Easton Staff Development Review
MEETING AGENDA

Wednesday, April 22, 2026 - 11:00 AM
Council Chambers, Easton Town Office
14 S Harrison Street

1. Discussion Items

a.

Application Number:	2026 - 1636 / ESDR 26 - 02
Applicant:	Sunrise Solar Inc.
Location:	12 Magnolia Street (Talbot County Board of Education) Tax Map 0103, Grid 00EA, Parcel 0555
Zoning District:	R-10A
Request:	Commercial Special Exception review pursuant to Section 28-1303.5. B of the Town of Easton Zoning Ordinance, use (6) 618 in Table 2.1 of Section 28-201 of the Ordinance for the utilization of Solar Panels, Array* in the R-10A Residential Zoning District.

b.

Application Number:	2026 - 1697 / ESDR 26 - 04
Applicant:	Rauch Inc. on behalf of Osprey Property Company II LLC
Location:	Port Street and Easton Parkway Tax Map 0015, Grid 0034, Parcel 0077, Lot 4
Zoning District:	MXW
Request:	Sketch site plan review for the development of a 64 unit multi-family residential complex.

c.

Application Number:	2026 - 1699 / ESDR 26 - 05
Applicant:	Rauch Inc. on behalf of Building African American Minds Inc. (BAAM)
Location:	406 Moton Street Tax Map 0104, Grid 00EA, Parcel 1367B
Zoning District:	R-7A

Request:	Sketch site plan approval for site improvements with associated stormwater management facilities and other facility improvements.

Commercial Application for Building Permit

APPLICANT INSTRUCTIONS: COMPLETE ALL PARTS OF THIS APPLICATION. A Commercial Building Permit Assistance Bulletiin is available and or the Building Inspection Division can answer questions regarding the completion of this application. Additional Applications are required for Grading, Demolition, Swimming Pools, Signage, Plumbing, Mechanical and Electrical work. Applicants should also contact the following offices for additional requirements: Planning and Zoning, Engineering, Easton Utilities, State Fire Marshals Office, Environmental Health, Soil Conservation Services, Maryland Department of the Environment and State Highway Administration. This application must be accompanied by three sets of construction documents prepared by a registered design professional.

Revised Dec. 2023

Town of Easton
Building Inspection Division
14 S. Harrison St.
Easton, MD 21601
Phone: 410-822-2526
Fax: 410-822-8738

Office Use Only

Received Date ____ / ____ / ____

Building Permit Number _____

Total Permit Fees $ _____

Part 1: Property Information

	Project Application Date	0103	Tax Map
		00EA	Grid
MT. Pleasant Ave.	Project's Address	0550	Parcel
	Project's Subdivision (if any)	1	Lot
Easton, MD 21601	Project's City, State and Zip Code		Zoning

Indicate if the Project is located within the Overlay District's below:

☐ Planned Redevelopment ☐ Historic ☐ Critical Area ☐ Planned Unit Development ☐ Planned Health Care

Part 2: Owner - Tenant Information

Owner

Board of education of Talbot county	Name
P.O. Box 1029	Address
Easton, MD 21601	City, State and Zip Code
	Email Address and Phone Number

Tenant Information

For a Multiple Occupancy Building provide tenants information by attaching additional sheets

	Name
	Address
	City, State and Zip Code
	Email Address and Phone Number
	Occupied Square Footage

Part 3: Certification

The applicant hereby certifies by completing this application as follows: (1) "I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as their agent." (2) "That the information contained in the application and construction documents is a full disclosure of the project." (3) "That the information contained in the application and construction documents is in compliance with all applicable covenants and or deed restrictions."

The applicant further certifies if a permit is issued as follows; (1) "That I will comply with all codes of the Town of Easton and the State of Maryland which are applicable thereto.", (2) "That I will perform no work on the above property not specifically in this application and construction documents." and (3) "That the Town Officials shall have the authority to enter areas covered by such permit to enforce the codes applicable to such permit.".

Katie Jester
Signature of Applicant

Sunrise Solar INC Katie Jester
Printed Name of Applicant

Telephone Number

Email Address

Contractor
Connection with Application

6408 Church Hill RD Chestertown, MD 21620
Mailing Address of Applicant

Part 4: Contractor Information

General Contractor

For Multiple Contractors, provide information by attaching additional sheets

Sunrise Solar INC	Name
P.O. Box 898	Address
Chestertown, MD 21620	City, State and Zip Code
	Email Address and Phone Number
MHIC 130696	Contractor's or MHIC and/or MHBR License Numbers

Mechanical Contractor

For Multiple Contractors, provide information by attaching additional sheets

	Name
	Address
	City, State and Zip Code
	Email Address and Phone Number
	Maryland HVACR License Number

Plumbing Contractor

For Multiple Contractors, provide information by attaching additional sheets

	Name
	Address
	City, State and Zip Code
	Email Address and Phone Number
	Maryland, Talbot and/or Easton Plumbing License Number

Electrical Contractor

For Multiple Contractors, provide information by attaching additional sheets

Smartech Electrical Inc	Name
6512 Church Hill RD	Address
Chestertown, MD 21620	City, State and Zip Code
	Email Address and Phone Number
MD 13700, Talbot 18-160	Talbot County Electrical Registration Number

Sprinkler Contractor

For Multiple Contractors, provide information by attaching additional sheets

	Name
	Address
	City, State and Zip Code
	Email Address and Phone Number
	MHIC & Sprinkler License Number

Part 5: Permit Information

Upon receipt of the Building Permit the permit shall be posted on site and work covered by that permit may commence. Every permit issued shall become: invalid unless the work is commenced within 180 days after the permit's issuance or expired if the commenced work is suspended or abandoned for a period greater than 180 days from the last inspection. Validation of commencement shall be through required inspections and, suspension or abandonment shall be through periodic departmental inspections. All permits shall expire 630 days from the date of their issuance. The Code Official is authorized to grant, in writing, one or more extensions of time, for periods not exceeding 90 days each. All extension shall be requested in writing with justifiable cause demonstrated. One set of approved Construction Documents must be on site at all times.

It shall be the duty of the holder of the Building Permit or their duly authorized agent to: notify the Building Inspection Division when work is ready for inspection, to provide access to such work and means for the inspections of such work, for all required inspections. Inspection requests shall be made twenty-four hours in advance of the work being ready. Requested inspections will be made on the next available business day, prior to the end of business. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the Building Inspection Division.

No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building, structure or portion thereof shall be made until the Code Official has issued a Certificate of Occupancy. Prior to the issuance of a Certificate of Occupancy, the Building Inspection Division shall have received all required approval from the following offices: Planning and Zoning, Engineering, Easton Utilities, State Fire Marshals Office, Environmental Health, Soil Conservation Services, Maryland Department of the Environment and State Highway Administration. All required inspections for Building, Grading, Demolition, Swimming Pools, Signage, Plumbing, Mechanical and Electrical permits associated with the building structure or portion thereof shall have been approved. The Building Inspection Division shall also have received final reports from all third party inspection agencies for special inspections and a certified location survey plat.

Part 6: Square Footages by Floor for Classification of Work

Classification of Work	Basement	First	Second	Third	Fourth
New Construction or Addition		8,990			
Change of Occupancy					
Alteration Level 3					
Alteration Level 2					
Alteration Level 1					
Repairs					
Demolition					
Unaltered					
Total Building Floor		8,990			

Part 7: Building Information

Occupancy Design

- ○ Single Occupancy
- ○ Multiple Occupancies

Occupancy Separation

- ○ Single Occupancy
- ○ Non-Separated
- ○ Separated

Fire Protection

- ○ No Sprinklers
- ○ Partially Sprinklered
- ○ Fully Sprinklered

Number of Fire Areas

- ○ Single Fire Area
- ○ _____ Fire Areas

Part 8: Square Footages by Floor for Occupancy Classification

Occupancy Classification	Basement	First	Second	Third	Fourth
Assembly					
Business					
Educational					
Factory and Industrial					
High Hazard					
Institutional					
Mercantile					
Residential					
Storage					
Utility and Miscellaneous		8,990			
Total Building Floor		8,990			

Part 9: Fire Resistance Rating for Building Elements

Complete Information for One Construction Type Only

Occupancy Classification	Structural Frame	Bearing Walls Exterior/Interior	Non-Bearing Walls Exterior/Interior	Floor Construction	Roof Construction
Type I - Noncombustible					
Type II - Noncombustible					
Type III - Noncombustible					
Type IV - Heavy Timber					
Type V - Combustible					

Part 10: Total Project Information

Estimated Start Date	Estimated Finish Date	Estimated Project Value	FEMA Flood Plain
4 / 1 / 2026	7 / 30 / 2026	$ 492,064.00	Y or N

Part 11: Description of Proposed Work

Install 208.3 KW ground mounted solar system 8,990 Sq. Ft. 328 Qcell 635 watt panels, Chint inverter SCA60KTL-DO/US-480, Steal racking.

All but 2,325 sf of the system will be located on the existing concrete pad.

Installing 712 LFT of 6 ft high chain-link fence the west side will have privacy slats

Office Use Only

Building Dept - General Info.

- O Received Date ___ / ___ / ___
- O Permit # _____
- O Permit Fee $ _____

Planning & Zoning - General Info.

- O Not Applicable
- O Town Impact $ _____
- O County Receipt Received

Engineering Dept Application

- O Not Applicable
- O Grading Permit # _____
- O ROW Permit # _____

HDC Application

- O Not Applicable
- O Yes - In Review
- O Yes - Approved

Approval

- O Date ____ / ____ / ____
- O BD Initials _____

Approval

- O Date ____ / ____ / ____
- O P&Z Initials _____

Approval

- O Date _____ / _____ / _____
- O Eng. Initials _____

Approval

- O Date ____ / ____ / ____
- O HDC Initials _____

EUC Approval / Comments

- O Date ____ / ____ / ____
- O EUC Initials _____

Revised Dec 2023

50/60kW, 1000Vdc String Inverters for North America

The 50 & 60kW medium power CPS three phase string inverters are designed for ground mount, large rooftop and carport applications. The units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiency at 98.8% peak and 98.5% CEC, wide operating voltages, broad temperature ranges and a NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications. The CPS 50/60kW products ship with either the standard wire-box or the H4 style wire-box, each fully integrated and separable with touch safe fusing, monitoring, and AC and DC disconnect switches. The CPS Flex Gateway enables monitoring, controls and remote product upgrades.



CPS SCA50KTL-DO/US-480
CPS SCA60KTL-DO/US-480

Key Features

- NEC 2014 compliant & UL listed Arc-Fault circuit protection
- 0-90° Mounting orientation for lay flat roof installs
- Touch safe DC Fuse holders adds convenience and safety
- CPS Flex Gateway enables remote FW upgrades
- Integrated AC & DC disconnect switches
- Optional factory installed H4 connectors
- 3 MPPT's with 5 inputs each for maximum flexibility
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- Advanced Smart-Grid features (Rule 21, HECO compatible)
- Separable wire-box design for fast service
- Standard 10 year warranty with extensions to 20 years
- Generous 1.5 DC/AC Inverter Load Ratio



50/60kW Standard Wire-box



50/60kW H4 Wire-box

Intertek 4004522
Conforms to UL Std. 1741
Cert.to CSA Std.C22.2 No.107.1-01

This device complies with part 15 of the FCC Rules

© CHINT POWER 2017/01-MKT NA

Chint Power Systems America
7060 Koll Center Parkway, Suite 318 Pleasanton, CA 94566
Tel: 855-584-7168 Mail: AmericaSales@chintpower.com Web: www.chintpowersystems.com

Model Name	CPS SCA50KTL-DO/US-480	CPS SCA60KTL-DO/US-480
DC Input		
Max. PV Power	75kW (25kW per MPPT)	90kW (30kW per MPPT)
Max. DC Input Voltage	1000Vdc	
Operating DC Input Voltage Range	200-950Vdc	
Start-up DC Input Voltage / Power	330V / 80W	
Number of MPP Trackers	3	
MPPT Voltage Range	480-850Vdc	540-850Vdc
Max. Operating Current (Imp)	108A (36A per MPPT)	114A (38A per MPPT)
Max. PV Input Current (Isc x 1.25)	180A (60A per MPPT)	
Number of DC Inputs	15 inputs, 5 per MPPT	
DC Disconnection Type	Load rated DC switch	
AC Output		
Rated AC Output Power	50kW	60kW
Max. AC Output Power	50kVA	60kVA
Rated Output Voltage	480Vac	
Output Voltage Range[1]	422 - 528Vac	
Grid Connection Type	3Φ / PE / N	
Nominal AC Output Current @480Vac	60.2A	72.2A
Rated Output Frequency	60Hz	
Output Frequency Range[1]	57 - 63Hz	
Power Factor	>0.99 (±0.8 adjustable)	
Current THD @ Rated Load	<3%	
AC Disconnection Type	Load rated AC switch	
System and Performance		
Topology	Transformerless	
Max. Efficiency	98.8%	
CEC Efficiency	98.5%	
Stand-by / Night Consumption	<30W / <1W	
Environment		
Enclosure Protection Degree	NEMA Type 4X	
Cooling Method	Variable speed cooling fans	
Operating Temperature Range	-22°F to +140°F / - 30°C to +60°C (derating from +113°F / +45°C)	
Non-Operating Temperature Range[2]	No low temp minimum to +158°F / +70°C maximum	
Operating Humidity	0 to 95%, non-condensing	
Operating Altitude	13123.4ft / 4000m (derating from 9842.5ft / 3000m)	
Audible Noise	<60dB @ 1m and 25°C	
Display and Communication		
User Interface and Display	LCD+LED	
Inverter Monitoring	Modbus RS485 and TCP / IP	
Site Level Monitoring	CPS Flex Gateway (1 per 32 inverters)	
Modbus Data Mapping	SunSpec / CPS	
Remote Diagnostics / FW Upgrade Functions	Standard	
Mechanical		
Dimensions (HxWxD)	39.4 x 23.6 x 10.24in. (1000 x 600 x 260mm)	
Weight	Inverter: 123.5lbs/56kg; Wire-box: 33lbs/15kg	
Mounting / Installation Angle[3]	0 to 90 degrees from horizontal (vertical, angled, or lay flat)	
AC Termination	M8 Stud Type Terminal Block (Wire range: #4 - 2/0AWG CU/AL)	
DC Termination	Screw Clamp Fuse Holder (Wire range: #14 - #6AWG CU), Optional H4 (Amphenol)	
Fused String Inputs (5 per MPPT)	15A standard fuse value (20, 25, 30A acceptable)	
Safety		
Safety and EMC Standard	UL1741-2010, UL1741SA-2016[4], UL1699B, CSA-C22.2 NO.107.1-01, IEEE1547; FCC PART15	
Grid Standard and SRD	IEEE 1547-2003, Rule 21[4] and HECO/Rule14[4]	
Smart-Grid Features[4]	Voltage-RideThru, Frequency-RideThru, Soft-Start, Volt-Var, Frequency-Watt, Volt-Watt	
Warranty		
Standard	10 years	
Extended Terms	15 and 20 years	

1) The "Output Voltage Range" and "Output Frequency Range" may differ according to the specific grid standard.
2) See user manual for further requirements regarding non-operating conditions.
3) Shade Cover accessory required for installation angles of 30 degrees or less.
4) Certification Pending.

Application for Fences, Swimming Pools & Spas

APPLICANT INSTRUCTIONS: COMPLETE ALL PARTS OF THIS APPLICATION. The Building Inspection Division can answer questions regarding the completion of this application. Additional applications for pools and spas are required for Plumbing, Mechanical and Electrical work. This application must be accompanied by three sets of site plans and details for the fence, pool and/or spa, and a description of the proposed work. All applications for the installation of fencing within a forest conservation area must be accompanied by a summary of the proposed construction techniques and measures being taken to reduce impacts to existing vegetation. Fence styles currently permitted within these easements are a 4-foot high wooden, 3-rail split-rail fence or in some limited cases a 4-foot high paddock style fence.

Revised Dec. 2023

Town of Easton
Building Inspection Division
14 S. Harrison St.
Easton, MD 21601
Phone: 410-822-2526
Fax: 410-822-8738

Office Use Only

Received Date ____ / ____ / ____

Building Permit Number ____

Total Permit Fees $ ____

Part 1: Project Information

	Project Application Date	0103	Tax Map
		00EA	Grid
MT. Pleasant Ave.	Project's Address	0550	Parcel
	Project's Subdivision (if any)	1	Lot
Easton, MD 21601	Project's City, State and Zip Code		Zoning

Confirm the Project Work Area in Square Footage

	Fence 712 LFT		Above-Ground Swimming Pool
	In-Ground Swimming Pool		Spa or Hot Tub

Part 2: Owner - Tenant Information

Owner

Board of education of Talbot county	Name
P.O. Box 1029, Easton, MD 21601	Address
Easton, MD 21601	City, State and Zip Code
	Email Address and Phone Number

Tenant Information

For a Multiple Occupancy Building provide tenants information by attaching additional sheets

	Name
	Address
	City, State and Zip Code
	Email Address and Phone Number
	Occupied Square Footage

Part 3: Certification

The applicant hereby certifies by completing this application as follows: (1) "I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I am the contractor in charge of the project and have been authorized by the owner to make this application as their agent." (2) "That the information contained in the application and construction documents is a full disclosure of the project." (3) "That the information contained in the application and construction documents is in compliance with all applicable covenants and or deed restrictions."

The applicant further certifies if a permit is issued as follows; (1) "That I will comply with all codes of the Town of Easton and the State of Maryland which are applicable thereto.", (2) "That I will perform no work on the above property not specifically in this application and construction documents." and (3) "That the Town Officials shall have the authority to enter areas covered by such permit to enforce the codes applicable to such permit.".

Katie Jester
Signature of Applicant

Katie Jester
Printed Name of Applicant

Telephone Number

Email Address

Contractor
Connection with Application

P.O. Box 898, Chestertown, MD 21620
Mailing Address of Applicant

Part 4: Contractor Information

Fencing Contractor

For Multiple Contractors, provide information by attaching additional sheets

Sunrise Solar INC	Name
P.O. Box 898	Address
Chestertown, MD 21620	City, State and Zip Code
	Email Address and Phone Number
MHIC 130696	Contractor's or MHIC License Numbers

Pool / Spa Contractor

For Multiple Contractors, provide information by attaching additional sheets

	Name
	Address
	City, State and Zip Code
	Email Address and Phone Number
	Contractor's or MHIC License Numbers

Plumbing / Gas Fitter Contractor

For Multiple Contractors, provide information by attaching additional sheets

	Name
	Address
	City, State and Zip Code
	Email Address and Phone Number
	Maryland, Talbot and/or Easton Plumbing License Number

Electrical Contractor

For Multiple Contractors, provide information by attaching additional sheets

	Name
	Address
	City, State and Zip Code
	Email Address and Phone Number
	Talbot County Electrical Registration Number

Part 5: Permit Information

Upon receipt of the Building Permit the permit shall be posted on site and work covered by that permit may commence. Every permit issued shall become: invalid unless the work is commenced within 180 days after the permit's issuance or expired if the commenced work is suspended or abandoned for a period greater than 180 days from the last inspection. Validation of commencement shall be through required inspections and, suspension or abandonment shall be through periodic departmental inspections. All permits shall expire 630 days from the date of their issuance. The Code Official is authorized to grant, in writing, one or more extensions of time, for periods not exceeding 90 days each. All extension shall be requested in writing with justifiable cause demonstrated. One set of approved Construction Documents must be on site at all times.

It shall be the duty of the holder of the Building Permit or their duly authorized agent to: notify the Building Inspection Division when work is ready for inspection, to provide access to such work and means for the inspections of such work, for all required inspections. Inspection requests shall be made twenty-four hours in advance of the work being ready. Requested inspections will be made on the next available business day, prior to the end of business. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the Building Inspection Division.

No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building, structure or portion thereof shall be made until the Code Official has issued a Certificate of Occupancy. Prior to the issuance of a Certificate of Occupancy, the Building Inspection Division shall have received all required approval from the following offices: Planning and Zoning, Engineering, Easton Utilities, State Fire Marshals Office, Environmental Health, Soil Conservation Services, Maryland Department of the Environment and State Highway Administration. All required inspections for Building, Grading, Demolition, Swimming Pools, Signage, Plumbing, Mechanical and Electrical permits associated with the building structure or portion thereof shall have been approved. The Building Inspection Division shall also have received final reports from all third party inspection agencies for special inspections and a certified location survey plat.

Part 6: Description of Proposed Work

Installing 712 LFT of 6 ft high chain-link fence the west side will have privacy slats

Part 7: Total Project Information

____ / ____ / _____	_____ / ____ / _____	$ 26,000	FEMA Flood Plain
Estimated Start Date	Estimated Finish Date	Estimated Project Value	Y or N

Office Use Only

Building Dept - General Info.	Planning & Zoning - General Info.	Engineering Dept Application	HDC Application
O Received Date ___ / ___ / ___	O Not Applicable	O Not Applicable	O Not Applicable
O Permit # _____	O Town Impact $ _____	O Grading Permit # _____	O Yes - In Review
O Permit Fee $ _____	O County Receipt Received	O ROW Permit # _____	O Yes - Approved
Approval	**Approval**	**Approval**	**Approval**
O Date ____ / ____ / ____	O Date ____ / ____ / ____	O Date ____ / ____ / ____	O Date ____ / ____ / ____
O BD Initials _____	O P&Z Initials _____	O Eng. Initials _____	O HDC Initials _____

EUC Approval / Comments: Date: _____ / _____ / _____ EUC Initials: _____

Revised Dec. 2023

Application for Grading Permit

Town of Easton
Engineering Department
14 South Harrison Street
Easton, Maryland 21601
Telephone 410-820-8822

A Grading Permit is required for all new single family homes, OR any site disturbing 4,000 or more sq.ft of land by cut or fill, OR 100 cubic yards cut & fill.
Additional Applications are required for ROW Access, and Building Construction. This application must be accompanied by three sets of construction documents prepared by a registered design professional.

Office Use Only
Received Date _____ / _____ / _____
Permit Number _____
Total Permit Fees $ _____

Part 1: Site Information

	Application Date	0103	Tax Map
MT. Pleasant Ave.	Site Address	00EA	Grid
	Subdivision (if any)	0550	Parcel
Easton, MD 21601	City, State and Zipcode	1	Lot
Indicate if the Project is located within the Overlay District's Below:			Zoning

	Planned Redevelopment		Historic		Critical Area		Planned Unit Development		Planned Health Care

Part 2: Owner Information

Board of education of Talbot county	Property Owner(s)
P.O. Box 1029	Address
Easton, MD 21601	City, State and Zip Code
	E-Mail and Telephone Number

Part 3: Certification

Upon receiving the approved Grading Permit, work may commence. A Grading Permit will expire if work is not started within 6 months of Approval Date or if work is not completed within one (1) year of Approval Date. A Grading Permit extension must be requested in writing prior to expiration date(s).
An approved Sediment Erosion Control Plan by the Talbot Soil Conservation District (SCD) and a Storm Water Management Plan (SWM) which has been approved by the Town Engineer must be issued prior to issuing a Grading Permit.
The Grading Permit may be waived by the Town Engineer on a case-by-case basis for any Project that does not disturb over 5,000 square feet of land area. In addition, a Project that does not disturb over 5,000 square feet of land area does not require SCD and SWM approvals for this Application.
The applicant hereby certifies and agrees as follows: (1) that he/she is authorized to make this application; (2) that the information is correct; (3) that he/she will comply with all regulations of the Town of Easton which are applicable hereto; (4) that he/she will perform no work on the above property not specifically in this application; (5) that he/she grants Town Officials the right to enter onto the property for the purpose of inspecting work permitted and posting notices.

Katie Jester	Katie Jester
Signature of Applicant	Printed Name of Applicant

Applicant Information

Sunrise Solar INC Katie Jester	Company/ Contact
P.O. Box 898	Address
Chestertown, MD 21620	City, State and Zip Code
	E-Mail and Telephone Number

Part 4: Contractor Information

Sunrise Solar INC	Company / Contact
P.O. Box 898	Address
Chestertown, MD 21620	City, State and Zip Code
	E-Mail and Telephone Number
MHIC 130696	License Numbers

Part 5: Project Details

Total Site Area		Estimated Start Date	
Total Area Disturbed		Estimated Completion Date	
Talbot Soil Conservation Approval Date			

Part 6: Description of Proposed Work

Install 208.3 KW ground mounted solar system 8,990 Sq. Ft. All post are pounded.
328 Qcell 635 watt panels, Chint inverter SCA60KTL-DO/US-480, Steal racking.All but 2,325 sf of the system will be located on the existing concrete pad.

Part 7: Required Submittals Prior to Grading Permit Approval

Single Lot Plan	Site Development Plan
☐ Completed Grading Permit Application	☐ Completed Grading Permit Application
☐ 2 Copies of Single Lot Site Plan and Erosion and Sediment Control Plan	☐ Digital Copy of Signed Approved Plan Set
☐ Fee	☐ Fee
☐ Copy of Talbot Soil Conservation District Approval letter.	☐ Talbot Soil Conservation District Signature on Plan and Copy of Approval letter
Single Lot Site Plan Requirements and Information:	**For All Plan Reviews (As Applicable)**
• Drawn to standard Engineering scale of 1"=10', 1"=20', 1"=50', etc. with scale noted on plan.	• SWM Easement and Declaration of Covenants Recorded
• The Site Plan and all existing and proposed structures and improvements including accessory utility equipment (ex: HVAC Units) shall be drawn to the same scale.	• Public Works Argeement Recorded
• Location and dimensions of all roads, easements, property lines and natural features. Label each item.	• Utility Easements Recorded
• Setbacks from property boundary lines, shorelines, streams, and wetlands to the proposed structures.	• Completed Cost Estimate Form
• The location of the driveway, labeled existing or proposed.	• SWM and ROW Surety/Bond/ Letter of Credit/ Cash Agreement (to follow approved Cost Estimate)
• Elevations including finish floor elevation, proposed grade elevations at building corners, driveway corners, etc.	• Copy of SHA Access Agreement
• Direction of proposed drainage and associated slope.	• MDE Non-Tidal Wetland Permit No. _____
• Proposed and existing countour lines.	MDE NPDES Notice of Intent No. _____
• Examples of Single Lot Plans can be provided upon Request.	

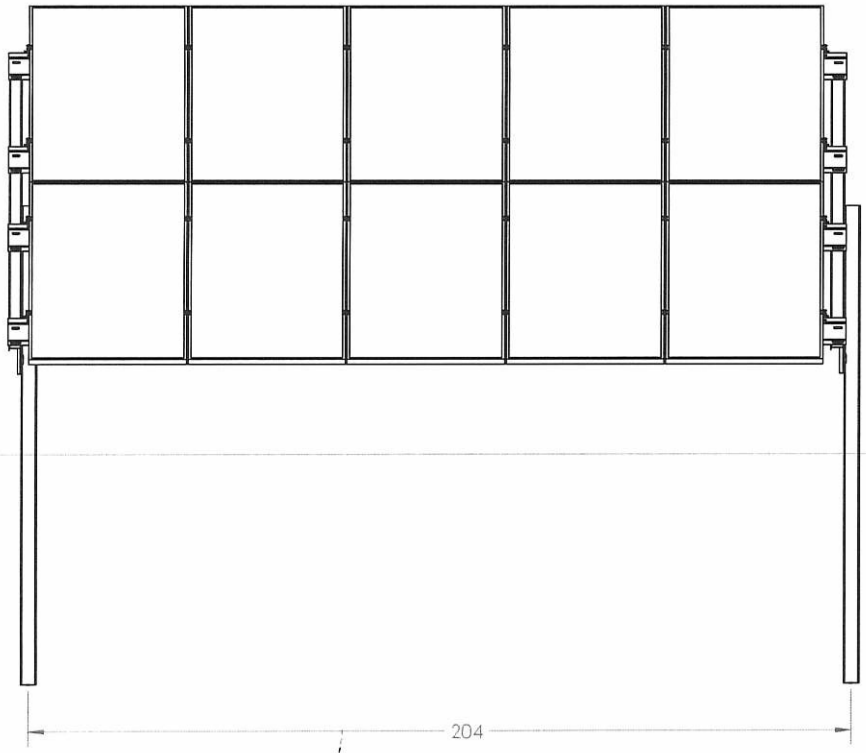
Part 8: Permit Information - Inspections

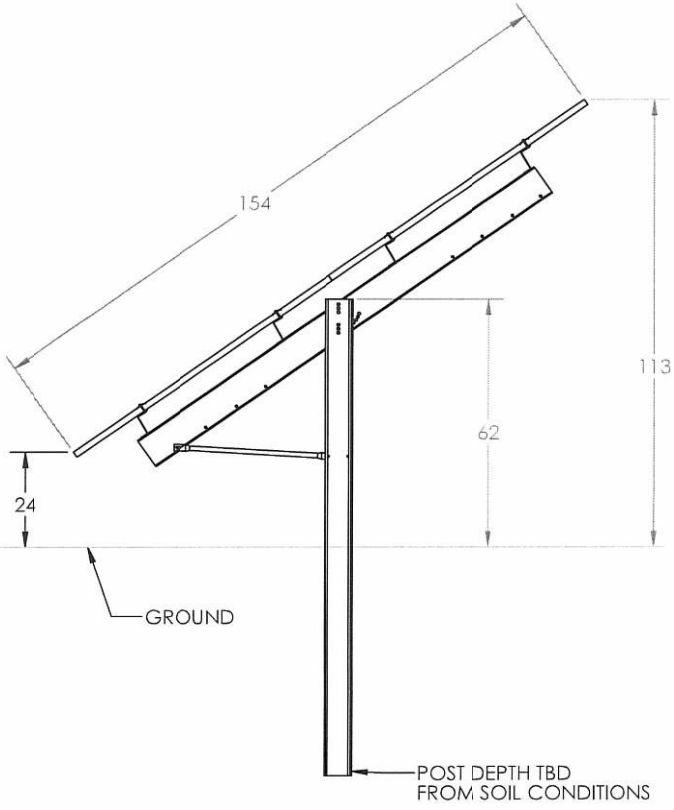
It shall be the duty of the holder of the Grading Permit or their duly authorized agent to : notify the Engineering Department when work is ready for inspections of such work and means for the inspections of such work, for all required inspections. Inspection requests shall be made twenty-four hours in advance of the time for the requested inspection. Final Site inspections should be requested at least 2 weeks prior to Occupancy Inspection.

Office Use Only

☐ Permit Number _____ Date of Approval _____

☐ Fee _____ Date of Approval _____





James A. Clancy, PE
601 Asbury Avenue
National Park, NJ 08063
Maryland PE Lic # 31585

STATE OF MARYLAND
JAMES A. CLANCY
No. 31585
PROFESSIONAL ENGINEER

	NAME	DATE
DRAWN		
CHECKED		

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
ANGULAR: MACH ±.5° BEND ±1°
X/X ± 1/8"
X.X ± 0.060
X.XX ± 0.020
X.XXX ± 0.005

MATERIAL
FINISH
DO NOT SCALE DRAWING

Sinclair Designs

TITLE:
2-HIGH 35DEG
72 CELL

SIZE B | DWG. NO. | REV

SCALE: 1:30 WEIGHT: | SHEET 1 OF 1

Top Lock



The Top-Lock Slat provides an economical and attractive way to enhance any chain link fence.

Pexco is the largest manufacturer of Top-Lock Slats, which are marketed under the PDS® brand name. With over 40 years of experience extruding these innovative, proprietary products, you are assured of the highest standards in quality—from the raw materials used in manufacturing to the finished product in your fence. This design utilizes a top-locking mechanism located near the top of the slats to ensure a clean, straight edge, further enhancing its appearance.

Design
Top-Locking Slats are flat and tubular in shape, with circular, notched-out holes located near the top of the slat.

Standard Heights
4, 5, 6, 7, 8, 10 & 12 feet. Special heights available upon request.

Slat Length
2" shorter than the overall height of fence.

Flexible, Top-Locking Channel
10 feet provided in each bag.

Wind Load and Privacy Factor
Approximately 75%.

Colors*

white green brown black beige gray redwood royal blue light blue

* Exact representation of slat colors in printing is difficult. Please refer to actual color samples for final matching.

PDS FENCE PRODUCTS

PDS® is a registered trademark of Pexco.

Top Lock Product Specifications

Slat Type	Slat Width	Mesh Size	Wire Gauge	Slats Per Bag	Approx. Coverage Per Box
Top Lock 2"	1 3/32"	2"	8, 9 or 11	82	10 linear feet
Top Lock 2¼"	1¼"	2¼" or 2 3/8"	11½ or 12½	78	10 linear feet
Top Lock 1¾"	7/8"	1¾"	8, 9 or 11	100	10 linear feet
	7/8"	2"	6	100	10 linear feet

Materials
The Top Lock product is extruded from High Density Polyethylene (HDPE), color pigments and ultra violet (UV) inhibitors, specifically designed to retard the harmful effects of the sun and lengthen the life of the product.

Durability
Pexco PDS® HDPE Fence Products are resistant to: severe weather conditions, salt water, sand, road dirt, most acids, alcohol, alkaline, ammonia, petroleum distillates, and common environmental pollutants.

Maintenance
Pressure cleaning of surface contaminants is quickly accomplished with plain water.

Wind Load Disclaimer
Pexco will not be responsible for damage due to wind load conditions resulting from insufficient structural support.

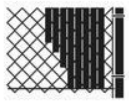
Limited Warranty
Top Lock carries a 25-year, pro-rata warranty against breakage under normal conditions. Write Pexco for full warranty information.

HDPE Technical Properties

Property	Value
Melt Index	(.6) A low melt index indicates improved stress and crack resistance.
Density	(.957) Polyethylene ranges anywhere from .914 to .960 in density. A higher density yields maximum stiffness without becoming overly brittle.
Minimum Temp.	(-76° F) Polyethylene stays flexible even at this temperature extreme.
Maximum Temp.	(250° F) Polyethylene does not distort until reaching this temperature.
Tensile Strength	(3,700 psi) Material will not suffer distortion at lesser loads or impacts.

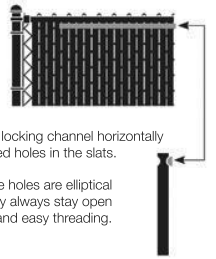
Installation Instructions

Step 1



There is no need to kneel down! Simply insert the slats vertically from top to bottom, keeping the locking holes on top.

Step 2



Thread the flexible locking channel horizontally through the notched holes in the slats.

These holes are elliptical to ensure they always stay open for fast and easy threading.

PDS FENCE PRODUCTS

Pexco Tacoma
Tacoma, WA
800.822.SLAT
(7528)

Pexco Athol
Athol, MA
800.755.SLAT
(7528)

www.pexco.com/fence

Contact your local fence professional for more information about our complete line of enhancement products.

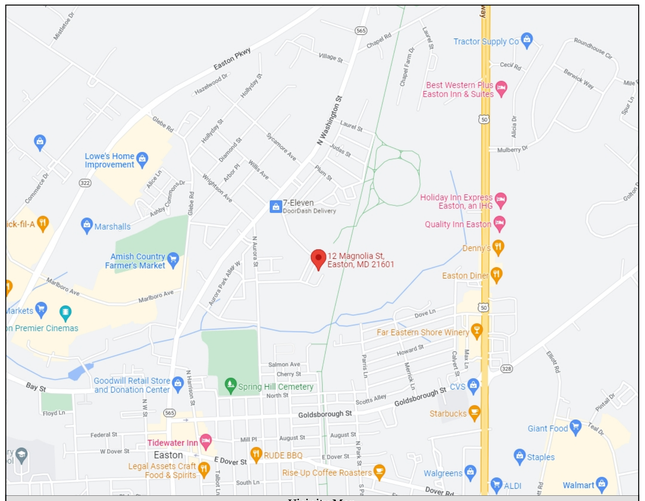


Commercial Solar Array System Summary	
System Size:	208.3 kW (DC)
	180 kW (AC)
Modules Type:	QCell 635 Watt
Module Quantity:	328
Mounting System:	Fixed Tilt Ground Mount
Tilt Angle:	25°
Monitoring System:	Chint Flex Gateway
Inverters:	(3) 60 kW Chint Power Systems
Utility:	Easton Utility
PROGRESS DRAWING	PERMIT
All contents is subject to change	

SHEET NUMBER	SHEET NAME
Sheet 001	Perspective
Sheet 002	Plot
Sheet 003	Array/Fence
Sheet 004	Single Line
Sheet 005	Plot Layout
Sheet 006	
Sheet 007	
Sheet 008	
Sheet 009	
Sheet 010	
Sheet 011	
Sheet 012	
Sheet 013	
Sheet 014	
Sheet 015	

Talbot County Public Schools

N



Vicinity Map



Property Map



21 Perspective
Scale: 0" : 0"

Talbot County Public Schools
12 Magnolia St
Easton, MD 21601

Proprietary and Confidential
The information contained in the drawing is the property of Sunrise Solar Inc.
Any reproduction in part or as a whole without the written permission of
Sunrise Solar Inc. is prohibited.

Sunrise Solar Inc.
6408 Church Hill Rd
Chestertown, MD 21620
www.sunrisesolarmd.com

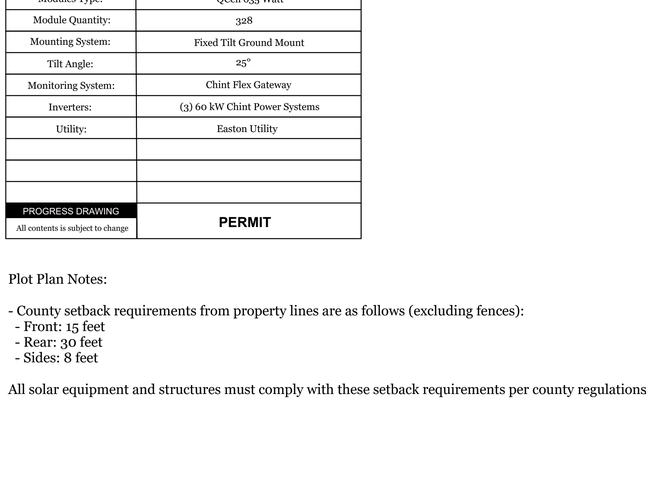
March 30, 2026

Commercial Solar Array System Summary	
System Size:	208.3 kW (DC)
	180 kW (AC)
Modules Type:	QCell 635 Watt
Module Quantity:	328
Mounting System:	Fixed Tilt Ground Mount
Tilt Angle:	25°
Monitoring System:	Chint Flex Gateway
Inverters:	(3) 60 kW Chint Power Systems
Utility:	Easton Utility
PROGRESS DRAWING	PERMIT
All contents is subject to change	

Plot Plan Notes:

- County setback requirements from property lines are as follows (excluding fences):
  - Front: 15 feet
  - Rear: 30 feet
  - Sides: 8 feet

All solar equipment and structures must comply with these setback requirements per county regulations



Property Map

02 Plot
Scale: 1" : 60'

N



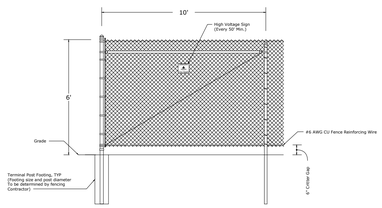
Talbot County Public Schools
12 Magnolia St
Easton, MD 21601

Proprietary and Confidential
The information contained in the drawing is the property of Sunrise Solar Inc.
Any reproduction in part or as a whole without the written permission of
Sunrise Solar Inc. is prohibited.

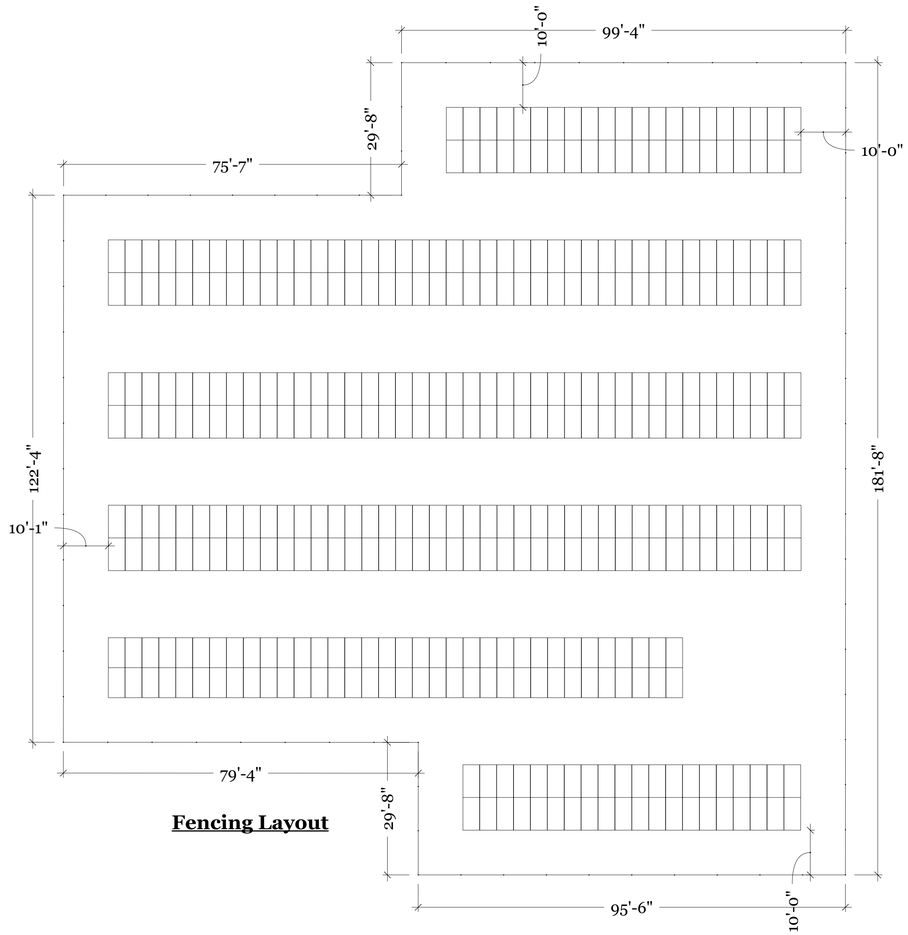
Sunrise Solar Inc.
6408 Church Hill Rd
Chestertown, MD 21620
www.sunrisesolarmd.com

March 30, 2026

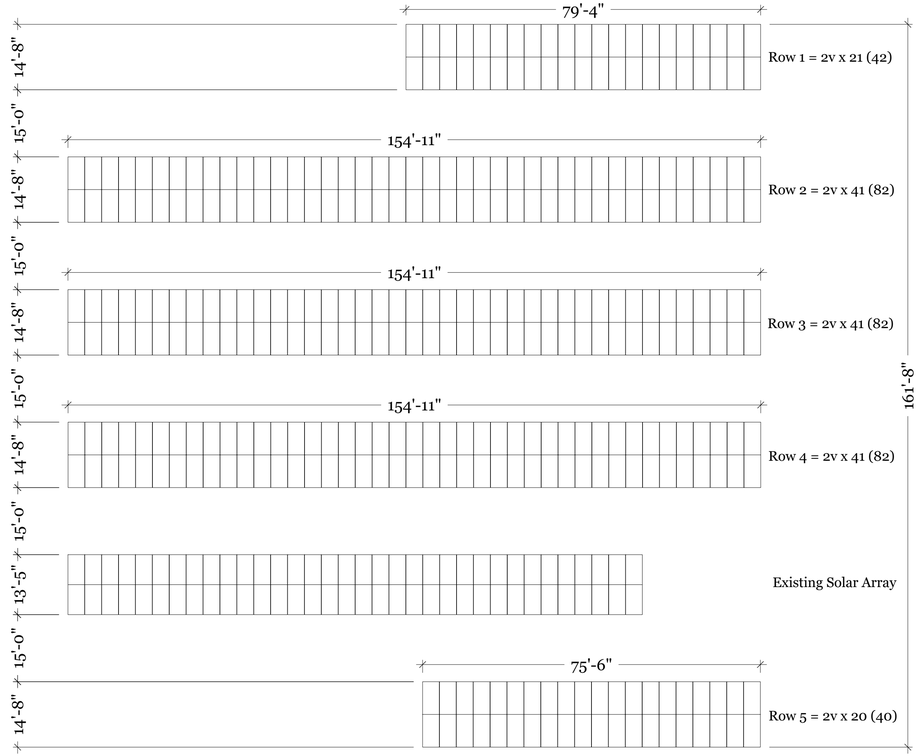
Commercial Solar Array System Summary	
System Size:	208.3 kW (DC)
	180 kW (AC)
Modules Type:	QCell 635 Watt
Module Quantity:	328
Mounting System:	Fixed Tilt Ground Mount
Tilt Angle:	25°
Monitoring System:	Chint Flex Gateway
Inverters:	(3) 60 kW Chint Power Systems
Utility:	Easton Utility
PROGRESS DRAWING	**PERMIT**
All contents is subject to change	



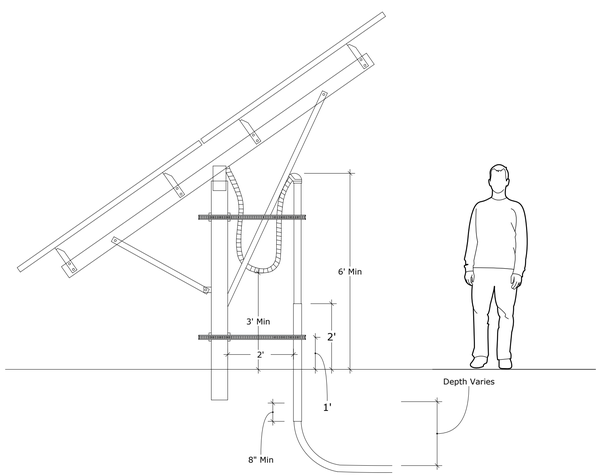
6' Fence Detail



Fencing Layout



Array Layout



A3.3 Array/Fence
Scale: 1/16" : 1'

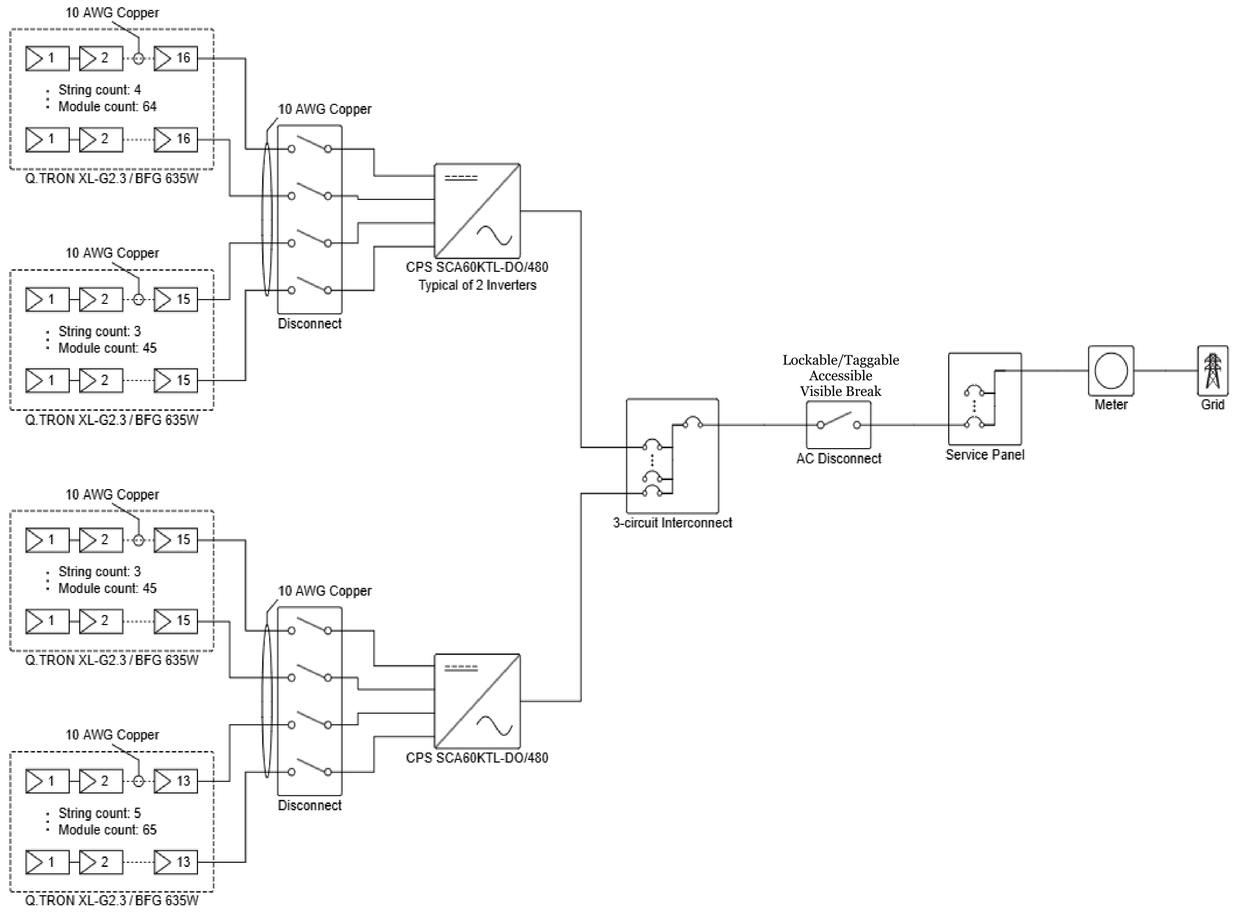
Talbot County Public Schools
12 Magnolia St
Easton, MD 21601

Proprietary and Confidential
The information contained in the drawing is the property of Sunrise Solar Inc.
Any reproduction in part or as a whole without the written permission of
Sunrise Solar Inc. is prohibited.

Sunrise Solar Inc.
6408 Church Hill Rd
Chestertown, MD 21620
www.sunrisesolarmd.com

March 30, 2026

Commercial Solar Array System Summary	
System Size:	208.3 kW (DC)
	180 kW (AC)
Modules Type:	QCell 635 Watt
Module Quantity:	328
Mounting System:	Fixed Tilt Ground Mount
Tilt Angle:	25°
Monitoring System:	Chint Flex Gateway
Inverters:	(3) 60 kW Chint Power Systems
Utility:	Easton Utility
PROGRESS DRAWING	PERMIT
All contents is subject to change	



Module Specifications	
328x Qcells Q.TRON XL-G2.3 / BFG 635W	
STC Rating	635 W
Vmp	48.09 V
Imp	13.21 A
Voc	57.51 V
Isc	13.93 A

Inverter Specifications	
3x Chint CPS SCA60KTL-DO/480	
Max AC Power Rating	60 kW
Max Input Voltage	1,000 V
Min AC Power Rating	0 W
Min Input Voltage	200 V

Wire Schedule		
Tier	Wire	Length
String	22x 10 AWG	3204ft

04 Single Line
Scale: 0" : 0"

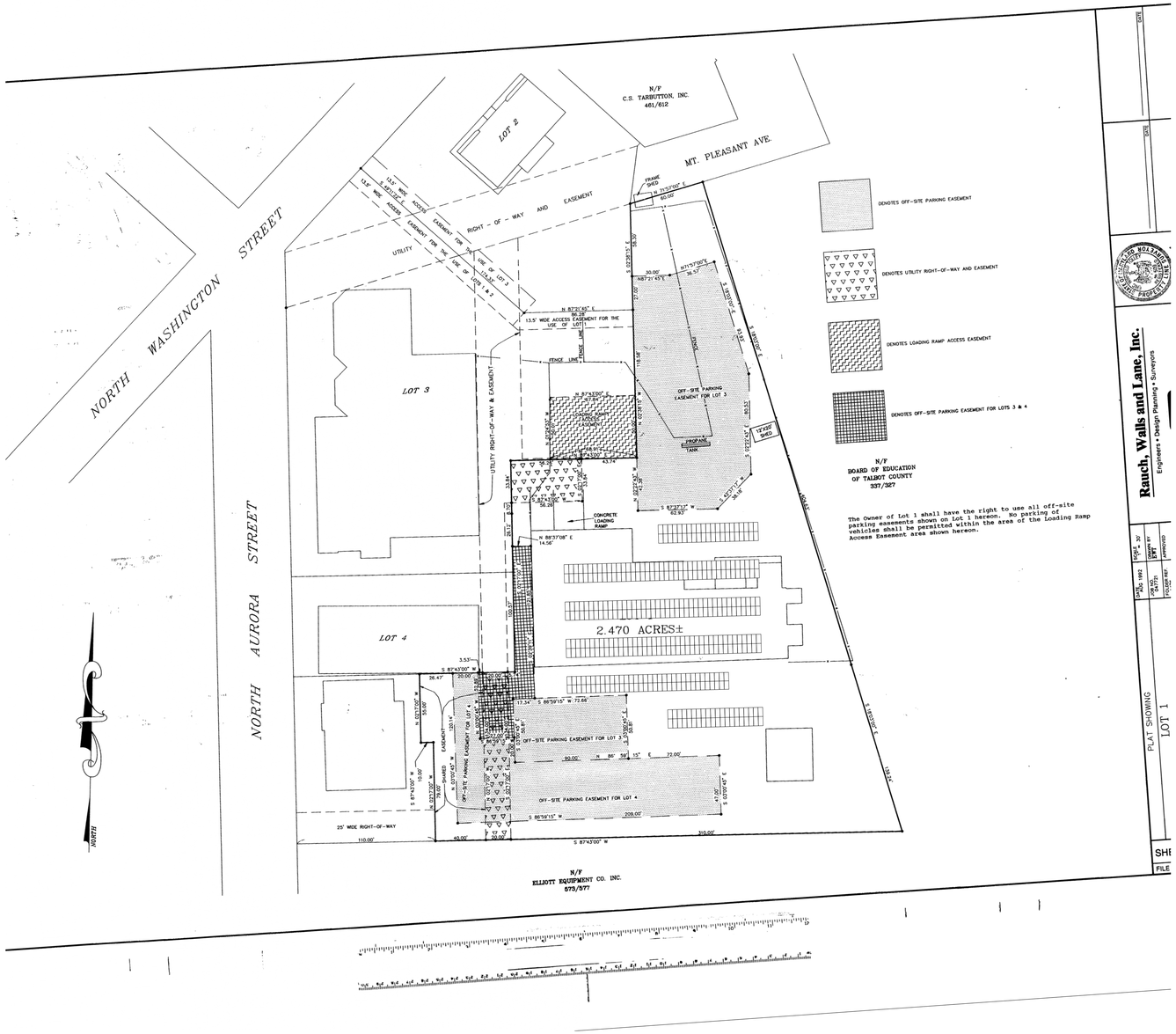
Talbot County Public Schools
12 Magnolia St
Easton, MD 21601

Proprietary and Confidential
The information contained in the drawing is the property of Sunrise Solar Inc.
Any reproduction in part or as a whole without the written permission of
Sunrise Solar Inc. is prohibited.

Sunrise Solar Inc.
6408 Church Hill Rd
Chestertown, MD 21620
www.sunrisesolarmd.com

March 30, 2026

Commercial Solar Array System Summary	
System Size:	208.3 kW (DC)
	180 kW (AC)
Modules Type:	QCell 635 Watt
Module Quantity:	328
Mounting System:	Fixed Tilt Ground Mount
Tilt Angle:	25°
Monitoring System:	Chint Flex Gateway
Inverters:	(3) 60 kW Chint Power Systems
Utility:	Easton Utility
PROGRESS DRAWING	
All contents is subject to change	**PERMIT**



15 Plot
Scale: 1" : 50'

Talbot County Public Schools 12 Magnolia St Easton, MD 21601	**Proprietary and Confidential** The information contained in the drawing is the property of Sunrise Solar Inc. Any reproduction in part or as a whole without the written permission of Sunrise Solar Inc. is prohibited.	**Sunrise Solar Inc.** 6408 Church Hill Rd Chestertown, MD 21620 www.sunrisesolarmd.com March 30, 2026

Q.TRON XL-G2 SERIES

610 - 635 Wp | 156 Cells
22.7 % Maximum Module Efficiency

MODEL Q.TRON XL-G2.3 / BFG



High performance Qcells N-type solar cells

Q.ANTUM NEO Technology with optimized module layout boosts module efficiency up to 22.7 %.

Bifacial energy yield gain of up to 21%

Bifacial Q.ANTUM NEO solar cells make efficient use of light shining on the module rear-side for radically improved LCOE.

A reliable investment

Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty[1].

Enduring high performance

Long-term yield security with Anti LeTID and Anti PID Technology[2], Hot-Spot Protect.

Frame for versatile mounting options

High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400 Pa) and wind loads (3750 Pa)[3].

Innovative all-weather technology

Optimal yields, whatever the weather with excellent low-light and temperature behavior.

[1] See data sheet on rear for further information.
[2] APT test conditions according to IEC / TS 62804-1:2015 method B (–1500 V, 168 h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)
[3] See Installation Manual for instructions

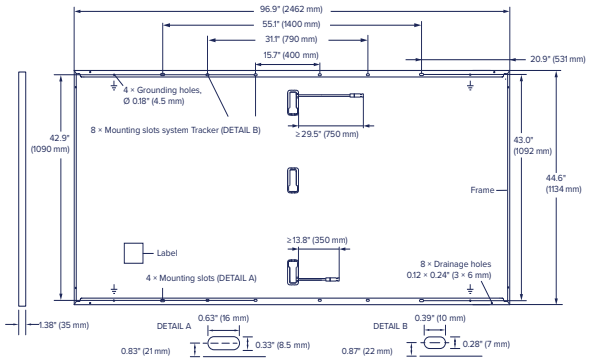
The ideal solution for:

Ground mounted solar panels

Q.TRON XL-G2 SERIES

Mechanical Specification

Format	96.9 in × 44.6 in × 1.38 in (including frame) (2462 mm × 1134 mm × 35 mm)
Weight	78.0 lbs (35.4 kg)
Front Cover	0.08 in (2.0 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.08 in (2.0 mm) semi-tempered glass
Frame	Anodised aluminium
Cell	6 × 26 monocrystalline Q.ANTUM NEO solar half cells
Junction box	2.09-3.98 × 1.26-2.36 × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 29.5 in (750 mm), (−) ≥ 13.8 in (350 mm)
Connector	Stäubli MC4-Evo2, Stäubli MC4 ; IP68



Electrical Characteristics

POWER CLASS				610		615		620		625		630		635	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / −0 W)					BSTC*		BSTC*		BSTC*		BSTC*		BSTC*		BSTC*
Minimum	Power at MPP[1]	P_{MPP}	[W]	610	675.4	615	681.0	620	686.5	625	692.0	630	697.6	635	703.1
	Short Circuit Current[1]	I_{SC}	[A]	13.65	15.13	13.71	15.19	13.76	15.25	13.82	15.31	13.88	15.38	13.93	15.44
	Open Circuit Voltage[1]	V_{OC}	[V]	56.11	56.34	56.39	56.62	56.67	56.90	56.95	57.18	57.23	57.46	57.51	57.74
	Current at MPP	I_{MPP}	[A]	12.95	14.34	13.00	14.40	13.05	14.46	13.10	14.51	13.15	14.57	13.21	14.62
	Voltage at MPP	V_{MPP}	[V]	47.10	47.09	47.30	47.29	47.50	47.49	47.70	47.69	47.89	47.88	48.09	48.08
	Efficiency[1]	η	[%]	≥ 21.8		≥ 22.0		≥ 22.2		≥ 22.4		≥ 22.6		≥ 22.7	

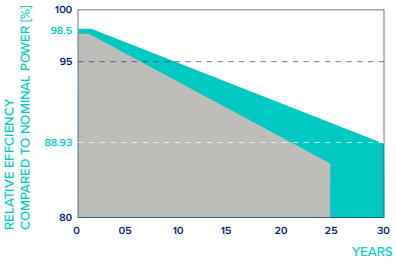
Bifaciality of P_{MPP} and I_{SC} 80 % ± 5 % • Bifaciality given for rear side irradiation on top of STC (front side) • According to IEC 60904-1-2

[1] Measurement tolerances P_{MPP} ± 3 %; I_{SC}, V_{OC} ± 5 % at STC: 1000 W/m²; *at BSTC: 1000 W/m² + φ × 135 W/m², φ = 80 %, 25 ± 2 °C, AM 1.5 according to IEC 60904-3

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]								
Minimum	Power at MPP	P_{MPP}	[W]	461.1	464.9	468.7	472.5	476.2	480.0
	Short Circuit Current	I_{SC}	[A]	11.00	11.05	11.09	11.14	11.18	11.23
	Open Circuit Voltage	V_{OC}	[V]	53.24	53.51	53.77	54.04	54.31	54.58
	Current at MPP	I_{MPP}	[A]	10.18	10.22	10.26	10.30	10.34	10.38
	Voltage at MPP	V_{MPP}	[V]	45.28	45.48	45.67	45.86	46.05	46.24

[2] 800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

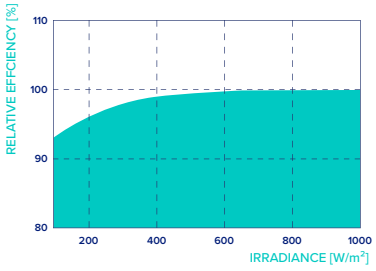


At least 98.5% of nominal power during first year. Thereafter max. 0.33 % degradation per year. At least 95.53% of nominal power up to 10 years. At least 88.93 % of nominal power up to 30 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organisation of your respective country.

*Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	−0.24
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.30	Nominal Module Operating Temperature	NMOT	[°F]	109 ± 5.4 (43 ± 3 °C)

Properties for System Design

Maximum System Voltage	V_{SYS}	[V]	1500
Maximum Series Fuse Rating		[A DC]	30
Max. Push Load[3], Test / Design		[lbs / ft²]	113 (5400 Pa) / 75 (3600 Pa)
Max. Pull Load[3], Test / Design		[lbs / ft²]	78 (3750 Pa) / 52 (2500 Pa)

[3] See Installation Manual for instructions

PV module classification	Class II
Fire Rating based on ANSI / UL 61730	TYPE 29[4]
Permitted Module Temperature on Continuous Duty	−40 °F up to +185 °F (−40 °C up to +85 °C)

[4] New Type is similar to Type 3 but with metallic frame

Qualifications and Certificates

UL 61730-1 & UL 61730-2, CE-compliant,
Quality Controlled PV - TUV Rheinland,
IEC 61215:2016, IEC 61730:2016,
U.S. Patent No. 9,893,215(solar cells)

www.tuv.com
ID 1111220277

* Contact your Qcells Sales Representative for details regarding the module's eligibility to be Buy American Act (BAA) compliant.

Qcells pursues minimizing paper output in consideration of the global environment.

Note: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product.
Hanwha Q CELLS America Inc. 400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL hqc-inquiry@qcells.com | WEB www.qcells.com

Specifications subject to technical changes © Qcells QTRON_XL-G2-BFG_series_610-635_DA_2024-02_Rev03_NA

Talbot County Board of Education – Solar Array Expansion
12 Magnolia Street – Tax Map 103 Parcel 550
Applicant: Sunrise Solar Inc.
Response to ESDR Staff Review Comments
Date: 3/31/26

The following responses address the comments provided by the Town of Easton Planning & Zoning Department and Engineering Department in the Staff Development Review dated February 25, 2026.

Planning & Zoning Comments

Comment 1

The property is located within the R-10A Residential Zoning District where solar panel arrays are permitted by Special Exception approval from the Board of Zoning Appeals.

Response:
Acknowledged. The applicant is requesting approval for an expansion to the previously approved Special Exception granted by the Board of Zoning Appeals on August 16, 2022 for installation of a solar panel array on the subject property.

Comment 2

A Fence Permit Application is required to be submitted to the Building Inspection Division for review.

Response:
A Fence Permit Application has been completed and is included with this resubmittal package for review by the Building Inspection Division.

Comment 3

The previously approved solar array required screening from adjoining residential districts and public rights-of-way. Existing panels are visible from Aurora Street. A Site Plan depicting adequate screening along the west side of the solar panel array may be required pending BOZA review.

Response:
To address visibility from Aurora Street, the proposed fence along the west side of the solar array will include privacy slats designed to screen the solar panels from public view. The updated site plan identifies the location of the fence and screening to ensure compliance with the screening requirements previously established during the August 16, 2022 Board of Zoning Appeals approval.

Additional Site Plan Clarification

Off-Site Parking Easement

Response:
The proposed solar array layout has been revised to ensure that all arrays are located outside of the existing off-site parking easement area. The updated site plan reflects the revised layout.

Engineering Department Comments

Comment 1

Prior to installation, a Grading Permit is required. Stormwater management must be addressed for solar installations exceeding 5,000 square feet of disturbance.

Response:
A Grading Permit Application has been included with this resubmittal.

The revised layout minimizes ground disturbance by locating the majority of the solar array on the existing concrete pad. Only approximately **2,325 square feet of the system will be installed on previously undisturbed ground**, which is below the 5,000 square foot disturbance threshold requiring a formal stormwater management plan.

Per the **Maryland Department of the Environment Solar Panel Stormwater Design Guidance**, a minimum of **15 feet of vegetated disconnected surface** will be provided between solar arrays installed on pervious surfaces.

The array located on the existing concrete pad will maintain the same 15-foot separation between rows; however, vegetation will not be installed in this area as the existing concrete surface will remain in place and is not proposed to be removed or modified.

Additionally, the project will **not alter the existing site grading**, and therefore no change to existing drainage patterns is anticipated.

PORT STREET - SENIOR HOUSING

RESIDENTIAL DEVELOPMENT
TOWN OF EASTON, MARYLAND
MARCH 2, 2026

TRAFFIC IMPACT STUDY

PREPARED FOR:
OSPREY PROPERTY COMPANY

PREPARED BY:

TRAFFIC CONCEPTS, INC.

7525 CONNELLEY DRIVE
SUITE B
HANOVER, MARYLAND 21076
410-760-2911
www.traffic-concepts.com

TC#4317

TABLE OF CONTENTS

		PAGE
EXECUTIVE SUMMARY		**1**
INTRODUCTION		**2**
EXHIBIT 1	SITE LOCATION	
EXHIBIT 2	LANE CONFIGURATION	
EXISTING CONDITION		**5**
EXHIBIT 3	EXISTING TRAFFIC VOLUMES	
BACKGROUND CONDITION		**7**
EXHIBIT 4	PROJECTED GROWTH RATES	
EXHIBIT 5	TOTAL BACKGROUND TRAFFIC VOLUMES	
FUTURE CONDITION		**10**
EXHIBIT 6	SITE GENERATED TRAFFIC	
EXHIBIT 7	TOTAL FUTURE TRAFFIC VOLUMES	
SAFETY STUDY		**13**
EXHIBIT 8	BUS STOP LOCATIONS	
INTERSECTION CAPACITY ANALYSIS		**16**
QUEUING ANALYSIS		**18**
CONCLUSIONS AND RECOMMENDATIONS		**19**

APPENDICES

APPENDIX I	INTERSECTION CAPACITY CALCULATIONS
I-A	- CRITICAL LANE VOLUME ANALYSIS
I-B	- HCM REPORTS – SIGNALIZED INTERSECTIONS
I-C	- HCM REPORTS – UNSIGNALIZED INTERSECTIONS
APPENDIX II	I-TMS HISTORICAL TRAFFIC DATA
APPENDIX III	TRAFFIC COUNT INFORMATION
APPENDIX IV	SCOPING LETTER & SITE DATA
APPENDIX V	TRANSIT DATA
APPENDIX VI	CRASH DATA



EXECTIVE SUMMARY

EXECUTIVE SUMMARY

Traffic Concepts, Inc. conducted a traffic impact study for the proposed Port Street senior adult housing development. The development site is located within the Town of Easton, on the southeast quadrant of MD 322 (Easton Pkwy) and MD 334 (Port St). The proposed project consists of up to 72 senior adult housing units.

Scope of Services: The key intersections listed below define the study area.

- MD 322 (Easton Pkwy) @ MD 334 (Port St) (Signalized)
- MD 334 (Port St) @ Meadow Dr/G. Muphy Community Pool Access (Unsignalized)
- MD 334 (Port St) @ Jowite Street (Unsignalized)

Analysis Methodology: The traffic study is comprised of an Existing, Background, and Future traffic conditions. The key intersections were analyzed under each traffic condition, which is explained by the following formula:

Total Future Traffic *=* *(**Existing Condition** – current intersection turning movement volumes + **Background Condition** – 2.0% Growth Rate compounded over 2 years + pipeline development traffic + **Future Condition** - site generated traffic)*

All key intersections were analyzed with the Critical Lane Volume (CLV) methodology and the Highway Capacity Manual software (HCM).

New Site Generated (Peak Hour) Trips: The new site generated peak hour trips were generated with land use data contained in the *Institute of Transportation Engineers, Trip Generation Manual 12th Edition* for senior adult housing for multifamily units (ITE LUC 252). Based on the ITE data, the site will generate 14 total AM and 18 total PM peak hour trips.

Site Access: The site will have vehicle access to Meadow Drive.

CONCLUSION: The results of the intersection capacity analysis indicate that the key intersections would continue to operate at "B" or better levels of service with the proposed development project.

With the submittal of this traffic report, we respectfully request that this project be approved from a traffic impact standpoint



INTRODUCTION

INTRODUCTION

Traffic Concepts, Inc. has prepared a traffic impact study for a proposed senior adult housing development along Port St. The site is located on a vacant lot on the southeast quadrant of MD 322 (Easton Pkwy) and MD 334 (Port St). This project will create up to 72 senior adult multi-family housing units. The site will have vehicle access to Meadow Drive. The site location is depicted on Exhibit 1.

Scope of Services

The study limits were established by the Town and a scope of services memo is included in the study appendix. The following key intersections were counted during the weekday morning (7:00 AM to 9:00 AM) and afternoon (4:00 PM to 6:00 PM) peak hours:

- MD 322 (Easton Pkwy) @ MD 334 (Port St) (Signalized)
- MD 334 (Port St) @ Meadow Dr/G. Muphy Community Pool Access (Unsignalized)
- MD 334 (Port St) @ Jowite Street (Unsignalized)

Study Methodology

The study was conducted in three study conditions that analyze the existing, traffic volumes, the background volumes, and future traffic volumes. The existing baseline traffic conditions are created with intersection turning movement counts that were conducted at the key intersections. The total background condition traffic volumes are determined by applying growth rates for the site build-out period. Finally, the total future traffic conditions were determined by incorporating trips generated by the proposed new development.

To determine intersection levels of service, the key intersections were analyzed during study conditions using the Critical Lane Volume (CLV) and the Highway Capacity Manual (HCM) methods.

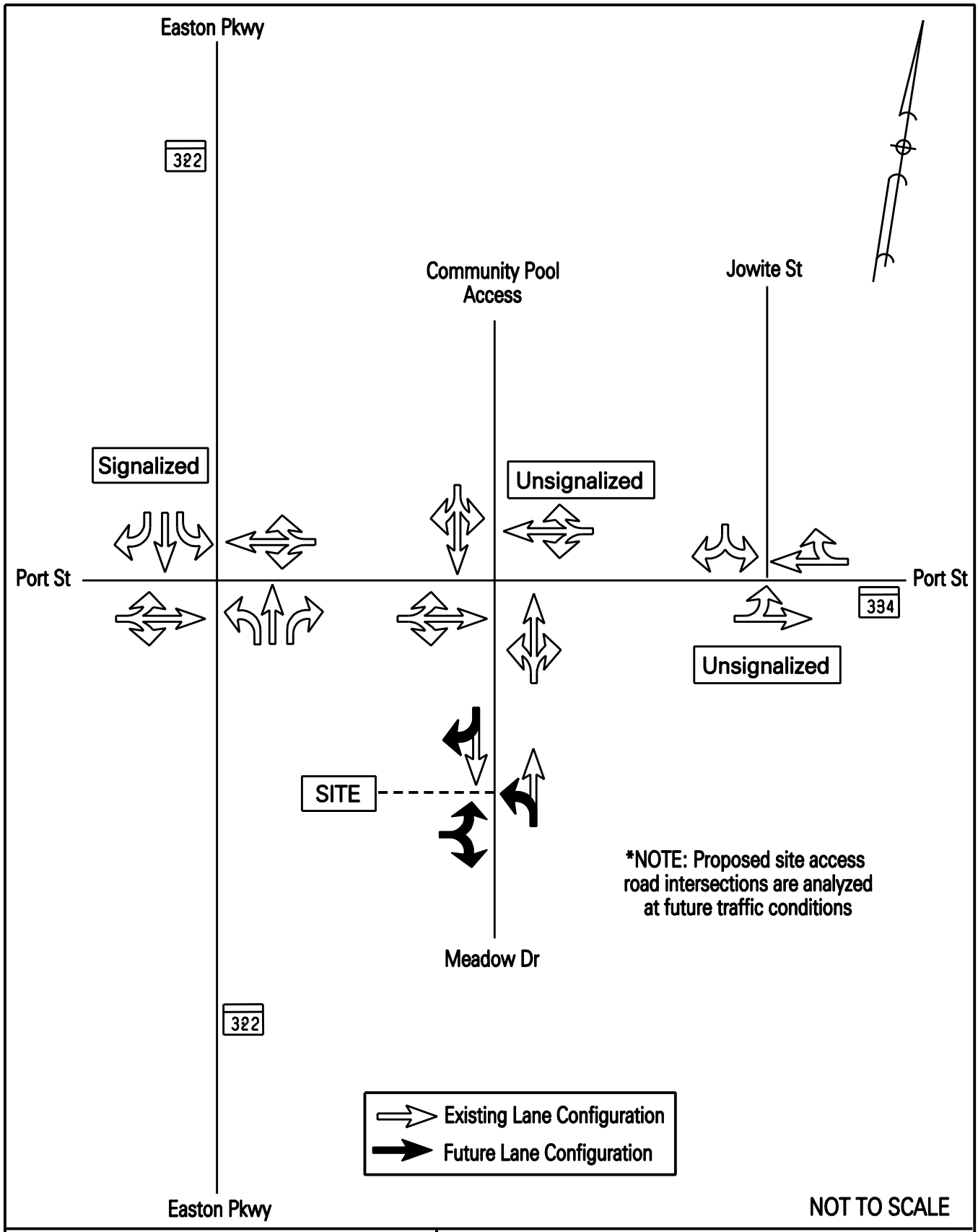


Key Intersections:
1. MD 322 @ MD 334
2. MD 334 @ Meadow Dr
3. MD 334 @ Jowite St

● – Intersection Studied

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, Maryland 21054
410-923-7101

EXHIBIT 1
Site Location



TRAFFIC CONCEPTS, INC. 7525 Connelley Drive Suite B Hanover, Maryland 21076 410-760-2911	EXHIBIT 2 Lane Configuration



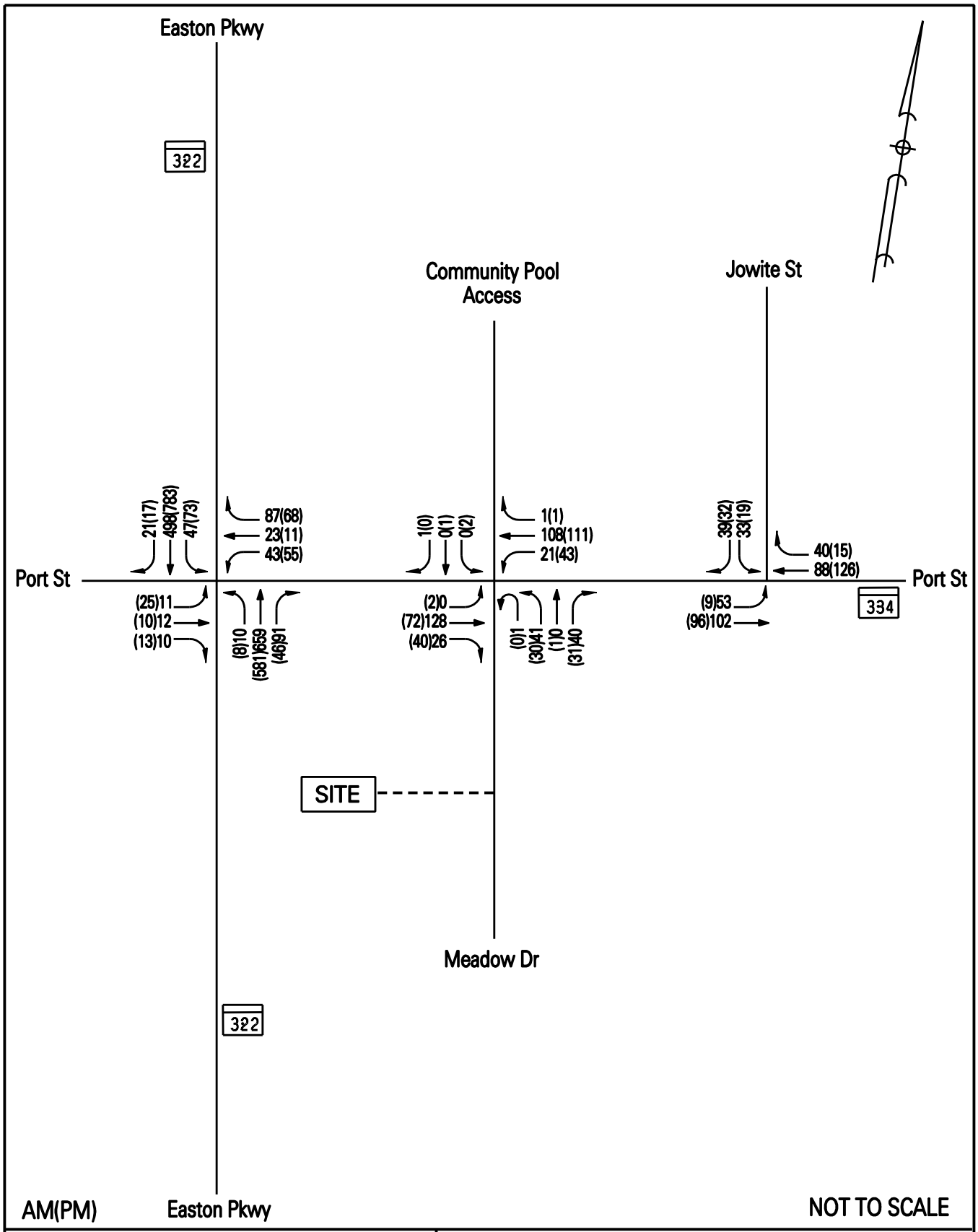
EXISTING CONDITION

EXISTING CONDITION

As stated, the existing traffic condition establishes the baseline intersection levels of service at the key intersections.

Existing lane configurations at the key intersections are depicted on Exhibit 2. The weekday intersection turning movement counts were conducted on Thursday, February 5, 2026, from 7:00-9:00 AM and 4:00-6:00 PM when schools were in session. The resulting existing peak hour volumes are displayed on Exhibit 3. Bicycle/pedestrian counts were also conducted at all key intersections. The count data and intersection condition aerial exhibits are provided in Appendix III.

Intersection	AM Peak Hour	PM Peak Hour
MD 322 (Easton Pkwy) @ MD 334 (Port St)	7:30 - 8:30	4:30 – 5:30
MD 334 (Port St) @ Meadow Dr/G. Muphy Community Pool Access	7:30 - 8:30	4:00 – 5:00
MD 334 (Port St) @ Jowite Street	8:00 – 9:00	4:00– 5:00



TRAFFIC CONCEPTS, INC. 7525 Connelley Drive Suite B Hanover, Maryland 21076 410-760-2911	EXHIBIT 3 Existing Traffic Volumes



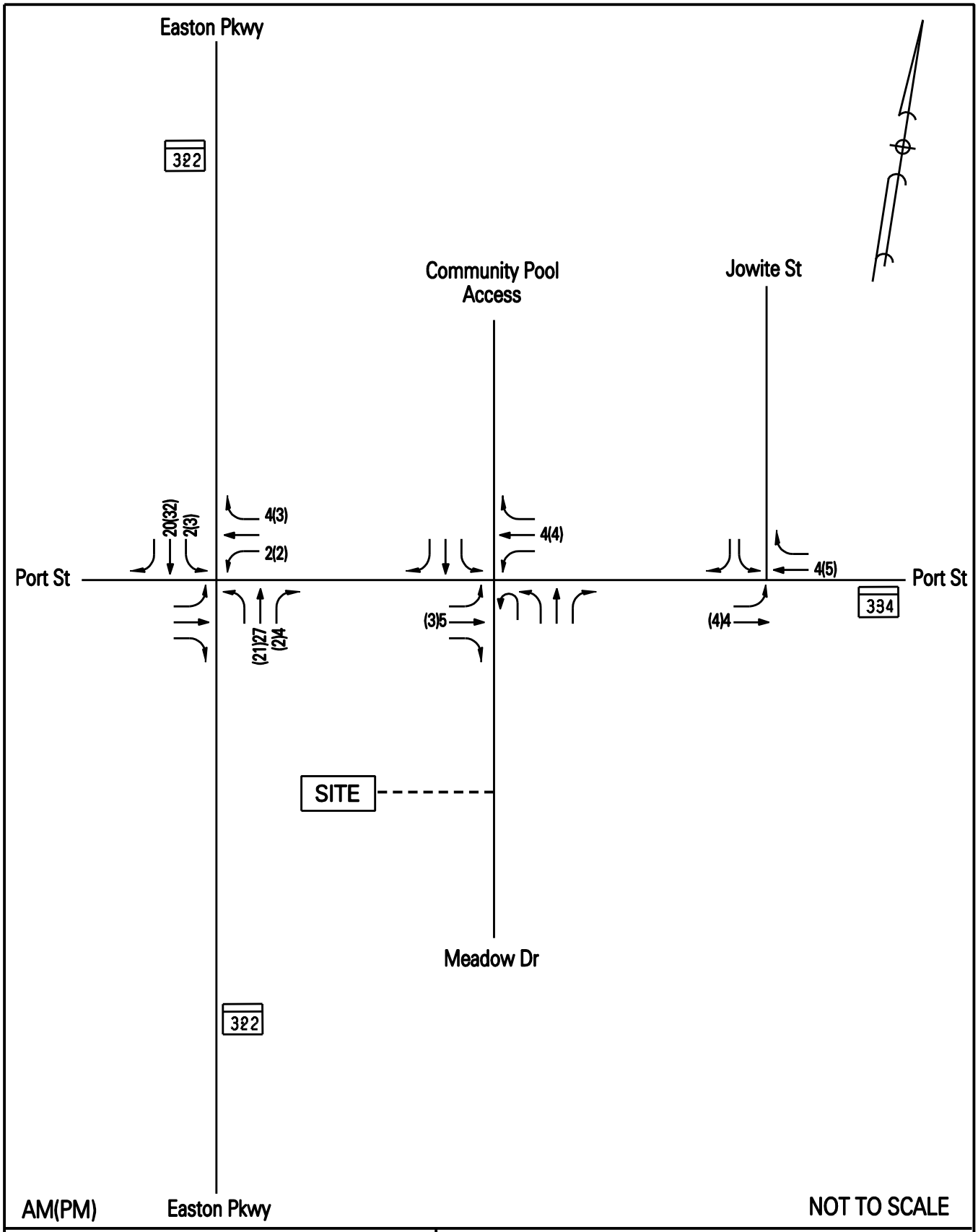
BACKGROUND CONDITION

BACKGROUND CONDITION

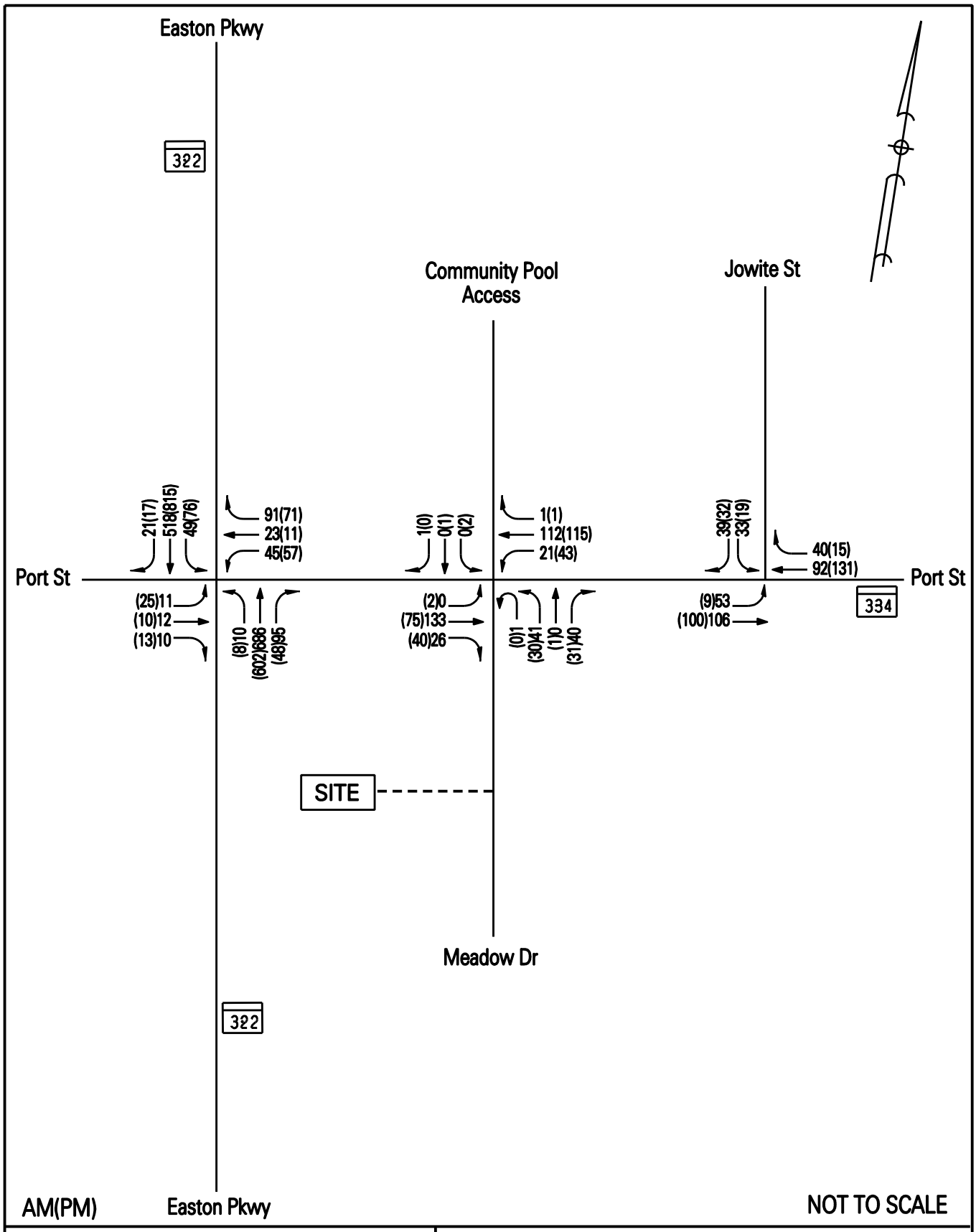
The background traffic conditions evaluate the key intersections with consideration given to a regional growth rate and trips generated by other approved developments that are not yet constructed.

The regional growth rate represents the annual increase in through traffic volumes within the study area that originates from outside the localized study area. To determine this rate, we analyzed MDOT SHA historical traffic data from the past three years, retrieved from the Internet Traffic Monitoring System (I-TMS) webpage. This data can be found in Appendix II. Our analysis of this data indicates that traffic volumes have remained stable over the last three years.

However, to be conservative a two percent growth rate, compounded over the two-year project build-out period, was applied at the study intersections, as shown on Exhibit 4. The total background traffic volumes shown on Exhibit 5 include the projected growth in traffic.



TRAFFIC CONCEPTS, INC. 7525 Connelley Drive Suite B Hanover, Maryland 21076 410-760-2911	EXHIBIT 4 Projected Growth Rates (2.0% for Two Years)



TRAFFIC CONCEPTS, INC. 7525 Connelley Drive Suite B Hanover, Maryland 21076 410-760-2911	EXHIBIT 5 Total Background Traffic Volumes



FUTURE CONDITION

FUTURE CONDITION

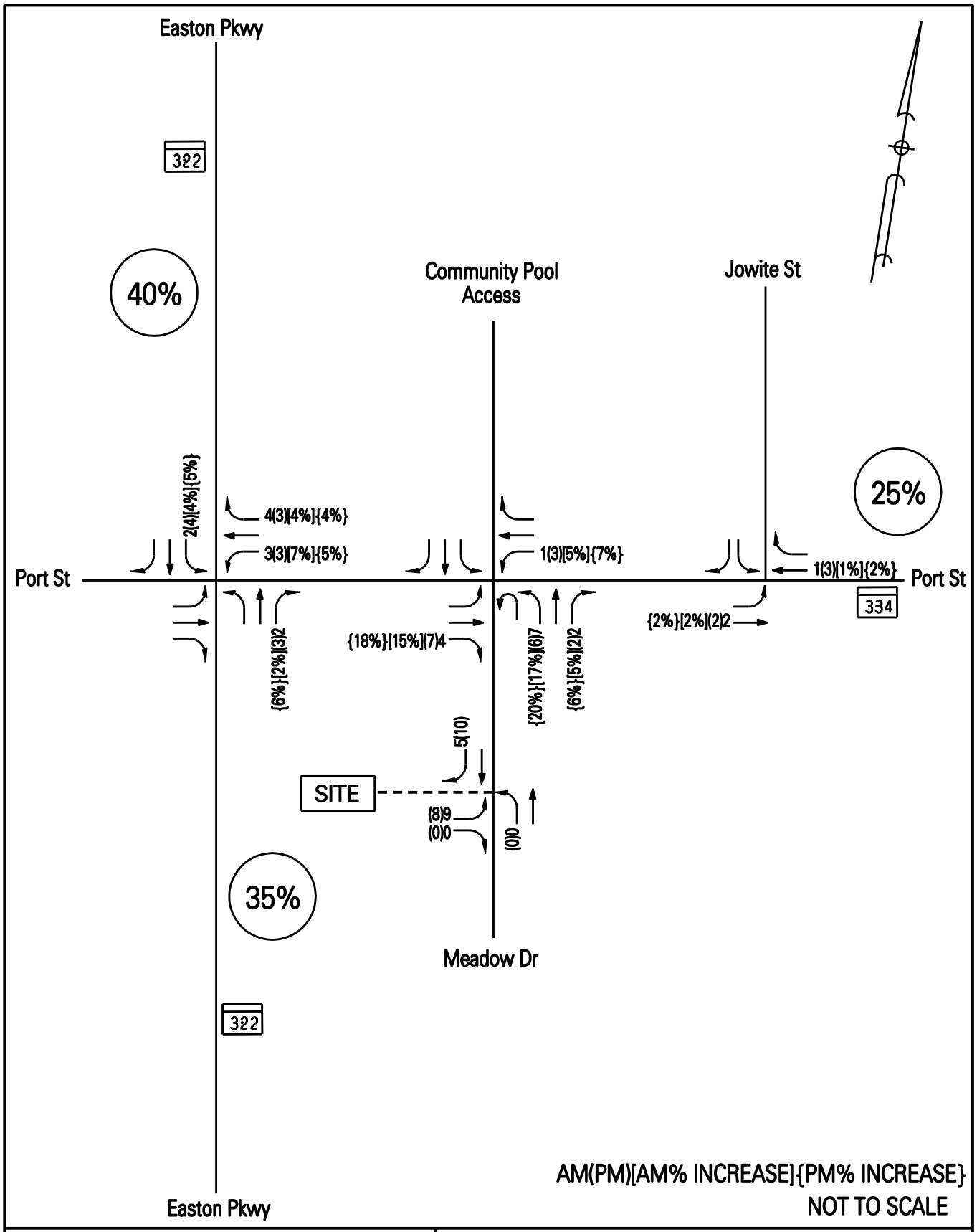
The future condition analysis determines the new site generated trips and analyzes the key intersections with the total future traffic volumes.

The proposed new site trips generated by 72 senior adult multi-family housing units were determined with data contained in the *Institute of Transportation Engineers', Trip Generation Manual (ITE), 12th Edition.* The new site generated peak hour trips are shown in the table below and the detailed ITE data is included in the scope of services memo that is provided in Appendix IV.

NEW SITE TRIPS: PEAK HOUR TRIP GENERATION						
	AM			**PM**		
	IN	**OUT**	**TOTAL**	**IN**	**OUT**	**TOTAL**
Senior Adult Housing—Multifamily (252) 72 UNITS	5	9	14	10	8	18
TOTAL PEAK HOUR TRIPS	**14**			**18**		

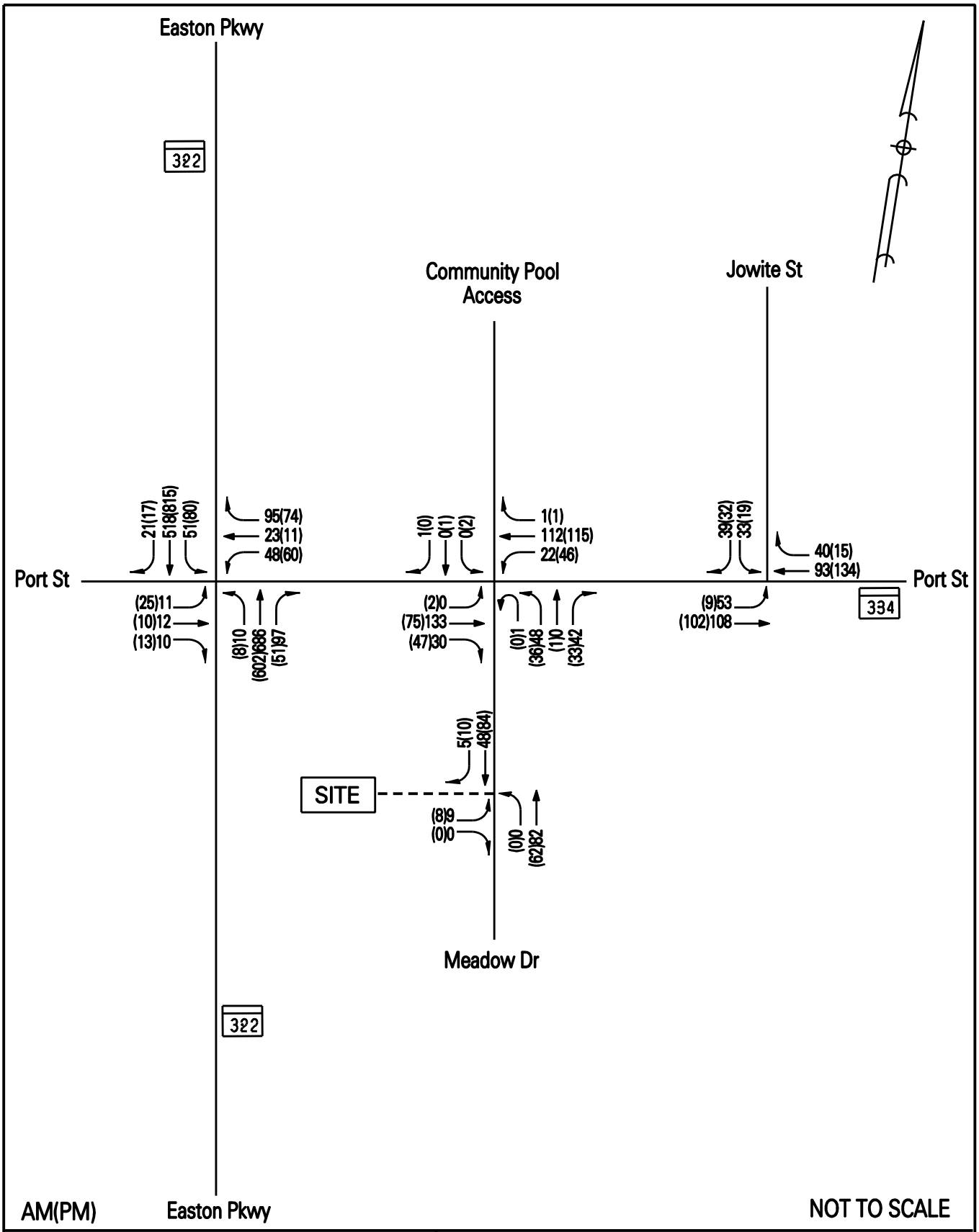
Source: ITE, Trip Generation Manual, 12th Edition (ITE)

The site generated trip distribution and assignment pattern is based on existing traffic volumes and the location of major access routes. Exhibit 6 shows the site generated trips. These trips were added to the total background traffic volumes to arrive at total future traffic volumes, as shown on Exhibit 7.



