

## APPLICATION FORM

APPLICATION TYPE: \_\_\_\_\_ ☐ Revision of Case # \_\_\_\_\_

Companion Cases: \_\_\_\_\_

Payment option: ☐ Credit Card ☐ Check (payable to M-NCPPC) *Do not submit payment until requested by staff*

PROJECT NAME:

Complete address (if applicable) \_\_\_\_\_

Geographic Location (distance related to or near major intersection)

Total Acreage:	Aviation Policy Area:	Election District:
Tax Map/Grid:	Current Zone(s):	Council District:
WSSC Grid:	Existing Lots/Blocks/Parcels:	Dev. Review District:
Planning Area:	In Municipal Boundary:	Is development exempt from grading permit pursuant to 32-127(a)(6)(A)? <input type="checkbox"/> Yes <input type="checkbox"/> No
Tax Account #:	Police District #:	General Plan Growth Policy:

Proposed Use of Property and Request of Proposal:

Please list previously approved applications affecting the subject property:

Applicant Name, Address & Phone:

Consultant Name, Address & Phone:

Owner Name, Address & Phone:  
 (if same as applicant indicate same/corporation see Disclosure)

Contact Name, Phone & E-mail:

SIGNATURE (Sign where appropriate; include Application Form Disclosure for additional owner's signatures):

Owner's Signature (signed)

Date

Applicant's Signature (signed)

Date

Contract Purchaser's Signature (signed)

Date

Applicant's Signature (signed)

Date

**FOR STAFF USE ONLY**

Application No.(s):




<b>SUBDIVISION CASES: Preliminary Plan of Subdivision/Conservation Sketch Plan</b>	
Type of Application (Check all that apply): <input type="checkbox"/> Conventional Subdivision <input type="checkbox"/> Conservation Subdivision <input type="checkbox"/> Conservation Sketch Plan <input type="checkbox"/> Subdivision Ordinance Interpretation <input type="checkbox"/> Vacation Petition	
Variation, Variance or Alternative Compliance Request(s): <input type="checkbox"/> Yes <input type="checkbox"/> No	Applicable Zoning/Subdivision Regulation Section(s): _____
Total Number of Proposed: Lots _____ Outlots _____ Parcels _____ Outparcels _____	
Number of Dwelling Units: Attached _____ Detached _____ Multifamily _____	Gross Floor Area (Nonresidential portion only): _____
<b>SUBDIVISION CASES: Final Plat</b>	
Water/Sewer: <input type="checkbox"/> DPIE <input type="checkbox"/> Health Department	Number of Plats: _____
Detailed Site Plan No.: _____	WSSC Authorization No.: _____
Approval Date of Preliminary Plan: _____	Check box if a hearing is requested: <input type="checkbox"/>
<b>URBAN DESIGN AND ZONING CASES</b>	
Type of Application (Check all that apply): <input type="checkbox"/> Certification of Nonconforming Use <input type="checkbox"/> Conservation Plan <input type="checkbox"/> Detailed Site Plan <input type="checkbox"/> Planned Development <input type="checkbox"/> Secondary Amendment <input type="checkbox"/> Special Exception <input type="checkbox"/> Zoning Map Amendment <input type="checkbox"/> Zoning Ordinance Interpretation	
Details of Request:	Applicable Zoning Ordinance Section(s):
Total Number of Proposed: Lots _____ Outlots _____ Parcels _____ Outparcels _____	
Number of Dwelling Units: Attached _____ Detached _____ Multifamily _____	Gross Floor Area (Nonresidential portion only): _____
Variance Request: <input type="checkbox"/> Yes <input type="checkbox"/> No	Applicable Zoning/Subdivision Regulation Section(s): _____
Departure Request: <input type="checkbox"/> Yes <input type="checkbox"/> No	Application Filed: <input type="checkbox"/> Yes <input type="checkbox"/> No
Alternative Compliance Request: <input type="checkbox"/> Yes <input type="checkbox"/> No	Application Filed: <input type="checkbox"/> Yes <input type="checkbox"/> No



**AFFIDAVIT**

The purpose of this affidavit is to certify that pursuant to Section 27-3403(g)(2) of the Zoning Ordinance and/or Section 24-3304(f) of the Subdivision Regulations, ***Informational Mailing*** letters regarding the application for DSP-13008-02, Gilpin Property (Phase 3), were mailed to all adjoining property owners, registered associations, municipalities within one mile, and previous parties of record (if applicable) on March 12, 2024.

I, Meagan Evans, solemnly affirm under the penalties of perjury that the contents of the foregoing paper are true to the best of my knowledge, information, and belief.

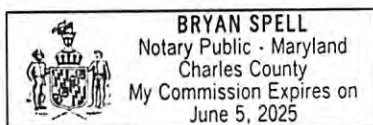
  
Meagan Evans

STATE OF MARYLAND \*  
COUNTY OF PRINCE GEORGE'S \* To wit:

On this 13th day of March 2024, before me, the undersigned officer, personally appeared Meagan Evans, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within Instrument and acknowledged that she executed the same for the purposes therein contained.

**In Witness Whereof**, I hereunto set my hand and official seal.

My Commission Expires: 6/5/25



  
\_\_\_\_\_  
Notary Public



4TH WARD CIVIC ASSOCIATION  
(TOWN OF CHEVERLY)  
1709 62ND AVENUE,  
HYATTSVILLE, MD 20785

BERKSHIRE CIVIC ASSOCIATION  
GREGORY MCCLAIN  
2916 UPLAND AVENUE,  
DISTRICT HEIGHTS, MD 20747

HILLSIDE CIVIC ASSOCIATION  
SHIRLEY GILMORE  
1005 DRUM AVENUE,  
CAPITOL HEIGHTS, MD 20743

POWDER MILL ESTATES  
COMMUNITY GROUP  
KATHY CORLEY  
10908 BARNEDALE DRIVE,  
HYATTSVILLE, MD 20783

CENTRAL CIVIC ASSOCIATION OF  
THE WILBURN COMMUNITY  
DAISY CHERRY MAGGETT  
6616 SISALBED DRIVE,  
CAPITOL HEIGHTS, MD 20743

SKYLINE HILLS HOA  
TONI HARRIS  
4723 JOHN STREET,  
SUITLAND, MD 20746

GREATER CAPITOL HEIGHTS  
IMPROVEMENT CORPORATION INC.  
BRADLEY HEARD  
415 ZELMA AVE,  
CAPITOL HEIGHTS, MD 20743

FLEISCHMAN'S VILLAGE CITIZENS  
ASSOCIATION  
STEPHON MILLS  
3407 ANDOVER PLACE,  
SUITLAND, MD 20746

BROOKE ROAD, ROLLINS AVE.,  
WALKER MILL RD. (BRW) CIVIC  
ASSOC.  
KAREN F. JEFFERSON  
1112 BROOKE ROAD,  
CAPITOL HEIGHTS, MD 20743

CAMP SPRINGS CIVIC ASSOCIATION  
CAROLYN FLEMING  
TEMPLE HILLS, MD 20757

MILLWOOD COMMUNITY  
ASSOCIATION, INC.  
306 SHADY GLEN DRIVE,  
CAPITOL HEIGHTS, MD 20743

PRINCE GEORGE'S COUNTY  
EDUCATOR'S ASSOCIATION (PGCEA)  
8008 MARLBORO PIKE,  
DISTRICT HEIGHTS, MD 20747

SUITLAND CIVIC ASSOCIATION, INC.  
CHARLOTTE WILLIAMS  
4801 TANGIER PLACE,  
SUITLAND, MD 20746

BARNABY MANOR CITIZENS ASSN.  
INC.  
JAMES BEHR  
5008 BOULDER DRIVE,  
OXON HILL, MD 20745

ST. MARGARET'S OF SCOTLAND  
CATHOLIC CHURCH  
408 ADDISON ROAD,  
CAPITOL HEIGHTS, MD 20743

THE PARK AT ADDISON METRO HOA,  
INC.  
LAYLA BROWN  
3414 MORNINGWOOD DRIVE,  
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HOMES, INC.  
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BERNETTA REESE  
SUITLAND, MD 20752

DUPOINT VILLAGE NEIGHBORHOOD  
WATCH  
2218 WYNGATE ROAD,  
SUITLAND, MD 20746

BARNABY VALLEY PARK  
HOMEOWNERS ASSOCIATION  
ANGELENE JONES PERRY  
2001 CHITA CT,  
TEMPLE HILLS, MD 20748

SCENIC PRINCE GEORGE'S  
MARK FALZONE  
1012 14TH STREET, NW, 1108  
WASHINGTON, DC 20005

SILVER BRANCH LLC  
1055 THOMAS JEFFERSON ST NW  
STE 250  
WASHINGTON, DC 20007

SOUTHVIEW APARTMENTS LLC  
SOUTHERN MGMT CORP SUITE 500N  
7950 JONES BRANCH DR  
MCLEAN, VA 22102

PRINCE GEORGES COUNTY  
RIGHT OF WAY SECTION  
ROOM 3020 CAB  
UPPER MARLBORO, MD 20772

WILBARGER LLC  
PO BOX 2367  
DENVER, CO 80201

RHAVI OPERATING CO INC  
4421 WHEELER RD  
OXON HILL, MD 20745

PEGASUS MOTORS CORPORATION  
4439 WHEELER RD  
OXON HILL, MD 20745

MNCPPC  
CHIEF PK&P DIVPKS & REC-ROOM  
303  
6600 KENILWORTH AVE  
RIVERDALE, MD 20737

4429 WHEELER ROAD LLC  
4429 WHEELER RD  
OXON HILL, MD 20745

KHAN MUHAMMAD ETAL  
SUITE 5  
445 N ARMISTEAD ST  
ALEXANDRIA, VA 22312



HOUSING AUTHORITY OF P G  
COUNTY  
9400 PEPPERCORN PL  
LANDOVER, MD 20785

COHEN WILLIAM & ANGELO A  
PUGLISI  
C/O WILLCO COMPANIES  
7811 MONTROSE RD STE 200  
POTOMAC, MD 20854

DHILLON INVESTMENTS LLC  
833 SOUTHERN AVE  
OXON HILL, MD 20745

SHEPERD MEREDITH  
4431 WHEELER RD  
OXON HILL, MD 20745

SOUTHERN AVE ASSOC LTD  
PARTNERSHIP  
ATTN: BETH MYERS  
2707 32ND ST NW  
WASHINGTON, DC 20008


Mayor Troy Barrington Lilly  
5508 Arapahoe Drive  
Forest Heights, MD 20745



**AFFIDAVIT**

The purpose of this affidavit is to certify that pursuant to Section 27-3403(g)(2) of the Zoning Ordinance and/or Section 24-3304(f) of the Subdivision Regulations, ***Acceptance Mailing*** letters regarding the application for DSP-13008-02, Gilpin Property (Phase 3), were mailed to all adjoining property owners, registered associations, municipalities within one mile, and previous parties of record (if applicable) on September 4, 2024.

I, Meagan Evans, solemnly affirm under the penalties of perjury that the contents of the foregoing paper are true to the best of my knowledge, information, and belief.

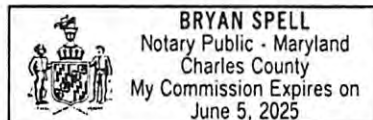
  
\_\_\_\_\_  
Meagan Evans

STATE OF MARYLAND \*  
COUNTY OF PRINCE GEORGE'S \* To wit:

On this 4th day of September 2024, before me, the undersigned officer, personally appeared Meagan Evans, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within Instrument and acknowledged that she executed the same for the purposes therein contained.

**In Witness Whereof**, I hereunto set my hand and official seal.

My Commission Expires: 6/5/25



Notary Public



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Mayor Troy Barrington Lilly  
5508 Arapahoe Drive  
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Hillcrest-Marlow Heights Civic Association  
George W. Hanna  
3212 Beaumont Street  
Temple Hills, MD 20748

DHILLON INVESTMENTS LLC  
833 SOUTHERN AVE  
OXON HILL, MD 20745





**McNamee Hosea**  
Attorneys & Advisors

McNamee Hosea  
6004 Ivy Lane, Suite 220  
Greenbelt, Maryland 20770  
D 301-441-2420  
F 301-952-9450  
[mhlawyers.com](http://mhlawyers.com)

September 4, 2024

Via First Class Mail

TO: Adjoining Property Owners, Municipalities Within a Mile, Previous Parties of Record, and/or Registered Associations

FROM: Matthew C. Tedesco, Esq.

RE: DSP-13008-02; Gilpin Property (Phase 3)

Dear Adjoining Property Owner, Municipality, Previous Party of Record, and/or Registered Association:

This letter is to inform you that the Maryland-National Capital Park and Planning Commission ("M-NCPPC") is ready to accept the subject application. The address of the subject property is 899 Southern Avenue, Oxon Hill, Maryland 20745, generally located in the southeast quadrant of the intersection of Southern Avenue and Wheeler Road, and approximately 720 feet north of Southview Drive. The nature of the review is for a second amendment to a Detailed Site Plan (DSP-13008) for the development of an approximately 115,364 square foot consolidated storage facility pursuant to the I-1 Zone of the prior Zoning Ordinance..

Once the application is formally accepted, it will be scheduled for a future Planning Board hearing. If you have not already registered to become a person of record, you are encouraged to do so at this time. Persons of Record are entitled to certain rights under zoning and subdivision laws, but registration is required. You may register online at [https://www.mncppcapps.org/planning/Person\\_of\\_Record/default.cfm](https://www.mncppcapps.org/planning/Person_of_Record/default.cfm), or you may submit your name, address, and the above-referenced application number and name by mailing a written request to:

The Maryland-National Capital Park and Planning Commission  
Development Review Division  
1616 McCormick Drive  
County Administration Office  
Largo, MD 20774

If you have already registered to become a person of record from an earlier mailing for this application, DSP-13008-02, you do not have to register again. Being a person of record on a separate application on the same property does not make you a person of record for the subject application. You must request to become a person of record for each separate application (separate applications have different application numbers).

If you have any questions about this application, you may contact me at 301-441-2420 or [mtedesco@mhlawyers.com](mailto:mtedesco@mhlawyers.com) or the M NCPPC case reviewer, Joshua Mitchum, at 301-952-3530 or [Joshua.Mitchum@ppd.mncppc.org](mailto:Joshua.Mitchum@ppd.mncppc.org).

Sincerely,

Matthew C. Tedesco, Esq.



### **APPLICATION FORM DISCLOSURE**

List all persons having at least five percent (5%) interest in the subject property ONLY required for Special Exception and Zoning Map Amendment Applications.

<b>Owner(s) Name</b> (printed)	<b>Signature and Date</b>	<b>Residence Address</b>

If the property is owned by a corporation, please fill in below.

<b>Officers</b>	<b>Date Assumed Duties</b>	<b>Residence Address</b>	<b>Business Address</b>

<b>Officers</b>	<b>Date Assumed Duties</b>	<b>Date Term Expires</b>	<b>Residence Address</b>	<b>Business Address</b>





**THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION**

**Prince George's County Planning Department  
Historic Preservation Section**

**(301) 952-3680  
www.mncppc.org**

**Historic Preservation/Archeology Pre-Submittal Checklist for  
Development Applications**

Project Name: Gilpin Property (Phase 3) Applicant's Name: Arcland Property Company, LLC  
Application Type: DSP Project Number (if applicable): DSP-13008-02  
Contact/Agent: Bryan Spell Phone/Fax: 301-441-2420  
E-mail Address: bspell@mhlawyers.com Associated/Previous Project Numbers: \_\_\_\_\_

- Provide photographs of all standing structures or structural remains, such as foundations or man-made landscape features, on the property.
- Provide chain of title information on the property to at least 1900.
- Provide a list and location of any known historic resources or cemeteries on or adjacent to the property.

**To be completed by Historic Preservation Section staff.**

Required Information	Yes	No	N/A	Requirement for this Applicant
Photographs of all structures or structural remains			X	If checked Yes or N/A, no further information needed.
Chain of title	X			If checked Yes or N/A, no further information needed.
List of known historic resources and cemeteries			X	If checked Yes or N/A, no further information needed.

Additional Information Required: Site was previously graded. No additional information needed

This proposal will not affect any Historic Sites or resources or known archaeological sites.

Jennifer Stabler 4/8/2024  
Historic Preservation Staff Signature Date  
**Jennifer Stabler**  
Historic Preservation Staff Name (printed)  
301-952-5595; jennifer.stabler@ppd.mncppc.org  
Historic Preservation Staff Phone and E-mail





**McNamee Hosea**  
Attorneys & Advisors

McNamee Hosea  
6404 Ivy Lane, Suite 620  
Greenbelt, Maryland 20770  
P 301.441.2420  
F 301.982.9480  
[mhlawyers.com](http://mhlawyers.com)

March 12, 2024

Via First Class Mail

TO: Adjoining Property Owners, Municipalities Within a Mile, Persons of Record,  
and Registered Associations

FROM: Matthew C. Tedesco, Esq.

RE: DSP-13008-02; Gilpin Property (Phase 3)

Dear Adjoining Property Owners, Municipalities Persons of Record, and/or Registered Association:

A second amendment to a detailed site plan for the above-referenced project will be submitted for review to the Development Review Division of The Maryland-National Capital Park and Planning Commission, M-NCPPC.

The address of the subject property is 899 Southern Avenue, Oxon Hill, Maryland 20745, generally located in the southeast quadrant of the intersection of Southern Avenue and Wheeler Road, and approximately 720 feet north of Southview Drive. The nature of the review is for a second amendment to a Detailed Site Plan (DSP-13008) for the development of an approximately 115,364 square foot consolidated storage facility pursuant to the I-1 Zone of the prior Zoning Ordinance.

If you wish to become a Person of Record to this application, you are encouraged to do so at this time. As a Person of Record, you will receive a notice of the Planning Board hearing date and a copy of the Planning Board resolution. Being a Person of Record also gives you the right to seek reconsideration or request appeal. You may register online at [https://www.mncppcapps.org/planning/Person\\_of\\_Record/default.cfm](https://www.mncppcapps.org/planning/Person_of_Record/default.cfm), or you may submit your name, address, and the above referenced application number and name by mailing a written request to:

The Maryland-National Capital Park and Planning Commission  
Development Review Division  
County Administration Building  
1616 McCormick Drive  
Largo, MD 20774

Being a Person of Record on a separate application on the same property **does not** make you a Person of Record for this application. You must request to become a Person of Record for each separate application (separate applications have different application numbers). At this time, no government agency has reviewed the application. **After** the application has been filed, you may contact the M-NCPPC at 301-952-3530.



***IMPORTANT: This notice is your opportunity to interact with the applicant prior to the acceptance of the subject application. Once an application is accepted, it may be subject to mandatory action time frames that are established by law. Contacting the applicant as soon as possible after receiving this notice will help facilitate your ability to receive information and/or establish a time when the applicant may meet with you or your civic group to provide information and answer questions about the development proposed. Any concerns regarding an applicant's failure to provide information or engage in dialogue about the proposed development should be directed in writing to the same mailing address listed for becoming a party of record. Please be sure to include the application number with any such correspondence.***

If you are interested in receiving more information about this application, reviewing a copy of a site plan, or meeting to discuss the project, you may contact Matthew C. Tedesco at 301-441-2420 or [MTedesco@mhlawyers.com](mailto:MTedesco@mhlawyers.com).

Sincerely,



Matthew C. Tedesco



The Maryland-National Capital Park & Planning Commission  
Planning Department Prince George's County  
Development Review Division  
1616 McCormick Drive  
Largo, Maryland 20774  
[www.pgplanning.org](http://www.pgplanning.org)

Date: 3/4/2024

## MAILING LIST - RECEIPT

☒ Development Application      **DSP-13008-02**

☐ County Application

This receipt is to acknowledge that Matt Tedesco received the following lists as described by the categories below:

<input checked="" type="checkbox"/> Registered community organization list	Total Records: 21
<input checked="" type="checkbox"/> Adjoining property owners list	Total Records: 19
<input checked="" type="checkbox"/> Municipalities within one mile list	Total Records: 1

This list is valid for 180 days from the date referenced above. Applicants must obtain an updated mailing list if notifications are not sent within 180 days.

This property is located on WSSC Grid: 206SE01

Don Townsend  
Development Review Division

### Download Extracts:

[DSP-13008-02\\_03042024154558\\_Reg\\_Assoc.xlsx](#)  
[DSP-13008-02\\_03042024154558\\_Adjoining\\_Property\\_Premise\\_Owner\\_Address.xlsx](#)  
[DSP-13008-02\\_03042024154558\\_Muni1Mile.xlsx](#)

A copy of the adjoining properties map has been included for your reference:

[DSP-13008-02\\_03042024154558\\_Adjoining\\_Property.jpg](#)

A mailing list archive has been generated for your reference:

[DSP-13008-02\\_03042024154558\\_MailingListArchive.zip](#)

The download extract links above will be available for 3 months. You must download the extracts if you need access to the data in the future.

Data extract may include duplicate address records.



The Maryland-National Capital Park & Planning Commission Results  
Prince George's County Planning Department  
Case Number: DSP-13008-02  
Date: 3/4/2024  
Time: 03:45:58 PM

=====  
Total Records(s): 21  
=====

Registered Association Name	First Name
4TH WARD CIVIC ASSOCIATION (TOWN OF CHEVERLY)	
BERKSHIRE CIVIC ASSOCIATION	GREGORY
HILLSIDE CIVIC ASSOCIATION	SHIRLEY
POWDER MILL ESTATES COMMUNITY GROUP	KATHY
CENTRAL CIVIC ASSOCIATION OF THE WILBURN COMMUNITY	DAISY
SKYLINE HILLS HOA	TONI
GREATER CAPITOL HEIGHTS IMPROVEMENT CORPORATION INC.	BRADLEY
FLEISCHMAN'S VILLAGE CITIZENS ASSOCIATION	STEPHON
BROOKE ROAD, ROLLINS AVE., WALKER MILL RD. (BRW) CIVIC ASSOC.	KAREN F.
CAMP SPRINGS CIVIC ASSOCIATION	CAROLYN
MILLWOOD COMMUNITY ASSOCIATION, INC.	
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SUITLAND CIVIC ASSOCIATION, INC.	CHARLOTTE
BARNABY MANOR CITIZENS ASSN. INC.	JAMES
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THE PARK AT ADDISON METRO HOA, INC.	LAYLA
PICKWICK SQUARE MUTUAL HOMES, INC.	LINDA
APPLEGATE CONDOMINIUM	BERNETTA
DUPOINT VILLAGE NEIGHBORHOOD WATCH	
BARNABY VALLEY PARK HOMEOWNERS ASSOCIATION	ANGELENE
SCENIC PRINCE GEORGE'S	MARK



Last Name	Address Number	Street Name & Type	Suite Number	City
	1709	62ND AVENUE		HYATTSVILLE
MCCLAIN	2916	UPLAND AVENUE		DISTRICT HEIGHTS
GILMORE	1005	DRUM AVENUE		CAPITOL HEIGHTS
CORLEY	10908	BARNEDALE DRIVE		HYATTSVILLE
CHERRY MAGGETT	6616	SISALBED DRIVE		CAPITOL HEIGHTS
HARRIS	4723	JOHN STREET		SUITLAND
HEARD	415	ZELMA AVE		CAPITOL HEIGHTS
MILLS	3407	ANDOVER PLACE		SUITLAND
JEFFERSON	1112	BROOKE ROAD		CAPITOL HEIGHTS
FLEMING				TEMPLE HILLS
	306	SHADY GLEN DRIVE		CAPITOL HEIGHTS
	8008	MARLBORO PIKE		DISTRICT HEIGHTS
WILLIAMS	4801	TANGIER PLACE		SUITLAND
BEHR	5008	BOULDER DRIVE		OXON HILL
	408	ADDISON ROAD		CAPITOL HEIGHTS
BROWN	3414	MORNINGWOOD DRIVE		OLNEY
BRISCOE	1574	ADDISON ROAD SOUTH		DISTRICT HEIGHTS
REESE				SUITLAND
	2218	WYNGATE ROAD		SUITLAND
JONES PERRY	2001	CHITA CT		TEMPLE HILLS
FALZONE	1012	14TH STREET, NW	1108	WASHINGTON



State	Zip Code
MD	20785
MD	20747
MD	20743
MD	20783
MD	20743
MD	20746
MD	20743
MD	20746
MD	20743
MD	20757
MD	20743
MD	20747
MD	20746
MD	20745
MD	20743
MD	20832
MD	20747
MD	20752
MD	20746
MD	20748
DC	20005



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Case Number: DSP-13008-02

Date: 3/4/2024

Time: 03:45:58 PM

Premise Address - Table Columns G-M

Owner Address - Table Columns P-U

=====  
Total Records(s): 19

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Tax Account    Lot    Block    Parcel    Plat    Property Description    House Number

5593818			087	12245076	LOT 4	899
1351352				A12-4699	PT PARCEL F EQ 4.1320 ACRES	1414
1239805				A12-6951	PAR A EX 4.9857 AC AT N PT	4300
1229541				A12-4699	OUTLOT F	0
1276732			032			4421
1314442				A12-7634	PARCEL A	4439
1351386				A12-4699	PT PAR F EQ 3.68 ACRES	1314
1314459			037			0
1203454			052			0
1194190	5A			A12-3458		4429
1298975			033			4427
1370204				A12-6951	PT PAR A EQ 4.9857 ACRES AT N PT	4300
1218973			031		(USE CODE CHANGE 2004)	0
1255603				A12-9123	PARCEL A	833
1351345				A12-4699	PT PARCEL F EQ 8.05 ACRES	1414
5593807			087		LOT 3	0
1295591			034		(CORR USE 06)	4431
1325968				A12-4697	PT PARCEL A EQ 1.1497 ACRES	827
1325950				A12-4697	PT OF PARCEL A EQ 597443 SF	801



House Suffix	Street Name	Street Type	Unit Number	City	ZIP Code	WSSC Grid
	SOUTHERN	AVE		OXON HILL	20745	206SE01
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	VERMILLION	AVE		OXON HILL	20745	206SE02
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	VERMILLION	AVE		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	SOUTHERN	AVE		OXON HILL	20745	206SE01
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	SOUTHERN	AVE		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	SOUTHERN	AVE	251	OXON HILL	20745	206SE01
	SOUTHERN	AVE	251	OXON HILL	20745	206SE01



Mailing Indicator	Owner Name	In Care Of Name
I	SILVER BRANCH LLC	1055 THOMAS JEFFERSON ST NW
I	SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
I	PRINCE GEORGES COUNTY	RIGHT OF WAY SECTION
O	WILBARGER LLC	
O	RHAVI OPERATING CO INC	
O	PEGASUS MOTORS CORPORATION	
I	SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
O	PEGASUS MOTORS CORPORATION	
I	MNCPPC	CHIEF PK&P DIVPKS & REC-ROOM 303
O	4429 WHEELER ROAD LLC	
I	KHAN MUHAMMAD ETAL	SUITE 5
O	HOUSING AUTHORITY OF P G COUNTY	
I	COHEN WILLIAM & ANGELO A PUGLISI	C/O WILLCO COMPANIES
O	DHILLON INVESTMENTS LLC	
I	SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
I	SILVER BRANCH LLC	1055 THOMAS JEFFERSON ST NW
O	SHEPERD MEREDITH	
I	SOUTHERN AVE ASSOC LTD PARTNERSHIP	ATTN: BETH MYERS
I	SOUTHERN AVE ASSOC LTD PARTNERSHIP	ATTN: BETH MYERS



Mailing Street Address	Mailing City	Mailing State	Mailing ZIP Code
STE 250	WASHINGTON	DC	20007
7950 JONES BRANCH DR	MCLEAN	VA	22102
ROOM 3020 CAB	UPPER MARLBORO	MD	20772
PO BOX 2367	DENVER	CO	80201
4421 WHEELER RD	OXON HILL	MD	20745
4439 WHEELER RD	OXON HILL	MD	20745
7950 JONES BRANCH DR	MCLEAN	VA	22102
4439 WHEELER RD	OXON HILL	MD	20745
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4429 WHEELER RD	OXON HILL	MD	20745
445 N ARMISTEAD ST	ALEXANDRIA	VA	22312
9400 PEPPERCORN PL	LANDOVER	MD	20785
7811 MONTROSE RD STE 200	POTOMAC	MD	20854
833 SOUTHERN AVE	OXON HILL	MD	20745
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Total Records(s): 1

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Primary Key	Name of the Municipality	Municipal Number	DAMS Link	Officials Name
27	FOREST HEIGHTS	99	99	Troy Barrington Lilly



Officials Title	Address	City	Zip Code	Executive Selection
Mayor	5508 Arapahoe Drive	Forest Heights	20745	Elected



Executive Term Expiration	Acreage	Buffer Distance	Original FID	Telephone
3/1/2025	1049.13521985	5280.0	237	301-839-1030



Email Address	Area	Length
shawkins@forestheightsmd.gov	319345034.10762697	65057.843793526205











The Maryland-National Capital Park & Planning Commission Results  
Prince George's County Planning Department  
Case Number: DSP-13008-02  
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Time: 03:46:32 PM

=====  
Total Records(s): 21  
=====

Registered Association Name	First Name
MILLWOOD COMMUNITY ASSOCIATION, INC.	
HILLSIDE CIVIC ASSOCIATION	SHIRLEY
GREATER CAPITOL HEIGHTS IMPROVEMENT CORPORATION INC.	BRADLEY
DUPOINT VILLAGE NEIGHBORHOOD WATCH	
BROOKE ROAD, ROLLINS AVE., WALKER MILL RD. (BRW) CIVIC ASSOC.	KAREN F.
ST. MARGARET'S OF SCOTLAND CATHOLIC CHURCH	
SCENIC PRINCE GEORGE'S	MARK
4TH WARD CIVIC ASSOCIATION (TOWN OF CHEVERLY)	
PICKWICK SQUARE MUTUAL HOMES, INC.	LINDA
THE PARK AT ADDISON METRO HOA, INC.	LAYLA
BERKSHIRE CIVIC ASSOCIATION	GREGORY
CAMP SPRINGS CIVIC ASSOCIATION	CAROLYN
PRINCE GEORGE'S COUNTY EDUCATOR'S ASSOCIATION (PGCEA)	
CENTRAL CIVIC ASSOCIATION OF THE WILBURN COMMUNITY	DAISY
FLEISCHMAN'S VILLAGE CITIZENS ASSOCIATION	STEPHON
BARNABY VALLEY PARK HOMEOWNERS ASSOCIATION	ANGELENE
HILLCREST-MARLOW HEIGHTS CIVIC ASSOCIATION	GEORGE W.
SUITLAND CIVIC ASSOCIATION, INC.	CHARLOTTE
BARNABY MANOR CITIZENS ASSN. INC.	JAMES
SKYLINE HILLS HOA	TONI
APPLEGATE CONDOMINIUM	BERNETTA



Last Name	Address Number	Street Name & Type	Suite Number	City
	306	SHADY GLEN DRIVE		CAPITOL HEIGHTS
GILMORE	1005	DRUM AVENUE		CAPITOL HEIGHTS
HEARD	415	ZELMA AVE		CAPITOL HEIGHTS
	2218	WYNGATE ROAD		SUITLAND
JEFFERSON	1112	BROOKE ROAD		CAPITOL HEIGHTS
	408	ADDISON ROAD		CAPITOL HEIGHTS
FALZONE	1012	14TH STREET, NW	1108	WASHINGTON
	1709	62ND AVENUE		HYATTSVILLE
BRISCOE	1574	ADDISON ROAD SOUTH		DISTRICT HEIGHTS
BROWN	3414	MORNINGWOOD DRIVE		OLNEY
MCCLAIN	2916	UPLAND AVENUE		DISTRICT HEIGHTS
FLEMING				TEMPLE HILLS
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HANNA	3212	BEAUMONT STREET		TEMPLE HILLS
WILLIAMS	4801	TANGIER PLACE		SUITLAND
BEHR	5008	BOULDER DRIVE		OXON HILL
HARRIS	4723	JOHN STREET		SUITLAND
REESE				SUITLAND



State	Zip Code
MD	20743
MD	20743
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MD	20746
MD	20743
MD	20743
DC	20005
MD	20785
MD	20747
MD	20832
MD	20747
MD	20748
MD	20747
MD	20743
MD	20746
MD	20748
MD	20748
MD	20746
MD	20745
MD	20746
MD	20752



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1298975			033			4427
1229541				A12-4699	OUTLOT F	0
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1276732			032			4421
1255603				A12-9123	PARCEL A	833
1351345				A12-4699	PT PARCEL F EQ 8.05 ACRES	1414
1314459			037			0
1203454			052			0
5593807			087		LOT 3	0
1218973			031		(USE CODE CHANGE 2004)	0
1194190	5A			A12-3458		4429
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	SOUTHERN	AVE	251	OXON HILL	20745	206SE01
	WHEELER	RD		OXON HILL	20745	206SE02
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	SOUTHERN	AVE		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
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I	SOUTHERN AVE ASSOC LTD PARTNERSHIP	ATTN: BETH MYERS
O	SHEPERD MEREDITH	
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O	RHAVI OPERATING CO INC	
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O	PEGASUS MOTORS CORPORATION	
I	MNCPPC	CHIEF PK&P DIVPKS & REC-ROOM 303
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O	4429 WHEELER ROAD LLC	
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Mailing Street Address	Mailing City	Mailing State	Mailing ZIP Code
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445 N ARMISTEAD ST	ALEXANDRIA	VA	22312
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833 SOUTHERN AVE	OXON HILL	MD	20745
7950 JONES BRANCH DR	MCLEAN	VA	22102
4439 WHEELER RD	OXON HILL	MD	20745
6600 KENILWORTH AVE	RIVERDALE	MD	20737
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4429 WHEELER RD	OXON HILL	MD	20745
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Primary Key	Name of the Municipality	Municipal Number	DAMS Link	Officials Name
27	FOREST HEIGHTS	99	99	Troy Barrington Lilly



Officials Title	Address	City	Zip Code	Executive Selection
Mayor	5508 Arapahoe Drive	Forest Heights	20745	Elected



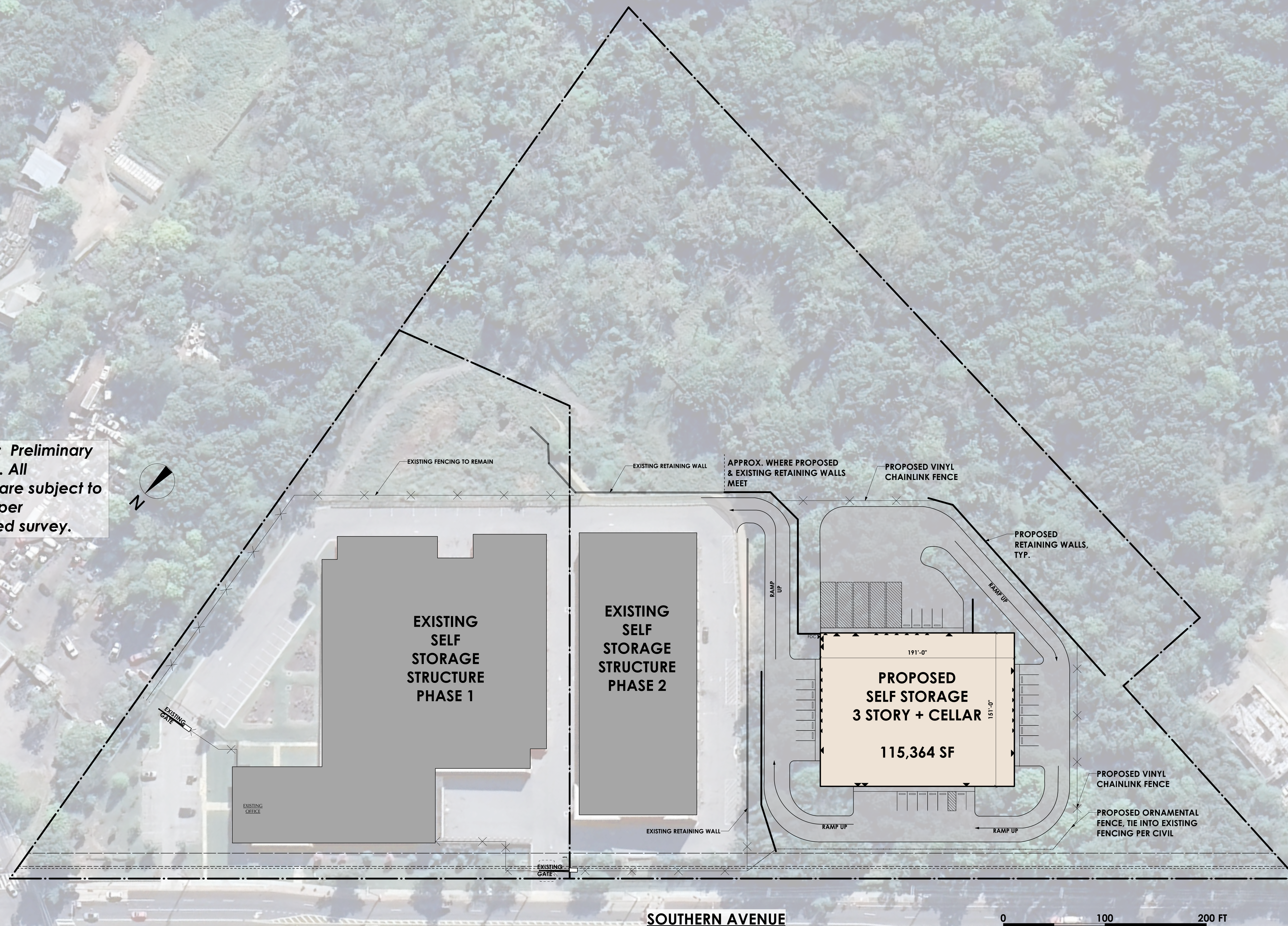
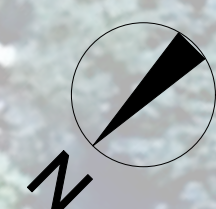
Executive Term Expiration	Acreage	Buffer Distance	Original FID	Telephone
3/1/2025	1049.13521985	5280.0	27	301-839-1030



Email Address	Area	Length
shawkins@forestheightsmd.gov	319317529.43448901	65054.570061884398



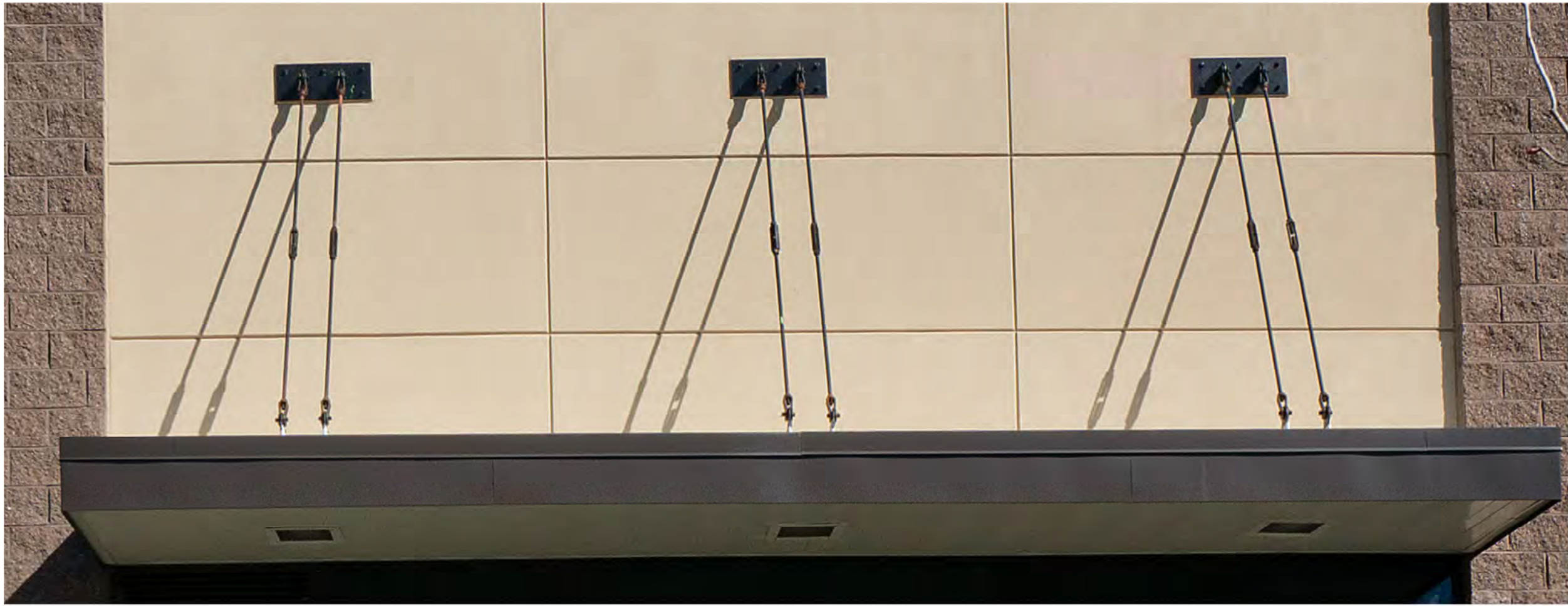
**Disclaimer :** Preliminary  
Layout Only. All  
dimensions are subject to  
verification per  
computerized survey.



**SOUTHERN AVENUE**

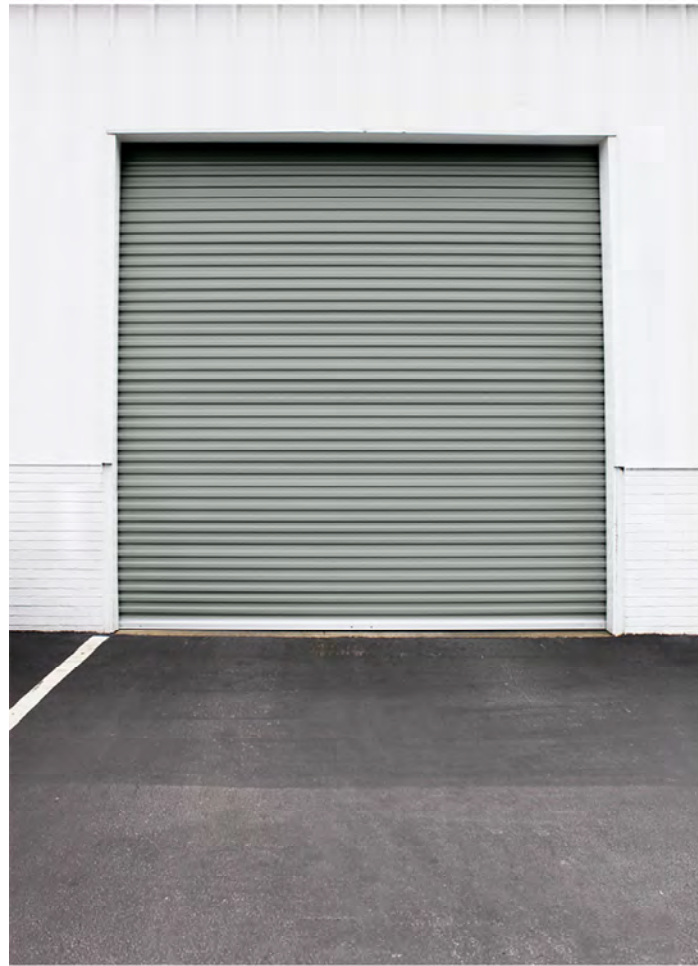
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O-1 DECORATIVE CANOPY

EXTERIOR MATERIAL SCHEDULE					
MATERIAL	NO.	ITEM	MANUFACTURER	FINISH	COLOR
MASONRY	CM-1	Architectural CMU-Field	Oldcastle/Echelon	Quik-Brik	Rappanok Red
	CM-2	Architectural CMU-Accent	Oldcaslte/Echelon	Split Face	Slate Grey
METALS	MTL-1	Metal Siding - Vertical Field	MBCI	Pre-Finished	Almond
	MTL-2	Metal Siding - Horizontal	MBCI	Pre-Finished	Almond
	MTL-3	Not Used			
	MTL-4	Metal Accent	MBCI	Pre-Finished	Polar White
	MTL-5	Break Metal	MBCI	Pre-Finished	Slate Gray
	MTL-6	IMP Panel	MBCI	Pre-Finished	Almond
	MTL-7	8" Coping	MBCI	Pre-Finished	Polar White
	MTL-8	8" Coping	MBCI	Pre-Finished	Rustic Red
FENESTRATION	F-1	Hollow Metal Door		Paint	Match Adj. Surface
	F-2	Automatic Sliding Door		Pre-Finished	Anodized Aluminum
	F-3	Storefront System		Pre-Finished	Anodized Aluminum
	F-4	Storage Unit Roll Up Door	Janus	Pre-Finished	Silhouette Gray
OTHER	O-1	Decorative Canopy	-	Pre-Finished	
	O-2	Wall Sign A	-	-	-
	O-3	Wall Pack	-	-	-
NOTES					
1. All Materials and Colors Subject to Modification per Final Design					



F-4 STORAGE UNIT ROLL UP DOOR



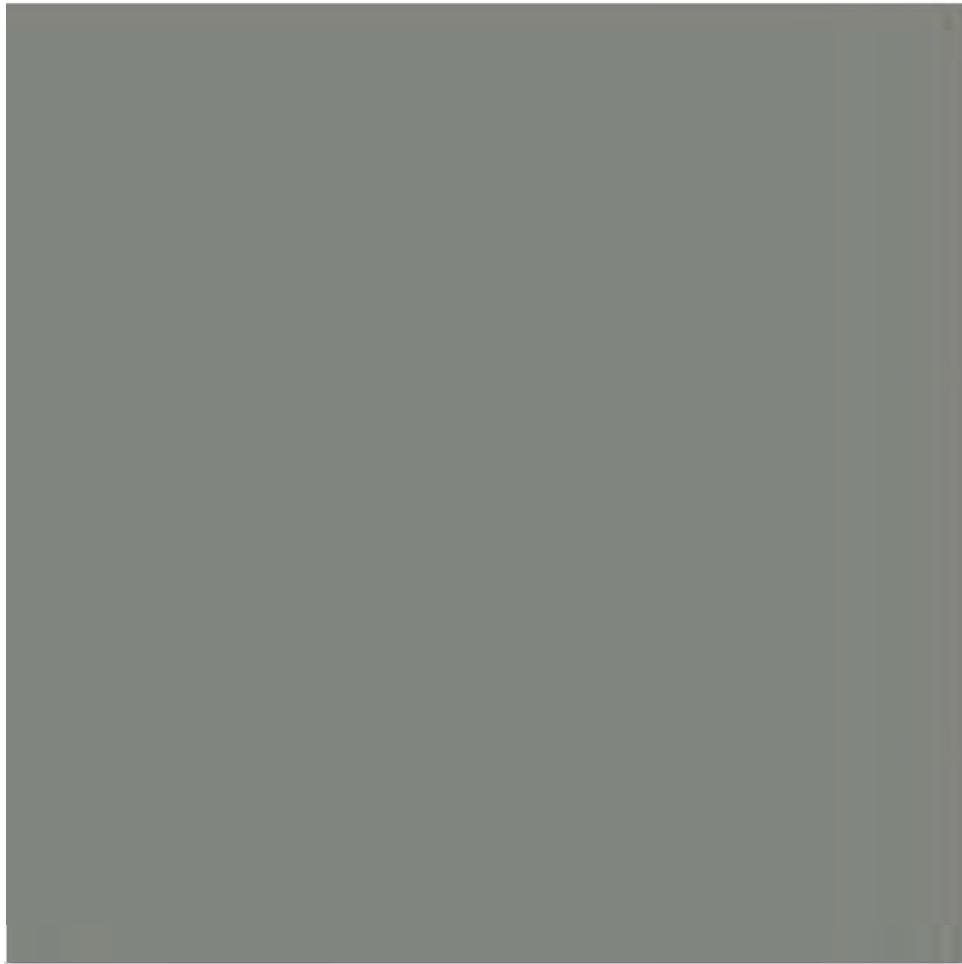
F-3 STOREFRONT SYSTEM



F-2 AUTOMATIC SLIDING DOOR



F-1 HOLLOW METAL DOOR



MTL-5 SLATE GRAY



MTL-4 WHITE



MTL-1 ALMOND  
MTL-2  
MTL-6



CM-2 Slate Gray



CM-1 RAPPAHANNOCK RED





**bwd**architects  
PLANNING • ARCHITECTURE • PROPERTY VISIONING

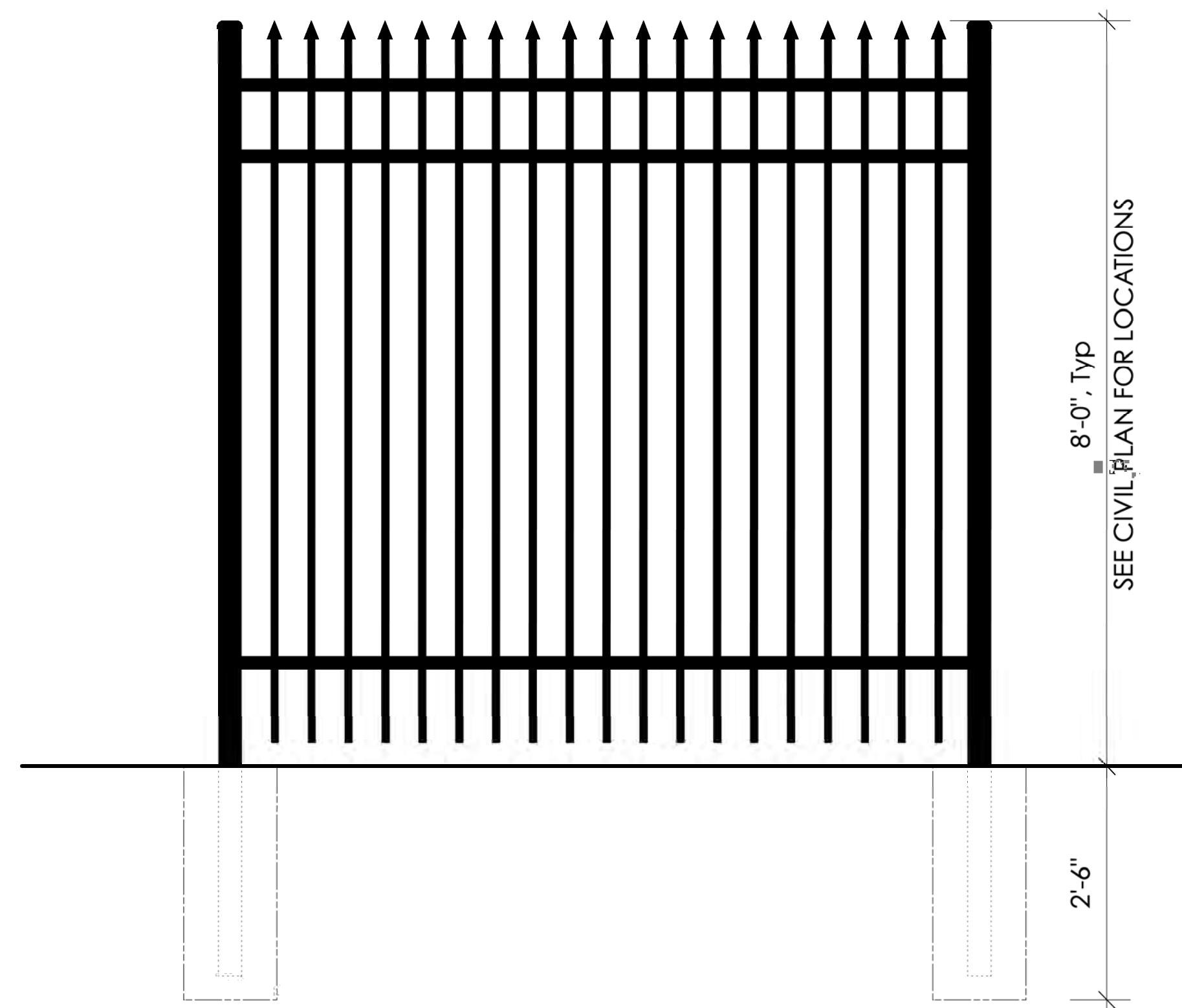
# Signage Analysis

## Southern Ave Self Storage Phase III

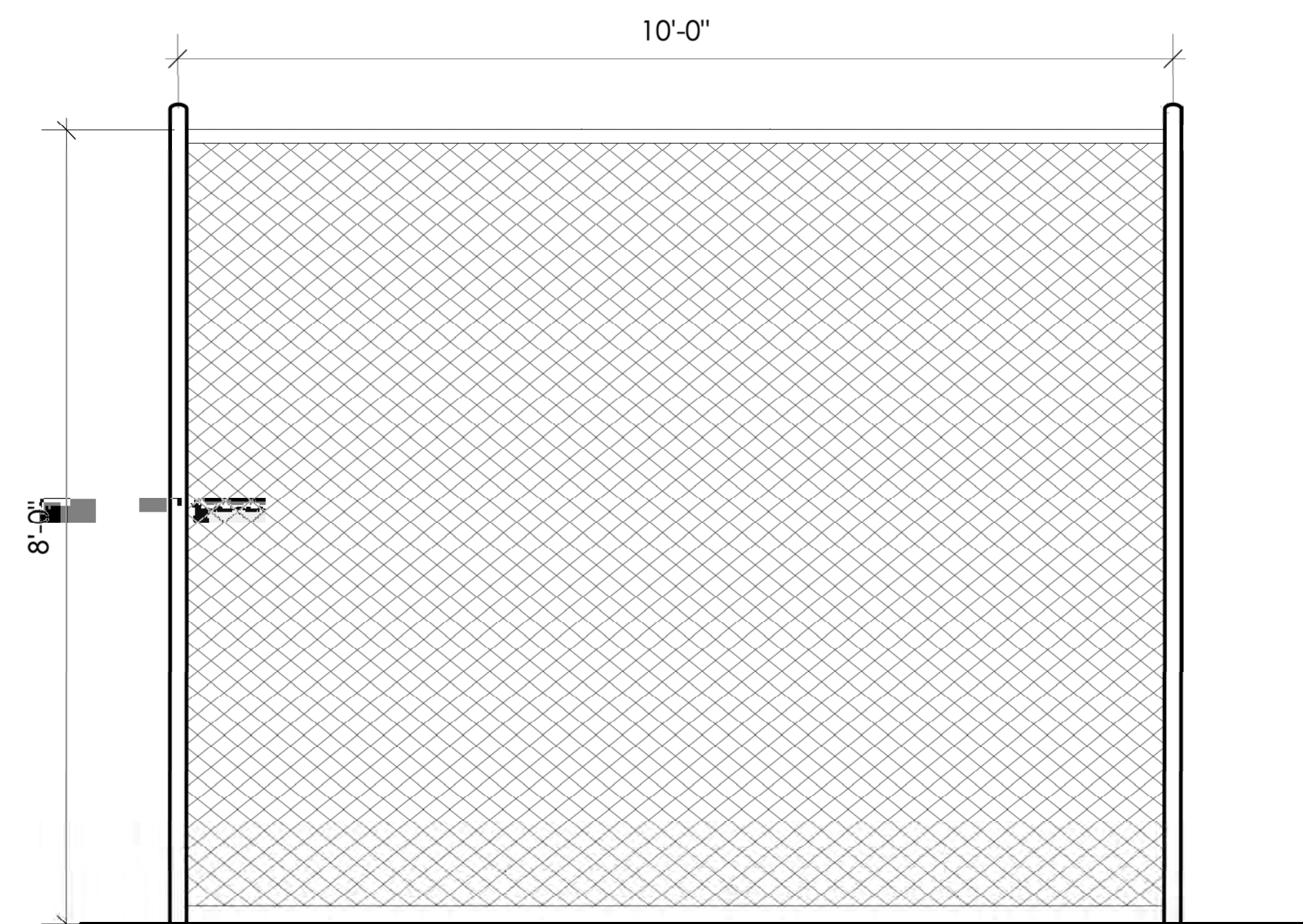
Proj# 18056 DSP REVISION REVIEW SET



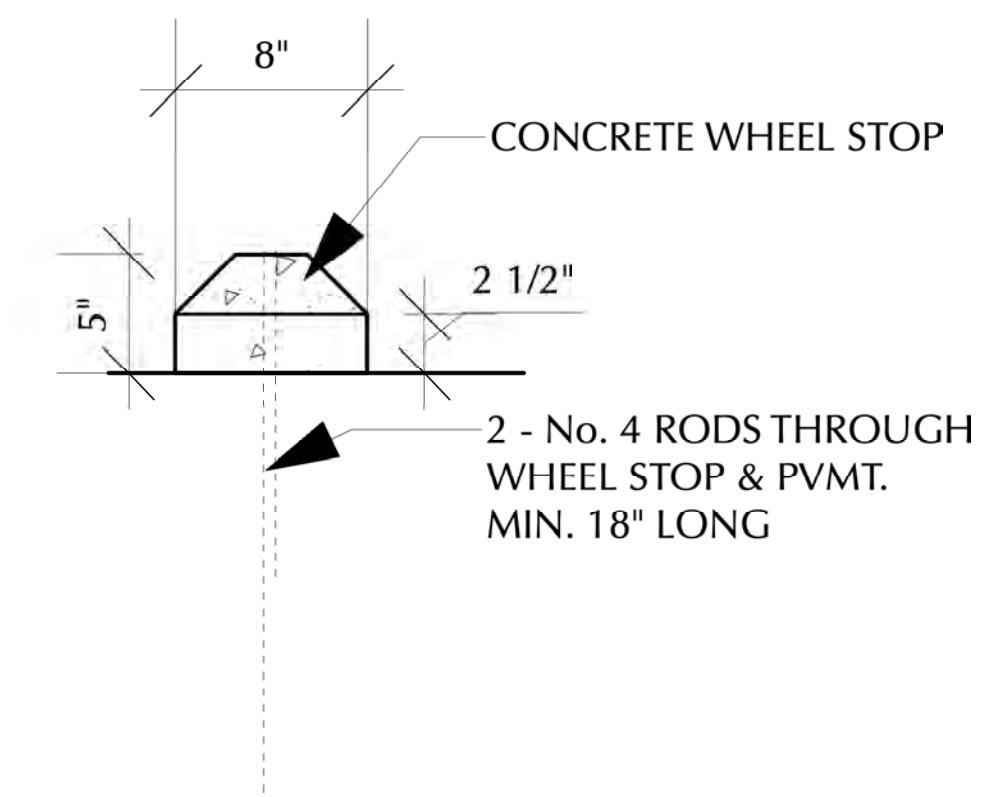




**3** DECORATIVE FENCE  
P-502 Scale: 3/4" = 1'-0"



**2** VINYL DIPPED CHAIN LINK FENCE  
P-002 Scale: 3/4" = 1'-0"

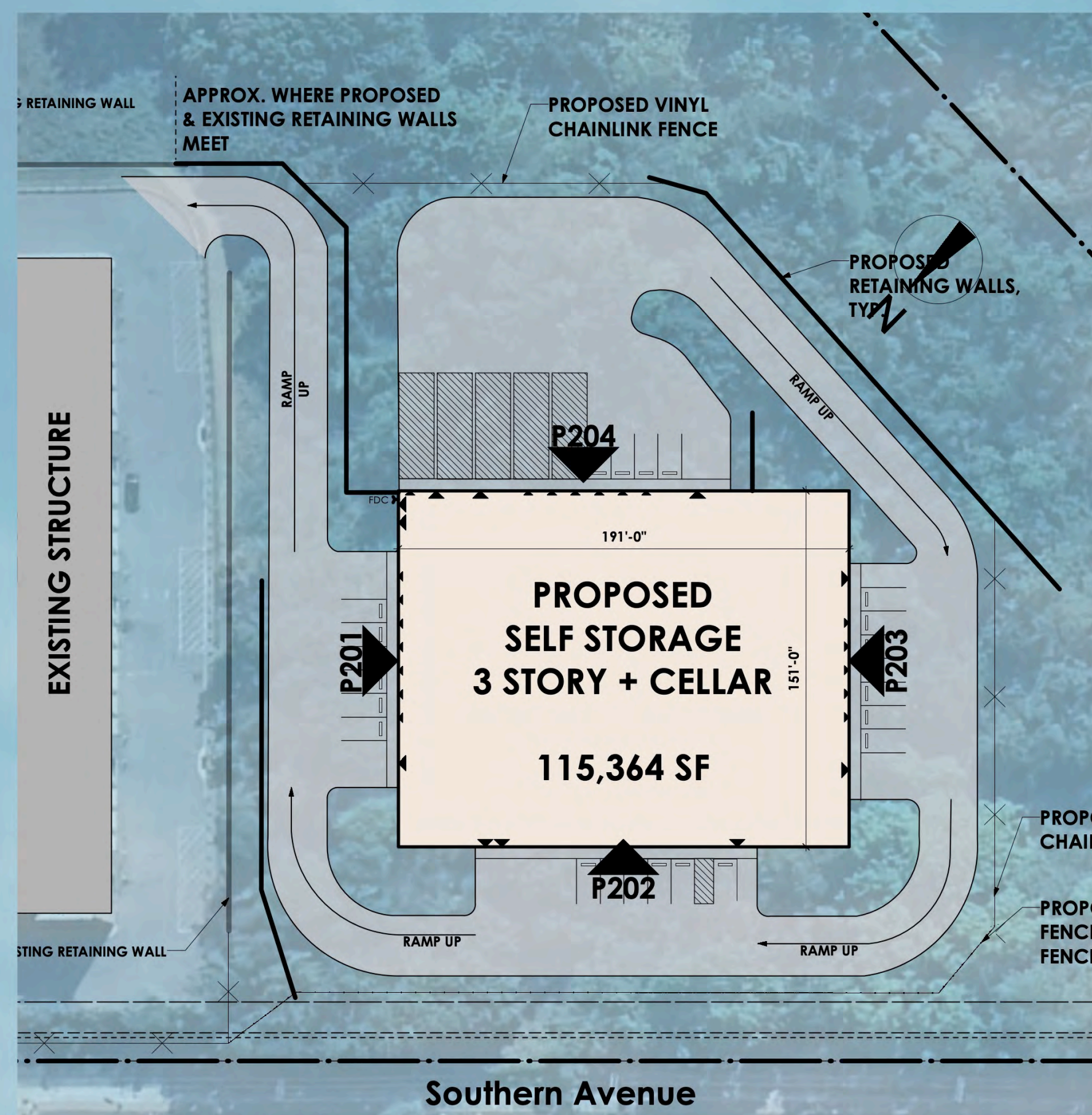


**1** WHEEL STOP  
P-502 Scale: 1 1/2" = 1'-0"





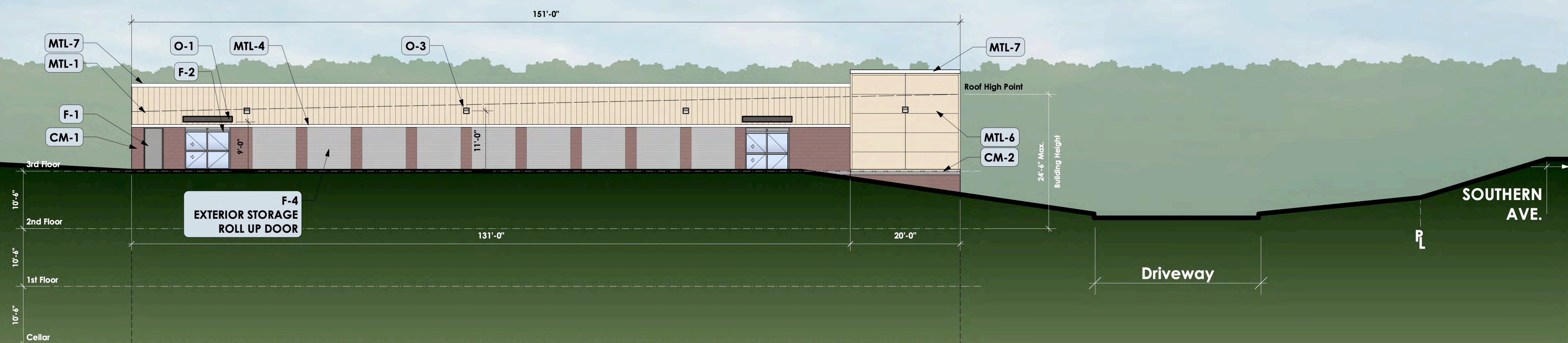




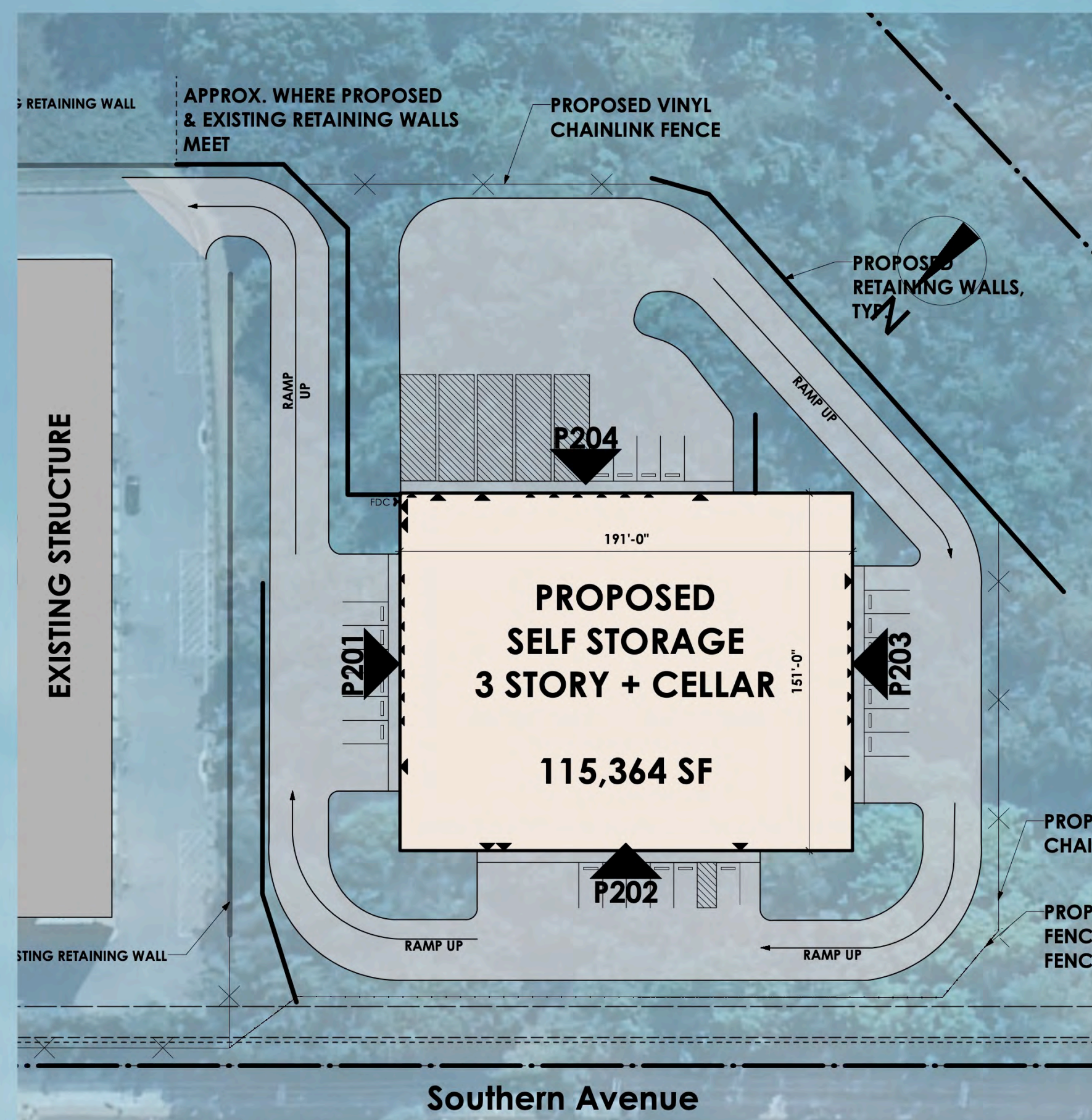
Exterior Material Schedule					
Material	No.	Item	Manufacturer	Finish	Color
Masonry	CM-1	Architectural CMU-Field	Oldcastle/Echelon	Quik-Brik	Rappanok Red
	CM-2	Architectural CMU-Accent	Oldcastle/Echelon	Split Face	Slate Grey
Metals	MTL-1	Metal Siding - Vertical Field	MBCI	Pre-Finished	Almond
	MTL-2	Metal Siding - Horizontal	MBCI	Pre-Finished	Almond
	MTL-3	Not Used			
	MTL-4	Metal Accent	MBCI	Pre-Finished	Polar White
	MTL-5	Break Metal	MBCI	Pre-Finished	Slate Gray
	MTL-6	IMP Panel	MBCI	Pre-Finished	Almond
	MTL-7	8" Coping	MBCI	Pre-Finished	Polar White
	MTL-8	8" Coping	MBCI	Pre-Finished	Rustic Red
Fenestration	F-1	Hollow Metal Door		Paint	Match Adj. Surface
	F-2	Automatic Sliding Door		Pre-Finished	Anodized Aluminum
	F-3	Storefront System		Pre-Finished	Anodized Aluminum
	F-4	Storage Unit Roll Up Door	Janus	Pre-Finished	Silhouette Gray
Other	O-1	Decorative Canopy	-	Pre-Finished	
	O-2	Wall Sign A	-	-	-
	O-3	Wall Pack	-	-	-

NOTES

1. All Materials and Colors Subject to Modification per Final Design



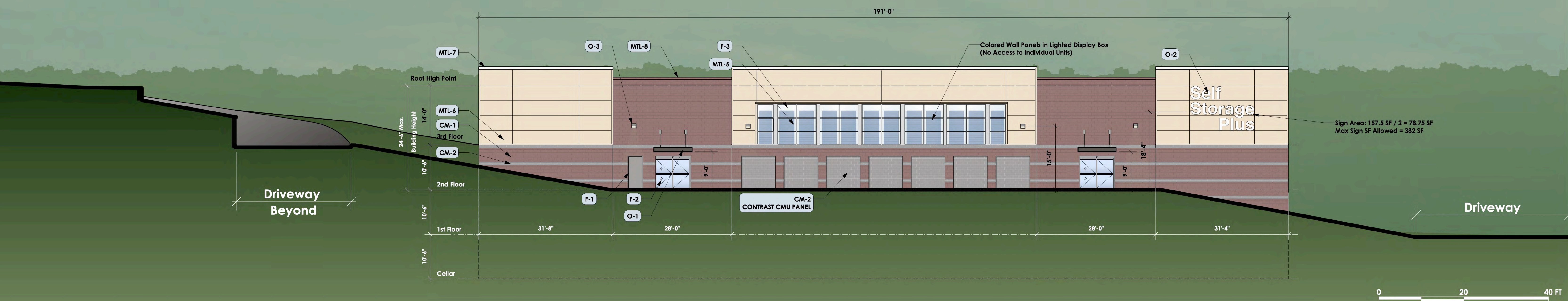




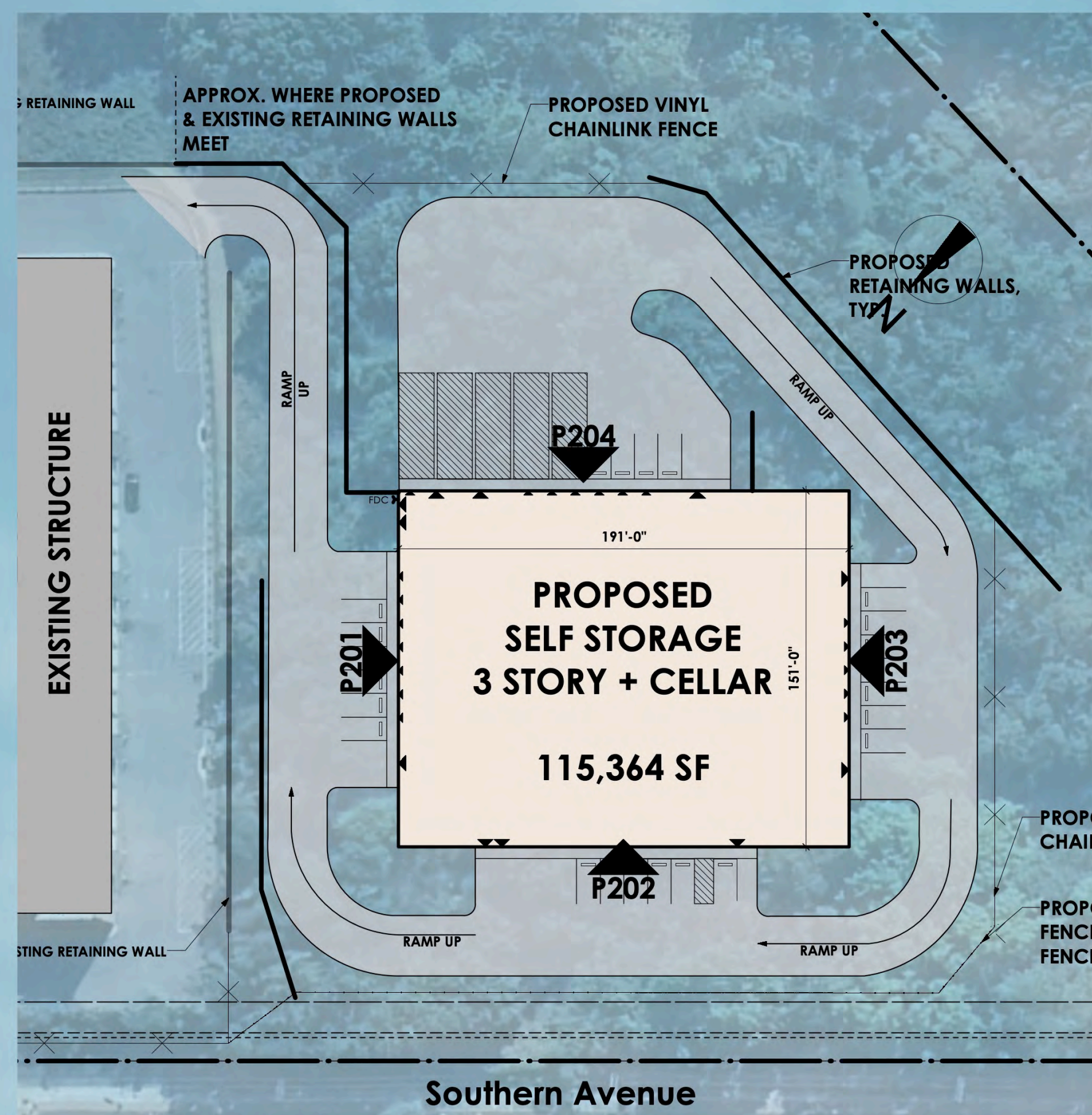
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	CM-2	Architectural CMU-Accent	Oldcastle/Echelon	Split Face	Slate Grey
Metals	MTL-1	Metal Siding - Vertical Field	MBCI	Pre-Finished	Almond
	MTL-2	Metal Siding - Horizontal	MBCI	Pre-Finished	Almond
	MTL-3	Not Used			
	MTL-4	Metal Accent	MBCI	Pre-Finished	Polar White
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NOTES

1. All Materials and Colors Subject to Modification per Final Design



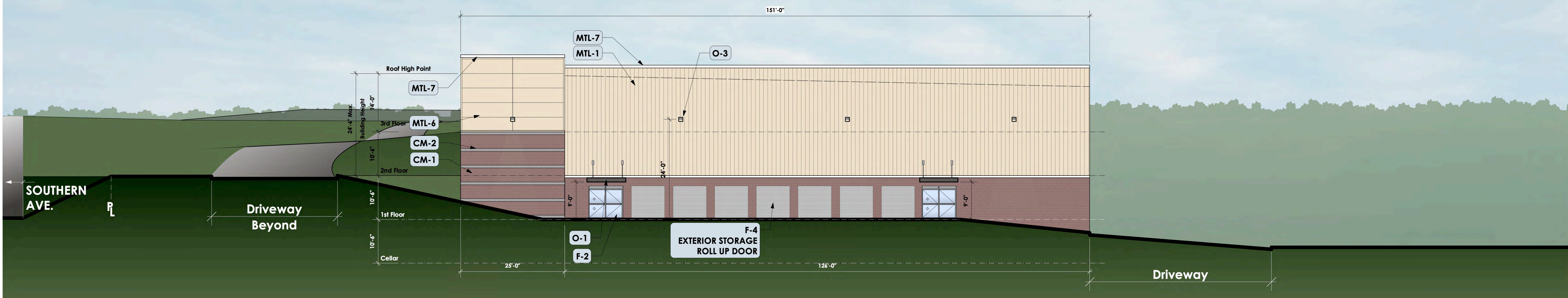




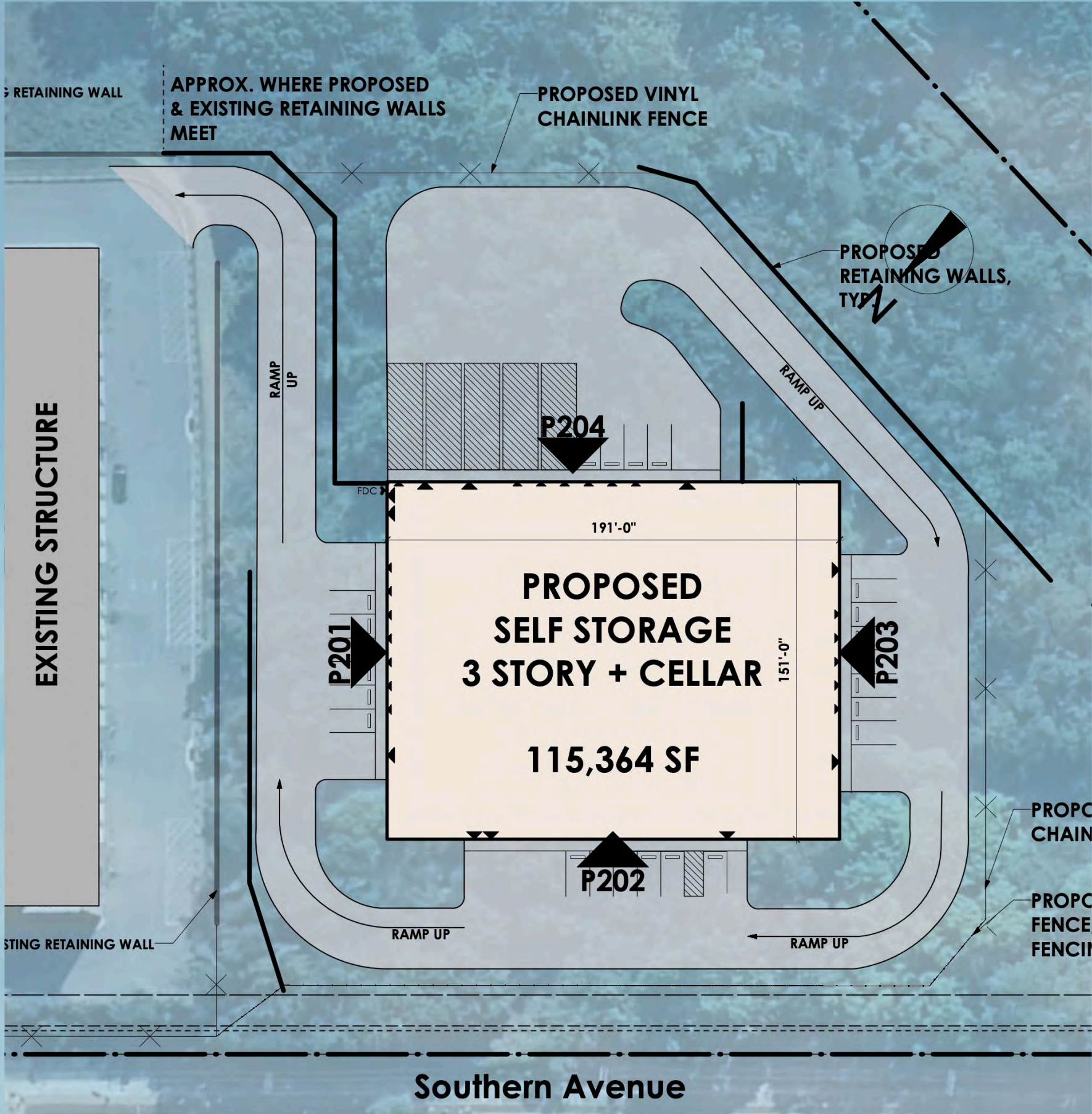
Exterior Material Schedule					
Material	No.	Item	Manufacturer	Finish	Color
Masonry	CM-1	Architectural CMU-Field	Oldcastle/Echelon	Quik-Brik	Rappanok Red
	CM-2	Architectural CMU-Accent	Oldcastle/Echelon	Split Face	Slate Grey
Metals	MTL-1	Metal Siding - Vertical Field	MBCI	Pre-Finished	Almond
	MTL-2	Metal Siding - Horizontal	MBCI	Pre-Finished	Almond
	MTL-3	Not Used			
	MTL-4	Metal Accent	MBCI	Pre-Finished	Polar White
	MTL-5	Break Metal	MBCI	Pre-Finished	Slate Gray
	MTL-6	IMP Panel	MBCI	Pre-Finished	Almond
	MTL-7	8" Coping	MBCI	Pre-Finished	Polar White
	MTL-8	8" Coping	MBCI	Pre-Finished	Rustic Red
Fenestration	F-1	Hollow Metal Door		Paint	Match Adj. Surface
	F-2	Automatic Sliding Door		Pre-Finished	Anodized Aluminum
	F-3	Storefront System		Pre-Finished	Anodized Aluminum
	F-4	Storage Unit Roll Up Door	Janus	Pre-Finished	Silhouette Gray
Other	O-1	Decorative Canopy	-	Pre-Finished	
	O-2	Wall Sign A	-	-	-
	O-3	Wall Pack	-	-	-

NOTES

1. All Materials and Colors Subject to Modification per Final Design



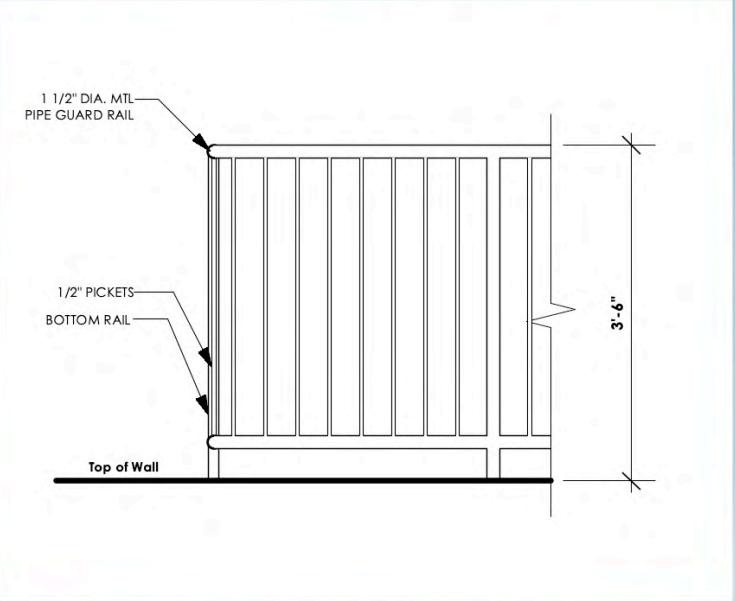




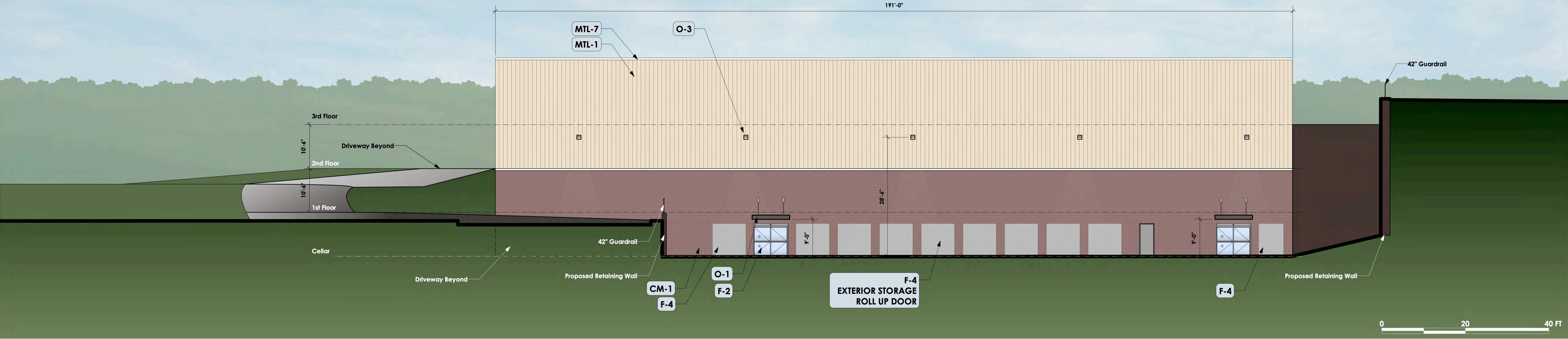
Site Diagram

EXTERIOR MATERIAL SCHEDULE					
MATERIAL	NO.	ITEM	MANUFACTURER	FINISH	COLOR
MASONRY	CM-1	Architectural CMU-Field	Oldcastle/Echelon	Quik-Brik	Rappanok Red
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METALS	MTL-1	Metal Siding - Vertical Field	MBCI	Pre-Finished	Almond
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	F-4	Storage Unit Roll Up Door	Janus	Pre-Finished	Silhouette Gray
OTHER	O-1	Decorative Canopy	-	Pre-Finished	
	O-2	Wall Sign A	-	-	-
	O-3	Wall Pack	-	-	-

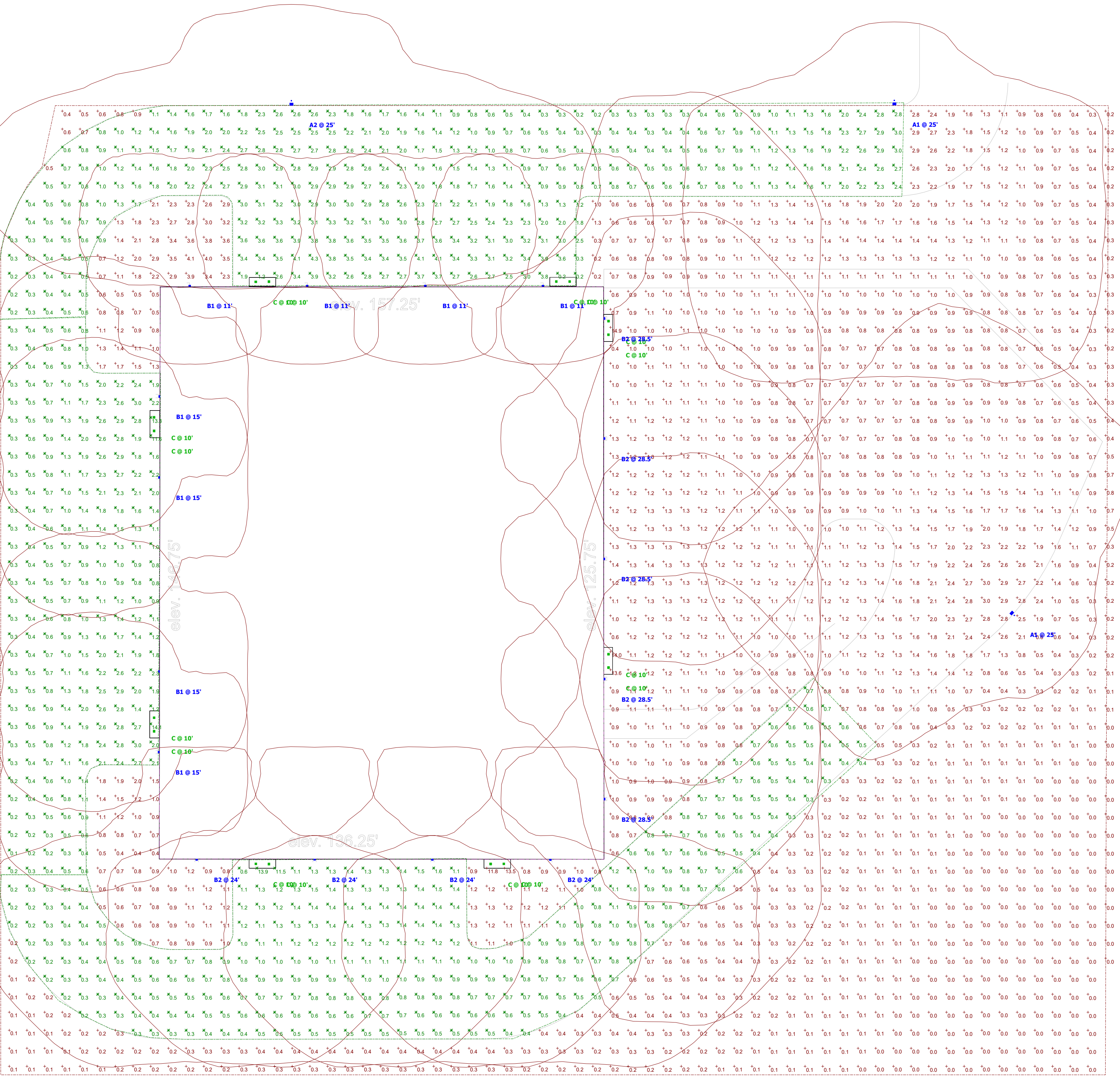
NOTES  
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Guardrail Detail

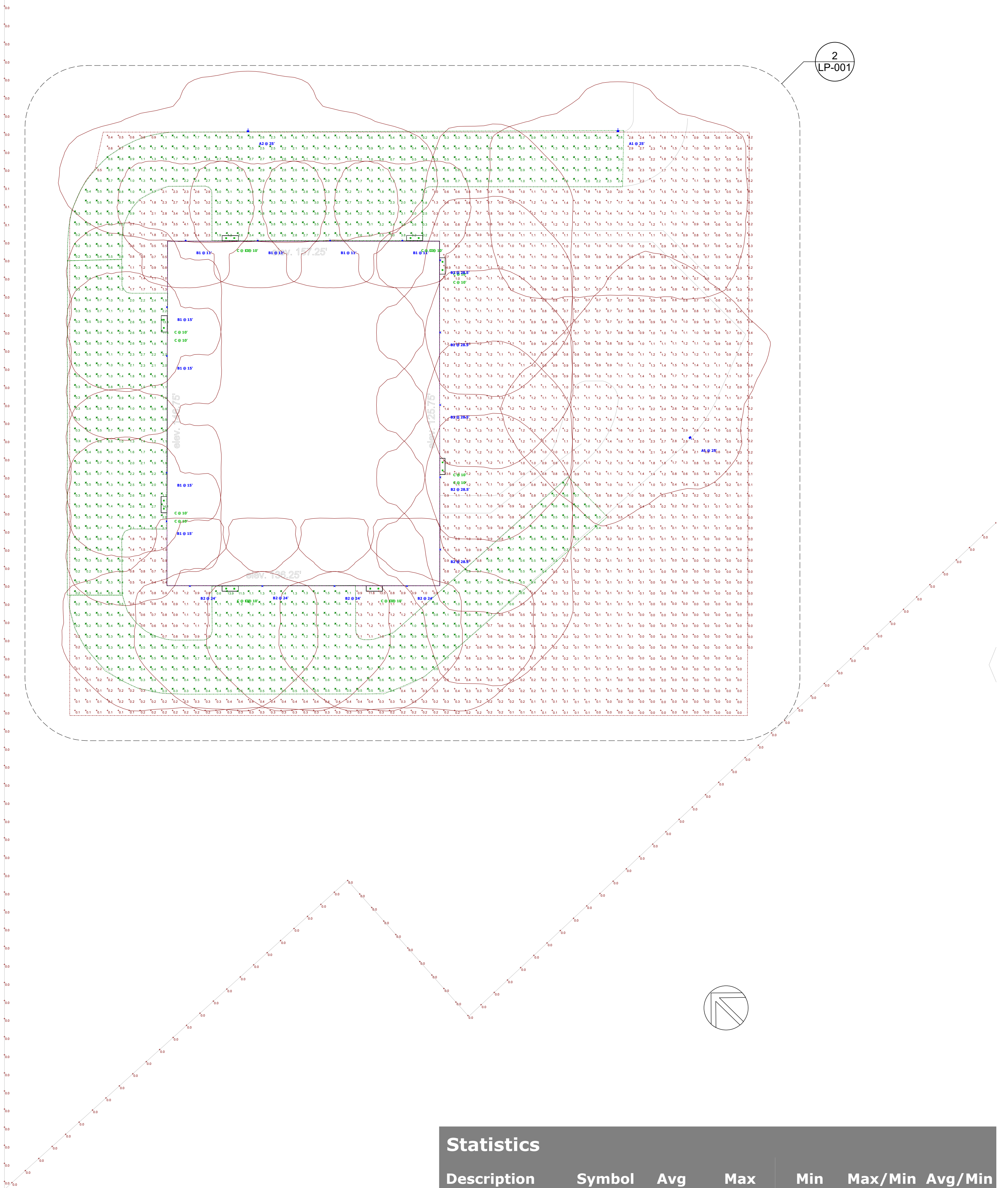






2 ENLARGED PHOTOMETRIC

Schedule							
Symbol	QTY	Manufacturer	Catalog	Lamp Output	LLF	Description	Input Power
B.1	8	Lithonia Lighting	WDGE2 LED P4 30K 70CRI TFTM	4402	0.9	WDGE2 LED WITH P4 - PERFORMANCE PACKAGE, 3000K, 70CRI, TYPE FORWARD THROW MEDIUM OPTIC	46.6589
B.2	9	Lithonia Lighting	WDGE2 LED P4 30K 70CRI T4M	4376	0.9	WDGE2 LED WITH P4 - PERFORMANCE PACKAGE, 3000K, 70CRI, TYPE 4 MEDIUM OPTIC	46.6589
C	16	eLuminaire	RCS1 DP 25 30 FINISH	2993	0.7	RECESSED CANOPY MOUNT	20.9
A.1	2	Lithonia Lighting	DSX0 LED P7 30K 70CRI TFTM HS/ POLE MOUNTED 25'	16709	0.9	D-Series Size 0 Area Luminaire P7 Performance Package 3000K CCT 70 CRI Forward Throw Houseside Shield	170.81
A.2	1	Lithonia Lighting	DSX0 LED P7 30K 70CRI TZM/ POLE MOUNTED 25'	19273	0.9	D-Series Size 0 Area Luminaire P7 Performance Package 3000K CCT 70 CRI Type 2 Medium	170.81



1 SITE PHOTOMETRIC

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Drive/Loading 2	✗	1.8 fc	4.3 fc	0.2 fc	21.5:1	9.0:1
Drive/Loading 3	✗	0.8 fc	13.9 fc	0.2 fc	69.5:1	4.0:1
PROPERTY LINE	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Storage Lot	+	1.0 fc	14.9 fc	0.0 fc	N/A	N/A
Drive/Loading 1	✗	1.3 fc	14.1 fc	0.1 fc	141.0:1	13.0:1







**Gilpin Property**

(DSP-13008-02, TCP2-018-13)

December 3, 2024

**Letter of Justification re: Variance to Remove Specimen Trees****INTRODUCTION**

On behalf of our client, Arcland Property Company, LLC (the “Applicant”), we hereby request a Specimen Tree Variance for the property identified as Lot 4 located at 899 Southern Avenue (the "Property") pursuant to Section 25-119 of the Prince George’s County Code.

In order to obtain approval of the removal or disturbance of certain identified trees that are considered priority for retention and protection under State law and the Prince George’s County Code, the applicant hereby requests a variance to remove certain Specimen Tree(s) from the Property on behalf of the client in connection with the coordinated review of Detailed Site Plan DSP-13008-02. The Specimen Trees to be removed include ST-58 and ST-59 as depicted on the submitted Type 2 Tree Conservation Plan TCP2-018-13.

The subject Property is a 10.105± acre site situated on developed land located in the southeast quadrant of the intersection of Southern Avenue and Wheeler Road, approximately 720 feet north of Southview Drive. The now requested Detailed Site Plan DSP-13008-02, which accompanies this Variance Request, proposes to accommodate the development of an additional +/-115,364 square foot, three story, consolidated storage facility under the prior Zoning Ordinance in the I-1 (Light Industrial) Zone. The property is also located in the 2000 *Approved Master Plan for The Heights and Vicinity* and *Sectional Map Amendment*, and within the Growth Tier Boundary as designated by the 2014 General Plan. The Property is surrounded by commercial uses and vacant wooded land to the South, commercial uses to the East, Gilpin Property Phase 1 and 2 (consolidated storage use) to the North, and Southern Avenue to the West.

**NATURE OF THE REQUEST****Variance from Section 25-122(b)(1)(G) – (Specimen Trees)**

The approved Natural Resources Inventory Plan (NRI-029-13) identifies 5 specimen trees located on the Property. The property also contains a total of 45,939 SF of Primary Management Area (“PMA”) and includes 0.50 acres of 100-year floodplain. The applicant now requests a variance from Section 25-122(b)(1)(G) of the County Code to allow removal of two specimen trees.

Below is a comprehensive list of all specimen trees found onsite, for the purpose of indicating the percentage of Critical Root Zone (CRZ) proposed to be impacted under this Detailed Site Plan amendment that serves as the subject of this variance request:



SPECIMEN TREE TABLE						
No.	Common Name	Scientific Name	Onsite/ Offsite	DBH (inches)	Condition Rating	Comments
56	Tulip poplar	<i>Liriodendron tulipifera</i>	Offsite	43	Fair	Five leaders, decay base of trunk, girdling, PCA, large dead wood, small dead wood
57	Tulip poplar	<i>Liriodendron tulipifera</i>	Offsite	31	Poor	Minor vine coverage, large cavity in trunk, minor girdling, small dead wood
58	Slippery elm	<i>Ulmus rubra</i>	Onsite	32	Poor	Co-dominant, heavy vine coverage, small dead wood, large dead wood, girdling, broken branches
59	Silver maple	<i>Acer saccharinum</i>	Onsite	32	Poor	Multi-leader, heavy vine coverage, dead leader, small dead wood, large dead wood, broken branches
60	Cottonwood	<i>Populus deltoides</i>	Onsite	31	Poor	Heavy vine coverage, co-dominant, on slope, leader leaning, small dead wood

As the above table demonstrates, pursuant to the approved NRI-029-13, Specimen Trees 58 and 59 were found to be in “poor” condition at the time of field work. Removal is required for the reasons provided herein. The trees in question are spread over the Property and their removal is critical to the development of the site.

## REQUIRED FINDINGS

Section 25-122(b)(1)(G) requires that “Specimen trees, champion trees, and trees that are part of a historic site or are associated with a historic structure shall be preserved and the design shall either preserve the critical root zone of each tree in its entirety or preserve an appropriate percentage of the critical root zone in keeping with the tree’s condition and the species’ ability to survive construction as provided in the [Environmental] Technical Manual.” The code, however, is not inflexible.

The authorizing legislation of Prince George’s County’s WCO is the Maryland Forest Conservation Act, which is codified under Title 5, Subtitle 16 of the Natural Resources Article of the Maryland Code. Section 5-1611 of the Natural Resources Article requires the local jurisdiction to provide procedures for granting variances to the local forest conservation program. The variance criteria in Prince George’s County’s WCO are set forth in Section 25-119(d).

Pursuant to Section 25-119(d), the Prince George’s County Planning Board may approve a variance for the removal of specimen trees subject to findings in accordance with specific enumerated criteria. For the reasons set forth below, the Applicant respectfully submits that this request conforms to the required findings under Section 25-119(d):

### (d) Variances

- (1) An applicant may request a variance from this Division as part of the review of a TCP where owing to special features of the site or other circumstances, implementation of this subtitle would result in unwarranted hardship to an applicant. To approve a variance, the approving authority shall find that:**

**(A) Special conditions peculiar to the property have caused the unwarranted hardship;**

RESPONSE: The Woodland Conservation Ordinance (WCO) does not define “unwarranted hardship.” However, the appellate courts have had an occasion to consider the meaning of this phrase. In *Assateague Coastal Trust, Inc. v. Schwalbach*, 448 MD 112, 139 (2016), the Court of Appeals held:



In order to establish an unwarranted hardship, the applicant has the burden of demonstrating that, without a variance, the applicant would be denied a use of the property that is both significant and reasonable. In addition, the applicant has the burden of showing that such a use cannot be accomplished elsewhere on the property without a variance.

*Id.* As articulated below, the applicant contends that without the requested variance to remove the two (2) specimen trees in question, the applicant will be unreasonably restricted from being able to provide necessary roadway construction, parking/loading facilities, and associated grading. Further, and as explained in more detail herein, given the existing conditions of the some of the trees in question and the grading that is needed to accommodate necessary the development, the development cannot be accomplished elsewhere on the property without impacting additional PMA areas.

Specifically, the site contains several environmental conditions which limit the area available for development. Over an acre of this site is within the Primary Management Area, and thus unable to be developed. The site also contains 0.50ac of 100-year floodplain. The site contains Phoenix clay soils which is a potobac soil with drainage issues as well as steep slopes, which creates the need for additional grading to mitigate slope failure and limited areas for stormwater management to be effective given the soil conditions and, therefore, limiting the areas of the site available for this proposed development.

The proposed development includes an expansion to the existing consolidated storage building in a manner consistent with and meeting the intent of the I-1 zone. Parking areas, landscaping/open space, and stormwater management facilities will be organized in a manner to minimize disturbance to regulated environmental features while prioritizing areas for woodland conservation. Construction of the building expansion, parking/loading areas, roadways, sidewalks, retaining walls, and grading will require removal of the two specimen trees. Because of the varied topography of the existing site, disturbance for site grading, retaining walls, and stormwater management facilities will be required for development, and due to the aforementioned site constraints, specimen tree removal cannot be avoided. As shown on the submitted TCP2-018-13, woodland preservation and afforestation and/or reforestation will be provided to the maximum extent practicable while meeting the required 2.09 acres woodland conservation threshold on site.

PMA and adjacent woodlands are being preserved – including the majority of the steep slopes on-site. Although the site contains wooded PMA that includes floodplain associated with a tributary of Oxon Run, the prior TCP showed preservation of the onsite PMA with no impacts. The applicant designed the facility so as to minimize grading on the site and preserve the natural contours as much as feasible.

The Applicant would suffer unwarranted hardship if the removal and disturbance of the designated trees are not allowed in order to construct the proposed development. Unwarranted hardship is demonstrated for the purpose of obtaining a Specimen Tree Variance when an applicant presents evidence that denial of the variance would



deprive the applicant of the reasonable and substantial use of the roughly 10-acre property. The Property being developed to accommodate the development of an additional +/-115,364 square foot consolidated storage facility with associated parking, loading, landscaping, and stormwater management facilities is within the class of reasonable and substantial uses that justify the approval of a Specimen Tree Variance. Simply, it is impractical to avoid these impacts and if the requested variance were denied, the Applicant would be precluded from developing the Property for a reasonable and significant use commonly enjoyed by other nearby commercially and industrially zoned property owners. On the site there are currently two specimen trees being removed. Specimen tree 58 and 59 are located northwest of the property and near to the road and direct conflict with the site access and building construction. The trees are in poor condition as noted below and will not survive construction. Please see tree specimen table below.

SPECIMEN TREE TABLE						
No.	Common Name	Scientific Name	Onsite/ Offsite	DBH (inches)	Condition Rating	Comments
56	Tulip poplar	<i>Liriodendron tulipifera</i>	Offsite	43	Fair	Five leaders, decay base of trunk, girdling, PCA, large dead wood, small dead wood
57	Tulip poplar	<i>Liriodendron tulipifera</i>	Offsite	31	Poor	Minor vine coverage, large cavity in trunk, minor girdling, small dead wood
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**(B) Enforcement of these rules will deprive the applicant of rights commonly enjoyed by others in similar areas;**

RESPONSE: The applicant is seeking to develop this property to add another building (Phase 3) for consolidated storage use, which is a permitted use in the prior I-1 Zone, and the site has obtained prior approvals for prior phases of said use on the property. If the requested variance were denied, the Applicant would be denied the right enjoyed by other similarly situated property owners to develop their I-1 zoned property in a manner permitted by the zoning ordinance that is consistent with the development history of the neighborhood and development goals of I-1 zoning. The 2000 *Approved Master Plan and Sectional Map Amendment for the Heights and Vicinity (Planning Area 76A)* retained the subject property in the prior I-1 Zone. The Master Plan does not address the subject property specifically, but it does include recommendations within the Environmental Resources section that were analyzed with the prior approvals. The Planning Board, in approving PPS 4-15017, found that that regulated environmental features have been preserved and/or restored in a natural state to the fullest extent possible in accordance with the requirement of Subtitle 24-130(b)(5).

If the variance were not granted for the trees identified on the aforementioned table, the Applicant would be unable to develop the proposed building, which would result in the disparate treatment of the Applicant in comparison to the exercise of rights commonly enjoyed by others in the same area and in similar I-1 zoned properties, and it would contradict the Master Plan's vision and land use recommendation for the Property. On



the site there are currently two specimen trees being removed. Specimen tree 58 and 59 are located northwest of the property and near to the road and direct conflict with the site access and building construction. The trees are in poor condition as noted below and will not survive construction. Please see tree specimen table below.

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**(C) Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.**

RESPONSE: Similar to the Finding (B) above, the variance confers no special privileges on the applicant that would be denied to other applicants. This Property is in an area planned for the proposed use/development. Special circumstances exist on the property, including topography, soils, and floodplain. The variance is necessary if the applicant is to be permitted to develop the Property in a manner consistent with its approved Preliminary Plan of Subdivision, and Detailed Site Plan. On the site there are currently two specimen trees being removed. Specimen tree 58 and 59 are located northwest of the property and near to the road and direct conflict with the site access and building construction. The trees are in poor condition as noted below and will not survive construction. Please see tree specimen table below.

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**(D) The request is not based on conditions or circumstances which are the result of actions by the applicant;**

RESPONSE: The instant request is based on minimum layout requirements for proposed storage use/development as contemplated by the aforementioned entitlement approvals for the Property. The request is necessary due to the unique property conditions of the site (as set forth in Finding A above) and is not a result of actions by the applicant. The stormwater concept plan has been approved (SDCP #38138-2024) on August 2, 2024. Per the approval, water quality is being treated by four micro-bio retention facilities to meet the required ESDV. One underground



detention facility has been provided to manage the 100-year flow to predevelopment conditions. There have been no physical modifications to the site such as woodland clearing, grading, construction, or arborist work since the date of approved NRI-029-13 that would have altered the structural integrity or health of the specimen trees and result in the request for removal. Removals requests are based solely on the planned development and associated roadway network, utilities and grading. On the site there are currently two specimen trees being removed. Specimen tree 58 and 59 are located northwest of the property and near to the road and direct conflict with the site access and building construction. The trees are in poor condition as noted below and will not survive construction. Please see tree specimen table below.

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**(E) The request does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; and**

RESPONSE: The request is based solely on the conditions existing on the Property and does not arise from a condition relating to land or building use on neighboring properties. The surrounding land uses (vacant, industrial, and commercial) do not have any inherent characteristics or conditions that have created or contributed to this particular need for a variance. Additionally, there are currently no recent or proposed changes to the adjacent properties such as permitted or nonconforming construction or other site modifications that have contributed to the request for removal. On the site there are currently two specimen trees being removed. Specimen tree 58 and 59 are located northwest of the property and near to the road and direct conflict with the site access and building construction. The trees are in poor condition as noted below and will not survive construction. Please see tree specimen table below.

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**(F) Granting of the variance will not adversely affect water quality.**

RESPONSE: Impact on water quality for the development of this project will be controlled by the stormwater management facilities proposed onsite. Stormwater Concept Plan, #38138-2024 is currently in for review and will be submitted once approved by DPIE. The Stormwater Concept Plat will address surface water runoff in accordance with Subtitle 32, which requires that Environmental Site Design (ESD) be implemented to the maximum extent practicable (MEP) in accordance with the Stormwater Management Act. Several micro bioretention facilities are proposed to treat the ESD volume. Granting of the variance will not adversely affect water quality. On the site there are currently two specimen trees being removed. Specimen tree 58 and 59 are located northwest of the property and near to the road and direct conflict with the site access and building construction. The trees are in poor condition as noted below and will not survive construction. Please see tree specimen table below.

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## CONCLUSION

For the above reasons, the Applicant respectfully requests that the Planning Board grant its request for a variance from the for the removal of two (2) specimen trees pursuant to the provisions of Section 25-119 of the Prince George's County Woodland and Wildlife Habitat Conservation Ordinance, as all required findings are met. Said approval, in accordance with the required findings, will facilitate the requested impact to certain specimen trees in order to allow the construction of this project. The site is context sensitive with previously approved and developed uses identical to the proposed expansion of the existing use on the subject property. As a result, the proposed development will provide for orderly, planned, efficient, and economical development in accordance with the principles/guidelines (as applicable) of the Zoning Ordinance, General Plan, Master Plan or other approved plans.



Thank you in advance for your consideration of this Application. If you have any questions or comments, please do not hesitate to contact the undersigned.

Prepared by:

A handwritten signature in blue ink, appearing to read "Chris Rizzi".

Christopher M Rizzi, PLA  
Associate



## **Gilpin Property**

(DSP-13008-02, TCP2-018-13)

October 31, 2024

### **Letter of Justification re: Variance to Remove Specimen Trees**

#### **INTRODUCTION**

The Gilpen Property is a 10.105± acre site situated on developed land located at 899 Southern Avenue in Oxon Hill, Maryland. The Gilpen Property is proposing to expand the existing storage facility. The property is in the Growth Tier Boundary as designated by the 2014 General Plan and is zoned I-1 (Light Industrial). The Gilpen Property is surrounded by vacant land to the South, existing self-storage facility to the East, Southern Avenue to the North, and an existing shopping center to the West. The Specimen Trees to be removed include ST-58 and ST-59.

#### **NATURE OF THE REQUEST**

##### **Variance from Section 25-122(b)(1)(G) – (Specimen Trees)**

The property contains a total of 45,939 SF of Primary Management Area (“PMA”) and includes no regulated streams and 0.50 acres of 100-year floodplain. The approved Natural Resources Inventory Plan (NRI-029-13) identifies 5 specimen trees located on the property. Similarly, the applicant now requests a variance from Section 25-122(b)(1)(G) of the County Code is to allow removal of the specimen trees noted below on the Property. The removal of these specimen trees is necessary to facilitate the proposed final development approved for the site. The trees in question are spread over the Property and their removal is critical to the development of the site. These specimen trees are located within the proposed limits of disturbance for the project. We have updated the specimen tree table on the TCP2 to reflect these additional trees to be removed and there are no additional PMA impacts proposed for the removal of these trees.

In the cases of all specimen trees noted above, they are either directly located within the proposed building footprints, parking areas, or along areas impacted significantly by proposed grading for the site and hence are requested for approval for removal. Specifically, the reasons for removal are as follows:

ST58, ST59 – These trees are all located directly within the building footprints and/or parking/paved areas proposed for the site and proposed grades will be substantially different vertically in these areas. Impacts to these trees cannot be avoided.

There are several sub-categories of our request. Descriptions of the reasons for removal are outlined.



## REQUIRED FINDINGS

Section 25-119(d) sets forth the following requirements for approvals of variances to requirements of Subtitle 25 – Trees and Vegetation.

### (d) Variances

**(1) An applicant may request a variance from this Division as part of the review of a TCP where owing to special features of the site or other circumstances, implementation of this subtitle would result in unwarranted hardship to an applicant. To approve a variance, the approving authority shall find that:**

**(A) Special conditions peculiar to the property have caused the unwarranted hardship;**

RESPONSE: There are several conditions on this site which limit the area available for development. Over an acre of this site is within the Primary Management Area, and thus unable to be developed. The site contains 0.50ac of 100-year floodplain. The site contains Phoenix clay soils which is a potobac soil with drainage issues as well as steep slopes, which creates the need for additional grading to mitigate slope failure and limited areas for stormwater management to be effective given the soil conditions and, therefore, limiting the areas of the site available for this proposed development. On the site there are currently two specimen trees being removed. Specimen tree 58 and 59 are located northwest of the property and near the road. The trees are in poor conditions and will not survive after construction. Please see tree specimen table below.

SPECIMEN TREE TABLE						
No.	Common Name	Scientific Name	Onsite/ Offsite	DBH (inches)	Condition Rating	Comments
56	Tulip poplar	<i>Liriodendron tulipifera</i>	Offsite	43	Fair	Five leaders, decay base of trunk, girdling, PCA, large dead wood, small dead wood
57	Tulip poplar	<i>Liriodendron tulipifera</i>	Offsite	31	Poor	Minor vine coverage, large cavity in trunk, minor girdling, small dead wood
58	Slippery elm	<i>Ulmus rubra</i>	Onsite	32	Poor	Co-dominant, heavy vine coverage, small dead wood, large dead wood, girdling, broken branches
59	Silver maple	<i>Acer saccharinum</i>	Onsite	32	Poor	Multi-leader, heavy vine coverage, dead leader, small dead wood, large dead wood, broken branches
60	Cottonwood	<i>Populus deltoides</i>	Onsite	31	Poor	Heavy vine coverage, co-dominant, on slope, leader leaning, small dead wood

**(B) Enforcement of these rules will deprive the applicant of rights commonly enjoyed by others in similar areas;**

RESPONSE: The applicant is seeking to develop this property as is allowed per the appropriate provisions of the Zoning Ordinance, Preliminary Plan and Detailed Site Plan. Enforcement of these rules, given the unique characteristics of the property, would deprive the applicant of the right to develop the property in a similar fashion to other properties in the immediate area. Due to the geometrical shape on site specimen tree 58 and 59, located on the northwest side of the property need to be removed of their conditions. They have broken branches and vine coverage which is overall not beneficial to the sites current state.



**(C) Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.**

RESPONSE: Similar to the Finding (B) above, the variance confers no special privileges on the applicant that would be denied to other applicants. This Property is in an area planned for the proposed use/development. Special circumstances exist on the property, including topography, soils, and floodplain. The variance is necessary if the applicant is to be permitted to develop the Property in a manner consistent with its approved Preliminary Plan of Subdivision, and Detailed Site Plan. The applicant is requesting to remove two specimen trees on the northwest side of the site. These trees are in poor conditions which could cause other issues in the future.

**(D) The request is not based on conditions or circumstances which are the result of actions by the applicant;**

RESPONSE: The instant request is based on minimum layout requirements for proposed storage use/development as contemplated by the entitlement approvals for the Gilpin Property. The request is necessary due to the unique property conditions of the site (as set forth in Finding A above) and is not a result of actions by the applicant. The stormwater concept plan has been approved (SDCP #38138-2024) on August 2, 2024. Per the approval, water quality is being treated by four micro-bio retention facilities to meet the required ESDV. One underground detention facility has been provided to manage the 100-year flow to predevelopment conditions. The request is made based on minimum layout requirements due to the current site conditions. As a result, the proposed conditions do not negatively impact the water quality or quantity and mimic woodlands in good conditions. There are two specimen trees on the northwest side of the site. The applicant is solely requesting to remove these trees because of their condition.

**(E) The request does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; and**

RESPONSE: The request is based solely on the existing conditions on the property and has nothing to do with land or building use on neighboring properties. The applicant is requesting to remove specimen tree 58 and 59 located on the northwest side of the site. This request does not arise from conditions relating to land or building use. This request is solely based on the trees conditions.

**(F) Granting of the variance will not adversely affect water quality.**

RESPONSE: Impact on water quality for the development of this project will be controlled by the stormwater management facilities proposed onsite. A Stormwater Concept Plan, #38138-2024 has been approved. There is no evidence that the removal



of specimen tree 58 and 59 located on the northwest side of the site would affect water quality. The applicant is requesting to remove these trees because of their poor condition.

## CONCLUSION

This specimen tree variance application meets all applicable requirements for approval set forth in the Prince George's County Code, as discussed herein. As such, the Applicant respectfully requests that the instant variance be approved.

Thank you in advance for your consideration of this Application. If you have any questions or comments, please do not hesitate to contact the undersigned.

Prepared by:



Christopher M Rizzi, PLA  
Associate



# PRIOR ZONING SKETCH MAP

APP NO: DSP-13008-02

EXISTING ZONE:

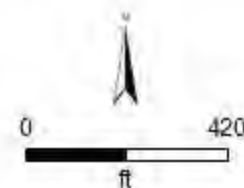
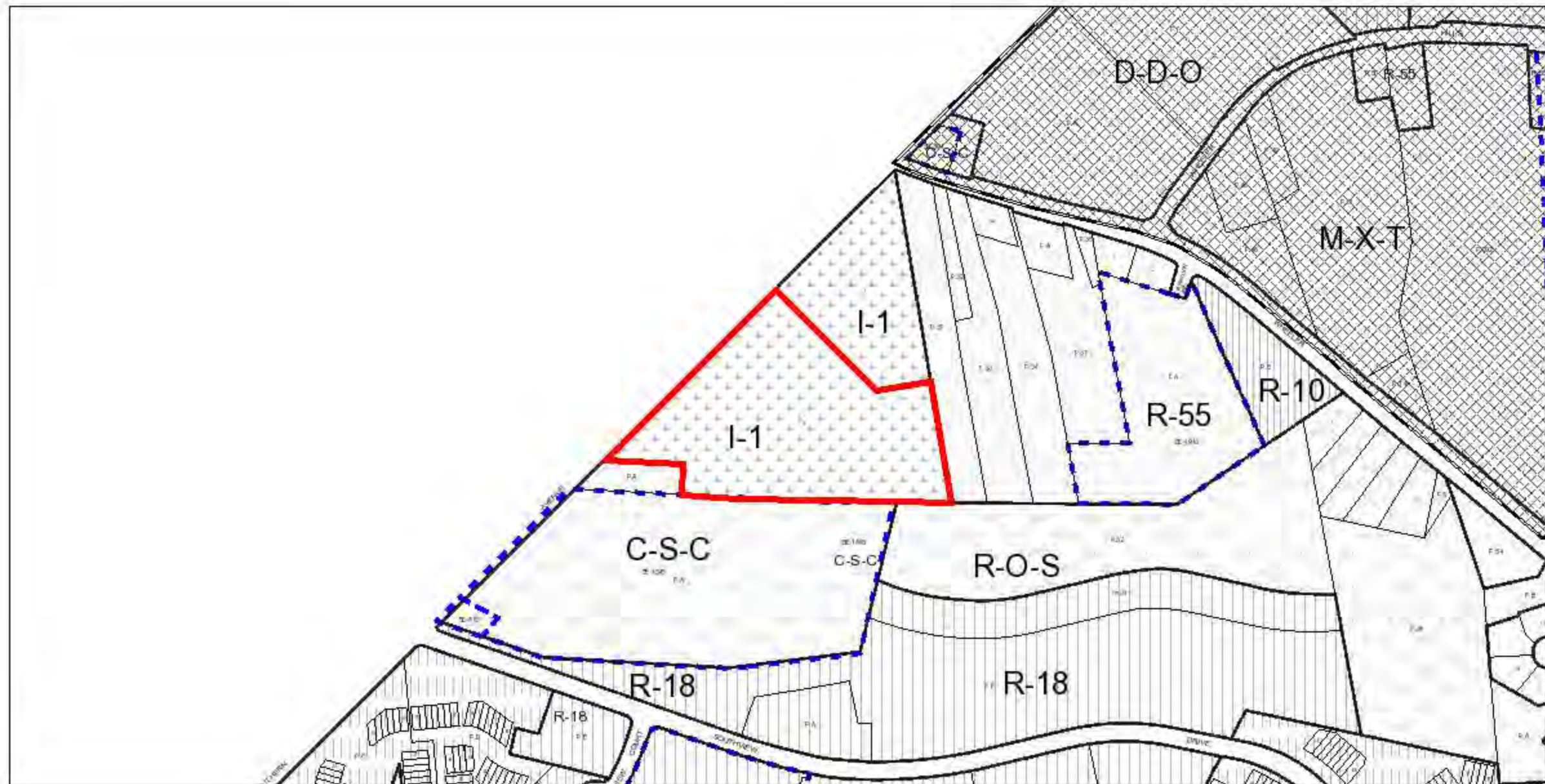
PLANNING AREA: 76A

WSSC GRID: 206SE01

TAX MAP: 87

TAX GRID: B3

COUNCIL DISTRICT: 7



The Marion County Capital Area Planning Commission  
Marion County Planning Department  
Geographic Information System

Created: 8/27/2024



STANDARD DRAWING LEGEND		
FOR ENTIRE PLAN SET		
LIMIT OF WORK		LOW LOW
LIMIT OF DISTURBANCE		LOD LOD
EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
---	ONSITE PROPERTY LINE / R.O.W. LINE	---
- - -	NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE	- - -
---	EASEMENT LINE	---
- - -	SETBACK LINE	- - -
=====	CONCRETE CURB & GUTTER	<div>CURB AND GUTTER</div> <div>SPILL   TRANSITION</div> <div>DEPRESSED CURB AND GUTTER</div>
	UTILITY POLE WITH LIGHT	
	POLE LIGHT	
	TRAFFIC LIGHT	
	UTILITY POLE	
	TYPICAL LIGHT	
	ACORN LIGHT	
	TYPICAL SIGN	
	PARKING COUNTS	
<div>---170---</div> <div>- - -169- - -</div> <div>TC 516.4 OR 516.4</div>	CONTOUR LINE	<div>190</div> <div>187</div> <div>TC 516.00 BC 515.55 MATCH EX 518.02 ±</div>
<div>SAN #</div> <div></div>	SANITARY LABEL	<div>SAN #</div> <div></div>
<div>SL</div> <div>W</div> <div>E</div> <div>G</div> <div>OH</div> <div>T</div> <div>C</div>	SANITARY SEWER LATERAL UNDERGROUND WATER LINE UNDERGROUND ELECTRIC LINE UNDERGROUND GAS LINE OVERHEAD WIRE UNDERGROUND TELEPHONE LINE UNDERGROUND CABLE LINE	<div>SL</div> <div>W</div> <div>E</div> <div>G</div> <div>OH</div> <div>T</div> <div>C</div>
<div>---</div> <div>- - -5- - -</div>	STORM SEWER SANITARY SEWER MAIN	<div>---</div> <div>---</div>
	HYDRANT	
	SANITARY MANHOLE	
	STORM MANHOLE	
	WATER METER	
	WATER VALVE	
	GAS VALVE	
	GAS METER	
	TYPICAL END SECTION	
	HEADWALL OR ENDWALL	
	GRATE INLET	
	CURB INLET	
	CLEAN OUT	
	ELECTRIC MANHOLE	
	TELEPHONE MANHOLE	
	ELECTRIC BOX	
	ELECTRIC PEDESTAL	
	MONITORING WELL	
	TEST PIT	
	BENCHMARK	
	BORING	

FOR ENTIRE PLAN SET	
AC	ACRES
ADA	AMERICANS WITH DISABILITY ACT
ARCH	ARCHITECTURAL
BC	BOTTOM OF CURB
BF	BASEMENT FLOOR
BK	BLOCK
BL	BASELINE
BLDG	BUILDING
BM	BUILDING BENCHMARK
BRL	BUILDING RESTRICTION LINE
CF	CUBIC FEET
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONN	CONNECTION
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARDS
DEC	DECORATIVE
DEP	DEPRESSED
DIP	DUCTILE IRON PIPE
DOM	DOMESTIC
ELEC	ELECTRIC
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
EW	END WALL
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FH	FIRE HYDRANT
FG	FINISHED GRADE
G	GRADE
GF	GARAGE FLOOR (AT DOOR)
GH	GRADE HIGHER SIDE OF WALL
GL	GRADE LOWER SIDE OF WALL
GRT	GRATE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
HOR	HORIZONTAL
HW	HEADWALL
INT	INTERSECTION
INV	INVERT
LF	LINEAR FOOT
LOC	LIMITS OF CLEARING
LOD	LIMITS OF DISTURBANCE
LOS	LINE OF SIGHT
LP	LOW POINT
L/S	LANDSCAPE
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
MJ	MECHANICAL JOINT
OC	ON CENTER
PA	POINT OF ANALYSIS
PC	POINT CURVATURE
PCCR	POINT OF COMPOUND CURVATURE, CURB RETURN
PI	POINT OF INTERSECTION
POG	POINT OF GRADE
PROP	PROPOSED
PT	POINT OF TANGENCY
PTGR	POINT OF TANGENCY, CURB RETURN
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RET WALL	RETAINING WALL
R/W	RIGHT OF WAY
S	SLOPE
SAN	SANITARY SEWER
SF	SQUARE FEET
STA	STATION
STM	STORM
SW	SIDEWALK
TBR	TO BE REMOVED
TBRL	TO BE RELOCATED
TC	TOP OF CURB
TELE	TELEPHONE
TPF	TREE PROTECTION FENCE
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
W	WIDE
WL	WATER LINE
WM	WATER METER
±	PLUS OR MINUS
°	DEGREE
Ø	DIAMETER
#	NUMBER

SOIL TYPES		
SOIL TYPE	DESCRIPTION	HYDROLOGIC SOIL GROUP
CcE	CHRISTIANA-DOWNER COMPLEX, 15 TO 25 PERCENT SLOPES	D
SdD	SASSAFRAS-CROOM-URBAN LAND COMPLEX, 5 TO 15 PERCENT SLOPES	A
Px	POTOBAC-ISSUE COMPLEX, FREQUENTLY FLOODED	B/D

SHEET TITLE	SHEET NUMBER
COVER SHEET	DSP-1
PLAN APPROVALS SHEET	DSP-2
EXISTING CONDITIONS / DEMOLITION PLAN	DSP-3
OVERALL SITE PLAN	DSP-4
SITE PLAN	DSP-5
STORMDRAIN AND GRADING PLAN	DSP-6
LANDSCAPE PLAN	DSP-7
LANDSCAPE DETAILS	DSP-8
SITE DETAILS	DSP-9
TRUCK TURN EXHIBIT	DSP-10 - DSP-11
ARCHITECTURAL PLANS	P-001 - P-501
LIGHTING PLANS	LP-001 - LP-002

	REQUIRED (I-1 ZONE)	PROPOSED
VEHICLE PARKING	MINIMUM: 23 SPACES 2 SPACES PER RESIDENT MANAGER + 2 + 4.0 SPACES PER 1,000 SQ. FT. OF GHA OR OFFICE SPACE (NO OFFICE = 0) + 1.0 SPACE PER 50 UNITS WITH DIRECT ACCESS FROM A BUILDING (107750 = 22) 24 SPACES TOTAL	24 SPACES TOTAL 23 STANDARD SPACES (1 ACCESSIBLE (ADA) PARKING SPACES)
MINIMUM PARKING SPACE DIMENSION (PERPENDICULAR PARKING)	9.5' X 19' (STANDARD SPACES)	10' X 19' (STANDARD SPACES) 8' X 19' (ADA SPACES WITH 5'-10" WIDE EMBARK/DEBARK AREA)
DRIVE AISLE WIDTHS	22' FOR TWO-WAY TRAFFIC WITH PERPENDICULAR PARKING	22' MIN.
OFF-STREET LOADING BERTHS	5 LOADING BERTHS (UP TO 10,000 SQFT = 2 LOADING BERTH) (EACH ADDITIONAL 40,000 SQFT OR MAJOR FRACTION THEREOF = ADD 1 LOADING BERTH)	5 LOADING BERTH
OFF STREET LOADING MINIMUM SIZE	15' WIDE X 45' LONG	15' WIDE X 45' LONG
GREEN AREA	10% OF LOT AREA = 1.11 AC.	6.87 AC.
FRONT YARD SETBACK	25' MIN.	98'
SIDE YARD SETBACK	20' MIN.	168'
REAR YARD SETBACK	0'/20' MIN.	280'
PRINCIPAL STRUCTURE HEIGHT	36'	31.5' (3 STORIES)

REVISION 3 - 10/31/24





## REVISIONS

REV	DATE	COMMENT	DRAWING CHECKED
1	8/5/24	PRE-REVIEW COMMENTS	SL NS
2	9/5/24	PRE-ACCEPTANCE COMMENTS	SL NS
3	10/31/24	PER SDRG COMMENTS	SK JD



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DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	MDB230010.00
DRAWN BY:	SJL
CHECKED BY:	NBS
DATE:	02/19/2024
CAD I.D.:	CND3

PROJECT:

## DETAILED SITE PLAN

- FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

BOHLER//

16701 MELFORD BLVD . SUITE 430

BOWIE, MARYLAND 20715

Phone: (301) 809-4500

Fax: (301) 809-4500  
MD@BoblerEng.com

J. DIMARCO

PROFESSIONAL ENGINEER

MARYLAND LICENSE No. 34390  
PROFESSIONAL CERTIFICATION

I, JOSEPH DIMARCO, HEREBY CERTIFY THAT THESE

DOCUMENTS WERE PREPARED OR APPROVED BY ME

UNDER THE LAWS OF THE STATE OF MARYLAND.

SHEET TITLE:

# PLAN APPROVALS SHEET

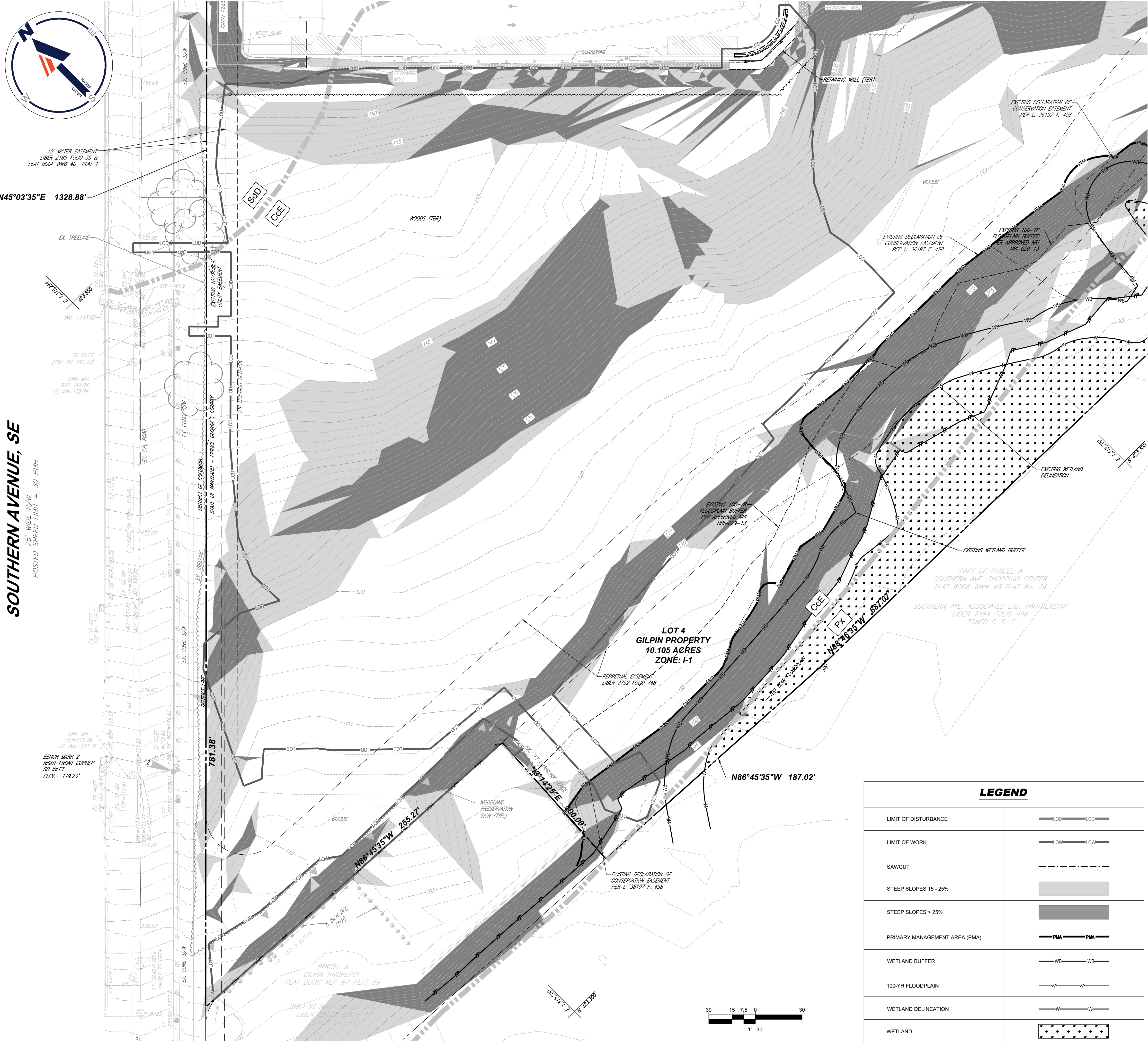
SHEET NUMBER:

# DSP-2

REVISION 3 - 10/31/24



## SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

DEMOLITION / REMOVAL LEGEND	
DEMOLITION/REMOVAL NOTE	TYPICAL NOTE TEXT
-----	EASEMENT
-----	CONCRETE CURB & GUTTER
-----	UTILITY POLE WITH LIGHT
-----	POLE LIGHT
-----	TRAFFIC LIGHT
-----	UTILITY POLE
-----	TYPICAL LIGHT
-----	ACORN LIGHT
-----	TYPICAL SIGN
-----	PARKING COUNTS
-----	SPOT ELEVATIONS
-----	SANITARY LABEL
-----	STORM LABEL
-----	SANITARY SEWER LATERAL
-----	UNDERGROUND WATER LINE
-----	UNDERGROUND ELECTRIC LINE
-----	UNDERGROUND GAS LINE
-----	OVERHEAD WIRE
-----	UNDERGROUND TELEPHONE LINE
-----	UNDERGROUND CABLE LINE
-----	STORM SEWER
-----	SANITARY SEWER MAIN
-----	HYDRANT
-----	SANITARY MANHOLE
-----	STORM MANHOLE
-----	WATER METER
-----	WATER VALVE
-----	GAS VALVE
-----	GAS METER

## SURVEY NOTES:

- PROPERTY IS ALL OF LOTS 3 AND 4, GILPIN PROPERTY AS RECORDED IN PLAT BOOK SHJ 245 AT PLAT NO. 76 AND BEING THE LANDS OF SILVER BRANCH, LLC AS RECORDED IN LIBER 35352 FOLIO 289, ALL AMONG THE LAND RECORDS OF PRINCE GEORGE'S MARYLAND AND HAVING A TAX MAP NUMBER OF 87 B3 0000 PER THE DEPARTMENT OF ASSESSMENTS.
- LOT 3 AREA= 188,683 SQUARE FEET OR 4.332 ACRES  
LOT 4 AREA= 180,190 SQUARE FEET OR 10.105 ACRES
- LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE, SOURCE INFORMATION FROM PLANS AND MARKINGS HAS BEEN COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED, WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY.
- THIS FIELD SURVEY WAS PERFORMED UTILIZING THE REFERENCE MATERIAL AS LISTED HEREON AND DEPICTS BUILDINGS, STRUCTURES AND OTHER IMPROVEMENTS THEREON, ON DECEMBER 19, 2016, BY BOHLER ENGINEERING.
- THIS SURVEY IS PREPARED WITH REFERENCE TO A COMMITMENT FOR TITLE INSURANCE PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT NO. RE10451, WITH AN EFFECTIVE DATE OF NOVEMBER 8, 2016. OUR OFFICE HAS REVIEWED THE FOLLOWING SURVEY RELATED EXCEPTIONS IN SCHEDULE B, SECTION II:
  - THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY; HOWEVER, NO PHYSICAL INDICATIONS OF SUCH WERE FOUND AT THE TIME OF THE FIELD INSPECTION OF THIS SITE.
  - THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, PRINCE GEORGE'S COUNTY, MARYLAND AND INCORPORATED AREAS, PANEL 230 OF 466", MAP NUMBER 2403302020E, WITH A MAP EFFECTIVE DATE OF SEPTEMBER 16, 2016.
- ZONING: I-1 (LIGHT INDUSTRIAL)
- MINIMAL BUILDING, STRUCTURES, PARKING COMPOUNDS, AND LOADING AREAS SET BACK (27-462)  
FROM STREET: 25'  
SIDE (FROM RESIDENTIAL ZONE): 20'  
SIDE (FROM NON-RESIDENTIAL ZONE): 30' TOTAL BOTH YARDS

ALL ZONING INFORMATION WAS PROVIDED IN A ZONING MEMORANDUM PREPARED BY BOHLER ENGINEERING, DATED JANUARY 3, 2017 AND MUST BE VERIFIED PRIOR TO USE OR RELIANCE UPON SAME, TO CONFIRM THE ZONING INFORMATION REPRESENTS AND DEPICTS THE CURRENT SITE SPECIFIC INFORMATION. SHOULD THERE BE ANY CHANGE IN USE, SETBACK(S) OR SET BACK REQUIREMENTS, ZONING CLASSIFICATION, OR ANY OTHER CHANGE OR VARIATION FROM THE CONDITIONS RECORDED HEREIN, THE CLIENT MUST VERIFY COMPLIANCE WITH THE USE, SET BACK, ZONING CLASSIFICATION OR ORDINANCE, REGULATION OR LEGAL REQUIREMENT, PRIOR TO USING OR RELYING UPON THE FINDINGS RECORDED HEREIN, OR REFERENCING SAME AS RELATED TO THE PROPERTY, PROJECT OR DEVELOPMENT.

9. THERE IS NO RECENT EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

10. THERE ARE NOT ANY CHANGES IN STREET RIGHT OF WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION AND THERE IS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

## LEGEND

LIMIT OF DISTURBANCE	LOD LOD
LIMIT OF WORK	LOW LOW
SAWCUT	---
STEEP SLOPES 15 - 25%	
STEEP SLOPES > 25%	
PRIMARY MANAGEMENT AREA (PMA)	PMA PMA
WETLAND BUFFER	WB WB
100-YR FLOODPLAIN	FP FP
WETLAND DELINEATION	W W
WETLAND	

## REVISIONS

REV	DATE	COMMENT	CHECKED BY
1	8/5/24	PRE-REVIEW COMMENTS	SL
2	9/5/24	PRE-ACCEPTANCE COMMENTS	NS
3	10/31/24	PER SDRG COMMENTS	SK
			JD

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PROJECT No.: MDB230010.00  
DRAWN BY: SJL  
CHECKED BY: NBS  
DATE: 02/19/2024  
CAD I.D.: DEMO

PROJECT:

DETAILED SITE  
PLAN

FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

## BOHLER

16701 Melford Blvd., Suite 430  
Bowie, Maryland 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com

## J. DIMARCO

PROFESSIONAL ENGINEER  
MARYLAND LICENSE NO. 1888  
PROFESSIONAL CERTIFICATION:  
I, JOSEPH DIMARCO, 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. 34990, EXPIRATION DATE: 12/23/2024

SHEET TITLE:

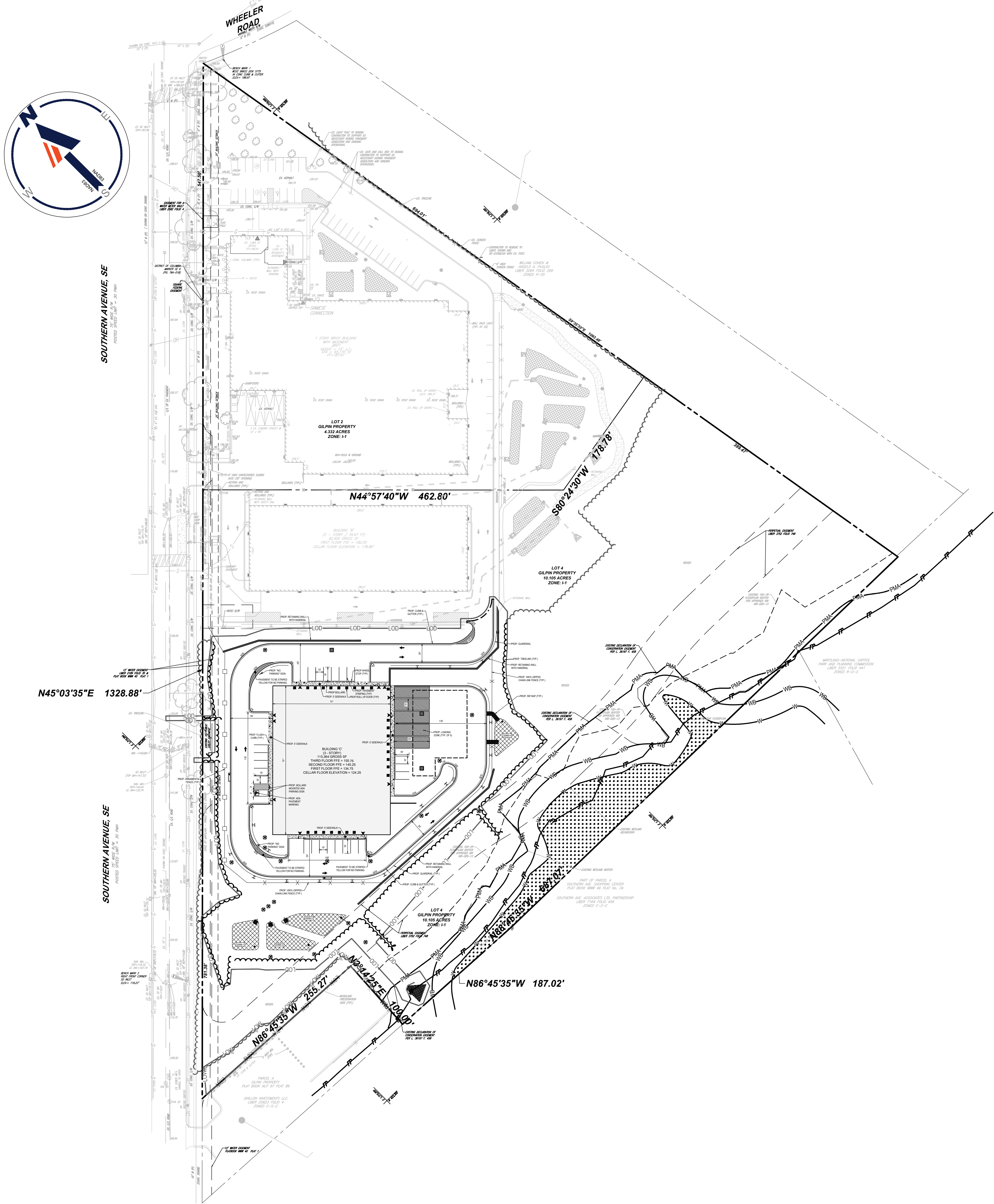
EXISTING  
CONDITIONS /  
DEMOLITION  
PLAN

SHEET NUMBER:

DSP-3

REVISION 3 - 10/31/24





### OVERALL SITE PARKING TABULATION

PARKING REQUIREMENTS	REQUIRED	PROPOSED
1 SPACE PER 50 STORAGE UNITS (EXISTING LOT 2)	34 SPACES	36 SPACES
1 SPACE PER 50 STORAGE UNITS (PROPOSED LOT 4)	22 SPACES	22 SPACES
4 SPACES PER 1,000 SF OF OFFICE SPACE (EXISTING LOT 2)	4 SPACES	4 SPACES
2 SPACES PER CARETAKERS APARTMENT (EXISTING LOT 2)	2 SPACES	2 SPACES
2 SPACES PER CARETAKERS APARTMENT (PROPOSED LOT 4)	2 SPACES	2 SPACES
TOTAL SPACES	64 SPACES	66 SPACES
ADA SPACES (EXISTING LOT 2)	N/A	2 VAN ACCESSIBLE WITH 8' ACCESS AISLE
ADA SPACES (PROPOSED LOT 4)	N/A	1 VAN ACCESSIBLE WITH 8' ACCESS AISLE
LOADING SPACES (2 SPACES FOR THE FIRST 10,000 SF OF A PLUS 1 SPACE FOR EACH ADDITIONAL 40,000 SF GFA) (EXISTING LOT 2)	6 SPACES (12'X45')	7 SPACES (12'X45')
OFF STREET LOADING BERTHS (PROPOSED LOT 4)	5 SPACES (15'X45')	5 SPACES (15'X45')
STANDARD PARKING SPACE DIMENSION (NONPARALLEL) (EXISTING LOT 2)	9.5'X19'	9.5'X19'
STANDARD PARKING SPACE DIMENSION (NONPARALLEL) (PROPOSED LOT 4)	9.5'X19'	10'X19'
STANDARD PARKING SPACE DIMENSION (PARALLEL) (EXISTING LOT 2)	8'X22'	8'X22'
ADA SPACE DIMENSION (NON-VAN) (EXISTING LOT 2)	8'X18'	8'X19'
ADA SPACE DIMENSION (VAN) (EXISTING LOT 2)	8'X18'	11'X19'
ADA SPACE DIMENSION (VAN) (PROPOSED LOT 4)	8'X18'	8'X19'
LOADING SPACE DIMENSION (EXISTING LOT 2)	12'X33'	12'X45'
DRIVE AISLE WIDTH:		
TWO-WAY (EXISTING LOT 2 & PROPOSED LOT 4)	22'	22' (MIN)
ONE-WAY (EXISTING LOT 2)	18' (60' SPACES)	18' (60' SPACES)

### REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	8/5/24	PRE-REVIEW COMMENTS	SL
2	9/5/24	PRE-ACCEPTANCE COMMENTS	SL
3	10/31/24	PER SDRG COMMENTS	JD



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PROJECT No.: MDB230010.00  
DRAWN BY: S.J.L.  
CHECKED BY: N.B.S.  
DATE: 02/19/2024  
CAD I.D.: SITE

PROJECT:

### DETAILED SITE PLAN

FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

## BOHLER

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MD@BohlerEng.com

### J. DIMARCO

PROFESSIONAL ENGINEER  
MARYLAND LICENSE NO. 9808  
PROFESSIONAL CERTIFICATION:  
I, JOSEPH DIMARCO, 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. 34390, EXPIRATION DATE: 12/23/2024.

