Planning Commission
MEETING AGENDA

Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street

1. Call to Order

2. Approval of Minutes

a. Approval of the Decision Summary from the April 18, 2024 meeting.

3. Old Business

a.

Applicant:	Shore Health System / University of Maryland Medical System
File No.:	2023 - 1027
Location:	Longwoods Road, Parcel 0129 Tax Map 0017, Grid 0023, Parcel 0129
Zoning District:	RH
Nature of Request:	General signage plan approval for the temporary placement of a 10' x 20' construction site sign and a 4'x8' sign in the RH District.

b.

Applicant:	Far Eastern Shore Winery
File No.:	2023 - 989
Location:	8374 Ocean Gateway Tax Map 0103, Grid 0EA, Parcel 2952
Zoning District:	CG
Nature of Request:	**The amendment to a previously approved signage permit for a multi-building property has been withdrawn from the May 16, 2024 Planning Commission agenda.**

c.

Applicant:	Corrigan & Trippe Ventures, LLC
File No.:	2024 - 1115
Location:	East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
Current County Zoning District:	TC/TR

Requested Town Zoning District: R-10A
Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland, Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.

4. New Business

a.
Applicant: Lane Engineering, LLC
File No.: 2024 - 1182
Location: 139 N. Washington Street
Tax Map 0104, Grid 0EA, Parcel 0612
Zoning District: CB
Request: PUD Infill recommendation to the Town Council and Subdivision Sketch Plat approval for the construction of townhomes (24 units) and single-family detached dwellings (9 units). This application (2024-1182) is also scheduled to appear on the May 13, 2024 Historic District Commission agenda for the demolition of the old Safeway building and subsequent construction of the 33 total units.

b.
Applicant: Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
File No.: 2024 - 1156
Location: 28640 Mary's Court - Talbot County Public Safety Complex
Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
Zoning District: BC
Request: Request for a Supplemental Parking Waiver from the required parking spaces. This application (SE-1156 / SE 24-04) is scheduled to appear on the

May 21, 2024 Board of Zoning Appeals agenda to obtain a Special Exception pursuant to use 304 in Table 2.1 of Section 28-202 of the Zoning Ordinance, to be utilized as a Fire, Rescue, or Police Station. The Talbot County Sheriff's Office and the Talbot County Department of Emergency Services intend to relocate their offices to this newly improved facility.

c.

Applicant:	RAUCH Inc.
File No.:	2024 - 1178
Location:	521 August Street Tax Map 0103, Grid 0EA, Parcel 1028
Zoning District:	CB
Nature of Request:	Sketch Site Plan approval for the development of lot 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot. The applicant intends to develop a 2-story mansion apartment with a total of 7 units. At their January 22, 2024 meeting, the Historic District Commission granted a Certificate of Appropriateness for the proposed redevelopment plan.

d. Shore Health System / UMMS Water and Sewer Service Plan — Formal recommendation of an amendment to the Developer's Rights & Responsibilities Agreement (DRRA) with findings as to its consistency with the Comprehensive Plan.

5. Discussion Item

a. Potential Revisions to the Zoning and Subdivision Text Amendments.

6. Adjournment

Town of Easton Planning Commission
Draft Decision Summary
Thursday, April 18, 2024 at 1:00 p.m.
Town Hall Chamber 2
14 S. Harrison Street, Easton, Maryland

Archived video of the meeting is available at:
Town of Easton Agendas and Minutes (eastonmd.gov)

Attendance:

Commission Members:
Jennifer Dindinger, Chairperson
Philip Toussaint, Vice Chairperson
Tom Klein
Victoria McAndrews
William Ryall
Michael Ports, Alternate

Staff:
Miguel Salinas, Planning and Zoning Director
Lynn B. Thomas, Town Planner
Joseph Mayer, Plan Reviewer
Nicholas Johnson, Planner
Sharon Van Emburgh Esq, Town Attorney
Rick Van Emburgh, Town Engineer
Ryan Heckler, Building Inspector
Tom Diem, Building Code Official
Jackie Naylor, Code Enforcement Director
Susan Filbird, Code Enforcement Officer
Samantha Smith, Administrative Specialist

1. **Call to Order** — Chairperson Dindinger called the meeting to order at 1:00 pm.

2. **Decision Summary Review** —
   a. March 21, 2024 - The Commission noted the following correction to the draft decision summary:

      i. Line 240: Clarifying language to the list of proposed text amendments to be further discussed including Revised Internal Illumination Standards for Signage and Food Trucks.

Commissioner Klein moved to approve the March 21, 2024 Decision Summary with amendments. Commissioner McAndrews seconded the motion.

Vote	5 - 0
FOR:	5 - Dindinger, Toussaint, Klein, McAndrews, Ryall
AGAINST:	0

ABSTAIN: 0
ABSENT: 0

3. Old Business

a. Applicant: **Four Sisters Halal Meat & Groceries**
File No.: **2019 - 0070 / 2024 -1166**
Location: 600 Dover Road, Suite 105 Easton, MD 21601
Tax Map 0105, Grid 00EA, Parcel 1053
Zoning: CB
Request: At their July 18, 2019 meeting, the Commission moved (4-1) to approve a Planned Redevelopment (PR) Overlay application for a five-year period with the condition that if the applicant ceases to operate on the property located at 600 Dover Road, the trailer shall be removed. The applicant is now seeking approval for a continuance of the previously approved (PR) Overlay application for the long-term use of an 8' wide by 20' long mobile food truck to remain on the West side of the building at a designated parking space with a no parking zone to provide pedestrian access.

Staff recommends the following conditions:

1. Any tripping hazards shall be removed as deemed necessary by the Building Inspection Division.

2. The applicant shall add cross-hatching for the no parking zone to provide pedestrian access.

3. The applicant shall address the Town's Building Inspection Division review comments:

    a. The Town of Easton Building Department is requesting a Plumbing permit application to be filled out and returned to the Building Inspection Division. We are asking for the owners to outline on the application everything plumbing related that deals with this food truck. The application should include exactly how clean and "dirty" water is being dealt with, including where and how these connections terminate, as well as how grease is being separated prior to disposal into the Town sanitary.

    b. Based on the information presented to us, a plumbing permit may or may not be issued. We cannot say for certain until received. But by supplying us with that information on an official application you have allowed us the opportunity to make that determination.

4. The applicant shall address the Talbot County Health Department

Office of Environmental Health review comment:

a. As a result of a meeting held between this office and Andleeb Khurshid on 2/18/20, Andleeb agreed to maintain and submit a record of each time the mobile unit was transported to another venue/event/location to demonstrate that the unit moves as part of its routine operation to change location for sales and stay within compliance of COMAR 10.15.03. This office has not received a record for the year 2023, therefore we cannot say whether the unit has moved as part of its routine operation within the last year.

Staff Presentation:
Miguel Salinas, Planning and Zoning Director
Joseph Mayer, Plan Reviewer
Sharon Van Emburgh Esq, Town Attorney
Ryan Heckler, Building Inspector

Applicant Presentation:
Andleeb Khurshid, Four Sisters Owner
Garrett Fitzgerald, Property Owner

Public Comment — None

Public Comment Written:
Joan Leanos

Vice Chairperson Toussaint moved to approve the request subject to the following staff recommended conditions:

1. **Any tripping hazards shall be removed as deemed necessary by the Building Inspection Division.**

2. **The applicant shall add cross-hatching for the no parking zone to provide pedestrian access.**

3. **The applicant shall address the Town's Building Inspection Division review comments:**

   a. The Town of Easton Building Department is requesting a Plumbing permit application to be filled out and returned to the Building Inspection Division. We are asking for the owners to outline on the application everything plumbing related that deals with this food truck. The application should include exactly how clean and "dirty" water is being dealt with, including where and how these connections terminate, as well as how grease is being separated prior

to disposal into the Town sanitary.

b. Based on the information presented to us, a plumbing permit may or may not be issued. We cannot say for certain until received. But by supplying us with that information on an official application you have allowed us the opportunity to make that determination.

4. The applicant shall address the Talbot County Health Department Office of Environmental Health review comment:

a. As a result of a meeting held between this office and Andleeb Khurshid on 2/18/2020, Andleeb agreed to maintain and submit a record of each time the mobile unit was transported to another venue/event/location to demonstrate that the unit moves as part of its routine operation to change location for sales and stay within compliance of COMAR 10.15.03. This office has not received a record for the year 2023, therefore we cannot say whether the unit has moved as part of its routine operation within the last year.

Commissioner Klein seconded the motion.

Vote	5 - 0
FOR:	5 - Dindinger, Toussaint, Klein, McAndrews, Ryall
AGAINST:	0
ABSTAIN:	0
ABSENT:	0

4. New Business

a. Applicant: 128 S. West Street LLC
File No.: 2024 - 1148
Location: 128 S. West Street, Easton, MD 21601
Tax Map 0104, Grid 00EA, Parcel 1990
Zoning: CB
Request: The applicant is seeking approval to allow the existing 8’ x 20’ portable on demand storage (POD) unit to remain on-site for a long term basis.

Background: On January 11, 2021, the Historic District Commission (HDC) granted a Certificate of Appropriateness for the proposed addition and exterior renovations on the contributing structure located at 128 S. West Street. On February 18, 2021, the Planning Commission (Commission) reviewed a minor subdivision plat for 128 S. West Street as a Discussion Item. The Commission voted (5-0) to recommend the concept as presented and setbacks as shown on the submission at the appropriate location however, the vote was not a formal approval. On May 20, 2021, the Commission moved (4-0) to approve the minor

subdivision plat as submitted. The minor subdivision plat, KMD 89-145 was recorded on September 13, 2021. On January 11, 2022, the HDC granted a Certificate of Appropriateness for the relocation of a shed. On February 20, 2024, the applicant obtained a Zoning Certificate for Temporary Use of a POD to remain on-site for a 30 day limit; on March 12, 2024, this use was extended for an additional 30 day time period until the pending Planning Commission review at their April 18, 2024 meeting for a use longer than sixty days.

Staff recommends the following condition:

1. Establish a time limit to remain through April 18, 2026.

Staff Presentation:
Joseph Mayer, Plan Reviewer
Lynn Thomas, Town Planner
Tom Diem, Building Code Official
Jackie Naylor, Code Enforcement Officer
Susan Filbird, Code Enforcement Officer

Applicant Presentation:
Noah Matten, 128 S. West Street LLC

Public Comment — None

Vice Chairperson Toussaint moved to approve the request to remain for one (1) year of use (April 18, 2025). Commissioner McAndrews seconded the motion.

Vote	4 - 1
FOR:	4 - Dindinger, Toussaint, McAndrews, Ryall
AGAINST:	1 - Klein
ABSTAIN:	0
ABSENT:	0

b. Applicant: Corrigan & Trippe Ventures, LLC
File No.: 2024 - 1115
Location: East Side of Ocean Gateway, South of Dutchmans Lane, Easton,MD 21601
Tax Map 0034, Grid 0024, Parcels 0128 & 0175
Current County Zoning: TC/TR
Requested Town Zoning: R-10A
Request: The applicant is seeking Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland, Tax Map 0034, Grid 0024, Parcels 0128 & 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as

well as a formal recommendation concerning the Annexation and the proposed Zoning Classification of R-10A to the property.

Staff Presentation:
Joseph Mayer, Plan Reviewer
Lynn Thomas, Town Planner
Miguel Salinas, Director of Planning and Zoning
Sharon Van Emburgh Esq., Town Attorney

Applicant Presentation:
Zachary A. Smith Esq., Armistead, Lee, Rust & Wright, PA
William Corrigan, Owner

Public Comment:
Tom Alspach, Talbot Preservation Alliance
Becky and Orville Allen, 7567 Ocean Gateway
Norma Hallegos and Ashley Guillen, 7511 Ocean Gateway

Public Comment Written:
Becky and Orville Allen, 7567 Ocean Gateway

Vice Chairperson Toussaint moved to table the application. Commissioner Klein seconded the motion.

The Commission made a request for staff to work with the applicant to provide recommended language in an Annexation Agreement to address a commitment to attainable housing; alternatives for traffic, safety and connectivity; and other environmental site conditions including access to amenities.

Vote	5 - 0
FOR:	5 - Dindinger, Toussaint, Klein, McAndrews, Ryall
AGAINST:	0
ABSTAIN:	0
ABSENT:	0

c. Applicant: Fink, Whitten & Associates
File No.: 2024 - 1130
Location: 220 South Street, Easton, MD 21601
Tax Map 0104, Grid 00EA, Parcel 1902
Zoning: R-7A
Request: The applicant is proposing to subdivide the property located at 220 South Street to create two lots (Lots 1 and 2) and is seeking a Supplemental Waiver Request of two (2) parking spaces for the proposed Lot 2. At their April 16, 2024 meeting, the Board of Zoning Appeals (Board) moved (3-0) to approve a variance request from the minimum rear and side setbacks in the R-7A zoning district with the condition that: 1) The applicant shall comply with all

Subdivision Regulations and obtain all applicable Building permits; and 2) As determined by the findings of the Board including the applicant's submission and Town staff report, the recorded plat shall indicate that any subsequent expansion or encroachment into the setback is required to appear before the Board prior to approval.

Staff recommend the following conditions:

1. The waiver should be modified to request three (3) parking spaces.

2. Approval of the parking waiver is contingent upon the Board of Zoning Appeals decision and the applicant obtaining all applicable building permits and a Certificate of Occupancy for the accessory dwelling on Lot 2.

Staff Presentation:
Joseph Mayer, Plan Reviewer
Miguel Salinas, Director of Planning and Zoning

Applicant Presentation:
Elizabeth "Ebie" Fink
Pamela Into, Owner

Public Comment:
Michael Brophy, 216 South Street

Public Comment Written:
Joyce DeLaurentis, 215 Talbot Street

Commissioner McAndrews moved to approve the waiver request for three (3) parking spaces. Vice Chairperson Toussaint seconded the motion.

Vote	5 - 0
FOR:	5 - Dindinger, Toussaint, Klein, McAndrews, Ryall
AGAINST:	0
ABSTAIN:	0
ABSENT:	0

5. Discussion Items

a. Follow up from the April 17, 2024 Inclusionary Zoning Ordinance Workshop — The Commission scheduled an additional special workshop for Thursday, May 23, 2024 at 10:00 am for the purpose of continuing the review and discussion of the draft Inclusionary Zoning Ordinance. The Commission is anticipated to make

a formal recommendation of this draft to the Easton Town Council prior to the introduction of new legislation.

6. **Adjournment** — Chairperson Dindinger moved to adjourn. Vice Chairperson Toussaint seconded the motion. The meeting was adjourned at 4:00 p.m.

TOWN OF EASTON
PLANNING & ZONING
14 S Harrison Street, Easton MD 21601

Date of Meeting: May 16, 2024

3a

PLANNING COMMISSION
SUPPLEMENTAL ITEM

SUBJECT:	**Shore Health System/University of Maryland Medical System**
ELECTION WARD:	Ward 1
CRITICAL ACTION DATE:	At the pleasure of the Commission
STAFF CONTACTS:	Joseph Mayer, Plan Reviewer Miguel Salinas, Director of Planning and Zoning
DOCUMENT CREATED ON:	May 6, 2024

PURPOSE: The applicant is seeking approval from the Planning Commission for a general signage plan for the temporary placement of a 10' x 20' construction site sign and a 4'x8' sign in the RH District

RECOMMENDATION:

Staff: Staff supports Planning Commission approval of the proposed General Signage Plan for the temporary placement of two construction site signs, with a condition (see below).

28 – 311.2 DEVELOPMENT STANDARDS

K. Signage – Signage within an RH District shall be developed in accordance with a General Signage Plan approved and/or modified by the Planning and Zoning Commission for each RH District. The size, location, height and number of signs constructed within a RH District shall comply with the General Signage Plan applicable at the time of construction of such signs. In light of the master-planned, campus style development permitted by a RH District and the importance of providing for efficient direction and movement of patients and visitors throughout the campus, the General Signage Plan shall provide for the planning, design, and implementation of signs that are coordinated and compatible throughout a RH District. The General Signage Plan shall comply with Section 28 – 1101 of the Zoning Code except as such provisions are modified by the Planning and Zoning Commission through approval of such General Signage Plan. The Planning and Zoning Commission may permit deviations from Section 28 – 1101 with respect to the number, type and/or size of signs, including up to the

following:

1. *One freestanding sign at each State road frontage, the area of which may not exceed 250 square feet and the height of which may not exceed 15';*

2. *Identification signs for the name of the regional medical campus on not more than three facades of a hospital, so long as the area of the signs does not exceed 12% of the area of each façade and the area of each sign does not exceed 400 square feet; and*

3. *Identification signs for the name(s) of a business or office complex or tenant(s) on not more than two facades of a structure two or more stories in height, so long as the area of each of the signs does not exceed the lesser of 10% of the façade or 300 square feet.*

ISSUES: There are no outstanding issues.

RECOMMENDED CONDITIONS:

Staff recommends the Planning Commission approve the the proposed General Signage Plan for the temporary placement of two construction site signs with the following condition:

- Prior to the removal of the temporary construction site signs, the applicant is required to obtain approval from the Planning and Zoning Commission for an amendment to the General Signage Plan that depicts the permanent placement of signs.

DRAFT MOTIONS:

1. I move that the Planning Commission approve the proposed General Signage Plan for the temporary placement of two construction site signs with staff's Condition of Approval.

OR

2. I move that the Planning Commission forward the application to the June 20th Commission meeting for further discussion.

OR

3. I move an alternate motion.

ATTACHMENTS:
1. 2024.04.29 SRMC - Temp Signs - PC Application, paper copy & PDF
2. 2024.04.29 TM - PC-TempSignage-Submittal Package, paper copy & PDF
3. 2024.04.29 UMSRMC-TEMP_SITE_SIGNS, paper copy & PDF
4. 2024.04.29 UMSRMC-TempSiteSignageLetter, paper copy & PDF
5. 2024.05.05 PC 400' Notice Letter - Shore Health UMMS, paper copy & PDF

RECEIVED
APR 29 2024
TOWN OF EASTON

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Planning Commission Concept, Use, and Design Application

Site Information					
Structure's Floor Area	N/A			Structure's Square Feet	N/A
Area of Disturbance	73.60 Ac.			Number of Dwelling Units	N/A
Property Size		Acres	236.15	Square Feet	10,286,694
Address	Longwoods Road (Route 662) - South of Hiners Lane and West of Talbot County Community Center				
Tax Map	17	Grid	23	Parcel	129	Lot	3/5
Zoning District	RH	Historic District	Y ☐ N ☐	PRD	Y ☐ N ☐		
Other Information					
Existing Use	Farm land				

Owner			
Name	University of Maryland Medical System / UM Shore Regional Health		
Mailing Address	219 S. Washington Street, Easton, MD 21601		
Telephone No.	410-328-7283	Email	rstever@umm.edu

Applicant / Agent			
Name	Kenneth Webb IV AIA, ACHA, LEED AP		
Mailing Address	1250 I St NW, #600, Washington, DC 20005		
Telephone No.	202-315-1153	Email	kwebb@hksinc.com

General Information:

Planning Commission Meeting request for Approval of Temporary Signage ("Coming Soon"); size of sign larger than described in the Town zoning ordinance. Development Site Plan package of hospital is in with the Town for 2nd review. The SHA plans have been through 1 review by SHA. The Community Center entrance has been reviewed once by Talbot County. The goal is to obtain grading permits in July 2024.

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	4/29/2024
Printed Name of Applicant or Agent	Kenneth Webb IV AIA, ACHA, LEED AP

For Office Use Only

Planned Commission Meeting Date	05/16/2024	
Review Fee Amount	$250.00	**ESDR 23-19 / 2023-1027**
Review Fee Paid Date	04/30/2024	
ESDR Y / N Date	09/27/2023	

Revised 02-2019

HKS

29 April 2024

HKS on behalf of University of Maryland Medical System and UM Shore Regional Medical Center

Re: University of Maryland Shore Regional Medical Center
Temporary Site Signage

HKS Project No. 19782.014

Dear Mr. Salinas:

We are asking for consideration of temporary site signage on behalf of University of Maryland Medical System (UMMS) and University of Maryland Shore Regional Medical Center (UMSRMC) at the site of the replacement hospital construction site. We are proposing two temporary signs to communicate the project is "coming soon." Please see included exhibit and below.

1. UMSRMC would like to place a 10'x20' sign along Route 50, as indicated at Location 01 on the attached. This sign is requested to be larger than 32 SF due to its location along a state highway with higher speed limits to enable safe visibility.
2. Additionally, UMSRMC would like to place a 4'x8' sign along Route 662. First preference is at Location 02b, at the intersection of Route 662 and Airport Road. This sign is proposed to be 32 SF, but is located outside the UMSRMC site boundary. If this is found unacceptable through further due diligence, we propose Location 02a, at the intersection of Route 662 and Hiners Lane. This location is within the site boundary and the 32 SF sign is within limited duration signage guidelines.

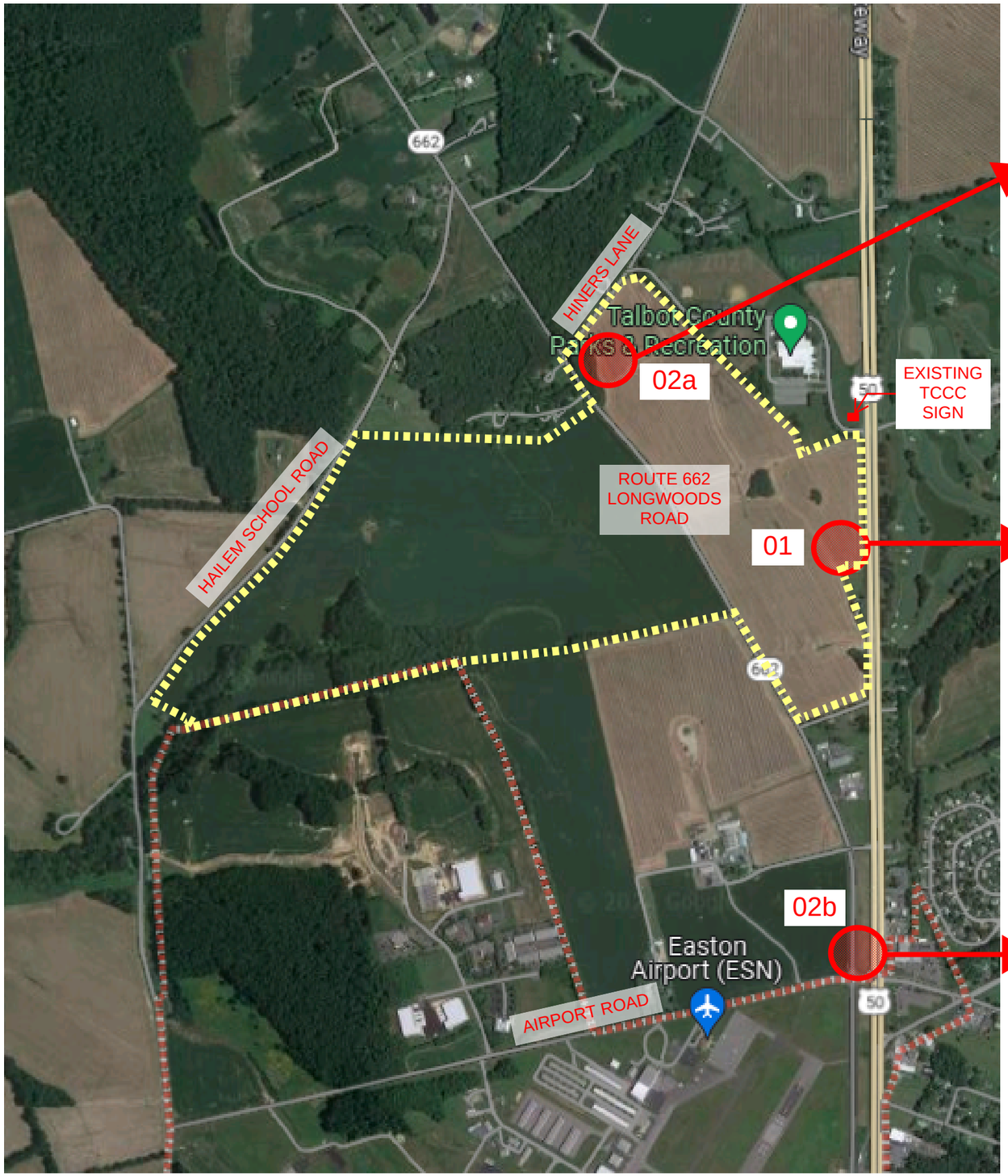
These are both temporary site signage; permanent signage will be submitted at a later date. It is anticipated that these signs will be installed in late June to early July 2024. Grading permits will not be in hand by this date, but are anticipated summer 2024.

Thank you for your consideration.

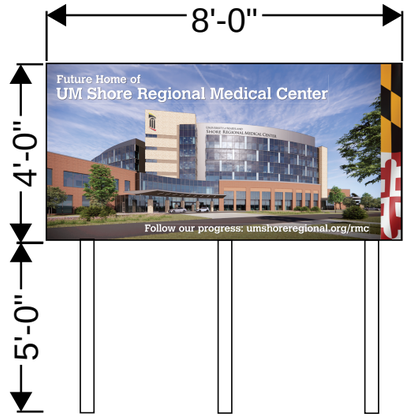
Sincerely,

Kenneth Webb IV, AIA, ACHA, LEED AP
Regional Practice Director, Health
Partner
HKS

HKS, P.C.
1250 I St NW #600
Washington, DC 20005

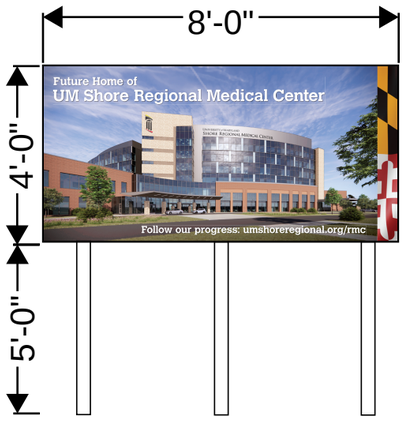


LOCATION -02a ROUTE 662 AT HINERS LANE



LOCATION -01 ROUTE 50

LOCATION -02b ROUTE 662 AT AIRPORT ROAD



UM SHORE REGIONAL HEALTH

TEMPORARY SITE SIGNAGE PROPOSAL - 4/29/2024

HKS COVĀLUS WHITING-TURNER MAHOGANY

UNIVERSITY of MARYLAND SHORE REGIONAL HEALTH

TOWN OF EASTON

14 South Harrison Street
Easton, Maryland 21601

May 1, 2024

Dear Resident,

The Easton Planning Commission (Commission) will hold a public meeting on **Thursday, May 16, 2024 at 1:00 p.m**. in the Easton Town Council Chambers located on the second floor of 14 South Harrison Street. The Town of Easton Zoning Ordinance requires that owners of property located within 400 feet of a parcel on which certain types of applications are pending be given notice of upcoming meetings or hearings. If you are a tenant in or an owner of a multi-unit building, please distribute or post this notice in a visible location for all other tenants or owners to view. If you are a tenant of a rental property, please notify the property owner that this notice letter has been distributed to their property. Notice has also been sent to the Star Democrat, a sign has been posted at the subject property and the hearing agenda has been posted on the Town of Easton website: http://eastonmd.gov/.

This letter is sent to inform you that Application 2023-1027 has been filed on behalf of Shore Health System of University of Maryland Medical System (UMMS) at Longwoods Road, also generally described as Tax Map 0017, Grid 0023, Parcel 0129, to request General Signage Plan approval for the temporary placement of a 10' x 20' construction site sign, and 4' x 8' sign in the RH District.

Copies of the proposed application are on file and available for public review in the Town's Planning Office at 14 South Harrison Street between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday. **In addition, digital copies will be available for review one week prior to the scheduled meeting via the Town's website at** https://www.eastonmd.gov/129/Agendas-Minutes. If you have any questions regarding this application, please contact the Planning Office at (410) 822-1943 or via email at ssmith@eastonMD.gov.

Samantha N. Smith

Samantha N. Smith, Administrative Specialist
Planning & Zoning Department
410-822-1943 ssmith@eastonMD.gov

APG Media of Chesapeake, LLC

INVOICE
04/29/24

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

Cust. AcctID:		Creation Date:	**04/29/24**
		Ad Date:	**05/01/24**
		Class:	
Name:	**Joanne Drummer**	Ad ID:	
Company:	**TOWN OF EASTON (L)**	Words:	
Address:	**PO Box 520**	Lines:	
	EASTON, MD 21601	Agate Lines:	
		Depth:	
		Inserts:	
		Blind Box:	
Telephone:	**(410) 822-2525**		
Description:	**Planning Comm Meeting**		

Other Charges:		Total:	
Discount:			
Surcharge:		Paid Amount:	
Credits:			
Bill Depth:		Amount Due:	

CREDIT CARD DETAILS

PT	CT	CN	Number	Exp.	Amnt.

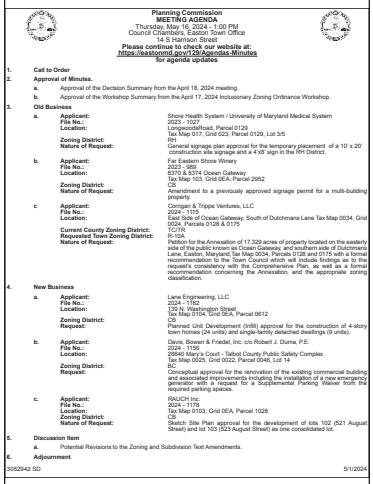
Publication	Start	Stop	Inserts
The Star Democrat	05/01/24	05/01/24	1

Ad Note:

Sign posted on May 1, 2024

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!



Planning Commission
MEETING AGENDA
Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street
Please continue to check our website at:
https://eastonmd.gov/129/Agendas-Minutes
for agenda updates

1. **Call to Order**
2. **Approval of Minutes.**
   a. Approval of the Decision Summary from the April 18, 2024 meeting.
   b. Approval of the Workshop Summary from the April 17, 2024 Inclusionary Zoning Ordinance Workshop.
3. **Old Business**
   a. **Applicant:** Shore Health System / University of Maryland Medical System
      File No.: 2023 - 1027
      Location: Longwoods Road, Parcel 0129
      Tax Map 017, Grid 023, Parcel 0129, Lot 3/5
      Zoning District: RH
      Nature of Request: General signage plan approval for the temporary placement of a 10' x 20' construction site signage and a 4'x8' sign in the RH District.
   b. **Applicant:** Far Eastern Shore Winery
      File No.: 2023 - 999
      Location: 8370 & 8374 Ocean Gateway
      Tax Map 103, Grid 0EA, Parcel 2952
      Zoning District: CB
      Nature of Request: Amendment to a previously approved signage permit for a multi-building property.
   c **Applicant:** Corrigan & Trippe Ventures, LLC
      File No.: 2024 - 1115
      Location: East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
      Current County Zoning District: R-10A
      Requested Town Zoning District: R-10A
      Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland, Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.
4. **New Business**
   a. **Applicant:** Lane Engineering, LLC
      File No.: 2024 - 1162
      Location: 139 N. Washington Street
      Tax Map 0104, Grid 0EA, Parcel 0612
      Zoning District: CB
      Request: Planned Unit Development (infill) approval for the construction of 4-story town homes (24 units) and single-family detached dwellings (9 units).
   b. **Applicant:** Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
      File No.: 2024 - 1156
      Location: 28640 Mary's Court - Talbot County Public Safety Complex
      Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
      Zoning District: BC
      Request: Conceptual approval for the renovation of the existing commercial building and associated improvements including the installation of a new emergency generator and a request for a Supplemental Parking Waiver from the required parking spaces.
   c. **Applicant:** RAUCH Inc.
      File No.: 2024 - 1179
      Location: Tax Map 0103, Grid 0EA, Parcel 1028
      Zoning District: CB
      Nature of Request: Sketch Site Plan approval for the development of lots 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot.
5. **Discussion Item**
   a. Potential Revisions to the Zoning and Subdivision Text Amendments.
6. **Adjournment.**

3052942 SD 5/1/2024

APG Media of Chesapeake, LLC

INVOICE
05/06/24

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

Cust. AcctID:		Creation Date:	**05/06/24**
		Ad Date:	**05/08/24**
		Class:	
Name:	**Joanne Drummer**	Ad ID:	
Company:	**TOWN OF EASTON (L)**	Words:	
Address:	**PO Box 520**	Lines:	
	EASTON, MD 21601	Agate Lines:	
		Depth:	
		Inserts:	
		Blind Box:	
Telephone:	**(410) 822-2525**		
Description:	**Planning Comm Meeting**		

Other Charges:		Total:	
Discount:			
Surcharge:		Paid Amount:	
Credits:			
Bill Depth:		Amount Due:	

CREDIT CARD DETAILS

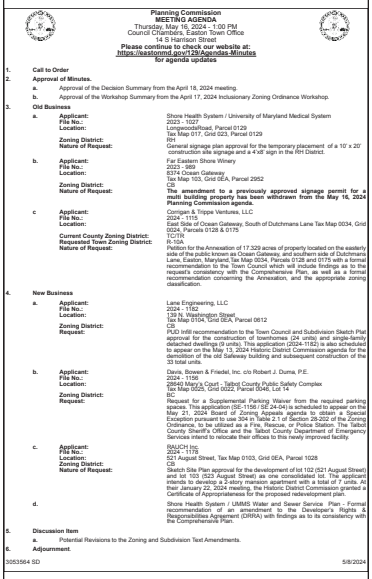
PT	CT	CN	Number	Exp.	Amnt.

Publication	Start	Stop	Inserts
The Star Democrat	05/08/24	05/08/24	1

Ad Note:

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!



Planning Commission
MEETING AGENDA
Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street

Please continue to check our website at:
https://eastonmd.gov/139/Agendas-Minutes
for agenda updates

1. **Call to Order**
2. **Approval of Minutes.**
   a. Approval of the Decision Summary from the April 18, 2024 meeting.
   b. Approval of the Workshop Summary from the April 17, 2024 Inclusionary Zoning Ordinance Workshop.
3. **Old Business**
   a. **Applicant:** Shore Health System / University of Maryland Medical System
      File No.: 2023 - 1027
      Location: Longwoods Road, Parcel 0129
      Tax Map 017, Grid 023, Parcel 0129
      Zoning District: RH
      Nature of Request: General signage plan approval for the temporary placement of a 10' x 20' construction site signage and a 4'x8' sign in the RH District.
   b. **Applicant:** Far Eastern Shore Winery
      File No.: 2023 - 989
      Location: 8374 Ocean Gateway
      Tax Map 103, Grid 0EA, Parcel 2952
      Zoning District: CB
      Nature of Request: **The amendment to a previously approved signage permit for a multi building property has been withdrawn from the May 16, 2024 Planning Commission agenda.**
   c **Applicant:** Corrigan & Trippe Ventures, LLC
      File No.: 2024 - 1115
      Location: East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
      Current County Zoning District: IL
      Requested Town Zoning District: IL-10A
      Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland, Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.
4. **New Business**
   a. **Applicant:** Lane Engineering, LLC
      File No.: 2024 - 1162
      Location: 139 N. Washington Street
      Tax Map 0104, Grid 0EA, Parcel 0612
      Zoning District: RR
      Request: PUD Infill recommendation to the Town Council and Subdivision Sketch Plat approval for the construction of townhomes (24 units) and single-family detached dwellings (9 units). This application (2024-1162) is also scheduled to appear on the May 13, 2024 Historic District Commission agenda for the demolition of the old Safeway building and subsequent construction of the 33 total units.
   b. **Applicant:** Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
      File No.: 2024 - 1156
      Location: 28640 Mary's Court - Talbot County Public Safety Complex
      Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
      Zoning District: BC
      Request: Request for a Supplemental Parking Waiver from the required parking spaces. This application (SE-1156 / SE 24-04) is scheduled to appear on the May 21, 2024 Board of Zoning Appeals agenda to obtain a Special Exception pursuant to use 304 in Table 2.1 of Section 28-202 of the Zoning Ordinance, to be utilized as a Fire, Rescue, or Police Station. The Talbot County Sheriff's Office and the Talbot County Department of Emergency Services intend to relocate their offices to this newly improved facility.
   c. **Applicant:** RAUCH Inc.
      File No.: 2024 - 1179
      Location: 521 August Street, Tax Map 0103, Grid 0EA, Parcel 1028
      Zoning District: CB
      Nature of Request: Sketch Site Plan approval for the development of lot 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot. The applicant intends to develop a 2-story mansion apartment with a total of 7 units. At their January 22, 2024 meeting, the Historic District Commission granted a Certificate of Appropriateness for the proposed redevelopment plan.
   d. Shore Health System / UMMS Water and Sewer Service Plan - Formal recommendation of an amendment to the Developer's Rights & Responsibilities Agreement (DRRA) with findings as to its consistency with the Comprehensive Plan.
5. **Discussion Item**
   a. Potential Revisions to the Zoning and Subdivision Text Amendments.
6. **Adjournment.**

3053564 SD 5/8/2024

TOWN OF EASTON
PLANNING & ZONING
14 S Harrison Street, Easton MD 21601

Date of Meeting: April 18, 2024

4b

PLANNING COMMISSION
PROPOSED ANNEXATION
STAFF REPORT

SUBJECT: **PROPOSED ANNEXATION**

ELECTION WARD: Ward 3 (Upon Annexation)

CRITICAL ACTION DATE: Apr 18, 2024

STAFF CONTACTS: Lynn Thomas, Town Planner
Sharon VanEmburgh , Town Attorney
Miguel Salinas, Director of Planning and Zoning

APPLICANT: Zachary A. Smith

PROPERTY OWNER: Corrigan & Trippe Ventures, LLC

DOCUMENT CREATED ON: April 10, 2024

PURPOSE: The applicant is seeking Annexation of the property into Town limits. Specifically, at this meeting, a recommendation to the Town Council is needed.

RECOMMENDATION: Staff recommends that the Commission recommends approval of the Annexation, finds the proposed annexation request consistent with the Comprehensive Plan, and recommends the assignment of the R-10A Zoning Classification to the property.

APPLICATION INFORMATION:	
APPLICANT: Zachary A. Smith	**OWNER** Corrigan & Trippe Ventures, LLC

PARCELS/ACREAGE:

Address	East Side of Ocean Gateway
Parcel Information	Acreage
Map 034, Parcel 128 & 175	17.329 ac.

PROPOSED ZONING R-10A	**LOCATION:** East side of Ocean Gateway
EXISTING ZONING TC/TR (Talbot County)	**EXISTING LAND USE:** Vacant
GROWTH AREAS DESIGNATION: Priority 1 (Boundary Refinement)	**FUTURE LAND USE MAP:** Commercial

CONTEXT:
Location/Site Access – The subject property is located on the east side of US Route 50 (Ocean Gateway), south of Royal Farms and east of properties fronting Route 50. The proposed annexation includes Second and Third Streets.

Existing Conditions – Vacant and partially cleared, partially forested.

Surrounding Properties

- To the east are the rear of lots within the Stoney Ridge Subdivision. Included among these lots is a Park. These lots are zoned R-10A under Easton's Zoning Code.
- To the north is the Royal Farms Convenience Store and the vacant area that is approved for construction of climate-controlled storage. This property is zoned PUD (with an underlying classification of CL).
- To the west are a number of lots directly fronting Route 50. These are not within the jurisdiction of the Town of Easton and are zoned Town Residential, or TR, by Talbot County.
- To the south is the Unitarian Universalist Church. This parcel is zoned Town Conservation, or TC, by Talbot County.

PROPOSAL: The Applicant is seeking Annexation of the subject property into the Town, presumably so that it can be developed under Town rules and regulations as well as take advantage of Town infrastructure.

STAFF RECOMMENDATION & DISCUSSION:

Staff recommends that the Commission recommends approval of the Annexation, finds the proposed annexation request consistent with the Comprehensive Plan, and recommends the assignment of the General Commercial R-10A Zoning Classification to the property. It should be noted that this request is similar to a couple of recent requests whereby the proposed land use in our Comprehensive Plan is different from the requested zoning and the current zoning under Talbot County's jurisdiction. In this case, our Comprehensive Plan recommends that these parcels be zoned for commercial usage. The applicant is requesting R-10A Zoning and has indicated that they will likely file a PUD for a multifamily development project. In that scenario, the actual zoning assigned is virtually moot as they could propose such a PUD regardless of the assigned zoning. It would only matter should that proposal, for whatever reason, fail to move to fruition. Given the well documented need for more housing and the fact that the subject property does not actually front Route 50, there is a compelling argument to assign a residential zoning classification in this instance.

It is also worth noting that the proposed annexation boundary is, at best, quirky. This is, however, likely to increasingly be the case given that we have adopted a growth boundary, beyond which we will not entertain requests for annexation. There is only so much land available for potential development. Requests for annexation to accommodate our desired growth will potentially continue to face this issue, especially when, as is the case here, the area proposed for annexation is located adjacent to "legacy development" located outside of the Town limits. State Annexation laws prohibit the creation of "islands of unincorporated land surrounded by incorporated land", so applicants for annexation will likely need to be creative in satisfying this requirement, as is the case with this application which leaves a silver of land parallelling a stream bed to satisfy the criteria.

DRAFT MOTIONS:

1. I move that the Planning Commission finds the proposed Annexation consistent with the Town's Comprehensive Plan and recommends that the Easton Town Council approve the Annexation request and assign the Town's R-10A Zoning classification to the Annexation properties.

OR

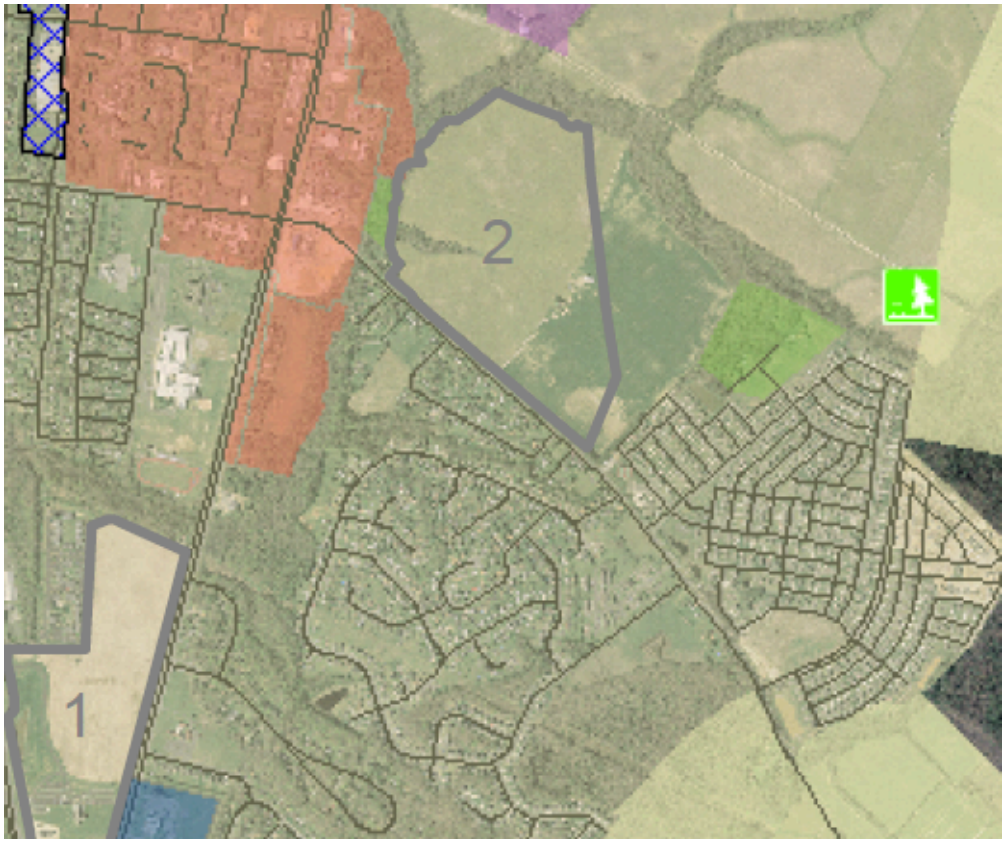
2. I move that the Planning Commission table the application to the October 19th Commission meeting for further discussion.

OR

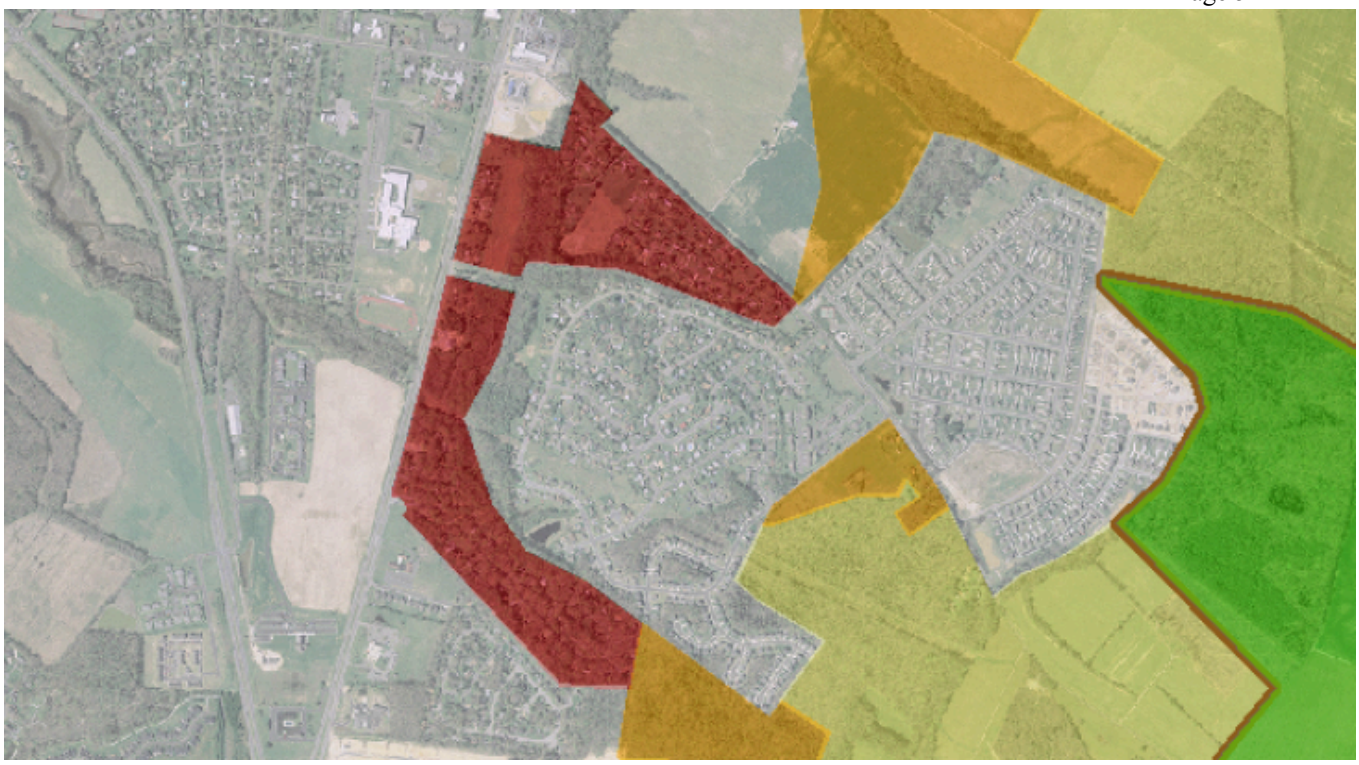
3. I move an alternate motion.

ATTACHMENTS:

1. Future Land Use Map
2. Growth Areas Map
3. Eye Over Easton Aerial Photo



Future Land Use Map



Growth Areas Map

ArcGIS Web Map

TOWN OF
EASTON
ENGINEERING DEPARTMENT

DATE: **February 29th, 2024**

TO: **Zach Smith – Applicant**
Cc: **Rick Van Emburgh – Town Engineer**
Aaron Goller – EUC
Lynn Thomas - Planning and Zoning
FROM: **Sierra Clem – Engineering Department**
SUBJECT: **Petition for Annexation - Ocean Gateway and Dutchmans Lane**
Sketch Site Plan Review - ESDR

Our office has reviewed the Application for the Subject annexation received on 1/22/2024. The request for annexation is acceptable to our Department with the following recommendations for the Planning Commission and Town Council:

1. Provide additional ROW width to meet Town standards for Third Street.
2. Label the Right-of-Ways indicating which Jurisdiction has authority.
3. Label all existing easements.
4. Please clarify if any existing ROW is being requested for abandonment.
5. If Annexed, future proposals should not include dead ends or cul-de-sacs.
6. If Annexed, future proposals should include a pedestrian connection to the Town Park to the east.
7. It is our recommendation to not have the proposed Town Boundary split a parcel. One parcel in two jurisdictions may cause confusion for public amenities and emergency services.

Please contact me if you have any questions. Thank you.

P.O. Box 520, Easton, Maryland 21601
410-820-8822
Engineering@EastonMD.gov - www.EastonMD.gov

ANNEXATION AND PUBLIC FACILITIES AGREEMENT

THIS ANNEXATION AND PUBLIC FACILITIES AGREEMENT ("**Agreement**") made this ____ day of _____, 2024, by the TOWN OF EASTON, a Maryland municipal corporation ("**Town**") and CORRIGAN & TRIPPE VENTURES, LLC, a Maryland limited liability company ("**Petitioner**"). Herein, the Town and Petitioner are each a "**Party**" and collectively, the "**Parties**".

RECITALS

The Recitals set forth herein, to the extent that they set forth the intentions of or commitments by the Parties, are enforceable provisions of this Agreement.

A. Petitioner is the fee simple owner of a parcel of land designated as Parcel 128 on Talbot County Tax Map 34, which is located along the east side of Ocean Gateway/U.S. Route 50 in Easton, Maryland. Such parcel totals 17.329 acres, more or less, and is referred to herein as the "**Annexation Property**".

B. The Annexation Property is contiguous and adjacent to the present corporate boundary of the Town. The Annexation Property is more particularly depicted as "TOTAL AREA OF ANNEXATION AREA: 17.329 AC ±" (the "Annexation Property") on a plat titled "ANNEXATION PLAT ON THE LANDS OF CORRIGAN AND TRIPPE VENTURES, LLC IN THE FIRST ELECTION DISTRICT TALBOT COUNTY, MARYLAND TAX MAP 34, GRID 24 PARCEL 128", prepared by Lane Engineering, LLC, dated December 21, 2023 ("**Annexation Plat**"), which plat is incorporated herein and a reduced scale copy of which is attached hereto as Exhibit A. The Annexation Property is also more particularly described by metes, bounds, courses and distances by a legal description ("**Annexation Description**") dated January 11, 2024 prepared by Lane Engineering, LLC entitled "ANNEXATION DESCRIPTION ON THE LANDS OF CORRIGAN AND TRIPPE VENTURES, LLC IN THE FIRST ELECTION DISTRICT TALBOT COUNTY, MARYLAND", which is attached hereto as Exhibit B.

C. In order to effectuate the annexation of the Annexation Property, Petitioner executed and submitted to the Town a Petition for Annexation of the Annexation Property ("**Annexation Petition**"). Petitioner constitutes the owner of one hundred percent (100%) of the assessed valuation of the Annexation Property. There are no registered voters in Talbot County who reside on the Annexation Property.

D. The 2010 Town of Easton Comprehensive Plan, as amended (the "Easton Plan"), designates the Annexation Property as a Priority 1 Boundary Refinement Area. (Easton Plan Growth Areas Map). The Municipal Growth Element of the Comprehensive Plan defines Boundary Refinement Areas as areas that in most cases "are already developed in Talbot County and they are deemed appropriate for consideration for annexation during the life of this Plan." (Easton Plan p. 49). The Easton Plan identifies Priority 1, Boundary Refinement Areas, including the Annexation Property, as areas that are "important to bring…into [the] Town." (Easton Plan p. 257). The Easton Plan was amended in 2016 to incorporate a Sewer Tier Map, in accordance with State law and this map classifies the Property as "Tier II – Planned for Sewer, Municipal or Growth Area."

E. The Comprehensive Plan more specifically explains that the "Priority 1 – Boundary Refinement" designation on the Growth Area Map is applied to areas that:

> "… are not presently within the Town of Easton but should be…. Generally these consist of already developed areas like Crofton, Old Stoney Ridge, Old Beechwood, and most of Easton Point. They have long ago been developed under Talbot County rules and regulations and have increasingly become surrounded by properties developed under Town of Easton guidelines. To virtually any outsider, these areas would be assumed to currently be in the Town of Easton corporate limits. It is important to bring these areas into Town for at least three reasons. First, all of these areas are served by septic systems and most utilize individual private wells for water. This is both potentially environmentally damaging and inefficient given the relative close proximity and availability of Town water and sewer.
>
> The second reason these properties should be in the Town of Easton is that given their location, they enjoy many of the conveniences of being in Town without paying a fair share. Finally, from the Town's perspective the most important reason these areas should be in Town is that they preclude the Town's ability to grow in the future. This is due to the fact that Maryland annexation law makes it illegal to create an enclave or island of unincorporated land surrounded by a municipality. Thus when such areas exist, they have the short-term effect of causing some rather strange Town boundaries as developers annex in such a way as to technically comply with this requirement. The long-term effect is that growth is stopped in a given direction. As indicated in the Land Use chapter, these are the only areas that should be annexed during the next planning period.

F. The Petitioner requested the establishment of R-10A Residential zoning for the Annexation Property, which permits medium density residential uses. The Petitioner intends to submit a Planned Unit Development ("PUD") for the property to construct multi-family housing on the property.

G. Petitioner requests annexation of the Annexation Property by the Town so long as certain matters pertaining to its present use and future development are resolved, including without limitation, matters related to zoning and extension of public utilities and services.

H. The Town desires to provide access to municipal services for existing developed areas located immediately adjacent to the municipal boundary, to control the growth that will occur adjacent to its boundaries, and to ensure that such growth enhances the character of the Town and that the impacts of such growth are managed for the benefit of the Town and its citizens.

I. The Town is willing to annex the Annexation Property, provided that the Petitioner agrees to adhere to the laws, ordinances and regulations of the Town and such other provisions set forth herein regarding the use and development of the Annexation Property.

J. Appropriate and required Town public hearings have been held pursuant to applicable law and the Easton Town Council voted to adopt Annexation Resolution No. 6185 on _____ _____, 2024, a copy of which is attached hereto as Exhibit C.

K. Petitioner and the Town desire to set forth the terms and conditions of the proposed annexation.

NOW, THEREFORE, in consideration of the mutual interests, provisions and covenants, agreements, and undertakings set forth herein, the sufficiency of which is expressly acknowledged, Petitioner and the Town mutually agree as follows:

1. **Property; Town Taxes.** The Annexation Property was annexed pursuant to the Annexation Resolution. This Annexation Agreement shall apply to, run with and bind the Annexation Property. The Annexation Property shall be subject to all applicable Town taxes, unless otherwise exempt.

2. **Zoning Upon Annexation.**

2.1. Existing Uses. Except as provided herein, Petitioner and the Town agree that all existing land uses, lots and structures, whether permitted, accessory, conforming, non-conforming, or special exceptions, currently made in and upon the Annexation Property may continue following annexation subject to the Minimum Property Maintenance Standards of the Easton Town Code and subject to the provisions regarding non-conforming uses contained in the Town Zoning Ordinance.

2.2. Zoning. Simultaneously with the filing of the Annexation Petition, Petitioner requested that the Town adopt an ordinance to: (i) amend the official Town zoning map to include the Annexation Property and (ii) apply the R-10A Residential zoning district to the Annexation Property. The Town introduced Ordinance No. 811, a copy of which is attached hereto as Exhibit D, on April 1, 2024.

2.3. County Consent. Petitioners acknowledge that due to the differences in density between the proposed Town zoning classification and the pre-annexation County zoning classification, the Town submitted a request to the Talbot County Council for express approval of the proposed Town R-10A zoning, which was approved by adoption of Talbot County Resolution No. _____ on _____, 2024.

3. **Future Uses of Annexation Property.** Petitioner intends to develop the Annexation Property with multi-family housing. Although multi-family housing is permitted by special exception or through the use of a PUD, Petitioner agrees that as a condition of the annexation, it will only develop the Annexation Property with multi-family housing in accordance with the PUD provisions of the Town Zoning Ordinance. Petitioner intends that all of the multi-family housing shall be attainable. However, at a minimum any development on the Annexation Property shall have at least twenty five percent (25%) of its housing as attainable, defined as ownership or rental housing that is attainable to those household making 60% or less of the Easton Median Family Income (MFI) adjusted by household size, and further adjusted yearly by the Easton Affordable Housing Board, and who generally do not spend more than 30% of their income on housing costs. The affordability period shall be the time period set by the Easton Affordable Housing Board. Alternatively, if developed under the Federal Low Income Housing Tax Credit Program, the income limitations of tenants and the affordability period shall be in accordance with

such program. Petitioner hereby acknowledges and agrees that any future development of the Annexation Property must comply with applicable zoning and approval processes of the Town. Development must also comply with development impact fee ordinances of the Town and County, as applicable. Nothing herein shall, in any way, constitute a development approval of a specific project or a waiver of any associated fees.

4. **Public Services and Improvements.** The following provisions, at a minimum, will govern the obligations of the Parties with respect to public services and improvements. Notwithstanding anything herein to the contrary, this Agreement shall not preclude, limit or otherwise affect the ability of the Petitioner to propose and enter into development impact fee credit agreement(s) with the Town and/or County.

4.1. Standards for Public Improvements; Equality of Exactions. Petitioner agrees to comply with the Town's design standards and requirements in effect at the time of construction ("**Town Standards**") with respect to any public improvements or infrastructure to be owned and maintained by the Town, such as roads, streets and alleys, curbs and gutters, sidewalks, and water, sewer and stormwater drainage systems. Petitioner, if undertaking such work, shall cause all work on the improvements to be completed in a good and workmanlike manner and with due dispatch. Where the construction and installation of any improvement requires the consent, permission, or approval of any public agency or private party, should Petitioner propose construction or installation, Petitioner shall promptly file all applications, enter into all agreements, post all security, pay all fees and costs, and otherwise take all steps that may be legally required to obtain such consent, permission or approval.

4.2. Provision of Public Services; Reservation and Allocation of Water and Sewer Capacity. The Town further represents, subject to the obligations of Petitioner set forth in this Section 4, that it will support existing uses and proposed redevelopment of the Annexation Property by providing all necessary municipal services required by the Annexation Property, including, but not limited to, adequate water, sewer, gas, data/communication and electric (if applicable) services through Easton Utilities, fire and police protection, garbage collection and other municipal services generally available to Town residents subject to applicable Town fees and tariffs and other costs in effect at the time services is rendered, unless otherwise agreed between the Town and Petitioner.

With regard to public water and sewer allocation, the Town guarantees, covenants and warrants that it will not set any policy, position or course of action that is detrimental to existing use or development of the Annexation Property provided that development is consistent with other applicable Town regulations and standards. These covenants notwithstanding and subject to limitations established by any subsequent development rights and responsibilities agreement(s), the Parties understand and agree that the Town, if otherwise authorized by law, may enact future ordinances, charter provisions, or amendments deemed necessary to protect the public health, safety and welfare of the citizens of the Town and said ordinances, charter provisions, or amendments shall apply to the use and development of the Annexation Property, provided such application does not interfere with Petitioner's vested rights. Nothing in this Agreement shall entitle or obligate the Town through the Easton Utilities Commission ("**EUC**") to provide electric service to any portion of the Annexation Property located outside of its authorized service area.

Petitioner acknowledges and agrees that no public water or wastewater capacity for existing uses or redevelopment of any portion of the Annexation Property shall be allocated or reserved by EUC unless and until the owner of the parcel(s) for which capacity is desired pays to EUC the capital charges applicable for such allocation or reservation under the then-applicable water and wastewater tariffs. Notwithstanding any provision herein to the contrary, Petitioner shall not be obligated to pay such capital charges or connect the Annexation Property to the Town water or wastewater systems unless and until the occurrence of the earlier of: (i) election by Petitioner to connect to such systems, (ii) issuance by the Talbot County Health Department or Maryland Department of the Environment of a final, non-appealable order requiring connection of the Annexation Property to such systems, (iii) expansion of existing improvements or redevelopment of the Annexation Property in a manner that requires capacity in excess of the capacity of the existing septic system on such property, or (iv) replacement of an existing septic system on the Annexation Property is required for any reason.

4.3. Public Utility Improvements and Extensions. Except as provided herein, to the extent that extensions of public utilities will be necessary to meet the utility service requirements within the Annexation Property, Petitioner will design and construct or cause to be constructed, at its sole expense including charges provided for in the applicable tariff(s) in effect at the time service is rendered, such lighting, gas, cable, electric (if applicable) and public water and sanitary sewer utility extensions, including water and sewer mains, trunk lines, fire hydrants and appurtenant facilities, required or imposed to serve development, redevelopment or other actions on the Annexation Property in accordance with the standards and specifications of the Town and Easton Utilities. With the exception of the pump station and force main, upon completion of construction and satisfactory inspection in accordance with Town Standards, the Town shall assume the ownership and on-going operation and maintenance of these facilities in accordance with Town ownership and maintenance policies or pursuant to the terms of a development rights and responsibilities agreement. With respect to the pump station and force main, Petitioner, or its successors in title shall own, operate, and maintain them subject to EUC approval authority.

4.3.1. Wastewater Improvements

A. *Connection of Annexation Property.* Annexation shall be effective before any connection to the Town's collection system will be permitted.

B. *Available Capacity*. Sewer capacity to the Annexation Property is available to accommodate current uses, subject to the provisions of Section 4.2. Additional capacity for future uses may be available subject to an analysis of the available capacity of the existing force main and approval by EUC at the time a development plan is proposed. At the time of annexation, the Petitioner shall be assessed the cost of one (1) EDU per parcel.

C. *Service Configuration*. Town sewer service will be available to the Annexation Property. The size of the sewer service will be based on the current or approved flow demands of the Annexation Property. Petitioner shall be responsible for all costs associated with the design and construction of the individual sewer service to the EUC public sewer main, including; taps to the main, service to the property line, grinder pump, and repairs to public infrastructure disturbed with the installation of the new sewer service.

4.3.2. Water Improvements.

A. *Connection of Annexation Property*. Annexation shall be effective before any connection to the Town's water system will be permitted. Prior to any connection to the EUC water system, the structure to be connected to the water system shall be physically disconnected by a minimum of five (5) feet from any other source of water.

B. *Available Capacity*. Water capacity to the Annexation Property is available to accommodate current uses, subject to the provisions of Section 4.2. Additional water service for future demands may be provided subject to an analysis of the capacity of the existing water main and approval by EUC at the time a development plan is proposed.

C. *Service Configuration*. Town water service will be available to the Annexation Property. The size of the water service will be based on the current or approved flow demands of the Annexation Property. Petitioner shall be responsible for all costs associated with the design and construction of the individual water service to the EUC public water main, including; taps to the water main, service to the property line, curb stops, water meter installation, and repairs to public infrastructure disturbed with the installation of the new water services.

4.4. Roads. To the extent that public roadway improvements are lawfully required to serve future development or redevelopment of any portion of the Annexation Property, Petitioner shall be responsible for constructing or causing to be constructed, at its expense, all roadway improvements required or imposed due to development, redevelopment or other actions on such Petitioner's property in accordance with the applicable standards, specifications and requirements of the Town. The parties anticipate that Third Street will be the primary access point for the Annexation Property. Petitioner agrees to diligently pursue a traffic signal at the intersection of Third Street (or such other primary access point for the Annexation Property) and Ocean Gateway/U.S. Route 50 with the State Highway Administration ("SHA"). If the Petitioner is able to secure approval from SHA and if the entire cost of the traffic signal is not borne by SHA, then the Petitioner shall be responsible for the cost of the traffic signal.

4.5 Easements and Rights-of-Ways. Petitioner hereby agrees to grant to the Town upon request, at no cost, rights-of-way or easements within ten (10) feet of the exterior boundaries of the Annexation Property in the event that such rights-of-way or easements shall be necessary for the installation, maintenance, replacement and/or removal of public utilities and roads in accordance with the provisions of this Section 4.

4.6 Public Works Agreements. If required by the Town, should Petitioner propose to develop the Annexation Property, Petitioner and Town shall enter into one or more public works agreements that provide more detailed provisions regarding the construction of all required improvements and extension of public utilities and which shall be in a form reasonably acceptable to the Town Attorney.

4.7 Amendment of Comprehensive Water and Sewer Plan. Petitioner and the Town agree and acknowledge that it may be necessary to amend the County Comprehensive Water and Sewer Plan before Petitioner undertakes the water and sewer facilities improvements and the

Town extends water and sewer services to the Annexation Property. Petitioner and the Town agree to cooperate to apply for and obtain any amendments to the Talbot County Comprehensive Water and Sewer Plan as may be required.

4.8 Connectivity. Petitioner agrees to diligently pursue pedestrian connectivity, which at a minimum shall include pedestrian connectivity to the park in the nearby Stoney Ridge subdivision and a safe pedestrian access to the intersection of Dutchmans Lane and Ocean Gateway/U.S. Route 50 where there is a pedestrian crossing. Petitioner's obligation shall include the acquisition of any required rights of way, as well as the design, permitting, and construction of the pedestrian connections.

5. **Mutual Assistance.** The Parties shall do all things reasonably necessary or appropriate to carry out and to expedite the terms and provisions of this Agreement and to aid and assist each other in carrying out the terms and provisions of this Agreement and the intentions of the Parties as reflected by said terms including, without limitation, the giving of such notices, the holding of such public hearings, the enactment by the Town of such resolutions and ordinances and the taking of such other actions as may be necessary to enable the Parties' compliance with the terms and provisions of this Agreement and as may be necessary to give effect to the terms and objectives of this Agreement and the intentions of the Parties as reflected by said terms.

Petitioner and the Town agree to promptly execute all permit applications needed by Petitioner for permits or approvals from Federal, State or County agencies and departments or any other public or private agencies from whom a permit is required to develop such Petitioner's portion of the Annexation Property, provided that such permit applications are prepared in accordance with applicable laws, ordinances, rules, and regulations and consistent with development approvals granted by the Town for the Annexation Property. The Parties each further agree to cooperate in the securing of such permits or approvals from such agencies. Nothing in this Agreement shall require the Town to vary, deviate, or depart from applicable rules, regulations, or standards in processing any permit, application, or in issuing any approval. All such rules, regulations, and standards shall remain in full force and effect.

6. **Notices**. All notices and other communication in connection with this Agreement shall be in writing and shall be deemed delivered to the addressee thereof (1) when delivered in person on a business day at the address set forth below; (2) on the third business day after being deposited in any main or branch United States post office, for delivery by properly addressed, postage prepaid certified or registered mail, return receipt requested, at the address set forth below; or (3) by a nationally-recognized delivery service company to the street address with written proof of delivery.

Notices and communications to the Petitioner shall be addressed to, and delivered at, the following addresses:

Corrigan & Trippe Ventures, LLC
27849 Little Park Road
Easton, Maryland 21601

With a copy to:
Zachary A. Smith, Esquire
114 Bay Street
Easton, Maryland 21601

Notices and communications to the Town shall be addressed to, and delivered at, the following addresses:

Town of Easton
14 S. Harrison Street
Easton, Maryland 21601
Attn: Mayor

With a copy to:
Sharon M. VanEmburgh, Esquire
Ewing, Dietz, Fountain & Kehoe, P.A.
16 South Washington Street
Easton, Maryland 21601

7. **Other Provisions.**

7.1. Applicable Law. It is the intention of the Parties that all questions with respect to the construction of this Agreement and rights and liabilities of the Parties hereunder shall be determined in accordance with the laws of the State of Maryland.

7.2. Scope of Agreement. This Agreement is not intended to limit the exercise of police powers of the Town or to limit the operation of the Town government, or to guarantee the outcome of any administrative process. Unless otherwise specifically provided in writing in this Agreement or any other subsequent agreement, this Agreement shall be subject to all properly enacted laws, and properly adopted governmental regulations, now or hereafter existing and applicable. This Agreement shall not be rendered invalid by reason of the enactment or amendment of any law or the adoption or amendment of any regulation, which law or regulation is either (1) enacted or adopted in the exercise of a governmental power for a valid governmental purpose; (2) enacted or adopted by the Town as the result of a mandate by the State of Maryland or the U.S. Government; or (3) applicable to both the Annexation Property and to similarly situated property located outside of the Town in Talbot County.

7.3. Entire Agreement. Except as specifically provided herein, this Agreement embodies and constitutes the entire understanding between the Parties with respect to the transactions contemplated herein, and all prior or contemporaneous agreements, understandings, representations and statements, oral or written, are merged into this Agreement.

7.4. Estoppel. The Parties to this Agreement agree not to challenge or contest, and waive any right to challenge or contest, in any legal or equitable proceeding, in any forum whatsoever, the validity, legality, or enforceability of this Agreement, or any of its provisions, terms or conditions.

7.5. Waiver of Breaches. No waiver of any contingency or the breach of any of the terms or provisions of this document shall be a waiver of any other contingency or proceeding or succeeding breach of this document or any provision hereof.

7.6. Project as a Private Undertaking. It is understood and agreed by and between the Parties that the development or redevelopment of the Annexation Property is a private undertaking, that neither the Town nor Petitioner is acting as the agent of any other party in any respect hereunder, and that each Party is an independent contracting entity with respect to the

provisions of this Agreement. No partnership, joint venture or other association of any kind is formed by this Agreement.

7.7. Modification. Neither this Agreement nor any provision hereof may be waived, modified, amended, discharged or terminated except by an instrument in writing signed by the party against which the enforcement of such waiver, modification, amendment, discharge or termination is sought, and then only to the extent set forth in such instrument. No such modification shall be binding on the other Party hereto nor affect their rights under this Agreement as to any other Party without such Party's written consent.

7.8. Headings. Descriptive headings are for convenience only and shall not control or affect the meaning or construction of any provision of this Agreement.

7.9. Binding Effect. The terms of this Agreement shall be binding upon and shall inure to the benefit of the Parties, any successor municipal authorities of the Town and successor owners of record of the Annexation Property, it being expressly understood and agreed that this Agreement shall be assignable, in whole or in part, by Petitioner, with respect to its portion of the Annexation Property, without the consent of the Town, any of its elected officials, employees or agents. Notwithstanding the foregoing, any transfer of all or a portion of the Annexation Property shall be subject to the terms of this Agreement.

Except with respect to Section 7.17, Petitioner's obligations hereunder shall be contingent upon annexation of the Annexation Property and establishment of the Town zoning described by Section 2.2, and shall not constitute personal obligations independent of ownership of the Annexation Property.

7.10. No Third-Party Beneficiaries. This Agreement shall not confer any rights or remedies upon any person other than the Parties hereto and their respective successors and assigns as permitted and limited by this Agreement. It is expressly agreed by all parties that the owner or successor owner of a portion of the Annexation Property shall have no contractual rights by virtue of this Agreement to control, approve or otherwise direct the size, density, proposed use, style, arrangement, timing, phasing or any other aspect of development of the remainder of the Annexation Property that it does not own.

7.11. Severability. The Parties intend that should any provision, covenant, agreement, or portion of this Agreement or its application to any person, entity, or property be held invalid by a court of competent jurisdiction, the remaining provisions of this Agreement and the validity, enforceability, and application to any person, entity, or property shall not be impaired thereby, but such remaining provisions shall be interpreted, applied and enforced so as to achieve, as near as may be, the purpose and intent of this Agreement to the greatest extent permitted by applicable law.

7.12. Enforceability. This Agreement shall be specifically enforceable in any court of competent jurisdiction by either Party hereto by any appropriate action or suit at law or in equity to secure the performance of the covenants herein contained.

7.13. Survival. The terms and conditions of this Agreement shall survive the effective date of the Annexation Resolution and shall not be merged or expunged by the annexation of the Annexation Property or any part thereof by the Town.

7.14. Exhibits. Each exhibit referred to herein or affixed hereto shall constitute a part of this Agreement and be incorporated herein by reference:

Exhibit A – Reduced-scale copy of the Annexation Plat;
Exhibit B – Legal Description;
Exhibit C – Town Annexation Resolution No. 6185; and
Exhibit D – Town Ordinance No. 811;

7.15. Time. Time is of the essence of this Agreement and of each and every provision thereof.

7.16. Town's Annexation Action. This Agreement memorializes the Town's approval of the annexation and the negotiated terms thereof, as approved by the Town during its meeting on _____ ____, 2024.

7.17. Annexation Fees. Petitioner shall be responsible for fees and expenses incurred by the Town of Easton associated with the annexation process, including, but not limited to, legal fees, engineering fees, consulting fees, and advertising expenses, as described herein. Such fees shall include fees from third parties employed by the Town. Petitioner paid the annexation fee of $15,000.00 with its filing of the annexation petition ("**Annexation Fee**"). The Annexation Fee shall be applied as a credit to the fees and expenses incurred by the Town in connection with annexation of the Annexation Property.

7.18. Mutual Drafting; No Presumption. The drafting and negotiation of this Agreement has been undertaken by the Parties hereto and their respective counsel. For all purposes, this Agreement shall be deemed to have been drafted jointly by the Parties with no presumption in favor of one Party over another in the event of any ambiguity.

7.19. Remedies. The remedies set forth in the Agreement are in addition to, and not in lieu of, any other rights or remedies available to the Parties in law or equity.

IN WITNESS WHEREOF, the Parties have executed and sealed this Agreement as of the day and year first above written, provided, however, that for the purposes of determining the date hereof, as used in this Agreement, such date shall be the last date any Party hereto executes this Agreement.

SIGNATURES APPEAR ON FOLLOWING PAGES

WITNESS: **TOWN OF EASTON**

_____ By: _____

Kathy M. Ruf, Town Clerk Megan J. M. Cook, Mayor

STATE OF MARYLAND, COUNTY OF _____, TO WIT:

I HEREBY CERTIFY, that on this _____ day of _____, 2024, before me, a Notary Public of the State aforesaid, personally appeared MEGAN J. M. COOK, who acknowledged herself to be the Mayor of the Town of Easton, a Maryland municipal corporation, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within Annexation Agreement, and acknowledged that she executed the same for the purposes therein contained as the fully authorized agent of said Town of Easton.

WITNESS my hand and Notarial Seal.

_____

My Commission expires: _____ Notary Public

SIGNATURES CONTINUE ON FOLLOWING PAGES

WITNESS **CORRIGAN & TRIPPE VENTURES, LLC**

_____ By: _____
William Coyne, Authorized Member

STATE OF MARYLAND, COUNTY OF _____, TO WIT:

I HEREBY CERTIFY, that on this _____ day of _____, 2024, before me, a Notary Public of the State aforesaid, personally appeared WILLIAM COYNE, who acknowledged himself to be the Managing Member of CORRIGAN & TRIPPE VENTURES, LLC, a Maryland limited liability company ("Company"), known to me (or satisfactorily proven) to be the person whose name is subscribed to the within Annexation Agreement, and acknowledged that he, as Managing Member of the Company, being authorized to do so, executed the same for the purposes therein contained on behalf of the Company.

WITNESS my hand and Notarial Seal.

_____
My Commission expires: _____ Notary Public

ATTORNEY CERTIFICATION

I HEREBY CERTIFY THAT I am an attorney in good standing and duly licensed to practice before the Court of Appeals of Maryland, and that this instrument was prepared by me or under my supervision.

_____
Sharon M. VanEmburgh

RECEIVED
JAN 22 2024
TOWN OF EASTON

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Petition for Annexation Application

Property Information

Property Size	Acres	17.329		Square Feet			
Current Land Use	Vacant			Proposed Land Use	Residential		
Address	East Side of Ocean Gateway, South of Dutchmans Lane						
Tax Map	34	Grid	24	Parcel	128 & 175	Lot(s)	
Deed Refernce:	Liber	2937	Folio	5			
Plat Reference:	Liber	23	Folio	46			
Current Country Zoning District		TC/TR			(52/18) Requested Town Zoning District	R10-A	

Town of Easton Comprehensive Plan Priority Designation *(circle)* (1) 2 3

Property Owner

Owner Name	Corrigan & Trippe Ventures, LLC		
Mailing Address	27849 Little Park Road, Easton		
Telephone No.		Email	

Agent Information

Agent Name	Zachary A. Smith	License No.		Expiration Date	
Mailing Address	114 Bay Street, Building C, Easton, Maryland 21601				
Telephone No.	410-819-8989	Email	zachsmith@alrwlaw.com		

ALL OF THE ITEMS ARE REQUIRED TO BE FILED SIMULTANEOUSLY FOR A COMPLETED APPLICATION
(check if included)

- ☒ Petition for Annexation (Needs to be signed by 25% of person who reside in the area to be annexed and who are registered voters and owners of 25% of assessed value of area to be annexed. Can also do by ballot vote ahead of time and initiation of resolution by Town.)
- ☒ An application fee of $15,000 shall be paid to the Town of Easton. Please Note that the fee collected is a deposit only and that additional fees may be required.
- ☐ The applicant must sign a Town Reimbursement Agreement to ensure all fees, costs, and expenses incurred by the Town in excess of the application fee amount will be reimbursed.
- ☒ Metes and bounds description for property
- ☐ Plats of property which shall include 2 mylar and 8 paper copies.
- ☐ Proposed Annexation Resolution, Proposed Ordinance for Zoning, Proposed Annexation Plan, and Proposed Annexation Agreement.
- NA ☐ If Special Tax District proposed a Resolution to Create Special Tax District shall be required. -Need consent of owners of 2/3 of assessed value of area, plus 2/3 of number of different property owners. Can also do by ballot vote ahead of time and initiation of resolution by Town.

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 01-22-24

Printed Name of Applicant or Agent Zachary A. Smith

For Office Use Only **ESDR 2024-02 / AX 24-02**

Application No.	**2024-1115**	Fee Paid	**01/23/2024**
Date Resolution Introduced to Town Council		04/01/2024	
Planning Commission Meeting	**04/18/2024**	Positive Recommendation to Council? Y ☐ N ☐	
Town Council Public Hearing	**TBD**	Is a Zoning Waiver Required? Y ☐ N ☐	
Resolution Enactment Date		Resolution Effective Date	
ESDR Y / N Date	**02/28/2024**		*Revised 2-2020*

EXHIBIT C TO RESOLUTION 6185
ANNEXATION PLAN
2024 ANNEXATION TO THE TOWN OF EASTON OF CERTAIN LANDS LOCATED ON THE EAST SIDE OF OCEAN GATEWAY/U.S. ROUTE 50 AND CONSISTING OF 17.329 ACRES OF LAND, MORE OR LESS

In accordance with § 4-415 of the Local Government Article of the Annotated Code of Maryland, the Town of Easton hereby sets forth the following Annexation Plan for Resolution No. 6185. Section 4-415 permits amendment of the Annexation Plan during the annexation process.

I. Property. The property proposed for annexation to which this Annexation Plan relates consists of 17.329± acres of land comprised of "TOTAL AREA OF ANNEXATION AREA: 17.329 AC ±" (the "Annexation Property") on a plat titled "ANNEXATION PLAT ON THE LANDS OF CORRIGAN AND TRIPPE VENTURES, LLC IN THE FIRST ELECTION DISTRICT TALBOT COUNTY, MARYLAND TAX MAP 34, GRID 24 PARCEL 128", prepared by Lane Engineering, LLC, dated December 21, 2023 (the "Annexation Plat"), which is Exhibit "A" to Resolution 6185.

II. Land Use Patterns and Plans – Existing and Proposed.

A. The 2016 Talbot County Comprehensive Plan identifies the Annexation Property as "Designated Growth Residential" and a "Tier II-B Secondary Mapped Growth Area, Planned for Sewage".

The 2010 Town of Easton Comprehensive Plan, as amended (the "Easton Plan"), designates the Annexation Property as a Priority 1 Boundary Refinement Area. (Easton Plan Growth Areas Map). The Municipal Growth Element of the Comprehensive Plan defines Boundary Refinement Areas as areas that in most cases "are already developed in Talbot County and they are deemed appropriate for consideration for annexation during the life of this Plan." (Easton Plan p. 49). The Easton Plan identifies Priority 1, Boundary Refinement Areas, including the Annexation Property, as areas that are "important to bring…into [the] Town." (Easton Plan p. 257). The Easton Plan was amended in 2016 to incorporate a Sewer Tier Map, in accordance with State law and this map classifies the Property as "Tier II – Planned for Sewer, Municipal or Growth Area."

B. The pre-annexation Talbot County zoning of the Annexation Property is Town Conservation (TC). The proposed R-10A Residential zoning district permits medium density residential uses. The Petitioner intends to submit a Planned Unit Development ("PUD") for the property to construct multi-family housing on the property.

C. The R-10A Residential district permits a greater than 50% density than and permits land uses that are not authorized in the County's Town Conservation (TC) zone. In accordance with § 4-416 of the Local Government Article of the Maryland Annotated Code, if the County expressly approves, the Town may place the annexed land in zoning classifications that permit land uses different from the land uses specified under the Talbot County Zoning Ordinance and/or permits a 50% greater density than that allowed under the Talbot County Zoning Ordinance. The Town intends

to seek Talbot County's express approval to apply the zoning district proposed. Any future development of the Annexation Property shall be in accordance with the Zoning Ordinance provisions applicable to the Annexation Property at the time of the development.

III. Availability of Land for Public Facilities. Following annexation, the Annexation Property will be served by the Easton public water and sewer systems, which will require extension of those public utility systems. Adequate water and sewer capacity exists within the Town's utility systems to serve existing and future uses of the Annexation Property without dedication of additional land. Fire and police protection will be provided by the Easton Volunteer Fire Company and the Town of Easton Police Department using existing facilities. The Town's existing public works, fire, police and emergency services facilities, equipment and personnel are adequate to accommodate the Annexation Property at this time. With the multi-family units there will be an impact on schools, libraries and other recreational services, but the applicant's share of that impact is adequately captured by impact fees. At this time, no additional land for public facilities on the Annexation Property is considered reasonably necessary.

IV. Extension of Municipal Services (Schedule and Financing).

A. Utility Service. Following annexation, all or portions of the Annexation Property may be served by Town water and sewer for facilities. All such extensions will be completed at the Owner's expense and in accordance with the standards and specifications of the Town.

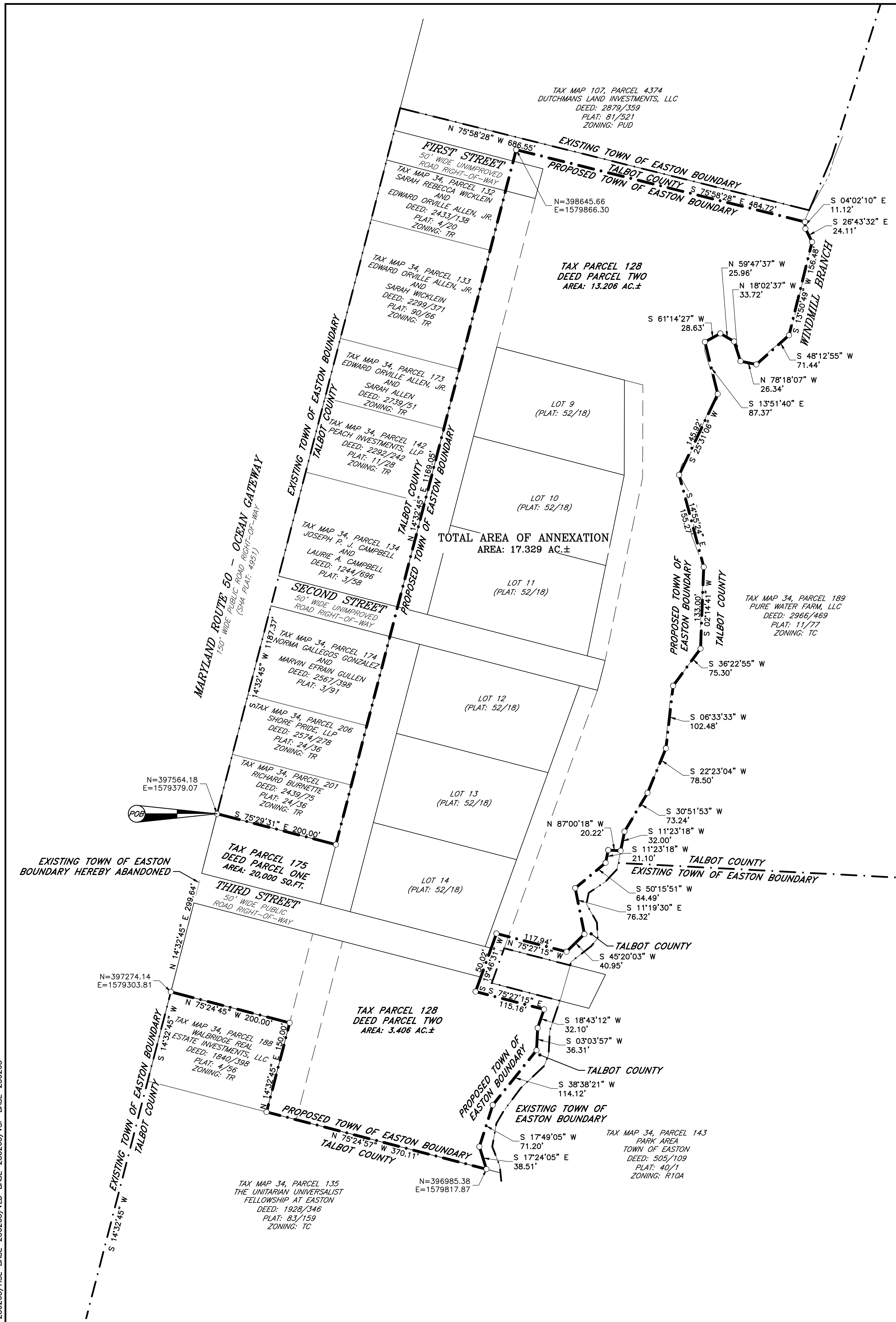
All applicable Town fees and user rates to cover the costs associated with usage- or consumption-based municipal services, such as water and sewer service shall be charged to the Annexation Property.

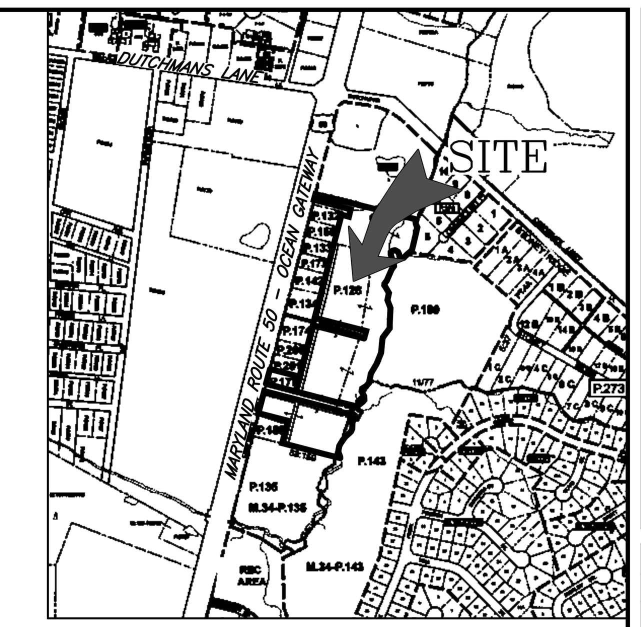
B. Roads. The Annexation Property has existing access off of Ocean Gateway/U.S. Route 50, which is a State Road.

C. Fire Protection. The Easton Volunteer Fire Company already provides service to the Annexation Property and will continue to provide such service at the same or similar level of service after annexation. The Fire Company receives substantial financial support from the Town.

D. Police Services. Police Services are currently provided by the Talbot County Sheriff's Department. Upon annexation, the Easton Police Department will extend service to the Annexation Property. Service will be provided using existing personnel and equipment. The costs of these services shall be paid out of the Town's general funds.

Pursuant to Section 4-415(g) of the Local Government Article, amendments to this Annexation Plan shall not be construed amendments to the Annexation Resolution, nor may they serve in any manner to cause a re-initiation of the annexation procedure related to the property described in Section I.





VICINITY MAP
SCALE: 1" = 1000'

PROPERTY OWNER:	CORRIGAN AND TRIPPE VENTURES LLC
PROPERTY ADDRESS:	OCEAN GATEWAY EASTON, MARYLAND 21601
DEED REFERENCE:	2937/5
PLAT REFERENCE:	23/46 AND 52/18

AREA TO BE ANNEXED

TAX PARCEL 175 (DEED PARCEL ONE):	0.459 AC.±
TAX PARCEL 128 (DEED PARCEL TWO):	15.857 AC.±
FIRST STREET:	0.057
SECOND STREET:	0.401 AC.±
THIRD STREET:	0.555 AC.±
TOTAL AREA TO BE ANNEXED:	17.329 AC.±

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND COMPLIES WITH THE REQUIREMENTS AS SET FORTH IN REGULATION 09.13.06.12, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 363, AND, SUBJECT TO BIENNIAL RENEWAL, MY CURRENT EXPIRATION DATE IS AUGUST 3, 2025.

[signature] 1/5/24
DATE

JEFFERSON EWELL HUBBARD
REGISTERED PROPERTY LINE SURVEYOR
MARYLAND REGISTRATION No. 363
LANE ENGINEERING, LLC
117 BAY STREET
EASTON, MARYLAND 21601

LEGEND

EXISTING TOWN BOUNDARY
TOWN BOUNDARY HEREBY ABANDONED
TOWN BOUNDARY HEREBY ESTABLISHED
COMPUTED POINT

100' 50' 0' 50' 100' 200'
SCALE IN FEET

NAD 83 (2011)
MD COORDINATE SYSTEM

REVISIONS			
No.	DATE	DESCRIPTION	BY

Lane Engineering, LLC
Established 1986
Civil Engineers • Land Planning • Land Surveyors
E–mail: general@leinc.com
117 Bay St. Easton, MD 21601 (410) 822–8003
15 Washington St. Cambridge, MD 21613 (410) 221–0818
354 Pennsylvania Ave. Centreville, MD 21617 (410) 758–2095

SEAL
STATE OF MARYLAND · JEFFERSON EWELL HUBBARD · NO. 363 REGISTERED · PROPERTY LINE SURVEYOR
[signature] 1/5/24
DATE

ANNEXATION PLAT

ON THE LANDS OF
CORRIGAN
AND
TRIPPE VENTURES, LLC

IN THE FIRST ELECTION DISTRICT
TALBOT COUNTY, MARYLAND
TAX MAP 34, GRID 24, PARCEL 128

ISSUED FOR:	DATE:	BY:
DRAFT – CLIENT REVIEW	12–21–23	BCE
CLIENT REVIEW	01–02–24	BCE
AGENCY SUBMITTAL	01–05–24	BCE

SHEET No. 1 OF 1	DATE: 12–21–23
	JOB No. 230265
SCALE: AS NOTED	FILE No. 1110

© LANE ENGINEERING, LLC

Date: 01/05/2024 – 3:17pm User: scopp Project Manager: BCE
Drawing Path: J:\2023\0200\230265\Civil3D–230265\Dwg\Plots\VLD–PLTS–230265.dwg | ANNEXATION
XREF File(s): RAR–BASE–230265/HSL–BASE–230265/VLD–BASE–230265/VSF–BASE–230265

Lane Engineering, LLC
Established 1986

Civil Engineers • Land Planning • Land Surveyors

15 Washington Street
Cambridge, Maryland 21613
Tel 410-221-0818

117 Bay Street
Easton, Maryland 21601
Tel 410-822-8003
Fax 410-822-2024

354 Pennsylvania Avenue
Centreville, Maryland 21617
Tel 410-758-2095

ANNEXATION DESCRIPTION

ON THE LANDS OF

CORRIGAN AND TRIPPE VENTURES, LLC

IN THE FIRST ELECTION DISTRICT

TALBOT COUNTY, MARYLAND

January 11, 2024

All that piece, parcel or tract of land situate, lying and being in the First Election District, Talbot County, Maryland, and being more particularly described as follows.

Beginning for the same at a point, said point also being on the easterly side of the public known as Ocean Gateway (150-foot-wide right-of-way) as delineated on a plat titled "Plat showing division of Lots 6 & 7, Mecklenburg Lots (Second Block – E Section" recorded among the Land Records of Talbot County, Maryland in Plat Book 24, Folio 36, said point also being on the easterly "Right-of-Way Line" as delineated on State Roads Commission of Maryland Plat Number 4951, said point also being at the southwest corner of the lands of Richard Burnette (Liber 2439, Folio75), and from said point of beginning and running in the meridian of the Maryland State Coordinate System NAD 83 (2011), and by and with said southerly side of Richard Burnette lands following course and distance

(1) South 75 degrees 29 minutes 31 seconds East, 200.00 feet to a point and the rear property line of said Richard Burnette; thence by and with said rear property line and the extension thereof the following course and distance.

(2) North 14 degrees 32 minutes 45 seconds East, 1169.05 feet to a point 20-feet south of the lands of Dutchmans Land Investments, LLC (Liber 2879, Folio359) as delineated on a plat of subdivision titled "Plat Showing Proposed Annexation to the Town of Easton" recorded among the aforesaid Land Records in Plat Book 78, Folio 47; thence running 20-feet south and parallel to said Dutchmans Land Investments, LLC lands the following course and distance

(3) South 75 degrees 58 minutes 28 seconds East, 484.72 feet more or less to a point and the center of Windmill Branch; thence by and with the center of the said Windmill Branch and many meanderings thereof generally the following seventeen courses and distances

(4) South 04 degrees 02 minutes 10 seconds East, 11.12 feet to a point; thence

(5) South 26 degrees 43 minutes 32 seconds East, 24.11 feet to a point; thence

(6) South 13 degrees 50 minutes 49 seconds West, 156.48 feet to a point; thence

(7) South 48 degrees 12 minutes 55 seconds West, 71.44 feet to a point; thence

(8) North 78 degrees 18 minutes 07 seconds West, 26.34 feet to a point; thence

(9) North 18 degrees 02 minutes 37 seconds West, 33.72 feet to a point; thence

(10) North 59 degrees 47 minutes 37 seconds West, 25.96 feet to a point; thence

(11) South 61 degrees 14 minutes 27 seconds West, 28.63 feet to a point; thence

(12) South 13 degrees 51 minutes 40 seconds East, 87.37 feet to a point; thence

(13) South 25 degrees 32 minutes 02 seconds West, 145.73 feet to a point; thence

(14) South 14 degrees 53 minutes 22 seconds East, 155.44 feet to a point; thence

(15) South 02 degrees 14 minutes 41 seconds West, 133.00 feet to a point; thence

(15) South 36 degrees 22 minutes 55 seconds West, 75.30 feet to a point; thence

(16) South 06 degrees 33 minutes 33 seconds West, 102.48 feet to a point; thence

(17) South 22 degrees 23 minutes 04 seconds West, 78.50 feet to a point; thence

(18) South 30 degrees 51 minutes 53 seconds West, 73.24 feet to a point; thence

(19) South 11 degrees 23 minutes 18 seconds West, 32.00 feet to a point; thence leaving said Windmill Branch and running in, through, over and across Tax Parcel 128, Deed Parcel Two as to include a portion thereof the following twelve courses and distances

(20) North 87 degrees 00 minutes 18 seconds West, 20.22 feet more or less to a point; thence

(21) South 11 degrees 23 minutes 18 seconds West, 21.10 feet to a point; thence

(22) South 50 degrees 15 minutes 51 seconds West, 64.49 feet to a point; thence

(23) South 11 degrees 19 minutes 30 seconds East, 76.32 feet to a point; thence

(24) South 45 degrees 20 minutes 03 seconds West, 40.95 feet to a point; thence

(25) North 75 degrees 27 minutes 15 seconds West, 117.94 feet to a point; thence

(26) South 19 degrees 46 minutes 31 seconds West, 100.42 feet to a point; thence

(27) South 75 degrees 27 minutes 15 seconds East, 115.16 feet to a point; thence

(28) South 18 degrees 43 minutes 12 seconds West, 32.10 feet to a point; thence

(29) South 03 degrees 03 minutes 57 seconds West, 36.31 feet to a point; thence

(30) South 38 degrees 38 minutes 21 seconds West, 114.12 feet to a point; thence

(31) South 17 degrees 49 minutes 05 seconds West, 71.20 feet to a point; thence

(32) South 17 degrees 24 minutes 05 seconds East, 38.51 feet to a point and the lands of The Unitarian Universalist Fellowship at Easton (Liber 1928, Folio 346); thence by and with said The Unitarian Universalist Fellowship at Easton lands

(33) North 75 degrees 24 minutes 57 seconds West, 370.11 feet to a point and the lands of Walbridge Real Estate Investments, LLC (Liber 1840, Folio 398; thence by and with said Walbridge Real Estate Investments, LLC land the following two courses and distances

(34) North 14 degrees 32 minutes 45 seconds East, 150.00 feet to a point; thence

(35) North 75 degrees 24 minutes 45 seconds West, 200.00 feet to a point and the aforementioned easterly side of Ocean Gateway; thence by and with said easterly side of Ocean Gateway

(36) North 14 degrees 32 minutes 45 seconds East, 299.64 feet to the Place of Beginning, containing 17.329 Acres of Land, more or less, and

The above parcel is intended to be all of the same land, as shown as Total Area of Annexation on a plan entitled "Annexation Plat on the lands of Corrigan and Trippe Ventures, LLC" as prepared by Lane Engineering, LLC, on January 5, 2024, I hereby certify that these documents were prepared by me or under my responsible charge and complies with requirements as set forth in regulation 09.13.06.12, and that I am a duly licensed property line surveyor under the laws of the State of Maryland, License No. 363, and, subject to biennial renewal, my current expiration date is August 3, 2025

1/11/24

Jefferson Ewell Hubbard
Registered Property Line Surveyor
Maryland Registration Number 363

www.leinc.com
general@leinc.com

IN THE MATTER OF THE ANNEXATION OF THE PROPERTY OF CORRIGAN & TRIPPE VENTURES, LLC	* * *	**BEFORE THE TOWN COUNCIL OF EASTON, MARYLAND**

PETITION FOR ANNEXATION

A. THIS PETITION FOR ANNEXATION ("Petition") is submitted by Corrigan & Trippe Ventures, LLC, a Maryland limited liability company ("Petitioner"), the owner of certain real property shown and depicted on Exhibit "1" attached hereto and titled "ANNEXATION PLAT ON THE LANDS OF CORRIGAN AND TRIPPE VENTURES, LLC IN THE FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND TAX MAP 34 GRID 24, PARCEL128," and described in the metes and bounds description attached hereto as Exhibit "2" ("Annexation Property").

B. The Annexation Property consists of a total of 17.329 acres of land, more or less.

C. Petitioner hereby petitions the Town Council of Easton, Maryland to annex the Annexation Property by extending the municipal boundaries of the Town of Easton, Maryland to include the Annexation Property.

D. Petitioner owns all of the Annexation Property, and accordingly, constitutes at least twenty-five percent (25%) of the persons eligible to sign this Petition.

E. There are no registered voters residing within the boundaries of the Annexation Property.

F. The Annexation Property is contiguous and adjoining to the existing municipal boundaries of the Town of Easton, Maryland.

G. The expansion of the existing municipal boundaries of the Town of Easton, Maryland to include the Annexation Property will not create enclaves of unincorporated land bounded on all sides by real property located within the municipal boundaries of the Town of Easton, Maryland.

H. The Annexation Property is shown as a "*Priority 1 – Boundary Refinement Area*" on the "*Growth Areas Map*" included in the 2010 Easton Comprehensive Plan, which areas are described in the Comprehensive Plan as "*deemed appropriate for consideration for Annexation*" (2010 Town of Easton Comprehensive Plan, Municipal Growth Element, page 49).

NOW, THEREFORE, Petitioner hereby petitions the Town Council of Easton, Maryland to introduce a resolution to extend the municipal boundaries of the Town of Easton, Maryland to include the Annexation Property.

IN WITNESS WHEREOF, Petitioner has caused this Petition to be signed and sealed by its duly authorized representative this 8th day of January, 2024.

CORRIGAN & TRIPPE VENTURES, LLC,
a Maryland limited liability company

By: William Coyne
William Coyne, Authorized Member

RESOLUTION NO. 6185

A RESOLUTION TO ANNEX A PARCEL OF LAND OWNED BY CORRIGAN & TRIPPE VENTURES, LLC LOCATED ON THE EAST SIDE OF OCEAN GATEWAY/U.S. ROUTE 50, CONSISTING OF 17.329 ACRES OF LAND, MORE OR LESS, INTO THE TOWN OF EASTON AND TO PROVIDE FOR THE TERMS AND CONDITIONS OF THE ANNEXATION.

Introduced by: _____

WHEREAS, the Town of Easton (the "Town") is authorized by the provisions of §4-401 *et. seq.* of the Local Government Article of the Maryland Annotated Code (the "Code") to expand its municipal boundaries by annexing lands adjacent to it, and wishes to annex a certain parcel of land owned by Corrigan & Trippe Ventures, LLC located on the east side of Ocean Gateway/U.S. Route 50, consisting of 17.329 acres of land, more or less, which parcel is shown and depicted as "TOTAL AREA OF ANNEXATION AREA: 17.329 AC ±" (the "Annexation Property") on a plat titled "ANNEXATION PLAT ON THE LANDS OF CORRIGAN AND TRIPPE VENTURES, LLC IN THE FIRST ELECTION DISTRICT TALBOT COUNTY, MARYLAND TAX MAP 34, GRID 24 PARCEL 128", prepared by Lane Engineering, LLC, dated December 21, 2023 (the "Annexation Plat"), which is Exhibit "A" to this Resolution and is also described in a metes and bounds description dated January 11, 2024 prepared by Lane Engineering, LLC entitled "ANNEXATION DESCRIPTION ON THE LANDS OF CORRIGAN AND TRIPPE VENTURES, LLC IN THE FIRST ELECTION DISTRICT TALBOT COUNTY, MARYLAND", which is Exhibit "B" to this Resolution ("Annexation Description").

Corrigan & Trippe Ventures, LLC is the owner of one hundred percent (100%) of the assessed value of the real property lying within the area to be annexed and has consented to the annexation. There are no registered voters in Talbot County who reside on the Annexation Property.

The Annexation Property is adjacent to existing Town boundaries. If the Annexation Property is incorporated into the Town boundaries, no enclaves of non-Town land will be created.

Now, therefore, the Town hereby resolves:

Section 1. Modification of Town Boundaries. The corporate boundaries of the Town are hereby amended to include the addition of the Annexation Property, which is described on the Annexation Plat and Annexation Description. The plat and metes and bounds description are subject to technical review and correction by the Town prior to the public hearing to be held on this Resolution.

Section 2. Application of Town Charter; Ordinances; and Taxes. Upon the effective date of this Resolution, the provisions of the Charter and Code of the Town of Easton, and any local public laws enacted or to be enacted affecting the Town, shall be effective within the Annexation Property except to the extent that this Resolution provides otherwise. The Annexation Property shall be included in the Third Election Ward of the Town for purposes of municipal elections until such time as the boundaries for election wards may be modified by the Town Council.

Section 3. Annexation Plan. The Petitioner has prepared an Annexation Plan with regard to the Annexation Property (the "Plan"). The Plan is Exhibit "C" to this Resolution but is not a part hereof, and the Town Council reserves the right to amend the Plan prior to the final enactment of this Resolution in the manner provided in §4-415 of the Local Government Article of the Code.

Section 4. Zoning Classification. Concurrently with the introduction of this Resolution, the Town Council has introduced Ordinance No. 811 to apply a zoning classification of R-10A Residential to the Annexation Property. The Talbot County zoning for the Annexation Property is Town Conservation (TC). The proposed R-10A Residential zoning classification permits land uses that are substantially different from the land uses allowed under the current Talbot County zoning classifications and/or permits development at a substantially higher density exceeding 50% of the density allowed under the current Talbot County zoning classification applicable to the Annexation Property. In accordance with §4-416 of the Local Government Article of the Code, if Talbot County

expressly approves, the Town can place the annexed land in zoning classifications that allow different land uses and/or allows a substantially higher density exceeding 50% of the density allowed under the current Talbot County zoning classification. The classification of the Annexation Property in the R-10A Residential zoning district is contingent upon the Town receiving the express consent of the County prior to the effective date of Ordinance 811. If Ordinance No. 811 is not enacted before the effective date of this Resolution, or, if as enacted, it contains provisions that are deemed unacceptable to the Petitioner, or, if the parties are unable to agree upon the terms of an Annexation Agreement, the Petitioner shall be free to withdraw this request for annexation by written notice delivered to the Town Clerk before the effective date of this Resolution, and this Resolution shall become null and void.

Section 5. Incorporation of Certain Exhibits. Exhibits A, and B are incorporated into this Resolution and made a part of it.

Section 6. Public Hearing and Public Notice. The Town Council shall conduct a public hearing on this Resolution and upon Ordinance No. 811 on _____, 2024 at 5:35 p.m. Prior to the hearing, the Town Clerk shall arrange for the publication of a legally sufficient notice of the hearing in *The Star Democrat* for the Town two times at not less than weekly intervals, the date of publication of the last such notice to be at least 15 days prior to the date of the hearing. In addition, on the date of the first publication of the notice of the hearing, the Town Clerk shall notify the following persons or agencies of the hearing and shall provide them with a photocopy of the legal notice and this Resolution, including Exhibits:

(a) the Talbot County Council;

(b) the Talbot County Planning and Zoning Commission;

(c) the Maryland Department of Planning; and

(d) the Critical Area Commission for the Chesapeake and Atlantic Coastal Bays.

Section 7. Registration of Boundaries. Within ten (10) days of the effective date of this Resolution, in accordance with the provisions of §4-414 of the Local Government Article of the Code, the Mayor or other Town designee, shall promptly cause a copy of the resolution with the new municipal boundaries to be sent to:

(a) the Town Clerk;

(b) the Clerk of the Circuit Court for Talbot County, Maryland; and

(c) the Maryland Department of Legislative Services.

Pursuant to §4-414(b) of the Local Government Article of the Code, each such official or agency shall keep this Resolution with the new boundaries on record and make it available for public inspection during regular business hours.

Section 8. Effective Date. This Resolution shall become effective 45 days after final enactment unless a petition for referendum has been filed prior thereto in accordance with §4-408, §4-409, or §4-410 of the Local Government Article of the Code or if a petition for referendum is filed and a majority of the votes are in favor of the annexation resolution, the date upon which the Annexation Resolution becomes effective pursuant to §4-412 of the Local Government Article of the Code. This Resolution shall be deemed "finally enacted" on the date on which the Mayor of the Town of Easton indicates his approval of this Resolution by signing it or when the Town Council overrides the Mayor's veto hereof in the manner specified in the Town Charter.

Curry -
Abbatiello -
Montgomery -
Davis -
Gunsallus -

I hereby certify that the above Resolution was passed by a yea and nay vote of the Town Council this _____ day of _____, 2024.

_____
Frank Gunsallus, Town Council President

Delivered to the Mayor by me this _____ day of _____, 2024.

_____
Kathy M. Ruf, Town Clerk

APPROVED:

Date: _____

_____
Megan J. M. Cook, Mayor

EFFECTIVE DATE: _____, 2024.

ORDINANCE NO. 811

AN ORDINANCE OF THE TOWN OF EASTON AMENDING THE OFFICIAL ZONING MAP OF THE TOWN OF EASTON TO APPLY THE R-10A RESIDENTIAL ZONING DISTRICT TO CERTAIN LOTS OR PARCELS OF LAND ANNEXED TO THE TOWN OF EASTON BY RESOLUTION NO. 6185 LOCATED TO THE EAST OF OCEAN GATEWAY/U.S. ROUTE 50 CONSISTING, OF 17.329 ACRES OF LAND, MORE OR LESS

Introduced by: _____

WHEREAS, the Town of Easton ("Town") is authorized by §§ 4-416 and 5-213 of the Local Government Article and § 4-102 of the Land Use Article of the Maryland Annotated Code ("Code") to exercise planning and zoning jurisdiction in areas annexed by it and to enact and administer a zoning ordinance, which ordinance is Chapter 28 of the Easton Town Code; and

WHEREAS, the Town is authorized by § 4-201 of the Land Use Article of the Code to divide land within the municipal boundaries into zoning districts in a manner it deems best suited to execute the purposes of the Land Use Article; and

WHEREAS, the Town is authorized by § 4-204 of the Land Use Article of the Code to amend, supplement, modify or repeal sections of the zoning ordinance; and

WHEREAS, the Town has acted pursuant to its authority under §4-401 *et. seq*. of the Local Government Article of the Code to introduce Resolution No. 6185 (the "Resolution") to expand its municipal boundaries by annexing lands adjacent to the present Town. The area proposed for annexation is generally located on the east side of Ocean Gateway/U.S. Route 50, consisting of 17.329 acres of land, more or less, which parcel is shown and depicted as "TOTAL AREA OF ANNEXATION AREA: 17.329 AC ±" (the "Annexation Property") on a plat titled "ANNEXATION PLAT ON THE LANDS OF CORRIGAN AND TRIPPE VENTURES, LLC IN THE FIRST ELECTION DISTRICT TALBOT COUNTY, MARYLAND TAX MAP 34, GRID

24 PARCEL 128", prepared by Lane Engineering, LLC, dated December 21, 2023 (the "Annexation Plat"), which is Exhibit "A" to this Ordinance ; and

WHEREAS, the Town Planning Commission considered the annexation and zoning requests during its public meeting on _____, 2024 and recommended that the Town annex the Annexation Property and zone such land as R-10A Residential for several reasons, including:

(1) While the Comprehensive Plan designates the property for future Commercial land use, the Commission believes that given that the current County zoning and the adjacent residential zoning, that R-10A Residential zoning is appropriate and

(2) Given the location and zoning of the property in Talbot County, it is highly likely to be developed regardless of the outcome of the annexation request. It is more appropriate to have this development occur where there is Town infrastructure and under the terms of the Town zoning code and associated design standards and guidelines.

WHEREAS, the Easton Town Council finds that it is in the best interest of the Town to amend the Official Zoning Map of the Town to include the Annexation Property and to establish the R-10A Residential zoning for the Property; and

WHEREAS, the Easton Town Council held a duly noticed public hearing on this Ordinance on Monday, _____, 2024.

Now, therefore, the Town of Easton hereby ordains as follows:

Section 1. Incorporation. The Annexation Plat attached hereto as Exhibit A is incorporated herein by reference.

Section 2. Modification of Official Zoning Map Boundaries and Designation of Zoning. The Official Zoning Map of the Town of Easton is hereby amended to add that certain parcels or tracts of land annexed pursuant to the Annexation Resolution and designated by the plat attached hereto as Exhibit A. The Property shall be assigned classification of R-10A Residential. In accordance

with Section 28-107 of the Zoning Ordinance, the amendment shall be made on the Official Zoning Map promptly after the effective date of this Ordinance by the Easton Town Council.

Section 3. County Zoning Consent. The County zoning for the property is Town Conservation (TC). If the proposed R-10A zoning classification permits land uses that are different from the land uses allowed under the current County zoning classifications applicable to the Annexation Property and/or allows a density greater than 50% of the density allowed under the current Talbot County zoning classification, then in accordance with §4-416 of the Local Government Article of the Code, if Talbot County expressly approves, the Town can place the annexed land in zoning classifications that allow different land uses and/or allows a density greater than 50% of the density allowed under the current Talbot County zoning classification applied to the Annexation Property. The classification of the Annexation Property in the R-10A Residential zoning district is contingent upon the Town receiving the express consent of the County prior to the effective date of this Ordinance. By majority vote on _____ ____, 2024, the County Council of Talbot County, Maryland adopted Resolution No. ____ for the purpose of expressly approving establishment of the municipal zoning as provided by this Ordinance.

Section 4. Survival. Except as amended herein, the remainder of the Official Zoning Map and the remaining terms of existing ordinances shall remain in full force and effect.

Section 5. Effective Date. In accordance with § 4-416 of the Local Government Article of the Code, § 4-203 of the Land Use Article of the Code and Article II, Section 9 of the Easton Town Charter, this Ordinance shall become effective upon the later of: (a) the effective date of the Resolution pursuant to which the land area that is the subject of this Ordinance is annexed to the Town of Easton, (b) ten (10) days after the Town Council's public hearing on this Ordinance, or (c) twenty (20) calendar days after approval by the Mayor or passage of this Ordinance by the Council over the Mayor's veto.

Section 6. Severability. The Easton Town Council intends that, if a court of competent jurisdiction issues a final decision holding that any part of this ordinance is invalid, the remaining provisions hereof remain in full force and effect.

Curry	-
Abbatiello	-
Montgomery	-
Davis	-
Gunsallus	-

I hereby certify that the above Ordinance was passed by a yea and nay vote of the Council this _____ day of _____, 2024.

_____
Frank Gunsallus, Town Council President

Delivered to the Mayor by me this _____ day of _____, 2024.

_____
Kathy M. Ruf, Town Clerk

APPROVED:

Date: _____

_____
Megan J. M Cook, Mayor

EFFECTIVE DATE: _____, 2024.

TOWN OF EASTON

14 South Harrison Street
Easton, Maryland 21601

May 1, 2024

Dear Resident,

The Easton Planning Commission (Commission) will hold a public meeting on **Thursday, May 16, 2024 at 1:00 p.m**. in the Easton Town Council Chambers located on the second floor of 14 South Harrison Street. The Town of Easton Zoning Ordinance requires that owners of property located within 400 feet of a parcel on which certain types of applications are pending be given notice of upcoming meetings or hearings. If you are a tenant in or an owner of a multi-unit building, please distribute or post this notice in a visible location for all other tenants or owners to view. If you are a tenant of a rental property, please notify the property owner that this notice letter has been distributed to their property. Notice has also been sent to the Star Democrat, a sign has been posted at the subject property and the hearing agenda has been posted on the Town of Easton website: http://eastonmd.gov/.

This letter is sent to inform you that the Easton Planning Commission will meet to discuss application 2021-1115, a Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton Maryland, also known as Tax Map 0034, Parcels 0128 and 0175. The Commission will ultimately submit a recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.

Copies of the proposed application are on file and available for public review in the Town's Planning Office at 14 South Harrison Street between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday. **In addition, digital copies will be available for review one week prior to the scheduled meeting via the Town's website at** https://www.eastonmd.gov/129/Agendas-Minutes. If you have any questions regarding this application, please contact the Planning Office at (410) 822-1943 or via email at ssmith@eastonMD.gov.

Samantha N. Smith

Samantha N. Smith, Administrative Specialist
Planning & Zoning Department
410-822-1943 ssmith@eastonMD.gov

APG Media of Chesapeake, LLC

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

INVOICE
04/29/24

Cust. AcctID:		Creation Date:	**04/29/24**
		Ad Date:	**05/01/24**
		Class:	
Name:	**Joanne Drummer**	Ad ID:	
Company:	**TOWN OF EASTON (L)**	Words:	
Address:	**PO Box 520**	Lines:	
	EASTON, MD 21601	Agate Lines:	
		Depth:	
		Inserts:	
		Blind Box:	
Telephone:	**(410) 822-2525**		
Description:	**Planning Comm Meeting**		

Other Charges:		Total:	
Discount:			
Surcharge:		Paid Amount:	
Credits:			
Bill Depth:		Amount Due:	

CREDIT CARD DETAILS

PT	CT	CN	Number	Exp.	Amnt.

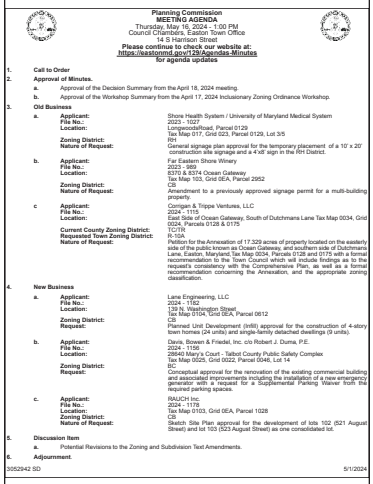
Publication	Start	Stop	Inserts
The Star Democrat	05/01/24	05/01/24	1

Ad Note:

Sign posted on May 1, 2024

Customer Note:

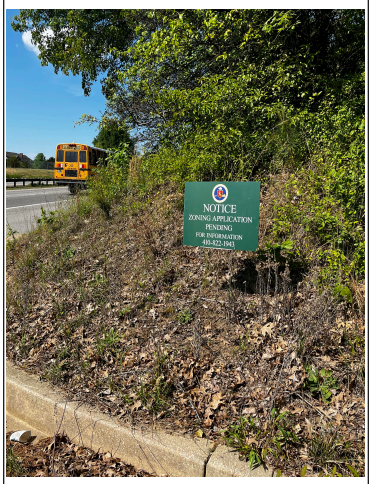
We Appreciate Your Business!
Thank You Joanne Drummer!



Planning Commission
MEETING AGENDA
Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street
Please continue to check our website at:
https://eastonmd.gov/129/Agendas-Minutes
for agenda updates

1. **Call to Order**
2. **Approval of Minutes.**
   a. Approval of the Decision Summary from the April 18, 2024 meeting.
   b. Approval of the Workshop Summary from the April 17, 2024 Inclusionary Zoning Ordinance Workshop.
3. **Old Business**
   a. **Applicant:** Shore Health System / University of Maryland Medical System
      File No.: 2023 - 1027
      Location: Longwoods Road, Parcel 0129
      Tax Map 017, Grid 023, Parcel 0129, Lot 3/5
      Zoning District: RH
      Nature of Request: General signage plan approval for the temporary placement of a 10' x 20' construction site signage and a 4'x8' sign in the RH District.
   b. **Applicant:** Far Eastern Shore Winery
      File No.: 2023 - 999
      Location: 8370 & 8374 Ocean Gateway
      Tax Map 103, Grid 9EA, Parcel 2952
      Zoning District: CB
      Nature of Request: Amendment to a previously approved signage permit for a multi-building property.
   c **Applicant:** Corrigan & Trippe Ventures, LLC
      File No.: 2024 - 1115
      Location: East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
      Current County Zoning District: A
      Requested Town Zoning District: R-10A
      Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland; Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.
4. **New Business**
   a. **Applicant:** Lane Engineering, LLC
      File No.: 2024 - 1162
      Location: 139 N. Washington Street
      Tax Map 0104, Grid 9EA, Parcel 0612
      Zoning District: CB
      Request: Planned Unit Development (infill) approval for the construction of 4-story town homes (24 units) and single-family detached dwellings (9 units).
   b. **Applicant:** Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
      File No.: 2024 - 1156
      Location: 28640 Mary's Court - Talbot County Public Safety Complex
      Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
      Zoning District: BC
      Request: Conceptual approval for the renovation of the existing commercial building and associated improvements including the installation of a new emergency generator and a request for a Supplemental Parking Waiver from the required parking spaces.
   c. **Applicant:** RAUCH Inc.
      File No.: 2024 - 1179
      Location: Tax Map 0103, Grid 0EA, Parcel 1028
      Zoning District: CB
      Nature of Request: Sketch Site Plan approval for the development of lots 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot.
5. **Discussion Item**
   a. Potential Revisions to the Zoning and Subdivision Text Amendments.
6. **Adjournment.**

3052942 SD 5/1/2024



APG Media of Chesapeake, LLC

INVOICE
05/06/24

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

Cust. AcctID:		Creation Date:	**05/06/24**
		Ad Date:	**05/08/24**
		Class:	
Name:	**Joanne Drummer**	Ad ID:	
Company:	**TOWN OF EASTON (L)**	Words:	
Address:	**PO Box 520**	Lines:	
	EASTON, MD 21601	Agate Lines:	
		Depth:	
		Inserts:	
		Blind Box:	
Telephone:	**(410) 822-2525**		
Description:	**Planning Comm Meeting**		

Other Charges:		Total:	
Discount:			
Surcharge:		Paid Amount:	
Credits:			
Bill Depth:		Amount Due:	

CREDIT CARD DETAILS

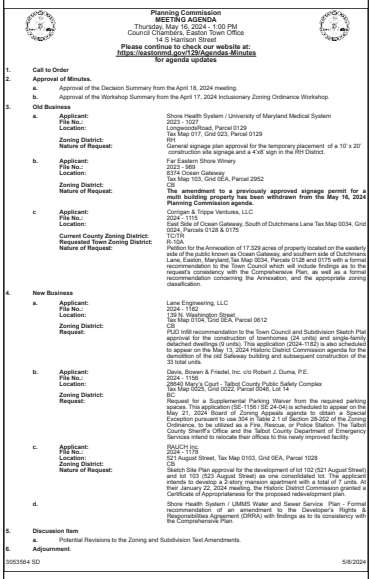
PT	CT	CN	Number	Exp.	Amnt.

Publication	Start	Stop	Inserts
The Star Democrat	05/08/24	05/08/24	1

Ad Note:

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!



Planning Commission
MEETING AGENDA
Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street

Please continue to check our website at:
https://eastonmd.gov/139/Agendas-Minutes
for agenda updates

1. **Call to Order**
2. **Approval of Minutes.**
   a. Approval of the Decision Summary from the April 18, 2024 meeting.
   b. Approval of the Workshop Summary from the April 17, 2024 Inclusionary Zoning Ordinance Workshop.
3. **Old Business**
   a. **Applicant:** Shore Health System / University of Maryland Medical System
      File No.: 2023 - 1027
      Location: Longwoods Road, Parcel 0129
      Tax Map 017, Grid 023, Parcel 0129
      Zoning District: RH
      Nature of Request: General signage plan approval for the temporary placement of a 10' x 20' construction site signage and a 4'x8' sign in the RH District.
   b. **Applicant:** Far Eastern Shore Winery
      File No.: 2023 - 989
      Location: 8374 Ocean Gateway
      Tax Map 103, Grid 0EA, Parcel 2952
      Zoning District: CB
      Nature of Request: **The amendment to a previously approved signage permit for a multi building property has been withdrawn from the May 16, 2024 Planning Commission agenda.**
   c **Applicant:** Corrigan & Trippe Ventures, LLC
      File No.: 2024 - 1115
      Location: East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
      Current County Zoning District: IL
      Requested Town Zoning District: IL-10A
      Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland, Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.
4. **New Business**
   a. **Applicant:** Lane Engineering, LLC
      File No.: 2024 - 1162
      Location: 139 N. Washington Street
      Tax Map 0104, Grid 0EA, Parcel 0612
      Zoning District: RC
      Request: PUD Infill recommendation to the Town Council and Subdivision Sketch Plat approval for the construction of townhomes (24 units) and single-family detached dwellings (9 units). This application (2024-1162) is also scheduled to appear on the May 13, 2024 Historic District Commission agenda for the demolition of the old Safeway building and subsequent construction of the 33 total units.
   b. **Applicant:** Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
      File No.: 2024 - 1156
      Location: 28640 Mary's Court - Talbot County Public Safety Complex
      Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
      Zoning District: BC
      Request: Request for a Supplemental Parking Waiver from the required parking spaces. This application (SE-1156 / SE 24-04) is scheduled to appear on the May 21, 2024 Board of Zoning Appeals agenda to obtain a Special Exception pursuant to use 304 in Table 2.1 of Section 28-202 of the Zoning Ordinance, to be utilized as a Fire, Rescue, or Police Station. The Talbot County Sheriff's Office and the Talbot County Department of Emergency Services intend to relocate their offices to this newly improved facility.
   c. **Applicant:** RAUCH Inc.
      File No.: 2024 - 1179
      Location: 521 August Street, Tax Map 0103, Grid 0EA, Parcel 1028
      Zoning District: CB
      Nature of Request: Sketch Site Plan approval for the development of lot 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot. The applicant intends to develop a 2-story mansion apartment with a total of 7 units. At their January 22, 2024 meeting, the Historic District Commission granted a Certificate of Appropriateness for the proposed redevelopment plan.
   d. Shore Health System / UMMS Water and Sewer Service Plan - Formal recommendation of an amendment to the Developer's Rights & Responsibilities Agreement (DRRA) with findings as to its consistency with the Comprehensive Plan.
5. **Discussion Item**
   a. Potential Revisions to the Zoning and Subdivision Text Amendments.
6. **Adjournment.**

3053564 SD 5/8/2024

Good Neighbors

THE HOUSING COMMISSION
Of Talbot County

900 Doverbrook ☐ Easton, MD 21601 ☐ phone: 410.822.5358 ☐ fax: 410.822.3213

Don E. Bibb, Executive Director

January 23, 2024

Easton Town Council
c/o Frank Gunsallus, Council President
14 South Harrison Street
P.O. Box 520
Easton, Maryland 21601

Re: Annexation of the Lands of Corrigan & Trippe Ventures, LLC

Dear President Gunsallus and Members of the Town Council:

The Housing Commission of Talbot has met recently with Zach Smith and Bill Coyne to discuss the potential development of affordable housing on the approximately 17 acres of land owned by Corrigan & Trippe Ventures, LLC and that is the subject of a pending Petition for Annexation into the Town of Easton. These discussions have centered on the prospect of building multi-family rental housing on this property that will be available to the populations that the Housing Authority of Talbot County serves, and the possibility of a public private partnership to develop and/or to operate such units. While there is no formal and/or final agreement between our organizations at this point, the discussions thus far have been very encouraging. As we all know there is a shortage of affordable housing units within our community, and the construction of multi-family residential on the subject property will certainly help to address this shortage.

The Housing Commission of Talbot supports the effort to annex this land into the Town, and hopes to continue collaborating with the property owner following its annexation to help create additional affordable units within our community. Please support the annexation.

Sincerely,

Don E. Bibb, PHM
Executive Director
Housing Commission of Talbot

RECEIVED
FEB 02 2024
TOWN OF EASTON

EQUAL HOUSING OPPORTUNITY

April 18, 2024

Dear Easton Planning Commission Members,

My husband and I are the landowners of 7567 Ocean Gateway, 7557 Ocean Gateway and Parcel 0132. We received your letter regarding the application for Annexation and Zoning Classification of the location known as East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175.

Prior to making your recommendation we wanted to point out a few concerns we hope you take into consideration. These concerns have ultimately caused us to be opposed to the proposed request.

1) Multifamily housing density is not consistent with the surrounding area.
2) Lot 128, which is 16.7 acres, is currently all wooded and is housing Grey and Red Foxes, Red-tailed Hawks, Eastern Turkeys and White-tailed Deer. Please see the attached satellite image of the proposed area. Lot 175, which is 20,000 square feet, is the only land that is currently cleared.
3) Lot 128 is bordered by a tributary that flows directly into the Tred Avon River. This stream and buffer area is ecologically sensitive, and currently hosts crayfish, turtles, and fish. The runoff from a multi-family development could have an adverse impact on the river.
4) The only access to this land would be from Rte. 50 and would contribute to the traffic congestion. 7567 Ocean Gtwy is our primary residence and during morning and evening rush hours, and for many hours on Saturday and Sunday Rte. 50 is very difficult to turn on to. The traffic traveling back from Ocean City is no longer a summer-only problem, it has become year-round and during those hours you will often find Rt.50 at a standstill while waiting for the light at Dutchmans Lane. Has a traffic study been considered? Currently, it can take several minutes to find an opening to pull out of our driveway. Having a large number of cars leaving a multi-family development would only make the situation worse and a cause of frustration for the new residents.
5) There is pedestrian traffic using Rte. 50 to access Royal Farms. Putting a multi-family development without direct sidewalk access to Royal Farms could lead to heavier foot traffic on Rte. 50 raising additional safety concern.

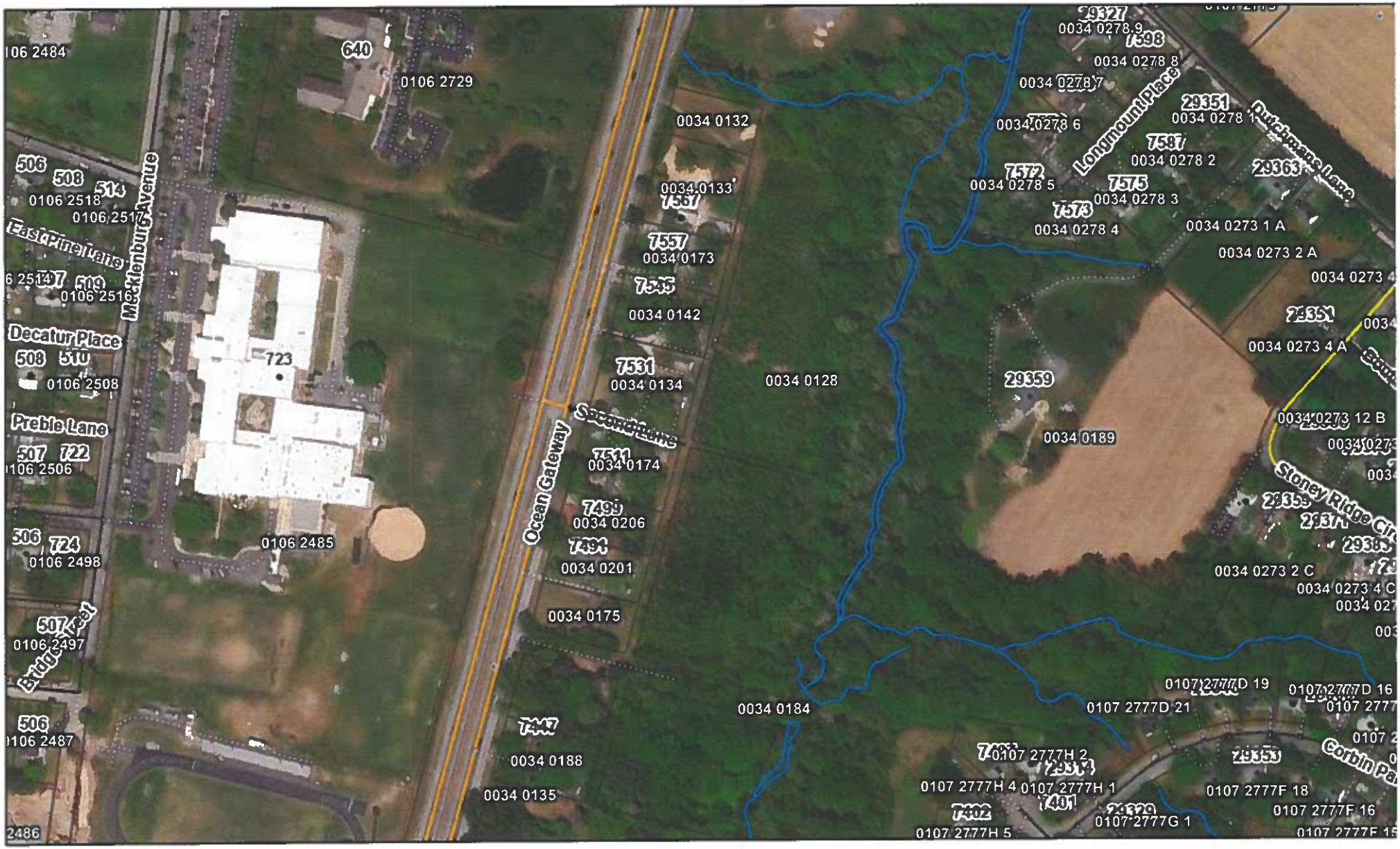
In closing, please know our intentions of bringing these concerns forward are not because we oppose development. However, we believe growth needs to be reasonable for the land it is on. We would love to see the landowners use the property in Talbot County and under the existing zoning regulations.

We appreciate your time and consideration and are available for any questions you may have.

Orville Allen
Becky Allen

Orville Allen
Becky Allen
7567 Ocean Gtwy
Easton, MD 21601
410-829-5255
443-262-5014

Talbot County Interactive Maps



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Maxar

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Municiple

County

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Maxar | MD iMAP, DoIT | The remapping of Maryland's Critical Area has been a collaboration of the Critical Area Commission, Maryland Department of Natural Resources, Talbot County, and ESRGC at Salisbur

TOWN OF EASTON
PLANNING & ZONING
14 S Harrison Street, Easton MD 21601

Date of Hearing: May 16, 2024

4a

PLANNING COMMISSION
PUBLIC HEARING
STAFF REPORT

SUBJECT: **PUD Infill application and Sketch Subdivision Plat on the lands of NAI Saturn Eastern, LLC**

ELECTION WARD: Ward 1

CRITICAL ACTION DATE: At the pleasure of the Commission

STAFF CONTACTS: Joseph Mayer, Plan Reviewer
Miguel Salinas, Director of Planning and Zoning

APPLICANT: Miller Development Corporation % Robert Miller

DOCUMENT CREATED ON: May 6, 2024

PURPOSE: The applicant, Miller Development Corporation, is seeking a sketch subdivision approval as well as a recommendation from the Planning Commission to the Town Council regarding a PUD request to construct twenty-four (24) four-story townhomes and nine (9) single-family detached dwellings with associated parking, stormwater management facilities, and landscaping.

RECOMMENDATION: Should the Planning Commission approve the sketch subdivision plat as well as make a positive recommendation to the Town Council, staff recommends proposed conditions (see below).

APPLICATION INFORMATION:	
APPLICANT: NAI Saturn Eastern, LLC (Owner) Miller Development Corporation (Developer): Robert Miller	**REPRESENTATIVE:** Lane Engineering, LLC (Agent): Brett Ewing MDSW: Ryan D. Showalter

PARCELS/ACREAGE:

Parcel Information	Acreage
Map 104, Grid 0000, Parcels 0612	1.522

ACCEPTANCE DATE: April 29, 2024	**LOCATION:** 139 N Washington Street
EXISTING ZONING CB PUD Infill Boundary	**EXISTING LAND USE:** Commercial
HISTORIC DISTRICT: Applicable	**FUTURE LAND USE MAP:** Commercial

CONTEXT:
Location/Site Access – The subject property is located along North Washington Street, fronting on the West side of the road, at the intersection of Washington and Bay Streets.

Existing Conditions – The subject property is currently improved with a 22,547 square foot (SF) +/- vacant building.

Surrounding Properties

- 7, 11, 13, 17, 19 & 101 Bay Street - CB
- 117, 119, 120, 129 North West Street - CB
- 122, 123, 130, 134, 133 & 201 North Washington Street - CB

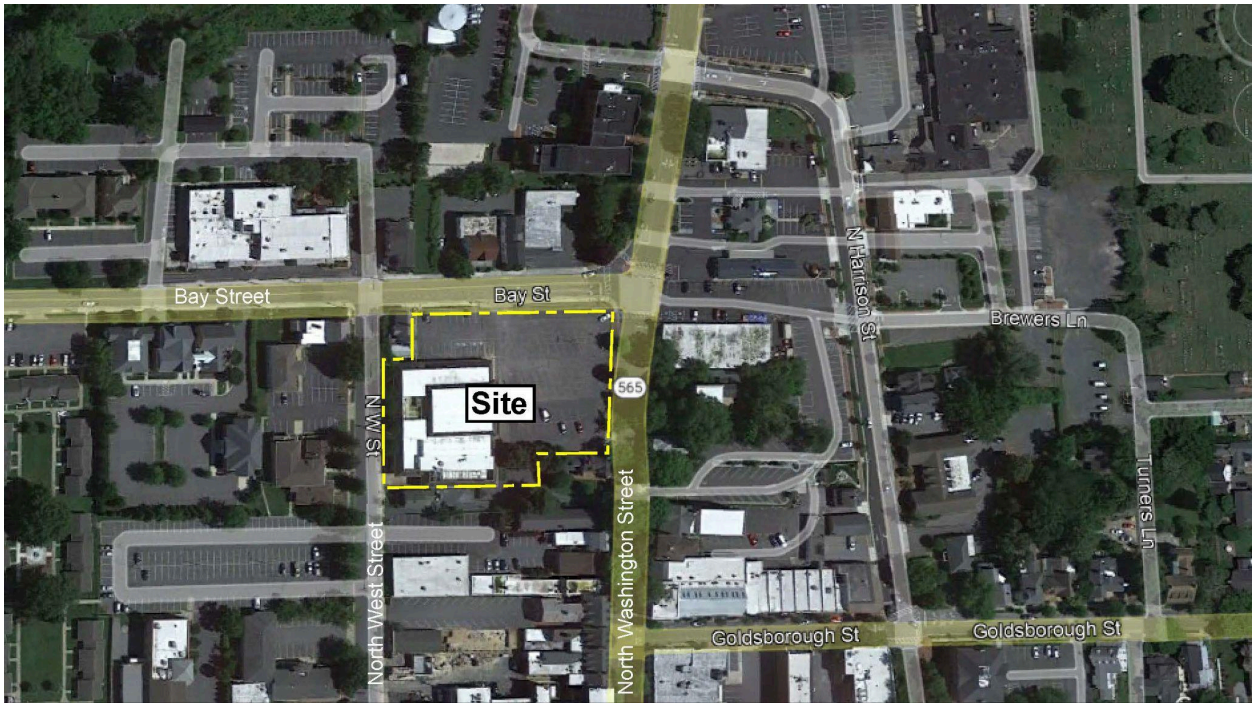

***Figure 1**: Vicinity Map*

PROPOSAL: Miller Development Corporation (Applicant) is seeking a Sketch Subdivision Plat approval and a recommendation from the Planning Commission to the Town Council of Planned Unit Development (PUD) Infill for the construction of twenty-four (24) townhomes and nine (9) single-family detached dwellings with associated parking, stormwater management facilities, and landscaping. The site is the former Safeway grocery store and is zoned Central Business (CB). Areas zoned CB allow a maximum density of 7 dwelling units per gross acre for single-family dwellings and 12 dwelling units per gross acre for townhomes. The maximum density allowed on the property, based on the PUD (Infill) standards, is 60 dwelling units per acre which equals a maximum density of 91 dwelling units based on the property's size (1.46 acres). The total proposed density is 21.68 dwelling units per acre. The subdivision also proposes a mews, which includes an ornamental fence, garden walls and decorative pavers to provide a walkable connection between North Washington Street and North West Street.

BACKGROUND: The applicant submitted an application to the Easton Staff Development Review (ESDR) Committee on April 24, 2024 (please see attached ESDR Determination Letter). The property is also within the Historic District and the Applicant is scheduled to appear before the HDC at their May 13, 2024 meeting for a Certificate of Appropriateness.

OUTSTANDING ISSUES:

1. **Trash and Recycling Collection.** The applicant needs to coordinate with the Engineering Department for refuse collection; resolving the placement of trash receptacles on collection day and a safe maneuverable route for the vehicles to collect the refuse

2. **Mews Access.** Staff is seeking clarification from the Applicant on whether the mews is planned for public access.
3. Traffic Impact Analysis. Staff is requesting clarification from the Applicant and traffic consultant on whether there are recommended improvements to the intersection of Bay Street and North Washington Street or Bay Street and North West Street.

ZONING ANALYSIS:

A. Purpose and Intent

Section 28-701 A.

> ***The purpose of a PUD District is to provide for carefully planned residential, mixed use and certain commercial developments at appropriate locations within the Town of Easton. It is the intent of this Section to allow all aspects of a PUD District to be subject to public review and control by the Town with specific provisions to be made on a case-by-case basis for adequate open space, architectural appearance, the height, bulk and location of buildings, required public facilities, and a variety of housing types, densities, and/or compatible commercial or industrial uses as a part of a detailed development plan.***
>
> ***Not all locations in the Town are suitable for PUD development and the nature, size, scale or intensity of proposed uses may cause a particular site not to be suitable for a specific PUD proposal. Therefore, there is no general presumption that an application for such a use at a particular location is valid, inures to the general benefit of the Town or is in compliance with the Town's Comprehensive Plan. Instead, each application will be evaluated according to its particular location and the degree to which the developer is willing or able to propose a development plan which furthers the goals and objectives of this Section and the Ordinance generally.***

B. Location

> ***Section 28-701 B. The PUD is a floating zone. That means that while provisions and regulations are made to govern development within any PUD District, no such District will be pre-mapped on the Zoning Map. A PUD District may be established in any parent zoning district provided the requirements outlined in this subsection are met.***

Analysis - The current process of the Town of Easton Zoning Ordinance is for the Planning and Zoning Commission to review the material submitted and forward a recommendation to the Mayor and Town Council. The Commission may include recommended changes to the PUD sketch plan or recommended conditions of approval that the Commission deems necessary to better insure compliance with the Comprehensive Plan. In reaching its conclusion, the Commission shall make recommendations addressing the factors in § 28-701.H(2) (see below).

C. Off-Street Parking

28-1001.3 Parking Requirements

	Use/Activity	Minimum Vehicle Spaces	Maximum Vehicle Spaces	Minimum Bicycle Spaces	Notes
	Residential Buildings				
1	Single-Family Detached	2 per du	–	–	
2	Single-Family Attached	2 per du	–	–	

Total Site Parking Required:
Single-Family Detached: 2 Spaces per dwelling unit required-Minimum
9 units x 2 = 18 spaces required-Minimum
Single-Family Attached: 2 Spaces per dwelling unit required-Minimum
(Townhomes) 24 units x 2 = 48 spaces required-Minimum

33 units x 2 = 66 spaces required-Minimum
Total spaces provided: 67

Analysis- There are no minimum off-street parking spaces required within the CB zoning district, although the adequacy of parking may be a consideration of site plan review. The Applicant is proposing 67 parking spaces.. The townhomes have a total of 24 units and the single-family detached dwellings have a total of 9 units. The Applicant believes the proposed parking is adequate to support the daily operation of this property.

D. DEVELOPMENT STANDARDS

Section 28-701.G.
Applications for any type of Planned Unit Development shall meet the following requirements:

(1) The area proposed for a planned unit development shall be in one (1) ownership, or, if in several ownerships, the proposal shall be filed jointly by all the owners of the property included in the development plan.

Analysis - The Property is owned by a single entity.

(2) The site shall be of a configuration suitable for the development proposed.

Analysis - The site includes 1.522 acres and has direct access onto Bay Street and North West Street. The planned layout and proposed site design provide for a functionally designed site.

(3) Public water and sewerage shall be available, although it may be made available in conjunction with the development of the PUD.

Analysis - There's adequate water and sewer service on-site to serve the proposed Project. The Applicant will provide the utility extensions that are necessary to connect the Project to Town services and will work with Easton Utilities to ensure that all permits and approvals are granted.

