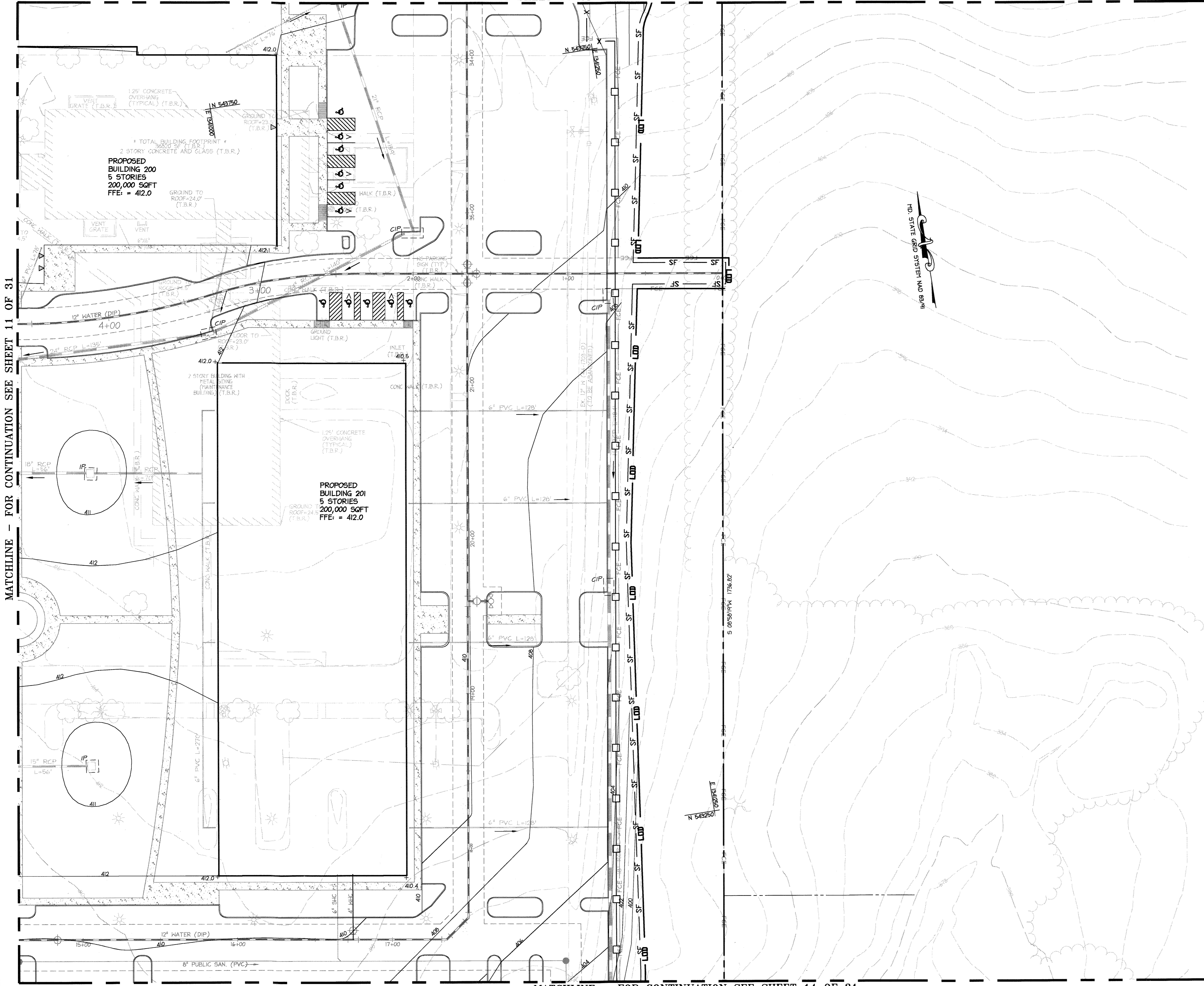


MDC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 10 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 11 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 14 OF 31



DEVELOPER'S CERTIFICATE
 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.
 Signature of Developer: Richard T. Boca Date: 5/7/09
 Print name below signature: Richard T. Boca

ENGINEER'S CERTIFICATE
 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.
 Signature of Engineer: J.M. Householder Date: 5.1.09
 Print name below signature: JOHN HOUSEHOLDER, P.E.

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.
 This development plan is approved for soil erosion and sediment control by The HOWARD SOIL CONSERVATION DISTRICT.
 Howard SCD 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.
 Signature of Engineer: J.M. Householder Date: 5.1.09
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010

JHU/APL
 1100 JOHNS HOPKINS ROAD
 CLARKSVILLE MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5134 FAX 443.778.6122

christopher consultants
 engineering - surveying - land planning
 christopher consultants, inc.
 7122 colonial gateway drive suite 1000 | columbia, md 21046-2990
 410.872.8860 | md: 301.861.0148 | va: 410.872.8860

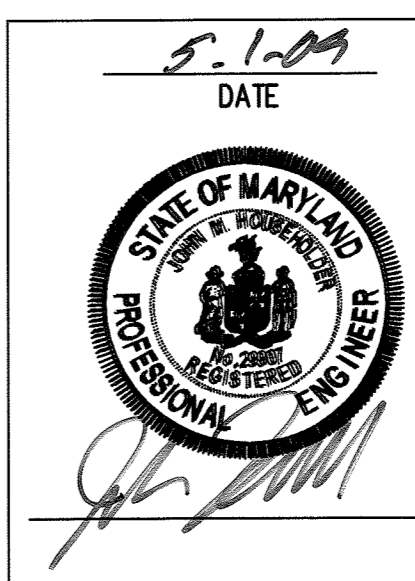
PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. 22 ZONE PEC	TAX MAP 41 ELECTION DISTRICT 5th

TITLE: **SEDIMENT AND EROSION CONTROL PLAN**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	12 OF 31
CHECKED: ENJ/JMH	APPROVED: JMH	

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
 Signature: Morgan G. Swales Date: 5/14/09
 PLANNING DIRECTOR DATE



MDC-932 (PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 11 OF 31

MAPLE LAWN FARM INC.
L. 2113 F. 597
L. 2133 F. 600
L. 7161 F. 91
ZONE: RR-MXD-3
PARCEL A-13

MATCHLINE - FOR CONTINUATION SEE SHEET THIS SHEET

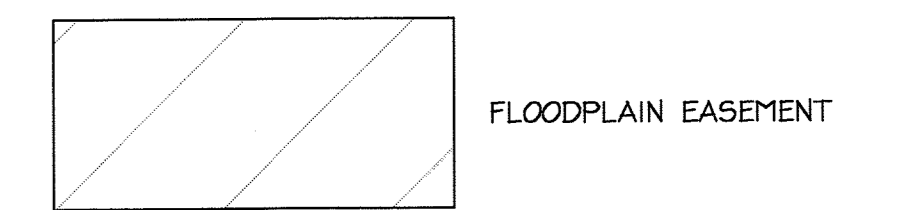
N/F
MAPLE LAWN FARM INC.
L. 2113 F. 597
L. 2133 F. 600
L. 7161 F. 91
ZONE: RR-MXD-3

N/F
MAPLE LAWN FARM INC.
L. 2113 F. 597
L. 2133 F. 600
L. 7161 F. 91
ZONE: RR-MXD-3

MATCHLINE - FOR CONTINUATION SEE SHEET 8 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET THIS SHEET

MATCHLINE - FOR CONTINUATION SEE SHEET 14 OF 31



DEVELOPER'S CERTIFICATE
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.

Signature of Developer: *Richard T. Boca*
Date: 5/1/09

Print name below signature: Richard T. Boca

ENGINEER'S CERTIFICATE
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.

Signature of Engineer: *J.M. Householder*
Date: 5.1.09

JOHN HOUSEHOLDER, P.E.
Print name below signature

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

This development plan is approved for soil erosion and sediment control by The HOWARD SOIL CONSERVATION DISTRICT.

Howard SCD _____
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.

Signature of Engineer: *J.M. Householder*
Date: 5.1.09

JOHN M. HOUSEHOLDER
MD LICENSE NUMBER: 29907
EXPIRATION DATE: 1-27-2010

Date No. Revision Description

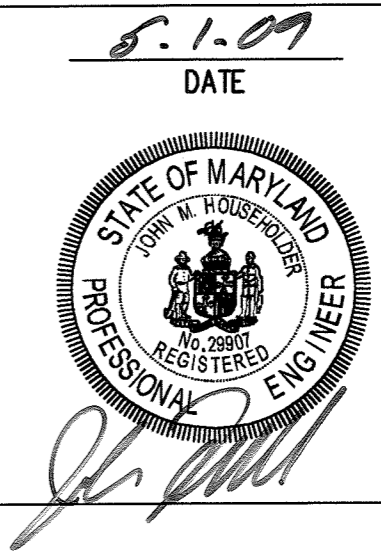
JHU/APL
1100 JOHNS HOPKINS ROAD
CLARKSVILLE MARYLAND 20723-6099
ATTN: JAMES LOESCH, P.E., CFM
PHONE: 443.778.5134 FAX 443.778.6122

christopher consultants
engineering - surveying - land planning
christopher consultants, inc.
772 columbia gateway drive suite 100, columbia, md 21046-2996
410.322.6600 metro 301.514.1144 fax 410.322.6600

PERMIT INFORMATION CHART			
PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02	
DEED REF. L10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41	ELECTION DISTRICT 5th

TITLE: **SEDIMENT AND EROSION CONTROL PLAN**

DESIGN: ENJ SCALE: 1" = 30' PROJECT: 08A901.00
DRAWN: DAM DATE: MAY, 2009
CHECKED: ENJ/JMH APPROVED: JMH

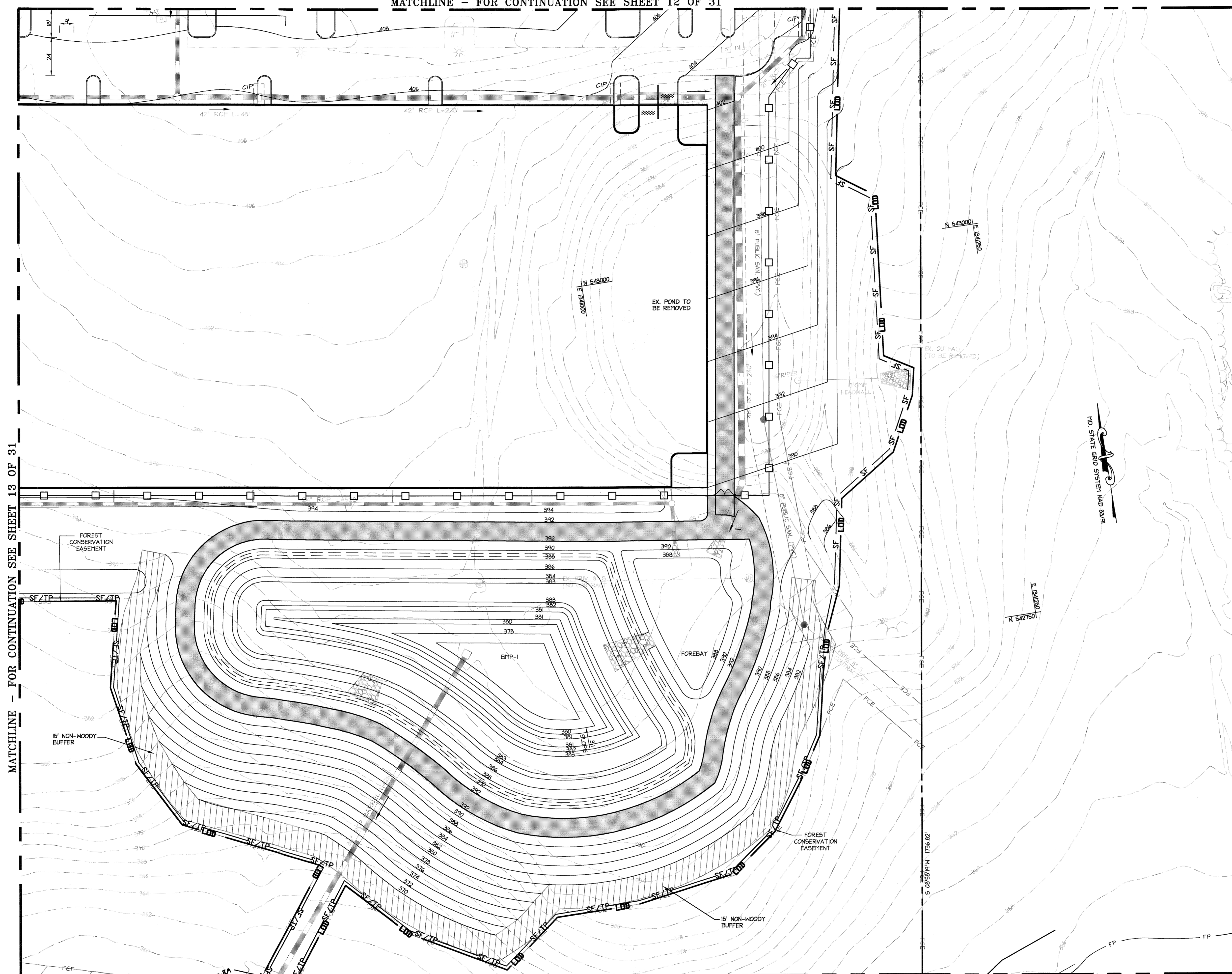


TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY

William B. Suttle
PLANNING DIRECTOR
DATE: 5/14/09

MDC-0932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 12 OF 31



MATCHLINE - FOR CONTINUATION SEE SHEET 8 OF 31

DEVELOPER'S CERTIFICATE
 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.
 Signature of Developer: Richard T. Roca Date: 5/7/09
 Print name below signature: Richard T. Roca

ENGINEER'S CERTIFICATE
 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.
 Signature of Engineer: [Signature] Date: 5-1-09
 Print name below signature: JOHN HOUSEHOLDER, P.E.

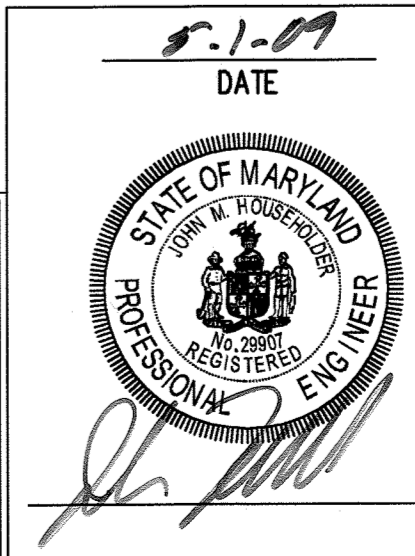
REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

This development plan is approved for soil erosion and sediment control by The HOWARD SOIL CONSERVATION DISTRICT.
 Howard SCD Date: _____

MATCHLINE - FOR CONTINUATION SEE SHEET 13 OF 31

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
 Planning Director: [Signature] DATE: 5/14/09

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.
 Signature of Engineer: [Signature] DATE: 5-1-09
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010