SHEET TITLE:

### OVERALL SITE PLAN

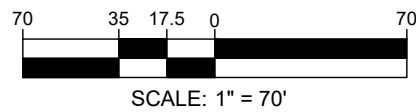
SHEET NUMBER:

DSP-4

REVISION 3 - 10/31/24

### LEGEND

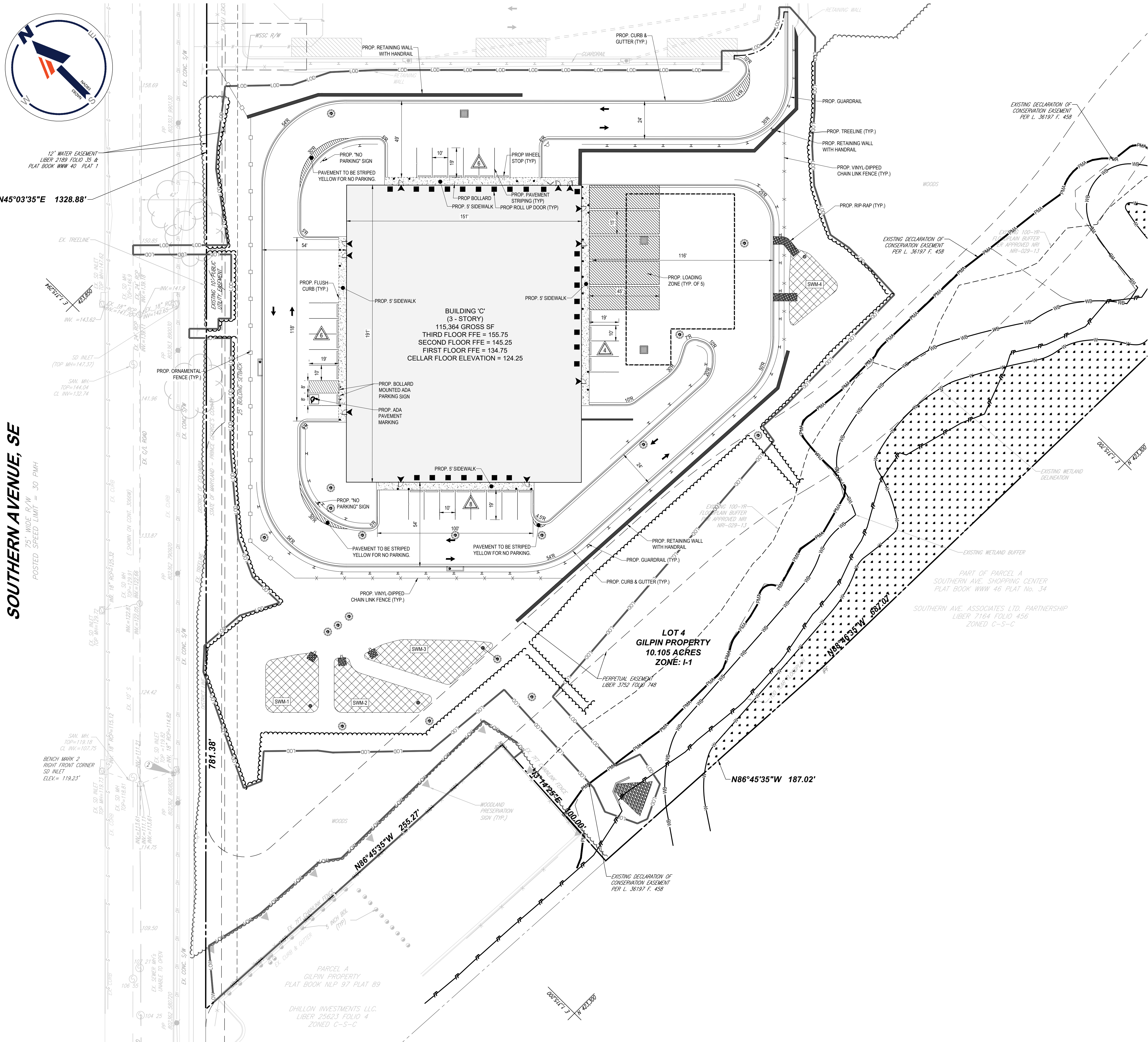
LIMIT OF DISTURBANCE	— LOD — LOD —
PRIMARY MANAGEMENT AREA (PMA)	— PMA — PMA —
WETLAND BUFFER	— WB — WB —
100-YR FLOODPLAIN	— FP — FP —
WETLAND DELINEATION	— W — W —



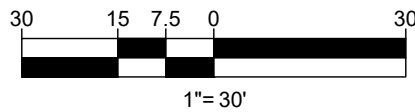


SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH



LEGEND	
LIMIT OF DISTURBANCE	— LOD — LOD —
PRIMARY MANAGEMENT AREA (PMA)	— PMA — PMA —
WETLAND BUFFER	— WB — WB —
100-YR FLOODPLAIN	— FP — FP —
WETLAND DELINEATION	— W — W —



**BOHLER**  
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REVISIONS				
REV	DATE	COMMENT	CHECKED BY	DRAWN BY
1	8/5/24	PRE-REVIEW COMMENTS	SL	NS
2	9/5/24	PRE-ACCEPTANCE COMMENTS	SL	NS
3	10/31/24	PER SDC COMMENTS	SK	JD

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PROJECT No.: MCD230010.00  
DRAWN BY: S.J.L.  
CHECKED BY: NBS  
DATE: 02/19/2024  
CAD I.D.: SITE

PROJECT:  
**DETAILED SITE PLAN**  
FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

**BOHLER**  
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**J. DIMARCO**  
PROFESSIONAL ENGINEER  
MARYLAND LICENSE NO. 9881  
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SHEET TITLE:

**SITE PLAN**

SHEET NUMBER:  
**DSP-5**

REVISION 3 - 10/31/24



SOUTHERN AVENUE, SE

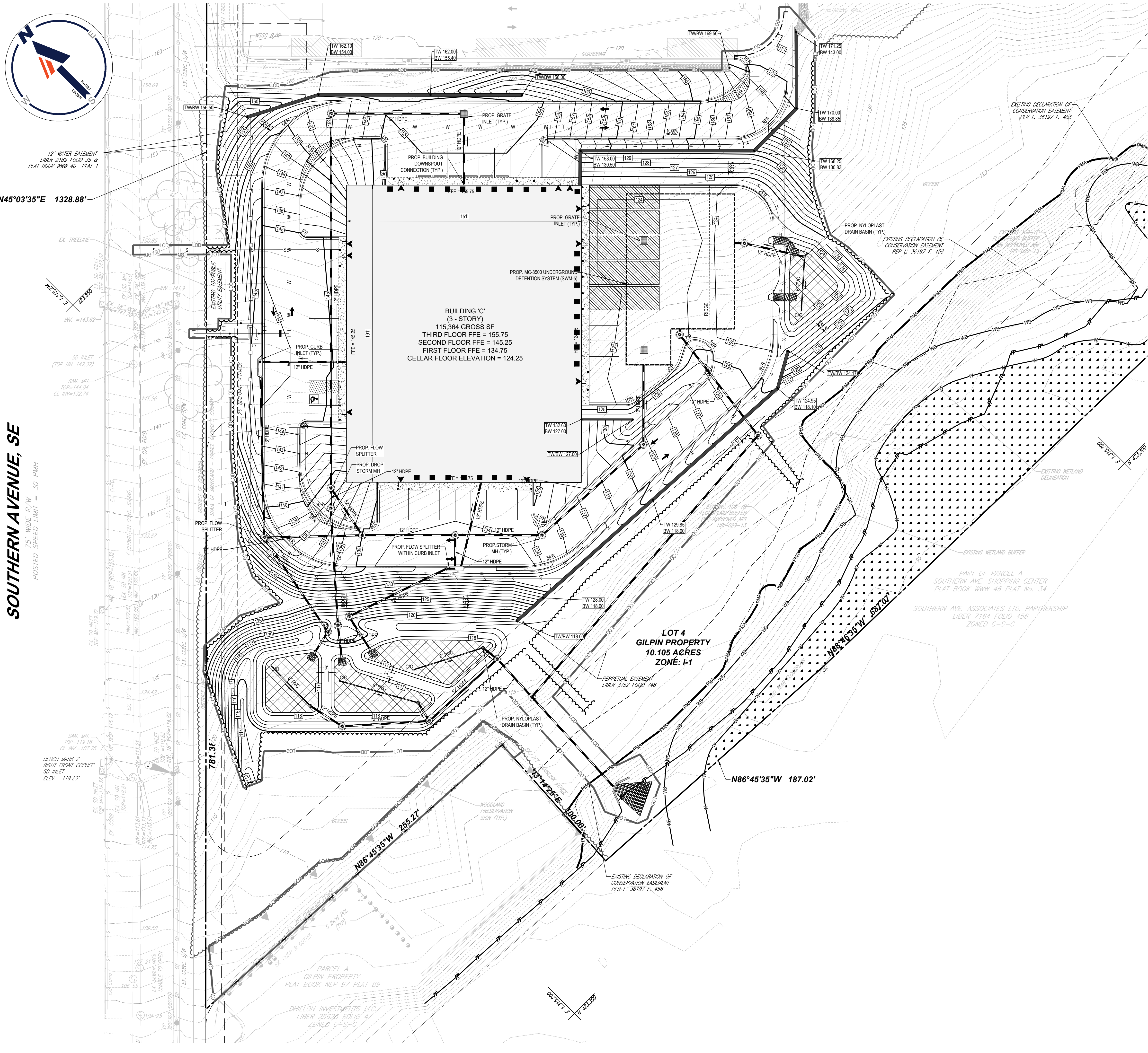
75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

12" WATER EASEMENT  
LIBER 2189 FOLIO 35 &  
PLAT BOOK WWW 40 PLAT 1

N45°03'35"E 1328.88'

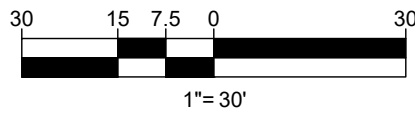
SD INLET  
(TOP MH=147.37)  
SAN. MH  
TOP=144.04  
CL INV=132.74

BENCH MARK 2  
RIGHT FRONT CORNER  
SD INLET  
ELEV= 119.23'



LEGEND

LIMIT OF DISTURBANCE	— LOD — LOD —
SAWCUT	— SAWCUT —
PRIMARY MANAGEMENT AREA (PMA)	— PMA — PMA —
WETLAND BUFFER	— WB — WB —
100-YR FLOODPLAIN	— FP — FP —
WETLAND DELINEATION	— W — W —



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REVISIONS

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2	9/5/24	PRE-ACCEPTANCE COMMENTS	SL	NS
3	10/31/24	PER SDRC COMMENTS	SK	JD



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PROJECT No.: MD230010.00  
DRAWN BY: SJL  
CHECKED BY: NBS  
DATE: 02/19/2024  
CAD I.D.: SITE

PROJECT:

DETAILED SITE PLAN

FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

BOHLER

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SHEET TITLE:

STORMDRAIN AND GRADING PLAN

SHEET NUMBER:

DSP-6

REVISION 3 - 10/31/24



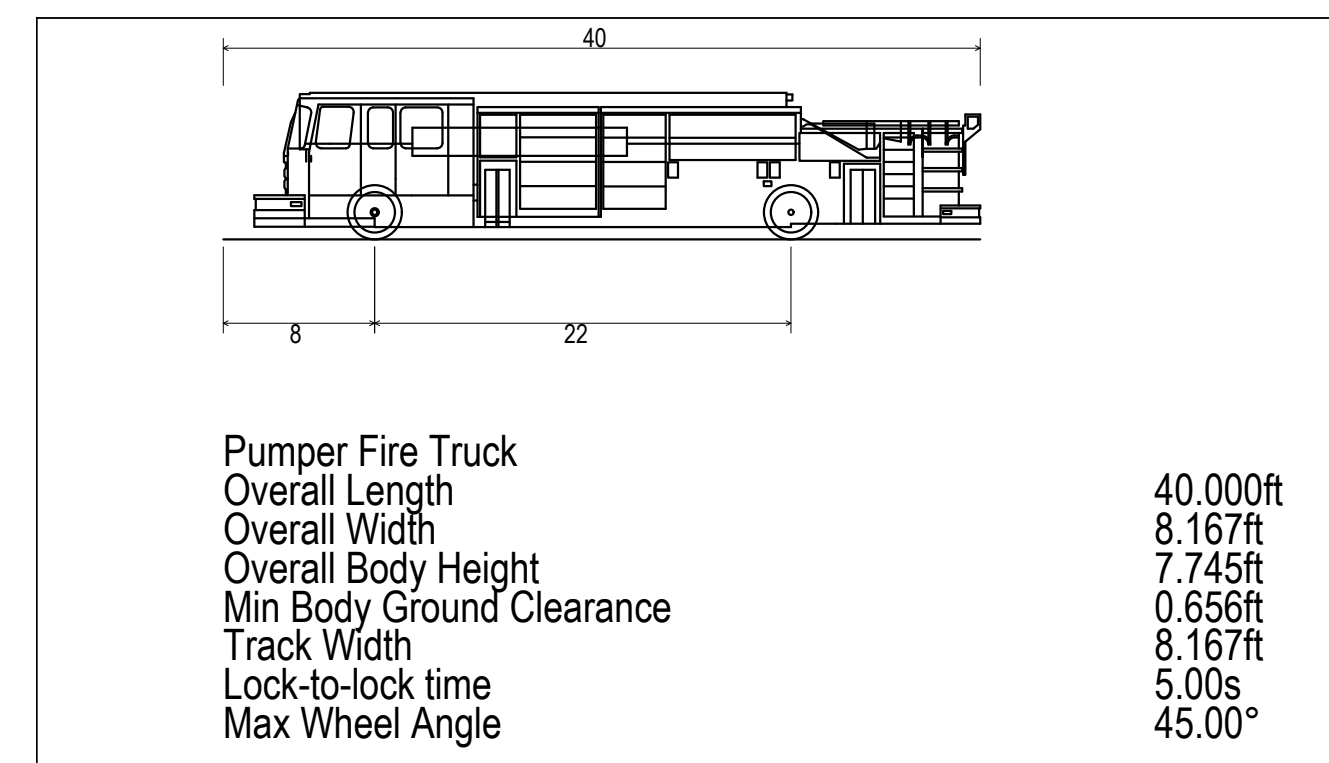
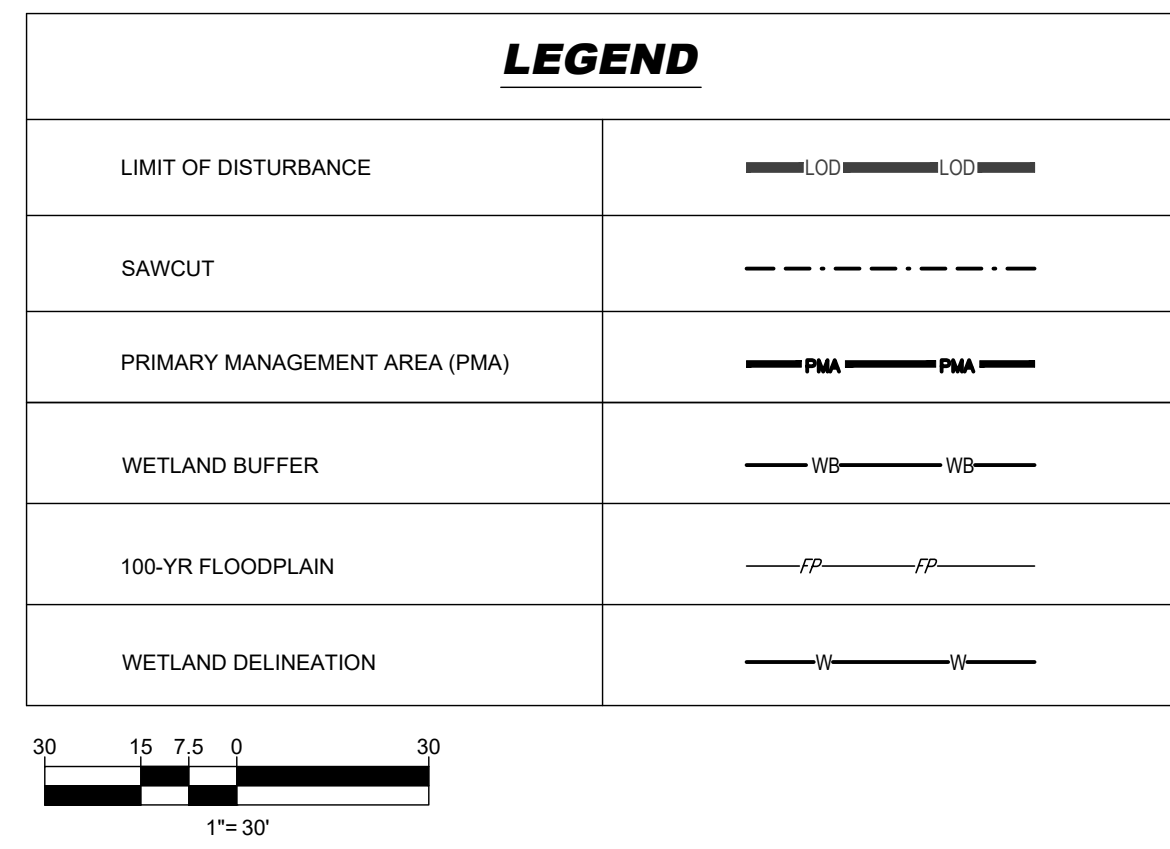






***SOUTHERN AVENUE, SE***

75' WIDE R/W  
POSTED SPEED LIMIT = 30 PMH



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- SUSTAINABLE DESIGN
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DRAWN BY:	SJL
CHECKED BY:	NBS
DATE:	02/19/2024
CAD I.D.:	SITE

PROJECT:

## DETAILED SITE PLAN

— FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

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LICENSE NO. 34390, EXPIRATION DATE: 12/23/2024

SHEET TITLE:

**TRUCK TURN  
EXHIBIT**

SHEET NUMBER:

HEET NUMBER:  
**DSP-10**

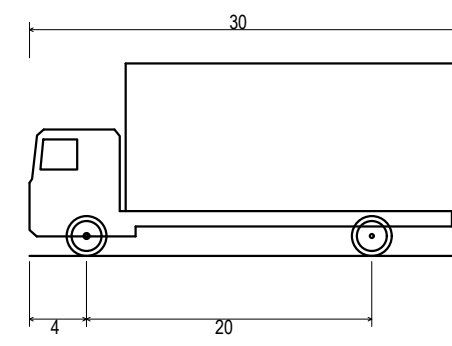
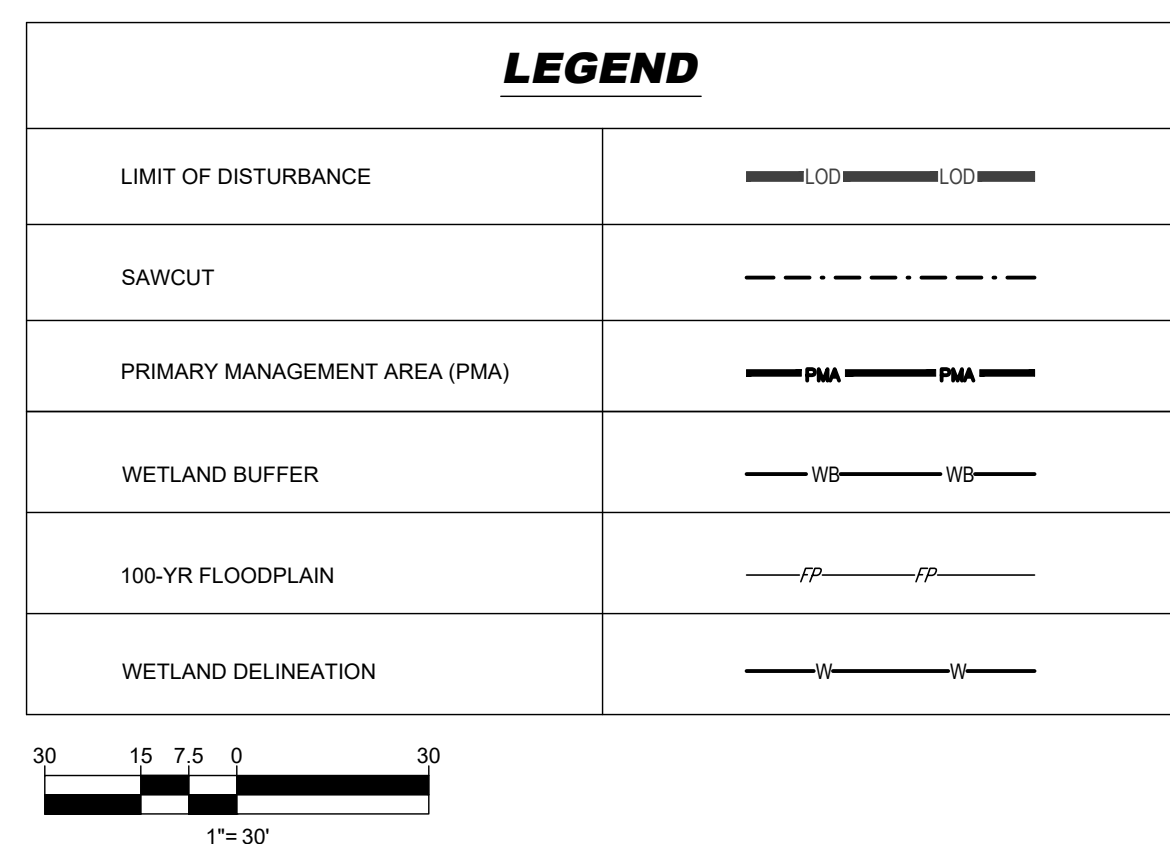
REVISION 3 - 10/31/24





**SOUTHERN AVENUE, SE**

75' WIDE R/W  
POSTED SPEED LIMIT = 30 PMH



SU-30 - Single Unit Truck	
Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	31.80°

TM

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PROJECT No.:	MDB230010.00
DRAWN BY:	SJL
CHECKED BY:	NBS
DATE:	02/19/2024
CAD I.D.:	SITE

**PROJECT:**

**DETAILED SITE  
PLAN**

- FOR -

GILPIN PROPERTY

899 SOUTHERN AVENUE  
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**J. DIMARCO**

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PROFESSIONAL ENGINEER  
MARYLAND LICENSE NO. 34390

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LICENSE NO. 34390, EXPIRATION DATE: 12/23/2024

SHEET TITLE:

## TRUCK TURN EXHIBIT

SHEET NUMBER

**DSP-11**

REVISION 3 - 10/31/24



### **Prince George's Councilmembers**

Effective July 25, 2023 – This document will be placed in the “Docs to Applicant” Dropbox folder for all preapplications filed for Planning Board.

Applicants must send a copy of the notice of preapplication neighborhood meeting to the applicable District Councilmember and include both of the At Large Councilmembers. Mailing address:

Councilmember Name  
Wayne K. Curry Administration Building  
1301 McCormick Drive  
Largo, MD 20774

District 1	Thomas Dernoga
District 2	Wanika Fisher
District 3	Eric Olson
District 4	Ingrid Watson
District 5	Jolene Ivey
District 6	Wala Blegay
District 7	Krystal Oriadha
District 8	Edward Burroughs III
District 9	Sydney Harrison
District –At Large	Mel Franklin
District –At Large	Clavin Hawkins, II





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Admitted in Maryland

E-mail: [MTedesco@mhlawyers.com](mailto:MTedesco@mhlawyers.com)  
Direct Dial: Extension 222

September 5, 2024

Via Electronic Delivery

Joshua Mitchum  
Planner III  
Development Review Division  
M-NCPPC  
1616 McCormack Drive  
Largo, MD 20774

**Re: DSP-13008-02; Gilpin Property, Phase III  
Pre-Acceptance Point-By-Point Comment Response Letter**

Dear Joshua:

On behalf of the applicant, please find below point-by-point responses to the Pre-Acceptance Comments transmitted to the applicant on August 26, 2024.

**Subdivision Section:**

**2. The resolution of the PPS also included a finding (finding 2) which evaluated both Lots 3 and 4 as one "lot", and that "the proposed development on Lot 3 and 4 together has been reviewed as one "Lot" for conformance to the applicable zoning and Subdivision Regulations. Subsequent site plans will include both Lots 3 and 4 for review purposes." Since Lots 3 and 4 share access, parking, stormwater management, this DSP should include Lot 3 as well.**

Response: As noted below, this will be addressed post SDRC.

**4. The property boundary metes and bounds shown on the overall site plan do not match the plat of record. ~~These should be corrected prior to acceptance.~~**

Response: As noted below, this will be addressed post SDRC.

**Ok to accept. Comments 2 and 4 are outstanding and can be addressed after acceptance.**

**Environmental Planning Section:**

**1. An approved revised NRI plan and specimen tree variance were submitted, however the location of the specimen trees shown on the TCP2 are not reflective of the approved NRI**



**plan. The TCP2 shall show all existing regulated environmental features in conformance with the approved NRI plan.**

Response: The TCP2 has been updated to reflect the approved NRI as requested.

**2. For the large area of woodland identified as “retained – not credited” that is outside of the perpetual easement could any of this area be utilized as woodland conservation or for afforestation? The applicant shall explore all opportunities to provide more woodland conservation on-site and adequate buffers to the PMA. Additionally, provide a more distinctive line type so the existing easements are more easily identifiable.**

Response: The woodland conservation calculations have been updated and more of retained – not credited area has been utilized as woodland conservation.

**3. Additional clearing on-site is proposed. Revise the TCP2 worksheet to the current standard and indicate how much clearing is occurring both within the net tract and the floodplain. The applicant shall meet all requirements on-site as previously proposed.**

Response: The woodland conservation calculations have been updated and more of retained – not credited area has been utilized as woodland conservation.

**4. Make sure that all symbols used on the TCP2 plan appear in the legend. Keep a consistent font and spacing for the general notes.**

Response: The TCP2 symbols have been updated to match per your request.

**Geotechnical Comments:**

**A geotechnical report, titled Southern Avenue Self Storage – Phase III, prepared by Hillis-Carnes Engineering Associates, Inc. and dated May 15, 2023, has been submitted with the second submission. Based on the report, ten (10) soil borings were drilled at depths up to 60 feet. Christiana clay (CH, fat clay) was encountered in majority of the borings. Steep slopes are present on-site. Tall retaining walls have been proposed to accommodate the proposed construction. The following are the review comments:**

**1. Provide a slope stability analysis performed on critical slope sections for both unmitigated and mitigated conditions per Techno-Gram 005-2018.**

Response: Per discussions with staff, this effort is ongoing and will ultimately be addressed post SDRC.

**2. Provide soil borings at a minimum rate of one soil test boring per 100 linear feet of the retaining wall length per Techno-Gram 002-2021.**

Response: Per discussions with staff, this effort is ongoing and will ultimately be addressed post SDRC.



**3. Provide a global stability analysis performed on retaining wall sections taller than 10 feet or taller than 6 feet with a backslope 3 horizontal to 1 vertical or steeper per Techno-Gram 002-2021.**

Response: Per discussions with staff, this effort is ongoing and will ultimately be addressed post SDRC.

If you have any questions, please do not hesitate to contact me at 301-441-2420.

Sincerely,



Matthew C. Tedesco

Enclosures





**McNamee Hosea**  
Attorneys & Advisors

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November 1, 2024

Via Electronic Delivery

Dexter E. Cofield  
Planner II  
Development Review Division  
M-NCPPC  
1616 McCormick Drive  
Largo, MD 20774

**Re: DSP-13008-02; Gilpin Property, Phase III  
SDRC Point-By-Point Comment Response Letter  
SDRC Date: September 27, 2024**

Dear Dexter:

On behalf of the applicant, please find below point-by-point responses to the SDRC Comments transmitted to the applicant on September 30, 2024 and October 1, 2024.

**Urban Design:**

**MAJOR ISSUES:**

**1. Revise the TCC worksheet per CB-21-2024 and demonstrate conformance to the 15% requirement for and within the net tract area.**

Response: TCC worksheet has been revised to 15%.

**2. The proposed signage demonstrates conformance to Section 27-61500, which is not applicable under the prior ZO. The plan should be revised to demonstrate conformance to Section 27-613.**

Response: Plan revised to comply with 27-613 under prior ZO.

**3. Additionally, the applicant claims a 50 percent reduction in the sign area; however, more information regarding the sign is needed (i.e. material, lighting, mounting method, etc.) to confirm this is applicable.**

Response: Signage revised to comply with Section 27-591 (A) under prior ZO, removing background color to meet this fifty percent (50%) shall be presumed to equal the spaces between the letters, figures, and designs.



**4. The site plan does not appear to match the architecture relative to vehicular door locations. Staff are concerned that these locations conflict with the required parking spaces with no intervening curb, sidewalk, wheelstop, bollards, etc. Clarify the functionality.**

Response: Site Plan and Architectural have been adjusted to permit pedestrian movement parallel to face of building. This accounts for storage unit door locations, proposed bollards, wheel stops, and flush sidewalk conditions.

**5. The property boundary metes and bounds shown on the overall site plan do not match the plat of record. These should be corrected prior to acceptance.**

Response: Metes and bounds have been updated to match the plat of record. (See DSP-3).

**MINOR ISSUES:**

**1. Ensure architecture is consistent with the prior buildings relative to facade materials, roof treatments, etc.**

Response: Sheet P-200 has been added to demonstrate architectural consistency with Phase 2 building façade. Elevations also have adjustments, see P-201, P-202, P-203, P-204. Insulated metal panels with faux stucco finish have been incorporated to match the existing adjacent building on key elevations while maintaining the prefinished metal profiled siding that provides shadow line variation and contrast along other facades. Other colors and materials are consistently used between the existing and proposed buildings.

**2. Provide whether plants on Plant Schedule are native or non-native.**

Response: Native or nonnative column has been added to plant schedule.

**3. Label and indicate the location of fire lanes and “No Parking” areas, including proposed markings and signage.**

Response: The fire lanes and “no parking” areas have been indicated on the plans. (See DSP-5).

**4. Provide any way-finding signage, if applicable.**

Response: Comment acknowledged. Way-finding signage to be provided when available.

**5. Provide details of proposed guardrail.**

Response: Guardrail detail provided. (See DSP-9).

**6. The proposed “decorative canopies” do not appear to match the installation height of the canopies on the other buildings. Staff is concerned that the proposed height of the decorative canopies will cause them to be ineffective.**



Response: Canopies revised to coordinate with previous phase, see P-202, P-203, P-204.

**7. Clarify on plans what an architectural accent and what is a roll-up door on plans and elevations.**

Response: Labels added, as needed, see P-201, P-202, P-203, P-204.

**8. The existing building adjacent to the proposed has Solar Panels on roof. Staff questions if the proposed building will also have Solar Panels on roof, if so, please provide details.**

Response: Solar Panels will not be provided on the building, and this is not a jurisdictional requirement.

**9. The parking lot area for Section 4.3 should include the entirety of the eastern loading area.**

Response: The entire parking lot area has been included in the calculations.

**Subdivision:**

**1. Please include both Lots 3 and 4 in the in the proposed DSP amendment, as they form one building site.**

Response: Lots 3 and 4 are shown on the DSP amendment. (See DSP-4).

**2. The proposed DSP amendment must clearly show all bearings and distances consistent with the recorded plat (SJH 245, p. 76) or permits will be placed on hold until the plans have been revised.**

Response: The bearings and distances have been updated to match the plat of record. (See DSP-4)

**3. This referral is based off the review of plans provided at acceptance on September 10, 2024.**

Response: Comment acknowledged.

**Transportation:**

**1. The trips generated for the site are calculated based on 272,625 SF of consolidated storage, which will generate 25 AM and 42 PM peak hour trips. The trip generation memo provided calculated trips based on a lesser square footage. Staff analysis will be based on 25 AM and 42 PM peak hour trips for the subject site.**

Response: The AM trip cap is 48 and the PM trip cap is 51, therefore this application remains within the trip cap. Our calculations using ITE Trip Generation Manual indicate that a 272,625 square foot consolidated storage facility would generate 23 AM and 40 PM trips. However, either calculation results in the total development remaining within the approved trip cap.

**2. The truck turning plan shows that vehicles cannot make the required turning movements**



**given the current proposal. Staff has concerns, particularly given the topography of the subject site, that both emergency vehicles and users of the consolidated storage will not be able to navigate the site. Revise the plans to demonstrate that proper vehicular circulation has been met with the current proposal. There are other potential conflicts not shown on the turning plan that could include ground mounted light poles, landscaping elements and guardrails.**

Response: The proposed truck turn movement has been revised to avoid any conflicts. Guard rails have also been adjusted to avoid the path of the truck movements. (See DSP-10, DSP-11)

**3. Evaluate the feasibility of a separate access point from Southern Ave to the subject site. This may not eliminate all circulation concerns and would require coordination with the District of Columbia as the entire frontage of Southern Ave is under their jurisdiction.**

Response: A separate access point from Southern Ave to the subject site is not feasible due to the steep topography of the site and the queuing that would result in the public road. For safety reasons, all traffic should be directed to one entrance.

**4. Only one small portion of sidewalk is provided along the building frontage along the northern side of the building. There are no other pedestrian facilities accessing the subject site. Provide additional pedestrian pathways of justification for how pedestrian circulation is provided, given that each level of the building will only be accessible by vehicle.**

Response: Sidewalks adjacent to the proposed building have been added along all four sides of building. Primary site activity will be via vehicles directly to their respective building. Any new customer will go to the office to obtain a security access code, then gain access beyond the security gates and to gain access into any of the building entrances. Existing customers who already have an access code may go directly to their respective building through the security gate and building entrance. Building entries and security gates also have intercoms to communicate with office/management staff in event any issues arise. Given this site's multi-building layout and significant topographic changes, only pedestrian pathways are proposed immediately adjacent to the building at each respective floors parking/loading area.

**5. The proposed parking spaces appear to obstruct access to the bay doors. Additionally, doors accessing the interior of the building appear to be near or within the same parking areas. Staff has concerns about conflicts between vehicles in the parking areas and users accessing the building entrances.**

Response: See response above to comment #4 from Urban Design.

**Environmental:**

**1. The Environmental Planning Section requests that all revised materials be submitted 40 days prior to the Planning Board Hearing. Provide a statement addressing Section 25-119(C)(1)(A)(i).**

Response: Noted.



**2. The applicant has submitted an approved stormwater management concept plan which shows microbioretention facilities and two proposed outfalls discharging towards the PMA. What is the status of the erosion and sediment control plan? If changes to the stormwater management or grading are requested by PGSCD which results in an impact to the PMA, a PMA SOJ will be required.**

Response: A PMA impact exhibit and SOJ has been provided in the submission package.

**3. This application proposes clearing within a recorded woodland conservation easement (Liber 38433 folio 437) which serves the other development on this property. The woodland conservation easement shall be vacated and restated prior to signature approval of the TCP2. The prior TCP2 approval showed woodland conservation within the perpetual easement area. This application shall strive to also provide woodland conservation within that area unless directed by another agency.**

Response: Noted.

**4. Within the specimen tree variance, the following revisions are required:**

**a. Within Finding A, there is a mention of Marlboro Clays on-site which are stated as a limiting factor due to needing to grade for slope failure. The approved NRI did not identify Marlboro Clays on-site. Where is the Marlboro Clay soil located on-site? If this soil type is on-site, then NRI and TCP2 shall be revised to show those clay soils. If these soils are not located on-site, then revise the variance to remove this as a justification.**

Response: Marlboro clay has been revised and switched to phoenix clay.

**b. Within Finding A, there is a reference that woodland conservation will be provided on-site to the extent practicable. If the applicant is seeking to process this application under the current Subtitle 25 regulations, then the 2.09 woodland conservation threshold is required to be met on-site, or a variance is required. If this application is grandfathered to Subtitle 25, then the woodland conservation can still be met on-site if the applicant proposed woodland conservation in the perpetual easement as was shown on TCP2-018-13-01.**

Response: 2.09 woodland conservation has threshold has been met on-site.

**c. Within each finding, reference the location, construction tolerances, and condition of the specimen trees requested for removal. The trees in question are located near the road frontage and in poor condition. This is not described anywhere in the variance. The specimen tree variance is not a zoning variance and as such cannot rely of the zoning, master plan, or prior approvals. More specifically this area was not considered for development with 4-15017. As such the findings made that environmental resources were preserved, protected, or enhanced to the extent practicable with that application has no bearing on this application.**

Response: the specimen trees being removed have been added to the tree specimen variance.



**d. Revise Finding D to detail that the stormwater concept plan has been approved. This finding should state that water quality will not adversely affect water quality and mimic woodland in good condition. This finding should not state the goal is to improve water quality as this development is not a mitigation or enhancement project and will add new impervious surfaces.**

Response: Finding D has been revised and references the stormwater concept plan.

**5. The following technical corrections are required on the TCP2.**

**a. Show all specimen trees proposed for removal with an X, which is the standard symbol for specimen trees requested for removal. All specimen tree labels shall be clearly visible and not obscured under other labels.**

Response: All specimen trees for removal have been revised.

**b. The PMA area on the TCP2 is not delineated as shown on the NRI plan. The PMA, specimen trees, and other regulated environmental features shall be accurately reflected on the TCP2 to demonstrate conformance with the approved NRI.**

Response: The PMA has been updated to match the NRI.

**c. Show all proposed developments in black and all existing grades and features in gray.**

Response: Comment noted and revised.

**d. If this application is proceeding as a revision of a prior application and is seeking to be grandfathered as a result then the woodland conservation worksheet shall be revised to 2010 woodland conservation worksheet.**

Response: Comment noted. This application was submitted after July 1st.

**e. This application will be the second revision of the TCP2. Within the woodland conservation worksheet, identify the TCP2 number as TCP2-018-03, Revision 2.f. Revise the soils type table so that the table on the TCP2 is in conformance with the approved NRI plan.**

Response: This has been revised in the TCP2 worksheet.

**g. The site statistics table shall be in conformance with the site statistics table on the approved NRI plan. The total woodland in the net tract shall be consistent between the TCP2 and the NRI.**

Response: The site statistics table has been updated and the TCP matches the NRI.



**h. Provide the Forest Conservation Act reporting table on the TCP2. EPS recommends that the applicant add an additional sheet to the TCP2 for the general notes and the detail graphics.**

Response: Forest Conservation Act reporting table has been added to TCP2.

**i. Provide the standard detail graphic for the permanent tree protection fence and the line type on the plan.**

Response: The permanent tree protection fence has been added to the detail sheet.

**j. Within the Environmental Planning Section approval block, identify the reason for revision along the - 02 line as "Phase III".**

Response: Reason has been identified in the approval block.

**6. A geotechnical report, titled Southern Avenue Self Storage – Phase III, prepared by Hillis-Carnes Engineering Associates, Inc. and dated May 15, 2023, has been submitted with the second submission. Based on the report, ten (10) soil borings were drilled at depths up to 60 feet. Christiana clay (CH, fat clay) was encountered in majority of the borings. Steep slopes are present on-site. Tall retaining walls have been proposed to accommodate the proposed construction. The geotechnical report shall include the following:**

**a. Provide a slope stability analysis performed on critical slope sections for both unmitigated and mitigated conditions per Techno-Gram 005-2018.**

Response: Slope stability analysis has been provided.

**b. Provide soil borings at a minimum rate of one soil test boring per 100 linear feet of the retaining wall length per Techno-Gram 002-2021.**

Response: Soil borings have been provided.

**c. Provide a global stability analysis performed on retaining wall sections taller than 10 feet or taller than 6 feet with a backslope 3 horizontal to 1 vertical or steeper per Techno-Gram 002-2021.**

Response: A global stability analysis has been provided.

**Fire/EMS:**

**1) Please provide the location of any proposed FDC. A fire hydrant must be provided within 200' of any proposed FDC. This distance must be measured as hose is laid by the fire department; along drive aisles, around corners and other obstacles, and in accordance with County Subtitle 4-167.**

Response: The proposed FDC has been provided and a fire hydrant has been shown within 200'



of the FDC. Please see the site plan sheet DSP-5.

**2) The provided Autoturn exhibit appears to show the sample fire truck traversing over the proposed curbs. Please adjust the proposed curbs or provide additional information showing that the fire truck will be able to negotiate the proposed drive aisles.**

Response: Proposed curbs have been adjusted to allow for trucks to traverse the site. (See DSP-10)

**DPIE:**

- **The entire right-of-way for Southern Avenue (including the sidewalk along the frontage of the subject site) is under the jurisdiction of the District of Columbia. As such, we defer all other comments on this roadway to the District of Columbia.**
- **The roadway studied as part of this detailed site plan is under the jurisdiction of the District of Columbia. As such, we defer all comments to the District of Columbia.**

Response: Acknowledged.

- **A soil investigation report, which includes subsurface exploration and geotechnical engineering evaluation for all proposed work including buildings, is required.**

Response: Acknowledged.

- **A floodplain study and approval are required for this property.**

Response: Acknowledged.

- **This memorandum incorporates the Site Development Plan Review pertaining to Stormwater Management (County Code 32-182(b)). The following comments are provided pertaining to this approval phase:**

- a) Final site layout, exact impervious area locations are not shown on plans.**
- b) The exact acreage of impervious areas to be provided with DSP for Technical review.**
- c) Proposed grading to be shown on plans.**
- d) Stormwater volume computations have been provided with the concept submittal. These computations shall be further updated with site development fine grading permit submission.**
- e) Erosion/sediment control plans that contain the construction sequence, any phasing necessary to limit earth disturbances and impacts to natural resources, and an overlay plan showing the types and locations of ESD devices and erosion, and sediment control practices are not included in the submittal.**
- f) A detailed SDFG report will be required for technical review.**
- g) Applicant shall provide items (a-f) at the time of filing final site permits.**

Response: Acknowledged.



If you have any questions, please do not hesitate to contact me at 301-441-2420.

Sincerely,

A handwritten signature in blue ink, appearing to read "Matthew C. Tedesco", enclosed within a light blue rectangular border.

Matthew C. Tedesco

Enclosures



Matthew C. Tedesco, Esquire  
Admitted in Maryland

E-mail: MTedesco@mhlawyers.com  
Direct Dial: Extension 222

November 1, 2024

Via Electronic Delivery

Dexter E. Cofield  
Planner II  
Development Review Division  
M-NCPPC  
1616 McCormick Drive  
Largo, MD 20774

***Re: DSP-13008-02; Gilpin Property, Phase III  
SDRC Point-By-Point Comment Response Letter  
SDRC Date: September 27, 2024***

Dear Dexter:

On behalf of the applicant, please find below point-by-point responses to the SDRC Comments transmitted to the applicant on September 30, 2024 and October 1, 2024.

**Urban Design:**

**MAJOR ISSUES:**

**1. Revise the TCC worksheet per CB-21-2024 and demonstrate conformance to the 15% requirement for and within the net tract area.**

Response: TCC worksheet has been revised to 15%

**2. The proposed signage demonstrates conformance to Section 27-61500, which is not applicable under the prior ZO. The plan should be revised to demonstrate conformance to Section 27-613.**

Response: Plan revised to comply with 27-613 under prior ZO.

**3. Additionally, the applicant claims a 50 percent reduction in the sign area; however, more information regarding the sign is needed (i.e. material, lighting, mounting method, etc.) to confirm this is applicable.**

Response: Signage revised to comply with Section 27-591 (A) under prior ZO, removing background color to meet this fifty percent (50%) shall be presumed to equal the spaces between the letters, figures, and designs.



**4. The site plan does not appear to match the architecture relative to vehicular door locations. Staff are concerned that these locations conflict with the required parking spaces with no intervening curb, sidewalk, wheelstop, bollards, etc. Clarify the functionality.**

Response: Site Plan and Architectural have been adjusted to permit pedestrian movement parallel to face of building. This accounts for storage unit door locations, proposed bollards, wheel stops, and flush sidewalk conditions.

**5. The property boundary metes and bounds shown on the overall site plan do not match the plat of record. These should be corrected prior to acceptance.**

Response: Metes and bounds have been updated to match the plat of record. (See DSP-3)

**MINOR ISSUES:**

**1. Ensure architecture is consistent with the prior buildings relative to facade materials, roof treatments, etc.**

Response: Sheet P-200 has been added to demonstrate architectural consistency with phase 2 building façade. Elevations also have adjustments, see P-201, P-202, P-203, P-204.

**2. Provide whether plants on Plant Schedule are native or non-native.**

Response: native or nonnative column has been added to plant schedule

**3. Label and indicate the location of fire lanes and “No Parking” areas, including proposed markings and signage.**

Response: The fire lanes and “no parking” areas have been indicated on the plans. (See DSP-5).

**4. Provide any way-finding signage, if applicable.**

Response: Comment acknowledged. Way-finding signage to be provided when available.

**5. Provide details of proposed guardrail.**

Response: Guardrail detail provided. (See DSP-9)

**6. The proposed “decorative canopies” do not appear to match the installation height of the canopies on the other buildings. Staff is concerned that the proposed height of the decorative canopies will cause them to be ineffective.**

Response: Canopies revised to coordinate with previous phase, see P-202, P-203, P-204.

**7. Clarify on plans what an architectural accent and what is a roll-up door on plans and elevations.**



Response: Labels added, as needed, see P-201, P-202, P-203, P-204.

**8. The existing building adjacent to the proposed has Solar Panels on roof. Staff questions if the proposed building will also have Solar Panels on roof, if so, please provide details.**

Response: Solar Panels will not be provided on the building, and this is not a jurisdictional requirement.

**9. The parking lot area for Section 4.3 should include the entirety of the eastern loading area..**

Response: The entire parking lot area has been included in the calculations.

**Subdivision:**

**1. Please include both Lots 3 and 4 in the in the proposed DSP amendment, as they form one building site.**

Response: Lots 3 and 4 are shown on the DSP amendment. (See DSP-4).

**2. The proposed DSP amendment must clearly show all bearings and distances consistent with the recorded plat (SJH 245, p. 76) or permits will be placed on hold until the plans have been revised.**

Response: The bearings and distances have been updated to match the plat of record. (See DSP-4)

**3. This referral is based off the review of plans provided at acceptance on September 10, 2024.**

Response: Comment acknowledged.

**Transportation:**

**1. The trips generated for the site are calculated based on 272,625 SF of consolidated storage, which will generate 25 AM and 42 PM peak hour trips. The trip generation memo provided calculated trips based on a lesser square footage. Staff analysis will be based on 25 AM and 42 PM peak hour trips for the subject site.**

Response: The AM trip cap is 48 and the PM trip cap is 51, therefore this application remains within the trip cap. Our calculations using ITE Trip Generation Manual indicate that a 272,625 square foot consolidated storage facility would generate 23 AM and 40 PM trips. However, either calculation results in the total development remaining within the approved trip cap.

**2. The truck turning plan shows that vehicles cannot make the required turning movements given the current proposal. Staff has concerns, particularly given the topography of the subject site, that both emergency vehicles and users of the consolidated storage will not be able to navigate the site. Revise the plans to demonstrate that proper vehicular circulation has been met with the current proposal. There are other potential conflicts not shown on**



**the turning plan that could include ground mounted light poles, landscaping elements and guardrails.**

Response: The proposed truck turn movement has been revised to avoid any conflicts. Guard rails have also been adjusted to avoid the path of the truck movements. (See DSP-10, DSP-11)

**3. Evaluate the feasibility of a separate access point from Southern Ave to the subject site. This may not eliminate all circulation concerns and would require coordination with the District of Columbia as the entire frontage of Southern Ave is under their jurisdiction.**

Response: A separate access point from Southern Ave to the subject site is not feasible due to the steep topography of the site and the queuing that would result in the public road. For safety reasons, all traffic should be directed to one entrance.

**4. Only one small portion of sidewalk is provided along the building frontage along the northern side of the building. There are no other pedestrian facilities accessing the subject site. Provide additional pedestrian pathways of justification for how pedestrian circulation is provided, given that each level of the building will only be accessible by vehicle.**

Response: Sidewalks adjacent to the proposed building have been added along all four sides of building. Primary site activity will be via vehicles directly to their respective building. Any new customer will go to the office to obtain a security access code, then gain access beyond the security gates and to gain access into any of the building entrances. Existing customers who already have an access code may go directly to their respective building through the security gate and building entrance. Building entries and security gates also have intercoms to communicate with office/management staff in event any issues arise. Given this site's multi-building layout and significant topographic changes, only pedestrian pathways are proposed immediately adjacent to the building at each respective floors parking/loading area.

**5. The proposed parking spaces appear to obstruct access to the bay doors. Additionally, doors accessing the interior of the building appear to be near or within the same parking areas. Staff has concerns about conflicts between vehicles in the parking areas and users accessing the building entrances.**

Response: See response above to comment #4 from Urban Design.

**Environmental:**

**1. The Environmental Planning Section requests that all revised materials be submitted 40 days prior to the Planning Board Hearing. Provide a statement addressing Section 25-119(C)(1)(A)(i).**

Response: comment noted

**2. The applicant has submitted an approved stormwater management concept plan which shows microbioretenion facilities and two proposed outfalls discharging towards the PMA. What is the status of the erosion and sediment control plan? If changes to the stormwater**



**management or grading are requested by PGSCD which results in an impact to the PMA, a PMA SOJ will be required.**

Response: A PMA impact exhibit and SOJ has been provided in the submission package.

**3. This application proposes clearing within a recorded woodland conservation easement (Liber 38433 folio 437) which serves the other development on this property. The woodland conservation easement shall be vacated and restated prior to signature approval of the TCP2. The prior TCP2 approval showed woodland conservation within the perpetual easement area. This application shall strive to also provide woodland conservation within that area unless directed by another agency.**

Response: comment noted

**4. Within the specimen tree variance, the following revisions are required:**

**a. Within Finding A, there is a mention of Marlboro Clays on-site which are stated as a limiting factor due to needing to grade for slope failure. The approved NRI did not identify Marlboro Clays on-site. Where is the Marlboro Clay soil located on-site? If this soil type is on-site, then NRI and TCP2 shall be revised to show those clay soils. If these soils are not located on-site, then revise the variance to remove this as a justification.**

Response: Marlboro clay has been revised and switched to phoenix clay.

**b. Within Finding A, there is a reference that woodland conservation will be provided on-site to the extent practicable. If the applicant is seeking to process this application under the current Subtitle 25 regulations, then the 2.09 woodland conservation threshold is required to be met on-site, or a variance is required. If this application is grandfathered to Subtitle 25, then the woodland conservation can still be met on-site if the applicant proposed woodland conservation in the perpetual easement as was shown on TCP2-018-13-01.**

Response: 2.09 woodland conservation has threshold has been met on-site.

**c. Within each finding, reference the location, construction tolerances, and condition of the specimen trees requested for removal. The trees in question are located near the road frontage and in poor condition. This is not described anywhere in the variance. The specimen tree variance is not a zoning variance and as such cannot rely of the zoning, master plan, or prior approvals. More specifically this area was not considered for development with 4-15017. As such the findings made that environmental resources were preserved, protected, or enhanced to the extent practicable with that application has no bearing on this application.**

Response: the specimen trees being removed have been added to the tree specimen variance

**d. Revise Finding D to detail that the stormwater concept plan has been approved. This finding should state that water quality will not adversely affect water quality and mimic woodland in good condition. This finding should not state the goal is to improve water quality**



**as this development is not a mitigation or enhancement project and will add new impervious surfaces.**

Response: Finding D has been revised and references the stormwater concept plan

**5. The following technical corrections are required on the TCP2.**

**a. Show all specimen trees proposed for removal with an X, which is the standard symbol for specimen trees requested for removal. All specimen tree labels shall be clearly visible and not obscured under other labels.**

Response: all specimen trees for removal have been revised.

**b. The PMA area on the TCP2 is not delineated as shown on the NRI plan. The PMA, specimen trees, and other regulated environmental features shall be accurately reflected on the TCP2 to demonstrate conformance with the approved NRI.**

Response: The PMA has been updated to match the NRI.

**c. Show all proposed developments in black and all existing grades and features in gray.**

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**e. This application will be the second revision of the TCP2. Within the woodland conservation worksheet, identify the TCP2 number as TCP2-018-03, Revision 2.f. Revise the soils type table so that the table on the TCP2 is in conformance with the approved NRI plan.**

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**g. The site statistics table shall be in conformance with the site statistics table on the approved NRI plan. The total woodland in the net tract shall be consistent between the TCP2 and the NRI.**

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**h. Provide the Forest Conservation Act reporting table on the TCP2. EPS recommends that the applicant add an additional sheet to the TCP2 for the general notes and the detail graphics.**

Response: Forest Conservation Act reporting table has been added to TCP2.



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Response: Reason has been identified in the approval block.

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**a. Provide a slope stability analysis performed on critical slope sections for both unmitigated and mitigated conditions per Techno-Gram 005-2018.**

Response: Slope stability analysis has been provided.

**b. Provide soil borings at a minimum rate of one soil test boring per 100 linear feet of the retaining wall length per Techno-Gram 002-2021.**

Response: Soil borings have been provided.

**c. Provide a global stability analysis performed on retaining wall sections taller than 10 feet or taller than 6 feet with a backslope 3 horizontal to 1 vertical or steeper per Techno-Gram 002-2021.**

Response: A global stability analysis has been provided.

**Fire/EMS:**

**1) Please provide the location of any proposed FDC. A fire hydrant must be provided within 200’ of any proposed FDC. This distance must be measured as hose is laid by the fire department; along drive aisles, around corners and other obstacles, and in accordance with County Subtitle 4-167.**

Response: The proposed FDC has been provided and a fire hydrant has been shown within 200’ of the FDC. Please see the site plan sheet DSP-5.

**2) The provided Autoturn exhibit appears to show the sample fire truck traversing over the proposed curbs. Please adjust the proposed curbs or provide additional information showing that the fire truck will be able to negotiate the proposed drive aisles.**



Response: Proposed curbs have been adjusted to allow for trucks to traverse the site. (See DSP-10)

**DPIE:**

- **The entire right-of-way for Southern Avenue (including the sidewalk along the frontage of the subject site) is under the jurisdiction of the District of Columbia. As such, we defer all other comments on this roadway to the District of Columbia.**
- **The roadway studied as part of this detailed site plan is under the jurisdiction of the District of Columbia. As such, we defer all comments to the District of Columbia.**

Response: Acknowledged.

- **A soil investigation report, which includes subsurface exploration and geotechnical engineering evaluation for all proposed work including buildings, is required.**

Response: Acknowledged.

- **A floodplain study and approval are required for this property.**

Response: Acknowledged.

- **This memorandum incorporates the Site Development Plan Review pertaining to Stormwater Management (County Code 32-182(b)). The following comments are provided pertaining to this approval phase:**

- a) Final site layout, exact impervious area locations are not shown on plans.**
- b) The exact acreage of impervious areas to be provided with DSP for Technical review.**
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- e) Erosion/sediment control plans that contain the construction sequence, any phasing necessary to limit earth disturbances and impacts to natural resources, and an overlay plan showing the types and locations of ESD devices and erosion, and sediment control practices are not included in the submittal.**
- f) A detailed SDFG report will be required for technical review.**
- g) Applicant shall provide items (a-f) at the time of filing final site permits.**

Response: Comment acknowledged.

If you have any questions, please do not hesitate to contact me at 301-441-2420.

Sincerely,



Matthew C. Tedesco

Enclosures



Case No.: DSP-13008-01  
Gilpin Property

Applicant: Silver Branch, LLC

COUNTY COUNCIL OF PRINCE GEORGE’S COUNTY, MARYLAND  
SITTING AS THE DISTRICT COUNCIL

FINAL DECISION — APPROVAL OF DETAILED SITE PLAN

Pursuant to Section 25-210 of the Land Use Article (“LU”), Md. Ann. Code (2012 Ed. & Supp. 2015) and Section 27-290 of the Prince George’s County Code (2011 Ed. & Supp. 2015, or as amended) (“PGCC”), we have jurisdiction to issue the final decision in this Detailed Site Plan Application Number 13031, (“DSP-13008-01”).<sup>1</sup> Planning Board’s Resolution No. 15-137 (“PGCPB No. 15-137”), approving DSP-13008-01, to construct an additional 98,832 square feet of consolidated storage use, including 948 interior and exterior access units in one new building and three building expansions to the existing structure be and the same, is hereby AFFIRMED.

As the basis for this final decision, and as expressly authorized by Titles 22 and 25 of the Land Use Article of the Annotated Code of Maryland and Subtitle 27 of the Prince George’s County Code, we hereby adopt the findings and conclusions set forth within PGCPB No. 15-137, except where otherwise stated herein, and APPROVE DSP-13008-01.

FACTUAL AND PROCEDURAL BACKGROUND

DSP-13008-01 seeks to construct an additional 98,832 gross floor area of consolidated storage use on improved property described as 14.43 acres of land located in the southeastern quadrant of the intersection of Southern Avenue and Wheeler Road, approximately 770 feet

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<sup>1</sup> See also *Cnty. Council of Prince George’s Cnty. v. Zimmer Dev. Co.*, 444 Md. 490; 120 A.3d 677; (2015) (The District Council is expressly authorized to review a final decision of the county planning board to approve or disapprove a detailed site plan and the District Council’s review results in a final decision).



northeast of Southview Drive, in the I-1 (Light Industrial) Zone, Planning Area 76A, Council District 7. *See* PGCPB No. 15-137, at 2. The property is improved, with the primary structure constructed in 1961 and recently converted for use as an existing consolidated storage use pursuant to approval of DSP-13008 in 2014. *See* PGCPB No. 15-137, at 2.

The amendment, as opposed to a revision, was filed for the purpose of adding 157,262 square feet of consolidated storage use on the property. *See* 10/07/2015 TSR, at 44; Statement of Justification, 08/07/15, at 2. In October 2015, the Planning Department accepted DSP-13008-01 for review as a *revision* to DSP-13008 and assigned case number DSP-13008-01 to this application. *See* 10/07/2015 TSR, at 1. On October 7, 2015, the Technical Staff issued its report and assessment of the application, conditionally recommending approval of DSP-13008-01. Subsequently, Technical Staff transmitted its conditional recommendation to Planning Board for its consideration. *See* 10/07/2015 TSR, at 1. Planning Board held a hearing on December 17, 2015, and at the conclusion of the hearing, Planning Board voted to approve DSP-13008-01, embodying its decision in a resolution, PGCPB No. 15-137.

On February 8, 2016, we elected to review DSP-13008-01. A hearing was held on March 28, 2016. At the conclusion of the hearing, we took this matter under advisement. *See generally* 03/28/2016, Tr.

### FINDINGS AND CONCLUSIONS

Part 3, Division 9 (Subdivisions 1–3) of Subtitle 27 of the County Code governs the requirements for review and disposition of a Detailed Site Plan. Accordingly, Planning Board “shall review the Detailed Site Plan for compliance with Part 3, Division 9 (Subdivisions 1–3) of Subtitle 27 of the Prince George’s County Code. *See* §§ 27-274, 27-285, 27-289, 27-475.04, PGCC.



There is *no* provision in Part 3, Division 9 (Subdivisions 1–3) of Subtitle 27 of the County Code that allows for a *revision* of a Detailed Site Plan. Part 3, Division 9 (Subdivisions 1–3) of Subtitle 27 of the County Code. There is, however, a process set forth in the County Code for *amendment* of an approved Detailed Site Plan. Accordingly, when the Applicant filed its 2015 application requesting an amendment to DSP-13008—**“for the purpose of adding 157,262 square feet of consolidated storage on the property”**—it was subject to the requirements of § 27-289, PGCC, as follows:

(a) General.

An application to amend a Detailed Site Plan shall be filed with the Planning Board by the owner or authorized owner representative. No amendment of a Detailed Site Plan shall be permitted without the approval of the Planning Board or Planning Director, as provided in this Section. The Director may authorize staff to take any action the Director may take under this Section.

(b) Amendment, Planning Board.

**All requirements for the filing and review of an original Detailed Site Plan shall apply to an amendment. The Planning Board shall follow the same procedures and make the same findings.**

§ 27-289, PGCC (emphasis added); 10/07/2015 TSR, at 44.

Notwithstanding the plain requirements of the County zoning law, the record reflects that when Planning Board approved DSP-13008-01, its decision was limited to an assessment and determinations as to conformance with the approval of DSP-13008; the approval of Preliminary Plan 4-15017; a portion of the applicable zoning requirements set forth in §§ 27-473, 27-474.05, PGCC; and various requirements prescribed by the County Landscape Manual the Tree Canopy Coverage Ordinance. *See* PGCPB No. 15-137, at 3–16.

Although we find that Planning Board should have made more specific findings of facts and conclusions of law, as set forth in set forth in § 27-274, PGCC, before approving DSP-13008-01, we also find that Planning Board ultimately concluded that the proposed amendment—to triple



the size and number of units for the consolidated storage use on the site—represents a reasonable alternative for satisfying the site design guidelines of Subtitle 27, Part 3, Division 9 of the Prince George’s County Code without requiring unreasonable cost and without detracting substantially from the utility of the proposed development for its intended use. *See* PGCPB No. 15-137, at 16.<sup>2</sup>

In the future, absent a provision in the County Code to the contrary, Planning Board shall apply the law as it is set forth in Part 3, Division 9 (Subdivisions 1–3) of Subtitle 27 of the County Code which includes making required findings and conclusions necessary to determine whether the Detailed Site Plan was designed in accordance with the eleven (11) evaluation criteria of the site design guidelines set forth in § 27-274, PGCC. *See also* §§ 27-274, 27-281, 27-283, 27-285, 27-289, PGCC; PGCPB No. 15-137.<sup>3</sup>

Moreover, on May 6, 2014, we adopted County Resolution 26-2014, which approved *Plan Prince George’s 2035*, the comprehensive update to the County General Plan for that portion of the Maryland-Washington District within Prince George’s County, pursuant to the provisions of Md. Code Ann., LU, §§ 21-103(a)–(b), 21-104 (2012 & Supp. 2015). As a result, our approval of *Plan Prince George’s 2035*, the 2014 General Plan *superseded* the County general development policies within the 2002 *Prince George’s County General Plan*. When Planning Board approved

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<sup>2</sup> *See* PGCC, § 27-285(a)(5) (requiring that “[w]hen it approves a Detailed Site Plan, Planning Board shall state its reasons for the action). *See also Harford County v. Preston*, 322 Md. 493, 505, 588 A.2d 772, 778 (1991) (holding agency’s duty to make findings of fact “is in recognition of the fundamental right of a party to a proceeding before an administrative agency to be apprised of the facts relied upon by the agency in reaching its decision and to permit meaningful judicial review of those findings”); *Forman v. Motor Vehicle Admin.*, 332 Md. 201, 221, 630 A.2d 753, 764 (1993) (reaffirming that “[w]ithout findings of fact on all material issues . . . a reviewing court cannot properly perform its function”).

<sup>3</sup> *See Pollock v. Patuxent Inst. Bd. of Review*, 374 Md. 463, 503, 823 A.2d 626, 650 (2003) (holding that administrative agency must generally observe all rules, regulations, or procedures which it established and when it fails to do so, its actions will be vacated and the matter remanded. This rule is consistent with Maryland’s body of administrative law, which generally holds that an agency should not violate its own rules and regulations).



DSP-13008-01, we find little beyond a one-sentence conclusion below as to how the application provides for development in accordance with the principles for the orderly, planned, efficient and economical development contained in the General Plan, Master Plan, or other approved plan:

The application is consistent with the *Plan Prince George's 2035 Approved General Plan* (Plan Prince George's 2035). The development application is consistent with the 2000 *The Heights and Vicinity Approved Master Plan and Sectional Map Amendment* (Heights and Vicinity Master Plan and SMA). There are no planning issues.

PGCPB No. 15-137, at 10.<sup>4</sup>

While Planning Board's resolution approving DSP-13008-01 sets forth at least *de minimus* analysis of the facts in the record with respect to findings (b)(2)–(4), above, its assessment as to finding (b)(1) on page 15, paragraph 14 of PGCPB No. 15-137 reflects only affirmative, boilerplate restatement of the text of § 27-285(b)(1) as sufficient support for the finding. Notwithstanding Planning Board's deficient findings of facts in certain areas of its approval of DSP-13008-01, we choose not to remand this case to Planning Board for further findings of fact and conclusions of law because, in our view, it would delay economic revitalization in the County. *See* PGCPB No. 15-137, at 15.

Because by statute, the District Council is expressly authorized to review a decision of

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<sup>4</sup> A use permitted by right in a zone does not warrant automatic approval of a zoning application. *See Coffey v. Maryland-National Capital Park and Planning Commission*, 293 Md. 24, 441 A.2d 1041(1982) (observing that if Planning Board's lone function is a "rubber-stamp approval" after reviewing a zoning application for every subdivision plat which conformed with the zoning ordinance, there would be little or no reason for their existence. An applicant must also comply with state and other county regulations).



the Planning Board to approve or disapprove a Detailed Site Plan, we find that DSP-13008-01 was designed in accordance with the eleven (11) evaluation criteria of the site design guidelines set forth in § 27-274, PGCC.

APPROVAL of DSP-13008-01 is subject to the following conditions:

1. Prior to certificate of approval of DSP-13008-01, the Applicant shall revise the detailed site plan as follows:
  - a. Provide a plan that conforms to construction activity dust control requirements as specified in the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control.
  - b. Provide a plan that conforms to construction activity noise control requirements as specified in Subtitle 19 of the Prince George's County Code.
  - c. Provide wall heights and spot shots along on all existing and proposed retaining and screen walls on the site.
  - d. Indicate the correct proposed building square footage and unit numbers in the general notes on the DSP, as necessary.
  - e. Revise the parking space dimensions, requirements, and plant labels, as necessary to reflect what is provided.
  - f. Revise the architecture as follows:
    - (1) Provide decorative concrete block, to match Building 'B,' as the primary façade material on the three building expansions of Building 'A.'
    - (2) Specify the sloped metal roof on the three building expansions of Building 'A' to be brown to match the existing brick.
    - (3) Extend the proposed decorative concrete block a minimum of eight feet in height above the grade level along the intersecting corner of the north and east elevations.
    - (4) Show all proposed building-mounted signage on Building 'B,' subject to the Zoning



Ordinance requirements, to be reviewed by the Urban Design staff as designee of the Planning Board.

- g. Revise the site plan and architecture to conform to the maximum 36-foot building height requirement required by the County Code.
- 2. Prior to certification of the detailed site plan, the Type 2 Tree Conservation Plan shall be revised as follows:
  - a. The TCP2 shall be revised to reflect the correct PMA acreage consistent with the approved NRI and TCP1.
  - b. The wetland and wetland buffer symbols shall be shown on the TCP2 plan as shown in the legend.
  - c. Add the existing treeline to the TCP2 plan.
  - d. Show the required vicinity map on the TCP2 plan.
  - e. Revise the limits of disturbance to exclude the areas of “Woodland Preserved-Not Credited” or show the area of “Woodland Preserved-Not Credited” within the limits of disturbance as cleared. Revise the worksheet as necessary.
- 3. The following note shall be placed on the Final Plat of Subdivision:

“This plat is subject to the recordation of a Woodland Conservation Easement pursuant to Section 25-122(d)(1)(B) with the Liber and folio reflected on the Type 2 Tree Conservation Plan.”

ORDERED this 5<sup>th</sup> day of April, 2016, by the following vote:



In Favor: Council Members Davis, Franklin, Glaros, Harrison, Lehman, Patterson, and Taveras.

Opposed: Council Member Toles.

Abstained:

Absent: Council Member Turner.

Vote: 7-1

COUNTY COUNCIL OF PRINCE GEORGE'S  
COUNTY, MARYLAND, SITTING AS THE  
DISTRICT COUNCIL FOR THAT PART OF  
THE MARYLAND-WASHINGTON  
REGIONAL DISTRICT IN PRINCE GEORGE'S  
COUNTY, MARYLAND

By: \_\_\_\_\_  
Derrick L. Davis, Chairman

ATTEST:

\_\_\_\_\_  
Redis C. Floyd  
Clerk of the Council





THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

14741 Governor Oden Bowie Drive  
Upper Marlboro, Maryland 20772  
TTY: (301) 952-4366  
[www.mncppc.org/pgco](http://www.mncppc.org/pgco)

PGCPB No. 15-119

File No. 4-15017

RESOLUTION

WHEREAS, Silver Branch, LLC is the owner of a 14.44-acre parcel of land known as Tax Map 87 in Grid B-3, said property being in the 12th Election District of Prince George's County, Maryland, and being zoned Light Industrial (I-I); and

WHEREAS, on September 16, 2015, Silver Branch, LLC filed an application for approval of a Preliminary Plan of Subdivision for Lot 3 (4.33 acres) and Lot 4 (10.11 acre-lots); and

WHEREAS, the application for approval of the aforesaid Preliminary Plan of Subdivision, also known as Preliminary Plan 4-15017 for Gilpin Property was presented to the Prince George's County Planning Board of The Maryland-National Capital Park and Planning Commission by the staff of the Commission on November 19, 2015, for its review and action in accordance with the Land Use Article of the Annotated Code of Maryland and the Regulations for the Subdivision of Land, Subtitle 24, Prince George's County Code; and

WHEREAS, the staff of The Maryland-National Capital Park and Planning Commission recommended APPROVAL of the application with conditions; and

WHEREAS, on November 19, 2015, the Prince George's County Planning Board heard testimony and received evidence submitted for the record on the aforesaid application.

NOW, THEREFORE, BE IT RESOLVED, that pursuant to the provisions of Subtitle 24, Prince George's County Code, the Prince George's County Planning Board APPROVED Type 1 Tree Conservation Plan (TCP1-007-15), and further APPROVED Preliminary Plan of Subdivision for Lot 3 (4.33 acres) and Lot 4 (10.11 acres) with the following conditions:

1. Prior to signature approval of the preliminary plan of subdivision (PPS), the plan shall be revised to make the following technical corrections:
  - a. Provide the location of the District of Columbia marker SE 6 (PG:76A-01/8) on the plan.
  - b. Clearly label the Prince George's County line on sheet 2 of 3.
  - c. Revise General Note 8 to show the correct acreage of regulated environmental features in accordance with the NRI.
  - d. Provide the right-of-way width for Southern Avenue on the plan.
  - e. Provide the easements shown on the NRI and label as "abandoned" per Equity Case No. C-9990.



- f. Label the middle existing driveway as "To Be Removed."
  - g. Remove reference to the "Developed Tier" from General Note 11.
  - h. Provide the acreage of adjusted land area between Lots 1 and 2 on the plan drawing.
2. Development of this site shall be in conformance with Stormwater Management Concept 19266-2015 Plan and any subsequent revisions.
3. At the time of final plat, the applicant and the applicant's heirs, successors, and/or assignees shall grant a ten-foot-wide public utility easement along all public rights-of-way.
4. Prior to signature approval of the preliminary plan of subdivision (PPS), the Type 1 tree conservation plan (TCP1) shall be revised as follows:
- a. Provide the location of the District of Columbia marker SE 6 (PG:76A-01/8) on the plan.
  - b. The wetland and wetland buffer symbols shall be shown on the TCP plan as shown in the legend.
  - c. Add the existing treeline to the TCP plan.
  - d. Show the required vicinity map on the TCP plan.
  - e. Revise the LOD to exclude the area of "Woodland Preserved-Not Credited" located on the eastern property line, or show as cleared. Revise the worksheet as necessary.
  - f. Revise the PMA acreage for consistency with the acreage shown on the revised NRI, 46,939 square feet
5. Prior to signature approval of the PPS, the NRI shall be revised as necessary to show the correct acreage of on-site PMA.
6. Development of this subdivision shall be in conformance with an approved Type 1 Tree Conservation Plan (TCP1-007-2015). The following note shall be placed on the Final Plat of Subdivision:

"This development is subject to restrictions shown on the approved Type 1 Tree Conservation Plan (TCP1-007-2015 or most recent revision), or as modified by the Type 2 Tree Conservation Plan, and precludes any disturbance or installation of any structure within specific areas. Failure to comply will mean a violation of an approved Tree Conservation Plan and will make the owner subject to mitigation under the Woodland and Wildlife Habitat Conservation Ordinance. This property is subject to the notification provisions of CB-60-2005. Copies of all approved Tree Conservation Plans for the subject



property are available in the offices of the Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department."

7. Any residential development of the subject property shall require approval of a new subdivision prior to approval of any building permits.

8. The following note shall be placed on the Final Plat of Subdivision:

"This plat is subject to the recordation of a Woodland Conservation Easement pursuant to Section 25-122(d)(1)(B) with the Liber and Folio reflected on the Type 2 Tree Conservation Plan."

9. At time of final plat, a conservation easement shall be described by bearings and distances. The conservation easement shall contain the delineated primary management area except for any approved impacts and shall be reviewed by the Environmental Planning Section prior to approval of the final plat. The following note shall be placed on the plat:

"Conservation easements described on this plat are areas where the installation of structures and roads and the removal of vegetation are prohibited without prior written consent from the M-NCPPC Planning Director or designee. The removal of hazardous trees, limbs, branches, or trunks is allowed."

10. Total development shall be limited to uses that would generate no more than 48 AM and 51 PM peak-hour vehicle trips. Any development generating an impact greater than that identified herein shall require a new preliminary plan of subdivision with a new determination of the adequacy of transportation facilities.

BE IT FURTHER RESOLVED, that the findings and reasons for the decision of the Prince George's County Planning Board are as follows:

1. The subdivision, as modified with conditions, meets the legal requirements of Subtitles 24 and 27 of the Prince George's County Code and the Land Use Article of the Annotated Code of Maryland.
2. **Background**—The subject property is located at the border of Prince George's County and the District of Columbia on Tax Map 87 in Grid B-3 and is composed of Lots 1 and 2 – Gilpin Property, recorded in Plat WWW 40-1 in February, 1961 in the County Land Records. Lot 2 includes a parcel of land (Lots 6 through 10 and part of Lot 5, Block 1 and all of Lots 1 through 8, Block 2, as shown on Plat 25-82 – Southern Hills Manor and all of Brandywine Street) having been abandoned by Equity Case No. C-9990. The property consists of 14.44 acres of land within the Light Industrial (I-1) Zone. The site is currently developed with 58,430 square feet of gross floor area (GFA) for industrial use. This preliminary plan of subdivision (PPS) proposes the addition of 98,831 square feet of GFA for industrial use and a lot line adjustment between existing Lots 1 and 2 (proposed Lot 3 and 4). The proposed total GFA is 157,261 square feet. Pursuant to



Section 24-111(c)(3) of the Subdivision Regulations, a final plat of subdivision approved prior to October 27, 1970 shall be resubdivided prior to issuance of a building permit for the development of more than 5,000 square feet of GFA, resulting in this application.

Proposed Lot 3 (4.33 acres) and Lot 4 (10.11 acres) are located just southeast of the intersection of Southern Avenue and Wheeler Road. The entire site (Lots 3 and 4) is generally triangular in shape and has approximately 1,328.88 feet of frontage along the eastern side of Southern Avenue, which is under the authority of the District of Columbia. This edge of Southern Avenue is the boundary between the County and the District of Columbia. Three vehicular access driveways are located on the site's frontage along Southern Avenue. One driveway is proposed to be removed, which is supported by the Planning Board. The PPS proposes a lot line adjustment between existing Lots 1 and 2 (proposed Lot 3 and 4) to accommodate the proposed additional GFA. The proposed adjustment, for the accommodation of a new building, will result in an increase of one acre of land from existing Lot 1 to existing Lot 2. The existing building (64,861 GFA) will be located on proposed Lot 3 (4.33 acres) and the proposed building (92,400 GFA) will be located on proposed Lot 4 (10.11 acres). In accordance the definition of a "Lot" provided in Section 27-107.01 of the Zoning Ordinance, which specifies that a "Lot" shall be made up of one (1) or more entire "Record Lots," the proposed development on Lot 3 and 4 together has been reviewed as one "Lot" for conformance to the applicable zoning and Subdivision Regulations. Subsequent site plans will include both Lots 3 and 4 for review purposes. The applicant has stated that retaining the two existing lots is preferable to allow for separate ownership interests of the two buildings within this single site.

Pursuant to Section 27-475.04 of the Zoning Ordinance, a Detailed Site Plan shall be approved for consolidated storage developments in accordance with Part 3, Division 9, of Subtitle 27.

Detailed Site Plan DSP-13008-01 has been submitted and is tentatively scheduled for the Planning Board hearing on December 17, 2015.

3. **Setting**—The subject site is located in the southeastern quadrant of the intersection of Southern Avenue and Wheeler Road. To the south of the site is C-S-C zoned property that is developed with a shopping center and vacant R-O-S zoned property. To the east of the site is developed R-55 zoned property.
4. **Development Data Summary**—The following information relates to the subject PPS application and the proposed development.



	EXISTING	APPROVED
Zone	I-1	I-1
Use(s)	58,430 GFA for industrial use	157,261 GFA total for industrial use (98,831 GFA proposed)
Acreage	14.44 acres	14.44 acres
Lots	2	2
Outlots	0	0
Parcels	0	0
Dwelling	0	0
Public	No	No
Variance	No	No
Variation	No	No

Pursuant to Section 24-119(d)(2) of the Subdivision Regulations, this case was heard before the Subdivision and Development Review Committee (SDRC) on October 9, 2015, as required by Section 24-113(b) of the Subdivision Regulations.

5. **Community Planning**—This site is located within the Established Communities growth policy area of the Prince George's County Growth Policy Map in the *Plan Prince George's 2035 Approved General Plan* (Plan Prince George's 2035). As described in Plan Prince George's 2035, established communities should have context-sensitive infill and low- to medium-density development. This property is also located in the 2000 *Approved Heights and Vicinity Master Plan and Sectional Map Amendment* (SMA). This application, with its proposed industrial uses, is consistent with the land use recommendations of Plan Prince George's 2035 and the Heights and Vicinity Master Plan.
6. **Urban Design**—Consolidated storage is a permitted use in the I-1 Zone in accordance with Section 27-475.04 which includes the following requirements:

**Section 27-475.04 states the following:**

- (a) **Beginning June 23, 1988, a Detailed Site Plan shall be approved for consolidated storage developments in accordance with Part 3, Division 9, of this Subtitle to insure compliance with the provisions of this Section. Consolidated storage constructed pursuant to a building permit issued prior to this date; consolidated storage for which grading permits were issued prior to this date, subject to Subsection (b); and consolidated storage for which applications for building permits were filed on September 22, 1987, and which are actively pending as of October 25, 1988, subject to Subsection (b), need not meet these requirements.**

A consolidated storage use already exists on the site, as approved with DSP-13008. Therefore, an expansion of that use will require a revision to the detailed site plan (DSP).



Conformance with the remainder of this section and other applicable Zoning Ordinance requirements will be reviewed with the DSP.

In accordance the definition of a "Lot" provided in Section 27-107.01 which specifies that a "Lot" shall be made up of one (1) or more entire "Record Lots," the proposed development has been reviewed as one "Lot" for conformance to the applicable zoning and subdivision regulations including building setbacks and access. Additionally, the pending DSP review will consider Lots 3 and 4 as one "Lot" for review purposes, in accordance with this definition. However, subsequent revisions to the DSP may be approved which review Lots 3 and 4 separately for conformance to the applicable zoning regulations as deemed appropriate at such time.

**Conformance with the 2010 Prince George's County Landscape Manual**

The subject proposal includes an increase in impervious surface and gross floor area for the property which would then be subject to the requirements of the 2010 *Prince George's County Landscape Manual* (Landscape Manual). More particularly, this application would be subject to Section 4.2, Requirements for Landscaped Strips along Streets, Section 4.4, Screening Requirements, Section 4.7, Buffering Incompatible Uses, and Section 4.9 Sustainable Landscaping Requirements. Conformance with these requirements will be evaluated with the DSP.

**Tree Canopy Coverage Ordinance**

The subject proposal includes more than 5,000 square feet of new gross floor area or disturbance. Therefore, compliance with the Tree Canopy Coverage Ordinance must be demonstrated and will be evaluated with the DSP.

7. **Environmental**—A Natural Resources Inventory, NRI-029-13, for this project area was approved on April 1, 2013. A Tree Conservation Plan, TCP2-018-13 was previously reviewed as a companion case to Detailed Site Plan DSP-13008, and was found to be in conformance with the Woodland Conservation Ordinance (PGCPB Resolution No. 13-93). The DSP was remanded to the Planning Board by the District Council for further evidence and testimony regarding conformance with the applicable master plan. The Planning Board affirmed they had no authority to reconsider the DSP and returned the case to the District Council who elected not to review (PGCPB Resolution No. 14-35). The DSP was subsequently certified in accordance with PGCPB Resolution No. 13-93. The applicable conditions of approval of DSP-13008 and TCP2-018-13 can be found in PGCPB Resolution No. 13-93. The project is subject to the environmental regulations of Subtitles 24 and 25 that came into effect on September 1, 2010 because the application is for a new preliminary plan.

This 14.44-acre site in the I-1 Zone is located on the southeastern corner of Southern Avenue and Wheeler Road and adjacent to the District of Columbia boundary. According to mapping research and as documented on the approved NRI, there are regulated environmental features present on-site that include wetlands, 100-year floodplain and their associated buffers. This site drains to Oxon Run within the Potomac River Basin. There are several areas of steep slope on the property. The predominant soils on the site, according to the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS), are the Beltsville-Urban



land complex, Christiana-Downer complex, Croom gravelly sandy loam, Grosstown-Urban land complex, Issue-Urban land complex, Potobac-Issue complex and Sassafras-Urban land complex. According to available information, Marlboro clay is not located on-site, but Christiana complexes are found to occur on this property. The Maryland Department of Natural Resources, Natural Heritage Program provided correspondence to the applicant on February 6, 2013 indicating there are no rare, threatened, or endangered (RTE) species on or in the vicinity of this property. No specimen trees were identified on-site through the NRI process. There are no nearby noise sources and the proposed use is not expected to be a noise generator. There are no designated scenic or historic roads adjacent or within the site area.

#### **Master Plan Conformance**

The site is located within the Established Communities Area of the Growth Policy Map and Environmental Strategy Area 1 (formerly the Developed Tier) of the Regulated Environmental Protection Areas Map as designated by the *Plan Prince George's 2035 Approved General Plan* (Plan Prince George's 2035).

The site is also located in the 2000 *Approved Master Plan and Sectional Map Amendment for the Heights and Vicinity (Planning Area 76A)* (Master Plan SMA). The Environmental Infrastructure section of the Master Plan contains recommendations and guidelines. An environmental goal is stated as "To protect and enhance the environmental qualities of the planning area by preserving natural environmental assets as the integral part of the community." The following recommendations in **BOLD** are applicable to the current project.

**Recommendation 1: Woodland Preservation – The existing woodlands in Natural Reserve Areas must be retained. Other existing woodlands should be retained to the extent possible in order to maintain or increase the current percentage of woodland. Furthermore, the expansion of woodlands through afforestation and reforestation is encouraged in the implementation of the greenways and open space program linkages.**

According to the approved Master Plan, no natural reserve areas occur onsite. Per the revised TCP, additional clearing is proposed for the expansion; however, the plan proposes to continue to exceed the minimum Woodland Conservation threshold onsite. The retention area includes the Priority Management Area (PMA) and adjacent woodlands, including the majority of steep slopes on the site. No afforestation or reforestation is required at this time.

**Recommendation 2: The County should pursue efforts to minimize development impacts on contiguous woodland areas adjacent to Henson Creek and the Oxon Run Tributary through land acquisition for parks, where feasible, and through appropriate land use recommendations.**

The site contains wooded PMA that includes floodplain associated with a tributary of Oxon Run. The TCP proposes to preserve the entirety of the onsite PMA with no impacts. Land acquisition shall be addressed by the Department of Parks and Recreation, as deemed necessary.



**Recommendation 3: Stormwater Management – The County should ensure that stormwater is properly managed, and major streams and detention/retention basins should be monitored for water quality and flow characteristics. The plan recommends the development of five stormwater management ponds as shown on the plan map.**

**Recommendation 4: Alternative solutions to provide remedial action for on-site stormwater management may be necessary, until such time as the Department of Environmental Resources (DER) implements the proposed potential regional stormwater management ponds in the planning area.**

With regard to Recommendations 3 and 4, the stormwater management design is conceptually and technically reviewed and approved by the Department of Permitting, Inspections and Enforcement (DPIE) to address surface water runoff issues in accordance with Subtitle 32 Water Quality Resources and Grading Code, which requires that Environmental Site Design (ESD) be implemented to the maximum extent practicable (MEP) in accordance with the Stormwater Management Act of 2007. The site has an approved Stormwater Management Concept Plan (19266-2015). Several microbioretention facilities are proposed to treat the ESD volume.

**Recommendation 5: Noise Attenuation – In areas of 65 dBA (Ldn) or greater, residential development proposals should be reviewed and certified by a professional acoustical engineer stating that the building shell of habitable structures located within a prescribed noise corridor will attenuate ultimate exterior noise level to an interior level not to exceed 45 dBA (Ldn), especially in the AICUZ designated noise corridor.**

The proposed development use is commercial, not residential, in nature.

**Recommendation 6: Air Quality: The County should continue to participate aggressively in metropolitan efforts to prevent further air quality deterioration and should support all available measures to improve local air quality.**

Air quality is a regional issue that is currently being addressed by the Metropolitan Council of Governments.

**Recommendation 7: Proposed developments should meet stringent standards and guidelines and the potential environmental impacts of human activities should be identified as early as possible in the planning process. The constraints of Natural Reserve and Conditional Reserve Area must be adhered to.**

There are no Natural Reserve or Conditional Reserve Areas located on-site or on the adjacent properties. The proposed impacts due to the expansion are being addressed through Subtitles 24, 25, and 32. No impacts to regulated environmental features are proposed.



### **Conformance with the Countywide Green Infrastructure Plan**

According to the 2005 *Approved Countywide Green Infrastructure Plan*, the site contains Evaluation and Network Gap Areas within the designated network of the plan. The proposed woodland conservation and retention areas will preserve portions of the existing woodland in the Evaluation Area and Network Gap Area. Properties to the south of the subject property contain a stream valley, which are Regulated Areas of the Countywide Green Infrastructure Plan. Therefore, preservation of forest on the southern end of the subject property will create contiguous protected woodlands adjacent to the stream valley.

### **Environmental Review**

A Natural Resources Inventory, NRI -029-13, was approved for the site April 1, 2013. The site contains wetlands, wetland buffer, 100-year floodplain, and areas of steep slopes. The symbol for the wetland and wetland buffer are not shown on the plan as shown on the legend. The acreage of the PMA on the revised NRI (46,939 square feet) and the TCP1-007-2015 (45,939 square feet) vary slightly. This minor inconsistency shall be addressed prior to approval of the TCP1.

This site is subject to the provisions of the Prince George's County Woodland and Wildlife Habitat Conservation Ordinance (WCO) because the property is greater than 40,000 square feet in size and it contains more than 10,000 square feet of existing woodland. The site contains a total of 9.66 acres of woodlands. The site has a woodland conservation threshold of 2.09 acres and a total requirement of 2.62 acres. The TCP1 proposes to meet the requirements with on-site woodland preservation (2.62 acres). An additional 4.95 acres of woodland will be preserved, but not credited. Therefore, a total of 7.6 acres of woodland is proposed to remain on the subject site.

One area of woodland shown as "Woodland Preserved-Not Credited" is within the proposed Limit of Disturbance (LOD). This area should be removed from the LOD and shown as cleared, which would require the acreage of "Woodland Preserved-Not Credited" to be reduced to exclude it. If the area is proposed to remain, the LOD must be revised. The area is a narrow strip of woodland along the property line, east of the existing warehouse structure.

The subject property was previously subject to a Detailed Site Plan application (DSP-13008) and TCP2-018-13. A Woodland Conservation Easement (1.51 acres) was recorded in the County Land Records in Liber 36197 at Folio 466 per TCP2-018-13. The PMA shown on the TCP1 is consistent with previously approved TCP2; however, the proposed additional clearing with the current application yields increased woodland conservation requirements beyond what has already been recorded under TCP2-018-13. As such, prior to signature approval of the revised TCP2, the current woodland conservation easement will need to be vacated and the new easement must be recorded.

The site has frontage on Southern Avenue (located in the District of Columbia) and Wheeler Road (collector roadway) which is located north of the property. These roads are not regulated for traffic related noise and the application does not propose residential development. No additional information is required with regard to noise.



8. **Primary Management Area**—According to mapping research and as documented on the approved NRI, there are regulated environmental features present on-site including wetlands, 100-year floodplain and their associated buffers. This site drains to Oxon Run within the Potomac River Basin. Several areas of steep slope areas occur on-site.

The site contains a Primary Management Area (PMA) that is required to be preserved to the fullest extent possible per Section 24-130(b)(5). The Subdivision Regulations requires that: "...all plans associated with the subject application shall demonstrate the preservation and/or restoration of regulated environmental features in a natural state to the fullest extent possible." The regulated environmental features on the subject property include the delineated PMA.

Impacts to the regulated environmental features should be limited to those that are necessary for the development of the property. Necessary impacts are those that are directly attributable to infrastructure required for the reasonable use and orderly and efficient development of the subject property or are those that are required by County Code for reasons of health, safety, or welfare. Necessary impacts include, but are not limited to, adequate sanitary sewerage lines and water lines, road crossings for required street connections, and outfalls for stormwater management facilities. Road crossings of streams and/or wetlands may be appropriate if placed at the location of an existing crossing or at the point of least impact to the regulated environmental features. Stormwater management outfalls may also be considered necessary impacts if the site has been designed to place the outfall at a point of least impact. The types of impacts that can be avoided include those for site grading, building placement, parking, stormwater management facilities (not including outfalls), and road crossings where reasonable alternatives exist. The cumulative impacts for the development of a property should be the fewest necessary and sufficient to reasonably develop the site in conformance with County Code.

All wetland areas, 100-year floodplain, and the majority of steep slopes are located within the PMA. The PMA and adjacent woodlands are proposed for preservation or retention. Based on the proposed limits of disturbance, the regulated environmental features have been preserved to the fullest extent possible because no impacts are proposed.

9. **Stormwater Management**—The Prince George's County Department of Permitting, Inspections and Enforcement (DPIE) has approved a Stormwater Management Concept Plan, 19266-2015-00, to ensure that development of this site does not result in on-site or downstream flooding and that stormwater control is provided on-site. The approved concept shows the use of micro-bioretenion to treat stormwater for the entire project. Development of this site shall conform to that approval or any subsequent amendments.

The 2010 *Approved Water Resources Functional Master Plan* contains policies and strategies related to the sustainability, protection, and preservation of drinking water, stormwater, and wastewater systems within the County, on a countywide level. These policies are not intended to be implemented on individual properties or projects, and instead will be reviewed periodically on a countywide level. As such, each property reviewed and found to be consistent with the various countywide and area master plans; County ordinances for stormwater management, 100-year



floodplain, and woodland conservation; and programs implemented by DPIE; the Prince George's County Health Department; the Prince George's County Department of the Environment (DoE); the Prince George's Soil Conservation District; the M-NCPPC, Planning Department; and the Washington Suburban Sanitary Commission (WSSC) are also deemed to be consistent with this functional master plan.

10. **Parks and Recreation**—In accordance with Section 24-134(a) of the Subdivision Regulations, mandatory dedication of parkland is not required for the subject site because it consists of nonresidential uses.
11. **Trails**—This PPS has been reviewed for conformance with Sections 24-123 and 24-124.01 of the Subdivision Regulations, the 2009 Approved Countywide Master Plan of Transportation (MPOT), and the 2000 *Approved Master Plan and Sectional Map Amendment for the Heights and Vicinity (Planning Area 76A)* (Master Plan SMA) in order to implement planned trails, bikeways, and pedestrian improvements. The proposed development is not located within a community center or corridor per the Adequate Public Facility Review Map of Plan Prince George's 2035. Therefore, it is not subject to the requirements of Section 24-124.01, "Transportation Review Guidelines, Part 2, 2013."

There are no master plan trails issues that impact the subject site. There is an existing sidewalk on Southern Avenue for the entire frontage of the subject property in order to safely accommodate pedestrians. The concrete material of the sidewalk is carried across the site's vehicular access driveways to further delineate the crossings as part of the pedestrian realm. Furthermore, there is an existing sidewalk linking the public sidewalk along Southern Avenue with appropriate destinations on the subject site, such as the building entrance and parking lot. These existing facilities adequately accommodate pedestrians. It should be noted, however, that the entire right-of-way for Southern Avenue (including the sidewalk along the frontage of the subject site) is under the jurisdiction of the District of Columbia and is beyond the scope of this application.

The planned Barnaby Run Trail lies to the south of the subject site. The Maryland-National Capital Park and Planning Commission (M-NCPPC) owns land along this stream valley to the south and east of the subject property. Some of this land immediately abuts the subject property. However, it appears that the headwaters of Barnaby Run end on the property to the south of the subject application. Furthermore, this future stream valley trail is probably most appropriate in the residential communities to the south and east of the subject site where parkland has been acquired, not within the industrially zoned consolidated storage property. There are no additional master plan trail or sidewalk recommendations.

12. **Transportation**—The subject site has frontage is on Southern Avenue, a four-lane undivided roadway which is under the authority of the District of Columbia. The property currently and three vehicular access driveway along Southern Avenue. One driveway is proposed to be removed, which is supported by the Planning Board. This development will be served by surface parking. Access to the parking spaces and the overall site circulation are acceptable.



The PPS proposes expansion of an existing consolidated storage facility. The size of the expansion will be 98,831 square feet. Based on recommendation from the *Trip Generation Manual, 9th Edition* (Institute of Transportation Engineers), the planned development will add 30 AM and 32 PM trips during the peak hours. The signalized intersection of Southern Avenue and Wheeler Road (located 300 feet north of the site) is deemed to be critical to the development. Based on a May 12, 2015 peak hour turning movement count, the intersection operates with a LOS/CLV of C/1221 and B/1052 during the AM and PM peak hours. While these levels of service represent adequacy based on the "Guidelines," the intersection is located entirely outside the County, and therefore beyond the jurisdiction of the Planning Board. A trip cap of 48 AM and 51 PM peak-hour trips is recommended for the total on-site development of 157,261 square feet of GFA.

Based on the preceding findings, adequate transportation facilities would exist to serve the proposed subdivision as required under Section 24-124 of the Subdivision Regulations.

13. **Schools**—The subdivision has been reviewed for impact on school facilities in accordance with Section 24-122.02 of the Subdivision Regulations and the "Adequate Public Facilities Regulations for Schools" (County Council Resolutions CR-23-2001 and CR-38-2002), and concluded that the subdivision will have no impact on school clusters because it is a nonresidential use.
14. **Fire and Rescue**—The PPS has been reviewed for adequacy of fire and rescue services in accordance with Sections 24-122.01(d) and 24-122.01(e)(1)(E) of the Subdivision Regulations.

Section 24-122.01(e)(1)(E) states that "A statement by the Fire Chief that the response time for the first due station in the vicinity of the property proposed for subdivision is a maximum of seven (7) minutes travel time. The Fire Chief shall submit monthly reports chronicling actual response times for call for service during the preceding month."

The proposed project is served by Oxon Hill Fire/EMS, Company 842. This first due response station located at 1100 Marcy Avenue, Oxon Hill, Maryland, is within the maximum seven-minute travel time for nonresidential land uses.

#### **Capital Improvement Program (CIP)**

There are no Prince George's County CIP projects for public safety facilities proposed in the vicinity of the subject site.

The above findings are in conformance with the 2008 *Approved Public Safety Facilities Master Plan* and the "Guidelines for the Analysis of Development Impact on Fire and Rescue Facilities."

15. **Police Facilities**—The proposed development is within the service area of Police District IV, Oxon Hill. There is 267,660 square feet of space in all of the facilities used by the Prince George's County Police Department and the July 1, 2014 (U.S. Census Bureau) county population estimate is 904,430. Using the 141 square feet per 1,000 residents, it calculates to 127,524 square feet of space for police. The current amount of space 267,660 square feet is within the guideline.



16. **Water and Sewer Categories**—Section 24-122.01(b)(1) of the Subdivision Regulations states that “the location of the property within the appropriate service area of the Ten-Year Water and Sewerage Plan is deemed sufficient evidence of the immediate or planned availability of public water and sewerage for preliminary or final plat approval.” The 2008 *Water and Sewer Plan* placed part of this property in water and sewer Category 3, Community System. The site will therefore be served by public water and sewer service. The site is located in Sustainable Growth Tier 1 which also requires public service systems.
17. **Health Department**—The Prince George’s County Health Department has evaluated the PPS and recommends that the applicant remove any trash debris from the site at the time of grading permits.
18. **Public Utility Easement (PUE)**—In accordance with Section 24-122(a) of the Subdivision Regulations, when public utility easements (PUEs) are required by a public utility company, the subdivider should include the following statement on the final plat:

“Utility easements are granted pursuant to the declaration recorded among the County Land Records in Liber 3703 at Folio 748.”

The PPS correctly delineates a ten-foot-wide PUE along the public right-of-way as required, which will be reflected on the final plat prior to approval.

19. **Historic**—The existing building on the subject property was built in 1961 for the Henry B. Gilpin Company. The building was designed by the architectural firm of Chatelain, Gauger & Nolan and was constructed by E.A. Baker Co. The firm of Chatelain, Gauger & Nolan was formed in 1956 by Leon Chatelain, Jr., with partners Earl V. Gauger and James A. Nolan. This architectural and engineering firm was well known for its institutional and commercial buildings and also designed the Kiplinger Editor’s Park Building formerly located at 3401 East-West Highway in Hyattsville.

The Henry B. Gilpin Company was one of the largest and oldest wholesale drug companies in the country. Participants at an open house ceremony on May 6, 1962 included Maryland Governor Tawes and Dr. William S. Apple, Secretary and General Manager of the American Pharmaceutical Association. The new Gilpin building at 901 Southern Avenue contained 59,000 square feet of space and was equipped with conveyor systems for rapid handling of products. The Gilpin building was sold to Jack R. Tribble and Associates, an appliance and electrical components distribution firm, in November 1981. Harvey Memorial Baptist Church of Washington, D.C. acquired the building in August 2002.

The former Gilpin building was operated as a church from 2002 until recently. District of Columbia boundary marker SE 6 (#76A-018) is located on the western edge of the subject property. The site of the boundary stone is not shown on all of the plans and should. This boundary stone is one of 40 milestones marking the boundary between Maryland and Virginia and the original 100 square miles allotted for the City of Washington. The Maryland boundary stones were set in 1792. The 36 surviving boundary stones were listed in the National Register of Historic Places on November 1, 1996. Each stone has a three-foot easement around it that is considered



federal property. The District of Columbia Department of Transportation accepted legal responsibility for the stones from the Department of Interior in 2003.

Phase I archeological survey is not recommended on the property. Aerial photographs show that the subject property was extensively graded in the 1960s. A search of current and historic photographs, topographic and historic maps, and locations of currently known archeological sites indicates the probability of archeological sites within the subject property is low.

20. **Use Conversion**—The subject application is not proposing any residential development; however, if a residential land use were proposed, a new subdivision is recommended. There exists different adequate public facility requirements comparatively between residential and nonresidential uses, and there are other considerations for a residential subdivision not considered in the review of commercial, industrial, and mixed-use development including recreational components, noise, and access. A new subdivision is recommended if residential development is to be proposed.

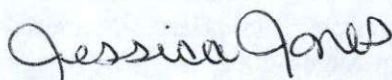
BE IT FURTHER RESOLVED, that an appeal of the Planning Board's action must be filed with Circuit Court for Prince George's County, Maryland within thirty (30) days following the date of notice of the adoption of this Resolution.

\* \* \* \* \*

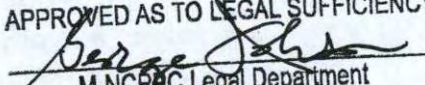
This is to certify that the foregoing is a true and correct copy of the action taken by the Prince George's County Planning Board of The Maryland-National Capital Park and Planning Commission on the motion of Commissioner Washington, seconded by Commissioner Geraldo, with Commissioners Washington, Geraldo, Shoaff, Bailey and Hewlett voting in favor of the motion at its regular meeting held on Thursday, November 19, 2015, in Upper Marlboro, Maryland.

Adopted by the Prince George's County Planning Board this 10th day of December 2015.

Patricia Colihan Barney  
Executive Director

  
By Jessica Jones  
Planning Board Administrator

PCB:JJ:WM:ydw

APPROVED AS TO LEGAL SUFFICIENCY  
  
M-NCPPC Legal Department  
Date 11/24/15





# THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

14741 Governor Oden Bowie Drive  
Upper Marlboro, Maryland 20772  
TTY: (301) 952-4366  
[www.mncppc.org/pgco](http://www.mncppc.org/pgco)

PGCPB No. 14-35

File No. DSP-13008

## RESOLUTION

WHEREAS, the Prince George's County Planning Board is charged with the approval of Detailed Site Plans pursuant to Part 3, Division 9 of the Zoning Ordinance of the Prince George's County Code; and

WHEREAS, DSP-13008 for Gilpin Property was approved by the Planning Board on July 25, 2013, and PGCPB Resolution No. 13-93 was adopted on September 12, 2013; and

WHEREAS, on October 15, 2013, the District Council elected to review this case; and

WHEREAS, on February 11, 2014, the District Council voted to remand the case to the Planning Board in accordance with Section 27-290 of the Zoning Ordinance in order to require the applicant to submit a revised detailed site plan that proposes architectural elevations and land uses that implement the November 2000 *Approved Master Plan and Sectional Map Amendment for the Heights and Vicinity Planning Area 76A*, and provide additional information; and

WHEREAS, by letter dated April 7, 2014 (attached hereto as Exhibit A), the applicant has declined to submit a revised detailed site plan for the reasons stated in Exhibit A; and

WHEREAS, the applicant raises valid points about the limits of detailed site plan review by the Planning Board, and the lack of authority in the Zoning Ordinance to require a detailed site plan to conform to a master plan; and

WHEREAS, the District Council's Remand Order requires the Planning Board to reconsider the detailed site plan for conformance to the applicable master plan upon receipt of a revised detailed site plan, however no revised site plan will be submitted by the Applicant, so the Planning Board has no authority, pursuant to the remand order, to reconsider the detailed site plan; and

WHEREAS, the Remand Order requires the Planning Board, prior to taking additional testimony, to issue an informational mailing in compliance with Section 24-119.01 and CB-55-2008, provisions of the Subdivision Regulations for the County, however the subject application is a detailed site plan not a subdivision, and is not subject to the Subdivision Regulations. Further the Planning Board cannot take additional testimony for the reasons stated above, so the requirement of an informational mailing is moot;

### NOW THEREFORE,

1. The Planning Board has no authority to re-open or reconsider the detailed site plan.
2. The Planning Board hereby returns this matter to the District Council.

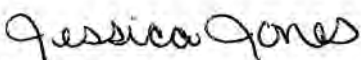


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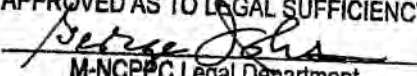
This is to certify that the foregoing is a true and correct copy of the action taken by the Prince George's County Planning Board of The Maryland-National Capital Park and Planning Commission on the motion of Commissioner Geraldo, seconded by Commissioner Shoaff, with Commissioners Geraldo, Shoaff, Bailey and Hewlett voting in favor of the motion, and with Commissioner Washington absent at its regular meeting held on Thursday, May 1, 2014, in Upper Marlboro, Maryland.

Adopted by the Prince George's County Planning Board this 1st day of May 2014.

Patricia Colihan Barney  
Executive Director

  
By Jessica Jones  
Planning Board Administrator

PCB:JJ:MF:arj

APPROVED AS TO LEGAL SUFFICIENCY  
  
M-NCPPC Legal Department  
Date 5/2/14





# THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

PGCPB No. 15-137

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File No. DSP-13008-01

## RESOLUTION

WHEREAS, the Prince George's County Planning Board is charged with the approval of Detailed Site Plans pursuant to Part 3, Division 9 of the Zoning Ordinance of the Prince George's County Code; and

WHEREAS, in consideration of evidence presented at a public hearing on December 17, 2016 regarding Detailed Site Plan DSP-13008-01 for Gilpin Property, the Planning Board finds:

1. **Request:** The subject application requests approval for the construction of an additional 98,832 square feet of consolidated-storage use with an additional 948 interior and exterior-access units in one new building and three building expansions to the existing 58,430-square-foot consolidated storage building with 515 interior-access units.
2. **Development Data Summary:**

	EXISTING	APPROVED
Zone(s)	I-1	I-1
Use(s)	Consolidated Storage	Consolidated Storage
Acreage	14.43	14.43
Total Square Footage/GFA	58,430	157,262 (98,832 proposed)
Storage Units	515	1,463 (948 proposed)

### OTHER DEVELOPMENT DATA

<b>Parking Required:</b>	<b>36 spaces</b>
Storage Consolidated – 1,463 units @ 1 space per 50 units	30 spaces
Office Space – 1,064 sq. ft. @ 4 spaces per 1,000 sq. ft.	4 spaces
Resident Manager – 1 manager @ 2 spaces per manager	2 spaces

<b>Parking Approved:</b>	<b>42 spaces</b>
Standard Spaces	40 spaces
Van-Accessible ADA Spaces	2 spaces

<b>Loading Required:</b>	<b>6 spaces</b>
157,262 sq. ft. @ 2 spaces for first 10,000 sq. ft.	2 spaces
+ 1 space per each additional 40,000 sq. ft.	4 spaces

<b>Loading Approved:</b>	<b>7 spaces</b>
7 spaces at 12 ft. x 45 ft.	7 spaces



3. **Location:** The subject property is located in the southeastern quadrant of the intersection of Southern Avenue and Wheeler Road, approximately 770 feet northeast of Southview Drive, in Planning Area 76A in Council District 7.
4. **Surrounding Uses:** The subject property is bounded to the east by an R-55-zoned (One-Family Detached Residential), vacant, wooded parcel (Parcel 31). To the southeast is a vacant, wooded R-O-S-zoned (Reserved Open Space) property (Parcel 52) that is owned by The Maryland-National Capital Park and Planning Commission (M-NCPPC). To the west of the M-NCPPC land is a C-S-C-zoned (Commercial Shopping Center) parcel (Parcel A), which is the site of a commercial shopping center and other commercial uses. The subject property is bounded to the northwest by Southern Avenue, whose right-of-way is under the jurisdiction of the District of Columbia. The properties located across Southern Avenue from the subject property are located within the District of Columbia, and are improved with single-family attached and apartment-style dwelling uses.
5. **Previous Approvals:** According to tax records, the primary structure on-site was constructed in 1961. Detailed Site Plan DSP-13008, to convert the primary structure to a consolidated storage use, was originally approved by the Planning Board on July 25, 2013 (PGCPB Resolution No. 13-93), subject to five conditions. The District Council elected to review the case and on February 11, 2014, voted to remand the case to the Planning Board. On May 1, 2014, the Planning Board determined that they had no authority to reconsider the DSP and returned the matter to the District Council (PGCPB Resolution No. 14-35). The District Council did not elect to re-hear the case and the original Planning Board resolution was affirmed as a final decision.

On November 19, 2015, the Planning Board heard and approved Preliminary Plan of Subdivision 4-15017 (PGCPB Resolution No. 15-119) for the additional square footage on the subject property.

6. **Design Features:** The original DSP application was approved to convert the existing one-story, brick structure on-site into a consolidated storage use by installing 615 storage units within the building, with a few minor exterior and site modifications. The current DSP revision application proposes to add three, one-story expansions to the existing building and build one, new, three-story building with a total of an additional 948 storage units.

The existing building sits in the northeast corner of the property, fronting on Southern Avenue, with a small parking lot to the east and loading spaces at the west end. Two access points off of Southern Avenue, at the east and west ends of the existing building, provide for vehicular access to the use. The previous approval provided for an office space and resident manager apartment at the east end of the existing building, which served as the primary building entrance area. All of the improvements approved under the original DSP have been implemented on the site and are to remain largely unchanged with the subject application.

The major change proposed with the subject revision is to construct a separate 34.67-foot-high, three-story building, Building 'B,' to the west of the existing building along the Southern Avenue



frontage and to build three, one-story expansions along the western and southern elevations of the existing building. In addition to the building modifications, the applicant proposes to modify the on-site fencing to extend the secured vehicular access around the new building; new stormwater features east of the existing building and along the southeastern edge of the site; expansion of the parking area to the east and south of the existing building; additional loading spaces to the west of the proposed building; and a new retaining wall along the southern side of the proposed building.

Building 'B's shorter elevation faces Southern Avenue to the north. This elevation includes some beige metal panel, reddish decorative concrete block with quoining, storefront windows and enhanced cornices at either end to provide variety to the flat roofline. The Planning Board found that additional masonry be added to the north and east elevations, at the intersecting corner only, such that the masonry would extend a minimum of eight feet in height above the grade level. A large green and white, internally-illuminated cabinet building-mounted sign, similar to two on the existing building, is located along the eastern end of the northern elevation. Beige metal roll-up doors provide access to the exterior facing units along the ground level on the eastern and western elevations of Building 'B.' These elevations are finished with the reddish decorative concrete block for the entirety of the ground level, with beige metal panel above, and glass sliding doors at either end for access to the interior storage units. The southern elevation, which faces the proposed stormwater features and existing woodlands, continues the concrete block along the ground level with beige metal panel above with no other features or entrances.

The three building expansions proposed on the existing Building 'A' will have all exterior-access units with beige metal roll-up doors and is proposed to be finished in painted corrugated metal panel. The Planning Board found that this material is not visually appropriate and it should be changed to match the decorative concrete block proposed for the new building, which will also blend better with the existing brick building they are attached to.

The Planning Board found that the proposed metal sloping roof be brown in color to match the existing building. A condition requiring this has been included in this approval.

#### COMPLIANCE WITH EVALUATION CRITERIA

7. **Prince George's County Zoning Ordinance:** The subject application has been reviewed for compliance with Part 3, Division 1, General Zoning Procedures; the requirements of the I-1 Zone; the site plan design guidelines of the Zoning Ordinance; Part 11, Off-Street Parking and Loading; and Part 12, Signs, as follows:
  - a. In accordance with Section 27-473(b), Table of Uses, the proposed consolidated storage building is permitted in the I-1 Zone, in accordance with Section 27-475.04(a)(1), and subject to DSP approval. The subject site meets these requirements, as follows:



(1) **Requirements.**

- (A) **No entrances to individual consolidated storage units shall be visible from a street or from adjoining land in any Residential or Commercial Zone (or land proposed to be used for residential or commercial purposes on an approved Basic Plan for a Comprehensive Design Zone, or any approved Conceptual or Detailed Site Plan).**

The architectural elevations indicate that no entrances to individual units are visible from any street or from adjoining land in any residential or commercial zone.

- (B) **Entrances to individual consolidated storage units shall be either oriented toward the interior of the development or completely screened from view by a solid wall, with landscaping along the outside thereof.**

All proposed individual storage units are either oriented toward the interior of the development, such as along the east elevation of Building 'B' and west elevation of the existing building, or are screened by existing trees or proposed landscaping.

- (C) **The maximum height shall be thirty-six (36) feet. Structures exceeding this height and approved before January 1, 2000, shall not be considered nonconforming.**

The existing building ranges from 15 feet to approximately 32 feet in height including the parapet features. The site plan notes the average height of the proposed building is 34.67 feet from the finished floor, with the parapet features. It is unclear how this building height was determined relative to the Zoning Ordinance definition. Therefore, a condition has been included in this approval to revise the site plan and architecture as necessary to describe the clear conformance to the 36-foot maximum height.

- b. In accordance with Section 27-474(b), Regulations, the proposal meets the setback and ten percent green area requirements of the I-1 Zone. The buildings are set back a minimum of 25 feet from the street as required in the I-1 Zone.
- c. The proposal includes building-mounted signs, which have been reviewed for conformance with I-1 Zone regulations as follows:

**Building-Mounted Signs:** The applicant proposes one new building-mounted sign. Section 27-613(c)(3)(B) states the following:



- (B) In all Commercial Zones (except the C-O Zone) and all Industrial Zones (except the I-3 and U-L-I Zones), if all of the permissible sign area is to be used on any building occupied by only one (1) use that is not located within an integrated shopping or industrial center or office building complex, the following applies:
- (i) Each building shall be allowed a sign having an area of at least sixty (60) square feet.
  - (ii) Except as provided in (i), above, the area of all of the signs on a building shall be not more than two (2) square feet for each one (1) lineal foot of width along the front of the building (measured along the wall facing the front of the lot or the wall containing the principal entrance to the building, whichever is greater), to a maximum of four hundred (400) square feet.

The proposed building-mounted signage will be located on the northern elevation of the new building, Building 'B'. The front wall of this building is 280 feet long and the proposed sign is 100 square feet, which complies with this requirement. The applicant has asked for additional building-mounted signage, with a similar design, be allowed up to the maximum area allowed by the Zoning Ordinance. The Planning Board found this acceptable and has included a condition in this approval allowing for this revision prior to certification.

8. **Conformance with Preliminary Plan of Subdivision 4-15017:** Preliminary Plan of Subdivision (PPS) 4-15017 was heard and approved by the Planning Board on November 19, 2015, subject to ten conditions. The Planning Board is scheduled to adopt a final resolution of approval on December 10, 2015, (PGCPB Resolution No. 15-119), subject to the same conditions, of which the following are applicable to the review of this DSP and warrant discussion as follows:

2. **Development of this site shall be in conformance with Stormwater Management Concept 19266-2015 Plan and any subsequent revisions.**

The Department of Permitting, Inspections and Enforcement (DPIE) provided a referral stating that the DSP is consistent with the Approved Stormwater Management Concept Plan No. 19266-2015, dated July 20, 2015.

10. **Total development shall be limited to uses that would generate no more than 48 AM and 51 PM peak-hour vehicle trips.**

**Any development generating an impact greater than that identified herein shall require a new preliminary plan of subdivision with a new determination of the adequacy of transportation facilities.**



The subject DSP proposes exactly the same amount of development as was approved with the PPS and the Transportation Planning Section indicated there are no transportation issues with the DSP. Therefore, it can be found that the application as proposed is in conformance with Condition No. 10 above.

9. **Conformance to Detailed Site Plan DSP-13008:** Detailed Site Plan DSP-13008 was originally approved by the Planning Board on July 25, 2013 (PGCPB Resolution No. 13-93), subject to five conditions. The District Council ultimately affirmed the Planning Board's decision. The following conditions of that approval are relevant to the subject application:

**PGCPB Resolution No. 13-93 Conditions of Approval:**

1. **Prior to certificate of approval of the detailed site plan (DSP), the following revisions shall be made, or information shall be provided:**

- c. **The location and square footage of the office shall be indicated on the detailed site plan.**

The office space for the use is located at the eastern end of the existing building on-site and no office space will be provided in the proposed building.

- e. **A note shall be provided stating that "black-out windows along Southern Avenue shall not be permitted."**

This specified note has been provided on the site plan revision to ensure that the proposed building complies with this requirement.

- f. **The three-space parking lot along Southern Avenue shall be removed and replaced with green area. Two additional shade trees shall be provided near the removed driveway on the subject property as a continuation of the streetscape.**

The previous DSP was revised to reflect these improvements prior to certification and they have now been implemented in the field.

- g. **All information regarding a freestanding sign shall be removed from the DSP submission, including the architectural plans.**

This was completed prior to the previous DSP certification and no new freestanding signage is proposed with this application.

- i. **All chain-link fencing visible from Southern Avenue (with or without barbed wire) shall be removed, or replaced with a durable metal fence.**



This condition was complied with prior to certification of the original DSP and has been maintained by the site improvements proposed with the subject revision.

- j. The right-of-way width for Southern Avenue shall be shown on the plan, as well as the building's setback from this right-of-way.**

This condition was complied with prior to certification of the original DSP and is also being met by the subject revision.

- l. The parking schedule shall be revised to reflect the elimination of the three-space parking lot. Two handicap parking spaces shall be provided.**

This condition was complied with prior to certification of the original DSP and is also being met by the subject revision.

- m. The plan shall indicate that cut-off or shielded light fixtures are provided.**

This condition was complied with prior to certification of the original DSP and is also being met by the subject revision through the provision of building-mounted, downward-facing floodlights.

- n. Sufficient lighting consistent with Police Department recommendations shall be provided for the parking lots at the rear of the building and within the southwest parking lot.**

The site plan revision shows proposed building-mounted lights around the proposed building and building expansions. The Prince George's Police Department indicated that there are no crime prevention through environmental design (CPTED) at this time.

- o. A note indicating the security plan shall be provided on the DSP.**

This condition was complied with prior to certification of the original DSP and is also being met by the subject revision.

- 4. Prior to approval of use and occupancy permits, the existing three-space parking lot along Southern Avenue shall be removed and replaced with green area.**

The specified parking lot was shown as to be removed on the original DSP approval and is not shown on the current DSP. The applicant also provided photographic evidence that the parking lot has been removed.

- 5. The applicant agrees to seek to have the parking lot's remaining driveway apron along Southern Avenue removed. The District of Columbia's Government has exclusive jurisdiction in this request.**



The District of Columbia's Government approved the removal of the driveway and the applicant provided photographic evidence confirming that it has been implemented in the field.

10. **2010 Prince George's County Landscape Manual:** The DSP for additional building square footage is subject to the requirements of the 2010 *Prince George's County Landscape Manual* (Landscape Manual), as follows:
  - a. **Section 4.2, Requirements for Landscaped Strips along Streets**—Section 4.2 specifies that, for all nonresidential uses in any zone and for all parking lots, a landscape strip shall be provided on the property abutting all public and private streets. This section applies to the subject application, along its frontage on Southern Avenue, because it proposes an increase of more than ten percent of the gross floor area on the site. The submitted plans provided schedules and notes demonstrating conformance to this section through both proposed tree plantings along the eastern end of the frontage and existing woodlands along the western end.
  - b. **Section 4.3, Parking Lot Requirements**—Section 4.3 requires parking lot interior planting depending on the size of the parking lot. This application proposes the reconfiguration and expansion of the parking lot making it subject to the requirements of this section. The submitted plans provide the appropriate schedule demonstrating conformance to this section.
  - c. **Section 4.4, Screening Requirements**—Section 4.4 requires that all dumpsters, loading spaces, and mechanical areas be screened from adjoining existing residential uses, land in any residential zone, and constructed public streets. There are four existing loading spaces and two proposed dumpsters on the west side of the building, which are screened by an existing brick retaining wall located parallel to the right-of-way. There are three new loading spaces proposed at the west end of the new building which will be screened from the right-of-way by proposed evergreen trees.
  - d. **Section 4.7, Buffering Incompatible Uses**—A goal of Section 4.7 is to provide a comprehensive, consistent, and flexible landscape buffering system that provides transitions between moderately incompatible uses. This section applies to the subject application because it proposes an increase of more than ten percent of the gross floor area on the site. The submitted plans provide the appropriate schedules and notes demonstrating conformance to this section.
  - e. **Section 4.9, Sustainable Landscaping Requirements**—The site is subject to Section 4.9, which requires that a percentage of the proposed plant materials be native plants. The required schedule and notes has been provided on the plan and indicate conformance with this section.



11. **Prince George's County Woodland and Wildlife Habitat Conservation Ordinance:** The site is subject to the provisions of the Prince George's County Woodland and Wildlife Habitat Conservation Ordinance (WCO) because the property is greater than 40,000 square feet in size and it contains more than 10,000 square feet of existing woodland. A Type 2 Tree Conservation Plan, TCP2-018-13 was previously reviewed as a companion case to Detailed Site Plan DSP-13008, and was found to be in conformance with the Woodland Conservation Ordinance (PGCPB Resolution No. 13-93). The project is subject to the environmental regulations of Subtitles 25 and 27 that came into effect on September 1, 2010 because the application is for a revised DSP in association with a recently approved preliminary plan.

The site contains a total of 9.66 acres of woodlands. The site has a woodland conservation threshold of 2.09 acres and a total requirement of 2.61 acres. The TCP2 proposes to meet the entire requirement with on-site woodland preservation (2.61 acres). According to the TCP2, an additional 5.46 acres of woodland will be preserved, but not credited including 0.5 acres within 100-year floodplain. Therefore, a total of 8.07 acres of woodland is proposed to remain on the subject site. The preservation acreage shown on the TCP2 worksheet differs from the total acreage on the recently approved TCP1 by 0.47 acres. Although the acreages vary between the plans, no additional woodland is shown to be preserved on the plan. Prior to signature approval of the TCP2, the worksheet shall be evaluated for conformance to the woodland conservation requirements as approved on the TCP1.

Two areas of woodland shown as "Woodland Preserved-Not Credited" are within the proposed Limit of Disturbance (LOD) on the TCP2. These areas shall be removed from the LOD and shown as cleared, which would require the acreage of "Woodland Preserved-Not Credited" to be reduced. If the areas are proposed to remain, the LOD must be revised to reflect them to remain undisturbed. The first area is located west of the proposed retaining wall, southwest of proposed Building 'B.' The second area is a narrow strip of woodland along the property line, east of the existing warehouse structure.

The subject property was previously subject to a Detailed Site Plan application (DSP-13008) and Type 2 Tree Conservation Plan TCP2-018-13. A Woodland Conservation Easement (1.51 acres) was recorded at 36197/466 per TCP2-018-13. The Primary Management Area (PMA) shown on the TCP2 is consistent with previously approved TCP2; however, the proposed additional clearing with the current application yields increased woodland conservation requirements beyond what has already been recorded under TCP2-018-13. As such, prior to signature approval of the revised TCP2, the current woodland conservation easement will need to be vacated and the new easement must be recorded.

The acreage of the PMA shown on the submitted TCP2 (42,488 square feet) is inconsistent with the acreage of the PMA shown on the revised NRI and TCP1 (45,939 square feet). The acreage of the PMA on the TCP2 should be revised for consistency with previous plans. Conditions have been included in this approval requiring the specified revisions.



12. **Tree Canopy Coverage Ordinance:** Subtitle 25, Division 3, the Tree Canopy Coverage Ordinance, requires a minimum percentage of tree canopy coverage (TCC) on projects that require a grading permit for more than 5,000 square feet of disturbance. Properties that are zoned I-1 are required to provide a minimum of ten percent of the gross tract area in tree canopy. The subject property is 14.44 acres in size, resulting in a TCC requirement of 1.44 acres.

The provided tree canopy worksheet indicates that 7.59 acres of existing trees and 10,555 square feet of landscape trees will be provided on the subject site for a total of 7.83 acres of tree canopy, which meets and exceeds this requirement.

13. **Further Planning Board Findings and Comments from Other Entities:**

- a. **Archeological Review**—The Planning Board reviewed a brief history of the subject property and found that a Phase I archeological survey is not recommended on the subject property. Aerial photographs show that the subject property was extensively graded in the 1960s. A search of current and historic photographs, topographic and historic maps, and locations of currently known archeological sites indicates the probability of archeological sites within the subject property is low.
- b. **Community Planning**—The application is consistent with the *Plan Prince George's 2035 Approved General Plan* (Plan Prince George's 2035). The development application is consistent with the 2000 *The Heights and Vicinity Approved Master Plan and Sectional Map Amendment* (Heights and Vicinity Master Plan and SMA). There are no planning issues.
- c. **Transportation Planning**—There are no transportation issues with the subject application.
- d. **Subdivision Review**—The subject property is composed of Lots 1 and 2 – Gilpin Property, recorded in Plat WWW 40 1 in February, 1961 in the County Land Records. The property also includes Lots 6 through 10 and part of Lot 5, Block 1 and all of Lots 1 through 8, Block 2, as shown on Plat 25-82 – Southern Hills Manor and all of Brandywine Street having been abandoned by Equity Case No. C-9990. The property is located on Tax Map 87 in Grid B-3, and is approximately 14.44 acres in size. The site is currently improved with 58,430 square feet of gross floor area (GFA) for industrial use. This DSP proposes the addition of 98,831 square feet of GFA for industrial use and depicts a lot line adjustment between existing Lots 1 and 2. The proposed total GFA is 157,262 square feet. Pursuant to Section 24-111(c)(3) of the Subdivision Regulations, a final plat of subdivision approved prior to October 27, 1970 shall be resubdivided prior to issuance of a building permit for the development of more than 5,000 square feet of GFA. Therefore, a Preliminary Plan of Subdivision (PPS) must be approved for the site prior to approval of the DSP, pursuant to Section 27-270 Order of Approvals of the Zoning Ordinance.



Preliminary Plan 4-15017 has been submitted for concurrent review and was approved by the Planning Board on November 19, 2015. The proposed development shown on the DSP is consistent with the PPS.

Subdivision comments are as follows:

- (1) Prior to certification of the DSP, the following corrections should be required:
  - (a) Revise General Note 3(A) to reflect that the subdivision is "Gilpin Property."
  - (b) Revise General Note 3(F) to state the following: "Number of Lots: 2."
  - (c) Revise General Note 3(M) to provide the approval date of the SWM Concept Plan.
  - (d) Revise General Note 3(X) to state that the site is located at the intersection of Wheeler Road and Southern Avenue.
  - (e) Demonstrate the proposed lot line adjustment requested with PPS 4-15017 with bearings and distances, and provide the acreage of land being adjusted.

Failure of the site plan and record plat to match (including bearings, distances, and lot sizes) will result in permits being placed on hold until the plans are corrected. There are no other subdivision issues at this time.

The DSP has been revised to address the Subdivision comments.

- e. **Trails**—The Planning Board reviewed an analysis regarding the site plan's conformance with the Heights and Vicinity Master Plan and SMA (area master plan) and the November 2009 *Approved Countywide Master Plan of Transportation* (MPOT).

There are no master plan trails issues that impact the subject site in either the MPOT or the area master plan. It should be noted that the entire right-of-way for Southern Avenue (including the sidewalk along the frontage of the subject site) is under the jurisdiction of Washington, D.C. and is beyond the scope of this application or the control of Prince George's County. However, there is an existing sidewalk on Southern Avenue for the entire frontage of the subject property in order to safely accommodate pedestrians. The concrete material of the sidewalk is carried across the site's ingress/egress points to further delineate the pedestrian crossings as part of the pedestrian realm. Furthermore, there is an existing sidewalk linking the public sidewalk along Southern Avenue with appropriate



destinations on the subject site, such as the building entrance and parking lot. These existing facilities adequately accommodate pedestrian along and to the subject application.

It should also be noted that the planned Barnaby Run Trail lies to the south of the subject site. The Maryland-National Capital Park and Planning Commission (M-NCPPC) owns land along this stream valley to the south and east of the subject property. Some of this land immediately abuts the subject property. However, it appears that the headwaters of Barnaby Run end on the property to the south of the subject application. Furthermore, this future stream valley trail is probably most appropriate in the residential communities to the south and east of the subject site where parkland has been acquired, not within the subject industrially-zoned consolidated storage property. There are no additional master plan trail or sidewalk recommendations.

- f. **Permit Review**—Permit comments have been addressed by revisions to the plans or are addressed in conditions of approval.
- g. **Environmental Planning**—The Environmental Planning Section approved a Natural Resources Inventory, NRI-029-13, for this project area on April 1, 2013. According to mapping research and as documented on the approved NRI, there are regulated environmental features present on-site that include wetlands, 100-year floodplain and their associated buffers. This site drains to Oxon Run within the Potomac River Basin. There are several areas of steep slope on the property. The predominant soils on the site, according to the US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS), are the Beltsville-Urban land complex, Christiana-Downer complex, Croom gravelly sandy loam, Grosstown-Urban land complex, Issue-Urban land complex, Potobac-Issue complex and Sassafras-Urban land complex. According to available information, Marlboro clay is not located on-site, but Christiana complexes are found to occur on this property. The Maryland Department of Natural Resources, Natural Heritage Program provided correspondence to the applicant on February 6, 2013 indicating there are no rare, threatened, or endangered (RTE) species on or in the vicinity of this property. No specimen trees were identified on-site through the NRI process. There are no nearby noise sources and the proposed use is not expected to be a noise generator. There are no designated scenic or historic roads adjacent or within the site area.
- h. **Fire/EMS Department**—In a memorandum dated November 17, 2015, the Prince George's County Fire/EMS Department offered information on needed accessibility, private road design, and the location and performance of fire hydrants.
- i. **Department of Permitting, Inspections and Enforcement (DPIE)**—In a memorandum dated November 30, 2015, DPIE offered the following comments on the subject application:



- (1) The property is located at 901 Southern Avenue in the southeast quadrant of the intersection of Southern Avenue and Wheeler Road. Access to this site is from Southern Avenue which is under the jurisdiction of the District of Columbia. The application request is for 157,262 square feet of proposed building additions and new building.
- (2) All improvements on-site are to be in accordance with the County Grading and Road Ordinance, the Department of Public Works and Transportation's (DPW&T) Specifications and Standards and the Americans with Disabilities Act (ADA).
- (3) Existing sidewalks and ramps along all roadways within the property limits may require repair/replacement. Applicant shall secure permits from the District of Columbia for work in the public right-of-way.
- (4) A District of Columbia permit is required for additional access points onto existing frontage road(s), improvements of existing access points, utility taps. A DPIE grading permit is required for on-site grading work associated with this development.
- (5) The proposed site plan is consistent with approved DPIE Stormwater Management Concept Plan No. 19266-2015, dated July 20, 2015.
- (6) All easements are to be approved by DPIE, and recorded prior to the technical approval/issuance of permits.
- (7) A maintenance agreement is to be approved by DPIE, and recorded prior to the technical approval/issuance of permits.
- (8) A soils investigation report, which includes subsurface exploration and a geotechnical engineering evaluation, is required.
- (9) DPIE has no objection to the proposed expansion of existing facility.
- (10) This memorandum incorporates the site development plan review pertaining to stormwater management (Section 32-182(b) of the Prince George's County Code).

The following comments are provided pertaining to this approval phase:

- (a) Final site layout, exact impervious area locations are not shown on plans.
- (b) The exact acreage of impervious area has not been provided.



- (c) Proposed grading is shown on the plans.
- (d) Delineated drainage areas at all points of discharge from the site have not been provided.
- (e) Stormwater volume computations have not been provided.
- (f) Erosion/sediment control plans that contain the construction sequence, and any phasing necessary to limit earth disturbances and impacts to natural resources, and an overlay plan showing the types and location of ESD devices and erosion and sediment control practices are not included in the submittal.
- (g) A narrative in accordance with the County Code has not been provided.
- (h) Provide any missing information described above for further review with permit submission.

The majority of DPIE's comments are either factual or are required to be addressed prior to issuance of permits, at the time of technical plan approvals. It should be noted that DPIE has stated that the plans are consistent with the approved stormwater management concept plan.

- j. **Prince George's County Police Department**—In a memorandum dated October 15, 2015, the Prince George's County Police Department indicated that there are no crime prevention through environmental design (CPTED) at this time.
- k. **Prince George's County Health Department**—In a memorandum dated November 23, 2015, the Health Department stated that the Environmental Engineering Program of the Prince George's County Health Department had completed a health impact assessment review of the subject DSP and had the following recommendations:
  - (1) There is an increasing body of scientific research suggesting that artificial light pollution can have lasting adverse impacts on human health. The applicant has satisfied comments previously made by the Health Department by indicating that "proposed lighting will provide patrons with a bright, safe atmosphere while not causing a glare onto adjoining properties."

This is noted.

- (2) During the demolition/construction phases of this project, no dust should be allowed to cross over property lines and impact adjacent properties. Indicate intent to conform to construction activity dust control requirements as specified in the



2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control.

This requirement will be enforced at the time of permit; however, a note should be provided on the DSP indicating the applicant's intent to conform with the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control requirements.

- (3) During the demolition/construction phases of this project, no noise should be allowed to adversely impact activities on the adjacent properties. Indicate intent to conform to construction activity noise control requirements as specified in Subtitle 19 of the Prince George's County Code.

This requirement will be enforced at the time of permit; however, a note should be provided on the DSP indicating the applicant's intent to conform to construction activity noise control requirements as specified in Subtitle 19 of the Prince George's County Code.

- (4) Living in proximity to green space is associated with reduced self-reported health symptoms, better self-rated health, and higher scores on general questionnaires. The detailed site plan proposes a green space that will be 71 percent of the total surface area of the site.

This is noted.

- l. **Washington Suburban Sanitary Commission (WSSC)**—In a memorandum dated October 16, 2015, WSSC provided standard comments on the DSP regarding existing water and sewer systems in the area, along with requirements for service and connections, requirements for easements, spacing, work within easements, and meters. These issues must be addressed at the time of permits for site work.
  - m. **Verizon**—Verizon did not offer comments on the subject application.
  - n. **Potomac Electric Power Company (PEPCO)**—PEPCO did not offer comments on the subject application.
  - o. **District of Columbia**—A referral was sent to the District of Columbia due to the site's proximity to the municipal boundary. A referral was not received prior to the hearing.
  - p. **Town of Forest Heights**—The Town of Forest Heights did not offer comments on the subject application.
14. Based on the foregoing, and as required by Section 27-285(b)(1) of the Zoning Ordinance, the detailed site plan represents a reasonable alternative for satisfying the site design guidelines of Subtitle 27, Part 3, Division 9, of the Prince George's County Code without requiring



unreasonable cost and without detracting substantially from the utility of the proposed development for its intended use.

15. Section 27-285(b)(4) of the Zoning Ordinance provides the following required finding for approval of a detailed site plan:

- (4) The Planning Board may approve a Detailed Site Plan if it finds that the regulated environmental features have been preserved and/or restored in a natural state to the fullest extent possible in accordance with the requirement of Subtitle 24-130 (b)(5).**

The Planning Board found that, based on the proposed limits of disturbance, the regulated environmental features have been preserved and/or restored to the fullest extent possible.

NOW, THEREFORE, BE IT RESOLVED, that pursuant to Subtitle 27 of the Prince George's County Code, the Prince George's County Planning Board of The Maryland-National Capital Park and Planning Commission adopted the findings contained herein and APPROVED the Type 2 Tree Conservation Plan (TCP2-018-13-01) and further APPROVED Detailed Site Plan DSP-13008-01 for the above-described land, subject to the following conditions:

1. Prior to certificate of approval of the detailed site plan (DSP), the following revisions shall be made, or information shall be provided:
  - a. Provide a plan note that indicates that the applicant intends to conform to construction activity dust control requirements as specified in the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control.
  - b. Provide a plan note that indicates that the applicant intends to conform to construction activity noise control requirements as specified in Subtitle 19 of the Prince George's County Code.
  - c. Provide wall heights and spot shots along on all existing and proposed retaining and screen walls on the site.
  - d. Indicate the correct proposed building square footage and unit numbers in the general notes on the DSP, as necessary.
  - e. Revise the parking space dimensions, requirements, and plant labels, as necessary to reflect what is provided.
  - f. Revise the architecture as follows:
    - (1) Provide decorative concrete block, to match Building 'B,' as the primary façade material on the three building expansions of Building 'A.'



- (2) Specify the sloped metal roof on the three building expansions of Building 'A' to be brown to match the existing brick.
    - (3) Extend the proposed decorative concrete block a minimum of eight feet in height above the grade level along the intersecting corner of the north and east elevations.
    - (4) Show all proposed building-mounted signage on Building 'B,' subject to the Zoning Ordinance requirements, to be reviewed by the Urban Design staff as designee of the Planning Board.
  - g. Revise the site plan and architecture, as necessary, to describe conformance to the maximum 36-foot building height requirement.
2. Prior to certification of the detailed site plan, the Type 2 Tree Conservation Plan shall be revised as follows:
- a. The TCP2 shall be revised to reflect the correct PMA acreage consistent with the approved NRI and TCP1.
  - b. The wetland and wetland buffer symbols shall be shown on the TCP2 plan as shown in the legend.
  - c. Add the existing treeline to the TCP2 plan.
  - d. Show the required vicinity map on the TCP2 plan.
  - e. Revise the limits of disturbance to exclude the areas of "Woodland Preserved-Not Credited" or show the area of "Woodland Preserved-Not Credited" within the limits of disturbance as cleared. Revise the worksheet as necessary.
3. The following note shall be placed on the Final Plat of Subdivision:

"This plat is subject to the recordation of a Woodland Conservation Easement pursuant to Section 25-122(d)(1)(B) with the Liber and folio reflected on the Type 2 Tree Conservation Plan."

BE IT FURTHER RESOLVED, that an appeal of the Planning Board's action must be filed with the District Council of Prince George's County within thirty (30) days following the final notice of the Planning Board's decision.

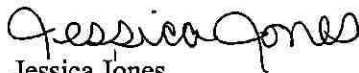


\* \* \* \* \*

This is to certify that the foregoing is a true and correct copy of the action taken by the Prince George's County Planning Board of The Maryland-National Capital Park and Planning Commission on the motion of Commissioner Washington, seconded by Commissioner Geraldo, with Commissioners Washington, Geraldo, Bailey, and Hewlett voting in favor of the motion, and with Commissioner Shoaff temporarily absent at its regular meeting held on Thursday, December 17, 2015, in Upper Marlboro, Maryland.

Adopted by the Prince George's County Planning Board this 7th day of January 2016.

Patricia Colihan Barney  
Executive Director

By   
Jessica Jones  
Planning Board Administrator

PCB:JJ:JK:rpg

APPROVED AS TO LEGAL SUFFICIENCY

  
M-NCPPC Legal Department

Date 12/21/15





# M-NCPPC — Development Review Division

## Detailed Site Plan/Specific Design Plan Submittal Checklist

Submittal Date: 4-24-2024

Project Name and Number: Gilpin Property, Phase III DSP-13008-02

Reviewer: Joshua Mitchum \_\_\_\_\_

Technician/ Review Date: Marty 4-24-2024 Date to Supervisor: 4-24-2024

Date to Reviewer: 4/29/24 Date Returned to Technician: \_\_\_\_\_

Date Comments Transmitted to Applicant: 5-13-2024 8-26-2024

Application and Posting Fee \$ \_\_\_\_\_

Dates Revised Plans/Documents Received: 8-8-2024

### DOCUMENTS REQUIRED

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Signed application form</li> <li><input type="checkbox"/> CD of all documents/plans required for acceptance</li> <li><input type="checkbox"/> Detailed site plan/specific design plan</li> <li><input type="checkbox"/> Landscape plan — scale is specified in plan requirements</li> <li><input type="checkbox"/> Architectural elevations all sides exterior structure (color copy, print &amp; digital) with acceptance submission for Planning Board</li> <li><input type="checkbox"/> Property Survey with bearing distances outlined in red</li> <li><input type="checkbox"/> Proposed sign plans (details)</li> <li><input type="checkbox"/> Existing conditions plan (for redevelopment only)</li> <li><input type="checkbox"/> Zoning sketch map (no older than 6 months)</li> <li><input type="checkbox"/> Conditions of all previous approvals, including comments from M-NCPPC Permits Office (if applicable)</li> <li><input type="checkbox"/> State Ethics Commission Affidavit(s) Form N/A</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> <del>Type 2 Tree Conservation plan, at same scale as site and landscape plan or Standard Letter of Exemption</del></li> <li><input type="checkbox"/> Approved Natural Resource Inventory or NRI Equivalency Letter</li> <li><input type="checkbox"/> Typed and signed Statement of Justification addressing all specific and general requirements</li> <li><input type="checkbox"/> Informational Mailing with Affidavit, Receipt and list of addressees</li> <li><input type="checkbox"/> Stormwater Management Concept Plan and Approval Letter</li> <li><input type="checkbox"/> WSSC Payment Receipt and all applicable pre-assessment checklists and scoping agreements</li> <li><input type="checkbox"/> Point by point response to initial review comments</li> </ul> |
|--|--|

### SITE PLAN REQUIREMENTS

#### General Notes:

- ☐ Subdivision or project name
- ☐ Total acreage (broken down by all zones)
- ☐ Existing zoning
- ☐ Proposed use of property
- ☐ Number of lots, parcels, outlots & outparcels
- ☐ Breakdown of proposed dwelling units by type
- ☐ Gross floor area of existing and proposed (commercial/industrial only)
- ☐ 200-foot map reference number (WSSC)
- ☐ Tax map number and grid
- ☐ Aviation policy area number and airport name/MIOZ
- ☐ Existing water/sewer designation
- ☐ Proposed water/sewer designation
- ☐ Stormwater management concept plan number
- ☐ 10-foot Public Utility Easement along all rights-of-way
- ☐ Mandatory park dedication (if applicable, how to be provided)
- ☐ Cemeteries on or contiguous to the property (indicate yes no)
- ☐ Historic sites on or in the vicinity of the property (indicate yes or no)
- ☐ Streams and wetlands (indicate yes or no) for each
- ☐ 100-year floodplain (indicate yes or no) source of delineation
- ☐ Chesapeake Bay Critical Area overlay (indicate yes or no)
- ☐ Source of topography
- ☐ Applicant (indicate either owner or contract purchaser)



**Plan Requirements:**

- ☐ Table of required site data
- ☐ North arrow
- ☐ Vicinity map
- ☐ Title block/QR Code
- ☐ Revision box
- ☐ Approvals blocks
- ☐ Location map
- ☐ Scale (1-inch equals 20 feet)
- ☐ Graphic scale
- ☐ Plans equal or greater than 3 sheets require: cover sheet, composite plan and key plan
- ☐ Cover sheet of residential plans show all models footprints with gross floor area
- ☐ Approval sheet for certificates of approval
- ☐ Match lines for each sheet
- ☐ Names and addresses of record owner(s), subdivider, and surveyor
- ☐ Subdivision, lot and block of adjacent properties
- ☐ Existing uses of adjacent properties
- ☐ Existing and proposed ownership of parcels and easements
- ☐ Parcel, lot, outlot, or outparcel designation
- ☐ Area of each lot, parcel, outlot or outparcel
- ☐ Aviation policy area location/MIOZ
- ☐ Seal and signature of land surveyor, architect or engineer and property line surveyor
- ☐ Existing and proposed locations, names, and present rights-of-way widths of adjacent streets, alleys or public ways
- ☐ Legal description of all existing easements and rights-of-way on or adjacent to property (including liber - folio)
- ☐ Center line or base line of existing rights-of-way with name of right of way
- ☐ Street grading concept: percent slopes/flow arrows and right-of-way for proposed roads
- ☐ Interchanges within and adjacent to the site
- ☐ Subdivision name and proposed street names, (if any)
- ☐ Adjoining property: ownership, zoning, legal description (Liber- Folio or Plat Number), description of existing uses, and major improvements within 50 feet of the property line
- ☐ Lot and parcel line dimensions and bearings and distances
- ☐ Existing topography at two-foot contours with labels
- ☐ Drainage area map
- ☐ For private well and septic, show proposed well locations and septic fields
- ☐ Land dedication area
- ☐ Location of entrance feature or gateway sign, if proposed
- ☐ Historic resources within or adjacent to the proposed site
- ☐ Dimension lines from townhouse block to project boundaries
- ☐ Location and details for fences and retaining walls
- ☐ Location, size and height and number of stories of existing structures and fences to remain and coverage calculations (if applicable)
- ☐ Location of proposed storm drains, water and sewer lines (if outside the public right-of-way) and house connections

- ☐ Size and height of proposed buildings
- ☐ Existing and proposed uses of structures
- ☐ Proposed grading and spot elevations
- ☐ Water/Sewer lines (existing and proposed) and how the development is to be served

**Parking Requirements:**

- ☐ Parking and loading schedule
- ☐ Layout of parking facilities
- ☐ Size and location of loading areas
- ☐ Typical parking space size
- ☐ Proposed striping
- ☐ Location of handicap parking
- ☐ Width of drive aisles
- ☐ Location of access roads and drive aisles
- ☐ Location of waste collection areas and proposed screening
- ☐ Proposed system of internal streets and right-of-way widths
- ☐ Right-of-way improvements (sidewalks, ramps, etc.)
- ☐ Lighting information for multifamily and townhouse, and for all nonresidential with parking compounds that will be in use at night.
- ☐ Ensure that lighting information is added to landscape plans only.
- ☐ Lighting may be placed with landscape to be titled Landscape and Lighting Plans (if applicable)
- ☐ Photometric plan
- ☐ Location, height of pole, and luminaire (1.25 lumens minimum, per BOCA requirements)
- ☐ Detail and specifications of fixture type

**Environmental Requirements:**

- ☐ Existing tree line as shown on the submitted TCP2
- ☐ Areas of woodland conservation as shown on the submitted TCP2
- ☐ Limits of disturbance as shown on the submitted TCP2
- ☐ Steep slopes (greater or equal to 15% less than 25% on highly erodible soils) and severe slopes (greater or equal to 25%)
- ☐ One-hundred-year floodplain; streams and their associated buffers; wetlands and their associated buffers and the full extent of the regulated area (expanded stream buffer or primary management area)
- ☐ Location of existing and/or proposed stormwater management facilities.

**Landscape and Recreation Requirements:**

- ☐ Keyed location of landscape materials proposed
- ☐ Planting schedule
- ☐ Planting details and specifications
- ☐ Location and layout of proposed recreational facilities
- ☐ Listing of proposed recreational facilities
- ☐ Proposed construction schedule for recreation facilities
- ☐ Construction specifications and details for recreation facilities
- ☐ Manufacturer and model numbers for recreational facilities
- ☐ Tree Canopy Coverage table



## APPLICATION DEFICIENCIES:

### Technician Comments:

- ~~1. Please submit NRI Plan or Equivalency Letter~~
- ~~2. Please submit SWM Approval Letter~~
- ~~3. Please submit WSSC receipt~~
- ~~4. Please submit a point by point response to all staff comments~~

### Supervisor Comments:

☐ SCHEDULE FOR SDRC

Please include below items for the planning board:

- Building elevation, section
- 3D model
- Signage information if any.

HKG, 5/10/24

### Reviewer Comments:

NOT Ready to accept — JSM 5/8/2024

NOT Ready to accept – JSM 8/26/2024

### Subdivision Section: ☐

~~1. PPS 4-15017 approved 2 lots (recorded subsequently as Lots 3 and 4) for 157,261 square feet of industrial use of which 58,430 square feet existed on Lot 3. DSP 13008-01 approved a 92,400 square foot building on Lot 4 and 6,769 square feet additions on Lot 3 (totalling 157,599 square feet). This development was determined to be within the trip cap established with Condition 10 of PGCPB Resolution No. 15-119 (48 AM and 51 PM peak-hour vehicle trips).~~

2. The resolution of the PPS also included a finding (finding 2) which evaluated both Lots 3 and 4 as one “lot”, and that “the proposed development on Lot 3 and 4 together has been reviewed as one “Lot” for conformance to the applicable zoning and Subdivision Regulations. Subsequent site plans will include both Lots 3 and 4 for review purposes.” Since Lots 3 and 4 share access, parking, stormwater management, this DSP should include Lot 3 as well.

~~3. DSP 13008-02 proposes a 115,364 square foot self storage facility on Lot 4. The applicant has provided in their statement of justification that the proposed development, in addition to the existing development on Lots 3 and 4 (157,999 sq.ft.), will remain within the trip cap established with the PPS. Transportation Planning Section should verify this statement.~~

4. The property boundary metes and bounds shown on the overall site plan do not match the plat of record. These should be corrected prior to acceptance.

MG 4/26/24.

Ok to accept. Comments 2 and 4 are outstanding and can be addressed after acceptance.

AS – 8/22/2024



**Environmental Planning Section:** ☒ **Not ready to accept.** ANK 4/30/2024

1. The following documents and plans are required prior to acceptance of the detailed site plan:

a. The approved valid natural resources inventory plan. NRI 029-13-01 was approved April 1, 2013 and has since passed the five year validity period. Revalidation is not applicable as this NRI is over ten years old. A revised NRI shall be approved prior to acceptance of the DSP. As part of the NRI revision an updated floodplain study is required.

b. A specimen tree variance request for the removal of specimen trees, which addresses the required findings and discusses each tree in detail. Within the specimen tree table on the TCP2 provide a column for condition rating and a column for the percentage critical root zone impact for each tree. Additionally indicate if there are any specimen trees within 100 feet of the property boundaries. Identify these specimen trees as off-site within the specimen tree table. Impacts to specimen trees shall be minimized to the extent practicable.

c. A statement of justification and exhibit for impacts to the PMA. Impacts to PMA shall be minimized to the extent practicable. Impacts to the PMA for stormwater management facilities of non-woody buffers are not supported.

d. The approved stormwater concept plan and associated letter which features the red DPIE approval stamp.

2. The submitted TCP2 shows the clearing of woodlands which have been recorded in a woodland conservation easement (Liber 38433 folio 437) to serve the prior development on-site. This easement shall be vacated and restated prior to signature approval of the TCP2. All woodland conservation areas shall meet the design requirements as established in Subtitle 25-122(b)(1). Proposed woodland conservation cannot overlap other easements.

3. As indicated in comment 2 above, additional clearing on-site is proposed. Revise the TCP2 worksheet to the current standard and indicate how much clearing is occurring both within the net tract and the floodplain. The applicant shall meet all requirements on-site as previously proposed.

4. The following technical corrections will be required on the TCP2:

a. Provide the top and bottom of wall elevations for the proposed retaining wall.

b. Identify all existing and proposed easements on the TCP2.

c. Within the Environmental Planning Section Approval block provide the prior TCP2 approval information and the DRD number for this case.

d. Revise TCP2 general note 9 to reference Section 25-119(G).

e. Between TCP2 general notes 14 and 15 add the appropriate spacing for the "Removal of Hazardous Trees or Limbs by Developers or Builders" heading.

f. Add the post development notes (ETM appendix A 35 — A 36) to the TCP2 general notes.

**Not ready to accept.** ANK 8/9/2024

1. An approved revised NRI plan and specimen tree variance were submitted, however the location of the specimen trees shown on the TCP2 are not reflective of the approved NRI plan. The TCP2 shall show all existing regulated environmental features in conformance with the approved NRI plan.

2. For the large area of woodland identified as "retained – not credited" that is outside of the perpetual easement could any of this area be utilized as woodland conservation or for afforestation? The applicant shall explore all opportunities to provide more woodland conservation on-site and adequate buffers to the PMA. Additionally, provide a more distinctive line type so the existing easements are more easily identifiable.

3. Additional clearing on-site is proposed. Revise the TCP2 worksheet to the current standard and indicate how much clearing is occurring both within the net tract and the floodplain. The applicant shall meet all requirements on-site as previously proposed.



4. Make sure that all symbols used on the TCP2 plan appear in the legend. Keep a consistent font and spacing for the general notes.

**Geotechnical Review:** ☒

~~Christiana complex is mapped on site according to PGAtlas. The site slopes down from north to south in elevation approximately from El. 170 to El. 100. Geotechnical investigation report including a slope stability analysis shall be submitted with this DSP application. The geotechnical analysis shall be performed in compliance with Prince George's County Geotechnical Guidelines, Techno-Gram 005-2018. In addition, soil borings along the proposed retaining walls and a global stability analysis on the cross section of the retaining walls shall be included in the report. The retaining wall design shall be performed in compliance with Retaining Wall Requirements, Techno-Gram 002-2021. Not ready to accept. DS 4/30/2024~~

A geotechnical report, titled Southern Avenue Self Storage – Phase III, prepared by Hillis-Carnes Engineering Associates, Inc. and dated May 15, 2023, has been submitted with the second submission. Based on the report, ten (10) soil borings were drilled at depths up to 60 feet. Christiana clay (CH, fat clay) was encountered in majority of the borings. Steep slopes are present on-site. Tall retaining walls have been proposed to accommodate the proposed construction. The following are the review comments:

1. Provide a slope stability analysis performed on critical slope sections for both unmitigated and mitigated conditions per Techno-Gram 005-2018.
2. Provide soil borings at a minimum rate of one soil test boring per 100 linear feet of the retaining wall length per Techno-Gram 002-2021.
3. Provide a global stability analysis performed on retaining wall sections taller than 10 feet or taller than 6 feet with a backslope 3 horizontal to 1 vertical or steeper per Techno-Gram 002-2021.

Not ready to accept. DS 8/21/2024

**Transportation Planning Section:** ☐

Ok to accept. However, the applicant shall demonstrate that the subject application, Phase III is within the trip cap established with 4-15017. Provide a trip generation matrix that includes the existing warehouses and the proposed. NS – 5/10/2024

**Historic-Archeology Section:** ☐ No additional information is needed. OK to accept. AGC 4/25/24

**Community Planning Division:** ☐ No additional information is needed. OK to accept. MT 5/7/24

**Special Projects :** ☐ N/A

**Parks Department:** ☐



**Case Number & Name:**

**Assigned Reviewer:** Joshua Mitchum

Please use the box to state the purpose of the application, as you want it to appear in DAMS description:  
(Note DAMS description can only hold 180 characters)

Development of an additional +/-115,364 square foot 3-story consolidated storage facility to the prior approved DSP-13008.