(4) The site shall be located adjacent to adequate transportation facilities capable of serving existing traffic and that expected to be generated by the proposed development. Private roads may only be approved in commercial and multifamily projects or portions of projects. Such roads shall be internal to the development. Private roads shall comply with any standards developed and adopted for such roads by the Town Council. The Town shall bear no responsibility for construction or maintenance of private roads. Development on private roads may not be entitled to all Town services.

Analysis - The Project has two existing access points; one from Bay Street, a State-owned street and the other from North West Street, a Town-owned street. A Traffic Impact Study ("TIS") was conducted by Traffic Concepts, Inc. in April 18, 2024, which is included with the submittal of this Application. The TIS demonstrates that all intersections of interest near the Project will continue to operate at a Level of Service (LOS) of "D" after the Project is completed. Comments from The Maryland State Highway Administration ("SHA") are pending.

(5) The owners or developers must indicate that they plan to begin construction of the development within three (3) years after final approval. If there is no action on the part of the applicant at any point in the process for a period of three (3) years, the zoning of the site shall revert to its previous classification unless a time extension is requested by the developer and granted by the Planning and Zoning Commission. For projects constructed in parts or phases, the PUD approval applicable to any portion not improved in accordance with said PUD approval, shall expire if no development activity occurs for a period of five years.

Analysis - The Applicant intends to commence construction upon approval from the Town Council, in light of the time incurred in obtaining all necessary building permits.

(6) The setback, lot size, lot coverage, height, minimum frontage, minimum open space, and yard requirements shall be established for each individual project by the Town Council in the ordinance granting the application. The Planning and Zoning Commission shall make recommendations to the Town Council with regard to these requirements. The Town recognizes that it is necessary and encourages such uniquely established standards.

Analysis - The minimum bulk requirements for the Project will remain consistent with the development standards.

(7) Off-street parking shall be provided for each individual use in the planned unit development in accordance with the requirements of Section 1001. Mixed-use PUD's that integrate coordinated pedestrian and bicycle circulation systems throughout the development, shall be permitted to reduce the required off-street parking by 20% of the required standard without the need for a parking variance, waiver, or deferral.

Analysis - There are no minimum off-street parking spaces required within the CB Zoning District, although the adequacy of parking may be a consideration of site plan review. Off street parking within the Project does comply with Town standards. The Town code requires a

minimum of two parking spaces per unit (66 spaces). The Project proposes 67 spaces, which is one space above the minimum parking requirement for the residential community. The municipal services offered for refuse collection will not access the private property, therefore the applicant will need to show and describe how refuse will be collected. The applicant needs to coordinate with the Engineering Department for refuse collection; resolving the placement of trash receptacles on collection day and a safe maneuverable route for the vehicles to collect the refuse.

(8) No more than 50% of the off-street parking area for the entire property of a major retail or shopping center use, shall be located between the front façade of the principal building(s) and the primary abutting street.

Analysis - Not Applicable.

In addition, some development standards will vary according to the type of PUD in accordance with the following Table:

Standard	**PUD Sub District**	
	PUD- Infill	**139 N. Washington Street**
Minimum Size	**N/A**	1.522 acres
Maximum Size	**5 acres**	N/A
Maximum Residential Density (per gross residential acre)**	**60 du/acre******	21.68 du/ac
Minimum Open Space Requirement***	**Open space shall be that which is deemed adequate by the Town Council. In addition, landscaping shall be provided to enhance the project and advance the degree to which the infill project blends in with surrounding properties.**	Required: 30% of total gross area = 0.456 acres. Proposed: A Mews is proposed, which includes ornamental fence, garden walls and decorative pavers to provide a walkable connection between North Washington Street and North West Street.
Applicability	**Lands within the area indicated on Map 7-1**	The property qualifies as Infill

Analysis - Not Applicable.

*****The Town Council may consider projects with a density of up to 25% more than the maximum stated in this table upon a finding that such increased density is in keeping with the existing or intended character of the neighborhood (as expressed in the Comprehensive Plan or, if applicable, any adopted Small Area Plans) and that any potential detrimental impacts from such increased density are ameliorated to the satisfaction of the Council. Additionally, if residential use is part of a vertically-mixed use project (i.e., non-residential uses are present on the ground floor with residential units on non-ground floors), there shall be no limit on the residential density.***

Analysis - As explained above, the Applicant is requesting approval of the PUD allowing a density of 21.68 dwelling units per acre, less than the potential maximum of 60 dwelling units per acre and will not result in any detriment to neighboring properties or nearby traffic patterns and public right of ways. The Property is situated between commercial uses and residential uses and is perfectly suited for higher-density development to create a tiered development scheme. Approval of the requested density is consistent with the goals of the Comprehensive Plan and results in provision of housing that the Town of Easton is seeking for its current and future residents. This has been achieved through creating a sense of place; utilizing existing infrastructure efficiently, producing a pedestrian-friendly neighborhood with connectivity and accommodating transit to Washington Street, Bay Street and West Street.

.

******The Town Council may consider projects with less than the minimum open space required as specified in this Table, upon a finding that unique circumstances or conditions exist which warrant such a reduction and further provide that the applicant addresses the open space requirement in another acceptable means.***

Analysis - Though there is no designated open space, the Applicant has designed a Mews, which includes an ornamental fence, garden walls and decorative pavers to provide a walkable connection between North Washington Street and North West Street.

*******In the PUD General sub district, for any residential units proposed in excess of the maximum residential density permitted in base residential zoning districts (3.5 du/ac), at least 25% must be devoted to affordable housing, or the developer may contribute a fee-in-lieu to an entity to be determined by the Town.***

Analysis - Not Applicable.

E. Forest Conservation

Easton Forest Conservation Ordinance #718, Article III, § 31-3.2 Exemptions

O. An activity on a previously developed area covered by impervious surface and located in the priority funding area.

Analysis - The site is within the priority funding area and is an existing developed area covered by impervious surface; existing building, parking lot and utilities. The overall site area is 1.522 acres with nine (9) proposed single-family detached dwellings and twenty-four (24) proposed 4-story townhomes with associated parking, stormwater management and landscaping. Required Forest Conservation would be 0.228 acres or 9,945 square feet. The intent of the project is to maximize density within the infill area and provide adequate facilities to accommodate the site. The applicant has provided a landscape plan with ten (10) deciduous-shade/canopy trees, fourteen (14) understory trees and one (1) evergreen tree that is sixty (60) percent of the required forest conservation area. Based on the existing conditions and priority funding area, the staff supports the exemption under *Ordinance #718, Article III, § 31-3.2 Exemption, "O", an activity on a previously developed area covered by impervious surface and located in the priority funding area.*

F. Traffic Impact Analysis

The Traffic Impact Analysis (TIA) was submitted by the applicant on April 18, 2024. The documents prepared by Lenhart Traffic Consulting, Inc. described that the primary access to the single-family detached dwellings and townhome units will be provided along Bay Street and West Street.

The study was prepared in accordance with a scoping agreement coordinated with the Town of Easton and conforms to the MDOT SHA Traffic Impact Study Guidelines. Note that per MDOT SHA's Access Permits Manual, all study intersections were evaluated using the Critical Lane Volume (CLV) methodology and must maintain Level-of-Service (LOS) D or better to be considered adequate. The Highway Capacity Manual (HCM) methodology was also utilized to evaluate the study intersections per Town of Easton Guidelines. Study intersections included:

- Bay Street & West Street.
- Bay Street & Site Access.
- Bay Street & MD 565 (Washington Street).
- West Street & Site Access.
- West Street & Federal Street.

Morning and evening peak hour turn movement counts were conducted on April 18, 2024. The Maryland Department of Transportation State Highway Administration's Average Daily Traffic Volumes (ADT's) have been reviewed for the past ten years and it was determined that average yearly growth in the area is approximately 1.34%. To provide a conservative analysis, a growth rate of 3.0% was applied for 3 years to the existing peak hour volumes and the resulting base peak hour volumes. The previous use for the property, a Safeway grocery store, has been vacant for some time. To account for the traffic previously generated by the property, the previous grocery store use was included as a background development.

Projected Conditions with Site

The site is proposed to be redeveloped with 9 single family detached units and 24 single family attached units. The trip generation rates were obtained from the ITE Trip Generation Manual, 11th Edition. Trips associated with the previous use for the property were included in the background peak hour volumes. With the proposed redevelopment, these trips will no longer be on the roadway. The proposed project will generate less trips than the previous grocery store.

The CLV analysis indicates that all intersections operate at LOS A under total conditions. The results of the HCM analyses indicate that each study intersection operates with LOS "D" or better. The TIA also indicates minimal impact on the minor street delays at the unsignalized study intersections.

The TIA noted that an evaluation of sight distance for each of the proposed access points was evaluated to ensure vehicles are able to safely exit the site. The posted speed limit along both Bay Street and West Street is 25 MPH. Given the proximity of the proposed access points to the signalized intersection of MD 565 & Bay Street, and the stop-controlled intersection of Bay Street & West Street, it is likely vehicles are traveling below the posted speed limit when passing the site access points. As such, a 25 MPH design speed is assumed for Bay Street and West Street for the purpose of the sight distance evaluations. The required stopping sight distance (SSD) for left turns from stop considering a 25 MPH design speed is 155 feet and the required intersection sight distance (ISD) is 280 feet. Right turn maneuvers from stop require lower distances for both SSD and ISD purposes and are not analyzed in the following discussion.

The minimum SSD is provided in both directions from each access point. While the minimum ISD is not achieved, the AASHTO Green Book (A Policy on Geometric Design of Highways and Streets) contains guidance on intersection sight distance in Chapter 9.5.1 and states that, *"if the available sight distance for an entering or crossing vehicle is at least equal to the appropriate sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions"*. As mentioned above, due to the proximity of the access points to the intersections of MD 565 & Bay Street and Bay Street & West Street, it is likely that vehicles are traveling well below the posted speed limit of 25 MPH. As such, the actual SSD required to anticipate and avoid collisions at these locations is likely lower than the minimum SSD used in this analysis. Based on the results of the sight distance evaluation, and according to AASHTO guidance, drivers have sufficient sight distance to safely anticipate and avoid collisions.

In the conclusion of the findings contained in the report, it is recommended by Lenhart Traffic Consulting, Inc. that the proposed development be approved. In their letter dated April 26, 2024, the Town of Easton Engineering Department stated that they reviewed the analysis and found it acceptable with the following comments that should be addressed by the Traffic Consultant at the Planning Commission meeting:

- SHEET 83 OF 83: AASHTO stopping sight distance layout is acceptable
- Curb markings indicating NO PARKING locations must be labeled on the Preliminary Site Plan
- Are there any recommended improvements to the intersection at Bay/Washington or Bay/West?

- Comments from The Maryland State Highway Administration ("SHA") are pending.

POLICY ANALYSIS:

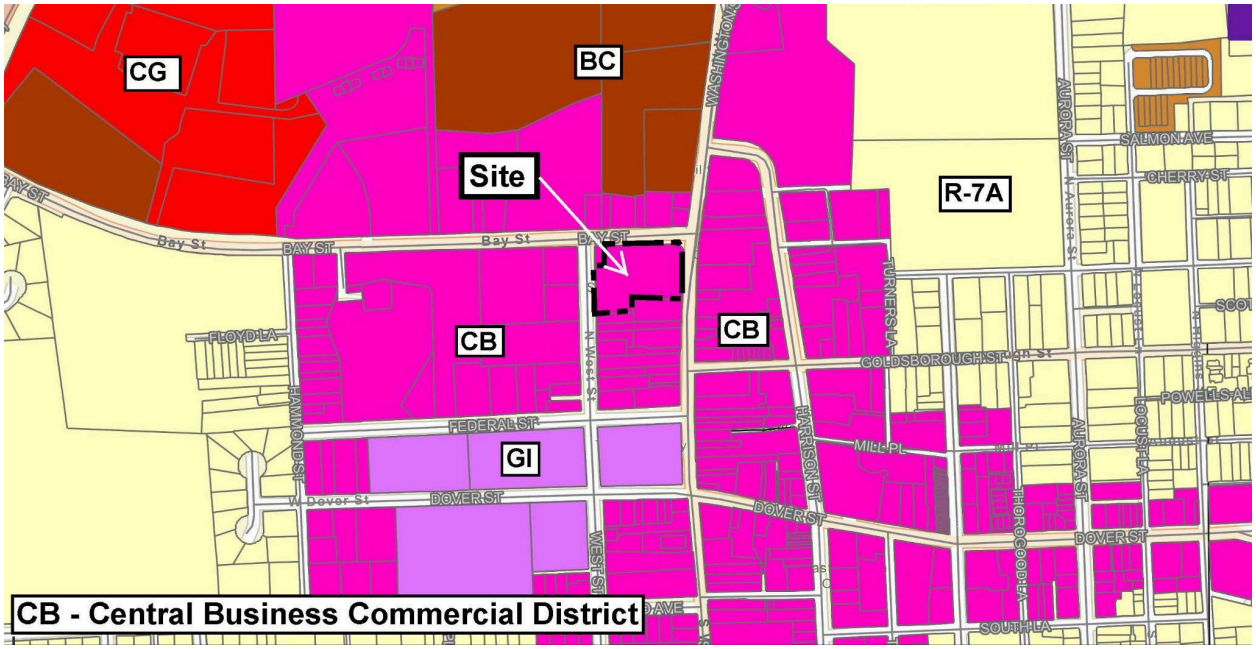

Figure 2: Zoning Map

Section 28-901.2.G of the Town Code states that the submission of a site plan for a proposed use or development activity shall not be approved unless it meets the factors below:

1. The site plan meets the design principles and standards and required improvements set forth in this Ordinance, the Town Comprehensive Plan, the Town of Easton Subdivision Regulations, and other ordinances, regulations, and policies established by the Town of Easton.

Analysis - The proposed subdivision meets the design requirements of the Town of Easton, including those described in the Town's Comprehensive Plan, Zoning Code, and any Design Guidelines. Notwithstanding, the staff's outstanding comments as noted above. Those comments can be resolved prior to Final Record Plat recording.

Town of Easton 2010 Comprehensive Plan Design Principles (Principle #1) Integrated uses are desirable- Applicant's response: *This development proposes residential development adjoining other residential land use and commercial uses.*

Staff notes that this is an appropriate location for walkable residential townhomes and single-family detached dwellings within the Town of Easton's Central Business Commercial District. In addition, the proposed development is under the PUD Infill Boundary, which provides a mechanism for the redevelopment, rehabilitation, and general improvement of certain

older areas within the Town of Easton, including properties that have fallen into a somewhat neglected or dilapidated state.

(Principle #2) Natural features should determine design – Applicant's response: *No compelling natural features; SWM integrated on site.*

Staff notes that there are no compelling natural features on site.

(Principle #3) Automobiles should not determine design – Applicant's response: *Parking for residents is important. The proposed parking has been designed to accommodate the building layout on-site.*

Staff notes that the applicant has provided adequate off-street parking interior to the site while maintaining a form of development consistent within the context of the Central Business District; i.e. the site layout with its street fronting single-family detached homes does not reflect a suburban, auto-oriented type of residential development.

(Principle #4) Ample Open Space should be provided within & around neighborhoods – Applicant's response: *Usable open space not specifically applicable here.*

Staff notes that an attractive open space has been created within the proposed mews area, which includes an ornamental fence, garden walls and decorative pavers to provide a walkable connection between North Washington Street and North West Street. The mews enhances the project and advances it to the degree to which this infill project blends in with surrounding properties.

(Principle #5) Architecture should respect Easton's Historical Development – Applicant's response: *The application proposes architecture compatible with existing buildings and compatible with existing architecture found in Easton.*

Staff notes that this project is scheduled for Historic District Commission on 5/13/24 for the demolition of an existing building and the construction of twenty-four (24) four-story townhomes and nine (9) single-family detached dwellings.

(Principle #6) Signs should inform but not dominate – Applicant's response: *Signs should inform but not dominate-signage tasteful, simple and per code.*

Staff notes that any proposed monument sign will require a Signage Application to be submitted prior to installation.

(Principle #7) Neighborhoods should contain a diversity of housing types – *Applicant's response: This development proposes townhomes and single family dwellings as permitted in the CB Zoning District.*

Staff notes that the townhomes and single family dwellings offer a diverse pairing of housing types on the project site.

(Principle #8) Residential neighborhoods should be interesting places – *Applicant's response: This development setting provides diversity to the downtown district.*

(Principle #9) Neighborhoods should connect – *Applicant's response: The mews will provide pedestrian connection from Washington Street to West Street.*

Staff notes that the Comprehensive Plan states that older historic areas of Easton are where you find a great variety of lot sizes, configurations, and housing types as opposed to the more recent homogenous subdivisions built over the last 30 years. In addition, the plan states that connected neighborhoods are a fundamental characteristic of the older parts of Easton that are essential to emulate in new development projects for four reasons: 1) to offer multiple travel options, 2) to promote community and increase the opportunities for social interactions and walking between adjacent developments, 3) connected neighborhoods are safer and urban gridded streets promote lower vehicular speeds, and 4) connected neighborhoods are more sustainable and can promote compact, vibrant, mixed-use neighborhoods where living in a mixed-use environment where residents are within walking distance of shops and services results in increased walking and biking.

The Comprehensive Plan's Community Character chapter, related to the role of infill development in Easton's growth strategy, states that infill development can accommodate growth without annexing land. Infill and redevelopment means:

- ***decreased demand for new, undeveloped greenfields***
- ***mobility for those who do not or cannot drive***
- ***it's less expensive to provide services to infill sites versus greenfield sites***
- ***An increased supply of smaller‐sized housing units can offer more affordable and lower maintenance housing choices for smaller households***
- ***new opportunities and improved quality of life for in‐Town residents,***
- ***savings on energy and the environment,***
- ***development that is consistent with State Smart Growth Policies***

The plan does state that extra attention needs to be given to compatibility and neighborhood impact issues and the plan offers points for consideration with any infill or redevelopment project. These points include: ensure housing types that are compatible with existing types, employ appropriate traffic calming measures, and provide a continuous pedestrian network.

It is also noted that this site is included within the area subject to the Downtown Easton Master Plan for Infill Development, and was in fact one of a handful of parcels examined more closely for potential infill and redevelopment opportunities. The plan was finalized in July of 2008. While outdated, there are principles or recommendations in the plan which are still useful for reference. The following is a portion of the description of such opportunities for this site:

NORTH SIDE STRATEGIC INFILL SITE: SAFEWAY

DEVELOPMENT PRINCIPLES AND CONCEPT PLAN

As shown on Figure 1-15, the development principles of this infill site create a unique opportunity to begin making the important gateway intersection of Bay and Washington Streets integrated to the character and context of downtown (also see the rendered illustration in Figure 1-11, above). By creating a development plan that pushes parking to the interior and brings active building frontages to the corner, a new gateway anchor in the community can be established. Use of the adjacent Town parking lot across West Street can also minimize the total parking provided on-site.

Figure 1-15 provides a concept plan for the site emphasizing its street-oriented and mixed-use approach. The proposed site redevelopment a small residential component of about 12 units fronting on West Street, about 29,500 square feet of new retail, and about 36,000 square feet of ground floor and upper floor commercial space. Like the existing Safeway store, the site is very appropriate for an urban-scale grocery store and that is the assumed use for the new retail space. Parking would be to the interior possibly on a two story deck or utilizing internal parking and the Town lot located across West Street.

The Downtown Plan envisioned a mixed-use project with residential units over retail. Notwithstanding, the proposed site plan practically mirrors the recommendations of the Downtown Plan. In addition, the Downtown Plan states that providing for residential development will serve to reactivate downtown and increase the hours that downtown is active. The property is located in what the Downtown Plan calls the Downtown Gateway, which includes Washington Street. The building heights of the dwellings facing the street are consistent with the recommended stories (three plus a dormer level), the homes demonstrate variations of siding materials (brick and fiber cement), the window openings are vertically oriented, and the dwellings are close to the front setback line (Table 1-2, Infill Design Guidelines).

The Downtown Plan also notes that there is a noticeable gap or divide between the existing development pattern north and south of Goldsborough Street. Where the area south of Goldsborough includes small parcels, finely-scaled architecture, and historical street-fronting buildings, the area north of the street is characterized by larger vacant lots (some used for parking), irregular street walls (street frontage), and irregular building styles. Staff notes this area includes more auto-dominated development patterns typical of suburban patterns of development. Prime examples are the Talbot Town shopping center, Talbot Cleaners, the two buildings at 134 and 137 North Washington Street, and the old Safeway site that is the subject of this application.

The Downtown Plan recommends establishing the Washington/Bay Street intersection as a new gateway presence to help connect the northern and southern portions of downtown[1]. The plan also recommends closing up gaps in the street wall and activating the street at ground level to help make the area more walkable and to reinvigorate downtown. Staff notes that the

[1] Other recommendations were to connect Bay Street with Brewers Lane and extend Harrison Street into the Talbot Town site.

architectural renderings show a low street wall that includes a series of planting beds along North Washington Street. These beds, combined with the single family homes located close to the front setback, closes the current gap that exists along the roadside and achieves the more traditional urban form that defines the downtown[2].

2. The site plan avoids or minimizes adverse impacts upon features (whether on-site or off-site) of historical, cultural or ecological significance.

Analysis - The site is within the Historic District and is seeking architectural approval from the Historic District at their meeting scheduled for May 13, 2024. The site is not within the Critical Area. This project would provide thirty-three residential units with improved amenities; adequate parking, stormwater management facilities and landscaping.

3. The proposed use or development activity will not substantially increase traffic hazards due to traffic generated by the proposed use, the location of curb cuts or the layout of internal traffic circulation.

Analysis - The proposed use and activity will not increase traffic hazards in the surrounding area. Adequate off-street parking is provided.

4. The site plan and the proposed use or uses do not cause any adverse impact upon the health or safety of persons residing or working in the area surrounding the site or upon the character of the neighborhood surrounding the site; and

Analysis - There would be no adverse impacts. The existing property is located within the Central Business zoning district. The project would provide a residential use with associated parking, stormwater management facilities and landscaping.

5. ***The site plan improves the water quality of the Chesapeake Bay or its tributaries.***

Analysis - The proposed site would meet required design practices for stormwater management.

Section 28-701.H.2
The Planning and Zoning Commission shall review the material submitted and following the presentation from the applicant, shall forward a recommendation to the Mayor and Town Council. The Planning and Zoning Commission's transmittal to the Town Council may include recommended changes to the PUD Sketch Plan or recommended conditions of approval that the Commission deems necessary to better insure compliance with the Comprehensive Plan. In reaching its conclusion as to the merits of the project, the Commission shall make recommendations addressing the following:

[2] The Downtown Plan states that the entire character of the north downtown area can be enhanced by orienting new development to the street and eliminating large areas of open parking and non-contiguous street frontages (p. 1-7).

a. Whether the proposed PUD development conforms to the Town of Easton Comprehensive Plan;

Analysis - The proposed PUD revisions conforms to the Town's Comprehensive Plan.

b. Whether the proposed PUD development conforms with all provisions of the Town of Easton Zoning Code which are not proposed for modification subject to the request;

Analysis - This PUD development conforms with all provisions of the Town of Easton Zoning Code which are not proposed for modification subject to the request.

c. Whether the proposed PUD development complies with all Town engineering and design regulations and standards;

Analysis - The overall development conforms with Town engineering and design regulations and standards. Staff notes the sketch plan will still need to submit a development site plan, upon approval of the PUD, for further review of site infrastructure.

d. Whether the proposed PUD development complies with any other applicable Town, County, State, or Federal regulations, policies or plans, except those standards proposed for modification. If the standards of any jurisdiction other than the Town of Easton are proposed for modification, any PUD project approval, should it subsequently be granted by the Town Council, shall be subject to the applicant successfully obtaining approval of said modification and demonstrating proof of such approval to the Town's satisfaction.

Analysis - Currently, this PUD development complies with the standards of any jurisdiction other than the Town of Easton.

e. Whether the proposed PUD will be superior to or more innovative than conventional development and how it will provide greater public benefit without additional probable significant adverse impacts to public health, safety or the environment, than would be available through the use of conventional zoning and/or development standards.

Analysis - The development's proximity to multiple use properties will provide greater public benefit without additional significant adverse impacts to public health, safety or the environment. The development provides a walkable design to support a pedestrian-oriented community, parking, landscaping, stormwater management and forest conservation.

CHAPTER 25, ARTICLE IV-SECTION 401 SKETCH PLAT PROCEDURES

(f) The Planning and Zoning Commission shall not approve a sketch subdivision plan unless they determine that the proposed subdivision satisfies each of the following requirements. Failure to satisfy any single requirement shall be just cause to deny a subdivision application, even if all others are satisfied. For each subdivision, the Planning Commission shall make findings that:

(1) The proposed subdivision provides against such scattered or premature subdivision of land as would involve danger or injury to health, safety, or prosperity by reason of the lack of water supply, drainage, transportation, schools, fire protection, or other public services, or necessitate the excessive expenditure of public funds for the supply of such services;

Analysis - There would be no adverse impacts that would involve danger or injury to the surrounding area. The existing property is located within the Central Business zoning district and is not within the Critical Area.. The project would provide a residential use with associated parking, stormwater management facilities and landscaping. Adequate water and sewer services to serve the proposed Project exist and are adjacent to the property. The Applicant will provide the utility extensions that are necessary to connect the Project to Town services and will work with Easton Utilities to ensure that all permits and approvals are granted

(2) The proposed subdivision provides for harmonious development of the municipality and its environs;

Analysis - The proposed subdivision will promote a harmonious infill development by providing townhomes and single family dwellings that offer a diverse pairing of housing types to complement the Central Business Commercial District. This development provides an integrated use that is desirable for the site and its surrounding multiple use properties; ranging from commercial to residential. The development's proximity to multiple use properties will provide greater public benefit without additional probable significant adverse impacts to public health, safety or the environment. The development provides a walkable design to support a pedestrian oriented community, parking, landscaping, and stormwater management.

(3) The proposed subdivision requires the proper arrangement and coordination of streets within subdivisions in relation to other existing or planned streets;

Analysis - The single-family detached dwellings and townhome units will be provided access along Bay Street and West Street. The Traffic Impact Analysis (TIA), prepared by Lenhart Traffic Consulting, Inc., described the CLV analysis indicating that all intersections operate at LOS A under total conditions and the results of the HCM analyses indicate that each study intersection operates with LOS “D” or better. The TIA also indicates minimal impact on the minor street delays at the unsignalized study intersections. The previous use for the property, a Safeway grocery store, has been vacant for some time. To account for the traffic previously generated by the property, the previous grocery store use was included as a background development. Staff is requesting clarification from the Applicant and traffic consultant on whether there are recommended improvements to the intersection of Bay Street and North Washington Street or Bay Street and North West Street.

(4) The proposed subdivision provides for open spaces of adequate proportions (or satisfies this requirement by other acceptable means, when and as specified herein);

Analysis - The proposed subdivision meets the open space requirement by creating an attractive mews area, which includes an ornamental fence, garden walls and decorative pavers to provide a walkable connection between North Washington Street and North West Street. The mews enhances the project and advances it to the degree to which this infill project blends in with surrounding properties.

(5) The proposed subdivision provides suitably located streets of sufficient width to accommodate existing and prospective traffic and afford adequate light, air, and access for fire fighting apparatus and equipment to buildings, and is coordinated so as to compose a convenient system; Town of Easton 9 Subdivision Regulations Effective DECEMBER 12, 2023

Analysis - The proposed subdivision provides adequate drive aisle widths necessary for maneuverability and access for parking spaces and garages. The Applicant will need to work with the Easton Fire Department to ensure that access for fire fighting apparatus and equipment to buildings are adequate. In addition, the applicant needs to coordinate with the Engineering Department for refuse collection; resolving the placement of trash receptacles on collection day and a safe maneuverable route for the vehicles to collect the refuse

(6) The proposed subdivision provides parks of reasonable size for neighborhood playgrounds or other recreational uses on land suitable for such uses (or satisfies this requirement by other acceptable means) in accordance with the standards of Section 708 of these Regulations;

Analysis - The proposed subdivision provides *other acceptable means* to meet the park requirement by creating an attractive mews area, which includes an ornamental fence, garden walls and decorative pavers to provide a walkable connection between North Washington Street and North West Street. The mews enhances the project and advances it to the degree to which this infill project blends in with surrounding properties.

(7) The land indicated on the plats submitted to the Planning Commission is of such character that it can be used for building purposes without danger to public health, safety, or general welfare;

Analysis - The proposed subdivision indicated on the Sketch Plat can be used for building purposes without danger to public health, safety, or general welfare.

(8) The proposed subdivision prescribes minimum areas of lots in conformance with the Town's Zoning Ordinance and such additional areas as may be needed for each lot for on-site sanitary facilities (if needed);

Analysis - The proposed subdivision offers adequate lot sizes with applicable utilities.

(9) The proposed subdivision promotes the orderly growth of the Town of Easton, providing for public and other open space and for proper development of land while preventing, through the Commission's discretion, such scattered, premature and undesirable subdivision and development of land as would involve danger, or injury to health, safety or property, by reason of lack of water supply, sewage, drainage, transportation, or other public services or would necessitate in the Commission's judgment an excessive expenditure of public funds for the supply of such services, or would be injurious to maintenance of the integrity of the adopted Town Comprehensive Plan;

Analysis - The proposed subdivision is a complementing infill project that promotes an orderly growth within the Central Business Commercial District. This project utilizes other acceptable means to meet the open space and park requirement by creating an attractive mews area, which enhances the project and advances it to the degree to which this infill project blends in with surrounding properties. There would be no adverse impacts that would involve danger or injury to the surrounding area. The project would provide a residential use with associated parking, stormwater management facilities, landscaping and a walkable connectivity between Washington Street and West Street through the proposed mews. Adequate water and sewer services to serve the proposed Project exist and are adjacent to the property. The Applicant will provide the utility extensions that are necessary to connect the Project to Town services and will work with Easton Utilities to ensure that all permits and approvals are granted

(10) The proposed subdivision satisfies all technical requirements of these Regulations; and

Analysis - The proposed subdivision satisfies the technical requirements. Notwithstanding, the staff's outstanding comments as noted above. Those comments can be resolved prior to Final Record Plat recording.

(11) The proposed subdivision meets all design requirements of the Town of Easton, including those described in the Town's Comprehensive Plan, Zoning Code, and any Design Guidelines as may be adopted by the Town Council. The Planning Commission may approve a sketch subdivision plat subject to conditions intended to insure compliance with these requirements.

Analysis - The proposed subdivision meets the design requirements of the Town of Easton, including those described in the Town's Comprehensive Plan, Zoning Code, and any Design Guidelines. Notwithstanding, the staff's outstanding comments as noted above. Those comments can be resolved prior to Final Record Plat recording.

RECOMMENDED CONDITIONS: Staff believes the proposed PUD is consistent with the Town's Comprehensive Plan, including the Downtown Small Area Plan, and recommends that you indicate such to the Town Council.

Staff suggests the Planning Commission consider recommending the following conditions of approval:

- The applicant will need to coordinate with the Town Engineer and State Highway Administration to obtain approval of the Traffic Impact Study.
- Address all ESDR comments intended to be complete during the Preliminary Site Plan review.

DRAFT MOTIONS:

1. I move that the Planning Commission approve the sketch plat conditioned on Council approval of the PUD. I also move that the Planning Commission forward a positive recommendation of the PUD to the Town Council, subject to staff's Conditions of Approval.

OR

2. I move that the Planning Commission forward the applications to the June 20th Commission meeting for further discussion.

OR

3. I move an alternate motion.

ATTACHMENTS:
1. 2024-04-03 Application - Site Plan, paper copy & PDF
2. 2024-04-08 HDC Application, paper copy & PDF
3. 2024-04-08-Arch Drawings, paper copy & PDF
4. 2024-04-22 Traffic Impact Analysis, paper copy & PDF
5. 2024-04-25 ESDR Determination Letter & Application, paper copy & PDF
6. 2024-04-26-CommentResponses, paper copy & PDF
7. 2024-04-29-PUD Sketch Plan 139 N Washington-PC Submittal, paper copy & PDF
8. 2024-05-06 139 N. Washington Street - May PC 400' Notice Letter, paper copy & PDF
9. 2024-05-06 Subdivision Application, paper copy & PDF

TOWN OF
EASTON
ENGINEERING DEPARTMENT

DATE: **April 26, 2024**

TO: **Brett Ewing – Lane Engineering, LLC**
Cc: **Rick Van Emburgh – Town Engineer**
Lynn Thomas – Town Planner
Aaron Goller – EUC

FROM: **Sierra Clem – Engineering Department**

SUBJECT: **139 N Washington St**
Sketch Site Plan, Sketch Subdivision, Traffic Impact Analysis & Sketch Stormwater Management Review for ESDR

Our office has reviewed the Application for the Subject project received on 4/3/2024 and the Traffic Impact Analysis received 4/22/2024.

It is noted that the proposed internal pavement is a parking lot with associated drive aisles and will not include proposed Town ROW. Bay Street is owned and maintained by the State. Washington Street, including the intersection with Bay Street and the traffic signals are owned and maintained by the Town of Easton. West Street is owned and maintained by the Town of Easton.

The **Sketch Site Plan** is **Acceptable** to the Engineering Department.

The following comments should be addressed with the Preliminary Site Plan submission:

1. Reconstruct existing entrance on West Street to ensure ADA compliance.
2. Remove the curb cut and driveway entrance on Washington Street and install sidewalk.
3. Verify that no steps are located within the Town ROW.
4. Label the width of the ROW in plan view on all sheets.
5. Show and describe how refuse collection will be managed, municipal services offered will not access the private property for collection.
6. Verify the dimensions of the parking space associated with unit 33.
7. All retaining walls shown on the concept plan are to be located on the private property, not within the Town ROW.

Please address the comment above and submit a Preliminary Site Plan.

The **Traffic Impact Analysis** is **Acceptable** to the Engineering Department with the following comments that should be addressed by the Traffic Consultant at the Planning Commission meeting:

8. **SHEET 83 OF 83:** AASHTO stopping sight distance layout is acceptable. Curb markings indicating NO PARKING locations must be labeled on the Preliminary Site Plan.
9. Are there any recommended improvements to the intersection at Bay/Washington or Bay/West?

The **Sketch Stormwater Management Plan is Approved**.

The following comments must be address prior to providing a Preliminary Site Plan and Preliminary Stormwater Management Plan:

10. **SHEET 5 OF 6 - SWM QUANTITY SUMMARY CHART -** The POI-1 Impervious Area appears incorrect.
11. **SHEET 5 OF 6 - ESD SUMMARY CHART -** Where is the Bayfilter referenced in the Chart located on the Plan view?
12. Calculations appear to assume the entire site is captured by the proposed stormwater management system. Illustrate how runoff is collected along the perimeter of the property and conveyed to the proposed stormwater management system.

Please address the comment above and submit a Preliminary Stormwater Management Plan.

The **Sketch Plat** is **Acceptable** to the Engineering Department pending bulk standards approval by Town Council associated with the PUD. The Preliminary Plat will be reviewed by a licensed surveyor. The Preliminary Plat should address the following comments:

13. Street Trees - Address how the proposed Subdivision will comply with Public Street Tree Requirements.

Please address the comment above and submit a Preliminary Plat.

Please contact me if you have any questions. Thank you.

TOWN OF EASTON
PLANNING & ZONING
14 S Harrison Street, Easton MD 21601

Historic District Commission Staff Report

Meeting Date: 5/12/2024

Staff Contact: Miguel Salinas, Director of Planning and Zoning, msalinas@eastonmd.gov

Property Address: 139 N. Washington Street

Application Number: 2024-1182

Request: Demolition of an existing building and Certificate of Appropriateness for the construction of townhomes and single-family dwellings

Executive Summary:

The applicant, Miller Development Corporation, is seeking approval for the demolition of a non-contributing building (the former Safeway building) and a Certificate of Appropriateness to construct twenty-four (24) four-story townhomes and nine (9) single-family dwellings with associated parking, stormwater management facilities, and landscaping. The applicant also has additional associated applications under review: 1) sketch subdivision, and 2) Planned Unit Development (PUD) – Infill.

Background Information:

Miller Development Corporation (Applicant) is seeking approval for the demolition of an existing non-contributing building built in 1967 and construction of twenty-four (24) townhomes and nine (9) single-family dwellings with associated parking, stormwater management facilities, and landscaping. The site is the former Safeway grocery store and is zoned Central Business (CB). The project also proposes a mews, which includes an ornamental fence, garden walls and decorative pavers to provide a walkable connection between North Washington Street and North West Street.

Staff supports the demolition of the existing structure as the Old Safeway building. Although the building was in 1967, it is a non-contributing building; the structure was built after the Historic District's period of significance.

Historic District Guidelines for New Construction:

Guideline 94. Style

The Guidelines recommend avoiding the imitation of earlier of historic architectural styles and to create a new design that compliments the existing historic surroundings. New infill buildings should relate to and be compatible with the architectural detailing of adjacent buildings.

Staff notes the applicant provided precedent images that demonstrate the proposed project is compatible, but does not imitate earlier historic architectural styles.

Guideline 95. Siting

The Guidelines recommend to site new construction on existing vacant lots whenever possible and that new buildings should be oriented to the street. Landscaping should be in keeping with those of neighboring properties.

The applicant has met this guideline as it related to surrounding single-family structures.

Guideline 96. Orientation, Alignment, and Setback

The Guidelines recommend orienting new construction towards the major streets and to align new buildings with the setback of surrounding buildings on the street.

The applicant has met this guideline.

Guideline 97. Form, Massing, Height, and Scale

The Guidelines recommend that the height of a new building should be within ten percent of the height of the surrounding buildings.

The applicant provided a building height exhibit and demonstrates that they are in keeping with the ten percent guideline. For conformance with the additional recommendations of this guideline, see the sections below.

Guideline 98. Street Rhythm

The Guidelines recommend that the overall size, massing, and form of a new building should respect the existing street rhythm and to avoid designs that interrupt or otherwise disrupt the street rhythms.

Staff notes that the site plan and rendering show consistency with historic surrounding homes related to breaks between the facades of the single-family homes adjacent to North Washington Street and Bay Street. In addition, the mews is effective in breaking up the lengthy street frontages of the property on the aforementioned streets.

Guideline 103. Materials

The Guidelines for walls, sloped roofs, and other visible elements state that new buildings should utilize materials that are either the same or similar to those found on buildings in the surrounding area in order to tie into the streetscape. Board siding, including wood and cementitious fiber/cement may be appropriate. In addition, unpainted brick masonry is generally an appropriate material for exterior walls. Staff notes the applicant is not proposing vinyl siding on any of the elevations.

Overall, the elevations of all the buildings show clear delineations between the base, middle, and cap of their facades through the use of varying materials, textures, and designs. The North Washington Street east elevation demonstrates homes using fiber cement clapboard siding and fiber cement vertical shiplap siding along with fiber cement panels and trims. The front elevation for homes 28 and 27 use a combination of clapboard siding for floors 2 and 3 and vertical shiplap siding on the front gable for the top half-floors. Home 25 replaces the vertical shiplap on the front gable with a fiber cement panel. The two side gable homes propose red Brick A(floors 2 and 3). All five homes incorporate a brick base (ground floor) although the application is not clear on any final differences between Brick A and Brick B. The elevations demonstrate a combination of red and gray brick.

Regarding the Bay Street north elevation, Home 25 continues the fiber cement clapboard siding and brick base consistent with its North Washington Street elevation. The bay windows on Floors 2 and 3 incorporate fibber cement panel identical to the material on the homes front gable. The front elevation of the townhomes along Bay Street consists of red brick facades with differentiation between floors 2 and 3 by incorporating a checkerboard brick spandrel of matching break. Similarly between floors 3 and the tope half-floor, the facades incorporate a corbel of matching brick.

The West Street elevations for the front gable homes depict materials similar to those on the North Washington Street frontage, as does the side gable home.

The north and south alley elevations of the townhomes use a red brick and matching corbels consistent with their front facades except that the checkerboard brick spandrel is eliminated between floors 2 and 3. The facades are further articulated with soldier course brick headers of matching brick. The top half-floors include fiber cement vertical shiplap siding.

The main materials used for the facades of the townhomes facing the mews are consistent with the materials used for the front facades of the townhomes along the North Washington Street frontage.

The porch materials include polymer flooring and decorative porch columns and entablatures along with decorative railings.

Staff requests the applicant clarify the differences between Brick A and Brick B, especially as depicted on the North Washington Street frontage.

Guideline 105. Exterior Color

The Guidelines states that exterior walls and detail colors of new construction should harmonize with the colors of surrounding historic properties and to avoid using more than three exterior colors for a new building or addition.

Guideline 107. Placement of Doors and Entrances

Guideline 108. Design

The Guidelines state that doors may be centered or aligned to either side of the façade and that secondary doors should be understated and simple in design as compared to the front or main door.

The red brick side gable homes facing North Washington Street and West Street include centered fiberglass and steel double doors. The front-gables homes and townhomes include side-aligned fiberglass and steel single doors. The side doors of the front-gable homes facing the alleys are clearly secondary. The fiberglass doors are consistent with the Guidelines.

In addition, the applicant is proposing sectional aluminum and glass overhead garage doors with painted steel lintels. Although modern in appearance, staff prefers these materials for the overhead garage doors as they provide a contras with the more traditional features of the townhomes and avoid completely mimicking the surrounding historic structures.

Guidelines 108. Energy and Sustainability

The Guidelines recommend employing energy and sustainability techniques including the use of shutters and awnings, to place energy efficient HVAC equipment on non-visible rooftop locations, in the rear of buildings, or in other locations that are not visible from the street; avoid paving up to the building foundation, avoid removing existing shade trees or vegetation.

The applicant has addressed several of the guidelines. indicated the shutters on the front gable homes will be operable. The applicant, as depicted in the illustratives or renderings, is also proposing private landscape beds using masonry garden walls along North Washington Street, West Street, and portions of Bay Street. Similar private garden beds with masonry walls are also proposed to flank each entrance of the mews. These beds serve to soften the hardscape along these street frontages. Private raised garden beds, to include flowering trees, perpendicular to the Mews are also proposed along the mews to provide additional green space and to delineate the

private front patios of the townhomes. These depictions are consistent with the applicant's PUD sketch plan. However, the plan depicts canopy trees planted along Bay Street. Staff notes the narrow width of the roadside right-of-way precludes the planting of any street trees.

Staff notes the narrow width of the roadside precludes the planting of canopy trees on the right of way. Staff requests the applicant clarify whether private planting beds along Bay Street are of sufficient width and depth to support canopy trees. Staff also requests the applicant indicate the placement of HVAC mechanical equipment. Lastly, staff notes that the removal of existing vegetation along West Street will be required.

Guideline 110. Exterior Lighting

The Guidelines recommend exterior lighting that matches the character of the building and is subordinate to the overall façade design. They also recommend to place building-mounted lighting to illuminate functional building elements such as entrances and to utilize accent lighting to highlight architectural elements and lace in inconspicuous locations not generally visible from street level.

The renderings show wall lighting using traditional design on the townhomes on the ground level above the entrance doors. This same element is shown on the townhomes facing Bay Street. The applicant meets this guideline.

Guideline 112. Proportion

The relation of dimensions (height and width) of the front elevation of a building and its components should be compatible with the facades of its neighbors. The Guidelines recommend avoiding different proportions on new buildings and additions.

Staff notes that the proportion of buildings create scale and scale is the relationship of the human form to the buildings and from one building to another. The applicant provided precedent images show single-family structures in Easton between three and four bays wide. The proposed single-family homes along the street frontages are three bays. Although the width of the brick single-

family homes are wider with two adjacent windows on the outside bays, staff considers them as three bay homes as the elevations effectively reduces the perception of these widths by incorporating porches and decorative porch columns. Staff notes the North Washington Street elevation includes two attached dwellings. The design is a unique adaption of a traditional narrow single-family Gable-Ell house where one dwelling unit is the rectangular gable-front and the other unit is formed with an intersecting, perpendicular ell. The design of the two attached units is effective in reducing the perceived width of the structure.

The directional expression of the buildings are vertical in proportion, similar to several along Washington Street. The top half stories of the homes along North Washington Street and West Street also provide a more human scale to their vertical proportions. The same can be said for the half stories of the townhomes along Bay Street with their unique straight mansard-like roofs. The renderings also show these half story roofs reduce pedestrians' perceptions of their vertical proportionality along the mews.

Guideline 113. Façade and Rhythm

The spacing and repetition of building façade elements (windows, doors, etc.) give an elevation its rhythm. The Guidelines recommend avoiding façade rhythms drastically different from those in the surrounding area. Staff notes that the rhythm and placement of window and door openings are compatible with those of adjacent historic structures and of the street itself. If anything, the street rhythm closes the gap that exists between the incompatible suburban-style former property and the traditional historic district development pattern of Easton's central business district.

Guideline 114. Landscape Features.

The Guidelines recommend that new buildings should respect the existing character-defining landscape features of the property on which it is located and should be compatible with the landscape design of adjacent properties.

Staff notes that existing property is currently devoid of any landscaping. The applicant proposes landscaping beds to soften the look of the buildings adjacent to the roadside and contribute to an attractive gateway into the historic downtown.

Guideline 115. Roof Form
Guideline 116. Roof Material
Guideline 117. Gutters and Downspouts.

The Guidelines recommend that roof shapes of new buildings should respect that of its neighbors. Roof materials should also be generally consistent with that of surrounding buildings and colors, where visible, should be compatible with the color scheme of the new buildings and the surrounding area. The Guidelines recommend to locate gutters so they are obscured by parapets and to locate downspouts in inconspicuous locations on the façade. Half-round gutters and round downspouts are generally more appropriate.

Washington Street consists of a mix of predominantly side gable roofs along with mansard and flat roofs. Staff notes the existing home at the corner of Bay Street and North Washington Street, as well as the existing home adjacent the proposed development on West Street are front gable. The mix of front and side gable single family homes create a variety of roof forms along the front elevations. As previously mentioned, the townhomes include unique stepped-back half stories of straight mansard-like roofs.

The townhomes include standing seam metal roofs and the single-family homes are slate asphalt shingled roofing. The standing seam metal roofs are 1.5” or less for the rib seam height with closed rib ends and a maximum panel width of 16 inches. These specifications are consistent with the Guidelines for roof material of existing historic structures. The applicant’s submission includes Highland Slate Designer Roofing Shingles with options for a darker color palette (Smokey Quartz, New England Slate, Fieldstone, Black Granite, Weathered Wood).

Staff recommends the applicant adhere to the darker color palette for the slate asphalt roofing shingles and requests the applicant clarify that the roofing materials for the porches on the

single-family homes will match that of the main structures as well as the painted color of the standing seam metal roofs. The applicant is proposing underground stormwater storage chambers. Staff notes the applicant has provided a cut sheet for aluminum half round reverse bead gutters and aluminum plain round downspouts. Staff recommends a condition that the location of gutters and downspouts shall be consistent with Guideline 117.

Guideline 122. Trash and Refuse Containers

The Guidelines recommend locating dumpsters and trash receptacles in the rear or on a non-visible elevation and to employ opaque fencing or screening to limit the view from public rights-of-way.

Staff notes the applicant has stated at the Easton Staff Development Review Committee that trash and recycling collection will be privately contracted and receptacles will be kept in garages. Staff requests the applicant clarify the location of receptacles. Staff also recommends that the location and screening of trash receptacles shall adhere to Guideline 122.

Guideline 123. Mechanical Equipment

The Guidelines recommend that rooftop mechanical systems should be positioned so as not to be visible from the street and, where rooftop location is not possible, to locate such equipment at a side or rear elevation and screened with plantings.

Staff requests the applicant verify that the rooftop mechanical equipment for the townhomes will be effectively screened. Staff also requests the applicant verify that mechanical equipment for the single-family homes will be located to the side and rear and will be effectively screened.

Guideline 126. Window Arrangement

The Guidelines recommend that windows should be present on all elevations that are visible from the street; that window heights and sizes on new buildings should generally be consistent with that of the surrounding buildings; that the relationship of solids to voids should be similar to

that of neighboring buildings; and that window orientation should be consistent with the directional expression of surrounding buildings.

Staff finds the application is consistent with this guideline.

Guideline 127. Window Type

The Guidelines recommend that windows should match the character of the new building's façade; that vinyl windows are not appropriate in the historic district; and that wood, aluminum, aluminum clad wood; and fiberglass may be appropriate materials.

The applicant is proposing wood clad double hung or awning windows and dormer windows (Anderson 400 Series). The wood clad double hung windows depicted in the elevations include cast stonesill/band/headers with the exception of the rear facades of the townhomes which include soldier course brick headers along with matching vertical stacked bond brick for third story windows.

Staff Recommendation:

Staff supports a Commission **approval** of the demolition and Certificate of Appropriateness as submitted subject to the applicant clarifying:

1. The differences between Brick A and Brick B, especially as depicted on the North Washington Street frontage
2. Whether private planting beds along Bay Street are of sufficient width and depth to support canopy trees
3. The location of HVAC mechanical equipment
4. The painted color of the standing seam metal roofs
5. The location of trash receptacles and/or dumpsters

Should the application be approved, staff recommends the following conditions, in addition to any other conditions required by the Commission:

1. The applicant adhere to the darker color palette for the slate asphalt roofing shingles.
2. The roofing materials for the porches on the single-family homes will match that of the main structures.
3. The location of gutters and downspouts shall be consistent with Guideline 117.
4. The location and screening of trash receptacles shall adhere to Guideline 122.
5. The placement of HVAC mechanical equipment on the rooftops shall be effectively screened or otherwise such equipment shall be located at ground level to the side and rear of structures and will be effectively screened through landscaping or a masonry wall.

Draft Motions:

1. I move that the Historic District Commission **approve** the demolition of the existing old Safeway building. I further move that the Historic District Commission approve a Certificate of Appropriateness for the application as submitted subject to the following conditions…

OR

2. I move that the Historic District Commission deny the application based on the following findings…

OR

3. I move an alternate motion.

TOWN OF EASTON
Planning & Zoning Department
14 South Harrison Street
P.O. Box 520
Easton, Maryland 21601

Easton Staff Development Review Worksheet

Date: April 25, 2024
Project: 139 North Washington Street
To: Mr. Brett Ewing, Lane Engineering, LLC.
CC: Mr. Ryan D. Showalter, MDSW
CC: Ms. Julie Carroll, Lane Engineering, LLC.
CC: Mr. Jarret Beyer, Lane Engineering, LLC.
CC: Mr. Robert Miller, Miller Development Corporation

The Easton Staff Development Review (ESDR) Committee meeting was held on April 24th at 11:00 am. Staff reviewed the proposed Planned Unit Development (Infill) application. The site includes four-story townhomes (24 units) and single-family detached dwellings (9 units) on the property located at 139 North Washington Street, also known as Tax Map 104, Parcel 612.

The Committee determined that the project will need to address all agency comments as specified in the attached review letters and at ESDR. Review comments from the Engineering Department will be forwarded under a separate item. It was determined by the Committee that the application may be scheduled for Planning Commission review. Please submit all revised documents.

The next Planning Commission meeting is scheduled for **Thursday, May 16, 2024 at 1:00 pm.** Submit all documentation to the Planning and Zoning Department no later than Monday, April 29th at 1:00 pm. Files for presentation at the Planning Commission need to be provided on a flash drive. In addition, provide a digital submittal (via email) of all supporting documents necessary for the Planning Commissions review, including **six paper copies**.

Please contact the Planning & Zoning Department at 410 822-1943 with any questions.
Sincerely,

Joseph A. Mayer
Plan Reviewer

TOWN OF EASTON
PLANNING & ZONING DEPARTMENT

P.O. Box 520
Easton, Maryland 21601
410-822-1943
www.EastonMD.gov

DATE: **April 24, 2024**
TO: **Brett Ewing –** Lane Engineering, LLC (Agent)
Robert Miller - % Miller Development Corporation (Developer)
Cc: **Miguel Salinas** – Director, Planning & Zoning Department
Rick VanEmburgh – Town Engineer, Department of Engineering

FROM: **Joseph A. Mayer -** Plan Reviewer, Planning & Zoning Department
SUBJECT: **139 North Washington Street - PUD (Infill)**

We reviewed the **April 3, 2024** Sketch Plan Submittal for the Subject Project and have the following comments:

PLANNING & ZONING COMMENTS

Sketch Site Plan Review #1

1. Single-Family Detached unit #30 needs an accessible path towards the proposed mews.
2. Determine applicable Bufferyards required for the site adjacent to Parcels 610, 619 and 1268.
3. Please submit a *Subdivision & Property Line Adjustment Application* with the required fee.
4. Is the proposed service vehicle space intended for a loading and unloading area for the proposed site? If so, please provide applicable screening per Chapter 28-308.2.J of the Zoning Code.
5. Will there be any on-site lighting, especially along the mews? If so, please indicate on the site plan.
6. Show and label all building restriction lines and easements on all applicable plan views.
7. Revise the Traffic Impact Analysis within Section 5: Conclusions/Recommendations, sheet 20 of 83. There are twenty-four (24) single family attached units proposed.
8. Any proposed monument sign will require a *Signage Application* to be submitted prior to installation. Please add this statement within the Project Notes on sheet 1 of 6.

9. Provide additional understory trees between single family unit #25 through unit #27 detached buildings.
10. Is the existing brick wall adjacent to parcel 610 going to remain? If so, please label all applicable plan views.
11. Per *Chapter 28-1014.6.A.1* of the Zoning Code, Street trees are required along West Street.
12. Show and label existing structures at Parcels 618 and 1268.
13. Dimension between the paving and adjacent property line to verify distance.
14. Provide dimensions between the proposed structures and adjacent property lines.

Please address review comments 1 through 3 prior to your Planning Commission submission. All remaining comments are to be addressed prior to Preliminary Site Plan review.

Plan Review Status

Sketch Site Plan Review			Comments
Plans Approved	☐Y	☒ N	Please review the comments above. Revise and resubmit.

Forest Stand Delineation & Forest Conservation Plan	
☐ Required ☐ Submitted ☐Approved	**Exempt from Forest Conservation per Article III, § 31-3.2 O. The proposed activity is on a previously developed area covered by impervious surface and is located within the priority funding area. As noted on the Sketch Site Plans, sheet 1 of 6.** **Analysis -** The site is within the priority funding area and is an existing developed area covered by impervious surface; existing building, parking lot and utilities. The overall site area is 1.522 acres with nine (9) proposed single-family detached dwellings and twenty-four (24) proposed 4-story townhomes with associated parking, stormwater management and landscaping. Required Forest Conservation would be 0.228 acres or 9,945 square feet. The intent of the project is to maximize density within the infill area and provide adequate facilities to accommodate the site. The applicant has provided a landscape plan with ten (10) deciduous-shade/canopy trees, fourteen (14) understory trees and one (1) evergreen tree that is sixty (60) percent of the required forest conservation area. Based on the existing conditions and priority funding area, the staff supports the exemption.
Other	
☒Required ☐ Submitted ☐ Approved	**IMPACT FEES** **Please note, there will be a required Impact Fee for all proposed buildings. The Town's Impact Fees and Inspection Fees are to be paid upon the time you pick up your Building Permit. Please provide building square footage with appropriate use for calculation of Impact Fee.** **Talbot County Impact Fees are due prior to obtaining your Building Permit. Please provide receipt of payment to the Town's Building Inspection Division.** **Please add estimated Town Impact Fee calculations to cover sheet and add note below calculations; "*Note: The Impact Fee indicated in this notation shall not be construed as vested and until submission of the building application.*"**

Please contact me if you have any questions. Thank you.

TOWN OF EASTON
PO Box 520
Easton, Maryland 21601
(410)-822-2526 Fax (410)-822-8738

ACCREDITED

ESDR- Building Inspection and Permit Department Comments

Date: April 24, 2024

Project; 139 N. Washington Street (Safeway)
Owner; NAI Saturn Eastern, LLC 250 Park Center Blvd, Boise, ID 83706
Developer: Miller Development Corporation c/o Robby Miller
8120 Woodmont Ave, Ste #160, Bethesda, MD 20814

A Town of Easton Building Permit is required for all new Residential Construction.

Contact this Department and verify current Building Codes including the Town of Easton's modifications prior to preparation of Building plans. Town will be adopting the 2021 ICC Codes including the International Residential and Energy Conservation Codes by the end of May 2024.

The following lists items required on the construction drawings in order to apply for a Building Permit.

- Construction Documents (3 sets) for any new construction will be required. Documents must be prepared by a registered Maryland Registered Architect, with original plans signed and sealed.
- All mechanical, electrical, and plumbing permits as required must include construction documents signed and sealed by a professional engineer and by a responsible party for the contractor receiving the permit. Be sure the Town of Easton modifications are included. Section 6-16 of the Town Code.
- An appointment may be set up with this department to review your permit application materials prior to permit application submission.
- **State Fire Marshal,** (410-822-7609) plan review and inspections are required. It is your responsibility to contact them and make application.

EASTON UTILITIES

Life. Made better.™

Easton Utilities Commission

Plan Review Comments

Date: Tuesday, April 16, 2024
To: Joe Mayer; Nicholas Johnson; Sierra Clem
From: Kia Gibbs on behalf of Aaron Goller, PE **No. of Pages:** 1
Regarding: 139 N. Washington Street - Safeway Townhomes
Phase: Sketch Site Plan **SUBM:** 1 **Status:** **Approved as Noted**

Easton Utilities Commission has reviewed the above referenced plans and have provided the following comments. Please provide your corrections as listed below. Additional reviews will be required to ensure comments have been addressed. Items or documents not provided on initial submission will be subject to further review. Please contact Kia Gibbs, Admin Support at kgibbs@eucmail.com should you have any questions.

ITEM:	DRAWING / PAGE	COMMENTS:
1	General	Consider above ground utility locations. (trans, peds, etc)
2	General	Capital charges required
3	General	Utilities must maintain seperation of 10'
4	General	Provide communication design

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

RECEIVED
APR 03 2024
TOWN OF EASTON

Easton Staff Development Review

Property Information

Address	139 N Washington St, Easton, MD 21601						
Tax Map	104	Grid	EA	Parcel	612	Lot	
Deed Refernce:	Liber	2237	Folio	62			
Plat Reference:	Liber	21 / 37	Folio	48 / 10			
Base Zoning District	CB	Historic District Y ☒ N ☐		Planning Redevelopment Y ☐ N ☐			

Purpose of Application / Description of Work:

Construction of 4-story town homes and single-family detached dwellings totaling 33 units.

Owner

Name	NAI Saturn Eastern, LLC	Developer: Miller Development Corporation c/o Robby Miller
Mailing Address	250 Park Center Blvd, Boise, ID 83706	8120 Woodmont Ave, Ste #160, Bethesda, MD 20814
Telephone No.	301-807-7057	Email rmiller@miller.group

Applicant / Agent

Name	Lane Engineering, LLC c/o Brett Ewing, AICP
Mailing Address	117 Bay St, Easton, MD 21601
Telephone No.	410-822-8003 Email bewing@leinc.com

Surveyor / Engineer

Name	Jarret Beyer, P.E.	License No.	48188	Expiration Date	12/28/2025
Mailing Address	117 Bay St, Easton, MD 21601				
Telephone No.	410-822-8003	Email	jbeyer@leinc.com		

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 4/3/2024

Printed Name of Applicant or Agent Brett Ewing, AICP, Lane Engineering, LLC

For Office Use Only

Easton Staff Development Review Meeting Required Y ☒ N ☐ **2024-1182 / ESDR 24-08**

Easton Staff Development Review Meeting Date 04/24/2024

Completeness Check Date 04/03/2024

Revisions/Resubmissions Required Y ☐ N ☒

Resubmission Date

Documents Received Y ☐ N ☐

Staff Determination

Planning Commission Requir(Y ☒ N ☐ **05/16/2024**

BOZA Required Y ☐ N ☒

Historic District Commission Required Y ☒ N ☐

Resubmission for ESDR Required Y ☐ N ☐

Staff Signature Samantha N. Smith Date 04/03/2024

Revised 02-2019

Lane Engineering, LLC

Established 1986

Civil Engineering • Land Planning • Land Surveyors

15 Washington Street
Cambridge, Maryland 21613
Tel 410-221-0818
Fax 410-476-9942

117 Bay Street
P.O. Box 1767
Easton, Maryland 21601
Tel 410-822-8003
Fax 410-822-2024

354 Pennsylvania Avenue
Centreville, Maryland 21617
Tel 410-758-2095
Fax 410-758-4422

April 26, 2024

Joe Mayer; Plan Reviewer
Town of Easton
14 South Harrison Street Easton, MD 21601

Subject: 139 North Washington Street ESDR Review;
139 North Washington Street Easton, MD

Dear Mr. Mayer,

We have received the review comments issued April 25, 2024 regarding the ESDR meeting held on April 24th and have incorporated the requested items (noted as P&Z comments 1-3) into this submission for the May 16th Planning Commission meeting and provided our comment responses herein.
Our responses are in order with comments as follows:

Comment responses to Planning & Zoning:

1. As discussed and agreed upon with Joe Mayer in prior correspondence, an ADA accessible path has been provided from Unit 30 to West Street (to provide walkable access to the mews).
2. Although the project proposes a 6' – 8' tall privacy fence/ masonry wall along all adjoining property lines, as shown on the concept site plan, we believe bufferyards are not required per town code article X as all adjoining properties are comprised of the same CBD zoning as the subject property and uses that are compatible and consistent with the proposed project.
3. Subdivision & Property Line Adjustment Application and fee have been submitted with this resubmission package for PC.

Thank you for your review of this project. Should you have any questions or need additional information, please contact me directly at 410-822-8003.

Sincerely,

Julie Carroll, Project Design Team

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

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TOWN OF EASTON

Site Plan, PUD, Planned Healthcare Application

Application Type

Planned Unit Development ☒ Amendment ☐ Health Care (HC) ☐ Site Plan ☒

Subdivision Information

Name	139 North Washington				
Original Property Size	Acres	1.522 AC ±	Square Feet	66,298 SF ±	
Telephone No.	301-807-7057	Email	rmiller@miller.group		

Site Plan Information

Property Size	Acres	1.522 AC ±	Square Feet	66,286 SF ±	
Structure's Floor Area	25,548 SF ±	total	Structure's Square Feet	83,340 SF ±	total approximate GFA
Area of Disturbance	1.522 AC ±		Number of Dwelling Units	33	

Property Information

Address	139 N Washington St, Easton, MD 21601						
Tax Map	104	Grid	EA	Parcel	612	Lot	
Deed Refernce:	Liber	2237	Folio	62			
Plat Reference:	Liber	21 / 37	Folio	48 / 10			
Base Zoning District	CB	Historic	Y ☒	N ☐	Planned Redevelopment	Y ☐	N ☐
Source of Electricity	Easton Utilities						

Owner

Name	NAI Saturn Eastern, LLC	Developer:	Miller Development Corporation c/o Robby Miller
Mailing Address	250 Park Center Blvd, Boise, ID 83706		8120 Woodmont Ave, #160, Bethesda, MD 20814
Telephone No.	301-807-7057	Email	rmiller@miller.group

Applicant or Agent

Name	Lane Engineering, LLC c/o Brett Ewing, AICP
Mailing Address	117 Bay St, Easton, MD 21601
Telephone No.	410-822-8003
Email	bewing@leinc.com

Surveyor / Engineer

Name	Jarret Beyer, P.E.	License No.	48188	Expiration Date	12/28/2025
Mailing Address	117 Bay St, Easton, MD 21601				
Telephone No.	410-822-8003	Email	jbeyer@leinc.com		

Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed and satisfied the Town of Easton Development Standards and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent

Date 4/3/2024

Printed Name of Applicant or Agent Brett Ewing, AICP, Lane Engineering, LLC

For Office Use Only

Planning Commission Required	Y ☒ N ☐		
Planning Commission Meeting Date	05/16/2024		
Sketch Approval Date		Project No. PUD 24-01	ESDR 24-08
Prelim/Dev. Approval Date		Application No.	2024-1182
Final Approval Date		Sketch Fee Paid	04/03/2024
Recordation Date		Develop. Fee Paid	

Revised 02-2019

Town of Easton
Engineering, Planning and Zoning
13 South Harrison Street, Easton, MD 21601

Subdivision & Property Line Adjustment Application

Application Type

Subdivision ☒ Minor Subdivision ☐ Lot Line Revision ☐

Subdivision Information

Name	139 North Washington			
Property Size	Acres	1.522 AC ±	Square Feet	66,298 SF ±
Number of Lots Proposed	33			

Property Information

Address	139 N Washington St, Easton, MD 21601						
Tax Map	104	Grid	EA	Parcel	612	Lot	
Deed Refernce:	Liber	2237	Folio	62			
Plat Reference:	Liber	21 / 37	Folio	48 / 10			
Zoning District	CB	Planned Redevelopment Y ☐ N ☒		Historic District Y ☒ N ☐			
Source of Electricity	Easton Utilities						

Owner

Name	Owner: NAI Saturn Eastern, LLC	Contract Purchaser: Miller Development Corp. c/o Robby Miller	
Mailing Address	250 Park Center Blvd, Boise, ID 83706	8120 Woodmont Ave, #160, Bethesda, MD 20814	
Telephone No.	301-807-7057	Email	rmiller@miller.group

Surveyor / Engineer

Name	Jarret Beyer P.E.	License No.	48188	Expiration Date	12/28/2025
Mailing Address	Lane Engineering, LLC, 117 Bay St, Easton, MD 21601				
Telephone No.	410-822-8003	Email	jbeyer@leinc.com		

Applicant or Agent

Name	Brett Ewing, AICP, Lane Engineering, LLC		
Mailing Address	117 Bay St, Easton, MD 21601		
Telephone No.	410-822-8003	Email	bewing@leinc.com

Additional Comments:

33 Lot Subdivision through the PUD process.

Minimum Lot Size	CB: 5,000 SF PUD: N/A	Minimum Lot Frontage	30'
Minimum Lot Envelope	20' x 30'	Existing Lot Coverage	34%
		Proposed Lot Coverage	41%

- ☐ ESDR Letter
- ☐ $200 Per Subdivided Lot Fee
- ☐ $500 Lot Line Revision Fee

Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed and satisfied the Town of Easton Subdivision Regulations Article 4, Procedures and Requirements and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent

Date 4/29/2024

Printed Name of Applicant or Agent Brett Ewing, AICP, Lane Engineering, LLC

For Office Use Only

Planning Commission Y ☒ N ☐			
Planning Commission Meeting Date		05/16/2024	
PC Approval Date		Subdivision No.	SUB 24-01
Conditions? Y / N		Application No.	2024-1182
Recordation Date		Fee Amount	$13,800
ESDR Y / N Date		Review Fee Paid	04/30/2024
			Revised 02-2019

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TOWN OF EASTON

TOWN OF EASTON
PLANNING AND ZONING
14 SOUTH HARRISON STREET, EASTON, MD 21601

HD 24-47

Application #: 2024-1182
Date Received: 04/08/2024
Fee Paid: 04/08/2024
HDC Meeting Date: 04/22/2024
Date Property Posted: 04/15/2024

HISTORIC DISTRICT COMMISSION HEARING APPLICATION

APPLICATION TYPE
(PLEASE CIRCLE)

ROOFING DEMOLITION SIGNAGE FENCING OTHER

NEW CONSTRUCTION/ADDITION EXTERIOR ALTERATIONS

FOR TREE REMOVAL(S) - PLEASE USE THE TREE REMOVAL APPLICATION

PROPERTY INFORMATION

ADDRESS: 139 N Washington St, Easton, MD 21601

☐ Contributing ☒ Non-Contributing YEAR BUILT: 1967 NATIONAL REGISTAR #:

PROPERTY INFORMATION

OWNER NAME: Contract Purchaser/Applicant: Miller Development Corporation c/o Robby Miller

TELEPHONE NO.: 301-807-7057 EMAIL: rmiller@miller.group

Applicant or Agent

NAME: Lane Engineering, LLC c/o Brett Ewing, AICP

TELEPHONE NO.: 410-822-8003 EMAIL: bewing@leinc.com

Description of Proposal (include additional sheets, as necessary)

Demolition of the old Safeway building and construction of 4-story townhomes and single-family dwellings (33 units total).

Specific Requirements

- The payment of fees is due at the time of application submittal.
  As of December 27, 2022, the fees are as follows:
  Commercial - $200 Residential - $75 Signs - $75 Staff Approval $25
- Provide 2 hard copies plus 1 digital copy of the application and all supplemental information.
- Disclose any easements or deed restrictions pertaining to the property and any improvements including the details of said easements or restrictions.
- Disclose any tax credits and or grants being considered for the project.

The Historic District Commission (HDC) reserves the right to request reasonable additional information or design drawings that further clarify proposals. In cases where professional design services are warranted, the HDC may require the applicant to retain a licensed design consultant.
If the applicant or their designee is not present for the scheduled meeting the Commission may elect to refrain from discussing and voting on the scheduled agenda item.
Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed the Easton Historic District Guidelines as published

Signature of Applicant or Agent

Date 4/8/2024

Printed Name of Applicant or Agent Brett Ewing, AICP, Lane Engineering, LLC

Revised 4.4.2022

Historic District Commission Application Checklist

Revised December 2022

Please complete the section that applies to your application. If a checklist item is not included or is non-applicable, please provide information supporting its omission for the Commission's consideration.

Requirements:

The payment of fees is due at the time of application submittal. As of December, 2022, the fees are as follows: ***Commercial - $200, Residential - $75, Signs - $75, Staff Approval - $25.***

The application submitted shall include 2 copies plus 1 digital.

All Applications to Include:

☒ A narrative fully explaining the request

☒ Photographs of all existing conditions and that will be affected by the proposed project

TBD ☐ Description of all existing materials and a listing of all materials to be used for proposed project.

TBD ☐ Manufacturer cut-sheets and material specifications related to all proposed work.

☒ Any available and applicable historical photographs, sketches or other documentary evidence illustrating previous conditions and configurations of the building(s)

New Construction / Addition

☒ Dimensioned elevations drawn to an appropriate scale illustrating all sides of the proposed structure. Drawings shall include notations outlining roof pitches, trim details and the type of windows and doors to be used for the project

☒ Site plan drawn to an appropriate scale and including setbacks and neighboring structures. Site Plan should illustrate the footprint(s) of all proposed EXISTING AND PROPOSED construction.

TBD ☐ Construction schedule

☒ For new construction only, the Commission will require a three-dimensional rendering, superimposed photo, silhouette or model of the proposed structure, other structure(s) located on the subject property and neighboring structures when necessary to understand the visual impact of the new construction and its compliance with the Guidelines.

Renovations

- ☐ Elevations or photographs of the existing conditions
- ☐ Elevation of the proposed changes
- ☐ Cut sheet for all proposed materials – Be sure to include all of the following that apply and any other additional materials:
    - Windows
    - Doors
    - Trim, fascia, soffit, etc
    - Decking/ porch flooring materials
    - Roofing Materials, gutters

Windows

Restoration of existing windows is the Commissions first choice. However, the Commission recognizes it may not always be practical to replace windows. For contributing buildings the front façade and any other façade facing a primary right of way are required to be wood windows. Aluminum, or fiberglass clad wood windows <u>may</u> be approved by the Commission on side or rear façades of contributing buildings. For non-contributing buildings clad wood windows will be considered on all elevations. Note: National Register Buildings are held to the highest of standards.

- ☐ Photograph or scaled elevation of all elevations of the building with each window that is to be replaced clearly labeled.
- ☐ Manufacturers cut sheet for each window to be replaced. Clearly labeled where it will be installed on the building.
- ☐ Materials for the windows must be clearly identified on the cut sheet
- ☐ Please note if existing trim/shutters are to remain or if new are to be installed, please include list of all new materials and cut sheets.

Roofing

Note: National Register Buildings are held to the highest of standards.

- ☐ Photographs or scaled elevations showing the existing roofing material to be replaced.
- ☐ Manufacturers cut sheet for each type of roofing to be replaced. Clearly labeled where it will be installed on the building.
- ☐ Please note if existing trim, fascia, soffit, or gutters are to remain or if new are to be installed, please include list of all new materials and cut sheets.

Signs

- ☐ Dimensioned scale drawings of the sign. Identify all materials to be used, color(s), lettering (including size and font style) and wording
- ☐ Photograph depicting the proposed location for the signage
- ☐ Lighting detail
- ☐ Construction and or mounting details

Landscaping & Trees

☐ Landscape plan where existing and proposed landscape features to be installed/planted, removed and/or relocated are identified including the location and species of existing and new trees

Fence

☐ Application must Include:

- A Site plan :
  - Drawn to scale
  - Show and label the location of new and any existing fence. (this can be completed on two separate site plans for clarity)
  - Include location of neighboring structures
  - Identify height of proposed fence, location of gates and other openings
  - If the height or style of fence changes based on location, this must be clearly identified.
- Proposed fence style and material
- Include photograph, manufacturer cut-sheet of the fence, or detailed sketch of proposed fence.
- other relevant construction and or material detail

Demolition

The Historic District Commission (HDC) reserves the right to request a professional inspection of the structure(s). Said request may include evaluation by a historic preservation specialist.

☐ Elevations and photographic documentation of all elevations of the structure(s) to be demolished including footprint dimensions, height dimensions and a site plan illustrating location of the structure(s) to be demolished

☐ Structural Analysis by Structural Engineer or Licensed Architect

☐ For Economic Hardship please provide documentation. Reference Guideline 13.9

☐ Attach replacement plan

Other

☐ Attach all documentation supporting request

The Historic District Commission (HDC) reserves the right to request reasonable additional information or design drawings that further clarify proposals. In cases where professional design services are warranted, the HDC may require the applicant to retain a licensed design consultant.

If the applicant or their designee is not present for the scheduled HDC meeting, the Commission may elect to refrain from discussing and voting on the scheduled agenda item.

This checklist shall be submitted along with the completed Historic District Commission Application and all additional supporting information.

EASTON HISTORIC DISTRICT SURVEY

PROPERTY #: _____

Picture:

TAX ID	ADDRESS	OWNER NAME
2101024329	139 N WASHINGTON ST	SAFEWAY STORES HOLDINGS CORP.

YEAR BUILT	PHYSICAL CONDITION
1967	VERY GOOD

ARCHITECTURAL STYLE	ADDITION(S)
COMMERCIAL	

NHL DISTRICT	NR DISTRICT	NR LISTED	MEETS NR CRITERIA	1980 NR RATING	MD INVENTORY	CONTRIBUTING	NC CODE
				E		N	AGE

NOTES

BUILT AFTER DISTRICTS PERIOD OF SIGNIFICANCE.

PUD SKETCH PLAN
FOR
139 NORTH WASHINGTON
IN THE TOWN OF EASTON
TALBOT COUNTY, MARYLAND

PROJECT DATA

OWNER: NAI SATURN EASTERN, LLC
ATTN LEGAL DEPARTMENT
250 PARK CENTER BOULEVARD
BOISE, ID 83706

APPLICANT/DEVELOPER: MILLER DEVELOPMENT CORPORATION
C/O ROBBY MILLER (PRESIDENT)
8120 WOODMONT AVENUE, #160
BETHESDA, MD 20814

PROPERTY ADDRESS

139 NORTH WASHINGTON STREET EASTON, MD 21601

DEED REFERENCE: 2237/62

PLAT REFERENCE: 21/37 & 48/10

ZONING CLASSIFICATION: CB – CENTRAL BUSINESS COMMERCIAL DISTRICT
PUD – PLANNED UNIT DEVELOPMENT (INFILL)
HISTORIC DISTRICT

SITE AREA: 1.522 ACRES±

ZONING REQUIREMENTS

	CB	PUD INFILL	PROPOSED PUD
MINIMUM LOT SIZE	5,000 SF	N/A	1,159 SF±
MAXIMUM LOT SIZE	N/A	5 ACRES	4,934 SF±
MAXIMUM BUILDING HEIGHT	60'	N/A	42'±
*MAXIMUM LOT COVERAGE	90%	N/A	N/A
*EXISTING LOT COVERAGE	34%	–	–
*PROPOSED LOT COVERAGE *(BUILDINGS & STRUCTURES)	–	–	41%
MAXIMUM DENSITY	SINGLE FAMILY 7 DWELLING UNITS/ACRE (10 DWELLING UNITS TOTAL) MIDDLE HOUSING 9 DWELLING UNITS/ACRE (13 DWELLING UNITS TOTAL)	60 DWELLING UNITS/ACRE (91 DWELLING UNITS TOTAL)	22 DWELLING UNITS/ACRE (33 DWELLING UNITS TOTAL)

APPROVALS: HDC REVIEW/APPROVAL IS REQUIRED.

EXISTING CONDITIONS: EXISTING GROCERY STORY BUILDING WITH THE REMAINDER OF THE PARCEL CONSISTING OF PAVED PARKING LOT.

PROPOSED DEVELOPMENT: 4–STORY TOWNHOMES & SINGLE FAMILY DETACHED DWELLINGS (33 UNITS TOTAL)

BUILDING FOOTPRINT: 760 SF± (TOWNHOMES)
798 SF± (SINGLE FAMILY DETACHED DWELLINGS)
840 SF± (SINGLE FAMILY DETACHED DWELLINGS)

PARKING REQUIRED: CODE 28–305.2 OFFSTREET PARKING SHALL NOT BE REQUIRED WITHIN CB ZONING DISTRICT.

PARKING PROVIDED: 67 TOTAL SPACES PROVIDED (INCLUDES GARAGES)

PARKING NOTE: OFF–STREET PARKING IS NOT REQUIRED FOR PROJECTS IN THE CBD ZONING DISTRICT, ALTHOUGH ADEQUACY IS CONSIDERED THROUGH THE SITE PLAN PROCESS. 2.06 SPACES IS PROPOSED PER UNIT AND SIDEWALK CONNECTION TO ACCESS DOWNTOWN EASTON RESULT IN ADEQUACY FROM A FUNCTION AND MARKETING PERSPECTIVE.

REFUSE/TRASH: PROPOSED RESIDENTIAL TIPPER CANS TO BE STORED WITHIN INDIVIDUAL GARAGES.

SITE LIGHTING: POLE HEIGHT TO BE DETERMINED FOR EFFICIENT LIGHT COVERAGE, BUT HEIGHTS IN RANGE OF 18'–20'±. PHOTOMETRIC ANALYSIS WILL BE PROVIDED PRIOR TO FINAL APPROVAL.

STORMWATER MANAGEMENT: STORMWATER QUANTITY MANAGEMENT IS ADDRESSED WITH UNDERGROUND CHAMBERS. THE SITE IS THE IN THE TANYARD BRANCH WATERSHED AND THE POST–DEVELOPMENT 10–YEAR STORM RUNOFF IS MANAGED TO THE PRE–DEVELOPMENT 2–YEAR STORM RUNOFF. STORMWATER QUALITY MANAGEMENT IS ADDRESSED THROUGH USE OF STRUCTURAL FILTERS, PAVERS, AND PLANTER AREAS. ADDITIONALLY, THIS IS A REDEVELOPMENT SITE AND IMPERVIOUS AREA HAS BEEN SIGNIFICANTLY REDUCED.

FOREST CONSERVATION: IS EXEMPT PER §31–3.2.0: AN ACTIVITY ON A PREVIOUSLY DEVELOPED AREA COVERED BY IMPERVIOUS SURFACE AND LOCATED IN THE PRIORITY FUNDING AREA.

PROJECT NOTES

THE PROPERTY SHOWN HEREON LIES ENTIRELY OUTSIDE OF THE CHESAPEAKE BAY CRITICAL AREA AS SHOWN ON THE TALBOT COUNTY CRITICAL AREA MAPS IN ACCORDANCE WITH TALBOT COUNTY BILL NO. 1295, ENACTED AUGUST 12, 2014.

THE ABOVE GROUND IMPROVEMENTS SHOWN HEREON WERE FIELD LOCATED BY LANE ENGINEERING, LLC ON FEBRUARY 2, 2024.

THE UNDERGROUND UTILITIES SHOWN HEREON WERE TAKEN FROM BEST AVAILABLE RESOURCES AND ARE APPROXIMATE ONLY.

THE DIMENSIONS OF BUILDINGS, STRUCTURES AND SETBACKS WERE MEASURED TO THE NEAREST 0.1 FOOT.

THE ELEVATIONS SHOWN HEREON ARE NAVD 1988 DATUM AS ESTABLISHED BY GPS METHODOLOGY TO CORS STATIONS MDNM (NGS CERTIFICATE PENDING) AND LOYF (PID DK7414) COMBINED FACTOR: 0.99995360

THE COORDINATES SHOWN HEREON ARE BASED ON THE MARYLAND COORDINATE SYSTEM NAD83 (2011), AS ESTABLISHED BY GPS METHODOLOGY TO CORS STATIONS MDNM (NGS CERTIFICATE PENDING) AND LOYF (PID DK7414) COMBINED FACTOR: 0.99995360. THE DISTANCES SHOWN HEREON ARE GROUND BASED.

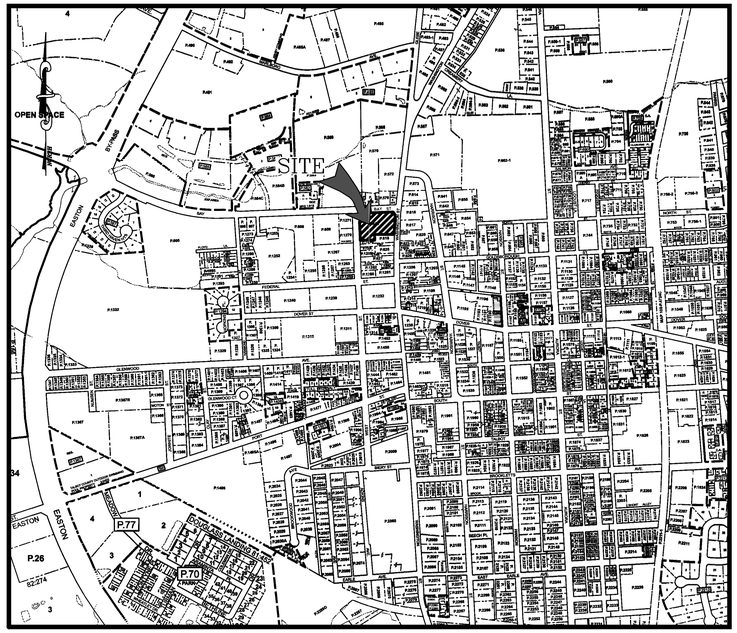
NO ABSTRACT OF TITLE, TITLE COMMITMENT, NOR RESULTS OF A TITLE SEARCH HAVE BEEN FURNISHED TO LANE ENGINEERING, LLC. THE BUILDING RESTRICTION LINES AS SHOWN HEREON ARE BASED SOLELY ON THE CURRENT TOWN OF EASTON COUNTY ZONING ORDINANCE APPLICABLE TO THE PROPERTY SHOWN HEREON AND ARE SUBJECT TO CHANGE WITH THE REVISION OF ZONING LAWS. OTHER DOCUMENTS OF RECORD MAY EXIST THAT MAY AFFECT THE SURVEYED PROPERTY REFLECTED HEREON, INCLUDING BUT NOT LIMITED TO EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, PLAT RESTRICTIONS OR ANY OTHER FACTS THAT AN ACCURATE, COMPLETE AND CURRENT TITLE SEARCH MAY DISCLOSE.

FLOOD DATA

THE PROPERTY SHOWN HEREON IS NOT LOCATED IN THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SPECIAL FLOOD HAZARD AREA (SFHA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD. THE PROPERTY IS MAPPED IN THE "X" FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAPS FOR COMMUNITY NO. 240067, MAP NO. 24041C0189D FOR TOWN OF EASTON, MARYLAND. THE 1% ANNUAL CHANCE FLOOD (100–YEAR FLOOD), ALSO KNOWN AS THE BASE FLOOD, IS THE FLOOD THAT HAS A 1% CHANCE OF BEING EQUALED OR EXCEEDED IN ANY GIVEN YEAR. THE SFHA IS THE AREA SUBJECT TO FLOODING BY THE 1% ANNUAL CHANCE FLOOD. THE SFHA INCLUDES ZONES A, AE, AH, AO, AR, A99, V & VE. THE BASE FLOOD ELEVATION (BFE) IS THE WATER SURFACE ELEVATION OF THE 1% ANNUAL CHANCE FLOOD. FLOOD INSURANCE MAY BE REQUIRED FOR STRUCTURES LOCATED IN THE SPECIAL FLOOD HAZARD AREA.

FLOOD ZONE LEGEND
ZONE X – AREA OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD

THE FLOOD DATA SHOWN HEREON IS BASED ON AVAILABLE MAPPED AND/OR DIGITAL INFORMATION AND IS DEPICTED AS DIRECTED AND REQUIRED BY FEDERAL, STATE AND LOCAL REGULATIONS. IT IS SUBJECT TO DATA INACCURACIES AND REGULATORY CHANGE AND SHOULD BE VERIFIED PRIOR TO FINALIZING DEVELOPMENT OR IMPROVEMENT PLANS FOR THE SUBJECT LANDS.



VICINITY MAP

0 0 0' 0 0 0
SCALE IN FEET

INDEX OF SHEETS

PDF SHEET	TITLE
1	TITLE SHEET & PROJECT NOTES
2	AERIAL CONTEXT PLAN
3	SKETCH SITE PLAN
4	ILLUSTRATIVE SITE PLAN
5	CONCEPTUAL SWM PLAN
6	PROPOSED LOT LAYOUT

PUD LANDSCAPE REQUIREMENTS SUMMARY PER ZONING ORDINANCE: SECTION 701:

SECTION 701.G (TABLE)

PUD INFILL – MINIMUM OPEN SPACE REQUIREMENTS: LANDSCAPING SHALL BE PROVIDED TO ENHANCE THE PROJECT AND ADVANCE THE DEGREE TO WHICH THE INFILL PROJECT BLENDS IN WITH SURROUNDING PROPERTIES

COMPREHENSIVE PLAN DESIGN PRINCIPLES RESPONSE NARRATIVE

PRINCIPLE #1– INTEGRATED USES ARE DESIRABLE– THIS DEVELOPMENT PROPOSES RESIDENTIAL DEVELOPMENT ADJOINING OTHER RESIDENTIAL LAND USES AND COMMERCIAL USES.

PRINCIPLE #2– NATURAL FEATURES SHOULD DETERMINE DESIGN– NO COMPELLING NATURAL FEATURES; SWM INTEGRATED ON SITE.

PRINCIPLE #3– AUTOMOBILES SHOULD NOT DETERMINE DESIGN– PARKING FOR RESIDENTS IS IMPORTANT. THE PROPOSED PARKING HAS BEEN DESIGNED TO ACCOMMODATE THE BUILDING LAYOUT ON–SITE.

PRINCIPLE #4– AMPLE OPEN SPACES SHOULD BE PROVIDED WITHIN & AROUND NEIGHBORHOODS– USABLE OPEN SPACE NOT SPECIFICALLY APPLICABLE HERE.

PRINCIPLE #5– ARCHITECTURE SHOULD RESPECT EASTON'S HISTORICAL DEVELOPMENT– THIS APPLICATION PROPOSES ARCHITECTURE COMPATIBLE WITH EXISTING BUILDINGS AND COMPATIBLE WITH EXISTING ARCHITECTURE FOUND IN EASTON.

PRINCIPLE #6– SIGNS SHOULD INFORM BUT NOT DOMINATE–SIGNAGE TASTEFUL, SIMPLE AND PER CODE.

PRINCIPLE #7– NEIGHBORHOODS SHOULD CONTAIN A DIVERSITY OF HOUSING TYPES– THIS DEVELOPMENT PROPOSES TOWNHOMES AND SINGLE FAMILY DWELLINGS AS PERMITTED IN THE CB ZONING DISTRICT.

PRINCIPLE #8 RESIDENTIAL NEIGHBORHOODS SHOULD BE INTERESTING PLACES– THIS DEVELOPMENTS SETTING PROVIDES DIVERSITY TO THE DOWNTOWN DISTRICT.

PRINCIPLE #9– NEIGHBORHOODS SHOULD CONNECT– THE MEWS WILL PROVIDE PEDESTRIAN CONNECTION FROM WASHINGTON STREET TO WEST STREET.

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TOWN OF EASTON – TOWN PLANNER DATE

APPROVED:
TOWN OF EASTON – TOWN ENGINEER DATE

APPROVED:
PLANS ARE NOT APPROVED FOR CONSTRUCTION
EASTON PLANNER DATE

REVISIONS TO APPROVED PLANS

No.	DATE	DESCRIPTION	BY

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E–mail: general@leinc.com
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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. 48188 , Expiration Date: 12/28/2025.

SEAL
STATE OF MARYLAND
JARRET J. BOYCE
48188
PROFESSIONAL ENGINEER
4-26-24
DATE

TITLE SHEET

ON THE LANDS OF
NAI SATURN EASTERN, LLC

IN THE TOWN OF EASTON, WARD DISTRICT 1
TALBOT COUNTY, MARYLAND
TAX MAP 104 TAX PARCEL 612

ISSUED/REVISED FOR:	DATE:	BY:
ESDR	04/03/24	BCE
PC	04/26/24	BCE

SHEET No. 1 OF 6
SCALE: AS NOTED
JOB No. 240014
FILE No. B412

Date: 04/29/2024 – 8:55am User: jcarroll Project Manager: BCE
Drawing Path: J:\2024\0000\240014\Civil3D–240014\Dwg\Plots\GCS–CSK–PUD–PLTS–240014.dwg | 1–Notes
XREF File(s): VJD–BASE–240014/CBS–BASE–2436–240014

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APPROVED:
TOWN OF EASTON – TOWN ENGINEER DATE

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EASTON PLANNING COMMISSION DATE

REVISIONS TO APPROVED PLANS

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SEAL
STATE OF MARYLAND
JARRETT D. BAILEY
4-26-24
DATE

AERIAL CONTEXT PLAN

ON THE LANDS OF NAI SATURN EASTERN, LLC

IN THE TOWN OF EASTON, WARD DISTRICT 1
TALBOT COUNTY, MARYLAND
TAX MAP 104 TAX PARCEL 612

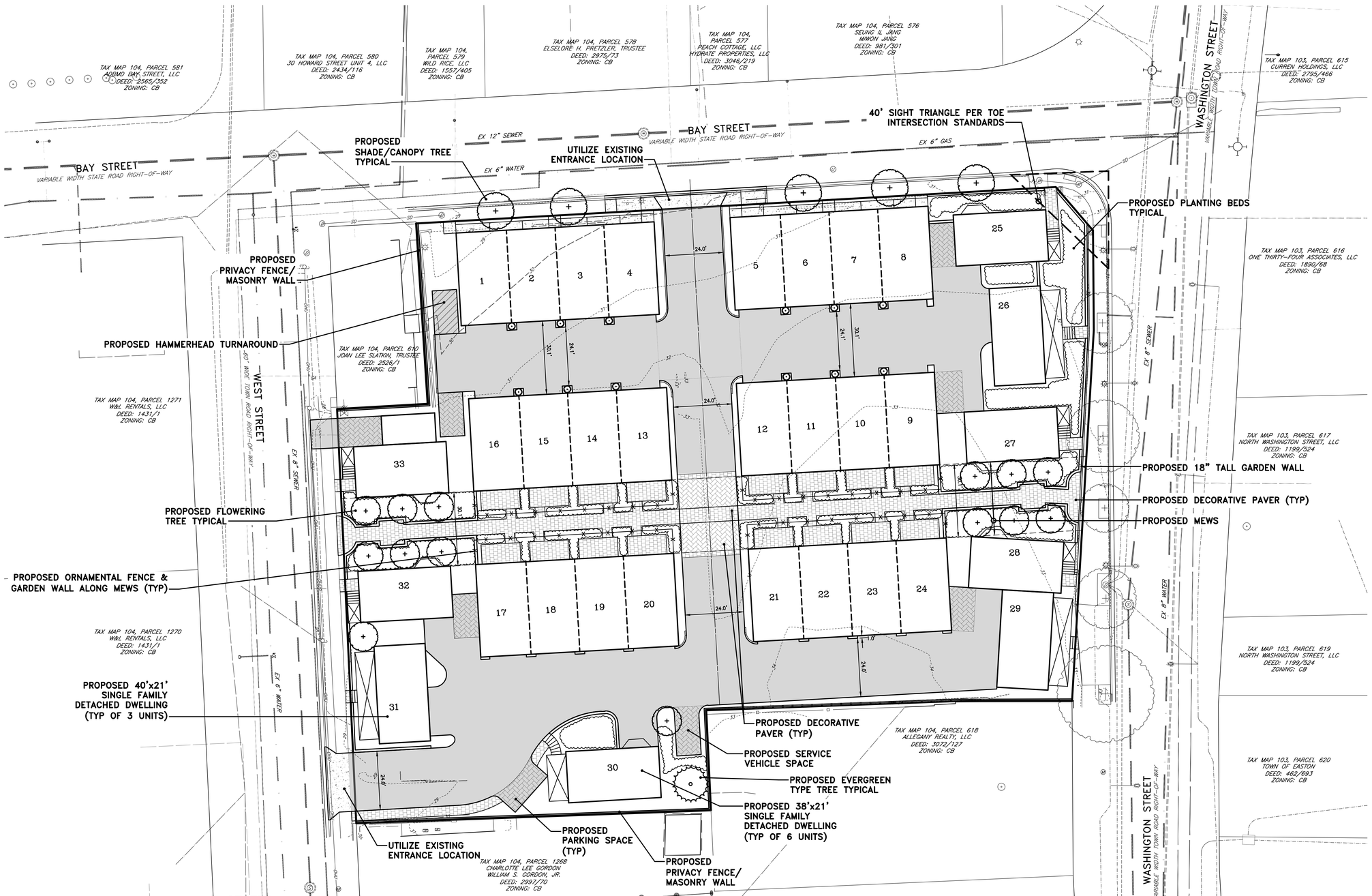
ISSUED/REVISED FOR:	DATE:	BY:
ESDR	04/03/24	BCE
PC	04/26/24	BCE

NAD 83 (2011) MD COORDINATE SYSTEM

60' 30' 0' 30' 60' 120'
SCALE IN FEET

SHEET No. 2 OF 6
SCALE: AS NOTED
JOB No. 240014
FILE No. B412

Date: 04/29/2024 – 8:56am User: jcarroll Project Manager: BCE
Drawing Path: C:\swap\JcPublish_11068\CSK-PUD-PLTS-240014.dwg | 2-Aerial Context Plan
XREF File(s): V:\D-BASE-240014\2024-03-18-CAR\CSF-SKCE-240014/CSK-BASE-240014/CBS-BASE-2436-240014/RAR-BASE-240014/RLD-EUC-OLD-BASE-240014/VSF-BASE-240014/VSF-BASE-240014/2024-03-18-CAR/CSF-SKCE-240014/CSK-BASE-240014/XRN-PUD-BASE-240014/LLP-PUD-BASE-240014



LEGEND

- IRON ROD FOUND
- COMPUTED POINT
- ELECTRIC HANDHOLE
- SINGLE POST SIGN
- GAS VALVE
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- UTILITY POLE
- LAMP POLE
- OHU — OVER HEAD UTILITY LINES
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE/INLET
- SD — STORM DRAIN LINE
- DECIDUOUS TREE

LANDSCAPE KEY

- 2" CALIPER MINIMUM CANOPY OR STREET TREES (OAK, MAPLE TYPES)
- 1.25" CALIPER OR 7' HEIGHT MINIMUM FLOWERING TREES (CHERRY, MAGNOLIA, SERVICEBERRY, RED BUD, SERVICEBERRY TYPES)
- 7' HEIGHT MINIMUM EVERGREEN TREES (WHITE PINE, AMERICAN ARBORVITAE, LOBLOLLY TYPES)
- PLANTING BEDS

UNOBSTRUCTED VISION TRIANGLE AREA NOTE

40' UNOBSTRUCTED VISION TRIANGLE (AT THE INTERSECTION OF WASHINGTON AND BAY STREET) IN ACCORDANCE WITH THE TOWN OF EASTON ZONING ORDINANCE.

NOTE: THE LAYOUT AS SHOWN HEREON IS CONCEPTUAL ONLY AND NOT INTENDED TO BE UTILIZED FOR DESIGN OR CONSTRUCTION PURPOSES.

20' 10' 0' 10' 20' 40'
SCALE IN FEET

MD COORDINATE SYSTEM
NAD 83 (2011)

APPROVED:
PLANS ARE ISSUED FOR REVIEW ONLY
TOWN OF EASTON – TOWN PLANNER DATE

APPROVED:
PLANS ARE NOT APPROVED FOR CONSTRUCTION
TOWN OF EASTON – TOWN ENGINEER DATE

REVISIONS TO APPROVED PLANS

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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. 48188 , Expiration Date: 12/28/2025.

SEAL

STATE OF MARYLAND — BRADLEY C. ENGLE — PROFESSIONAL ENGINEER

4-26-24
DATE

SKETCH SITE PLAN

ON THE LANDS OF
NAI SATURN EASTERN, LLC

IN THE TOWN OF EASTON, WARD DISTRICT 1
TALBOT COUNTY, MARYLAND
TAX MAP 104 TAX PARCEL 612

ISSUED/REVISED FOR:	DATE:	BY:
ESDR	04/03/24	BCE
PC	04/26/24	BCE

SHEET No. 3 OF 6
SCALE: AS NOTED
JOB No. 240014
FILE No. B412

Date: 04/29/2024 - 8:56am User: jcarroll Project Manager: BCE
Drawing Path: C:\swap\AcPublish_11068\CSK-PUD-PLTS-240014.dwg | J-Sketch
XREF File(s): VLD-BASE-240014/2024-03-18-CAR/CSP-SRCE-240014/CSK-BASE-240014/CBS-BASE-240014/RAR-BASE-240014/RLD-EUC-OLD-BASE-240014/VSF-BASE-240014/LLP-PUD-BASE-240014

LEGEND

- IRON ROD FOUND
- COMPUTED POINT
- ELECTRIC HANDHOLE
- SINGLE POST SIGN
- GAS VALVE
- FIRE HYDRANT
- WATER METER
- WATER VALVE
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NAD 83 (2011) MD COORDINATE SYSTEM

20' 10' 0' 10' 20' 40'
SCALE IN FEET

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SEAL
STATE OF MARYLAND
JAMES C. BOYLE
48188
REGISTERED PROFESSIONAL ENGINEER
FINAL ENGINEERING
4-26-24
DATE

ILLUSTRATIVE SITE PLAN

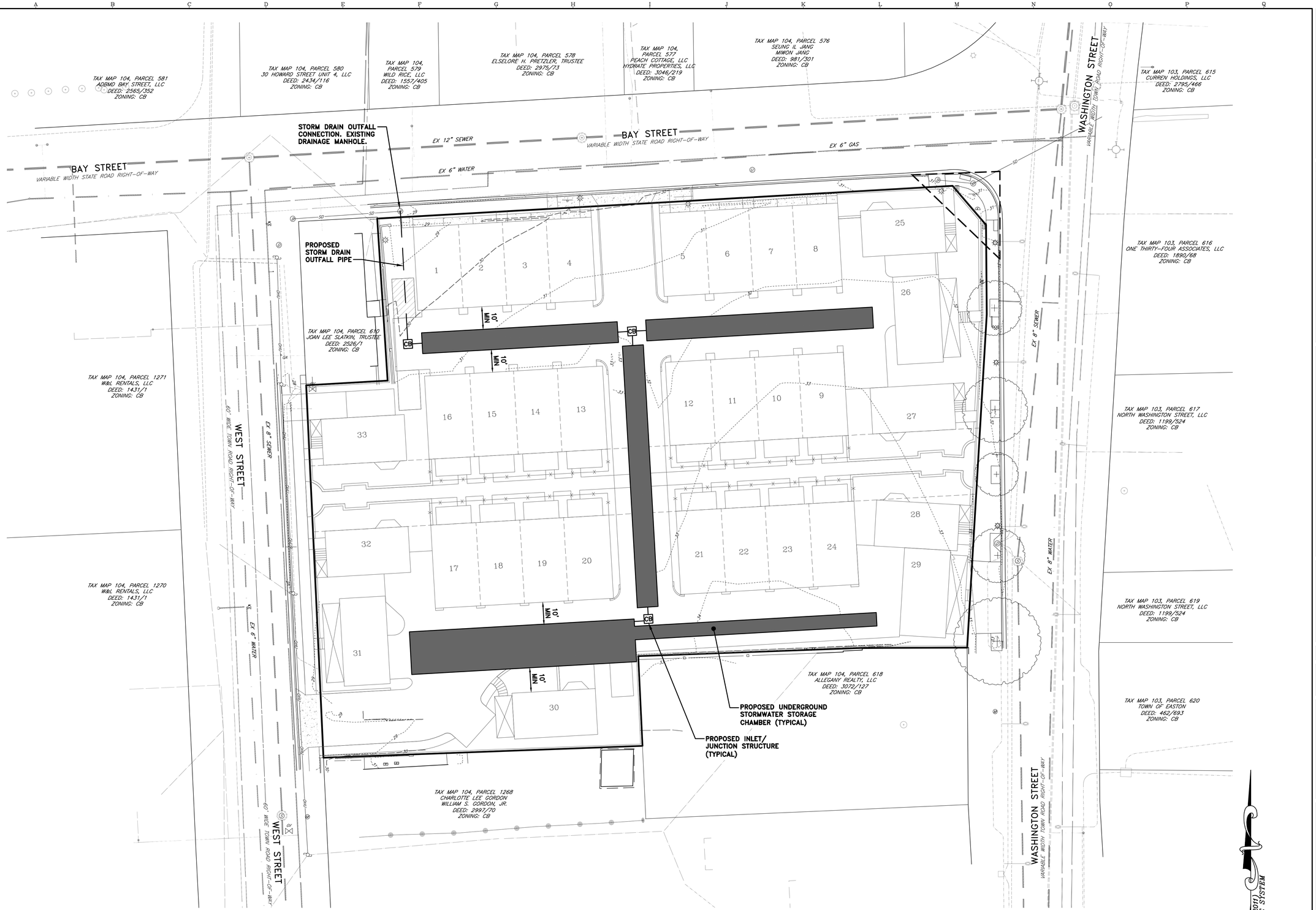
ON THE LANDS OF
NAI SATURN EASTERN, LLC

IN THE TOWN OF EASTON, WARD DISTRICT 1
TALBOT COUNTY, MARYLAND
TAX MAP 104 TAX PARCEL 612

ISSUED/REVISED FOR:	DATE:	BY:
ESDR	04/03/24	BCE
PC	04/26/24	BCE

SHEET No. 4 OF 6
JOB No. 240014
SCALE: AS NOTED
FILE No. B412

Date: 04/29/2024 - 8:56am User: jcarroll Project Manager:BCE
Drawing Path: C:\swap\AcePublish_11068\CSK-PUD-PLTS-240014.dwg | 4-illustrative
XREF File(s): VLD-BASE-240014/2024-03-18-CAR/CSF-SKCE-240014/CSK-BASE-240014/CBS-BASE-2438-240014/RAR-BASE-240014/RLD-EUC-OLD-BASE-240014/VSF-BASE-240014/LLP-PUD-BASE-240014



SWM QUANTITY SUMMARY CHART

POI	DA (ACRES)	IMPERVIOUS (ACRES)	RCN	Tc (MINUTES)	PRE 2 YEAR	POST 2 YEAR	WSE	PRE 10 YEAR	POST 10 YEAR	WSE	PRE 100 YEAR	POST 100 YEAR	WSE
1	1.50	0.04	–	2.9	7.06	3.87	–	11.15	6.93	–	–	–	–
2	0.06	0.01	–	1.3	0.33	0.15	–	0.53	0.30	–	–	–	–

ESD SUMMARY CHART

DRAINAGE AREA	TYPE OF ESD PRACTICE	TYPE OF ESD PRACTICE (STRUCTURE NAME)	ON-SITE OR OFF-SITE STRUCTURE	RUNOFF CURVE NUMBER (RCN) WEIGHTED	MARYLAND GRID COORDINATE NAD 83 METERS NORTHING	MARYLAND GRID COORDINATE NAD 83 METERS EASTING	ESD PRACTICE TOTAL DRAINAGE AREA (ACRES)	ESD PRACTICE IMPERVIOUS DRAINAGE AREA (ACRES)	SURFACE AREA OF ESD PRACTICE (ACRES)	TARGET PE (IN)	ACTUAL PE (IN)	TARGET ESDv (FT³)	ACTUAL ESDv (FT³)
OVERALL	–	BAYFILTER 522	ON-SITE	–	–	–	1.52	1.50	–	1.0	1.0	952	1,250

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TOWN OF EASTON – TOWN PLANNER DATE

APPROVED:
TOWN OF EASTON – TOWN ENGINEER DATE

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EASTON UTILITIES – ENGINEER DATE

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SEAL

4-26-24
DATE

CONCEPTUAL SWM PLAN

ON THE LANDS OF NAI SATURN EASTERN, LLC

IN THE TOWN OF EASTON, WARD DISTRICT 1
TALBOT COUNTY, MARYLAND
TAX MAP 104 TAX PARCEL 612

ISSUED/REVISED FOR:	DATE:	BY:
ESDR	04/03/24	BCE
PC	04/26/24	BCE

SHEET No. 5 OF 6
SCALE: AS NOTED
JOB No. 240014
FILE No. B412

Date: 04/29/2024 - 8:56am User: jcarroll Project Manager: BCE
Drawing Path: C:\swap\VuPublish_11068\CSK-PUD-PLTS-240014.dwg | 5-SWM
XREF File(s): VLD-BASE-240014/2024-03-18-CAR/CSP-SRCE-240014/CSK-BASE-240014/CBS-BASE-240014/RAR-BASE-240014/RLD-EUC-OLD-BASE-240014/XSF-BASE-240014/XRN-PUD-BASE-240014/LLP-PUD-BASE-240014

PROPOSED LOT LAYOUT TABLE		
UNIT #	LOT SIZE (SF±)	UNIT TYPE
1	2119	20'x38' TOWNHOME
2	1159	20'x38' TOWNHOME
3	1159	20'x38' TOWNHOME
4	2101	20'x38' TOWNHOME
5	2098	20'x38' TOWNHOME
6	1159	20'x38' TOWNHOME
7	1159	20'x38' TOWNHOME
8	1197	20'x38' TOWNHOME
9	1407	20'x38' TOWNHOME
10	1362	20'x38' TOWNHOME
11	1362	20'x38' TOWNHOME
12	2383	20'x38' TOWNHOME
13	2383	20'x38' TOWNHOME
14	1362	20'x38' TOWNHOME
15	1362	20'x38' TOWNHOME
16	1407	20'x38' TOWNHOME
17	1613	20'x38' TOWNHOME
18	1561	20'x38' TOWNHOME
19	1561	20'x38' TOWNHOME
20	2809	20'x38' TOWNHOME
21	2899	20'x38' TOWNHOME
22	1621	20'x38' TOWNHOME
23	1629	20'x38' TOWNHOME
24	1692	20'x38' TOWNHOME
25	2210	38'x21' SINGLE FAMILY DETACHED DWELLING
26	2865	40'x21' SINGLE FAMILY DETACHED DWELLING
27	2888	38'x21' SINGLE FAMILY DETACHED DWELLING
28	2481	38'x21' SINGLE FAMILY DETACHED DWELLING
29	1911	40'x21' SINGLE FAMILY DETACHED DWELLING
30	4934	38'x21' SINGLE FAMILY DETACHED DWELLING
31	2823	40'x21' SINGLE FAMILY DETACHED DWELLING
32	2516	38'x21' SINGLE FAMILY DETACHED DWELLING
33	3094	38'x21' SINGLE FAMILY DETACHED DWELLING
	TOTAL: 66,286 SF±/1.522 AC±	

NOTE

A WAIVER OF STANDARD DRAINAGE & UTILITY EASEMENTS (AT FRONT, SIDE AND REAR OF LOTS) IS REQUESTED AS PART OF THIS PUD.

SOME LOTS ARE PROPOSED AS FEE SIMPLE LOTS WITHOUT DIRECT ROAD FRONTAGE. A "BLANKET EASEMENT" WILL BE PROVIDED ACROSS THE PROPERTY FOR AREAS OF COMMON USE/TRAVEL.

NOTE: THE PROPOSED LOT LAYOUT AS SHOWN HEREON IS CONCEPTUAL ONLY AND NOT INTENDED FOR FINAL PLAT/LOT CONFIGURATION AND RECORDATION.

SCALE IN FEET: 20' 10' 0' 10' 20' 40'

APPROVED:
PLANS ARE ISSUED FOR REVIEW ONLY
TOWN OF EASTON – TOWN PLANNER DATE

APPROVED:
TOWN OF EASTON – TOWN ENGINEER DATE

APPROVED:
PLANS ARE NOT APPROVED FOR CONSTRUCTION
EASTON UTILITIES – ENGINEER DATE

REVISIONS TO APPROVED PLANS

No.	DATE	DESCRIPTION	BY

WARNING!!

THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THE QUANTITIES SHOWN ON THIS PLAN ARE FOR INFORMATIONAL AND PERMITTING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES TO HIS OWN SATISFACTION PRIOR TO BEGINNING CONSTRUCTION.

THE CONTRACTOR SHALL TEST PIT AND LOCATE EXISTING UNDERGROUND UTILITIES PRIOR TO THE BEGINNING OF ANY WORK ON-SITE. THE CONTRACTOR SHALL NOTIFY DEPT. OF PUBLIC WORKS OF ANY POSSIBLE CONFLICT AND REQUEST THE RELOCATION OF THE EXISTING UNDERGROUND UTILITIES BEFORE BEGINNING ANY WORK ON-SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RELOCATION EXPENSE.

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DIG WITH CARE
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MARYLAND LAW
BEFORE YOU DIG CALL
1-800-441-8355 OR 811
PROTECT YOURSELF, GIVE
TWO WORKING DAYS NOTICE

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Established 1986
Civil Engineers • Land Planning • Land Surveyors
E-mail: general@lanei.com
117 Bay St. Easton, MD 21601 (410) 822-8003
15 Washington St. Cambridge, MD 21613 (410) 221-0818
354 Pennsylvania Ave. Centreville, MD 21617 (410) 758-2095

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. 48188 , Expiration Date: 12/28/2025.

SEAL
STATE OF MARYLAND
JAMES W. BOWERS
48188
REGISTERED PROFESSIONAL ENGINEER
4-26-24
DATE

PROPOSED LOT LAYOUT

ON THE LANDS OF
NAI SATURN EASTERN, LLC

IN THE TOWN OF EASTON, WARD DISTRICT 1
TALBOT COUNTY, MARYLAND
TAX MAP 104 TAX PARCEL 612

ISSUED/REVISED FOR:	DATE:	BY:
ESDR	04/03/24	BCE
PC	04/26/24	BCE

SHEET No. 6 OF 6
SCALE: AS NOTED
JOB No. 240014
FILE No. B412

Date: 04/29/2024 - 8:56am User: jcarroll Project Manager: BCE
Drawing Path: C:\swap\AcPublish_11068\CSK-PUD-PLTS-240014.dwg | 6-Subdivision
XREF File(s): V:\0-BASE-240014\2024-03-18-CAR/CSF-SRCE-240014/CSK-BASE-240014/CBS-BASE-2436-240014/RAR-BASE-240014/RLD-EUC-OLD-BASE-240014/VSF-BASE-240014/CSW-CSK-BASE-240014/XRN-PUD-BASE-240014/LLP-PUD-BASE-240014

VIEW AT CORNER OF BAY ST AND WASHINGTON ST

KEY PLAN 1-40
1" = 40'-0"

HDC SUBMISSION - 04.08.24

139 N. Washington St.

139 N. WASHINGTON ST. | EASTON, MD 20814

1ST ELECTION DISTRICT
TALBOT COUNTY, MD
WSSC GRID:
TAX MAP:

MNCPPC:

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ARCHITECT

maurice**walters** | architect
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MAURICE C. WALTERS III
13218
ARCHITECT

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NAME: MAURICE WALTERS
LICENSE No: 15649
EXPIRATION DATE: 09/03/2024

Drawing Title

SITE RENDERING

Sheet No.

A001

Scale 1" = 40'-0"

VIEW FROM WASHINGTON ST TOWARD MEWS ENTRY

KEY PLAN 1-40
1" = 40'-0"

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Drawing Title

SITE RENDERING

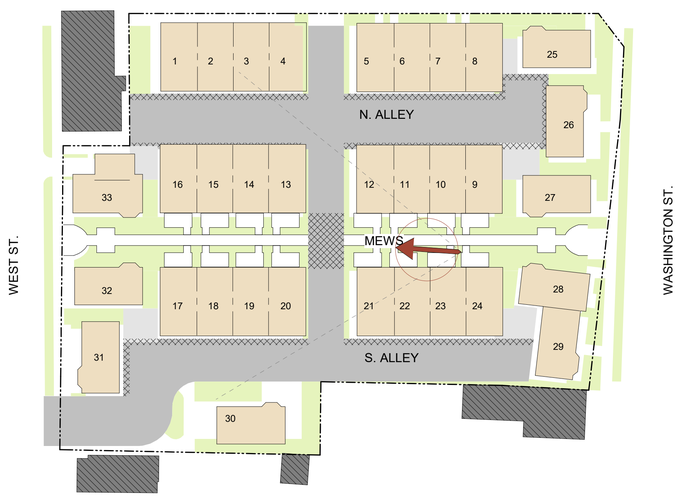
Sheet No.

A002

Scale 1" = 40'-0"

BAY ST.

VIEW IN MEWS TOWARD WEST ST



KEY PLAN 1-40
1" = 40'-0"

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139 N. Washington St.

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NAME: MAURICE WALTERS
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EXPIRATION DATE: 09/03/2024

Drawing Title

SITE RENDERING

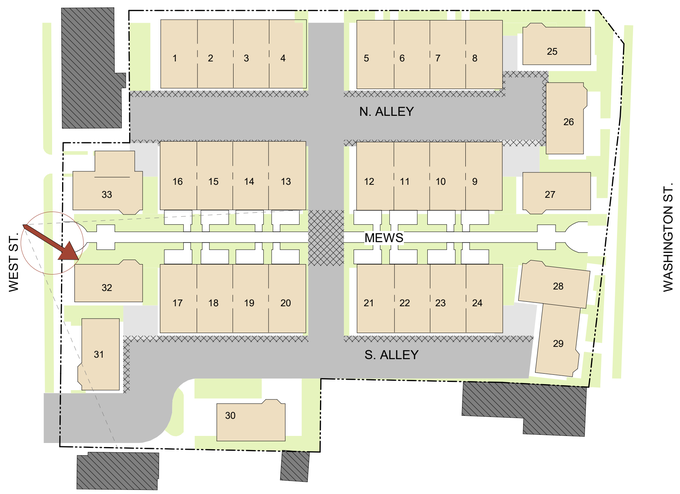
Sheet No.

A003

Scale 1" = 40'-0"

BAY ST.

VIEW AT MEWS ENTRY AT WEST ST



KEY PLAN 1-40
1" = 40'-0"

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139 N. Washington St.

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NAME: MAURICE WALTERS
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Drawing Title

SITE RENDERING

Sheet No.

A004

Scale 1" = 40'-0"

BAY ST.

VIEW FROM WEST ST TOWARD MEWS ENTRY

KEY PLAN 1-40
1" = 40'-0"

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Drawing Title

SITE RENDERING

Sheet No.

A005

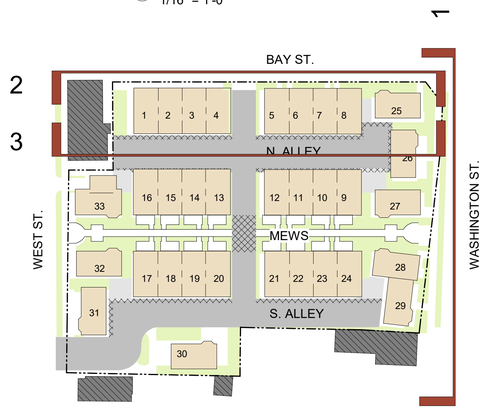
Scale 1" = 40'-0"

Materials Legend	
Key Value	Keynote Text
BR1	BRICK A (RED)
BR2	BRICK B (GRAY)
BR3	BRICK C (RED)
BR5	STACKED BOND BRICK, MATCH BRICK
BR6	SOLDIER COURSE BRICK HEADER, MATCH BRICK
BR7	BRICK CORBEL DETAIL, MATCH BRICK
BR8	CHECKERBOARD BRICK SPANDREL, MATCH BRICK
CL1	DECORATIVE PORCH COLUMNS AND ENTABLATURE
CS1	CAST STONE SILL/BAND/HEADER
CS2	CAST STONE COPING
DR1	TOWNHOUSE DOOR, SINGLE
DR2	TOWNHOUSE DOOR, DOUBLE
DR3	SECTIONAL ALUMINUM AND GLASS OVERHEAD GARAGE DOOR
DR4	TERRACE DOOR
FC1	CLAPBOARD SIDING (FIBER CEMENT)
FC2	VERTICAL SHIPLAP SIDING (FIBER CEMENT)
FC3	FIBER CEMENT PANEL
FC4	FIBER CEMENT TRIM
GW1	MASONRY GARDEN WALLS
MT1	DECORATIVE RAILING
MT2	STEEL LINTEL, PAINTED
RF1	SHINGLED ROOFING
RF3	STANDING SEAM METAL ROOF AND SIDING
SR1	SHUTTERS, OPERABLE
WS1	WINDOWS, HUNG OR AWNING
WS2	DORMER WINDOWS, HUNG OR AWING

1 Washington St - East Elevation
1/16" = 1'-0"

2 Bay Street - South Elevation
1/16" = 1'-0"

3 North Alley - North Elevation
1/16" = 1'-0"



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139 N. Washington St.

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1ST ELECTION DISTRICT
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LICENSE No: 15649
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Drawing Title

SITE ELEVATIONS

Sheet No.

SD - 201

Scale As indicated

Materials Legend	
Key Value	Keynote Text
BR1	BRICK A (RED)
BR2	BRICK B (GRAY)
BR3	BRICK C (RED)
BR5	STACKED BOND BRICK, MATCH BRICK
BR6	SOLDIER COURSE BRICK HEADER, MATCH BRICK
BR7	BRICK CORBEL DETAIL, MATCH BRICK
BR8	CHECKERBOARD BRICK SPANDREL, MATCH BRICK
CL1	DECORATIVE PORCH COLUMNS AND ENTABLATURE
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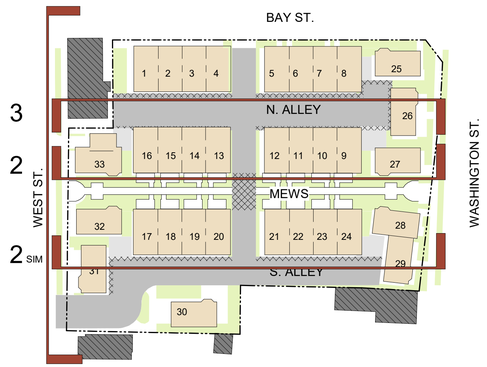
SR1	SHUTTERS, OPERABLE
WS1	WINDOWS, HUNG OR AWNING
WS2	DORMER WINDOWS, HUNG OR AWING

1 West St - West Elevation
1/16" = 1'-0"

2 Mews - North Elevation
1/16" = 1'-0"

3 North Alley - South Elevation (S. ALLEY SIMILAR)
1/16" = 1'-0"

1



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139 N. Washington St.

139 N. WASHINGTON ST. | EASTON, MD 20814

1ST ELECTION DISTRICT
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NAME: MAURICE WALTERS
LICENSE No: 15649
EXPIRATION DATE: 09/03/2024

Drawing Title

SITE ELEVATIONS

Sheet No.

SD - 202

Scale As indicated

TRAFFIC IMPACT ANALYSIS

FOR

139 N. WASHINGTON

Prepared by:

LENHART TRAFFIC CONSULTING, INC.

TRAFFIC ENGINEERING & TRANSPORTATION PLANNING

April 18, 2024

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1.2 Scope of Study

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2.2 Existing Lane Configurations
2.3 Existing Traffic Counts

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3.3 Background Traffic Volumes

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4.5 Projected Level of Service
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B Level of Service (LOS) Worksheets
C Background Developments
D Sight Distance Evaluation

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Section 1 Introduction

1.1 Project Description

This Traffic Impact Analysis (TIA) has been prepared for the proposed redevelopment of the property located at 139 N. Washington Street, located in Easton, Maryland. The location of the site is shown on **Exhibit 1.** The site was previously developed with a 22,547 square foot Safeway grocery store and is proposed to be redeveloped with 9 single family detached units and 26 single family attached units. Access to the site will be provided along Bay Street and West Street.

1.2 Scope of Study

This TIA has been prepared in accordance with a scoping agreement coordinated with the Town of Easton and conforms to the MDOT SHA Traffic Impact Study Guidelines. Note that per MDOT SHA's Access Permits Manual, all study intersections were evaluated using the Critical Lane Volume (CLV) methodology and must maintain Level-of-Service (LOS) D or better to be considered adequate. The Highway Capacity Manual (HCM) methodology was also utilized to evaluate the study intersections per Town of Easton Guidelines.

Trip Generation Memo	Site Location Map	**Exhibit 1**
LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BLVD, SUITE 214 SEVERNA PARK, MD 21146 www.lenharttraffic.com		

Section 2 Existing Conditions

2.1 Description of Road Network

The key roads in the study area are:

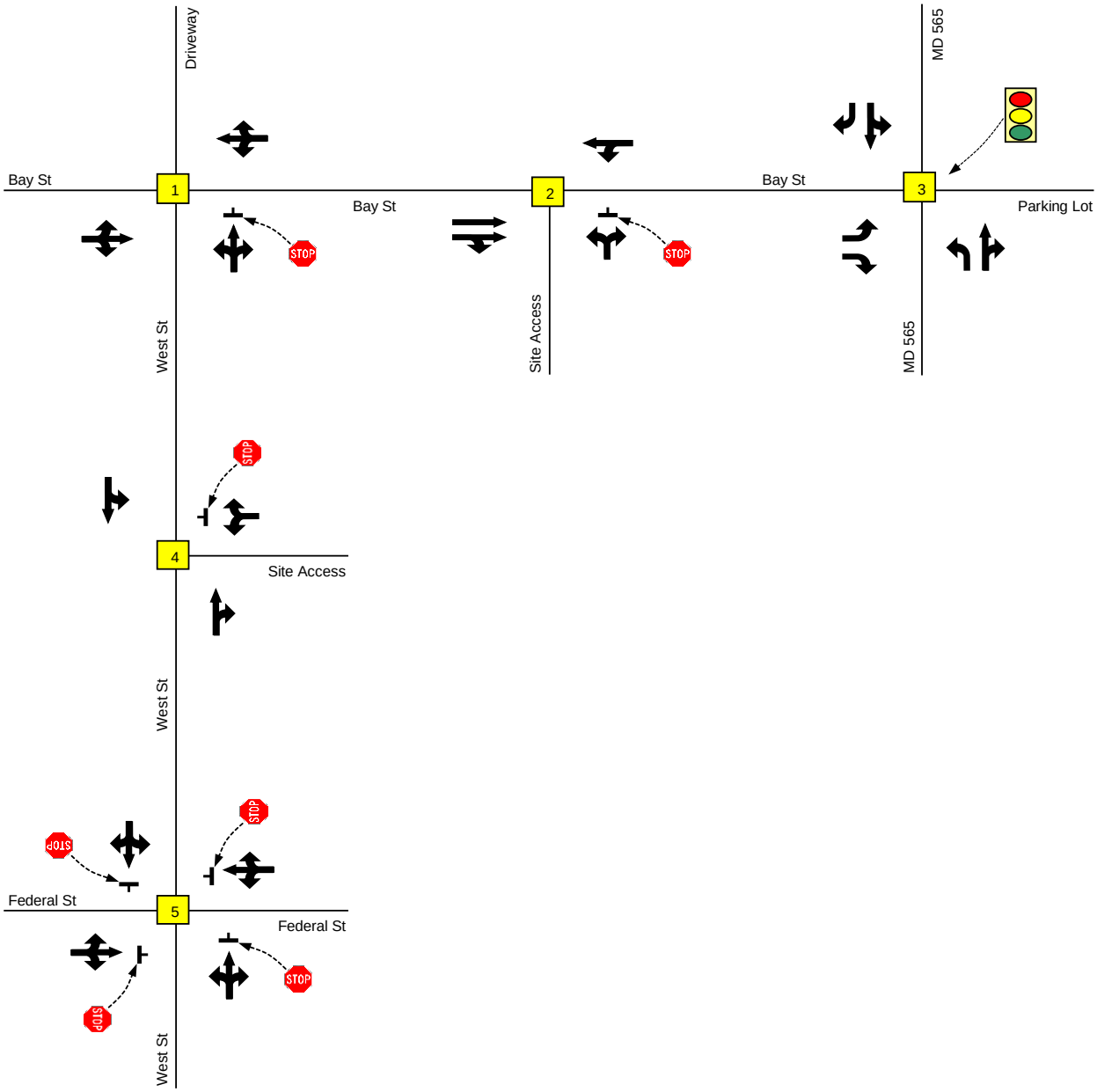
- N. Washington Street (MD 565) – a two- to four-lane roadway classified as a minor arterial. The roadway has a posted speed limit of 30 MPH.
- Bay Street (MD 33) – a two-lane roadway classified as a minor arterial. The roadway has a posted speed limit of 25 MPH within the vicinity of the site.
- West Street – a two-lane local roadway..

2.2 Existing Lane Configurations

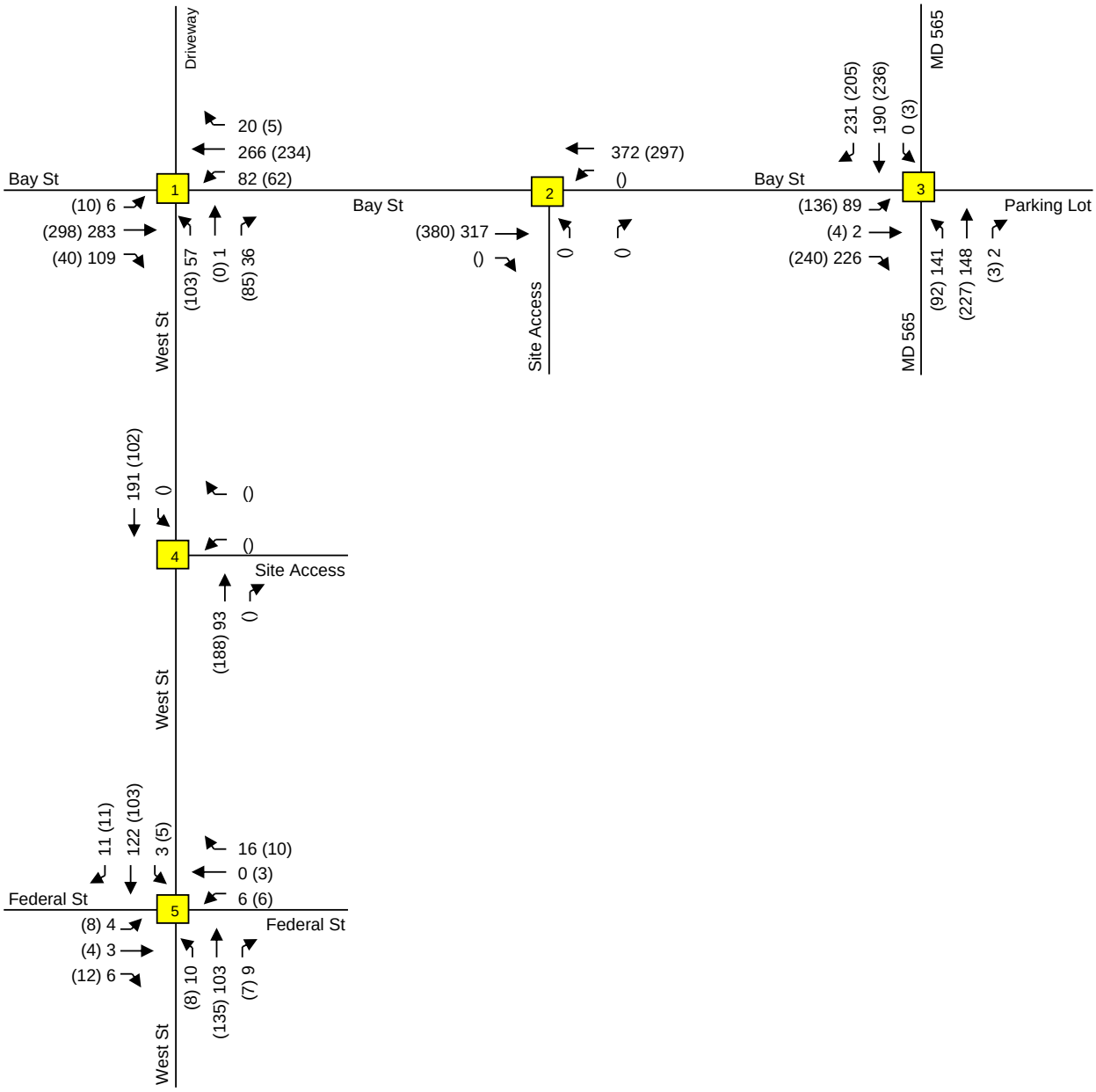
The Lane Use & Traffic Control Devices are shown on **Exhibit 2**.

2.3 Existing Traffic Counts

Peak hour turning movement counts were conducted and are shown on **Exhibit 3.**



Traffic Impact Analysis LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BLVD, SUITE 214 SEVERNA PARK, MD 21146 www.lenharttraffic.com	Existing Peak Hour Volumes Key: xx = AM Peak Vol's (xx) = PM Peak Vol's	**Exhibit 3**



Traffic Impact Analysis	Existing Peak Hour Volumes	**Exhibit 3**
LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BLVD, SUITE 214 SEVERNA PARK, MD 21146 www.lenharttraffic.com	Key: xx = AM Peak Vol's (xx) = PM Peak Vol's	

Section 3 Background Conditions

3.1 Annual Growth

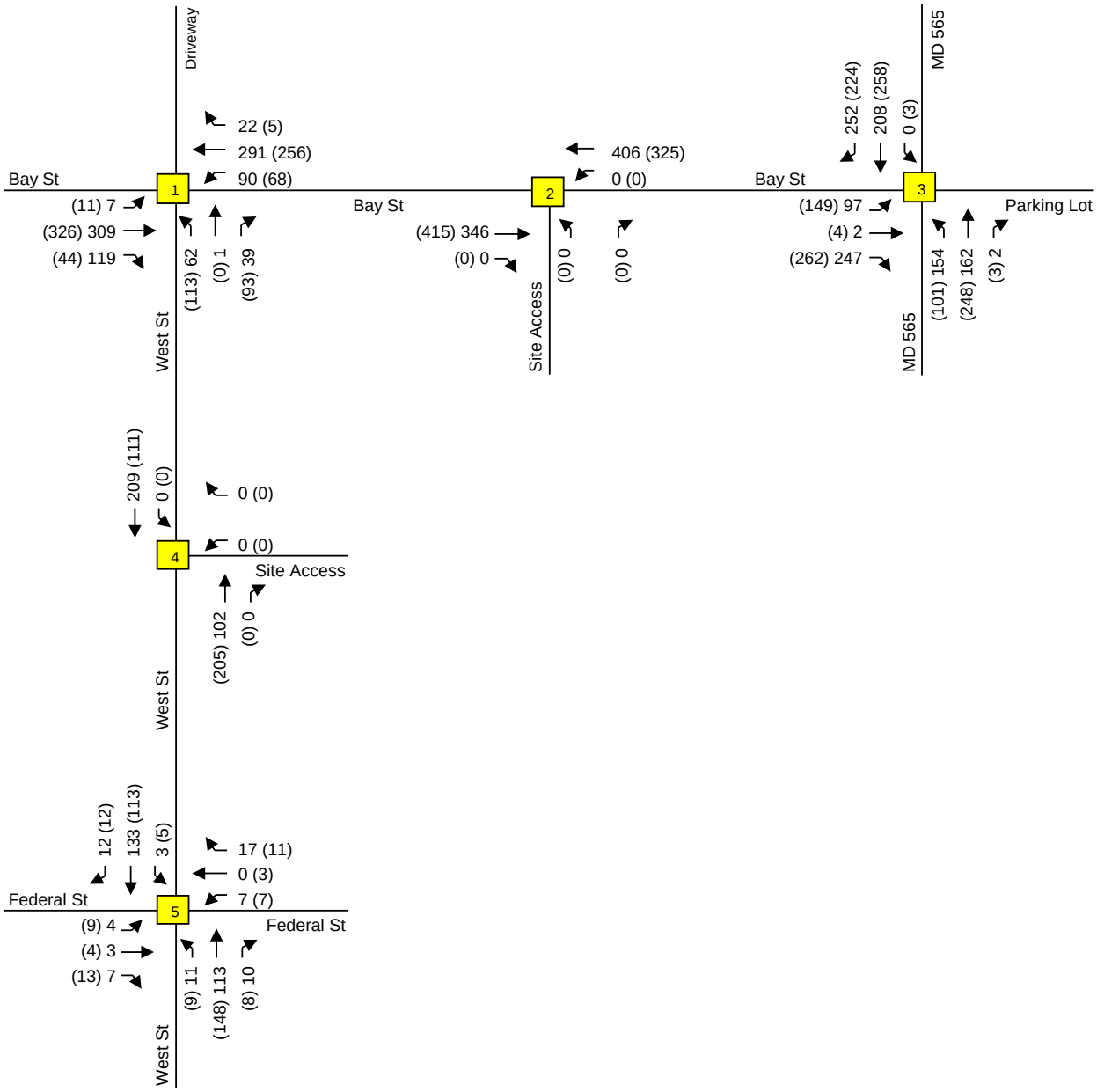
The Maryland Department of Transportation State Highway Administration's Average Daily Traffic Volumes (ADT's) have been reviewed for the past ten years and it was determined that average yearly growth in the area is approximately 1.34%. To provide a conservative analysis, a growth rate of 3.0% was applied for 3 years to the existing peak hour volumes and the resulting base peak hour volumes are shown on **Exhibit 4.**

3.2 Background Developments

The previous use for the property, a Safeway grocery store, has been vacant for some time. To account for the traffic previously generated by the property, the previous grocery store use was included as a background development. Trip generation and assignment exhibits for the previous use are provided in Appendix C.

3.3 Background Traffic Volumes

The background peak hour volumes are shown on **Exhibit 5.** These volumes combine the base peak hour volumes (Exhibit 4) with the trips generated by the previous use (Exhibit C-2 in Appendix C).



0.03	Growth Rate
3	Years of Growth
1.093	Total Growth

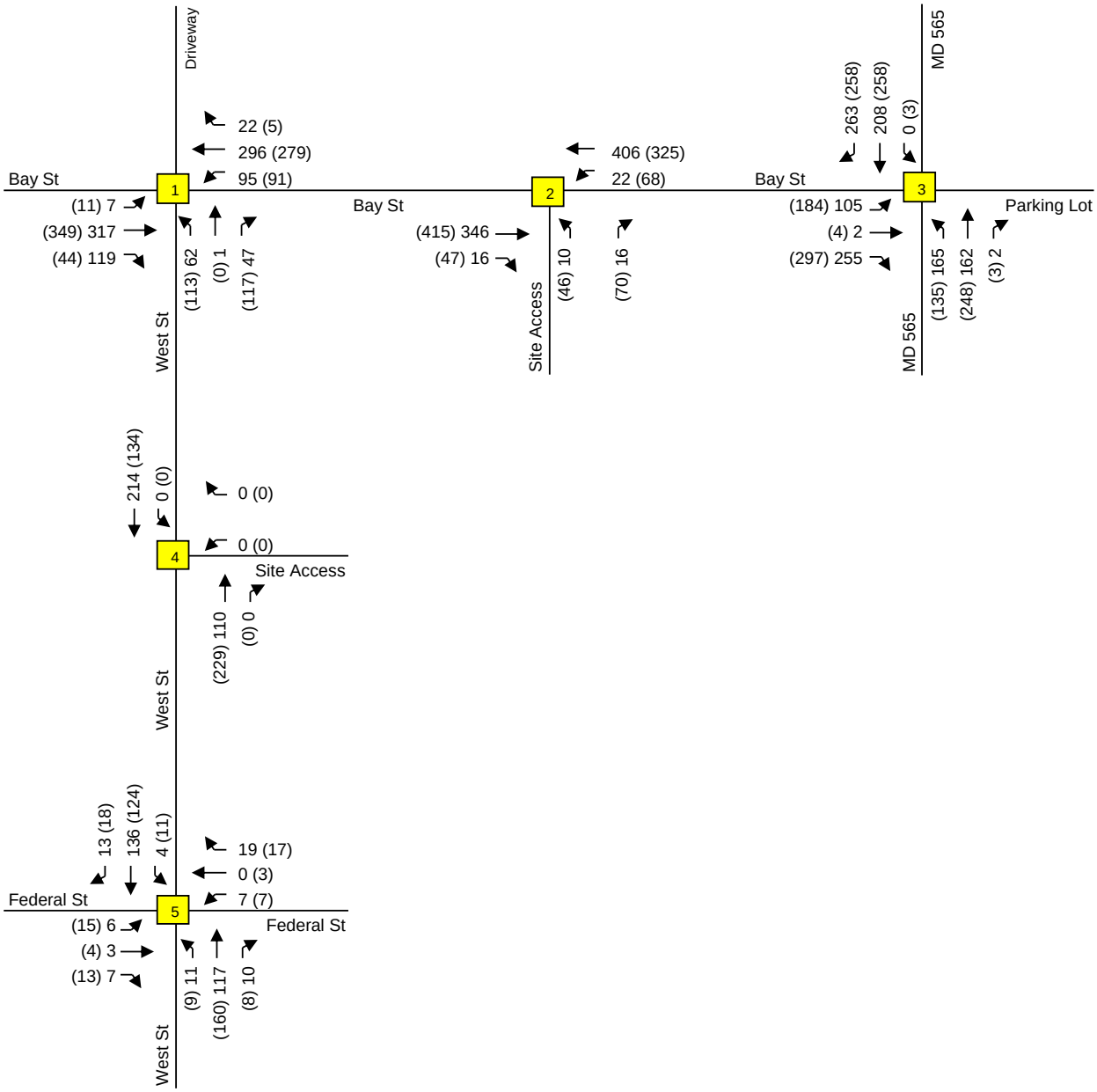
Traffic Impact Analysis

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

Existing Peak Hour Volumes

Key: xx = AM Peak Vol's (xx) = PM Peak Vol's

Exhibit 3



Traffic Impact Analysis LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BLVD, SUITE 214 SEVERNA PARK, MD 21146 www.lenharttraffic.com	Existing Peak Hour Volumes Key: xx = AM Peak Vol's (xx) = PM Peak Vol's	**Exhibit 3**

Section 4 Projected Conditions with Site

4.1 Site Trip Generation

The site is proposed to be redeveloped with 9 single family detached units and 26 single family attached units.

The trip generation for the proposed development is detailed on **Exhibit 6**. Trip generation rates were obtained from the ITE Trip Generation Manual, 11th Edition.

4.2 Removal of Trips Associated with Previous Use

Trips associated with the previous use for the property were included in the background peak hour volumes shown on Exhibit 5. With the proposed redevelopment, these trips will no longer be on the roadway. **Exhibit 7** removes the trips associated with the previous use for the property from the road network.

4.3 Site Trip Distribution & Trip Assignment

The trip distribution and assignment is shown on **Exhibit 8.**

4.4 Total Traffic Volumes

The Total Peak Hour Volumes are shown on **Exhibit 9**.

4.5 Projected Level of Service

The total peak hour traffic volumes shown on Exhibit 10 were evaluated using the CLV methodology per MDOT SHA Guidelines. The results of the CLV analyses are shown on **Exhibit 11** and indicate that all intersections operate at LOS A under total conditions. The results of the HCM analyses are shown on **Exhibit 12** and indicate that each study intersection operates with LOS D or better. The results on Exhibit 12 also indicate that the site has minimal impact on the minor street delays at the unsignalized study intersections.

4.6 Sight Distance Evaluation

The sight distance at each of the proposed access points was evaluated to ensure vehicles are able to safely exit the site.

The posted speed limit along both Bay Street and West Street is 25 MPH. Given the proximity of the proposed access points to the signalized intersection of MD 565 & Bay Street, and stop-controlled intersection of Bay Street & West Street it is likely vehicles are traveling below the posted speed limit when passing the site access

points. As such, a 25 MPH design speed is assumed for Bay Street and West Street for the purpose of the sight distance evaluations. The required stopping sight distance (SSD) for left turns from stop considering a 25 MPH design speed is 155 feet and the required intersection sight distance (ISD) is 280 feet. Right turn maneuvers from stop require lower distances for both SSD and ISD purposes and are not analyzed in the following discussion.

A sight distance evaluation exhibit has been included in Appendix D that includes sight distance lines for each access point.

As shown, the minimum SSD is provided in both directions from each access point. While the minimum ISD is not achieved, the AASHTO Green Book (A Policy on Geometric Design of Highways and Streets) contains guidance on intersection sight distance in Chapter 9.5.1 and states that, “if the available sight distance for an entering or crossing vehicle is at least equal to the appropriate sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions”. As mentioned above, due to the proximity of the access points to the intersections of MD 565 & Bay Street and Bay Street & West Street, it is likely that vehicles are traveling well below the posted speed limit of 25 MPH. As such, the actual SSD required to anticipate and avoid collisions at these locations is likely lower than the minimum SSD used in this analysis.

Based on the results of the sight distance evaluation, and according to AASHTO guidance, drivers have sufficient sight distance to safely anticipate and avoid collisions.