TRAFFIC CONCEPTS, INC.
7525 Connelley Drive
Suite B
Hanover, Maryland 21076
410-760-2911

EXHIBIT 6
Site Generated Traffic



TRAFFIC CONCEPTS, INC.
7525 Connelley Drive
Suite B
Hanover, Maryland 21076
410-760-2911

EXHIBIT 7
Total Future Traffic Volumes



SAFETY STUDY

SAFETY STUDY

CRASH DATA

Crash data (between January 1, 2022 and December 31, 2025) has been provided by MDOT SHA at the key intersections. The only reported crashes occurred at the MD 322 at MD 334 intersection, and about 65 percent of those crashes were angle collisions. The crash data revealed no fatalities at any of the intersections. A copy of the detailed crash data is included in Appendix VI, and the data is summarized in the following table.

TOTAL CRASHES (JANUARY 1, 2022 - DECEMBER 31, 2025)				
Intersection	2022	2023	2024	2025
MD 322 @ MD 334	1	1	2	2
MD 334 @ Meadow Dr	*	*	*	*
MD 334 @ Jowite St	*	*	*	*
*No crashes reported at these locations.				

NON-MOTORIZED INVENTORY

The following information provides a non-motorized inventory of the bicycle/pedestrian and transit amenities within the study area. This information also includes peak hour pedestrians, and bicycle counts at the key intersections.

Transit Facilities

Bus stop located approximately ½ mile from the site are shown on Exhibit 10. The bus routes that utilize these stops are listed below and the route maps and bus schedules are included in Appendix V.

- **Route 1:** Easton Shuttle (Kent Island – Grasonville – Centreville to Easton)
  Stop S202 – Memorial Hospital
- **Route C:** (A fixed route within Easton that loops through various points in town)
  Stop S144 – Easton Neighborhood Service Center
  Stop S180 – St. Marks Village
  Stop S168 – Safeway
  Stop S072 – Easton Library
- **Route 5:** (Runs from Denton to Easton)
  Stop S202 – Memorial Hospital
- **Denton – Easton AM Shuttle:**
  Stop S144 – Easton Neighborhood Service Center

Transit Facilities (Continued)

- **Route D:** (A fixed route within Easton that loops through various points in town)
  Stop S202 – Memorial Hospital
- **Route 9:** (Cambridge – Trappe – Easton)
  Stop S202 – Memorial Hospital

Delmarva Community Transit (DCT) also offers other specialized transportation options to area residents. DCT offers One Stop Service for people 60 years and older and people with disabilities, providing door-to-door service in vans or cars, with 24-hour advance notice. In compliance with the ADA (Americans with Disabilities Act), DCT also provides complementary origin to destination service up to 3/4 mile off of fixed routes for certified individuals with disabilities.

Pedestrian and Bicycle - Facilities & Counts

Within the study area, there are continuous sidewalks along both sides of Medow Drive at the site access. As shown on Exhibit 8, there is also a trail located near the site that extends to the Easton Rails-To-Trail, a scenic almost 5-mile trail that spans Easton north to south with access to local stores, parks, destinations, and schools.

The pedestrian/bicycle counts are summarized in the following tables:

MD 322 @ MD 334		
Peak Hour	Pedestrian Volume	Bicycle Volume
7:30 – 8:30 AM	0	0
4:30 – 5:30 PM	0	0

MD 334 @ Meadow Dr		
Peak Hour	Pedestrian Volume	Bicycle Volume
7:30 – 8:30 AM	0	0
4:00 – 5:00 PM	0	0

MD 334 @ Jowite St		
Peak Hour	Pedestrian Volume	Bicycle Volume
8:00 – 9:00 AM	0	0
4:00 – 5:00 PM	0	0



Bus Stops:
1. Stop S202 - Memorial Hospital
2. Stop S144 - Easton Neighborhood Service Center
3. Stop S180 - St. Marks Village
4. Stop S168 - Safeway
5. Stop S072 - Easton Library

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, Maryland 21054
410-923-7101

EXHIBIT 8
Bus Stop Locations



CAPACITY ANALYSIS RESULTS

INTERSECTION CAPACITY ANALYSIS

As stated, the key intersections were analyzed during the existing, background, and future traffic conditions, using the Critical Lane Volume (CLV) and Highway Capacity Manual (HCM) methods. The HCM analyses at the signalized intersections were conducted using signal timing data provided by MDOT SHA.

The levels of service results are listed on the following tables, and the detailed calculations are provided in Appendix I.

CRITICAL LANE VOLUME ANALYSIS – AM PEAK HOUR				
KEY INTERSECTIONS	EXISTING CLV / LOS	BACKGROUND CLV / LOS	FUTURE	
			CLV / LOS	CLV Change (%)
MD 322 (Easton Pkwy) @ MD 334 (Port St)	874 / A	910 / A	919 / A	+9 (1%)
MD 334 (Port St) @ Meadow Dr	261 / A	266 / A	281 / A	+15 (5.6%)
MD 334 (Port St) @ Jowite Street	253 / A	257 / A	258 / A	+1 (0.4%)
Meadow Dr @ Site Access	-	-	91 / A	NA
CRITICAL LANE VOLUME ANALYSIS – PM PEAK HOUR				
KEY INTERSECTIONS	EXISTING CLV / LOS	BACKGROUND CLV / LOS	FUTURE	
			CLV / LOS	CLV Change (%)
MD 322 (Easton Pkwy) @ MD 334 (Port St)	956 / A	993 / A	999 / A	+6 (0.6%)
MD 334 (Port St) @ Meadow Dr	228 / A	232 / A	246 / A	+14 (6.0%)
MD 334 (Port St) @ Jowite Street	201 / A	206 / A	209 / A	+3 (1.5%)
Meadow Dr @ Site Access	-	-	102 / A	NA

HIGHWAY CAPACITY MANUAL: SIGNAL CONTROL - AM PEAK HOUR				
KEY INTERSECTIONS	EXISTING Delay / LOS	BACKGROUND Delay / LOS	FUTURE	
			Delay / LOS	HCM Change (%)
MD 322 (Easton Pkwy) @ MD 334 (Port St)	16.6 / B	16.9 / B	17.1 / B	+0.2 (1.2%)
HIGHWAY CAPACITY MANUAL: SIGNAL CONTROL - PM PEAK HOUR				
KEY INTERSECTIONS	EXISTING Delay / LOS	BACKGROUND Delay / LOS	FUTURE	
			Delay / LOS	HCM Change (%)
MD 322 (Easton Pkwy) @ MD 334 (Port St)	18.1 / B	18.7 / B	18.8 / B	+0.1 (0.5%)

HIGHWAY CAPACITY MANUAL: STOP CONTROL - AM PEAK HOUR				
KEY INTERSECTIONS	EXISTING Delay / LOS	BACKGROUND Delay / LOS	FUTURE	
			Delay / LOS	HCM Change (%)
MD 334 (Port St) @ Meadow Dr				
EB L/T/R– MD 334	7.5 / A	7.5 / A	7.5 / A	+0 (0%)
WB L/T/R– MD 334	7.7 / A	7.7 / A	7.7 / A	+0 (0%)
NB L/T/R – Meadow dr	11.0 / B	11.1 / B	11.4 / B	+0.3 (2.7%)
SB L/T/R - Community Pool Access	8.9 / A	9.0 / A	9.0 / A	+0 (0%)
MD 334 (Port St) @ Jowite Street				
EB Left/Thru – MD 334 (Port St)	7.6 / A	7.7 / A	7.7 / A	+0 (0%)
SB Left/Right – Jowite Street	10.5 / B	10.6 / B	10.6 / B	+0 (0%)
Meadow Dr @ Site Access				
EB Left/Right – Site Access	-	-	9.3 / A	NA
NB Left/Thru – Meadow Dr	-	-	7.3 / A	NA

HIGHWAY CAPACITY MANUAL: STOP CONTROL - PM PEAK HOUR				
KEY INTERSECTIONS	EXISTING Delay / LOS	BACKGROUND Delay / LOS	FUTURE	
			Delay / LOS	HCM Change (%)
MD 334 (Port St) @ Meadow Dr				
EB L/T/R– MD 334	7.5 / A	7.5 / A	7.5 / A	+0 (0%)
WB L/T/R– MD 334	7.5 / A	7.5 / A	7.6 / A	+0.1 (1.3%)
NB L/T/R – Meadow dr	10.2 / B	10.3 / B	10.5 / B	+0.2 (1.9%)
SB L/T/R - Community Pool Access	11.2 / B	11.3 / B	11.4 / B	+0.1 (0.9%)
MD 334 (Port St) @ Jowite Street				
EB Left/Thru – MD 334 (Port St)	7.6 / A	7.6 / A	7.6 / A	+0 (0%)
SB Left/Right – Jowite Street	9.7 / A	9.8 / A	9.8 / A	+0 (0%)
Meadow Dr @ Site Access				
EB Left/Right – Site Access	-	-	9.4 / A	NA
NB Left/Thru – Meadow Dr	-	-	7.4 / A	NA



QUEUING ANALYSIS

QUEUING ANALYSIS

A queuing analysis was conducted for the dedicated left turn lanes at the signalized key intersection that do not share continuous storage with through movements. The Highway Capacity Manual (HCM) 95th percentile back of queues are listed in the table below, and the HCM reports are included in Appendix I.

HIGHWAY CAPACITY MANUAL - 95TH PERCENTILE BACK-OF-QUEUE (FEET)				
KEY INTERSECTIONS	EXISTING AM(PM)	BACKGROUND AM(PM)	FUTURE AM(PM)	STORAGE (ft)
MD 322 @ MD 334				
NB Left – MD 322	3(3)	3(3)	3(3)	200
SB Left – MD 322	13(20)	13(21)	14(23)	200



CONCLUSIONS

CONCLUSIONS AND RECOMMENDATIONS

Upon the build-out of the Port Street Senior Housing project, the study results show all key intersections are projected to operate at acceptable future levels of service (LOS).

- Critical Lane Volume (CLV) Analysis - The results of the CLV calculations show that all key intersections are projected to operate at “A” levels of service (LOS).

- HCM Signalized Intersection Analysis – The results determined adequate “B” overall future levels of service and adequate storage for left turn queues.

- HCM Unsignalized Intersection Analysis – The results show adequate “B” or better levels of service for all movements at the future build-out conditions.

We would like to note that a traffic study was not required by MDOT SHA, as this project generates fewer than 50 total trips during either peak hour and does not require a Maryland State access permit.

The 14 AM and 18 PM peak hour trips are not significant, as demonstrated by the adequate intersection capacity analyses, and will not impact bicycle or pedestrian travel.

Based on the study results and minimal impacts, we respectfully request approval of this project from a traffic impact standpoint.

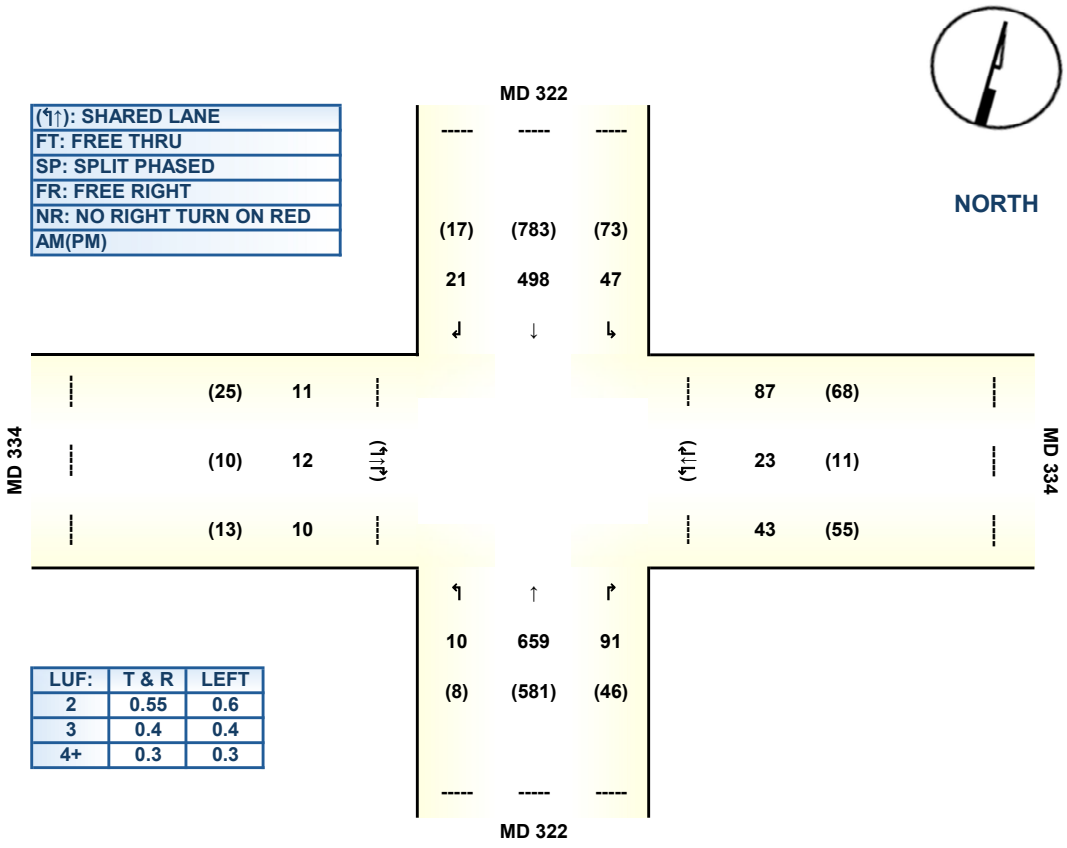


APPENDIX I-A

CRITICAL LANE ANALYSIS

INTERSECTION: MD 322 AT MD 334

PREPARED BY: I. HALSALL **CONDITION: EXISTING**



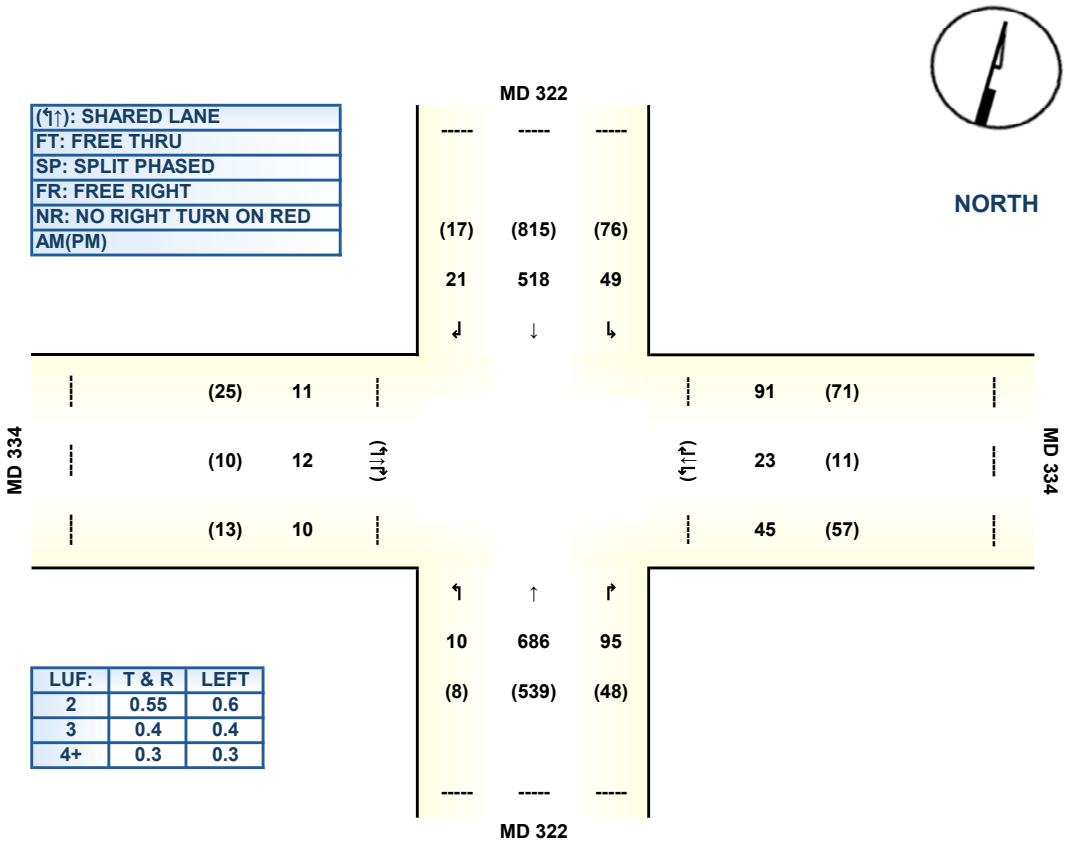
TIME	LANE	PCE ADJUSTMENT	TOTAL VOLUME * LUF	OPPOSING LEFTS * LUF	CRITICAL LANE VOLUME	LEVEL OF SERVICE
AM	NB		659 * 1	+ 47 * 1	= 706*	
	SB		498 * 1	+ 10 * 1	= 508	
	EB	11 * 1.1 = 12	(12 + 12 + 10) * 1	+ 43 * 1	= 77	A 874
	WB	43 * 1.1 = 47	(47 + 23 + 87) * 1	+ 11 * 1	= 168*	
PM	NB		581 * 1	+ 73 * 1	= 654	
	SB		783 * 1	+ 8 * 1	= 791*	
	EB	25 * 1.1 = 28	(28 + 10 + 13) * 1	+ 55 * 1	= 106	A 956
	WB	55 * 1.1 = 61	(61 + 11 + 68) * 1	+ 25 * 1	= 165*	

M:\ 4317

CRITICAL LANE ANALYSIS

INTERSECTION: MD 322 AT MD 334

PREPARED BY: I. HALSALL **CONDITION: BACKGROUND**



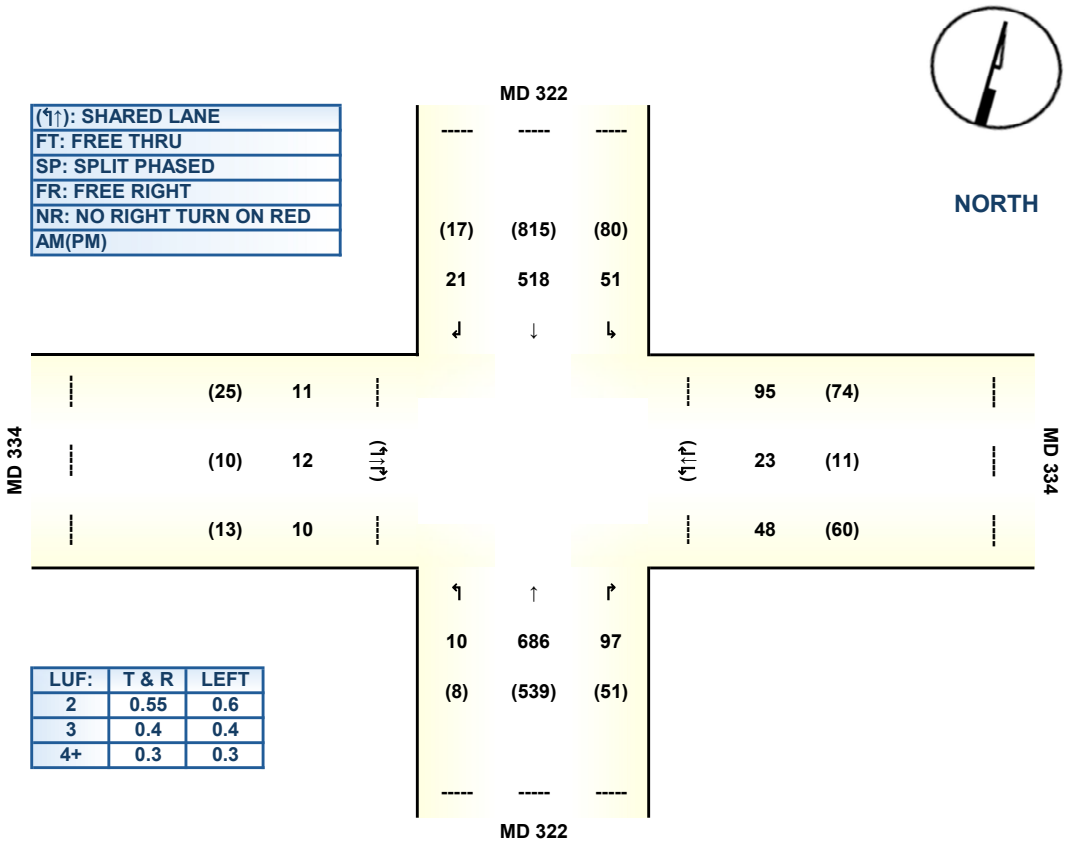
TIME	LANE	PCE ADJUSTMENT	TOTAL VOLUME * LUF	OPPOSING LEFTS * LUF	CRITICAL LANE VOLUME	LEVEL OF SERVICE
AM	NB		686 * 1	+ 49 * 1	= 735*	
	SB		518 * 1	+ 10 * 1	= 528	
	EB	11 * 1.1 = 12	(12 + 12 + 10) * 1	+ 45 * 1	= 79	A 910
	WB	45 * 1.1 = 50	(50 + 23 + 91) * 1	+ 11 * 1	= 175*	
PM	NB		539 * 1	+ 76 * 1	= 615	
	SB		815 * 1	+ 8 * 1	= 823*	
	EB	25 * 1.1 = 28	(28 + 10 + 13) * 1	+ 57 * 1	= 108	A 993
	WB	57 * 1.1 = 63	(63 + 11 + 71) * 1	+ 25 * 1	= 170*	

M:\ 4317

CRITICAL LANE ANALYSIS

INTERSECTION: MD 322 AT MD 334

PREPARED BY: I. HALSALL **CONDITION: FUTURE**



LUF:	T & R	LEFT
2	0.55	0.6
3	0.4	0.4
4+	0.3	0.3

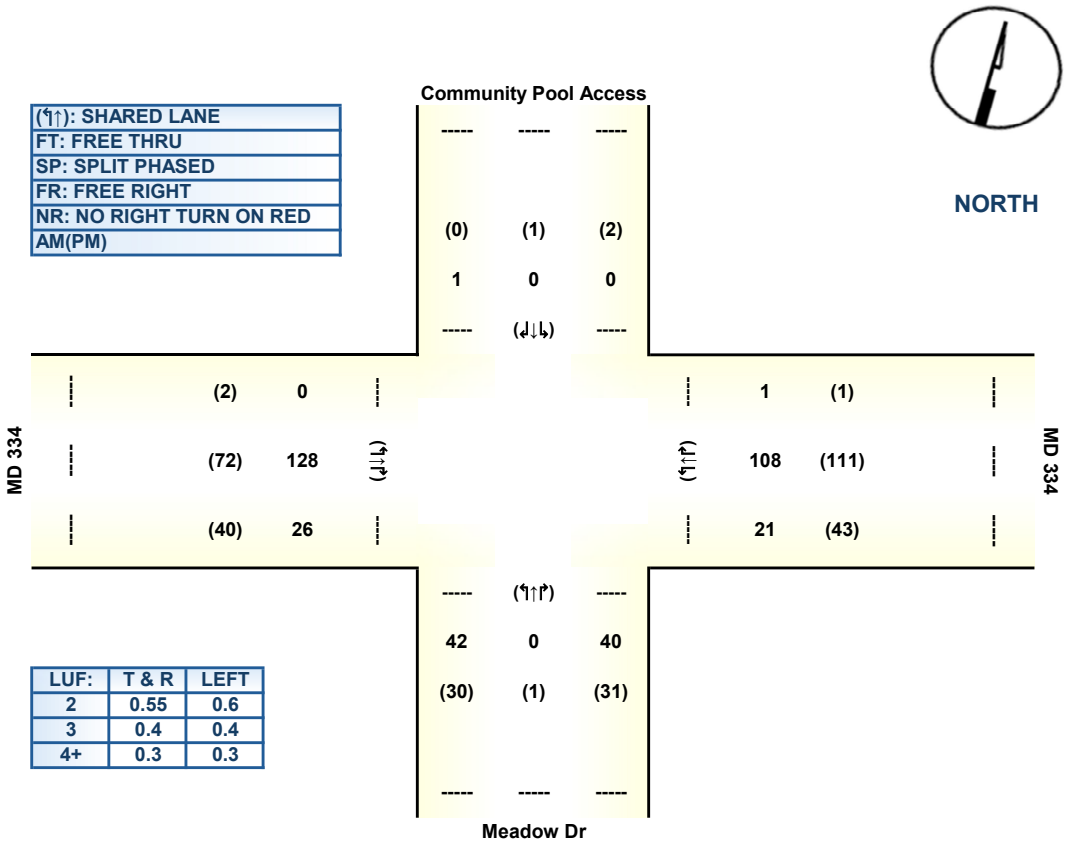
TIME	LANE	PCE ADJUSTMENT	TOTAL VOLUME * LUF	OPPOSING LEFTS * LUF	CRITICAL LANE VOLUME	LEVEL OF SERVICE
AM	NB		686 * 1	+ 51 * 1	= 737*	
	SB		518 * 1	+ 10 * 1	= 528	
	EB	11 * 1.1 = 12	(12 + 12 + 10) * 1	+ 48 * 1	= 82	A 919
	WB	48 * 1.1 = 53	(53 + 23 + 95) * 1	+ 11 * 1	= 182*	
PM	NB		539 * 1	+ 80 * 1	= 619	
	SB		815 * 1	+ 8 * 1	= 823*	
	EB	25 * 1.1 = 28	(28 + 10 + 13) * 1	+ 60 * 1	= 111	A 999
	WB	60 * 1.1 = 66	(66 + 11 + 74) * 1	+ 25 * 1	= 176*	

M:\ 4317

CRITICAL LANE ANALYSIS

INTERSECTION: MD 334 AT MEADOW DR

PREPARED BY: I. HALSALL **CONDITION: EXISTING**



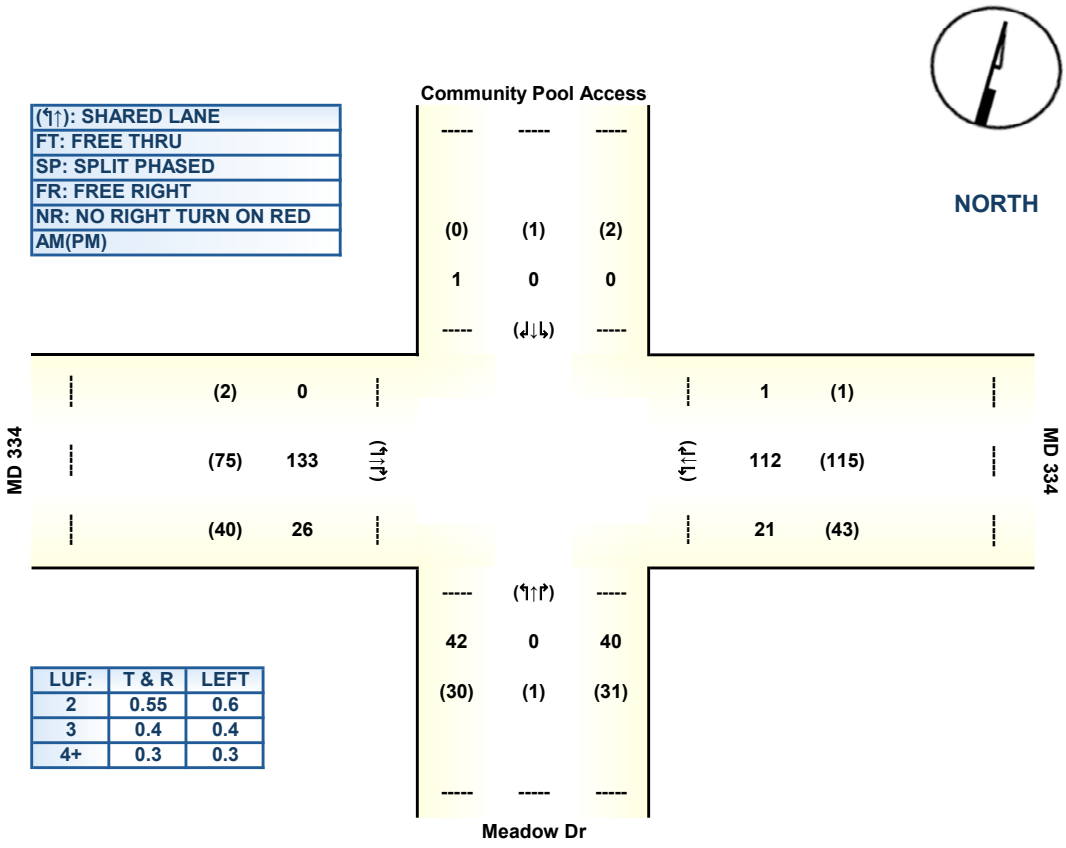
TIME	LANE	PCE ADJUSTMENT	TOTAL VOLUME * LUF	OPPOSING LEFTS * LUF	CRITICAL LANE VOLUME	LEVEL OF SERVICE
AM	NB	42 * 1.1 = 46	(46 + 0 + 40) * 1	+ 0 * 1	= 86*	
	SB	0 * 1.1 = 0	1 * 1	+ 42 * 1	= 43	
	EB	0 * 1.1 = 0	(0 + 128 + 26) * 1	+ 21 * 1	= 175*	A 261
	WB	21 * 1.1 = 23	(23 + 108 + 1) * 1	+ 0 * 1	= 132	
PM	NB	30 * 1.1 = 33	(33 + 1 + 31) * 1	+ 2 * 1	= 67*	
	SB	2 * 1.1 = 2	(2 + 1 + 0) * 1	+ 30 * 1	= 33	
	EB	2 * 1.1 = 2	(2 + 72 + 40) * 1	+ 43 * 1	= 157	A 228
	WB	43 * 1.1 = 47	(47 + 111 + 1) * 1	+ 2 * 1	= 161*	

M:\ 4317

CRITICAL LANE ANALYSIS

INTERSECTION: MD 334 AT MEADOW DR

PREPARED BY: I. HALSALL **CONDITION: BACKGROUND**



LUF:	T & R	LEFT
2	0.55	0.6
3	0.4	0.4
4+	0.3	0.3

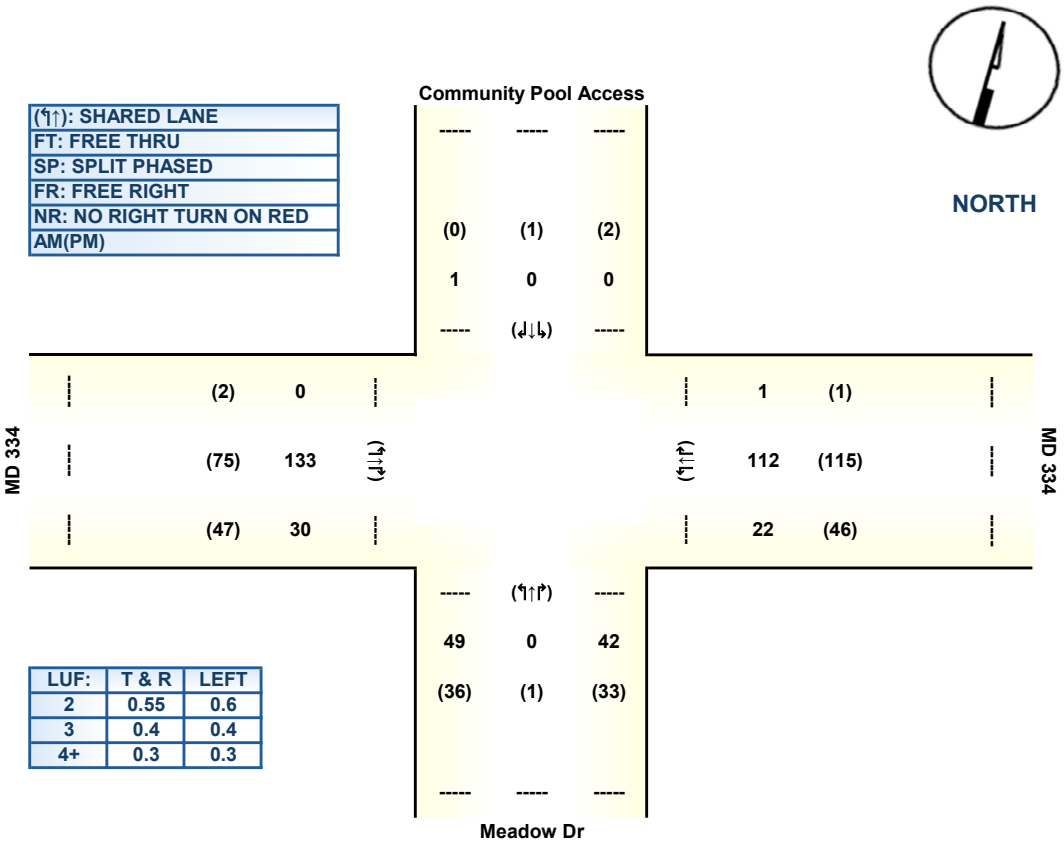
TIME	LANE	PCE ADJUSTMENT	TOTAL VOLUME * LUF	OPPOSING LEFTS * LUF	CRITICAL LANE VOLUME	LEVEL OF SERVICE
AM	NB	42 * 1.1 = 46	(46 + 0 + 40) * 1	+ 0 * 1	= 86*	
	SB	0 * 1.1 = 0	1 * 1	+ 42 * 1	= 43	
	EB	0 * 1.1 = 0	(0 + 133 + 26) * 1	+ 21 * 1	= 180*	A 266
	WB	21 * 1.1 = 23	(23 + 112 + 1) * 1	+ 0 * 1	= 136	
PM	NB	30 * 1.1 = 33	(33 + 1 + 31) * 1	+ 2 * 1	= 67*	
	SB	2 * 1.1 = 2	(2 + 1 + 0) * 1	+ 30 * 1	= 33	
	EB	2 * 1.1 = 2	(2 + 75 + 40) * 1	+ 43 * 1	= 160	A 232
	WB	43 * 1.1 = 47	(47 + 115 + 1) * 1	+ 2 * 1	= 165*	

M:\ 4317

CRITICAL LANE ANALYSIS

INTERSECTION: MD 334 AT MEADOW DR

PREPARED BY: I. HALSALL **CONDITION: FUTURE**



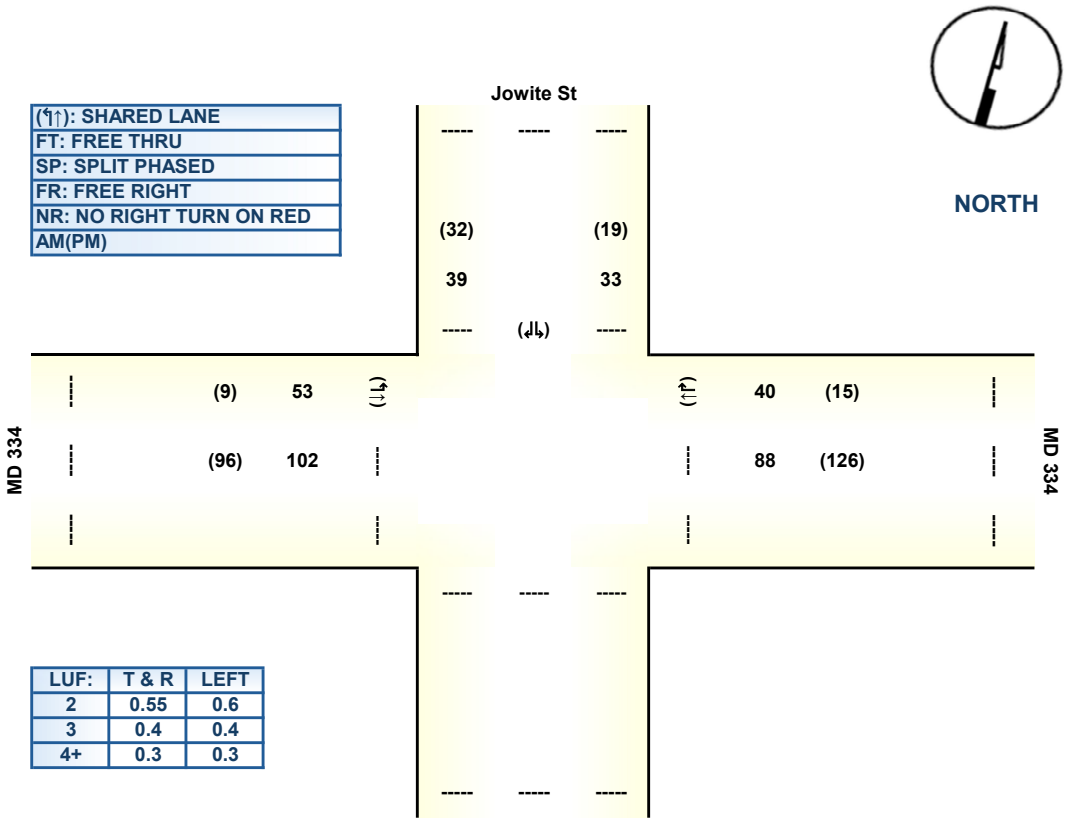
TIME	LANE	PCE ADJUSTMENT	TOTAL VOLUME * LUF	OPPOSING LEFTS * LUF	CRITICAL LANE VOLUME	LEVEL OF SERVICE
AM	NB	49 * 1.1 = 54	(54 + 0 + 42) * 1	+ 0 * 1	= 96*	
	SB	0 * 1.1 = 0	1 * 1	+ 49 * 1	= 50	
	EB	0 * 1.1 = 0	(0 + 133 + 30) * 1	+ 22 * 1	= 185*	A 281
	WB	22 * 1.1 = 24	(24 + 112 + 1) * 1	+ 0 * 1	= 137	
PM	NB	36 * 1.1 = 40	(40 + 1 + 33) * 1	+ 2 * 1	= 76*	
	SB	2 * 1.1 = 2	(2 + 1 + 0) * 1	+ 36 * 1	= 39	
	EB	2 * 1.1 = 2	(2 + 75 + 47) * 1	+ 46 * 1	= 170*	A 246
	WB	46 * 1.1 = 51	(51 + 115 + 1) * 1	+ 2 * 1	= 169	

M:\ 4317

CRITICAL LANE ANALYSIS

INTERSECTION: MD 334 AT JOWITE ST

PREPARED BY: I. HALSALL **CONDITION: EXISTING**



LUF:	T & R	LEFT
2	0.55	0.6
3	0.4	0.4
4+	0.3	0.3

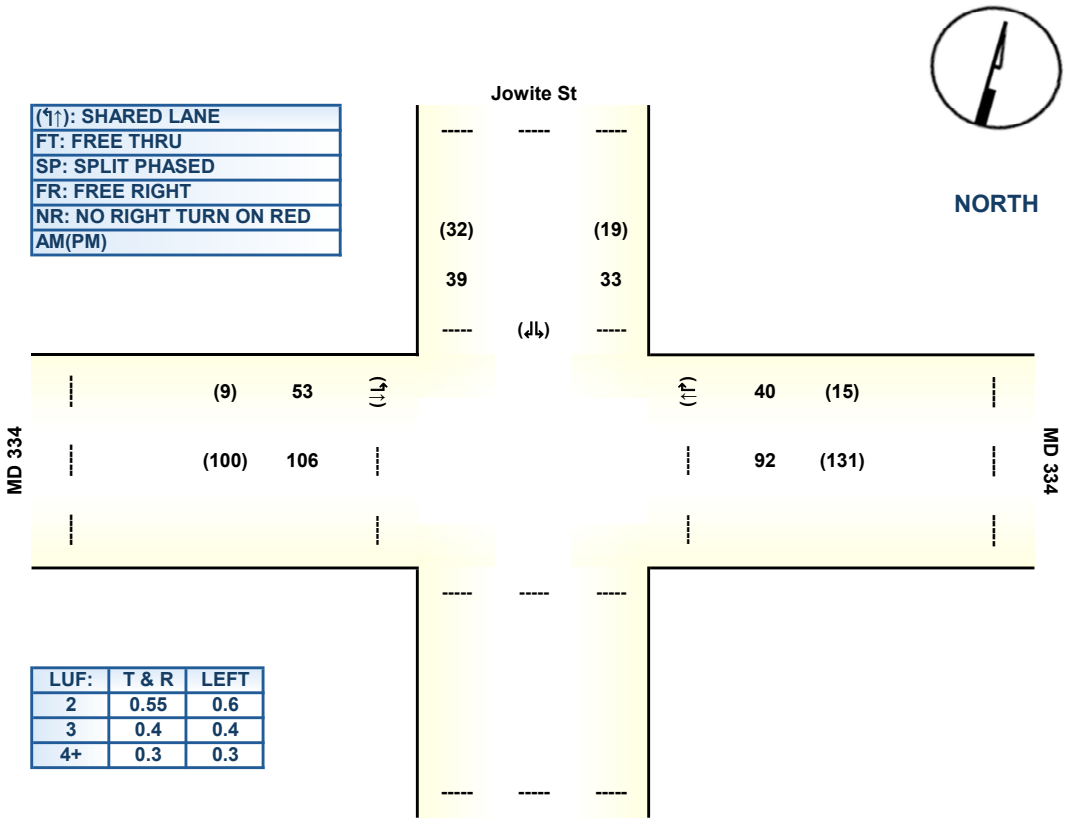
TIME	LANE	PCE ADJUSTMENT	TOTAL VOLUME * LUF	OPPOSING LEFTS * LUF	CRITICAL LANE VOLUME	LEVEL OF SERVICE
AM	NB					
	SB		(33 + 39) * 1		= 72*	
	EB	53 * 1.1 = 58	(58 + 102) * 1		= 160	A
	WB		(88 + 40) * 1	+ 53 * 1	= 181*	253
PM	NB					
	SB		(19 + 32) * 1		= 51*	
	EB	9 * 1.1 = 10	(10 + 96) * 1		= 106	A
	WB		(126 + 15) * 1	+ 9 * 1	= 150*	201

M:\ 4317

CRITICAL LANE ANALYSIS

INTERSECTION: MD 334 AT JOWITE ST

PREPARED BY: I. HALSALL **CONDITION: BACKGROUND**



LUF:	T & R	LEFT
2	0.55	0.6
3	0.4	0.4
4+	0.3	0.3

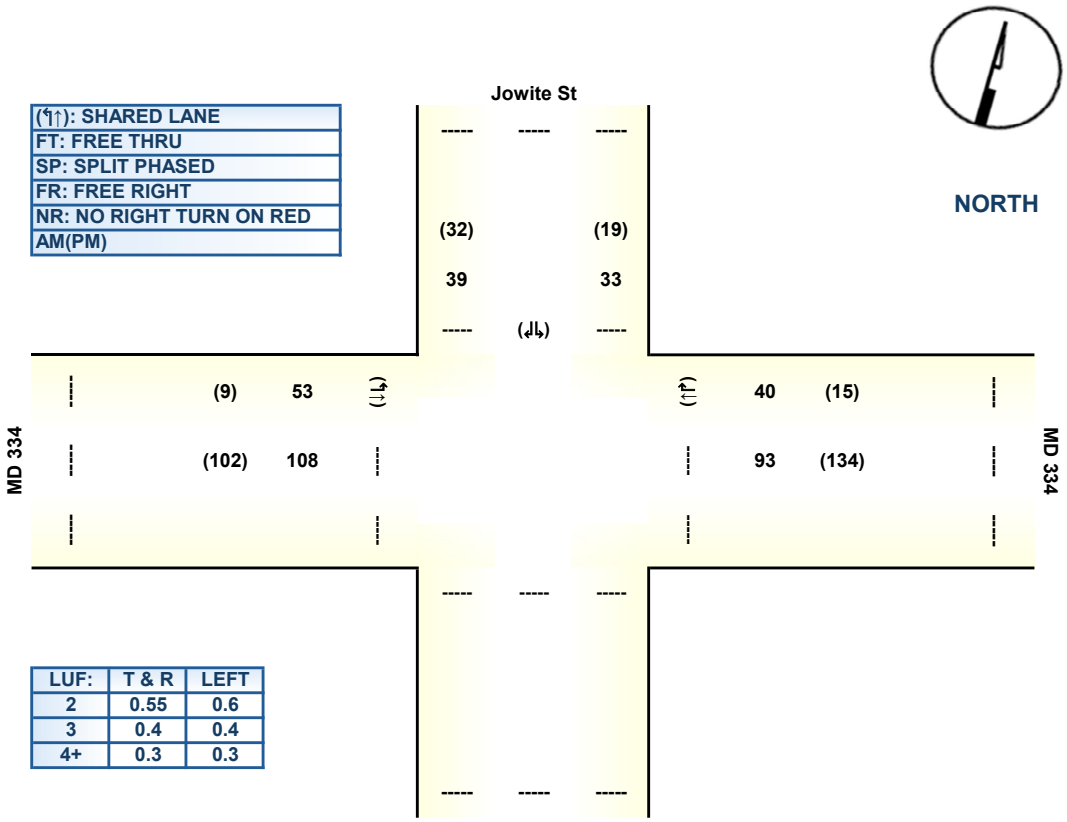
TIME	LANE	PCE ADJUSTMENT	TOTAL VOLUME * LUF	OPPOSING LEFTS * LUF	CRITICAL LANE VOLUME	LEVEL OF SERVICE
AM	NB					
	SB		(33 + 39) * 1		= 72*	
	EB	53 * 1.1 = 58	(58 + 106) * 1		= 164	A 257
	WB		(92 + 40) * 1	+ 53 * 1	= 185*	
PM	NB					
	SB		(19 + 32) * 1		= 51*	
	EB	9 * 1.1 = 10	(10 + 100) * 1		= 110	A 206
	WB		(131 + 15) * 1	+ 9 * 1	= 155*	

M:\ 4317

CRITICAL LANE ANALYSIS

INTERSECTION: MD 334 AT JOWITE ST

PREPARED BY: I. HALSALL **CONDITION: FUTURE**



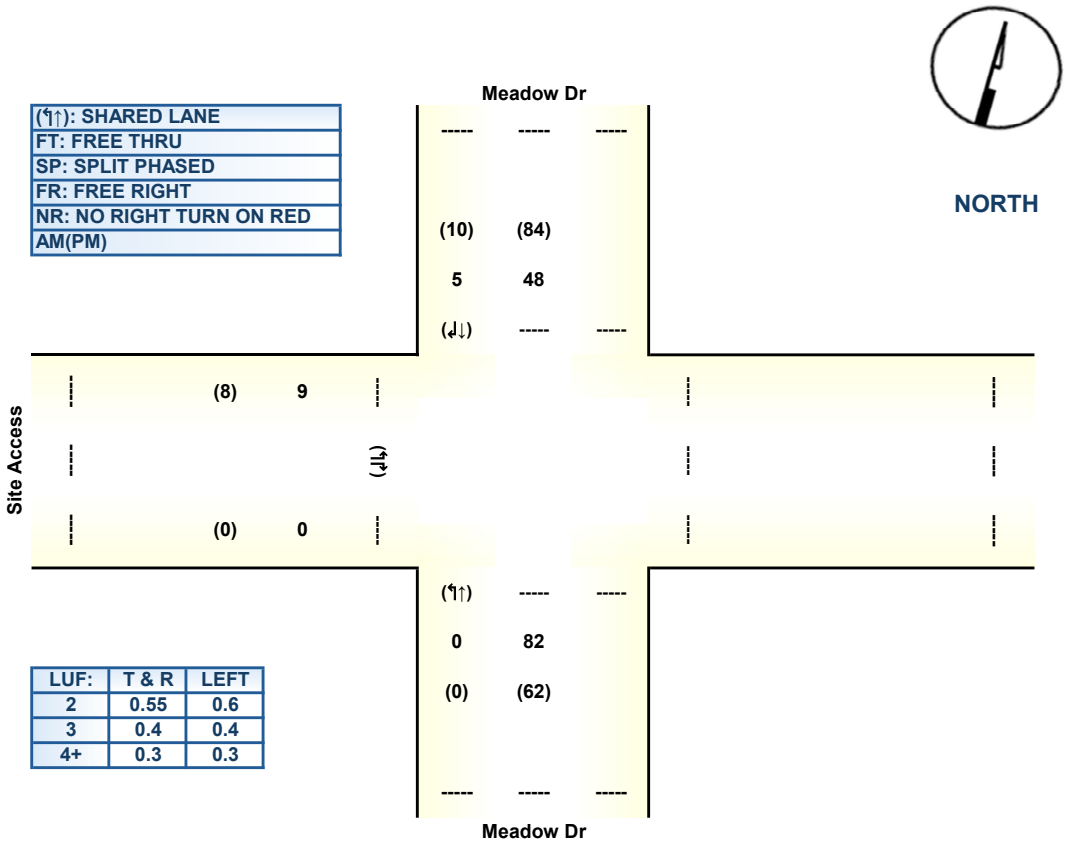
TIME	LANE	PCE ADJUSTMENT	TOTAL VOLUME * LUF	OPPOSING LEFTS * LUF	CRITICAL LANE VOLUME	LEVEL OF SERVICE
AM	NB					
	SB		(33 + 39) * 1		= 72*	
	EB	53 * 1.1 = 58	(58 + 108) * 1		= 166	A
	WB		(93 + 40) * 1	+ 53 * 1	= 186*	258
PM	NB					
	SB		(19 + 32) * 1		= 51*	
	EB	9 * 1.1 = 10	(10 + 102) * 1		= 112	A
	WB		(134 + 15) * 1	+ 9 * 1	= 158*	209

M:\ 4317

CRITICAL LANE ANALYSIS

INTERSECTION: MEADOW DR AT SITE ACCESS

PREPARED BY: I. HALSALL **CONDITION: FUTURE**



TIME	LANE	PCE ADJUSTMENT	TOTAL VOLUME * LUF	OPPOSING LEFTS * LUF	CRITICAL LANE VOLUME	LEVEL OF SERVICE
AM	NB	0 * 1.1 = 0	82 * 1		= 82*	
	SB		(48 + 5) * 1	+ 0 * 1	= 53	
	EB		9 * 1		= 9*	A 91
	WB					
PM	NB	0 * 1.1 = 0	62 * 1		= 62	
	SB		(84 + 10) * 1	+ 0 * 1	= 94*	
	EB		8 * 1		= 8*	A 102
	WB					

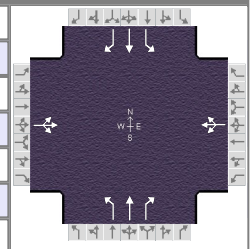
M:\ 4317



APPENDIX I-B

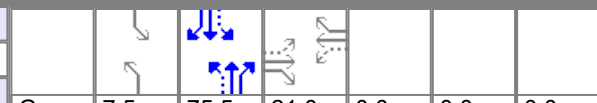
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	AM Peak	PHF	0.93
Urban Street		Analysis Year	Existing	Analysis Period	1> 7:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Ex Am- 120 sec - Pattern 3.xus		
Project Description					

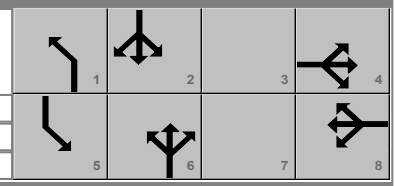


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	11	12	10	43	23	87	10	659	91	47	498	21

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	7.5	75.5	21.0	0.0	0.0	0.0
Yellow	3.5	5.5	4.0	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	11	12	10	43	23	87	10	659	91	47	498	21
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2			2		2	2	2	2	2	2
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)		1.00			1.00			1.00			1.00	
Lane Width (*W*), ft		16.0			11.0		11.0	11.0	11.0	12.0	12.0	12.0
Turn Bay Length, ft		0			0		200	0	200	200	0	200
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	50	50	50	50	50	50

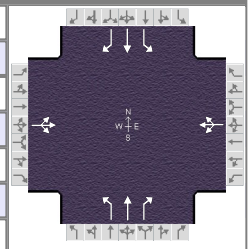
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		26.0		26.0	12.0	82.0	12.0	82.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.5	3.5	5.5
Red Clearance Interval (R_c), s		1.0		1.0	1.0	1.0	1.0	1.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		7.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

Copyright © 2026 University of Florida, All Rights Reserved.

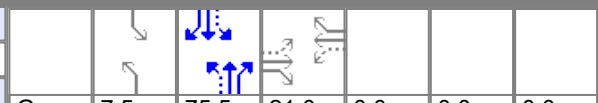
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	AM Peak	PHF	0.93
Urban Street		Analysis Year	Existing	Analysis Period	1> 7:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Ex Am- 120 sec - Pattern 3.xus		
Project Description					

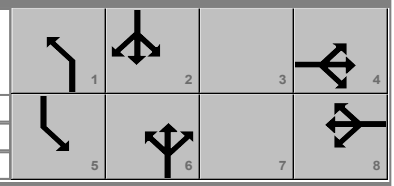


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	11	12	10	43	23	87	10	659	91	47	498	21

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	7.5	75.5	21.0	0.0	0.0	0.0
Yellow	3.5	5.5	4.0	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		8.0		8.0	1.1	3.0	1.1	3.0
Phase Duration, s		26.0		26.0	12.0	82.0	12.0	82.0
Change Period, ($Y+R_c$), s		5.0		5.0	4.5	6.5	4.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s		3.9		13.0	2.2		3.0	
Green Extension Time (g_e), s		0.4		0.2	0.0	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.01	0.00		0.07	

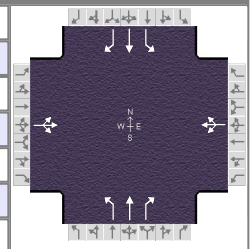
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h		35			165		11	709	98	51	535	23
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1640			1587		1781	1870	1585	1781	1870	1585
Queue Service Time (g_s), s		0.0			6.2		0.2	25.9	2.8	1.0	17.0	0.6
Cycle Queue Clearance Time (g_c), s		1.9			11.0		0.2	25.9	2.8	1.0	17.0	0.6
Green Ratio (*g/C*)		0.19			0.19		0.72	0.65	0.65	0.72	0.65	0.65
Capacity (*c*), veh/h		354			343		610	1208	1024	494	1208	1024
Volume-to-Capacity Ratio (*X*)		0.100			0.480		0.018	0.587	0.096	0.102	0.443	0.022
Back of Queue (*Q*), ft/ln (95 th percentile)		40			200		3	381	41	13	268	9
Back of Queue (*Q*), veh/ln (95 th percentile)		1.6			7.9		0.1	15.0	1.6	0.5	10.5	0.3
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00			0.00		0.01	0.00	0.20	0.06	0.00	0.04
Uniform Delay (d_1), s/veh		40.0			43.5		6.4	12.5	8.0	8.7	10.9	7.6
Incremental Delay (d_2), s/veh		0.0			0.4		0.0	2.1	0.2	0.0	1.2	0.0
Initial Queue Delay (d_3), s/veh		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		40.0			43.9		6.4	14.6	8.2	8.7	12.1	7.7
Level of Service (LOS)		D			D		A	B	A	A	B	A
Approach Delay, s/veh / LOS	40.0	D		43.9	D		13.8	B		11.7	B	
Intersection Delay, s/veh / LOS	16.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

Copyright © 2026 University of Florida, All Rights Reserved.

HCS Signalized Intersection Input Data

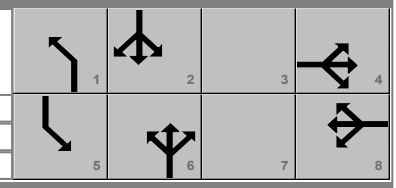
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	PM Peak	PHF	0.92
Urban Street		Analysis Year	Existing	Analysis Period	1> 4:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Ex Pm - 120 sec - Pattern 3.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	25	10	13	55	11	68	8	581	46	73	783	17

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.5	75.5	21.0	0.0	0.0	0.0	
Yellow	3.5	5.5	4.0	0.0	0.0	0.0	
Red	1.0	1.0	1.0	0.0	0.0	0.0	



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	25	10	13	55	11	68	8	581	46	73	783	17
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2			2		2	2	2	2	2	2
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)		1.00			1.00			1.00			1.00	
Lane Width (*W*), ft		16.0			11.0		11.0	11.0	11.0	12.0	12.0	12.0
Turn Bay Length, ft		0			0		200	0	200	200	0	200
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	50	50	50	50	50	50

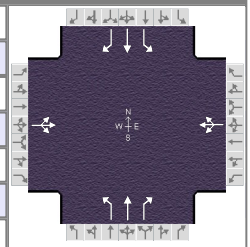
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		26.0		26.0	12.0	82.0	12.0	82.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.5	3.5	5.5
Red Clearance Interval (R_c), s		1.0		1.0	1.0	1.0	1.0	1.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		7.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

Copyright © 2026 University of Florida, All Rights Reserved.

HCS Signalized Intersection Results Summary

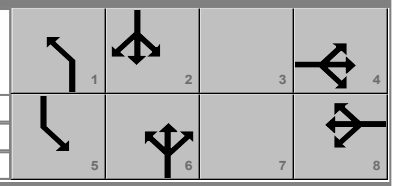
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	PM Peak	PHF	0.92
Urban Street		Analysis Year	Existing	Analysis Period	1> 4:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Ex Pm - 120 sec - Pattern 3.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	25	10	13	55	11	68	8	581	46	73	783	17

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.5	75.5	21.0	0.0	0.0	0.0						
Yellow	3.5	5.5	4.0	0.0	0.0	0.0						
Red	1.0	1.0	1.0	0.0	0.0	0.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		8.0		8.0	1.1	3.0	1.1	3.0
Phase Duration, s		26.0		26.0	12.0	82.0	12.0	82.0
Change Period, ($Y+R_c$), s		5.0		5.0	4.5	6.5	4.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s		5.1		11.9	2.2		3.5	
Green Extension Time (g_e), s		0.3		0.3	0.0	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.00	0.00		0.22	

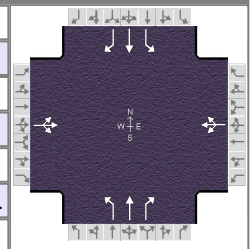
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h		52			146		9	632	50	79	851	18
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1522			1541		1781	1870	1585	1781	1870	1585
Queue Service Time (g_s), s		0.0			6.8		0.2	21.7	1.4	1.5	35.5	0.5
Cycle Queue Clearance Time (g_c), s		3.1			9.9		0.2	21.7	1.4	1.5	35.5	0.5
Green Ratio (*g/C*)		0.19			0.19		0.72	0.65	0.65	0.72	0.65	0.65
Capacity (*c*), veh/h		337			338		406	1208	1024	544	1208	1024
Volume-to-Capacity Ratio (*X*)		0.155			0.431		0.021	0.523	0.049	0.146	0.705	0.018
Back of Queue (*Q*), ft/ln (95 th percentile)		59			178		3	327	20	20	502	7
Back of Queue (*Q*), veh/ln (95 th percentile)		2.3			7.0		0.1	12.9	0.8	0.8	19.8	0.3
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00			0.00		0.01	0.00	0.10	0.10	0.00	0.04
Uniform Delay (d_1), s/veh		40.4			43.1		11.1	11.8	7.8	7.8	14.3	7.6
Incremental Delay (d_2), s/veh		0.1			0.3		0.0	1.6	0.1	0.0	3.5	0.0
Initial Queue Delay (d_3), s/veh		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		40.5			43.4		11.2	13.4	7.9	7.8	17.8	7.6
Level of Service (LOS)		D			D		B	B	A	A	B	A
Approach Delay, s/veh / LOS	40.5	D		43.4	D		13.0	B		16.7	B	
Intersection Delay, s/veh / LOS	18.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

Copyright © 2026 University of Florida, All Rights Reserved.

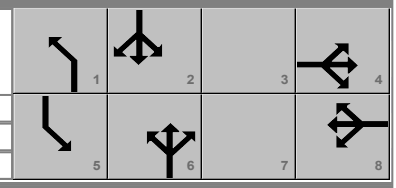
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	AM Peak	PHF	0.93
Urban Street		Analysis Year	Background	Analysis Period	1> 7:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Back Am- 120 sec - Pattern 3....		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	11	12	10	45	23	91	10	686	95	49	518	21

Signal Information												
Cycle, s	120.0	Reference Phase	2									
Offset, s	0	Reference Point	End	Green	7.5	75.5	21.0	0.0	0.0	0.0		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.5	5.5	4.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0		



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	11	12	10	45	23	91	10	686	95	49	518	21
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2			2		2	2	2	2	2	2
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)		1.00			1.00			1.00			1.00	
Lane Width (*W*), ft		16.0			11.0		11.0	11.0	11.0	12.0	12.0	12.0
Turn Bay Length, ft		0			0		200	0	200	200	0	200
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	50	50	50	50	50	50

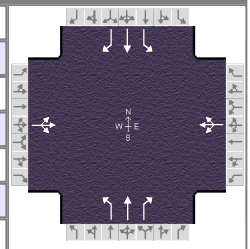
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		26.0		26.0	12.0	82.0	12.0	82.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.5	3.5	5.5
Red Clearance Interval (R_c), s		1.0		1.0	1.0	1.0	1.0	1.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		7.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

Copyright © 2026 University of Florida, All Rights Reserved.

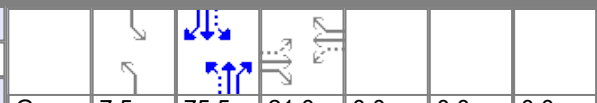
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	AM Peak	PHF	0.93
Urban Street		Analysis Year	Background	Analysis Period	1> 7:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Back Am- 120 sec - Pattern 3....		
Project Description					

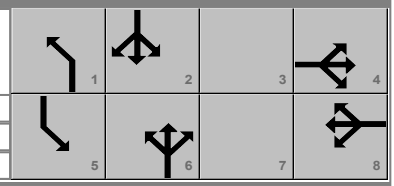


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	11	12	10	45	23	91	10	686	95	49	518	21

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	7.5	75.5	21.0	0.0	0.0	0.0
Yellow	3.5	5.5	4.0	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		8.0		8.0	1.1	3.0	1.1	3.0
Phase Duration, s		26.0		26.0	12.0	82.0	12.0	82.0
Change Period, ($Y+R_c$), s		5.0		5.0	4.5	6.5	4.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s		3.9		13.5	2.2		3.0	
Green Extension Time (g_e), s		0.4		0.2	0.0	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.02	0.00		0.07	

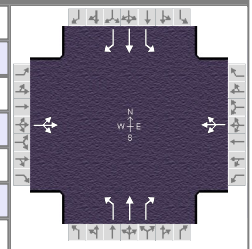
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h		35			171		11	738	102	53	557	23
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1626			1584		1781	1870	1585	1781	1870	1585
Queue Service Time (g_s), s		0.0			6.9		0.2	27.7	2.9	1.0	18.0	0.6
Cycle Queue Clearance Time (g_c), s		1.9			11.5		0.2	27.7	2.9	1.0	18.0	0.6
Green Ratio (*g/C*)		0.19			0.19		0.72	0.65	0.65	0.72	0.65	0.65
Capacity (*c*), veh/h		352			342		595	1208	1024	476	1208	1024
Volume-to-Capacity Ratio (*X*)		0.101			0.500		0.018	0.611	0.100	0.111	0.461	0.022
Back of Queue (*Q*), ft/ln (95 th percentile)		40			207		3	402	42	13	281	9
Back of Queue (*Q*), veh/ln (95 th percentile)		1.6			8.2		0.1	15.8	1.7	0.5	11.1	0.3
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00			0.00		0.01	0.00	0.21	0.07	0.00	0.04
Uniform Delay (d_1), s/veh		40.0			43.7		6.6	12.9	8.0	9.2	11.1	7.6
Incremental Delay (d_2), s/veh		0.0			0.4		0.0	2.3	0.2	0.0	1.3	0.0
Initial Queue Delay (d_3), s/veh		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		40.0			44.2		6.6	15.2	8.2	9.2	12.4	7.7
Level of Service (LOS)		D			D		A	B	A	A	B	A
Approach Delay, s/veh / LOS	40.0	D		44.2	D		14.2	B		11.9	B	
Intersection Delay, s/veh / LOS	16.9						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

Copyright © 2026 University of Florida, All Rights Reserved.

HCS Signalized Intersection Input Data

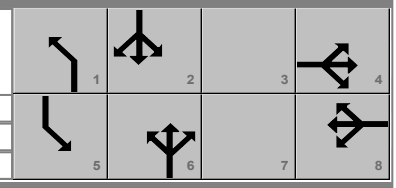
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	PM Peak	PHF	0.92
Urban Street		Analysis Year	Background	Analysis Period	1> 4:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Back Pm - 120 sec - Pattern…		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	25	10	13	57	11	71	8	602	48	76	815	17

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.5	75.5	21.0	0.0	0.0	0.0						
Yellow	3.5	5.5	4.0	0.0	0.0	0.0						
Red	1.0	1.0	1.0	0.0	0.0	0.0						



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	25	10	13	57	11	71	8	602	48	76	815	17
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2			2		2	2	2	2	2	2
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)		1.00			1.00			1.00			1.00	
Lane Width (*W*), ft		16.0			11.0		11.0	11.0	11.0	12.0	12.0	12.0
Turn Bay Length, ft		0			0		200	0	200	200	0	200
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	50	50	50	50	50	50

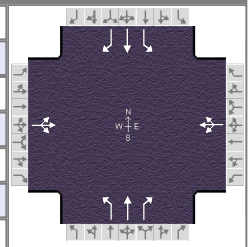
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		26.0		26.0	12.0	82.0	12.0	82.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.5	3.5	5.5
Red Clearance Interval (R_c), s		1.0		1.0	1.0	1.0	1.0	1.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		7.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

Copyright © 2026 University of Florida, All Rights Reserved.

HCS Signalized Intersection Results Summary

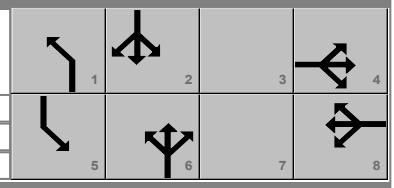
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	PM Peak	PHF	0.92
Urban Street		Analysis Year	Background	Analysis Period	1> 4:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Back Pm - 120 sec - Pattern…		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	25	10	13	57	11	71	8	602	48	76	815	17

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.5	75.5	21.0	0.0	0.0	0.0	
Yellow	3.5	5.5	4.0	0.0	0.0	0.0	
Red	1.0	1.0	1.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		8.0		8.0	1.1	3.0	1.1	3.0
Phase Duration, s		26.0		26.0	12.0	82.0	12.0	82.0
Change Period, ($Y+R_c$), s		5.0		5.0	4.5	6.5	4.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s		5.1		12.3	2.2		3.6	
Green Extension Time (g_e), s		0.3		0.3	0.0	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.01	0.00		0.25	

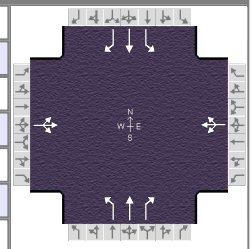
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h		52			151		9	654	52	83	886	18
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1510			1540		1781	1870	1585	1781	1870	1585
Queue Service Time (g_s), s		0.0			7.2		0.2	22.9	1.4	1.6	38.2	0.5
Cycle Queue Clearance Time (g_c), s		3.1			10.3		0.2	22.9	1.4	1.6	38.2	0.5
Green Ratio (*g/C*)		0.19			0.19		0.72	0.65	0.65	0.72	0.65	0.65
Capacity (*c*), veh/h		335			338		385	1208	1024	529	1208	1024
Volume-to-Capacity Ratio (*X*)		0.156			0.448		0.023	0.542	0.051	0.156	0.733	0.018
Back of Queue (*Q*), ft/ln (95 th percentile)		60			185		3	342	21	21	537	7
Back of Queue (*Q*), veh/ln (95 th percentile)		2.3			7.3		0.1	13.5	0.8	0.8	21.1	0.3
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00			0.00		0.02	0.00	0.10	0.11	0.00	0.04
Uniform Delay (d_1), s/veh		40.4			43.3		12.1	12.0	7.8	8.1	14.8	7.6
Incremental Delay (d_2), s/veh		0.1			0.3		0.0	1.7	0.1	0.1	4.0	0.0
Initial Queue Delay (d_3), s/veh		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		40.5			43.6		12.1	13.7	7.9	8.2	18.8	7.6
Level of Service (LOS)		D			D		B	B	A	A	B	A
Approach Delay, s/veh / LOS	40.5	D		43.6	D		13.3	B		17.7	B	
Intersection Delay, s/veh / LOS	18.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

Copyright © 2026 University of Florida, All Rights Reserved.

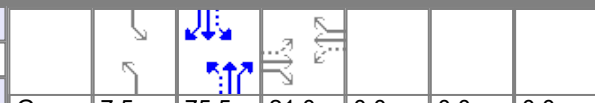
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	AM Peak	PHF	0.93
Urban Street		Analysis Year	Future	Analysis Period	1> 7:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Fu Am- 120 sec - Pattern 3.xus		
Project Description					

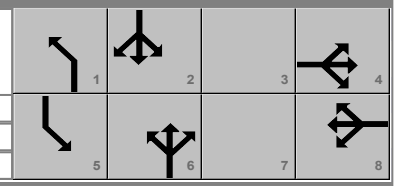


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	11	12	10	48	23	95	10	686	97	51	518	21

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	7.5	75.5	21.0	0.0	0.0	0.0
Yellow	3.5	5.5	4.0	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	11	12	10	48	23	95	10	686	97	51	518	21
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2			2		2	2	2	2	2	2
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)		1.00			1.00			1.00			1.00	
Lane Width (*W*), ft		16.0			11.0		11.0	11.0	11.0	12.0	12.0	12.0
Turn Bay Length, ft		0			0		200	0	200	200	0	200
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	50	50	50	50	50	50

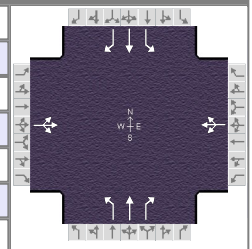
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		26.0		26.0	12.0	82.0	12.0	82.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.5	3.5	5.5
Red Clearance Interval (R_c), s		1.0		1.0	1.0	1.0	1.0	1.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		7.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

Copyright © 2026 University of Florida, All Rights Reserved.

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	AM Peak	PHF	0.93
Urban Street		Analysis Year	Future	Analysis Period	1> 7:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Fu Am- 120 sec - Pattern 3.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	11	12	10	48	23	95	10	686	97	51	518	21

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

							1	2	3	4
Green	7.5	75.5	21.0	0.0	0.0	0.0	5	6	7	8
Yellow	3.5	5.5	4.0	0.0	0.0	0.0				
Red	1.0	1.0	1.0	0.0	0.0	0.0				

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		8.0		8.0	1.1	3.0	1.1	3.0
Phase Duration, s		26.0		26.0	12.0	82.0	12.0	82.0
Change Period, ($Y+R_c$), s		5.0		5.0	4.5	6.5	4.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s		3.9		14.1	2.2		3.0	
Green Extension Time (g_e), s		0.4		0.2	0.0	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.04	0.00		0.08	

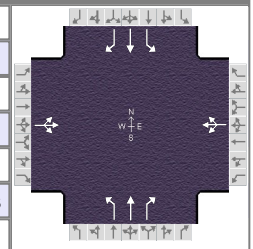
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h		35			178		11	738	104	55	557	23
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1610			1580		1781	1870	1585	1781	1870	1585
Queue Service Time (g_s), s		0.0			7.9		0.2	27.7	3.0	1.0	18.0	0.6
Cycle Queue Clearance Time (g_c), s		1.9			12.1		0.2	27.7	3.0	1.0	18.0	0.6
Green Ratio (*g/C*)		0.19			0.19		0.72	0.65	0.65	0.72	0.65	0.65
Capacity (*c*), veh/h		349			342		595	1208	1024	476	1208	1024
Volume-to-Capacity Ratio (*X*)		0.102			0.523		0.018	0.611	0.102	0.115	0.461	0.022
Back of Queue (*Q*), ft/ln (95 th percentile)		40			216		3	402	44	14	281	9
Back of Queue (*Q*), veh/ln (95 th percentile)		1.6			8.5		0.1	15.8	1.7	0.6	11.1	0.3
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00			0.00		0.01	0.00	0.22	0.07	0.00	0.04
Uniform Delay (d_1), s/veh		40.0			44.0		6.6	12.9	8.1	9.2	11.1	7.6
Incremental Delay (d_2), s/veh		0.0			0.7		0.0	2.3	0.2	0.0	1.3	0.0
Initial Queue Delay (d_3), s/veh		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		40.0			44.7		6.6	15.2	8.3	9.2	12.4	7.7
Level of Service (LOS)		D			D		A	B	A	A	B	A
Approach Delay, s/veh / LOS	40.0	D		44.7	D		14.2	B		11.9	B	
Intersection Delay, s/veh / LOS	17.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

Copyright © 2026 University of Florida, All Rights Reserved.

HCS Signalized Intersection Input Data

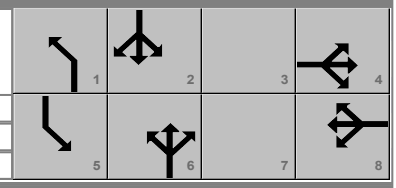
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	PM Peak	PHF	0.92
Urban Street		Analysis Year	Future	Analysis Period	1> 4:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Fu Pm - 120 sec - Pattern 3.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	25	10	13	60	11	74	8	602	51	80	815	17

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.5	75.5	21.0	0.0	0.0	0.0						
Yellow	3.5	5.5	4.0	0.0	0.0	0.0						
Red	1.0	1.0	1.0	0.0	0.0	0.0						



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	25	10	13	60	11	74	8	602	51	80	815	17
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2			2		2	2	2	2	2	2
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)		1.00			1.00			1.00			1.00	
Lane Width (*W*), ft		16.0			11.0		11.0	11.0	11.0	12.0	12.0	12.0
Turn Bay Length, ft		0			0		200	0	200	200	0	200
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	50	50	50	50	50	50

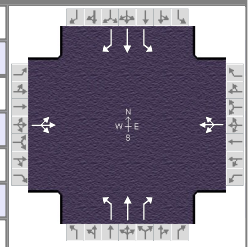
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		26.0		26.0	12.0	82.0	12.0	82.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.5	3.5	5.5
Red Clearance Interval (R_c), s		1.0		1.0	1.0	1.0	1.0	1.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		7.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

Copyright © 2026 University of Florida, All Rights Reserved.

HCS Signalized Intersection Results Summary

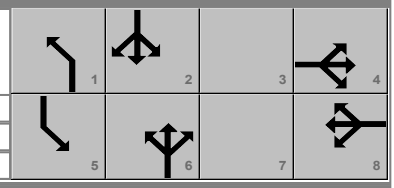
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	I. Halsall	Analysis Date	2/19/2026	Area Type	Other
Jurisdiction	Town of Easton, MD	Time Period	PM Peak	PHF	0.92
Urban Street		Analysis Year	Future	Analysis Period	1> 4:30
Intersection	MD 322 @ MD 334	File Name	MD 322 @ MD 334 Fu Pm - 120 sec - Pattern 3.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	25	10	13	60	11	74	8	602	51	80	815	17

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.5	75.5	21.0	0.0	0.0	0.0	
Yellow	3.5	5.5	4.0	0.0	0.0	0.0	
Red	1.0	1.0	1.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		8.0		8.0	1.1	3.0	1.1	3.0
Phase Duration, s		26.0		26.0	12.0	82.0	12.0	82.0
Change Period, ($Y+R_c$), s		5.0		5.0	4.5	6.5	4.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s		5.2		12.8	2.2		3.7	
Green Extension Time (g_e), s		0.4		0.3	0.0	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.01	0.00		0.29	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h		52			158		9	654	55	87	886	18
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1496			1539		1781	1870	1585	1781	1870	1585
Queue Service Time (g_s), s		0.0			7.7		0.2	22.9	1.5	1.7	38.2	0.5
Cycle Queue Clearance Time (g_c), s		3.2			10.8		0.2	22.9	1.5	1.7	38.2	0.5
Green Ratio (*g/C*)		0.19			0.19		0.72	0.65	0.65	0.72	0.65	0.65
Capacity (*c*), veh/h		332			337		385	1208	1024	529	1208	1024
Volume-to-Capacity Ratio (*X*)		0.157			0.467		0.023	0.542	0.054	0.164	0.733	0.018
Back of Queue (*Q*), ft/ln (95 th percentile)		60			194		3	342	22	23	537	7
Back of Queue (*Q*), veh/ln (95 th percentile)		2.3			7.6		0.1	13.5	0.9	0.9	21.1	0.3
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00			0.00		0.02	0.00	0.11	0.11	0.00	0.04
Uniform Delay (d_1), s/veh		40.4			43.5		12.1	12.0	7.8	8.2	14.8	7.6
Incremental Delay (d_2), s/veh		0.1			0.4		0.0	1.7	0.1	0.1	4.0	0.0
Initial Queue Delay (d_3), s/veh		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		40.5			43.8		12.1	13.7	7.9	8.2	18.8	7.6
Level of Service (LOS)		D			D		B	B	A	A	B	A
Approach Delay, s/veh / LOS	40.5	D		43.8	D		13.3	B		17.6	B	
Intersection Delay, s/veh / LOS	18.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

Copyright © 2026 University of Florida, All Rights Reserved.



APPENDIX I-C

HCS Two-Way Stop-Control Report

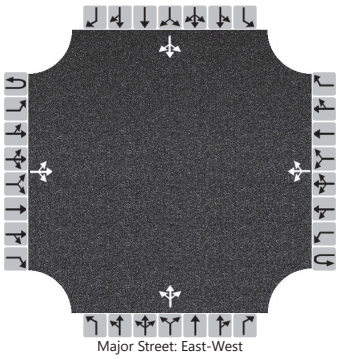
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Existing AM
Intersection Orientation	East-West
Project Description	4317

Site Information

Intersection	MD 334 (Port St) @ Meadow Dr
Jurisdiction	Town of Easton, MD
East/West Street	MD 334
North/South Street	Meadow Dr
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	128	26		21	108	1		42	0	40		0	0	1
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				26					100				1	
Capacity, c (veh/h)		1446				1380					696				914	
v/c Ratio		0.00				0.02					0.14				0.00	
95% Queue Length, Q_{95} (veh)		0.0				0.1					0.5				0.0	
95% Queue Length, Q_{95} (ft)		0.0				2.5					12.8				0.0	
Control Delay (s/veh)		7.5	0.0	0.0		7.7	0.2	0.2			11.0				8.9	
Level of Service (LOS)		A	A	A		A	A	A			B				A	
Approach Delay (s/veh)	0.0				1.4				11.0				8.9			
Approach LOS	A				A				B				A			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

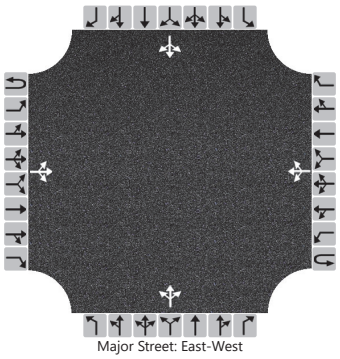
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Existing PM
Intersection Orientation	East-West
Project Description	4317

Site Information

Intersection	MD 334 (Port St) @ Meadow Dr
Jurisdiction	Town of Easton, MD
East/West Street	MD 334
North/South Street	Meadow Dr
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	72	40		43	111	1		30	1	31		2	1	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2				45					65				3	
Capacity, c (veh/h)		1466				1466					753				580	
v/c Ratio		0.00				0.03					0.09				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.1					0.3				0.0	
95% Queue Length, Q_{95} (ft)		0.0				2.5					7.7				0.0	
Control Delay (s/veh)		7.5	0.0	0.0		7.5	0.2	0.2			10.2				11.2	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.1				2.3				10.2				11.2			
Approach LOS	A				A				B				B			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

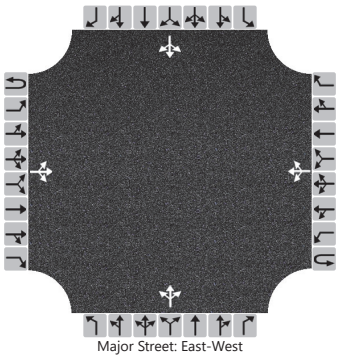
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Background AM
Intersection Orientation	East-West
Project Description	4317

Site Information

Intersection	MD 334 (Port St) @ Meadow Dr
Jurisdiction	Town of Easton, MD
East/West Street	MD 334
North/South Street	Meadow Dr
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	133	26		21	112	1		42	0	40		0	0	1
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

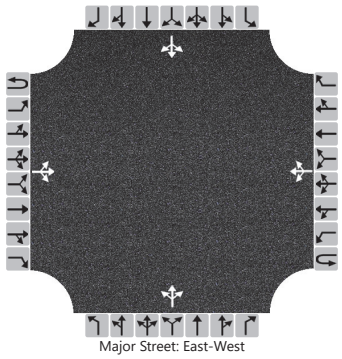
Flow Rate, v (veh/h)		0				26					100				1	
Capacity, c (veh/h)		1440				1373					686				909	
v/c Ratio		0.00				0.02					0.15				0.00	
95% Queue Length, Q_{95} (veh)		0.0				0.1					0.5				0.0	
95% Queue Length, Q_{95} (ft)		0.0				2.5					12.8				0.0	
Control Delay (s/veh)		7.5	0.0	0.0		7.7	0.2	0.2			11.1				9.0	
Level of Service (LOS)		A	A	A		A	A	A			B				A	
Approach Delay (s/veh)	0.0				1.3				11.1				9.0			
Approach LOS	A				A				B				A			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	I. Halsall	Intersection	MD 334 (Port St) @ Meadow Dr
Agency/Co.	Traffic Concepts, Inc.	Jurisdiction	Town of Easton, MD
Date Performed	2/17/2026	East/West Street	MD 334
Analysis Year	2026	North/South Street	Meadow Dr
Time Analyzed	Background PM	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	4317		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	75	40		43	115	1		30	1	31		2	1	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2				45					65				3	
Capacity, c (veh/h)		1461				1462					746				574	
v/c Ratio		0.00				0.03					0.09				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.1					0.3				0.0	
95% Queue Length, Q_{95} (ft)		0.0				2.5					7.7				0.0	
Control Delay (s/veh)		7.5	0.0	0.0		7.5	0.2	0.2			10.3				11.3	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.1				2.2				10.3				11.3			
Approach LOS	A				A				B				B			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

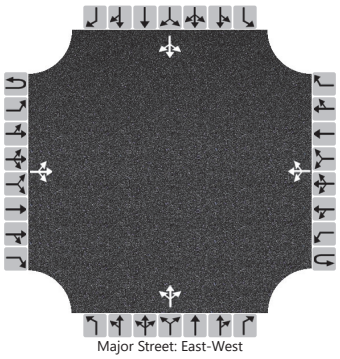
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Future AM
Intersection Orientation	East-West
Project Description	4317

Site Information

Intersection	MD 334 (Port St) @ Meadow Dr
Jurisdiction	Town of Easton, MD
East/West Street	MD 334
North/South Street	Meadow Dr
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	133	30		22	112	1		49	0	42		0	0	1
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				27					111				1	
Capacity, c (veh/h)		1440				1368					675				909	
v/c Ratio		0.00				0.02					0.16				0.00	
95% Queue Length, Q_{95} (veh)		0.0				0.1					0.6				0.0	
95% Queue Length, Q_{95} (ft)		0.0				2.5					15.4				0.0	
Control Delay (s/veh)		7.5	0.0	0.0		7.7	0.2	0.2			11.4				9.0	
Level of Service (LOS)		A	A	A		A	A	A			B				A	
Approach Delay (s/veh)	0.0				1.4				11.4				9.0			
Approach LOS	A				A				B				A			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

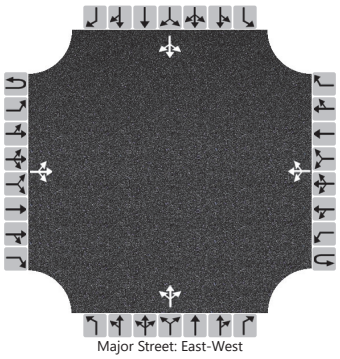
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Future PM
Intersection Orientation	East-West
Project Description	4317

Site Information

Intersection	MD 334 (Port St) @ Meadow Dr
Jurisdiction	Town of Easton, MD
East/West Street	MD 334
North/South Street	Meadow Dr
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	75	47		46	115	1		36	1	33		2	1	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2				48					73				3	
Capacity, c (veh/h)		1461				1453					728				562	
v/c Ratio		0.00				0.03					0.10				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.1					0.3				0.0	
95% Queue Length, Q_{95} (ft)		0.0				2.5					7.7				0.0	
Control Delay (s/veh)		7.5	0.0	0.0		7.6	0.3	0.3			10.5				11.4	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)		0.1				2.3				10.5				11.4		
Approach LOS		A				A				B				B		

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

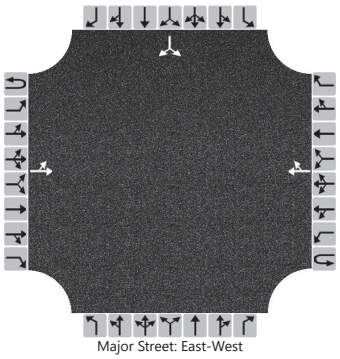
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Existing AM
Intersection Orientation	East-West
Project Description	4317

Site Information

Intersection	MD 334 (Port St) @ Jowite St
Jurisdiction	Town of Easton, MD
East/West Street	MD 334
North/South Street	Jowite St
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		53	102				88	40						33		39
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

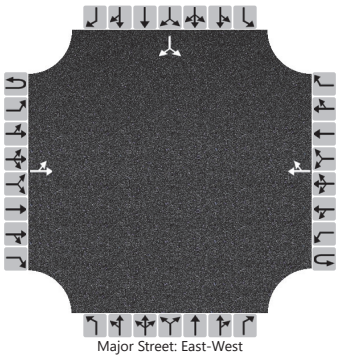
Flow Rate, v (veh/h)		62													85	
Capacity, c (veh/h)		1424													738	
v/c Ratio		0.04													0.11	
95% Queue Length, Q_{95} (veh)		0.1													0.4	
95% Queue Length, Q_{95} (ft)		2.6													10.2	
Control Delay (s/veh)		7.6	0.4												10.5	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)	2.8												10.5			
Approach LOS	A												B			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	I. Halsall	Intersection	MD 334 (Port St) @ Jowite St
Agency/Co.	Traffic Concepts, Inc.	Jurisdiction	Town of Easton, MD
Date Performed	2/17/2026	East/West Street	MD 334
Analysis Year	2026	North/South Street	Jowite St
Time Analyzed	Existing PM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	4317		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		9	96				126	15						19		32
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10													55	
Capacity, c (veh/h)		1421													820	
v/c Ratio		0.01													0.07	
95% Queue Length, Q_{95} (veh)		0.0													0.2	
95% Queue Length, Q_{95} (ft)		0.0													5.1	
Control Delay (s/veh)		7.6	0.1												9.7	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	0.7												9.7			
Approach LOS	A												A			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

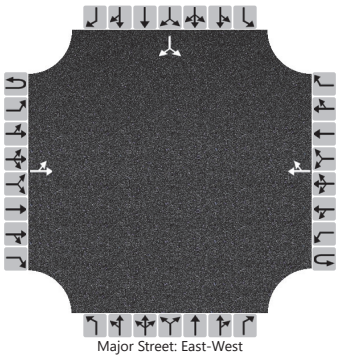
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Background AM
Intersection Orientation	East-West
Project Description	4317

Site Information

Intersection	MD 334 (Port St) @ Jowite St
Jurisdiction	Town of Easton, MD
East/West Street	MD 334
North/South Street	Jowite St
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		53	106				92	40						33		39
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		62													85	
Capacity, c (veh/h)		1419													730	
v/c Ratio		0.04													0.12	
95% Queue Length, Q_{95} (veh)		0.1													0.4	
95% Queue Length, Q_{95} (ft)		2.6													10.2	
Control Delay (s/veh)		7.7	0.4												10.6	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)	2.8												10.6			
Approach LOS	A												B			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

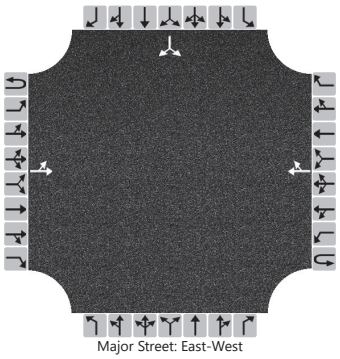
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Background PM
Intersection Orientation	East-West
Project Description	4317

Site Information

Intersection	MD 334 (Port St) @ Jowite St
Jurisdiction	Town of Easton, MD
East/West Street	MD 334
North/South Street	Jowite St
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		9	100				131	15						19		32
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10													55	
Capacity, c (veh/h)		1415													812	
v/c Ratio		0.01													0.07	
95% Queue Length, Q_{95} (veh)		0.0													0.2	
95% Queue Length, Q_{95} (ft)		0.0													5.1	
Control Delay (s/veh)		7.6	0.1												9.8	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	0.7												9.8			
Approach LOS	A												A			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

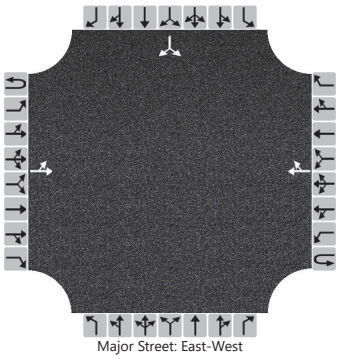
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Future AM
Intersection Orientation	East-West
Project Description	4317

Site Information

Intersection	MD 334 (Port St) @ Jowite St
Jurisdiction	Town of Easton, MD
East/West Street	MD 334
North/South Street	Jowite St
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		53	108				93	40						33		39
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		62													85	
Capacity, c (veh/h)		1417													728	
v/c Ratio		0.04													0.12	
95% Queue Length, Q_{95} (veh)		0.1													0.4	
95% Queue Length, Q_{95} (ft)		2.6													10.2	
Control Delay (s/veh)		7.7	0.4												10.6	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)	2.8												10.6			
Approach LOS	A												B			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

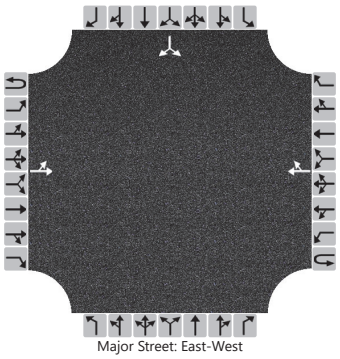
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Future PM
Intersection Orientation	East-West
Project Description	4317

Site Information

Intersection	MD 334 (Port St) @ Jowite St
Jurisdiction	Town of Easton, MD
East/West Street	MD 334
North/South Street	Jowite St
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		9	102				134	15						19		32
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10													55	
Capacity, c (veh/h)		1411													807	
v/c Ratio		0.01													0.07	
95% Queue Length, Q_{95} (veh)		0.0													0.2	
95% Queue Length, Q_{95} (ft)		0.0													5.1	
Control Delay (s/veh)		7.6	0.1												9.8	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	0.7												9.8			
Approach LOS	A												A			

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

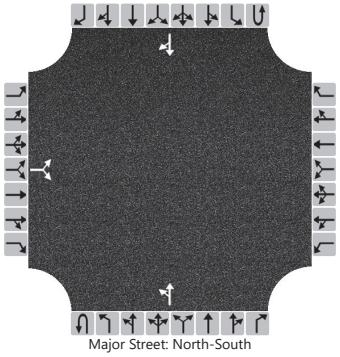
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Future AM
Intersection Orientation	North-South
Project Description	4317

Site Information

Intersection	Meadow Dr @ Site Access
Jurisdiction	Town of Easton, MD
East/West Street	Site Access
North/South Street	Meadow Dr
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		9		0						0	82				48	5
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			10							0						
Capacity, c (veh/h)			846							1540						
v/c Ratio			0.01							0.00						
95% Queue Length, Q_{95} (veh)			0.0							0.0						
95% Queue Length, Q_{95} (ft)			0.0							0.0						
Control Delay (s/veh)			9.3							7.3	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)	9.3								0.0							
Approach LOS	A								A							

Copyright © 2026 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

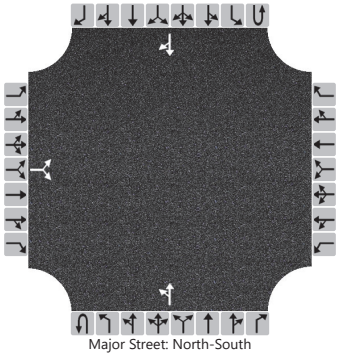
General Information

Analyst	I. Halsall
Agency/Co.	Traffic Concepts, Inc.
Date Performed	2/17/2026
Analysis Year	2026
Time Analyzed	Future PM
Intersection Orientation	North-South
Project Description	4317

Site Information

Intersection	Meadow Dr @ Site Access
Jurisdiction	Town of Easton, MD
East/West Street	Site Access
North/South Street	Meadow Dr
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		8		0						0	62				84	10
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			9							0						
Capacity, c (veh/h)			824							1484						
v/c Ratio			0.01							0.00						
95% Queue Length, Q_{95} (veh)			0.0							0.0						
95% Queue Length, Q_{95} (ft)			0.0							0.0						
Control Delay (s/veh)			9.4							7.4	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)	9.4								0.0							
Approach LOS	A								A							

Copyright © 2026 University of Florida. All Rights Reserved.



APPENDIX II

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

County:	TALBOT		Municipality:	NONE	
Prefix:	MD	Route NO: 334	Suffix:		Mile Point: 0.52
Location:	MD334 (PORT RD)-.10 MI E OF MD322				
Begin Sect:	0.42		End Sect:	1.03	
Station Desc:	MD 322 TO S. WASHINGTON ST				
Func Class:	17-URBAN COLLECTOR		Location ID:	B200006	

Year	AADT	AAWDT	Single Unit	Combination Unit	K Factor	D Factor	North East Split	South West Split	Dir In Peak Hour
2025	3,154	3,444			0	0			0
2024	3,173	3,493			9.23	51.4	50.95	49.05	WEST
2023	3,182	3,442			9.23	51.4	50.95	49.05	WEST
2022	3,131	3,321			9.23	51.4	50.95	49.05	WEST
2021	3,110	3,270			9.23	51.4	50.95	49.05	WEST
2020	2,655	2,875			8.27	53.99	51	49	WEST
2019	3,174	3,494			8.27	53.99	51	49	WEST
2018	3,173	3,363			8.27	53.99	51	49	WEST
2017	3,202	3,392			8.27	53.99	51	49	WEST
2016	3,121	3,341			8.27	53.99	51	49	WEST

Note

AADT: Annual Average Daily Traffic is the number of vehicles expected to pass a given location on an average day of the year.

AAWDT: Annual Average Weekday Traffic is the number of vehicles expected to pass a given location on an average Weekday (Monday – Friday).

Single Unit: Percentage of Trucks (FHWA Classes 4 -7).

Combination Unit: Percentage of Trucks (FHWA Classes 8-13).

K Factor: Proportion of Annual Average Daily Traffic occurring in the 30th highest hour volume for Continuous count station and Peak hour volume for Short duration count stations.

D Factor: Percentage of traffic moving in the peak direction during the 30th highest hour volume for Continuous count station and Peak hour volume for Short duration count stations.