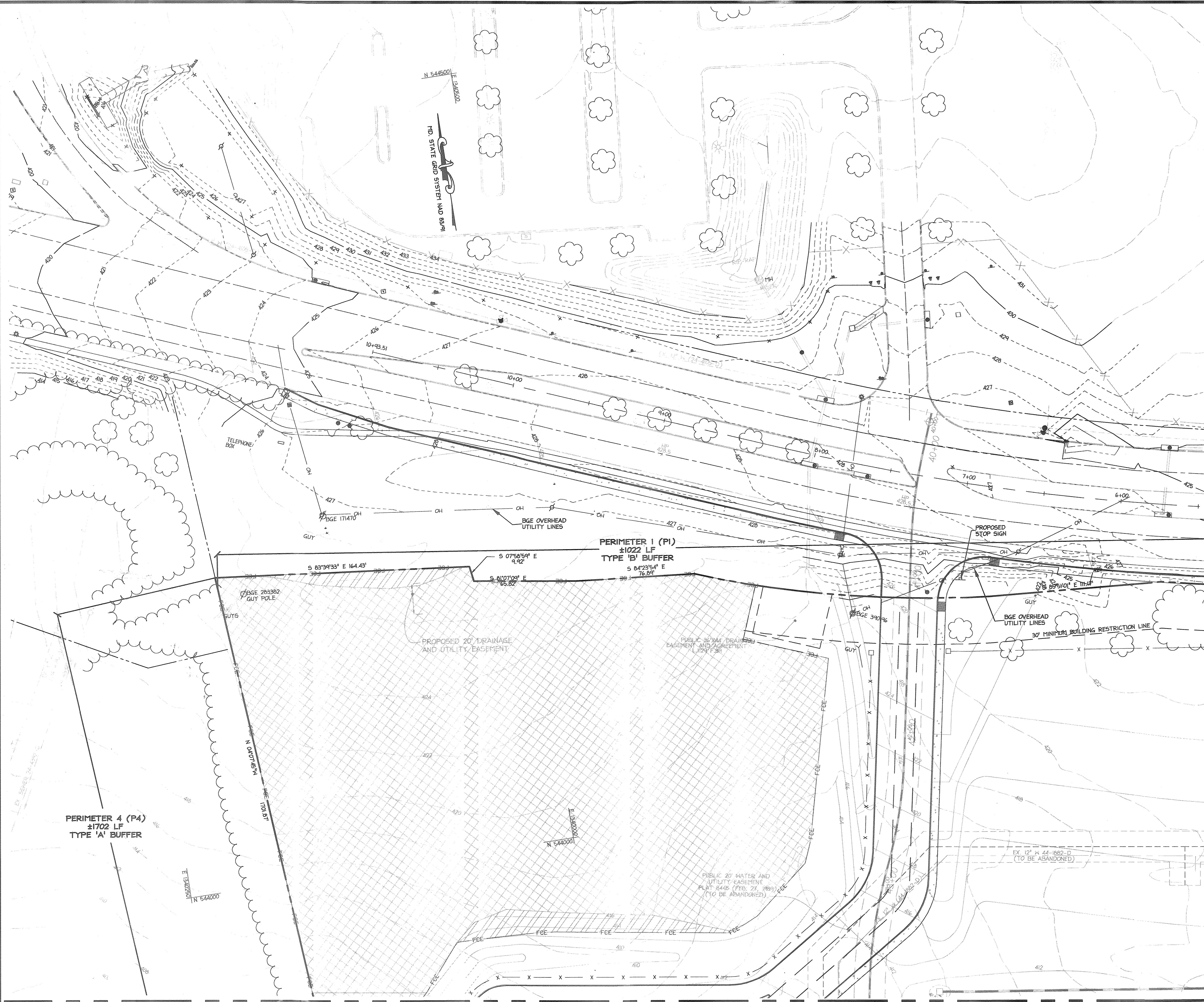
Date	No.	Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 CLARKSVILLE MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5134 FAX 443.778.6122

christopher consultants
 engineering - surveying - land planning
 christopher consultants, inc.
 7172 columbia gateway drive suite 103, coltsville, md. 21046-2890
 410.372.6600 www.csc.com fax 410.372.6600

PERMIT INFORMATION CHART			
PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02	
DEED REF. L10412, F.396	GRID NO. 22	ZONE PEC	TAX MAP 41
ELECTION DISTRICT 5th			
TITLE: SEDIMENT AND EROSION CONTROL PLAN			
DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00	
DRAWN: DAM	DATE: MAY, 2009		
CHECKED: ENJ/JMH	APPROVED: JMH	14 of 31	

MDC-932(PESP)



LEGEND

EXISTING CONTOURS	---
PROPOSED CONTOUR	---
EXISTING SANITARY SEWER	EX. 8" SAN
EXISTING WATER	EX. 6" WATER
PROPERTY LINE	---
STREAM CENTERLINE	---
WETLAND LIMITS	---
25' WETLAND BUFFER	---
LIMIT OF DISTURBANCE	---
EXISTING TREELINE	---
PROPOSED FOREST CON ESMT	---
PROPOSED 8' WROUGHT IRON FENCE	---
PROPOSED 8' CHAIN LINK FENCE	---
EXISTING TREE	☼
FOREST PRESERVATION AREA	▨
FOREST REFORESTATION AREA	▩
FLOODPLAIN AREA	▧

MATCHLINE - FOR CONTINUATION SEE SHEET 17 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 18 OF 31

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY
Thomas E. Smith
 PLANNING DIRECTOR
 DATE

Date	No.	Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 LAUREL MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5134 FAX: 443.778.6122

christopher consultants
 engineering - surveying - land planning
 christopher consultants, LLC
 7172 Columbia Gateway Drive Suite 100 Columbia, MD 21046-2890
 410.326.0800 - fax: 410.326.0803

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 310	CENSUS TRACT 6051.02
DEED REF. L10412, F.398	GRID NO. ZONE 22 PEC	TAX MAP 41
ELECTION DISTRICT 5th		

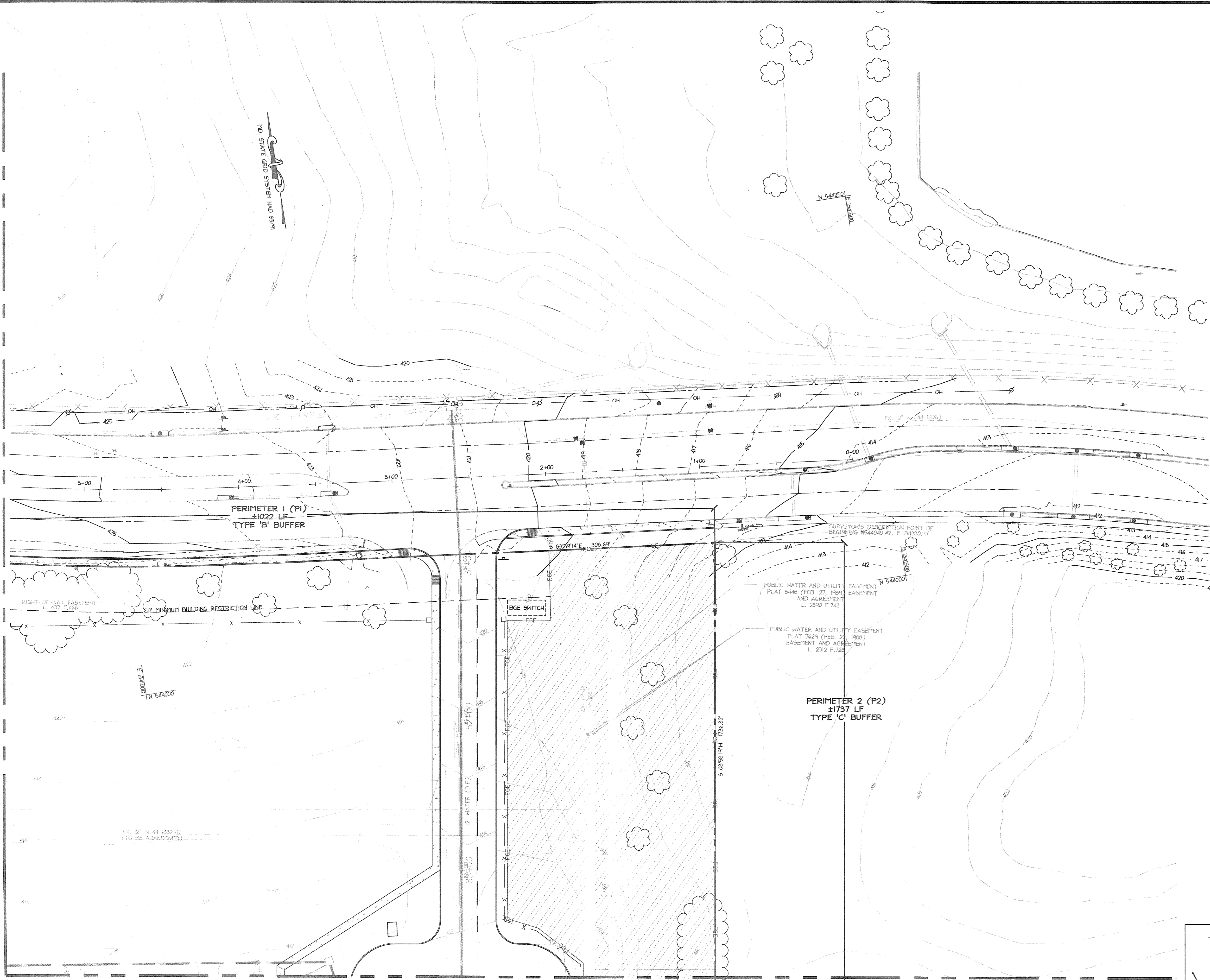
TITLE: **LANDSCAPE PLAN**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	16 of 31

5.1.2009
 DATE
J.A. Smith

MDC-032(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 16 OF 31



MATCHLINE - FOR CONTINUATION SEE SHEET 19 OF 31

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY
Barbara Butler
 PLANNING DIRECTOR DATE

5.1.2009
 DATE
John Gibbs

Date	No.	Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 LAUREL MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5834 FAX 443.778.6122

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 7172 columbia gateway drive suite 100 | columbia, md 21046-2899
 410.322.8800 · www.c3iconsultants.com

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L.10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41
		ELECTION DISTRICT 5th

TITLE:

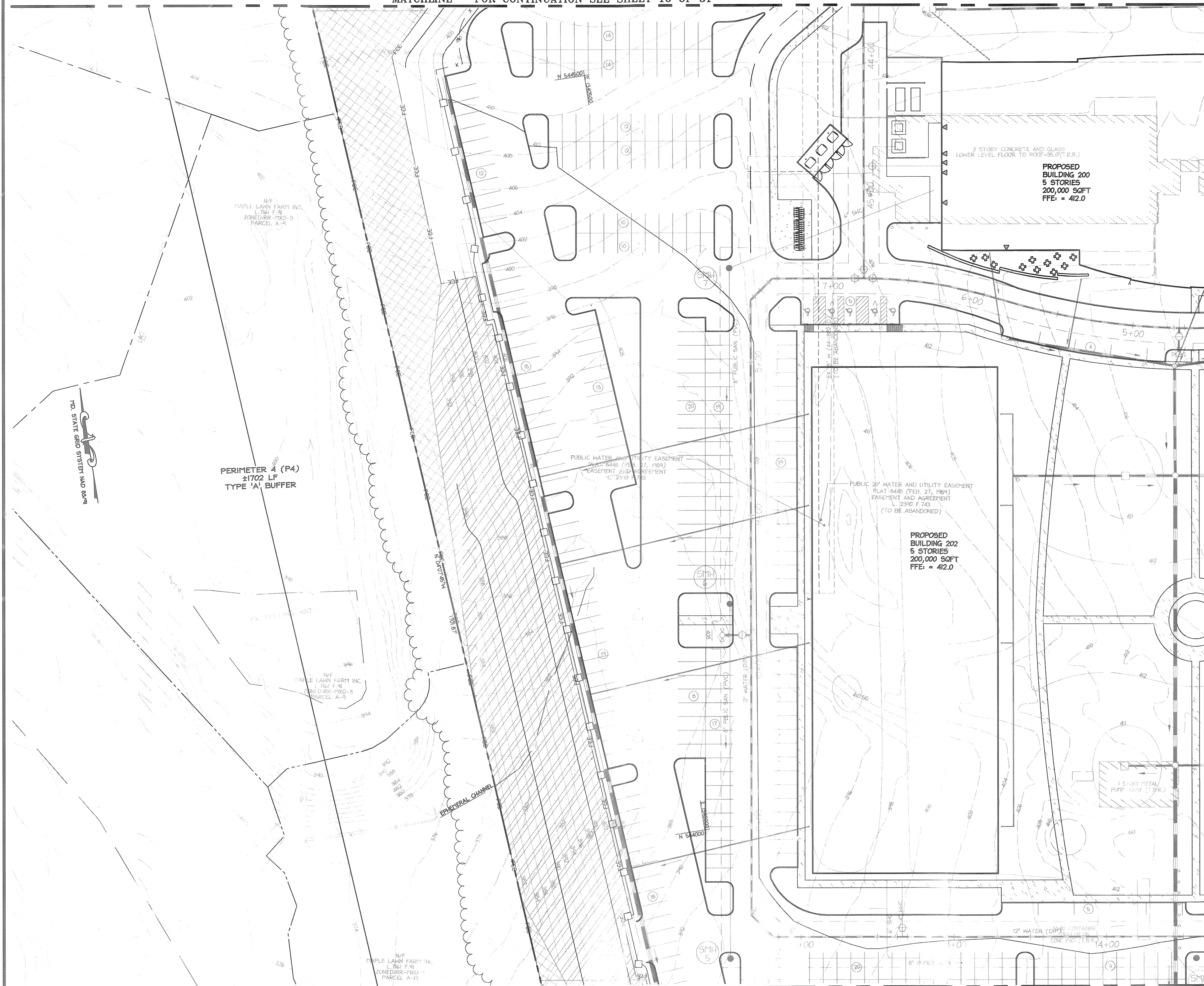
LANDSCAPE PLAN

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	17 of 31

SP-09-007

MDC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 16 OF 31



MATCHLINE - FOR CONTINUATION SEE SHEET 20 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 19 OF 31

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY
PLANNING DIRECTOR: [Signature] DATE

5.1.2009
DATE

[Signature]

Date	No.	Revision Description

JBU/APL
1100 JOHNS HOPKINS ROAD
LAUREL MARYLAND 20723-8099
ATTN: JAMES LOESCH, P.E., CFM
PHONE: 443.778.5134 FAX 443.778.6122

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christopher consultants, llc
7772 Columbia Gateway Drive Suite 100 Columbia, MD 21046-2900
410.872.2800 · mobile 301.881.0148 · fax 410.872.2800

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.386	GRID NO./ZONE 22 PEC	TAX MAP 41 ELECTION DISTRICT 5th

TITLE:

LANDSCAPE PLAN

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	18 of 31
CHECKED: ENJ/JMH	APPROVED: JMH	

SP-09-007

MDC-937(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 17 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 18 OF 31



MATCHLINE - FOR CONTINUATION SEE SHEET 21 OF 31

LEGEND

EXISTING CONTOURS	---
PROPOSED CONTOUR	---
EXISTING SANITARY SEWER	--- S.W. ---
EXISTING WATER	--- W. ---
PROPERTY LINE	---
STREAM CENTERLINE	---
WETLAND LIMITS	---
25' WETLAND BUFFER	---
LIMIT OF DISTURBANCE	---
EXISTING TREELINE	---
PROPOSED FOREST CON ESMT	---
PROPOSED WROUGHT IRON FENCE	---
PROPOSED CHAIN LINK FENCE	---
EXISTING TREE	---
FOREST PRESERVATION AREA	---
FOREST REFORESTATION AREA	---
FLOODPLAIN AREA	---

Date		No.		Revision Description	
<p>JHU/APL 1100 JOHNS HOPKINS ROAD CLARKSVILLE MARYLAND 20723-6099 ATTN: JAMES LOESCH, P.E., CFM PHONE: 443.778.5134 FAX 443.778.6122</p>					
<p>christopher consultants engineering · surveying · land planning christopherconsultants, ltd. 7172 columbian gateway drive (suite 100) · columbia, md · 21046-2900 410.329.0000 · www.c3.com · 0116 · 1a 410.329.0000</p>					
PERMIT INFORMATION CHART					
PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS		LOT/PARCEL NO. 300	CENSUS TRACT 6051.02		
DEED REF. L.10412, F.396	GRID NO. 22	ZONE PEC	TAX MAP 41	ELECTION DISTRICT 5th	
TITLE: LANDSCAPE PLAN					
DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00			
DRAWN: DAM	DATE: MAY, 2009				
CHECKED: ENJ/JMH	APPROVED: JMH			19 of 31	

5.1.2009
DATE

J. L. Jell

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Monica Kettle 5/14/09
PLANNING DIRECTOR DATE

MDC-992(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 18 OF 31

MATCHLINE - FOR CONTINUATION SEE THIS SHEET

PERIMETER 4 (P4)
±1702 LF
TYPE 'A' BUFFER

PERIMETER 4 (P4)
±1702 LF
TYPE 'A' BUFFER

APPROXIMATE LOCATION
ZONE A3 - AREA OF 100 YEAR
FLOOD PER F.I.R.M. MAP 240044
0036 B

APPROXIMATE LOCATION
ZONE A3 - AREA OF 100 YEAR
FLOOD PER F.I.R.M. MAP 240044
0036 B

MATCHLINE - FOR CONTINUATION SEE SHEET THIS SHEET

MATCHLINE - FOR CONTINUATION SEE SHEET 21 OF 31

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY
M. J. ...
PLANNING DIRECTOR DATE