Trip Generation Rates

	Trip Distribution (In/Out)
Supermarket (ksf, ITE-850)	
Morning Trips = 2.86 x ksf	60/41
Ln(Evening Trips) = 0.81 x Ln(ksf) + 2.92	51/49
Single-Family Detached Housing (ITE-210, Units)	**Trip Distribution (In/Out)**
Ln(Morning Trips) = 0.91 x Ln(Units) + 0.12	26/74
Ln(Evening Trips) = 0.94 x Ln(Units) + 0.27	63/37
Single-Family Attached Housing (ITE-215, Units)	**Trip Distribution (In/Out)**
Morning Trips = 0.52 x Units - 5.70	31/69
Evening Trips = 0.60 x Units - 3.93	57/43

Existing Trip Generation Totals

			AM Peak			PM Peak		
			In	Out	Total	In	Out	Total
LU Code 850	Supermarket (ksf, ITE-850)	22,547 sq.ft.	38	26	64	115	116	231

Proposed Trip Generation Totals

			AM Peak			PM Peak		
			In	Out	Total	In	Out	Total
LU Code 210	Single-Family Detached Housing (ITE-210, Units)	9 units	2	6	8	6	4	10
LU Code 215	Single-Family Attached Housing (ITE-215, Units)	26 units	2	6	8	7	5	12
		Total:	**4**	**12**	**16**	**13**	**9**	**22**

NOTE: Trip Generation Rates obtained from the ITE Trip Generation Manual, 11th Edition

Traffic Impact Analysis

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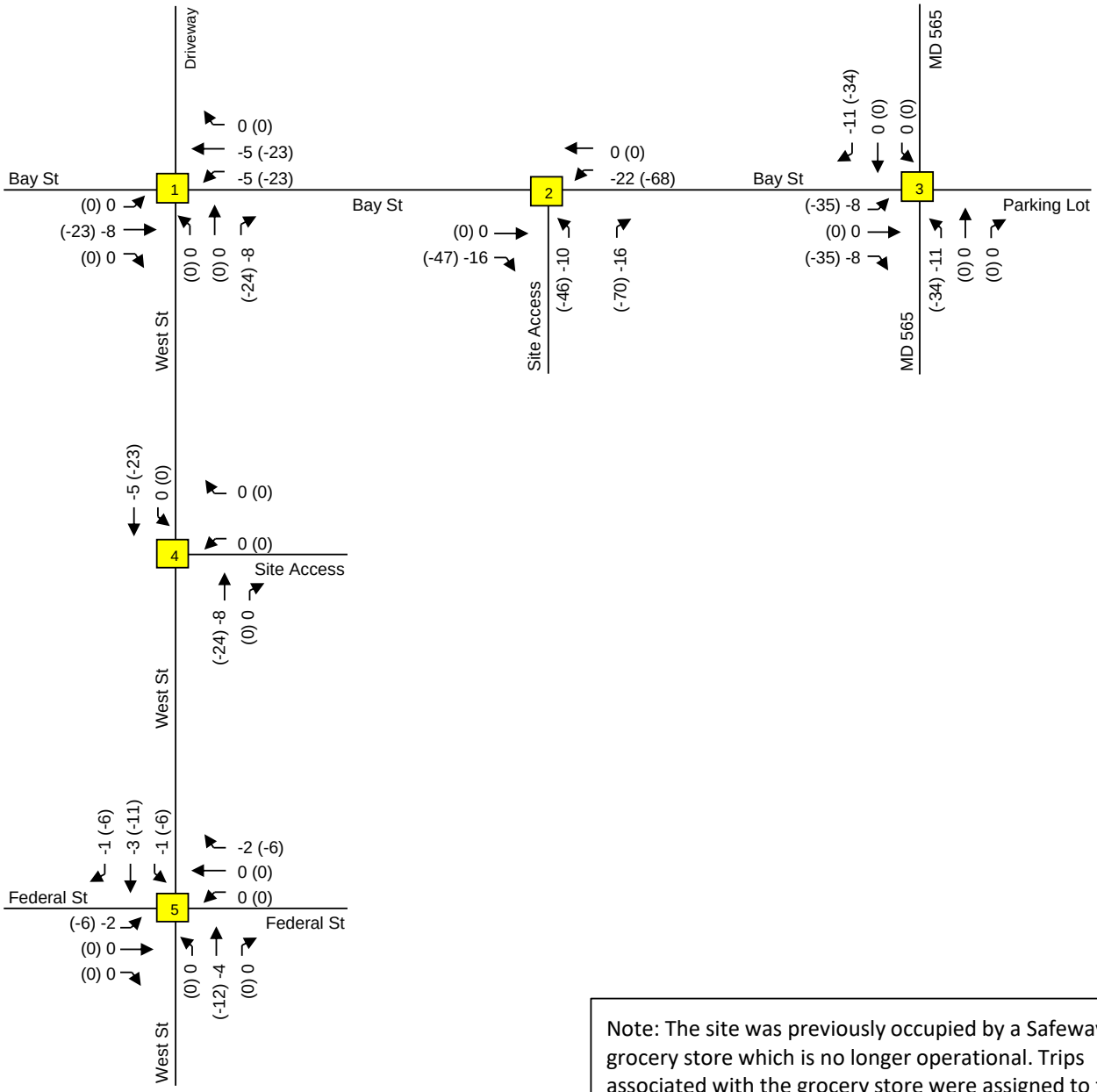
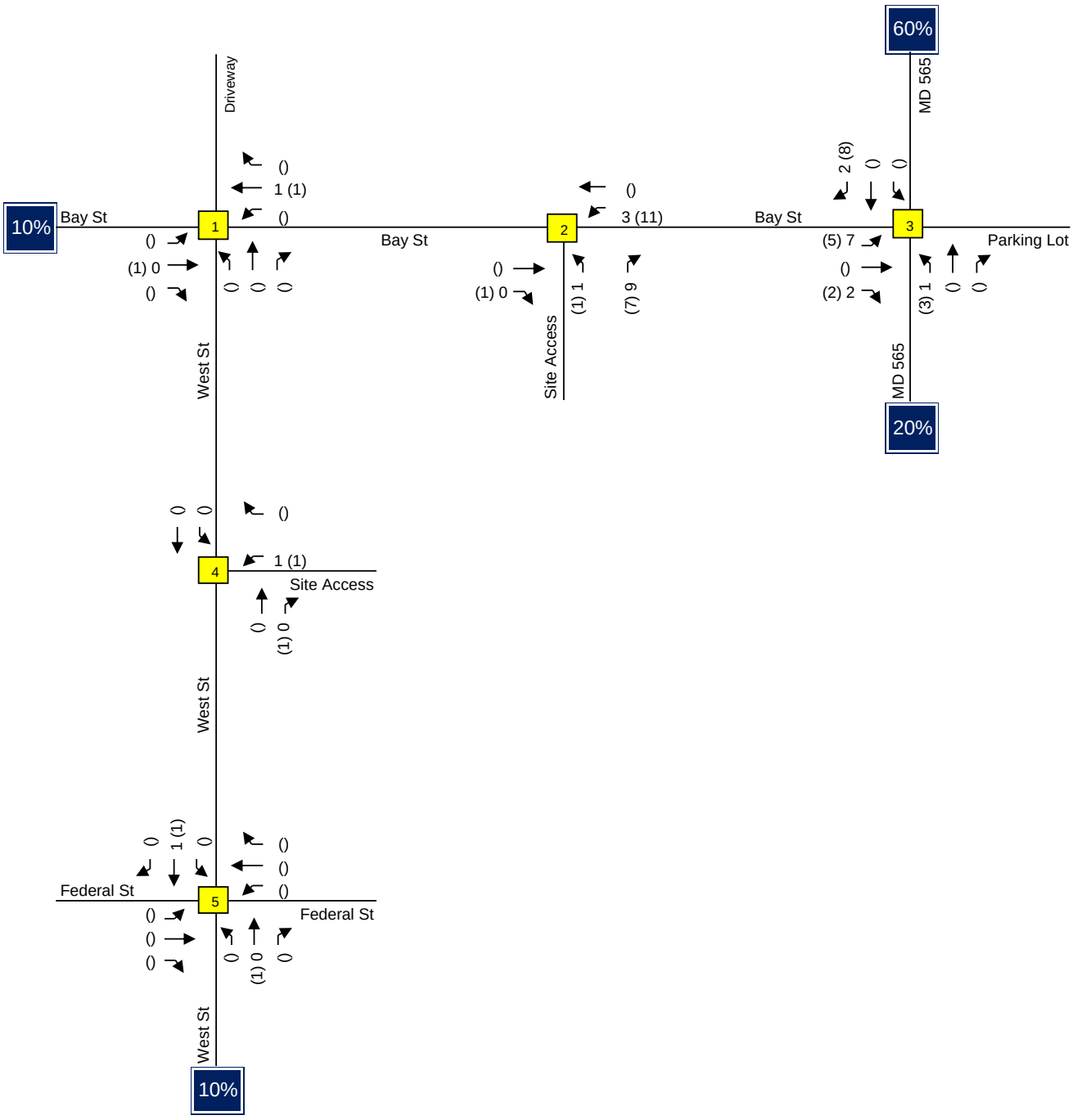
Trip Generation for Site

Exhibit 6

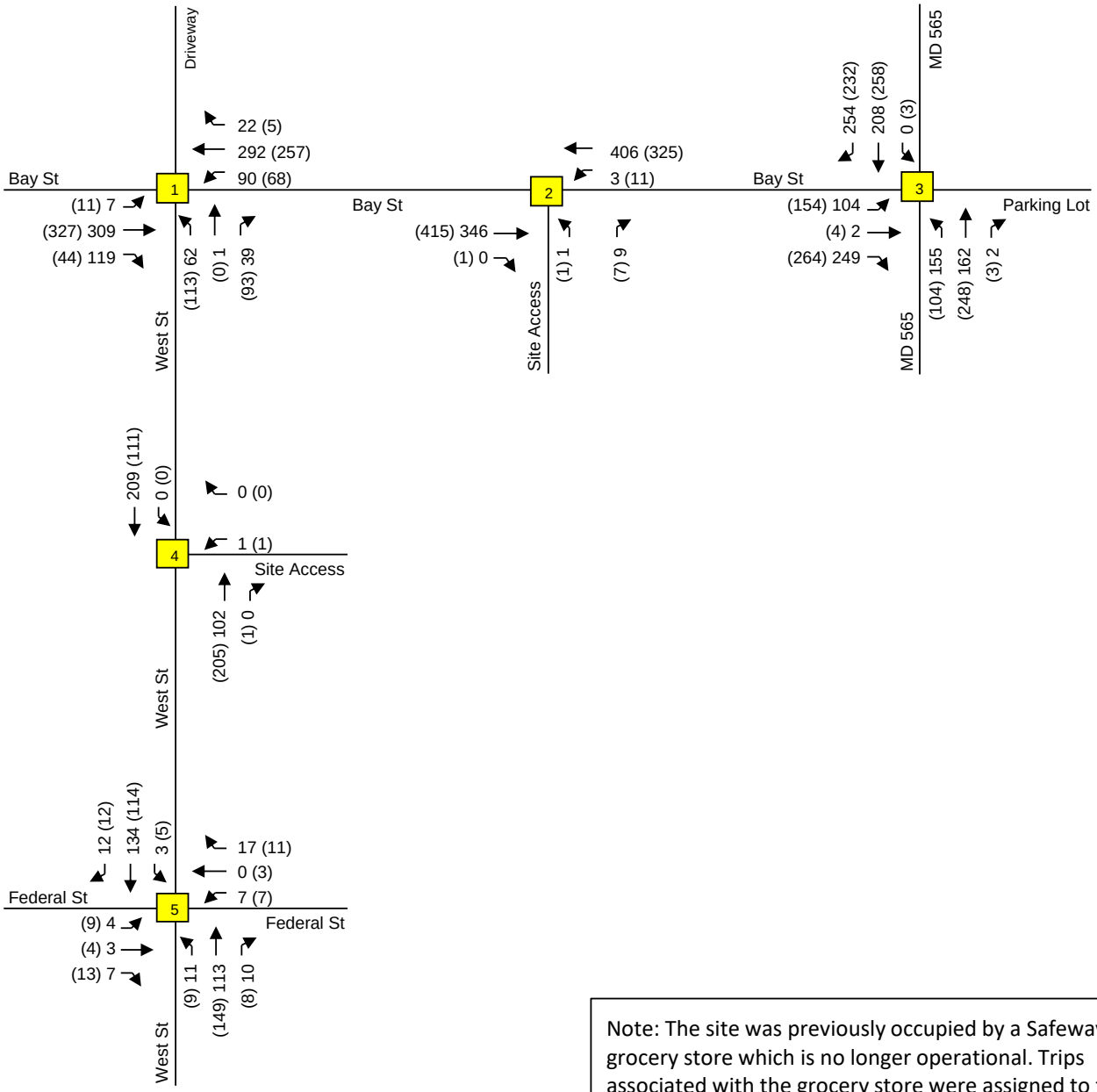


Note: The site was previously occupied by a Safeway grocery store which is no longer operational. Trips associated with the grocery store were assigned to the road network under background conditions. Those trips, shown on Exhibit C-2 in Appendix C, are removed from the study network on this exhibit as the grocery store is not part of the proposed redevelopment.

Traffic Impact Analysis LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BLVD, SUITE 214 SEVERNA PARK, MD 21146 www.lenharttraffic.com	Removal of Trips Associated with Previous Grocery Use Key: xx = AM Peak Vol's (xx) = PM Peak Vol's	**Exhibit 7**



Traffic Impact Analysis	Trip Assignment for Site	**Exhibit 8**
LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BLVD, SUITE 214 SEVERNA PARK, MD 21146 www.lenharttraffic.com	Key: xx = AM Peak Vol's (xx) = PM Peak Vol's	



Note: The site was previously occupied by a Safeway grocery store which is no longer operational. Trips associated with the grocery store were assigned to the road network under background conditions. Those trips, shown on Exhibit C-1 in Appendix C, are removed from the study network on this exhibit as the grocery store is not part of the proposed redevelopment.

Traffic Impact Analysis

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Total Peak Hour Volumes

Key: xx = AM Peak Vol's (xx) = PM Peak Vol's

Exhibit 9

Level-of-Service Results

Morning Peak Hour	Existing CLV	Background CLV	Total CLV	LOS D or better?
1). Bay Street & West Street	A / 586	A / 661	A / 640	Y
2). Bay Street & Site Access	A / 372	A / 476	A / 422	Y
3). MD 565 & Bay Street	A / 559	A / 630	A / 614	Y
4). West Street & Site Access	A / 191	A / 214	A / 210	Y
5). West Street & Federal Street	A / 173	A / 197	A / 189	Y
Evening Peak Hour	**Existing CLV**	**Background CLV**	**Total CLV**	**LOS D or better?**
1). Bay Street & West Street	A / 618	A / 747	A / 678	Y
2). Bay Street & Site Access	A / 297	A / 577	A / 355	Y
3). MD 565 & Bay Street	A / 578	A / 700	A / 636	Y
4). West Street & Site Access	A / 188	A / 229	A / 207	Y
5). West Street & Federal Street	A / 187	A / 232	A / 206	Y

NOTES:

1. All intersections satisfy MDOT SHA Guidelines of LOS "D" or better.

Level-of-Service Results

Morning Peak Hour	Existing LOS	Background LOS	Total LOS	LOS D or better?
1). Bay Street & West Street	A / 3.4	A / 4.1	A / 3.8	Y
Northbound Approach	C / 20.1	C / 24.4	C / 23.7	
2). Bay Street & Site Access	A / 0.0	A / 0.8	A / 0.2	Y
Northbound Approach	A / 0.0	B / 13.2	B / 10.1	
3). MD 565 & Bay Street	B / 12.6	B / 13.0	B / 12.9	Y
4). West Street & Site Access	A / 0.0	A / 0.0	A / 0.0	Y
Westbound Approach	A / 0.0	A / 0.0	B / 10.5	
5). West Street & Federal Street	A / 7.8	A / 8.0	A / 8.0	Y
Eastbound Approach	A / 7.4	A / 7.6	A / 7.4	
Westbound Approach	A / 7.2	A / 7.4	A / 7.4	
Northbound Approach	A / 7.9	A / 8.1	A / 8.0	
Southbound Approach	A / 7.9	A / 8.1	A / 8.1	

Evening Peak Hour	Existing LOS	Background LOS	Total LOS	LOS D or better?
1). Bay Street & West Street	A / 5.8	B / 10.2	A / 7.3	Y
Northbound Approach	C / 22.1	E / 39.7	D / 28.4	
2). Bay Street & Site Access	A / 0.0	A / 2.7	A / 0.3	Y
Northbound Approach	A / 0.0	C / 15.2	B / 10.5	
3). MD 565 & Bay Street	B / 13.4	B / 14.9	B / 13.8	Y
4). West Street & Site Access	A / 0.0	A / 0.0	A / 0.0	Y
Westbound Approach	A / 0.0	A / 0.0	B / 10.5	
5). West Street & Federal Street	A / 7.9	A / 8.3	A / 8.1	Y
Eastbound Approach	A / 7.5	A / 7.8	A / 7.6	
Westbound Approach	A / 7.5	A / 7.6	A / 7.6	
Northbound Approach	A / 8.1	A / 8.5	A / 8.3	
Southbound Approach	A / 7.9	A / 8.2	A / 8.0	

Section 5 Conclusions / Recommendations

5.1 Results of Analyses

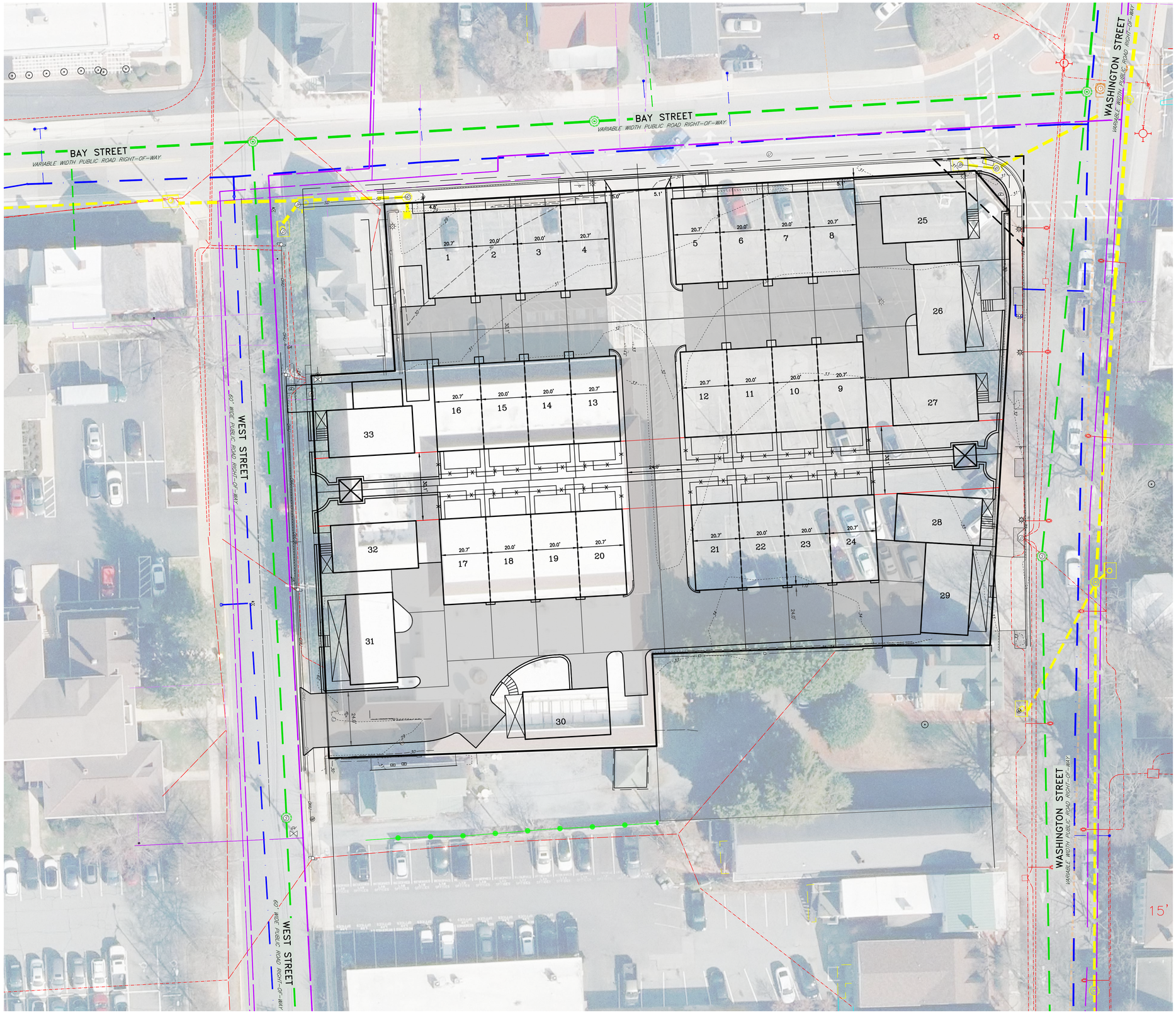
This Traffic Impact Analysis (TIA) has been prepared for the proposed redevelopment of the property located at 139 N. Washington Street, located in Easton, Maryland. The site was previously developed with a 22,547 square foot Safeway grocery store and is proposed to be redeveloped with 9 single family detached units and 26 single family attached units. Access to the site will be provided along Bay Street and West Street.

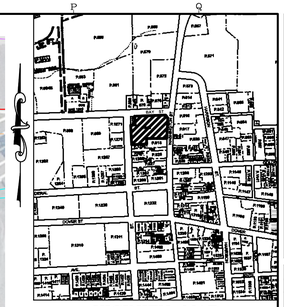
Based on the analyses contained in this report all study intersections operate at LOS "B" or better under existing, background, and total conditions using the CLV and HCM methodologies and are therefore considered to operate adequately per MDOT SHA and Town of Easton Guidelines.

In light of the findings contained in this report, it is recommended that the proposed development is approved.

Appendix A

Supplemental Information
Turning Movement Counts





VICINITY MAP
SCALE: 1" = 600'

APPROVED:
PLANS ARE
TOWN OF EASTON – TOWN PLANNER DATE

APPROVED:
ISSUED FOR
REVIEW ONLY
TOWN OF EASTON – TOWN ENGINEER DATE

APPROVED:
PLANS ARE NOT
APPROVED FOR
CONSTRUCTION
EASTON PLANNING COMMISSION DATE

REVISIONS TO APPROVED PLANS

No.	DATE	DESCRIPTION	BY

WARNING!!

THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THE QUANTITIES SHOWN ON THIS PLAN ARE FOR INFORMATIONAL AND PERMITTING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES TO HIS OWN SATISFACTION PRIOR TO BEGINNING CONSTRUCTION.

THE CONTRACTOR SHALL TEST PIT AND LOCATE EXISTING UNDERGROUND UTILITIES PRIOR TO THE BEGINNING OF ANY WORK ON-SITE. THE CONTRACTOR SHALL NOTIFY DEPT. OF PUBLIC WORKS OF ANY POSSIBLE CONFLICT AND REQUEST THE RELOCATION OF THE EXISTING UNDERGROUND UTILITIES BEFORE BEGINNING ANY WORK ON-SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RELOCATION EXPENSE.

MISS UTILITY
DIG WITH CARE
BEFORE YOU DIG CALL
1-800-441-8355 OR 811
PROTECT YOURSELF, GIVE
TWO WORKING DAYS NOTICE

Lane Engineering, LLC
Established 1986
Civil Engineers • Land Planning • Land Surveyors
E-mail: general@leinc.com
117 Bay St. Easton, MD 21601 (410) 822-8003
15 Washington St. Cambridge, MD 21613 (410) 221-0818
354 Pennsylvania Ave. Centreville, MD 21617 (410) 758-2095

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. 48188 , Expiration Date: 12/28/2025.

SEAL

STATE OF MARYLAND · JANET L. BUTLER · 48188 · REGISTERED PROFESSIONAL ENGINEER

DATE

ILLUSTRATIVE SITE PLAN

ON THE LANDS OF
NAI SATURN EASTERN, LLC

IN THE TOWN OF EASTON, WARD DISTRICT 1
TALBOT COUNTY, MARYLAND
TAX MAP 104 TAX PARCEL 612

ISSUED/REVISED FOR: DATE: BY:

SHEET No. 1 OF 1

SCALE: AS NOTED

JOB No. 240014

FILE No. B412

NAD 83 (2011)
MD COORDINATE SYSTEM

20' 10' 0' 10' 20' 40'
SCALE IN FEET

Date: 03/27/2024 – 8:53am User: jcarroll Project Manager: BCE
Drawing Path: J:\2024\0000\240014\Civil3D-240014\Dwg\Plots\CSK-PUD-PLTS-240014.dwg | Illustrative
XREF File(s): %D-BASE-240014/2024-03-18-CAR/CSF-SKCE-240014/CSK-BASE-240014/CBS-BASE-2438-240014/RAR-BASE-240014/RLD-EUC-OLD-BASE-240014/YSF-BASE-240014/YSF-BASE-240014/YSF-BASE-240014

From:	Rick VanEmburgh
To:	mlenhart
Cc:	Richard Baker (SHA); Robert Engel; Nick Driban; Henry Dierker; Sierra Clem
Subject:	Re: Safeway Site (139 N. Washington) Scoping
Date:	Tuesday, April 2, 2024 3:29:35 PM
Attachments:	image001.png image002.png Safeway Site Scoping Exhibits (1).pdf 2024-03-27.pdf

---

Rich -

I spoke to Mike Lenahrt on the phone today about the proposed townhouse project at our old Safeway site.

I understand the townhouses will generate less traffic than the Safeway and feel that the Scope is reasonable based on the reduction in traffic.

In summary, the Scope looks acceptable to me, but defer to you if there is something you would like modified.

Thank you.

Rick Van Emburgh, P.E.
Town Engineer
Town of Easton
Engineering Department
410-820-8822

On Tue, Apr 2, 2024 at 3:05 PM mlenhart <mlenhart@lenharttraffic.com> wrote:

> Hi Rich (Baker),
>
> I sent a scoping agreement to Rick Van Emburgh and he asked that I forward it to you for your review. He also pointed out that Bay Street is a state road which I didn't realize at first.
>
> 1. Site plan is attached.
> 2. This site was previously developed with a Safeway that has access to Bay Street and N. W. Street. (Attached Exhibit 1)
> 3. The 22 ksf Safeway generated 64 AM trips and 231 PM trips based on ITE Trip Generation (Attached Exhibit 2)
> 4. The proposed 35 townhomes will generate 16 AM and 22 PM trips.

5. A TIA would not normally be required by SHA since it generates fewer than 50 peak hour trips, and particularly in this case since the proposed redevelopment is a significant reduction in trips.
6. Even though a traffic study would not normally be required, we are providing one to the Town in case any questions arise during the review. The attached scope goes to the next intersection in each direction from the two access points.

We've run this scope by Rick at the Town and he is ok with it, but wanted us to make you aware and ensure you don't have any comments. We'll be sure the SHA gets a copy during the review process.

Thanks,

Mike

Mike Lenhart, P.E., PTOE

President

Office: (410) 216-3333 (Ext. 1)

Mobile: (410) 980-2367

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BOULEVARD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

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From: mlenhart <mlenhart@LENHARTTRAFFIC.COM>
Sent: Tuesday, April 2, 2024 2:08 PM
To: 'Rick Van Emburgh' <rvanemburgh@eastonmd.gov>
Cc: Robert Engel <rengel@LENHARTTRAFFIC.COM>; Nick Driban <ndriban@LENHARTTRAFFIC.COM>; mlenhart <mlenhart@LENHARTTRAFFIC.COM>
Subject: RE: Safeway Site (139 N. Washington) Scoping

Hi Rick,

Just wanted to follow up on the email trail below. We are placing cameras tomorrow to collect this traffic data. Please advise if you have any questions or comments, otherwise, we'll assume that the proposed scope (attached) is adequate.

As Nick pointed out in his email below, the townhomes will generate a fraction of the traffic that was generated by the Safeway. Also, the townhouses generate only 16 AM and 22 PM peak hour trips, therefore this should be adequate.

Thanks,

Mike

Mike Lenhart, P.E., PTOE

President

Office: (410) 216-3333 (Ext. 1)

Mobile: (410) 980-2367

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645 BALTIMORE ANNAPOLIS BOULEVARD, SUITE 214
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From: mlenhart <mlenhart@LENHARTTRAFFIC.COM>
Sent: Wednesday, March 27, 2024 5:23 PM
To: 'Rick Van Emburgh' <rvanemburgh@eastonmd.gov>
Cc: Robert Engel <rengel@LENHARTTRAFFIC.COM>; Nick Driban <ndriban@LENHARTTRAFFIC.COM>; mlenhart <mlenhart@LENHARTTRAFFIC.COM>
Subject: RE: Safeway Site (139 N. Washington) Scoping

Hi Rick,

I just wanted to follow up on Nick's scoping email below. See attached pdf for study intersections.

Please confirm this is acceptable. We're conducting traffic counts next week after school is back in session from Spring Break.

Thanks,

Mike

Mike Lenhart, P.E., PTOE

President

Office: (410) 216-3333 (Ext. 1)

Mobile: (410) 980-2367

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BOULEVARD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

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From: Nick Driban <ndriban@LENHARTTRAFFIC.COM>
Sent: Monday, March 25, 2024 3:26 PM
To: 'Rick Van Emburgh' <rvanemburgh@eastonmd.gov>
Cc: mlenhart <mlenhart@LENHARTTRAFFIC.COM>; Robert Engel <rengel@LENHARTTRAFFIC.COM>
Subject: Safeway Site (139 N. Washington) Scoping

Hi Rick,

I hope all is well with you!

I've attached scoping exhibits for a redevelopment of the old Safeway site, located at 139 North Washington. The development is proposed to include up to 35 units, mostly townhomes, but also a few single-family units. As shown, the site generates a very low volume of traffic, especially when compared to the Safeway that previously occupied the site. As such, I think any potential impacts from this minimal volume of traffic would be limited to the immediately adjacent intersections, which are what I've identified as the Study Intersections. As far as the Safeway, I don't intend to take credit for the Safeway trips in the study in terms of removing them from the roadway network (unless you say otherwise) as I know the store has been closed for quite some time, but I wanted to at least show the numbers on the exhibit since that use was in fact open and operating on this site at one point.

Access to the proposed residences is via Bay Street and along West Street.

Please confirm that the attached is acceptable. In particular, we'd like to get the counts done ASAP, so if you could confirm the study intersections as soon as possible, I'd really appreciate it.

I'm out of the office for a few days after today, but Mike or Robert Engel, both Cc'd on this email, can answer any questions you may have.

Thanks,

Nick

Nick Driban, P.E., PTOE

Associate Vice President

Cell Phone: (410) 294-7195

Direct Dial: (410) 777-9253

Office Directory: (410) 216-3333

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

Weekday Morning Peak Hour (6:30 am - 9:30 am)

	West St Northbound					Driveway Southbound					Bay St Eastbound					Bay St Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
6:30-6:45	0	8	0	3	0	0	0	1	0	0	0	1	25	3	0	0	2	41	0	0	84
6:45-7:00	0	15	0	2	0	0	0	0	0	0	0	1	28	9	0	0	4	57	0	0	116
7:00-7:15	0	16	0	6	0	0	0	0	0	0	0	1	25	13	0	0	8	44	2	0	115
7:15-7:30	0	9	1	6	0	0	0	0	0	0	0	0	61	14	0	0	12	48	1	0	152
7:30-7:45	0	12	0	6	1	0	0	0	0	1	0	3	61	14	0	0	12	59	7	0	174
7:45-8:00	0	10	0	5	2	0	0	0	1	0	0	2	90	22	0	0	20	78	1	0	229
8:00-8:15	0	15	0	9	0	0	0	0	0	0	0	1	74	33	0	0	16	74	7	1	229
8:15-8:30	0	17	0	10	0	0	0	0	0	0	0	1	59	27	0	0	24	60	7	0	205
8:30-8:45	0	15	1	12	0	0	0	0	0	2	0	2	60	27	0	0	22	54	5	0	198
8:45-9:00	0	7	0	15	1	0	0	0	1	0	0	0	61	24	0	0	22	49	4	1	183
9:00-9:15	0	16	0	9	0	0	0	0	0	2	0	2	47	15	0	0	12	49	0	0	150
9:15-9:30	0	9	0	5	0	0	0	0	0	0	0	1	59	14	0	0	14	41	4	1	147

Hourly Totals																					
6:30-7:30	0	48	1	17	0	0	0	1	0	0	0	3	139	39	0	0	26	190	3	0	467
6:45-7:45	0	52	1	20	1	0	0	0	0	1	0	5	175	50	0	0	36	208	10	0	559
7:00-8:00	0	47	1	23	3	0	0	0	1	1	0	6	237	63	0	0	52	229	11	0	674
7:15-8:15	0	46	1	26	3	0	0	0	1	1	0	6	286	83	0	0	60	259	16	1	789
7:30-8:30	0	54	0	30	3	0	0	0	1	1	0	7	284	96	0	0	72	271	22	1	842
7:45-8:45	0	57	1	36	2	0	0	0	1	2	0	6	283	109	0	0	82	266	20	1	866
8:00-9:00	0	54	1	46	1	0	0	0	1	2	0	4	254	111	0	0	84	237	23	2	820
8:15-9:15	0	55	1	46	1	0	0	0	1	4	0	5	227	93	0	0	80	212	16	1	742
8:30-9:30	0	47	1	41	1	0	0	0	1	4	0	5	227	80	0	0	70	193	13	2	685

AM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
7:45-8:45	**0**	**57**	**1**	**36**	**2**	**0**	**0**	**0**	**1**	**2**	**0**	**6**	**283**	**109**	**0**	**0**	**82**	**266**	**20**	**1**	**866**

Weekday Evening Peak Hour (4 pm - 7 pm)

	West St Northbound					Driveway Southbound					Bay St Eastbound					Bay St Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
4:00-4:15	0	28	0	22	0	0	0	0	1	0	0	2	62	9	0	0	12	71	1	1	208
4:15-4:30	0	27	0	19	0	0	0	0	0	0	0	4	67	13	0	0	18	57	3	0	208
4:30-4:45	0	28	0	24	0	0	0	0	0	0	0	2	90	15	0	0	16	47	1	0	223
4:45-5:00	0	20	0	20	1	0	0	0	0	1	0	2	79	3	0	0	16	59	0	0	199
5:00-5:15	0	44	2	23	0	0	0	0	0	0	0	0	62	11	0	0	10	42	1	0	195
5:15-5:30	0	26	0	18	0	0	0	0	0	0	0	1	73	16	0	0	15	43	2	0	194
5:30-5:45	0	16	0	12	0	0	0	1	0	0	0	2	48	7	0	0	12	41	2	0	141
5:45-6:00	0	8	2	11	0	0	0	0	1	0	0	0	49	8	0	0	13	33	2	0	127
6:00-6:15	0	15	2	18	0	0	0	0	0	0	0	1	46	9	0	0	7	37	4	0	139
6:15-6:30	0	13	0	6	1	0	0	0	0	0	0	1	54	4	0	0	9	20	2	0	109
6:30-6:45	0	10	0	2	0	0	1	0	0	1	0	1	36	10	0	0	9	25	0	0	94
6:45-7:00	0	12	0	6	2	0	0	0	0	0	0	1	32	5	0	0	9	21	0	1	86

Hourly Totals																					
4:00-5:00	0	103	0	85	1	0	0	0	1	1	0	10	298	40	0	0	62	234	5	1	841
4:15-5:15	0	119	2	86	1	0	0	0	0	1	0	8	298	42	0	0	60	205	5	0	827
4:30-5:30	0	118	2	85	1	0	0	0	0	1	0	5	304	45	0	0	57	191	4	0	813
4:45-5:45	0	106	2	73	1	0	0	1	0	1	0	5	262	37	0	0	53	185	5	0	731
5:00-6:00	0	94	4	64	0	0	0	1	1	0	0	3	232	42	0	0	50	159	7	0	657
5:15-6:15	0	65	4	59	0	0	0	1	1	0	0	4	216	40	0	0	47	154	10	0	601
5:30-6:30	0	52	4	47	1	0	0	1	1	0	0	4	197	28	0	0	41	131	10	0	517
5:45-6:45	0	46	4	37	1	0	1	0	1	1	0	3	185	31	0	0	38	115	8	0	471
6:00-7:00	0	50	2	32	3	0	1	0	0	1	0	4	168	28	0	0	34	103	6	1	433

PM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
4:00-5:00	**0**	**103**	**0**	**85**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**10**	**298**	**40**	**0**	**0**	**62**	**234**	**5**	**1**	**841**

Peak Hour
Turning Movement Count

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

Intersection: Bay St & Driveway
Weather: Clear
Count by: Count Cam DSS
Count Day/Date: Thursday, April 11, 2024
Jurisdiction: Talbot County

Weekday Morning Peak Hour (6:30 am - 9:30 am)

	MD 565 Northbound					MD 565 Southbound					Bay St Eastbound					Driveway Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
6:30-6:45	0	23	17	0	0	0	0	29	19	0	0	10	0	19	0	0	0	1	0	0	118
6:45-7:00	0	32	22	0	0	0	0	44	40	0	0	7	1	21	0	0	0	0	0	0	167
7:00-7:15	0	24	11	0	0	0	0	22	29	0	0	10	0	20	0	0	0	0	0	0	116
7:15-7:30	0	24	27	0	0	0	0	37	37	1	0	23	0	44	0	0	0	0	0	0	192
7:30-7:45	0	33	38	0	0	0	0	50	44	0	0	17	2	47	1	0	0	0	0	0	231
7:45-8:00	0	49	28	0	0	0	0	47	57	0	0	23	1	73	0	0	0	0	0	0	278
8:00-8:15	0	27	48	0	0	0	0	52	65	1	0	14	1	66	1	0	0	0	0	0	273
8:15-8:30	0	35	28	2	0	0	0	47	56	0	0	25	0	46	0	0	0	0	1	2	240
8:30-8:45	0	30	44	0	0	0	0	44	53	0	0	27	0	41	3	0	0	0	0	0	239
8:45-9:00	0	26	44	1	0	0	0	46	50	0	0	31	1	46	0	0	0	0	0	0	245
9:00-9:15	0	27	52	0	0	0	1	44	33	0	0	14	0	39	0	0	0	0	1	2	211
9:15-9:30	0	31	38	0	0	0	1	40	28	0	0	17	0	45	3	0	0	0	1	0	201
Hourly Totals																					
6:30-7:30	0	103	77	0	0	0	0	132	125	1	0	50	1	104	0	0	0	1	0	0	594
6:45-7:45	0	113	98	0	0	0	0	153	150	1	0	57	3	132	1	0	0	0	0	0	708
7:00-8:00	0	130	104	0	0	0	0	156	167	1	0	73	3	184	1	0	0	0	0	0	819
7:15-8:15	0	133	141	0	0	0	0	186	203	2	0	77	4	230	2	0	0	0	0	0	978
7:30-8:30	0	144	142	2	0	0	0	196	222	1	0	79	4	232	2	0	0	0	1	2	1027
7:45-8:45	0	141	148	2	0	0	0	190	231	1	0	89	2	226	4	0	0	0	1	2	1037
8:00-9:00	0	118	164	3	0	0	0	189	224	1	0	97	2	199	4	0	0	0	1	2	1004
8:15-9:15	0	118	168	3	0	0	1	181	192	0	0	97	1	172	3	0	0	0	2	4	942
8:30-9:30	0	114	178	1	0	0	2	174	164	0	0	89	1	171	6	0	0	0	2	2	904

AM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
7:45-8:45	**0**	**141**	**148**	**2**	**0**	**0**	**0**	**190**	**231**	**1**	**0**	**89**	**2**	**226**	**4**	**0**	**0**	**0**	**1**	**2**	**1037**

Weekday Evening Peak Hour (4 pm - 7 pm)

	MD 565 Northbound					MD 565 Southbound					Bay St Eastbound					Driveway Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
4:00-4:15	0	29	60	0	0	0	2	55	56	0	0	36	0	52	1	0	0	0	4	2	294
4:15-4:30	0	17	54	0	0	0	0	59	58	0	0	26	2	54	0	0	0	0	0	0	270
4:30-4:45	0	22	57	2	0	0	0	60	44	0	0	39	2	75	0	0	0	0	4	0	305
4:45-5:00	0	24	56	1	0	0	1	62	47	0	0	35	0	59	0	0	0	0	0	0	285
5:00-5:15	0	19	51	1	3	0	0	63	32	0	0	29	0	64	0	0	0	1	0	0	260
5:15-5:30	0	21	44	1	0	0	0	54	38	2	0	30	0	60	1	0	0	0	3	0	251
5:30-5:45	0	17	41	1	3	0	1	58	36	1	0	21	0	41	0	0	0	0	2	0	218
5:45-6:00	0	10	41	1	1	0	0	52	38	0	0	14	0	47	1	0	0	0	1	0	204
6:00-6:15	0	12	29	2	0	0	0	47	35	0	0	25	1	37	0	0	0	0	0	0	188
6:15-6:30	0	10	45	0	1	0	0	50	20	2	0	12	0	48	2	0	0	1	1	0	187
6:30-6:45	0	10	24	0	1	0	1	39	21	2	0	6	1	33	1	0	0	2	1	3	138
6:45-7:00	0	8	35	0	2	0	1	38	21	0	0	6	0	32	0	0	0	1	2	2	144
Hourly Totals																					
4:00-5:00	0	92	227	3	0	0	3	236	205	0	0	136	4	240	1	0	0	0	8	2	1157
4:15-5:15	0	82	218	4	3	0	1	244	181	0	0	129	4	252	0	0	0	1	4	0	1123
4:30-5:30	0	86	208	5	3	0	1	239	161	2	0	133	2	258	1	0	0	1	7	0	1107
4:45-5:45	0	81	192	4	6	0	2	237	153	3	0	115	0	224	1	0	0	1	5	0	1024
5:00-6:00	0	67	177	4	7	0	1	227	144	3	0	94	0	212	2	0	0	1	6	0	945
5:15-6:15	0	60	155	5	4	0	1	211	147	3	0	90	1	185	2	0	0	0	6	0	870
5:30-6:30	0	49	156	4	5	0	1	207	129	3	0	72	1	173	3	0	0	1	4	0	808
5:45-6:45	0	42	139	3	3	0	1	188	114	4	0	57	2	165	4	0	0	3	3	3	731
6:00-7:00	0	40	133	2	4	0	2	174	97	4	0	49	2	150	3	0	0	4	4	5	673

PM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
4:00-5:00	**0**	**92**	**227**	**3**	**0**	**0**	**3**	**236**	**205**	**0**	**0**	**136**	**4**	**240**	**1**	**0**	**0**	**0**	**8**	**2**	**1157**

Peak Hour
Turning Movement Count

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

Intersection: Bay St & MD 565
Weather: Clear
Count by: Count Cam DSS
Count Day/Date: Thursday, April 11, 2024
Jurisdiction: Talbot County

Note: The westbound approach is signed as one-way only for vehicles entering the driveway. The westbound vehicles shown above are not permitted to make those movements. They are subsequentally not included in the traffic analyses.

Weekday Morning Peak Hour (6:30 am - 9:30 am)

	West St Northbound					West St Southbound					Federal St Eastbound					Federal St Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
6:30-6:45	0	0	11	1	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	1	17
6:45-7:00	0	1	17	0	0	0	1	9	0	3	0	1	0	0	0	0	0	0	0	1	29
7:00-7:15	0	0	23	1	0	0	0	18	2	1	0	0	0	1	0	0	0	1	1	0	47
7:15-7:30	0	1	18	0	3	0	0	21	3	0	0	0	0	1	0	0	1	0	0	0	45
7:30-7:45	0	3	22	3	0	0	1	16	3	3	0	1	0	0	0	0	0	0	1	0	50
7:45-8:00	0	3	15	3	5	0	1	30	2	9	0	1	1	2	2	0	0	0	4	6	62
8:00-8:15	0	2	18	3	3	0	0	37	0	9	0	1	1	2	0	0	2	0	9	3	75
8:15-8:30	0	1	27	1	2	0	0	30	1	8	0	1	0	2	1	0	1	0	2	2	66
8:30-8:45	0	1	34	2	1	0	1	29	5	8	0	0	2	2	0	0	1	0	2	1	79
8:45-9:00	0	6	24	3	0	0	2	26	5	15	0	2	0	0	0	0	2	0	3	4	73
9:00-9:15	0	2	24	0	0	0	0	19	2	10	0	2	0	2	1	0	0	0	1	0	52
9:15-9:30	0	3	15	2	0	0	0	21	3	4	0	2	0	0	0	0	1	0	1	2	48
Hourly Totals																					
6:30-7:30	0	2	69	2	3	0	1	53	5	5	0	1	0	2	0	0	1	1	1	2	148
6:45-7:45	0	5	80	4	3	0	2	64	8	7	0	2	0	2	0	0	1	1	2	1	182
7:00-8:00	0	7	78	7	8	0	2	85	10	13	0	2	1	4	2	0	1	1	6	6	233
7:15-8:15	0	9	73	9	11	0	2	104	8	21	0	3	2	5	2	0	3	0	14	9	275
7:30-8:30	0	9	82	10	10	0	2	113	6	29	0	4	2	6	3	0	3	0	16	11	306
7:45-8:45	0	7	94	9	11	0	2	126	8	34	0	3	4	8	3	0	4	0	17	12	342
8:00-9:00	0	10	103	9	6	0	3	122	11	40	0	4	3	6	1	0	6	0	16	10	350
8:15-9:15	0	10	109	6	3	0	3	104	13	41	0	5	2	6	2	0	4	0	8	7	323
8:30-9:30	0	12	97	7	1	0	3	95	15	37	0	6	2	4	1	0	4	0	7	7	298

AM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
8:00-9:00	**0**	**10**	**103**	**9**	**6**	**0**	**3**	**122**	**11**	**40**	**0**	**4**	**3**	**6**	**1**	**0**	**6**	**0**	**16**	**10**	**350**

Weekday Evening Peak Hour (4 pm - 7 pm)

	West St Northbound					West St Southbound					Federal St Eastbound					Federal St Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
4:00-4:15	0	1	38	0	0	0	0	22	2	3	0	4	0	2	2	1	2	1	2	1	75
4:15-4:30	0	1	32	1	0	0	1	26	3	0	0	0	1	0	1	0	0	1	3	1	69
4:30-4:45	0	3	38	1	6	0	2	26	2	1	0	2	2	5	4	0	0	1	2	0	84
4:45-5:00	0	0	29	3	0	0	1	21	3	3	0	3	1	3	1	2	1	1	4	1	72
5:00-5:15	0	1	40	1	2	0	2	24	2	3	0	3	0	3	2	0	2	1	4	0	83
5:15-5:30	0	4	28	2	0	0	0	32	4	4	0	0	1	1	3	1	0	0	0	0	73
5:30-5:45	0	0	24	1	0	0	0	19	2	2	0	1	2	1	1	1	0	0	1	4	52
5:45-6:00	0	2	11	3	2	0	1	17	3	1	0	1	0	3	0	0	2	0	2	2	45
6:00-6:15	0	0	26	1	0	0	0	15	1	2	0	2	0	1	1	2	6	0	2	0	56
6:15-6:30	0	0	17	6	7	0	0	13	1	1	0	0	0	1	0	1	4	2	4	1	49
6:30-6:45	0	1	11	3	2	0	1	14	3	6	0	0	0	0	0	0	3	3	1	0	40
6:45-7:00	0	0	14	2	4	0	0	10	2	0	0	0	1	1	0	0	2	1	2	1	35
Hourly Totals																					
4:00-5:00	0	5	137	5	6	0	4	95	10	7	0	9	4	10	8	3	3	4	11	3	324
4:15-5:15	0	5	139	6	8	0	6	97	10	7	0	8	4	11	8	2	3	4	13	2	333
4:30-5:30	0	8	135	7	8	0	5	103	11	11	0	8	4	12	10	3	3	3	10	1	342
4:45-5:45	0	5	121	7	2	0	3	96	11	12	0	7	4	8	7	4	3	2	9	5	306
5:00-6:00	0	7	103	7	4	0	3	92	11	10	0	5	3	8	6	2	4	1	7	6	279
5:15-6:15	0	6	89	7	2	0	1	83	10	9	0	4	3	6	5	4	8	0	5	6	248
5:30-6:30	0	2	78	11	9	0	1	64	7	6	0	4	2	6	2	4	12	2	9	7	226
5:45-6:45	0	3	65	13	11	0	2	59	8	10	0	3	0	5	1	3	15	5	9	3	215
6:00-7:00	0	1	68	12	13	0	1	52	7	9	0	2	1	3	1	3	15	6	9	2	205

PM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
4:30-5:30	**0**	**8**	**135**	**7**	**8**	**0**	**5**	**103**	**11**	**11**	**0**	**8**	**4**	**12**	**10**	**3**	**3**	**3**	**10**	**1**	**342**

Peak Hour
Turning Movement Count

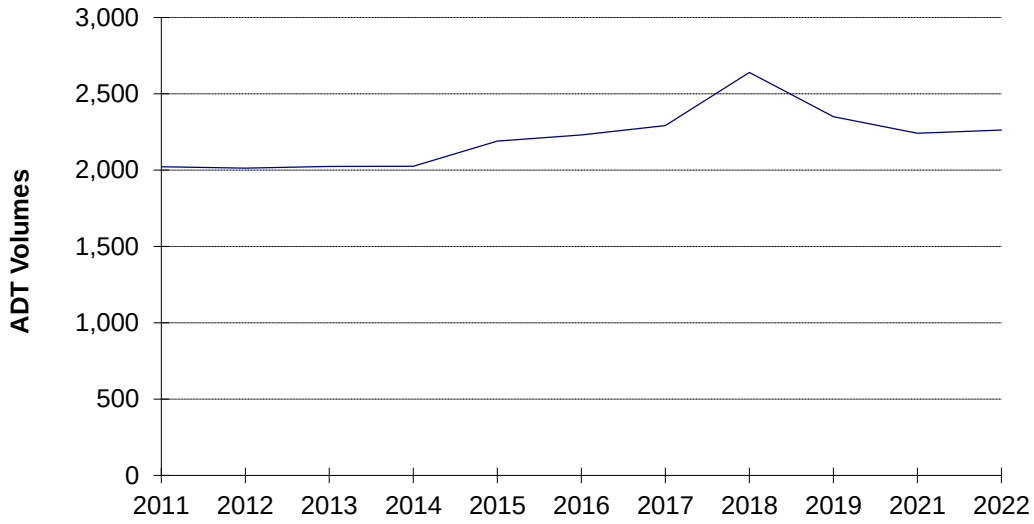
LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

Intersection: Federal St & West St
Weather: Clear
Count by: Count Cam DSS
Count Day/Date: Thursday, April 11, 2024
Jurisdiction: Talbot County

TRAFFIC GROWTH PROJECTION

LOCATION: **MD 565, north of MD 322**
REPORT DATE: 17-Apr-24
AVERAGE GROWTH: 1.34%
MATHEMATICAL GROWTH: 1.13%

Year	ADT Volume	Vol. increase	% increase	Average %
2011	2,022			
2012	2,013	-9	-0.45%	-0.45%
2013	2,024	11	0.55%	0.05%
2014	2,025	1	0.05%	0.05%
2015	2,190	165	8.15%	2.07%
2016	2,231	41	1.87%	2.03%
2017	2,292	61	2.73%	2.15%
2018	2,640	348	15.18%	4.01%
2019	2,350	-290	-10.98%	2.14%
2021	2,242	-108	-4.60%	1.39%
2022	2,263	21	0.94%	1.34%



TRAFFIC GROWTH
MD 565, north of MD 322

Appendix B

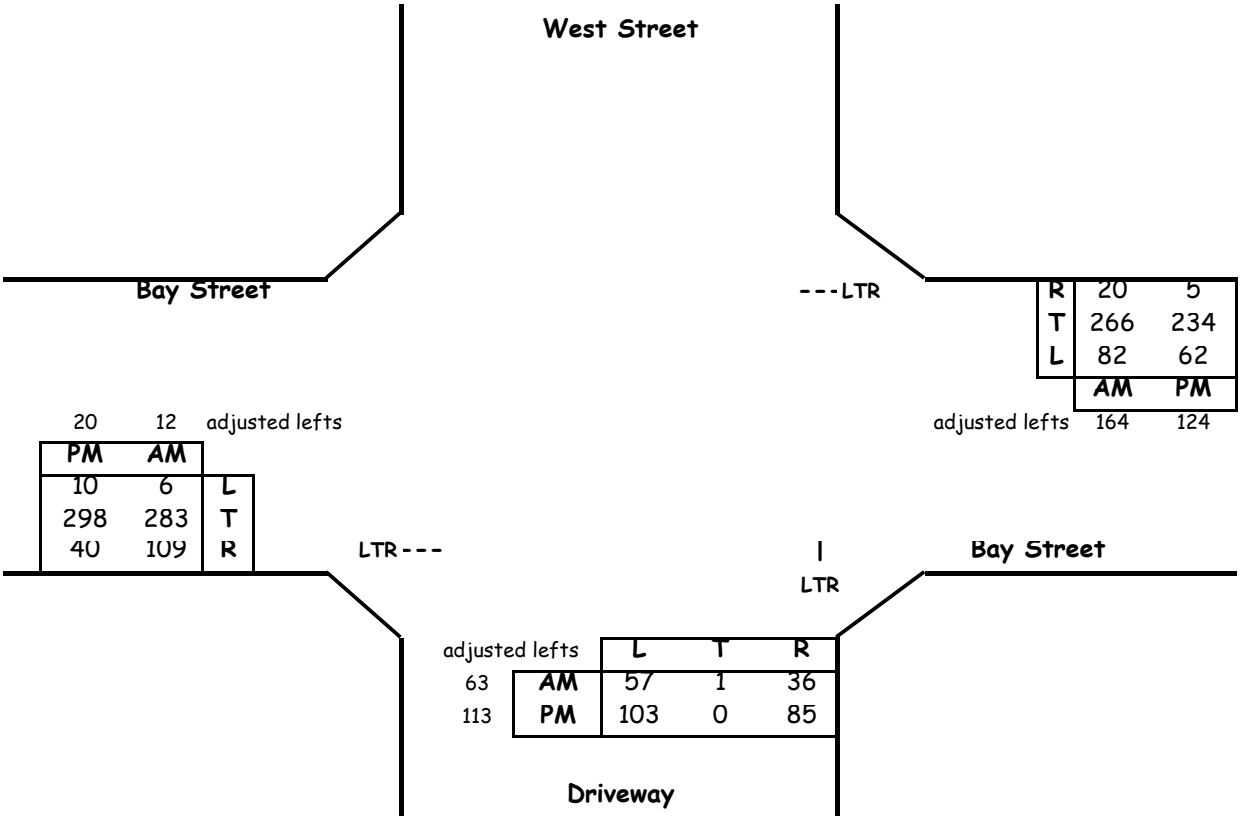
Critical Lane Volume (LOS) Worksheets

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

Main Line: West Street
Minor Street: Bay Street
Study Period: Existing Traffic

Analyst: Lenhart Traffic Consulting

Lane Use + Traffic Volumes



Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	100	1.00	100	0	0	0	100
SB	0	0.00	0	57	1	57	
EB	404	1	404	82	1	82	486
WB	450	1	450	6	1	6	

CLV TOTAL= **586**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	198	1.00	198	0	0	0	198
SB	0	0.00	0	103	1	103	
EB	358	1	358	62	1	62	420
WB	363	1	363	10	1	10	

CLV TOTAL= **618**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

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West Street &
Bay Street
(Existing Traffic)

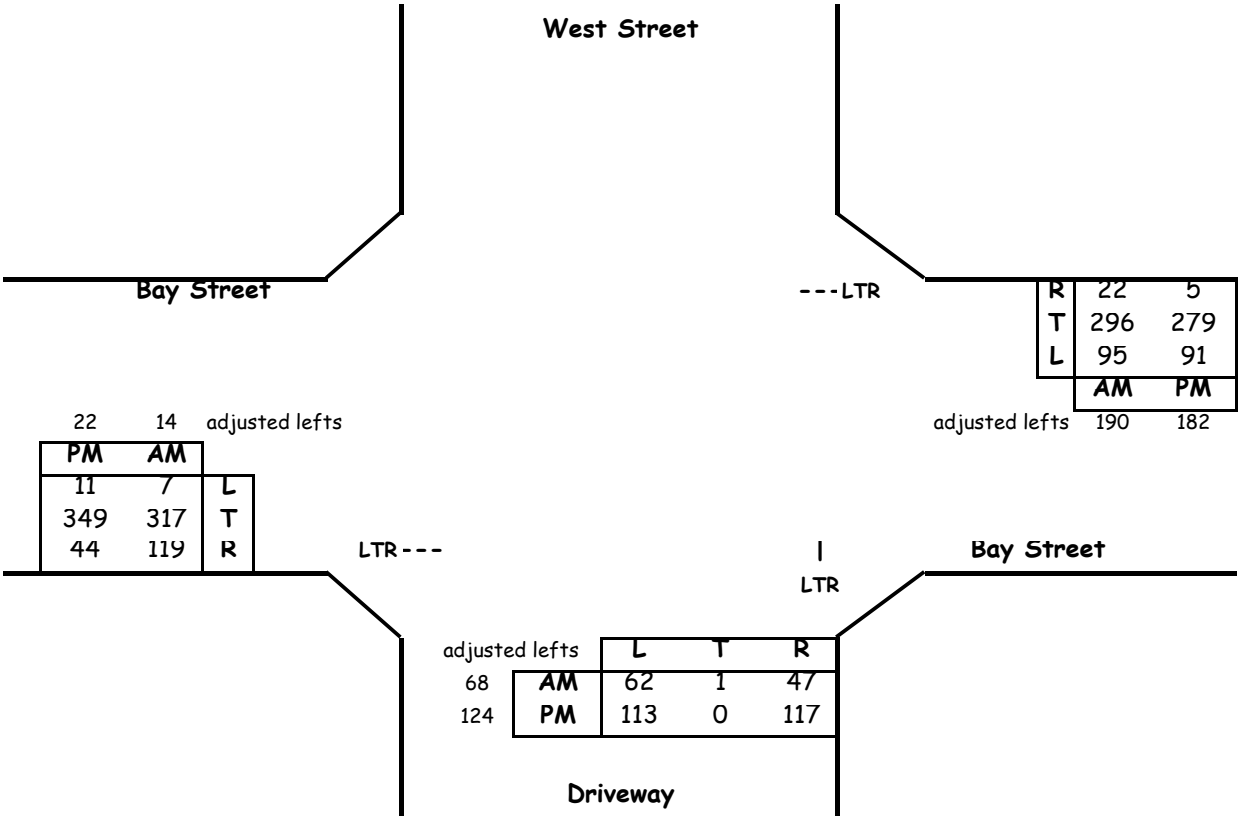
Intersection
1

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

Main Line: West Street
Minor Street: Bay Street
Study Period: Background Traffic

Analyst: Lenhart Traffic Consulting

Lane Use + Traffic Volumes



Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	116	1.00	116	0	0	0	116
SB	0	0.00	0	62	1	62	
EB	450	1	450	95	1	95	545
WB	508	1	508	7	1	7	

CLV TOTAL= **661**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	241	1.00	241	0	0	0	241
SB	0	0.00	0	113	1	113	
EB	415	1	415	91	1	91	506
WB	466	1	466	11	1	11	

CLV TOTAL= **747**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

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West Street &
Bay Street
(Background Traffic)

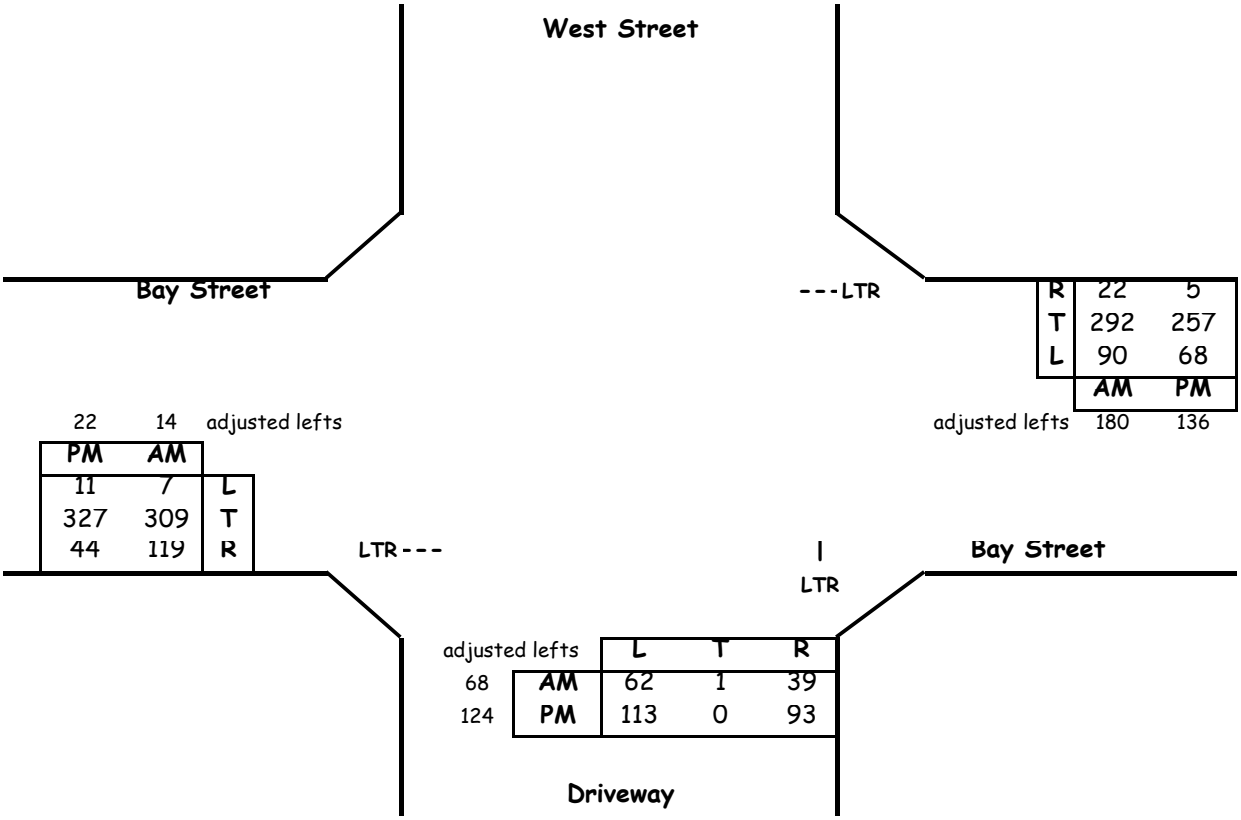
Intersection
1

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

Main Line: West Street
Minor Street: Bay Street
Study Period: Total Traffic

Analyst: Lenhart Traffic Consulting

Lane Use + Traffic Volumes



Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	108	1.00	108	0	0	0	108
SB	0	0.00	0	62	1	62	
EB	442	1	442	90	1	90	532
WB	494	1	494	7	1	7	

CLV TOTAL= **640**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	217	1.00	217	0	0	0	217
SB	0	0.00	0	113	1	113	
EB	393	1	393	68	1	68	461
WB	398	1	398	11	1	11	

CLV TOTAL= **678**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

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West Street &
Bay Street
(Total Traffic)

Intersection
1

Critical Lane Volume (CLV) Methodology for MSHA

Main Line: Bay Street
Minor Street: Site Access
Study Period: Existing Traffic

Analyst: Lenhart Traffic Consulting

BAY STREET ---TL

	AM	PM
T	372	297
L	0	0
adjusted lefts	0	0

PM	AM	
380	317	T
0	0	R

T---
TR---

BAY STREET

LR

	L	R
AM	0	0
PM	0	0

Site Access

Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	0	1.00	0				0
EB	317	0.55	174	0	1.00	0	372
WB	372	1.00	372				

CLV TOTAL= **372**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	0	1.00	0				0
EB	380	0.55	209	0	1.00	0	297
WB	297	1.00	297				

CLV TOTAL= **297**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

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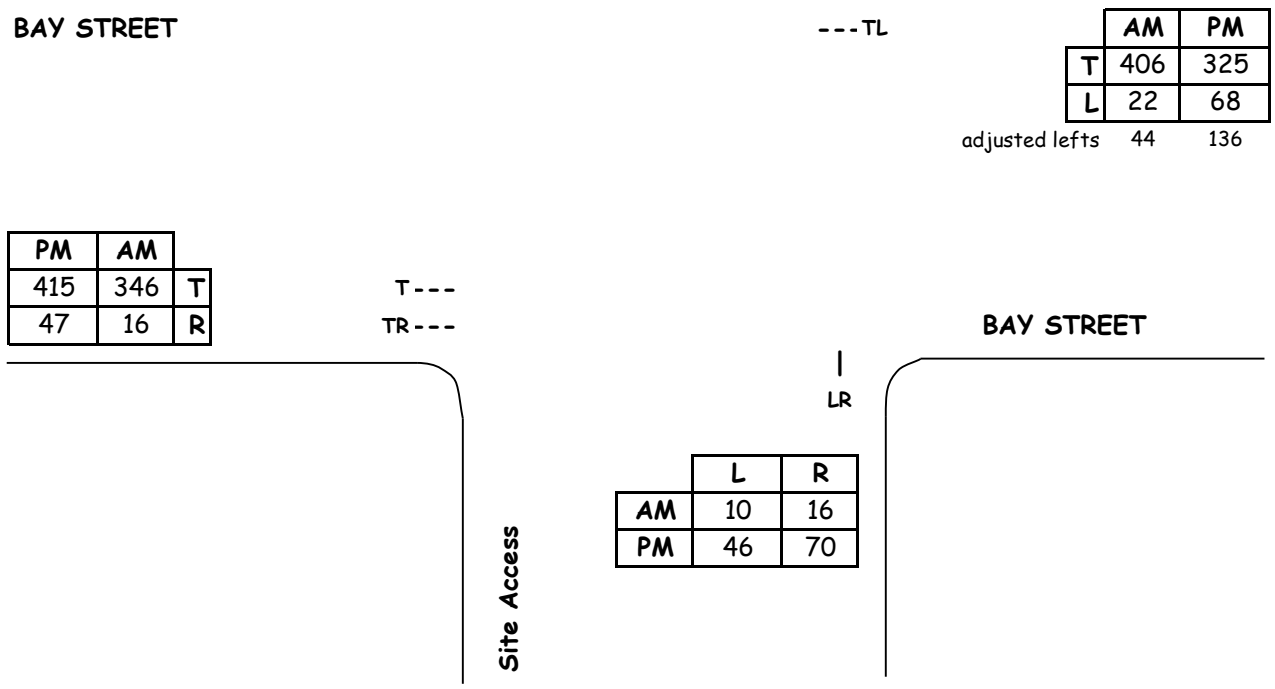
Bay Street &
Site Access
(Existing Traffic)

Intersection
2

Critical Lane Volume (CLV) Methodology for MSHA

Main Line: Bay Street
Minor Street: Site Access
Study Period: Background Traffic

Analyst: Lenhart Traffic Consulting



	AM	PM
T	406	325
L	22	68
adjusted lefts	44	136

PM	AM	
415	346	T
47	16	R

	L	R
AM	10	16
PM	46	70

Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	26	1.00	26				26
EB	362	0.55	199	22	1.00	22	450
WB	450	1.00	450				
						CLV TOTAL=	**476**
						Level of Service (LOS)=	**A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	116	1.00	116				116
EB	462	0.55	254	68	1.00	68	461
WB	461	1.00	461				
						CLV TOTAL=	**577**
						Level of Service (LOS)=	**A**

Critical Lane Volume Analysis

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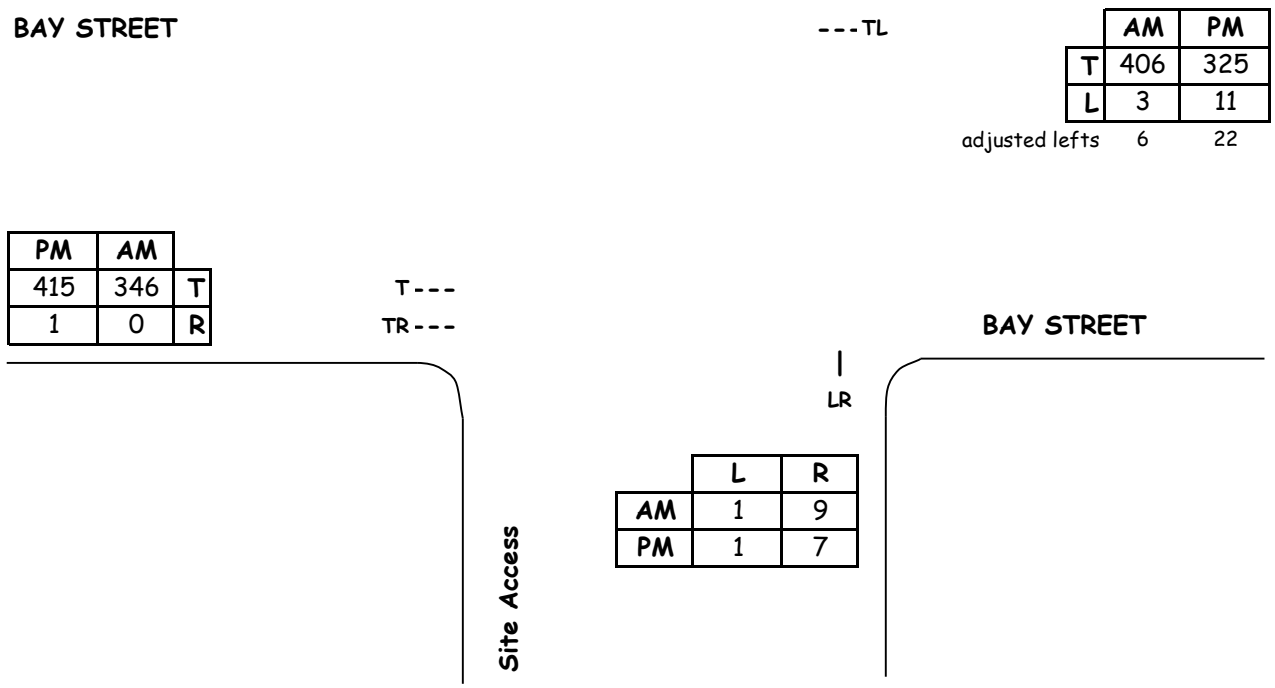
Bay Street &
Site Access
(Background Traffic)

Intersection
2

Critical Lane Volume (CLV) Methodology for MSHA

Main Line: Bay Street
Minor Street: Site Access
Study Period: Total Traffic

Analyst: Lenhart Traffic Consulting



	AM	PM
T	406	325
L	3	11
adjusted lefts	6	22

PM	AM	
415	346	T
1	0	R

	L	R
AM	1	9
PM	1	7

Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	10	1.00	10				10
EB	346	0.55	190	3	1.00	3	412
WB	412	1.00	412				
					CLV TOTAL=		**422**
					Level of Service (LOS)=		**A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	8	1.00	8				8
EB	416	0.55	229	11	1.00	11	347
WB	347	1.00	347				
					CLV TOTAL=		**355**
					Level of Service (LOS)=		**A**

Critical Lane Volume Analysis

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Bay Street &
Site Access
(Total Traffic)

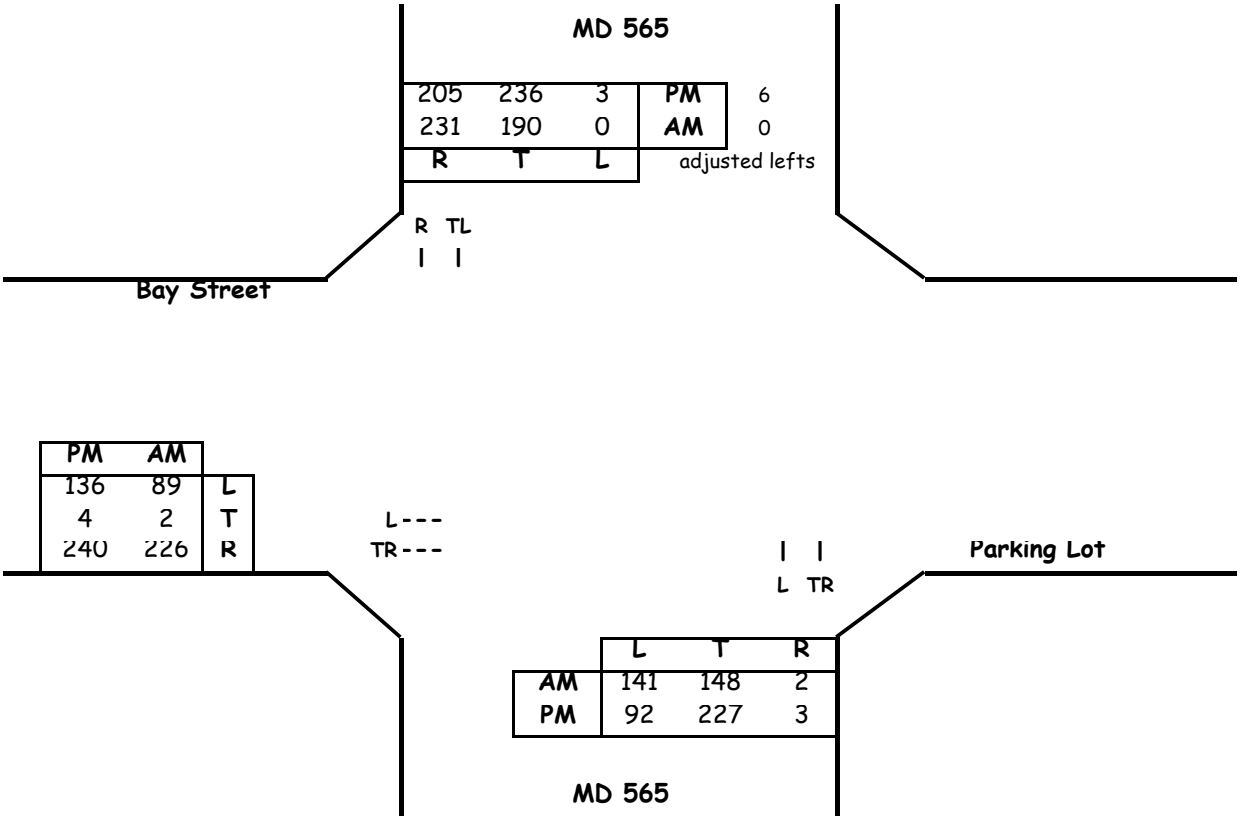
Intersection
2

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

Main Line: MD 565
Minor Street: Parking Lot
Study Period: Existing Traffic

Analyst: Lenhart Traffic Consulting

Lane Use + Traffic Volumes



Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	150	1.00	150	0	1	0	331
SB	190	1.00	190	141	1	141	
EB	228	1	228	0	0	0	228
WB	0	0	0	89	1	89	

CLV TOTAL= **559**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	230	1.00	230	3	1	3	334
SB	242	1.00	242	92	1	92	
EB	244	1	244	0	0	0	244
WB	0	0	0	136	1	136	

CLV TOTAL= **578**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

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MD 565 &
Parking Lot
(Existing Traffic)

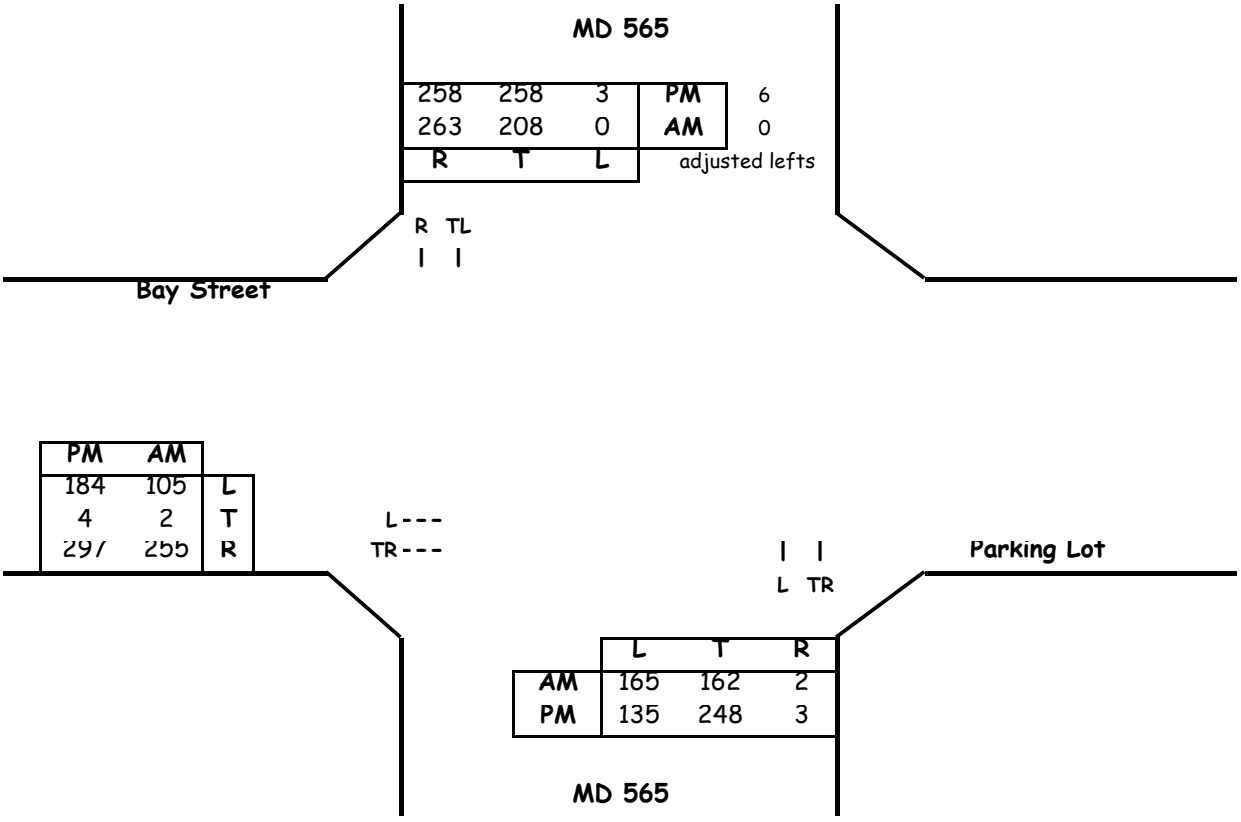
Intersection
3

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

Main Line: MD 565
Minor Street: Parking Lot
Study Period: Background Traffic

Analyst: Lenhart Traffic Consulting

Lane Use + Traffic Volumes



Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	164	1.00	164	0	1	0	373
SB	208	1.00	208	165	1	165	
EB	257	1	257	0	0	0	257
WB	0	0	0	105	1	105	

CLV TOTAL= **630**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	251	1.00	251	3	1	3	399
SB	264	1.00	264	135	1	135	
EB	301	1	301	0	0	0	301
WB	0	0	0	184	1	184	

CLV TOTAL= **700**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

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MD 565 &
Parking Lot
(Background Traffic)

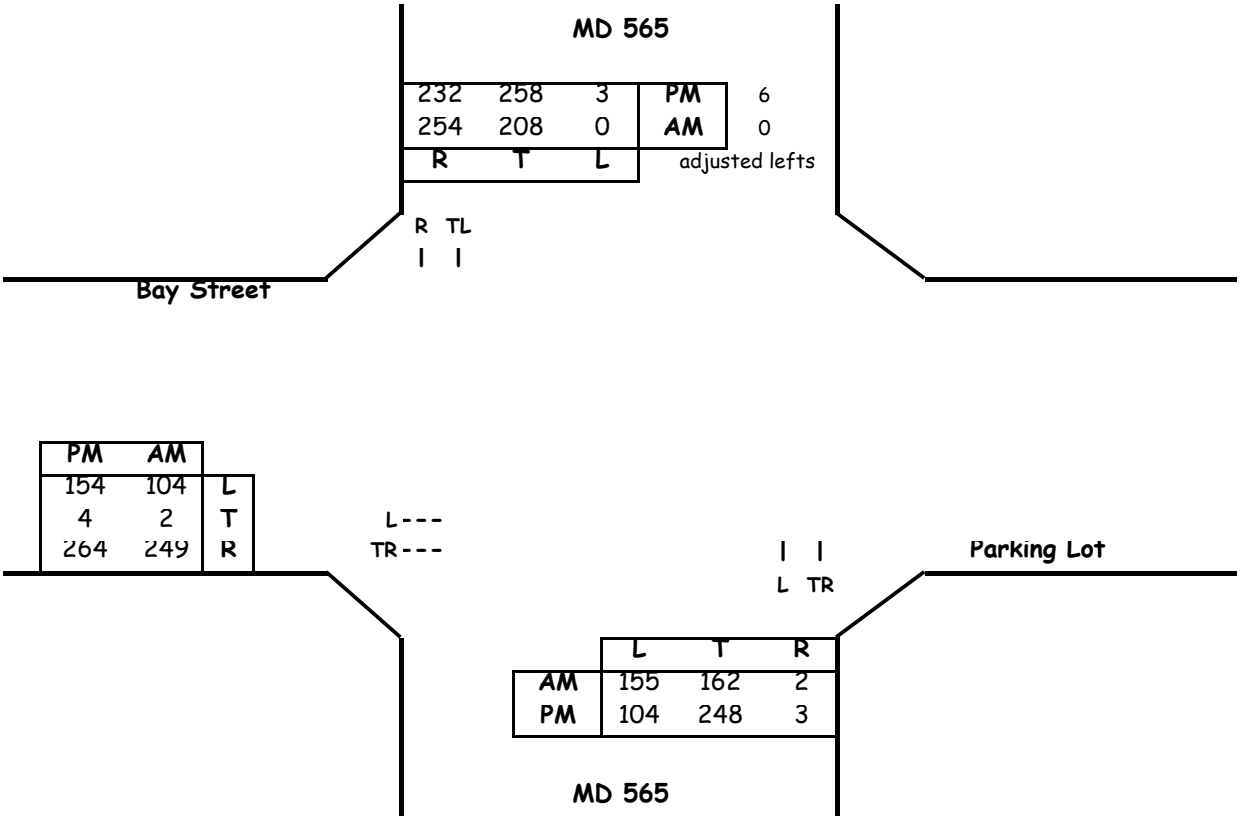
Intersection
3

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

Main Line: MD 565
Minor Street: Parking Lot
Study Period: Total Traffic

Analyst: Lenhart Traffic Consulting

Lane Use + Traffic Volumes



Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	164	1.00	164	0	1	0	363
SB	208	1.00	208	155	1	155	
EB	251	1	251	0	0	0	251
WB	0	0	0	104	1	104	

CLV TOTAL= **614**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	251	1.00	251	3	1	3	368
SB	264	1.00	264	104	1	104	
EB	268	1	268	0	0	0	268
WB	0	0	0	154	1	154	

CLV TOTAL= **636**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

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MD 565 & Parking Lot
(Total Traffic)

Intersection 3

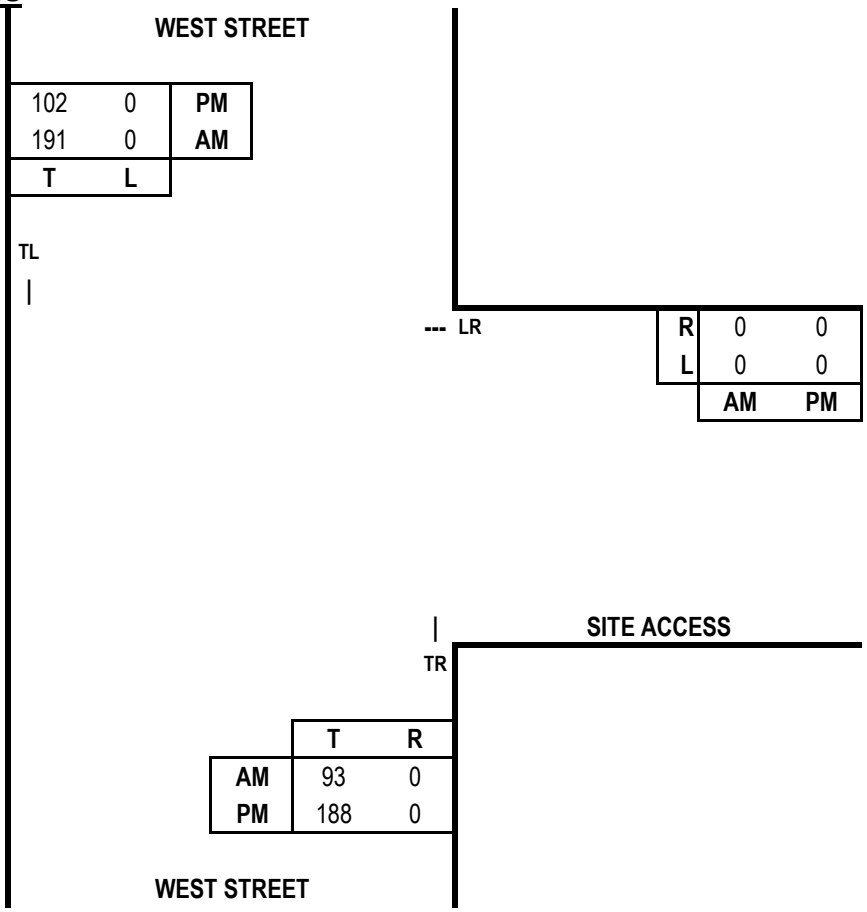
CRITICAL LANE VOLUME (CLV) METHODOLOGY

Choose your methodologies

Intersection of: West Street
and: Site Access
Conditions: Existing Traffic

Analyst: Lenhart Traffic Consulting

Lane Use + Traffic Volumes



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
WB	0	1.00	0				0
NB	93	1.00	93	0	1.00	0	191
SB	191	1.00	191				

CLV TOTAL= **191**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
WB	0	1.00	0				0
NB	188	1.00	188	0	1.00	0	188
SB	102	1.00	102				

CLV TOTAL= **188**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

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N

West Street &
Site Access
(Existing Traffic)

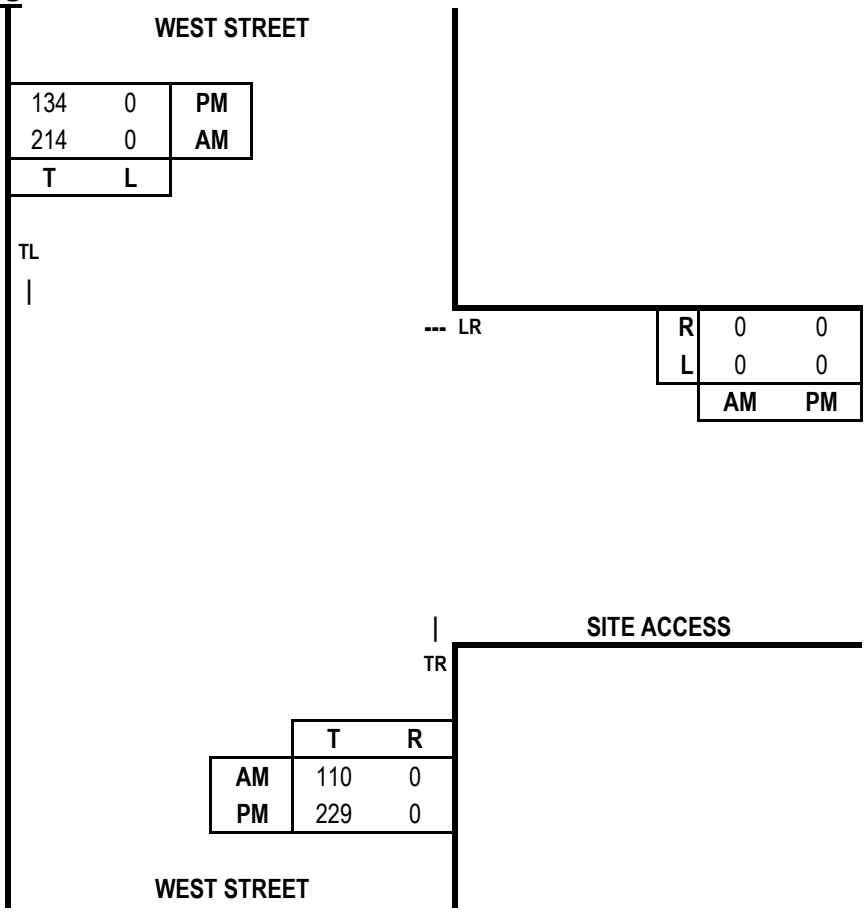
Intersection 4

CRITICAL LANE VOLUME (CLV) METHODOLOGY

Choose your methodologies

Intersection of: West Street **Analyst:** Lenhart Traffic Consulting
and: Site Access
Conditions: Background Traffic

Lane Use + Traffic Volumes



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
WB	0	1.00	0				0
NB	110	1.00	110	0	1.00	0	214
SB	214	1.00	214				

CLV TOTAL= **214**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
WB	0	1.00	0				0
NB	229	1.00	229	0	1.00	0	229
SB	134	1.00	134				

CLV TOTAL= **229**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

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N

West Street &
Site Access
(Background Traffic)

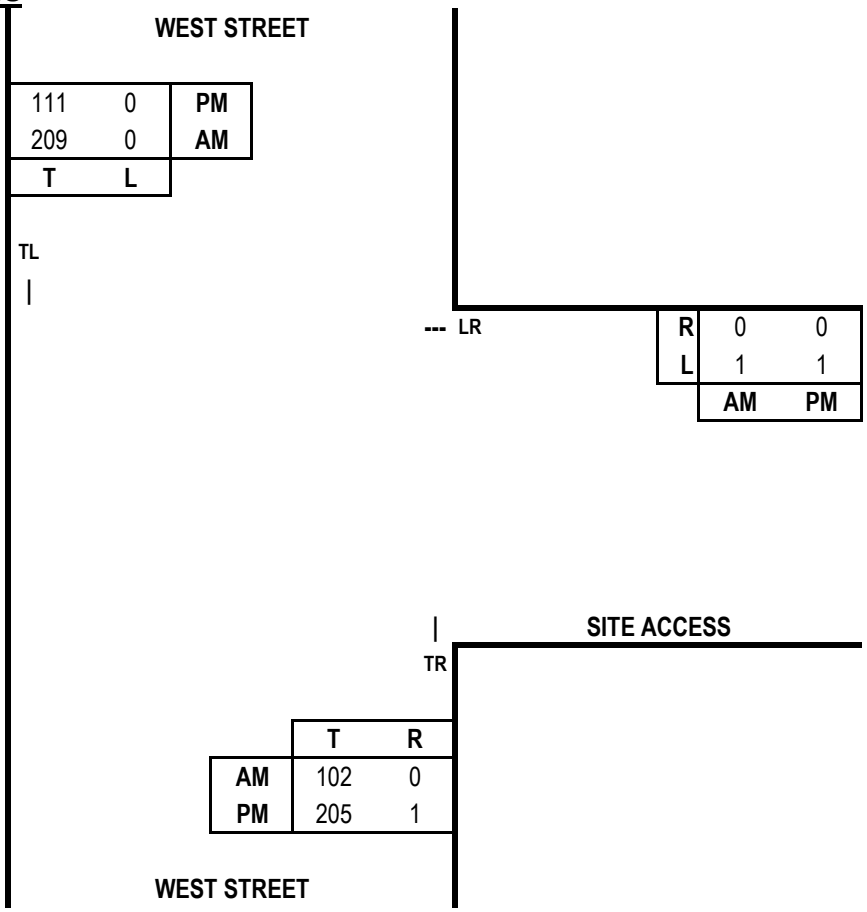
Intersection 4

CRITICAL LANE VOLUME (CLV) METHODOLOGY

Choose your methodologies

Intersection of: West Street **Analyst:** Lenhart Traffic Consulting
and: Site Access
Conditions: Total Traffic

Lane Use + Traffic Volumes



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
WB	1	1.00	1				1
NB	102	1.00	102	0	1.00	0	209
SB	209	1.00	209				
CLV TOTAL=							**210**
Level of Service (LOS)=							**A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
WB	1	1.00	1				1
NB	206	1.00	206	0	1.00	0	206
SB	111	1.00	111				
CLV TOTAL=							**207**
Level of Service (LOS)=							**A**

Critical Lane Volume Analysis

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N

West Street &
Site Access
(Total Traffic)

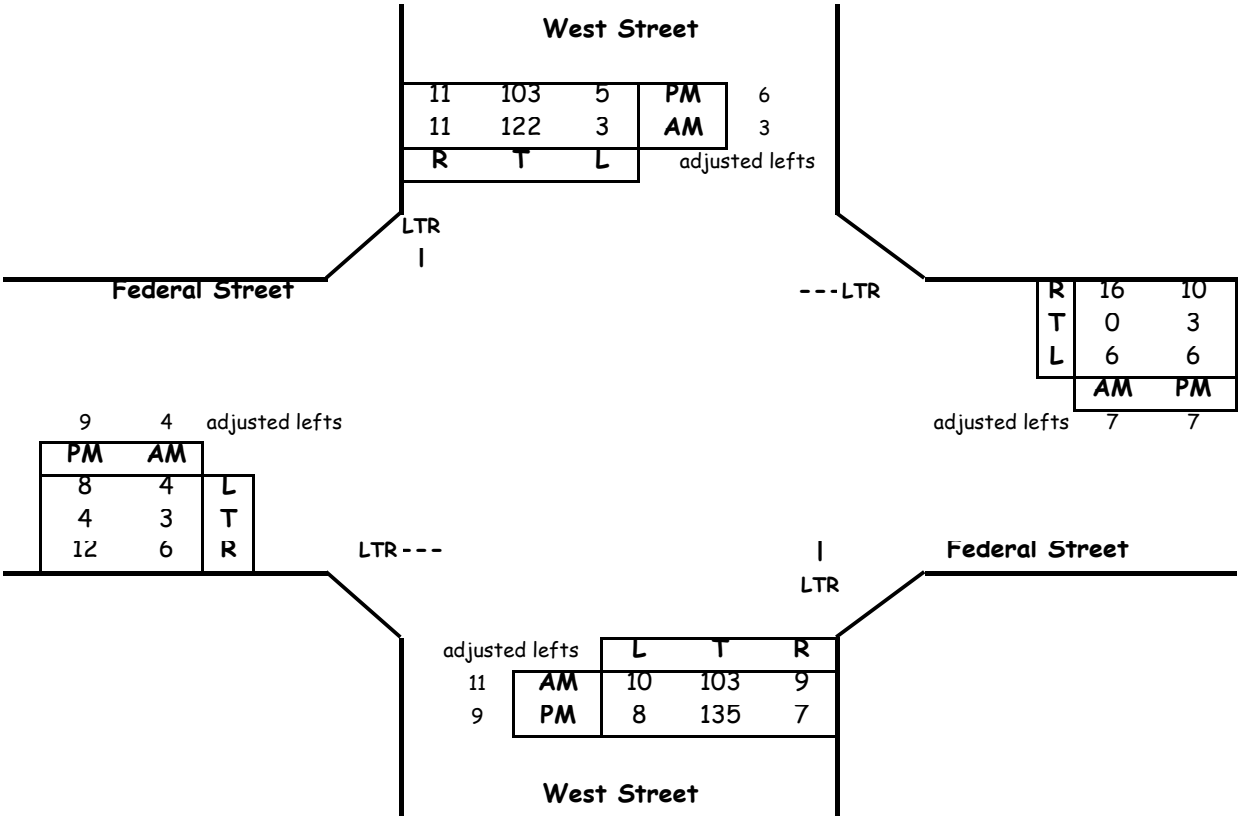
Intersection
4

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

Main Line: West Street
Minor Street: Federal Street
Study Period: Existing Traffic

Analyst: Lenhart Traffic Consulting

Lane Use + Traffic Volumes



Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	123	1.00	123	3	1	3	146
SB	136	1.00	136	10	1	10	
EB	13	1	13	6	1	6	27
WB	23	1	23	4	1	4	

CLV TOTAL= **173**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	151	1.00	151	5	1	5	156
SB	120	1.00	120	8	1	8	
EB	25	1	25	6	1	6	31
WB	20	1	20	8	1	8	

CLV TOTAL= **187**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

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West Street & Federal Street
(Existing Traffic)

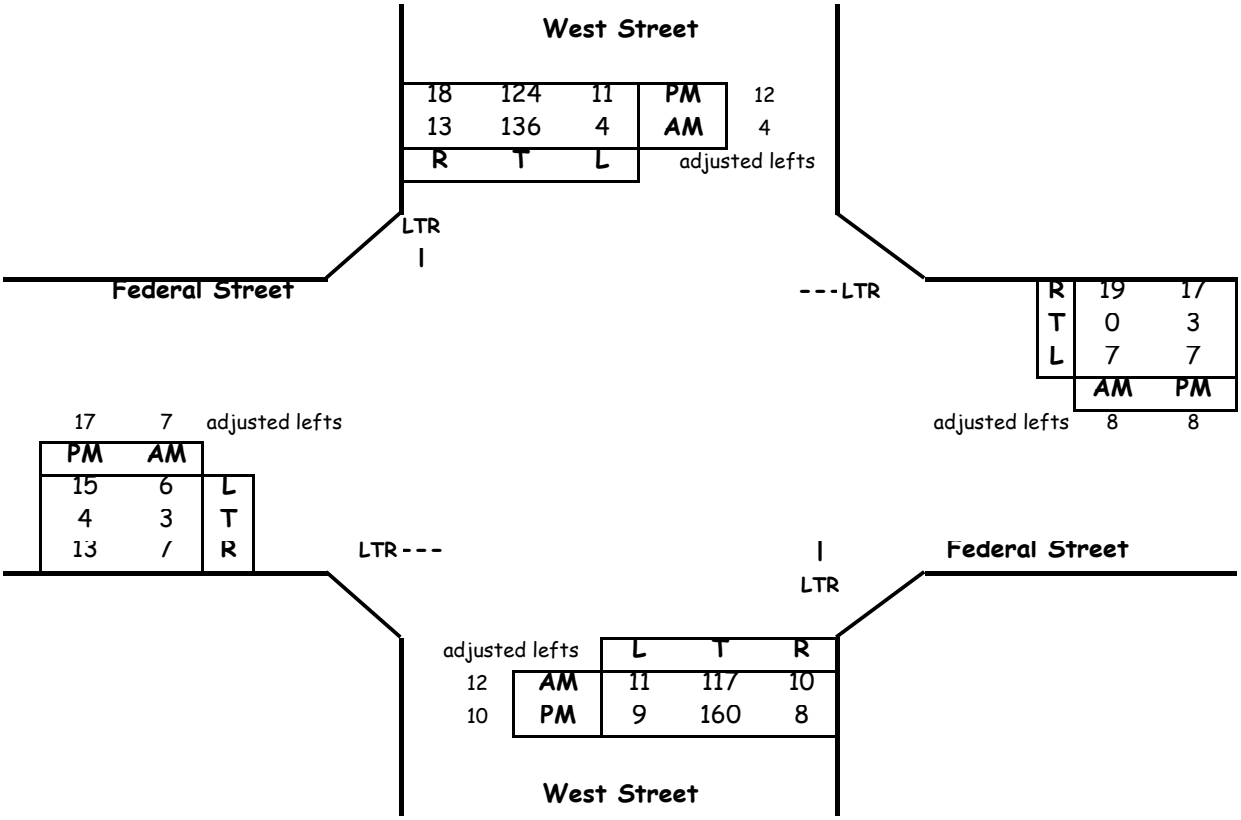
Intersection 5

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

Main Line: West Street
Minor Street: Federal Street
Study Period: Background Traffic

Analyst: Lenhart Traffic Consulting

Lane Use + Traffic Volumes



Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	139	1.00	139	4	1	4	164
SB	153	1.00	153	11	1	11	
EB	17	1	17	7	1	7	33
WB	27	1	27	6	1	6	

CLV TOTAL= **197**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	178	1.00	178	11	1	11	189
SB	154	1.00	154	9	1	9	
EB	34	1	34	7	1	7	43
WB	28	1	28	15	1	15	

CLV TOTAL= **232**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis

LENHART TRAFFIC CONSULTING, INC.
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West Street &
Federal Street
(Background Traffic)

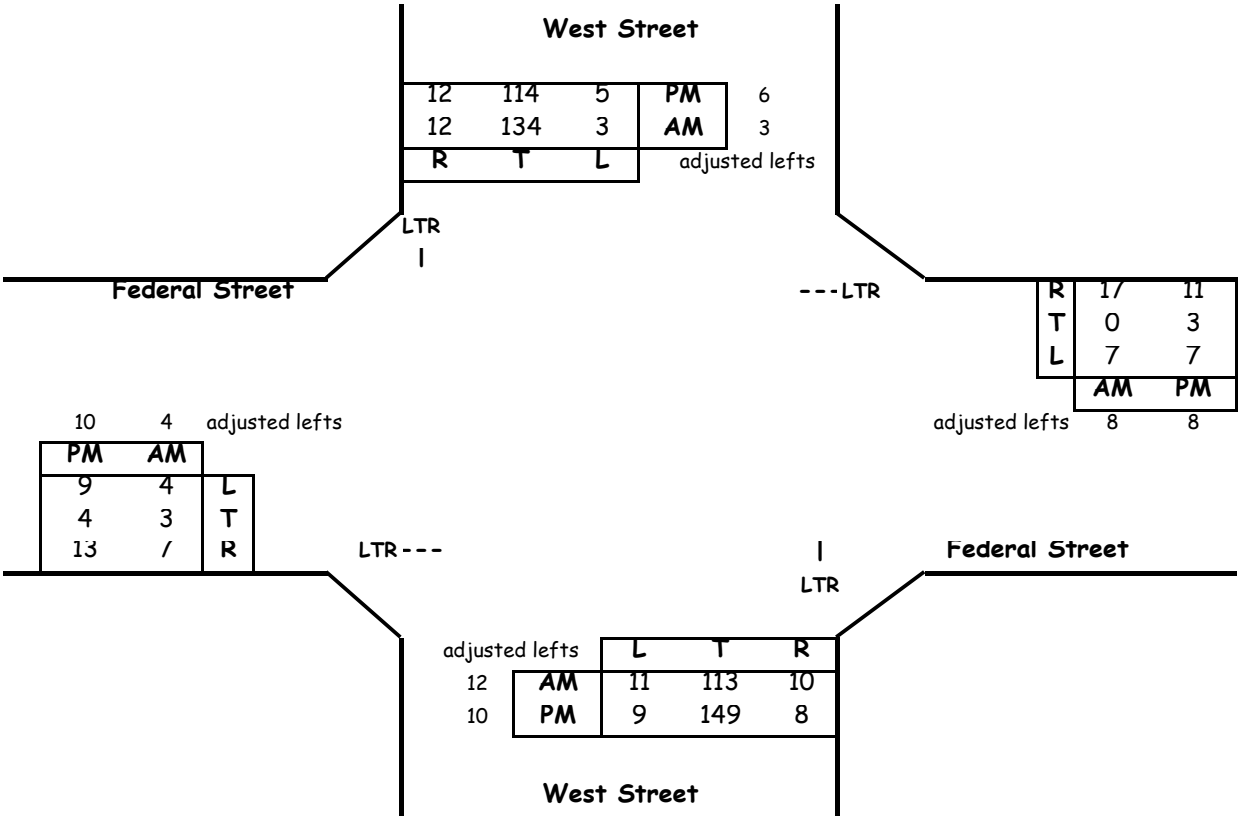
Intersection
5

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

Main Line: West Street
Minor Street: Federal Street
Study Period: Total Traffic

Analyst: Lenhart Traffic Consulting

Lane Use + Traffic Volumes



Critical Lane Volume Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	135	1.00	135	3	1	3	160
SB	149	1.00	149	11	1	11	
EB	14	1	14	7	1	7	29
WB	25	1	25	4	1	4	

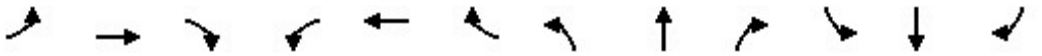
CLV TOTAL= **189**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	167	1.00	167	5	1	5	172
SB	132	1.00	132	9	1	9	
EB	27	1	27	7	1	7	34
WB	22	1	22	9	1	9	

CLV TOTAL= **206**
Level of Service (LOS)= **A**

Critical Lane Volume Analysis LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BLVD, SUITE 214 SEVERNA PARK, MD 21146 www.lenharttraffic.com	West Street & Federal Street (Total Traffic)	**Intersection 5**



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	283	109	82	266	20	57	1	36	0	0	0
Future Volume (Veh/h)	6	283	109	82	266	20	57	1	36	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	308	118	89	289	22	62	1	39	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					385							
pX, platoon unblocked												
vC, conflicting volume	311			426			859	870	367	898	918	300
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	311			426			859	870	367	898	918	300
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			92			76	100	94	100	100	100
cM capacity (veh/h)	1249			1133			259	265	678	229	249	740

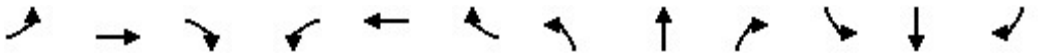
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	433	400	102
Volume Left	7	89	62
Volume Right	118	22	39
cSH	1249	1133	339
Volume to Capacity	0.01	0.08	0.30
Queue Length 95th (ft)	0	6	31
Control Delay (s)	0.2	2.5	20.1
Lane LOS	A	A	C
Approach Delay (s)	0.2	2.5	20.1
Approach LOS			C

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	317	0	0	372	0	0
Future Volume (Veh/h)	317	0	0	372	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	345	0	0	404	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				149		
pX, platoon unblocked					0.99	
vC, conflicting volume			345		749	172
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			345		738	172
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1211		348	841

Direction, Lane #	EB 1	EB 2	WB 1	NB 1
Volume Total	230	115	404	0
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1211	1700
Volume to Capacity	0.14	0.07	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS				A
Approach Delay (s)	0.0		0.0	0.0
Approach LOS				A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	22.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	2	226	0	0	0	141	148	2	0	190	231
Future Volume (vph)	89	2	226	0	0	0	141	148	2	0	190	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	1.00					1.00	1.00			1.00	1.00
Frt	1.00	0.85					1.00	1.00			1.00	0.85
Flt Protected	0.95	1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770	1586					1770	1859			1863	1583
Flt Permitted	0.95	1.00					0.57	1.00			1.00	1.00
Satd. Flow (perm)	1770	1586					1054	1859			1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	97	2	246	0	0	0	153	161	2	0	207	251
RTOR Reduction (vph)	0	213	0	0	0	0	0	0	0	0	0	107
Lane Group Flow (vph)	97	35	0	0	0	0	153	163	0	0	207	144
Turn Type	Perm	NA					pm+pt	NA			NA	Perm
Protected Phases		4					5	2			6	
Permitted Phases	4						2			6		6
Actuated Green, G (s)	9.4	9.4					52.6	52.6			40.8	40.8
Effective Green, g (s)	9.4	9.4					52.6	52.6			40.8	40.8
Actuated g/C Ratio	0.13	0.13					0.74	0.74			0.57	0.57
Clearance Time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0					3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	234	209					854	1377			1070	909
v/s Ratio Prot		0.02					c0.02	0.09			c0.11	
v/s Ratio Perm	c0.05						0.11					0.09
v/c Ratio	0.41	0.17					0.18	0.12			0.19	0.16
Uniform Delay, d1	28.3	27.3					2.8	2.6			7.2	7.1
Progression Factor	1.00	1.00					1.00	1.00			1.00	1.00
Incremental Delay, d2	1.2	0.4					0.1	0.2			0.4	0.4
Delay (s)	29.5	27.7					2.9	2.8			7.6	7.4
Level of Service	C	C					A	A			A	A
Approach Delay (s)		28.2			0.0			2.8			7.5	
Approach LOS		C			A			A			A	

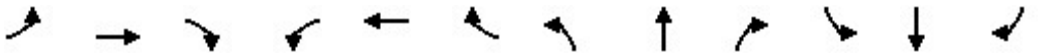
Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	71.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	93	0	0	191
Future Volume (Veh/h)	0	0	93	0	0	191
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	101	0	0	208
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			376			
pX, platoon unblocked						
vC, conflicting volume	309	101			101	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	309	101			101	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	683	954			1491	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	101	208
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1491
Volume to Capacity	0.00	0.06	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

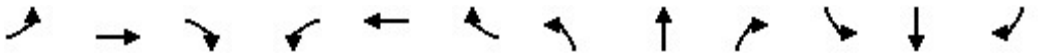
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	13.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	4	3	6	3	0	16	10	103	9	3	122	11
Future Volume (vph)	4	3	6	3	0	16	10	103	9	3	122	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	3	7	3	0	17	11	112	10	3	133	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	14	20	133	148
Volume Left (vph)	4	3	11	3
Volume Right (vph)	7	17	10	12
Hadj (s)	-0.21	-0.45	0.01	-0.01
Departure Headway (s)	4.3	4.1	4.1	4.1
Degree Utilization, x	0.02	0.02	0.15	0.17
Capacity (veh/h)	768	813	852	865
Control Delay (s)	7.4	7.2	7.9	7.9
Approach Delay (s)	7.4	7.2	7.9	7.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay	7.8			
Level of Service	A			
Intersection Capacity Utilization	21.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	317	119	95	296	22	62	1	47	0	0	0
Future Volume (Veh/h)	7	317	119	95	296	22	62	1	47	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	345	129	103	322	24	67	1	51	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					385							
pX, platoon unblocked												
vC, conflicting volume	346			474			966	978	410	1017	1030	334
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	346			474			966	978	410	1017	1030	334
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			91			69	100	92	100	100	100
cM capacity (veh/h)	1213			1088			216	225	642	183	210	708

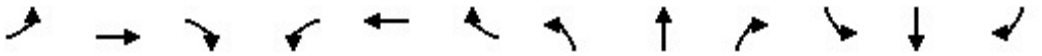
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	482	449	119
Volume Left	8	103	67
Volume Right	129	24	51
cSH	1213	1088	302
Volume to Capacity	0.01	0.09	0.39
Queue Length 95th (ft)	0	8	45
Control Delay (s)	0.2	2.8	24.4
Lane LOS	A	A	C
Approach Delay (s)	0.2	2.8	24.4
Approach LOS			C

Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	346	16	22	406	10	16
Future Volume (Veh/h)	346	16	22	406	10	16
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	376	17	24	441	11	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				149		
pX, platoon unblocked					0.98	
vC, conflicting volume			393		874	196
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			393		859	196
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		96	98
cM capacity (veh/h)			1162		283	812

Direction, Lane #	EB 1	EB 2	WB 1	NB 1
Volume Total	251	142	465	28
Volume Left	0	0	24	11
Volume Right	0	17	0	17
cSH	1700	1700	1162	468
Volume to Capacity	0.15	0.08	0.02	0.06
Queue Length 95th (ft)	0	0	2	5
Control Delay (s)	0.0	0.0	0.6	13.2
Lane LOS			A	B
Approach Delay (s)	0.0		0.6	13.2
Approach LOS				B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	2	255	0	0	0	165	162	2	0	208	263
Future Volume (vph)	105	2	255	0	0	0	165	162	2	0	208	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	1.00					1.00	1.00			1.00	1.00
Frt	1.00	0.85					1.00	1.00			1.00	0.85
Flt Protected	0.95	1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770	1585					1770	1860			1863	1583
Flt Permitted	0.95	1.00					0.56	1.00			1.00	1.00
Satd. Flow (perm)	1770	1585					1034	1860			1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	114	2	277	0	0	0	179	176	2	0	226	286
RTOR Reduction (vph)	0	238	0	0	0	0	0	0	0	0	0	125
Lane Group Flow (vph)	114	41	0	0	0	0	179	178	0	0	226	161
Turn Type	Perm	NA					pm+pt	NA			NA	Perm
Protected Phases		4					5	2			6	
Permitted Phases	4						2			6		6
Actuated Green, G (s)	10.2	10.2					52.6	52.6			40.3	40.3
Effective Green, g (s)	10.2	10.2					52.6	52.6			40.3	40.3
Actuated g/C Ratio	0.14	0.14					0.73	0.73			0.56	0.56
Clearance Time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0					3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	251	225					837	1362			1045	888
v/s Ratio Prot		0.03					c0.02	0.10			0.12	
v/s Ratio Perm	c0.06						c0.13					0.10
v/c Ratio	0.45	0.18					0.21	0.13			0.22	0.18
Uniform Delay, d1	28.2	27.1					3.0	2.8			7.9	7.7
Progression Factor	1.00	1.00					1.00	1.00			1.00	1.00
Incremental Delay, d2	1.3	0.4					0.1	0.2			0.5	0.4
Delay (s)	29.6	27.5					3.2	3.0			8.3	8.1
Level of Service	C	C					A	A			A	A
Approach Delay (s)		28.1			0.0			3.1			8.2	
Approach LOS		C			A			A			A	

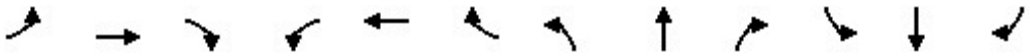
Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	71.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	110	0	0	214
Future Volume (Veh/h)	0	0	110	0	0	214
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	120	0	0	233
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			376			
pX, platoon unblocked						
vC, conflicting volume	353	120			120	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	353	120			120	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	645	931			1468	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	120	233
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1468
Volume to Capacity	0.00	0.07	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

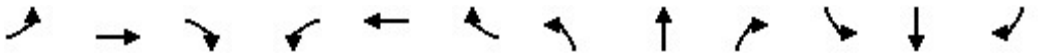
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	3	7	7	0	19	11	117	10	4	136	13
Future Volume (vph)	6	3	7	7	0	19	11	117	10	4	136	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	3	8	8	0	21	12	127	11	4	148	14

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	18	29	150	166
Volume Left (vph)	7	8	12	4
Volume Right (vph)	8	21	11	14
Hadj (s)	-0.15	-0.35	0.01	-0.01
Departure Headway (s)	4.5	4.3	4.2	4.1
Degree Utilization, x	0.02	0.03	0.17	0.19
Capacity (veh/h)	739	774	839	852
Control Delay (s)	7.6	7.4	8.1	8.1
Approach Delay (s)	7.6	7.4	8.1	8.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.0			
Level of Service	A			
Intersection Capacity Utilization	22.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	309	119	90	292	22	62	1	39	0	0	0
Future Volume (Veh/h)	7	309	119	90	292	22	62	1	39	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	336	129	98	317	24	67	1	42	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					385							
pX, platoon unblocked												
vC, conflicting volume	341			465			942	954	400	984	1006	329
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	341			465			942	954	400	984	1006	329
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			91			70	100	94	100	100	100
cM capacity (veh/h)	1218			1096			225	234	650	197	218	712

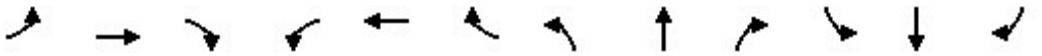
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	473	439	110
Volume Left	8	98	67
Volume Right	129	24	42
cSH	1218	1096	300
Volume to Capacity	0.01	0.09	0.37
Queue Length 95th (ft)	0	7	41
Control Delay (s)	0.2	2.7	23.7
Lane LOS	A	A	C
Approach Delay (s)	0.2	2.7	23.7
Approach LOS			C

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	346	0	3	406	1	9
Future Volume (Veh/h)	346	0	3	406	1	9
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	376	0	3	441	1	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				149		
pX, platoon unblocked					0.98	
vC, conflicting volume			376		823	188
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			376		809	188
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1179		311	822

Direction, Lane #	EB 1	EB 2	WB 1	NB 1
Volume Total	251	125	444	11
Volume Left	0	0	3	1
Volume Right	0	0	0	10
cSH	1700	1700	1179	715
Volume to Capacity	0.15	0.07	0.00	0.02
Queue Length 95th (ft)	0	0	0	1
Control Delay (s)	0.0	0.0	0.1	10.1
Lane LOS			A	B
Approach Delay (s)	0.0		0.1	10.1
Approach LOS				B

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	33.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	2	249	0	0	0	155	162	2	0	208	254
Future Volume (vph)	104	2	249	0	0	0	155	162	2	0	208	254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	1.00					1.00	1.00			1.00	1.00
Frt	1.00	0.85					1.00	1.00			1.00	0.85
Flt Protected	0.95	1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770	1585					1770	1860			1863	1583
Flt Permitted	0.95	1.00					0.56	1.00			1.00	1.00
Satd. Flow (perm)	1770	1585					1035	1860			1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	113	2	271	0	0	0	168	176	2	0	226	276
RTOR Reduction (vph)	0	233	0	0	0	0	0	0	0	0	0	120
Lane Group Flow (vph)	113	40	0	0	0	0	168	178	0	0	226	156
Turn Type	Perm	NA					pm+pt	NA			NA	Perm
Protected Phases		4					5	2			6	
Permitted Phases	4						2			6		6
Actuated Green, G (s)	10.2	10.2					52.6	52.6			40.5	40.5
Effective Green, g (s)	10.2	10.2					52.6	52.6			40.5	40.5
Actuated g/C Ratio	0.14	0.14					0.73	0.73			0.56	0.56
Clearance Time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0					3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	251	225					836	1362			1050	892
v/s Ratio Prot		0.03					c0.02	0.10			c0.12	
v/s Ratio Perm	c0.06						0.13					0.10
v/c Ratio	0.45	0.18					0.20	0.13			0.22	0.17
Uniform Delay, d1	28.2	27.1					3.0	2.8			7.8	7.6
Progression Factor	1.00	1.00					1.00	1.00			1.00	1.00
Incremental Delay, d2	1.3	0.4					0.1	0.2			0.5	0.4
Delay (s)	29.5	27.5					3.1	3.0			8.2	8.0
Level of Service	C	C					A	A			A	A
Approach Delay (s)		28.1			0.0			3.1			8.1	
Approach LOS		C			A			A			A	

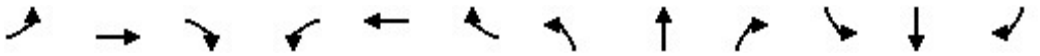
Intersection Summary			
HCM 2000 Control Delay	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	71.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	0	102	0	0	209
Future Volume (Veh/h)	1	0	102	0	0	209
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	0	111	0	0	227
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			376			
pX, platoon unblocked						
vC, conflicting volume	338	111			111	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	338	111			111	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	658	942			1479	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	1	111	227
Volume Left	1	0	0
Volume Right	0	0	0
cSH	658	1700	1479
Volume to Capacity	0.00	0.07	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	10.5	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.5	0.0	0.0
Approach LOS	B		

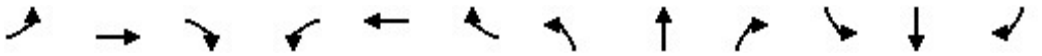
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	21.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	4	3	7	7	0	17	11	113	10	3	134	12
Future Volume (vph)	4	3	7	7	0	17	11	113	10	3	134	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	3	8	8	0	18	12	123	11	3	146	13

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	15	26	146	162
Volume Left (vph)	4	8	12	3
Volume Right (vph)	8	18	11	13
Hadj (s)	-0.23	-0.32	0.01	-0.01
Departure Headway (s)	4.4	4.3	4.2	4.1
Degree Utilization, x	0.02	0.03	0.17	0.19
Capacity (veh/h)	756	775	844	857
Control Delay (s)	7.4	7.4	8.0	8.1
Approach Delay (s)	7.4	7.4	8.0	8.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.0			
Level of Service	A			
Intersection Capacity Utilization	22.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	298	40	62	234	5	103	0	85	0	0	0
Future Volume (Veh/h)	10	298	40	62	234	5	103	0	85	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	324	43	67	254	5	112	0	92	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					385							
pX, platoon unblocked												
vC, conflicting volume	259			367			758	760	346	850	780	256
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	259			367			758	760	346	850	780	256
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			94			64	100	87	100	100	100
cM capacity (veh/h)	1306			1192			308	314	697	232	306	782

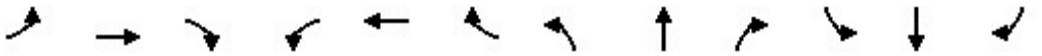
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	378	326	204
Volume Left	11	67	112
Volume Right	43	5	92
cSH	1306	1192	411
Volume to Capacity	0.01	0.06	0.50
Queue Length 95th (ft)	1	4	67
Control Delay (s)	0.3	2.1	22.1
Lane LOS	A	A	C
Approach Delay (s)	0.3	2.1	22.1
Approach LOS			C

Intersection Summary				
Average Delay	5.8			
Intersection Capacity Utilization	55.6%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	380	0	0	297	0	0
Future Volume (Veh/h)	380	0	0	297	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	413	0	0	323	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				149		
pX, platoon unblocked					1.00	
vC, conflicting volume			413		736	206
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			413		733	206
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1142		354	800

Direction, Lane #	EB 1	EB 2	WB 1	NB 1
Volume Total	275	138	323	0
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1142	1700
Volume to Capacity	0.16	0.08	0.00	0.02
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS				A
Approach Delay (s)	0.0		0.0	0.0
Approach LOS				A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	19.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	4	240	0	0	0	92	227	3	3	236	205
Future Volume (vph)	136	4	240	0	0	0	92	227	3	3	236	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	1.00					1.00	1.00			1.00	1.00
Frt	1.00	0.85					1.00	1.00			1.00	0.85
Flt Protected	0.95	1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770	1588					1770	1859			1862	1583
Flt Permitted	0.95	1.00					0.53	1.00			1.00	1.00
Satd. Flow (perm)	1770	1588					993	1859			1859	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	148	4	261	0	0	0	100	247	3	3	257	223
RTOR Reduction (vph)	0	219	0	0	0	0	0	0	0	0	0	93
Lane Group Flow (vph)	148	46	0	0	0	0	100	250	0	0	260	130
Turn Type	Perm	NA					pm+pt	NA		Perm	NA	Perm
Protected Phases		4					5	2			6	
Permitted Phases	4						2			6		6
Actuated Green, G (s)	11.9	11.9					53.5	53.5			43.4	43.4
Effective Green, g (s)	11.9	11.9					53.5	53.5			43.4	43.4
Actuated g/C Ratio	0.16	0.16					0.72	0.72			0.58	0.58
Clearance Time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0					3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	283	253					772	1336			1084	923
v/s Ratio Prot		0.03					0.01	c0.13				
v/s Ratio Perm	c0.08						0.08				c0.14	0.08
v/c Ratio	0.52	0.18					0.13	0.19			0.24	0.14
Uniform Delay, d1	28.6	27.0					3.3	3.4			7.5	7.0
Progression Factor	1.00	1.00					1.00	1.00			1.00	1.00
Incremental Delay, d2	1.7	0.3					0.1	0.3			0.5	0.3
Delay (s)	30.4	27.4					3.4	3.7			8.0	7.4
Level of Service	C	C					A	A			A	A
Approach Delay (s)		28.5			0.0			3.6			7.7	
Approach LOS		C			A			A			A	

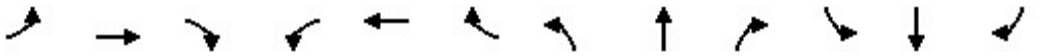
Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	74.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	188	0	0	102
Future Volume (Veh/h)	0	0	188	0	0	102
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	204	0	0	111
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			376			
pX, platoon unblocked						
vC, conflicting volume	315	204			204	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	315	204			204	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	678	837			1368	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	204	111
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1368
Volume to Capacity	0.00	0.12	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

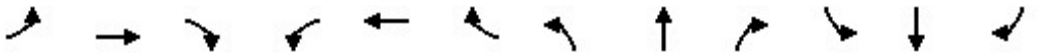
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	13.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	8	4	12	6	3	10	8	135	7	5	103	11
Future Volume (vph)	8	4	12	6	3	10	8	135	7	5	103	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	4	13	7	3	11	9	147	8	5	112	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	26	21	164	129
Volume Left (vph)	9	7	9	5
Volume Right (vph)	13	11	8	12
Hadj (s)	-0.20	-0.21	0.02	-0.01
Departure Headway (s)	4.4	4.4	4.2	4.2
Degree Utilization, x	0.03	0.03	0.19	0.15
Capacity (veh/h)	760	761	846	849
Control Delay (s)	7.5	7.5	8.1	7.9
Approach Delay (s)	7.5	7.5	8.1	7.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay	7.9			
Level of Service	A			
Intersection Capacity Utilization	20.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	349	44	91	279	5	113	0	117	0	0	0
Future Volume (Veh/h)	11	349	44	91	279	5	113	0	117	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	379	48	99	303	5	123	0	127	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					385							
pX, platoon unblocked												
vC, conflicting volume	308			427			930	933	403	1058	954	306
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	308			427			930	933	403	1058	954	306
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			91			46	100	80	100	100	100
cM capacity (veh/h)	1253			1132			229	241	647	151	234	734

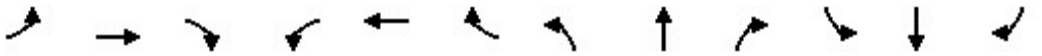
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	439	407	250
Volume Left	12	99	123
Volume Right	48	5	127
cSH	1253	1132	341
Volume to Capacity	0.01	0.09	0.73
Queue Length 95th (ft)	1	7	138
Control Delay (s)	0.3	2.7	39.7
Lane LOS	A	A	E
Approach Delay (s)	0.3	2.7	39.7
Approach LOS			E

Intersection Summary			
Average Delay	10.2		
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	47	415	68	325	46	70
Future Volume (Veh/h)	47	415	68	325	46	70
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	51	451	74	353	50	76
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				149		
pX, platoon unblocked					0.98	
vC, conflicting volume			502		778	251
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			502		762	251
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		84	90
cM capacity (veh/h)			1059		311	749

Direction, Lane #	EB 1	EB 2	WB 1	NB 1
Volume Total	34	468	427	126
Volume Left	0	0	74	50
Volume Right	0	451	0	76
cSH	1700	1700	1059	480
Volume to Capacity	0.02	0.28	0.07	0.26
Queue Length 95th (ft)	0	0	6	26
Control Delay (s)	0.0	0.0	2.1	15.2
Lane LOS			A	C
Approach Delay (s)	0.0		2.1	15.2
Approach LOS				C

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	184	4	297	0	0	0	135	248	3	3	258	258
Future Volume (vph)	184	4	297	0	0	0	135	248	3	3	258	258
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	1.00					1.00	1.00			1.00	1.00
Frt	1.00	0.85					1.00	1.00			1.00	0.85
Flt Protected	0.95	1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770	1587					1770	1860			1862	1583
Flt Permitted	0.95	1.00					0.50	1.00			1.00	1.00
Satd. Flow (perm)	1770	1587					928	1860			1859	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	200	4	323	0	0	0	147	270	3	3	280	280
RTOR Reduction (vph)	0	261	0	0	0	0	0	0	0	0	0	132
Lane Group Flow (vph)	200	66	0	0	0	0	147	273	0	0	283	148
Turn Type	Perm	NA					pm+pt	NA		Perm	NA	Perm
Protected Phases		4					5	2			6	
Permitted Phases	4						2			6		6
Actuated Green, G (s)	14.7	14.7					52.7	52.7			40.4	40.4
Effective Green, g (s)	14.7	14.7					52.7	52.7			40.4	40.4
Actuated g/C Ratio	0.19	0.19					0.69	0.69			0.53	0.53
Clearance Time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0					3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	340	305					726	1283			983	837
v/s Ratio Prot		0.04					0.02	c0.15				
v/s Ratio Perm	c0.11						0.12				c0.15	0.09
v/c Ratio	0.59	0.22					0.20	0.21			0.29	0.18
Uniform Delay, d1	28.1	26.0					4.4	4.3			10.0	9.4
Progression Factor	1.00	1.00					1.00	1.00			1.00	1.00
Incremental Delay, d2	2.6	0.4					0.1	0.4			0.7	0.5
Delay (s)	30.7	26.4					4.5	4.7			10.7	9.8
Level of Service	C	C					A	A			B	A
Approach Delay (s)		28.0			0.0			4.6			10.3	
Approach LOS		C			A			A			B	

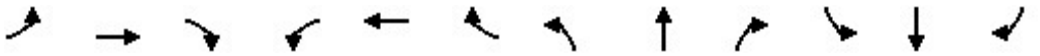
Intersection Summary			
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	76.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	229	0	0	134
Future Volume (Veh/h)	0	0	229	0	0	134
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	249	0	0	146
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			376			
pX, platoon unblocked						
vC, conflicting volume	395	249			249	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	395	249			249	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	610	790			1317	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	249	146
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1317
Volume to Capacity	0.00	0.15	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

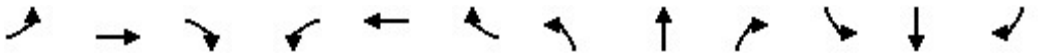
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	15.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	15	4	13	7	3	17	9	160	8	11	124	18
Future Volume (vph)	15	4	13	7	3	17	9	160	8	11	124	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	4	14	8	3	18	10	174	9	12	135	20

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	34	29	193	167
Volume Left (vph)	16	8	10	12
Volume Right (vph)	14	18	9	20
Hadj (s)	-0.12	-0.28	0.02	-0.02
Departure Headway (s)	4.6	4.4	4.2	4.2
Degree Utilization, x	0.04	0.04	0.23	0.20
Capacity (veh/h)	713	736	827	833
Control Delay (s)	7.8	7.6	8.5	8.2
Approach Delay (s)	7.8	7.6	8.5	8.2
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.3			
Level of Service	A			
Intersection Capacity Utilization	21.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	327	44	68	257	5	113	0	93	0	0	0
Future Volume (Veh/h)	11	327	44	68	257	5	113	0	93	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	355	48	74	279	5	123	0	101	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					385							
pX, platoon unblocked												
vC, conflicting volume	284			403			832	835	379	934	856	282
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	284			403			832	835	379	934	856	282
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			94			55	100	85	100	100	100
cM capacity (veh/h)	1278			1156			272	281	668	197	273	757

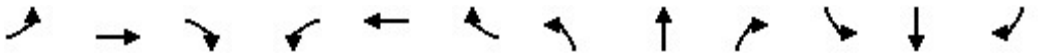
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	415	358	224
Volume Left	12	74	123
Volume Right	48	5	101
cSH	1278	1156	371
Volume to Capacity	0.01	0.06	0.60
Queue Length 95th (ft)	1	5	95
Control Delay (s)	0.3	2.2	28.4
Lane LOS	A	A	D
Approach Delay (s)	0.3	2.2	28.4
Approach LOS			D

Intersection Summary			
Average Delay	7.3		
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	415	1	11	325	1	7
Future Volume (Veh/h)	415	1	11	325	1	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	451	1	12	353	1	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				149		
pX, platoon unblocked					0.99	
vC, conflicting volume			452		828	226
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			452		823	226
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1105		306	777

Direction, Lane #	EB 1	EB 2	WB 1	NB 1
Volume Total	301	151	365	9
Volume Left	0	0	12	1
Volume Right	0	1	0	8
cSH	1700	1700	1105	663
Volume to Capacity	0.18	0.09	0.01	0.01
Queue Length 95th (ft)	0	0	1	1
Control Delay (s)	0.0	0.0	0.4	10.5
Lane LOS			A	B
Approach Delay (s)	0.0		0.4	10.5
Approach LOS				B

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	4	264	0	0	0	104	248	3	3	258	232
Future Volume (vph)	154	4	264	0	0	0	104	248	3	3	258	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	1.00					1.00	1.00			1.00	1.00
Frt	1.00	0.85					1.00	1.00			1.00	0.85
Flt Protected	0.95	1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770	1587					1770	1860			1862	1583
Flt Permitted	0.95	1.00					0.51	1.00			1.00	1.00
Satd. Flow (perm)	1770	1587					955	1860			1859	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	167	4	287	0	0	0	113	270	3	3	280	252
RTOR Reduction (vph)	0	239	0	0	0	0	0	0	0	0	0	107
Lane Group Flow (vph)	167	52	0	0	0	0	113	273	0	0	283	145
Turn Type	Perm	NA					pm+pt	NA		Perm	NA	Perm
Protected Phases		4					5	2			6	
Permitted Phases	4						2			6		6
Actuated Green, G (s)	12.7	12.7					53.6	53.6			43.3	43.3
Effective Green, g (s)	12.7	12.7					53.6	53.6			43.3	43.3
Actuated g/C Ratio	0.17	0.17					0.71	0.71			0.58	0.58
Clearance Time (s)	4.5	4.5					4.5	4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0					3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	298	267					742	1323			1068	910
v/s Ratio Prot		0.03					0.01	c0.15				
v/s Ratio Perm	c0.09						0.10				c0.15	0.09
v/c Ratio	0.56	0.20					0.15	0.21			0.26	0.16
Uniform Delay, d1	28.7	26.9					3.6	3.7			8.0	7.5
Progression Factor	1.00	1.00					1.00	1.00			1.00	1.00
Incremental Delay, d2	2.4	0.4					0.1	0.4			0.6	0.4
Delay (s)	31.1	27.3					3.7	4.0			8.6	7.9
Level of Service	C	C					A	A			A	A
Approach Delay (s)		28.7			0.0			3.9			8.3	
Approach LOS		C			A			A			A	

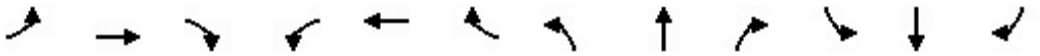
Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	75.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	0	205	1	0	111
Future Volume (Veh/h)	1	0	205	1	0	111
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	0	223	1	0	121
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			376			
pX, platoon unblocked						
vC, conflicting volume	344	224			224	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	344	224			224	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	652	816			1345	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	1	224	121
Volume Left	1	0	0
Volume Right	0	1	0
cSH	652	1700	1345
Volume to Capacity	0.00	0.13	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	10.5	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.5	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	20.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	9	4	13	7	3	11	9	149	8	5	114	12
Future Volume (vph)	9	4	13	7	3	11	9	149	8	5	114	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	4	14	8	3	12	10	162	9	5	124	13

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	28	23	181	142
Volume Left (vph)	10	8	10	5
Volume Right (vph)	14	12	9	13
Hadj (s)	-0.19	-0.21	0.02	-0.01
Departure Headway (s)	4.4	4.4	4.2	4.2
Degree Utilization, x	0.03	0.03	0.21	0.17
Capacity (veh/h)	744	745	840	842
Control Delay (s)	7.6	7.6	8.3	8.0
Approach Delay (s)	7.6	7.6	8.3	8.0
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.1			
Level of Service	A			
Intersection Capacity Utilization	21.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Appendix C

Background Developments

Existing Trip Generation Rates

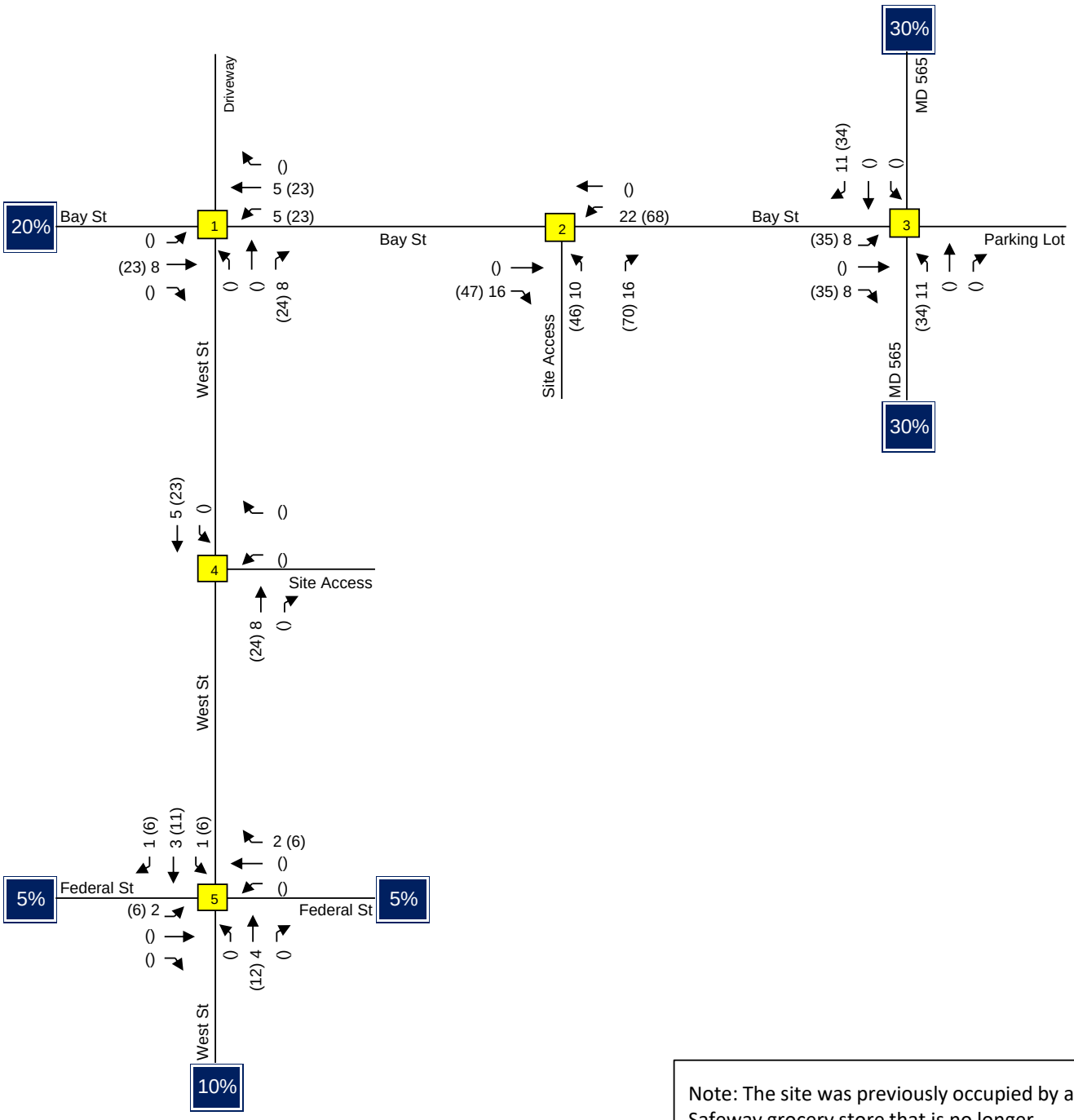
Supermarket (ksf, ITE-850)	Trip Distribution (In/Out)
Morning Trips = 2.86 x ksf	60/41
Ln(Evening Trips) = 0.81 x Ln(ksf) + 2.92	51/49

Existing Trip Generation Totals

			AM Peak			PM Peak		
			In	Out	Total	In	Out	Total
LU Code 850	Supermarket (ksf, ITE-850)	22,547 sq.ft.	38	26	64	115	116	231

NOTE: Trip Generation Rates obtained from the ITE Trip Generation Manual, 11th Edition

Traffic Impact Analysis	Trip Generation for Previous Use on Site	**Exhibit C-1**
LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BLVD, SUITE 214 SEVERNA PARK, MD 21146 www.lenharttraffic.com		



Note: The site was previously occupied by a Safeway grocery store that is no longer operational. The trips associated with the Safeway (shown on Exhibit 6) are assigned on this exhibit.

Traffic Impact Analysis

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

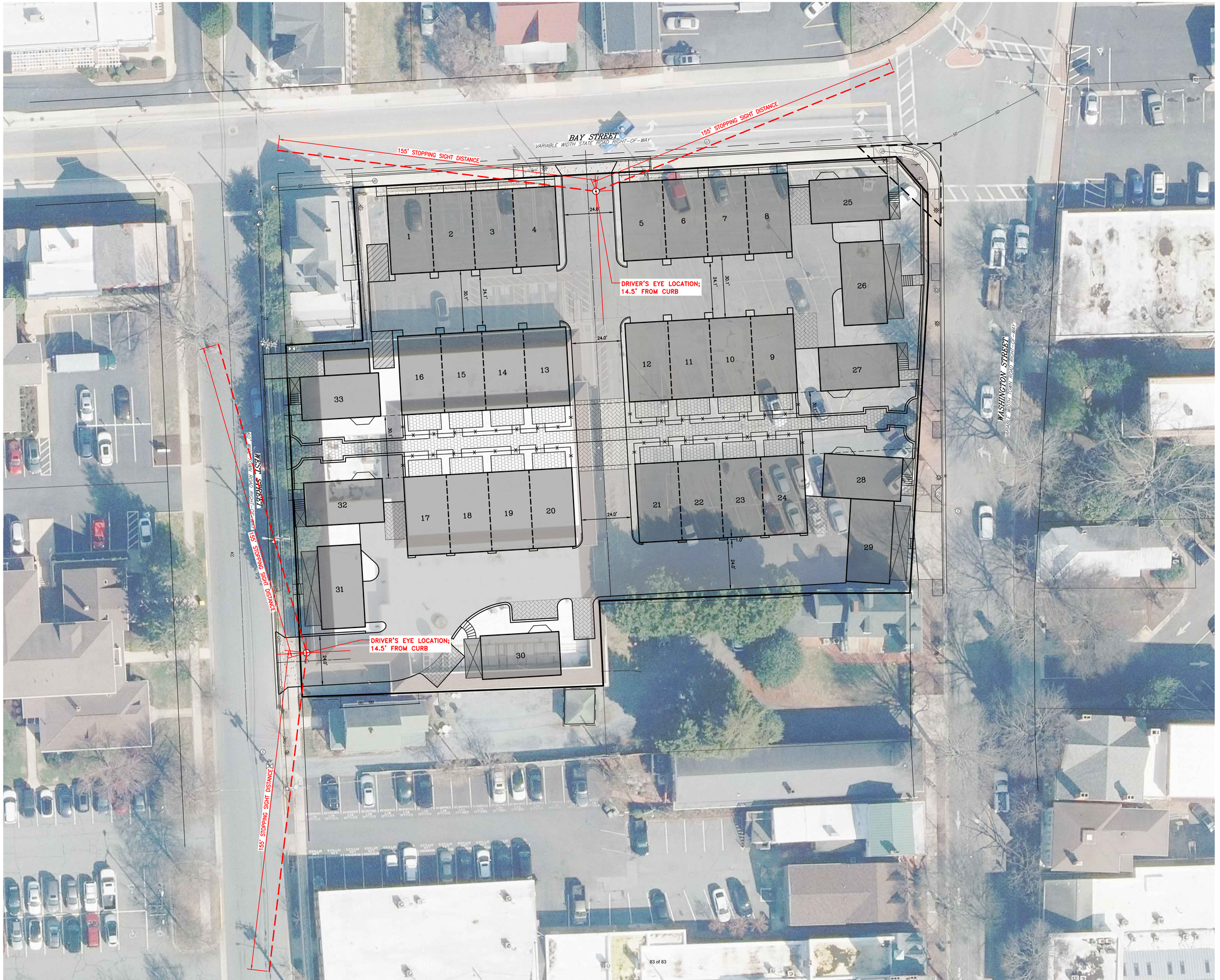
Trip Assignment for Previous Use on Property

Key: xx = AM Peak Vol's (xx) = PM Peak Vol's

Exhibit C-2

Appendix D

Sight Distance Evaluation


BAY STREET
VARIABLE WIDTH STATE ROAD RIGHT-OF-WAY
155' STOPPING SIGHT DISTANCE
155' STOPPING SIGHT DISTANCE
DRIVER'S EYE LOCATION; 14.5' FROM CURB
DRIVER'S EYE LOCATION; 14.5' FROM CURB
155' STOPPING SIGHT DISTANCE
WASHINGTON STREET
VARIABLE WIDTH STATE ROAD RIGHT-OF-WAY
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
24.0'
30.1'
24.1'
50'
NAD 83 (2011) FLORIDA EAST
20' 10' 0' 10' 20' 40'
SCALE IN FEET

TOWN OF EASTON

14 South Harrison Street
Easton, Maryland 21601

May 1, 2024

Dear Resident,

The Easton Planning Commission (Commission) will hold a public meeting on **Thursday, May 16, 2024 at 1:00 p.m**. in the Easton Town Council Chambers located on the second floor of 14 South Harrison Street. The Town of Easton Zoning Ordinance requires that owners of property located within 400 feet of a parcel on which certain types of applications are pending be given notice of upcoming meetings or hearings. If you are a tenant in or an owner of a multi-unit building, please distribute or post this notice in a visible location for all other tenants or owners to view. If you are a tenant of a rental property, please notify the property owner that this notice letter has been distributed to their property. Notice has also been sent to the Star Democrat, a sign has been posted at the subject property and the hearing agenda has been posted on the Town of Easton website: http://eastonmd.gov/.