North East Split: Percentage of traffic in the North or East Direction.

South West Split: Percentage of traffic in the South or West Direction.

Peak Hour Direction: The direction with largest volume in the peak hour.



APPENDIX III

PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: MD 322 @ MD 334

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: FEBRUARY 5, 2026

WEATHER: CLEAR

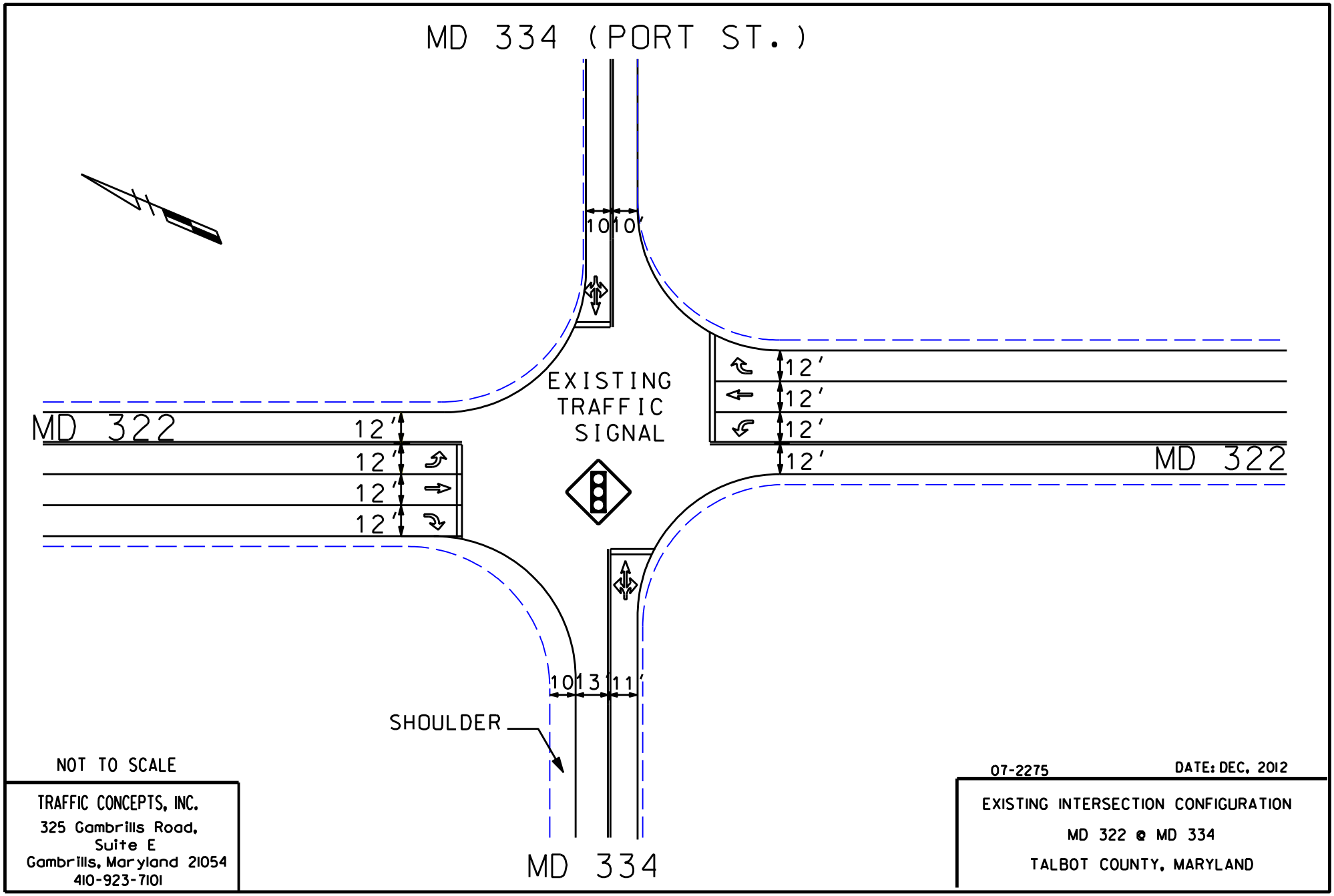
DAY: THURSDAY

CAM

	MD 322 NORTHBOUND				MD 322 SOUTHBOUND				MD 334 EASTBOUND				MD 334 WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15	0	3	110	6	0	5	69	4	0	3	2	3	0	1	0	9	215
7:15-7:30	0	4	132	11	0	9	99	7	0	5	1	6	0	7	1	17	299
7:30-7:45	0	0	177	29	0	8	120	7	0	2	5	2	0	13	4	25	392
7:45-8:00	0	3	177	29	0	13	130	5	0	2	3	3	0	14	6	21	406
8:00-8:15	0	3	162	13	0	12	132	5	0	3	1	3	0	7	6	14	361
8:15-8:30	0	4	143	20	0	14	116	4	0	4	3	2	0	9	7	27	353
8:30-8:45	0	4	148	21	0	13	98	7	0	5	2	7	0	12	7	11	335
8:45-9:00	0	5	176	15	0	22	87	9	0	4	4	6	0	11	7	20	366
AM PEAK HR 7:30-8:30 TOTALS	0	10	659	91	0	47	498	21	0	11	12	10	0	43	23	87	PHF 0.93
PM																	PM
4:00-4:15	0	3	149	10	0	11	195	2	0	8	8	3	0	23	6	10	428
4:15-4:30	0	2	138	4	0	14	164	5	0	5	2	4	0	18	3	18	377
4:30-4:45	0	1	158	12	0	15	215	5	0	8	3	3	0	12	2	23	457
4:45-5:00	0	3	148	12	0	23	183	5	0	5	3	3	0	9	1	15	410
5:00-5:15	0	3	143	14	0	13	204	4	0	10	2	6	0	17	4	16	436
5:15-5:30	0	1	132	8	0	22	181	3	0	2	2	1	0	17	4	14	387
5:30-5:45	0	1	98	7	0	13	147	1	0	2	4	2	0	10	0	15	300
5:45-6:00	0	0	91	9	0	9	124	1	0	2	1	2	0	20	1	19	279
PM PEAK HR 4:30-5:30 TOTALS	0	8	581	46	0	73	783	17	0	25	10	13	0	55	11	68	PHF 0.92

TRAFFIC CONCEPTS, INC.
7525 CONNELLEY DRIVE, SUITE B
HANOVER, MARYLAND 21076
410-760-2911
TRAFFIC@TRAFFIC-CONCEPTS.COM

M:\4317


MD 334 (PORT ST.)
1010'
EXISTING
TRAFFIC
SIGNAL
MD 322
12'
12'
12'
12'
MD 322
12'
12'
12'
12'
1013'
11'
SHOULDER
MD 334
NOT TO SCALE
TRAFFIC CONCEPTS, INC.
325 Gambrills Road,
Suite E
Gambrills, Maryland 21054
410-923-7101
07-2275
DATE: DEC. 2012
EXISTING INTERSECTION CONFIGURATION
MD 322 @ MD 334
TALBOT COUNTY, MARYLAND

PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: MD 334 (PORT ST) @ MEADOW DR

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: FEBRUARY 5, 2026

WEATHER: CLEAR

DAY: THURSDAY

CAM

	MEADOW DR NORTHBOUND				POOL ACCESS SOUTHBOUND				MD 334 EASTBOUND				MD 334 WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15	1	2	0	11	0	0	0	0	0	0	11	2	0	3	7	0	37
7:15-7:30	0	16	0	18	0	0	0	0	0	0	19	2	0	4	11	0	70
7:30-7:45	0	13	0	9	0	0	0	0	0	0	34	6	0	9	27	0	98
7:45-8:00	0	9	0	14	0	0	0	0	0	0	43	8	0	5	32	1	112
8:00-8:15	0	9	0	11	0	0	0	1	0	0	16	8	0	3	18	0	66
8:15-8:30	1	10	0	6	0	0	0	0	0	0	35	4	0	4	31	0	91
8:30-8:45	0	4	0	11	0	0	0	0	0	0	33	2	0	8	28	0	86
8:45-9:00	0	10	0	10	0	0	0	0	0	0	34	8	0	8	26	1	97
AM PEAK HR 7:30-8:30 TOTALS	1	41	0	40	0	0	0	1	0	0	128	26	0	21	108	1	PHF 0.82
PM																	PM
4:00-4:15	0	3	0	6	0	0	0	0	0	0	18	10	0	7	36	0	80
4:15-4:30	0	13	0	9	0	0	1	0	0	0	13	7	0	13	27	0	83
4:30-4:45	0	9	0	7	0	1	0	0	0	1	18	12	0	9	27	0	84
4:45-5:00	0	5	1	9	0	1	0	0	0	1	23	11	0	14	21	1	87
5:00-5:15	0	6	0	5	0	2	0	2	0	2	17	12	0	3	30	0	79
5:15-5:30	0	10	0	6	0	0	0	0	0	0	21	11	0	7	23	0	78
5:30-5:45	0	7	0	8	0	0	0	0	0	0	18	6	0	11	20	0	70
5:45-6:00	0	8	0	6	0	0	0	0	0	0	11	6	0	7	31	0	69
PM PEAK HR 4:00-5:00 TOTALS	0	30	1	31	0	2	1	0	0	2	72	40	0	43	111	1	PHF 0.96

TRAFFIC CONCEPTS, INC.
7525 CONNELLEY DRIVE, SUITE B
HANOVER, MARYLAND 21076
410-760-2911
TRAFFIC@TRAFFIC-CONCEPTS.COM

M:\4317


MD 334 (Port St) @ Meadow Dr
Town of Easton, MD
Google Earth
Image © 2026 Airbus
N

PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: MD 334 @ JOWTIE ST

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: FEBRUARY 5, 2026

WEATHER: CLEAR

DAY: THURSDAY

CAM

	NORTHBOUND				JOWTIE ST SOUTHBOUND				MD 334 EASTBOUND				MD 334 WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15					0	3		0	0	2	21		0		10	1	37
7:15-7:30					0	4		2	0	1	35		0		14	3	59
7:30-7:45					0	1		2	0	1	43		0		35	1	83
7:45-8:00					0	2		0	0	4	53		0		37	5	101
8:00-8:15					0	2		3	0	3	23		0		20	2	53
8:15-8:30					0	11		8	0	15	26		0		25	10	95
8:30-8:45					0	7		15	0	21	23		0		21	17	104
8:45-9:00					0	13		13	0	14	30		0		22	11	103
AM PEAK HR 8:00-9:00 TOTALS	0	0	0	0	0	33	0	39	0	53	102	0	0	0	88	40	PHF 0.85
PM																	PM
4:00-4:15					0	4		14	0	3	21		0		30	6	78
4:15-4:30					0	3		9	0	2	20		0		31	1	66
4:30-4:45					0	7		4	0	0	25		0		31	5	72
4:45-5:00					0	5		5	0	4	30		0		34	3	81
5:00-5:15					0	6		7	0	3	21		0		25	5	67
5:15-5:30					0	6		3	0	1	26		0		25	5	66
5:30-5:45					0	9		7	0	2	24		0		26	8	76
5:45-6:00					0	16		17	0	1	15		0		19	4	72
PM PEAK HR 4:00-5:00 TOTALS	0	0	0	0	0	19	0	32	0	9	96	0	0	0	126	15	PHF 0.92

TRAFFIC CONCEPTS, INC.
7525 CONNELLEY DRIVE, SUITE B
HANOVER, MARYLAND 21076
410-760-2911
TRAFFIC@TRAFFIC-CONCEPTS.COM

M:\4317


MD 334 (Port St) @ Jowite St
Town of Easton, MD
Google Earth
Image © 2026 Airbus
N



APPENDIX IV

TRAFFIC CONCEPTS, INC.
7525 Connelley Drive • Suite B • Hanover, MD 21076 • 410-760-2911

January 22, 2026

Meeting Date:

Attendees: Brian Lopez
Weishi Zhang
Joe Clark
Rick Van Emburgh, Town of Easton
Mark Keeley, Traffic Concepts Inc

RE: Port Street Senior Housing (Multifamily Building) – Town of Easton Traffic Impact Study

SCOPE of SERVICES

TRAFFIC STUDY

Project Description: The purpose of this memorandum is to describe the proposed project and the traffic impact study limits. The proposed project consists of 72 Senior Adult Housing Units – Multifamily.

PEAK HOUR TRIP GENRATION

NEW SITE TRIPS: PEAK HOUR TRIP GENERATION						
	AM			PM		
	IN	OUT	TOTAL	IN	OUT	TOTAL
Senior Adult Housing—Multifamily (252) 72 UNITS	5	9	14	10	8	18
TOTAL PEAK HOUR TRIPS	**14**			**18**		

Source: ITE, Trip Generation Manual, 12th Edition (ITE)

Land Use: Senior Adult Housing—Multifamily (252)
Independent Variable: 60 Dwelling Units

Time Period: Weekday AM - One Hour Between 7 and 9 a.m.
Average Rate: 0.19 / Fitted Curve Equation: T = 0.19(X) + 0.17
Directional Distribution: 34% entering, 66% exiting
Calculated Trip Ends: Average Rate: 14 (Total), 5 (Entry), 9 (Exit)
Fitted Curve: 14 (Total), 5 (Entry), 9 (Exit)

Time Period: Weekday PM - One Hour Between 4 and 6 p.m.
Average Rate: 0.25 / Fitted Curve Equation: T = 0.25(X) + 0.03
Directional Distribution: 56% entering, 44% exiting
Calculated Trip Ends: Average Rate: 18 (Total), 10 (Entry), 8 (Exit)
Fitted Curve: 18 (Total), 10 (Entry), 8 (Exit)

Intersection Study Periods:

- Weekday AM: 7:00 AM to 9:00 AM
- Weekday PM: 4:00 PM to 6:00 PM

Key Intersections:

- MD 334 (Port St) @ Meadow Dr/G. Muphy Community Pool Access (UNSIGNALIZED)
- MD 322 (Easton Pkwy) @ MD 334 (Port St) (SIGNALIZED)
- Port Street @ Jowite Street (UNSIGNALIZED)
- Meadow Drive @ site access UNSIGNALIZED

Methodology:

- All intersections will be analyzed using the Critical Lane Volume Analysis (CLV) and the Highway Capacity Manual (HCM) methodologies.

Background Development Projects:

- Growth Rate to be determined

Design Year: Two Years

Percent Traffic Added to Road Network: Create Exhibit showing actual trips and the percentage of new site generated peak hour trips added to the study area.

SAFETY STUDY

Crash Data: Collect crash data from MDOT SHA at the key intersections. Typically, the crash data is provided for the last three (3) years.

Non-Motorized Inventory: Conduct an inventory of bicycle/pedestrian and transit amenities within the study area.

Gmail

Ivette Halsall <ihalsall@traffic-concepts.com>

Port Street - Senior Housing (72 Unit Multifamily Building)

2 messages

Mark Keeley <mkeeley@traffic-concepts.com> Thu, Jan 22, 2026 at 3:55 PM
To: Rick Van Emburgh <rvanemburgh@eastonmd.gov>, "Richard Baker (SHA)" <RBaker@mdot.maryland.gov>, Henry Dierker <HDierker@mdot.maryland.gov>
Cc: Joe Clark <jclark@ospreypc.com>, Ivette Halsall <ihalsall@traffic-concepts.com>

Rick and Rich/Henry - I have attached traffic scoping information for a new senior housing project in the Town of Easton. The project would create 72 senior housing units. The site is located on a vacant lot on the southeast quadrant of the MD 322 (Easton Parkway) @ Port Street intersection. The project will have access to Meadow Drive (See Attachment). As shown below, the project generates less than 50 peak hour trips and is exempt from the SHA traffic study requirements. However, the Town has requested a study. The study limits are outlined in the attached scope of work.

Please let me know if you have any questions or changes to the study limits. I will be glad to meet with you if necessary.

PEAK HOUR TRIP GENRATION

NEW SITE TRIPS: PEAK HOUR TRIP GENERATION						
	AM			PM		
	IN	OUT	TOTAL	IN	OUT	TOTAL
Senior Adult Housing—Multifamily (252) 72 UNITS	5	9	14	10	8	18
TOTAL PEAK HOUR TRIPS		**14**			**18**	

Source: ITE, Trip Generation Manual, 12th Edition (ITE)

Thanks,
Mark

Mark Keeley, PTP
Senior Project Manager
TRAFFIC CONCEPTS, INC.

Office: 410-760-2911 | Direct: 410-450-3190
www.traffic-concepts.com
mkeeley@traffic-concepts.com
7525 Connelley Drive | Suite B | Hanover, MD 21076

2 attachments

Pic-compressed (1).pdf
195K

2026-1-22_Port Street Scope.pdf
461K

Henry Dierker <HDierker@mdot.maryland.gov> Mon, Feb 2, 2026 at 10:48 AM
To: Mark Keeley <mkeeley@traffic-concepts.com>, Rick Van Emburgh <rvanemburgh@eastonmd.gov>, "Richard Baker (SHA)" <RBaker@mdot.maryland.gov>
Cc: Joe Clark <jclark@ospreypc.com>, Ivette Halsall <ihalsall@traffic-concepts.com>, "Stephanie McFaden (Consultant)" <SMcFaden.consultant@mdot.maryland.gov>, Henry Dierker <HDierker@mdot.maryland.gov>

Mark,

SHA Access Management concurs with the proposed traffic scoping for the subject proposed project.

Henry R. Dierker III
Access Permits Regional Engineer
District Two Traffic

410.810.3244 **office**
410-708-0013 **mobile**
Hdierker@mdot.maryland.gov

Maryland State Highway Administration-District Two
615 Morgnec Road, Chestertown, MD 21620

From: Mark Keeley <mkeeley@traffic-concepts.com>
Sent: Thursday, January 22, 2026 3:55 PM
To: Rick Van Emburgh <rvanemburgh@eastonmd.gov>; Richard Baker (SHA) <RBaker@mdot.maryland.gov>; Henry Dierker <HDierker@mdot.maryland.gov>
Cc: Joe Clark <jclark@ospreypc.com>; Ivette Halsall <ihalsall@traffic-concepts.com>
Subject: Port Street - Senior Housing (72 Unit Multifamily Building)

Caution: CAUTION: Suspicious? Double-check! This email is from an external source. If something seems unusual, even from someone you know, verify directly. Forward suspicious emails directly to Email Abuse (abuse@mdot.maryland.gov) or call the MDOT Service Desk at 410-768-7181 for assistance.

Rick and Rich/Henry - I have attached traffic scoping information for a new senior housing project in the Town of Easton. The project would create 72 senior housing units. The site is located on a vacant lot on the southeast quadrant of the MD 322 (Easton Parkway) @ Port Street intersection. The project will have access to Meadow Drive (See Attachment). As shown below, the project generates less than 50 peak hour trips and is exempt from the SHA traffic study requirements. However, the Town has requested a study. The study limits are outlined in the attached scope of work.

Please let me know if you have any questions or changes to the study limits. I will be glad to meet with you if necessary.

PEAK HOUR TRIP GENRATION

NEW SITE TRIPS: PEAK HOUR TRIP GENERATION						
	AM			PM		
	IN	OUT	TOTAL	IN	OUT	TOTAL
Senior Adult Housing—Multifamily (252) 72 UNITS	5	9	14	10	8	18
TOTAL PEAK HOUR TRIPS		**14**			**18**	

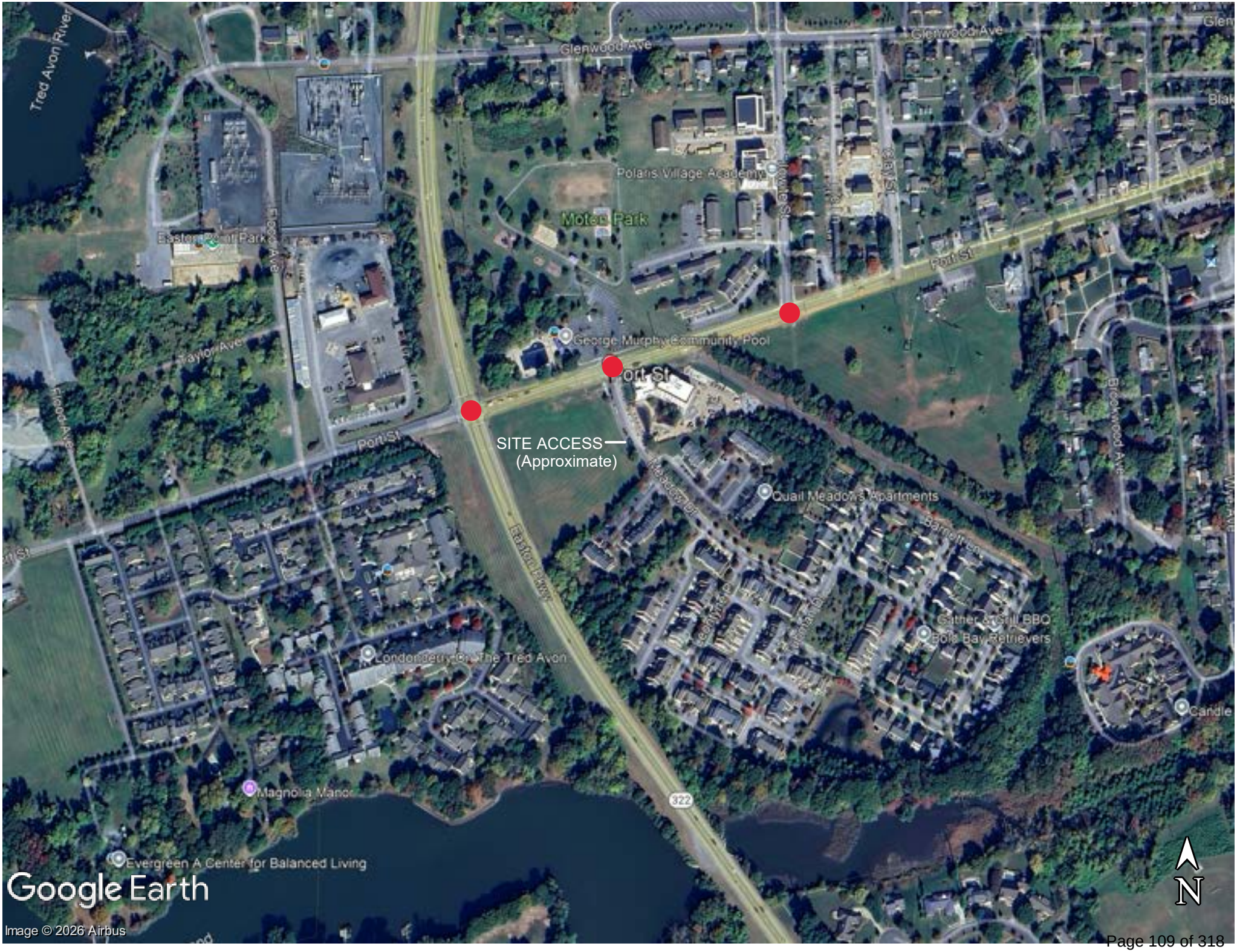
Source: ITE, Trip Generation Manual, 12th Edition (ITE)

Thanks,

Mark

Mark Keeley, PTP
Senior Project Manager
TRAFFIC CONCEPTS, INC.

Office: 410-760-2911 | Direct: 410-450-3190
www.traffic-concepts.com
mkeeley@traffic-concepts.com
7525 Connelley Drive | Suite B | Hanover, MD 21076


Tred Avon River
Glenwood Ave
Polaris Village Academy
Motor Park
Eastern Shore Park
Taylor Ave
George Murphy Community Pool
Port St
SITE ACCESS
(Approximate)
Quail Meadows Apartments
Eastern Bay
Londonderry On The Tred Avon
Magnolia Manor
322
Evergreen A Center for Balanced Living
Google Earth
Image © 2026 Airbus
N

Real Property Data Search ( )
Search Result for TALBOT COUNTY

View Map **No Ground Rent Redemption on File** **No Ground Rent Registration on File**

Special Tax Recapture: None

Account Number: **District -** 01 **Account Identifier -** 084100

Owner Information

Owner Name: SIMPSON W REMBERT TRUSTEE **Use:** COMMERCIAL
Principal Residence: NO
Mailing Address: 52B DAVIS LN **Deed Reference:** /02753/ 00320
EASTON MD 21601-

Location & Structure Information

Premises Address: PORT ST **Legal Description:** LOT 4 - 3.497 AC
EASTON 21601-0000 W/S POINT ROAD
PAPERMILL PARK

Map:	Grid:	Parcel:	Neighborhood:	Subdivision:	Section:	Block:	Lot:	Assessment Year:	Plat No:
0034	0015	0077	10500.21	0000			4	2025	**Plat Ref:** 3/ 61E

Town: EASTON

Primary Structure Built	Above Grade Living Area	Finished Basement Area	Property Land Area	County Use
			3.4900 AC	000000

Stories	Basement	Type	Exterior	Quality	Full/Half Bath	Garage	Last Notice of Major Improvements
			/				

Value Information

	Base Value	Value	Phase-in Assessments	
		As of 01/01/2025	As of 07/01/2025	As of 07/01/2026
Land:	202,900	300,900		
Improvements	0	0		
Total:	202,900	300,900	235,567	268,233
Preferential Land:	0	0		

Transfer Information

Seller: SIMPSON W REMBERT TRUSTEE **Date:** 10/02/2020 **Price:** $0
Type: NON-ARMS LENGTH OTHER **Deed1:** /02753/ 00320 **Deed2:**

Seller: SIMPSON W REMBERT **Date:** 10/03/2018 **Price:** $0
Type: NON-ARMS LENGTH OTHER **Deed1:** /02568/ 00169 **Deed2:**

Seller: **Date:** **Price:** $0
Type: NON-ARMS LENGTH OTHER **Deed1:** /00656/ 00932 **Deed2:**

Exemption Information

Partial Exempt Assessments:	Class	07/01/2025	07/01/2026
County:	000	0.00	
State:	000	0.00	
Municipal:	000	0.00|0.00	0.00|0.00

Special Tax Recapture: None

Homestead Application Information

Homestead Application Status: No Application

Homeowners' Tax Credit Application Information

Homeowners' Tax Credit Application Status: No Application **Date:**



APPENDIX V

Route 1 Ruta 1

Easton Shuttle

Kent Island - Grasonville - Centreville to Easton

1 DEVIATED ROUTE

		AM	AM	AM	PM	PM
Kramer Center	Centreville	-	6:45	-	-	-
DP: Grasonville Sr Ctr	Grasonville	-	7:10	-	-	-
Kent Towne (Dollar Tree)	Chester	-	7:22	-	-	-
Harbor View	Kent Island	-	-	-	-	-
Acme	Kent Island	-	7:26	-	-	-
AP: Percy Thomas Ctr	Stevensville	-	-	-	-	-
DP: Percy Thomas Ctr	Stevensville	-	7:33	-	-	-
Terrapin Grove	Kent Island	-	7:35	-	-	-
Kmart	Stevensville	-	7:40	-	-	-
Food Lion	Kent Island	-	7:42	-	-	-
Kent Towne (Dollar Tree)	Chester	-	7:46	-	-	-
Stevensville Park & Ride	Stevensville	7:10	-	-	-	-
Kent Towne (Dollar Tree)	Chester	7:16	-	-	-	-
AR: Grasonville Sr Ctr	Grasonville	7:27	-	-	-	1:43
DP: Grasonville Sr Ctr	Grasonville	7:30	8:00	-	12:00	2:07
AR: Chesapeake College	Wye Mills	7:45	-	-	-	-
DP: Chesapeake College	Wye Mills	7:50	8:15	-	12:15	2:22
Country School	Easton	8:10	-	-	-	-
AR: Walmart	Easton	-	8:37	-	-	2:46
DP: Walmart	Easton	-	8:40	-	-	2:46
Auto Zone (Near Ches Ctr)	Easton	8:12	-	-	-	2:50
Sts.Peter & Paul School	Easton	-	-	-		2:52
Sts.Peter & Paul School	Easton	8:15	-	-	12:45	3:10
Country School	Easton	-	-	-		3:15
Memorial Hospital	Easton	-	-		* *	-
Davita Dialysis/Idewild Ave	Easton	-	-		* *	-
AR: Walmart	Easton	8:21	-	-	1:05	3:25
DP: Walmart	Easton	8:21	-	-	1:06	3:25
AR: Chesapeake College	Wye Mills	-	-	9:45	1:30	3:46
DP: Chesapeake College	Wye Mills	**	9:00	9:50	1:30	3:50
AR: Grasonville Senior Cntr	Grasonville	D	9:15	-	1:45	4:05
DP: Grasonville Senior Ctr	Grasonville	-	9:30	-	-	4:05
Stevensville Park & Ride	Stevensville	-	-	-	-	4:17
Kent Towne (Dollar Tree)	Chester	-	-	-	-	D
Food Lion	Centreville	-	-	-	-	-
Kramer Center	Centreville	-	-	10:05	-	-

No Pick up Fridays 3:20 at Country School
** Call in, D - Drop off only
- No bus service at this time
Route in service M-F, 6:45AM-4:30 PM
Route in service August 25-June 15
DEVIATED ROUTE: Buses deviate 3/4 mile around route. Must provide 2 hour advance notice. Call for rate information.
Schedule in yellow only operates August 25th - June 13th

Queen Anne's County County Ride

Route 5 Ruta 5

Denton-Easton

5 **DEVIATED ROUTE**

		AM	AM	AM	PM	PM	PM	PM	PM
Walmart	Denton	7:20	–	**	–	**	–	–	–
Village Circle	Denton	7:30	–	10:15	–	12:35	–	–	–
HAPS Bldg	Denton	7:35	9:40	10:20	12:00	12:40	1:40	2:00	3:00
Town Parking Lot	Denton	7:45	9:45	10:25	12:05	12:45	1:45	2:05	3:05
Walmart	Easton	8:10	10:15	11:00	12:25	1:15	2:15	2:35	4:30
High & Choptank	Easton	8:15	**	–	–	–	–	3:00	–
Goldsborough & Calvert	Easton	8:20	**	–	–	–	–	3:10	–
Memorial Hospital	Easton	8:35	10:25	**	**	–	–	–	–
Walmart	Easton	8:45	–	–	12:45	1:15	2:15	3:30	–
Walmart	Denton	**	–	–	**	**	2:55	**	–
HAPS Bldg	Denton	9:10	–	–	1:10	1:40	3:00	3:55	–
Town Parking Lot	Denton	9:15	–	–	1:15	1:45	–	–	5:15
Walmart	Easton	–	–	11:35	–	–	–	–	–
Bethlehem Store	Bethlehem	–	–	**	–	–	–	–	–
Preston Store	Preston	–	–	11:50	–	–	–	–	–
Town Parking Lot	Federalsburg	–	–	12:00	–	–	–	–	–
HAPS Bldg	Denton	–	–	12:25	–	–	–	–	–
Town Parking Lot	Denton	–	–	12:30	–	–	–	–	–

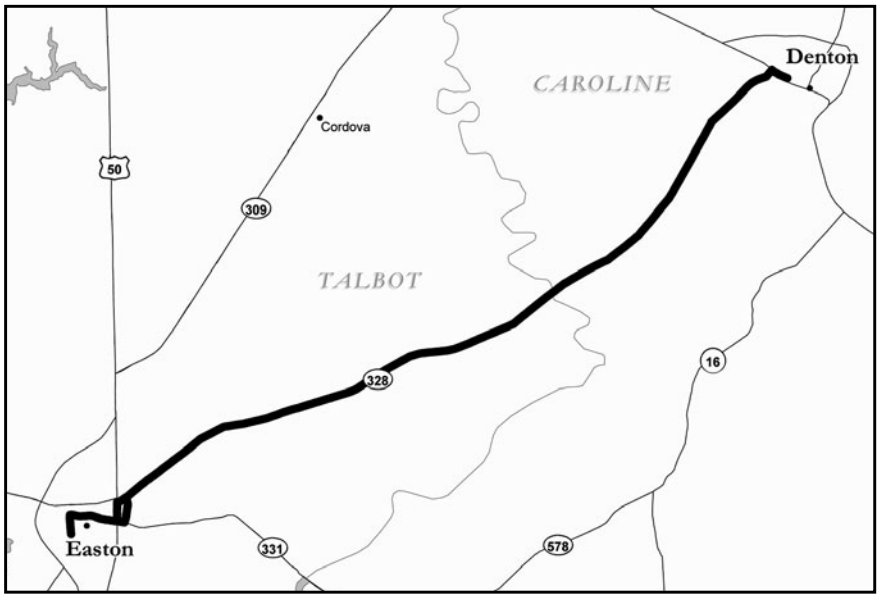
Walmart Transfer to Route 4,5,7,9,11,C & D

** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-479-3867

– No bus service at this time

Route in service M-F, 7:35 AM-5:15 PM

DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Must provide 2 hour advance notice. Call for rate information.



DELMARVA COMMUNITY SERVICES, INC.
DELMARVA COMMUNITY TRANSIT

Route 9 Ruta 9
Cambridge - Trappe - Easton

9 **DEVIATED ROUTE**

		AM	AM	AM	PM	PM	PM
Walmart	Cambridge	6:00	7:45	9:35	11:35	3:20	5:30
Shore Stop	Trappe	**	**	**	**	**	**
Post Office	Trappe	6:15	8:00	9:50	11:50	3:30	5:45
Lover's Lane	Trappe	6:15	8:00	9:50	11:50	3:30	5:45
Walmart	Easton	6:30	8:15	10:05	12:05	3:45	6:00
Memorial Hospital	Easton	6:40	8:25	10:15	12:15	3:55	**
Walmart	Easton	7:10	8:45	10:35	1:15	4:30	–
Lover's Lane	Trappe	7:30	9:00	10:50	1:30	4:45	6:15
Post Office	Trappe	7:30	9:00	10:50	1:30	4:45	6:15
Shore Stop	Trappe	**	**	**	**	**	**
Walmart	Cambridge	7:40	9:15	11:05	1:45	5:00	6:30

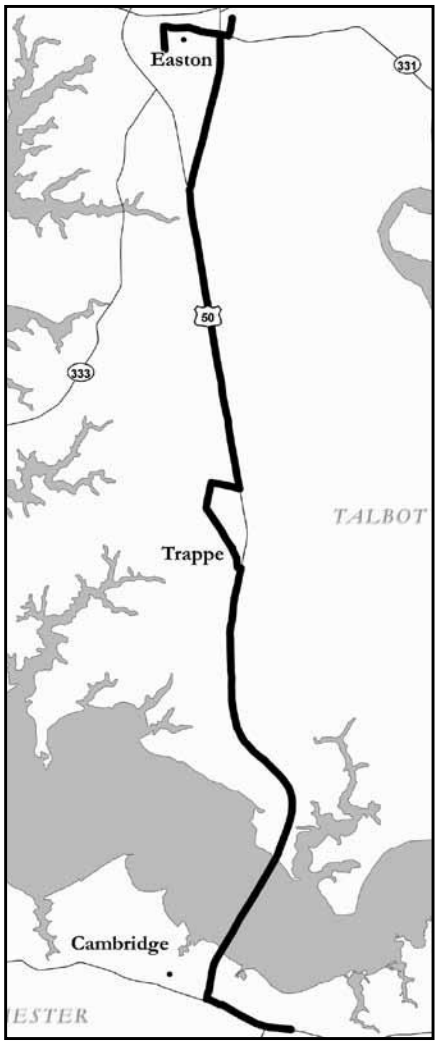
** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-221-1910
– No bus service at this time
Route in service M-F, 6:00 AM-6:15 PM
DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Must provide 2 hour advance notice. Call for rate information.

Route 9A Ruta 9A
Operates only August 20 - June 15
Cambridge - Trappe - Easton

9A **DEVIATED ROUTE**

		AM	PM
DCT Depot	Cambridge	7:20	2:20
American Legion	Cambridge	7:30	-
Shore Stop	Trappe	**	**
Goldsborough & Calvert	Easton	8:00	-
High & Choptank	Easton	8:10	-
Walmart	Easton	**	**
High & Choptank	Easton	-	3:10
Goldsborough & Calvert	Easton	-	3:20
High's-Citgo	Trappe	-	**
Visitor's Center	Cambridge	-	3:50
Walmart	Cambridge	**	**

** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-221-1910
– No bus service at this time
Route in service M-F, 7:20 AM-3:50 PM ***August-June 15 only***
DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Must provide 2 hour advance notice. Call for rate information.



DELMARVA COMMUNITY SERVICES, INC.
DELMARVA COMMUNITY TRANSIT

Denton - Easton AM Shuttle DEVIATED ROUTE

JARC Route 4 Ruta Directa Denton - Easton

		AM
HAPS Bldg	Denton	5:05
Town Parking Lot	Denton	5:10
Walmart	Easton	5:35
Mulberry Hill	Easton	5:40
Pippin Farm	Easton	5:42
Corner Carry Out	Easton	5:45
Post Office	Easton	5:50
Neighborhood Center	Easton	5:55
Chatham Village	Easton	6:00
Magnolia Meadows	Easton	6:02
The Greens	Easton	6:04
Comfort Inn	Easton	6:20
Bob Evans/Panera Bread	Easton	6:22
612/Greyhound /MVA	Easton	6:30
Airport Industrial Park	Easton	6:40
Walmart	Easton	6:50

Transfer to Routes 4,5,6,7,9,11,C & D Route in service M-F, 5:05 AM-6:50 AM

DEVIATED ROUTE: Buses deviate ¾ mile around route corridor. Must provide 2 hour advance notice. Call for rate information. 410-822-4155 or 410-479-3867

SATURDAY Denton - Easton Shuttle

Ruta Directa el Sábado Denton - Easton

DEVIATED ROUTE		AM	AM	PM	PM
Village Circle	Denton	8:25	-	-	-
Town Parking Lot	Denton	8:30	-	-	-
Royal Farms	Denton	8:32	-	-	-
HAPS Bldg	Denton	8:35	-	-	-
Caroline Apartments	Denton	8:37	-	-	-
Denton Plaza	Denton	8:40	-	-	-
Walmart	Denton	8:45	-	-	-
Walmart	Easton	9:15	10:15	12:15	1:15
Giant	Easton	**	**	**	**
Doverbrook	Easton	**	**	**	**
Post Office	Easton	9:25	10:25	12:25	1:25
Mulberry Hill	Easton	9:30	10:30	12:30	1:30
Pippin Farm	Easton	**	**	**	**
Corner Carry Out	Easton	**	**	**	**
Rite Aid (Easton Plaza)	Easton	9:35	10:35	12:35	1:35
Kohl's	Easton	**	**	**	**
Food Lion	Easton	9:40	10:40	12:40	1:40
Target	Easton	9:45	10:45	12:45	1:45
Acme	Easton	**	**	**	**
Chatham Village	Easton	**	**	**	**
Magnolia Meadows	Easton	9:55	10:55	12:55	1:55
The Greens	Easton	**	**	**	**
Parkview	Easton	10:05	11:05	1:05	2:05
Walmart	Easton	10:15	11:15	1:15	2:15
HAPS Bldg	Denton	-	-	-	2:45
Town Parking Lot	Denton	-	-	-	2:55
Walmart	Denton	-	-	-	3:00

**Must provide 24 hour advance notice. Call for rate information 410-822-4155 or 410-479-3867

– No bus service at this time

DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Route in service Saturday 8:25 AM- 3 PM

Route C Ruta C Easton

Fixed Route with Specialized Services. Call 410-822-4155 for eligibility requirements and more information.

		AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM
Walmart	Easton	7:15	8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5;15
Giant	Easton	**	**	**	**	**	**	**	**	**	**	**
Comfort Inn	Easton	**	**	**	**	**	**	**	**	**	**	**
Panera Bread	Easton	**	**	**	**	**	**	**	**	**	**	**
6/12-Greyhound/MVA	Easton	**	**	**	**	**	**	**	**	**	**	**
Mulberry Hill	Easton	7:25	8:25	9:25	10:25	11:25	12:25	1:25	2:25	3:25	4:25	5:25
Pippin Farm	Easton	**	**	**	**	**	**	**	**	**	**	**
Corner Carryout	Easton	**	**	**	**	**	**	**	**	**	**	**
Rite-Aid (Easton Plaza)	Easton	7:30	8:30	9:30	10:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30
Kohl's	Easton	**	**	**	**	**	**	**	**	**	**	**
Food Lion	Easton	7:35	8:35	9:35	10:35	11:35	12:35	1:35	2:35	3:35	4:35	5:35
Commerce Dr	Easton	**	**	**	**	**	**	**	**	**	**	**
Target	Easton	7:45	8:45	9:45	10:45	11:45	12:45	1:45	2:45	3:45	4:45	5:45
Acme	Easton	7:48	8:48	9:48	10:48	11:48	12:48	1:48	2:48	3:48	4:48	5:48
301 Bay St (Social Services)	Easton	7:50	8:50	9:50	10:50	11:50	12:50	1:50	2:50	3:50	4:50	5:50
St. Marks Village	Easton	**	**	**	**	**	**	**	**	**	**	**
Safeway	Easton	7:52	8:52	9:52	10:52	11:52	12:52	1:52	2:52	3:52	4:52	5:52
Library	Easton	**	**	**	**	**	**	**	**	**	**	**
Neighborhood Service Center	Easton	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00
Post Office	Easton	8:05	9:05	10:05	11:05	12:05	1:05	2:05	3:05	4:05	5:05	6:05
East Ave at Goldsborough	Easton	**	**	**	**	**	**	**	**	**	**	**
Walmart	Easton	8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5:15	6:15

Walmart Transfer to Routes 4,5,7,9,11,C & D
Target Transfer to Routes C & D

** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-822-4155

Route in service M-F, 7:15 AM-4:16 PM

Fridays ONLY

SPECIALIZED SERVICES: Operates Monday through Friday, 7:15 AM to 4:15 PM. Eligibility required. Please call ahead to schedule trip. Curb-to-curb demand response service is available for general public, seniors, persons with disabilities, Medicare clients and those unable to access this route. Call for Special Service fees.

DELMARVA COMMUNITY SERVICES, INC.
DELMARVA COMMUNITY TRANSIT

Route D Ruta D Easton

D **Fixed Route with Specialized Services. Call 410-822-4155 for eligibility requirements and more information.**

		AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM
Walmart	Easton	7:15	8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:30	5:30
Giant	Easton	**	**	**	**	**	**	**	**	**	**	**
Parkview	Easton	7:25	8:25	9:25	10:25	11:25	12:25	1:25	2:25	3:25	4:40	5:40
Dutchmans Lane	Easton	**	**	**	**	**	**	**	**	**	**	**
510 Idlewild Ave	Easton	7:30	8:30	9:30	10:30	11:30	12:30	1:30	2:30	3:30	4:45	5:45
Cynwood	Easton	**	**	**	**	**	**	**	**	**	**	**
Purdy	Easton	**	**	**	**	**	**	**	**	**	**	**
Marvel Court	Easton	**	**	**	**	**	**	**	**	**	**	**
Digestive Center	Easton	**	**	**	**	**	**	**	**	**	**	**
Diagnostic Center	Easton	**	**	**	**	**	**	**	**	**	**	**
2 Martin Court	Easton	**	**	**	**	**	**	**	**	**	**	**
YMCA	Easton	**	**	**	**	**	**	**	**	**	**	**
Target	Easton	7:45	8:45	9:45	10:45	11:45	12:45	1:45	2:45	3:45	5:00	6:00
BJ's	Easton	**	**	**	**	**	**	**	**	**	**	**
Chatham Village	Easton	**	**	**	**	**	**	**	**	**	**	**
Magnolia Meadows	Easton	7:55	8:55	9:55	10:55	11:55	12:55	1:55	2:55	3:55	5:10	6:10
The Greens	Easton	**	**	**	**	**	**	**	**	**	**	**
Memorial Hospital	Easton	8:05	9:05	10:05	11:05	12:05	1:05	2:05	3:05	4:05	5:25	6:25
Senior Center	Easton	**	**	**	**	**	**	**	**	**	**	**
Dover Brook	Easton	**	**	**	**	**	**	**	**	**	**	**
Walmart	Easton	8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5:40	6:40

Walmart Transfer to Routes 4,5,7,9,11,C & D
Target Transfer to Routes C & D

** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-822-4155

Route in service M-F, 7:15 AM-5:40 PM

SPECIALIZED SERVICES: Operates Monday through Friday 7:15 AM to 5:40 PM. Eligibility required. Please call ahead to schedule trip. Curb-to-curb demand response service is available for general public, seniors, persons with disabilities, Medicare clients and those unable to access this route. Call for Special Service fees.



APPENDIX VI

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic and Safety
Traffic Development & Support Division

Consultant Crash Data/Analysis Request Form

Request Date: February 9, 2026 Note: date set automatically

Location: MD 322 (Easton Pkwy) @ MD 334 (Port St)

County: Talbot Town/Place: Easton
Route: MD 322 (Easton Pkwy) Log Mile: 2.41
☒ at MD 334 (Port St)
☐ from to

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain)

Originally Requested By: Town of Easton
When Needed: As soon as possible

Work Requested:

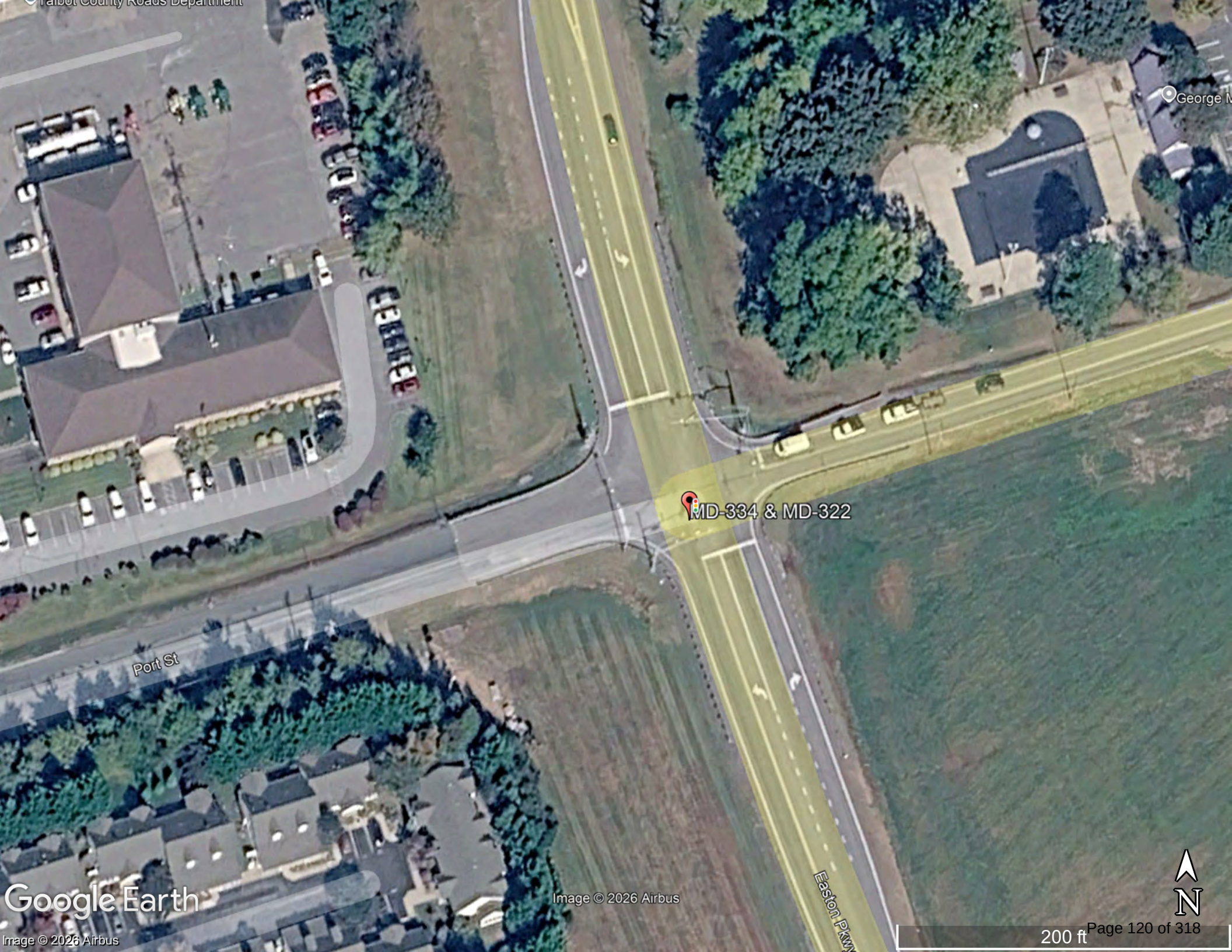
☒ Crash Summary ☒ Crash History ☐ Crash Rates
☐ Study Worksheet ☐ Intersection/Line Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date(s) to

Additional Instructions or Remarks:
Requested by: Ivette Halsall Title: Traffic Analyst
Consultant Firm:Traffic Concepts, Inc. Phone: 410-450-3188
Street Address: 7525 Connelley Drive Cell Phone:
City: Hanover State: MD Zip: 21076 Email: ihalsall@traffic-concepts.com
Consultant Subcontractor: Phone:

Please indicate map coordinates of location to be studied.
GIS
Purpose/Need:

Send to: Traffic Development & Support Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5844 Fax: (410) 582-9469 Email: wmacleod@sha.state.md.us


MD-334 & MD-322
Port St
Google Earth
Image © 2026 Airbus
Image © 2026 Airbus
N
200 ft

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Arcade Bandeke

Date: 02/12/2026

Location: MD322 @ MD334 / PORT ST.

Logmiles: 2.41 At 0.42 Radius: 250 ft.

County: Talbot, D2

Period: January 01, 2022 To December 31, 2025

Note: Year 2025 data is preliminary !

YEAR >>	2022	2023	2024	2025	Total
Fatal	0	0	0	0	0
No. Killed	0	0	0	0	0
Injury	1	1	0	1	3
No. Injured	1	1	0	3	5
Prop. Damage	0	0	2	1	3
Total Crashes	1	1	2	2	6
Severity Index	2	2	2	5	Avg 3
Opposite Dir.	0	0	0	0	0
Rear End	0	0	0	1	1
Sideswipe	0	0	0	0	0
Left Turn	0	0	1	0	1
Angle	1	1	1	1	4
Pedestrian	0	0	0	0	0
Parked Veh.	0	0	0	0	0
Fixed Object	0	0	0	0	0
Other	0	0	0	0	0
U-Turn	0	0	0	0	0
Backing	0	0	0	0	0
Animal	0	0	0	0	0
Railroad	0	0	0	0	0
Fire / Expl.	0	0	0	0	0
Overturn	0	0	0	0	0
Truck Related	0	0	0	0	0
Night Time	0	0	0	0	0
Wet Surface	0	1	1	1	3
Alcohol	0	0	0	0	0
Intersection	1	1	2	2	6
Total Vehicles	2	3	5	5	15
Total Trucks	0	0	0	0	0
Truck %	0.0	0.0	0.0	0.0	0.0

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 01/2025-1

Name: Arcade Bandeke

Date: 02/12/2026

Location: MD322 @ MD334 / PORT ST.

Logmiles: 2.41 At 0.42 Radius: 250 ft.

County: Talbot, D2

Period: January 1, 2022 To December 31, 2025

Note: Year 2025 data is preliminary !

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Crashes		3	3	6
Veh Occ		5		
Pedestrian				

AVG Severity Index: 3

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
		2	1	1		2	

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
1				1		1			1		2	

CONDITION	DRIVER	PED
Normal:	12	
Alcohol:		
Other:	3	

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:									1				
PM:		3	1		1								

VEHICLES INVOLVED PER CRASH

1	2	3	4	5	6+	UNK	TOTAL
	3	3					15

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
6	Passenger Vehicle		Passenger Bus
3	Sport Utility Veh		School Bus
2	Pick-Up Truck		Emergency Veh
	Trucks (2+3 axles)	4	Other Types

SURFACE

3	Wet
3	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
	1			5		1	3			2	

OTHER MOVEMENTS 3

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
1	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn	5	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:			1	1
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:			1	1
	UnRelated:				
Angle	Related:		3	1	4
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01
I	Building	02
X	Culvert/Ditch	03
E	Curb	04
D	Guardrail/Barrier	05
	Embankment	06
O	Fence	07
B	Light Pole	08
J	Sign Pole	09
E	Other Pole	10
C	Tree/Shrubbery	11
T	Contr. Barrier	12
S	Crash Attenuator	13
	Other Fixed Object	

WEATHER

5	Clear / Cloudy
	Foggy
1	Raining
	Snow / Sleet
	Other

ILLUMINATION

6	Day
	Dawn/Dusk
	Dark - Lights On
	Dark - No Lights
	Other

TOTALS

22-25	6

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2023-1 - Combined Year Listing

Name: Arcade Bandeke

Date: 02/12/2026

Location: MD322 @ MD334 / PORT ST.

Logmiles: 2.41 At 0.42 Radius: 250 ft.

County: Talbot, D2

Period: January 01, 2022 To December 31, 2025

Note: Year 2025 data is preliminary !

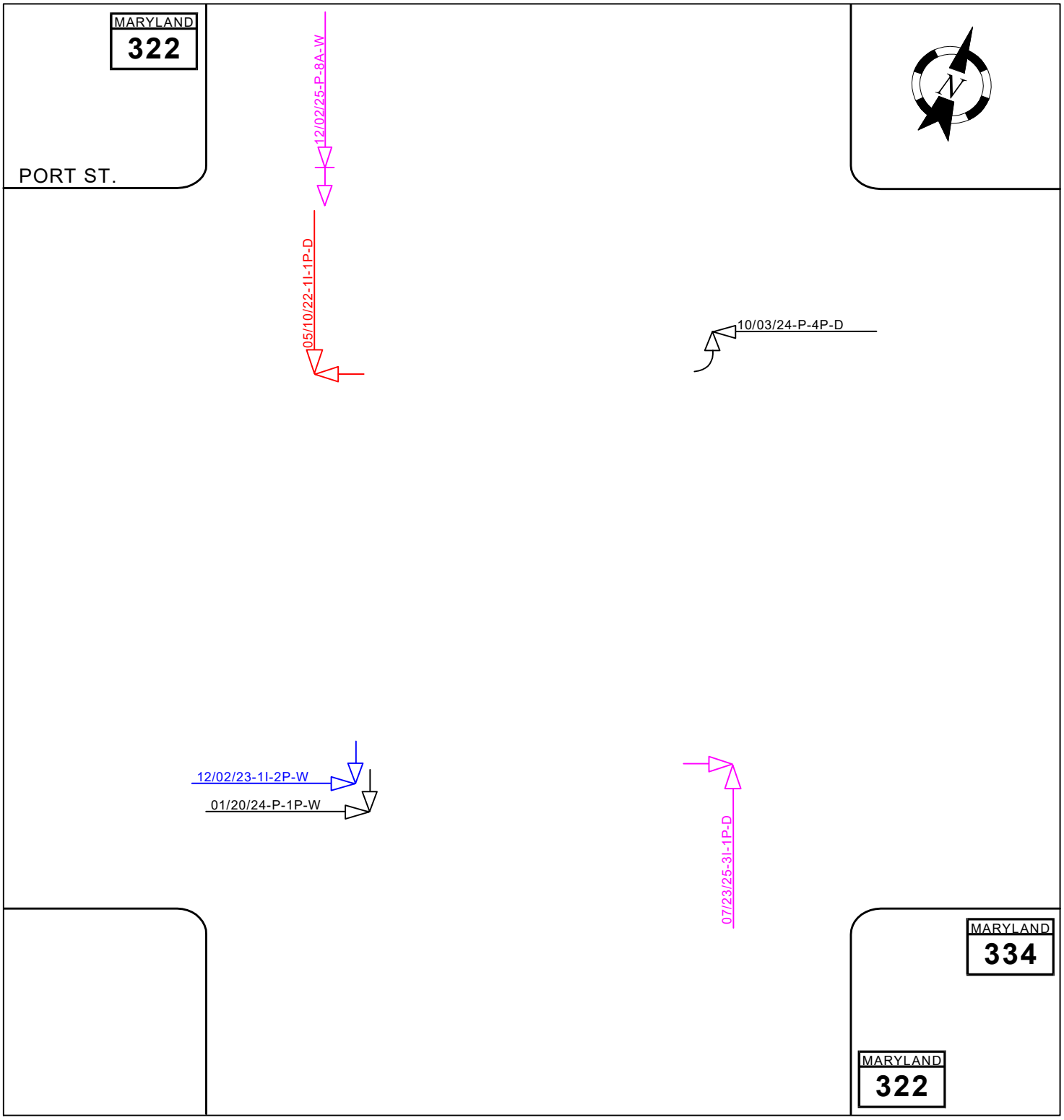
MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
MD322												
2.410	☐	05102022	1 Injured	01P	Day	Dry			ANGLE	WS	SS	Other or Unknown
2.410	☐	12022023	1 Injured	02P	Day	Wet			ANGLE	SS	ES	Fail to obey traffic signal
2.410	☐	01202024	Property	01P	Day	Wet			ANGLE	ES	SS	Other or Unknown
2.410	☐	10032024	Property	04P	Day	Dry			LFTRN	EL	WS	Other or Unknown
2.410	☐	07232025	3 Injured	01P	Day	Dry			ANGLE	ES	NS	Other or Unknown
2.410	☐	12022025	Property	08A	Day	Wet			RREND	SS	SS	Other or Unknown

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: MD322 @ MD334 / PORT ST.
County: TALBOT
Study Period: 01/01/2022 to Approx. 12/31/2025
Analyst: ARCADE BANDEKE, EIT Date: 02/12/2026



DATE-SEVERITY-TIME-SURFECE
NIGHT
ALCOHOL
DRUGS

SEVERITY
F - Fatalities
I - Injured
P - Property Damage Only

SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
07 – Fence

08 - Light Support Pole
09 - Sign Support Pole
10 - Other Pole
11 - Tree Shrubbery
12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

U - Units Separated
N - Other Non collision
D - Off Road
R - Downhill Runaway
F - Explosion or Fire
? - Unknown

template 12-14-23

U - TURN
BACKING
OVERTURN
Parked Vehicle
P Pedestrian

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic and Safety
Traffic Development & Support Division

Consultant Crash Data/Analysis Request Form

Request Date: February 9, 2026 Note: date set automatically

Location: MD 334 (Port St) @ Meadow Dr/ G. Murphy Community Pool Access

County: Talbot Town/Place: Easton
Route: MD 334 (Port St) Log Mile: 0.51
☒ at Meadow Dr
☐ from to

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain)

Originally Requested By: Town of Easton
When Needed: As soon as possible

Work Requested:

☒ Crash Summary ☒ Crash History ☐ Crash Rates
☐ Study Worksheet ☐ Intersection/Line Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date(s) to

Additional Instructions or Remarks:

Requested by: Ivette Halsall Title: Traffic Analyst
Consultant Firm:Traffic Concepts, Inc. Phone: 410-450-3188
Street Address: 7525 Connelley Drive Cell Phone:
City: Hanover State: MD Zip: 21076 Email: ihalsall@traffic-concepts.com
Consultant Subcontractor: Phone:

Please indicate map coordinates of location to be studied.
GIS
Purpose/Need:

Send to: Traffic Development & Support Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5844 Fax: (410) 582-9469 Email: wmacleod@sha.state.md.us


George Murphy Community Pool
Port St
MD-334 & Meadow Dr
334
Port St
Meadow Dr
Meadow Dr
480
102
Google Earth
Image © 2026 Airbus
Image © 2026 Airbus
N
100 ft

February 12, 2026

Maryland State Highway Administration
Office of Traffic & Safety
Traffic Development and Support Division
Crash Analysis Safety Team

MD334 @ Meadow Dr. (Mu675)

Talbot County
(Logmile 0.51 @ 0.00)

There were no police-reported intersection-related accidents found during this 4-yr. study.
Note, year 2025 data is preliminary.

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic and Safety
Traffic Development & Support Division

Consultant Crash Data/Analysis Request Form

Request Date: February 9, 2026 Note: date set automatically

Location: MD 334 (Port St) @ Jowite Street

County: Talbot Town/Place: Easton
Route: MD 334 (Port St) Log Mile: 0.62
☒ at Jowite St
☐ from to

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain)

Originally Requested By: Town of Easton
When Needed: As soon as possible

Work Requested:

☒ Crash Summary ☒ Crash History ☐ Crash Rates
☐ Study Worksheet ☐ Intersection/Line Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date(s) to

Additional Instructions or Remarks:
Requested by: Ivette Halsall Title: Traffic Analyst
Consultant Firm:Traffic Concepts, Inc. Phone: 410-450-3188
Street Address: 7525 Connelley Drive Cell Phone:
City: Hanover State: MD Zip: 21076 Email: ihalsall@traffic-concepts.com
Consultant Subcontractor: Phone:

Please indicate map coordinates of location to be studied.
GIS
Purpose/Need:

Send to: Traffic Development & Support Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5844 Fax: (410) 582-9469 Email: wmacleod@sha.state.md.us


Jowite St
Tile Ln
11
11
11
334
MD-334 & Jowite St
Port St
Google Earth
Image © 2026 Airbus
Image © 2026 Airbus
N
100 ft

February 12, 2026

Maryland State Highway Administration
Office of Traffic & Safety
Traffic Development and Support Division
Crash Analysis Safety Team

MD334 @ Meadow Dr. (Mu675)

Talbot County
(Logmile 0.51 @ 0.00)

There were no police-reported intersection-related accidents found during this 4-yr. study.
Note, year 2025 data is preliminary.

RAUCH inc.
engineering design & development services

STORMWATER MANAGEMENT ANALYSIS
FOR
PORT STREET MULTIFAMILY

PREPARED FOR
OSPREY PROPERTIES COMPANY LLC

PREPARED BY
RAUCH, INC
106 N. HARRISON STREET
EASTON, MD 21601

27th of March, 2026



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENCED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

ROBERT D. RAUCH, LICENCE NO. 11024 — 03/27/2026 DATE
EXPIRATION DATE 7/24/2026

106 N. Harrison Street - Easton, MD 21601
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com

TABLE OF CONTENTS

SECTION 1……...Stormwater Management Narrative

SECTION 2…….Existing & Proposed Stormwater Drainage Area Plans

SECTION 3……ESD Water Quality Calculations

SECTION 4……Pre/Post-Development Quantity Calculations

SECTION 5……...……..Soil Report

Appendix A.....Rational Method Spreadsheet for Existing and Proposed Pipes

Main Office: 106 N Harrison St – Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410.770.9081 | Fax: 410.770.3667

RAUCH inc.
engineering design & development services

STORMWATER MANAGEMENT ANALYSIS – NARRATIVE

EXISTING CONDITIONS

The project site under analysis is located in the town of Easton, Maryland, in Talbot County. It is bordered by MD 322 – Easton Parkway, MD 334 – Port Street, and Meadow Drive.

The site's existing condition consists of vast grassed areas, with a few trees along the Meadow Drive frontage. The site contains several swaths of both connected and disconnected wetlands as identified by MDE. The soil composition is predominantly poorly drained HSG C and HSG C/D soils.

Water drainage patterns differ across the parcel. The northwestern section drains via a combination of sheet flow and shallow concentrated flow, eventually reaching connected wetlands and draining off the property via a culvert under MD 322 at Study Point 1. The southwest section drains via a combination of sheet flow and shallow concentrated flow, eventually reaching an existing ditch and draining off the property towards the south at Study Point 2. The eastern section drains southward along the curb on Meadow Drive, flowing south and ultimately reaching Study Point 3.

PROPOSED CONDITIONS

Port Street Multifamily involves the construction of one large 64-unit residential building, an aesthetic water feature, parking lot (including ADA-compliant spaces), driving aisles, and a stormwater management facility.

The proposed impervious will be treated for quality management by a submerged gravel wetland with a forebay. The ponding in the forebay and submerged gravel wetland will also be used as quantity management.

Proposed conditions during the 2-, and 10-year storm events have been analyzed and show postconstruction peak flows are less than preconstruction peak flows at the Study Point.

The maps included with this report detail all drainage areas with times of concentration.

106 N. Harrison Street - Easton, MD 21601
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com

WATER QUALITY – ESDv/WQv

The summary of the calculations is shown below:

BMP SUMMARY CHART									
BMP ID	TYPE OF ESD PRACTICE (STRUCTURE NAME)	MARYLAND GRID COORDINATE (NAD 83) METERS		BMP DRAINAGE AREA	IMPERVIOUS AREA	TARGET PE	ACTUAL PE	TARGET ESDv	ACTUAL ESDv
		NORTHING	EASTING	(SF)	(SF)	(IN)	(IN)	(CF)	(CF)
SGW-1	SUBMERGED GRAVEL WETLAND	402707.78	1572962.51	118,516	59,659	1.8	1.82	10,290	12,422
TOTAL				**118,516**	**59,659**			**10,290**	**12,422**

STORMWATER QUALITY NOTES:

The above quality stormwater management practices meet the Environmental Site Design Volume required for the site.

WATER QUANTITY

Volume control is provided within the submerged gravel wetland and by managing/maintaining existing times of concentrations within existing and reshaped drainage areas.
By decreasing the size of proposed DA1 and increasing the size of proposed DA2 versus existing areas, a majority of the site drains entirely into a forebay via a series of yard and curb inlets. From there, the flow moves to the submerged gravel wetland. The eastern and northwestern portions of the site continue to utilize existing drainage paths with reduced volumes.

Below is a summary of the proposed peak runoffs flows from the 2 and 10-year storms compared to existing peak runoff flows from the same events.

DRAINAGE AREA SUMMARY CHART																	
DA #	DA		IMPERVIOUS AREA		CN		Tc		2-YEAR STORM			10-YEAR STORM			ESDv	
	EXISTING (ACRES)	PROPOSED (ACRES)	EXISTING (ACRES)	PROPOSED (ACRES)	EXISTING	PROPOSED	EXISTING (MINUTES)	PROPOSED (MINUTES)	EXISTING (CFS)	PROPOSED (CFS)	CHANGE	EXISTING (CFS)	PROPOSED (CFS)	CHANGE	TARGET (CF)	ACTUAL (CF)
1	3.003	1.385	0.03	0.058	76	75	62.8	22.2	1.88	1.7	-0.18	4.24	3.86	-0.38	521	0
2	1.187	2.721	0	1.37	87	87	41.3	19.5	1.24	0.81	-0.43	2.71	1.66	-1.05	8753	12413
3	0.075	1.589	0.016	0.047	81	81	30.6	5.7	0.29	0.21	-0.08	0.55	0.42	-0.13	383	0
TOTAL	4.265	5.695	0.046	1.475											9657	12413

NATURAL AREA PRESERVATION

The stormwater management facilities for this project have been designed to preserve natural areas such as existing treelines as best as possible.

CONCLUSION

This report shows that all requirements of the MDE stormwater design manual have been met for this site and natural areas have been preserved in meeting these guidelines.

106 N. Harrison Street - Easton, MD 21601
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com

ESD Calculations

Maryland ESD Calculations and 10% Phosphorus Removal

Last Update: 1/6/2019 Rauch Inc.

Project Name:	**Osprey - Port Street Multifamily - SITE**
Date:	**27-Mar-26**

data input cells
calculation cells

Step 1: Complete ESD Implementation Checklist

Check all of the Following ESD Practices That Were Implemented at Site	*Yes - No - N/A*
Environmental Mapping Was Conducted at Site Prior to Layout	*YES*
Natural Areas Were Conserved (e.g., forests, wetlands, steep slopes, floodplains)	*YES*
Stream, Wetland and Shoreline Buffers Were Reserved	*YES*
Disturbance of Permeable Soils Was Minimized	*YES*
Natural Flow Paths Were Maintained Across the Site	*YES*
Building Layout Was Fingerprinted to Reduce Clearing and Grading at Site	*YES*
Site Grading Promoted Sheetflow From Impervious Areas to Pervious Ones	*YES*
Site Design Was Evaluated to Reduce Creation of Needless Impervious Cover	*YES*
Site Design Was Evaluated to Maximize Disconnection of Impervious Cover	*YES*
Site Design Was Evaluated to Identify Potential Hotspot Generating Area for Stormwater Treatment	*YES*
Erosion and Sediment Control Practices and Post Construction Stormwater Management Practices Were Integrated into a Comprehensive Plan	*YES*
Tree PlantingWas Used at the Site to Convert Turf Areas into Forest	*YES*

Step 2: Calculate Site Imperviousness and Water Quality Volume, WQv (for redevelopment)

defined as A single tract, lot, parcel of land or combination of tracts, lots parcels of land that are in one ownership or are contiguous and in diverse ownership where develoment is to be perfomed as part of a unit, subdivision or project. See page 5.117 in the design handbook. This means that a project may be classed as redevelopment even if the LOD is less than 40% impervious

Total SITE Area, A (acres or sq-ft)	*3.497*
Existing SITE Impervious Area (acres or sq-ft)	*0*
SITE percent impervious	0%
Development Category (for ESD)	**New Development**

LOD Area, A (acres)	3.50
Existing LOD Impervious Surface Area (acres)	0.47
Proposed LOD Impervious Surface Area (acres)	1.55
Rainfall Depth, P (in)	1.0

Existing LOD Imperviousness, I_{pre}	13%
Proposed LOD Imperviousness, I_{post}	44%

Water Quality Calculation for Redevelopment Only

Required Treatment Area (acres)	0.000
Runoff Coefficient, Rv	0.95

Water Quality Volume, WQv (cf)	**0**

Step 3: Calculate Phosphorous Removal Requirement, RR for Critical Area Sites

Development Category (for 10%)		**New Development**
New Development		
Average Annual Predevelopment Load, Lpre (lbs P / yr)		1.75
Redevelopment:		
Predevelopment Runoff Coefficient, Rv_{pre}		0.17
Phosphorous Mean Concentration, C (mg/L)		0.3
Average Annual Predevelopment Load, L_{pre} (lbs P / yr)		1.45
Post-Development Runoff Coefficient, Rv_{post}		0.45
Average Annual Post-Development Load, L_{post} (lbs P / yr)		3.85
Removal Requirement, RR (lbs P / yr)		**2.28**

Step 4: Calculate Environmental Site Design (ESD) Rainfall Target, P_E

% Soil Type A	0%	RCN Soil Type A	65.43
% Soil Type B	0%	RCN Soil Type B	77.66
% Soil Type C	67%	RCN Soil Type C	84.89
% Soil Type D	33%	RCN Soil Type D	87.89

Target Pre-Developed Condition, RCN_{woods}	72.28067	Post-Developed Condition, RCN	85.86

Soil Type A ESD Rainfall Target, P_E (in)	0.00
Soil Type B ESD Rainfall Target, P_E (in)	0.00
Soil Type C ESD Rainfall Target, P_E (in)	1.80
Soil Type D ESD Rainfall Target, P_E (in)	1.80
1yr	
Maximum P_E (in)	2.7

Runnoff depths for H and H analysis		
2yr	10yr	100yr
3.4	*5.3*	*7.6*

Site ESD Rainfall Target, P_E (in)	1.80
ESD Runoff Depth, Q_E (in)	0.81
ESD Runoff Volume, ESDv (cf)	**10,278**
Total Treatment Volume (cf)	**10,278**

Step 5: Select Nonstructural Practices to Treat the ESD Rainfall Target

Step 6: Select Micro-Scale Practices to Treat the ESD Rainfall Target

Micro-Scale Practices	P_E Credit Description	Contributing Drainage Area (sf)	Direct ESDv Received by Practice (cf)	WQv or ESDv from Up-Gradient Practices (cf)	WQv or ESDv credit (cf)	Runoff Volume Remaining (cf)
Submerged Gravel Wetlands	ESDv credit is based on design storage volume	118,516	15,013	8649	11,498	12,164

Critical Area Credits

Baseline Phosphorous Removal Efficiency	Average Adjusted Removal Efficiency Rate	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remaining Load (lbs/yr)
FALSE	65%	5.91	3.83	2.08

Step 7: Check for ESDv to MEP compliance and Revise Site If Necessary

Drainage Area Treated (sf)	118,516

WQv or ESDv Treated (cf) using ESD practices	11,498
P_E achieved (inches)	2.01
Entire ESDv Treated Through ESD Practices?	**YES**
ESDv Remaining? (cf)	**0**
If ESDV is not fully treated, is ESD to MEP achieved?	**NO**
Redevelopment WQv Requirements Met Through ESD Practices?	**N/A**
WQv Remaining? (cf)	**0**
New Development WQv Requirements Met Through ESD Practices?	**YES**
WQv Remaining? (cf)	**0**

Total Load Reduction (lbs P / year)	3.83
Total Load Reduction Remaining (lbs P / yr)	**0.00**

New Development Water Quality Volume Requirements

Required Treatment Area (acres)	3.50
Runoff Coefficient, Rv	0.45
Water Quality Volume, WQv (cf)	**5,710**

Maryland ESD Calculations and 10% Phosphorus Removal

Last Update: 1/6/2019 Rauch Inc.

Project Name:	**Osprey - Port Street Multifamily - DRAINAGE AREA 1**
Date:	**11-Mar-26**

data input cells
calculation cells

Step 1: Complete ESD Implementation Checklist

Check all of the Following ESD Practices That Were Implemented at Site	*Yes - No - N/A*
Environmental Mapping Was Conducted at Site Prior to Layout	*YES*
Natural Areas Were Conserved (e.g., forests, wetlands, steep slopes, floodplains)	*YES*
Stream, Wetland and Shoreline Buffers Were Reserved	*YES*
Disturbance of Permeable Soils Was Minimized	*YES*
Natural Flow Paths Were Maintained Across the Site	*YES*
Building Layout Was Fingerprinted to Reduce Clearing and Grading at Site	*YES*
Site Grading Promoted Sheetflow From Impervious Areas to Pervious Ones	*YES*
Site Design Was Evaluated to Reduce Creation of Needless Impervious Cover	*YES*
Site Design Was Evaluated to Maximize Disconnection of Impervious Cover	*YES*
Site Design Was Evaluated to Identify Potential Hotspot Generating Area for Stormwater Treatment	*YES*
Erosion and Sediment Control Practices and Post Construction Stormwater Management Practices Were Integrated into a Comprehensive Plan	*YES*
Tree PlantingWas Used at the Site to Convert Turf Areas into Forest	*YES*

Step 2: Calculate Site Imperviousness and Water Quality Volume, WQv (for redevelopment)

New development/redevelopment category is based on the the TOTAL SITE AREA whereas the ESD and WQ volume are based on the LOD AREA. The term "SITE" is defined as A single tract, lot, parcel of land or combination of tracts, lots parcels of land that are in one ownership or are contiguous and in diverse ownership where develoment is to be performed as part of a unit, subdivision or project. See page 5.117 in the design handbook. This means that a project may be classed as redevelopment even if the LOD is less than 40% impervious

Total SITE Area, A (acres or sq-ft)	*1.374*
Existing SITE Impervious Area (acres or sq-ft)	*0*
SITE percent impervious	0%
Development Category (for ESD)	**New Development**

LOD Area, A (acres)	0.59
Existing LOD Impervious Surface Area (acres)	0.00
Proposed LOD Impervious Surface Area (acres)	0.06
Rainfall Depth, P (in)	1.0

Existing LOD Imperviousness, I_{pre}	1%
Proposed LOD Imperviousness, I_{post}	10%

Water Quality Calculation for Redevelopment Only

Required Treatment Area (acres)	0.000
Runoff Coefficient, Rv	0.95
Water Quality Volume, WQv (cf)	**0**

Step 3: Calculate Phosphorous Removal Requirement, RR for Critical Area Sites

Development Category (for 10%)	**New Development**

New Development

Average Annual Predevelopment Load, Lpre (lbs P / yr)	0.29

Redevelopment:

Predevelopment Runoff Coefficient, Rv_{pre}	0.06
Phosphorous Mean Concentration, C (mg/L)	0.3
Average Annual Predevelopment Load, L_{pre} (lbs P / yr)	0.08
Post-Development Runoff Coefficient, Rv_{post}	0.14
Average Annual Post-Development Load, L_{post} (lbs P / yr)	0.20
Removal Requirement, RR (lbs P / yr)	**-0.07**

Step 4: Calculate Environmental Site Design (ESD) Rainfall Target, P_E

% Soil Type A	0%	RCN Soil Type A	45.74
% Soil Type B	0%	RCN Soil Type B	64.83
% Soil Type C	80%	RCN Soil Type C	75.91
% Soil Type D	21%	RCN Soil Type D	81.91

Target Pre-Developed Condition, RCN_{woods}	71.86584	Post-Developed Condition, RCN	77.61

Soil Type A ESD Rainfall Target, P_E (in)	0.00
Soil Type B ESD Rainfall Target, P_E (in)	0.00
Soil Type C ESD Rainfall Target, P_E (in)	1.00
Soil Type D ESD Rainfall Target, P_E (in)	1.00
1yr	
Maximum P_E (in)	2.7

Runnoff depths for H and H analysis		
2yr	10yr	100yr
3.4	*5.3*	*7.6*

Site ESD Rainfall Target, P_E (in)	1.80
ESD Runoff Depth, Q_E (in)	0.25
ESD Runoff Volume, ESDv (cf)	**521**
Site Rainfall Target, P_E (in)	**1.80**
Total Treatment Volume (cf)	**521**

Step 7: Check for ESDv to MEP compliance and Revise Site If Necessary

Drainage Area Treated (sf)	2

WQv or ESDv Treated (cf) using ESD practices	0
P_E achieved (inches)	0.00
Entire ESDv Treated Through ESD Practices?	**NO**
ESDv Remaining? (cf)	**521**
If ESDV is not fully treated, is ESD to MEP achieved?	**NO**
Redevelopment WQv Requirements Met Through ESD Practices?	**N/A**
WQv Remaining? (cf)	**0**
New Development WQv Requirements Met Through ESD Practices?	**NO**
WQv Remaining? (cf)	**290**

Total Load Reduction (lbs P / year)	0.00
Total Load Reduction Remaining (lbs P / yr)	**0.00**

New Development Water Quality Volume Requirements

Required Treatment Area (acres)	0.59
Runoff Coefficient, Rv	0.14
Water Quality Volume, WQv (cf)	**290**

Maryland ESD Calculations and 10% Phosphorus Removal

Last Update: 1/6/2019 Rauch Inc.

Project Name:	**Osprey - Port Street Multifamily - DRAINAGE AREA 2**
Date:	**11-Mar-26**

data input cells
calculation cells

Step 1: Complete ESD Implementation Checklist

Check all of the Following ESD Practices That Were Implemented at Site	*Yes - No - N/A*
Environmental Mapping Was Conducted at Site Prior to Layout	*YES*
Natural Areas Were Conserved (e.g., forests, wetlands, steep slopes, floodplains)	*YES*
Stream, Wetland and Shoreline Buffers Were Reserved	*YES*
Disturbance of Permeable Soils Was Minimized	*YES*
Natural Flow Paths Were Maintained Across the Site	*YES*
Building Layout Was Fingerprinted to Reduce Clearing and Grading at Site	*YES*
Site Grading Promoted Sheetflow From Impervious Areas to Pervious Ones	*YES*
Site Design Was Evaluated to Reduce Creation of Needless Impervious Cover	*YES*
Site Design Was Evaluated to Maximize Disconnection of Impervious Cover	*YES*
Site Design Was Evaluated to Identify Potential Hotspot Generating Area for Stormwater Treatment	*YES*
Erosion and Sediment Control Practices and Post Construction Stormwater Management Practices Were Integrated into a Comprehensive Plan	*YES*
Tree PlantingWas Used at the Site to Convert Turf Areas into Forest	*YES*

Step 2: Calculate Site Imperviousness and Water Quality Volume, WQv (for redevelopment)

New development/redevelopment category is based on the the TOTAL SITE AREA whereas the ESD and WQ volume are based on the LOD AREA. The term "SITE" is defined as A single tract, lot, parcel of land or combination of tracts, lots parcels of land that are in one ownership or are contiguous and in diverse ownership where develoment is to be performed as part of a unit, subdivision or project. See page 5.117 in the design handbook. This means that a project may be classed as redevelopment even if the LOD is less than 40% impervious

Total SITE Area, A (acres or sq-ft)	*1.374*
Existing SITE Impervious Area (acres or sq-ft)	*0*
SITE percent impervious	0%
Development Category (for ESD)	**New Development**

LOD Area, A (acres)	2.14
Existing LOD Impervious Surface Area (acres)	0.00
Proposed LOD Impervious Surface Area (acres)	1.37
Rainfall Depth, P (in)	1.0

Existing LOD Imperviousness, I_{pre}	0%
Proposed LOD Imperviousness, I_{post}	64%

Water Quality Calculation for Redevelopment Only

Required Treatment Area (acres)	0.000
Runoff Coefficient, Rv	0.95
Water Quality Volume, WQv (cf)	**0**

Step 3: Calculate Phosphorous Removal Requirement, RR for Critical Area Sites

Development Category (for 10%)	**New Development**

New Development

Average Annual Predevelopment Load, Lpre (lbs P / yr)		1.07

Redevelopment:

Predevelopment Runoff Coefficient, Rv_{pre}	0.05
Phosphorous Mean Concentration, C (mg/L)	0.3
Average Annual Predevelopment Load, L_{pre} (lbs P / yr)	0.26
Post-Development Runoff Coefficient, Rv_{post}	0.63
Average Annual Post-Development Load, L_{post} (lbs P / yr)	3.28
Removal Requirement, RR (lbs P / yr)	**2.32**

Step 4: Calculate Environmental Site Design (ESD) Rainfall Target, P_E

% Soil Type A	0%	RCN Soil Type A	76.35
% Soil Type B	0%	RCN Soil Type B	84.57
% Soil Type C	57%	RCN Soil Type C	89.57
% Soil Type D	43%	RCN Soil Type D	91.78

Target Pre-Developed Condition, RCN_{woods}	72.99595	Post-Developed Condition, RCN	90.52

Soil Type A ESD Rainfall Target, P_E (in)	0.00
Soil Type B ESD Rainfall Target, P_E (in)	0.00
Soil Type C ESD Rainfall Target, P_E (in)	2.00
Soil Type D ESD Rainfall Target, P_E (in)	1.80
1yr	
Maximum P_E (in)	2.7

Runnoff depths for H and H analysis		
2yr	10yr	100yr
3.4	*5.3*	*7.6*

Site ESD Rainfall Target, P_E (in)	1.80
ESD Runoff Depth, Q_E (in)	1.13
ESD Runoff Volume, ESDv (cf)	**8,753**
Site Rainfall Target, P_E (in)	**1.80**
Total Treatment Volume (cf)	**8,753**

Step 5: Select Nonstructural Practices to Treat the ESD Rainfall Target

Step 6: Select Micro-Scale Practices to Treat the ESD Rainfall Target

Micro-Scale Practices	P_E Credit Description	Contributing Drainage Area (sf)	Direct ESDv Received by Practice (cf)	WQv or ESDv from Up-Gradient Practices (cf)	WQv or ESDv credit (cf)	Runoff Volume Remaining (cf)
Submerged Gravel Wetlands	ESDv credit is based on design storage volume	152,322	15,436	8492	12,413	11,515

Critical Area Credits

Baseline Phosphorous Removal Efficiency	Average Adjusted Removal Efficiency Rate	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remaining Load (lbs/yr)
#NUM!	66%	5.98	3.95	2.03

Step 7: Check for ESDv to MEP compliance and Revise Site If Necessary

Drainage Area Treated (sf)	152,322

WQv or ESDv Treated (cf) using ESD practices	12,413
P_E achieved (inches)	2.55
Entire ESDv Treated Through ESD Practices?	**YES**
ESDv Remaining? (cf)	**0**
If ESDV is not fully treated, is ESD to MEP achieved?	**NO**
Redevelopment WQv Requirements Met Through ESD Practices?	**N/A**
WQv Remaining? (cf)	**0**
New Development WQv Requirements Met Through ESD Practices?	**YES**
WQv Remaining? (cf)	**0**

Total Load Reduction (lbs P / year)	3.95
Total Load Reduction Remaining (lbs P / yr)	**0.00**

New Development Water Quality Volume Requirements

Required Treatment Area (acres)	2.14
Runoff Coefficient, Rv	0.63
Water Quality Volume, WQv (cf)	**4,863**

Maryland ESD Calculations and 10% Phosphorus Removal

Last Update: 1/6/2019 Rauch Inc.