SELECT the REVIEW level

	<b>Planning Director level review</b> Posting is waived OR Posting is required?
<b>X</b>	<b>Planning Board level review</b>

SELECT SDRC scheduling option-

<b>X</b>	<b><u>YES</u>, application must be scheduled for SDRC</b>
	<b><u>NO</u>, application does NOT need be scheduled for SDRC</b>

SELECT – Business Entity Status with MD prior to preacceptance:

<https://egov.maryland.gov/businessexpress/entitysearch>

<b>X</b>	<b><u>YES</u>, applicant is registered in good standing</b>
	<b><u>NO</u>, applicant is NOT registered or not in good standing.</b>

Date/Initials: \_\_\_\_\_ Ready for Pre-Acceptance. I have reviewed the sign posting map  
**linked** and agree OR have changes.

Date/Initials: \_\_\_\_\_ Items needed to complete processing

Supervisor's Approval: \_\_\_\_\_

\_\_\_\_\_





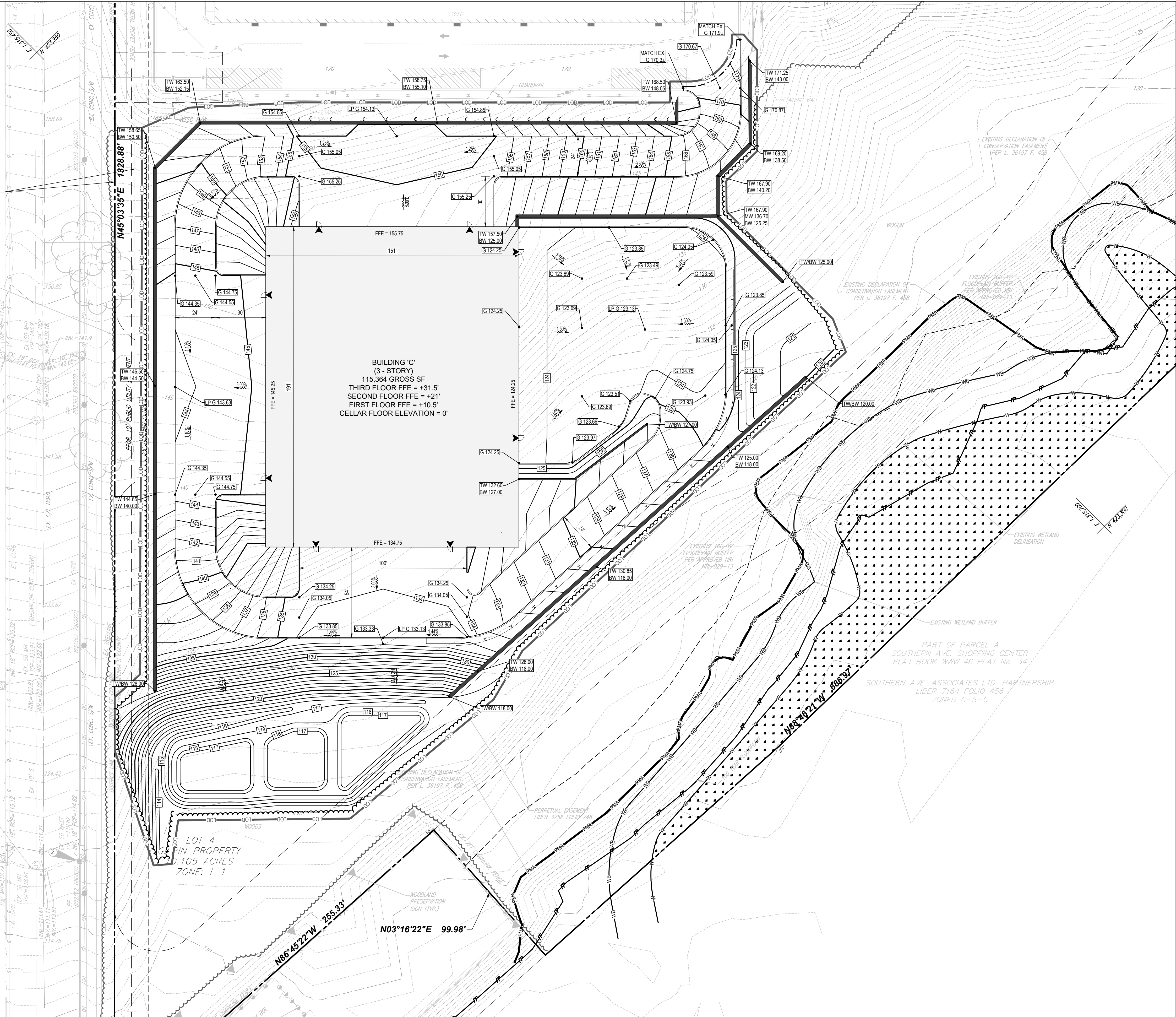
SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

12" WATER EASEMENT  
LIBER 2189 FOLIO 35 &  
PLAT BOOK WWV 40 PLAT 1

SD INLET  
(TOP MH=147.37)  
SAN. MH.  
TOP=144.04  
CL. INV.=132.74

BENCH MARK 2  
RIGHT FRONT CORNER  
SD INLET  
ELEV.= 119.23'



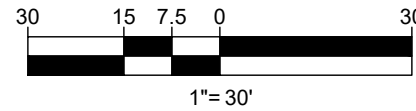
# CONCEPT GRADING PLAN

05/18/23 | SJL | MDB230010.00 |

**BOHLER** //

16701 MELFORD BLVD, SUITE 310  
BOWIE, MARYLAND 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com

ARCLAND SOUTHERN AVE





# ZONING SKETCH MAP

APP NO: DSP-13008-02

EXISTING ZONE:

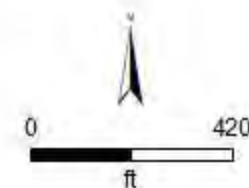
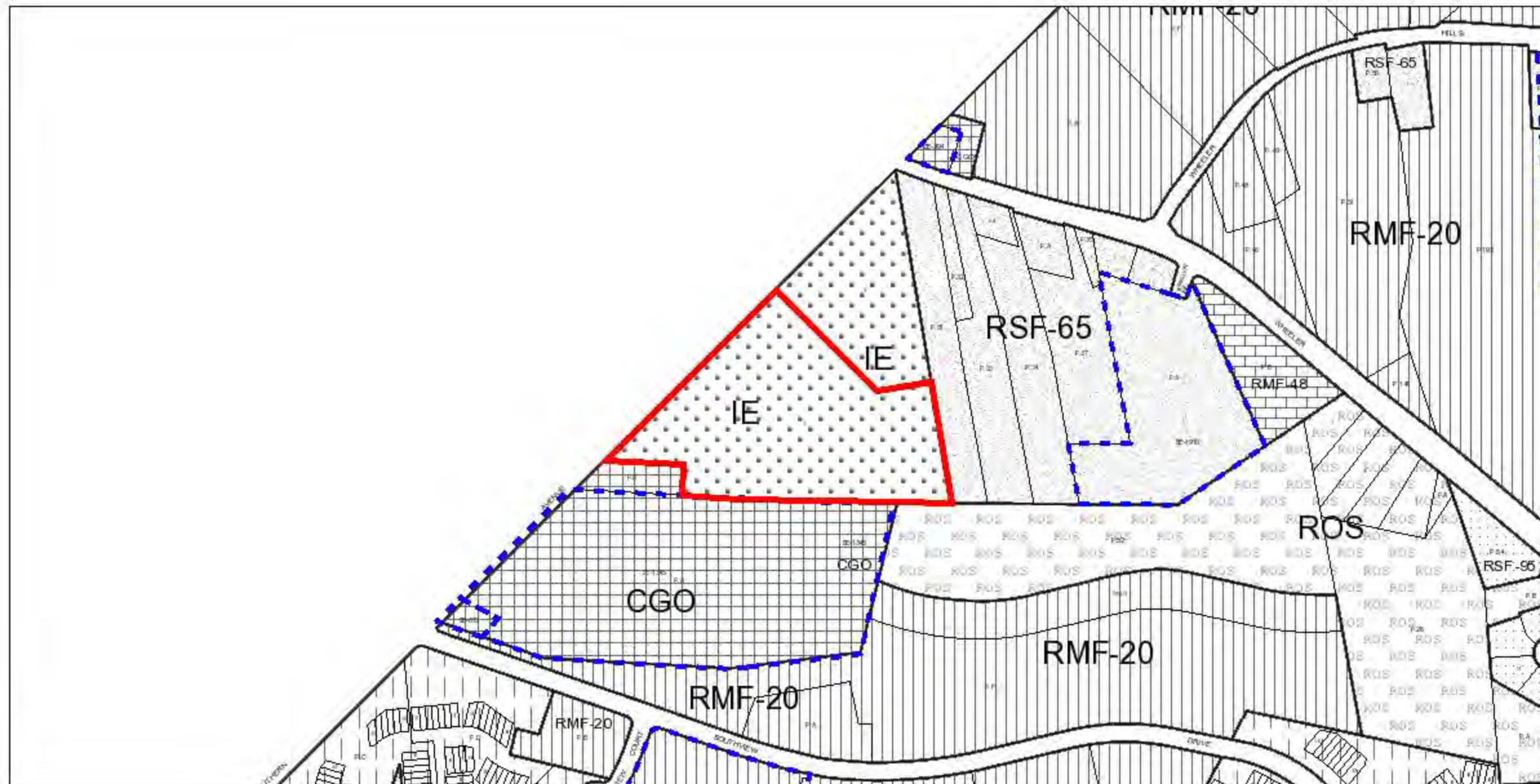
PLANNING AREA: 76A

WSSC GRID: 206SE01

TAX MAP: 87

TAX GRID: B3

COUNCIL DISTRICT: 7



The Maryland-National Capital Park and Planning Commission  
Prince George's County Planning Department  
Geographic Information System

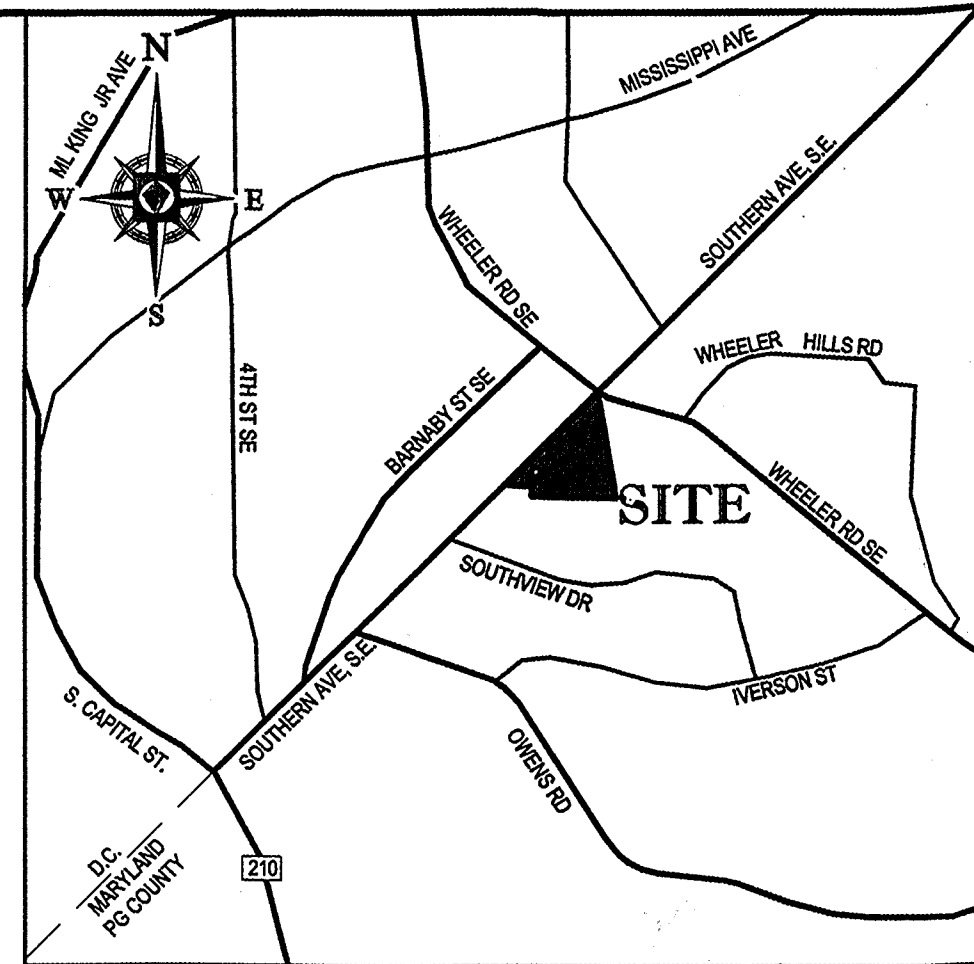
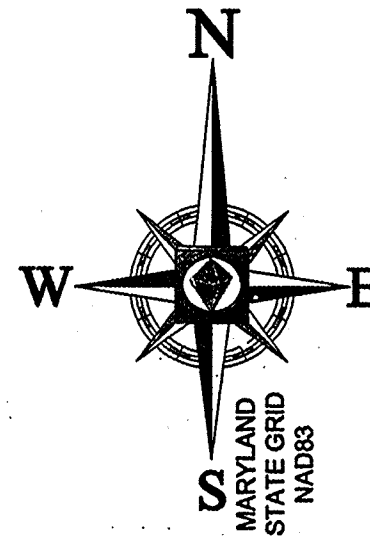
Created: 8/27/2024



SJH245-76

NOTES

1. DEVELOPMENT OF THIS PROPERTY MUST CONFORM TO DETAILED SITE PLAN WHICH WAS APPROVED BY THE PRINCE GEORGE'S COUNTY PLANNING BOARD ON SEPTEMBER 12, 2013, DSP-13008, OR AS AMENDED BY ANY SUBSEQUENT REVISIONS THERETO.
2. DEVELOPMENT OF THIS SITE SHALL BE IN CONFORMANCE WITH STORMWATER MANAGEMENT CONCEPT PLAN, 19266-2015 AND ANY SUBSEQUENT REVISIONS.
3. APPROVAL OF THIS PLAT WILL HAVE NO IMPACT ON THE EXISTING PUBLIC WATER AND SEWER SYSTEMS. THE APPROVAL OF FUTURE BUILDING PERMITS WILL BE BASED UPON PUBLIC WATER AND SEWER CAPACITIES BEING AVAILABLE PRIOR TO CONSTRUCTION.
4. THIS DEVELOPMENT IS SUBJECT TO RESTRICTIONS SHOWN ON THE APPROVED TYPE I TREE CONSERVATION PLAN (TCP1-007-2015 OR MOST RECENT REVISION), OR AS MODIFIED BY THE TYPE 2 TREE CONSERVATION PLAN, AND PRECLUDES ANY DISTURBANCE OR INSTALLATION OF ANY STRUCTURE WITHIN SPECIFIC AREAS. FAILURE TO COMPLY WILL MEAN A VIOLATION OF AN APPROVED TREE CONSERVATION PLAN AND WILL MAKE THE OWNER SUBJECT TO MITIGATION UNDER THE WOODLAND AND WILDLIFE HABITAT CONSERVATION ORDINANCE. THIS PROPERTY IS SUBJECT TO THE NOTIFICATION PROVISIONS OF CB-60-2005. COPIES OF ALL APPROVED TREE CONSERVATION PLANS FOR THE SUBJECT PROPERTY ARE AVAILABLE IN THE OFFICES OF THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION, PRINCE GEORGE'S COUNTY PLANNING DEPARTMENT.
5. ANY RESIDENTIAL DEVELOPMENT OF THE SUBJECT PROPERTY SHALL REQUIRE APPROVAL OF A NEW SUBDIVISION PRIOR TO APPROVAL OF ANY BUILDING PERMITS.
6. THIS PLAT IS SUBJECT TO THE RECORDATION OF A WOODLAND CONSERVATION EASEMENT PURSUANT TO SECTION 25-122(d)(1)(B) WITH THE LIBER AND FOLIO REFLECTED ON THE TYPE 2 TREE CONSERVATION PLAN.
7. CONSERVATION EASEMENTS DESCRIBED ON THIS PLAT ARE AREAS WHERE THE INSTALLATION OF STRUCTURES AND ROADS AND THE REMOVAL OF VEGETATION ARE PROHIBITED WITHOUT PRIOR WRITTEN CONSENT FROM THE M-NCPP PLANNING DIRECTOR OR DESIGNEE. THE REMOVAL OF HAZARDOUS TREES, LIMBS, BRANCHES OR TRUNKS IS ALLOWED.
8. TOTAL DEVELOPMENT SHALL BE LIMITED IN ACCORDANCE WITH CONDITION 10 OF PGCPB RESOLUTION NO. 15-119.



VICINITY MAP  
SCALE: 1"=2000'

OWNER'S DEDICATION

SILVER BRANCH, LLC, OWNER OF THE PROPERTY SHOWN HEREON AND DESCRIBED IN THE SURVEYOR'S CERTIFICATE, HEREBY ADOPT THIS PLAT OF SUBDIVISION, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES; GRANT TO THE PUBLIC UTILITIES, THEIR SUCCESSORS AND ASSIGNS, A 10 FOOT PUBLIC UTILITY EASEMENT AS SHOWN, SUBJECT TO THE TERMS AND PROVISIONS RECORDED AMONG THE LAND RECORDS OF PRINCE GEORGE'S COUNTY, MARYLAND IN LIBER 3703 AT FOLIO 748. PROPERTY MARKERS WILL BE PLACED IN ACCORDANCE WITH SECTION 24-120(b)(6)(F)(ii) OF THE SUBDIVISION REGULATIONS.

THERE ARE NO SUITS, ACTIONS AT LAW, LEASES, LIENS, MORTGAGES OR TRUSTS AFFECTING THE PROPERTY INCLUDED IN THIS PLAT OF SUBDIVISION.

*[Signature]* 9/19/16  
SILVER BRANCH, LLC, ITS MANAGING MEMBER DATE

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE PLAT SHOWN HEREON IS CORRECT; THAT IT IS A RESUBDIVISION OF ALL THE LAND CONVEYED TO SILVER BRANCH, LLC BY DEED DATED SEPTEMBER 30, 2013 AND RECORDED AMONG THE LAND RECORDS OF PRINCE GEORGE'S COUNTY, MARYLAND IN LIBER 35352 AT FOLIO 289, ALSO BEING A RESUBDIVISION OF LOTS 1 AND 2, AS SHOWN ON A PLAT OF SUBDIVISION TITLED GILPIN PROPERTY RECORDED AMONG THE AFOREMENTIONED LAND RECORDS IN PLAT BOOK WWW 40 AT PLAT NO. 1, AND THAT THE TOTAL AREA INCLUDED IN THIS PLAT OF SUBDIVISION IS 628,872 SQUARE FEET OR 14.437 ACRES.

*[Signature]* 9-19-16  
ROBERT C. HARR, JR., PROFESSIONAL LAND SURVEYOR DATE  
MARYLAND REGISTRATION No. 21587  
EXP. DATE 01-16-2017

GILPIN PROPERTY  
LOTS 3 & 4

12TH ELECTION DISTRICT  
PRINCE GEORGE'S COUNTY, MARYLAND  
SCALE: 1"=100' DATE: SEPTEMBER 19, 2016



SB132024SUB3.dwg

FILED

OCT 06 2016

FOR PUBLIC WATER AND SEWER

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION  
PRINCE GEORGE'S COUNTY PLANNING BOARD

APPROVED: *[Signature]* October 6, 2016  
CHAIRMAN ASSISTANT SECRETARY

MNCPPC FILE No. 5-16097

DEPARTMENT OF THE ENVIRONMENT  
PRINCE GEORGE'S COUNTY, MARYLAND

APPROVED: *[Signature]* September 22, 2016  
DIRECTOR OR DESIGNEE

CLERK OF THE CIRCUIT COURT  
FOR PRINCE GEORGE'S COUNTY, MD

RECORDED: 10-06-16

PLAT BOOK: SJH245

PLAT NO.: 76

I-1  
4-15017  
206SE01 & 02

P217655

MSA 51250-19575

2016.10.06



**From:** [no-reply@pgatlas.com](mailto:no-reply@pgatlas.com)  
**To:** [Grigsby, Martin](#)  
**Subject:** DSP-13008-02 Mailing List  
**Date:** Tuesday, August 27, 2024 3:48:54 PM

---

**[EXTERNAL EMAIL]** Exercise caution when opening attachments, clicking links, or responding.

The Maryland-National Capital Park & Planning Commission  
Planning Department Prince George's County  
Development Review Division  
1616 McCormick Drive  
Largo, Maryland 20774  
[www.pgplanning.org](http://www.pgplanning.org)

Date: 8/27/2024

## MAILING LIST - RECEIPT

☒ Development Application    **DSP-13008-02**  
☐ County Application

This receipt is to acknowledge that Bryan Spell received the following lists as described by the categories below:

<input checked="" type="checkbox"/> Registered community organization list	Total Records: 21
<input checked="" type="checkbox"/> Adjoining property owners list	Total Records: 19
<input checked="" type="checkbox"/> Municipalities within one mile list	Total Records: 1

This list is valid for 180 days from the date referenced above. Applicants must obtain an updated mailing list if notifications are not sent within 180 days.

This property is located on WSSC Grid: 206SE01

Martin Grigsby  
Development Review Division

Download Extracts:

[DSP-13008-02\\_08272024154632\\_Reg\\_Assoc.xlsx](#)

[DSP-13008-02\\_08272024154632\\_Adjoining\\_Property\\_Premise\\_Owner\\_Address.xlsx](#)

[DSP-13008-02\\_08272024154632\\_Muni1Mile.xlsx](#)



A copy of the adjoining properties map has been included for your reference:

[DSP-13008-02\\_08272024154632\\_Adjoining\\_Property.jpg](#)

A mailing list archive has been generated for your reference:

[DSP-13008-02\\_08272024154632\\_MailingListArchive.zip](#)

The download extract links above will be available for 3 months. You must download the extracts if you need access to the data in the future.

Data extract may include duplicate address records.



# PRIOR ZONING SKETCH MAP

APP NO: DSP-13008-02

EXISTING ZONE:

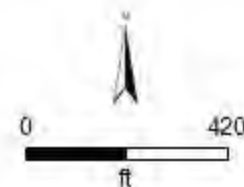
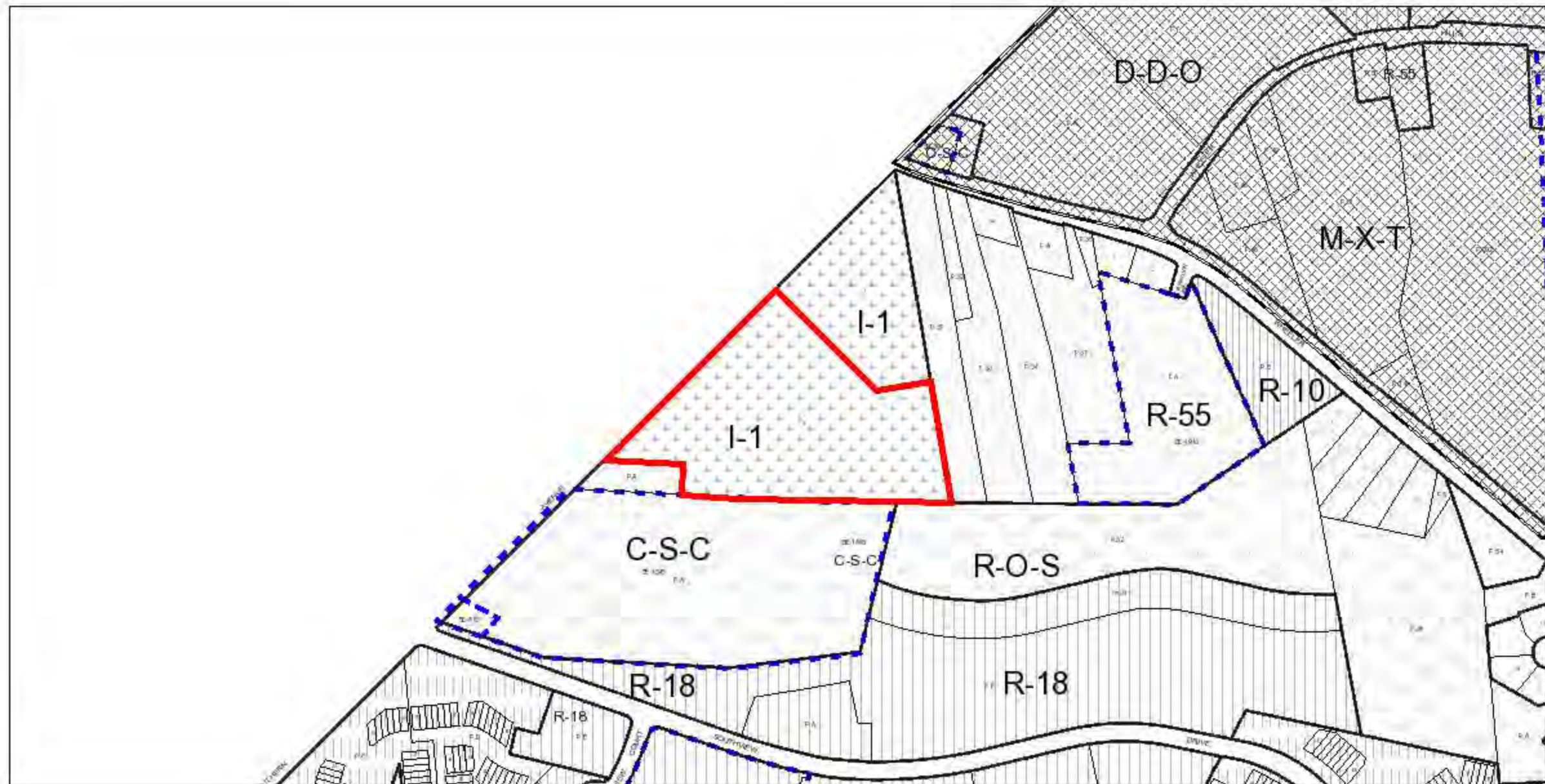
PLANNING AREA: 76A

WSSC GRID: 206SE01

TAX MAP: 87

TAX GRID: B3

COUNCIL DISTRICT: 7



The Marion County Capital Area Planning Commission  
Marion County Planning Department  
Geographic Information System

Created: 8/27/2024



**PRE-APPLICATION NARRATIVE FOR DSP**

**GILPIN PROPERTY (PHASE 3)**

APPLICANT: Arcland Property Company, LLC  
1055 Thomas Jefferson Street, NW, Suite 250  
Washington, District of Columbia 20007

OWNERS: Silver Branch LLC  
1055 Thomas Jefferson Street, NW, Suite 250  
Washington, District of Columbia 20007

ATTORNEY/  
CORRESPONDENT: Matthew C. Tedesco, Esq.  
McNamee Hosea, P.A.  
6404 Ivy Lane, Suite 820  
Greenbelt, Maryland 20770  
(301) 441-2420 Voice  
(301) 982-9450 Fax

CIVIL ENGINEER: Bohler  
16701 Melford Blvd., Suite 310  
Bowie, Maryland 20715  
(301) 809-4500

REQUEST: An amendment to a detailed site plan (DSP-13008) to accommodate the development of an approximately 115,364 square foot consolidated storage facility under the prior Zoning Ordinance in the prior I-1 Zone.

---

**I. DESCRIPTION OF PROPERTY**

1. Addresses – 899 Southern Avenue, Oxon Hill, Maryland 20745.
2. Location – Southeast quadrant of the intersection of Southern Avenue and Wheeler Road, approximately 720 feet north of Southview Drive.
3. Tax Account(s) – 5593818.
4. Proposed Use – The development of an approximately 115,364 square foot consolidated storage facility under the prior Zoning Ordinance in the prior I-1 Zone.
5. Previous Approvals – DSP-13008, DSP-13008-01 and 4-15017.



6. Record Plat – Plat Book SJH 245, Plat 76.
7. Schools – Panorama Elementary, Benjamin Stoddert Middle and Potomac High.
8. Police – District IV.
9. Fire/EMS – Oxon Hill, Battalion 885, Station 842.
10. Library – PGCMLS Hillcrest Heights Branch Library
11. Water/Sewer Category – W3/S3
12. Historic Site/Resources – St. Barnabas Church, Oxon Hill & Cemetery (ID 76A-004, 1.62 miles from the subject property), Butler House (ID 76A-014, 1.81 miles from the subject property), St. Ignatius' Church and Cemetery (ID 76B-006, 2.0 miles from the subject property) and Kildare (ID 76B-007, 2.1 miles from the subject property).

## II. NATURE OF REQUEST

Arcland Property Company, LLC (hereinafter the “Applicant”) is requesting a detailed site plan to accommodate the development of an approximately 115,364 square feet, three story, consolidated storage facility under the prior Zoning Ordinance in the prior I-1 Zone.

Pursuant to Section 27-1704 of the Zoning Ordinance, this application is being filed pursuant to the prior Zoning Ordinance and will be reviewed pursuant to the prior I-1 Zone. DSP-13008 and DSP-13008-01 were approved by the Planning Board on May 1, 2014 (PGCPB No. 14-35 was adopted on May 2014) and the District Council on April 5, 2016, respectively, and remains valid. In addition, the final plat for the property was recorded on October 6, 2016, in Plat Book SJH 245 at Page 76. Pursuant to Section 24-1704(a) of the Subdivision Regulations, subdivision approvals of any type remain valid for the period of time specified in the Subdivision Regulations under which the subdivision was approved. Since the PPS is vested and the plats have no validity period once recorded, the subdivision approval remains valid. Moreover, and again, Section 24-1704(b) of the Subdivision Regulations provides, among other things, that the project may proceed to the next steps in the approval process (including any zoning steps that may be necessary) and continue to be reviewed and decided under the Subdivision Regulations and Zoning Ordinance in effect immediately prior to the effective date of the new Subdivision Regulations and new Zoning Ordinance. In other words, since the PPS is vested and the plats are recorded, an applicant may proceed to the next steps in the process.

Accordingly, this second amendment to DSP-13008 for Phase 3 is being filed in accordance with the prior Zoning Ordinance and prior Subdivision Regulations.

Section 27-1704(e) provides, “[s]ubsequent revisions or amendments to development approvals or permits ‘grandfathered’ under the provisions of this Section shall be reviewed and decided under the Zoning Ordinance under which the original development approval or permit



was approved . . . .” Further, the applicant recognizes that the provisions of the prior Subdivision Regulations and prior Zoning Ordinance have been successfully utilized and implemented for development of the proposed use in the County for decades, to an include on the subject property. Therefore, since the use is a permitted use in the prior I-1 Zone and since a number of prior approvals have already been obtained that will continue to facilitate the now proposed Phase 3, the applicant contends that the prior Zoning Ordinance offers the most efficient, flexible, and established framework for review and approval of the applicant’s desired use/development at this time.

### III. DEVELOPMENT STANDARDS

Pursuant to Sections 27-473(b), 27-474, and 27-475.04, consolidated storage is a permitted use in the I-1 Zone. The future detailed site plan, as very conceptually shown on the concept plan submitted herewith, seeks to specifically conform to the applicable development standards in Section 27-475.04 and generally to the applicable development standards in 27-465 (Fences and Walls), 27-466 (Corner Lot Obstructions), 27-466.01 (Frontage), and 27-467 (Extensions and Projections). Detailed review of the applicable criterion will occur during the review of the detailed site plan.

Respectfully submitted,

MCNAMEE HOSEA, P.A.

By:



---

Matthew C. Tedesco  
Attorney for the Applicant

Date: February 28, 2024



STANDARD DRAWING LEGEND		
FOR ENTIRE PLAN SET		
LIMIT OF WORK		LOW LOW
LIMIT OF DISTURBANCE		LOD LOD
EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
---	ONSITE PROPERTY LINE / R.O.W. LINE	---
- - -	NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE	- - -
---	EASEMENT LINE	---
- - -	SETBACK LINE	- - -
=====	CONCRETE CURB & GUTTER	<div>CURB AND GUTTER</div> <div>SPILL   TRANSITION</div> <div>DEPRESSED CURB AND GUTTER</div>
	UTILITY POLE WITH LIGHT	
	POLE LIGHT	
	TRAFFIC LIGHT	
	UTILITY POLE	
	TYPICAL LIGHT	
	ACORN LIGHT	
	TYPICAL SIGN	
	PARKING COUNTS	
	CONTOUR LINE	
TC 516.4 OR 516.4	SPOT ELEVATIONS	
	SANITARY LABEL	
	STORM LABEL	
	SANITARY SEWER LATERAL	
	UNDERGROUND WATER LINE	
	UNDERGROUND ELECTRIC LINE	
	UNDERGROUND GAS LINE	
	OVERHEAD WIRE	
	UNDERGROUND TELEPHONE LINE	
	UNDERGROUND CABLE LINE	
	STORM DRAIN	
	SANITARY SEWER MAIN	
	HYDRANT	
	SANITARY MANHOLE	
	STORM MANHOLE	
	WATER METER	
	WATER VALVE	
	GAS VALVE	
	GAS METER	
	TYPICAL END SECTION	
	HEADWALL OR ENDWALL	
	GRATE INLET	
	CURB INLET	
	CLEAN OUT	
	ELECTRIC MANHOLE	
	TELEPHONE MANHOLE	
	ELECTRIC BOX	
	ELECTRIC PEDESTAL	
	MONITORING WELL	
	TEST PIT	
	BENCHMARK	
	BORING	

FOR ENTIRE PLAN SET	
AC	ACRES
ADA	AMERICANS WITH DISABILITY ACT
ARCH	ARCHITECTURAL
BC	BOTTOM OF CURB
BF	BASEMENT FLOOR
BK	BLOCK
BL	BASELINE
BLDG	BUILDING
BM	BUILDING BENCHMARK
BRL	BUILDING RESTRICTION LINE
CF	CUBIC FEET
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONN	CONNECTION
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARDS
DEC	DECORATIVE
DEP	DEPRESSED
DIP	DUCTILE IRON PIPE
DOM	DOMESTIC
ELEC	ELECTRIC
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
EW	END WALL
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FH	FIRE HYDRANT
FG	FINISHED GRADE
G	GRADE
GF	GARAGE FLOOR (AT DOOR)
GH	GRADE HIGHER SIDE OF WALL
GL	GRADE LOWER SIDE OF WALL
GRT	GRATE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
HOR	HORIZONTAL
HW	HEADWALL
INT	INTERSECTION
INV	INVERT
LF	LINEAR FOOT
LOC	LIMITS OF CLEARING
LOD	LIMITS OF DISTURBANCE
LOS	LINE OF SIGHT
LP	LOW POINT
L/S	LANDSCAPE
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
MJ	MECHANICAL JOINT
OC	ON CENTER
PA	POINT OF ANALYSIS
PC	POINT CURVATURE
PCCR	POINT OF COMPOUND CURVATURE, CURB RETURN
PI	POINT OF INTERSECTION
POG	POINT OF GRADE
PROP	PROPOSED
PT	POINT OF TANGENCY
PTCR	POINT OF TANGENCY, CURB RETURN
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RET WALL	RETAINING WALL
R/W	RIGHT OF WAY
S	SLOPE
SAN	SANITARY SEWER
SF	SQUARE FEET
STA	STATION
STM	STORM
S/W	SIDEWALK
TBR	TO BE REMOVED
TBRL	TO BE RELOCATED
TC	TOP OF CURB
TELE	TELEPHONE
TPF	TREE PROTECTION FENCE
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
W	WIDE
WL	WATER LINE
WM	WATER METER
±	PLUS OR MINUS
°	DEGREE
Ø	DIAMETER
#	NUMBER

- PROJECT NAME: GILPIN PROPERTY
2. SOURCE OF TOPOGRAPHY:  
BOHLER ENGINEERING  
TITLED: "ALTAINSPS LAND TITLE SURVEY  
GILPIN PROPERTY  
901 SOUTHERN AVENUE  
12TH ELECTION DISTRICT  
PRINCE GEORGES COUNTY, MARYLAND"  
PROJECT NO.: 5B132024  
DATED: 01/20/2017  
ELEVATIONS: NAVD29
3. OWNER:  
SILVER BRANCH, LLC  
1055 THOMAS JEFFERSON ST NW, STE 250  
WASHINGTON, D.C. 20007
4. TOTAL ACREAGE: 440,190 SF OR 10.105 ACRES (RECORD)
5. CURRENT ZONING (PRIOR): I-1 (LIGHT INDUSTRIAL)
6. EXISTING USE: CONSOLIDATED STORAGE BUILDING (92,400 GSF)  
PROPOSED USE: CONSOLIDATED STORAGE (ADDITIONAL 115,364 SF)
7. NUMBER OF LOTS, PARCELS, OUTLOTS & OUTPARCELS: 1
8. PROPOSED DWELLING UNITS: NONE
9. EXISTING GROSS FLOOR AREA: 92,400 SF  
PROPOSED GROSS FLOOR AREA: TOTAL 207,764 GSF (ADDITIONAL 115,364 SF)
10. WSSC GRID: 206SE01
11. TAX MAP & GRID: TM 87 GRID B3
12. AVIATION POLICY NUMBER AND GRID: NONE
13. EXISTING WATER/SEWER DESIGNATION: W-3 / S-3  
PROPOSED WATER/SEWER DESIGNATION: W-3 / S-3
14. 10-FOOT PUBLIC UTILITY EASEMENTS PRESENT ON-SITE.
15. MANDATORY PARK DEDICATION: NONE
16. CEMETERIES LOCATED IN VICINITY OF THE PROPERTY: NONE
17. HISTORIC SITES LOCATED IN VICINITY OF THE PROPERTY: NONE
18. STREAMS AND WETLANDS: YES
19. 100-YEAR FLOODPLAIN: YES
20. CHESAPEAKE CRITICAL BAY AREA: NO
21. TIER II WATER BODY AS DEPIED IN COMAR 26.08.02.04: NO
22. STRONGHOLD WATERSHED: NO
23. ENDANGERED SPECIES: NO.
24. THE SOURCE OF THE SOILS INFORMATION ON THIS PLAN IS FROM USDA NRCS WEB SOIL SURVEY (WSS) IN A CUSTOM SOIL RESOURCES REPORT FOR AN AREA OF INTEREST ESTABLISHED FOR THE SUBJECT SITE ONLY AND GENERATED IN JANUARY OF 2015.
25. MARLBORO CLAY AND CHRISTINA COMPLEX ARE NOT FOUND ON OR WITHIN THE VICINITY OF THIS PROPERTY.
26. WATERWAY: OXON RUN.
27. STORMWATER MANAGEMENT CONCEPT NO.: 38138-2024  
APPROVAL: TBD

SOIL TYPES		
SOIL TYPE	DESCRIPTION	HYDROLOGIC SOIL GROUP
CeE	CHRISTIANA-DOWNER COMPLEX, 15 TO 25 PERCENT SLOPES	D
SdD	SASAFARAS-CROOM-URBAN LAND COMPLEX, 5 TO 15 PERCENT SLOPES	A
Px	POTOBAG-ISSUE COMPLEX, FREQUENTLY FLOODED	B/D

FOR

**GILPIN PROPERTY**

**DSP #13008-02**

## SHEET INDEX

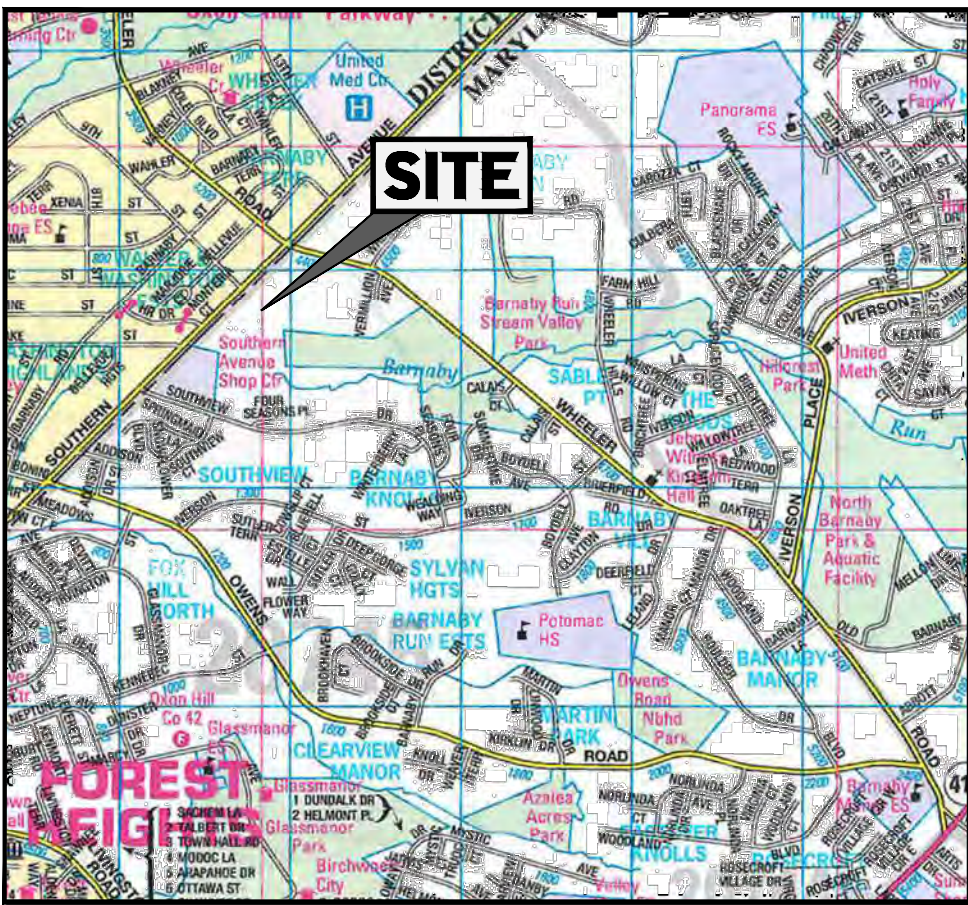
SHEET TITLE	SHEET NUMBER
COVER SHEET	DSP-1
PLAN APPROVALS SHEET	DSP-2
EXISTING CONDITIONS / DEMOLITION PLAN	DSP-3
OVERALL SITE PLAN	DSP-4
SITE PLAN	DSP-5
STORM DRAIN AND GRADING PLAN	DSP-6
LANDSCAPE PLAN	DSP-7
LANDSCAPE DETAILS	DSP-8
SITE DETAILS	DSP-9
TRUCK TURN EXHIBIT	DSP-10 - DSP-11
ARCHITECTURAL PLANS	P-001 - P-501
LIGHTING PLANS	LP-001 - LP-002

SILVER BRANCH, LLC  
1055 THOMAS JEFFERSON ST NW, STE 250  
WASHINGTON, D.C. 20007

ARCLAND  
P.O. BOX 25523  
WASHINGTON, D.C. 20027  
CONTACT: STEVE CRATIN  
PHONE: 443-845-6981  
EMAIL: STEVE@ARC.LAND

# BOHLER //

EMAIL: [jdimarco@bohlereng.com](mailto:jdimarco@bohlereng.com)



SCALE: 1" = 2000

**▲TALPANSPS LAND TITLE SURVEY:**  
 BOHLER ENGINEERING  
 TITLED: "TALPANSPS LAND TITLE SURVEY  
 GILPIN PROPERTY  
 800' SOUTHERN AVENUE  
 10TH ELECTION DISTRICT  
 PRINCE GEORGE'S COUNTY, MARYLAND"  
 PROJECT NO.: 58132024  
 DATED: 01/20/2017

**◆NR1:**  
 WSSI  
 TITLED: "NATURAL RESOURCES INVENTORY"  
 NR029-13  
 PROJECT NO.: TBD  
 DATED: TBD  
 APPROVED: TBD

**UTILITIES:**  
 THE FOLLOWING COMPANIES WERE NOTIFIED BY MARYLAND MISS UTILITY  
 SYSTEM (1-800-257-7777) AND REQUESTED TO MARK OUT UNDERGROUND  
 FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY  
 INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES  
 RESPONSE TO THIS REQUEST. SERIAL NUMBER(S): 14546727

UTILITY COMPANY	PHONE NUMBER
VERIZON - LAMBERT CABLE	(410) 536-0070
BGE ELECTRIC - USIC	(800) 778-9140
BGE GAS - USIC	(800) 778-9140
COMCAST - UTILITEQUEST	(410) 536-0070
PATUNG COUNTY GOV'T - SAN LOCATO	(304) 942-8989
WASHINGTON GAS - UTILQUEST	(301) 210-0355
WSSC - PINPOINT UG	(301) 886-6803

	REQUIRED (I-1 ZONE)	PROPOSED
VEHICLE PARKING	<p>MINIMUM: 23 SPACES</p> <p>2 SPACES PER RESIDENT MANAGER + 2 + 4.0 SPACES PER 1,000 SQ. FT. OF GYM OR OFFICE SPACE (NO OFFICE = 0) + 1.0 SPACE PER 50 UNITS WITH DIRECT ACCESS FROM A BUILDING (107750 = 22) 24 SPACES TOTAL</p>	<p>24 SPACES TOTAL 23 STANDARD SPACES (1 ACCESSIBLE (ADA) PARKING SPACES)</p>
MINIMUM PARKING SPACE DIMENSION (PERPENDICULAR PARKING)	9'5" X 19' (STANDARD SPACES)	10' X 19' (STANDARD SPACES) 8' X 19' (ADA SPACES WITH 5'-10" WIDE EMBARK/DEBARK AREA)
DRIVE AISLE WIDTHS	22' FOR TWO-WAY TRAFFIC WITH PERPENDICULAR PARKINGS	22' MIN.
OFF-STREET LOADING BERTHS	<p>5 LOADING BERTHS (UP TO 10,000 SQFT = 2 LOADING BERTH) (EACH ADDITIONAL 40,000 SQFT OR MAJOR FRACTION THEREOF = ADD 1 LOADING BERTH)</p>	5 LOADING BERTH
OFF STREET LOADING MINIMUM SIZE	15' WIDE X 45' LONG	15' WIDE X 45' LONG
GREEN AREA	10% OF LOT AREA = 1.11 AC.	6.87 AC.
FRONT YARD SETBACK	25' MIN.	98'
SIDE YARD SETBACK	20' MIN.	168'
REAR YARD SETBACK	0'/20' MIN.	280'
PRINCIPAL STRUCTURE HEIGHT	36'	31.5' (3 STORIES)

## REVISIONS

[illegible]

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PROJECT No.:	MDB230010.00
DRAWN BY:	SJL
CHECKED BY:	NBS
DATE:	02/19/2024
CAD I.D.:	CNDS

PROJECT

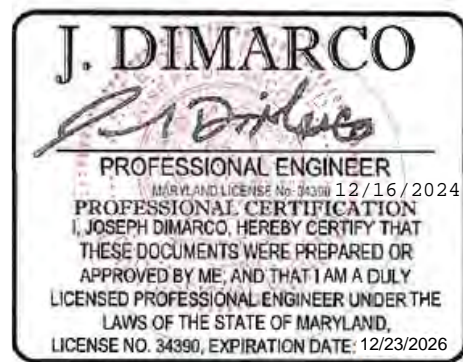
- FOR -

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

16701 MELFORD BLVD , SUITE 430

Phone: (301) 809-4500  
Fax: (301) 809-4501  
***MD@BohlerEng.com***



SHEET TITLE

## SHEET NUMBER:

# DSP-1

REVISION 3 - 10/31/24







SOUTHERN AVENUE, SE

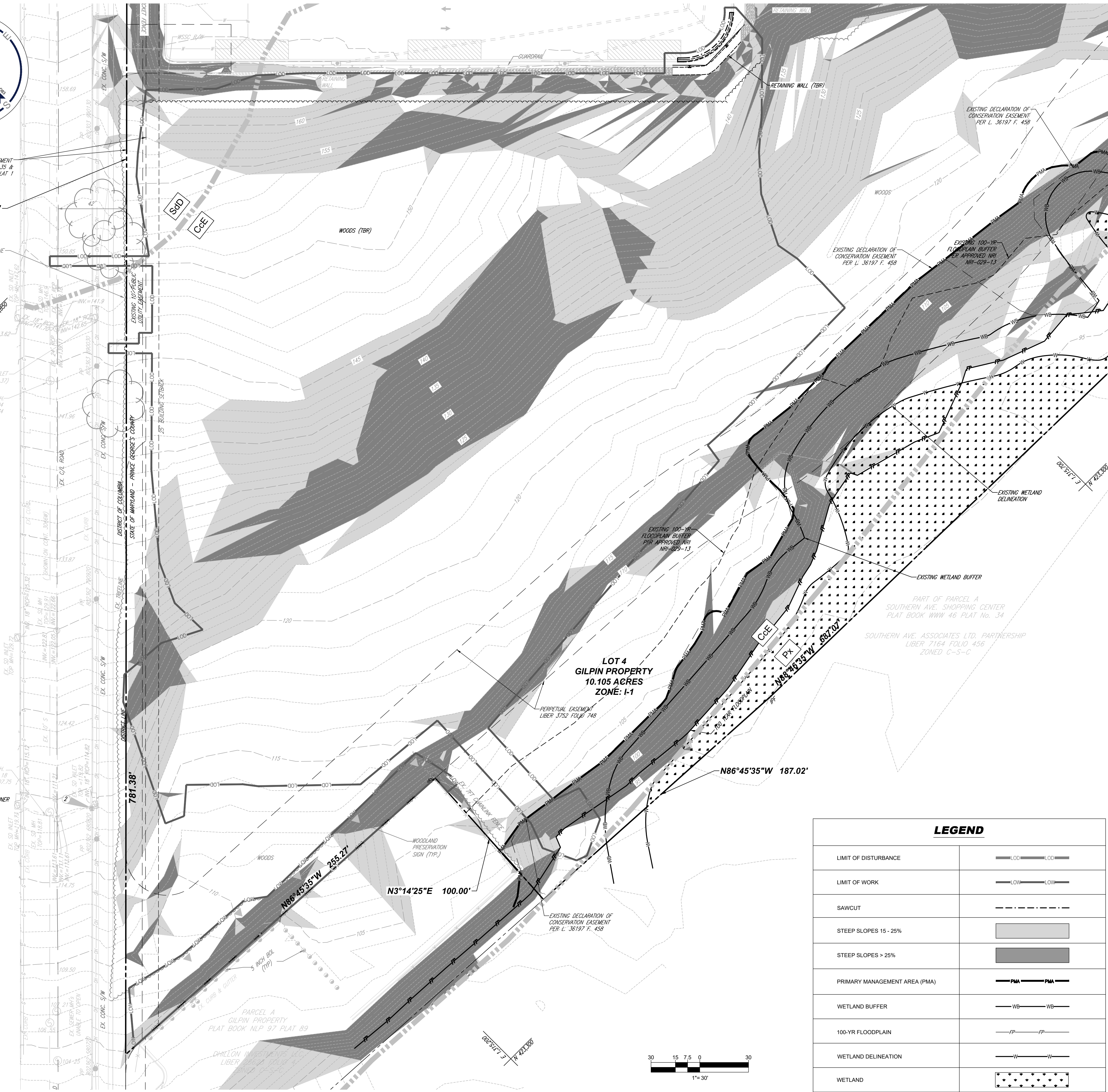
75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

12" WATER EASEMENT  
LIBER 2189 FOLIO 35 &  
PLAT BOOK WWW 40 PLAT 1

N45°03'35"E 1328.88'

EX. TREE LINE  
SD INLET  
TOP MH=143.62  
CL INV=143.62  
SD INLET  
(TOP MH=147.37)  
SAN. MH  
TOP=144.04  
CL INV=132.74

BENCH MARK 2  
RIGHT FRONT CORNER  
SD INLET  
ELEV= 119.23'



DEMOLITION / REMOVAL LEGEND	
DEMOLITION/REMOVAL NOTE	TYPICAL NOTE TEXT
-----	EASEMENT
-----	CONCRETE CURB & GUTTER
-----	UTILITY POLE WITH LIGHT
-----	POLE LIGHT
-----	TRAFFIC LIGHT
-----	UTILITY POLE
-----	TYPICAL LIGHT
-----	ACORN LIGHT
-----	TYPICAL SIGN
-----	PARKING COUNTS
-----	SPOT ELEVATIONS
-----	SANITARY LABEL
-----	STORM LABEL
-----	SANITARY SEWER LATERAL
-----	UNDERGROUND WATER LINE
-----	UNDERGROUND ELECTRIC LINE
-----	UNDERGROUND GAS LINE
-----	OVERHEAD WIRE
-----	UNDERGROUND TELEPHONE LINE
-----	UNDERGROUND CABLE LINE
-----	STORM SEWER
-----	SANITARY SEWER MAIN
-----	HYDRANT
-----	SANITARY MANHOLE
-----	STORM MANHOLE
-----	WATER METER
-----	WATER VALVE
-----	GAS VALVE
-----	GAS METER

SURVEY NOTES:

- PROPERTY IS ALL OF LOTS 3 AND 4, GILPIN PROPERTY AS RECORDED IN PLAT BOOK SHJ 245 AT PLAT NO. 76 AND BEING THE LANDS OF SILVER BRANCH, LLC AS RECORDED IN LIBER 35352 FOLIO 289, ALL AMONG THE LAND RECORDS OF PRINCE GEORGE'S MARYLAND AND HAVING A TAX MAP NUMBER OF 87 B3 0000 PER THE DEPARTMENT OF ASSESSMENTS.
- LOT 3 AREA= 188,683 SQUARE FEET OR 4.332 ACRES  
LOT 4 AREA= 440,190 SQUARE FEET OR 10.105 ACRES
- LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE, SOURCE INFORMATION FROM PLANS AND MARKINGS HAS BEEN COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED, WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY.
- THIS FIELD SURVEY WAS PERFORMED UTILIZING THE REFERENCE MATERIAL AS LISTED HEREON AND DEPICTS BUILDINGS, STRUCTURES AND OTHER IMPROVEMENTS THEREON, ON DECEMBER 19, 2016, BY BOHLER ENGINEERING.
- THIS SURVEY IS PREPARED WITH REFERENCE TO A COMMITMENT FOR TITLE INSURANCE PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT NO. RE10451, WITH AN EFFECTIVE DATE OF NOVEMBER 8, 2016. OUR OFFICE HAS REVIEWED THE FOLLOWING SURVEY RELATED EXCEPTIONS IN SCHEDULE B, SECTION II:
- THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY; HOWEVER, NO PHYSICAL INDICATIONS OF SUCH WERE FOUND AT THE TIME OF THE FIELD INSPECTION OF THIS SITE.
- THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, PRINCE GEORGE'S COUNTY, MARYLAND AND INCORPORATED AREAS, PANEL 230 OF 466", MAP NUMBER 2403302020E, WITH A MAP EFFECTIVE DATE OF SEPTEMBER 16, 2016.
- ZONING: I-1 (LIGHT INDUSTRIAL)
- MINIMAL BUILDING, STRUCTURES, PARKING COMPOUNDS, AND LOADING AREAS SET BACK (27-462) FROM STREET: 25'  
SIDE (FROM RESIDENTIAL ZONE): 20'  
SIDE (FROM NON-RESIDENTIAL ZONE): 30' TOTAL BOTH YARDS

ALL ZONING INFORMATION WAS PROVIDED IN A ZONING MEMORANDUM PREPARED BY BOHLER ENGINEERING, DATED JANUARY 3, 2017 AND MUST BE VERIFIED PRIOR TO USE OR RELIANCE UPON SAME, TO CONFIRM THE ZONING INFORMATION REPRESENTS AND DEPICTS THE CURRENT SITE SPECIFIC INFORMATION. SHOULD THERE BE ANY CHANGE IN USE, SETBACK(S) OR SET BACK REQUIREMENTS, ZONING CLASSIFICATION, OR ANY OTHER CHANGE OR VARIATION FROM THE CONDITIONS RECORDED HEREIN, THE CLIENT MUST VERIFY COMPLIANCE WITH THE USE, SET BACK, ZONING CLASSIFICATION OR ORDINANCE, REGULATION OR LEGAL REQUIREMENT, PRIOR TO USING OR RELYING UPON THE FINDINGS RECORDED HEREIN, OR REFERENCING SAME AS RELATED TO THE PROPERTY, PROJECT OR DEVELOPMENT.

9. THERE IS NO RECENT EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

10. THERE ARE NOT ANY CHANGES IN STREET RIGHT OF WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION AND THERE IS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

LEGEND	
LIMIT OF DISTURBANCE	--- LOD --- LOD ---
LIMIT OF WORK	--- LOW --- LOW ---
SAWCUT	-----
STEEP SLOPES 15 - 25%	-----
STEEP SLOPES > 25%	-----
PRIMARY MANAGEMENT AREA (PMA)	--- PMA --- PMA ---
WETLAND BUFFER	--- WB --- WB ---
100-YR FLOODPLAIN	--- FP --- FP ---
WETLAND DELINEATION	--- W --- W ---
WETLAND	-----

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING  
1000 SILVER BRANCH, LLC  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

REVISIONS				
REV	DATE	COMMENT	CHECKED BY	DRAWN BY
1	8/5/24	PRE-REVIEW COMMENTS	SL	NS
2	9/5/24	PRE-ACCEPTANCE COMMENTS	SL	NS
3	10/31/24	PER SDRG COMMENTS	SK	JD

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PROJECT No.:	MDE230010.00
DRAWN BY:	SJL
CHECKED BY:	NBS
DATE:	02/19/2024
CAD I.D.:	DEMO

PROJECT:

DETAILED SITE PLAN

FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

BOHLER

16701 MELFORD BLVD., SUITE 430  
BOWIE, MARYLAND 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com

J. DIMARCO

PROFESSIONAL ENGINEER  
J. DIMARCO, P.E.  
PROFESSIONAL CERTIFICATION  
J. DIMARCO, P.E.  
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. 34890, EXPIRATION DATE: 12/23/2026

SHEET TITLE:

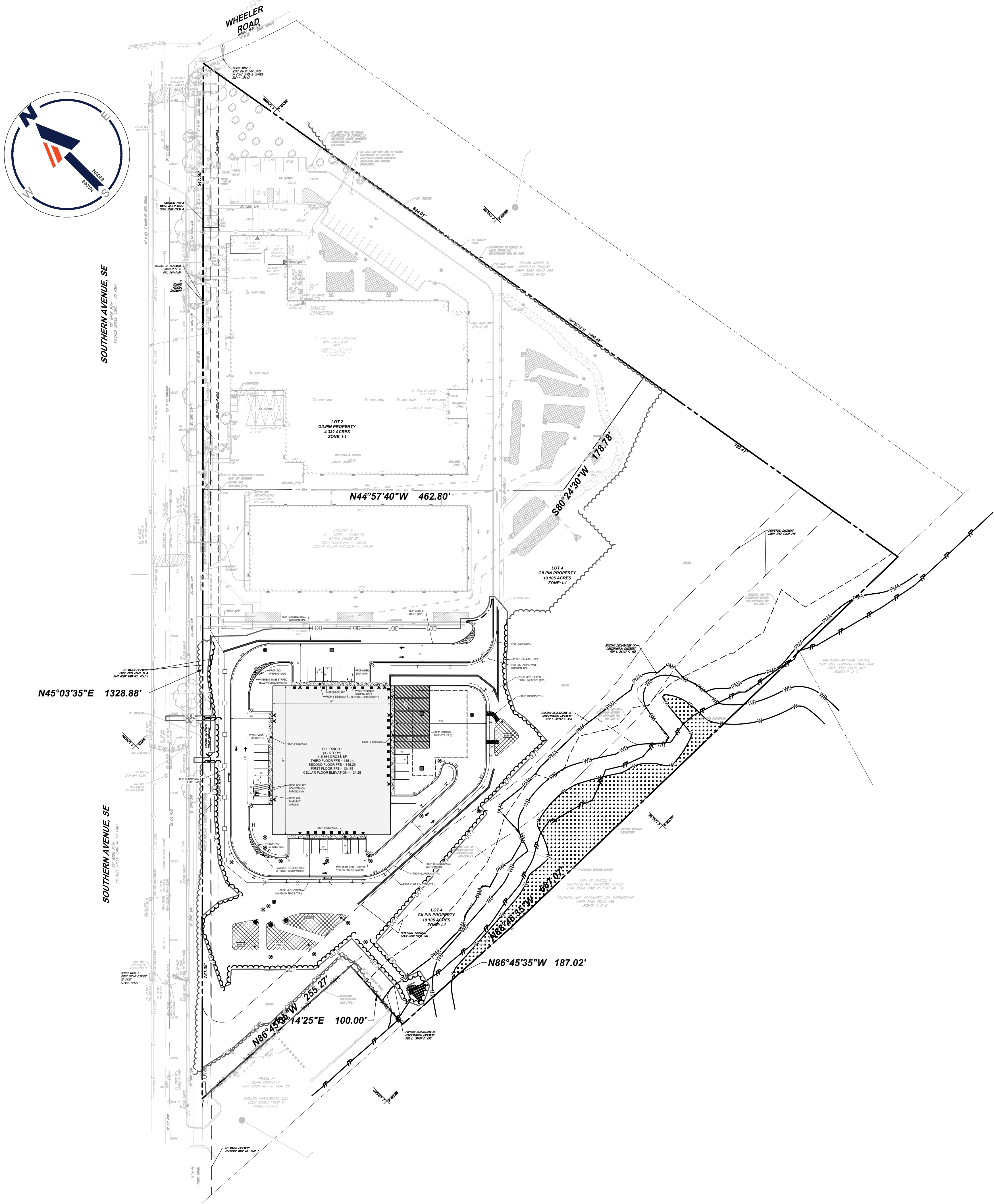
EXISTING  
CONDITIONS /  
DEMOLITION  
PLAN

SHEET NUMBER:

DSP-3

REVISION 3 - 10/31/24





### OVERALL SITE PARKING TABULATION

PARKING REQUIREMENTS	REQUIRED	PROPOSED
1 SPACE PER 50 STORAGE UNITS (EXISTING LOT 2)	34 SPACES	36 SPACES
1 SPACE PER 50 STORAGE UNITS (PROPOSED LOT 4)	22 SPACES	22 SPACES
4 SPACES PER 1,000 SF OF OFFICE SPACE (EXISTING LOT 2)	4 SPACES	4 SPACES
2 SPACES PER CARETAKERS APARTMENT (EXISTING LOT 2)	2 SPACES	2 SPACES
2 SPACES PER CARETAKERS APARTMENT (PROPOSED LOT 4)	2 SPACES	2 SPACES
TOTAL SPACES	64 SPACES	66 SPACES
ADA SPACES (EXISTING LOT 2)	N/A	2 VAN ACCESSIBLE WITH 8' ACCESS AISLE
ADA SPACES (PROPOSED LOT 4)	N/A	1 VAN ACCESSIBLE WITH 8' ACCESS AISLE
LOADING SPACES (2 SPACES FOR THE FIRST 10,000 SF OF A PLUS 1 SPACE FOR EACH ADDITIONAL 40,000 SF GFA) (EXISTING LOT 2)	6 SPACES (12X45')	7 SPACES (12X45')
OFF STREET LOADING BERTHS (PROPOSED LOT 4)	5 SPACES (15X45')	5 SPACES (15X45')
STANDARD PARKING SPACE DIMENSION (NONPARALLEL) (EXISTING LOT 2)	9.5X19'	9.5X19'
STANDARD PARKING SPACE DIMENSION (NONPARALLEL) (PROPOSED LOT 4)	9.5X19'	10X19'
STANDARD PARKING SPACE DIMENSION (PARALLEL) (EXISTING LOT 2)	8'X22'	8'X22'
ADA SPACE DIMENSION (NON-VAN) (EXISTING LOT 2)	8'X18'	8'X19'
ADA SPACE DIMENSION (VAN) (EXISTING LOT 2)	8'X18'	11'X19'
ADA SPACE DIMENSION (VAN) (PROPOSED LOT 4)	8'X18'	8'X19'
LOADING SPACE DIMENSION (EXISTING LOT 2)	12'X33'	12'X45'
DRIVE AISLE WIDTH:		
TWO-WAY (EXISTING LOT 2 & PROPOSED LOT 4)	22'	22' (MIN)
ONE-WAY (EXISTING LOT 2)	18' (60' SPACES)	18' (60' SPACES)

### REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	8/5/24	PRE-REVIEW COMMENTS	SL
2	9/5/24	PRE-ACCEPTANCE COMMENTS	SL
3	10/31/24	PER SDRG COMMENTS	JD



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PROJECT No.: MDB230010.00  
DRAWN BY: S/L  
CHECKED BY: NBS  
DATE: 02/19/2024  
CAD I.D.: SITE

PROJECT:

### DETAILED SITE PLAN

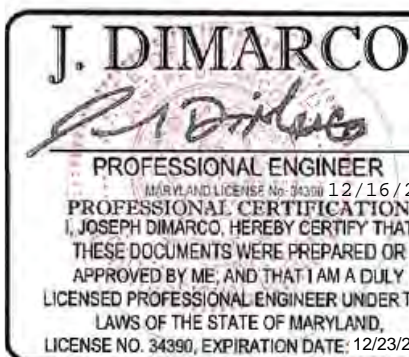
FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGES COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

## BOHLER

16701 MELFORD BLVD, SUITE 430  
BOWIE, MARYLAND 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com



SHEET TITLE:

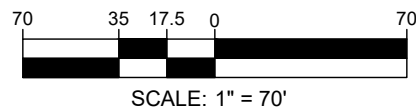
### OVERALL SITE PLAN

SHEET NUMBER:

DSP-4

REVISION 3 - 10/31/24

LEGEND	
LIMIT OF DISTURBANCE	— LOD — LOD —
PRIMARY MANAGEMENT AREA (PMA)	— PMA — PMA —
WETLAND BUFFER	— WB — WB —
100-YR FLOODPLAIN	— FP — FP —
WETLAND DELINEATION	— W — W —

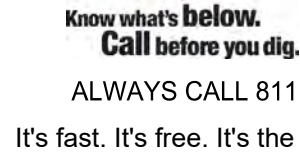






30 15 7.5 0 30

1" = 30'

[illegible]

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PROJECT No.: MDB230010  
DRAWN BY: S  
CHECKED BY: N  
DATE: 02/19/20  
AD I.D.: S

PROJECT:

## DETAILED SITE PLAN

\_\_\_\_\_ FOR \_\_\_\_\_

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

**BOHLER //**

**16701 MELFORD BLVD , SUITE 430**  
**BOWIE, MARYLAND 20715**  
 Phone: (301) 809-4500  
 Fax: (301) 809-4501  
***MD@BohlerEng.com***

**J. DIMARCO**  
*J. Dimarco*  
PROFESSIONAL ENGINEER  
MARYLAND LICENSE NO. 34390 12/16/2024  
PROFESSIONAL CERTIFICATION  
I, JOSEPH DIMARCO, 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. 34390, EXPIRATION DATE: 12/23/2026

SHEET TITLE:

## ***SITE PLAN***

SHEET NUMBER: \_\_\_\_\_

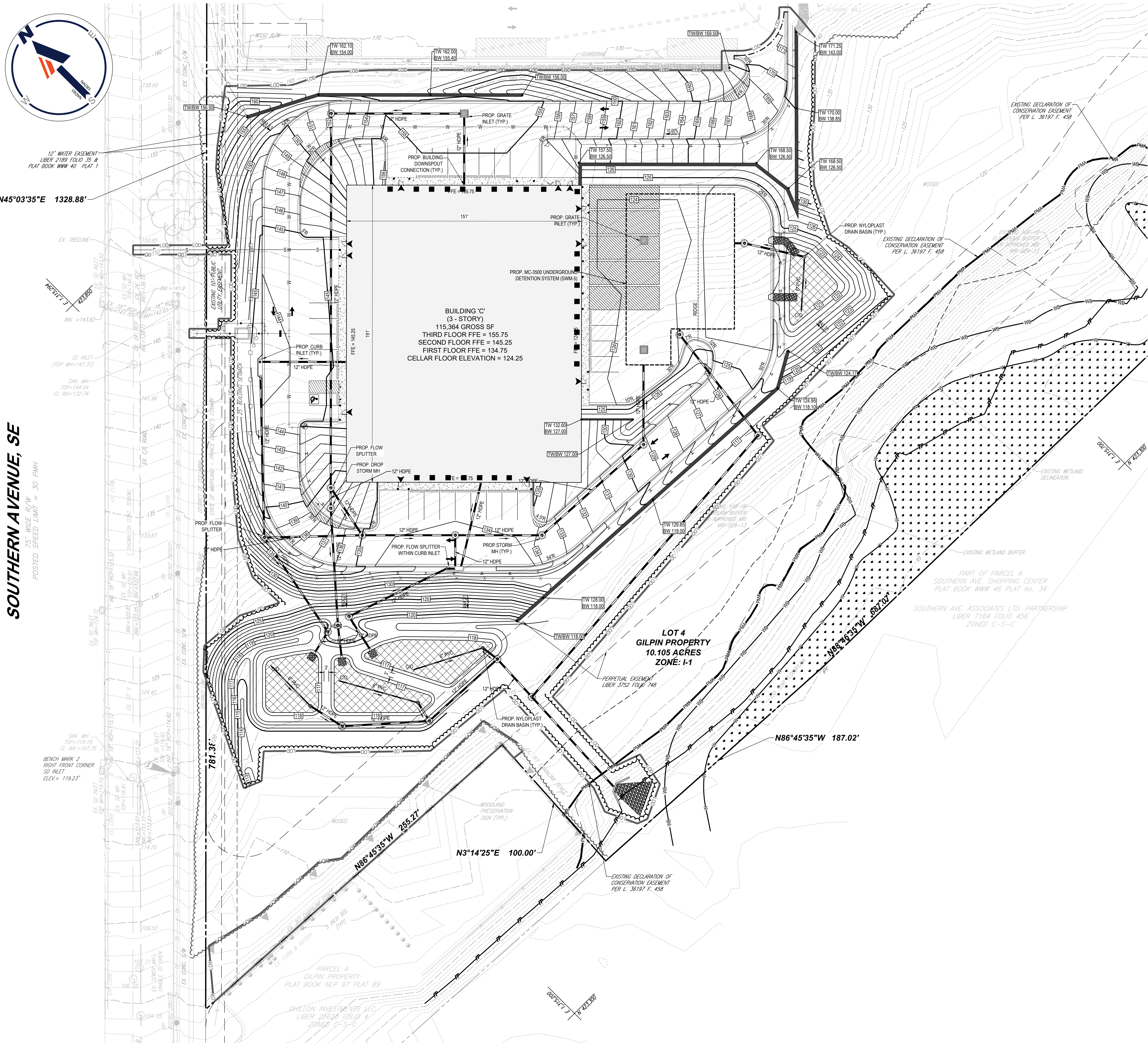
# DSP-5

REVISION 3 - 10/31/24



SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH



**LEGEND**

LIMIT OF DISTURBANCE	— LOD — LOD —
SAWCUT	— — — — —
PRIMARY MANAGEMENT AREA (PMA)	— PMA — PMA —
WETLAND BUFFER	— WB — WB —
100-YR FLOODPLAIN	— FP — FP —
WETLAND DELINEATION	— W — W —

30 15 7.5 0 30

1"= 30'

TM

**BOHLER**

SITE CIVIL AND CONSULTING ENGINEERING  
1000 SUPPLEMENTARY ROAD  
BOWIE, MARYLAND 20715  
PHONE: (301) 809-4500  
FAX: (301) 809-4501  
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REVISIONS

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2	9/5/24	PRE-ACCEPTANCE COMMENTS	SL	NS
3	10/31/24	PER SDRC COMMENTS	SK	JD

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PROJECT No.: MD230010.00

DRAWN BY: S.J.L.

CHECKED BY: N.B.S.

DATE: 02/19/2024

CAD I.D.: SITE

PROJECT:

DETAILED SITE PLAN

FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGES COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

BOHLER

16701 MELFORD BLVD., SUITE 430  
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MD@BohlerEng.com

J. DIMARCO

PROFESSIONAL ENGINEER  
J. DIMARCO, P.E.  
I, J. DIMARCO, P.E., 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. 34890, EXPIRATION DATE: 12/23/2026

SHEET TITLE:

STORMDRAIN AND GRADING PLAN

SHEET NUMBER:

DSP-6

REVISION 3 - 10/31/24



SOUTHERN AVENUE, SE

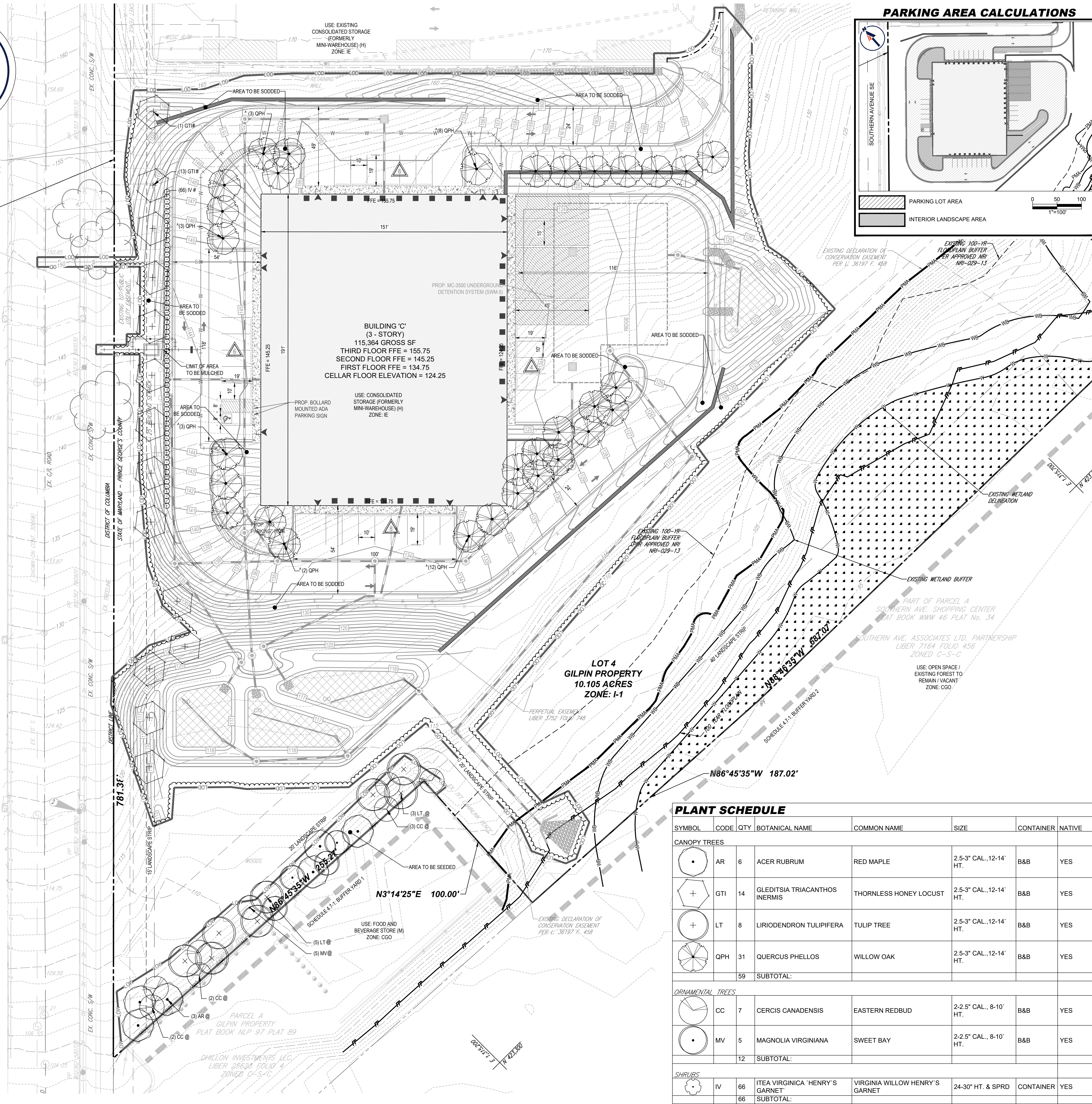
75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

N45°03'35"E 1328.88'

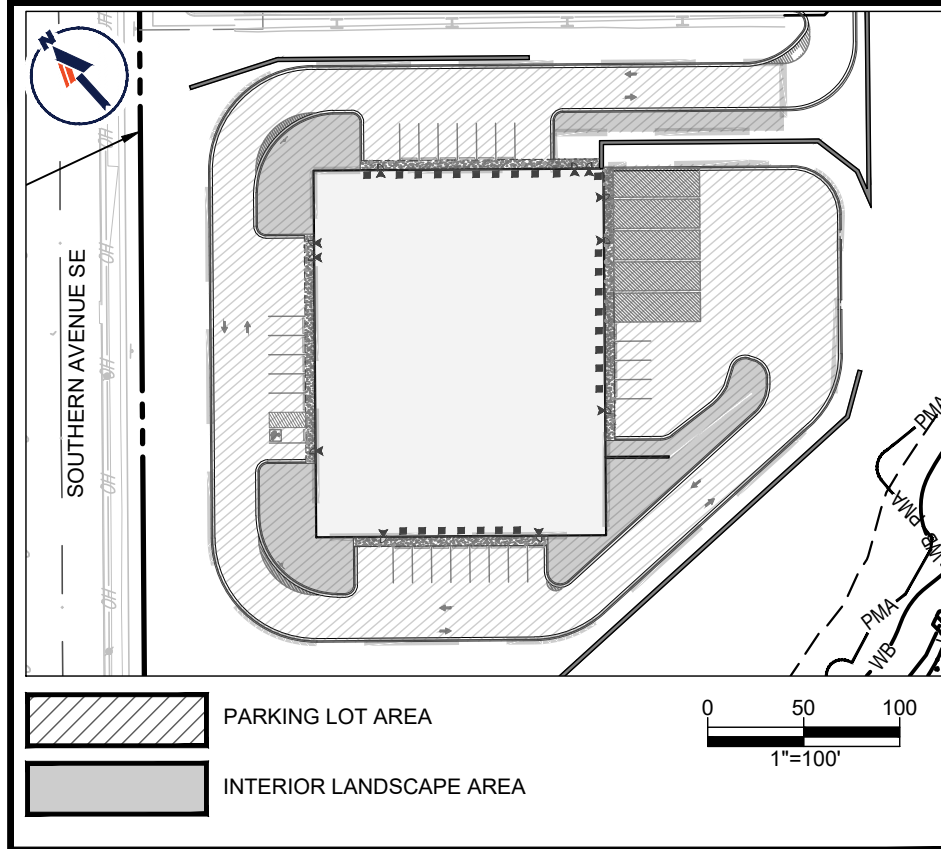
12" WATER EASEMENT  
LIBER 2189 FOLIO 35 &  
PLAT BOOK WWW 40 PLAT 1

162°51'7" 422.80'

BENCH MARK 2  
RIGHT FRONT CORNER  
SD INLET  
ELEV = 119.23'



PARKING AREA CALCULATIONS



SCHEDULE 4.7-1 BUFFERING INCOMPATIBLE USES REQUIREMENTS: BUFFER YARD '1'	
1. GENERAL PLAN DESIGNATION	DEVELOPED TIER
2. USE OF PROPOSED DEVELOPMENT:	CONSOLIDATED STORAGE (FORMERLY MINI-WAREHOUSE)
3. IMPACT OF PROPOSED DEVELOPMENT	HIGH
4. USE OF ADJOINING DEVELOPMENT	FOOD AND BEVERAGE STORE
5. IMPACT OF ADJOINING DEVELOPMENT	MEDIUM
6. MINIMUM REQUIRED BUFFERYARD (A, B, C, D OR E)	B
7. MINIMUM REQUIRED BUILDING SETBACK	30 FEET
8. BUILDING SETBACK PROVIDED	±168 FEET
9. MINIMUM REQUIRED WIDTH OF LANDSCAPE YARD	20 FEET
10. WIDTH OF LANDSCAPE YARD PROVIDED	±114 FEET
11. LINEAR FEET OF BUFFER STRIP REQUIRED ALONG PROPERTY LINE AND RIGHT-OF-WAY	356 L.F.
12. PERCENTAGE OF REQUIRED BUFFERYARD OCCUPIED BY EXISTING TREES	30%
13. IS A SIX FOOT HIGH FENCE OR WALL INCLUDED IN BUFFERYARD	YES - EXISTING 7' CHAIN LINK FENCE ON SUBJECT PROPERTY FOR 101 L.F.
14. TOTAL NUMBER OF PLANT UNITS REQUIRED IN BUFFER STRIP	284.8 P.U. - 30% EXISTING VEGETATION = 199.4 P.U.
15. TOTAL NUMBER OF PLANT UNITS PROVIDED	SHADE TREES 14 x 10 P.U. = 140 P.U. EVERGREEN TREES 0 x 5 P.U. = 0 P.U. ORNAMENTAL TREES 12 x 5 P.U. = 60 P.U. SHRUBS 0 x 1 P.U. = 0 P.U. TOTAL = 200.0 P.U.

\*@# INDICATES PLANT MATERIAL UTILIZED TO FULFILL REQUIREMENT

SCHEDULE 4.7-1 BUFFERING INCOMPATIBLE USES REQUIREMENTS: BUFFER YARD '2'	
1. GENERAL PLAN DESIGNATION	DEVELOPED TIER
2. USE OF PROPOSED DEVELOPMENT:	CONSOLIDATED STORAGE (FORMERLY MINI-WAREHOUSE)
3. IMPACT OF PROPOSED DEVELOPMENT	HIGH
4. USE OF ADJOINING DEVELOPMENT	OPEN SPACE / EXISTING FOREST / VACANT
5. IMPACT OF ADJOINING DEVELOPMENT	COMMERCIALLY ZONED
6. MINIMUM REQUIRED BUFFERYARD (A, B, C, D OR E)	D
7. MINIMUM REQUIRED BUILDING SETBACK	50 FEET
8. BUILDING SETBACK PROVIDED	±191 FEET
9. MINIMUM REQUIRED WIDTH OF LANDSCAPE YARD	40 FEET
10. WIDTH OF LANDSCAPE YARD PROVIDED	±153 FEET
11. LINEAR FEET OF BUFFER STRIP REQUIRED ALONG PROPERTY LINE AND RIGHT-OF-WAY	457 L.F.
12. PERCENTAGE OF REQUIRED BUFFERYARD OCCUPIED BY EXISTING TREES	100%
13. IS A SIX FOOT HIGH FENCE OR WALL INCLUDED IN BUFFERYARD	NO
14. TOTAL NUMBER OF PLANT UNITS REQUIRED IN BUFFER STRIP	0 P.U. / 100% EXISTING VEGETATION TO REMAIN

NOTES:  
1) IF A DEVELOPING PROPERTY WITH A NON-RESIDENTIAL USE IS LOCATED ADJACENT TO A VACANT LOT LOCATED IN A COMMERCIAL OR INDUSTRIAL ZONE, FIFTY PERCENT (50%) OF THE BUFFERYARD IS REQUIRED TO BE PROVIDED ON THE DEVELOPING LOT.

SCHEDULE 4.2-1 REQUIREMENTS FOR LANDSCAPE STRIPS ALONG STREETS	
LINEAR FEET OF STREET FRONTAGE, EXCLUDING DRIVEWAY ENTRANCES (SOUTHERN AVENUE SE)	600 L.F. - 140 L.F. (25' WIDE EXISTING FOREST CONSERVATION) = 460 L.F.
1. GENERAL PLAN DESIGNATION	DEVELOPED TIER
2. OPTION SELECTED	2
3. IS THERE A PUBLIC UTILITY EASEMENT ALONG THE FRONTAGE OF THE PROPERTY?	YES
4. NUMBER OF PLANTS REQUIRED	14 SHADE TREES 66 SHRUBS
5. TOTAL NUMBER OF TREES PROVIDED	14 SHADE TREES 66 SHRUBS

\*# INDICATES PLANT MATERIAL UTILIZED TO FULFILL REQUIREMENT

SECTION 4.9 SUSTAINABLE LANDSCAPING REQUIREMENT	
REQUIRED	PROVIDED
SHADE TREES: 50 x 50% = 30 ORNAMENTAL TREES: 12 x 50% = 6 EVERGREEN TREES: N/A SHRUBS: 66 x 30% = 20	SHADE TREES: 59 (100% NATIVE) ORNAMENTAL TREES: 12 (100% NATIVE) EVERGREEN TREES: N/A SHRUBS: 66 (100% NATIVE)
2. ARE INVASIVE SPECIES PROPOSED	NO
3. ARE EXISTING INVASIVE SPECIES ON-SITE IN AREAS THAT ARE TO REMAIN UNDISTURBED	NO
4. IF "YES" IS CHECKED IN NUMBERS 2 OR 3, IS A NOTE INCLUDED ON THE PLAN REQUIRING REMOVAL OF INVASIVE SPECIES PRIOR TO CERTIFICATION IN ACCORDANCE WITH SECTION 1.5, CERTIFICATION OF INSTALLATION OF PLANT MATERIALS	N/A
5. ARE TREES PROPOSED TO BE PLANTED ON SLOPES GREATER THAN 3:1	NO

SECTION 4.3-2 INTERIOR PLANTING FOR PARKING LOTS 7,000 S.F. OR LARGER	
1. PARKING LOT AREA	55,546 S.F.
2. INTERIOR LANDSCAPE AREA REQUIRED	8% 3,769 S.F.
3. INTERIOR LANDSCAPE AREA PROVIDED	16.3% 9,093 S.F.
4. NUMBER OF SHADE TREES REQUIRED	
PARKING LOTS LESS THAN 50,000 S.F. (1 PER 300 S.F. OF INTERIOR PLANTING AREA PROVIDED)	31 SHADE TREES
PARKING LOTS GREATER THAN 50,000 S.F. (1 PER 200 S.F. OF INTERIOR PLANTING AREA PROVIDED)	N/A
5. NUMBER OF SHADE TREES PROVIDED	31 TREES
6. IS A MINIMUM OF 160 S.F. OF CONTIGUOUS PERVIOUS LAND AREA PROVIDED PER SHADE TREE?	YES
7. IS THERE A PLANTING ISLAND ON AVERAGE EVERY 10 SPACES?	YES
8. IS A CURB OR WHEEL STOP PROVIDED FOR ALL PARKING SPACES ABUTTING A PLANTING OR PEDESTRIAN AREA?	YES
9. ARE PLANTING ISLANDS WHICH ARE EITHER PARALLEL OR PERPENDICULAR TO PARKING SPACES ON BOTH SIDES A MINIMUM OF 9 FEET WIDE?	YES
10. IS A PLANTING ISLAND THAT IS PERPENDICULAR TO PARKING SPACES ON ONE SIDE A MINIMUM OF 6 FEET WIDE?	YES
11. FOR PARKING LOTS 50,000 S.F. OR LARGER	
A) IS THERE A 9 FOOT WIDE PLANTING ISLAND PERPENDICULAR TO PARKING FOR EVERY 2 BAYS?	N/A
B) IS THE NUMBER OF SHADE TREES REQUIRED INCREASED (1 PER 200 S.F. OF INTERIOR PLANTING AREA PROVIDED)?	N/A

\*\*\* INDICATES PLANT MATERIAL UTILIZED TO FULFILL REQUIREMENT

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	NATIVE
CANOPY TREES							
	AR	6	ACER RUBRUM	RED MAPLE	2.5-3" CAL., 12-14' HT.	B&B	YES
	GTI	14	GLEDITSIA TRIACANTHOS INERMIS	THORNLESS HONEY LOCUST	2.5-3" CAL., 12-14' HT.	B&B	YES
	LT	8	LIRIODENDRON TULIPIFERA	TULIP TREE	2.5-3" CAL., 12-14' HT.	B&B	YES
	QPH	31	QUERCUS PHELLOS	WILLOW OAK	2.5-3" CAL., 12-14' HT.	B&B	YES
	59	SUBTOTAL:					
ORNAMENTAL TREES							
	CC	7	CERCIS CANADENSIS	EASTERN REDBUD	2-2.5" CAL., 8-10' HT.	B&B	YES
	MV	5	MAGNOLIA VIRGINIANA	SWEET BAY	2-2.5" CAL., 8-10' HT.	B&B	YES
	12	SUBTOTAL:					
SHRUBS							
	IV	66	ITEA VIRGINICA 'HENRY'S GARNET'	VIRGINIA WILLOW HENRY'S GARNET	24-30" HT. & SPRD	CONTAINER	YES
	66	SUBTOTAL:					

**BOHLER**  
SITE CIVIL AND CONSULTING ENGINEERING  
LANDSCAPE ARCHITECTURE  
PROGRAM MANAGEMENT  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

REVISIONS				
REV	DATE	COMMENT	DRAWN BY	CHECKED BY
1	8/5/24	PRE-REVIEW COMMENTS	SL	NS
2	9/5/24	PRE-ACCEPTANCE COMMENTS	SL	NS
3	10/31/24	PER SDCR COMMENTS	SK	JD

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PROJECT No.:	MDS230010.00
DRAWN BY:	SJL
CHECKED BY:	NBS
DATE:	02/19/2024
CAD I.D.:	LSCP

PROJECT:  
**DETAILED SITE PLAN**  
FOR  
GILPIN PROPERTY  
899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

**BOHLER**  
16701 Melford Blvd., Suite 430  
Bowie, Maryland 20715  
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MD@BohlerEng.com

**C.M. RIZZI**  
PROFESSIONAL LANDSCAPE ARCHITECT  
LICENSED UNDER THE STATE OF MARYLAND  
LICENSE NO. 10178/2026

SHEET TITLE:  
**LANDSCAPE PLAN**  
SHEET NUMBER:  
**DSP-7**  
REVISION 3 - 10/31/24



## LANDSCAPE SPECIFICATIONS

### 1. SCOPE OF WORK:

THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

### 2. MATERIALS

A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM SIX INCH (6") THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES.

1.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED

1.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS.

1.3. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

D. MULCH - THE MULCH AROUND THE PERIMETER OF THE BUILDING SHALL BE A 3" LAYER OF DOUBLE SHREDDED BLACK CEDAR MULCH ONLY. ALL OTHER AREAS SHALL BE MULCHED WITH A 3" LAYER OF DOUBLE SHREDDED DARK BROWN HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.

### E. FERTILIZER

1.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.

1.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

### F. PLANT MATERIAL

1.1. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.

1.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.

1.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.

1.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1/4", WHICH HAVE NOT BEEN COMPLETELY CALLED, SHALL BE REJECTED. PLANTS SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

1.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.

1.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.

1.7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.

1.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

### 3. GENERAL WORK PROCEDURES

A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

### 4. SITE PREPARATIONS

A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT, ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

### 5. TREE PROTECTION

A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY VISI-FENCE, OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

### 6. SOIL MODIFICATIONS

A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

B. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.

1.1. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.

1.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.

1.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

### 7. FINISHED GRADING

A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1-3).

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS SPECIFIED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

### 8. TOPSOILING

A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.

B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

D. ALL PLANTING AND LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA):

1.1. 20 POUNDS GROW POWER OR APPROVED EQUAL

1.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

### 9. PLANTING

A. INsofar THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:

1.1. PLANTS: MARCH 15 TO DECEMBER 15

1.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

G. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

H. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM PLATANUS X ACERIFOLIA  
BETULA VARIETIES POPULUS VARIETIES  
CARPINUS VARIETIES PRUNUS VARIETIES  
CRATAEGUS VARIETIES PYRUS VARIETIES  
KOELREUTERA QUERCUS VARIETIES  
LIQUIDAMBER STYRACIFLUA TILIA TOMENTOSA  
LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES

I. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL, MIXED THOROUGHLY:

• 1 PART PEAT MOSS  
• 1 PART COMPOSTED COW MANURE BY VOLUME  
• 3 PARTS TOPSOIL BY VOLUME  
• 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:  
A) 3 TABLETS PER 1 GALLON PLANT  
B) 3 TABLETS PER 5 GALLON PLANT  
C) 4 TABLETS PER 15 GALLON PLANT  
D) LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK

J. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

K. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

L. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.

M. GROUND COVER AREAS SHALL RECEIVE A 1/2" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

N. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

O. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

P. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

### 10. TRANSPLANTING (WHEN REQUIRED)

A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.

B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

### 11. WATERING

A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

### 12. GUARANTEE

A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.

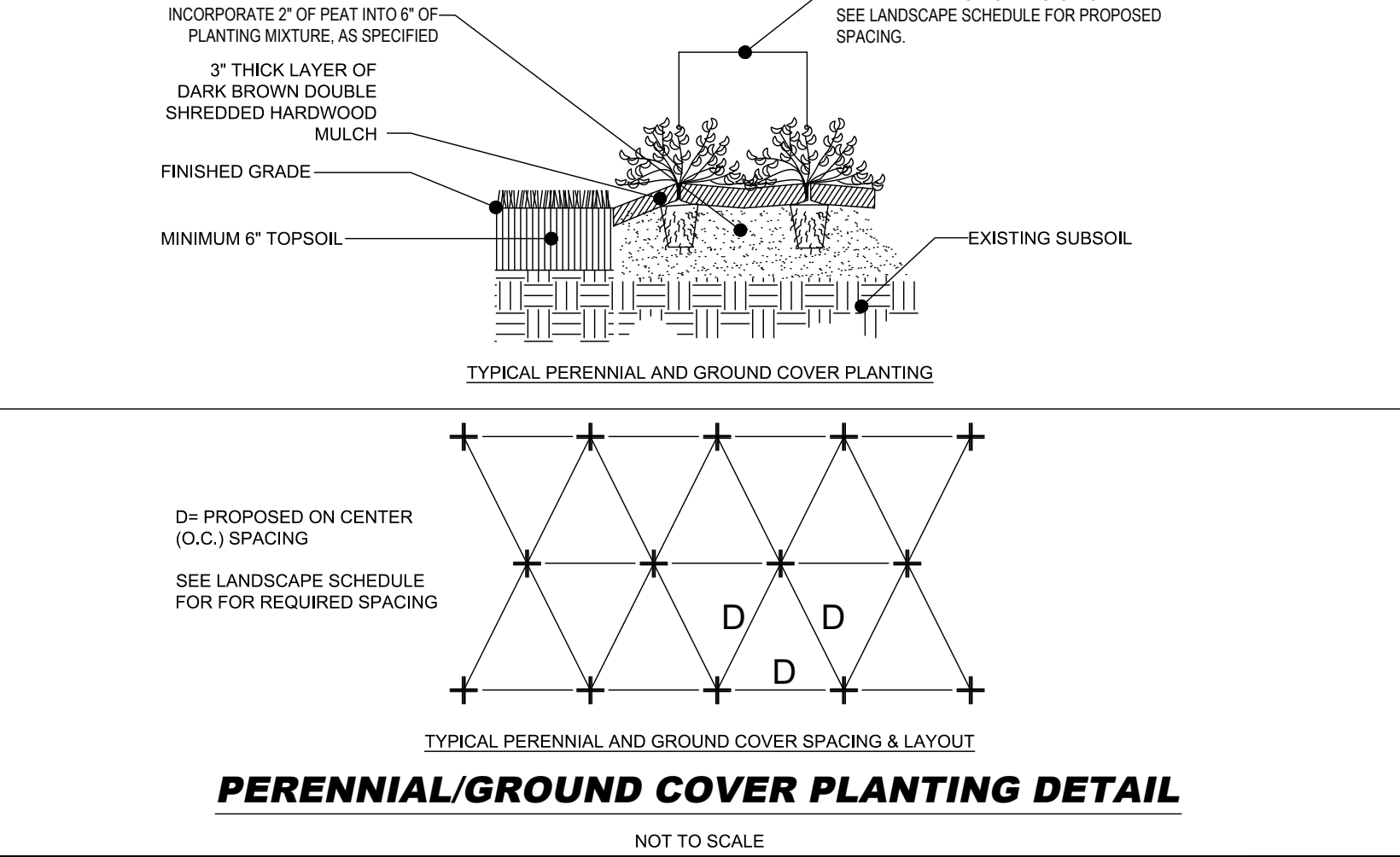
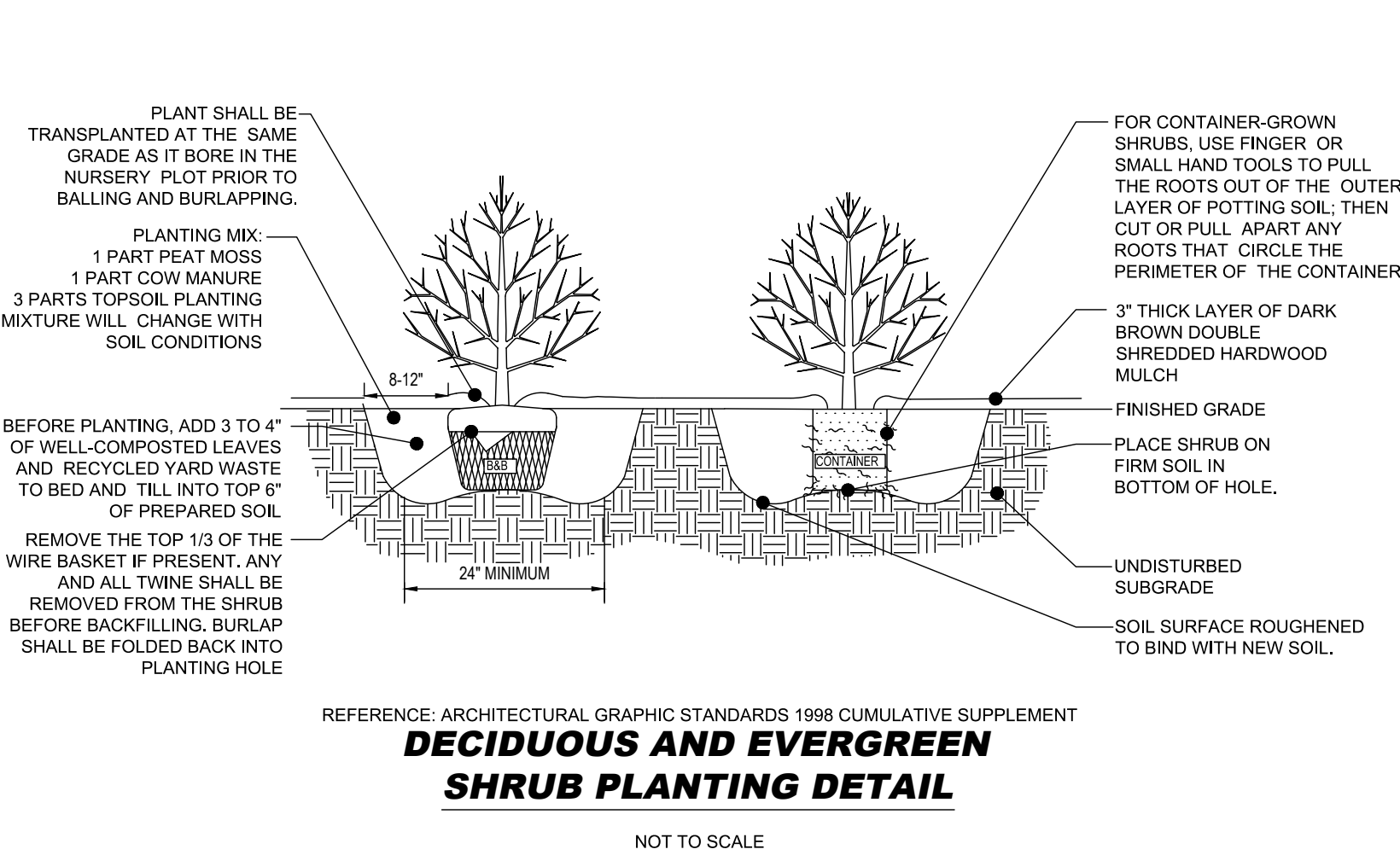
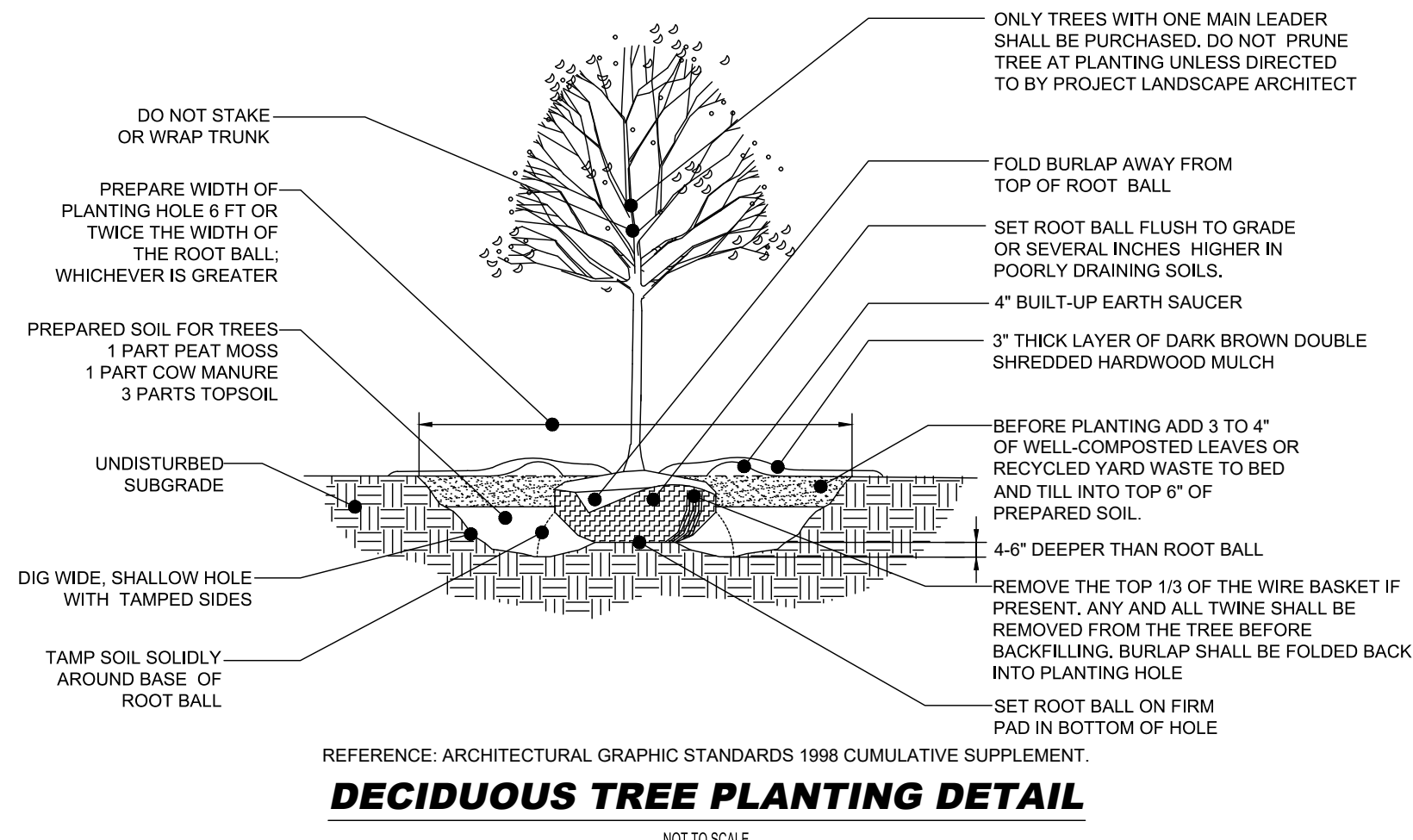
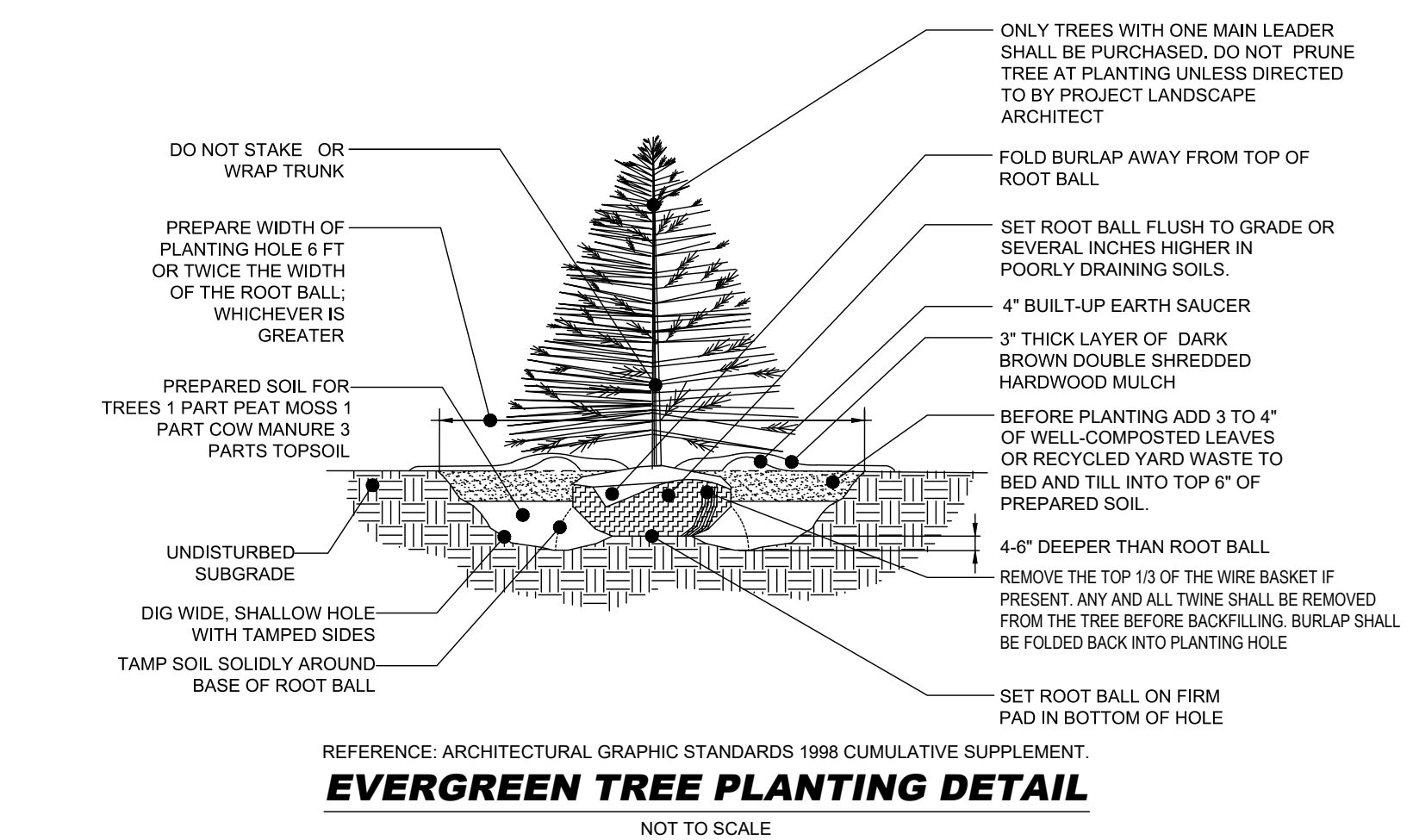
C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

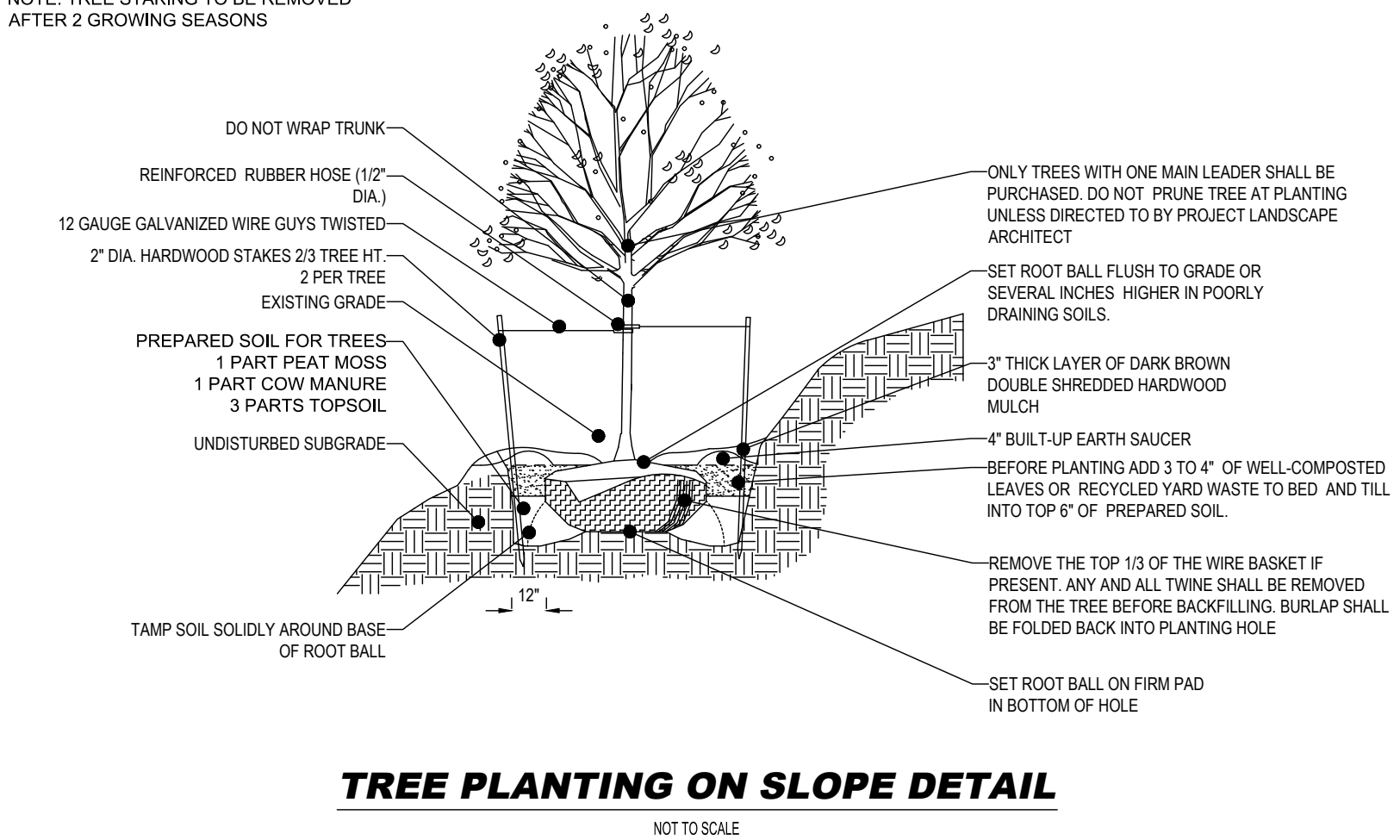
### 13. CLEANUP

A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEARED.

B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.



NOTE: TREE STAKING TO BE REMOVED AFTER 2 GROWING SEASONS



## SEEDING SPECIFICATIONS

- PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.
- PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.
- SEEDING RATES:

PERENNIAL RYEGRASS	12 LBS/1,000 SQ FT
KENTUCKY BLUEGRASS	1 LBS/1,000 SQ FT
RED FESCUE	1 1/2 LBS/1,000 SQ FT
SPREADING FESCUE	1 1/2 LBS/1,000 SQ FT
FERTILIZER (20-10-10)	14 LBS/1,000 SQ FT
MULCH	90 LBS/1,000 SQ FT
- GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER.

## OWNER MAINTENANCE RESPONSIBILITIES

UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPRKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL.
- TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS.
- VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVELED SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS.
- FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER HAZARDS.

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.

Tree Canopy Coverage Schedule for Sec. 25-128				
Project Name:	TCP2B:	DRD Case #:	Area (acres)	
GILPIN PROPERTY				
Site Calculations:				
	Zone 1:	IE	10.11	
	Zone 2:			
	Zone 3:			
	Zone 4:			
	Total Acres:		10.11	
Total Acres (gross acres)	10.11	% of TCC required	TCC Required (Acres)	TCC Required (SF)
			1.52	66059
A. TOTAL ON-SITE WC PROVIDED (acres) =		2.86 acres		124581.6
B. TOTAL AREA EXISTING TREES (non-WC acres) =		1.05 acres		45738
C. TOTAL SQUARE FOOTAGE IN LANDSCAPE TREES =				14475
D. TOTAL TREE CANOPY COVERAGE PROVIDED =				184795
E. TOTAL SQUARE FOOTAGE REQUIRED =				66059
				Requirement Satisfied
Credit Categories for Landscape Trees				
	TCC Credit per Tree Based on Size at Planting (\$F)	Number of Trees	TCC Credit (\$F)	
Deciduous - columnar shade tree (50' or less height)	2 - 1/2 - 3" = 65		0	
	3 - 3 1/2" = 75		0	
Deciduous - ornamental tree (20' or less height with equal spread). Minimum planting size 7' - 9' in height	1 - 1/2 - 1 3/4" = 75		0	
	2 - 2 1/2" = 100	12	1200	
	2 - 1/2 - 3" = 110		0	
Deciduous - minor shade tree (25-50' height with equal spread or greater). Minimum planting size 8-10' in height	2 - 1/2 - 3" = 160		0	
	3 - 3 1/2" = 175	59	13275	
Deciduous - major shade tree (50' and greater ht. with spread equal to or greater than ht) Minimum planting size 12 to 14' in height	2 - 1/2 - 3" = 225		0	
	3 - 3 1/2" = 250		0	
	6 - 8" = 50		0	
Evergreen - columnar tree (less than 30' height with spread less than 15')	10 - 12" = 75		0	
	6 - 8" = 75		0	
Evergreen - small tree (30-40' height with spread of 15-20')	8 - 10" = 100		0	
	10 - 12" = 125		0	
	6 - 8" = 125		0	
Evergreen - medium tree (40-50' height with spread of 20-30')	8 - 10" = 150		0	
	10 - 12" = 175		0	
	6 - 8" = 150		0	
Evergreen - large tree (50' height or greater with spread of over 30')	8 - 10" = 200		0	
	10 - 12" = 250		0	
TOTAL NUMBER OF TREES/TCC CREDIT (\$F)		71	14475	
(Manually enter information/figures into shaded areas)				
Bohler Engineering		13-Sep-24		
Prepared by		Date		
Revised June 2011				



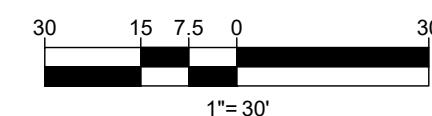
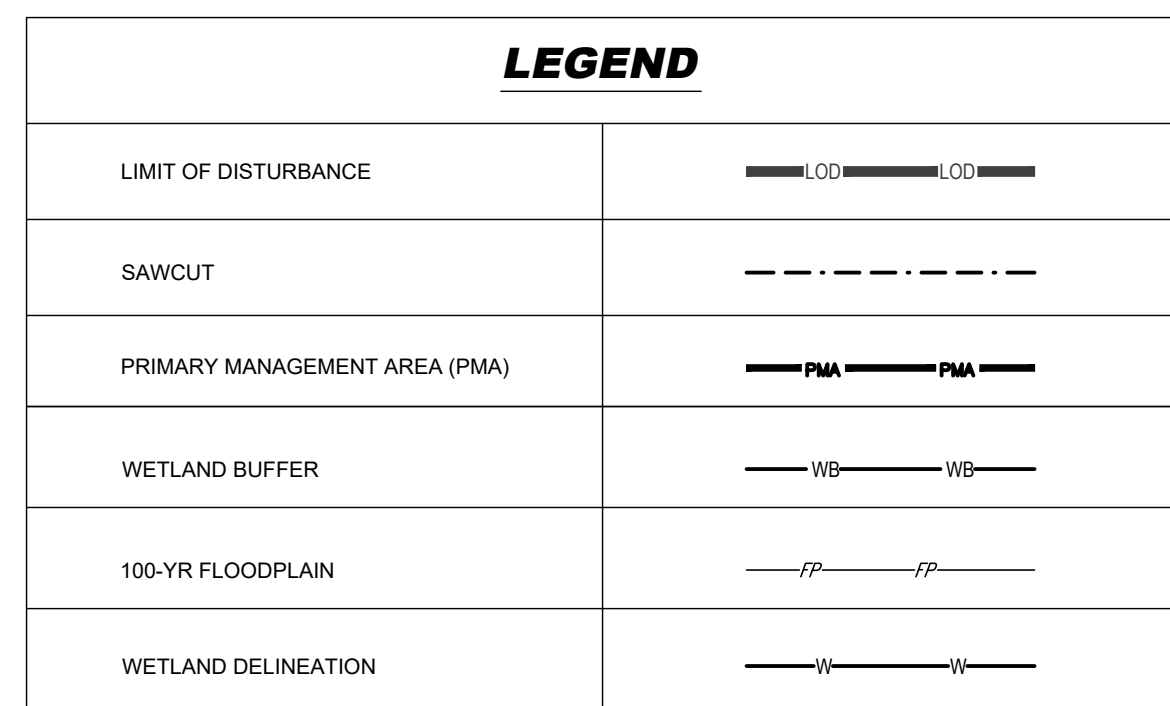






**SOUTHERN AVENUE, SE**

75' WIDE R/W  
POSTED SPEED LIMIT = 30 PMH

[illegible]

ALWAYS CALL 811

fast. It's free. It's the

NOT APPROVED FOR  
CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	MDB230010.00
DRAWN BY:	SJL
CHECKED BY:	NBS
DATE:	02/19/2024
PROJECT ID:	SITE

## OBJECT

## DETAILED SITE PLAN

OR -

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

BOHLER//

**6701 MELFORD BLVD , SUITE 430**  
**BOWIE, MARYLAND 20715**  
 Phone: (301) 809-4500  
 Fax: (301) 809-4501  
***MD@BohlerEng.com***

**J. DIMARCO**  
*J. Dimarco*  
PROFESSIONAL ENGINEER  
ESTATE AND LICENSE NO. 34390 12/16/2024  
PROFESSIONAL CERTIFICATION  
I, JOSEPH DIMARCO, 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. 34390, EXPIRATION DATE: 12/23/2026

EET TITLE

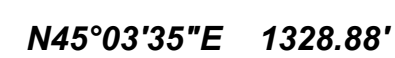
## TRUCK TURN EXHIBIT

EET NUMBER

# DSP-10

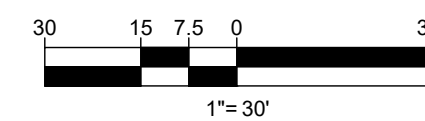
REVISION 3 - 10/31/24





**SOUTHERN AVENUE, SE**

75' WIDE R/W  
POSTED SPEED LIMIT = 30 PMH

[illegible]

ALWAYS CALL 811  
It's fast. It's free. It's the law.

NOT APPROVED FOR  
CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY  
REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION  
DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	MDB230010.00
DRAWN BY:	SJL
CHECKED BY:	NBS
DATE:	02/19/2024
CAD I.D.:	SIT

PROJECT:

**DETAILED SITE  
PLAN**

— FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

**16701 MELFORD BLVD , SUITE 430**  
**BOWIE, MARYLAND 20715**  
 Phone: (301) 809-4500  
 Fax: (301) 809-4501  
***MD@BohlerEng.com***

**J. DIMARCO**  
*J. Dimarco*  
**PROFESSIONAL ENGINEER**  
MARYLAND LICENSE NO. 34390 12/26/2021  
**PROFESSIONAL CERTIFICATION**  
I, JOSEPH DIMARCO, 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. 34390, EXPIRATION DATE: 12/23/2026

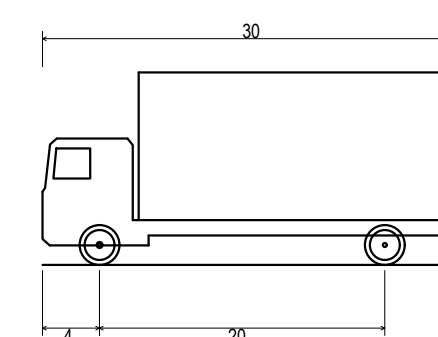
SHEET TITLE:

## TRUCK TURN EXHIBIT

SHEET NUMBER:

EET NUMBER:  
**DSP-11**

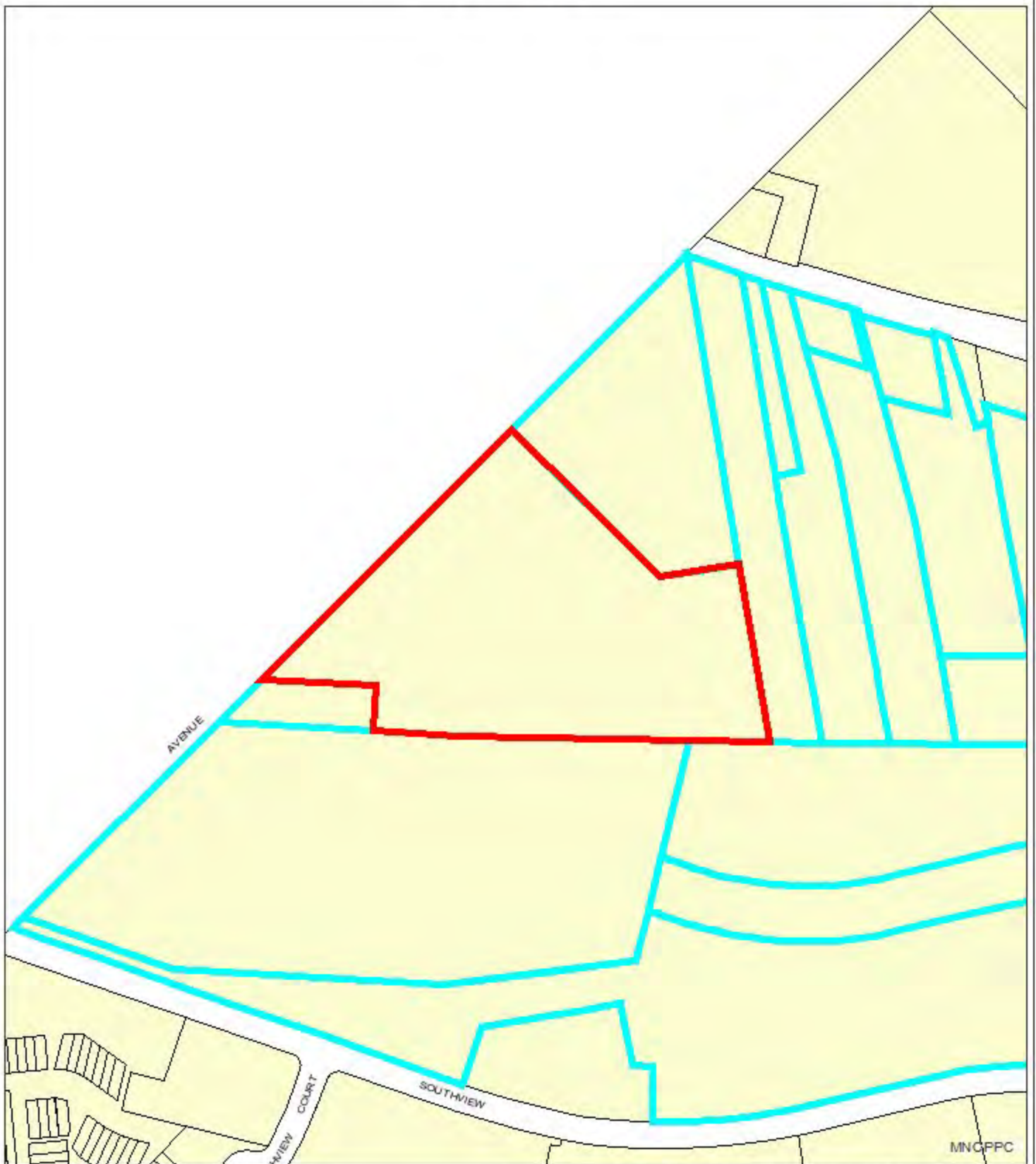
REVISION 3 - 10/31/24



SU-30 - Single Unit Truck  
Overall Length  
Overall Width  
Overall Body Height  
Min Body Ground Clearance  
Track Width  
Lock-to-lock time  
Max Steering Angle (Virtual)

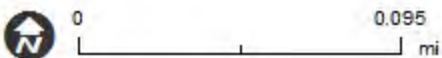
30.000ft  
8.000ft  
13.500ft  
1.367ft  
8.000ft  
5.00s  
31.80°





Development Address & Sketchmap  
Extract Adjoining Properties

The Maryland-National Capital Park and Planning Commission  
Prince George's County Planning Department Geographic Information System



Map Date: 3/4/2024



The Maryland-National Capital Park & Planning Commission Results

Prince George's County Planning Department

Case Number: DSP-13008-02

Date: 3/4/2024

Time: 03:45:58 PM

Premise Address - Table Columns G-M

Owner Address - Table Columns P-U

=====  
Total Records(s): 19  
=====

Tax Account	Lot	Block	Parcel	Plat	Property Description	House Number
5593818			087	12245076	LOT 4	899
1351352				A12-4699	PT PARCEL F EQ 4.1320 ACRES	1414
1239805				A12-6951	PAR A EX 4.9857 AC AT N PT	4300
1229541				A12-4699	OUTLOT F	0
1276732			032			4421
1314442				A12-7634	PARCEL A	4439
1351386				A12-4699	PT PAR F EQ 3.68 ACRES	1314
1314459			037			0
1203454			052			0
1194190	5A			A12-3458		4429
1298975			033			4427
1370204				A12-6951	PT PAR A EQ 4.9857 ACRES AT N PT	4300
1218973			031		(USE CODE CHANGE 2004)	0
1255603				A12-9123	PARCEL A	833
1351345				A12-4699	PT PARCEL F EQ 8.05 ACRES	1414
5593807			087		LOT 3	0
1295591			034		(CORR USE 06)	4431
1325968				A12-4697	PT PARCEL A EQ 1.1497 ACRES	827
1325950				A12-4697	PT OF PARCEL A EQ 597443 SF	801



House Suffix	Street Name	Street Type	Unit Number	City	ZIP Code	WSSC Grid
	SOUTHERN	AVE		OXON HILL	20745	206SE01
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	VERMILLION	AVE		OXON HILL	20745	206SE02
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	VERMILLION	AVE		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	SOUTHERN	AVE		OXON HILL	20745	206SE01
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	SOUTHERN	AVE		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	SOUTHERN	AVE	251	OXON HILL	20745	206SE01
	SOUTHERN	AVE	251	OXON HILL	20745	206SE01



Mailing Indicator	Owner Name	In Care Of Name
I	SILVER BRANCH LLC	1055 THOMAS JEFFERSON ST NW
I	SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
I	PRINCE GEORGES COUNTY	RIGHT OF WAY SECTION
O	WILBARGER LLC	
O	RHAVI OPERATING CO INC	
O	PEGASUS MOTORS CORPORATION	
I	SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
O	PEGASUS MOTORS CORPORATION	
I	MNCPPC	CHIEF PK&P DIVPKS & REC-ROOM 303
O	4429 WHEELER ROAD LLC	
I	KHAN MUHAMMAD ETAL	SUITE 5
O	HOUSING AUTHORITY OF P G COUNTY	
I	COHEN WILLIAM & ANGELO A PUGLISI	C/O WILLCO COMPANIES
O	DHILLON INVESTMENTS LLC	
I	SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
I	SILVER BRANCH LLC	1055 THOMAS JEFFERSON ST NW
O	SHEPERD MEREDITH	
I	SOUTHERN AVE ASSOC LTD PARTNERSHIP	ATTN: BETH MYERS
I	SOUTHERN AVE ASSOC LTD PARTNERSHIP	ATTN: BETH MYERS



Mailing Street Address	Mailing City	Mailing State	Mailing ZIP Code
STE 250	WASHINGTON	DC	20007
7950 JONES BRANCH DR	MCLEAN	VA	22102
ROOM 3020 CAB	UPPER MARLBORO	MD	20772
PO BOX 2367	DENVER	CO	80201
4421 WHEELER RD	OXON HILL	MD	20745
4439 WHEELER RD	OXON HILL	MD	20745
7950 JONES BRANCH DR	MCLEAN	VA	22102
4439 WHEELER RD	OXON HILL	MD	20745
6600 KENILWORTH AVE	RIVERDALE	MD	20737
4429 WHEELER RD	OXON HILL	MD	20745
445 N ARMISTEAD ST	ALEXANDRIA	VA	22312
9400 PEPPERCORN PL	LANDOVER	MD	20785
7811 MONTROSE RD STE 200	POTOMAC	MD	20854
833 SOUTHERN AVE	OXON HILL	MD	20745
7950 JONES BRANCH DR	MCLEAN	VA	22102
STE 250	WASHINGTON	DC	20007
4431 WHEELER RD	OXON HILL	MD	20745
2707 32ND ST NW	WASHINGTON	DC	20008
2707 32ND ST NW	WASHINGTON	DC	20008



The Maryland-National Capital Park & Planning Commission Results

Prince George's County Planning Department

Case Number: DSP-13008-02

Date: 3/4/2024

Time: 03:45:58 PM

=====

Total Records(s): 1

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Primary Key	Name of the Municipality	Municipal Number	DAMS Link	Officials Name
27	FOREST HEIGHTS	99	99	Troy Barrington Lilly



Officials Title	Address	City	Zip Code	Executive Selection
Mayor	5508 Arapahoe Drive	Forest Heights	20745	Elected



Executive Term Expiration	Acreage	Buffer Distance	Original FID	Telephone
3/1/2025	1049.13521985	5280.0	237	301-839-1030



Email Address	Area	Length
shawkins@forestheightsmd.gov	319345034.10762697	65057.843793526205



The Maryland-National Capital Park & Planning Commission Results  
Prince George's County Planning Department  
Case Number: DSP-13008-02  
Date: 3/4/2024  
Time: 03:45:58 PM

=====  
Total Records(s): 21  
=====

Registered Association Name	First Name
4TH WARD CIVIC ASSOCIATION (TOWN OF CHEVERLY)	
BERKSHIRE CIVIC ASSOCIATION	GREGORY
HILLSIDE CIVIC ASSOCIATION	SHIRLEY
POWDER MILL ESTATES COMMUNITY GROUP	KATHY
CENTRAL CIVIC ASSOCIATION OF THE WILBURN COMMUNITY	DAISY
SKYLINE HILLS HOA	TONI
GREATER CAPITOL HEIGHTS IMPROVEMENT CORPORATION INC.	BRADLEY
FLEISCHMAN'S VILLAGE CITIZENS ASSOCIATION	STEPHON
BROOKE ROAD, ROLLINS AVE., WALKER MILL RD. (BRW) CIVIC ASSOC.	KAREN F.
CAMP SPRINGS CIVIC ASSOCIATION	CAROLYN
MILLWOOD COMMUNITY ASSOCIATION, INC.	
PRINCE GEORGE'S COUNTY EDUCATOR'S ASSOCIATION (PGCEA)	
SUITLAND CIVIC ASSOCIATION, INC.	CHARLOTTE
BARNABY MANOR CITIZENS ASSN. INC.	JAMES
ST. MARGARET'S OF SCOTLAND CATHOLIC CHURCH	
THE PARK AT ADDISON METRO HOA, INC.	LAYLA
PICKWICK SQUARE MUTUAL HOMES, INC.	LINDA
APPLEGATE CONDOMINIUM	BERNETTA
DUPOINT VILLAGE NEIGHBORHOOD WATCH	
BARNABY VALLEY PARK HOMEOWNERS ASSOCIATION	ANGELENE
SCENIC PRINCE GEORGE'S	MARK



Last Name	Address Number	Street Name & Type	Suite Number	City
	1709	62ND AVENUE		HYATTSVILLE
MCCLAIN	2916	UPLAND AVENUE		DISTRICT HEIGHTS
GILMORE	1005	DRUM AVENUE		CAPITOL HEIGHTS
CORLEY	10908	BARNEDALE DRIVE		HYATTSVILLE
CHERRY MAGGETT	6616	SISALBED DRIVE		CAPITOL HEIGHTS
HARRIS	4723	JOHN STREET		SUITLAND
HEARD	415	ZELMA AVE		CAPITOL HEIGHTS
MILLS	3407	ANDOVER PLACE		SUITLAND
JEFFERSON	1112	BROOKE ROAD		CAPITOL HEIGHTS
FLEMING				TEMPLE HILLS
	306	SHADY GLEN DRIVE		CAPITOL HEIGHTS
	8008	MARLBORO PIKE		DISTRICT HEIGHTS
WILLIAMS	4801	TANGIER PLACE		SUITLAND
BEHR	5008	BOULDER DRIVE		OXON HILL
	408	ADDISON ROAD		CAPITOL HEIGHTS
BROWN	3414	MORNINGWOOD DRIVE		OLNEY
BRISCOE	1574	ADDISON ROAD SOUTH		DISTRICT HEIGHTS
REESE				SUITLAND
	2218	WYNGATE ROAD		SUITLAND
JONES PERRY	2001	CHITA CT		TEMPLE HILLS
FALZONE	1012	14TH STREET, NW	1108	WASHINGTON



State	Zip Code
MD	20785
MD	20747
MD	20743
MD	20783
MD	20743
MD	20746
MD	20743
MD	20746
MD	20743
MD	20757
MD	20743
MD	20747
MD	20746
MD	20745
MD	20743
MD	20832
MD	20747
MD	20752
MD	20746
MD	20748
DC	20005



The Maryland-National Capital Park & Planning Commission  
Planning Department Prince George's County  
Development Review Division  
1616 McCormick Drive  
Largo, Maryland 20774  
[www.pgplanning.org](http://www.pgplanning.org)

Date: 3/4/2024

## MAILING LIST - RECEIPT

☒ Development Application      **DSP-13008-02**

☐ County Application

This receipt is to acknowledge that Matt Tedesco received the following lists as described by the categories below:

<input checked="" type="checkbox"/> Registered community organization list	Total Records: 21
<input checked="" type="checkbox"/> Adjoining property owners list	Total Records: 19
<input checked="" type="checkbox"/> Municipalities within one mile list	Total Records: 1

This list is valid for 180 days from the date referenced above. Applicants must obtain an updated mailing list if notifications are not sent within 180 days.

This property is located on WSSC Grid: 206SE01

Don Townsend  
Development Review Division

### Download Extracts:

[DSP-13008-02\\_03042024154558\\_Reg\\_Assoc.xlsx](#)  
[DSP-13008-02\\_03042024154558\\_Adjoining\\_Property\\_Premise\\_Owner\\_Address.xlsx](#)  
[DSP-13008-02\\_03042024154558\\_Muni1Mile.xlsx](#)

A copy of the adjoining properties map has been included for your reference:

[DSP-13008-02\\_03042024154558\\_Adjoining\\_Property.jpg](#)

A mailing list archive has been generated for your reference:

[DSP-13008-02\\_03042024154558\\_MailingListArchive.zip](#)

The download extract links above will be available for 3 months. You must download the extracts if you need access to the data in the future.

Data extract may include duplicate address records.



The Maryland-National Capital Park & Planning Commission Results

Prince George's County Planning Department

Case Number: DSP-13008-02

Date: 8/27/2024

Time: 03:46:32 PM

Premise Address - Table Columns G-M

Owner Address - Table Columns P-U

=====  
Total Records(s): 19

=====  
Tax Account   Lot   Block   Parcel   Plat   Property Description   House Number

5593818			087	12245076	LOT 4	899
1351352				A12-4699	PT PARCEL F EQ 4.1320 ACRES	1414
1325968				A12-4697	PT PARCEL A EQ 1.1497 ACRES	827
1295591			034		(CORR USE 06)	4431
1370204				A12-6951	PT PAR A EQ 4.9857 ACRES AT N PT	4300
1325950				A12-4697	PT OF PARCEL A EQ 597443 SF	801
1298975			033			4427
1229541				A12-4699	OUTLOT F	0
1351386				A12-4699	PT PAR F EQ 3.68 ACRES	1314
1239805				A12-6951	PAR A EX 4.9857 AC AT N PT	4300
1276732			032			4421
1255603				A12-9123	PARCEL A	833
1351345				A12-4699	PT PARCEL F EQ 8.05 ACRES	1414
1314459			037			0
1203454			052			0
5593807			087		LOT 3	0
1218973			031		(USE CODE CHANGE 2004)	0
1194190	5A			A12-3458		4429
1314442				A12-7634	PARCEL A	4439



House Suffix	Street Name	Street Type	Unit Number	City	ZIP Code	WSSC Grid
	SOUTHERN	AVE		OXON HILL	20745	206SE01
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	SOUTHERN	AVE	251	OXON HILL	20745	206SE01
	WHEELER	RD		OXON HILL	20745	206SE02
	VERMILLION	AVE		OXON HILL	20745	206SE02
	SOUTHERN	AVE	251	OXON HILL	20745	206SE01
	WHEELER	RD		OXON HILL	20745	206SE02
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	VERMILLION	AVE		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	SOUTHERN	AVE		OXON HILL	20745	206SE01
	SOUTHVIEW	DR		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	SOUTHERN	AVE		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02
	WHEELER	RD		OXON HILL	20745	206SE02



Mailing Indicator	Owner Name	In Care Of Name
I	SILVER BRANCH LLC	1055 THOMAS JEFFERSON ST NW
I	SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
I	SOUTHERN AVE ASSOC LTD PARTNERSHIP	ATTN: BETH MYERS
O	SHEPERD MEREDITH	
O	HOUSING AUTHORITY OF P G COUNTY	
I	SOUTHERN AVE ASSOC LTD PARTNERSHIP	ATTN: BETH MYERS
I	KHAN MUHAMMAD ETAL	SUITE 5
O	WILBARGER LLC	
I	SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
I	PRINCE GEORGES COUNTY	RIGHT OF WAY SECTION
O	RHAVI OPERATING CO INC	
O	DHILLON INVESTMENTS LLC	
I	SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
O	PEGASUS MOTORS CORPORATION	
I	MNCPPC	CHIEF PK&P DIVPKS & REC-ROOM 303
I	SILVER BRANCH LLC	1055 THOMAS JEFFERSON ST NW
I	COHEN WILLIAM & ANGELO A PUGLISI	C/O WILLCO COMPANIES
O	4429 WHEELER ROAD LLC	
O	PEGASUS MOTORS CORPORATION	



Mailing Street Address	Mailing City	Mailing State	Mailing ZIP Code
STE 250	WASHINGTON	DC	20007
7950 JONES BRANCH DR	MCLEAN	VA	22102
2707 32ND ST NW	WASHINGTON	DC	20008
4431 WHEELER RD	OXON HILL	MD	20745
9400 PEPPERCORN PL	LANDOVER	MD	20785
2707 32ND ST NW	WASHINGTON	DC	20008
445 N ARMISTEAD ST	ALEXANDRIA	VA	22312
PO BOX 2367	DENVER	CO	80201
7950 JONES BRANCH DR	MCLEAN	VA	22102
ROOM 3020 CAB	UPPER MARLBORO	MD	20772
4421 WHEELER RD	OXON HILL	MD	20745
833 SOUTHERN AVE	OXON HILL	MD	20745
7950 JONES BRANCH DR	MCLEAN	VA	22102
4439 WHEELER RD	OXON HILL	MD	20745
6600 KENILWORTH AVE	RIVERDALE	MD	20737
STE 250	WASHINGTON	DC	20007
7811 MONTROSE RD STE 200	POTOMAC	MD	20854
4429 WHEELER RD	OXON HILL	MD	20745
4439 WHEELER RD	OXON HILL	MD	20745



The Maryland-National Capital Park & Planning Commission Results

Prince George's County Planning Department

Case Number: DSP-13008-02

Date: 8/27/2024

Time: 03:46:32 PM

=====

Total Records(s): 1

=====

Primary Key	Name of the Municipality	Municipal Number	DAMS Link	Officials Name
27	FOREST HEIGHTS	99	99	Troy Barrington Lilly



Officials Title	Address	City	Zip Code	Executive Selection
Mayor	5508 Arapahoe Drive	Forest Heights	20745	Elected



Executive Term Expiration	Acreage	Buffer Distance	Original FID	Telephone
3/1/2025	1049.13521985	5280.0	27	301-839-1030



Email Address	Area	Length
shawkins@forestheightsmd.gov	319317529.43448901	65054.570061884398



The Maryland-National Capital Park & Planning Commission Results  
Prince George's County Planning Department  
Case Number: DSP-13008-02  
Date: 8/27/2024  
Time: 03:46:32 PM

=====  
Total Records(s): 21  
=====

Registered Association Name	First Name
MILLWOOD COMMUNITY ASSOCIATION, INC.	
HILLSIDE CIVIC ASSOCIATION	SHIRLEY
GREATER CAPITOL HEIGHTS IMPROVEMENT CORPORATION INC.	BRADLEY
DUPOINT VILLAGE NEIGHBORHOOD WATCH	
BROOKE ROAD, ROLLINS AVE., WALKER MILL RD. (BRW) CIVIC ASSOC.	KAREN F.
ST. MARGARET'S OF SCOTLAND CATHOLIC CHURCH	
SCENIC PRINCE GEORGE'S	MARK
4TH WARD CIVIC ASSOCIATION (TOWN OF CHEVERLY)	
PICKWICK SQUARE MUTUAL HOMES, INC.	LINDA
THE PARK AT ADDISON METRO HOA, INC.	LAYLA
BERKSHIRE CIVIC ASSOCIATION	GREGORY
CAMP SPRINGS CIVIC ASSOCIATION	CAROLYN
PRINCE GEORGE'S COUNTY EDUCATOR'S ASSOCIATION (PGCEA)	
CENTRAL CIVIC ASSOCIATION OF THE WILBURN COMMUNITY	DAISY
FLEISCHMAN'S VILLAGE CITIZENS ASSOCIATION	STEPHON
BARNABY VALLEY PARK HOMEOWNERS ASSOCIATION	ANGELENE
HILLCREST-MARLOW HEIGHTS CIVIC ASSOCIATION	GEORGE W.
SUITLAND CIVIC ASSOCIATION, INC.	CHARLOTTE
BARNABY MANOR CITIZENS ASSN. INC.	JAMES
SKYLINE HILLS HOA	TONI
APPLEGATE CONDOMINIUM	BERNETTA

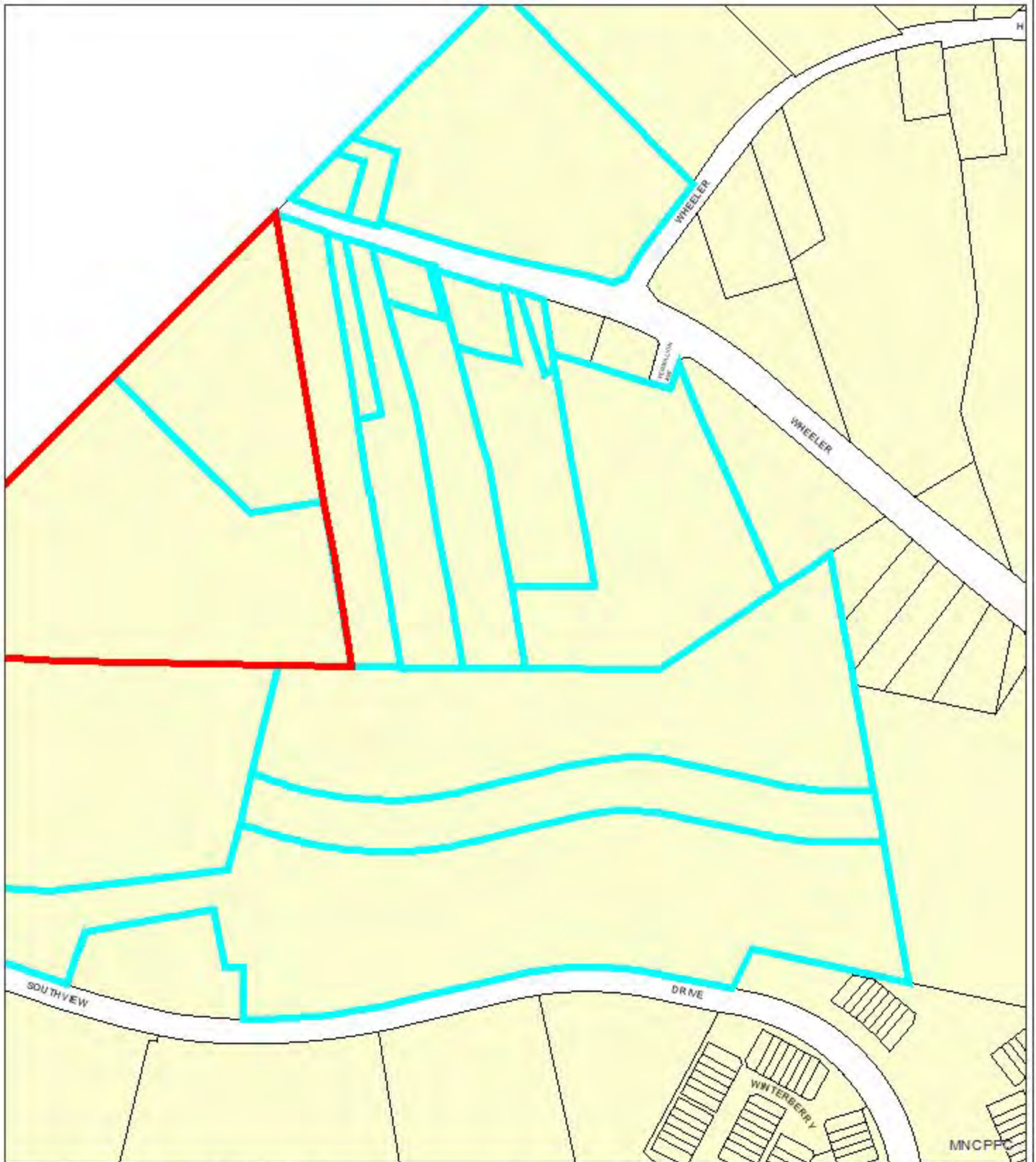


Last Name	Address Number	Street Name & Type	Suite Number	City
	306	SHADY GLEN DRIVE		CAPITOL HEIGHTS
GILMORE	1005	DRUM AVENUE		CAPITOL HEIGHTS
HEARD	415	ZELMA AVE		CAPITOL HEIGHTS
	2218	WYNGATE ROAD		SUITLAND
JEFFERSON	1112	BROOKE ROAD		CAPITOL HEIGHTS
	408	ADDISON ROAD		CAPITOL HEIGHTS
FALZONE	1012	14TH STREET, NW	1108	WASHINGTON
	1709	62ND AVENUE		HYATTSVILLE
BRISCOE	1574	ADDISON ROAD SOUTH		DISTRICT HEIGHTS
BROWN	3414	MORNINGWOOD DRIVE		OLNEY
MCCLAIN	2916	UPLAND AVENUE		DISTRICT HEIGHTS
FLEMING				TEMPLE HILLS
	8008	MARLBORO PIKE		DISTRICT HEIGHTS
CHERRY MAGGETT	6616	SISALBED DRIVE		CAPITOL HEIGHTS
MILLS	3407	ANDOVER PLACE		SUITLAND
JONES PERRY	2001	CHITA CT		TEMPLE HILLS
HANNA	3212	BEAUMONT STREET		TEMPLE HILLS
WILLIAMS	4801	TANGIER PLACE		SUITLAND
BEHR	5008	BOULDER DRIVE		OXON HILL
HARRIS	4723	JOHN STREET		SUITLAND
REESE				SUITLAND



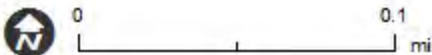
State	Zip Code
MD	20743
MD	20743
MD	20743
MD	20746
MD	20743
MD	20743
DC	20005
MD	20785
MD	20747
MD	20832
MD	20747
MD	20748
MD	20747
MD	20743
MD	20746
MD	20748
MD	20748
MD	20746
MD	20745
MD	20746
MD	20752





Development Address & Sketchmap  
Extract Adjoining Properties

The Maryland-National Capital Park and Planning Commission  
Prince George's County Planning Department Geographic Information System



Map Date: 12/30/2024



Tax Account	Premise House Number	Premise House Suffix	Premise Street Name
1351386	1314		SOUTHVIEW
1351345	1414		SOUTHVIEW
1314459	0		WHEELER
1286749	4508		WHEELER
1255603	833		SOUTHERN
1298975	4427		WHEELER
1265131	4420		WHEELER
1276732	4421		WHEELER
1194190	4429		WHEELER
1325950	801		SOUTHERN
1203454	0		WHEELER
1229541	0		SOUTHVIEW
1265156	0		WHEELER
1370204	4300		VERMILLION
1265149	4422		WHEELER
5593818	899		SOUTHERN
1351352	1414		SOUTHVIEW
5593807	0		SOUTHERN
1314442	4439		WHEELER
1218973	0		WHEELER
1295591	4431		WHEELER
1370295	4445		WHEELER
1325968	827		SOUTHERN
1239805	4300		VERMILLION



Premise Street Type	Premise Unit Number	Premise City	Premise ZIP Code
DR		OXON HILL	20745
DR		OXON HILL	20745
RD		OXON HILL	20745
RD		OXON HILL	20745
AVE		OXON HILL	20745
RD		OXON HILL	20745
RD		OXON HILL	20745
RD		OXON HILL	20745
RD		OXON HILL	20745
AVE	251	OXON HILL	20745
RD		OXON HILL	20745
DR		OXON HILL	20745
RD		OXON HILL	20745
AVE		OXON HILL	20745
RD		OXON HILL	20745
AVE		OXON HILL	20745
DR		OXON HILL	20745
AVE		OXON HILL	20745
RD		OXON HILL	20745
RD		OXON HILL	20745
RD		OXON HILL	20745
RD		OXON HILL	20745
AVE	251	OXON HILL	20745
AVE		OXON HILL	20745



Owner Name	In Care Of Name
SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
PEGASUS MOTORS CORPORATION	
LEE & SEO INVESTMENT CO INC	
DHILLON INVESTMENTS LLC	
KHAN MUHAMMAD ETAL	
CJ & JJ LLC	ROBERT JEFFRIES
RHAVI OPERATING CO INC	
4429 WHEELER ROAD LLC	
SOUTHERN AVE ASSOC LTD PARTNERSHIP	ATTN: BETH MYERS
MNCPPC	CHIEF PK&P DIVPKS & REC-ROOM 303
TABE INVESTMENTS LLC	
LEE & SEO INVESTMENT CO INC	
HOUSING AUTHORITY OF P G COUNTY	
PRISU OPERATING CO INC	
SILVER BRANCH LLC	1055 THOMAS JEFFERSON ST NW
SOUTHVIEW APARTMENTS LLC	SOUTHERN MGMT CORP SUITE 500N
SILVER BRANCH LLC	1055 THOMAS JEFFERSON ST NW
PEGASUS MOTORS CORPORATION	
COHEN WILLIAM & ANGELO A PUGLISI	C/O WILLCO COMPANIES
SHEPERD MEREDITH	
WATERS TERRELL A	
SOUTHERN AVE ASSOC LTD PARTNERSHIP	ATTN: BETH MYERS
PRINCE GEORGES COUNTY	RIGHT OF WAY SECTION



Mailing Street Address	Mailing City	Mailing State	Mailing ZIP Code
7950 JONES BRANCH DR	MCLEAN	VA	22102
7950 JONES BRANCH DR	MCLEAN	VA	22102
4439 WHEELER RD	OXON HILL	MD	20745
3201 BRINKLEY RD	TEMPLE HILLS	MD	20748
833 SOUTHERN AVE	OXON HILL	MD	20745
9052 TWO BAYS RD	LORTON	VA	22079
1805 PEPPERRIDGE LN	RESTON	VA	20191
4421 WHEELER RD	OXON HILL	MD	20745
4429 WHEELER RD	OXON HILL	MD	20745
2707 32ND ST NW	WASHINGTON	DC	20008
6600 KENILWORTH AVE	RIVERDALE	MD	20737
1402 WAYNE MEMORIAL DRIVE	GOLDSBORO	NC	27534
3201 BRINKLEY RD	TEMPLE HILLS	MD	20748
9400 PEPPERCORN PL	LANDOVER	MD	20785
4422 WHEELER RD	OXON HILL	MD	20745
STE 250	WASHINGTON	DC	20007
7950 JONES BRANCH DR	MCLEAN	VA	22102
STE 250	WASHINGTON	DC	20007
4439 WHEELER RD	OXON HILL	MD	20745
7811 MONTROSE RD STE 200	POTOMAC	MD	20854
4431 WHEELER RD	OXON HILL	MD	20745
2969 SOUTHAVEN DR	ANNAPOLIS	MD	21401
2707 32ND ST NW	WASHINGTON	DC	20008
ROOM 3020 CAB	UPPER MARLBORO	MD	20772



The Maryland-National Capital Park & Planning Commission Results  
Prince George's County Planning Department  
Case Number: DSP-13008-02  
Date: 12/30/2024  
Time: 03:13:43 PM

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Total Records(s): 5

=====

Name of the Municipaltiy	Officials Name	Officials Title
FOREST HEIGHTS	Troy Barrington Lilly	Mayor
	Lakisha Hull	Planning Director
	Krystal Oriadha	Council Member, District 7
	Jolene Ivey	Council Member-At-Large Ivey
	Calvin S. Hawkins, II	Council Member-At-Large Hawkins



In Care Of	Address	Sub Address
Prince George's County Planning Department	5508 Arapahoe Drive	
	1616 McCormick Drive	
	1301 McCormick Drive	County Council, 2nd Floor
	1301 McCormick Drive	County Council, 2nd Floor
	1301 McCormick Drive	County Council, 2nd Floor



City	State	Zip Code
Forest Heights	MD	20745
Largo	MD	20774
Largo	MD	20774
Largo	MD	20774
Largo	MD	20774



The Maryland-National Capital Park & Planning Commission Results  
Prince George's County Planning Department  
Case Number: DSP-13008-02  
Date: 12/30/2024  
Time: 03:13:43 PM

=====  
Total Records(s): 21  
=====

Registered Association Name	First Name
PRINCE GEORGE'S COUNTY EDUCATOR'S ASSOCIATION (PGCEA)	
THE PARK AT ADDISON METRO HOA, INC.	LAYLA
SUITLAND CIVIC ASSOCIATION, INC.	CHARLOTTE
HILLCREST-MARLOW HEIGHTS CIVIC ASSOCIATION	GEORGE W.
BROOKE ROAD, ROLLINS AVE., WALKER MILL RD. (BRW) CIVIC ASSOC.	KAREN F.
APPLEGATE CONDOMINIUM	BERNETTA
FLEISCHMAN'S VILLAGE CITIZENS ASSOCIATION	STEPHON
MILLWOOD COMMUNITY ASSOCIATION, INC.	
4TH WARD CIVIC ASSOCIATION (TOWN OF CHEVERLY)	
BERKSHIRE CIVIC ASSOCIATION	GREGORY
BARNABY MANOR CITIZENS ASSN. INC.	JAMES
SKYLINE HILLS HOA	TONI
ST. MARGARET'S OF SCOTLAND CATHOLIC CHURCH	
DUPOINT VILLAGE NEIGHBORHOOD WATCH	
BARNABY VALLEY PARK HOMEOWNERS ASSOCIATION	ANGELENE
CAMP SPRINGS CIVIC ASSOCIATION	CAROLYN
GREATER CAPITOL HEIGHTS IMPROVEMENT CORPORATION INC.	BRADLEY
HILLSIDE CIVIC ASSOCIATION	SHIRLEY
SCENIC PRINCE GEORGE'S	MARK
CENTRAL CIVIC ASSOCIATION OF THE WILBURN COMMUNITY	DAISY
PICKWICK SQUARE MUTUAL HOMES, INC.	LINDA



Last Name	Address Number	Street Name & Type	Suite Number	City
	8008	MARLBORO PIKE		DISTRICT HEIGHTS
BROWN	3414	MORNINGWOOD DRIVE		OLNEY
WILLIAMS	4801	TANGIER PLACE		SUITLAND
HANNA	3212	BEAUMONT STREET		TEMPLE HILLS
JEFFERSON	1112	BROOKE ROAD		CAPITOL HEIGHTS
REESE				SUITLAND
MILLS	3407	ANDOVER PLACE		SUITLAND
	306	SHADY GLEN DRIVE		CAPITOL HEIGHTS
	1709	62ND AVENUE		HYATTSVILLE
MCCLAIN	2916	UPLAND AVENUE		DISTRICT HEIGHTS
BEHR	5008	BOULDER DRIVE		OXON HILL
HARRIS	4723	JOHN STREET		SUITLAND
	408	ADDISON ROAD		CAPITOL HEIGHTS
	2218	WYNGATE ROAD		SUITLAND
JONES PERRY	2001	CHITA CT		TEMPLE HILLS
FLEMING				TEMPLE HILLS
HEARD	415	ZELMA AVE		CAPITOL HEIGHTS
GILMORE	1005	DRUM AVENUE		CAPITOL HEIGHTS
FALZONE	1012	14TH STREET, NW	1108	WASHINGTON
CHERRY MAGGETT	6616	SISALBED DRIVE		CAPITOL HEIGHTS
BRISCOE	1574	ADDISON ROAD SOUTH		DISTRICT HEIGHTS



State	Zip Code
MD	20747
MD	20832
MD	20746
MD	20748
MD	20743
MD	20752
MD	20746
MD	20743
MD	20785
MD	20747
MD	20745
MD	20746
MD	20743
MD	20746
MD	20748
MD	20748
MD	20743
MD	20743
DC	20005
MD	20743
MD	20747



The Maryland-National Capital Park & Planning Commission  
Planning Department Prince George's County  
Development Review Division  
1616 McCormick Drive  
Largo, Maryland 20774  
[www.pgplanning.org](http://www.pgplanning.org)

Date: 12/30/2024

## MAILING LIST - RECEIPT

☒ Development Application      **DSP-13008-02**

☐ County Application

This receipt is to acknowledge that DSP-13008-02 received the following lists as described by the categories below:

<input checked="" type="checkbox"/> Registered community organization list	Total Records: 21
<input checked="" type="checkbox"/> Adjoining property owners list	Total Records: 24
<input checked="" type="checkbox"/> Municipalities within one mile list	Total Records: 1
<input checked="" type="checkbox"/> Additional government contacts	Total Records: 4

This list is valid for 180 days from the date referenced above. Applicants must obtain an updated mailing list if notifications are not sent within 180 days.