This letter is sent to inform you that Lane Engineering has filed Planned Unit Development (PUD) Infill application 2024 - 1182 on behalf of NAI Saturn Eastern, LLC to request PUD Sketch Site Plan approval for the construction of townhomes (24 units) and single-family detached dwellings (9 units) on the property located at 139 N. Washington Street, also known as Tax Map 0104, Grid 0EA, Parcel 0612. This application is also scheduled to appear on the May 13, 2024 Historic District Commission agenda for the demolition of the old Safeway building and subsequent construction of the 33 total units.

Copies of the proposed application are on file and available for public review in the Town's Planning Office at 14 South Harrison Street between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday. **In addition, digital copies will be available for review one week prior to the scheduled meeting via the Town's website at** https://www.eastonmd.gov/129/Agendas-Minutes. If you have any questions regarding this application, please contact the Planning Office at (410) 822-1943 or via email at ssmith@eastonMD.gov.

Samantha N. Smith

Samantha N. Smith, Administrative Specialist
Planning & Zoning Department
410-822-1943 ssmith@eastonMD.gov

APG Media of Chesapeake, LLC

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

INVOICE
04/29/24

Cust. AcctID:		Creation Date:	**04/29/24**
		Ad Date:	**05/01/24**
		Class:	
Name:	**Joanne Drummer**	Ad ID:	
Company:	**TOWN OF EASTON (L)**	Words:	
Address:	**PO Box 520**	Lines:	
	EASTON, MD 21601	Agate Lines:	
		Depth:	
		Inserts:	
		Blind Box:	
Telephone:	**(410) 822-2525**		
Description:	**Planning Comm Meeting**		

Other Charges:		Total:	
Discount:			
Surcharge:		Paid Amount:	
Credits:			
Bill Depth:		Amount Due:	

CREDIT CARD DETAILS

PT	CT	CN	Number	Exp.	Amnt.

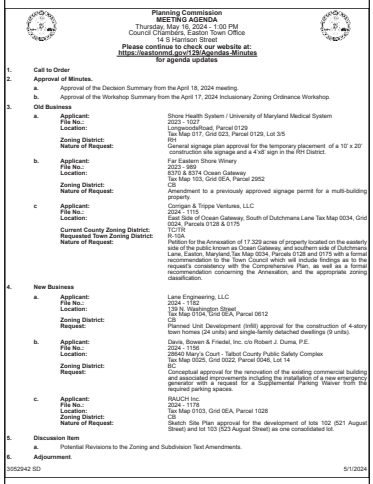
Publication	Start	Stop	Inserts
The Star Democrat	05/01/24	05/01/24	1

Ad Note:

Sign posted on April 8, 2024

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!



Planning Commission
MEETING AGENDA
Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street
Please continue to check our website at:
https://eastonmd.gov/129/Agendas-Minutes
for agenda updates

1. **Call to Order**
2. **Approval of Minutes.**
   a. Approval of the Decision Summary from the April 18, 2024 meeting.
   b. Approval of the Workshop Summary from the April 17, 2024 Inclusionary Zoning Ordinance Workshop.
3. **Old Business**
   a. **Applicant:** Shore Health System / University of Maryland Medical System
      File No.: 2023 - 1027
      Location: Longwoods Road, Parcel 0129
      Tax Map 017, Grid 023, Parcel 0129, Lot 3/5
      Zoning District: RH
      Nature of Request: General signage plan approval for the temporary placement of a 10' x 20' construction site signage and a 4'x8' sign in the RH District.
   b. **Applicant:** Far Eastern Shore Winery
      File No.: 2023 - 999
      Location: 8370 & 8374 Ocean Gateway
      Tax Map 103, Grid 9EA, Parcel 2952
      Zoning District: CB
      Nature of Request: Amendment to a previously approved signage permit for a multi-building property.
   c **Applicant:** Corrigan & Trippe Ventures, LLC
      File No.: 2024 - 1115
      Location: East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
      Current County Zoning District: R-10A
      Requested Town Zoning District: R-10A
      Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland; Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.
4. **New Business**
   a. **Applicant:** Lane Engineering, LLC
      File No.: 2024 - 1162
      Location: 139 N. Washington Street
      Tax Map 0104, Grid 9EA, Parcel 0612
      Zoning District: CB
      Request: Planned Unit Development (infill) approval for the construction of 4-story town homes (24 units) and single-family detached dwellings (9 units).
   b. **Applicant:** Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
      File No.: 2024 - 1156
      Location: 28640 Mary's Court - Talbot County Public Safety Complex
      Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
      Zoning District: BC
      Request: Conceptual approval for the renovation of the existing commercial building and associated improvements including the installation of a new emergency generator and a request for a Supplemental Parking Waiver from the required parking spaces.
   c. **Applicant:** RAUCH Inc.
      File No.: 2024 - 1179
      Location: Tax Map 0103, Grid 0EA, Parcel 1028
      Zoning District: CB
      Nature of Request: Sketch Site Plan approval for the development of lots 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot.
5. **Discussion Item**
   a. Potential Revisions to the Zoning and Subdivision Text Amendments.
6. **Adjournment.**

3052942 SD 5/1/2024

APG Media of Chesapeake, LLC

INVOICE
05/06/24

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

Cust. AcctID:		Creation Date:	**05/06/24**
		Ad Date:	**05/08/24**
		Class:	
Name:	**Joanne Drummer**	Ad ID:	
Company:	**TOWN OF EASTON (L)**	Words:	
Address:	**PO Box 520**	Lines:	
	EASTON, MD 21601	Agate Lines:	
		Depth:	
		Inserts:	
		Blind Box:	
Telephone:	**(410) 822-2525**		
Description:	**Planning Comm Meeting**		

Other Charges:		Total:	
Discount:			
Surcharge:		Paid Amount:	
Credits:			
Bill Depth:		Amount Due:	

CREDIT CARD DETAILS

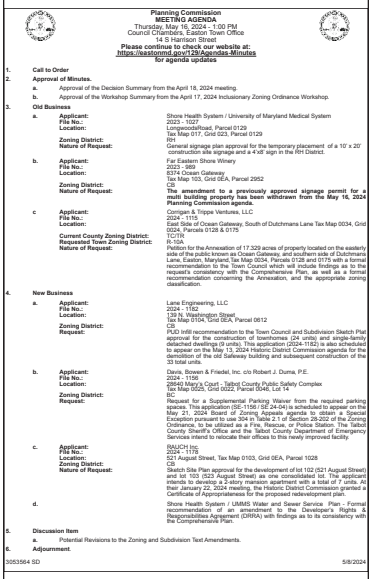
PT	CT	CN	Number	Exp.	Amnt.

Publication	Start	Stop	Inserts
The Star Democrat	05/08/24	05/08/24	1

Ad Note:

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!



Planning Commission
MEETING AGENDA
Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street

Please continue to check our website at:
https://eastonmd.gov/139/Agendas-Minutes
for agenda updates

1. **Call to Order**
2. **Approval of Minutes.**
   a. Approval of the Decision Summary from the April 18, 2024 meeting.
   b. Approval of the Workshop Summary from the April 17, 2024 Inclusionary Zoning Ordinance Workshop.
3. **Old Business**
   a. **Applicant:** Shore Health System / University of Maryland Medical System
      File No.: 2023 - 1027
      Location: Longwoods Road, Parcel 0129
      Tax Map 017, Grid 023, Parcel 0129
      Zoning District: RH
      Nature of Request: General signage plan approval for the temporary placement of a 10' x 20' construction site signage and a 4'x8' sign in the RH District.
   b. **Applicant:** Far Eastern Shore Winery
      File No.: 2023 - 989
      Location: 8374 Ocean Gateway
      Tax Map 103, Grid 0EA, Parcel 2952
      Zoning District: CB
      Nature of Request: **The amendment to a previously approved signage permit for a multi building property has been withdrawn from the May 16, 2024 Planning Commission agenda.**
   c **Applicant:** Corrigan & Trippe Ventures, LLC
      File No.: 2024 - 1115
      Location: East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
      Current County Zoning District: IL
      Requested Town Zoning District: IL-10A
      Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland, Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.
4. **New Business**
   a. **Applicant:** Lane Engineering, LLC
      File No.: 2024 - 1162
      Location: 139 N. Washington Street
      Tax Map 0104, Grid 0EA, Parcel 0612
      Zoning District: RC
      Request: PUD Infill recommendation to the Town Council and Subdivision Sketch Plat approval for the construction of townhomes (24 units) and single-family detached dwellings (9 units). This application (2024-1162) is also scheduled to appear on the May 13, 2024 Historic District Commission agenda for the demolition of the old Safeway building and subsequent construction of the 33 total units.
   b. **Applicant:** Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
      File No.: 2024 - 1156
      Location: 28640 Mary's Court - Talbot County Public Safety Complex
      Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
      Zoning District: BC
      Request: Request for a Supplemental Parking Waiver from the required parking spaces. This application (SE-1156 / SE 24-04) is scheduled to appear on the May 21, 2024 Board of Zoning Appeals agenda to obtain a Special Exception pursuant to use 304 in Table 2.1 of Section 28-202 of the Zoning Ordinance, to be utilized as a Fire, Rescue, or Police Station. The Talbot County Sheriff's Office and the Talbot County Department of Emergency Services intend to relocate their offices to this newly improved facility.
   c. **Applicant:** RAUCH Inc.
      File No.: 2024 - 1179
      Location: 521 August Street, Tax Map 0103, Grid 0EA, Parcel 1028
      Zoning District: CB
      Nature of Request: Sketch Site Plan approval for the development of lot 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot. The applicant intends to develop a 2-story mansion apartment with a total of 7 units. At their January 22, 2024 meeting, the Historic District Commission granted a Certificate of Appropriateness for the proposed redevelopment plan.
   d. Shore Health System / UMMS Water and Sewer Service Plan - Formal recommendation of an amendment to the Developer's Rights & Responsibilities Agreement (DRRA) with findings as to its consistency with the Comprehensive Plan.
5. **Discussion Item**
   a. Potential Revisions to the Zoning and Subdivision Text Amendments.
6. **Adjournment.**

3053564 SD 5/8/2024

TOWN OF EASTON
PLANNING & ZONING
14 S Harrison Street, Easton MD 21601

Date of Hearing: May 16, 2024

4b

PLANNING COMMISSION
PUBLIC HEARING
STAFF REPORT

SUBJECT:	**28640 Mary's Court - Talbot County Public Safety Complex**
ELECTION WARD:	Ward 1
CRITICAL ACTION DATE:	At the pleasure of the Commission
STAFF CONTACTS:	Joseph Mayer, Plan Reviewer Miguel Salinas, Director of Planning and Zoning
APPLICANT:	Robert J. Duma, Davis, Bowen & Friedel, Inc. Raymond P. Clarke, Talbot County, Maryland

DOCUMENT CREATED ON: May 6, 2024

PURPOSE: The applicant is seeking a Supplemental Waiver Request Application approval from the Planning Commission to provide less than the minimum required off-street parking. The current code requires 195 parking spaces. The applicant proposes 138 parking spaces.

RECOMMENDATION: Staff supports Planning Commission approval of the waiver request, with a condition (see below).

APPLICATION INFORMATION:	
APPLICANT: Talbot County Maryland % Raymond P. Clarke	**REPRESENTATIVE:** Davis, Bowen & Friedel, Inc: Robert J. Duma Talbot County Maryland % Raymond P. Clarke

PARCELS/ACREAGE:

Parcel Information	Acreage
Map 0025, Grid 0022, Parcel 0046, Lots 14 & 14A	4.832

ACCEPTANCE DATE: April 29, 2024	**LOCATION:** 28640 Mary's Court
EXISTING ZONING BC	**EXISTING LAND USE:** Office/commercial
HISTORIC DISTRICT: Not Applicable	**FUTURE LAND USE MAP:** Business Commercial

CONTEXT:
Location/Site Access – The subject property is located at the corner of Mary's Court and Mistletoe Drive, fronting on the North side of Mary's Court.

Existing Conditions – The subject property is currently a 27,648 SF two-story commercial building.

Surrounding Properties
- 8880 Mistletoe Drive Drive - BC
- 8845 Mistletoe Drive Drive - BC
- 8831 Mistletoe Drive Drive - BC
- 28659 Mary's Court - BC
- 28595 Mary's Court - BC
- 28600 Mary's Court - BC

***Figure 1**: Vicinity Map*

PROPOSAL: Talbot County Maryland (applicant) is seeking a Supplemental Waiver Request Application approval from the Planning Commission for less parking. The current code requires 195 parking spaces. The applicant has provided 138 parking spaces to construct a 1,933 square foot (SF) sally port to the existing commercial building for a public safety complex. The project would utilize the existing site design, landscaping, and building design where possible. All proposed features are requirements of the sally port and necessary traffic movements around these facilities. Other site improvements include the installation of natural gas service, installation of an emergency generator, relocation of the trash dumpster, and installation of a new parking lot. The proposed project will serve the Talbot County Sheriff's Department and the Department of Emergency Services.

BACKGROUND: On May 1, 2023, Talbot County Maryland (applicant) submitted an application for a Subdivision & Property Line Adjustment Application to remove the property line between Lots 14 & 14A. Approval is pending on the applicant addressing Town review comments dated July 24, 2023. On March 27, 2024, the applicant, submitted an application to the Easton Staff Development Review Committee for site plan and architectural approval of a proposed sally port and future maintenance/storage building. The applicant opted to eliminate the future maintenance/storage building to maximize available parking spaces. The applicant also submitted an application (SE-1156 / SE 24-04) to appear on the May 21, 2024 Board of Zoning Appeals agenda to obtain a Special Exception pursuant to use 304 in Table 2.1 of Section 28-202 of the Zoning Ordinance, to be utilized as a Fire, Rescue, or Police Station.

ZONING ANALYSIS:

A. Permissible Land Uses

28-201 table 2.1 (3) 304									BC			
304	Fire, Rescue, or Police Station	SE	SE	SE	SE	SE	SE	SE	SE	SE		

Analysis – The proposed project is presented and described by the Applicant as an existing two-story building. The Applicant proposes a 1,933 square foot (SF) sally port to the existing commercial building for a public safety complex. The project is categorized as a *"Fire, Rescue, or Police Station"*. The proposed use is permitted with a Special Exception within Table 2.1 Table of Permissible Uses.

B. Off-Street Parking

28-1001.3 Parking Requirements

	Use/Activity	Minimum Vehicle Spaces	Maximum Vehicle Spaces	Minimum Bicycle Spaces	Notes
	Institutional or Community Facilities				
59	Public Safety, fire and rescue, or police station.	1 per employee + 1 per each 3 Personnel on Normal shift +1 Per 200 sf usable Office space	–	3% of the number of vehicle parking spaces.	

Total Site Parking Required:

Use/Activity #59: 42 Employees x 1 space per employee: 42 Spaces Required- Minimum
+ 1 per each 3 personnel (42 Employees/3) : 14 Spaces Required- Minimum
+ 1 space/200 SF GFS (27,648 SF/200 = (138.24) 139 Spaces Required-
Total Minimum spaces required: 195 spaces
Total spaces provided: 138 spaces

Bicycle Spaces: 195 Spaces Required x 3% = 5.85 spaces required
Total bicycle spaces provided: 9

Analysis - The total minimum spaces required is 195 spaces. The applicant has 138 off-street parking spaces and believes that the amount of spaces is sufficient to support the operations of

the complex and will not have a negative impact on the health, safety or character of the property or adjacent properties. Additionally, using "usable office space" instead of gross square footage for the calculation should be sufficient and would reduce the parking requirement further. Further, five (5) of the employees in the calculation are on the road and do not require leaving a vehicle in the parking lot. Staff supports the reduction of parking spaces, recognizing that it should not impose any unnecessary parking congestion or burden on the Town and nearby residents.

C. Business Commercial District Development Standards

Table 1. Development Standards		
BC Zoning District	**Standard**	**Proposed**
Setbacks	Front = 40 feet Side = 10 feet Rear = 30 feet	Front = 75 feet Side = 10 feet Rear – 30 feet
Lot Size (min.)	40,000 square feet	210,481.92 square feet
Lot Frontage (min.)	100 feet	618 feet
Building Envelope (min.)	30 feet x 80 feet	418 feet X 158 feet
Lot Coverage (max.)	50% (Lot Area)	30.1% (Lot Area)
Height (max.)	35 feet	30.5 feet +/-

§ 308.2 of the Zoning Ordinance states that development within the Business Commercial District shall also meet these additional requirements:

- ***Off-Street Parking shall be provided in accordance with the provisions of Section 28 – 1001.***
- ***There shall be no open storage on any lot or open areas, nor shall any products be displayed in open areas. All outside storage shall be adequately screened and landscaped in accordance with provisions of Section 28 – 1014 of this Ordinance.***
- ***All on-site lighting unless approved otherwise by the Planning and Zoning Commission shall be low cut-off shielded luminaries at 18' height and light shall not shine off-site at levels greater than 1-foot candle.***
- ***All off-street loading and unloading areas shall be screened from view by permanent decorative screens or natural planting, either of which shall be a minimum of eight (8) feet in height, in accordance with the provisions of Section 28 – 1014 of this Ordinance.***

- ***All areas not devoted to buildings or parking areas shall be landscaped and maintained in a suitable manner, in accordance with the provisions of Section 28 – 1014 of this Ordinance.***

Analysis - The site falls under the BC - Business Commercial District Area and meets the 28-308 Development Standards. Any comments or concerns from the ESDR review letters will be addressed during the Development Site Plan review.

D. Forest Conservation

Easton Forest Conservation Ordinance #718, Article III,* § 31-3.1 *Relevance

A. Any person making an application for a subdivision, project plan, grading, or sediment and erosion control approval on units of land 40,000 square feet or greater after the effective date of this Ordinance.

Analysis - The site is located within the Talbot Commerce Park. Forest Conservation was approved at the original Subdivision Plat (Plat PC 4/35G).

POLICY ANALYSIS:

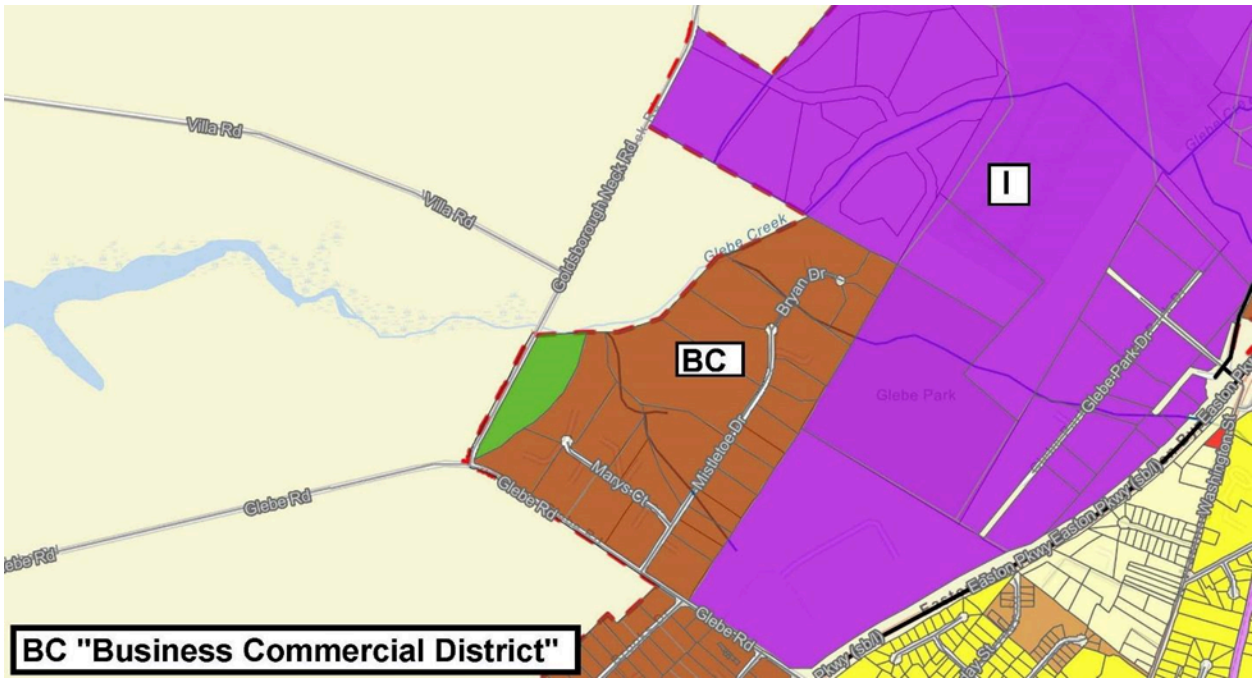


Figure 2: Zoning Map

The submission of a site plan for a proposed use or development activity shall not be approved unless it meets the factors below:

1. The site plan meets the design principles and standards and required improvements set forth in this Ordinance, the Town Comprehensive Plan, the Town of Easton Subdivision Regulations, and other ordinances, regulations, and policies established by the Town of Easton.

Analysis - The proposed site plan meets the design requirements of the Town of Easton, including those described in the Town's Comprehensive Plan, Zoning Code, and any Design Guidelines.

Town of Easton 2010 Comprehensive Plan Design Principles (Principle #1) Integrated uses are desirable- Applicant's response: *The plan set conforms to the recommended design principles of integrated use noted in the Comprehensive Plan.*

(Principle #2) Natural features should determine design – *Applicant's response: The plan set conforms to the natural features noted in the Comprehensive Plan..*

Staff notes that Forest Conservation was approved at the original Subdivision Plat (Plat PC 4/35G); site layout orientated to take advantage of natural drainage patterns.

(Principle #3) Automobiles should not determine design – *Applicant's response: The plan set conforms to automobiles not determining design as noted in the Comprehensive Plan.*

Staff notes that the applicant requests a parking waiver for less parking.

(Principle #4) Ample Open Space should be provided within & around neighborhoods – *Applicant's response: The plan set conforms to usable open space as noted in the Comprehensive Plan.*

Staff notes that open space is not applicable.

(Principle #5) Architecture should respect Easton's Historical Development – *Applicant's response: The plan set conforms to the recommended design principles for Easton, the architecture respects Easton's history as noted in the Comprehensive Plan.*

Staff notes that the application proposes a small building addition and parking in an existing industrial park with similar zoning along adjacent properties.

(Principle #6) Signs should inform but not dominate – *Applicant's response: Signs are to inform.*

Staff notes that any proposed monument sign will require a Signage Application to be submitted prior to installation. Signs should inform but not dominate the area.

(Principle #7) Neighborhoods should contain a diversity of housing types – *Applicant's response: Not applicable to this application.*

Staff notes that this is not a residential development so this Principle is not applicable.

(Principle #8) Residential neighborhoods should be interesting places – *Applicant's response: Not applicable to this application.*

(Principle #9) Neighborhoods should connect – *Applicant's response: Not specifically applicable to this application.*

2. The site plan avoids or minimizes adverse impacts upon features (whether on-site or off-site) of historical, cultural or ecological significance.

Analysis - The proposed site is not within the Historic District or the Critical Area. This project would provide a public safety complex to the existing commercial building with improved amenities; parking, stormwater management facilities and landscaping.

3. The proposed use or development activity will not substantially increase traffic hazards due to traffic generated by the proposed use, the location of curb cuts or the layout of internal traffic circulation.

Analysis - The proposed use and activity will not increase traffic hazards in the surrounding area. Adequate off-street parking is provided.

4. The site plan and the proposed use or uses do not cause any adverse impact upon the health or safety of persons residing or working in the area surrounding the site or upon the character of the neighborhood surrounding the site; and

Analysis - There would be no adverse impacts. The existing property is located within a business commercial zoned business park. The proposed use would provide a public safety complex with associated parking, stormwater management facilities and landscaping.

.

5. ***The site plan improves the water quality of the Chesapeake Bay or its tributaries.***

Analysis - The proposed site would meet required design practices for stormwater management.

RECOMMENDED CONDITION:

Staff recommends the Planning Commission approve the Supplemental Waiver Request Application with the following condition:

- The Applicant is required to obtain approval from the Board of Zoning Appeals to obtain a Special Exception pursuant to use 304 in Table 2.1 of Section 28-202 of the Zoning Ordinance, to be utilized as a Fire, Rescue, or Police Station.

DRAFT MOTIONS:

1. I move that the Planning Commission approve the Supplemental Waiver Request Application to staff's Condition of Approval.

OR

2. I move that the Planning Commission table the application to the June 20th Commission meeting for further discussion.

OR

3. I move an alternate motion.

ATTACHMENTS:
1. 2024.03.27 ESDR Determination Letter & Application, paper copy & PDF
2. 2024.04.28 ESDR Comment Response Letter, paper copy & PDF
3. 2024.04.29 Planning Concept Use & Design Application, paper copy & PDF
4. 2024.04.29 Site Plan Application, paper copy & PDF
5. 2024.04.29 Supplemental Waiver Application, paper copy & PDF
6. 2024.04.29 TC Public Safety Complex Architectural Rendering, paper copy & PDF
7. 2024.04.29 TC Public Safety Complex Project Plans, paper copy & PDF
8. 2024.04.29 TC Public Safety Complex Site Plan, paper copy & PDF
9. 2024.05.05 TC Public Safety Complex - May PC 400' Notice Letter, paper copy & PDF

TOWN OF
EASTON
ENGINEERING DEPARTMENT

DATE: **May 7th, 2024**

TO: **Ray Clarke, P.E. – Talbot County**
Robert Duma, P.E. – DBF
cc: **Rick Van Emburgh – Town Engineer**
Lynn Thomas – Town Planner
Aaron Goller – EUC
FROM: **Sierra Clem – Engineering Department**
SUBJECT: **Talbot Commerce Park Lot 14 & 14A – Sketch Site Plan Review for Planning Commission**

Our office has reviewed the Application for the Subject project at the 3/27/2024 ESDR meeting and has reviewed the revised application received 4/29/2024 for the 5/16/2024 Planning Commission Meeting. The application submitted now proposes the addition of a sally port to the existing commercial building on the property, the installation of utilities and additional parking.

The **Sketch Site Plan** and **Sketch Stormwater Management Plan** should be revised to address the following comments:

1. Please submit a revised SWM report reflecting the proposed changes from the 3/26/2024 SWM report. The site does not qualify for section 3.3 of the Town of Easton Stormwater Ordinance – Redevelopment. The current proposal includes removal and revisions to existing stormwater management on site. The site should be designed to accommodate the approved 2016 approved Stormwater Report as well as the current proposal. Please address how comprehensive SWM is being met for the entire site.
2. Please note that the existing Stormwater Easements on site will need to be revised to accommodate the relocation of features on site. This will need to be addressed prior to receiving a Town Grading Permit.

Please note that existing SWM features on site are currently inspected under the Town's MS4 program. Features to be revised and remain will continue to be regularly inspected on a triennial basis.

Please address the comments above and submit a revised Sketch Site Plan and Sketch Stormwater Management Plan.

Please contact me if you have any questions. Thank you.

P.O. Box 520, Easton, Maryland 21601
410-820-8822
Engineering@EastonMD.gov - www.EastonMD.gov

TOWN OF EASTON
Planning & Zoning Department
14 South Harrison Street
P.O. Box 520
Easton, Maryland 21601

Easton Staff Development Review Worksheet

Date: March 27, 2024
Project: 28640 Marys Court - Talbot County Public Safety Complex
To: Mr. Robert J. Duma – Davis, Bowen & Friedel, Inc. (Agent)
CC: Mr. Raymond Clarke - % Talbot County, Maryland (Owner)

The Easton Staff Development Review (ESDR) Committee meeting was held on March 27th at 11:00 am. Staff reviewed the Site Sketch Plan for the proposed sally port and future maintenance/storage building on the property located at 28640 Mary's Court, also known as Tax Map 0025, Parcel 0046, Lot 14.

The Committee determined that the project will need to address all agency comments as specified in the attached review letters and at ESDR. At this time, based on the ESDR sketch plan submission, Staff did identify that the Applicant will need to obtain a Special Exception approval from the Board of Zoning Appeals for the permitted land use "Fire, Rescue or Police Stations" on the above stated property.

Upon completion of the required items, the Committee also determined that the Applicant will need to obtain approval from the Planning Commission for: 1) Supplemental Waiver Request to permit off-street parking spaces below the minimum required, 2) Sketch Site Plan, and 3) architectural review of the maintenance/storage building.

The next Planning Commission meeting is scheduled for **Thursday, April 18, 2024 at 1:00 pm.** Submit all documentation to the Planning and Zoning Department no later than Thursday, April 4th at 1:00 pm. The following Planning Commission meeting is scheduled for **Thursday, May 16, 2024 at 1:00 pm.** Submit all documentation to the Planning and Zoning Department no later than Monday, April 29th at 1:00 pm. Files for presentation at the Planning Commission need to be provided on a flash drive. In addition, provide a digital submittal (via email) of all supporting documents necessary for the Planning Commissions review, including **six paper copies**.

The next Board of Zoning Appeals meeting is scheduled for **Tuesday, May 21, 2024 at 9:00 am.** Submit all documentation to the Planning and Zoning Department no later than Tuesday, April 16th at 12:00 pm. Provide a digital submittal (via email) of all supporting documents necessary for the Board of Zoning Appeals review, including **four paper copies**.

Please contact the Planning & Zoning Department at 410 822-1943 with any questions.
Sincerely,

Joseph A. Mayer
Plan Reviewer

TOWN OF EASTON
PLANNING & ZONING DEPARTMENT
P.O. Box 520
Easton, Maryland 21601
410-822-1943
www.EastonMD.gov

DATE: **March 27, 2024**
TO: **Robert J. Duma –** Davis, Bowen & Friedel, Inc. (Agent)
Raymond Clarke - % Talbot County, Maryland (Owner)
Cc: **Miguel Salinas** – Director, Planning & Zoning Department
Rick VanEmburgh – Town Engineer, Department of Engineering

FROM: **Joseph A. Mayer -** Plan Reviewer, Planning & Zoning Department
SUBJECT: **28640 Marys Court - Talbot County Public Safety Complex**

We reviewed the **March 6, 2024** Sketch Plan Submittal for the Subject Project and have the following comments:

PLANNING & ZONING COMMENTS

Sketch Site Plan Review #1

1. Per Chapter 28-201, Table 2.1, Table of Permitted Uses of the Zoning Code, the Applicant will be required to obtain a Special Exception request from the Board of Zoning Appeals for the use of a Fire, Rescue or Police Stations. Please see the attached application.

2. The future maintenance/storage building is greater than 5,000 square feet and will require the Applicant to submit an application to the Planning Commission for architectural review and approval. Provide conceptual building elevations or renderings illustrating the character, scale, and materials of the proposed structure. Such elevations or renderings shall be sealed by a licensed professional.

3. Per Appendix B, Sketch Plan Submittal Checklist, *a statement describing the extent to which the application complies with the Recommended Design Principles for Easton set forth on pages 29-31 of the Comprehensive Plan.* Please respond to the nine (9) Recommended Design Principles and place them onto the Title Sheet, C-001.

4. Revise the parking calculations on sheet C-001 to include the minimum required vehicle and bicycle spaces and tabulate the proposed vehicle spaces. Include the gross floor area for buildings. In addition, show the designated number of bike racks on all applicable plan views.

5. The proposed parking spaces are less than the required number of spaces. The

applicant will need to be scheduled for the Planning Commission to review a Supplemental Waiver Request Application for parking spaces. Please see attached application.

6. Show the zoning district boundaries on the Vicinity Map.

7. Per Chapter 28-1007.3.A.3.l.1 thru 5 of the Zoning Code, provide an impact statement on the site plan.

8. Revise label of *"Pr. Garage Building"* on sheet C-001 to read; *"Future Maintenance/Storage Building".*

9. The future Maintenance/Storage Building will require applicable ADA vehicle spaces. Please indicate location on sheet C-101.

10. Dimension the drive aisles and a typical parking space area on sheet C-101.

11. Check the drive aisle width between the proposed forty-five degree parking spaces and the entrance landing area for the future Maintenance/Storage Building. The minimum aisle width for a one-way aisle is sixteen feet. Please see the markup below.

12. Indicate the traffic direction of the proposed one-way drive aisle on sheet C-101.

13. Per Chapter 28-1007.A.3.g of the Zoning Code, provide safe pedestrian movement for parking spaces to enter the existing two-story office building and the future maintenance/storage building.

14. Will there be a loading and unloading area for the proposed site? If so, please provide applicable screening per Chapter 28-308.2.J of the Zoning Code .

15. Per Appendix B, Sketch Plan Submittal Checklist requires, *general location and description (r.e. Intended function, proposed species. etc.) of proposed landscaping.* List the proposed native species on a plan view and a Landscape Legend on sheet C-101.

16. Per *Chapter 28-1014.6.E.2.c* of the Zoning Code, *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.* ***See Figure 10-7*** . Areas that cannot utilize the replacement of Bufferyards for required hedges can be addressed by applying for a Supplemental Waiver Request Application for Landscaping & Buffering. Please see the markup below.

17. Will there be on-site lighting? Any outdoor lighting shall be shielded to direct light and glare only onto the mini-warehouse facility and may be of sufficient intensity to discourage vandalism and theft. Said lighting and glare shall be deflected, shaded, and focused away from all adjoining property.

18. Show the designated number of bike racks on plan view and add to the Data Column on sheet C-001.

19. Revise the proposed use callout within the Data Column to be consistent with Chapter 28-308.3 A thru K of the Zoning Code.

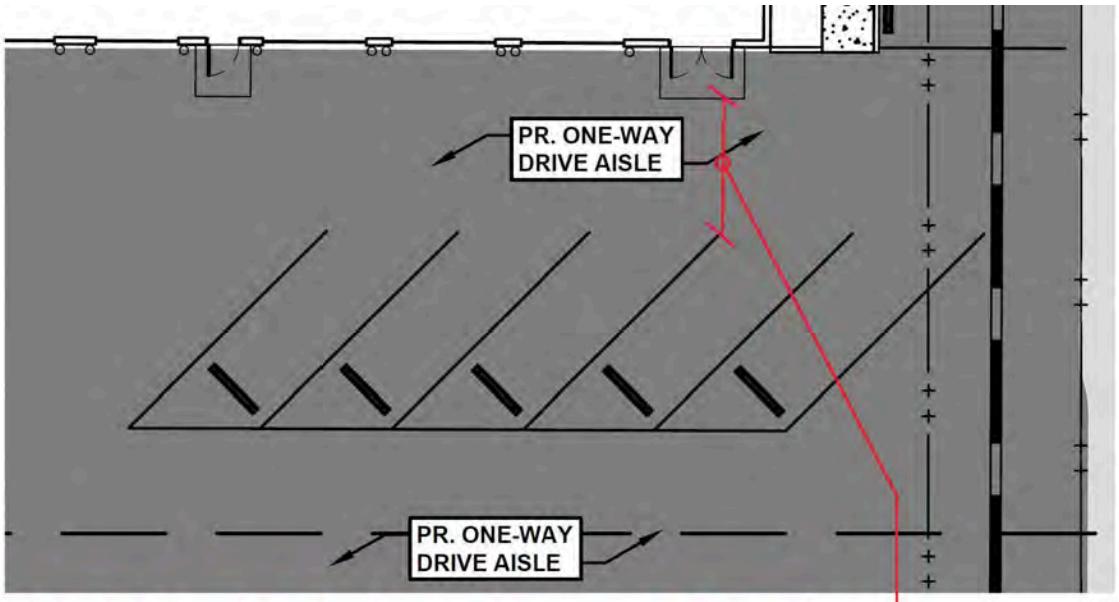
20. Provide dimensions between the future structure and property lines.

21. Show and label all building restriction lines on all applicable plan views. Is the 50’ front building restriction line per the private covenants, deed 885/399? Please verify and label on plan views.

22. Determine applicable Bufferyards required for the site or apply for a Supplemental Waiver Request Application for Landscaping & Buffering.

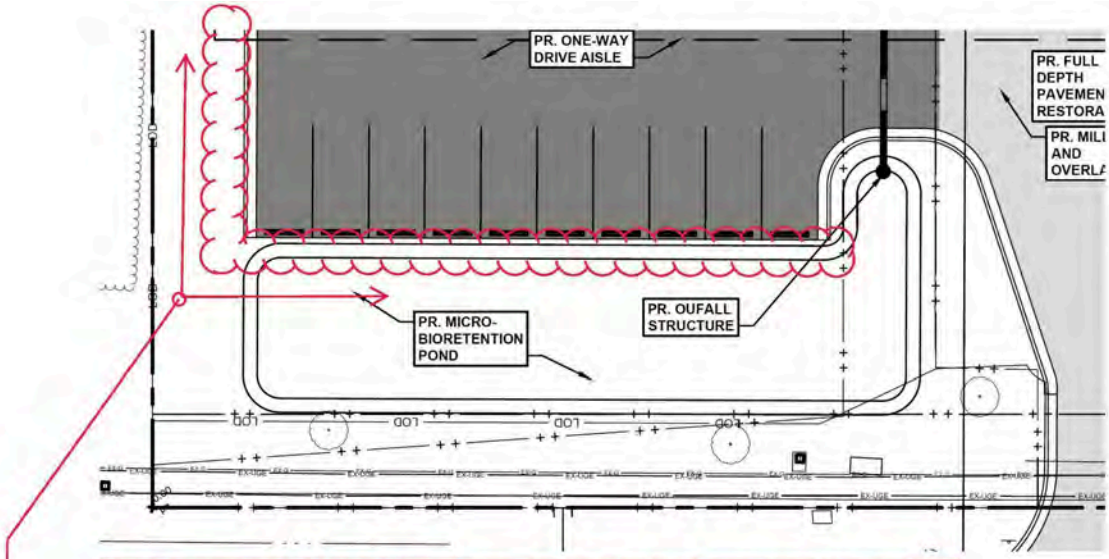
23. A*ny proposed monument sign will require a Signage Application to be submitted prior to installation.* Please add this statement within the Data Column on sheet C-001.

Review Comment #11



Check the drive aisle width between the proposed forty-five degree parking spaces and the entrance landing area for the future Maintenance/Storage Building. The minimum aisle width for a one-way aisle is sixteen feet.

Review Comment #16



Per Chapter 28-1014.6.E.2.c of the Zoning Code, 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).

Plan Review Status

Sketch Site Plan Review			Comments
Plans Approved	☐Y	☒ N	Please review the comments above. Revise and resubmit.

Forest Stand Delineation & Forest Conservation Plan	
☐ Required ☐ Submitted ☐Approved	***The Easton Forest Conservation Requirements of the Town Code, Article III, § 31-3.1 Relevance, states that the requirements are applicable to any person making application for a subdivision, project plan, grading, or sediment and erosion control approval on units of land 40,000 square feet or greater after the effective date of the Ordinance.*** **Analysis -** The development of this site has already been mitigated for Forest Conservation under the 1997 Forest Conservation Plan, recorded on record plat MAS 4/35G. Any impact into the existing Forest Conservation area would require an updated plan.
Other	
☒Required ☐ Submitted ☐ Approved	**IMPACT FEES** **Please note, there will be a required Impact Fee for all proposed buildings. The Town's Impact Fees and Inspection Fees are to be paid upon the time you pick up your Building Permit. Please provide building square footage with appropriate use for calculation of Impact Fee.** **Talbot County Impact Fees are due prior to obtaining your Building Permit. Please provide receipt of payment to the Town's Building Inspection Division.** **Please add estimated Town Impact Fee calculations to cover sheet and add note below calculations; "*Note: The Impact Fee indicated in this notation shall not be construed as vested and until submission of the building application.*"** **Lot Line Revision Plat** **The owner submitted a Subdivision & Property Line Adjustment Application submitted for review on May 1, 2023. Approval is pending applicant addressing review comments dated July 24, 2023.**

Please contact me if you have any questions. Thank you.

TOWN OF
EASTON
ENGINEERING DEPARTMENT

DATE: **March 13th, 2024**

TO: **Ray Clarke, P.E. – Talbot County**
Robert Duma, P.E. – DBF
cc: **Rick Van Emburgh – Town Engineer**
Lynn Thomas – Town Planner
Aaron Goller – EUC
FROM: **Sierra Clem – Engineering Department**
SUBJECT: **Talbot Commerce Park Lot 14 & 14A – Sketch Site Plan Review for ESDR**

Our office has reviewed the Application for the Subject project received on 3/11/2024 which is scheduled for the 3/27/2024 ESDR meeting. The application submitted proposes the addition of a sally port to the existing commercial building on the property, the installation of utilities, a new parking lot, and the footprint of a future maintenance/storage building.

The **Sketch Site Plan** is **Acceptable to the Engineering Department** and the **Sketch Stormwater Management Plan** is **Approved with the following conditions**:

1. The site does not qualify for section 3.3 of the Town of Easton Stormwater Ordinance – Redevelopment. The current proposal includes removal and revisions to existing stormwater management on site. The site should be designed to accommodate the approved 2016 approved Stormwater Report as well as the current proposal. Please address how comprehensive SWM is being met for the entire site.
2. Provide an ESD Summary Chart (similar to TOE-SWM-7.01) on the plans. This should include information for the entire site since existing ESD features are being removed.
3. Provide a SWM Quantity Summary Chart (similar to TOE-SWM-7.02) on the plans.
4. Please note that the existing Stormwater Easements on site will need to be revised to accommodate the relocation of features on site. This will need to be addressed prior to receiving a Town Grading Permit.

Please note that existing SWM features on site are currently inspected under the Town's MS4 program. Features to be revised and remain will continue to be regularly inspected on a triennial basis.

Please address the comments above and submit a Preliminary Site Plan and Preliminary Stormwater Management Plan.

Please contact me if you have any questions. Thank you.

P.O. Box 520, Easton, Maryland 21601
410-820-8822
Engineering@EastonMD.gov - www.EastonMD.gov

TOWN OF EASTON

PO Box 520
Easton, Maryland 21601
(410)-822-2526 Fax (410)-822-8738
Office of Building Inspection.

ESDR- Building Inspection and Permit Department Comments

Date: March 26, 2024

Project; Talbot County Public Safety Complex
Addition for a Sally Port
Ray Clark County Engineer

A Town of Easton Building Permit is required for all new construction that involves Addition and/or Alteration to an approved existing building.

- Contact this Department and verify current Building Codes including the Town of Easton's modifications prior to preparation of Building plans.

  The following lists items required on the construction drawings in order to apply for a Building Permit.

  - Indicate the type of construction, addition or alterations.
  - Construction Documents (3 sets) for any new construction will be required. Documents must be prepared by a registered Maryland Registered Architect, with original plans signed and sealed. A code analysis completed by a Registered Maryland Architect including, classification (use group), construction type, and occupant loads must be completed and included with the application materials. (See Maryland Architectural Act- Comar sect. 3-101, 102, 103)
  - Items that must be addressed by the construction documents will be structural strength, means of egress (include travel distance), facilities, stability, sanitation, light and ventilation, energy conservation and safety to life and property from fire and other hazards attributed to the built environment, **Accessibility**, and other safety requirements for public access.
  - All mechanical, electrical, and plumbing permits as required must include construction documents signed and sealed by a professional engineer and by a responsible party for the contractor receiving the permit. Be sure the Town of Easton modifications are included. Section 6-16 of the Town Code.
  - An appointment may be set up with this department to review your permit application materials prior to permit application submission.

- **State Fire Marshal,** (410-822-7609) plan review and inspections are required. It is your responsibility to contact them and make application.

EASTON UTILITIES
Life. Made better.™

Easton Utilities Commission

Plan Review Comments

Date: Thursday, March 21, 2024
To: Joe Mayer; Nicholas Johnson; Sierra Clem
From: Kia Gibbs on behalf of Aaron Goller, PE **No. of Pages:** 1
Regarding: 28640 Mary's Court
Phase: Sketch Site Plan **SUBM:** 1 **Status:** **Approved as Noted**

Easton Utilities Commission has reviewed the above referenced plans and have provided the following comments. Please provide your corrections as listed below. Additional reviews will be required to ensure comments have been addressed. Items or documents not provided on initial submission will be subject to further review. Please contact Kia Gibbs, Admin Support at kgibbs@eucmail.com should you have any questions.

ITEM:	DRAWING / PAGE	COMMENTS:
1	C-102	See electric comments. What are future electric plans for future maintenance /storage building; existing transformer or new service.
2	C-102	See CATV comments

PR. 15" HDPE STORM DRAIN PIPE

PR. 12" HDPE OUTFALL

PR. 15" HDPE STORM DRAIN PIPE

PR.6" HDPE STORM DRAIN PIPE

EX. TWO STORY OFFICE BUILDING

PR. STORM DRAIN PIPE TO TIE INTO EXISTING CLEANOUT

PR. SALLY PORT

PR. SEWER LATERAL TO TIE IN TO EXISTING STUB

PR. RELOCATION OF EXISTING IRRIGATION CONTROL VALVE

PR. WATER SERVICE TO TIE INTO EXISTING SERVICE

PR. RELOCATION OF EXISTING GRINDER PUMP AND CONTROL PANEL

CONTRACTOR TO TEST PIT AND IDENTIFY LOCATION OF EXISTING UNDERGROUND TELECOMMUNICATION AND POWER LINES.

PR. FORCE MAIN TO TIE BACK INTO EXISTING FORCE MAIN

EXISTING PAVING TO BE REMOVED

PROPOSED UTILITY PLAN

1"=20'

0' 20' 40' 60'

SCALE: 1" = 20'

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION. COPYRIGHT © 2024

STATE OF MARYLAND
ROBERT J. DUMA
Lic. No. 38830
PROFESSIONAL ENGINEER

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the laws of the State of Maryland. License No. 38830 Expiration Date: 12-29-24

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS · ENGINEERS · SURVEYORS
EASTON, MARYLAND 410.770.1744
MILFORD, DELAWARE 302.424.1441
SALISBURY, MARYLAND 410.543.9091

TALBOT COUNTY
PUBLIC SAFETY COMPLEX
PHASE 3: SALLY-PORT & GARAGE BUILDING
28640 MARY'S COURT, EASTON MD

DATE	COMMENTS

Date: MARCH 2024
Scale: 1"=20'
Dwn.By: NSB
Proj.No.: 1503A030

PROPOSED UTILITY PLAN

Dwg.No.: C-102

RECEIVED
MAR 08 2024
TOWN OF EASTON

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Easton Staff Development Review

Property Information

Address	28640 Marys Ct, Easton, MD 21601-0000						
Tax Map	0025	Grid	0022	Parcel	0046	Lot	14
Deed Refernce:	Liber	03016	Folio	00022			
Plat Reference:	Liber	87	Folio	11			
Base Zoning District	BC	Historic District Y ☐ N ☑		Planning Redevelopment Y ☐ N ☑			

Purpose of Application / Description of Work:

Work includes the addition of a sally port to the existing commercial building on the property. Other site improvements include the installation of natural gas service, installation of emergency generator, relocation of the trash dumpster, installation of a new parking lot, and the footprint of a future maintenance/storage building.

Owner

Name	Raymond P. Clarke, County Engineer, Talbot County Department of Public Works		
Mailing Address	215 Bay Street, Suite 6, Easton, Maryland 21601		
Telephone No.	(410) 770-8170	Email	rclarke@talbotcountymd.gov

Applicant / Agent

Name	Robert J. Duma, P.E., Associate		
Mailing Address	106 N. Washington Street, Suite 103, Easton, Maryland 21601		
Telephone No.	443-366-9038	Email	rjd@dbfinc.com

Surveyor / Engineer

Name	Robert J. Duma, P.E.	License No.	38830	Expiration Date	12-29-2024
Mailing Address	106 N. Washington Street, Suite 103, Easton, Maryland 21601				
Telephone No.	443-366-9038	Email	rjd@dbfinc.com		

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 03-05-2024

Printed Name of Applicant or Agent Robert J. Duma, P.E.

For Office Use Only

Easton Staff Development Review Meeting Required Y ☒ N ☐

Easton Staff Development Review Meeting Date 03/27/2024

2024 - 1156

ESDR 24-06

Completeness Check Date

Revisions/Resubmissions Required Y ☐ N ☐

Resubmission Date

Documents Received Y ☐ N ☐

Staff Determination

Planning Commission Requir(Y ☒ N ☐ 05/16/2024

BOZA Required Y ☒ N ☐ 05/21/2024

Historic District Commission Required Y ☐ N ☒

Resubmission for ESDR Required Y ☐ N ☒

Staff Signature Samantha N. Smith Date 04/30/2024

Revised 02-2019

Talbot County Public Safety Complex
DBF #1503A030
March 6, 2024

APPENDIX B

SKETCH PLAN SUBMITTAL CHECKLIST

NOTE: THIS CHECKLIST REPRESENTS THE MINIMUM INFORMATION TO BE SUBMITTED ON A SITE PLAN. ADDITIONAL INFORMATION MAY BE REQUIRED FOR UNIQUE SITUATIONS.

COMPLETE THE CHECKLIST AND SUBMIT IT WITH THE PLAN. IF AN ITEM IS NOT APPLICABLE, ENTER "N/A".

1. Location map, ✓
2. Boundary, ✓
3. Topography, ✓
4. General proposed land uses drawn to scale, and ✓
5. The Forest Stand Delineation as detailed in the Town of Easton's Forest Conservation Ordinance. N/A*
6. The location of any easements, rights-of-way or any other encumbrances which pertain to the property subject to the site plan review. ✓
7. Conditions of concern, for example, water courses, wetlands, floodplains, or other environmentally sensitive features. ✓
8. Location of refuse collection, exterior lighting, fencing, and all pedestrian walkways and sidewalks. ✓
9. General location and description (r.e. intended function, proposed species, etc.) of proposed landscaping. ✓
10. Location of parking including layout and landscaping. ✓
11. Conceptual building elevations or renderings illustrating the character, scale, and materials of all proposed structures. Such elevations or renderings shall be sealed by a licensed professional as described above. ✓
12. A statement describing the extent to which the application complies with the Recommended Design Principles for Easton set forth on pages 29-31 of the Comprehensive Plan. ✓

*Forest Conservation Area from 11/07/18 Subdivision Plat to remain.

DAVIS BOWEN & FRIEDEL, INC.

ARCHITECTS • ENGINEERS • SURVEYORS

Ring W. Lardner, P.E.
W. Zachary Crouch, P.E.
Michael E. Wheedleton, AIA, LEED GA
Jason P. Loar, P.E.
Jamie L. Sechler, P.E.

TALBOT COUNTY PUBLIC SAFETY COMPLEX
TOWN OF EASTON, TALBOT COUNTY, MARYLAND
DBF #1503A030

MARCH 5, 2024

Statement describing the extent to which the application complies with the Recommended Design Principles for Easton set forth on pages 29-31 of the Comprehensive Plan

The proposed project utilizes the existing site design, landscaping, and building design where possible. The existing landscaping and pervious features are kept where feasible. The proposed features are requirements of the sally port and garage building and the necessary traffic movements around these critical facilities. The proposed project will serve the Talbot County Sheriff's Department and Department of Emergency Services well and the architecture and site design will provide a nice aesthetic to the critical work being performed on the site.

Talbot County Public Safety Complex
DBF #1503A030
March 6, 2024

APPENDIX B-2

SKETCH STORMWATER MANAGEMENT PLAN
SUBMITTAL CHECKLIST

EFFECTIVE MAY 4, 2010

NOTE: THE FOLLOWING CHECKLIST REPRESENTS THE MINIMUM INFORMATION TO BE SUBMITTED FOR SUPPORT OF A STORMWATER MANAGEMENT CONCEPT PLAN, SITE DEVELOPMENT PLAN, AND/OR FINAL DESIGN PLAN. THE TOWN MAY REQUEST ADDITIONAL INFORMATION AS DEEMED NECESSARY.

COMPLETE THE APPROPRIATE CHECKLIST AND SUBMIT IT WITH THE PLANS, APPLICATION FORM, NARRATIVE OR REPORT, AND FEE. ITEMS IN BOLD ARE REQUIRED FOR CONCEPT AND/OR SITE DEVELOPMENT PHASE REVIEW.

I. Sketch Plan Submittal

A. Site and Resource Map

Natural Resources Identified on Plan, including, but not limited to:
Please use these responses for the following:
(Provided = P; Not Provided = NP; Not Applicable = N/A)

Tidal and Non-Tidal Wetland Boundaries	N/A
Wetland Buffers	N/A
Floodplain Boundaries and Elevations	N/A
Streams and other Waterways	N/A
Stream Buffers	N/A
Forest Boundaries	P
Forest Buffers	N/A
Critical Areas	N/A
Steep Slopes (>25%)	N/A
Erodible Soils	N/A
Areas of High Recharge	N/A
Springs	N/A
Soil Types and Hydrologic Soil Groups	P
Bedrock and/or other Geologic Features	N/A
Vegetative Cover	P
Existing Drainage Areas and Flow Patterns	P
Existing Stormwater Outfalls	P
Site and Resource Map field verified by a properly licensed design professional.	P

Existing contours (1' max intervals) and utilities shown. P

Large tracts of contiguous open spaces, forested areas and other important resources protected by conservation easements. P

Opportunities for afforestation identified. N/A

Wetland, stream and forest buffers enhanced and/or

expanded. N/A

B. Site Fingerprinting and Development Layout

Locations of proposed impervious areas provided. P

Proposed contours (1' max intervals) and utilities shown. NP

Preliminary locations of proposed Environmental Site Design (ESD) practices provided. P

Locations of stormwater outfalls and conveyance provided with offsite storm drains, culverts and grass channels with size and slope. P

Limit of disturbance and extent of clearing & grading. P

Site natural resources protected during construction. If site natural resources must be disturbed during construction, please include an explanation in the stormwater narrative. P

Better Site Design Techniques incorporated, including:

Sheetflow and overland flow provided wherever possible P

Building footprint and site layout designed to protect conservation areas P

Proposed streets, rights of way, and/or sidewalks with modifications to reduce impervious area P

Landscaped medians and/or cul-de-sacs N/A

Stormwater management features in medians or cul-de-sacs N/A

Private open road section with grass channels and/or biofilters N/A

Minimize numbers of parking spaces and sizes P

Narrow frontages to reduce road length N/A

Site graded to encourage runoff from impervious areas to pervious areas or other natural conveyance systems P

C. Stormwater Narrative

Title Page includes:

Job Name P

Owner/Developer P

Design Professional P

Date Prepared P

Seal and Signature (properly licensed Design Professional) P

Project is identified as new development or redevelopment. (Redevelopment projects have ≥40% total site imperviousness) P

Project and streets designed for 2-year and 10-year quantitative management. P

Project is identified as being within the Tanyard Branch Watershed. (Projects within this watershed must manage proposed 10-year storm flows to the existing 2-year storm discharge rate.) N/A

A narrative that supports the concept and describes how the design will achieve:

Natural resource protection and enhancement P
Maintenance of natural flow patterns P
Reduction of impervious areas through better site design, alternative surfaces, and non-structural practices P
Implementation of ESD planning techniques and practices to the Maximum Extent Practicable (MEP) P
Preliminary ESD sizing calculations provided P
Integration of erosion and sediment controls (ESC) into the stormwater strategy P

D. Sketch Plan Meeting

Following the Sketch Plan submittal, a meeting will be scheduled between the Town of Easton Planning & Zoning, Town Engineer, the Talbot County Soil Conservation District (SCD) ESC reviewer, the owner/developer, the SWM and ESC designer(s), and any other reviewers deemed necessary by the Town of Easton and/or the Talbot County SCD. Official Minutes from the Sketch Plan Meeting must be submitted for review and acceptance by all parties. These minutes must accompany all future submittals. ✓

This checklist completed by _____ Date _____

DAVIS BOWEN & FRIEDEL, INC.

ARCHITECTS • ENGINEERS • SURVEYORS

Ring W. Lardner, P.E.
W. Zachary Crouch, P.E.
Michael E. Wheedleton, AIA, LEED GA
Jason P. Loar, P.E.
Jamie L. Sechler, P.E.

TALBOT COUNTY PUBLIC SAFETY COMPLEX
TOWN OF EASTON, TALBOT COUNTY, MARYLAND
DBF #1503A030

APRIL 28, 2024

COMMENT RESPONSES FROM SKETCH PLAN/ESDR MEETING

PLANNING & ZONING COMMENTS

1. Per Chapter 28-201, Table 2.1, Table of Permitted Uses of the Zoning Code, the Applicant will be required to obtain a Special Exception request from the Board of Zoning Appeals for the use of a Fire, Rescue or Police Stations. Please see the attached application.

   The application to the Board of Zoning Appeals has been completed. The project is scheduled for the Tuesday, May 21, 2024 meeting.

2. The future maintenance/storage building is greater than 5,000 square feet and will require the Applicant to submit an application to the Planning Commission for architectural review and approval. Provide conceptual building elevations or renderings illustrating the character, scale, and materials of the proposed structure. Such elevations or renderings shall be sealed by a licensed professional.

   The future maintenance/storage building has been removed from the scope of work. The owner has elected to provide additional parking instead of the building.

3. Per Appendix B, Sketch Plan Submittal Checklist, a statement describing the extent to which the application complies with the Recommended Design Principles for Easton set forth on pages 29-31 of the Comprehensive Plan. Please respond to the nine (9) Recommended Design Principles and place them onto the Title Sheet, C-001.

   A response to the nine (9) Recommended Design Principles has been placed on the Title Sheet, C-001.

4. Revise the parking calculations on sheet C-001 to include the minimum required vehicle and bicycle spaces and tabulate the proposed vehicle spaces. Include the gross floor area for buildings. In addition, show the designated number of bike racks on all applicable plan views.

   The parking calculations on sheet C-001 have been updated. The required parking

calculation now uses gross square footage (as opposed to usable office space). The number of employees has been updated based upon information from the Sheriff's Office and the DES. Bicycle storage has been added to the table and the bicycle storage has been added to sheet C-101. A Supplemental Waiver Request Application is being submitted with this response for a waiver request for Parking Spaces.

5. The proposed parking spaces are less than the required number of spaces. The applicant will need to be scheduled for the Planning Commission to review a Supplemental Waiver Request Application for parking spaces. Please see attached application.

   A Supplemental Waiver Request Application is being submitted with this response for a waiver request for Parking Spaces.

6. Show the zoning district boundaries on the Vicinity Map.

   The Zoning Map has been added to the Title Sheet, C-001, which shows the zoning district boundaries. Unfortunately, it was not feasible to show the zoning on the Vicinity Map due to the map scale.

7. Per Chapter 28-1007.3.A.3.l.1 thru 5 of the Zoning Code, provide an impact statement on the site plan.

   An Impact Statement per the Zoning Code has been added to sheet C-101.

8. Revise label of "Pr. Garage Building" on sheet C-001 to read; "Future Maintenance/Storage Building".

   The building has been removed from the scope of the project.

9. The future Maintenance/Storage Building will require applicable ADA vehicle spaces. Please indicate location on sheet C-101.

   The building has been removed from the scope of the project.

10. Dimension the drive aisles and a typical parking space area on sheet C-101.

    Drive aisles and parking spaces are now dimensioned on sheet C-101.

11. Check the drive aisle width between the proposed forty-five degree parking spaces and the entrance landing area for the future Maintenance/Storage Building. The minimum aisle width for a one-way aisle is sixteen feet. Please see the markup below.

    All of the drive aisles for the site have been checked and meet the minimum (24') for two-way traffic. The one-way aisle has been removed.

12. Indicate the traffic direction of the proposed one-way drive aisle on sheet C-101.

The one-way drive aisle has been removed. All drive aisles are now two-way and meet the minimum width (24').

13. Per Chapter 28-1007.A.3.g of the Zoning Code, provide safe pedestrian movement for parking spaces to enter the existing two-story office building and the future maintenance/storage building.

    A pedestrian access aisle has been added to the parking island in the parking area.

14. Will there be a loading and unloading area for the proposed site? If so, please provide applicable screening per Chapter 28-308.2.J of the Zoning Code.

    No loading or unloading is proposed for the site. The future maintenance/storage building has been removed from the project scope.

15. Per Appendix B, Sketch Plan Submittal Checklist requires, general location and description (r.e. Intended function, proposed species. etc.) of proposed landscaping. List the proposed native species on a plan view and a Landscape Legend on sheet C-101.

    A Landscaping Plan, L-101 and Landscape Details, L-501 have been provided in the sheet set. The plant names are listed in the Landscape Plant Schedule on sheet L-501. Unfortunately, the landscaping labels and legend will not fit on C-101.

16. Per Chapter 28-1014.6.E.2.c of the Zoning Code, 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. See Figure 10-7 . Areas that cannot utilize the replacement of Bufferyards for required hedges can be addressed by applying for a Supplemental Waiver Request Application for Landscaping & Buffering. Please see the markup below.

    Buffer yard and parking lot evergreen shrub requirements are shown on the Site Plan, C-101 and further detailed on sheet L-101.

17. Will there be on-site lighting? Any outdoor lighting shall be shielded to direct light and glare only onto the mini-warehouse facility and may be of sufficient intensity to discourage vandalism and theft. Said lighting and glare shall be deflected, shaded, and focused away from all adjoining property.

    Parking lot lamp posts are proposed to be similar in nature to the existing lighting on the site and are placed in the islands of the parking lot.

18. Show the designated number of bike racks on plan view and add to the Data Column on sheet C-001.

Sheet C-001 has been updated to include the required bicycle storage. The bicycle rack is shown on sheet C-101.

19. Revise the proposed use callout within the Data Column to be consistent with Chapter 28-308.3 A thru K of the Zoning Code.

    The existing and proposed land use has been labeled "Business Commercial (BC)". Please advise if this is the correct intent of this comment.

20. Provide dimensions between the future structure and property lines.

    Sheet C-101 has been updated to show dimensions between the future structure and the property lines.

21. Show and label all building restriction lines on all applicable plan views. Is the 50' front building restriction line per the private covenants, deed 885/399? Please verify and label on plan views.

    The building restriction lines have been labeled on sheet C-101. Yes, the private covenants have an exception for lot 14, thus the jut out from 75 to 50 feet in this area. The BRLs are labeled and reference the deed.

22. Determine applicable Bufferyards required for the site or apply for a Supplemental Waiver Request Application for Landscaping & Buffering.

    The required buffer yards have been shown on sheet L-101.

23. Any proposed monument sign will require a Signage Application to be submitted prior to installation. Please add this statement within the Data Column on sheet C-001.

    Understood, the statement has been added to the Data Column on sheet C-001.

SHEET TITLED, "PLAN REVIEW STATUS / SKETCH SITE PLAN REVIEW"

1. The Easton Forest Conservation Requirements of the Town Code, Article III, § 31-3.1 Relevance, states that the requirements are applicable to any person making application for a subdivision, project plan, grading, or sediment and erosion control approval on units of land 40,000 square feet or greater after the effective date of the Ordinance. Analysis - The development of this site has already been mitigated for Forest Conservation under the 1997 Forest Conservation Plan, recorded on record plat MAS 4/35G. Any impact into the existing Forest Conservation area would require an updated plan.

   No impacts to the existing Forest Conservation are anticipated.

2. IMPACT FEES, Please note, there will be a required Impact Fee for all proposed buildings. The Town's Impact Fees and Inspection Fees are to be paid upon the time you pick up your

Building Permit. Please provide building square footage with appropriate use for calculation of Impact Fee. Talbot County Impact Fees are due prior to obtaining your Building Permit. Please provide receipt of payment to the Town's Building Inspection Division. Please add estimated Town Impact Fee calculations to cover sheet and add note below calculations; "Note: The Impact Fee indicated in this notation shall not be construed as vested and until submission of the building application."

The Impact Fee Calculation and note has been added to sheet C-001. The writer used office for the classification and used the proposed addition gross square footage for the calculated fee. Please advise if this is reasonable.

3. Lot Line Revision Plat, The owner submitted a Subdivision & Property Line Adjustment Application submitted for review on May 1, 2023. Approval is pending applicant addressing review comments dated July 24, 2023.

   Understood, the owner is working with Lane Engineering, LLC for the plat. This project will require modifications to the existing stormwater management easements and will propose new stormwater management easements.

ENGINEERING DEPARTMENT

1. The site does not qualify for section 3.3 of the Town of Easton Stormwater Ordinance – Redevelopment. The current proposal includes removal and revisions to existing stormwater management on site. The site should be designed to accommodate the approved 2016 approved Stormwater Report as well as the current proposal. Please address how comprehensive SWM is being met for the entire site.

   Understood, the project has been reworked as New Development. Existing stormwater management features to remain (grass swales) have been included in the calculations.

2. Provide an ESD Summary Chart (similar to TOE-SWM-7.01) on the plans. This should include information for the entire site since existing ESD features are being removed.

   The ESD Summary Chart has been added to the Post-Development Drainage Area Map, SWM-2. As the plans develop further, this chart may be moved to SWM Details, Sections, or Profiles sheet. Please note, the quantities are preliminary as we are reworking the stormwater management calculations and report. We will provide a complete SWM resubmission (Preliminary Stormwater Management Plan) in the near future.

3. Provide a SWM Quantity Summary Chart (similar to TOE-SWM-7.02) on the plans.

   The SWM Quantity Summary Chart has been added to the Post-Development Drainage Area Map, SWM-2. As the plans develop further, this chart may be moved to SWM Details, Sections, or Profiles sheet. Please note, the quantities are preliminary as we are reworking the stormwater management calculations and report. We will provide a complete SWM resubmission (Preliminary Stormwater Management Plan) in the near future.

4. Please note that the existing Stormwater Easements on site will need to be revised to accommodate the relocation of features on site. This will need to be addressed prior to receiving a Town Grading Permit.

   Understood, the owner is working with Lane Engineering, LLC for the plat. We will coordinate the easements to be removed and the proposed easements.

ESDR- BUILDING INSPECTIONS AND PERMIT DEPARTMENT COMMENTS

We will address these comments and provide a complete submission of the building plans at a later date, as we near application for the Building Permit.

EASTON UTILITIES COMMISSION

1. See electric comments. What are future electric plans for future maintenance/storage building; existing transformer or new service.

   The existing primary electric service in the duct has been added to the existing topo. The maintenance/storage building has been removed from the scope of the project.

2. See CATV comments.

   The fiber optic and coax cable have been added to the existing topo.

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

RECEIVED
APR 29 2024
TOWN OF EASTON

Planning Commission Concept, Use, and Design Application

Site Information

Structure's Floor Area	13,904		Structure's Square Feet	27,648	
Area of Disturbance	1.55 acres		Number of Dwelling Units	1 (or N/A)	
Property Size	Acres	4.832	Square Feet	210,482	
Address	28640 Marys Ct, Easton, MD 21601-0000				
Tax Map	0025	Grid 0022	Parcel 0046	Lot 14	
Zoning District	BC	Historic District Y ☐ N ☑		PRD Y ☐ N ☑	
Other Information					
Existing Use	Commercial Building				

Owner

Name	Raymond P. Clarke, County Engineer, Talbot County		
Mailing Address	215 Bay Street, Suite 6, Easton, Maryland 21601		
Telephone No.	(410) 770-8170	Email	rclarke@talbotcountymd.gov

Applicant / Agent

Name	Robert J. Duma, P.E., Associate		
Mailing Address	106 N. Washington Street, Suite 103, Easton, Maryland 21601		
Telephone No.	443-366-9038	Email	rjd@dbfinc.com

General Information:

Renovation of the existing commercial building and addition of a sally port to support the Talbot County Sheriff's Office and the Department of Emergency Services (DES). Other improvements include the installation of an emergency generator and a new parking lot on the west side of the building.

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	04/29/2024
Printed Name of Applicant or Agent	Robert J. Duma, P.E.

For Office Use Only

Planned Commission Meeting Date	05/16/2024	
Review Fee Amount	$2700	2024-1156
Review Fee Paid Date	03/08/2024	ESDR 24-06
ESDR Y / N Date	03/28/2024	

Revised 02-2019

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

RECEIVED
APR 29 2024
TOWN OF EASTON

Site Plan, PUD, Planned Healthcare Application

Application Type

Planned Unit Development ☐ Amendment ☐ Health Care (HC) ☐ Site Plan ☑

Subdivision Information

Name	Talbot County Public Safety Complex				
Original Property Size	Acres	4.832	Square Feet	210,482	
Telephone No.	(410) 770-8170	Email	rclarke@talbotcountymd.gov		

Site Plan Information

Property Size	Acres	4.832	Square Feet	210,482	
Structure's Floor Area	13,904		Structure's Square Feet	27,648	
Area of Disturbance	1.55 acres		Number of Dwelling Units	1 or (N/A)	

Property Information

Address	28640 Marys Ct, Easton, MD 21601-0000							
Tax Map	0025	Grid	0022	Parcel	0046	Lot	14	
Deed Refernce:	Liber	03016	Folio	00022				
Plat Reference:	Liber	87	Folio	11				
Base Zoning District		BC	Historic	Y ☐	N ☑	Planned Redevelopment	Y ☐	N ☑
Source of Electricity		Easton Utilities						

Owner

Name	Raymond P. Clarke, County Engineer, Talbot County
Mailing Address	215 Bay Street, Suite 6, Easton, Maryland 21601
Telephone No.	(410) 770-8170 Email rclarke@talbotcountymd.gov

Applicant or Agent

Name	Robert J. Duma, P.E., Associate
Mailing Address	106 N. Washington Street, Suite 103, Easton, Maryland 21601
Telephone No.	443-366-9038 Email rjd@dbfinc.com

Surveyor / Engineer

Name	Robert J. Duma, P.E.	License No.	38830	Expiration Date	12-29-2024
Mailing Address	106 N. Washington Street, Suite 103, Easton, Maryland 21601				
Telephone No.	443-366-9038	Email	rjd@dbfinc.com		

Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed and satisfied the Town of Easton Development Standards and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent	
Date	4/29/2024
Printed Name of Applicant or Agent	Robert J. Duma, P.E.

For Office Use Only

Planning Commission Required	Y ☒ N ☐		
Planning Commission Meeting Date	05/16/2024	SE-1156 / SE 24-04	
Sketch Approval Date		Project No.	ESDR 24-06
Prelim/Dev. Approval Date		Application No.	2024-1156
Final Approval Date		Sketch Fee Paid	03/08/2024
Recordation Date		Develop. Fee Paid	

Revised 02-2019

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

RECEIVED
APR 29 2024
TOWN OF EASTON

2024-1156 / ESDR 24-06

Supplemental Waiver Request Application

Waiver Request Type

Sidewalk ☐	Parking Spaces ☑	Parking/Aisle Dimension ☐
Landscaping & Buffering ☐	Signage ☐	Other ☐

Project Information

Address	28640 Marys Ct, Easton, MD 21601-0000						
Tax Map	0025	Grid	0022	Parcel	0046	Lot	14
Zoning District	BC	PC Meeting Date	05/16/2024	Historic District	Yes ☐	No	☑
Owner or Agent	Talbot County (Owner) / Robert J. Duma, P.E. (Agent) Davis, Bowen & Friedel, Inc.						
Mailing Address	106 N. Washington Street, Suite 103, Easton, Maryland 21601						
Telephone No.	443-366-9038	Email	rjd@dbfinc.com				

Request Details

Please attach a detailed description of the waiver request(s) being made and the justification(s) for requesting said waiver(s).

See attachment detailing waiver request and justification.

☑ Ordinance Section Supporting Waiver Request. 28-1001.3 C.

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 04/29/2024

Printed Name of Applicant or Agent Robert J. Duma, P.E., Associate

DAVIS BOWEN & FRIEDEL, INC.

ARCHITECTS • ENGINEERS • SURVEYORS

Ring W. Lardner, P.E.
W. Zachary Crouch, P.E.
Michael E. Wheedleton, AIA, LEED GA
Jason P. Loar, P.E.
Jamie L. Sechler, P.E.

TALBOT COUNTY PUBLIC SAFETY COMPLEX
TOWN OF EASTON, TALBOT COUNTY, MARYLAND
DBF #1503A030

APRIL 26, 2024

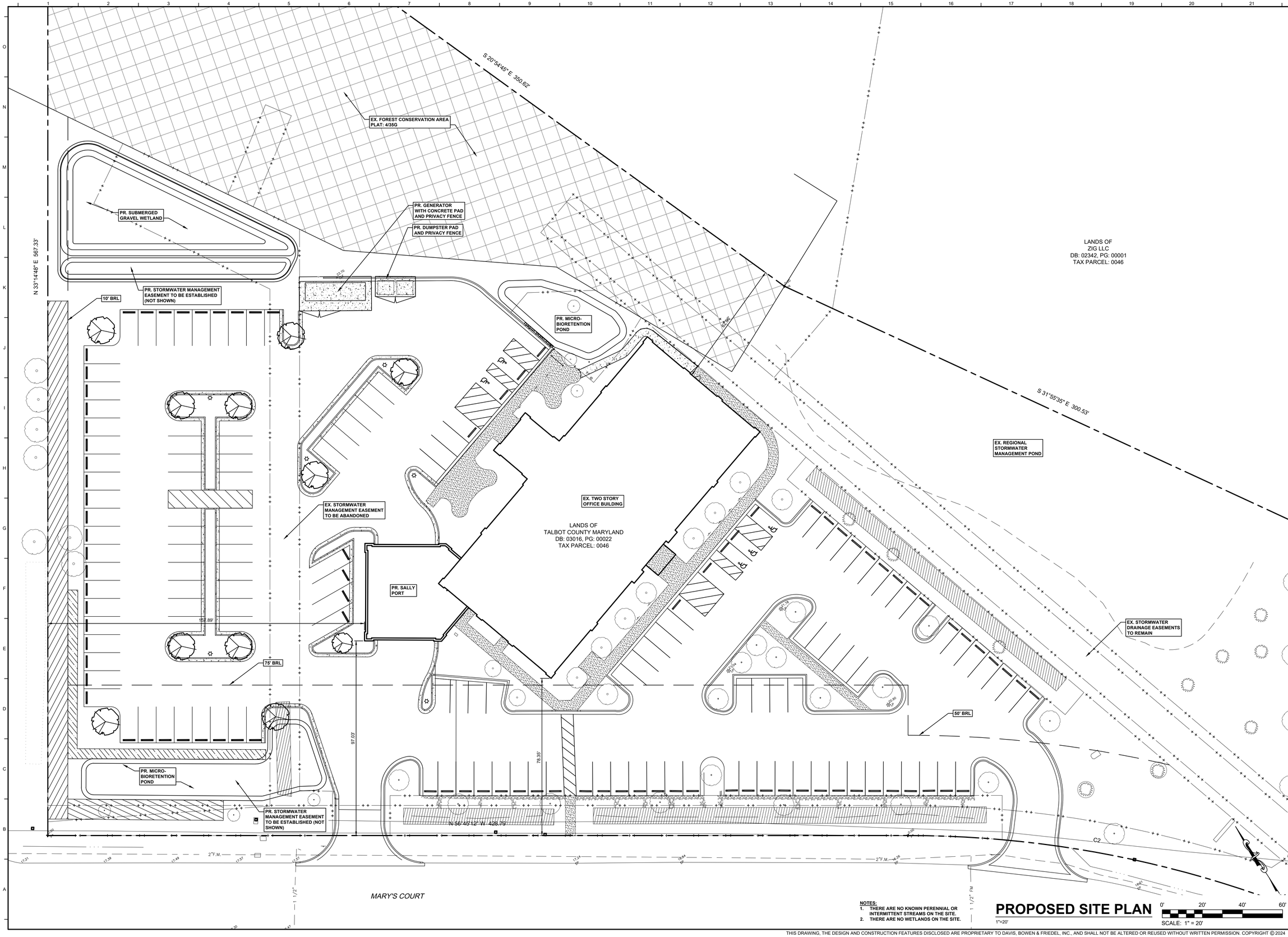
SUPPLEMENTAL WAIVER REQUEST – DESCRIPTION & JUSTIFICATION

Talbot County Sheriff's Office and Talbot County Department of Emergency Services (DES) are planning to relocate their offices to the existing office complex located at 28640 Mary's Court (lot 14 and 14A). The renovations of the existing building require the installation of a sally port located on the western side of the building. Unfortunately, this addition removes some of the existing parking on the site. Talbot County has elected to develop the adjacent lot (14A) with additional parking for the building.

The parking required for the site is calculated as follows. One parking space per employee. The Sheriff's Office has 21 employees, and the DES has 21 employees as well. This totals 42 employees. Additionally, the Zoning Code requires one (1) parking space for each three (3) personnel on normal shift. This requires an additional 14 parking spaces. The Zoning Code requires one (1) additional parking space for each 200 square feet of usable office space. The Planning & Zoning comments from the Sketch Plan submittal required this calculation to be gross square footage of the building. The gross square footage of the building is 27,648 square feet. This results in 138 parking spaces. The total required parking spaces for the site are 195 when using the calculations.

Maximizing available parking on the site, we are able to provide 138 parking spaces plus five (5) ADA accessible parking spaces. Bicycle storage meeting the required is achievable; six (6) required, nine (9) provided.

We believe the parking, as designed, is sufficient to support the operations of the safety complex and will not have a negative impact on the health, safety, or character of the property or adjacent properties. Additionally, we feel that using "usable office space" instead of gross square footage for the calculation should be sufficient and would reduce our parking requirement further. Additionally, five (5) of the employees in the calculation are on the road and do not require leaving a vehicle in the parking lot.



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the laws of the State of Maryland, License No. 38830 Expiration Date: 12-29-24

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS - ENGINEERS - SURVEYORS
EASTON, MARYLAND 410.770.4744
MILFORD, DELAWARE 302.424.1441
SALISBURY, MARYLAND 410.543.9091

TALBOT COUNTY PUBLIC SAFETY COMPLEX

PHASE 2: SALLY-PORT

28640 MARY'S COURT, EASTON MD

DATE	COMMENTS

Date: APRIL 2024
Scale: 1"=20'
Dwn.By: NSB
Proj.No.: 1503A030

PROPOSED SITE PLAN

Dwg.No.: EXH-1

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L:\1503A Talbot County\1503A030 Talbot Public Safety\CAD\Phase 2\Sheet\1503A030-C-101-SITE.dwg Apr 24 , 2024 - 2:35pm dumr

1 SOUTH (FRONT) ELEVATION

1/8" = 1'-0"

6 NORTH (REAR) ELEVATION

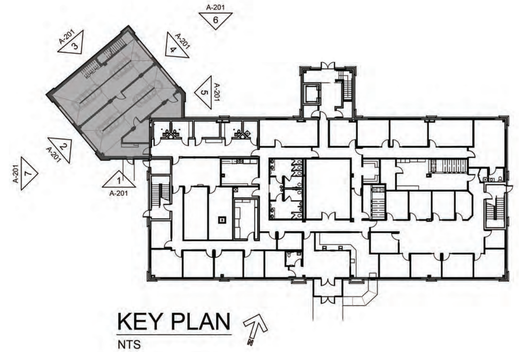
1/8" = 1'-0"

7 LEFT (WEST) ELEVATION

1/8" = 1'-0"

5 RIGHT (EAST) ELEVATION

1/8" = 1'-0"



KEY PLAN

NTS

STATE OF MARYLAND
PATTON L. BRADSHAW
20821
ARCHITECT

NOT FOR CONSTRUCTION

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS · ENGINEERS · SURVEYORS
EASTON, MARYLAND 410.770.4744
MILFORD, DELAWARE 302.424.1441
SALISBURY, MARYLAND 410.543.9091

TALBOT COUNTY
PUBLIC SAFETY COMPLEX
PHASE II: SALLY-PORT ADDITION
28640 MARY'S COURT, EASTON MD, 21601

DATE	COMMENTS
08/22/2023	90% CD SUBMISSION

Date: August 22, 2023
Scale: 1/8" = 1'-0"
Dwn.By: LWS
Proj.No.: 1503A030.A01

CONCEPTUAL
BUILDING ELEVATIONS

Dwg.No.:
A-201

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V:\Studio 3D Modeling\Talbot County Public Safety Bldg Sally Port_1503A030.A01\A-201.dwg Feb 27, 2024 - 9:42am mcok

TALBOT COUNTY
PUBLIC SAFETY COMPLEX

PHASE 2: SALLY-PORT
TOWN OF EASTON
EASTON, TALBOT COUNTY
MARYLAND

DBF# 1503A030

APRIL 2024

DATA COLUMN

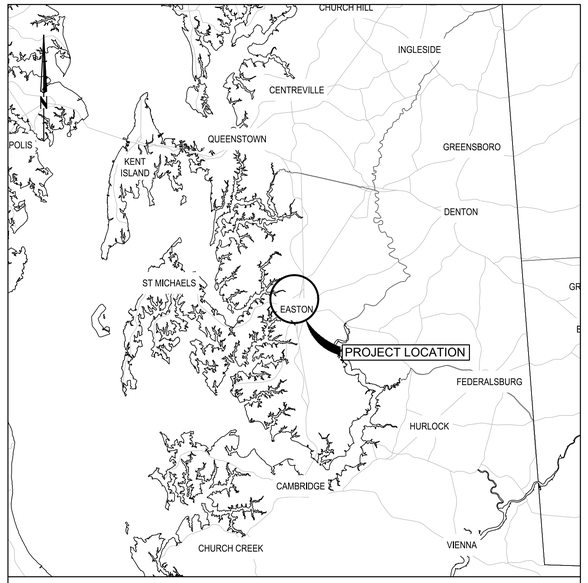
1	TAX MAP ID	M: 0025, G: 0022, P: 0046, Lot 14	
2	DEED REFERENCE	BOOK: 03016, PAGE: 00022	
3	APPROXIMATE PROJECT CENTER	LATITUDE 38.7926°	LONGITUDE -76.0823°
4	ENGINEER DAVIS, BOWEN & FRIEDEL, INC. 601 E. MAIN ST., SUITE 100 SALISBURY, MD 21804 ROBERT J. DUMA, PE PHONE: (410) 543-9091 EMAIL: rjd@dbfinc.com	OWNER TALBOT COUNTY MARYLAND 11 N. WASHINGTON ST. EASTON, MARYLAND 21601 PHONE: (410) 770-8170 EMAIL: rclarke@talbotcountymd.gov	
5	DATUM	HORIZONTAL NAVD 83 (MD STATE PLANE)	VERTICAL NAVD 88
6	ZONING	EXISTING BUSINESS COMMERCIAL (BC)	PROPOSED BUSINESS COMMERCIAL (BC)
7	LAND USE	EXISTING BUSINESS COMMERCIAL (BC)	PROPOSED BUSINESS COMMERCIAL (BC)
8	UTILITY PROVIDERS	SEWER EASTON UTILITIES	WATER EASTON UTILITIES TRASH PRIVATE ELECTRIC EASTON UTILITIES
9	POSTED SPEED LIMIT	MARYS COURT (LOCAL) 25 MPH	
10	FLOODPLAIN	THE PROPERTY IS NOT IMPACTED BY THE 100 YEAR FLOODPLAIN AS DETERMINED BY FEMA PANEL 24041C0187D, DATED JULY 20, 2016.	
11	GROUNDWATER RECHARGE	NO KNOWN GROUNDWATER RECHARGE AREAS ARE LOCATED ON THE PROPERTY.	
12	WELLHEAD PROTECTION AREA	THE PROPERTY IS NOT LOCATED WITHIN A WELLHEAD PROTECTION AREA.	
13	WETLANDS	WETLANDS ARE NOT FOUND ONSITE, PER DEPARTMENT OF NATURAL RESOURCES DATABASE	
14	CODE COMPLIANCE	REQUIRED	PROPOSED
	FRONT SETBACK	40 FEET	40 FEET
	SIDE SETBACK	10 FEET	10 FEET
	REAR SETBACK	30 FEET	30 FEET
	MAXIMUM DENSITY	1 DWELLING PER ACRE	1 DWELLING PER ACRE
	MAXIMUM BUILDING HEIGHT	35 FEET (3 STORIES)	30.5 FT (2 STORIES)
	OPEN SPACE	1.449 AC. (30.00%)	2.445 AC. (50.60%)
	PARKING	1 PER EMPLOYEE + 1 PER EACH 3 PERSONNEL ON NORMAL SHIFT + 1 PER 200 SF 42 + 14 + 138 = 194 SPACES	138 SPACES
	BICYCLE STORAGE	3% OF VEHICLE SPACES = 6	9 PROVIDED
	ADA PARKING	101 TO 150 TOTAL PARKING SPACES = 5 ADA ACCESSIBLE PARKING SPACES, 1 VAN ACCESSIBLE FOR EVERY 6 SPACES = 1 VAN ACCESSIBLE	4 ADA ACCESSIBLE PARKING SPACES AND 1 VAN ADA ACCESSIBLE PARKING SPACE = TOTAL OF 5
		SIGNAGE APPLICATION TO BE SUBMITTED PRIOR TO INSTALLATION.	
15	AREAS		
	RIGHT-OF-WAY DEDICATION	N/A	
	NET DEVELOPMENT AREA	21,431.52 SF. (0.492 AC.)	

	EXISTING	PROPOSED
SITE AREA	4.832 AC (100.00%)	4.832 AC (100.00%)
WOODS	0.976 AC (20.20%)	0.976 AC (20.20%)
IMPERVIOUS COVER	1.411 AC (29.20%)	1.456 AC (30.13%)

SOILS DATA

LABEL	SOIL	TYPE
CsA	CROSIADORE SILT LOAM, 0-2% SLOPES	C/D
EmA	ELKTON SILT LOAMS, 0-2% SLOPES	C/D
HfA	HAMBROOK - SASSAFRAS COMPLEX, 0-2% SLOPES	B
HfB	HAMBROOK - SASSAFRAS COMPLEX, 2-5% SLOPES	B
MtcA	MATTAPEX SILT LOAM, 0-2% SLOPES, MID - ATLANTIC COASTAL PLAIN	C
MtcB	MATTAPEX SILT LOAM, 2-5% SLOPES, MID - ATLANTIC COASTAL PLAIN	C
OtA	OTHELLO SILT LOAMS, 0-2% SLOPES, MID - ATLANTIC COASTAL PLAIN	C/D
Up	URBAN LAND	N/A
W	WATER	N/A
WdcB	WOODSTOWN SANDY LOAM, 2-5% SLOPES, MID - ATLANTIC COASTAL PLAIN	C
WocA	WOODSTOWN LOAM, 0-2% SLOPES, MID ATLANTIC COASTAL PLAIN	C
WocB	WOODSTOWN LOAM, 2-5% SLOPES, MID - ATLANTIC COASTAL PLAIN	C
Zk	ZEKIAH SILT LOAM, FREQUENTLY FLOODED	C/D

SOIL CLASSIFICATION OBTAINED FROM WEB SOIL SURVEY PREPARED BY THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE, VERSION 19 ISSUED SEPTEMBER 14, 2022.



VICINITY MAP — **SCALE: 1" = 6 MILES**

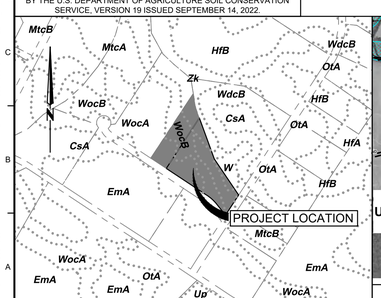
0' 6 MI 12 MI 18 MI

SCALE: 1" = 6 MILES

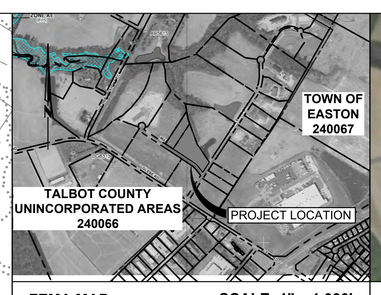
LOCATION MAP — **SCALE: 1" = 1,000'**

0' 1000' 2000' 3000'

SCALE: 1" = 1,000'

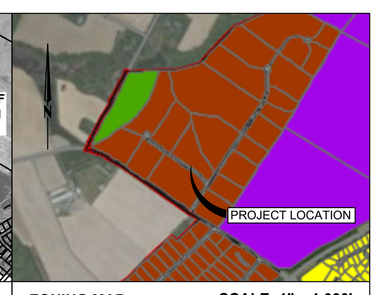


SOILS MAP — **SCALE: 1" = 500'**



FEMA MAP — **SCALE: 1" = 1,000'**

PANEL# 24041C0185C — **EFFECTIVE 08/05/2013**



ZONING MAP — **SCALE: 1" = 1,000'**

0' 1000' 2000' 3000'

SCALE: 1" = 1,000'

IMPACT FEE CALCULATION

EXISTING BUILDING:	24,052 GROSS SQUARE FEET (GSF)
PROPOSED ADDITION:	3,596 GSF
IMPACT FEE CLASSIFICATION:	OFFICE
FEE:	$1.41 PER SF
TOTAL FEE:	$5,070.36

NOTE: THE IMPACT FEE INDICATED IN THIS NOTATION SHALL NOT BE CONSTRUED AS VESTED AND UNTIL SUBMISSION OF THE BUILDING APPLICATION.

RECOMMENDED DESIGN PRINCIPLES

THIS PLAN SET CONFORMS TO THE RECOMMENDED DESIGN PRINCIPLES FOR EASTON AS NOTED IN THE COMPREHENSIVE PLAN. THE PLAN INCLUDES: INTEGRATED USES, NATURAL FEATURES, AUTOMOBILES NOT DETERMINING DESIGN, AMPLE OPEN SPACES, ARCHITECTURE RESPECTING EASTON'S HISTORY, SIGNS INFORM, DIVERSE HOUSING, INTERESTING RESIDENTIAL PLACES, AND CONNECTED NEIGHBORHOODS.

ENGINEER'S STATEMENT

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. 38830, EXPIRATION DATE: 12/29/2024.

ROBERT J. DUMA, P.E. — DATE
DAVIS, BOWEN & FRIEDEL, INC.
601 E. MAIN ST., SUITE 100
SALISBURY, MD 21804

DEVELOPER'S CERTIFICATION

I, HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION SHALL BE DONE ACCORDING TO THIS PLAN OR EROSION AND SEDIMENT CONTROL.

OWNER'S REPRESENTATIVE — DATE

OWNER:
TALBOT COUNTY MARYLAND
11 N. WASHINGTON ST
EASTON, MARYLAND 21601

1. 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 FORM THE ENGINEER WILL PLACE RESPONSIBILITY FOR SAID CHANGE ON THE CONTRACTOR OR SUBCONTRACTOR.
2. ANY RESPONSIBLE PERSONNEL INVOLVED IN THE 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
TOWN OF EASTON
ENGINEERING DEPARTMENT:

NAME — DATE
AGREEMENT #

APPROVED
TALBOT COUNTY ENGINEER:

NAME — DATE
AGREEMENT #

CERTIFICATION OF PLAN APPROVAL

TALBOT COUNTY PLANNING & ZONING DEPARTMENT — DATE

TALBOT SOIL CONSERVATION DISTRICT — DATE

Sheet List Table

Sheet Number	Sheet Title
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C-002	LEGEND & NOTES
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C-101	PROPOSED SITE PLAN
C-102	PROPOSED UTILITY PLAN
C-501	SITE DETAILS
L-101	LANDSCAPING SITE PLAN
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CG101	EROSION & SEDIMENT CONTROL PLAN
CG501	EROSION & SEDIMENT CONTROL DETAILS
SWM-1	PRE DEVELOPMENT DRAINAGE AREA MAP
SWM-2	POST- DEVELOPMENT DRAINAGE AREA MAP

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the laws of the State of Maryland, License No. 38830 Expiration Date: 12-29-24

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ARCHITECTS - ENGINEERS - SURVEYORS
EASTON, MARYLAND 410.770.4744
SALISBURY, MARYLAND 410.543.9091
MILFORD, DELAWARE 302.424.1441

TALBOT COUNTY
PUBLIC SAFETY COMPLEX
PHASE 2: SALLY-PORT
28640 MARY'S COURT, EASTON, MD

COMMENTS
DATE

Date: APRIL 2024
Scale: AS SHOWN
Dwn.By: NSB
Proj.No.: 1503A030

TITLE SHEET

Dwg.No.: C-001

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GENERAL NOTES

1. ACCORDING TO FEMA/FIRM FLOOD MAP 24041C0187D, DATED 7/20/2016, PROJECT DISTURBANCES ARE IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
2. BEFORE ANY EXCAVATION IS PERFORMED, CONTRACTOR SHALL CALL "MISS UTILITY OF DELMARVA" (1-800-441-8355) AT LEAST 48 HOURS PRIOR TO EXCAVATION, TO HAVE EXISTING UNDERGROUND UTILITIES LOCATED AND MARKED.
3. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DEVIATION FROM THESE PLANS UNLESS WRITTEN APPROVAL HAS BEEN PROVIDED BY THE OWNER OR ENGINEER.
4. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE CONTRACT DOCUMENTS, INCLUDING PLANS, NOTES AND SPECIFICATIONS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO SUBMITTING A BID.
5. THE CONTRACT DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS OF CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE PERFORMED IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED, AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.
6. RIGHT-OF-WAY LINES ARE ASSUMED WHERE SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL RIGHT-OF-WAY LINES AND EASEMENTS PRIOR TO BEGINNING CONSTRUCTION AS NECESSARY FOR CONSTRUCTION. ALL PROPOSED UTILITIES ARE TO BE CONSTRUCTED WITHIN TOWN OF EASTON RIGHT-OF-WAYS OR PERMISSION OBTAINED BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL TEMPORARY CONSTRUCTION EASEMENTS NECESSARY TO COMPLETE THE WORK. THE CONTRACTOR SHALL PROVIDE ALL STAKEOUTS NECESSARY FOR THE INSTALLATION OF THE WORK.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC IN ALL WORK AREAS IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. TRAFFIC CONTROL, REGULATORY, WARNING AND INFORMATIONAL SIGNS SHALL REMAIN FUNCTIONAL AND VISIBLE TO THE APPROPRIATE LANES OF TRAFFIC AT ALL TIMES, WITH THE RELOCATION KEPT TO A MINIMUM DISTANCE.
8. EXISTING UTILITY LOCATIONS ARE SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION, AND ARE SHOWN ONLY FOR THE CONTRACTOR'S CONVENIENCE. THE CONTRACTOR SHALL TEST PIT TO VERIFY LOCATION, SIZE, MATERIALS AND INVERT OF ALL EXISTING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION, WHETHER OR NOT SHOWN ON THE DRAWINGS, SHALL BE REPAIRED BY THE CONTRACTOR, TO THE UTILITY OWNER'S SATISFACTION, AT THE CONTRACTOR'S EXPENSE.
9. WHENEVER EXCAVATION DISRUPTS GUY WIRES OR ENDANGERS EXISTING UTILITY POLES, THE POLE SHALL BE BRACED AND/OR GUY WIRES RELOCATED IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS AT THE CONTRACTOR'S EXPENSE.
10. CONTRACTOR SHALL EXERCISE EXTREME CARE AND CAUTION TO PROTECT ALL TREES, SHRUBS, AND LANDSCAPING FROM DAMAGE DURING CONSTRUCTION OPERATIONS UNLESS SPECIFICALLY DESIGNATED TO BE REMOVED. DAMAGED LANDSCAPING SHALL BE REPLACED IN-KIND, TO THE SATISFACTION OF THE PROPERTY OWNER.
11. CONTRACTOR SHALL REMOVE AND IMMEDIATELY REPLACE, RELOCATE, RESET, OR RECONSTRUCT ALL OBSTRUCTIONS IN THE WORK AREA, INCLUDING, BUT NOT LIMITED TO: SIGNS, LANDSCAPING, CULVERTS, FENCES, PROPERTY MARKERS, OR OTHER NATURAL OR MAN-MADE OBSTRUCTIONS ENCOUNTERED. ALL ASSOCIATED COST SHALL BE INCLUDED IN THE APPROPRIATE PRICES BID.
12. ALL PAVING, CURBS, GUTTERS, SIDEWALKS, STORMDRAINS, STRUCTURES, CASTINGS, ETC., NOT DESIGNATED FOR REPLACEMENT, DAMAGED BY THE CONTRACTOR, SHALL BE REMOVED AND REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
13. THE CONTRACTOR SHALL TOPSOIL, SEED AND MULCH ALL UNPAVED AREAS DISTURBED DURING CONSTRUCTION, ACCORDING TO THE EROSION AND SEDIMENT CONTROL PLAN AND/OR THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
14. FITTINGS SHOWN ON THE PLANS ILLUSTRATE ANTICIPATED SIZE AND ANGLE OF DEFLECTION. THIS INFORMATION IS SHOWN FOR GENERAL INFORMATION AND IS NOT GUARANTEED. ACTUAL SIZES AND ANGLES MAY VARY DUE TO FIELD CONDITIONS.
15. CONTRACTOR SHALL MAINTAIN UTILITY SERVICE TO USERS AT ALL TIMES. WHEN TEMPORARY INTERRUPTIONS ARE NECESSARY, THEY SHALL BE KEPT TO A MINIMUM. 48 HOURS NOTICE SHALL BE GIVEN TO THE TOWN AND PROPERTY OWNERS PRIOR TO SERVICE TRANSFERS OR ANY SERVICE DISRUPTIONS.
16. PRIOR TO PAVING, ALL UTILITIES, SIDEWALKS, VALVE BOXES, FRAMES AND GRATES SHALL BE ADJUSTED TO GRADE.
17. LIMITS OF SIDEWALK AND CURB CONSTRUCTION SHOWN ON THE PLANS ARE APPROXIMATE, AND ARE INTENDED TO COINCIDE WITH THE NEAREST EXISTING JOINT. ALL SIDEWALK AND CURB CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST RECENT ADA GUIDELINES. COST FOR CONCRETE SIDEWALK, CURB AND GUTTER REPLACEMENT, AS CALLED FOR ON THE PLANS, OR APPROVED BY THE OWNER SHALL BE PAID FOR IN ACCORDANCE WITH THE UNIT PRICES BID.

DEMOLITION NOTES

1. MISS UTILITY OF DELMARVA SHALL BE NOTIFIED THREE CONSECUTIVE WORKING DAYS PRIOR TO EXCAVATION, AT 1-800-282-8555.
2. EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DONE TO THEM DUE TO HIS/HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSING IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL ABOVE GROUND STRUCTURES, UNDERGROUND STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
4. THE CONTRACTOR SHALL REMOVE AND IMMEDIATELY REPLACE, RELOCATE, RESET OR RECONSTRUCT ALL OBSTRUCTIONS IN THE ROAD WAY, INCLUDING, BUT NOT LIMITED TO, MAILBOXES, SIGNS, LANDSCAPING, LIGHTING, PLANTERS, CULVERTS, DRIVEWAYS, PARKING AREAS, CURBS, GUTTERS, FENCES, OR OTHER NATURAL OR MAN-MADE OBSTRUCTIONS. TRAFFIC CONTROL, REGULATORY, WARNING AND INFORMATIONAL SIGNS SHALL REMAIN FUNCTIONAL AND VISIBLE TO THE APPROPRIATE LANES OF TRAFFIC AT ALL TIMES, WITH THEIR RELOCATION KEPT TO A MINIMUM DISTANCE. THE COST SHALL BE INCLUDED IN THE COST OF ITEMS BID.
5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION.
6. MARYLAND REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS, INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING THE EXCAVATION FOR STRUCTURES AND UTILITY LINES ON AND OFF SITE MUST BE REMOVED AND PROPERLY DISCARDED. ANY REMEDIAL ACTION REQUIRED IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM. ADDITIONAL COSTS WILL BE NEGOTIATED WITH THE OWNER.
7. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES, PERMITS AND CHARGES.
8. DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL WORK MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERETO APPURTENANT.
9. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., TO THE BEST PRACTICES.
10. COORDINATE WITH OWNER THE REMOVAL AND SALVAGE OF ALL EXISTING SITE FURNISHINGS.
11. PRIOR TO DEMOLITION OCCURRING, EROSION CONTROL DEVICES ARE TO BE INSTALLED AS DETAILED ON THE SEQUENCE OF CONSTRUCTION.

EXISTING SYMBOLS

LINETYPE	DESCRIPTION
	PROPERTY LINE
R/W	RIGHT-OF-WAY LINE
+ + + +	EASEMENT
X	FENCE
-24-	CONTOUR
x 24.24 x 24.24 TC 24.24	SPOT ELEVATIONS: SURFACE
	SWALE
	EDGE OF WOODS
EX-SS	SANITARY SEWER - SEWER MAIN, MANHOLE, & CLEANOUT
EX-W	WATER SERVICE -
	STORM SEWER - STORMDRAIN, MANHOLE, & INLET
	CURB, CURB & GUTTER
	CONCRETE - SIDEWALK, PAD, OR PAVING
	FULL DEPTH PAVEMENT - LIGHT / HEAVY
	BUILDING
	TREES & BUSH - DECIDUOUS & EVERGREEN
	SIGNS & MAILBOXES

PROPOSED SYMBOLS

LINETYPE	DESCRIPTION
℄	PROPERTY LINE
R/W	RIGHT-OF-WAY LINE
PE	EASEMENT
X	FENCE
24	CONTOUR
23.00 TC 22.50 BC 23.00	SPOT ELEVATIONS: SURFACE TOP OF CURB / BOTTOM OF CURB
	SWALE
	EDGE OF WOODS
BSS	SANITARY SEWER - MANHOLE, CLEANOUT, & FLOW ARROW
BW W.M.	WATER SERVICE - VALVE, WATER METER, & FIRE HYDRANT
	STORM SEWER - MANHOLE, PIPE, & DRAINAGE INLET
	CURB, CURB & GUTTER
	CONCRETE - SIDEWALK, PAD, OR PAVING
	FULL DEPTH PAVEMENT - LIGHT
	FULL DEPTH PAVEMENT - HEAVY
	BUILDING
	TREES & BUSHES - DECIDUOUS
	TREES & BUSHES - EVERGREEN
	ITEMS TO BE DEMOLISHED
	SIGNS
A	SITE NOTES
16	PARKING COUNT
	PR. MICROBIO EXPANSION
SF	SILT FENCE
SSF	SUPER SILT FENCE
	DRAINAGE AREA BOUNDARY

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SALISBURY, MARYLAND 410.543.9091
MILFORD, DELAWARE 302.424.1441

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the laws of the State of Maryland License No. 38830 Expiration Date: 12-29-2024

TALBOT COUNTY PUBLIC SAFETY COMPLEX

PHASE 2: SALLY-PORT

28640 MARY'S COURT, EASTON MD

Date: APRIL 2024
Scale: NOT TO SCALE
Dwn.By: NSB
Proj.No.: 1503A030

LEGEND & NOTES

Dwg.No.: **C-002**

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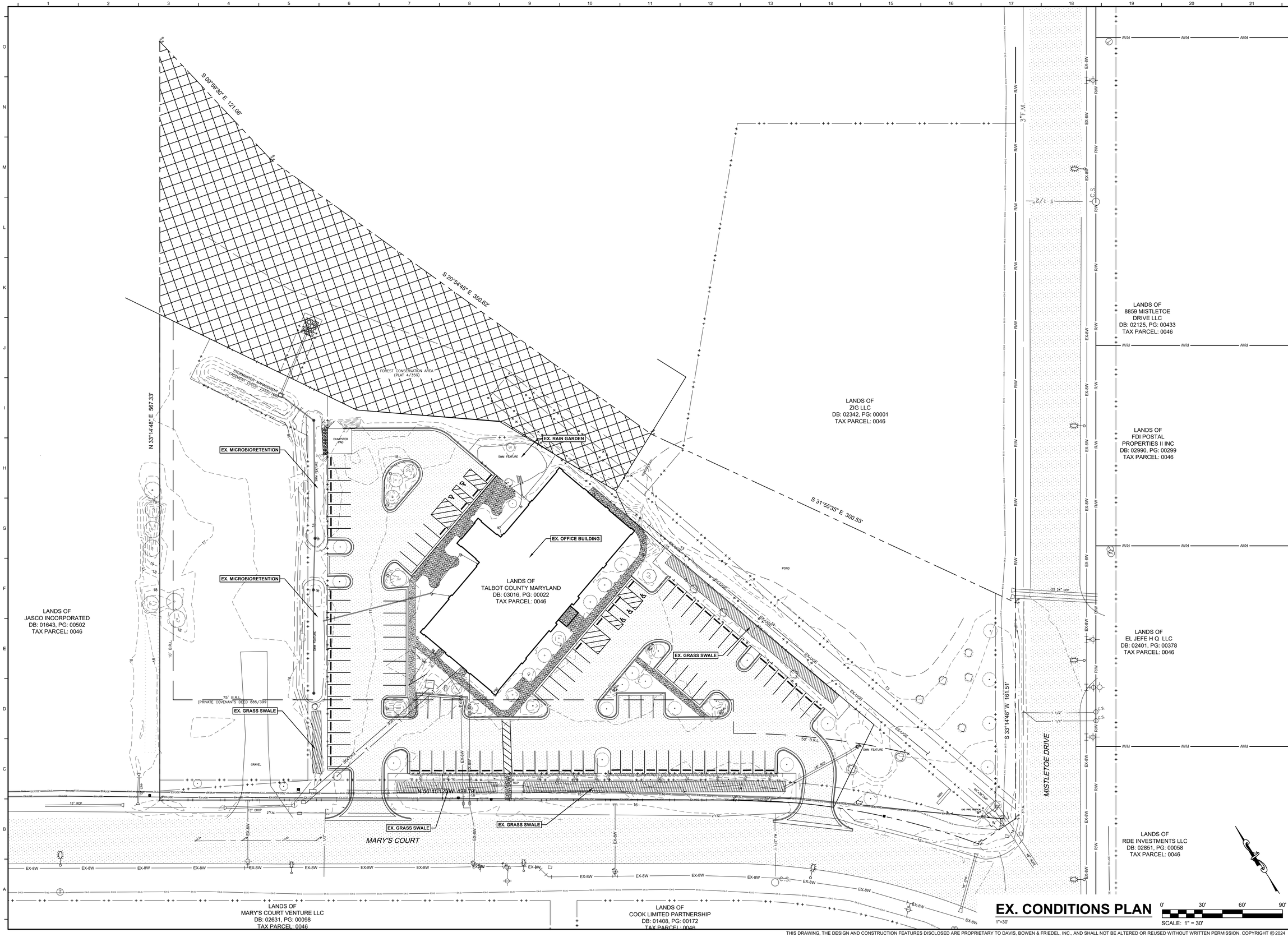

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TALBOT COUNTY PUBLIC SAFETY COMPLEX

PHASE 2: SALLY-PORT

28640 MARY'S COURT, EASTON, MD

Date:	APRIL 2024
Scale:	1"=30'
Dwn.By:	NSB
Proj.No.:	1503A030

EXISTING CONDITIONS PLAN

Dwg.No.: **V-101**

EX. CONDITIONS PLAN

1"=30'

0' 30' 60' 90'

SCALE: 1" = 30'

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CONTRACTOR TO SAW CUT AND REMOVE EXISTING DUMPSTER PAD, FENCING AND BOLLARDS

CONTRACTOR TO REMOVE EX. STORMWATER MANAGEMENT FEATURE, PIPING, AND STRUCTURES

CONTRACTOR TO SAW CUT AND REMOVE PAVEMENT

CONTRACTOR TO REMOVE EXISTING PARKING BLOCKS

CONTRACTOR TO SAW CUT AND REMOVE EXISTING CURB, SIDEWALK, AND ISLAND

CONTRACTOR TO REMOVE TREE (3)

CONTRACTOR TO REMOVE TREE

CONTRACTOR TO REMOVE EX. STORMWATER MANAGEMENT FEATURE, PIPING, AND STRUCTURES

CONTRACTOR TO SAW CUT AND REMOVE EXISTING CURB, ISLAND AND PAVEMENT

CONTRACTOR TO SAW CUT AND REMOVE EXISTING CURB AND ISLAND

CONTRACTOR TO REMOVE TREE

CONTRACTOR TO REMOVE EXISTING PARKING BLOCKS

CONTRACTOR TO REMOVE AND RELOCATE EXISTING DRAIN PIPE

CONTRACTOR TO REMOVE EX. STORMWATER MANAGEMENT FEATURE, PIPING, AND STRUCTURES

CONTRACTOR TO SAW CUT AND REMOVE EXISTING CURB, SIDEWALK, AND PAVEMENT

CONTRACTOR TO REMOVE TREE

CONTRACTOR TO SAW CUT AND REMOVE EXISTING CURB, SIDEWALK, AND ISLAND

CONTRACTOR TO REPLACE EXISTING DRAIN PIPES

CONTRACTOR TO SAW CUT AND REMOVE EXISTING SIDEWALK TO NEAREST JOINT

IRRIGATION CONTROL VALVE TO BE RELOCATED

CONTROL PANEL, GRINDER PUMP, AND SEWER CLEANOUT TO BE RELOCATED OUTSIDE OF BUILDING FOOTPRINT

TRANSFORMER TO REMAIN

LANDS OF
ZIG LLC
DB: 02342, PG: 00001
TAX PARCEL: 0046

LANDS OF
TALBOT COUNTY MARYLAND
DB: 03016, PG: 00022
TAX PARCEL: 0046

MARY'S COURT

DEMOLITION PLAN

1"=20'

0' 20' 40' 60'
SCALE: 1" = 20'

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SALISBURY, MARYLAND 410.543.9091

TALBOT COUNTY PUBLIC SAFETY COMPLEX

PHASE 2: SALLY-PORT

28640 MARY'S COURT, EASTON, MD

Date:	APRIL 2024
Scale:	1"=20'
Dwn.By:	NSB
Proj.No.:	1503A030

DEMOLITION PLAN

Dwg.No.: **CD101**

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IMPACT STATEMENT

1. THE BUILDING ARCHITECTURE IS A CONTEMPORARY CONVENTIONAL OFFICE BUILDING THAT IS SHORT AND WIDE WITH VERTICAL PILASTER ACCENTS, HORIZONTAL BANDING, AND STEPPING OF THE ROOF PARAPET. THESE ELEMENTS HELP TO BREAK UP THE OVERALL SCALE OF THE BUILDING. THE EXTERIOR FINISH CONSISTS OF GENERALLY WHITE AND GREY STUCCO OVER AN EXTERIOR INSULATION FINISH SYSTEM (EIFS) WITH TRIM, REVEALS, AND ACCENTS.
2. FULL STAFF OPERATE THE BUILDING FROM 7:00AM TO 5:00PM MONDAY THROUGH FRIDAY. SEVEN (7) STAFF OPERATE THE 24-HOUR SHIFT.
3. THE BUILDING OPERATIONS WILL NOT RESULT IN NOXIOUS OR OFFENSIVE ODORS. THE PROPOSED GENERATOR FOLLOWS EPA REGULATIONS, TRASH SERVICE WILL BE SCHEDULED ROUTINELY, AND SEWAGE FACILITIES ARE ADEQUATE.
4. AIR POLLUTION AND NOISE CONTROL WILL BE MAINTAINED THROUGH THE USE OF AN EPA REGULATED NATURAL GAS GENERATOR. NO WATER QUALITY ISSUES ARE ANTICIPATED.
5. TRAFFIC GENERATION IS ANTICIPATED TO BE THE 42 EMPLOYEES ENTERING AND EXITING THE SITE WITH STANDARD VEHICLES. TRASH SERVICE IS EXPECTED TO BE ONE TRUCK VISITING WEEKLY. VISITORS ARE ANTICIPATED TO BE 14 STANDARD VEHICLES PER DAY. ENTRANCES AND EXITS ARE ADEQUATE.

PR. SUBMERGED GRAVEL WETLAND
PR. GENERATOR WITH CONCRETE PAD AND PRIVACY FENCE
PR. DUMPSTER PAD WITH BOLLARDS AND PRIVACY FENCE
EX. CURB TO REMAIN WITH FLOW PATH UNALTERED
10' BRL
PR. CONCRETE WHEEL STOP, TYP.
PR. FULL DEPTH PAVEMENT RESTORATION
PR. MICRO-BIORETENTION POND
PR. 4' WIDE SIDEWALK
PR. 4' HIGH DECORATIVE ALUMINUM FENCE, MATCH EXISTING
PR. LIGHT POLE, TYP.
PR. GRASSED PARKING LOT ISLAND WITH CURB & GUTTER, TYP.
PR. TREE, TYP.
PR. 9-BIKE CAPACITY BICYCLE RACK
PR. LIGHT POLE, TYP.
PR. RELOCATED LIGHT POLE
PR.CURB AND GUTTER AND GRASS AREA
PR. PEDESTRIAN ACCESS
PR. LIGHT POLE, TYP.
PR. CURB AND GUTTER AND GRASS AREA
EX. TWO STORY OFFICE BUILDING
PR. CONCRETE RAMP
PR. SALLY PORT
CONTRACTOR TO REPLACE EXISTING CONCRETE SIDEWALK
PR. FULL DEPTH PAVEMENT
PR. GRASSED PARKING LOT ISLAND WITH CURB & GUTTER, TYP.
PR. LIGHT POLE, TYP.
PR. CURB AND GUTTER, TYP.
PR. FULL DEPTH PAVEMENT RESTORATION
PR. TREE, TYP.
PR.CURB AND GRASS AREA
PR. RELOCATED LIGHT POLE
75' BUILDING RESTRICTION LINE (BRL) PER PRIVATE COVENANTS (885/399)
PR. MICRO-BIORETENTION POND
PR. PARKING LOT EVERGREEN SHRUB
50' BUILDING RESTRICTION LINE (BRL) EXCEPTION FOR THIS LOT ONLY, PER PRIVATE COVENANTS (885/399)
BUFFER YARD 'E'
BUFFER YARD 'D'
2"F.M.
1 1/2" I.P.

PROPOSED SITE PLAN

1"=20'

0' 20' 40' 60'
SCALE: 1" = 20'

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TALBOT COUNTY PUBLIC SAFETY COMPLEX
PHASE 2: SALLY-PORT
28640 MARY'S COURT, EASTON, MD

DATE	COMMENTS

Date: APRIL 2024
Scale: 1"=20'
Dwn.By: NSB
Proj.No.: 1503A030

PROPOSED SITE PLAN

Dwg.No.: C-101

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PR. OUTFALL STRUCTURE
PR. SUBMERGED GRAVEL WETLAND
PR. 15" HDPE STORM DRAIN PIPE
PR. STORM DRAIN MANHOLE
PR. GAS METER FOR GENERATOR
PR. 12" HDPE FLARED END SECTION AND RIP RAP
PR. 12" HDPE PIPE
PR. OUTFALL STRUCTURE
PR. PRETREATMENT FOREBAY
PR. MICRO-BIORETENTION POND
PR. GAS MAIN
PR. 15" HDPE STORM DRAIN PIPE
PR.6" HDPE STORM DRAIN PIPE
PR. 6" SCH 40 PVC PIPE, CONNECT TO EXISTING
PROVIDE CONCRETE PIPE CRADLE FOR SHALLOW PIPE UNDER SIDEWALK
PR. GAS METER
PR. STORMDRAIN CLEANOUT
EX. TWO STORY OFFICE BUILDING
PR. STORM DRAIN PIPE TO TIE INTO EXISTING CLEANOUT
PR. SEWER LATERAL TO TIE IN TO EXISTING STUB
PR. SALLY PORT
PR. RELOCATION OF EXISTING IRRIGATION CONTROL VALVE
PR. WATER SERVICE TO TIE INTO EXISTING SERVICE
PR. RELOCATION OF EXISTING GRINDER PUMP AND CONTROL PANEL.
CONTRACTOR TO TEST PIT AND IDENTIFY LOCATION OF EXISTING UNDERGROUND TELECOMMUNICATION AND POWER LINES.
PR. FORCE MAIN TO TIE BACK INTO EXISTING FORCE MAIN
PR. OUFALL STRUCTURE
PR. MICRO-BIORETENTION POND
LOD
EX-UGE
EX-UGT
EX-W
EX-6W
157.89'
97.03'
78.35'
EX-UGE
EX-UGT
2"F.M.
1 1/2"
6" PIPE VERTICAL 17.04

PROPOSED UTILITY PLAN

1"=20'

0' 20' 40' 60'

SCALE: 1" = 20'

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ARCHITECTS - ENGINEERS - SURVEYORS
EASTON, MARYLAND 410.770.4744
SALISBURY, MARYLAND 410.543.9091
MILFORD, DELAWARE 302.424.1441

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the laws of the State of Maryland, License No. 38830 Expiration Date: 12-29-24

TALBOT COUNTY
PUBLIC SAFETY COMPLEX
PHASE 2: SALLY-PORT
28640 MARY'S COURT, EASTON, MD

DATE	COMMENTS

Date: APRIL 2024
Scale: 1"=20'
Dwn.By: NSB
Proj.No.: 1503A030

PROPOSED UTILITY PLAN

Dwg.No.: C-102

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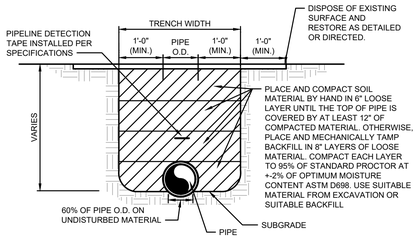
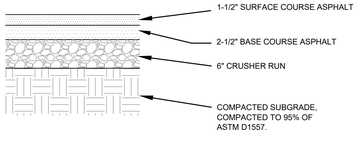
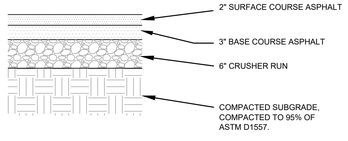


TRENCH BACKFILL DETAIL
NOT TO SCALE



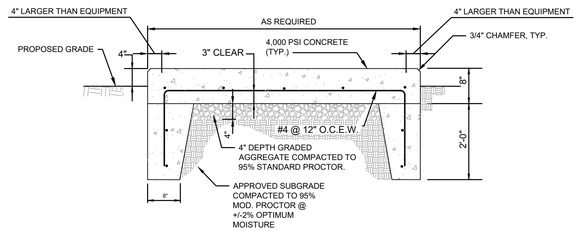
LIGHT DUTY PAVEMENT SECTION
NOT TO SCALE

NOTE:
1. FOR USE IN PARKING SPACES AND AREAS ONLY. NOT FOR USE IN HEAVY DUTY, ACCESS AISLES, OR TRAVEL LANES.

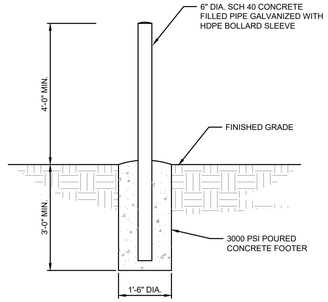


HEAVY DUTY PAVEMENT SECTION
NOT TO SCALE

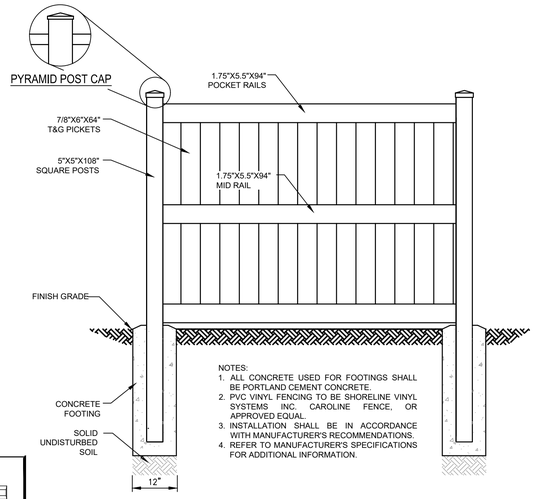
NOTE:
1. FOR USE IN ACCESS AISLES AND TRAVEL LANES. ACCEPTABLE AS ALTERNATE FOR PARKING SPACES AND AREAS.



GENERATOR PAD DETAIL
NOT TO SCALE

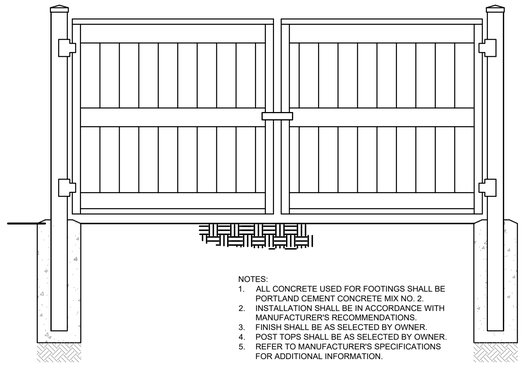


BOLLARD DETAIL
NOT TO SCALE



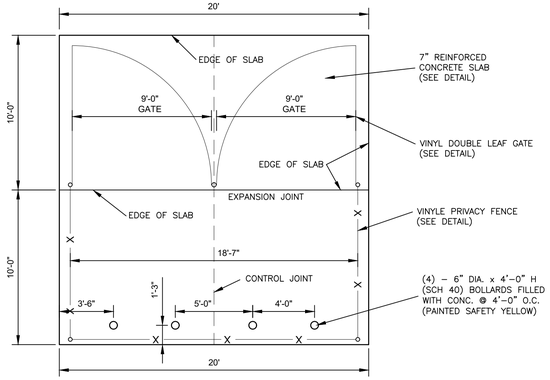
NOTES:
1. ALL CONCRETE USED FOR FOOTINGS SHALL BE PORTLAND CEMENT CONCRETE.
2. PVC VINYL FENCING TO BE SHORELINE VINYL SYSTEMS INC. CAROLINE FENCE, OR APPROVED EQUAL.
3. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. REFER TO MANUFACTURER'S SPECIFICATIONS FOR ADDITIONAL INFORMATION.

VINYL PRIVACY FENCE
NOT TO SCALE

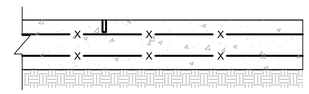


NOTES:
1. ALL CONCRETE USED FOR FOOTINGS SHALL BE PORTLAND CEMENT CONCRETE MIX NO. 2.
2. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. FINISH SHALL BE AS SELECTED BY OWNER.
4. POST TOPS SHALL BE AS SELECTED BY OWNER.
5. REFER TO MANUFACTURER'S SPECIFICATIONS FOR ADDITIONAL INFORMATION.

VINYL DOUBLE LEAF GATE
NOT TO SCALE

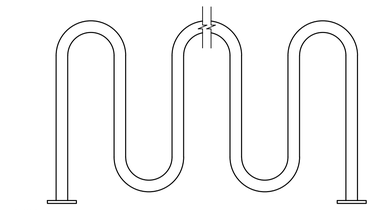


DUMPSTER ENCLOSURE PLAN
NOT TO SCALE



DUMPSTER PAD DETAIL
NOT TO SCALE

CONCRETE WHEELSTOP DETAIL
NOT TO SCALE



NOTES:
1. BICYCLE SPACE ARE PER LOOP.

LOOP STYLE BIKE RACK DETAIL
NOT TO SCALE

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the laws of the State of Maryland, License No. 38830 Expiration Date: 12-29-24

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MILFORD, DELAWARE 302.424.1441

TALBOT COUNTY PUBLIC SAFETY COMPLEX
PHASE 2: SALLY-PORT
28640 MARY'S COURT, EASTON, MD

DATE	COMMENTS

Date: APRIL 2024
Scale: AS NOTED
Dwn.By: NSB
Proj.No.: 1503A030

SITE DETAILS

Dwg.No.: **C-501**

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STORMWATER MANAGEMENT

FOREST CONSERVATION AREA
(PLAT 4/35G)

EXISTING TREES TO REMAIN. PROVIDE TREE PROTECTION FENCE OR USE SILT FENCE AS REQUIRED FOR SEDIMENT AND EROSION CONTROL.

LANDS OF
ZIG LLC
DB: 02342, PG: 00001
TAX PARCEL: 0046
CITY ZONED: BC
USE: COMMERCIAL/MANUFACTURING

260' LENGTH (5 PLANTING UNITS)
10' WIDE BUFFERYARD 'E'

EXISTING HEDGE

GENERATOR AND DUMPSTER WITH PRIVACY FENCES.

STORMWATER MANAGEMENT

EXISTING TREE CANOPY, TYP.

EXISTING EVERGREEN TREE BUFFER ON ADJACENT PROPERTY

LIGHT POLE, TYP.

EXISTING BUILDING

LANDS OF
TALBOT COUNTY MARYLAND
DB: 03016, PG: 00022
TAX PARCEL: 0046

PROPOSED SALLYPORT BUILDING

88' LENGTH (2 PLANTING UNITS)
15' WIDE. BUFFERYARD 'D'

EXISTING TREE TO REMAIN. PROVIDE TREE PROTECTION FENCE, TYP.

EX. TREES AND SHRUBS

MARY'S COURT

PROPOSED LANDSCAPING PLAN

1"=20'

SCALE: 1" = 20'

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the laws of the State of Maryland, License No. 38830 Expiration Date: 12-29-24

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TALBOT COUNTY
PUBLIC SAFETY COMPLEX
PHASE 2: SALLY-PORT
28640 MARY'S COURT, EASTON, MD

DATE	COMMENTS

Date: APRIL 2024
Scale: 1"=20'
Dwn.By: NSB
Proj.No.: 1503A030

PROPOSED LANDSCAPING PLAN

Dwg.No.: L-101

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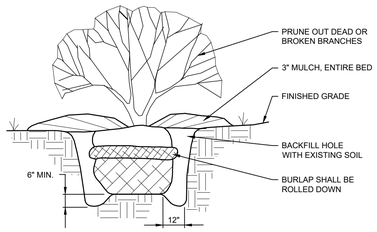
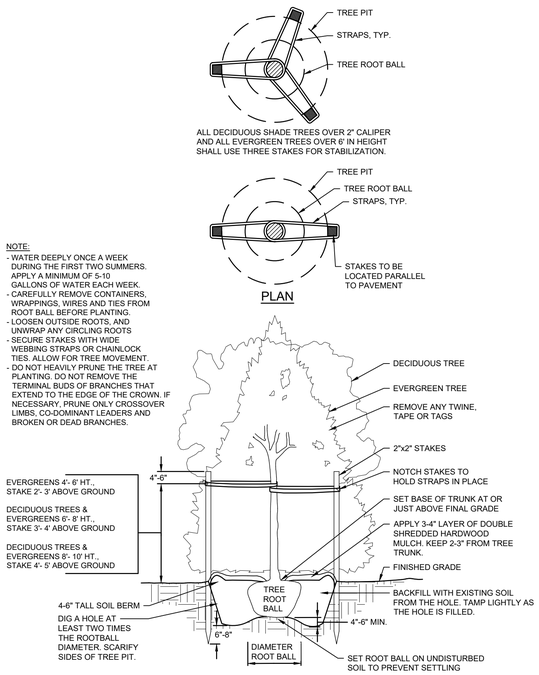


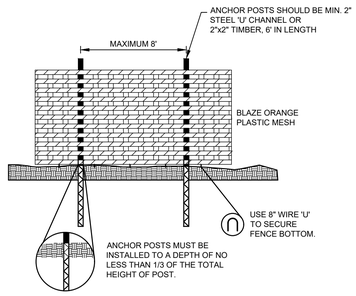
SHRUB PLANTING DETAIL

NOT TO SCALE



TREE PLANTING DETAIL

NOT TO SCALE



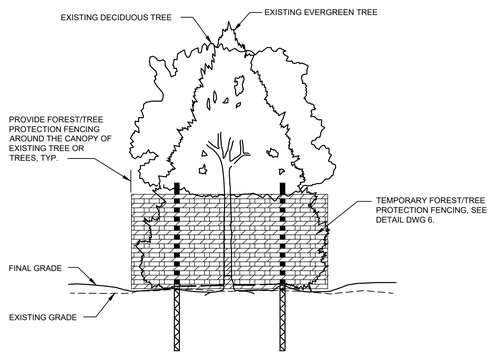
NOTES:

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

TEMPORARY FOREST/TREE PROTECTION FENCING

NOT TO SCALE

PLAN



SECTION

NOTE: ALL GRADING WILL BE LIMITED TO THE CANOPY AND/OR TEMPORARY FOREST/TREE PROTECTION FENCING.

EXISTING TREE PROTECTION DETAIL

NOT TO SCALE

GENERAL LANDSCAPE NOTES

1. LANDSCAPE INSTALLER SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK. INSTALLER SHALL ENSURE THAT FINAL GRADES HAVE BEEN ESTABLISHED AND THE SITE IS READY FOR LANDSCAPE INSTALLATION.
2. LANDSCAPE INSTALLER SHALL MAINTAIN THE LANDSCAPE IMPROVEMENT AREAS IN A CLEAN CONDITION, REMOVING DEBRIS DAILY AND AT THE COMPLETION OF THE INSTALLATION.
3. INSTALLER SHALL LAYOUT ALL BEDS AND POSITION PLANTS PER THE PLANS. ADJUST AS REQUIRED FOR FIELD CONDITIONS. REPORT SIGNIFICANT ADJUSTMENTS TO THE OWNER FOR APPROVAL PRIOR TO PLANT INSTALLATION. ALL BED AREAS SHALL BE SPRAYED WITH HERBICIDE AS NEEDED TO KILL AND/OR REMOVE ALL WEED OR GRASS VEGETATION.
4. EXCEPT FOR TREE SPADE INSTALLATIONS, ALL TREE PITS SHALL BE EXCAVATED TO A DEPTH SO THAT THE ROOT BALL WILL REST ON SOLID SOIL AT THE PROPER HEIGHT. STREET TREES PLANTING PITS SHALL BE EXCAVATED AND WORKED IN A RECTANGULAR FORM WITH THE SMALL DIMENSION TWICE THE DIAMETER OF THE ROOT BALL AND THE LARGE DIMENSION AT LEAST THREE (3) TIMES THE DIAMETER OF THE ROOT BALL. OPEN AREA TREE PITS SHALL BE EXCAVATED TO A MINIMUM DIMENSION OF TWICE THE ROOTBALL WIDTH. TREES PLANTED ON SLOPES OR SIDE SWALES SHALL BE INSTALLED AT A HEIGHT RELATING TO THE UPHILL SIDE OF THE PIT, AND MOUNDED WITH SOIL AROUND THE LOWER SIDE. ALL SIDES AND BOTTOM OF TREE PLANTING PITS SHALL BE SCARIFIED OR LOOSENED TO PERMIT ROOT GROWTH. EXCAVATED SOILS THAT HAVE BEEN PREVIOUSLY UNDISTURBED SHALL BE LOOSENED AND UTILIZED FOR BACKFILL. COMPACTED SOILS THAT CANNOT BE RESTORED TO A REASONABLE PLANTING SOIL SHALL BE REMOVED AND REPLACED WITH FRIABLE NATIVE SOILS FROM THE REGION.
5. ALL SHRUB PLANTING PITS, LANDSCAPE BEDS AND PLANTING MASS AREAS SHALL BE WORKED TO A DEPTH OF TWELVE INCHES (12") (OR RAISED SLIGHTLY TO ACHIEVE A TWELVE INCH (12") FRIABLE SOIL DEPTH). SHRUB PLANTING AREAS SHALL BE WORKED TO TWELVE INCH (12") MINIMUM OUTSIDE THE ROOT BALL.
6. ALL LANDSCAPE BEDS SHALL BE "V" EDGED AND MULCHED WITH MINIMUM THREE INCH (3") DOUBLE SHREDDED HARDWOOD BARK MULCH, OR APPROVED EQUAL. MULCH TO FENCE LINES OR BACK OF CURBS WHERE APPROPRIATE TO ELIMINATE NARROW GRASS AREAS. AVOID MULCH PILED AGAINST TREE TRUNKS, ETC.
7. ALL TREES TO BE STAKED AND GUYED WITH HARDWOOD STAKES, MINIMUM OF TWO (2) –FIVE FEET (5') LONG, OR OTHER APPROVED GUYING SYSTEM. STAKES SHALL BE DRIVEN INTO STABLE SOILS. PROVIDE WIRE GUYS WITH RUBBER PROTECTANT OR OTHER APPROVED INDUSTRY PRACTICE.
8. LANDSCAPE INSTALLER SHALL MAINTAIN ALL PLANT MATERIALS THROUGH THE COMPLETION OF THE LANDSCAPE INSTALLATION, AND THEN AS REQUIRED BY THE OWNER.
9. AT THE COMPLETION OF THE LANDSCAPE INSTALLATION (OR BY PHASED COMPLETION IF PROVIDED FOR ON THE PLAN), THE OWNER, OR HIS DESIGNATED REPRESENTATIVE SHALL REQUEST AN INSPECTION BY TOWN OF EASTON.
10. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN "AMERICAN STANDARDS FOR NURSERY STOCK".
11. CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER INSTALLATION IS COMPLETE AND FINAL ACCEPTANCE OF SITE WORK HAS BEEN GIVEN. AT THE END OF ONE YEAR ALL PLANT MATERIAL WHICH IS DEAD OR DYING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AS ORIGINALLY SPECIFIED.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND MAY MAKE MINOR ADJUSTMENTS IN SPACING AND/OR LOCATION OF PLANT MATERIALS. CONTRACTOR TO VERIFY "AS BUILT" LOCATION OF ALL UTILITIES.
13. NO SUBSTITUTIONS SHALL BE MADE WITHOUT APPROVAL OF THE OWNER.
14. ALL AREAS NOT STABILIZED IN PAVING OR PLANT MATERIALS SHOULD BE SEEDED AND MULCHED. (SEE EROSION & SEDIMENT CONTROL PLAN.)
15. ALL DECIDUOUS SHADE TREES SHALL BRANCH A MINIMUM OF 5'-0" ABOVE GROUND LEVEL. TREES SHALL BE PLANTED AND STAKED IN ACCORDANCE WITH THE STAKING DETAIL SHOWN.
16. THE FULL EXTENT OF ALL PLANTING BEDS SHALL RECEIVE 4" OF TOPSOIL AND 3" 0F BARK MULCH PER SPECIFICATIONS.
17. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THIS DRAWING AND AS SPECIFIED.
18. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING.
19. THE CONTRACTOR SHALL WATER ALL PLANTS THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING, AND THEN WEEKLY OR MORE OFTEN, IF NECESSARY, DURING THE FIRST GROWING SEASON.

SITE DATA:

1.	OWNER:	TALBOT COUNTY MARYLAND 11 N. WASHINGTON ST. EASTON, MARYLAND 21601 RAY CLARKE PHONE: 410-770-8170 RCLARKE@TALBOTCOUNTYMD.GOV
2.	DESIGN PROFESSIONAL:	DAVIS, BOWEN & FRIEDEL, INC. 601 E. MAIN ST., SUITE 100 SALISBURY, MARYLAND 21804 ROBERT J. DUMA, P.E. PHONE: 410-543-9091 EMAIL: RJD@DBFINC.COM
3.	PARCEL AREA:	4.832 ACRES
4.	DISTURBED AREA:	1.524 ACRES (66,371 SF)
5.	PROPERTY ADDRESS:	28640 MARYS COURT EASTON, MARYLAND 21601
6.	ZONING:	BC - BUSINESS COMMERCIAL

7. EXISTING WETLANDS ARE ON THE PARCEL BUT ARE NOT LOCATED WITHIN THE DEVELOPMENT AREA.
8. EXISTING WOODLANDS ARE ON THE PARCEL BUT ARE NOT LCOATED WITHIN THE DEVELOPMENT AREA.

LANDSCAPE AND BUFFERING DATA:

FOREST CONSERVATION	
PROVIDED	RECORDED PLAT 4/35G
OVERALL TREES	
REQUIRED	45 = (11,000/1,000) + (50,646 SF/1500) 1 TREE/1000 SF (FIRST 11,000 SF AREA) 1 TREE/1500 SF (11,001 TO 100,000 SF AREA)
PROVIDED	45 = 44 TREES + 1 EXISTING
INTERNAL STREET TREES	
REQUIRED	N/A
INTERIOR PARKING LOT	
REQUIRED	11 TREES = 78 SPACES / 7.5 SPACES 1 TREE PER 7.5 SPACES
PROVIDED	11 TREES
PARKING LOT HEDGE	
REQUIRED	42" EVERGREEN HEDGE
PROVIDED	YES
BUILDING FACADE	
REQUIRED	1 TREE PER 50' FACADE, BEDS ALONG 25%
PROVIDED	PROVIDED WITH EXISTING PLANTINGS
SERVICE LOADING AREA	
REQUIRED	6' FENCE SCREEN AT DUMPSTERS
PROVIDED	6' FENCE SCREEN AT DUMPSTERS
BUFFERYARD	
REQUIRED	STREET - BUFFERYARD 'D' SIDE - BUFFERYARD 'E' REAR - N/A
PROVIDED	STREET - YES (IN COMBINATION WITH PARKING LOT SHRUBS) SIDE - YES REAR - EXISTING FOREST CONSERVATION EASEMENT

LANDSCAPE PLANT SCHEDULE

SYMBOL	NATIVE	KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
DECIDUOUS TREE - CANOPY						
	✓	AR	ACER rubrum 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2" - 2 1/2" Cal., B&B	8
	✓	BN	BETULA nigra 'CULLY'	HERITAGE RIVER BIRCH	6' - 7' HT., B&B, 3-5 STEM	5
	✓	LT	LIRIODENDRON tulipifera	TULIP TREE	2" - 2 1/2" Cal., B&B	1
		TC	TILIA cordata 'GREENSPIRE'	GREENSPIRE LINDEN	2" - 2 1/2" Cal., B&B	7
					TOTAL	21
EVERGREEN SHRUBS						
✳	✓	IG	ILEX glabra 'SHAMROCK'	SHAMROCK INKBERRY	18"-24", B&B	42
					TOTAL	42
DECIDUOUS SHRUBS						
⊙	✓	AA	ARONIA arbutifolia 'BRILLIANTISSIMA'	BRILLIANT RED CHOKEBERRY	24"-36", B&B	2
					TOTAL	2

PLANT SCHEDULE - BUFFERS

SYMBOL	NATIVE	KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
DECIDUOUS TREE - CANOPY						
	✓	AR	ACER rubrum 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2" - 2 1/2" Cal., B&B	3
	✓	LT	LIRIODENDRON tulipifera	TULIP TREE	2" - 2 1/2" Cal., B&B	3
					TOTAL	6
EVERGREEN TREES						
	✓	IO	ILEX opaca	AMERICAN HOLLY	7' - 8' HT., B&B	7
	✓	JV	JUNIPERUS virginiana	EASTERN RED CEDAR	7' - 8' HT., B&B	6
	✓	PV	PINUS virginiana	VIRGINIA PINE	7' - 8' HT., B&B	4
					TOTAL	17

LANDSCAPE ARCHITECT'S STATEMENT

I, TIMOTHY M. METZNER, HEREBY STATE THAT I AM A REGISTERED LANDSCAPE ARCHITECT IN THE STATE OF MARYLAND, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ARCHITECTURAL PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF MARYLAND.

SIGNATURE _____ DATE _____

REGISTERED LANDSCAPE ARCHITECT: TIMOTHY M. METZNER, RLA
DAVIS, BOWEN & FRIEDEL, INC.
601 E. MAIN STREET, SUITE 100
SALISBURY, MARYLAND 21804

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the laws of the State of Maryland, License No. 38830 Expiration Date: 12-29-24

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28640 MARY'S COURT, EASTON, MD

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LANDSCAPE DETAILS

Dwg.No.: **L-501**

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PR. SILT FENCE

PR. SILT FENCE

PR. SILT FENCE

PR. SILT FENCE

2"F.M.

2"F.M.

1 1/2"

EX-6W

EX-6W

EX-6W

EX-UGE

EX-UGT

EX-W

LOD

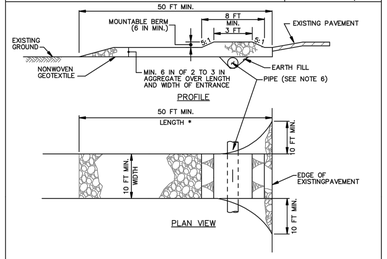
SF

SF

SF

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 (*)50 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.