Project Name:	**Osprey - Port Street Multifamily - DRAINAGE AREA 3**
Date:	**11-Mar-26**

data input cells
calculation cells

Step 1: Complete ESD Implementation Checklist

Check all of the Following ESD Practices That Were Implemented at Site	*Yes - No - N/A*
Environmental Mapping Was Conducted at Site Prior to Layout	*YES*
Natural Areas Were Conserved (e.g., forests, wetlands, steep slopes, floodplains)	*YES*
Stream, Wetland and Shoreline Buffers Were Reserved	*YES*
Disturbance of Permeable Soils Was Minimized	*YES*
Natural Flow Paths Were Maintained Across the Site	*YES*
Building Layout Was Fingerprinted to Reduce Clearing and Grading at Site	*YES*
Site Grading Promoted Sheetflow From Impervious Areas to Pervious Ones	*YES*
Site Design Was Evaluated to Reduce Creation of Needless Impervious Cover	*YES*
Site Design Was Evaluated to Maximize Disconnection of Impervious Cover	*YES*
Site Design Was Evaluated to Identify Potential Hotspot Generating Area for Stormwater Treatment	*YES*
Erosion and Sediment Control Practices and Post Construction Stormwater Management Practices Were Integrated into a Comprehensive Plan	*YES*
Tree PlantingWas Used at the Site to Convert Turf Areas into Forest	*YES*

Step 2: Calculate Site Imperviousness and Water Quality Volume, WQv (for redevelopment)

New development/redevelopment category is based on the the TOTAL SITE AREA whereas the ESD and WQ volume are based on the LOD AREA. The term "SITE" is defined as A single tract, lot, parcel of land or combination of tracts, lots parcels of land that are in one ownership or are contiguous and in diverse ownership where develoment is to be performed as part of a unit, subdivision or project. See page 5.117 in the design handbook. This means that a project may be classed as redevelopment even if the LOD is less than 40% impervious

Total SITE Area, A (acres or sq-ft)	*1.374*
Existing SITE Impervious Area (acres or sq-ft)	*0*
SITE percent impervious	0%
Development Category (for ESD)	**New Development**

LOD Area, A (acres)	0.16
Existing LOD Impervious Surface Area (acres)	0.04
Proposed LOD Impervious Surface Area (acres)	0.06
Rainfall Depth, P (in)	1.0

Existing LOD Imperviousness, I_{pre}	23%
Proposed LOD Imperviousness, I_{post}	34%

Water Quality Calculation for Redevelopment Only

Required Treatment Area (acres)	0.000
Runoff Coefficient, Rv	0.95
Water Quality Volume, WQv (cf)	**0**

Step 3: Calculate Phosphorous Removal Requirement, RR for Critical Area Sites

Development Category (for 10%)	**Redevelopment**

New Development

Average Annual Predevelopment Load, Lpre (lbs P / yr)		0.08

Redevelopment:

Predevelopment Runoff Coefficient, Rv_{pre}	0.26
Phosphorous Mean Concentration, C (mg/L)	0.3
Average Annual Predevelopment Load, L_{pre} (lbs P / yr)	0.10
Post-Development Runoff Coefficient, Rv_{post}	0.36
Average Annual Post-Development Load, L_{post} (lbs P / yr)	0.14
Removal Requirement, RR (lbs P / yr)	**0.05**

Step 4: Calculate Environmental Site Design (ESD) Rainfall Target, P_E

% Soil Type A	0%	RCN Soil Type A	59.59
% Soil Type B	0%	RCN Soil Type B	73.73
% Soil Type C	46%	RCN Soil Type C	81.86
% Soil Type D	0%	RCN Soil Type D	85.86

Target Pre-Developed Condition, RCN_{woods}	32.15246	Post-Developed Condition, RCN	37.60

Soil Type A ESD Rainfall Target, P_E (in)	0.00
Soil Type B ESD Rainfall Target, P_E (in)	0.00
Soil Type C ESD Rainfall Target, P_E (in)	1.60
Soil Type D ESD Rainfall Target, P_E (in)	0.00
1yr	
Maximum P_E (in)	2.7

Runnoff depths for H and H analysis		
2yr	10yr	100yr
3.4	*5.3*	*7.6*

Site ESD Rainfall Target, P_E (in)	1.80
ESD Runoff Depth, Q_E (in)	0.65
ESD Runoff Volume, ESDv (cf)	**383**
Site Rainfall Target, P_E (in)	**1.80**
Total Treatment Volume (cf)	**383**

Step 7: Check for ESDv to MEP compliance and Revise Site If Necessary

Drainage Area Treated (sf)	2

WQv or ESDv Treated (cf) using ESD practices	0
P_E achieved (inches)	0.00
Entire ESDv Treated Through ESD Practices?	**NO**
ESDv Remaining? (cf)	**383**
If ESDV is not fully treated, is ESD to MEP achieved?	**NO**
Redevelopment WQv Requirements Met Through ESD Practices?	**N/A**
WQv Remaining? (cf)	**0**
New Development WQv Requirements Met Through ESD Practices?	**NO**
WQv Remaining? (cf)	**213**

Total Load Reduction (lbs P / year)	0.00
Total Load Reduction Remaining (lbs P / yr)	**0.05**

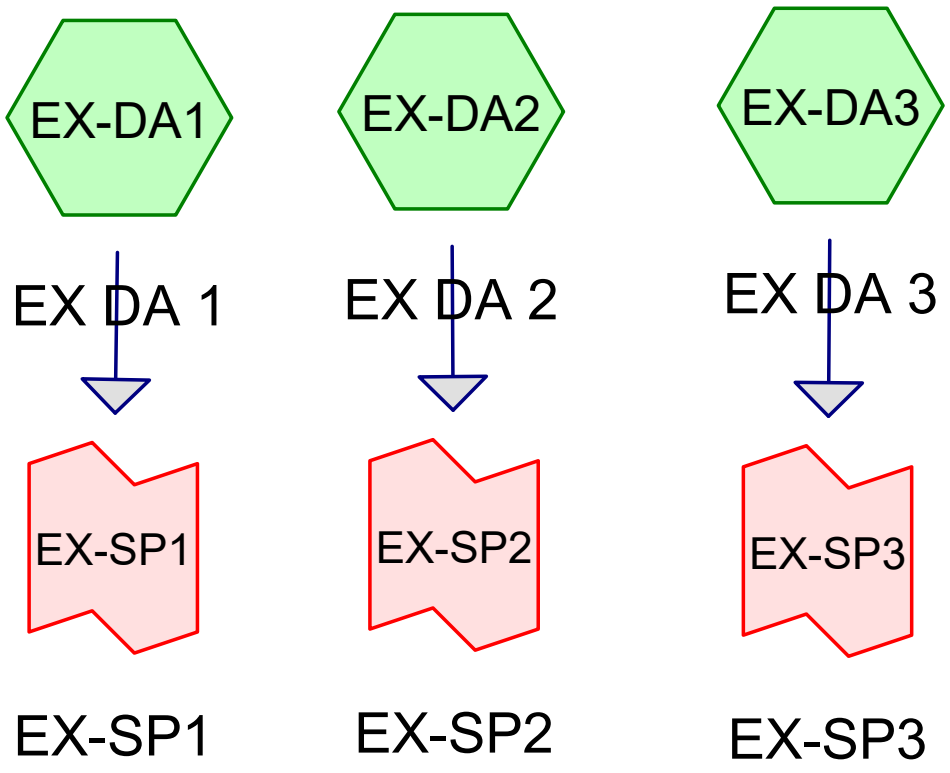
New Development Water Quality Volume Requirements

Required Treatment Area (acres)	0.16
Runoff Coefficient, Rv	0.36
Water Quality Volume, WQv (cf)	**213**

Micro-Scale Practices	Contributing Drainage Area (sf)	% Impervious Cover ---------- RV	To fully treat sub area ------ PE required ------- WQV required	Max available WQv or ESDv from CDA (cf)	Area of upstream catchment (sf)	WQv or ESDv from Up-Gradient Practices (cf)	Total catchment area ----- Total ESDv to practice	Practice Specific Parameter(s)				WQV or ESDv provided (cf)	Runoff Volume Remaining (cf)	Down-Gradient Practice and Row	SOIL TYPE	Baseline Phosphorous Removal Efficiency	Adjusted Removal Rate	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remaining Load (lbs/yr)	Watershed-inches treated (PE Provided)	Annual Rainfall Treated (%)
		57%	1.93				118,516	Surface Area (sf)	Top of Ponding	Ponding Depth (ft)	Media Depth (ft)			Submerged Gravel Wetlands							
TOTAL SITE - Forebay #1	118,516	0.563	10758	15,013	0	0	15013	6,364	7,542	1	0	6,364	8,649	2	C/D	60%	62.53%	3.75	2.34	1.41	1.14	86.05%
		0%	1.00				118,516	Surface Area (sf)		Ponding Depth (ft)	Media Depth (ft)										
TOTAL SITE - Submerged Gravel Wetlands		0.05	0	0	118516	8649	8649	2,852	3,522	1	2	5,134	3,515		C/D	60%	68.84%	2.16	1.49	0.67	1.60	94.74%
Total	118,516			15,013		8,649						11,498	12,164			FALSE	64.84%	5.91	3.83	2.08	1.31	89.58%

Micro-Scale Practices	Contributing Drainage Area (sf)	% Impervious Cover ---------- RV	To fully treat sub area ------ - PE required - ------ WQV required	Max available WQv or ESDv from CDA (cf)	Area of upstream catchment (sf)	WQv or ESDv from Up-Gradient Practices (cf)	Total catchment area - ----- Total ESDv to practice	Practice Specific Parameter(s)				WQV or ESDv provided (cf)	Runoff Volume Remaining (cf)	Down-Gradient Practice and Row	SOIL TYPE	Baseline Phosphorous Removal Efficiency	Adjusted Removal Rate	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remaining Load (lbs/yr)	Watershed-inches treated (PE Provided)	Annual Rainfall Treated (%)
								Bed Surface Area (sf)	Top of Ponding Surface Area (sf)	Ponding Depth (ft)	Media Depth (ft)											
DRAINAGE AREA 2 ONLY - Forebay #1	152,322	44%	1.80				152,322							Submerged Gravel Wetlands								
		0.4503801	10290	15,436	0	0	15436	6,364	7,524	1	0	6,944	8,492	2	C/D	60%	63.65%	3.86	2.45	1.40	1.21	87.59%
								Bed Surface Area (sf)	Top of Ponding Surface Area (sf)	Ponding Depth (ft)	Media Depth (ft)											
DRAINAGE AREA 2 ONLY - Submerged Gravel Wetlands #1		0%	1.00				152,322															
		0.05	0	0	152322	8492	8492	2,852	3,522	1	2	5,469	3,023		C/D	60%	70.37%	2.12	1.49	0.63	1.74	96.84%
Total	152,322			15,436		8,492						12,413	11,515			0%	66.03%	5.98	3.95	2.03	1.40	91.26%

Analysis of Existing Conditions



Subcat Reach Pond Link

Routing Diagram for Port Street Multifamily - HydroCad
Prepared by Rauch Inc, Printed 3/26/2026
HydroCAD® 10.20-7a s/n 02413 © 2025 HydroCAD Software Solutions LLC

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	2.977	1.242	0.000	4.219	>75% Grass cover, Good	EX-DA1, EX-DA2, EX-DA3
0.000	0.000	0.046	0.000	0.000	0.046	Paved roads w/curbs & sewers	EX-DA1, EX-DA3
0.000	**0.000**	**3.023**	**1.242**	**0.000**	**4.265**	**TOTAL AREA**	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX-DA1: EX DA 1 Runoff Area=129,081 sf 0.26% Impervious Runoff Depth>1.15"
Flow Length=372' Tc=62.8 min CN=76 Runoff=1.88 cfs 0.283 af

Subcatchment EX-DA2: EX DA 2 Runoff Area=52,263 sf 0.00% Impervious Runoff Depth>1.22"
Flow Length=433' Tc=34.6 min CN=77 Runoff=1.24 cfs 0.122 af

Subcatchment EX-DA3: EX DA 3 Runoff Area=4,418 sf 37.78% Impervious Runoff Depth>1.64"
Flow Length=368' Tc=8.4 min CN=83 Runoff=0.29 cfs 0.014 af

Link EX-SP1: EX-SP1 Inflow=1.88 cfs 0.283 af
Primary=1.88 cfs 0.283 af

Link EX-SP2: EX-SP2 Inflow=1.24 cfs 0.122 af
Primary=1.24 cfs 0.122 af

Link EX-SP3: EX-SP3 Inflow=0.29 cfs 0.014 af
Primary=0.29 cfs 0.014 af

Total Runoff Area = 4.265 ac Runoff Volume = 0.419 af Average Runoff Depth = 1.18"
98.92% Pervious = 4.219 ac 1.08% Impervious = 0.046 ac

Summary for Subcatchment EX-DA1: EX DA 1

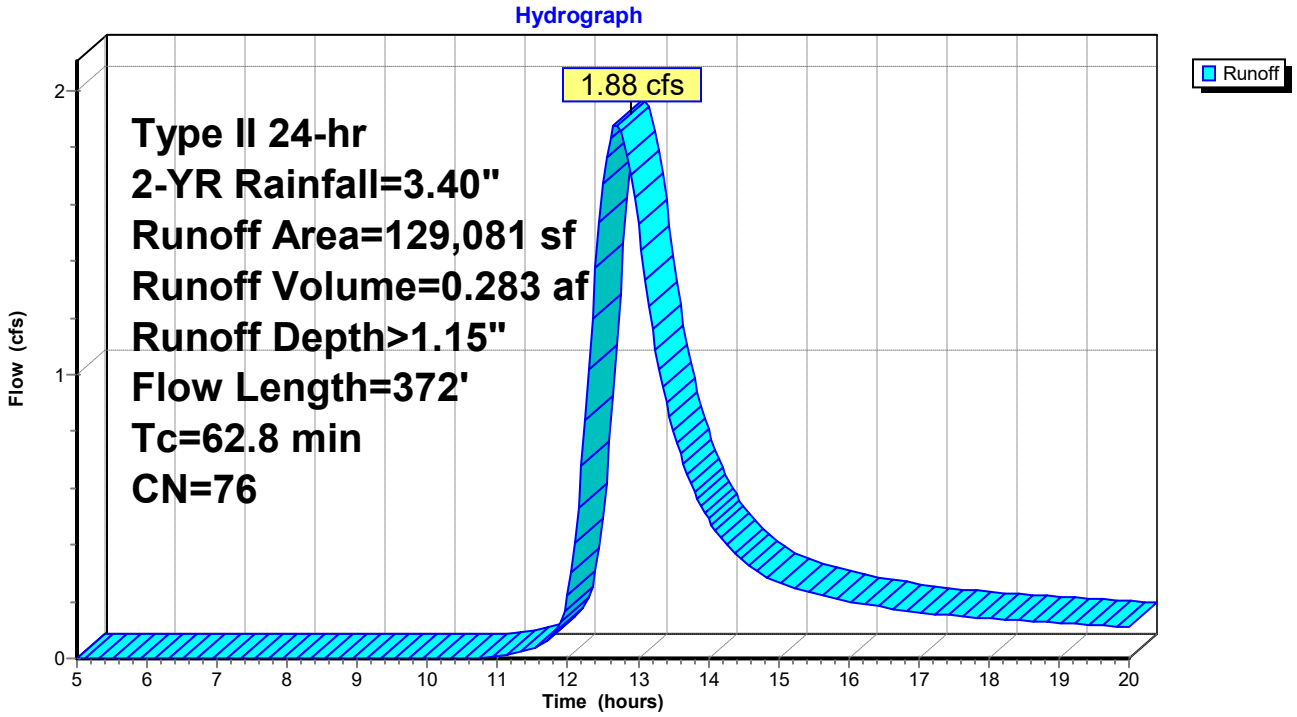
Runoff = 1.88 cfs @ 12.69 hrs, Volume= 0.283 af, Depth> 1.15"
Routed to Link EX-SP1 : EX-SP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
96,492	74	>75% Grass cover, Good, HSG C
32,259	80	>75% Grass cover, Good, HSG D
330	98	Paved roads w/curbs & sewers, HSG C
129,081	76	Weighted Average
128,751		99.74% Pervious Area
330		0.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
51.0	87	0.0017	0.03		**Sheet Flow, GRASS SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
8.3	13	0.0035	0.03		**Sheet Flow, GRASS SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
1.2	67	0.0035	0.95		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
1.4	128	0.0093	1.55		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
0.9	77	0.0080	1.44		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
62.8	372	Total			

Subcatchment EX-DA1: EX DA 1



Summary for Subcatchment EX-DA2: EX DA 2

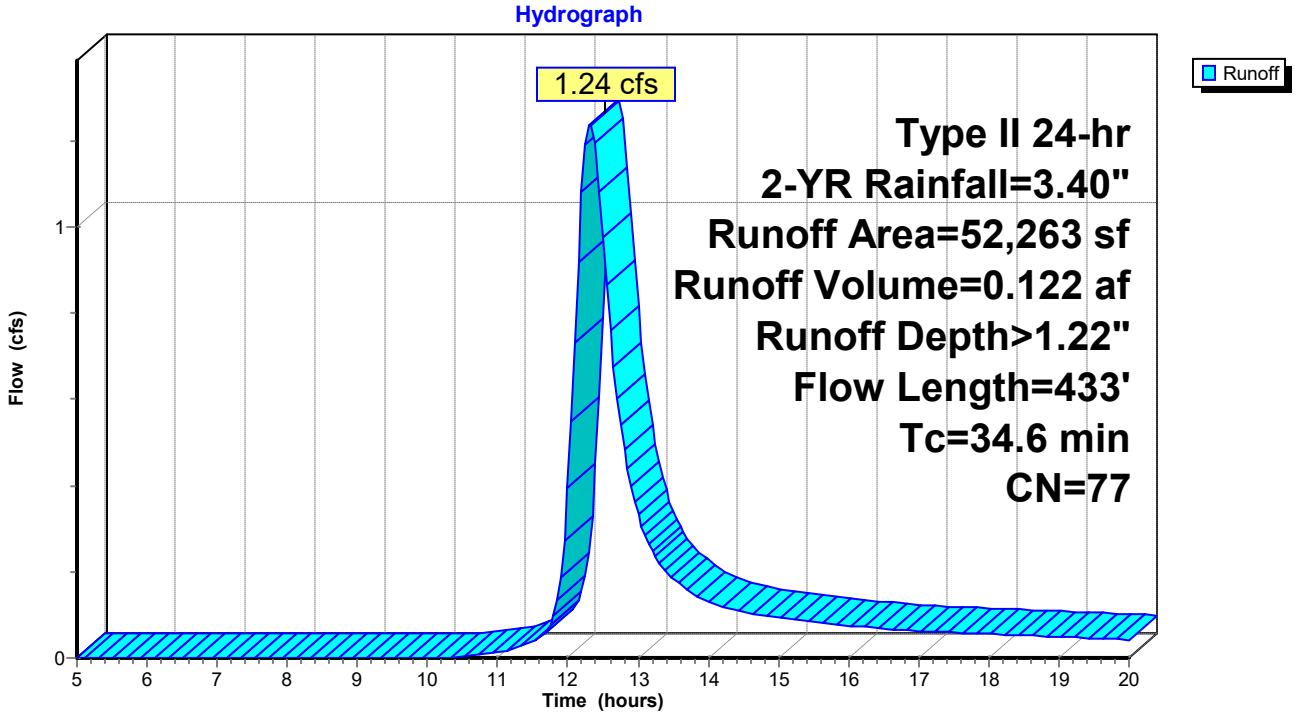
Runoff = 1.24 cfs @ 12.32 hrs, Volume= 0.122 af, Depth> 1.22"
Routed to Link EX-SP2 : EX-SP2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
30,428	74	>75% Grass cover, Good, HSG C
21,835	80	>75% Grass cover, Good, HSG D
52,263	77	Weighted Average
52,263		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.9	83	0.0143	0.07		**Sheet Flow, SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
8.9	17	0.0051	0.03		**Sheet Flow, GRASS SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
4.8	333	0.0051	1.15		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
34.6	433	Total			

Subcatchment EX-DA2: EX DA 2



Summary for Subcatchment EX-DA3: EX DA 3

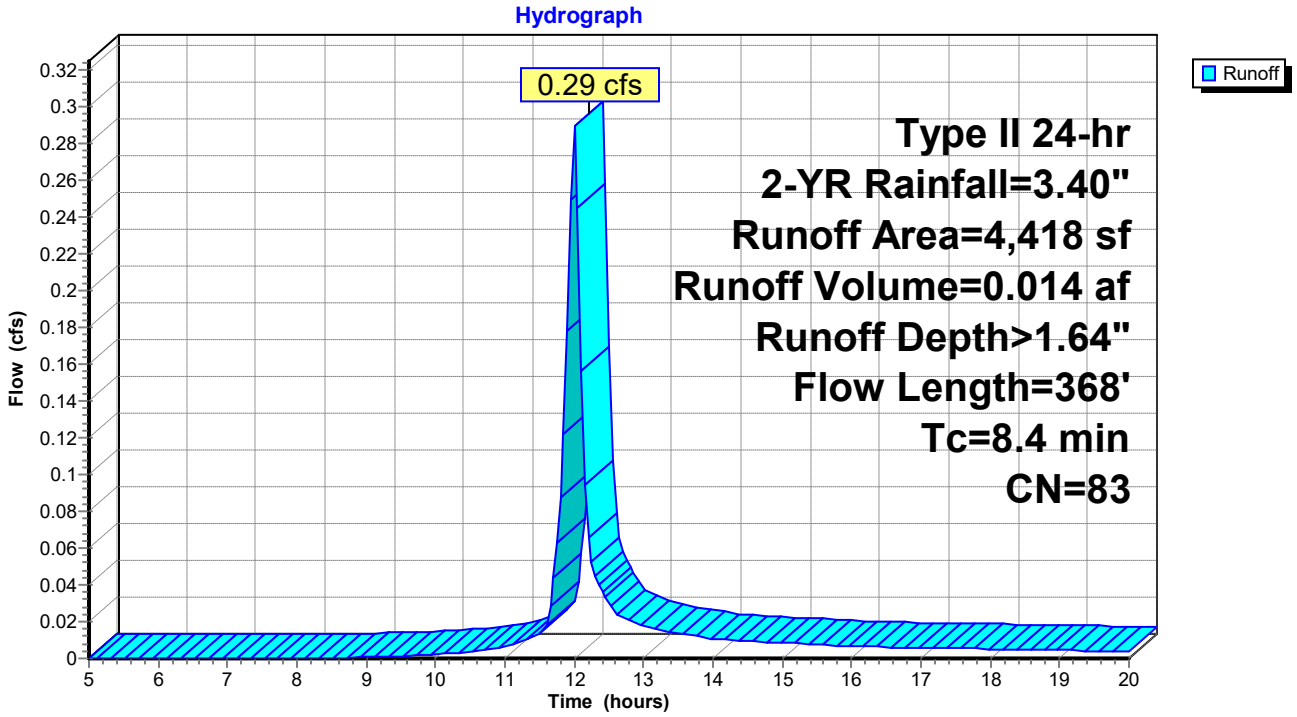
Runoff = 0.29 cfs @ 12.00 hrs, Volume= 0.014 af, Depth> 1.64"
Routed to Link EX-SP3 : EX-SP3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
2,749	74	>75% Grass cover, Good, HSG C
1,669	98	Paved roads w/curbs & sewers, HSG C
4,418	83	Weighted Average
2,749		62.22% Pervious Area
1,669		37.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	11	0.0253	1.00		**Sheet Flow, PAVED SHEET FLOW** Smooth surfaces n= 0.011 P2= 3.40"
3.3	11	0.0253	0.06		**Sheet Flow, GRASS SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
0.2	11	0.0253	1.00		**Sheet Flow, PAVED SHEET FLOW** Smooth surfaces n= 0.011 P2= 3.40"
1.9	78	0.0037	0.69		**Sheet Flow, PAVED SHEET FLOW** Smooth surfaces n= 0.011 P2= 3.40"
1.1	78	0.0037	1.23		**Shallow Concentrated Flow, PAVED SCF** Paved Kv= 20.3 fps
1.7	179	0.0072	1.72		**Shallow Concentrated Flow, PAVED SCF** Paved Kv= 20.3 fps
8.4	368	Total			

Subcatchment EX-DA3: EX DA 3

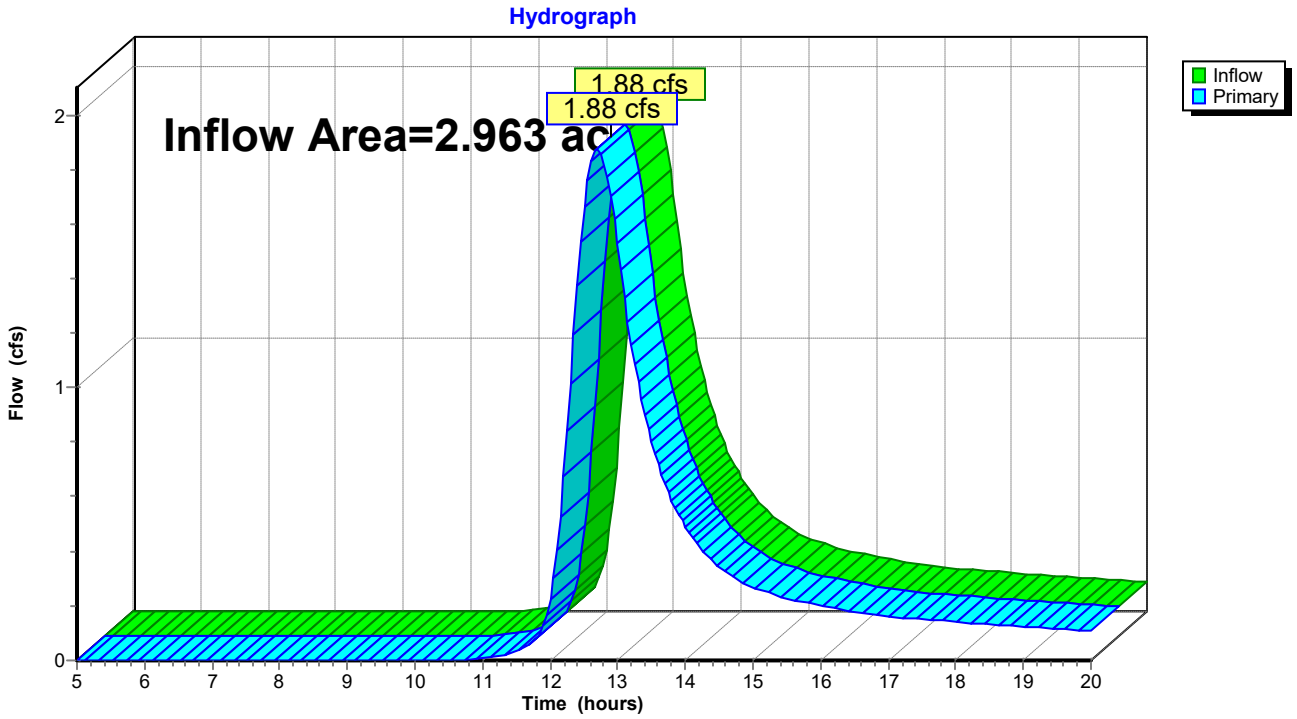


Summary for Link EX-SP1: EX-SP1

Inflow Area = 2.963 ac, 0.26% Impervious, Inflow Depth > 1.15" for 2-YR event
Inflow = 1.88 cfs @ 12.69 hrs, Volume= 0.283 af
Primary = 1.88 cfs @ 12.69 hrs, Volume= 0.283 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link EX-SP1: EX-SP1

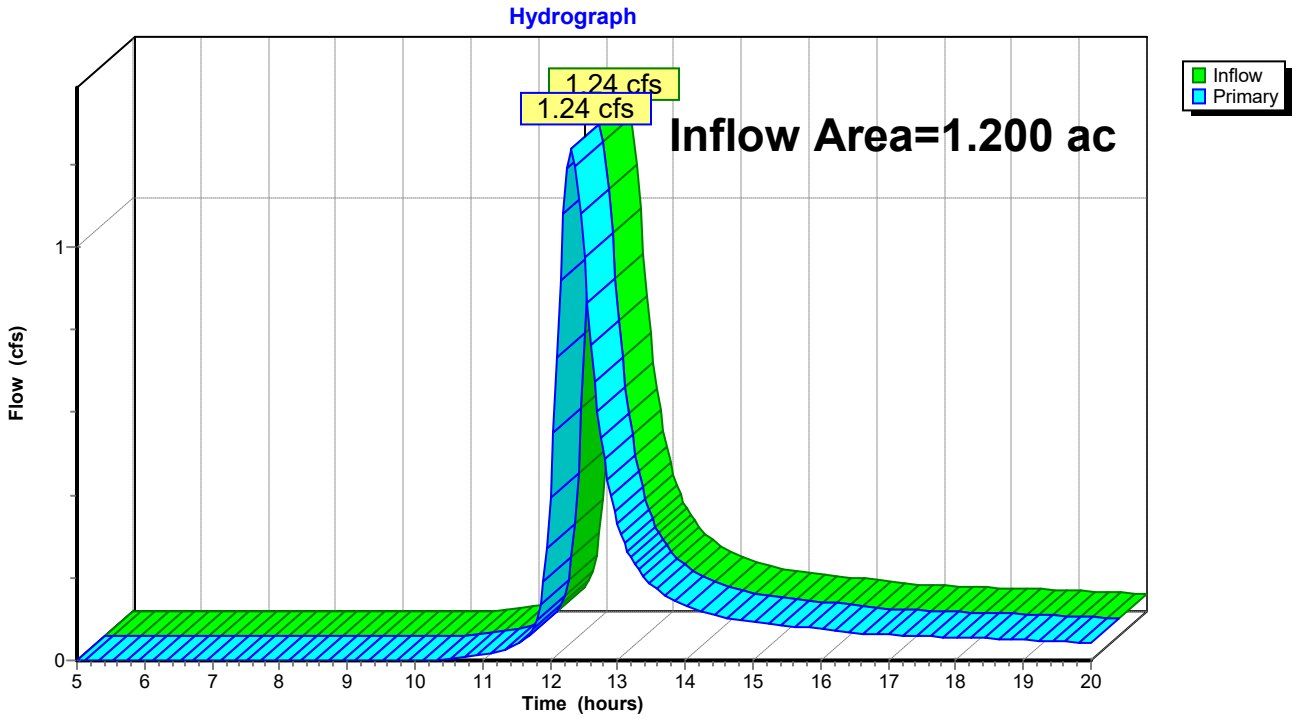


Summary for Link EX-SP2: EX-SP2

Inflow Area = 1.200 ac, 0.00% Impervious, Inflow Depth > 1.22" for 2-YR event
Inflow = 1.24 cfs @ 12.32 hrs, Volume= 0.122 af
Primary = 1.24 cfs @ 12.32 hrs, Volume= 0.122 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link EX-SP2: EX-SP2

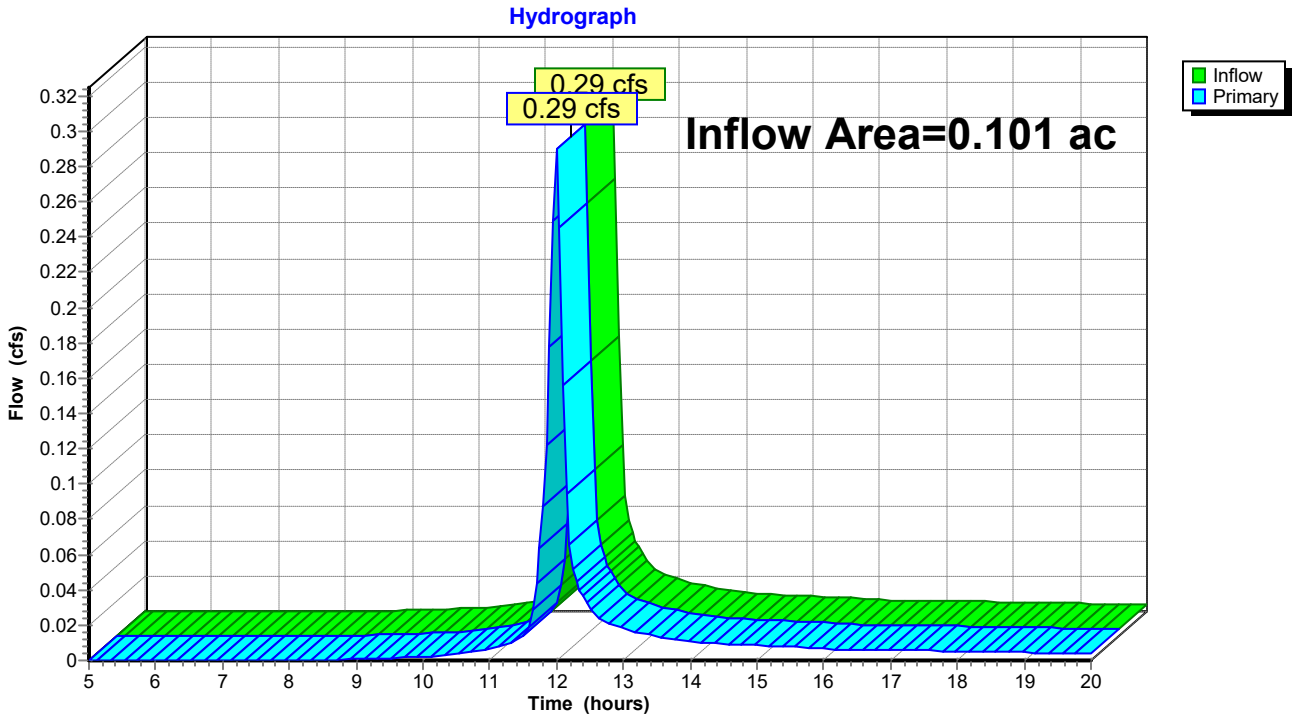


Summary for Link EX-SP3: EX-SP3

Inflow Area = 0.101 ac, 37.78% Impervious, Inflow Depth > 1.64" for 2-YR event
Inflow = 0.29 cfs @ 12.00 hrs, Volume= 0.014 af
Primary = 0.29 cfs @ 12.00 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link EX-SP3: EX-SP3



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX-DA1: EX DA 1 Runoff Area=129,081 sf 0.26% Impervious Runoff Depth>2.51"
Flow Length=372' Tc=62.8 min CN=76 Runoff=4.24 cfs 0.621 af

Subcatchment EX-DA2: EX DA 2 Runoff Area=52,263 sf 0.00% Impervious Runoff Depth>2.63"
Flow Length=433' Tc=34.6 min CN=77 Runoff=2.71 cfs 0.263 af

Subcatchment EX-DA3: EX DA 3 Runoff Area=4,418 sf 37.78% Impervious Runoff Depth>3.21"
Flow Length=368' Tc=8.4 min CN=83 Runoff=0.55 cfs 0.027 af

Link EX-SP1: EX-SP1 Inflow=4.24 cfs 0.621 af
Primary=4.24 cfs 0.621 af

Link EX-SP2: EX-SP2 Inflow=2.71 cfs 0.263 af
Primary=2.71 cfs 0.263 af

Link EX-SP3: EX-SP3 Inflow=0.55 cfs 0.027 af
Primary=0.55 cfs 0.027 af

Total Runoff Area = 4.265 ac Runoff Volume = 0.911 af Average Runoff Depth = 2.56"
98.92% Pervious = 4.219 ac 1.08% Impervious = 0.046 ac

Summary for Subcatchment EX-DA1: EX DA 1

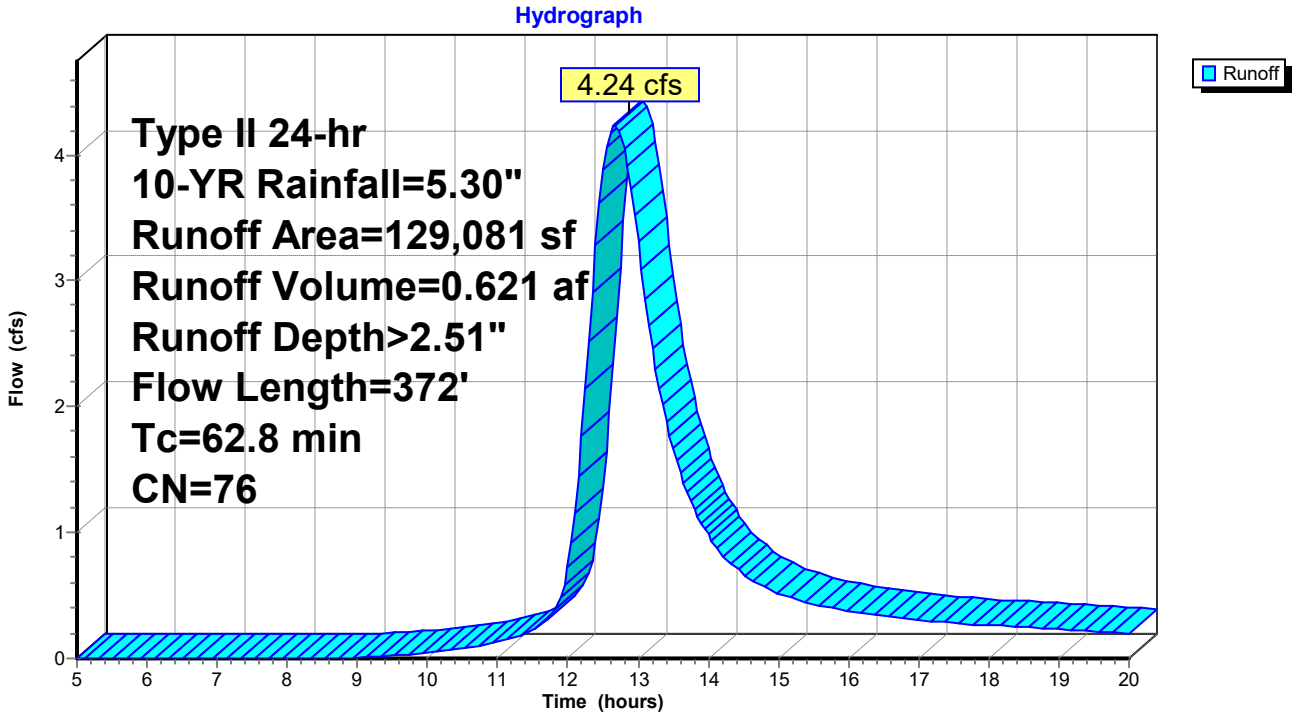
Runoff = 4.24 cfs @ 12.66 hrs, Volume= 0.621 af, Depth> 2.51"
Routed to Link EX-SP1 : EX-SP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
96,492	74	>75% Grass cover, Good, HSG C
32,259	80	>75% Grass cover, Good, HSG D
330	98	Paved roads w/curbs & sewers, HSG C
129,081	76	Weighted Average
128,751		99.74% Pervious Area
330		0.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
51.0	87	0.0017	0.03		**Sheet Flow, GRASS SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
8.3	13	0.0035	0.03		**Sheet Flow, GRASS SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
1.2	67	0.0035	0.95		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
1.4	128	0.0093	1.55		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
0.9	77	0.0080	1.44		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
62.8	372	Total			

Subcatchment EX-DA1: EX DA 1



Summary for Subcatchment EX-DA2: EX DA 2

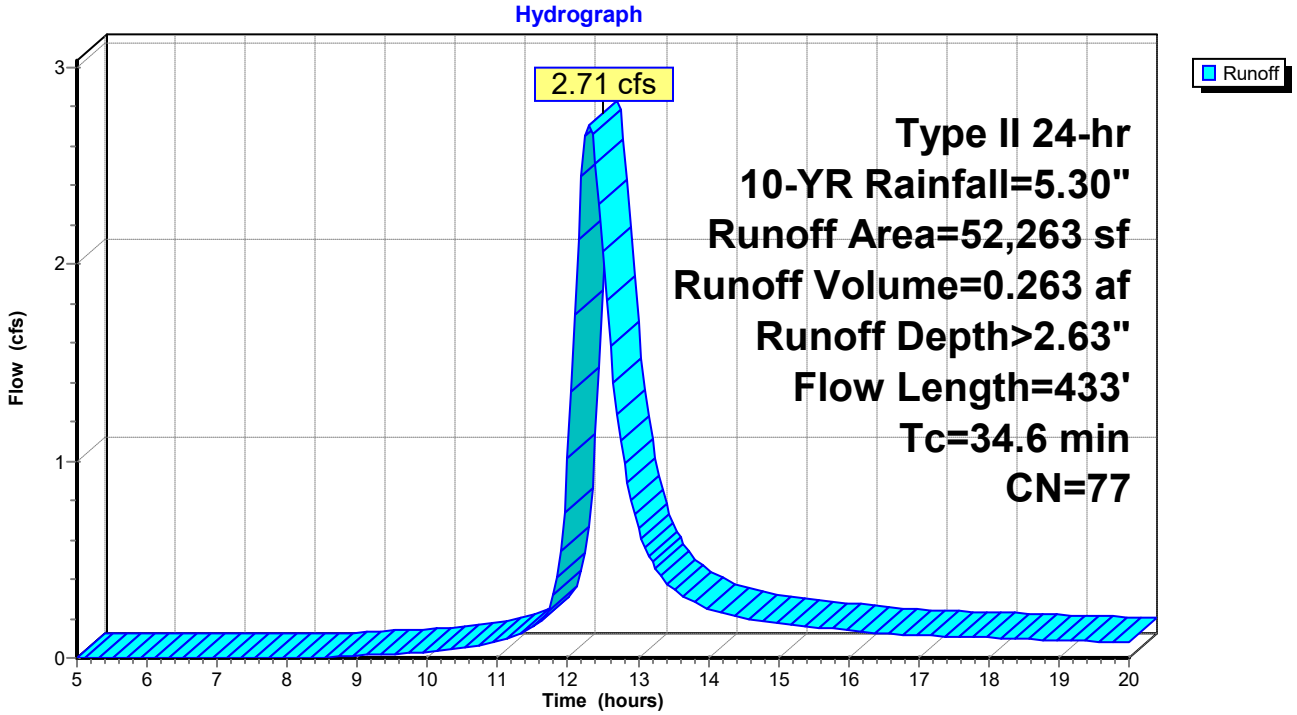
Runoff = 2.71 cfs @ 12.30 hrs, Volume= 0.263 af, Depth> 2.63"
Routed to Link EX-SP2 : EX-SP2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
30,428	74	>75% Grass cover, Good, HSG C
21,835	80	>75% Grass cover, Good, HSG D
52,263	77	Weighted Average
52,263		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.9	83	0.0143	0.07		**Sheet Flow, SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
8.9	17	0.0051	0.03		**Sheet Flow, GRASS SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
4.8	333	0.0051	1.15		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
34.6	433	Total			

Subcatchment EX-DA2: EX DA 2



Summary for Subcatchment EX-DA3: EX DA 3

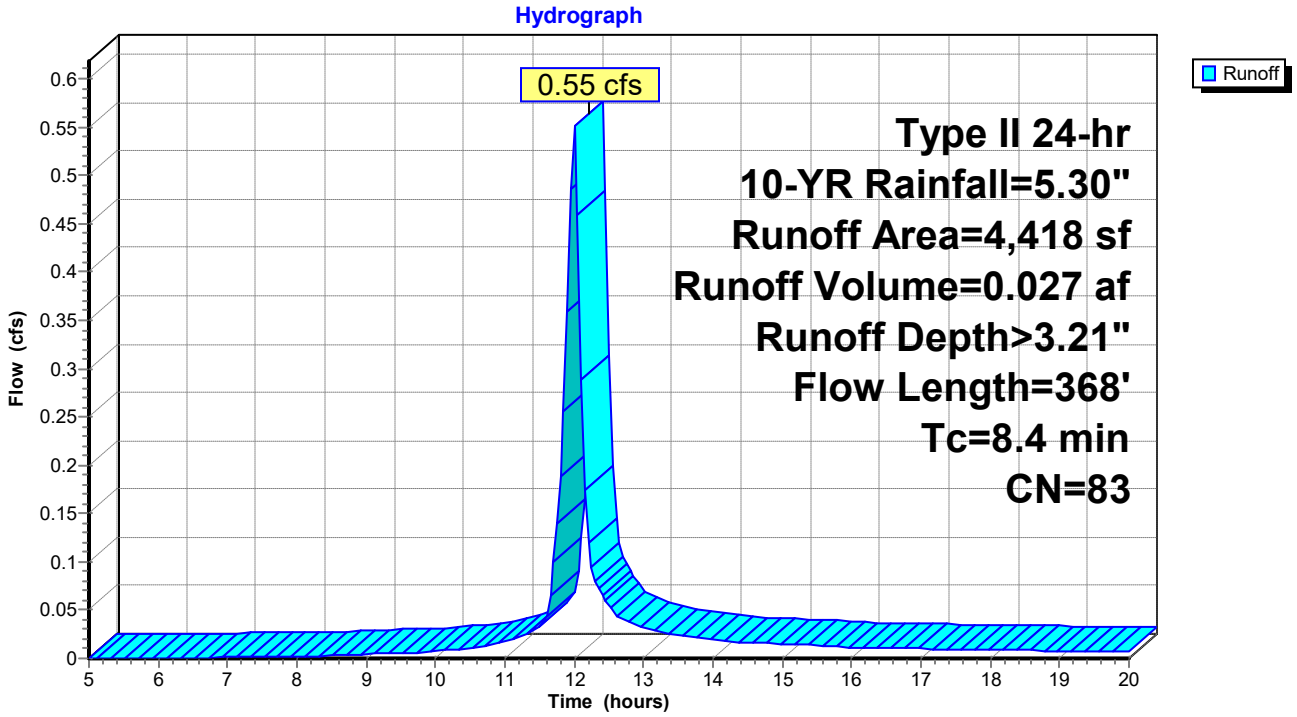
Runoff = 0.55 cfs @ 12.00 hrs, Volume= 0.027 af, Depth> 3.21"
Routed to Link EX-SP3 : EX-SP3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
2,749	74	>75% Grass cover, Good, HSG C
1,669	98	Paved roads w/curbs & sewers, HSG C
4,418	83	Weighted Average
2,749		62.22% Pervious Area
1,669		37.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	11	0.0253	1.00		**Sheet Flow, PAVED SHEET FLOW** Smooth surfaces n= 0.011 P2= 3.40"
3.3	11	0.0253	0.06		**Sheet Flow, GRASS SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
0.2	11	0.0253	1.00		**Sheet Flow, PAVED SHEET FLOW** Smooth surfaces n= 0.011 P2= 3.40"
1.9	78	0.0037	0.69		**Sheet Flow, PAVED SHEET FLOW** Smooth surfaces n= 0.011 P2= 3.40"
1.1	78	0.0037	1.23		**Shallow Concentrated Flow, PAVED SCF** Paved Kv= 20.3 fps
1.7	179	0.0072	1.72		**Shallow Concentrated Flow, PAVED SCF** Paved Kv= 20.3 fps
8.4	368	Total			

Subcatchment EX-DA3: EX DA 3

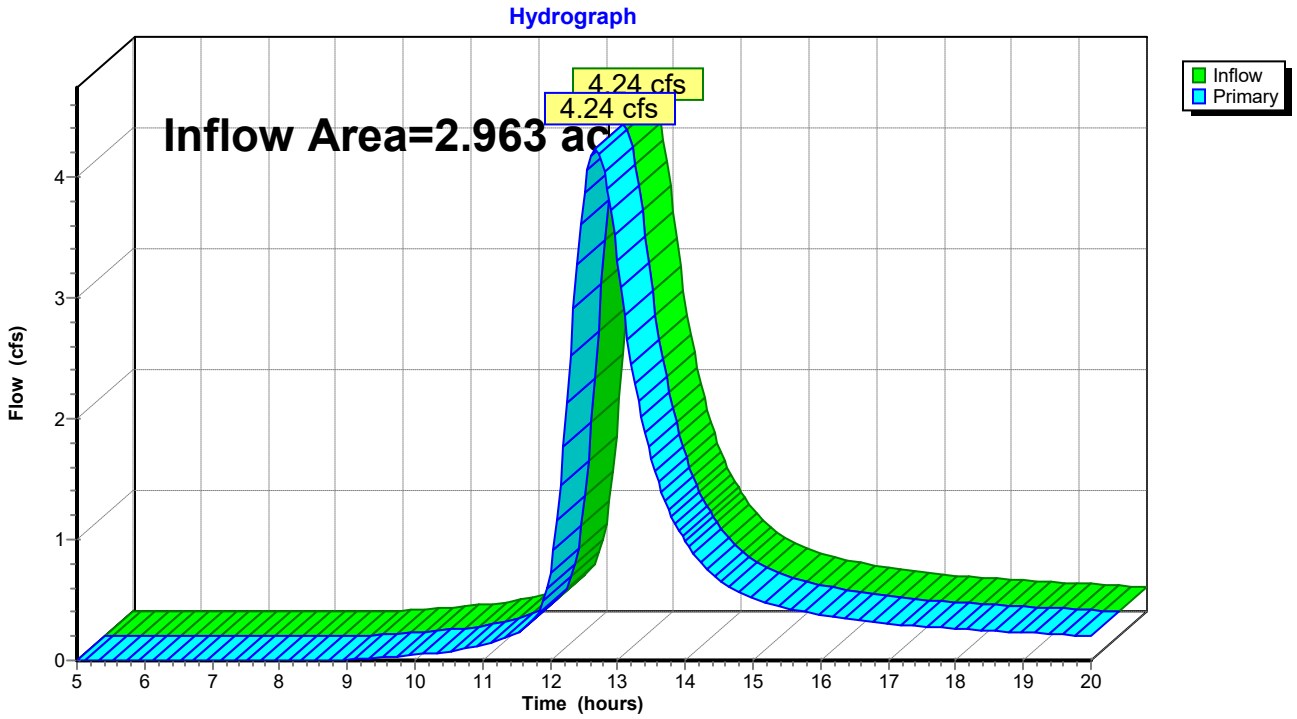


Summary for Link EX-SP1: EX-SP1

Inflow Area = 2.963 ac, 0.26% Impervious, Inflow Depth > 2.51" for 10-YR event
Inflow = 4.24 cfs @ 12.66 hrs, Volume= 0.621 af
Primary = 4.24 cfs @ 12.66 hrs, Volume= 0.621 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link EX-SP1: EX-SP1

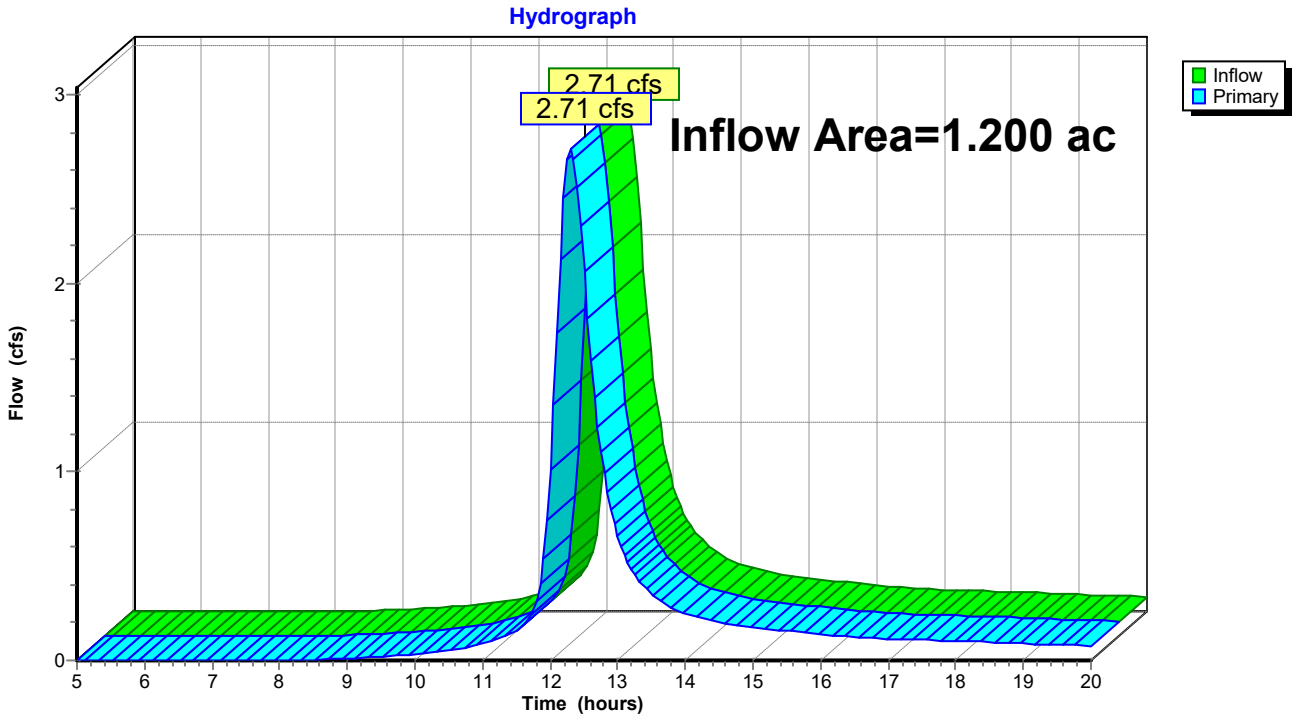


Summary for Link EX-SP2: EX-SP2

Inflow Area = 1.200 ac, 0.00% Impervious, Inflow Depth > 2.63" for 10-YR event
Inflow = 2.71 cfs @ 12.30 hrs, Volume= 0.263 af
Primary = 2.71 cfs @ 12.30 hrs, Volume= 0.263 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link EX-SP2: EX-SP2

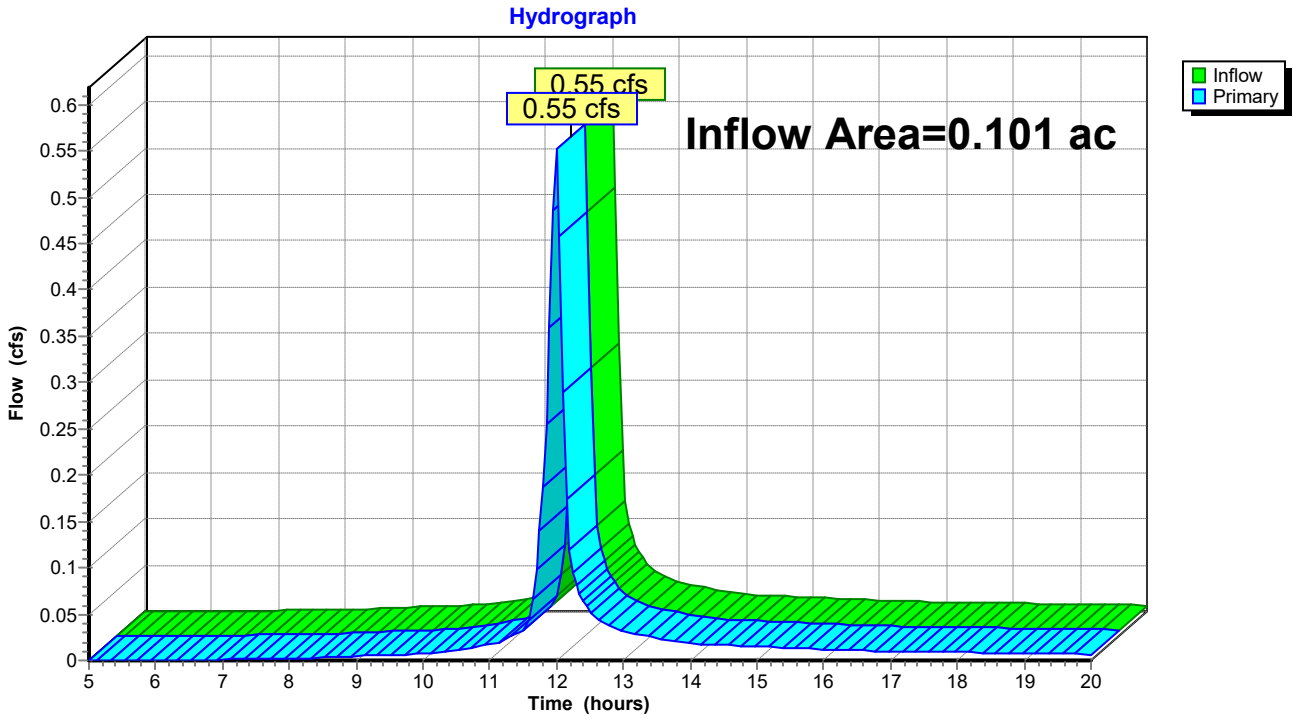


Summary for Link EX-SP3: EX-SP3

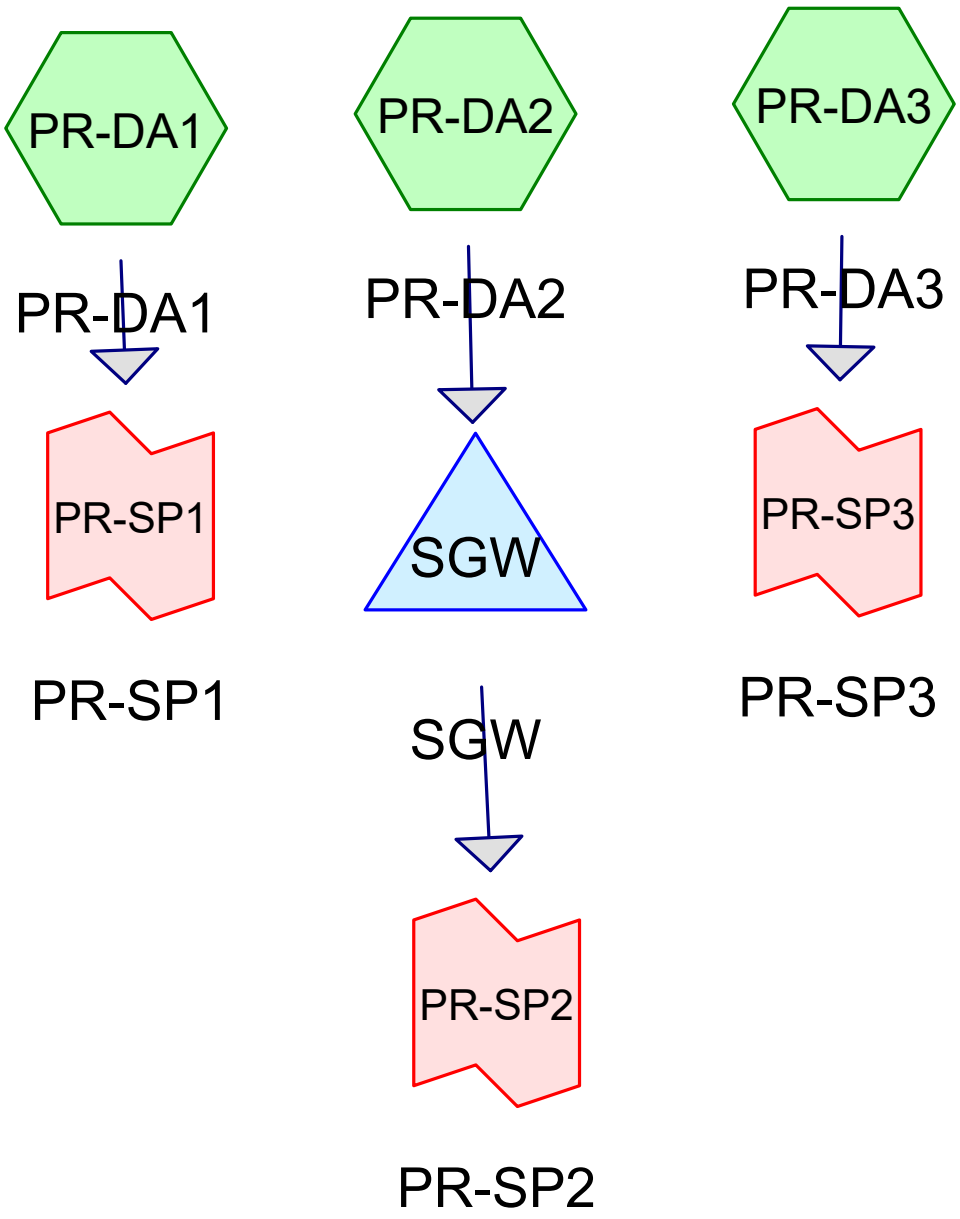
Inflow Area = 0.101 ac, 37.78% Impervious, Inflow Depth > 3.21" for 10-YR event
Inflow = 0.55 cfs @ 12.00 hrs, Volume= 0.027 af
Primary = 0.55 cfs @ 12.00 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link EX-SP3: EX-SP3



Analysis of Proposed Conditions



Subcat Reach Pond Link

Routing Diagram for Port Street Multifamily - HydroCad
Prepared by Rauch Inc, Printed 3/26/2026
HydroCAD® 10.20-7a s/n 02413 © 2025 HydroCAD Software Solutions LLC

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PR-DA1: PR-DA1 Runoff Area=59,842 sf 3.62% Impervious Runoff Depth>1.11"
Flow Length=382' Tc=22.2 min CN=75 Runoff=1.70 cfs 0.127 af

Subcatchment PR-DA2: PR-DA2 Runoff Area=118,518 sf 50.34% Impervious Runoff Depth>1.95"
Flow Length=480' Tc=5.2 min CN=87 Runoff=9.98 cfs 0.441 af

Subcatchment PR-DA3: PR-DA3 Runoff Area=7,120 sf 30.15% Impervious Runoff Depth>1.48"
Flow Length=165' Tc=34.3 min CN=81 Runoff=0.21 cfs 0.020 af

Pond SGW: SGW Peak Elev=17.35' Storage=14,229 cf Inflow=9.98 cfs 0.441 af
Outflow=0.81 cfs 0.437 af

Link PR-SP1: PR-SP1 Inflow=1.70 cfs 0.127 af
Primary=1.70 cfs 0.127 af

Link PR-SP2: PR-SP2 Inflow=0.81 cfs 0.437 af
Primary=0.81 cfs 0.437 af

Link PR-SP3: PR-SP3 Inflow=0.21 cfs 0.020 af
Primary=0.21 cfs 0.020 af

Total Runoff Area = 4.258 ac Runoff Volume = 0.588 af Average Runoff Depth = 1.66"
65.51% Pervious = 2.789 ac 34.49% Impervious = 1.469 ac

Summary for Subcatchment PR-DA1: PR-DA1

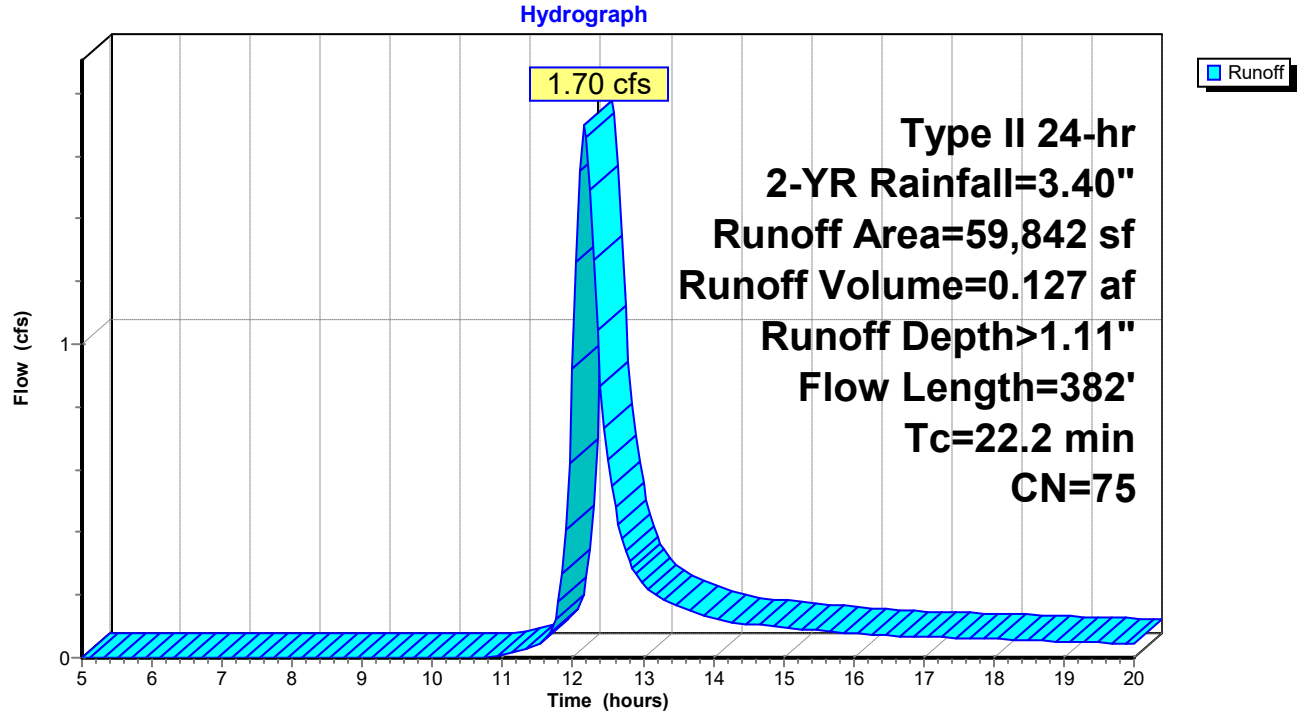
Runoff = 1.70 cfs @ 12.16 hrs, Volume= 0.127 af, Depth> 1.11"
Routed to Link PR-SP1 : PR-SP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
54,257	74	>75% Grass cover, Good, HSG C
3,418	80	>75% Grass cover, Good, HSG D
155	98	Unconnected pavement, HSG C
2,012	98	Unconnected pavement, HSG D
59,842	75	Weighted Average
57,675		96.38% Pervious Area
2,167		3.62% Impervious Area
2,167		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.9	100	0.0309	0.09		**Sheet Flow, SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
4.3	282	0.0046	1.09		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
22.2	382	Total			

Subcatchment PR-DA1: PR-DA1



Summary for Subcatchment PR-DA2: PR-DA2

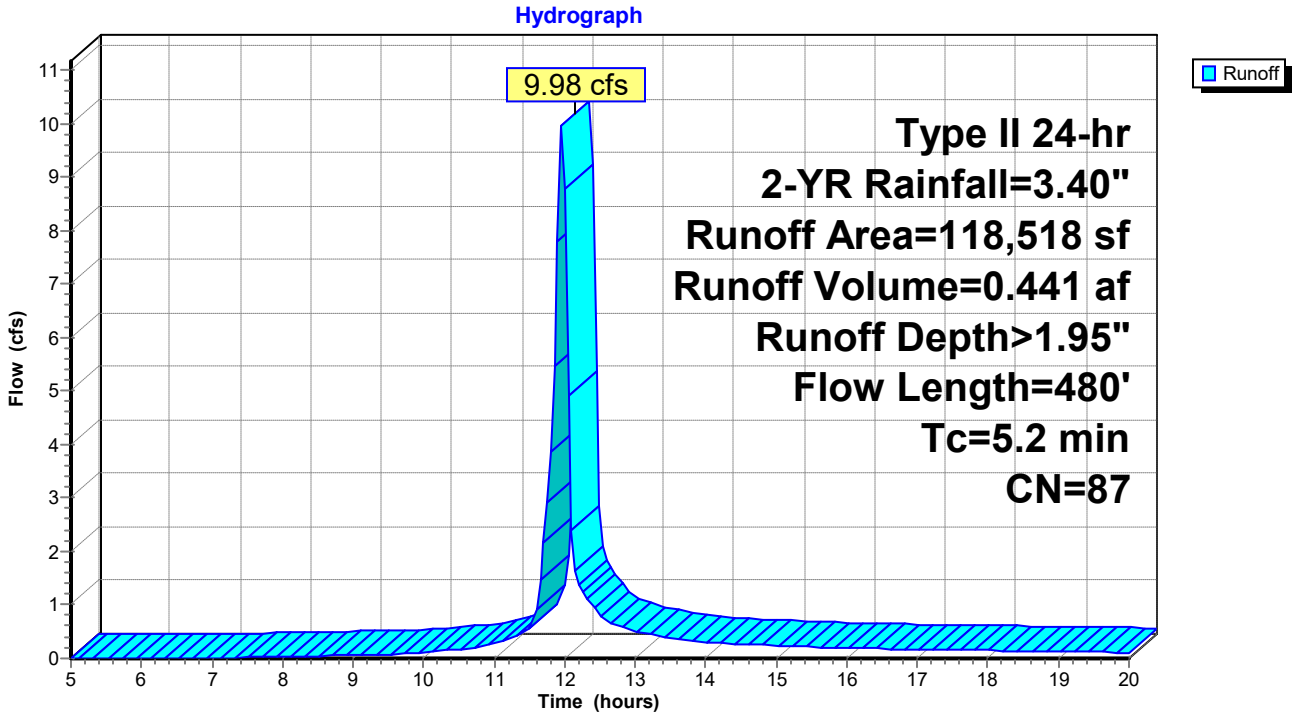
Runoff = 9.98 cfs @ 11.96 hrs, Volume= 0.441 af, Depth> 1.95"
Routed to Pond SGW : SGW

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
37,810	74	>75% Grass cover, Good, HSG C
21,050	80	>75% Grass cover, Good, HSG D
25,945	98	Paved parking, HSG C
11,283	98	Paved parking, HSG D
6,097	98	Unconnected roofs, HSG C
16,333	98	Unconnected roofs, HSG D
118,518	87	Weighted Average
58,860		49.66% Pervious Area
59,658		50.34% Impervious Area
22,430		37.60% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	89	0.0131	1.17		**Sheet Flow, SHEET FLOW** Smooth surfaces n= 0.011 P2= 3.40"
0.2	11	0.0209	0.93		**Sheet Flow, PAVED SHEET FLOW** Smooth surfaces n= 0.011 P2= 3.40"
0.1	10	0.0209	2.93		**Shallow Concentrated Flow, PAVED SCF** Paved Kv= 20.3 fps
2.5	41	0.0003	0.28		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
0.2	51	0.0050	4.17	3.28	**Pipe Channel, CMP_Round 12"** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.010 PVC, smooth interior
0.3	86	0.0050	4.84	5.94	**Pipe Channel, CMP_Round 15"** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010 PVC, smooth interior
0.5	164	0.0050	5.46	9.66	**Pipe Channel, CMP_Round 18"** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010 PVC, smooth interior
0.1	28	0.0050	5.46	9.66	**Pipe Channel, CMP_Round 18"** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010 PVC, smooth interior
5.2	480	Total			

Subcatchment PR-DA2: PR-DA2



Summary for Subcatchment PR-DA3: PR-DA3

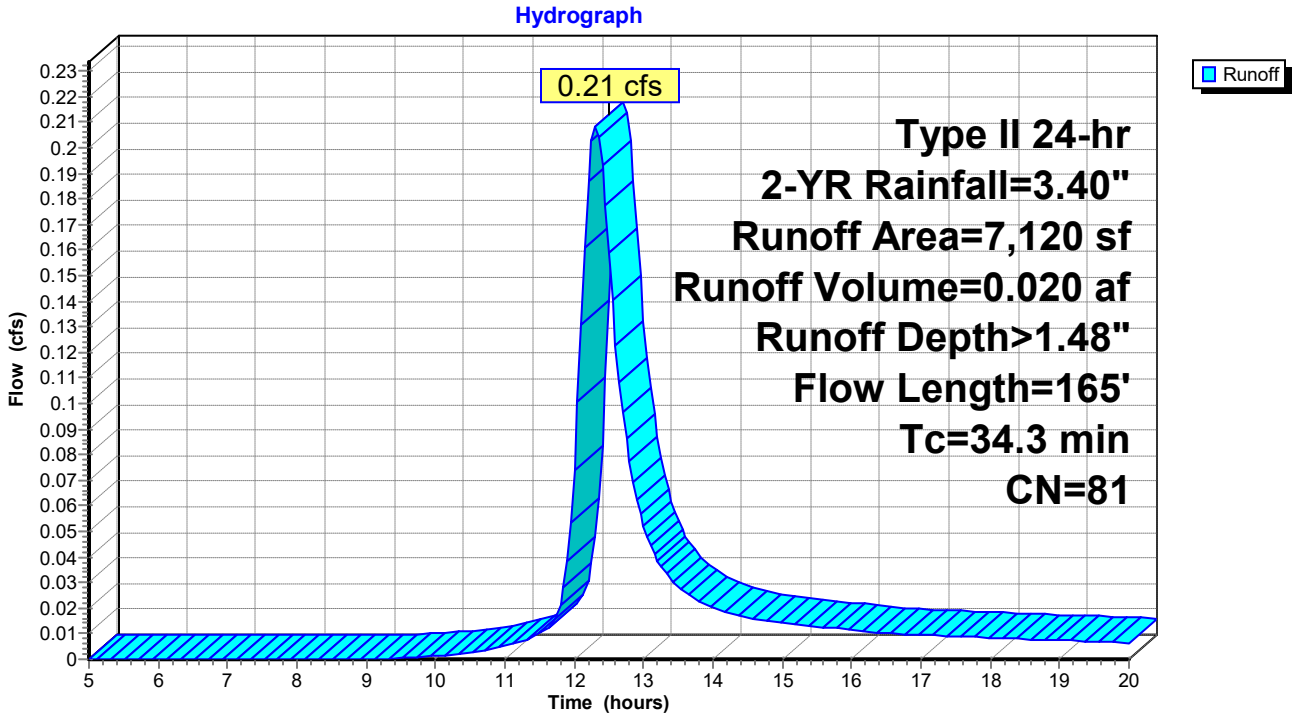
Runoff = 0.21 cfs @ 12.30 hrs, Volume= 0.020 af, Depth> 1.48"
Routed to Link PR-SP3 : PR-SP3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
4,973	74	>75% Grass cover, Good, HSG C
2,147	98	Paved parking, HSG C
7,120	81	Weighted Average
4,973		69.85% Pervious Area
2,147		30.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.7	100	0.0063	0.05		**Sheet Flow, GRASS SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
0.1	10	0.0134	1.86		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
0.2	23	0.0134	2.35		**Shallow Concentrated Flow, PAVED SCF** Paved Kv= 20.3 fps
0.3	32	0.0134	1.86		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
34.3	165	Total			

Subcatchment PR-DA3: PR-DA3



Summary for Pond SGW: SGW

Inflow Area = 2.721 ac, 50.34% Impervious, Inflow Depth > 1.95" for 2-YR event
Inflow = 9.98 cfs @ 11.96 hrs, Volume= 0.441 af
Outflow = 0.81 cfs @ 12.51 hrs, Volume= 0.437 af, Atten= 92%, Lag= 32.9 min
Primary = 0.81 cfs @ 12.51 hrs, Volume= 0.437 af
Routed to Link PR-SP2 : PR-SP2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Starting Elev= 16.17' Surf.Area= 2,852 sf Storage= 5,339 cf
Peak Elev= 17.35' @ 12.51 hrs Surf.Area= 10,801 sf Storage= 14,229 cf (8,890 cf above start)

Plug-Flow detention time= 240.0 min calculated for 0.314 af (71% of inflow)
Center-of-Mass det. time= 107.2 min (881.2 - 774.0)

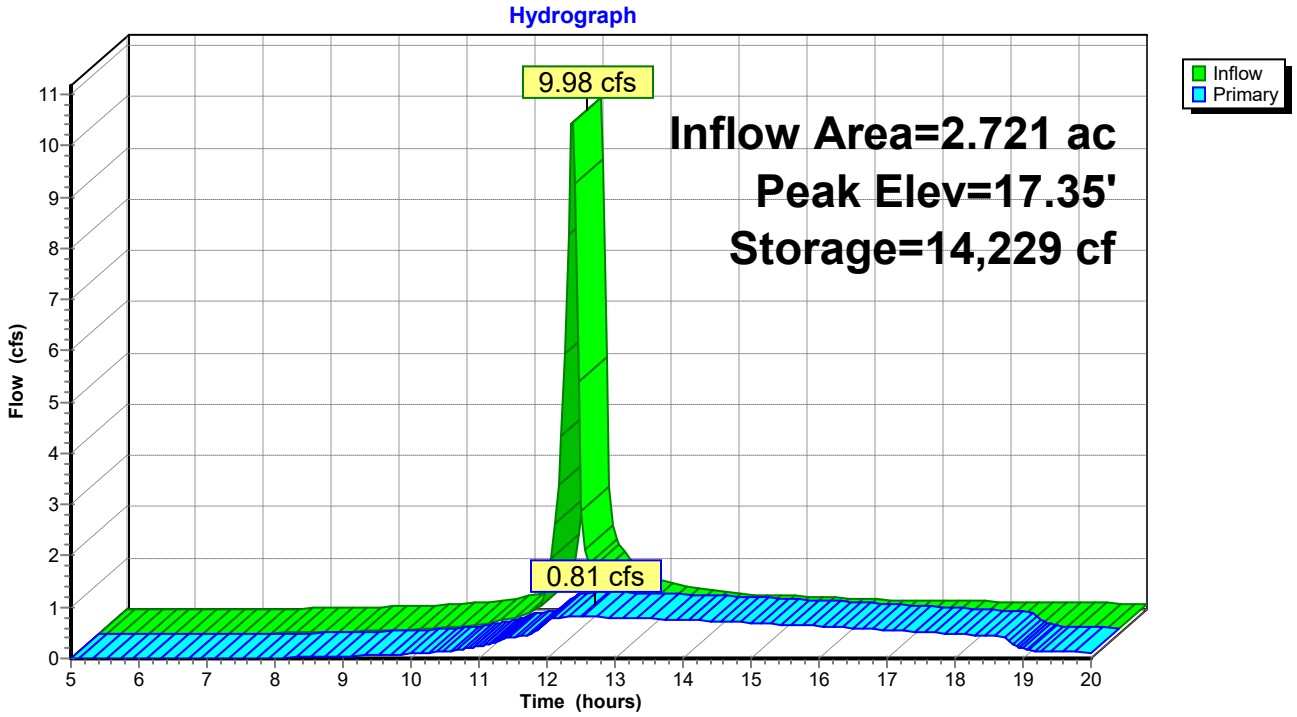
Volume	Invert	Avail.Storage	Storage Description
#1	11.49'	36,129 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
11.49	2,852	214.0	0.0	0	0	2,852
11.50	2,852	214.0	40.0	11	11	2,854
16.49	2,852	214.0	40.0	5,693	5,704	3,922
16.50	9,216	507.0	100.0	57	5,761	20,733
18.00	12,110	536.0	100.0	15,945	21,706	23,264
18.50	12,921	656.0	100.0	6,257	27,963	34,651
19.00	20,000	733.0	100.0	8,166	36,129	43,169

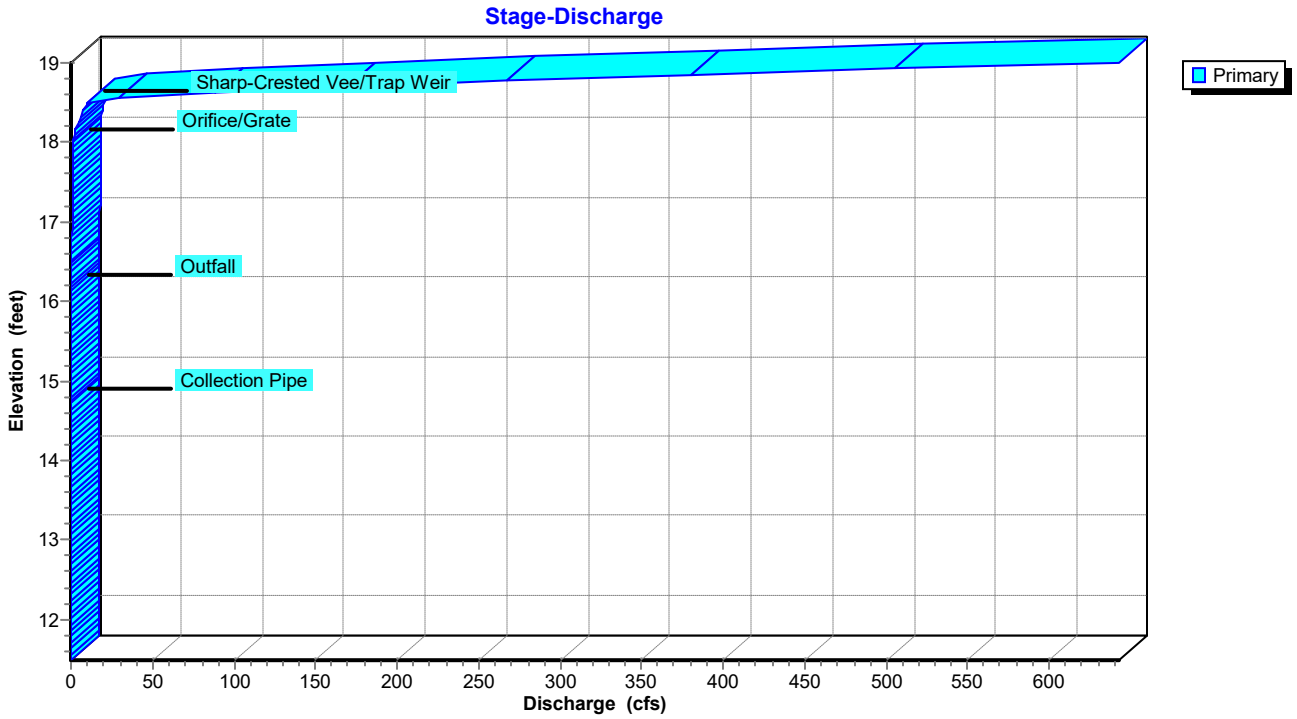
Device	Routing	Invert	Outlet Devices
#1	Primary	16.17'	**18.0" Round Outfall** L= 53.0' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 16.17' / 15.91' S= 0.0049 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf
#2	Device 1	18.00'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	18.50'	**545.0' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)
#4	Device 1	14.75'	**6.0" Round Collection Pipe** L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 14.75' / 14.75' S= 0.0000 '/' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf

Primary OutFlow Max=0.81 cfs @ 12.51 hrs HW=17.35' (Free Discharge)
- **1=Outfall** (Passes 0.81 cfs of 4.33 cfs potential flow)
  - **2=Orifice/Grate** (Controls 0.00 cfs)
  - **4=Collection Pipe** (Inlet Controls 0.81 cfs @ 4.12 fps)
- **3=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)

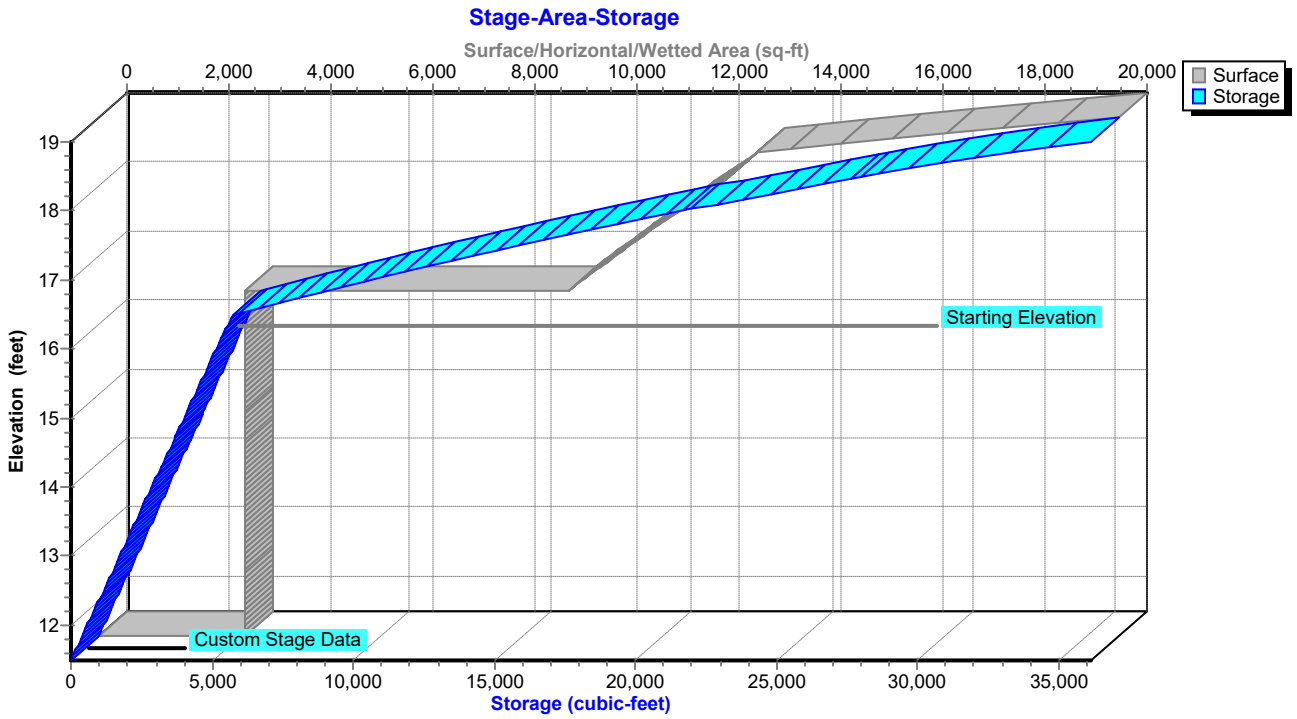
Pond SGW: SGW



Pond SGW: SGW



Pond SGW: SGW

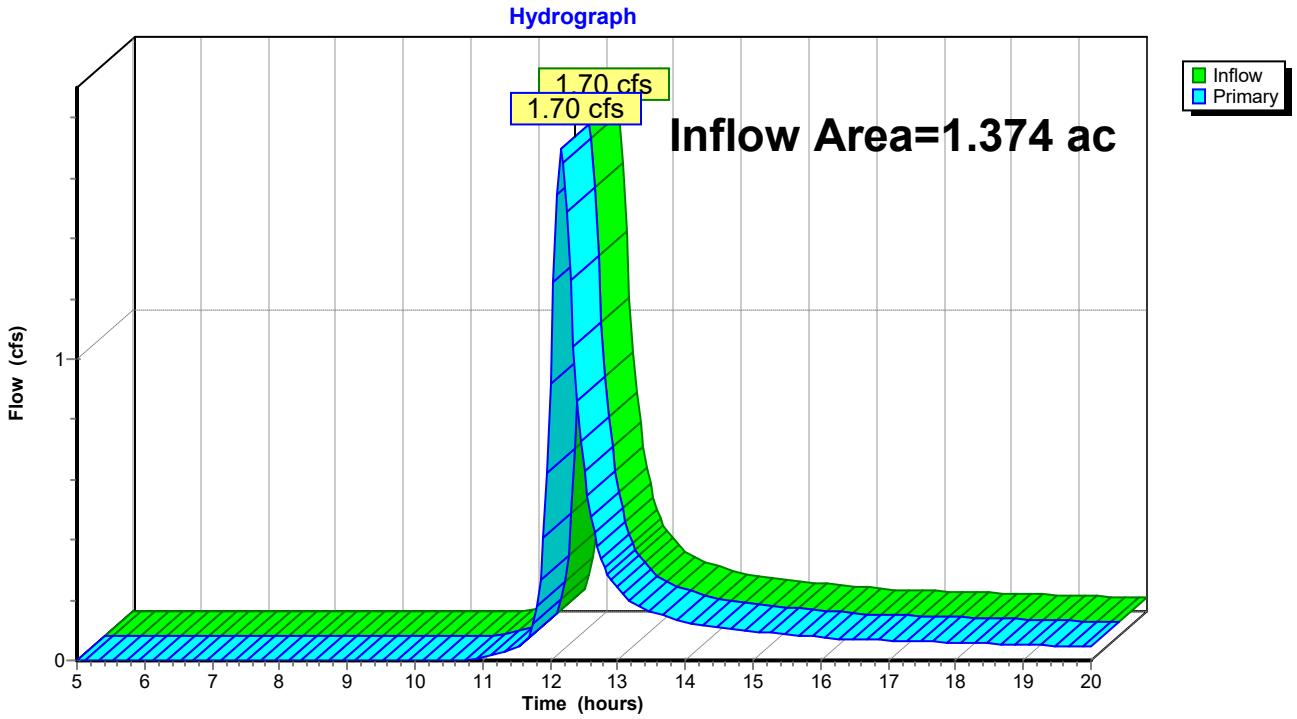

Stage-Area-Storage
Surface/Horizontal/Wetted Area (sq-ft)
0
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
18,000
20,000
Surface
Storage
19
18
17
16
15
14
13
12
Elevation (feet)
Starting Elevation
Custom Stage Data
0
5,000
10,000
15,000
20,000
25,000
30,000
35,000
Storage (cubic-feet)

Summary for Link PR-SP1: PR-SP1

Inflow Area = 1.374 ac, 3.62% Impervious, Inflow Depth > 1.11" for 2-YR event
Inflow = 1.70 cfs @ 12.16 hrs, Volume= 0.127 af
Primary = 1.70 cfs @ 12.16 hrs, Volume= 0.127 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link PR-SP1: PR-SP1

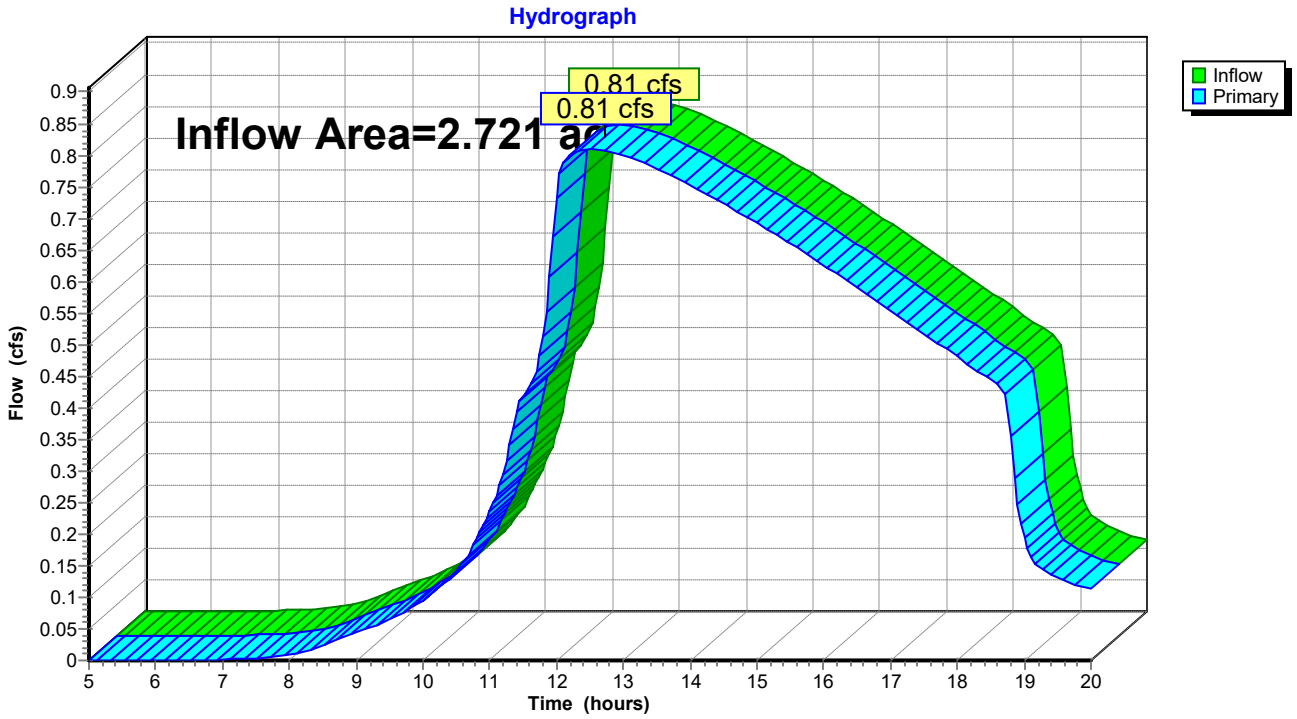


Summary for Link PR-SP2: PR-SP2

Inflow Area = 2.721 ac, 50.34% Impervious, Inflow Depth > 1.93" for 2-YR event
Inflow = 0.81 cfs @ 12.51 hrs, Volume= 0.437 af
Primary = 0.81 cfs @ 12.51 hrs, Volume= 0.437 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link PR-SP2: PR-SP2

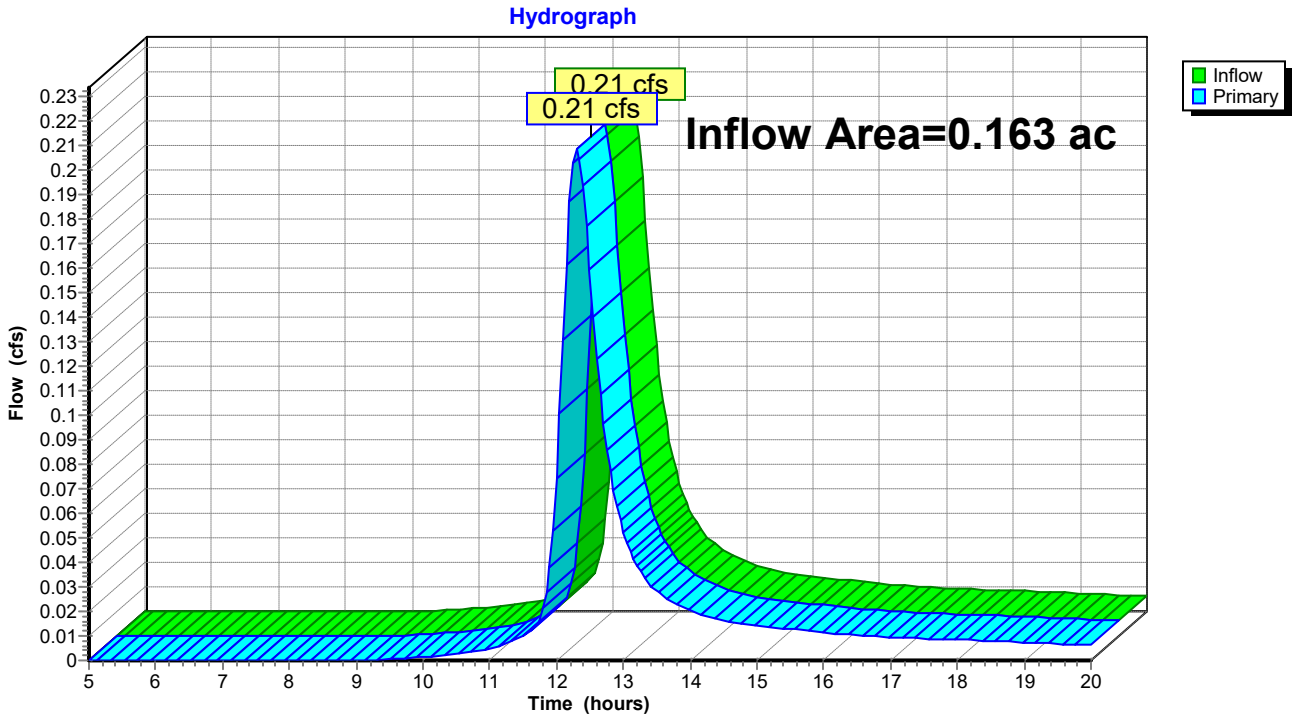


Summary for Link PR-SP3: PR-SP3

Inflow Area = 0.163 ac, 30.15% Impervious, Inflow Depth > 1.48" for 2-YR event
Inflow = 0.21 cfs @ 12.30 hrs, Volume= 0.020 af
Primary = 0.21 cfs @ 12.30 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link PR-SP3: PR-SP3



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PR-DA1: PR-DA1 Runoff Area=59,842 sf 3.62% Impervious Runoff Depth>2.47"
Flow Length=382' Tc=22.2 min CN=75 Runoff=3.86 cfs 0.283 af

Subcatchment PR-DA2: PR-DA2 Runoff Area=118,518 sf 50.34% Impervious Runoff Depth>3.61"
Flow Length=480' Tc=5.2 min CN=87 Runoff=17.80 cfs 0.818 af

Subcatchment PR-DA3: PR-DA3 Runoff Area=7,120 sf 30.15% Impervious Runoff Depth>2.99"
Flow Length=165' Tc=34.3 min CN=81 Runoff=0.42 cfs 0.041 af

Pond SGW: SGW Peak Elev=18.08' Storage=22,677 cf Inflow=17.80 cfs 0.818 af
Outflow=1.66 cfs 0.723 af

Link PR-SP1: PR-SP1 Inflow=3.86 cfs 0.283 af
Primary=3.86 cfs 0.283 af

Link PR-SP2: PR-SP2 Inflow=1.66 cfs 0.723 af
Primary=1.66 cfs 0.723 af

Link PR-SP3: PR-SP3 Inflow=0.42 cfs 0.041 af
Primary=0.42 cfs 0.041 af

Total Runoff Area = 4.258 ac Runoff Volume = 1.141 af Average Runoff Depth = 3.22"
65.51% Pervious = 2.789 ac 34.49% Impervious = 1.469 ac

Summary for Subcatchment PR-DA1: PR-DA1

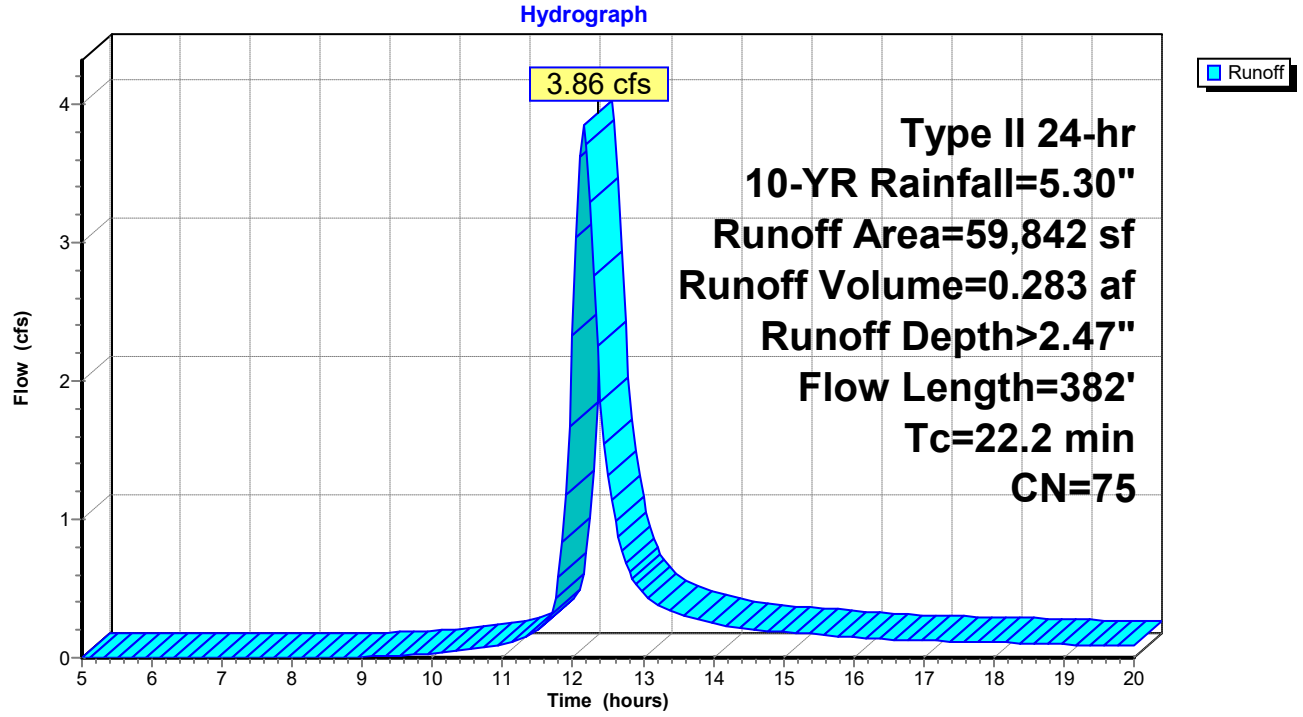
Runoff = 3.86 cfs @ 12.16 hrs, Volume= 0.283 af, Depth> 2.47"
Routed to Link PR-SP1 : PR-SP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
54,257	74	>75% Grass cover, Good, HSG C
3,418	80	>75% Grass cover, Good, HSG D
155	98	Unconnected pavement, HSG C
2,012	98	Unconnected pavement, HSG D
59,842	75	Weighted Average
57,675		96.38% Pervious Area
2,167		3.62% Impervious Area
2,167		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.9	100	0.0309	0.09		**Sheet Flow, SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
4.3	282	0.0046	1.09		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
22.2	382	Total			

Subcatchment PR-DA1: PR-DA1



Summary for Subcatchment PR-DA2: PR-DA2

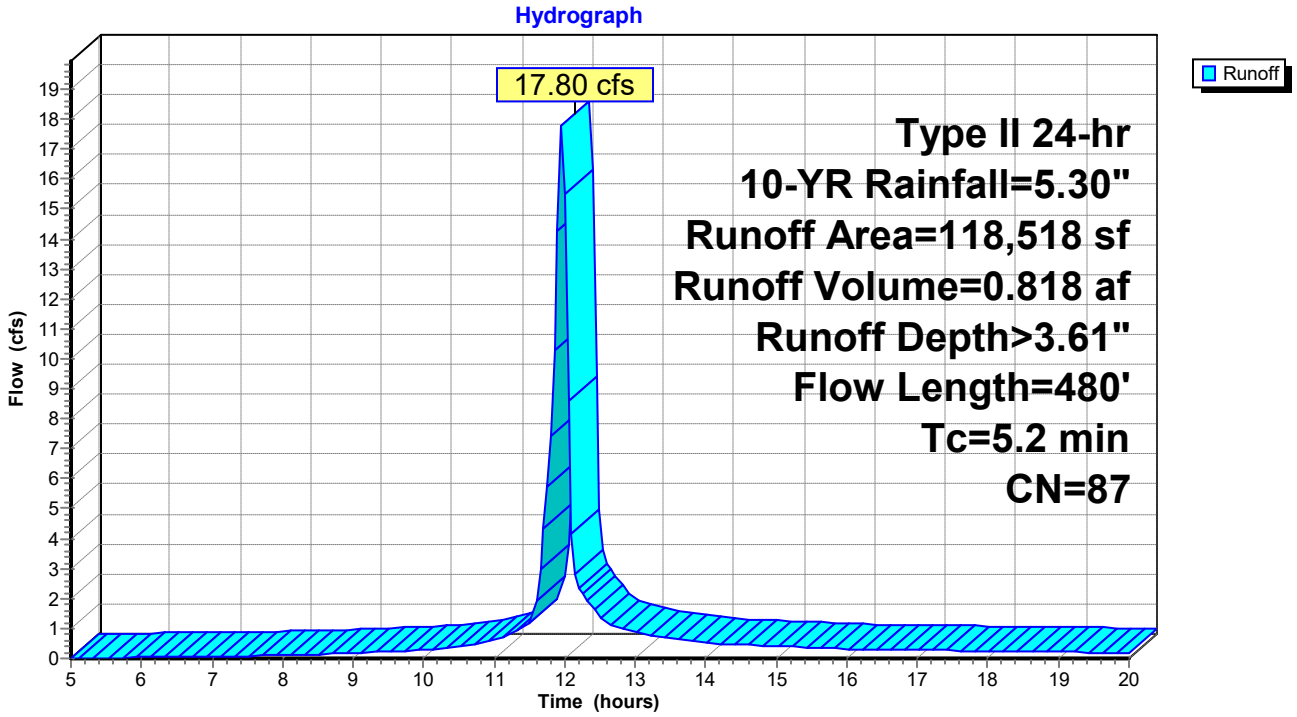
Runoff = 17.80 cfs @ 11.96 hrs, Volume= 0.818 af, Depth> 3.61"
Routed to Pond SGW : SGW

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
37,810	74	>75% Grass cover, Good, HSG C
21,050	80	>75% Grass cover, Good, HSG D
25,945	98	Paved parking, HSG C
11,283	98	Paved parking, HSG D
6,097	98	Unconnected roofs, HSG C
16,333	98	Unconnected roofs, HSG D
118,518	87	Weighted Average
58,860		49.66% Pervious Area
59,658		50.34% Impervious Area
22,430		37.60% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	89	0.0131	1.17		**Sheet Flow, SHEET FLOW** Smooth surfaces n= 0.011 P2= 3.40"
0.2	11	0.0209	0.93		**Sheet Flow, PAVED SHEET FLOW** Smooth surfaces n= 0.011 P2= 3.40"
0.1	10	0.0209	2.93		**Shallow Concentrated Flow, PAVED SCF** Paved Kv= 20.3 fps
2.5	41	0.0003	0.28		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
0.2	51	0.0050	4.17	3.28	**Pipe Channel, CMP_Round 12"** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.010 PVC, smooth interior
0.3	86	0.0050	4.84	5.94	**Pipe Channel, CMP_Round 15"** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010 PVC, smooth interior
0.5	164	0.0050	5.46	9.66	**Pipe Channel, CMP_Round 18"** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010 PVC, smooth interior
0.1	28	0.0050	5.46	9.66	**Pipe Channel, CMP_Round 18"** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010 PVC, smooth interior
5.2	480	Total			

Subcatchment PR-DA2: PR-DA2



Summary for Subcatchment PR-DA3: PR-DA3

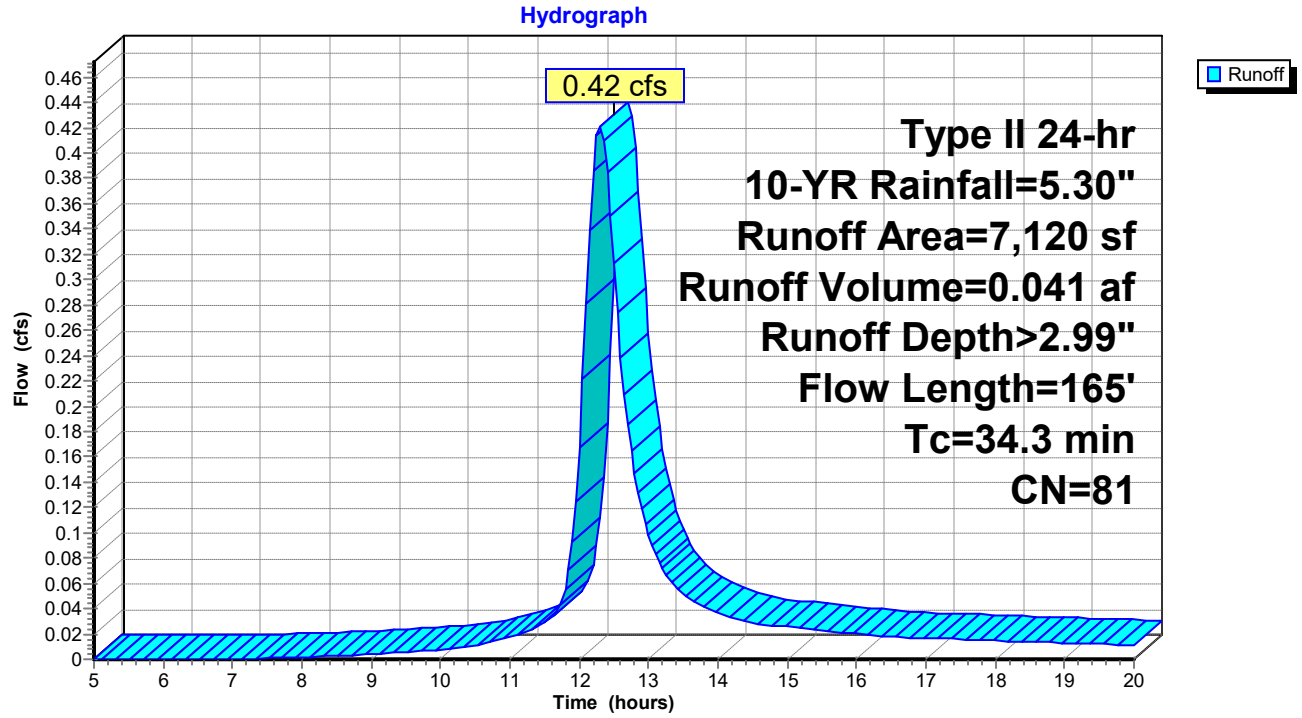
Runoff = 0.42 cfs @ 12.29 hrs, Volume= 0.041 af, Depth> 2.99"
Routed to Link PR-SP3 : PR-SP3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
4,973	74	>75% Grass cover, Good, HSG C
2,147	98	Paved parking, HSG C
7,120	81	Weighted Average
4,973		69.85% Pervious Area
2,147		30.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.7	100	0.0063	0.05		**Sheet Flow, GRASS SHEET FLOW** Grass: Bermuda n= 0.410 P2= 3.40"
0.1	10	0.0134	1.86		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
0.2	23	0.0134	2.35		**Shallow Concentrated Flow, PAVED SCF** Paved Kv= 20.3 fps
0.3	32	0.0134	1.86		**Shallow Concentrated Flow, GRASS SCF** Unpaved Kv= 16.1 fps
34.3	165	Total			