Date	No.	Revision Description

JHU/APL
1100 JOHNS HOPKINS ROAD
LAUREL, MARYLAND 20723-8099
ATTN: JAMES LOESCH, P.E., CFM
PHONE: 443.778.5934 FAX 443.778.6122

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7172 Columbia Gateway Drive Suite 100 Columbia, Md. 21046-2990
410.228.0000 fax 410.228.0001

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L.10412, F.396	GRID NO. 22	TAX MAP 41
	ZONE PEC	ELECTION DISTRICT 5th

TITLE:
LANDSCAPE PLAN

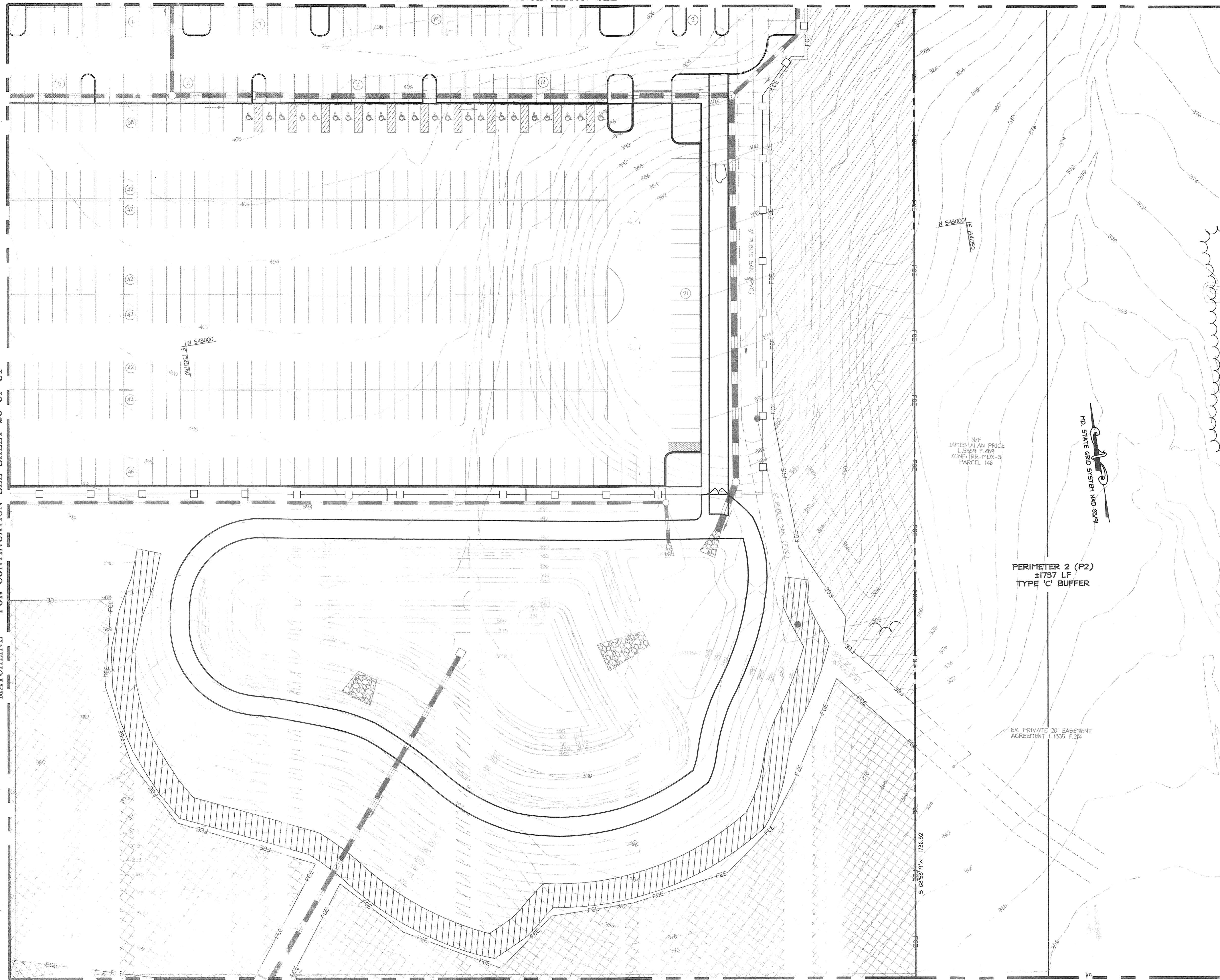
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DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	20 of 31

10.1.2009
DATE
J. J. ...

SP-09-007

MDC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 20 OF 31



MATCHLINE - FOR CONTINUATION SEE SHEET 22 OF 31

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY
Monica S. Butler
PLANNING DIRECTOR DATE

5.1.2009
DATE
J.L. Miller

Date	No.	Revision Description

JHU/APL
1100 JOHNS HOPKINS ROAD
LAUREL, MARYLAND 20723-6099
ATTN: JAMES LOESCH, P.E., CFM
PHONE: 443.778.5134 FAX: 443.778.6122

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7172 Columbia Gateway Drive Suite 100 Columbia, MD 21046-2900
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PERMIT INFORMATION CHART

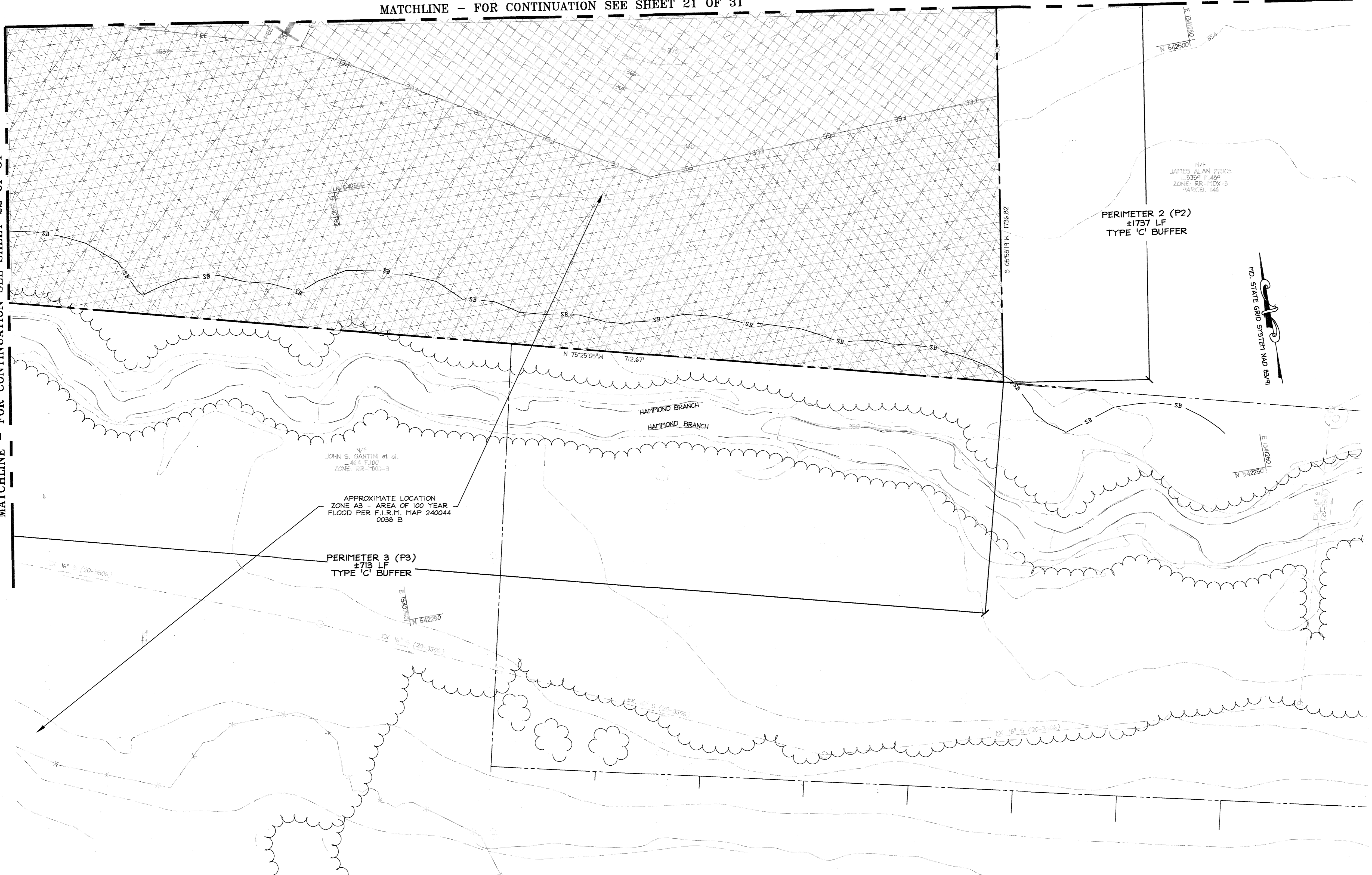
PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. 22	TAX MAP 41
	ZONE PEC	ELECTION DISTRICT 5h

TITLE: LANDSCAPE PLAN		
DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWING: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	21 of 31

MDC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 21 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 22 OF 31



PERIMETER 2 (P2)
±1737 LF
TYPE 'C' BUFFER

N/F
JOHN S. SANTINI et al.
L 464 F 393
ZONE: RR-15D-3

APPROXIMATE LOCATION
ZONE A3 - AREA OF 100 YEAR
FLOOD PER F.I.R.M. MAP 240044
0039 B

PERIMETER 3 (P3)
±713 LF
TYPE 'C' BUFFER

Date	No.	Revision Description

JHU/APL
1100 JOHNS HOPKINS ROAD
CLARKSVILLE MARYLAND 20723-6099
ATTN: JAMES LOESCH, P.E., CFM
PHONE: 443.778.5134 FAX 443.778.6122

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7172 columbia gateway drive suite 1001 columbia, md 21046-2996
410.322.8900 · www.c3i.com · fax 410.322.8900

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41
		ELECTION DISTRICT 5th

5.1.2009
DATE
James Loesch

TITLE: **LANDSCAPE PLAN**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	22 of 31
CHECKED: ENJ/JMH	APPROVED: JMH	

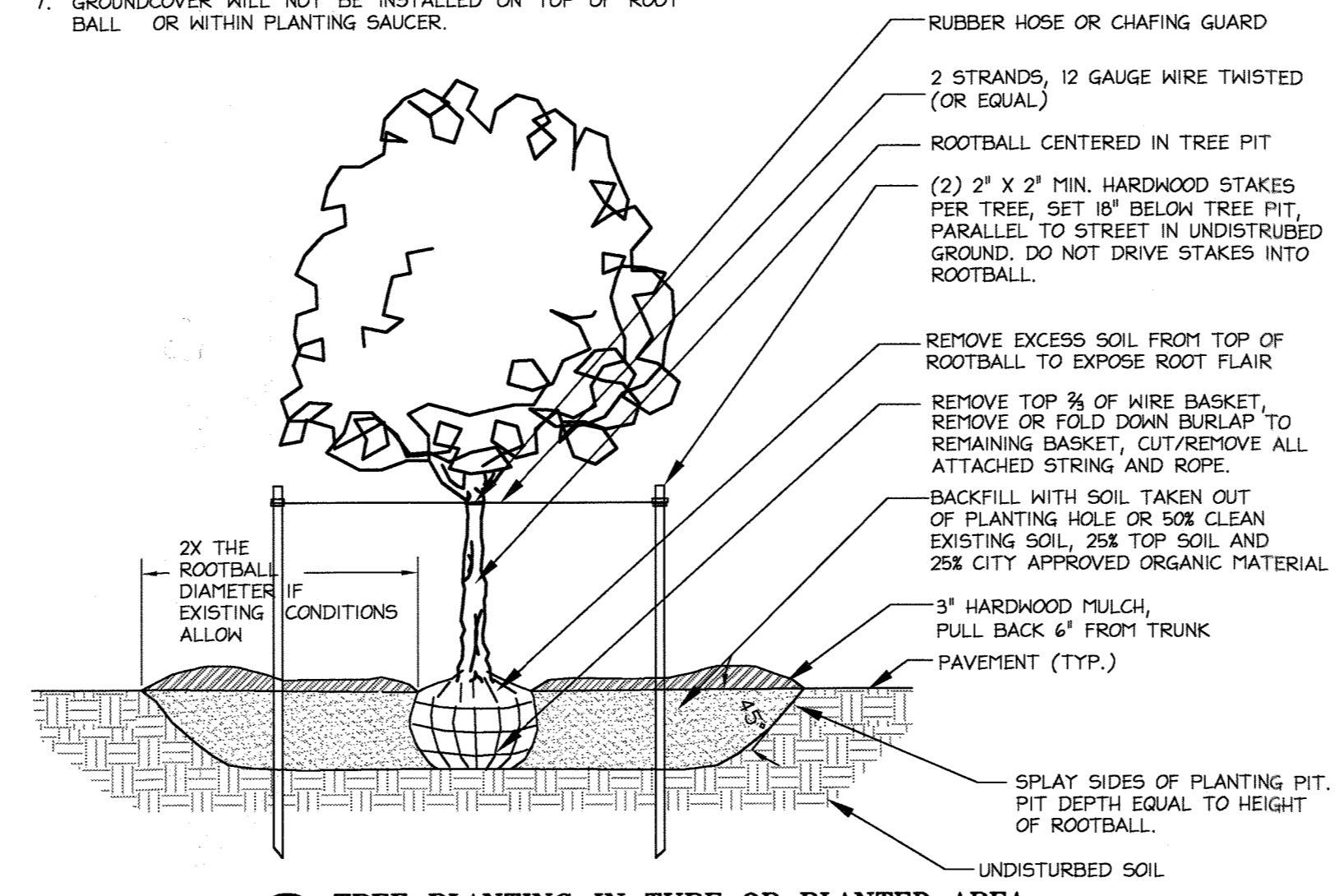
TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY
Monica S. Sullivan
PLANNING DIRECTOR DATE

MDC-932(PESP)

**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	
PERIMETER	P1	P2	P3	P4	
LANDSCAPE TYPE 'A' 1 SHADE TREE PER 60 L.F.					±1702
LANDSCAPE TYPE 'B' 1 SHADE TREE PER 50 L.F. 1 EVERGREEN TREE PER 40 L.F.	±1022				
LANDSCAPE TYPE 'C' L.F. OF PER. 1 SHADE TREE PER 40 L.F. AND 1 EVERGREEN PER 20 L.F.		±1737	±713		
CREDIT FOR EX. VEG. BELOW IF NEEDED	YES, 490 LF EX VEG & 10 EX SHADE TREES	YES, 303 LF EX VEG & 35 EX EVERGREEN TREES & 5 EX SHADE TREES	YES, 100% TIS LF EX VEG	YES, 156 LF OF EX VEG	
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	
NO. OF PLANTS REQ.					Plant Totals
SHADE TREES	1	31	0	9	43 SHADE TREES
EVG. TREES	14	37	0	0	53 EVG. TREES
SHRUBS	0	0	0	0	0 SHRUBS
NO. OF PLANTS PROV.					Plant Totals
SHADE TREES	2	36	0	9	47 SHADE TREES
EVG. TREES	15	37	0	0	55 EVG. TREES
OTHER TREES	0	0	0	0	0 OTHER TREES
SHRUBS	0	0	0	0	0 SHRUBS

- NOTES:**
1. PRUNE TO REMOVE DAMAGED, DISEASED OR BROKEN BRANCHES
 2. DO NOT REMOVE MORE THAN 1/3 OF BRANCH SYSTEM.
 3. DO NOT CUT LEADER. TREE MUST RETAIN NATURAL CROWN SHAPE.
 4. REMOVE ALL STAKES WITHIN THE REQUIRED PERIOD.
 5. MULCH AND SOIL SHALL BE HELD AWAY FROM TREE TRUNK AT TOP OF ROOT BALL.
 6. TREE TRENCHES SHALL HOLD A MINIMUM OF 300 CUBIC FEET OF SOIL PER TREE
 7. GROUNDCOVER WILL NOT BE INSTALLED ON TOP OF ROOT BALL OR WITHIN PLANTING SAUCER.