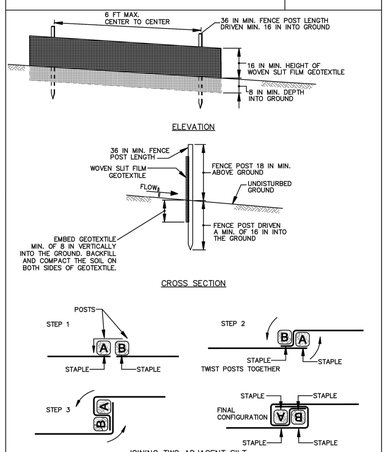
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

B.2

DETAIL E-1 SILT FENCE

STANDARD SYMBOL: SF



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

E.2

DETAIL E-1 SILT FENCE

STANDARD SYMBOL: SF

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1⅜ x 1⅜ ± ¾ 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

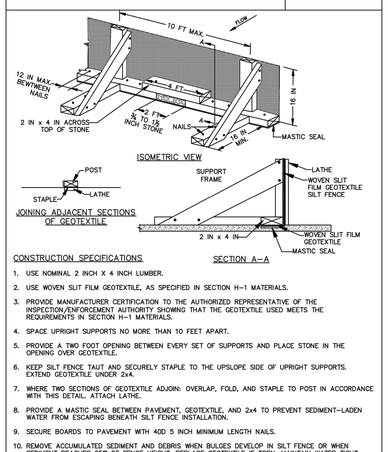
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.3

DETAIL E-2 SILT FENCE ON PAVEMENT

STANDARD SYMBOL: SFOP



CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH X 4 INCH LUMBER.
2. USE WOVEN SLIT FILM GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS.
3. 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.
4. SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
5. PROVIDE A TWO FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
6. KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
7. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.
8. PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT–LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
9. SECURE BOARDS TO PAVEMENT WITH 4OD 5 INCH MINIMUM LENGTH NAILS.
10. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

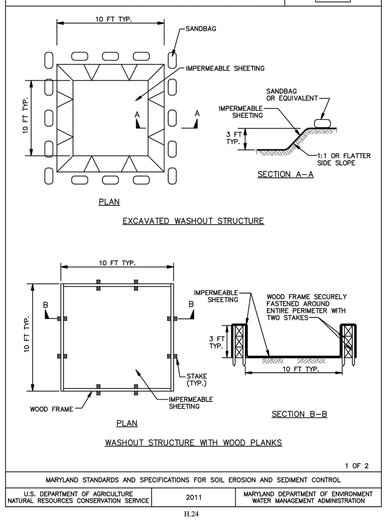
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.5

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL: CWS



1 OF 2

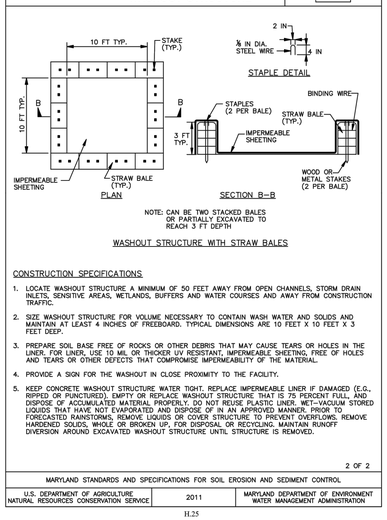
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

H.24

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL: CWS



CONSTRUCTION SPECIFICATIONS

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET–VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER, PRIOR TO FORECASTED RAINSTORMS. REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

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

H.25

EROSION AND SEDIMENT CONTROL NOTES

1. ALL SEDIMENT AND EROSION MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".
2. A PERIODIC MAINTENANCE OF ALL SEDIMENT CONTROL MEASURES SHALL BE REQUIRED TO INSURE EFFECTIVE SEDIMENT CONTROL. INSPECTION OF ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MADE WEEKLY AND AFTER EACH RAINFALL.
3. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION IS ESTABLISHED.
4. ALL AREAS NOT COVERED BY BUILDINGS, PAVEMENT, OR OTHER SUITABLE LANDSCAPING WILL BE SEEDED USING APPROPRIATE SEED MIXTURE SHOWN ON THIS PLAN.
5. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THE REQUIREMENTS OF THIS SUBPARAGRAPH DO NOT APPLY TO THOSE AREAS WHICH ARE SHOWN ON THE PLAN AND ARE CURRENTLY BEING USED FOR MATERIAL STORAGE OF FOR THESE AREAS ON WHICH ACTUAL CONSTRUCTION ACTIVITIES ARE CURRENTLY BEING PERFORMED.
6. THE SOIL CONSERVATION DISTRICT RESERVES THE RIGHT TO REQUIRE ADDITIONAL SEDIMENT AND EROSION MEASURES DURING THE CONSTRUCTION OF THIS PROJECT.
7. SEEDING (PERMANENT)
   A. SHALL BE CONDUCTED BETWEEN MARCH 1 TO MAY 15 OR AUGUST 15 TO OCTOBER 15.
   B. SEED BED PREPARATION: APPLY 10-20-20 FERTILIZER AS SHOWN ON THE PERMANENT SEEDING SUMMARY AND HARROW OR DISC INTO SOIL TO A DEPTH OF 1/4 TO 1/2 INCHES; APPLY GRANULATED LIMESTONE AT 2 TONS PER ACRE. LEVEL AND RAKE THE AREA TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1 ½ INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.
   C. SEEDING: APPLY SEED AS SHOWN IN THE PERMANENT SEEDING SUMMARY ON A MOIST SEED BED WITH SUITABLE EQUIPMENT - MINIMUM COVERAGE 1/4 TO 1/2 INCH. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATERS FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.
   D. MULCHING: IMMEDIATELY AFTER SEEDING, UNIFORMLY MULCH ENTIRE AREA WITH UNWEATHERED SMALL GRAIN STRAW AT A RATE OF 2.5 TONS PER ACRE. MULCH TO BE ANCHORED WITH MULCH ANCHORING TOOL ON THE CONTOUR.
8. TEMPORARY STABILIZATION:
   A. SEED BED PREP: APPLY 10 LB PER 1,000 SQ FT OF 10-20-20.
   B. PROVIDE TEMPORARY SEEDING AS SHOWN ON THE TEMPORARY SEEDING SUMMARY, BETWEEN FALL AND SPRING SEEDING DATES USE MULCH ONLY IF GROUND IS FROZEN AND RESEED WHEN THAWED.
   C. MULCH PER 7.D. ABOVE.
9. IF TEMPORARY STABILIZATION IS REQUIRED, PERMANENT SEEDING SHALL BE PERFORMED DURING THE NEXT APPLICABLE PERIOD PER PARAGRAPH (7) ABOVE.
10. ALL FILL SLOPE AREAS SHOWN HEREON ARE TO BE STABILIZED PER PARAGRAPHS (7) OR (8) ABOVE IMMEDIATELY AFTER COMPLETION OF GRADING OPERATIONS FOR THESE SLOPES.
11. INSTALL EROSION CONTROL MATTING ON ALL SLOPES 3:1 0R GREATER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING NECESSARY CLEANING OF ACCUMULATED SEDIMENT, DEBRIS, ETC. FROM THE EXISTING STORMWATER MANAGEMENT INFRASTRUCTURE.

SEQUENCE OF CONSTRUCTION

1. CONTACT MDE INSPECTOR (410-901-4020) AT LEAST TWO (2) WEEKS PRIOR TO CONSTRUCTION AND ANY LAND DISTURBING ACTIVITIES TO SCHEDULE A PRE-CONSTRUCTION MEETING.
2. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE ALL AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF THE CURRENT "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL".
3. FUTURE ESD PRACTICES SHALL BE PROTECTED FROM DISTURBANCE TO THE MAXIMUM EXTENT PRACTICAL DURING CONSTRUCTION. EXCAVATION FOR SUBMERGED GRAVEL WETLANDS AREAS SHALL BE COMPLETED USING WIDE TRACK OR MARSH TRACK EQUIPMENT OR LIGHT EQUIPMENT WITH TURF TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS OR HIGH-PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION AND IS NOT ACCEPTABLE.
4. LIMITS OF DISTURBANCE AREA NOTED BY THE LIMIT OF DISTURBANCE (LOD) AND SILT FENCE (SF) LINE.
5. CLEAR AND GRUB AREAS NECESSARY FOR THE INSTALLATION OF EROSION & SEDIMENT CONTROLS. INSTALL PERIMETER CONTROLS, SILT FENCING, AND TREE PROTECTION FENCING. INSTALL INLET PROTECTION AS NECESSARY AND ESTABLISH TEMPORARY STOCKPILE, AND CONCRETE WASHOUT LOCATIONS.
6. NOTIFY MDE ONCE PERIMETER SEDIMENT CONTROLS ARE IN PLACE.
7. CLEAR AND GRUB ALL AREAS NECESSARY FOR CONSTRUCTION, AND DEMOLISH ALL EXISTING ITEMS NECESSARY FOR PROPOSED CONSTRUCTION.
8. PROCEED WITH GRADING OF ALL AREAS, BUILDING CONSTRUCTION AND PARKING LOT CONSTRUCTION. BEGIN EXCAVATING BMPS AND RETROFITTING EXISTING RAIN GARDEN.
9. FINE GRADE FOR PROPOSED PAVING, INSTALL CURBING, MILL EXISTING PAVEMENT AND PLACE PAVEMENT PER PAVEMENT SPECIFICATIONS AND PLANS. INSPECT PAVED AREAS FOR SEDIMENT BEFORE INSTALLING FINAL PAVING SURFACE.
10. FINALIZE CONSTRUCTION OF STORMWATER BMPS.
11. FINALIZE ALL SITE AND BUILDING CONSTRUCTION. INSTALL ALL LANDSCAPING, SIGNS, AND OTHER SITE DECORATIONS.
12. SURVEY SHALL BE PERFORMED WITHIN EACH STORMWATER MANAGEMENT FACILITY AFTER FINAL EXCAVATION AND BEFORE MATERIAL FILLING FOR VOLUME VERIFICATION. THIS SURVEY INFORMATION SHALL BE INCLUDED IN THE AS-BUILT SUBMITTAL.
13. CONTRACTOR TO PROVIDE STORMWATER MANAGEMENT AS-BUILTS TO OWNER, TOWN OF EASTON, TALBOT COUNTY PUBLIC WORKS, AND TALBOT COUNTY CONSERVATION DISTRICT WITHIN THIRTY (30) DAYS AFTER COMPLETION OF CONSTRUCTION.
14. STABILIZE AND RESTORE ALL OTHER DISTURBED AREAS NOT OCCUPIED BY BUILDING, PAVEMENT, IMPERVIOUS FEATURES, OR ESD'S PER EROSION AND SEDIMENT CONTROL NOTES.
15. AFTER FINAL STABILIZATION CONTACT MDE, TOWN OF EASTON, AND TALBOT COUNTY FOR INSPECTION, REMOVE EROSION AND SEDIMENT CONTROL MEASURES NOT BEING USED AND STABILIZE AS NECESSARY.

TEMPORARY SEEDING SUMMARY

SPECIES	SEE MIXTURE (HARDINESS ZONE 7b) FROM TABLE 26 APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTHS	FERTILIZER RATE (10-20-20)	LIME RATE
ANNUAL RATE	40	2/15 - 4/30 8/15 - 11/30	1/2"	436 lb/ac (10 lb / 1000sf)	2 tons/ac (90 lb / 1000sf)
FOX TAIL MILLET	30	5/1 - 8/14	1/2"		

NOTE: FOR SANDY SOILS, PLANT SEEDS AT TWICE THE DEPTH LISTED ABOVE.

PERMANENT SEEDING SUMMARY

SPECIES	SEE MIXTURE (HARDINESS ZONE 7b) FROM TABLE 25 APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTHS	FERTILIZER RATE (10-20-20) N	P205	K20	LIME RATE
TALL FESCUE BLUEGRASS RED TOP	100 15 1	3/1 - 5/15 8/15 - 10/15	1/4" -1/2"	45 lb/ac (1 lb / 1000sf)	90 lb/ac (2 lb / 1000sf)	90 lb/ac (2 lb / 1000sf)	2 tons/ac (90 lb / 1000sf)

STANDARD STABILIZATION NOTE

1. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
   A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
   B. SEVEN (7) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING

ESD TO THE MEP

ESD TO THE MEP HAS BEEN IMPLEMENTED IN ORDER TO MEET THE FOLLOWING ELEMENTS:

- PREVENT SOIL EROSION FROM DEVELOPMENT PROJECTS.
- PREVENT INCREASES IN NONPOINT POLLUTION.
- MINIMIZE POLLUTANTS IN STORMWATER RUNOFF FROM BOTH NEW DEVELOPMENT AND REDEVELOPMENT.
- RESTORE, ENHANCE, AND MAINTAIN CHEMICAL, PHYSICAL, AND BIOLOGICAL INTEGRITY OF RECEIVING WATERS TO PROTECT PUBLIC HEALTH AND ENHANCE DOMESTIC, MUNICIPAL, RECREATIONAL, INDUSTRIAL AND OTHER USES OF WATER AS SPECIFIED BY MDE.
- MAINTAIN 100% OF THE AVERAGE ANNUAL PREDEVELOPMENT GROUNDWATER RECHARGE VOLUME.
- CAPTURE AND TREAT RUNOFF TO REMOVE POLLUTANTS.
- IMPLEMENT A CHANNEL PROTECTION STRATEGY TO PROTECT RECEIVING STREAMS.
- PREVENT INCREASES IN THE FREQUENCY AND MAGNITUDE OF OUT-OF-BANK FLOODING FROM LARGE, LESS FREQUENT STORMS.
- PROTECT PUBLIC SAFETY THROUGH THE PROPER DESIGN AND OPERATION OF STORMWATER MANAGEMENT FACILITIES.

DESIGN CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I & II AND THE MARYLAND ENVIRONMENT EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT REGULATIONS.

ROBERT J. DUMA, P.E. — DATE
MD. P.E. REGISTRATION NO. 38830
EXP. 12/29/24

RESPONSIBLE PERSONNEL CERTIFICATION

"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION OR DEVELOPMENT, WILL BE DONE PURSUANT TO THIS PLAN AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A DEPARTMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."

OWNER/DEVELOPER'S SIGNATURE — DATE

PRINTED NAME & TITLE

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the laws of the State of Maryland, License No. 38830 Expiration Date: 12-29-24

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS - ENGINEERS - SURVEYORS
EASTON, MARYLAND 410.770.4744
SALISBURY, MARYLAND 410.543.9091
MILFORD, DELAWARE 302.424.1441

TALBOT COUNTY PUBLIC SAFETY COMPLEX PHASE 2: SALLY-PORT

28640 MARY'S COURT, EASTON, MD

COMMENTS | DATE

Date: APRIL 2024
Scale: AS SHOWN
Dwn.By: NSB
Proj.No.: 1503A030

EROSION & SEDIMENT CONTROL DETAILS

Dwg.No.: CG501

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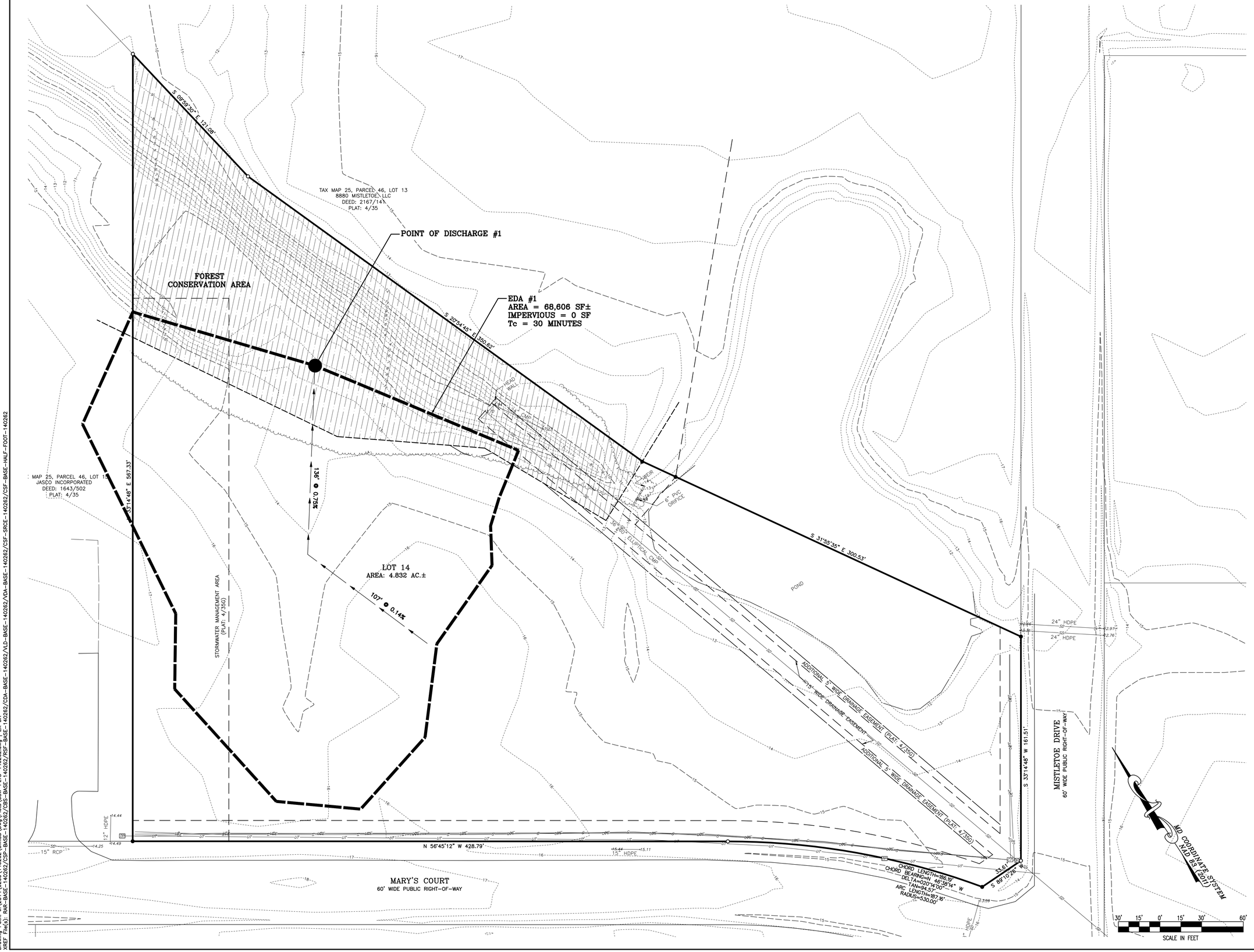

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APPROVED:

TOWN OF EASTON – PLANNING & ZONING DATE

APPROVED:

TOWN OF EASTON – TOWN ENGINEER DATE

REVISIONS

No.	DATE	DESCRIPTION	BY

Lane Engineering, LLC
Established 1986
Civil Engineers • Land Planning • Land Surveyors
E-mail: general@lanei nc.com
117 Bay St. Easton, MD 21601 (410) 822-8003
15 Washington St. Cambridge, MD 21613 (410) 221-0818
354 Pennsylvania Ave. Centreville, MD 21617 (410) 758-2095

NOT VALID FOR CONSTRUCTION
UNLESS SIGNED AND DATED HERE:

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. 48165 , Expiration Date: 12/28/2017.

SEAL

STATE OF MARYLAND
REGISTERED
PROFESSIONAL ENGINEER

DATE

EXISTING CONDITIONS DRAINAGE AREA

HIGHLAND TCP, LLC
"TALBOT COMMERCE PARK"
–LOT 14–

IN THE TOWN OF EASTON
TALBOT COUNTY, MARYLAND
TAX MAP 25, GRID 22, PARCEL 46, LOT 14

PROVIDED AS PRE DEVELOPMENT DRAINAGE AREA MAP, SHEET SWM-1, IN THE SHEET SET TITLED TALBOT COUNTY PUBLIC SAFETY COMPLEX, PHASE 2: SALLY-PORT.

SHEET No. 1 OF 1	03/21/2016
SCALE: AS NOTED	JOB No. 140262
	FILE No. A037

ESD SUMMARY CHART

DRAINAGE AREA	TYPE OF ESD PRACTICE	NAME OF ESD PRACTICE (STRUCTURE NAME)	ON-SITE OR OFF-SITE STRUCTURE	RUNOFF CURVE NUMBER (RCN) WEIGHTED	MARYLAND GRID COORDINATE NAD 83 METERS NORTHING	MARYLAND GRID COORDINATE NAD 83 METERS EASTING	ESD PRACTICE TOTAL DRAINAGE AREA (ACRES)	ESD PRACTICE IMPERVIOUS DRAINAGE AREA (ACRES)	SURFACE AREA OF ESD PRACTICE (ACRES)	TARGET PE (IN.)	ACTUAL PE (IN.)	TARGET ESDv ($FT.^3$)	ACTUAL ESDv ($FT.^3$)
DA-1	MICRO-SCALE	GRASS SWALE	ON-SITE		125344.0700	479765.2700	0.4185	0.2621	0.0422	1.0000	1.0100	941	613
DA-2	MICRO-SCALE	GRASS SWALE	ON-SITE		125338.1600	479709.8000	0.6069	0.3747	0.0643	1	1.0600	1334	933
DA-3	MICRO-SCALE	MICRO-BIORETENTION	ON-SITE		125382.1000	479653.1500	0.3685	0.3042	0.0492	2.0000	2.0000	2121	2863
DA-4	MICRO-SCALE	MICRO-BIORETENTION	ON-SITE		125410.7400	479738.8000	0.2830	0.2830	0.0239	2.2000	1.3000	2147	1874
DA-5	MICRO-SCALE	SUBMERGED GRAVEL WETLAND	ON-SITE		125457.7800	479694.3400	0.7819	0.6581	0.0540	2.0000		4584	6177
TOTAL/AVERAGE							2.4589	1.8831	10177	8.2000	7.3700	11127	12460

SWM QUANTITY SUMMARY CHART

PRACTICE	DA (ACRES)	IMPERVIOUS (ACRES)	RCN	Tc (MINUTES)	PRE 2 YEAR	POST 2 YEAR	W.S.E.	PRE 10 YEAR	POST 10 YEAR	W.S. E.	PRE 100 YEAR	POST 100 YEAR	W.S.E.
GRASS SWALE	0.4185	0.2621											
GRASS SWALE	0.6069	0.3747											
MICRO-BIORETENTION	0.3685	0.3042											
MICRO-BIORETENTION	0.2830	0.2830											
SUBMERGED GRAVEL WETLAND	0.7819	0.6581											

POI-1

PR. SGW-1
TOP OF BANK: 15.40
BOTTOM OF BANK: 12.90
BOTTOM OF FACILITY: 9.90

SGW-1
SURFACE AREA = 2,354 SF
PONDING DEPTH = 1.25 FT
MEDIA DEPTH = 4 FT

APPROX. LOCATION OF EXISTING SWALE

PR. MBR-1
TOP OF BANK: 17.25 BOTTOM OF BANK: 16.15 BOTTOM OF FACILITY: 13.90

DA-5
SUBMERGED GRAVEL WETLAND
AREA = 34,061 SF
IMPERVIOUS = 28,666 SF
84.2%

DA-4
MICROBIORETENTION
AREA = 12,327 SF
IMPERVIOUS = 12,327 SF
100.0%

EXISTING REGIONAL STORMWATER POND

DA-1
GRASS SWALE
AREA = 18,229 SF
IMPERVIOUS = 11,417 SF
62.6%

PR. MBR-2
TOP OF BANK: 15.75
BOTTOM OF BANK: 15.00
BOTTOM OF FACILITY: 12.75

DA-3
MICROBIORETENTION
AREA = 16,054 SF
IMPERVIOUS = 13,249 SF
82.5%

DA-2
GRASS SWALE
AREA = 26,438 SF
IMPERVIOUS = 16,323 SF
61.7%

POST DEVELOPMENT DRAINAGE AREA PLAN

1"=20'

0' 20' 40' 60'
SCALE: 1" = 20'

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the laws of the State of Maryland, License No. 38830 Expiration Date: 12-29-24

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS - ENGINEERS - SURVEYORS
EASTON, MARYLAND 410.770.4744
SALISBURY, MARYLAND 410.543.9091
MILFORD, DELAWARE 302.424.1441

TALBOT COUNTY PUBLIC SAFETY COMPLEX
PHASE 2: SALLY-PORT
28640 MARY'S COURT, EASTON, MD

DATE	COMMENTS

Date: APRIL 2024
Scale: 1"=20'
Dwn.By: NSB
Proj.No.: 1503A030

POST-DEVELOPMENT DRAINAGE AREA MAP

Dwg.No.: **SWM-2**

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION. COPYRIGHT © 2024

L:\1503A Talbot County\1503A030 Talbot Public Safety\CAD\Phase 2\Sheet\1503A030-SWM-1.dwg Apr 29, 2024 - 11:43pm dumr

TOWN OF EASTON

14 South Harrison Street
Easton, Maryland 21601

May 1, 2024

Dear Resident,

The Easton Planning Commission (Commission) will hold a public meeting on **Thursday, May 16, 2024 at 1:00 p.m**. in the Easton Town Council Chambers located on the second floor of 14 South Harrison Street. The Town of Easton Zoning Ordinance requires that owners of property located within 400 feet of a parcel on which certain types of applications are pending be given notice of upcoming meetings or hearings. If you are a tenant in or an owner of a multi-unit building, please distribute or post this notice in a visible location for all other tenants or owners to view. If you are a tenant of a rental property, please notify the property owner that this notice letter has been distributed to their property. Notice has also been sent to the Star Democrat, a sign has been posted at the subject property and the hearing agenda has been posted on the Town of Easton website: http://eastonmd.gov/.

This letter is sent to inform you that Davis, Bowen & Friedel, Inc (Applicant) has filed application 2024 - 1156 on behalf of the Talbot County Department of Public Works to request a Supplemental Parking Waiver from the required number of parking spaces. The property is located at 28640 Mary's Court, also known as Tax Map 0025, Grid 0022, Parcel 0046, Lots 14 and 14A. This application (SE-1156 / SE 24 - 04) is scheduled to appear on the May 21, 2024 Board of Zoning Appeals agenda to obtain a Special Exception pursuant to use 304 in Table 2.1 of Section 28-202 of the Ordinance, to be utilized as a Fire, Rescue, or Police Station. The Talbot County Sheriff's Office, and the Talbot County Department of Emergency Services intend to relocate their offices to this newly improved facility.

Copies of the proposed application are on file and available for public review in the Town's Planning Office at 14 South Harrison Street between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday. **In addition, digital copies will be available for review one week prior to the scheduled meeting via the Town's website at** https://www.eastonmd.gov/129/Agendas-Minutes. If you have any questions regarding this application, please contact the Planning Office at (410) 822-1943 or via email at ssmith@eastonMD.gov.

Samantha N. Smith, Administrative Specialist
Planning & Zoning Department
410-822-1943 ssmith@eastonMD.gov

APG Media of Chesapeake, LLC

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

INVOICE
04/29/24

Cust. AcctID:		Creation Date:	**04/29/24**
		Ad Date:	**05/01/24**
		Class:	
Name:	**Joanne Drummer**	Ad ID:	
Company:	**TOWN OF EASTON (L)**	Words:	
Address:	**PO Box 520**	Lines:	
	EASTON, MD 21601	Agate Lines:	
		Depth:	
		Inserts:	
		Blind Box:	
Telephone:	**(410) 822-2525**		
Description:	**Planning Comm Meeting**		

Other Charges:		Total:	
Discount:			
Surcharge:		Paid Amount:	
Credits:			
Bill Depth:		Amount Due:	

CREDIT CARD DETAILS

PT	CT	CN	Number	Exp.	Amnt.

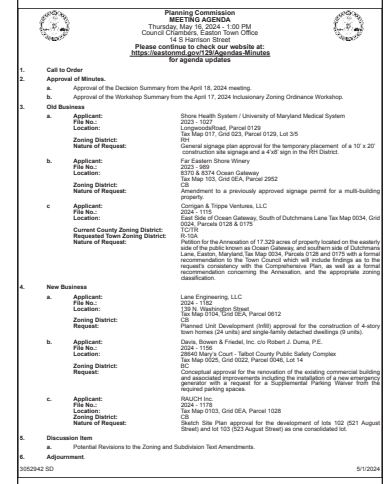
Publication	Start	Stop	Inserts
The Star Democrat	05/01/24	05/01/24	1

Ad Note:

Sign posted on May 1, 2024

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!



Planning Commission
MEETING AGENDA
Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street
Please continue to check our website at:
https://eastonmd.gov/129/Agendas-Minutes
for agenda updates

1. **Call to Order**
2. **Approval of Minutes.**
   a. Approval of the Decision Summary from the April 18, 2024 meeting.
   b. Approval of the Workshop Summary from the April 17, 2024 Inclusionary Zoning Ordinance Workshop.
3. **Old Business**
   a. **Applicant:** Shore Health System / University of Maryland Medical System
      File No.: 2023 - 1027
      Location: Longwoods Road, Parcel 0129
      Tax Map 017, Grid 023, Parcel 0129, Lot 3/5
      Zoning District: RH
      Nature of Request: General signage plan approval for the temporary placement of a 10' x 20' construction site signage and a 4'x8' sign in the RH District.
   b. **Applicant:** Far Eastern Shore Winery
      File No.: 2023 - 999
      Location: 8370 & 8374 Ocean Gateway
      Tax Map 103, Grid 8EA, Parcel 2952
      Zoning District: CB
      Nature of Request: Amendment to a previously approved signage permit for a multi-building property.
   c **Applicant:** Corrigan & Trippe Ventures, LLC
      File No.: 2024 - 1115
      Location: East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
      Current County Zoning District: RC
      Requested Town Zoning District: R-10A
      Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland; Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.
4. **New Business**
   a. **Applicant:** Lane Engineering, LLC
      File No.: 2024 - 1162
      Location: 139 N. Washington Street
      Tax Map 0104, Grid 0EA, Parcel 0612
      Zoning District: CB
      Request: Planned Unit Development (infill) approval for the construction of 4-story town homes (24 units) and single-family detached dwellings (9 units).
   b. **Applicant:** Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
      File No.: 2024 - 1156
      Location: 28640 Mary's Court - Talbot County Public Safety Complex
      Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
      Zoning District: BC
      Request: Conceptual approval for the renovation of the existing commercial building and associated improvements including the installation of a new emergency generator and a request for a Supplemental Parking Waiver from the required parking spaces.
   c. **Applicant:** RAUCH Inc.
      File No.: 2024 - 1179
      Location: Tax Map 0103, Grid 0EA, Parcel 1028
      Zoning District: CB
      Nature of Request: Sketch Site Plan approval for the development of lots 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot.
5. **Discussion Item**
   a. Potential Revisions to the Zoning and Subdivision Text Amendments.
6. **Adjournment.**

3052942 SD 5/1/2024

APG Media of Chesapeake, LLC

INVOICE
05/06/24

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

Cust. AcctID:		Creation Date:	**05/06/24**
		Ad Date:	**05/08/24**
		Class:	
Name:	**Joanne Drummer**	Ad ID:	
Company:	**TOWN OF EASTON (L)**	Words:	
Address:	**PO Box 520**	Lines:	
	EASTON, MD 21601	Agate Lines:	
		Depth:	
		Inserts:	
		Blind Box:	
Telephone:	**(410) 822-2525**		
Description:	**Planning Comm Meeting**		

Other Charges:		Total:	
Discount:			
Surcharge:		Paid Amount:	
Credits:			
Bill Depth:		Amount Due:	

CREDIT CARD DETAILS

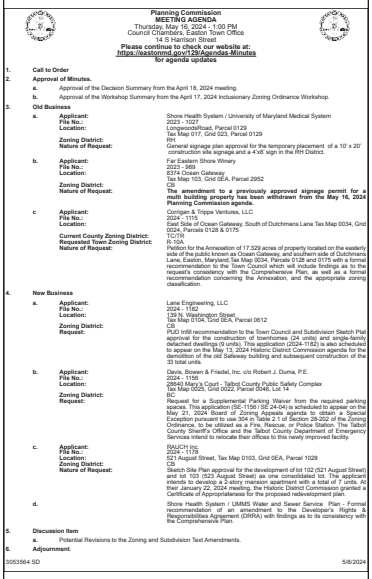
PT	CT	CN	Number	Exp.	Amnt.

Publication	Start	Stop	Inserts
The Star Democrat	05/08/24	05/08/24	1

Ad Note:

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!



Planning Commission
MEETING AGENDA
Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street

Please continue to check our website at:
https://eastonmd.gov/139/Agendas-Minutes
for agenda updates

1. **Call to Order**
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   a. Approval of the Decision Summary from the April 18, 2024 meeting.
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   a. **Applicant:** Shore Health System / University of Maryland Medical System
      File No.: 2023 - 1027
      Location: Longwoods Road, Parcel 0129
      Tax Map 017, Grid 023, Parcel 0129
      Zoning District: RH
      Nature of Request: General signage plan approval for the temporary placement of a 10' x 20' construction site signage and a 4'x8' sign in the RH District.
   b. **Applicant:** Far Eastern Shore Winery
      File No.: 2023 - 989
      Location: 8374 Ocean Gateway
      Tax Map 103, Grid 0EA, Parcel 2952
      Zoning District: CB
      Nature of Request: **The amendment to a previously approved signage permit for a multi building property has been withdrawn from the May 16, 2024 Planning Commission agenda.**
   c **Applicant:** Corrigan & Trippe Ventures, LLC
      File No.: 2024 - 1115
      Location: East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
      Current County Zoning District: IL
      Requested Town Zoning District: IL-10A
      Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland, Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.
4. **New Business**
   a. **Applicant:** Lane Engineering, LLC
      File No.: 2024 - 1162
      Location: 139 N. Washington Street
      Tax Map 0104, Grid 0EA, Parcel 0612
      Zoning District: RC
      Request: PUD Infill recommendation to the Town Council and Subdivision Sketch Plat approval for the construction of townhomes (24 units) and single-family detached dwellings (9 units). This application (2024-1162) is also scheduled to appear on the May 13, 2024 Historic District Commission agenda for the demolition of the old Safeway building and subsequent construction of the 33 total units.
   b. **Applicant:** Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
      File No.: 2024 - 1156
      Location: 28640 Mary's Court - Talbot County Public Safety Complex
      Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
      Zoning District: BC
      Request: Request for a Supplemental Parking Waiver from the required parking spaces. This application (SE-1156 / SE 24-04) is scheduled to appear on the May 21, 2024 Board of Zoning Appeals agenda to obtain a Special Exception pursuant to use 304 in Table 2.1 of Section 28-202 of the Zoning Ordinance, to be utilized as a Fire, Rescue, or Police Station. The Talbot County Sheriff's Office and the Talbot County Department of Emergency Services intend to relocate their offices to this newly improved facility.
   c. **Applicant:** RAUCH Inc.
      File No.: 2024 - 1179
      Location: 521 August Street, Tax Map 0103, Grid 0EA, Parcel 1028
      Zoning District: CB
      Nature of Request: Sketch Site Plan approval for the development of lot 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot. The applicant intends to develop a 2-story mansion apartment with a total of 7 units. At their January 22, 2024 meeting, the Historic District Commission granted a Certificate of Appropriateness for the proposed redevelopment plan.
   d. Shore Health System / UMMS Water and Sewer Service Plan - Formal recommendation of an amendment to the Developer's Rights & Responsibilities Agreement (DRRA) with findings as to its consistency with the Comprehensive Plan.
5. **Discussion Item**
   a. Potential Revisions to the Zoning and Subdivision Text Amendments.
6. **Adjournment.**

3053564 SD 5/8/2024

TOWN OF EASTON
PLANNING & ZONING
14 S Harrison Street, Easton MD 21601

Date of Hearing: May 16, 2024

4c

PLANNING COMMISSION
PUBLIC HEARING
STAFF REPORT

SUBJECT:	**Sketch Site Plan Review for 521 August Street (41 N. Park Street – Pending New Address)**
ELECTION WARD:	Ward 4
CRITICAL ACTION DATE:	At the pleasure of the Commission
STAFF CONTACTS:	Joseph Mayer, Plan Reviewer Miguel Salinas, Director of Planning and Zoning
APPLICANT:	Chesapeake Community Development, LLC.

DOCUMENT CREATED ON: May 07, 2024

PURPOSE: Chesapeake Community Development, LLC. (Applicant), is seeking sketch site plan approval for the construction of a 2-story mansion apartment building (middle housing) comprising 3,330 square feet (SF) of gross floor area (GFA) with a total of 7 units. Associated site improvements include permeable pavers and SWM planter box facilities to provide stormwater management.

RECOMMENDATION: Should the Planning Commission (Commission) approve the sketch site plan, staff recommends approval as submitted.

APPLICATION INFORMATION:	
APPLICANT: Chesapeake Community Development, LLC.	**REPRESENTATIVE:** Rauch Inc.: Casey Rauch, Chris Schoenster Chesapeake Community Development, LLC.: Judi Olinger

PARCELS/ACREAGE:

Parcel Information	Acreage
Map 103, Grid 0000E, Parcel 1028, Lots 2 & 3	0.192

ACCEPTANCE DATE: April 29, 2024	**LOCATION:** 521 August Street
EXISTING ZONING CB PUD Infill Boundary PR Boundary	**EXISTING LAND USE:** Unimproved
HISTORIC DISTRICT: Applicable	**FUTURE LAND USE MAP:** Residential

CONTEXT:
Location/Site Access – The subject property is located on the northwest corner of August and North Park Street, fronting on the west side of North Park Street.

Existing Conditions – The subject property is currently unimproved.

Surrounding Properties

- 26 N Park Street – R7A, PUD Infill
- 401 Goldsborough Street – R7A, Historic District, PUD Infill
- 524 Goldsborough Street – R7A, Historic District, PUD Infill
- 522 Goldsborough Street – R7A, Historic District, PUD Infill
- 517 August Street – CB, PR District, Historic District, PUD Infill
- 516 August Street – CB, PR District, Historic District, PUD Infill
- 522 August Street – CB, PR District, Historic District, PUD Infill
- 602 August Street – R7A, Historic District, PUD Infill

Figure 1**: **Vicinity Map

PROPOSAL: The Applicant is proposing to construct a two-story Mansion Apartment (7 unit) building. The proposed structure is approximately 3,330 square feet, with a building height of 24'-8". There's also proposed permeable pavers and SWM planter box facilities that will be provided to manage stormwater.

The Zoning Code permits one Mansion Apartment building to be constructed on any recorded lot that meets all development standards without regard to density limitations. Because this is proposed as a Planned Redevelopment application, the Commission has the flexibility to establish a number of site-specific and unique development standards, if necessary (e.g., height, setbacks, etc…).

The Applicant is proposing five Off-Street Parking spaces adjacent to Powell's Alley and four On-Street Parking spaces along N. Park Street. Off-Street Parking is not required within the Central Business Commercial District or the Planned Redevelopment Overlay District. The applicant has provided landscaping close to the building that faces street fronts. The total site area is less than 40,000 sf; therefore, no Forest Conservation Plan is required. The current proposed density is 37.9 dwelling units per acre.

BACKGROUND: The previous Applicant, Better Homes, Better Communities, submitted applications for Easton Staff Development Review on September 7, 2022 and October 26, 2022. They later submitted an application for the November 17, 2022 Planning Commission meeting to

develop the lots as one consolidated lot. At the conclusion of the meeting, the Commission voted 4-0, deferring the proposal on the premise that the Applicant withdraw waiver requests for all buffering, parking and setback requirements; that the Applicant attempts to reduce the scale of the building with respect to length and width; that the proposal attempts to maintain the architectural integrity of the surrounding neighborhood; and that the record is held open for public comment.

The current Applicant, Chesapeake Community Development, LLC., submitted applications for the Historic District Commission and received a Certificate of Appropriateness on February 14, 2024 for the construction of a two-story mansion apartment, approximately 3,300 square feet, with a height of 26 feet. The Applicant also requested approval for the removal of healthy trees. The Commission approved the application with the condition that: 1) all trash and recycling receptacles shall be screened on three sides; and 2) minor revisions to the proposed site and structure that are consistent with the Historic District Guidelines may be administratively approved by staff after consultation with the Chair of the commission. On April 24, 2024, Chesapeake Community Development, LLC., submitted an application for the Easton Staff Development Review.

Staff notes that the Applicant has addressed previous Planning Commission concerns: The current Applicant has reduced the overall scale of the building and lowered the number of dwelling units from the original 12 dwelling units to the proposed 7 dwelling units. Architectural integrity of the surrounding neighborhood was achieved by obtaining architectural approval from the Historic District Commission for a Certificate of Appropriateness on February 14, 2024. There's sufficient proposed landscaping along August Street, North Park Street and Powell's Alley. The non-street exterior property line on the west side of Lot 2 adjoins a compatible land use and is buffered by an existing six (6) foot privacy fence.

OUTSTANDING ISSUES:

There are no outstanding issues.

ZONING ANALYSIS:

A. Purpose

Section 28-501 A.

> ***The purpose of the Planned Redevelopment Overlay District (PR) is to provide a mechanism for the redevelopment, rehabilitation, and general improvement of certain older areas within the Town of Easton that have fallen into a somewhat neglected or dilapidated state or have simply been used for a purpose that no longer serves the health, safety or general welfare of the neighborhood. PR applications may be***

submitted only if the project is located within the Planned Redevelopment Overlay District. However, this mechanism is optional and shall not be required of all projects located within this zone. Projects not being developed in accordance with PR District standards shall be developed in accordance with the development standards of the underlying base zoning district.

The nature, size, scale or intensity of a proposed use may cause a particular site not to be suitable for a specific PR proposal. Therefore, there is no general presumption that an application for such a use at a particular location is valid, inures to the general benefit of the Town, is compatible with surrounding uses, or is in compliance with the Town's Comprehensive Plan. Instead, each application will be evaluated according to its particular location and the degree to which the developer is willing or able to propose a development plan which ameliorates possible adverse impacts and furthers the goals and objectives of this Section and the Ordinance generally

Analysis - The current process of the Town of Easton Zoning Ordinance is for the Planning and Zoning Commission to review the material submitted as described in § 28-501.C of the Town Code and shall represent the initial step in the PR review process. Successful applications shall subsequently follow the appropriate steps for the type of project submitted and the applicant shall prepare and submit for review a development and a final site plan in accordance with the site plan requirements specified in § 28 – 901.3.B and C of the Town Code and the requirements of the Town of Easton Subdivision Regulations, if applicable.

B. Off-Street Parking

28-1001.3 Parking Requirements

	Use/Activity	Minimum Vehicle Spaces	Maximum Vehicle Spaces	Minimum Bicycle Spaces	Notes
	Residential Buildings				
3	Any Middle Housing Type (except single-family attached/Townhome)	0.75 per du	1.0 per du		

Total Site Parking Required (when not proposed as a PR application):

Mansion Apartment (Middle Housing): 0.75 Space per dwelling unit required-Minimum
7 units x 0.75 = 5 spaces required-Minimum
1 Space per dwelling unit required-Maximum
7 units x 1 = 7 spaces required-Maximum
Total spaces provided: 9

Analysis- There are no minimum off-street parking spaces required within the PR Overlay Zoning District, although the adequacy of parking may be a consideration of site plan review. The Applicant is proposing 9 parking spaces.. There are 5 proposed off-street parking spaces along Powell's Alley and 4 proposed parallel on-street parking spaces along North Park Street. The mansion-apartment has a total of 7 units. Each unit is a two-bedroom apartment. The overall proposed parking spaces are 55% over the minimum required parking spaces for projects not developed under the PR Overlay Zoning District. The Applicant believes the proposed parking is adequate to support the daily operation of this complex. In addition to the provided parking spaces, the existing public parking along August Street and Park Street are adequate for the proposed development and are not anticipated to cause significant traffic congestion, based on the observations of evening parking conditions after 6:30 pm during weekdays.

Chesapeake Community Development, LLC. has demonstrated that they can adequately provide parking spaces within the minimum and maximum requirements established in § 28-1001.3.A of the Town Code.

C. Central Business Commercial District Development Standards

Table 1. Development Standards		
CB Zoning District	**Standard**	**Proposed (Planned Redevelopment Overlay)**
Setbacks	**Front:** a. in previously developed areas in the CB commercial zone the existing or established front building line of that block; b. all buildings hereafter constructed in areas without an established front building line in that block shall be setback twenty-five (25) feet from the front property line **Rear:** a. in previously developed areas in the CB commercial zone the existing or established rear building line of that block; b. all buildings hereafter constructed in areas without an established rear building line in that block shall be setback fifteen (15) feet from the rear property line. **Side:** none.	Front = 10 feet Side = 5 feet
Lot Size (min.)	5,000 square feet	8,382 square feet

Lot Frontage (min.)	30 feet	64.94 feet
Building Envelope (min.)	20 feet x 30 feet	75’ x 45’-6”
Lot Coverage (max.)	90% (Lot Area)	40.4% (Lot Area)
Height (max.)	60 feet	24’-8” (Same height as adjacent building)

§ 305.2 of the Zoning Ordinance states that development within the Central Business Commercial District shall also meet these additional requirements:

- ***Building structure size – not to exceed twenty-five thousand (25,000) square feet of gross floor area, except by Special exception.***
- ***Maximum density shall be seven (7) dwelling units per acre for single-family dwellings, sixteen (16) dwelling units per acre for multifamily dwellings, or as specified in Section 28-1007.1 A 9 for Middle Housing Types.***
- ***All on-site lighting unless approved otherwise by the Planning and Zoning Commission shall be low cut-off shielded luminaries at 18’ height and light shall not shine off-site at levels greater than 1-foot candle.***
- ***All off-street loading and unloading areas shall be screened from view by permanent, decorative screens or natural plantings, a minimum of eight (8) feet in height, as per the requirements of Section 28 – 1014 of this Ordinance.***

Analysis - The site falls under the CB - Central Business Commercial District Area and meets the § 28-305.2 Development Standards.

D. DEVELOPMENT STANDARDS

Section 28-501.B.
Development within the Planned Redevelopment Overlay District shall meet the following requirements:

(1) The area proposed for a planned redevelopment shall be in one (1) ownership, or, if in several ownerships, the proposal shall be filed jointly by all the owners of the property included in the development plan.

Analysis: The property is owned by a single entity.

(2) The site shall be of a configuration suitable for the development proposed.

Analysis: The site includes an aggregate of 0.192 acres and has direct access to North Park Street and Powell's Alley. The property is surrounded by existing single family dwellings and is in close proximity to the Rails to Trails project to the west. The planned layout and site design provide for a functional and well-designed residential complex. The configuration focuses parking to the exterior of the Property along North Park Street and Powell's Alley and provides for attractive and a well-landscaped mansion apartment.

(3) Public water and sewerage shall be available.

Analysis: Adequate water and sewer services to serve the proposed project exist and are adjacent to the property. The Applicant will provide the utility extensions that are necessary to connect the project to Town services and will work with Easton Utilities to ensure that all permits and approvals are granted.

(4) The site shall be located adjacent to adequate transportation facilities capable of serving existing traffic and that are expected to be generated by the proposed development.

Analysis: The project will access from N. Park Street, August Street, and from Powell's Alley. The parking surfaces serving the project comply with applicable Town standards.

(5) The overall residential density of a Planned Redevelopment project shall not exceed forty (40) units per gross residential acre. For the purposes of this subsection, the gross residential area shall include all land within the area intended to be used for residences, residential parking space, and reservation for community recreation and education facilities. Any land mapped as floodway by the Federal Emergency Management Agency, and non-residential uses shall be excluded in computing the gross area. The Planning and Zoning Commission may require a lower density if review of the proposed development indicates that the maximum allowable density is excessive for the surrounding area.

Analysis: The Applicant is proposing 7 total units, which is 0.68 units or 0.08% under the maximum density of 7.68 units permitted on the property.

(6) For new infill development projects, the setback, lot size, lot coverage, height, and yard requirements shall be established for each individual project by the Planning and Zoning Commission. In establishing these requirements, the Planning and Zoning Commission shall consider such factors as the proposed intensity of the project and the existing character of the neighborhood.

Analysis: The Planning Commission can apply, in its discretion, bulk standards such as setbacks and maximum height on a project-by-project basis. The project proposes: (1) 10 ' front yard setbacks; (2) 5' side yard setback, · (3) 24'-8" maximum height. The Applicant and development team has worked to reduce the number of proposed units such that the building proposed is only two (2) stories and the site layout concentrates parking to the exterior of the property. Other site

constraints imposed, such as stormwater management, dumpster enclosure, sidewalks, and landscaping, dictate that the most reasonable project layout is the one proposed for the project.

(7) Off-street parking is not required for projects proposed in the Planned Redevelopment Overlay District, although adequacy of parking may be a consideration of site plan review.

Analysis: Despite the fact that the Code does not require any parking for the project, the Applicant recognizes that it should not impose unnecessary parking congestion or burden on the Town and nearby residents who may use public parking. Therefore, the Applicant is proposing a total of 9 parking spaces to serve the project, which is four (4) spaces above the ordinarily-prescribed parking minimum applicable to middle housing type. The Applicant is confident that this design will ensure that parking occurs on the property and North Park Street. In addition to the provided parking spaces, the existing public parking along August Street and Park Street are adequate for the proposed development and are not anticipated to cause significant traffic congestion, based on the observations of evening parking conditions after 6:30 pm during weekdays.

(8) Sidewalks shall be constructed along any public right-of-way (except for alleys) adjacent to the site along the entire frontage(s) of the property. To the extent practicable, walkways shall be constructed on the site to tie building entrances and/or pedestrian pathway systems into existing or proposed public sidewalk systems.

Analysis: The project design addresses this requirement by proposing sidewalks along the frontage of North Park Street and existing sidewalk on August Street. Sidewalks on the property are proposed to ensure ease of access to roadways, the apartment complex and the Rails to Trails project.

Applications under the PR Overlay Zoning District for multi-family apartments are exempt from applicable supplemental use standard requirements as specified in § 28-1007.1.14 of the Town Code.

E. Forest Conservation

The Easton Forest Conservation Requirements of the Town Code, Article III,* § 31-3.1 *Relevance, states that the requirements are applicable to any person making application for a subdivision, project plan, grading, or sediment and erosion control approval on units of land 40,000 square feet or greater after the effective date of the Ordinance.

Analysis - The development of this site is within the priority funding area that's within the proximity of residential dwellings. The overall site area is 8,382 square feet and is under the required 40,000 square foot minimum. Therefore, Forest Conservation is not required.

POLICY ANALYSIS:

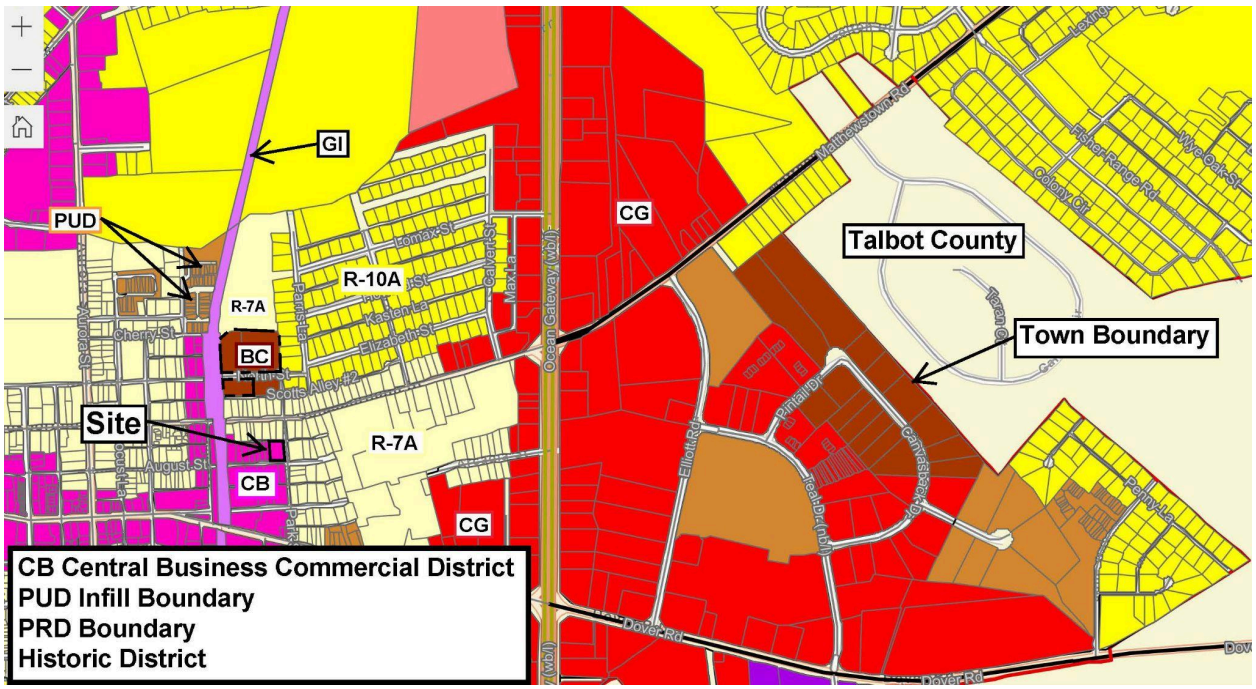


Figure 2: Zoning Map

Section 28-901.2.G of the Town Code states that the submission of a site plan for a proposed use or development activity shall not be approved unless it meets the factors below:

1. The site plan meets the design principles and standards and required improvements set forth in this Ordinance, the Town Comprehensive Plan, the Town of Easton Subdivision Regulations, and other ordinances, regulations, and policies established by the Town of Easton.

Analysis -

Town of Easton 2010 Comprehensive Plan Design Principles (Principle #1) Integrated uses are desirable- Applicant's response: *August Street consists of residential and commercial properties. This project will have a total of 7 affordable and market rate dwelling units within the building. This addresses the need for housing which is in line with the Comprehensive Plan to increase the number and types of housing available in the area.*

Staff notes that this is an appropriate location for a walkable residential mansion apartment within the Town of Easton's Central Business Commercial District. In addition, the proposed

development is under the PR Overlay Zoning District, which includes properties adjacent to Rails-to-Trails to provide a mechanism for the redevelopment, rehabilitation, and general improvement of certain older areas within the Town of Easton, including properties that have fallen into a somewhat neglected or dilapidated state.

(Principle #2) Natural features should determine design – Applicant's response: *The site is within an existing neighborhood block. Stormwater planters and permeable pavers are being utilized to migrate rain runoff and improve water quality of ground water. The planters are designed to blend in with the building architecture and minimize their visual impact. Native specimens will be planted to offer shade and visual interest to the area. In conjunction with the existing brick front walk, sidewalks have been proposed on the two street frontages which will increase the walkability in the area.*

Staff notes that there are no compelling natural features on site.

(Principle #3) Automobiles should not determine design – Applicant's response: *The modest rear parking lot does not dominate this site. Clever use of parallel parking spaces have been employed to minimize the hard surfaces while accommodating the parking demands of the additional dwelling units. parking pavers provide a distinctive upscale look while improving stormwater.*

Staff notes that the Applicant has provided adequate off-street parking interior to the site and it should be noted that there's proposed on-street parking along North Park Street.

(Principle #4) Ample Open Space should be provided within & around neighborhoods – Applicant's response: *This project provides both front and rear yard as well as tree lined sidewalks with tasteful, low maintenance landscape. The use of porches and balconies provides for outdoor living for the apartment residents.*

Staff notes that open space is not applicable.

(Principle #5) Architecture should respect Easton's Historical Development – Applicant's response: *This project has been reviewed and approved by the Town of Easton Historic District Commission. The architectural design is compatible with the neighborhood in terms of scale, roof lines, detailing and material selections.*

Staff notes that this project received Historic District Approval on 01/22/24 for the construction of a two-story mansion apartment, approximately 3,300 square feet, with a height of 26 feet. The Applicant also requested approval for the removal of healthy trees.

(Principle #6) Signs should inform but not dominate – Applicant's response: *There will be minimal signage on this property. Each unit will have a street/house number that will indicate the unit and address for the public and fire/rescue services. A free standing sign is not anticipated on this property.*

Staff notes that any future monument sign will require a Signage Application to be submitted prior to installation. Signs should inform but not dominate the area.

(Principle #7) Neighborhoods should contain a diversity of housing types – *Applicant's response: This mansion style apartment building offers a choice in an otherwise predominantly community of single family dwellings.*

Staff notes that the mansion apartment use offers a diverse housing type. The Comprehensive Plan states that there is a demonstrated need for apartment units in Town, and that to the extent that it exists, the apartments are strictly segregated. The plan supports a diversity of housing types to enable people from a broad spectrum of economic levels to live within the same neighborhood.

(Principle #8) Residential neighborhoods should be interesting places – *Applicant's response: This apartment offers architectural interest through the use of porches, balconies, varied rooflines, bay windows and different materials as well as landscape. The fact that there are both market and affordable housing offers inclusion for people with different social and economic classes.*

(Principle #9) Neighborhoods should connect – *Applicant's response: Pedestrians can traverse the Town in a safe and pleasant way with the addition of sidewalks along the property edges.*

Staff notes that the Comprehensive Plan states that older historic areas of Easton are where you find a great variety of lot sizes, configurations, and housing types as opposed to the more recent homogenous subdivisions built over the last 30 years. In addition, the plan states that connected neighborhoods are a fundamental characteristic of the older parts of Easton that are essential to emulate in new development projects for four reasons: 1) to offer multiple travel options, 2) to promote community and increase the opportunities for social interactions and walking between adjacent developments, 3) connected neighborhoods are safer and urban gridded streets promote lower vehicular speeds, and 4) connected neighborhoods are more sustainable and can promote compact, vibrant, mixed-use neighborhoods where living in a mixed-use environment where residents are within walking distance of shops and services results in increased walking and biking.

The Comprehensive Plan's Community Character chapter, related to the role of infill development in Easton's growth strategy, states that infill development can accommodate growth without annexing land. Infill and redevelopment means:

- ***decreased demand for new, undeveloped greenfields***
- ***mobility for those who do not or cannot drive***
- ***it's less expensive to provide services to infill sites versus greenfield sites***
- ***An increased supply of smaller‐sized housing units can offer more affordable and lower maintenance housing choices for smaller households***
- ***new opportunities and improved quality of life for in‐Town residents,***

- ***savings on energy and the environment,***
- ***development that is consistent with State Smart Growth Policies***

The plan does state that extra attention needs to be given to compatibility and neighborhood impact issues and the plan offers points for consideration with any infill or redevelopment project. These points include: ensure housing types that are compatible with existing types, employ appropriate traffic calming measures, and provide a continuous pedestrian network.

2. The site plan avoids or minimizes adverse impacts upon features (whether on-site or off-site) of historical, cultural or ecological significance.

Analysis - The site is within the Historic District and has received architectural approval from the Historic District on January 22, 2024. The site is not within the Critical Area. This project would provide seven residential units with improved amenities; adequate parking, stormwater management facilities and landscaping.

3. The proposed use or development activity will not substantially increase traffic hazards due to traffic generated by the proposed use, the location of curb cuts or the layout of internal traffic circulation.

Analysis - The proposed use and activity will not increase traffic hazards in the surrounding area. Adequate off-street and on-street parking is provided.

4. The site plan and the proposed use or uses do not cause any adverse impact upon the health or safety of persons residing or working in the area surrounding the site or upon the character of the neighborhood surrounding the site; and

Analysis - There would be no adverse impacts. The existing property is located within a Central Business Commercial Zoned District. Proposed use would provide a middle housing use with associated parking, stormwater management facilities and landscaping.

5. ***The site plan improves the water quality of the Chesapeake Bay or its tributaries.***

Analysis - The proposed site would meet required design practices for stormwater management.

RECOMMENDED CONDITIONS:

Staff has no recommended conditions.

DRAFT MOTIONS:

1. I move that the Planning Commission approve the sketch site plan as submitted.

OR

2. I move that the Planning Commission forward the application to the June 20th Commission meeting for further discussion.

OR

3. I move an alternate motion.

ATTACHMENTS:
1. 2024.04.29 Laura House -Sketch Site Plan_MAY 2024, paper copy & PDF
2. 2024.04.29 LauraHouse_FULL SWM Report, PDF
3. 2024.04.29 SKETCH PLAN CHECKLIST, paper copy & PDF
4. 2024.04.29 SKETCH SWM PLAN CHECKLIST, paper copy & PDF
5. 2024.04.29 The Laura House Architecture Package, paper copy & PDF
6. 2024.01.22 Approval - Historic District COA, paper copy & PDF
7. 2024.04.24 ESDR Determination Letter & Application, paper copy & PDF
8. 2024.05.05 May PC 400' Notice Letter, paper copy & PDF

TOWN OF
EASTON
ENGINEERING DEPARTMENT

DATE: **May 8, 2024**

TO: **Brian Fitzgerald – Rauch, Inc.**
Cc: **Rick Van Emburgh – Town Engineer**
Lynn Thomas – Town Planner
Aaron Goller – EUC

FROM: **Sierra Clem – Engineering Department**

SUBJECT: **521 August Street House of Laura**
Sketch Site Plan & Sketch Stormwater Management Review for Planning Commission

Our office has reviewed the revised Application for the Subject project received on 4/30/2024. The **Sketch Site Plan and Sketch Stormwater Management Plan must be revised** to address the following comments:

1. **SHEET C-401:** Provide a row that includes a total value at the bottom of the ESD Summary Chart (similar to TOE-SWM-7.01). The total ESD required is 1170 cf but the total ESD provided is 1161 cf. Additional treatment must be provided.

Prior to Preliminary Site Plan and Preliminary Stormwater Management Plan application, please address the following comments:

2. **SHEET G-100 - GENERAL NOTES -** Change TOWN OF EASTON DPW to TOWN OF EASTON ENGINEERING DEPARTMENT - 410-820-8822.
3. **SHEET C-101 -** Existing fire hydrant at southeast corner of the site will likely need to be relocated to accommodate the proposed ADA Ramp at the corner of August Street and Park Street.
4. **SHEET C-401** - Provide proposed inlets for access at all proposed stormdrain bends and connections in Powell Alley.
5. **SHEET C-401** - Proposed stormdrain pipe in Powell Alley ROW should be 15" minimum HP Storm (or approved equivalent) and maintain 0.5% minimum slope if possible.
6. **SHEET C-403.01 -** Provide a 10-Year Hydraulic Grade Line on each stormdrain profile.
7. **SHEET C-403.01** - **Section A Station 0+00** - Show the existing gas main.

Please address the comments above and submit a revised Sketch Site Plan and Sketch Stormwater Management Plan.

Please contact me if you have any questions. Thank you.

TOWN OF EASTON
Planning & Zoning Department
14 South Harrison Street
P.O. Box 520
Easton, Maryland 21601

Easton Staff Development Review Worksheet

Date: April 24, 2024
Project: 521 August Street
To: Mr. Casey Rauch, Rauch, Inc.
CC: Mr. Chris Schoenster, Rauch, Inc.
CC: Ms. Judi Olinger, Chesapeake Community Development

The Easton Staff Development Review (ESDR) Committee meeting was held on April 24th at 11:00 am. Staff reviewed the Site Sketch Plan for the proposed mansion apartment (7 units) on the property located at 521 August Street, also known as Tax Map 103, Parcel 1028, Lot's 2 & 3.

The Committee determined that the project will need to address all agency comments as specified in the attached review letters and at ESDR. It was determined by the Committee that the application may be scheduled for Planning Commission review. Please submit all revised documents.

The next Planning Commission meeting is scheduled for **Thursday, May 16, 2024 at 1:00 pm.** Submit all documentation to the Planning and Zoning Department no later than Monday, April 29th at 1:00 pm. Files for presentation at the Planning Commission need to be provided on a flash drive. In addition, provide a digital submittal (via email) of all supporting documents necessary for the Planning Commissions review, including **six paper copies**.

Please contact the Planning & Zoning Department at 410 822-1943 with any questions.
Sincerely,

Joseph A. Mayer
Plan Reviewer

TOWN OF EASTON
PLANNING & ZONING DEPARTMENT
P.O. Box 520
Easton, Maryland 21601
410-822-1943
www.EastonMD.gov

DATE: **April 24, 2024**
TO: **Casey Rauch & Chris Schoenster** – Rauch, Inc. (Agent)
Judi Olinger - % Chesapeake Community Development (Owner)
Cc: **Miguel Salinas** – Director, Planning & Zoning Department
Rick VanEmburgh – Town Engineer, Department of Engineering

FROM: **Joseph A. Mayer** - Plan Reviewer, Planning & Zoning Department
SUBJECT: **521 August Street - The Laura House**

We reviewed the **April 1, 2024** Sketch Plan Submittal for the Subject Project and have the following comments:

PLANNING & ZONING COMMENTS

Sketch Site Plan Review #1

1. Per Appendix B, Sketch Plan Submittal Checklist requires, *general location and description (r.e. Intended function, proposed species. etc.) of proposed landscaping.* List the proposed native species on a plan view and a Landscape Legend on sheet C-601.01.
2. Revise the Site Data on sheet G-100 to include the overall density per acre, lot coverage percentage, building envelope, building height and proposed setback requirements.
3. Will there be on-site lighting? Any outdoor lighting shall be shielded to direct light and glare only onto the mansion apartment and may be of sufficient intensity to discourage vandalism and theft. Said lighting and glare shall be deflected, shaded, and focused away from all adjoining property.
4. Label Lot 2 and 3 on applicable plan views.
5. Show and label all building restriction lines on all applicable plan views.
6. Provide dimensions between the building and property lines.
7. Add the Historic District Commission note to the General Notes on sheet G-100 to reference the Certificate of Appropriateness with approval date and conditions.
8. Show the location of mechanical equipment, such as HVAC, on all applicable plan views and verify for screening.

9. Relocate the hydrant in the ADA ramp.

10. The existing property line shared between 521 August Street and 523 August Street will be dissolved upon lot line revision. Please submit a Subdivision & Property Line Adjustment Application prior to Site Plan approval.

Please address review comments 1 & 2 prior to your Planning Commission submission. All remaining comments are to be addressed prior to Preliminary Site Plan review.

Plan Review Status

Sketch Site Plan Review			Comments
Plans Approved	☐Y	☒ N	Please review the comments above. Revise and resubmit.
Forest Stand Delineation & Forest Conservation Plan			
☐ Required ☐ Submitted ☐ Approved			***The Easton Forest Conservation Requirements of the Town Code, Article III, § 31-3.1 Relevance, states that the requirements are applicable to any person making application for a subdivision, project plan, grading, or sediment and erosion control approval on units of land 40,000 square feet or greater after the effective date of the Ordinance.*** **Analysis -** The development of this site is within the priority funding area that's within the proximity of residential dwellings. The overall site area is 8,382 square feet and is under the required 40,000 square foot minimum. Therefore, Forest Conservation is not required.
Other			
☒ Required ☐ Submitted ☐ Approved			**IMPACT FEES** **Please note, there will be a required Impact Fee for the proposed building. The Town's Impact Fees and Inspection Fees are to be paid upon the time you pick up your Building Permit. Please provide building square footage with appropriate use for calculation of Impact Fee.** **Talbot County Impact Fees are due prior to obtaining your Building Permit. Please provide receipt of payment to the Town's Building Inspection Division.** **Please add estimated Town Impact Fee calculations to cover sheet and add note below calculations; "*Note: The Impact Fee indicated in this notation shall not be construed as vested and until submission of the building application.*"** **Supplemental Waiver Request Application** **The previous applicant for 521 August Street requested a landscape and buffering waiver from Chapter 28-1014.7.E.5 of the Zoning Code. On November 17, 2022 , the Commission voted 4-0, deferring the proposal on the premise that the applicant withdraw waiver requests for all buffering, parking and setback requirements; that the application attempts to reduce the scale of the building with respect to length and width; that the proposal attempts to maintain the architectural integrity of the surrounding neighborhood; and that the record is held open for public comment.** **Analysis -** The current applicant has reduced the overall scale of the building and lowered the number of dwelling units from the original 12 dwelling units to the proposed 7 dwelling units. Architectural integrity of the surrounding neighborhood was achieved by obtaining architectural approval from the Historic District Commission for a Certificate of Appropriateness on February 14, 2024. There's sufficient proposed landscaping along August Street, North Park Street and Powell Alley. The non-street exterior property line on the west side of Lot 2 adjoins a compatible land use and is buffered by an existing six (6) foot privacy fence.

Please contact me if you have any questions. Thank you.

TOWN OF
EASTON
ENGINEERING DEPARTMENT

DATE: **April 23, 2024**

TO: **Brian Fitzgerald – Rauch, Inc.**
Cc: **Rick Van Emburgh – Town Engineer**
Lynn Thomas – Town Planner
Aaron Goller – EUC

FROM: **Sierra Clem – Engineering Department**

SUBJECT: **521 August Street House of Laura**
Sketch Site Plan & Sketch Stormwater Management Review for ESDR

I reviewed the Application for the Subject project received on 4/3/2024. The **Sketch Site Plan and Sketch Stormwater Management Plan must be revised** to address the following comments prior to Planning Commission:

1. Provide an ESD Summary Chart (similar to TOE-SWM-7.01) on the plans.
2. Provide a SWM Quantity Summary Chart (similar to TOE-SWM-7.02) on the plans.

Prior to Preliminary Site Plan and Preliminary Stormwater Management Plan application, please address the following comments:

3. **SHEET G-100 - GENERAL NOTES -** Change TOWN OF EASTON DPW to TOWN OF EASTON ENGINEERING DEPARTMENT - 410-820-8822.
4. **SHEET C-101 -** Existing fire hydrant at southeast corner of the site will likely need to be relocated to accommodate the proposed ADA Ramp at the corner of August Street and Park Street.
5. **SHEET C-401** - Provide proposed inlets for access at all proposed stormdrain bends and connections in Powell Alley.
6. **SHEET C-401** - Proposed stormdrain pipe in Powell Alley ROW should be 15" minimum HP Storm (or approved equivalent) and maintain 0.5% minimum slope if possible.
7. **SHEET C-403.01 -** Provide a 10-Year Hydraulic Grade Line on each stormdrain profile.
8. **SHEET C-403.01** - **Section A Station 0+00** - Show the existing gas main.

Please address the comments above and submit a revised Sketch Site Plan and Sketch Stormwater Management Plan.

Please contact me if you have any questions. Thank you.

TOWN OF EASTON
PO Box 520
Easton, Maryland 21601
(410)-822-2526 Fax (410)-822-8738

ACCREDITED

ESDR- Building Inspection and Permit Department Comments

Date: April 24, 2024

Project; 521 August Street Easton, MD 21601
Chesapeake Community Development Suite
300 999 Corporate Drive, Linthicum Heights MD, 21090

A Town of Easton Building Permit is required for all new Residential Construction.
Your project as submitted will be a R2 Apartment House

Contact this Department and verify current Building Codes including the Town of Easton's modifications prior to preparation of Building plans. Town will be adopting the 2021 ICC Codes including the International Building and Energy Conservation Codes by the end of May 2024.

The following lists items required on the construction drawings in order to apply for a Building Permit.

- Construction Documents (3 sets) for any new construction will be required. Documents must be prepared by a registered Maryland Registered Architect, with original plans signed and sealed.
- All mechanical, electrical, and plumbing permits as required must include construction documents signed and sealed by a professional engineer and by a responsible party for the contractor receiving the permit. Be sure the Town of Easton modifications are included. Section 6-16 of the Town Code.
- An appointment may be set up with this department to review your permit application materials prior to permit application submission.
- **State Fire Marshal,** (410-822-7609) plan review and inspections are required. It is your responsibility to contact them and make application.

EASTON UTILITIES

Life. Made better.™

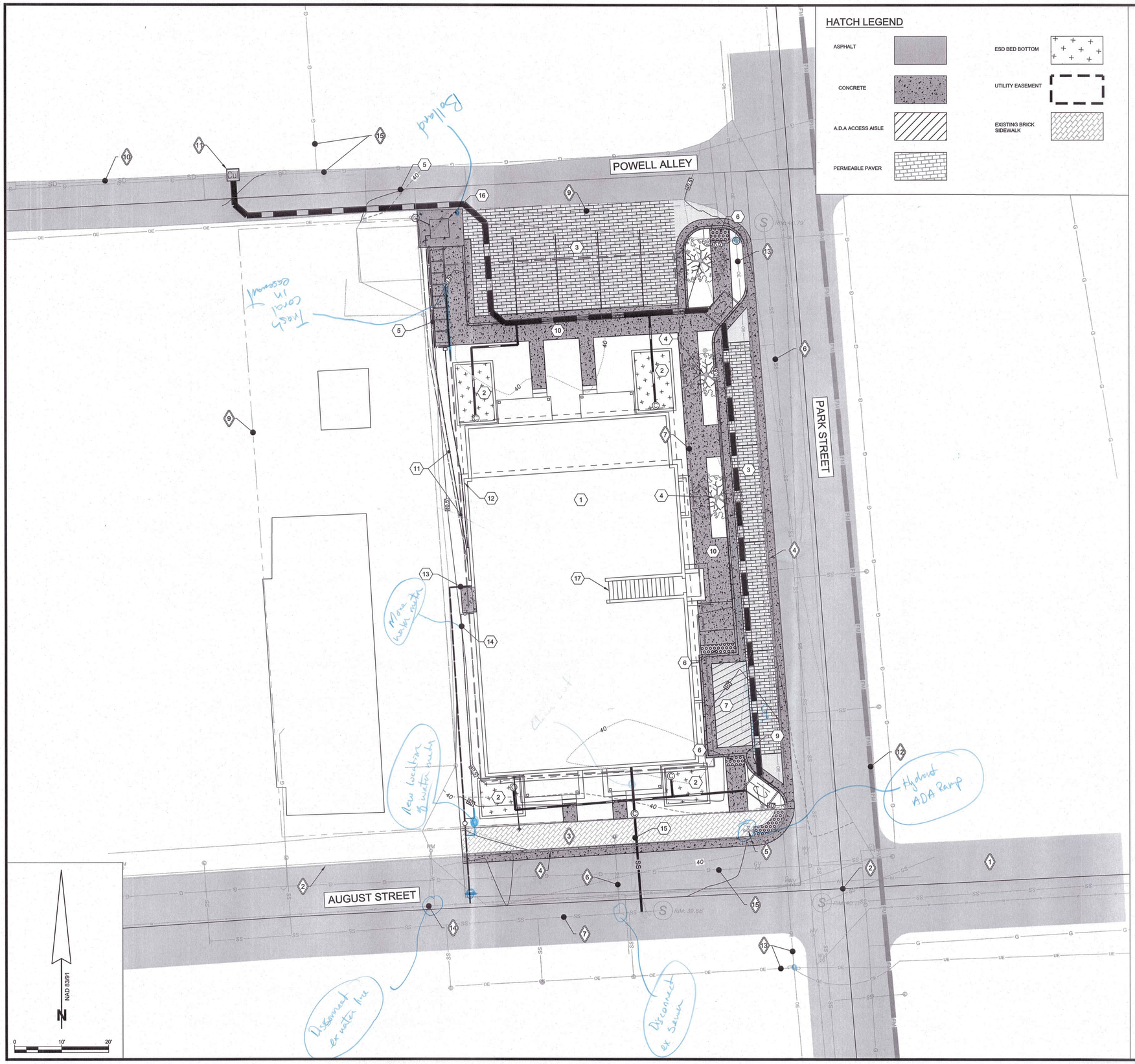
Easton Utilities Commission

Plan Review Comments

Date: Tuesday, April 16, 2024
To: Joe Mayer; Nicholas Johnson; Sierra Clem
From: Kia Gibbs on behalf of Aaron Goller, PE **No. of Pages:** 2
Regarding: 521 August Street
Phase: Sketch Site Plan **SUBM:** 1 **Status:** **Approved as Noted**

Easton Utilities Commission has reviewed the above referenced plans and have provided the following comments. Please provide your corrections as listed below. Additional reviews will be required to ensure comments have been addressed. Items or documents not provided on initial submission will be subject to further review. Please contact Kia Gibbs, Admin Support at kgibbs@eucmail.com should you have any questions.

ITEM:	DRAWING / PAGE	COMMENTS:
1	C-101	Move water meter
2	C-101	Hydrant in ADA ramp
3	C-101	Electric cable "M Conduit"
4	C-101	Add bollard to protect transformer
5	C-101	Trash corrale in easement - EU not responsible to utility repairs
6	C-101	Abandon existing utilities and add valve to fire line
7	C-101	Capital charges due.



HATCH LEGEND

- ASPHALT
- CONCRETE
- A.D.A ACCESS AISLE
- PERMEABLE PAVER
- ESD BED BOTTOM
- UTILITY EASEMENT
- EXISTING BRICK SIDEWALK

PROPOSED SITE PLAN NOTES

1. APARTMENT BUILDING FOOTPRINT (F.F.E = 40.69')
2. SWM PLANTER BOX. SEE DETAIL ON SHEET C-405.01
3. PERMEABLE PAVER. SEE DETAIL ON SHEET C-405.01
4. PROPOSED UNDERSTORY TREES. SEE DETAIL SHEET ON C-601.01.
5. TRASH CORRAL WITH WOODEN SCREENING FENCE FOR 8 TRASH RECEPTACLES.
6. ADA SIDEWALK RAMP. SEE DETAIL ON SHEET C-305
7. A.D.A. ACCESS AISLE STRIPED PER A.D.A. STANDARDS
8. TRASH CORRAL WITH WOODEN SCREENING FENCE.
9. STANDARD CURB AND GUTTER. SEE DETAIL ON SHEET C-305
10. CONCRETE SIDEWALK
11. UNDERGROUND ELECTRIC AND FIBER OPTIC SERVICE LINES
12. ELECTRIC METER AND CATV UTILITY MOUNT
13. FIRE SUPPRESSION LINE
14. WATER LINE
15. SANITARY SEWER
16. ELECTRIC TRANSFORMER. SEE DETAIL SHEET C-502.02.
17. ENTRANCE STAIRCASE TO SECOND STORY.

EXISTING FEATURES

1. ROAD
2. ROAD CENTERLIINE
3. BRICK SIDEWALK - **NOTE**: EXISTING BRICK SIDEWALK WILL REMAIN AND ONLY REPAIRED IN THE AREAS WHERE PROPOSED UTILITY SERVICE LINES ARE INDICATED ON THESE PLANS.
4. CURB AND GUTTER
5. FIRE HYDRANT
6. SANITARY SEWER
7. SEWER
8. EASEMENT LINE / R.O.W
9. PROPERTY LINE
10. 10' TERRACOTTA STORM DRAIN
11. BRICK GRATE INLET
12. APPROXIMATE LOCATION OF EXISTING SEWER FORCE MAIN (GIS DATA)
13. OVERHEAD ELECTRIC
14. WATER LINE
15. GIS LINE

OVERALL SITE PLAN

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028
ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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 9881 | Fax: 410 770 3667

REVISIONS

REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA — 811

DATE:	3/29/2024
SCALE:	1" = 10'
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-101

FOR REVIEW

RECEIVED
APR 0 1 2024
TOWN OF EASTON

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Easton Staff Development Review

Property Information

Address	521 August Street Easton, MD 21601						
Tax Map	0103	Grid	00EA	Parcel	01028	Lot	
Deed Refernce:	Liber	2429/00366	Folio				
Plat Reference:	Liber	85/98	Folio				
Base Zoning District	COMMERCIAL	Historic District	Y ☑	N ☐	Planning Redevelopment	Y ☑	N ☐

Purpose of Application / Description of Work:

Chesapeake Community Development is applying for ESDR to develop lots 0102 (521 August St) and lot 0103 (523 August St) as one consolidated lot. New address confirmation is pending.

August Street is within the Commercial District, Historic District, PUD Infill, PRD, and this application reflects a PRD application development with no special exemptions at this point. It complies with existing zoning code to develop a single 2 story mansion style apartment building with 7 dwelling units.

Owner

Name	Chesapeake Community Development Suite 300		
Mailing Address	999 Corporate Drive, Linthicum Heights MD, 21090		
Telephone No.	410-269-1883	Email	jolinger@chesapeakeneighbors.org

Applicant / Agent

Name	RAUCH Inc.		
Mailing Address	106 N. Harrison Street, Easton, MD 21601		
Telephone No.	410-770-9081	Email	casey@raucheng.com

Surveyor / Engineer

Name	RAUCH Inc.	License No.	11024	Expiration Date	7-24-24
Mailing Address	106 N. Harrison Street, Easton, MD 21601				
Telephone No.	410-770-9081	Email	robert@raucheng.com		

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	3/29/24
Printed Name of Applicant or Agent	Robert Rauch

For Office Use Only

Easton Staff Development Review Meeting Required Y ☒ N ☐

Easton Staff Development Review Meeting Date **04/24/2024** 2024-1178 / ESDR 24-07

Completeness Check Date **04/03/2024**

Revisions/Resubmissions Required Y ☐ N ☐

Resubmission Date _____ Documents Received Y ☐ N ☐

Staff Determination

Planning Commission Requir(Y ☒ N ☐ **05/16/2024**

BOZA Required Y ☐ N ☒

Historic District Commission Required Y ☐ N ☒ * **Historic District Commission Approval on 01/22/2024**
2024-007 / HD 24-05

Resubmission for ESDR Required Y ☐ N ☐

Staff Signature Samantha N. Smith Date **04/03/2024**

Revised 02-2019

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Site Plan, PUD, Planned Healthcare Application

Application Type

Planned Unit Development ☐ Amendment ☐ Health Care (HC) ☐ Site Plan ■

Subdivision Information

Name	n/a				
Original Property Size	Acres		Square Feet		
Telephone No.		Email			

Site Plan Information

Property Size	Acres	0.192	Square Feet	8,382	
Structure's Floor Area	6,254 SF		Structure's Square Feet	3,443	
Area of Disturbance	10,639 SF		Number of Dwelling Units	7	

Property Information

Address	521 August Street Easton, MD 21601						
Tax Map	0103	Grid	00EA	Parcel	01028	Lot	
Deed Refernce:	Liber	2429	Folio	00366			
Plat Reference:	Liber	85/98	Folio				
Base Zoning District	COMMERCIAL	Historic	Y ■	N ☐	Planned Redevelopment	Y ■	N ☐
Source of Electricity	EUC						

Owner

Name	Chesapeake Community Development Suite 300		
Mailing Address	999 Corporate Drive, Linthicum Heights MD, 21090		
Telephone No.	410-269-1883	Email	jolinger@chesapeakeneighbors.org

Applicant or Agent

Name	RAUCH Inc.		
Mailing Address	106 N. Harrison Street, Easton, MD 21601		
Telephone No.	410-770-9081	Email	casey@raucheng.com

Surveyor / Engineer

Name	RAUCH Inc.	License No.	11024	Expiration Date	7-24-24
Mailing Address	106 N. Harrison Street, Easton, MD 21601				
Telephone No.	410-770-9081	Email	robert@raucheng.com		

Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed and satisfied the Town of Easton Development Standards and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent	
Date	5/8/24
Printed Name of Applicant or Agent	Robert Rauch

For Office Use Only

Planning Commission Required	Y ☒ N ☐		
Planning Commission Meeting Date	05/16/2024		
Sketch Approval Date		Project No.	**ESDR 24-07**
Prelim/Dev. Approval Date		Application No.	**2024-1178**
Final Approval Date		Sketch Fee Paid	**04/03/2024**
Recordation Date		Develop. Fee Paid	

Revised 02-2019

*** Historic District Commission Approval on 01/22/2024**
2024-007 / HD 24-05

Town of Easton
Planning and Zoning
14 S. Harrison Street Easton, MD 21601 410-822-1943
HISTORIC DISTRICT COMMISSION
CERTIFICATE OF APPROPRIATENESS

Meeting Date:	**1/22/2024**
Application Number:	**2024-007**
Location:	**521 August Street**
Applicant:	**Chesapeake Community Development LLC**

Request: The applicant is proposing to construct a two-story mansion apartment on the corner of Park Street, August Street, and Powells Alley. The proposed structure is approximately 3,330 square feet, with a height of 26 feet. The applicant is also requesting approval for the removal of healthy trees within the Historic District.

Commissioner Greer moved to approve the application with the condition that:

1) all trash and recycling receptacles shall be screened on three sides; and

2) minor revisions to the proposed site and structure that are consistent with the Historic District Guidelines may be administratively approved by staff after consultation with the Chair of the Commission.

Commissioner Bateman seconded the motion.
FOR: 5 - Demby, Brophy, Bateman, Greer, Pezor

If the scope of work changes and or the materials and methods used are contrary to that understood by the application and any supplemental information provided, the work shall not continue until such time that the Commission is notified and said differences are considered and approved by the Commission.

"A Certificate of Appropriateness shall lapse upon the expiration of the corresponding Building Permit. For applications that require a building permit but for which none is issued, this Certificate of Appropriateness shall lapse six (6) months after issuance. In the event a building permit is not required, the Certificate of Appropriateness shall lapse six (6) months from its issuance if substantial work is not underway. For good cause shown, this period may be extended by the Commission".

Prior to start of work please contact the Building Inspection Department at 410 822 2525 to ensure all required building permits have been obtained. Also, please reach out to the Building Inspection department to ensure your project complies with the Town of Easton's building codes.

Nicholas Johnson _____ 2/14/2024

Representative, Historic District Commission Date

received 01/03/2024

TOWN OF EASTON
PLANNING AND ZONING
14 SOUTH HARRISON STREET, EASTON, MD 21601

Application #:	НЛНПЛЛТ I 5 нплр
Date Received:	ЛМКЛОКНЛНП
Fee Paid:	ÞНЛЛ◊ЛЛ
HDC Meeting Date:	ЛМКННКНЛНП
Date Property Posted:	ЛМКМРКНЛНП

HISTORIC DISTRICT COMMISSION HEARING APPLICATION

APPLICATION TYPE
(PLEASE CIRCLE)

ROOFING DEMOLITION SIGNAGE FENCING OTHER

(NEW CONSTRUCTION/ADDITION) EXTERIOR ALTERATIONS

(FOR TREE REMOVAL(S) - PLEASE USE THE TREE REMOVAL APPLICATION)

PROPERTY INFORMATION

ADDRESS: 521 August Street

☑ Contributing ☐ Non-Contributing YEAR BUILT: _____ NATIONAL REGISTAR # n/a

PROPERTY INFORMATION

OWNER NAME: Chesapeake Community Development LLC

TELEPHONE NO.: 410-269-1883 EMAIL: Jolinger@chesapeakeneighbors.org

Applicant or Agent

NAME: Virginia Richardson

TELEPHONE NO.: 410-714-2405 EMAIL: Virginia@raucheng.com

Description of Proposal (include additional sheets, as necessary)

See attached.

Specific Requirements

- The payment of fees is due at the time of application submittal.
  As of December 27, 2022, the fees are as follows:
  Commercial - $200 Residential - $75 Signs - $75 Staff Approval $25
- Provide 3 hard copies plus 1 digital copy of the application and all supplemental information.
- Disclose any easements or deed restrictions pertaining to the property and any improvements including the details of said easements or restrictions.
- Disclose any tax credits and or grants being considered for the project.

The Historic District Commission (HDC) reserves the right to request reasonable additional information or design drawings that further clarify proposals. In cases where professional design services are warranted, the HDC may require the applicant to retain a licensed design consultant.
If the applicant or their designee is not present for the scheduled meeting the Commission may elect to refrain from discussing and voting on the scheduled agenda item.
Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed the Easton Historic District Guidelines as published

Signature of Applicant or Agent _____

Date 01-03-2024

Printed Name of Applicant or Agent Virginia Richardson

Revised 4.4.2022

Chesapeake Neighbors – Laura House
521 August Street
Easton, MD

Proposed Redevelopment Plan (7 Units)

12-28-2023

Project Description:

Chesapeake Neighbors (the “Owner”), the owner of 521 August St, Easton,MD (the “Property”), is seeking approval from the Historic District Commission to combine 2 parcels and develop a new
ment that will consist of 7 units. The site will provide one parking space for every unit in the building.

It is the Owner’s intent to improve the quality of life for the residents by enhancing the quality of the built environment and maximizing the space within each rental unit. The goal of the project is to provide quality affordable housing near downtown, a goal consistent with the Comprehensive Plan.

CONTACT INFORMATION

OWNER/DEVELOPER: CHESAPEAKE COMMUNITY DEVELOPMENT SUITE 300
999 CORPORATE DRIVE
LINTHICUM HEIGHTS MD, 21090
410-269-1883

ENGINEER: RAUCH Inc.
106 N HARRISON ST
EASTON, MARYLAND 21301
(410)770-9081

SITE DATA

CURRENT PROPERTY ADDRESS:	521 AUGUST STREET EASTON, MD 21601
FUTURE ADDRESS AFTER LOT LINE REVISION:	41 N. PARK STREET (NEW ADDRESS CONFIRMATION PENDING) EASTON, MD 21601
LATITUDE: LONGITUDE:	38°46'31.3" N -76°04'00.8" W
PRESENT ZONING CLASSIFICATION: PROPOSED ZONING: PRESENT USE: PROPOSED USE:	CBD, PRD, PUD-INFILL, HISTORIC PRD UNDEVELOPED SITE SINGLE MANSION APARTMENT (BUILDING FOOTPRINT AREA: 3,443 SQ-FT)
MAXIMUM BUILDING HEIGHT: ACTUAL BUILDING HEIGHT: MINIMUM BUILDING ENVELOPE: ACTUAL BUILDING ENVELOPE: MAXIMUM LOT COVERAGE: ACTUAL LOT COVERAGE: MAXIMUM DENSITY: ACTUAL DENSITY:	60' (CB); 10% HIGHER THAN ADJACENT BUILDING 24'-8"; SAME HEIGHT AS ADJACENT BUILDING 20' DEEP X 30' WIDE 75' DEEP X 45'-6" WIDE 90% 40.4% 40 UNITS PER ACRE (PRD) OR 7.70 UNITS PER THIS PROJECT 7 UNITS
PROPOSED SETBACKS:	FRONT (AUGUST ST. & PARK ST) = 10' SIDE = 5' REAR = 10' (POWELL ALLEY)
TAX MAP: GRID: PARCEL: DEED REFERENCE:	0103 00EA *01028* *02429/ 00366*
SITE AREA:	8,382 SQ. FT / 0.192 ACRES
FEMA FLOOD MAP:	PANEL 2400670002B
FOREST CONSERVATION:	TOTAL SITE AREA IS LESS THAN 40,000 S.F. THEREFORE NO FCP IS REQUIRED
SURVEY DATUM: HORIZONTAL: VERTICAL: EPSG CODE:	 NAVD83 NAVD88 2248

ZONING & PARKING NOTE:
THE REQUIREMENTS FOR OFF-STREET PARKING IN THE SUPPLEMENTAL REQUIREMENTS OF THE ZONING ORDINANCE ARE NOT A REQUIREMENT IN PRD OVERLAY ZONE NOR IN THE CB ZONE. THIS APPLICATION REFLECTS A SINGLE MANSION APARTMENT MIDDLE-HOUSING TYPE WITH PROPOSED 7 DWELLING UNITS.

AS A MANSION APARTMENT, A MINIMUM 0.75 PARKING SPACES ARE NORMALLY REQUIRED PER DWELLING UNIT FOR ALL MIDDLE HOUSING TYPES (7 DU's X 0.75 = 5.25), WITH A MAXIMUM OF 1 PER DU (7 DU's X 1 = 7). 9 PARKING SPACES ARE PROVIDED, INCLUDING 1 HANDICAP VAN SPACE AND AN AISLE. IN ADDITION TO THE PROVIDED PARKING SPACES, THE EXISTING PUBLIC PARKING ALONG AUGUST AND PARK STREETS ARE ADEQUATE FOR THE PROPOSED DEVELOPMENT AND ARE NOT ANTICIPATED TO CAUSE SIGNIFICANT TRAFFIC CONGESTION, BASED ON OBSERVATIONS OF EVENING PARKING CONDITIONS AFTER 6:30 PM DURING WEEKDAYS.

DESIGN PRINCIPLES FOR EASTON
(2010 COMPREHENSIVE PLAN, PG. 94 - 111)

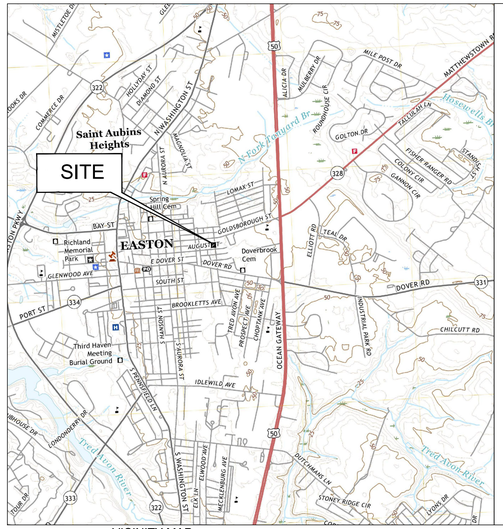
1. **INTEGRATED USES ARE DESIRABLE** - AUGUST STREET CONSISTS OF RESIDENTIAL AND COMMERCIAL PROPERTIES. THIS PROJECT WILL HAVE A TOTAL OF 7 AFFORDABLE AND MARKET RATE DWELLING UNITS WITHIN THE BUILDING. THIS ADDRESSES THE NEED FOR HOUSING WHICH IS IN LINE WITH THE COMPREHENSIVE PLAN TO INCREASE THE NUMBER AND TYPES OF HOUSING AVAILABLE IN THE AREA.
2. **NATURAL FEATURES SHOULD DETERMINE DESIGN** - THE SITE IS WITHIN AN EXISTING NEIGHBORHOOD BLOCK. STORMWATER PLANTERS AND PERMEABLE PAVERS ARE BEING UTILIZED TO MITIGATE RAIN RUNOFF AND IMPROVE WATER QUALITY OF GROUND WATER. THE PLANTERS ARE DESIGNED TO BLEND IN WITH THE BUILDING ARCHITECTURE AND MINIMIZE THEIR VISUAL IMPACT. NATIVE SPECIMENS WILL BE PLANTED TO OFFER SHADE AND VISUAL INTEREST TO THE AREA. IN CONJUNCTION WITH THE EXISTING BRICK FRONT WALK, SIDEWALKS HAVE BEEN PROPOSED ON THE TWO STREET FRONTAGES WHICH WILL INCREASE THE WALKABILITY IN THE AREA.
3. **AUTOMOBILES SHOULD NOT DETERMINE DESIGN** -THE MODEST REAR PARKING LOT DOES NOT DOMINATE THIS SITE. CLEAVER USE OF PARALLEL PARKING SPACES HAVE BEEN EMPLOYED TO MINIMIZE THE HARD SURFACES WHILE ACCOMMODATING THE PARKING DEMANDS OF THE ADDITIONAL DWELLING UNITS. PARKING PAVERS PROVIDE A DISTINCTIVE UPSCALE LOOK WHILE IMPROVING STORMWATER.
4. **AMPLE OPEN SPACES SHOULD BE PROVIDED WITHIN AND AROUND NEIGHBORHOODS** - THIS PROJECT PROVIDES BOTH FRONT AND REAR YARD AS WELL AS TREE LINED SIDEWALKS WITH TASTEFUL, LOW MAINTENANCE LANDSCAPE. THE USE OF PORCHES AND BALCONIES PROVIDES FOR OUTDOOR LIVING FOR THE APARTMENT RESIDENTS.
5. **ARCHITECTURE SHOULD RESPECT EASTON'S HISTORIC DISTRICT** - THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY THE TOWN OF EASTON HISTORIC DISTRICT COMMISSION. THE ARCHITECTURAL DESIGN IS COMPATIBLE WITH THE NEIGHBORHOOD IN TERMS OF SCALE, ROOF LINES, DETAILING AND MATERIAL SELECTIONS.
6. **SIGNS SHOULD INFORM BUT NOT DOMINATE** - THERE WILL BE MINIMAL SIGNAGE ON THIS PROPERTY. EACH UNIT WILL HAVE A STREET/HOUSE NUMBER THAT WILL INDICATE THE UNIT AND ADDRESS FOR THE PUBLIC AND FIRE/RESCUE SERVICES. A FREE STANDING SIGN IS NOT ANTICIPATED ON THIS PROPERTY.
7. **NEIGHBORHOODS SHOULD CONTAIN A DIVERSITY OF HOUSING TYPES** - THIS MANSION STYLE APARTMENT BUILDING OFFERS A CHOICE IN AN OTHERWISE PREDOMINANTLY COMMUNITY OF SINGLE FAMILY DWELLINGS.
8. **RESIDENTIAL DEVELOPMENTS SHOULD BE INTERESTING PLACES** - THIS APARTMENT OFFERS ARCHITECTURAL INTEREST THROUGH THE USE OF PORCHES, BALCONIES , VARIED ROOF LINES, BAY WINDOWS AND DIFFERENT MATERIALS AS WELL AS LANDSCAPE. THE FACT THAT THERE ARE BOTH MARKET AND AFFORDABLE HOUSING OFFERS INCLUSION FOR PEOPLE WITH DIFFERENT SOCIAL AND ECONOMIC CLASSES.
9. **NEIGHBORHOODS SHOULD CONNECT** - PEDESTRIANS CAN TRAVERSE THE TOWN IN A SAFE AND PLEASANT WAY WITH THE ADDITION OF THE SIDEWALKS ALONG THE PROPERTY EDGES.

THE LAURA HOUSE

DEVELOPMENT PLANS

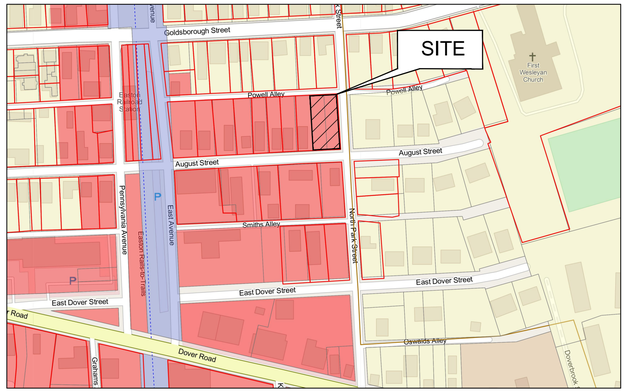
FOR

CHESAPEAKE COMMUNITY DEVELOPMENT
TALBOT COUNTY, MARYLAND 21601



VICINITY MAP
SCALE: 1" = 2,000'

ZONING VICINITY MAP



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DRAWING LIST

SHEET NUMBER	DRAWING TITLE
G-100	COVER SHEET
V-100	EXISTING CONDITIONS AND DEMO PLAN
C-101	OVERALL SITE PLAN
C-200	EROSION AND SEDIMENT CONTROL COVER SHEET
C-201	EROSION AND SEDIMENT CONTROL
C-205	EROSION AND SEDIMENT CONTROL DETAILS
C-301	SITE GRADING PLAN
C-305	SITE DETAILS
C-401	STORMWATER AND STORM DRAIN PLAN
C-403	STORMWATER AND STORM DRAIN PROFILES
C-405.01 - .02	STORMWATER DETAILS
C-501	UTILITY PLAN
C-505.01 - .02	UTILITY DETAILS
C-601.01 - .02	LANDSCAPING PLAN
C-605	LANDSCAPING NOTES AND DETAILS

ESTIMATED TOWN IMPACT FEES
TOTAL FEE COST: $54,795

ZONING & SUBDIVISION FEES

LOT LINE REVISION: $500.00

PLAN REVIEWS:
PLANNED REDEVELOPMENT (PRD) REVIEW: $500.00
MULTI-FAMILY REVIEW: $2,870.00
STORMWATER MANAGEMENT - UP TO 1 ACRE: $1,250.00
HISTORIC DISTRICT REVIEW FOR RESIDENTIAL: $75.00

PLANNING COMMISSION FEES

CONCEPT, USE & DESIGN REVIEW: $250.00

EASTON UTILITIES:

CAPITAL CHARGES FOR WATER & WASTEWATER: $7,050 PER EDU
FOR 7 EDU'S = $49,350

NOTE: THE IMPACT FEES INDICATED IN THIS NOTATION SHALL NOT BE CONSTRUCTED AS VESTED AND UNTIL SUBMISSION OF THE BUILDING APPLICATION.

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
TOWN OF EASTON DPW_____	410-882-0513
EASTON UTILITIES_____	410-822-6110
TALBOT COUNTY SCD_____	410-882-1577 x 3
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.

FIRE LANE AND ACCESS WILL MEET REQUIREMENTS FOR THE PROPOSED BUILDING PRIOR TO THE FINAL SITE PLAN.

ENVIRONMENTAL NOTES:
1. THE PROJECT SITE IS NOT LOCATED WITHIN THE CRITICAL AREA BUFFER
2. THE SITE IS NOT LOCATED WITHIN A 100 YEAR FLOODPLAIN
3. NON-TIDAL WETLANDS ARE NOT PRESENT ON-SITE

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

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
TREELINE/VEGETATION		
ROADWAY CENTERLINE		
HIGHWAY BARRIER		
UTILITIES		
OVERHEAD ELECTRIC	OE	OE
UNDERGROUND ELECTRIC	UE	UE
TELEPHONE LINE	T	T
GAS PIPE LINE	G	G
CABLE TV	CTV	CTV
WATER PIPE	W	W
STORMWATER PIPE		
UNDERDRAIN		
SANITARY SEWER	SS	SS
FORCE MAIN SEWER	FM	FM
ENVIRONMENTAL		
WETLAND LINE		
FLOOD PLANE 100/500 YR		
MEAN HIGH WATER		MHW
MEAN LOW WATER		MLW
CRITICAL AREA BOUNDARY		
BUFFER 25'/100'		
SOILS BOUNDARY		
EROSION AND SEDIMENT CONTROL		
SILT FENCE		
SUPER SILT FENCE	SSF	
SILT FENCE ON PAVEMENT	SFOP	
LIMITS OF DISTURBANCE		
LOD & SILT FENCE		
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'		

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
GATE VALVE	GV	GV
STUB		
SIGN		
WATER METER	WM	WM
FIRE HYDRANT		
WELL	W	W
BOLLARD		
ELECTRIC TRANSFORMER	ELEC	ELEC
TELEPHONE PEDESTAL	T	T
UTILITY POLE		
GUY WIRE		
CONIFEROUS TREE		
DECIDUOUS TREE		
SPOT ELEVATION	X39.01	X 39.00
LAND SLOPE	2.41%	2.41%
BENCHMARK	ELEV: 123	
BOREHOLE/MONITORING WELL		

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

COVER SHEET
FOR
THE LAURA HOUSE
TAX MAP: 0103, GRID: 00EA, PARCEL: 01028
ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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 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, 2022
14-May-24

REVISIONS

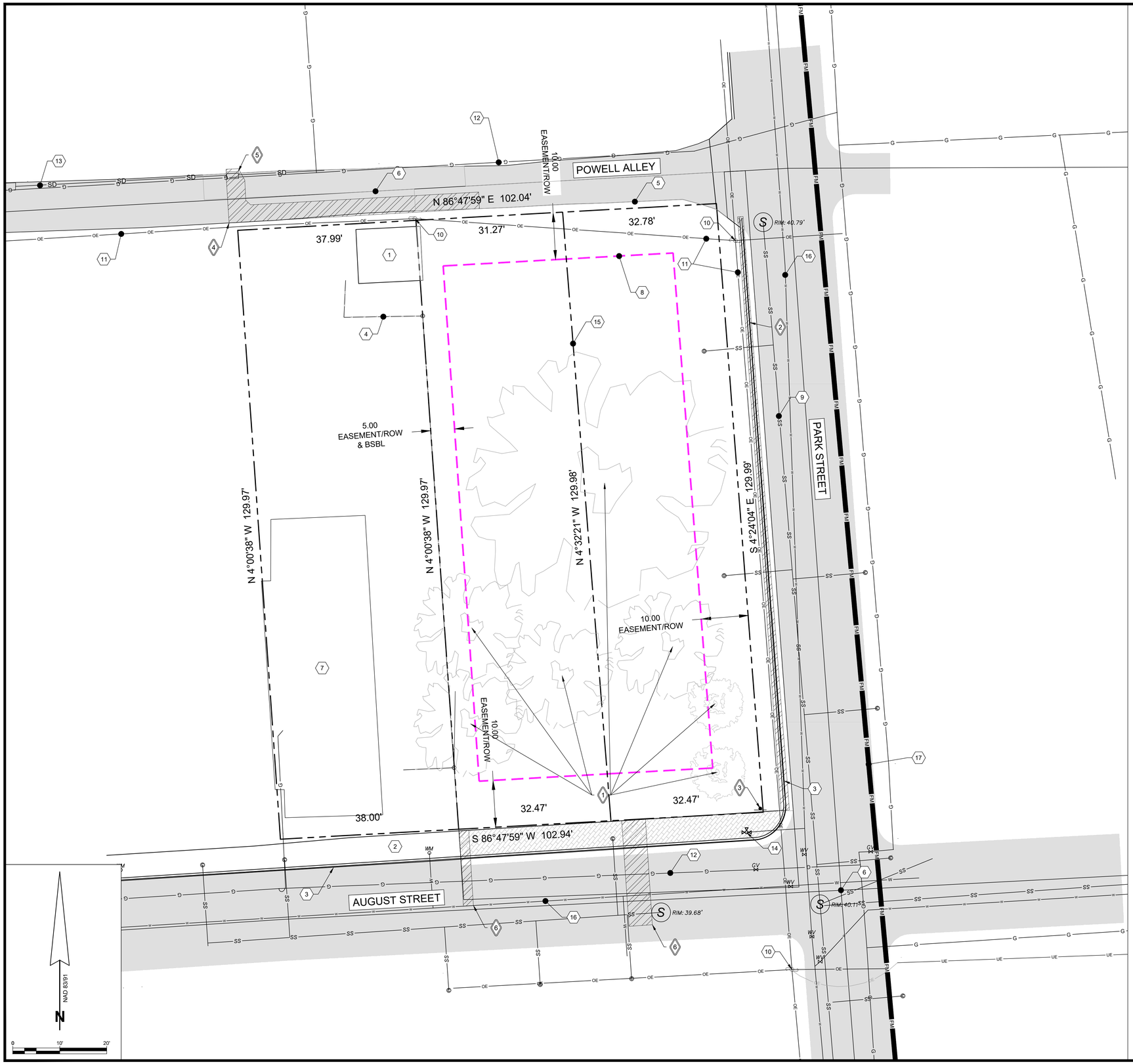
REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA 811

DATE:	5/14/2024
SCALE:	AS SHOWN
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: G-100

FOR REVIEW



EXISTING FEATURES

1. CONCRETE PARKING PAD
2. BRICK SIDEWALK
3. CONCRETE CURB AND GUTTER
4. WOODEN FENCE ALONG SHARED PROPERTY LINE
5. EDGE OF PAVEMENT
6. ROAD CENTERLINE
7. HOUSE
8. EASTON UTILITY EASEMENT/R.O.W.
9. SANITARY SEWER
10. UTILITY POLE
11. OVERHEAD ELECTRIC
12. GAS LINE
13. 10' TERRACOTTA STORM DRAIN
14. FIRE HYDRANT
15. EXISTING SURVEYED PROPERTY LINE SHARED BETWEEN 521 AUGUST ST AND 523 AUGUST WILL BE DISSOLVED UPON LOT LINE REVISION. PROPOSED PLAN DRAWINGS WILL HIDE THIS LINE FOR CLARITY AND TO REPRESENT PROPOSED INTENTIONS.
16. WATER LINE
17. FORCE MAIN
18. FENCE

DEMOLITION

1. CLEAR & GRUB EXISTING TREES (5) AND LARGE SHRUBS (2)
2. DEMOLISH AND REMOVE APPROXIMATELY 200 LF OF EXISTING CONCRETE CURB & GUTTER ALONG PARK STREET.
3. EXISTING METAL STREET SIGN AND POST TO BE TEMPORARILY REMOVED AND RE-INSTALLED UPON PROJECT COMPLETION
4. DEMOLISH AND REPAIR APPROXIMATELY 220 SF OF ALLEY TO INSTALL PROPOSED STORMWATER PIPE. DEMOLISH AND REPAIR REMAINING ASPHALT AREAS AS SHOWN ON PLAN FOR PROPOSED UTILITY CONNECTIONS. SEE PATCH REPAIR DETAIL ON SHEET C-305
5. DEMOLISH AND REPLACE BRICK GRATE INLET BOX IN POWELL ALLEY WITH STANDARD TRAFFIC BEARING CONCRETE YARD INLET. SEE DETAIL ON SHEET C-405.01
6. DEMOLISH AND EXCAVATE APPROXIMATELY 147 SF EXISTING ROAD AND SIDEWALK SECTIONS TO GET ACCESS TO WATER AND SEWER SERVICE LINES.

EXISTING CONDITIONS AND DEMO PLAN

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028
ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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

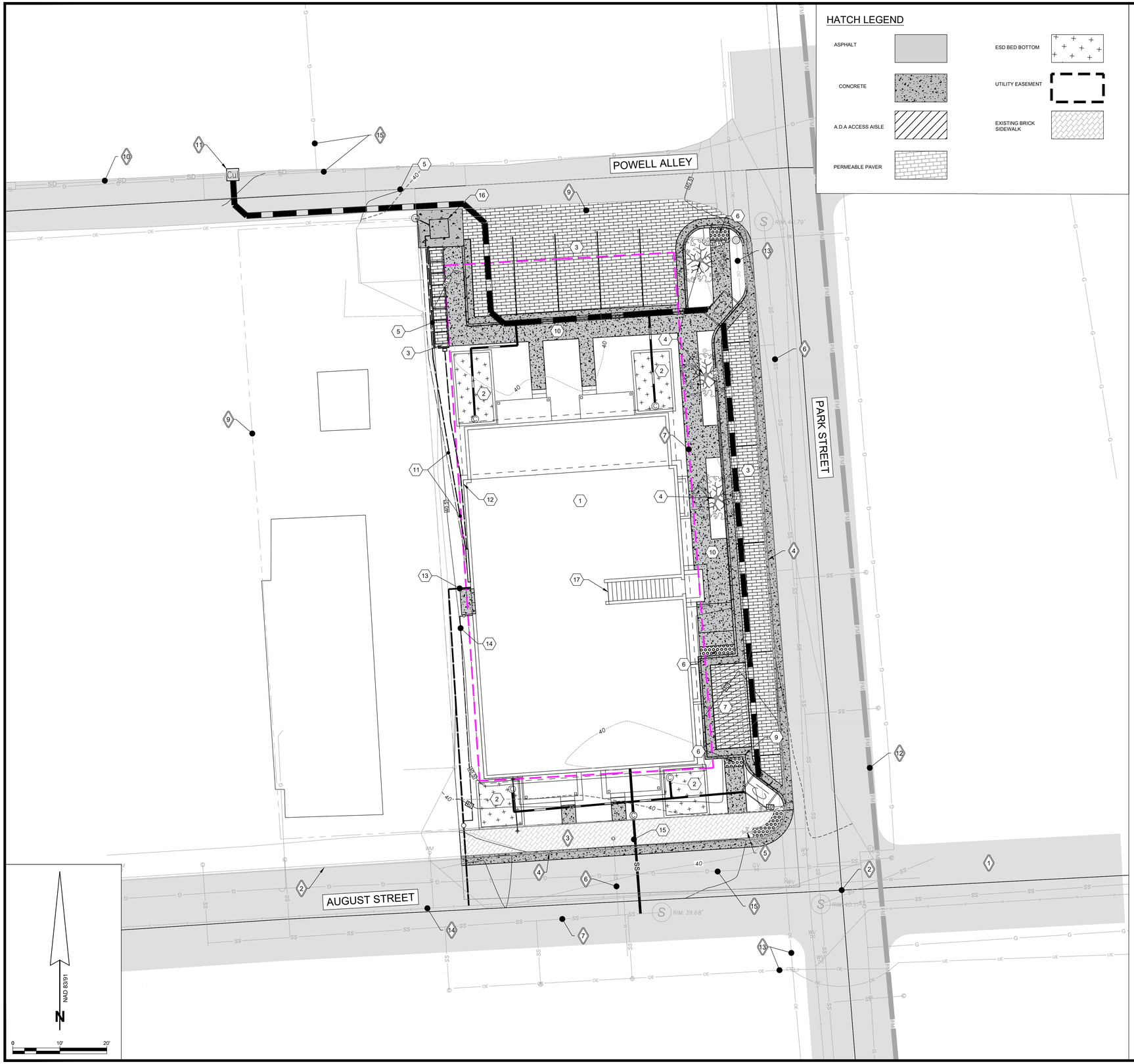
REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA — 811

DATE:	5/14/2024
SCALE:	1" = 10'
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: V-100

FOR REVIEW



HATCH LEGEND

- ASPHALT
- CONCRETE
- A.D.A ACCESS AISLE
- PERMEABLE PAVER
- ESD BED BOTTOM
- UTILITY EASEMENT
- EXISTING BRICK SIDEWALK

PROPOSED SITE PLAN NOTES

1. APARTMENT BUILDING FOOTPRINT (F.F.E = 40.69')
2. SWM PLANTER BOX. SEE DETAIL ON SHEET C-405.01
3. PERMEABLE PAVER. SEE DETAIL ON SHEET C-405.01
4. PROPOSED UNDERSTORY TREES. SEE DETAIL SHEET ON C-601.01.
5. TRASH CORRAL WITH WOODEN SCREENING FENCE FOR 8 TRASH RECEPTACLES.
6. ADA SIDEWALK RAMP. SEE DETAIL ON SHEET C-305
7. A.D.A. ACCESS AISLE STRIPED PER A.D.A. STANDARDS
8. TRASH CORRAL WITH WOODEN SCREENING FENCE.
9. STANDARD CURB AND GUTTER. SEE DETAIL ON SHEET C-305
10. CONCRETE SIDEWALK
11. UNDERGROUND ELECTRIC AND FIBER OPTIC SERVICE LINES
12. ELECTRIC METER AND CATV UTILITY MOUNT
13. FIRE SUPPRESSION LINE
14. WATER LINE
15. SANITARY SEWER
16. ELECTRIC TRANSFORMER. SEE DETAIL SHEET C-502.02.
17. ENTRANCE STAIRCASE TO SECOND STORY.

EXISTING FEATURES

1. ROAD
2. ROAD CENTERLIINE
3. BRICK SIDEWALK - **NOTE**: EXISTING BRICK SIDEWALK WILL REMAIN AND ONLY REPAIRED IN THE AREAS WHERE PROPOSED UTILITY SERVICE LINES ARE INDICATED ON THESE PLANS.
4. CURB AND GUTTER
5. FIRE HYDRANT
6. SANITARY SEWER
7. SEWER
8. EASEMENT LINE / R.O.W
9. PROPERTY LINE
10. 10' TERRACOTTA STORM DRAIN
11. BRICK GRATE INLET
12. APPROXIMATE LOCATION OF EXISTING SEWER FORCE MAIN (GIS DATA)
13. OVERHEAD ELECTRIC
14. WATER LINE
15. GIS LINE

OVERALL SITE PLAN

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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REVISIONS

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DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-101

FOR REVIEW

THE LAURA HOUSE

DEVELOPMENT PLANS

FOR

CHESAPEAKE COMMUNITY DEVELOPMENT
TALBOT COUNTY, MARYLAND 21601

CONTACT INFORMATION

OWNER/DEVELOPER: CHESAPEAKE COMMUNITY DEVELOPMENT SUITE 300
999 CORPORATE DRIVE
LINTHICUM HEIGHTS MD, 21090
410-269-1883

ENGINEER: RAUCH Inc.
106 N HARRISON ST
EASTON, MARYLAND 21301
(410)770-9081

ESC DRAWING LIST

SHEET NUMBER	DRAWING TITLE
C-200.00	EROSION AND SEDIMENT CONTROL COVER
C-201	EROSION AND SEDIMENT CONTROL PLAN
C-205	EROSION AND SEDIMENT CONTROL DETAILS

STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. The contractor shall notify the Maryland Department of the Environment (MDE) Sediment Control Inspector at 410-901-4020 and the Talbot County Department of Public Works (DPW) at 410-770-8170 at least 48 hours prior to commencing any land disturbing activities and, unless waived by the Sediment Control inspector, shall be required to hold a pre-construction meeting at the project site. The contractor must provide the name of the person on the site who is responsible for inspection and maintenance of erosion and sediment control measures and a copy of their green card to the Sediment Control Inspector.
2. All projects with construction activities disturbing 1 acre or more are required to submit a General Permit (NOI) to MDE to comply with the General Permit for Construction Activity for Stormwater Discharges. The General Permit must be approved prior to disturbance activities. To obtain a General Permit (NOI) form, contact the Permits Coordinator at the MDE Compliance Program at 410-537-3510.
3. The limit of disturbance shall be clearly delineated in the field prior to the pre-construction meeting and any grading activities to ensure compliance with the approved plan.
4. The approved Erosion and Sediment Control Plan must be kept at the project site.
5. The Talbot Soil Conservation District (TSCD) reserves the right to modify the Erosion and Sediment Control Plans.
6. The TSCD may revoke the approval of the Erosion and Sediment Control Plan if work performed at the project site does not conform to the provisions of the grading permit, to the approved plan or to any written instructions from MDE, Talbot County DPW or the TSCD.
7. The contractor must request that the Sediment Control Inspector approve work completed in accordance with the approved Erosion and Sediment Control Plan, the grading or building permit and the Talbot County Erosion and Sediment Control Ordinance at the following points of project development:
   A. Upon completion of the installation of perimeter erosion and sediment control measures but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by MDE is made.
   B. Prior to removal or modification of any sediment control structure(s).
   C. Upon final stabilization of the site and prior to the removal of any sediment control measures.
8. The contractor shall construct all erosion and sediment control measures per the approved plan and construction sequence and shall have them inspected and approved by the Sediment Control Inspector prior to beginning any other land disturbances.
9. The contractor shall ensure that all runoff from disturbed areas is directed to the sediment control devices and shall not remove any erosion or sediment control measure without prior permission from the Sediment Control Inspector.
10. The following minor plan modifications may be approved by the Sediment Control Inspector in the field:
    A. Sediment control structures (except basins and traps) may be moved to meet the existing contours and field conditions, when moving these structures would have no impact on their function or design criteria.
    B. Substitution of perimeter control measures may be made provided the measure substituted is equivalent (i.e., silt fence for straw bales) or is an upgrade of the original measure (i.e., silt fence to a perimeter berm with properly sized outlet).
    C. Addition and extension of perimeter controls (including stone construction entrances) may be made to meet field conditions. Any modifications to the plan which are not listed above require the plan to be submitted to the TSCD for review and approval.
11. The contractor shall protect all points of construction ingress and egress to prevent the deposition of materials onto public roads. All materials deposited onto public roads shall be removed immediately.
12. On-site temporary stockpile areas must be placed as shown on the approved plan. If the construction schedule is to exceed 3 days, the stockpile areas must be stabilized. Stockpile areas should not exceed fifteen feet in height. If a stockpile is to exceed fifteen feet in height, it must be shown on the plan to be terraced with pipe slope drains installed and approved by TSCD. Upon the completion of the use of the stockpile area, existing ground surfaces shall be restored to their original conditions and permanently stabilized.
13. Various steps in the sequence of construction may require the contractor to remove excess excavated material to an approved location or to import material from an approved location. For purposes of this plan, an approved location shall be one which is operating under an approved erosion and sediment control plan and an active grading permit at the time of construction.
14. The contractor shall inspect daily and maintain continuously in an effective operating condition all erosion and sediment control measures until such time as they are removed with prior permission from the Sediment Control Inspector.
15. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within:
    A. Three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes equal to or greater than 3 horizontal to 1 vertical (3:1), and
    B. Seven (7) days as to all other disturbed or graded areas on the project site. The above requirements do not apply to those areas which are shown on the plan and are currently being used for material storage or for those areas on which actual construction activities are currently being performed or to interior areas of a surface mine site where the stabilization material would contaminate the recoverable resource. Maintenance shall be performed as necessary to ensure that the stabilized areas continuously meet the appropriate requirements of the most current Maryland Standards and Specifications for Soil Erosion and Sediment Control.
16. Sediment control practices will be maintained until the entire contributing area to the practice has been permanently stabilized and meets the satisfaction of the Sediment Control Inspector. Sediment controls may only be removed with the authorization of the Sediment Control Inspector.
17. All areas disturbed by the removal of sediment control devices must be immediately stabilized.
18. Surface drainage flows over unstabilized cut and fill slopes shall be controlled by either preventing drainage flows from traversing the slopes or by installing protective devices to convey the water downslope without causing erosion. Dikes shall be installed and maintained at the top of cut or fill slopes until the slope and drainage area to it are fully stabilized, at which time the dikes must be removed and final grading done to promote sheet flow drainage. Erosion control measures must be implemented at points of concentrated flow where erosion is likely to occur.
19. No permanent cut or fill slope with a gradient steeper than 3:1 will be permitted in lawn maintenance areas. A slope gradient of up to 2:1 will be permitted in non-maintenance areas provided that those areas are indicated on the erosion and sediment control plans with a low-maintenance ground cover specified for permanent stabilization. Slope gradient steeper than 2:1 will not be permitted with vegetation stabilization.
20. All flow lines are to be stabilized with sod or seed with erosion control matting to a depth of flow of 1 foot.
21. Sediment traps or basins are not permitted within 20 feet of a foundation which is existing or under construction. No structure may be constructed within 20 feet of an active sediment trap or basin.
22. Temporary sediment traps and sediment basins shall be cleaned out and restored to the original dimensions when sediment has accumulated to one half (1/2) the wet storage depth of the trap or basin.
23. Sediment removed from traps (and basins) shall be placed and stabilized in approved areas, but not within a floodplain, wetland or forest retention area. When pumping sediment laden water, the discharge must be directed to a sediment trapping device prior to release from the site.
24. For approved dewatering strategies for traps and basins, see section F of the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control. Pumping sediment laden water into the waters of the State without filtration is strictly forbidden.
25. Sediment control devices placed in infiltration areas must have bottom elevations at least two (2) feet higher than the finished grade elevation of the infiltration practice. When converting a sediment trap to an infiltration device, all accumulated sediment must be removed and disposed of prior to final grading of infiltration device.
26. The developer is responsible for obtaining all necessary permits prior to any construction activities. Further, the issuance of a grading permit does not relieve the developer of the responsibility to obtain any additional local, state or federal permits.

SITE SEQUENCE OF CONSTRUCTION:

1. NOTIFY AT LEAST 2 WEEKS PRIOR TO START OF CONSTRUCTION:

MDE	(410) 901-4020
NOTIFY TALBOT SOIL CONSERVATION DISTRICT	(410) 822-1577
TOWN OF EASTON	(410) 822-0513

2. PRE-CONSTRUCTION MEETING.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
4. INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES (SILT FENCING & INLET PROTECTION) PER PLANS.
5. COMPLETE SITE DEMOLITION AND HAUL OFF SITE (SEE SHEETS V-101).
6. REMOVE TOPSOIL AND HAUL OFFSITE.
7. ROUGH GRADE SITE INSIDE LIMITS OF DISTURBANCE.
8. FINE GRADE SITE
9. INSTALL LANDSCAPE PLANTS AND TURF AREAS SHOWN ON PLANS AND AS SPECIFIED.
10. ALL DISTURBED AREAS TO BE PERMANENTLY STABILIZED.
11. MAINTAIN ALL PERIMETER CONTROLS AND SEDIMENT CONTROL DEVICES UNTIL FINAL STABILIZATION HAS BEEN COMPLETELY ESTABLISHED.
12. REMOVE PERIMETER CONTROLS UPON APPROVAL BY THE MDE SEDIMENT CONTROL INSPECTOR

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.

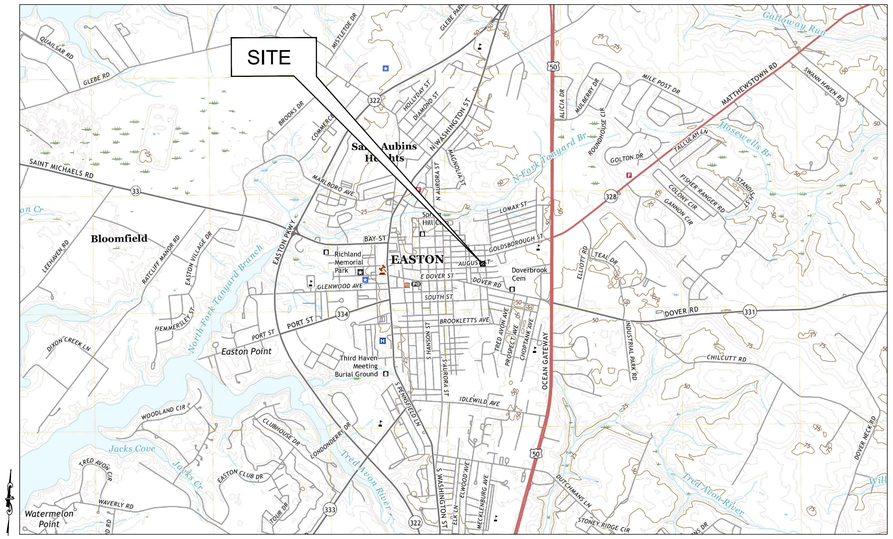
THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO (2) WEEKS PRIOR TO START OF CONSTRUCTION AND SHALL COORDINATE ALL CONSTRUCTION PHASES WITH THEM:

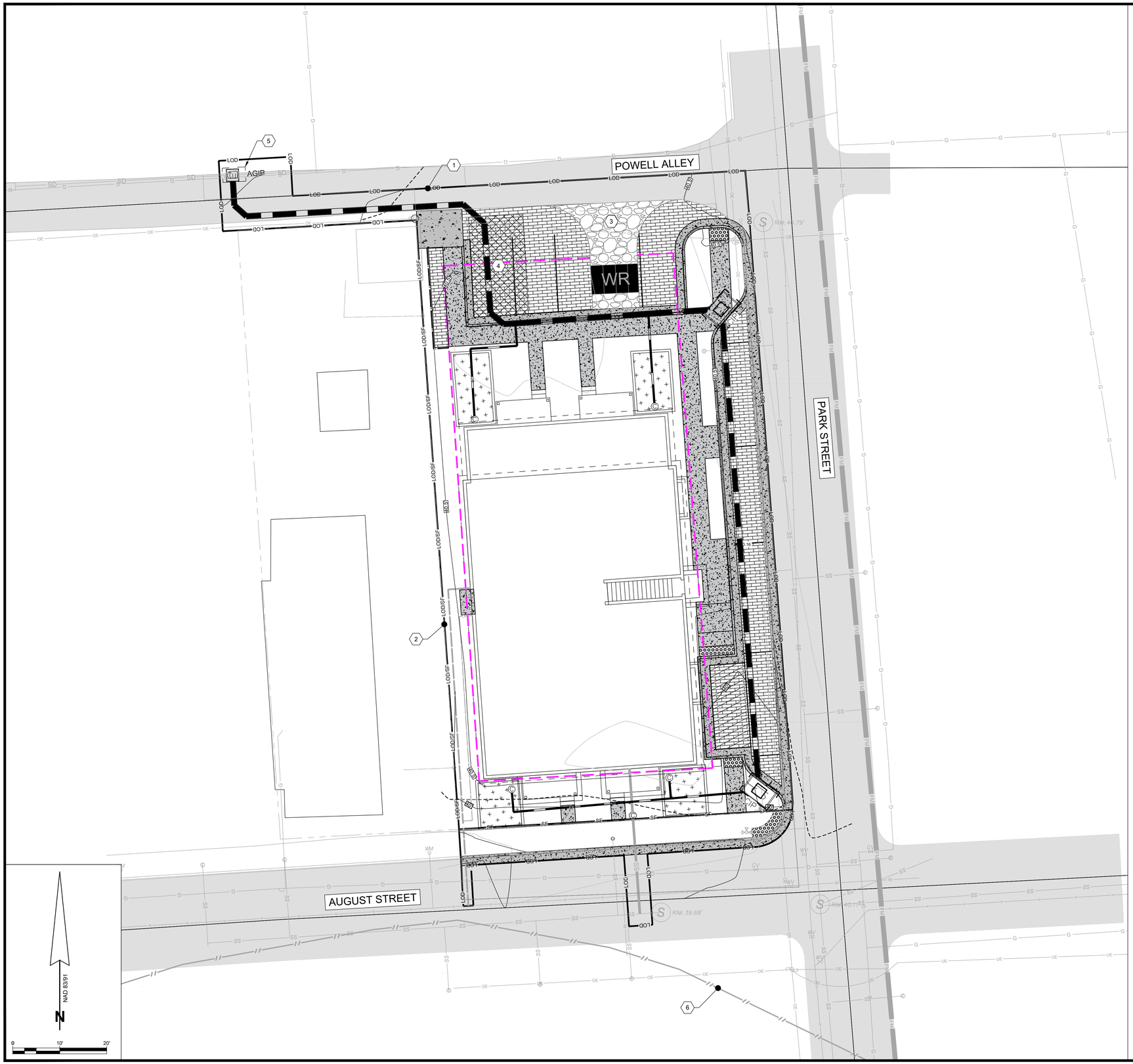
MDE (Main Number)	410-537-3000
MDE (Eastern Shore Field Office)	410-901-4020
TOWN OF EASTON DPW	410-882-0513
EASTON UTILITIES	410-822-6110
TALBOT COUNTY SCD	410-882-1577 x 3
MISS UTILITY	800-257-7777 or 811

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.


SITE
Saint Aubins Heights
EASTON
Bloomfield
Easton Point
Third Haven Meeting Burial Ground
Richland Memorial Park
Dovetbrook Cem
Watermelon Point
Jacks Cove
Tred Avon River
Wye River
Miles River
Harris Cr
Glebe Rd
Saint Michaels Rd
Port St
Dover Rd
Chilcutt Rd
Matthewstown Rd
Mile Post Dr
Goldsborough St
Brookletts Ave
Idlewild Ave
Glenwood Ave
Bay St
Augusta Ave
Lomax St
Ocean Gateway
Easton Pkwy
Dutchman Ln
Easton Club Dr
Stoney Ridge Cir
Dover Rd Ext
Hemmesley Dr
Dixon Creek Ln
Woodland Cir
Waverly Rd
Red Hook Cir
Clubhouse Dr
Longhorn Dr
Tilghman Rd
Talbot Blvd
Goldsborough Dr
Peachtree Dr
Cherry Tree Ln
Tred Avon Dr
Cadboro Dr
Fairfield Dr
Hanson St
Dover St
South St
Aurora St
Washington St
Talbot St
Harrison St
Mechlenburg St
Talbot Ln
Colton Dr
Gannons Cir
Rowhouse Cir
Mulberry Dr
Alicia Dr
Brooks Dr
Commerce St
Bartlett Dr
Glebe Rd
Quillen Rd
Lehmann Rd
Ratcliff Manor Rd
Easton Village Dr
Tidewater Dr
Rolling Rd
Longwood Rd
Gunpowder River
Hoppers Br
N Fork Tanyard Br
Tanyard Br
Trippe Ranger Rd
Stanford Ln
Shannahan Rd
Dover Beach Rd
Chilcutt Rd
Tred Avon Dr
Cherry Tree Ln
Peachtree Dr
Goldsborough Dr
Talbot Blvd
Longwood Rd
Tilghman Rd
Dutchman Ln
Stoney Ridge Cir
Easton Club Dr
Waverly Rd
Red Hook Cir
Woodland Cir
Dixon Creek Ln
Hemmesley Dr
Ratcliff Manor Rd
Easton Village Dr
Lehmann Rd
Quillen Rd
Glebe Rd
Saint Michaels Rd
Bartlett Dr
Commerce St
Brooks Dr
Rolling Rd
Tidewater Dr
Mulberry Dr
Alicia Dr
Rowhouse Cir
Colton Dr
Gannons Cir
Trippe Ranger Rd
Stanford Ln
Shannahan Rd
Dover Beach Rd
Matthewstown Rd
Mile Post Dr
Talbot Ln
Harrison St
Mechlenburg St
Talbot St
Washington St
Aurora St
Dover St
South St
Hanson St
Fairfield Dr
Cadboro Dr
Tred Avon Dr
Peachtree Dr
Cherry Tree Ln



EROSION & SEDIMENT CONTROL NOTES

1. LIMIT OF DISTURBANCE
2. LIMIT OF DISTURBANCE & SILT FENCE. SEE DETAIL ON SHEET C-205.01
3. STABILIZED CONSTRUCTION ENTRANCE WITH WASHOUT RACK. SEE DETAIL ON SHEET C-205.01
4. STOCKPILE / STAGING AREA
5. AT-GRADE INLET PROTECTION. SEE DETAIL ON SHEET C-205.01
6. SOILS LINE - **NOTE**: ENTIRE SITE IS WITHIN FALLINGSTON LOAM (FgA) - HYDROLOGIC SOIL GROUP D

HATCH LEGEND

ASPHALT		ESD BED BOTTOM	
A.D.A ACCESS AISLE		EASEMENT	
PERMEABLE PAVER		CONCRETE	

EROSION AND SEDIMENT CONTROL

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

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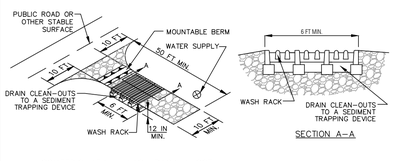
APPROVED BY:	BBF

SHEET NO.: C-201

FOR REVIEW

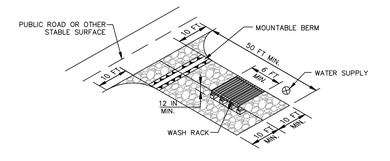
DETAIL B-2 WASH RACK OPTION

STANDARD SYMBOL: WR



SECTION A–A

ISOMETRIC VIEW – WASH RACK IN SCE



ISOMETRIC VIEW– WASH RACK ALONG SCE

CONSTRUCTION SPECIFICATIONS

1. USE A WASH RACK DESIGNED AND CONSTRUCTED/MANUFACTURED FOR THE ANTICIPATED TRAFFIC LOADS. CONCRETE, STEEL, OR OTHER MATERIALS ARE ACCEPTABLE. PRE–FABRICATED UNITS SUCH AS CATTLE GUARDS ARE ACCEPTABLE. USE MINIMUM DIMENSION OF 6 FEET x 10 FEET. ORIENT DIRECTION OF RIBS AS SHOWN ON THE DETAIL.
2. INSTALL PRIOR TO, ALONG SIDE OF, OR AS PART OF THE SCE.
3. DIRECT WASH WATER TO AN APPROVED SEDIMENT TRAPPING DEVICE.
4. KEEP AREA UNDER WASH RACK FREE OF ACCUMULATED SEDIMENT. IF DAMAGED, REPAIR OR REPLACE WASH RACK.

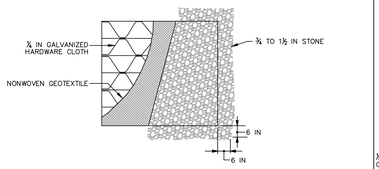
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

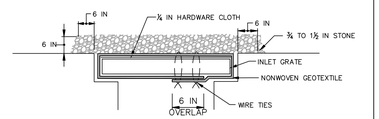
DETAIL E-9-2 AT-GRADE INLET PROTECTION

STANDARD SYMBOL: AGIP

MAXIMUM DRAINAGE AREA = 1 ACRE



PLAN / CUT AWAY VIEW



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.

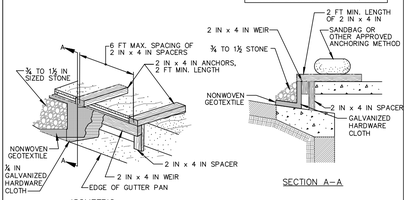
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-3 CURB INLET PROTECTION

STANDARD SYMBOL: CIP

MAXIMUM DRAINAGE AREA = ¾ ACRE



ISOMETRIC

SECTION A–A

CONSTRUCTION SPECIFICATIONS

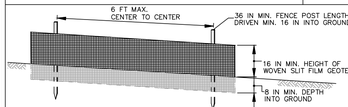
1. USE NOMINAL 2 INCH x 4 INCH LUMBER
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS.
3. NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
4. ATTACH A CONTINUOUS PIECE OF ¾ INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4 WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE.
5. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 WEIR.
6. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH), EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
7. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
8. FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE.
9. AT NON–SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
10. 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

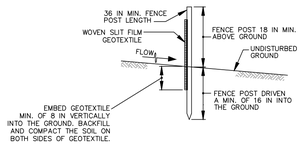
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

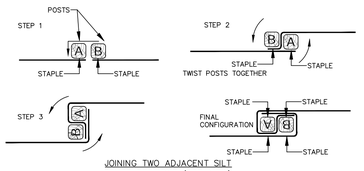
STANDARD SYMBOL: SF



ELEVATION



CROSS SECTION



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 1½ x 1½ x ¾ 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

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.

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.

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.

EROSION AND SEDIMENT CONTROL DETAILS

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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

REVISIONS

REV. #	DATE	DESCRIPTION

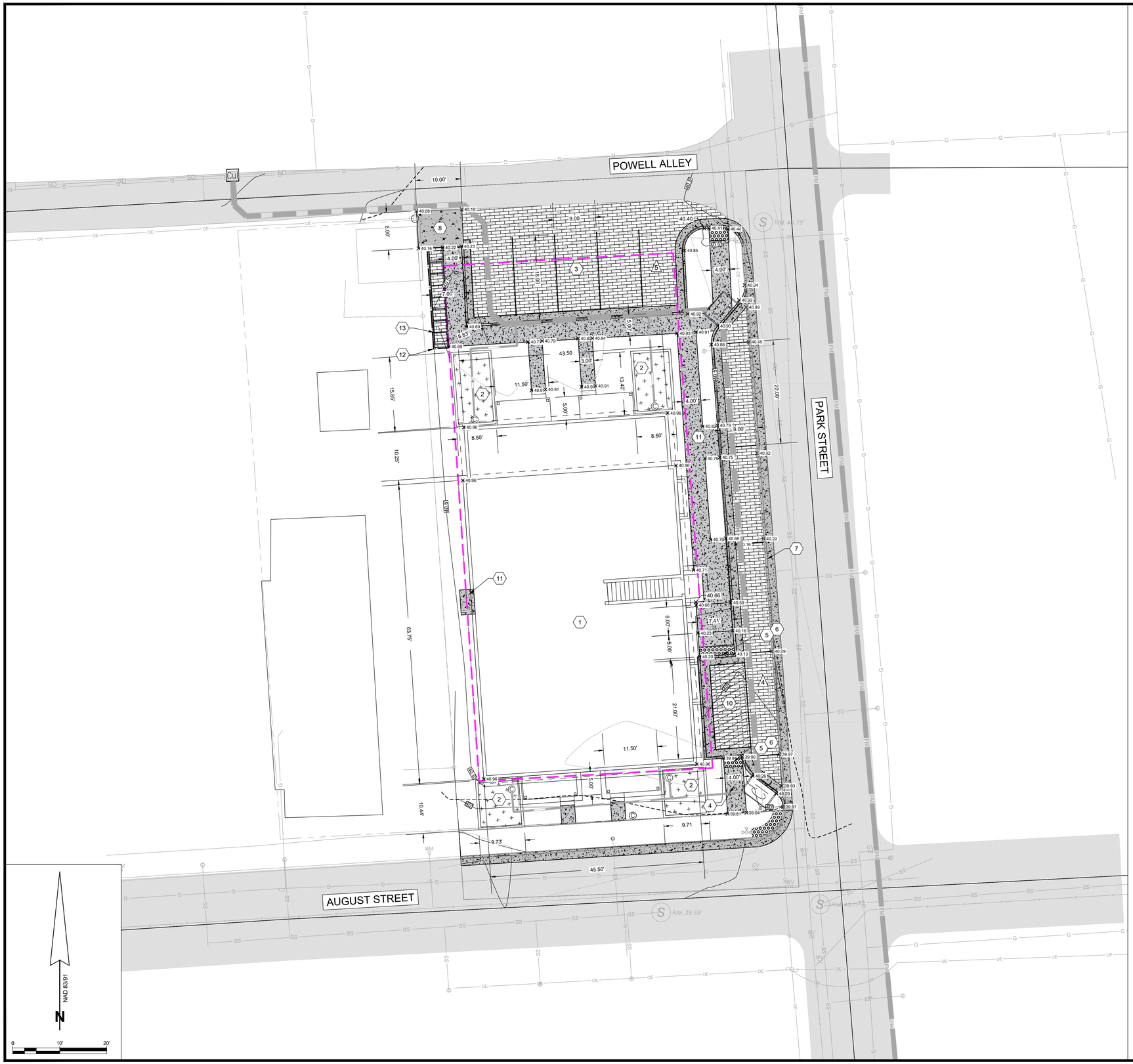
MISS UTILITY OF DELMARVA — DIAL 811 OR MORE SAFELY

811

DATE:	5/14/2024
SCALE:	N/A
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-205

FOR REVIEW



PROPOSED SITE PLAN NOTES

1. APARTMENT BUILDING FOOTPRINT (F.F.E = 41.96)
2. STORMWATER PLANTER BOX WITH 6" WIDE CONCRETE MASONRY BLOCKS AND WOODEN FACADE. SEE DETAIL ON SHEET C-405.01
3. PERMEABLE PAVERS. SEE DETAIL ON SHEET C-405.01
4. 5 FT BRICK PAVER SIDEWALK EXCEPT WHERE SHOWN. SEE DETAIL ON SHEET C-405.01
5. SIDEWALK RAMP. SEE DETAIL ON SHEET C-305
6. DETECTABLE WARNING SURFACE. SEE DETAIL ON SHEET C-305
7. DEPRESSED CURB. SEE DETAIL ON SHEET C-305
8. CONCRETE DUMPSTER PAD. SEE DETAIL ON SHEET C-305
9. STANDARD CURB AND GUTTER. SEE DETAIL ON SHEET C-305
10. A.D.A. ACCESS AISLE STRIPED PER A.D.A. STANDARDS
11. CONCRETE SIDEWALK / LANDING
12. WOODEN SCREENING FENCE FOR TRASH CORRAL FOR 8 TRASH RECEPTACLES.