Subcatchment PR-DA3: PR-DA3



Summary for Pond SGW: SGW

Inflow Area = 2.721 ac, 50.34% Impervious, Inflow Depth > 3.61" for 10-YR event
Inflow = 17.80 cfs @ 11.96 hrs, Volume= 0.818 af
Outflow = 1.66 cfs @ 12.41 hrs, Volume= 0.723 af, Atten= 91%, Lag= 27.5 min
Primary = 1.66 cfs @ 12.41 hrs, Volume= 0.723 af
Routed to Link PR-SP2 : PR-SP2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Starting Elev= 16.17' Surf.Area= 2,852 sf Storage= 5,339 cf
Peak Elev= 18.08' @ 12.41 hrs Surf.Area= 12,238 sf Storage= 22,677 cf (17,338 cf above start)

Plug-Flow detention time= 237.5 min calculated for 0.598 af (73% of inflow)
Center-of-Mass det. time= 123.4 min (883.2 - 759.8)

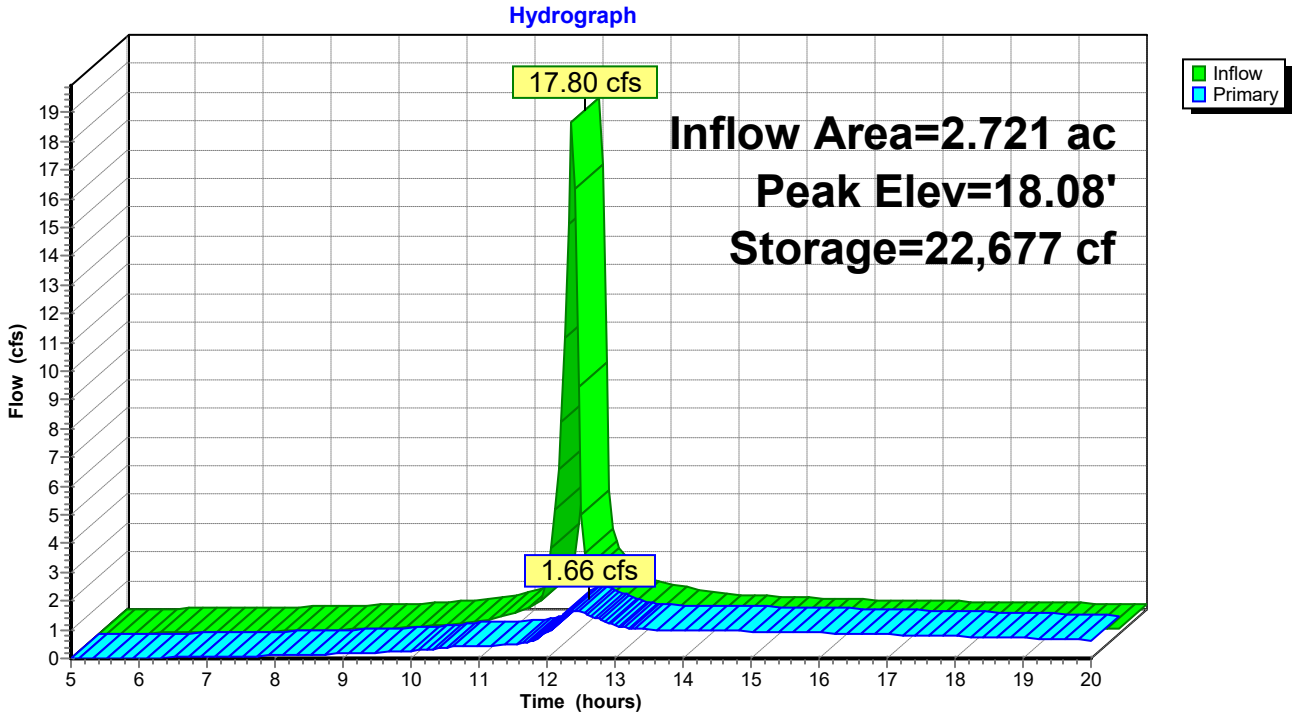
Volume	Invert	Avail.Storage	Storage Description
#1	11.49'	36,129 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
11.49	2,852	214.0	0.0	0	0	2,852
11.50	2,852	214.0	40.0	11	11	2,854
16.49	2,852	214.0	40.0	5,693	5,704	3,922
16.50	9,216	507.0	100.0	57	5,761	20,733
18.00	12,110	536.0	100.0	15,945	21,706	23,264
18.50	12,921	656.0	100.0	6,257	27,963	34,651
19.00	20,000	733.0	100.0	8,166	36,129	43,169

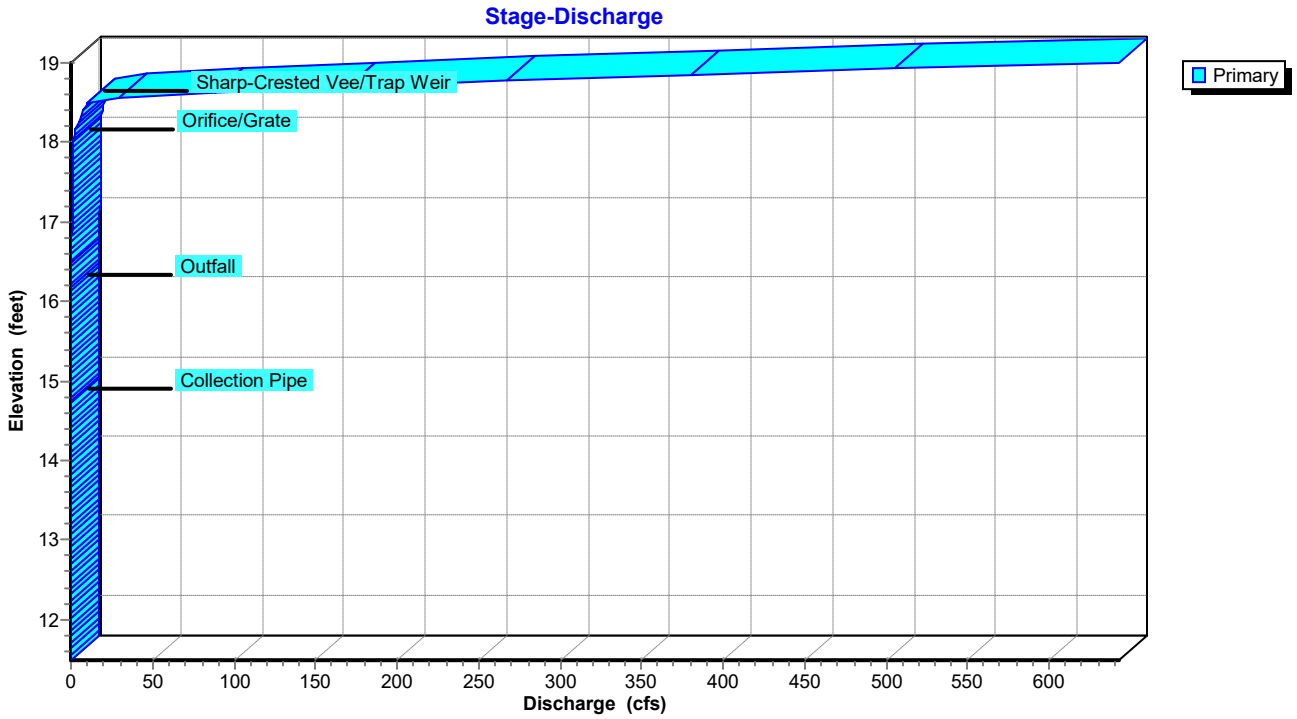
Device	Routing	Invert	Outlet Devices
#1	Primary	16.17'	**18.0" Round Outfall** L= 53.0' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 16.17' / 15.91' S= 0.0049 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf
#2	Device 1	18.00'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	18.50'	**545.0' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)
#4	Device 1	14.75'	**6.0" Round Collection Pipe** L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 14.75' / 14.75' S= 0.0000 '/' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf

Primary OutFlow Max=1.62 cfs @ 12.41 hrs HW=18.08' (Free Discharge)
- **1=Outfall** (Passes 1.62 cfs of 8.09 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 0.59 cfs @ 0.92 fps)
  - **4=Collection Pipe** (Inlet Controls 1.03 cfs @ 5.25 fps)
- **3=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)

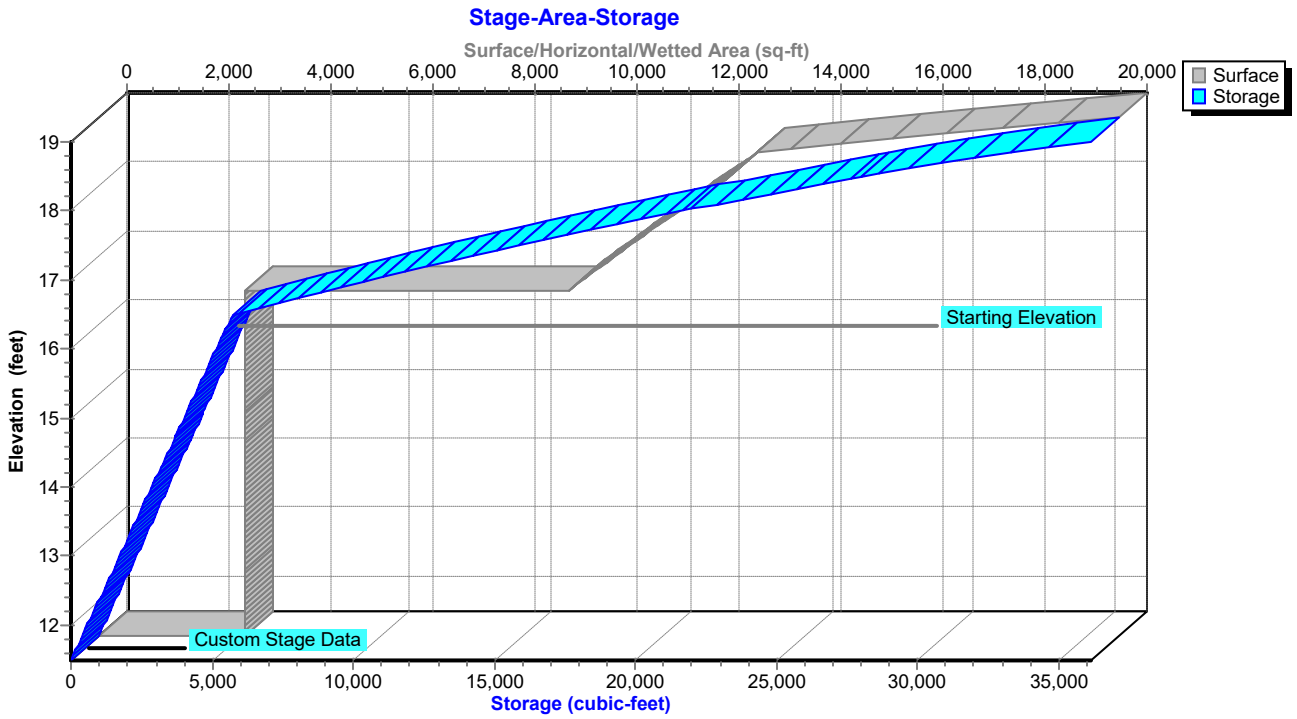
Pond SGW: SGW



Pond SGW: SGW



Pond SGW: SGW

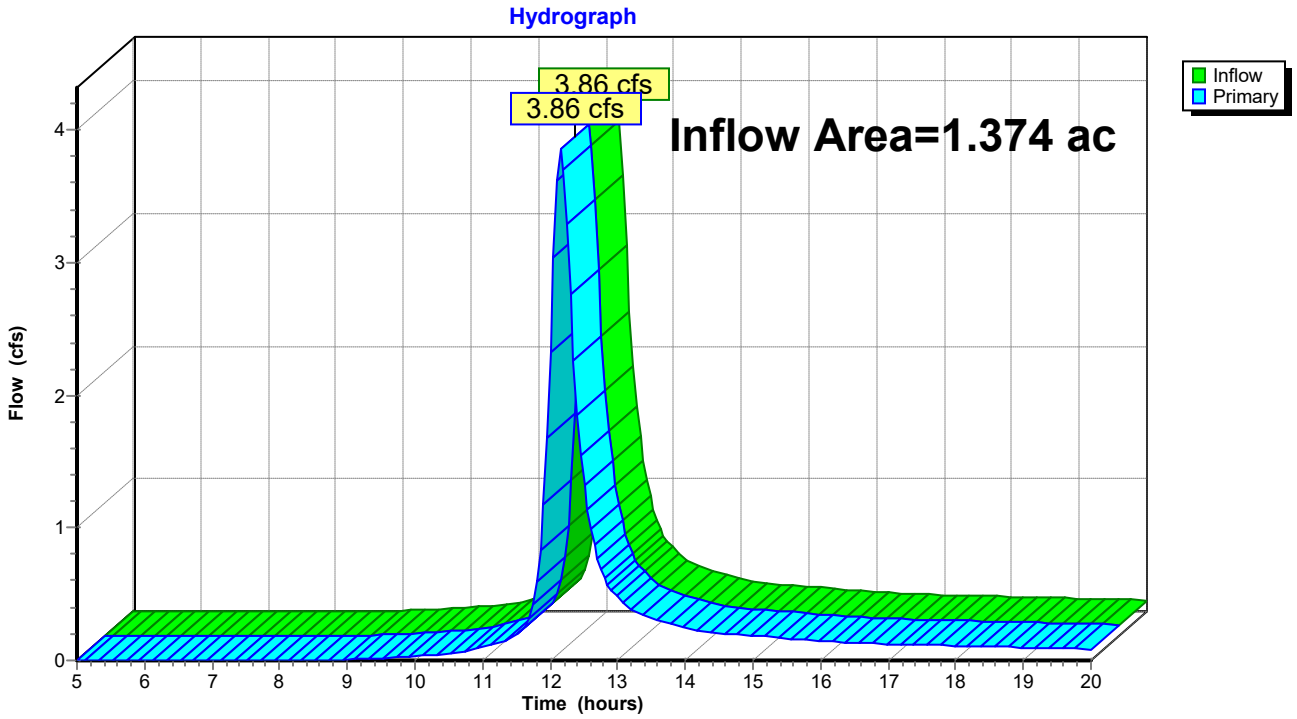

Stage-Area-Storage
Surface/Horizontal/Wetted Area (sq-ft)
0
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
18,000
20,000
Surface
Storage
19
18
17
16
15
14
13
12
Elevation (feet)
Starting Elevation
Custom Stage Data
0
5,000
10,000
15,000
20,000
25,000
30,000
35,000
Storage (cubic-feet)

Summary for Link PR-SP1: PR-SP1

Inflow Area = 1.374 ac, 3.62% Impervious, Inflow Depth > 2.47" for 10-YR event
Inflow = 3.86 cfs @ 12.16 hrs, Volume= 0.283 af
Primary = 3.86 cfs @ 12.16 hrs, Volume= 0.283 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link PR-SP1: PR-SP1

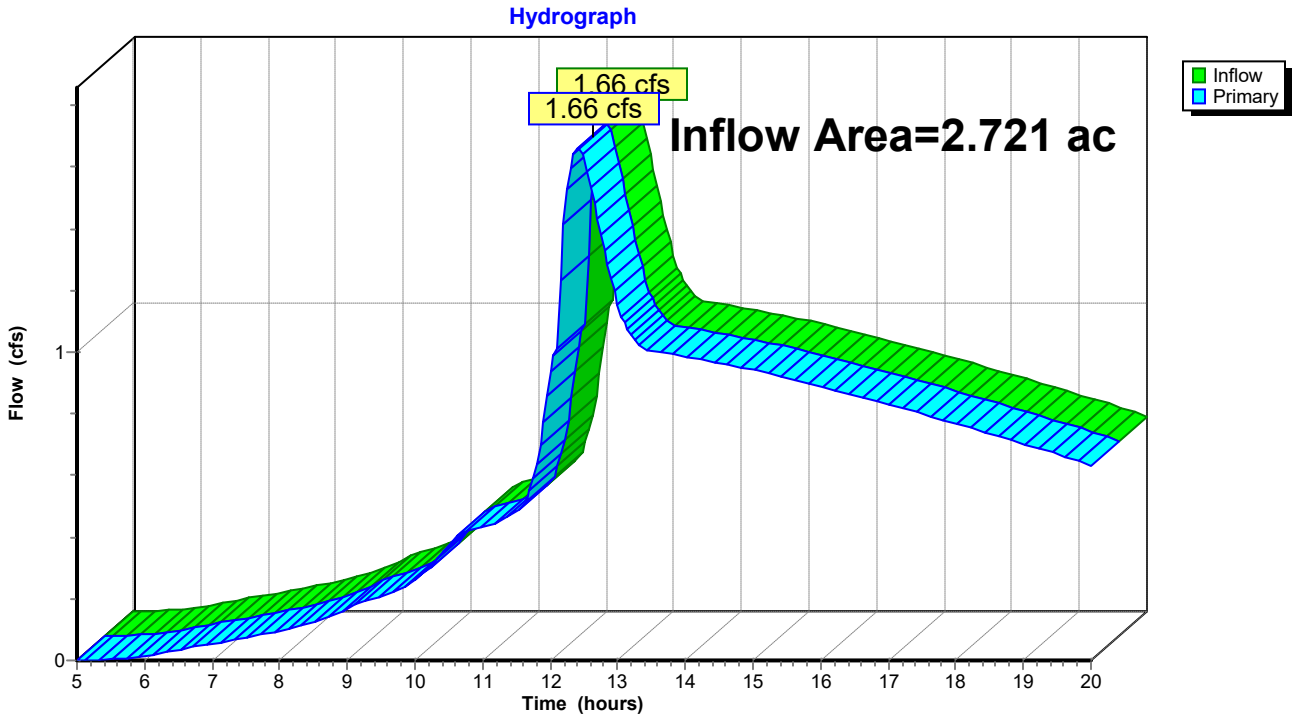


Summary for Link PR-SP2: PR-SP2

Inflow Area = 2.721 ac, 50.34% Impervious, Inflow Depth > 3.19" for 10-YR event
Inflow = 1.66 cfs @ 12.41 hrs, Volume= 0.723 af
Primary = 1.66 cfs @ 12.41 hrs, Volume= 0.723 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link PR-SP2: PR-SP2

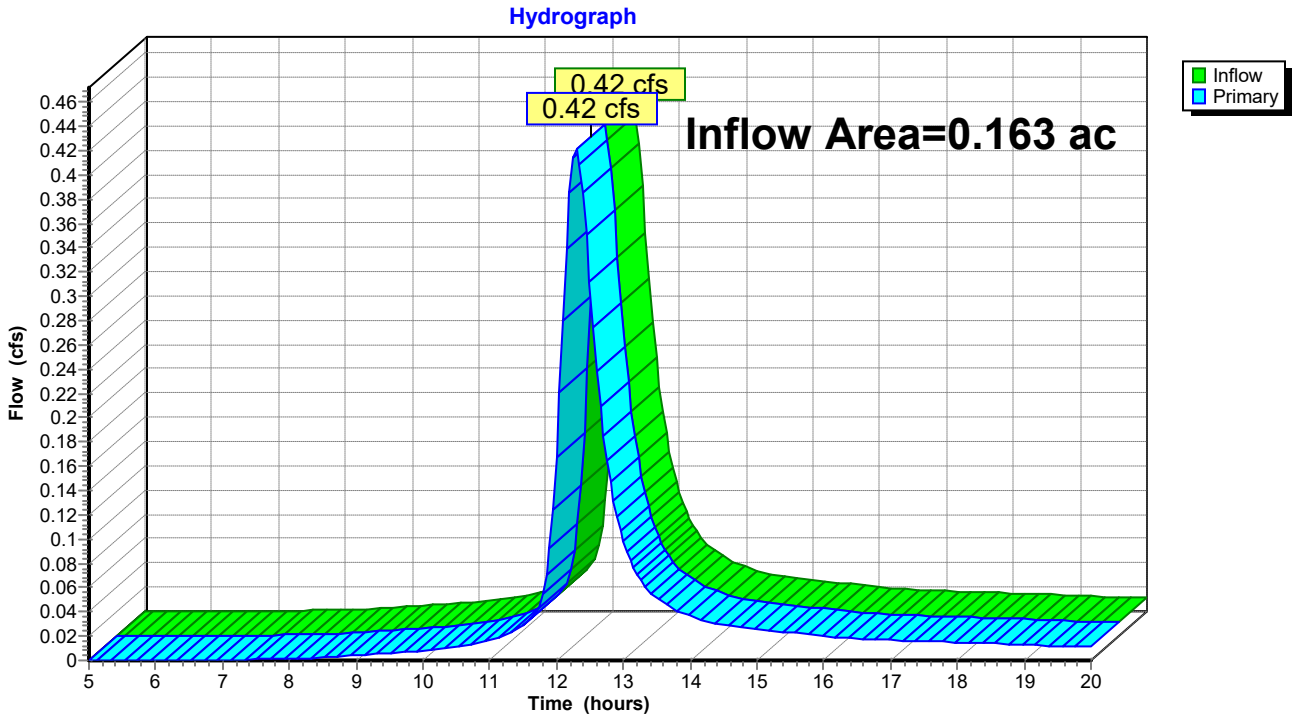


Summary for Link PR-SP3: PR-SP3

Inflow Area = 0.163 ac, 30.15% Impervious, Inflow Depth > 2.99" for 10-YR event
Inflow = 0.42 cfs @ 12.29 hrs, Volume= 0.041 af
Primary = 0.42 cfs @ 12.29 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link PR-SP3: PR-SP3



Stormwater Drainage Area Maps



PROPERTY DATA

A	SIMPSON W REMBERT TRUSTEE M/G/P/L: 0034/0015/0077/4 - B/P: 02753/00320 ZONE MXW
B	CENTREVILLE II LIMITED PARTNERSHIP M/G/P/L: 0034/0015/0077/3 - B/P: 00823/00725 ZONE R7A
C	TRAPPE LIMITED PARTNERSHIP M/G/P/L: 0034/0015/0077/2 - B/P: 00736/00516 ZONE R7A
D	CHESAPEAKE COMMUNITY DEVELOPMENT LLC M/G/P/L: 0034/0015/0077/1 - B/P: 02873/00398 ZONE MXW
E	TALBOT COUNTY MARYLAND M/G/P/L: 0104/00EA/1367/1 - B/P: 00986/00719 ZONE MXW

EXISTING DRAINAGE AREA

OF THE LANDS OF

PORT STREET MULTIFAMILY

TAX MAP 0034, GRID 0015, PARCEL 0077, LOT 4

ELECTION WAR 4, TOWN OF EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@rauchenq.com
Phone: 410 770 9081 | Fax: 410 770 3667

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.

PRELIMINARY
FOR REVIEW ONLY

License No. 11024
Expiration Date: July 24, 2026

26-Mar-26

REVISIONS

REV. #	DATE	DESCRIPTION
1		

DATE:	3/13/2026
SCALE:	1" = 30'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	

SHEET NO.: SWM-EX

DESIGN DEVELOPMENT

Z:\+PROJECTS\26036 - OSPREY PROPERTY - PORT STREET MULTIFAMILY\+DEPARTMENTS\CIVIL\CALCULATIONS\STORMWATER\26036C-CSSWM.DWG



PROPERTY DATA

A	SIMPSON W REMBERT TRUSTEE M/G/P/L: 0034/0015/0077/4 - B/P: 02753/00320 ZONE MXW
B	CENTREVILLE II LIMITED PARTNERSHIP M/G/P/L: 0034/0015/0077/3 - B/P: 00823/00725 ZONE R7A
C	TRAPPE LIMITED PARTNERSHIP M/G/P/L: 0034/0015/0077/2 - B/P: 00736/00516 ZONE R7A
D	CHESAPEAKE COMMUNITY DEVELOPMENT LLC M/G/P/L: 0034/0015/0077/1 - B/P: 02873/00398 ZONE MXW
E	TALBOT COUNTY MARYLAND M/G/P/L: 0104/00EA/1367/1 - B/P: 00986/00719 ZONE MXW

PROPOSED DRAINAGE AREA

OF THE LANDS OF

PORT STREET MULTIFAMILY

TAX MAP 0034, GRID 0015, PARCEL 0077, LOT 4

ELECTION WAR 4, TOWN OF EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc
Engineering | Survey | Architecture | Environmental
Main Office: 108 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 9081 | Fax: 410 770 3887

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

PRELIMINARY FOR REVIEW ONLY

26-Mar-26

REVISIONS		
REV. #	DATE	DESCRIPTION
1		

DATE:	3/10/2026 PM
SCALE:	1" = 30'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	
SHEET NO.:	SWM-PR

DESIGN DEVELOPMENT

Z:\+PROJECTS\3800\38...OSPREY PROPERTY - PORT STREET MULTIFAMILY\+DEPARTMENTS\CIVIL\CALCULATIONS\STORMWATER\3800SWC-CSSWM.DWG

Soils Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Talbot County, Maryland

Port Street Multifamily



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Talbot County, Maryland.....13
MtcA—Mattapex silt loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain.....13
OtA—Othello silt loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain.....14
Up—Urban land.....17
References.....18

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

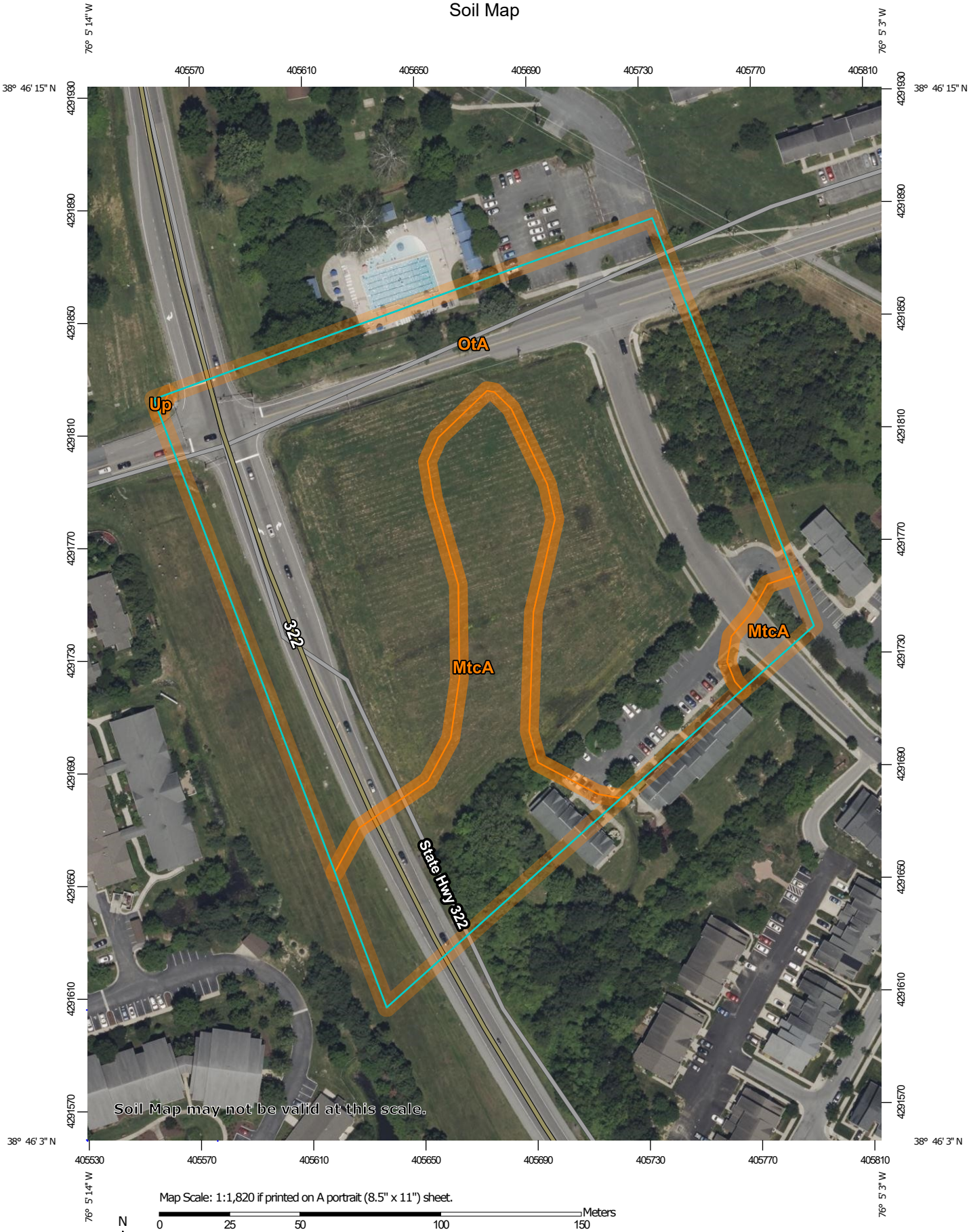
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


76° 5' 14" W
76° 5' 3" W
38° 46' 15" N
38° 46' 3" N
405570
405610
405650
405690
405730
405770
405810
4291930
4291890
4291850
4291810
4291770
4291730
4291690
4291650
4291610
4291570
OtA
Up
MtcA
MtcA
322
State Hwy 322
Soil Map may not be valid at this scale.
405530
Map Scale: 1:1,820 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0 25 50 100 150
Feet
0 50 100 200 300
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Talbot County, Maryland
Survey Area Data: Version 22, Sep 9, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 30, 2022—Jul 4, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
MtcA	Mattapex silt loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	2.3	24.7%
OtA	Othello silt loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	6.9	75.2%
Up	Urban land	0.0	0.0%
Totals for Area of Interest		**9.1**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Talbot County, Maryland

MtcA—Mattapex silt loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2thwt
Landscape: Lowlands, coastal plains
Elevation: 0 to 90 feet
Mean annual precipitation: 42 to 46 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 190 to 260 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Mattapex and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mattapex

Setting

Landscape: Lowlands, coastal plains
Landform: Swales, Flats, Depressions
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Parent material: Silty eolian deposits over fluviomarine sediments

Typical profile

Ap - 0 to 11 inches: silt loam
BE - 11 to 15 inches: silt loam
Bt - 15 to 36 inches: silt loam
2C1 - 36 to 60 inches: fine sandy loam
2C2 - 60 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Minor Components

Nassawango

Percent of map unit: 10 percent
Landscape: Coastal plains
Landform: Flats, Bay terraces
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153CY030MD - Well Drained Loess Upland
Hydric soil rating: No

Othello, drained

Percent of map unit: 5 percent
Landscape: Coastal plains
Landform: Flats, Depressions, Swales
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Crosiadore

Percent of map unit: 5 percent
Landscape: Coastal plains
Landform: Shallow depressions, Flats
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

OtA—Othello silt loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2thwn
Landscape: Coastal plains
Elevation: 0 to 100 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 46 to 68 degrees F
Frost-free period: 210 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Othello, drained, and similar soils: 48 percent
Othello, undrained, and similar soils: 28 percent
Minor components: 24 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Othello, Drained

Setting

Landscape: Coastal plains
Landform: Flats, Depressions, Swales
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Silty eolian deposits over fluviomarine deposits

Typical profile

Ap - 0 to 9 inches: silt loam
Btg - 9 to 29 inches: silt loam
2BCg - 29 to 34 inches: sandy loam
2Cg - 34 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: Rare
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Description of Othello, Undrained

Setting

Landscape: Coastal plains
Landform: Flats, Depressions, Swales, Drainageways
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Silty eolian deposits over fluviomarine deposits

Typical profile

Oe - 0 to 2 inches: peat
A - 2 to 4 inches: silt loam
Eg - 4 to 10 inches: silt loam
Btg - 10 to 29 inches: silt loam
2BCg - 29 to 35 inches: sandy loam
2Cg - 35 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Minor Components

Crosiadore

Percent of map unit: 7 percent
Landscape: Coastal plains
Landform: Flats, Fluviomarine terraces, Depressions
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Mattapex

Percent of map unit: 7 percent
Landscape: Coastal plains
Landform: Flats, Depressions, Swales, Broad interstream divides
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Fallsington, undrained

Percent of map unit: 5 percent
Landscape: Coastal plains
Landform: Flats, Depressions, Swales, Drainageways
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Kentuck, undrained

Percent of map unit: 5 percent

Landscape: Coastal plains
Landform: Flats, Depressions, Swales
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Up—Urban land

Map Unit Setting

National map unit symbol: 1vh0w
Landscape: Uplands
Elevation: 0 to 300 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landscape: Uplands
Landform: Flats
Anthropogenic Feature: Urban land
Down-slope shape: Linear
Across-slope shape: Linear

Minor Components

Udorthents, loamy

Percent of map unit: 10 percent
Landscape: Coastal plain uplands
Landform: Broad interstream divides
Anthropogenic features: Fills
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

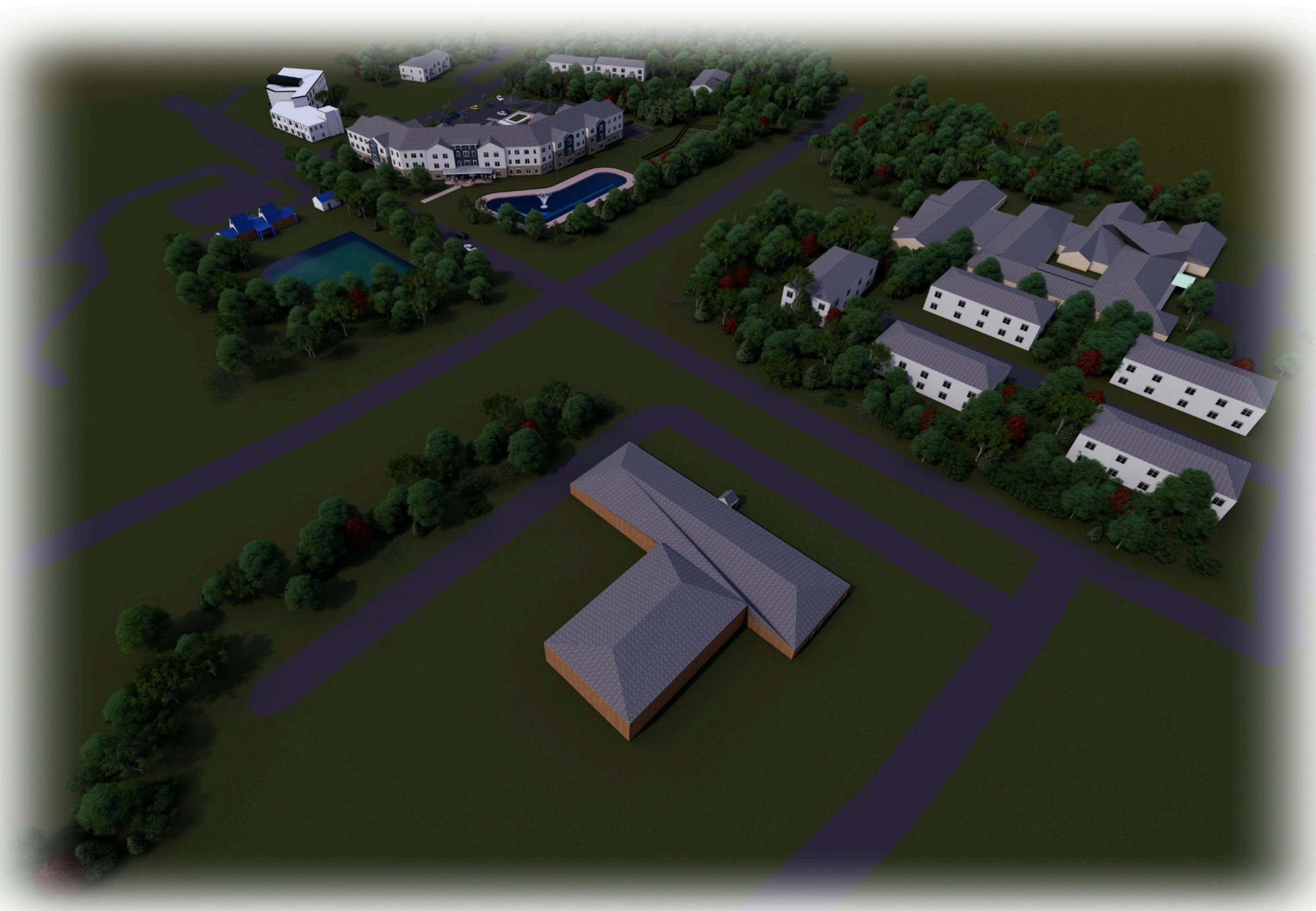
United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

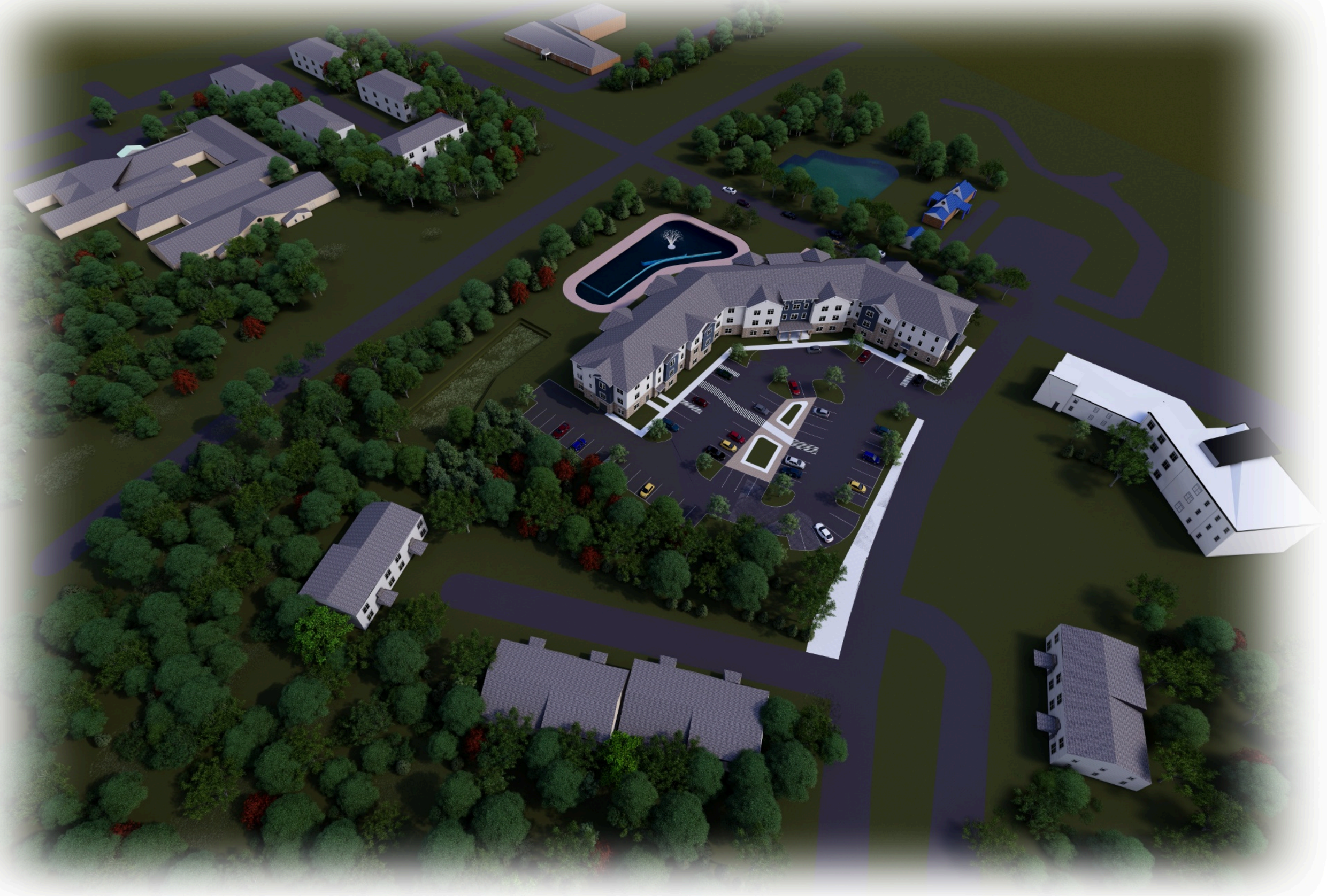
United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf



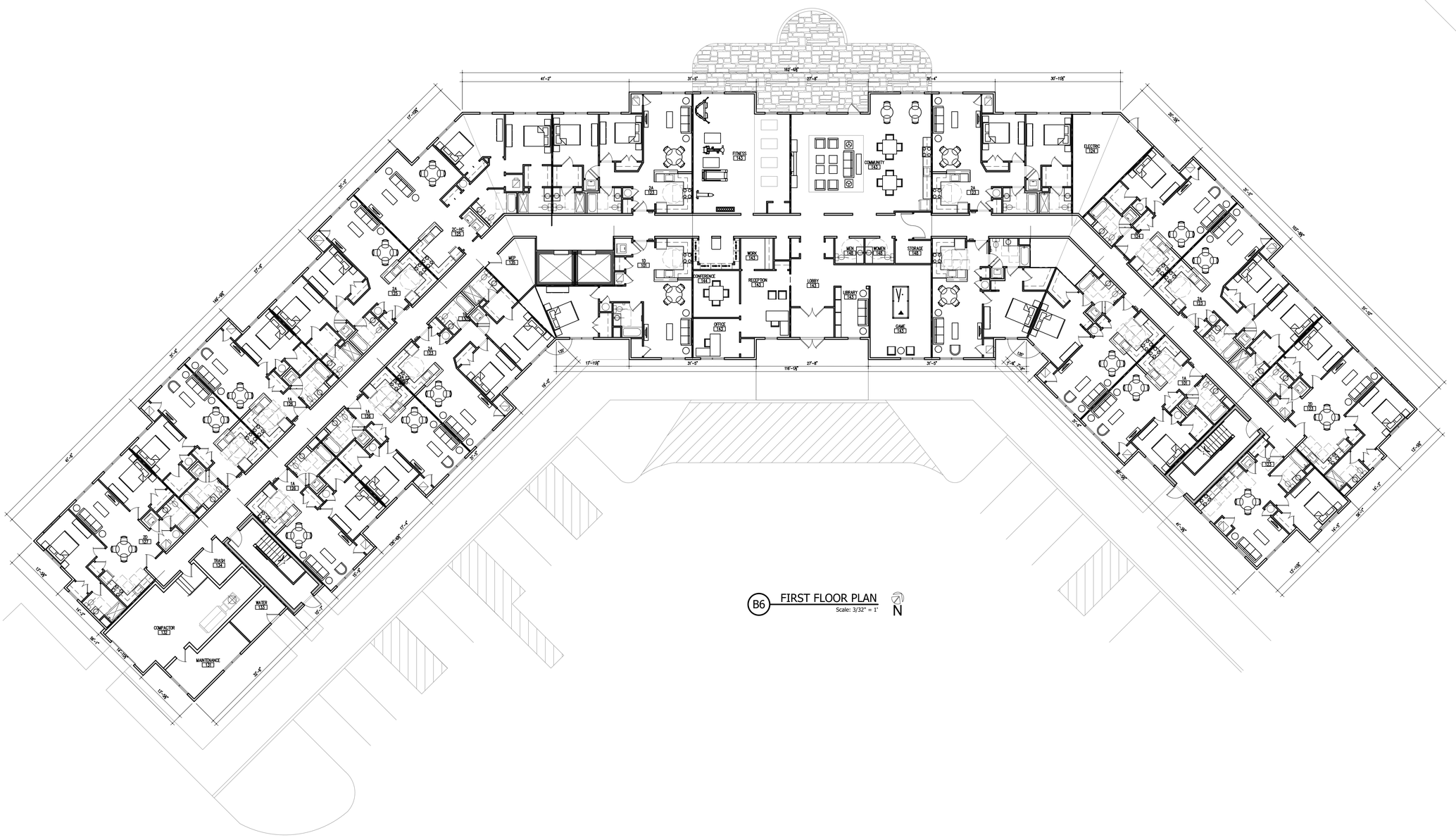












B6 FIRST FLOOR PLAN
Scale: 3/32" = 1'

N

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2027

BUILDING DATA:

Use Group: R2

DRAWING NAME: FIRST FLOOR BUILDING PLAN

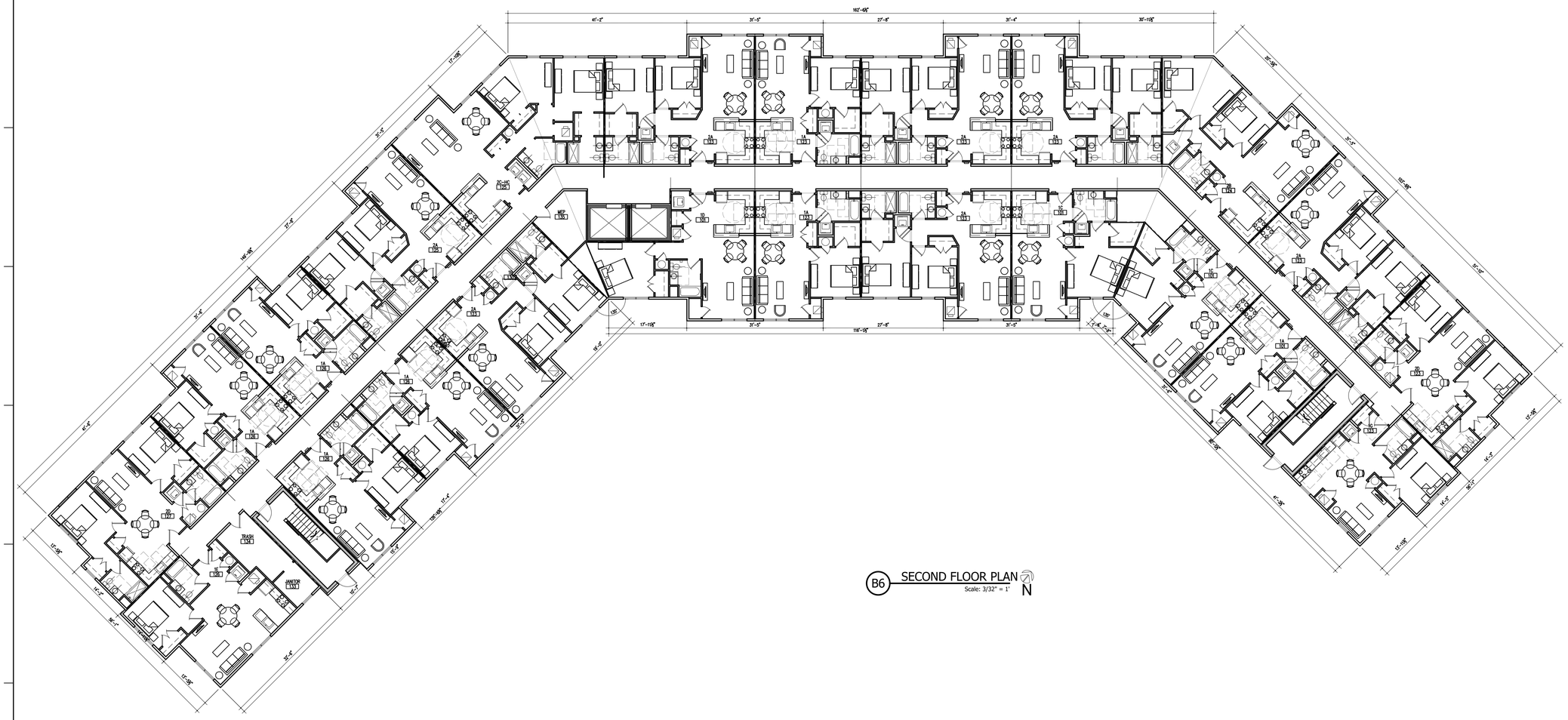
NO.	REVISION	DATE
#2		
#1	SCHEMATIC SET	04/01/26

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS
PORT STREET SENIOR
101 MEADOW DRIVE
EASTON, MD 21601

TALBOT COUNTY

PROJECT: PORT ST
DATE: 03/12/26
SCALE:
SHEET: A-1.1



B6 SECOND FLOOR PLAN
Scale: 3/32" = 1'

N

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2027

BUILDING DATA:

Use Group: R2

DRAWING NAME: SECOND FLOOR BUILDING PLAN

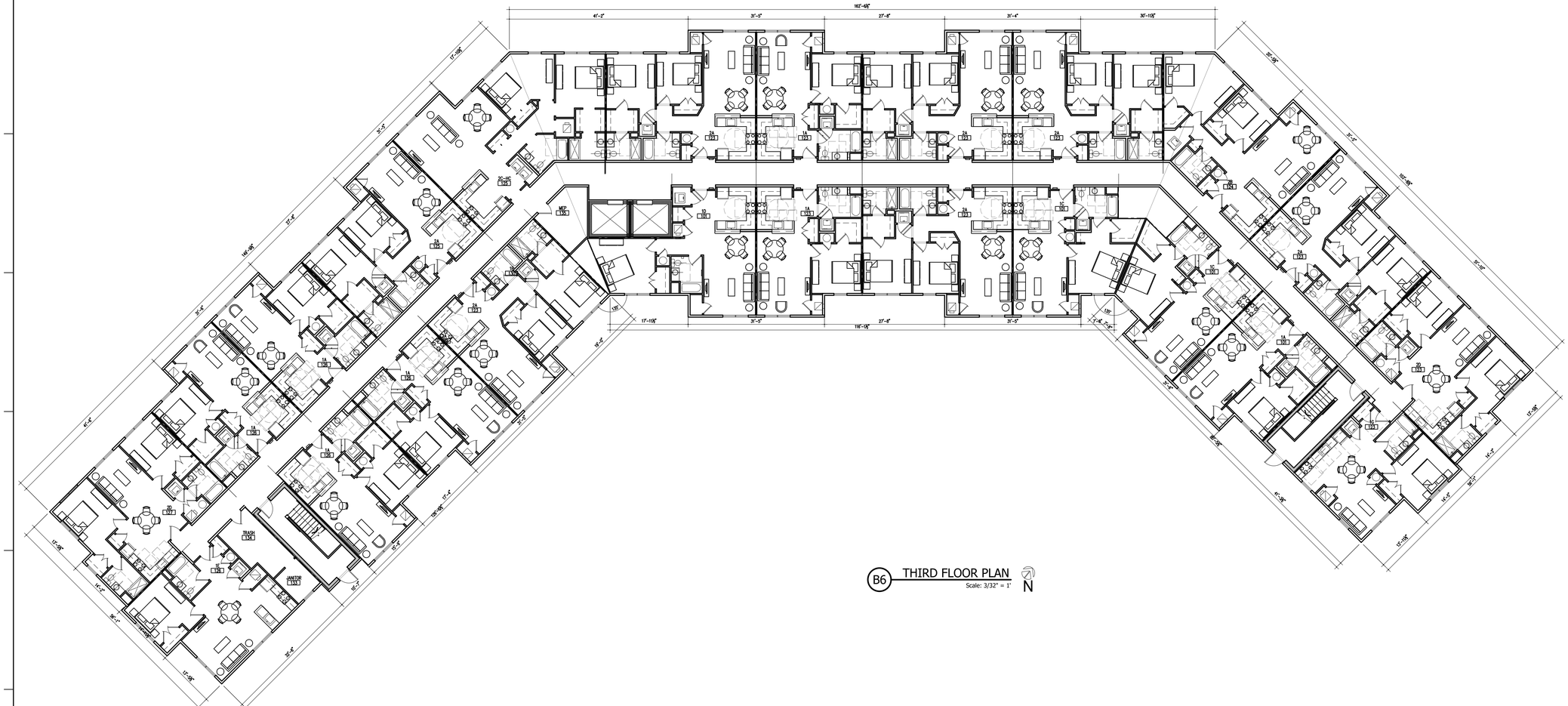
NO.	REVISION	DATE
#2		
#1	SCHEMATIC SET	04/01/26

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS
PORT STREET SENIOR
101 MEADOW DRIVE
EASTON, MD 21601

TALBOT COUNTY

PROJECT	SHEET
PORT ST	A-1.2
DATE: 03/12/26	
SCALE:	



B6 THIRD FLOOR PLAN
Scale: 3/32" = 1'

N

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2027

BUILDING DATA:

Use Group: R2

DRAWING NAME: THIRD FLOOR BUILDING PLAN

NO.	REVISION	DATE
#2		
#1	SCHEMATIC SET	04/01/26

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS
PORT STREET SENIOR
101 MEADOW DRIVE
EASTON, MD 21601

TALBOT COUNTY

PROJECT	SHEET
PORT ST	A-1.3
DATE: 03/12/26	
SCALE:	



E6 RENDERED PERSPECTIVE
Scale: NTS



A3 RENDERED PERSPECTIVE
Scale: NTS



A8 RENDERED PERSPECTIVE
Scale: NTS

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2027

BUILDING DATA:

Use Group: R2

DRAWING NAME: PERSPECTIVE RENDERINGS

NO.	REVISION	DATE
#2		
#1	SCHEMATIC SET	04/01/26

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

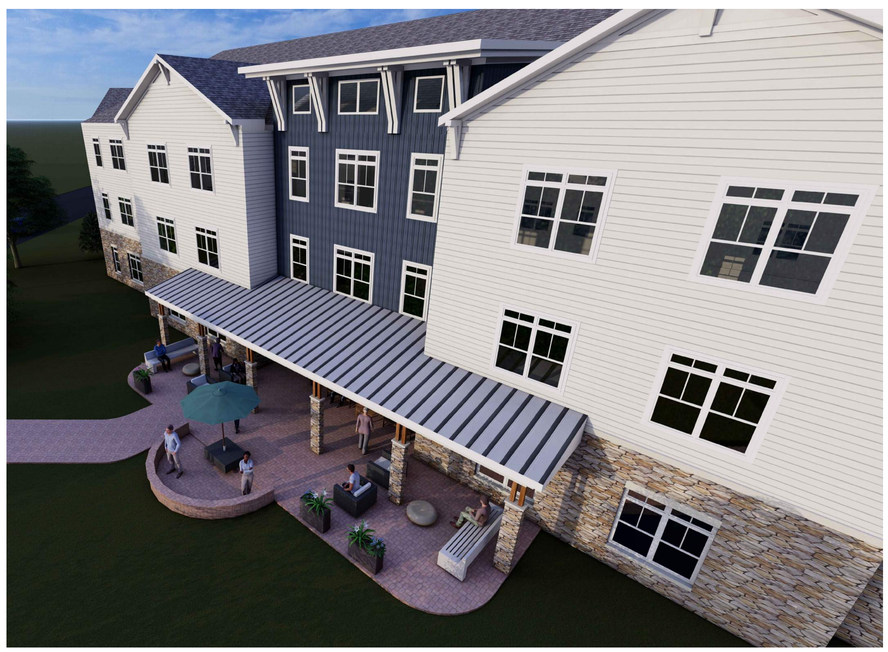
PROJECT NAME AND ADDRESS
PORT STREET SENIOR
101 MEADOW DRIVE
EASTON, MD 21601

TALBOT COUNTY

PROJECT	SHEET
PORT ST	A-2.0
DATE: 03/12/26	
SCALE:	



E6 RENDERED PERSPECTIVE
Scale: NTS



A3 RENDERED PERSPECTIVE
Scale: NTS



A8 RENDERED PERSPECTIVE
Scale: NTS

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2027

BUILDING DATA:

Use Group: R2

DRAWING NAME: REAR PERSPECTIVE RENDERINGS

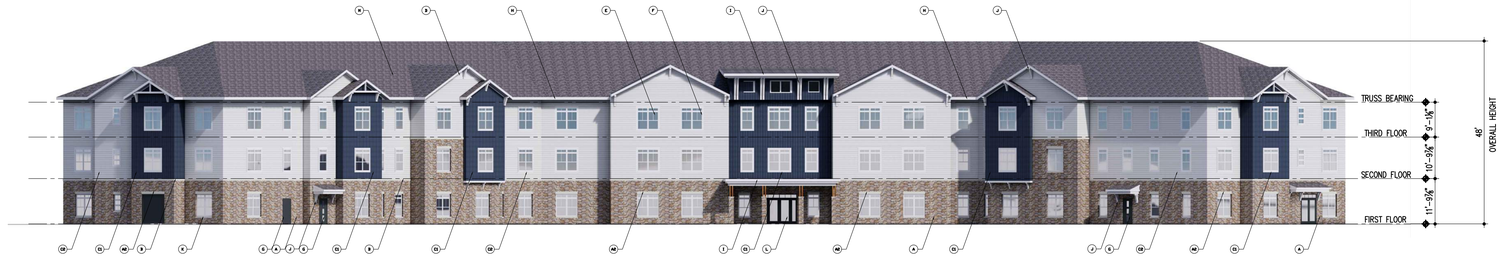
NO.	REVISION	DATE
#2		
#1	SCHEMATIC SET	04/01/26

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS
PORT STREET SENIOR
101 MEADOW DRIVE
EASTON, MD 21601

TALBOT COUNTY

PROJECT: PORT ST
DATE: 03/12/26
SCALE:
SHEET: A-2.1



H6 FRONT ELEVATION
Scale: 1/16"=1"



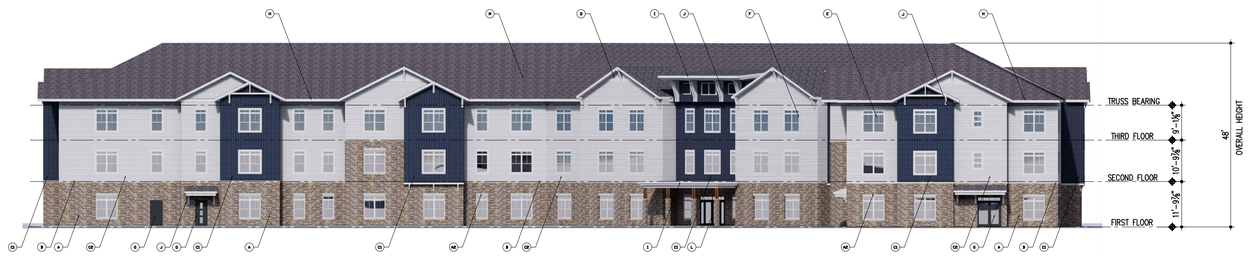
E2 FRONT SIDE PERSPECTIVE
Scale: NTS



E8 FRONT SIDE ELEVATION
Scale: 1/16"=1"



A2 FRONT SIDE PERSPECTIVE
Scale: NTS



A8 FRONT SIDE ELEVATION
Scale: 1/16"=1"

3.13.1 CRITERIA APPLICABLE TO ALL PROJECTS

1. Project will be designed to comply with currently adopted State and local building codes,which includes the 2021 International Energy Conservation Code (IECC), MD COMAR 05.02.02,and the Uniform Federal Accessibility Standards (UFAS).
2. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater. The Rater will provide review of the design documents, modeling services, field observations and final testing and inspection.
3. The design documents will include pest and rodent preventative measures. In addition, a pest management program will be implemented by the management company.
4. The project will be constructed with Architectural grade asphalt shingle roofing that provides a minimum of 30 year warranty.
5. Entry doors will be hollow metal with polyurethane core for improved durability and thermal resistance.
6. Project specifications will include detailed installation instructions including a requirement to comply with manufacturer's instructions.

3.13.2 ADDITIONAL CRITERIA FOR NEW CONSTRUCTION AND GUT REHAB

1. This project will be certified under the current Energy Star Multi-Family NC program.
2. Windows will be Energy Star qualified vinyl single hung.
3. Paving at the dumpster pad, the access drive to the dumpster, and any turns or return path of the garbage truck route will equal local requirements for standard duty residential roadway, or provide eight inches stone topped with five inches of bituminous asphalt.

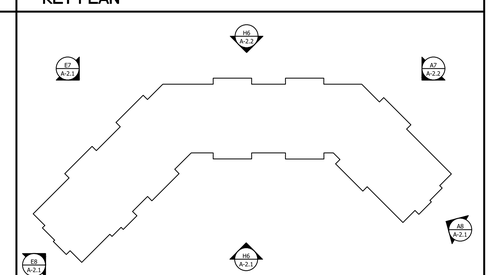
4.6 DEVELOPMENT QUALITY ENHANCEMENTS

1. Building entrances are designed and located to provide security and weather protection for the targeted resident group and the project includes green space areas, play areas, courtyards or exterior seating areas that provide recreational and social opportunities for the targeted resident community.
2. The building architecture, structure and mass complement the existing neighborhood and the project includes exterior architectural features and design elements that add interest and/or functionality, create unity with nearby architectural style, and generally improve the appearance of the building(s).
3. Architectural accessories such as decorative door surrounds, larger window trim, corner eave, cornice and column details or other special features are provided and are of composite or other durable materials.
4. Individual units, common areas and community spaces are well designed for comfortable living and tenant activities. Layouts are efficient, with practical traffic flow, and provide adequate space for furniture placement.

ELEVATION KEY

- A MANUFACTURED COBBLESTONE VENEER
- A2 MANUFACTURED STONE HEADER
- B MANUFACTURED WAINSCOT STONE CAP
- C1 VINYL VERTICAL SIDING COLOR MIDNIGHT BLUE
- C2 VINYL HORIZONTAL SIDING COLOR COLONIAL WHITE
- D FIXED VINYL LOUVER – WHITE
- E ENERGY STAR VINYL WINDOWS
- F 3 1/2" VINYL WINDOW TRIM
- G HM DOOR W/ POLYURETHANE CORE
- H PREFORMED ALUMINUM GUTTER
- I LOW-SLOPE ROOF
- J STRUCTURAL KNEE BRACKETS
- K INSULATED STEEL ROLLUP DOOR
- L HOLLOW METAL ENTRY DOOR
- M ARCHITECTURAL GRADE ROOF SHINGLES
- N STANDING SEAM METAL ROOF

KEY PLAN



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2027

BUILDING DATA:

Use Group: R2

EXTERIOR ELEVATIONS

DRAWING NAME

NO.	REVISION	DATE
#2		
#1	SCHEMATIC SET	04/01/26

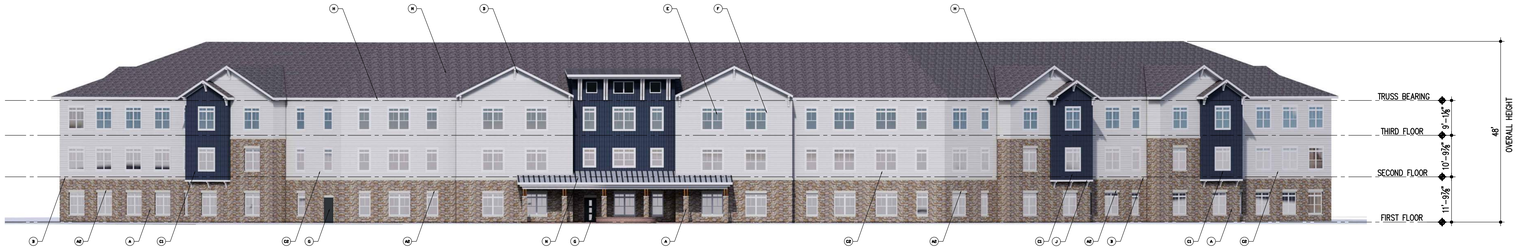
STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS

PORT STREET SENIOR
101 MEADOW DRIVE
EASTON, MD 21601

TALBOT COUNTY

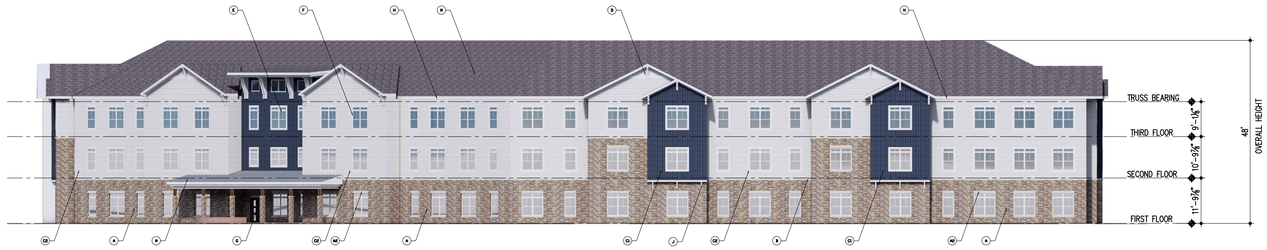
PROJECT	SHEET
PORT ST	A-2.2
DATE: 03/12/26	
SCALE:	



H6 REAR ELEVATION
Scale: 1/16"=1"



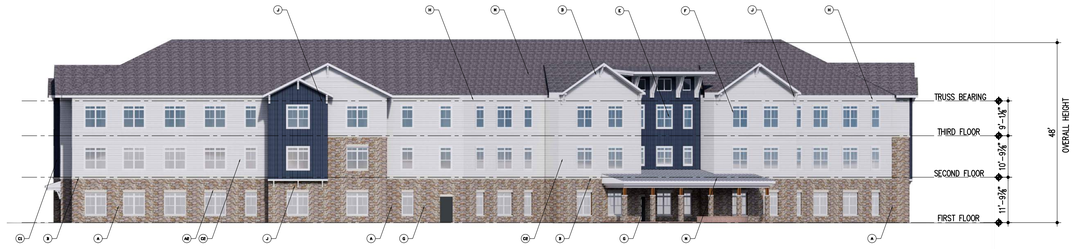
E2 REAR SIDE PERSPECTIVE
Scale: NTS



E7 REAR SIDE ELEVATION
Scale: 1/16"=1"



A2 REAR SIDE PERSPECTIVE
Scale: NTS



A7 REAR SIDE ELEVATION
Scale: 1/16"=1"

3.13.1 CRITERIA APPLICABLE TO ALL PROJECTS

1. Project will be designed to comply with currently adopted State and local building codes,which includes the 2021 International Energy Conservation Code (IECC), MD COMAR 05.02.02,and the Uniform Federal Accessibility Standards (UFAS).
2. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater. The Rater will provide review of the design documents, modeling services, field observations and final testing and inspection.
3. The design documents will include pest and rodent preventative measures. In addition, a pest management program will be implemented by the management company.
4. The project will be constructed with Architectural grade asphalt shingle roofing that provides a minimum of 30 year warranty.
5. Entry doors will be hollow metal with polyurethane core for improved durability and thermal resistance.
6. Project specifications will include detailed installation instructions including a requirement to comply with manufacturer's instructions.

3.13.2 ADDITIONAL CRITERIA FOR NEW CONSTRUCTION AND GUT REHAB

1. This project will be certified under the current Energy Star Multi-Family NC program.
2. Windows will be Energy Star qualified vinyl single hung.
3. Paving at the dumpster pad, the access drive to the dumpster, and any turns or return path of the garbage truck route will equal local requirements for standard duty residential roadway, or provide eight inches stone topped with five inches of bituminous asphalt.

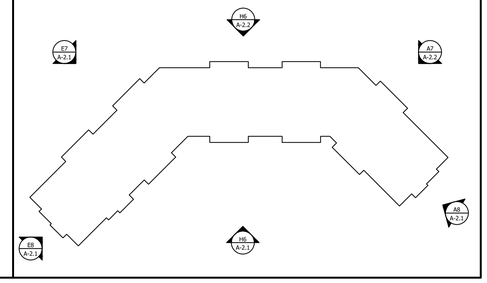
4.6 DEVELOPMENT QUALITY ENHANCEMENTS

1. Building entrances are designed and located to provide security and weather protection for the targeted resident group and the project includes green space areas, play areas, courtyards or exterior seating areas that provide recreational and social opportunities for the targeted resident community.
2. The building architecture, structure and mass complement the existing neighborhood and the project includes exterior architectural features and design elements that add interest and/or functionality, create unity with nearby architectural style, and generally improve the appearance of the building(s).
3. Architectural accessories such as decorative door surrounds, larger window trim, corner eave, cornice and column details or other special features are provided and are of composite or other durable materials.
4. Individual units, common areas and community spaces are well designed for comfortable living and tenant activities. Layouts are efficient, with practical traffic flow, and provide adequate space for furniture placement.

ELEVATION KEY

- A MANUFACTURED COBBLESTONE VENEER
- A2 MANUFACTURED STONE HEADER
- B MANUFACTURED WAINSCOT STONE CAP
- C1 VINYL VERTICAL SIDING COLOR MIDNIGHT BLUE
- C2 VINYL HORIZONTAL SIDING COLOR COLONIAL WHITE
- D FIXED VINYL LOUVER – WHITE
- E ENERGY STAR VINYL WINDOWS
- F 3 1/2" VINYL WINDOW TRIM
- G HM DOOR W/ POLYURETHANE CORE
- H PREFORMED ALUMINUM GUTTER
- I LOW-SLOPE ROOF
- J STRUCTURAL KNEE BRACKETS
- K INSULATED STEEL ROLLUP DOOR
- L HOLLOW METAL ENTRY DOOR
- M ARCHITECTURAL GRADE ROOF SHINGLES
- N STANDING SEAM METAL ROOF

KEY PLAN



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2027

BUILDING DATA:

Use Group: R2

EXTERIOR ELEVATIONS

DRAWING NAME

NO.	REVISION	DATE
#2		
#1	SCHEMATIC SET	04/01/26

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS

PORT STREET SENIOR
101 MEADOW DRIVE
EASTON, MD 21601

TALBOT COUNTY

PROJECT	SHEET
PORT ST	A-2.3
DATE 03/12/26	
SCALE	

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Easton Staff Development Review

Property Information

Address	SE Corner of Port Street and Easton Parkway						
Tax Map	0015	Grid	0034	Parcel	0077	Lot	4
Deed Refernce:	Liber	02753	Folio	00320			
Plat Reference:	Liber	3	Folio	061e			
Base Zoning District	MXW	Historic District Y ☐ N ☐		Planning Redevelopment Y ☐ N ☐			

Purpose of Application / Description of Work:

Construction of 64-unit apartment building for senior/affordable housing within the Town of Easton. Site work also to include construction of off-street vehicle parking, bicycle parking, sidewalks, underground utilities, stormwater management structures, and landscaping.

Owner

Name	Osprey Property Company II LLC (future)		
Mailing Address	16 Greenmeadow Drive, Suite G107, Timonium, MD 21093		
Telephone No.		Email	

Applicant / Agent

Name	RAUCH inc		
Mailing Address	106 N. Harrison Street, Easton, MD 21601		
Telephone No.		Email	

Surveyor / Engineer

Name	RAUCH inc	License No.	11024	Expiration Date	07/24/2026
Mailing Address	106 N. Harrison Street, Easton, MD 21601				
Telephone No.		Email			

Any modifications during review shall warrant an updated application.

I do hereby solemnly declare and affirm that the information provided by this application and the documents attached hereto accurately represent the conditions of the request and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent 

Date 3/30/26

Printed Name of Applicant or Agent Brian Fitzgerald

For Office Use Only

Easton Staff Development Review Meeting Required Y ☒ N ☐

Easton Staff Development Review Meeting Date 04/22/2026

2026 - 1697 / ESDR 26 - 04

Completeness Check Date 04/01/2026

Revisions/Resubmissions Required Y ☐ N ☐

Resubmission Date TBD

Documents Received Y ☐ N ☐

Staff Determination

Scheduled for April 22, 2026 ESDR

Planning Commission Requir(Y ☒ N ☐

BOZA Required Y ☐ N ☐ TBD

Historic District Commission Required Y ☐ N ☒

Resubmission for ESDR Required Y ☐ N ☐ TBD

Staff Signature Samantha N. Smith Date 04/01/2026

Revised 02-2019

PORT STREET SENIOR MULTIFAMILY

INFRASTRUCTURE IMPROVEMENTS SKETCH PLAN

FOR

OSPREY PROPERTY COMPANY II LLC

EASTON, TALBOT COUNTY, MARYLAND 21601

SITE DATA:

PROPERTY ADDRESS:	PORT STREET AND EASTON PARKWAY EASTON, MD 21601
LATITUDE:	38° 46' 12.37" N
LONGITUDE:	-76° 05' 07.86" W
PRESENT ZONING CLASSIFICATION:	MXW
PRESENT USE: FUTURE USE:	VACANT MIXED USE - MULTIFAMILY RESIDENTIAL
TAX MAP: GRID: PARCEL: PLAT: DEED REFERENCE:	0015 0034 0077, LOT 4 061E 02753/00320
PROPERTY AREA: LIMITS OF DISTURBANCE: CUT: FILL: NET CUT/FILL: EXISTING IMPERVIOUS: PROPOSED IMPERVIOUS:	152,329 SF - 3.497 ACRES 123,485 SF - 2.835 ACRES 2,314 CY 7,241 CY 4,927 CY (FILL) 0% 41.10%
FEMA FLOOD MAP: WATERSHED:	PANEL 24041C0189D 021304030465 - LOWER CHOPTANK

NO PORTION OF THIS PROJECT SITE IS LOCATED WITHIN THE 100-YR FLOOD PLAIN

A PORTION OF THIS PROJECT SITE IS LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA

A FOREST CONSERVATION PLAN WILL BE PREPARED FOR THIS PROJECT

SURVEY DATUM

HORIZONTAL:	NAD83
VERTICAL:	NAVD88
DATE OF SURVEY:	2/19/2026

NOTE: ALL ON-SITE LIGHTING UNLESS APPROVED OTHERWISE BY PLANNING AND ZONING COMMISSION SHALL BE LOW CUT-OFF SHIELDED LUMINARIES AT 18' HEIGHT AND LIGHT SHALL NOT SHINE OFF-SITE AT LEVEL GREATER THAN 1' CANDLE.

28-312.1(C).c INLAND SUB-DISTRICT
HIGH-DENSITY RESIDENTIAL, MIXED USE, AND NON-RESIDENTIAL USES COMPATIBLE WITH AND SUPPORTIVE OF RESIDENTIAL DEVELOPMENT;
- AND -
PROVIDE DEVELOPERS WITH MAXIMUM FLEXIBILITY AVAILABLE IN THE MXW TO ENCOURAGE SUITABLE INFILL, REDEVELOPMENT AND NEW DEVELOPMENT PROJECTS

28-312.1.(C).d PORT STREET CORRIDOR SUB-DISTRICT
CREATE AN URBAN-SCALE STREETSCAPE;
PROMOTE AN URBAN DESIGN THAT WILL ULTIMATELY SERVE TO VISUALLY CONNECT OR LINK THE WATERFRONT TO EASTON'S DOWNTOWN;
- AND -
ALLOW FOR MIXED USES WITH AN EMPHASIS ON MULTI-FAMILY, LIVE-WORK UNITS AND SMALL COMMERCIAL USES

28-312.2 - DEVELOPMENT STANDARDS
(A) IN ACCORDANCE WITH STANDARDS OF SECTION 28-301 AND SUBJECT TO P&Z REVIEW.

28-312.2.1 - PERMITTED USES
MULTI-FAMILY DWELLINGS* - THE SUPPLEMENTAL STANDARDS RELATED TO SETBACKS AND ADJACENCY SHALL NOT APPLY IN THE MXW.
* - LISTED USE IS ALSO SUBJECT TO SUPPLEMENTAL STANDARDS OF 28-1008 OF THE CODE

28-312.3 - SITE PLANNING STANDARDS
BUILDING BASE ELEVATION: MINIMUM BASE FLOOD ELEVATION **PLUS** 24 INCHES

28-312.3.4 - VEHICULAR AND PEDESTRIAN CONNECTIVITY STANDARDS
(A) LOTS SHALL BE INTERCONNECTED TO ALL ADJOINING LOTS BY PROVIDING THE MEANS TO EXTEND - CONNECT ON-SITE; SIDEWALKS, PEDESTRIAN PATHS, SERVICE - ACCESS ROADS.

28-312.3.6 - SITE LOADING AND UNLOADING AREA STANDARDS
(A) ALL SITE LOADING AND UNLOADING AREAS SHALL BE FULLY SCREENED FROM VIEW BY ARCHITECTURAL DESIGN FEATURE, OR BY PERMANENT, DECORATIVE SCREENS OR NATURAL PLANTINGS, A MINIMUM OF EIGHT (8) FEED IN HEIGHT

28-312.3.8 - LIGHTING STANDARDS
(A) ALL ON-SITE LIGHTING SHALL BE LOW CUT-OFF SHIELDED LUMINARIES AT A MAXIMUM 15' HEIGHT AND LIGHT SHALL NOT SHINE OFF-SITE AT LEVELS GREATER THAN 1 FOOT CANDLE. ALL ON-SITE LIGHTING SHALL BE DECORATIVE LAMPS CONSISTENT WITH THE DESIGN ELEMENTS OF THE AREA.

28.312.3.9 - UNDERGROUND AND SCREENING OF UTILITIES
(A) ALL NEW, REPLACEMENT AND/OR MODIFIED UTILITY FACILITIES SHALL BE LOCATED UNDERGROUND WHERE PRACTICAL, EXCLUDING APPURTENANCES SUCH AS PEDESTALS, CABINETS, CONTROL STRUCTURE, ETC. ALL UTILITY METERS AND CONNECTIONS (EXCEPT WATER AND WASTEWATER) SHALL BE MADE AT THE SIDE OR REAR OF A BUILDING AND PROPERLY SCREENED TO PREVENT VISIBILITY FROM PUBLIC STREETS.

28-312.4.7 - LANDSCAPING AND LANDSCAPING FEATURES
(A) LANDSCAPING SHALL BE REQUIRED FOR ALL DEVELOPMENT IN ACCORDANCE WITH THE PROVISIONS OF 28-1015 OF THE TOWN CODE AND SHALL UTILIZE NATIVE VEGETATION.
(B) PROJECTS PROPOSED ON PROPERTY WHICH ABUTS ANY PROPERTY THAT IS NOT ZONED MXW, SHALL ADHERE TO THE BUFFER YARD REQUIREMENT SPECIFIED FOR "PROPERTY LINES ADJOINING MORE OR LESS INTENSE ZINING OR LAND USE" AS DETAILS IN SUBSECTION 28-1014.7 E 5 OF THE TOWN CODE

PARKING SPACES REQUIRED:

PER 28-1001.3:
MULTIFAMILY RESIDENTIAL: MIN - 1 PER DU = 64
MAX - 2 PER DU = 128
BIKE - 0.5 PER DU = 32
BIKE STALL TO MEASURE 2'6" x 6' WITH 7' VERTICAL CLEARANCE LOCATED WITHIN 50' OF PRIMARY BUILDING ENTRANCE

EXISTING ON-STREET PARKING: 0 SPACES

MXW SUBDISTRICTS - FROM TABLE 28-312B

DEVELOPMENT STANDARDS	SUBDISTRICTS			
	INLAND		PORT STREET	
	BASE	MAX	BASE	MAX
MIN. LOT SIZE*	5,000 SF	5,000 SF	5,000 SF	5,000 SF
MAX. DU PER ACRE	12	30	12	30
MAX HEIGHT**	50'-0"	65'-0"	40'-0"	50'-0"
MAX STORIES**	3.00	5.00	3.0 (2.5 MIN)	4.00
MAX LOT COVERAGE	40%	75%	50%	80%
FRONT SETBACK****	5' MIN, 15' MAX	5' MIN, 15' MAX	39' FROM PORT STREET CL MIN, 51' FROM PORT STREET CL MAX.*****	39' FROM PORT STREET CL MIN, 51' FROM PORT STREET CL MAX.*****
MIN SIDE SETBACK	N/A	N/A	N/A	N/A

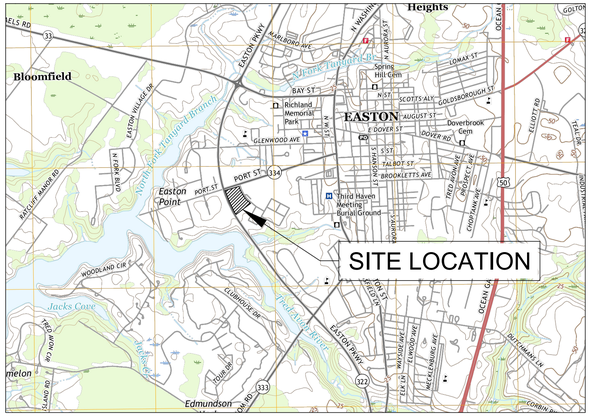
* FOR SUBDIVISIONS OF 10 OR MORE LOTS, THE MINIMUM LOT SIZE MAY BE REPLACED BY AN AVERAGE LOT SIZE OF THE SPECIFIED DIMENSION

** HEIGHT AND STORIES IN THE ZONING DISTRICT SHALL BE MEASURED FROM BASE ELEVATION

*** MEASURED FROM THE PROPERTY LINE

**** FOR PARCELS THAT ARE (OR WILL BECOME) SUBJECT TO AN EASEMENT FOR THE EASTON RAIL TRAIL, THE MAXIMUM FRONT SETBACK FROM PORT STREET SHALL BE 10' FROM THE SOUTHERN EDGE OF THE EASEMENT

NOTE: APPLICANT MAY EXCEED THE LIMITS SPECIFIED AS "BASE" UP TO LIMITS SPECIFIED AS "MAX." UPON PAYMENT OF FEE OF $9.50 PER SQUARE FOOT AREA IN EXCESS OF BASE SQUARE FOOTAGE



VICINITY MAP
SCALE: 1" = 2000'

DESIGN PRINCIPLES FOR EASTON (COMPREHENSIVE PLAN, PG. 29-31)

1. **INTEGRATED USES ARE DESIRABLE** - THE PROJECT CONSISTS OF RESIDENTIAL, OPEN SPACE, STORMWATER MANAGEMENT, AND PARKS. THIS PROJECT WILL HAVE A TOTAL OF 120 DWELLING UNITS ADDRESSING THE NEED FOR HOUSING AS STATED IN THE COMPREHENSIVE PLAN TO INCREASE THE NUMBER AND TYPES OF HOUSING AVAILABLE IN THE AREA.
2. **NATURAL FEATURES SHOULD DETERMINE DESIGN** - THE SITE IS DEVELOPED TO MAINTAIN EXISTING NATURAL CONTOURS AND DRAINAGE PATHS. THERE ARE FEW NATURAL FEATURES ON THE EXISTING SITE AS THE ORIGINAL SITE WAS MOSTLY IMPERVIOUS INCLUDING GRAIN TANKS. MORE GREEN/OPEN SPACE IS INCORPORATED INTO THE PROPOSED SITE PLAN.
3. **AUTOMOBILES SHOULD NOT DETERMINE DESIGN** - AUTOMOBILES WERE NOT THE PRIORITY FOCUS FOR THE DESIGN BUT SUFFICIENT PARKING IS PROVIDED, WHICH INCLUDES AMPLE LANDSCAPING AND GREEN SPACE.
4. **AMPLE OPEN SPACES SHOULD BE PROVIDED WITHIN AND AROUND NEIGHBORHOODS** - THIS PROJECT PROVIDES OPEN PARK AREAS AND GREEN SPACES THROUGHOUT THE PARCEL. THE SITE ALSO CONNECTS PEDESTRIANS TO THE RAILS TO TRAILS PATH.
5. **ARCHITECTURE SHOULD RESPECT EASTON'S HISTORIC DISTRICT** - THIS PROJECT IS NOT WITHIN THE HISTORIC DISTRICT BUT THE ARCHITECTURE IS MOTIVATED BY THE ORIGINAL GRAIN TANKS FROM THE EXISTING SITE.
6. **SIGNS SHOULD INFORM BUT NOT DOMINATE** - THERE WILL BE MINIMAL SIGNAGE ON THIS PROPERTY. EACH UNIT WILL HAVE A STREET/BUILDING NUMBER THAT WILL INDICATE THE UNIT AND ADDRESS FOR THE PUBLIC AND FIRE/RESCUE SERVICES. FREE STANDING SIGNS AT EACH ENTRANCE WILL NOT DOMINATE THE ROAD FRONTAGE.
7. **NEIGHBORHOODS SHOULD CONTAIN A DIVERSITY OF HOUSING TYPES** - THIS PROJECT HAS SEVERAL DIFFERENT STRUCTURE STYLES WHICH DIFFER IN THE NUMBER OF STORIES AND RESIDENTIAL AND COMMERCIAL UNITS. THIS OFFERS A DIVERSITY OF PRICE RANGES FOR THE HOMES IN THE PROJECT. THE STRUCTURE DESIGN STYLES ARE IN ADDITION TO THE CLIENTS OVERALL RESIDENTIAL PORTFOLIO IN AND AROUND THE TOWN OF EASTON. THE CLIENT'S PORTFOLIO HAS A DIVERSE HOUSING TYPE WITHIN THE TOWN OF EASTON.
8. **RESIDENTIAL DEVELOPMENTS SHOULD BE INTERESTING PLACES** - THE PROJECT EMBRACES THE EXISTING AGRICULTURE BUSINESS THAT ORIGINATED THE PARCEL, INCORPORATING THE AGRICULTURE BUSINESS WITHIN THE MOTIVATION OF THE RESIDENTIAL ARCHITECTURE, THE PARK GAZEBO, AND THE CONNECTION TO THE RAILS TO TRAILS. PATH MAKE THIS A VERY INTERESTING PROJECT AND PLACE.
9. **NEIGHBORHOODS SHOULD CONNECT** - PEDESTRIANS CAN TRAVERSE BETWEEN SOUTH STREET AND BROOKLETTS AVENUE AS WELL AS SOUTH HIGGINS STREET AND KEMP LANE. CONNECTION POINTS FOR PEDESTRIANS TO RAILS TO TRAILS ARE ALSO PROVIDED.

DRAINAGE AREA SUMMARY CHART

DA #	DA		IMPERVIOUS AREA		CN		Tc		2-YEAR STORM			10-YEAR STORM			ESDv	
	EXISTING (ACRES)	PROPOSED (ACRES)	EXISTING (ACRES)	PROPOSED (ACRES)	EXISTING	PROPOSED	EXISTING (MINUTES)	PROPOSED (MINUTES)	EXISTING (CFS)	PROPOSED (CFS)	CHANGE	EXISTING (CFS)	PROPOSED (CFS)	CHANGE	TARGET (CF)	ACTUAL (CF)
1	3.003	1.385	0.03	0.058	76	75	62.8	22.2	1.88	1.7	-0.18	4.24	3.86	-0.38	521	0
2	1.187	2.721	0	1.37	87	87	41.3	19.5	1.24	0.81	-0.43	2.71	1.66	-1.05	8753	12413
3	0.075	1.589	0.016	0.047	81	81	30.6	5.7	0.29	0.21	-0.08	0.55	0.42	-0.13	383	0
TOTAL	4.265	5.695	0.046	1.475											9657	12413

BMP SUMMARY CHART

BMP ID	TYPE OF ESD PRACTICE (STRUCTURE NAME)	MARYLAND GRID COORDINATE (NAD 83) METERS		BMP DRAINAGE AREA	IMPERVIOUS AREA	TARGET PE	ACTUAL PE	TARGET ESDv	ACTUAL ESDv
		NORTHING	EASTING	(SF)	(SF)	(IN)	(IN)	(CF)	(CF)
SGW-1	SUBMERGED GRAVEL WETLAND	402707.78	1572982.51	118,516	59,659	1.8	1.82	10,290	12,422
TOTAL				**118,516**	**59,659**			**10,290**	**12,422**

PROPOSED IMPERVIOUS AREA TABLE

Description	Area (Sq.Ft.)	Area (Ac.)	Site Percentage
Total Site Area	152,329	3.497	100%
Buildings	22,431	0.515	14.7%
Roadway - Curb and gutters	31,247	0.717	20.5%
Sidewalk - Paths	5,981	0.137	3.9%
Total Impervious Area	59,659	1.369	39.1%
Remainder Pervious Area	92,670	2.128	60.9%

CONTACT INFORMATION

OWNER/DEVELOPER:	OSPREY PROPERTY COMPANY II LLC 16 GREENMEADOW DRIVE, SUITE G107, TIMONIUM, MD 21093 (443) 509-0989
ENGINEER:	RAUCH Inc. 106 N HARRISON ST EASTON, MARYLAND 21301 (410)770-9081

DRAWING LIST	
DRAWING NUMBER	**DRAWING NAME**
G-100	TITLE SHEET
V-100	EXISTING CONDITIONS PLAN
C-100	OVERALL SITE PLAN AND NOTES
L-1	LANDSCAPE CONCEPT

ENVIRONMENTAL NOTES:

1. A PORTION OF THIS PROJECT SITE IS LOCATED WITHIN THE CRITICAL AREA BUFFER
2. THE SITE IS NOT LOCATED WITHIN A 100 YEAR FLOODPLAIN
3. STEEP SLOPES ARE NOT PRESENT ON SITE
4. NON TIDAL WETLANDS ARE PRESENT ON THIS PORTION OF THE PROJECT

HYDROLOGY NOTES:

1. THE PROJECT WILL NOT ALTER HYDROLOGY TO OR FROM THE SITE
2. NO OUTLETS WILL BE ALTERED BY THIS PROJECT

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIATION MUST BE COMPLETE WITHIN:
A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND
B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING

SEQUENCE OF CONSTRUCTION

1. NOTIFY MDE AT (410) 901-4020
   TALBOT SOIL CONSERVATION DISTRICT AT (410) 822-1583
   TOWN OF EASTON ENGINEERING AT (410) 820-8822
2. PRE-CONSTRUCTION MEETING.
4. INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES PER PLANS.
5. CONSTRUCT SEDIMENT TRAP AND INSTALL SKIMMER DE-WATERING DEVICE TO BE USED DURING CONSTRUCTION PER DETAILS ON C-205.01.
6. DEMO PER PLAN
7. START SITE GRADING
8. INSTALL STORMWATER MANAGEMENT NETWORK
9. INSTALL UTILITIES
10. CONSTRUCT CURBS AS INDICATED ON THE PLANS
11. INSTALL BASE PAVEMENT
12. ERECT RESIDENTIAL STRUCTURE
13. CONSTRUCT SIDEWALKS AS INDICATED ON THE PLAN
14. CONSTRUCT SUBMERGED GRAVEL WETLAND AREA. DO NOT FINALIZE CONSTRUCTION OF THIS UNTIL EARTH DISTURBANCE IS COMPLETE.
15. PERMANENTLY STABILIZE REMAINING AREAS.
16. MAINTAIN ALL PERIMETER CONTROLS AND SEDIMENT CONTROL DEVICES UNTIL FINAL STABILIZATION HAS BEEN COMPLETELY ESTABLISHED.
17. REMOVE PERIMETER CONTROLS UPON APPROVAL BY THE MDE SEDIMENT CONTROL INSPECTOR.

GENERAL NOTES

PROJECT SHALL BE CONSTRUCTED TO COMPLY WITH THE TOWN OF EASTON DESIGN AND CONSTRUCTION STANDARDS.

ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, LOCAL BUILDING CODES, BEST PRACTICES OF THE RESPECTIVE TRADES AND THE STANDARD SPECIFICATIONS AND DETAILS REFERRED TO HEREON.

THIS DRAWING SHOWS INFORMATION OBTAINED FROM AVAILABLE RECORDS REGARDING PIPES, CONDUITS, TELEPHONE LINES AND OTHER STRUCTURES AND CONDITIONS WHICH EXIST WITHIN LIMITS OF THE WORK AT AND BELOW THE SURFACE OF THE GROUND. THE CONTRACTOR IS RESPONSIBLE FOR SUPPORTING AND PROTECTING ALL PIPES, CONDUITS, TELEPHONE LINES, AND OTHER STRUCTURES.

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO (2) WEEKS PRIOR TO START OF CONSTRUCTION AND SHALL COORDINATE ALL CONSTRUCTION PHASES WITH THEM:

MDE (Main Number)	410-537-3000
MDE (Eastern Shore Field Office)	410-901-4020
TOWN OF EASTON ENGINEERING	410-820-8822
TALBOT COUNTY SCD	410-822-1583
MISS UTILITY	800-257-7777 or 811

SHOULD ANY DAMAGE OCCUR TO ANY MARKED UTILITIES, THEY SHALL BE REPAIRED SOLELY AT THE CONTRACTORS EXPENSE.

ALL LANDSCAPING SHALL BE PERFORMED BY QUALIFIED PROFESSIONALS. ALL PLANT MATERIALS SHALL BE FROM CERTIFIED NURSERYMAN AND BE GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF PLANTING.

ANY PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE REPLACED SOLELY AT THE CONTRACTORS EXPENSE.

CRITICAL AREA SUMMARY NARRATIVE

THE SITE IS LOCATED ON THE SOUTHEAST CORNER OF THE INTERSECTION OF PORT STREET AND EASTON PARKWAY IN EASTON, MARYLAND. THE CURRENT LOT IS VACANT OF STRUCTURES WITH MAINTAINED GRASS. THE PARCEL TOTALS 3.497 ACRES WITH 1.842 ACRES LYING WITHIN THE CRITICAL AREA (IDA) BUFFER. PER TOWN OF EASTON SECTION 28-401.3.B, ALL PROPOSED STORMWATER MANAGEMENT TECHNOLOGIES SHALL REDUCE POLLUTANT LOADINGS BY AT LEAST 10% BELOW THE LEVEL OF POLLUTION ON SITE PRIOR TO DEVELOPMENT, CALCULATED TO BE 1.75 POUNDS OF PHOSPHORUS PER YEAR. PER CALCULATIONS PROVIDED WITHIN THE SWM REPORT, OUR PROPOSED SWM PRACTICE SHOULD, AT A MINIMUM, REMOVED 2.28 POUNDS OF PHOSPHORUS PER YEAR. AS DESIGNED, OUR PRACTICE EXCEEDS THIS MINIMUM, PROVIDING REMOVAL OF 3.83 POUNDS OF PHOSPHORUS PER YEAR.

SIMPLIFIED FOREST STAND DELINEATION & FOREST CONSERVATION NARRATIVE

THE SITE IS LOCATED ON THE SOUTHEAST CORNER OF THE INTERSECTION OF PORT STREET AND EASTON PARKWAY IN EASTON, MARYLAND. THE CURRENT LOT IS VACANT OF STRUCTURES WITH MAINTAINED GRASS. NO FOREST AS DEFINED BY THE CODE OF MARYLAND REGULATIONS EXISTS ON SITE. THE TOTAL AREA UNDER CONSIDERATION IS THE EXISTING LOT TOTALING 3.50 ACRES. 1.84 ACRES OF THE PARCEL EXISTS WITHIN THE CRITICAL AREA BOUNDARY, THEREFORE IT HAS BEEN DEDUCTED FROM THE FOREST CONSERVATION CALCULATIONS.