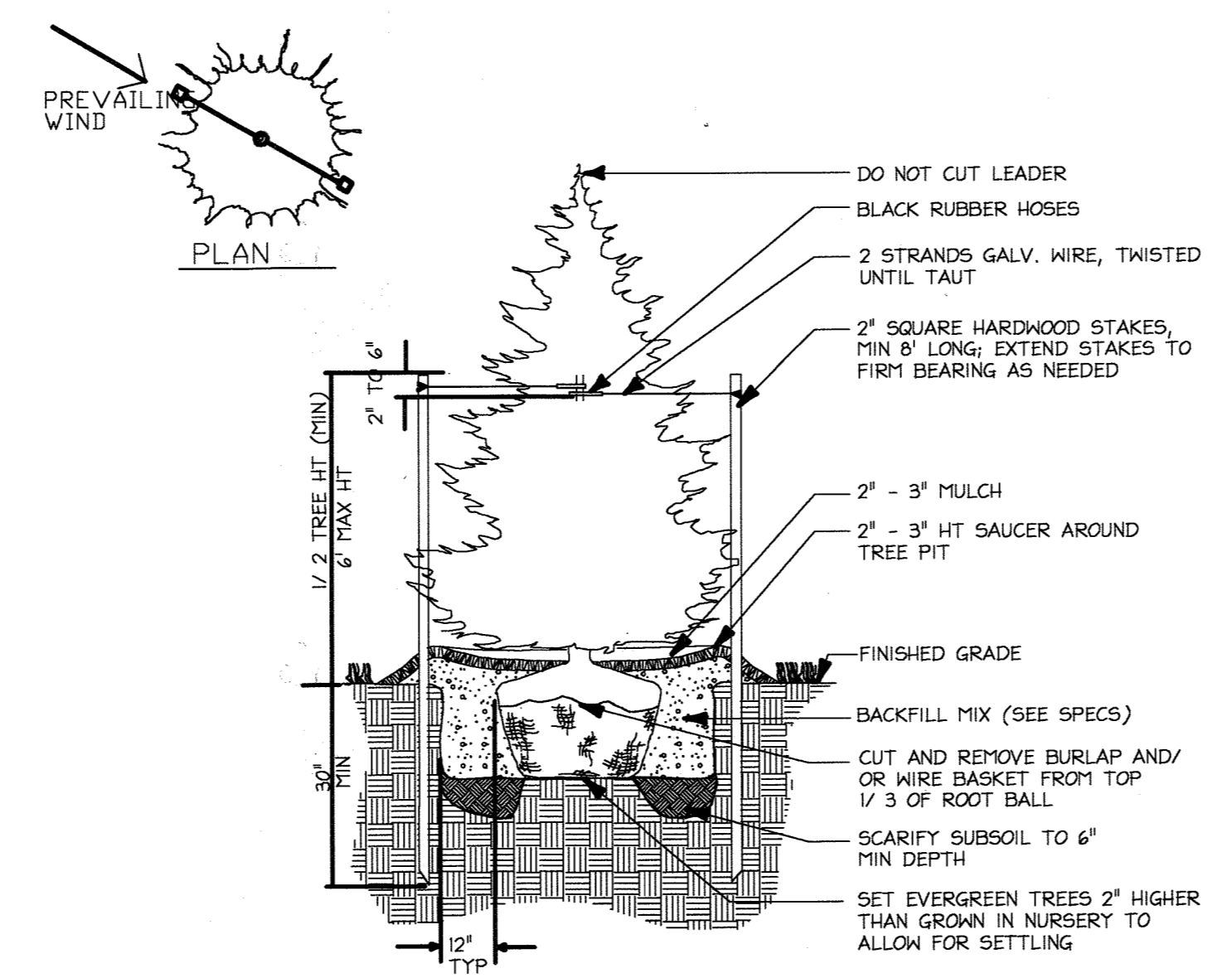
A TREE PLANTING IN TURF OR PLANTED AREA
NOT TO SCALE

**SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING**

NUMBER OF PROPOSED PARKING SPACES	1175
INTERNAL ISLANDS REQUIRED (1 ISLAND/ 20 PARKING SPACES)	59
INTERNAL ISLANDS PROVIDED (200 SQ. FT./ISLAND)	59
NUMBER OF TREES REQUIRED (1 SHADE TREE/ 20 PARKING SPACES)	59
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	59 0

**SCHEDULE D
STORMWATER MANAGEMENT AREA LANDSCAPING**

LINEAR FEET OF PERIMETER	806
NUMBER OF TREES REQUIRED SHADE TREES EVERGREEN TREES	5 10
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	YES, 77%
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO
NUMBER OF TREES PROVIDED SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION)	6 10 0



E EVERGREEN TREE PLANTING
Not To Scale

THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, AND IS THE RESPONSIBILITY OF THE DEVELOPER (AT FINAL PLAT) OR THE BUILDER (INTERNAL LANDSCAPING AT SITE DEVELOPMENT PLAN), PER SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPING MANUAL. UPON TREES COMPLETION, A LETTER OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE-YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY
M. M. Smith
PLANNING DIRECTOR DATE

5.1.2009
DATE
J. J. [Signature]

Date	No.	Revision Description

JHU/APL
1100 JOHNS HOPKINS ROAD
CLARKSVILLE MARYLAND 20723-6099
ATTN: JAMES LOESCH, P.E., CFM
PHONE: 443.778.5134 FAX 443.778.6122

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7172 Columbia Gateway Drive Suite 110 Columbia, MD 21046-2999
410.312.8800 www.c3i.com fax 410.312.8800

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41 ELECTION DISTRICT 5th

TITLE: **LANDSCAPE NOTES & DETAILS**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	23 of 31

SHEET 25

SHEET 26

FOREST CONSERVATION WORKSHEET LOCATED ON SHEET 37

STAND	TYPE OF COMMUNITY	AREA	SOIL INFORMATION			EXISTING VEGETATION (Dominant Species and Approx %)	STAND CHARACTERISTICS			FOREST AREA IN SENSITIVE ENVIRONMENTS (Acres)	HABITAT VALUE
			Soil Types	Typical forest cover for soil type	Woodland Suitability Index		Size (Dia.)	Age (Years)	General Conditions		
1	Tulip Poplar	1.81 acres	Cn GqH GqC GqH	Upland Hardwood Upland Hardwood Upland Hardwood Tolerant Hardwood	30 30 12 4	Tulip Poplar 50% Red Oak 15% White Oak 15%	20'-30"	60-80	Good	0.66	Good
2	Tulip Poplar	4.72 acres	GqC H4 GqC	Upland Hardwood Bottom Hardwood	30 2	Red Maple 50% Tulip Poplar 25%	12'-20"	30-60	Good	2.30	Good
3	Tulip Poplar	1.54 acres	GqC	Upland Hardwood Upland Hardwood	30 30	Tulip Poplar 60%	8'-15"	10-25	Good	0.03	Good

FOREST STAND NARRATIVES

F1 - FOREST STAND ONE
Stand One is approximately 13.7 acres in size and runs along the western edge of the parcel to its southern limit where it is delineated from Stand #2 by the change in topography and associated soil type. Stand #1 does not continue offsite to the west and is bounded on its eastern edge by the existing site development. This mature stand is dominated by 20 to 30 inch dbh Tulip Poplars (Liriodendron tulipifera), Red Oak (Quercus rubra), and White Oak (Quercus alba) within the canopy. The understory was dominated by Black Cherry (Prunus serotina) and Bush Honeysuckle (Lonicera sp.) with other species such as Oak (Quercus sp.), American Holly (Ilex opaca), Flowering Dogwood (Cornus florida), Spicebush (Lindera benzoin), Multiflora rose (Rosa multiflora) and Greenbriar (Smilax rotundifolia) recorded. Due to winter survey no herbaceous layer was noted, but leaf litter was noted as well developed (greater than 4 inches).
Stand #1 contains the highest quality forest on the site from the perspective of timber quality and biodiversity. The structural diversity of this stand is high and there is healthy regeneration of oak species. The intermittent stream, its buffer and the 19 specimen trees should be given high priority for retention. Invasive species were located throughout the stand but were concentrated along the edges and in the southwestern section. Some distress was seen in the oak community and several stand oaks were observed. It is believed that this distress was due to past gypsey moth damage and should be monitored and treated as necessary.

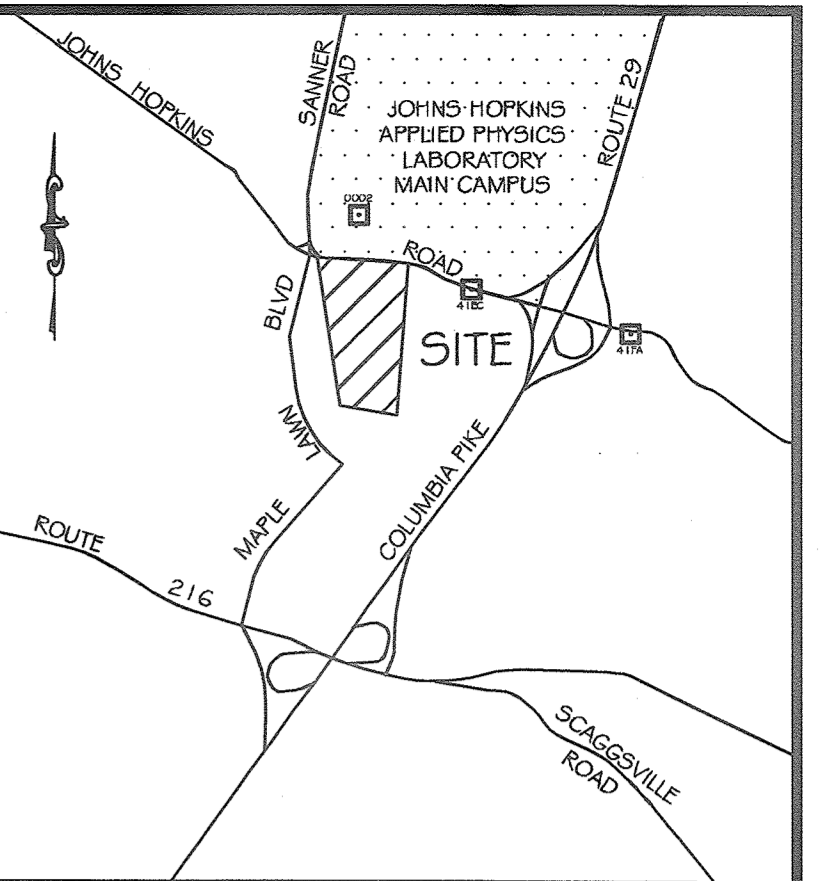
F2 - FOREST STAND TWO
Stand Two is a mid-successional stage forest approximately 4.7 acres in size and is located along the southern portion of the property within or adjacent to the floodplain of Hammond Branch. Stand #2 extends offsite to the East, West, and South of the delineated from Stands #1 and #3 by topography as it is associated with the floodplain. The stand is dominated by 12 to 20 inch dbh Red Maples (Acer rubra) with Tulip Poplars, Black Cherry, Green Ash (Fraxinus pennsylvanica), and Pin Oaks (Quercus jeffersonii) also noted. The understory of Stand #2 was comparable to Stand #1 with the addition of Muscadine (Carpinus caroliniana) and Arrowwood (Viburnum dentatum). The herbaceous layer was lacking due to winter survey but the emergence of Slunk Cabbage (Syrmplocospa betula) within the delineated wetland area was noted. A small isolated stand of native Loblolly Pine (Pinus taeda) was noted near the northern edge of the stand and a large bat, possibly a barred owl, was noted on several occasions roosting in this area.
Due to its location within the 100 yr floodplain and the presence of delineated wetlands Stand #2 represents the highest priority stand for retention and contains 2 specimen trees. Multiflora Rose and Honeysuckle were found in dense concentrations at regular intervals throughout the stand.

F3 - FOREST STAND THREE
Forest Stand Three is approximately 1.6 acres in size and located on a small knoll between Stand #2 and the existing stormwater management pond. The stand is essentially a monoculture of young Tulip Poplar trees under 15" in diameter through Black Cherry and Red Maples were also observed. The understory contained species similar to Stand #1, however, invasive shrubs and vines were more prevalent and quite dense in many areas.
Stand #3 does not contain any specimen trees. Due to a lack of diversity, low species value, and the extensive presence of invasive species Stand #3 should be considered of low retention value where other environmental factors such as slope are not an issue.

H1 & H2 - HEDGEROWS ONE AND TWO
Two hedgerows exist along the eastern edge of the property. H1 consists of a buffer planting of White Pine trees currently approximately 20' in height. H2 is a scrubby mix of young Tulip Poplars, Black cherries, Trees of Heaven, and other opportunistic species which are becoming increasingly overgrown by invasive vines and shrubs. Currently the hedgerows are not serving as a buffer to adjacent land uses (weeds) so retention is not a high priority. Selective thinning and invasive control is recommended if these areas are retained.
T1 & L1 LAWN AREAS
Two distinct manicured areas exist on the site. Lawn Area #1 consists of the existing stormwater management dry detention pond to the south of the southern most parking area. Lawn Area #1 consists entirely of manicured turf with no woody growth. Lawn Area #2 consists of the remaining lawn area within the campus. This area contains various groupings and singular plantings of trees planted for aesthetic value. Many of these trees are mature in size although none have reached specimen size (>30" dbh).

LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOUR
- EXISTING SANITARY SEWER
- EXISTING WATER
- SOILS
- PROPERTY LINE
- STREAM CENTERLINE
- WETLAND LIMITS
- 2% WETLAND BUFFER
- LIMIT OF DISTURBANCE
- PROPOSED TREELINE
- EXISTING TREELINE
- FOREST STAND BOUNDARY
- NON-FOREST STAND OUTLINES
- FOREST CONSERVATION EASEMENT
- SPECIMEN TREE
- +25% STEEP SLOPES
- 15-25% STEEP SLOPES
- FOREST PRESERVATION AREA
- FOREST CLEARING AREA
- FOREST REFORESTATION AREA
- 100 YEAR FLOODPLAIN
- PERMANENT FOREST CONSERVATION SIGN
- TEMPORARY FOREST CONSERVATION SIGN



VICINITY MAP
SCALE 1"=2000'
AD# 20807164
HOWARD COUNTY MAP PAGE 18 - GRID A-3 & B-3

GOALS & OBJECTIVES
THE GOAL OF THIS PLAN IS TO ADDRESS THE FOREST CONSERVATION ACT AND ANY REFORESTATION/AFFORESTATION THAT MAY BE REQUIRED FOR THE DEVELOPMENT OF THE PROPERTY. THIS PROJECT PROPOSES SITE CLEARING TO ALLOW FOR DEVELOPMENT OF THE EXISTING LOTS IN ACCORDANCE WITH THE ZONING CODE. PROPOSED PRESERVATION AND REFORESTATION LOCATED ON-SITE ARE TO THE FULLEST EXTENT POSSIBLE.

FOREST CONSERVATION NOTES

- TOTAL FORESTED AREA ON SITE (EXCLUDING FLOODPLAINS) = 17.41 AC
- FOREST CLEARING PROPOSED = 11.82 AC
- ON-SITE RETENTION = 5.59 AC
- ON-SITE REFORESTATION = 3.51 AC
- TOTAL REFORESTATION REQUIRED = 4.51 AC
- REMAINING 1.00 AC OF REFORESTATION REQUIRED WILL BE SATISFIED OFF-SITE OR FEE-IN-LEU
- STEEP SLOPES (15%-25% OR 25% OR GREATER) HAVE BEEN IDENTIFIED ON THE SITE
- THE 100 YEAR FLOODPLAIN AREA HAS BEEN IDENTIFIED ON-SITE
- NONTIDAL WETLAND, WETLAND BUFFERS STREAMS OR STREAM BUFFERS DO EXIST ON SITE.