This property is located on WSSC Grid: 206SE01

Theresa Windsor  
Development Review Division

### Download Extracts:

[DSP-13008-02\\_12302024151343\\_Reg\\_Assoc.xlsx](#)  
[DSP-13008-02\\_12302024151343\\_Adjoining\\_Property\\_Premise\\_Owner\\_Address.xlsx](#)  
[DSP-13008-02\\_12302024151343\\_GovernmentContact.xlsx](#)

A copy of the adjoining properties map has been included for your reference:

[DSP-13008-02\\_12302024151343\\_Adjoining\\_Property.jpg](#)

A mailing list archive has been generated for your reference:

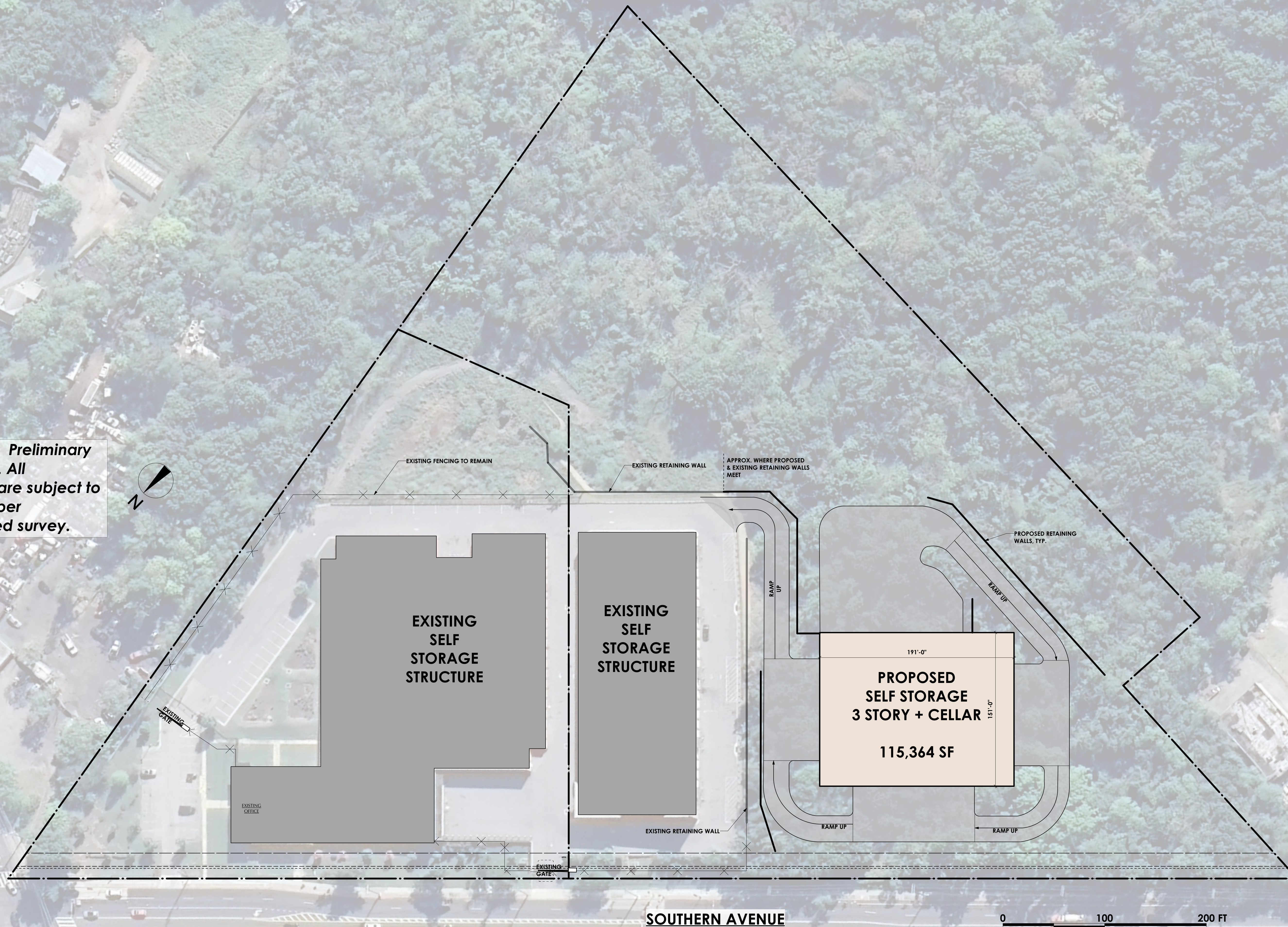
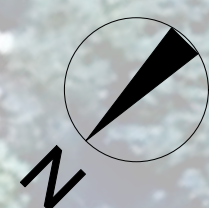
[DSP-13008-02\\_12302024151343\\_MailingListArchive.zip](#)

The download extract links above will be available for 3 months. You must download the extracts if you need access to the data in the future.

Data extract may include duplicate address records.



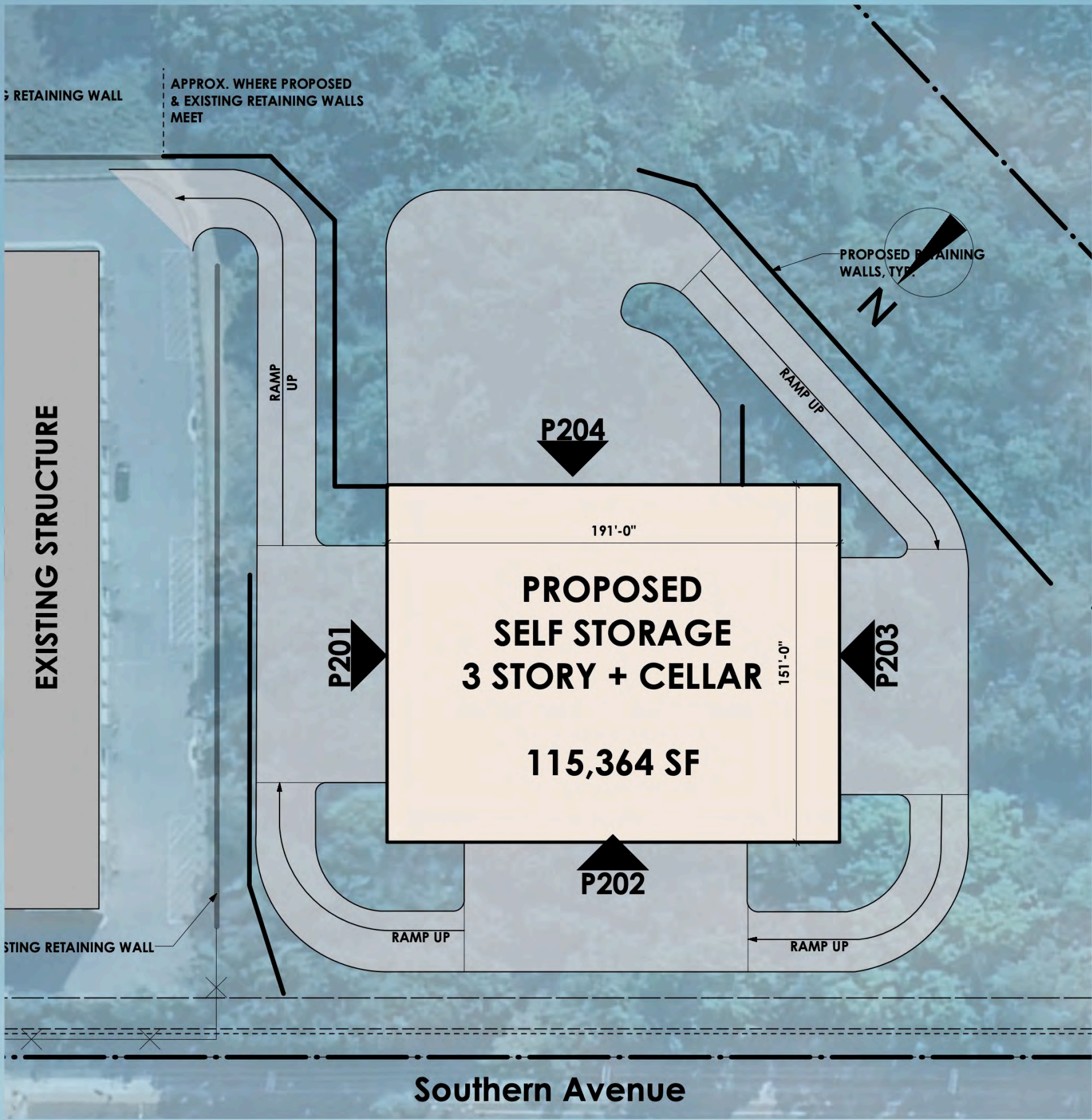
**Disclaimer :** Preliminary  
Layout Only. All  
dimensions are subject to  
verification per  
computerized survey.









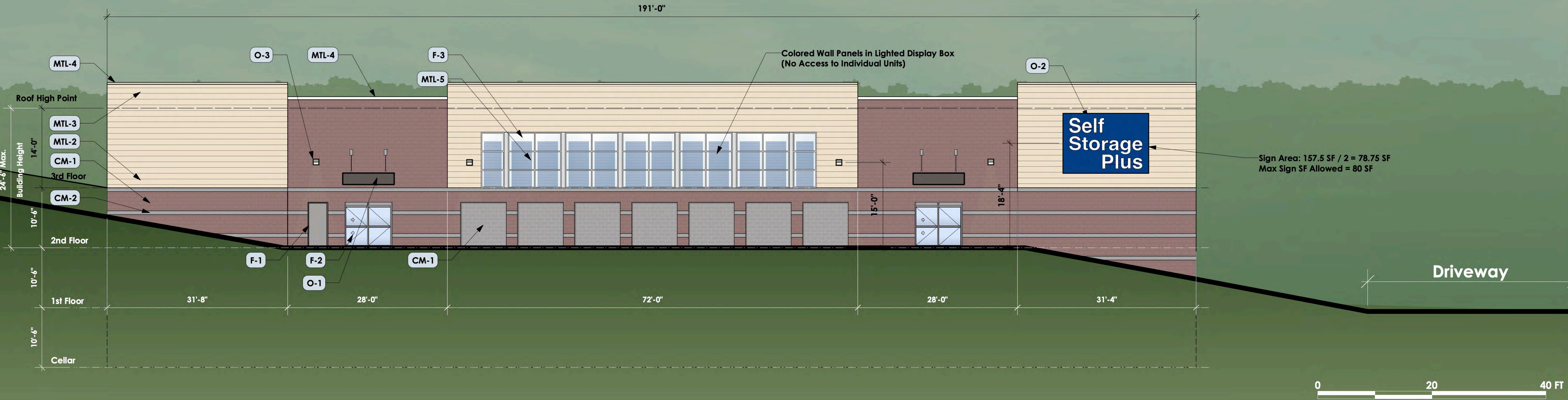


Site Diagram

EXTERIOR MATERIAL SCHEDULE

MATERIAL	NO.	ITEM	MANUFACTURER	FINISH	COLOR
MASONRY	CM-1	Architectural CMU-Field	Oldcastle/Echelon	Quik-Brik	Rappanok Red
	CM-2	Architectural CMU-Accent	Oldcastle/Echelon	Split Face	Opal
METALS	MTL-1	Metal Siding - Vertical Field	MBCI	Pre-Finished	Almond
	MTL-2	Metal Siding - Horizontal	MBCI	Pre-Finished	Almond
	MTL-3	Metal Siding - Horizontal Accent	MBCI	Pre-Finished	Polar White
	MTL-4	Metal Accent	MBCI	Pre-Finished	Polar White
	MTL-5	Break Metal	MBCI	Pre-Finished	Slate Gray
FENESTRATION	F-1	Hollow Metal Door		Paint	Match Adj. Surface
	F-2	Automatic Sliding Door		Pre-Finished	Anodized Aluminum
	F-3	Storefront System		Pre-Finished	Anodized Aluminum
	F-4	Storage Unit Roll Up Door	Janus	Pre-Finished	Silhouette Gray
OTHER	O-1	Decorative Canopy	-	Pre-Finished	
	O-2	Wall Sign A	-	-	-
	O-3	Wall Pack	-	-	-

NOTES  
1. All Materials and Colors Subject to Modification per Final Design



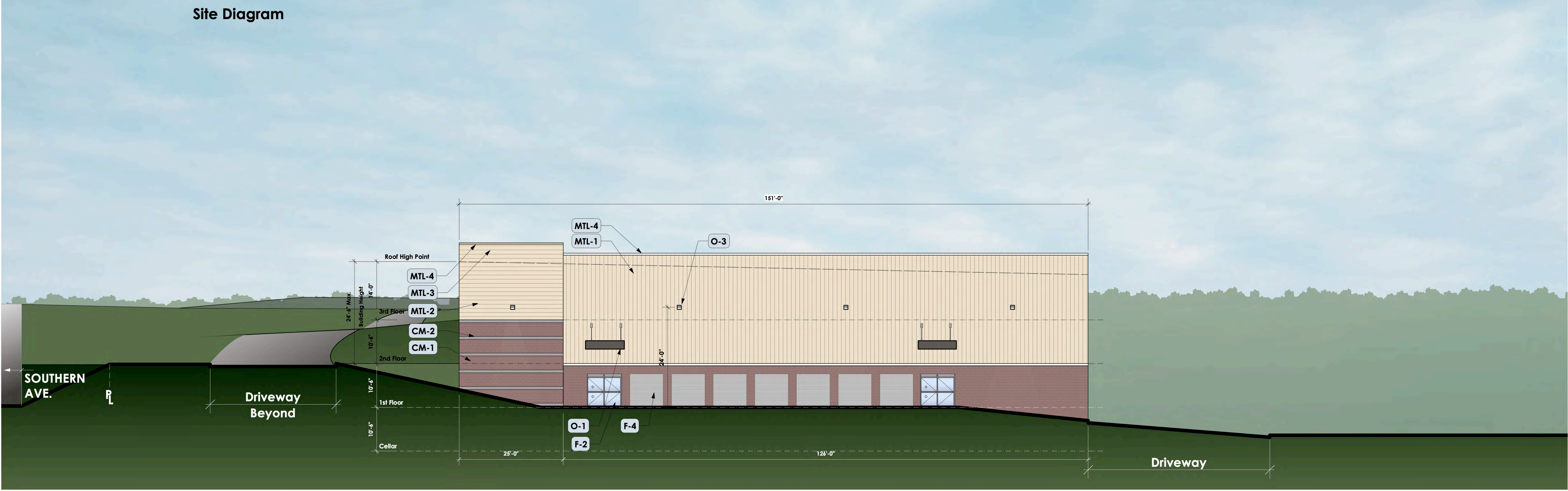




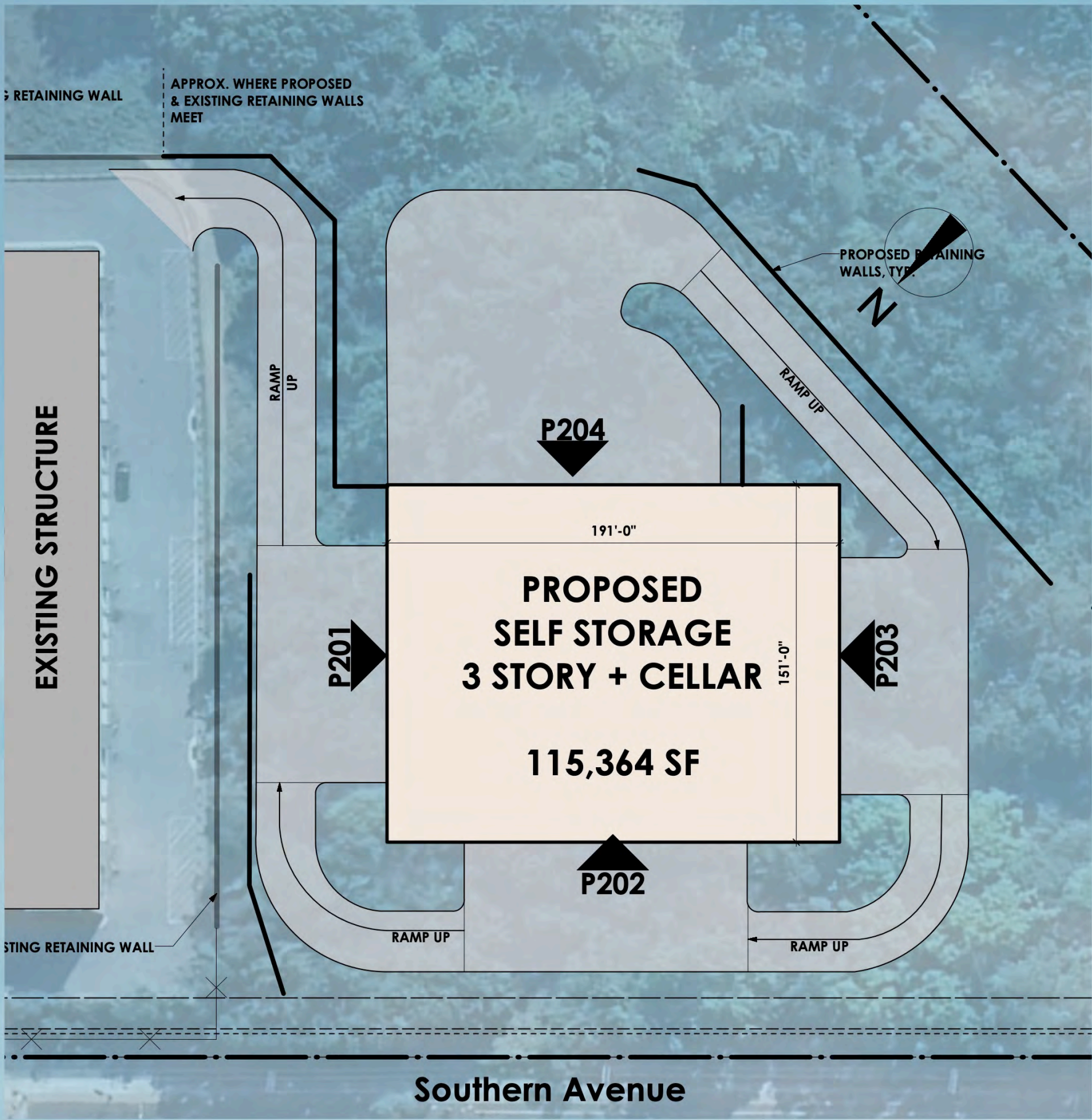
Site Diagram

EXTERIOR MATERIAL SCHEDULE					
MATERIAL	NO.	ITEM	MANUFACTURER	FINISH	COLOR
MASONRY	CM-1	Architectural CMU-Field	Oldcastle/Echelon	Quik-Brik	Rappanok Red
	CM-2	Architectural CMU-Accent	Oldcastle/Echelon	Split Face	Opal
METALS	MTL-1	Metal Siding - Vertical Field	MBCI	Pre-Finished	Almond
	MTL-2	Metal Siding - Horizontal	MBCI	Pre-Finished	Almond
	MTL-3	Metal Siding - Horizontal Accent	MBCI	Pre-Finished	Polar White
	MTL-4	Metal Accent	MBCI	Pre-Finished	Polar White
	MTL-5	Break Metal	MBCI	Pre-Finished	Slate Gray
FENESTRATION	F-1	Hollow Metal Door		Paint	Match Adj. Surface
	F-2	Automatic Sliding Door		Pre-Finished	Anodized Aluminum
	F-3	Storefront System		Pre-Finished	Anodized Aluminum
	F-4	Storage Unit Roll Up Door	Janus	Pre-Finished	Silhouette Gray
OTHER	O-1	Decorative Canopy	-	Pre-Finished	
	O-2	Wall Sign A	-	-	-
	O-3	Wall Pack	-	-	-

NOTES  
1. All Materials and Colors Subject to Modification per Final Design





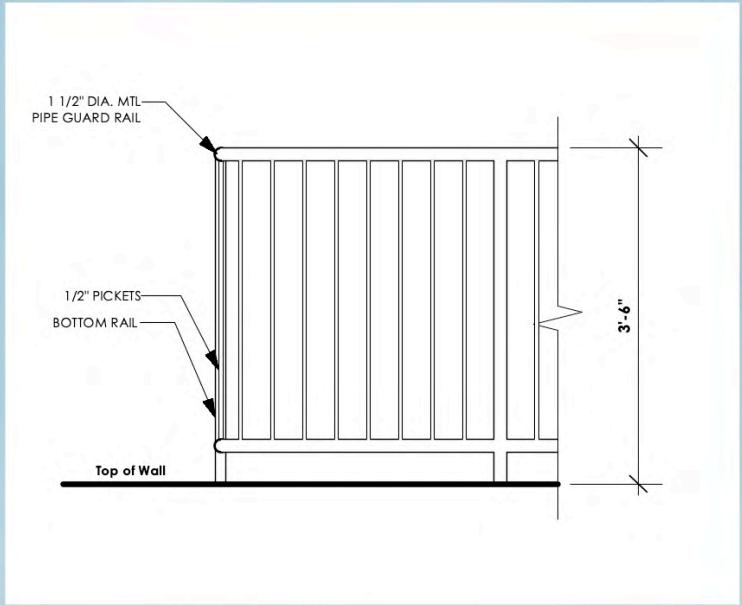


Site Diagram

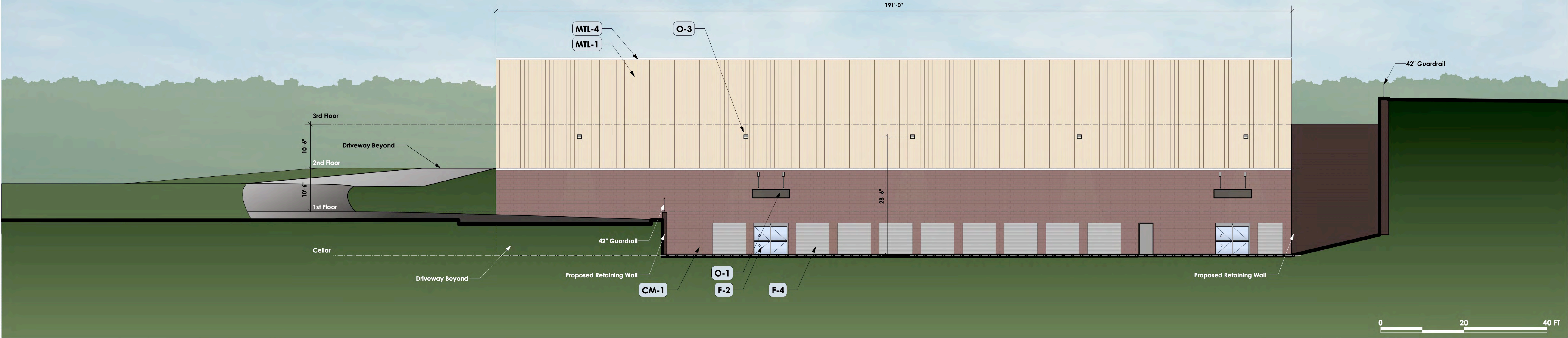
EXTERIOR MATERIAL SCHEDULE

MATERIAL	NO.	ITEM	MANUFACTURER	FINISH	COLOR
MASONRY	CM-1	Architectural CMU-Field	Oldcastle/Echelon	Quik-Brik	Rappanok Red
	CM-2	Architectural CMU-Accent	Oldcastle/Echelon	Split Face	Opal
METALS	MTL-1	Metal Siding - Vertical Field	MBCI	Pre-Finished	Almond
	MTL-2	Metal Siding - Horizontal	MBCI	Pre-Finished	Almond
	MTL-3	Metal Siding - Horizontal Accent	MBCI	Pre-Finished	Polar White
	MTL-4	Metal Accent	MBCI	Pre-Finished	Polar White
	MTL-5	Break Metal	MBCI	Pre-Finished	Slate Gray
FENESTRATION	F-1	Hollow Metal Door		Paint	Match Adj. Surface
	F-2	Automatic Sliding Door		Pre-Finished	Anodized Aluminum
	F-3	Storefront System		Pre-Finished	Anodized Aluminum
	F-4	Storage Unit Roll Up Door	Janus	Pre-Finished	Silhouette Gray
OTHER	O-1	Decorative Canopy	-	Pre-Finished	
	O-2	Wall Sign A	-	-	-
	O-3	Wall Pack	-	-	-

NOTES  
1. All Materials and Colors Subject to Modification per Final Design



Guardrail Detail







O-1 DECORATIVE CANOPY

EXTERIOR MATERIAL SCHEDULE					
MATERIAL	NO.	ITEM	MANUFACTURER	FINISH	COLOR
MASONRY	CM-1	Architectural CMU-Field	Oldcastle/Echelon	Quik-Brik	Rappanok Red
	CM-2	Architectural CMU-Accent	Oldcaslte/Echelon	Split Face	Opal
METALS	MTL-1	Metal Siding - Vertical Field	MBCI	Pre-Finished	Almond
	MTL-2	Metal Siding - Horizontal	MBCI	Pre-Finished	Almond
	MTL-3	Metal Siding - Horizontal Accent	MBCI	Pre-Finished	Polar White
	MTL-4	Metal Accent	MBCI	Pre-Finished	Polar White
	MTL-5	Break Metal	MBCI	Pre-Finished	Slate Gray
FENESTRATION	F-1	Hollow Metal Door		Paint	Match Adj. Surface
	F-2	Automatic Sliding Door		Pre-Finished	Anodized Aluminum
	F-3	Storefront System		Pre-Finished	Anodized Aluminum
	F-4	Storage Unit Roll Up Door	Janus	Pre-Finished	Silhouette Gray
OTHER	O-1	Decorative Canopy	-	Pre-Finished	
	O-2	Wall Sign A	-	-	-
	O-3	Wall Pack	-	-	-
NOTES					
1. All Materials and Colors Subject to Modification per Final Design					



F-4 STORAGE UNIT ROLL UP DOOR



F-3 STOREFRONT SYSTEM



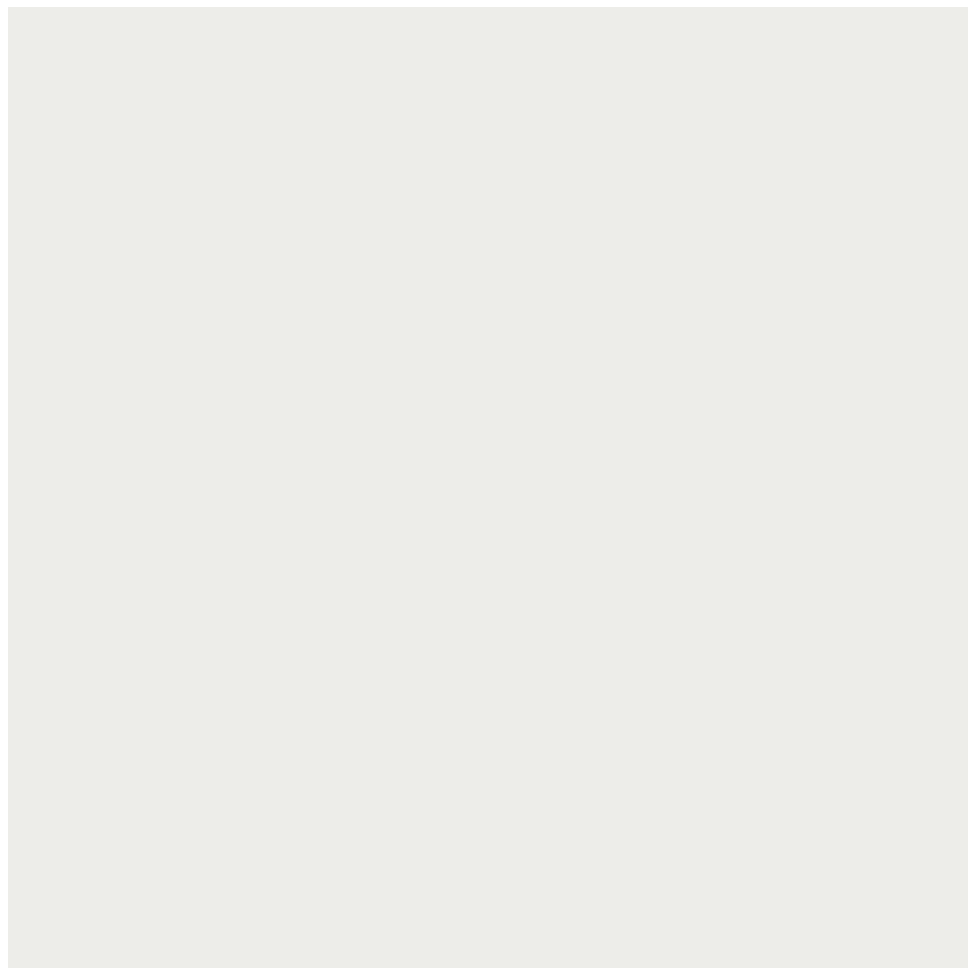
F-2 AUTOMATIC SLIDING DOOR



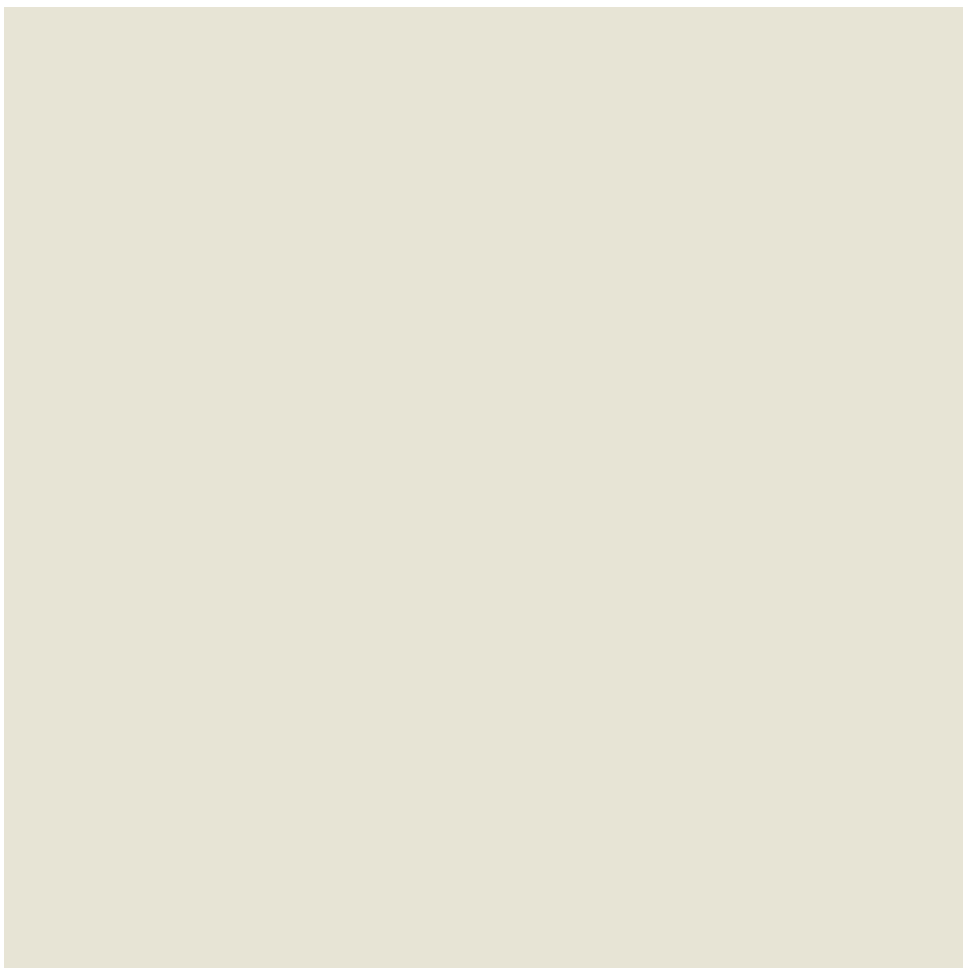
F-1 HOLLOW METAL DOOR



MTL-5 SLATE GRAY



MTL-4 WHITE



MTL-1 ALMOND  
MTL-2  
MTL-3



CM-2 OPAL



CM-1 RAPPAHANNOCK RED

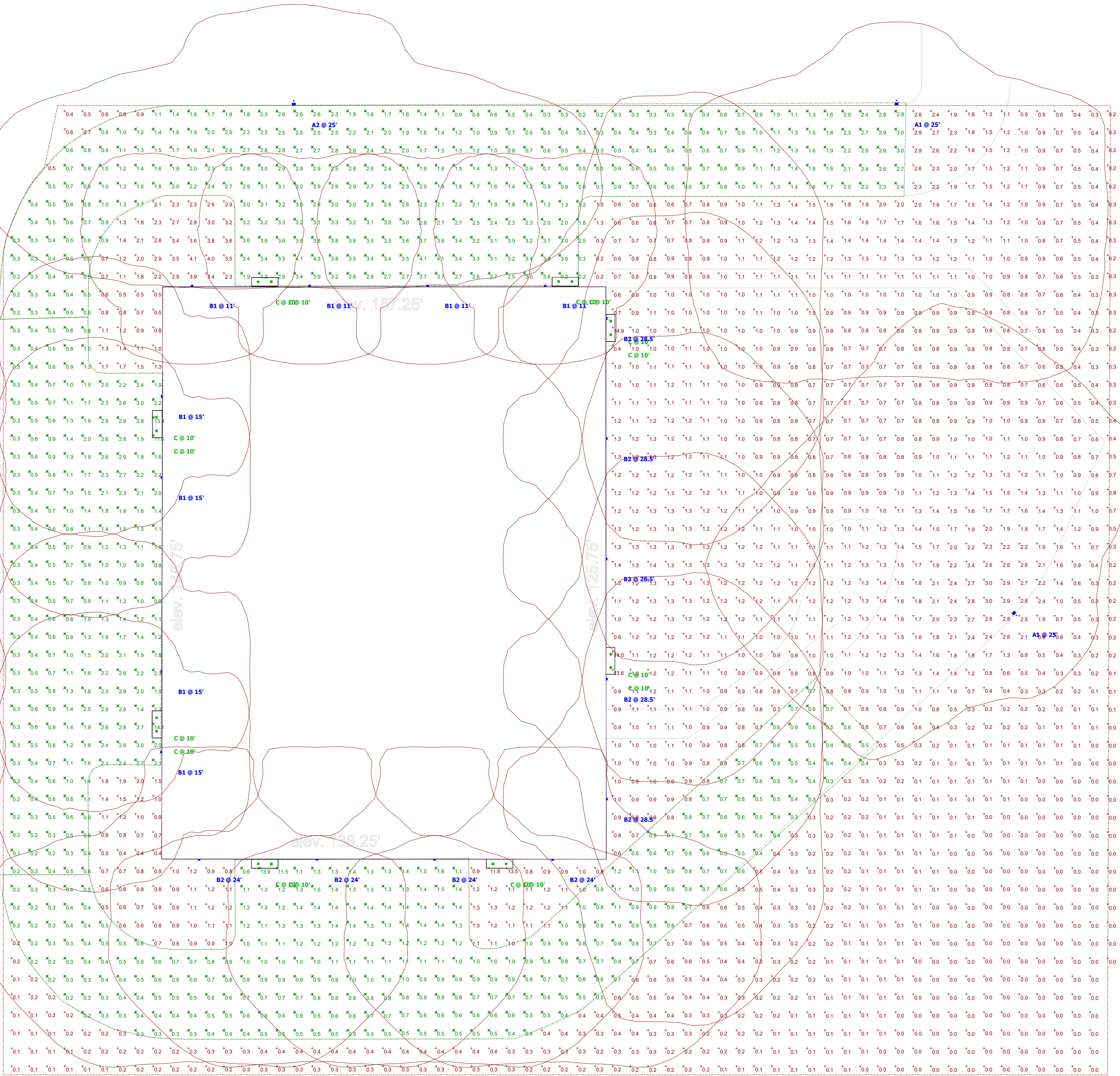




## Wall Sign A

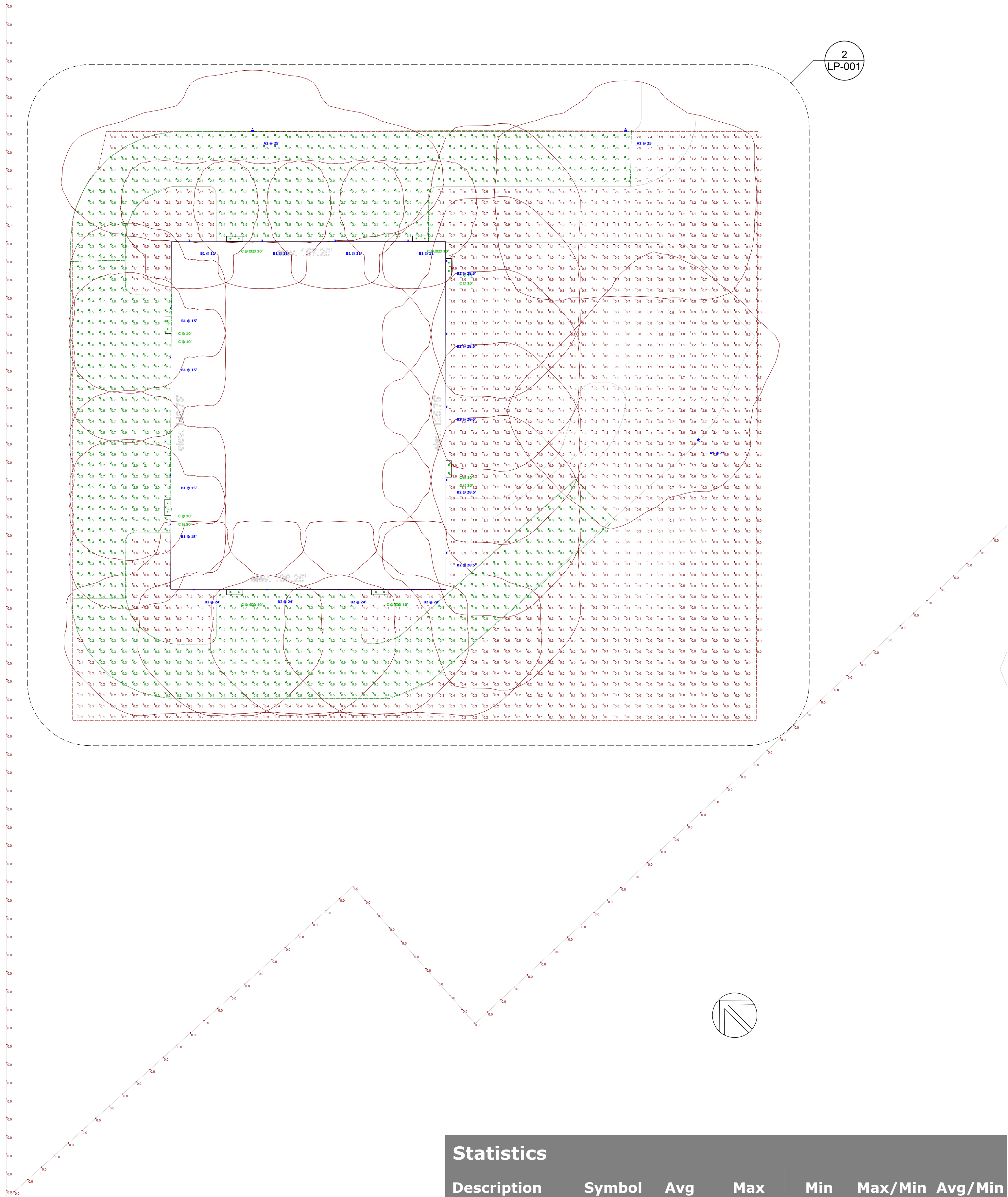
PROPOSED SIGNAGE SCHEDULE - IE ZONE								
SIGN	DRAWING REF	TYPE	SIGN LENGTH	SIGN WIDTH	SIGN AREA*	SIGN CALCULATED AREA*	PROJECTION**	ILLUMINATION***
A	P-202	Building - Attached	15'0"	10'6"	157.50 SF	78.75 SF	12" Max	Internally, Static
<b>TOTAL PROPOSED WALL SIGN AREA</b>						<b>78.75 SF</b>		
<b>Max Area Allowed=</b>						<b>80.00 SF</b>		
<b>Signage Complies</b>								
* Sign Area Measured as per §27-2200(J)(2) Sign Measurement								
**Table 27-61.505, Other Standards. Signs shall not extend more than 12" from a building wall.								
*** Sign Illumination per §27-61.504 (a)(1) Static Illumination								





2 ENLARGED PHOTOMETRIC


Schedule							
Symbol	QTY	Manufacturer	Catalog	Lamp Output	LLF	Description	Input Power
B.1	8	Lithonia Lighting	WDGE2 LED P4 30K 70CRI TFTM	4402	0.9	WDGE2 LED WITH P4 - PERFORMANCE PACKAGE, 3000K, 70CRI, TYPE FORWARD THROW MEDIUM OPTIC	46.6589
B.2	9	Lithonia Lighting	WDGE2 LED P4 30K 70CRI T4M	4376	0.9	WDGE2 LED WITH P4 - PERFORMANCE PACKAGE, 3000K, 70CRI, TYPE 4 MEDIUM OPTIC	46.6589
C	16	eLuminaire	RCS1 DP 25 30 FINISH	2993	0.7	RECESSED CANOPY MOUNT	20.9
A.1	2	Lithonia Lighting	DSX0 LED P7 30K 70CRI TFTM HS/ POLE MOUNTED 25'	16709	0.9	D-Series Size 0 Area Luminaire P7 Performance Package 3000K CCT 70 CRI Forward Throw Houseside Shield	170.81
A.2	1	Lithonia Lighting	DSX0 LED P7 30K 70CRI TZM/ POLE MOUNTED 25'	19273	0.9	D-Series Size 0 Area Luminaire P7 Performance Package 3000K CCT 70 CRI Type 2 Medium	170.81



1 SITE PHOTOMETRIC

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Drive/Loading 2		1.8 fc	4.3 fc	0.2 fc	21.5:1	9.0:1
Drive/Loading 3		0.8 fc	13.9 fc	0.2 fc	69.5:1	4.0:1
PROPERTY LINE		0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Storage Lot		1.0 fc	14.9 fc	0.0 fc	N/A	N/A
Drive/Loading 1		1.3 fc	14.1 fc	0.1 fc	141.0:1	13.0:1

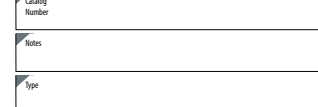




**d²-series**

# D-Series Size 0

## LED Area Luminaire



**Specifications**

**EFL:** 18.5W  
19.5W  
20.5W

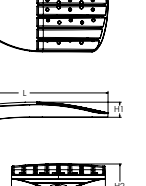
**Length:** 26.5" / 673mm

**Width:** 16.5" / 419mm

**Height:** 1.1" / 28mm

**Weight:** 2.54" / 65mm

**Weight:** 21.84 / 491g



**Introduction**

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. This design offers the benefits of the latest in LED technology and the most sophisticated, high-efficiency LED luminaire.

The photometric performance results in areas with excellent uniformity, greater pole spacing and lower power density. A Series 0 design containing photometric aids in reducing the number of poles required in area lighting applications, with service life of over 100,000 hours.


**CS design select**

CS design select is a design tool that allows you to create a custom luminaire design for your specific application and in 15 day turn around. Please email [csdesignselect@luminaire.com](mailto:csdesignselect@luminaire.com) for more information.

**Example: D500 LED P6 40K TCR 1m DMV S0 3m NATURAL PHOSPHOR DODGE**

Series	Size	Color temperature	Color rendering index	Beam spread	Beam angle	Height	Mounting
D500	<b>Standard options</b>	<b>Color temp (2700K)</b>	<b>CRI</b>	<b>Beam spread</b>	<b>Beam angle</b>	<b>Height</b>	<b>Mounting</b>
	P2	2700	90	120°	120°	100"	Surface mount
	P2	3000	90	120°	120°	100"	Surface mount
	P2	3500	90	120°	120°	100"	Surface mount
	P2	4000	90	120°	120°	100"	Surface mount
	P2	5000	90	120°	120°	100"	Surface mount
	P2	5600	90	120°	120°	100"	Surface mount
	P2	6500	90	120°	120°	100"	Surface mount
	P2	7500	90	120°	120°	100"	Surface mount
	P2	8200	90	120°	120°	100"	Surface mount
	P2	9300	90	120°	120°	100"	Surface mount
	P2	10000	90	120°	120°	100"	Surface mount
	P2	11500	90	120°	120°	100"	Surface mount
	P2	13000	90	120°	120°	100"	Surface mount
	P2	15000	90	120°	120°	100"	Surface mount
	P2	17700	90	120°	120°	100"	Surface mount
	P2	20000	90	120°	120°	100"	Surface mount
	P2	22000	90	120°	120°	100"	Surface mount
	P2	24000	90	120°	120°	100"	Surface mount
	P2	2700	90	120°	120°	100"	Surface mount
	P2	3000	90	120°	120°	100"	Surface mount
	P2	3500	90	120°	120°	100"	Surface mount
	P2	4000	90	120°	120°	100"	Surface mount
	P2	5000	90	120°	120°	100"	Surface mount
	P2	5600	90	120°	120°	100"	Surface mount
	P2	6500	90	120°	120°	100"	Surface mount
	P2	7500	90	120°	120°	100"	Surface mount
	P2	8200	90	120°	120°	100"	Surface mount
	P2	9300	90	120°	120°	100"	Surface mount
	P2	10000	90	120°	120°	100"	Surface mount
	P2	11500	90	120°	120°	100"	Surface mount
	P2	13000	90	120°	120°	100"	Surface mount
	P2	15000	90	120°	120°	100"	Surface mount
	P2	17700	90	120°	120°	100"	Surface mount
	P2	20000	90	120°	120°	100"	Surface mount
	P2	22000	90	120°	120°	100"	Surface mount
	P2	24000	90	120°	120°	100"	Surface mount
	P2	2700	90	120°	120°	100"	Surface mount
	P2	3000	90	120°	120°	100"	Surface mount
	P2	3500	90	120°	120°	100"	Surface mount
	P2	4000	90	120°	120°	100"	Surface mount
	P2	5000	90	120°	120°	100"	Surface mount
	P2	5600	90	120°	120°	100"	Surface mount
	P						


## FIXTURES A



# WDGE2 LED


Architectural Wall or Surface  
Precision Reflective Optic

Color  
Temperature  
Type



## Specifications

**Depth (D1):** 1.5"   
 **Depth (D2):** 1.5"   
 **Height:** 1.5"   
 **Width:** 1.5"   
 **Weight:** 1.5 lbs   
 **Mounting:** 1.5 lbs



## Introduction

The WDGE2 LED family is designed to meet specifically every well-enclosed lighting scene in a widely accepted place that blends well with any architecture. The clean, minimalist design comes in four sizes with three packages ranging from 1,200 to 2,500 Lumens, providing true wall-to-wall solution. Embedded with rugged A++ wide-angle optics, the WDGE2 family provides an elegant, clean, simple and modern solution.

WDGE2 with integrated multiple refractive optics processed with anode distribution and optical control. When combined with indirect lighting, the WDGE2 family provides a wide range of lighting solutions, including any 100W clock temperature option. The WDGE2 becomes the ideal wall-mounted lighting solution for professional-scale applications in any environment.

## WDGE2 LED Family Overview

Package	Model	Rated Power (W)	Color Temp. (K)	Beam	Approximate Lumen Output (lm) - WDGE2									
					1200	1500	1800	2000	2200	2400	2600	2800	3000	
					P1	P2	P3	P4	P5	P6	P7	P8	P9	
WDGE2-1200	Wall Center	12W	4000K	Standard Angle	--	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	
WDGE2-1500	Wall Center	15W	4000K	Standard Angle	--	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	
WDGE2-1800	Wall Center	18W	4000K	Standard Angle	--	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	
WDGE2-2000	Wall Center	20W	4000K	Standard Angle	--	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
WDGE2-2200	Wall Center	22W	4000K	Standard Angle	--	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	
WDGE2-2400	Wall Center	24W	4000K	Standard Angle	--	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	
WDGE2-2600	Wall Center	26W	4000K	Standard Angle	--	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	

## Ordering Information

**EXAMPLE: WDGE2 LED P4 4000K 18W MVOLT 5MM D20X2**

Series	Package	Color Temperature	Watt	Dimensions	Mount	Mounting	Order Separately
WDGE2-1200	P1	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P2	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P3	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P4	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P5	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P6	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P7	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P8	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P9	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P10	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P11	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P12	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P13	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P14	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P15	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P16	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting
	P17	4000K	12W	1.5" x 1.5" x 1.5"	400°	Direct Mounting	Direct Mounting

## FIXTURES B

[illegible][illegible]

**Control / Sensor Options**

**Motion/Ambient Sensor (PIR, PHi)**

Motion/Ambient sensor (Sensor Switch M20C3) is integrated into the LinkMotion. The sensor provides both Motion and Daylight beam dimming of the Luminaires. For motion detection, the sensor utilizes 100% Daylight Passive Infrared (PIR) technology that is suited for reducing line motion and preventing false tripping from the environment. The integrated photoreceptor allows additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIR/PIR option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIR+ is optimized for 15-40ft mounting height.

**Networked Control (NLCAR2)**

rs-GPIB-AR is a networked lighting control platform that allows for seamless integration of both indoor and outdoor luminaires. For fire security applications, 900 MHz wireless communication and easy iCLARITY™ Pro based configuration combined together make rs-GPIB-AR a secure, reliable and easy to use solution.

**PIR**

**PIR+ 15'**

**PHi**

**SIDE VIEW**

**TOP VIEW**

Option	Mount	Height range	Beam spread	Beam spread	Mount	Height range	Beam spread
PIR+ PIR	Mount: 15'-20' (at 15' at least)	100% (PIR)	Included p IR	1-6m	1-6m	15'-20'	120°
PIR+ PIR+ PIR	Mount: 15'-20' (at 15' at least)	100% (PIR)	Included p IR	1-6m	1-6m	15'-20'	120°
NETWORKED PIR+ PIR	Mount: 15'-20' (at 15' at least)	100% (PIR)	Included p IR	7-20m	1-6m	15'-20'	120°

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Mounting, Options & Accessories

**Motion Activated Sensor**

- D=7"
- W= 9" (Standard version)
- 17" high (all versions, 2" sensors will be perching down behind the sensor)
- H=11.5"

**AW5 - D3x8 Architectural Wall Sensor**

- D=3x8"
- H=4.4"
- W=2.5"

**PIB3W - Surface-Mounted Back Box**

Use when there is no junction box available.

- H=9"
- W=11.5"

**FEATURES & SPECIFICATIONS**

**INSTALLED USE**  
Designed for use in the standard open junction boxes of the NCEC-UL-IEC design to provide a secure, weather-tight, shock, surge, and other environmental protection for the sensor.

**CONSTRUCTION**  
The sensor is constructed from aluminum housing, aluminum mounting bracket, and stainless steel mounting hardware. The sensor is mounted to a wall with a 1/4" x 3/8" stainless steel mounting bracket. The sensor is mounted to a wall with a 1/4" x 3/8" stainless steel mounting bracket.

**FINISH**  
The sensor is finished with a powder coat finish. The sensor is finished with a powder coat finish. The sensor is finished with a powder coat finish.

**ENVIRONMENTAL**  
The sensor is designed for use in environments with temperatures ranging from -40°F to 140°F. The sensor is designed for use in environments with temperatures ranging from -40°F to 140°F.

**WARRANTY**  
The sensor is warranted for a period of 5 years. The sensor is warranted for a period of 5 years. The sensor is warranted for a period of 5 years.

**INSTALLATION**  
The sensor is installed in a standard open junction box. The sensor is installed in a standard open junction box. The sensor is installed in a standard open junction box.

**INSTALLATION**  
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**WARRANTY**  
The sensor is warranted for a period of 5 years. The sensor is warranted for a period of 5 years. The sensor is warranted for a period of 5 years.

COMMERCIAL OUTDOOR

Call us directly at 1-800-456-7890, email at [info@ledvance.com](mailto:info@ledvance.com)

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[www.ledvance.com](http://www.ledvance.com)

00000002

EN-10120

20'-0" TALL 6" X 6" LIGHT POLE  
(coordinate this with project specific information or approved photometrics)

ANCHOR INTO CONC. BASE  
3/4" diameter X 24" long F1554 (Grade 36) headed anchor rods with 20" embedment.

8 # 6 VERTICAL WITH 3 TIES @ 8" O.C.

3'-0" BASE

30" Ø 5'-0" DEEP CONCRETE FOUND. 3000 PSI MIN.

CONDUIT PER ELECTRICAL DWGS

5'-0" MIN

2'-6" Ø

BOTTOM OF FOOTING TO BEAR ON UNDISTURBED SOIL CAPABLE OF MINIMUM 2,000 PSF ALLOWABLE SOIL BEARING

1 LIGHT POLE BASE  
LP-002 Scale: 1/2" = 1'-0"

Technical Specifications

Date:	Location:
Type:	Project:
Catalog #:	

## CENTURY DP Series

### Low Glare Recessed Canopy

#### Product Description

The Century DP Series LED luminaire has a form factor designed to meet standards for all recessed canopy and utility applications. The Century DP produces up to 277 lumens per square foot while only consuming 10 watts. The Century DP Series Requires low glare optics delivering between 2000-2500 foot candles while only consuming 21 to 33 watts. Delivering up to 150 lumens per foot, it's the lowest wattage recessed canopy.

Applications: Recessed canopy soffits, Low to mid bay general lighting

#### Product Performance

- Ballast: Resistor - 274W-650W
- Input Voltage: 120-277V or 277-650V
- CCT: Warm, Neutral, or Cool, Ambient and custom CCT available
- CRI: Minimum 80 CRI standard (custom CRI available)
- UL-85 Listed Component
- 100V Surge Protection available
- 100V UL-ETL Certified Power Supply
- Available Sensor, Wireless dimmer PFP 211
- Custom color available, consult factory
- 5 year Warranty

<b>Key Features</b>	<b>2,800-5,000 lm/ft²</b>
Efficiency	21-32
Lumen Range	10 to 150 l/ft²
Beam Spread	170°/210° or 120°/170°
Dimensions	16.0" x 16.0" x 1.25"
Weight	6.0 to 7.5 lbs

#### Ordering Guide

Example:	CCT	DP220X	XX	XXXX	XX	XX
	Color	Size	Output	Input	Wattage	Fixture value
Series	Distribution		Output Type	CCT	Wattage	
DP220	DP - Ambient Canopy		1 to 3,300 Lumens, 270W	1000K - 5000K, 60-200	10W - 150W/270W	Mini White
			4 to 1,100 Lumens, 270W	4000K - 6000K, 60-200	10W - 277-480W	BC - Black
			8 to 3,300 Lumens, 480W	1000K - 5000K, 80-200		Mini White
			8 to 3,300 Lumens, 500W	4000K - 6000K, 80-200		BC - Black
				AMM - Ambient, Special Order		PAK - Custom Color (Specify PAK)

#### Options

- CAC - Integrated/Consuming Series (100-270W), [View Spec PDF](#)
- L2 - Sensor PFP L2 Lum, 30W, 48V, 0-10V, Coverage of 170°/210° Coverage of 12°/12°
- L7 - Sensor PFP L7 Lum, 30W, 48V, 0-10V, Coverage of 170°/210°
- L7 - Sensor PFP L7 Lum, 30W, 48V, 0-10V, Coverage of 170°/210°
- SP077 - 270W, 100V Surge Protection
- (Sensor - 48Vdc, 100V Surge Protection)

See [LED Spec](#) for Power to Remote Battery Backup w/ PFP

#### Custom Size

- Custom - 10W/210°/12°
- 1400mm x 1440 mm (50 in x 56 in)
- 1400mm x 1440 mm (50 in x 56 in)

\* Coverage of 12°/12° of available, may require larger fixture sizes, consult factory for details.  
 \* Coverage of 170°/210° of available, may require larger fixture sizes, consult factory for details.  
 \* Ambient, or Cool, Warm, Neutral, Warm (white) output, or custom color available, consult factory for details.

Consult factory for DCLC fixtures

Century DP Series LED luminaire is designed and engineered in the USA | [www.eluminaire.com](http://www.eluminaire.com) | [sales@eluminaire.com](mailto:sales@eluminaire.com)

2020-01-01-01

Technical Specifications

@Luminaire

## CENTURY DP Series

### Product Descriptions

#### Construction & Materials

- Aluminum housing with high stage pre-treatment and high-durability
- UVB powder coat finish
- UV Resistant glass (PMMA Lens - Tempered resistant)
- Weighted profile design
- Recessed mount concealed wiring only

#### Optical System

- DP Lens - Type V Low Glare Medium Cavity Lens

#### Electrical System

- Input Voltage: 120-277V or 277-480V
- Power Factor: > 0.9
- Total Harmonic Distortion: < 0%
- Operating Temperature Range: -40°C to 60°C

### Testing & Certifications

#### UL/ETL listed

- UL1848, CSA STD 252 compliant
- Suitable for Wet Locations & damp
- EMC Compliant
- Shower Complexes use FCC Part 14 Class B/FED5611, EN61000-3-2 Class C, EN61000-3-3
- Can meet ARMADA Map Reference requirements as required

#### Lumen Maintenance

- L70/24 25K+ over 50,000 hours

### Photometry

All qualitative photometric testing data is performed to IESNA LM79-08 standards by a NAL-APAC laboratory. To obtain an IES file specific to your project contact our sales team at:

	OffAxis Cavity Distribution									
	800K					400K				
Output Angle	Beam Diameter (mm)	Beam Area (mm²)	Beam Length (mm)	Beam Width (mm)	Beam Depth (mm)	Beam Diameter (mm)	Beam Area (mm²)	Beam Length (mm)	Beam Width (mm)	Beam Depth (mm)
20	2,800	1,960	3,300	167	3,300	1,167	2,800	1,167	2,800	1,167
30	3,600	3,240	4,200	210	4,200	1,500	3,600	1,500	3,600	1,500
40	4,800	5,760	5,600	280	5,600	1,960	4,800	1,960	4,800	1,960
50	6,000	9,000	7,200	360	7,200	2,520	6,000	2,520	6,000	2,520
60	7,200	12,960	8,400	420	8,400	3,080	7,200	3,080	7,200	3,080

The figure displays four beam pattern diagrams (20°, 30°, 40°, 50°) and a table of beam data. The diagrams show the beam diameter, beam area, beam length, beam width, and beam depth for each angle. The table provides the same data in a structured format.

Beam Angle	Beam Diameter (mm)	Beam Area (mm²)	Beam Length (mm)	Beam Width (mm)	Beam Depth (mm)
20°	2,800	1,960	3,300	167	3,300
30°	3,600	3,240	4,200	210	4,200
40°	4,800	5,760	5,600	280	5,600
50°	6,000	9,000	7,200	360	7,200

The information in this document is subject to change without notice.

The technical drawing shows the luminaire from the front and side views. The front view shows a square luminaire with a diameter of 11.7 inches. The side view shows the luminaire mounted on a wall with a mounting bracket. The dimensions are given in inches and millimeters.






Dimensions:

- Front View: 11.7" (298mm) diameter
- Side View: 11.7" (298mm) diameter, 11.7" (298mm) height, 11.7" (298mm) width
- Mounting Bracket: 11.7" (298mm) diameter, 11.7" (298mm) height, 11.7" (298mm) width

Fixture Weight: 6.0 ± 0.75 lbs

Page 2 of 2 | [www.luminaire.com](http://www.luminaire.com) • Designed and engineered in the USA • Contact: [sales@luminaire.com](mailto:sales@luminaire.com)

## FIXTURES C

Schedule							
Symbol	QTY	Manufacturer	Catalog	Lamp Output	LLF	Description	Input Power
B.1 	8	Lithonia Lighting	WDGE2 LED P4 30K 70CRI TFTM	4402	0.9	WDGE2 LED WITH P4 - PERFORMANCE PACKAGE, 3000K, 70CRI, TYPE FORWARD THROW MEDIUM OPTIC	46.6589
B.2 	9	Lithonia Lighting	WDGE2 LED P4 30K 70CRI T4M	4376	0.9	WDGE2 LED WITH P4 - PERFORMANCE PACKAGE, 3000K, 70CRI, TYPE 4 MEDIUM OPTIC	46.6589
C 	16	eLuminaire	RCS1 DP 25 30 FINISH	2993	0.7	RECESSED CANOPY MOUNT	20.9
A.1 	2	Lithonia Lighting	DSX0 LED P7 30K 70CRI TFTM HS/ POLE MOUNTED 25'	16709	0.9	D-Series Size 0 Area Luminaire P7 Performance Package 3000K CCT 70 CRI Forward Throw Houseside Shield	170.81
A.2 	1	Lithonia Lighting	DSX0 LED P7 30K 70CRI T2M/ POLE MOUNTED 25'	19273	0.9	D-Series Size 0 Area Luminaire P7 Performance Package 3000K CCT 70 CRI Type 2 Medium	170.81



## Arcland Southern DSP #13008-02

October 31, 2024

### **Letter of Justification – Impacts to Environmental Regulated Features**

#### **INTRODUCTION**

The site (the “Property”) is located at 899 Southern Avenue, Oxon Hill, MD 20745 in Prince George’s County. It is bordered by Southern Avenue to the northwest and Wheeler Road to the northeast. The overall property consists of 14.44 acres of land. Per the delineation reflected in Natural Resources Inventory NRI-029-13, the property contains 1.18 acres defined as Primary Management Area (PMA). An area of 0.03 acres of PMA will be impacted. The impact is required for discharge from a storm drain outfall.

Site Statistics	Total
Gross Tract Area	14.44 ac.
Existing 100-year Floodplain	0.50 ac.
Net Tract Area	13.94 ac.
Existing Woodland in Floodplain	0.50 ac.
Existing Woodland Net Tract	7.71 ac.
Existing Woodland Total	8.21 ac.
Existing PMA	1.18 ac.
Regulated Stream (Linear feet of Centerline)	0 lf
Riparian Wooded Buffer up to 300" wide	0 ac.

This application requests approval of one (1) impact to the Primary Management Area (PMA). The total area of PMA impact proposed is 0.03 acres. Justification and specific reasons for the impact is provided below. Included in this justification are exhibits of the current proposed impact.

#### **SPECIFIC IMPACTS**

The impact location is listed below, with the purpose of the area. The area of PMA impact is summarized below. There is a steep slope in the area where the site stormwater system will outfall. The outfall must be designed to discharge at the bottom of a hill at non-erosive slopes so PMA impacts will be required.



<u>Impact</u>	<u>Purpose</u>	<u>PMA</u>	
		SF	AC
1	Storm Drain Outfall	1,245	0.03

## **TECHNICAL MANUAL**

The Prince George's County Subdivision Regulations and Zoning Ordinance require that streams and their associated PMA be preserved to the "fullest extent possible." The Environmental Technical Manual (Page C-2) includes the following:

*"The determination of 'fullest extent possible' is a three-step process that starts with avoidance of impacts. Then, if the impacts are unavoidable and necessary to the overall development of the site (as defined below) and cannot be avoided, the impacts must be minimized. In the third step, if the cumulative, minimized impacts are above the designated threshold, then mitigation is required for the impacts proposed."*

**"Where properties are located in the Developed Tier or a designated center or corridor, impacts to regulated environmental features may be considered where needed to accommodate planned development on constrained sites. Such impacts may include allowing impervious surfaces to remain within the buffer or the placement of structures within a currently unvegetated buffer. Preservation of existing vegetated buffers will be a priority."**

## **THREE STEP PROCESS**

The Prince George's County Technical Manual on Page C-2 identifies a three-step process for determining the appropriateness of impacts to regulated environmental features. The three steps are:

1. ***Avoidance: Can the impacts be avoided by another design? Are the road crossings as shown necessary for the reasonable development of the property? Is it necessary to place the utilities within the boundaries of the regulated environmental features?***

**When designing a site, the first step is to prepare a natural resource inventory (NRI) to determine the locations of regulated environmental features. The NRI is then used as the base map to start laying out the proposed development. The next step is to prepare a draft plan that shows no impacts to regulated environmental features.**

**If this design does not result in a development plan that allows for the reasonable use and orderly and efficient development of the subject property, or does not adequately provide for the health, safety, and welfare of county citizens, then impacts can be considered.**

RESPONSE: In general, the revised layout has been shaped to minimize disturbance to the PMA, and thus a small percentage of the total PMA (0.03 Acres of 1.18 Acres or 2.5%) is proposed to be impacted. The impacts shown are required to provide necessary infrastructure such as:

Stable Outfall Conveyance – Impact 1



An outfall has been proposed on the downstream side of the side. The site flows towards the PMA to the south at steep slopes. The outfall has been designed to discharge flow to a non-erosive condition at the bottom of the steep slopes. PMA impacts are limited to only what is needed to construct a stable outfall.

2. ***Minimization: Have the impacts been minimized? Are road crossings placed at the point of least impact? Are the utilities placed in locations where they can be paired or grouped to reduce the number of different locations of impacts? Are there alternative designs that could reduce the proposed impacts?***

**Minimization of impacts to regulated environmental features may include placing a road crossing or utility at the narrowest point of the PMA; the use of retaining walls instead of extending the grading; bridging instead of constructing a culvert; placing required infrastructure elements together in one location instead of placing each one individually; and, where appropriate, obtaining waivers from County Code with regard to required side slopes or road cross-sections as appropriate and as approved by the regulating agency.**

**Temporary impacts to regulated environmental features may be necessary for certain temporary erosion and sediment controls that cannot be designed in any other way.**

**These impacts may be supported if the area is restored. All erosion and sediment control structures, such as ponds and collecting basins, shall be placed outside regulated environmental features. Temporary impacts and the proposed restoration must be shown on the associated tree conservation plan.**

RESPONSE: There is one outfall that requires minimal disturbance. Grading will be held as tight as possible to avoid any additional disturbance. Total impact to PMA is 0.03 ac.

3. ***Mitigation: For areas of significant impacts, has a mitigation package been proposed to provide an equal or better trade-off for the impacts proposed?***

**“Mitigation” means the design and installation of measures to enhance, restore, or stabilize existing environmentally degraded streams and/or wetlands to compensate for proposed impacts. Mitigation shall be required for significant impacts to regulated streams, wetlands, and 100-year floodplains. Significant impacts are defined as the cumulative impacts that result in the disturbance on one site of 200 or more linear feet of stream beds or one-half acre of wetland and wetland buffer area. Stream or wetland restoration, wetland creation, or retrofitting of existing stormwater management facilities that are not required by some other section of County Code may be considered credit as mitigation. The amount and type of mitigation shall be at least generally equivalent to, or a greater benefit than, the total of all impacts proposed, as determined by the Planning Board.**

RESPONSE: There are no impacts to wetlands, wetland buffers, or the stream bed. There are minor impacts to the floodplain area for rip-rap conveyance at non-erosive slopes. Overall, the



total impact is about 2.5% of the entire PMA area. Thus, by the definition stated above, this impact is not significant and mitigation will not be required.

## **CONCLUSION**

The proposed impact satisfies the first two criteria for approval found in the Technical Manual: Avoidance is not entirely possible given the location of the PMA and the steep slopes on the downstream side of the site. For the necessary disturbances, all efforts to minimize the area of disturbance has been made. Given the need to provide necessary infrastructure, and the relatively small incursion into the PMA relative to the total onsite, the proposed development seeks to preserve the PMA to the fullest extent possible. Proposed impacts are minimal and are not anticipated to trigger a need for mitigation. Given these findings, we request that the proposed impacts be approved.



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October 31, 2024

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# **HILLIS-CARNES**

## **ENGINEERING ASSOCIATES**

Preliminary Report of Subsurface Exploration and  
Geotechnical Engineering Services  
**Southern Avenue Self Storage Retaining Walls - Phase III**  
901 Southern Avenue, Oxon Hill, Maryland  
HCEA Project No. F23050

**October 31, 2024**

### **Prepared For:**

Ms. Nana Baine  
Development Project Manager  
Arcland Property Company  
1055 Thomas Jefferson St. NW, Suite 250  
Washington, DC 20007



October 31, 2024

Ms. Nana Baine  
Development Project Manager  
Arcland Property Company  
1055 Thomas Jefferson St. NW, Suite 250  
Washington, DC 20007

1660 Bowman Farm Road, Suite 105  
Frederick, MD 21701  
Phone (301) 662-2522  
Fax (301) 662-5575  
www.hcea.com

Re: Preliminary Geotechnical Engineering Study  
**Southern Avenue Self Storage Retaining Walls - Phase III**  
901 Southern Avenue, Oxon Hill, Maryland  
HCEA Project No. F23050

Dear Ms. Baine:

Hillis-Carnes Engineering Associates, Inc. (HCEA) is pleased to submit this preliminary report concerning the geotechnical evaluation for the four (4) retaining walls that are proposed to be constructed at the above referenced project site located in Oxon Hill, Maryland. The purpose of this study was to determine the general subsurface conditions at the boring locations and to provide evaluations pertaining to the structural design of the proposed walls.

## **PROJECT DESCRIPTION**

It is our understanding that the project consists of the construction of a three-story storage building with a walk-out cellar and associated pavements. We also understand that a total of four (4) retaining walls (RW-1 through RW-4) are planned on the northwest, northeast and southeast sides of the project site to retain fill materials that will be placed associated with the site development. We understand that the design of the retaining walls has not been completed. We assumed RW-1, RW-2, and RW-4 will be segmental block reinforced walls and RW-3 will be a gravity or cantilever wall.

The locations of the retaining walls are shown in the Boring Location Plan (Drawing No. 2) enclosed with this report. The site grading plan we reviewed indicated that the planned approximate maximum heights of RW-1, RW-2, RW-3 and RW-4 are 14, 38, 8, and 5.5 feet, respectively.

The purpose of this study was to determine the general subsurface conditions at the boring locations and to provide engineering soil properties for use in the structural design of the walls by others. Our scope of work also includes analyzing the global stability of the proposed walls and stability of critical slopes.

Please note that this report is preliminary prepared to provide general information on the site conditions. A final report will be provided once the laboratory testing is completed and the exact type and design of each wall is determined.



## **SUBSURFACE EXPLORATION**

To determine the general soil types along the proposed locations of the retaining walls and slopes identified to be critical, a total of thirteen (13) Standard Penetration Test (SPT) soil borings were drilled. Ten (10) of the borings (R-1 through R-10) were located at the planned locations of the retaining walls. The remaining 3 borings (R-1, R-2, and R-3) were drilled at a location identified as a critical slope. It should be noted that select borings from the previous study performed at the project site (HCEA Project No. F23050, dated May 15, 2023) were used in the analysis of the retaining walls. A summary of the borings drilled at each structure location and the depths they were extended to are included in Table 1.

**Table 1 – Summary of Borings**

<b>Structure</b>	<b>Borings</b>	<b>Planned Termination Depth (feet)</b>	<b>Drilled Depth (feet)</b>
RW-1	R-1, R-2, R-3, and R-4	20	8 to 20
RW-2	R-5, R-6, R-7, and B-4	60 to 70	40 to 70
RW-3	R-8, R-9, and R-10	20	20
RW-4	B-3	30	30
Slope	R-1, S-1, S-2, and S-3	20	10 to 20

Note: B borings are from previous study

As shown above in the table, some of the RW-1, RW-2 and Slope borings terminated before reaching the planned termination depths. Borings R-2, R-3, R-4, and S-1 refused within what appeared to be man placed fill materials. Auger refusal was attained in borings B-6 and B-7 at depths of 60 and 40 feet below existing site grades, respectively, on what appeared to be surface of bedrock or very hard cemented soil layer.

The borings were staked in the field by HCEA's surveying group, and the approximate locations of the borings are shown on the Boring Location Plan enclosed with this report.

The borings were advanced with hollow-stem augers and the subsurface soils were sampled continuously. Samples were taken by driving a 1-3/8-inch I.D. (2-inch O.D.) split-spoon sampler in accordance with ASTM D-1586 specifications. The sampler was first seated 6 inches to penetrate any loose cuttings and then was driven an additional foot with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler the final foot is designated as the "Penetration Resistance" or "N" value. The penetration resistance, when properly evaluated, is an index to the soil strength and compression characteristics.

Representative portions of each soil sample were placed in glass jars and transported to HCEA's laboratory. In the laboratory, the samples were visually examined by the Geotechnical Engineer to verify the driller's field classifications. The samples were classified in accordance with the Unified Soil Classification System (USCS) and the field classifications were revised where necessary. The USCS Symbols appear on the Boring Logs and the system nomenclature is briefly described in the Appendix.



## **SUBSURFACE CONDITIONS**

Details of the subsurface conditions encountered at the site are shown on the Records of Soil Exploration (Boring Logs). A brief description of the subsurface conditions and pertinent engineering characteristics of the soils are given below.

Strata divisions shown on the Records of Soil Exploration have been estimated based on visual examinations of the recovered boring samples. In the field, strata changes could occur gradually and/or at slightly different levels than indicated. Also, groundwater conditions indicated on the Records of Soil Exploration are those observed during the period of the subsurface exploration. Fluctuations in groundwater levels could occur seasonally and might also be influenced by changes in grading, runoff and infiltration rates, and other influencing factors.

Generalized subsurface conditions based on the results of the borings are discussed below:

### **Site Geology**

The USGS geological map of Prince George's County indicates that the project site is underlain by the Lowland Deposits (Ql) of the Quaternary geologic age. The Lowland Deposits is reported to consist of "gravel, sand, silt, and clay. Medium- to coarse-grained sand and gravel; cobbles and boulders near base; commonly contains reworked Eocene glauconite; varicolored silts and clays; brown to dark gray lignitic silty clay; contains estuarine to marine fauna in some areas (includes in part Pamlico, Talbot, Wicomico and Sunderland Formations of earlier reports); thickness 0 to 150 feet".

### **Subsurface Soil Conditions**

Subsurface soil conditions as encountered in the soil borings generally reflect the soil types referenced in the geology sections of this report and were divided into the strata listed below.

Surface Materials---Approximately 3 inches of topsoil was encountered in the borings. Topsoil/root mat thickness should be expected to vary across the site. Therefore, the topsoil depths shown on the boring logs should not be used solely to estimate topsoil quantities at the site. Note that topsoil thickness noted on our boring logs is pure grass cover thickness observed at the boring locations based on limited sample recovered in the borings. In areas of heavy tree/brush growth, more than normal sub-topsoil layer, heavy root mat may be encountered and should be accounted for probable removal/in place remediation.

Fill Materials---Man-placed FILL materials were encountered in all borings except borings R-5, R-6, and R-7. Fill and Possible Fill materials were also encountered in the borings drilled in the previous study. The fill materials consisted of varying combinations of lean clay, fat clay, silt, sand, and gravel. The fill materials in some of the borings consisted of varying amounts and types of construction debris materials. The depth and characteristics of the fill materials encountered in the borings are summarized in Table 2 as follows.



**Table 2 – Depth and Characteristics of Fill Materials**

Structure	Boring	Fill Depth (feet)	Remark
RW-1	R-1	0-13.5	- Trace organics and asphalt debris
	R-2	0-11.5	- Trace of asphalt and concrete debris - Boring refused at 11.5 feet possibly on top of construction debris - Auger refusal on an offset location at a depth of 10 feet
	R-3	0-13.0	- Trace of asphalt and concrete debris - Boring refused at 13 feet possibly on top of construction debris
	R-4	0-8.0	- Boring refused at 8 feet possibly on top of construction debris
RW-2	R-5	NA	- Fill material was not encountered
	R-6	NA	- Fill material was not encountered
	R-7	NA	- Fill material was not encountered
	B-4	0-8.5	- Trace of organics
RW-3	R-8	0-8.0	- Trace of organics
	R-9	0-8.0	- Trace of organics
	R-10	0-8.0	- Trace of organics
RW-4	B-3	0-8.5	- Trace of asphalt debris
Slope	S-1	0-10.0	- Trace of asphalt and concrete debris - Boring refused at 10 feet possibly on top of construction debris - Auger refusal on two offset locations at depths of 6 and 7 feet
	S-2	0-20.0	- Fill materials extended to the boring termination depth of 20 feet - Trace of asphalt debris - Refusal on the first two attempted locations at depths of 8 & 10 feet
	S-3	0-13.0	- Trace of asphalt debris
	B-5	0-2.5	- Trace of organics
	B-6	0-13.5	- Trace of brick and asphalt debris
Building	B-1	0-5.0	- Trace of brick debris
	B-2	0-2.5	- Trace of organics
	B-9	0-10	- Fill materials extended to the boring termination depth of 10 feet - Trace of brick debris
Pavement	B-7	NA	- Fill material was not encountered
	B-8	0-5.0	- Trace of organics

Note: B borings are from previous study



It should be noted that test borings are not a definitive method of evaluating the presence of existing fill materials because of the limited size of the hole diameters and the very limited sample sizes obtained in comparison to the areal extent of the site. Also, the fill materials may be similar in composition to the on-site natural soils. Due to these reasons, it is often difficult to determine the presence and composition of fill materials from the relatively small SPT boring samples.

As summarized above in the table, construction debris materials were encountered in the borings mainly in those located on the southern and southwestern sides of the site. This portion of the site may have been used as a dump site. Test pitting must be performed to accurately delineate the extent and characteristics of the fill materials.

**Natural Soils---** The natural materials encountered below the surface or fill layers were classified in accordance with the USCS as Fat CLAY (CH), lean CLAY (CL), silty clayey SAND (SC-SM), silty SAND (SM), well graded SAND (SP), and clayey Gravel with sand (GC). Based on the SPT “N” values, the stiffness of the natural cohesive soils ranged from very soft to hard and the relative density of the cohesionless materials varied from medium dense to very dense.

**Disintegrated ROCK---** Disintegrated ROCK is defined as a residual material, with a penetration resistance (N-value) ranging from 60 blows per foot to 50 blows per 1-inch penetration. Disintegrated rock was encountered in RW-2 borings (B-4, R-5, R-6, and R-7), RW-4 boring (B-3), B-1, and B-5 at depths that ranged from 23.5 to 33.5 feet below existing site grades.

**Auger Refusal---** Auger refusal, which is typically an indicator of top of rock or very hard cemented soil layer, was encountered in borings R-6 and R-7 at approximated depths of 60 and 40 feet, respectively. Auger refusal was also encountered in borings S-1, R-2, R-3, and R-4 at depths that ranged from 8 to 13 feet. However, the auger refusal in these borings were encountered within the fill stratum possibly on the surface of construction debris.

### Subsurface Water

Subsurface water was monitored in the borings during and after completion of drilling operations. During these times, subsurface was encountered at an approximate depth of 40 feet in boring R-5 and 20 feet in borings B-3 and B-5. Subsurface water, which appeared to be perched water that is trapped within the fill materials, were encountered at a depth of 3 feet in boring R-8. Subsurface water was not encountered in the remaining borings within the depths explored.

A 2-inch diameter well is installed at an approximate depth of 50 feet in boring R-5 to monitor the groundwater table. As required by PG county, a water reading will be taken after 10 weeks sometime in January.



## **PRELIMINARY DESIGN RECOMMENDATIONS**

### **Foundations**

We understand that the design of the retaining walls has not been completed. We assumed the walls are going to be segmental concrete block reinforced walls. The foundation subgrade materials expected to be present at each retaining wall location are shown in the retaining wall profiles included in the report and summarized in Table 3.

**Table 3 – Summary of Expected Foundation Subgrade Materials**

<b>Structure</b>	<b>Expected Foundation Subgrade Material</b>
RW-1	Man Placed Fill Materials with construction debris
RW-2	Natural Soil Materials
RW-3	Man Placed Fill Materials
RW-4	New Structural Fill

The fill materials below RW-1 are expected to extend to deeper depths (> 15 feet). Furthermore, the fill materials are expected to consist of construction debris. Accordingly, complete removal and replacement is required. Alternatively, due to the deeper depths of the fill materials, foundation soil improvement with aggregate piers or other ground improvement systems will likely be the most economical option.

The natural cohesive soils at the bottom of RW-2 are expected to be suitable for an allowable soil bearing pressure of 3,000 psf.

The fill materials encountered in RW-3 area are expected to extend up to a depth of 5 feet below the planned bottom elevation of the wall. The fill materials should be undercut and replaced with controlled structural fill. Foundation soils prepared in this manner may be suitable for an allowable bearing pressure of 2,500 psf.

Up to 7 feet of new structural fill will be required to attain the bottom elevation of RW-4. Fill materials that extend to an approximate depth of 8.5 feet was encountered in the boring (B-3) drilled at the location of RW-4. The fill materials should be undercut and replaced with structural fill before placing the required new structural fill. Foundation subgrade soils prepared in this manner are expected to be suitable for an allowable bearing pressure of 2,500 psf.

The area of the reinforced compacted fill zone should be proof rolled with a 20-ton payload dump truck or other pneumatic-tired vehicle of similar size and weight. The proof rolling should involve overlapping passes in mutually perpendicular directions. Where rutting or



pumping is observed during proof rolling, the soft and/or unstable soils should be excavated and replaced with a controlled compacted fill material.

All wall designs and installations should be in accordance with manufacture recommendations. It is recommended that all excavations be inspected, tested, and approved by a geotechnical engineer directly prior to the placement of the modular blocks. The purpose of the inspection would be to verify that the subgrade soils are capable of supporting the allowable bearing pressure. If soft or loose pockets are encountered in the excavations, the unsuitable material should be removed and replaced with compacted structural fill or AASHTO #57 stone.

Soils exposed at the base of all approved excavations should be protected against disturbance from the effects of groundwater, rain, and freezing temperatures. Care should be taken to minimize disturbance of the natural soils at the footing subgrades. Surface runoff and other water should be drained away from the excavations and not be allowed to pond on the subgrade soils. If possible, all foundations should be placed the same day that the excavation is made and approved. If this is not practical, then the bearing surfaces should be adequately protected with a 3-inch lean-mix concrete mud mat.

#### Base Leveling Pad Material

The facing units/blocks should bear on a leveling pad that consists of a minimum of 6 inches of AASHTO #57 stone or crushed stone. The leveling pad should not bear on very loose soil. Backfill of over-excavated bearing areas, if required, should be with approved material compacted to at least 95 percent of the standard Proctor maximum dry density at a moisture content within 2 percentage points of optimum (as determined by ASTM D 698) or AASHTO #57 stone. Also, the exposed over-excavated subgrade should be compacted to the above criteria.

#### Reinforced Backfill

The reinforced compacted fill zone should consist of materials that are classified as SM or more granular. The materials should satisfy the structural fill specifications listed in this report.

Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage. The materials should be placed in horizontal lifts with maximum height of 8 inches loose measure where heavy compaction equipment is used. The lift thickness should be decreased to maximum of 6 inches loose measure where portable hand operated compaction equipment is used. Only light-weight hand operated equipment should be used within 3 feet from the tail of the facing units. We recommend that reinforced backfill be compacted to at least 95% of the standard Proctor maximum dry density per ASTM D-698 or 92% of the modified Proctor maximum dry density per ASTM D-1557.



## Foundation and Retained On-Site Soil

The engineering properties provided below in Table 4 are recommended for the on-site soils that are expected to be encountered behind the reinforced fill zone and at the foundation level. The soil engineering properties listed for the on-site subsurface materials were developed from generally accepted empirical correlations with SPT N-values and USCS classification.

**Table 4 – Foundation and Retained On-Site Soil Properties**

<b>Subsurface Material Type</b>	<b>Moist ** Unit Weight (pcf)</b>	<b>Angle of Internal Friction (degrees)</b>	<b>Cohesion (psf)</b>
New Structural Fill*	120	30	0
Existing Fill	110	18	0
Fine Grained Natural Soils (CL, CH, MH)	120	22	0
Coarse Grained Natural Soils (SM or more Granular)	125	28	0
Disintegrated Rock	135	36	0
Rock	145	42	0

\*Structural fill materials placed at the site should have a minimum of these soil properties

\*\*The moist unit weight should be subtracted by 62.4 pcf (unit weight of water) for soils below the water table

## Global Stability Analysis

We assumed RW-1, RW-2, and RW-4 will be segmental block reinforced walls and RW-3 will be a gravity or cantilever wall. Accordingly, the overall or global stability of the walls was evaluated using the program GEOSTASE. The soil properties summarized in Table 4 were used for the analysis. The wall and site grade geometry were taken from the grading plan that was provided by the client. A vehicular surcharge load of 200 psf was applied for the pavement planned near the wall.

The global stability of the walls was evaluated by examining potential failure planes passing behind and under the reinforced zone. We understand that PG County requires a minimum factor of safety (FOS) of 1.5. The length of the reinforcement zone was adjusted until the FOS for the critical failure plane was at least 1.5. Our analysis indicated that, to attain the required FOS, the reinforcement lengths of RW-1, RW-2, and RW-4 should be at least 100%, 120%, and 110% of the wall heights, respectively. The stability analysis performed in RW-3 indicated a FOS above 1.5. The analysis result is enclosed with this report.

Please note that the global stability analyses of the walls included here are preliminary. The stability of the walls will be reanalyzed once the design of the walls is completed, and laboratory testing are finalized.



## **CONSTRUCTION RECOMMENDATIONS**

### **Controlled Structural Fill**

All structural fill materials, whether on-site or imported from an off-site source, should be tested for suitability and quality prior to its use as structural fill. We recommend that the material be tested to determine particle size (gradation), plasticity, and maximum dry density. The following standard tests should be performed to determine the above properties of all imported fill materials:

Particle Gradation	ASTM D-422
Atterberg Limits	ASTM D-4318
Modified Proctor	ASTM D-1557

Structural fill material shall consist of quality, low plasticity, non-organic soil that classifies as GW, GP, GM, GM-GP, GC, SW, SP, SM-SP, SM or SC in accordance with ASTM D-2487 and shall have a maximum of 30% retained on a standard 3/4-inch sieve with a maximum dry density (MDD) of more than 110 pcf. All fill material shall be free of ice, snow, organic material (OH, OL), expansive soils of high plasticity/elasticity (CH/MH), construction debris, rock sizes greater than 4 inches, or other deleterious material. The structural fill materials should have a minimum friction angle of 30° and moist unit weight of 120 pcf.

Fill materials should be placed in horizontal lifts with maximum height of 8 inches loose measure. In confined areas such as utility trenches and foundation walls, portable compaction equipment and thinner lifts of 3 to 4 inches may be required to achieve adequate degrees of compaction. New fill should be adequately keyed into stripped and scarified subgrade soils and should, where applicable, be properly benched into existing slopes or laid-back portions of excavations. During fill operations, positive surface drainage should be maintained to prevent the accumulation of water.

We recommend that structural fill be compacted to at least 95 percent of the standard Proctor maximum dry density. The moisture content of the fill should be within 2% points of the optimum moisture content as determined by the modified Proctor density test or drier, if necessary, so as to attain proper compaction. This may require the contractor to dry soil during wet weather or add water during dry, hot weather. The geotechnical engineer should individually evaluate structural fill material.

We recommend that the contractor have equipment on site during earthwork for both drying and wetting of the soil as moisture alterations could very well be necessary at the time of construction. Moisture control may be especially difficult during winter months or extended periods of rain. Attempts to work the soil when wet can be expected to result in deterioration of otherwise suitable soil conditions of previously placed and properly compacted fill.

Where construction traffic or weather has disturbed the subgrade, the affected soils intended for structural support should be scarified and re-compacted. Each lift of fill



should be tested in order to confirm that the recommended degree of compaction is attained. Field density tests to verify fill compaction should be performed for every 5,000 square feet (approximately 70 feet square) of fill area, with a minimum of two tests per lift.

### Groundwater and Drainage

Based on the results of the borings, subsurface water is not anticipated during the anticipated earthwork and foundation excavations and is estimated to occur below foundation levels. Of course, fluctuations in subsurface water levels and soil moisture can be anticipated with seasonal changes, as well as changes in precipitation amounts and rainfall runoff characteristics.

Any water infiltration resulting from precipitation, surface run-off, or perched water should be able to be controlled by means of sump pits and pumps, or by gravity ditching procedures. If any conditions are encountered which cannot be handled in such a manner, this office should be consulted.

### **REMARKS**

This report has been prepared to aid in the evaluation of the site for the proposed retaining walls design and construction. Additional recommendations can be provided as needed.

These analyses and recommendations are, of necessity, based on the information made available to us at the time of the actual writing of the report and the on-site conditions, surface and subsurface that existed at the time the exploratory borings were drilled. A further assumption has been made that the limited exploratory borings, in relation both to the areal extent of the site and to depth, are representative of conditions across the site.

The recommendations contained herein have been based on a series of widely spaced soil borings. Actual subsurface conditions encountered could vary from those outlined in this report. If subsurface conditions are encountered which differ from those reported herein, this Office should be notified immediately so that the analyses and recommendations can be reviewed and/or revised as necessary.

HCEA appreciates having had the opportunity to provide the geotechnical consultation for this project, and we will remain available for further consultation during the various design stages. Should you have any questions concerning the contents of this report, or require additional consultation, design, inspection, or testing services, please contact our Office.



Very truly yours,

**HILLIS-CARNES ENGINEERING ASSOCIATES, INC.**



Paul Fritz, E.I.T.  
Staff Engineer



Robel Gibbe, P.E.  
Project Engineer

Senior Review:



Rajesh Goel, P.E.  
Principal Engineer

Robel Gibbe - 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 Number: 52076.

Enclosure: Site Location Plan  
Boring Location Plan  
Soil Boring Profiles  
Records of Soil Exploration (Boring Logs)  
Soil Description Sheet  
General Notes for Subsurface Records  
Global Stability Analysis Results



# Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

**The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.**

## Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

## Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer

will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.*

## Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

## You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*



responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

### Most of the “Findings” Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site’s subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual site-wide subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

### This Report’s Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

### This Report Could Be Misinterpreted

Other design professionals’ misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals’ plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

### Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note*

*conspicuously that you’ve included the material for information purposes only.* To avoid misunderstanding, you may also want to note that “informational purposes” means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

### Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled “limitations,” many of these provisions indicate where geotechnical engineers’ responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

### Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a “phase-one” or “phase-two” environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

### Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer’s services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer’s recommendations will not of itself be sufficient to prevent moisture infiltration.* Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists.*



GEOPROFESSIONAL  
BUSINESS  
ASSOCIATION

Telephone: 301/565-2733

e-mail: [info@geoprofessional.org](mailto:info@geoprofessional.org) [www.geoprofessional.org](http://www.geoprofessional.org)





**HILLIS-CARNES**  
**Engineering Associates, Inc.**

PROJECT NO.: F23050

SCALE: NTS

DATE: October 31, 2024

Site Location Plan, Southern Avenue Phase III – Retaining Walls and Slope, Oxon Hill, MD

Drawing No.

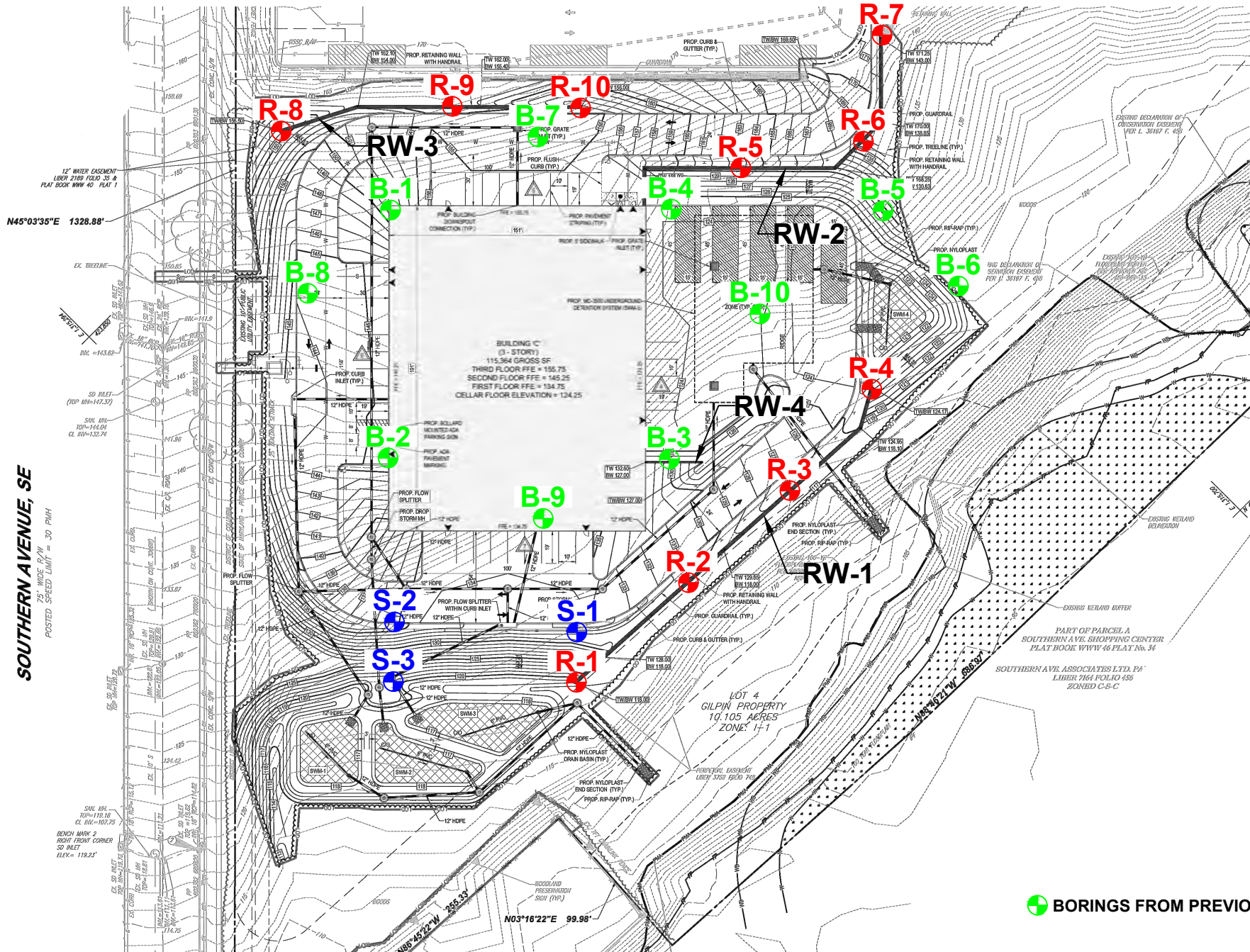
1



SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

N45°03'35"E 1328.88'



BORINGS FROM PREVIOUS STUDY



**HILLIS-CARNES**  
ENGINEERING ASSOCIATES  
1660 Bowman Farm Road, Suite 105 Frederick, MD 21701  
Phone: (301) 662-2522 Fax: (301) 662-5575

**BORING LOCATION PLAN**  
**SOUTHERN AVENUE PHASE III**  
**OXON HILL, MARYLAND**

PROJECT NO.	F23050	DESIGN BY:	
DATE:	10/31/24	DRAWN BY:	CA
SCALE:	1"=80'	CHECKED BY:	RG
SHEET:	1 of 1		



## RW-1 Profile



Topsoil

Fill

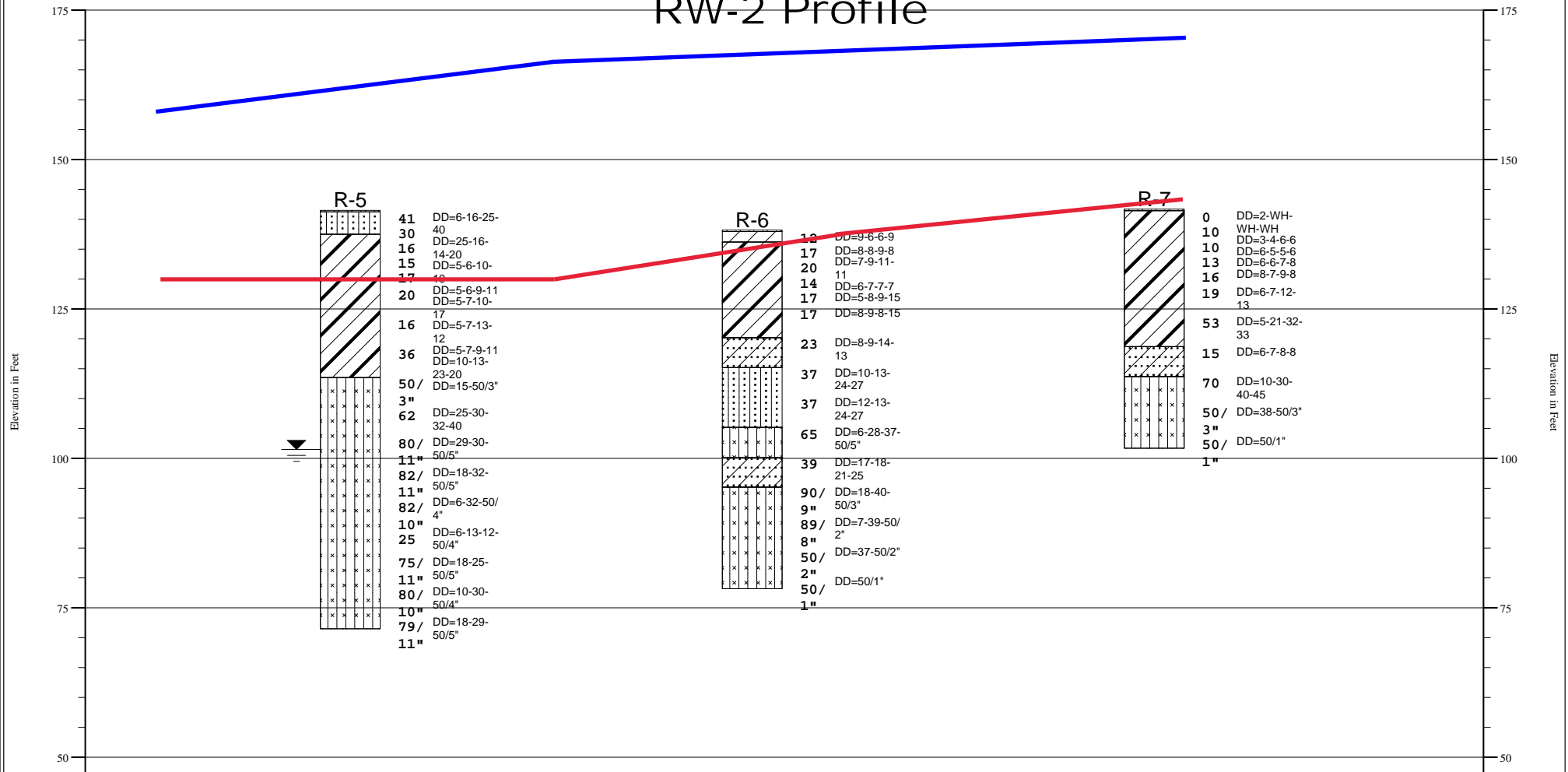
Low plasticity clay

Clayey sand

<h1 style="text-align: center;">HILLIS-CARNES ENGINEERING ASSOCIATES</h1> <h2 style="text-align: center;">GENERALIZED SOIL PROFILE</h2>		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=7.5'		10/31/2024
<h3>Southern Avenue Phase III</h3>		
PROJECT NO. F23050		FIGURE NUMBER



# LOG OF BORINGS Southern Avenue Phase III RW-2 Profile



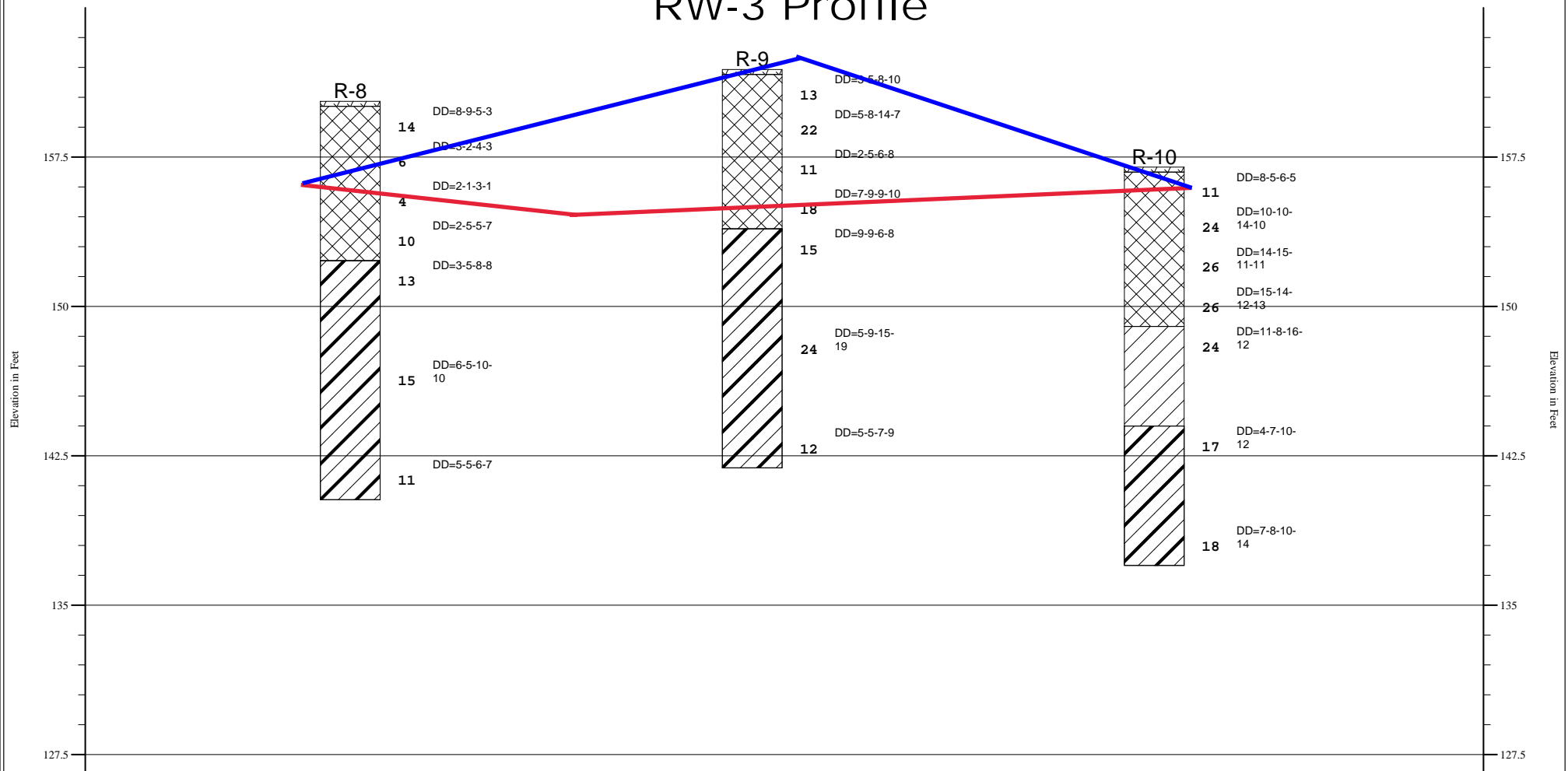
- Topsoil
- Silty sand
- Low-high plasticity clays
- Description not given for: "ZX"
- Low plasticity clay
- Clayey sand





— Top of Wall  
— Bottom of Wall

HILLIS-CARNES ENGINEERING ASSOCIATES GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=25'		10/31/2024
Southern Avenue Phase III		
PROJECT NO. F23050		FIGURE NUMBER



# LOG OF BORINGS Southern Avenue Phase III RW-3 Profile



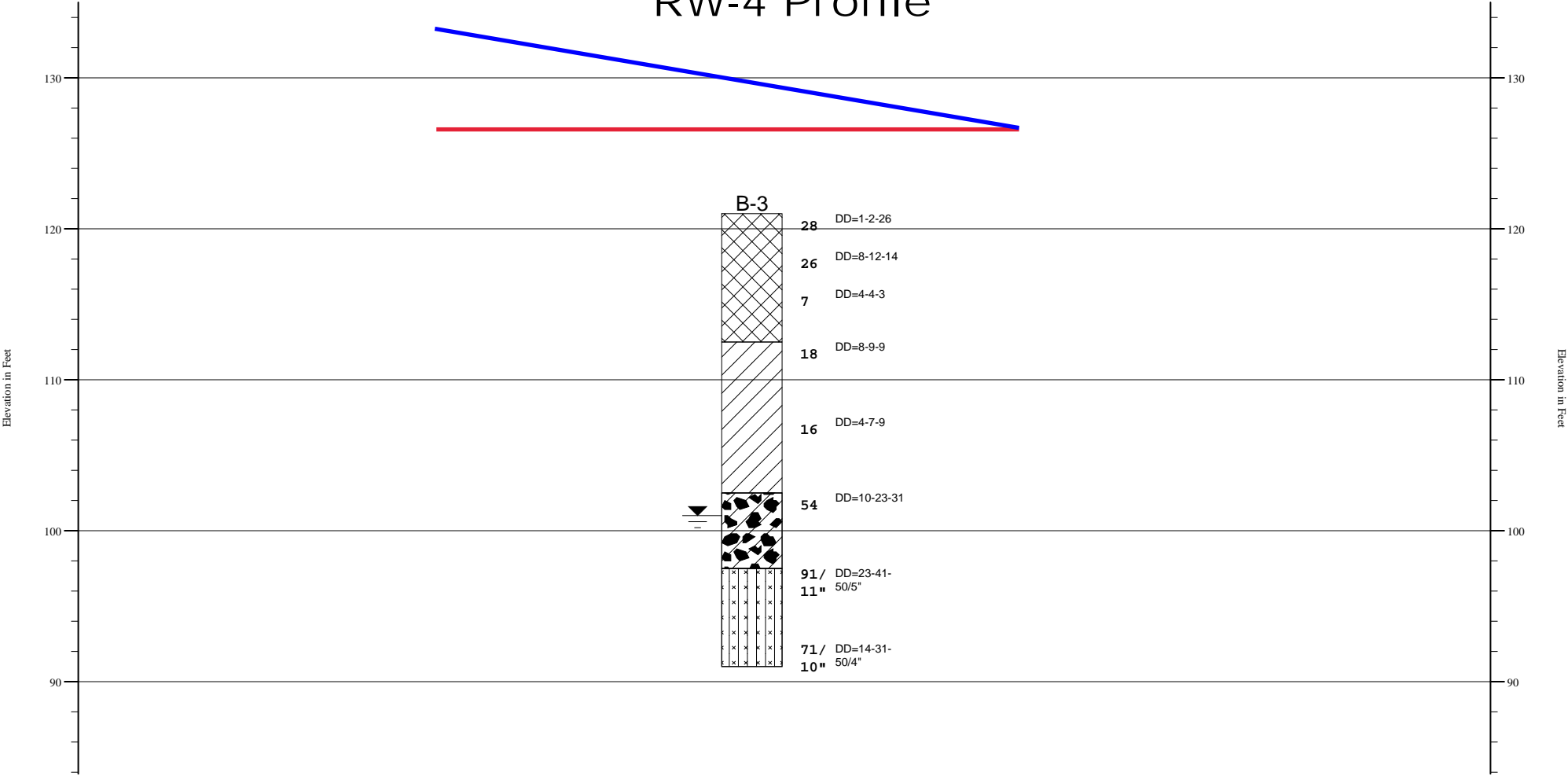
-  Topsoil
-  Fill
-  Low-high plasticity clays
-  Low plasticity clay





— Top of Wall  
— Bottom of Wall

HILLIS-CARNES ENGINEERING ASSOCIATES GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=7.5'		10/31/2024
Southern Avenue Phase III		
PROJECT NO. F23050		FIGURE NUMBER



LOG OF BORINGS  
Southern Avenue - Phase III  
RW-4 Profile



-  Fill
-  Low plasticity clay
-  Clayey gravel
-  Description not given for: "ZX"

— Top of Wall  
— Bottom of Wall

HILLIS-CARNES ENGINEERING ASSOCIATES		
GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=10'		10/31/2024
Southern Avenue - Phase III		
PROJECT NO. F23050		FIGURE NUMBER



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-1  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 116.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
0		3" Topsoil						
115		Dark brown with reddish brown, silty SAND, with gravel, hard, moist (FILL		12		6-9-50/5"	59/11"	
		Light brown, GRAVEL, trace of sand, moist		3		18-50/3"	50/3"	
5		Brown and grayish brown, silty SAND, with gravel, very dense, moist		10		38-26-28-32	54	
110		- Brown and light brown, trace of asphalt debris		12		26-31-19-14	50	
		- Multicolored, trace of organics, medium dense		18		5-7-13-14	20	
10								
105								
		Orangish brown with grayish brown, sandy Lean CLAY, trace of rock fragments, medium dense, moist (CL-Natural)		14		7-11-8-7	19	
15								
100								
		Orangish brown with yellowish brown, clayey SAND, with rock fragments, medium dense, moist (SC)		12		7-8-13-7	21	
20			End of Boring at 20.0 feet below grade					
95								
25								
90								
30								
85								

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

**SAMPLE CONDITIONS**  
D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST  
AT COMPLETION  
AFTER 24 HRS.  
AFTER \_\_\_\_ HRS.

**GROUND WATER**  
DRY ft.  
DRY ft.  
\_\_\_\_ ft.

**CAVE IN DEPTH**  
16.0 ft.  
14.0 ft.  
\_\_\_\_ ft.

**BORING METHOD**  
HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.




# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-2  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.4 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/17/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/17/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot		
							N	C U R V E	
								10	30
0		3" Topsoil							
		Brown and grayish brown, silty SAND, with gravel, medium dense, moist (FILL)		12		5-14-15-3	29		
115		Brown and orangish brown, clayey SAND, with gravel, medium dense, moist		12		8-7-8-8	15		
5		Gray, silty SAND, with gravel, dense, moist		7		12-24-16-12	40		
		Gray, silty SAND, with gravel, dense, moist		10		7-7-8-15	15		
110		- Grayish brown with brown, trace of asphalt debris		0		50/0"	50/0"		
10		- Brown, trace of gravel and concrete debris, hard							
			Auger Refusal at 11.5 feet below grade						
105									
15									
100									
20									
95									
25									
90									
30									

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

**SAMPLE CONDITIONS**  
D - DISINTEGRATED AT COMPLETION  
I - INTACT AFTER 24 HRS.  
U - UNDISTURBED AFTER \_\_\_\_ HRS.  
L - LOST

**GROUND WATER**  
DRY ft.  
DRY ft.  
\_\_\_\_ ft.

**CAVE IN DEPTH**  
5.0 ft.  
4.0 ft.  
\_\_\_\_ ft.

**BORING METHOD**  
HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-3  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 117.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/17/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/17/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
0		3" Topsoil						
115		Brown and grayish brown, silty SAND, with gravel, dense, moist (FILL)		12		7-14-25-50/2"	39	
		- Light grayish brown, medium dense		12		12-12-5-9	17	
5		- Orangish brown and brown, trace of gravel and asphalt debris, dense		24		16-21-18-14	39	
110		- Orangish brown and grayish brown, with gravel		7		11-18-18-12	36	
		- Orangish brown with reddish brown, trace of concrete debris, medium dense		10		15-10-9-9	19	
10								
105								
			Auger Refusal at 13.0 feet below grade					
15								
100								
20								
95								
25								
90								
30								

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION <u>DRY</u> ft. AFTER 24 HRS. <u>DRY</u> ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>8.0</u> ft. <u>5.5</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-4  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/17/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/17/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
0		3" Topsoil						10 30 50
115		Orangish brown and light brown, silty SAND, with gravel, medium dense, moist (FILL) - Multicolored, trace of gravel, hard - Brown		16		5-11-16-20	27	
5				10		25-50/5"	50/5"	
				4		50/4"	50/4"	
				0		50/0"	50/0"	
110			Auger Refusal at 8.0 feet below grade					
10								
105								
15								
100								
20								
95								
25								
90								
30								

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE  
NOTED  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

**SAMPLE CONDITIONS**  
D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST  
AT COMPLETION  
AFTER 24 HRS.  
AFTER \_\_\_\_ HRS.

**GROUND  
WATER**  
DRY ft.  
DRY ft.  
\_\_\_\_ ft.

**CAVE IN  
DEPTH**  
3.0 ft.  
3.0 ft.  
\_\_\_\_ ft.

**BORING METHOD**  
HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-5  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/24/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/24/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
0		3" Topsoil						
140		Light brown, silty SAND, trace of rock fragments, dense, moist (SM-Natural)		12		6-16-25-40	41	
		- Reddish brown with orangish brown, trace of fine roots, meidum dense		18		25-16-14-20	30	
5				12		5-6-10-10	16	
135		Gray and reddish brown, Lean/Fat CLAY, trace of sand, very stiff, moist (CL/CH)		12		5-6-9-11	15	
		- Stiff		24		5-7-10-17	17	
10		- Reddish brown with light gray, very stiff						
130								
		- Gray and brown		24		5-7-13-12	20	
15								
125								
				24		5-7-9-11	16	
20								
120								
		- Hard		24		10-13-23-20	36	
25								
115								
		Orangish brown and purplish brown, disintegrated ROCK sampled as clayey sand, hard, moist		12		15-50/3"	50/3"	
30								
110								

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED

PT - PRESSED SHELBY TUBE

CA - CONTINUOUS FLIGHT AUGER

RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED

I - INTACT

U - UNDISTURBED

L - LOST

AT COMPLETION

AFTER 24 HRS.

AFTER \_\_\_\_ HRS.

**GROUND  
WATER**  
40.0 ft.

**CAVE IN  
DEPTH**  
50.0 ft.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS

CFA - CONTINUOUS FLIGHT AUGERS

DC - DRIVING CASING

MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-5  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/24/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/24/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	C U R V E		
								10	30	50
35		- Purplish brown, sampled as silty sand		14		25-30-32-40	62			62
105										
40				14		29-30-50/5"	80/ 11"			80/11"
100		- Paleish brown	Water observed at 43.0 feet while drilling	17		18-32-50/5"	82/ 11"			82/11"
45										
95		- Light brown with grayish brown, damp		16		6-32-50/4"	82/ 10"			82/10"
50										
90		Light brown with grayish brown, silty SAND, medium dense, damp (SM)		22		6-13-12-50/4"	25			
55										
85		Light brown with grayish brown, disintegrated ROCK sampled as silty sand, hard, damp		12		18-25-50/5"	75/ 11"			75/11"
60										
80				16		10-30-50/4"	80/ 10"			80/10"

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

**SAMPLE CONDITIONS**  
D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

AT COMPLETION  
AFTER 24 HRS.  
AFTER \_\_\_\_ HRS.

**GROUND WATER**  
40.0 ft.

**CAVE IN DEPTH**  
50.0 ft.

**BORING METHOD**  
HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



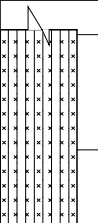
# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-5  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/24/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/24/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	C U R V E		
								10	30	50
65										
75										
70										
70										
75										
65										
80			End of Boring at 70.0 feet below grade							
60										
85										
55										
90										
50										
95										
45										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION <u>40.0</u> ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>50.0</u> ft. _____ ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.

























# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-6  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 138.2 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot		
							N	C U R V E	
								10	30
0		3" Topsoil							
135		Multicolored, Lean CLAY, with sand, trace of fine roots, stiff, moist (CL-Natural)		12		9-6-6-9	12		
5		Gray and orangish brown, Lean/Fat CLAY with sand, very stiff, moist (CL/CH) - Gray with reddish brown - Multicolored, stiff		18		8-8-9-8	17		
130				24		7-9-11-11	20		
10				24		6-7-7-7	14		
125		- Gray with brown, trace of sand		24		5-8-9-15	17		
15				24		8-9-8-15	17		
120		Orangish brown with dark brown, clayey SAND, medium dense, moist (SC)		24		8-9-14-13	23		
20									
115		Purplish brown, silty SAND, dense, moist (SM)		24		10-13-24-27	37		
25									
110				24		12-13-24-27	37		
30									

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

**SAMPLE CONDITIONS**  
D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST  
AT COMPLETION  
AFTER 24 HRS.  
AFTER \_\_\_\_ HRS.

**GROUND WATER**  
DRY ft.  
DRY ft.  
\_\_\_\_ ft.

**CAVE IN DEPTH**  
38.0 ft.  
36.0 ft.  
\_\_\_\_ ft.

**BORING METHOD**  
HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-6  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 138.2 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
105		Purplish brown, disintegrated ROCK sampled as silty sand, hard, moist		12		6-28-37-50/5"	65	65
35								
100		Light gray and yellowish brown, clayey SAND, dense, moist (SC)		24		17-18-21-25	39	
40								
95		Light brown, disintegrated ROCK sampled as silty sand, hard, damp		15		18-40-50/3"	90/9"	90/9"
45								
90		- Light brown and brown, sampled as clayey sand		14		7-39-50/2"	89/8"	89/8"
50								
85		- Light brown with gray, sampled as silty sand		8		37-50/2"	50/2"	
55								
80				1		50/1"	50/1"	
60			Auger Refusal at 60.0 feet below grade					
75								

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE  
NOTED  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

**SAMPLE CONDITIONS**  
D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST  
AT COMPLETION  
AFTER 24 HRS.  
AFTER \_\_\_\_ HRS.

**GROUND  
WATER**  
DRY ft.  
DRY ft.  
ft.

**CAVE IN  
DEPTH**  
38.0 ft.  
36.0 ft.  
ft.

**BORING METHOD**  
HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-7  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/23/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/23/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
0		3" Topsoil						
140		Light gray with reddish brown, Lean/Fat CLAY, with sand, trace of fine roots, very soft, moist (CL/ CH-Natural)		12		2-WH-WH-WH	0	
		- Gray and reddish brown, trace of sand, stiff		12		3-4-6-6	10	
5				12		6-5-5-6	10	
135		- Very stiff		24		6-6-7-8	13	
				12		8-7-9-8	16	
10								
130		- Gray and brown		24		6-7-12-13	19	
15								
125		- Hard		24		5-21-32-33	53	
20								
120		Orangish brown and dark brown, clayey SAND, trace of rock fragments, medium dense, moist (SC)		12		6-7-8-8	15	
25								
115		Light brown, disintegrated ROCK sampled as silty sand, hard, moist		24		10-30-40-45	70	
30								
110								

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE  
NOTED

PT - PRESSED SHELBY TUBE

CA - CONTINUOUS FLIGHT AUGER

RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED

I - INTACT

U - UNDISTURBED

L - LOST

AT COMPLETION

AFTER 24 HRS.

AFTER \_\_\_\_ HRS.

**GROUND  
WATER**

DRY ft.

\_\_\_\_ ft.

\_\_\_\_ ft.

**CAVE IN  
DEPTH**

30.0 ft.

\_\_\_\_ ft.

\_\_\_\_ ft.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS

CFA - CONTINUOUS FLIGHT AUGERS

DC - DRIVING CASING

MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-7  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/23/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/23/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
35		- Light reddish brown		9		38-50/3"	50/3"	
105								
40			Auger Refusal at 40.0 feet below grade	1		50/1"	50/1"	
100								
45								
95								
50								
90								
55								
85								
60								
80								

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

**SAMPLE CONDITIONS**  
D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST  
AT COMPLETION  
AFTER 24 HRS.  
AFTER \_\_\_\_ HRS.

**GROUND WATER**  
DRY ft.  
**CAVE IN DEPTH**  
30.0 ft.

**BORING METHOD**  
HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-8  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 160.3 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
160 0		3" Topsoil						
		Orangish brown with light gray, clayey SAND, trace of organics and gravel, medium dense, moist (FILL)		15		8-9-5-3	14	
		- Grayish brown and brown, with gravel, loose		15		3-2-4-3	6	
155 5		- Light brown with reddish brown, trace of gravel, very loose		10		2-1-3-1	4	
		Multicolored, sandy Lean CLAY, trace of gravel, stiff, moist		5		2-5-5-7	10	
		Yellowish brown with light gray, Lean/Fat CLAY, trace of sand, stiff, moist (CL/CH-Natural)		12		3-5-8-8	13	
150 10		- Gray with reddish brown		24		6-5-10-10	15	
145 15				24		5-5-6-7	11	
140 20			End of Boring at 20.0 feet below grade					
135 25								
130 30								

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

**SAMPLE CONDITIONS**  
D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST  
AT COMPLETION  
AFTER 24 HRS.  
AFTER \_\_\_\_ HRS.

**GROUND WATER**  
DRY ft.  
3.0 ft.  
\_\_\_\_ ft.

**CAVE IN DEPTH**  
11.0 ft.  
5.0 ft.  
\_\_\_\_ ft.

**BORING METHOD**  
HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-9  
 Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
 Surf. Elev. 161.9 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
 Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	C U R V E		
								10	30	50
0		3" Topsoil								
160		Brown with grayish brown, sandy Lean CLAY, trace of gravel, stiff, moist (FILL)		15		3-5-8-10	13			
		- Very stiff		7		5-8-14-7	22			
5		- Brown with various colors, stiff		10		2-5-6-8	11			
155		- Trace of organics, very stiff		12		7-9-9-10	18			
		Multicolored, Lean/Fat CLAY, with sand, stiff, moist (CL/CH- Natural)		10		9-9-6-8	15			
10										
150		- Gray and reddish brown, trace of sand, very stiff		15		5-9-15-19	24			
15										
145										
20			End of Boring at 20.0 feet below grade	24		5-5-7-9	12			
140										
25										
135										
30										
130										

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE  
 NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST  
 AT COMPLETION  
 AFTER 24 HRS.  
 AFTER \_\_\_\_ HRS.

**GROUND  
WATER**  
DRY ft.  
DRY ft.  
 \_\_\_\_\_ ft.

**CAVE IN  
DEPTH**  
10.0 ft.  
10.0 ft.  
 \_\_\_\_\_ ft.

**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-10  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 157.0 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	C U R V E		
								10	30	50
0		3" Topsoil								
155		Orangish brown with reddish brown, sandy Lean CLAY, trace of gravel, stiff, moist (FILL)		19		8-5-6-5	11			
		- Brown and light brown, trace of organics, very stiff		20		10-10-14-10	24			
5		- With gravel		4		14-15-11-11	26			
150		Brown, silty SAND, trace of gravel, medium dense, moist		2		15-14-12-13	26			
		Orangish brown and grayish brown, sandy Lean CLAY, trace of rock fragments, very stiff, moist (CL-Natural)		15		11-8-16-12	24			
10										
145										
		Reddish brown and gray, Lean/Fat CLAY, trace of sand, very stiff, moist (CL/CH)		18		4-7-10-12	17			
15										
140										
				24		7-8-10-14	18			
20			End of Boring at 20.0 feet below grade							
135										
25										
130										
30										
125										

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

**SAMPLE CONDITIONS**  
D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST  
AT COMPLETION  
AFTER 24 HRS.  
AFTER \_\_\_\_ HRS.

**GROUND WATER**  
DRY ft.  
DRY ft.  
\_\_\_\_ ft.

**CAVE IN DEPTH**  
9.0 ft.  
9.0 ft.  
\_\_\_\_ ft.

**BORING METHOD**  
HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. S-1  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.6 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot		
							N	C U R V E	
								10	30
0		3" Topsoil							
		Light brown and grayish brown, silty SAND, with gravel, loose, moist (FILL)		12		3-6-4-3	10		
115		- Brown and black, with asphalt debris, medium dense		14		6-8-10-6	18		
5		- Grayish brown, with organics, loose		7		5-6-4-5	10		
		- Grayish brown and black		5		6-8-12-15	20		
110		Gray, GRAVEL, with concrete debris, hard, dry		2		50/2"	50/2"		
10			Auger Refusal at 10.0 feet below grade						
105									
15									
100									
20									
95									
25									
90									
30									

**SAMPLER TYPE**  
DRIVEN SPLIT SPOON UNLESS OTHERWISE  
NOTED  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

**SAMPLE CONDITIONS**  
D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST  
AT COMPLETION  
AFTER 24 HRS.  
AFTER \_\_\_\_ HRS.

**GROUND  
WATER**  
DRY ft.  
DRY ft.  
\_\_\_\_ ft.

**CAVE IN  
DEPTH**  
4.0 ft.  
5.0 ft.  
\_\_\_\_ ft.

**BORING METHOD**  
HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. S-2  
 Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
 Surf. Elev. 122.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
 Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
0		3" Topsoil	Offset 10ft SW					
120		Brown and dark brown, silty SAND, with gravel and asphalt debris, medium dense, moist (FILL)		10		21-25-11-10	26	
5		Brown with grayish brown, clayey SAND, with gravel, medium dense, moist		3		10-11-18-12	19	
115		- Orangish brown with grayish brown		24		12-10-12-14	22	
		Gray, GRAVEL, trace of sand, dry		14		11-14-16-13	30	
10				2		50/2"	50/2"	
110								
15		Orangish brown with light gray, Lean CLAY, with sand, trace of gravel, dense, moist		7		12-17-22-26	39	
105								
20		- Orangish brown with grayish brown, sandy, with gravel		10		7-8-12-10	20	
			End of Boring at 20.0 feet below grade					
100								
25								
95								
30								

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED AT COMPLETION  
 I - INTACT AFTER 24 HRS.  
 U - UNDISTURBED AFTER \_\_\_\_ HRS.  
 L - LOST

**GROUND WATER**  
DRY ft.  
**CAVE IN DEPTH**  
14.0 ft.

**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. S-3  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

### SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.1 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	C U R V E		
								10	30	50
		3" Topsoil								
		Brown and dark brown, silty SAND, with gravel and asphalt debris, medium dense, moist (FILL)		12		7-9-10-7	19			
115		- Brown and yellowish brown, trace of gravel		12		6-6-7-10	13			
5		Multicolored, clayey SAND, with asphalt debris, medium dense, moist		14		8-15-7-11	22			
110		Multicolored, sandy Lean CLAY, trace of asphalt debris, stiff, moist		12		4-4-6-8	10			
10		Brown and grayish brown, clayey SAND, trace of gravel, medium dense, moist		12		6-7-8-7	15			
105		Orangish brown with light brown, Lean CLAY, with sand, stiff, moist (CL-Natural)		12		6-7-7-11	14			
15										
100				24		6-6-6-6	12			
20			End of Boring at 20.0 feet below grade							
95										
25										
90										
30										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>16.0</u> ft. <u>16.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



# KEY TO SYMBOLS

Symbol    Description

## Strata symbols



Topsoil



Fill



Low plasticity  
clay



Clayey sand



Silty sand



Low-high plasticity  
clays



Description not given for:  
"ZX"

## Misc. Symbols



Boring continues



Water table during  
drilling



Water table at  
boring completion

## Notes:

1. Exploratory borings were drilled on 10/16/2024 using a 6-inch outside diameter hand-auger.
2. Water level readings were taken during drilling and upon completion of each boring. Borings were backfilled upon completion.
3. Boring locations were selected by project HCEA and staked in the field by HCEA using existing site features as reference.
4. These logs are subject to the limitations, conclusions, and recommendations in this report.
5. Results of tests conducted on samples recovered are reported on the logs.



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-1  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 152.7 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
0		Yellow, red, and gray Fat CLAY, trace of brick debris, organics, moist, soft, (FILL)	5" topsoil	10		1-2-2	4	●		
150		Yellow brown, red, yellow, and gray sandy Fat CLAY, moist, stiff, (Possible FILL)		10		4-6-7	13	●		
5		Reddish brown and very light gray sandy Fat CLAY, fine roots, moist, stiff, (CH-Natural)		10		5-5-4	9	●		
145		Reddish brown with brown Fat CLAY with sand, trace of gravel and roots, moist, medium stiff, (CH)		10		2-2-3	5	●		
10		Reddish brown, yellow, gray, and purple lean CLAY, moist, very stiff, (CL)		12		5-8-13	21	●		
140										
15				18		4-7-11	18	●		
135										
20				18		3-6-11	17	●		
130										
25		- gray, dark brown, and yellow brown		18		6-9-14	23	●		
125										
30										
120										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION _____ ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>GROUND WATER</b> _____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. _____ ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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**HILLIS - CARNES**  
**ENGINEERING ASSOCIATES, INC.**  
**RECORD OF SOIL EXPLORATION**

Project Name Southern Avenue - Phase III Boring No. B-1  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 152.7 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
35		Dark brown, purple, and yellow disintegrated Rock as SAND, moist, very dense		18		24-40-45	85			85
115		Dark brown, purple, and yellow silty clayey SAND, moist, dense, (SC-SM)		18		13-17-22	39			
40		- light purple		18		10-21-24	45			
110		- dark brow, light purple, and yellow		18		9-17-25	42			
45		Purple silty SAND, moist, very dense, (SM)		18		17-23-32	55			
105		Yellow brown disintegrated ROCK as a sand, wet, very dense	Subsurface water at 58.5 feet during drilling End of boring at 60 feet below grade.	18		18-31-46	77			77
50										
100										
55										
95										
60										
90										
65										
85										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION _____ ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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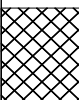










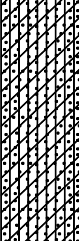
# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-2  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 142.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
 Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	CURVE		
								10	30	50
0		Red brown, yellow brown, and dark brown sandy fat CLAY, trace of gravel, moist, medium stiff, (Possible FILL)	4" topsoil	10		1-2-5	7			
140		Dark gray with black sandy Fat CLAY, charcoal moist, stiff, (CH-Natural) - reddish brown, gray, and yellow, with gravel, very stiff		4		3-3-7	10			
5				12		8-12-7	19			
135		Red brown, yellow brown, and purple lean CLAY, moist, very stiff, (CL)  - red brown, purple, and gray  - purple and gray with yellow brown		16		14-12-9	21			
10				12		7-7-9	16			
130				18		6-8-11	19			
15				16		12-23-27	50			
125				16		9-23-31	54			
20		Dark brown, yellow, and light purple silty clayey SAND, moist, dense, (SC-SM)  - very dense	End of boring at 30 feet below grade.							
120										
25										
115										
30										
110										

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

**GROUND WATER**  
 AT COMPLETION Dry ft.  
 AFTER 24 HRS. \_\_\_\_\_ ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**CAVE IN DEPTH**  
23.5 ft.  
 \_\_\_\_\_ ft.  
 \_\_\_\_\_ ft.

**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-3  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 121 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
 Date Started 03/08/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/08/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	CURVE		
								10	30	50
0			5" topsoil	16		1-2-26	28			
120		Dark brown with black silty clayey SAND with gravel, trace of charcoal, moist, medium dense, (FILL)		14		8-12-14	26			
5		Dark brown sandy lean CLAY, fine roots, moist, very stiff, (Possible FILL)		12		4-4-3	7			
115		Brown and yellow brown clayey SAND with gravel, moist, loose, (Possible FILL)		12		8-9-9	18			
10		Light red brown and yellow brown lean CLAY, moist, very stiff, (CL-Natural)		18		4-7-9	16			
110		- red brown, yellow, and gray		12		10-23-31	54			
15		Reddish brown and yellow clayey Gravel with sand, moist, very dense, (GC)		16		23-41-50/5"	91/11"			
105		Light brown and dark brown disintegrated Rock as sand, wet, very dense	Subsurface water at 23.5 feet during drilling	14		14-31-50/4"	71/10"			
20			End of boring at 30 feet below grade.							
100										
25										
95										
30										
90										

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

**GROUND WATER**  
 AT COMPLETION 20 ft.  
 AFTER 24 HRS. 20 ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**CAVE IN DEPTH**  
21.5 ft.  
21.5 ft.  
 \_\_\_\_\_ ft.

**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-4  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 146.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		Dark purple with yellow sandy lean	5" topsoil	10		2-2-4	6			
145		CLAY, roots, moist, medium stiff, (Possible FILL) - stiff		10		2-3-8	11			
5		- dark brown, with gravel and organics		10		12-8-6	14			
140										
10		Red, yellow brown, and gray Fat CLAY, moist, very stiff, (CH- Natural)		10		7-7-9	16			
135										
15		- reddish brown with gray and yellow brown, roots		12		4-7-14	21			
130										
20		Brown and gray lean CLAY, moist, very stiff, (CL)		18		5-8-10	18			
125										
25		Yellow, light purple, and red silty SAND, moist, medium dense, (SM)		18		5-7-12	19			
120										
30		Brownish yellow sandy lean CLAY, moist, very stiff, (CL)		18		7-11-16	27			
115										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> ____ ft.	<b>CAVE IN DEPTH</b> <u>32.5</u> ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-4  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 146.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
 Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
35		Yellow and brown disintegrated Rock as sand, moist, very dense		18		20-38-47	85	85
110								
40		Purple silty clayey SAND, moist, dense, (SC-SM) Yellow brown well graded SAND, wet, dense, (SW)	Subsurface water at 39.5 feet during drilling	18		15-19-21	40	
105		- medium dense		18		6-9-17	26	
45								
100		- dense		18		9-21-27	48	
50								
95								
55		Purple, red brown, gray, and black disintegrated Rock as sand, charcoal, moist, very dense		18		10-27-38	65	65
90								
60		Yellow brown disintegrated ROCK as a sand, wet, very dense	End of boring at 60 feet below grade.	18		17-31-49	80	80
85								
65								
80								

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE  
 NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

**GROUND  
WATER**  
 AT COMPLETION \_\_\_\_\_ ft.  
 AFTER 24 HRS. \_\_\_\_\_ ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**CAVE IN  
DEPTH**  
32.5 ft.  
 \_\_\_\_\_ ft.  
 \_\_\_\_\_ ft.

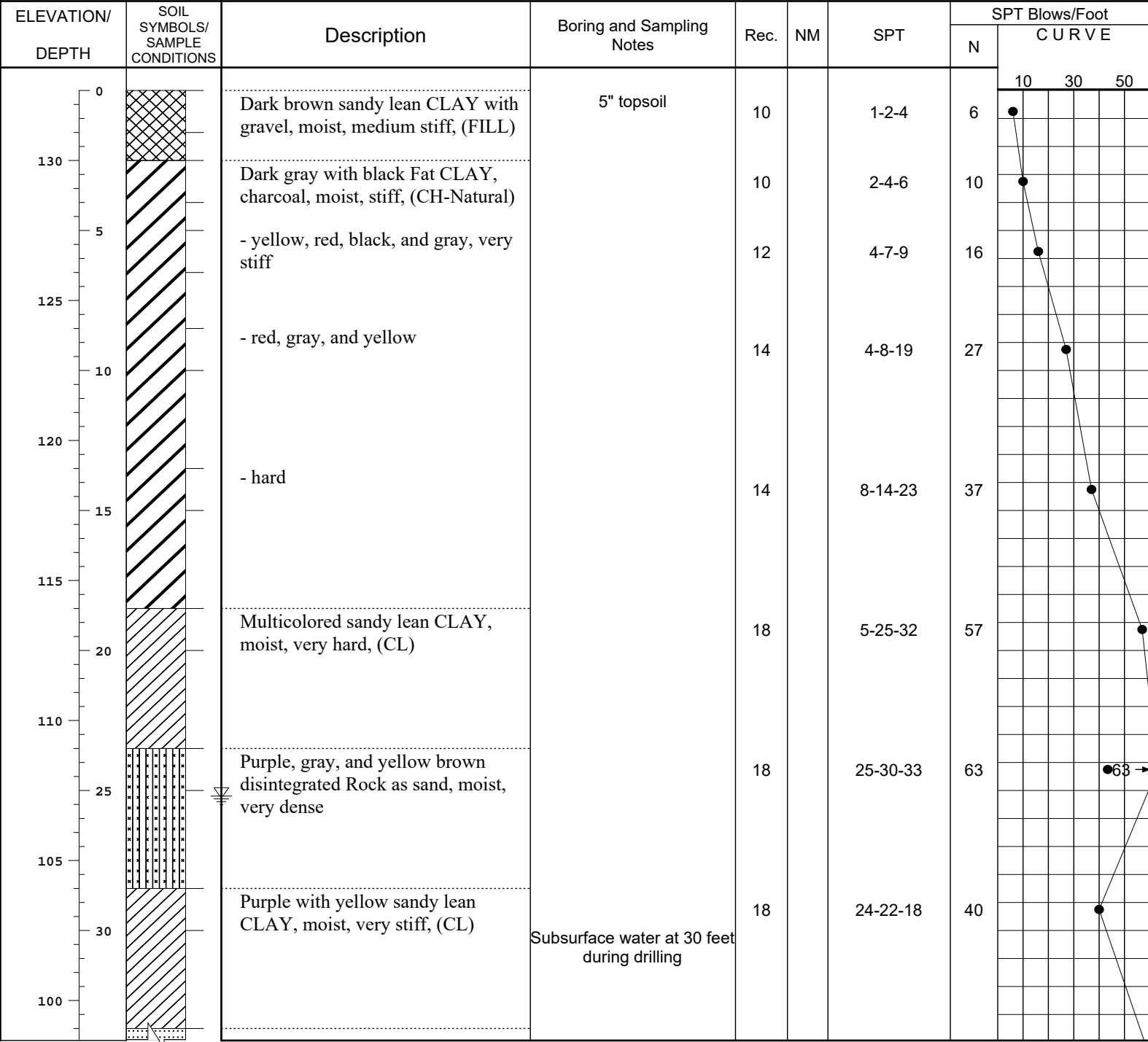
**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-5  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 132.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023



<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>25.2</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-5  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 132.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
35		Purple and yellow brown well graded SAND, wet, very dense, (SW)		18		23-32-27	59			
95										
40		Purple, gray, and yellow disintegrated Rock as SAND, wet, very dense		18		11-36-45	81			
90										
45		- brown, very light gray, and yellow brown		18		16-36-50/4"	86/ 10"			
85										
50		Brown and yellow brown well graded SAND, wet, dense, (SW)	End of boring at 60 feet below grade.	18		19-21-27	48			
80										
55		- yellow brown		18		11-16-33	49			
75										
60		Yellow brown disintegrated ROCK as a sand, wet, very dense		18		14-21-49	70			
70										
65										
65										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>25.2</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-6  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 121.3 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
 Date Started 03/19/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/19/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
0		Dark brown with black silty Gravel with sand, asphalt debris, moist, loose, (FILL)	5" topsoil	10		6-6-3	9			
120		Yellow brown with brown sandy lean CLAY, trace of gravel, very stiff		10		3-6-11	17			
5		Yellow brown and brown silty clayey SAND with gravel, moist, medium dense		12		5-7-13	20			
115		- light brown, trace of brick debris		10		18-13-12	25			
10		Light purple with yellow silty clayey SAND, moist, dense, (SC-SM Natural)								
110				14		6-16-23	39			
15										
105				18		9-19-20	39			
20										
100		- light purple, yellow, and dark brown, wet	Subsurface water at 23.5 feet during drilling	18		11-12-27	39			
25										
95										
30		Yellow brown well graded SAND, wet, very dense, (SW)	End of boring at 30 feet below grade.	18		10-19-32	51			
90										

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

AT COMPLETION \_\_\_\_\_ ft.  
 AFTER 24 HRS. \_\_\_\_\_ ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**GROUND WATER**  
 \_\_\_\_\_ ft.