ALL AFFORESTATION, AS REQUIRED BY THE FOREST CONSERVATION ACT SHALL BE COMPLETED BY PLANTING 66 2" CALIPER CANOPY TREES. PER TOWN OF EASTON ZONING ORDINANCE THESE CANOPY TREES WILL GIVE CREDIT FOR 0.61 ACRES OF PLANTING, SURPASSING THE REQUIRED 0.25 ACRES.

THE TIMELINE FOR DEVELOPMENT IS AS FOLLOWS:
PLAN REVIEW – SPRING 2026
PLAN APPROVAL – SPRING/ SUMMER 2026
CONSTRUCTION – FALL 2026

PROVIDED LANDSCAPE CONCEPT PLAN INDICATES THAT 66 CANOPY TREES SHALL BE PLANTED.

REVIEWED FOR THE TALBOT SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

APPROVED:

TALBOT SOIL CONSERVATION DISTRICT _____ DATE _____

NOTE: THE TALBOT SOIL CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, DELETE, MODIFY OR OTHERWISE ALTER THE EROSION CONTROL PROVISIONS OF THIS PLAN IN THE EVENT THAT ADDITIONAL PROTECTION BECOMES NECESSARY.

DEVELOPER'S CERTIFICATION

I HEREBY CERTIFY THAT ALL OF THE DEVELOPMENT AND/OR CONSTRUCTION SHALL BE DONE IN ACCORDANCE TO THIS PLAN OF EROSION AND SEDIMENT CONTROL.

SIGNATURE _____ DATE _____

1. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR TO NOTIFY THE ENGINEER OF ANY DEVIATION MADE IN THIS PLAN. ANY CHANGE MADE TO THIS PLAN WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER WILL PLACE RESPONSIBILITY FOR SAID CHANGE ON THE CONTRACTOR OR SUBCONTRACTOR.
2. ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT.

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT MANAGER DATE

COVER SHEET

OF THE LANDS OF

PORT STREET SENIOR MULTIFAMILY

TAX MAP 0034, GRID 0015, PARCEL 0077, LOT 4

ELECTION WARD 4, TOWN OF EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH INC
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 9081 | Fax: 410 770 3667

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 11024
Expiration Date: July 24, 2026

03-27-2026

PRELIMINARY NOT FOR CONSTRUCTION (REVIEW)

REVISIONS

REV. #	DATE	DESCRIPTION
1		

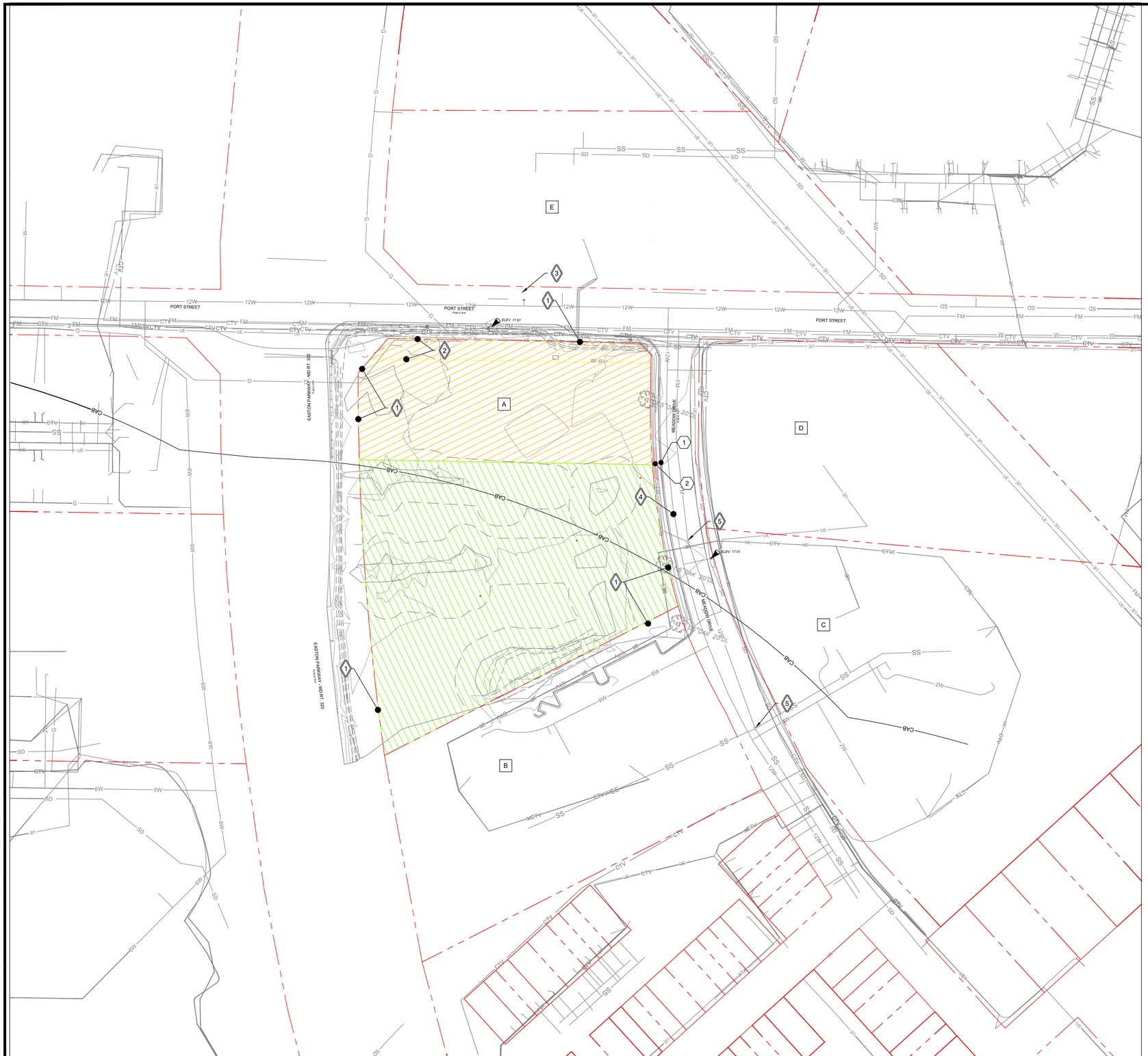
MISS UTILITY OF DELMARVA — DIAL BEFORE YOU DIG — 811

DATE:	3/27/2026
SCALE:	AS SHOWN
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	

SHEET NO.: G-100

DESIGN DEVELOPMENT

Z:\+PROJECTS\3800\38...OSPREY PROPERTY - PORT STREET MULTIFAMILY\+DESIGN\TIMONIUM\CIVIL\LOADPRODUCTION\3800SKC-SET-ESDK.DWG



SYMBOLS

	EXISTING
STORM DRAIN MANHOLE	D
SANITARY SEWER MANHOLE	S
CLEANOUT	C
GATE VALVE	GV
SIGN	
WATER METER	W
FIRE HYDRANT	
ELECTRIC TRANSFORMER	ELEC
COMMUNICATION PEDESTAL	CATV
UTILITY POLE	
SITE LIGHT	
CANOPY/SHADE TREE	
BENCHMARK	

LINETYPES

	EXISTING
TOPOGRAPHY	
MAJOR CONTOURS	
MINOR CONTOURS	
TOP OF SLOPE BREAKLINE	
BOTTOM OF SLOPE BREAKLINE	
PARCEL BOUNDARY	
PARCEL SETBACK/EASEMENT	
BUILDING RESTRICTION LINE	BRL
BUFFERYARD BOUNDARY	BY
ROADWAY CENTERLINE	
UTILITIES	
OVERHEAD ELECTRIC	OE
UNDERGROUND ELECTRIC	UE
GAS PIPE LINE	G
CABLE TV	CTV
WATER PIPE	W
SANITARY PIPE	SS
STORMWATER PIPE	SD
ENVIRONMENTAL	
WETLAND LINE	
CRITICAL AREA BOUNDARY	CAB

MXW ZONING HATCH LEGEND

- PORT STREET CORRIDOR SUB-DISTRICT
- INLAND SUB-DISTRICT

EXISTING FEATURES

1. EXISTING PROPERTY LINE
2. EXISTING 25' EASEMENT
3. EXISTING FIRE HYDRANT
4. EXISTING WATER MAIN
5. EXISTING SANITARY MANHOLE

DEMOLITION FEATURES

1. EXISTING CURB TO BE DEMOLISHED
2. EXISTING SIDEWALK TO BE DEMOLISHED

PROPERTY DATA

A SIMPSON W REMBERT TRUSTEE
M/G/P/L: 0034/0015/0077/4 - B/P: 02753/00320
ZONE MXW

B CENTREVILLE II LIMITED PARTNERSHIP
M/G/P/L: 0034/0015/0077/3 - B/P: 00823/00725
ZONE R7A

C TRAPPE LIMITED PARTNERSHIP
M/G/P/L: 0034/0015/0077/2 - B/P: 00736/00516
ZONE R7A

D CHESAPEAKE COMMUNITY DEVELOPMENT LLC
M/G/P/L: 0034/0015/0077/1 - B/P: 02873/00398
ZONE MXW

E TALBOT COUNTY MARYLAND
M/G/P/L: 0104/00EA/1367/1 - B/P: 00986/00719
ZONE MXW

NAD 83

0 60' 120'

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT MANAGER DATE

EXISTING CONDITIONS

OF THE LANDS OF

PORT STREET SENIOR MULTIFAMILY

TAX MAP 0034, GRID 0015, PARCEL 0077, LOT 4

ELECTION WARD 4, TOWN OF EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc
Engineering | Survey | Architecture | Environmental
Main Office: 108 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 9081 | Fax: 410 770 3667

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

03-27-2026

PRELIMINARY NOT FOR CONSTRUCTION
FOR REVIEW ONLY

REVISIONS

REV. #	DATE	DESCRIPTION
1		

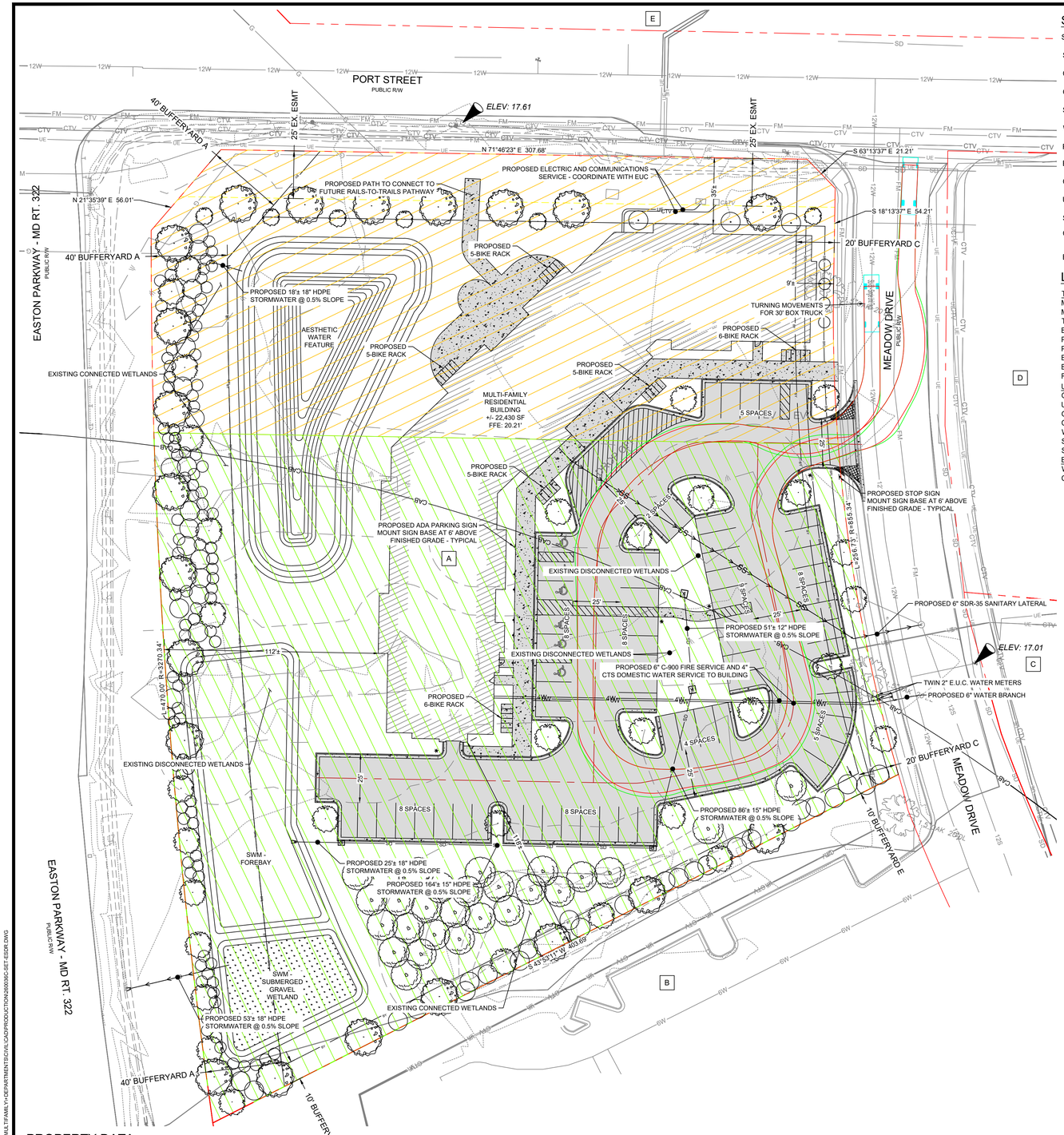
MISS UTILITY OF DELMARVA — STATE LAW REQUIRES YOU TO CALL — 811

DATE:	3/27/2026
SCALE:	1" = 60'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	

SHEET NO.: V-100

DESIGN DEVELOPMENT

Z:\PROJECTS\36036 - OSPREY PROPERTY - PORT STREET MULTIFAMILY\DEPARTMENTS\CIVIL\LOAD\PRODUCTION\36036C-SET-ESDR.DWG



PROPERTY DATA

- A — SIMPSON W REMBERT TRUSTEE — M/G/P/L: 0034/0015/0077/4 - B/P: 02753/00320 — ZONE MXW
- B — CENTREVILLE II LIMITED PARTNERSHIP — M/G/P/L: 0034/0015/0077/3 - B/P: 00823/00725 — ZONE R7A
- C — TRAPPE LIMITED PARTNERSHIP — M/G/P/L: 0034/0015/0077/2 - B/P: 00736/00516 — ZONE R7A
- D — CHESAPEAKE COMMUNITY DEVELOPMENT LLC — M/G/P/L: 0034/0015/0077/1 - B/P: 02873/00398 — ZONE MXW
- E — TALBOT COUNTY MARYLAND — M/G/P/L: 0104/00EA/1367/1 - B/P: 00986/00719 — ZONE MXW

SYMBOLS

	PROPOSED	EXISTING
STORM DRAIN MANHOLE	Ⓓ	Ⓓ
SANITARY SEWER MANHOLE	Ⓢ	Ⓢ
CLEANOUT	Ⓒ	Ⓒ
GATE VALVE	GV	GV
SIGN	●	●
WATER METER	Ⓦ	Ⓦ
FIRE HYDRANT		
ELECTRIC TRANSFORMER	ELEC	ELEC
COMMUNICATION PEDESTAL	CATV	CATV
UTILITY POLE		
SITE LIGHT	✶	✶
CANOPY/SHADE TREE		
BENCHMARK	ELEV: 123	

LINETYPES

	PROPOSED	EXISTING
TOPOGRAPHY		
MAJOR CONTOURS		
MINOR CONTOURS		
TOP OF SLOPE BREAKLINE		
BOTTOM OF SLOPE BREAKLINE		
PARCEL BOUNDARY		
PARCEL SETBACK/EASEMENT		
BUILDING RESTRICTION LINE		BRL
BUFFERYARD BOUNDARY		6W
ROADWAY CENTERLINE		
UTILITIES		
OVERHEAD ELECTRIC	OE	OE
UNDERGROUND ELECTRIC	UE	UE
GAS PIPE LINE	G	G
CABLE TV	CTV	CTV
WATER PIPE	W	W
SANITARY PIPE	SS	SS
STORMWATER PIPE	SD	SD
ENVIRONMENTAL		
WETLAND LINE		Ψ
CRITICAL AREA BOUNDARY		CAB

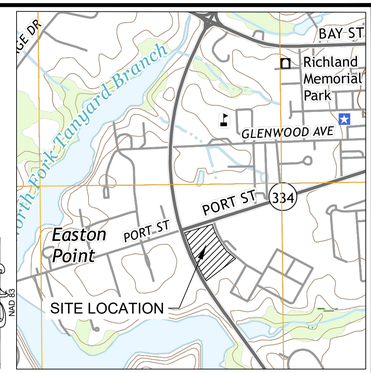
CONTACT INFORMATION

OWNER/DEVELOPER: OSPREY PROPERTY COMPANY II LLC
16 GREENMEADOW DRIVE, SUITE G107,
TIMONIUM, MD 21093
(443) 509-0989

ENGINEER: RAUCH Inc.
106 N HARRISON ST
EASTON, MARYLAND 21301
(410)770-9081

MXW ZONING HATCH LEGEND

- PORT STREET CORRIDOR SUB-DISTRICT
- INLAND SUB-DISTRICT



VICINITY MAP
SCALE: 1" = 1,000'

DESIGN PRINCIPLES FOR EASTON (COMPREHENSIVE PLAN, PG. 29-31)

1. **INTEGRATED USES ARE DESIRABLE** - THE PROJECT CONSISTS OF RESIDENTIAL, OPEN SPACE, STORMWATER MANAGEMENT, AND PARKS. THIS PROJECT WILL HAVE A TOTAL OF 120 DWELLING UNITS ADDRESSING THE NEED FOR HOUSING AS STATED IN THE COMPREHENSIVE PLAN TO INCREASE THE NUMBER AND TYPES OF HOUSING AVAILABLE IN THE AREA.
2. **NATURAL FEATURES SHOULD DETERMINE DESIGN** - THE SITE IS DEVELOPED TO MAINTAIN EXISTING NATURAL CONTOURS AND DRAINAGE PATHS. THERE ARE FEW NATURAL FEATURES ON THE EXISTING SITE AS THE ORIGINAL SITE WAS MOSTLY IMPERVIOUS INCLUDING GRAIN TANKS. MORE GREEN/OPEN SPACE IS INCORPORATED INTO THE PROPOSED SITE PLAN.
3. **AUTOMOBILES SHOULD NOT DETERMINE DESIGN** - AUTOMOBILES WERE NOT THE PRIORITY FOCUS FOR THE DESIGN BUT SUFFICIENT PARKING IS PROVIDED, WHICH INCLUDES AMPLE LANDSCAPING AND GREEN SPACE.
4. **AMPLE OPEN SPACES SHOULD BE PROVIDED WITHIN AND AROUND NEIGHBORHOODS** - THIS PROJECT PROVIDES OPEN PARK AREAS AND GREEN SPACES THROUGHOUT THE PARCEL. THE SITE ALSO CONNECTS PEDESTRIANS TO THE RAILS TO TRAILS PATH.
5. **ARCHITECTURE SHOULD RESPECT EASTON'S HISTORIC DISTRICT** - THIS PROJECT IS NOT WITHIN THE HISTORIC DISTRICT BUT THE ARCHITECTURE IS MOTIVATED BY THE ORIGINAL GRAIN TANKS FROM THE EXISTING SITE.
6. **SIGNS SHOULD INFORM BUT NOT DOMINATE** - THERE WILL BE MINIMAL SIGNAGE ON THIS PROPERTY. EACH UNIT WILL HAVE A STREET/BUILDING NUMBER THAT WILL INDICATE THE UNIT AND ADDRESS FOR THE PUBLIC AND FIRE/RESCUE SERVICES. FREE STANDING SIGNS AT EACH ENTRANCE WILL NOT DOMINATE THE ROAD FRONTAGE.
7. **NEIGHBORHOODS SHOULD CONTAIN A DIVERSITY OF HOUSING TYPES** - THIS PROJECT HAS SEVERAL DIFFERENT STRUCTURE STYLES WHICH DIFFER IN THE NUMBER OF STORIES AND RESIDENTIAL AND COMMERCIAL UNITS. THIS OFFERS A DIVERSITY OF PRICE RANGES FOR THE HOMES IN THE PROJECT. THE STRUCTURE DESIGN STYLES ARE IN ADDITION TO THE CLIENTS OVERALL RESIDENTIAL PORTFOLIO IN AND AROUND THE TOWN OF EASTON. THE CLIENT'S PORTFOLIO HAS A DIVERSE HOUSING TYPE WITHIN THE TOWN OF EASTON.
8. **RESIDENTIAL DEVELOPMENTS SHOULD BE INTERESTING PLACES** - THE PROJECT EMBRACES THE EXISTING AGRICULTURE BUSINESS THAT ORIGINATED THE PARCEL. INCORPORATING THE AGRICULTURE BUSINESS WITHIN THE MOTIVATION OF THE RESIDENTIAL ARCHITECTURE, THE PARK GAZEBO, AND THE CONNECTION TO THE RAILS TO TRAILS. PATH MAKE THIS A VERY INTERESTING PROJECT AND PLACE.
9. **NEIGHBORHOODS SHOULD CONNECT** - PEDESTRIANS CAN TRAVERSE BETWEEN SOUTH STREET AND BROOKLETTS AVENUE AS WELL AS SOUTH HIGGINS STREET AND KEMP LANE. CONNECTION POINTS FOR PEDESTRIANS TO RAILS TO TRAILS ARE ALSO PROVIDED.

SITE DATA:

PROPERTY ADDRESS: PORT STREET AND EASTON PARKWAY
EASTON, MD 21601

LATITUDE: 38° 46' 12.37" N

LONGITUDE: -76° 05' 07.86" W

PRESENT ZONING CLASSIFICATION: MXW

PRESENT USE: VACANT
PROPOSED USE: MIXED USE - MULTIFAMILY RESIDENTIAL

TAX MAP: 0015
GRID: 0034
PARCEL: 0077, LOT 4
PLAT: 061E
DEED REFERENCE: 02753/00320

PROPERTY AREA: 152,329 SF - 3.497 ACRES
LIMITS OF DISTURBANCE: 123,485 SF - 2.835 ACRES
CUT: 2,314 CY
FILL: 7,241 CY
NET CUT/FILL: 4,927 CY (FILL)
EXISTING IMPERVIOUS: 0%
PROPOSED IMPERVIOUS: 62,611 SF - 1.437 ACRES - 41.10%

FEMA FLOOD MAP: PANEL 24041C0189D
WATERSHED: 021304030465 - LOWER CHOPTANK

NO PORTION OF THIS PROJECT SITE IS LOCATED WITHIN THE 100-YR FLOOD PLAIN

A PORTION OF THIS PROJECT SITE IS LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA

SURVEY DATUM
HORIZONTAL: NAD83
VERTICAL: NAVD88
DATE OF SURVEY: 2/19/2026

BENCHMARK:
UTILITY POLE - PORT STREET — ELEV: 17.61'
LATITUDE: N 38° 46' 12.44"
LONGITUDE: W 76° 05' 09.81"
FIRE HYDRANT - MEADOW DR. — ELEV: 17.01'
LATITUDE: N 38° 46' 10.62"
LONGITUDE: W 76° 05' 05.45"

NOTE: ALL ON-SITE LIGHTING UNLESS APPROVED OTHERWISE BY PLANNING AND ZONING COMMISSION SHALL BE LOW CUT-OFF SHIELDED LUMINARIES AT 18' HEIGHT AND LIGHT SHALL NOT SHINE OFF-SITE AT LEVEL GREATER THAN 1' CANDLE.

DENSITY:
REQUIRED: 12 UNITS PER ACRE EXCLUDING BONUS PROVISIONS
BONUS PROVISIONS: 30 UNITS PER ACRE
DENSITY PROVIDED: 18.30 UNITS PER ACRE

SETBACKS:
PORT STREET CORRIDOR: FRONT: 29'-39' FROM PORT STREET CENTERLINE **- OR -** 10' FROM BACKSIDE OF UTILITY EASEMENT; SIDE: N/A; REAR: N/A
INLAND SUB-DISTRICT: FRONT: 5 -15' FT FROM PROPERTY LINE; SIDE: N/A; REAR: N/A
28-1009.3 - MD ROUTE 333: 40'

LOT SIZE: MINIMUM = 5,000 SF
(N/A - NO INTENT TO SUBDIVIDE)

LOT COVERAGE:
EXISTING: 0%
REQUIRED:
PORT STREET CORRIDOR: 50% - 80%
INLAND SUB-DISTRICT: 40% - 75%
ACTUAL PR. LOT COVERAGE: 41.1%

OPEN SPACE
REQUIRED PER 28-1007.1.14.B: 25% OF GROSS DEVELOPMENT
PROVIDED: 41% OF GROSS DEVELOPMENT

BUILDING HEIGHT
BASE BUILDING HEIGHT:
PORT STREET CORRIDOR: 40'
INLAND SUB-DISTRICT: 50'
MAX BUILDING HEIGHT:
PORT STREET CORRIDOR: 50'
INLAND SUB-DISTRICT: 65'
MAX. EXISTING STRUCT. HEIGHT: 0
MAX PR. BUILDING HEIGHT: 48'

PARKING
REQUIRED PER 28-1001.3:
MULTIFAMILY RESIDENTIAL: MIN - 1 PER DU = 64; MAX - 2 PER DU = 128; BIKE - 0.5 PER DU = 32

EXISTING ON-STREET PARKING: 0 SPACES

PARKING PROVIDED: 65 VEHICLE STALLS; INCLUDES 6 ADA VAN ACCESSIBLE STALLS; INCLUDES 2 E.V. CHARGING STALLS; 32 BICYCLE STALLS

LANDSCAPING:
28-1007.14 F - ALL AREAS NOT UTILIZED FOR BUILDING OR OFF-STREET PARKING SHALL BE LANDSCAPED AND MAINTAINED IN ACCORDANCE WITH 28-1014
28-1014.6.B.1.a - STREET TREES - (1) DECIDUOUS, SHADE/CANOPY TREE PER 25' OF STREET CENTERLINE LENGTH. TREES TO BE PLANTED ALONG BOTH SIDES OF STREET BEHIND CURB AND INSIDE SIDEWALK WHEREVER POSSIBLE OR OTHERWISE WITHIN 15' OF CURB LINE
28-1014.6.B.1.b - PARKING LOTS/PARKING COURTS - (1) DECIDUOUS, SHADE/CANOPY TREE PER 5 SPACES TO BE LOCATED WITHIN THE PARKING LOT INTERIOR. TREES SHALL BE LOCATED WITHIN THE PARKING BAYS SO THAT NO MORE THAN 10 PARKING SPACES FORM AN UNTERRUPTED ROW. TREES SHALL BE PLANTED WITHIN AN AREA OF PERVIOUS SPACE OF AT LEAST 64 SQ. FT. ALLOCATED PER TREE, WITH NO DIMENSION OF ANY PARKING LOT PLATING ISLAND LESS THAN 6'
28-1014.6.B.1.c - ALL PARKING LOTS SHALL BE LANDSCAPED WITH AN EVERGREEN SHRUB HEDGE WHICH WILL GROW TO A MINIMUM 42" HEIGHT WITHIN 5 YEARS ALONG ALL SIDES EXCLUDING THE BUILDING OR FACILITY ACCESS SIDE(S). SHRUBS SHALL BE SPACED TO FORM A CONTINUOUS HEDGE WITHIN 5 YEARS. REQUIRED BUFFERYARDS MAY REPLACE ALL OR PART OF THIS REQUIREMENT WHEN THE APPLICANT CAN DEMONSTRATE THAT EFFECTIVE SCREENING WILL BE ACHIEVED.
28-1014.6.B.1.d - BALANCE OF REQUIRED 3 TREES/UNIT TO BE PLANTED AROUND STRUCTURES, ON LOGS AND/ON COMMON OPEN SPACE AREAS. A MINIMUM OF 25% OF THESE TREES SHALL BE EVERGREEN. BUFFERYARD PLANTINGS MAY BE SUPPLEMENTED WITH THESE TREES IF IT CAN BE DEMONSTRATED TO THE SATISFACTION OF THE PLANNING AND ZONING COMMISSION THAT THE OVERALL APPEARANCE AND SCREENING NEEDS OF THE PROJECT WOULD BE BETTER SERVED.
28-1014.6.B.2 - SHRUB AND GROUNDCOVER PLANTINGS - SHRUBS AND GROUNDCOVERS SHALL BE INTEGRATED INTO THE SITE AND LANDSCAPE PLAN TO COMPLEMENT ARCHITECTURAL DESIGN, SCREEN OBJECTIONABLE VIEWS, SEPARATE PEDESTRIAN ACTIVITIES FROM VEHICULAR TRAVEL WAYS, STABILIZE SENSITIVE OR ERODING AREAS AND OTHER APPLICATIONS THAT CONTRIBUTE TO THE OVERALL LANDSCAPE APPEARANCE. THE APPLICANT SHALL PROVIDE SHRUB AND GROUNDCOVER PLANTINGS OR DEMONSTRATE WHY THEY ARE UNNECESSARY, IMPRACTICAL OR NOT EFFECTIVE IN PROVIDING AN ACCEPTABLE LANDSCAPE APPEARANCE.

28-1014.7 - BUFFERYARDS - SEE OVERALL SITE PLAN & LNSCP CONCEPT - SHEET L-1
BUFFERYARD "A" - (FOR RESIDENTIALLY ZONED LOTS OR LAND USE APPLICATIONS TO BUFFER MAJOR ROADS AS DESCRIBED IN 28-1009 - 40' WIDTH PLANTED WITH (2) SHADE/CANOPY TREES, (2) EVERGREEN TREES, AND (10) LARGE SHRUBS PER 50' OF PROPERTY LINE LENGTH. *(1.5) UNDERSTORY TREES MAY BE SUBSTITUTED FOR (1) EVERGREEN TREE. NOTE: WHERE THIS BUFFERYARD IS LOCATED BETWEEN A PARKING LOT AND STREET R/W, DELETE THE SHRUB REQUIREMENT.*
BUFFERYARD "C" - (FOR ALL RESIDENTIALLY ZONED LOTS OR LAND USE APPLICATIONS TO BUFFER ALL OTHER STREETS EQUALING OR EXCEEDING TOWN OF EASTON "RESIDENTIAL COLLECTOR DESIGNATION") THIS BUFFERYARD IS NOT REQUIRED ALONG THE STREET WHERE THE PRIMARY LOT FRONTAGE IS DESIGNATED - 20' WIDTH PLANTED WITH (1) SHADE/CANOPY TREE, (2) EVERGREEN TREES, AND (5) LARGE SHRUBS. *(1) EVERGREEN TREE MAY BE SUBSTITUTED FOR (5) SHRUBS NOTE: WHERE THIS BUFFERYARD IS LOCATED BETWEEN A PARKING LOT AND STREET R/W, DELETE THE SHRUB REQUIREMENT.*
BUFFERYARD "E" - (ALONG NON-STREET, EXTERIOR PROPERTY LINES ADJOINING MORE OR LESS INTENSE ZONING OR LAND USE) - 10' WIDTH PLANTED WITH (1) SHADE/CANOPY AND (3) EVERGREES TREES PER 50' OF PROPERTY LINE LENGTH.

FOREST CONSERVATION: WILL BE PREPARED FOR THIS PROJECT

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER — DATE	TOWN OF EASTON PLANNING AND ZONING — DATE	EASTON UTILITIES - ENGINEER — DATE	TALBOT SOIL CONSERVATION DISTRICT MANAGER — DATE

OVERALL SITE PLAN AND NOTES

OF THE LANDS OF

PORT STREET SENIOR MULTIFAMILY

TAX MAP 0034, GRID 0015, PARCEL 0077, LOT 4

ELECTION WARD 4, TOWN OF EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@rauchenv.com
Phone: 410 770 9081 | Fax: 410 770 3667

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 11024
Expiration Date: July 24, 2026

PRELIMINARY NOT FOR CONSTRUCTION
PRELIMINARY REVIEW ONLY
03-27-2026

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	3/27/2026
SCALE:	AS SHOWN
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	

SHEET NO.: C-100

DESIGN DEVELOPMENT

Z:\+PROJECTS\26008 - OSPREY PROPERTY - PORT STREET MULTIFAMILY\+DEPARTMENTS\CIVIL\CAD\PRODUCTION\26008D-SET-ESDR.DWG



PROPERTY DATA

A	SIMPSON W REMBERT TRUSTEE M/G/P/L: 0034/0015/0077/4 - B/P: 02753/00320
B	CENTREVILLE II LIMITED PARTNERSHIP M/G/P/L: 0034/0015/0077/3 - B/P: 00823/00725
C	TRAPPE LIMITED PARTNERSHIP M/G/P/L: 0034/0015/0077/2 - B/P: 00736/00516
D	CHESAPEAKE COMMUNITY DEVELOPMENT LLC M/G/P/L: 0034/0015/0077/1 - B/P: 02873/00398
E	TALBOT COUNTY MARYLAND M/G/P/L: 0104/00EA/1367/1 - B/P: 00986/00719

NAD 83

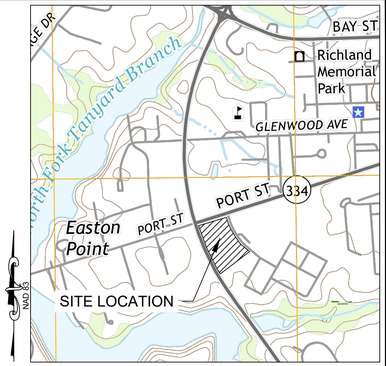
0 30' 60'

SYMBOLS

	PROPOSED	EXISTING
STORM DRAIN MANHOLE	D	D
SANITARY SEWER MANHOLE	S	S
CLEANOUT	C	C
GATE VALVE	GV	GV
SIGN		
WATER METER	W	W
FIRE HYDRANT		
ELECTRIC TRANSFORMER	ELEC	ELEC
COMMUNICATION PEDESTAL	CATV	CATV
UTILITY POLE		
CANOPY/SHADE TREE		
SHRUB		
BENCHMARK	ELEV: 123	

LINETYPES

	PROPOSED	EXISTING
TOPOGRAPHY		
MAJOR CONTOURS		
MINOR CONTOURS		
TOP OF SLOPE BREAKLINE		
BOTTOM OF SLOPE BREAKLINE		
PARCEL BOUNDARY		
PARCEL SETBACK/EASEMENT		
BUILDING RESTRICTION LINE		
BUFFERYARD BOUNDARY		
ROADWAY CENTERLINE		
UTILITIES		
OVERHEAD ELECTRIC	OE	OE
UNDERGROUND ELECTRIC	UE	UE
GAS PIPE LINE	G	G
CABLE TV	CTV	CTV
WATER PIPE	W	W
SANITARY PIPE	SS	SS
STORMWATER PIPE	SD	SD
ENVIRONMENTAL		
WETLAND LINE		
CRITICAL AREA BOUNDARY		



VICINITY MAP
SCALE: 1" = 1,000'

LANDSCAPE REQUIREMENTS SUMMARY PER ZONING ORDINANCE:

§ 28 1014.6 B.1

OVERALL TREES: 3 PER UNIT --- 64 UNITS X 3 TREES = 192 SITE TREES REQUIRED

§ 28 1014.6 B.1. A

STREET TREES: CENTERLINE OF ROADWAY --- 1,175' / 25' L = 47 STREET TREES

PORT STREET: 13 TREES **(PROVIDED)**
EASTON BYPASS: 21 TREES **(PROVIDED IN BUFFERYARD A)**
MEADOW DRIVE: 13 TREES **(2 EXISTING, 11 PROVIDED)**
- WAIVER FOR 7 SMALLER SPECIES, SPACE RESTRICTION ALONG MEADOW DR.

§ 28 1014.6 B.1 B

PARKING LOT TREES: 65 PARKING SPACES / 5 = 13 TREES

§ 28 1014.6 B.1 C

SCREENING HEDGE PLANTS: 430' HEDGE, 5' O.C. = 94 SHRUBS PROVIDED

---

§ 28 1014.5

FOREST CONSERVATION CANOPY PLANTED ON-SITE:
10,800 SF / 400 SF PER CANOPY TREE CREDIT = 27 TREES PROVIDED

BUFFERYARD STANDARDS

§ 28 1014.7 (D-4.), (E-1-5.)

- WEST EDGE - ROUTE 322: BUFFERYARD A = 10 PLANTING UNITS
- SOUTH EDGE - RESIDENTIAL ZONE ADJACENT = 8 PLANTING UNITS
- EAST EDGE - NON-COLLECTOR STREET, NO ZONE DIFFERENCE - **EXEMPT**

OPEN SPACE

§ 28 1007.1 (14-B)

GROSS AREA: 152,321 SF (3.5 AC) X 25% = 38,080 (.87 AC) - 41,050 SF PROVIDED

LANDSCAPING:

28-1014.6.B.1.a - STREET TREES - (1) DECIDUOUS, SHADE/CANOPY TREE PER 25' OF STREET CENTERLINE LENGTH. TREES TO BE PLANTED ALONG BOTH SIDES OF STREET BEHIND CURB AND INSIDE SIDEWALK WHEREVER POSSIBLE OR OTHERWISE WITHIN 15' OF CURB LINE.

28.1014.6.B.1.b - PARKING LOTS/PARKING COURTS - (1) DECIDUOUS, SHADE/CANOPY TREE PER 5 SPACES TO BE LOCATED WITHIN THE PARKING LOT INTERIOR. TREES SHALL BE LOCATED WITHIN THE PARKING BAYS SO THAT NO MORE THAN 10 PARKING SPACES FORM AN UNTERRUPTED ROW. TREES SHALL BE PLANTED WITHIN AN AREA OF PERVIOUS SPACE OF AT LEAST 64 SQ. FT. ALLOCATED PER TREE, WITH NO DIMENSION OF ANY PARKING LOT PLATING ISLAND LESS THAN 6'

28.1014.6.B.1.c - ALL PARKING LOTS SHALL BE LANDSCAPED WITH AN EVERGREEN SHRUB HEDGE WHICH WILL GROW TO A MINIMUM 42" HEIGHT WITHIN 5 YEARS ALONG ALL SIDES EXCLUDING THE BUILDING OR FACILITY ACCESS SIDE(S). SHRUBS SHALL BE SPACED TO FORM A CONTINUOUS HEDGE WITHIN 5 YEARS. REQUIRED BUFFERYARDS MAY REPLACE ALL OR PART OF THIS REQUIREMENT WHEN THE APPLICANT CAN DEMONSTRATE THAT EFFECTIVE SCREENING WILL BE ACHIEVED.

28.1014.6.B.1.d - BALANCE OF REQUIRED 3 TREES/UNIT TO BE PLANTED AROUND STRUCTURES, ON LOGS AND/OR COMMON OPEN SPACE AREAS. A MINIMUM OF 25% OF THESE TREES SHALL BE EVERGREEN. BUFFERYARD PLANTINGS MAY BE SUPPLEMENTED WITH THESE TREES IF IT CAN BE DEMONSTRATED TO THE SATISFACTION OF THE PLANNING AND ZONING COMMISSION THAT THE OVERALL APPEARANCE AND SCREENING NEEDS OF THE PROJECT WOULD BE BETTER SERVED.

28.1014.6.B.2 - SHRUB AND GROUNDCOVER PLANTINGS - SHRUBS AND GROUNDCOVERS SHALL BE INTEGRATED INTO THE SITE AND LANDSCAPE PLAN TO COMPLEMENT ARCHITECTURAL DESIGN, SCREEN OBJECTIONABLE VIEWS, SEPARATE PEDESTRIAN ACTIVITIES FROM VEHICULAR TRAVEL WAYS, STABILIZE SENSITIVE OR ERODING AREAS AND OTHER APPLICATIONS THAT CONTRIBUTE TO THE OVERALL LANDSCAPE APPEARANCE. THE APPLICANT SHALL PROVIDE SHRUB AND GROUNDCOVER PLANTINGS OR DEMONSTRATE WHY THEY ARE UNNECESSARY, IMPRACTICAL OR NOT EFFECTIVE IN PROVIDING AN ACCEPTABLE LANDSCAPE APPEARANCE.

28-1014.7 - BUFFERYARDS:

BUFFERYARD "A" - (FOR RESIDENTIALLY ZONED LOTS OR LAND USE APPLICATIONS TO BUFFER MAJOR ROADS AS DESCRIBED IN 28-1009 - 40' WIDTH PLANTED WITH (2) SHADE/CANOPY TREES, (2) EVERGREEN TREES, AND (10) LARGE SHRUBS PER 50' OF PROPERTY LINE LENGTH. *(1.5) UNDERSTORY TREES MAY BE SUBSTITUTED FOR (1) EVERGREEN TREE. NOTE: WHERE THIS BUFFERYARD IS LOCATED BETWEEN A PARKING LOT AND STREET R/W, DELETE THE SHRUB REQUIREMENT.*

BUFFERYARD "C" - (FOR ALL RESIDENTIALLY ZONED LOTS OR LAND USE APPLICATIONS TO BUFFER ALL OTHER STREETS EQUALING OR EXCEEDING TOWN OF EASTON "RESIDENTIAL COLLECTOR DESIGNATION") THIS BUFFERYARD IS NOT REQUIRED ALONG THE STREET WHERE THE PRIMARY LOT FRONTAGE IS DESIGNATED - 20' WIDTH PLANTED WITH (1) SHADE/CANOPY TREE, (2) EVERGREEN TREES, AND (5) LARGE SHRUBS. *(1) EVERGREEN TREE MAY BE SUBSTITUTED FOR (5) SHRUBS NOTE: WHERE THIS BUFFERYARD IS LOCATED BETWEEN A PARKING LOT AND STREET R/W, DELETE THE SHRUB REQUIREMENT.*

BUFFERYARD "E" - (ALONG NON-STREET, EXTERIOR PROPERTY LINES ADJOINING MORE OR LESS INTENSE ZONING OR LAND USE) - 10' WIDTH PLANTED WITH (1) SHADE/CANOPY AND (3) EVERGREES TREES PER 50' OF PROPERTY LINE LENGTH.

28-1007.1 - 14.B - OPEN SPACE:

AT LEAST TWENTY-FIVE (25%) PERCENT OF THE GROSS DEVELOPMENT AREA SHALL BE RESERVED AS COMMON OPEN SPACE, EXCEPT FOR PROJECTS DEVELOPED IN THE CBD ZONING DISTRICT, IN WHICH CASE THIS STANDARD SHALL NOT APPLY.

TREE KEY:

- LARGE CANOPY/SHADE
- MEDIUM / SMALL DECIDUOUS
- FOREST CONSERVATION TREE
- EVERGREEN TREES
- MEDIUM SHRUB / SMALL TREE
- EVERGREEN SHRUB

PLANT LIST:

SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SPECIFICATION
NATIVE CANOPY TREES				
AR	14	ACER RUBRUM	RED MAPLE	2" CALIPER
BN	8	BETULA NIGRA	RIVER BIRCH	2" CALIPER
PO	8	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2" CALIPER
QB	8	QUERCUS BICOLOR	SWAMP WHITE OAK	2" CALIPER
QM	1	QUERCUS MICHAUXII	SWAMP CHESTNUT OAK	2" CALIPER
QN	5	QUERCUS NIGRA	WATER OAK	2" CALIPER
QS	6	QUERCUS STELLATA	POST OAK	2" CALIPER
TA	16	TILIA AMERICANA 'BOULEVARD'	BASSWOOD	2" CALIPER
NATIVE EVERGREEN TREES				
IO	12	ILEX OPACA	AMERICAN HOLLY	1.25" CALIPER
JV	28	JUNIPERUS VIRGINIANA	REDCEDAR	1.25" CALIPER
PS	22	PINUS SEROTINA	POND PINE	1.25" CALIPER
TN	3	THUJA NIGRA	AMERICAN ARBORVITAE	1.25" CALIPER
NATIVE UNDERSTORY TREES				
AC	9	AMELANCHIER CANDENSIS 'TRAZAM'	TRADITION SERVICEBERRY	1.25" CALIPER
NATIVE SHRUBS				
AA	20	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	3-4' #10
CO	20	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	3-4' #10
IV	20	ITEA VIRGINICA	SWEETSPIRE	3-4' #10
MC	20	MYRICA CERIFERA	BAYBERRY	3-4' #10
VD	20	VIBURNUM DENTATUM	ARROWWOOD	3-4' #10
IG	94	ILEX GLABRA 'SHAMROCK'	INKBERRY	#5
STORMWATER PLANTS				
VC	TBD	VACINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	#3
PV	TBD	PANICUM VIGRATUM	SWITCHGRASS	2" PLUG
AI	TBD	ASCLEPIAS INCARNATA	SWAMP MILKWEED	1 QUART
AN	TBD	ASTER NON-ANGLIAE	NEW ENGLAND ASTER	1 QUART

OVERALL SITE PLAN & LNSCP CONCEPT

OF THE LANDS OF

PORT STREET SENIOR MULTIFAMILY

TAX MAP 0034, GRID 0015, PARCEL 0077, LOT 4

ELECTION WARD 4, TOWN OF EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH INC
Engineering | Survey | Architecture | Environmental
Main Office: 108 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 9081 | Fax: 410 770 3667

PRELIMINARY
FOR REVIEW ONLY

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — STOP. THINK. DIG SAFELY. CALL BEFORE YOU DIG. — 811

DATE:	3/18/2026
SCALE:	1" = 30'
DRAWN BY:	GJR
DESIGNED BY:	GJR
APPROVED BY:	

SHEET NO.: L-1

Z:_PROJECTS\3850\38 - OSPREY PROPERTY - PORT STREET MULTIFAMILY_DEPARTMENTS\CIVIL\CAD\LDNEWORK\3850SC_CLNSCP.DWG

RAUCH inc.
engineering design & development services

STORMWATER MANAGEMENT ANALYSIS

FOR

MOTON STREET

PREPARED FOR

BUILDING AFRICAN AMERICAN MINDS INC.

PREPARED BY
RAUCH, INC
106 N. HARRISON STREET
EASTON, MD 21601

24TH of March 2026



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENCED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

ROBERT D. RAUCH, LICENCE NO. 11024 — DATE 03/24/2026
EXPIRATION DATE 7/24/2026

106 N. Harrison Street - Easton, MD 21601
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com

Stormwater Management Narrative

RAUCH inc.
engineering design & development services

STORMWATER MANAGEMENT ANALYSIS – NARRATIVE

EXISTING CONDITIONS

The project site under analysis is in the town of Easton, Maryland, in Talbot County. It is bordered by Jowite Street, Pit Lane ROW, Numseen Street ROW, and is bisected by Moton Street, and Moton Street ROW.

The site's existing conditions feature a remaining gravel parking lot on the southeast corner of the property within the Moton Street ROW. The remainder of the site is open space. The soil composition is moderately well drained HSG C soil.

Water drainage patterns are a combination of sheet flow and shallow concentrated flow that feeds into yard inlets at the southeast end of the site on both sides of the existing gravel parking entrance and on the western side of the property within the Numseen Street ROW.

PROPOSED CONDITIONS

Moton Street improvements are proposing one new BAAM buildings with connected pedestrian walking paths that perimeter a proposed community garden, reflection patio, traffic garden, and equipment storage buildings.

The proposed building, sidewalk, parking area, and impervious landscape features will require treatment for quality management.

Proposed conditions during the 2-, 10-, and 100-year storm events have been analyzed and show postconstruction peak flows are more than preconstruction peak flows at the Study Points.

The maps included with this report detail all drainage areas with times of concentration.

106 N. Harrison Street - Easton, MD 21601
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com

WATER QUALITY – ESDv/WQv

The summary of the calculations is shown below:

BMP SUMMARY CHART									
BMP ID	TYPE OF ESD PRACTICE	MARYLAND GRID COORDINATE (NAD 83)		BMP DRAINAGE AREA	IMPERVIOUS AREA	TARGET PE	ACTUAL PE	TARGET ESDv	ACTUAL ESDv
	STRUCTURE NAME	METERS		(SF)	(SF)	(IN)	(IN)	(CF)	(CF)
		NORTHING	EASTING						
SGW-1	SUBMERGED GRAVEL WETLAND	404030.3830'	1573076.2565'	85826	23489	1.8	1.93	5467	5848
TOTAL				85826	23489			5467	5848

STORMWATER QUALITY NOTES:

The above quality stormwater management practices meet the Environmental Site Design Volume required for the site.

WATER QUANTITY

Volume control is provided within the submerged gravel wetland and by managing/maintaining existing times of concentrations within existing and reshaped drainage areas.

The eastern portion of the site drains entirely into a forebay on the western side of the site via a series of yard inlets. From there, the flow moves to the submerged gravel wetland which then discharges into the town's storm pipe system via the existing storm drain located within the Numseen Street ROW.

Below is a summary of the proposed peak runoffs flows from the 2 and 10-year storms compared to existing peak runoff flows from the same events.

DRAINAGE AREA SUMMARY CHART																	
DA#	DA		IMPERVIOUS AREA		CN		Tc		2-YEAR STORM			10-YEAR STORM			ESDv	
	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	CHANGE	EXISTING	PROPOSED	CHANGE	TARGET	ACTUAL
	(ACRES)	(ACRES)	(ACRES)	(ACRES)			(MINUTES)	(MINUTES)	(CFS)	(CFS)		(CFS)	(CFS)		(CF)	(CF)
1	85826	85826	0.539	0.841	81	84	26.2	16.5	3.01	0.64	-2.37	6.05	5.24	-0.81	5467	5848
TOTAL	85826	85826	0.539	0.841											5467	5848

NATURAL AREA PRESERVATION

The stormwater management facilities for this project have been designed to preserve natural areas such as existing tree lines as best as possible.

CONCLUSION

This report shows that all requirements of the MDE stormwater design manual have been met for this site and natural areas have been preserved in meeting these guidelines.

106 N. Harrison Street - Easton, MD 21601
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com

ESD Calculations

VERSION 4.2

Maryland ESD Calculations and 10% Phosphorus Removal

Last Update: 1/6/2019 Rauch Inc.

Project Name:	**Moton Street Improvements**
Date:	**24-Mar-26**

data input cells
calculation cells

Step 1: Complete ESD Implementation Checklist

Check all of the Following ESD Practices That Were Implemented at Site	*Yes - No - N/A*
Environmental Mapping Was Conducted at Site Prior to Layout	*YES*
Natural Areas Were Conserved (e.g., forests, wetlands, steep slopes, floodplains)	*YES*
Stream, Wetland and Shoreline Buffers Were Reserved	*YES*
Disturbance of Permeable Soils Was Minimized	*YES*
Natural Flow Paths Were Maintained Across the Site	*YES*
Building Layout Was Fingerprinted to Reduce Clearing and Grading at Site	*YES*
Site Grading Promoted Sheetflow From Impervious Areas to Pervious Ones	*YES*
Site Design Was Evaluated to Reduce Creation of Needless Impervious Cover	*YES*
Site Design Was Evaluated to Maximize Disconnection of Impervious Cover	*YES*
Site Design Was Evaluated to Identify Potential Hotspot Generating Area for Stormwater Treatment	*YES*
Erosion and Sediment Control Practices and Post Construction Stormwater Management Practices Were Integrated into a Comprehensive Plan	*YES*
Tree PlantingWas Used at the Site to Convert Turf Areas into Forest	*YES*

Step 2: Calculate Site Imperviousness and Water Quality Volume, WQv (for redevelopment)

New development/redevelopment category is based on the the TOTAL SITE AREA whereas the ESD and WQ volume are based on the LOD AREA. The term "SITE" is defined as A single tract, lot, parcel of land or combination of tracts, lots parcels of land that are in one ownership or are contiguous and in diverse ownership where develoment is to be perfomed as part of a unit, subdivision or project. See page 5.117 in the design handbook. This means that a project may be classed as redevelopment even if the LOD is less than 40% impervious

Total SITE Area, A (acres or sq-ft)	*85826*
Existing SITE Impervious Area (acres or sq-ft)	*23489*
SITE percent impervious	27%
Development Category (for ESD)	**New Development**

LOD Area, A (acres)	1.97
Existing LOD Impervious Surface Area (acres)	0.54
Proposed LOD Impervious Surface Area (acres)	0.82
Rainfall Depth, P (in)	1.0

Existing LOD Imperviousness, I_{pre}	27%
Proposed LOD Imperviousness, I_{post}	42%

Water Quality Calculation for Redevelopment Only

Required Treatment Area (acres)	0.000
Runoff Coefficient, Rv	0.95
Water Quality Volume, WQv (cf)	**0**

Step 3: Calculate Phosphorous Removal Requirement, RR for Critical Area Sites

Development Category (for 10%)	**Redevelopment**

New Development

Average Annual Predevelopment Load, Lpre (lbs P / yr)	0.99

Redevelopment:

Predevelopment Runoff Coefficient, Rv_{pre}	0.30
Phosphorous Mean Concentration, C (mg/L)	0.3
Average Annual Predevelopment Load, L_{pre} (lbs P / yr)	1.43
Post-Development Runoff Coefficient, Rv_{post}	0.42
Average Annual Post-Development Load, L_{post} (lbs P / yr)	2.05
Removal Requirement, RR (lbs P / yr)	**0.76**

Step 4: Calculate Environmental Site Design (ESD) Rainfall Target, P_E

% Soil Type A	0%	RCN Soil Type A	62.63
% Soil Type B	0%	RCN Soil Type B	75.98
% Soil Type C	100%	RCN Soil Type C	84.33
% Soil Type D	0%	RCN Soil Type D	87.33

Target Pre-Developed Condition, RCN_{woods}	70.00000	Post-Developed Condition, RCN	84.33

Soil Type A ESD Rainfall Target, P_E (in)	0.00
Soil Type B ESD Rainfall Target, P_E (in)	0.00
Soil Type C ESD Rainfall Target, P_E (in)	1.80
Soil Type D ESD Rainfall Target, P_E (in)	0.00
1yr	
Maximum P_E (in)	2.7

Runnoff depths for H and H analysis		
2yr	10yr	100yr
3.4	*5.3*	*7.6*

Site ESD Rainfall Target, P_E (in)	1.80
ESD Runoff Depth, Q_E (in)	0.76
ESD Runoff Volume, ESDv (cf)	**5,467**
Site Rainfall Target, P_E (in)	**1.80**
Total Treatment Volume (cf)	**5,467**

Step 6: Select Micro-Scale Practices to Treat the ESD Rainfall Target

Micro-Scale Practices	P_E Credit Description	Contributing Drainage Area (sf)	Direct ESDv Received by Practice (cf)	WQv or ESDv from Up-Gradient Practices (cf)	WQv or ESDv credit (cf)	Runoff Volume Remaining (cf)
Submerged Gravel Wetlands	ESDv credit is based on design storage volume	85,826	8,265	5101	5,848	7,518

Step 7: Check for ESDv to MEP compliance and Revise Site If Necessary

Drainage Area Treated (sf)	85,826

WQv or ESDv Treated (cf) using ESD practices	5,848
P_E achieved (inches)	1.93
Entire ESDv Treated Through ESD Practices?	**YES**
ESDv Remaining? (cf)	**0**
If ESDV is not fully treated, is ESD to MEP achieved?	**NO**
Redevelopment WQv Requirements Met Through ESD Practices?	**N/A**
WQv Remaining? (cf)	**0**
New Development WQv Requirements Met Through ESD Practices?	**YES**
WQv Remaining? (cf)	**0**

New Development Water Quality Volume Requirements

Required Treatment Area (acres)	1.97
Runoff Coefficient, Rv	0.42
Water Quality Volume, WQv (cf)	**3,037**

Entire ESDv Treated Through Environmental Site Design? YES

Total Treatment Volume: 5,467 VOID RATIO: 0.4

Volume Treated: 5,848

M-2

	Direct drainage				Indirect drainage																		
Micro-Scale Practices	Contributing Drainage Area (sf)	% Impervious Cover / RV	To fully treat sub area / PE required / WQV required	Max available WQv or ESDv from CDA (cf)	Area of upstream catchment (sf)	WQv or ESDv from Up-Gradient Practices (cf)	Total catchment area / Total ESDv to practice	Practice Specific Parameter(s)				WQV or ESDv provided (cf)	Runoff Volume Remaining (cf)	Down-Gradient Practice and Row	SOIL TYPE	Baseline Phosphorous Removal Efficiency	Adjusted Removal Rate	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remaining Load (lbs/yr)	Watershed-inches treated (PE Provided)	Annual Rainfall Treated (%)	Phosporous removal remaining for CA
		42%	1.80					Bed Surface Area (sf)	Top of Ponding Surface Area (sf)	Ponding Depth (ft)	Media Depth (ft)			Submerged Gravel Wetlands									0.00
Forebay #1	85,826	0.428	5510	8,265	0	0	8265	1,150	2,014	2	0	3,164	5,101	2	C/D	60%	60.62%	2.06	1.25	0.81	1.03	83.42%	
		0%	1.00					Bed Surface Area (sf)	Top of Ponding Surface Area (sf)	Ponding Depth (ft)	Media Depth (ft)												
Submerged Gravel Wetlands	0	0.05	0	0	85826	5101	5101	709	1,408	2	2	2,684	2,417		C/D	60%	66.58%	1.27	0.85	0.43	1.42	91.63%	
Total	85,826			8,265		5,101						5,848	7,518			60%	62.89%	3.34	2.10	1.24	1.18	86.87%	

Design Guidence:

Conveyance: Pretreated stormwater enters via piped or overland flow and discharges into the gravel-filled chamber. A perforated pipe (4 to 6-inch preferred) at the base of the gravel layer allows for flow-through conditions and maintains a constant water surface elevation. Discharges that exceed the ESD_v exit to a stable outfall at non-erosive velocities. These systems should be located off-line.

Treatment: Submerged gravel wetlands shall meet the following conditions:

Pretreatment shall be provided for 10% of the total ESD_v.

The gravel substrate shall be no deeper than four feet .

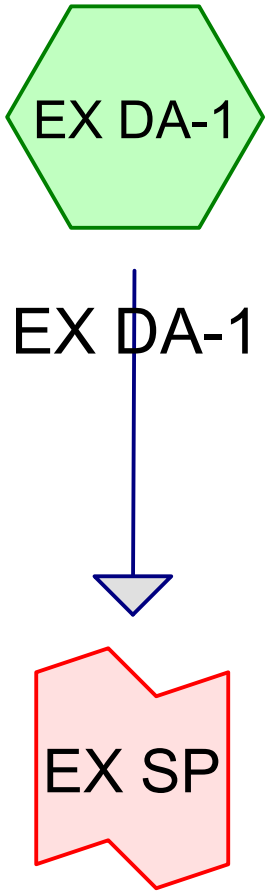
Temporary ponding depth shall not be greater than the tolerance levels of the wetland vegetation.

Observation Wells: *An observation well consisting of an anchored, six-inch diameter perforated pipe shall be required. The top of the observation well shall be at least six inches above grade.*

Landscaping: *A minimum of three different types of wetland species shall be provided.* Replacement plantings may be necessary.

Analysis of Existing Conditions

EXISTING



Subcat Reach Pond Link

Routing Diagram for 260047-Phase2
Prepared by Rauch Inc, Printed 3/25/2026
HydroCAD® 10.20-7a s/n 02413 © 2025 HydroCAD Software Solutions LLC

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX DA-1: EX DA-1 Runoff Area=85,826 sf 27.37% Impervious Runoff Depth>1.48"
Flow Length=229' Tc=26.2 min CN=81 Runoff=3.01 cfs 0.244 af

Link EX SP: EX SP Inflow=3.01 cfs 0.244 af
Primary=3.01 cfs 0.244 af

Total Runoff Area = 1.970 ac Runoff Volume = 0.244 af Average Runoff Depth = 1.48"
72.63% Pervious = 1.431 ac 27.37% Impervious = 0.539 ac

Summary for Subcatchment EX DA-1: EX DA-1

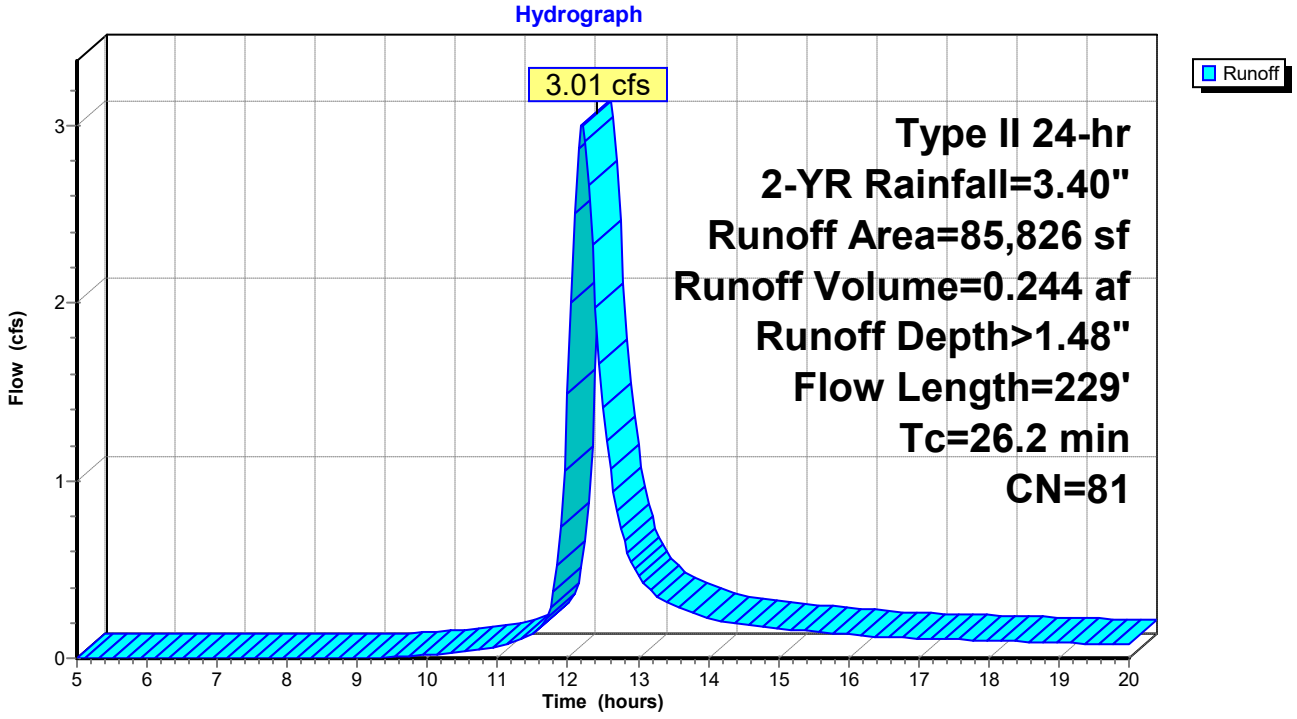
Runoff = 3.01 cfs @ 12.20 hrs, Volume= 0.244 af, Depth> 1.48"
Routed to Link EX SP : EX SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

	Area (sf)	CN	Description
*	12,866	98	Gravel parking, HSG C
	62,337	74	>75% Grass cover, Good, HSG C
	9,427	98	Roofs, HSG C
	1,196	98	Paved parking, HSG C
	85,826	81	Weighted Average
	62,337		72.63% Pervious Area
	23,489		27.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.1	100	0.0045	0.07		**Sheet Flow, GRASSED SHEET FLOW** Grass: Dense n= 0.240 P2= 3.40"
1.1	129	0.0150	1.97		**Shallow Concentrated Flow, GRASSED SHALLOW CONCENTRAT** Unpaved Kv= 16.1 fps
26.2	229	Total			

Subcatchment EX DA-1: EX DA-1

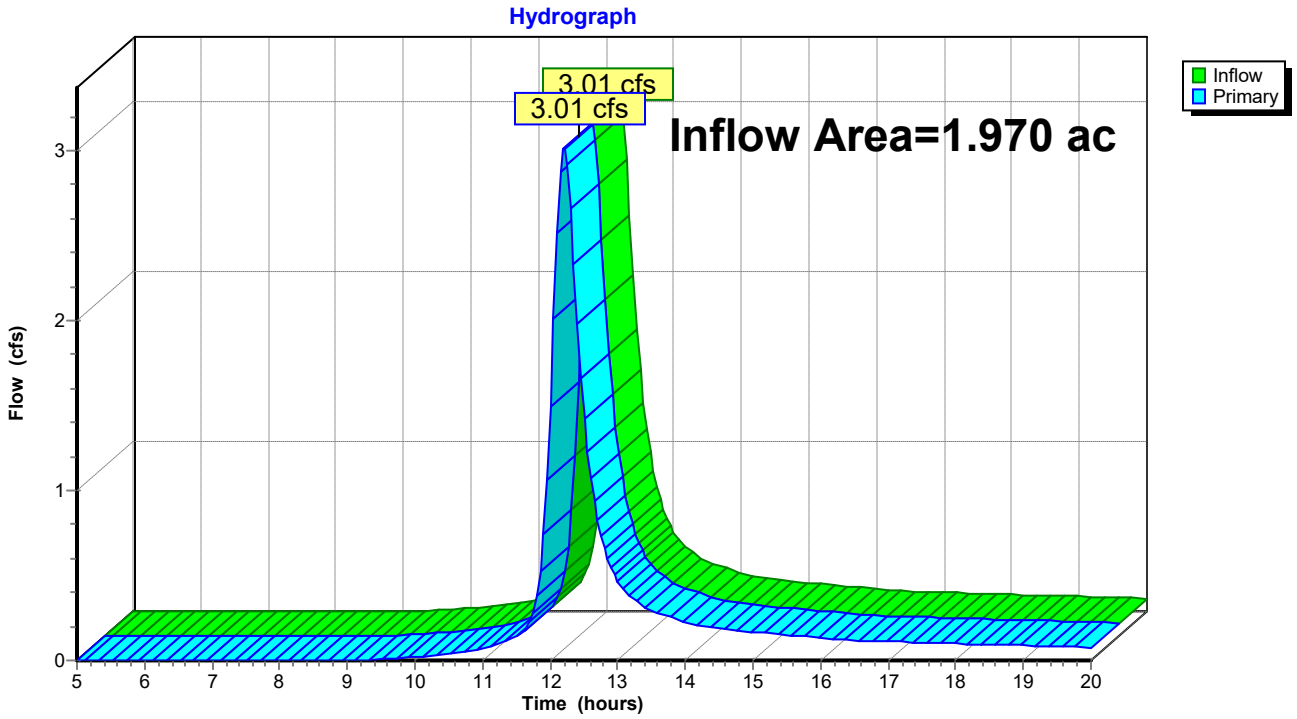


Summary for Link EX SP: EX SP

Inflow Area = 1.970 ac, 27.37% Impervious, Inflow Depth > 1.48" for 2-YR event
Inflow = 3.01 cfs @ 12.20 hrs, Volume= 0.244 af
Primary = 3.01 cfs @ 12.20 hrs, Volume= 0.244 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link EX SP: EX SP



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX DA-1: EX DA-1 Runoff Area=85,826 sf 27.37% Impervious Runoff Depth>3.00"
Flow Length=229' Tc=26.2 min CN=81 Runoff=6.05 cfs 0.493 af

Link EX SP: EX SP Inflow=6.05 cfs 0.493 af
Primary=6.05 cfs 0.493 af

Total Runoff Area = 1.970 ac Runoff Volume = 0.493 af Average Runoff Depth = 3.00"
72.63% Pervious = 1.431 ac 27.37% Impervious = 0.539 ac

Summary for Subcatchment EX DA-1: EX DA-1

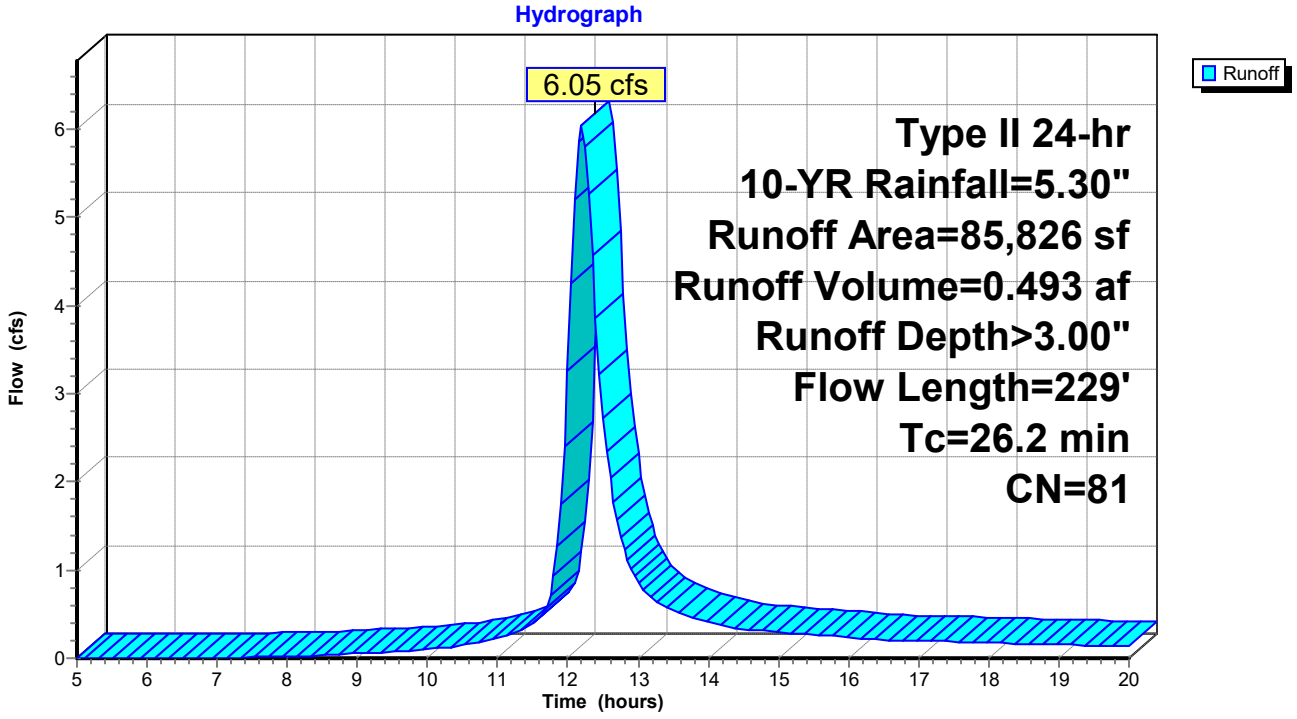
Runoff = 6.05 cfs @ 12.20 hrs, Volume= 0.493 af, Depth> 3.00"
Routed to Link EX SP : EX SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

	Area (sf)	CN	Description
*	12,866	98	Gravel parking, HSG C
	62,337	74	>75% Grass cover, Good, HSG C
	9,427	98	Roofs, HSG C
	1,196	98	Paved parking, HSG C
	85,826	81	Weighted Average
	62,337		72.63% Pervious Area
	23,489		27.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.1	100	0.0045	0.07		**Sheet Flow, GRASSED SHEET FLOW** Grass: Dense n= 0.240 P2= 3.40"
1.1	129	0.0150	1.97		**Shallow Concentrated Flow, GRASSED SHALLOW CONCENTRAT** Unpaved Kv= 16.1 fps
26.2	229	Total			

Subcatchment EX DA-1: EX DA-1

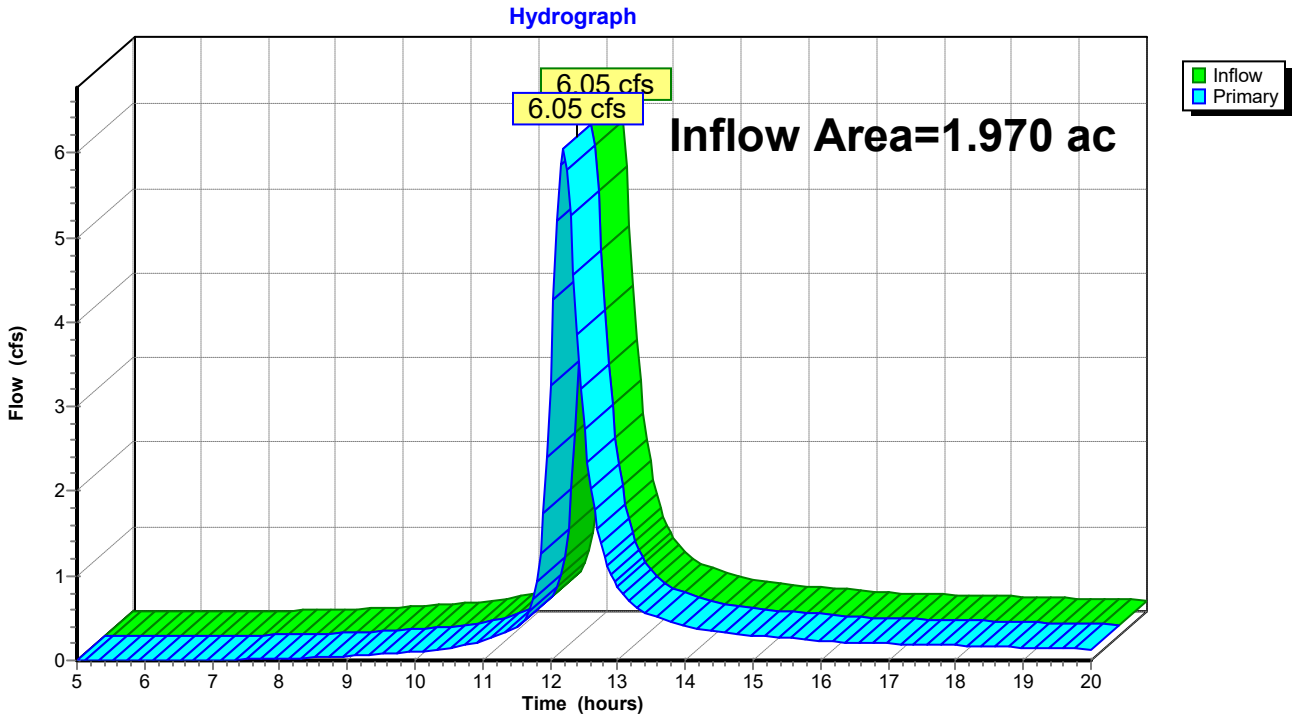


Summary for Link EX SP: EX SP

Inflow Area = 1.970 ac, 27.37% Impervious, Inflow Depth > 3.00" for 10-YR event
Inflow = 6.05 cfs @ 12.20 hrs, Volume= 0.493 af
Primary = 6.05 cfs @ 12.20 hrs, Volume= 0.493 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link EX SP: EX SP



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX DA-1: EX DA-1 Runoff Area=85,826 sf 27.37% Impervious Runoff Depth>4.99"
Flow Length=229' Tc=26.2 min CN=81 Runoff=9.88 cfs 0.819 af

Link EX SP: EX SP Inflow=9.88 cfs 0.819 af
Primary=9.88 cfs 0.819 af

Total Runoff Area = 1.970 ac Runoff Volume = 0.819 af Average Runoff Depth = 4.99"
72.63% Pervious = 1.431 ac 27.37% Impervious = 0.539 ac

Summary for Subcatchment EX DA-1: EX DA-1

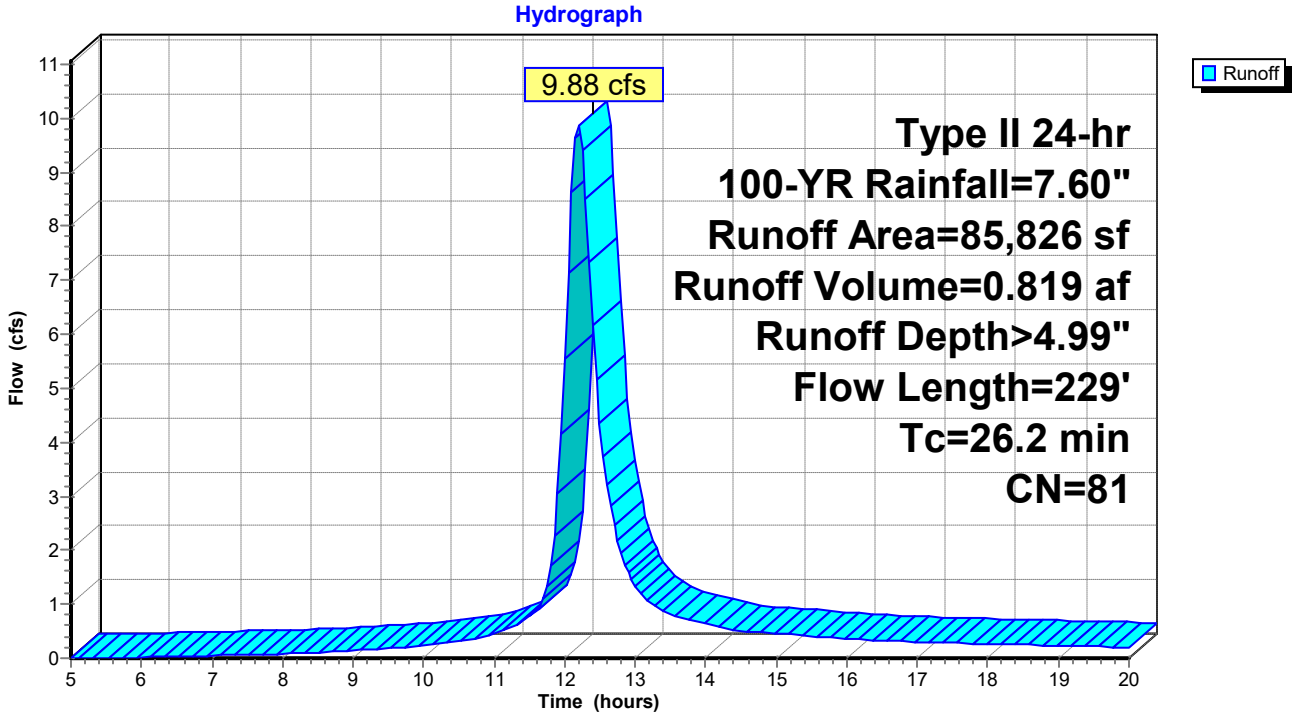
Runoff = 9.88 cfs @ 12.19 hrs, Volume= 0.819 af, Depth> 4.99"
Routed to Link EX SP : EX SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

	Area (sf)	CN	Description
*	12,866	98	Gravel parking, HSG C
	62,337	74	>75% Grass cover, Good, HSG C
	9,427	98	Roofs, HSG C
	1,196	98	Paved parking, HSG C
	85,826	81	Weighted Average
	62,337		72.63% Pervious Area
	23,489		27.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.1	100	0.0045	0.07		**Sheet Flow, GRASSED SHEET FLOW** Grass: Dense n= 0.240 P2= 3.40"
1.1	129	0.0150	1.97		**Shallow Concentrated Flow, GRASSED SHALLOW CONCENTRAT** Unpaved Kv= 16.1 fps
26.2	229	Total			

Subcatchment EX DA-1: EX DA-1

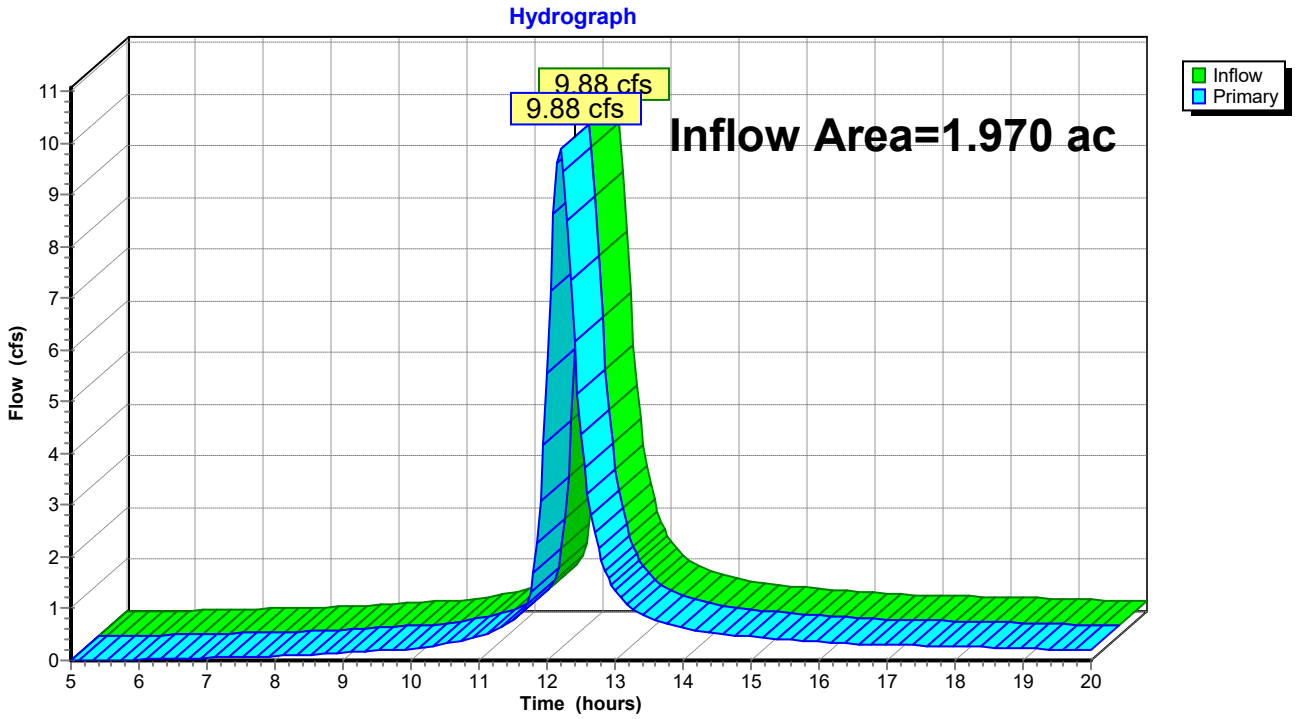


Summary for Link EX SP: EX SP

Inflow Area = 1.970 ac, 27.37% Impervious, Inflow Depth > 4.99" for 100-YR event
Inflow = 9.88 cfs @ 12.19 hrs, Volume= 0.819 af
Primary = 9.88 cfs @ 12.19 hrs, Volume= 0.819 af, Atten= 0%, Lag= 0.0 min

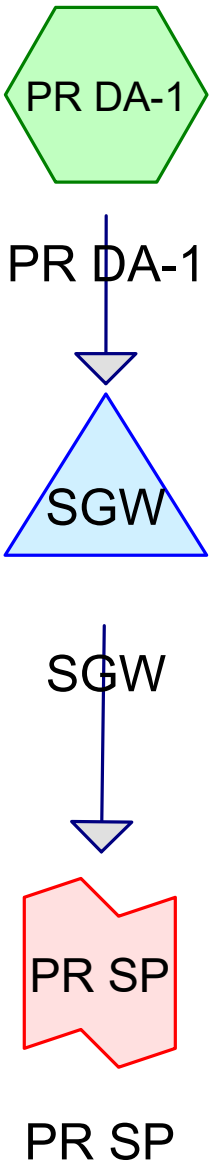
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link EX SP: EX SP



Analysis of Proposed Conditions

PROPOSED



Subcat Reach Pond Link

Routing Diagram for 260047-Phase2
Prepared by Rauch Inc, Printed 3/25/2026
HydroCAD® 10.20-7a s/n 02413 © 2025 HydroCAD Software Solutions LLC

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PR DA-1: PR DA-1 Runoff Area=85,826 sf 42.69% Impervious Runoff Depth>1.70"
Flow Length=125' Tc=16.5 min CN=84 Runoff=4.48 cfs 0.280 af

Pond SGW: SGW Peak Elev=10.98' Storage=6,642 cf Inflow=4.48 cfs 0.280 af
Outflow=0.64 cfs 0.290 af

Link PR SP: PR SP Inflow=0.64 cfs 0.290 af
Primary=0.64 cfs 0.290 af

Total Runoff Area = 1.970 ac Runoff Volume = 0.280 af Average Runoff Depth = 1.70"
57.31% Pervious = 1.129 ac 42.69% Impervious = 0.841 ac

Summary for Subcatchment PR DA-1: PR DA-1

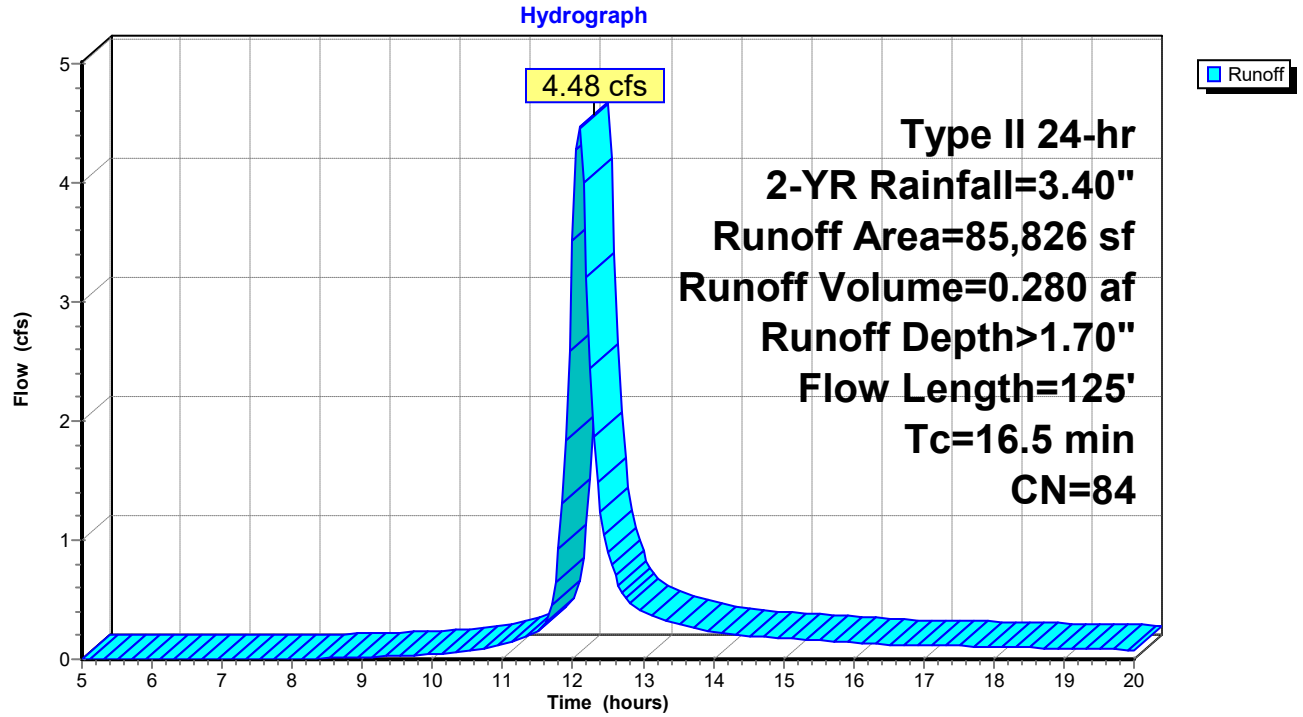
Runoff = 4.48 cfs @ 12.09 hrs, Volume= 0.280 af, Depth> 1.70"
Routed to Pond SGW : SGW

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

	Area (sf)	CN	Description
	14,681	98	Paved parking, HSG C
	7,220	98	Roofs, HSG C
*	5,590	98	Concrete Sidewalk, HSG C
*	8,239	98	Concrete Patio/Landscaping, HSG C
	912	98	Water Surface, HSG C
	49,184	74	>75% Grass cover, Good, HSG C
	85,826	84	Weighted Average
	49,184		57.31% Pervious Area
	36,642		42.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.2	100	0.0136	0.10		**Sheet Flow, GRASSED SHEET FLOW** Grass: Dense n= 0.240 P2= 3.40"
0.3	25	0.0079	1.43		**Shallow Concentrated Flow, SCF GRASS** Unpaved Kv= 16.1 fps
16.5	125	Total			

Subcatchment PR DA-1: PR DA-1



Summary for Pond SGW: SGW

Inflow Area = 1.970 ac, 42.69% Impervious, Inflow Depth > 1.70" for 2-YR event
Inflow = 4.48 cfs @ 12.09 hrs, Volume= 0.280 af
Outflow = 0.64 cfs @ 12.64 hrs, Volume= 0.290 af, Atten= 86%, Lag= 33.1 min
Primary = 0.64 cfs @ 12.64 hrs, Volume= 0.290 af
Routed to Link PR SP : PR SP

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Starting Elev= 9.17' Surf.Area= 1,974 sf Storage= 1,828 cf
Peak Elev= 10.98' @ 12.64 hrs Surf.Area= 3,412 sf Storage= 6,642 cf (4,814 cf above start)

Plug-Flow detention time= 141.0 min calculated for 0.247 af (88% of inflow)
Center-of-Mass det. time= 57.3 min (848.4 - 791.1)

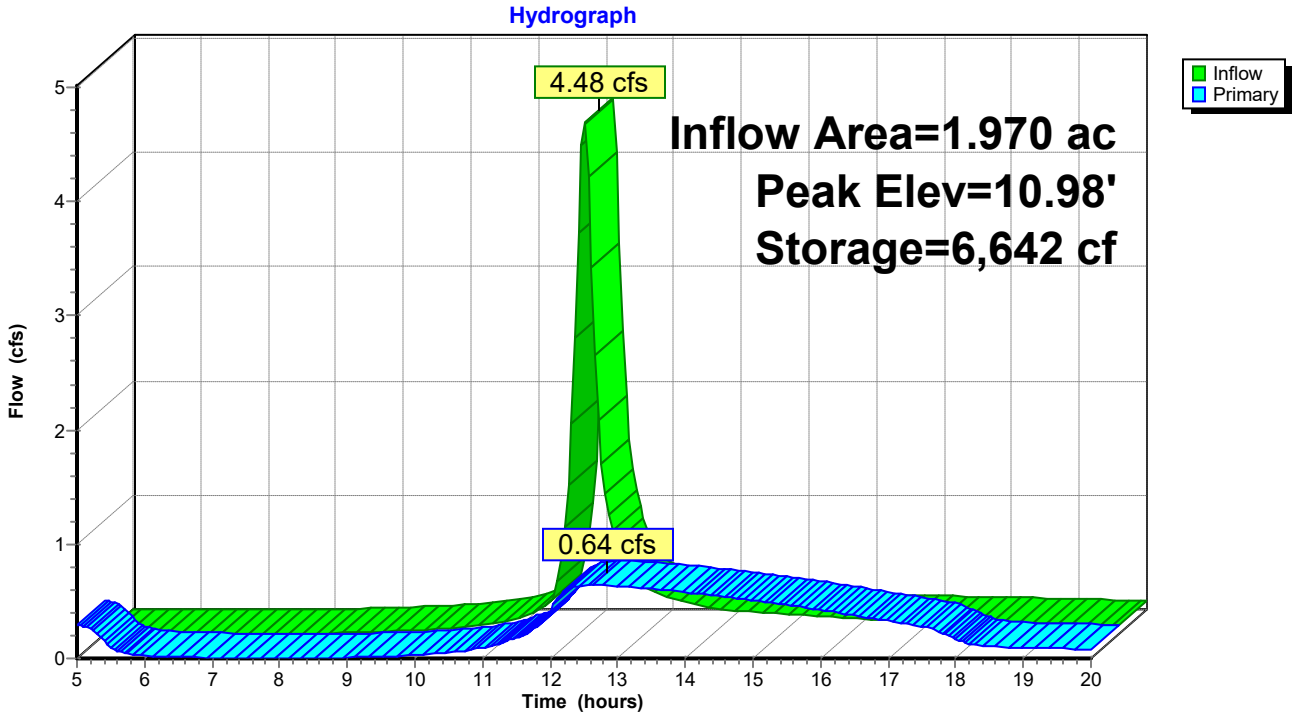
Volume	Invert	Avail.Storage	Storage Description
#1	5.99'	10,573 cf	**Custom Stage Data - SGW & FB (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
5.99	709	97.7	0.0	0	0	709
6.00	709	97.7	40.0	3	3	710
8.99	1,858	223.0	40.0	1,481	1,484	3,943
9.00	1,858	223.0	100.0	19	1,502	3,946
9.99	2,584	260.7	100.0	2,189	3,691	5,416
10.00	2,584	260.7	100.0	26	3,717	5,419
10.99	3,422	298.4	100.0	2,963	6,680	7,119
11.00	3,422	298.4	100.0	34	6,715	7,122
12.00	4,312	266.9	100.0	3,858	10,573	8,567

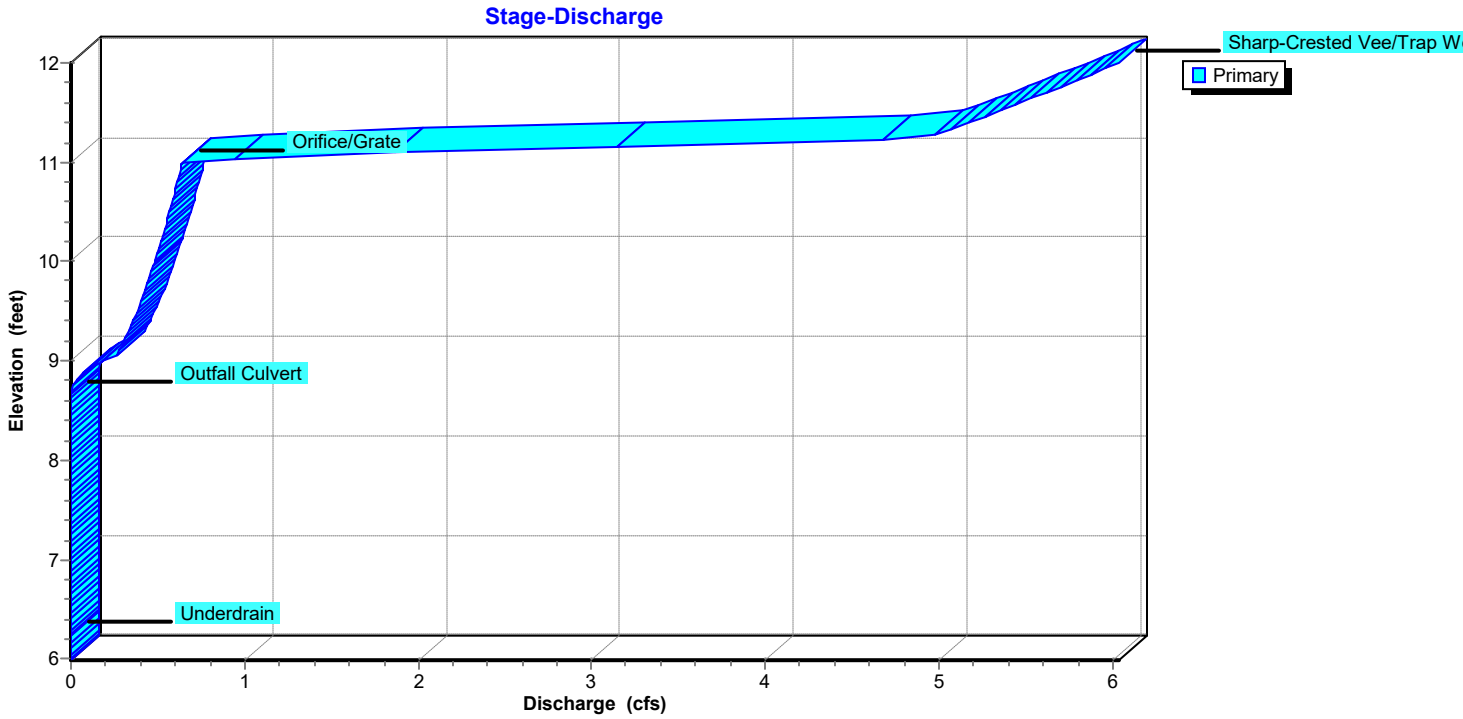
Device	Routing	Invert	Outlet Devices
#1	Primary	8.67'	**15.0" Round Outfall Culvert** L= 52.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 8.67' / 8.50' S= 0.0033 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 1.23 sf
#2	Device 1	11.00'	**36.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	12.00'	**266.9' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)
#4	Device 1	6.25'	**4.0" Round Underdrain** L= 10.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 6.25' / 6.25' S= 0.0000 '/' Cc= 0.900 n= 0.009 PVC, smooth interior, Flow Area= 0.09 sf