NOTE: ALL FLOW LINE FILLETS RADIUS OF 5', UNLESS OTHERWISE SPECIFIED

(#) NUMBER OF PARKING SPACES

HATCH LEGEND

- ASPHALT
- ESD BED BOTTOM
- A.D.A ACCESS AISLE
- EASEMENT
- PERMEABLE PAVER
- CONCRETE

SITE GRADING PLAN

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

RAUCH inc
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Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3867

REVISIONS

REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA — IT'S THE LAW! — 811

DATE:	5/14/2024
SCALE:	1" = 10'
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-301

FOR REVIEW

OVERLAY	• HMA SUPERPAVE 9.5 MM, PG 64-22,LEVEL 2, FOR 1-1/2" OVERLAYS. • HMA SUPERPAVE 12.5 MM, PG 64-22,LEVEL 2, FOR 2" OVERLAYS. • MATCH THE SURFACE COURSE SPECIFIED FOR THE ADJUSTMENT FULL DEPTH PAVING IF DIFFERENT FROM THE ABOVE.
COMMERCIAL ASPHALT PAVEMENT FOR ROADS	SURFACE COURSE: 2" HOT MIX ASPHALT SUPERPAVE 9.5 MM BASE COURSE: 4" HOT MIX ASPHALT SUPERPAVE, 19.0 MM PLACED IN 2-2" LIFTS. SUB BASE: 9" CR-6 GRADED AGGREGATE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
RESIDENTIAL ASPHALT PAVEMENT FOR ALLEYS	SURFACE COURSE: 2" HOT MIX ASPHALT SUPERPAVE 9.5 MM BASE COURSE: 2 1/2" HOT MIX ASPHALT SUPERPAVE, 19.0 MM SUB BASE: 6" CR-6 GRADED AGGREGATE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
CONCRETE PAVEMENT	8" PORTLAND CEMENT CONCRETE MIX#7. SUB BASE: 6" CR-6 GRADED AGGREGATE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.

APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
PAVING SPECIFICATIONS
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-1.01

PAVING NOTES

PAVING REQUIREMENTS

A. BASE COURSE

1. SUB-GRADE SHALL BE PLACED ON PREPARED AND COMPACTED REFILLED EXCAVATIONS TO THE COMPACTED DEPTH AS SHOWN ON DETAIL 9W-1.03. MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET THE PROVISIONS OF MD SHA STANDARDS, SECTION 208.
2. GRADED AGGREGATE BASE COURSE:

a) GRADED AGGREGATE BASE COURSE SHALL BE SPREAD ON PREPARED AND COMPACTED REFILLED EXCAVATION TO THE COMPACTED DEPTH SHOWN ON THE DRAWING DETAILS.
b) GRADED AGGREGATE SHALL BE PER MD SHA STANDARD, SECTION 901.
c) RECYCLED CRUSHED CONCRETE IS AN ACCEPTABLE ALTERNATIVE PROVIDED THICKNESS ADJUSTMENTS ARE MADE BASED ON SUPPLEMENTAL TESTING TO BE SUBMITTED BY A QUALIFIED TESTING LABORATORY AND APPROVED BY THE TOWN ENGINEER.

B. TACK COAT

1. COATING SHALL BE RESIDUAL ASPHALT UNIFORMLY SPREAD BETWEEN .01 AND .05 GALLONS/SQ. YARD.
2. CONTRACTOR SHALL TAKE CARE NOT TO TRACK COAT ON SURFACE COURSES.

C. HOT MIX ASPHALT PAVEMENT

1. HOT MIX ASPHALT PAVEMENT SHALL CONSIST OF A NUMBER OF COURSES OF HMA SUPERPAVE MATERIAL AND AGGREGATE ON A PREPARED SUB-BASE AS SHOWN WITHIN THE TOWN STANDARDS.
2. MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET THE PROVISIONS OF SECTION 504 AND SECTION 904 OF THE MD SHA STANDARDS AND DETAILS.
3. SURFACE COURSES OF BITUMINOUS CONCRETE MIXES SHALL HAVE LESS THAN 15% OF RECYCLED ASPHALT PAVEMENT (RAP).
4. BASE COURSES SHALL HAVE NO MORE THAN 20% RAP.
5. WEATHER RESTRICTIONS:

a) PLANT MIXED SEAL – MINIMUM SURFACE TEMPERATURE 60°F AND RISING.
b) SURFACE COURSE – MINIMUM SURFACE TEMPERATURE 40°F AND RISING.
c) BASE COURSE – MINIMUM SURFACE TEMPERATURE 32°F AND RISING.

D. CONCRETE PAVEMENT

1. CONCRETE USED IN THE RESTORATION OF STREET AND ROADS SHALL BE PLACED TO THE MINIMUM THICKNESS THAT SHALL BE APPROVED BY THE TOWN. CONCRETE MAY BE A BASE COURSE WITH A BITUMINOUS CONCRETE OVERLAY OR A FINISHED SURFACE COURSE.
2. CONCRETE PAVEMENT SHALL MEET THE PROVISIONS OF MD SHA STANDARDS, SECTION 522.
3. CONCRETE SIDEWALK AND CURB AND GUTTER RESTORATION SHALL BE AS INDICATED WITHIN THE TOWN STANDARDS.

E. SOIL CEMENT

1. WHERE THE CBR VALUES ARE FOUND TO BE LOW WITHIN THE PAVED AREA, THE TOWN WILL ALLOW THE SUB-GRADE BE REINFORCED BY A CEMENTIOUS MATERIAL BEING MIXED IN THE SUBOGRADE. APPLICATION SHALL BE SUBJECT TO THE GEOTECHNICAL INVESTIGATION.
2. A MINIMUM OF 2" OF GRADED AGGREGATE SHALL BE INSTALLED BETWEEN THE AMENDED SOIL AND BITUMINOUS PAVEMENT.
3. MINIMUM MIX DEPTH OF THE SOIL CEMENT MIXTURE SHALL BE 8" WITH A 5-5.5% MINIMUM CEMENT CONTENT.

APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
PAVING NOTES
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-1.02

CONCRETE QUICK REFERENCE LIST

CAST-IN-PLACE CONCRETE SIDEWALKS AND CURBING

A. SUBMITTALS:

1. SUBMIT MIX DESIGN FOR APPROVAL PRIOR TO PLACING CONCRETE (MSHA MIX #3 FOR ALL CONCRETE SIDEWALKS, AIR ENTRAINED, MINIMUM 3500 PSI MIX). FOR CURB AND GUTTER, UTILIZE MSHA MIX #7, EXCEPT MAXIMUM WATER CEMENTITIOUS RATIO OF 0.45 AND 611 POUNDS MINIMUM CEMENTITIOUS MATERIALS , AIR ENTRAINED, MINIMUM 4200 PSI MIX.
2. SUBMIT CONCRETE TESTING AGENCY FOR APPROVAL, WHICH CONTRACTOR OR PROJECT OWNER SHALL EMPLOY FOR INFIELD AND LABORATORY TESTING.

B. CONCRETE PLACEMENT

1. NOTIFY TOWN OF INTENTION TO POUR CONCRETE 24 HOURS PRIOR TO PERFORMING WORK. (PHONE: 410-822-8822).
2. DRIVER SHALL PRESENT COMPUTER GENERATED MIX DELIVERY TICKET UPON ARRIVAL TO SITE.
3. DO NOT ADD WATER TO MIX AT JOB SITE UNLESS APPROVED BY ENGINEER. DO NOT POUR CONCRETE DURING RAIN EVENTS.
4. TESTING AGENCY SHALL TEST FOR SLUMP, TEMPERATURE AND AIR ENTRAINMENT AT THE JOB SITE, PRIOR TO POURING EACH TRUCK LOAD DELIVERED TO SITE. THE MAXIMUM TIME FROM ADDING WATER TO BATCH AT PLANT TO DISCHARGE AT SITE SHALL BE WITHIN 1½ HOURS. TESTING AGENCY SHALL VERIFY THAT SUB-GRADE IS PROPERLY COMPACTED.
5. TESTING AGENCY SHALL COLLECT CYLINDERS FOR COMPRESSION TESTING ON EACH TRUCK LOAD OF CONCRETE DELIVERED TO SITE PER ACI REQUIREMENTS. TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER WITHIN 48 HOURS OF 7 AND 28 DAY BREAKS, REPORT SHALL INCLUDE LOCATION OF POUR PER PLAN STATIONING.
6. ENGINEER OF HIS/HER REPRESENTATIVE SHALL VERIFY THAT AREA OF CONCRETE WORK IS PROPERLY PREPARED, FREE OF WATER, FREE OF UNSTABLE MATERIALS AND THAT ALL REINFORCEMENT REQUIRED AT DRIVEWAYS, RAMP, VALLEY GUTTERS, ETC. IS IN PLACE AND PROPERLY SUPPORTED.
7. COLD WEATHER CONCRETE PLACEMENT SHALL BE PROTECTED FROM DAMAGE AND FROST, FREEZING ACTION OR LOW TEMPERATURES. NO UNAPPROVED ADMIXTURES ARE PERMITTED.
8. CONCRETE CURB AND SIDEWALKS SHALL HAVE PROPER CONTROL JOINTS INSTALLED AT 10 FOOT INTERVALS FOR CURB AND 5 FOOT INTERVALS FOR SIDEWALK. EXPANSION JOINTS FOR CURBING SHALL BE AT EACH 100 FOOT INTERVAL PLUS AT EACH POINT OF TANGENT OR CURVE. SIDEWALKS SHALL HAVE EXPANSION JOINTS AT 20 FOOT INTERVALS OR AT CHANGE OF DIRECTION.

APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
CONCRETE QUICK REFERENCE LIST
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-1.03

CAST-IN-PLACE CONCRETE SIDEWALKS AND CURBING

A. Submittals:

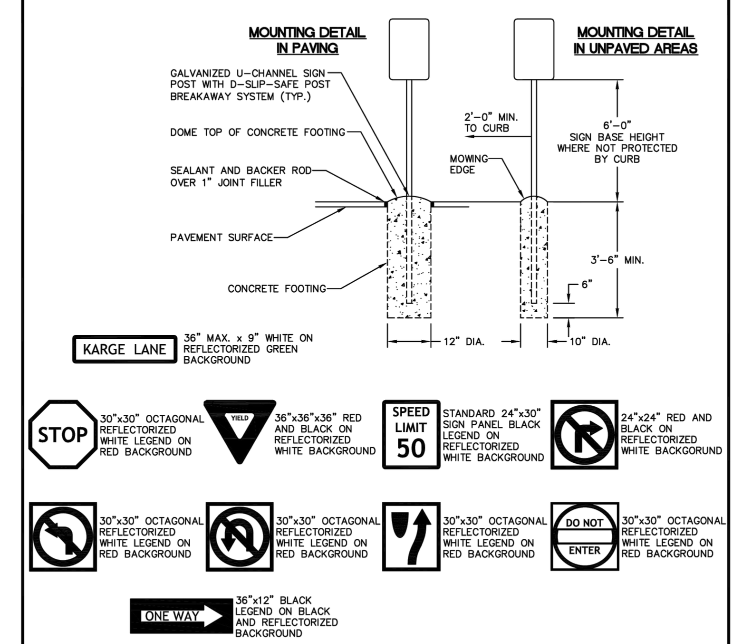
1) Submit mix design for approval prior to placing concrete (MSHA MIX #3 for all concrete sidewalks, air entrained, minimum 3500 psi mix). For curb and gutter, utilize MSHA Mix #7, except maximum water cementitious ratio of 0.45 and 611 pounds minimum cementitious materials, air entrained, minimum 4200 psi mix.
2) Submit Concrete Testing Agency for approval, which contractor or project owner shall employ for infield and laboratory testing.

B. Concrete Placement:

1) Notify the Town of intention to pour concrete 24 hours prior to performing work. (Phone: 410-820-8822).
2) Driver shall present computer generated mix delivery ticket upon arrival to site.
3) Do not add water to mix at job site unless approved by Engineer. Do not pour concrete during rain events.
4) Testing agency shall test for slump, temperature and air entrainment at the job site, prior to pouring each truck load delivered to site. The maximum time from adding water to batch at plant to discharge at site shall be 1 ½ hours. Testing agency shall verify that subgrade is properly compacted.
5) Testing agency shall collect cylinders for compression testing on each truck load of concrete delivered to site per ACI requirements. Test results shall be provided to the Engineer within 48 hours of 7 and 28 day breaks. Report shall include location of pour per plan stationing.
6) Engineer or his representative shall verify that area of concrete work is properly prepared, free of water, free of unstable materials and that all reinforcement required at driveways, ramps, valley gutters, etc. is in place and properly supported.
7) Cold weather concrete placement shall be protected from damage and frost, freezing action or low temperatures. No unapproved admixtures are permitted.
8) Concrete curb and sidewalks shall have proper control joints installed at 10 foot intervals for curb and 5 foot intervals for sidewalk. curb & gutter shall have contraction joints every 10'-0", and expansion joints every 40'-0". Extruded concrete curb & gutter shall have contraction joints every 10'-0", and expansion joints every 100'-0" and at point of tangent or curve. Sidewalks shall have expansion joints at 20 foot intervals or at change of direction.

APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
CONCRETE QUICK REFERENCE LIST
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-7.09

SIGN DETAILS

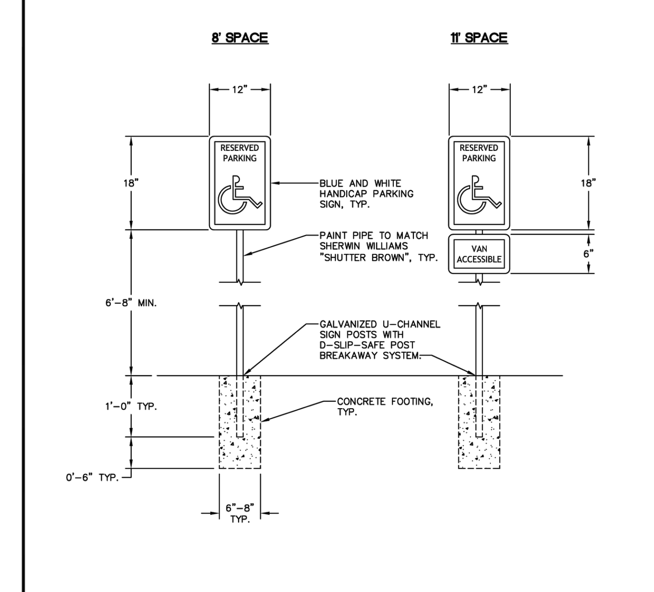


NOTES:

1. REFER TO THE MARYLAND STATE HIGHWAY ADMINISTRATION "STANDARD BOOK" FOR DIMENSIONS AND COLORS OF ALL SIGNS NOT SHOWN.
2. ALL PROPOSED SIGNS MUST MEET THE MINIMUM REQUIREMENTS FOR RETROREFLECTIVITY SET FORTH BY THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES, MUST CURRENT EDITION.

APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
SIGN DETAILS
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-8.03

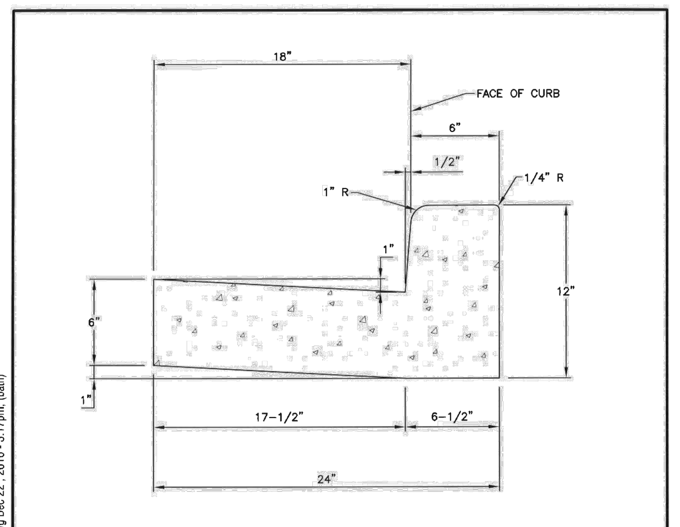
SIGN DETAILS FOR HANDICAP PARKING SPACES



NOTES:

1. H/C PARKING SIGNS (US DOT STANDARD R7-8).

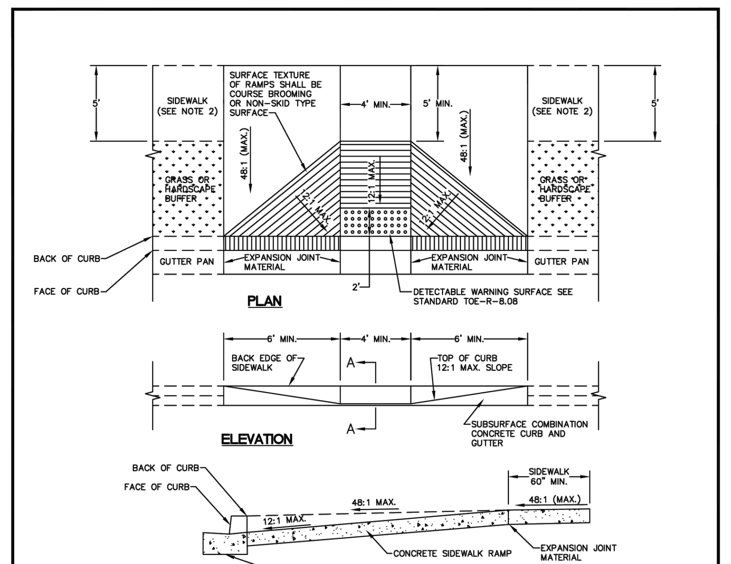
APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
SIGN DETAILS FOR HANDICAP PARKING SPACES
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-SI-4.01



NOTES:
1. ALL CONCRETE USED FOR CURB & GUTTER SHALL BE SHA MIX NO. 7.
2. CURB & GUTTER SHALL HAVE CONTRACTION JOINTS EVERY 10'-0", AND EXPANSION JOINTS EVERY 40'-0". EXTRUDED CONCRETE CURB & GUTTER SHALL HAVE CONTRACTION JOINTS EVERY 10'-0", AND EXPANSION JOINTS EVERY 100'-0" AND AT PT OR PC.
3. DEPRESSED CURB AND GUTTER SHALL BE UTILIZED AT HANDICAPPED RAMPS WHEN TRANSITIONING FROM STANDARD CURB AND GUTTER.
4. MAXIMUM GUTTER SLOPE ON CURB RETURNS SHALL BE 2% WHERE HANDICAPPED RAMPS ARE REQUIRED.

APPROVAL	REVISED	TOWN OF EASTON AND EASTON UTILITIES STANDARD DETAILS
TOWN ENGINEER 9/12/11 DATE	MAY 1, 89 AUG 1, 94 FEB 25, 09 JAN 1, 11	STANDARD CURB AND GUTTER
ISSUED: MAY 1, 1986		STANDARD NO. PW-2.00

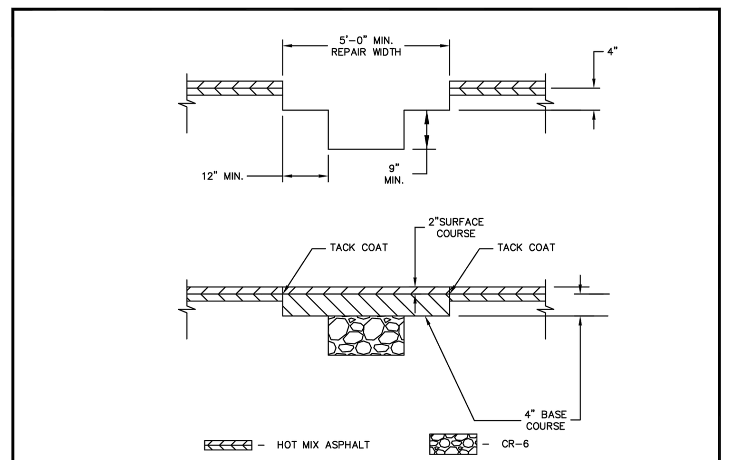
Y:\0000\CADD STANDARDS\DETAILS\City Details\Easton MD\DETAILS\PW-2.00.dwg Dec 22, 2010 - 3:17pm, (batn)



NOTES:

1. TO BE USED ON WIDE SIDEWALKS OR SIDEWALKS WITH SIGNIFICANT SEPARATION FROM THE ROADWAY WHERE THE GEOMETRY SPECIFIED IN THE DETAILS ABOVE CAN BE SATISFIED. MAY BE MODIFIED TO SUIT A PARTICULAR LOCATION.
2. WHERE 60" SIDEWALK CAN NOT BE PROVIDED, A DESIGN WAIVER MUST BE REQUESTED.
3. NO TRAVERSABLE SLOPE ON THE RAMP OR SIDEWALK SHALL EXCEED 12:1 IN THE DIRECTION OF PEDESTRIAN TRAVEL OR 48:1 PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.
4. EXPANSION JOINT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH TOE STANDARD 7.03.
5. SIDEWALK RAMPS TO BE SHOWN ON PLANS SYMBOLICALLY AND REFERENCED WITH THE CENTER OF THE RAMP ALIGNED TO A STATION ON THE CONSTRUCTION CENTERLINE. SEPARATE DETAILS SHALL BE SHOWN WHERE PROPOSED RAMP VARIES FROM STANDARD CASES.
6. TRANSITION PANELS TO TIE INTO EXISTING SIDEWALK MUST BE A MINIMUM OF 5' IN LENGTH.

APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
SIDEWALK RAMPS PERPENDICULAR
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-7.03



NOTES:

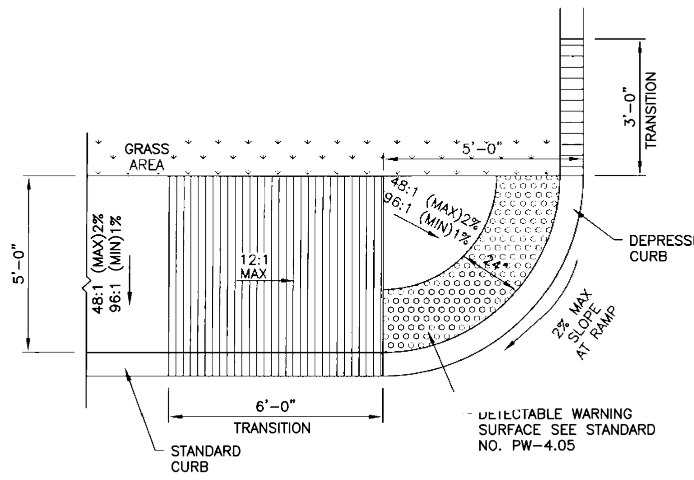
1. PAVEMENT SHALL BE SAW CUT FULL DEPTH OF THE EXISTING PAVEMENT SECTION. ALL CUTS SHALL BE MADE IN STRAIGHT LINES.
2. IF PATCH FALLS WITHIN 2' OF EXISTING CURB OR EDGE OF PAVING, CONTINUE RESTORATION TO EDGE OF PAVE.
3. SURFACE COURSE: 2" OF 9.5mm SUPERPAVE.
BASE COURSE: 4" OF 9.5mm, 12.5mm OR 19.0 mm SUPERPAVE IN 2-2" LIFTS./NOTE: IF SC & BC ARE BOTH 9.5mm, THEY MAY BE DONE IN 2-3" LIFTS.
4. ADDITIONAL MILL AND OVERLAY MAY BE REQUIRED WHEN MULTIPLE PAVEMENT REPAIRS ARE LOCATED IN THE SAME RELATIVE VICINITY. LIMITS OF MILL AND OVERLAY, WHEN REQUIRED, WILL BE DETERMINED BY THE TOWN ENGINEER.
5. WHEN SURFACE ARES OF REPAIR EXCEEDS 100 SF, THE 2" SURFACE COURSE SHALL EXTEND ENTIRE WIDTH OF TRAVEL LANE(S) AND/OR SHOULDER. LIMITS OF MILL AND OVERLAY, WHEN REQUIRED, WILL BE DETERMINED BY THE TOWN ENGINEER.
6. CONTRACTOR MUST CONFIRM LIMITS OF PAVEMENT REQUIRED WITH TOWN ENGINEER PRIOR TO START OF PAVEMENT WORK.

APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
PERMANENT ASPHALT PAVEMENT REPAIR FOR UTILITY TRENCHES
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-5.01-3

A. GENERAL NOTES
1. THIS SPECIFICATION SHALL APPLY TO ANY AND ALL UTILITY WORK OR STREET MODIFICATIONS SUCH AS DRAINAGE IMPROVEMENTS OR OTHER CONSTRUCTION DEEMED APPROPRIATE BY THE TOWN ENGINEER. THE CONTRACTOR SHALL RESTORE ALL SURFACES DAMAGED BY THEIR OPERATIONS TO THE WIDTHS AND EXTENT DETAILED OR SPECIFIED WITHIN.
2. SURFACE RESTORATION IN TOWN STREETS AND ROADS SHALL BE IN ACCORDANCE WITH THE MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS AND THESE TOWN STANDARDS.
3. EXISTING PAVEMENT SHALL BE TRIMMED TO SECURE A STRAIGHT CLEAN EDGE FOR REMOVING. SAW CUT PAVEMENT AS SHOWN ON PW-1.06 OR AS DIRECTED TO OBTAIN A CLEAN PAVEMENT EDGE. ALL TRENCHES SHALL BE CUT BACK BY ONE (1) FOOT ON EITHER SIDE OF THE TRENCH.
4. NO STAGGERED OR IRREGULAR LONGITUDINAL TRENCH REPAIR WIDTHS SHALL BE ALLOWED. REPAIRS SHALL BE A UNIFORM WIDTH AND IN A STRAIGHT LINE.
5. MINIMUM TEMPORARY TRENCH RESTORATION WIDTH IS FIVE (5) FEET. ACTUAL WIDTH SHALL VARY BASED ON FIELD CONDITIONS AS DETERMINED BY THE TOWN ENGINEER.
6. ALL STREET REPAIR AREAS SHALL INCLUDE RESTORATION WHERE APPLICABLE, PLUS MILL AND OVERLAY. MILL AND OVERLAY SHALL INCLUDE THE FULL LANE WIDTH OF ANY STREET DISTURBED. ON HORIZONTAL CROSSINGS THE MINIMUM RUN OF THE STREET TO BE MILLED AND OVERLAID SHALL BE THIRTY (30) FEET, CENTERED ON THE DISTURBANCE. SHOULD MULTIPLE CROSS ROAD REPAIRS ARE CREATED, MILL AND OVERLAY SHALL CONTINUE THE FULL LANE WIDTH TO INCLUDE ALL TRENCHES WHERE CROSS ROAD REPAIRS ARE LESS THAN FIFTY (50) FEET APART. LONGITUDINAL TRENCHES SHALL INCLUDE MILL AND OVERLAY FOR ONE (1) FULL LANE WIDTH FOR FIFTEEN (15) FEET BEYOND EXCAVATION FOR EACH LANE DISTURBED.
7. UNDERMINED AREAS SHALL BE GROUTED FILLED OR CUT BACK.
8. A TEMPORARY TWO (2) INCH LAYER OF COLD PATCH SHALL BE PLACED ON ALL UTILITY TRENCHES WHERE WEATHER CONDITIONS OR OTHER DELAYS DO NOT PERMIT FINAL REPAIRS WITHIN SEVEN (7) CALENDAR DAYS.
9. METAL PLATING MAY BE USED AT THE END POINT OF THE UTILITY LAYING OPERATION AND MUST BE USED TO PROTECT THE INTEGRITY OF CONCRETE PATCHES. CONTRACTOR SHALL POST WARNING SIGNS.
10. ALL ADJUSTMENTS TO EXISTING UTILITIES MUST BE MADE PRIOR TO PAVING OPERATIONS AND REPEATED IF THERE IS ANY DAMAGE DUE TO ROLLING AND COMPACTING OPERATIONS. MANHOLE OR CATCH BASIN ADJUSTMENTS SHALL BE DONE WITH ADJUSTMENT RINGS, BRICK COURSES, OR MORTAR LAYERS, SUBJECT TO EASTON UTILITIES APPROVAL.
11. PAVING OPERATIONS SHALL BE PERFORMED IF THE FOLLOWING MINIMUM TEMPERATURES ARE MET:
A) 32 DEGREES AND RISING FOR ANY HOT MIX BASE COURSE
B) 32 DEGREES AND RISING FOR ANY HOT MIX SURFACE COURSE
LIFT THICKNESS SHALL BE LIMITED TO:
A) 2" FOR 9.5mm SUPERPAVE
B) 3" FOR 12.5mm SUPERPAVE
C) 3" FOR 19mm SUPERPAVE
D) 4" FOR AGGREGATE
E) 8" FOR BACKFILL
12. CATCH BASINS, INLETS, CURBS AND ALL OTHER APPURTENANCES SHALL BE ADEQUATELY COVERED AND PROTECTED PRIOR TO APPLICATION OF BITUMINOUS MATERIALS. NO EARTH OF BITUMINOUS MATERIALS SHALL BE ALLOWED TO ENTER ANY STORM DRAINAGE SYSTEM. SUITABLE CONTAINMENT PROVISIONS SHALL BE EMPLOYED TO PREVENT SURFACE RUNOFF OF BITUMINOUS MATERIALS.
13. THE FINAL SURFACE SHALL PROVIDE A SMOOTH TRANSITION, FREE OR ABRUPT CHANGES IN GRADE, IS MADE WITH ADJACENT PAVEMENTS AND/OR SIDEWALK. NO DEPRESSIONS OR OTHER MISALIGNMENT SHALL OBSTRUCT, TRAP OR OTHERWISE MISDIRECT THE FLOW OF SURFACE WATER DRAINAGE.
14. ALL PAVEMENT SHALL BE CUT BACK ONE (1) FOOT ON EITHER SIDE OF THE TRENCH.

B. MAINTENANCE OF REFILLED EXCAVATIONS
1. ALL DEPRESSIONS APPEARING IN THE REFILLED EXCAVATION, STABILIZED BASE AND TEMPORARY PAVING SHALL BE PROPERLY REFILLED. IF THE CONTRACTOR FAILS TO MAKE REPAIRS WITHIN 48 HOURS AFTER RECEIPT OF WRITTEN NOTICE FROM THE TOWN ENGINEER, THE TOWN MAY REFILL SAID DEPRESSIONS AND THE COST THEREOF SHALL BE BILLED TO THE CONTRACTOR. IN CASE OF EMERGENCY, THE TOWN MAY REFILL ANY DEPRESSIONS OR PROTECT WITH BARRICADES WITHOUT GIVING PREVIOUS NOTICE TO THE CONTRACTOR, AND THE COST OF DOING SO SHALL BE BILLED TO THE CONTRACTOR.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY INJURY OR DAMAGE THAT MAY RESULT FROM LACK OF MAINTENANCE OF ANY REFILLED EXCAVATION AT ANY TIME.

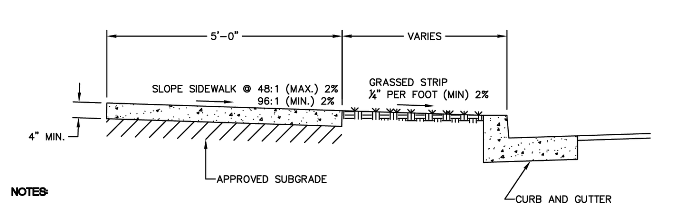
APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
SURFACE RESTORATION AND PAVING NOTES
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-5.04



NOTES:

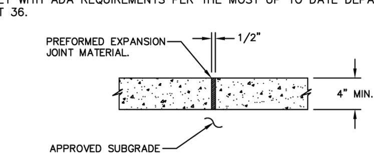
1. BRICK SIDEWALK AND HANDICAP RAMPS SHALL BE USED AS DIRECTED BY THE TOWN.
2. AT NO POINT SHALL THE SLOPE OF THE LANDING BE GREATER THAN 48:1 (2%), INCLUDING DIAGONAL.
3. THERE SHALL BE A LANDING PRIOR TO THE RAMPS. THE LANDING SHALL BE 3' IN LENGTH, MINIMUM.
4. DETAIL ONLY TO BE USED AS A GUIDE, CONTRACTOR TO USE GRADES SHOWN ON GRADING PLAN.

TYPE "G" SIDEWALK RAMP DETAIL



NOTES:

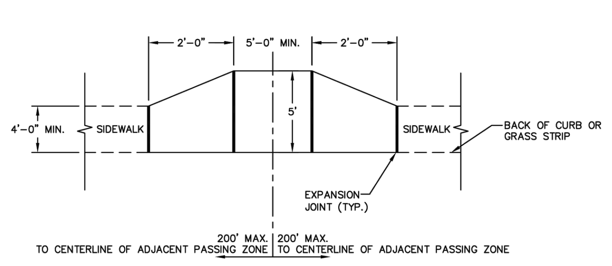
1. CONCRETE SHALL BE SHA MIX NO. 3.
2. CONTRACTION JOINTS SHALL BE TOOLED AT 5'-0" INTERVALS. (4' INTERVALS FOR 4' WIDE SIDEWALK)
3. EXPANSION JOINTS AT INTERVALS NOT GREATER THAN 20'-0".
4. ALL UNPAVED AREAS WITHIN STREET SIDELINES SHALL BE SEEDED OR SODDED PER SPECIFICATIONS.
5. SIDEWALKS AT DRIVEWAY LOCATIONS TO BE 8" THICK.
6. WHERE CONTINUOUS WIDTH OF TRAVEL IS LESS THAN 5'-0", PROVIDE PASSING ZONES AT AN INTERVAL NOT TO EXCEED 200' CENTER TO CENTER. ENTRANCES SHALL BE ACCEPTABLE PASSING ZONES PROVIDED PAVING WIDTH OF 5'-0" IS MAINTAINED AT 48:1 SLOPE.
7. GRASS STRIPS SHALL BE SLOPED AS TO PROVIDE POSITIVE DRAINAGE TOWARD STORMWATER FEATURES.
8. WHERE REVERSE SLOPES OF GRASS STRIPS AND SIDEWALKS ARE REQUIRED TO PROVIDE POSITIVE DRAINAGE TOWARDS A STORMWATER FEATURE, SPOT ELEVATIONS SHALL BE PROVIDED ON FRONT AND BACK OF SIDEWALK. (REVERSE SLOPES MUST BE APPROVED BY THE TOWN PRIOR TO CONSTRUCTION)
9. MAXIMUM SLOPE IN THE DIRECTION OF TRAVEL SHALL BE 5% IN LOCATIONS WITHOUT HANDICAPPED RAMPS.
10. SIDEWALKS SHALL COMPLY WITH ADA REQUIREMENTS PER THE MOST UP TO DATE DEPARTMENT OF JUSTICE REGULATION 28CFR PART 36.



EXPANSION JOINT DETAIL

APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
CONCRETE SIDEWALK
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-7.01

SIDEWALK PASSING ZONES

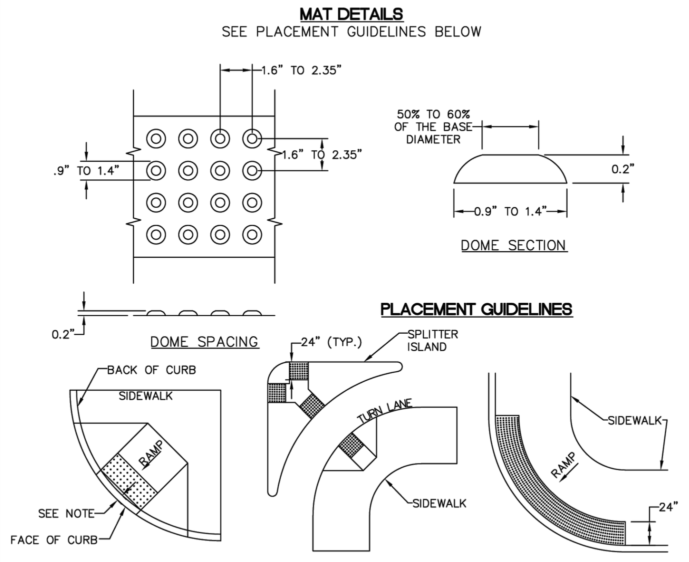


NOTES:

1. SIDEWALK TRAVERSE SLOPE SHALL BE MAINTAINED ACROSS THE ENTIRE WIDTH OF THE PASSING ZONE.
2. SIDEWALK WIDTH SHALL NOT INCLUDE CURB WIDTH.
3. CROSS SLOPE SHALL BE 48:1 MAX AND 96:1 MIN.

APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
SIDEWALK PASSING ZONES
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-7.06

MAT DETAILS
SEE PLACEMENT GUIDELINES BELOW

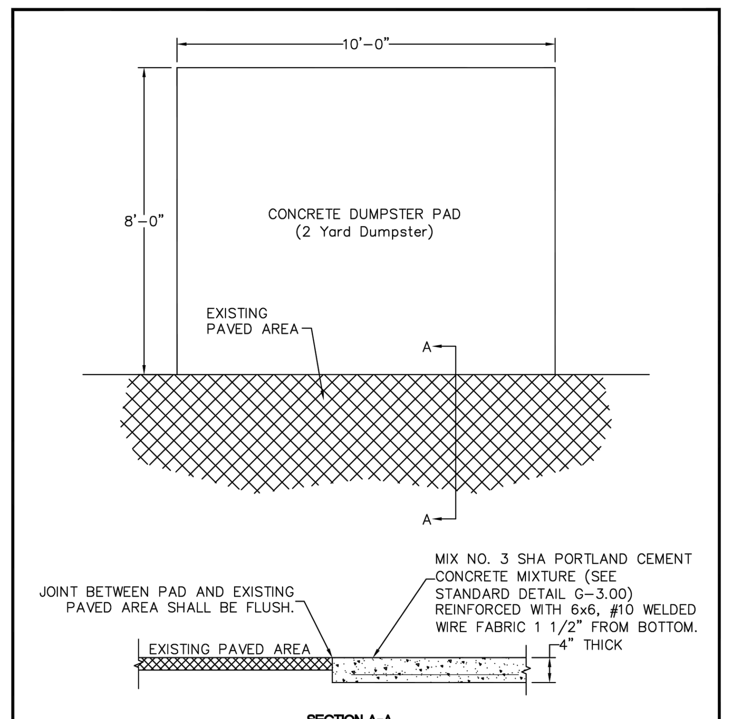


WHERE ISLANDS OR MEDIANS ARE LESS THAN 6 FEET WIDE, THE DETECTABLE WARNING SHOULD EXTEND ACROSS THE FULL LENGTH OF THE CUT THROUGH THE ISLAND OR MEDIAN.

NOTES:

1. THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 TO 8 INCHES FROM THE FACE OF CURB.
2. FOR SKEWED APPLICATIONS DETECTABLE WARNING SHALL BE PLACED SUCH THAT THE DOMES CLOSEST TO THE BACK OF CURB ARE NO LESS THAN 0.5" AND NO MORE THAN 3.0" FROM THE BACK OF CURB. TRUNCATED DOME SURFACES SHALL BE FABRICATED TO PROVIDE FULL DOMES ONLY.
3. DETECTABLE WARNING SURFACES SHALL BE PAID FOR IN ACCORDANCE WITH SECTION 611 OF THE SPECIFICATIONS.
4. DETECTABLE WARNING SURFACES ARE REQUIRED AT STREET CROSSING AND SIGNALIZED INTERSECTIONS.

APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
DETECTABLE WARNING SURFACES
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-7.08



APPROVAL
TOWN ENGINEER
DATE 1/2020
TOWN OF EASTON STANDARD DETAILS
CONCRETE DUMPSTER PAD
ISSUED: JANUARY 2020 | STANDARD NO.: TOE-SI-3.01

SITE DETAILS

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028
ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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

REVISIONS

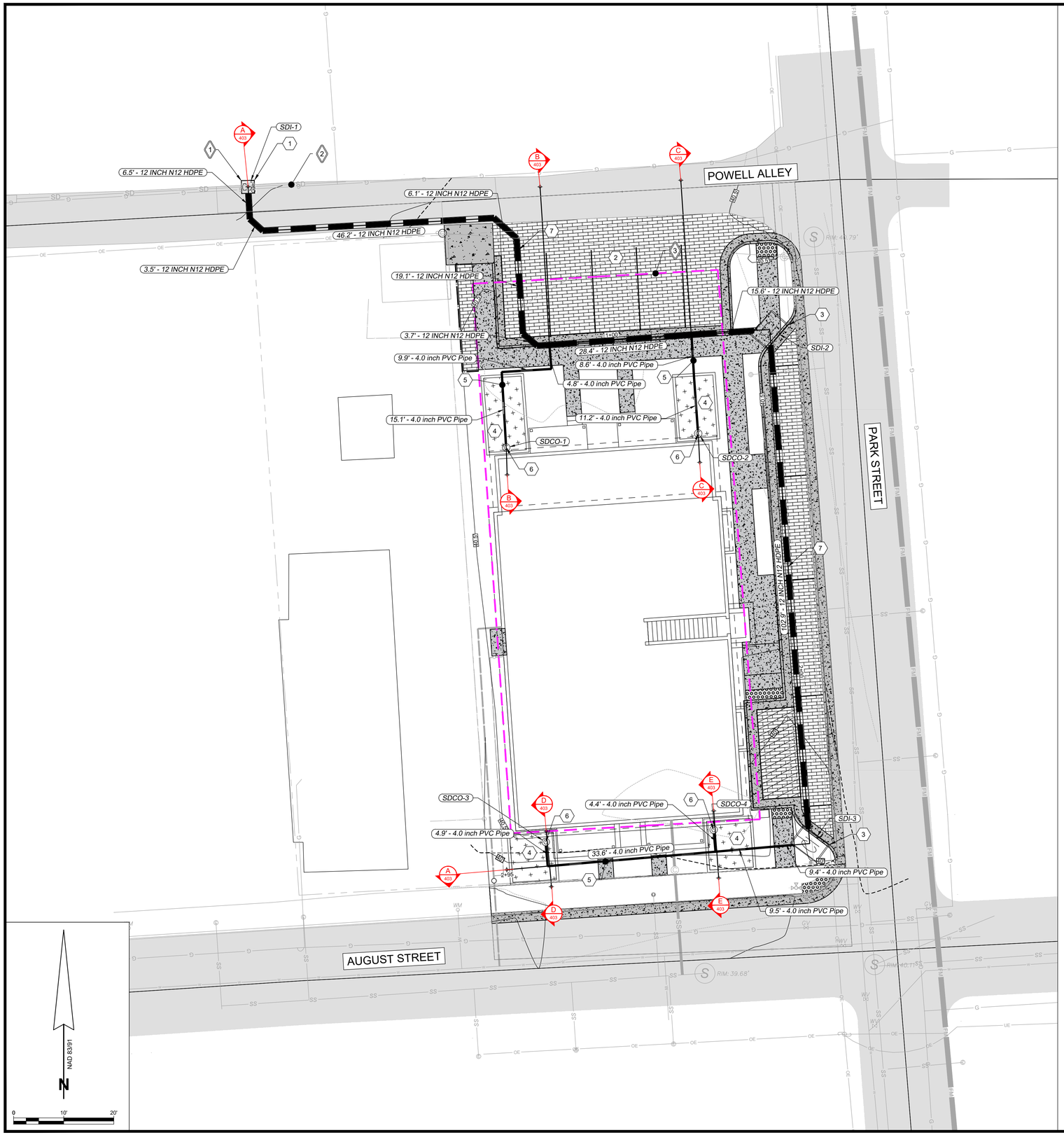
REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	5/14/2024
SCALE:	N/A
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-305

FOR REVIEW



PROPOSED STORMWATER FEATURES & NOTES

1. REPLACE EXISTING YARD INLET WITH STANDARD TRAFFIC BEARING YARD INLET. SEE DETAIL ON SHEET 405.01
2. PERMEABLE PAVERS USING PAVE DRAIN. SEE DETAILS ON SHEET C-405.01
3. STANDARD CURB INLET. SEE DETAIL ON SHEET C-405.01
4. STORMWATER MANAGEMENT PLANTER BOX. SEE DETAIL ON SHEET C-405.01
5. 4" PVC PIPE
6. 4" PVC CLEANOUT
7. 12" HDPE PIPE

EXISTING STORMWATER FEATURES

1. AT-GRADE STEEL INLET WITH BRICK CULVERT BOX TO BE REMOVED AND REPLACED WITH STANDARD TRAFFIC BEARING YARD INLET
2. 10" TERRACOTTA STORMWATER DRAIN PIPE
3. EASTON UTILITY EASEMENT/R.O.W.

STRUCTURE SCHEDULE
STORM DRAIN

STRUCTURE NAME	LOCATION	STRUCTURE TYPE AND SIZE	CONNECTED PIPES	RIM ELEVATION
SDCO-1	N405145.73, E1578325.90	4 in CLEANOUT	INV OUT = 38.00	42.95
SDCO-2	N405148.50, E1578364.23	4 in CLEANOUT	INV OUT = 38.40	42.92
SDCO-3	N405066.98, E1578333.78	4 in CLEANOUT	INV OUT = 38.00	41.64
SDCO-4	N405069.42, E1578367.31	4 in CLEANOUT	INV OUT = 37.95	41.90
SDI-1	N405197.77, E1578274.37	24 x 24 inch Rectangular Structure	INV IN = 37.60	39.32
SDI-2	N405169.26, E1578378.51	41 x 66 CURB INLET PER SD-1.01	INV IN = 37.78 INV OUT = 37.78	40.90
SDI-3	N405066.66, E1578386.49	41 x 66 CURB INLET PER SD-1.01	INV IN = 37.93 INV OUT = 37.93	40.27

PIPE SCHEDULE
STORM DRAIN

PIPE NAME	SIZE AND MATERIAL	LENGTH	SLOPE	UPSTREAM STRUCTURE AND INVERT	DOWNSTREAM STRUCTURE AND INVERT
SDP-1	12 INCH N12 HDPE	6.46'	0.17%	INV. 37.61'	SDI-1 INV. 37.60'
SDP-2	12 INCH N12 HDPE	3.46'	0.14%	INV. 37.62'	INV. 37.61'
SDP-3	12 INCH N12 HDPE	46.20'	0.14%	INV. 37.68'	INV. 37.62'
SDP-4	12 INCH N12 HDPE	6.08'	0.05%	INV. 37.69'	INV. 37.68'
SDP-5	12 INCH N12 HDPE	19.09'	0.13%	INV. 37.71'	INV. 37.69'
SDP-6	12 INCH N12 HDPE	3.68'	0.14%	INV. 37.72'	INV. 37.71'
SDP-7	12 INCH N12 HDPE	2.47'	0.15%	INV. 37.72'	INV. 37.72'
SDP-8	12 INCH N12 HDPE	28.43'	0.09%	INV. 37.75'	INV. 37.72'
SDP-9	12 INCH N12 HDPE	15.64'	0.22%	SDI-2 INV. 37.78'	INV. 37.75'
SDP-10	12 INCH N12 HDPE	102.91'	0.14%	SDI-3 INV. 37.93'	SDI-2 INV. 37.78'
SDP-11	4.0 inch PVC Pipe	9.36'	0.14%	INV. 37.94'	SDI-3 INV. 37.93'
SDP-12	4.0 inch PVC Pipe	9.51'	0.14%	INV. 37.95'	INV. 37.94'
SDP-13	4.0 inch PVC Pipe	33.62'	0.14%	INV. 38.00'	INV. 37.95'
SDP-14	4.0 inch PVC Pipe	4.80'	5.73%	INV. 38.00'	INV. 37.72'
SDP-15	4.0 inch PVC Pipe	9.92'	0.00%	INV. 38.00'	INV. 38.00'
SDP-16	4.0 inch PVC Pipe	15.08'	0.00%	SDCO-1 INV. 38.00'	INV. 38.00'
SDP-17	4.0 inch PVC Pipe	8.61'	7.59%	INV. 38.40'	INV. 37.75'
SDP-18	4.0 inch PVC Pipe	11.18'	0.00%	SDCO-2 INV. 38.40'	INV. 38.40'
SDP-19	4.0 inch PVC Pipe	4.85'	0.00%	SDCO-3 INV. 38.00'	INV. 38.00'
SDP-20	4.0 inch PVC Pipe	4.40'	0.00%	SDCO-4 INV. 37.95'	INV. 37.95'

HATCH LEGEND

- ASPHALT
- ESD BED BOTTOM
- ADA ACCESS AISLE
- EASEMENT
- PERMEABLE PAVER
- CONCRETE

STORMWATER AND STORM DRAIN PLAN

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028
ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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

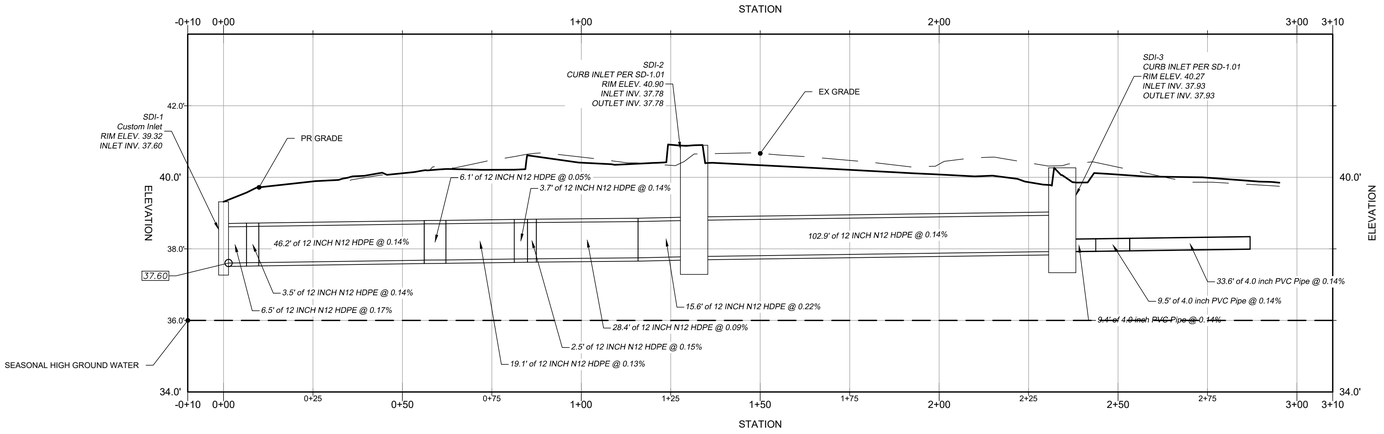
REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA — 811

DATE:	5/14/2024
SCALE:	1" = 10'
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-401

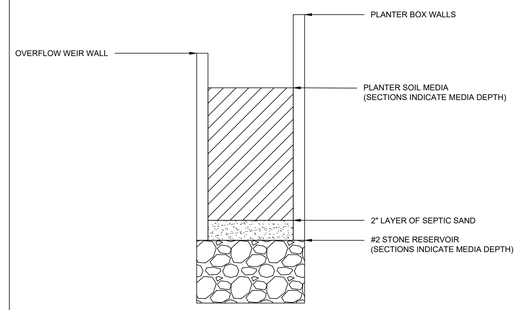
FOR REVIEW



1V:10H EXAGGERATED PROFILE:
A

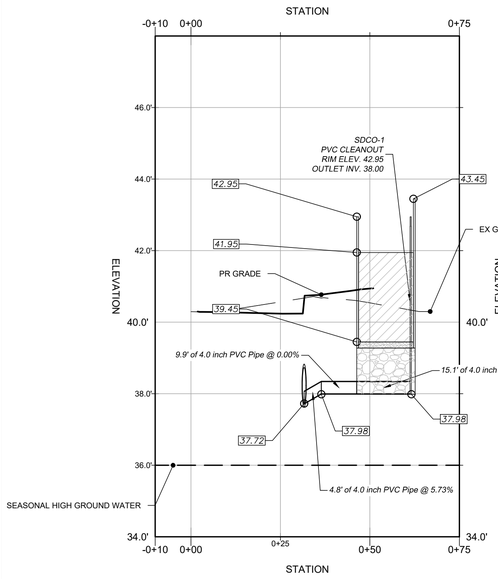
H: 1" = 20'
V: 1" = 2'

TYPICAL PLANTER BOX SECTION LEGEND



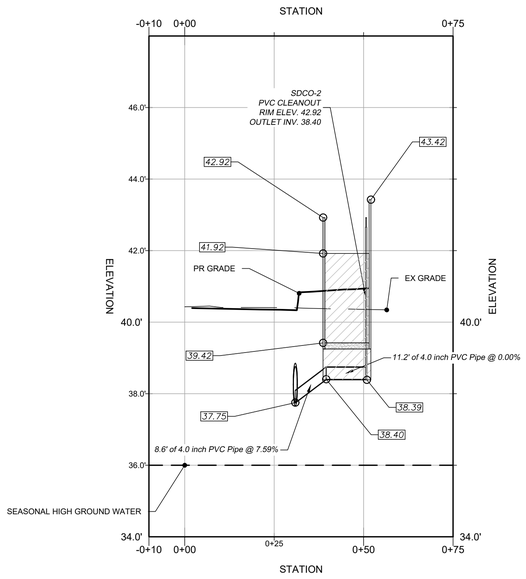
N.T.S.

NOTE: SEE STORMWATER PLANTER BOX ON DETAIL SHEET C-405.01



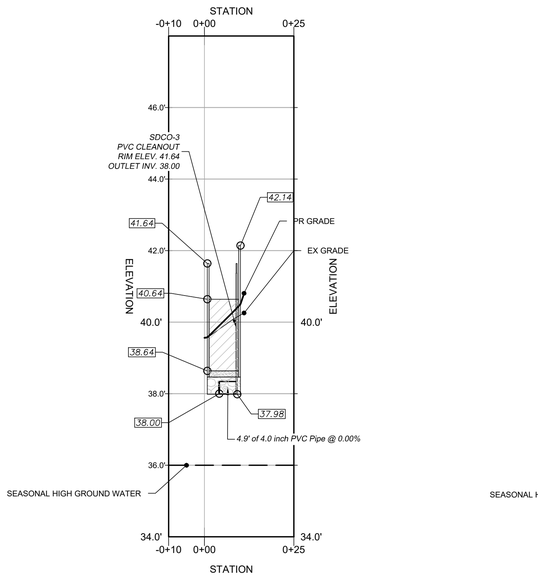
1V:10H EXAGGERATED PROFILE:
B

H: 1" = 20'
V: 1" = 2'



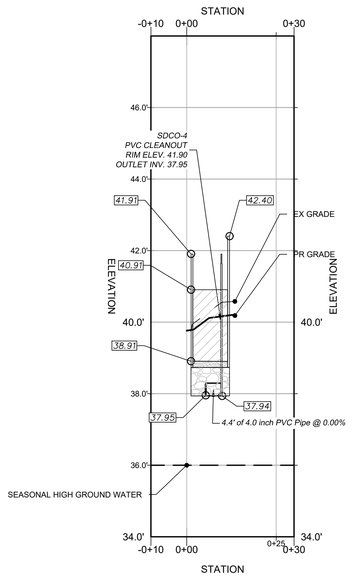
1V:10H EXAGGERATED PROFILE:
C

H: 1" = 20'
V: 1" = 2'



1V:10H EXAGGERATED PROFILE:
D

H: 1" = 20'
V: 1" = 2'



1V:10H EXAGGERATED PROFILE:
E

H: 1" = 20'
V: 1" = 2'

STORMWATER AND STORM DRAIN PROFILES

FOR

THE LAURA HOUSE

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REVISIONS

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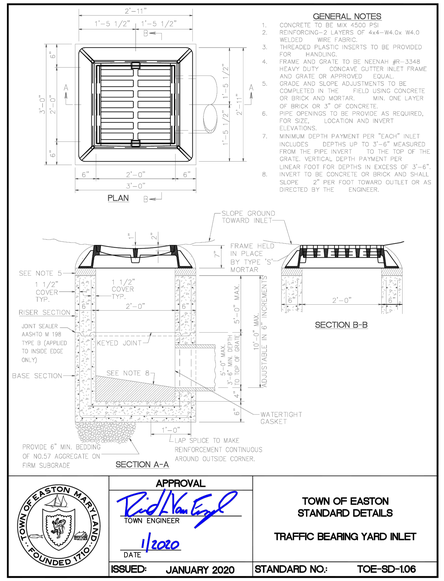
DATE:	5/14/2024
SCALE:	AS SHOWN
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-403

FOR REVIEW



APPROVAL	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER DATE 1/2020	TRAFFIC BEARING YARD INLET
ISSUED: JANUARY 2020	STANDARD NO.: TOE-SD-1.06

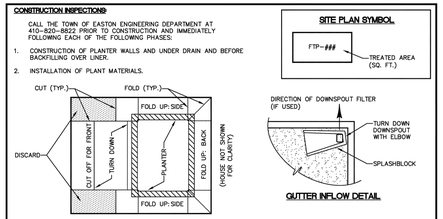
CONSTRUCTION INSPECTIONS:

CALL THE TOWN OF EASTON ENGINEERING DEPARTMENT AT 410-820-8822 PRIOR TO CONSTRUCTION AND IMMEDIATELY FOLLOWING EACH OF THE FOLLOWING PHASES:

1. CONSTRUCTION OF PLANTER WALLS AND UNDER DRAIN AND BEFORE BACKFILLING OVER LINER.
2. INSTALLATION OF PLANT MATERIALS.

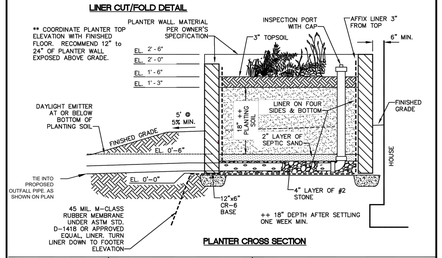
SITE PLAN SYMBOL

FTP-### — TREATED AREA (SQ. FT.)



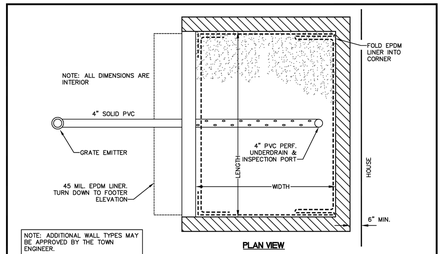
LINER CUT/FOLD DETAIL

GUTTER INFLOW DETAIL

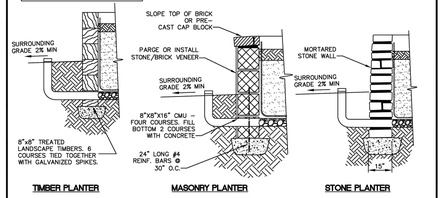


PLANTER CROSS SECTION

APPROVAL	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER DATE 1/2020	FLOW-THROUGH PLANTER PLAN AND SECTION
ISSUED: JANUARY 2020	STANDARD NO.: TOE-SWM-5.01-1



PLAN VIEW



TIMBER PLANTER **MASONRY PLANTER** **STONE PLANTER**

WALL CONSTRUCTION DETAILS

APPROVAL	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER DATE 1/2020	FLOW-THROUGH PLANTER CONSTRUCTION DETAIL
ISSUED: JANUARY 2020	STANDARD NO.: TOE-SWM-5.01-2

PLANT SELECTION

1. THE HOMEOWNER IS ENCOURAGED TO WORK WITH A REGISTERED LANDSCAPE ARCHITECT OR NURSERY TO DESIGN AN ATTRACTIVE AND FUNCTIONAL MIX OF NATIVE PLANTS SPECIFICALLY TOLERANT OF BOTH SATURATED AND DRY CONDITIONS.
2. INFORMATION ON APPROPRIATE SPECIES IS AVAILABLE BY TYPING "BAYSCAPES NATIVE PLANTS" INTO YOUR FAVORITE SEARCH ENGINE.
3. THE SCHEDULE AND TYPICAL DETAIL BELOW CAN BE USED AS A BASIS FOR PLANT SELECTION AND GROUPINGS, IF DESIRED.

FLOW-THROUGH PLANTER LANDSCAPE SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	PLANTER SIZE (SQ. FT.) 70 QTY.	140 QTY.	210 QTY.	280 QTY.
SHRUBS:						
ILEX GLABRA (MALE ONLY)	INKBERRY	2 GAL.	PICK ONE	PICK ONE	PICK TWO	PICK TWO
ARONIA MELANOCARPA	BLACK CHOKEBERRY	2 GAL.				
MYRICA CERIFERA	BAYBERRY	2 GAL.				
GROUND COVER:						
ANDROPOGON VIRGINICUS	BROOMSEDGE	PLUG	3	4	6	8
LIATRIS SPICATA	BLAZING STAR	PLUG	0	2	3	4
SEMPERVIVUM GLOBIFERUM	HENS & CHICKS	PLUG	3	4	6	8

SOIL SPECIFICATIONS

1. THE PLANTING SOIL SHALL HAVE A COMPOSITION OF 50% SAND, 20% COMPOSTED LEAVES, AND 30% TOPSOIL.
2. TOPSOIL SHALL BE OF UNIFORM COMPOSITION, FREE OF STONES, DEBRIS, STUMPS, ROOTS OR SIMILAR OBJECTS LARGER THAN ONE INCH.
3. TOPSOIL SHALL BE FREE OF PLANTS OR PLANT PARTS OF BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, MUGWORT, NUTSEDGE, POISON IVY, CANADIAN THISTLE.

SIZING CHART

TREATED AREA (SQ. FT.)	PLANTER AREA (SQ. FT.)	SUGGESTED INTERIOR DIMENSIONS LENGTH	WIDTH
250	10	4	3
500	20	7	3
750	30	8	4
1000	40	10	4

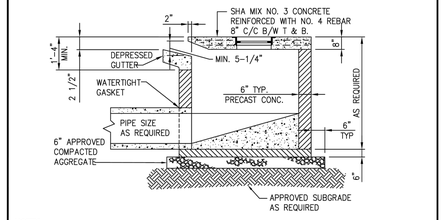
CONSTRUCTION NOTES

1. PLANTERS SHALL BE CONSTRUCTED AFTER EXTERIOR SIDING HAS BEEN INSTALLED.
2. LANDSCAPING MATERIALS SHOULD BE INSTALLED DURING THE SPRING OR FALL IF POSSIBLE.
3. GUTTER SCREENS AND/OR DOWNSPOUT FILTERS SHALL BE PROVIDED TO PRE-TREAT ANY ROOF AREAS THAT FLOW INTO A PLANTER. DOWNSPOUT FILTERS SHALL BE ORIENTED SO LEAVES AND DEBRIS FALL OUTSIDE THE PLANTER. (TYPE "DOWNSPOUT FILTER" IN YOUR FAVORITE SEARCH ENGINE TO FIND EXAMPLES FOR PURCHASE.)

MAINTENANCE CRITERIA:

1. WATER PLANTS LIBERALLY THE FIRST GROWING SEASON AND DURING PERIODS OF DROUGHT THEREAFTER.
2. REMOVE ACCUMULATED TRASH AND VEGETATIVE DEBRIS EVERY FEW MONTHS.
3. PRUNE AND REMOVE DEAD VEGETATION PERIODICALLY, AS WITH ANY LANDSCAPE BED. IF SPECIFIC PLANTS ARE NOT SURVIVING, REPLACE WITH A DIFFERENT SPECIES. WATERING MAY BE REQUIRED DURING PROLONGED DRY PERIODS.
4. SILT AND SEDIMENT SHOULD BE REMOVED FROM THE SURFACE OF THE FILTER BED WHEN ACCUMULATION EXCEEDS ONE INCH.
5. THE TOPSOIL AND FILTER MEDIA SHOULD BE REMOVED AND REPLACED WHEN WATER PONDS FOR MORE THAN 48 HOURS. EXISTING PLANT MATERIAL CAN BE TEMPORARILY REMOVED AND RE-PLANTED IN THE NEW SOIL.

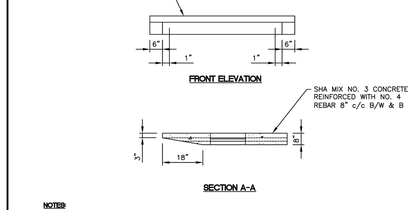
APPROVAL	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER DATE 1/2020	FLOW-THROUGH PLANTER NOTES
ISSUED: JANUARY 2020	STANDARD NO.: TOE-SWM-5.01-3



NOTES:

1. PROVIDE LIFT HOOKS IN UNEXPOSED SURFACES TO ACCOMMODATE FIELD PLACEMENT.

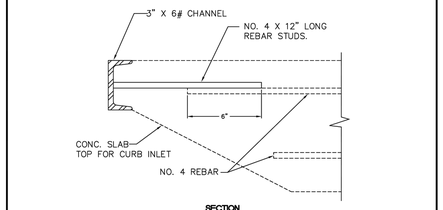
APPROVAL	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER DATE 1/2020	CURB INLET
ISSUED: JANUARY 2020	STANDARD NO.: TOE-SD-1.01



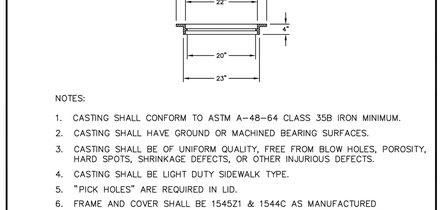
NOTES:

1. LIFTING DEVICE SHALL BE DETERMINED BY CONTRACTOR, NO DEVICES SHALL BE PERMITTED IN EXPOSED TOP SURFACES.

APPROVAL	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER DATE 1/2020	INLET TOP
ISSUED: JANUARY 2020	STANDARD NO.: TOE-SD-1.02



APPROVAL	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER DATE 1/2020	REINFORCED NOSING
ISSUED: JANUARY 2020	STANDARD NO.: TOE-SD-1.03



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 1545Z1 & 1544C AS MANUFACTURED BY EAST JORDON IRON WORKS, P.O. BOX 439 SPRING ST. EAST JORDON, MICH. 49727, OR AN APPROVED EQUAL.

APPROVAL	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER DATE 1/2020	INLET FRAME AND COVER
ISSUED: JANUARY 2020	STANDARD NO.: TOE-SD-1.04

STORMWATER DETAILS

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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REVISIONS

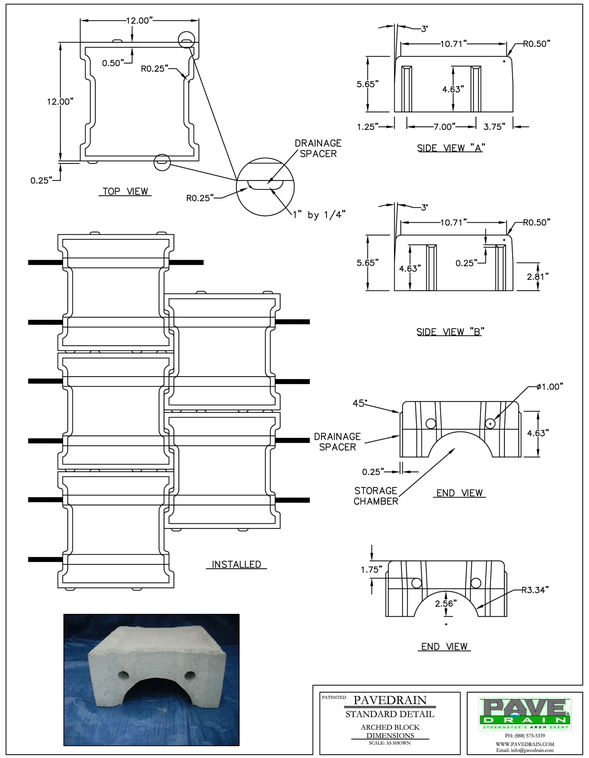
REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	5/14/2024
SCALE:	N/A
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

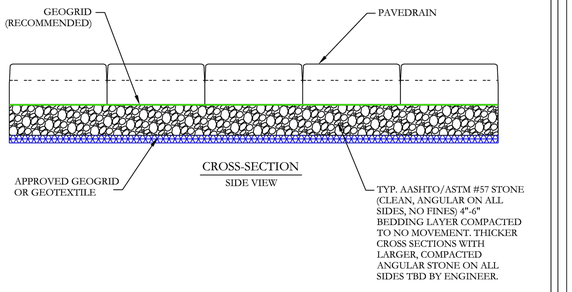
SHEET NO.: C-405.01

FOR REVIEW



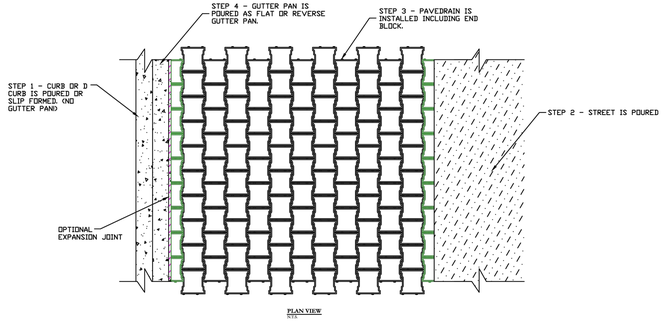
PATENTED PAVEDRAIN
STANDARD DETAIL
ARCHED BLOCK DIMENSIONS
SCALE: SEE SHOWN

PAVE DRAIN STORMWATER'S GRAND ENTRY
PH: (800) 575-5339
WWW.PAVEDRAIN.COM
Email: info@pavedrain.com



PAVEDRAIN
STANDARD DETAIL
CROSS-SECTIONS
SCALE: N.T.S.

PAVE DRAIN STORMWATER'S GRAND ENTRY
PH: (800) 575-5339
WWW.PAVEDRAIN.COM
Email: info@pavedrain.com



PATENTED PAVEDRAIN
STANDARD DETAIL
CURB & GUTTER
SCALE: N.T.S.

PAVE DRAIN STORMWATER'S GRAND ENTRY
PH: (800) 575-5339
WWW.PAVEDRAIN.COM
Email: info@pavedrain.com

STORMWATER DETAILS

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REVISIONS

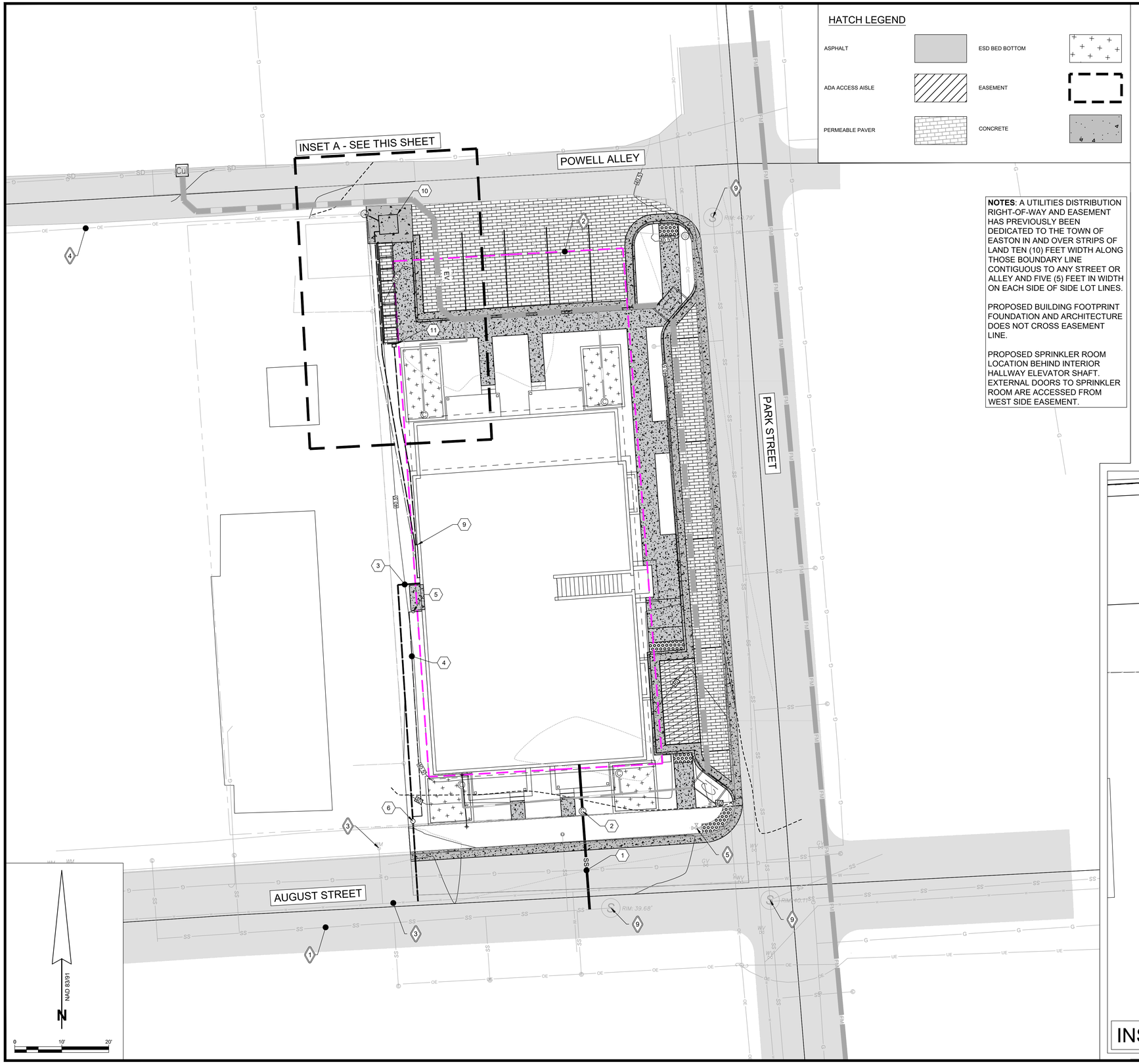
REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA
811

DATE:	5/14/2024
SCALE:	N/A
DRAWN BY:	JWL & WCS
DESIGNED BY:	JWL & WCS
APPROVED BY:	BBF

SHEET NO.: C-405.02

FOR REVIEW



HATCH LEGEND

ASPHALT		ESD BED BOTTOM	
ADA ACCESS AISLE		EASEMENT	
PERMEABLE PAVER		CONCRETE	

NOTES: A UTILITIES DISTRIBUTION RIGHT-OF-WAY AND EASEMENT HAS PREVIOUSLY BEEN DEDICATED TO THE TOWN OF EASTON IN AND OVER STRIPS OF LAND TEN (10) FEET WIDTH ALONG THOSE BOUNDARY LINE CONTIGUOUS TO ANY STREET OR ALLEY AND FIVE (5) FEET IN WIDTH ON EACH SIDE OF SIDE LOT LINES.

PROPOSED BUILDING FOOTPRINT FOUNDATION AND ARCHITECTURE DOES NOT CROSS EASEMENT LINE.

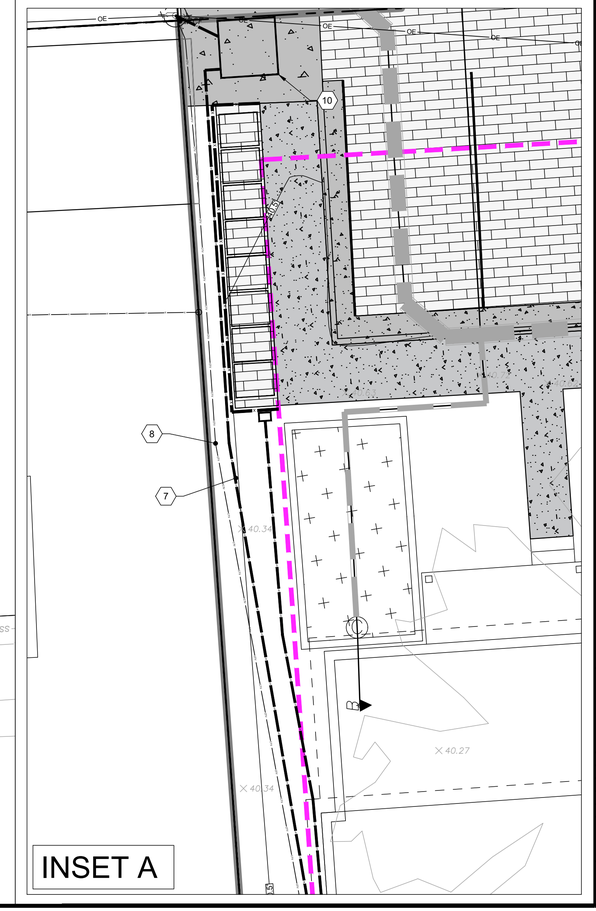
PROPOSED SPRINKLER ROOM LOCATION BEHIND INTERIOR HALLWAY ELEVATOR SHAFT. EXTERNAL DOORS TO SPRINKLER ROOM ARE ACCESSED FROM WEST SIDE EASEMENT.

PROPOSED UTILITY FEATURES

1. 6" SDR-35 SEWER. SEWER LATERALS CROSSING WATER SERVICE LINES MUST BE ENCASED WITH CONCRETE.. SEE DETAILS ON SHEET C-505.01
2. 6" SDR-35 SEWER CLEAN OUT. SEE DETAIL ON SHEET C-505.01
3. 6" FIRE C-900 WATER LINE. SEE DETAIL ON SHEET C-505.01
4. 2" POTABLE SDR-9 HDPE PIPE WATER LINE. SEE DETAIL ON SHEET C-505.01
5. WATER METER. SEE DETAIL ON SHEET C-505.01
6. WATER GATE VALVE. SEE DETAIL ON SHEET C-505.02
7. LOCATION OF 1-4" DUCT FOR UNDERGROUND ELECTRIC WITH PULL STRING. SEE DETAIL SHEET C-505.02.
8. LOCATION OF CATV LINE
9. LOCATION OF PROPOSED MOUNTING PANELS FOR ELECTRIC METER BANKS AND CATV BOX. SEE DETAIL ON SHEET 505.02
10. SINGLE-PHASE TRANSFORMER (75-167 KVA). SEE DETAIL ON SHEET 505.02
11. PROPOSED ELECTRIC VEHICLE (EV) CHARGING STATION ATTACHED TO OUTSIDE OF WOODEN SCREENING FENCE. SEE DETAIL ON SHEET 505.02

EXISTING FEATURES

1. 8" SEWER MAIN
2. EASTON UTILITY R.O.W. / EASEMENT LINE
3. WATER LINE
4. OVERHEAD ELECTRIC LINES
5. FIRE HYDRANT
6. SEWER MANHOLE



UTILITY PLAN

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

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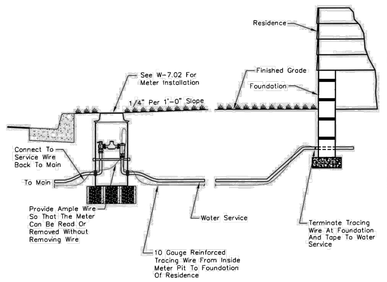
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

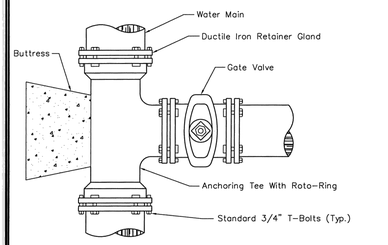
SHEET NO.: C-501

FOR REVIEW



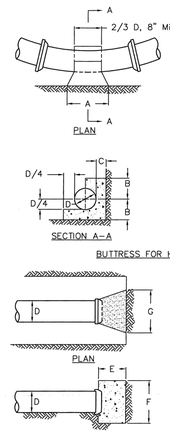
Notes:
1. 10 Gauge Solid Copper Tracer Wire; Blue Jacket.
2. Thoroughly Tape Mechanical Connections With Electrical Tape.
3. Installation Of Water Service Into Foundation Per Town Of Easton Standards.

APPROVAL	REVISED	
EU MANAGER OF ENGINEERING DATE	JUN. 23, 97	TOWN OF EASTON AND EASTON UTILITIES STANDARD DETAILS
	MAR 1, 98	
	MAR 1, 07	
	SEP 1, 09	WATER SERVICE CONNECTION
	SEP 15,14	
ISSUED: JUNE 5, 1997	AUG 6, 19	STANDARD NO. W-7.04



Note:
1. All Fittings Shall Be Mechanical Joint, With Ductile Iron Retainer Glands And Mega-Lug Or Equivalent Restraint.
2. Anchoring Tee Shall Be As Indicated And As Manufactured By Griffin Pipe Products, 1100 West Front St. Florance, N.J. 08518, Or An Approved Equal.
3. Retainer Gland Shall Be As Indicated And As Manufactured By Russell Pipe & Foundry Co. Inc., 910 Washington St., Alexander City, AL. 35010, Or An Approved Equal.

APPROVAL	REVISED	
EU MANAGER OF ENGINEERING DATE	AUG 1, 94	TOWN OF EASTON AND EASTON UTILITIES STANDARD DETAILS
	MAR 9, 95	
	MAR 1, 98	
		ANCHORING TEE
ISSUED: MAY 1, 1986		STANDARD NO. W-2.01

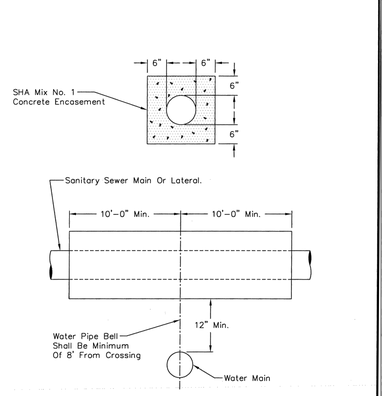


BUTTRESS FOR HORIZONTAL BENDS						
BEND		6"	8"	10"	12"	16"
1/32	A	6"	8"	10"	1'-0"	1'-4"
	B	7"	8"	9"	10"	1'-0"
	C	7"	7"	8"	8"	9"
1/16	A	9"	1'-0"	1'-6"	1'-9"	2'-3"
	B	7"	8"	9"	10"	1'-0"
	C	8"	9"	10"	11"	1'-2"
1/8	A	1'-3"	1'-8"	2'-1"	2'-6"	3'-4"
	B	7"	8"	9"	11"	1'-3"
	C	8"	9"	10"	11"	1'-2"
1/4	A	2'-0"	2'-6"	3'-0"	3'-6"	5'-0"
	B	6"	8"	1'-0"	1'-3"	1'-6"
	C	1'-10"	1'-9"	1'-8"	1'-7"	1'-5"

BUTTRESS FOR CAPS AND PLUGS					
D	6"	8"	10"	12"	16"
E	6"	8"	8"	10"	1'-0"
F	1'-0"	1'-4"	1'-6"	2'-0"	2'-8"
G	1'-5"	1'-11"	2'-.5"	2'-10"	3'-9"

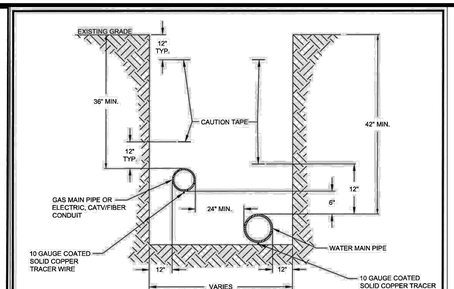
Notes:
1. All Concrete Shall Be SHA Mix No. 1.
2. Buttress Dimensions Are Minimum. Dimensions Are Based Upon Soil Bearing Pressure Of 3000 P.S.F. And Static Water Pressure Of 150 P.S.I. Where Pressure Exceeds 150 P.S.I. Or Where Soil Bearing Pressure Is Less Than 3000 P.S.F. Special Buttress Design Is Required.

APPROVAL	REVISED	
EU MANAGER OF ENGINEERING DATE		TOWN OF EASTON AND EASTON UTILITIES STANDARD DETAILS
		BUTTRESSES FOR CAPS AND HORIZONTAL BENDS
ISSUED: MAY 1, 1986		STANDARD NO. W-3.00



Notes;
1. Anytime The Water Main Is Below Any Sewer Main, The Sewer Main Shall Be Encased In Concrete.

APPROVAL	REVISED	
EU MANAGER OF ENGINEERING DATE	MAR 1, 98	TOWN OF EASTON AND EASTON UTILITIES STANDARD DETAILS
	AUG 1, 01	
	FEB 1, 02	CROSSING A WATER MAIN WITH A SEWER MAIN
ISSUED: MAY 1, 1986		STANDARD NO. G-5.00



NOTES:
1. USE SELECT GRANULAR BACKFILL ONLY.
2. PROVIDE AS MUCH SEPARATION AS PERMITTED BY TRENCH WIDTH.
3. TRENCH TAPE (WARNING TAPE) SHALL BE PLACED 12" ABOVE PIPE AND 12" ABOVE BELOW GROUND SURFACE.
4. GAS MAIN CONSTRUCTION BY EASTON UTILITIES IN ACCORDANCE WITH EASTON UTILITIES GAS CONSTRUCTION STANDARDS.
5. REINFORCED COATED TRACER WIRE AS MANUFACTURED BY COPPERHEAD INDUSTRIES, LLC, OR AN APPROVED EQUAL.
6. THOROUGHLY TAPE MECHANICAL CONNECTIONS OF TRACER WIRE WITH ELECTRICAL TAPE.

APPROVAL	REVISED	
EU ENGINEERING DEPARTMENT 1/31/2024 DATE		EASTON UTILITIES STANDARD DETAILS
		WATER MAIN JOINT TRENCHING
ISSUED: JANUARY 2024		STANDARD NO.: W-100.2

FRAME AND COVER REQUIRED	
PIPE SIZE	CASTING NUMBER
4"	EAST JORDAN IRON WORKS NO. 1570
6"	EAST JORDAN IRON WORKS NO. 1566

NOTES:
1. SERVICE CONNECTION SHALL BE PERPENDICULAR TO MAIN.
2. ADD DETECTOR TAPE TO ALL PIPE.
3. USE CLASS 50 DUCTILE IRON FOR SERVICES WITH LESS THAN 3' OF COVER.
4. NO SPLICES ON TRACER WIRE. MECHANICAL CONNECTORS ONLY IN CLEANOUTS.
5. EMBED PIPE IN #57 STONE FROM 6" BELOW INVERT TO 2" ABOVE CROWN.

APPROVAL	REVISED	
EU MANAGER OF ENGINEERING JAN 15, 19 DATE		EASTON UTILITIES STANDARD DETAILS
		GRAVITY SEWER CLEANOUTS
ISSUED: JAN 15, 2019		STANDARD NO. SS-8.03

NOTES:
1. SERVICE CONNECTION SHALL BE PERPENDICULAR TO MAIN.
2. ADD DETECTOR TAPE TO ALL PIPE.
3. USE CLASS 50 DUCTILE IRON FOR SERVICES WITH LESS THAN 3' OF COVER.
4. NO SPLICES ON TRACER WIRE. MECHANICAL CONNECTORS ONLY IN CLEANOUTS.
5. EMBED PIPE IN #57 STONE FROM 6" BELOW INVERT TO 2" ABOVE CROWN.
6. INSTALLATION OF SEWER LATERAL INTO FOUNDATION PER TOWN OF EASTON STANDARD.
7. PROVIDE VIDEO INSPECTION OF LATERAL FROM CLEANOUT AT HOUSE/STRUCTURE, TO MAIN.

APPROVAL	REVISED	
EU MANAGER OF ENGINEERING JAN 15, 19 DATE	JUN 11 ,97	EASTON UTILITIES STANDARD DETAILS
	MAR 1, 98	
	SEP 1, 09	
	JUL. 20, 11	PVC SEWER HOUSE CONNECTION
ISSUED: JULY 1, 1996	SEP 15, 14	STANDARD NO. SS-8.02
	JAN 15, 19	

NOTES:
1. SERVICE CONNECTION SHALL BE PERPENDICULAR TO MAIN.
2. ADD DETECTOR TAPE TO ALL PIPE.
3. USE CLASS 50 DUCTILE IRON FOR SERVICES WITH LESS THAN 3' OF COVER.
4. NO SPLICES ON TRACER WIRE. MECHANICAL CONNECTORS ONLY IN CLEANOUTS.
5. EMBED PIPE IN #57 STONE FROM 6" BELOW INVERT TO 2" ABOVE CROWN.

APPROVAL	REVISED	
JAN 15, 2019 DATE	MAY 1, 89	EASTON UTILITIES STANDARD DETAILS
	AUG 1, 94	
	MAR 9, 95	
	FEB 1, 02	SEWER COLLECTION SYSTEM SEWER HOUSE SERVICE
ISSUED: MAY 1, 1986	JAN 15, 19	STANDARD NO. SS-8.00

NOTES:
1. METER PIT, FRAME AND COVER, AND CUSTOM SETTER SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
2. COVER MUST BE TRUMBULL, POLYMER 367-5610 FOR TRAFFIC BEARING AREAS WITH WATER LOGO. A ¾" HOLE SHALL BE DRILLED IN THE CENTER OF ALL LIDS FOR EXTERNAL ANTENNA INSTALLATION.
3. THOROUGHLY TAPE MECHANICAL CONNECTIONS OF TRACER WIRE WITH ELECTRICAL TAPE.
4. CONTRACTOR TO PROVIDE METER SETTER TO EASTON UTILITIES INSPECTOR FOR SIZING. METER SETTER AND METER SHALL BE RETURNED TO THE CONTRACTOR WITH EASTON UTILITIES LOCKS INSTALLED. LOCKS SHALL ONLY BE REMOVED BY EASTON UTILITIES PERSONNEL.
5. METER SHALL BE FURNISHED BY EASTON UTILITIES.
6. CONTRACTOR SHALL PROVIDE A 7" SPOOL PIECE TO ALLOW A 10" METER TO HAVE A 17" LAY LENGTH.

APPROVAL	REVISED	
EU ENGINEERING DEPARTMENT 1/31/2024 DATE		EASTON UTILITIES STANDARD DETAILS
		2" WATER SERVICE INSTALLATION
ISSUED: JANUARY 2024		STANDARD NO.: W-103.2

NOTES:
1. BEDDING, HAUNCHING AND FILL MATERIAL TO THE TOP OF PIPE SHALL BE COARSE AGGREGATE MEETING THE REQUIREMENTS OF AASHTO M43, SIZE NUMBER 57.
2. DURING HAUNCHING, CONTRACTOR SHALL CAREFULLY WORK GRAVEL DOWN AROUND THE BOTTOM OF THE PIPE.
3. WARNING TAPE SHALL BE PLACED 12" ABOVE PIPE AND 12" BELOW GRADE SURFACE.
4. CONTRACTOR TO PLACE FILL IN LIFTS, TAMPING AFTER EACH LIFT. LIFTS NOT TO EXCEED 6".
5. THOROUGHLY TAPE MECHANICAL CONNECTIONS OF TRACER WIRE WITH ELECTRICAL TAPE.
6. THE TRACING WIRE SHALL BE A CONTINUOUS CONDUCTOR CONNECTED TO ALL FITTINGS AND SERVICES.
7. ALL FITTINGS SHALL BE AS SPECIFIED IN AWWA C110-93, RESTRAINED MECHANICAL JOINT; DUCTILE IRON, PRESSURE RATED AT 350 PSI.
8. ALL FITTINGS SHALL BE RESTRAINED BY THRUST BLOCKS ACCORDING TO W-101.1.

APPROVAL	REVISED	
EU ENGINEERING DEPARTMENT 1/31/2024 DATE		EASTON UTILITIES STANDARD DETAILS
		GRAVITY SEWER FORCEMAIN TRENCH
ISSUED: JANUARY 2024		STANDARD NO.: SS-100.1

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UTILITY DETAILS

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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

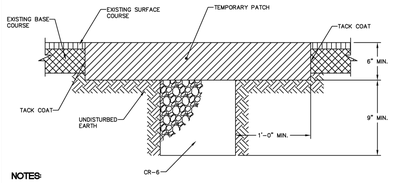
REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA 811

DATE:	5/14/2024
SCALE:	N/A
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-505.01

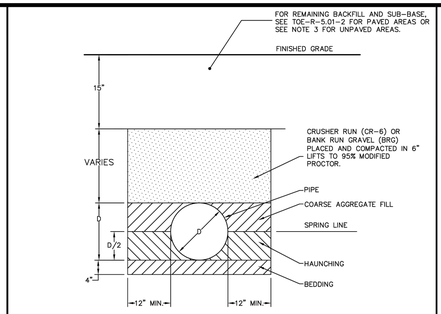
FOR REVIEW



NOTES:

1. PAVEMENT SHALL BE SAW CUT FULL DEPTH OF THE EXISTING PAVEMENT SECTION. ALL CUTS SHALL BE MADE IN STRAIGHT LINES.
2. TEMPORARY PATCH SHALL BE ONE OF THE FOLLOWING, PLACED AND COMPACTED IN 3" LIFTS (MAX).
   1. CR-6 (3" LIFTS MAX.)
   2. 9.5mm, (2" LIFTS MAX.)12.5mm, OR 19mm SUPPERPAVE, (3" LIFTS)
   3. COLD PATCH (3" LIFTS MAX.)
3. A TEMPORARY CR-6 PATCH MUST BE CONVERTED TO COLD PATCH OR SUPERPAVE WITHIN 1 WEEK OF COMPLETION OF TRENCH WORK, UNLESS APPROVED BY TOWN ENGINEER.
4. TEMPORARY TRENCH RESTORATION MUST BE CONVERTED TO A PERMANENT TRENCH RESTORATION WITHIN 30 CALENDAR DAYS OF COMPLETION OF TRENCH WORK, UNLESS APPROVED BY TOWN ENGINEER. TEMPORARY TRENCH RESTORATION DONE AFTER NOVEMBER 30TH MUST BE CONVERTED TO A PERMANENT TRENCH RESTORATION BEFORE MAY 30TH OF THE FOLLOWING YEAR.
5. TEMPORARY RESTORATION MUST BE INSPECTED AND MAINTAINED EVERY 30 DAYS UNTIL PERMANENT RESTORATION IS COMPLETED. AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT.
6. CONTRACTOR MUST CONFIRM LIMITS OF PATCH REQUIRED WITH THEN TOWN ENGINEER PRIOR TO START OF PATCH WORK.

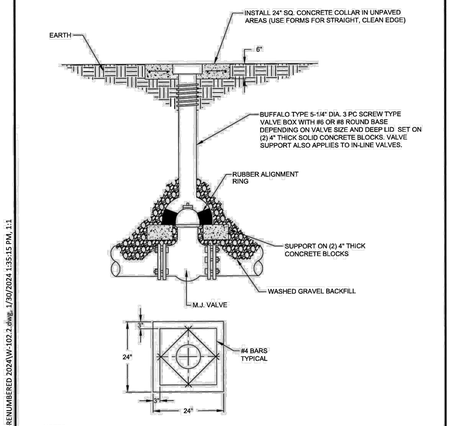
APPROVAL	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER — DATE 1/2020	TEMPORARY PAVEMENT REPAIR FOR UTILITY TRENCHES
ISSUED: JANUARY 2020	STANDARD NO.: TOE-R-5.01-2



NOTES:

1. BEDDING, HAUNCHING AND FILL MATERIAL TO THE TOP OF THE PIPE SHALL BE COARSE AGGREGATE MEETING THE REQUIREMENTS OF ASHTO M43-SIZE NUMBER 57, UNLESS OTHERWISE SPECIFIED BY THE PIPE MANUFACTURER AND APPROVED BY THE TOWN ENGINEER.
2. DURING HAUNCHING, CONTRACTOR SHALL CAREFULLY WORK GRAVEL DOWN AROUND THE BOTTOM OF THE PIPE.
3. IN UNPAVED AREAS, FILL CR-6 OR BRG TO 6" BELOW FINISHED GRADE, PLACED AND COMPACTED IN 6" LIFTS TO 95% MODIFIED PROCTOR. TOP 6" SHALL BE TOPSOIL.

APPROVAL	TOWN OF EASTON STANDARD DETAILS
TOWN ENGINEER — DATE 1/2020	TRENCH DETAIL
ISSUED: JANUARY 2020	STANDARD NO.: TOE-R-5.01-1



NOTES :
1. ALL REINFORCEMENT SHALL BE #4 REBAR UNLESS OTHERWISE NOTED.

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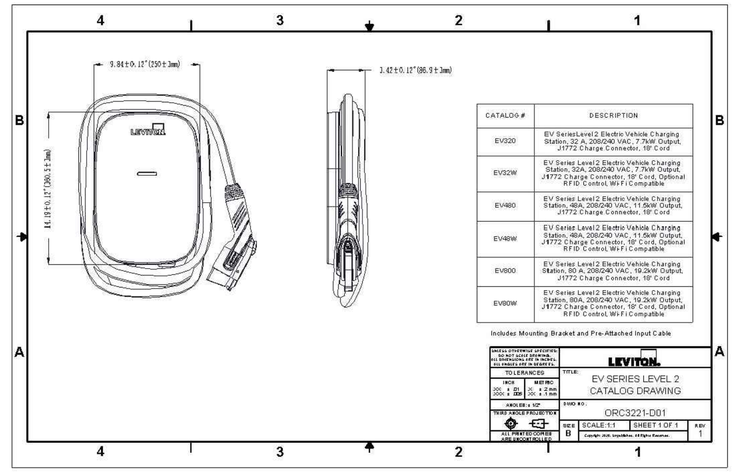
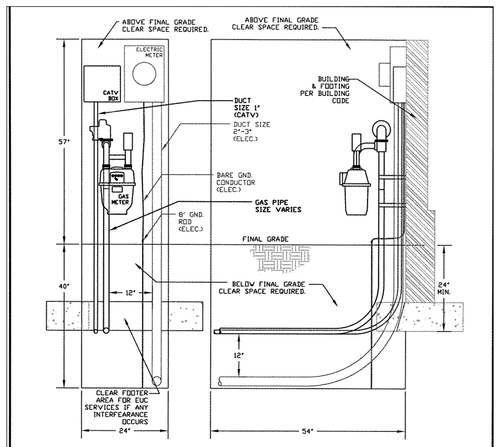
APPROVAL	REVISED	EASTON UTILITIES STANDARD DETAILS
EU ENGINEERING DEPARTMENT — DATE 1/31/2024		GATE VALVE BOX ASSEMBLY
ISSUED: JANUARY 2024		STANDARD NO.: W-102.2



CATALOG #	DESCRIPTION
EV320	EV Series Level 2 Electric Vehicle Charging Station, 32 A, 208/240 VAC, 7.7kW Output, J1772 Charge Connector, 18' Cord
EV32W	EV Series Level 2 Electric Vehicle Charging Station, 32A, 208/240 VAC, 7.7kW Output, J1772 Charge Connector, 18' Cord, Optional RFID Control, Wi-Fi Compatible
EV480	EV Series Level 2 Electric Vehicle Charging Station, 48A, 208/240 VAC, 11.5kW Output, J1772 Charge Connector, 18' Cord
EV48W	EV Series Level 2 Electric Vehicle Charging Station, 48A, 208/240 VAC, 11.5kW Output, J1772 Charge Connector, 18' Cord, Optional RFID Control, Wi-Fi Compatible
EV800	EV Series Level 2 Electric Vehicle Charging Station, 80 A, 208/240 VAC, 19.2kW Output, J1772 Charge Connector, 18' Cord
EV80W	EV Series Level 2 Electric Vehicle Charging Station, 80A, 208/240 VAC, 19.2kW Output, J1772 Charge Connector, 18' Cord, Optional RFID Control, Wi-Fi Compatible

Includes Mounting Bracket and Pre-Attached Input Cable

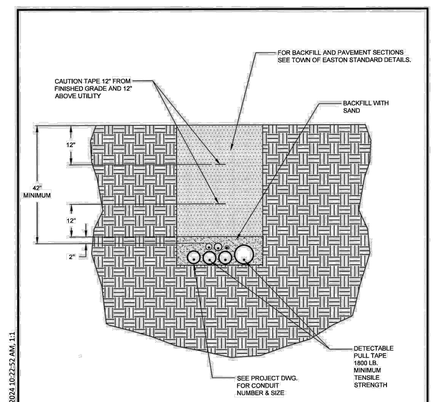
UNLESS OTHERWISE SPECIFIED, DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN INCHES. ALL ANGLES ARE IN DEGREES.	LEVITON
TOLERANCES: INCH ± .01, .XXX ± .005; MILIMETRIC .X ± 0.2 mm, .XX ± 0.1 mm	TITLE: EV SERIES LEVEL 2 CATALOG DRAWING
ANGLES ± 1/2°	DWG NO.: ORC3221-D01
THIRD ANGLE PROJECTION	SIZE B; SCALE:1:1; SHEET 1 OF 1; REV 1
ALL PRINTED COPIES ARE UNCONTROLLED	Copyright 2021, Leviton Mfg. All Rights Reserved.



ELECTRIC NOTES
1. 200A electric meter (Typical).

GAS NOTES
1. Gas meter locations shall be agreed upon by the customer and Easton Utilities in advance of construction and are subject to final approval by Easton Utilities.
2. Gas metering assemblies will not be installed in places where it may be subject to damage.
3. Should Easton Utilities determine bollards are required to protect its meter assemblies, the customer shall be required to provide such protection at their cost.
4. Outside gas meter assemblies are recommended to be at least three (3) feet from any equipment with an open flame or subject to electrical arcing.
5. Refer to National Fuel Gas Code 2002, Easton Utilities Gas Service Tariff and Customer Handbook for additional requirements.

APPROVAL	REVISED	TOWN OF EASTON AND EASTON UTILITIES COMMISSION STANDARD DETAILS
EU MANAGER OF ENGINEERING — DATE 4/19/07		ELECTRIC METER, GAS METER & CATV BOX LOCATIONS FOR TOWNHOUSES
ISSUED: NOV 1, 2006		STANDARD NO. E-5.00



NOTES:
1. SEE CONDUIT AND DUCT BANK NOTES ON E-100.1.2 STANDARD DETAILS.

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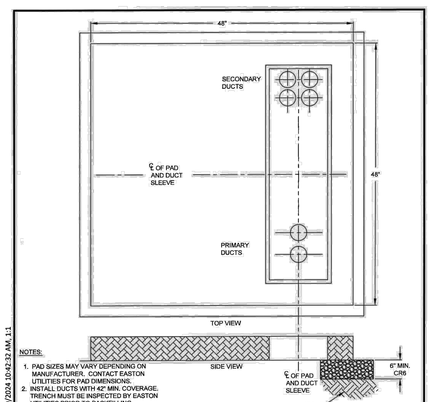
APPROVAL	REVISED	EASTON UTILITIES STANDARD DETAILS
EU ENGINEERING DEPARTMENT — DATE 1/31/2024		TYPICAL TRENCH DETAIL
ISSUED: JANUARY 2024		STANDARD NO.: E-100.2



NOTES:
1. PAD SIZES MAY VARY DEPENDING ON MANUFACTURER. CONTACT EASTON UTILITIES FOR PAD DIMENSIONS.
2. INSTALL DUCTS WITH 42" MIN. COVERAGE. TRENCH MUST BE INSPECTED BY EASTON UTILITIES PRIOR TO BACKFILLING.
3. REFER TO ELECTRIC PLAN DRAWINGS FOR PRIMARY AND SECONDARY CONDUIT SIZE AND QUANTITY.
4. MINIMUM OF 6" CRS COMPACTED UNDER TRANSFORMER PAD.
5. COORDINATE WITH EASTON UTILITIES CONDUIT LOCATIONS WITHIN SLEEVE.

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APPROVAL	REVISED	EASTON UTILITIES STANDARD DETAILS
EU ENGINEERING DEPARTMENT — DATE 1/31/2024		1Ø TRANSFORMER PAD 75 - 167 KVA (SUPPLIED BY EU)
ISSUED: JANUARY 2024		STANDARD NO.: E-101.1.2

UTILITY DETAILS

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028
ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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

REVISIONS

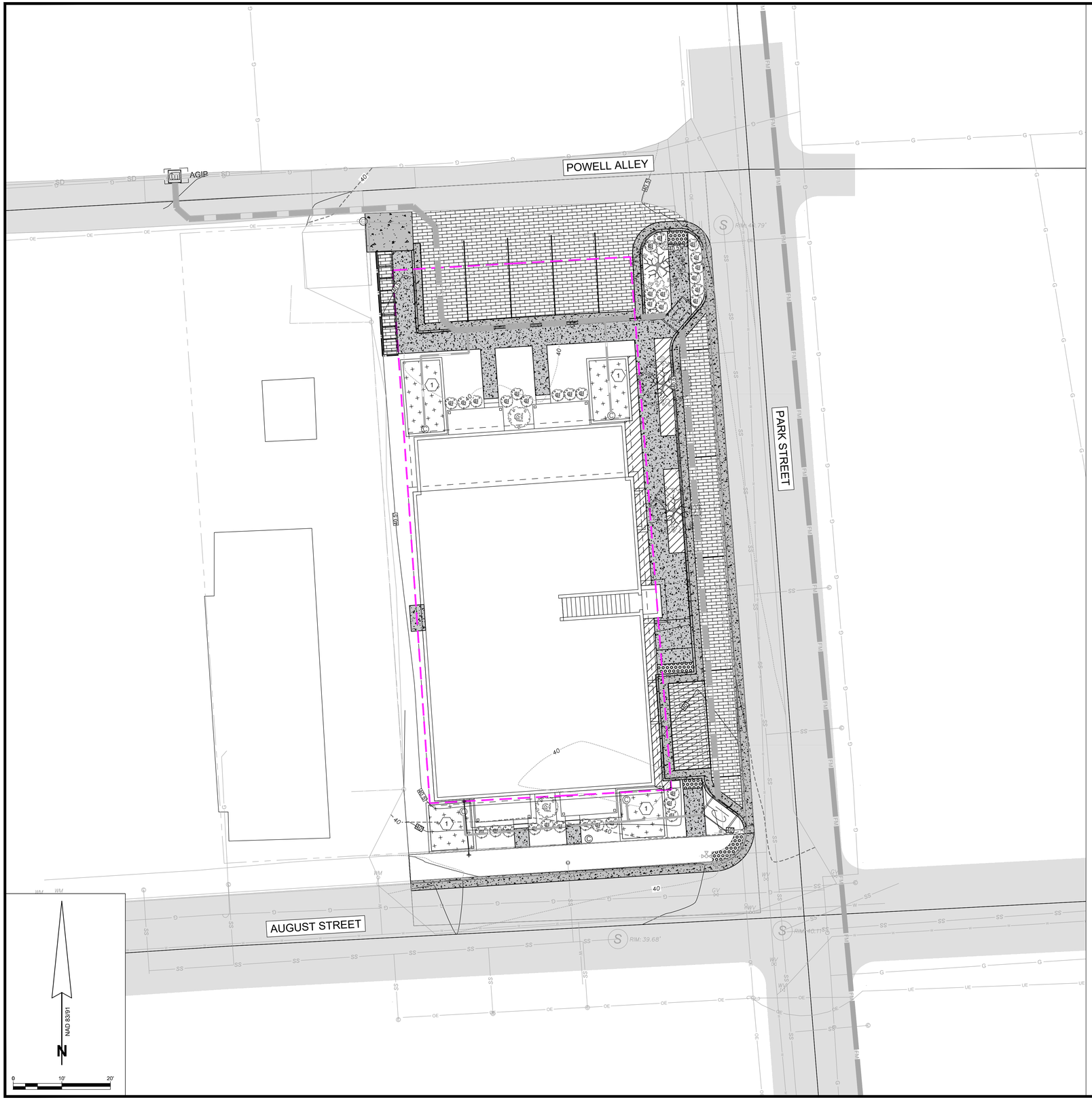
REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	5/14/2024
SCALE:	N/A
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-505.02

FOR REVIEW



BUFFERYARD & LANDSCAPE FEATURES

(1) PLANTER BOX PLANTING (SEE SHEET C-601.02 FOR MORE DETAIL)

LANDSCAPE LEGEND

- DECIDUOUS UNDERSTORY TREES
  EASTERN REDBUD
  OR EQUIVALENT APPROVED NATIVE SPECIES
- LARGE SHRUBS
  INKBERRY
  OR EQUIVALENT APPROVED NATIVE SPECIES
- SMALL SHRUBS
  LUYKENS LAUREL
  OR EQUIVALENT APPROVED NATIVE SPECIES
- HERBACEOUS PLANTING BED
  WITH APPROVED NATIVE HERBACEOUS PLANTS
- PLANTER BOX BED
  WITH APPROVED NATIVE SPECIES AND PER TOWN OF EASTON STANDARD DETAIL

NOTES:

BUFFER YARDS ARE NOT REQUIRED AS PER PRELIMINARY PLANNING & ZONING STAFF REVIEW COMMENTS.

NO CANOPY TREES SHALL BE PLANTED UNDER OVERHEAD ELECTRIC ALONG PARK STREET OR POWELL ALLEY.

LANDSCAPING PLAN

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028
ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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

MISS UTILITY OF DELMARVA — 811

DATE:	5/14/2024
SCALE:	1" = 10'
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-601.01

FOR REVIEW

PLANTER BOX PLANTING TO BE PER TOWN OF EASTON STANDARD DETAIL AND/OR WITH DIFFERING APPROVED NATIVE SPECIES

NAD 83/91

N

0 2' 4'

LANDSCAPING PLAN

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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 3887

REVISIONS

REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA — DO NOT EXCAVATE WITHOUT ONE CALL

811

DATE:	5/14/2024
SCALE:	1" = 10'
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-601.02

FOR REVIEW

LANDSCAPE PLANTING REQUIREMENTS

GENERAL REQUIREMENTS:

- COMPLIANCE WITH THE TERMS OF THIS LANDSCAPE PLAN, INCLUDING ALL MAINTENANCE AND WARRANTY REQUIREMENTS PRESCRIBED HEREON IS THE RESPONSIBILITY OF THE OWNER. MAINTENANCE AND WARRANTY TERMS AND RESPONSIBILITIES OF THE CONTRACTOR SHALL BE NEGOTIATED BETWEEN OWNER AND CONTRACTOR.
- THE CONTRACTOR (CONTRACTOR) IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL LANDSCAPING SHOWN OR IMPLIED ON THIS PLAN. PLANT QUANTITIES ARE SHOWN FOR CONVENIENCE ONLY AND SHALL BE VERIFIED PRIOR TO INSTALLATION. THE CONTRACTOR SHALL NOTIFY THE OWNER, OR DESIGNATED REPRESENTATIVE IF PROPOSED SPECIES AND/OR SITE PLANTING CONDITIONS WARRANT RE-DESIGN CONSIDERATIONS.
- THE CONTRACTOR SHALL DILIGENTLY ATTEMPT TO LOCATE THE SPECIFIED NATIVE PLANT MATERIAL. IF SPECIFIED PLANT MATERIALS CANNOT BE LOCATED, ALTERNATIVES MAY BE CONSIDERED AND APPROVED, IN ADVANCE, BY THE OWNER, OR DESIGNATED REPRESENTATIVE.
- PRIOR TO LANDSCAPE INSTALLATION, THE CONTRACTOR SHALL COORDINATE A SITE MEETING WITH THE OWNER, OR DESIGNATED REPRESENTATIVE TO REVIEW THE PLAN, SITE DRAINAGE CONDITIONS AND TO DETERMINE ANY FIELD ADJUSTMENTS NECESSARY.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK, AND SHALL COORDINATE WITH OTHER CONTRACTORS ON SITE AND MISS UTILITY TO VERIFY UTILITY LOCATIONS. ANY REPAIRS TO EXISTING UNDERGROUND UTILITIES REQUIRED AS A RESULT OF ACTIONS OF THE CONTRACTOR AND/OR HIS ASSIGNS SHALL BE BORNE BY CONTRACTOR.
- THE CONTRACTOR SHALL VERIFY THAT FINAL ROUGH GRADES HAVE BEEN ESTABLISHED AND THAT THE SITE IS READY FOR LANDSCAPE INSTALLATION. THE CONTRACTOR SHALL ENSURE THAT PLANTINGS WILL HAVE ADEQUATE DRAINAGE. THE CONTRACTOR SHALL INSTALL PLANT MATERIAL FACTORING IN ANY "FINAL" GRADING WORK TO BE COMPLETED AFTER LANDSCAPE INSTALLATION.
- THE CONTRACTOR SHALL LAY OUT BEDS AND POSITION PLANTS FOR APPROVAL BY OWNER, OR DESIGNATED REPRESENTATIVE. THE CONTRACTOR SHALL REVIEW ANY SIGNIFICANT FIELD ADJUSTMENTS PRIOR TO INSTALLATION.
  - **NOTE:** PLANTING WITHIN THE ROOT ZONE OF EXISTING TREES REQUIRES ADDITIONAL CARE. HAND DIGGING OF PLANTING HOLES AND ADJUSTMENT OF PLANTING LAYOUT MAY BE NECESSARY.
- THE CONTRACTOR SHALL MAINTAIN A CLEAN JOB SITE AND REMOVE ALL PLANTING AND RELATED DEBRIS DAILY DURING THE COURSE OF IMPLEMENTATION.
- THE OWNER, OR DESIGNATED REPRESENTATIVE SHALL REJECT ANY AND ALL PLANT MATERIAL THAT DOES NOT MEET SPECIFICATIONS, IS DISEASED OR OTHERWISE UNHEALTHY.
- ALL LANDSCAPE INSTALLATION SHALL BE ACCOMPLISHED WITH QUALIFIED PERSONNEL, UTILIZING INDUSTRY STANDARD PRACTICES AND TECHNIQUES.

PLANT MATERIAL:

- ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK AS APPROVED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE INC. LATEST EDITIONS.
- ALL PLANT MATERIAL SHALL BE NURSERY GROWN WITH SOUND HORTICULTURAL PRACTICES AND UNLESS OTHERWISE APPROVED BY THE OWNER, OR DESIGNATED REPRESENTATIVE, GROWN IN SOIL AND CLIMATE CONDITIONS SIMILAR TO THIS PROJECT SITE.
- ALL MATERIAL SHALL EXHIBIT HEALTHY GROWTH WITH GOOD BRANCHING STRUCTURE, DENSE FOLIAGE AND A FIBROUS, DEVELOPED ROOT SYSTEM.
- ALL MATERIAL SHALL BE FREE OF INSECT INFESTATION AND DISEASE. THE OWNER RESERVES THE RIGHT TO HAVE THE PLANT MATERIAL INSPECTED AND TAGGED AT THE GROWING SITE, AND TO REJECT ANY DEFICIENT MATERIAL AT THE JOB SITE.

PLANT MATERIAL HANDLING:

- ALL PLANT MATERIAL SHALL ARRIVE AT THE JOB SITE IN A HEALTHY CONDITION.
- THE CONTRACTOR SHALL STAGE DELIVERY AND PLANT INSTALLATION TO MINIMIZE STRESS ON PLANT MATERIAL.
- PLANT MATERIAL TO BE STAGED ON OR OFF THE JOB SITE SHALL BE LOCATED TO MAXIMIZE PROTECTION FROM HOT SUN AND DRYING WINDS, AND SHALL BE WATERED TO MAINTAIN A STRESS FREE CONDITION. ON-SITE WATER MAY NOT BE AVAILABLE FOR THE CONTRACTOR TO USE. THE LACK OF AVAILABLE WATER SHALL NOT RELIEVE THE CONTRACTOR OF ADEQUATE MAINTENANCE.

PLANTING SCHEDULE:

- PLANTING SCHEDULES SHALL COINCIDE WITH THE OVERALL PROGRESS OF SITE CONSTRUCTIONS.
- CERTAIN PLANT SPECIES REQUIRE SPECIFIC SEASON INSTALLATION AND SHALL BE COORDINATED APPROPRIATELY.
- PLANTING IS DISCOURAGED IN THE HOT, DRY PERIODS OF SUMMER AND DURING FROZEN GROUND CONDITIONS IN WINTER, BUT MAY BE CONSIDERED YEAR-ROUND WITH MAINTENANCE REQUIREMENTS ADDRESSED ACCORDINGLY.
- THE CONTRACTOR IS RESPONSIBLE FOR PLANT MATERIAL HEALTH AND VIGOR REGARDLESS OF WHEN THE MATERIAL IS INSTALLED.

TREE & SHRUB PLANTINGS:

- ALL TREE/SHRUB PLANTING PITS SHALL BE EXCAVATED TO A DEPTH SO THAT THE PLANT ROOT FLARE SHALL LIE AT THE FINISHED GRADE SURROUNDING THE PLANT. SOIL THAT MAY HAVE BEEN PLACED ON TOP OF ROOT BALL OR SETTLED AROUND TRUNK OR ROOT FLARE DURING TRANSPORT SHALL BE REMOVED TO ADEQUATELY EXPOSE ROOT FLARE SO PROPER PLANTING DEPTH CAN BE ESTABLISHED.
- THE ROOT BALL SHALL REST ON UNDISTURBED OR STABILIZED SOIL. THE CONTRACTOR SHALL NOTIFY THE OWNER, OR DESIGNATED REPRESENTATIVE IF THIS PLANTING DEPTH SPECIFICATION CANNOT BE IMPLEMENTED.
- TREE PLANTING PITS SHALL BE EXCAVATED DEPTH EQUAL TO THE HEIGHT OF THE ROOT BALL AND TO A WIDTH EQUALING TWICE THE ROOT BALL DIAMETER.
- EXCAVATED SOILS NOT PREVIOUSLY COMPACTED OR OTHERWISE DEGRADED SHALL BE RE-USED FOR PLANTING PIT BACKFILL. EXCAVATED SOILS UNSUITED FOR BACKFILL SHALL BE AMENDED WITH FRIABLE TOPSOIL TO CREATE A SUITABLE PLANTING SOIL AS APPROVED BY THE OWNER, OR DESIGNATED REPRESENTATIVE. EXCAVATED SOILS THAT CANNOT BE RESTORED TO A REASONABLE PLANTING SOIL SHALL BE REMOVED AND REPLACED WITH A SUITABLE PLANTING SOIL. NOTE: FOR BEDDING PURPOSES OR UNLESS OTHERWISE SPECIFIED HERON, THE CONTRACTOR SHALL ASSUME EXCAVATED SOILS ARE SUITABLE FOR PLANTING BACKFILL.
- SLOW RELEASE FERTILIZER TAB(S) (20-10-5, 21 GRAM, 2-YEAR) SHALL BE ADDED TO PLANTING HOLES AS PER MANUFACTURER'S SPECIFICATIONS.
- THE SIDES OF CONTAINER GROWN STOCK SHALL BE CUT OR SCARIFIED TO ELIMINATE BOUND ROOTS AND PROMOTE HEALTHY ROOT GROWTH.
- ALL SYNTHETIC MATERIALS FROM AROUND THE TREE TRUNK AND ROOT BALL SHALL BE REMOVED AND NOT EVIDENT WITHIN THE BACKFILL SOIL MIX. STRING, ROPE, SYNTHETIC BURLAP, PLASTIC, STRAPPING, AND OTHER MATERIALS THAT WILL NOT DECOMPOSE IN THE SOIL SHALL BE REMOVED AT THE TIME OF PLANTING
- SOIL GRADES SHALL BE FEATHERED AROUND PLANTINGS TO BLEND WITH SURROUNDING LANDSCAPE OR TURF AREAS. EXCESS EXCAVATED SOIL SHALL BE REMOVED FROM JOB SITE.
- ALL TREES AND SHRUBS SHALL BE WATERED DURING PLANTING TO MINIMIZE AIR POCKETS AND TO ENSURE SOIL CONTACT WITH ROOTS.

TREE STAKING/ GUYING:

- TREES SHALL BE STAKED TO PREVENT TOPPLING BY STRONG WIND.
- STAKES SHALL BE INSTALLED ACORDING TO DETAIL PROVIDED ON PLAN. ANOTHER STAKING/GUYING METHOD MAY BE USED WITH APPROVAL OF OWNER'S REPRESENTATIVE.

HERBACEOUS PLANT INSTALLATION:

- ROOT MASSES SHALL BE MOIST, BUT NOT SATURATED, AT THE TIME OF PLANTING.
- PLANT PITS SHALL BE PREPARED USING A DIBBLE, SPADE OR MECHANICAL AUGER BY OPENING A HOLE AT THE PLANTING SITE. FOR PLANTINGS UNDER EXISTING TREES, PLANTING HOLES SHALL BE HAND-DUG AND LOCATIONS ADJUSTED TO ACCOMMODATE EXISTING TREE ROOTS.
- PLANTS SHALL BE PLACED IN PLANTING PITS IN A VERTICAL POSITION.
- SOIL SHALL BE BACKFILLED INTO PLANT PITS, LIGHTLY COMPRESSED TO ELIMINATE AIR POCKETS, AND FIRMED AROUND THE PLANTS.
- ALL PLANTS SHALL BE WATERED DURING PLANTING TO MINIMIZE AIR POCKETS AND TO ENSURE SOIL CONTACT WITH ROOTS.

MULCHING:

- TWO TO THREE INCHES OF SHREDDED HARDWOOD MULCH SHALL BE APPLIED TO ALL NEWLY PLANTED TREES AND SHRUBS.
- TWO TO THREE INCHES OF HARDWOOD MULCH SHALL BE APPLIED TO UPLAND HERBACEOUS PLANTING AREAS AS SHOWN ON THE PLANTING PLAN.
- MULCH SHALL NOT BE APPLIED TO SWALE, FOREBAY, OR WETLAND PLANTING SHELF AREAS.

MAINTENANCE

DURING CONSTRUCTION PERIOD:

- THE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL THROUGHOUT JOB COMPLETION AND FINAL ACCEPTANCE. ALL PLANT MATERIAL SHALL BE WATERED, WEEDED, MULCHED, PRUNED AND TREATED FOR INSECT DAMAGE, FUNGUS OR DISEASE TO INSURE HEALTHY GROWING CONDITIONS. WATERING SHALL PROVIDE ADEQUATE MOISTURE TO SUPPORT VIGOROUS GROWTH. DURING TIMES OF NORMAL PRECIPITATION, ALL TREES SHALL RECEIVE 1", OR APPROX. 5-10 GALLONS OF WATER PER WEEK. PLANTS IN HEAVIER SOILS SHALL BE MONITORED TO AVOID OVER-WATERING. GATOR BAGS, WATERING TRAYS, IRRIGATION, HAND WATERING, OR OTHER INDUSTRY STANDARD TECHNIQUES SHALL BE EMPLOYED TO MAINTAIN ADEQUATE MOISTURE SUPPLY TO THE PLANT MATERIAL. THE CONTRACTOR SHALL INSTRUCT THE OWNER REGARDING THE REQUIRED AND PROPER ON-GOING MAINTENANCE OF LANDSCAPE MATERIAL.

DURING WARRANTY PERIOD:

- THE CONTRACTOR SHALL VISIT THE SITE PERIODICALLY TO ADVISE OWNER OF ANY DEFICIENT CONDITIONS AFFECTING PLANT SURVIVABILITY. DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED (SEE WARRANTY BELOW).

LANDSCAPE WARRANTIES

FROM THE 2018 TOWN OF EASTON ZONING ORDINANCE:

A. PRIOR TO ISSUANCE OF AN OCCUPANCY PERMIT, THE APPROVED PRELIMINARY LANDSCAPE PLAN SHALL BE IMPLEMENTED BY THE APPLICANT. AT COMPLETION, THE APPLICANT SHALL REQUEST THAT THE TOWN INSPECT THE COMPLETE LANDSCAPING AND ISSUE THE APPROPRIATE APPROVAL. THE TOWN RECOGNIZES THAT PLANTING SCHEDULES AND FAVORABLE WEATHER/CLIMATIC CONDITIONS DO NOT ALWAYS COINCIDE. THE APPLICANT SHALL MAKE EVERY REASONABLE EFFORT TO COORDINATE BUILDING AND SITE CONSTRUCTION WITH LANDSCAPE IMPROVEMENT INSTALLATION SO THAT ALL PROJECT CONSTRUCTION CAN BE COMPLETE PRIOR TO REQUEST FOR OCCUPANCY PERMITS. UPON DEMONSTRATING THAT SOME OR ALL OF THE REQUIRED LANDSCAPE IMPROVEMENTS SHOULD BE POSTPONED, AND SUBJECT TO THE APPROVAL OF THE TOWN, THE APPLICANT SHALL POST AN IRREVOCABLE FINANCIAL SURETY EQUAL TO THE ESTIMATED INSTALLATION COSTS AS APPROVED BY THE TOWN, GUARANTEEING THE COMPLETE IMPLEMENTATION OF THE LANDSCAPE PLAN WITHIN 6 MONTHS OF OCCUPANCY OR USE OF THE SITE OR SUBDIVISION. AFTER INSTALLATION IS COMPLETE AND INSPECTED AND APPROVED BY THE TOWN, THE APPLICANT SHALL REQUEST IN WRITING TO THE TOWN TO RELEASE ANY UNUSED PORTION OF THE SURETY.

B. THE OWNER/DEVELOPER SHALL MAINTAIN ALL LANDSCAPE IMPROVEMENTS PROVIDING ADEQUATE GROWING CONDITIONS TO INSURE HEALTHY, VIGOROUS PLANT SURVIVAL AND GROWTH. THE TOWN RESERVES THE RIGHT TO PERIODICALLY REVIEW INSTALLED LANDSCAPES AND REPORT ANY SIGNIFICANT DEFICIENCIES TO THE OWNER/DEVELOPER. AT THE END OF TWO GROWING SEASONS, AND/OR AT ANY TIME PRIOR TO, THE TOWN SHALL ASSESS THE LANDSCAPE IMPROVEMENTS AND DIRECT REPLACEMENT OR REVITALIZATION OF ANY DEFICIENT AREAS. THE OWNER SHALL REPAIR OR REPLACE DEFICIENT ITEMS WITHIN 30 CALENDAR DAYS.

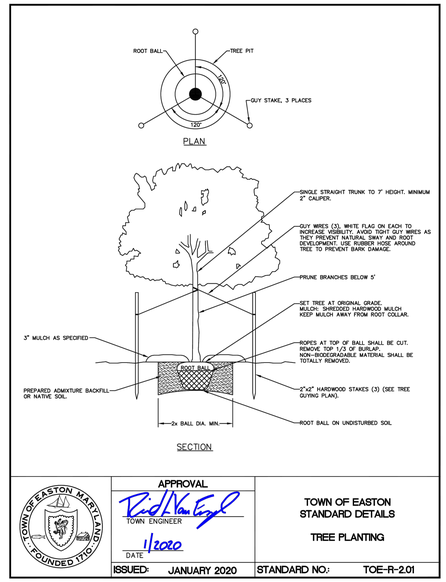
C. FAILURE TO MAINTAIN, REPAIR OR REPLACE THE REQUIRED AND APPROVED LANDSCAPE IMPROVEMENTS SHALL BE CONSIDERED A VIOLATION OF THIS ORDINANCE AND SHALL BE ENFORCED IN ACCORDANCE WITH SECTION 28 – 1308 OF THE TOWN OF EASTON ZONING ORDINANCE.

MAINTENANCE:

DURING CONSTRUCTION PERIOD:
THE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL THROUGH JOB COMPLETION AND FINAL ACCEPTANCE. ALL PLANT MATERIAL SHALL BE WATERED, WEEDED, MULCHED, PRUNED AND TREATED FOR INSECT DAMAGE, FUNGUS OR DISEASE TO ENSURE HEALTHY GROWING CONDITIONS. WATERING SHALL PROVIDE ADEQUATE MOISTURE TO SUPPORT VIGOROUS GROWTH. TYPICALLY, ALL TREES SHOULD RECEIVE APPROXIMATELY 1", OR 5-10 GALLONS OF WATER PER WEEK. PLANTS IN HEAVIER SOILS SHALL BE MONITORED TO AVOID OVER-WATERING. GATOR BAGS, WATERING TRAYS, IRRIGATION, HAND WATERING, OR OTHER INDUSTRY STANDARD TECHNIQUES SHALL BE EMPLOYED TO MAINTAIN ADEQUATE MOISTURE SUPPLY TO THE PLANT MATERIAL. INSTRUCT OWNER REGARDING REQUIRED AND PROPER ON-GOING MAINTENANCE OF LANDSCAPE INSTALLATION.

LANDSCAPING NOTES:

1. LANDSCAPE INSTALLER SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK. INSTALLER SHALL ENSURE THAT FINAL GRADES HAVE BEEN ESTABLISHED AND THE SITE IS READY FOR LANDSCAPE INSTALLATION.
2. LANDSCAPE INSTALLER SHALL MAINTAIN THE LANDSCAPE IMPROVEMENT AREAS IN A CLEAN CONDITION, REMOVING DEBRIS DAILY AND AT THE COMPLETION OF THE INSTALLATION.
3. INSTALLER SHALL LAYOUT ALL BEDS AND POSITION PLANTS PER THE PLANS. ADJUST AS REQUIRED FOR FIELD CONDITIONS. REPORT SIGNIFICANT ADJUSTMENTS TO THE OWNER FOR APPROVAL PRIOR TO PLANT INSTALLATION. ALL BED AREAS SHALL BE SPRAYED WITH HERBICIDE AS NEEDED TO KILL AND/OR REMOVE ALL WEED OR GRASS VEGETATION.
4. EXCEPT FOR TREE SPADE INSTALLATIONS, ALL TREE PITS SHALL BE EXCAVATED TO A DEPTH SO THAT THE ROOT BALL WILL REST ON SOLID SOIL AT THE PROPER HEIGHT. STREET TREES PLANTING PITS SHALL BE EXCAVATED AND WORKED IN A RECTANGULAR FORM WITH THE SMALL DIMENSION TWICE THE DIAMETER OF THE ROOT BALL AND THE LARGE DIMENSION AT LEAST THREE TIMES THE DIAMETER OF THE ROOT BALL. OPEN AREA TREE PITS SHALL BE EXCAVATED TO A MINIMUM DIMENSION OF TWICE THE ROOTBALL WIDTH. TREES PLANTED ON SLOPES OR SIDE SWALES SHALL BE INSTALLED AT A HEIGHT RELATING TO THE UPHILL SIDE OF THE PIT, AND MOUNDED WITH SOIL AROUND THE LOWER SIDE. ALL SIDES AND BOTTOM OF TREE PLANTING PITS SHALL BE SCARIFIED OR LOOSENED TO PERMIT ROOT GROWTH. EXCAVATED SOILS THAT HAVE BEEN PREVIOUSLY UNDISTURBED SHALL BE LOOSENED AND UTILIZED FOR BACKFILL. COMPACTED SOILS THAT CANNOT BE RESTORED TO A REASONABLE PLANTING SOIL SHALL BE REMOVED AND REPLACED WITH FRIABLE NATIVE SOILS FROM THE REGION.
5. ALL SHRUB PLANTING PITS, LANDSCAPE BEDS AND PLANTING MASS AREAS SHALL BE WORKED TOWN OF EASTON 2018 EDITION ZONING ORDINANCE ARTICLE X 10-62 TO A DEPTH OF 12" (OR RAISED SLIGHTLY TO ACHIEVE A 12" FRIABLE SOIL DEPTH). SHRUB PLANTING AREAS SHALL BE WORKED TO 12" MINIMUM OUTSIDE THE ROOT BALL.
6. ALL LANDSCAPE BEDS SHALL BE "V" EDGED AND MULCHED WITH MINIMUM 3" DOUBLE SHREDDED HARDWOOD BARK MULCH, OR APPROVED EQUAL. MULCH TO FENCE LINES OR BACK OF CURBS WHERE APPROPRIATE TO ELIMINATE NARROW GRASS AREAS. AVOID MULCH PILED AGAINST TREE TRUNKS, ETC.
7. ALL TREES TO BE STAKED AND GUYED WITH HARDWOOD STAKES, MINIMUM OF TWO (2) - 5' LONG, OR OTHER APPROVED GUYING SYSTEM. STAKES SHALL BE DRIVEN INTO STABLE SOILS. PROVIDE WIRE GUYS WITH RUBBER PROTECTANT OR OTHER APPROVED INDUSTRY PRACTICE.
8. LANDSCAPE INSTALLER SHALL MAINTAIN ALL PLANT MATERIALS THROUGH THE COMPLETION OF THE LANDSCAPE INSTALLATION, AND THEN AS REQUIRED BY THE OWNER.
9. AT THE COMPLETION OF THE LANDSCAPE INSTALLATION (OR BY PHASED COMPLETION IF PROVIDED FOR ON THE PLAN), THE OWNER, OR HIS DESIGNATED REPRESENTATIVE SHALL REQUEST AN INSPECTION BY TOWN OF EASTON.



TOWN OF EASTON MARYLAND FOUNDED 1710

APPROVAL

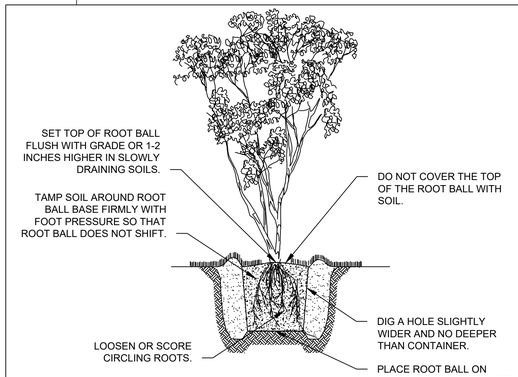
TOWN ENGINEER

DATE 1/2020

TOWN OF EASTON STANDARD DETAILS

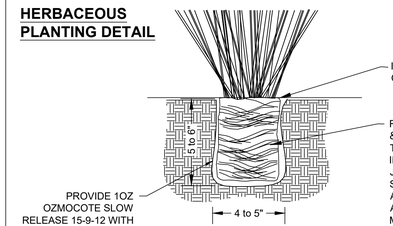
TREE PLANTING

ISSUED: JANUARY 2020 | STANDARD NO.: TOE-R-2.01



CONTAINER TREE & SHRUB PLANTING DETAIL

HERBACEOUS PLANTING DETAIL



LANDSCAPING NOTES AND DETAILS

FOR

THE LAURA HOUSE

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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 3887

REVISIONS

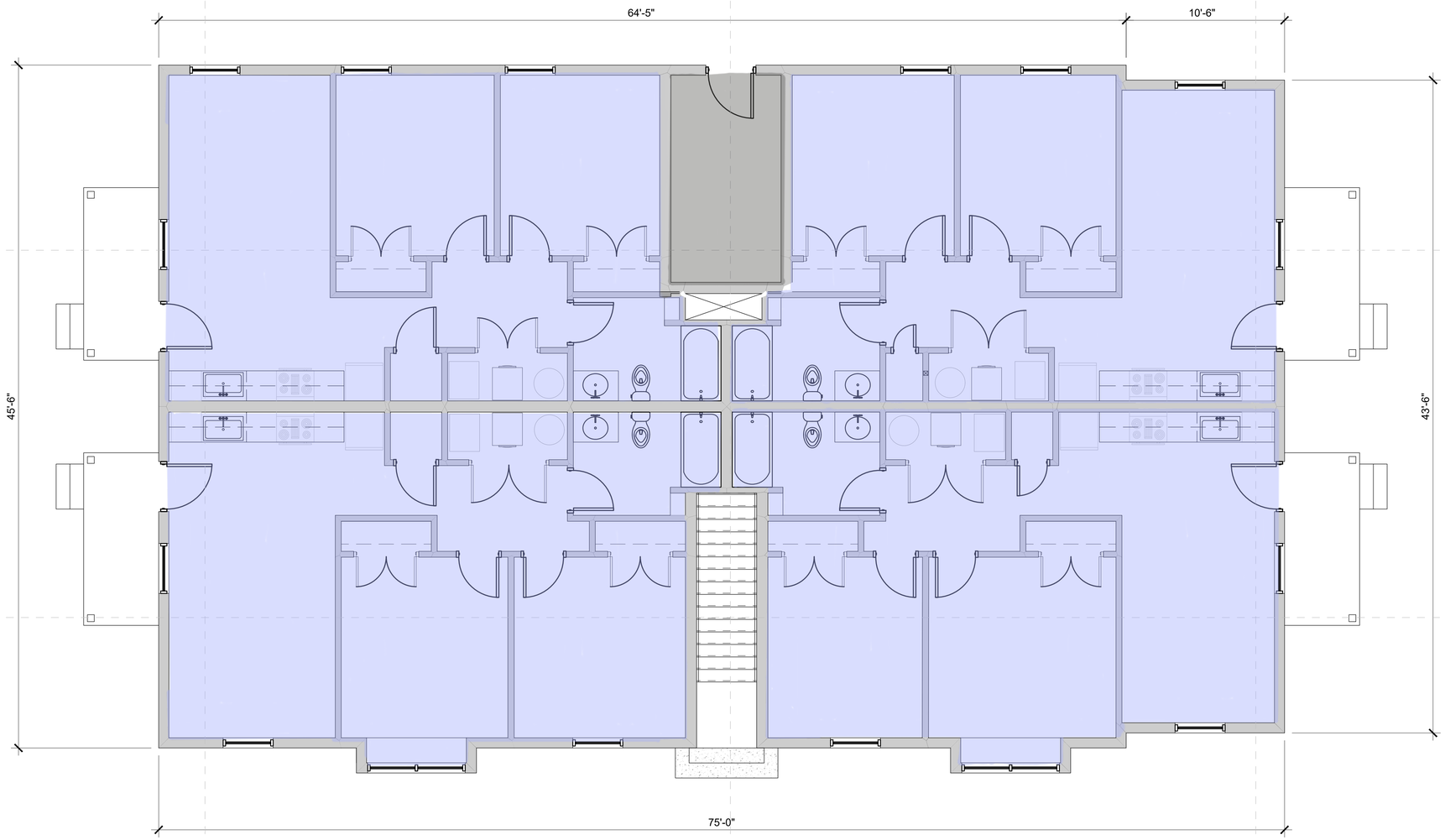
REV. #	DATE	DESCRIPTION

MISS UTILITY OF DELMARVA — CALL TOLL FREE 811 — 811

DATE:	5/14/2024
SCALE:	N/A
DRAWN BY:	AFK & WCS
DESIGNED BY:	AFK & WCS
APPROVED BY:	BBF

SHEET NO.: C-605

FOR REVIEW



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Virginia Office: 8229 Boone Blvd, Suite 625 - Vienna, VA 22182

FIRST FLOOR PLAN

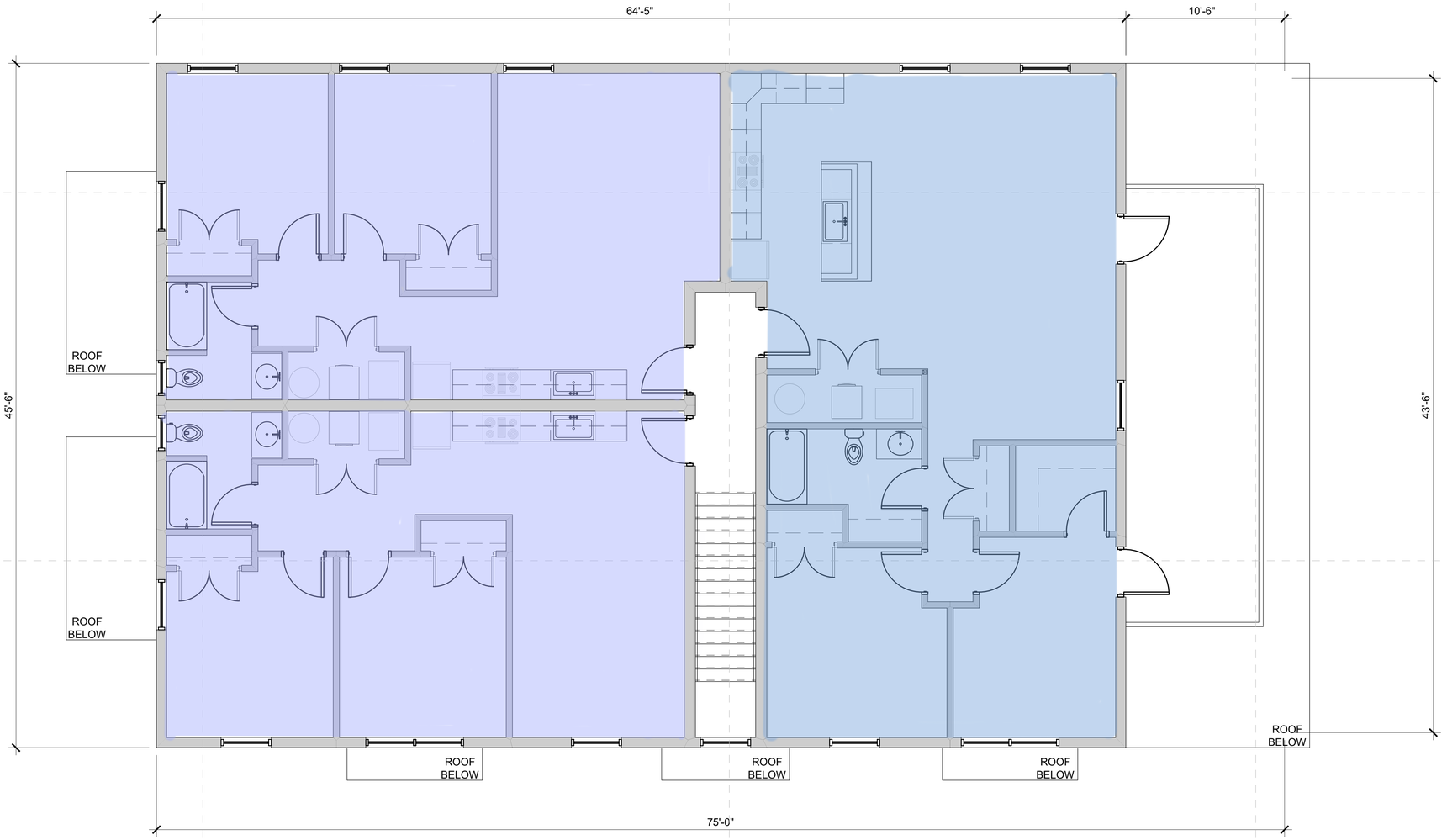
PROJECT NAME: THE LAURA HOUSE

DATE: 04/25/2024

NOTES:

SCALE:

1/4"=1'-0"



SECOND FLOOR PLAN

PROJECT NAME: THE LAURA HOUSE

DATE: 04/25/2024

NOTES:

SCALE:

1/4"=1'-0"

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SOUTH & WEST ELEVATIONS

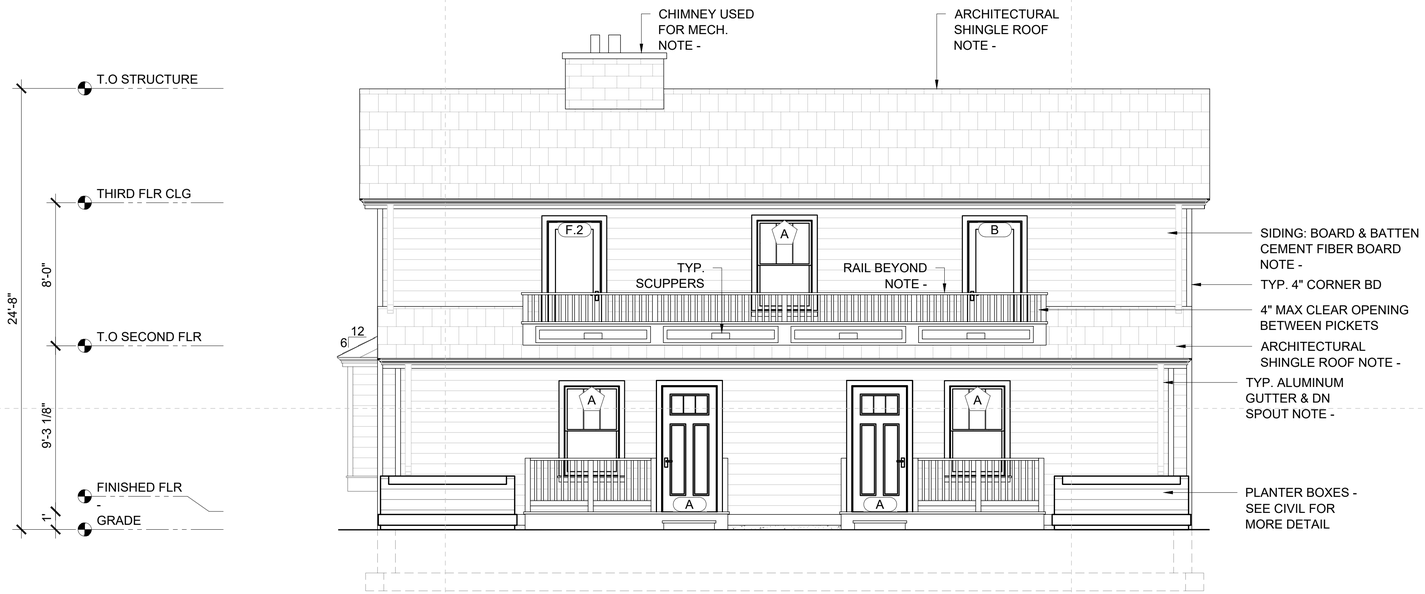
PROJECT NAME: THE LAURA HOUSE

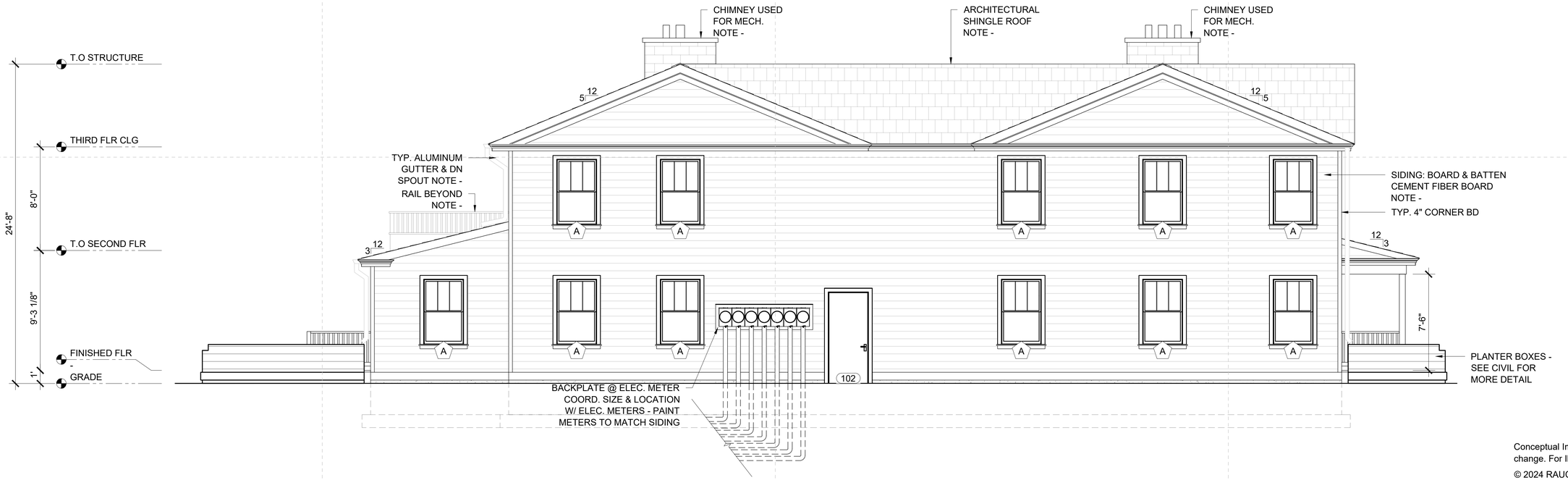
DATE: 04/25/2024

NOTES:

SCALE:

1/4"=1'-0"





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Virginia Office: 8229 Boone Blvd, Suite 625 - Vienna, VA 22182

NORTH & EAST ELEVATIONS

PROJECT NAME: THE LAURA HOUSE

DATE: 04/25/2024

NOTES:

SCALE:

1/4"=1'-0"

THE LAURA HOUSE . August Street . Easton, Maryland

Schematic Design
March 25, 2024

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THE LAURA HOUSE . August Street . Easton, Maryland

Schematic Design
March 25, 2024

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THE LAURA HOUSE . August Street . Easton, Maryland

Schematic Design
March 25, 2024

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Site Development Stormwater Management Analysis

FOR

"The Laura House"
521 August Street
Easton, Md 21601

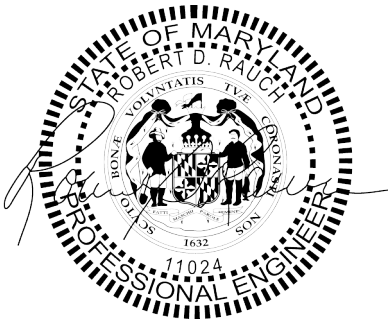
PREPARED FOR:

Chesapeake Community Development
999 Corporate Blvd,
Linthicum Heights, MD 21090

PREPARED BY:

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

May 14, 2024



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.