**CAVE IN DEPTH**  
19.0 ft.

**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-7  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 153.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		Yellow brown with dark brown Fat CLAY with sand, moist, medium stiff, (CH-Natural) - trace of gravel	6" topsoil	10		1-2-3	5	•		
150				12		2-3-3	6	•		
5		Red and gray lean CLAY with sand, moist, medium stiff, (CL)		12		3-3-4	7	•		
145		- yellow brown		14		4-3-5	8	•		
10			End of boring at 10 feet below grade.							
140										
15										
135										
20										
130										
25										
125										
30										
120										

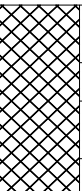

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>Dry</u> ft. <u>Dry</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>6</u> ft. <u>6</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-8  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

SAMPLER  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 150 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
150 0		Dark brown sandy lean CLAY with gravel, organics, moist, medium stiff, (FILL) - dark brown and yellow brown	6" topsoil	10		1-2-4	6	●		
145 5		Yellow brown sandy Fat CLAY with gravel, moist, medium stiff, (CH-Natural) - red, yellow, and gray, very stiff		12		9-7-11	18	●		
140 10			End of boring at 10 feet below grade.	10		4-3-3	6	●		
				14		6-11-15	26	●		
135 15										
130 20										
125 25										
120 30										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>Dry</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>7.3</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-9  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

SAMPLER  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 130.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/08/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/08/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
130		Dark brown and yellow brown sandy lean CLAY with gravel, organics, moist, medium stiff, (FILL) - trace of brick debris	6" topsoil	8		2-3-3	6	●		
				14		4-3-3	6	●		
125		Reddish brown, gray, brown, and black Fat CLAY with sand, charcoal, moist, very stiff, (Possible FILL) - trace of brick debris, very stiff		10		4-3-6	9	●		
120			End of boring at 10 feet below grade.	16		6-11-18	29		●	
115										
110										
105										
100										

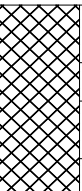


<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION <u>Dry</u> ft. AFTER 24 HRS. <u>Dry</u> ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>6.1</u> ft. <u>6.1</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-10  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 126.7 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		Multicolored Fat CLAY, trace of roots and gravel, moist, medium stiff, (FILL)	6" topsoil	10		1-2-4	6	●		
125		Dark brown with gray brown sandy lean CLAY with gravel, moist, very stiff, (FILL)		14		7-14-11	25		●	
5		Yellow brown Fat CLAY with sand, moist, stiff, (CH-Natural)		12		4-5-6	11	●		
120		Yellow brown, red brown, and purple lean CLAY with sand, moist, very stiff, (CL)	End of boring at 10 feet below grade.	14		7-11-19	30		●	
10										
115										
15										
110										
20										
105										
25										
100										
30										
95										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>Dry</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>6</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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# KEY TO SYMBOLS

Symbol	Description
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## Strata symbols



Fill



High plasticity  
clay



Low plasticity  
clay



Description not given for:  
"ZX"



Poorly graded clayey  
silty sand



Silty sand



Clayey gravel



Well graded sand

## Misc. Symbols



Boring continues



Water table during  
drilling



Water table at  
boring completion

## Notes:

1. Exploratory borings were drilled on 03/09/2023 using a 6-inch outside diameter hand-auger.
2. Water level readings were taken during drilling and upon completion of each boring. Borings were backfilled upon completion.
3. Boring locations were selected by project HCEA and staked in the field by HCEA using existing site features as reference.
4. These logs are subject to the limitations, conclusions, and recommendations in this report.
5. Results of tests conducted on samples recovered are reported on the logs.



## **GENERAL NOTES FOR SUBSURFACE RECORDS**

1. Numbers in the sampling data column (5, 9, 12) indicate blows required to drive a 2-inch OD, 1-3/8-inch ID sampling spoon 6 inch, using a 140-pound hammer, falling 30 inches, according to ASTM-D-1586.
2. Visual classification of soil is in accordance with terminology set forth in the "Soil Identification" sheet (attached). The unified soil classification symbols shown are based on visual inspection, in accordance with ASTM-D2487.
3. Water level readings that were obtained in the borings during and after completion are noted on the subsurface records.
4. Refusal at the surface of rock, boulder, or obstruction is defined as a penetration resistance of 50 blows for 1-inch penetration or less.
5. The subsurface records and related information depict subsurface conditions only at the specific locations and times indicated. Subsurface conditions including the material properties of soil (and rock) and water levels at other locations may differ from conditions as reported on subsurface records with the passage of time.
6. The depth and thickness of the surface strata indicated on the section profile (if any) were generalized from and interpolated between the test borings. The transition between materials is most likely more gradual than indicated. These stratification lines were used for our analytical purposes and should be used as a basis of design or construction cost estimates.
7. Rock coring is in accordance with ASTM-2113: NQ size rock core, 2-inch OD.
8. Undisturbed samples were obtained in accordance with ASTM 01587-94: 2- or 3-inch thin walled shelly tubes.
9. Transitions between soil strata are represented on the subsurface records. A solid line represents an observed transition, and a dashed line represents an estimated change.
10. Keys to symbols and abbreviations:  
RQD = rock quality designation  
REC = recovery %  
WOH = weight of hammer advanced sample spoon 6 inches  
WOR = weight of drilling rods advanced sample spoon 6 inches  
%M = natural moisture content

Cohesive Soils (Clay, Silt, and Combinations)		Non-Cohesive Soils (Silt, Sand, Gravel, and Combinations)	
Consistency		Density	
Very Soft	2 blows/ft or less	Very Loose	4 blows/ft or less
Soft	3 to 4 blows/ft	Loose	5 to 10 blows/ft
Medium Stiff	5 to 8 blows/ft	Medium Dense	11 to 30 blows/ft
Stiff	9 to 15 blows/ft	Dense	31 to 50 blows/ft
Very Stiff	16 to 30 blows/ft	Very Dense	51 blows/ft or more
Hard	31 blows/ft or more		



## SOIL IDENTIFICATION

### A. DEFINITION OF SOIL GROUP NAMES (ASTM D-2487-83)

Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels – More than 50% of coarse fraction retained on No. 4 sieve Coarse, ¾” to 3” Fine, No. 4 to ¾”	Clean gravels Less than 5% fines	GW	Well graded gravel
			GP	Poorly graded gravel
		Gravels with fines More than 12% fines	GM	Silty gravel
			GC	Clayey gravel
	Sands – 50% or more of coarse fraction passes No. 4 sieve Coarse, No. 10 to No. 4 Medium, No. 40 to No. 10 Fine, No. 200 to No. 40	Clean Sands Less than 5% fines	SW	Well-graded sand
			SP	Poorly graded sand
		Sands with fines More than 12% fines	SM	Silty sand
			SC	Clayey sand
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silts and Clays – Liquid Limit Less than 50 Low to medium plasticity	Inorganic	CL	Lean clay
			ML	Silt
		Organic	OL	Organic clay Organic silt
			Silts and Clays – Liquid Limit 50 or more Medium to high plasticity	Inorganic
	MH	Elastic silt		
	Organic	OH		Organic Clay Organic silt
		Highly Organic Soils		Primarily organic matter, dark in color, and organic odor

### B. DEFINITION OF MINOR COMPONENT PROPORTIONS

Minor Component	Approximate Percentage of Fraction by Weight
Adjective Form Gravelly, Sandy Silty, Clayey	30% or more of gravel or sand 12% or more of silt or clay
With Silt, Sand, Gravel and Clay	15% or more of sand or gravel 5% to 12% of silt or clay
Trace Sand, Gravel Silt, Clay	Less than 15% of sand or gravel Less than 5% of silt or clay

### C. GLOSSARY OF MISCELLANEOUS TERMS

**SYMBOLS** – Unified Soil Classification Symbols are shown above as group symbols. Dual symbols are used for borderline classifications.

**BOULDERS & COBBLES** – Boulders are considered rounded pieces of rock larger than 12 inches, while cobbles range from 3- to 12-inch size.

**ROCK FRAGMENTS** – Angular pieces of rock within residual soils resulting from differential weathering of the underlying bedrock.

**QUARTZ** – A hard silica mineral often found in residual soils.

**IRONITE** – Iron oxide deposited within a soil layer forming cemented deposits.

**CEMENTED SAND** – Localized rock-like deposits within a soil stratum composed of sand grains cemented by iron oxide or other materials.

**MICA** – A soft plate of silica mineral found in many rocks and in residual or transported soils derived therefrom.

**TOPSOIL** – Surface soils that support plant life and which contain more than 5% organic matter.

**FILL** – Manmade deposit containing soil, rock, and often foreign matter.

**PROBABLE FILL** – Soils which contain no visually detected foreign matter but which are suspect with regard to origin.

**LENSES** – 0 to  $\frac{1}{2}$ -inch seam of minor soil component.

**LAYERS** –  $\frac{1}{2}$ - to 12-inch seam of minor soil component.

**POCKET** – Discontinuous body of minor soil component.

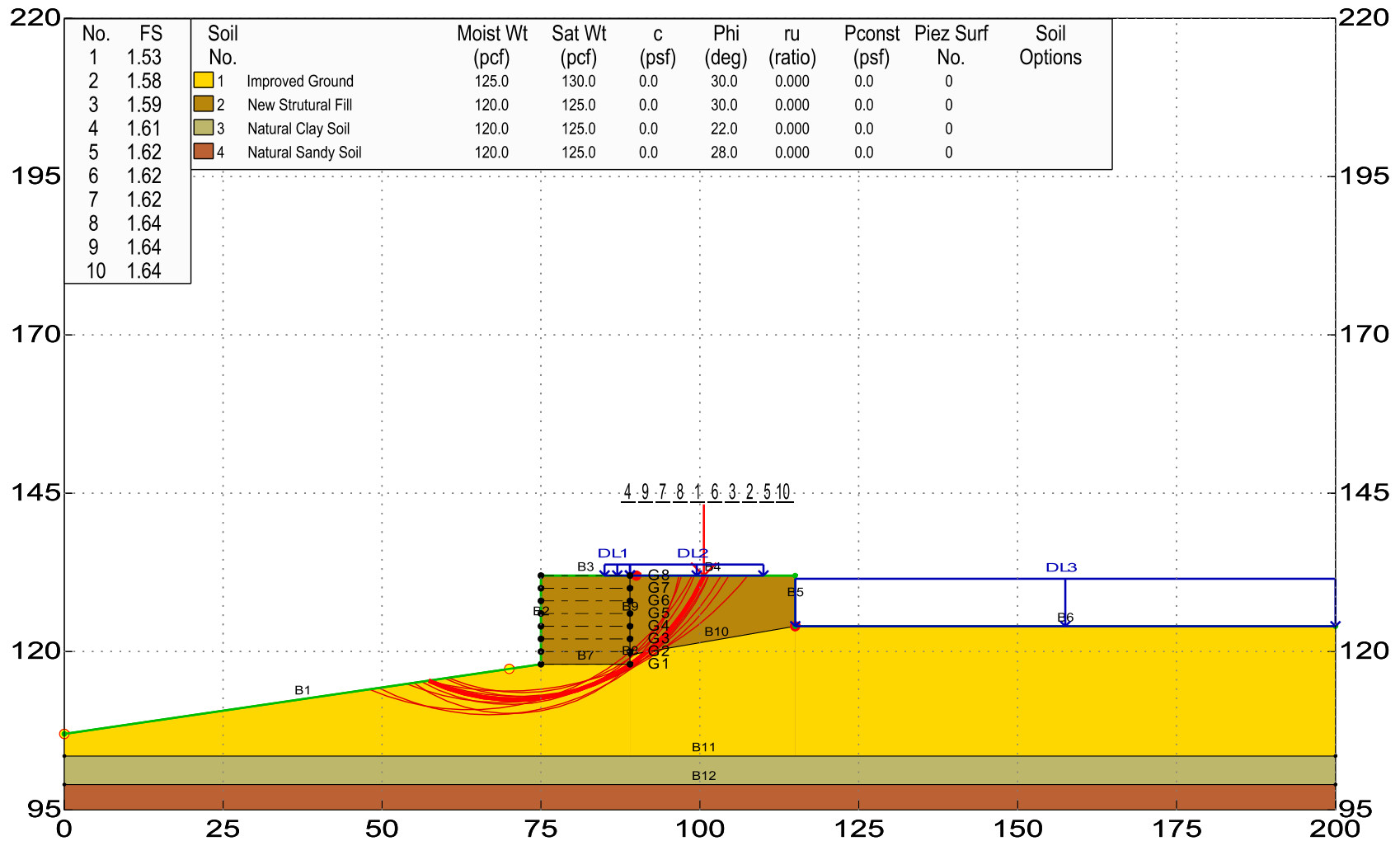
**MOISTURE CONDITIONS** – Wet, very moist, moist, or dry to indicate visual appearance of specimen.



# Retaining Wall 1 (RW-1) Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\RW-1.gsd



GEOSTASE FS = 1.53

Spencer Method



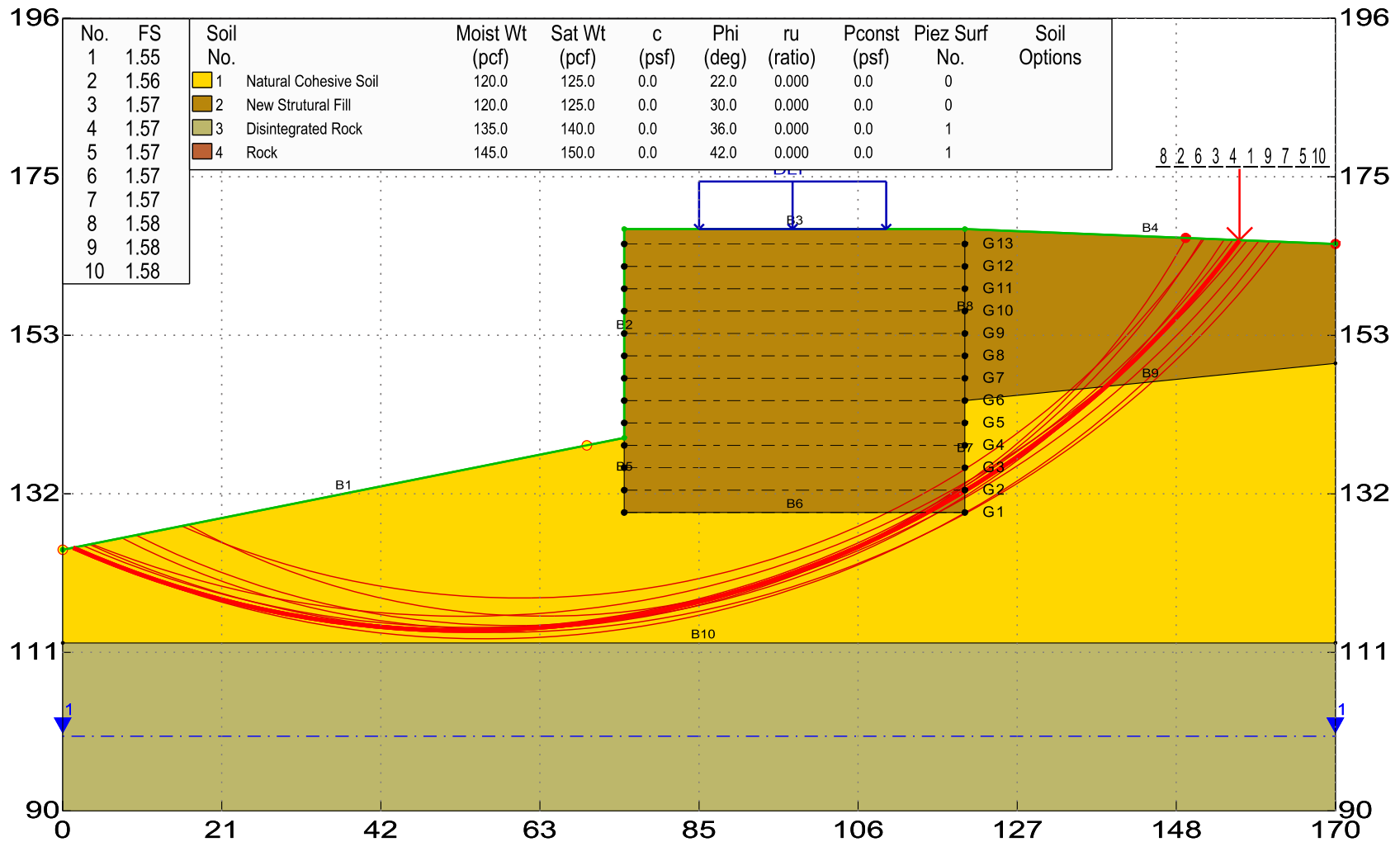


# Retaining Wall 2 (RW-2)

## Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\RW-2.gsd

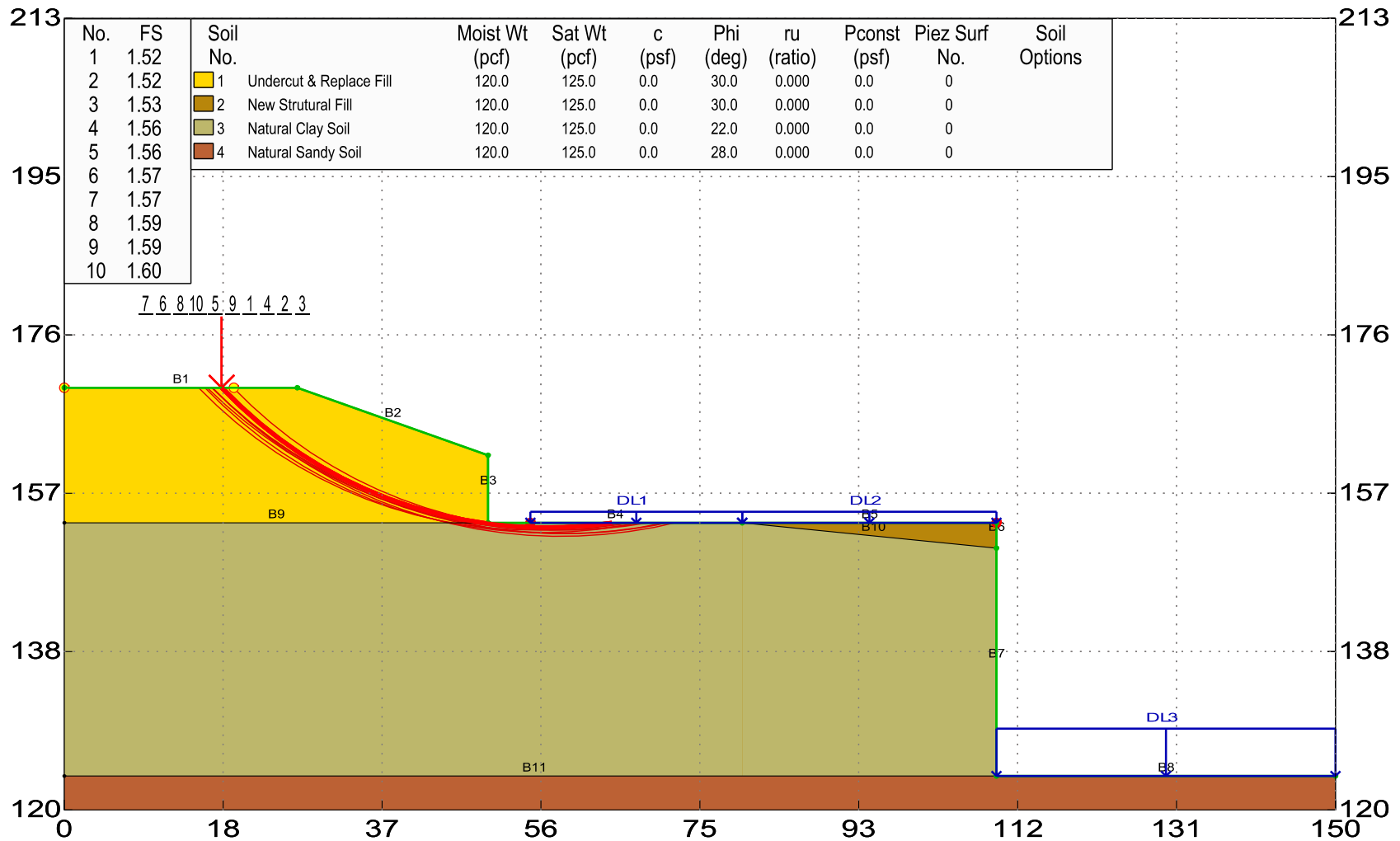




# Retaining Wall 3 (RW-3) Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\RW-3.gsd



GEOSTASE FS = 1.52

Spencer Method



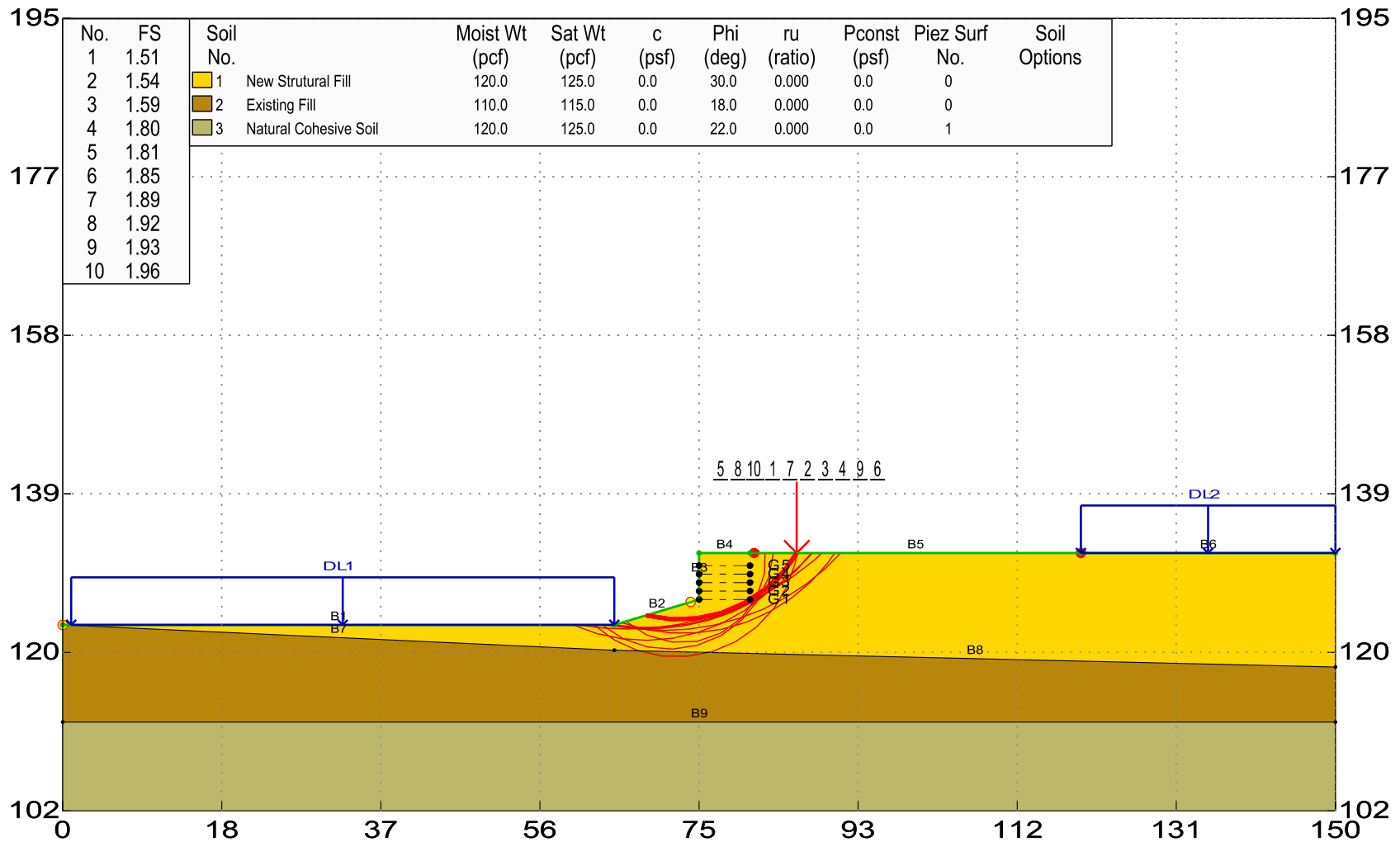


## Retaining Wall 4 (RW-4)

### Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\RW-4.gsd



GEOSTASE FS = 1.51

## Spencer Method





December 5, 2024

1660 Bowman Farm Road, Suite 105

Frederick, MD 21701

Phone (301) 662-2522

Fax (301) 662-5575

[www.hcea.com](http://www.hcea.com)

Ms. Nana Baine  
Development Project Manager  
Arcland Property Company  
1055 Thomas Jefferson St. NW, Suite 250  
Washington, DC 20007

Re: Preliminary Geotechnical Engineering Study  
**Southern Avenue Self Storage Retaining Walls - Phase III**  
901 Southern Avenue, Oxon Hill, Maryland  
HCEA Project No. F23050

Dear Ms. Baine:

Please see below our responses to the comments provided by PG County's reviewer regarding the preliminary report we prepared.

1. Provide a final geotechnical report. Preliminary report is not acceptable at Detailed Site Plan stage.

**Response: Attached please find the final geotechnical report.**

2. Provide the soil laboratory test results of the fat clays (CH) including particle size distribution, Atterberg, direct shear test, etc.

**Response: Laboratory test results are included in the final geotechnical report.**

3. Show the location of the slope stability analysis on the boring location plan of the report.

**Response: Locations of the stability analyses are included in the boring location plan.**

4. Provide the detail (types, tensile strength, length, etc.) of the geogrid reinforcement of the retaining wall so the walls will be designed accordingly.

**Response: Geogrid reinforcement details are included on Pages 8 and 9 of the final report.**



5. Confirm the four geogrid-reinforced layers embedded below the proposed grade have been recommended for the Retaining Wall 2.

**Response:** We are recommending a minimum embedment depth of 6 feet measured from final adjacent grade to top of leveling pad. The geogrid layers shown below the adjacent final grade are extending to the proposed bottom of the wall.

6. Confirm no geogrid reinforcement for the Retaining Wall 3.

**Response:** Our revised analysis based on the results of the laboratory results indicates the need for geogrid reinforcement layers for Retaining Wall 3. We revised our recommendation in the final report to reflect that.



# **HILLIS-CARNES**

## **ENGINEERING ASSOCIATES**

Revised Report of Subsurface Exploration and  
Geotechnical Engineering Services  
**Southern Avenue Self Storage Retaining Walls - Phase III**  
901 Southern Avenue, Oxon Hill, Maryland  
HCEA Project No. F23050

Initial Report: December 5, 2024

**Revised Report: December 16, 2024**

### **Prepared For:**

Ms. Nana Baine  
Development Project Manager  
Arcland Property Company  
1055 Thomas Jefferson St. NW, Suite 250  
Washington, DC 20007



Initial Report: December 5, 2024  
**Revised Report: December 16, 2024**

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Re: Geotechnical Engineering Study  
**Southern Avenue Self Storage Retaining Walls - Phase III**  
901 Southern Avenue, Oxon Hill, Maryland  
HCEA Project No. F23050

Dear Ms. Baine:

Hillis-Carnes Engineering Associates, Inc. (HCEA) is pleased to submit this revised report concerning the geotechnical evaluation for the four (4) retaining walls that are proposed to be constructed at the above referenced project site located in Oxon Hill, Maryland. The purpose of this study was to determine the general subsurface conditions at the boring locations and to provide evaluations pertaining to the structural design of the proposed walls.

## **PROJECT DESCRIPTION**

It is our understanding that the project consists of the construction of a three-story storage building with a walk-out cellar and associated pavements. We also understand that a total of four (4) retaining walls (RW-1 through RW-4) are planned on the northwest, northeast and southeast sides of the project site to retain fill materials that will be placed associated with the site development. We understand that the design of the retaining walls has not been completed. We assumed the walls to be segmental block reinforced walls.

The initial proposed locations of the retaining walls are shown in the Boring Location Plan (Drawing No. 2) enclosed with this report. The length and height of RW-2 was changed by the civil designer as shown in Drawing No. 3 to accommodate the recommendations we provided in the previous report. The revised site grading plan (Drawing No. 3) we reviewed indicated that the planned approximate maximum heights of RW-1, RW-2, RW-3 and RW-4 are 14, 43, 8, and 5.5 feet, respectively. We have also identified on the initial grading plan two slopes located on the southwest (Slope A-A) and northeast (Slope B-B) sides of the site (Drawing No. 2) which we considered to be critical slopes. Slope B-B was revised from 3H:1 to 5H:1V slope as shown in the revised plan (Drawing No. 3) based on the recommendations we provided in our previous report.

The purpose of this study was to determine the general subsurface conditions at the boring locations and to provide engineering soil properties for use in the structural design of the walls by others. Our scope of work also includes analyzing the global stability of the proposed walls and stability of the critical slopes.

Corporate Headquarters - Annapolis Junction, MD

Maryland ♦ Washington, DC ♦ Delaware ♦ Pennsylvania ♦ Virginia ♦ Caribbean



## **SUBSURFACE EXPLORATION**

To determine the general soil types along the proposed locations of the retaining walls and slopes identified to be critical, a total of thirteen (13) Standard Penetration Test (SPT) soil borings were drilled. Ten (10) of the borings (R-1 through R-10) were located at the planned locations of the retaining walls. The remaining 3 borings (R-1, R-2, and R-3) were drilled at a location identified as critical slopes. It should be noted that select borings from the previous study performed at the project site (HCEA Project No. F23050, dated May 15, 2023) were used in the analysis of the retaining walls. A summary of the borings drilled at each structure location and the depths they were extended to are included in Table 1.

**Table 1 – Summary of Borings**

<b>Structure</b>	<b>Borings</b>	<b>Planned Termination Depth (feet)</b>	<b>Drilled Depth (feet)</b>
RW-1	R-1, R-2, R-3, & R-4	20	8 to 20
RW-2	R-5, R-6, R-7, B-4, B-5, & B-6	60 to 70	40 to 70
RW-3	R-8, R-9, R-10, & B-1	20	20
RW-4	B-3	30	30
Slopes	R-1, R-6, S-1, S-2, S-3, B-5, B-9, & B-10	20	10 to 20

Note: B borings are from previous study

As shown above in the table, some of the RW-1, RW-2 and Slope borings terminated before reaching the planned termination depths. Borings R-2, R-3, R-4, and S-1 refused within what appeared to be man placed fill materials. Auger refusal was attained in borings R-6 and R-7 at depths of 60 and 40 feet below existing site grades, respectively, on what appeared to be surface of bedrock or very hard cemented soil layer.

The borings were staked in the field by HCEA's surveying group, and the approximate locations of the borings are depicted on the Boring Location Plan enclosed with this report.

The borings were advanced with hollow-stem augers and the subsurface soils were sampled continuously. Samples were taken by driving a 1-3/8-inch I.D. (2-inch O.D.) split-spoon sampler in accordance with ASTM D-1586 specifications. The sampler was first seated 6 inches to penetrate any loose cuttings and then was driven an additional foot with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler the final foot is designated as the "Penetration Resistance" or "N" value. The penetration resistance, when properly evaluated, is an index to the soil strength and compression characteristics.

Representative portions of each soil sample were placed in glass jars and transported to HCEA's laboratory. In the laboratory, the samples were visually examined by the Geotechnical Engineer to verify the driller's field classifications. The samples were classified in accordance with the Unified Soil Classification System (USCS) and the field classifications were revised where necessary. The USCS Symbols appear on the Boring Logs and the system nomenclature is briefly described in the Appendix.



## **SUBSURFACE CONDITIONS**

Details of the subsurface conditions encountered at the site are shown on the Records of Soil Exploration (Boring Logs). A brief description of the subsurface conditions and pertinent engineering characteristics of the soils are given below.

Strata divisions shown on the Records of Soil Exploration have been estimated based on visual examinations of the recovered boring samples. In the field, strata changes could occur gradually and/or at slightly different levels than indicated. Also, groundwater conditions indicated on the Records of Soil Exploration are those observed during the period of the subsurface exploration. Fluctuations in groundwater levels could occur seasonally and might also be influenced by changes in grading, runoff and infiltration rates, and other influencing factors.

Generalized subsurface conditions based on the results of the borings are discussed below:

### **Site Geology**

The USGS geological map of Prince George's County indicates that the project site is underlain by the Lowland Deposits (Ql) of the Quaternary geologic age. The Lowland Deposits is reported to consist of "gravel, sand, silt, and clay. Medium- to coarse-grained sand and gravel; cobbles and boulders near base; commonly contains reworked Eocene glauconite; varicolored silts and clays; brown to dark gray lignitic silty clay; contains estuarine to marine fauna in some areas (includes in part Pamlico, Talbot, Wicomico and Sunderland Formations of earlier reports); thickness 0 to 150 feet".

### **Subsurface Soil Conditions**

Subsurface soil conditions as encountered in the soil borings generally reflect the soil types referenced in the geology sections of this report and were divided into the strata listed below.

Surface Materials---Approximately 3 inches of topsoil was encountered in the borings. Topsoil/root mat thickness should be expected to vary across the site. Therefore, the topsoil depths shown on the boring logs should not be used solely to estimate topsoil quantities at the site. Note that topsoil thickness noted on our boring logs is pure grass cover thickness observed at the boring locations based on limited sample recovered in the borings. In areas of heavy tree/brush growth, more than normal sub-topsoil layer, heavy root mat may be encountered and should be accounted for probable removal/in place remediation.

Fill Materials---Man-placed FILL materials were encountered in all borings except borings R-5, R-6, and R-7. Fill and Possible Fill materials were also encountered in the borings drilled in the previous study. The fill materials consisted of varying combinations of lean clay, fat clay, silt, sand, and gravel. The fill materials in some of the borings consisted of varying amounts and types of construction debris materials. The depth and characteristics of the fill materials encountered in the borings are summarized in Table 2 as follows.



**Table 2 – Depth and Characteristics of Fill Materials**

Structure	Boring	Fill Depth (feet)	Remark
RW-1	R-1	0-13.5	- Trace organics and asphalt debris
	R-2	0-11.5	- Trace of asphalt and concrete debris - Boring refused at 11.5 feet possibly on top of construction debris - Auger refusal on an offset location at a depth of 10 feet
	R-3	0-13.0	- Trace of asphalt and concrete debris - Boring refused at 13 feet possibly on top of construction debris
	R-4	0-8.0	- Boring refused at 8 feet possibly on top of construction debris
RW-2	R-5	NA	- Fill material was not encountered
	R-6	NA	- Fill material was not encountered
	R-7	NA	- Fill material was not encountered
	B-4	0-8.5	- Trace of organics
RW-3	R-8	0-8.0	- Trace of organics
	R-9	0-8.0	- Trace of organics
	R-10	0-8.0	- Trace of organics
RW-4	B-3	0-8.5	- Trace of asphalt debris
Slope	S-1	0-10.0	- Trace of asphalt and concrete debris - Boring refused at 10 feet possibly on top of construction debris - Auger refusal on two offset locations at depths of 6 and 7 feet
	S-2	0-20.0	- Fill materials extended to the boring termination depth of 20 feet - Trace of asphalt debris - Refusal on the first two attempted locations at depths of 8 & 10 feet
	S-3	0-13.0	- Trace of asphalt debris
	B-5	0-2.5	- Trace of organics
	B-6	0-13.5	- Trace of brick and asphalt debris
Building	B-1	0-5.0	- Trace of brick debris
	B-2	0-2.5	- Trace of organics
	B-9	0-10	- Fill materials extended to the boring termination depth of 10 feet - Trace of brick debris
Pavement	B-7	NA	- Fill material was not encountered
	B-8	0-5.0	- Trace of organics

Note: B borings are from previous study



It should be noted that test borings are not a definitive method of evaluating the presence of existing fill materials because of the limited size of the hole diameters and the very limited sample sizes obtained in comparison to the areal extent of the site. Also, the fill materials may be similar in composition to the on-site natural soils. Due to these reasons, it is often difficult to determine the presence and composition of fill materials from the relatively small SPT boring samples.

As summarized above in the table, construction debris materials were encountered in the borings mainly in those located on the southern and southwestern sides of the site. This portion of the site may have been used as a dump site. Test pitting must be performed to accurately delineate the extent and characteristics of the fill materials.

**Natural Soils---** The natural materials encountered below the surface or fill layers were classified in accordance with the USCS as Fat CLAY (CH), lean CLAY (CL), silty clayey SAND (SC-SM), silty SAND (SM), well graded SAND (SP), and clayey Gravel with sand (GC). Based on the SPT “N” values, the stiffness of the natural cohesive soils ranged from very soft to hard and the relative density of the cohesionless materials varied from medium dense to very dense.

**Disintegrated ROCK---**Disintegrated ROCK is defined as a residual material, with a penetration resistance (N-value) ranging from 60 blows per foot to 50 blows per 1-inch penetration. Disintegrated rock was encountered in RW-2 borings (B-4, R-5, R-6, and R-7), RW-4 boring (B-3), B-1, and B-5 at depths that ranged from 23.5 to 33.5 feet below existing site grades.

**Auger Refusal---** Auger refusal, which is typically an indicator of top of rock or very hard cemented soil layer, was encountered in borings R-6 and R-7 at approximated depths of 60 and 40 feet, respectively. Auger refusal was also encountered in borings S-1, R-2, R-3, and R-4 at depths that ranged from 8 to 13 feet. However, the auger refusal in these borings were encountered within the fill stratum possibly on the surface of construction debris.

### Subsurface Water

Subsurface water was monitored in the borings during and after completion of drilling operations. During these times, subsurface was encountered at an approximate depth of 40 feet in boring R-5 and 20 feet in borings B-3 and B-5. Subsurface water, which appeared to be perched water that is trapped within the fill materials, were encountered at a depth of 3 feet in boring R-8. Subsurface water was not encountered in the remaining borings within the depths explored.



## **DESIGN RECOMMENDATIONS**

### **Foundations**

We understand that the design of the retaining walls has not been completed. We assumed the walls are going to be segmental concrete block reinforced walls. The foundation subgrade materials expected to be present at each retaining wall location are shown in the retaining wall profiles included in the report and summarized in Table 3.

**Table 3 – Summary of Expected Foundation Subgrade Materials**

<b>Structure</b>	<b>Expected Foundation Subgrade Material</b>
RW-1	Man Placed Fill Materials with construction debris
RW-2	Natural Soil Materials
RW-3	Man Placed Fill Materials
RW-4	New Structural Fill

The fill materials below RW-1 are expected to extend to deeper depths (> 15 feet). Furthermore, the fill materials are expected to consist of construction debris. Accordingly, complete removal and replacement with new structural fill is required. An allowable bearing pressure of 2,500 psf may be used for foundation soils prepared in this manner. Alternatively, due to the deeper depths of the fill materials, foundation soil improvement with aggregate piers or other ground improvement systems can be considered. Aggregate piers are normally designed by a design-build contractor and the proposed soil improvement plan is reviewed by the Geotechnical Engineer of Record. The soil improvement typically produces a subgrade capable of providing an allowable soil bearing pressure in the range of 4,000 to 6,000 psf. We anticipate the aggregate piers will have to extend to 15 to 25+/- feet below the proposed wall bottom elevation to attain the recommended improved allowable bearing pressure.

The natural soils at the bottom of RW-2 are expected to be suitable for an allowable soil bearing pressure of 3,000 psf.

The fill materials encountered in RW-3 area are expected to extend up to a depth of 5 feet below the planned bottom elevation of the wall. The fill materials should be undercut and replaced with controlled structural fill. Foundation soils prepared in this manner may be suitable for an allowable bearing pressure of 2,500 psf.

Up to 7 feet of new structural fill will be required to attain the bottom elevation of RW-4. Fill materials that extend to an approximate depth of 8.5 feet were encountered in the boring (B-3) drilled at the location of RW-4. The fill materials should be undercut and replaced with structural fill before placing the required new structural fill. Foundation subgrade soils prepared in this manner are expected to be suitable for an allowable bearing pressure of 2,500 psf.



The area of the reinforced compacted fill zone should be proof rolled with a 20-ton payload dump truck or other pneumatic-tired vehicle of similar size and weight. The proof rolling should involve overlapping passes in mutually perpendicular directions. Where rutting or pumping is observed during proof rolling, the soft and/or unstable soils should be excavated and replaced with a controlled compacted fill material.

All wall designs and installations should be in accordance with manufacture recommendations. It is recommended that all excavations be inspected, tested, and approved by a geotechnical engineer directly prior to the placement of the modular blocks. The purpose of the inspection would be to verify that the subgrade soils are capable of supporting the allowable bearing pressure. If soft or loose pockets are encountered in the excavations, the unsuitable material should be removed and replaced with compacted structural fill or AASHTO #57 stone.

Soils exposed at the base of all approved excavations should be protected against disturbance from the effects of groundwater, rain, and freezing temperatures. Care should be taken to minimize disturbance of the natural soils at the footing subgrades. Surface runoff and other water should be drained away from the excavations and not be allowed to pond on the subgrade soils. If possible, all foundations should be placed the same day that the excavation is made and approved. If this is not practical, then the bearing surfaces should be adequately protected with a 3-inch lean-mix concrete mud mat.

#### Base Leveling Pad Material

The facing units/blocks should bear on a leveling pad that consists of a minimum of 6 inches of AASHTO #57 stone or crushed stone. The leveling pad should not bear on very loose soil. Backfill of over-excavated bearing areas, if required, should be with approved material compacted to at least 95 percent of the standard Proctor maximum dry density at a moisture content within 2 percentage points of optimum (as determined by ASTM D 698) or AASHTO #57 stone. Also, the exposed over-excavated subgrade should be compacted to the above criteria.

#### Reinforced Backfill

The reinforced compacted fill zone should consist of materials that are classified as SM or more granular with a minimum unit weight of 120 pcf and friction angle of 32°. The materials should satisfy the structural fill specifications listed in this report.

Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage. The materials should be placed in horizontal lifts with maximum height of 8 inches loose measure where heavy compaction equipment is used. The lift thickness should be decreased to maximum of 6 inches loose measure where portable hand operated compaction equipment is used. Only light-weight hand operated equipment should be used within 3 feet from the tail of the facing units. We recommend that reinforced backfill be compacted to at least 95% of the standard Proctor maximum dry density per ASTM D-698 or 92% of the modified Proctor maximum dry density per ASTM D-1557.



### Geogrid Soil Reinforcement

The geogrids should have a minimum of 2,000 lb/ft long term allowable design strength (LTDS) such as Miragrid 3XT or equivalent.

### Foundation and Retained On-Site Soil

The engineering properties provided below in Table 4 are recommended for the on-site soils that are expected to be encountered behind the reinforced fill zone and at the foundation level. The soil engineering properties listed for the on-site subsurface materials were developed from generally accepted empirical correlations with SPT N-values, USCS classification, and laboratory results.

**Table 4 – Foundation and Retained On-Site Soil Properties**

<b>Subsurface Material Type</b>	<b>Moist ** Unit Weight (pcf)</b>	<b>Angle of Internal Friction (degrees)</b>	<b>Cohesion (psf)</b>
New Structural Fill*	120	30	0
Natural Fat Clay (CH) Soils	120	10	0
Natural Lean Clay (CL) Soils	120	19	0
Coarse Grained Natural Soils (SM or more Granular)	125	28	0
Disintegrated Rock	135	36	0
Rock	145	42	0

\*Structural fill materials placed at the site should have a minimum of these soil properties

\*\*The moist unit weight should be subtracted by 62.4 pcf (unit weight of water) for soils below the water table

### Critical Slopes Stability Analysis

We identified in the initial grading plan the slopes located on the southwest (Slope A-A) and northeast (Slope B-B) sides of the site to be critical slopes. The locations of these slopes are identified as Slope A-A and Slope B-B in the Boring Location Plan (Drawing No. 2) included with this report. The results of the stability analysis of the slopes are enclosed with this report and summarized as follows:

#### Slope A-A

Fill materials that have what appeared to be construction debris were encountered in this area. New fill materials placed on top of uncontrolled fill materials will experience excessive settlement and slope failure. Accordingly, before placing the new fill materials, either the existing fill materials in entirety should be removed and replaced with new structural fill or the soil improved with aggregate piers or other ground improvement systems. A FOS above 1.5 was estimated for the 2H:1V slope (Drawing No. 4) depicted on the grading plan if the existing fill materials are removed and replaced with controlled structural fill or the soil improved as recommended in this report.



### Slope B-B

Our analysis indicates a low FOS of 0.9 for the 3H:1V slope depicted on the initial grading plan (Drawing No. 5). To attain a minimum FOS of 1.5, the slope will have to be adjusted to 5H:1V or flatter (Drawing No. 6). Accordingly, the site grading behind RW-2 should be adjusted to reflect a slope of 5H:1V.

**Please note that as per our recommendation above, the slope behind RW-2 was adjusted to 5H:1V by the civil engineer as shown in the revised grading plan included in this report as Drawing No. 3.**

### Global Stability Analysis

We assumed the walls to be segmental block reinforced walls. Accordingly, the overall or global stability of the walls was evaluated using the program GEOSTASE. The soil properties summarized in Table 4 were used for the analysis. The wall and site grade geometry were taken from the grading plan that was provided by the client. A vehicular surcharge load of 100 psf was applied for the parking areas planned near the walls.

The global stability of the walls was evaluated by examining potential failure planes passing behind and under the reinforced zone. The sections of walls RW-1, RW-3, and RW-4 analyzed are shown in Drawing No. 2. The section of RW-2 analyzed is shown in the revised grading plan (Drawing No. 3). We understand that PG County requires a minimum factor of safety (FOS) of 1.5. The minimum reinforcement lengths and other adjustments required to attain the required minimum FOS of 1.5 for each wall are summarized below. The results of the global stability analysis of each wall are enclosed with this report.

#### RW-1 (Drawing No. 7)

As previously noted, the retained and foundation soils in the areas of RW-1 are expected to consist of fill materials that have what appeared to be construction debris. The fill materials in entirety should be removed and replaced with new structural fill or the on-site soil improved with aggregate piers or other ground improvement systems.

The geogrid reinforcement length should be at least equal to the wall height (1H), H measured from the top of the leveling pad to top of the wall.

#### RW-2 (Drawing No. 8)

As noted in the previous sections of this report, the length, orientation, and height of RW-2 was adjusted from what was shown in the initial grading plan to accommodate the 5H:1V slope recommended behind RW-2. The following minimum requirements must be met to attain the required minimum FOS of 1.5:

- A minimum reinforcement length of 1.65H, H measured from the top of the leveling pad to top of the wall.
- Undercut the on-site soil below the reinforcement zone a minimum of 5 feet and replace it with new structural fill.



RW-3 (Drawing No. 9)

A minimum reinforcement length of 2.5H, H measured from the top of the leveling pad to top of the wall.

RW-4 (Drawing No. 10)

A minimum reinforcement length of 1.1H, H measured from the top of the leveling pad to top of the wall

Settlement

We understand based on the grading plan we reviewed up to 30 feet of fill will be required to attain the proposed pavement grade in the northeast side of the site near RW-2. We also understand that up to 14 feet of fill will be required to attain the pavement grade proposed on the southwest side of the site. Up to 10 and 20 feet of cut will be required on the north and southeast sides of the site, respectively.

Our analysis indicates that the on-site soil below the pavement in the deeper fill area could experience settlement in the range of 7 inches from the loading from the new structural fill. The time required to attain the estimated substantial settlement is estimated to range from 12 to 15 months. Therefore, after the new structural fills are placed to required finished pavement subgrade elevations, the on-site soils should be allowed to settle for 12 to 15 months before construction of the pavement layer sections can begin.

We recommend the estimated settlement to be taken into consideration when determining the top of the wall elevations of retaining wall RW-2. An allowance may need to be considered when estimating the height of the top row to account for continuing settlement.

Settlement should be monitored by installing settlement plates as detailed in the Construction Recommendations section of this report. If a shorter settlement period is desired, HCEA is open to discussing options to expedite the settlement or ground improvement systems.

**CONSTRUCTION RECOMMENDATIONS**

Controlled Structural Fill

All structural fill materials, whether on-site or imported from an off-site source, should be tested for suitability and quality prior to its use as structural fill. We recommend that the material be tested to determine particle size (gradation), plasticity, and maximum dry density. The following standard tests should be performed to determine the above properties of all imported fill materials:

Particle Gradation	ASTM D-422
Atterberg Limits	ASTM D-4318
Modified Proctor	ASTM D-1557



Structural fill material shall consist of quality, low plasticity, non-organic soil that classifies as GW, GP, GM, GM-GP, GC, SW, SP, SM-SP, SM or SC in accordance with ASTM D-2487 and shall have a maximum of 30% retained on a standard 3/4-inch sieve with a maximum dry density (MDD) of more than 110 pcf. All fill material shall be free of ice, snow, organic material (OH, OL), expansive soils of high plasticity/elasticity (CH/MH), construction debris, rock sizes greater than 4 inches, or other deleterious material. The structural fill materials should have a minimum friction angle of 30° and moist unit weight of 120 pcf.

Fill materials should be placed in horizontal lifts with maximum height of 8 inches loose measure. In confined areas such as utility trenches and foundation walls, portable compaction equipment and thinner lifts of 3 to 4 inches may be required to achieve adequate degrees of compaction. New fill should be adequately keyed into stripped and scarified subgrade soils and should, where applicable, be properly benched into existing slopes or laid-back portions of excavations. During fill operations, positive surface drainage should be maintained to prevent the accumulation of water.

We recommend that structural fill be compacted to at least 95 percent of the standard Proctor maximum dry density. The moisture content of the fill should be within 2% points of the optimum moisture content as determined by the modified Proctor density test or drier, if necessary, so as to attain proper compaction. This may require the contractor to dry soil during wet weather or add water during dry, hot weather. The geotechnical engineer should individually evaluate structural fill material.

We recommend that the contractor have equipment on site during earthwork for both drying and wetting of the soil as moisture alterations could very well be necessary at the time of construction. Moisture control may be especially difficult during winter months or extended periods of rain. Attempts to work the soil when wet can be expected to result in deterioration of otherwise suitable soil conditions of previously placed and properly compacted fill.

Where construction traffic or weather has disturbed the subgrade, the affected soils intended for structural support should be scarified and re-compacted. Each lift of fill should be tested in order to confirm that the recommended degree of compaction is attained. Field density tests to verify fill compaction should be performed for every 5,000 square feet (approximately 70 feet square) of fill area, with a minimum of two tests per lift.

#### Groundwater and Drainage

Based on the results of the borings, subsurface water is not anticipated during the anticipated earthwork and foundation excavations and is estimated to occur below foundation levels. Of course, fluctuations in subsurface water levels and soil moisture can be anticipated with seasonal changes, as well as changes in precipitation amounts and rainfall runoff characteristics.



Any water infiltration resulting from precipitation, surface run-off, or perched water should be able to be controlled by means of sump pits and pumps, or by gravity ditching procedures. If any conditions are encountered which cannot be handled in such a manner, this office should be consulted.

### Settlement Plates

Due to the significant amount of fill required to establish the proposed finished pavement subgrade elevations and time-dependent settlement characteristics of the on-site soils, settlement monitoring within the fill areas is recommended. Foundation and pavement construction within areas receiving fill should not commence until substantial settlement of the soils underlying the fill areas is complete. Settlement monitoring should consist of the installation of settlement monitoring plates prior to fill placement, with periodic surveying (at least once per week) of the tops of the settlement monitors as fill is being placed. HCEA recommends that the settlement plates be located within the deep fill areas. Settlement monitoring should continue until the survey data indicates steady state conditions have been achieved. Based on our analysis, we estimate at least 12-15 months from the end of fill placement until the start of pavement installation in the fill areas to allow for settlement to occur. If the settlement monitoring indicates that the fill induced settlement has stopped prior to the 12-15 months period, pavement construction can begin in the direction of the Geotechnical Engineer. The Geotechnical Engineer should review the settlement data to determine when foundation construction can commence.

- Start with installation the settlement plate base and first vertical section.
- Add extensions as needed during grading operations. The extensions should be added such that a minimum of 12-inches of “stick-up” is maintained above the fill surface. No more than one extension should be exposed at a time to ensure the top of the devices are accessible to survey crew.
- The addition of extensions should be coordinated with surveyor to ensure the appropriate measurements are obtained at the time of the addition to evaluate any required data adjustments.
- It will also be the contractor’s responsibility to properly protect the settlement plates from disturbance by traffic or construction activities. Any disturbance of the devices will impact the ability to properly obtain and evaluate settlement data and provide geotechnical recommendations.

It is recommended that fill placement and monitoring begin as far in advance of foundation and pavement construction as is possible to allow the settlements to occur without detrimentally impacting the construction schedule. A settlement plate detail is enclosed with this report (Drawing No. 11). The settlement monitoring program should be planned and conducted by the Geotechnical Engineer and coordinated with the Client/Contractor.



## **REMARKS**

This report has been prepared to aid in the evaluation of the site for the proposed retaining walls design and construction. Additional recommendations can be provided as needed.

These analyses and recommendations are, of necessity, based on the information made available to us at the time of the actual writing of the report and the on-site conditions, surface and subsurface that existed at the time the exploratory borings were drilled. A further assumption has been made that the limited exploratory borings, in relation both to the areal extent of the site and to depth, are representative of conditions across the site.

The recommendations contained herein have been based on a series of widely spaced soil borings. Actual subsurface conditions encountered could vary from those outlined in this report. If subsurface conditions are encountered which differ from those reported herein, this Office should be notified immediately so that the analyses and recommendations can be reviewed and/or revised as necessary.

HCEA appreciates having had the opportunity to provide the geotechnical consultation for this project, and we will remain available for further consultation during the various design stages. Should you have any questions concerning the contents of this report, or require additional consultation, design, inspection, or testing services, please contact our Office.

Very truly yours,

**HILLIS-CARNES ENGINEERING ASSOCIATES, INC.**



Paul Fritz, E.I.T.  
Staff Engineer



Robel Gibbe, P.E.  
Project Engineer

Senior Review:



Rajesh Goel, P.E.  
Principal Engineer



Enclosure: Site Location Plan  
Boring Location Plan  
Soil Boring Profiles  
Records of Soil Exploration (Boring Logs)  
Soil Description Sheet  
General Notes for Subsurface Records  
Global Stability Analysis Results  
Slope Stability Analysis Results  
Settlement Plate Detail



# Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

**The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.**

## Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

## Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer

will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.*

## Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

## You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*



responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

### Most of the “Findings” Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site’s subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual site-wide subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

### This Report’s Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

### This Report Could Be Misinterpreted

Other design professionals’ misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals’ plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

### Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note*

*conspicuously that you’ve included the material for information purposes only.* To avoid misunderstanding, you may also want to note that “informational purposes” means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

### Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled “limitations,” many of these provisions indicate where geotechnical engineers’ responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

### Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a “phase-one” or “phase-two” environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

### Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer’s services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer’s recommendations will not of itself be sufficient to prevent moisture infiltration.* Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists.*



**GEOPROFESSIONAL  
BUSINESS  
ASSOCIATION**

Telephone: 301/565-2733

e-mail: [info@geoprofessional.org](mailto:info@geoprofessional.org) [www.geoprofessional.org](http://www.geoprofessional.org)





**HILLIS-CARNES**  
**Engineering Associates, Inc.**

PROJECT NO.: F23050

SCALE: NTS

DATE: October 31, 2024

Site Location Plan, Southern Avenue Phase III – Retaining Walls and Slope, Oxon Hill, MD

Drawing No.

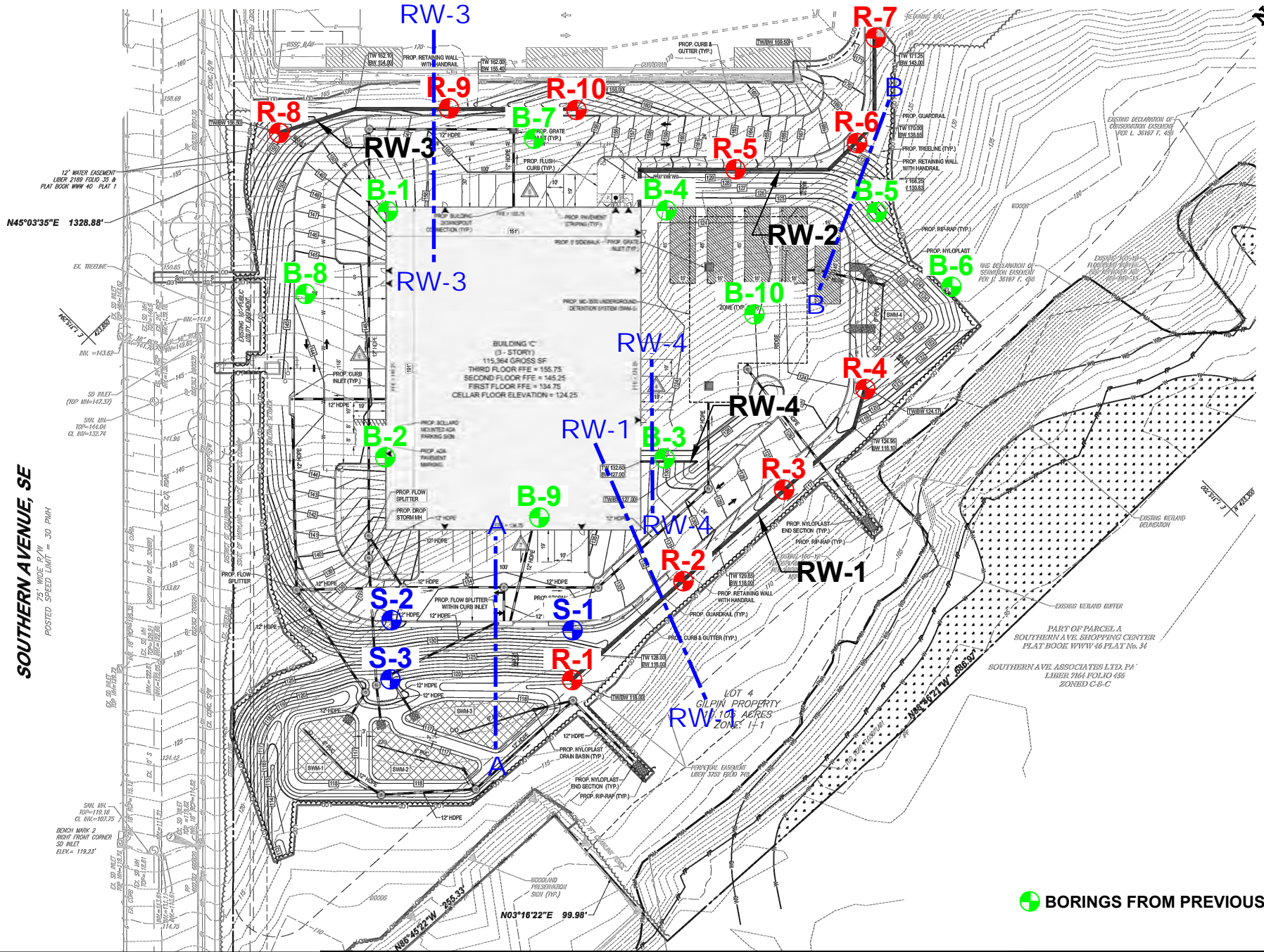
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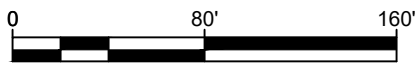
SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

N45°03'35"E 1328.88'



BORINGS FROM PREVIOUS STUDY



Drawing No.2

**HILLIS-CARNES**  
ENGINEERING ASSOCIATES  
1660 Bowman Farm Road, Suite 105 Frederick, MD 21701  
Phone: (301) 662-2522 Fax: (301) 662-5575

**BORING LOCATION PLAN**  
SOUTHERN AVENUE PHASE III  
OXON HILL, MARYLAND

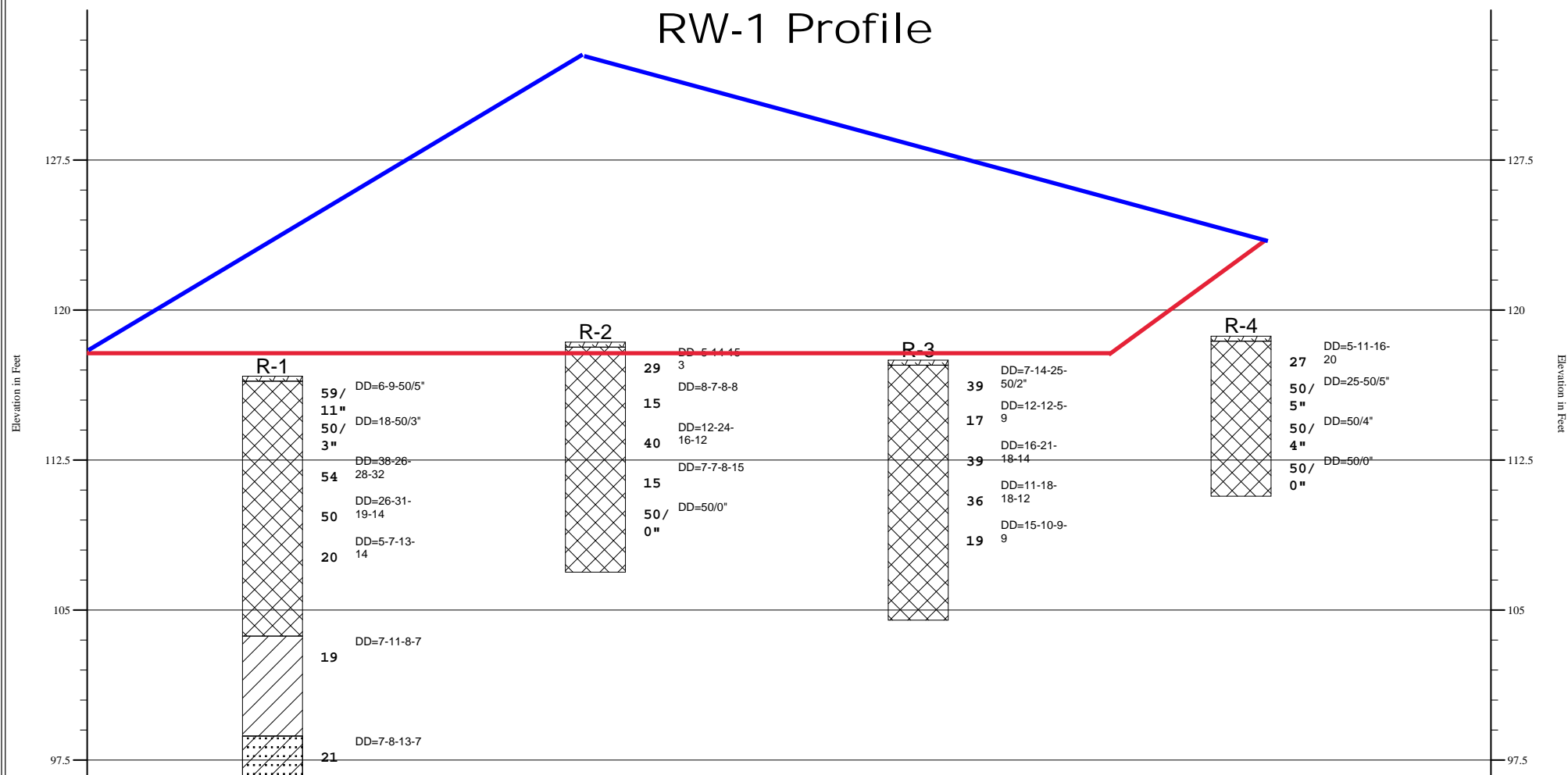
PROJECT NO.	F23050	DESIGN BY:	
DATE:	10/31/24	DRAWN BY:	CA
SCALE:	1"=80'	CHECKED BY:	RG
SHEET:	1 of 1		







## RW-1 Profile



Topsoil



Fill



Low plasticity  
clay



Clayey sand

— Top of Wall  
— Bottom of Wall

## HILLIS-CARNES ENGINEERING ASSOCIATES GENERALIZED SOIL PROFILE

HORIZONTAL  
SCALE:

VERTICAL  
SCALE: 1"=7.5'

DRAWN BY/APPROVED BY

DATE DRAWN

10/31/2024

### Southern Avenue Phase III

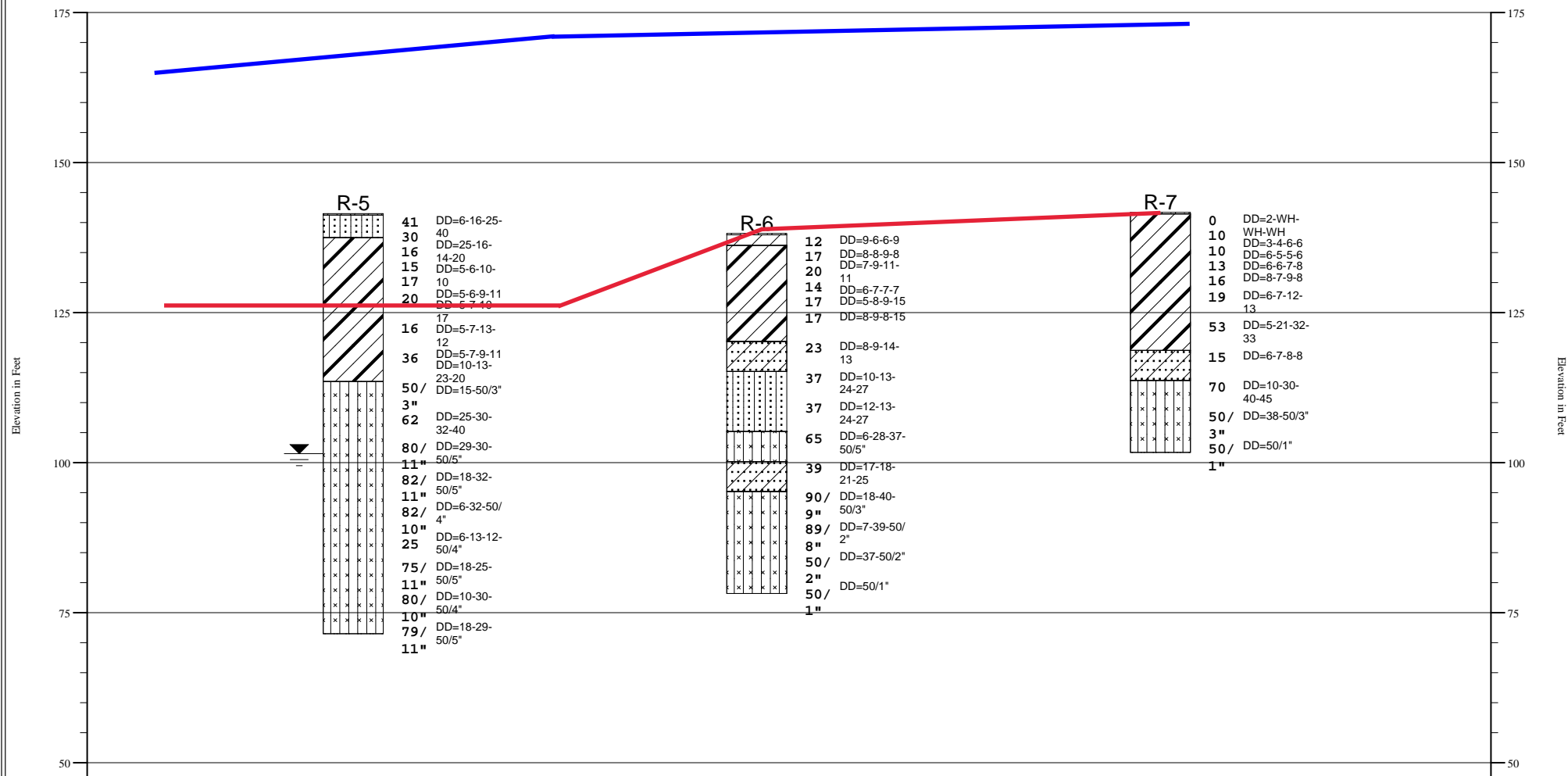
PROJECT NO. F23050

FIGURE NUMBER
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# RW-2 Profile

## LOG OF BORINGS Southern Avenue Phase III



Topsoil



Silty sand



Low-high plasticity clays



Description not given for: "ZX"



Low plasticity clay



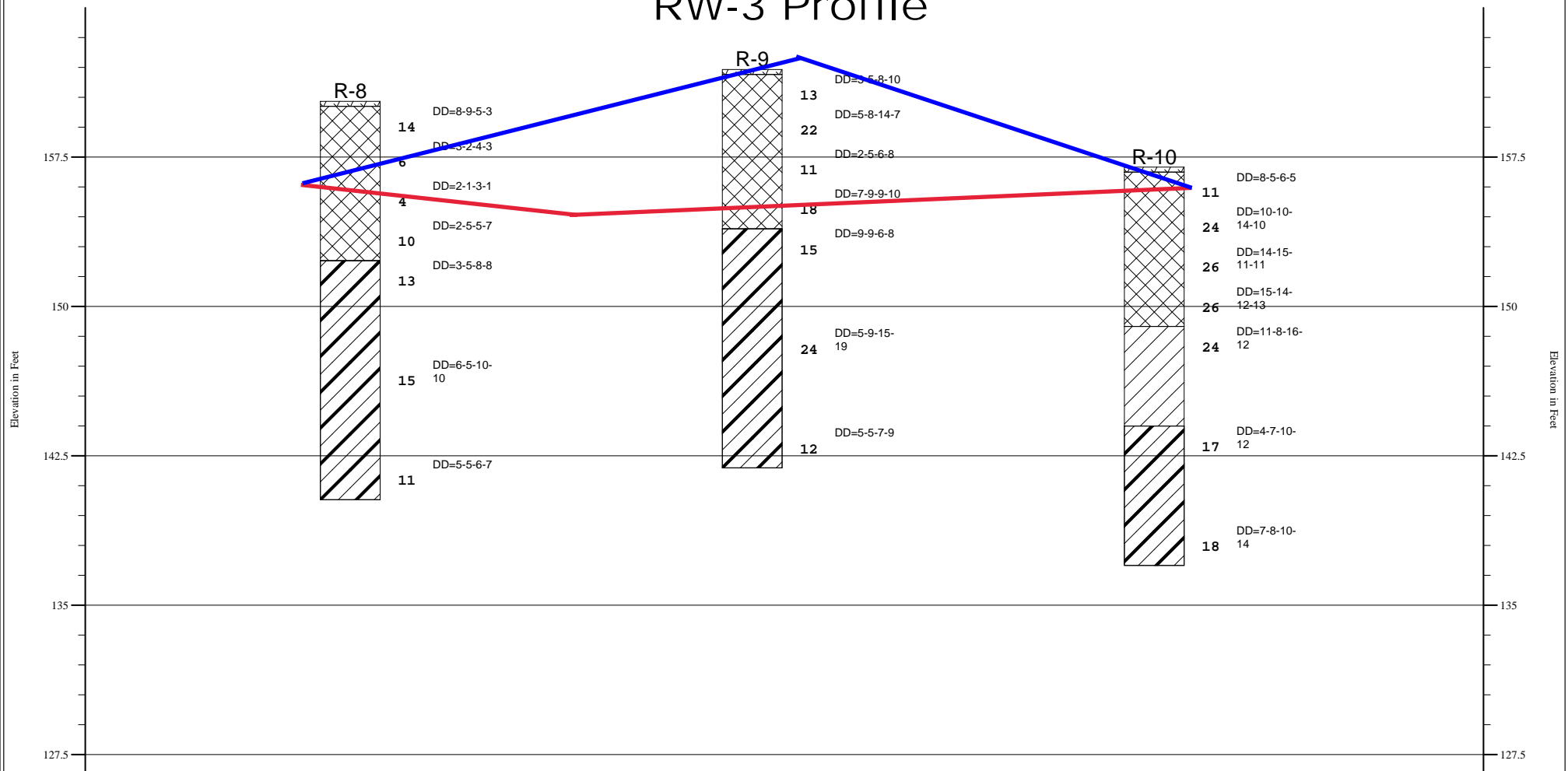
Clayey sand





— Top of Wall  
— Bottom of Wall

HILLIS-CARNES ENGINEERING ASSOCIATES		
GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=25'		10/31/2024
Southern Avenue Phase III		
PROJECT NO. F23050		FIGURE NUMBER



# LOG OF BORINGS Southern Avenue Phase III RW-3 Profile



-  Topsoil
-  Fill
-  Low-high plasticity clays
-  Low plasticity clay

— Top of Wall  
— Bottom of Wall

## HILLIS-CARNES ENGINEERING ASSOCIATES GENERALIZED SOIL PROFILE

HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=7.5'		10/31/2024

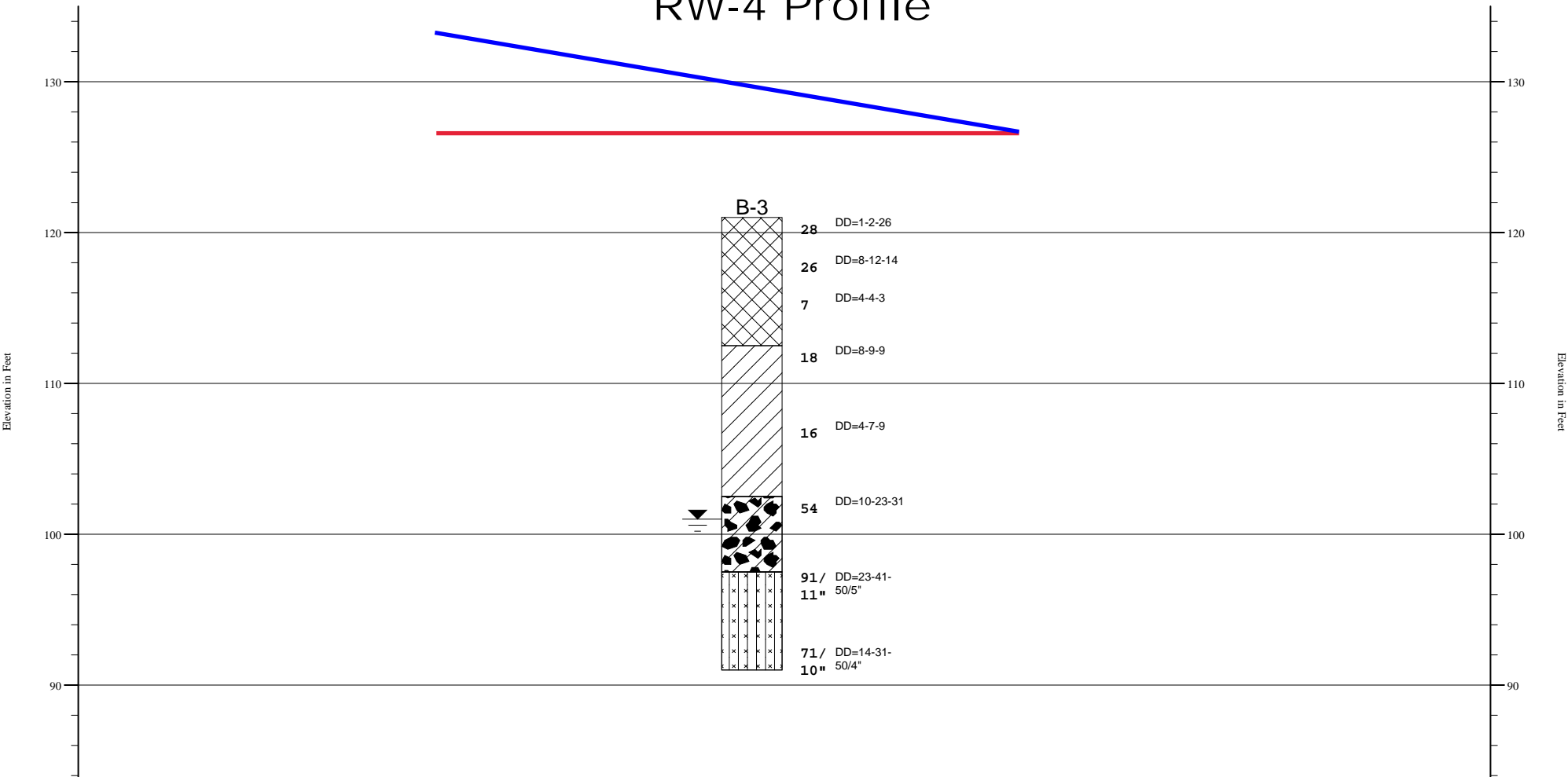
Southern Avenue Phase III

PROJECT NO. F23050

FIGURE NUMBER



LOG OF BORINGS  
Southern Avenue - Phase III  
RW-4 Profile



- Fill
- Low plasticity clay
- Clayey gravel
- Description not given for: "ZX"

Top of Wall  
Bottom of Wall

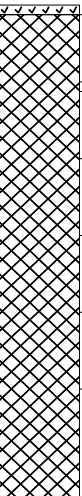
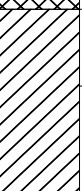

HILLIS-CARNES ENGINEERING ASSOCIATES		
GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=10'		10/31/2024
Southern Avenue - Phase III		
PROJECT NO. F23050		FIGURE NUMBER



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-1  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 116.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
0		3" Topsoil	End of Boring at 20.0 feet below grade	12		6-9-50/5"	59/ 11"			
115		Dark brown with reddish brown, silty SAND, with gravel, hard, moist (FILL		3		18-50/3"	50/3"			
5		Light brown, GRAVEL, trace of sand, moist		10		38-26-28-32	54			
110		Brown and grayish brown, silty SAND, with gravel, very dense, moist		12		26-31-19-14	50			
10		- Brown and light brown, trace of asphalt debris - Multicolored, trace of organics, medium dense		18		5-7-13-14	20			
105		Orangish brown with grayish brown, sandy Lean CLAY, trace of rock fragments, very stiff, moist (CL- Natural)		14		7-11-8-7	19			
15										
100		Orangish brown with yellowish brown, clayey SAND with rock fragments, medium dense, moist (SC)		12		7-8-13-7	21			
20										
95										
25										
90										
30										
85										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>16.0</u> ft. <u>14.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-2  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.4 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/17/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/17/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
0		3" Topsoil						
		Brown and grayish brown, silty SAND, with gravel, medium dense, moist (FILL)		12		5-14-15-3	29	
115		Brown and orangish brown, clayey SAND, with gravel, medium dense, moist		12		8-7-8-8	15	
5		Gray, silty SAND, with gravel, dense, moist		7		12-24-16-12	40	
		- Grayish brown with brown, trace of asphalt debris		10		7-7-8-15	15	
110		- Brown, trace of gravel and concrete debris, hard	Auger Refusal at 11.5 feet below grade	0		50/0"	50/0"	
10								
105								
15								
100								
20								
95								
25								
90								
30								
85								

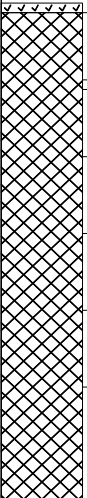
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION <u>DRY</u> ft. AFTER 24 HRS. <u>DRY</u> ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>5.0</u> ft. <u>4.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-3  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 117.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/17/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/17/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot				
							N	CURVE			
								10	30	50	
0		3" Topsoil									
115		Brown and grayish brown, silty SAND, with gravel, dense, moist (FILL)	12		7-14-25-50/2"	39					
5		- Light grayish brown, medium dense	12		12-12-5-9	17					
110		- Orangish brown and brown, trace of gravel and asphalt debris, dense	24		16-21-18-14	39					
10		- Orangish brown and grayish brown, with gravel	7		11-18-18-12	36					
105		- Orangish brown with reddish brown, trace of concrete debris, medium dense	10		15-10-9-9	19					
15			Auger Refusal at 13.0 feet below grade								
100											
20											
95											
25											
90											
30											
85											

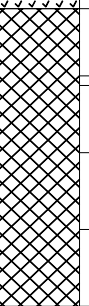
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>8.0</u> ft. <u>5.5</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-4  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/17/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/17/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		3" Topsoil	Auger Refusal at 8.0 feet below grade	16		5-11-16-20	27			
115		Orangish brown and light brown, silty SAND, with gravel, medium dense, moist (FILL) - Multicolored, trace of gravel, hard - Brown		10		25-50/5"	50/5"			
5				4		50/4"	50/4"			
110				0		50/0"	50/0"			
10										
105										
15										
100										
20										
95										
25										
90										
30										
85										

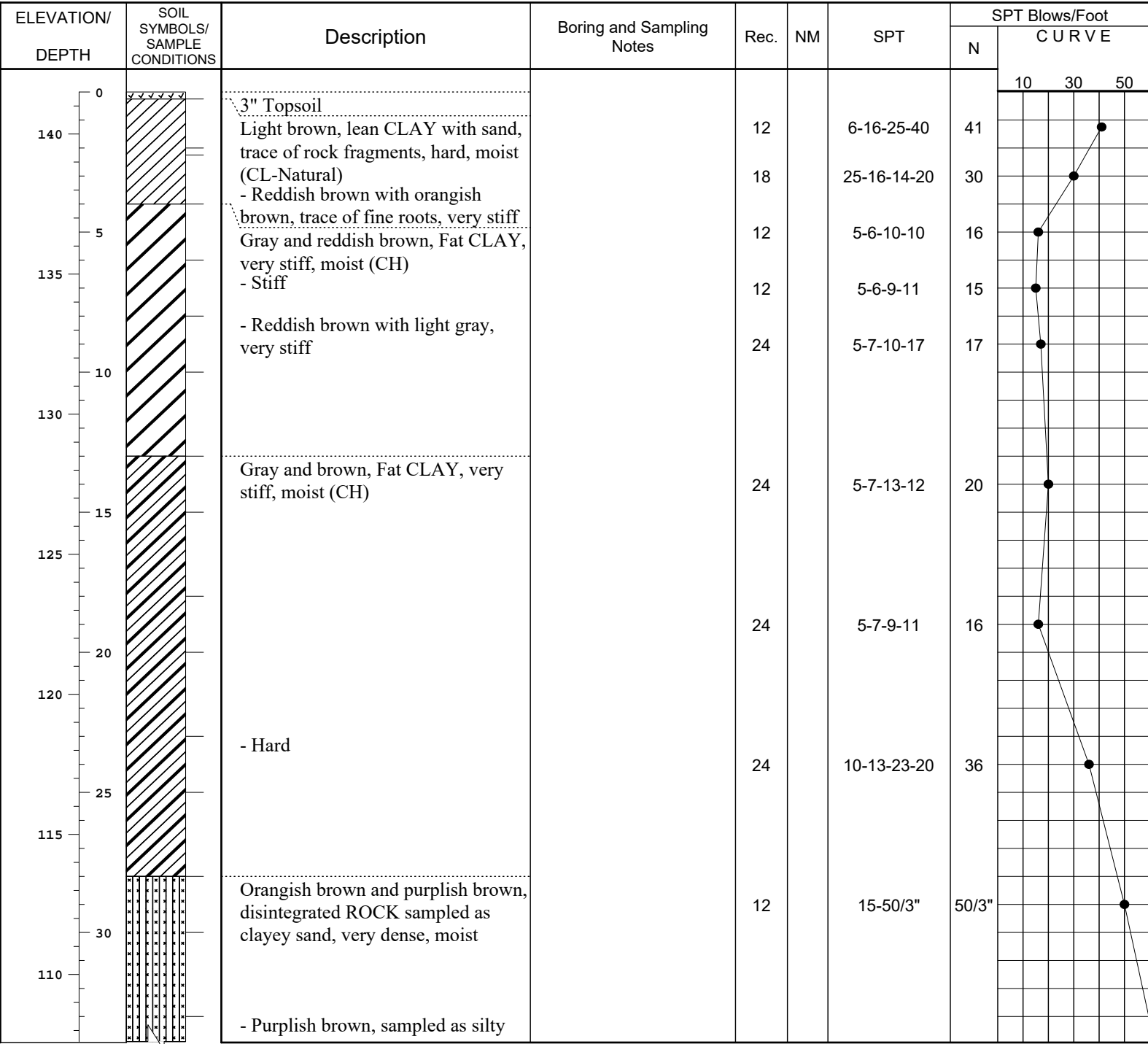
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION <u>DRY</u> ft. AFTER 24 HRS. <u>DRY</u> ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>3.0</u> ft. <u>3.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-5  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/24/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/24/2024



<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>40.0</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>50.0</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-5  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/24/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/24/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	CURVE		
								10	30	50
35		sand		14		25-30-32-40	62			62
105										
40				14		29-30-50/5"	80/ 11"			80/11"
100		- Paleish brown	Water observed at 43.0 feet while drilling							
45				17		18-32-50/5"	82/ 11"			82/11"
95		- Light brown with grayish brown, damp								
50				16		6-32-50/4"	82/ 10"			82/10"
90										
55		Light brown with grayish brown, silty SAND, medium dense, damp (SM)		22		6-13-12-50/4"	25			
85										
60		Light brown with grayish brown, disintegrated ROCK sampled as silty sand, very dense, damp		12		18-25-50/5"	75/ 11"			75/11"
80										
65				16		10-30-50/4"	80/ 10"			80/10"
75										


<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>40.0</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>50.0</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-5  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/24/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/24/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
70			End of Boring at 70.0 feet below grade	17		18-29-50/5"	79/ 11"			
70										
75										
65										
80										
60										
85										
55										
90										
50										
95										
45										
100										
40										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION <u>40.0</u> ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>50.0</u> ft. _____ _____ _____	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-6  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 138.2 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	C U R V E		
								10	30	50
0		3" Topsoil								
		Multicolored, Lean CLAY, with sand, trace of fine roots, stiff, moist (CL-Natural)		12		9-6-6-9	12			
135		Gray and orangish brown, Fat CLAY, very stiff, moist (CH)		18		8-8-9-8	17			
5		- Gray with reddish brown		24		7-9-11-11	20			
		- Multicolored, stiff		24		6-7-7-7	14			
130				24		5-8-9-15	17			
10										
125		Gray with brown, Lean CLAY, medium stiff, moist (CL)		24		8-9-8-15	17			
15										
120		Orangish brown with dark brown, clayey SAND, medium dense, moist (SC)		24		8-9-14-13	23			
20										
115		Purplish brown, silty SAND, dense, moist (SM)		24		10-13-24-27	37			
25										
110				24		12-13-24-27	37			
30										
105		Purplish brown, disintegrated ROCK								

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>38.0</u> ft. <u>36.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-6  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 138.2 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE	
							N	
35		sampled as silty sand, very dense, moist		12		6-28-37-50/5"	65	10 30 50 65
100		Light gray and yellowish brown, clayey SAND, dense, moist (SC)		24		17-18-21-25	39	
40								
95		Light brown, disintegrated ROCK sampled as silty sand, very dense, damp		15		18-40-50/3"	90/9"	90/9"
45								
90		- Light brown and brown, sampled as clayey sand		14		7-39-50/2"	89/8"	89/8"
50								
85		- Light brown with gray, sampled as silty sand		8		37-50/2"	50/2"	
55								
80								
60			Auger Refusal at 60.0 feet below grade	1		50/1"	50/1"	
75								
65								

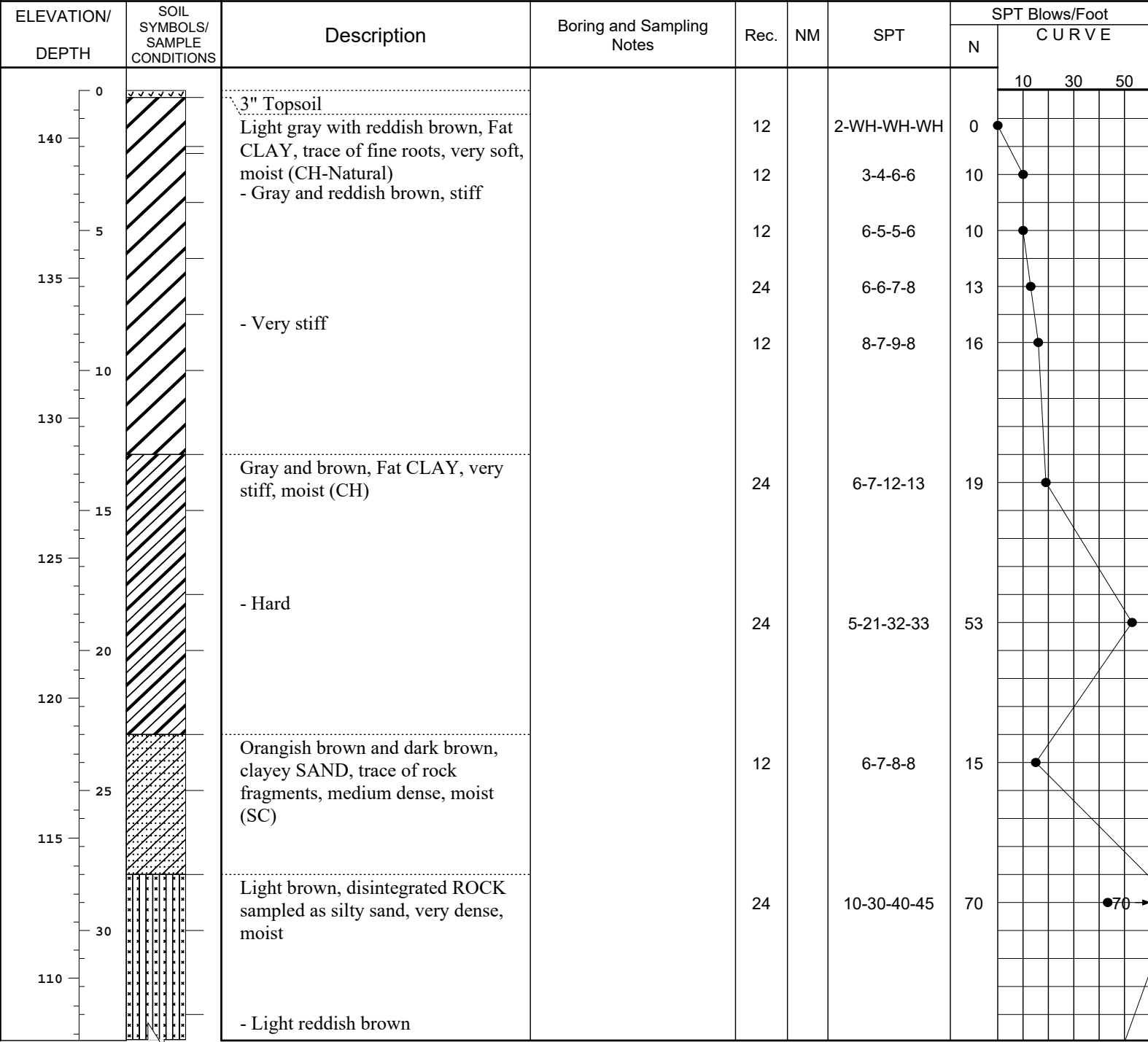
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. ft.	<b>CAVE IN DEPTH</b> <u>38.0</u> ft. <u>36.0</u> ft. ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-7  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/23/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/23/2024



<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> DRY ft. ft. ft.	<b>CAVE IN DEPTH</b> 30.0 ft. ft. ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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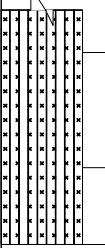
STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-7  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/23/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/23/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
35  105				9		38-50/3"	50/3"			
40  100			Auger Refusal at 40.0 feet below grade	1		50/1"	50/1"			
45  95										
50  90										
55  85										
60  80										
65  75										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>30.0</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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## RECORD OF SOIL EXPLORATION

SAMPLER									
Datum	<u>MSL</u>	Hammer Wt.	<u>140</u>	lbs.	Hole Diameter	<u>3.25"</u>	Foreman		
Surf. Elev.	<u>160.3 +/-</u>	Ft.	Hammer Drop	<u>30</u>	in.	Rock Core Diameter	<u>NA</u>	Inspector	<u>Paul F.</u>
Date Started	<u>10/18/2024</u>	Pipe Size	<u>2.0</u>	in.	Boring Method	<u>HSA</u>	Date Completed	<u>10/18/2024</u>	

SAMPLER TYPE	SAMPLE CONDITIONS		SOIL WATER	DEPTH	BORING METHOD
DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED	D - DISINTEGRATED	AT COMPLETION	<u>DRY</u> ft.	<u>11.0</u> ft.	HSA - HOLLOW STEM AUGERS
PT - PRESSED SHELBY TUBE	I - INTACT	AFTER 24 HRS.	<u>3.0</u> ft.	<u>5.0</u> ft.	CFA - CONTINUOUS FLIGHT AUGERS
CA - CONTINUOUS FLIGHT AUGER	U - UNDISTURBED	AFTER ____ HRS.	_____ ft.	_____ ft.	DC - DRIVING CASING
RC - ROCK CORE	L - LOST				MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-9  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 161.9 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		3" Topsoil								
160		Brown with grayish brown, sandy Lean CLAY, trace of gravel, stiff, moist (FILL) - Very stiff		15		3-5-8-10	13			
		- Brown with various colors, stiff		7		5-8-14-7	22			
5		- Trace of organics, very stiff		10		2-5-6-8	11			
155		Multicolored, Fat CLAY, stiff, moist (CH-Natural)		12		7-9-9-10	18			
		- Gray and reddish brown, very stiff	End of Boring at 20.0 feet below grade	10		9-9-6-8	15			
10										
150										
15				15		5-9-15-19	24			
145										
20				24		5-5-7-9	12			
140										
25										
135										
30										
130										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>10.0</u> ft. <u>10.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-10  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 157.0 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		3" Topsoil								
155		Orangish brown with reddish brown, sandy Lean CLAY, trace of gravel, stiff, moist (FILL) - Brown and light brown, trace of organics, very stiff - With gravel		19		8-5-6-5	11			
				20		10-10-14-10	24			
5				4		14-15-11-11	26			
150		Brown, silty SAND, trace of gravel, medium dense, moist		2		15-14-12-13	26			
		Orangish brown and grayish brown, sandy Lean CLAY with rock fragments, very stiff, moist (CL- Natural)		15		11-8-16-12	24			
10										
145										
		Reddish brown and gray, Fat CLAY, very stiff, moist (CH)		18		4-7-10-12	17			
15										
140										
				24		7-8-10-14	18			
20			End of Boring at 20.0 feet below grade							
135										
25										
130										
30										
125										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>9.0</u> ft. <u>9.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. S-1  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.6 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		3" Topsoil	Auger Refusal at 10.0 feet below grade							
		Light brown and grayish brown, silty SAND, with gravel, loose, moist (FILL)		12		3-6-4-3	10			
115		- Brown and black, with asphalt debris, medium dense		14		6-8-10-6	18			
5		- Grayish brown, with organics, loose		7		5-6-4-5	10			
		- Grayish brown and black		5		6-8-12-15	20			
110		Gray, GRAVEL, with concrete debris, hard, dry	Auger Refusal at 10.0 feet below grade	2		50/2"	50/2"			
10										
105										
15										
100										
20										
95										
25										
90										
30										
85										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>4.0</u> ft. <u>5.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. S-2  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 122.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	CURVE		
								10	30	50
0		3" Topsoil	Offset 10ft SW							
		Brown and dark brown, silty SAND, with gravel and asphalt debris, medium dense, moist (FILL)		10		21-25-11-10	26			
120				3		10-11-18-12	19			
5		Brown with grayish brown, clayey SAND, with gravel, medium dense, moist - Orangish brown with grayish brown		24		12-10-12-14	22			
115		Gray, GRAVEL, trace of sand, dry		14		11-14-16-13	30			
10			End of Boring at 20.0 feet below grade	2		50/2"	50/2"			
110										
15		Orangish brown with light gray, Lean CLAY, with sand, trace of gravel, dense, moist		7		12-17-22-26	39			
105										
20		- Orangish brown with grayish brown, sandy, with gravel		10		7-8-12-10	20			
100										
25										
95										
30										
90										

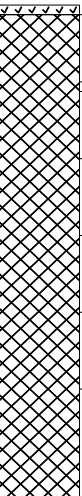
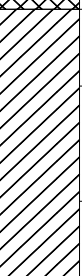
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>14.0</u> ft. <u>14.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. S-3  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.1 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
0		3" Topsoil								
		Brown and dark brown, silty SAND, with gravel and asphalt debris, medium dense, moist (FILL)		12		7-9-10-7	19			
115		- Brown and yellowish brown, trace of gravel		12		6-6-7-10	13			
5		Multicolored, clayey SAND, with asphalt debris, medium dense, moist		14		8-15-7-11	22			
		Multicolored, sandy Lean CLAY, trace of asphalt debris, stiff, moist		12		4-4-6-8	10			
110		Brown and grayish brown, clayey SAND, trace of gravel, medium dense, moist	End of Boring at 20.0 feet below grade	12		6-7-8-7	15			
10										
105		Orangish brown with light brown, Lean CLAY with sand, stiff, moist (CL-Natural)		12		6-7-7-11	14			
15										
100				24		6-6-6-6	12			
20										
95										
25										
90										
30										
85										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>16.0</u> ft. <u>16.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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# KEY TO SYMBOLS

Symbol    Description

## Strata symbols



Topsoil



Fill



Low plasticity  
clay



Clayey sand



High plasticity  
clay



Low-high plasticity  
clays



Description not given for:  
"ZX"



Silty sand

## Misc. Symbols



Boring continues



Water table during  
drilling



Water table at  
boring completion

## Notes:

1. Exploratory borings were drilled on 10/16/2024 using a 6-inch outside diameter hand-auger.
2. Water level readings were taken during drilling and upon completion of each boring. Borings were backfilled upon completion.
3. Boring locations were selected by project HCEA and staked in the field by HCEA using existing site features as reference.
4. These logs are subject to the limitations, conclusions, and recommendations in this report.
5. Results of tests conducted on samples recovered are reported on the logs.

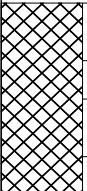
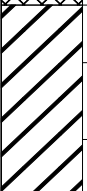
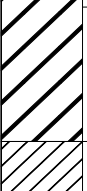
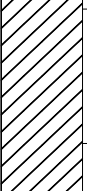
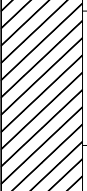
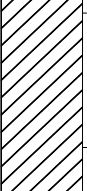
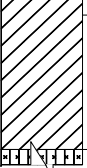


**HILLIS - CARNES**  
**ENGINEERING ASSOCIATES, INC.**  
**RECORD OF SOIL EXPLORATION**

Project Name Southern Avenue - Phase III Boring No. B-1  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 152.7 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
0		Yellow, red, and gray Fat CLAY, trace of brick debris, organics, moist, soft, (FILL)	5" topsoil	10		1-2-2	4	●		
150		Yellow brown, red, yellow, and gray sandy Fat CLAY, moist, stiff, (Possible FILL)		10		4-6-7	13	●		
5		Reddish brown and very light gray sandy Fat CLAY, fine roots, moist, stiff, (CH-Natural)		10		5-5-4	9	●		
145		Reddish brown with brown Fat CLAY with sand, trace of gravel and roots, moist, medium stiff, (CH)		10		2-2-3	5	●		
10		Reddish brown, yellow, gray, and purple lean CLAY, moist, very stiff, (CL)		12		5-8-13	21	●		
140										
15				18		4-7-11	18	●		
135										
20				18		3-6-11	17	●		
130										
25		- gray, dark brown, and yellow brown		18		6-9-14	23	●		
125										
30										
120										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION _____ ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>GROUND WATER</b> _____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. _____ ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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**HILLIS - CARNES**  
**ENGINEERING ASSOCIATES, INC.**  
**RECORD OF SOIL EXPLORATION**

Project Name Southern Avenue - Phase III Boring No. B-1  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 152.7 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	C U R V E		
								10	30	50
35		Dark brown, purple, and yellow disintegrated Rock as SAND, moist, very dense		18		24-40-45	85			85
115		Dark brown, purple, and yellow silty clayey SAND, moist, dense, (SC-SM)		18		13-17-22	39			
40		- light purple		18		10-21-24	45			
110		- dark brow, light purple, and yellow		18		9-17-25	42			
45		Purple silty SAND, moist, very dense, (SM)		18		17-23-32	55			
105		Yellow brown disintegrated ROCK as a sand, wet, very dense	Subsurface water at 58.5 feet during drilling End of boring at 60 feet below grade.	18		18-31-46	77			77
50										
100										
55										
95										
60										
90										
65										
85										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION _____ ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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

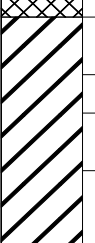



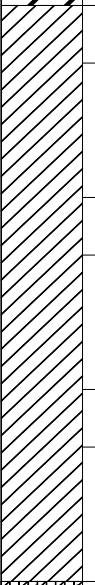




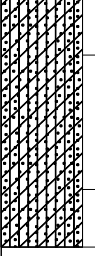
# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-2  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 142.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
 Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	CURVE		
								10	30	50
0		Red brown, yellow brown, and dark brown sandy fat CLAY, trace of gravel, moist, medium stiff, (Possible FILL)	4" topsoil	10		1-2-5	7			
140		Dark gray with black sandy Fat CLAY, charcoal moist, stiff, (CH-Natural) - reddish brown, gray, and yellow, with gravel, very stiff		4		3-3-7	10			
5				12		8-12-7	19			
135				16		14-12-9	21			
10		Red brown, yellow brown, and purple lean CLAY, moist, very stiff, (CL)  - red brown, purple, and gray  - purple and gray with yellow brown		12		7-7-9	16			
130				18		6-8-11	19			
15				16		12-23-27	50			
125				16		9-23-31	54			
20			End of boring at 30 feet below grade.							
120										
25		Dark brown, yellow, and light purple silty clayey SAND, moist, dense, (SC-SM)  - very dense								
115										
30										
110										

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

**GROUND WATER**  
 AT COMPLETION Dry ft.  
 AFTER 24 HRS. \_\_\_\_\_ ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**CAVE IN DEPTH**  
23.5 ft.  
 \_\_\_\_\_ ft.  
 \_\_\_\_\_ ft.

**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-3  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 121 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
 Date Started 03/08/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/08/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	CURVE		
								10	30	50
0			5" topsoil	16		1-2-26	28			
120		Dark brown with black silty clayey SAND with gravel, trace of charcoal, moist, medium dense, (FILL)		14		8-12-14	26			
5		Dark brown sandy lean CLAY, fine roots, moist, very stiff, (Possible FILL)		12		4-4-3	7			
115		Brown and yellow brown clayey SAND with gravel, moist, loose, (Possible FILL)		12		8-9-9	18			
10		Light red brown and yellow brown lean CLAY, moist, very stiff, (CL-Natural)		18		4-7-9	16			
110		- red brown, yellow, and gray		12		10-23-31	54			
15		Reddish brown and yellow clayey Gravel with sand, moist, very dense, (GC)		16		23-41-50/5"	91/11"			
105		Light brown and dark brown disintegrated Rock as sand, wet, very dense	Subsurface water at 23.5 feet during drilling	14		14-31-50/4"	71/10"			
20			End of boring at 30 feet below grade.							
100										
25										
95										
30										
90										

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

**GROUND WATER**  
 AT COMPLETION 20 ft.  
 AFTER 24 HRS. 20 ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**CAVE IN DEPTH**  
21.5 ft.  
21.5 ft.  
 \_\_\_\_\_ ft.

**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



**HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION**

Project Name Southern Avenue - Phase III Boring No. B-4  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 146.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		Dark purple with yellow sandy lean CLAY, roots, moist, medium stiff, (Possible FILL) - stiff	5" topsoil	10		2-2-4	6			
145				10		2-3-8	11			
5		- dark brown, with gravel and organics		10		12-8-6	14			
140										
10		Red, yellow brown, and gray Fat CLAY, moist, very stiff, (CH-Natural)		10		7-7-9	16			
135										
15		- reddish brown with gray and yellow brown, roots		12		4-7-14	21			
130										
20		Brown and gray lean CLAY, moist, very stiff, (CL)		18		5-8-10	18			
125										
25		Yellow, light purple, and red silty SAND, moist, medium dense, (SM)		18		5-7-12	19			
120										
30		Brownish yellow sandy lean CLAY, moist, very stiff, (CL)		18		7-11-16	27			
115										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION _____ ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>GROUND WATER</b> _____ ft.	<b>CAVE IN DEPTH</b> <u>32.5</u> ft. _____ ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-4  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 146.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
 Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
35		Yellow and brown disintegrated Rock as sand, moist, very dense		18		20-38-47	85	85
110								
40		Purple silty clayey SAND, moist, dense, (SC-SM) Yellow brown well graded SAND, wet, dense, (SW)	Subsurface water at 39.5 feet during drilling	18		15-19-21	40	
105		- medium dense		18		6-9-17	26	
45		- dense		18		9-21-27	48	
100								
50		Purple, red brown, gray, and black disintegrated Rock as sand, charcoal, moist, very dense		18		10-27-38	65	65
95								
55		Yellow brown disintegrated ROCK as a sand, wet, very dense		18		17-31-49	80	80
90			End of boring at 60 feet below grade.					
60								
85								
65								
80								

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE  
 NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

**GROUND  
WATER**  
 AT COMPLETION \_\_\_\_\_ ft.  
 AFTER 24 HRS. \_\_\_\_\_ ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**CAVE IN  
DEPTH**  
32.5 ft.  
 \_\_\_\_\_ ft.  
 \_\_\_\_\_ ft.

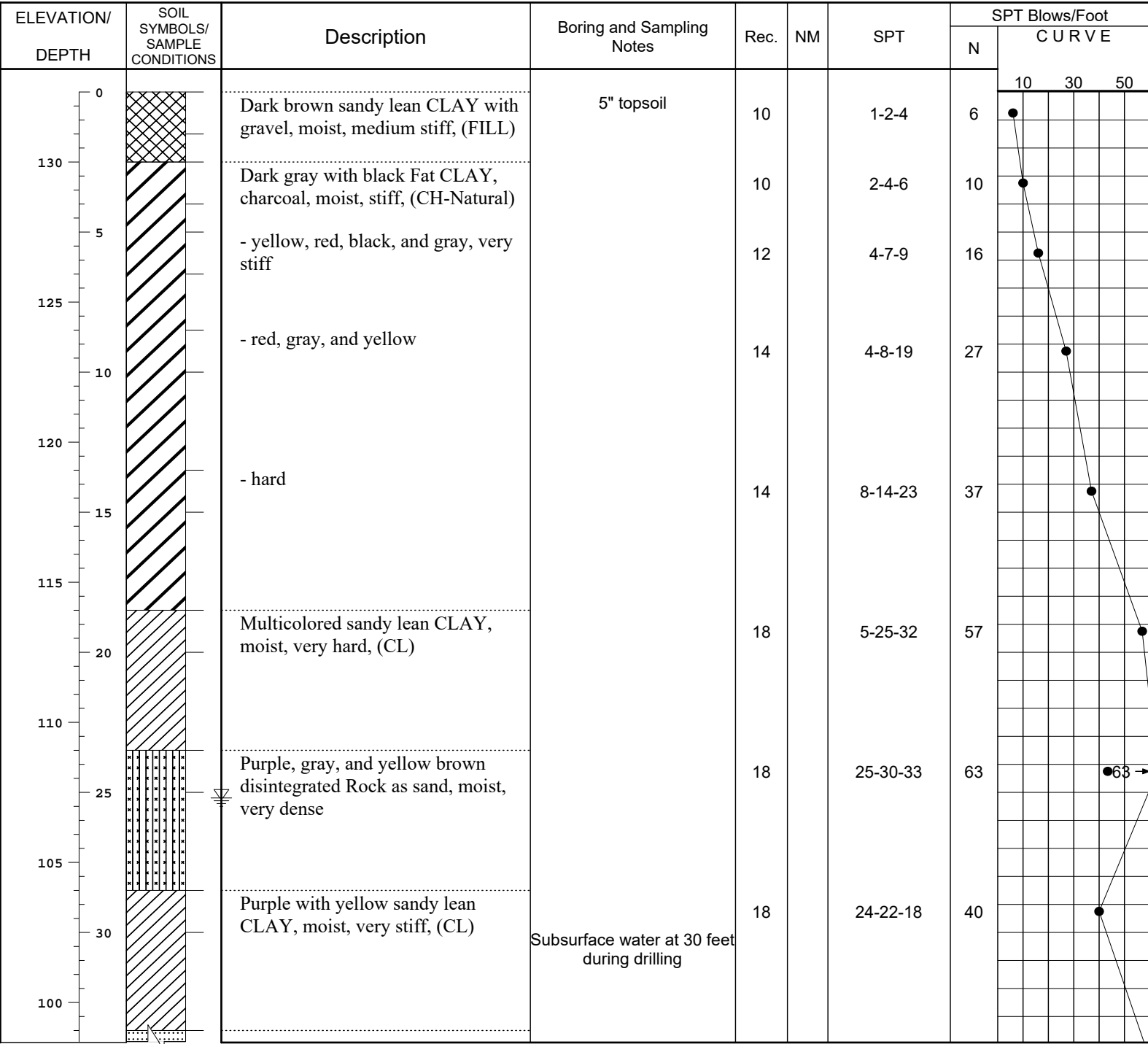
**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-5  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 132.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023



<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>25.2</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-5  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 132.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
35		Purple and yellow brown well graded SAND, wet, very dense, (SW)		18		23-32-27	59			
95										
40		Purple, gray, and yellow disintegrated Rock as SAND, wet, very dense		18		11-36-45	81			
90										
45		- brown, very light gray, and yellow brown		18		16-36-50/4"	86/ 10"			
85										
50		Brown and yellow brown well graded SAND, wet, dense, (SW)		18		19-21-27	48			
80										
55		- yellow brown		18		11-16-33	49			
75										
60		Yellow brown disintegrated ROCK as a sand, wet, very dense		18		14-21-49	70			
70										
65										
65			End of boring at 60 feet below grade.							

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>25.2</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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**HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION**

Project Name Southern Avenue - Phase III Boring No. B-6  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 121.3 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/19/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/19/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
0										
120		Dark brown with black silty Gravel with sand, asphalt debris, moist, loose, (FILL)	5" topsoil	10		6-6-3	9			
		Yellow brown with brown sandy lean CLAY, trace of gravel, very stiff		10		3-6-11	17			
5		Yellow brown and brown silty clayey SAND with gravel, moist, medium dense		12		5-7-13	20			
115		- light brown, trace of brick debris		10		18-13-12	25			
10		Light purple with yellow silty clayey SAND, moist, dense, (SC-SM Natural)								
110				14		6-16-23	39			
15										
105				18		9-19-20	39			
20										
100		- light purple, yellow, and dark brown, wet	Subsurface water at 23.5 feet during drilling	18		11-12-27	39			
25										
95										
		Yellow brown well graded SAND, wet, very dense, (SW)		18		10-19-32	51			
30			End of boring at 30 feet below grade.							
90										

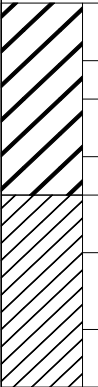
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION _____ ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>GROUND WATER</b> _____ ft.	<b>CAVE IN DEPTH</b> <u>19.0</u> ft. _____ ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-7  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 153.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		Yellow brown with dark brown Fat CLAY with sand, moist, medium stiff, (CH-Natural) - trace of gravel	6" topsoil	10		1-2-3	5	•		
150				12		2-3-3	6	•		
5		Red and gray lean CLAY with sand, moist, medium stiff, (CL)		12		3-3-4	7	•		
145		- yellow brown		14		4-3-5	8	•		
10			End of boring at 10 feet below grade.							
140										
15										
135										
20										
130										
25										
125										
30										
120										

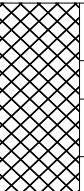
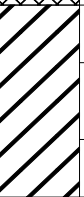
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>Dry</u> ft. <u>Dry</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>6</u> ft. <u>6</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-8  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

SAMPLER  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 150 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
150 0		Dark brown sandy lean CLAY with gravel, organics, moist, medium stiff, (FILL) - dark brown and yellow brown	6" topsoil	10		1-2-4	6	●		
145 5		Yellow brown sandy Fat CLAY with gravel, moist, medium stiff, (CH-Natural) - red, yellow, and gray, very stiff		12		9-7-11	18	●		
140 10			End of boring at 10 feet below grade.	10		4-3-3	6	●		
				14		6-11-15	26	●		
135 15										
130 20										
125 25										
120 30										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION <u>Dry</u> ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>7.3</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-9  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

SAMPLER  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 130.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/08/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/08/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
130 0		Dark brown and yellow brown sandy lean CLAY with gravel, organics, moist, medium stiff, (FILL) - trace of brick debris	6" topsoil	8		2-3-3	6	●		
				14		4-3-3	6	●		
125 5		Reddish brown, gray, brown, and black Fat CLAY with sand, charcoal, moist, very stiff, (Possible FILL) - trace of brick debris, very stiff		10		4-3-6	9	●		
120 10			End of boring at 10 feet below grade.	16		6-11-18	29		●	
115 15										
110 20										
105 25										
100 30										

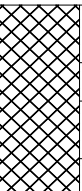


<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>Dry</u> ft. <u>Dry</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>6.1</u> ft. <u>6.1</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-10  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 126.7 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		Multicolored Fat CLAY, trace of roots and gravel, moist, medium stiff, (FILL)	6" topsoil	10		1-2-4	6	●		
125		Dark brown with gray brown sandy lean CLAY with gravel, moist, very stiff, (FILL)		14		7-14-11	25		●	
5		Yellow brown Fat CLAY with sand, moist, stiff, (CH-Natural)		12		4-5-6	11	●		
120										
		Yellow brown, red brown, and purple lean CLAY with sand, moist, very stiff, (CL)	End of boring at 10 feet below grade.	14		7-11-19	30		●	
10										
115										
15										
110										
20										
105										
25										
100										
30										
95										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION <u>Dry</u> ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>6</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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# KEY TO SYMBOLS

Symbol	Description
--------	-------------

## Strata symbols



Fill



High plasticity  
clay



Low plasticity  
clay



Description not given for:  
"ZX"



Poorly graded clayey  
silty sand



Silty sand



Clayey gravel



Well graded sand

## Misc. Symbols



Boring continues



Water table during  
drilling



Water table at  
boring completion

## Notes:

1. Exploratory borings were drilled on 03/09/2023 using a 6-inch outside diameter hand-auger.
2. Water level readings were taken during drilling and upon completion of each boring. Borings were backfilled upon completion.
3. Boring locations were selected by project HCEA and staked in the field by HCEA using existing site features as reference.
4. These logs are subject to the limitations, conclusions, and recommendations in this report.
5. Results of tests conducted on samples recovered are reported on the logs.



## **GENERAL NOTES FOR SUBSURFACE RECORDS**

1. Numbers in the sampling data column (5, 9, 12) indicate blows required to drive a 2-inch OD, 1-3/8-inch ID sampling spoon 6 inch, using a 140-pound hammer, falling 30 inches, according to ASTM-D-1586.
2. Visual classification of soil is in accordance with terminology set forth in the "Soil Identification" sheet (attached). The unified soil classification symbols shown are based on visual inspection, in accordance with ASTM-D2487.
3. Water level readings that were obtained in the borings during and after completion are noted on the subsurface records.
4. Refusal at the surface of rock, boulder, or obstruction is defined as a penetration resistance of 50 blows for 1-inch penetration or less.
5. The subsurface records and related information depict subsurface conditions only at the specific locations and times indicated. Subsurface conditions including the material properties of soil (and rock) and water levels at other locations may differ from conditions as reported on subsurface records with the passage of time.
6. The depth and thickness of the surface strata indicated on the section profile (if any) were generalized from and interpolated between the test borings. The transition between materials is most likely more gradual than indicated. These stratification lines were used for our analytical purposes and should be used as a basis of design or construction cost estimates.
7. Rock coring is in accordance with ASTM-2113: NQ size rock core, 2-inch OD.
8. Undisturbed samples were obtained in accordance with ASTM 01587-94: 2- or 3-inch thin walled shelly tubes.
9. Transitions between soil strata are represented on the subsurface records. A solid line represents an observed transition, and a dashed line represents an estimated change.
10. Keys to symbols and abbreviations:  
RQD = rock quality designation  
REC = recovery %  
WOH = weight of hammer advanced sample spoon 6 inches  
WOR = weight of drilling rods advanced sample spoon 6 inches  
%M = natural moisture content

Cohesive Soils (Clay, Silt, and Combinations)		Non-Cohesive Soils (Silt, Sand, Gravel, and Combinations)	
Consistency		Density	
Very Soft	2 blows/ft or less	Very Loose	4 blows/ft or less
Soft	3 to 4 blows/ft	Loose	5 to 10 blows/ft
Medium Stiff	5 to 8 blows/ft	Medium Dense	11 to 30 blows/ft
Stiff	9 to 15 blows/ft	Dense	31 to 50 blows/ft
Very Stiff	16 to 30 blows/ft	Very Dense	51 blows/ft or more
Hard	31 blows/ft or more		



## SOIL IDENTIFICATION

### A. DEFINITION OF SOIL GROUP NAMES (ASTM D-2487-83)

Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels – More than 50% of coarse fraction retained on No. 4 sieve Coarse, ¾” to 3” Fine, No. 4 to ¾”	Clean gravels Less than 5% fines	GW	Well graded gravel	
			GP	Poorly graded gravel	
		Gravels with fines More than 12% fines	GM	Silty gravel	
			GC	Clayey gravel	
	Sands – 50% or more of coarse fraction passes No. 4 sieve Coarse, No. 10 to No. 4 Medium, No. 40 to No. 10 Fine, No. 200 to No. 40	Clean Sands Less than 5% fines	SW	Well-graded sand	
			SP	Poorly graded sand	
		Sands with fines More than 12% fines	SM	Silty sand	
			SC	Clayey sand	
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silts and Clays – Liquid Limit Less than 50 Low to medium plasticity	Inorganic	CL	Lean clay	
			ML	Silt	
		Organic	OL	Organic clay Organic silt	
			Silts and Clays – Liquid Limit 50 or more Medium to high plasticity	Inorganic	CH
	MH	Elastic silt			
	Organic	OH		Organic Clay Organic silt	
		Highly Organic Soils		Primarily organic matter, dark in color, and organic odor	

### B. DEFINITION OF MINOR COMPONENT PROPORTIONS

Minor Component	Approximate Percentage of Fraction by Weight
Adjective Form Gravelly, Sandy Silty, Clayey	30% or more of gravel or sand 12% or more of silt or clay
With Silt, Sand, Gravel and Clay	15% or more of sand or gravel 5% to 12% of silt or clay
Trace Sand, Gravel Silt, Clay	Less than 15% of sand or gravel Less than 5% of silt or clay

### C. GLOSSARY OF MISCELLANEOUS TERMS

**SYMBOLS** – Unified Soil Classification Symbols are shown above as group symbols. Dual symbols are used for borderline classifications.

**BOULDERS & COBBLES** – Boulders are considered rounded pieces of rock larger than 12 inches, while cobbles range from 3- to 12-inch size.

**ROCK FRAGMENTS** – Angular pieces of rock within residual soils resulting from differential weathering of the underlying bedrock.

**QUARTZ** – A hard silica mineral often found in residual soils.

**IRONITE** – Iron oxide deposited within a soil layer forming cemented deposits.

**CEMENTED SAND** – Localized rock-like deposits within a soil stratum composed of sand grains cemented by iron oxide or other materials.

**MICA** – A soft plate of silica mineral found in many rocks and in residual or transported soils derived therefrom.

**TOPSOIL** – Surface soils that support plant life and which contain more than 5% organic matter.

**FILL** – Manmade deposit containing soil, rock, and often foreign matter.

**PROBABLE FILL** – Soils which contain no visually detected foreign matter but which are suspect with regard to origin.

**LENSES** – 0 to  $\frac{1}{2}$ -inch seam of minor soil component.

**LAYERS** –  $\frac{1}{2}$ - to 12-inch seam of minor soil component.

**POCKET** – Discontinuous body of minor soil component.

**MOISTURE CONDITIONS** – Wet, very moist, moist, or dry to indicate visual appearance of specimen.



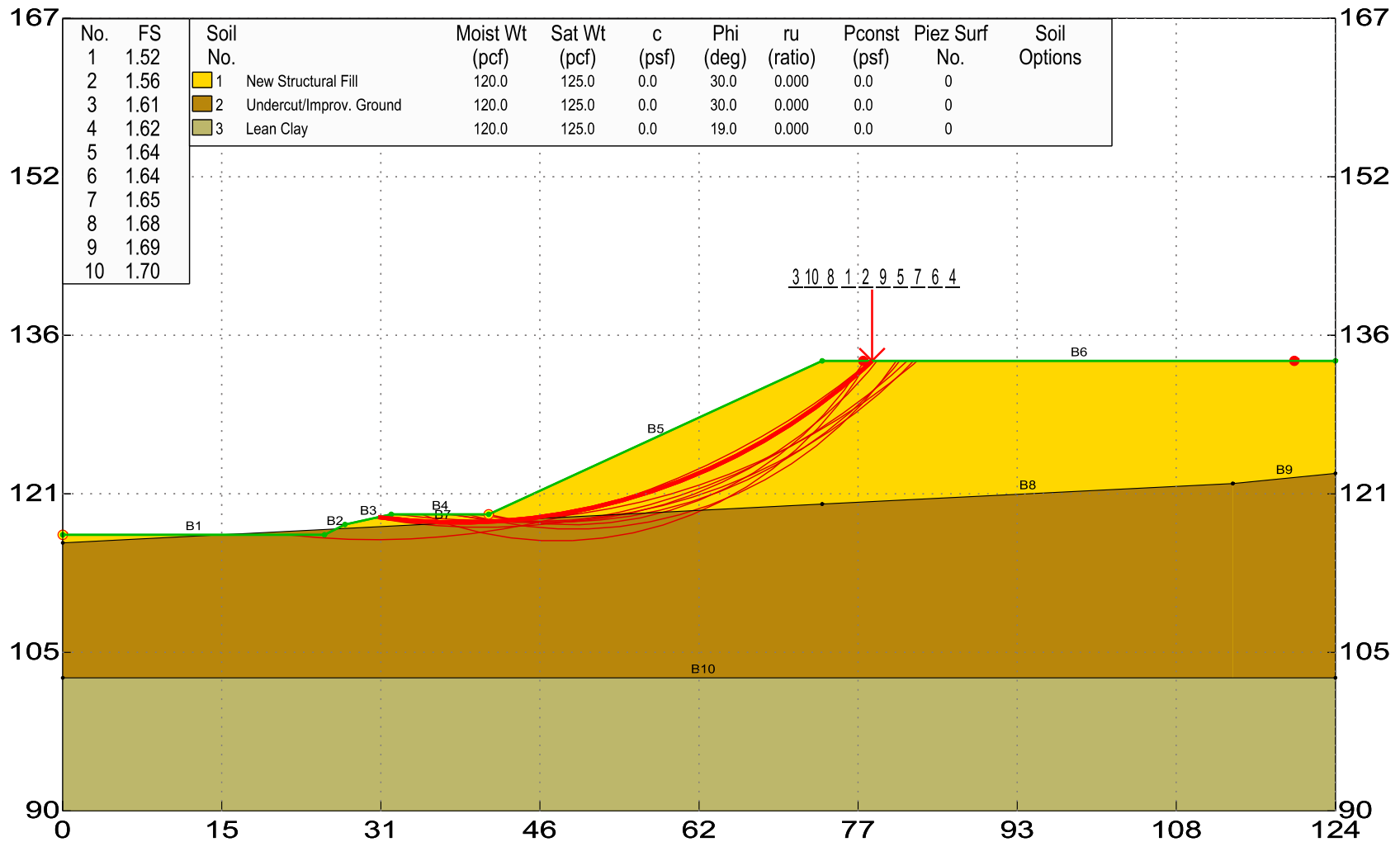
# Drawing No. 4

## Slope A-A

### Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\Slope A-A.gsd



GEOSTASE FS = 1.52

Spencer Method





# Southern Avenue Self Storage - Phase III

\Slope B-B.gsd



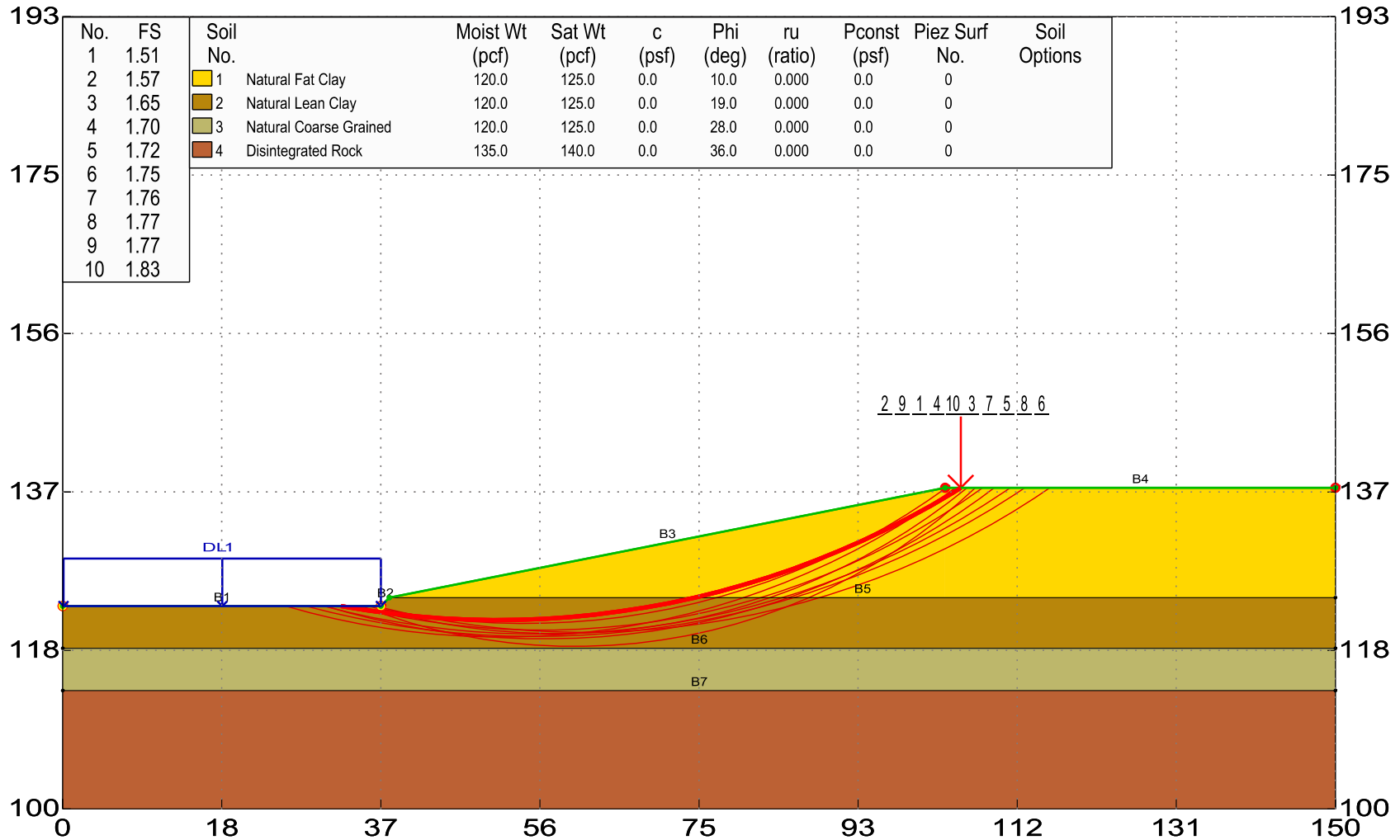


# Drawing No. 6

## Slope B-B (with Recommended 5H:1V Slope) Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\Slope B-B - Revised.gsd



GEOSTASE FS = 1.51

Spencer Method





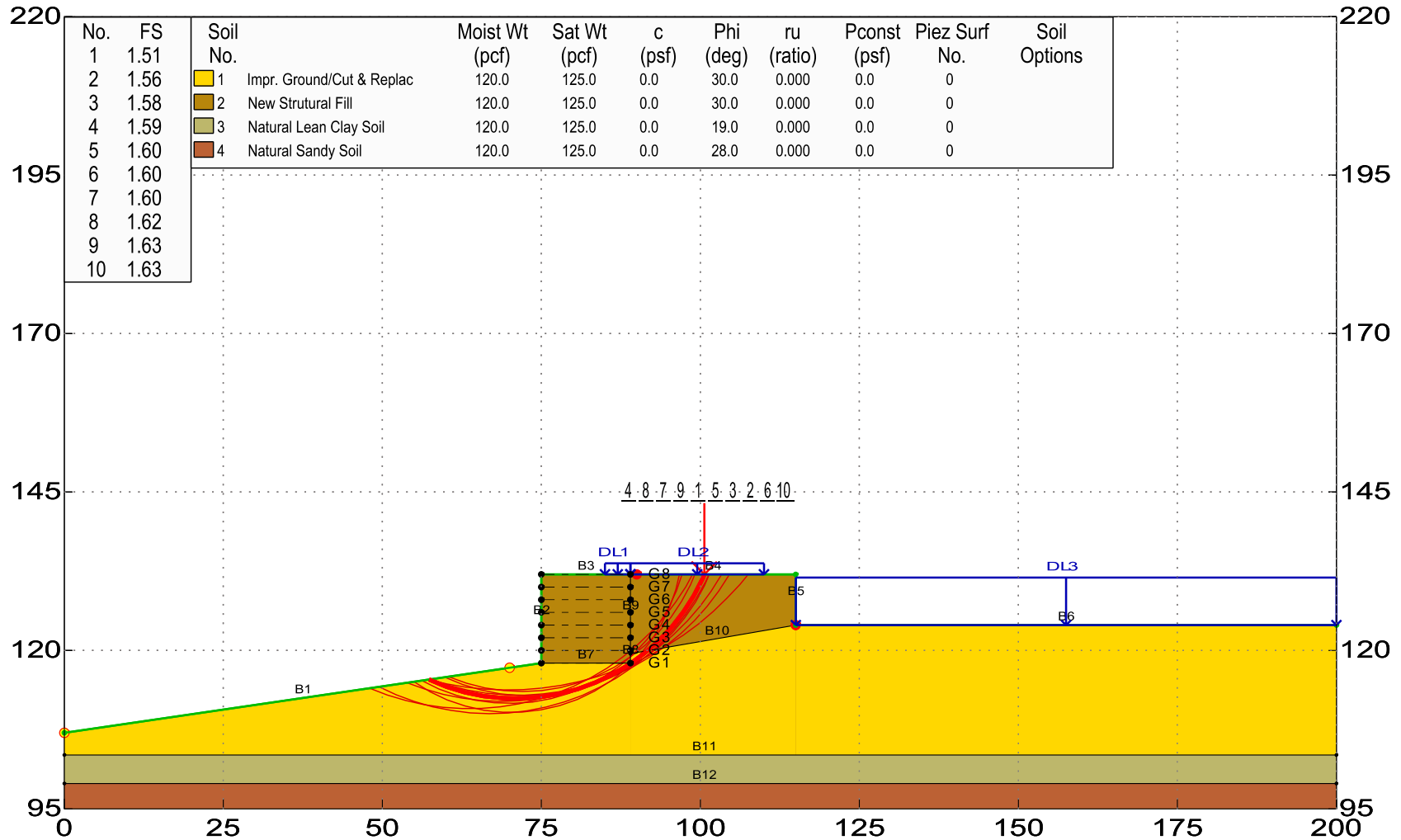
# Drawing No. 7

## Retaining Wall 1 (RW-1)

### Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\RW-1 - Updated.gsd



GEOSTASE FS = 1.51

Spencer Method





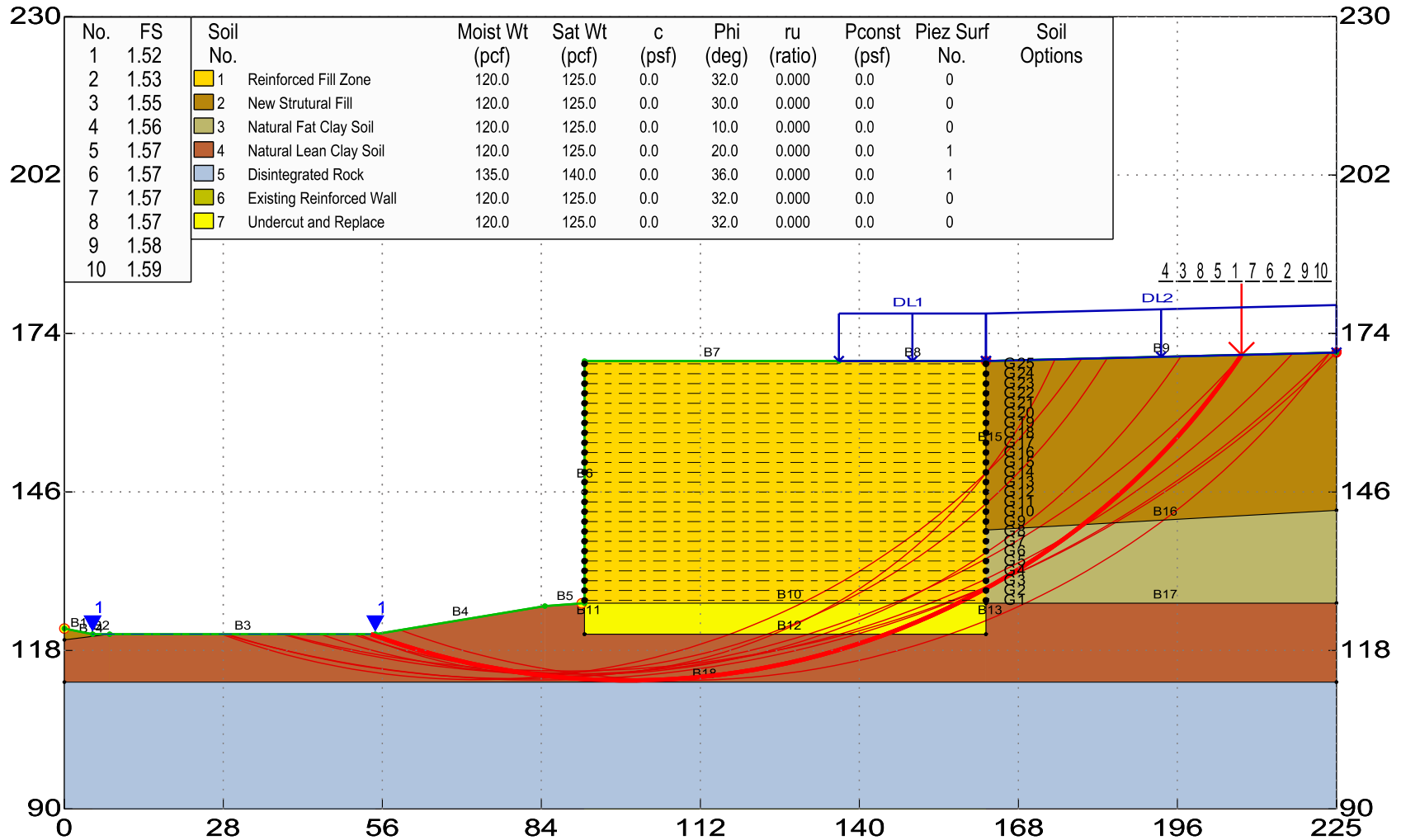
# Drawing No. 8

## Retaining Wall 2 (RW-2)

### Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\RW-2 - Revised Wall.gsd



GEOSTASE FS = 1.52

Spencer Method





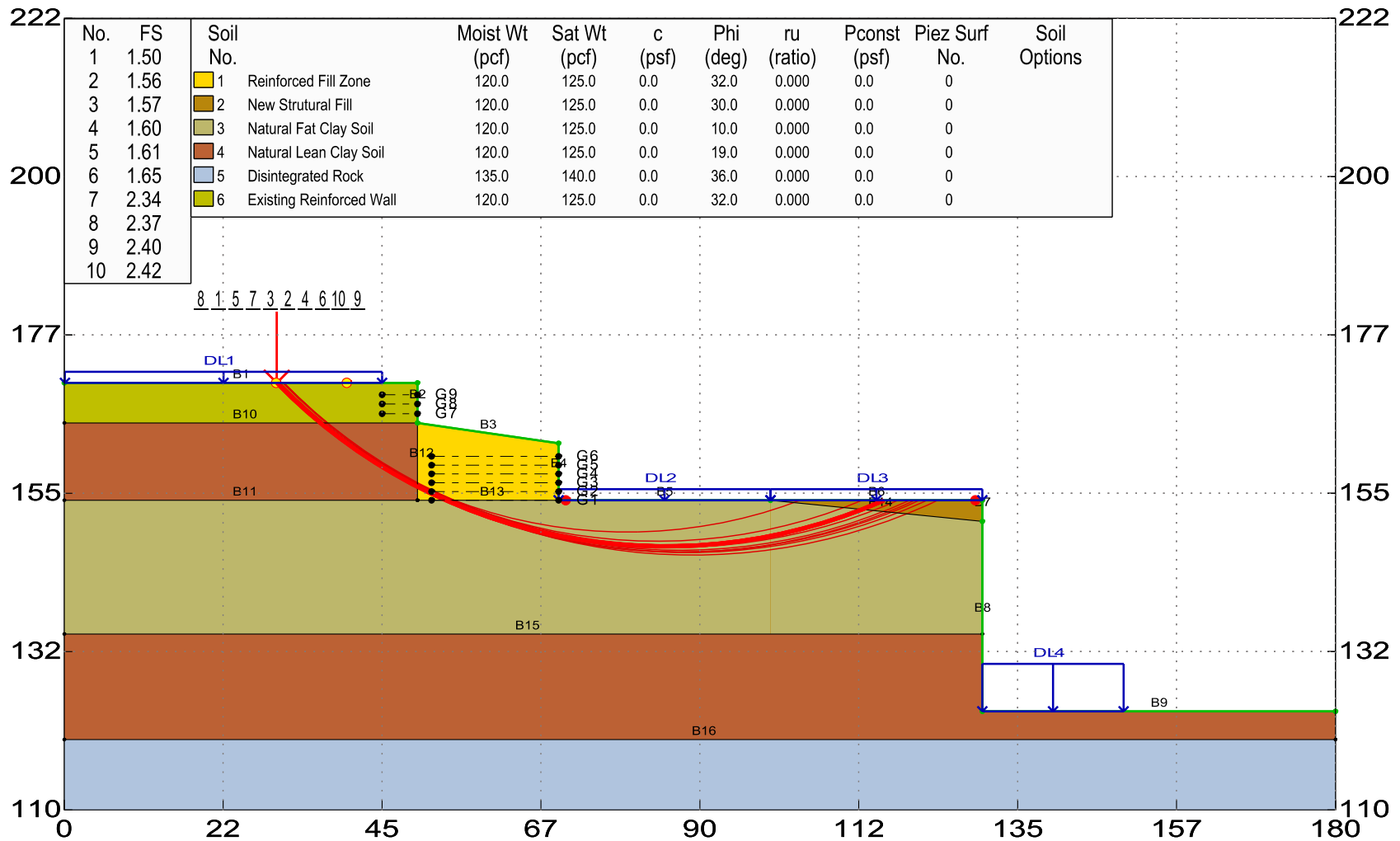
# Drawing No. 9

## Retaining Wall 3 (RW-3)

### Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\RW-3 - Updated.gsd



GEOSTASE FS = 1.50

Spencer Method



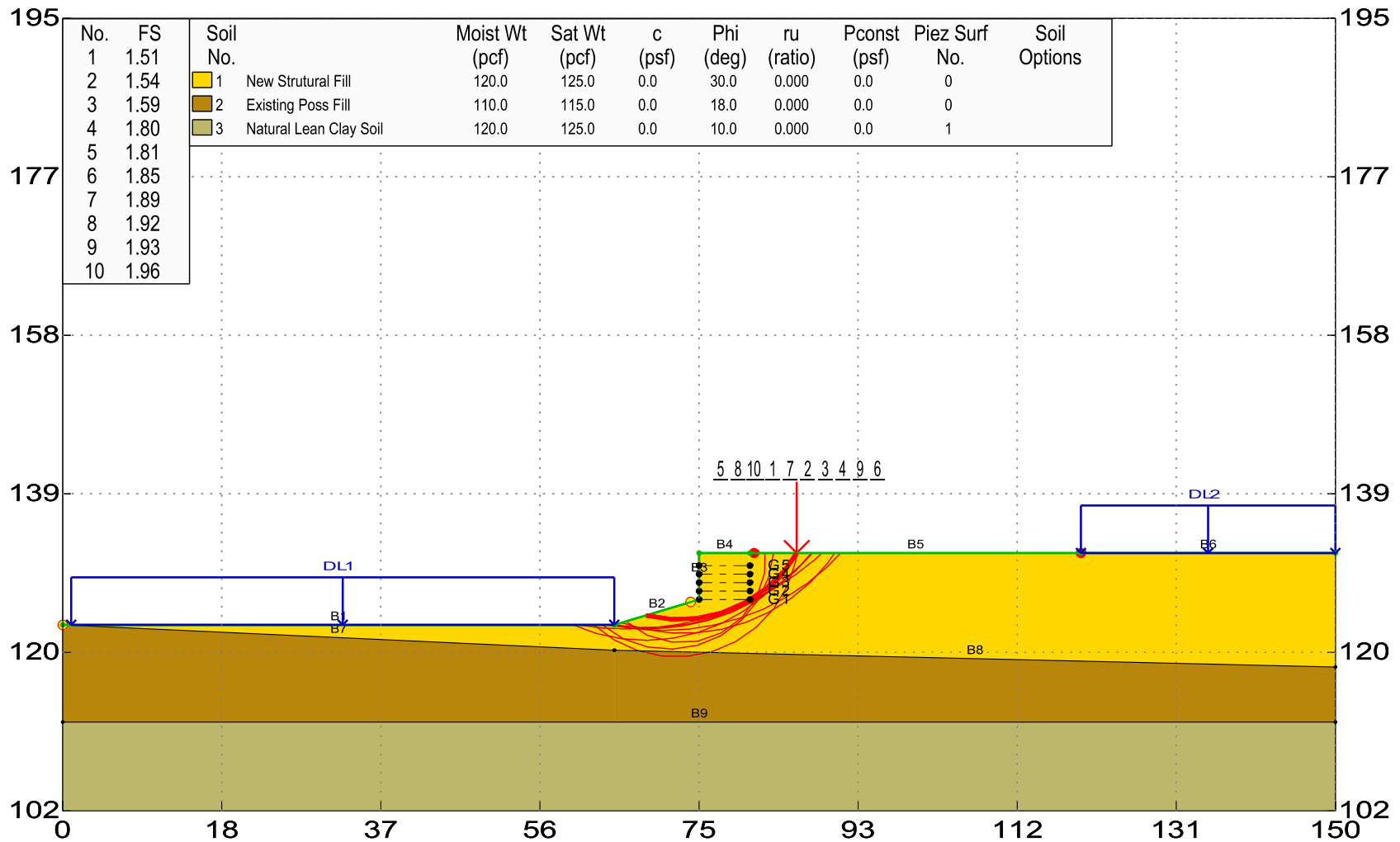
# Drawing No. 10

## Retaining Wall 4 (RW-4)

### Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\RW-4 - Updated.gsd

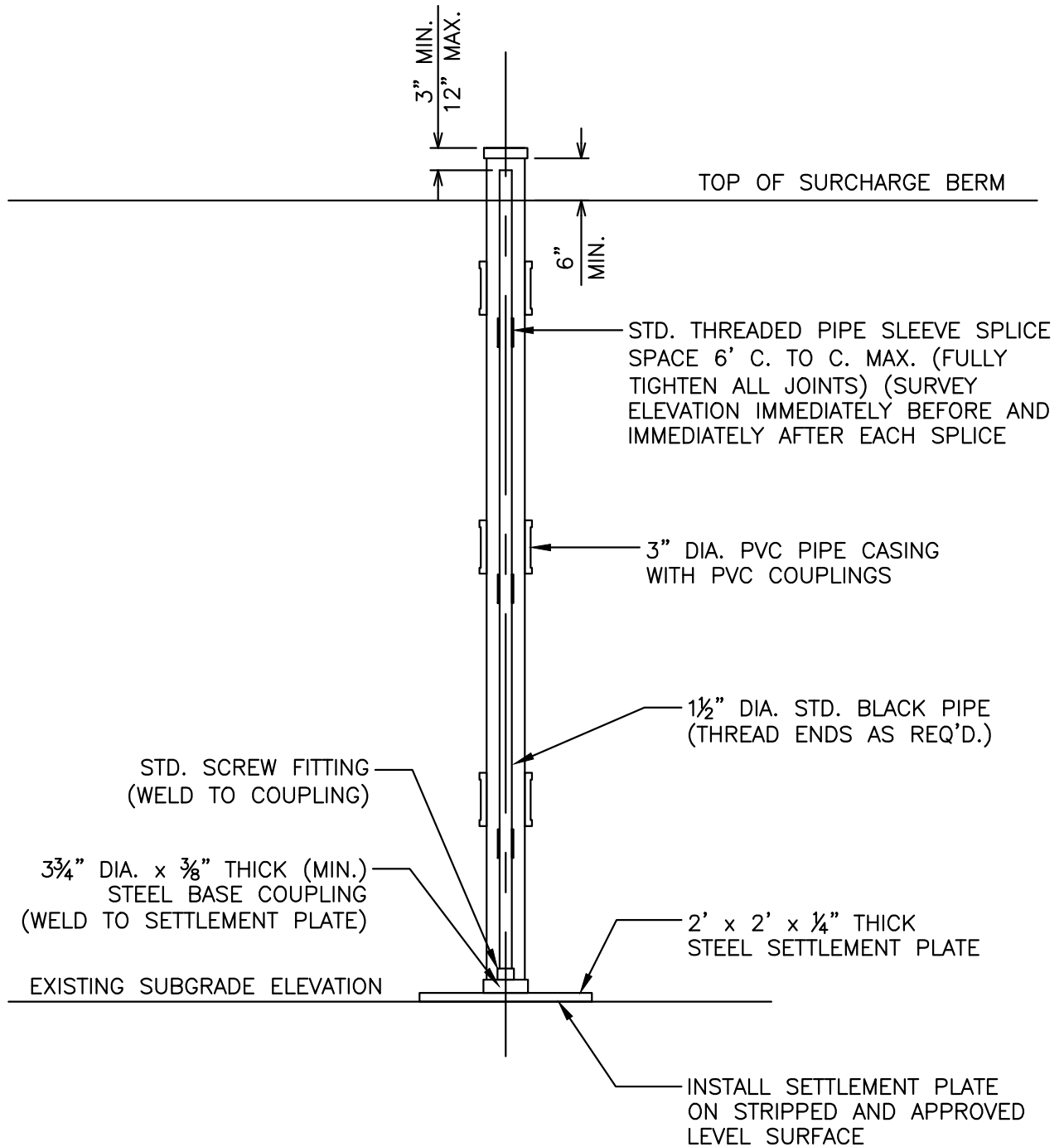


GEOSTASE FS = 1.51

Spencer Method

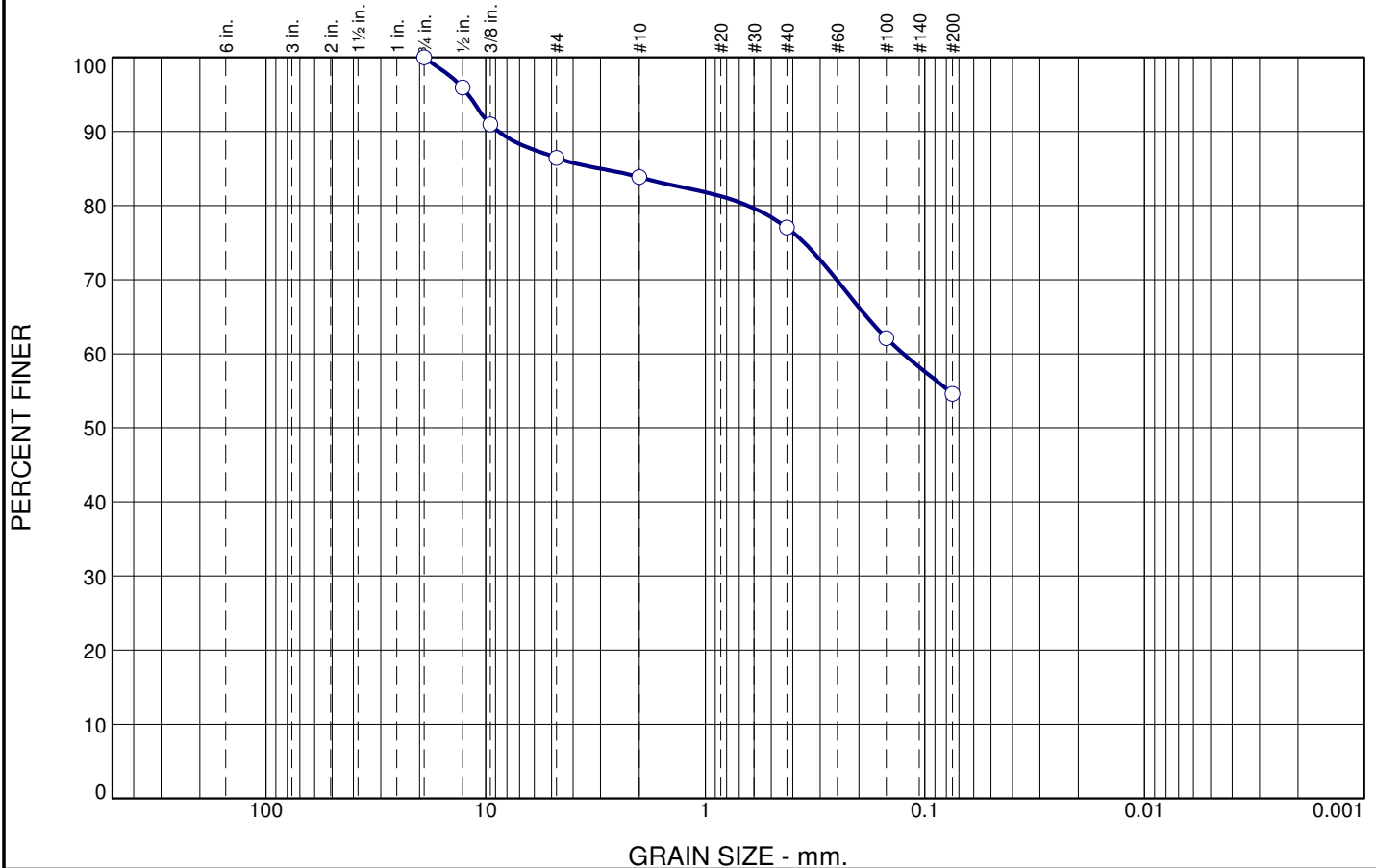








# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	13.6	2.6	6.8	22.4	54.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.75	100.0		
0.5	95.9		
0.375	90.9		
#4	86.4		
#10	83.8		
#40	77.0		
#100	62.1		
#200	54.6		