Primary OutFlow Max=0.64 cfs @ 12.64 hrs HW=10.98' (Free Discharge)
- **1=Outfall Culvert** (Passes 0.64 cfs of 4.46 cfs potential flow)
  - **2=Orifice/Grate** (Controls 0.00 cfs)
  - **4=Underdrain** (Inlet Controls 0.64 cfs @ 7.32 fps)
- **3=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)

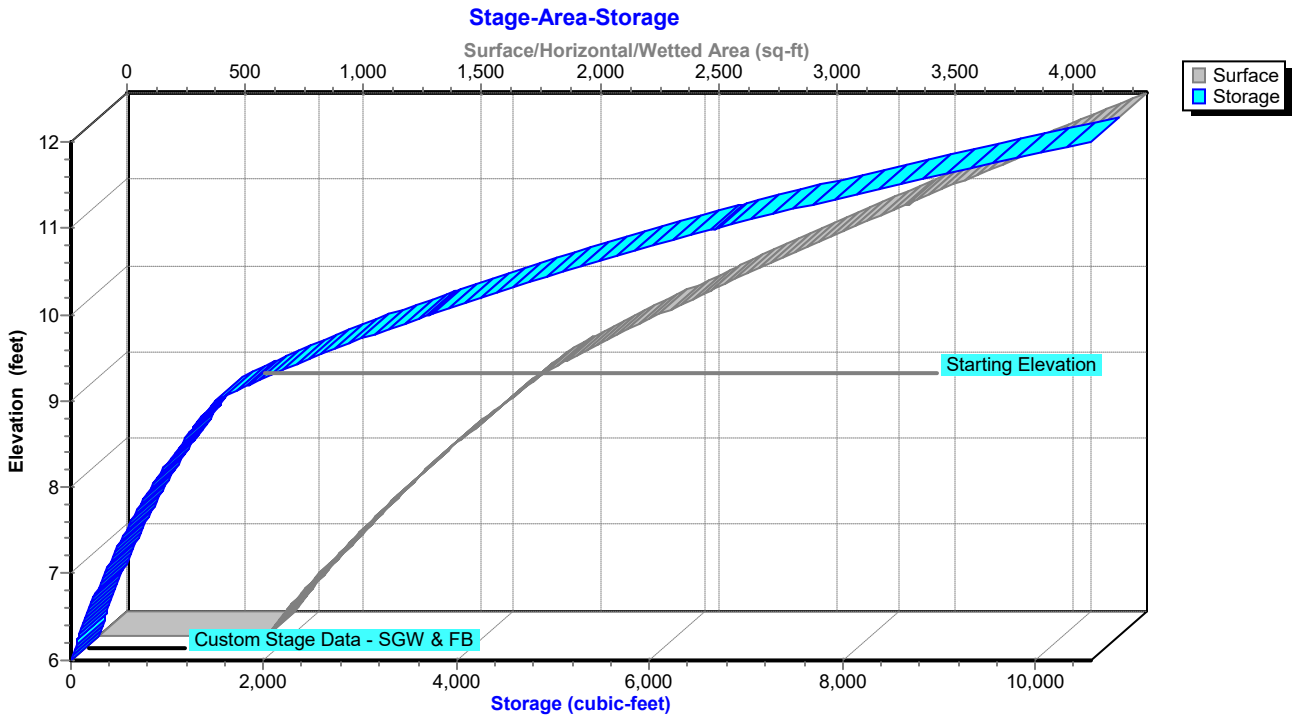
Pond SGW: SGW



Pond SGW: SGW



Pond SGW: SGW

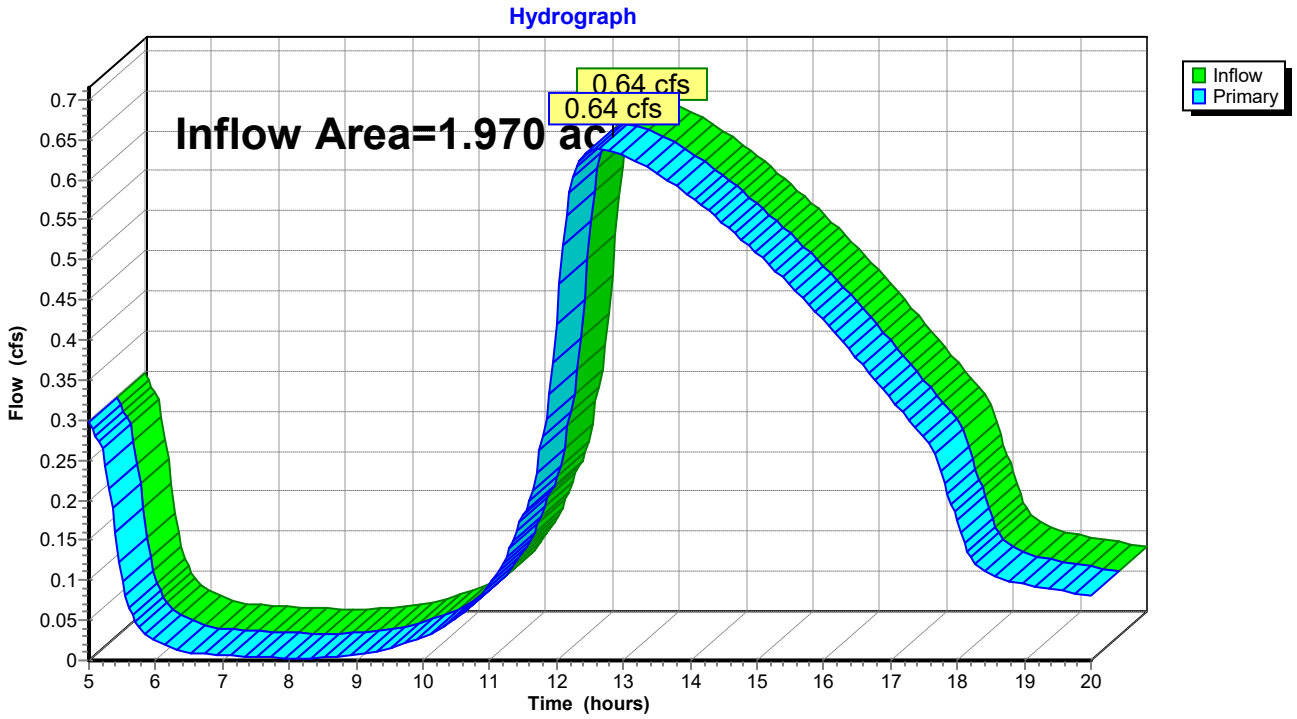

Stage-Area-Storage
Surface/Horizontal/Wetted Area (sq-ft)
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
Surface
Storage
12
11
10
9
8
7
6
Elevation (feet)
Starting Elevation
Custom Stage Data - SGW & FB
0
2,000
4,000
6,000
8,000
10,000
Storage (cubic-feet)

Summary for Link PR SP: PR SP

Inflow Area = 1.970 ac, 42.69% Impervious, Inflow Depth > 1.77" for 2-YR event
Inflow = 0.64 cfs @ 12.64 hrs, Volume= 0.290 af
Primary = 0.64 cfs @ 12.64 hrs, Volume= 0.290 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link PR SP: PR SP



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PR DA-1: PR DA-1 Runoff Area=85,826 sf 42.69% Impervious Runoff Depth>3.30"
Flow Length=125' Tc=16.5 min CN=84 Runoff=8.47 cfs 0.541 af

Pond SGW: SGW Peak Elev=11.44' Storage=8,321 cf Inflow=8.47 cfs 0.541 af
Outflow=5.24 cfs 0.550 af

Link PR SP: PR SP Inflow=5.24 cfs 0.550 af
Primary=5.24 cfs 0.550 af

Total Runoff Area = 1.970 ac Runoff Volume = 0.541 af Average Runoff Depth = 3.30"
57.31% Pervious = 1.129 ac 42.69% Impervious = 0.841 ac

Summary for Subcatchment PR DA-1: PR DA-1

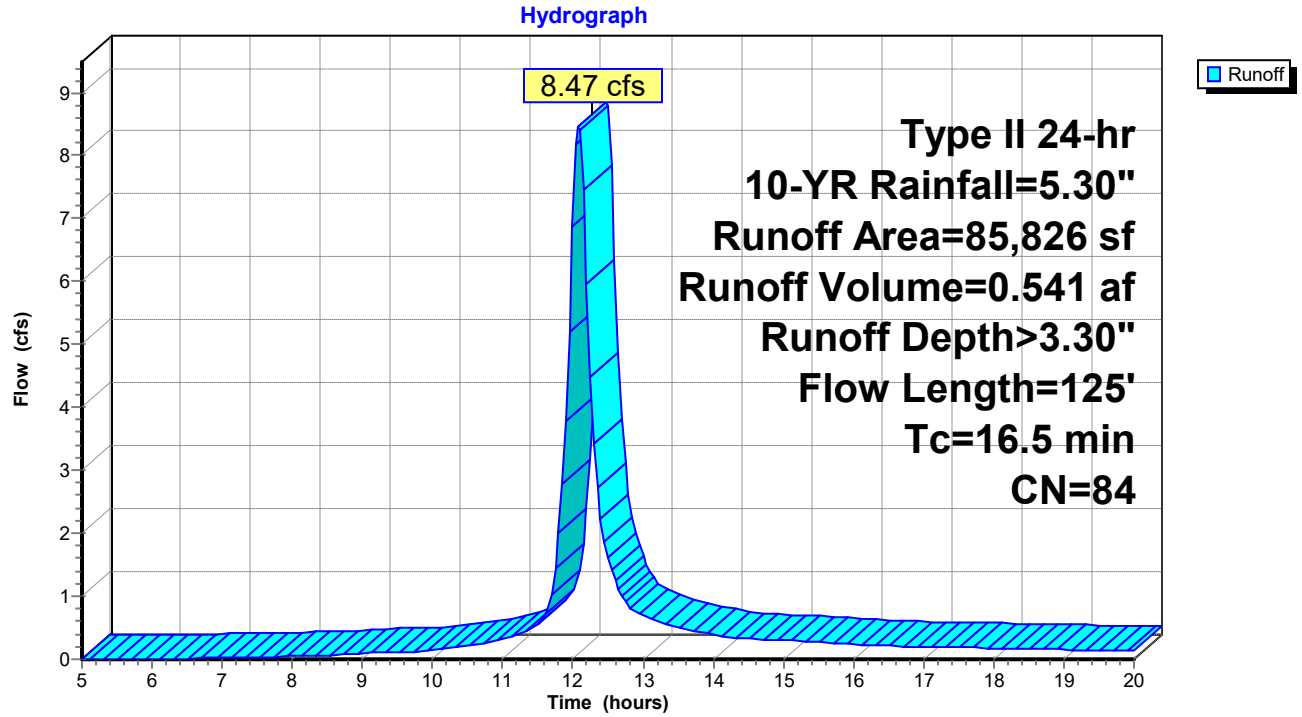
Runoff = 8.47 cfs @ 12.08 hrs, Volume= 0.541 af, Depth> 3.30"
Routed to Pond SGW : SGW

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

	Area (sf)	CN	Description
	14,681	98	Paved parking, HSG C
	7,220	98	Roofs, HSG C
*	5,590	98	Concrete Sidewalk, HSG C
*	8,239	98	Concrete Patio/Landscaping, HSG C
	912	98	Water Surface, HSG C
	49,184	74	>75% Grass cover, Good, HSG C
	85,826	84	Weighted Average
	49,184		57.31% Pervious Area
	36,642		42.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.2	100	0.0136	0.10		**Sheet Flow, GRASSED SHEET FLOW** Grass: Dense n= 0.240 P2= 3.40"
0.3	25	0.0079	1.43		**Shallow Concentrated Flow, SCF GRASS** Unpaved Kv= 16.1 fps
16.5	125	Total			

Subcatchment PR DA-1: PR DA-1



Summary for Pond SGW: SGW

Inflow Area = 1.970 ac, 42.69% Impervious, Inflow Depth > 3.30" for 10-YR event
Inflow = 8.47 cfs @ 12.08 hrs, Volume= 0.541 af
Outflow = 5.24 cfs @ 12.22 hrs, Volume= 0.550 af, Atten= 38%, Lag= 8.4 min
Primary = 5.24 cfs @ 12.22 hrs, Volume= 0.550 af
Routed to Link PR SP : PR SP

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Starting Elev= 9.17' Surf.Area= 1,974 sf Storage= 1,828 cf
Peak Elev= 11.44' @ 12.22 hrs Surf.Area= 3,805 sf Storage= 8,321 cf (6,493 cf above start)

Plug-Flow detention time= 100.7 min calculated for 0.506 af (94% of inflow)
Center-of-Mass det. time= 51.2 min (827.6 - 776.4)

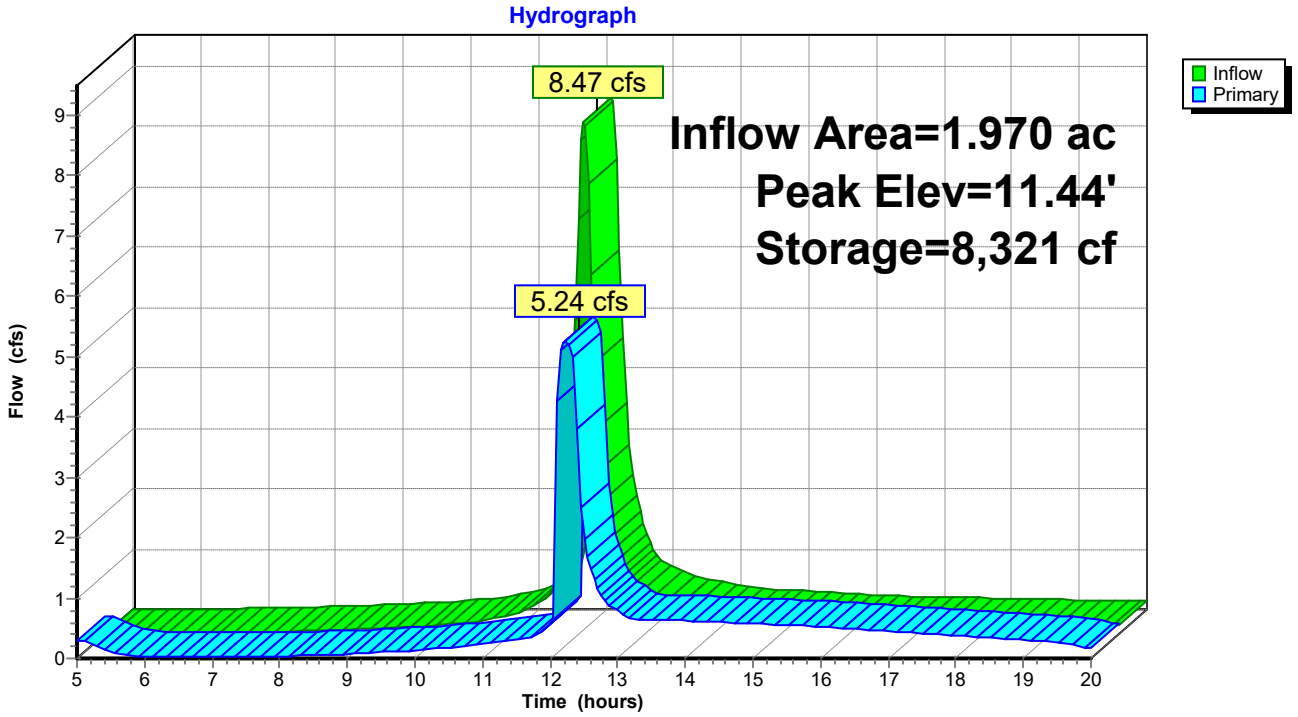
Volume	Invert	Avail.Storage	Storage Description
#1	5.99'	10,573 cf	**Custom Stage Data - SGW & FB (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
5.99	709	97.7	0.0	0	0	709
6.00	709	97.7	40.0	3	3	710
8.99	1,858	223.0	40.0	1,481	1,484	3,943
9.00	1,858	223.0	100.0	19	1,502	3,946
9.99	2,584	260.7	100.0	2,189	3,691	5,416
10.00	2,584	260.7	100.0	26	3,717	5,419
10.99	3,422	298.4	100.0	2,963	6,680	7,119
11.00	3,422	298.4	100.0	34	6,715	7,122
12.00	4,312	266.9	100.0	3,858	10,573	8,567

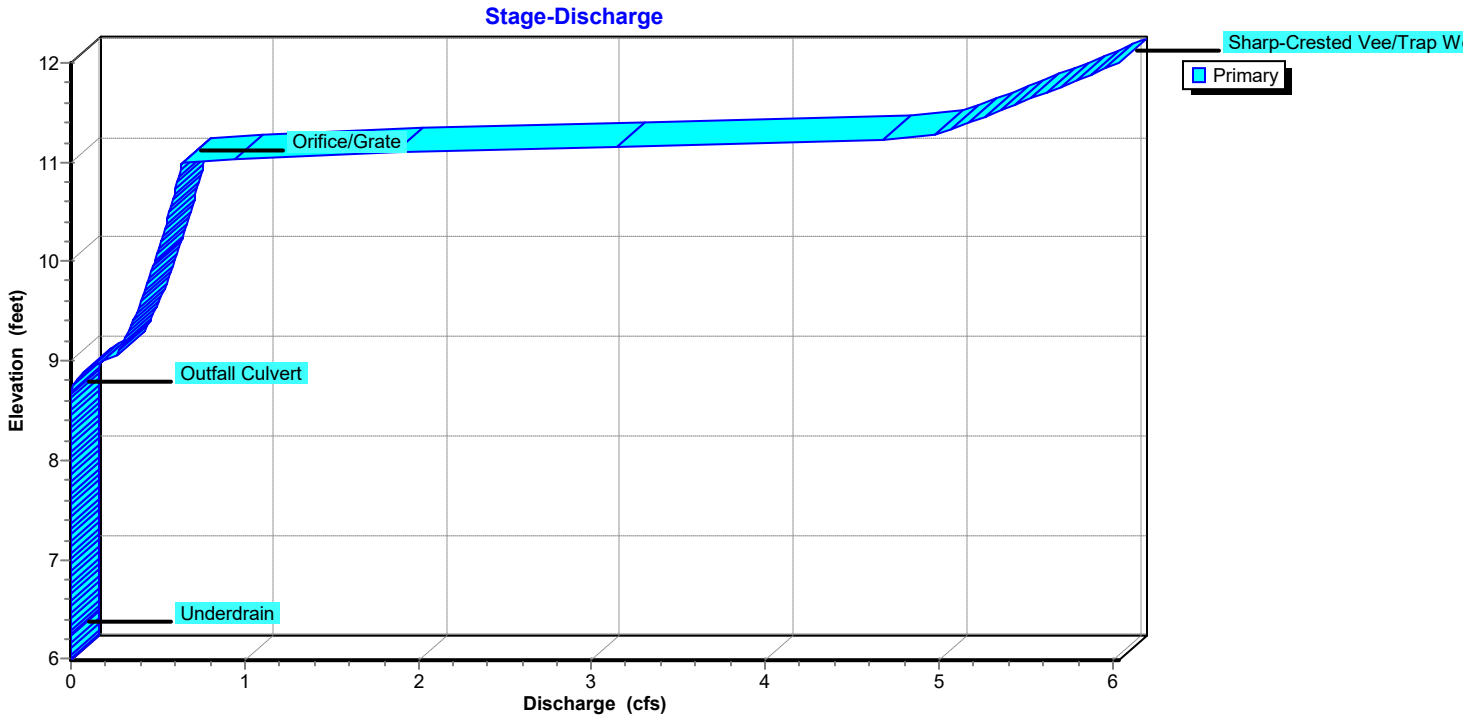
Device	Routing	Invert	Outlet Devices
#1	Primary	8.67'	**15.0" Round Outfall Culvert** L= 52.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 8.67' / 8.50' S= 0.0033 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 1.23 sf
#2	Device 1	11.00'	**36.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	12.00'	**266.9' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)
#4	Device 1	6.25'	**4.0" Round Underdrain** L= 10.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 6.25' / 6.25' S= 0.0000 '/' Cc= 0.900 n= 0.009 PVC, smooth interior, Flow Area= 0.09 sf

Primary OutFlow Max=5.23 cfs @ 12.22 hrs HW=11.44' (Free Discharge)
- **1=Outfall Culvert** (Barrel Controls 5.23 cfs @ 4.26 fps)
  - **2=Orifice/Grate** (Passes < 11.28 cfs potential flow)
  - **4=Underdrain** (Passes < 0.70 cfs potential flow)
- **3=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)

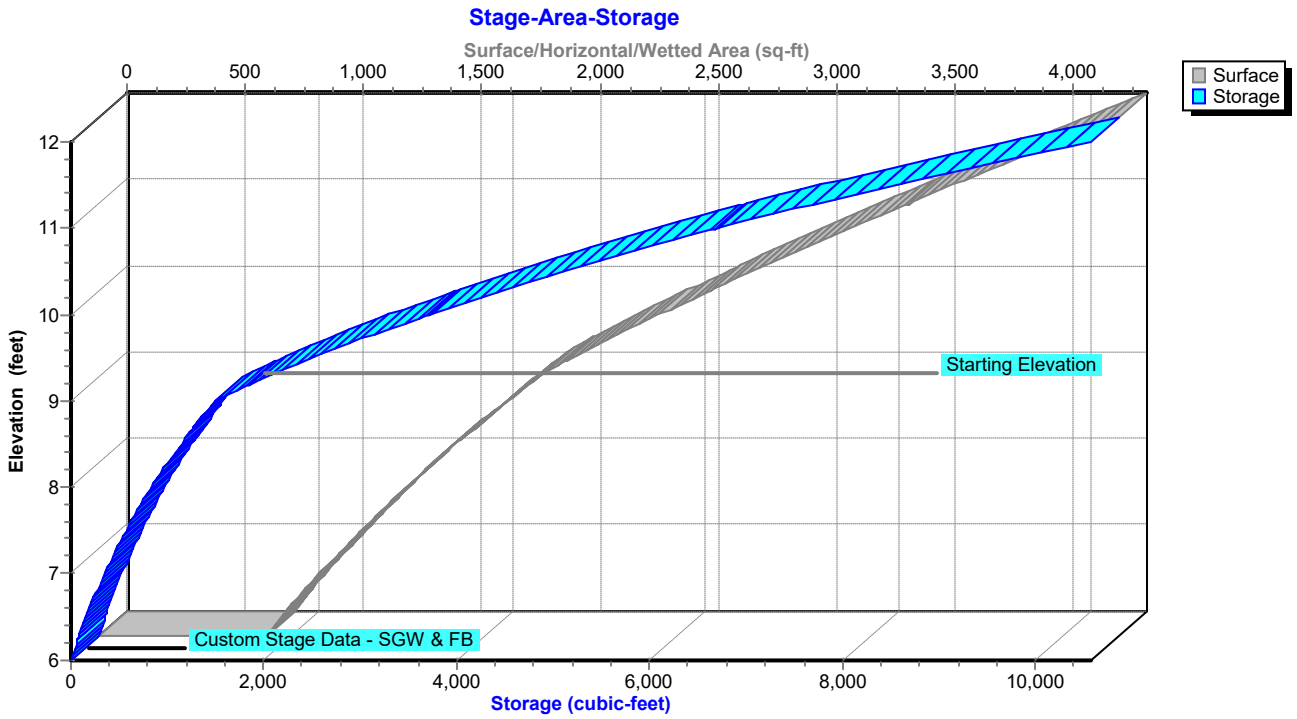
Pond SGW: SGW



Pond SGW: SGW



Pond SGW: SGW

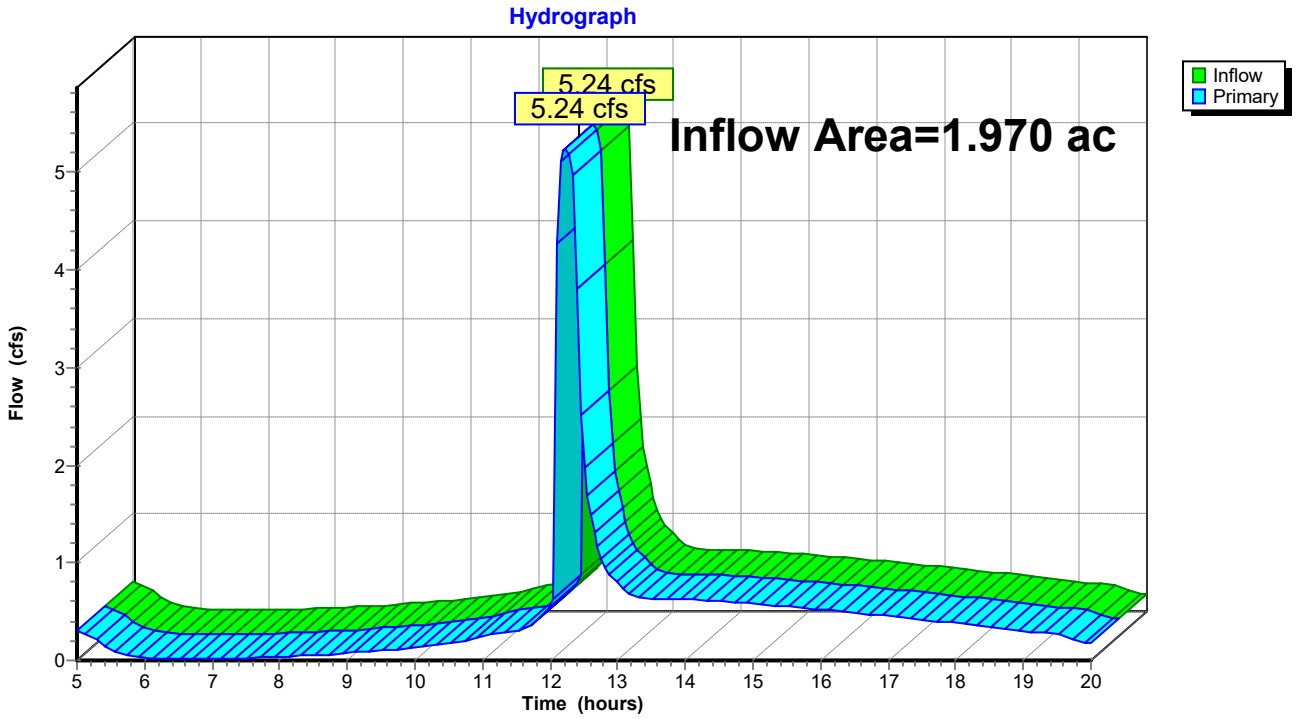

Stage-Area-Storage
Surface/Horizontal/Wetted Area (sq-ft)
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
Surface
Storage
12
11
10
9
8
7
6
Elevation (feet)
Starting Elevation
Custom Stage Data - SGW & FB
0
2,000
4,000
6,000
8,000
10,000
Storage (cubic-feet)

Summary for Link PR SP: PR SP

Inflow Area = 1.970 ac, 42.69% Impervious, Inflow Depth > 3.35" for 10-YR event
Inflow = 5.24 cfs @ 12.22 hrs, Volume= 0.550 af
Primary = 5.24 cfs @ 12.22 hrs, Volume= 0.550 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link PR SP: PR SP



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PR DA-1: PR DA-1 Runoff Area=85,826 sf 42.69% Impervious Runoff Depth>5.34"
Flow Length=125' Tc=16.5 min CN=84 Runoff=13.38 cfs 0.877 af

Pond SGW: SGW Peak Elev=12.06' Storage=10,573 cf Inflow=13.38 cfs 0.877 af
Outflow=18.88 cfs 0.865 af

Link PR SP: PR SP Inflow=18.88 cfs 0.865 af
Primary=18.88 cfs 0.865 af

Total Runoff Area = 1.970 ac Runoff Volume = 0.877 af Average Runoff Depth = 5.34"
57.31% Pervious = 1.129 ac 42.69% Impervious = 0.841 ac

Summary for Subcatchment PR DA-1: PR DA-1

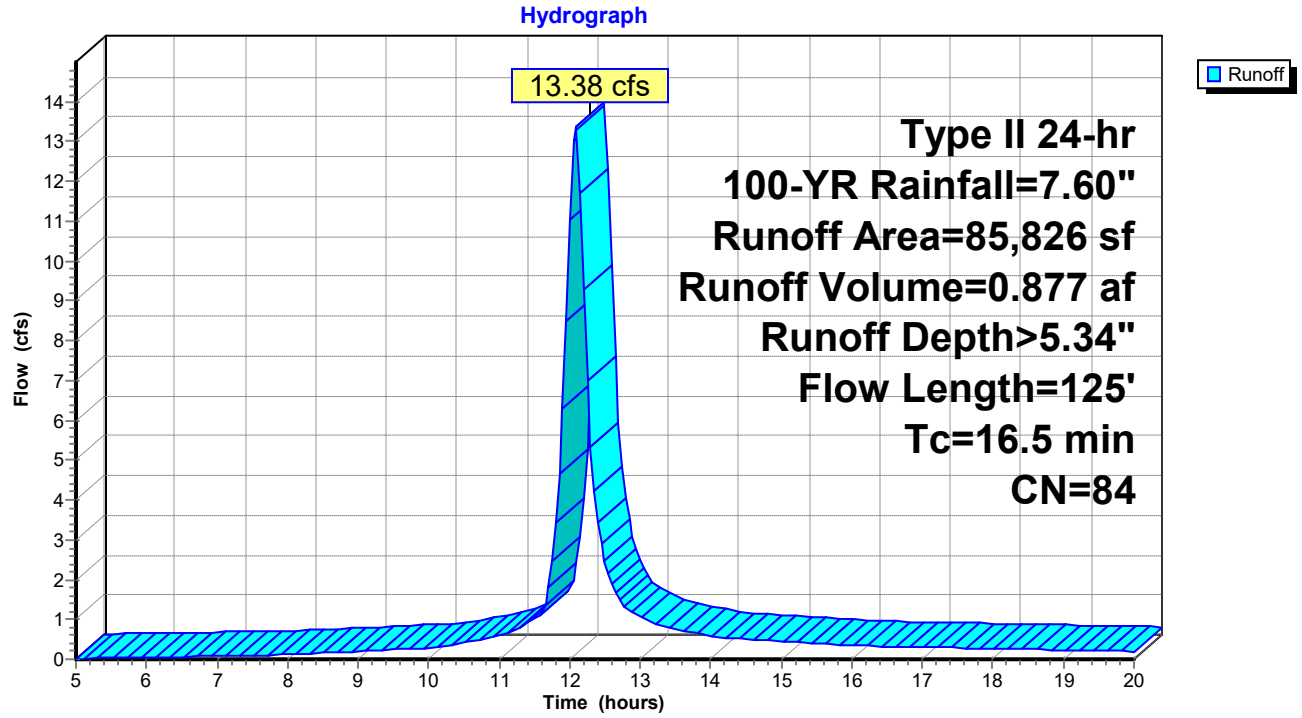
Runoff = 13.38 cfs @ 12.08 hrs, Volume= 0.877 af, Depth> 5.34"
Routed to Pond SGW : SGW

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

	Area (sf)	CN	Description
	14,681	98	Paved parking, HSG C
	7,220	98	Roofs, HSG C
*	5,590	98	Concrete Sidewalk, HSG C
*	8,239	98	Concrete Patio/Landscaping, HSG C
	912	98	Water Surface, HSG C
	49,184	74	>75% Grass cover, Good, HSG C
	85,826	84	Weighted Average
	49,184		57.31% Pervious Area
	36,642		42.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.2	100	0.0136	0.10		**Sheet Flow, GRASSED SHEET FLOW** Grass: Dense n= 0.240 P2= 3.40"
0.3	25	0.0079	1.43		**Shallow Concentrated Flow, SCF GRASS** Unpaved Kv= 16.1 fps
16.5	125	Total			

Subcatchment PR DA-1: PR DA-1



Summary for Pond SGW: SGW

Inflow Area = 1.970 ac, 42.69% Impervious, Inflow Depth > 5.34" for 100-YR event
Inflow = 13.38 cfs @ 12.08 hrs, Volume= 0.877 af
Outflow = 18.88 cfs @ 12.15 hrs, Volume= 0.865 af, Atten= 0%, Lag= 4.1 min
Primary = 18.88 cfs @ 12.15 hrs, Volume= 0.865 af
Routed to Link PR SP : PR SP

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Starting Elev= 9.17' Surf.Area= 1,974 sf Storage= 1,828 cf
Peak Elev= 12.06' @ 12.14 hrs Surf.Area= 4,312 sf Storage= 10,573 cf (8,745 cf above start)

Plug-Flow detention time= 80.6 min calculated for 0.823 af (94% of inflow)
Center-of-Mass det. time= 38.7 min (804.0 - 765.3)

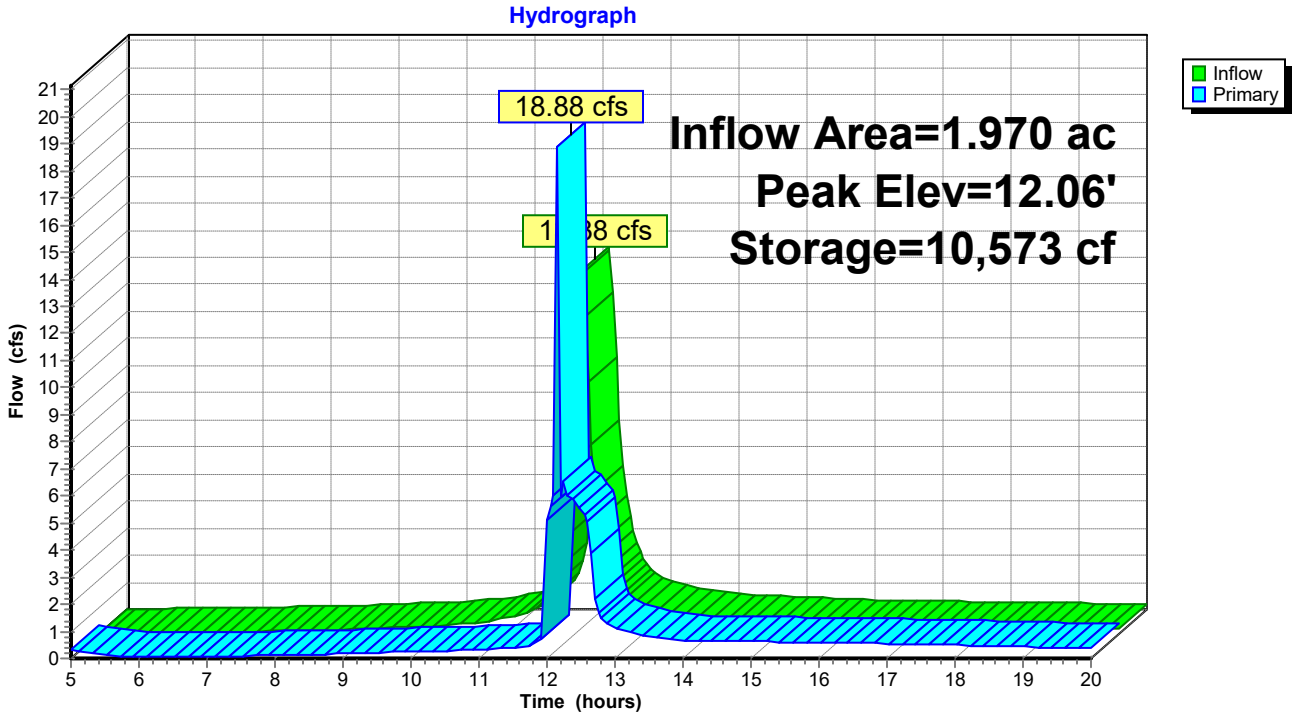
Volume	Invert	Avail.Storage	Storage Description
#1	5.99'	10,573 cf	**Custom Stage Data - SGW & FB (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
5.99	709	97.7	0.0	0	0	709
6.00	709	97.7	40.0	3	3	710
8.99	1,858	223.0	40.0	1,481	1,484	3,943
9.00	1,858	223.0	100.0	19	1,502	3,946
9.99	2,584	260.7	100.0	2,189	3,691	5,416
10.00	2,584	260.7	100.0	26	3,717	5,419
10.99	3,422	298.4	100.0	2,963	6,680	7,119
11.00	3,422	298.4	100.0	34	6,715	7,122
12.00	4,312	266.9	100.0	3,858	10,573	8,567

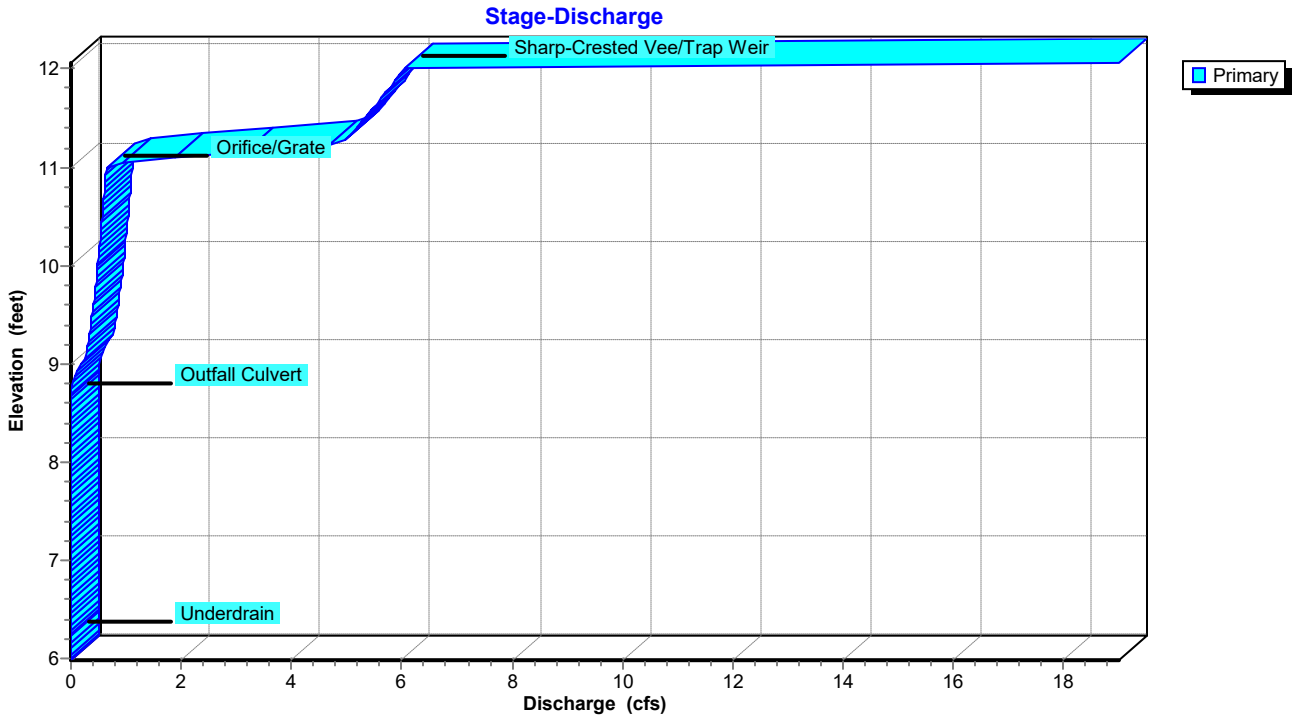
Device	Routing	Invert	Outlet Devices
#1	Primary	8.67'	**15.0" Round Outfall Culvert** L= 52.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 8.67' / 8.50' S= 0.0033 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 1.23 sf
#2	Device 1	11.00'	**36.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	12.00'	**266.9' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)
#4	Device 1	6.25'	**4.0" Round Underdrain** L= 10.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 6.25' / 6.25' S= 0.0000 '/' Cc= 0.900 n= 0.009 PVC, smooth interior, Flow Area= 0.09 sf

Primary OutFlow Max=18.78 cfs @ 12.15 hrs HW=12.06' (Free Discharge)
- **1=Outfall Culvert** (Barrel Controls 6.12 cfs @ 4.99 fps)
  - **2=Orifice/Grate** (Passes < 42.79 cfs potential flow)
  - **4=Underdrain** (Passes < 0.77 cfs potential flow)
- **3=Sharp-Crested Vee/Trap Weir** (Weir Controls 12.66 cfs @ 0.80 fps)

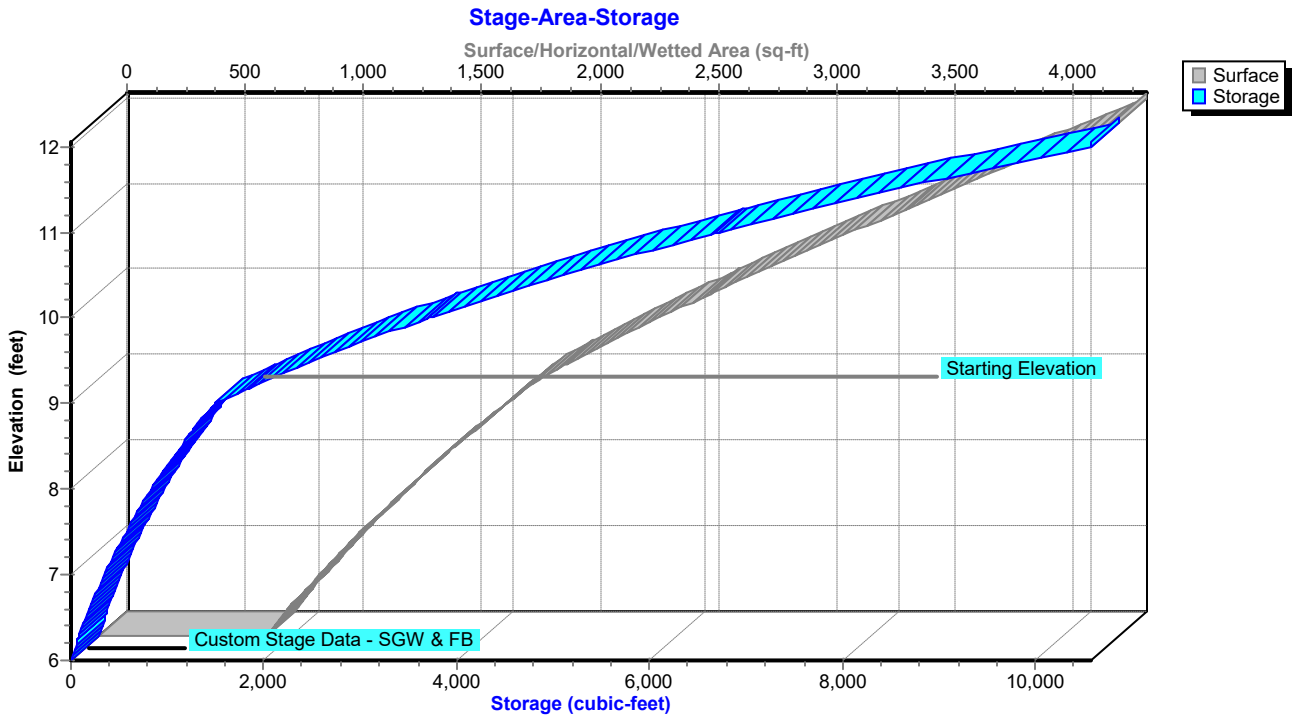
Pond SGW: SGW



Pond SGW: SGW



Pond SGW: SGW

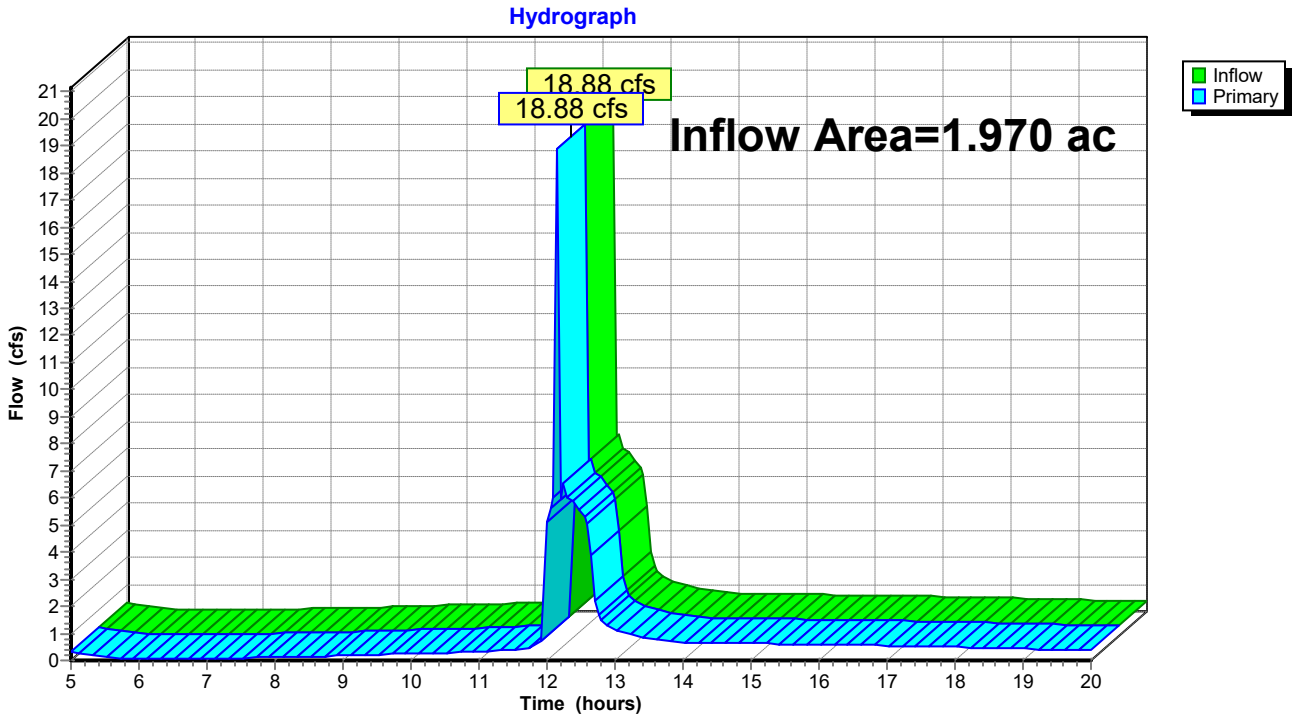

Stage-Area-Storage
Surface/Horizontal/Wetted Area (sq-ft)
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
Surface
Storage
12
11
10
9
8
7
6
Elevation (feet)
Starting Elevation
Custom Stage Data - SGW & FB
0
2,000
4,000
6,000
8,000
10,000
Storage (cubic-feet)

Summary for Link PR SP: PR SP

Inflow Area = 1.970 ac, 42.69% Impervious, Inflow Depth > 5.27" for 100-YR event
Inflow = 18.88 cfs @ 12.15 hrs, Volume= 0.865 af
Primary = 18.88 cfs @ 12.15 hrs, Volume= 0.865 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link PR SP: PR SP



Stormwater Drainage Area Maps

NAD 83

0 30' 60'

EXISTING SITE FEATURES

1. PROPERTY LINE
2. ADJACENT PROPERTY LINE
3. EXISTING BUILDING
4. PAVED ROAD
5. BENCHMARK - EXISTING SEWER CLEANOUT
6. PAVED PARKING LOT
7. CONCRETE SIDEWALK
8. EXISTING SETBACKS
9. EXISTING FIRE HYDRANT TO REMAIN
10. APPROXIMATE LOCATION OF EXISTING TREES/ TREELINE TO REMAIN

LEGEND

FLOWPATH

DRAINAGE AREA

SOILS BOUNDARY

PROPERTY DATA

AA BUILDING AFRICAN AMERICAN MINDS INC.
M/G/P: 0104/00EA/1376B- B/P: 03153/00290

BB BUILDING AFRICAN AMERICAN MINDS INC.
M/G/P: 0104/00EA/1365- B/P: 02551/00184

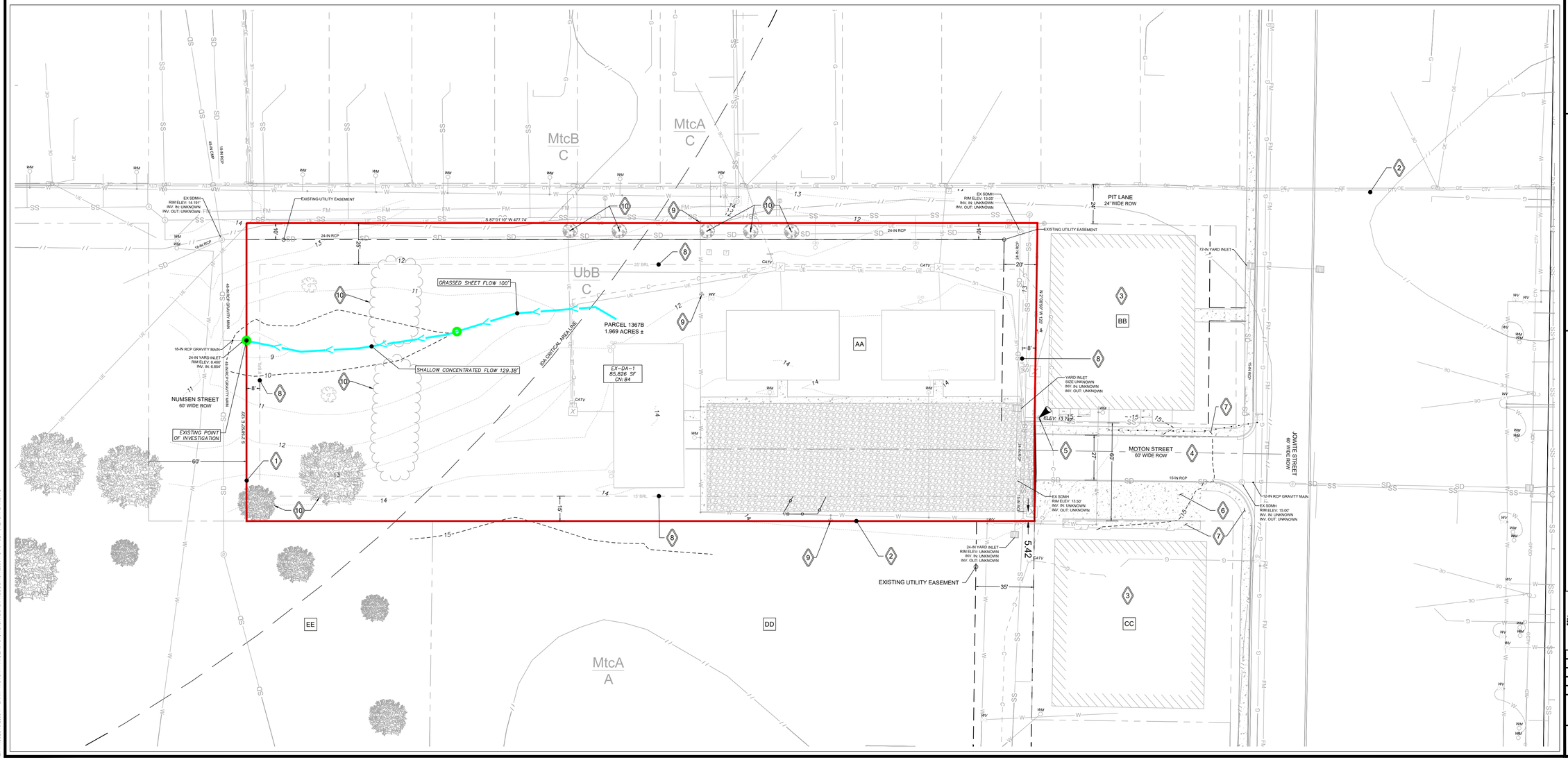
CC BUILDING AFRICAN AMERICAN MINDS INC.
M/G/P: 0104/00EA/1366- B/P: 02371/00018

DD EASTON PARKWAY LIMITED PARTNERSHIP
M/G/P: 0104/00EA/1367A - B/P: 00573/00363

EE TOWN OF EASTON
M/G/P: 0104/00EA/0000 - B/P: 00548/00380

SITE SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
UbB	Udorthents, borrow area, 0 to 5 percent slopes	C	0.37	Yes
MtcB	Mattapex silt loam, 2 to 5 percent slopes	C	0.49	Yes



STORMWATER EXISTING - QA MAP

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMPROVEMENTS

TAX MAP 0104 , GRID 00EA , PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3667

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

31-Mar-26

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	03/30/2026
SCALE:	1" = 30'
DRAWN BY:	VJK
DESIGNED BY:	VJK
APPROVED BY:	BBF

SHEET NO.: C-201.02

Z:\PROJECTS\260047 - BAAM - MOTON PARK, EASTON, MD\CIVIL\CAD\PRODUCTION\260047C-101-SET-SHEET\DRPLAN.DWG

NAD 83

0 30' 60'

STORMWATER MANAGEMENT FEATURES

1. FOREBAY #1
2. SUBMERGED GRAVEL WETLAND #1
3. SGW OUTFALL STRUCTURE
4. 15-IN HDPE SGW OUTFALL CULVERT
5. 15-IN HDPE SGW CONVEYANCE CULVERT
6. DOWNSPOUT LOCATIONS
7. COLLECTION UNDERDRAIN
8. STONE WEIR
9. RIP-RAP PROTECTION

BMP SUMMARY CHART

BMP ID	TYPE OF ESD PRACTICE STRUCTURE NAME	MARYLAND GRID COORDINATE (NAD 83) METERS NORTHING	MARYLAND GRID COORDINATE (NAD 83) METERS EASTING	BMP DRAINAGE AREA (SF)	IMPERVIOUS AREA (SF)	TARGET PE (IN)	ACTUAL PE (IN)	TARGET ESDv (CF)	ACTUAL ESDv (CF)
SGW-1	SUBMERGED GRAVEL WETLAND	404030.3830'	1573076.2565'	85826	23489	1.8	1.93	5467	5848
TOTAL				85826	23489			5467	5848

DRAINAGE AREA SUMMARY CHART

DA #	DA EXISTING (ACRES)	DA PROPOSED (ACRES)	IMPERVIOUS AREA EXISTING (ACRES)	IMPERVIOUS AREA PROPOSED (ACRES)	CN EXISTING	CN PROPOSED	Tc EXISTING (MINUTES)	Tc PROPOSED (MINUTES)	2-YEAR STORM EXISTING (CFS)	2-YEAR STORM PROPOSED (CFS)	2-YEAR STORM CHANGE	10-YEAR STORM EXISTING (CFS)	10-YEAR STORM PROPOSED (CFS)	10-YEAR STORM CHANGE	ESDv TARGET (CF)	ESDv ACTUAL (CF)
1	85826	85826	0.539	0.841	81	84	26.2	16.5	3.01	0.64	-2.37	6.05	5.24	-0.81	5467	5848
TOTAL	85826	85826	0.539	0.841											5467	5848

LEGEND

FLOWPATH

DRAINAGE AREA

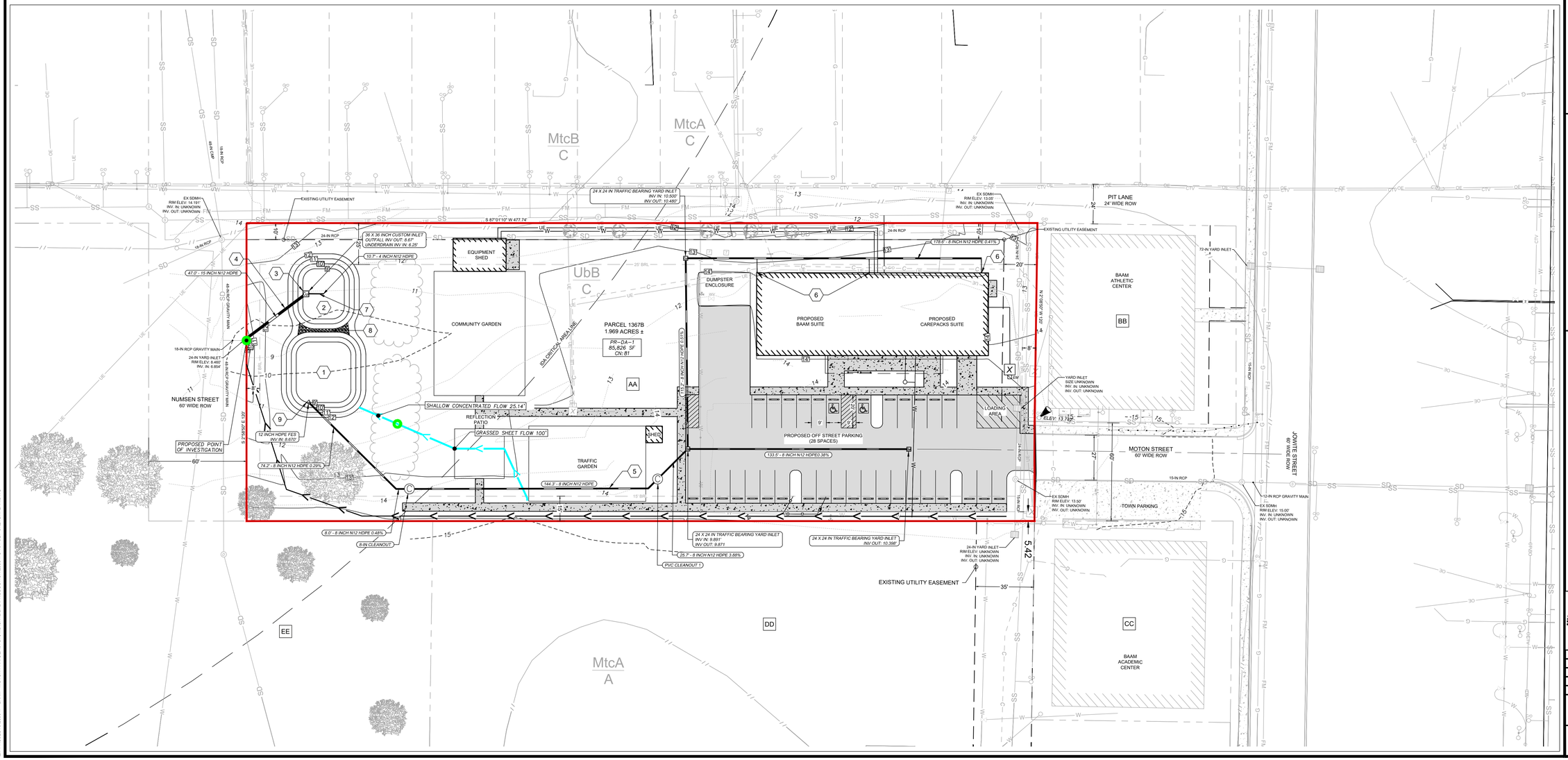
SOILS BOUNDARY

PROPERTY DATA

- AA BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1376B- B/P: 03153/00290
- BB BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1365- B/P: 02551/00184
- CC BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1366- B/P: 02371/00018
- DD EASTON PARKWAY LIMITED PARTNERSHIP M/G/P: 0104/00EA/1367A - B/P: 00573/00363
- EE TOWN OF EASTON M/G/P: 0104/00EA/0000 - B/P: 00548/00380

SITE SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
UbB	Udorthents, borrow area, 0 to 5 percent slopes	C	0.37	Yes
MtcB	Mattapex silt loam, 2 to 5 percent slopes	C	0.49	Yes



Z:\+PROJECTS\260047 - BAAM - MOTON PARK, EASTON, MD\CIVIL\CAD\PRODUCTION\260047C-101-SHEET\CHPLAN.DWG

STORMWATER PROPOSED - QA MAP

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMPROVEMENTS

TAX MAP 0104 , GRID 00EA , PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3667

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

31-Mar-26

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL 1 BUSINESS DAY — 811

DATE:	03/30/2026
SCALE:	1" = 30'
DRAWN BY:	VJK
DESIGNED BY:	VJK
APPROVED BY:	BBF

SHEET NO.: C-201.03

Soils Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Talbot County, Maryland



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Talbot County, Maryland.....13
MtcA—Mattapex silt loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain.....13
MtcB—Mattapex silt loam, 2 to 5 percent slopes, Mid-Atlantic Coastal Plain.....14
UbB—Udorthents, borrow area, 0 to 5 percent slopes.....16
References.....18

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



Map Scale: 1:1,210 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 15 30 60 90

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Talbot County, Maryland
Survey Area Data: Version 22, Sep 9, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 30, 2022—Jul 4, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
MtcA	Mattapex silt loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	1.7	29.6%
MtcB	Mattapex silt loam, 2 to 5 percent slopes, Mid-Atlantic Coastal Plain	0.4	7.2%
UbB	Udorthents, borrow area, 0 to 5 percent slopes	3.6	63.1%
Totals for Area of Interest		**5.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Talbot County, Maryland

MtcA—Mattapex silt loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2thwt
Landscape: Lowlands, coastal plains
Elevation: 0 to 90 feet
Mean annual precipitation: 42 to 46 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 190 to 260 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Mattapex and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mattapex

Setting

Landscape: Lowlands, coastal plains
Landform: Swales, Flats, Depressions
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Parent material: Silty eolian deposits over fluviomarine sediments

Typical profile

Ap - 0 to 11 inches: silt loam
BE - 11 to 15 inches: silt loam
Bt - 15 to 36 inches: silt loam
2C1 - 36 to 60 inches: fine sandy loam
2C2 - 60 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Minor Components

Nassawango

Percent of map unit: 10 percent
Landscape: Coastal plains
Landform: Flats, Bay terraces
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153CY030MD - Well Drained Loess Upland
Hydric soil rating: No

Othello, drained

Percent of map unit: 5 percent
Landscape: Coastal plains
Landform: Flats, Depressions, Swales
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Crosiadore

Percent of map unit: 5 percent
Landscape: Coastal plains
Landform: Shallow depressions, Flats
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

MtcB—Mattapex silt loam, 2 to 5 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2thwx
Landscape: Lowlands, uplands, coastal plains
Elevation: 0 to 100 feet
Mean annual precipitation: 41 to 50 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 190 to 260 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Mattapex and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mattapex

Setting

Landscape: Lowlands, uplands, coastal plains
Landform: Swales, Flats, Depressions
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Parent material: Silty eolian deposits over fluviomarine sediments

Typical profile

Ap - 0 to 11 inches: silt loam
BE - 11 to 15 inches: silt loam
Bt - 15 to 36 inches: silt loam
2C1 - 36 to 60 inches: fine sandy loam
2C2 - 60 to 80 inches: loamy sand

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Minor Components

Nassawango

Percent of map unit: 10 percent
Landscape: Uplands, lowlands
Landform: Bay terraces, Flats
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153CY030MD - Well Drained Loess Upland
Hydric soil rating: No

Crosiadore

Percent of map unit: 5 percent
Landscape: Lowlands
Landform: Flats, Shallow depressions
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F153CY020MD - Moist Loess Upland

Hydric soil rating: No

Othello, drained

Percent of map unit: 5 percent
Landscape: Coastal plains
Landform: Depressions, Flats, Swales
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

UbB—Udorthents, borrow area, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1vh0s
Landscape: Uplands, lowlands
Elevation: 0 to 150 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents, borrow area, and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Borrow Area

Setting

Landscape: Uplands, lowlands
Landform: Flats, Knolls
Anthropogenic Feature: Borrow pits
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Parent material: Fluviomarine sediments fluviomarine deposits

Typical profile

AC - 0 to 2 inches: loam
C - 2 to 80 inches: sandy loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 20 to 40 inches

Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Udorthents, loamy

Percent of map unit: 10 percent
Landscape: Coastal plain uplands
Landform: Broad interstream divides
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Talf
Anthropogenic features: Fills
Down-slope shape: Linear, convex
Across-slope shape: Linear
Hydric soil rating: No

Askecksy, drained

Percent of map unit: 5 percent
Landscape: Uplands, lowlands
Landform: Flats, Depressions, Swales
Landform position (three-dimensional): Talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F153DY130MD - Sandy Coastal Plain Swamp
Hydric soil rating: Yes

Water

Percent of map unit: 5 percent
Landscape: Coastal plains
Anthropogenic features: Borrow pits
Hydric soil rating: No

Klej

Percent of map unit: 5 percent
Landscape: Coastal plains, uplands
Landform: Flats, Shallow depressions
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F153DY150NJ - Moist Sandy Upland
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

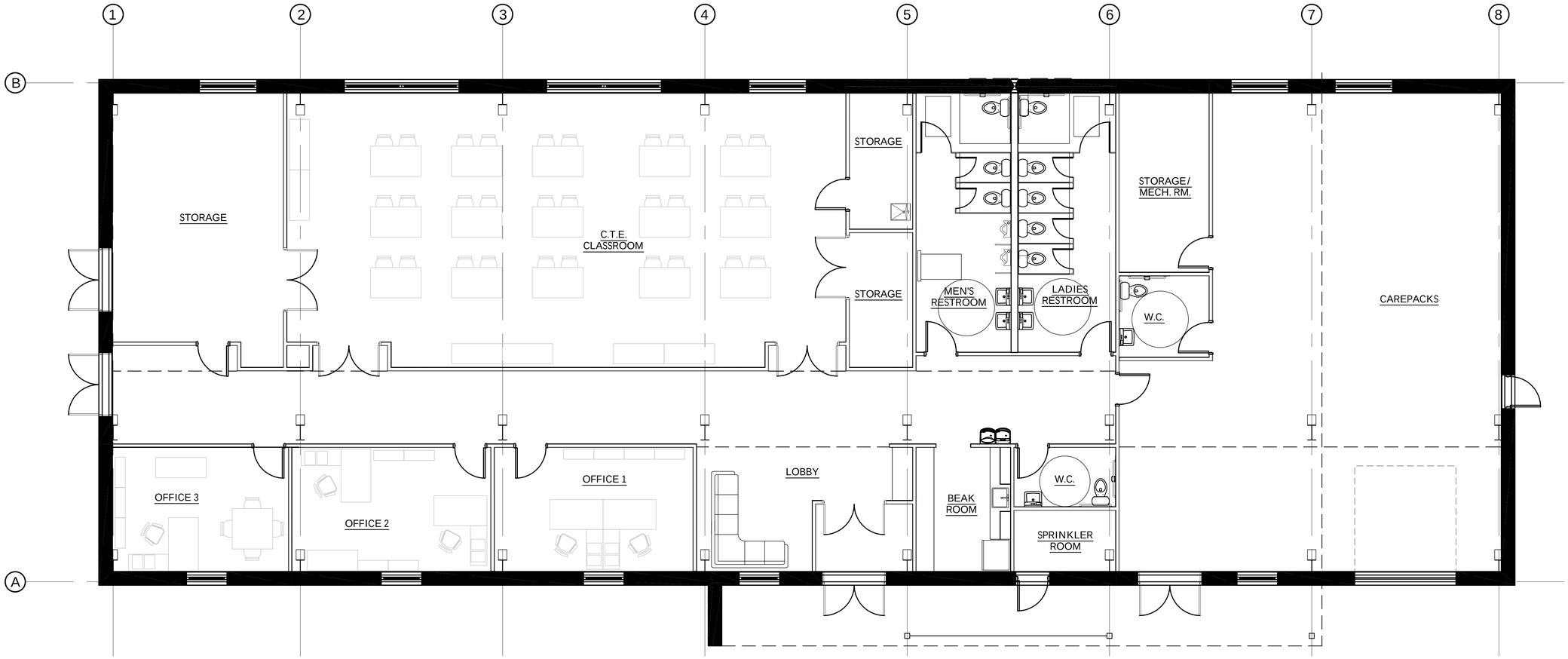
United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf



1 FLOOR PLAN

Scale: 3/16" = 1'- 0"

PRELIMINARY DESIGN SUBJECT TO CHANGE AS DETERMINED BY TOWN REQUIREMENTS

BAAM
MOTON STREET REDEVELOPMENT

TAX MAP 0104, GRID 000EA, PARCEL 1367B
ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR:
BUILDING AFRICAN AMERICAN MINDS, INC.
C/O DINA DALY

RAUCH inc
office: 410.770.9081
email: design@raucheng.com | web: www.raucheng.com
108 N. Harrison St. - Easton, MD 21601

PROFESSIONAL CERTIFICATION:

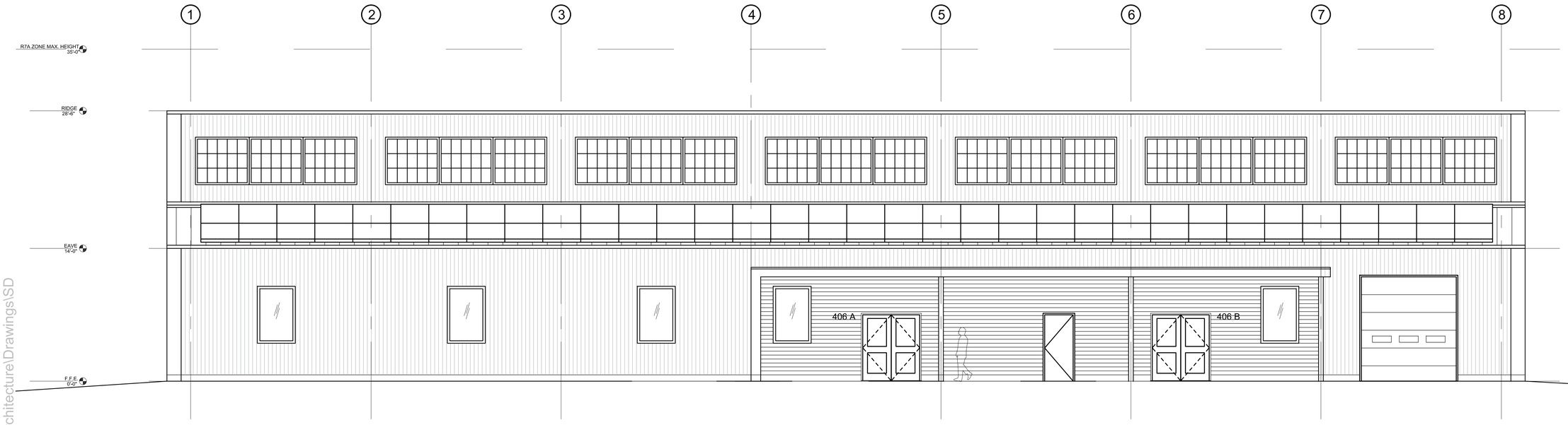
REVISIONS

REV. #	DATE	DESCRIPTION

DATE: 04/01/2026
SCALE: AS SHOWN
DRAWN BY: ZS, PR
DESIGNED BY: PR
APPROVED BY: AS SHOWN

SHEET NO.:
SD - A 100

Z:\+Projects\260047 - BAAM - Moton Park, Easton, MD\Architecture\Drawings\SD



1 SOUTH ELEVATION

Scale: 3/16" = 1'- 0"

PRELIMINARY DESIGN SUBJECT TO CHANGE AS DETERMINED BY TOWN REQUIREMENTS

Z:\+Projects\260047 - BAAM - Moton Park, Easton, MD\Architecture\Drawings\SD

BAAM
MOTON STREET REDEVELOPMENT

TAX MAP 0104, GRID 000EA, PARCEL 1367B

ELECTION DISTRICT - TALBOT COUNTY, MARYLAND

PREPARED FOR:
BUILDING AFRICAN AMERICAN MINDS, INC.
C/O DINA DALY

RAUCH inc.
office: 410.770.9081
email: design@rauchengineering.com | web: www.rauchengineering.com
106 N. Harrison St - Easton, MD 21601

PROFESSIONAL CERTIFICATION:

REVISIONS

REV. #	DATE	DESCRIPTION

DATE: 04/01/2026

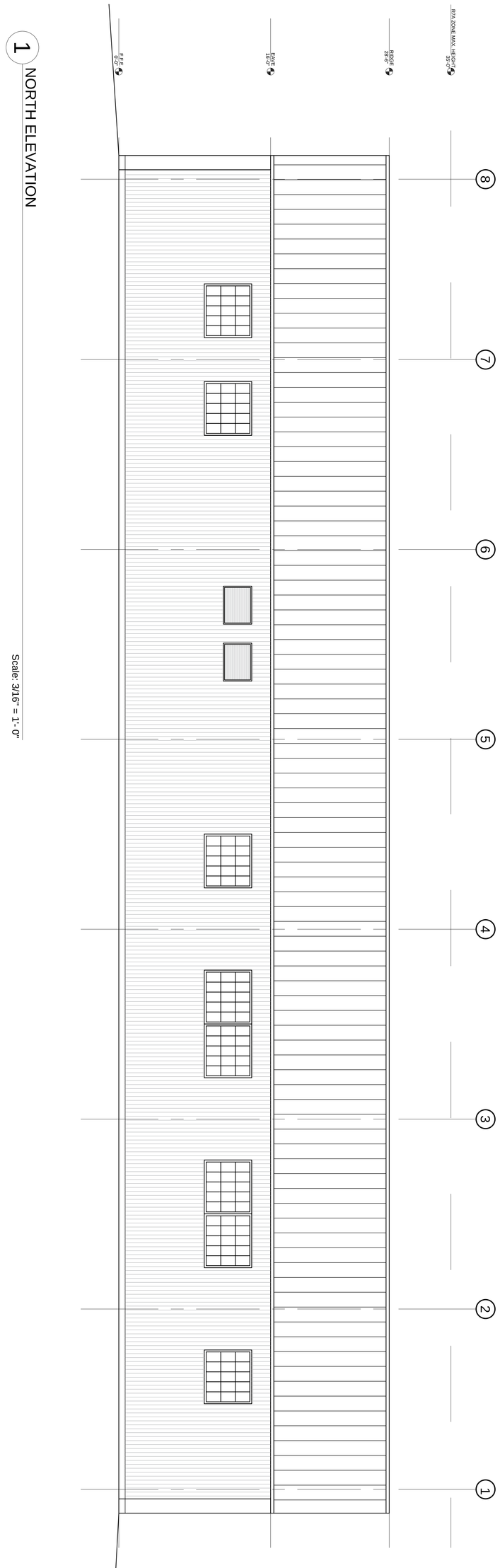
SCALE: AS SHOWN

DRAWN BY: ZS, PR

DESIGNED BY: PR

APPROVED BY: AS SHOWN

SHEET NO.:
SD - A 200



SHEET NO.:	SD - A 201
APPROVED BY:	AS SHOWN
DESIGNED BY:	PR
DRAWN BY:	ZS, PR
SCALE:	AS SHOWN
DATE:	04/01/2026

REVISIONS

REV. #	DATE	DESCRIPTION

PROFESSIONAL CERTIFICATION:

RAUCH inc.

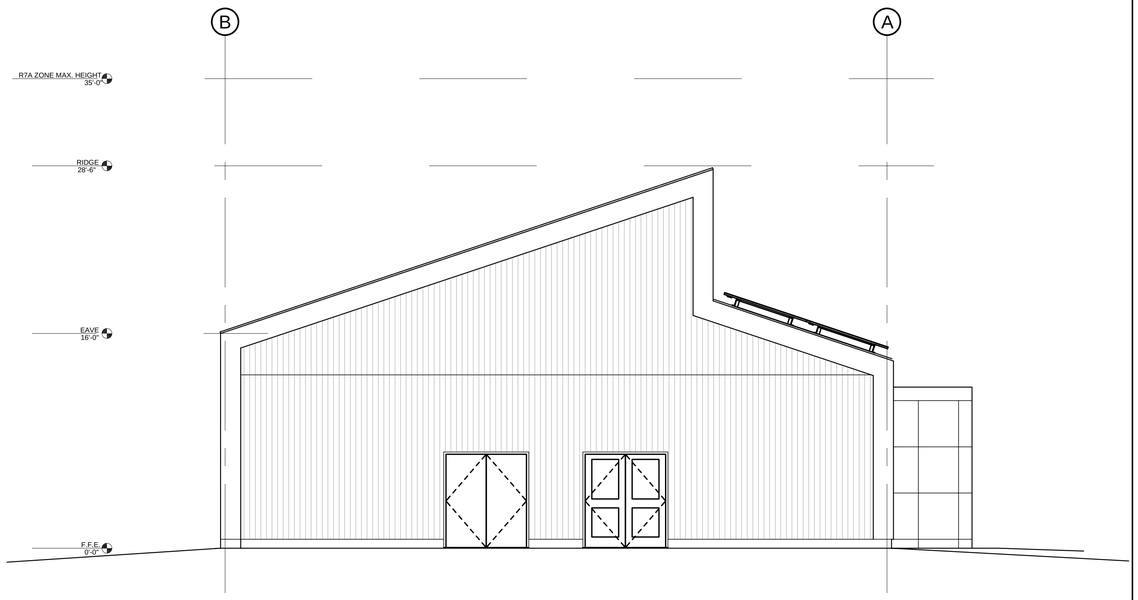
office: 410.770.9081
email: design@raucheng.com | web: www.raucheng.com
106 N. Harrison St - Easton, MD 21601

BAAM
MOTON STREET REDEVELOPMENT

TAX MAP 0104, GRID 000EA, PARCEL 1367B

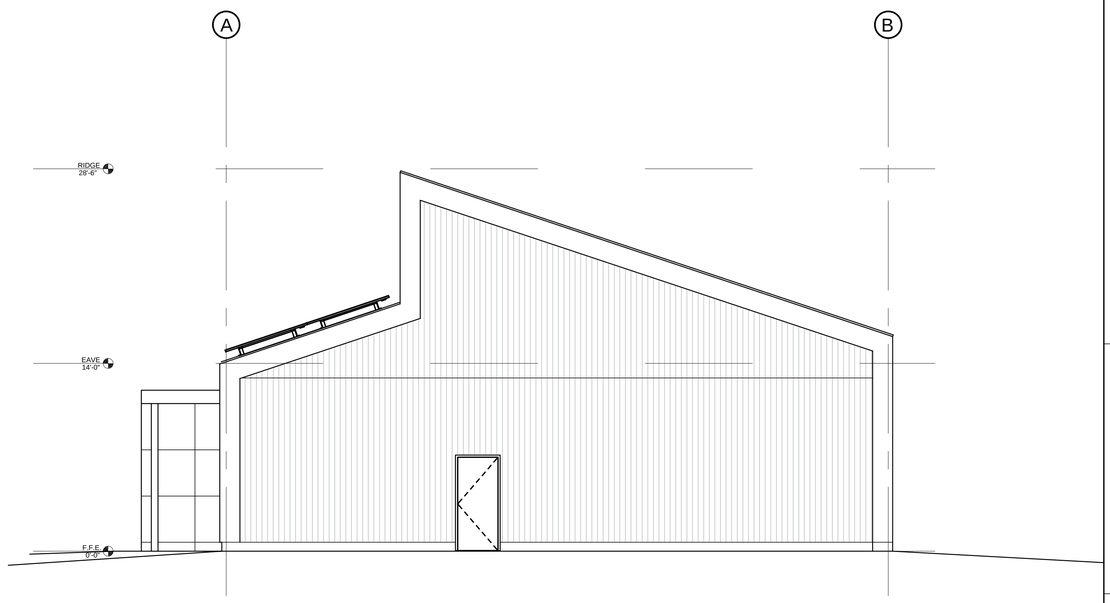
ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR:
BUILDING AFRICAN AMERICAN MINDS, INC.
C/O DINA DALY



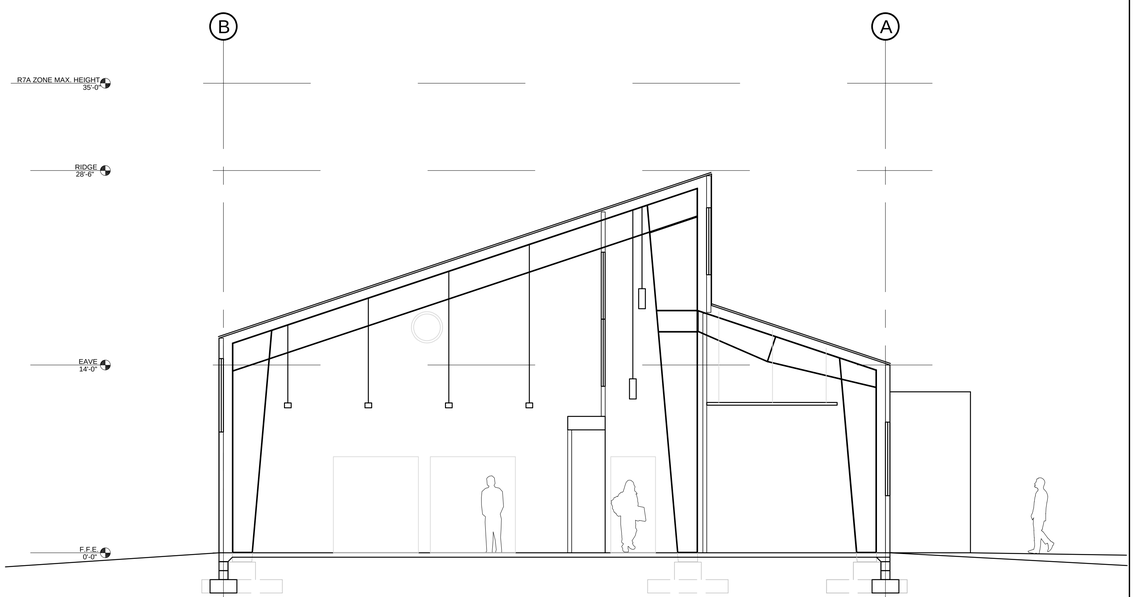
1 WEST ELEVATION

Scale: 3/16" = 1'- 0"



2 EAST ELEVATION

Scale: 3/16" = 1'- 0"



3 SECTION

Scale: 3/16" = 1'- 0"

PRELIMINARY DESIGN SUBJECT TO CHANGE AS DETERMINED BY TOWN REQUIREMENTS

Z:\+Projects\260047 - BAAM - Moton Park, Easton, MD\Architecture\Drawings\SD

BAAM
MOTON STREET REDEVELOPMENT

TAX MAP 0104, GRID 000EA, PARCEL 1367B

ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR:
BUILDING APRICAN AMERICAN MINDS, INC.
C/O DINA DALY

RAUCH inc.
office: 410.770.9681
email: design@rauchengr.com | web:
www.rauchengr.com
106 N. Harrison St - Easton, MD 21601

PROFESSIONAL CERTIFICATION:

REVISIONS

REV. #	DATE	DESCRIPTION

DATE: 04/01/2026

SCALE: AS SHOWN

DRAWN BY: ZS, PR

DESIGNED BY: PR

APPROVED BY: AS SHOWN

SHEET NO.:
SD - A 202

BAAM MOTON STREET REDEVELOPMENT

CONCEPT SITE PLAN

FOR

BUILDING AFRICAN AMERICAN MINDS INC

EASTON, TALBOT COUNTY, MARYLAND 21601

PROJECT DATA

PROPERTY ADDRESS:	406 MOTON STREET EASTON, MD 21601
LATITUDE:	38° 46' 21.15" N
LONGITUDE:	-76° 08' 41.08" W
DEED REFERENCE: PLAT REFERENCE:	03153 / 00290 75 / 2
TAX MAP/ GRID/ PARCEL:	0104 / 00EA / 1367B
ZONING CLASSIFICATION:	R7A / PRD & PUD INFILL
EXISTING USE:	CENSUS BLOCK: 2012 BLOCK GROUP: 2 CENSUS TRACT: 960300 (M) MUNICIPAL TYPE - APARTMENTS (SUBSIDIZED HOUSING)
PROPOSED USE:	(EC) EXEMPT COMMERCIAL TYPE - MULTI-USE SCHOOL BUILDING
TOTAL SITE AREA: EXISTING OPEN SPACE: PROPOSED SWM AREA: LIMITS OF DISTURBANCE:	1.969 ACRES 1.431 AC / 62,337 SF 0.098 AC / 4,312 SF 1.970 AC / 85,826 SF
EXISTING IMPERVIOUS: PROPOSED IMPERVIOUS:	27% 42%
PROPOSED SETBACKS:	FRONT - 15' SIDE - 8' REAR - 25'
MINIMUM LOT SIZE:	7,500 SF
LOT COVERAGE ALLOWED: LOT COVERAGE PROPOSED:	100% WITHIN BUILDING ENVELOPE 8.4% (BUILDING COVERAGE)
BUILDING HEIGHT ALLOWED: BUILDING HEIGHT PROPOSED:	35' LESS THAN 35'
MIN. BUILDING ENVELOPE:	60' DEEP X 30' WIDE
VARIANCE REQUIRED:	N/A

PARKING CALCULATIONS

REQUIRED PARKING SPACES: PROPOSED PARKING SPACES:	8 SPACES (1 SPACE PER 1,000 SF) 32 SPACES INCLUDING (2) ADA HANDICAP SPACES (1) ADA VAN ACCESSIBLE AISLE
REQUIRED BICYCLE PARKING: PROPOSED BICYCLE PARKING:	3 SPACES (1 PER 10 VEHICLE SPACES) 3 SPACES

PROJECT NOTES

FOREST CONSERVATION:	EXEMPT PER SECTION 31-3.2 FROM THE TOWN OF EASTON FOREST CONSERVATION ORDINANCE #718 EXEMPTION "O" - THE PROPOSED ACTIVITY IS ON A PREVIOUSLY DEVELOPED AREA COVERED BY IMPERVIOUS SURFACE AND IS LOCATED WITHIN THE PRIORITY FUNDING AREA.
FEMA FLOOD MAPS:	PANEL 24041C0189D
WATERSHED:	LOWER CHOPTANK 021304030465

NO PORTION OF THIS PROJECT SITE IS LOCATED WITHIN THE 100-YR FLOOD PLAIN

THE CHESAPEAKE BAY CRITICAL AREA DESIGNATION: IDA

SURVEY DATUM

HORIZONTAL:	NAD83
VERTICAL:	NAVD88
DATE OF SURVEY:	FEBRUARY 2026
BENCHMARK: LOCATION:	EXISTING SEWER CLEANOUT 404004.1340' NORTHING 1573510.8380' EASTING
ELEVATION:	13.742'

CONTACT INFORMATION

OWNER/DEVELOPER:	BUILDING AFRICAN AMERICAN MINDS INC. P.O. BOX 1066 EASTON, MD 21601 (443) 496-3034
ENGINEER:	RAUCH INC 106 N HARRISON ST EASTON, MARYLAND 21601 (410)770-9081

HYDROLOGY NOTES:

1. THE PROJECT WILL NOT ALTER HYDROLOGY TO OR FROM THE SITE
2. NO OUTLETS WILL BE ALTERED BY THIS PROJECT

STANDARD STABILIZATION NOTES:

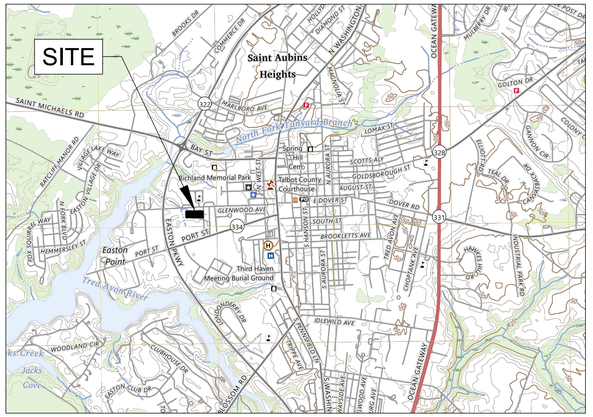
FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETE WITHIN:

A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND

B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING

ENVIRONMENTAL NOTES:

1. THE PROJECT SITE IS LOCATED WITHIN THE IDA CRITICAL AREA BUFFER
   A. DEVELOPMENT ACTIVITIES HAVE BEEN DESIGNED TO MINIMIZE DESTRUCTION OF FOREST AND WOODLAND VEGETATION; SEE PLANS FOR MINIMIZED DISTURBANCE OF TREES.
   B. ALL DEVELOPMENT AND REDEVELOPMENT ACTIVITIES WILL INCLUDE STORMWATER MANAGEMENT TECHNOLOGIES THAT REDUCE POLLUTANT LOADINGS BY AT LEAST 10 PERCENT (10%) BELOW THE LEVEL OF POLLUTION ON THE SITE PRIOR TO DEVELOPMENT/ REDEVELOPMENT. PLEASE SEE SWM REPORT FOR VERIFICATION.
2. THE SITE IS NOT LOCATED WITHIN A 100 YEAR FLOODPLAIN
3. STEEP SLOPES ARE NOT PRESENT ON SITE
4. NON TIDAL WETLANDS ARE NOT PRESENT ON THIS PORTION OF THE PROJECT



VICINITY MAP

SCALE: 1" = 2000'

TABLE OF CONTENTS

SHEET NO.	DRAWING TITLE
G-100	COVER SHEET
G-200	LEGEND
V-101	EXISTING CONDITIONS & DEMOLITION PLAN
C-101	OVERALL SITE PLAN
C-201.01	EROSION & SEDIMENT CONTROL PLAN
C-201.02	STORMWATER EXISTING - QA MAP
C-201.03	STORMWATER PROPOSED - QA MAP
C-205.01 - .02	EROSION & SEDIMENT CONTROL DETAILS
C-205.03	STORMWATER MANAGEMENT DETAILS
L-101	ILLUSTRATIVE LANDSCAPE PLAN

SEQUENCE OF CONSTRUCTION

1. NOTIFY MDE AT (410) 901-4020
   TALBOT CONSERVATION DISTRICT AT (410) 822-1583
   TOWN OF EASTON ENGINEERING DEPARTMENT AT (410) 822-8822
2. PRE-CONSTRUCTION MEETING.
3. INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES PER PLANS.
4. DEMO PER PLAN.
5. INSTALL STORMWATER MANAGEMENT NETWORK.
6. INSTALL UTILITIES.
7. START SITE GRADING.
8. CONSTRUCT CURBS INDICATED ON THE PLANS.
9. INSTALL BASE PAVEMENT.
10. CONSTRUCT SIDEWALK AND BUILDINGS AS INDICATED ON THE PLANS.
11. CONSTRUCT SUBMERGED GRAVEL WETLAND AREA. DO NOT FINALIZE CONSTRUCTION OF THIS UNTIL EARTH DISTURBANCE IS COMPLETE.
12. PERMANENTLY STABILIZE REMAINING AREAS.
13. MAINTAIN ALL PERIMETER CONTROLS AND SEDIMENT CONTROL DEVICES UNTIL FINAL STABILIZATION HAS BEEN COMPLETELY ESTABLISHED.
14. REMOVE PERIMETER CONTROLS UPON APPROVAL BY THE MDE SEDIMENT CONTROL INSPECTOR.

GENERAL NOTES

PROJECT SHALL BE CONSTRUCTED TO COMPLY WITH THE TOWN OF EASTON DESIGN AND CONSTRUCTION STANDARDS.

ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, LOCAL BUILDING CODES, BEST PRACTICES OF THE RESPECTIVE TRADES AND THE STANDARD SPECIFICATIONS AND DETAILS REFERRED TO HEREON.

THIS DRAWING SHOWS INFORMATION OBTAINED FROM AVAILABLE RECORDS REGARDING PIPES, CONDUITS, TELEPHONE LINES AND OTHER STRUCTURES AND CONDITIONS WHICH EXIST WITHIN LIMITS OF THE WORK AT AND BELOW THE SURFACE OF THE GROUND. THE CONTRACTOR IS RESPONSIBLE FOR SUPPORTING AND PROTECTING ALL PIPES, CONDUITS, TELEPHONE LINES, AND OTHER STRUCTURES.

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO (2) WEEKS PRIOR TO START OF CONSTRUCTION AND SHALL COORDINATE ALL CONSTRUCTION PHASES WITH THEM:

MDE (Main Number)	410-537-3000
MDE (Eastern Shore Field Office)	410-901-4020
TOWN OF EASTON ENGINEERING DEPARTMENT	410-822-8822
TALBOT SCD	410-822-1583
MISS UTILITY	800-257-7777 or 811

SHOULD ANY DAMAGE OCCUR TO ANY MARKED UTILITIES, THEY SHALL BE REPAIRED SOLELY AT THE CONTRACTORS EXPENSE.

ALL LANDSCAPING SHALL BE PERFORMED BY QUALIFIED PROFESSIONALS. ALL PLANT MATERIALS SHALL BE FROM CERTIFIED NURSERYMAN AND BE GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF PLANTING.

ANY PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE REPLACED SOLELY AT THE CONTRACTORS EXPENSE.

THE FOLLOWING ITEMS HAVE BEEN ADDRESSED TO MEET THE REQUIREMENTS OF THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY (NPDES NUMBER MDR10, STATE DISCHARGE PERMIT NUMBER 09GP).

1. UTILIZATION OF ENVIRONMENTAL SITE DESIGN
2. MAINTENANCE OF LIMITS OF DISTURBANCE TO PROTECT NATURAL AREAS
3. CONTROL OF CONSTRUCTION EQUIPMENT AND VEHICLES
4. EVALUATION AND APPROPRIATE LIMITATION OF SITE CLEARING
5. EVALUATION AND DESIGNATION OF SITE AREA FOR PHASING OR SEQUENCING
6. IDENTIFICATION OF SOILS AT HIGH RISK FOR EROSION AND ADVANCED STABILIZATION TECHNIQUES TO BE USED
7. IDENTIFICATION OF STEEP SLOPES AND DESIGNATION OF LIMITATIONS ON CLEARING THEM
8. EVALUATION AND DESIGNATION OF STABILIZATION REQUIREMENTS AND TIME LIMITS AND PROTECTION MEASURES FOR DISCHARGES TO THE CHESAPEAKE BAY, IMPAIRED WATERS WITH AN ESTABLISHED TOTAL MAXIMUM DAILY LOAD (TMDL)

BMP SUMMARY CHART

BMP ID	TYPE OF ESD PRACTICE / STRUCTURE NAME	MARYLAND GRID COORDINATE (NAD 83) METERS NORTHING	MARYLAND GRID COORDINATE (NAD 83) METERS EASTING	BMP DRAINAGE AREA (SF)	IMPERVIOUS AREA (SF)	TARGET PE (IN)	ACTUAL PE (IN)	TARGET ESDv (CF)	ACTUAL ESDv (CF)
SGW-1	SUBMERGED GRAVEL WETLAND	404030.3830'	1573076.2565'	85826	23489	1.8	1.93	5467	5848
TOTAL				85826	23489			5467	5848

DRAINAGE AREA SUMMARY CHART

DA#	DA EXISTING (ACRES)	DA PROPOSED (ACRES)	IMPERVIOUS AREA EXISTING (ACRES)	IMPERVIOUS AREA PROPOSED (ACRES)	CN EXISTING	CN PROPOSED	Tc EXISTING (MINUTES)	Tc PROPOSED (MINUTES)	2-YEAR STORM EXISTING (CFS)	2-YEAR STORM PROPOSED (CFS)	2-YEAR STORM CHANGE	10-YEAR STORM EXISTING (CFS)	10-YEAR STORM PROPOSED (CFS)	10-YEAR STORM CHANGE	ESDv TARGET (CF)	ESDv ACTUAL (CF)
1	85826	85826	0.539	0.841	81	84	26.2	16.5	3.01	0.64	-2.37	6.05	5.24	-0.81	5467	5848
TOTAL	85826	85826	0.539	0.841											5467	5848

DESIGN PRINCIPLES FOR EASTON

(COMPREHENSIVE PLAN, PG. 29-31)

1. **INTEGRATED USES ARE DESIRABLE** - THE PROPOSED BUILDING FEATURES A WALKABLE LAYOUT THAT CONSISTS OF COMMUNITY GATHERING AREAS, OPEN SPACE, AND ENVIRONMENTAL SITE DESIGN FEATURES SUCH AS A SUBMERGED GRAVEL WETLAND.
2. **NATURAL FEATURES SHOULD DETERMINE DESIGN** - THE SITE IS DEVELOPED TO MAINTAIN EXISTING NATURAL CONTOURS AND DRAINAGE PATHS.
3. **AUTOMOBILES SHOULD NOT DETERMINE DESIGN** - AUTOMOBILES WERE NOT THE PRIORITY FOCUS FOR THE DESIGN BUT SUFFICIENT PARKING IS PROVIDED, WHICH INCLUDES AMPLE LANDSCAPING AND GREEN SPACE.
4. **AMPLE OPEN SPACES SHOULD BE PROVIDED WITHIN AND AROUND NEIGHBORHOODS** - THIS PROJECT PROVIDES OPEN AREAS AND GREEN SPACES THROUGHOUT THE SITE.
5. **ARCHITECTURE SHOULD RESPECT EASTON'S HISTORIC DISTRICT** - THIS PROJECT IS NOT WITHIN THE HISTORIC DISTRICT.
6. **SIGNS SHOULD INFORM BUT NOT DOMINATE** - THERE WILL BE MINIMAL SIGNAGE ON THIS PROPERTY. THE PROPOSED BUILDING WILL INDICATE THE UNIT AND ADDRESS FOR THE PUBLIC AND FIRE/RESCUE SERVICES.
7. **NEIGHBORHOODS SHOULD CONTAIN A DIVERSITY OF HOUSING TYPES** - THIS PROJECT IS NOT A NEIGHBORHOOD.
8. **RESIDENTIAL DEVELOPMENTS SHOULD BE INTERESTING PLACES** - THIS PROJECT IS NOT A RESIDENTIAL DEVELOPMENT.
9. **NEIGHBORHOODS SHOULD CONNECT** - THIS PROJECT IS NOT A NEIGHBORHOOD.