3/21/2024

ROBERT D. RAUCH, LICENCE NO. 11024 DATE
EXPIRATION DATE 7/24/2024

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SECTION 5……...……..Soil Report

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SECTION 1 – STORMWATER MANAGEMENT NARRATIVE

SITE DEVELOPMENT STORMWATER MANAGEMENT NARRATIVE

The proposed Laura House development at 521 August Street is located on an undeveloped 0.19-acre parcel of land with 5 trees and 2 shrubs. The site is outside of the Critical Area, does not qualify for Forest Conservation, is outside of the floodplain, and within the Tanyard Branch watershed. All the existing vegetation will be cleared for this project. The entire limit of disturbance is 10,639 sq-ft. The dominant Hydrologic Soil Type is Type D.

Within the LOD development, the plan will add 0.108 acres (4,744 sq-ft) of impervious surfaces, or a 44% increase. There will be permeable pavers for both the parallel parking spaces along Park St and 90-degree parking along Powell Alley using a permeable paver product called PaveDrain. The PaveDrain pavers were selected as ideal for this site primarily because of their patented internal arc chamber that can store more water volume than the average paver, which increases the probability of water exfiltrating through the soil and not overflowing into nearby stormwater infrastructure; this is important given the challenging stormwater requirements within the Tanyard Branch. All soil located within the areas of permeable pavement will be one foot below the permeable pavement stone reservoir and replaced with amended soil to improve infiltration. Based on the conditions of the existing parcel, the proposed development will be categorized as "New Development". The spreadsheets found in Section 2 of this report calculate the required ESD volume to be 1,017 CF of ESD storage.

Water quality will be met through four Town of Easton stormwater planter boxes and permeable pavers. The planters collect runoff coming from the proposed building and will discharge to the grate inlet in Powell Alley. The permeable paver parking lots have stone reservoirs that exfiltrates into the ground and directly into the discharge pipe out to Powell Alley. All distribution pipes collect the water around the site and discharge at the location of an existing inlet in Powell Alley, referred to as Study Point #1. The inlet that we are discharging into will be replaced with a traffic bearing yard inlet and all existing pipes will be re-connected to it. The proposed planters and permeable pavers slightly overtreat 1,027 CF of water, compared to the required and calculated 1,017 CF.

Water quantity control is required for a 10-year storm event to be less than a 2-year storm event within the Tanyard Branch watershed for the Town of Easton. All on-site water will be collected within our facilities and most off-site Town drainage will bypass our facilities as they currently do. The table for all study points is shown below for existing and proposed. Water quantity control is accomplished primarily through the combination of planter boxes and PaveDrain permeable pavers.

Study Point #1		
	2-YR (CFS)	**10-YR (CFS)**
Existing	**0.48**	0.89
Proposed	0.27	**0.42**

Study Point #2		
	2-YR (CFS)	**10-YR (CFS)**
Existing	**0.27**	0.43
Proposed	0.10	**0.18**

SECTION 2 – EXISTING & PROPOSED DRAINAGE AREA MAPS

STUDY POINT #1

54' OF SHALLOW CONCENTRATED FLOW
@ 1.4% SLOPE

POWELL ALLEY

100' OF SHEET FLOW
@ 0.54% SLOPE

SHALLOW CONCENTRATED FLOW
93' @ 1.0%

PARK STREET

100' OF SHEET FLOW
@ 1.6% SLOPE

STUDY POINT #2

AUGUST STREET

109' OF SHALLOW CONCENTRATED FLOW
@ 0.40% SLOPE

NAD 83/91

N

0 10' 20'

EXISTING CATCHMENT FEATURES

1. AT-GRADE STEEL INLET WITH BRICK CULVERT BOX
2. DRAINAGE AREA #1 = 8,329 SF
3. DRAINAGE AREA #2 = 2,781 SF

EXISTING DRAINAGE PLAN

OF THE LANDS OF

CHESAPEAKE COMMUNITY DEVELOPMENT

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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

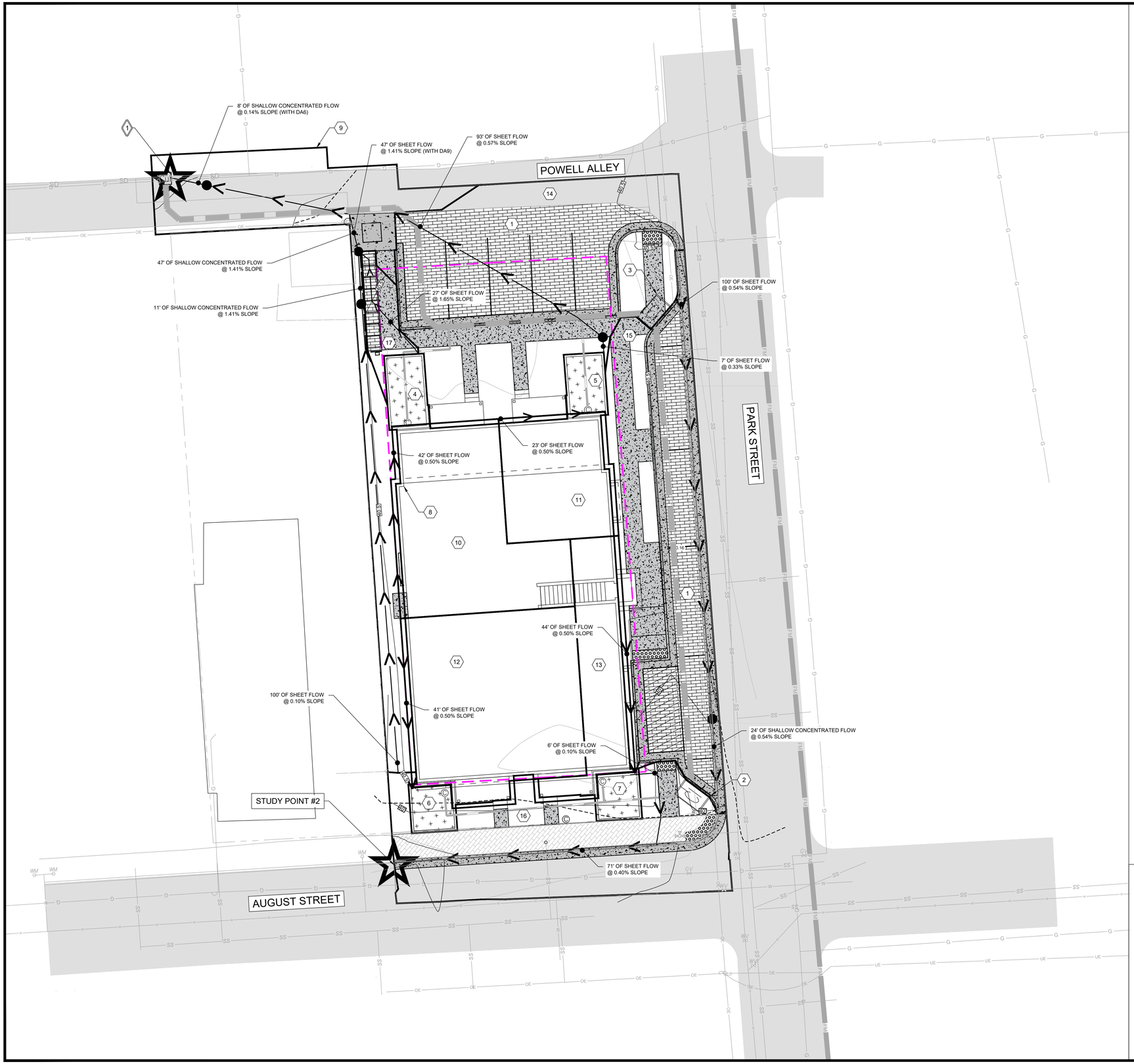
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE	4/26/2024
SCALE:	1" = 10'
DRAWN BY:	WCS
DESIGNED BY:	WCS
APPROVED BY:	BBF

SHEET NO.: EX-DA MAP

FOR REVIEW



STORMWATER NOTES

1. PAVEDRAIN PERMEABLE PAVERS
2. CURB INLET #1
3. CURB INLET #2
4. STORMWATER PLANTER BOX #1
5. STORMWATER PLANTER BOX #2
6. STORMWATER PLANTER BOX #3
7. STORMWATER PLANTER BOX #4
8. BUILDING
9. DRAINAGE AREA 1 = 1,604 SF
10. DRAINAGE AREA 2 = 1,287 SF
11. DRAINAGE AREA 3 = 733 SF
12. DRAINAGE AREA 4 = 1,511 SF
13. DRAINAGE AREA 5 = 692 SF
14. DRAINAGE AREA 6 = 2,452 SF
15. DRAINAGE AREA 7 = 1,930 SF
16. DRAINAGE AREA 8 = 1,512 SF
17. DRAINAGE AREA 9 = 165 SF

EXISTING CATCHMENT FEATURES

1. AT-GRADE STEEL INLET WITH BRICK CULVERT BOX TO BE REPLACED WITH PROPOSED TRAFFIC BEARING YARD INLET

PROPOSED DRAINAGE PLAN

OF THE LANDS OF

CHESAPEAKE COMMUNITY DEVELOPMENT

TAX MAP: 0103, GRID: 00EA, PARCEL: 01028

ELECTION DISTRICT 01, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT

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REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	4/26/2024
SCALE:	1" = 10'
DRAWN BY:	WCS
DESIGNED BY:	WCS
APPROVED BY:	BBF

SHEET NO.: PR-DA MAP

FOR REVIEW

SECTION 3 – ESD WATER QUALITY CALCULATIONS

LIMITS OF DISTURBANCE

EXISTING LOD COVERAGE

COVERAGE DESCRIPTION	COVERAGE CATEGORY	COVERAGE AREA SQ-FT	SOIL TYPE
ROADWAY + CONCRETE	IMPERVIOUS	1445.59	C
TURF LAWN	PERVIOUS	9193.41	C

TOTAL SITE AREA	10639	SQ-FT
EXISTING IMPERVIOUS AREA	1445.59	SQ-FT
PERCENT IMPERVIOUS	14%	

PROPOSED LOD COVERAGE

COVERAGE DESCRIPTION	COVERAGE CATEGORY	COVERAGE AREA SQ-FT	
SIDEWALK	IMPERVIOUS	902	concrete, brick sidewalks and dumpster pad, and remaining asphalt parking spaces that are not pervious pavers
PERMEABLE PAV	PERVIOUS	1819	Proposed Parking
ROOFS	IMPERVIOUS	3443	
PERMEABLE PAV	PERVIOUS	230.00	Porch patios 4x
PAVEMENT	IMPERVIOUS	904.45	Concrete curb
SIDEWALK	IMPERVIOUS		Auxillary sidewalk around side 75.7
ROADWAY	IMPERVIOUS	792.52	Existing Road
PAVEMENT	IMPERVIOUS	83	Planter Box Wall
GRAVEL	IMPERVIOUS	42.44	
PAVEMENT	IMPERVIOUS	22	Porch steps

TOTAL SITE AREA	10639	SQ-FT
PROPOSED IMPERVIOUS AREA	6190	SQ-FT
PERCENT IMPERVIOUS	58%	

PERCENT HSG A	0%
PERCENT HSG B	0%
PERCENT HSG C	100%
PERCENT HSG D	0%

0.142 acres

1196

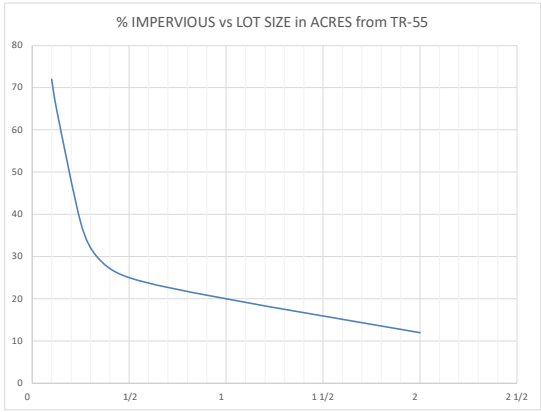
1527

1

0.166667

FROM TR-55

	LOT SIZE	% IMPERVIOUS
	2.00	12
	1.00	20
1/2	0.50	25
1/3	0.33	30
1/4	0.25	38
1/8	0.13	65
	0.10	72



PERVIOUS	A
IMPERVIOUS	B
	C
	D

GRAVEL	IMPERVIOUS
ROOFS	IMPERVIOUS
OUS PARKING	IMPERVIOUS
DRIVEWAY	IMPERVIOUS
ROADWAY	IMPERVIOUS
WATER	IMPERVIOUS
PAVEMENT	IMPERVIOUS
SIDEWALK	IMPERVIOUS
LANDSCAPING	PERVIOUS
PERVIOUS PARKING	PERVIOUS
TREES/VEGETATION	PERVIOUS
TURF LAWN	PERVIOUS
CONSERVATION AREA	PERVIOUS
PERMEABLE PAVEMENT	PERVIOUS

Maryland ESD Calculations and 10% Phosphorus Removal

Last Update: 1/6/2019 Rauch Inc.

Project Name:	
Date:	

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)	*10812.4*
Existing SITE Impervious Area (acres or sq-ft)	*1445.59*
SITE percent impervious	13%
Development Category (for ESD)	**New Development**

LOD Area, A (acres)	0.24
Existing LOD Impervious Surface Area (acres)	0.03
Proposed LOD Impervious Surface Area (acres)	0.14
Rainfall Depth, P (in)	1.0

Existing LOD Imperviousness, I_{pre}	14%
Proposed LOD Imperviousness, I_{post}	58%

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)		0.12

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)	0.10
Post-Development Runoff Coefficient, Rv_{post}	0.57
Average Annual Post-Development Load, L_{post} (lbs P / yr)	0.34
Removal Requirement, RR (lbs P / yr)	**0.23**

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

% Soil Type A	0%	RCN Soil Type A	73.27
% Soil Type B	0%	RCN Soil Type B	82.27
% Soil Type C	100%	RCN Soil Type C	87.27
% Soil Type D	0%	RCN Soil Type D	90.64

Target Pre-Developed Condition, RCN_{woods}	70.00000	Post-Developed Condition, RCN	87.27

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)	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)	2.00
ESD Runoff Depth, Q_E (in)	1.15
ESD Runoff Volume, ESDv (cf)	**1,017**
Total Treatment Volume (cf)	**1,017**

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

Nonstructural Practices	P_E Credit Description	Contributing Drainage Area (sf)	Direct WQv or ESDv Received by Practice (cf)	WQv or ESDv from Up-Gradient Practices (cf)	Average P_E Credit (in)	WQV or ESDv credit (cf)	Runoff Volume Remaining (cf)	*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)
Disconnection of Rooftop Runoff 1	Up to 1 inch credit provided based upon disconnection flow length.	0	0	N/A	#DIV/0!	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Disconnection of Rooftop Runoff 2	Up to 1 inch credit provided based upon disconnection flow length.	0	0	N/A	#DIV/0!	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Disconnection of Non-Rooftop Runoff 1	Up to 1 inch credit provided based upon disconnection and contributing flow lengths.	0	0	N/A	#DIV/0!	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Disconnection of Non-Rooftop Runoff 2	Up to 1 inch credit provided based upon disconnection and contributing flow lengths.	0	0	N/A	#DIV/0!	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Sheetflow to Conservation Areas 1	Up to 1 inch credit provided based upon conservation area width.	0	0	0	#DIV/0!	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Sheetflow to Conservation Areas 2	Up to 1 inch credit provided based upon conservation area width.	0	0	0	#DIV/0!	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00

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)	Baseline Phosphorous Removal Efficiency	Average Adjusted Removal Efficiency Rate	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remaining Load (lbs/yr)
Green Roof (Level 1)	ESDv credit is based on roof thickness	0	0	N/A	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Green Roof (Level 2)	ESDv credit is based on roof thickness	0	0	N/A	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Pemeable Pavement (A Soils)	ESDv credit is based on subbase thickness	4,421	786	N/A	396	395	80%	87%	0.65	0.57	0.09
Pemeable Pavement (B Soils)	ESDv credit is based on subbase thickness	0	0	N/A	0	0	80%	#DIV/0!	0.00	0.00	0.00
Pemeable Pavement (C Soils)	ESDv credit is based on subbase thickness	0	0	N/A	0	0	40%	#DIV/0!	0.00	0.00	0.00
Rainwater Harvesting	ESDv credit is based on design storage volume and annual use	0	0	0	0	0	45%	#DIV/0!	0.00	0.00	0.00
Submerged Gravel Wetlands	ESDv credit is based on design storage volume	0	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!
Infiltration berms	ESDv credit is based on design storage volume	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Rain Gardens 1	ESDv credit is based on design storage volume	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Rain Gardens 2	ESDv credit is based on design storage volume	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Micro-Bioretention 1	ESDv credit is based on design storage volume	4,088	812	812	632	181	#VALUE!	#VALUE!	0.20	#VALUE!	#VALUE!
Micro-Bioretention 2	ESDv credit is based on design storage volume	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Landscape Infiltration	ESDv credit is based on design storage volume	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Grass Swales 1	ESDv credit is based on design storage volume	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Grass Swales 2	ESDv credit is based on design storage volume	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Bio-swales 1	ESDv credit is based on design storage volume	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Bio-swales 2	ESDv credit is based on design storage volume	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00
Wet Swales	ESDv credit is based on design storage volume	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0.00	0.00

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

Drainage Area Treated (sf)	8,509

WQv or ESDv Treated (cf) using ESD practices	1,027
P_E achieved (inches)	2.02
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)	#VALUE!
Total Load Reduction Remaining (lbs P / yr)	**#VALUE!**

New Development Water Quality Volume Requirements

Required Treatment Area (acres)	0.24
Runoff Coefficient, Rv	0.57
Water Quality Volume, WQv (cf)	**509**

Step 8: Determine Reduced RCN and Volume Management Requirements Based Upon P_E Achieved

Reduced RCN for Type A Soils	N/A
Reduced RCN for Type B Soils	N/A
Reduced RCN for Type C Soils	N/A
Reduced RCN for Type D Soils	N/A
Composite Reduced RCN CN* 1 yr	**N/A**
Q_E (in) for Reduced RCN	N/A
V (ft^3) for Reduced RCN	N/A
Volume Management Required (cf)	**0**
Volume Required for structural practices (cf)	**0**

Target Reduced RCN $_{woods}$ 1 yr	70.00
Q_E (in) for pre developed RCN	0.55
V (ft^3) for pre developed RCN	491

	Composite reduced runoff curve number for H and H analysis (TR-55)		
	S	Ia	Pe achived x Rv
	1.46	0.29	1.16
Return period	2 yr	10 yr	100 yr
Qr	2.12	3.88	6.09
Qr-(Pe achieved x Rv)	0.96	2.72	4.93
CN*	**70.19**	**75.29**	**77.22**

Step 9: Select Structural Practices to Meet Volume Management Requirements

Structural Practices	Contributing Drainage Area (sf)	% Impervious Cover	Direct ESDv Received by Practice (cf)	ESDv from Upstream Practices (cf)	Treatment Volume (cf)
Stormwater Ponds (Level 1)	0	0%	0	0	0
Stormwater Ponds (Level 2)	0	0%	0	0	0
Stormwater Wetlands (Level 1)	0	0%	0	0	0
Stormwater Wetlands (Level 2)	0	0%	0	0	0
Stormwater Filtering Systems (Level 1)	0	0%	0	0	0
Stormwater Filtering Systems (Level 2)	0	0%	0	0	0
Stormwater Infiltration (Level 1)	0	0%	0	0	0
Stormwater Infiltration (Level 2)	0	0%	0	0	0

Total structural CPv or WQv provided	0
WQv Requirement Met through structural practices?	**YES**
WQv Remaining (cf)	**0**
CPv Requirement Met through structural practices?	**YES**
CPv Remaining (cf)	**0**

Critical Area Credits

Phosphorous Removal Efficiency	Adjusted Phosphorus Removal Efficiency	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remaining Load (lbs/yr)
50%	0%	0.00	0.00	0.00
75%	0%	0.00	0.00	0.00
50%	0%	0.00	0.00	0.00
75%	0%	0.00	0.00	0.00
60%	0%	0.00	0.00	0.00
65%	0%	0.00	0.00	0.00
60%	0%	0.00	0.00	0.00
90%	0%	0.00	0.00	0.00

Total Load Reduction (lbs P / year)	#VALUE!
Total Load Reduction Remaining (lbs P / yr)	**#VALUE!**

Calculation Summary	0.5 acre site .25 acres to .38 acres
Critical Area 10% Calculations	50% to 75%
Removal Requirement, RR (lbs P / yr)	**0.23**
after non-structural and micro-scale BMPs (Steps 5 and 6)	
Total Load Reduction (lbs P / year)	#VALUE!
Total Load Reduction Remaining (lbs P / yr)	**#VALUE!**
after structural practices (Step 9)	
Total Load Reduction (lbs P / year)	#VALUE!
Total Load Reduction Remaining (lbs P / yr)	**#VALUE!**

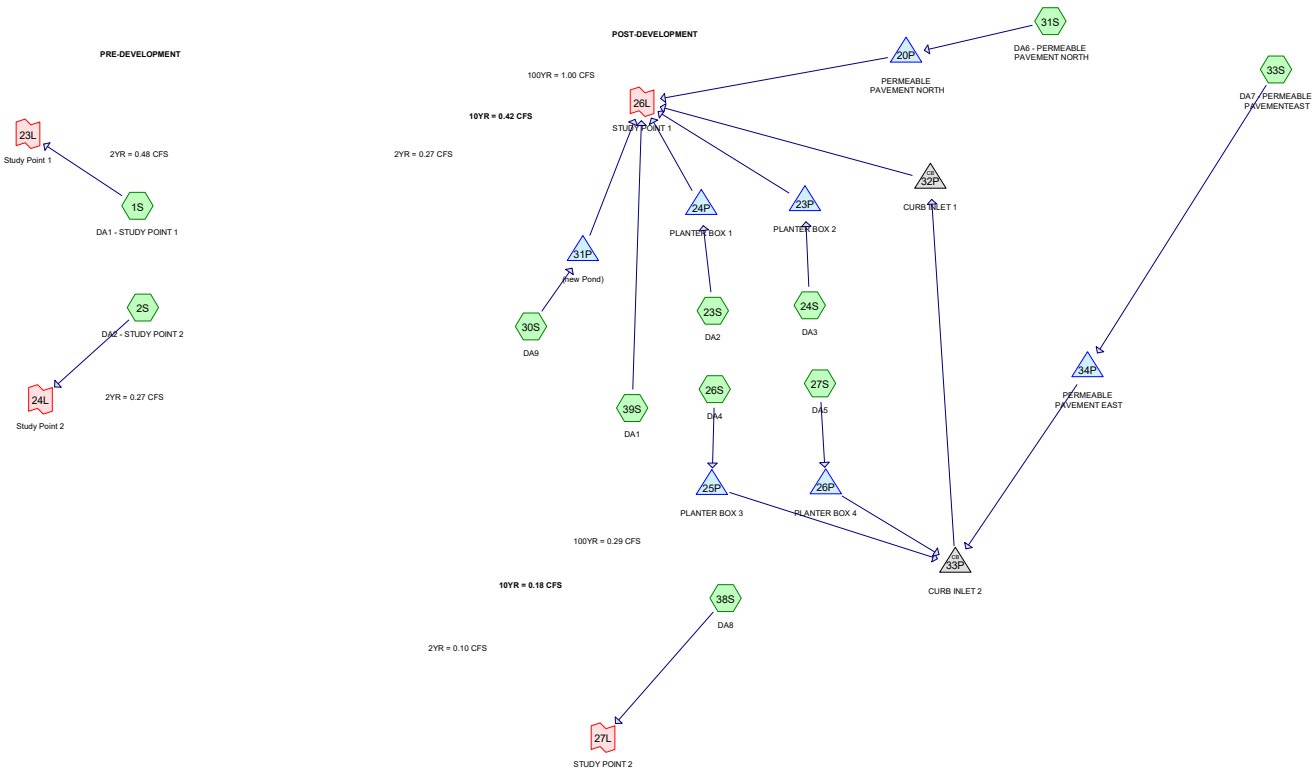
MDE's ESD to the MEP Calculations

ESD Runoff Volume, ESDv (cf)	1017.00
Total Treatment Volume (cf)	1017.00
WQv or ESDv Treated (cf) using ESD practices	1027.10
PE achieved (inches)	2.02
Entire ESDv Treated Through ESD Practices?	YES
ESDv Remaining? (cf)	0.00
If ESDV is not fully treated, is ESD to MEP achieved?	NO
Redevelopment WQv Requirements Met Through ESD Practices?	N/A
WQv Remaining? (cf)	0.00
New Development WQv Requirements Met Through ESD Practices?	YES
WQv Remaining? (cf)	0.00

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)				Bed area % of direct catchement area	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)												
PLANTER BOX 1	1,246	93%	2.20				1,246																
		0.887	203	249	0	0	249	111	111	1	2.5	8.9%	222	27			#VALUE!	0.06	#VALUE!	#VALUE!	2.41	105.27%
PLANTER BOX 2	713	87%	2.00				713																
		0.833	99	134	0	0	134	93	93	1	2.5	13.0%	134	0			#VALUE!	0.03	#VALUE!	#VALUE!	2.70	108.20%
PLANTER BOX 3	1,475	96%	2.20				1,475																
		0.914	247	303	0	0	303	83	83	1	2	5.6%	149	154			#VALUE!	0.08	#VALUE!	#VALUE!	1.33	89.92%
PLANTER BOX 4	654	90%	2.00				654																
		0.86	94	127	0	0	127	85	85	1	2	13.0%	127	0			#VALUE!	0.03	#VALUE!	#VALUE!	2.70	108.20%
Micro-Bioretention 1		0%	100%				0																
		0.05	0	0	0	0	0					#DIV/0!	0	0			0.00%	0.00	0.00	0.00	0.00	0.00%
Micro-Bioretention 1		0%	1.00				0																
		0.05	0	0	0	0	0					#DIV/0!	0	0			0.00%	0.00	0.00	0.00	0.00	0.00%
Micro-Bioretention 1		0%	1.00				0																
		0.05	0	0	0	0	0					#DIV/0!	0	0			0.00%	0.00	0.00	0.00	0.00	0.00%
Micro-Bioretention 1		0%	1.00				0																
		0.05	0	0	0	0	0					#DIV/0!	0	0			0.00%	0.00	0.00	0.00	0.00	0.00%
Micro-Bioretention 1		0%	1.00				0																
		0.05	0	0	0	0	0					#DIV/0!	0	0			0.00%	0.00	0.00	0.00	0.00	0.00%
Micro-Bioretention 1		0%	1.00				0																
		0.05	0	0	0	0	0					#DIV/0!	0	0			0.00%	0.00	0.00	0.00	0.00	0.00%
Micro-Bioretention 1		0%	1.00				0																
		0.05	0	0	0	0	0					#DIV/0!	0	0			0.00%	0.00	0.00	0.00	0.00	0.00%
Micro-Bioretention 1		0%	1				0																
		0.05	0	0	0	0	0					#DIV/0!	0	0			0.00%	0.00	0.00	0.00	0.00	0.00%
Total	4,088			812		0							632	181			#VALUE!	#VALUE!	0.20	#VALUE!	#VALUE!	2.10	101.71%

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)	Practice Specific Parameter(s)		WQV or ESDv provided (cf)	Runoff Volume Remaining (cf)	Down-Gradient Practice and Row	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 (%)
		85%	2.00		Pavement Area (sf)	Subbase Thickness (in)										
Pemeable Pavement (A Soils)	2,326	0.815	316	427	1040	12	214	212		80%	87.62%	0.37	0.32	0.05	1.36	90.43%
		79%	2.00		Pavement Area (sf)	Subbase Thickness (in)										
Pemeable Pavement (A Soils)	1,930	0.761	245	330	715	12	147	183		80%	84.63%	0.26	0.22	0.04	1.20	87.35%
		82%	2.00		Pavement Area (sf)	Subbase Thickness (in)										
Pemeable Pavement (A Soils)	165	0.788	22	29	64	12	34	-5		80%	100.00%	0.02	0.02	0.00	3.14	112.07%
		100%	2.20		Subbase Thickness (in)											
Pemeable Pavement (A Soils)		0.95	0	0			0	0		80%	0.00%	0.00	0.00	0.00	0.00	0.00%
		100%	2.20		Subbase Thickness (in)											
Pemeable Pavement (A Soils)		0.95	0	0			0	0		80%	0.00%	0.00	0.00	0.00	0.00	0.00%
		100%	2.2		Subbase Thickness (in)											
Pemeable Pavement (A Soils)		0.95	0	0			0	0		80%	0.00%	0.00	0.00	0.00	0.00	0.00%
Total	4,421			786			396	395		80%	86.86%	0.65	0.57	0.09	1.36	90.47%

SECTION 4 – PRE/POST-DEVELOPMENT QUANTITY CALCULATIONS



Subcat Reach Pond Link

Routing Diagram for CN_August st_Laura House_WCS_CURRENT_V2
Prepared by {enter your company name here}, Printed 5/14/2024
HydroCAD® 10.00-20 s/n 02413 © 2017 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.001	86	<50% Grass cover, Poor, HSG C (30S)
0.038	39	>75% Grass cover, Good, HSG A (31S, 33S, 38S, 39S)
0.009	39	Pasture/grassland/range, Good, HSG A (23S, 24S, 26S, 27S)
0.003	98	Paved parking, HSG C (30S)
0.074	98	Paved parking, HSG D (1S, 2S, 31S)
0.087	98	Roofs, HSG D (23S, 24S, 26S, 27S)
0.112	98	Unconnected pavement, HSG D (23S, 24S, 26S, 27S, 31S, 33S, 38S, 39S)
0.211	86	Woods/grass comb., Poor, HSG D (1S, 2S)
0.534	**88**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.047	HSG A	23S, 24S, 26S, 27S, 31S, 33S, 38S, 39S
0.000	HSG B	
0.004	HSG C	30S
0.483	HSG D	1S, 2S, 23S, 24S, 26S, 27S, 31S, 33S, 38S, 39S
0.000	Other	
0.534		**TOTAL AREA**

Ground Covers (all 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	0.001	0.000	0.000	0.001	<50% Grass cover, Poor	30S
0.038	0.000	0.000	0.000	0.000	0.038	>75% Grass cover, Good	31S, 33S, 38S, 39S
0.009	0.000	0.000	0.000	0.000	0.009	Pasture/grassland/range, Good	23S, 24S, 26S, 27S
0.000	0.000	0.003	0.074	0.000	0.077	Paved parking	1S, 2S, 30S, 31S
0.000	0.000	0.000	0.087	0.000	0.087	Roofs	23S, 24S, 26S, 27S
0.000	0.000	0.000	0.112	0.000	0.112	Unconnected pavement	23S, 24S, 26S, 27S, 31S, 32S,

Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.211	0.000	0.211	Woods/grass comb., Poor	1S, 2S
0.047	**0.000**	**0.004**	**0.483**	**0.000**	**0.534**	**TOTAL AREA**	

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA1 - STUDY POINT 1 Runoff Area=8,470 sf 7.58% Impervious Runoff Depth=1.57"
Flow Length=197' Tc=8.6 min CN=87 Runoff=0.36 cfs 0.025 af

Subcatchment 2S: DA2 - STUDY POINT 2 Runoff Area=2,902 sf 52.55% Impervious Runoff Depth=1.97"
Flow Length=209' Tc=3.4 min CN=92 Runoff=0.21 cfs 0.011 af

Subcatchment 23S: DA2 Runoff Area=1,287 sf 91.38% Impervious Runoff Depth=2.06"
Flow Length=42' Slope=0.0050 '/' Tc=1.0 min CN=93 Runoff=0.11 cfs 0.005 af

Subcatchment 24S: DA3 Runoff Area=733 sf 87.45% Impervious Runoff Depth=1.89"
Flow Length=23' Slope=0.0050 '/' Tc=0.6 min CN=91 Runoff=0.06 cfs 0.003 af

Subcatchment 26S: DA4 Runoff Area=1,511 sf 94.51% Impervious Runoff Depth=2.25"
Flow Length=41' Slope=0.0050 '/' Tc=1.0 min CN=95 Runoff=0.14 cfs 0.007 af

Subcatchment 27S: DA5 Runoff Area=692 sf 87.72% Impervious Runoff Depth=1.89"
Flow Length=44' Slope=0.0050 '/' Tc=1.1 min CN=91 Runoff=0.05 cfs 0.002 af

Subcatchment 30S: DA9 Runoff Area=165 sf 81.82% Impervious Runoff Depth=2.36"
Flow Length=74' Tc=1.1 min CN=96 Runoff=0.02 cfs 0.001 af

Subcatchment 31S: DA6 - PERMEABLE Runoff Area=2,452 sf 80.26% Impervious Runoff Depth=1.49"
Flow Length=108' Tc=4.3 min CN=86 Runoff=0.13 cfs 0.007 af

Subcatchment 33S: DA7 - PERMEABLE Runoff Area=1,930 sf 85.18% Impervious Runoff Depth=1.72"
Flow Length=124' Slope=0.0054 '/' Tc=2.3 min CN=89 Runoff=0.13 cfs 0.006 af

Subcatchment 38S: DA8 Runoff Area=1,512 sf 78.77% Impervious Runoff Depth=1.42"
Flow Length=77' Tc=5.0 min CN=85 Runoff=0.07 cfs 0.004 af

Subcatchment 39S: DA1 Runoff Area=1,604 sf 64.34% Impervious Runoff Depth=0.93"
Flow Length=158' Tc=32.0 min CN=77 Runoff=0.02 cfs 0.003 af

Pond 20P: PERMEABLE PAVEMENT NORTH Peak Elev=39.10' Storage=116 cf Inflow=0.13 cfs 0.007 af
Discarded=0.01 cfs 0.007 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.007 af

Pond 23P: PLANTER BOX 2 Peak Elev=39.50' Storage=41 cf Inflow=0.06 cfs 0.003 af
Outflow=0.02 cfs 0.002 af

Pond 24P: PLANTER BOX 1 Peak Elev=39.79' Storage=83 cf Inflow=0.11 cfs 0.005 af
Outflow=0.02 cfs 0.005 af

Pond 25P: PLANTER BOX 3 Peak Elev=38.48' Storage=16 cf Inflow=0.14 cfs 0.007 af
Outflow=0.12 cfs 0.007 af

Pond 26P: PLANTER BOX 4 Peak Elev=38.24' Storage=11 cf Inflow=0.05 cfs 0.002 af
Outflow=0.05 cfs 0.002 af

Pond 31P: (new Pond) Peak Elev=39.30' Storage=0.000 af Inflow=0.02 cfs 0.001 af
Discarded=0.00 cfs 0.001 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.001 af

Pond 32P: CURB INLET 1 Peak Elev=38.06' Inflow=0.17 cfs 0.009 af
Outflow=0.17 cfs 0.009 af

Pond 33P: CURB INLET 2 Peak Elev=38.23' Inflow=0.17 cfs 0.009 af
Outflow=0.17 cfs 0.009 af

Pond 34P: PERMEABLE PAVEMENT EAST Peak Elev=39.13' Storage=115 cf Inflow=0.13 cfs 0.006 af
Discarded=0.01 cfs 0.006 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.006 af

Link 23L: Study Point 1 Inflow=0.36 cfs 0.025 af
Primary=0.36 cfs 0.025 af

Link 24L: Study Point 2 Inflow=0.21 cfs 0.011 af
Primary=0.21 cfs 0.011 af

Link 26L: STUDY POINT 1 Inflow=0.21 cfs 0.019 af
Primary=0.21 cfs 0.019 af

Link 27L: STUDY POINT 2 Inflow=0.07 cfs 0.004 af
Primary=0.07 cfs 0.004 af

Total Runoff Area = 0.534 ac Runoff Volume = 0.074 af Average Runoff Depth = 1.67"
48.45% Pervious = 0.259 ac 51.55% Impervious = 0.275 ac

Summary for Subcatchment 1S: DA1 - STUDY POINT 1

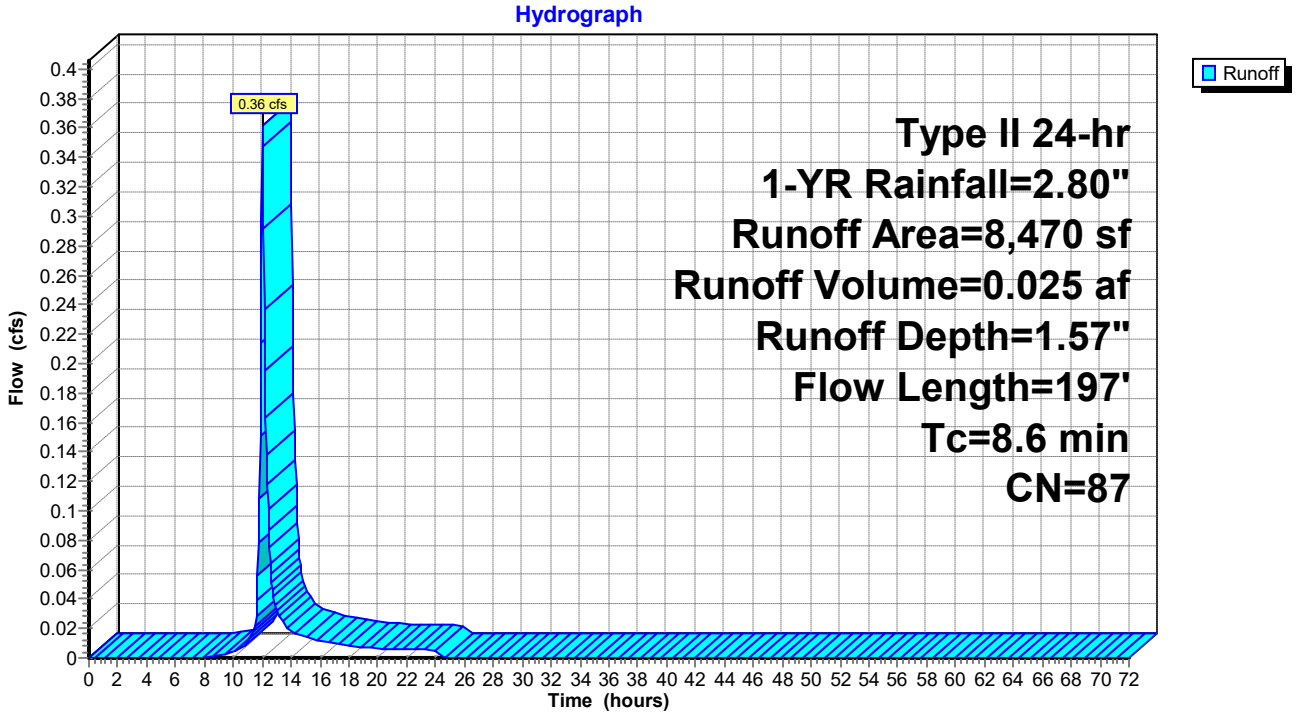
Runoff = 0.36 cfs @ 12.02 hrs, Volume= 0.025 af, Depth= 1.57"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
7,828	86	Woods/grass comb., Poor, HSG D
642	98	Paved parking, HSG D
8,470	87	Weighted Average
7,828		92.42% Pervious Area
642		7.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0160	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
2.2	93	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.4	54	0.0140	2.40		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
8.6	197	Total			

Subcatchment 1S: DA1 - STUDY POINT 1



Summary for Subcatchment 2S: DA2 - STUDY POINT 2

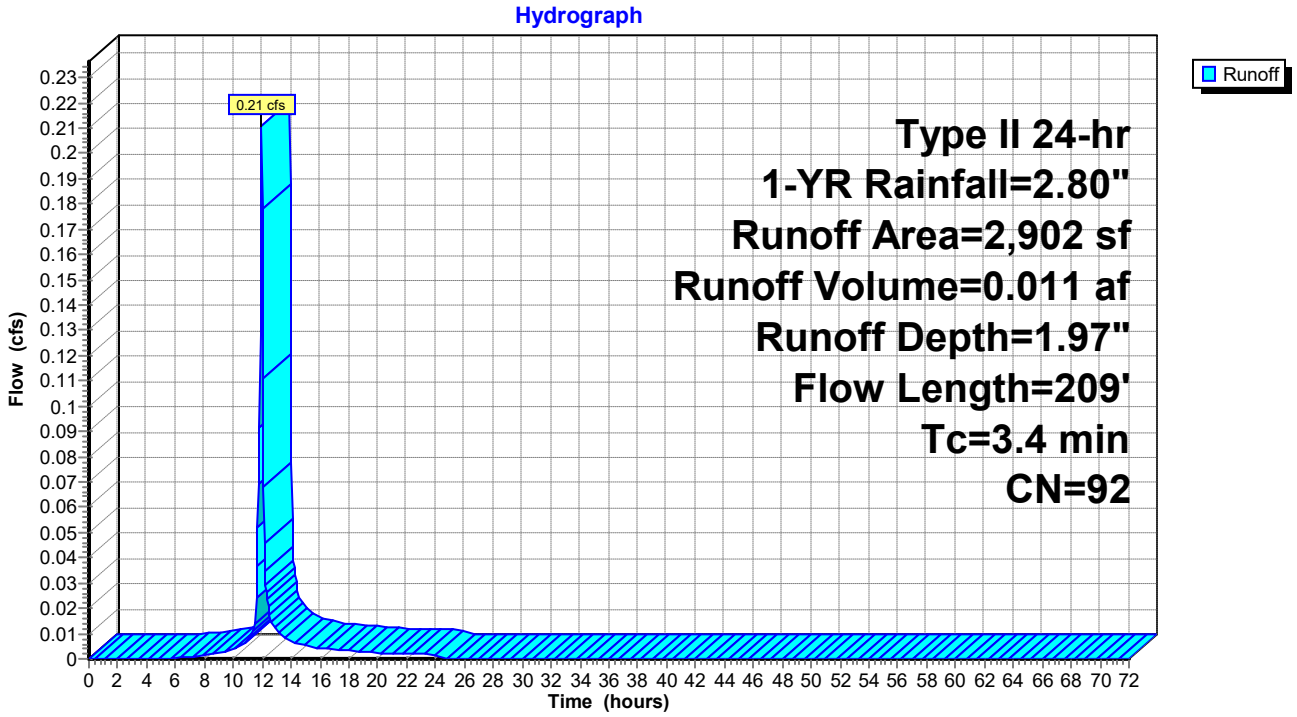
Runoff = 0.21 cfs @ 11.95 hrs, Volume= 0.011 af, Depth= 1.97"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
1,377	86	Woods/grass comb., Poor, HSG D
1,525	98	Paved parking, HSG D
2,902	92	Weighted Average
1,377		47.45% Pervious Area
1,525		52.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	100	0.0054	0.84		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
1.4	109	0.0040	1.28		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.4	209	Total			

Subcatchment 2S: DA2 - STUDY POINT 2



Summary for Subcatchment 23S: DA2

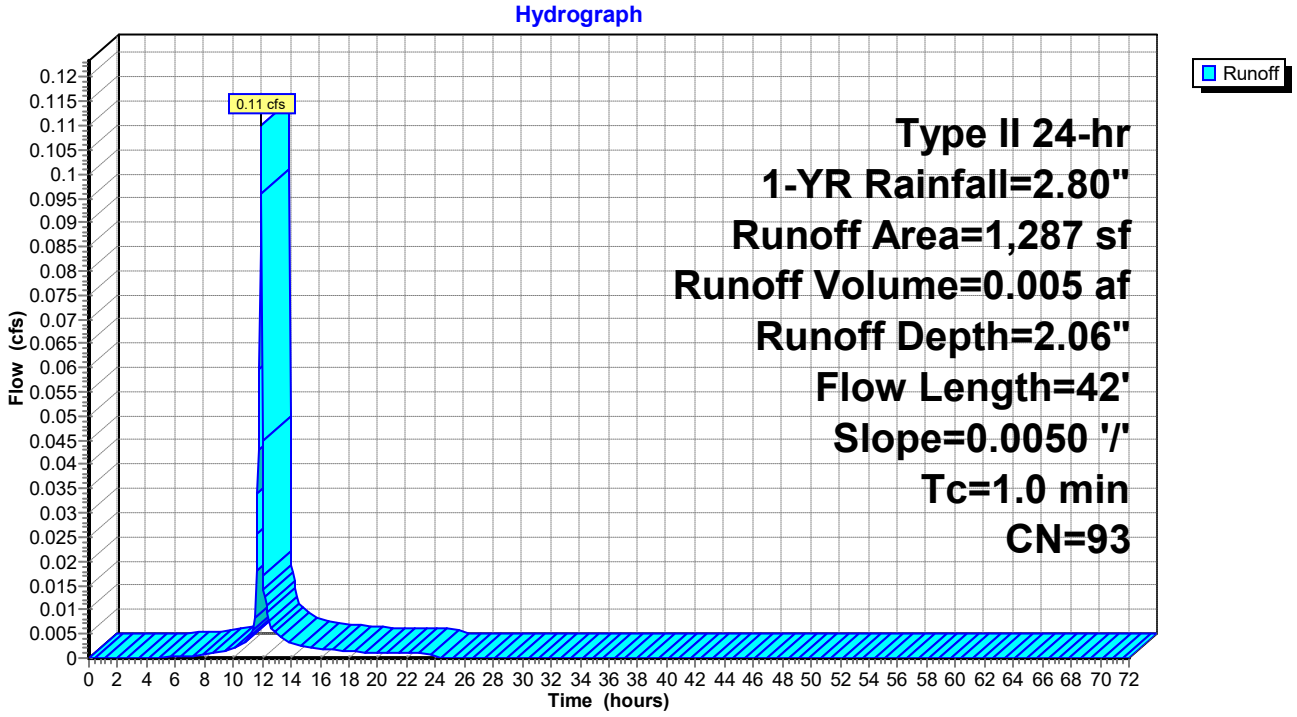
Runoff = 0.11 cfs @ 11.91 hrs, Volume= 0.005 af, Depth= 2.06"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
1,153	98	Roofs, HSG D
111	39	Pasture/grassland/range, Good, HSG A
23	98	Unconnected pavement, HSG D
1,287	93	Weighted Average
111		8.62% Pervious Area
1,176		91.38% Impervious Area
23		1.96% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	42	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 23S: DA2



Summary for Subcatchment 24S: DA3

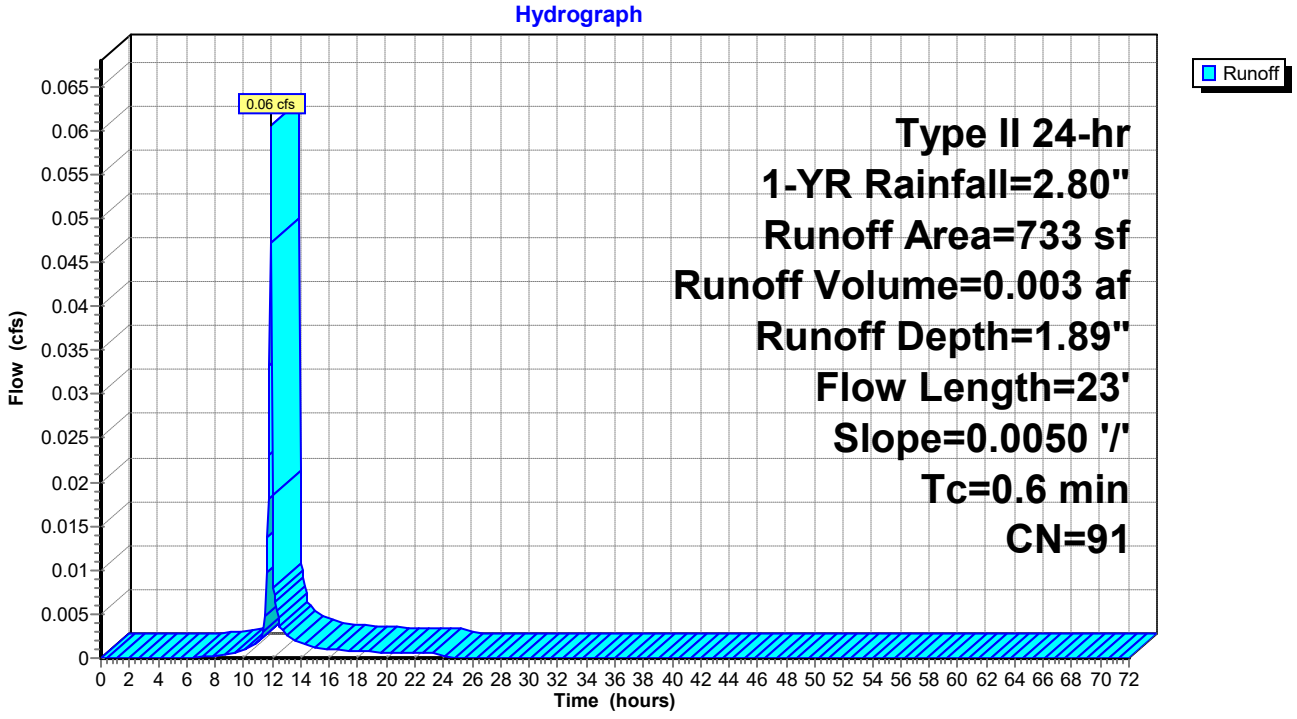
Runoff = 0.06 cfs @ 11.90 hrs, Volume= 0.003 af, Depth= 1.89"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
620	98	Roofs, HSG D
92	39	Pasture/grassland/range, Good, HSG A
21	98	Unconnected pavement, HSG D
733	91	Weighted Average
92		12.55% Pervious Area
641		87.45% Impervious Area
21		3.28% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	23	0.0050	0.61		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 24S: DA3



Summary for Subcatchment 26S: DA4

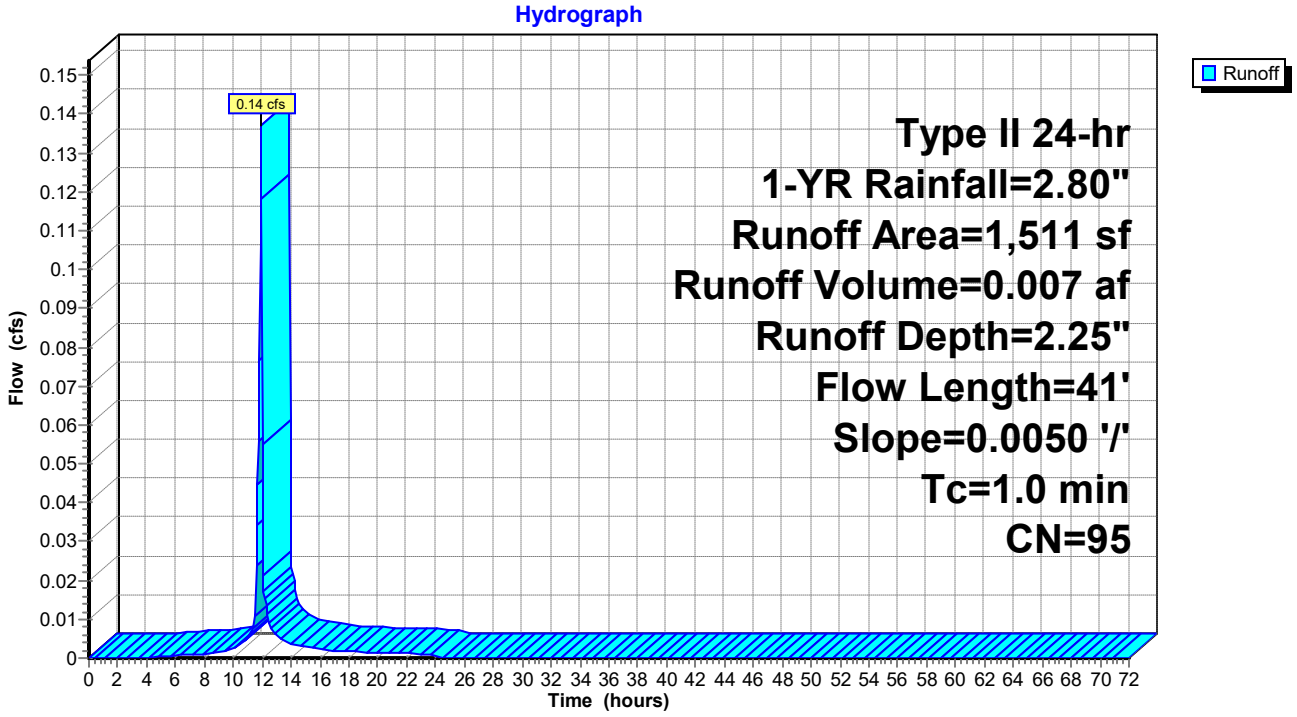
Runoff = 0.14 cfs @ 11.91 hrs, Volume= 0.007 af, Depth= 2.25"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
1,409	98	Roofs, HSG D
83	39	Pasture/grassland/range, Good, HSG A
19	98	Unconnected pavement, HSG D
1,511	95	Weighted Average
83		5.49% Pervious Area
1,428		94.51% Impervious Area
19		1.33% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	41	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 26S: DA4



Summary for Subcatchment 27S: DA5

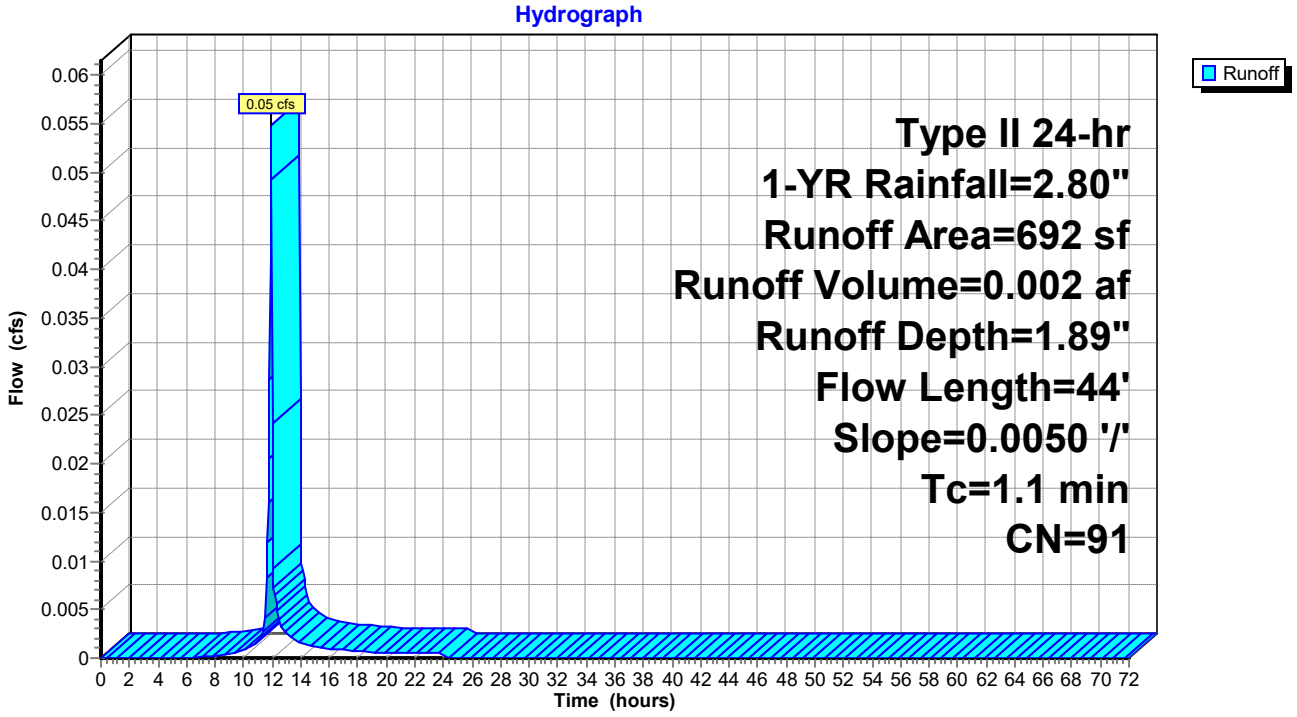
Runoff = 0.05 cfs @ 11.91 hrs, Volume= 0.002 af, Depth= 1.89"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
588	98	Roofs, HSG D
85	39	Pasture/grassland/range, Good, HSG A
19	98	Unconnected pavement, HSG D
692	91	Weighted Average
85		12.28% Pervious Area
607		87.72% Impervious Area
19		3.13% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	44	0.0050	0.69		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 27S: DA5



Summary for Subcatchment 30S: DA9

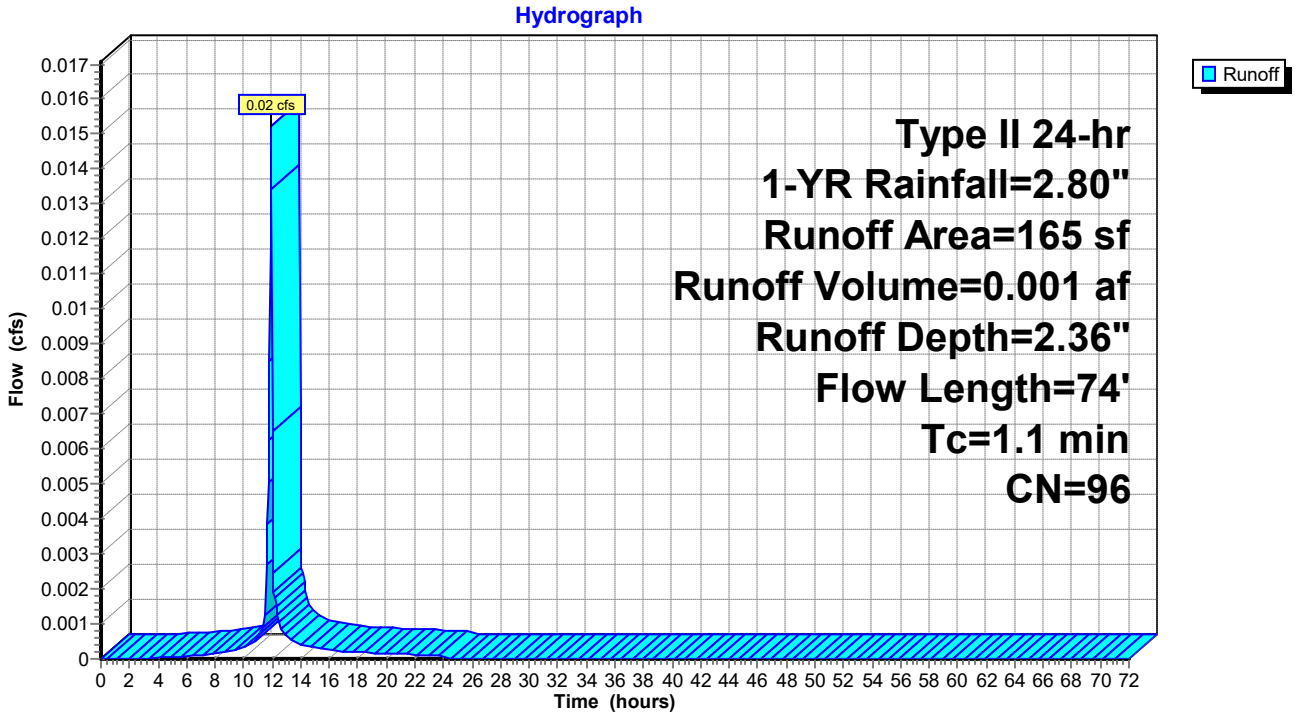
Runoff = 0.02 cfs @ 11.91 hrs, Volume= 0.001 af, Depth= 2.36"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
135	98	Paved parking, HSG C
30	86	<50% Grass cover, Poor, HSG C
165	96	Weighted Average
30		18.18% Pervious Area
135		81.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	27	0.0165	1.01		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.7	47	0.0141	1.06		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
1.1	74	Total			

Subcatchment 30S: DA9



Summary for Subcatchment 31S: DA6 - PERMEABLE PAVEMENT NORTH

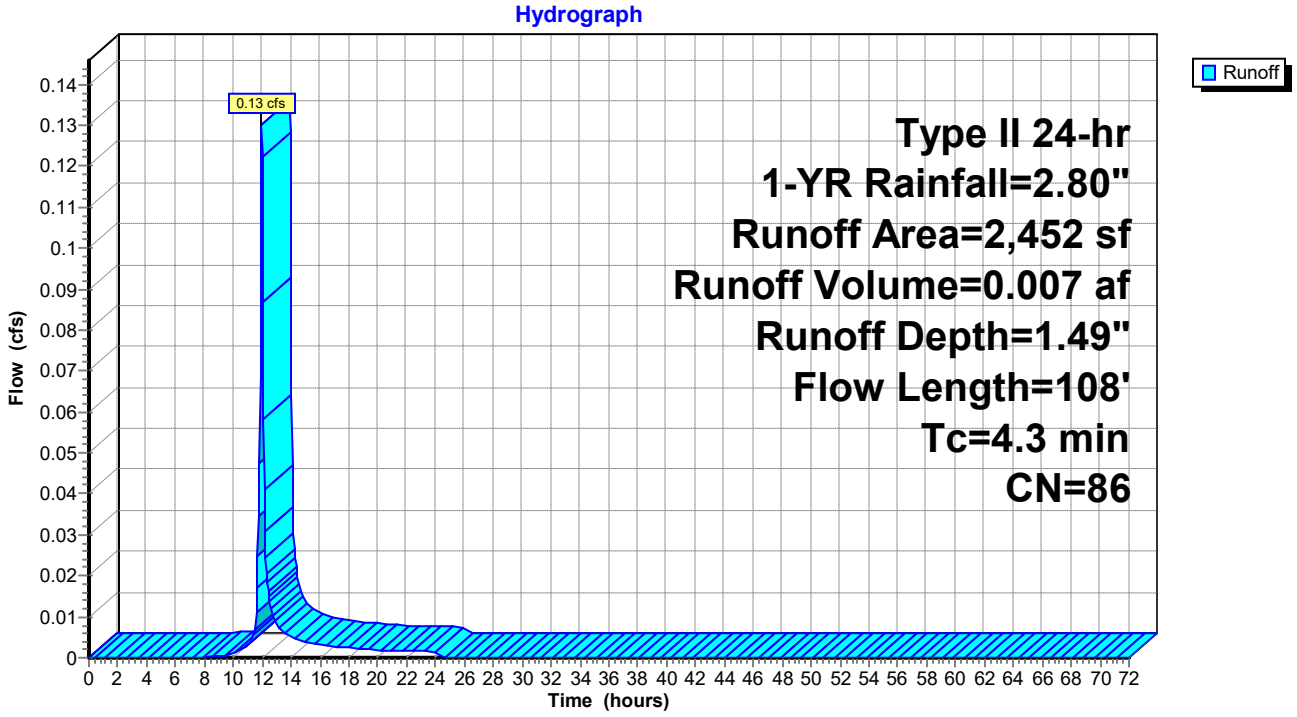
Runoff = 0.13 cfs @ 11.97 hrs, Volume= 0.007 af, Depth= 1.49"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
1,040	98	Paved parking, HSG D
928	98	Unconnected pavement, HSG D
484	39	>75% Grass cover, Good, HSG A
2,452	86	Weighted Average
484		19.74% Pervious Area
1,968		80.26% Impervious Area
928		47.15% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	7	0.0033	0.05		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.8	93	0.0057	0.85		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.2	8	0.0014	0.76		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
4.3	108	Total			

Subcatchment 31S: DA6 - PERMEABLE PAVEMENT NORTH



Summary for Subcatchment 33S: DA7 - PERMEABLE PAVEMENTEAST

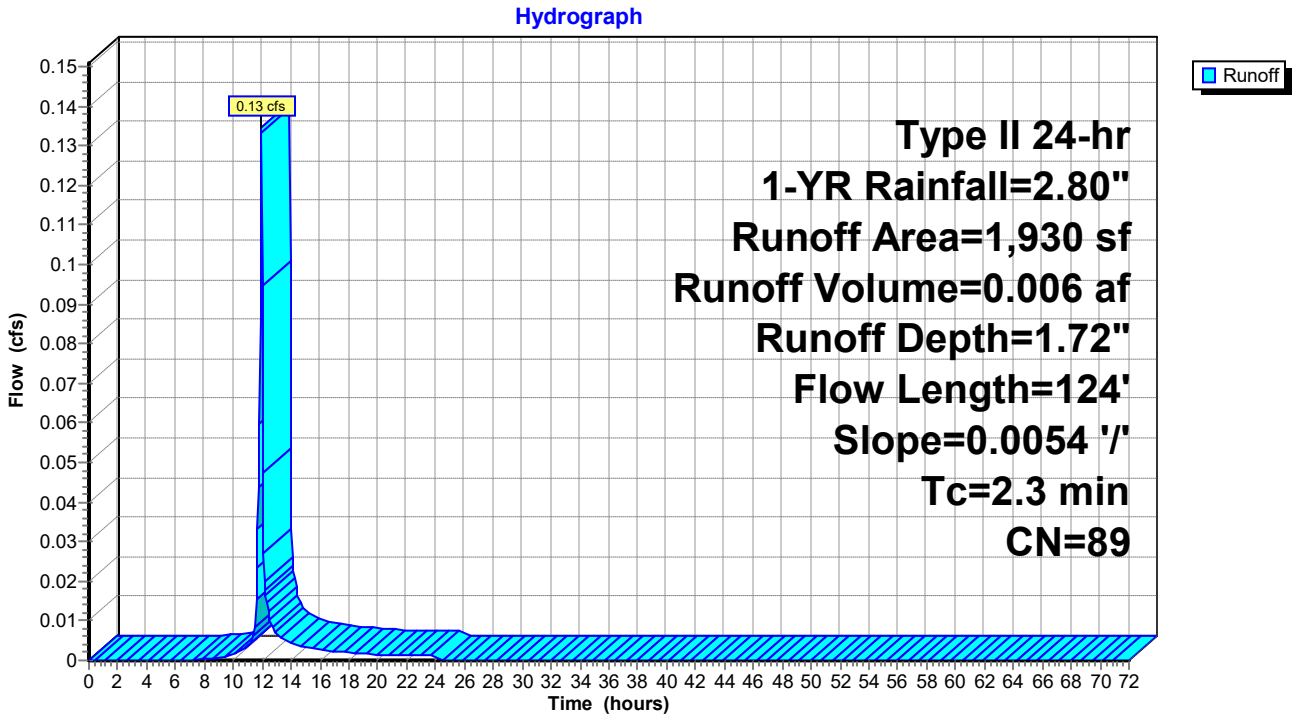
Runoff = 0.13 cfs @ 11.94 hrs, Volume= 0.006 af, Depth= 1.72"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
286	39	>75% Grass cover, Good, HSG A
1,644	98	Unconnected pavement, HSG D
1,930	89	Weighted Average
286		14.82% Pervious Area
1,644		85.18% Impervious Area
1,644		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	100	0.0054	0.84		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.3	24	0.0054	1.49		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.3	124	Total			

Subcatchment 33S: DA7 - PERMEABLE PAVEMENTEAST



Summary for Subcatchment 38S: DA8

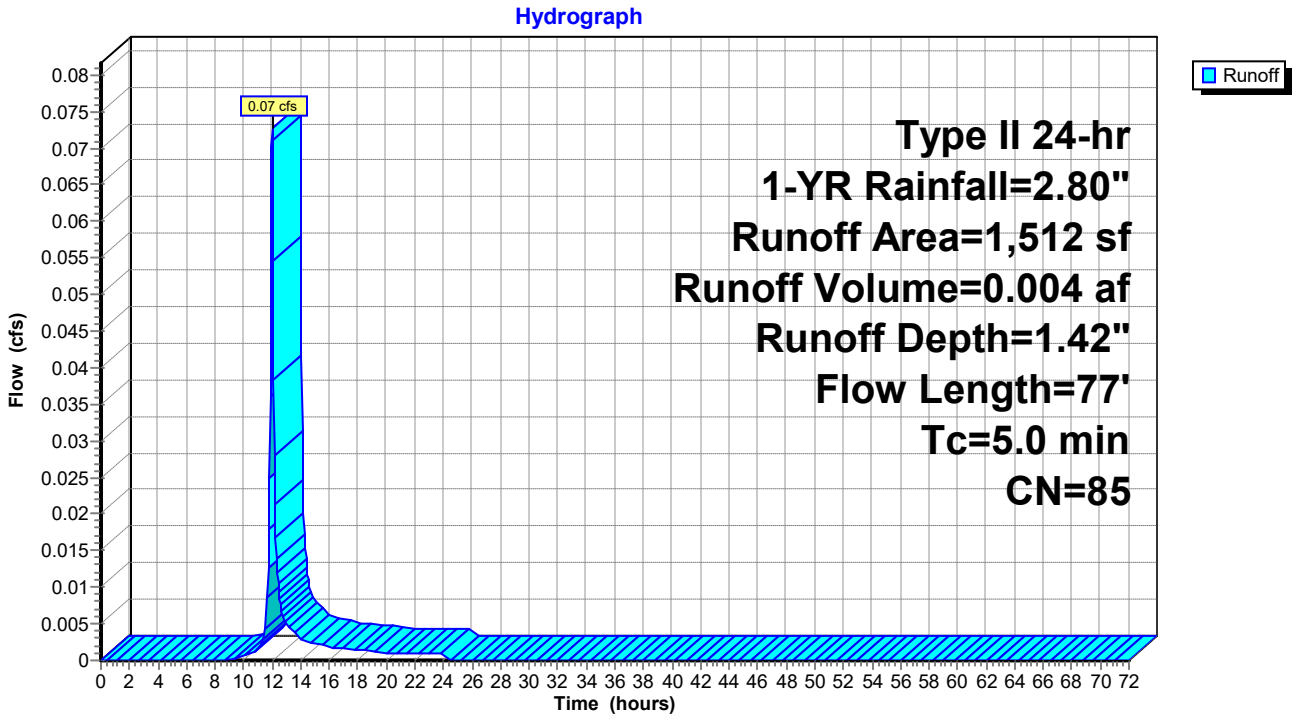
Runoff = 0.07 cfs @ 11.98 hrs, Volume= 0.004 af, Depth= 1.42"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
1,191	98	Unconnected pavement, HSG D
321	39	>75% Grass cover, Good, HSG A
1,512	85	Weighted Average
321		21.23% Pervious Area
1,191		78.77% Impervious Area
1,191		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	6	0.0010	0.03		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.7	71	0.0040	0.70		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
5.0	77	Total			

Subcatchment 38S: DA8



Summary for Subcatchment 39S: DA1

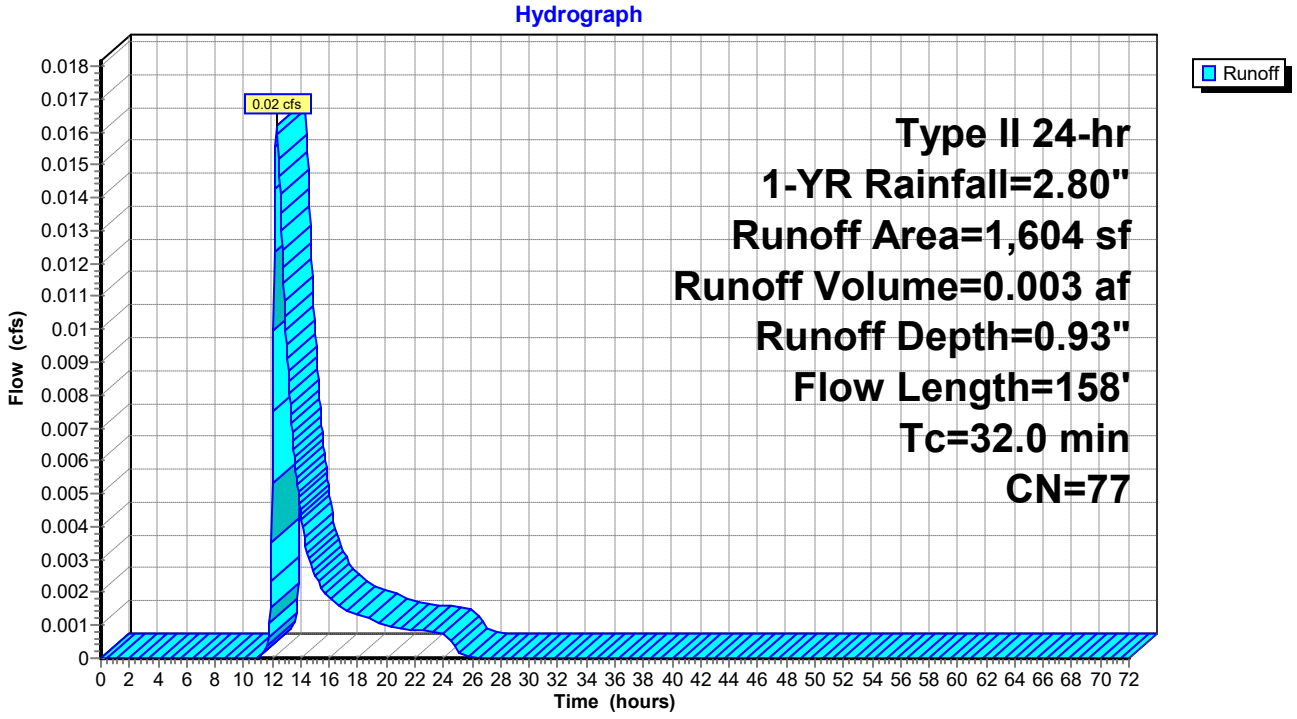
Runoff = 0.02 cfs @ 12.32 hrs, Volume= 0.003 af, Depth= 0.93"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.80"

Area (sf)	CN	Description
1,032	98	Unconnected pavement, HSG D
572	39	>75% Grass cover, Good, HSG A
1,604	77	Weighted Average
572		35.66% Pervious Area
1,032		64.34% Impervious Area
1,032		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.5	100	0.0010	0.05		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
0.2	11	0.0141	0.83		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.3	47	0.0141	2.41		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
32.0	158	Total			

Subcatchment 39S: DA1



Summary for Pond 20P: PERMEABLE PAVEMENT NORTH

Inflow Area = 0.056 ac, 80.26% Impervious, Inflow Depth = 1.49" for 1-YR event
Inflow = 0.13 cfs @ 11.97 hrs, Volume= 0.007 af
Outflow = 0.01 cfs @ 12.53 hrs, Volume= 0.007 af, Atten= 90%, Lag= 34.0 min
Discarded = 0.01 cfs @ 12.53 hrs, Volume= 0.007 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.10' @ 12.53 hrs Surf.Area= 1,001 sf Storage= 116 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 70.2 min (896.6 - 826.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.82'	403 cf	**23.00'W x 43.50'L x 1.47'H Field A** 1,467 cf Overall - 460 cf Embedded = 1,008 cf x 40.0% Voids
#2A	39.82'	103 cf	**PaveDrain S6-45** x 1075 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 25 Rows of 43 Chambers
#3B	38.82'	18 cf	**4.67'W x 9.50'L x 1.47'H Field B** -Impervious 65 cf Overall - 19 cf Embedded = 46 cf x 40.0% Voids
#4B	39.82'	4 cf	**PaveDrain S6-45** x 45 Inside #3 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 5 Rows of 9 Chambers
		528 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.82'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.19'	**43.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 12.53 hrs HW=39.10' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.82' TW=37.68' (Dynamic Tailwater)
↑—**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 20P: PERMEABLE PAVEMENT NORTH - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

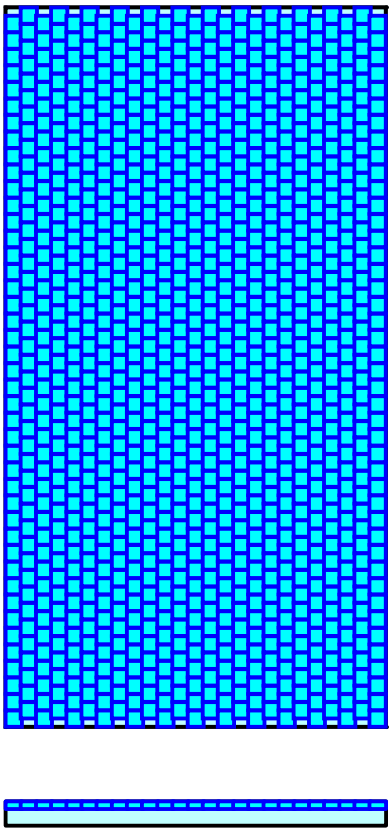
43 Chambers/Row x 1.00' Long = 43.00' Row Length +0.50' Row Offset = 43.50' Base Length
25 Rows x 12.0" Wide - 1.0" Nesting x 24 = 23.00' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

1,075 Chambers x 0.1 cf = 102.6 cf Chamber Storage
1,075 Chambers x 0.4 cf = 459.9 cf Displacement

1,467.4 cf Field - 459.9 cf Chambers = 1,007.5 cf Stone x 40.0% Voids = 403.0 cf Stone Storage

Chamber Storage + Stone Storage = 505.7 cf = 0.012 af
Overall Storage Efficiency = 34.5%
Overall System Size = 43.50' x 23.00' x 1.47'

1,075 Chambers
54.3 cy Field
37.3 cy Stone



Pond 20P: PERMEABLE PAVEMENT NORTH - Chamber Wizard Field B

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

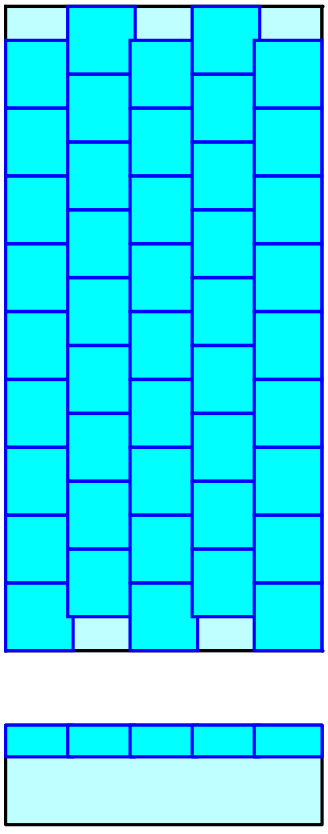
9 Chambers/Row x 1.00' Long = 9.00' Row Length +0.50' Row Offset = 9.50' Base Length
5 Rows x 12.0" Wide - 1.0" Nesting x 4 = 4.67' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

45 Chambers x 0.1 cf = 4.3 cf Chamber Storage
45 Chambers x 0.4 cf = 19.3 cf Displacement

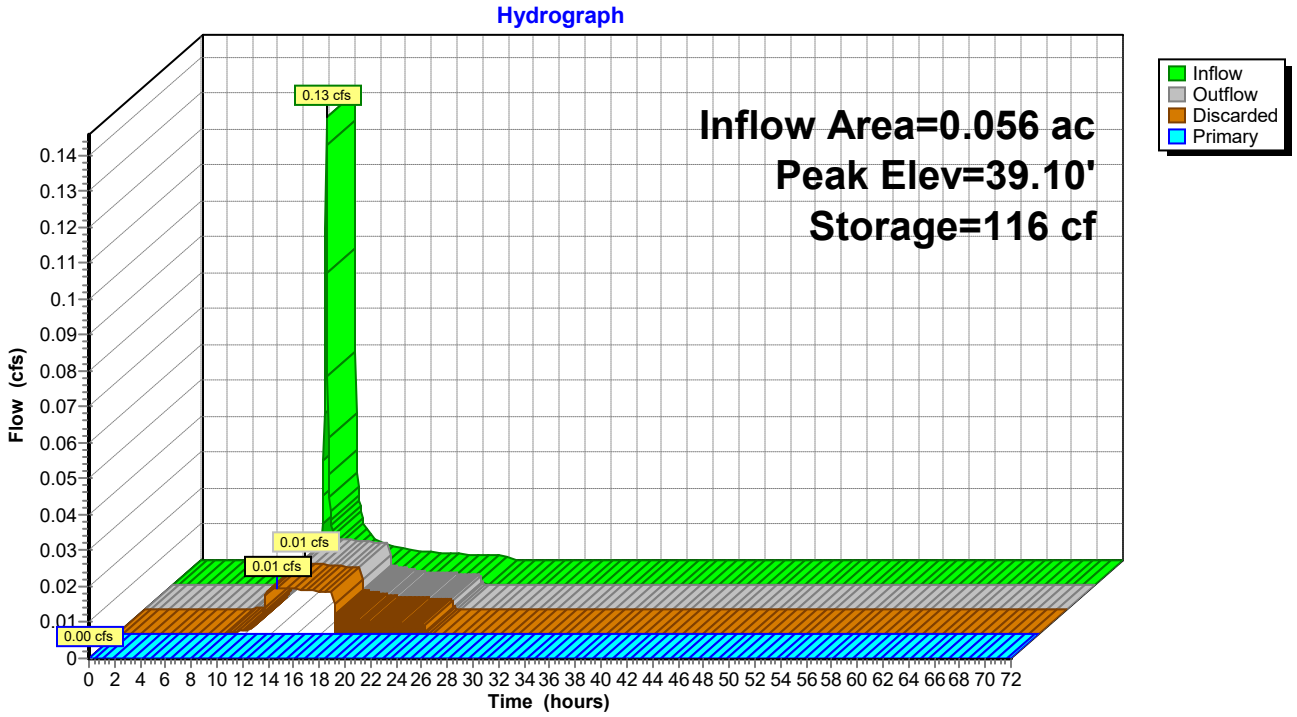
65.0 cf Field - 19.3 cf Chambers = 45.8 cf Stone x 40.0% Voids = 18.3 cf Stone Storage

Chamber Storage + Stone Storage = 22.6 cf = 0.001 af
Overall Storage Efficiency = 34.8%
Overall System Size = 9.50' x 4.67' x 1.47'

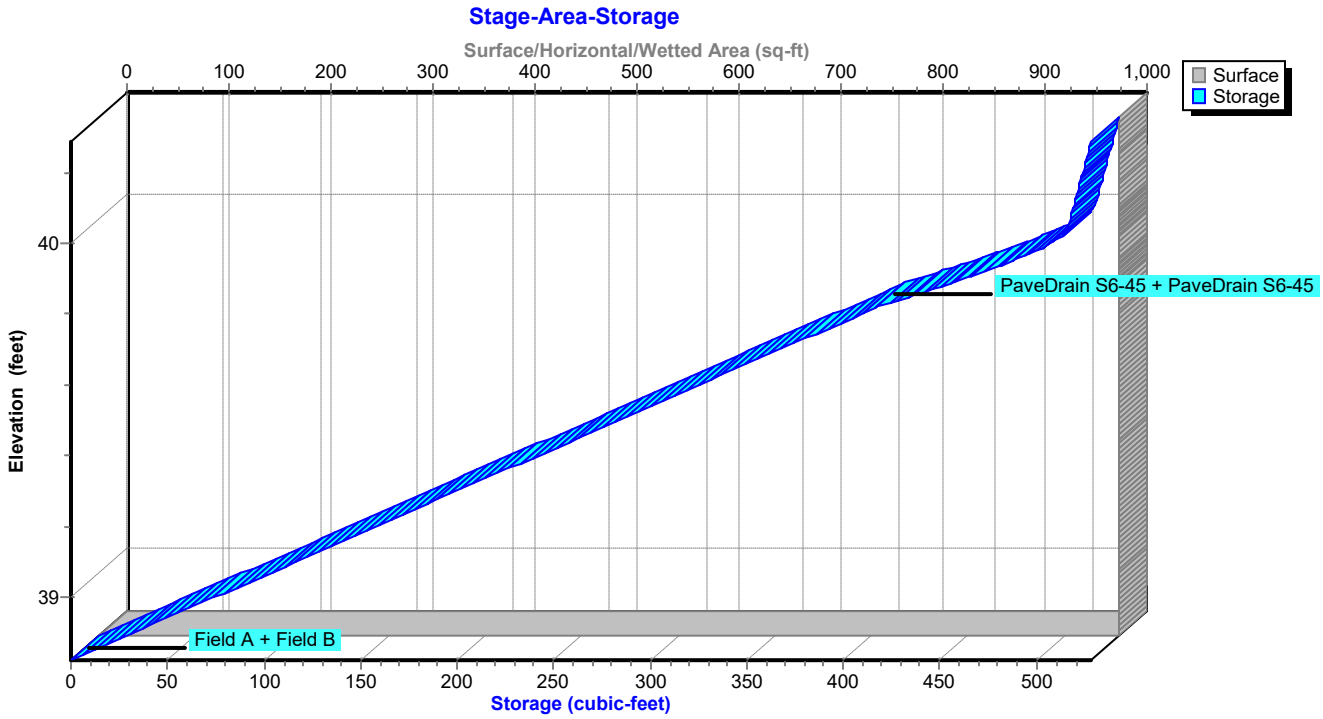
45 Chambers
2.4 cy Field
1.7 cy Stone



Pond 20P: PERMEABLE PAVEMENT NORTH



Pond 20P: PERMEABLE PAVEMENT NORTH



Summary for Pond 23P: PLANTER BOX 2

Inflow Area = 0.017 ac, 87.45% Impervious, Inflow Depth = 1.89" for 1-YR event
Inflow = 0.06 cfs @ 11.90 hrs, Volume= 0.003 af
Outflow = 0.02 cfs @ 12.02 hrs, Volume= 0.002 af, Atten= 72%, Lag= 7.0 min
Primary = 0.02 cfs @ 12.02 hrs, Volume= 0.002 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.50' @ 12.02 hrs Surf.Area= 92 sf Storage= 41 cf

Plug-Flow detention time= 65.2 min calculated for 0.002 af (94% of inflow)
Center-of-Mass det. time= 31.2 min (831.0 - 799.8)

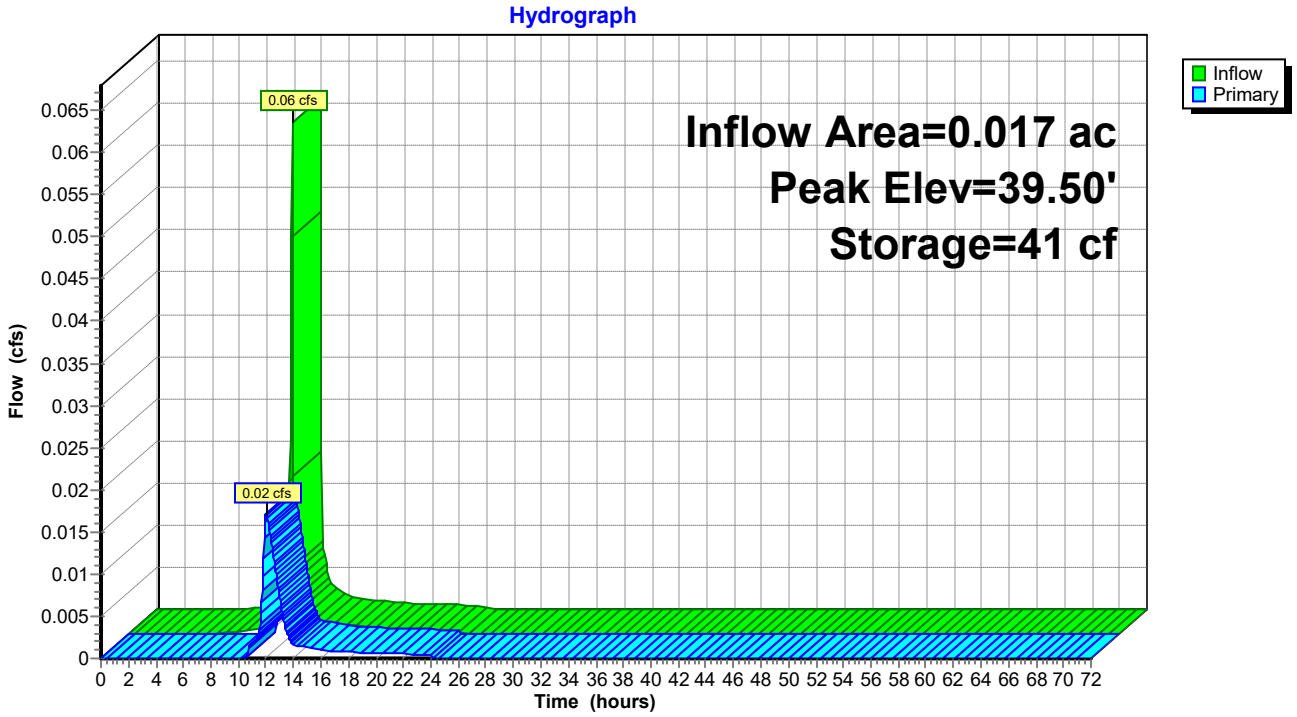
Volume	Invert	Avail.Storage	Storage Description
#1	38.40'	2,745 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
38.40	92	0.0	0	0
38.41	92	40.0	0	0
41.92	92	40.0	129	130
41.93	92	100.0	1	130
42.92	92	100.0	91	222
43.42	10,000	100.0	2,523	2,745

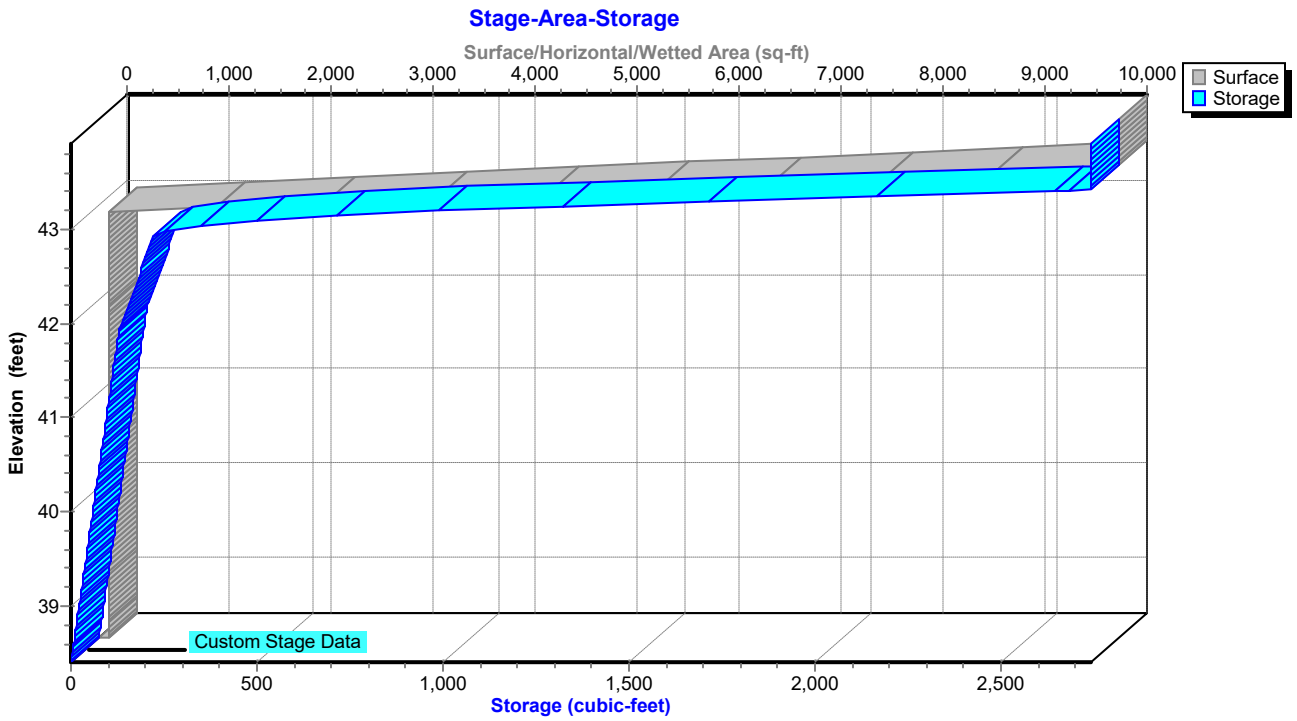
Device	Routing	Invert	Outlet Devices
#1	Primary	37.75'	**12.0" Round Culvert** L= 106.5' Ke= 0.500 Inlet / Outlet Invert= 37.75' / 37.60' S= 0.0014 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	38.42'	**4.0" Round Culvert** L= 8.6' Ke= 0.500 Inlet / Outlet Invert= 38.42' / 37.75' S= 0.0779 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 2	38.59'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	43.41'	**7.5' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.02 cfs @ 12.02 hrs HW=39.49' TW=37.68' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.02 cfs of 3.02 cfs potential flow)
  - **2=Culvert** (Passes 0.02 cfs of 0.40 cfs potential flow)
    - **3=Orifice/Grate** (Orifice Controls 0.02 cfs @ 4.58 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 23P: PLANTER BOX 2



Pond 23P: PLANTER BOX 2



Summary for Pond 24P: PLANTER BOX 1

Inflow Area = 0.030 ac, 91.38% Impervious, Inflow Depth = 2.06" for 1-YR event
Inflow = 0.11 cfs @ 11.91 hrs, Volume= 0.005 af
Outflow = 0.02 cfs @ 12.05 hrs, Volume= 0.005 af, Atten= 79%, Lag= 8.6 min
Primary = 0.02 cfs @ 12.05 hrs, Volume= 0.005 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.79' @ 12.05 hrs Surf.Area= 111 sf Storage= 83 cf

Plug-Flow detention time= 64.0 min calculated for 0.005 af (96% of inflow)
Center-of-Mass det. time= 40.2 min (830.3 - 790.2)

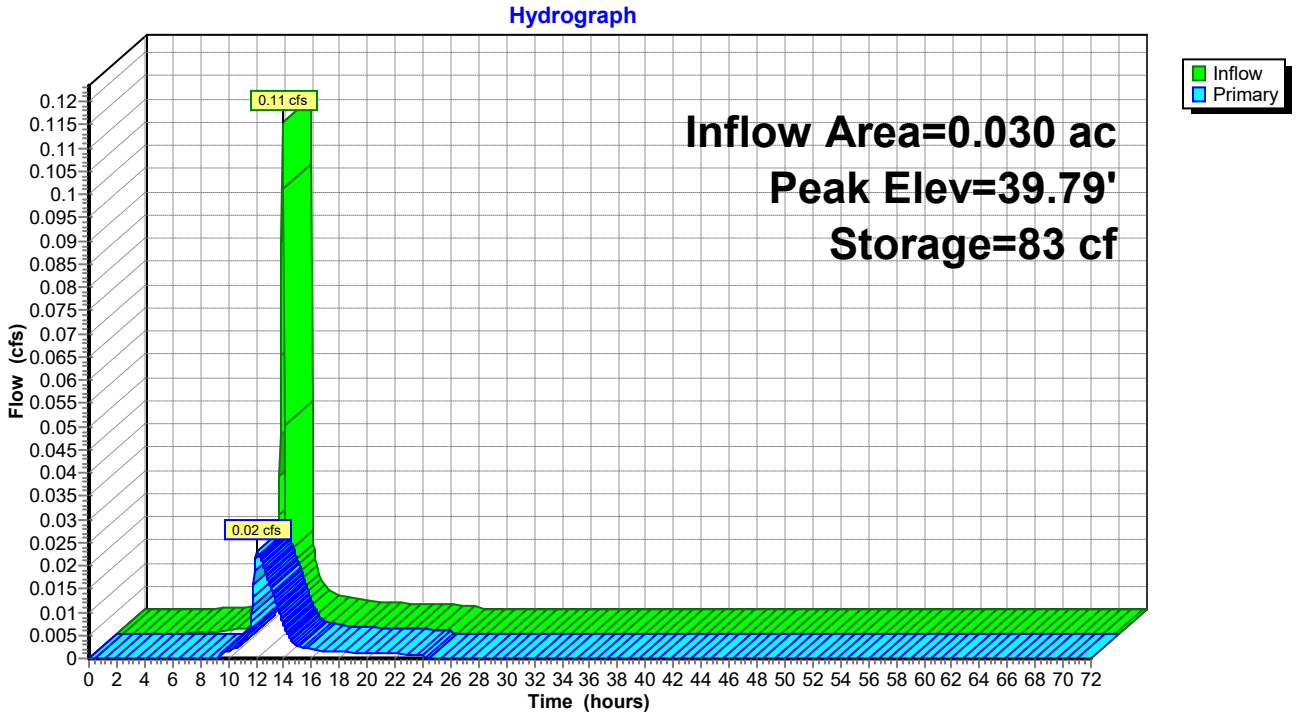
Volume	Invert	Avail.Storage	Storage Description
#1	37.92'	2,818 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.92	111	0.0	0	0
37.93	111	40.0	0	0
41.95	111	40.0	178	179
41.96	111	100.0	1	180
42.95	111	100.0	110	290
43.45	10,000	100.0	2,528	2,818

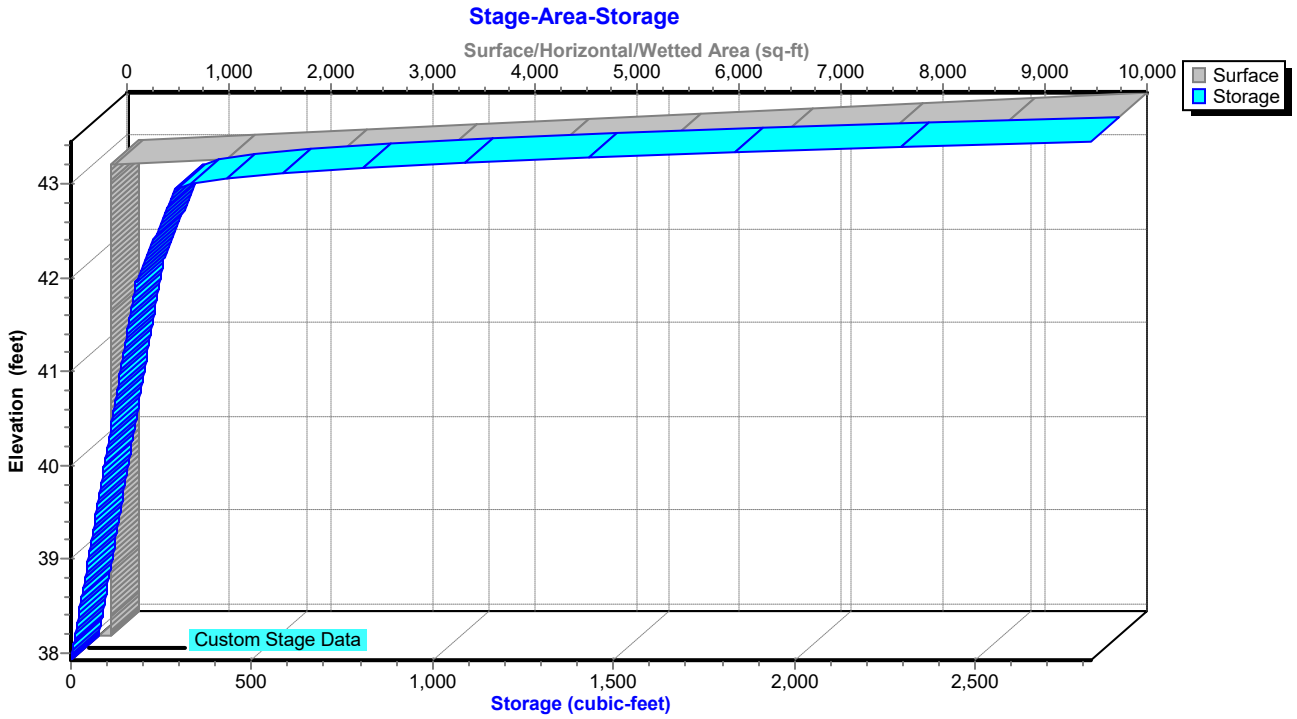
Device	Routing	Invert	Outlet Devices
#1	Primary	37.73'	**12.0" Round Culvert** L= 87.6' Ke= 0.500 Inlet / Outlet Invert= 37.73' / 37.60' S= 0.0015 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	37.95'	**4.0" Round Culvert** L= 4.8' Ke= 0.500 Inlet / Outlet Invert= 37.95' / 37.73' S= 0.0458 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 2	38.12'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	42.95'	**7.5' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.02 cfs @ 12.05 hrs HW=39.79' TW=37.68' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.02 cfs of 3.69 cfs potential flow)
  - **2=Culvert** (Passes 0.02 cfs of 0.54 cfs potential flow)
    - **3=Orifice/Grate** (Orifice Controls 0.02 cfs @ 6.22 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 24P: PLANTER BOX 1



Pond 24P: PLANTER BOX 1



Summary for Pond 25P: PLANTER BOX 3

Inflow Area = 0.035 ac, 94.51% Impervious, Inflow Depth = 2.25" for 1-YR event
Inflow = 0.14 cfs @ 11.91 hrs, Volume= 0.007 af
Outflow = 0.12 cfs @ 11.93 hrs, Volume= 0.007 af, Atten= 10%, Lag= 1.6 min
Primary = 0.12 cfs @ 11.93 hrs, Volume= 0.007 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.48' @ 11.94 hrs Surf.Area= 83 sf Storage= 16 cf

Plug-Flow detention time= 8.9 min calculated for 0.007 af (100% of inflow)
Center-of-Mass det. time= 8.4 min (786.3 - 777.9)

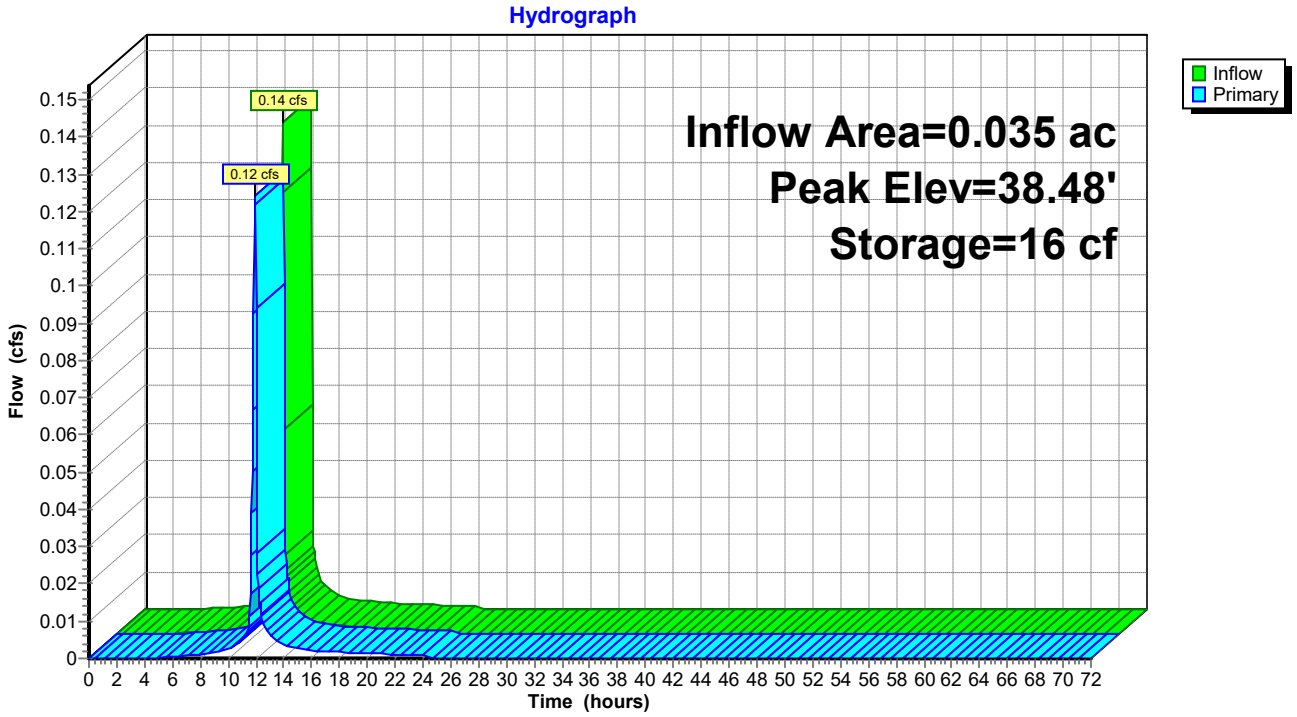
Volume	Invert	Avail.Storage	Storage Description
#1	37.99'	2,667 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.99	83	0.0	0	0
38.00	83	40.0	0	0
41.14	83	40.0	104	105
41.15	83	100.0	1	105
41.64	83	100.0	41	146
42.14	10,000	100.0	2,521	2,667

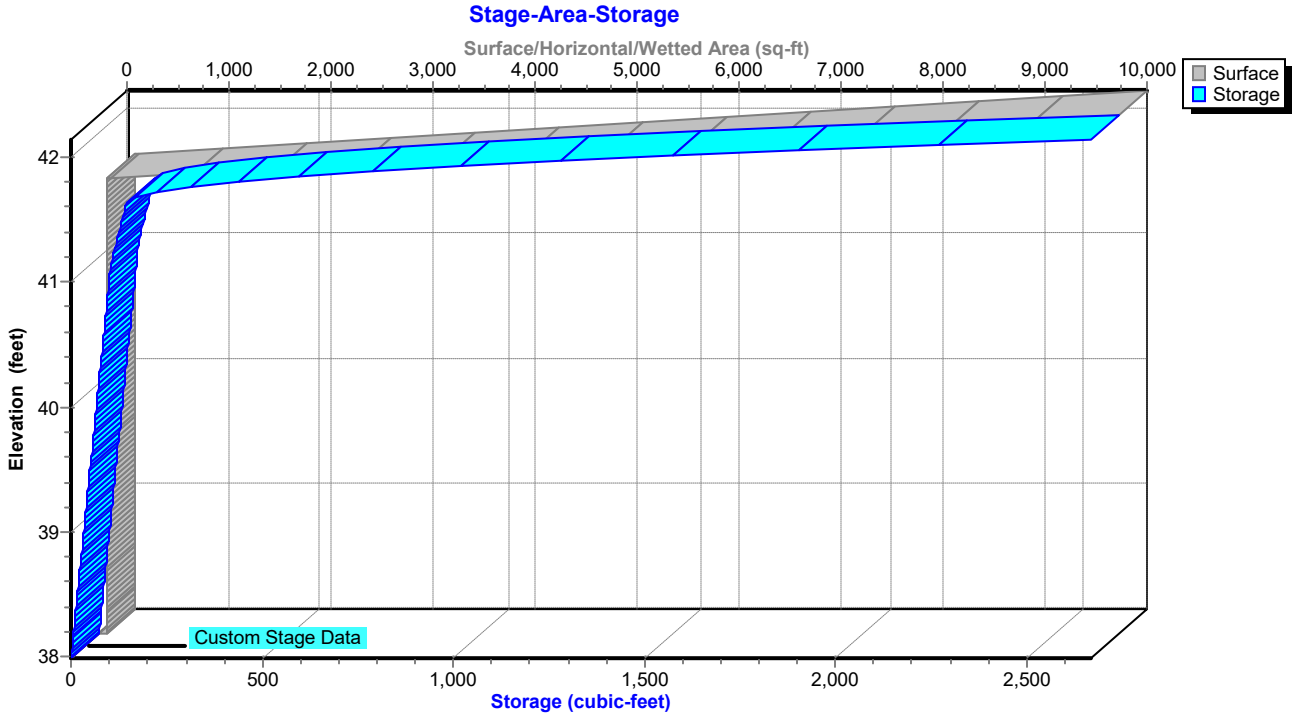
Device	Routing	Invert	Outlet Devices
#1	Primary	38.00'	**4.0" Round Culvert** L= 52.5' Ke= 0.500 Inlet / Outlet Invert= 38.00' / 37.94' S= 0.0011 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#2	Device 1	38.00'	**4.0" Round Culvert** L= 4.9' Ke= 0.500 Inlet / Outlet Invert= 38.00' / 38.00' S= 0.0000 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 1	38.17'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	41.64'	**8.7' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.12 cfs @ 11.93 hrs HW=38.46' TW=38.22' (Dynamic Tailwater)
- **1=Culvert** (Barrel Controls 0.12 cfs @ 1.34 fps)
  - **2=Culvert** (Passes < 0.18 cfs potential flow)
  - **3=Orifice/Grate** (Passes < 0.01 cfs potential flow)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 25P: PLANTER BOX 3



Pond 25P: PLANTER BOX 3



Summary for Pond 26P: PLANTER BOX 4

Inflow Area = 0.016 ac, 87.72% Impervious, Inflow Depth = 1.89" for 1-YR event
Inflow = 0.05 cfs @ 11.91 hrs, Volume= 0.002 af
Outflow = 0.05 cfs @ 11.93 hrs, Volume= 0.002 af, Atten= 11%, Lag= 0.9 min
Primary = 0.05 cfs @ 11.93 hrs, Volume= 0.002 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.24' @ 11.97 hrs Surf.Area= 85 sf Storage= 11 cf

Plug-Flow detention time= 23.9 min calculated for 0.002 af (99% of inflow)
Center-of-Mass det. time= 18.7 min (819.3 - 800.6)

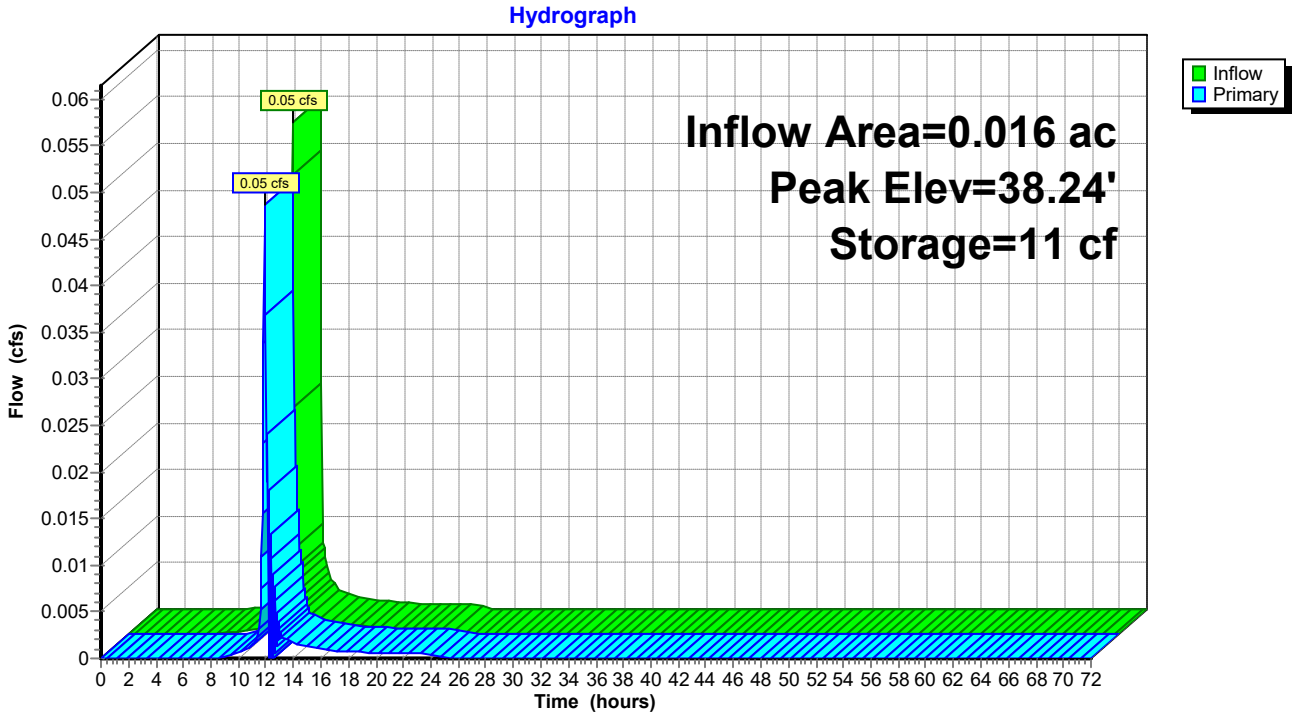
Volume	Invert	Avail.Storage	Storage Description
#1	37.91'	2,682 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.91	85	0.0	0	0
37.92	85	40.0	0	0
41.40	85	40.0	118	119
41.41	85	100.0	1	120
41.90	85	100.0	42	161
42.40	10,000	100.0	2,521	2,682

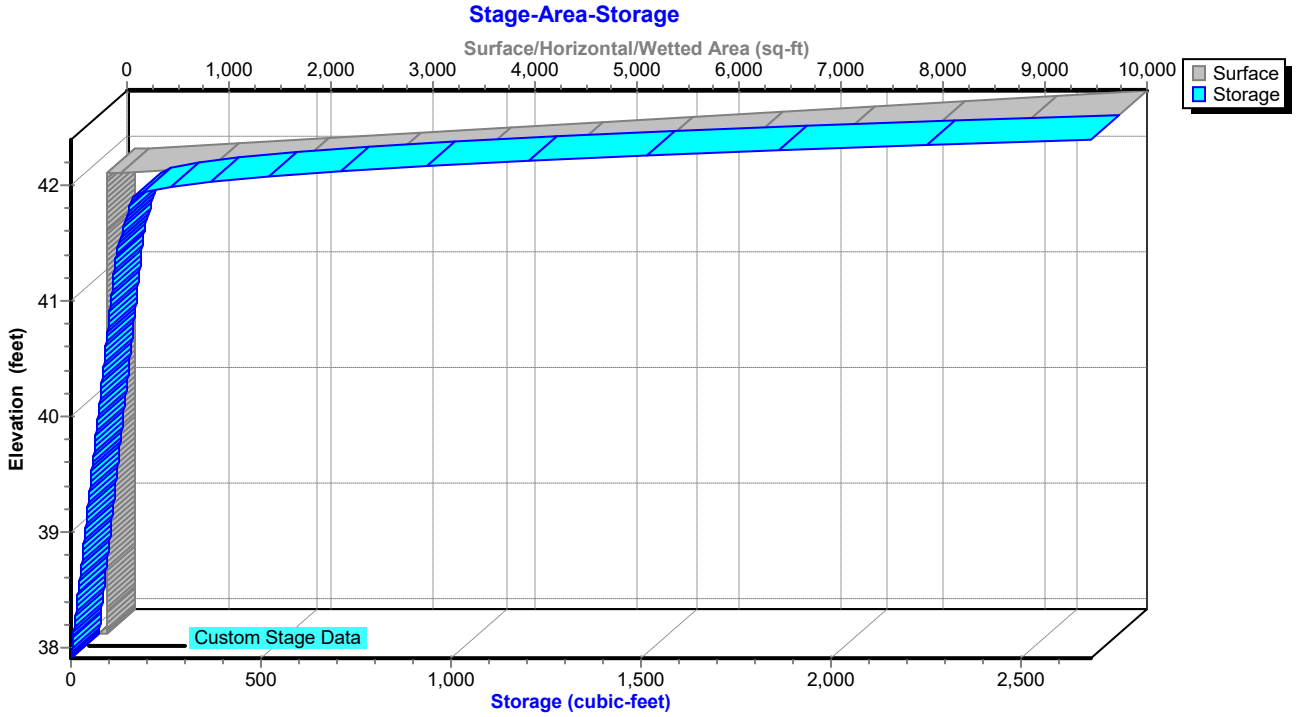
Device	Routing	Invert	Outlet Devices
#1	Primary	37.94'	**4.0" Round Culvert** L= 9.5' Ke= 0.500 Inlet / Outlet Invert= 37.94' / 37.93' S= 0.0011 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#2	Device 1	37.94'	**4.0" Round Culvert** L= 4.3' Ke= 0.500 Inlet / Outlet Invert= 37.94' / 37.94' S= 0.0000 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 1	38.11'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	41.90'	**8.7' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.00 cfs @ 11.93 hrs HW=38.22' TW=38.22' (Dynamic Tailwater)
- **1=Culvert** (Controls 0.00 cfs)
  - **2=Culvert** (Controls 0.00 cfs)
  - **3=Orifice/Grate** (Controls 0.00 cfs)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 26P: PLANTER BOX 4



Pond 26P: PLANTER BOX 4



Summary for Pond 31P: (new Pond)

Inflow Area = 0.004 ac, 81.82% Impervious, Inflow Depth = 2.36" for 1-YR event
Inflow = 0.02 cfs @ 11.91 hrs, Volume= 0.001 af
Outflow = 0.00 cfs @ 12.63 hrs, Volume= 0.001 af, Atten= 94%, Lag= 43.1 min
Discarded = 0.00 cfs @ 12.63 hrs, Volume= 0.001 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.30' @ 12.63 hrs Surf.Area= 0.001 ac Storage= 0.000 af

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 127.8 min (898.4 - 770.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.74'	0.001 af	**2.83'W x 21.50'L x 1.47'H Field A** 0.002 af Overall - 0.001 af Embedded = 0.001 af x 40.0% Voids
#2A	39.74'	0.000 af	**PaveDrain S6-45** x 63 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 3 Rows of 21 Chambers
		0.001 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.74'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.21'	**24.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.00 cfs @ 12.63 hrs HW=39.30' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.74' TW=37.68' (Dynamic Tailwater)
↑—**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 31P: (new Pond) - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

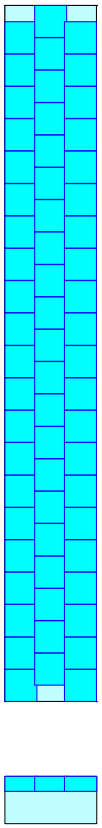
21 Chambers/Row x 1.00' Long = 21.00' Row Length +0.50' Row Offset = 21.50' Base Length
3 Rows x 12.0" Wide - 1.0" Nesting x 2 = 2.83' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

63 Chambers x 0.1 cf = 6.0 cf Chamber Storage
63 Chambers x 0.4 cf = 27.0 cf Displacement

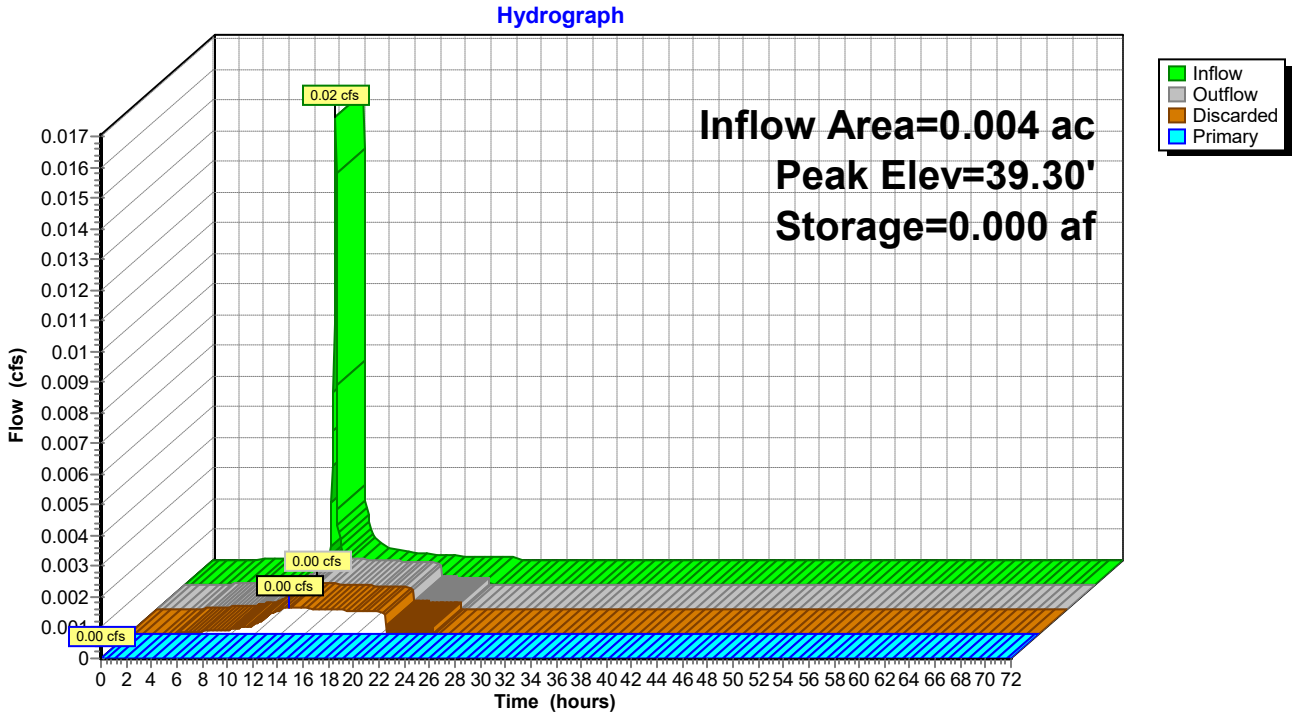
89.3 cf Field - 27.0 cf Chambers = 62.4 cf Stone x 40.0% Voids = 25.0 cf Stone Storage

Chamber Storage + Stone Storage = 31.0 cf = 0.001 af
Overall Storage Efficiency = 34.7%
Overall System Size = 21.50' x 2.83' x 1.47'

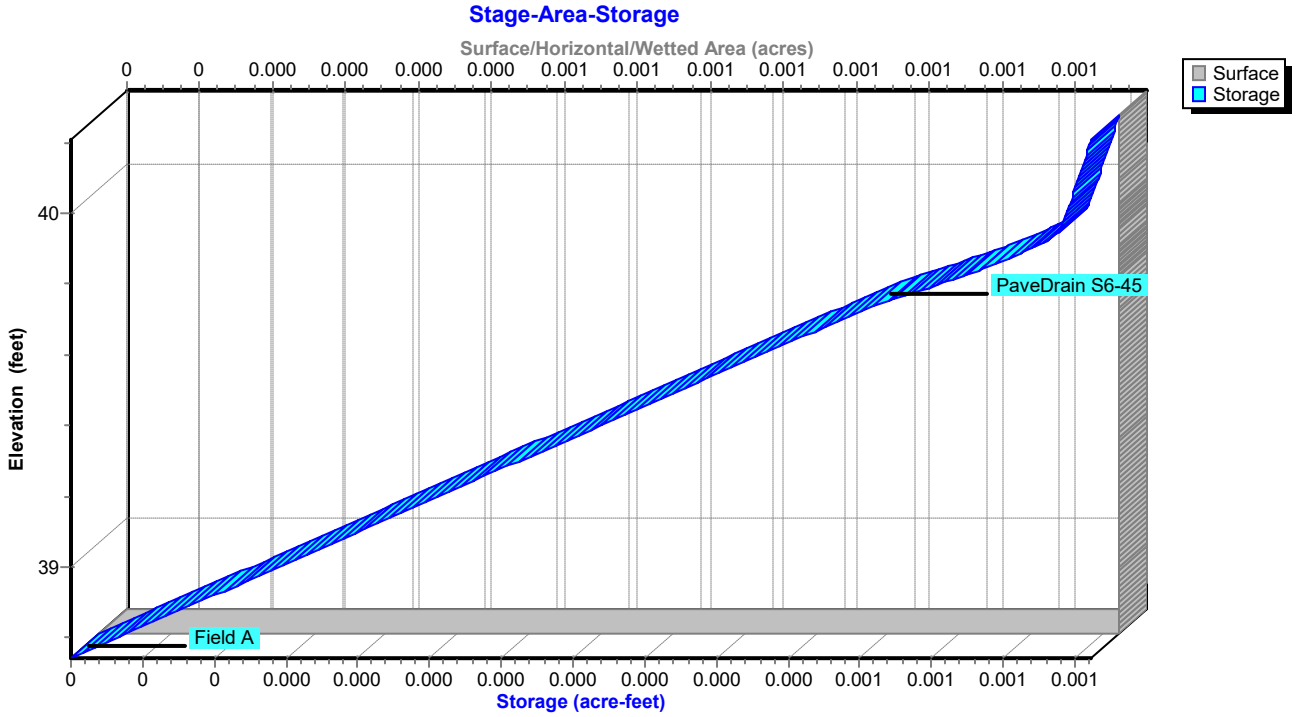
63 Chambers
3.3 cy Field
2.3 cy Stone



Pond 31P: (new Pond)



Pond 31P: (new Pond)



Summary for Pond 32P: CURB INLET 1

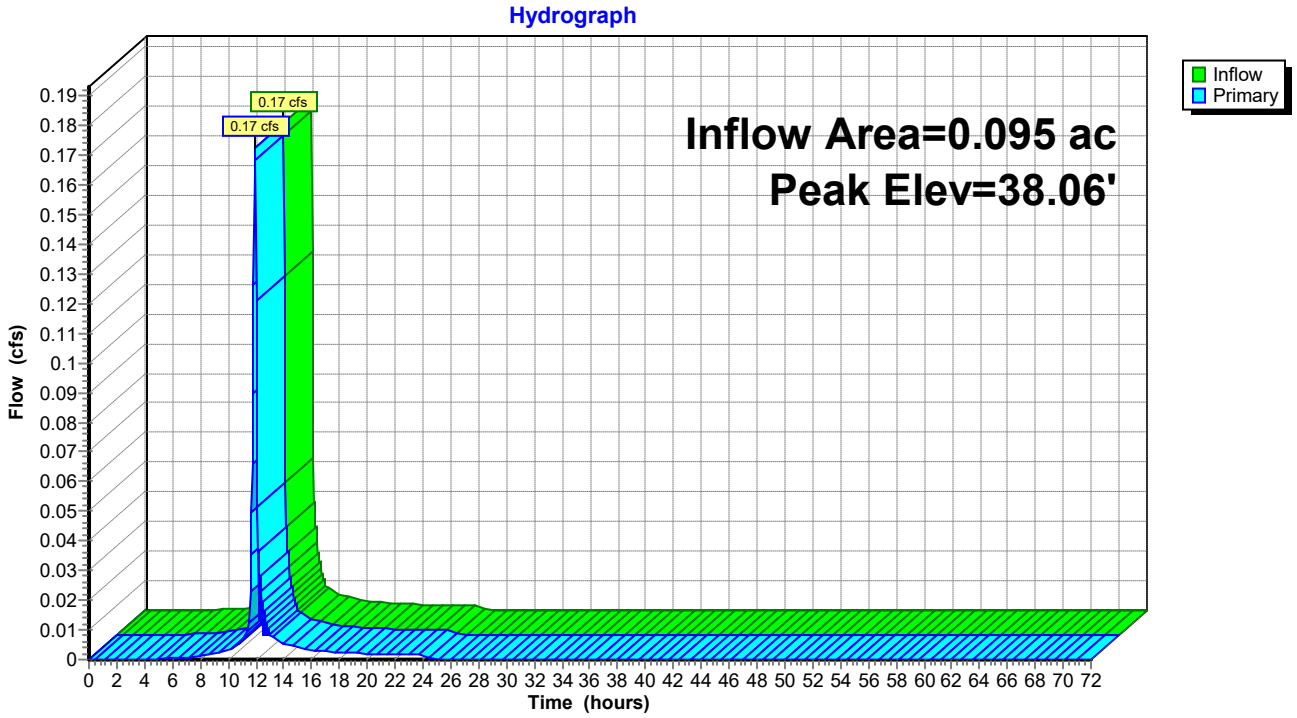
Inflow Area = 0.095 ac, 89.02% Impervious, Inflow Depth = 1.14" for 1-YR event
Inflow = 0.17 cfs @ 11.93 hrs, Volume= 0.009 af
Outflow = 0.17 cfs @ 11.93 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min
Primary = 0.17 cfs @ 11.93 hrs, Volume= 0.009 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.06' @ 11.93 hrs

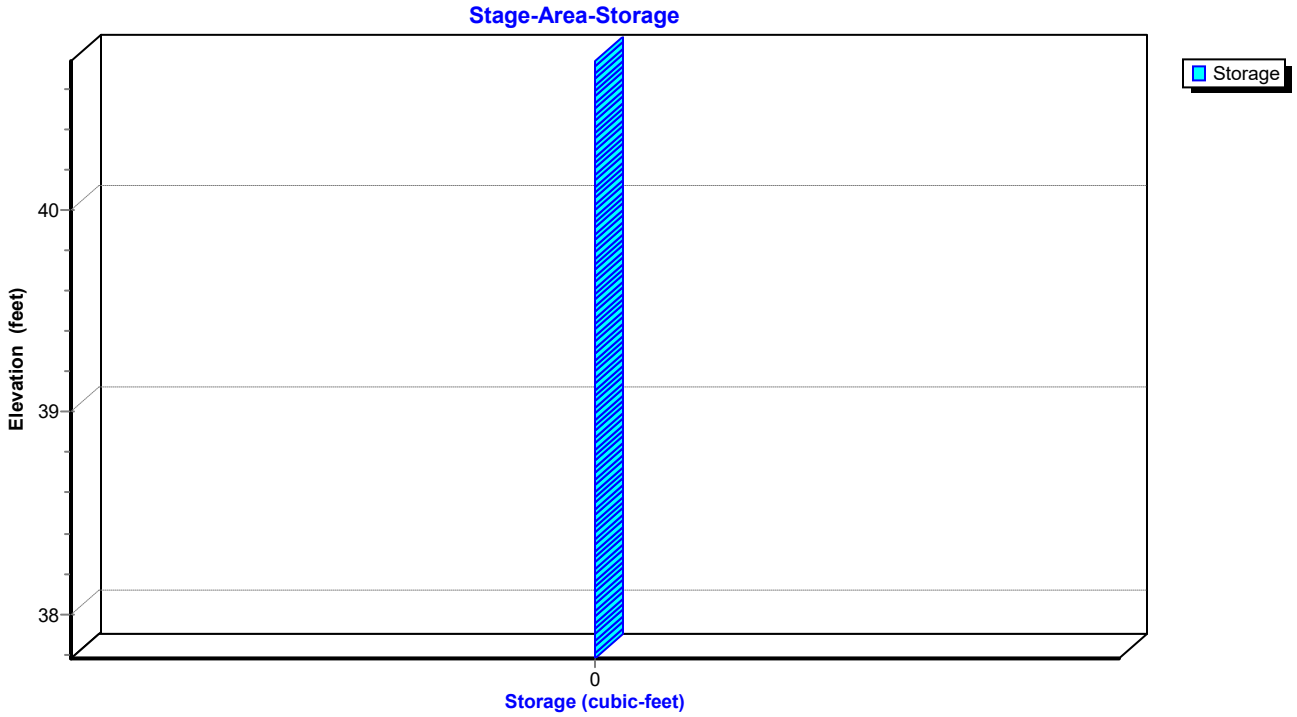
Device	Routing	Invert	Outlet Devices
#1	Primary	37.78'	**12.0" Round Culvert** L= 25.1' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 37.78' / 37.75' S= 0.0012 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Primary	40.40'	**66.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=0.17 cfs @ 11.93 hrs HW=38.05' TW=37.68' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.17 cfs @ 1.46 fps)
2=Orifice/Grate (Controls 0.00 cfs)

Pond 32P: CURB INLET 1



Pond 32P: CURB INLET 1



Summary for Pond 33P: CURB INLET 2

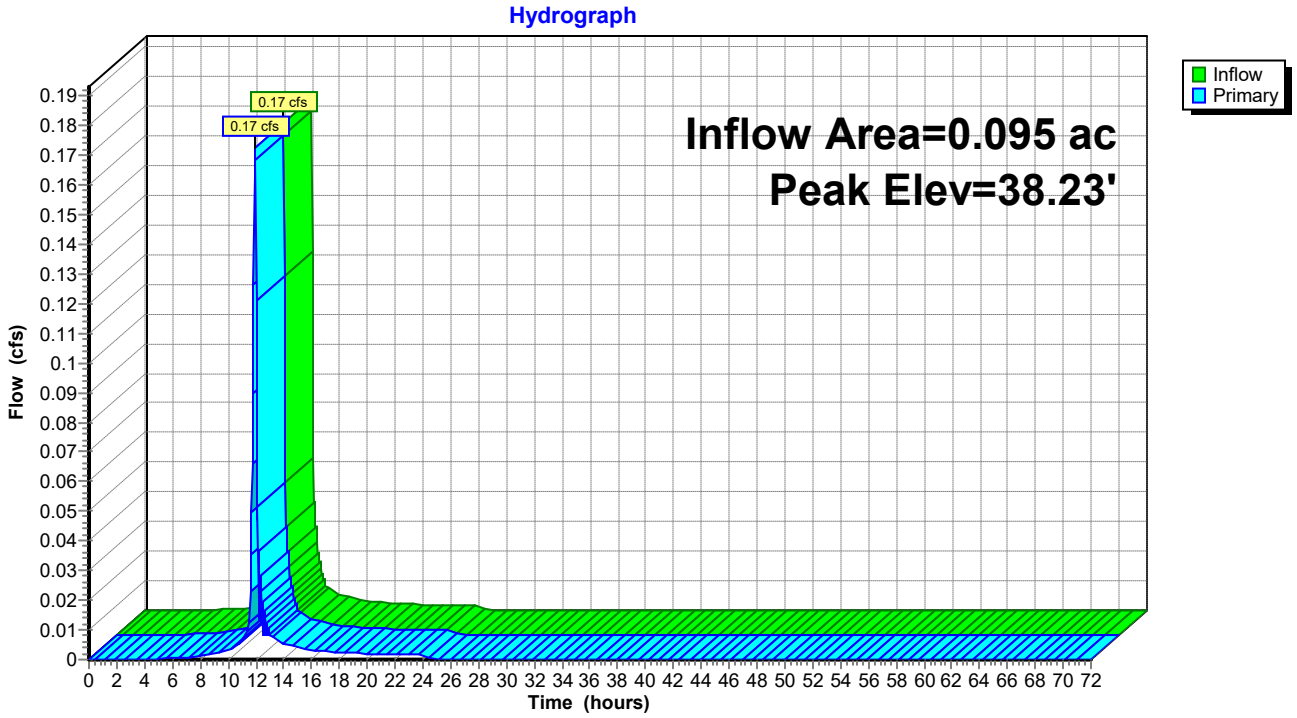
Inflow Area = 0.095 ac, 89.02% Impervious, Inflow Depth = 1.14" for 1-YR event
Inflow = 0.17 cfs @ 11.93 hrs, Volume= 0.009 af
Outflow = 0.17 cfs @ 11.93 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min
Primary = 0.17 cfs @ 11.93 hrs, Volume= 0.009 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.23' @ 11.94 hrs

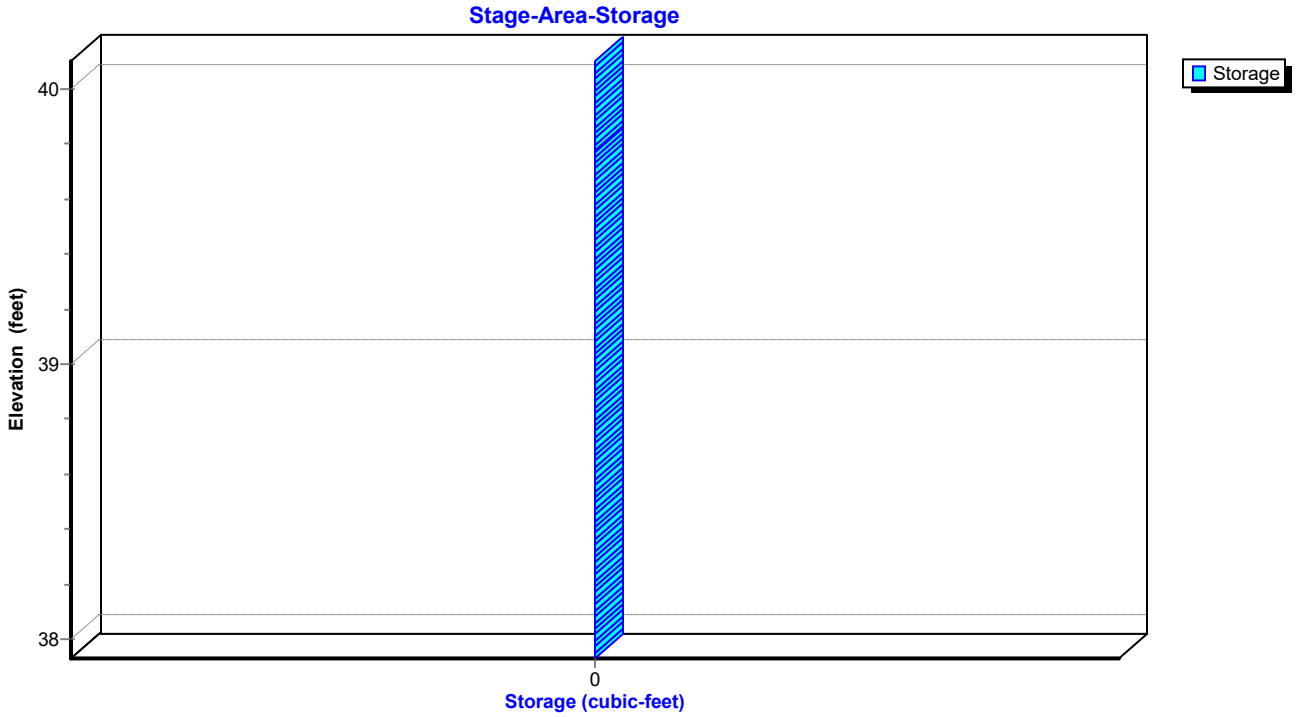
Device	Routing	Invert	Outlet Devices
#1	Primary	37.93'	**12.0" Round Culvert** L= 102.9' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 37.93' / 37.78' S= 0.0015 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Primary	39.77'	**66.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=0.16 cfs @ 11.93 hrs HW=38.22' TW=38.05' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.16 cfs @ 1.26 fps)
└─**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 33P: CURB INLET 2