\* (no specification provided)

## Soil Description

Brown Sandy Lean CLAY, trace rock fragments

## Atterberg Limits

PL= 14 LL= 26 PI= 12

## Coefficients

D<sub>90</sub>= 8.7353 D<sub>85</sub>= 3.0493 D<sub>60</sub>= 0.1254  
D<sub>50</sub>= D<sub>30</sub>= D<sub>15</sub>=  
D<sub>10</sub>= C<sub>u</sub>= C<sub>c</sub>=

## Classification

USCS= CL AASHTO= A-6(3)

## Remarks

Moisture Content: 15.2%

Location: R-1

Sample Number: S-6

Depth: 13.0'-15.0'

Date: 11-08-24

HILLIS-CARNES ENGINEERING ASSOCIATES

FREDERICK, MD

Client: Arcland Property Company

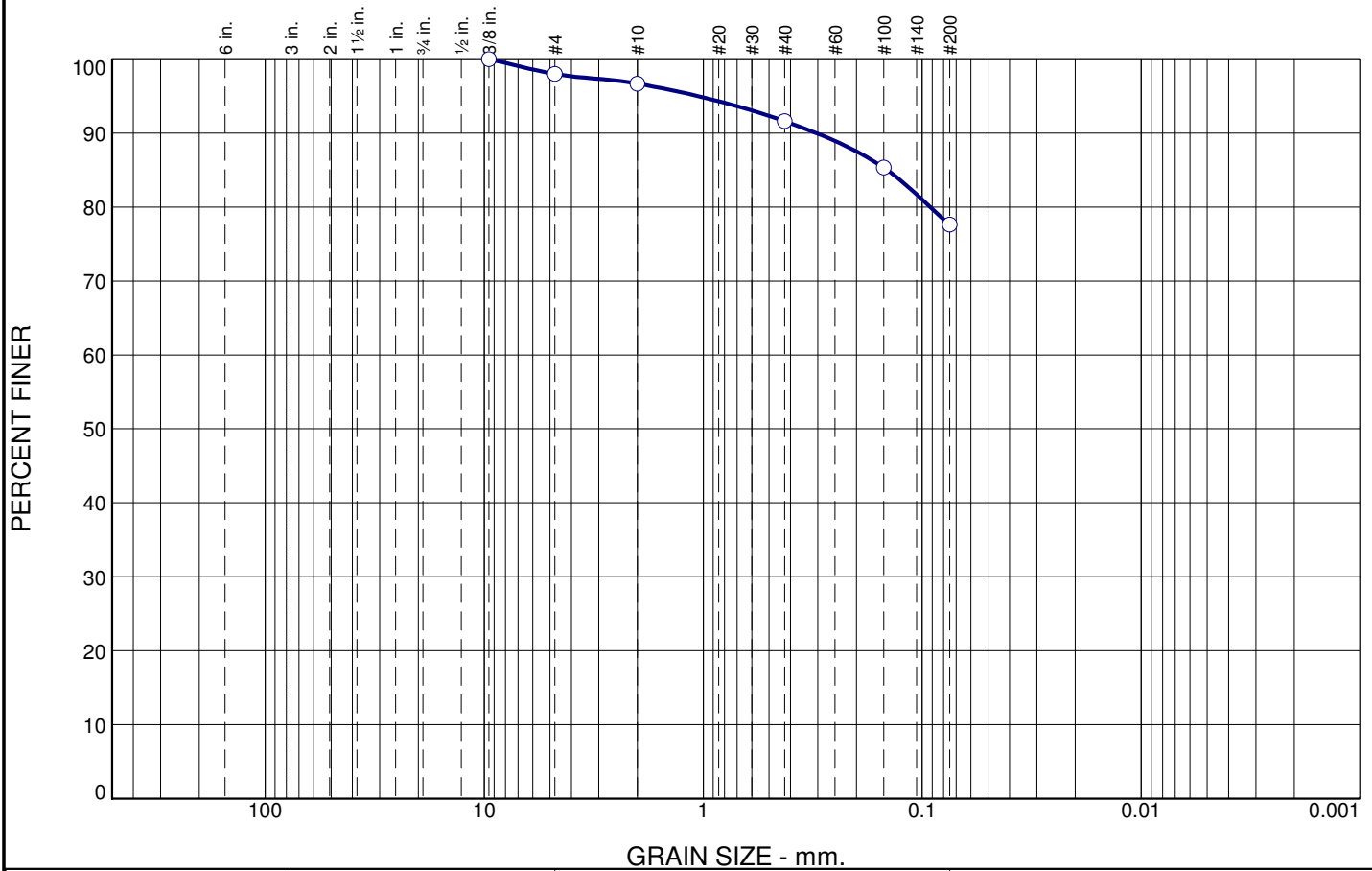
Project: Southern Avenue Phase III

Project No: F23050

Figure #4476A



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.0	1.3	5.1	14.0	77.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.375	100.0		
#4	98.0		
#10	96.7		
#40	91.6		
#100	85.3		
#200	77.6		

\* (no specification provided)

## Soil Description

Reddish brown Lean CLAY with sand, trace rock fragments

## Atterberg Limits

PL= 22 LL= 40 PI= 18

## Coefficients

D<sub>90</sub>= 0.3054 D<sub>85</sub>= 0.1443 D<sub>60</sub>=  
D<sub>50</sub>= D<sub>30</sub>= D<sub>15</sub>=  
D<sub>10</sub>= C<sub>u</sub>= C<sub>c</sub>=

## Classification

USCS= CL AASHTO= A-6(14)

## Remarks

Moisture Content: 14.9%

Location: R-5

Sample Number: S-2

Depth: 2.0'-4.0'

Date: 11-08-24

HILLIS-CARNES ENGINEERING ASSOCIATES

FREDERICK, MD

Client: Arcland Property Company

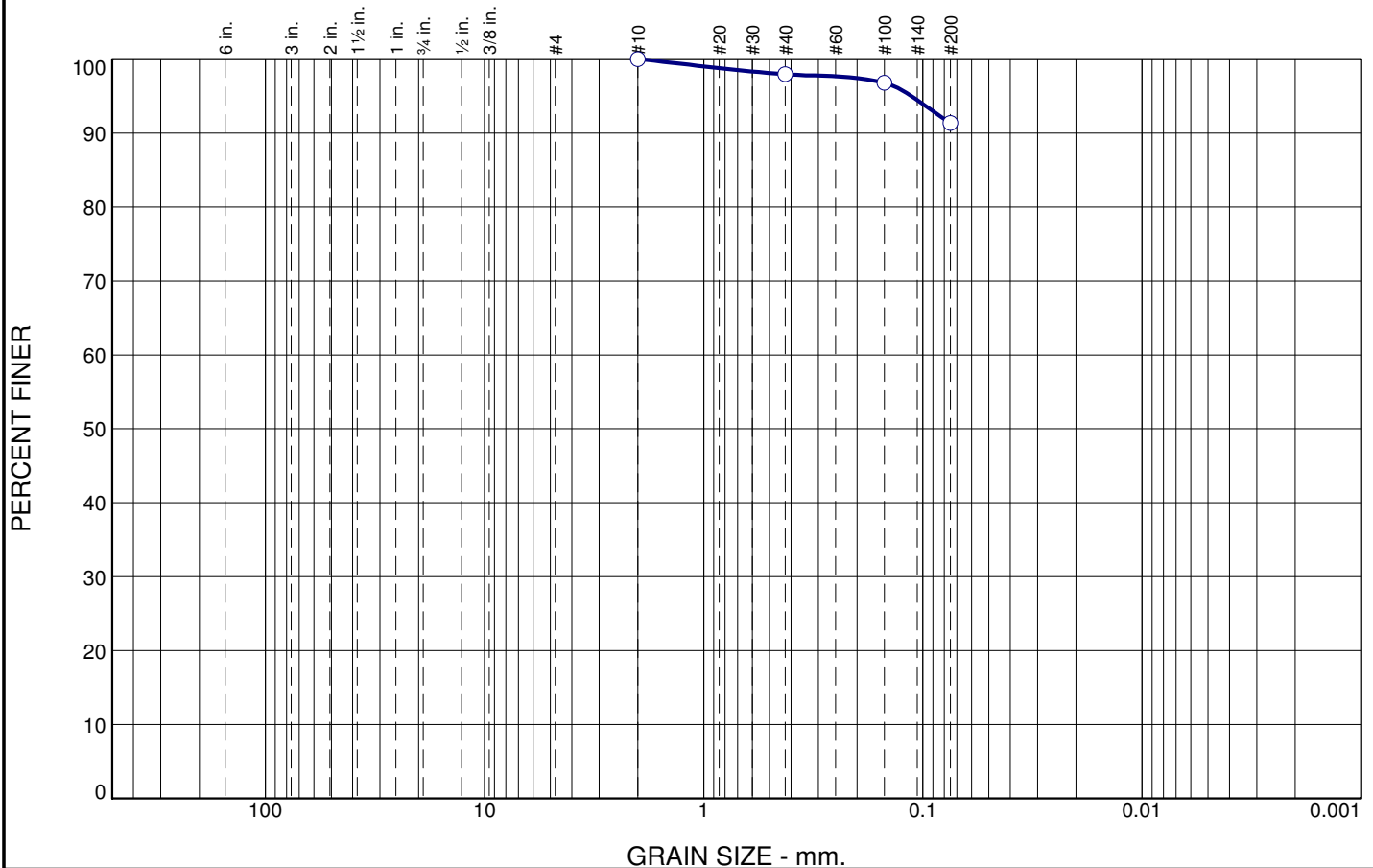
Project: Southern Avenue Phase III

Project No: F23050

Figure #4476B



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	2.1	6.5	91.4	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#40	97.9		
#100	96.8		
#200	91.4		

\* (no specification provided)

## Soil Description

Reddish brown Fat CLAY, trace sand

## Atterberg Limits

PL= 22 LL= 54 PI= 32

## Coefficients

D<sub>90</sub>= D<sub>85</sub>= D<sub>60</sub>=  
D<sub>50</sub>= D<sub>30</sub>= D<sub>15</sub>=  
D<sub>10</sub>= C<sub>u</sub>= C<sub>c</sub>=

## Classification

USCS= CH AASHTO= A-7-6(32)

## Remarks

Moisture Content: 19.5%

Location: R-5

Sample Number: S-5

Depth: 8.0'-10.0'

Date: 11-08-24

HILLIS-CARNES ENGINEERING ASSOCIATES

FREDERICK, MD

Client: Arcland Property Company

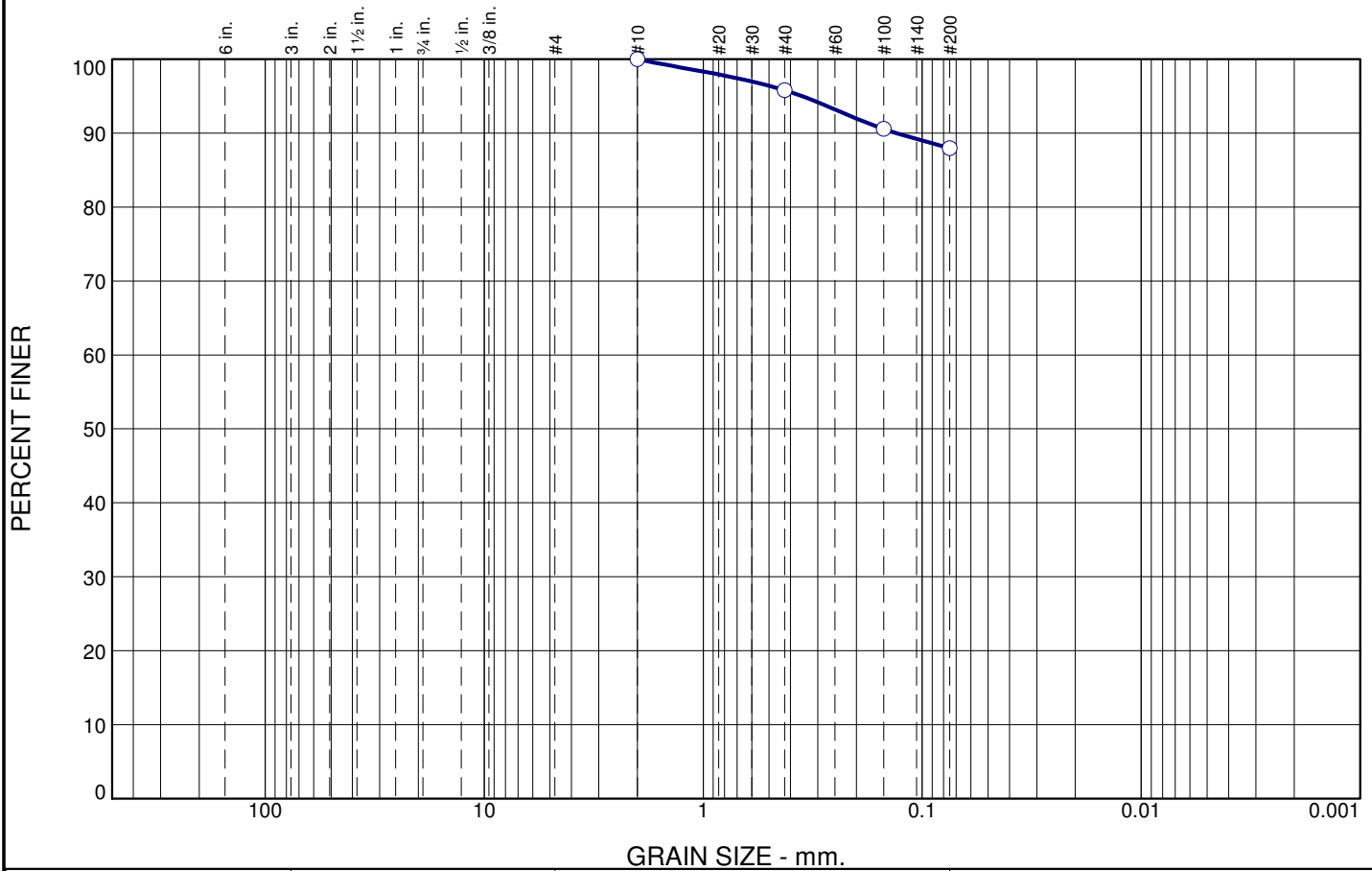
Project: Southern Avenue Phase III

Project No: F23050

Figure #4476C



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	4.2	7.9	87.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#40	95.8		
#100	90.6		
#200	87.9		

\* (no specification provided)

## Soil Description

Brown Fat CLAY, trace sand

## Atterberg Limits

PL= 25

LL= 77

PI= 52

## Coefficients

D<sub>90</sub>= 0.1313

D<sub>85</sub>=

D<sub>60</sub>=

D<sub>50</sub>=

D<sub>30</sub>=

D<sub>15</sub>=

D<sub>10</sub>=

C<sub>u</sub>=

C<sub>c</sub>=

## Classification

USCS= CH

AASHTO= A-7-6(51)

## Remarks

Moisture Content: 23.5%

Location: R-6

Sample Number: S-2

Depth: 2.0'-4.0'

Date: 11-08-24

HILLIS-CARNES ENGINEERING ASSOCIATES

FREDERICK, MD

Client: Arcland Property Company

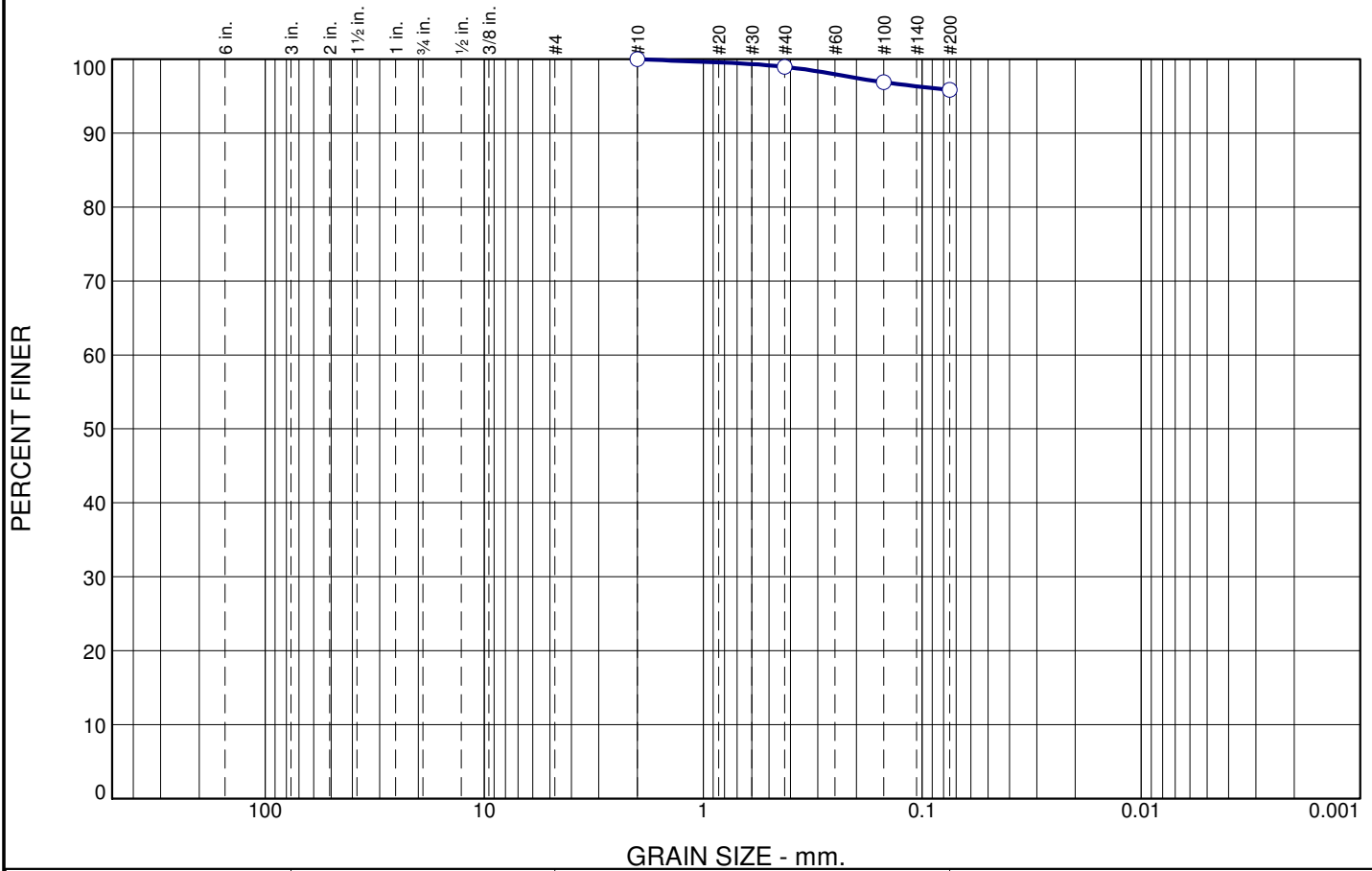
Project: Southern Avenue Phase III

Project No: F23050

Figure #4476D



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	1.0	3.2	95.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#40	99.0		
#100	96.9		
#200	95.8		

\* (no specification provided)

## Soil Description

Reddish brown Fat CLAY, trace sand

## Atterberg Limits

PL= 24 LL= 70 PI= 46

## Coefficients

D<sub>90</sub>= D<sub>85</sub>= D<sub>60</sub>=  
D<sub>50</sub>= D<sub>30</sub>= D<sub>15</sub>=  
D<sub>10</sub>= C<sub>u</sub>= C<sub>c</sub>=

## Classification

USCS= CH AASHTO= A-7-6(51)

## Remarks

Moisture Content: 31.8%

Location: R-7

Sample Number: S-1

Depth: 0.0'-2.0'

Date: 11-08-24

HILLIS-CARNES ENGINEERING ASSOCIATES

FREDERICK, MD

Client: Arcland Property Company

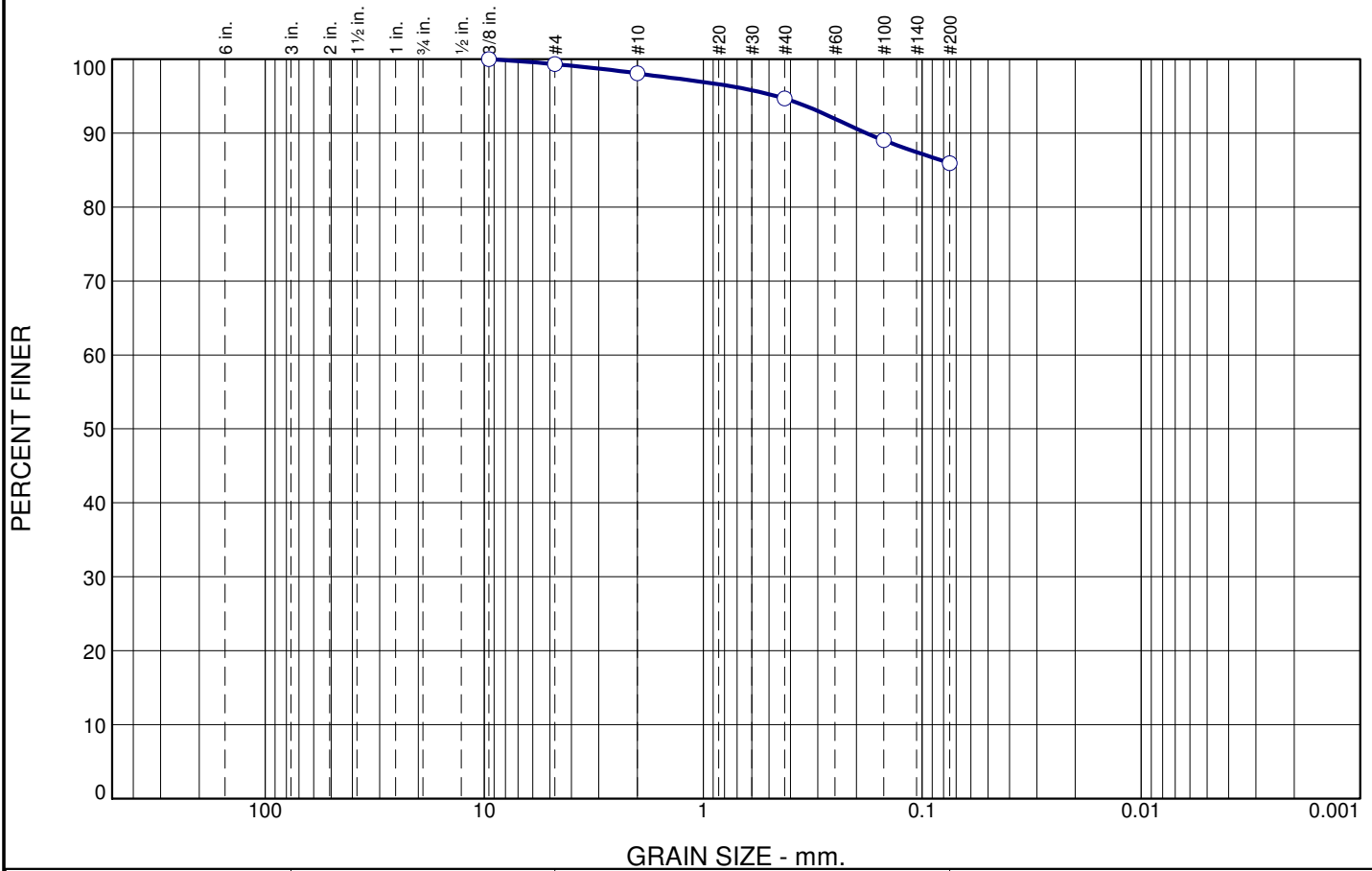
Project: Southern Avenue Phase III

Project No: F23050

Figure #4476E



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.7	1.2	3.4	8.8	85.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.375	100.0		
#4	99.3		
#10	98.1		
#40	94.7		
#100	89.0		
#200	85.9		

\* (no specification provided)

## Soil Description

Reddish brown Fat CLAY, trace sand, trace rock fragments

## Atterberg Limits

PL= 27 LL= 70 PI= 43

## Coefficients

D<sub>90</sub>= 0.1805 D<sub>85</sub>= D<sub>60</sub>=  
D<sub>50</sub>= D<sub>30</sub>= D<sub>15</sub>=  
D<sub>10</sub>= C<sub>u</sub>= C<sub>c</sub>=

## Classification

USCS= CH AASHTO= A-7-6(41)

## Remarks

Moisture Content: 25.3%

Location: R-8

Sample Number: S-5

Depth: 8.0'-10.0'

Date: 11-08-24

HILLIS-CARNES ENGINEERING ASSOCIATES

FREDERICK, MD

Client: Arcland Property Company

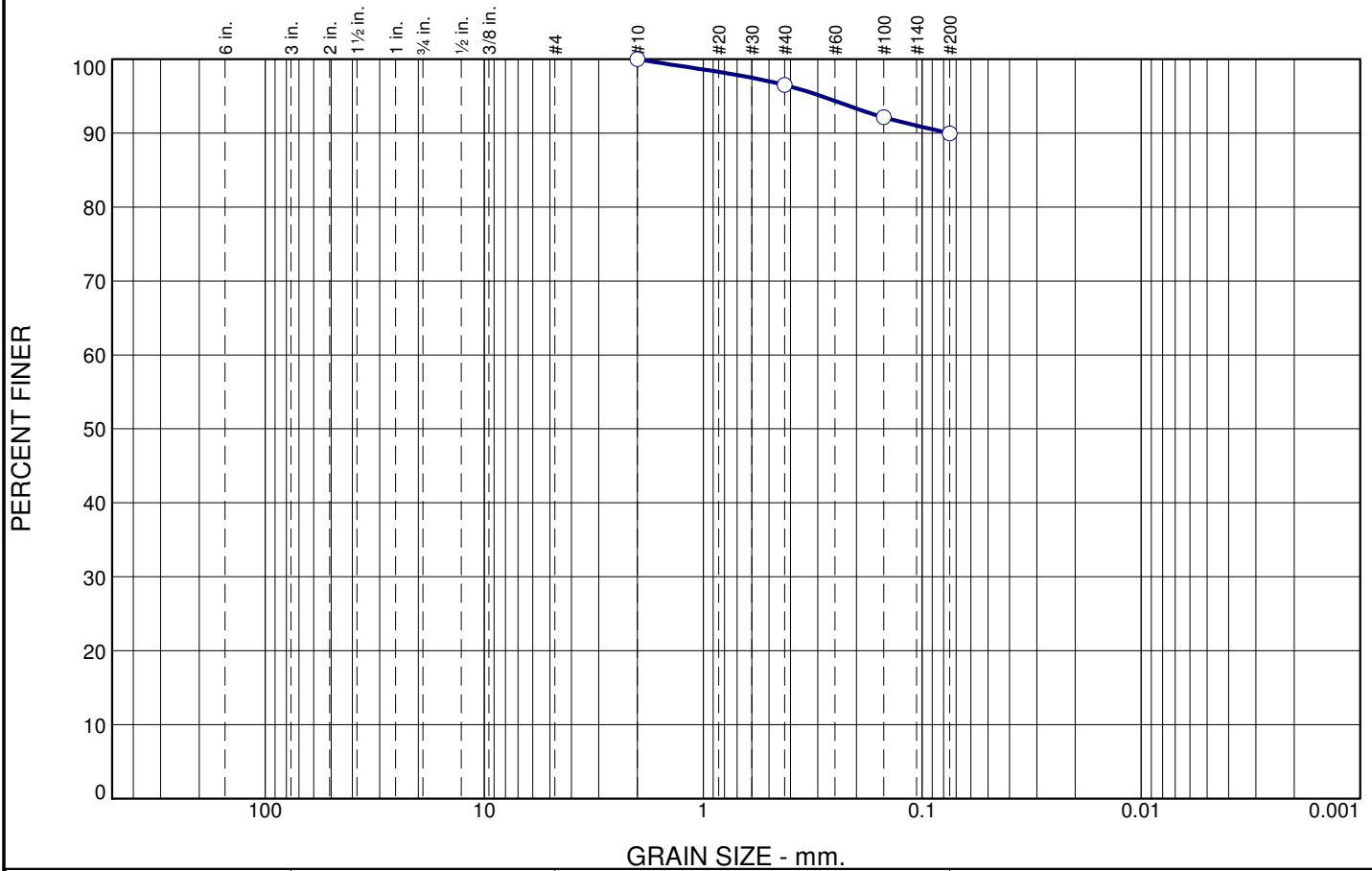
Project: Southern Avenue Phase III

Project No: F23050

Figure #4476F



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	3.5	6.5	90.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#40	96.5		
#100	92.1		
#200	90.0		

\* (no specification provided)

## Soil Description

Reddish brown Fat CLAY, trace sand

## Atterberg Limits

PL= 25 LL= 58 PI= 33

## Coefficients

D<sub>90</sub>= 0.0761 D<sub>85</sub>= D<sub>60</sub>=  
D<sub>50</sub>= D<sub>30</sub>= D<sub>15</sub>=  
D<sub>10</sub>= C<sub>u</sub>= C<sub>c</sub>=

## Classification

USCS= CH AASHTO= A-7-6(33)

## Remarks

Moisture Content: 20.4%

Location: R-9

Sample Number: S-5

Depth: 8.0'-10.0'

Date: 11-08-24

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FREDERICK, MD

Client: Arcland Property Company

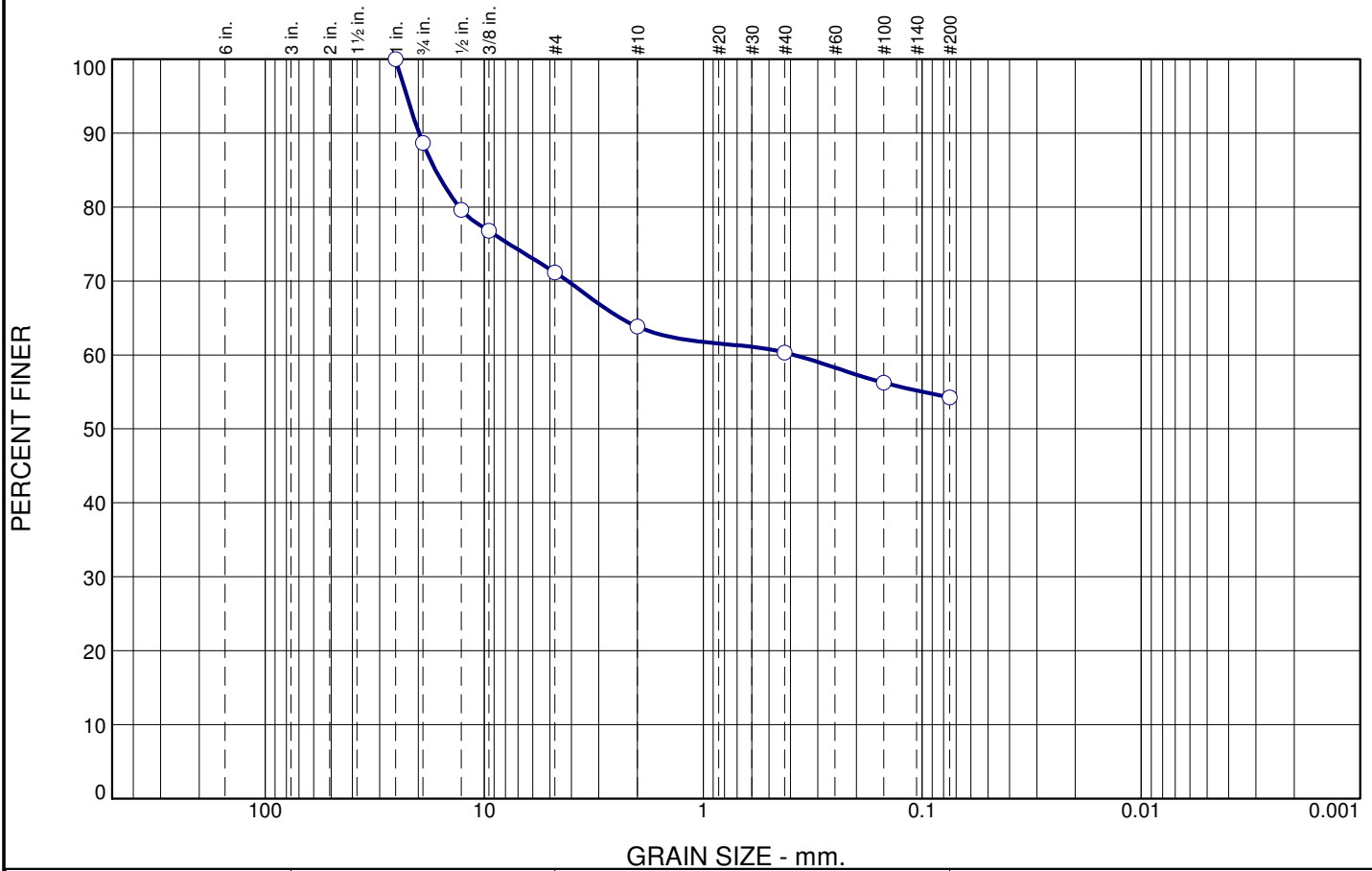
Project: Southern Avenue Phase III

Project No: F23050

Figure #4476G



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	11.3	17.5	7.4	3.5	6.1	54.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
0.75	88.7		
0.5	79.6		
0.375	76.8		
#4	71.2		
#10	63.8		
#40	60.3		
#100	56.2		
#200	54.2		

\* (no specification provided)

## Soil Description

Brown rocky Lean CLAY with sand

## Atterberg Limits

PL= 23

LL= 42

PI= 19

## Coefficients

D<sub>90</sub>= 19.8395

D<sub>85</sub>= 16.6829

D<sub>60</sub>= 0.3848

D<sub>50</sub>=

D<sub>30</sub>=

D<sub>15</sub>=

D<sub>10</sub>=

C<sub>u</sub>=

C<sub>c</sub>=

## Classification

USCS= CL

AASHTO= A-7-6(8)

## Remarks

Moisture Content: 14.7%

Location: R-10

Sample Number: S-5

Depth: 8.0'-10.0'

Date: 11-08-24

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FREDERICK, MD

Client: Arcland Property Company

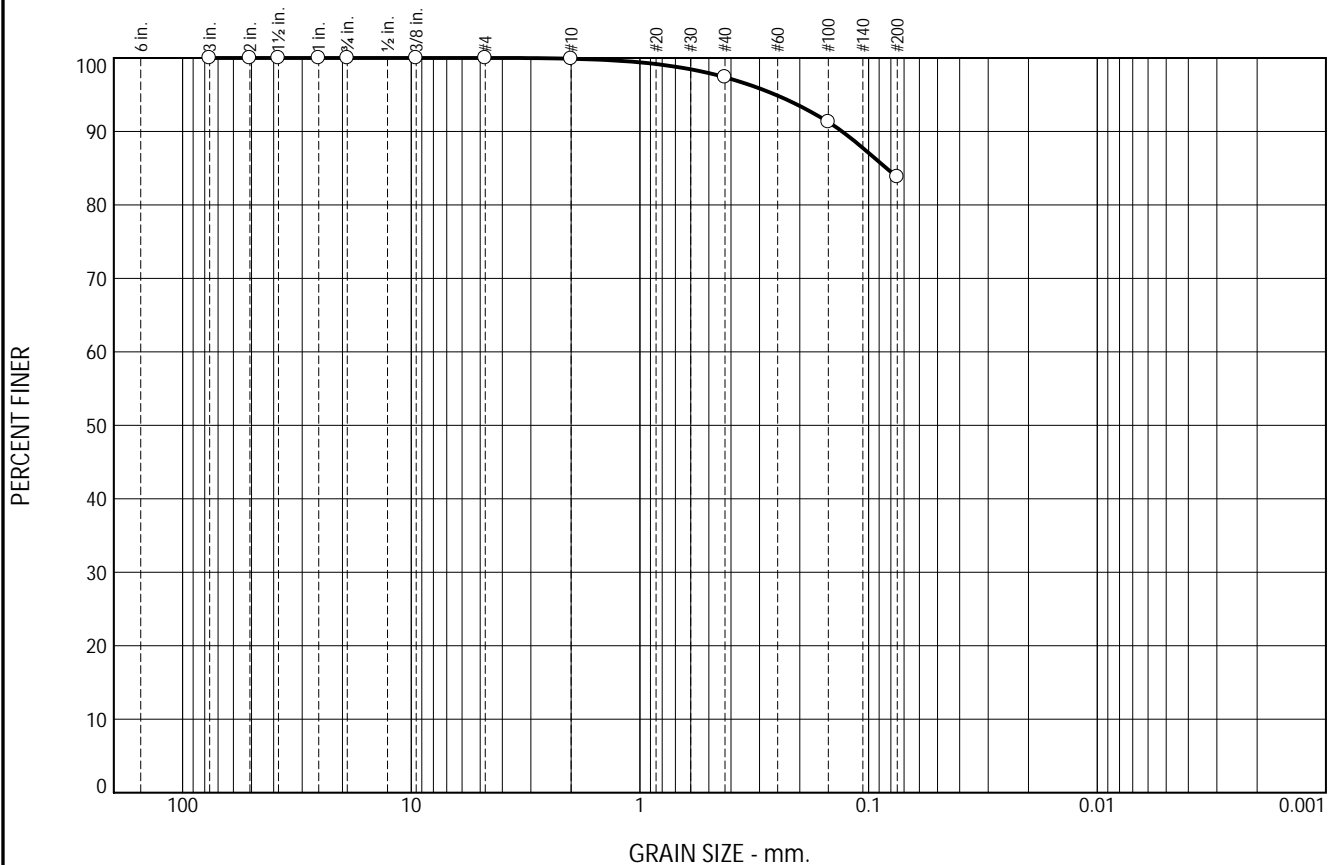
Project: Southern Avenue Phase III

Project No: F23050

Figure #4476H



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	2.5	13.6	83.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	99.9		
#40	97.4		
#100	91.3		
#200	83.8		

\* (no specification provided)

Soil Description		
Reddish brown with orange fat clay with sand		
<u>Atterberg Limits</u>		
PL= 20	LL= 50	PI= 30
<u>Coefficients</u>		
D <sub>90</sub> = 0.1305	D <sub>85</sub> = 0.0836	D <sub>60</sub> =
D <sub>50</sub> =	D <sub>30</sub> =	D <sub>15</sub> =
D <sub>10</sub> =	C <sub>u</sub> =	C <sub>c</sub> =
<u>Classification</u>		
USCS= CH	AASHTO=	A-7-6(26)
<u>Remarks</u>		
Moisture content: 18.2%		

Location: R-5. Tube

Sample Number: 2

Depth: 15.0'-17.0'

Date: 11/07/24

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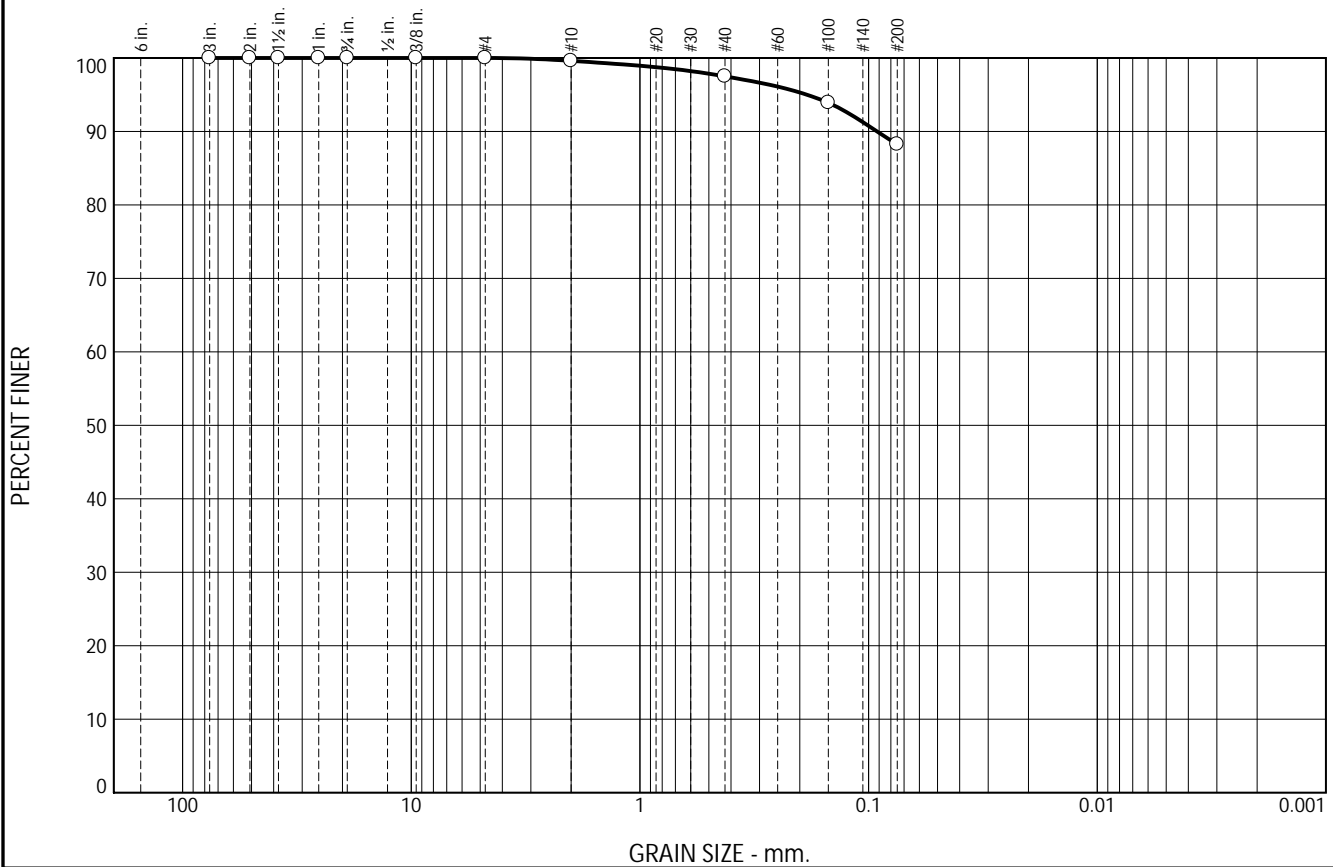
Client: Arcland Property Company  
Project: Southern Avenue Phase III

Project No: F23050

Figure



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.4	2.1	9.3	88.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	99.6		
#40	97.5		
#100	93.9		
#200	88.2		

\* (no specification provided)

Soil Description		
Brown with orange & gray lean clay		
<u>Atterberg Limits</u>		
PL= 19	LL= 46	PI= 27
<u>Coefficients</u>		
D <sub>90</sub> = 0.0919	D <sub>85</sub> =	D <sub>60</sub> =
D <sub>50</sub> =	D <sub>30</sub> =	D <sub>15</sub> =
D <sub>10</sub> =	C <sub>u</sub> =	C <sub>c</sub> =
<u>Classification</u>		
USCS= CL	AASHTO=	A-7-6(25)
<u>Remarks</u>		
Moisture content: 17.9%		

Location: R-6. Tube

Sample Number: 3

Depth: 15.0'-17.0'

Date: 11/07/24

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Annapolis Junction, MD

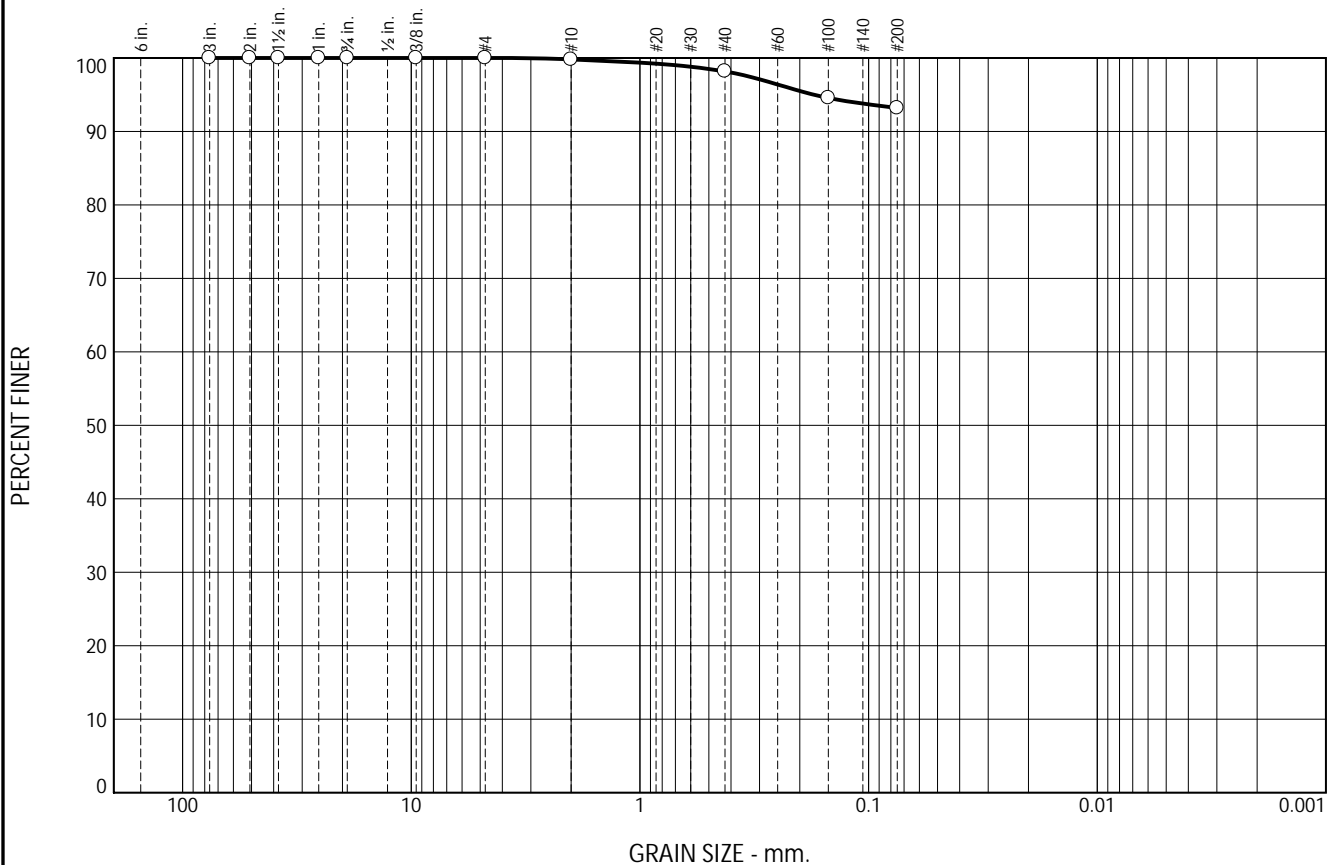
Client: Arcland Property Company  
Project: Southern Avenue Phase III

Project No: F23050

Figure



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.2	1.6	5.0	93.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	99.8		
#40	98.2		
#100	94.6		
#200	93.2		

\* (no specification provided)

Soil Description		
Reddish brown with gray fat clay		
<u>Atterberg Limits</u>		
PL= 26	LL= 72	PI= 46
<u>Coefficients</u>		
D <sub>90</sub> =	D <sub>85</sub> =	D <sub>60</sub> =
D <sub>50</sub> =	D <sub>30</sub> =	D <sub>15</sub> =
D <sub>10</sub> =	C <sub>u</sub> =	C <sub>c</sub> =
<u>Classification</u>		
USCS= CH	AASHTO=	A-7-6(49)
<u>Remarks</u>		
Moisture content: 32.1%		

Location: R-7. Tube  
Sample Number: 4 Depth: 4.0'-6.0'

Date: 11/07/24

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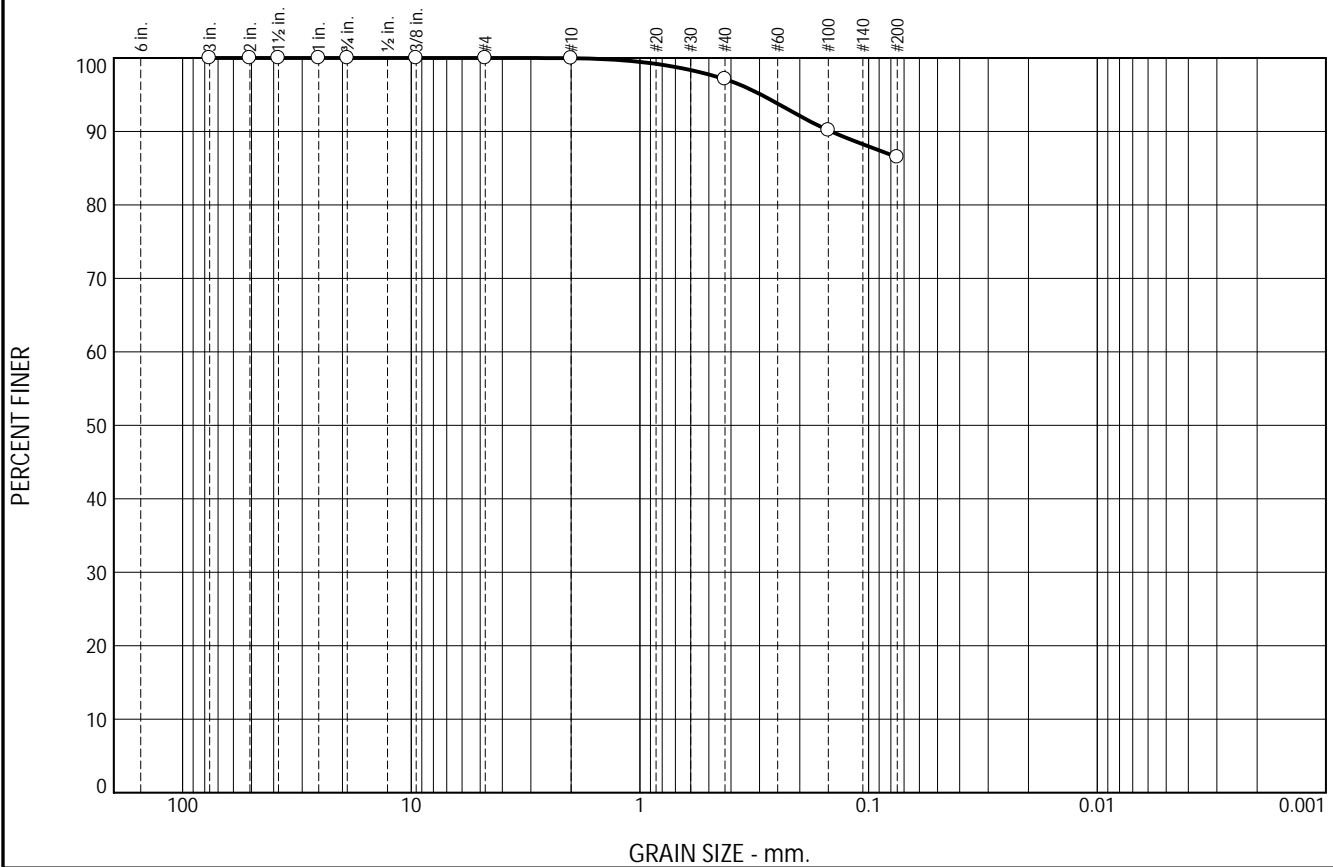
Client: Arcland Property Company  
Project: Southern Avenue Phase III

Project No: F23050

Figure



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	2.9	10.6	86.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#40	97.1		
#100	90.2		
#200	86.5		

\* (no specification provided)

Soil Description		
Gray with red fat clay		
<u>Atterberg Limits</u>		
PL= 26	LL= 79	PI= 53
<u>Coefficients</u>		
D <sub>90</sub> = 0.1460	D <sub>85</sub> =	D <sub>60</sub> =
D <sub>50</sub> =	D <sub>30</sub> =	D <sub>15</sub> =
D <sub>10</sub> =	C <sub>u</sub> =	C <sub>c</sub> =
<u>Classification</u>		
USCS= CH	AASHTO=	A-7-6(51)
<u>Remarks</u>		
Moisture content: 28.3%		

Location: R-10. Tube  
Sample Number: 5 Depth: 15.0'-17.0'

Date: 11/07/24

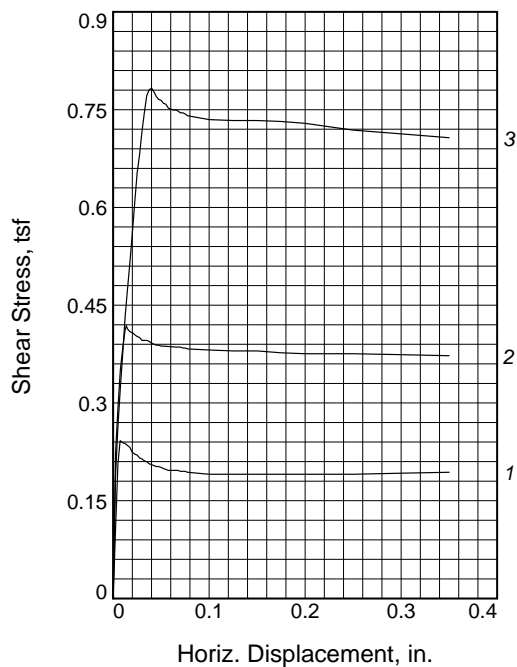
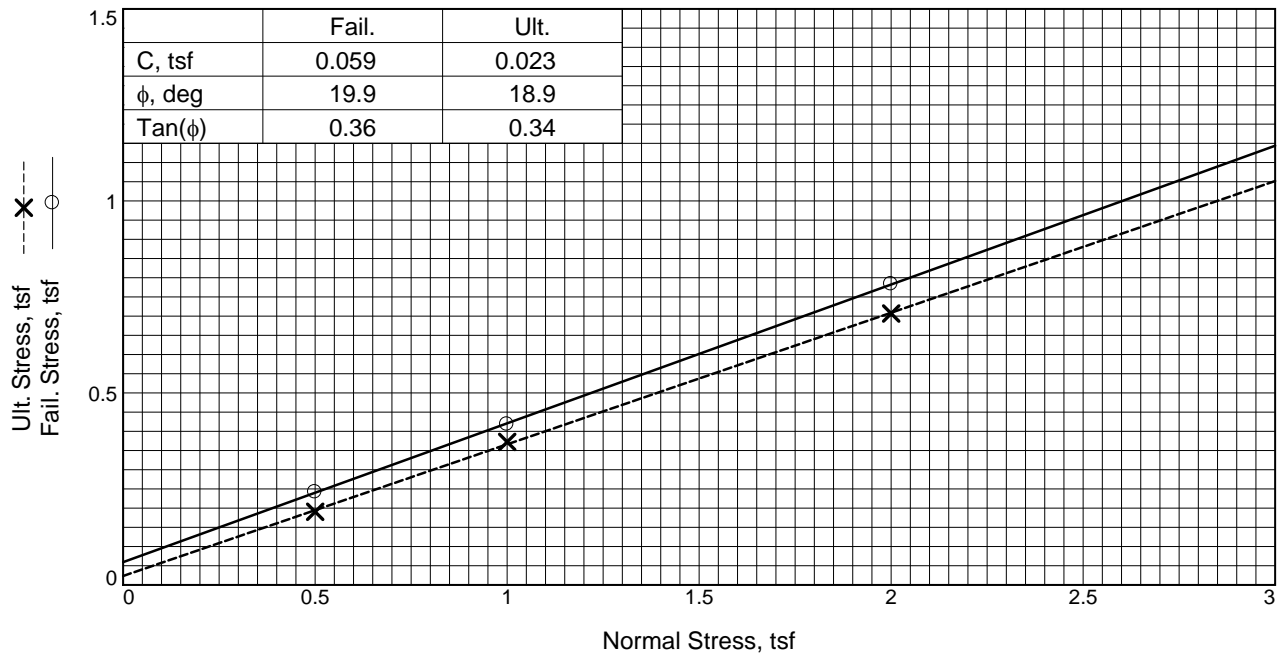
**HILLIS-CARNES  
ENGINEERING ASSOCIATES, INC.**  
Annapolis Junction, MD

Client: Arcland Property Company  
Project: Southern Avenue Phase III

Project No: F23050

Figure





Sample No.		1	2	3
Initial	Water Content, %	19.5	19.5	19.5
	Dry Density, pcf	110.2	110.2	110.2
	Saturation, %	96.0	96.0	96.0
	Void Ratio	0.5579	0.5579	0.5579
	Diameter, in.	2.50	2.50	2.50
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	21.3	21.3	21.3
	Dry Density, pcf	110.4	110.7	111.6
	Saturation, %	105.5	106.5	109.0
	Void Ratio	0.5556	0.5503	0.5378
	Diameter, in.	2.50	2.50	2.50
	Height, in.	1.00	0.99	0.99
Normal Stress, tsf		0.500	1.000	2.000
Fail. Stress, tsf		0.242	0.418	0.783
Displacement, in.		0.01	0.01	0.04
Ult. Stress, tsf		0.191	0.373	0.707
Displacement, in.		0.25	0.35	0.35
Strain rate, %/min.		0.01	0.01	0.01

**Sample Type:** undisturbed

**Description:** Reddish brown with orange fat clay  
with sand

**LL=** 50      **PL=** 20      **PI=** 30

**Assumed Specific Gravity=** 2.75

**Remarks:** Shear plane pre-split prior to testing

Strain Rate: 0.00035 in/min

Report Date: 11/15/2024

**Figure** \_\_\_\_\_

**Client:** Arcland Property Company

**Project:** Southern Avenue Phase III

**Location:** R-5. Tube

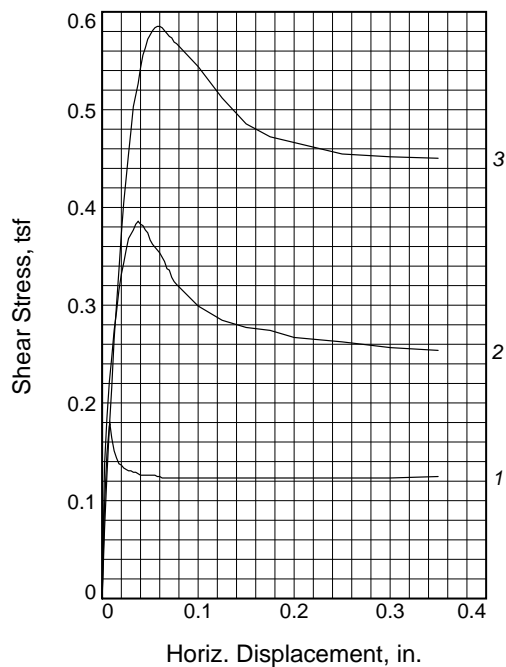
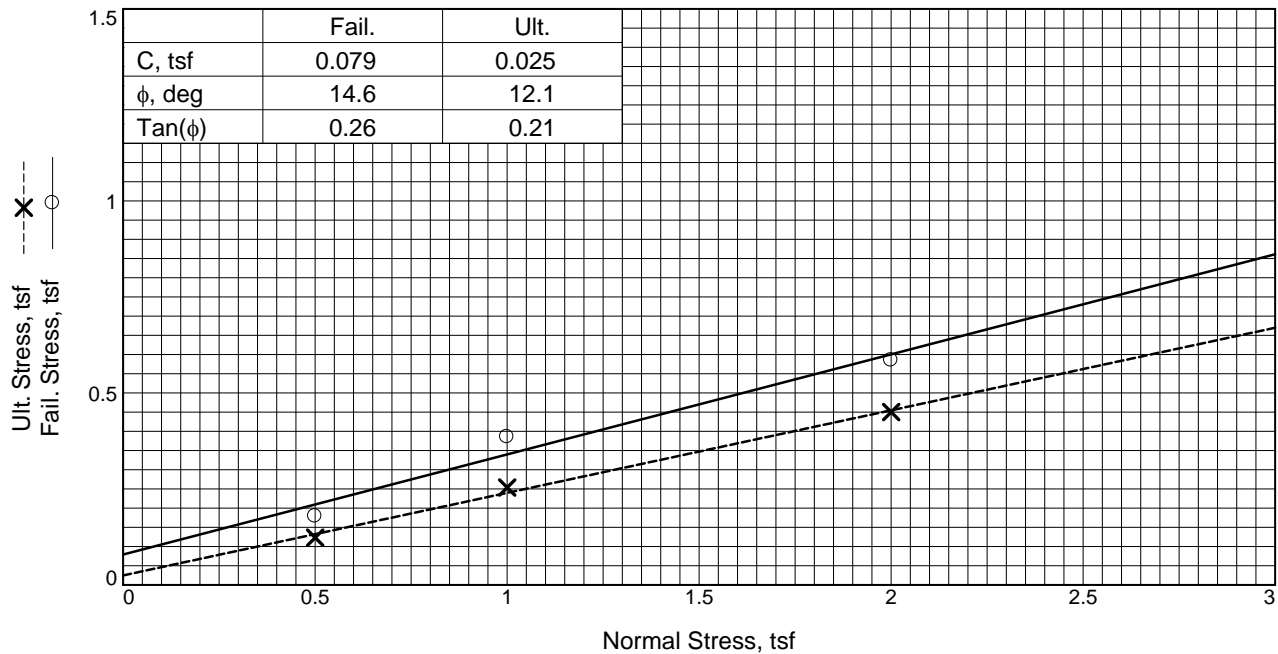
**Sample Number:** 2      **Depth:** 15.0'-17.0'

**Proj. No.:** F23050

**Date Sampled:**

DIRECT SHEAR TEST REPORT  
HILLIS-CARNES ENGINEERING ASSOCIATES, INC.  
Annapolis Junction, MD





Sample No.		1	2	3
Initial	Water Content, %	29.2	29.2	29.2
	Dry Density, pcf	94.5	94.5	94.5
	Saturation, %	99.1	99.1	99.1
	Void Ratio	0.8020	0.8020	0.8020
	Diameter, in.	2.50	2.50	2.50
	Height, in.	1.01	1.01	1.01
At Test	Water Content, %	29.9	29.9	29.9
	Dry Density, pcf	94.7	95.4	96.7
	Saturation, %	102.1	103.7	107.0
	Void Ratio	0.7979	0.7851	0.7610
	Diameter, in.	2.50	2.50	2.50
	Height, in.	1.00	1.00	0.98
Normal Stress, tsf		0.500	1.000	2.000
Fail. Stress, tsf		0.179	0.386	0.585
Displacement, in.		0.01	0.04	0.06
Ult. Stress, tsf		0.123	0.254	0.450
Displacement, in.		0.30	0.35	0.35
Strain rate, %/min.		0.01	0.01	0.01

**Sample Type:** undisturbed

**Description:** Reddish brown with gray fat clay

**LL=** 72

**PL=** 26

**PI=** 46

**Specific Gravity=** 2.727

**Remarks:** Shear plane pre-split prior to testing

Strain Rate: 0.00035 in/min

Report Date: 11/19/2024

**Figure** \_\_\_\_\_

**Client:** Arcland Property Company

**Project:** Southern Avenue Phase III

**Location:** R-7. Tube

**Sample Number:** 4

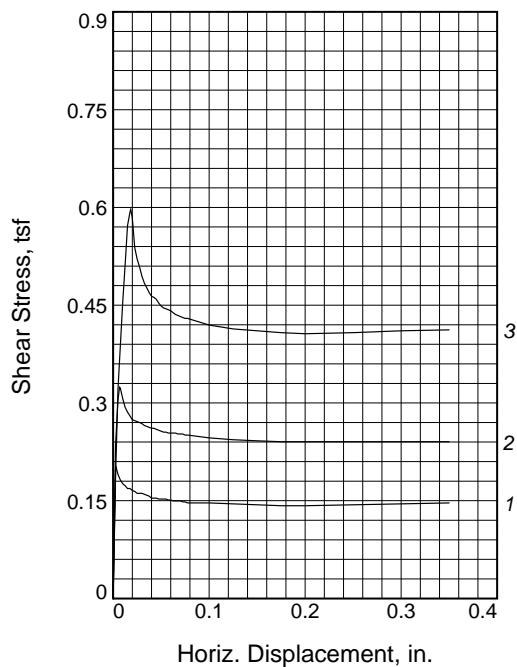
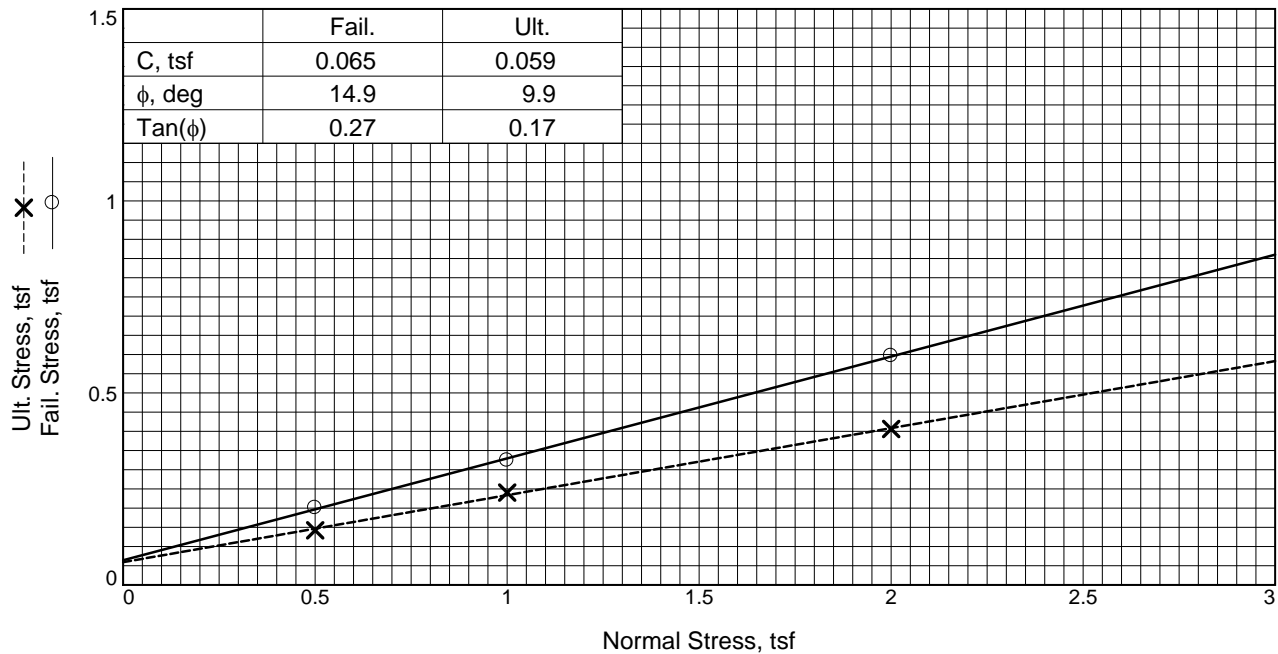
**Depth:** 4.0'-6.0'

**Proj. No.:** F23050

**Date Sampled:**

DIRECT SHEAR TEST REPORT  
HILLIS-CARNES ENGINEERING ASSOCIATES, INC.  
Annapolis Junction, MD





Sample No.		1	2	3
Initial	Water Content, %	28.2	28.2	28.2
	Dry Density, pcf	97.1	97.1	97.1
	Saturation, %	98.0	98.0	98.0
	Void Ratio	0.8105	0.8105	0.8105
	Diameter, in.	2.50	2.50	2.50
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	29.0	29.0	29.0
	Dry Density, pcf	97.2	97.6	98.3
	Saturation, %	101.2	101.9	103.6
	Void Ratio	0.8085	0.8027	0.7895
	Diameter, in.	2.50	2.50	2.50
	Height, in.	1.00	1.00	0.99
Normal Stress, tsf		0.500	1.000	2.000
Fail. Stress, tsf		0.201	0.324	0.597
Displacement, in.		0.00	0.01	0.02
Ult. Stress, tsf		0.142	0.241	0.406
Displacement, in.		0.20	0.17	0.20
Strain rate, %/min.		0.01	0.01	0.01

**Sample Type:** undisturbed

**Description:** Gray with red fat clay

**LL=** 79

**PL=** 26

**PI=** 53

**Specific Gravity=** 2.817

**Remarks:** Shear plane pre-split prior to testing

Strain Rate: 0.00035 in/min

Report Date: 11/22/2024

**Figure** \_\_\_\_\_

**Client:** Arcland Property Company

**Project:** Southern Avenue Phase III

**Location:** R-10. Tube

**Sample Number:** 5

**Depth:** 15.0'-17.0'

**Proj. No.:** F23050

**Date Sampled:**

DIRECT SHEAR TEST REPORT  
HILLIS-CARNES ENGINEERING ASSOCIATES, INC.  
Annapolis Junction, MD



The figure consists of two vertically stacked plots sharing a common x-axis representing Applied Pressure in tons per square foot (tsf) on a logarithmic scale from 0.1 to 10.

**Top Plot: Void Ratio vs. Applied Pressure**

The y-axis represents the Void Ratio, ranging from 0.56 to 0.96. Two data series are plotted, both showing a decrease in void ratio as applied pressure increases. The upper curve represents a sample with a higher initial void ratio, and the lower curve represents a sample with a lower initial void ratio. A straight line is drawn tangent to the upper curve at approximately 1 tsf, indicating the recompression path.

Applied Pressure (tsf)	Void Ratio (Upper Curve)	Void Ratio (Lower Curve)
0.2	0.92	0.77
0.5	0.91	0.74
1.0	0.88	0.71
2.0	0.83	0.67
5.0	0.78	0.64
10.0	0.71	0.62
20.0	0.62	0.61

**Bottom Plot: Coefficient of Vertical Consolidation ( $C_v$ ) vs. Applied Pressure**

The y-axis represents the Coefficient of Vertical Consolidation ( $C_v$ ) in ft.<sup>2</sup>/day, ranging from 0 to 2.0. Two data series are plotted. The upper series shows a sharp decrease in  $C_v$  as pressure increases, starting from approximately 1.7 ft.<sup>2</sup>/day at 0.2 tsf and dropping to near zero by 1.0 tsf. The lower series shows a much lower and relatively constant  $C_v$  value, around 0.05 ft.<sup>2</sup>/day, across the entire pressure range.

Applied Pressure (tsf)	$C_v$ (Upper Series)	$C_v$ (Lower Series)
0.2	1.7	0.05
0.5	0.05	0.05
1.0	0.05	0.05
2.0	0.05	0.05
5.0	0.05	0.05
10.0	0.05	0.05
20.0	0.05	0.05

Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (tsf)	P <sub>C</sub> (tsf)	C <sub>C</sub>	C <sub>r</sub>	Initial Void Ratio
Saturation	Moisture									
101.4 %	34.2 %	88.7	72	46	2.727		1.6	0.27	0.08	0.919

MATERIAL DESCRIPTION	USCS	AASHTO
Reddish brown with gray fat clay	CH	A-7-6(49)

**HILLIS-CARNES ENGINEERING ASSOCIATES, INC.**  
Annapolis Junction, MD

0.125 tsf required to prevent swell  
Report Date: 11/22/2024

### Figure



# Dial Reading vs. Time

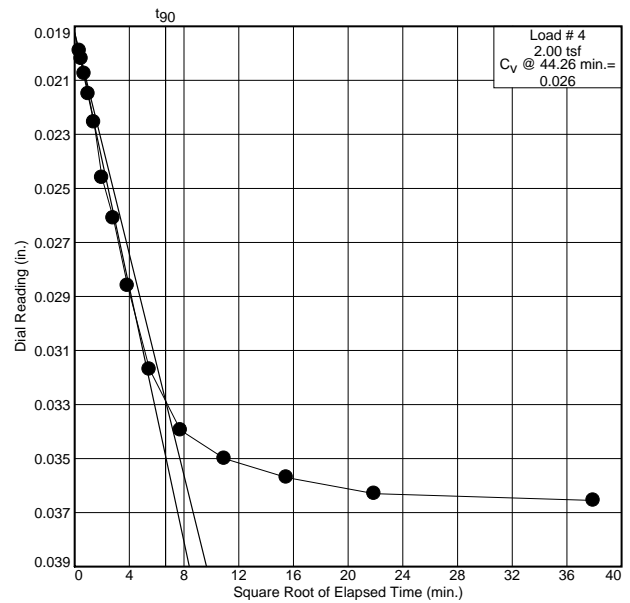
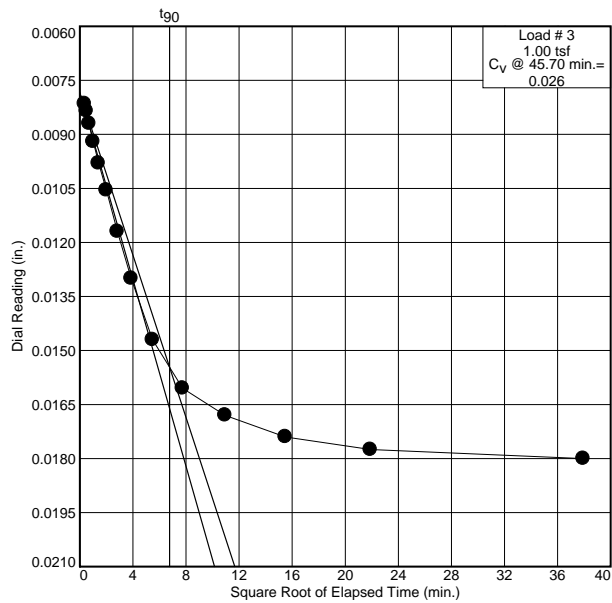
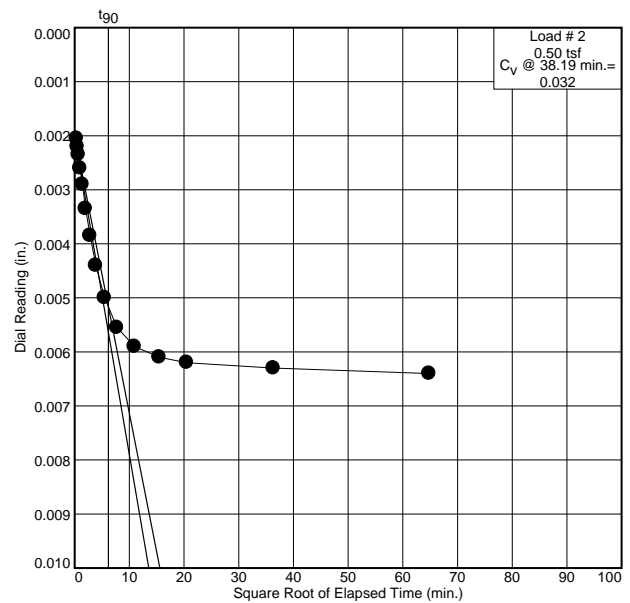
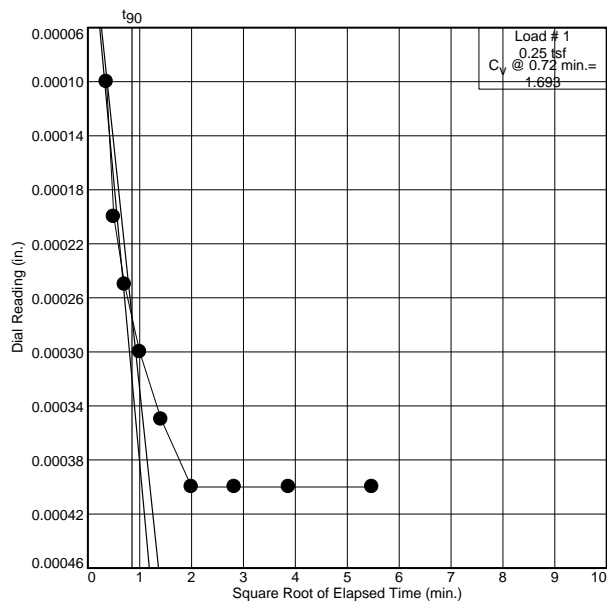
Project No.: F23050

Project: Southern Avenue Phase III

Location: R-7. Tube

Depth: 4.0'-6.0'

Sample Number: 4



**HILLIS-CARNES ENGINEERING ASSOCIATES, INC.**  
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Figure



# Dial Reading vs. Time

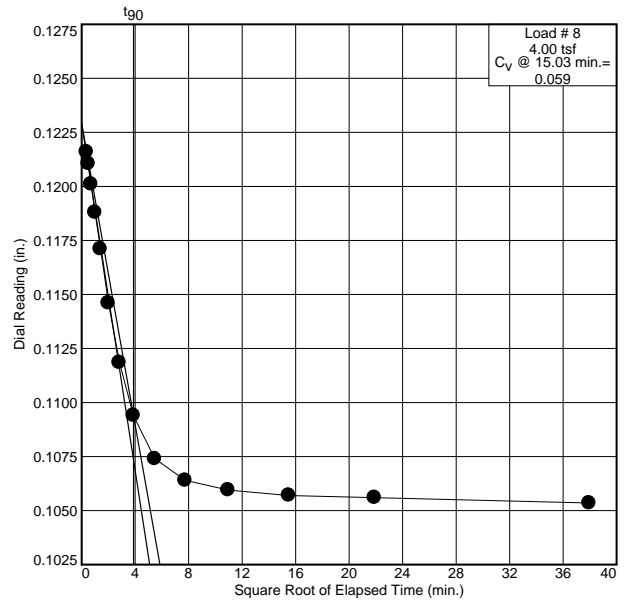
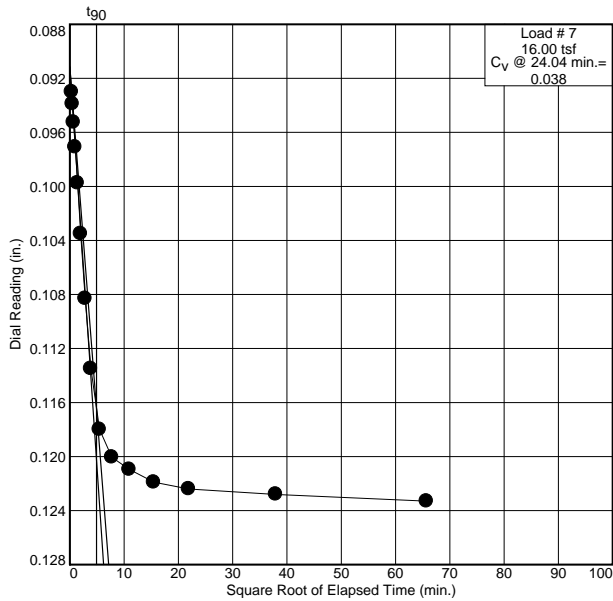
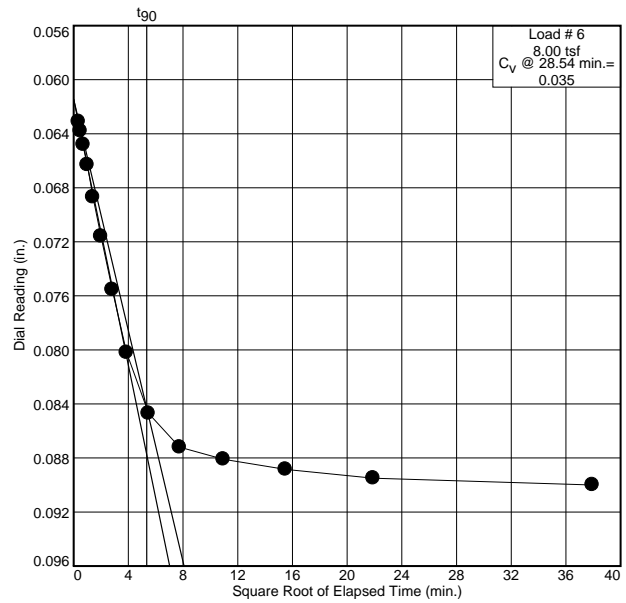
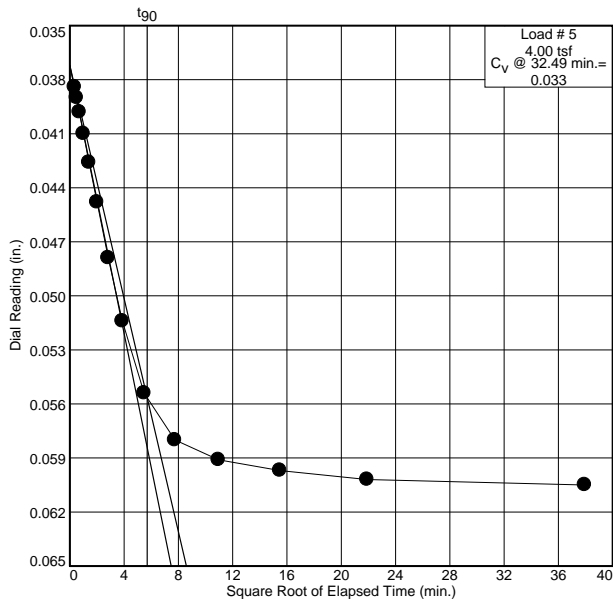
Project No.: F23050

Project: Southern Avenue Phase III

Location: R-7. Tube

Depth: 4.0'-6.0'

Sample Number: 4



**HILLIS-CARNES ENGINEERING ASSOCIATES, INC.**  
**Annapolis Junction, MD**

Figure



# Dial Reading vs. Time

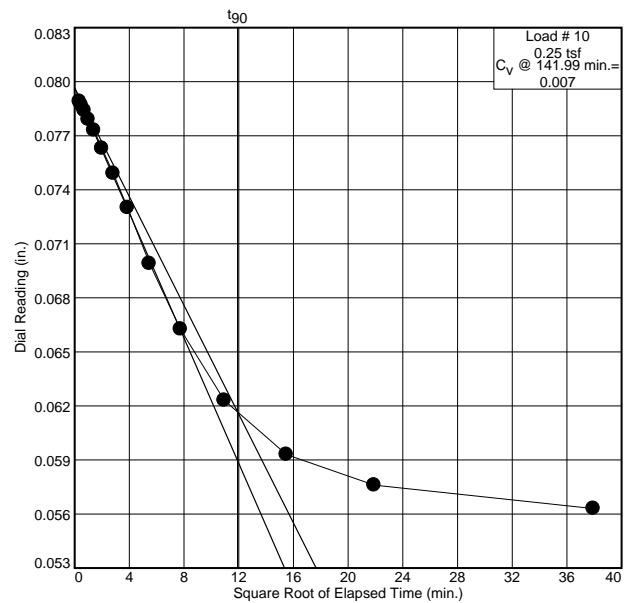
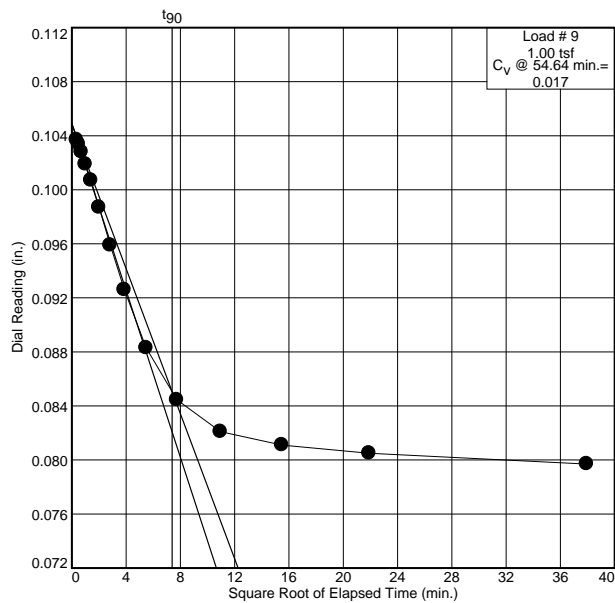
Project No.: F23050

Project: Southern Avenue Phase III

Location: R-7. Tube

Depth: 4.0'-6.0'

Sample Number: 4

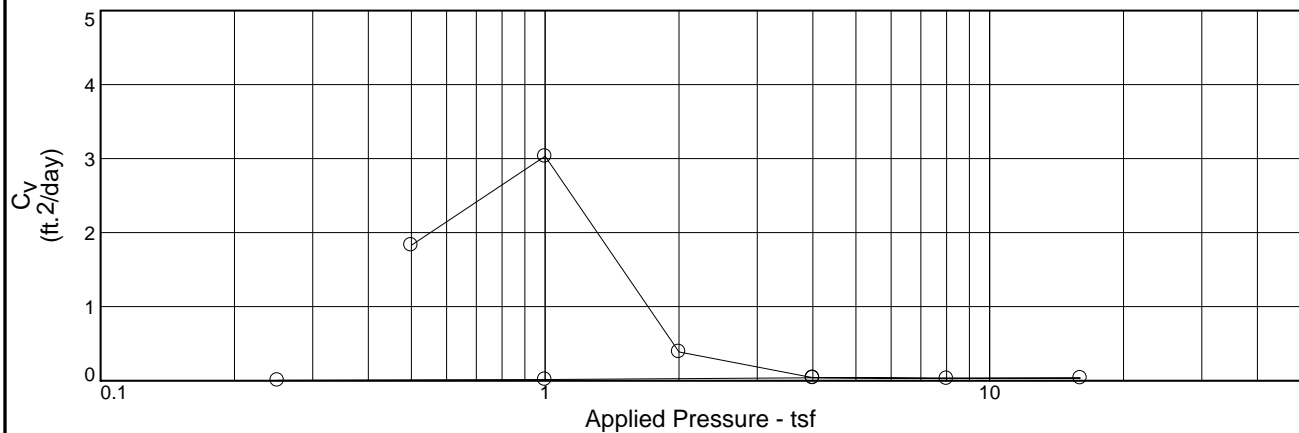
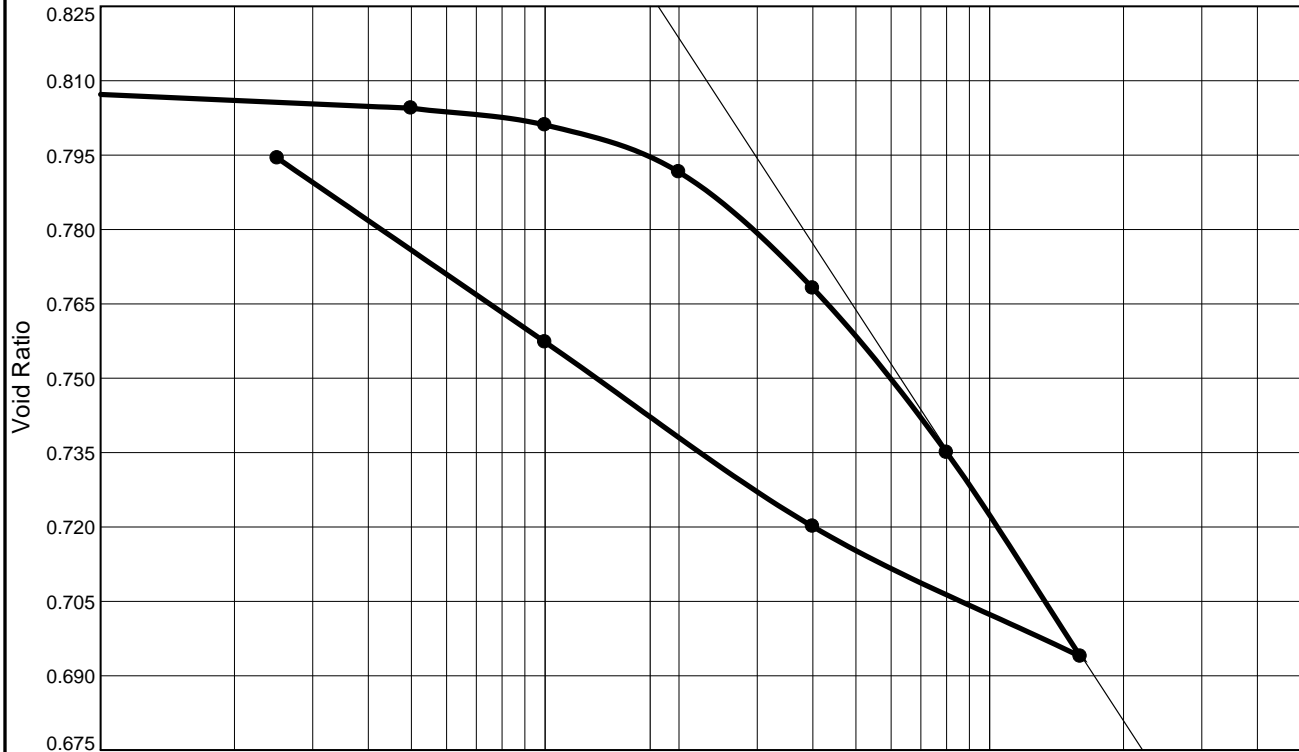


**HILLIS-CARNES ENGINEERING ASSOCIATES, INC.**  
**Annapolis Junction, MD**

Figure



# CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (tsf)	P <sub>c</sub> (tsf)	C <sub>c</sub>	C <sub>r</sub>	Initial Void Ratio
Saturation	Moisture									
96.7 %	27.7 %	97.3	79	53	2.817		3.3	0.14	0.06	0.807

MATERIAL DESCRIPTION								USCS	AASHTO
Gray with red fat clay								CH	A-7-6(51)

<b>Project No.</b> F23050 <b>Client:</b> Arcland Property Company			<b>Remarks:</b> 0.25 tsf required to prevent swell Report Date: 11/22/2024
<b>Project:</b> Southern Avenue Phase III			
<b>Location:</b> R-10. Tube	<b>Depth:</b> 15.0'-17.0'	<b>Sample Number:</b> 5	
<b>HILLIS-CARNES ENGINEERING ASSOCIATES, INC.</b> <b>Annapolis Junction, MD</b>			<b>Figure</b>

Figure



# Dial Reading vs. Time

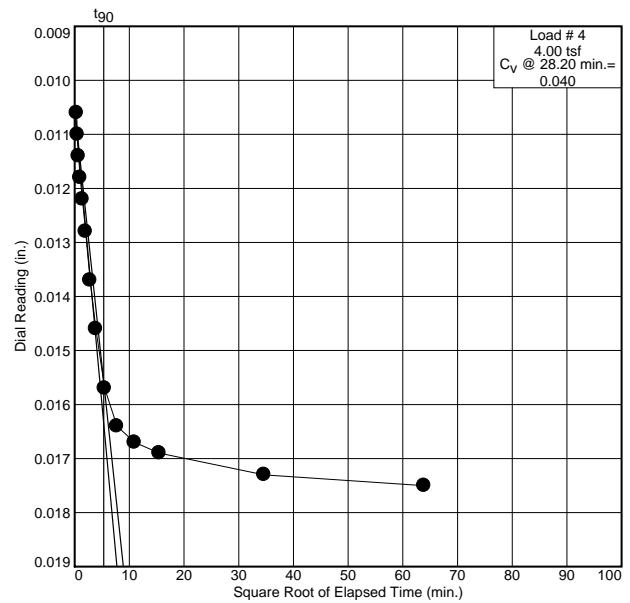
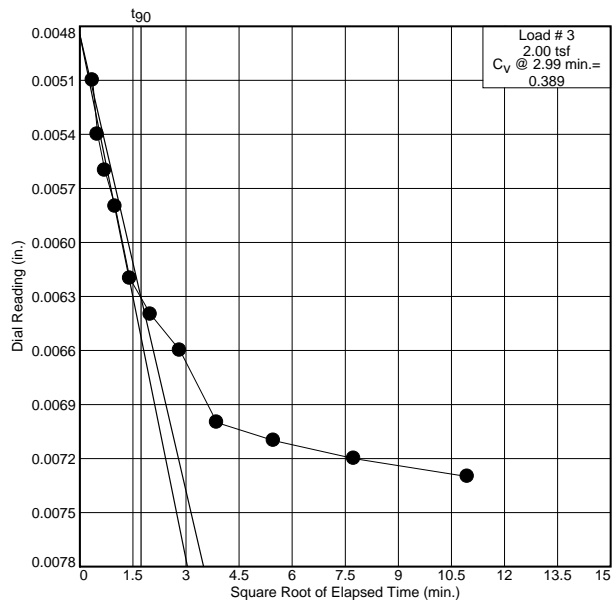
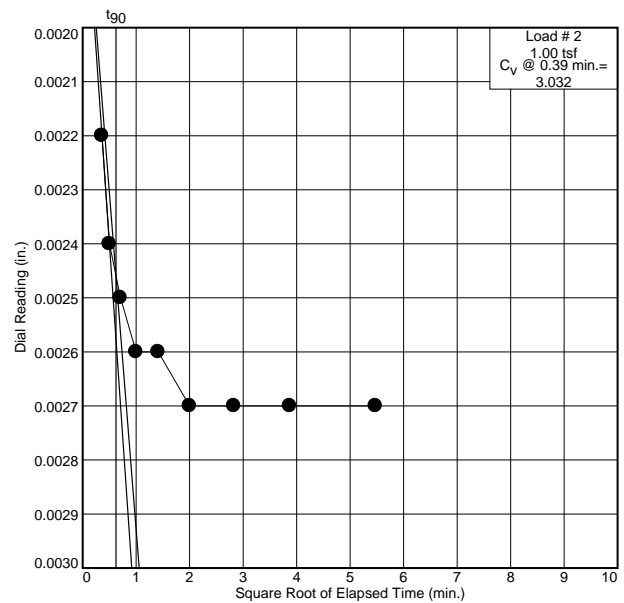
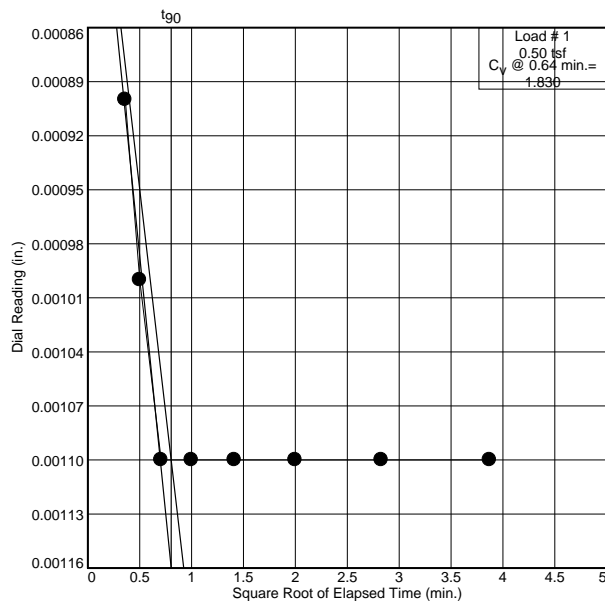
Project No.: F23050

Project: Southern Avenue Phase III

Location: R-10. Tube

Depth: 15.0'-17.0'

Sample Number: 5



**HILLIS-CARNES ENGINEERING ASSOCIATES, INC.**  
Annapolis Junction, MD

Figure



# Dial Reading vs. Time

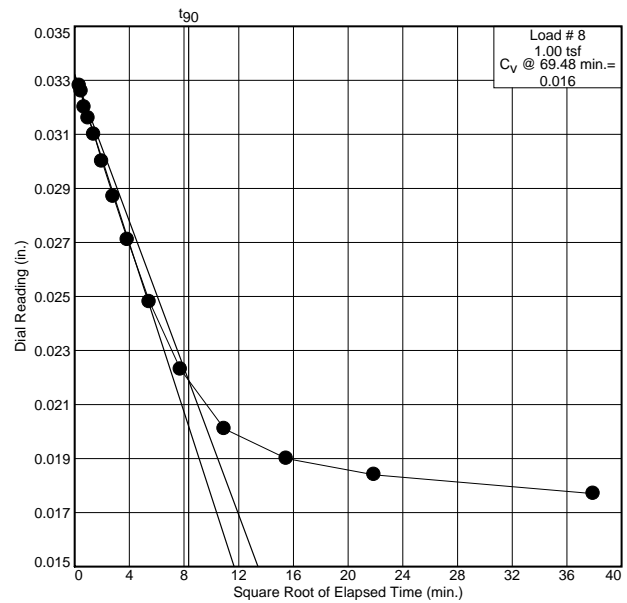
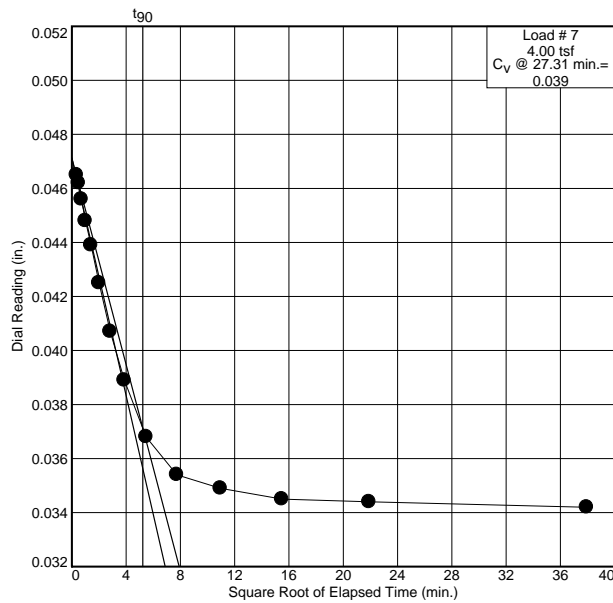
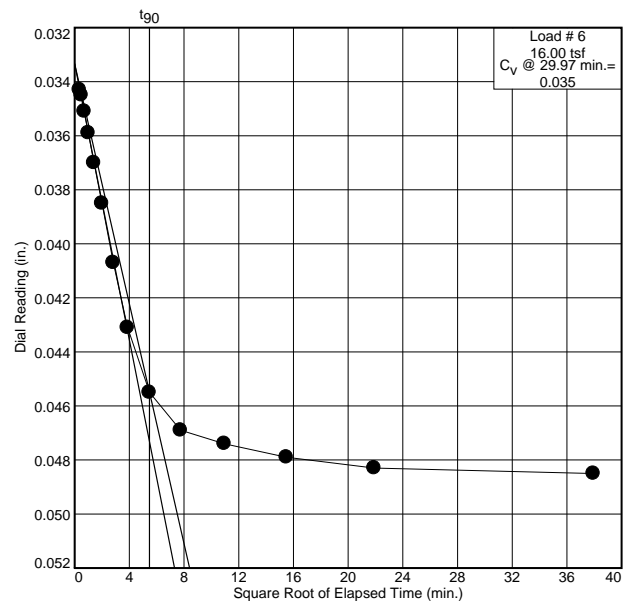
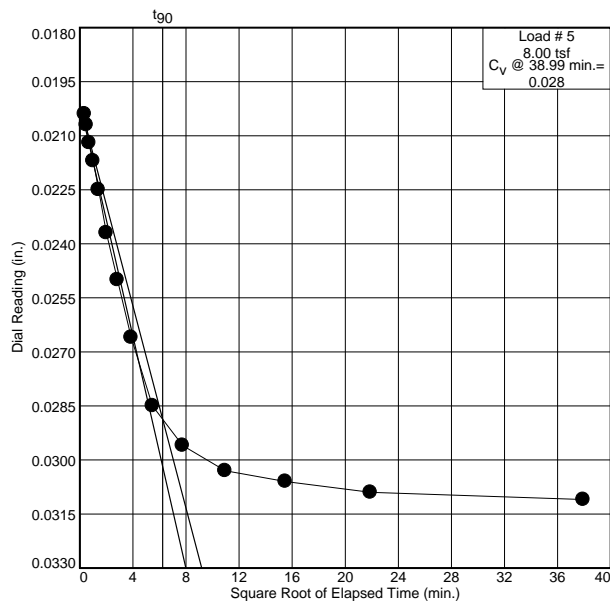
Project No.: F23050

Project: Southern Avenue Phase III

Location: R-10. Tube

Depth: 15.0'-17.0'

Sample Number: 5



**HILLIS-CARNES ENGINEERING ASSOCIATES, INC.**  
**Annapolis Junction, MD**

Figure



## Dial Reading vs. Time

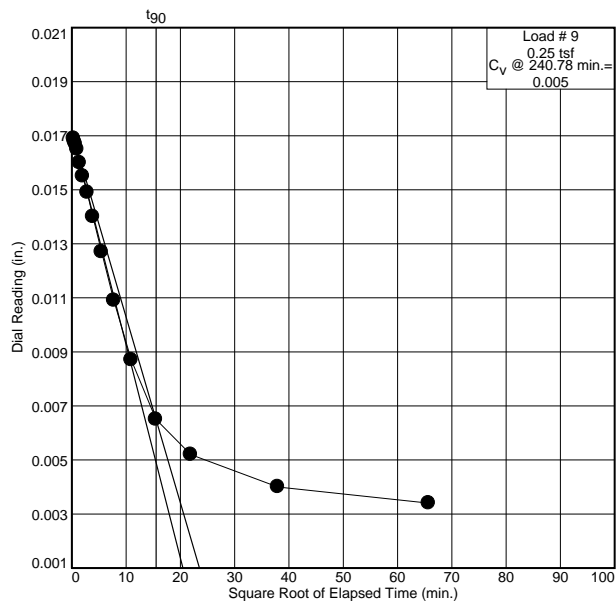
Project No.: F23050

Project: Southern Avenue Phase III

Location: R-10. Tube

Depth: 15.0'-17.0'

Sample Number: 5



**HILLIS-CARNES ENGINEERING ASSOCIATES, INC.**  
**Annapolis Junction, MD**

Figure



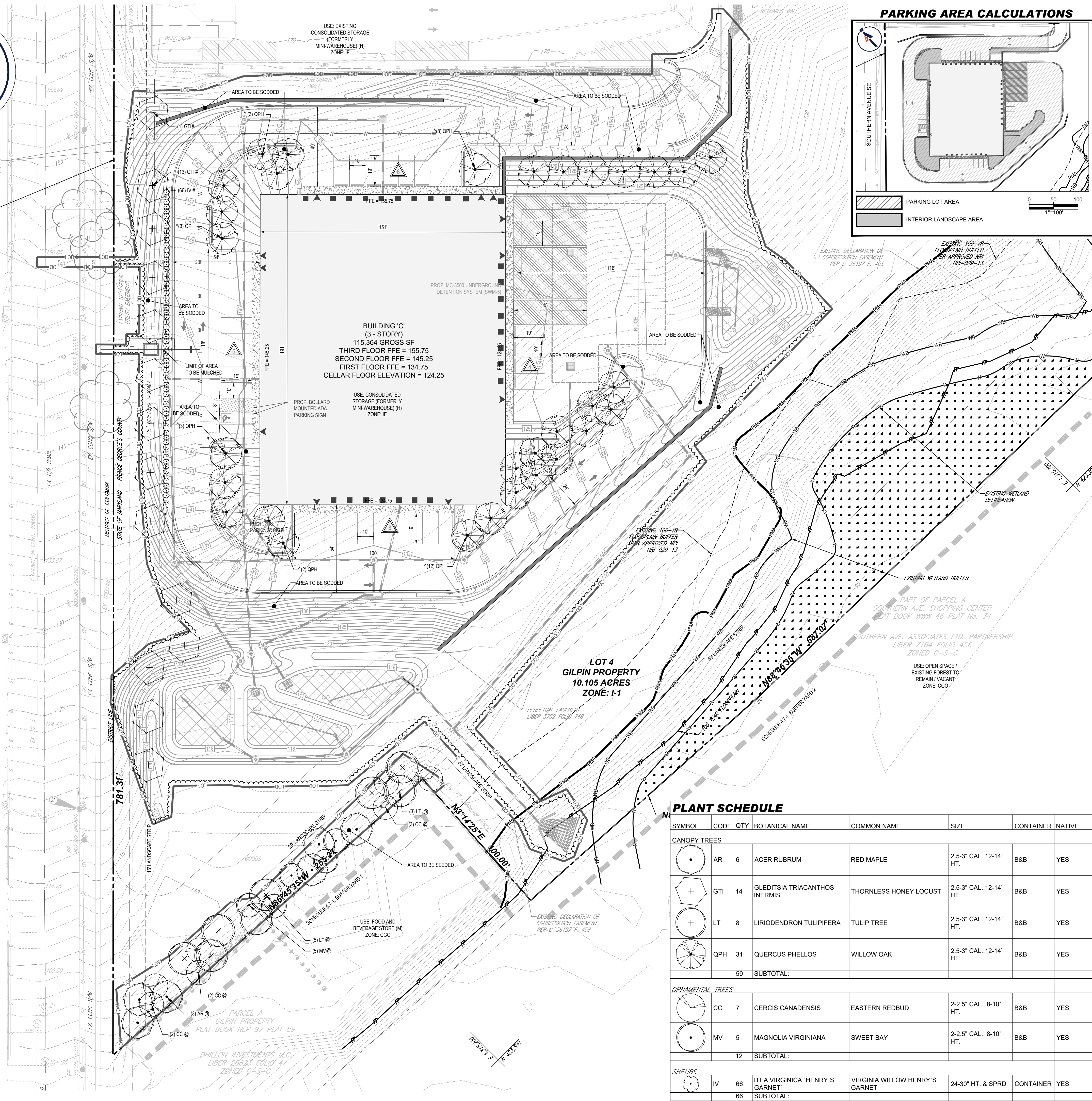
SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

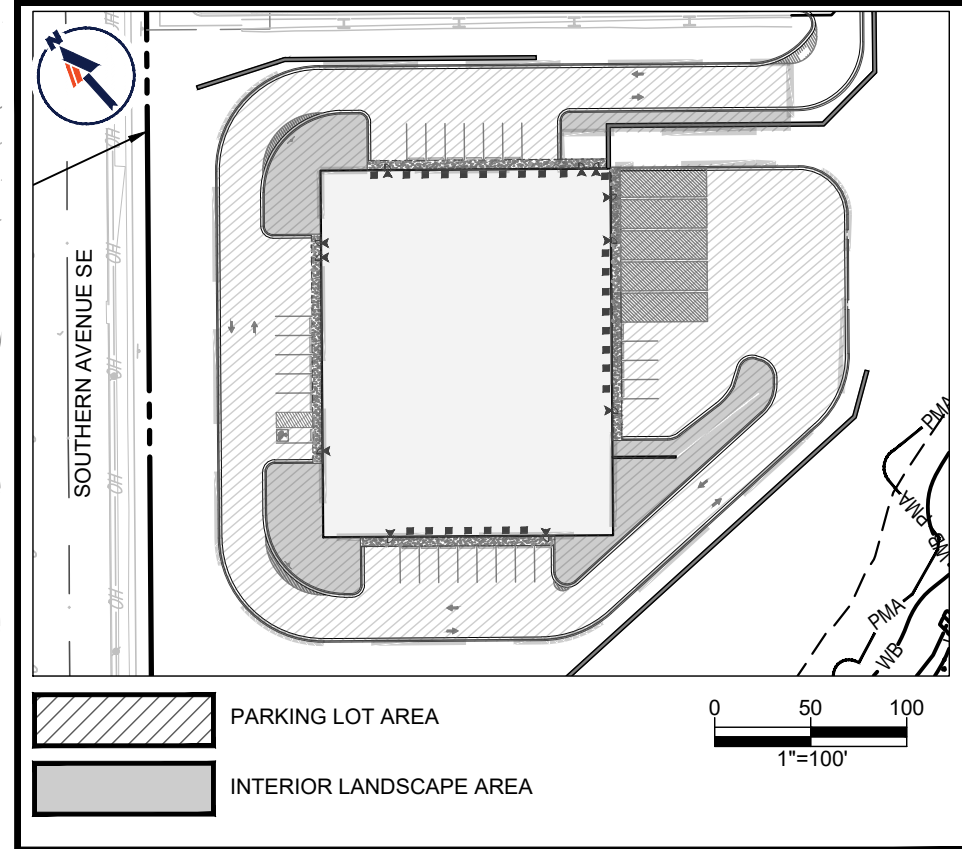
N45°03'35"E 1328.88'

12" WATER EASEMENT  
LIBER 2189 FOLIO 35 &  
PLAT BOOK WWW 40 PLAT 1

162°51'7" 422.880

BENCH MARK 2  
RIGHT FRONT CORNER  
SD INLET  
ELEV = 119.23'

## PARKING AREA CALCULATIONS



## SCHEDULE 4.7-1

## BUFFERING INCOMPATIBLE USES REQUIREMENTS: BUFFER YARD '1'

GENERAL PLAN DESIGNATION	DEVELOPED TIER
2. USE OF PROPOSED DEVELOPMENT:	CONSOLIDATED STORAGE (FORMERLY MINI-WAREHOUSE)
3. IMPACT OF PROPOSED DEVELOPMENT	HIGH
4. USE OF ADJOINING DEVELOPMENT	FOOD AND BEVERAGE STORE
5. IMPACT OF ADJOINING DEVELOPMENT	MEDIUM
6. MINIMUM REQUIRED BUFFERYARD (A, B, C, D OR E)	B
7. MINIMUM REQUIRED BUILDING SETBACK	30 FEET
8. BUILDING SETBACK PROVIDED	±168 FEET
9. MINIMUM REQUIRED WIDTH OF LANDSCAPE YARD	20 FEET
10. WIDTH OF LANDSCAPE YARD PROVIDED	±114 FEET
11. LINEAR FEET OF BUFFER STRIP REQUIRED ALONG PROPERTY LINE AND RIGHT-OF-WAY	356 L.F.
12. PERCENTAGE OF REQUIRED BUFFERYARD OCCUPIED BY EXISTING TREES	30%
13. IS A SIX FOOT HIGH FENCE OR WALL INCLUDED IN BUFFERYARD	YES - EXISTING 7' CHAIN LINK FENCE ON SUBJECT PROPERTY FOR 101 L.F.
14. TOTAL NUMBER OF PLANT UNITS REQUIRED IN BUFFER STRIP	284.8 PU - 30% EXISTING VEGETATION = 199.4 PU
15. TOTAL NUMBER OF PLANT UNITS PROVIDED	SHADE TREES 14 x 10 P.U. = 140 P.U. EVERGREEN TREES 0 x 5 P.U. = 0 P.U. ORNAMENTAL TREES 12 x 5 P.U. = 60 P.U. SHRUBS 0 x 1 P.U. = 0 P.U. TOTAL = 200.0 P.U.

\*@# INDICATES PLANT MATERIAL UTILIZED TO FULFILL REQUIREMENT

## SCHEDULE 4.7-1

## BUFFERING INCOMPATIBLE USES REQUIREMENTS: BUFFER YARD '2'

GENERAL PLAN DESIGNATION	DEVELOPED TIER
2. USE OF PROPOSED DEVELOPMENT:	CONSOLIDATED STORAGE (FORMERLY MINI-WAREHOUSE)
3. IMPACT OF PROPOSED DEVELOPMENT	HIGH
4. USE OF ADJOINING DEVELOPMENT	OPEN SPACE / EXISTING FOREST / VACANT
5. IMPACT OF ADJOINING DEVELOPMENT	COMMERCIALLY ZONED
6. MINIMUM REQUIRED BUFFERYARD (A, B, C, D OR E)	D
7. MINIMUM REQUIRED BUILDING SETBACK	50 FEET
8. BUILDING SETBACK PROVIDED	±191 FEET
9. MINIMUM REQUIRED WIDTH OF LANDSCAPE YARD	40 FEET
10. WIDTH OF LANDSCAPE YARD PROVIDED	±153 FEET
11. LINEAR FEET OF BUFFER STRIP REQUIRED ALONG PROPERTY LINE AND RIGHT-OF-WAY	457 L.F.
12. PERCENTAGE OF REQUIRED BUFFERYARD OCCUPIED BY EXISTING TREES	100%
13. IS A SIX FOOT HIGH FENCE OR WALL INCLUDED IN BUFFERYARD	NO
14. TOTAL NUMBER OF PLANT UNITS REQUIRED IN BUFFER STRIP	0 PU / 100% EXISTING VEGETATION TO REMAIN

NOTES:  
1) IF A DEVELOPING PROPERTY WITH A NON-RESIDENTIAL USE IS LOCATED ADJACENT TO A VACANT LOT LOCATED IN A COMMERCIAL OR INDUSTRIAL ZONE, FIFTY PERCENT (50%) OF THE BUFFERYARD IS REQUIRED TO BE PROVIDED ON THE DEVELOPING LOT.

## SCHEDULE 4.2-1

## REQUIREMENTS FOR LANDSCAPE STRIPS ALONG STREETS

LINEAR FEET OF STREET FRONTAGE, EXCLUDING DRIVEWAY ENTRANCES (SOUTHERN AVENUE SE)	600 L.F. - 140 L.F. (25' WIDE EXISTING FOREST CONSERVATION) = 460 L.F.
1. GENERAL PLAN DESIGNATION	DEVELOPED TIER
2. OPTION SELECTED	2
3. IS THERE A PUBLIC UTILITY EASEMENT ALONG THE FRONTAGE OF THE PROPERTY?	YES
4. NUMBER OF PLANTS REQUIRED	14 SHADE TREES 66 SHRUBS
5. TOTAL NUMBER OF TREES PROVIDED	14 SHADE TREES 66 SHRUBS

\*# INDICATES PLANT MATERIAL UTILIZED TO FULFILL REQUIREMENT

## SECTION 4.9

## SUSTAINABLE LANDSCAPING REQUIREMENT

REQUIRED	PROVIDED
SHADE TREES: 50 x 50% = 30 ORNAMENTAL TREES: 12 x 50% = 6 EVERGREEN TREES: N/A SHRUBS: 66 x 30% = 20	SHADE TREES: 59 (100% NATIVE) ORNAMENTAL TREES: 12 (100% NATIVE) EVERGREEN TREES: N/A SHRUBS: 66 (100% NATIVE)
2. ARE INVASIVE SPECIES PROPOSED	NO
3. ARE EXISTING INVASIVE SPECIES ON-SITE IN AREAS THAT ARE TO REMAIN UNDISTURBED	NO
4. IF "YES" IS CHECKED IN NUMBERS 2 OR 3, IS A NOTE INCLUDED ON THE PLAN REQUIRING REMOVAL OF INVASIVE SPECIES PRIOR TO CERTIFICATION IN ACCORDANCE WITH SECTION 1.5, CERTIFICATION OF INSTALLATION OF PLANT MATERIALS	N/A
5. ARE TREES PROPOSED TO BE PLANTED ON SLOPES GREATER THAN 3:1	NO

## SECTION 4.3-2

## INTERIOR PLANTING FOR PARKING LOTS 7,000 S.F. OR LARGER

1. PARKING LOT AREA	55,546 S.F.
2. INTERIOR LANDSCAPE AREA REQUIRED	8% 3,769 S.F.
3. INTERIOR LANDSCAPE AREA PROVIDED	16.3% 9,093 S.F.
4. NUMBER OF SHADE TREES REQUIRED	
PARKING LOTS LESS THAN 50,000 S.F. (1 PER 300 S.F. OF INTERIOR PLANTING AREA PROVIDED)	31 SHADE TREES
PARKING LOTS GREATER THAN 50,000 S.F. (1 PER 200 S.F. OF INTERIOR PLANTING AREA PROVIDED)	N/A
5. NUMBER OF SHADE TREES PROVIDED	31 TREES
6. IS A MINIMUM OF 160 S.F. OF CONTIGUOUS PERVIOUS LAND AREA PROVIDED PER SHADE TREE?	YES
7. IS THERE A PLANTING ISLAND ON AVERAGE EVERY 10 SPACES?	YES
8. IS A CURB OR WHEEL STOP PROVIDED FOR ALL PARKING SPACES ABUTTING A PLANTING OR PEDESTRIAN AREA?	YES
9. ARE PLANTING ISLANDS WHICH ARE EITHER PARALLEL OR PERPENDICULAR TO PARKING SPACES ON BOTH SIDES A MINIMUM OF 9 FEET WIDE?	YES
10. IS A PLANTING ISLAND THAT IS PERPENDICULAR TO PARKING SPACES ON ONE SIDE A MINIMUM OF 6 FEET WIDE?	YES
11. FOR PARKING LOTS 50,000 S.F. OR LARGER	
A) IS THERE A 9 FOOT WIDE PLANTING ISLAND PERPENDICULAR TO PARKING FOR EVERY 2 BAYS?	N/A
B) IS THE NUMBER OF SHADE TREES REQUIRED INCREASED (1 PER 200 S.F. OF INTERIOR PLANTING AREA PROVIDED)?	N/A

\*\*\* INDICATES PLANT MATERIAL UTILIZED TO FULFILL REQUIREMENT

## PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	NATIVE
CANOPY TREES							
	AR	6	ACER RUBRUM	RED MAPLE	2.5-3" CAL., 12-14' HT.	B&B	YES
	GTI	14	GLEDITSIA TRIACANTHOS INERMIS	THORNLESS HONEY LOCUST	2.5-3" CAL., 12-14' HT.	B&B	YES
	LT	8	LIRIODENDRON TULIPIFERA	TULIP TREE	2.5-3" CAL., 12-14' HT.	B&B	YES
	QPH	31	QUERCUS PHELLOS	WILLOW OAK	2.5-3" CAL., 12-14' HT.	B&B	YES
		59	SUBTOTAL:				
ORNAMENTAL TREES							
	CC	7	CERCIS CANADENSIS	EASTERN REDBUD	2-2.5" CAL., 8-10' HT.	B&B	YES
	MV	5	MAGNOLIA VIRGINIANA	SWEET BAY	2-2.5" CAL., 8-10' HT.	B&B	YES
		12	SUBTOTAL:				
SHRUBS							
	IV	66	ITEA VIRGINICA 'HENRY'S GARNET'	VIRGINIA WILLOW HENRY'S GARNET	24-30" HT. & SPRD	CONTAINER	YES
		66	SUBTOTAL:				

**BOHLER**  
SITE CIVIL AND CONSULTING ENGINEERING  
LANDSCAPE ARCHITECTURE  
PROGRAM MANAGEMENT  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

## REVISIONS

REV	DATE	COMMENT	CHECKED BY
1	8/5/24	PRE-REVIEW COMMENTS	SL
2	9/5/24	PRE-ACCEPTANCE COMMENTS	SL
3	10/31/24	PER SOURCE COMMENTS	SK

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It's fast. It's free. It's the law.

## NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	MDB230010.00
DRAWN BY:	SJL
CHECKED BY:	NBS
DATE:	02/19/2024
CAD I.D.:	LSCP

PROJECT:

## DETAILED SITE PLAN

FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4**BOHLER**16701 MELFORD BLVD., SUITE 430  
BOWIE, MARYLAND 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com

E.R. McWILLIAMS

11/01/2024

REGISTERED LANDSCAPE ARCHITECT  
I, E.R. McWILLIAMS, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME, AND THAT I AM A duly LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3897, EXPIRATION DATE: 9/20/26

SHEET TITLE:

## LANDSCAPE PLAN

SHEET NUMBER:

DSP-7

REVISION 3 - 10/31/24



LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK:

THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS

A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM SIX INCH (6") THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES.

1.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED

1.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS.

1.3. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

D. MULCH - THE MULCH AROUND THE PERIMETER OF THE BUILDING SHALL BE A 3" LAYER OF DOUBLE SHREDDED BLACK CEDAR MULCH ONLY. ALL OTHER AREAS SHALL BE MULCHED WITH A 3" LAYER OF DOUBLE SHREDDED DARK BROWN HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.

E. FERTILIZER

1.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.

1.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

F. PLANT MATERIAL

1.1. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.

1.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.

1.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.

1.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1/4", WHICH HAVE NOT BEEN COMPLETELY CALLED, SHALL BE REJECTED. PLANTS SHALL BE MONITORED ON A WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.

1.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.

1.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.

1.7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.

1.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES

A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS

A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION

A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY VISI-FENCE, OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS

A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

B. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.

1.1. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.

1.2. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING

A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1-3).

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS SPECIFIED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING

A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.

B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

D. ALL PLANTING AND LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA):

1.1. 20 POUNDS GROW POWER OR APPROVED EQUAL

1.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING

A. INsofar THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING. UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:

1.1. PLANTS: MARCH 15 TO DECEMBER 15

1.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

G. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

H. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON.

ACER RUBRUM PLATANUS X ACERIFOLIA  
BETULA VARIETIES POPULUS VARIETIES  
CARPINUS VARIETIES PRUNUS VARIETIES  
CRATAEGUS VARIETIES PYRUS VARIETIES  
KOELREUTERA QUERCUS VARIETIES  
LIQUIDAMBER STYRACIFLUA TILIA TOMENTOSA  
LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES

I. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL, MIXED THOROUGHLY:

• 1 PART PEAT MOSS  
• 1 PART COMPOSTED COW MANURE BY VOLUME  
• 3 PARTS TOPSOIL BY VOLUME  
• 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:  
A) 3 TABLETS PER 1 GALLON PLANT  
B) 3 TABLETS PER 5 GALLON PLANT  
C) 4 TABLETS PER 15 GALLON PLANT  
D) LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK

J. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

K. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

L. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7 FROM GRADE.

M. GROUND COVER AREAS SHALL RECEIVE A 1/2" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

N. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

O. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

P. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)

A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.

B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING

A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT THE TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE

A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.

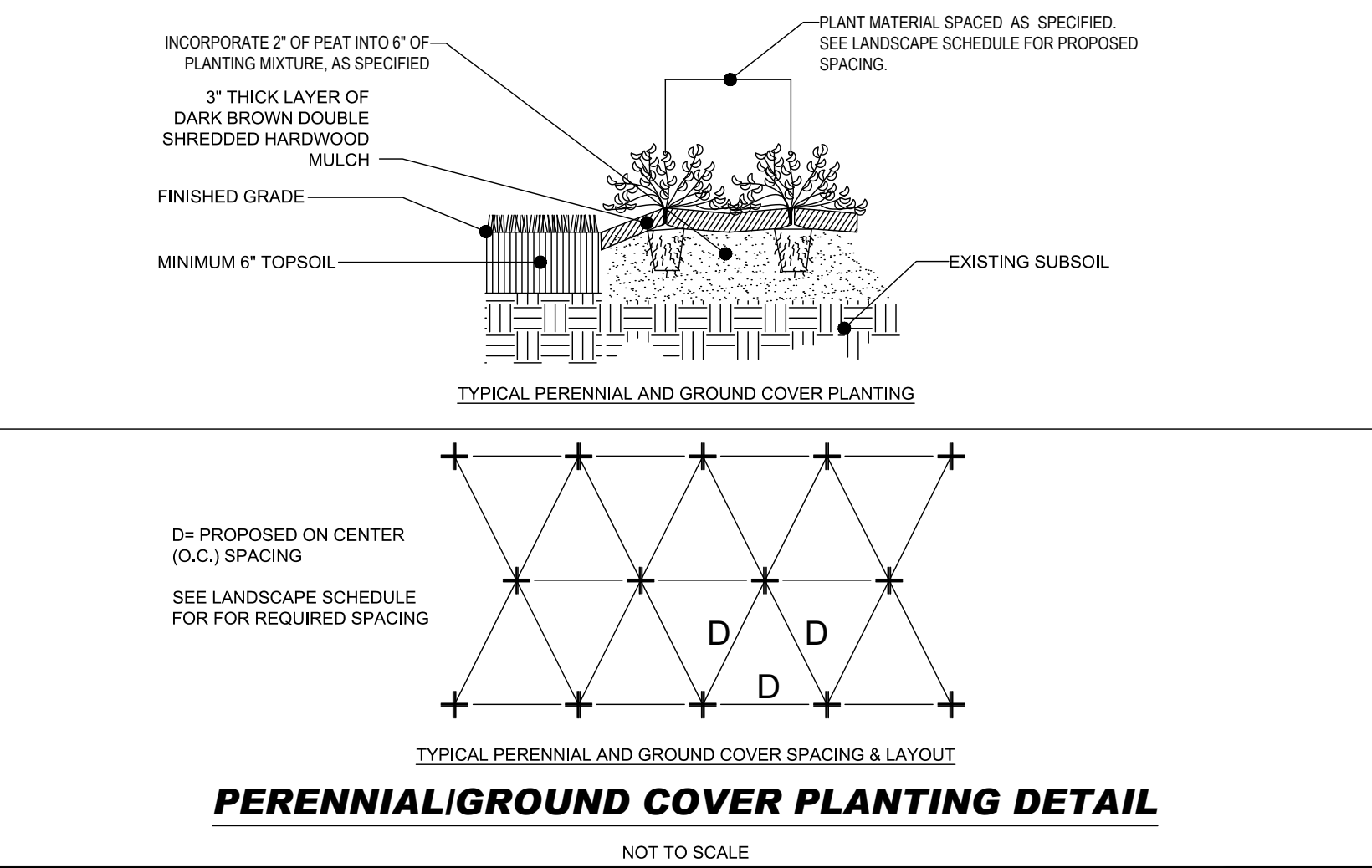
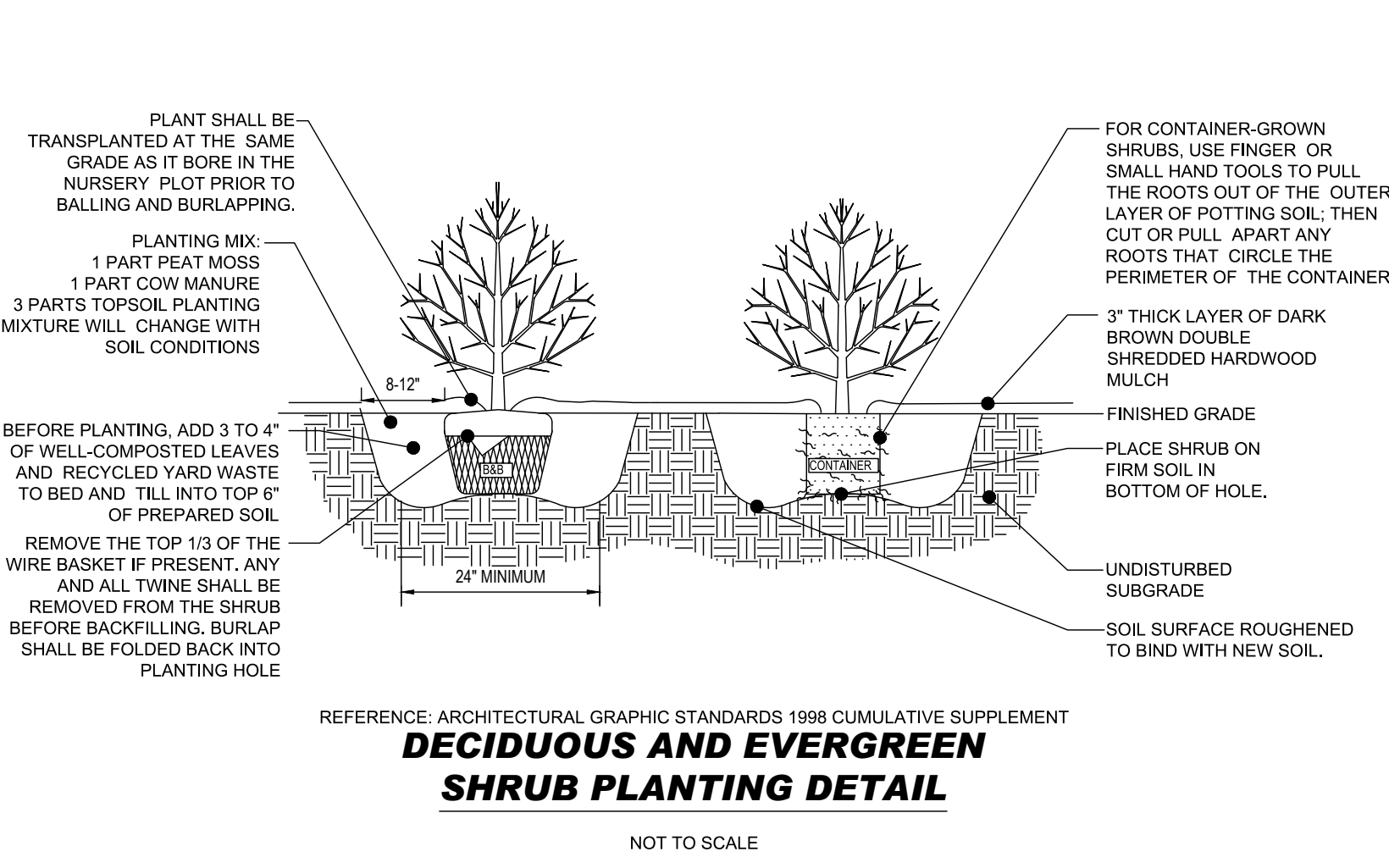
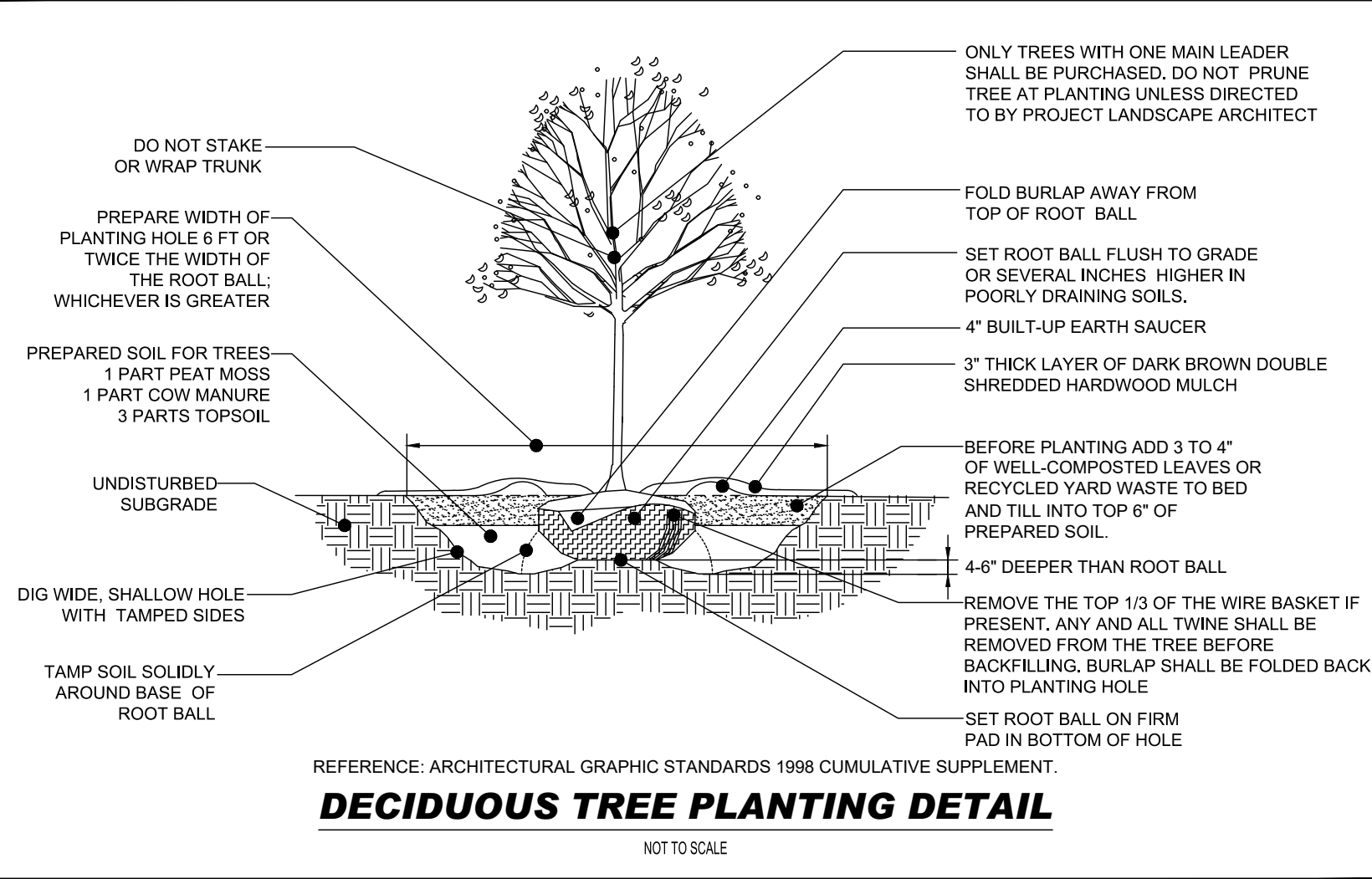
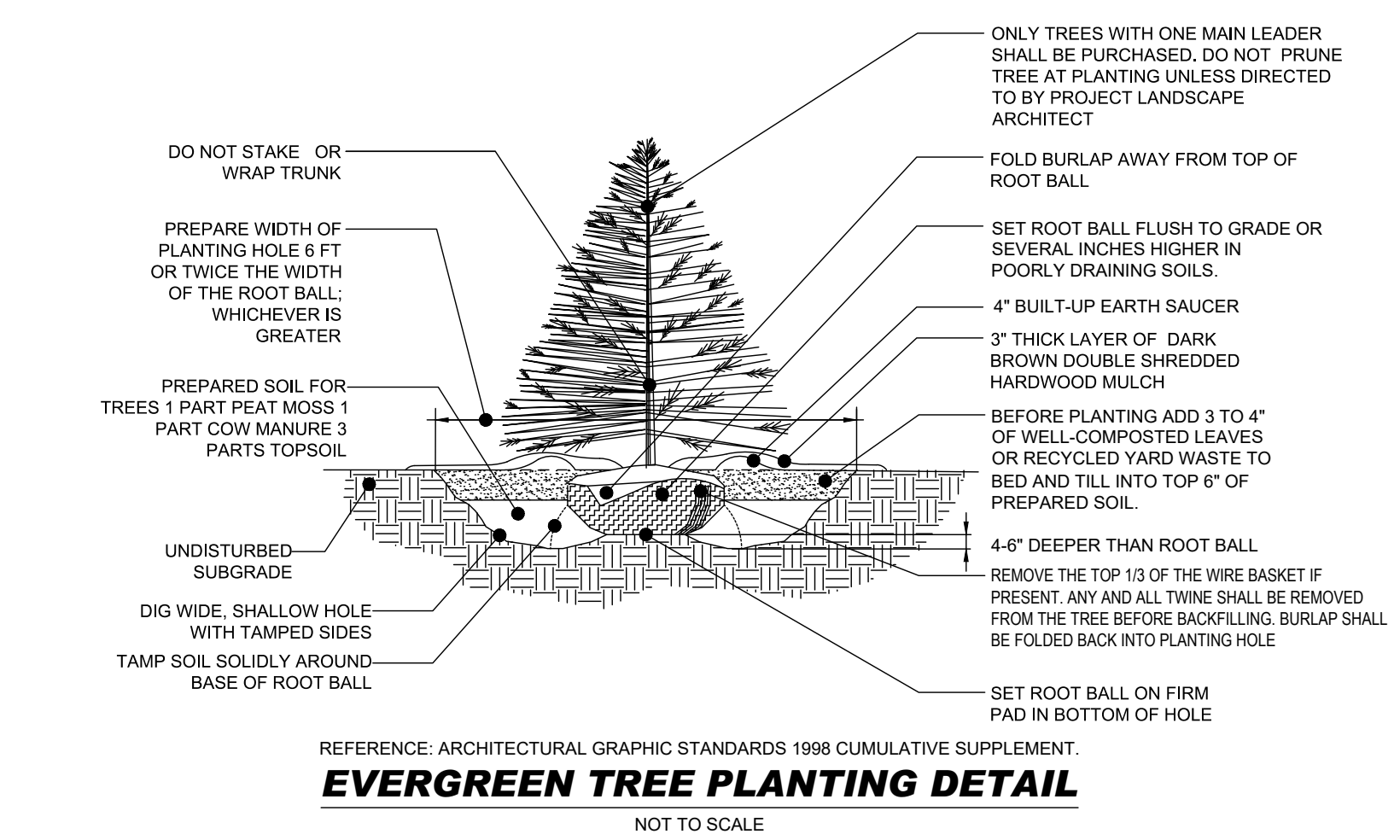
C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

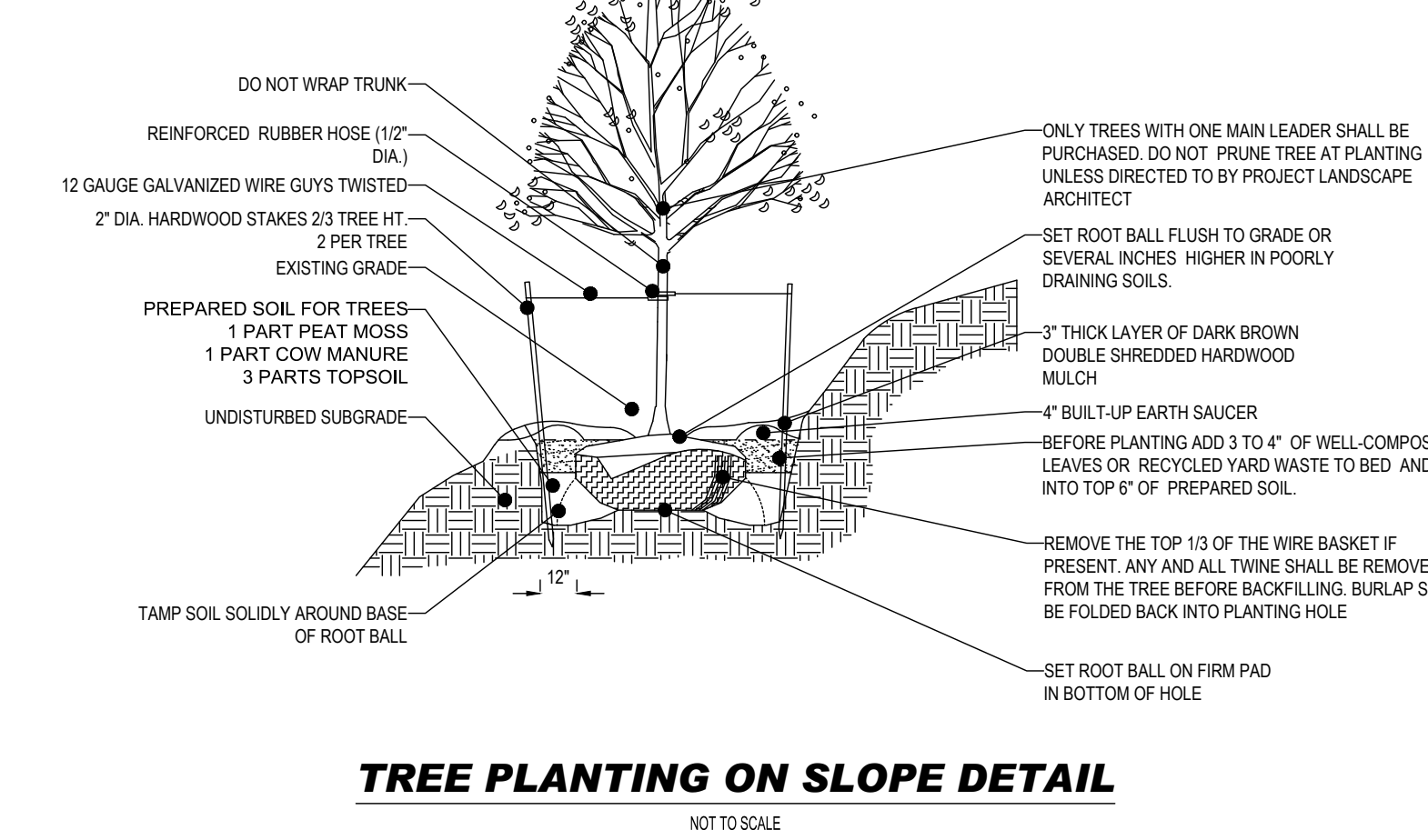
13. CLEANUP

A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEARED.

B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.



NOTE: TREE STAKING TO BE REMOVED AFTER 2 GROWING SEASONS



**SEEDING SPECIFICATIONS**

1.	PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.	
2.	PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.	
3.	SEEDING RATES:	
	PERENNIAL RYEGRASS	12 LBS/1,000 SQ FT
	KENTUCKY BLUEGRASS	1 LBS/1,000 SQ FT
	RED FESCUE	1 1/2 LBS/1,000 SQ FT
	SPREADING FESCUE	1 1/2 LBS/1,000 SQ FT
	FERTILIZER (20-10-10)	14 LBS/1,000 SQ FT
	MULCH	90 LBS/1,000 SQ FT
4.	GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER.	

**OWNER MAINTENANCE RESPONSIBILITIES**

UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPRKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL.
- TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS.
- VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVELED SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS.
- FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER HAZARDS.

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.

Tree Canopy Coverage Schedule for Sec. 25-128				
Project Name:	TCP2B:	DRD Case #:	Area (acres)	
GILPIN PROPERTY				
Site Calculations:	Zone 1:	IE	10.11	
	Zone 2:			
	Zone 3:			
	Zone 4:			
	Total Acres:		10.11	
Total Acres (gross acres)	10.11	% of TCC required	TCC Required (Acres)	TCC Required in (\$F)
		15.0%	1.52	66059
A. TOTAL ON-SITE WC PROVIDED (acres) =	2.86	acres		124581.6
B. TOTAL AREA EXISTING TREES (non-WC acres) =	1.05			45738
C. TOTAL SQUARE FOOTAGE IN LANDSCAPE TREES =				14475
D. TOTAL TREE CANOPY COVERAGE PROVIDED =				184795
E. TOTAL SQUARE FOOTAGE REQUIRED =				66059
				Requirement Satisfied

Credit Categories for Landscape Trees	TCC Credit per Tree Based on Size at Planting (\$F)	Number of Trees	TCC Credit (\$F)
Deciduous - columnar shade tree (50' or less height)	2 - 1/2' - 3" = 65		0
	3 - 3 1/2" = 75		0
Deciduous - ornamental tree (20' or less height with equal spread). Minimum planting size 7' - 9' in height	1 - 1/2' - 1 - 3/4" = 75		0
	2 - 2 1/2" = 100	12	1200
	2 - 3 1/2' - 3" = 110		0
Deciduous - minor shade tree (25-50' height with equal spread or greater). Minimum planting size 8-10' in height	2 - 1/2' - 3" = 160		0
	3 - 3 1/2" = 175	59	13275
Deciduous - major shade tree (50' and greater ht. with spread equal to or greater than ht) Minimum planting size 12 to 14' in height	3 - 3 1/2" = 250		0
	6 - 8" = 40		0
Evergreen - columnar tree (less than 30' height with spread less than 15')	8 - 10" = 50		0
	10 - 12" = 75		0
	6 - 8" = 75		0
Evergreen - small tree (30-40' height with spread of 15-20')	8 - 10" = 100		0
	10 - 12" = 125		0
Evergreen - medium tree (40-50' height with spread of 20-30')	6 - 8" = 125		0
	8 - 10" = 150		0
	10 - 12" = 175		0
	6 - 8" = 150		0
Evergreen - large tree (50' height or greater with spread of 30 or 30')	8 - 10" = 200		0
	10 - 12" = 250		0
TOTAL NUMBER OF TREES/TCC CREDIT (\$F)			14475
(Manual enter information/figures into shaded areas)			

Bohler Engineering  
Prepared by

11/01/2024

Date

11/01/2024

Checked (mm/dd/yyyy)



L:\\_Maryland Projects\MD2000s\MD2022\01 CAD\05-ENVR\NRI\Working\MD2221\_01\_NRI\_Plan\pdated.dwg 1 Plotted By: Katelyn Housington, 7/12/2024 12:04 PM

MAPPED SOIL TYPES					
Map Unit	Soil Description	Hydrologic Soil Group	K factor (whole soil)	Hydric Rating	Drainage Class
BuB	Beltsville-Urban land complex, 0 to 5 percent slopes	C	0.37	5	Moderately well drained
CeE	Christiana-Downer complex, 15 to 25 percent slopes	D	0.49	5	Moderately well drained
CtB	Croon-gravelly sandy loam, 2 to 5 percent slopes	C	0.17	0	Well drained
GtB	Grosstown-Urban land complex, 0 to 5 percent slopes	A	0.24	0	Well drained
Iu	Issue-Urban land complex, occasionally flooded	B/D	0.37	10	Somewhat poorly drained
Px	Potobac-Issue complex, frequently flooded	B/D	0.28	75	Poorly drained
SdD	Sassafras-Croon-Urban land complex, 5 to 15 percent slopes	C	0.15	0	Well drained
Source: <a href="http://websoilsurvey.nrcs.usda.gov">http://websoilsurvey.nrcs.usda.gov</a> (March 2024)					

General Information Table		
Layer Category	Layer Name	Value
Zone	Zoning (Zone)(Prior)	I-1
Zone	Zoning (Zone)(Current)	IE
Zone	Aviation Policy Area (APA)*	N/A
Administrative	Tax Gtd (TMG)	87-B3
Administrative	WSSC Gtd (Sheet 20)	206SE01/206SE02
Administrative	Planning Area (Plan Area)	76A
Administrative	Election District (ED)	12
Administrative	Councilmanic District (CD)	7
Administrative	General Plan 2002 Tier (Tier)	Developed
Administrative	General Plan Growth Policy (2035)	Established Communities
Administrative	Police District	IV

SPECIMEN TREE TABLE						
No.	Common Name	Scientific Name	Onsite/ Offsite	DBH (inches)	Condition Rating	Comments
56	Tulip poplar	<i>Liriodendron tulipifera</i>	Offsite	43	Fair	Five leaders, decay base of trunk, girdling, PCA, large dead wood, small dead wood
57	Tulip poplar	<i>Liriodendron tulipifera</i>	Offsite	31	Poor	Minor vine coverage, large cavity in trunk, minor girdling, small dead wood
58	Slippery elm	<i>Ulmus rubra</i>	Onsite	32	Poor	Co-dominant, heavy vine coverage, small dead wood, large dead wood, girdling, broken branches
59	Silver maple	<i>Acer saccharinum</i>	Onsite	32	Poor	Multi-leader, heavy vine coverage, dead leader, small dead wood, large dead wood, broken branches
60	Cottonwood	<i>Populus deltoides</i>	Onsite	31	Poor	Heavy vine coverage, co-dominant, on slope, leader leaning, small dead wood

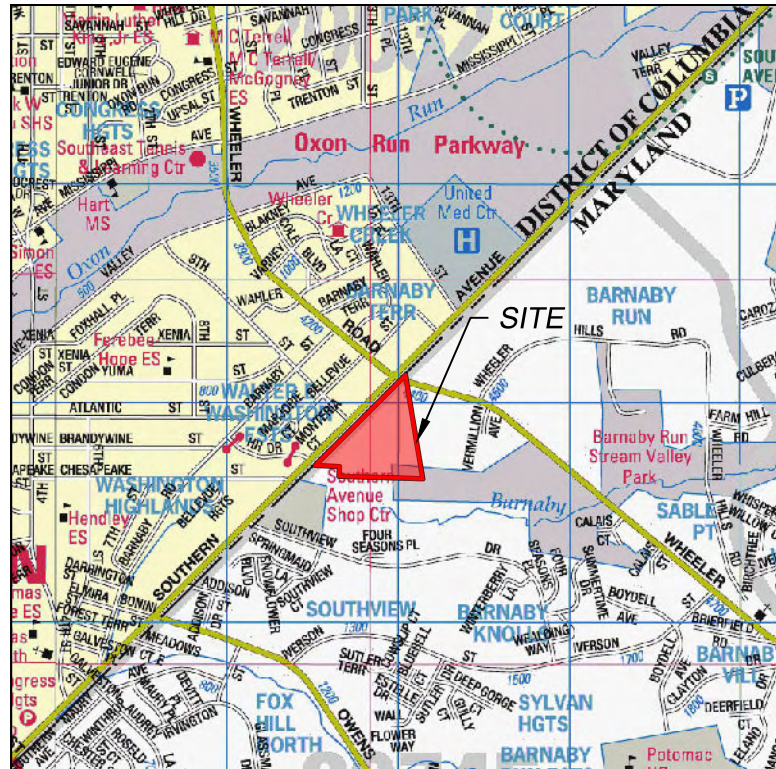
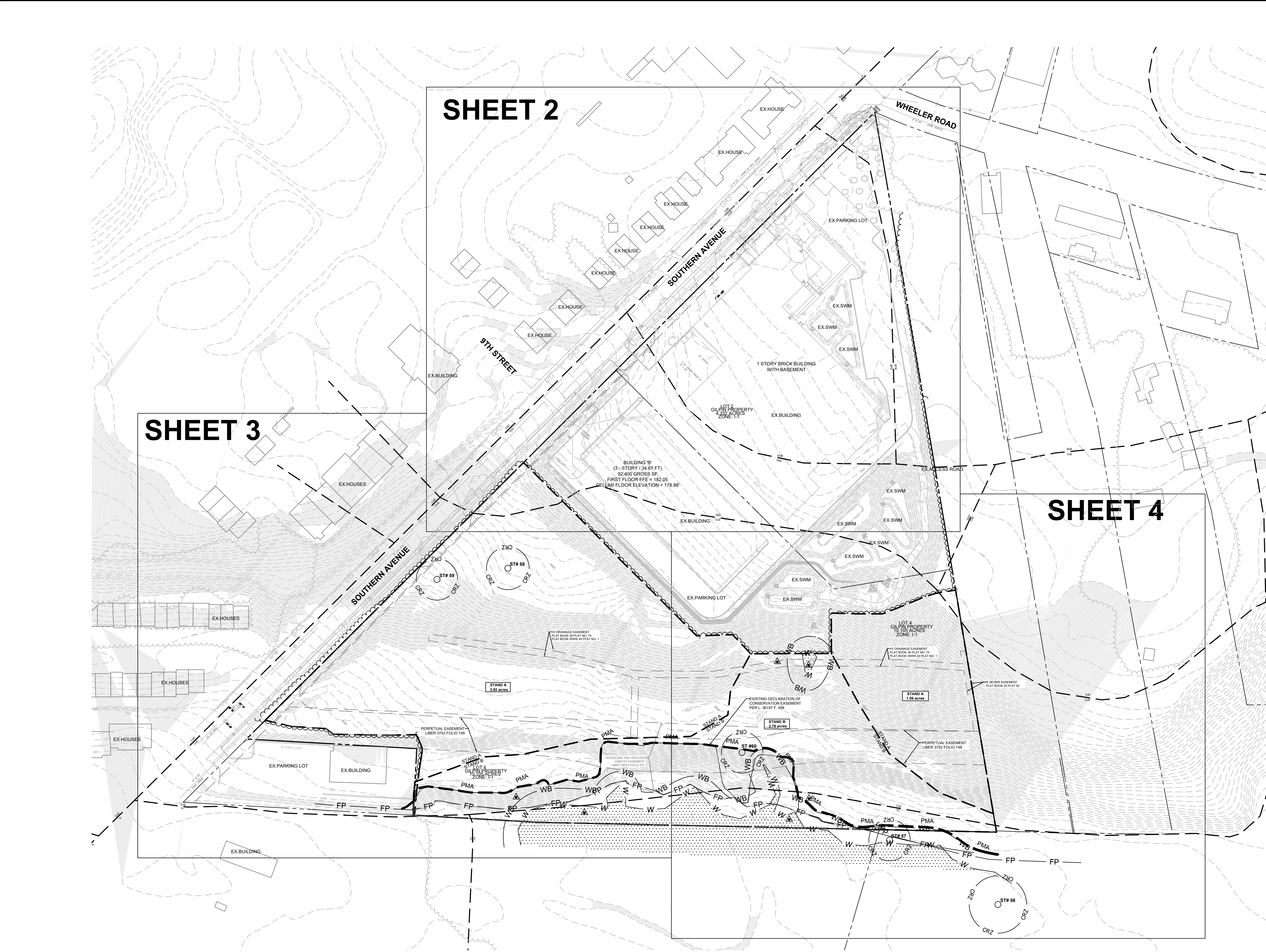
Site Statistics		Total
Gross Tract Area		14.44 ac.
Existing 100-year Floodplain		0.50 ac.
Net Tract Area		13.94 ac.
Existing Woodland in Floodplain		0.50 ac.
Existing Woodland Net Tract		7.71 ac.
Existing Woodland Total		8.21 ac.
Existing PMA		1.18 ac.
Regulated Stream (Linear feet of Centerline)		0 lf
Riparian Wooded Buffer up to 300' wide		0 ac.