FOREST CONSERVATION EASEMENT 1
9.10 AC
RETENTION THIS SHEET = 1.86 AC
REFORESTATION THIS SHEET = 0.06 AC
CLEARING THIS SHEET = 0.39 AC

FOREST CONSERVATION EASEMENT 1
9.10 AC
REFORESTATION THIS SHEET = 0.80 AC

FOREST CONSERVATION EASEMENT 1
9.10 AC
RETENTION THIS SHEET = 0.39 AC
REFORESTATION THIS SHEET = 0.61 AC
CLEARING THIS SHEET = 4.50 AC

FOREST CONSERVATION EASEMENT 1
9.10 AC
CLEARING THIS SHEET = 0.95 AC
REFORESTATION THIS SHEET = 0.97 AC

FOREST CONSERVATION EASEMENT 1
9.10 AC
RETENTION THIS SHEET = 1.71 AC
REFORESTATION THIS SHEET = 0.30 AC
CLEARING THIS SHEET = 1.66 AC
FLOODPLAIN THIS SHEET = 0.07 AC

FOREST CONSERVATION EASEMENT 1
9.10 AC
RETENTION THIS SHEET = 1.17 AC
REFORESTATION THIS SHEET = 0.77 AC
CLEARING THIS SHEET = 4.92 AC
FLOODPLAIN THIS SHEET = 0.01 AC

FOREST CONSERVATION EASEMENT 1
9.10 AC
FLOODPLAIN THIS SHEET = 0.54 AC

FOREST CONSERVATION EASEMENT 1
9.10 AC
RETENTION THIS SHEET = 0.65 AC
FLOODPLAIN THIS SHEET = 1.85 AC
CLEARING THIS SHEET = 0.01 AC

SOIL CHARACTERISTICS						
SERIES	NAME	SUBGROUP	WOODLAND SUITABILITY GROUP	HYDRIC?	K FACTOR	
GqH2	Chesler gravelly silt loam, 3-8% slopes, moderately eroded	Typic Hapludolls	31	No	0.32	
GqC2	Chesler gravelly silt loam, 8-10% slopes, mod. eroded	Typic Hapludolls	31	No	0.32	
ChA	Chesler silt loam, 0-3% slopes	Typic Hapludolls	30	No	0.32	
Ch	Codomo Sil Loam	Fluvent Dystrudochrepts	4	No	0.37	
G1B2	Chesler Loam, 3-8%, mod. eroded	Typic Hapludolls	30	H	0.32	
G1C2	Chesler Loam, 8-10%, mod. eroded	Typic Hapludolls	30	H	0.32	
ChA	Chesler Sil Loam, 0-2% slopes	Typic Hapludolls	12	H	0.32	
H4	Hatboro Sil Loam	Fluvent Hapludolls	2	Y	0.37	
MH2	Many gravelly loam, 3-8% slopes, moderately eroded	Typic Dystrudochrepts	43	No	0.43	
MH2	Mt. Air cherty loam, 3-8% slopes, mod. eroded	Typic Dystrudochrepts	51	No	0.38	
MH3	Mt. Air cherty loam, 8-10% slopes, severely eroded	Typic Dystrudochrepts	51	No	0.38	
MH2	Mt. Air cherty loam, 15-20% slopes, mod. eroded	Typic Dystrudochrepts	52	No	0.38	

ID	Species	Common Name	DBH	Condition	Trunk	CRZ
228	Liriodendron tulipifera	Tulip Poplar	31	Good	Single	46.5
226	Acer rubrum	Red Maple	30	Poor	Single	45
227	Quercus falcata	Southern Red Oak	40.5	Good	Single	60.75
228	Liriodendron tulipifera	Tulip Poplar	43	Good	Double	64.5
229	Quercus alba	White Oak	38	Good	Single	57
230	Quercus falcata	Southern Red Oak	33	Good	Single	49.5
231	Quercus falcata	Southern Red Oak	39.5	Good	Single	59.25
232	Liriodendron tulipifera	Tulip Poplar	30	Fair	Single	45
233	Liriodendron tulipifera	Tulip Poplar	33	Good	Single	49.5
234	Liriodendron tulipifera	Tulip Poplar	30	Good	Single	45
235	Quercus falcata	Southern Red Oak	31.5	Good	Single	47.25
236	Quercus falcata	Southern Red Oak	35.5	Good	Single	53.25
237	Quercus falcata	Southern Red Oak	30	Good	Single	45
238	Liriodendron tulipifera	Tulip Poplar	30	Good	Single	45
239	Liriodendron tulipifera	Tulip Poplar	30.5	Good	Single	45.75
240	Liriodendron tulipifera	Tulip Poplar	30	Good	Single	45
241	Liriodendron tulipifera	Tulip Poplar	33	Good	Single	49.5
242	Quercus alba	White Oak	31	Good	Single	46.5
243	Liriodendron tulipifera	Tulip Poplar	30.5	Good	Single	45.75
244	Quercus falcata	Southern Red Oak	35	Good	Single	52.5
245	Quercus falcata	Southern Red Oak	30.5	Good	Single	45.75
246	Liriodendron tulipifera	Tulip Poplar	33	Good	Single	49.5

FOREST CONSERVATION AREAS

FOREST CONSERVATION EASEMENT	9.10 AC
TOTAL RETENTION	5.59 AC
TOTAL REFORESTATION	3.51 AC
TOTAL CLEARING	11.82 AC
TOTAL FLOODPLAIN (FFA-1)	2.47 AC

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
PLANNING DIRECTOR
DATE 5/16/09

5/16/09
DATE

TIMOTHY R. HESS
COMAR QUALIFIED FOREST PROFESSIONAL

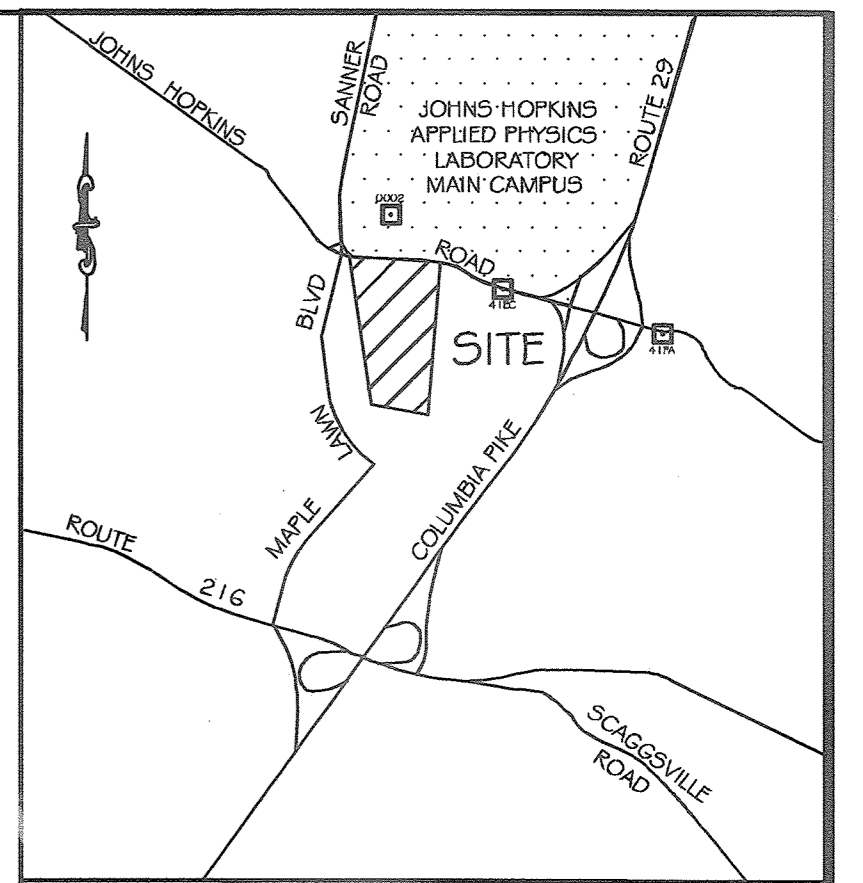
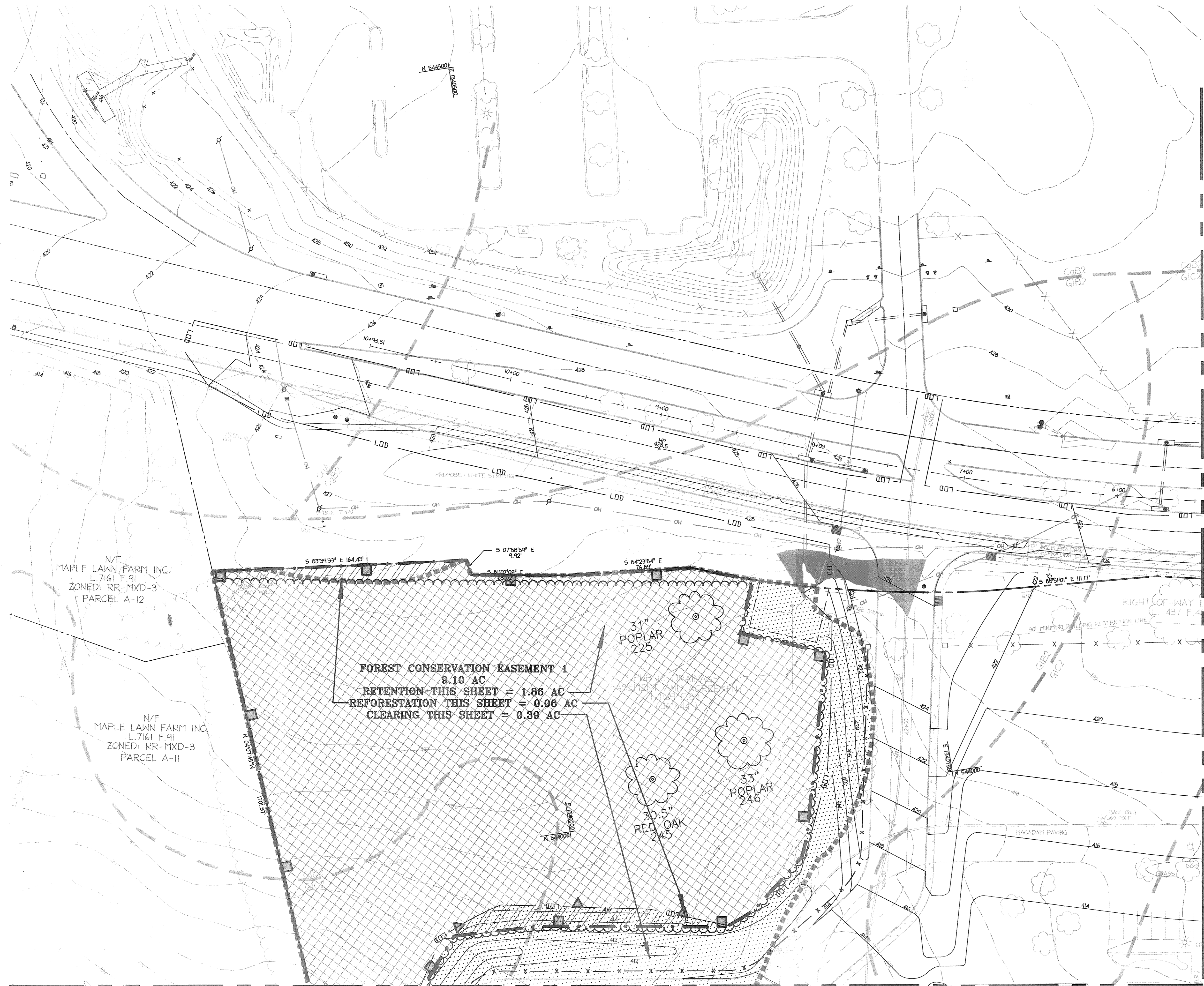
Date No. Revision Description

JHU/APL
1100 JOHN HOPKINS ROAD
LAUREL MARYLAND 20723-6009
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1772 columbia gateway drive suite 1000 columbia, md 21046 2880
410.282.8880 • fax 410.282.5148 • fax 410.282.8880

PERMIT INFORMATION CHART			
PROJECT NAME: THE JOHN HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02	
DEED REF. L10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41	ELECTION DISTRICT 5th
TITLE: FOREST CONSERVATION PLAN OVERALL VIEW			
DESIGN: ENJ	SCALE: 1"=100'	PROJECT: 08A901.00	
DRAWN: DAM	DATE: MAY, 2009		
CHECKED: ENJ/JMH	APPROVED: JMH		

MDC-932(PESP)



VICINITY MAP
SCALE 1"=2000'
ADC# 20807164
HOWARD COUNTY MAP PAGE 19 - GRID A-3 & B-3

N/F
MAPLE LAWN FARM INC.
L.7161 F.91
ZONED: RR-MXD-3
PARCEL A-12

N/F
MAPLE LAWN FARM INC.
L.7161 F.91
ZONED: RR-MXD-3
PARCEL A-II

FOREST CONSERVATION EASEMENT 1
9.10 AC
RETENTION THIS SHEET = 1.86 AC
REFORESTATION THIS SHEET = 0.06 AC
CLEARING THIS SHEET = 0.39 AC

31"
POPLAR
225

33"
POPLAR
246

30.5"
RED OAK
245

MATCHLINE - FOR CONTINUATION SEE SHEET 26 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 27 OF 31

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
Monica E. Tuttle
PLANNING DIRECTOR
5/14/09
DATE

Date	No.	Revision Description

JHU/APL
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410.322.8800 www.c3c.com fax 410.322.8800

PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41
		ELECTION DISTRICT 501

TITLE: **FOREST CONSERVATION PLAN**

DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	25 OF 31

5/16/09
DATE

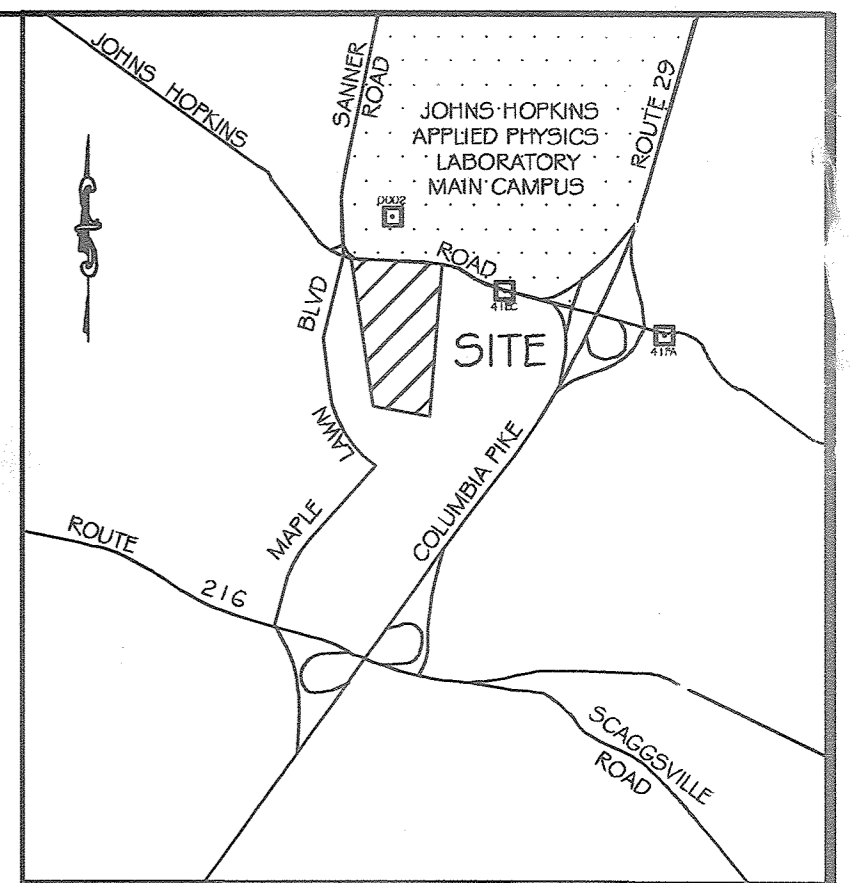
Timothy H. Hess
TIMOTHY H. HESS
COMAR QUALIFIED FOREST PROFESSIONAL