BAAM Building African American Minds

THE TOWN OF EASTON

TOWN APPROVING AUTHORITY _____ DATE _____

OWNERS CERTIFICATION

I,_____, AUTHORIZED REPRESENTATIVE FOR COMMISSIONERS OF EASTON, OWNERS OF THE PROPERTY SHOWN AND DESCRIBED HEREON, HEREBY APPROVE AND ADOPT THIS PLAN OF INFRASTRUCTURE IMPROVEMENTS.

_____ DATE _____

(PRINTED NAME HERE)

_____

TITLE

REVIEWED FOR THE TALBOT SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

APPROVED:

_____ _____

TALBOT SOIL CONSERVATION DISTRICT DATE

NOTE: THE TALBOT SOIL CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, DELETE, MODIFY OR OTHERWISE ALTER THE EROSION CONTROL PROVISIONS OF THIS PLAN IN THE EVENT THAT ADDITIONAL PROTECTION BECOMES NECESSARY.

DEVELOPER'S CERTIFICATION

I HEREBY CERTIFY THAT ALL OF THE DEVELOPMENT AND/OR CONSTRUCTION SHALL BE DONE IN ACCORDANCE TO THIS PLAN OF EROSION AND SEDIMENT CONTROL.

_____ _____

SIGNATURE DATE

1. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR TO NOTIFY THE ENGINEER OF ANY DEVIATION MADE IN THIS PLAN. ANY CHANGE MADE TO THIS PLAN WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER WILL PLACE RESPONSIBILITY FOR SAID CHANGE ON THE CONTRACTOR OR SUBCONTRACTOR.
2. ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT.

COVER SHEET

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMPROVEMENTS

TAX MAP 0104, GRID 00EA, PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 9081 | Fax: 410 770 3867

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 11024 Expiration Date: July 24, 2026

31-Mar-26

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA 811

DATE	03/30/2026
SCALE:	AS SHOWN
DRAWN BY:	VJK
DESIGNED BY:	BBF
APPROVED BY:	BBF

SHEET NO.: G-100

Z:\PROJECTS\26047 - BAAM - MOTON PARK, EASTON, MD\CIVIL\CADD\PRODUCTION\26047C-101-SET-SHEETSPLAN.DWG

LINETYPES

	PROPOSED	EXISTING
TOPOGRAPHY		
MAJOR CONTOURS	45	45
MINOR CONTOURS	44	44
TOP OF SLOPE BREAKLINE		
BOTTOM OF SLOPE BREAKLINE		
TOPOGRAPHY BREAKLINE		
CATCHMENT AREA		
Tc FLOW PATH		
PARCEL BOUNDARY		
PARCEL SETBACK/EASEMENT		
FENCELINE WOOD		
FENCELINE STEEL		X X
TREELINE/VEGETATION		
ROADWAY CENTERLINE		
HIGHWAY BARRIER		
UTILITIES		
OVERHEAD ELECTRIC	OE	OE
UNDERGROUND ELECTRIC	UE	UE
TELEPHONE LINE	T	T
GAS PIPE LINE	G	G
COMMUNICATIONS (FIBER, ETC)	C	CTV
WATER PIPE	W	W
STORMWATER PIPE		
UNDERDRAIN		
SANITARY SEWER	SS	SS
FORCE MAIN SEWER	FM	FM
ENVIRONMENTAL		
WETLAND LINE		Ψ Ψ
FLOOD PLANE 100/500 YR		FP 100
MEAN HIGH WATER		MHW
MEAN LOW WATER		MLW
CRITICAL AREA BOUNDARY		CAB
BUFFER 25'/100'		25'
SOILS BOUNDARY		
EROSION AND SEDIMENT CONTROL		
SILT FENCE	SF	
SUPER SILT FENCE	SSF	
SILT FENCE ON PAVEMENT	SFOP	
LIMITS OF DISTURBANCE	LOD	
LOD & SILT FENCE	LOD/SF	
LOD & SUPER SILT FENCE	LOD/SSF	
LOD & SILT FENCE ON PAVEMENT	LOD/SFOP	
STANDARD INLET PROTECTION	SIP	
AT-GRADE INLET PROTECTION	AGIP	
CURB INLET PROTECTION	CIP	
SWM EASEMENT 5'/10'		
CONIFEROUS TREE		
DECIDUOUS TREE		
SPOT ELEVATION	X39.01	X 39.00
LAND SLOPE	0.41%	0.41%
BENCHMARK	ELEV: 123	

SYMBOLS

	PROPOSED	EXISTING
FLARED END SECTION		
YARD INLET	YI	YI
CURB INLET	CI	CI
CUSTOM INLET	CuI	CuI
NYLOPLAST INLET	N	N
STORM DRAIN MANHOLE	D	D
SANITARY SEWER MANHOLE	S	S
CLEANOUT	C	C
SEPTIC TANK	ST	ST
WATER METER	WM	WM
WATER VALVE	WV	WV
FIRE HYDRANT		
WELL	W	W
WATER GATE VALVE	GV	GV
ELECTRIC METER	EM	EM
TELEPHONE PEDESTAL	T	T
ELECTRIC TRANSFORMER	X	X
HEAT PUMP	HP	HP
UTILITY POLE		
GUY WIRE		
ELECTRIC MANHOLE	E	E
TELECOMM. MANHOLE	T	T
GAS LID	G	G
GAS VALVE	GAS VALVE	GAS VALVE
STUB		
BOREHOLE/MONITORING WELL		
FLAG POLE		
BOLLARD		
SIGN		
STREET LIGHT		
FENCE POST		
MAILBOX	MB	MB

HATCHES

- ASPHALT
- GRAVEL
- CONCRETE
- RIPRAP/ROCK
- ESD BED BOTTOM
- BRICK PAVING
- EXISTING,TO BE DEMOLISHED
- STEEP SLOPES
- ROOFTOP/NON-ROOFTOP DISCONNECT

ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
AGIP	AT GRADE INLET PROTECTION
@	AT
BC	BACK OF CURB
BM	BENCHMARK
BRL	BUILDING RESTRICTION LINE
CES	CONCRETE END SECTION
C/O	CLEAN OUT
CHRD	CHORD
CI	CURB INLET
CIP	CURB INLET PROTECTION
CL	CENERLINE
CMP	CORRUGATED METAL PIPE
CuI	CUSTOM INLET
CY	CUBIC YARD
DI	DUCTILE IRON
E	EAST
EL/ELEV	ELEVATION
EP	EDGE OF PAVE
ESC	EROSION AND SEDIMENT CONTROL
EX	EXISTING
FES	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
FL	FLOW LINE
FT	FOOT
GFA	GROSS FLOOR AREA
GPD	GALLONS PER DAY
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
I	INLET
INV	INVERT
KV	KILOVOLTS
L	ARC LENGTH
LF	LINEAR FEET
LOD	LIMITS OF DISTURBED AREA
LT	LEFT
MAX	MAXIMUM
MBR	MICRO-BIORETENTION
MD	MARYLAND
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MH	MANHOLE
MHW	MEAN HIGH WATER
MIN	MINIMUM
MLW	MEAN LOW WATER
MSHA	MARYLAND STATE HIGHWAY ADMINISTRATION
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
N	NORTH
NO	NUMBER
PC	POINT OF CURVATURE
PE	POLYETHYLENE
PERF	PERFORATED
PR	PROPOSED
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
Q	DISCHARGE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RCN	RUNOFF CURVE NUMBER
ROW	RIGHT-OF-WAY
RT	RIGHT
S	SOUTH
SCE	STABILIZED CONSTRUCTION ENTRANCE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
Sf	FRICTION SLOPE
SF	SILT FENCE
SHA	STATE HIGHWAY ADMINISTRATION
SIP	STANDARD INLET PROTECTION
SQ	SQUARE
SS	SANITARY SEWER
SSF	SUPER SILT FENCE
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
SWM	STORM WATER MANAGEMENT
TAN	TANGENT
TB	THRUST BLOCK
TBR	TO BE REMOVED
TC	TOP OF CURB
Tc	TIME OF CONCENTRATION
TP	TAX PARCEL
TYP	TYPICAL
UE	UNDERGROUND ELECTRIC
UL	UNDERGROUND LIGHT CABLE
UT	UNDERGROUND TELEPHONE
V	VELOCITY
W	WEST
W/	WITH

LEGEND

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMPROVEMENTS

TAX MAP 0104, GRID 00EA, PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@rauchorg.com
Phone: 410 770 8081 | Fax: 410 770 3667

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

31-Mar-26

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	03/30/2026
SCALE:	1" = 30'
DRAWN BY:	VJK
DESIGNED BY:	BBF
APPROVED BY:	BBF

SHEET NO.:
G-200

Z:\PROJECTS\280047 - BAAM - MOTON PARK, EASTON, MD\CIVIL\CAD\PRODUCTION\280047C-101-SET-SHEETGRPLAN.DWG

NAD 83

0 20' 40'

EXISTING SITE FEATURES

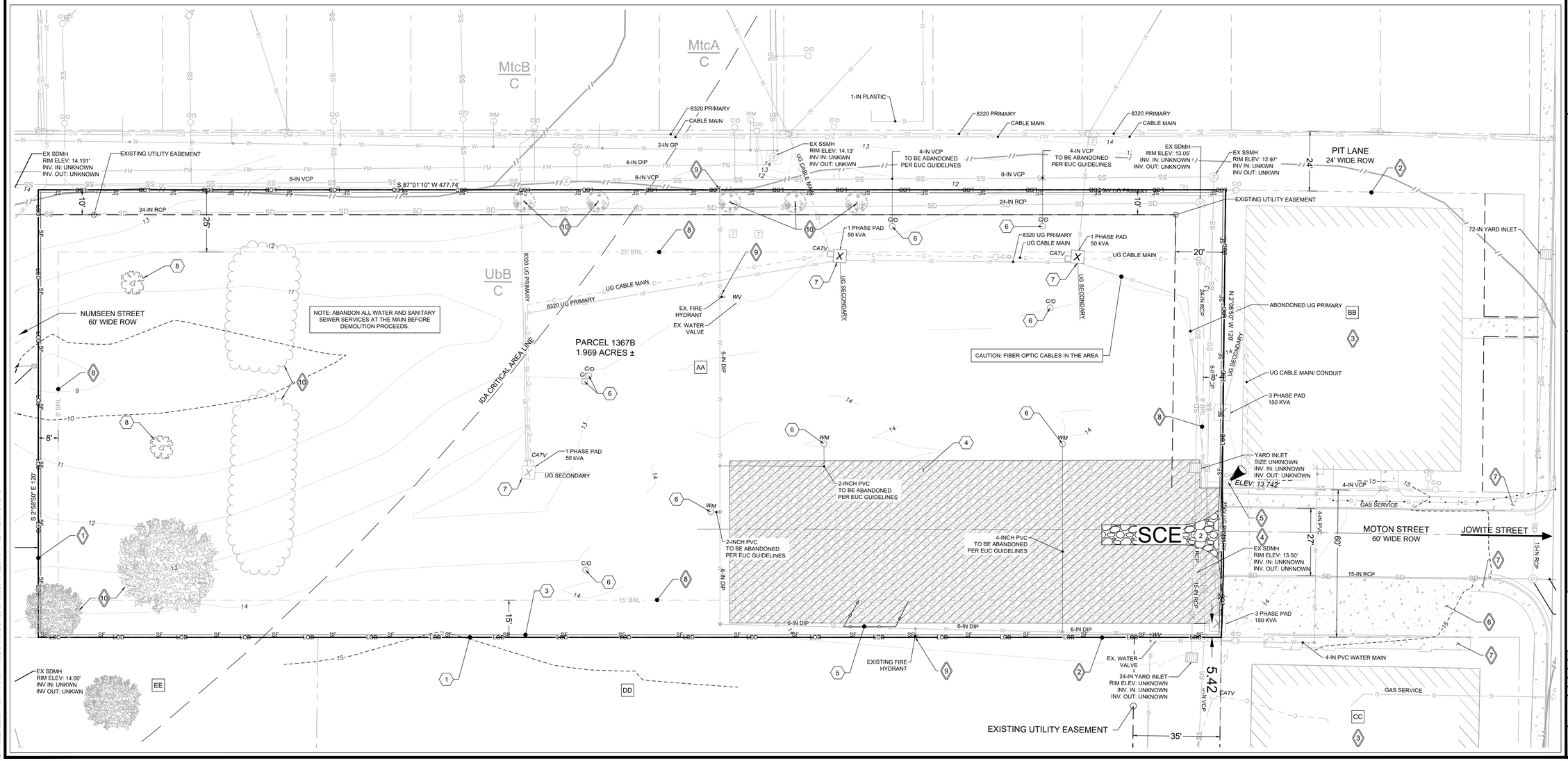
1. PROPERTY LINE
2. ADJACENT PROPERTY LINE
3. EXISTING BUILDING
4. PAVED ROAD
5. BENCHMARK - EXISTING WATER METER
6. PAVED PARKING LOT
7. CONCRETE SIDEWALK
8. EXISTING SETBACKS
9. EXISTING FIRE HYDRANT TO REMAIN
10. APPROXIMATE LOCATION OF EXISTING TREES/ TREELINE TO REMAIN

DEMOLITION FEATURES

1. LIMIT OF DISTURBANCE
2. STABILIZED CONSTRUCTION ENTRANCE - SEE DETAIL ON SHEET C-205.01
3. SILT FENCE (TYP.) - SEE DETAIL ON SHEET C-205.01
4. EXISTING GRAVEL PARKING LOT TO BE REMOVED
5. EXISTING DUMPSTER FENCE TO BE REMOVED
6. ABANDON ALL EXISTING WATER AND SEWER CONNECTIONS, CLEANOUTS, AND METER PITS AT THE MAIN PER EUC GUIDELINES - SEE PHASE 1 DEMOLITION PLANS
7. COORDINATE WITH EUC TO REMOVE OR RELOCATE EXISTING TRANSFORMER - SEE PHASE 1 DEMOLITION PLANS
8. APPROXIMATE LOCATION OF EXISTING TREES TO BE REMOVED

PROPERTY DATA

- AA BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1376B- B/P: 03153/00290
- BB BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1365- B/P: 02551/00184
- CC BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1366- B/P: 02371/00018
- DD EASTON PARKWAY LIMITED PARTNERSHIP M/G/P: 0104/00EA/1367A - B/P: 00573/00363
- EE TOWN OF EASTON M/G/P: 0104/00EA/0000 - B/P: 00548/00380



EXISTING CONDITIONS & DEMOLITION PLAN

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMPROVEMENTS

TAX MAP 0104, GRID 00EA, PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3667

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

31-Mar-26

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — DE | MD | EASTERN SHORE — 811

DATE:	03/30/2026
SCALE:	1" = 20'
DRAWN BY:	VJK
DESIGNED BY:	BBF
APPROVED BY:	BBF

SHEET NO.: V-101

Z:\+PROJECTS\2600\47 - BAAM - MOTON PARK, EASTON, MD\CIVIL\CAD\PRODUCTION\2600ATC-101-SET-SHEETCHPLAN.DWG

NAD 83

0 20' 40'

EXISTING SITE FEATURES

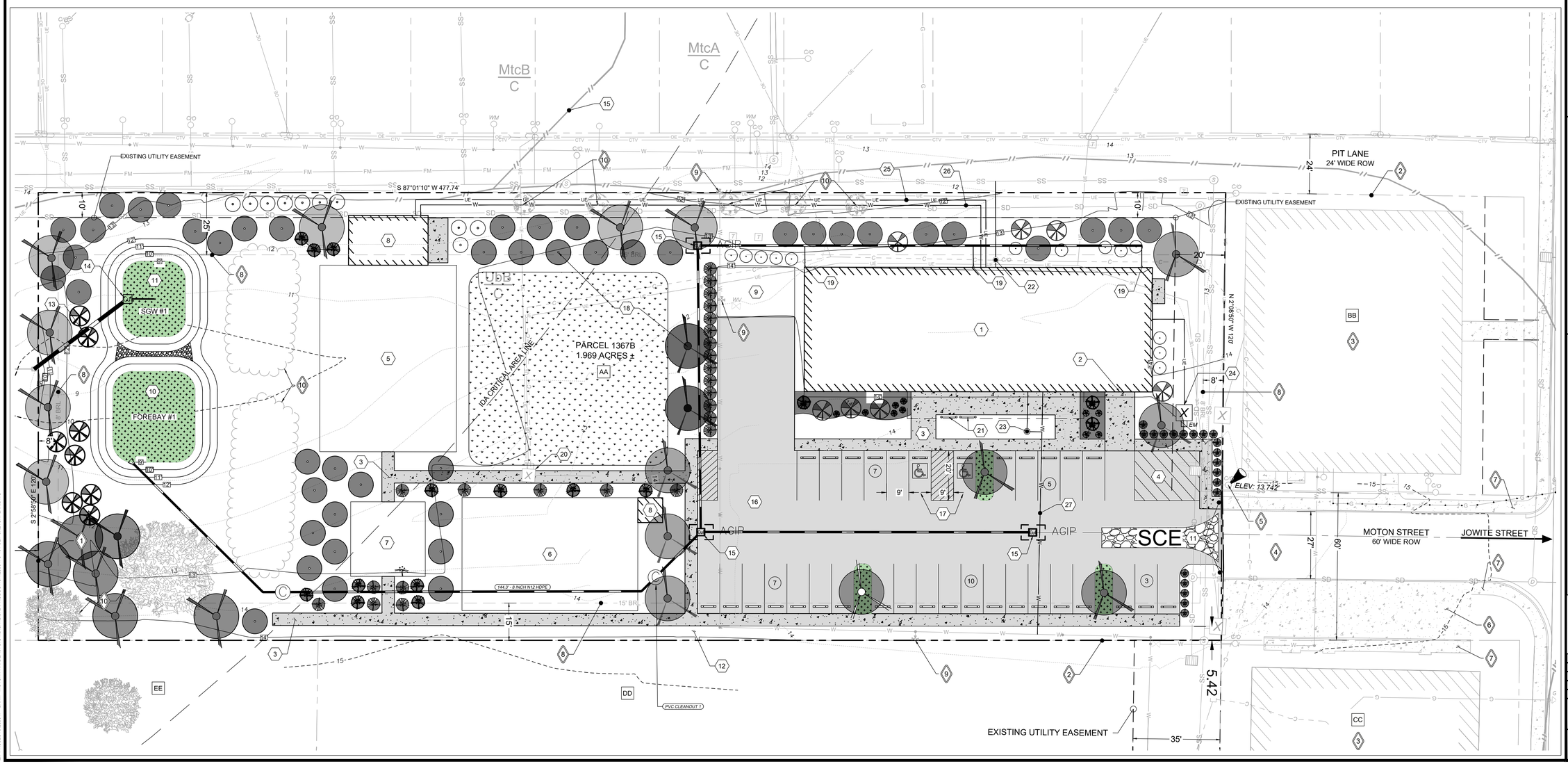
1. PROPERTY LINE
2. ADJACENT PROPERTY LINE
3. EXISTING BUILDING
4. PAVED ROAD
5. BENCHMARK - EXISTING SEWER CLEANOUT
6. PAVED PARKING LOT
7. CONCRETE SIDEWALK
8. EXISTING SETBACKS
9. EXISTING FIRE HYDRANT TO REMAIN
10. APPROXIMATE LOCATION OF EXISTING TREES/ TREELINE TO REMAIN

PROPOSED SITE FEATURES

1. PROPOSED BUILDING - BAAM SUITE & CAREPACKS SUITE
2. PROPOSED OVERHEAD DOOR VEHICLE ACCESS
3. CONCRETE SIDE WALK
4. LOADING ZONE
5. COMMUNITY GARDEN
6. TRAFFIC GARDEN
7. REFLECTION PATIO
8. EQUIPMENT SHED
9. DUMPSTER ENCLOSURE
10. FOREBAY #1
11. SUBMERGED GRAVEL WETLAND #1 SEE DETAILS ON SHEET C-205.03
12. V SWALE
13. 15-IN OUTFALL CULVERT - SEE DETAILS ON SHEET C-205.03
14. OUTFALL STRUCTURE - SEE DETAILS ON SHEET C-205.03
15. YARD INLET - SEE DETAILS ON SHEET C-205.03
16. PAVED PARKING AREA
17. ADA PARKING SPACES WITH VAN ACCESS AISLE
18. PROPOSED TREES & PLANTINGS - SEE SHEET L-101
19. DOWNSPOUT LOCATIONS
20. COORDINATE WITH EUC TO RESIZE/ RELOCATE EXISTING SINGLE PHASE TRANSFORMER
21. BICYCLE PARKING STALLS
22. SANITARY SEWER CLEANOUT AND 4-INCH SERVICE TO PROPOSED BUILDING
23. WATER METER AND 2-INCH SERVICE TO PROPOSED BUILDING
24. THREE PHASE TRANSFORMER, ELECTRICAL METER, AND 2-INCH CONDUIT TO PROPOSED BUILDING
25. 2-INCH ELECTRIC CONDUIT FROM PROPOSED BUILDING TO PROPOSED SHED
26. 1-INCH WATER SERVICE FROM PROPOSED BUILDING TO PROPOSED SHED
27. 6-INCH FIRE WATER LINE FROM PROPOSED BUILDING TO EXISTING MAIN

PROPERTY DATA

- AA BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1376B- B/P: 03153/00290
- BB BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1365- B/P: 02551/00184
- CC BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1366- B/P: 02371/00018
- DD EASTON PARKWAY LIMITED PARTNERSHIP M/G/P: 0104/00EA/1367A - B/P: 00573/00363
- EE TOWN OF EASTON M/G/P: 0104/00EA/0000 - B/P: 00548/00380



OVERALL SITE PLAN

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMPROVEMENTS

TAX MAP 0104, GRID 00EA, PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3667

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

31-Mar-26

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — DIG SAFE BEFORE YOU DIG — 811

DATE:	03/30/2026
SCALE:	1" = 20'
DRAWN BY:	VJK
DESIGNED BY:	BBF
APPROVED BY:	BBF

SHEET NO.: C-101

Z:\+PROJECTS\260047 - BAAM - MOTON PARK EASTON, MD\CIVIL\CAD\PRODUCTION\260047C-101-SET-SHEETPLAN.DWG

NAD 83

0 20' 40'

EXISTING SITE FEATURES

1. PROPERTY LINE
2. ADJACENT PROPERTY LINE
3. EXISTING BUILDING
4. PAVED ROAD
5. BENCHMARK - EXISTING SEWER CLEANOUT
6. PAVED PARKING LOT
7. CONCRETE SIDEWALK
8. EXISTING SETBACKS
9. EXISTING FIRE HYDRANT TO REMAIN
10. APPROXIMATE LOCATION OF EXISTING TREES/ TREELINE TO REMAIN

EROSION & SEDIMENT CONTROL FEATURES

1. STABILIZED CONSTRUCTION ENTRANCE - SEE DETAIL ON SHEET C-205.01
2. SILT FENCE (TYP.) - SEE DETAIL ON SHEET C-205.01
3. AT GRADE INLET PROTECTION - SEE DETAIL ON SHEET C-205.01

EROSION AND SEDIMENT CONTROL

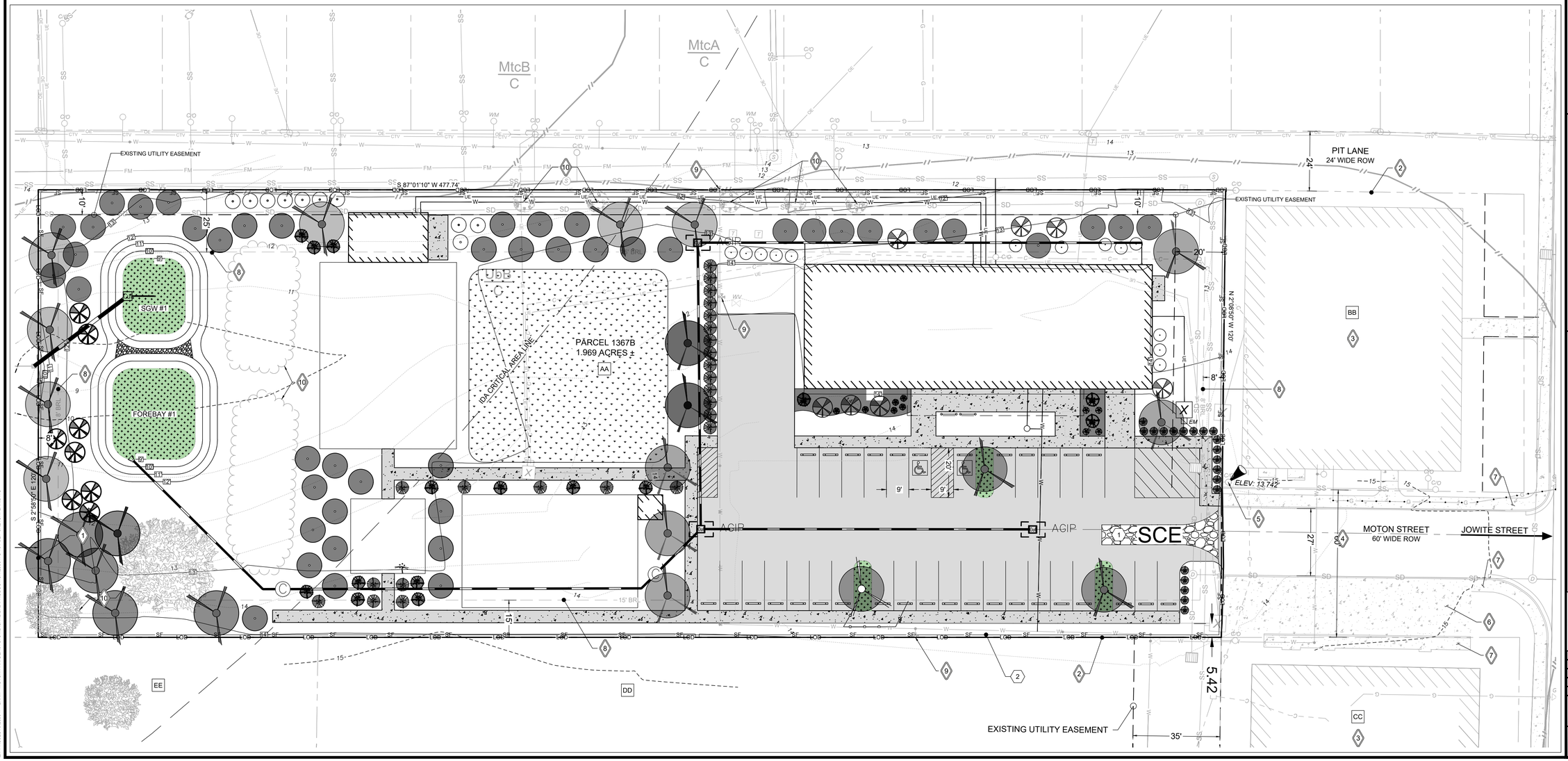
SILT FENCE	SF
SUPER SILT FENCE	SSF
SILT FENCE ON PAVEMENT	SFOP
LIMITS OF DISTURBANCE	LOD
LOD & SILT FENCE	LOD/SF
LOD & SUPER SILT FENCE	LOD/SSF
LOD & SILT FENCE ON PAVEMENT	LOD/SFOP
STANDARD INLET PROTECTION	SIP
AT-GRADE INLET PROTECTION	AGIP
CURB INLET PROTECTION	CIP
SWM EASEMENT 5'/10'	

PROPERTY DATA

- AA BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1376B- B/P: 03153/00290
- BB BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1365- B/P: 02551/00184
- CC BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1366- B/P: 02371/00018
- DD EASTON PARKWAY LIMITED PARTNERSHIP M/G/P: 0104/00EA/1367A - B/P: 00573/00363
- EE TOWN OF EASTON M/G/P: 0104/00EA/0000 - B/P: 00548/00380

SITE SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
UbB	Udorthents, borrow area, 0 to 5 percent slopes	C	0.37	Yes
MtcB	Mattapex silt loam, 2 to 5 percent slopes	C	0.49	Yes



EROSION & SEDIMENT CONTROL PLAN

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMPROVEMENTS

TAX MAP 0104, GRID 00EA, PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3667

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

31-Mar-26

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — 811

DATE:	03/30/2026
SCALE:	1" = 20'
DRAWN BY:	VJK
DESIGNED BY:	BBF
APPROVED BY:	BBF

SHEET NO.: C-201.01

Z:\+PROJECTS\260047 - BAAM - MOTON PARK EASTON, MD\CIVIL\CAD\PRODUCTION\260047C-10-SET-SKETCHPLAN.DWG

NAD 83

0 30' 60'

EXISTING SITE FEATURES

1. PROPERTY LINE
2. ADJACENT PROPERTY LINE
3. EXISTING BUILDING
4. PAVED ROAD
5. BENCHMARK - EXISTING SEWER CLEANOUT
6. PAVED PARKING LOT
7. CONCRETE SIDEWALK
8. EXISTING SETBACKS
9. EXISTING FIRE HYDRANT TO REMAIN
10. APPROXIMATE LOCATION OF EXISTING TREES/ TREELINE TO REMAIN

LEGEND

FLOWPATH

DRAINAGE AREA

SOILS BOUNDARY

PROPERTY DATA

AA BUILDING AFRICAN AMERICAN MINDS INC.
M/G/P: 0104/00EA/1376B- B/P: 03153/00290

BB BUILDING AFRICAN AMERICAN MINDS INC.
M/G/P: 0104/00EA/1365- B/P: 02551/00184

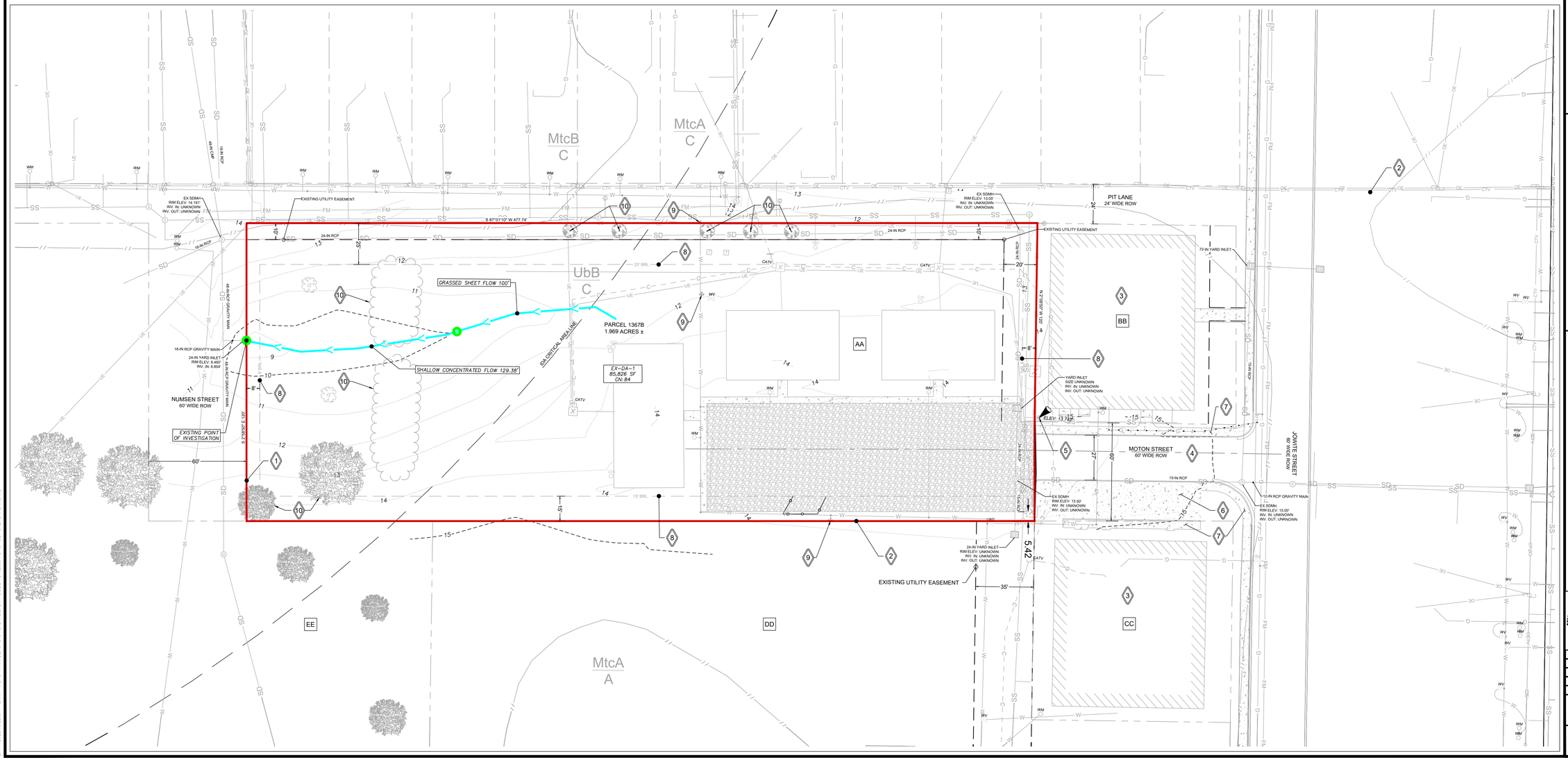
CC BUILDING AFRICAN AMERICAN MINDS INC.
M/G/P: 0104/00EA/1366- B/P: 02371/00018

DD EASTON PARKWAY LIMITED PARTNERSHIP
M/G/P: 0104/00EA/1367A - B/P: 00573/00363

EE TOWN OF EASTON
M/G/P: 0104/00EA/0000 - B/P: 00548/00380

SITE SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
UbB	Udorthents, borrow area, 0 to 5 percent slopes	C	0.37	Yes
MtcB	Mattapex silt loam, 2 to 5 percent slopes	C	0.49	Yes



Z:\PROJECTS\280047 - BAAM - MOTON PARK, EASTON, MD\CIVIL\CAD\PRODUCTION\280047C-101-SET-SHEETCHPLAN.DWG

STORMWATER EXISTING - QA MAP

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMPROVEMENTS

TAX MAP 0104 , GRID 00EA , PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3667

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 11024
Expiration Date: July 24, 2026

31-Mar-26

REV. #	DATE	DESCRIPTION
1		

REVISIONS

MISS UTILITY OF DELMARVA
CALL BEFORE YOU DIG
811

DATE:	03/30/2026
SCALE:	1" = 30'
DRAWN BY:	VJK
DESIGNED BY:	VJK
APPROVED BY:	BBF

SHEET NO.: C-201.02

NAD 83

0 30' 60'

STORMWATER MANAGEMENT FEATURES

1. FOREBAY #1
2. SUBMERGED GRAVEL WETLAND #1
3. SGW OUTFALL STRUCTURE
4. 15-IN HDPE SGW OUTFALL CULVERT
5. 15-IN HDPE SGW CONVEYANCE CULVERT
6. DOWNSPOUT LOCATIONS
7. COLLECTION UNDERDRAIN
8. STONE WEIR
9. RIP-RAP PROTECTION

BMP SUMMARY CHART

BMP ID	TYPE OF ESD PRACTICE STRUCTURE NAME	MARYLAND GRID COORDINATE (NAD 83) METERS NORTHING	MARYLAND GRID COORDINATE (NAD 83) METERS EASTING	BMP DRAINAGE AREA (SF)	IMPERVIOUS AREA (SF)	TARGET PE (IN)	ACTUAL PE (IN)	TARGET ESDv (CF)	ACTUAL ESDv (CF)
SGW-1	SUBMERGED GRAVEL WETLAND	404030.3830'	1573076.2565'	85826	23489	1.8	1.93	5467	5848
TOTAL				85826	23489			5467	5848

DRAINAGE AREA SUMMARY CHART

DA #	DA EXISTING (ACRES)	DA PROPOSED (ACRES)	IMPERVIOUS AREA EXISTING (ACRES)	IMPERVIOUS AREA PROPOSED (ACRES)	CN EXISTING	CN PROPOSED	Tc EXISTING (MINUTES)	Tc PROPOSED (MINUTES)	2-YEAR STORM EXISTING (CFS)	2-YEAR STORM PROPOSED (CFS)	2-YEAR STORM CHANGE	10-YEAR STORM EXISTING (CFS)	10-YEAR STORM PROPOSED (CFS)	10-YEAR STORM CHANGE	ESDv TARGET (CF)	ESDv ACTUAL (CF)
1	85826	85826	0.539	0.841	81	84	26.2	16.5	3.01	0.64	-2.37	6.05	5.24	-0.81	5467	5848
TOTAL	85826	85826	0.539	0.841											5467	5848

LEGEND

FLOWPATH

DRAINAGE AREA

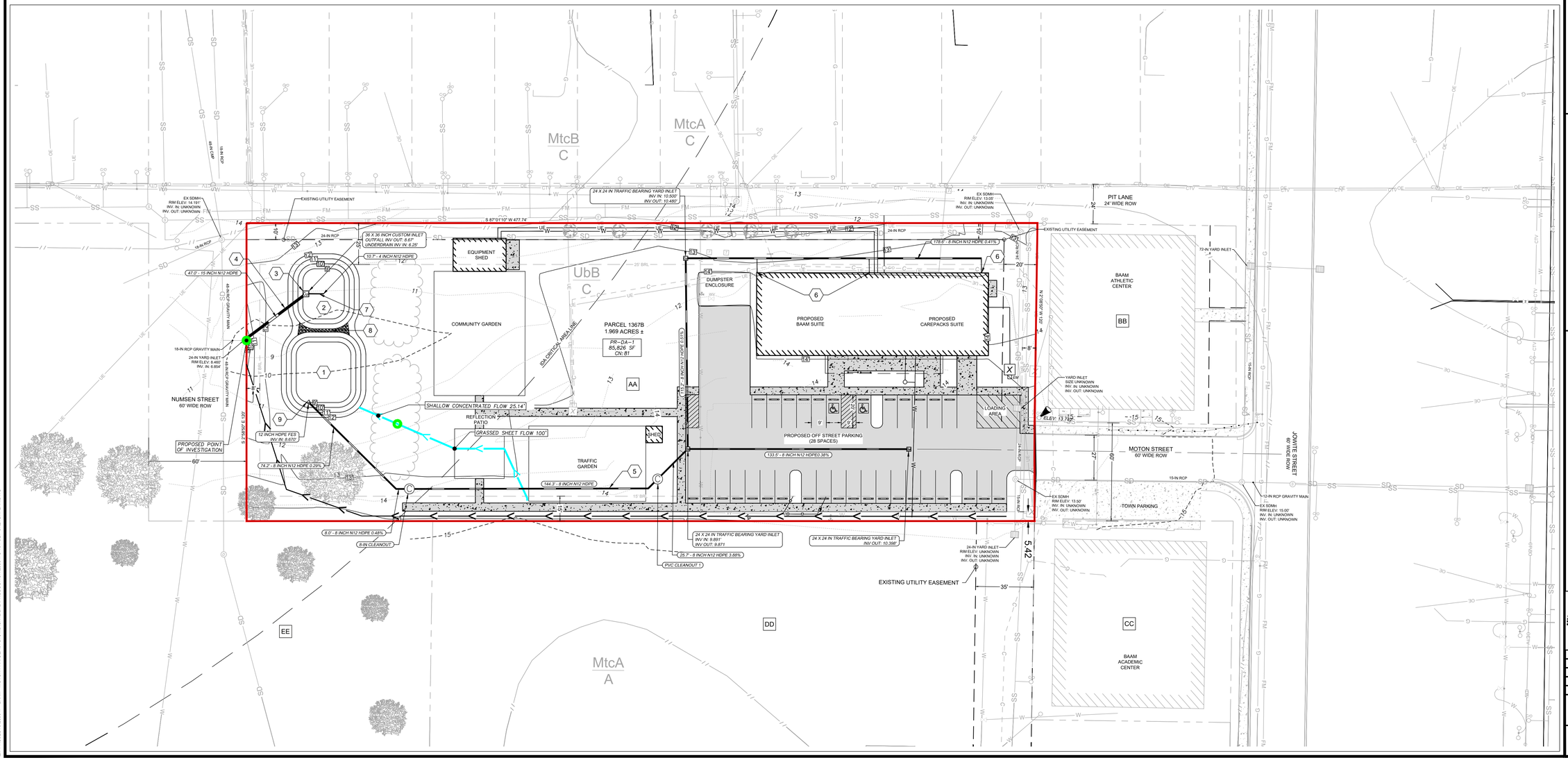
SOILS BOUNDARY

PROPERTY DATA

- AA BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1376B- B/P: 03153/00290
- BB BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1365- B/P: 02551/00184
- CC BUILDING AFRICAN AMERICAN MINDS INC. M/G/P: 0104/00EA/1366- B/P: 02371/00018
- DD EASTON PARKWAY LIMITED PARTNERSHIP M/G/P: 0104/00EA/1367A - B/P: 00573/00363
- EE TOWN OF EASTON M/G/P: 0104/00EA/0000 - B/P: 00548/00380

SITE SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
UbB	Udorthents, borrow area, 0 to 5 percent slopes	C	0.37	Yes
MtcB	Mattapex silt loam, 2 to 5 percent slopes	C	0.49	Yes



STORMWATER PROPOSED - QA MAP

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMPROVEMENTS

TAX MAP 0104 , GRID 00EA , PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 9081 | Fax: 410 770 3667

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

31-Mar-26

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA 1-800-282-8555 CALL BEFORE YOU DIG

811

DATE:	03/30/2026
SCALE:	1" = 30'
DRAWN BY:	VJK
DESIGNED BY:	VJK
APPROVED BY:	BBF

SHEET NO.: C-201.03

Z:\+PROJECTS\260047 - BAAM - MOTON PARK, EASTON, MD\CIVIL\CAD\PRODUCTION\260047C-101-SHEET\CHPLAN.DWG

GENERAL NOTES

ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, LOCAL BUILDING CODES, BEST PRACTICES OF THE RESPECTIVE TRADES AND THE STANDARD SPECIFICATIONS AND DETAILS REFERRED TO HEREON.

THIS DRAWING SHOWS INFORMATION OBTAINED FROM AVAILABLE RECORDS REGARDING PIPES, CONDUITS, TELEPHONE LINES AND OTHER STRUCTURES AND CONDITIONS WHICH EXIST WITHIN LIMITS OF THE WORK AT AND BELOW THE SURFACE OF THE GROUND. THE CONTRACTOR IS RESPONSIBLE FOR SUPPORTING AND PROTECTING ALL PIPES, CONDUITS, TELEPHONE LINES, AND OTHER STRUCTURES.

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO (2) WEEKS PRIOR TO START OF CONSTRUCTION AND SHALL COORDINATE ALL CONSTRUCTION PHASES WITH THEM:

MDE (Main Number)	410-537-3000
MDE (Eastern Shore Field Office)	410-901-4020
DORCHESTER COUNTY DPW	410-228-2920
DORCHESTER COUNTY SCD	410-228-3733
MISS UTILITY	800-257-7777 or 811

SHOULD ANY DAMAGE OCCUR TO ANY MARKED UTILITIES, THEY SHALL BE REPAIRED SOLELY AT THE CONTRACTORS EXPENSE.

ALL LANDSCAPING SHALL BE PERFORMED BY QUALIFIED PROFESSIONALS. ALL PLANT MATERIALS SHALL BE FROM CERTIFIED NURSERYMAN AND BE GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF PLANTING.

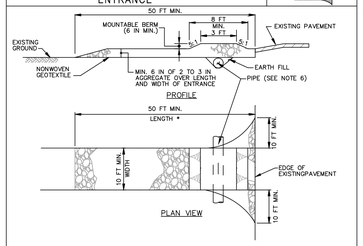
ANY PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE REPLACED SOLELY AT THE CONTRACTORS EXPENSE.

CLEARING & GRUBBING NOTES :

1. ALL TREES TO BE LOGGED AND STUMPS TO BE REMOVED.
2. ALL AREAS/HOLES WHERE A STUMP ONCE WAS IS TO BE FILLED IN TO MEET SURROUNDING GRADES.
3. CLEARING AND GRUBBING SHALL INCLUDE ALL TREES. BUSH, DEBRIS, ROAD MATERIAL AND ORGANIC MATERIALS TO BE REMOVED.

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL: SCE



CONSTRUCTION SPECIFICATIONS

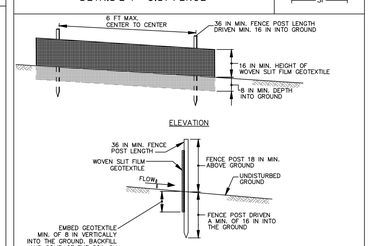
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

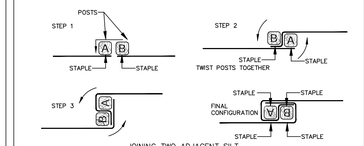
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

STANDARD SYMBOL: SF





JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW)

1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

STANDARD SYMBOL: SF

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ x 1¾ ± ⅜ INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

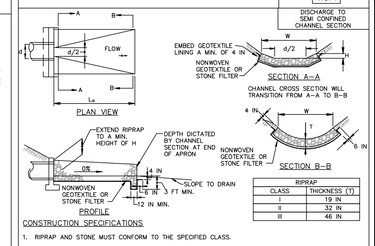
2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL D-4-1-A ROCK OUTLET PROTECTION I

STANDARD SYMBOL: ROP1



RIPRAP	
CLASS	THICKNESS (T)
I	19 IN
II	32 IN
III	46 IN

CONSTRUCTION SPECIFICATIONS

1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE. OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (⅜ TO 1½ INCH STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF THE RIPRAP.
5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENEOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE STONE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
7. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

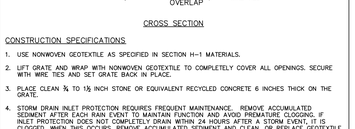
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

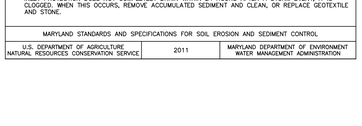
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-2 AT-GRADE INLET PROTECTION

STANDARD SYMBOL: AGIP

MAXIMUM DRAINAGE AREA = 1 ACRE





CROSS SECTION

CONSTRUCTION SPECIFICATIONS

1. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
2. LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.
3. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRATE.
4. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

EROSION & SEDIMENT CONTROL DETAILS

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMRPOVEMENTS

TAX MAP 0104, GRID 00EA, PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@rauchorg.com
Phone: 410 770 8081 | Fax: 410 770 3867

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

REVISIONS		
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	03/30/2026
SCALE:	N.T.S.
DRAWN BY:	VJK
DESIGNED BY:	BBF
APPROVED BY:	BBF

SHEET NO.: C-205.01

Z:\+PROJECTS\260047 - BAAM - MOTON PARK, EASTON, MD\CIVIL\CAD\PRODUCTION\260047C-101-SET-SKETCHPLAN.DWG

Table B.1: Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate 1/		Seeding Depth 2/ (inches)	Recommended Seeding Dates by Plant Hardiness Zone 3/		
	lb/ac	lb/1000 ft²		5b and 6a	6b	7a and 7b
Cool-Season Grasses						
Annual Ryegrass (*Lolium perenne ssp. multiflorum*)	40	1.0	0.5	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Barley (*Hordeum vulgare*)	96	2.2	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Oats (*Avena sativa*)	72	1.7	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Wheat (*Triticum aestivum*)	120	2.8	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Cereal Rye (*Secale cereale*)	112	2.8	1.0	Mar 15 to May 31; Aug 1 to Oct 31	Mar 1 to May 15; Aug 1 to Nov 15	Feb 15 to Apr 30; Aug 15 to Dec 15
Warm-Season Grasses						
Foxtail Millet (*Setaria italica*)	30	0.7	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14
Pearl Millet (*Pennisetum glaucum*)	20	0.5	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14

NOTES:

1/ Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.

Seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixes, use 1/3 of the seeding rate listed above for barley, oats, and wheat. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 5% (by weight) of the overall permanent seeding mix. Cereal rye generally should not be used as a nurse crop, unless planting will occur in very late fall beyond the seeding dates for other temporary seedings. Cereal rye has allelopathic properties that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above.

Oats are the recommended nurse crop for warm-season grasses.

2/ For sandy soils, plant seeds at twice the depth listed above.

3/ The planting dates listed are averages for each Zone and may require adjustment to reflect local conditions, especially near the boundaries of the zone.

B-4 STANDARDS AND SPECIFICATIONS
FOR
VEGETATIVE STABILIZATION

Definition

Using vegetation as cover to protect exposed soil from erosion.

Purpose

To promote the establishment of vegetation on exposed soil.

Conditions Where Practice Applies

On all disturbed areas not stabilized by other methods. This specification is divided into sections on incremental stabilization; soil preparation, soil amendments and topsoiling; seeding and mulching; temporary stabilization; and permanent stabilization.

Effects on Water Quality and Quantity

Stabilization practices are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and runoff to downstream areas.

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Over time, vegetation will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.

Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone.

Sediment control practices must remain in place during grading, seedbed preparation, seeding, mulching, and vegetative establishment.

Adequate Vegetative Establishment

Inspect seeded areas for vegetative establishment and make necessary repairs, replacements, and reseedings within the planting season.

1. Adequate vegetative stabilization requires 95 percent groundcover.

2. If an area has less than 40 percent groundcover, restabilize following the original recommendations for lime, fertilizer, seedbed preparation, and seeding.

3. If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates originally specified.

4. Maintenance fertilizer rates for permanent seeding are shown in Table B.6.

EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

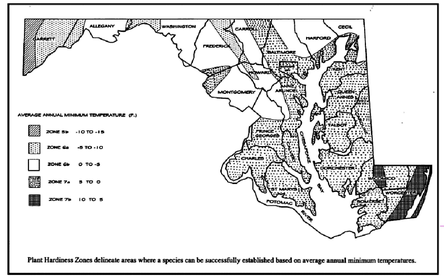
1. Contractor shall install soil erosion and sediment control devices prior to any grading. Following initial disturbance or re-disturbance, permanent or temporary stabilization shall be completed within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes greater than three (3) horizontal to one (1) vertical (3:1) and seven (7) days as to all other disturbed or graded areas on the project site not under active grading.
2. All temporary erosion and sediment control devices are to be provided as indicated on this plan, with location adjustments to be made in the field as necessary, and to be maintained at the end of each working day until project completion. The minimum area practical shall be disturbed for the minimal amount of time possible.
3. Clearing and grubbing shall include all trees, brush, debris, root mat and organic materials to be removed.
4. Temporary seeding shall be accomplished between February 15th through April 30th, or August 15th through November 30th. During other times, temporary mulching shall be provided.
5. Temporary seeding shall conform to the following applications: 436 lbs. per acre of 10-20-20; 4,000 lbs. per acre of ground limestone, to be incorporated into the soil by disking or other suitable means. Annual ryegrass shall be applied at a rate of 50 lbs. per acre using suitable equipment. Mulching shall be accomplished immediately after seeding.

Seed Mixture (For Hardiness Zone 7a) (From Table B.1)					Fertilizer Rate (10-20-20)	Lime Rate
No.	Species	Appl. Rate (lbs./ac.)	Seeding Dates	Seeding Depths		
	ANNUAL RYEGRASS	50#	2/15 - 4/30 8/15 - 11/30	½"	436 lb/ac 10 lb/ 1000 sf	2 tons/ac 90 lb/ 1000 sf
	BARLEY OATS WHEAT CEREAL RYE	96# 72# 120# 112#	2/15 - 4/30 / 8/15 - 11/30 2/15 - 4/30 / 8/15 - 11/30 2/15 - 4/30 / 8/15 - 11/30 2/15 - 4/30 / 8/15 - 12/15	1" 1" 1" 1"		
	FOXTAIL MILLET PEARL MILLET	30# 20#	5/1 - 8/14 5/1 - 8/14	½" ½"		

6. Mulching shall be unchopped, unrotted, small grain straw applied at a rate of 2-2½ tons per acre. Anchor mulch with a mulch anchoring tool on the Contour. Wood cellulose fiber may be used for anchoring straw at a rate of 750 lbs. per acre mixed with water at a maximum of 50 lbs. of wood cellulose fiber per 100 gals. of water, or with a synthetic liquid binder according to manufacturer recommendations. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1,500 lbs. per acre. Mix wood cellulose fiber with water to attain a mixture with a maximum of 50 lbs. of wood cellulose fiber per 100 gals. of water.
7. Permanent seeding shall be accomplished between March 1st through May 15th, or August 15th through October 15th. Permanent seeding at other than specified times will be allowed only upon written approval. Permanent seeding shall conform to the following applications: Permanent seeding for sites having disturbed over five (5) acres shall use fertilizer rates recommended by a soil testing agency and the recommendations provided in the Permanent Seeding Summary Table. Permanent seeding for conditions other than listed above shall be performed at the rates and dates as provided in the Permanent Seeding Summary Table below. Fertilizer and lime amendments shall be incorporated into the top 3"-5" of the soil by disking or other suitable means. Mulching shall be accomplished as discussed in Item #6 of these specifications.

Seed Mixture (For Hardiness Zone 7a) (From Table B.3)					Fertilizer Rate (10-20-20)			Lime Rate
No.	Species	Appl Rate (lbs/ac)	Seeding Dates	Seeding Depths	N	P2O5	K2O	
7	CREEPING RED FESCUE KENTUCKY BLUEGRASS	60# 15#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"	45 lb/ac 1lb/ 1000 sf	90 lb/ac 2lb/ 1000 sf	90 lb/ac 2lb/ 1000 sf	2 tons/ac 90 lb/ 1000 sq
8	TALL FESCUE	100#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"				
9	TALL FESCUE KENTUCKY BLUEGRASS PERRENIAL RYEGRASS	60# 40# 20#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"				

8. Any spoil or borrow will be placed at a site approved by the Soil Conservation District.
9. All areas remaining or intended to remain disturbed for longer than seven (7) days shall be stabilized in accordance with the USDA, Natural Resources Conservation Service Standards and Specifications for Soil Erosion and Sediment Control in developing areas for critical area stabilization.
10. It will be the responsibility of the Contractor or Subcontractor to notify the Engineer of any deviation from this plan. Any change made in this plan without written authorization from the Engineer will place responsibility of said change on the Contractor or Subcontractor.



Plant Hardiness Zones delineate areas where a species can be successfully established based on average annual minimum temperatures.

Figure B.3: U.S.D.A. Plant Hardiness Zones

B-4-2 STANDARDS AND SPECIFICATIONS
FOR
SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

Definition

The process of preparing the soils to sustain adequate vegetative stabilization.

Purpose

To provide a suitable soil medium for vegetative growth.

Conditions Where Practice Applies

Where vegetative stabilization is to be established.

Criteria

A. Soil Preparation

1. Temporary Stabilization
   a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
   b. Apply fertilizer and lime as prescribed on the plans.
   c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.

2. Permanent Stabilization
   a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
      i. Soil pH between 6.0 and 7.0.
      ii. Soluble salts less than 500 parts per million (ppm).
      iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lovegrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
      iv. Soil contains 1.5 percent minimum organic matter by weight.
      v. Soil contains sufficient pore space to permit adequate root penetration.
   b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
   c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
   d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
   e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.

B. Topsoiling

1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

2. Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS.

3. Topsoiling is limited to areas having 2:1 or flatter slopes where:
   a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
   b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
   c. The original soil to be vegetated contains material toxic to plant growth.
   d. The soil is so acidic that treatment with limestone is not feasible.

4. Areas having slopes steeper than 2:1 require special consideration and design.

5. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
   a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1½ inches in diameter.
   b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
   c. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

6. Topsoil Application
   a. Erosion and sediment control practices must be maintained when applying topsoil.
   b. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.
   c. Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

C. Soil Amendments (Fertilizer and Lime Specifications)

1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.

2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.

3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve.

4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.

5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

B-4-3 STANDARDS AND SPECIFICATIONS
FOR
SEEDING AND MULCHING

Definition

The application of seed and mulch to establish vegetative cover.

Purpose

To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies

To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

Criteria

A. Seeding

1. Specifications
   a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate.
   b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen.The appropriate seeding mixture must be applied when the ground thaws.
   c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective. Sod or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.
2. Application
   a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
      i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.
      ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good seed to soil contact.
   b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.
      i. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.
      ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
   c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
      i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P2O5 (phosphorous), 200 pounds per acre; K2O (potassium), 200 pounds per acre.
      i. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
      iii. Mix seed and fertilizer on site and seed immediately and without interruption.
      iv. When hydroseeding do not incorporate seed into the soil.

B. Mulching

1. Mulch Materials (in order of preference)
   a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas where one species of grass is desired.
   b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
      i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
      ii. WCFM, including dye, must contain no germination or growth inhibiting factors.
      iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
      iv. WCFM material must not contain elements or compounds at concentration levels that will be phyto-toxic.
      v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

2. Application
   a. Apply mulch to all seeded areas immediately after seeding.
   b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.
   c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
3. Anchoring
   a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:
      i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.
      ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
      iii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited.
      iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000 feet long.

EROSION & SEDIMENT CONTROL DETAILS

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMRPOVEMENTS

TAX MAP 0104, GRID 00EA, PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3867

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2026

REVISIONS		
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — 811

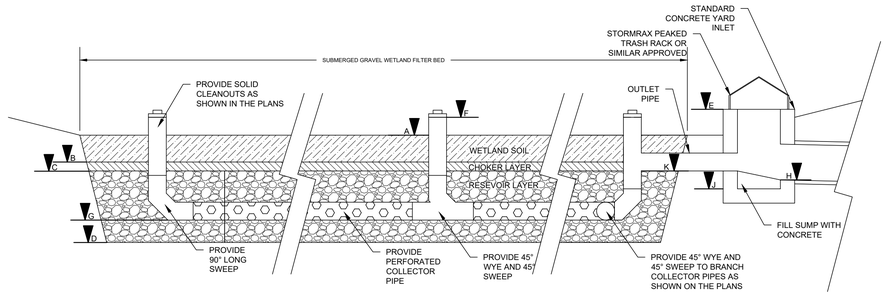
DATE:	3/2/2026
SCALE:	N/A
DRAWN BY:	VJK
DESIGNED BY:	BBF
APPROVED BY:	BBF

SHEET NO.:
C-205.02

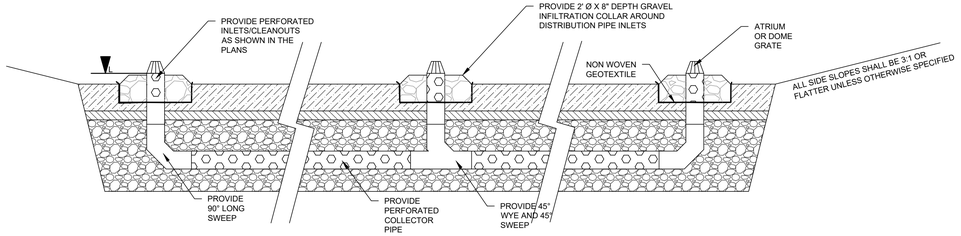
Z:\+PROJECTS\260047 - B&AM - MOTON PARK, EASTON, MD\CIVIL\CAD\PRODUCTION\260047C-101-SET-SKETCHPLAN.DWG

SUBMERGED GRAVEL WETLAND
STANDARD DETAIL N.T.S.

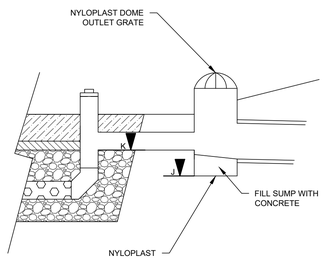
COLLECTION LINE DETAIL



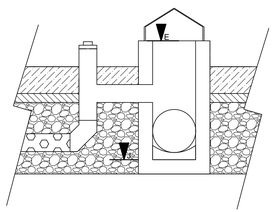
DISTRIBUTION LINE DETAIL



ALTERNATE NYLOPLAST OUTLET STRUCTURE DETAIL

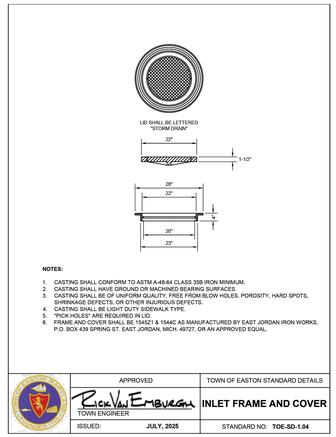


OUTLET STRUCTURE INSIDE WETLAND BED



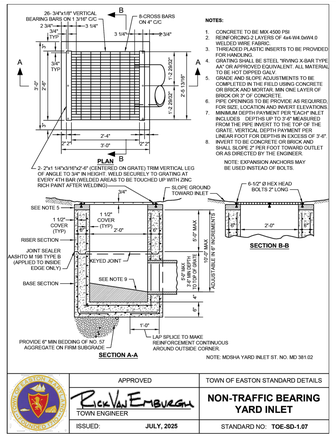
NOTES:
- WETLAND SOILS SHALL BE LOW Ksat SOIL (0.1-0.01 FT/DAY) CONTAINING ±50%SILT/CLAY, ±25% SAND, ±25% ORGANIC CONTENT
- ALL PIPES SHALL BE SDR-35 OR SCHEDULE 40 UNLESS SHOWN
- FILTER FABRIC IS NOT USED BETWEEN SOIL AND CHOKER STONE OR GRAVEL AND CHOKER STONE
- PERFORATIONS SHALL BE ½" Ø @ 6" o/c AROUND THE CIRCUMFERENCE OF THE PIPE
- CHOKER STONE SHALL BE PEA GRAVEL OR #8 STONE, WASHED AND FREE OF FINES
- RESERVOIR GRAVEL SHALL BE ¾" RIVER GRAVEL OR #57 CRUSHED STONE, WASHED AND FREE OF FINES
- YARD INLETS SHALL BE FOUNDED ON 6" NO 57 STONE ATTOP GEOTEXTILE FILTER - COMPACT SUBGRADE.

SUBMERGED GRAVEL WETLAND		
PRACTICE NAME		SGW #1
COMPONENT		ELEVATION - FT
A	SUBMERGED GRAVEL WETLAND	9.00
B	CHOKER TOP	8.33
C	RESEVOIR TOP	8.00
D	RESERVOIR BOTTOM	6.00
E	RIM	11.00
G	COLLECTION & DISTRIBUTION UNDERDRAIN INVERT	6.25
H	OUTLET PIPE INVERT	8.67
I	OUTLET STRUCTURE BOTTOM	5.25
J	IWS ELEVATION	8.67
	COLLECT & DISTRIBUTE PIPES	4"
	OUTLET STRUCTURE SIZE + TYPE	36"X36" CONC.
	OUTLET PIPE SIZE + TYPE	15" HDPE
	BED AREA	709 SF

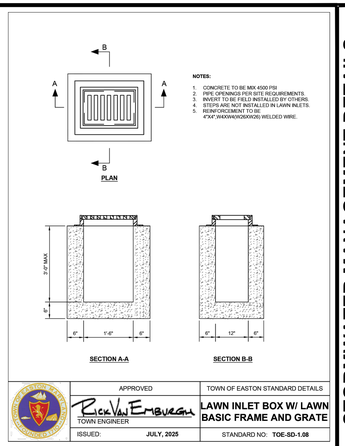


NOTES:
1. CASTING SHALL CONFORM TO ASTM A-48-64 CLASS 35B IRON MINIMUM.
2. CASTING SHALL HAVE GROUND OR MACHINED BEARING SURFACES.
3. CASTING SHALL BE OF UNIFORM QUALITY, FREE FROM BLOW HOLES, POROSITY, HARD SPOTS, SHRINKAGE DEFECTS, OR OTHER INJURIOUS DEFECTS.
4. CASTING SHALL BE LIGHT DUTY SIDEWALK TYPE.
5. "PICK HOLES" ARE REQUIRED IN LID.
6. FRAME AND COVER SHALL BE 154521 & 1544C AS MANUFACTURED BY EAST JORDAN IRON WORKS, P.O. BOX 439 SPRING ST. EAST JORDAN, MICH. 49727, OR AN APPROVED EQUAL.

APPROVED	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER: RickVanEmburgh	INLET FRAME AND COVER
ISSUED: JULY, 2025	STANDARD NO: TOE-SD-1.04

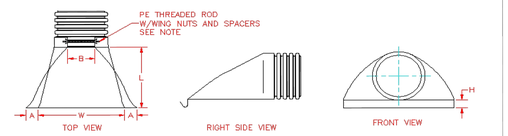

20- 3/4"X1/8" VERTICAL BEARING BARS ON 1 3/16" C/C
6-CROSS BARS ON 4" C/C
PLAN
2-2"x1 1/4"x1/4"x2'-0" (CENTERED ON GRATE) TRIM VERTICAL LEG WELDED TO 3/4" IN HORIZONTAL WELD ON GRATE TO GRATING AT EVERY 4TH BAR (WELDED AREAS TO BE TOUCHED UP WITH ZINC RICH PAINT AFTER WELDING)
SLOPE GROUND TOWARD INLET
6-1/2" Ø HEX HEAD BOLTS 2" LONG
SEE NOTE 5
1 1/2" COVER (TYP)
RISER SECTION
JOINT SEALER AASHTO M 198 TYPE B (APPLIED TO INSIDE EDGE ONLY)
KEYED JOINT
SEE NOTE 9
BASE SECTION
PROVIDE 6" MIN BEDDING OF NO. 57 AGGREGATE ON FIRM SUBGRADE
LAP SPLICE TO MAKE REINFORCEMENT CONTINUOUS AROUND OUTSIDE CORNER.
SECTION A-A
SECTION B-B
NOTES:
1. CONCRETE TO BE MIX 4500 PSI
2. REINFORCING 2 LAYERS OF 4x4 W4.0xW4.0 WELDED WIRE FABRIC
3. USE WOOD PLASTIC INSERTS TO BE PROVIDED FOR GRATE.
4. GRATING SHALL BE STEEL "IRVING X-BAR TYPE AA" OR APPROVED EQUIVALENT. ALL MATERIAL TO BE HOT DIPPED GALV.
5. GRADE AND SLOPE ADJUSTMENTS TO BE COMPLETED IN THE FIELD USING CONCRETE BRICK AND MORTAR OR ONE LAYER OF BRICK OR 3" OF CONCRETE.
6. PIPE OPENINGS TO BE PROVIDE AS REQUIRED, FOR SIZE, LOCATION AND INVERT ELEVATIONS.
7. MINIMUM DEPTH PAYMENT PER "EACH" INLET SHALL BE 4'-0" VERTICAL DEPTH MEASURED FROM THE PIPE INVERT TO THE TOP OF THE GRATE. VERTICAL DEPTH PAYMENT PER LINEAR FOOT FOR DEPTHS IN EXCESS OF 3'-6"
8. INVERT TO BE CONCRETE OR BRICK AND SHALL SLOPE 2" PER FOOT TOWARD OUTLET OR AS DIRECTED BY THE ENGINEER.
NOTE: EXPANSION ANCHORS MAY BE USED INSTEAD OF BOLTS.
NOTE: MOSHA YARD INLET ST. NO. MD 381.02

APPROVED	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER: RickVanEmburgh	NON-TRAFFIC BEARING YARD INLET
ISSUED: JULY, 2025	STANDARD NO: TOE-SD-1.07



APPROVED	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER: RickVanEmburgh	LAWN INLET BOX W/ LAWN BASIC FRAME AND GRATE
ISSUED: JULY, 2025	STANDARD NO: TOE-SD-1.08

FLARED END SECTIONS



PART #	PIPE SIZE	A	B(MAX)	H	L	W
1015NP	10 in (250 mm)	3.8 in (95 mm)	10.0 in (254 mm)	6.5 in (165 mm)	28.0 in (711 mm)	34.5 in (876 mm)
1215NP	12 & 15 (300 & 375mm)	6.5 in (165 mm)	10.0 in (254 mm)	6.5 in (165 mm)	25.0 in (635 mm)	29.0 in (737 mm)
1810NP	18 in (450 mm)	7.5 in (191 mm)	15.0 in (381 mm)	6.5 in (165 mm)	32.0 in (813 mm)	35.0 in (889 mm)
2410NP	24 in (600 mm)	7.5 in (191 mm)	18.0 in (457 mm)	6.5 in (165 mm)	36.0 in (914 mm)	45.0 in (1143 mm)
3015NP	30 in (750 mm)	7.5 in (191 mm)	12.0 in (305 mm)	8.6 in (218 mm)	58.0 in (1473 mm)	63.0 in (1600 mm)
3615NP	36 in (900 mm)	7.5 in (191 mm)	25.0 in (635 mm)	8.6 in (218 mm)	58.0 in (1473 mm)	63.0 in (1600 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

© 2023 Advanced Drainage Systems, Inc.

ADS Advanced Drainage Systems, Inc.

DRAWING #:	6070	
DRAWN BY:	JCS	01.17.07
APPROVED BY:	JCB	08.28.07
REVISIONS:	TJR	6/7/2016

PIPE SCHEDULE
PROPOSED STORMWATER

PIPE NAME	SIZE AND MATERIAL	LENGTH	SLOPE	UPSTREAM STRUCTURE AND INVERT	DOWNSTREAM STRUCTURE AND INVERT
DOWNSPOUTS - INLET 1	8 INCH N12 HDPE	178.63'	0.41%	INV. 12.18'	STORM INLET 1 INV. 11.46'
INLET 1 - INLET 3	8 INCH N12 HDPE	115.20'	0.51%	STORM INLET 1 INV. 11.46'	STORM INLET 3 INV. 10.87'
INLET 2 - INLET 3	8 INCH N12 HDPE	133.54'	0.38%	STORM INLET 2 INV. 11.38'	STORM INLET 3 INV. 10.87'
SGW OUTFALL CULV - EX STORM INLET	15 INCH N12 HDPE	46.97'	0.71%	SGW OUTFALL STRUCTURE INV. 8.67'	INV. 8.34'
UNDERDRAIN - SGW OUTFALL STRUCTURE	4 INCH N12 HDPE	10.66'	0.00%	INV. 6.25'	SGW OUTFALL STRUCTURE INV. 6.25'
INLET 3 - CLEANOUT 1	8 INCH N12 HDPE	25.75'	3.88%	PVC CLEANOUT 1 INV. 10.87'	STORM INLET 3 INV. 9.87'
CLEANOUT 2 - 45 DEG BEND	8 INCH N12 HDPE	8.00'	0.48%	PVC CLEANOUT 2 INV. 9.25'	45-DEG BEND INV. 9.21'
45-DEG BEND - FOREBAY	8 INCH N12 HDPE	74.20'	0.29%	45-DEG BEND INV. 9.21'	OUTFALL FOREBAY INV. 9.00'
45-DEG BEND - CLEANOUT 2	8 INCH N12 HDPE	144.27'	-8.54%	45-DEG BEND INV. -0.33'	PVC CLEANOUT 2 INV. 11.99'
CLEANOUT 1 - 45-DEG BEND	8 INCH N12 HDPE	8.00'	-5.22%	PVC CLEANOUT 1 INV. -0.33'	45-DEG BEND INV. 0.08'

STRUCTURE SCHEDULE
PROPOSED STORMWATER

STRUCTURE NAME	LOCATION	STRUCTURE TYPE AND SIZE	CONNECTED PIPES	RIM ELEVATION
45-DEG BEND	N403947.13, E1573277.80	???	CLEANOUT 1 - 45-DEG BEND INV IN = 0.084 45-DEG BEND - CLEANOUT 2 INV OUT = -0.334	0.86
45-DEG BEND	N403937.54, E1573125.82	???	CLEANOUT 2 - 45 DEG BEND INV IN = 9.213 45-DEG BEND - FOREBAY INV OUT = 9.213	9.96
OUTFALL FOREBAY	N403986.47, E1573070.03	12" HDPE FES	45-DEG BEND - FOREBAY INV IN = 9.000	9.71
PVC CLEANOUT 1	N403953.12, E1573283.11	8 in CLEANOUT	INLET 3 - CLEANOUT 1 INV OUT = 10.870 CLEANOUT 1 - 45-DEG BEND INV OUT = -0.334	12.35
PVC CLEANOUT 2	N403938.04, E1573133.81	8 in CLEANOUT	45-DEG BEND - CLEANOUT 2 INV IN = 11.992 CLEANOUT 2 - 45 DEG BEND INV OUT = 9.251	13.48
SGW OUTFALL STRUCTURE	N404051.91, E1573064.31	36 x 36 inch Rectangular Structure	UNDERDRAIN - SGW OUTFALL STRUCTURE INV IN = 6.250 SGW OUTFALL CULV - EX STORM INLET INV OUT = 8.670	10.36
STORM INLET 1	N404087.29, E1573291.94	24 x 24 inch Rectangular Structure	DOWNSPOUTS - INLET 1 INV IN = 11.459 INLET 1 - INLET 3 INV OUT = 11.459	12.51
STORM INLET 2	N403980.38, E1573433.49	24 x 24 inch Rectangular Structure	INLET 2 - INLET 3 INV OUT = 11.377	12.42
STORM INLET 3	N403972.39, E1573300.19	24 x 24 inch Rectangular Structure	INLET 2 - INLET 3 INV IN = 10.870 INLET 3 - CLEANOUT 1 INV IN = 9.871 INLET 1 - INLET 3 INV IN = 10.870	11.92

STORMWATER MANAGEMENT DETAILS

BUILDING AFRICAN AMERICAN MINDS INC.

MOTON STREET IMRPOVEMENTS

TAX MAP 0104, GRID 00EA, PARCEL 1367B

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 9081 | Fax: 410 770 3867

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 11024
Expiration Date: July 24, 2026

31-Mar-26

REVISIONS		
REV. #	DATE	DESCRIPTION
1		

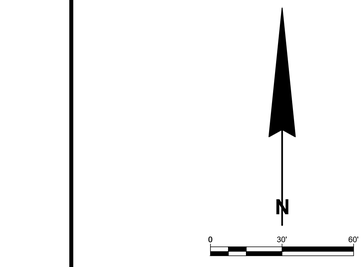
MISS UTILITY OF DELMARVA — 811

DATE:	3/2/2026
SCALE:	N.T.S.
DRAWN BY:	VJK
DESIGNED BY:	BBF
APPROVED BY:	BBF

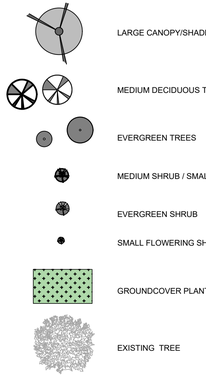
SHEET NO.: C-205.03

Z:\+PROJECTS\800047 - BAAM - MOTON PARK, EASTON, MD\CIVIL\CAD\PRODUCTION\2800\MTC-101-SET-SHEETCHIPLAN.DWG





TREE KEY:



LANDSCAPING CODE ORDINANCE:

28-1014.6.E.1 - OVERALL MINIMUM TREE PLANTINGS REQUIRED (EXCLUDING REQUIRED BUFFERYARDS) SHALL BE BASED ON SITE AREA TO BE DISTURBED.

28.1014.6.E.2.A - INTERNAL, ON-LOT PUBLIC OR PRIVATE STREET TREE PLANTINGS - ONE (1) PER SHADE/CANOPY TREE PER 35' OF STREET CENTERLINE LENGTH. TREES TO BE PLANTED WITHIN 15' OF CURB LINE. STREETS INTEGRATED WITHIN THE PARKING LOT SHALL BE INCLUDED UNDER THE INTERIOR PARKING LOT PLANTING REQUIREMENT.

28.1014.6.E.2.B - INTERIOR PARKING LOT PLANTINGS - 1 TREE PER 7.5 SPACES TO BE PLANTED WITHIN THE INTERIOR OR THE PARKING LOT. TREES SHALL BE LOCATED WITHIN THE PARKING BAYS SO THAT NO MORE THAN 15 PARKING SPACES FORM AN UNINTERRUPTED ROW. TREES SHALL BE PLANTED WITHIN AN AREA OF PERVIOUS SPACE OF AT LEAST 64 SQ. FT. ALLOCATED PER TREE, WITH NO DIMENSION OF ANY PARKING LOT PLANTING ISLAND LESS THAN 6'.

28.1014.6.E.2.C - ALL PARKING LOTS SHALL BE LANDSCAPED WITH AN EVERGREEN SHRUB HEDGE WHICH WILL GROW TO A MINIMUM 42" HEIGHT WITHIN 5 YEARS ALONG ALL STREET OR ALLEY FRONTAGES AND ALONG ALL, OR PORTIONS OF SIDES VISIBLE FROM STREETS OR ALLEYS, EXCLUDING THE BUILDING OR FACILITY ACCESS SIDE(S). SHRUBS SHALL BE SPACED TO FORM A CONTINUOUS HEDGE WITHIN 5 YEARS. REQUIRED BUFFERYARDS MAY REPLACE ALL OR PART OF THIS REQUIREMENT WHEN THE APPLICANT CAN DEMONSTRATE THAT EFFECTIVE SCREENING WILL BE ACHIEVED.

28.1014.6.E.D - BUILDING FACADE PLANTINGS - THE LANDSCAPE IMPROVEMENT PLAN SHALL INCORPORATE TREE, SHRUB, GROUNDCOVER AND ACCENT PLANTINGS AROUND ENTRANCE POINTS, ALONG THE ENTRANCE FACE(S) OF BUILDING(S) AN/OR WITHIN THE ADJACENT PEDESTRIAN PAVING AREAS.

28.1014.6.E.F - SHRUB AND GROUNDCOVER PLANTINGS - SHRUBS AND GROUNDCOVERS SHALL BE INTEGRATED INTO THE SITE AND LANDSCAPE PLAN TO COMPLEMENT ARCHITECTURAL DESIGN, SCREEN OBJECTIONABLE VIEWS, SEPARATE PEDESTRIAN ACTIVITIES FROM VEHICULAR TRAVEL WAYS, STABILIZE SENSITIVE OR ERODING AREAS OF OTHER APPLICATIONS THAT CONTRIBUTE TO THE OVERALL LANDSCAPE APPEARANCE. THE APPLICANT SHALL PROVIDE SHRUB AND GROUNDCOVER PLANTINGS OR DEMONSTRATE WHY THEY ARE UNNECESSARY, IMPRACTICAL OR NOT EFFECTIVE IN PROVIDING AN ACCEPTABLE APPEARANCE.

28-1014.7 - BUFFERYARDS:

BUFFERYARD "E" - (ALONG NON-STREET, EXTERIOR PROPERTY LINES ADJOINING MORE OR LESS INTENSE ZONING OR LAND USE) - 10' WIDTH PLANTED WITH (1) SHADE/CANOPY AND (3) EVERGREES TREES PER 50' OF PROPERTY LINE LENGTH.

PLANT LIST:

SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SPECIFICATION
NATIVE CANOPY TREES				
AR	2	ACER RUBRUM	RED MAPLE	2" CALIPER
BN	3	BETULA NIGRA	RIVER BIRCH	2" CALIPER
NS	3	NYSSA SYLVATICA	BLACK GUM	2" CALIPER
QC	5	QUERCUS COCCINEA	SCARLET OAK	2" CALIPER
TA	10	TILIA AMERICANA 'BOULEVARD'	BASSWOOD	2" CALIPER
NATIVE EVERGREEN TREES				
IO	12	ILEX OPACA	AMERICAN HOLLY	1.25" CALIPER
JV	13	JUNIPERUS VIRGINIANA 'GLAUCA'	REDCEDAR	1.25" CALIPER
TS	13	THUJA OCCIDENTALIS 'SMARAGD'	AMERICAN ARBORVITAE	1.25" CALIPER
TT	11	THUJA OCCIDENTALIS 'TECHNY'	AMERICAN ARBORVITAE	1.25" CALIPER
NATIVE UNDERSTORY TREES				
MV	7	MAGNOLIA VIRGINIANA	STAR MAGNOLIA	1.25" CALIPER
NATIVE SHRUBS				
CO	8	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	3-4' #10
IV	8	ITEA VIRGINICA 'HENRY'S GARNET'	SWEETSPIRE	3-4' #10
IG	20	ILEX GLABRA 'SHAMROCK'	INKBERRY	#5
VD	12	VIBURNUM DENTATUM	ARROWWOOD	3-4' #10
STORMWATER PLANTS				
VC	TBD	VACINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	#3
PV	TBD	PANICUM VIGRATUM	SWITCHGRASS	2" PLUG
AI	TBD	ASCLEPIAS INCARNATA	SWAMP MILKWEED	1 QUART
AN	TBD	ASTER NON-ANGLIAE	NEW ENGLAND ASTER	1 QUART

LANDSCAPE REQUIREMENTS SUMMARY PER ZONING ORDINANCE:

COMMERCIAL/OFFICE USES (EXCLUDING CBD ZONING DISTRICT)

§ 28 1014.6 E.1 - *WAIVER REQUEST: CREDIT BUFFERYARD TREES TO TOTAL REQUIREMENT*

DISTURBANCE: 85,826 SF = 57 TREES
1 TREE / 1,500 SF

§ 28 1014.6 E.2 A - *PROVIDED*

CENTERLINE LENGTH OF INTERNAL PARKING LOT: 212' / 35 = 6 SHADE TREES

1 SHADE TREE PER 35' OF STREET CENTERLINE LENGTH

§ 28 1014.6 E.2 B - *PROVIDED*

OF PARKING SPACES: 32 / 7.5 = 4.26 TREES
1 TREE PER 7.5 PARKING SPACES

§ 28 1014.6 E.2 C - *EXEMPT*

PARKING LOT SCREENING FROM ADJACENT ROADS:

§ 28 1014.6 E.2 D - *PROVIDED*

BUILDING FACADE PLANTINGS: 136' / 50 = 2.72 TREES
1 TREE PER 50' OF FRONT BUILDING FACADE

§ 28 1014.6 E.2 E - *PROVIDED*

SERVICE AREAS: SCREENED FROM THE RESIDENTIAL TO THE NORTH

§ 28 1014.6 E.2 F - *PROVIDED*

SHRUB & GROUNDCOVER PLANTINGS: INCLUDED AROUND BUILDING

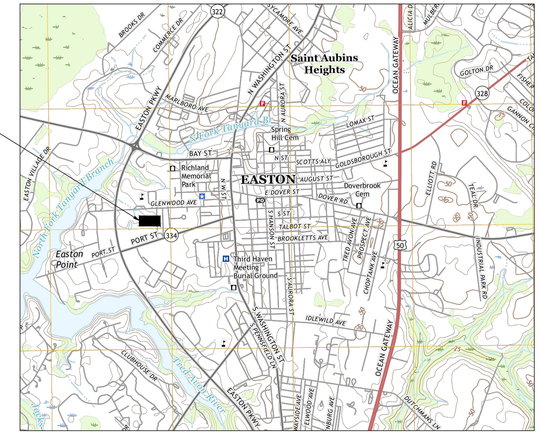
BUFFERYARD STANDARDS

§ 28 1014.7.E

BUFFERYARD 'E' (ALONG NON-STREET, EXTERIOR PROPERTY LINES ADJOINING MORE OR LESS INTENSE ZONING OR LAND USE)

10' WIDTH
PLANT UNIT: 1 SHADE CANOPY TREE & 3 EVERGREEN TREES
OPTION: 2 SHADE/CANOPY TREES & 8 LARGE EVERGREEN SHRUBS
OPTION: 4 EVERGREEN TREES
OPTION: WALL/FENCE WITH 3 LARGE EVERGREEN SHRUBS

- NORTH EDGE: 9.55 PLANTING UNITS (10)
  MET: *5 TREES TRANSPLANTED INTO BUFFER AS CREDIT; 3 ADDITIONAL SHADE TREES PROVIDED WITH 24 EVERGREEN TREES. REMAINING 2 PLANTING UNITS SUBSTITUTED FOR OPTION USING 8 ADDITIONAL EVERGREENS.*
  WAIVER REQUESTED FOR BUFFERYARD LOCATION DUE TO BUILDING & UTILITIES.
- WEST EDGE: 3.6 PLANTING UNITS (4)
  MET: *4 SHADE TREES PROVIDED; 4 EVERGREEN TREES PROVIDED;*
  WAVIER REQUESTED TO SUBSTITUTE REMAINING 8 EVERGREENS FOR FOR DECIDUOUS.
- SOUTH EDGE: 9.55 PLANTING UNITS (10)
  MET: *6 SHADE TREES PROVIDED W/ 24 LARGE SHRUBS* (3 PU)
  24 EVERGREEN TREES PROVIDED (6 PU)
  WAIVER REQUESTED TO RE-LOCATE PLANTINGS TO INTERIOR IN LIEU OF S. 10' BUFFERYARD.
- EAST EDGE: 3.6 PLANTING UNITS (4)
  MET: 8 EVERGREEN TREES PROVIDED
  20 EVERGREEN SHRUBS PROVIDED
  WAVIER REQUESTED TO SUBSTITUTE EVERGREEN SHRUBS FOR TREES.



VICINITY MAP
SCALE: 1" = 1,000'

WAIVER SUMMARY:

- TO RE-LOCATE SOUTHERN BUFFERYARD 'E' THROUGHOUT THE SITE DUE TO SPACE-CONSTRAINTS.
- TO UTILIZE 5 RECENTLY TRANSPLANTED TREES IN THE NORTHERN BUFFERYARD AS CREDIT TO THE PROPOSED NORTHERN BUFFERYARD.
- TO RE-LOCATE NORTHERN EDGE BUFFERYARD PLANTINGS OUTSIDE OF THE 1-' BUFFERYARD DUE TO SPACE-CONSTRAINTS.
- TO CREDIT 20 SHRUBS AS 2 OF 4 PLANTING UNITS FOR EASTERN BUFFERYARD.
- TO INCLUDE THE TREES PROPOSED IN BUFFERYARDS AS CREDIT TOWARDS TOTAL SITE PLANTINGS (BASED OFF DISTURBANCE ~ 57 TREES REQUIRED).

ILLUSTRATIVE LANDSCAPE PLAN

OF THE LANDS OF

BAAM MOTON PARK

TAX MAP , GRID , PARCEL
EASTON,TALBOT COUNTY, MARYLAND
PREPARED FOR BAAM

RAUCH inc
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng com
Phone: 410 770 8081 | Fax: 410 770 3867

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	3/31/2026
SCALE:	1" = 30'
DRAWN BY:	GJR
DESIGNED BY:	GJR
APPROVED BY:	

SHEET NO.: L-101

Z:\+PROJECTS\260047 - BAAM - MOTION PARK, EASTON, MD\LANDSCAPE\AUTOCAD\260047L-100-PRODUCTION.DWG

Town of Easton
Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Easton Staff Development Review

Property Information

Address	406 MOTON STREET EASTON MD 21601						
Tax Map	0104	Grid	00EA	Parcel	1367B	Lot	N/A
Deed Refernce:	Liber	03153	Folio	00290			
Plat Reference:	Liber	75	Folio	0002			
Base Zoning District	R7A	Historic District Y ☐ N ☒		Planning Redevelopment Y ☒ N ☐			

Purpose of Application / Description of Work:

THE SITE IMPROVEMENTS PROPOSED INCLUDE TWO NEW MULTI-USE BUILDINGS WITH SOLAR ON THE ROOF. THE SITE FEATURES INCLUDE PARKING AND ACCESSIBLE ENTRIES AND SITE PATHS, DUMPSTER ENCLOSURE WITH LOADING ACCESS, TRAFFIC GARDEN WITH STORAGE SHED, COMMUNITY GARDEN, AND UTILITY BUILDING/ SHED. THE PROJECT PRIORITIZES OPEN SPACE AND STORMWATER MANAGEMENT FEATURES THAT UTILIZE THE NATURAL FLOW PATHS OF THE PROPERTY AND THE SURROUNDING STORM DRAIN SYSTEM.

Owner

Name	BUILDING AFRICAN AMERICAN MINDS INC.		
Mailing Address	PO BOX 1066 EASTON MD 21601		
Telephone No.		E-mail	

Applicant / Agent

Name	RAUCH INC.		
Mailing Address	106 N HARRISON ST. EASTON MD 21601		
Telephone No.		E-mail	

Surveyor / Engineer

Name	RAUCH INC.	License No.	11024	Expiration Date	JULY 24, 2026
Mailing Address	106 N HARRISON STREET EASTON MD 21601				
Telephone No.		E-mail			

Any modifications during review shall warrant an updated application.

I do hereby solemnly declare and affirm that the information provided by this application and the documents attached hereto accurately represent the conditions of the request and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent	
Date	
Printed Name of Applicant or Agent	BRIAN FITZGERALD

For Office Use Only

Easton Staff Development Review Meeting Required Y ☒ N ☐

Easton Staff Development Review Meeting Date 04/22/2026 2026-1699 / ESDR 26 - 05

Completeness Check Date 04/01/2026

Revisions/Resubmissions Required Y ☐ N ☐ TBD

Resubmission Date Documents Received Y ☐ N ☐

Staff Determination

Scheduled for April 22, 2026 ESDR

Planning Commission Requir Y ☒ N ☐

BOZA Required Y ☐ N ☐ TBD

Historic District Commission Required Y ☐ N ☒

Resubmission for ESDR Required Y ☐ N ☐ TBD

Staff Signature Samantha N. Smith Date 04/01/2026

Revised 02-2019

2026 - 1699 / W 26 - 05

Town of Easton
Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Supplemental Waiver Request Application

Waiver Request Type

Sidewalk ☐ Parking Spaces ☐ Parking/Aisle Dimension ☐

Landscaping & Buffering ☐ Signage ☐ Other ☐

Project Information

Address	406 Moton Street, Easton MD 21601						
Tax Map	0104	Grid	00EA	Parcel	1367B	Lot	N/A
Zoning District	R7A	PC Meeting Date		Historic District	Yes ☐	No	☐
Owner or Agent	BAAM & Rauch INC						
Mailing Address	106 N. Harrison Street, Easton, MD 21601						
Telephone No.	[redacted]	Email	[redacted]				

Request Details

Please attach a detailed description of the waiver request(s) being made and the justification(s) for requesting said waiver(s).

Due to site constraints, we request a waiver to locate bufferyard plant units outside the area designated by the typical 10' wide class 'E' Buffer Zone.
On the northern property line: existing & proposed utilities conflict with the potential BY planting - we propose to move these in towards the interior, and outside of the utility zone.
On the south property line, a public sidewalk and drainage ditch restrict the space available to plant the BY - we propose to use these plantings in the interior, and to reinforce the north screen.

☐ Ordinance Section Supporting Waiver Request. 28-1014.7E

Any modifications during review shall warrant an updated application.

I do hereby solemnly declare and affirm that the information provided by this application and the documents attached hereto accurately represent the conditions of the request and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent

Date 3-31-2026

Printed Name of Applicant or Agent Brian Fitzgerald

Town of Easton
Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Supplemental Waiver Request Application

Waiver Request Type

Sidewalk ☐ Parking Spaces ☐ Parking/Aisle Dimension ☐

Landscaping & Buffering ☐ Signage ☐ Other ☐

Project Information

Address	406 Moton Street, Easton MD 21601						
Tax Map	0104	Grid	00EA	Parcel	1367B	Lot	N/A
Zoning District	R7A	PC Meeting Date		Historic District	Yes ☐	No ☐	
Owner or Agent	BAAM & Rauch INC						
Mailing Address	106 N. Harrison Street, Easton, MD 21601						
Telephone No.	[redacted]	Email	[redacted]				

Request Details

Please attach a detailed description of the waiver request(s) being made and the justification(s) for requesting said waiver(s).

Due to limited space available for plantings, we request plant material substitutions to fulfill required planting units for Bufferyards.
North BY: Credit 5 newly-transplanted deciduous trees towards PU credits.
West BY: Substitute 8 evergreen trees for 8 flowering trees to diversify & beautify the stmw pond
East BY: Substitute 8 evergreen trees for 20 evergreen shrubs, due to utilities, space-constraint.

☐ Ordinance Section Supporting Waiver Request. 28 1014.7 D. 6

Any modifications during review shall warrant an updated application.

I do hereby solemnly declare and affirm that the information provided by this application and the documents attached hereto accurately represent the conditions of the request and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent B F

Date 3-31-2026

Printed Name of Applicant or Agent Brian Fitzgerald

Town of Easton
Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Supplemental Waiver Request Application

Waiver Request Type

Sidewalk ☐ Parking Spaces ☐ Parking/Aisle Dimension ☐

Landscaping & Buffering ☐ Signage ☐ Other ☐

Project Information

Address	406 Moton Street, Easton MD 21601						
Tax Map	0104	Grid	00EA	Parcel	1367B	Lot	N/A
Zoning District	R7A	PC Meeting Date		Historic District	Yes ☐	No ☐	
Owner or Agent	BAAM & Rauch INC						
Mailing Address	106 N. Harrison Street, Easton, MD 21601						
Telephone No.	[redacted]	Email	[redacted]				

Request Details

Please attach a detailed description of the waiver request(s) being made and the justification(s) for requesting said waiver(s).

Waiver Request to fulfill disturbance-based planting requirement for Commercial Development. Although R7A, we posit that the appropriate landscape use is Commercial (CBD exempt). The site has no proposed residential units- and will be used as academic/mixed use. Code requires 57 disturbance-based trees (excluding bufferyard plantings). We ask that Bufferyard plantings credit towards this requirement. This allows fulfillment of code, while preserving open space for student outdoor recreation, and the proposed elements of traffic garden, community garden, and reflection patio. All other code plantings are met.

☐ Ordinance Section Supporting Waiver Request. 28-1014.6 E.1

Any modifications during review shall warrant an updated application.

I do hereby solemnly declare and affirm that the information provided by this application and the documents attached hereto accurately represent the conditions of the request and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent [signature]

Date 3/31/2026

Printed Name of Applicant or Agent Brian Fitzgerald

BAAM
MOTON STREET REDEVELOPMENT

TAX MAP 0104, GRID 000EA, PARCEL 1367B
ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR:
BUILDING AFRICAN AMERICAN MINDS, INC.
C/O DINA DALY

RAUCH INC.
office: 410.770.9081
email: design@raucheng.com | web: www.raucheng.com
106 N. Harrison St - Easton, MD 21601

PROFESSIONAL CERTIFICATION:

REVISIONS

REV. #	DATE	DESCRIPTION

DATE: 04/01/2026
SCALE: AS SHOWN
DRAWN BY: ZS, PR
DESIGNED BY: PR
APPROVED BY: AS SHOWN

SHEET NO.:
SD - A 000

Z:\Projects\260047 - BAAM - Moton Park - Easton, MD\Architecture\Drawings\SD