Applicant: Bohler  
Address: 16701 Melford Boulevard, Suite 310  
Bowie, MD 20715  
(301) 809-4590  
Consultant: Wetland Studies and Solutions, Inc.  
Address: 1131 Benfield Boulevard, Suite L  
Millersville, MD 21108  
(410)672-5990

**QUALIFIED PROFESSIONAL CERTIFICATION**  
THIS PLAN COMPLIES WITH THE CURRENT REQUIREMENTS OF PRINCE GEORGE'S CODE AND THE ENVIRONMENTAL TECHNICAL MANUAL.  
SIGNED: Marius Flemmer DATE: 03/25/2024  
MARIUS FLEMMER  
WETLAND STUDIES AND SOLUTIONS, INC.  
1131 BENFIELD BOULEVARD, SUITE L  
MILLERSVILLE, MD 21044  
PH: (703) 679-5692 FAX: (410) 672-5993  
E-MAIL: MFLEMMER@WETLANDS.COM

Prince George's County Planning Department, M-NCPPC Environmental Planning Section NATURAL RESOURCES INVENTORY PLAN APPROVAL NRI -029-13			
Approved by		Date	Reason for Revision
00	Chuck Schneider	4/1/2013	
01	Alexander Kerschhoff	7/12/2024	NRI Expired
02			
03			
04			
05			
06			

Horizontal Datum: VCS NAD 83		
Vertical Datum: NAVD 88		
Boundary and Topo Source: Bohler Prince George's County GIS		
Design	Draft	Approved
MF	MF	MJK
1 of 5		
WSSI Project Number: P.WS10000490		



VICINITY MAP  
SCALE: 1"=2,000'  
COPYRIGHT ADC THE MAP PEOPLE  
PERMITTED USE NUMBER 20711184

LEGEND	
	PROPERTY LINE
	EXISTING TREE LINE
	SOILS BOUNDARY
	EXISTING WETLAND
	25' WETLAND BUFFER
	PRIMARY MANAGEMENT AREA (2 FEET OFFSET)
	FOREST STAND BOUNDARY
	FOREST STAND DATA POINT LOCATION
	SPECIMEN TREE
	STEEP SLOPES 15% OR GREATER
	WETLAND DATA POINT
	EX. UNDERGROUND STORMWATER MANAGEMENT
	EX. UNDERGROUND SANITARY LINE
	EX. UNDERGROUND GAS LINE
	EX. ABOVE GROUND UTILITY LINE

#### NATURAL RESOURCE INVENTORY - GENERAL NOTES

- This site is zoned IE (Industrial, Employment) and is located in Environmental Strategy Area 1 in accordance with Plan 2035. The prior zoning designation for this property was I-1 (Light Industrial).
- The source of the property boundaries on this plan is from survey performed by Bohler in February, 2024.
- The topography shown on this plan is from survey performed by Bohler in February, 2024.
- The source of the soils information on this plan is from the 1) USDA NRCS Web Soil Survey (WSS) in a Custom Soil Resource Report for an Area of Interest (AOI) established for the subject site only and generated on March 27, 2024 and 2) current Prince George's Soil Conservation District Soil Erosion and Sediment Control - Pond Safety Reference Manual.
- The regulated 1-percent annual chance (100-year) floodplain information on this plan is derived from a floodplain study conducted by Bohler Engineering on April 3, 2024. The floodplain study was approved by Salmaan Babar from the Prince George's County Department of Permitting, Inspections and Enforcement, effective April 26, 2024. The Floodplain Application Number is 46576-2024-FLOOD and the permit number is P52390-2024-FLOOD. The Floodplain Study number is FPS 201301.
- The wetland and stream information on this plan is from a study prepared by Wetland Studies and Solutions, Inc. and dated March 22, 2024. Streams and wetlands were surveyed located.
- This site does not contain Wetlands of Special State Concern as defined in COMAR 26.23.06.01.
- This site is not located within a Tier II catchment area and does not contain a Tier II waterbody as defined in COMAR 26.08.02.04. This site is located within an impaired water body with a Total Maximum Daily Load (TMDL) allocated for sediment, which are afforded special protection under Maryland's Anti-degradation policy.
- PGSD reserves the right to restrict disturbance to any onsite or offsite Tier II buffer or buffers for impaired waters.
- This site is not located within a Stronghold Watershed as established by the MD DNR.
- This site is not within a Sensitive Species Protection Review Area based on a review of the SSPRA GIS layer prepared by the Heritage and Wildlife Service. Maryland Department of Natural Resources. In a letter dated April 25, 2024, the Maryland Department of Natural Resource Wildlife and Heritage Service has determined that this project site is within an area that contains habitat for the Northern Long-Eared Bat (*Myotis septentrionalis*), which is listed as an endangered species by the State of Maryland and by the U.S. Fish and Wildlife Service. In order to reduce loss of summer occupancy habitat for this species, we recommend that forest clearing and permanent forest loss be minimized to the greatest extent possible.
- The site does include Potential Forest Interior Dwelling Species habitat. Inset map detailing potential habitat is located on Sheet 5.
- This site is subject to previous TCP plans including TCP1-007-2015, TCP2-018-13, AND TCP2-018-01.
- There are four (4) specimen, champion and/or historic trees located on the property, and one (1) located off of the property. These trees were located using surveyed locations.
- The subject site is not with a Scenic Resources Policy Area.
- There are no scenic or historic roads located on or adjacent to this property.
- The subject property is not located within a Registered Historic District.
- There are no known archaeological sites located on the subject property; however, the subject property has not been surveyed for archaeological resources and a Phase I archeology report may be required during subsequent development review processes. There are no Prince George's County Historic Sites or resources on or adjacent to the subject property.
- Marlboro clay and Christiana clay are not found to occur on or within the vicinity of the property.
- The site is not located in the vicinity of any master planned roadway designated as arterial or higher.
- The subject property is not located within the 2009 Joint Base Andrews Noise Contours.
- The site is not located within an Aviation Policy Area (APA).
- The site is not located within the Chesapeake Bay Critical Area (CBCA).
- An approved NRI is valid for five years from the date of signature by staff, or until information used to prepare the NRI changes. NRIs will be required to be revised and re-approved if the base information changes significantly. Approval of this NRI in no way impacts any other development application approvals.
- The detailed site plan accounted for the target parcel and the one directly to the north with the existing self-storage. The current submission utilizes the total acreage for both parcels.

#### NATURAL RESOURCE INVENTORY (NRI) PLAN

Prepared For: Bohler

900 Southern Avenue

Prince George's County, Maryland

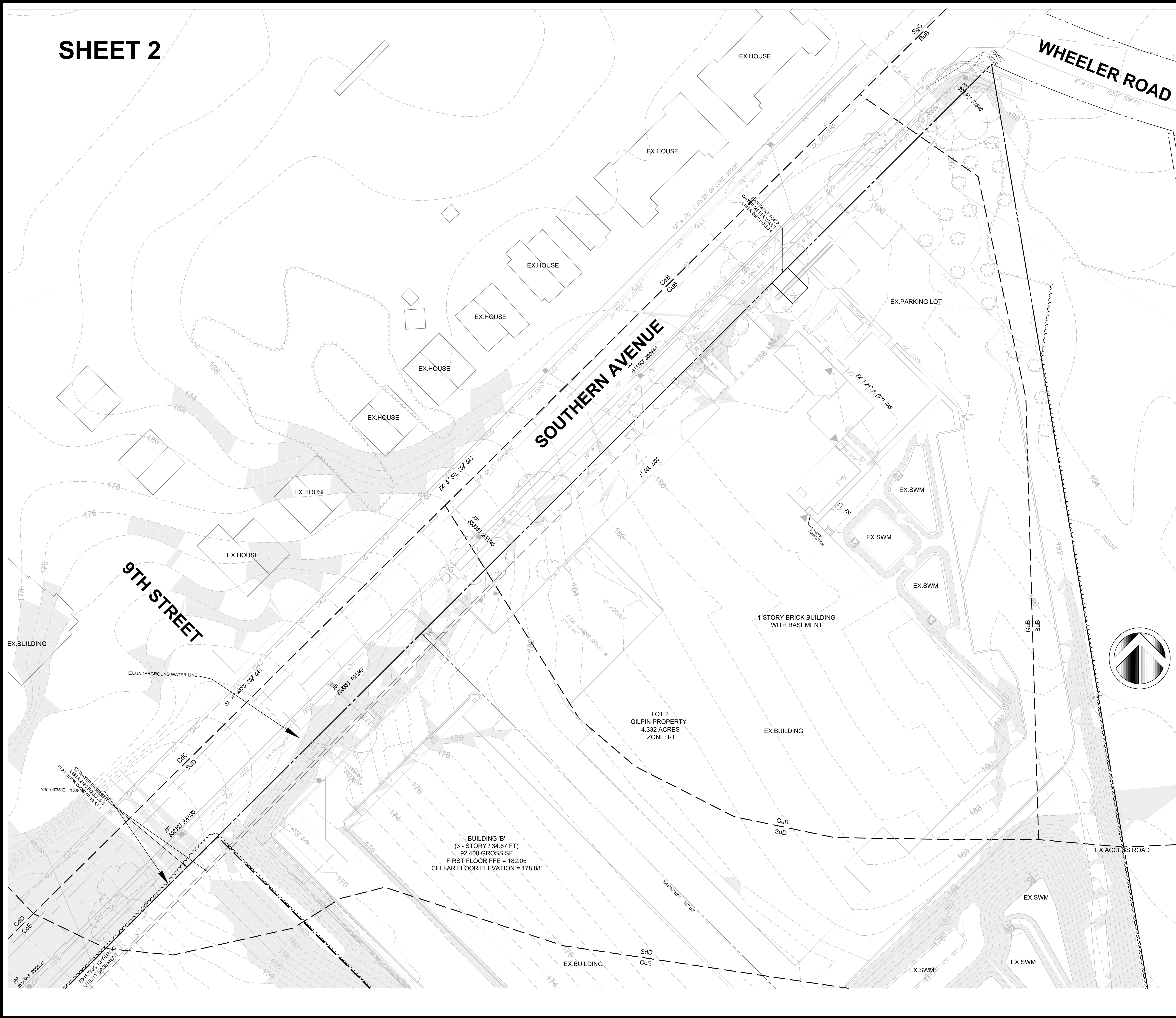
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#### REVISIONS

No.	Date	Description	Rev. By	App. By
1	06/4/24	UPDATED PLAN PER MNCPPC COMMENTS	KEH	MJK
2	06/28/24	UPDATED PLAN PER MNCPPC COMMENTS	KEH	MJK
3	07/11/24	UPDATED PLAN WITH DRAINAGE EASEMENT	KEH	MJK
SCALE: As Noted				
DATE: 25 March, 2024				

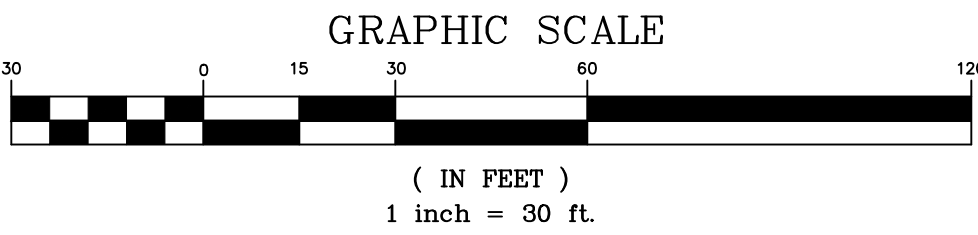
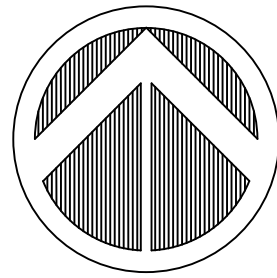


SHEET 2



**LEGEND**

	PROPERTY LINE
	EXISTING TREELINE
	SOILS BOUNDARY
	EXISTING WETLAND
	25' WETLAND BUFFER
	PRIMARY MANAGEMENT AREA (2 FEET OFFSET)
	FOREST STAND BOUNDARY
	FOREST STAND DATA POINT LOCATION
	SPECIMEN TREE
	STEEP SLOPES 15% OR GREATER
	WETLAND DATA POINT
	EX. UNDERGROUND STORMWATER MANAGEMENT LINE
	EX. UNDERGROUND SANITARY LINE
	EX. UNDERGROUND GAS LINE
	EX. ABOVE GROUND UTILITY LINE



**QUALIFIED PROFESSIONAL CERTIFICATION**  
THIS PLAN COMPLIES WITH THE CURRENT REQUIREMENTS OF PRINCE GEORGE'S CODE AND THE ENVIRONMENTAL TECHNICAL MANUAL.  
SIGNED: *Marius Flemmer* DATE: 03/25/2024  
**MARIUS FLEMMER**  
WETLAND STUDIES AND SOLUTIONS, INC.  
1131 BENFIELD BOULEVARD, SUITE L  
MILLERSVILLE, MD 21044  
PH: (703) 679-5692 FAX: (410) 672-5993  
E-MAIL: MFLEMMER@WETLANDS.COM

Prince George's County Planning Department, M-NCPPC Environmental Planning Section NATURAL RESOURCES INVENTORY PLAN APPROVAL NRI -029-13			
Approved by	Date	Reason for Revision	
00 Chuck Schneider	4/1/2013		
01 <i>Alexander Kirchhof</i>	7/12/2024	NRI Expired	
02			
03			
04			
05			
06			

NATURAL RESOURCE INVENTORY (NRI) PLAN

Prepared For: Bohler  
**900 Southern Avenue**  
Prince George's County, Maryland  
Copyright © 2024 Wetland Studies and Solutions, Inc.

REVISIONS

No.	Date	Description	Rev. By	App. By
1	06/04/24	UPDATED PLAN PER MNCPPC COMMENTS	KEH	MJK
2	06/28/24	UPDATED PLAN PER MNCPPC COMMENTS	KEH	MJK
3	07/11/24	UPDATED PLAN WITH DRAINAGE EASEMENT	KEH	MJK
DATE: 25 March, 2024		SCALE: As Noted	CL: 2'	

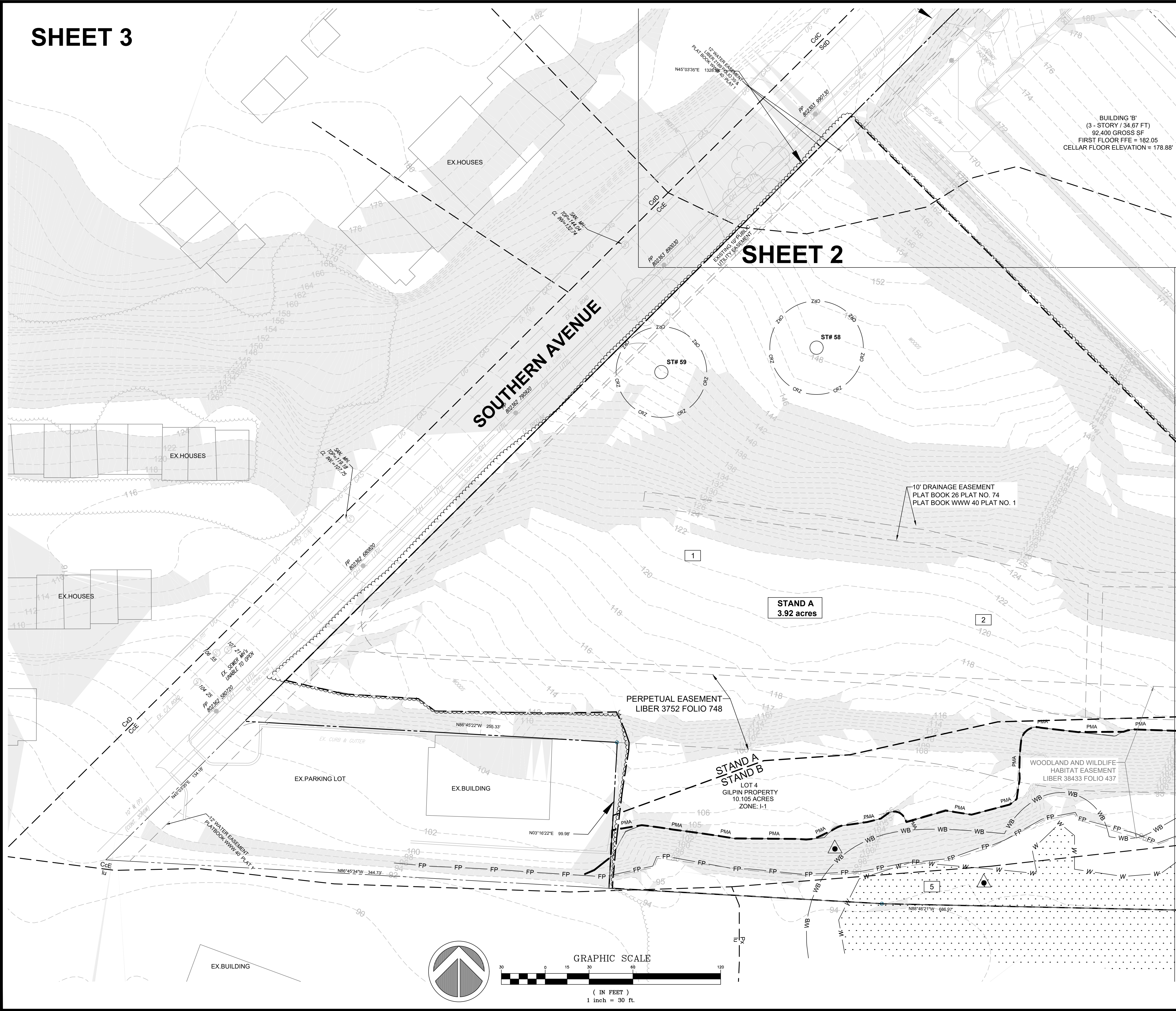
Horizontal Datum: VCS NAD 83		
Vertical Datum: NAVD 88		
Boundary and Topo Source: Bohler Prince George's County GIS		
Design	Draft	Approved
MF	MF	MJK
2 of 5		
WSSI Project Number: P.WS10000490		

**Wetland**  
Studies and Solutions, Inc.  
a DAWEY company  
1131 Benfield Boulevard • Suite L  
Millersville, Maryland 21108  
Phone: 410-672-5990 • Fax: 410-672-5993  
www.wetlands.com



SHEET 3

L:\\_Maryland Projects\MD\2000s\MD\2221\01\_CADD\05-ENV\NRI\Working\MD2221\_01\_NRI\_Plan\labeled.dwg 3 Plotted By: Katelyn Housington, 7/12/2024 12:04 PM



SHEET 2

**LEGEND**

	PROPERTY LINE
	EXISTING TREELINE
	SOILS BOUNDARY
	EXISTING WETLAND
	25' WETLAND BUFFER
	PRIMARY MANAGEMENT AREA (2 FEET OFFSET)
	FOREST STAND BOUNDARY
	FOREST STAND DATA POINT LOCATION
	SPECIMEN TREE
	STEEP SLOPES 15% OR GREATER
	WETLAND DATA POINT
	EX. UNDERGROUND STORMWATER MANAGEMENT LINE
	EX. UNDERGROUND SANITARY LINE
	EX. UNDERGROUND GAS LINE
	EX. ABOVE GROUND UTILITY LINE

**QUALIFIED PROFESSIONAL CERTIFICATION**  
THIS PLAN COMPLIES WITH THE CURRENT REQUIREMENTS OF PRINCE GEORGE'S CODE AND THE ENVIRONMENTAL TECHNICAL MANUAL.  
SIGNED: *M. Flemmer* DATE: 03/25/2024  
**MARIUS FLEMMER**  
WETLAND STUDIES AND SOLUTIONS, INC.  
1131 BENFIELD BOULEVARD, SUITE L  
MILLERSVILLE, MD 21044  
PH: (703) 679-5692 FAX: (410) 672-5993  
E-MAIL: MFLEMMER@WETLANDS.COM

Prince George's County Planning Department, M-NCPPC Environmental Planning Section NATURAL RESOURCES INVENTORY PLAN APPROVAL NRI-029-13		
Approved by	Date	Reason for Revision
00 Chuck Schneider	4/1/2013	
01 Alexander Kuschhof	7/12/2024	NRI Expired
02		
03		
04		
05		
06		

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Millersville, Maryland 21108  
Phone: 410-672-5990 • Fax: 410-672-5993  
www.wetlands.com

**NATURAL RESOURCE INVENTORY (NRI) PLAN**

Prepared For: Bohler

**900 Southern Avenue**  
Prince George's County, Maryland  
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REVISIONS		App. By		Rev. By		Date		Description	
No.	Date	App. By	Rev. By	No.	Date	App. By	Rev. By	Description	
1	06/04/24	KEH	MJK	1	06/04/24	KEH	MJK	UPDATED PLAN PER MNCPPC COMMENTS	
2	06/28/24	KEH	MJK	2	06/28/24	KEH	MJK	UPDATED PLAN PER MNCPPC COMMENTS	
3	07/11/24	KEH	MJK	3	07/11/24	KEH	MJK	UPDATED PLAN WITH DRAINAGE EASEMENT	
DATE: 25 March, 2024		SCALE: As Noted		CL: 2'					

Horizontal Datum: VCS NAD 83

Vertical Datum: NAVD 88

Boundary and Topo Source: Bohler  
Prince George's County GIS

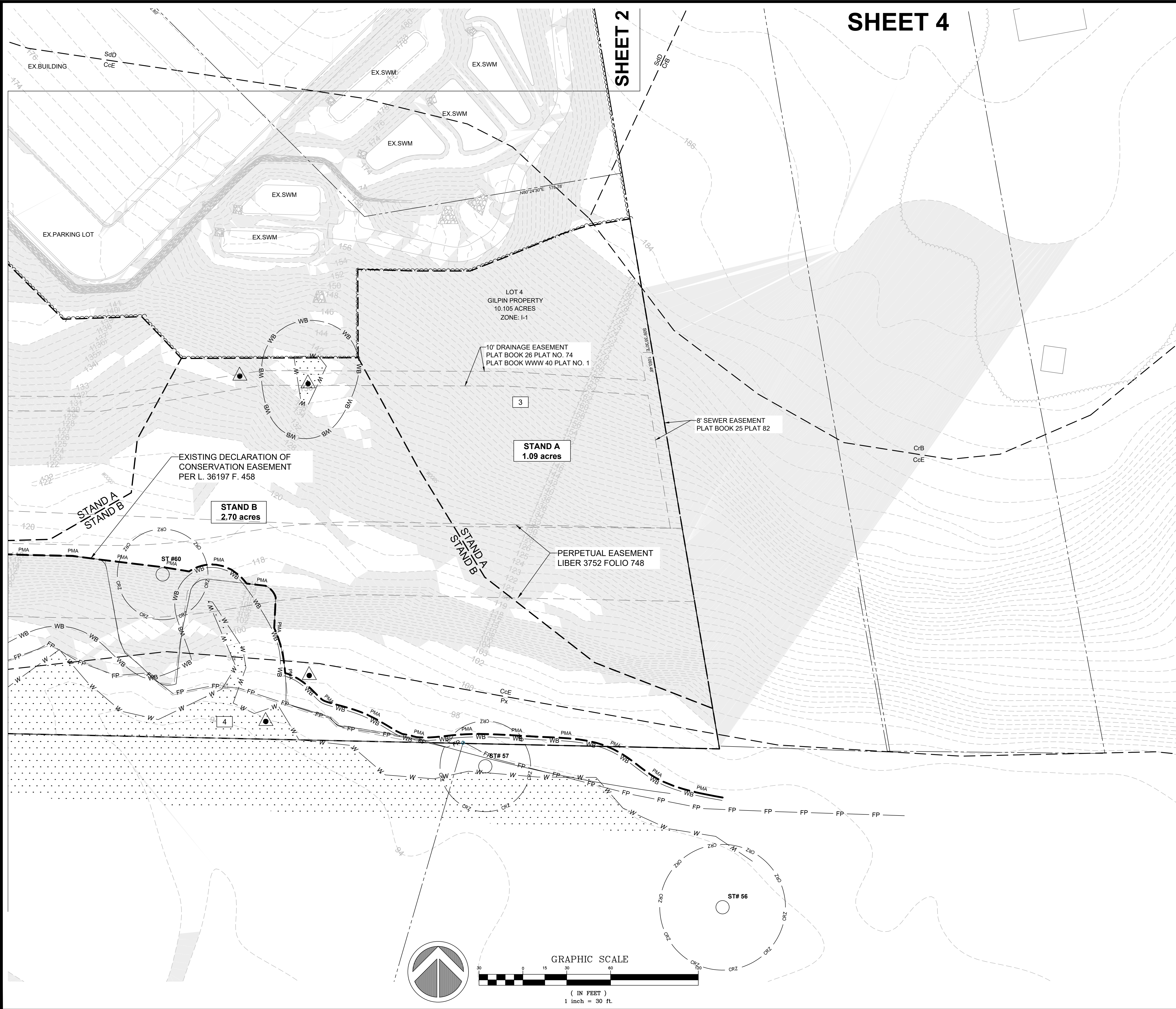
Design	Draft	Approved
MF	MF	MJK

3 of 5

WSSI Project Number:  
P.WS10000490



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SHEET 4

SHEET 2

**LEGEND**

	PROPERTY LINE
	EXISTING TREELINE
	SOILS BOUNDARY
	EXISTING WETLAND
	25' WETLAND BUFFER
	PRIMARY MANAGEMENT AREA (2 FEET OFFSET)
	FOREST STAND BOUNDARY
	FOREST STAND DATA POINT LOCATION
	SPECIMEN TREE
	STEEP SLOPES 15% OR GREATER
	WETLAND DATA POINT
	EX. UNDERGROUND STORMWATER MANAGEMENT
	EX. UNDERGROUND SANITARY LINE
	EX. UNDERGROUND GAS LINE
	EX. ABOVE GROUND UTILITY LINE

**QUALIFIED PROFESSIONAL CERTIFICATION**  
THIS PLAN COMPLIES WITH THE CURRENT REQUIREMENTS OF PRINCE GEORGE'S CODE AND THE ENVIRONMENTAL TECHNICAL MANUAL.  
SIGNED: DATE: 03/25/2024  
**MARIUS FLEMMER**  
WETLAND STUDIES AND SOLUTIONS, INC.  
1131 BENFIELD BOULEVARD, SUITE L  
MILLERSVILLE, MD 21044  
PH: (703) 679-5692 FAX: (410) 672-5993  
E-MAIL: MFLEMMER@WETLANDS.COM

Prince George's County Planning Department, M-NCPPC Environmental Planning Section NATURAL RESOURCES INVENTORY PLAN APPROVAL NRI -029-13			
No.	Date	Description	App. By
00		Approved by Chuck Schneider	4/1/2013
01		Alexander Kischkoff	7/12/2024
02			
03			
04			
05			
06			

**Wetland**  
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**NATURAL RESOURCE INVENTORY (NRI) PLAN**

Prepared For: Bohler  
**900 Southern Avenue**  
Prince George's County, Maryland  
Copyright © 2024 Wetland Studies and Solutions, Inc.

REVISIONS			
No.	Date	Description	App. By
1	06/04/24	UPDATED PLAN PER MNCPPC COMMENTS	KEH
2	06/28/24	UPDATED PLAN PER MNCPPC COMMENTS	KEH
3	07/11/24	UPDATED PLAN WITH DRAINAGE EASEMENT	KEH

DATE: 25 March, 2024 SCALE: As Noted CL: 2'

Horizontal Datum: VCS NAD 83  
Vertical Datum: NAVD 88  
Boundary and Topo Source: Bohler  
Prince George's County GIS

Design	Draft	Approved
MF	MF	MJK

4 of 5

WSSI Project Number:  
P.WS10000490



Forest Stand A			
Part A: Composition and Structure		Part B: Condition	
1. Percent Canopy Closure		1. Invasive Species Coverage (%)	
70-100%	3	Herbaceous	
40-69%	(2)	<1	3
10-39%	1	1-5	2
0-9%	0	>5	(1)
2. Number of shrubs under 20" tall		Understory	
15 or more	3	<1	3
10-14	(2)	1-5	2
5-9	1	>5	(1)
0-4	0	Canopy	
3. # of tree species 5" DBH and greater		<1	
6 or more	3	1-5	3
			2
4-5	(2)	>5	(1)
2-3	1	2. Percent of damage from insect & disease or storm damage	
0-1	0	0-10	(3)
4. Size class of dominant trees		11-20	2
Greater than 20"	3	21-30	1
6-19.9"	(2)	31+	0
3-5.9"	1	3. Percent of downed dead woody material present	
Less than 3"	0	15-50%	(3)
5. Percent herbaceous shrub cover under			
3"		5-14%	2
75-100%	3	51-100%	1
25-74%	(2)	0-4%	0
5-24%	1	4. Average number of standing dead trees/tenth acre plot	
0-4%	0	0-1	3
6. Stocking Level (BA)		2	2
<50		3-5	(1)
50-120	(2)	5 or more	0
>120	1	5. Other features	
7. Other Features			
At the discretion of the preparer, additional points may be assigned, provide description in the narrative		At the discretion of the preparer, additional points may be assigned, provide description in the narrative	
Composition and Structure TOTAL		Condition TOTAL	
12		10	

FOREST STAND SUMMARY SHEET	
Property: 900 Southern Avenue	Acreage: 5.01
Location: <u>Prince George's County, MD</u> ADC Map #: 5649B8 Grid Coordinates: 38°49'48" N, 76°59'17" W	
Prepared by: <u>Katelyn Hoisington of Wetland Studies and Solutions, Inc.</u>	Date: 5/3/2023
<i>Stand Variable</i>	<i>Stand A</i>
1. Dominant species/Co-dominant species	<i>Black locust, Tree-of-Heaven</i>
2. Forest Association	<i>Locust</i>
3. Successional Stage	<i>Mid</i>
4. Basal Area in square feet per acre	120
5. Size class of dominant species	10-179"
6. Percent of canopy coverage	44%
7. Number of tree species per acre	6
8. Common understory species	<i>White mulberry, Tree-of-heaven, Honeysuckle, Shipy elm, Box elder, Autumn olive</i>
9. Percent of understory cover 3' to 20 tall	26%
10. Number of understory species 3' to 20 tall	6
11. Common herbaceous species	<i>Panic grass, Multiflora rose, Garlic Mustard, Mock strawberry, Japanese stilt grass</i>
12. Percent of herbaceous & woody plant cover 0' to 3' tall	69%
13. List of major invasive plant species	<i>Tree-of-heaven, Honeysuckle, Multiflora rose, Wineberry, Autumn olive</i>
14. Percent invasive species coverage	66%
15. Number of standing dead trees 6" ≥dbh	1
Comments	

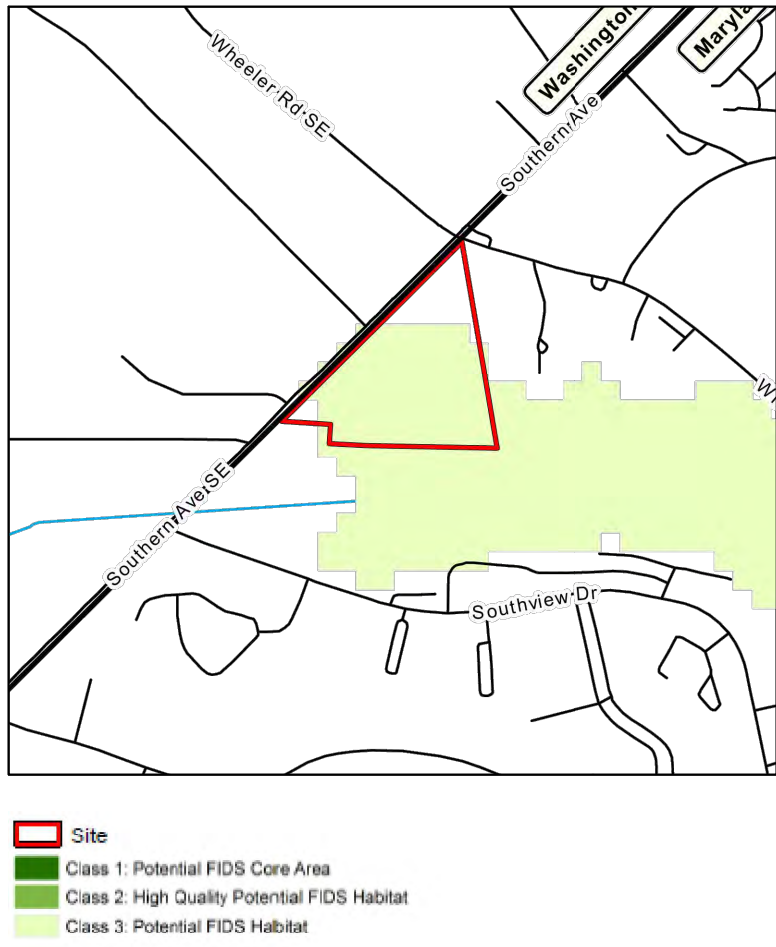
<b>Part C: Location</b>						
Priority 1	20					
Priority 2	15					
Priority 3	10					
Location Rating:		15				
<b>Part D:</b>						
Stand	Water Quality	Visual Screening	Wildlife Habitat	Energy Conservation	Personal Woodlot	Other Function
A	X	X	X			

Summary Table- Forest Analysis and Priorities						
Stand	Structure (out of 20)	Condition (out of 20)	Location (out of 20)	Total (out of 60)	Priority for Preservation (H, M or L)	Priority for Restoration (H, M or L)
A	10	15	15	40	M	M
B	12	12	15	39	M	M

Forest Stand A			
Part A: Composition and Structure		Part B: Condition	
1. Percent Canopy Closure		1. Invasive Species Coverage (%)	
70-100%	3	Herbaceous	
40-69%	(2)	<1	3
10-39%	1	1-5	2
0-9%	0	>5	(1)
2. Number of shrubs under 20" tall		Understory	
15 or more	3	<1	3
10-14	2	1-5	2
5-9	1	>5	(1)
0-4	(0)	Canopy	
3. # of tree species 5" DBH and greater 6 or more		<1	(5)
	(3)	1-5	2
4-5	2	>5	1
2-3	1	2. Percent of damage from insect & disease or storm damage	
0-1	0	0-10	(5)
4. Size class of dominant trees		11-20	2
Greater than 20"	3	21-30	1
6-19.9"	(2)	31+	0
3-5.9"	1	3. Percent of downed dead woody material present	
Less than 3"	0	15-50%	(5)
5. Percent herbaceous shrub cover under 3"		5-14%	2
75-100%	3	51-100%	1
25-74%	2	0-4%	0
5-24%	(1)	4. Average number of standing dead trees/tenth acre plot	
0-4%	0	0-1	3
6. Stocking Level (BA)		2	(2)
<50	3	3-5	1
50-120	(2)	5 or more	0
>120	1	5. Other features	
7. Other Features			
At the discretion of the preparer, additional points may be assigned, provide description in the narrative		At the discretion of the preparer, additional points may be assigned, provide description in the narrative	
Composition and Structure TOTAL		Condition TOTAL	
10			13

FOREST STAND SUMMARY SHEET	
Property: 900 Southern Avenue	Acreage: 2.70
Location: Prince George's County, MD ADC Map #: 5649B Grid Coordinates: 38°49'48"N, 76°59'17"W	
Prepared by: Katelyn Hoisington of Wetland Studies and Solutions, Inc.	Date: 5/3/2023
Stand Variable	Stand B
1. Dominant species/Co-dominant species	Willow oak
2. Forest Association	Oak/Maple
3. Successional Stage	Late
4. Basal Area in square feet per acre	85
5. Size class of dominant species	10-17.9
6. Percent of canopy coverage	59%
7. Number of tree species per acre	9
8. Common understory species	Willow oak, Sweet gum, Musclegwood, Red maple, Sugar maple, Honeysuckle
9. Percent of understory cover 3' to 20' tall	31
10. Number of understory species 3' to 20' tall	8
11. Common herbaceous species	Panic grass, Multiflora rose, Garlic Mustard, Virginia creeper, Common rush, Japanese stilt grass, Greenbrier, Winter creeper
12. Percent of herbaceous & woody plant cover 0' to 3' tall	24%
13. List of major invasive plant species	Multiflora rose, Garlic Mustard, Honeysuckle, Autumn olive, Winter creeper, Japanese stilt grass
14. Percent invasive species coverage	14%
15. Number of standing dead trees 6" ≥ dbh	2
Comments	

<b>Part C: Location</b>						
Priority 1	20					
Priority 2	15					
Priority 3	10					
Location Rating:		15				
<b>Part D:</b>						
Stand	Water Quality	Visual Screening	Wildlife Habitat	Energy Conservation	Personal Woodlot	Other Function
A	X	X	X			



**QUALIFIED PROFESSIONAL CERTIFICATION**  
THIS PLAN COMPLIES WITH THE CURRENT REQUIREMENTS  
OF PRINCE GEORGE'S CODE AND THE ENVIRONMENTAL  
TECHNICAL MANUAL.

SIGNED: M. Flemmer DATE: 03/25/2024

**MARIUS FLEMMER**  
**WETLAND STUDIES AND SOLUTIONS, INC.**  
**1131 BENFIELD BOULEVARD, SUITE L**  
**MILLERSVILLE, MD 21144**  
**PH: (703) 679-5692 FAX: (410) 672-5993**  
**E-MAIL: MFLFEMMER@WETLANDS.COM**

<b>Prince George's County Planning Department, M-NCPPC</b> <b>Environmental Planning Section</b> <b>NATURAL RESOURCES INVENTORY PLAN APPROVAL</b> <b>NRI-029-13</b>			
	Approved by	Date	Reason for Revision
00	Chuck Schneider	4/1/2013	
01	<i>Alexander Kirchhof</i>	7/12/2024	NRI Expired
02			
03			
04			
05			
06			

REVISIONS			
No.	Date	Description	Rev. By App. By
1	06/4/24	UPDATED PLAN PER MINCPPC COMMENTS	KEH MJK
2	06/28/24	UPDATED PLAN PER MINCPPC COMMENTS	KEH MJK
3	07/11/24	UPDATED PLAN WITH DRAINAGE EASEMENT	KEH MJK
DATE: 25 March, 2024		SCALE: As Noted	C.I.: 2'

NATURAL RESOURCE INVENTORY (NRI) PLAN

Prepared For: Bohler  
900 Southern Avenue  
Prince George's County, Maryland  
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**Wetland**  
Studies and Solutions, Inc.<sup>®</sup>

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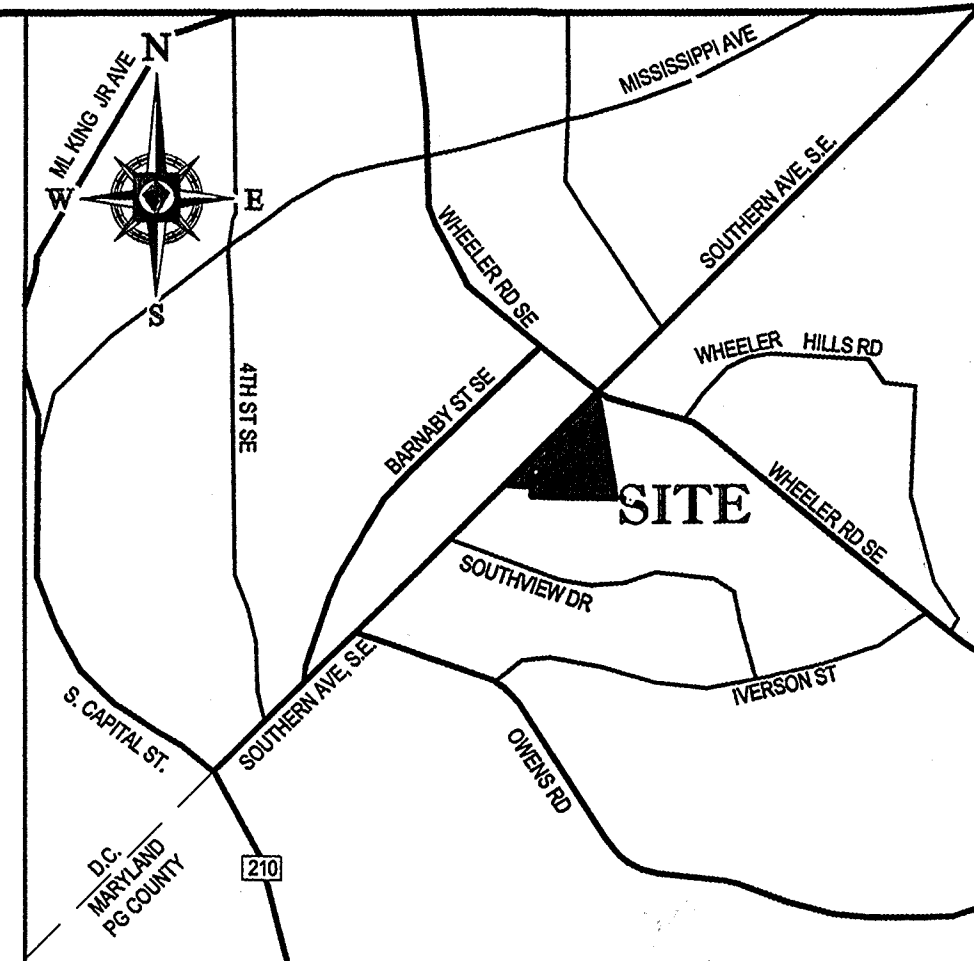
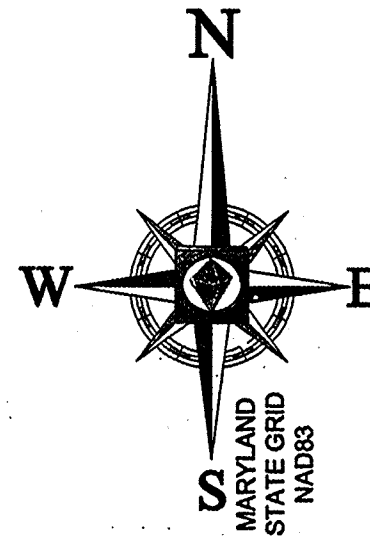
5 of 5



SJH245-76

NOTES

1. DEVELOPMENT OF THIS PROPERTY MUST CONFORM TO DETAILED SITE PLAN WHICH WAS APPROVED BY THE PRINCE GEORGE'S COUNTY PLANNING BOARD ON SEPTEMBER 12, 2013, DSP-13008, OR AS AMENDED BY ANY SUBSEQUENT REVISIONS THERETO.
2. DEVELOPMENT OF THIS SITE SHALL BE IN CONFORMANCE WITH STORMWATER MANAGEMENT CONCEPT PLAN, 19266-2015 AND ANY SUBSEQUENT REVISIONS.
3. APPROVAL OF THIS PLAT WILL HAVE NO IMPACT ON THE EXISTING PUBLIC WATER AND SEWER SYSTEMS. THE APPROVAL OF FUTURE BUILDING PERMITS WILL BE BASED UPON PUBLIC WATER AND SEWER CAPACITIES BEING AVAILABLE PRIOR TO CONSTRUCTION.
4. THIS DEVELOPMENT IS SUBJECT TO RESTRICTIONS SHOWN ON THE APPROVED TYPE I TREE CONSERVATION PLAN (TCP1-007-2015 OR MOST RECENT REVISION), OR AS MODIFIED BY THE TYPE 2 TREE CONSERVATION PLAN, AND PRECLUDES ANY DISTURBANCE OR INSTALLATION OF ANY STRUCTURE WITHIN SPECIFIC AREAS. FAILURE TO COMPLY WILL MEAN A VIOLATION OF AN APPROVED TREE CONSERVATION PLAN AND WILL MAKE THE OWNER SUBJECT TO MITIGATION UNDER THE WOODLAND AND WILDLIFE HABITAT CONSERVATION ORDINANCE. THIS PROPERTY IS SUBJECT TO THE NOTIFICATION PROVISIONS OF CB-60-2005. COPIES OF ALL APPROVED TREE CONSERVATION PLANS FOR THE SUBJECT PROPERTY ARE AVAILABLE IN THE OFFICES OF THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION, PRINCE GEORGE'S COUNTY PLANNING DEPARTMENT.
5. ANY RESIDENTIAL DEVELOPMENT OF THE SUBJECT PROPERTY SHALL REQUIRE APPROVAL OF A NEW SUBDIVISION PRIOR TO APPROVAL OF ANY BUILDING PERMITS.
6. THIS PLAT IS SUBJECT TO THE RECORDATION OF A WOODLAND CONSERVATION EASEMENT PURSUANT TO SECTION 25-122(d)(1)(B) WITH THE LIBER AND FOLIO REFLECTED ON THE TYPE 2 TREE CONSERVATION PLAN.
7. CONSERVATION EASEMENTS DESCRIBED ON THIS PLAT ARE AREAS WHERE THE INSTALLATION OF STRUCTURES AND ROADS AND THE REMOVAL OF VEGETATION ARE PROHIBITED WITHOUT PRIOR WRITTEN CONSENT FROM THE M-NCPP PLANNING DIRECTOR OR DESIGNEE. THE REMOVAL OF HAZARDOUS TREES, LIMBS, BRANCHES OR TRUNKS IS ALLOWED.
8. TOTAL DEVELOPMENT SHALL BE LIMITED IN ACCORDANCE WITH CONDITION 10 OF PGCPB RESOLUTION NO. 15-119.



VICINITY MAP  
SCALE: 1"=200'

OWNER'S DEDICATION

SILVER BRANCH, LLC, OWNER OF THE PROPERTY SHOWN HEREON AND DESCRIBED IN THE SURVEYOR'S CERTIFICATE, HEREBY ADOPT THIS PLAT OF SUBDIVISION, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES; GRANT TO THE PUBLIC UTILITIES, THEIR SUCCESSORS AND ASSIGNS, A 10 FOOT PUBLIC UTILITY EASEMENT AS SHOWN, SUBJECT TO THE TERMS AND PROVISIONS RECORDED AMONG THE LAND RECORDS OF PRINCE GEORGE'S COUNTY, MARYLAND IN LIBER 3703 AT FOLIO 748. PROPERTY MARKERS WILL BE PLACED IN ACCORDANCE WITH SECTION 24-120(b)(6)(F)(ii) OF THE SUBDIVISION REGULATIONS.

THERE ARE NO SUITS, ACTIONS AT LAW, LEASES, LIENS, MORTGAGES OR TRUSTS AFFECTING THE PROPERTY INCLUDED IN THIS PLAT OF SUBDIVISION.

*[Signature]* 9/19/16  
SILVER BRANCH, LLC, ITS MANAGING MEMBER DATE

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE PLAT SHOWN HEREON IS CORRECT; THAT IT IS A RESUBDIVISION OF ALL THE LAND CONVEYED TO SILVER BRANCH, LLC BY DEED DATED SEPTEMBER 30, 2013 AND RECORDED AMONG THE LAND RECORDS OF PRINCE GEORGE'S COUNTY, MARYLAND IN LIBER 35352 AT FOLIO 289, ALSO BEING A RESUBDIVISION OF LOTS 1 AND 2, AS SHOWN ON A PLAT OF SUBDIVISION TITLED GILPIN PROPERTY RECORDED AMONG THE AFOREMENTIONED LAND RECORDS IN PLAT BOOK WWW 40 AT PLAT NO. 1, AND THAT THE TOTAL AREA INCLUDED IN THIS PLAT OF SUBDIVISION IS 628,872 SQUARE FEET OR 14.437 ACRES.

*[Signature]* 9-19-16  
ROBERT C. HARR, JR., PROFESSIONAL LAND SURVEYOR DATE  
MARYLAND REGISTRATION No. 21587  
EXP. DATE 01-16-2017

GILPIN PROPERTY  
LOTS 3 & 4

12TH ELECTION DISTRICT  
PRINCE GEORGE'S COUNTY, MARYLAND  
SCALE: 1"=100' DATE: SEPTEMBER 19, 2016



SB132024SUB3.dwg

FILED

OCT 06 2016

FOR PUBLIC WATER AND SEWER

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION  
PRINCE GEORGE'S COUNTY PLANNING BOARD

APPROVED: *[Signature]* October 6, 2016  
CHAIRMAN ASSISTANT SECRETARY

MNCPPC FILE No. 5-16097

DEPARTMENT OF THE ENVIRONMENT  
PRINCE GEORGE'S COUNTY, MARYLAND

APPROVED: *[Signature]* September 22, 2016  
DIRECTOR OR DESIGNEE

CLERK OF THE CIRCUIT COURT  
FOR PRINCE GEORGE'S COUNTY, MD

RECORDED: 10-06-16

PLAT BOOK: SJH245

PLAT NO.: 76

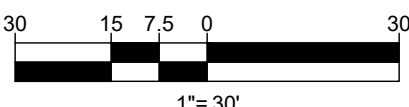
I-1  
4-15017  
206SE01 & 02

P217655

MSA 51250-19575



75' WIDE R/W  
POSTED SPEED LIMIT = 30 PMH



FLOODPLAIN IMPACT	
AREA NUMBER	IMPACT AREA (SF/ACRE)
1	498 (0.01)
TOTAL	498 (0.01)

ALWAYS CALL 811

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY  
REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION  
DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: MDB230010.00  
DRAWN BY: EKO  
CHECKED BY: JD  
DATE: 10/31/2024  
CAD I.D.: EXBT

PROJECT:

- FOR -

GILPIN  
PROPERTY

## LOCATION OF SITE

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

**16701 MELFORD BLVD , SUITE 430**  
**BOWIE, MARYLAND 20715**  
 Phone: (301) 809-4500  
 Fax: (301) 809-4501  
***MD@BohlerEng.com***

SHEET TITLE:

**PMA IMPACT  
EXHIBIT**

SHEET NUMBER

1

ORG. DATE - 10/31/2024



SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 PMH



N45°03'35"E 1328.88'

12" WATER EASEMENT  
LIBER 2189 FOLIO 35 &  
PLAT BOOK WWW 40 PLAT 1

EX. TREELINE

SD INLET  
(TOP MH=147.37)  
SAN. MH  
TOP=144.04  
CL INV=132.74

124.42

SAN. MH  
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CASE NO: DSP-13008-02  
CASE NAME: GILPIN PROPERTY (PHASE III)  
PARTY OF RECORD: 6  
PB DATE:

MATTHEW C TEDESCO  
MCNAMEE HOSEA  
6404 IVY LANE, SUITE 820  
GREENBELT MD 20770  
(CASE NUMBER: DSP-13008-02)

MEL FRANKLIN  
AT-LARGE MEMBER  
1301 MCCORMICK DRIVE, 2ND FLOOR WAYNE K.  
CURRY ADMINISTRATION BUILDING  
LARGO MD 20774  
(CASE NUMBER: DSP-13008-02)

ARCLAND PROPERTY COMPANY, LLC  
1055 THOMAS JEFFERSON STREET NW  
WASHINGTON DC 20007  
(CASE NUMBER: DSP-13008-02)

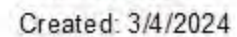
KRYSTAL ORIADHA  
PRINCE GEORGE'S COUNTY COUNCIL  
1301 MCCORMICK DRIVE, 2ND FLOOR WAYNE K.  
CURRY ADMINISTRATION BUILDING  
LARGO MD 20774  
(CASE NUMBER: DSP-13008-02)

CALVIN S HAWKINSII  
AT-LARGE MEMBER  
1301 MCCORMICK DRIVE, 2ND FLOOR WAYNE K.  
CURRY ADMINISTRATION BUILDING  
LARGO MD 20774  
(CASE NUMBER: DSP-13008-02)

SILVER BRANCH LLC  
1055 THOMAS JEFFERSON STREET NW SUITE 250  
WASHINGTON DC 20007  
(CASE NUMBER: DSP-13008-02)



## COUNCIL DISTRICT: 7





# **HILLIS-CARNES**

## **ENGINEERING ASSOCIATES**

Report of Subsurface Exploration and  
Geotechnical Engineering Services  
**Southern Avenue Self Storage Retaining Walls - Phase III**  
901 Southern Avenue, Oxon Hill, Maryland  
HCEA Project No. F23050

**December 5, 2024**

### **Prepared For:**

Ms. Nana Baine  
Development Project Manager  
Arcland Property Company  
1055 Thomas Jefferson St. NW, Suite 250  
Washington, DC 20007



December 5, 2024

1660 Bowman Farm Road, Suite 105

Frederick, MD 21701

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Ms. Nana Baine  
Development Project Manager  
Arcland Property Company  
1055 Thomas Jefferson St. NW, Suite 250  
Washington, DC 20007

Re: Geotechnical Engineering Study  
**Southern Avenue Self Storage Retaining Walls - Phase III**  
901 Southern Avenue, Oxon Hill, Maryland  
HCEA Project No. F23050

Dear Ms. Baine:

Hillis-Carnes Engineering Associates, Inc. (HCEA) is pleased to submit this report concerning the geotechnical evaluation for the four (4) retaining walls that are proposed to be constructed at the above referenced project site located in Oxon Hill, Maryland. The purpose of this study was to determine the general subsurface conditions at the boring locations and to provide evaluations pertaining to the structural design of the proposed walls.

## **PROJECT DESCRIPTION**

It is our understanding that the project consists of the construction of a three-story storage building with a walk-out cellar and associated pavements. We also understand that a total of four (4) retaining walls (RW-1 through RW-4) are planned on the northwest, northeast and southeast sides of the project site to retain fill materials that will be placed associated with the site development. We understand that the design of the retaining walls has not been completed. We assumed the walls to be segmental block reinforced walls.

The locations of the retaining walls are shown in the Boring Location Plan (Drawing No. 2) enclosed with this report. The site grading plan we reviewed indicated that the planned approximate maximum heights of RW-1, RW-2, RW-3 and RW-4 are 14, 38, 8, and 5.5 feet, respectively. We have also identified two slopes located on the southwest (Slope A-A) and northeast (Slope B-B) sides of the site which we considered to be critical slopes.

The purpose of this study was to determine the general subsurface conditions at the boring locations and to provide engineering soil properties for use in the structural design of the walls by others. Our scope of work also includes analyzing the global stability of the proposed walls and stability of the critical slopes.



## **SUBSURFACE EXPLORATION**

To determine the general soil types along the proposed locations of the retaining walls and slopes identified to be critical, a total of thirteen (13) Standard Penetration Test (SPT) soil borings were drilled. Ten (10) of the borings (R-1 through R-10) were located at the planned locations of the retaining walls. The remaining 3 borings (R-1, R-2, and R-3) were drilled at a location identified as critical slopes. It should be noted that select borings from the previous study performed at the project site (HCEA Project No. F23050, dated May 15, 2023) were used in the analysis of the retaining walls. A summary of the borings drilled at each structure location and the depths they were extended to are included in Table 1.

**Table 1 – Summary of Borings**

<b>Structure</b>	<b>Borings</b>	<b>Planned Termination Depth (feet)</b>	<b>Drilled Depth (feet)</b>
RW-1	R-1, R-2, R-3, & R-4	20	8 to 20
RW-2	R-5, R-6, R-7, B-4, B-5, & B-6	60 to 70	40 to 70
RW-3	R-8, R-9, R-10, & B-1	20	20
RW-4	B-3	30	30
Slopes	R-1, R-6, S-1, S-2, S-3, B-5, B-9, & B-10	20	10 to 20

Note: B borings are from previous study

As shown above in the table, some of the RW-1, RW-2 and Slope borings terminated before reaching the planned termination depths. Borings R-2, R-3, R-4, and S-1 refused within what appeared to be man placed fill materials. Auger refusal was attained in borings R-6 and R-7 at depths of 60 and 40 feet below existing site grades, respectively, on what appeared to be surface of bedrock or very hard cemented soil layer.

The borings were staked in the field by HCEA's surveying group, and the approximate locations of the borings are depicted on the Boring Location Plan enclosed with this report.

The borings were advanced with hollow-stem augers and the subsurface soils were sampled continuously. Samples were taken by driving a 1-3/8-inch I.D. (2-inch O.D.) split-spoon sampler in accordance with ASTM D-1586 specifications. The sampler was first seated 6 inches to penetrate any loose cuttings and then was driven an additional foot with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler the final foot is designated as the "Penetration Resistance" or "N" value. The penetration resistance, when properly evaluated, is an index to the soil strength and compression characteristics.

Representative portions of each soil sample were placed in glass jars and transported to HCEA's laboratory. In the laboratory, the samples were visually examined by the Geotechnical Engineer to verify the driller's field classifications. The samples were classified in accordance with the Unified Soil Classification System (USCS) and the field classifications were revised where necessary. The USCS Symbols appear on the Boring Logs and the system nomenclature is briefly described in the Appendix.



## **SUBSURFACE CONDITIONS**

Details of the subsurface conditions encountered at the site are shown on the Records of Soil Exploration (Boring Logs). A brief description of the subsurface conditions and pertinent engineering characteristics of the soils are given below.

Strata divisions shown on the Records of Soil Exploration have been estimated based on visual examinations of the recovered boring samples. In the field, strata changes could occur gradually and/or at slightly different levels than indicated. Also, groundwater conditions indicated on the Records of Soil Exploration are those observed during the period of the subsurface exploration. Fluctuations in groundwater levels could occur seasonally and might also be influenced by changes in grading, runoff and infiltration rates, and other influencing factors.

Generalized subsurface conditions based on the results of the borings are discussed below:

### **Site Geology**

The USGS geological map of Prince George's County indicates that the project site is underlain by the Lowland Deposits (Ql) of the Quaternary geologic age. The Lowland Deposits is reported to consist of "gravel, sand, silt, and clay. Medium- to coarse-grained sand and gravel; cobbles and boulders near base; commonly contains reworked Eocene glauconite; varicolored silts and clays; brown to dark gray lignitic silty clay; contains estuarine to marine fauna in some areas (includes in part Pamlico, Talbot, Wicomico and Sunderland Formations of earlier reports); thickness 0 to 150 feet".

### **Subsurface Soil Conditions**

Subsurface soil conditions as encountered in the soil borings generally reflect the soil types referenced in the geology sections of this report and were divided into the strata listed below.

Surface Materials---Approximately 3 inches of topsoil was encountered in the borings. Topsoil/root mat thickness should be expected to vary across the site. Therefore, the topsoil depths shown on the boring logs should not be used solely to estimate topsoil quantities at the site. Note that topsoil thickness noted on our boring logs is pure grass cover thickness observed at the boring locations based on limited sample recovered in the borings. In areas of heavy tree/brush growth, more than normal sub-topsoil layer, heavy root mat may be encountered and should be accounted for probable removal/in place remediation.

Fill Materials---Man-placed FILL materials were encountered in all borings except borings R-5, R-6, and R-7. Fill and Possible Fill materials were also encountered in the borings drilled in the previous study. The fill materials consisted of varying combinations of lean clay, fat clay, silt, sand, and gravel. The fill materials in some of the borings consisted of varying amounts and types of construction debris materials. The depth and characteristics of the fill materials encountered in the borings are summarized in Table 2 as follows.



**Table 2 – Depth and Characteristics of Fill Materials**

Structure	Boring	Fill Depth (feet)	Remark
RW-1	R-1	0-13.5	- Trace organics and asphalt debris
	R-2	0-11.5	- Trace of asphalt and concrete debris - Boring refused at 11.5 feet possibly on top of construction debris - Auger refusal on an offset location at a depth of 10 feet
	R-3	0-13.0	- Trace of asphalt and concrete debris - Boring refused at 13 feet possibly on top of construction debris
	R-4	0-8.0	- Boring refused at 8 feet possibly on top of construction debris
RW-2	R-5	NA	- Fill material was not encountered
	R-6	NA	- Fill material was not encountered
	R-7	NA	- Fill material was not encountered
	B-4	0-8.5	- Trace of organics
RW-3	R-8	0-8.0	- Trace of organics
	R-9	0-8.0	- Trace of organics
	R-10	0-8.0	- Trace of organics
RW-4	B-3	0-8.5	- Trace of asphalt debris
Slope	S-1	0-10.0	- Trace of asphalt and concrete debris - Boring refused at 10 feet possibly on top of construction debris - Auger refusal on two offset locations at depths of 6 and 7 feet
	S-2	0-20.0	- Fill materials extended to the boring termination depth of 20 feet - Trace of asphalt debris - Refusal on the first two attempted locations at depths of 8 & 10 feet
	S-3	0-13.0	- Trace of asphalt debris
	B-5	0-2.5	- Trace of organics
	B-6	0-13.5	- Trace of brick and asphalt debris
Building	B-1	0-5.0	- Trace of brick debris
	B-2	0-2.5	- Trace of organics
	B-9	0-10	- Fill materials extended to the boring termination depth of 10 feet - Trace of brick debris
Pavement	B-7	NA	- Fill material was not encountered
	B-8	0-5.0	- Trace of organics

Note: B borings are from previous study



It should be noted that test borings are not a definitive method of evaluating the presence of existing fill materials because of the limited size of the hole diameters and the very limited sample sizes obtained in comparison to the areal extent of the site. Also, the fill materials may be similar in composition to the on-site natural soils. Due to these reasons, it is often difficult to determine the presence and composition of fill materials from the relatively small SPT boring samples.

As summarized above in the table, construction debris materials were encountered in the borings mainly in those located on the southern and southwestern sides of the site. This portion of the site may have been used as a dump site. Test pitting must be performed to accurately delineate the extent and characteristics of the fill materials.

**Natural Soils---** The natural materials encountered below the surface or fill layers were classified in accordance with the USCS as Fat CLAY (CH), lean CLAY (CL), silty clayey SAND (SC-SM), silty SAND (SM), well graded SAND (SP), and clayey Gravel with sand (GC). Based on the SPT “N” values, the stiffness of the natural cohesive soils ranged from very soft to hard and the relative density of the cohesionless materials varied from medium dense to very dense.

**Disintegrated ROCK---** Disintegrated ROCK is defined as a residual material, with a penetration resistance (N-value) ranging from 60 blows per foot to 50 blows per 1-inch penetration. Disintegrated rock was encountered in RW-2 borings (B-4, R-5, R-6, and R-7), RW-4 boring (B-3), B-1, and B-5 at depths that ranged from 23.5 to 33.5 feet below existing site grades.

**Auger Refusal---** Auger refusal, which is typically an indicator of top of rock or very hard cemented soil layer, was encountered in borings R-6 and R-7 at approximated depths of 60 and 40 feet, respectively. Auger refusal was also encountered in borings S-1, R-2, R-3, and R-4 at depths that ranged from 8 to 13 feet. However, the auger refusal in these borings were encountered within the fill stratum possibly on the surface of construction debris.

### Subsurface Water

Subsurface water was monitored in the borings during and after completion of drilling operations. During these times, subsurface was encountered at an approximate depth of 40 feet in boring R-5 and 20 feet in borings B-3 and B-5. Subsurface water, which appeared to be perched water that is trapped within the fill materials, were encountered at a depth of 3 feet in boring R-8. Subsurface water was not encountered in the remaining borings within the depths explored.



## **DESIGN RECOMMENDATIONS**

### **Foundations**

We understand that the design of the retaining walls has not been completed. We assumed the walls are going to be segmental concrete block reinforced walls. The foundation subgrade materials expected to be present at each retaining wall location are shown in the retaining wall profiles included in the report and summarized in Table 3.

**Table 3 – Summary of Expected Foundation Subgrade Materials**

<b>Structure</b>	<b>Expected Foundation Subgrade Material</b>
RW-1	Man Placed Fill Materials with construction debris
RW-2	Natural Soil Materials
RW-3	Man Placed Fill Materials
RW-4	New Structural Fill

The fill materials below RW-1 are expected to extend to deeper depths (> 15 feet). Furthermore, the fill materials are expected to consist of construction debris. Accordingly, complete removal and replacement with new structural fill is required. An allowable bearing pressure of 2,500 psf may be used for foundation soils prepared in this manner. Alternatively, due to the deeper depths of the fill materials, foundation soil improvement with aggregate piers or other ground improvement systems can be considered. Aggregate piers are normally designed by a design-build contractor and the proposed soil improvement plan is reviewed by the Geotechnical Engineer of Record. The soil improvement typically produces a subgrade capable of providing an allowable soil bearing pressure in the range of 4,000 to 6,000 psf. We anticipate the aggregate piers will have to extend to 15 to 25+/- feet below the proposed wall bottom elevation to attain the recommended improved allowable bearing pressure.

The natural soils at the bottom of RW-2 are expected to be suitable for an allowable soil bearing pressure of 3,000 psf.

The fill materials encountered in RW-3 area are expected to extend up to a depth of 5 feet below the planned bottom elevation of the wall. The fill materials should be undercut and replaced with controlled structural fill. Foundation soils prepared in this manner may be suitable for an allowable bearing pressure of 2,500 psf.

Up to 7 feet of new structural fill will be required to attain the bottom elevation of RW-4. Fill materials that extend to an approximate depth of 8.5 feet were encountered in the boring (B-3) drilled at the location of RW-4. The fill materials should be undercut and replaced with structural fill before placing the required new structural fill. Foundation subgrade soils prepared in this manner are expected to be suitable for an allowable bearing pressure of 2,500 psf.



The area of the reinforced compacted fill zone should be proof rolled with a 20-ton payload dump truck or other pneumatic-tired vehicle of similar size and weight. The proof rolling should involve overlapping passes in mutually perpendicular directions. Where rutting or pumping is observed during proof rolling, the soft and/or unstable soils should be excavated and replaced with a controlled compacted fill material.

All wall designs and installations should be in accordance with manufacture recommendations. It is recommended that all excavations be inspected, tested, and approved by a geotechnical engineer directly prior to the placement of the modular blocks. The purpose of the inspection would be to verify that the subgrade soils are capable of supporting the allowable bearing pressure. If soft or loose pockets are encountered in the excavations, the unsuitable material should be removed and replaced with compacted structural fill or AASHTO #57 stone.

Soils exposed at the base of all approved excavations should be protected against disturbance from the effects of groundwater, rain, and freezing temperatures. Care should be taken to minimize disturbance of the natural soils at the footing subgrades. Surface runoff and other water should be drained away from the excavations and not be allowed to pond on the subgrade soils. If possible, all foundations should be placed the same day that the excavation is made and approved. If this is not practical, then the bearing surfaces should be adequately protected with a 3-inch lean-mix concrete mud mat.

#### Base Leveling Pad Material

The facing units/blocks should bear on a leveling pad that consists of a minimum of 6 inches of AASHTO #57 stone or crushed stone. The leveling pad should not bear on very loose soil. Backfill of over-excavated bearing areas, if required, should be with approved material compacted to at least 95 percent of the standard Proctor maximum dry density at a moisture content within 2 percentage points of optimum (as determined by ASTM D 698) or AASHTO #57 stone. Also, the exposed over-excavated subgrade should be compacted to the above criteria.

#### Reinforced Backfill

The reinforced compacted fill zone should consist of materials that are classified as SM or more granular with a minimum unit weight of 120 pcf and friction angle of 32°. The materials should satisfy the structural fill specifications listed in this report.

Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage. The materials should be placed in horizontal lifts with maximum height of 8 inches loose measure where heavy compaction equipment is used. The lift thickness should be decreased to maximum of 6 inches loose measure where portable hand operated compaction equipment is used. Only light-weight hand operated equipment should be used within 3 feet from the tail of the facing units. We recommend that reinforced backfill be compacted to at least 95% of the standard Proctor maximum dry density per ASTM D-698 or 92% of the modified Proctor maximum dry density per ASTM D-1557.



### Geogrid Soil Reinforcement

The geogrids should have a minimum of 2,000 lb/ft long term allowable design strength (LTDS) such as Miragrid 3XT or equivalent.

### Foundation and Retained On-Site Soil

The engineering properties provided below in Table 4 are recommended for the on-site soils that are expected to be encountered behind the reinforced fill zone and at the foundation level. The soil engineering properties listed for the on-site subsurface materials were developed from generally accepted empirical correlations with SPT N-values, USCS classification, and laboratory results.

**Table 4 – Foundation and Retained On-Site Soil Properties**

<b>Subsurface Material Type</b>	<b>Moist ** Unit Weight (pcf)</b>	<b>Angle of Internal Friction (degrees)</b>	<b>Cohesion (psf)</b>
New Structural Fill*	120	30	0
Natural Fat Clay (CH) Soils	120	10	0
Natural Lean Clay (CL) Soils	120	19	0
Coarse Grained Natural Soils (SM or more Granular)	125	28	0
Disintegrated Rock	135	36	0
Rock	145	42	0

\*Structural fill materials placed at the site should have a minimum of these soil properties

\*\*The moist unit weight should be subtracted by 62.4 pcf (unit weight of water) for soils below the water table

### Global Stability Analysis

We assumed the walls to be segmental block reinforced walls. Accordingly, the overall or global stability of the walls was evaluated using the program GEOSTASE. The soil properties summarized in Table 4 were used for the analysis. The wall and site grade geometry were taken from the grading plan that was provided by the client. A vehicular surcharge load of 100 psf was applied for the parking areas planned near the walls.

The global stability of the walls was evaluated by examining potential failure planes passing behind and under the reinforced zone. We understand that PG County requires a minimum factor of safety (FOS) of 1.5. The minimum reinforcement lengths and other adjustments required to attain the required minimum FOS of 1.5 for each wall are summarized below. The results of the global stability analysis of each wall are enclosed with this report.



### RW-1

As previously noted, the retained and foundation soils in the areas of RW-1 are expected to consist of fill materials that have what appeared to be construction debris. The fill materials in entirety should be removed and replaced with new structural fill or the on-site soil improved with aggregate piers or other ground improvement systems.

The geogrid reinforcement length should be at least equal to the wall height (1H), H measured from the top of the leveling pad to top of the wall.

### RW-2

The following minimum requirements must be met:

- A minimum reinforcement length of 1.55H, H measured from the top of the leveling pad to top of the wall.
- Undercut the on-site soil below the reinforcement zone a minimum of 5 feet and replace it with new structural fill.
- Embed the wall a minimum of 6 feet from adjacent finished grade to the top of leveling pad

### RW-3

A minimum reinforcement length of 2.5H, H measured from the top of the leveling pad to top of the wall.

### RW-4

A minimum reinforcement length of 1.1H, H measured from the top of the leveling pad to top of the wall

## Critical Slopes Stability Analysis

We identified the slopes located on the southwest (Slope A-A) and northeast (Slope B-B) sides of the site to be critical slopes. The locations of these slopes are identified as Slope A-A and Slope B-B in the Boring Location Plan included with this report. The results of the stability analysis of the slopes are enclosed with this report and summarized as follows:

### Slope A-A

Like RW-1, fill materials that have what appeared to be construction debris were encountered in this area. New fill materials placed on top of uncontrolled fill materials will experience excessive settlement and slope failure. Accordingly, before placing the new fill materials, either the existing fill materials in entirety should be removed and replaced with new structural fill or the soil improved with aggregate piers or other ground improvement systems. A FOS above 1.5 was estimated for the 2H:1V slope depicted on the grading plan if the existing fill materials are removed and replaced with controlled structural fill or the soil improved as recommended in this report.



### Slope B-B

Our analysis indicates a low FOS of 0.9 for the 3H:1V slope currently depicted on the grading plan. To attain a minimum FOS of 1.5, the slope will have to be adjusted to 5H:1V or flatter. Accordingly, the site grading behind RW-2 should be adjusted to reflect a slope of 5H:1V.

### Settlement

We understand based on the grading plan we reviewed up to 30 feet of fill will be required to attain the proposed pavement grade in the northeast side of the site near RW-2. We also understand that up to 14 feet of fill will be required to attain the pavement grade proposed on the southwest side of the site. Up to 10 and 20 feet of cut will be required on the north and southeast sides of the site, respectively.

Our analysis indicates that the on-site soil below the pavement in the deeper fill area could experience settlement in the range of 7 inches from the loading from the new structural fill. The time required to attain the estimated substantial settlement is estimated to range from 12 to 15 months. Therefore, after the new structural fills are placed to required finished pavement subgrade elevations, the on-site soils should be allowed to settle for 12 to 15 months before construction of the pavement layer sections can begin.

We recommend the estimated settlement to be taken into consideration when determining the top of the wall elevations of retaining wall RW-2. An allowance may need to be considered when estimating the height of the top row to account for continuing settlement.

Settlement should be monitored by installing settlement plates as detailed in the Construction Recommendations section of this report. If a shorter settlement period is desired, HCEA is open to discussing options to expedite the settlement or ground improvement systems.

## **CONSTRUCTION RECOMMENDATIONS**

### Controlled Structural Fill

All structural fill materials, whether on-site or imported from an off-site source, should be tested for suitability and quality prior to its use as structural fill. We recommend that the material be tested to determine particle size (gradation), plasticity, and maximum dry density. The following standard tests should be performed to determine the above properties of all imported fill materials:

Particle Gradation	ASTM D-422
Atterberg Limits	ASTM D-4318
Modified Proctor	ASTM D-1557

Structural fill material shall consist of quality, low plasticity, non-organic soil that classifies as GW, GP, GM, GM-GP, GC, SW, SP, SM-SP, SM or SC in accordance with ASTM D-2487 and shall have a maximum of 30% retained on a standard 3/4-inch sieve with a



maximum dry density (MDD) of more than 110 pcf. All fill material shall be free of ice, snow, organic material (OH, OL), expansive soils of high plasticity/elasticity (CH/MH), construction debris, rock sizes greater than 4 inches, or other deleterious material. The structural fill materials should have a minimum friction angle of 30° and moist unit weight of 120 pcf.

Fill materials should be placed in horizontal lifts with maximum height of 8 inches loose measure. In confined areas such as utility trenches and foundation walls, portable compaction equipment and thinner lifts of 3 to 4 inches may be required to achieve adequate degrees of compaction. New fill should be adequately keyed into stripped and scarified subgrade soils and should, where applicable, be properly benched into existing slopes or laid-back portions of excavations. During fill operations, positive surface drainage should be maintained to prevent the accumulation of water.

We recommend that structural fill be compacted to at least 95 percent of the standard Proctor maximum dry density. The moisture content of the fill should be within 2% points of the optimum moisture content as determined by the modified Proctor density test or drier, if necessary, so as to attain proper compaction. This may require the contractor to dry soil during wet weather or add water during dry, hot weather. The geotechnical engineer should individually evaluate structural fill material.

We recommend that the contractor have equipment on site during earthwork for both drying and wetting of the soil as moisture alterations could very well be necessary at the time of construction. Moisture control may be especially difficult during winter months or extended periods of rain. Attempts to work the soil when wet can be expected to result in deterioration of otherwise suitable soil conditions of previously placed and properly compacted fill.

Where construction traffic or weather has disturbed the subgrade, the affected soils intended for structural support should be scarified and re-compacted. Each lift of fill should be tested in order to confirm that the recommended degree of compaction is attained. Field density tests to verify fill compaction should be performed for every 5,000 square feet (approximately 70 feet square) of fill area, with a minimum of two tests per lift.

#### Groundwater and Drainage

Based on the results of the borings, subsurface water is not anticipated during the anticipated earthwork and foundation excavations and is estimated to occur below foundation levels. Of course, fluctuations in subsurface water levels and soil moisture can be anticipated with seasonal changes, as well as changes in precipitation amounts and rainfall runoff characteristics.

Any water infiltration resulting from precipitation, surface run-off, or perched water should be able to be controlled by means of sump pits and pumps, or by gravity ditching procedures. If any conditions are encountered which cannot be handled in such a manner, this office should be consulted.



### Settlement Plates

Due to the significant amount of fill required to establish the proposed finished pavement subgrade elevations and time-dependent settlement characteristics of the on-site soils, settlement monitoring within the fill areas is recommended. Foundation and pavement construction within areas receiving fill should not commence until substantial settlement of the soils underlying the fill areas is complete. Settlement monitoring should consist of the installation of settlement monitoring plates prior to fill placement, with periodic surveying (at least once per week) of the tops of the settlement monitors as fill is being placed. HCEA recommends that the settlement plates be located within the deep fill areas. Settlement monitoring should continue until the survey data indicates steady state conditions have been achieved. Based on our analysis, we estimate at least 12-15 months from the end of fill placement until the start of pavement installation in the fill areas to allow for settlement to occur. If the settlement monitoring indicates that the fill induced settlement has stopped prior to the 12-15 months period, pavement construction can begin in the direction of the Geotechnical Engineer. The Geotechnical Engineer should review the settlement data to determine when foundation construction can commence.

- Start with installation the settlement plate base and first vertical section.
- Add extensions as needed during grading operations. The extensions should be added such that a minimum of 12-inches of “stick-up” is maintained above the fill surface. No more than one extension should be exposed at a time to ensure the top of the devices are accessible to survey crew.
- The addition of extensions should be coordinated with surveyor to ensure the appropriate measurements are obtained at the time of the addition to evaluate any required data adjustments.
- It will also be the contractor’s responsibility to properly protect the settlement plates from disturbance by traffic or construction activities. Any disturbance of the devices will impact the ability to properly obtain and evaluate settlement data and provide geotechnical recommendations.

It is recommended that fill placement and monitoring begin as far in advance of foundation and pavement construction as is possible to allow the settlements to occur without detrimentally impacting the construction schedule. A settlement plate detail is enclosed with this report. The settlement monitoring program should be planned and conducted by the Geotechnical Engineer and coordinated with the Client/Contractor.

### **REMARKS**

This report has been prepared to aid in the evaluation of the site for the proposed retaining walls design and construction. Additional recommendations can be provided as needed.

These analyses and recommendations are, of necessity, based on the information made available to us at the time of the actual writing of the report and the on-site conditions,



surface and subsurface that existed at the time the exploratory borings were drilled. A further assumption has been made that the limited exploratory borings, in relation both to the areal extent of the site and to depth, are representative of conditions across the site.

The recommendations contained herein have been based on a series of widely spaced soil borings. Actual subsurface conditions encountered could vary from those outlined in this report. If subsurface conditions are encountered which differ from those reported herein, this Office should be notified immediately so that the analyses and recommendations can be reviewed and/or revised as necessary.

HCEA appreciates having had the opportunity to provide the geotechnical consultation for this project, and we will remain available for further consultation during the various design stages. Should you have any questions concerning the contents of this report, or require additional consultation, design, inspection, or testing services, please contact our Office.

Very truly yours,

**HILLIS-CARNES ENGINEERING ASSOCIATES, INC.**



Paul Fritz, E.I.T.  
Staff Engineer



Robel Gibbe, P.E.  
Project Engineer

Senior Review:



Rajesh Goel, P.E.  
Principal Engineer

Enclosure: Site Location Plan  
Boring Location Plan  
Soil Boring Profiles  
Records of Soil Exploration (Boring Logs)  
Soil Description Sheet  
General Notes for Subsurface Records  
Global Stability Analysis Results  
Slope Stability Analysis Results  
Settlement Plate Detail



# Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

**The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.**

## Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

## Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer

will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.*

## Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

## You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*



responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

### Most of the “Findings” Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site’s subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual site-wide subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

### This Report’s Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

### This Report Could Be Misinterpreted

Other design professionals’ misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals’ plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

### Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note*

*conspicuously that you’ve included the material for information purposes only.* To avoid misunderstanding, you may also want to note that “informational purposes” means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

### Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled “limitations,” many of these provisions indicate where geotechnical engineers’ responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

### Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a “phase-one” or “phase-two” environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

### Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer’s services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer’s recommendations will not of itself be sufficient to prevent moisture infiltration.* Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists.*



GEOPROFESSIONAL  
BUSINESS  
ASSOCIATION

Telephone: 301/565-2733

e-mail: [info@geoprofessional.org](mailto:info@geoprofessional.org) [www.geoprofessional.org](http://www.geoprofessional.org)





**HILLIS-CARNES**  
**Engineering Associates, Inc.**

PROJECT NO.: F23050

SCALE: NTS

DATE: October 31, 2024

Site Location Plan, Southern Avenue Phase III – Retaining Walls and Slope, Oxon Hill, MD

Drawing No.

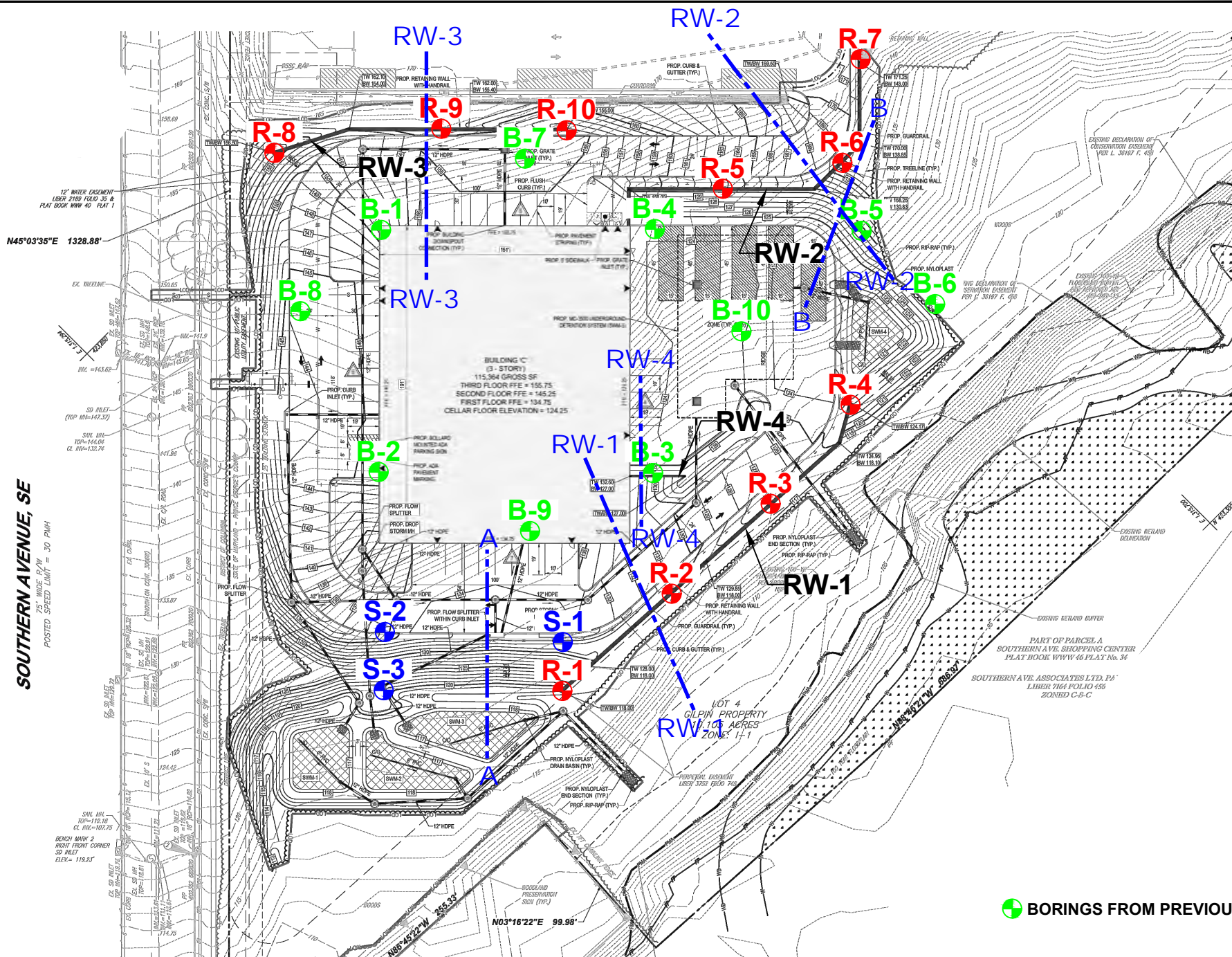
1



SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

N45°03'35"E 1328.88'



BORINGS FROM PREVIOUS STUDY



**HILLIS-CARNES**  
ENGINEERING ASSOCIATES  
1660 Bowman Farm Road, Suite 105 Frederick, MD 21701  
Phone: (301) 662-2522 Fax: (301) 662-5575

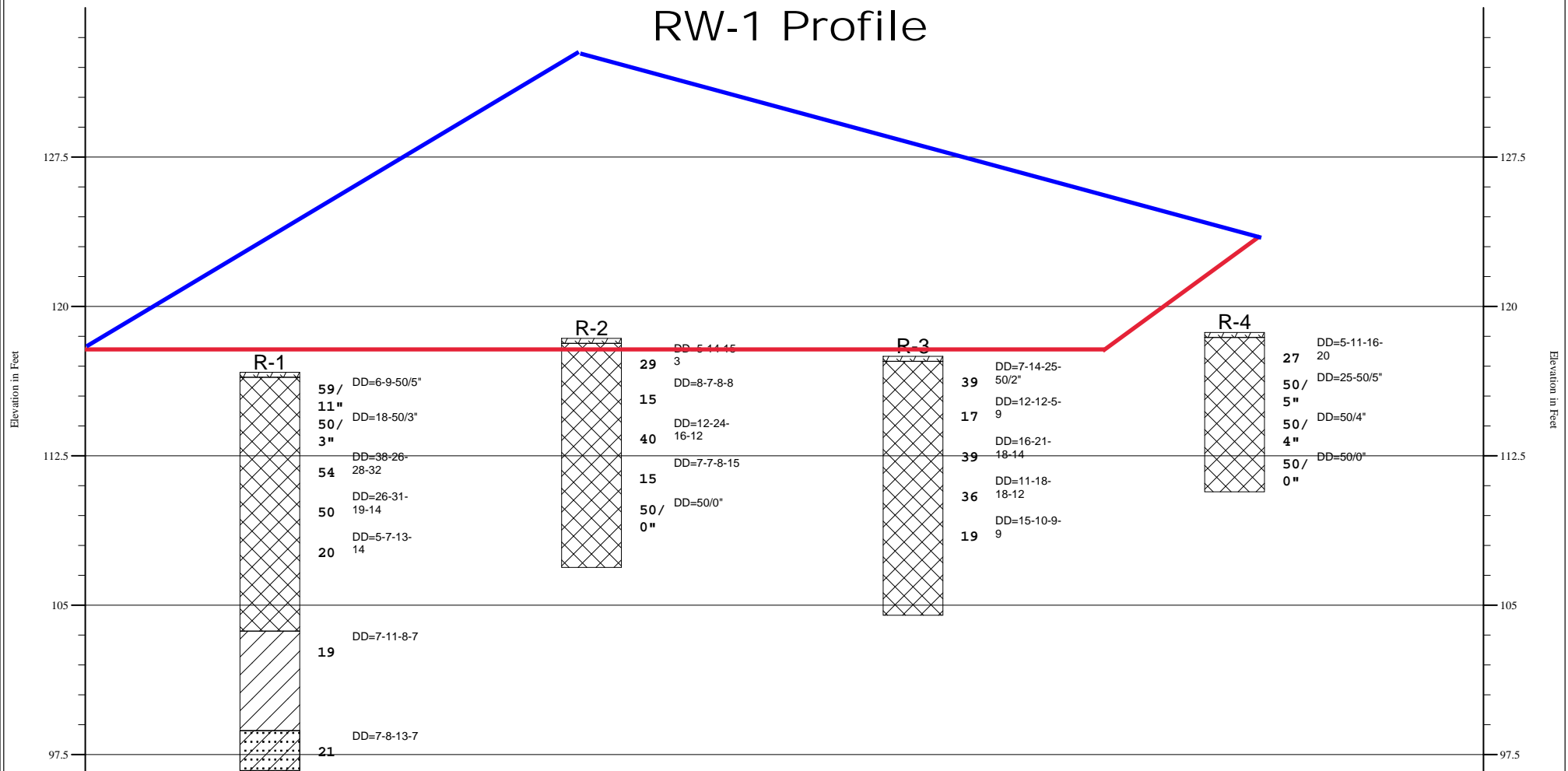
**BORING LOCATION PLAN**  
**SOUTHERN AVENUE PHASE III**  
**OXON HILL, MARYLAND**

PROJECT NO.	F23050	DESIGN BY:	
DATE:	10/31/24	DRAWN BY:	CA
SCALE:	1"=80'	CHECKED BY:	RG
SHEET:	1 of 1		



LOG OF BORINGS  
Southern Avenue Phase III

RW-1 Profile



- Topsoil
- Fill
- Low plasticity clay
- Clayey sand

— Top of Wall  
— Bottom of Wall

HILLIS-CARNES ENGINEERING ASSOCIATES  
GENERALIZED SOIL PROFILE

HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=7.5'		10/31/2024

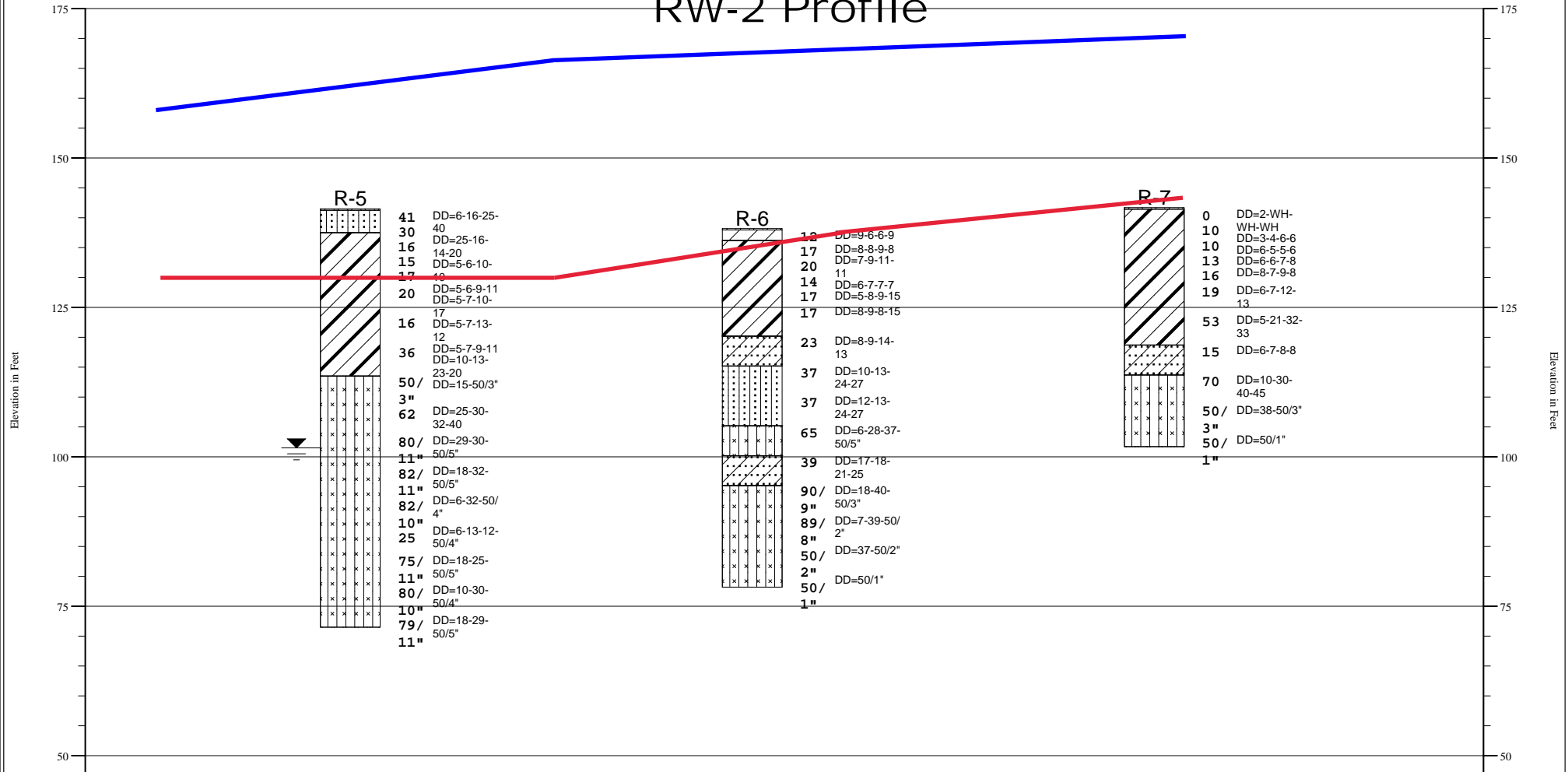
Southern Avenue Phase III

PROJECT NO. F23050

FIGURE NUMBER



# LOG OF BORINGS Southern Avenue Phase III RW-2 Profile



Topsoil



Silty sand



Low-high plasticity clays



Description not given for: "ZX"



Low plasticity clay



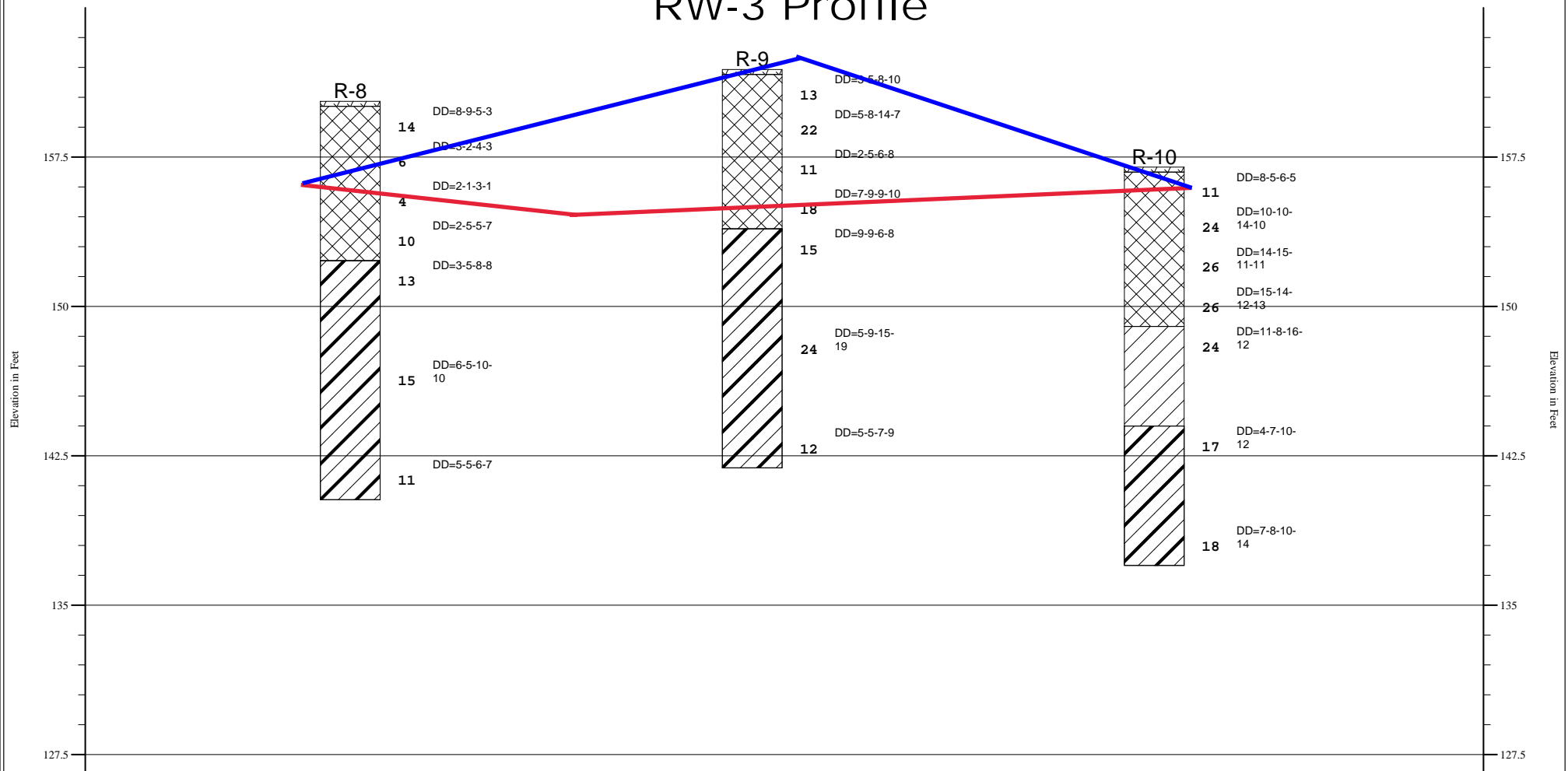
Clayey sand





— Top of Wall  
— Bottom of Wall

HILLIS-CARNES ENGINEERING ASSOCIATES		
GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=25'		10/31/2024
Southern Avenue Phase III		
PROJECT NO. F23050		FIGURE NUMBER



# LOG OF BORINGS Southern Avenue Phase III RW-3 Profile



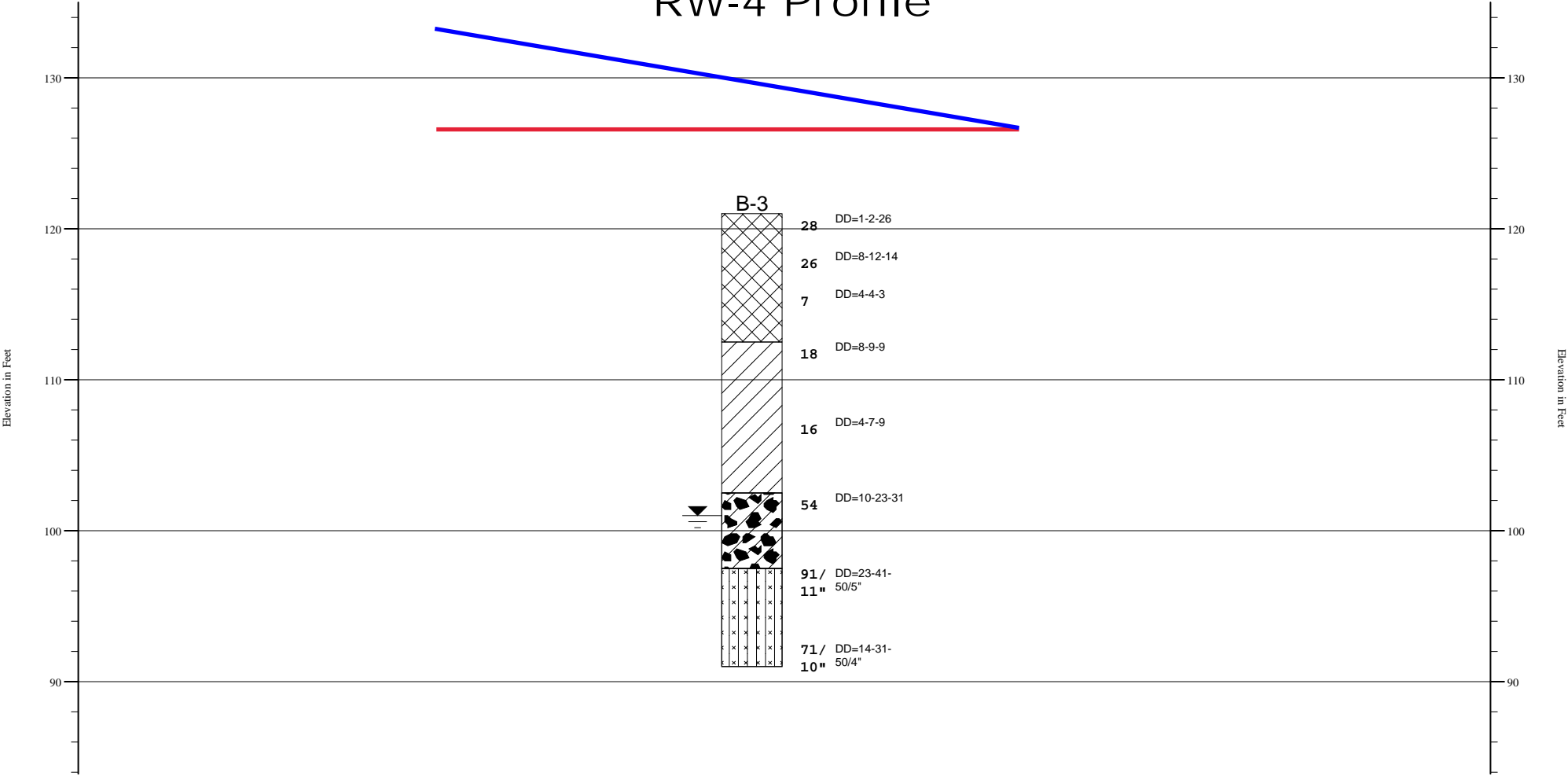
-  Topsoil
-  Fill
-  Low-high plasticity clays
-  Low plasticity clay

— Top of Wall  
— Bottom of Wall

HILLIS-CARNES ENGINEERING ASSOCIATES GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=7.5'		10/31/2024
Southern Avenue Phase III		
PROJECT NO. F23050		FIGURE NUMBER



LOG OF BORINGS  
Southern Avenue - Phase III  
RW-4 Profile



- Fill
- Low plasticity clay
- Clayey gravel
- Description not given for: "ZX"

Top of Wall  
Bottom of Wall

HILLIS-CARNES ENGINEERING ASSOCIATES		
GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=10'		10/31/2024
Southern Avenue - Phase III		
PROJECT NO. F23050		FIGURE NUMBER



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-1  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 116.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
0		3" Topsoil								
115		Dark brown with reddish brown, silty SAND, with gravel, hard, moist (FILL		12		6-9-50/5"	59/ 11"			
		Light brown, GRAVEL, trace of sand, moist		3		18-50/3"	50/3"			
5		Brown and grayish brown, silty SAND, with gravel, very dense, moist		10		38-26-28-32	54			
110		- Brown and light brown, trace of asphalt debris		12		26-31-19-14	50			
		- Multicolored, trace of organics, medium dense		18		5-7-13-14	20			
10										
105										
		Orangish brown with grayish brown, sandy Lean CLAY, trace of rock fragments, very stiff, moist (CL- Natural)		14		7-11-8-7	19			
15										
100										
		Orangish brown with yellowish brown, clayey SAND with rock fragments, medium dense, moist (SC)	End of Boring at 20.0 feet below grade	12		7-8-13-7	21			
20										
95										
25										
90										
30										
85										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>16.0</u> ft. <u>14.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-2  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.4 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/17/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/17/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
0		3" Topsoil	Auger Refusal at 11.5 feet below grade							
		Brown and grayish brown, silty SAND, with gravel, medium dense, moist (FILL)		12		5-14-15-3	29			
115		Brown and orangish brown, clayey SAND, with gravel, medium dense, moist		12		8-7-8-8	15			
5		Gray, silty SAND, with gravel, dense, moist		7		12-24-16-12	40			
		- Grayish brown with brown, trace of asphalt debris		10		7-7-8-15	15			
110		- Brown, trace of gravel and concrete debris, hard		0		50/0"	50/0"			
10										
105										
15										
100										
20										
95										
25										
90										
30										
85										

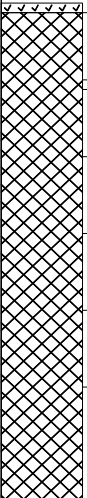
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>5.0</u> ft. <u>4.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-3  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 117.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/17/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/17/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot				
							N	CURVE			
								10	30	50	
0		3" Topsoil									
115		Brown and grayish brown, silty SAND, with gravel, dense, moist (FILL)	12		7-14-25-50/2"	39					
5		- Light grayish brown, medium dense	12		12-12-5-9	17					
110		- Orangish brown and brown, trace of gravel and asphalt debris, dense	24		16-21-18-14	39					
10		- Orangish brown and grayish brown, with gravel	7		11-18-18-12	36					
105		- Orangish brown with reddish brown, trace of concrete debris, medium dense	10		15-10-9-9	19					
15			Auger Refusal at 13.0 feet below grade								
100											
20											
95											
25											
90											
30											
85											

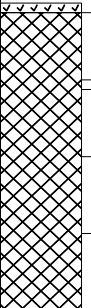
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>8.0</u> ft. <u>5.5</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-4  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/17/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/17/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		3" Topsoil	Auger Refusal at 8.0 feet below grade	16		5-11-16-20	27			
115		Orangish brown and light brown, silty SAND, with gravel, medium dense, moist (FILL) - Multicolored, trace of gravel, hard - Brown		10		25-50/5"	50/5"			
5				4		50/4"	50/4"			
110				0		50/0"	50/0"			
10										
105										
15										
100										
20										
95										
25										
90										
30										
85										

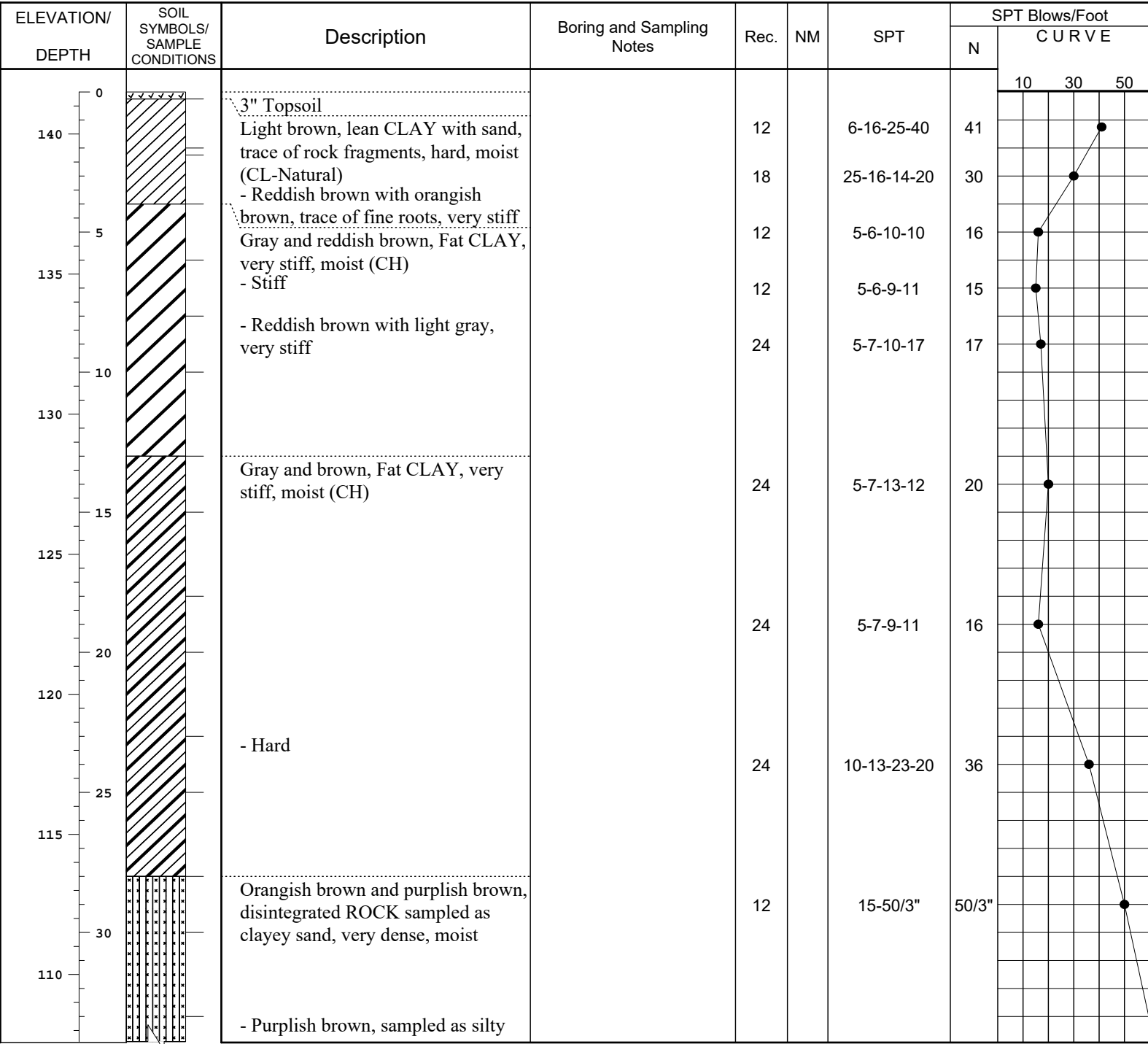
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>3.0</u> ft. <u>3.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-5  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/24/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/24/2024



<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>40.0</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>50.0</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-5  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/24/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/24/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
<div><div></div><div>105</div><div>35</div><div></div><div>100</div><div>40</div><div></div><div>95</div><div>45</div><div></div><div>90</div><div>50</div><div></div><div>85</div><div>55</div><div></div><div>80</div><div>60</div><div></div><div>75</div><div>65</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	sand		14		25-30-32-40	62	10 30 50 62
				14		29-30-50/5"	80/ 11"	80/11"
		- Paleish brown	Water observed at 43.0 feet while drilling	17		18-32-50/5"	82/ 11"	82/11"
		- Light brown with grayish brown, damp		16		6-32-50/4"	82/ 10"	82/10"
		Light brown with grayish brown, silty SAND, medium dense, damp (SM)		22		6-13-12-50/4"	25	
		Light brown with grayish brown, disintegrated ROCK sampled as silty sand, very dense, damp		12		18-25-50/5"	75/ 11"	75/11"
				16		10-30-50/4"	80/ 10"	80/10"

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>40.0</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>50.0</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-5  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.5 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/24/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/24/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>			End of Boring at 70.0 feet below grade	17		18-29-50/5"	79/ 11"			

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>40.0</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>50.0</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-6  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 138.2 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	C U R V E		
								10	30	50
0		3" Topsoil								
		Multicolored, Lean CLAY, with sand, trace of fine roots, stiff, moist (CL-Natural)		12		9-6-6-9	12			
135		Gray and orangish brown, Fat CLAY, very stiff, moist (CH)		18		8-8-9-8	17			
5		- Gray with reddish brown		24		7-9-11-11	20			
		- Multicolored, stiff		24		6-7-7-7	14			
130				24		5-8-9-15	17			
10										
125		Gray with brown, Lean CLAY, medium stiff, moist (CL)		24		8-9-8-15	17			
15										
120		Orangish brown with dark brown, clayey SAND, medium dense, moist (SC)		24		8-9-14-13	23			
20										
115		Purplish brown, silty SAND, dense, moist (SM)		24		10-13-24-27	37			
25										
110				24		12-13-24-27	37			
30										
105		Purplish brown, disintegrated ROCK								

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>38.0</u> ft. <u>36.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-6  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 138.2 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE	
							N	
35		sampled as silty sand, very dense, moist		12		6-28-37-50/5"	65	10 30 50 65
100		Light gray and yellowish brown, clayey SAND, dense, moist (SC)		24		17-18-21-25	39	
40								
95		Light brown, disintegrated ROCK sampled as silty sand, very dense, damp		15		18-40-50/3"	90/9"	90/9"
45								
90		- Light brown and brown, sampled as clayey sand		14		7-39-50/2"	89/8"	89/8"
50								
85		- Light brown with gray, sampled as silty sand		8		37-50/2"	50/2"	
55								
80								
60			Auger Refusal at 60.0 feet below grade	1		50/1"	50/1"	
75								
65								

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. ft.	<b>CAVE IN DEPTH</b> <u>38.0</u> ft. <u>36.0</u> ft. ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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## RECORD OF SOIL EXPLORATION

Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

Date Started 10/23/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/23/2024

SAMPLER TYPE	SAMPLE CONDITIONS		WATER	DEPTH	BORING METHOD
DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED	D - DISINTEGRATED	AT COMPLETION	<u>DRY</u> ft.	<u>30.0</u> ft.	HSA - HOLLOW STEM AUGERS
PT - PRESSED SHELBY TUBE	I - INTACT	AFTER 24 HRS.	_____ ft.	_____ ft.	CFA - CONTINUOUS FLIGHT AUGERS
CA - CONTINUOUS FLIGHT AUGER	U - UNDISTURBED	AFTER ____ HRS.	_____ ft.	_____ ft.	DC - DRIVING CASING
RC - ROCK CORE	L - LOST				MD - MUD DRILLING

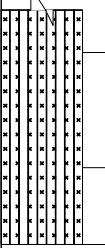
STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-7  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 141.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/23/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/23/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
35  105				9		38-50/3"	50/3"			
				1		50/1"	50/1"			
40  100			Auger Refusal at 40.0 feet below grade							
45  95										
50  90										
55  85										
60  80										
65  75										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION <u>DRY</u> ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>CAVE IN DEPTH</b> <u>30.0</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-8  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 160.3 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
160 0		3" Topsoil								
		Orangish brown with light gray, clayey SAND, trace of organics and gravel, medium dense, moist (FILL)		15		8-9-5-3	14			
		- Grayish brown and brown, with gravel, loose		15		3-2-4-3	6			
155 5		- Light brown with reddish brown, trace of gravel, very loose		10		2-1-3-1	4			
		Multicolored, sandy Lean CLAY, trace of gravel, stiff, moist	End of Boring at 20.0 feet below grade	5		2-5-5-7	10			
		Yellowish brown with light gray, Fat CLAY, stiff, moist (CH-Natural)		12		3-5-8-8	13			
150 10										
		- Gray with reddish brown		24		6-5-10-10	15			
145 15										
				24		5-5-6-7	11			
140 20										
135 25										
130 30										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>3.0</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>11.0</u> ft. <u>5.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-9  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 161.9 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		3" Topsoil								
160		Brown with grayish brown, sandy Lean CLAY, trace of gravel, stiff, moist (FILL) - Very stiff		15		3-5-8-10	13			
		- Brown with various colors, stiff		7		5-8-14-7	22			
5		- Trace of organics, very stiff		10		2-5-6-8	11			
155		Multicolored, Fat CLAY, stiff, moist (CH-Natural)		12		7-9-9-10	18			
		- Gray and reddish brown, very stiff	End of Boring at 20.0 feet below grade	10		9-9-6-8	15			
10										
150										
15				15		5-9-15-19	24			
145										
20				24		5-5-7-9	12			
140										
25										
135										
30										
130										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>10.0</u> ft. <u>10.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. R-10  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 157.0 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/18/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/18/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		3" Topsoil								
155		Orangish brown with reddish brown, sandy Lean CLAY, trace of gravel, stiff, moist (FILL) - Brown and light brown, trace of organics, very stiff - With gravel		19		8-5-6-5	11			
				20		10-10-14-10	24			
5				4		14-15-11-11	26			
150		Brown, silty SAND, trace of gravel, medium dense, moist		2		15-14-12-13	26			
		Orangish brown and grayish brown, sandy Lean CLAY with rock fragments, very stiff, moist (CL- Natural)		15		11-8-16-12	24			
10										
145										
		Reddish brown and gray, Fat CLAY, very stiff, moist (CH)		18		4-7-10-12	17			
15										
140										
				24		7-8-10-14	18			
20			End of Boring at 20.0 feet below grade							
135										
25										
130										
30										
125										

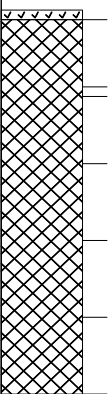
<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>9.0</u> ft. <u>9.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. S-1  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.6 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		3" Topsoil	Auger Refusal at 10.0 feet below grade							
		Light brown and grayish brown, silty SAND, with gravel, loose, moist (FILL)		12		3-6-4-3	10			
115		- Brown and black, with asphalt debris, medium dense		14		6-8-10-6	18			
5		- Grayish brown, with organics, loose		7		5-6-4-5	10			
		- Grayish brown and black		5		6-8-12-15	20			
110		Gray, GRAVEL, with concrete debris, hard, dry		2		50/2"	50/2"			
10										
105										
15										
100										
20										
95										
25										
90										
30										
85										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>4.0</u> ft. <u>5.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. S-2  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 122.7 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	CURVE		
								10	30	50
0		3" Topsoil	Offset 10ft SW							
		Brown and dark brown, silty SAND, with gravel and asphalt debris, medium dense, moist (FILL)		10		21-25-11-10	26			
120				3		10-11-18-12	19			
5		Brown with grayish brown, clayey SAND, with gravel, medium dense, moist - Orangish brown with grayish brown		24		12-10-12-14	22			
115		Gray, GRAVEL, trace of sand, dry		14		11-14-16-13	30			
10			End of Boring at 20.0 feet below grade	2		50/2"	50/2"			
110										
15		Orangish brown with light gray, Lean CLAY, with sand, trace of gravel, dense, moist		7		12-17-22-26	39			
105										
20		- Orangish brown with grayish brown, sandy, with gravel		10		7-8-12-10	20			
100										
25										
95										
30										
90										

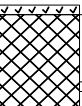

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>14.0</u> ft. <u>14.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue Phase III Boring No. S-3  
Location 901 Southern Ave, Oxon Hill, MD 20745 Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25" Foreman \_\_\_\_\_  
Surf. Elev. 118.1 +/- Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul F.  
Date Started 10/16/2024 Pipe Size 2.0 in. Boring Method HSA Date Completed 10/16/2024

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
0		3" Topsoil		12		7-9-10-7	19			
115		Brown and dark brown, silty SAND, with gravel and asphalt debris, medium dense, moist (FILL) - Brown and yellowish brown, trace of gravel		12		6-6-7-10	13			
5		Multicolored, clayey SAND, with asphalt debris, medium dense, moist Multicolored, sandy Lean CLAY, trace of asphalt debris, stiff, moist		14		8-15-7-11	22			
110		Brown and grayish brown, clayey SAND, trace of gravel, medium dense, moist		12		4-4-6-8	10			
10				12		6-7-8-7	15			
105		Orangish brown with light brown, Lean CLAY with sand, stiff, moist (CL-Natural)	End of Boring at 20.0 feet below grade	12		6-7-7-11	14			
15				24		6-6-6-6	12			
100										
20										
95										
25										
90										
30										
85										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>DRY</u> ft. <u>DRY</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>16.0</u> ft. <u>16.0</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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# KEY TO SYMBOLS

Symbol	Description
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## Strata symbols



Topsoil



Fill



Low plasticity  
clay



Clayey sand



High plasticity  
clay



Low-high plasticity  
clays



Description not given for:  
"ZX"



Silty sand

## Misc. Symbols



Boring continues



Water table during  
drilling



Water table at  
boring completion

## Notes:

1. Exploratory borings were drilled on 10/16/2024 using a 6-inch outside diameter hand-auger.
2. Water level readings were taken during drilling and upon completion of each boring. Borings were backfilled upon completion.
3. Boring locations were selected by project HCEA and staked in the field by HCEA using existing site features as reference.
4. These logs are subject to the limitations, conclusions, and recommendations in this report.
5. Results of tests conducted on samples recovered are reported on the logs.

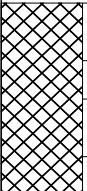
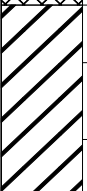
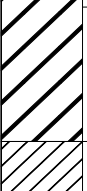
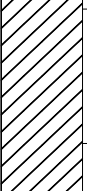
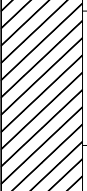
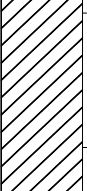
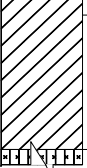


**HILLIS - CARNES**  
**ENGINEERING ASSOCIATES, INC.**  
**RECORD OF SOIL EXPLORATION**

Project Name Southern Avenue - Phase III Boring No. B-1  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 152.7 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
0		Yellow, red, and gray Fat CLAY, trace of brick debris, organics, moist, soft, (FILL)	5" topsoil	10		1-2-2	4	●		
150		Yellow brown, red, yellow, and gray sandy Fat CLAY, moist, stiff, (Possible FILL)		10		4-6-7	13	●		
5		Reddish brown and very light gray sandy Fat CLAY, fine roots, moist, stiff, (CH-Natural)		10		5-5-4	9	●		
145		Reddish brown with brown Fat CLAY with sand, trace of gravel and roots, moist, medium stiff, (CH)		10		2-2-3	5	●		
10		Reddish brown, yellow, gray, and purple lean CLAY, moist, very stiff, (CL)		12		5-8-13	21	●		
140										
15				18		4-7-11	18	●		
135										
20				18		3-6-11	17	●		
130										
25		- gray, dark brown, and yellow brown		18		6-9-14	23	●		
125										
30										
120										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	GROUND WATER ____ ft.	CAVE IN DEPTH 32 ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-1  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 152.7 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot				
							N	C U R V E			
								10	30	50	
35		Dark brown, purple, and yellow disintegrated Rock as SAND, moist, very dense		18		24-40-45	85			85	
115		Dark brown, purple, and yellow silty clayey SAND, moist, dense, (SC- SM)		18		13-17-22	39				
40		- light purple		18		10-21-24	45				
110		- dark brow, light purple, and yellow		18		9-17-25	42				
45		Purple silty SAND, moist, very dense, (SM)		18		17-23-32	55				
105		Yellow brown disintegrated ROCK as a sand, wet, very dense	Subsurface water at 58.5 feet during drilling End of boring at 60 feet below grade.	18		18-31-46	77			77	
50											
100											
55											
95											
60											
90											
65											
85											

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION _____ ft. AFTER 24 HRS. _____ ft. AFTER ____ HRS. _____ ft.	<b>GROUND WATER</b> _____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. _____ ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-2  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 142.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
 Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	CURVE		
								10	30	50
0		Red brown, yellow brown, and dark brown sandy fat CLAY, trace of gravel, moist, medium stiff, (Possible FILL)	4" topsoil	10		1-2-5	7			
140		Dark gray with black sandy Fat CLAY, charcoal moist, stiff, (CH-Natural)		4		3-3-7	10			
5		- reddish brown, gray, and yellow, with gravel, very stiff		12		8-12-7	19			
135		Red brown, yellow brown, and purple lean CLAY, moist, very stiff, (CL)		16		14-12-9	21			
10		- red brown, purple, and gray		12		7-7-9	16			
130		- purple and gray with yellow brown		18		6-8-11	19			
15		Dark brown, yellow, and light purple silty clayey SAND, moist, dense, (SC-SM)		16		12-23-27	50			
125		- very dense		16		9-23-31	54			
20			End of boring at 30 feet below grade.							
120										
25										
115										
30										
110										

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

**GROUND WATER**  
 AT COMPLETION Dry ft.  
 AFTER 24 HRS. \_\_\_\_\_ ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**CAVE IN DEPTH**  
23.5 ft.  
 \_\_\_\_\_ ft.  
 \_\_\_\_\_ ft.

**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-3  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 121 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
 Date Started 03/08/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/08/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	CURVE		
								10	30	50
0			5" topsoil	16		1-2-26	28			
120		Dark brown with black silty clayey SAND with gravel, trace of charcoal, moist, medium dense, (FILL)		14		8-12-14	26			
5		Dark brown sandy lean CLAY, fine roots, moist, very stiff, (Possible FILL)		12		4-4-3	7			
115		Brown and yellow brown clayey SAND with gravel, moist, loose, (Possible FILL)		12		8-9-9	18			
10		Light red brown and yellow brown lean CLAY, moist, very stiff, (CL-Natural)		18		4-7-9	16			
110		- red brown, yellow, and gray		12		10-23-31	54			
15		Reddish brown and yellow clayey Gravel with sand, moist, very dense, (GC)		16		23-41-50/5"	91/11"			
105		Light brown and dark brown disintegrated Rock as sand, wet, very dense	Subsurface water at 23.5 feet during drilling	14		14-31-50/4"	71/10"			
20			End of boring at 30 feet below grade.							
100										
25										
95										
30										
90										

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

**GROUND WATER**  
 AT COMPLETION 20 ft.  
 AFTER 24 HRS. 20 ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**CAVE IN DEPTH**  
21.5 ft.  
21.5 ft.  
 \_\_\_\_\_ ft.

**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



**HILLIS - CARNES**  
**ENGINEERING ASSOCIATES, INC.**  
**RECORD OF SOIL EXPLORATION**

Project Name Southern Avenue - Phase III Boring No. B-4  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 146.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot			
							N	C U R V E		
								10	30	50
0			5" topsoil	10		2-2-4	6	●		
145		Dark purple with yellow sandy lean CLAY, roots, moist, medium stiff, (Possible FILL) - stiff		10		2-3-8	11	●		
5		- dark brown, with gravel and organics		10		12-8-6	14	●		
140										
10		Red, yellow brown, and gray Fat CLAY, moist, very stiff, (CH- Natural)		10		7-7-9	16	●		
135										
15		- reddish brown with gray and yellow brown, roots		12		4-7-14	21	●		
130										
20		Brown and gray lean CLAY, moist, very stiff, (CL)		18		5-8-10	18	●		
125										
25		Yellow, light purple, and red silty SAND, moist, medium dense, (SM)		18		5-7-12	19	●		
120										
30		Brownish yellow sandy lean CLAY, moist, very stiff, (CL)		18		7-11-16	27	●		
115										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> ____ ft.	<b>CAVE IN DEPTH</b> <u>32.5</u> ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-4  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 146.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
 Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
35		Yellow and brown disintegrated Rock as sand, moist, very dense		18		20-38-47	85	85
110								
40		Purple silty clayey SAND, moist, dense, (SC-SM) Yellow brown well graded SAND, wet, dense, (SW)	Subsurface water at 39.5 feet during drilling	18		15-19-21	40	
105		- medium dense		18		6-9-17	26	
45		- dense		18		9-21-27	48	
100								
50		Purple, red brown, gray, and black disintegrated Rock as sand, charcoal, moist, very dense		18		10-27-38	65	65
95								
55		Yellow brown disintegrated ROCK as a sand, wet, very dense		18		17-31-49	80	80
90			End of boring at 60 feet below grade.					
60								
85								
65								
80								

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE  
 NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

**GROUND  
WATER**  
 AT COMPLETION \_\_\_\_\_ ft.  
 AFTER 24 HRS. \_\_\_\_\_ ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**CAVE IN  
DEPTH**  
32.5 ft.  
 \_\_\_\_\_ ft.  
 \_\_\_\_\_ ft.

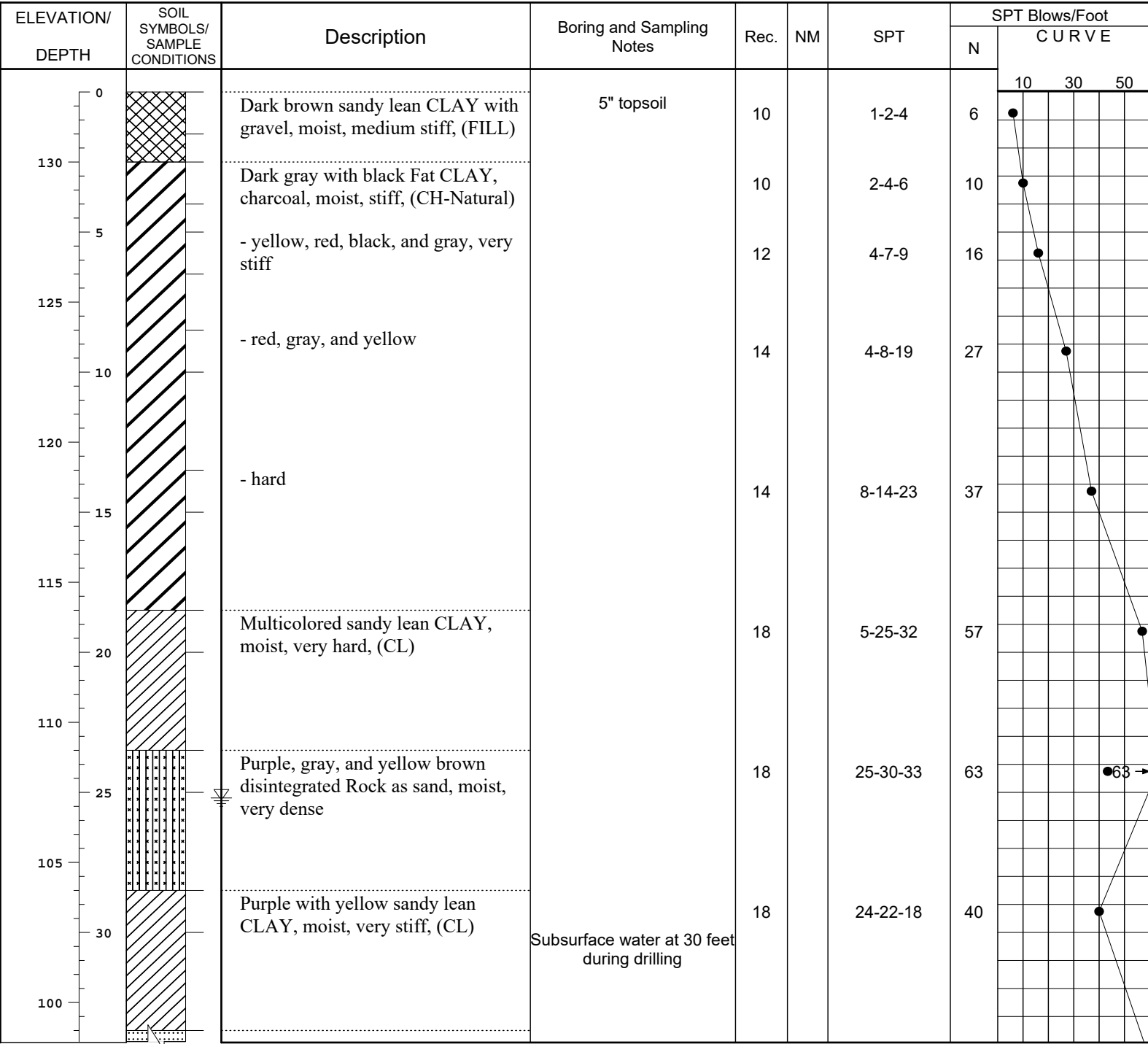
**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-5  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 132.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023



<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>25.2</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-5  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 132.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Robel  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot CURVE			
							N	10	30	50
35		Purple and yellow brown well graded SAND, wet, very dense, (SW)	End of boring at 60 feet below grade.	18		23-32-27	59			
95										
40		Purple, gray, and yellow disintegrated Rock as SAND, wet, very dense		18		11-36-45	81			81
90										
45		- brown, very light gray, and yellow brown		18		16-36-50/4"	86/ 10"			86/10"
85										
50		Brown and yellow brown well graded SAND, wet, dense, (SW)		18		19-21-27	48			
80										
55		- yellow brown		18		11-16-33	49			
75										
60		Yellow brown disintegrated ROCK as a sand, wet, very dense		18		14-21-49	70			70
70										
65										
65										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>25.2</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>32</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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# HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

## RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-6  
 Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
 Surf. Elev. 121.3 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
 Date Started 03/19/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/19/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot	
							N	CURVE
								10 30 50
0			5" topsoil	10		6-6-3	9	
120		Dark brown with black silty Gravel with sand, asphalt debris, moist, loose, (FILL)		10		3-6-11	17	
5		Yellow brown with brown sandy lean CLAY, trace of gravel, very stiff		12		5-7-13	20	
115		Yellow brown and brown silty clayey SAND with gravel, moist, medium dense		10		18-13-12	25	
10		- light brown, trace of brick debris		14		6-16-23	39	
110		Light purple with yellow silty clayey SAND, moist, dense, (SC-SM Natural)		18		9-19-20	39	
15				18		11-12-27	39	
105			Subsurface water at 23.5 feet during drilling	18		10-19-32	51	
20		- light purple, yellow, and dark brown, wet						
100								
25								
95								
30		Yellow brown well graded SAND, wet, very dense, (SW)	End of boring at 30 feet below grade.					
90								

**SAMPLER TYPE**  
 DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

**SAMPLE CONDITIONS**  
 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

AT COMPLETION \_\_\_\_\_ ft.  
 AFTER 24 HRS. \_\_\_\_\_ ft.  
 AFTER \_\_\_\_ HRS. \_\_\_\_\_ ft.

**GROUND WATER**  
 CAVE IN DEPTH  
19.0 ft.

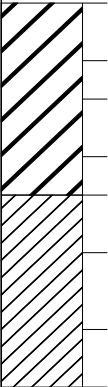
**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING



HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-7  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 153.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		Yellow brown with dark brown Fat CLAY with sand, moist, medium stiff, (CH-Natural) - trace of gravel	6" topsoil	10		1-2-3	5	•		
150				12		2-3-3	6	•		
5		Red and gray lean CLAY with sand, moist, medium stiff, (CL)		12		3-3-4	7	•		
145		- yellow brown		14		4-3-5	8	•		
10			End of boring at 10 feet below grade.							
140										
15										
135										
20										
130										
25										
125										
30										
120										

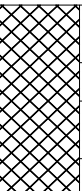

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>Dry</u> ft. <u>Dry</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>6</u> ft. <u>6</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-8  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

SAMPLER  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 150 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/13/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/13/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
150 0		Dark brown sandy lean CLAY with gravel, organics, moist, medium stiff, (FILL) - dark brown and yellow brown	6" topsoil	10		1-2-4	6	●		
145 5		Yellow brown sandy Fat CLAY with gravel, moist, medium stiff, (CH-Natural) - red, yellow, and gray, very stiff		12		9-7-11	18	●		
140 10			End of boring at 10 feet below grade.	10		4-3-3	6	●		
				14		6-11-15	26	●		
135 15										
130 20										
125 25										
120 30										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>Dry</u> ft. ____ ft. ____ ft.	<b>CAVE IN DEPTH</b> <u>7.3</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-9  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

SAMPLER  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 130.5 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/08/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/08/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
130 0		Dark brown and yellow brown sandy lean CLAY with gravel, organics, moist, medium stiff, (FILL) - trace of brick debris	6" topsoil	8		2-3-3	6	●		
				14		4-3-3	6	●		
125 5		Reddish brown, gray, brown, and black Fat CLAY with sand, charcoal, moist, very stiff, (Possible FILL) - trace of brick debris, very stiff		10		4-3-6	9	●		
120 10			End of boring at 10 feet below grade.	16		6-11-18	29		●	
115 15										
110 20										
105 25										
100 30										

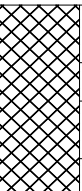

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>GROUND WATER</b> <u>Dry</u> ft. <u>Dry</u> ft. _____ ft.	<b>CAVE IN DEPTH</b> <u>6.1</u> ft. <u>6.1</u> ft. _____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
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HILLIS - CARNES  
ENGINEERING ASSOCIATES, INC.  
RECORD OF SOIL EXPLORATION

Project Name Southern Avenue - Phase III Boring No. B-10  
Location Southern Avenue SE, Oxon Hill, MD Job # F23050

**SAMPLER**  
Datum MSL Hammer Wt. 140 lbs. Hole Diameter 3.25 in. Foreman Jim Russell  
Surf. Elev. 126.7 Ft. Hammer Drop 30 in. Rock Core Diameter NA Inspector Paul Fritz  
Date Started 03/09/2023 Pipe Size 2 O.D. in. Boring Method HSA Date Completed 03/09/2023

ELEVATION/ DEPTH	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM	SPT	SPT Blows/Foot C U R V E			
							N	10	30	50
0		Multicolored Fat CLAY, trace of roots and gravel, moist, medium stiff, (FILL)	6" topsoil	10		1-2-4	6	●		
125		Dark brown with gray brown sandy lean CLAY with gravel, moist, very stiff, (FILL)		14		7-14-11	25		●	
5		Yellow brown Fat CLAY with sand, moist, stiff, (CH-Natural)		12		4-5-6	11	●		
120		Yellow brown, red brown, and purple lean CLAY with sand, moist, very stiff, (CL)	End of boring at 10 feet below grade.	14		7-11-19	30		●	
10										
115										
15										
110										
20										
105										
25										
100										
30										
95										

<b>SAMPLER TYPE</b> DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED PT - PRESSED SHELBY TUBE CA - CONTINUOUS FLIGHT AUGER RC - ROCK CORE	<b>SAMPLE CONDITIONS</b> D - DISINTEGRATED I - INTACT U - UNDISTURBED L - LOST	<b>GROUND WATER</b> AT COMPLETION AFTER 24 HRS. AFTER ____ HRS.	<b>CAVE IN DEPTH</b> <u>Dry</u> ft. ____ ft. ____ ft.	<b>BORING METHOD</b> HSA - HOLLOW STEM AUGERS CFA - CONTINUOUS FLIGHT AUGERS DC - DRIVING CASING MD - MUD DRILLING
--	--	--	--	--



# KEY TO SYMBOLS

Symbol	Description
--------	-------------

## Strata symbols



Fill



High plasticity  
clay



Low plasticity  
clay



Description not given for:  
"ZX"



Poorly graded clayey  
silty sand



Silty sand



Clayey gravel



Well graded sand

## Misc. Symbols



Boring continues



Water table during  
drilling



Water table at  
boring completion

## Notes:

1. Exploratory borings were drilled on 03/09/2023 using a 6-inch outside diameter hand-auger.
2. Water level readings were taken during drilling and upon completion of each boring. Borings were backfilled upon completion.
3. Boring locations were selected by project HCEA and staked in the field by HCEA using existing site features as reference.
4. These logs are subject to the limitations, conclusions, and recommendations in this report.
5. Results of tests conducted on samples recovered are reported on the logs.



## **GENERAL NOTES FOR SUBSURFACE RECORDS**

1. Numbers in the sampling data column (5, 9, 12) indicate blows required to drive a 2-inch OD, 1-3/8-inch ID sampling spoon 6 inch, using a 140-pound hammer, falling 30 inches, according to ASTM-D-1586.
2. Visual classification of soil is in accordance with terminology set forth in the "Soil Identification" sheet (attached). The unified soil classification symbols shown are based on visual inspection, in accordance with ASTM-D2487.
3. Water level readings that were obtained in the borings during and after completion are noted on the subsurface records.
4. Refusal at the surface of rock, boulder, or obstruction is defined as a penetration resistance of 50 blows for 1-inch penetration or less.
5. The subsurface records and related information depict subsurface conditions only at the specific locations and times indicated. Subsurface conditions including the material properties of soil (and rock) and water levels at other locations may differ from conditions as reported on subsurface records with the passage of time.
6. The depth and thickness of the surface strata indicated on the section profile (if any) were generalized from and interpolated between the test borings. The transition between materials is most likely more gradual than indicated. These stratification lines were used for our analytical purposes and should be used as a basis of design or construction cost estimates.
7. Rock coring is in accordance with ASTM-2113: NQ size rock core, 2-inch OD.
8. Undisturbed samples were obtained in accordance with ASTM 01587-94: 2- or 3-inch thin walled shelly tubes.
9. Transitions between soil strata are represented on the subsurface records. A solid line represents an observed transition, and a dashed line represents an estimated change.
10. Keys to symbols and abbreviations:  
RQD = rock quality designation  
REC = recovery %  
WOH = weight of hammer advanced sample spoon 6 inches  
WOR = weight of drilling rods advanced sample spoon 6 inches  
%M = natural moisture content

Cohesive Soils (Clay, Silt, and Combinations)		Non-Cohesive Soils (Silt, Sand, Gravel, and Combinations)	
Consistency		Density	
Very Soft	2 blows/ft or less	Very Loose	4 blows/ft or less
Soft	3 to 4 blows/ft	Loose	5 to 10 blows/ft
Medium Stiff	5 to 8 blows/ft	Medium Dense	11 to 30 blows/ft
Stiff	9 to 15 blows/ft	Dense	31 to 50 blows/ft
Very Stiff	16 to 30 blows/ft	Very Dense	51 blows/ft or more
Hard	31 blows/ft or more		



## SOIL IDENTIFICATION

### A. DEFINITION OF SOIL GROUP NAMES (ASTM D-2487-83)

Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels – More than 50% of coarse fraction retained on No. 4 sieve Coarse, ¾” to 3” Fine, No. 4 to ¾”	Clean gravels Less than 5% fines	GW	Well graded gravel	
			GP	Poorly graded gravel	
		Gravels with fines More than 12% fines	GM	Silty gravel	
			GC	Clayey gravel	
	Sands – 50% or more of coarse fraction passes No. 4 sieve Coarse, No. 10 to No. 4 Medium, No. 40 to No. 10 Fine, No. 200 to No. 40	Clean Sands Less than 5% fines	SW	Well-graded sand	
			SP	Poorly graded sand	
		Sands with fines More than 12% fines	SM	Silty sand	
			SC	Clayey sand	
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silts and Clays – Liquid Limit Less than 50 Low to medium plasticity	Inorganic	CL	Lean clay	
			ML	Silt	
		Organic	OL	Organic clay Organic silt	
			Silts and Clays – Liquid Limit 50 or more Medium to high plasticity	Inorganic	CH
	MH	Elastic silt			
	Organic	OH		Organic Clay Organic silt	
		Highly Organic Soils		Primarily organic matter, dark in color, and organic odor	

### B. DEFINITION OF MINOR COMPONENT PROPORTIONS

Minor Component	Approximate Percentage of Fraction by Weight
Adjective Form Gravelly, Sandy Silty, Clayey	30% or more of gravel or sand 12% or more of silt or clay
With Silt, Sand, Gravel and Clay	15% or more of sand or gravel 5% to 12% of silt or clay
Trace Sand, Gravel Silt, Clay	Less than 15% of sand or gravel Less than 5% of silt or clay

### C. GLOSSARY OF MISCELLANEOUS TERMS

**SYMBOLS** – Unified Soil Classification Symbols are shown above as group symbols. Dual symbols are used for borderline classifications.

**BOULDERS & COBBLES** – Boulders are considered rounded pieces of rock larger than 12 inches, while cobbles range from 3- to 12-inch size.

**ROCK FRAGMENTS** – Angular pieces of rock within residual soils resulting from differential weathering of the underlying bedrock.

**QUARTZ** – A hard silica mineral often found in residual soils.

**IRONITE** – Iron oxide deposited within a soil layer forming cemented deposits.

**CEMENTED SAND** – Localized rock-like deposits within a soil stratum composed of sand grains cemented by iron oxide or other materials.