SP-09-007

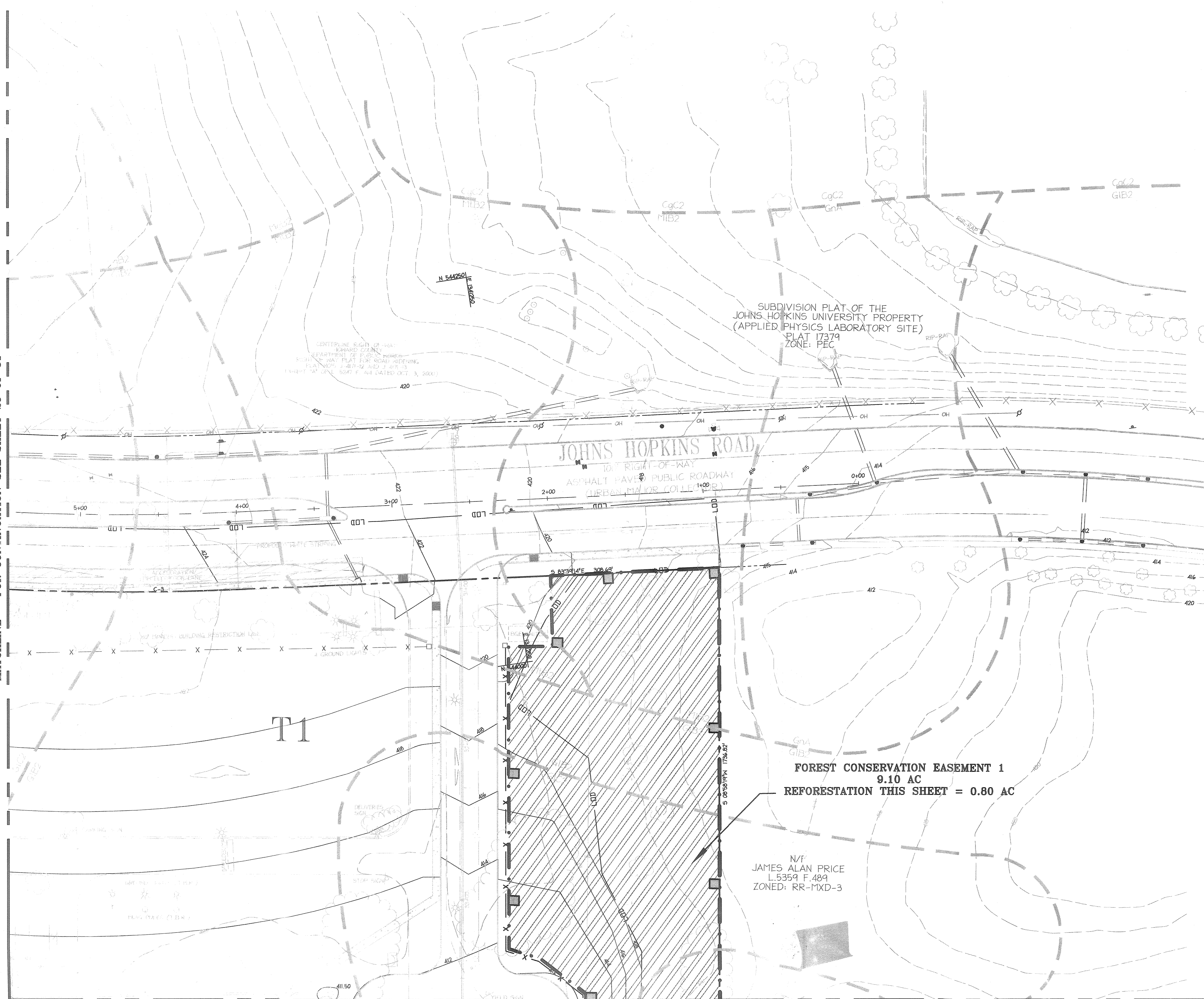
MDC-032(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 25 OF 31

MATCHLINE - FOR CONTINUATION SEE SHEET 28 OF 31



VICINITY MAP
 SCALE 1"=2000'
 ADC# 20807164
 HOWARD COUNTY MAP PAGE 19 - GRID A-3 & B-3



TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
Thomas G. Pottle
 PLANNING DIRECTOR
 DATE: 5/14/09

SUBDIVISION PLAT OF THE
 JOHNS HOPKINS UNIVERSITY PROPERTY
 (APPLIED PHYSICS LABORATORY SITE)
 PLAT 17379
 ZONE: PEC

JOHNS HOPKINS ROAD
 10' RIGHT-OF-WAY
 ASPHALT PAVED PUBLIC ROADWAY
 (URBAN MAJOR COLLECTOR)

FOREST CONSERVATION EASEMENT 1
 9.10 AC
 REFORESTATION THIS SHEET = 0.80 AC

N/F
 JAMES ALAN PRICE
 L.5359 F.489
 ZONED: RR-MXD-3

Date	No.	Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 LAUREL MARYLAND 20723-0099
 ATTN: JAMES LOESCH, P.E., CFM
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PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L.10412, F.396	GRID NO. ZONE 22 PEC	TAX MAP 41
		ELECTION DISTRICT 5h

TITLE: **FOREST CONSERVATION PLAN**

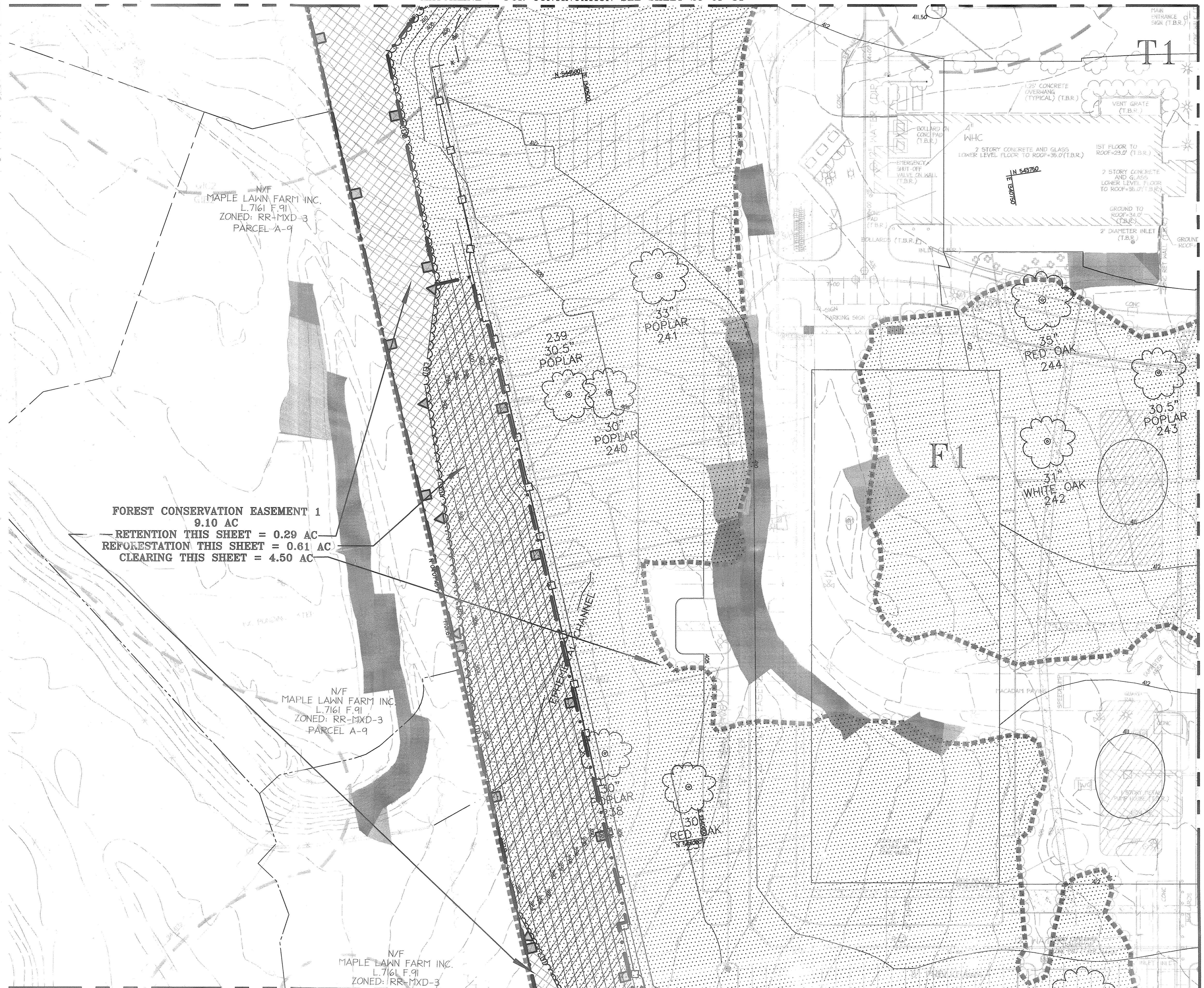
DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	26 of 31

5/14/09
 DATE

Timothy A. Bess
 TIMOTHY A. BESS
 COMAR QUALIFIED FOREST PROFESSIONAL

SP-09-007

MDC-932(PESP)



FOREST CONSERVATION EASEMENT 1
 9.10 AC
 RETENTION THIS SHEET = 0.29 AC
 REFORESTATION THIS SHEET = 0.61 AC
 CLEARING THIS SHEET = 4.50 AC

N/F
 MAPLE LAWN FARM INC.
 L.7161 F.91
 ZONED: RR-MXD-3
 PARCEL A-9

N/F
 MAPLE LAWN FARM INC.
 L.7161 F.91
 ZONED: RR-MXD-3
 PARCEL A-9

N/F
 MAPLE LAWN FARM INC.
 L.7161 F.91
 ZONED: RR-MXD-3

239
 30.5"
 POPLAR

33"
 POPLAR
 241

30"
 POPLAR
 240

35"
 RED OAK
 244

30.5"
 POPLAR
 243

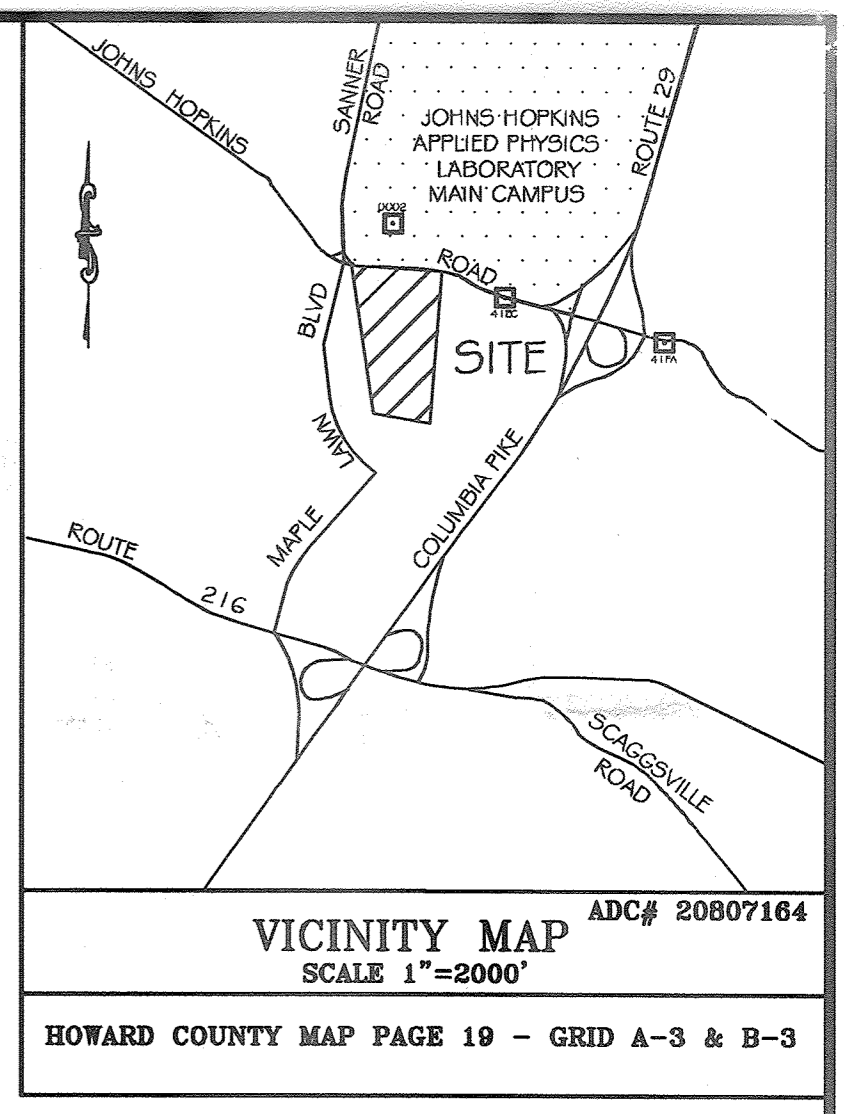
31"
 WHITE OAK
 242

30"
 RED OAK
 245

T1

F1

MATCHLINE - FOR CONTINUATION SEE SHEET 28 OF 31



TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY

 PLANNING DIRECTOR
 DATE: 5/14/09

Date	No.	Revision Description

JHU/APL
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PERMIT INFORMATION CHART

PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L.10412, F.396	GRID NO. 22	TAX MAP 41
	ZONE PEC	ELECTION DISTRICT 5th

TITLE:
FOREST CONSERVATION PLAN

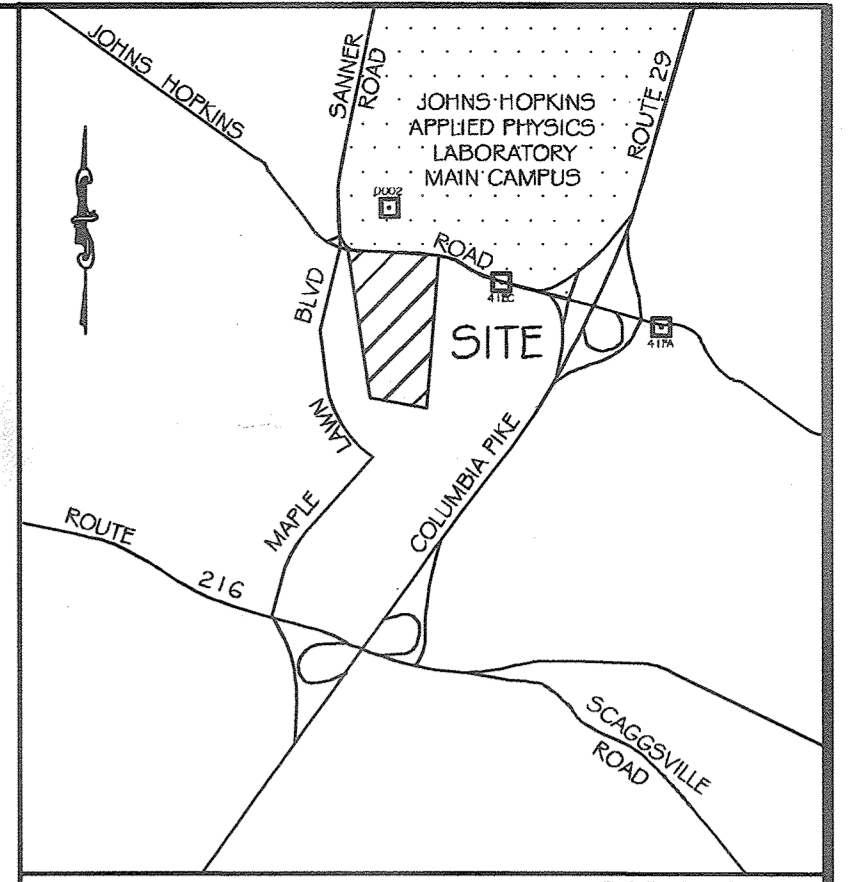
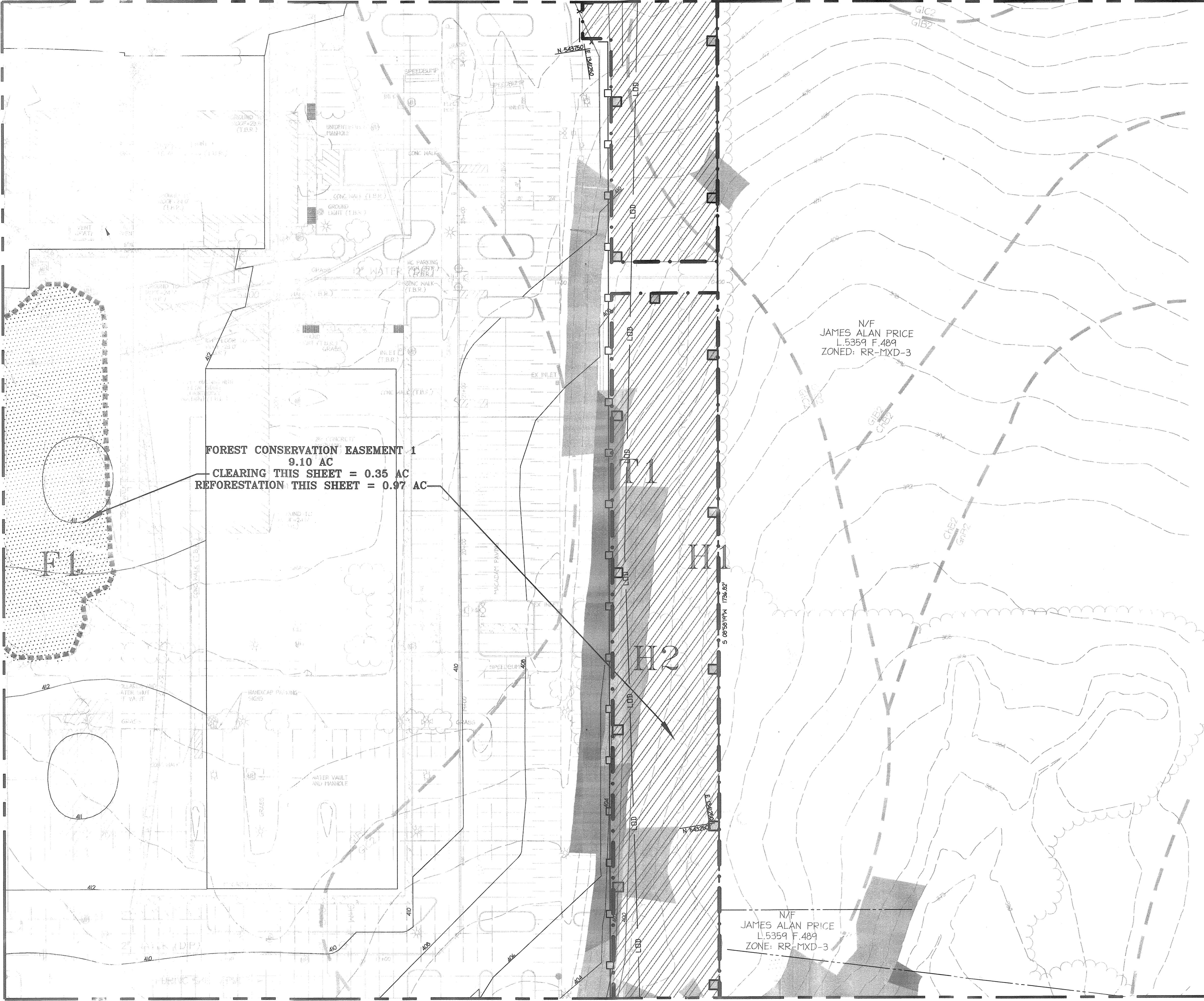
DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	27 of 31

5/16/09
 DATE

TIMOTHY J. HESS
 COMAR QUALIFIED FOREST PROFESSIONAL

MDC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 27 OF 31



VICINITY MAP
SCALE 1"=2000'
ADC# 20807164
HOWARD COUNTY MAP PAGE 19 - GRID A-3 & B-3

FOREST CONSERVATION EASEMENT 1
9.10 AC
CLEARING THIS SHEET = 0.35 AC
REFORESTATION THIS SHEET = 0.97 AC

N/F
JAMES ALAN PRICE
L 5359 F.489
ZONED: RR-MXD-3

N/F
JAMES ALAN PRICE
L 5359 F.489
ZONE: RR-MXD-3

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
Mona E. Battle
PLANNING DIRECTOR
5/16/09
DATE

Date	No.	Revision Description

JHU/APL
1100 JOHN HOPKINS ROAD
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PERMIT INFORMATION CHART

PROJECT NAME: THE JOHN HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02
DEED REF. L10412, F.396	GRID NO. 22	ZONE PEC
TAX MAP 41	ELECTION DISTRICT 5h	

5/16/09
DATE

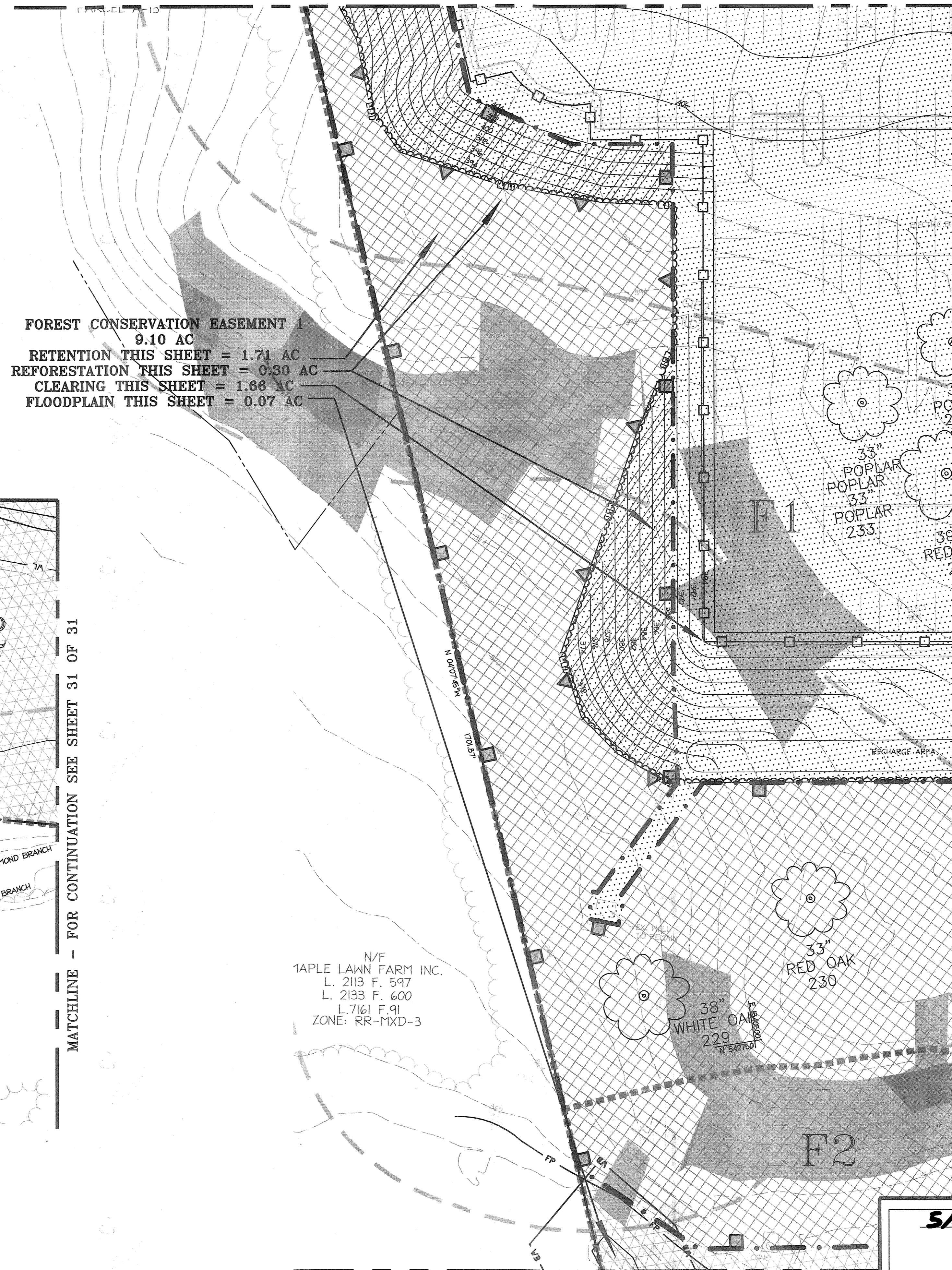
TITLE:
FOREST CONSERVATION PLAN

Timothy B. Hess
TIMOTHY B. HESS
COMAR QUALIFIED FOREST PROFESSIONAL

DESIGNER: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	28 of 31

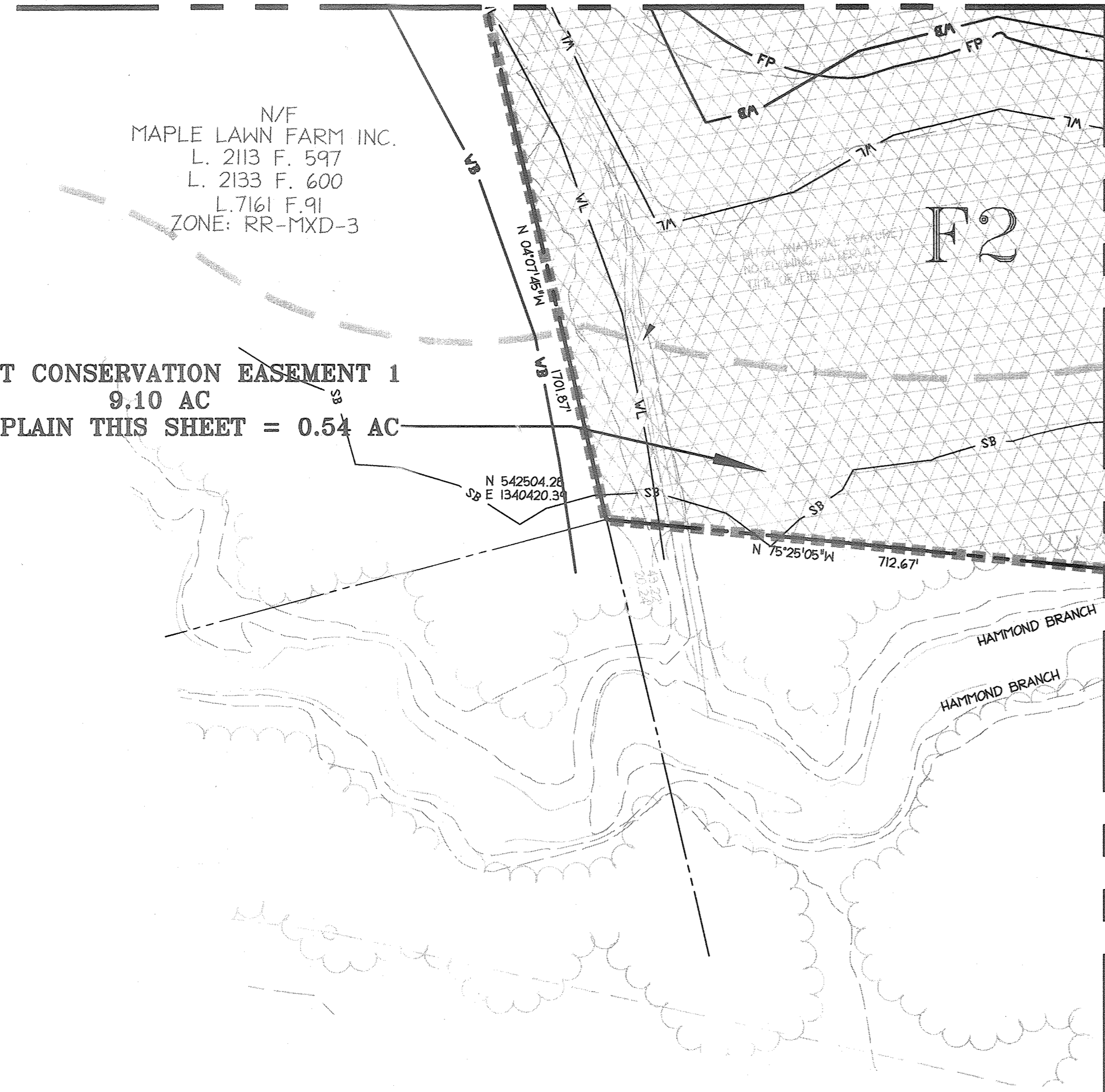
MTC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 27 OF 31



FOREST CONSERVATION EASEMENT 1
 9.10 AC
 RETENTION THIS SHEET = 1.71 AC
 REFORESTATION THIS SHEET = 0.30 AC
 CLEARING THIS SHEET = 1.66 AC
 FLOODPLAIN THIS SHEET = 0.07 AC

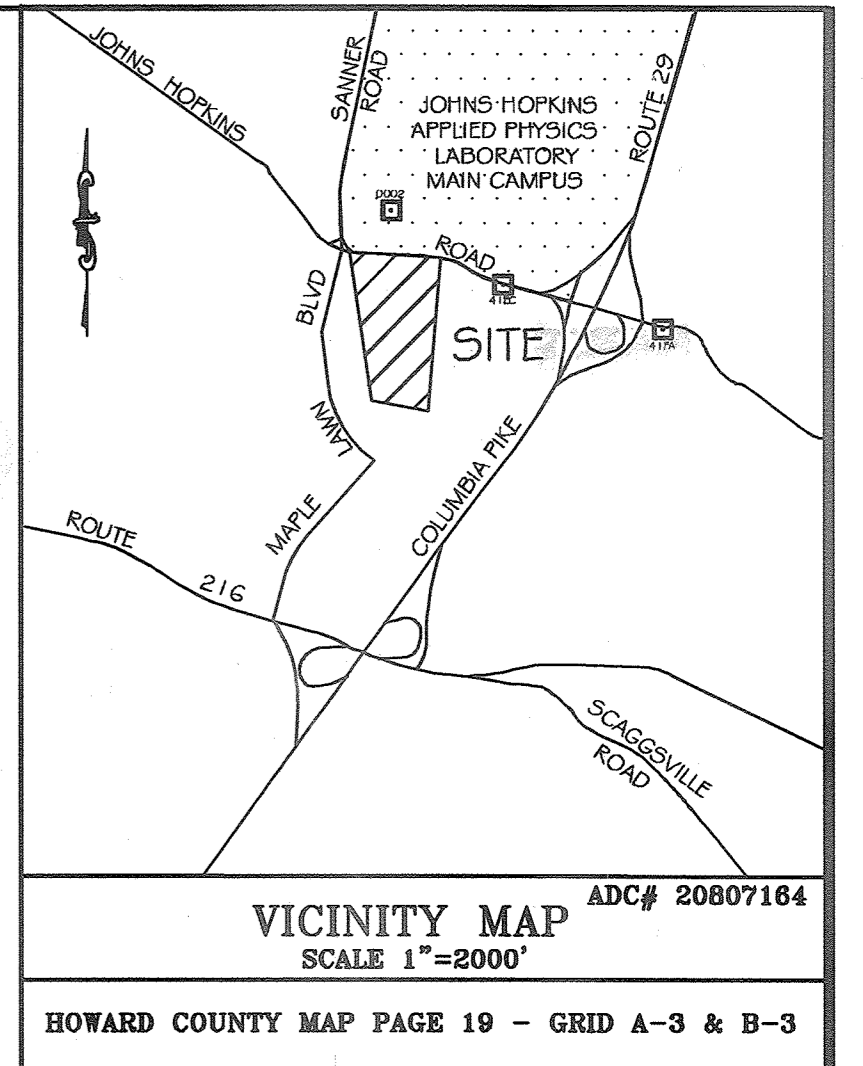
MATCHLINE - FOR CONTINUATION SEE THIS SHEET



FOREST CONSERVATION EASEMENT 1
 9.10 AC
 FLOODPLAIN THIS SHEET = 0.54 AC

N/F
 MAPLE LAWN FARM INC.
 L. 2113 F. 597
 L. 2133 F. 600
 L. 7161 F. 91
 ZONE: RR-MXD-3

MATCHLINE - FOR CONTINUATION SEE THIS SHEET



VICINITY MAP
 SCALE 1"=2000'
 HOWARD COUNTY MAP PAGE 19 - GRID A-3 & B-3

MATCHLINE - FOR CONTINUATION SEE SHEET 30 OF 31

Date	No.	Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
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 410.872.9890 fax 410.872.9148

PERMIT INFORMATION CHART			
PROJECT NAME: THE JOHNS HOPKINS UNIVERSITY / APPLIED PHYSICS LABORATORY - SOUTH CAMPUS	LOT/PARCEL NO. 300	CENSUS TRACT 6051.02	
DEED REF. L.10412, F.396	GRID NO. 22	TAX MAP 41	ELECTION DISTRICT 5th

TITLE: FOREST CONSERVATION PLAN		
DESIGN: ENJ	SCALE: 1" = 30'	PROJECT: 08A901.00
DRAWN: DAM	DATE: MAY, 2009	
CHECKED: ENJ/JMH	APPROVED: JMH	29 of 31