**MICA** – A soft plate of silica mineral found in many rocks and in residual or transported soils derived therefrom.

**TOPSOIL** – Surface soils that support plant life and which contain more than 5% organic matter.

**FILL** – Manmade deposit containing soil, rock, and often foreign matter.

**PROBABLE FILL** – Soils which contain no visually detected foreign matter but which are suspect with regard to origin.

**LENSES** – 0 to  $\frac{1}{2}$ -inch seam of minor soil component.

**LAYERS** –  $\frac{1}{2}$ - to 12-inch seam of minor soil component.

**POCKET** – Discontinuous body of minor soil component.

**MOISTURE CONDITIONS** – Wet, very moist, moist, or dry to indicate visual appearance of specimen.

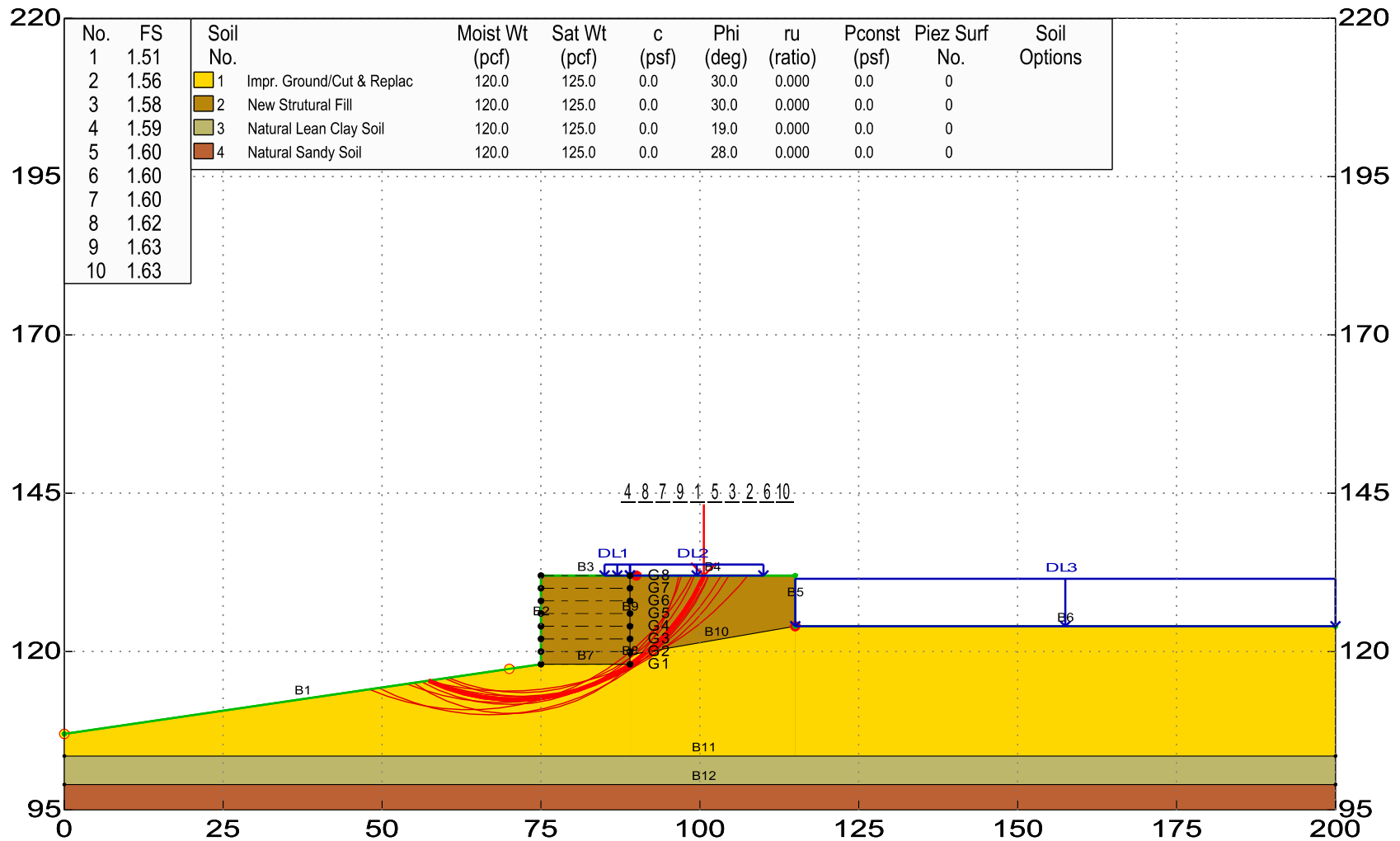


# Retaining Wall 1 (RW-1)

## Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\RW-1 - Updated.gsd



GEOSTASE FS = 1.51

Spencer Method

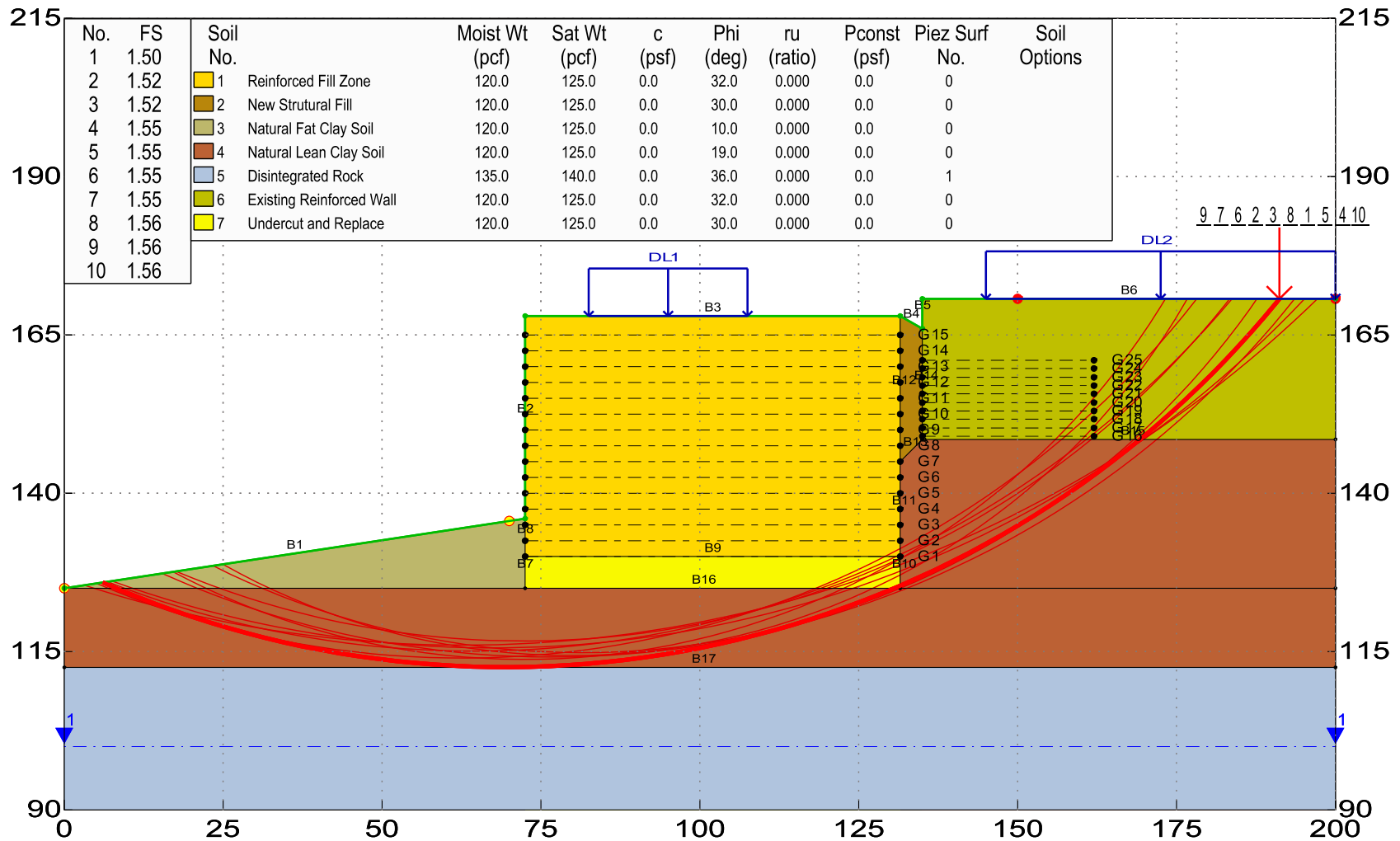




# Retaining Wall 2 (RW-2) Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\RW-2 - Updated.gsd



GEOSTASE FS = 1.50

Spencer Method

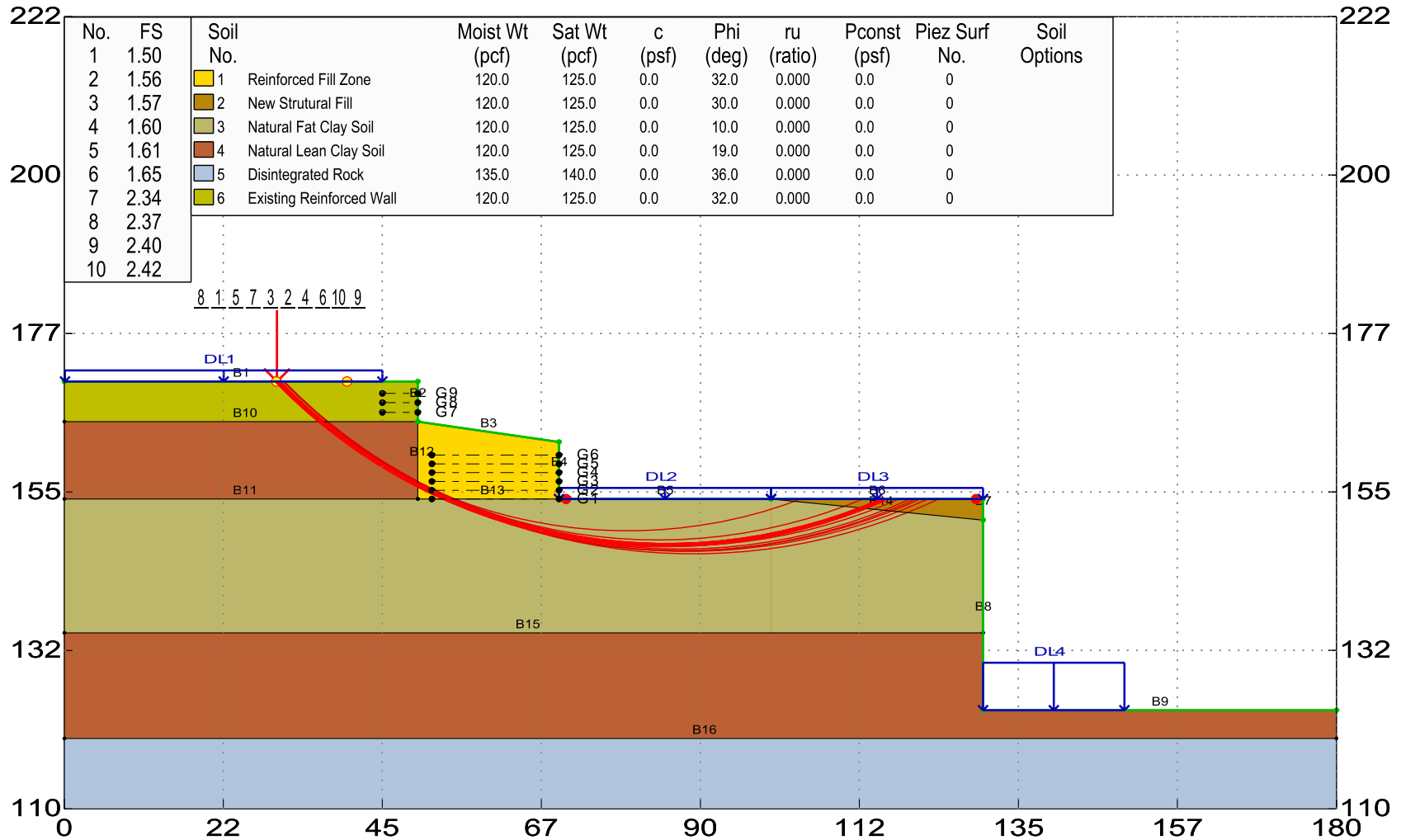




# Retaining Wall 3 (RW-3) Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\RW-3 - Updated.gsd



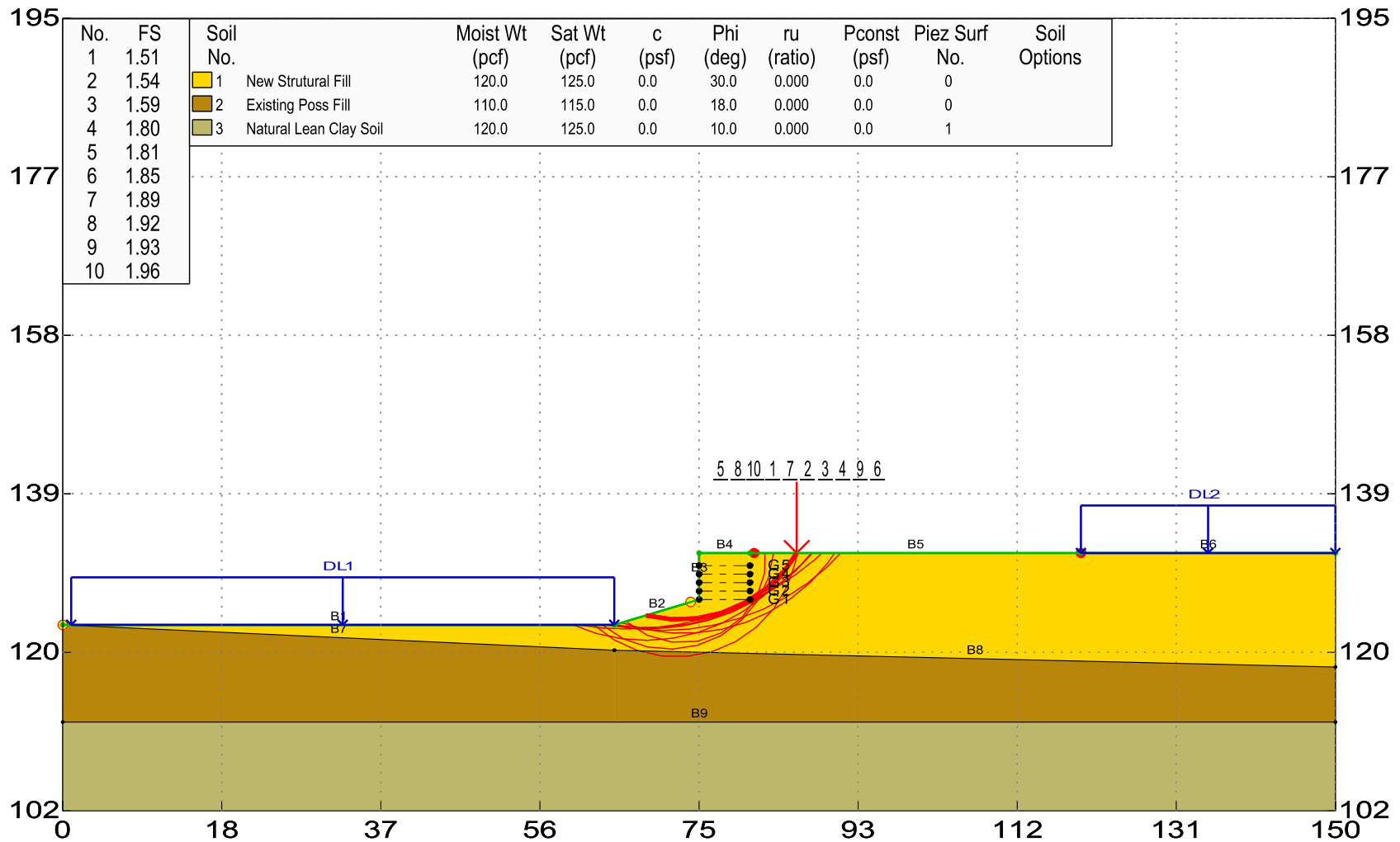


## Retaining Wall 4 (RW-4)

### Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\RW-4 - Updated.gsd



GEOSTASE FS = 1.51

## Spencer Method



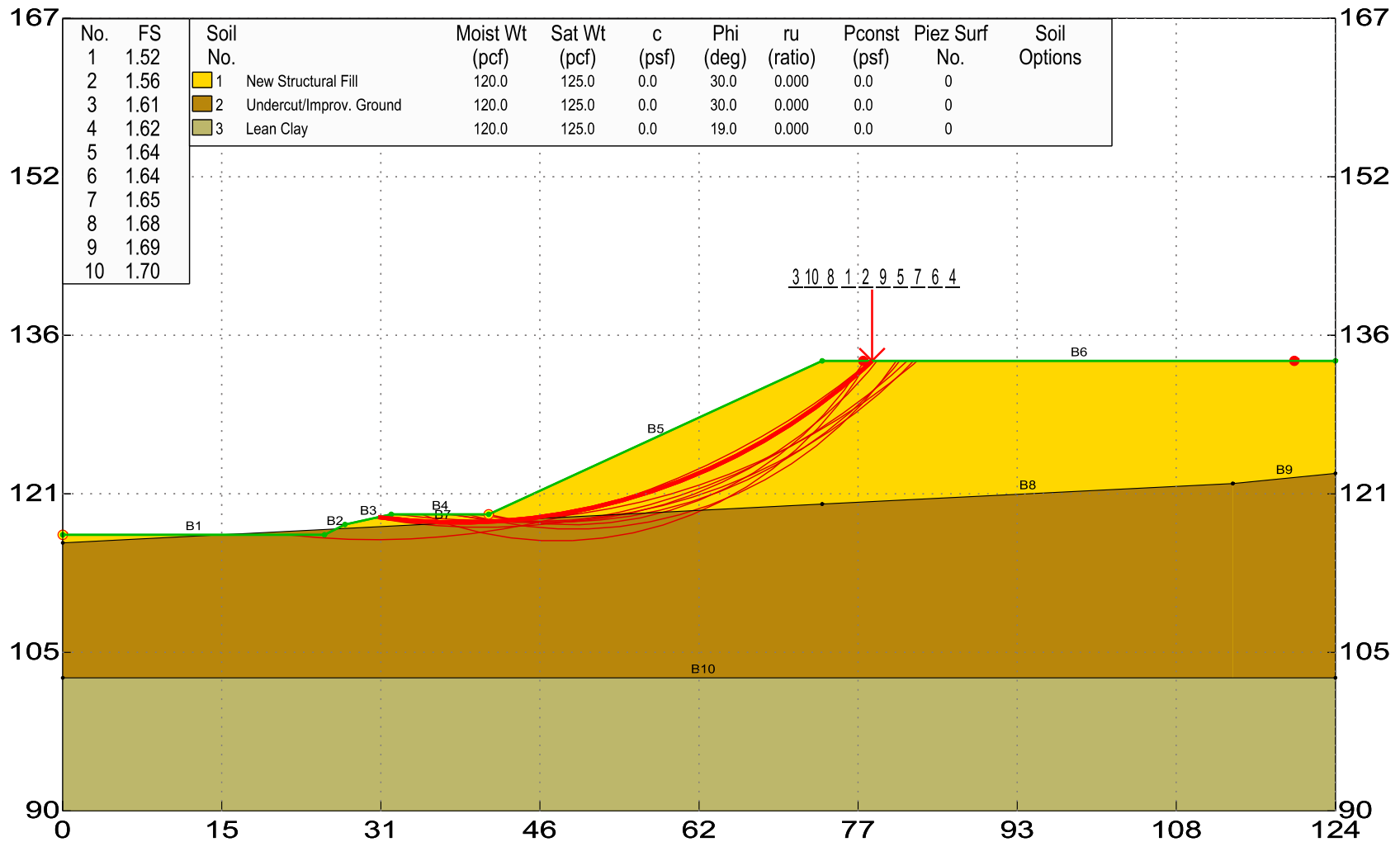


# Slope A-A

## Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\Slope A-A.gsd



GEOSTASE FS = 1.52

Spencer Method

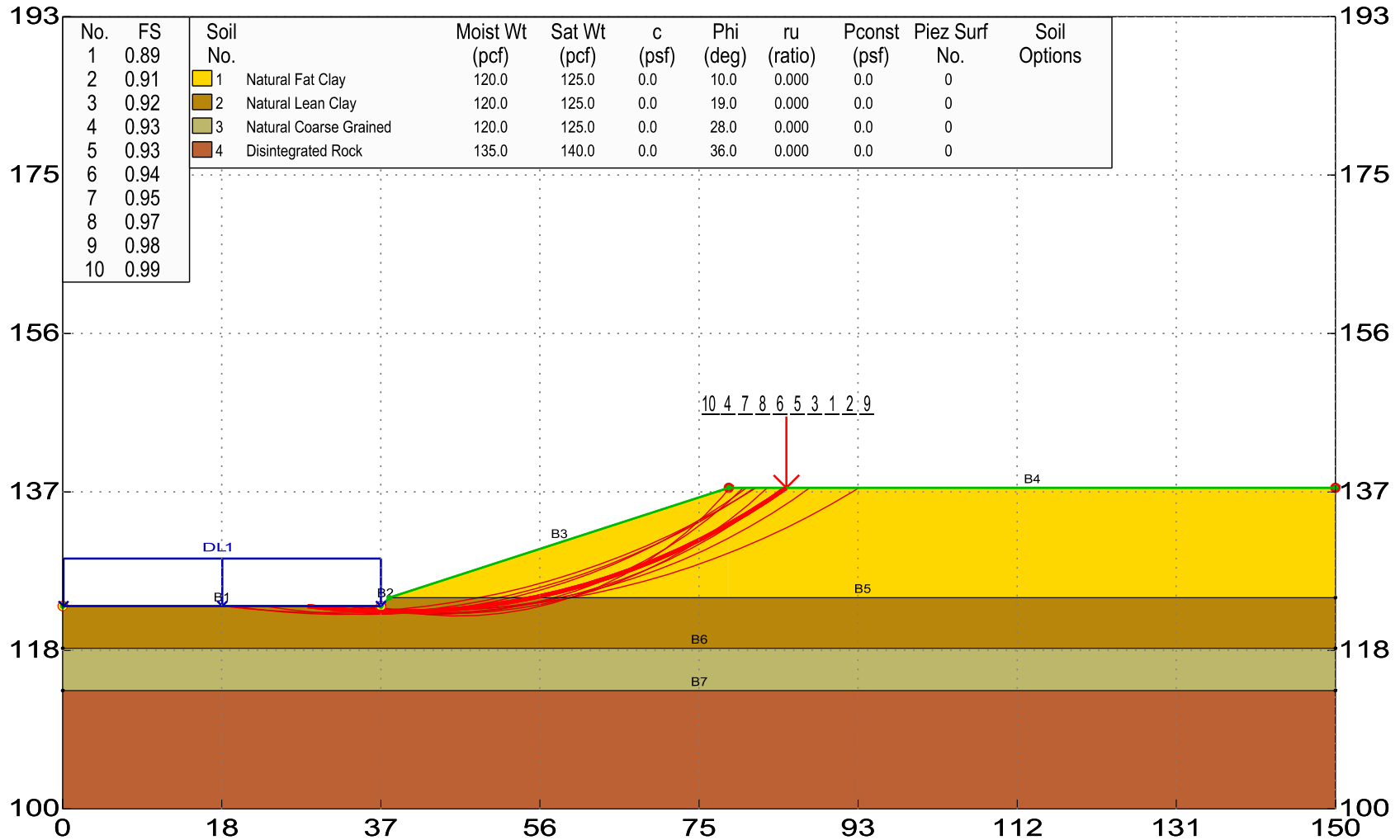




# Slope B-B Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\\Slope B-B.gsd

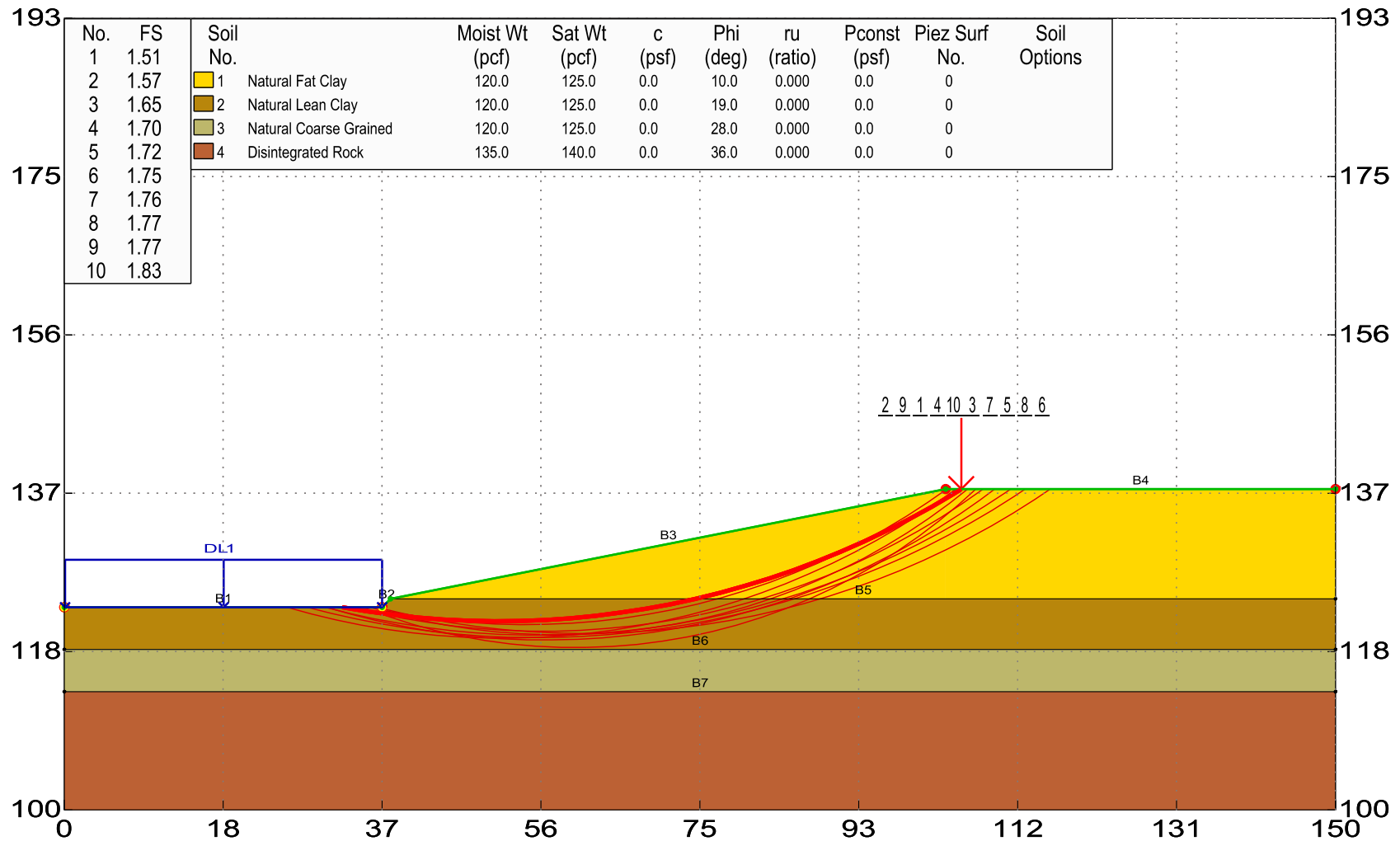




# Slope B-B (with Recommended 5H:1V Slope) Southern Avenue Self Storage - Phase III

GREGORY GEOTECHNICAL - GHG

\Slope B-B - Revised.gsd

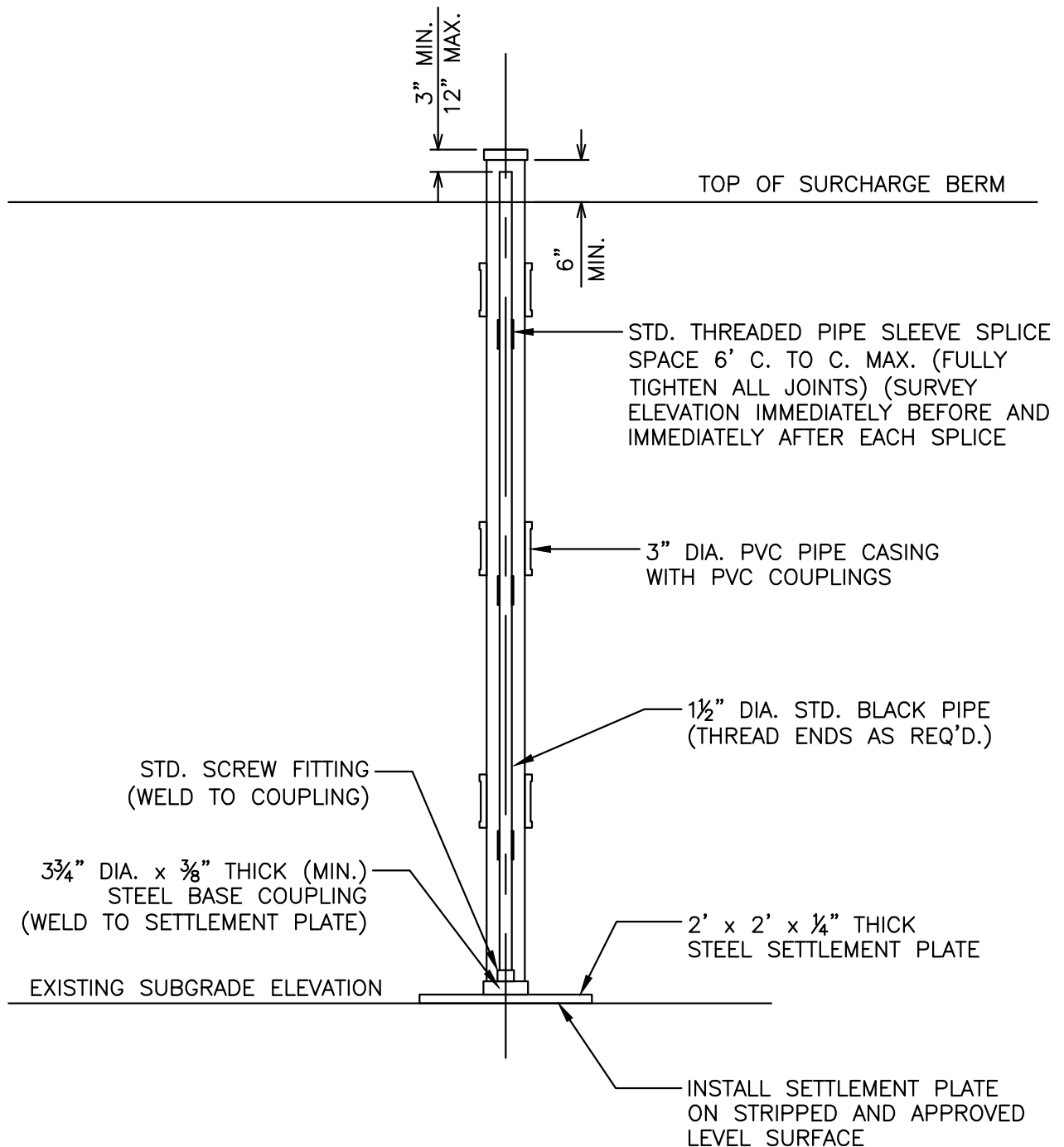


GEOSTASE FS = 1.51

Spencer Method









# ZONING SKETCH MAP

APP NO: DSP-13008-02

EXISTING ZONE:

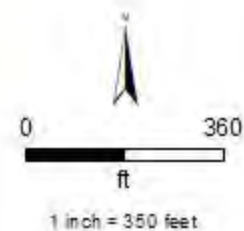
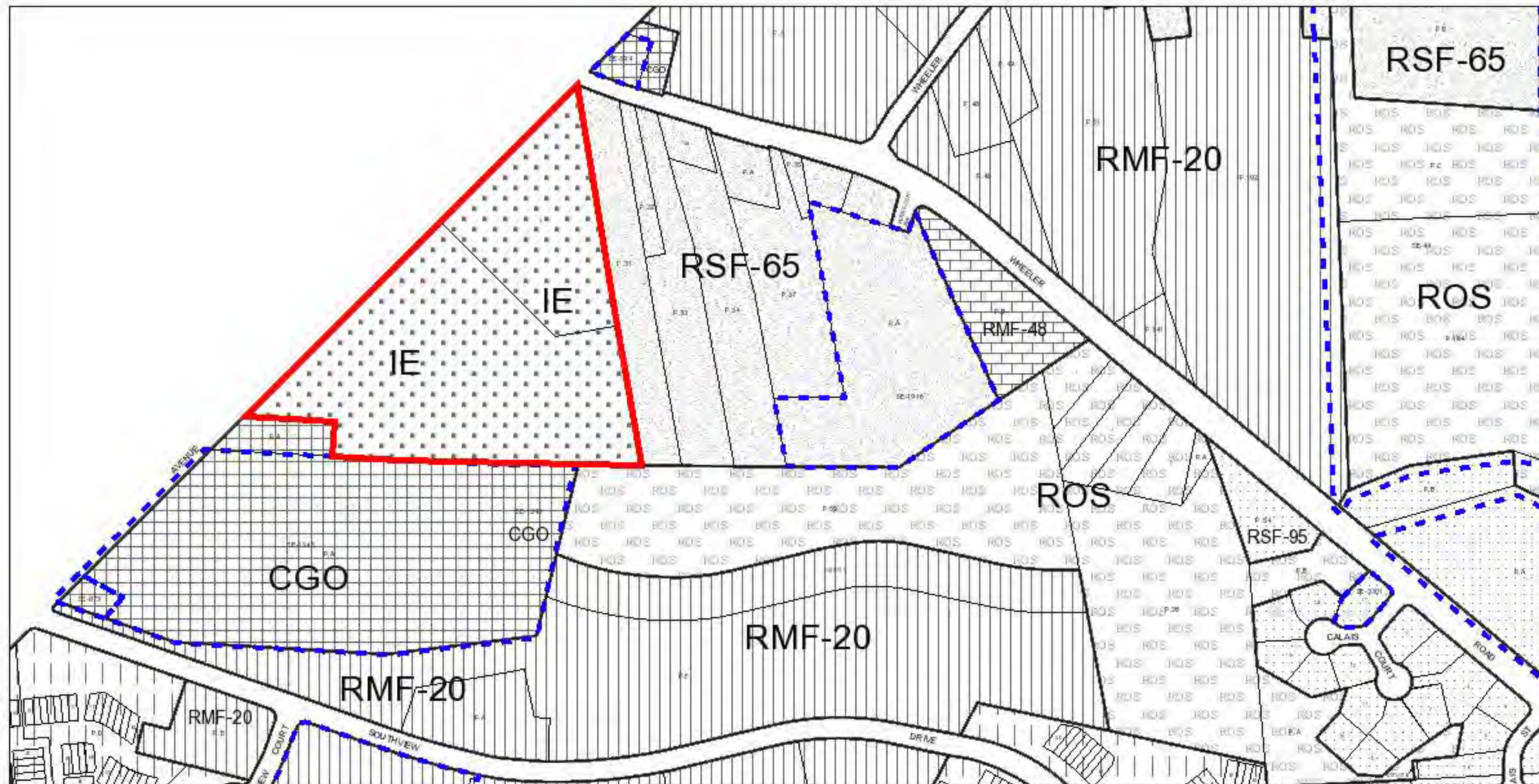
PLANNING AREA: 76A

WSSC GRID: 206SE01

TAX MAP: 87

TAX GRID: B3

COUNCIL DISTRICT: 7



The Maryland-National Capital Park and Planning Commission  
Prince Georges County Planning Department  
Geographic Information System

Created: 12/30/2024



**Gilpin Property**

(DSP-13008-02, TCP2-018-13)

August 7, 2024

**Letter of Justification re: Variance to Remove Specimen Trees****INTRODUCTION**

On behalf of our client, Arcland Property Company, LLC (the “Applicant”), we hereby request a Specimen Tree Variance for the property identified as Lot 4 located at 899 Southern Avenue (the “Property”) pursuant to Section 25-119 of the Prince George’s County Code.

In order to obtain approval of the removal or disturbance of certain identified trees that are considered priority for retention and protection under State law and the Prince George’s County Code, the applicant hereby requests a variance to remove certain Specimen Tree(s) from the Property on behalf of the client in connection with the coordinated review of Detailed Site Plan DSP-13008-02. The Specimen Trees to be removed include ST-58 and ST-59 as depicted on the submitted Type 2 Tree Conservation Plan TCP2-018-13.

The subject Property is a 10.105± acre site situated on developed land located in the southeast quadrant of the intersection of Southern Avenue and Wheeler Road, approximately 720 feet north of Southview Drive. The now requested Detailed Site Plan DSP-13008-02, which accompanies this Variance Request, proposes to accommodate the development of an additional +/-115,364 square foot, three story, consolidated storage facility under the prior Zoning Ordinance in the I-1 (Light Industrial) Zone. The property is also located in the 2000 *Approved Master Plan for The Heights and Vicinity* and *Sectional Map Amendment*, and within the Growth Tier Boundary as designated by the 2014 General Plan. The Property is surrounded by commercial uses and vacant wooded land to the South, commercial uses to the East, Gilpin Property Phase 1 and 2 (consolidated storage use) to the North, and Southern Avenue to the West.

**NATURE OF THE REQUEST****Variance from Section 25-122(b)(1)(G) – (Specimen Trees)**

The approved Natural Resources Inventory Plan (NRI-029-13) identifies 5 specimen trees located on the Property. The property also contains a total of 45,939 SF of Primary Management Area (“PMA”) and includes 0.50 acres of 100-year floodplain. The applicant now requests a variance from Section 25-122(b)(1)(G) of the County Code to allow removal of two specimen trees.

Below is a comprehensive list of all specimen trees found onsite, for the purpose of indicating the percentage of Critical Root Zone (CRZ) proposed to be impacted under this Detailed Site Plan amendment that serves as the subject of this variance request:



<b>SPECIMEN TREES</b>					
SPECIMEN TREE #	DBH (")	SCIENTIFIC NAME	TO BE REMOVED	CONDITION RATING	CRZ IMPACT %
56	43	LIRIODENDRON TULIIFERA	NO	FAIR	0
57	31	LIRIODENDRON TULIIFERA	NO	POOR	0
58	32	ACER NEGUNDO	YES	POOR	100
59	32	ACER SACCARHIMNUM	YES	POOR	100
60	31	POPULUS DELTOIDES	NO	POOR	0

As the above table demonstrates, pursuant to the approved NRI-029-13, Specimen Trees 58 and 59 were found to be in “poor” condition at the time of field work. Removal is required for the reasons provided herein. There are no additional PMA impacts proposed for development of the site. The trees in question are spread over the Property and their removal is critical to the development of the site.

## **REQUIRED FINDINGS**

Section 25-122(b)(1)(G) requires that “Specimen trees, champion trees, and trees that are part of a historic site or are associated with a historic structure shall be preserved and the design shall either preserve the critical root zone of each tree in its entirety or preserve an appropriate percentage of the critical root zone in keeping with the tree’s condition and the species’ ability to survive construction as provided in the [Environmental] Technical Manual.” The code, however, is not inflexible.

The authorizing legislation of Prince George’s County’s WCO is the Maryland Forest Conservation Act, which is codified under Title 5, Subtitle 16 of the Natural Resources Article of the Maryland Code. Section 5-1611 of the Natural Resources Article requires the local jurisdiction to provide procedures for granting variances to the local forest conservation program. The variance criteria in Prince George’s County’s WCO are set forth in Section 25-119(d).

Pursuant to Section 25-119(d), the Prince George’s County Planning Board may approve a variance for the removal of specimen trees subject to findings in accordance with specific enumerated criteria. For the reasons set forth below, the Applicant respectfully submits that this request conforms to the required findings under Section 25-119(d):

### **(d) Variances**

**(1) An applicant may request a variance from this Division as part of the review of a TCP where owing to special features of the site or other circumstances, implementation of this subtitle would result in unwarranted hardship to an applicant. To approve a variance, the approving authority shall find that:**

**(A) Special conditions peculiar to the property have caused the unwarranted hardship;**

RESPONSE: The Woodland Conservation Ordinance (WCO) does not define



“unwarranted hardship.” However, the appellate courts have had an occasion to consider the meaning of this phrase. In *Assateague Coastal Trust, Inc. v. Schwalbach*, 448 MD 112, 139 (2016), the Court of Appeals held:

[I]n order to establish an unwarranted hardship, the applicant has the burden of demonstrating that, without a variance, the applicant would be denied a use of the property that is both significant and reasonable. In addition, the applicant has the burden of showing that such a use cannot be accomplished elsewhere on the property without a variance.

*Id.* As articulated below, the applicant contends that without the requested variance to remove the two (2) specimen trees in question, the applicant will be unreasonably restricted from being able to provide necessary roadway construction, parking/loading facilities, and associated grading. Further, and as explained in more detail herein, given the existing conditions of the some of the trees in question and the grading that is needed to accommodate necessary the development, the development cannot be accomplished elsewhere on the property without impacting additional PMA areas.

Specifically, the site contains several environmental conditions which limit the area available for development. Over an acre of this site is within the Primary Management Area, and thus unable to be developed. The site also contains 0.50ac of 100-year floodplain, Marlboro clay soils, and steep slopes. These conditions create the need for additional grading to mitigate slope failure and limits the available areas best suited for stormwater management facilities to be effective given the soil conditions and, therefore, limiting the areas of the site available for the proposed development.

The proposed development includes an expansion to the existing consolidated storage building in a matter consistent with and meeting the intent of the I-1 zone. Parking areas, landscaping/open space, and stormwater management facilities will be organized in a manner to minimize disturbance to regulated environmental features while prioritizing areas for woodland conservation. Construction of the building expansion, parking/loading areas, roadways, sidewalks, retaining walls, and grading will require removal of the two specimen trees. Because of the varied topography of the existing site, disturbance for site grading, retaining walls, and stormwater management facilities will be required for development, and due to the aforementioned site constraints, specimen tree removal cannot be avoided. As shown on the submitted TCP2-018-13, woodland preservation and afforestation and/or reforestation will be provided to the maximum extent practicable.

PMA and adjacent woodlands are being preserved – including the majority of the steep slopes on-site. Although the site contains wooded PMA that includes floodplain associated with a tributary of Oxon Run, the prior TCP showed preservation of the onsite PMA with no impacts. The applicant designed the facility so as to minimize grading on the site and preserve the natural contours as much as feasible.

The Applicant would suffer unwarranted hardship if the removal and disturbance of the designated trees are not allowed in order to construct the proposed development. Unwarranted hardship is demonstrated for the purpose of obtaining a Specimen Tree Variance when an applicant presents evidence that denial of the variance would deprive the applicant of the reasonable and



substantial use of the 10-acre property. The Property being developed to accommodate the development of an additional +/-115,364 square foot consolidated storage facility with associated parking, loading, landscaping, and stormwater management facilities is within the class of reasonable and substantial uses that justify the approval of a Specimen Tree Variance. Simply, it is impractical to avoid these impacts and if the requested variance were denied, the Applicant would be precluded from developing the Property for a reasonable and significant use commonly enjoyed by other nearby commercially and industrially zoned property owners.

**(B) Enforcement of these rules will deprive the applicant of rights commonly enjoyed by others in similar areas;**

RESPONSE: The applicant is seeking to develop this property to add another building (Phase 3) for consolidated storage use, which is a permitted use in the prior I-1 Zone, and the site has obtained prior approvals for prior phases of said use on the property. If the requested variance were denied, the Applicant would be denied the right enjoyed by other similarly situated property owners to develop their I-1 zoned property in a manner permitted by the zoning ordinance that is consistent with the development history of the neighborhood and development goals of I-1 zoning. The 2000 *Approved Master Plan and Sectional Map Amendment for the Heights and Vicinity (Planning Area 76A)* retained the subject property in the prior I-1 Zone. The Master Plan does not address the subject property specifically, but it does include recommendations within the Environmental Resources section that were analyzed with the prior approvals. The Planning Board, in approving PPS 4-15017, found that that regulated environmental features have been preserved and/or restored in a natural state to the fullest extent possible in accordance with the requirement of Subtitle 24-130(b)(5).

If the variance were not granted for the trees identified on the aforementioned table, the Applicant would be unable to develop the proposed building, which would result in the disparate treatment of the Applicant in comparison to the exercise of rights commonly enjoyed by others in the same area and in similar I-1 zoned properties, and it would contradict the Master Plan's vision and land use recommendation for the Property.

**(C) Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.**

RESPONSE: Similar to the Finding (B) above, the variance confers no special privileges on the applicant that would be denied to other applicants. This Property is in an area planned for the proposed use/development. Special circumstances exist on the property, including topography, soils, and floodplain. The variance is necessary if the applicant is to be permitted to develop the Property in a manner consistent with its approved Preliminary Plan of Subdivision, and Detailed Site Plan.

**(D) The request is not based on conditions or circumstances which are the result of actions by the applicant;**

RESPONSE: The instant request is based on minimum layout requirements for proposed storage use/development as contemplated by the aforementioned entitlement approvals for the Property. The request is necessary due to the unique property conditions of the site (as set forth in Finding A above) and is not a result of actions by the applicant. There have been no physical modifications to the site such as woodland clearing, grading, construction, or arborist work since the date of approved NRI-029-



13 that would have altered the structural integrity or health of the specimen trees and result in the request for removal. Removals requests are based solely on the planned development and associated roadway network, utilities and grading.

**(E) The request does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; and**

RESPONSE: The request is based solely on the conditions existing on the Property and does not arise from a condition relating to land or building use on neighboring properties. The surrounding land uses (vacant, industrial, and commercial) do not have any inherent characteristics or conditions that have created or contributed to this particular need for a variance. Additionally, there are currently no recent or proposed changes to the adjacent properties such as permitted or nonconforming construction or other site modifications that have contributed to the request for removal.

**(F) Granting of the variance will not adversely affect water quality.**

RESPONSE: Impact on water quality for the development of this project will be controlled by the stormwater management facilities proposed onsite. Stormwater Concept Plan, #38138-2024 is currently in for review and will be submitted once approved by DPIE. The Stormwater Concept Plat will address surface water runoff in accordance with Subtitle 32, which requires that Environmental Site Design (ESD) be implemented to the maximum extent practicable (MEP) in accordance with the Stormwater Management Act. Several micro bioretention facilities are proposed to treat the ESD volume. Granting of the variance will not adversely effect water quality. The proposed site improvements should maintain, if not improve, rather than degrade water quality both during construction and after development.

## **CONCLUSION**

For the above reasons, the Applicant respectfully requests that the Planning Board grant its request for a variance from the for the removal of two (2) specimen trees pursuant to the provisions of Section 25-119 of the Prince George's County Woodland and Wildlife Habitat Conservation Ordinance, as all required findings are met. Said approval, in accordance with the required findings, will facilitate the requested impact to certain specimen trees in order to allow the construction of this project. The site is context sensitive with previously approved and developed uses identical to the proposed expansion of the existing use on the subject property. As a result, the proposed development will provide for orderly, planned, efficient, and economical development in accordance with the principles/guidelines (as applicable) of the Zoning Ordinance, General Plan, Master Plan or other approved plans.



Thank you in advance for your consideration of this Application. If you have any questions or comments, please do not hesitate to contact the undersigned.

Prepared by:

A handwritten signature in blue ink, appearing to read "Chris Rizzi", is positioned above the printed name.

Christopher M Rizzi, PLA  
Associate



# PRINCE GEORGE'S COUNTY, MARYLAND



DEPARTMENT OF PERMITTING, INSPECTIONS AND ENFORCEMENT  
SITE/ROAD PLAN REVIEW DIVISION  
9400 Peppercorn Place, Suite 230  
Largo, Maryland 20774  
(301) 636 - 2080



## SITE DEVELOPMENT CONCEPT APPROVAL

PERMIT PROJECT NAME: **ARCLAND, SOUTHERN AVENUE** APPLICATION NUMBER: **38138-2024-SDC**  
CASE NAME: **PEER REVIEW-GILPIN** APPROVAL NUMBER: **P00004-2024-SDC**  
**PROPERTY LOTS 3 & 4**  
PERMITEE'S NAME: **ARCLAND**  
ENGINEER: **BOHLER**

### REQUIREMENTS:

Technical Review is required for **PUBLIC /PRIVATE** Storm Drain /SWM Construction.

Type of Storm Drainage/SWM Construction is **PRIVATE**.

These additional approvals are required: .

These fees apply: .

These bonds apply: .

Required water quality controls: **Infiltration ; four (4) microbioretenion.**

Required water quantity controls: **100-year.**

A maintenance agreement is **required.**

Required easements: .

Storm Water Management fee payment of **\$0.00** in lieu of providing on-site attenuation/quality control measures.  
(Fee-In-Lieu subject to change during technical review.)

### CONDITIONS OF APPROVAL:

*Please see second page.*

APPROVED BY:

Rey De Guzman

APPROVAL DATE: **Aug-2-2024**

EXPIRATION DATE: **Aug-2-2027**

### FOR OFFICE USE ONLY

ADC MAP: **5649**  
WSSC 200' GRID: **206SE01**  
WORK LOCATION: **Please see last page.**  
12-DIGIT WATERSHED: **021402040805**  
8-DIGIT WATERSHED: **02140204**  
TOTAL NUMBER OF  
LOTS + PARCELS: **1**



# PRINCE GEORGE'S COUNTY, MARYLAND



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SITE/ROAD PLAN REVIEW DIVISION  
9400 Peppercorn Place, Suite 230  
Largo, Maryland 20774  
(301) 636 - 2080



---

## **CONDITIONS OF APPROVAL:**

- 1) ESD TO THE MEP PROPOSED USING FOUR (4) MICROBIORETENTIONS.
- 2) 100-YR QUANTITY MANAGEMENT PROPOSED USING AN UNDERGROUND STORAGE STRUCTURE
- 3) ALL RETAINING WALLS TO BE REVIEWED UNDER FINE GRADING PERMIT.
- 4) LANDSCAPE PLANS ARE REQUIRED AT TECHNICAL REVIEW.
- 5) THIS PROJECT WILL REQUIRE A SITE DEVELOPMENT FINE GRADING PERMIT.
- 6) ADEQUACY ANALYSIS OF THE RECEIVING STORM DRAIN CONVEYANCE SYSTEM IS REQUIRED.
- 7) PROJECT NEEDS TO BE ADA COMPLIANT.



# PRINCE GEORGE'S COUNTY, MARYLAND



DEPARTMENT OF PERMITTING , INSPECTIONS AND ENFORCEMENT  
SITE/ROAD PLAN REVIEW DIVISION  
9400 Peppercorn Place, Suite 230  
Largo, Maryland 20774  
(301) 636 - 2080



BUILDING NUMBER	STREET NAME	STREET SUFFIX	CITY / TOWN	TAX ACCOUNT	START STATION	END STATION
899	SOUTHERN	AVE	OXON HILL	5593818		





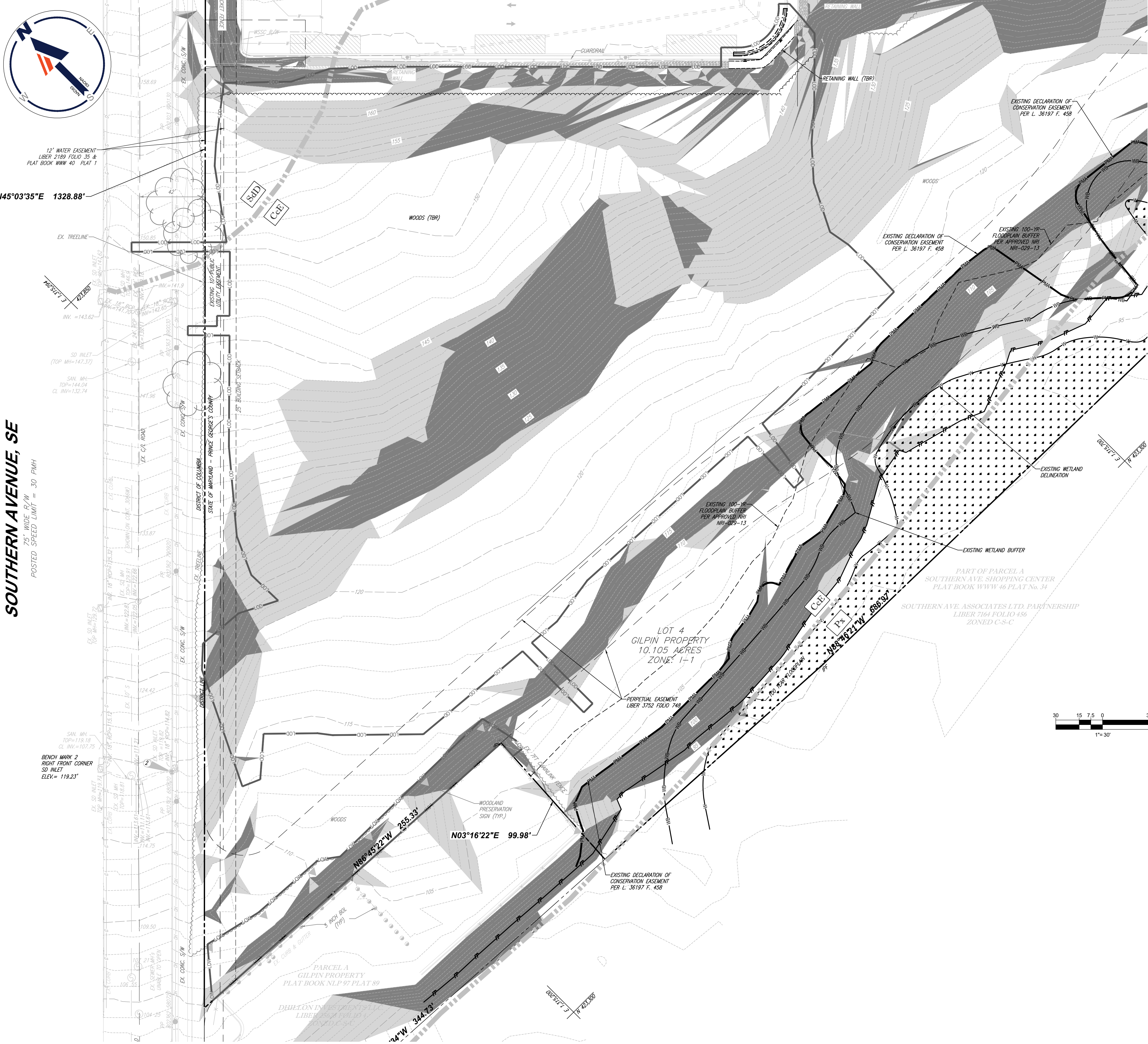






SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH



DEMOLITION / REMOVAL LEGEND	
DEMOLITION/REMOVAL NOTE	TYPICAL NOTE TEXT
---	EASEMENT
---	CONCRETE CURB & GUTTER
---	UTILITY POLE WITH LIGHT
---	POLE LIGHT
---	TRAFFIC LIGHT
---	UTILITY POLE
---	TYPICAL LIGHT
---	ACORN LIGHT
---	TYPICAL SIGN
---	PARKING COUNTS
---	SPOT ELEVATIONS
---	SANITARY LABEL
---	STORM LABEL
---	SANITARY SEWER LATERAL
---	UNDERGROUND WATER LINE
---	UNDERGROUND ELECTRIC LINE
---	UNDERGROUND GAS LINE
---	OVERHEAD WIRE
---	UNDERGROUND TELEPHONE LINE
---	UNDERGROUND CABLE LINE
---	STORM SEWER
---	SANITARY SEWER MAIN
---	HYDRANT
---	SANITARY MANHOLE
---	STORM MANHOLE
---	WATER METER
---	WATER VALVE
---	GAS VALVE
---	GAS METER

LEGEND	
LIMIT OF DISTURBANCE	---
SAWCUT	---
STEEP SLOPES 15 - 25%	---
STEEP SLOPES > 25%	---
PRIMARY MANAGEMENT AREA (PMA)	---
WETLAND BUFFER	---
100-YR FLOODPLAIN	---
WETLAND DELINEATION	---

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING  
10000 SOUTHERN AVENUE, SUITE 310  
BOWIE, MARYLAND 20715  
PHONE: (301) 809-4500  
FAX: (301) 809-4501  
MD@BohlerEng.com

REVISIONS			
REV	DATE	COMMENT	DRAWN BY
1	04/01/24	PER DP/IE COMMENTS	S.J.L.

811

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PROJECT No.: MDB23010.00  
DRAWN BY: S.J.L.  
CHECKED BY: N.B.S.  
DATE: 02/16/2024  
CAD I.D.: DEMO

SITE DEVELOPMENT CONCEPT PLAN

FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

BOHLER

16701 Melford Blvd., Suite 310  
Bowie, Maryland 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com

J. DIMARCO

4/4/24

PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION  
JOSEPH DIMARCO, 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. 34360, EXPIRATION DATE 12/31/2024

SHEET TITLE:  
EXISTING CONDITIONS /  
DEMOLITION PLAN

SHEET NUMBER:  
C-201

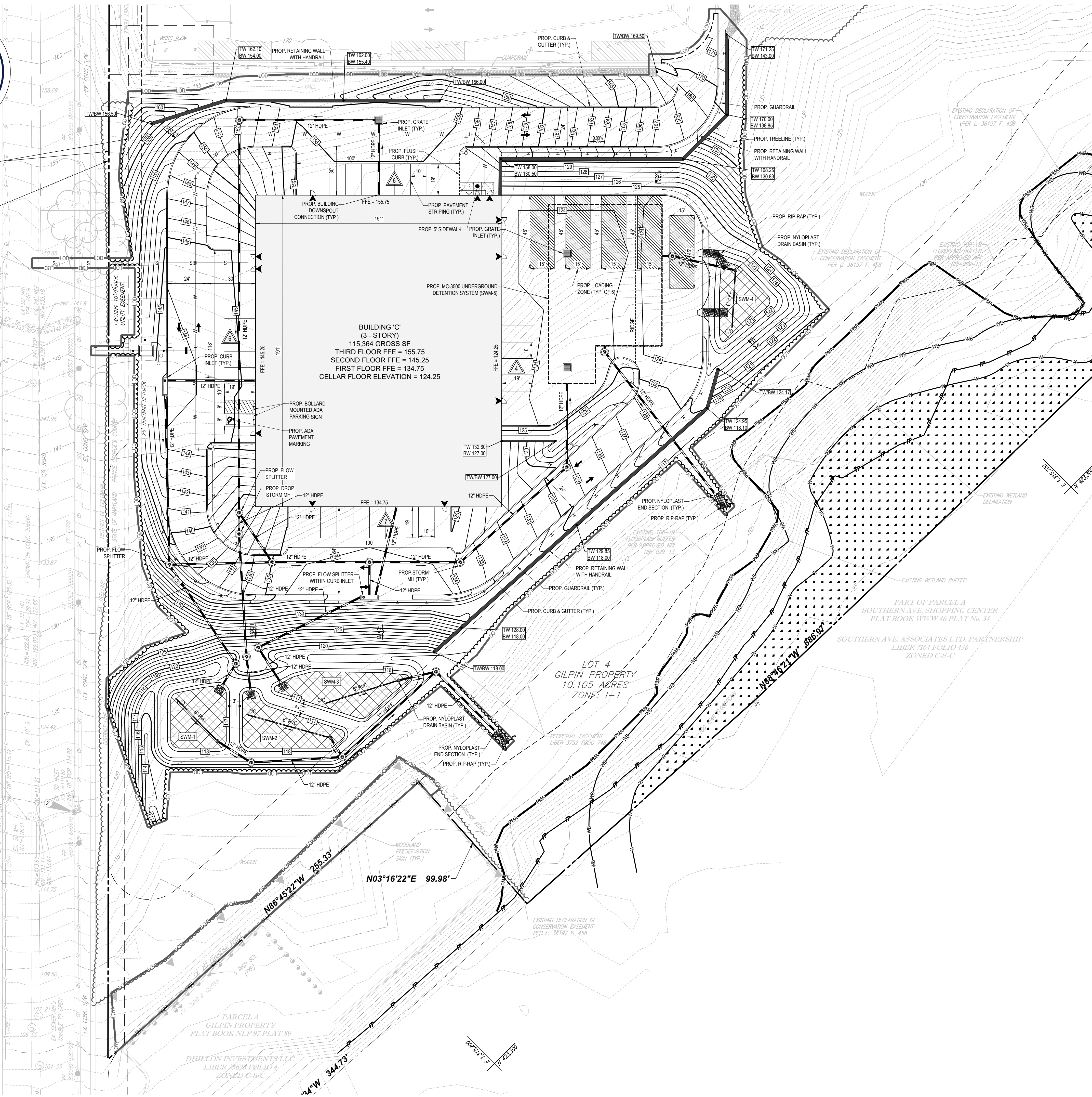
REVISION 1 - 04/01/24



SOUTHERN AVENUE, SE

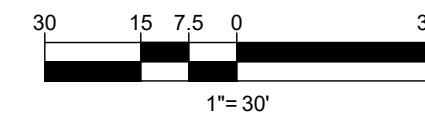
75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

N45°03'35"E 1328.88'

12" WATER EASEMENT  
LIBER 2189 FOLIO 35 &  
PLAT BOOK WWW 40 PLAT 1SD INLET  
(TOP MH=147.37)  
SAN. MH  
TOP=144.04  
CL INV=132.74BENCH MARK 2  
RIGHT FRONT CORNER  
SD INLET  
ELEV.= 119.23'

## LEGEND

LIMIT OF DISTURBANCE	— LOD — LOD —
SAWCUT	— SAWCUT —
PRIMARY MANAGEMENT AREA (PMA)	— PMA — PMA —
WETLAND BUFFER	— WB — WB —
100-YR FLOODPLAIN	— FP — FP —
WETLAND DELINEATION	— W — W —



## REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY
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PROJECT No.: MD230010.00  
DRAWN BY: SJL  
CHECKED BY: NBS  
DATE: 02/16/2024  
CAD I.D.: SITE

PROJECT:

**SITE  
DEVELOPMENT  
CONCEPT PLAN**  
FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

**BOHLER**

16701 MELFORD BLVD., SUITE 310  
BOWIE, MARYLAND 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com

**J. DIMARCO**  
4/4/24  
PROFESSIONAL ENGINEER  
I, JOSEPH DIMARCO, 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. 34360, EXPIRATION DATE 12/23/2024

SHEET TITLE:

**SITE  
DEVELOPMENT  
CONCEPT PLAN**

SHEET NUMBER:

**C-301**

REVISION 1 - 04/01/24





SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

N45°03'35"E 1328.88'

12" WATER EASEMENT  
LIBER 2189 FOLIO 35 &  
PLAT BOOK WNW 40 PLAT 1

GILPIN PROPERTY  
4.332 ACRES  
ZONE: I-1

S44°57'40"E 462.80'

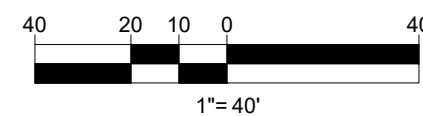
BUILDING 'B'  
(3 - STORY - 34.67 FT)  
92,400 GROSS SF  
FIRST FLOOR TYP. = 122.05'  
CELLAR FLOOR ELEVATION = 128.88'

LOT 4  
GILPIN PROPERTY  
10.105 ACRES  
ZONE: I-1

PERPETUAL EASEMENT  
LIBER 3752 FOLIO 748

DA-1

LOI-1



PRE-DEVELOPMENT DRAINAGE  
AREA TABLE

DRAINAGE AREA	AREA (AC.)	IMPERVIOUS AREA (AC.)
DA-1	7.78	0.00

10-YR PRE-DEVELOPMENT POI  
ANALYSIS

POINT OF INTEREST	PRE DEVELOPMENT FLOW
LOI-1	17.71 CFS

100-YR PRE-DEVELOPMENT  
POI ANALYSIS

POINT OF INTEREST	PRE DEVELOPMENT FLOW
LOI-1	38.82 CFS

LEGEND

LIMIT OF DISTURBANCE	— L.O.D. — L.O.D. —
SAWCUT	— — — — —
PRIMARY MANAGEMENT AREA (PMA)	— PMA — PMA —
WETLAND BUFFER	— WB — WB —
100-YR FLOODPLAIN	— FP — FP —
WETLAND DELINEATION	— W — W —
TOC PATH	— — — — —

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SITE CIVIL AND CONSULTING ENGINEERING  
LANDSCAPE ARCHITECTURE  
PROGRAM MANAGEMENT  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

REVISIONS

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DRAWN BY: S.J.L.  
CHECKED BY: N.B.S.  
DATE: 02/16/2024  
CAD I.D.: FRED

PROJECT:

SITE  
DEVELOPMENT  
CONCEPT PLAN  
FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

**BOHLER**

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Bowie, Maryland 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com

J. DIMARCO  
Professional Engineer  
4/4/24  
PROFESSIONAL CERTIFICATION  
JOSEPH DIMARCO, hereby certifies 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. 34360, EXPIRATION DATE 12/23/2024

SHEET TITLE:

PRE-  
DEVELOPMENT  
DRAINAGE  
AREA MAP

SHEET NUMBER:

C-901

REVISION 1 - 04/01/24





SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

N45°03'35"E 1328.88'

GILPIN PROPERTY  
4.332 ACRES  
ZONE: I-1

S44°57'40"E 462.80'

BUILDING 'B'  
3-STORY - 34,671 SF  
92,400 GROSS SF  
FIRST FLOOR FTE = 182.05  
CELLAR FLOOR ELEVATION = 128.88'

LOT 4  
GILPIN PROPERTY  
10.105 ACRES  
ZONE: I-1

DA-2

DA-1

LOI-1

POST-DEVELOPMENT DRAINAGE AREA TABLE

DRAINAGE AREA	AREA (AC.)	IMPERVIOUS AREA (AC.)	C VALUE
DA-1	2.44	1.79	0.74
DA-2	5.34	0	0.30

10-YR POST-DEVELOPMENT  
POI ANALYSIS

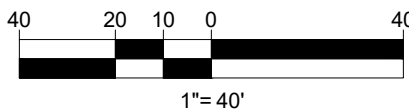
LINE/POINT OF INTEREST	POST DEVELOPMENT FLOW
LOI-1	17.71 CFS

100-YR POST-DEVELOPMENT  
POI ANALYSIS

POINT OF INTEREST	POST DEVELOPMENT FLOW
LOI-1	37.07 CFS

LEGEND

LIMIT OF DISTURBANCE	— LOD — LOD —
SAWCUT	- - - - -
PRIMARY MANAGEMENT AREA (PMA)	— PMA — PMA —
WETLAND BUFFER	— WB — WB —
100-YR FLOODPLAIN	— FP — FP —
WETLAND DELINEATION	— W — W —
TOC PATH	- - - - -



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REVISIONS

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PROJECT No.: MDB230010.00  
DRAWN BY: SJL  
CHECKED BY: NBS  
DATE: 02/16/2024  
CAD I.D.: PSTD

PROJECT:

**SITE  
DEVELOPMENT  
CONCEPT PLAN**  
FOR

GILPIN PROPERTY

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PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

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Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com

**J. DIMARCO**  
4/4/24  
PROFESSIONAL ENGINEER  
JOSEPH DIMARCO, hereby certifies 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. 34360, Expiration Date 12/31/2024

SHEET TITLE:

**POST-  
DEVELOPMENT  
DRAINAGE  
AREA MAP**

SHEET NUMBER:

C-902

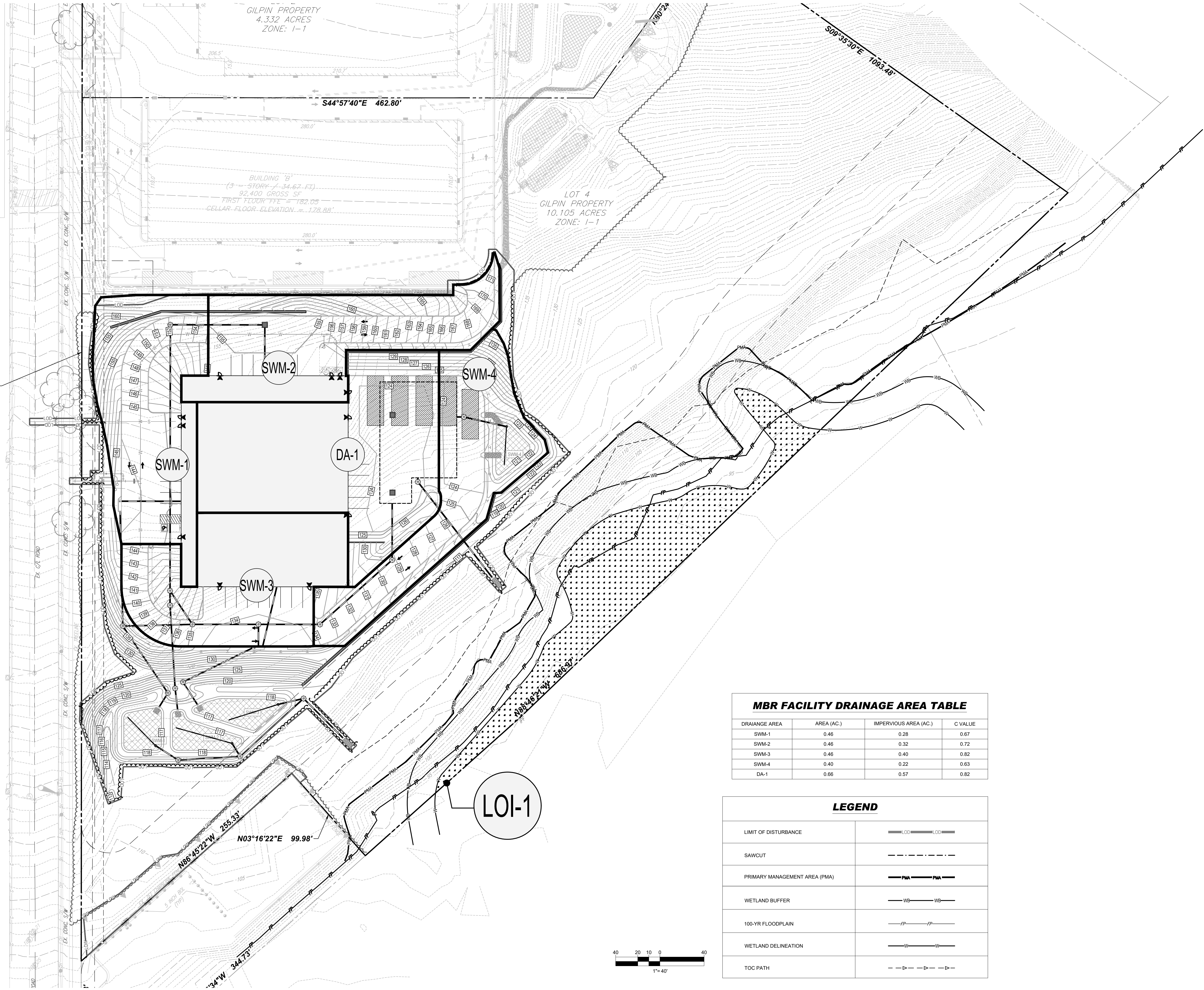
REVISION 1 - 04/01/24





SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH

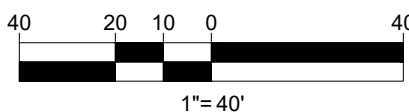


MBR FACILITY DRAINAGE AREA TABLE

DRAINAGE AREA	AREA (AC.)	IMPERVIOUS AREA (AC.)	C VALUE
SWM-1	0.46	0.28	0.67
SWM-2	0.46	0.32	0.72
SWM-3	0.46	0.40	0.82
SWM-4	0.40	0.22	0.63
DA-1	0.66	0.57	0.82

LEGEND

LIMIT OF DISTURBANCE	— L.O.D. — L.O.D. —
SAWCUT	- - - - -
PRIMARY MANAGEMENT AREA (PMA)	— PMA — PMA —
WETLAND BUFFER	— WB — WB —
100-YR FLOODPLAIN	— FP — FP —
WETLAND DELINEATION	— W — W —
TOC PATH	- - > - - > - - > - - > - -



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SITE CIVIL AND CONSULTING ENGINEERING  
LANDSCAPE ARCHITECTURE  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

TM

BOHLER

TM

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	04/01/24	PER DPIC COMMENTS	S.J.L. NBS



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PROJECT No.: MDB230010.00  
DRAWN BY: S.J.L.  
CHECKED BY: NBS  
DATE: 02/16/2024  
CAD I.D.: PSTD

PROJECT:  
**SITE  
DEVELOPMENT  
CONCEPT PLAN**  
FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

BOHLER

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MD@BohlerEng.com

J. DIMARCO  
4/4/24  
PROFESSIONAL ENGINEER  
JOSEPH DIMARCO, hereby certifies 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. 34360, EXPIRATION DATE 12/23/2024

SHEET TITLE:

**MICRO-BIO  
RETENTION FACILITY  
DRAINAGE AREA MAP**

SHEET NUMBER:

C-903

REVISION 1 - 04/01/24























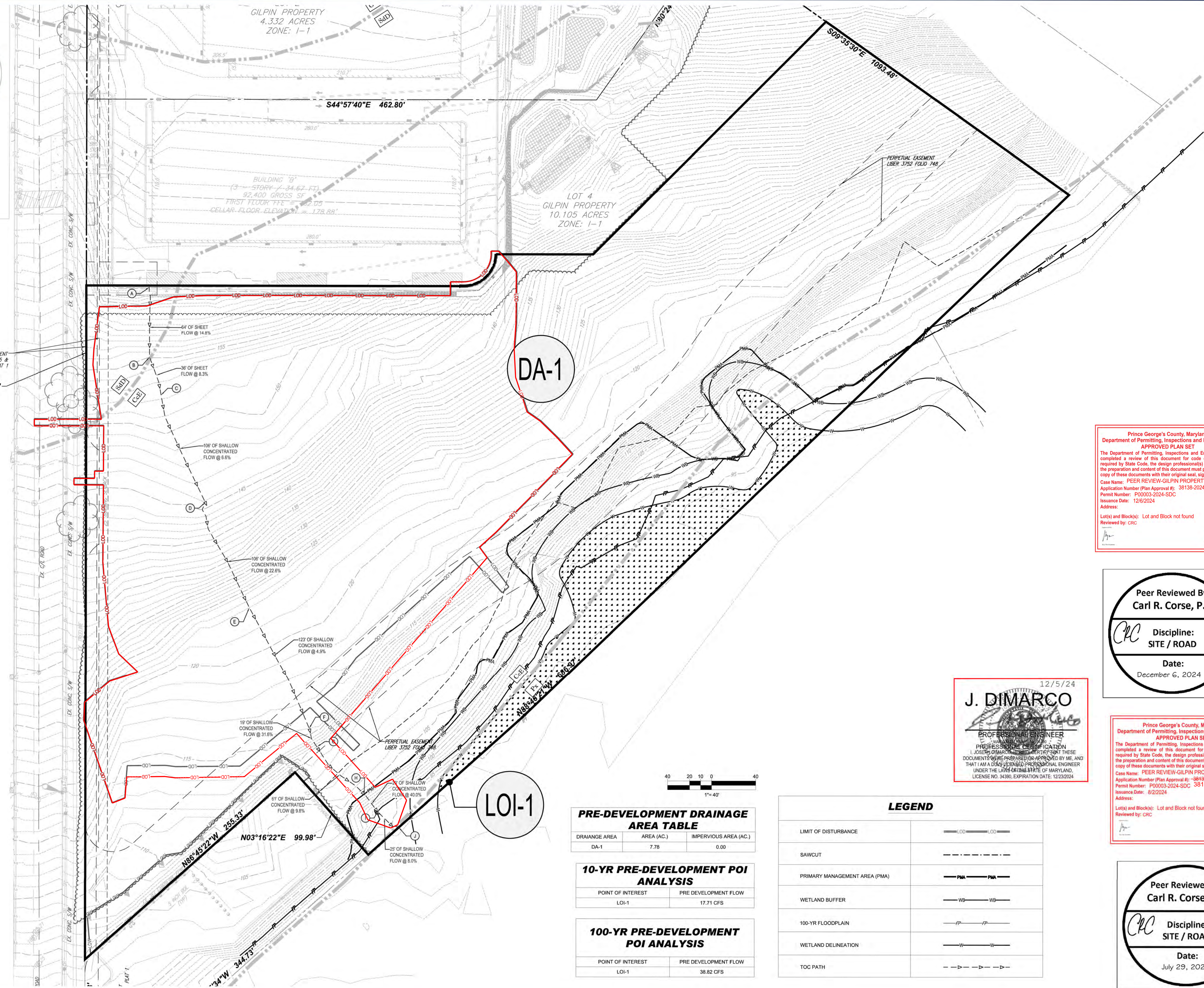






SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH



**PRE-DEVELOPMENT DRAINAGE AREA TABLE**

DRAINAGE AREA	AREA (AC.)	IMPERVIOUS AREA (AC.)
DA-1	7.78	0.00

**10-YR PRE-DEVELOPMENT POI ANALYSIS**

POINT OF INTEREST	PRE DEVELOPMENT FLOW
LOI-1	17.71 CFS

**100-YR PRE-DEVELOPMENT POI ANALYSIS**

POINT OF INTEREST	PRE DEVELOPMENT FLOW
LOI-1	38.82 CFS

**LEGEND**

LIMIT OF DISTURBANCE	---
SAWCUT	---
PRIMARY MANAGEMENT AREA (PMA)	---
WETLAND BUFFER	---
100-YR FLOODPLAIN	---
WETLAND DELINEATION	---
TOC PATH	---

Prince George's County, Maryland  
Department of Permitting, Inspections and Enforcement  
APPROVED PLAN SET  
The Department of Permitting, Inspections and Enforcement has completed a review of this document for code compliance. As required by State Code, the design professional(s) responsible for the preparation and content of this document must provide a record copy of these documents with their original seal, signature and date.  
Case Name: PEER REVIEW-GILPIN PROPERTY LOTS 3 & 4  
Application Number (Plan Approval #): 38138-2024-SDC-R01  
Permit Number: P00003-2024-SDC  
Issuance Date: 12/6/2024  
Address: Lot(s) and Block(s): Lot and Block not found  
Reviewed by: CRG

Peer Reviewed By:  
Carl R. Corse, P.E.  
Discipline:  
SITE / ROAD  
Date:  
December 6, 2024

12/5/24  
J. DIMARCO  
PROFESSIONAL ENGINEER  
I, JOSEPH DIMARCO, 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. 34390, EXPIRATION DATE: 12/23/2024

Prince George's County, Maryland  
Department of Permitting, Inspections and Enforcement  
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Application Number (Plan Approval #): 38138-2024-SDC  
Permit Number: P00003-2024-SDC  
Issuance Date: 8/2/2024  
Address: Lot(s) and Block(s): Lot and Block not found  
Reviewed by: CRG

Peer Reviewed By:  
Carl R. Corse, P.E.  
Discipline:  
SITE / ROAD  
Date:  
July 29, 2024

**BOHLER**  
SITE CIVIL AND CONSULTING ENGINEERING  
LAND SURVEYING  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

**REVISIONS**

REV	DATE	COMMENT	DRAWN BY
1	04/01/24	PER DP/IE COMMENTS.	S.J.L.

**811**  
Know what's below.  
Call before you dig.  
ALWAYS CALL 811  
It's fast. It's free. It's the law.

**NOT APPROVED FOR CONSTRUCTION**  
THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.  
PROJECT No.: MD8230010.00  
DRAWN BY: S.J.L.  
CHECKED BY: NBS  
DATE: 02/16/2024  
CAD L.D.: PREP

**SITE DEVELOPMENT CONCEPT PLAN**  
FOR  
GILPIN PROPERTY  
899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

**BOHLER**  
16701 MELFORD BLVD, SUITE 310  
BOWIE, MARYLAND 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com

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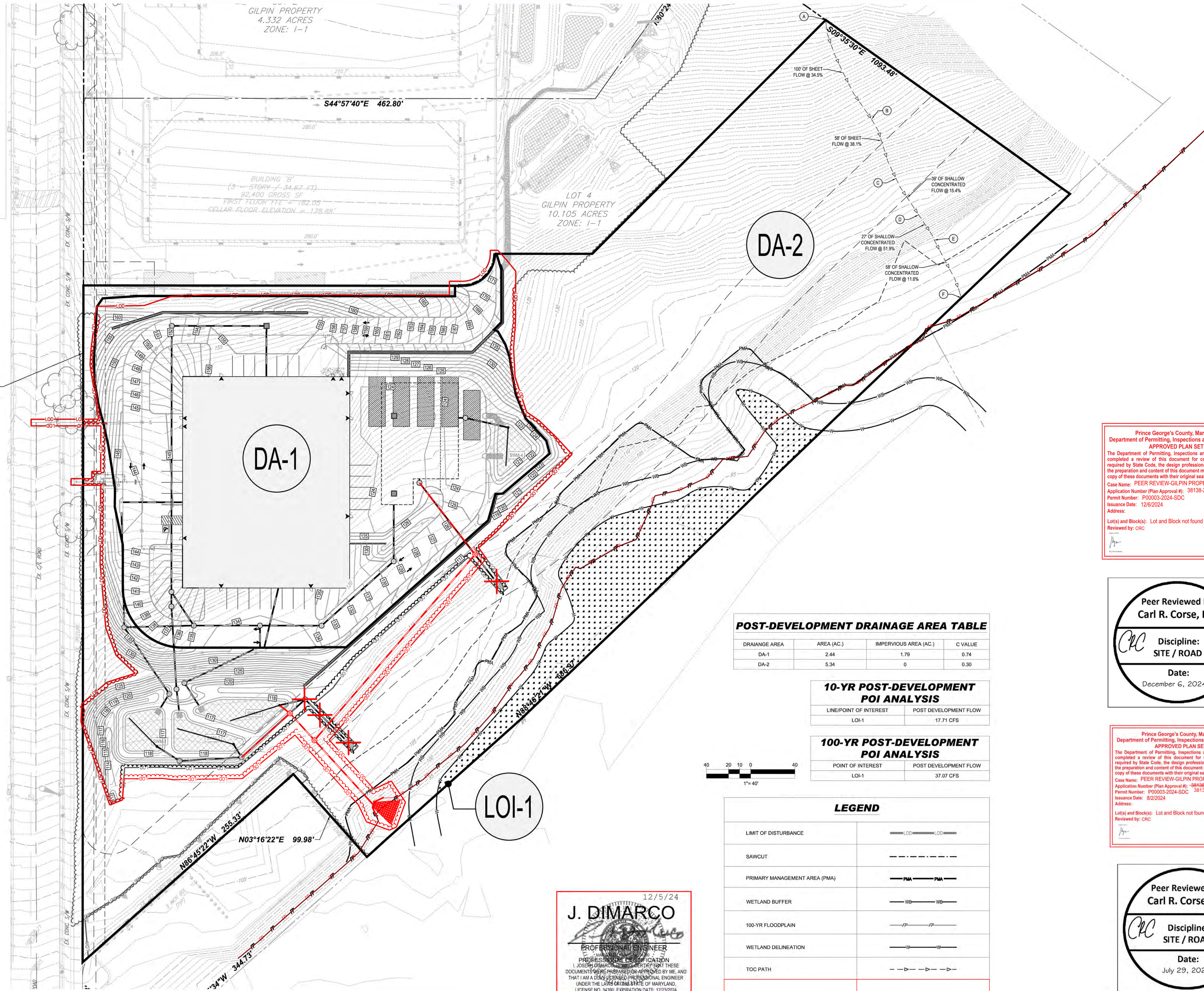
SHEET TITLE:  
**PRE-DEVELOPMENT DRAINAGE AREA MAP**  
SHEET NUMBER:  
**C-901**  
REVISION 1 - 04/01/24





SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH



POST-DEVELOPMENT DRAINAGE AREA TABLE

DRAINAGE AREA	AREA (AC.)	IMPERVIOUS AREA (AC.)	C VALUE
DA-1	2.44	1.79	0.74
DA-2	5.34	0	0.30

10-YR POST-DEVELOPMENT  
POI ANALYSIS

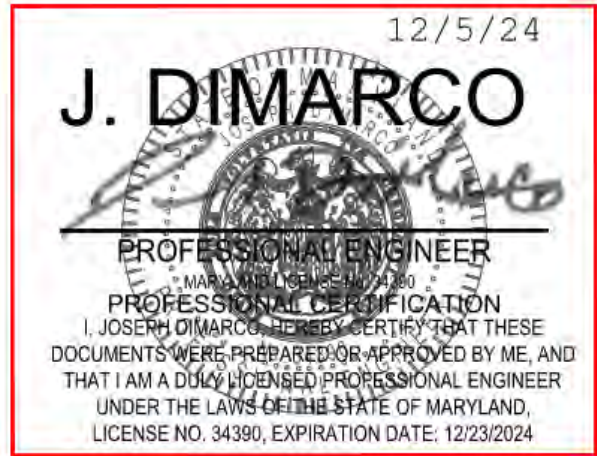
LINE/POINT OF INTEREST	POST DEVELOPMENT FLOW
LOI-1	17.71 CFS

100-YR POST-DEVELOPMENT  
POI ANALYSIS

POINT OF INTEREST	POST DEVELOPMENT FLOW
LOI-1	37.07 CFS

LEGEND

LIMIT OF DISTURBANCE	— LOD — LOD —
SAWCUT	— — — — —
PRIMARY MANAGEMENT AREA (PMA)	— PMA — PMA —
WETLAND BUFFER	— WB — WB —
100-YR FLOODPLAIN	— FP — FP —
WETLAND DELINEATION	— W — W —
TOC PATH	— — — — —
PROPOSED 100-YR FLOODPLAIN	— FP — FP —



Prince George's County, Maryland  
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Permit Number: P00003-2024-SDC  
Issuance Date: 12/6/2024  
Address: Lot(s) and Block(s): Lot and Block not found  
Reviewed by: CRC



Peer Reviewed By:  
Carl R. Corse, P.E.

Discipline:  
SITE / ROAD

Date:  
December 6, 2024

Prince George's County, Maryland  
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Application Number (Plan Approval #): 38138-2024-SDC  
Permit Number: P00003-2024-SDC 38138-2024-01-SDC  
Issuance Date: 8/2/2024  
Address: Lot(s) and Block(s): Lot and Block not found  
Reviewed by: CRC



Peer Reviewed By:  
Carl R. Corse, P.E.

Discipline:  
SITE / ROAD

Date:  
July 29, 2024



REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	04/01/24	PER DPIE COMMENTS.	S.J.L. NBS



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PROJECT No.: MD230010.00  
DRAWN BY: S.J.L.  
CHECKED BY: NBS  
DATE: 02/16/2024  
CAD I.D.: PSTD

PROJECT:

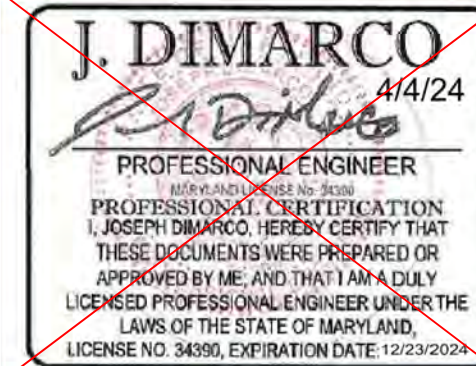
SITE  
DEVELOPMENT  
CONCEPT PLAN  
FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

BOHLER

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BOWIE, MARYLAND 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
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SHEET TITLE:

POST-  
DEVELOPMENT  
DRAINAGE  
AREA MAP

SHEET NUMBER:

C-902

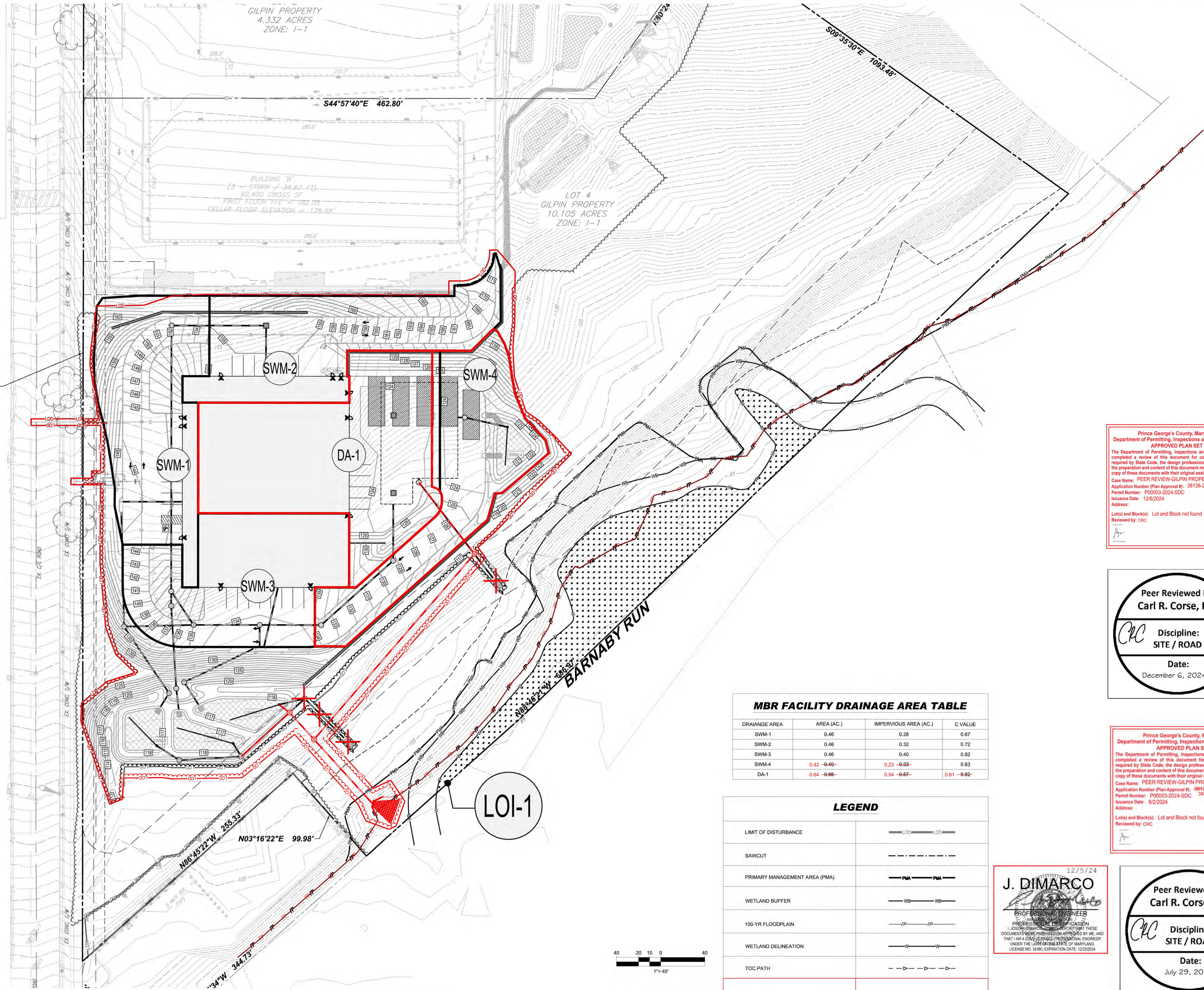
REVISION 1 - 04/01/24





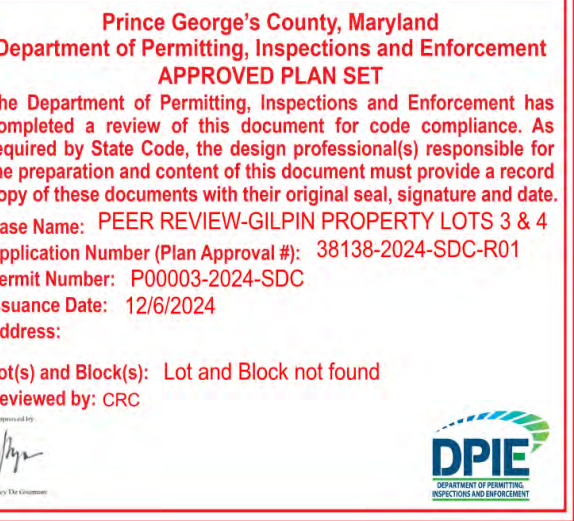
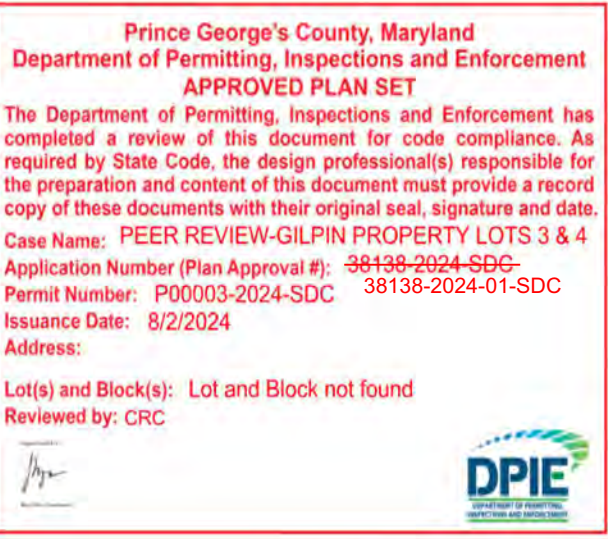
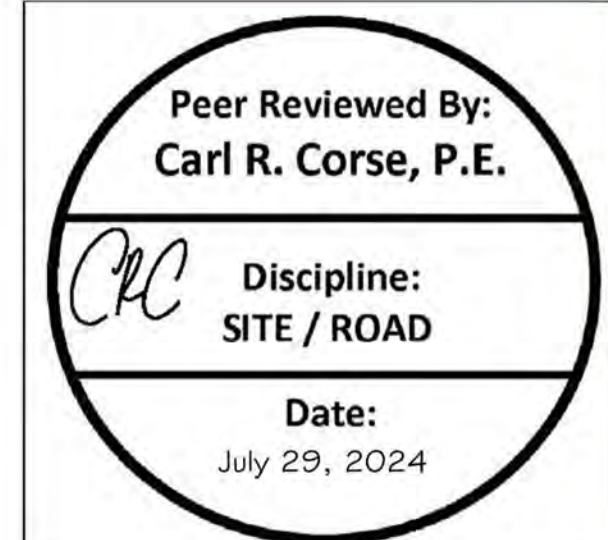
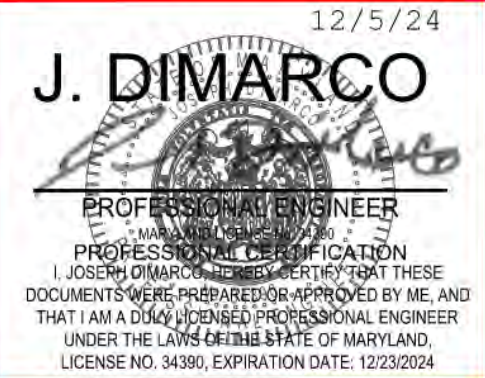
SOUTHERN AVENUE, SE

75' WIDE R/W  
POSTED SPEED LIMIT = 30 MPH



MBR FACILITY DRAINAGE AREA TABLE			
DRAINAGE AREA	AREA (AC.)	IMPERVIOUS AREA (AC.)	C VALUE
SWM-1	0.46	0.28	0.67
SWM-2	0.46	0.32	0.72
SWM-3	0.46	0.40	0.82
SWM-4	0.42 - 0.40-	0.23 - 0.22-	0.63
DA-1	0.64 - 0.66-	0.54 - 0.67-	0.81 - 0.82-

LEGEND	
LIMIT OF DISTURBANCE	---
SAWCUT	---
PRIMARY MANAGEMENT AREA (PMA)	---
WETLAND BUFFER	---
100-YR FLOODPLAIN	---
WETLAND DELINEATION	---
TOC PATH	---
PROPOSED 100-YR FLOODPLAIN	---



NOT APPROVED FOR CONSTRUCTION

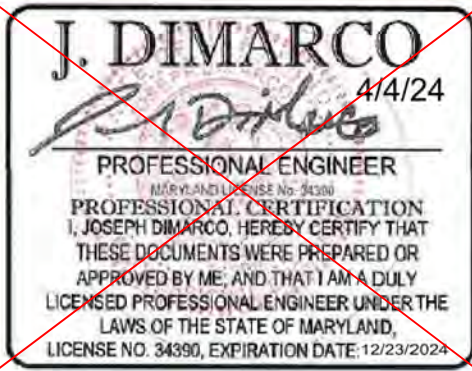
PROJECT No.: MD230010.00  
DRAWN BY: SUL  
CHECKED BY: NBS  
DATE: 02/16/2024  
CAD I.D.: PSTD

PROJECT: SITE DEVELOPMENT CONCEPT PLAN FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGE'S COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4

BOHLER  
16701 MELFORD BLVD, SUITE 310  
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Phone: (301) 809-4500  
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SHEET TITLE:

MICRO-BIO RETENTION FACILITY DRAINAGE AREA MAP

SHEET NUMBER: C-903

REVISION 1 - 04/01/24



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Application Number (Plan Approval): 38138-2024-SDC-R01  
Permit Number: P0003-2024-SDC  
Issuance Date: 12/6/2024  
Address:  
Lot(s) and Block(s): Lot and Block not found  
Reviewed by: CRC



### MC-3500 STORMTECH CHAMBER SPECIFICATIONS

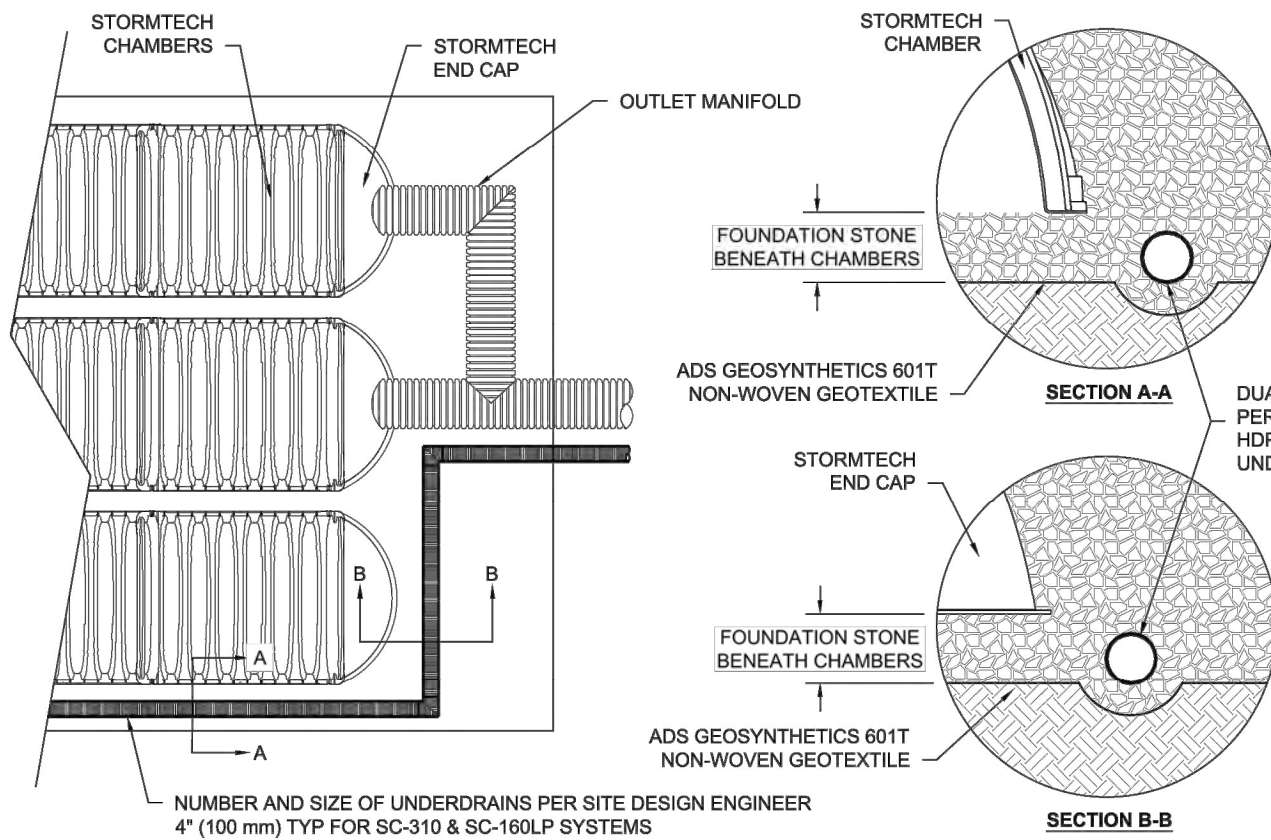
- CHAMBERS SHALL BE STORMTECH MC-3500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT<sup>2</sup>. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
  - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
  - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
  - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

### IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

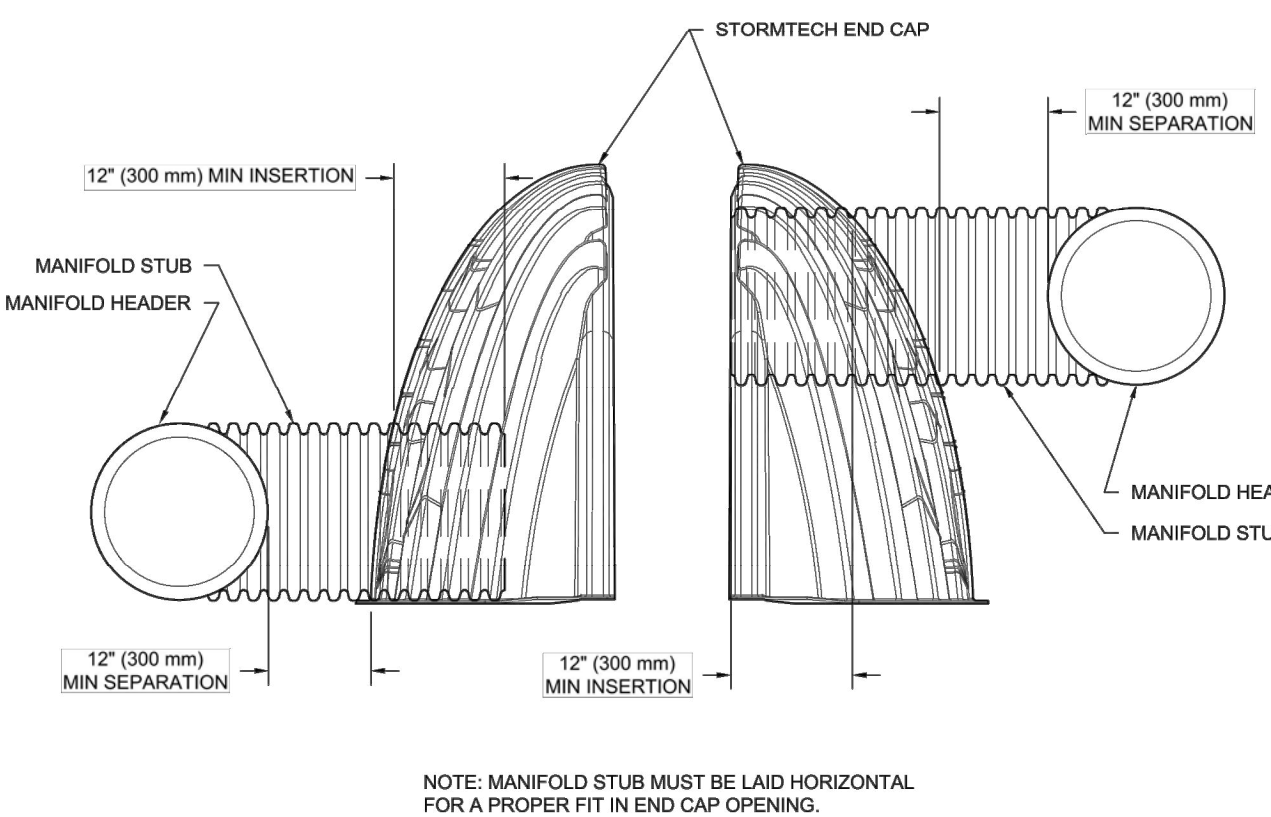
- STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
  - STONESHOOTER LOCATED OFF THE CHAMBER BED.
  - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
  - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDINGS CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

### NOTES FOR CONSTRUCTION EQUIPMENT

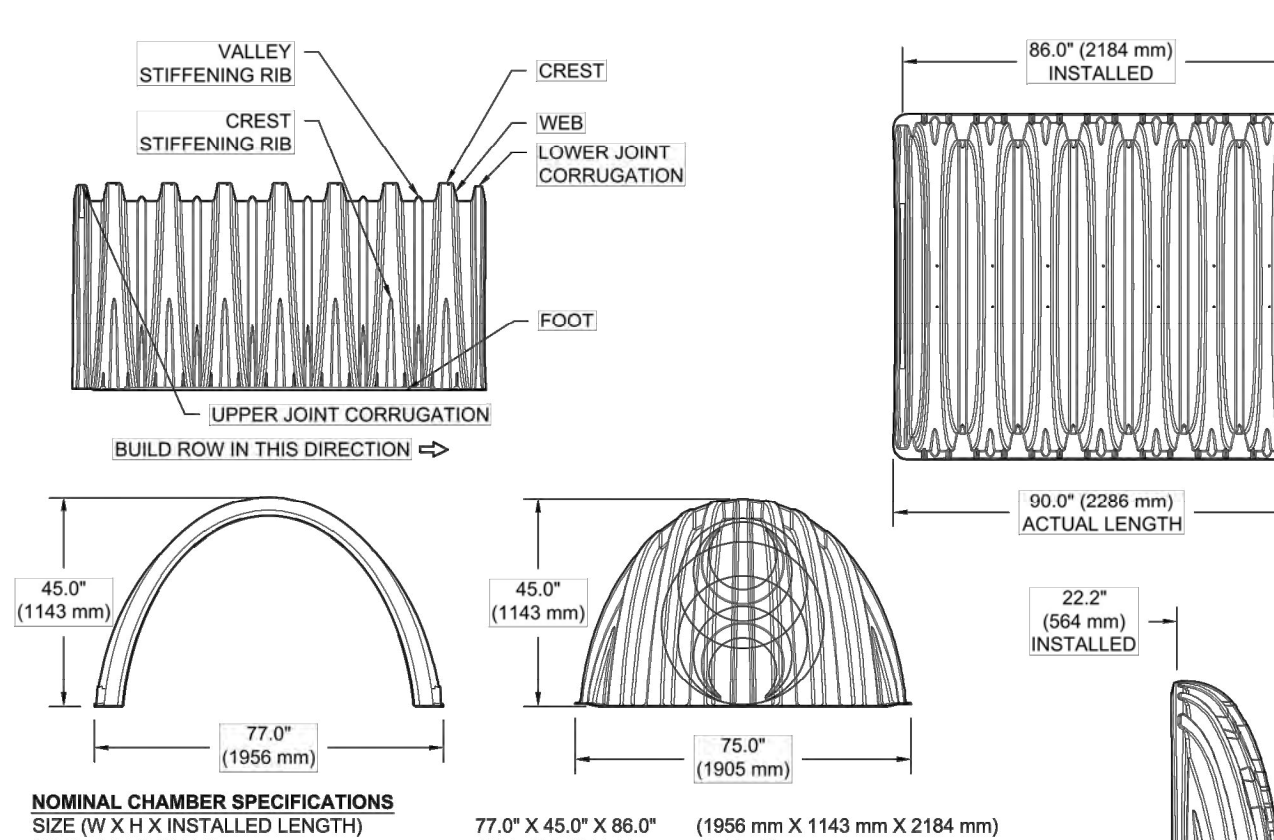
- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
  - THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
    - NO EQUIPMENT IS ALLOWED ON BASE CHAMBERS.
    - NO RUBBER Tired LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
    - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
  - FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.
- CONTACT STORMTECH AT 1-888-892-2884 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



### 5 UNDERDRAIN DETAIL



### 6 MC-SERIES END CAP INSERTION DETAIL



### NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)  
CHAMBER STORAGE  
MINIMUM INSTALLED STORAGE<sup>1</sup>  
WEIGHT

SIZE (W X H X INSTALLED LENGTH)  
END CAP STORAGE  
MINIMUM INSTALLED STORAGE<sup>1</sup>  
WEIGHT

\*ASSUMES 12" (306 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" (152 mm) STONE BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"  
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"  
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"  
END CAPS WITH A WELDED CROWN PLATE END WITH "C"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B	---	---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B	---	---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B	---	---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B	---	---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B	---	---	1.50" (38 mm)
MC3500IEPP17C	---	---	---
MC3500IEPP17W	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18BC	---	---	1.77" (45 mm)
MC3500IEPP18BW	---	---	---
MC3500IEPP24TC	---	---	---
MC3500IEPP24TW	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24BC	---	---	2.06" (52 mm)
MC3500IEPP24BW	30" (750 mm)	---	2.75" (70 mm)
MC3500IEPP30BC	---	---	---

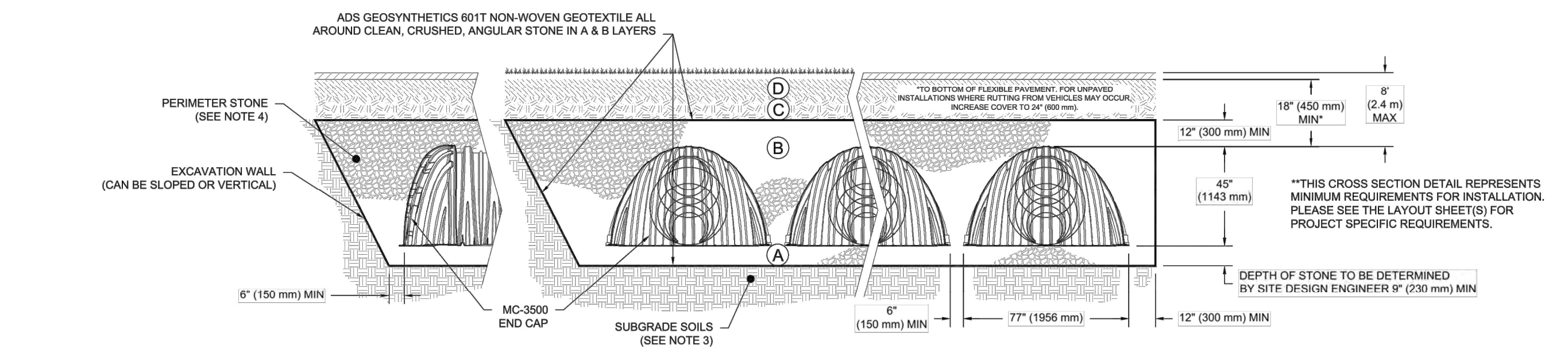
NOTE: ALL DIMENSIONS ARE NOMINAL.

### 2 MC-3500 TECHNICAL SPECIFICATIONS

### ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DE
D	<b>FINAL FILL:</b> FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN REQUIREMENTS. PREPARE PER SITE DESIGN INSTALLATIONS MAY HAVE PREPARATION
C	<b>INITIAL FILL:</b> FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER ABOVE.	AASHTO M145 <sup>1</sup> A-1, A-2, A-3 OR AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 88, 9, 10	BEGIN COMPACTIONS AFTER THE CHAMBERS IS REACHED. MINIMUM REQUIREMENTS FOR INSTALLATION. PLEASE SEE THE LAYOUT SHEET(S) FOR PROJECT SPECIFIC REQUIREMENTS.
B	<b>EMBEDMENT STONE:</b> FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	NO COMPACTION
A	<b>FOUNDATION STONE:</b> FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL.

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
  - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERS WITH A VIBRATORY COMPACTOR.
  - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
  - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
  - WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".

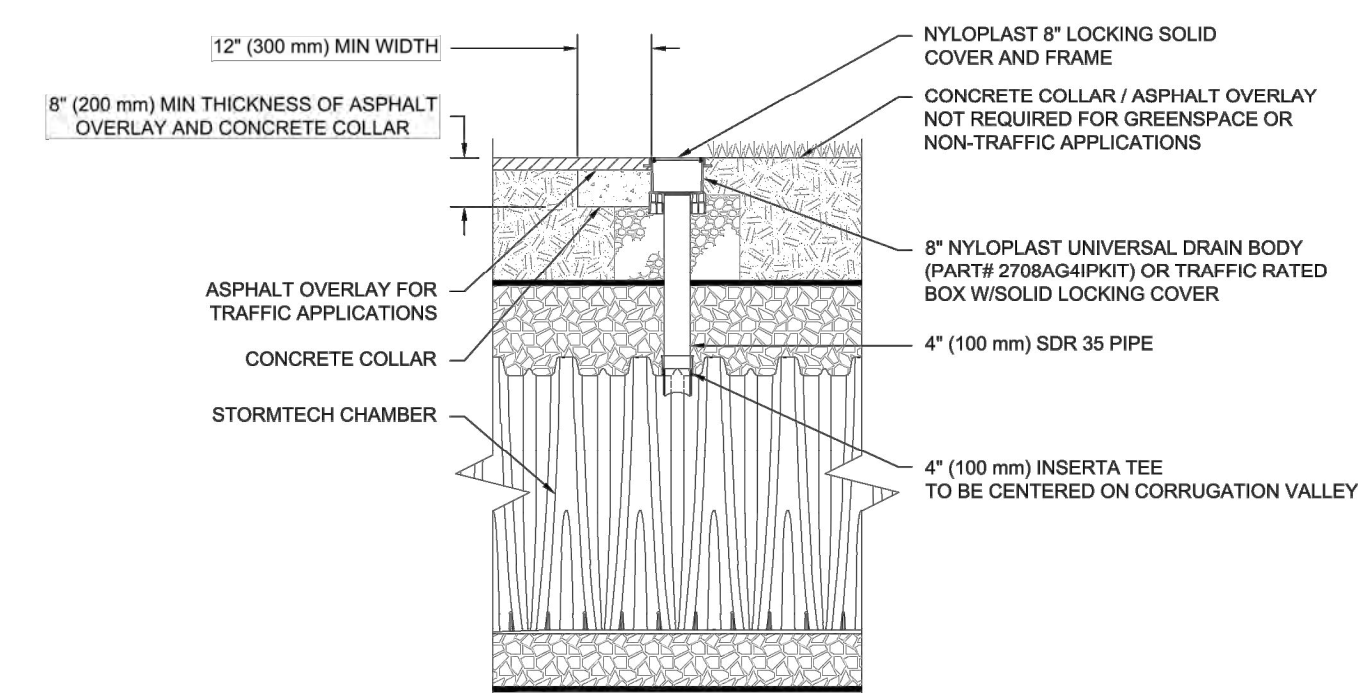


### NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT<sup>2</sup>. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

### 1 MC-3500 CROSS SECTION DETAIL

### 3 MC-3500 ISOLATOR ROW PLUS DETAIL



NOTE:  
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

### INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
- A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADIOMETER, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
- i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
- ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
- B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- A.5. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

### NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

### 4 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)

### MC-3500 STANDARD DETAILS

StormTech<sup>®</sup>  
Chamber System  
888-892-2884 | WWW.STORMTECH.CO

4640 TRUEMAN BLVD  
HILLIARD, OH 43026



SHEET

1



SITE CIVIL AND CONSULTING ENGINEERING  
NO CONSTRUCTION  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

### REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	04/01/24	PER DPIE COMMENTS	SJL
2	11/21/24	APPROVED PLAN REVISION	NBS
			SK
			JD



Know what's below.  
Call before you dig.

ALWAYS CALL 811

It's fast. It's free. It's the law.

### NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: MDB230010.00  
DRAWN BY: SJL  
CHECKED BY: NBS  
DATE: 02/16/2024  
CAD I.D.: CND/S

### SITE DEVELOPMENT CONCEPT PLAN

FOR

GILPIN PROPERTY

899 SOUTHERN AVENUE  
PRINCE GEORGES COUNTY  
OXON HILL, MD 20745  
TM: 87, GRID: B3, LOT: 4



16701 MOLFORD BLVD, SUITE 430  
BOWIE, MARYLAND 20715  
Phone: (301) 809-4500  
Fax: (301) 809-4501  
MD@BohlerEng.com

### J. DIMARCO

PROFESSIONAL ENGINEER  
PROFESSIONAL CERTIFICATION  
JOSEPH DIMARCO, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 34390, EXPIRATION DATE: 12/23/2024

SHEET TITLE:

### STORMWATER MANAGEMENT DETAILS

SHEET NUMBER:

C-904

REVISION 2 - 11/21/24

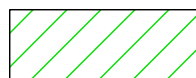
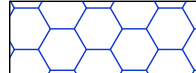



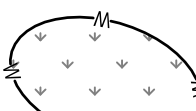

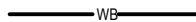
















# LEGEND

	WOODLAND PRESERVATION AREA
	WOODLAND PRESERVED - NOT CREDITED
	LIMITS OF DISTURBANCE (LOD)
	EXISTING TREELINE
	EXISTING 100-YR FLOODPLAIN
	EXISTING WETLAND
	EXISTING 25' WETLAND BUFFER
	EXISTING CONTOUR
	EXISTING TREE
	PRIMARY MANAGEMENT AREA (PMA)
	PROPOSED CONTOUR
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN
	WOODLAND PRESERVATION SIGNAGE
	
	

1. THIS PLAN IS SUBMITTED TO FULFILL THE WOOLAND CONSERVATION REQUIREMENTS OF DSP-13008-02. IF DSP-13008-02 EXPIRES, THEN THIS TPOZ ALSO EXPIRES AND IS NO LONGER VALID.
2. CUTTING OR CLEARING OF WOOLAND NOT IN CONFORMANCE WITH THIS PLAN OR WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE PLANNING DIRECTOR OR DESIGNEE SHALL BE SUBJECT TO A \$9.00 PER SQUARE FOOT MITIGATION FEE.
3. A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO THE ISSUANCE OF GRADING PERMITS. THE DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION OR THE DEPARTMENT OF ENVIRONMENTAL RESOURCES, AS APPROPRIATE, SHALL BE CONTRACTED PRIOR TO THE START OF ANY WORK ON THE SITE TO CONDUCT A PRE-CONSTRUCTION MEETING WHERE IMPLEMENTATION OF WOOLAND CONSERVATION MEASURES SHOWN ON THIS PLAN WILL BE DISCUSSED IN DETAIL.
4. THE DEVELOPER OR BUILDER OF THE LOTS OR PARCELS SHOWN ON THIS PLAN SHALL NOTIFY FUTURE BUYERS OF ANY WOOLAND CONSERVATION AREAS THROUGH THE PROVISION OF A COPY OF THIS PLAN AT TIME OF CONTRACT SIGNING. FUTURE PROPERTY OWNERS ARE ALSO SUBJECT TO THIS REQUIREMENT.
5. THE OWNERS OF THE PROPERTY SUBJECT TO THIS TREE CONSERVATION PLAN ARE SOLELY RESPONSIBLE FOR CONFORMANCE TO THE REQUIREMENTS CONTAINED HEREIN.
6. THE PROPERTY IS WITHIN ENVIRONMENTAL STRATEGY AREA (ESA 1) OF PLAN PRINCE GEORGE'S 2035 (FORMERLY THE DEVELOPED TIER) AND IS ZONED I-L.
7. THE SITE IS NOT ADJACENT TO A ROADWAY DESIGNATED AS SCENIC, HISTORIC, A PARKWAY OR A SCENIC BYWAY.
8. THE SITE IS NOT ADJACENT TO A ROADWAY CLASSIFIED AS ARTERIAL OR GREATER.
9. THIS PLAN IS NOT GRANDFATHERED UNDER CB-27-2010, SECTION 25-177(G).
10. ALL WOOLANDS DESIGNATED ON THIS PLAN FOR PRESERVATION ARE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE WOOLAND AREAS SHALL REMAIN IN A NATURAL STATE. THIS INCLUDES THE CANOPY TREES AND UNDERSTORY VEGETATION. A REVISED TREE CONSERVATION PLAN IS REQUIRED PRIOR TO CLEARING WOOLAND AREAS THAT ARE NOT SPECIFICALLY IDENTIFIED TO BE CLEARED ON THE APPROVED TPOZ.
11. TREE AND WOOLAND CONSERVATION METHODS SUCH AS ROOT PRUNING SHALL BE CONDUCTED AS NOTED ON THIS PLAN.
12. THE LOCATION OF ALL TEMPORARY TREE PROTECTION FENCING (TPFS) SHOWN ON THIS PLAN SHALL BE FLAGGED OR STAKED IN THE FIELD PRIOR TO THE PRE-CONSTRUCTION MEETING. UPON APPROVAL OF THE LOCATIONS BY THE COUNTY INSPECTOR, INSTALLATION OF THE TPFS MAY BEGIN.
13. ALL TEMPORARY TREE PROTECTION FENCING REQUIRED BY THIS PLAN SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CLEARING AND GRADING WORK ON ANY PORTION OF THE PROJECT. THE TREE IS RELEASED FROM THE TPOZ AND MUST BE REMOVED FOR THE PROJECT. FAILURE TO INSTALL AND MAINTAIN TEMPORARY OR PERMANENT TREE PROTECTIVE DEVICES IS A VIOLATION OF THIS TPOZ.
14. WOOLAND PRESERVATION AREAS SHALL BE REMOVED WITH SIGAZONE AS SHOWN ON THE PLANS AT THE SAME TIME AS THE TEMPORARY TPF INSTALLATION. THESE SIGNS MUST REMAIN IN PERPETUITY. POSTING OF HAZARDOUS TREES OR LIMBS BY DEVELOPERS OR BUILDERS
15. THE DEVELOPER AND/OR BUILDER IS RESPONSIBLE FOR THE COMPLETE PRESERVATION OF ALL FORESTED AREAS SHOWN ON THE APPROVED PLAN TO REMAIN UNDISTURBED. ONLY TREES OR PART THEREOF DESIGNATED BY THE COUNTY AS DEAD, DYING, OR HAZARDOUS MAY BE REMOVED.
16. A TREE IS CONSIDERED HAZARDOUS IF A CONDITION IS PRESENT WHICH LEADS A CERTIFIED ARBORIST OR LICENSED TREE EXPERT TO BELIEVE THAT THE TREE OR A PORTION OF THE TREE HAS A POTENTIAL TO FALL AND STRIKE A STRUCTURE, PARKING AREA, OR OTHER HIGH USE AREA AND RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE.
17. DURING THE INITIAL STAGES OF CLEARING AND GRADING, IF HAZARDOUS TREES ARE PRESENT, OR TREES ARE PRESENT THAT ARE NOT HAZARDOUS BUT ARE IN SUCH A CONDITION THAT THE TREE IS AT RISK OF FALLING, THE TREE IS RELEASED FROM THE TPOZ. CORRECTIVE MEASURES REGARDING THE REMOVAL OF THE HAZARDOUS TREES OR PORTIONS THEREOF SHALL REQUIRE AUTHORIZATION BY THE COUNTY INSPECTOR. ONLY AFTER APPROVAL BY THE INSPECTOR MAY THE TREE BE CUT BY CHAIN SAW TO NEAR THE EXISTING GROUND LEVEL. THE STUMP SHALL NOT BE REMOVED OR COVERED WITH SOIL, MULCH OR OTHER MATERIALS THAT WOULD INHIBIT SPROUTING.
18. IF A TREE OR TREES BECOME HAZARDOUS PRIOR TO BOND RELEASE FOR THE PROJECT, DUE TO STORM EVENTS OR OTHER SITUATIONS NOT RESULTING FROM AN ACTION BY THE PERMITTEE, PRIOR TO REMOVAL, A CERTIFIED ARBORIST OR A LICENSED TREE EXPERT MUST CERTIFY THAT THE TREE OR THE PORTION OF THE TREE IN QUESTION HAS A POTENTIAL TO FALL AND STRIKE A STRUCTURE, PARKING AREA, OR OTHER HIGH USE AREA AND MAY RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE. IF A TREE OR PORTIONS THEREOF ARE IN IMMINENT DANGER OF STRIKING A STRUCTURE, PARKING AREA, OR OTHER HIGH USE AREA AND MAY RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE, THEN THE CERTIFICATION IS NOT REQUIRED AND THE PERMITTEE SHALL TAKE CORRECTIVE ACTION IMMEDIATELY. THE CONDITION OF THE AREA SHALL BE FULLY DOCUMENTED THROUGH PHOTOGRAPHS PRIOR TO CORRECTIVE ACTION BEING TAKEN. THE PHOTOS SHALL BE SUBMITTED TO THE INSPECTOR FOR DOCUMENTATION OF THE DAMAGE.
19. IF CORRECTIVE PRUNING MAY ALLEViate A HAZARDOUS CONDITION, THE CERTIFIED ARBORIST OR A LICENSED TREE EXPERT MAY PROCEED WITHOUT FURTHER AUTHORIZATION. THE PRUNING MUST BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE APPROPRIATE ANSI A-300 PRUNING STANDARDS. THE CONDITION OF THE AREA SHALL BE FULLY DOCUMENTED THROUGH PHOTOGRAPHS PRIOR TO CORRECTIVE ACTION BEING TAKEN. THE PHOTOS SHALL BE SUBMITTED TO THE INSPECTOR FOR DOCUMENTATION OF THE DAMAGE.
20. DEBRIS FROM THE TREE REMOVAL OR PRUNING THAT OCCURS WITHIN 35 FEET OF THE WOOLAND EDGE MAY BE REMOVED AND PROPERLY DISPOSED OF BY RECYCLING, CHIPPING OR OTHER ACCEPTABLE METHODS. ALL DEBRIS THAT IS MORE THAN 35 FEET FROM THE WOOLAND EDGE SHALL BE CUT UP TO ALLOW CONTACT WITH THE GROUND, THUS ENCOURAGING DECOMPOSITION. THE SMALLER MATERIALS SHALL BE PLACED INTO BRUSH PILES THAT WILL SERVE AS WILDLIFE HABITAT.
21. TREE WORK TO BE COMPLETED WITHIN A ROAD RIGHT-OF-WAY REQUIRES A PERMIT FROM THE MARYLAND DEPARTMENT OF NATURAL RESOURCES UNLESS THE TREE REMOVAL IS SHOWN WITHIN THE APPROVED LIMITS OF DISTURBANCE ON A TPOZ. THE WORK IS REQUIRED TO BE CONDUCTED BY A LICENSED TREE EXPERT.
22. TREE PROTECTION FENCING (TPFS) IS NOT REQUIRED FOR ALL OR PORTIONS OF THIS PLAN BECAUSE AN UNDISTURBED 100-FOOT BUFFER OF OPEN LAND AND A 50-FOOT FORESTED BUFFER IS BEING MAINTAINED BETWEEN THE LIMIT OF DISTURBANCE (LOD) AND THE WOOLAND PRESERVATION AREAS. IF THE COUNTY CHANGES THE ZONING OR THE COUNTY INSPECTOR DETERMINES THAT THE CONTACT BETWEEN THE BUFFER AND WOOLAND MAY BE DETERMINE IF A REVISION TO THE TREE CONSERVATION PLAN IS NECESSARY OR IF INSTALLATION TPFS WILL BE REQUIRED.



Standard Woodland Conservation Worksheet for Prince George's County					
<b>SECTION I- Establishing Site Information-</b> (Enter acres for each zone)					
<b>Zone:</b>	I-1				
Gross Tract:	14.44				
Floodplain:	0.50				
Previously Dedicated Land:	0.00				
Net Tract (NTA):	13.94				
TCP Number	TCP#418-13				
Property Description or Subdivision Name:	Glisan Property				
Is this site subject to the 1989 Ordinance?(y/n)	N				
Is this one (1) single family lot? (y/n)	N				
Are there prior TCP approvals which include a combination of this lot(s)? (y/n)	Y				
Is any portion of the property in a WC Bank?	N				
Break-even Point (preservation) =	3.50	acres			
Clearing permitted w/o reforestation=	5.66	acres			
<b>SECTION II-Determining Requirements</b> (Enter acres for each corresponding column)					
	<b>Column A</b> WCT/AFT %	<b>Column B</b> Net Tract	<b>Column C</b> Floodplain (1-1)	<b>Column D</b> Off-Site Impacts (1:1)	
Existing Woodland		6.16	0.50		
Woodland Conservation Threshold (WCT) = Smaller of 13 or 14	15.00%	2.09			
Woodland above WCT		2.09			
Woodland cleared		7.07			
Woodland cleared below WCT (smaller of 16 or 17)		2.12	0.00	0.00	
Clearing above WCT ((0.25 - 1) replacement requirement		0.53			
Woodland cleared below WCT		0.00			
Clearing below WCT ( $\geq 1$ replacement requirement)		0.00			
Afforestation Threshold (AFT) =	15.00%	0.00			
Off-site WCA being provided on this property		0.00			
Woodland Conservation Required		2.62	acres		
<b>SECTION III-Meeting the Requirements</b>					
Woodland Preservation		2.62			
Afforestation / Reforestation		0.00			
Natural Regeneration		0.00			
Specimen/Historic Tree Credit (CRZ area < 2.0)	0.00	0.00			\$0.00
Forest Enhancement Credit (Area > 25)	0.00	0.00			\$0.00
Area approved for tree-to-tree/PFA		0.00			
Area approved for tree-to-non-PFA		0.00			
Credits for Off-Site Conservation on another property		0.00			
Off-site WCA (preservation) being provided on this property		0.00			
Off-site WCA (afforestation) being provided on this property		0.00			
Total Woodland Conservation Provided		2.62	acres		
Area of woodland not cleared	7.04	acres			
Net tract woodland retained not part of requirements:	4.42	acres			
100-floodplain woodland retained	0.50	acres			
On-site woodland conservation provided	2.62	acres			
On-site woodland retained not credited	1.52	acres			
Prepared by: Eric McWilliams, RLA					

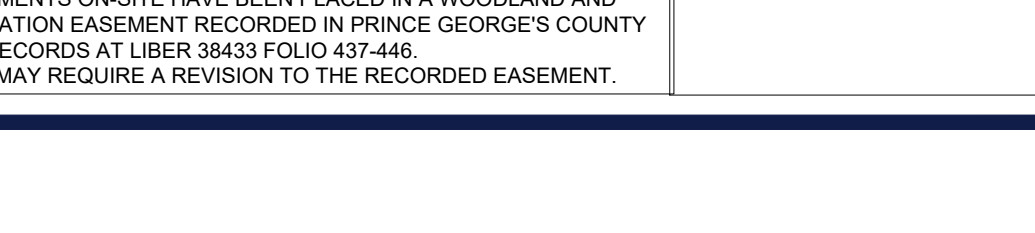
Prince George's County Planning Department, M-NCPPC Environmental Planning Section <b>TYPE 2TREE CONSERVATION PLAN APPROVAL</b> <b>TCP2 018-013</b>				
	Approved by	Date	DRD #	Reason for Revision
00				
01				
02				
03				
04				

ORG. DATE - 02/19/2024





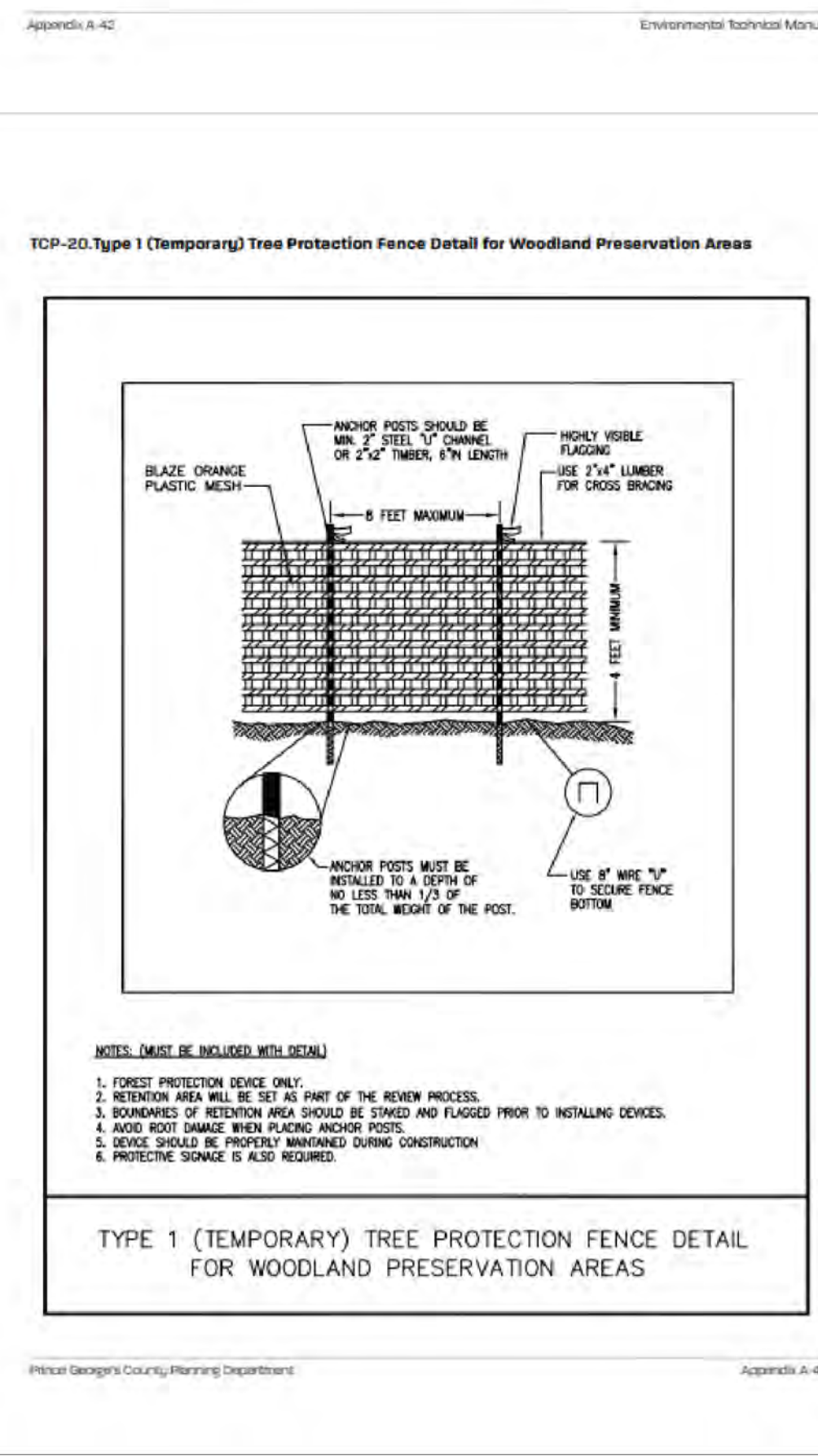
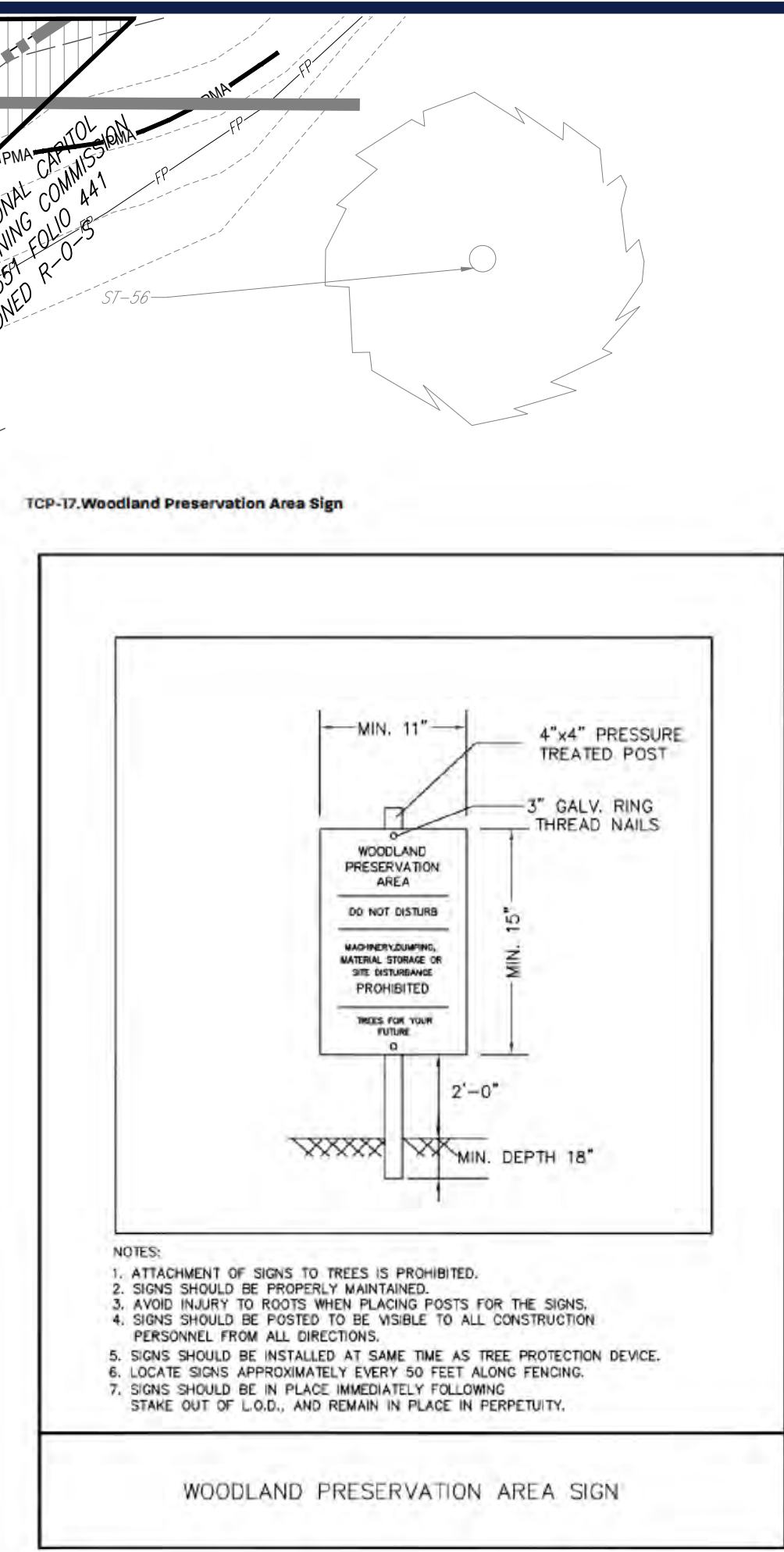
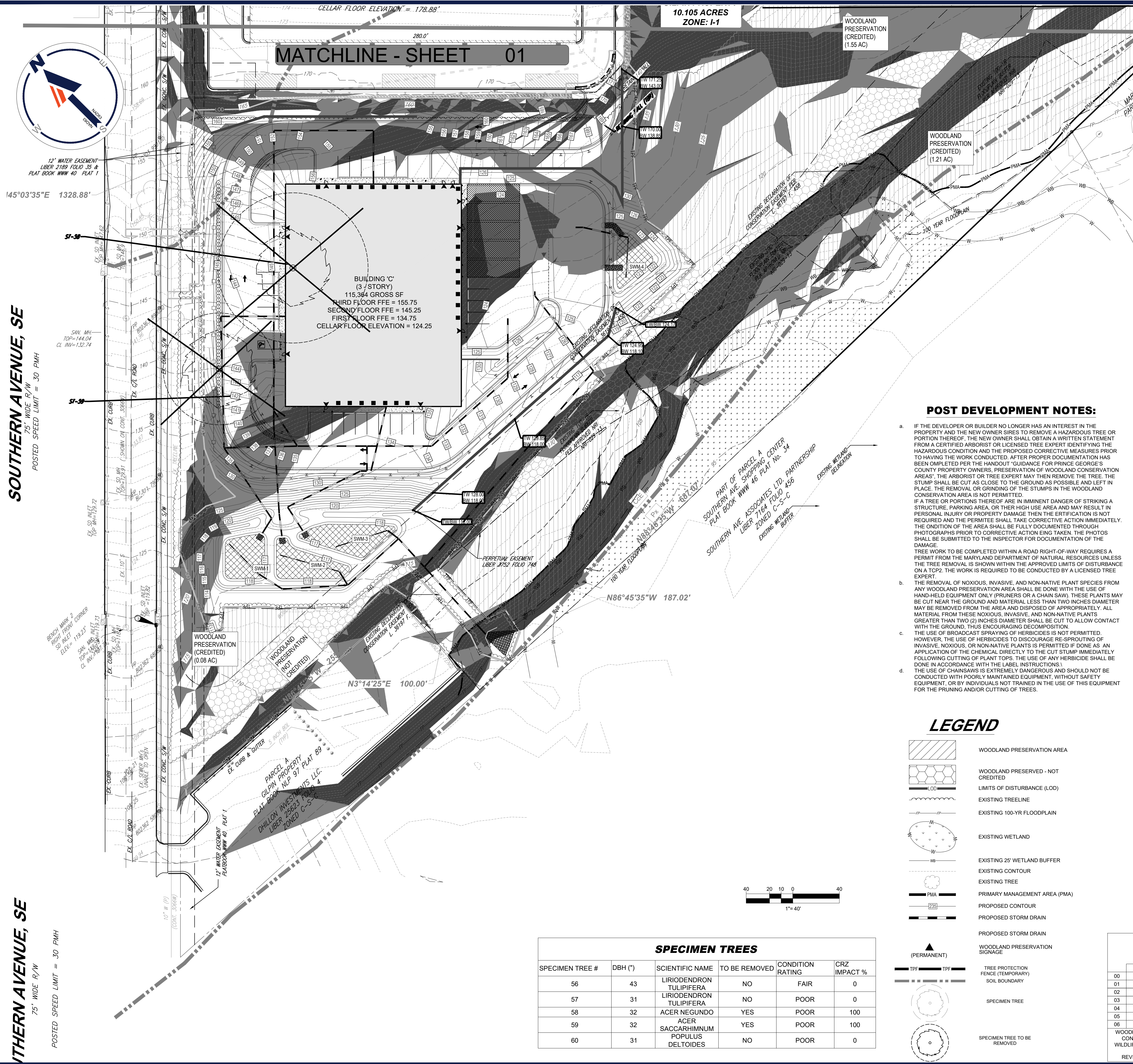




LAND RECORDS AT LIBR 38433 POND 43/446.  
REVISIONS TO THIS TCP2 MAY REQUIRE A REVISION TO THE RECORDED EASEMENT.

REVISION 3 - 10/31/24





<b>SPECIMEN TREES</b>					
SPECIMEN TREE #	DBH (")	SCIENTIFIC NAME	TO BE REMOVED	CONDITION RATING	CRZ IMPACT %
56	43	LIRIODENDRON TULIPIFERA	NO	FAIR	0
57	31	LIRIODENDRON TULIPIFERA	NO	POOR	0
58	32	ACER NEGUNDO	YES	POOR	100
59	32	ACER SACCARINUM	YES	POOR	100
60	31	POPULUS DELTOIDES	NO	POOR	0

Prince George's County Planning Department, M-NCPPC Environmental Planning Section TREE CONSERVATION PLAN APPROVAL				
TCP2 - 018 - 13				
	APPROVED BY	DATE	ORD #	REASON FOR REVISION
00	CHUCK SCHNEIDER	7/31/14	DSP-13008	
01	MEGAN REISER	8/31/14	DSP-13008-01	
02			DSP-13008-02	
03				
04				
05				
06				

WOODLANDS PRESERVED, PLANTED, OR REGENERATED IN FULFILLMENT OF WOODLAND CONSERVATION REQUIREMENTS ON-SITE HAVE BEEN PLACED IN A WOODLAND AND WILDLIFE HABITAT CONSERVATION EASEMENT RECORDED IN PRINCE GEORGE'S COUNTY LAND RECORDS AT LIBER 38453 TOLIC 437-446.

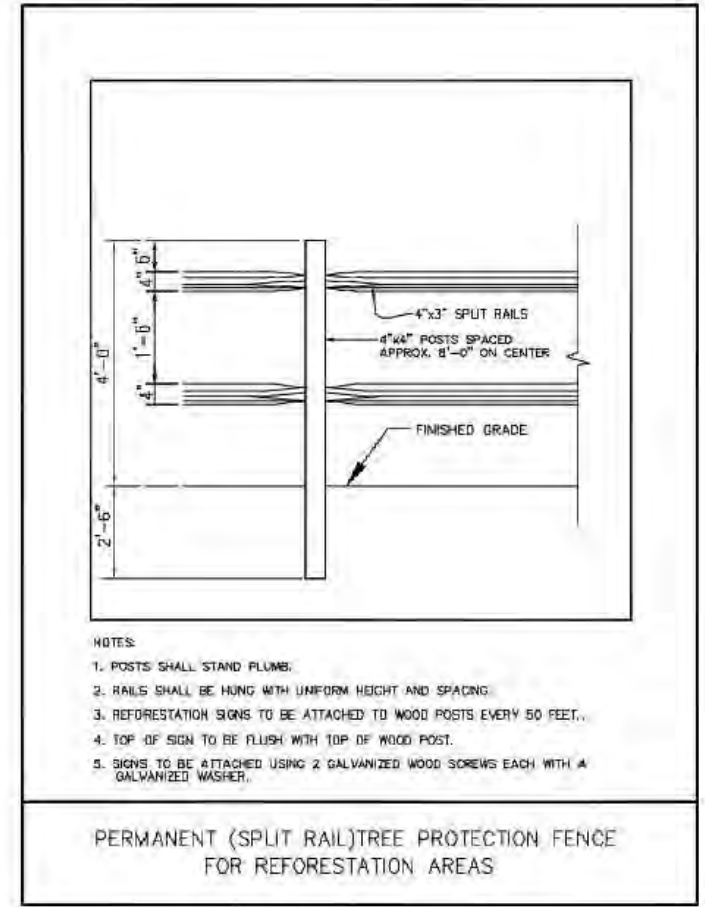
REVISIONS TO THIS TCP2 MAY REQUIRE A REVISION TO THE RECORDED EASEMENT.

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SHEET	GROSS TRACT AREA (NON-CRITICAL AREA)	EX. WOODLAND (GROSS)	EX. WOODLAND (NTA)	WOODLAND CLEARED NET- TRACT (C-NTA)	WOODLAND CLEARED OFF-SITE (C-OS)	WOODLAND PRESERVED AREA (WPA)	WOODLAND REFORESTED AREA (WRA)	WOODLAND RETAINED/NOT CREDITED (WR-NC)	WOODLAND RETAINED/ ASSUMED CLEARED (WR-AC)	STATE STREAM BUFFER
DSP-7	7.87	4.42	4.42	3.11	0.00	1.55	0.00	0.24	0.00	0.00
DSP-8	6.57	3.29	3.29	4.97	0.00	1.31	0.00	2.99	0.00	0.00
TOTAL	14.44	7.71	7.71	2.12	0.00	2.86	0.00	3.23	0.00	0.00

TCP-225 Permanent (Split Rail) Tree Protection Fence for Reforestation Areas




- NOTES:
1. POSTS SHALL STAY PLUMB.
  2. RAILS SHALL BE HUNG WITH UNIFORM HEIGHT AND SPACING.
  3. REFORESTATION SIGNS TO BE ATTACHED TO WOOD POSTS EVERY 50 FEET.
  4. TOP OF SIGNS TO BE FLUSH WITH TOP OF WOOD POST.
  5. SIGNS TO BE ATTACHED USING 2 GALVANIZED WOOD SCREWS EACH WITH A GALVANIZED WOODS.

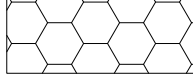
PERMANENT (SPLIT RAIL) TREE PROTECTION FENCE  
FOR REFORESTATION AREAS


20240110-01


20240110-01


## LEGEND

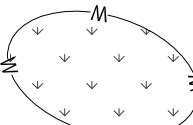
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WOODLAND PRESERVATION AREA
- 


WOODLAND PRESERVED - NOT CREDITED
- 


LIMITS OF DISTURBANCE (LOD)
- 


EXISTING TREELINE
- 

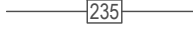
EXISTING 100-YR FLOODPLAIN
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EXISTING WETLAND
- 


EXISTING 25' WETLAND BUFFER
- 


EXISTING CONTOUR
- 


EXISTING TREE
- 


PRIMARY MANAGEMENT AREA (PMA)
- 


PROPOSED CONTOUR
- 


PROPOSED STORM DRAIN
- 


PROPOSED STORM DRAIN
- 


WOODLAND PRESERVATION SIGNAGE
- 


(PERMANENT)
- 


TPF
- 


TPF
- 


TPF
- 


TPF
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- 

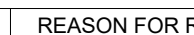
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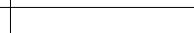
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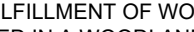
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# Lenhart Traffic Consulting, Inc.

Transportation Planning & Traffic Engineering

**Memorandum:**

***Date:*** May 14, 2024

TO: M-NCPPC  
14741 Governor Oden Bowie Drive  
Upper Marlboro, MD 20772

FROM: Mike Lenhart

RE: Gilpin Property (DSP-13008-02)

The purpose of this memo is to provide a trip generation report and memorandum confirming that the proposed DSP for this site will remain within the approved trip cap.

The site consists of Lots 3 and 4 of the Gilpin Property. These two lots are the subject of Preliminary Plan 4-15017 (PGCPB No. 15-119) which includes a Condition #10 that the development on these lots is subject to a trip cap of 48 AM peak hour trips and 51 PM peak hour trips.

DSP-13008 was approved in 2013 for the conversion of an existing building on Lot 3 into a 58,430 square foot consolidated storage building. DSP-13008-01 was approved in 2016 for the construction of an additional 98,832 square feet of consolidated storage on Lot 4. According to the DSP, there is currently a total of 92,400 square feet of consolidated storage on Lot 4.

The applicant is proposing an additional 115,364 of gross floor area to be added to the site on Lot 4. This would bring the square footage of consolidated storage to a total of 266,194 square feet on Lots 3 and 4.

The attached trip generation exhibit shows that the trips generated by the existing plus proposed consolidated storage would be 23 AM and 40 PM peak hour trips. This remains well within the approved trip cap, and therefore continues to satisfy Condition #10 of Preliminary Plan 4-15007.

Please do not hesitate to contact me if you have any questions or need any additional information regarding the above.

Thanks,



Michael Lenhart  
P.E., PTOE



### **Trip Generation Rates**

**Mini-Warehouse (ksf-Gross Floor Area, ITE-151)**

Morning Trips = 0.09 x ksf

Evening Trips = 0.15 x ksf

**Trip Distribution (In/Out)**

59/41

47/53

### **Trip Generation Totals**

			AM Peak			PM Peak		
			In	Out	Total	In	Out	Total
Existing Self Storage Lot 3	Mini-Warehouse (ksf-Gross Floor Area, ITE-151)	58,430 sq.ft.	3	2	5	4	5	9
Existing Self Storage Lot 4	Mini-Warehouse (ksf-Gross Floor Area, ITE-151)	92,400 sq.ft.	5	3	8	7	7	14
Proposed Expansion on Lot 4	Mini-Warehouse (ksf-Gross Floor Area, ITE-151)	115,364 sq.ft.	6	4	10	8	9	17
Total Existing + Proposed	Mini-Warehouse (ksf-Gross Floor Area, ITE-151)	266,194 sq.ft.	14	9	23	19	21	40
<b>Total Projected Trips on Lots 3 &amp; 4 with Proposed Expansion:</b>			<b>14</b>	<b>9</b>	<b>23</b>	<b>19</b>	<b>21</b>	<b>40</b>

Trip Cap per PGCPB Resolution 15-119 (PPS 4-15017)	AM Trip Cap = 48	PM Trip Cap = 51
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**NOTES:**

1. Trip Generation Rates obtained from the ITE Trip Generation Manual, 11th Edition

Traffic Impact Analysis	Trip Generation for Site	<b>Exhibit 1</b>
Lenhart Traffic Consulting, Inc. Traffic Engineering & Transportation Planning		



# INVOICE



Please make checks payable to WSSC Water. Please mail payments to: WSSC Water, Attn: Permit Services Section (Lobby Level), 14501 Sweitzer Lane, Laurel, MD 20707. Please include a copy of this invoice with payment.

**IMPORTANT!!** - Electronic payments (ACH or Credit Card) must be made via the ePermitting Citizen Self Service (CSS) online payment system.

Credit Card limit is \$1000.00 and ACH limit is \$99,999.00 - both limits include convenience fee amount.

## To:

Name	Company Name	Address
John Lawall, Jr.	Bohler Engineering	16701 Melford Boulevard, 310 Bowie, Md 20715
Nicholas Speech	BOHLER ENGINEERING	

**THESE FEES ARE VALID THROUGH JUNE 30. AFTER JUNE 30, THE FEES MAY INCREASE PURSUANT TO THE REGULATORY AUTHORITY OF THE WSSC. ANY UNPAID INVOICES AFTER JUNE 30 WILL BE VOIDED AND REINVOICED TO REFLECT THE INCREASED FEE AMOUNT.**

Invoice Number	Invoice Date	Invoice Amount	Amount Due	Invoice Status	Invoice Description
00370481	04/05/2024	\$1,710.00	\$0.00	Paid In Full	NONE

Reference Number	GL Account	Description	Quantity	Total
DSP 13008-02	06-40650	GOV Review (Major)	1	\$1,710.00

**Total Non-SDC Fees** \$1,710.00

**Note:** When making an online payment, our payment vendor charges a convenience fee per online transaction. The convenience fee is not included on the WSSC Water permit/plan invoice total.

## PAYMENTS (This invoice only)

Reference Number	Payment Receipt #	Description	Payment Method	Amount Paid
DSP 13008-02	TRC-336393-25-04-2024	GOV Review (Major)	ACH #8418	\$1,710.00

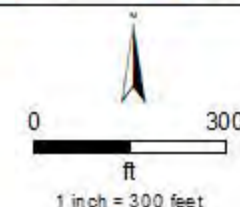
**Total Paid This Invoice** \$1,710.00



# ZONING MAP

## Legend

	Site Boundary		Special Exception
	AG		RE
	AR		RMF-12
	CGO		RMF-20
	CN		RMF-48
	CS		RMH
	IE		ROS
	IE-PD		RR
	IH		RSF-65
	LCD		RSF-95
	LMUTC		RSF-A
	LMXC		RTO-H-C
	LTO-C		RTO-H-E
	LTO-E		RTO-L-C
	LTO-PD		RTO-L-E
	MU-PD		RTO-PD
	NAC		TAC-C
	NAC-PD		TAC-E
	R-PD		TAC-PD



The Maryland-National Capital Park and Planning Commission  
Prince Georges County Planning Department  
Geographic Information System

Created: 3/4/2024