5/14/09
 DATE

Timothy J. Press
 TIMOTHY J. PRESS
 COMAR QUALIFIED FOREST PROFESSIONAL

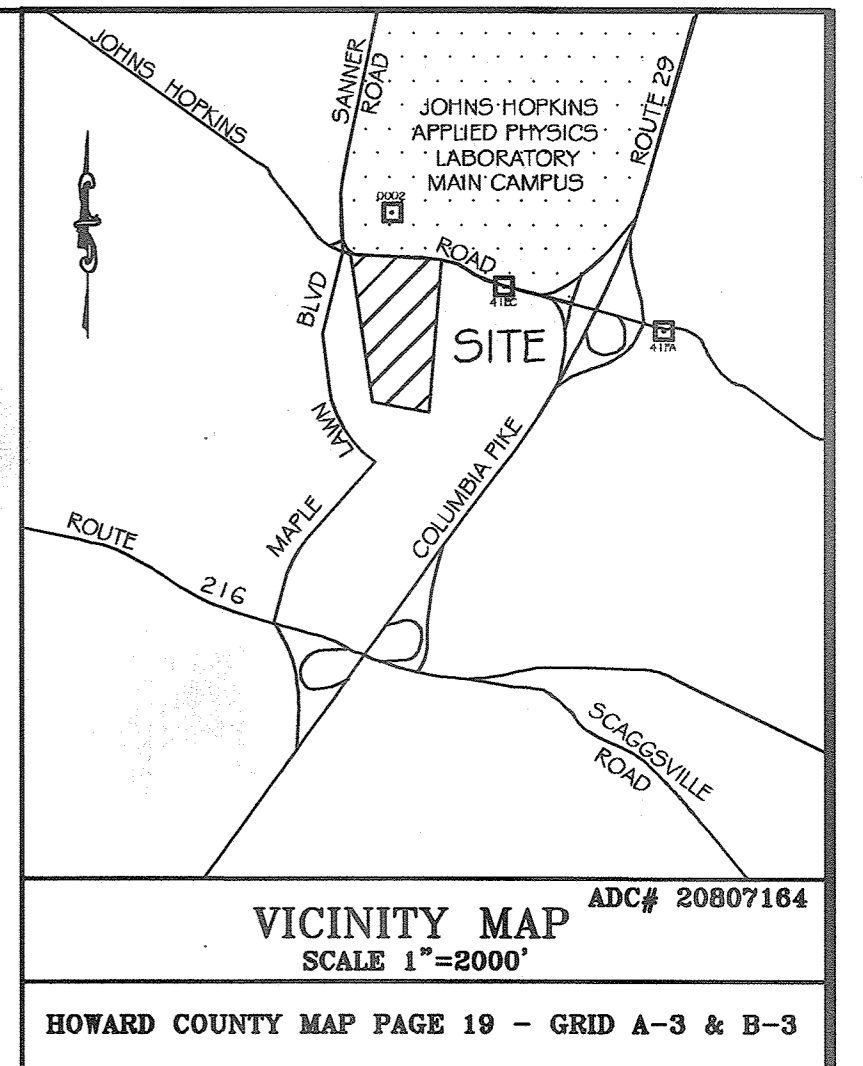
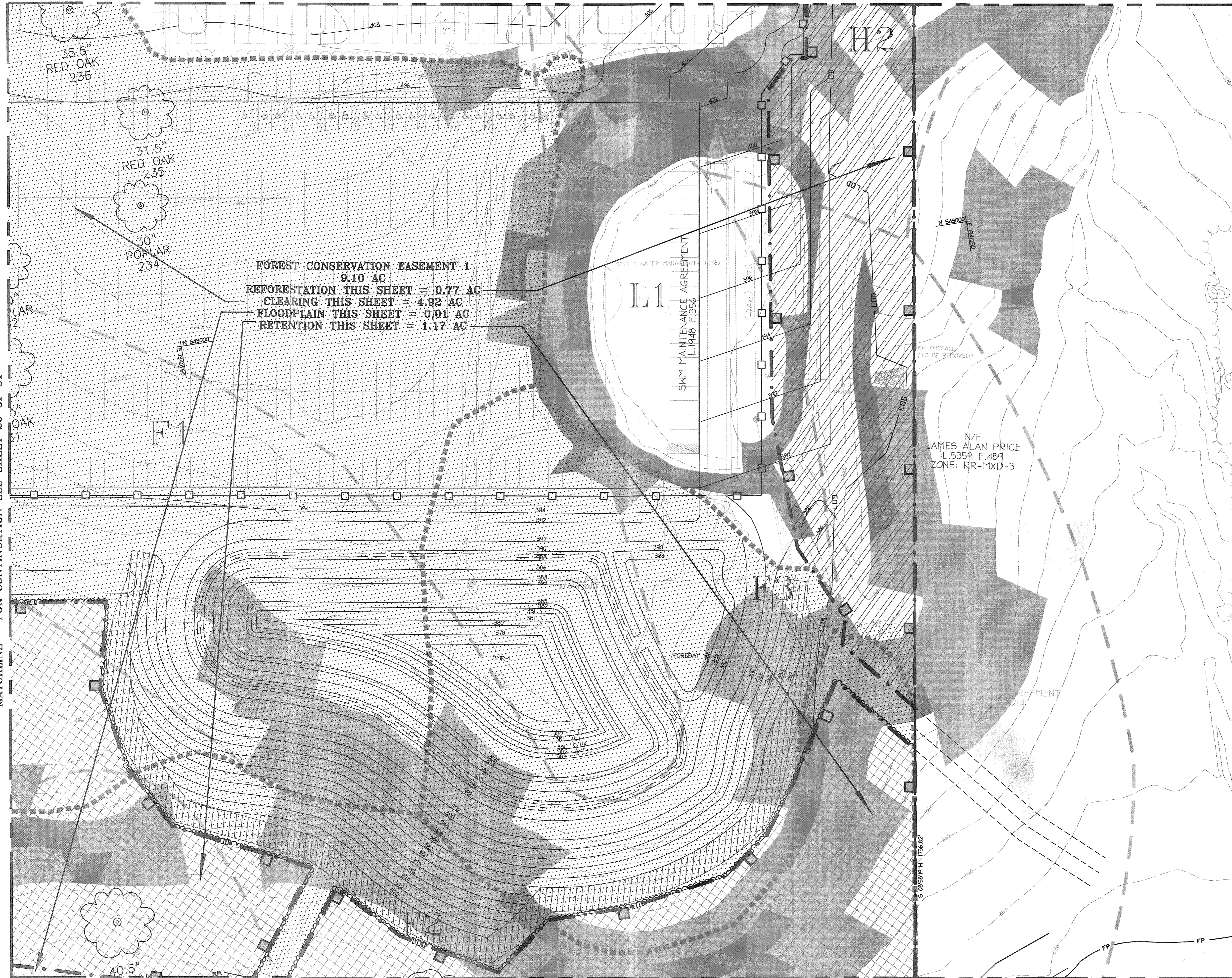
TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY

Thomas G. Spiller
 PLANNING DIRECTOR

5/14/09
 DATE

SP-09-007

MDC-932(PESP)



MATCHLINE - FOR CONTINUATION SEE SHEET 29 OF 31

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
Morgan G. Suttle
 PLANNING DIRECTOR
 5/14/09
 DATE

Date	No.	Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 LAUREL MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5134 FAX 443.778.6122

christopher consultants
 engineering surveying land planning
 christopher consultants, inc.
 7112 Columbia Gateway Drive Suite 100 Columbia, MD 21046-2950
 410.327.8800 www.crci.com fax 410.327.8802

PERMIT INFORMATION CHART

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DEED REF. L.10412, F.396	GRID NO. 22 ZONE PEC	TAX MAP 41 ELECTION DISTRICT 5th

TITLE: **FOREST CONSERVATION PLAN**

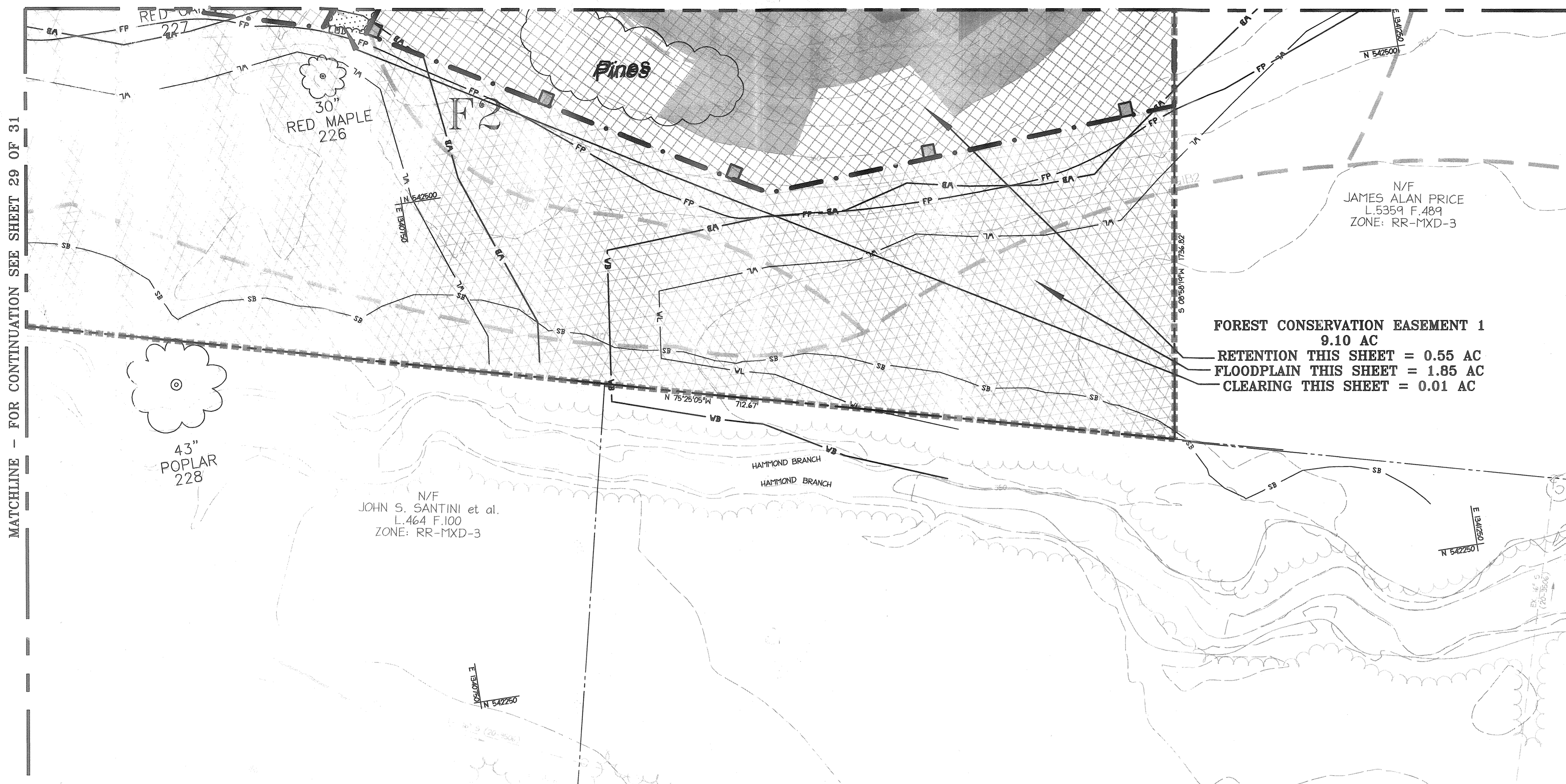
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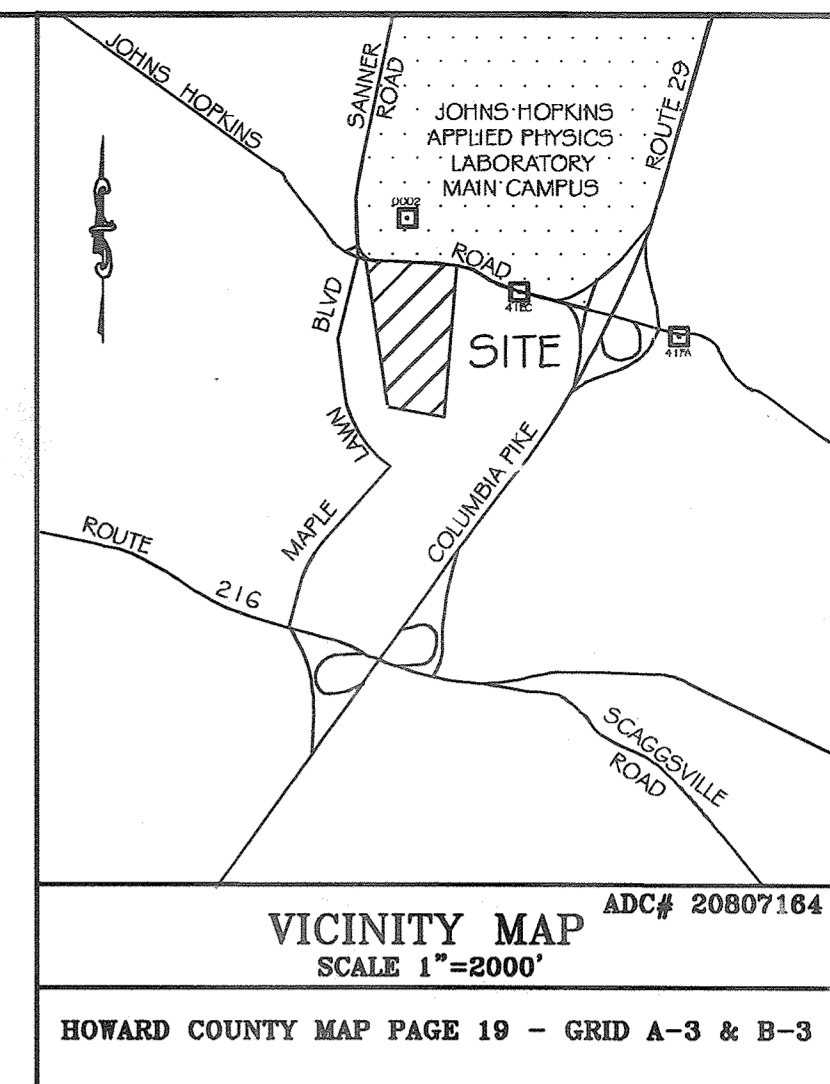
Timothy R. Hess
 TIMOTHY R. HESS
 COMAR QUALIFIED FOREST PROFESSIONAL

MDC-932(PESP)

MATCHLINE - FOR CONTINUATION SEE SHEET 30 OF 31



MATCHLINE - FOR CONTINUATION SEE SHEET 29 OF 31



FOREST CONSERVATION EASEMENT 1
9.10 AC
RETENTION THIS SHEET = 0.55 AC
FLOODPLAIN THIS SHEET = 1.85 AC
CLEARING THIS SHEET = 0.01 AC

JHU
 Job# 08A901.00
 06-May-09

FOREST CONSERVATION WORKSHEET

NET TRACT AREA:

A. Total tract area.....=		34.85
B. Area within 100 year floodplain.....=		2.47
C. Miscellaneous Area: Steep Slopes (above 25%).....=		0.00
D. Net tract area.....=		32.38
E. Afforestation Threshold.....=	15% x D =	4.86
F. Conservation Threshold.....=	20% x D =	6.48

EXISTING FOREST COVER:

G. Existing forest cover (excluding floodplain).....=		17.41
H. Area of forest above afforestation threshold.....=		12.55
I. Area of forest above conservation threshold.....=		10.93

BREAK EVEN POINT:

J. Forest retention above threshold with no mitigation.....=		8.66
K. Clearing permitted without mitigation.....=		8.75

PROPOSED FOREST CLEARING:

L. Total area of forest to be cleared.....=		11.82
M. Total area of forest to be retained.....=		5.59

PLANTING REQUIREMENTS:

N. Reforestation for clearing above conservation threshold.....=		2.73
P. Reforestation for clearing below conservation threshold.....=		1.77
Q. Credit for retention above conservation threshold.....=		0.00
R. Total reforestation required.....=		4.51
S. Total afforestation required.....=		0.00
T. Total reforestation and afforestation required.....=		4.51

*4.51 AC OF REFORESTATION REQUIRED ON-SITE
 OF THAT 3.51 AC OF REFORESTATION WILL BE SATISFIED ON-SITE
 OF THAT 1.00 AC OF REFORESTATION WILL BE SATISFIED OFF-SITE
 OR FEE-IN-LEU

Date	No.	Revision Description

JHU/APL
 1100 JOHNS HOPKINS ROAD
 LAUREL MARYLAND 20723-6099
 ATTN: JAMES LOESCH, P.E., CFM
 PHONE: 443.778.5134 FAX 443.778.6122

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 7172 columbian gateway drive suite 100, columbia, md 21046-2890
 410.321.8800 www.cpl.com 410.321.8800

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TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

Morgan G. Suttle
 PLANNING DIRECTOR

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MDC-032 (F-ESP)