Pond 33P: CURB INLET 2



Summary for Pond 34P: PERMEABLE PAVEMENT EAST

Inflow Area = 0.044 ac, 85.18% Impervious, Inflow Depth = 1.72" for 1-YR event
Inflow = 0.13 cfs @ 11.94 hrs, Volume= 0.006 af
Outflow = 0.01 cfs @ 12.59 hrs, Volume= 0.006 af, Atten= 93%, Lag= 39.3 min
Discarded = 0.01 cfs @ 12.59 hrs, Volume= 0.006 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.13' @ 12.59 hrs Surf.Area= 679 sf Storage= 115 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 104.2 min (915.7 - 811.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.71'	200 cf	**5.58'W x 88.50'L x 1.47'H Field A** 725 cf Overall - 226 cf Embedded = 499 cf x 40.0% Voids
#2A	39.71'	50 cf	**PaveDrain S6-45** x 528 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 6 Rows of 88 Chambers
#3B	38.71'	28 cf	**7.42'W x 18.50'L x 0.97'H Field B** 133 cf Overall - 62 cf Embedded = 71 cf x 40.0% Voids
#4B	39.21'	14 cf	**PaveDrain S6-45** x 144 Inside #3 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 8 Rows of 18 Chambers
#5C	38.71'	20 cf	**5.58'W x 8.50'L x 1.47'H Field C** 70 cf Overall - 21 cf Embedded = 49 cf x 40.0% Voids
#6C	39.71'	5 cf	**PaveDrain S6-45** x 48 Inside #5 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 6 Rows of 8 Chambers
		316 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard
Storage Group C created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.71'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.16'	**88.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 12.59 hrs HW=39.13' (Free Discharge)
1=Exfiltration (Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.71' TW=37.93' (Dynamic Tailwater)
2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

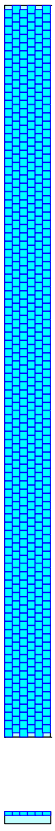
88 Chambers/Row x 1.00' Long = 88.00' Row Length +0.50' Row Offset = 88.50' Base Length
6 Rows x 12.0" Wide - 1.0" Nesting x 5 = 5.58' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

528 Chambers x 0.1 cf = 50.4 cf Chamber Storage
528 Chambers x 0.4 cf = 225.9 cf Displacement

724.7 cf Field - 225.9 cf Chambers = 498.8 cf Stone x 40.0% Voids = 199.5 cf Stone Storage

Chamber Storage + Stone Storage = 250.0 cf = 0.006 af
Overall Storage Efficiency = 34.5%
Overall System Size = 88.50' x 5.58' x 1.47'

528 Chambers
26.8 cy Field
18.5 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field B

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

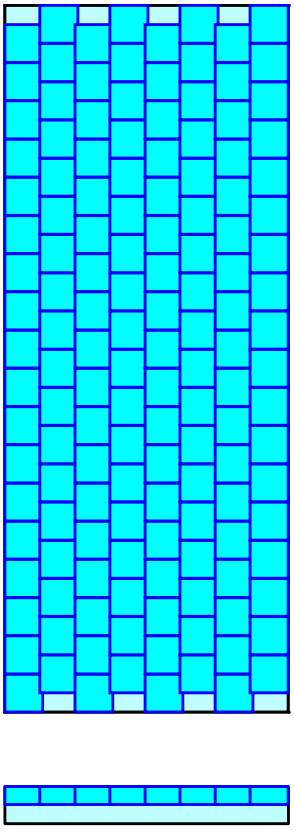
18 Chambers/Row x 1.00' Long = 18.00' Row Length +0.50' Row Offset = 18.50' Base Length
8 Rows x 12.0" Wide - 1.0" Nesting x 7 = 7.42' Base Width
6.0" Base + 5.6" Chamber Height = 0.97' Field Height

144 Chambers x 0.1 cf = 13.7 cf Chamber Storage
144 Chambers x 0.4 cf = 61.6 cf Displacement

132.6 cf Field - 61.6 cf Chambers = 71.0 cf Stone x 40.0% Voids = 28.4 cf Stone Storage

Chamber Storage + Stone Storage = 42.2 cf = 0.001 af
Overall Storage Efficiency = 31.8%
Overall System Size = 18.50' x 7.42' x 0.97'

144 Chambers
4.9 cy Field
2.6 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field C

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

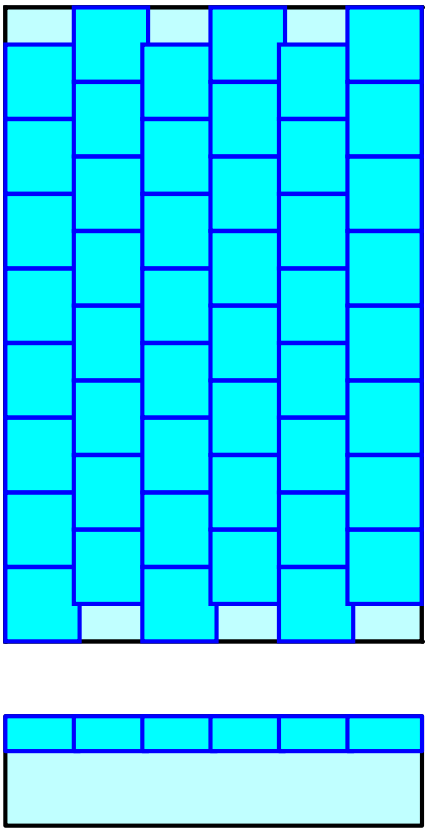
8 Chambers/Row x 1.00' Long = 8.00' Row Length +0.50' Row Offset = 8.50' Base Length
6 Rows x 12.0" Wide - 1.0" Nesting x 5 = 5.58' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

48 Chambers x 0.1 cf = 4.6 cf Chamber Storage
48 Chambers x 0.4 cf = 20.5 cf Displacement

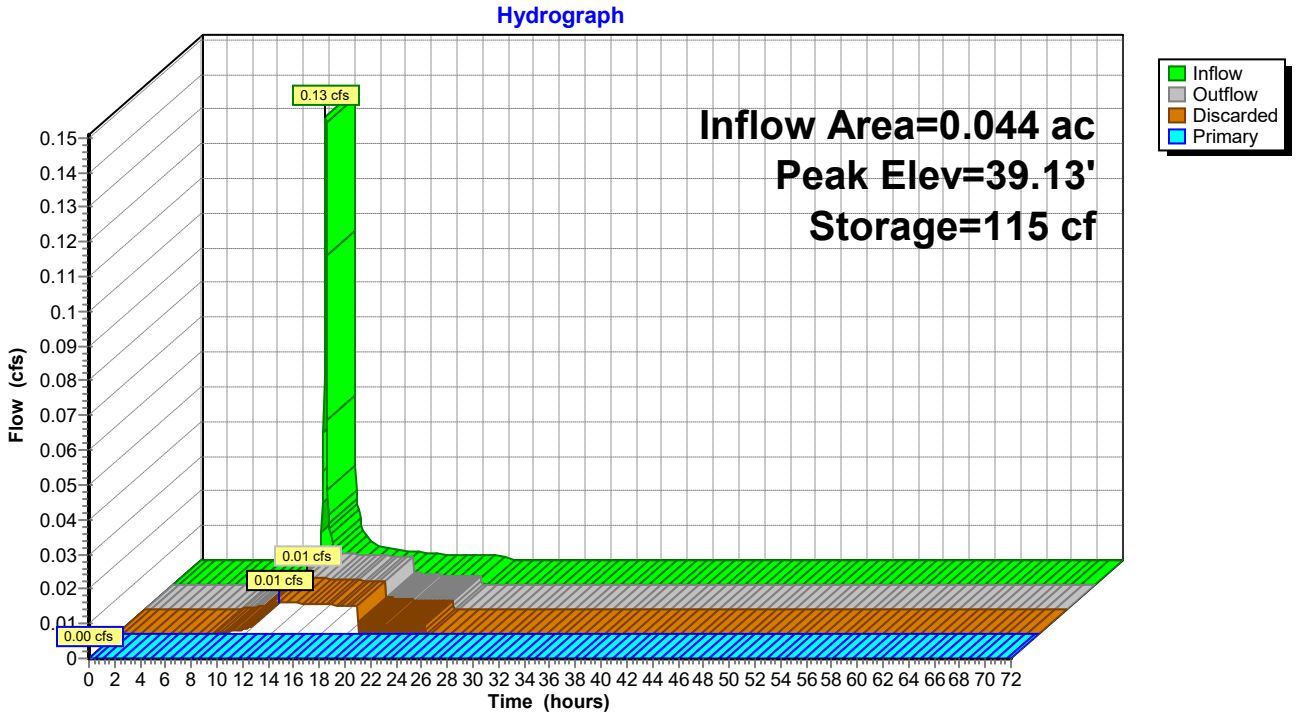
69.6 cf Field - 20.5 cf Chambers = 49.1 cf Stone x 40.0% Voids = 19.6 cf Stone Storage

Chamber Storage + Stone Storage = 24.2 cf = 0.001 af
Overall Storage Efficiency = 34.8%
Overall System Size = 8.50' x 5.58' x 1.47'

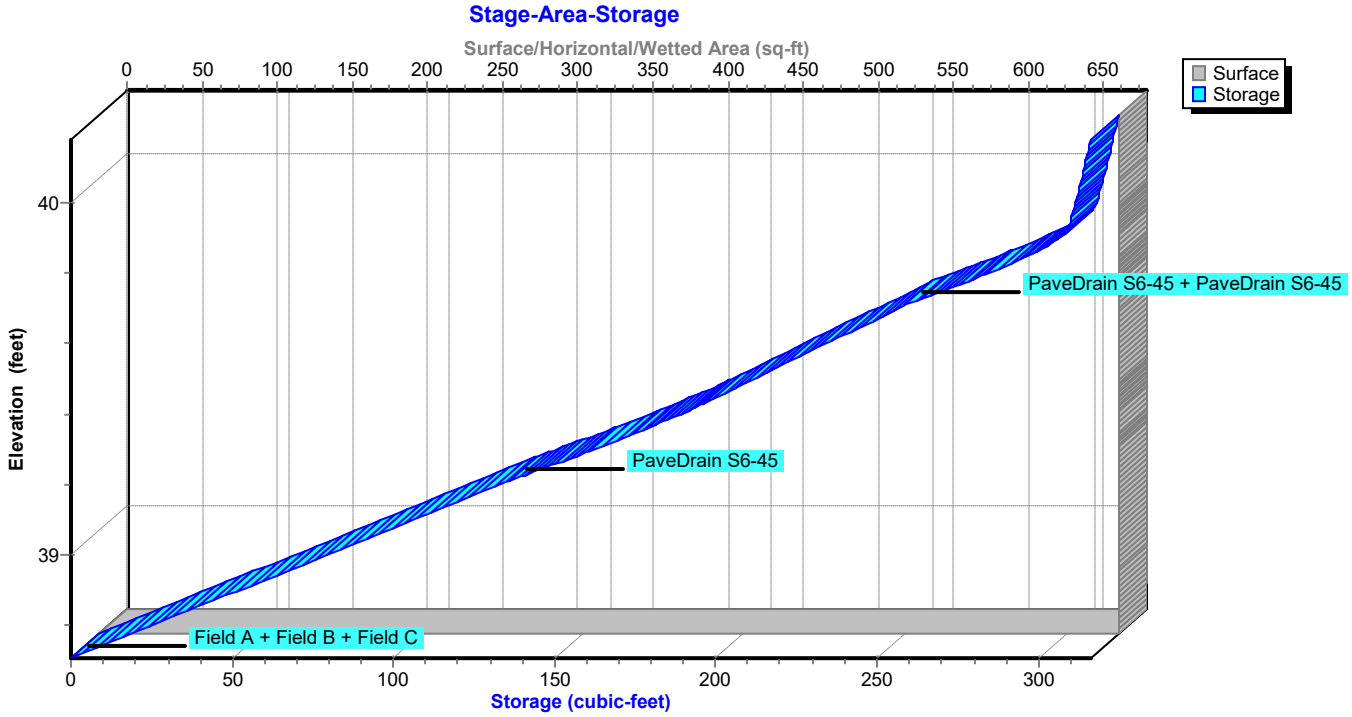
48 Chambers
2.6 cy Field
1.8 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST



Pond 34P: PERMEABLE PAVEMENT EAST

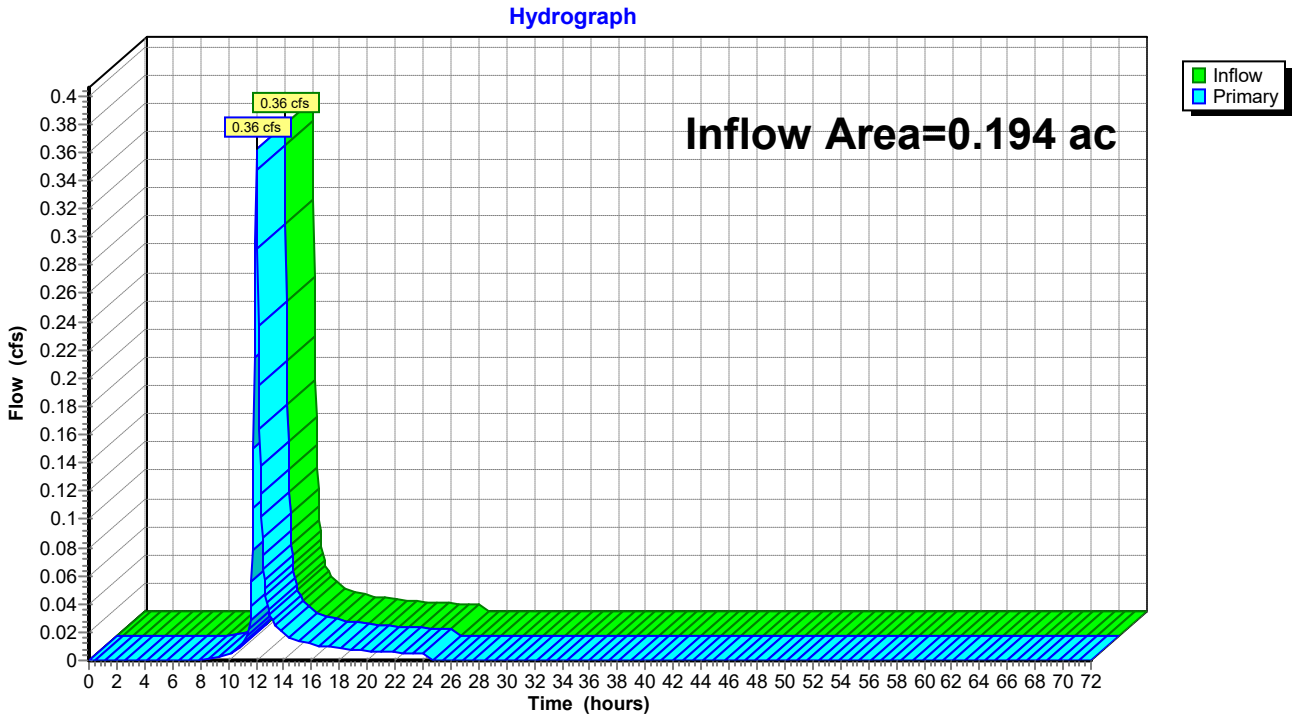


Summary for Link 23L: Study Point 1

Inflow Area = 0.194 ac, 7.58% Impervious, Inflow Depth = 1.57" for 1-YR event
Inflow = 0.36 cfs @ 12.02 hrs, Volume= 0.025 af
Primary = 0.36 cfs @ 12.02 hrs, Volume= 0.025 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 23L: Study Point 1

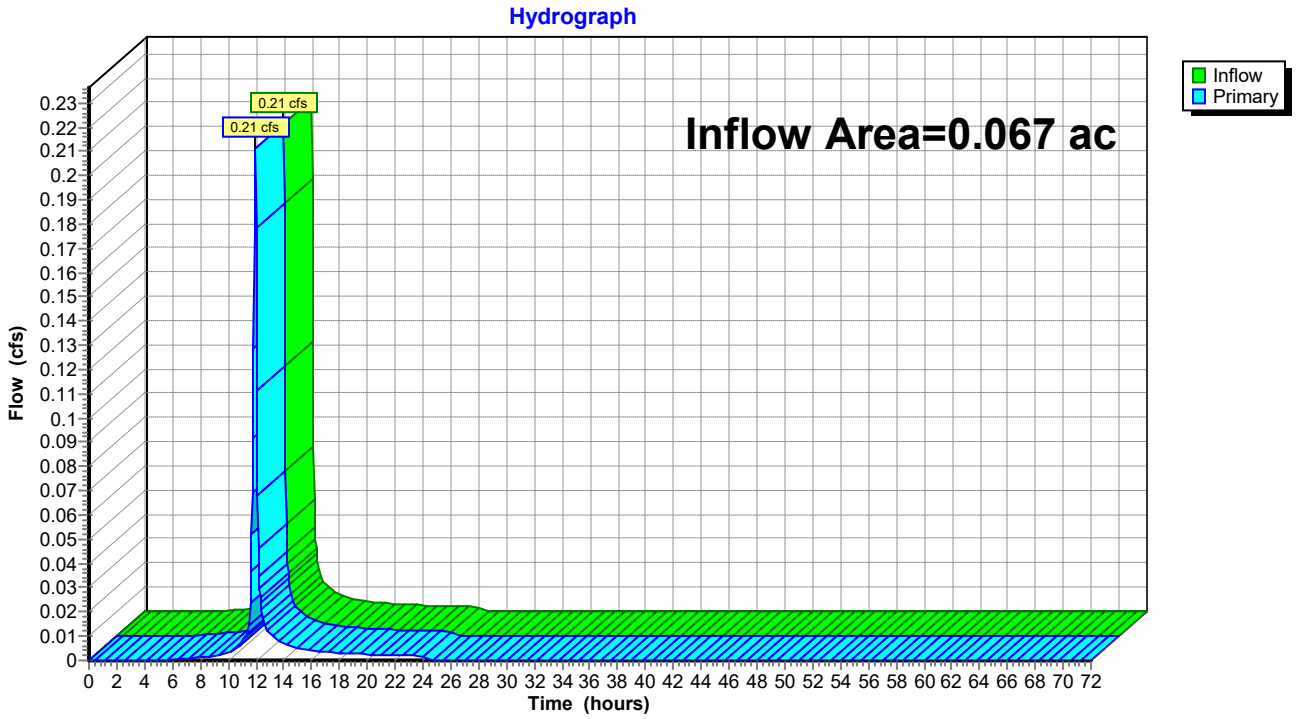


Summary for Link 24L: Study Point 2

Inflow Area = 0.067 ac, 52.55% Impervious, Inflow Depth = 1.97" for 1-YR event
Inflow = 0.21 cfs @ 11.95 hrs, Volume= 0.011 af
Primary = 0.21 cfs @ 11.95 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 24L: Study Point 2



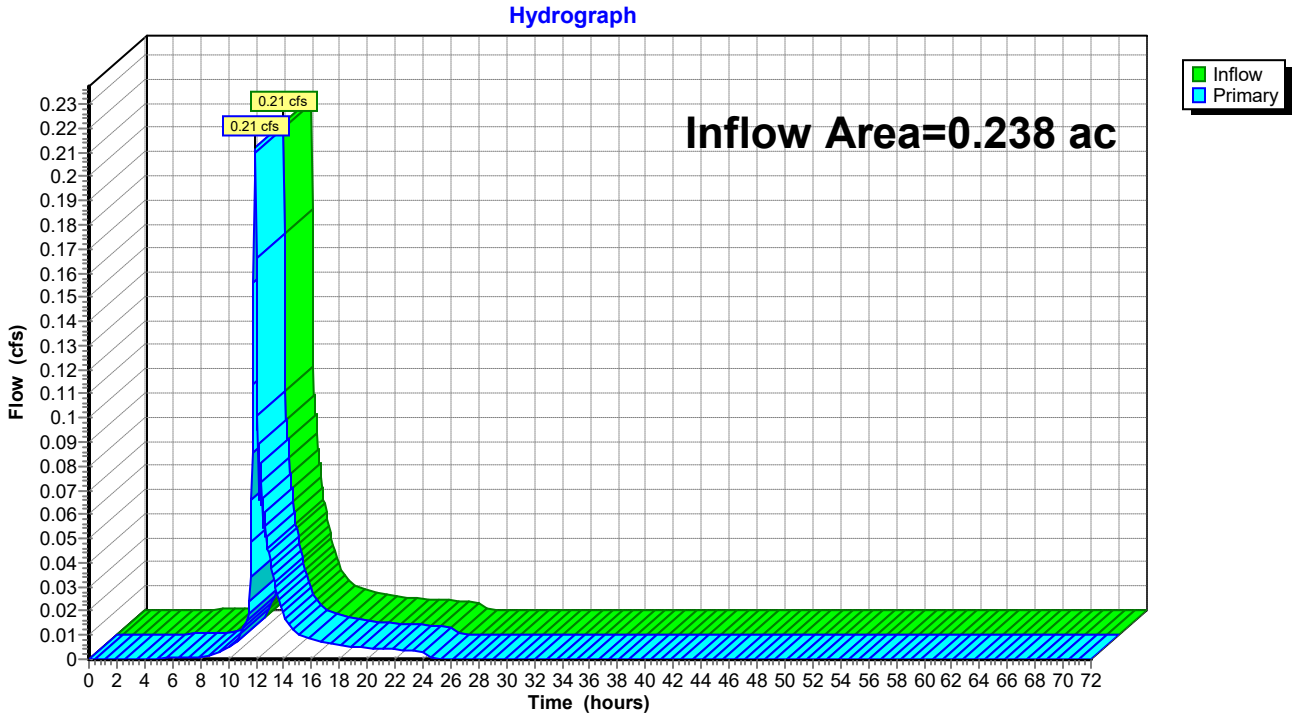
Summary for Link 26L: STUDY POINT 1

Inflow Area = 0.238 ac, 83.20% Impervious, Inflow Depth = 0.97" for 1-YR event
Inflow = 0.21 cfs @ 11.94 hrs, Volume= 0.019 af
Primary = 0.21 cfs @ 11.94 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Fixed water surface Elevation= 37.68'

Link 26L: STUDY POINT 1

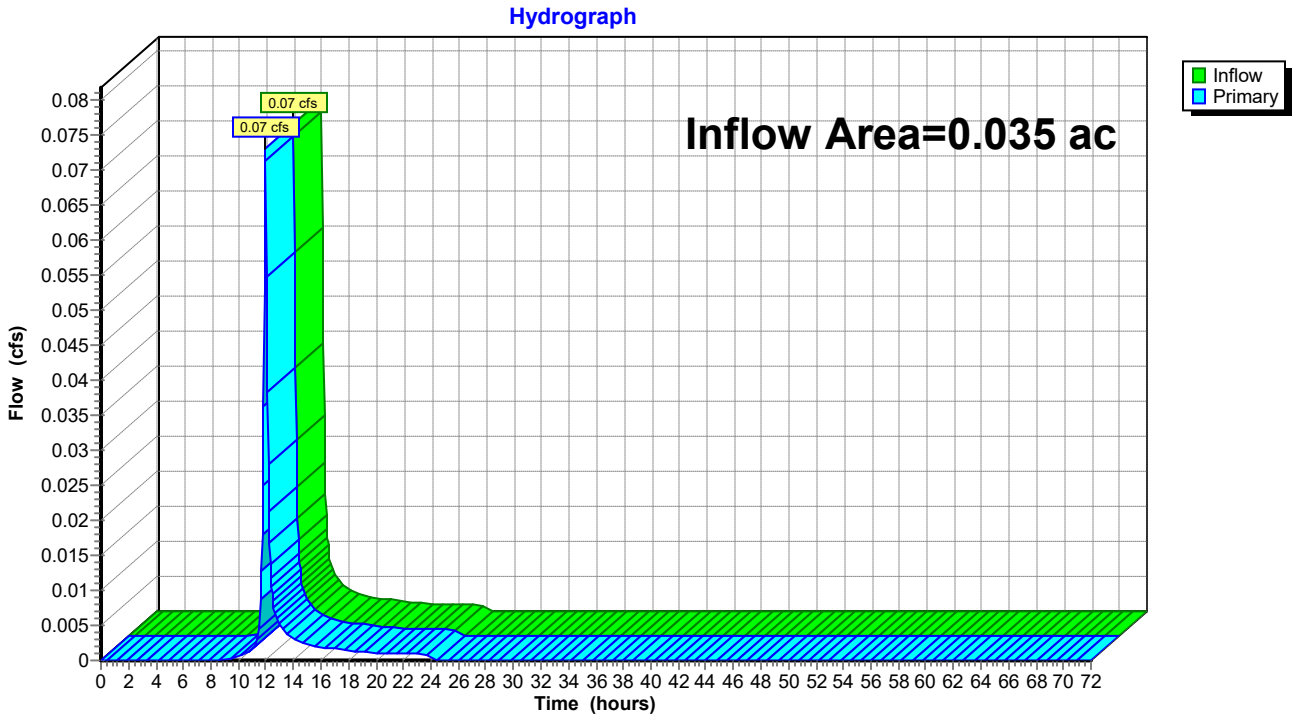


Summary for Link 27L: STUDY POINT 2

Inflow Area = 0.035 ac, 78.77% Impervious, Inflow Depth = 1.42" for 1-YR event
Inflow = 0.07 cfs @ 11.98 hrs, Volume= 0.004 af
Primary = 0.07 cfs @ 11.98 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 27L: STUDY POINT 2



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA1 - STUDY POINT 1 Runoff Area=8,470 sf 7.58% Impervious Runoff Depth=2.09"
Flow Length=197' Tc=8.6 min CN=87 Runoff=0.48 cfs 0.034 af

Subcatchment 2S: DA2 - STUDY POINT 2 Runoff Area=2,902 sf 52.55% Impervious Runoff Depth=2.54"
Flow Length=209' Tc=3.4 min CN=92 Runoff=0.27 cfs 0.014 af

Subcatchment 23S: DA2 Runoff Area=1,287 sf 91.38% Impervious Runoff Depth=2.64"
Flow Length=42' Slope=0.0050 '/' Tc=1.0 min CN=93 Runoff=0.14 cfs 0.006 af

Subcatchment 24S: DA3 Runoff Area=733 sf 87.45% Impervious Runoff Depth=2.45"
Flow Length=23' Slope=0.0050 '/' Tc=0.6 min CN=91 Runoff=0.08 cfs 0.003 af

Subcatchment 26S: DA4 Runoff Area=1,511 sf 94.51% Impervious Runoff Depth=2.84"
Flow Length=41' Slope=0.0050 '/' Tc=1.0 min CN=95 Runoff=0.17 cfs 0.008 af

Subcatchment 27S: DA5 Runoff Area=692 sf 87.72% Impervious Runoff Depth=2.45"
Flow Length=44' Slope=0.0050 '/' Tc=1.1 min CN=91 Runoff=0.07 cfs 0.003 af

Subcatchment 30S: DA9 Runoff Area=165 sf 81.82% Impervious Runoff Depth=2.95"
Flow Length=74' Tc=1.1 min CN=96 Runoff=0.02 cfs 0.001 af

Subcatchment 31S: DA6 - PERMEABLE Runoff Area=2,452 sf 80.26% Impervious Runoff Depth=2.01"
Flow Length=108' Tc=4.3 min CN=86 Runoff=0.17 cfs 0.009 af

Subcatchment 33S: DA7 - PERMEABLE Runoff Area=1,930 sf 85.18% Impervious Runoff Depth=2.26"
Flow Length=124' Slope=0.0054 '/' Tc=2.3 min CN=89 Runoff=0.17 cfs 0.008 af

Subcatchment 38S: DA8 Runoff Area=1,512 sf 78.77% Impervious Runoff Depth=1.93"
Flow Length=77' Tc=5.0 min CN=85 Runoff=0.10 cfs 0.006 af

Subcatchment 39S: DA1 Runoff Area=1,604 sf 64.34% Impervious Runoff Depth=1.36"
Flow Length=158' Tc=32.0 min CN=77 Runoff=0.02 cfs 0.004 af

Pond 20P: PERMEABLE PAVEMENT NORTH Peak Elev=39.23' Storage=171 cf Inflow=0.17 cfs 0.009 af
Discarded=0.01 cfs 0.009 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.009 af

Pond 23P: PLANTER BOX 2 Peak Elev=39.83' Storage=53 cf Inflow=0.08 cfs 0.003 af
Outflow=0.02 cfs 0.003 af

Pond 24P: PLANTER BOX 1 Peak Elev=40.33' Storage=107 cf Inflow=0.14 cfs 0.006 af
Outflow=0.03 cfs 0.006 af

Pond 25P: PLANTER BOX 3 Peak Elev=38.60' Storage=20 cf Inflow=0.17 cfs 0.008 af
Outflow=0.16 cfs 0.008 af

Pond 26P: PLANTER BOX 4 Peak Elev=38.28' Storage=12 cf Inflow=0.07 cfs 0.003 af
Outflow=0.06 cfs 0.003 af

Pond 31P: (new Pond) Peak Elev=39.48' Storage=0.000 af Inflow=0.02 cfs 0.001 af
Discarded=0.00 cfs 0.001 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.001 af

Pond 32P: CURB INLET 1 Peak Elev=38.09' Inflow=0.22 cfs 0.011 af
Outflow=0.22 cfs 0.011 af

Pond 33P: CURB INLET 2 Peak Elev=38.26' Inflow=0.22 cfs 0.011 af
Outflow=0.22 cfs 0.011 af

Pond 34P: PERMEABLE PAVEMENT EAST Peak Elev=39.30' Storage=162 cf Inflow=0.17 cfs 0.008 af
Discarded=0.01 cfs 0.008 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.008 af

Link 23L: Study Point 1 Inflow=0.48 cfs 0.034 af
Primary=0.48 cfs 0.034 af

Link 24L: Study Point 2 Inflow=0.27 cfs 0.014 af
Primary=0.27 cfs 0.014 af

Link 26L: STUDY POINT 1 Inflow=0.27 cfs 0.025 af
Primary=0.27 cfs 0.025 af

Link 27L: STUDY POINT 2 Inflow=0.10 cfs 0.006 af
Primary=0.10 cfs 0.006 af

Total Runoff Area = 0.534 ac Runoff Volume = 0.098 af Average Runoff Depth = 2.20"
48.45% Pervious = 0.259 ac 51.55% Impervious = 0.275 ac

Summary for Subcatchment 1S: DA1 - STUDY POINT 1

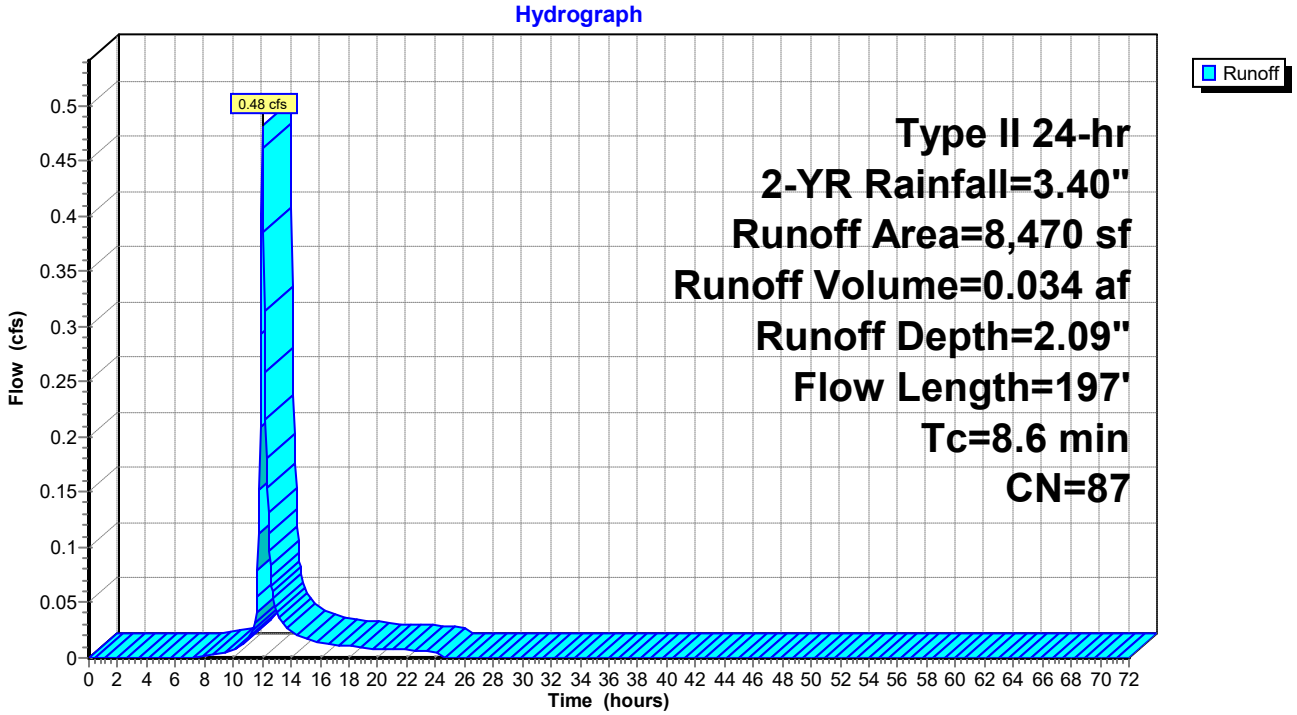
Runoff = 0.48 cfs @ 12.02 hrs, Volume= 0.034 af, Depth= 2.09"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
7,828	86	Woods/grass comb., Poor, HSG D
642	98	Paved parking, HSG D
8,470	87	Weighted Average
7,828		92.42% Pervious Area
642		7.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0160	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
2.2	93	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.4	54	0.0140	2.40		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
8.6	197	Total			

Subcatchment 1S: DA1 - STUDY POINT 1



Summary for Subcatchment 2S: DA2 - STUDY POINT 2

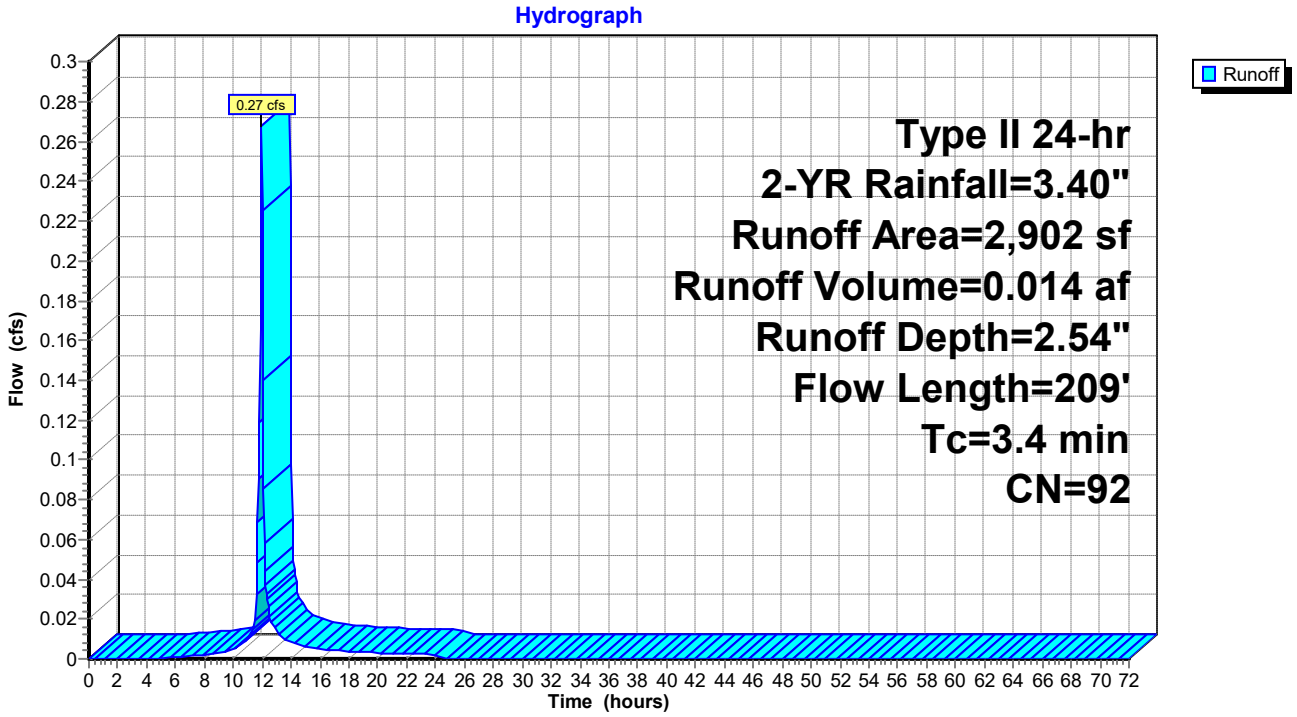
Runoff = 0.27 cfs @ 11.95 hrs, Volume= 0.014 af, Depth= 2.54"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
1,377	86	Woods/grass comb., Poor, HSG D
1,525	98	Paved parking, HSG D
2,902	92	Weighted Average
1,377		47.45% Pervious Area
1,525		52.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	100	0.0054	0.84		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
1.4	109	0.0040	1.28		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.4	209	Total			

Subcatchment 2S: DA2 - STUDY POINT 2



Summary for Subcatchment 23S: DA2

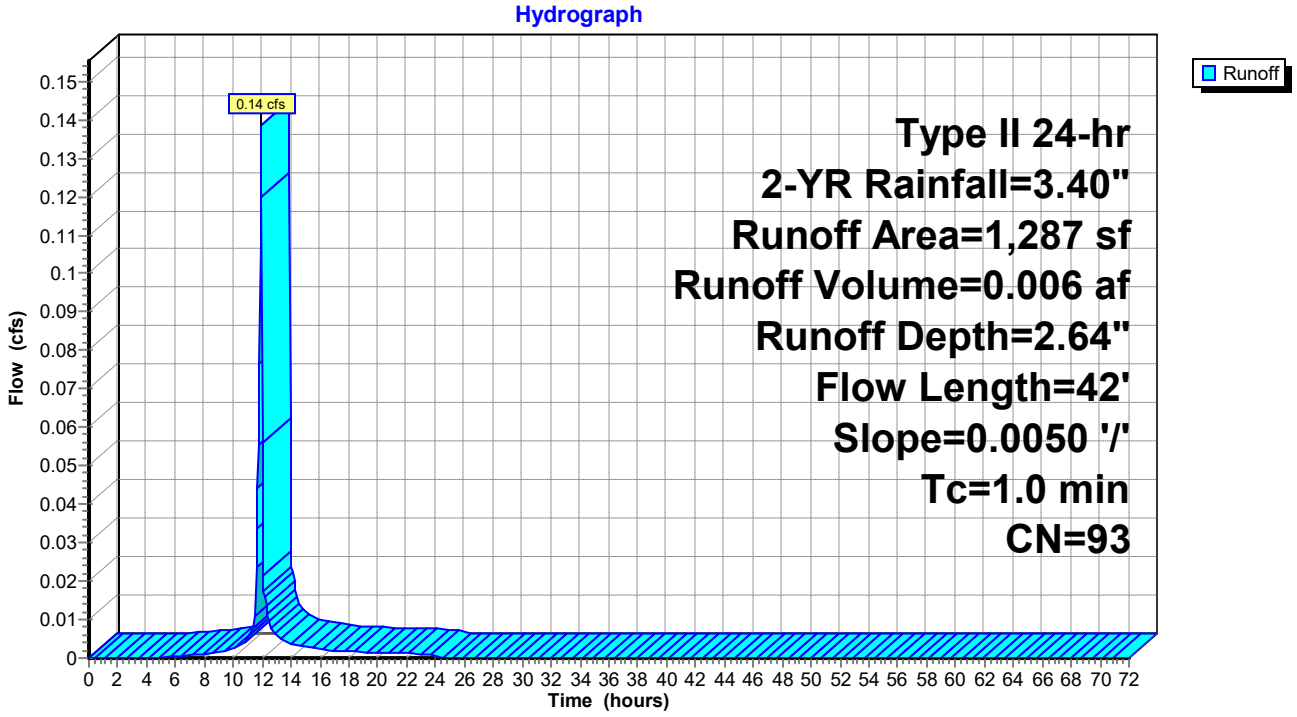
Runoff = 0.14 cfs @ 11.91 hrs, Volume= 0.006 af, Depth= 2.64"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
1,153	98	Roofs, HSG D
111	39	Pasture/grassland/range, Good, HSG A
23	98	Unconnected pavement, HSG D
1,287	93	Weighted Average
111		8.62% Pervious Area
1,176		91.38% Impervious Area
23		1.96% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	42	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 23S: DA2



Summary for Subcatchment 24S: DA3

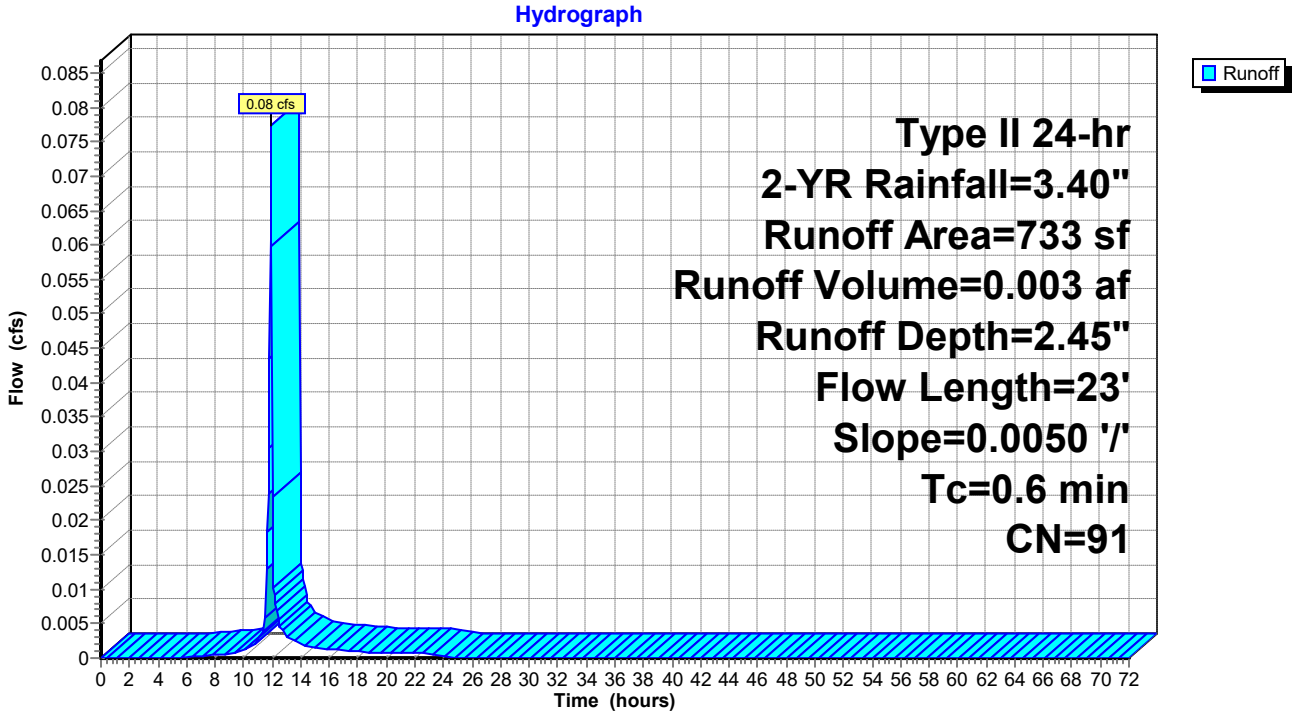
Runoff = 0.08 cfs @ 11.90 hrs, Volume= 0.003 af, Depth= 2.45"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
620	98	Roofs, HSG D
92	39	Pasture/grassland/range, Good, HSG A
21	98	Unconnected pavement, HSG D
733	91	Weighted Average
92		12.55% Pervious Area
641		87.45% Impervious Area
21		3.28% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	23	0.0050	0.61		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 24S: DA3



Summary for Subcatchment 26S: DA4

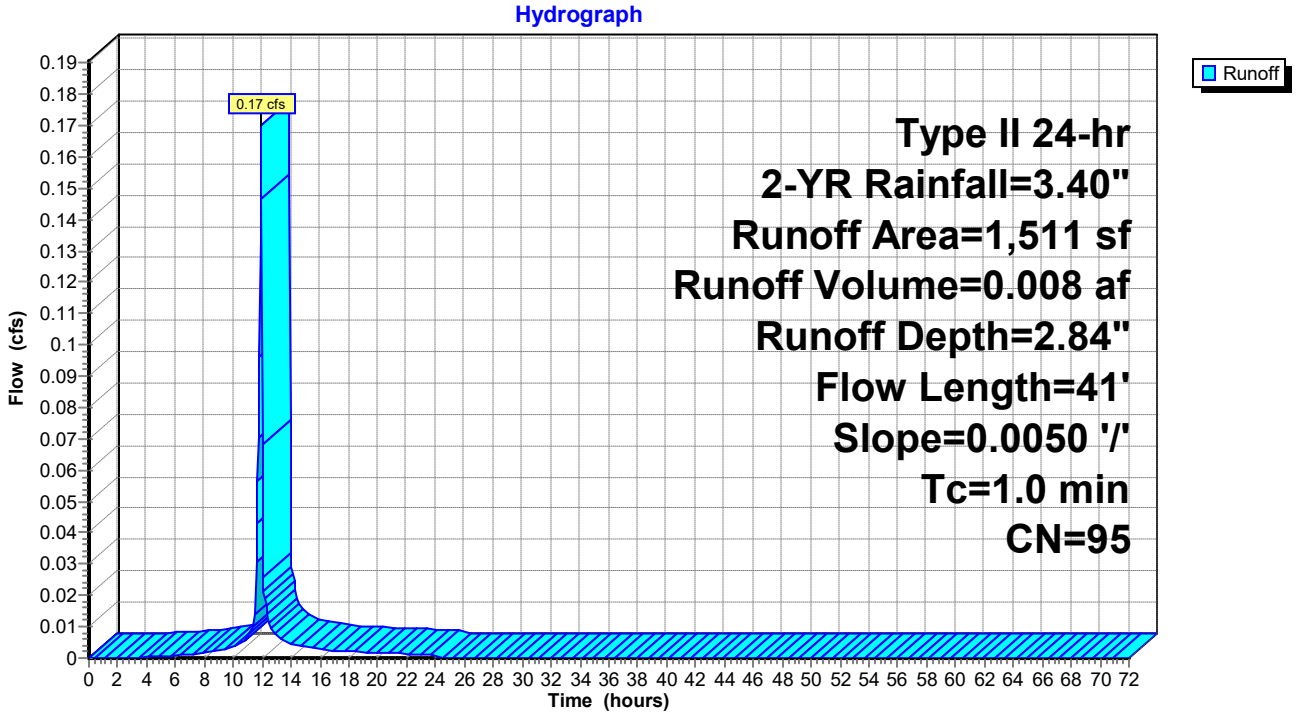
Runoff = 0.17 cfs @ 11.91 hrs, Volume= 0.008 af, Depth= 2.84"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
1,409	98	Roofs, HSG D
83	39	Pasture/grassland/range, Good, HSG A
19	98	Unconnected pavement, HSG D
1,511	95	Weighted Average
83		5.49% Pervious Area
1,428		94.51% Impervious Area
19		1.33% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	41	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 26S: DA4



Summary for Subcatchment 27S: DA5

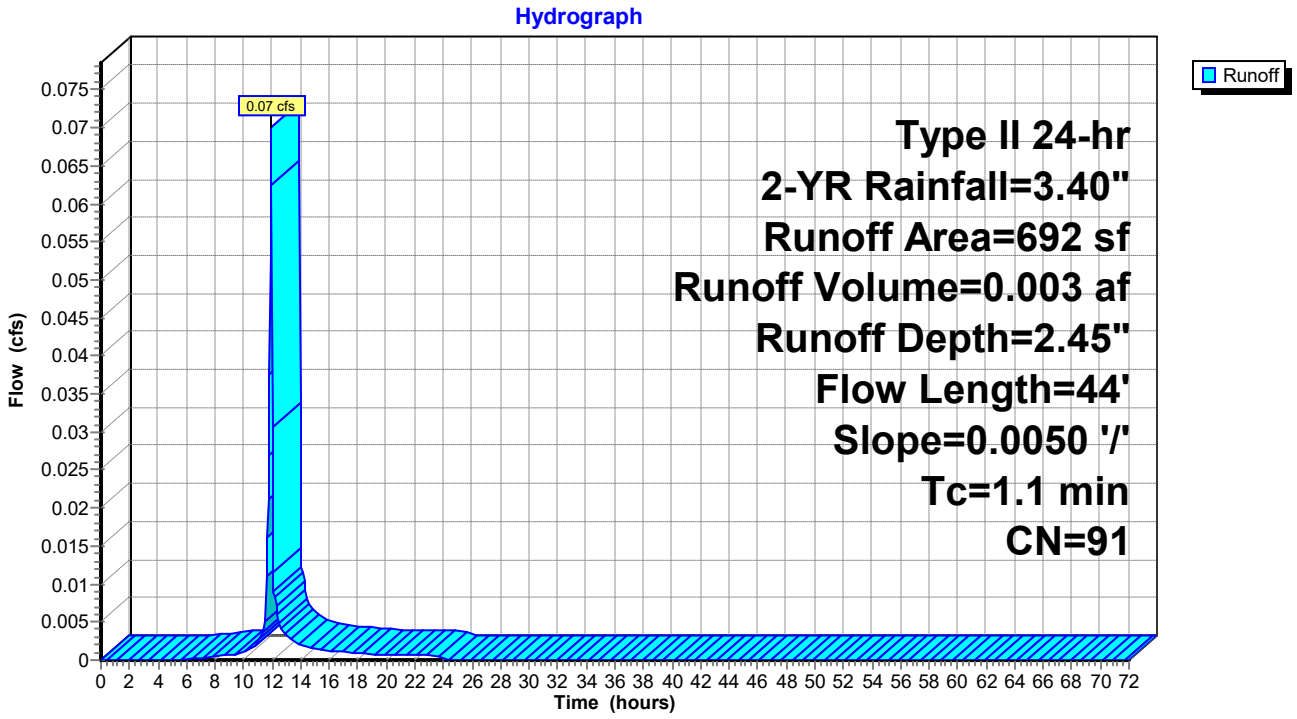
Runoff = 0.07 cfs @ 11.91 hrs, Volume= 0.003 af, Depth= 2.45"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
588	98	Roofs, HSG D
85	39	Pasture/grassland/range, Good, HSG A
19	98	Unconnected pavement, HSG D
692	91	Weighted Average
85		12.28% Pervious Area
607		87.72% Impervious Area
19		3.13% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	44	0.0050	0.69		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 27S: DA5



Summary for Subcatchment 30S: DA9

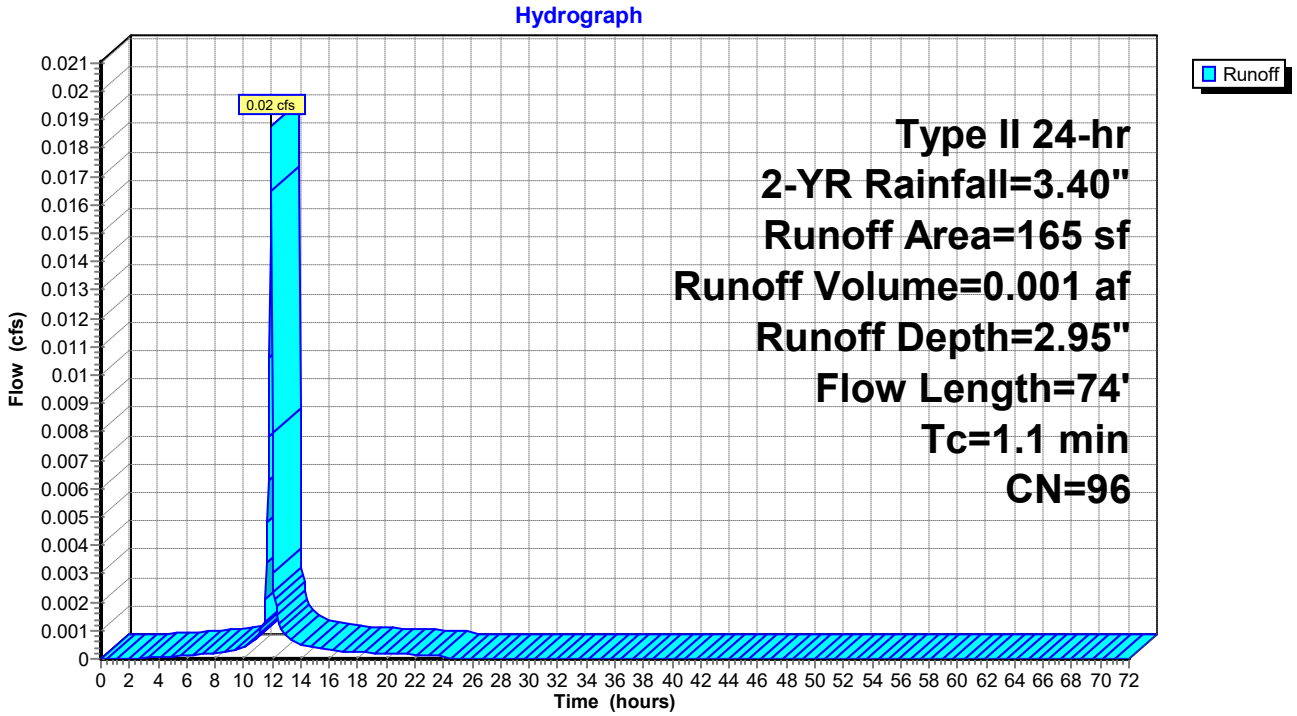
Runoff = 0.02 cfs @ 11.91 hrs, Volume= 0.001 af, Depth= 2.95"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
135	98	Paved parking, HSG C
30	86	<50% Grass cover, Poor, HSG C
165	96	Weighted Average
30		18.18% Pervious Area
135		81.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	27	0.0165	1.01		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.7	47	0.0141	1.06		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
1.1	74	Total			

Subcatchment 30S: DA9



Summary for Subcatchment 31S: DA6 - PERMEABLE PAVEMENT NORTH

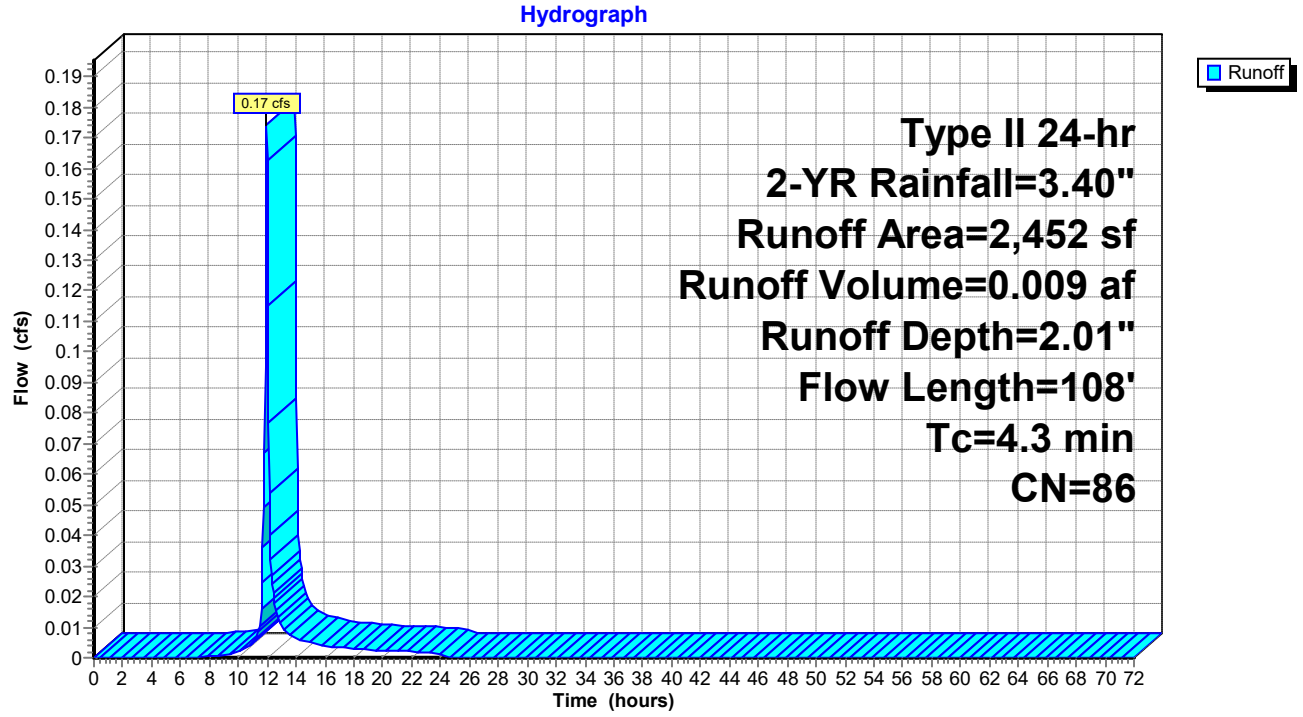
Runoff = 0.17 cfs @ 11.96 hrs, Volume= 0.009 af, Depth= 2.01"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
1,040	98	Paved parking, HSG D
928	98	Unconnected pavement, HSG D
484	39	>75% Grass cover, Good, HSG A
2,452	86	Weighted Average
484		19.74% Pervious Area
1,968		80.26% Impervious Area
928		47.15% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	7	0.0033	0.05		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.8	93	0.0057	0.85		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.2	8	0.0014	0.76		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
4.3	108	Total			

Subcatchment 31S: DA6 - PERMEABLE PAVEMENT NORTH



Summary for Subcatchment 33S: DA7 - PERMEABLE PAVEMENTEAST

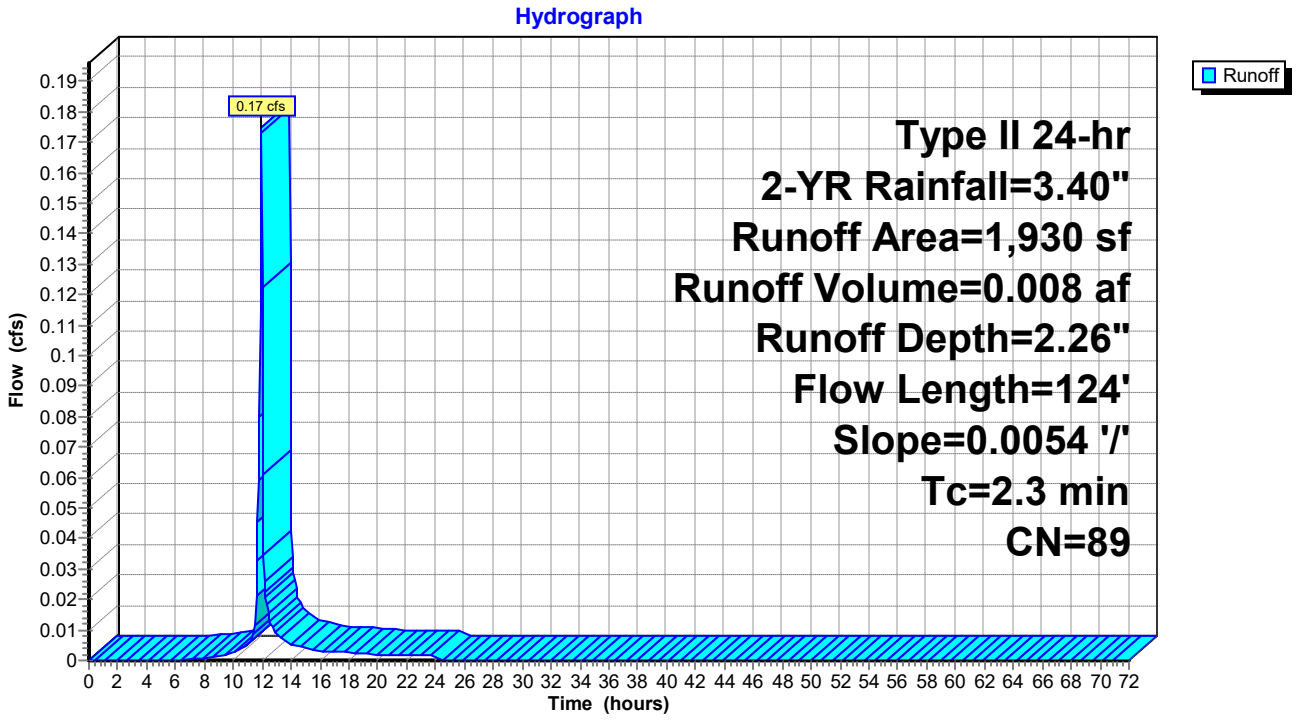
Runoff = 0.17 cfs @ 11.94 hrs, Volume= 0.008 af, Depth= 2.26"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
286	39	>75% Grass cover, Good, HSG A
1,644	98	Unconnected pavement, HSG D
1,930	89	Weighted Average
286		14.82% Pervious Area
1,644		85.18% Impervious Area
1,644		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	100	0.0054	0.84		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.3	24	0.0054	1.49		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.3	124	Total			

Subcatchment 33S: DA7 - PERMEABLE PAVEMENTEAST



Summary for Subcatchment 38S: DA8

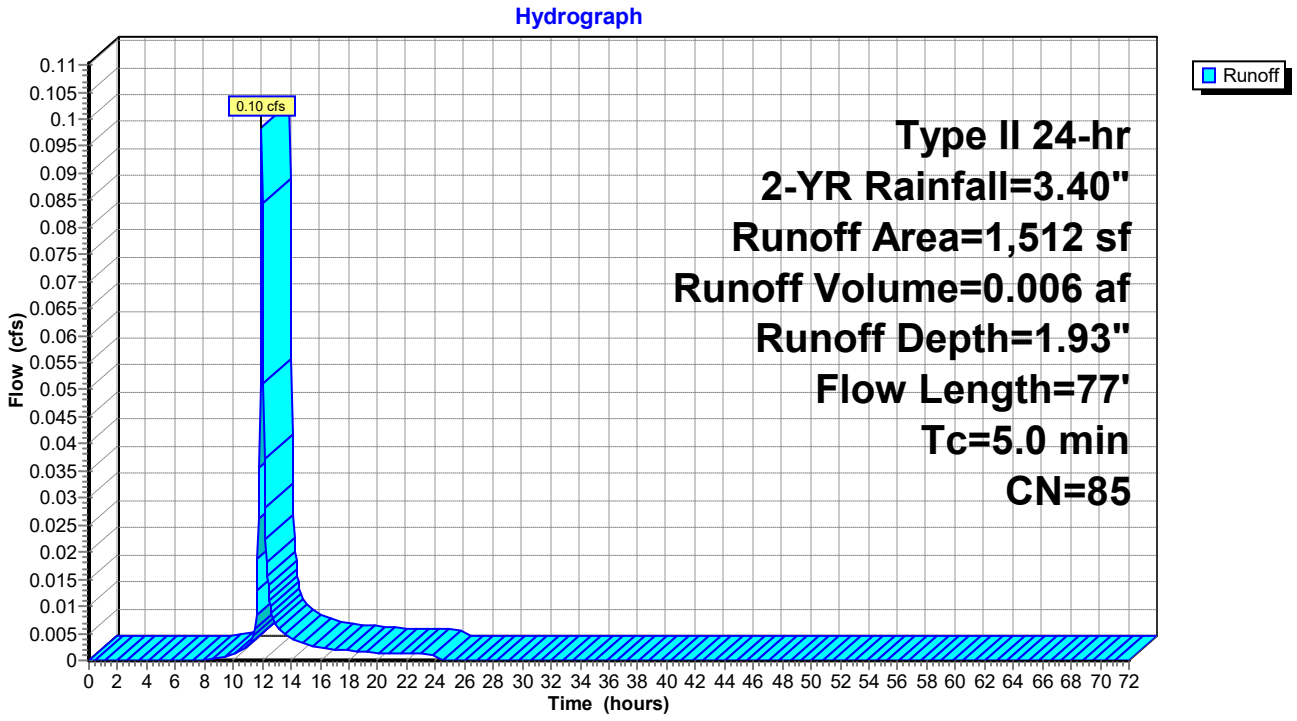
Runoff = 0.10 cfs @ 11.98 hrs, Volume= 0.006 af, Depth= 1.93"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
1,191	98	Unconnected pavement, HSG D
321	39	>75% Grass cover, Good, HSG A
1,512	85	Weighted Average
321		21.23% Pervious Area
1,191		78.77% Impervious Area
1,191		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	6	0.0010	0.03		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.7	71	0.0040	0.70		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
5.0	77	Total			

Subcatchment 38S: DA8



Summary for Subcatchment 39S: DA1

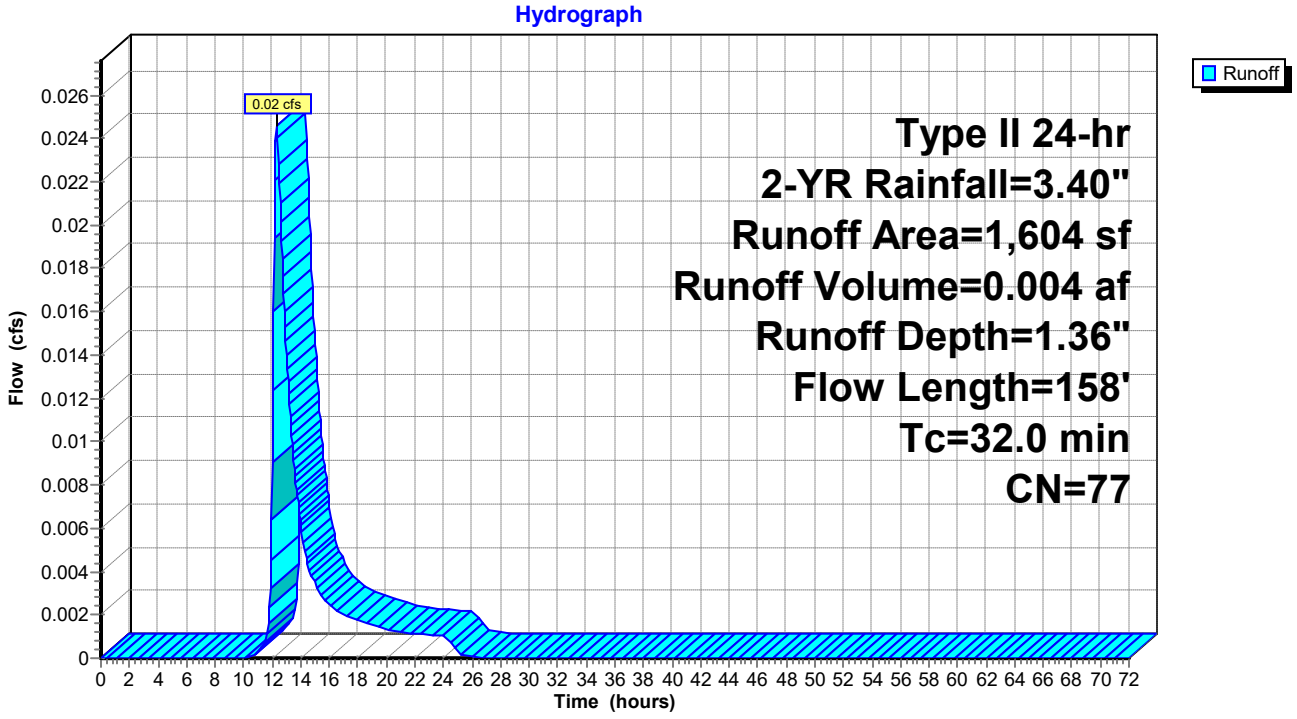
Runoff = 0.02 cfs @ 12.31 hrs, Volume= 0.004 af, Depth= 1.36"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-YR Rainfall=3.40"

Area (sf)	CN	Description
1,032	98	Unconnected pavement, HSG D
572	39	>75% Grass cover, Good, HSG A
1,604	77	Weighted Average
572		35.66% Pervious Area
1,032		64.34% Impervious Area
1,032		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.5	100	0.0010	0.05		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
0.2	11	0.0141	0.83		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.3	47	0.0141	2.41		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
32.0	158	Total			

Subcatchment 39S: DA1



Summary for Pond 20P: PERMEABLE PAVEMENT NORTH

Inflow Area = 0.056 ac, 80.26% Impervious, Inflow Depth = 2.01" for 2-YR event
Inflow = 0.17 cfs @ 11.96 hrs, Volume= 0.009 af
Outflow = 0.01 cfs @ 12.70 hrs, Volume= 0.009 af, Atten= 92%, Lag= 44.1 min
Discarded = 0.01 cfs @ 12.70 hrs, Volume= 0.009 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.23' @ 12.70 hrs Surf.Area= 1,001 sf Storage= 171 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 107.4 min (925.3 - 817.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.82'	403 cf	**23.00'W x 43.50'L x 1.47'H Field A** 1,467 cf Overall - 460 cf Embedded = 1,008 cf x 40.0% Voids
#2A	39.82'	103 cf	**PaveDrain S6-45** x 1075 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 25 Rows of 43 Chambers
#3B	38.82'	18 cf	**4.67'W x 9.50'L x 1.47'H Field B** -Impervious 65 cf Overall - 19 cf Embedded = 46 cf x 40.0% Voids
#4B	39.82'	4 cf	**PaveDrain S6-45** x 45 Inside #3 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 5 Rows of 9 Chambers
		528 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.82'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.19'	**43.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 12.70 hrs HW=39.23' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.82' TW=37.68' (Dynamic Tailwater)
↑—**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 20P: PERMEABLE PAVEMENT NORTH - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

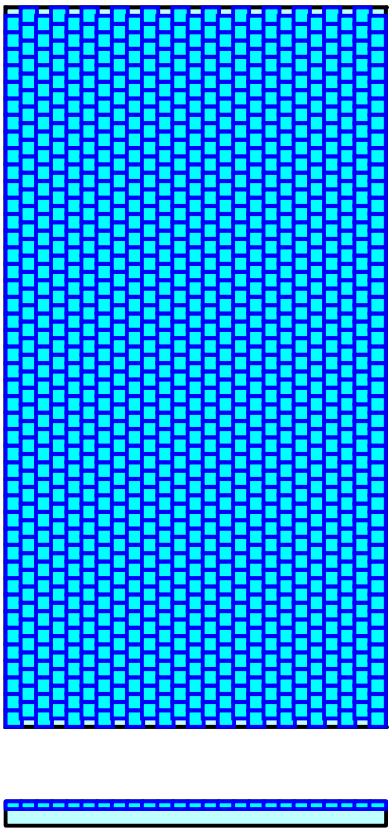
43 Chambers/Row x 1.00' Long = 43.00' Row Length +0.50' Row Offset = 43.50' Base Length
25 Rows x 12.0" Wide - 1.0" Nesting x 24 = 23.00' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

1,075 Chambers x 0.1 cf = 102.6 cf Chamber Storage
1,075 Chambers x 0.4 cf = 459.9 cf Displacement

1,467.4 cf Field - 459.9 cf Chambers = 1,007.5 cf Stone x 40.0% Voids = 403.0 cf Stone Storage

Chamber Storage + Stone Storage = 505.7 cf = 0.012 af
Overall Storage Efficiency = 34.5%
Overall System Size = 43.50' x 23.00' x 1.47'

1,075 Chambers
54.3 cy Field
37.3 cy Stone



Pond 20P: PERMEABLE PAVEMENT NORTH - Chamber Wizard Field B

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

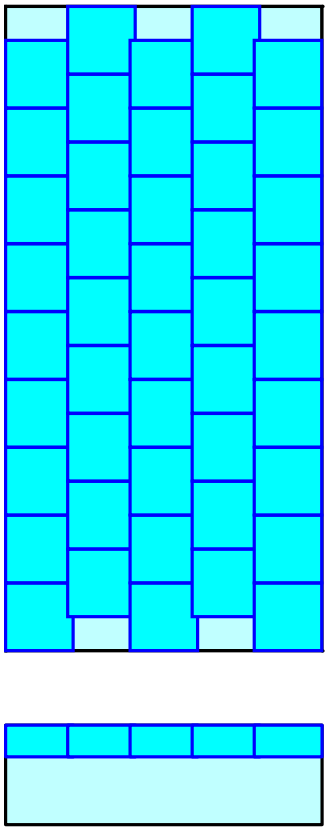
9 Chambers/Row x 1.00' Long = 9.00' Row Length +0.50' Row Offset = 9.50' Base Length
5 Rows x 12.0" Wide - 1.0" Nesting x 4 = 4.67' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

45 Chambers x 0.1 cf = 4.3 cf Chamber Storage
45 Chambers x 0.4 cf = 19.3 cf Displacement

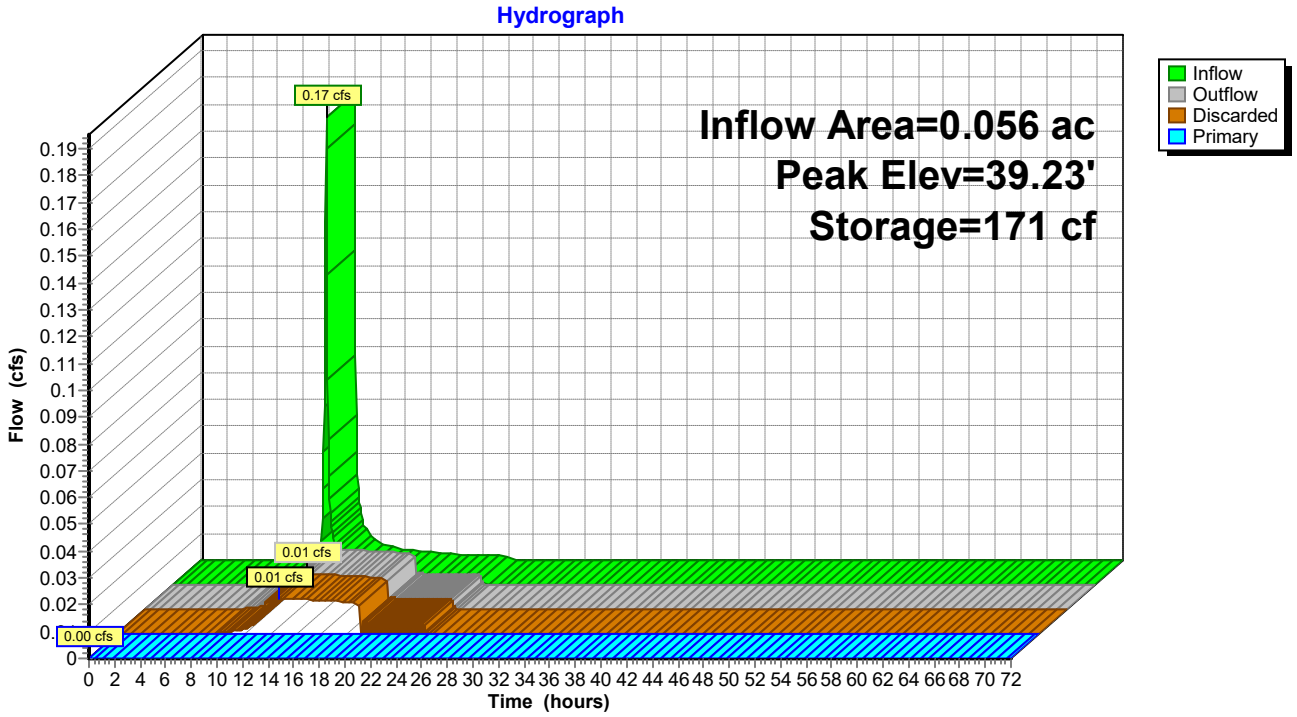
65.0 cf Field - 19.3 cf Chambers = 45.8 cf Stone x 40.0% Voids = 18.3 cf Stone Storage

Chamber Storage + Stone Storage = 22.6 cf = 0.001 af
Overall Storage Efficiency = 34.8%
Overall System Size = 9.50' x 4.67' x 1.47'

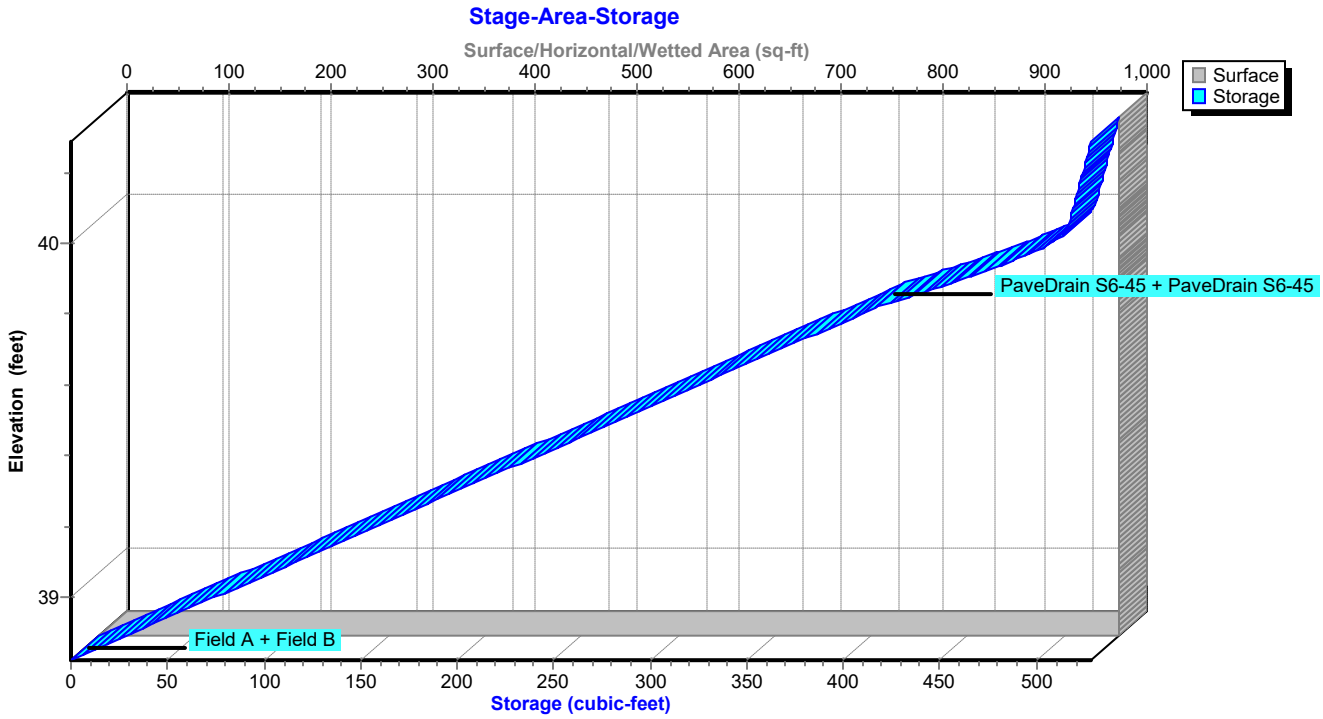
45 Chambers
2.4 cy Field
1.7 cy Stone



Pond 20P: PERMEABLE PAVEMENT NORTH



Pond 20P: PERMEABLE PAVEMENT NORTH



Summary for Pond 23P: PLANTER BOX 2

Inflow Area = 0.017 ac, 87.45% Impervious, Inflow Depth = 2.45" for 2-YR event
Inflow = 0.08 cfs @ 11.90 hrs, Volume= 0.003 af
Outflow = 0.02 cfs @ 12.02 hrs, Volume= 0.003 af, Atten= 74%, Lag= 7.2 min
Primary = 0.02 cfs @ 12.02 hrs, Volume= 0.003 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.83' @ 12.02 hrs Surf.Area= 92 sf Storage= 53 cf

Plug-Flow detention time= 59.7 min calculated for 0.003 af (95% of inflow)
Center-of-Mass det. time= 32.4 min (824.9 - 792.5)

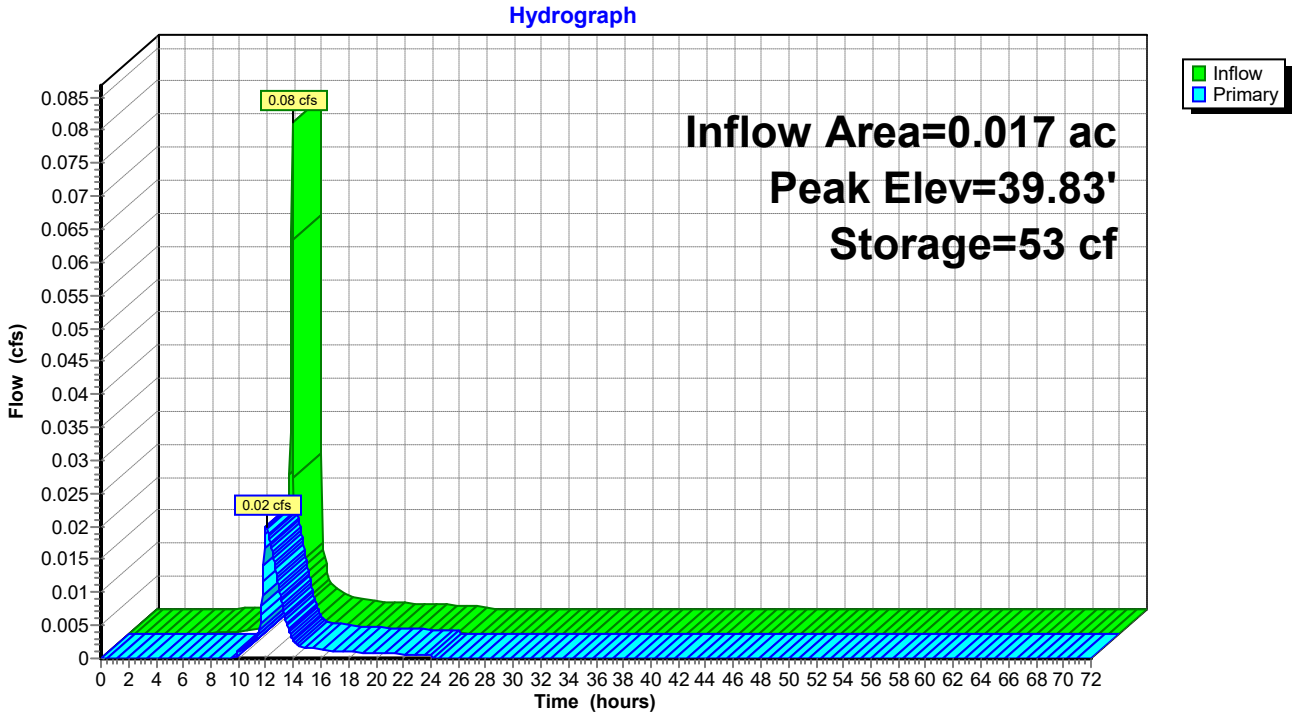
Volume	Invert	Avail.Storage	Storage Description
#1	38.40'	2,745 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
38.40	92	0.0	0	0
38.41	92	40.0	0	0
41.92	92	40.0	129	130
41.93	92	100.0	1	130
42.92	92	100.0	91	222
43.42	10,000	100.0	2,523	2,745

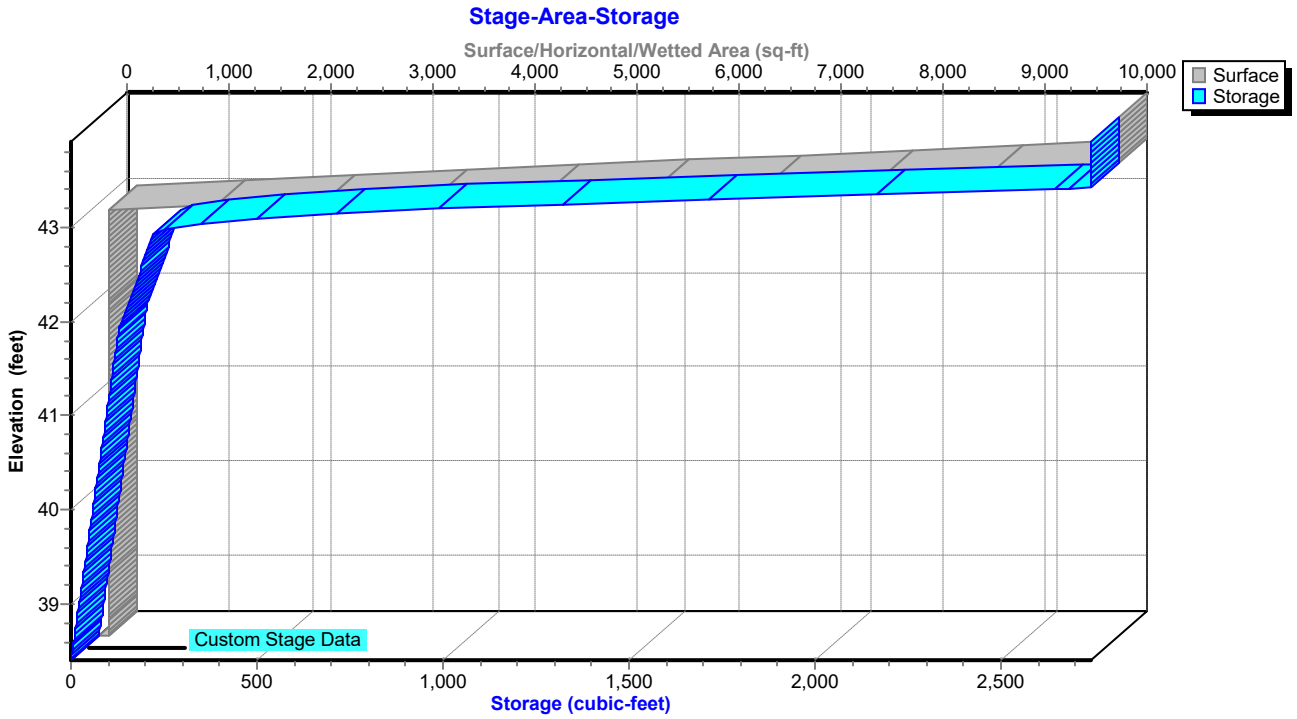
Device	Routing	Invert	Outlet Devices
#1	Primary	37.75'	**12.0" Round Culvert** L= 106.5' Ke= 0.500 Inlet / Outlet Invert= 37.75' / 37.60' S= 0.0014 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	38.42'	**4.0" Round Culvert** L= 8.6' Ke= 0.500 Inlet / Outlet Invert= 38.42' / 37.75' S= 0.0779 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 2	38.59'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	43.41'	**7.5' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.02 cfs @ 12.02 hrs HW=39.82' TW=37.68' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.02 cfs of 3.52 cfs potential flow)
  - **2=Culvert** (Passes 0.02 cfs of 0.47 cfs potential flow)
    - **3=Orifice/Grate** (Orifice Controls 0.02 cfs @ 5.33 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 23P: PLANTER BOX 2



Pond 23P: PLANTER BOX 2



Summary for Pond 24P: PLANTER BOX 1

Inflow Area = 0.030 ac, 91.38% Impervious, Inflow Depth = 2.64" for 2-YR event
Inflow = 0.14 cfs @ 11.91 hrs, Volume= 0.006 af
Outflow = 0.03 cfs @ 12.06 hrs, Volume= 0.006 af, Atten= 81%, Lag= 9.0 min
Primary = 0.03 cfs @ 12.06 hrs, Volume= 0.006 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 40.33' @ 12.06 hrs Surf.Area= 111 sf Storage= 107 cf

Plug-Flow detention time= 62.2 min calculated for 0.006 af (97% of inflow)
Center-of-Mass det. time= 43.2 min (826.5 - 783.3)

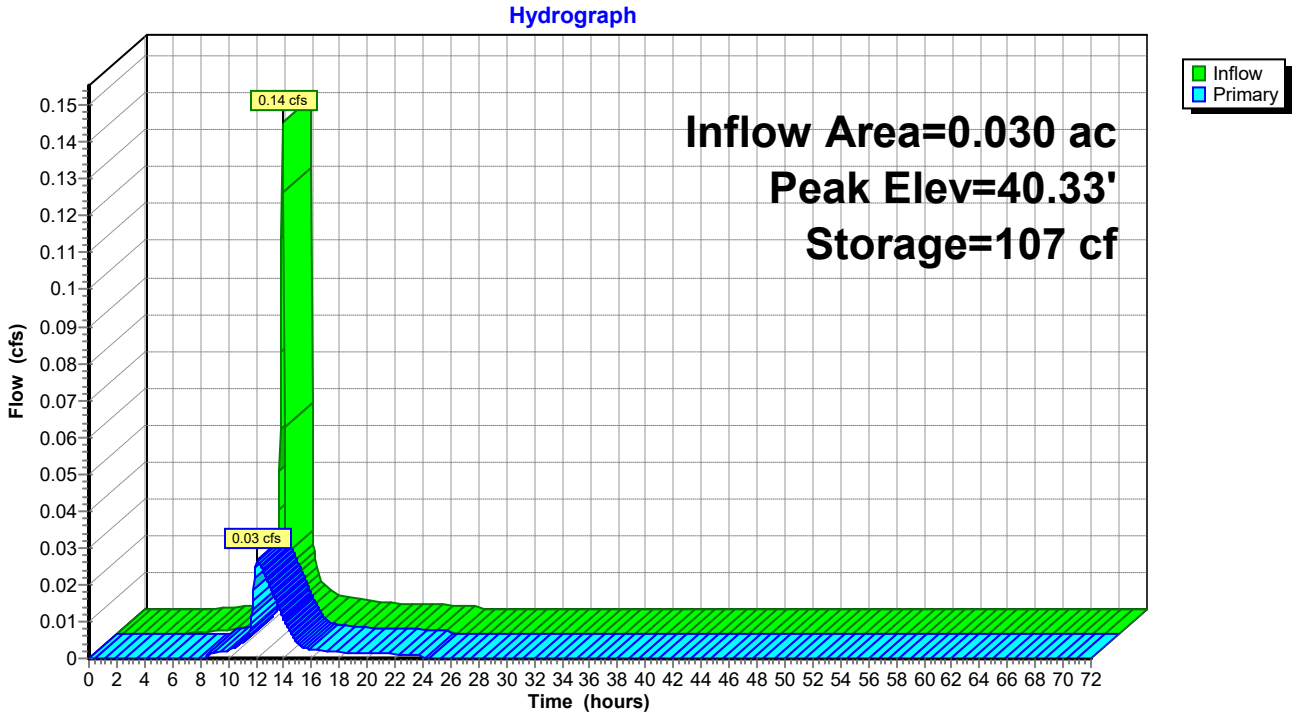
Volume	Invert	Avail.Storage	Storage Description
#1	37.92'	2,818 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.92	111	0.0	0	0
37.93	111	40.0	0	0
41.95	111	40.0	178	179
41.96	111	100.0	1	180
42.95	111	100.0	110	290
43.45	10,000	100.0	2,528	2,818

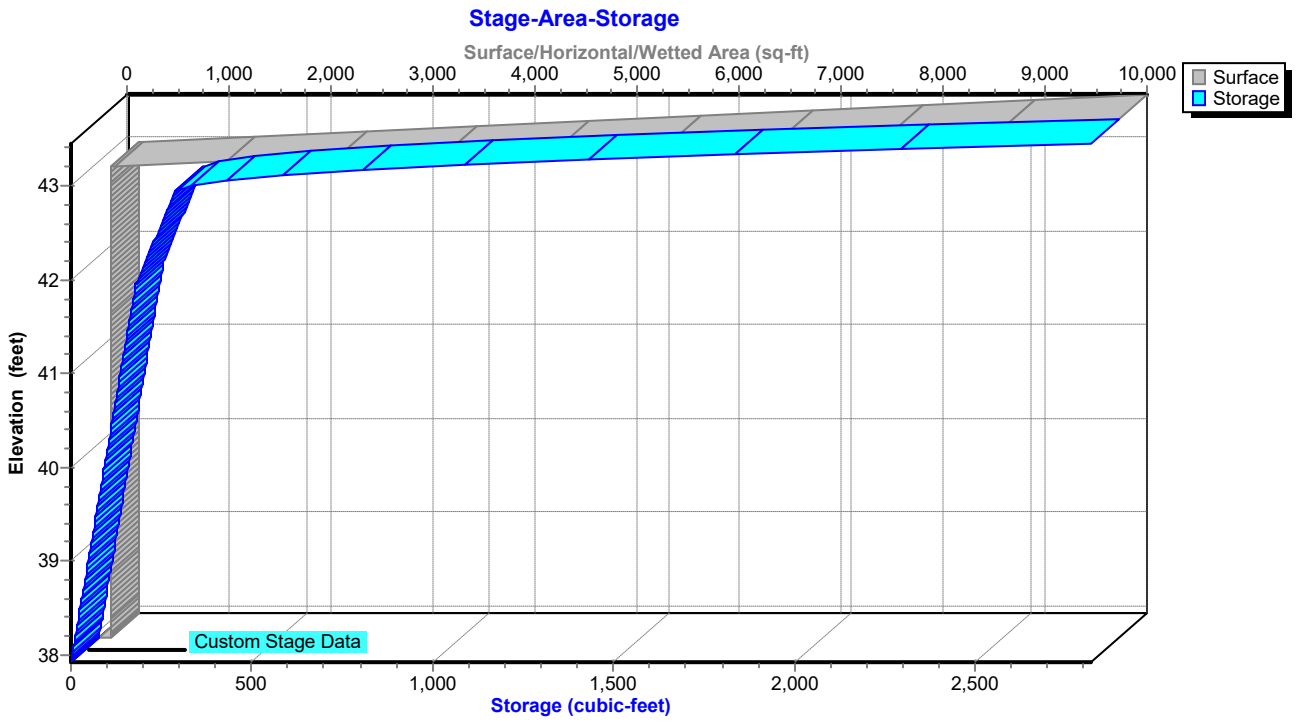
Device	Routing	Invert	Outlet Devices
#1	Primary	37.73'	**12.0" Round Culvert** L= 87.6' Ke= 0.500 Inlet / Outlet Invert= 37.73' / 37.60' S= 0.0015 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	37.95'	**4.0" Round Culvert** L= 4.8' Ke= 0.500 Inlet / Outlet Invert= 37.95' / 37.73' S= 0.0458 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 2	38.12'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	42.95'	**7.5' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.03 cfs @ 12.06 hrs HW=40.32' TW=37.68' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.03 cfs of 4.44 cfs potential flow)
  - **2=Culvert** (Passes 0.03 cfs of 0.62 cfs potential flow)
    - **3=Orifice/Grate** (Orifice Controls 0.03 cfs @ 7.15 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 24P: PLANTER BOX 1



Pond 24P: PLANTER BOX 1



Summary for Pond 25P: PLANTER BOX 3

Inflow Area = 0.035 ac, 94.51% Impervious, Inflow Depth = 2.84" for 2-YR event
Inflow = 0.17 cfs @ 11.91 hrs, Volume= 0.008 af
Outflow = 0.16 cfs @ 11.94 hrs, Volume= 0.008 af, Atten= 8%, Lag= 2.0 min
Primary = 0.16 cfs @ 11.94 hrs, Volume= 0.008 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.60' @ 11.94 hrs Surf.Area= 83 sf Storage= 20 cf

Plug-Flow detention time= 9.0 min calculated for 0.008 af (100% of inflow)
Center-of-Mass det. time= 7.6 min (779.3 - 771.7)

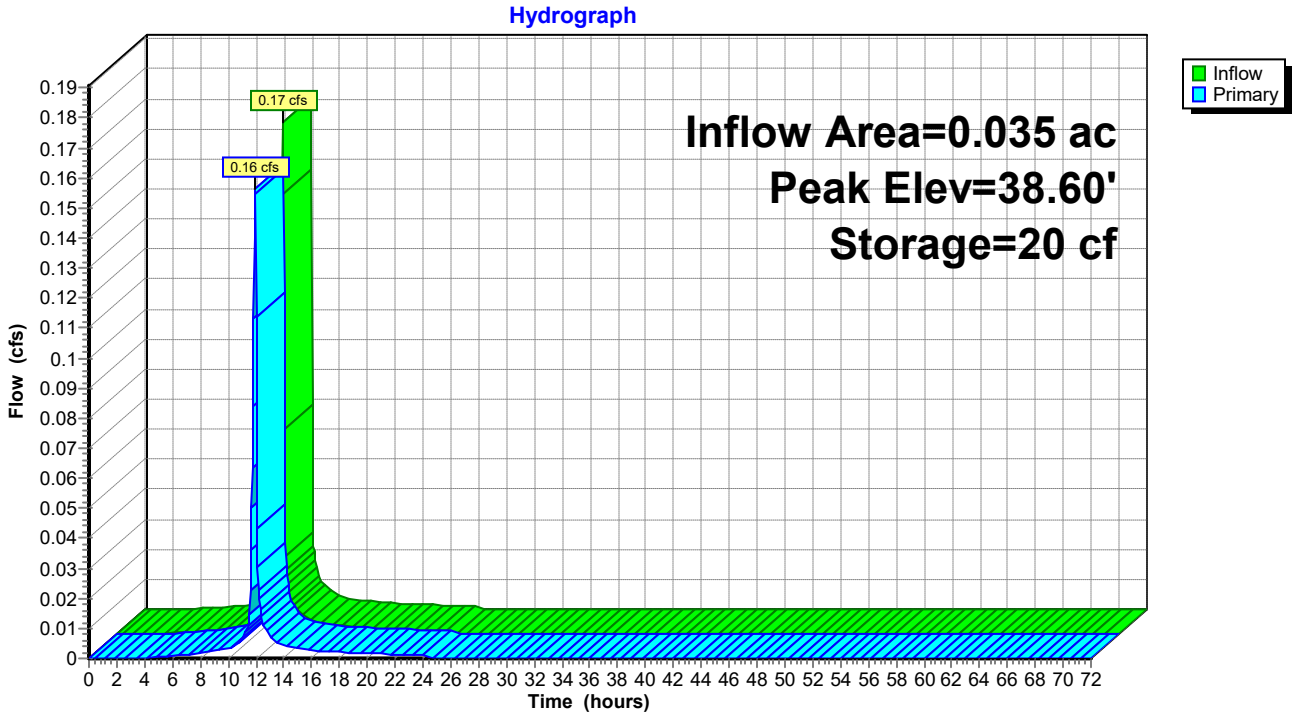
Volume	Invert	Avail.Storage	Storage Description
#1	37.99'	2,667 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.99	83	0.0	0	0
38.00	83	40.0	0	0
41.14	83	40.0	104	105
41.15	83	100.0	1	105
41.64	83	100.0	41	146
42.14	10,000	100.0	2,521	2,667

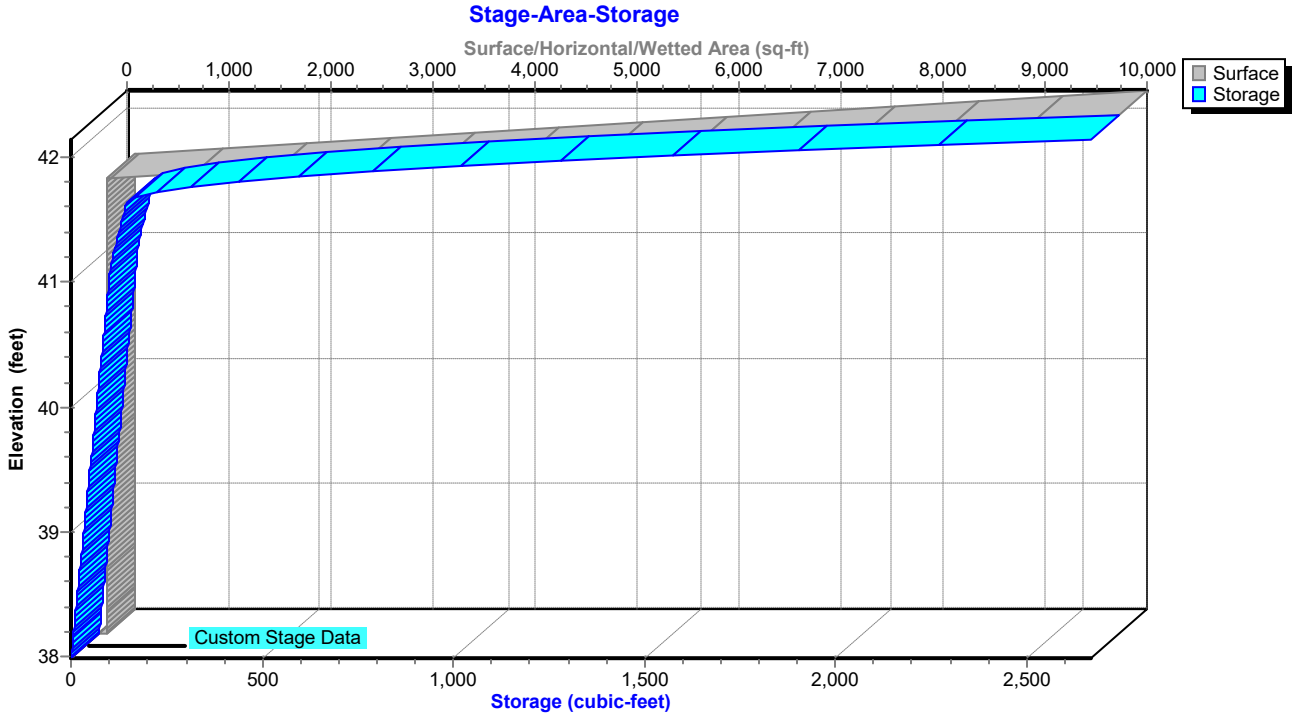
Device	Routing	Invert	Outlet Devices
#1	Primary	38.00'	**4.0" Round Culvert** L= 52.5' Ke= 0.500 Inlet / Outlet Invert= 38.00' / 37.94' S= 0.0011 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#2	Device 1	38.00'	**4.0" Round Culvert** L= 4.9' Ke= 0.500 Inlet / Outlet Invert= 38.00' / 38.00' S= 0.0000 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 1	38.17'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	41.64'	**8.7' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.15 cfs @ 11.94 hrs HW=38.58' TW=38.26' (Dynamic Tailwater)
- **1=Culvert** (Barrel Controls 0.15 cfs @ 1.73 fps)
  - **2=Culvert** (Passes < 0.24 cfs potential flow)
  - **3=Orifice/Grate** (Passes < 0.01 cfs potential flow)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 25P: PLANTER BOX 3



Pond 25P: PLANTER BOX 3



Summary for Pond 26P: PLANTER BOX 4

Inflow Area = 0.016 ac, 87.72% Impervious, Inflow Depth = 2.45" for 2-YR event
Inflow = 0.07 cfs @ 11.91 hrs, Volume= 0.003 af
Outflow = 0.06 cfs @ 11.92 hrs, Volume= 0.003 af, Atten= 11%, Lag= 0.7 min
Primary = 0.06 cfs @ 11.92 hrs, Volume= 0.003 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.28' @ 11.98 hrs Surf.Area= 85 sf Storage= 12 cf

Plug-Flow detention time= 21.7 min calculated for 0.003 af (99% of inflow)
Center-of-Mass det. time= 16.5 min (809.8 - 793.2)

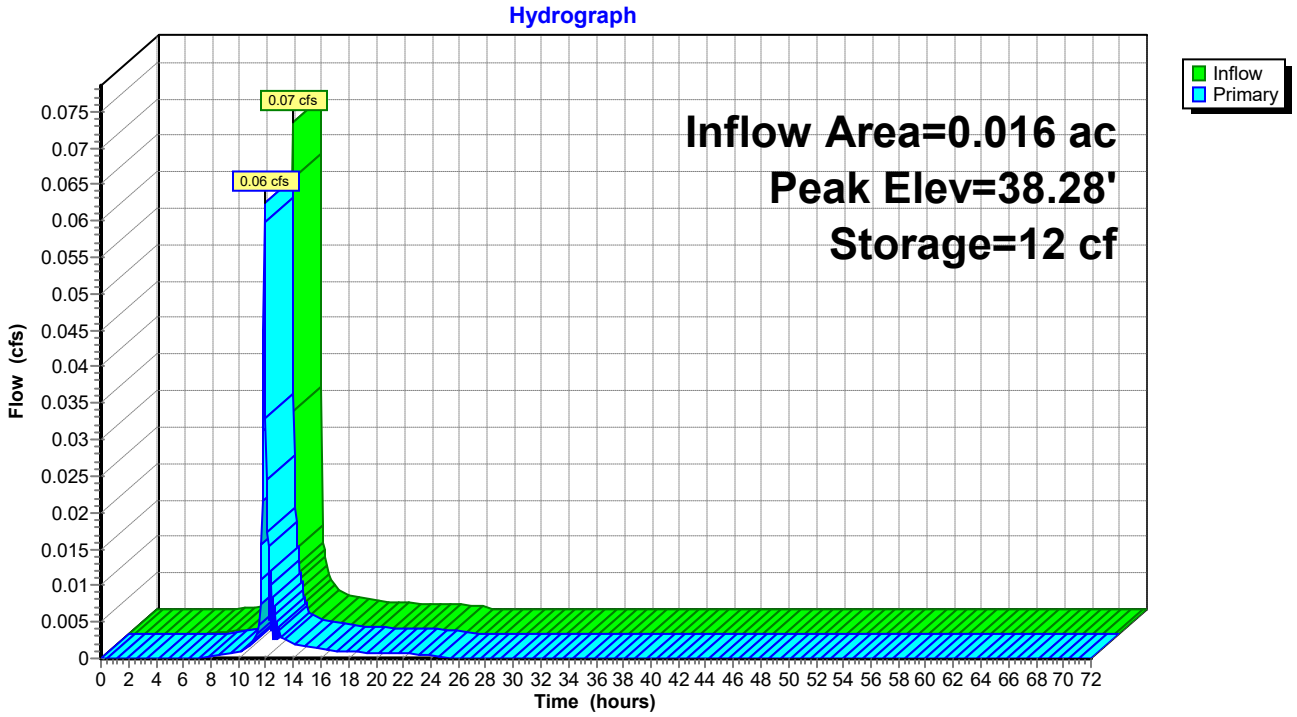
Volume	Invert	Avail.Storage	Storage Description
#1	37.91'	2,682 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.91	85	0.0	0	0
37.92	85	40.0	0	0
41.40	85	40.0	118	119
41.41	85	100.0	1	120
41.90	85	100.0	42	161
42.40	10,000	100.0	2,521	2,682

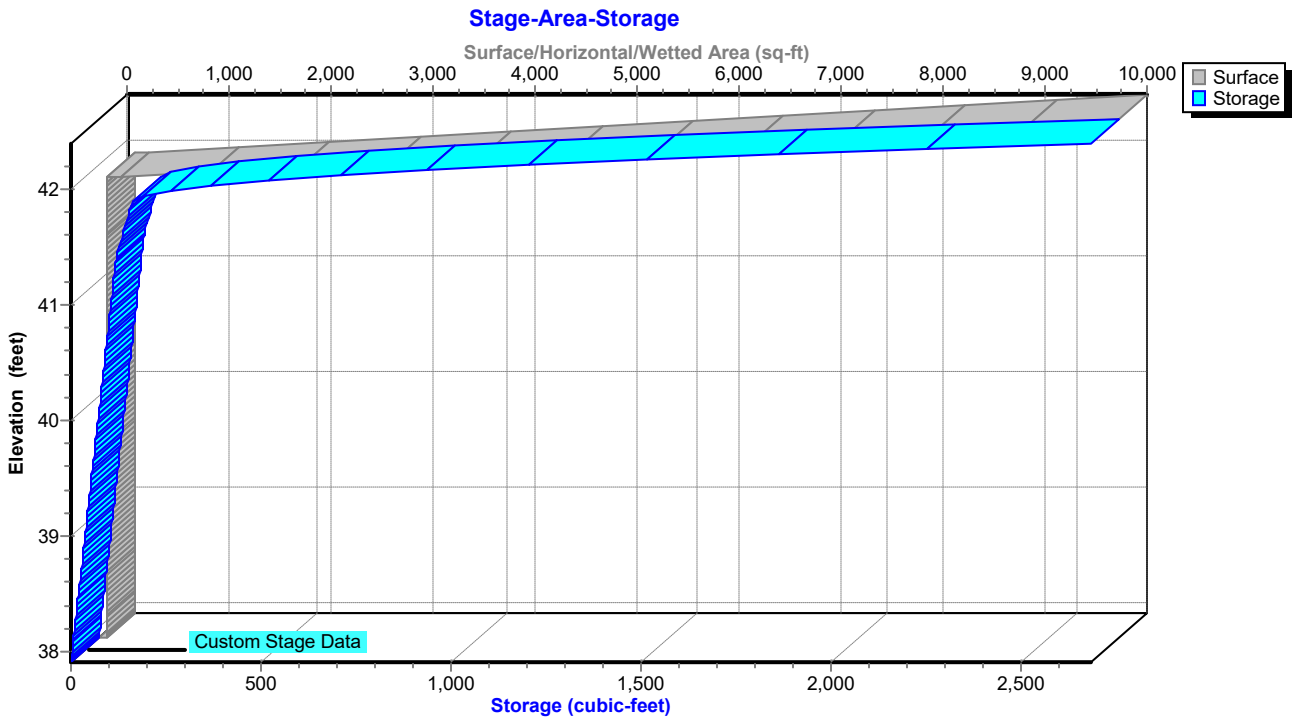
Device	Routing	Invert	Outlet Devices
#1	Primary	37.94'	**4.0" Round Culvert** L= 9.5' Ke= 0.500 Inlet / Outlet Invert= 37.94' / 37.93' S= 0.0011 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#2	Device 1	37.94'	**4.0" Round Culvert** L= 4.3' Ke= 0.500 Inlet / Outlet Invert= 37.94' / 37.94' S= 0.0000 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 1	38.11'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	41.90'	**8.7' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.01 cfs @ 11.92 hrs HW=38.25' TW=38.25' (Dynamic Tailwater)
- **1=Culvert** (Outlet Controls 0.01 cfs @ 0.13 fps)
  - **2=Culvert** (Passes < 0.01 cfs potential flow)
  - **3=Orifice/Grate** (Passes < 0.00 cfs potential flow)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 26P: PLANTER BOX 4



Pond 26P: PLANTER BOX 4



Summary for Pond 31P: (new Pond)

Inflow Area = 0.004 ac, 81.82% Impervious, Inflow Depth = 2.95" for 2-YR event
Inflow = 0.02 cfs @ 11.91 hrs, Volume= 0.001 af
Outflow = 0.00 cfs @ 12.85 hrs, Volume= 0.001 af, Atten= 95%, Lag= 56.4 min
Discarded = 0.00 cfs @ 12.85 hrs, Volume= 0.001 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.48' @ 12.85 hrs Surf.Area= 0.001 ac Storage= 0.000 af

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 168.2 min (933.1 - 764.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.74'	0.001 af	**2.83'W x 21.50'L x 1.47'H Field A** 0.002 af Overall - 0.001 af Embedded = 0.001 af x 40.0% Voids
#2A	39.74'	0.000 af	**PaveDrain S6-45** x 63 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 3 Rows of 21 Chambers
		0.001 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.74'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.21'	**24.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.00 cfs @ 12.85 hrs HW=39.48' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.74' TW=37.68' (Dynamic Tailwater)
↑—**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 31P: (new Pond) - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

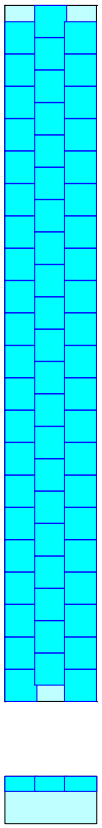
21 Chambers/Row x 1.00' Long = 21.00' Row Length +0.50' Row Offset = 21.50' Base Length
3 Rows x 12.0" Wide - 1.0" Nesting x 2 = 2.83' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

63 Chambers x 0.1 cf = 6.0 cf Chamber Storage
63 Chambers x 0.4 cf = 27.0 cf Displacement

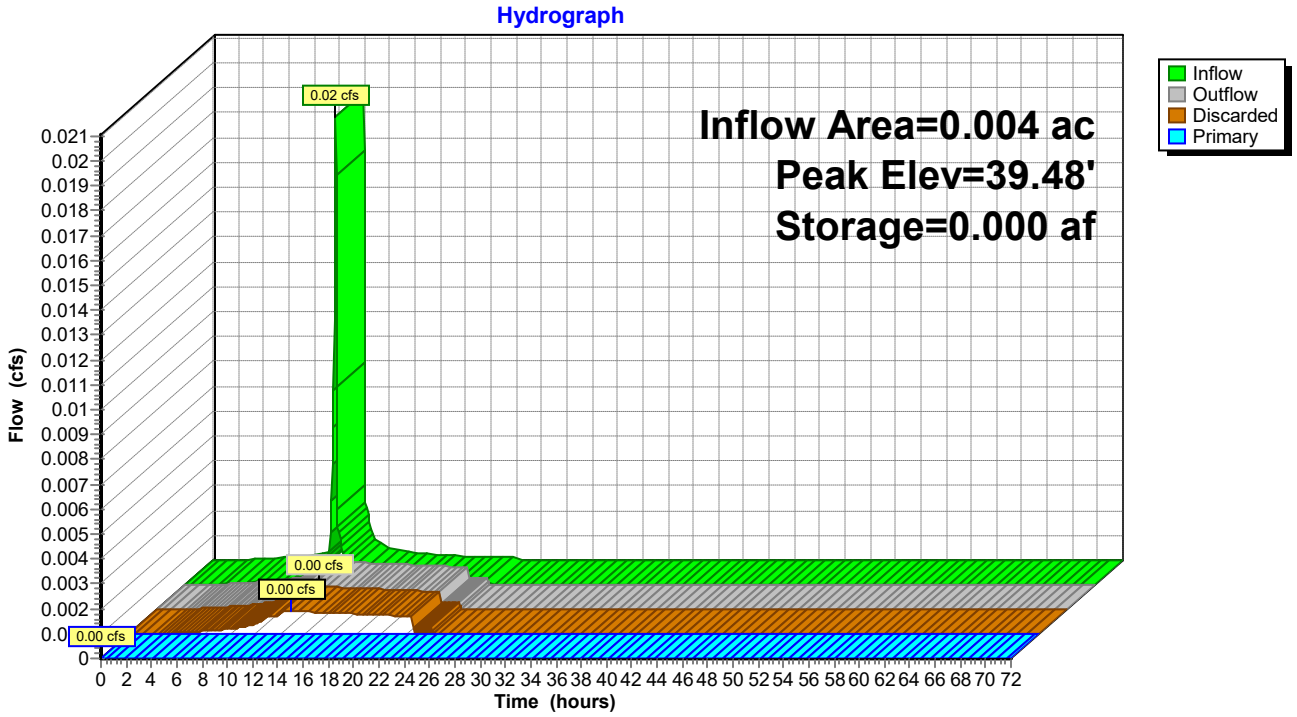
89.3 cf Field - 27.0 cf Chambers = 62.4 cf Stone x 40.0% Voids = 25.0 cf Stone Storage

Chamber Storage + Stone Storage = 31.0 cf = 0.001 af
Overall Storage Efficiency = 34.7%
Overall System Size = 21.50' x 2.83' x 1.47'

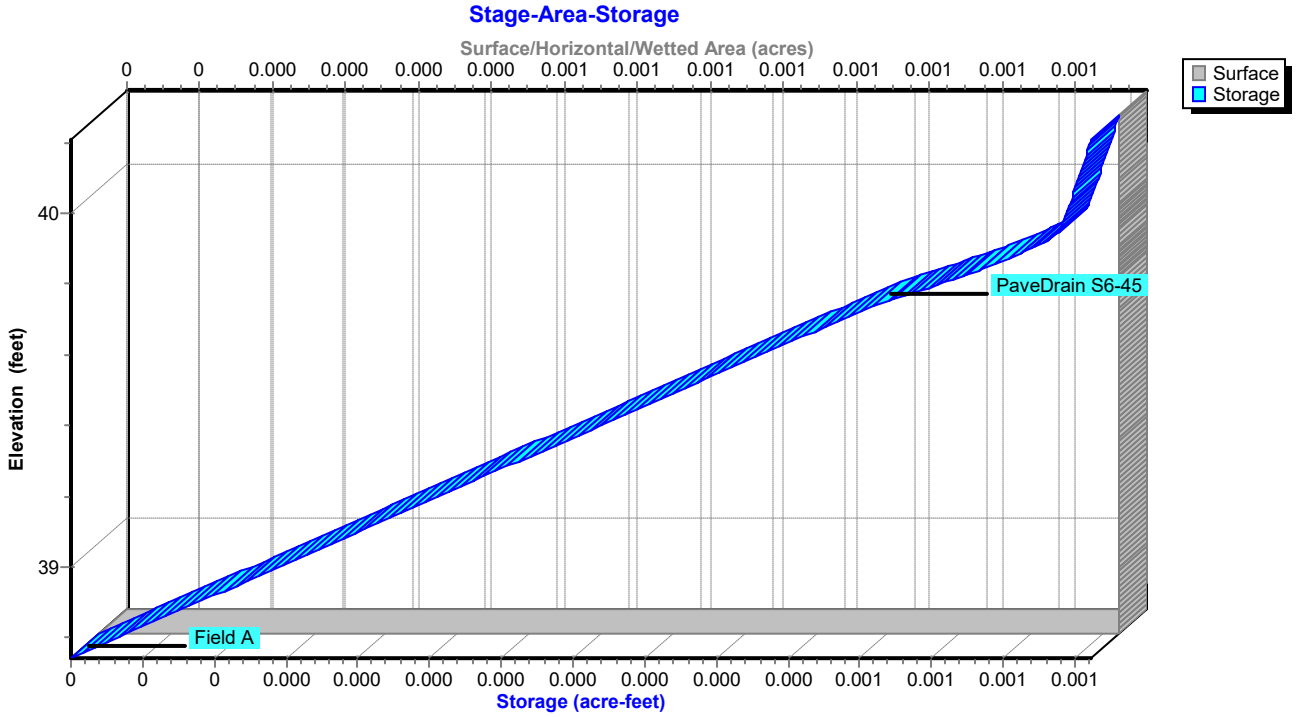
63 Chambers
3.3 cy Field
2.3 cy Stone



Pond 31P: (new Pond)



Pond 31P: (new Pond)



Summary for Pond 32P: CURB INLET 1

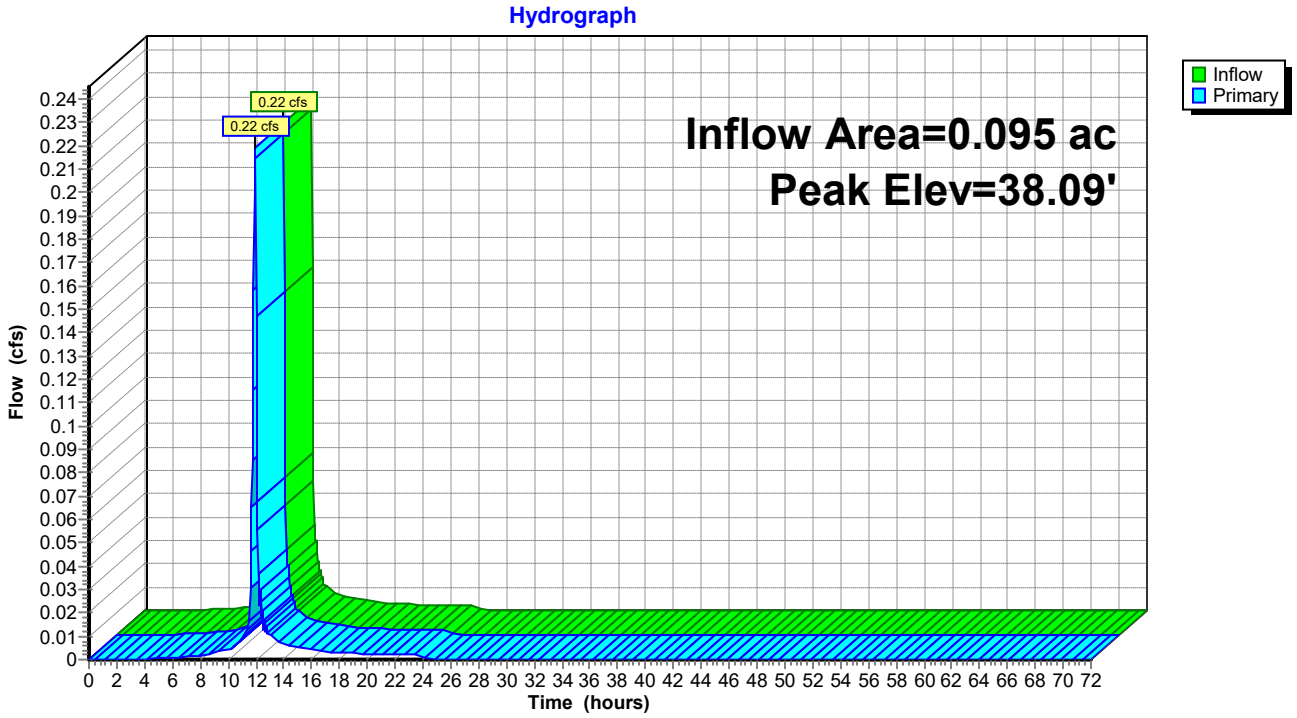
Inflow Area = 0.095 ac, 89.02% Impervious, Inflow Depth = 1.44" for 2-YR event
Inflow = 0.22 cfs @ 11.93 hrs, Volume= 0.011 af
Outflow = 0.22 cfs @ 11.93 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min
Primary = 0.22 cfs @ 11.93 hrs, Volume= 0.011 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.09' @ 11.93 hrs

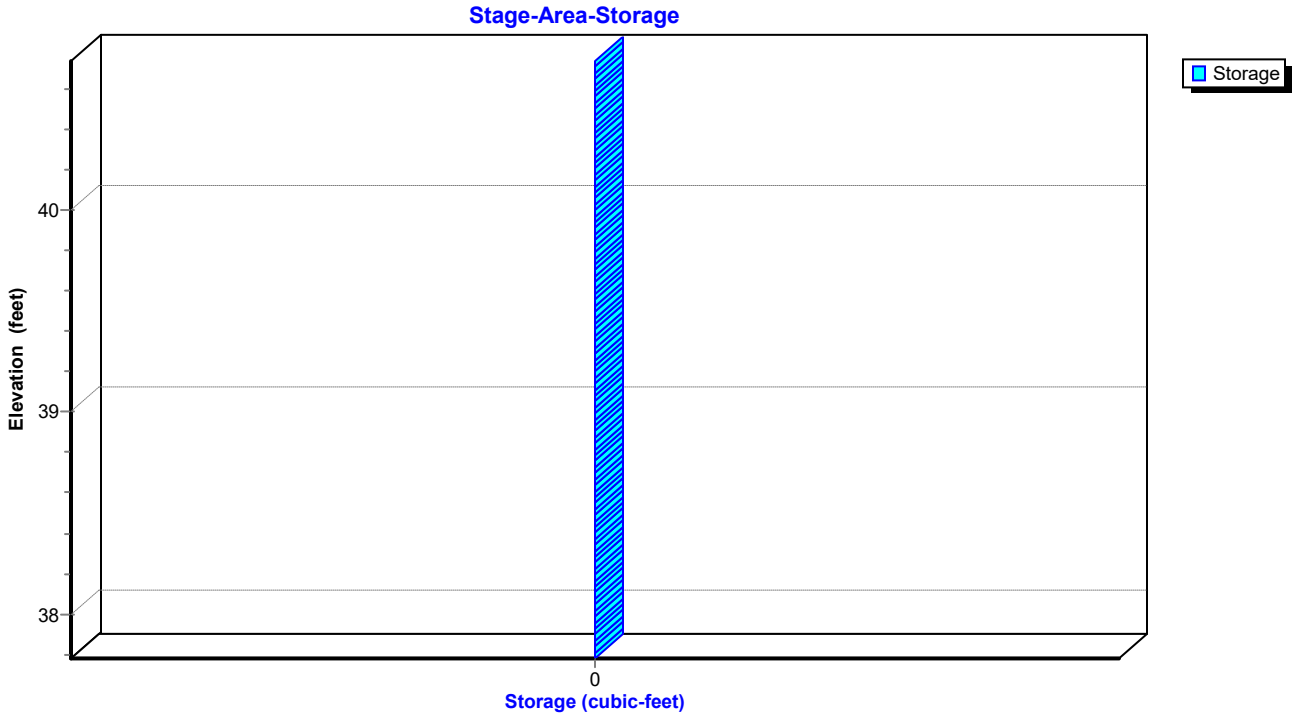
Device	Routing	Invert	Outlet Devices
#1	Primary	37.78'	**12.0" Round Culvert** L= 25.1' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 37.78' / 37.75' S= 0.0012 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Primary	40.40'	**66.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=0.21 cfs @ 11.93 hrs HW=38.08' TW=37.68' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.21 cfs @ 1.56 fps)
2=Orifice/Grate (Controls 0.00 cfs)

Pond 32P: CURB INLET 1



Pond 32P: CURB INLET 1



Summary for Pond 33P: CURB INLET 2

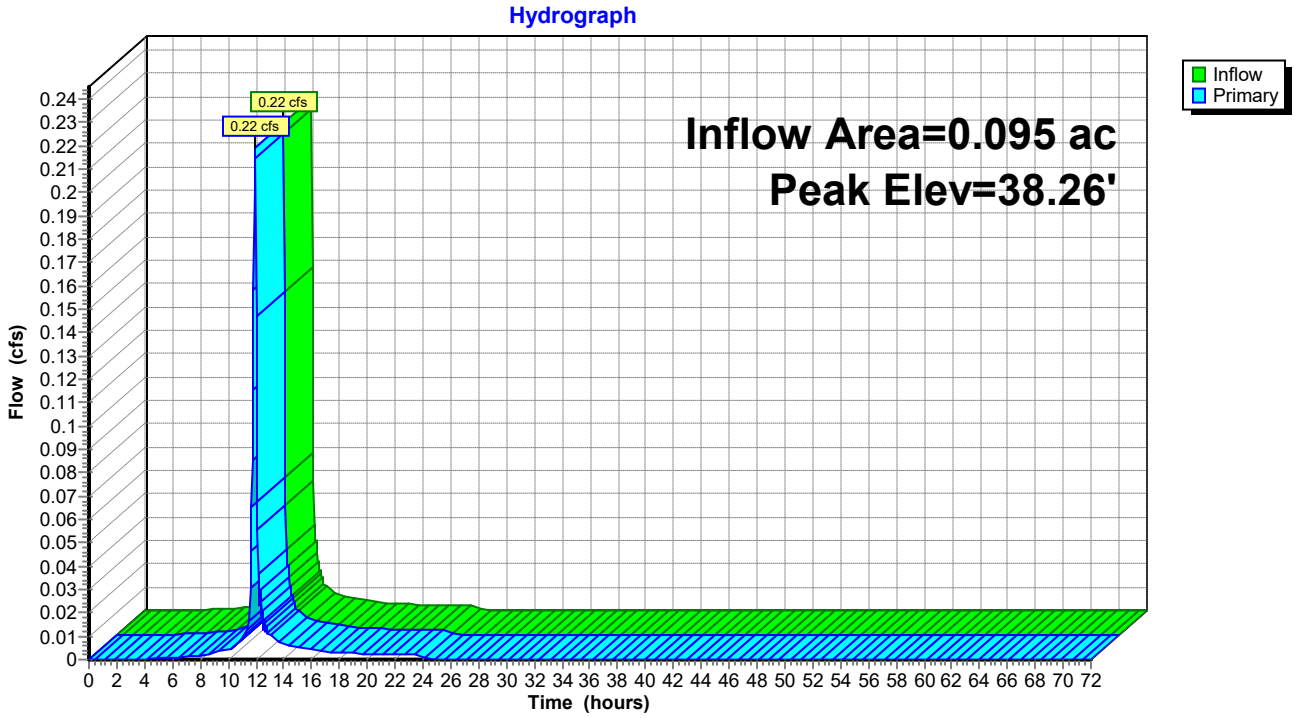
Inflow Area = 0.095 ac, 89.02% Impervious, Inflow Depth = 1.44" for 2-YR event
Inflow = 0.22 cfs @ 11.93 hrs, Volume= 0.011 af
Outflow = 0.22 cfs @ 11.93 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min
Primary = 0.22 cfs @ 11.93 hrs, Volume= 0.011 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.26' @ 11.94 hrs

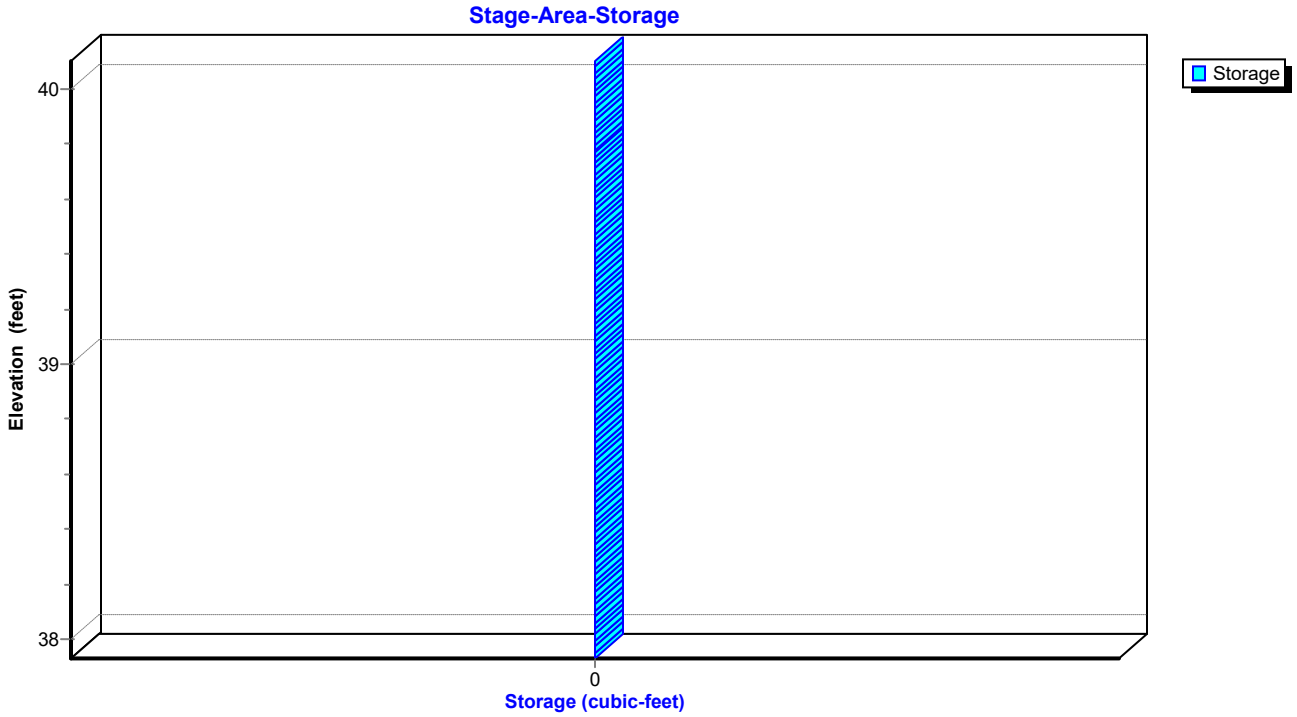
Device	Routing	Invert	Outlet Devices
#1	Primary	37.93'	**12.0" Round Culvert** L= 102.9' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 37.93' / 37.78' S= 0.0015 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Primary	39.77'	**66.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=0.20 cfs @ 11.93 hrs HW=38.26' TW=38.08' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.20 cfs @ 1.34 fps)
2=Orifice/Grate (Controls 0.00 cfs)

Pond 33P: CURB INLET 2



Pond 33P: CURB INLET 2



Summary for Pond 34P: PERMEABLE PAVEMENT EAST

Inflow Area = 0.044 ac, 85.18% Impervious, Inflow Depth = 2.26" for 2-YR event
Inflow = 0.17 cfs @ 11.94 hrs, Volume= 0.008 af
Outflow = 0.01 cfs @ 12.86 hrs, Volume= 0.008 af, Atten= 95%, Lag= 55.1 min
Discarded = 0.01 cfs @ 12.86 hrs, Volume= 0.008 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.30' @ 12.86 hrs Surf.Area= 679 sf Storage= 162 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 148.4 min (952.0 - 803.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.71'	200 cf	**5.58'W x 88.50'L x 1.47'H Field A** 725 cf Overall - 226 cf Embedded = 499 cf x 40.0% Voids
#2A	39.71'	50 cf	**PaveDrain S6-45** x 528 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 6 Rows of 88 Chambers
#3B	38.71'	28 cf	**7.42'W x 18.50'L x 0.97'H Field B** 133 cf Overall - 62 cf Embedded = 71 cf x 40.0% Voids
#4B	39.21'	14 cf	**PaveDrain S6-45** x 144 Inside #3 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 8 Rows of 18 Chambers
#5C	38.71'	20 cf	**5.58'W x 8.50'L x 1.47'H Field C** 70 cf Overall - 21 cf Embedded = 49 cf x 40.0% Voids
#6C	39.71'	5 cf	**PaveDrain S6-45** x 48 Inside #5 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 6 Rows of 8 Chambers
		316 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard
Storage Group C created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.71'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.16'	**88.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 12.86 hrs HW=39.30' (Free Discharge)
1=Exfiltration (Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.71' TW=37.93' (Dynamic Tailwater)
2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

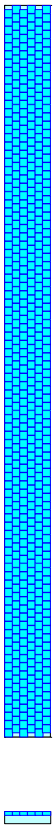
88 Chambers/Row x 1.00' Long = 88.00' Row Length +0.50' Row Offset = 88.50' Base Length
6 Rows x 12.0" Wide - 1.0" Nesting x 5 = 5.58' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

528 Chambers x 0.1 cf = 50.4 cf Chamber Storage
528 Chambers x 0.4 cf = 225.9 cf Displacement

724.7 cf Field - 225.9 cf Chambers = 498.8 cf Stone x 40.0% Voids = 199.5 cf Stone Storage

Chamber Storage + Stone Storage = 250.0 cf = 0.006 af
Overall Storage Efficiency = 34.5%
Overall System Size = 88.50' x 5.58' x 1.47'

528 Chambers
26.8 cy Field
18.5 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field B

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

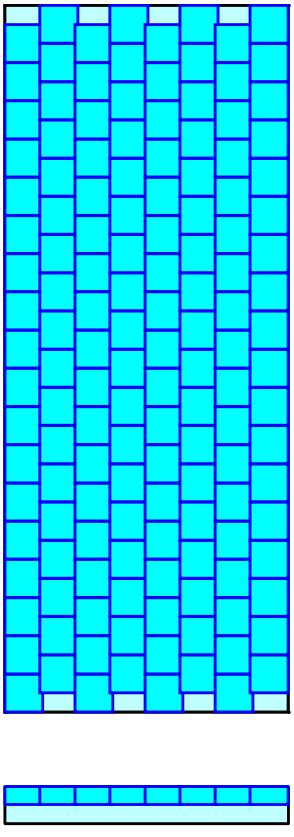
18 Chambers/Row x 1.00' Long = 18.00' Row Length +0.50' Row Offset = 18.50' Base Length
8 Rows x 12.0" Wide - 1.0" Nesting x 7 = 7.42' Base Width
6.0" Base + 5.6" Chamber Height = 0.97' Field Height

144 Chambers x 0.1 cf = 13.7 cf Chamber Storage
144 Chambers x 0.4 cf = 61.6 cf Displacement

132.6 cf Field - 61.6 cf Chambers = 71.0 cf Stone x 40.0% Voids = 28.4 cf Stone Storage

Chamber Storage + Stone Storage = 42.2 cf = 0.001 af
Overall Storage Efficiency = 31.8%
Overall System Size = 18.50' x 7.42' x 0.97'

144 Chambers
4.9 cy Field
2.6 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field C

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

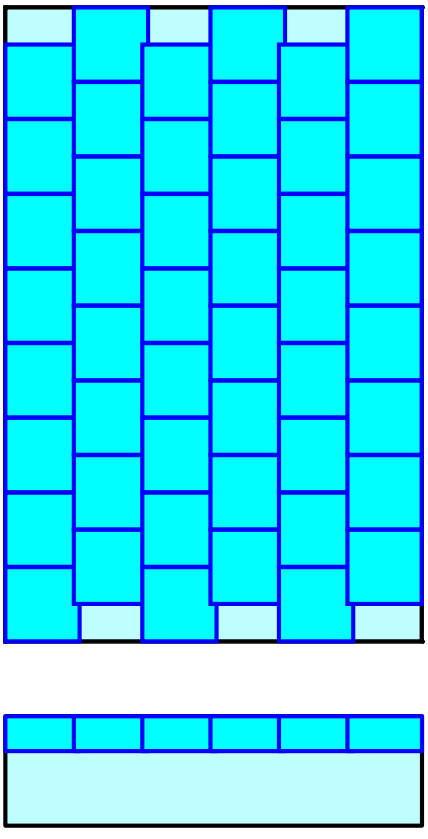
8 Chambers/Row x 1.00' Long = 8.00' Row Length +0.50' Row Offset = 8.50' Base Length
6 Rows x 12.0" Wide - 1.0" Nesting x 5 = 5.58' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

48 Chambers x 0.1 cf = 4.6 cf Chamber Storage
48 Chambers x 0.4 cf = 20.5 cf Displacement

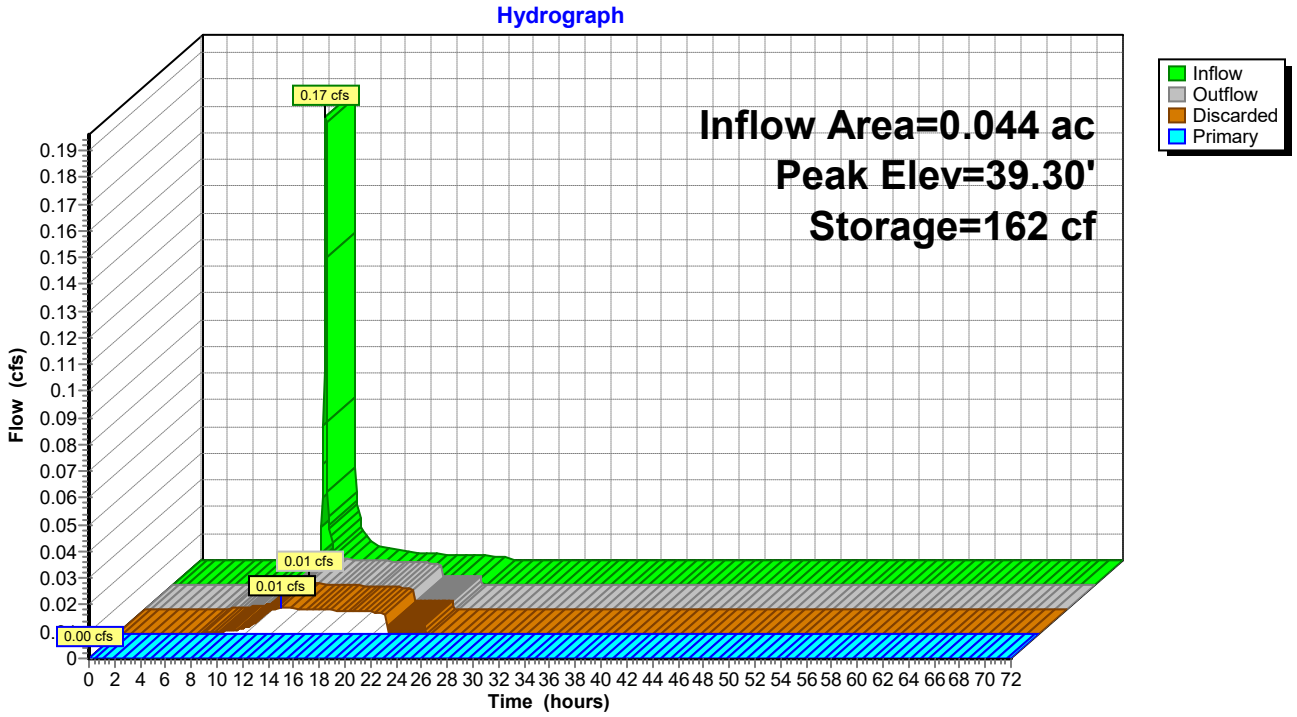
69.6 cf Field - 20.5 cf Chambers = 49.1 cf Stone x 40.0% Voids = 19.6 cf Stone Storage

Chamber Storage + Stone Storage = 24.2 cf = 0.001 af
Overall Storage Efficiency = 34.8%
Overall System Size = 8.50' x 5.58' x 1.47'

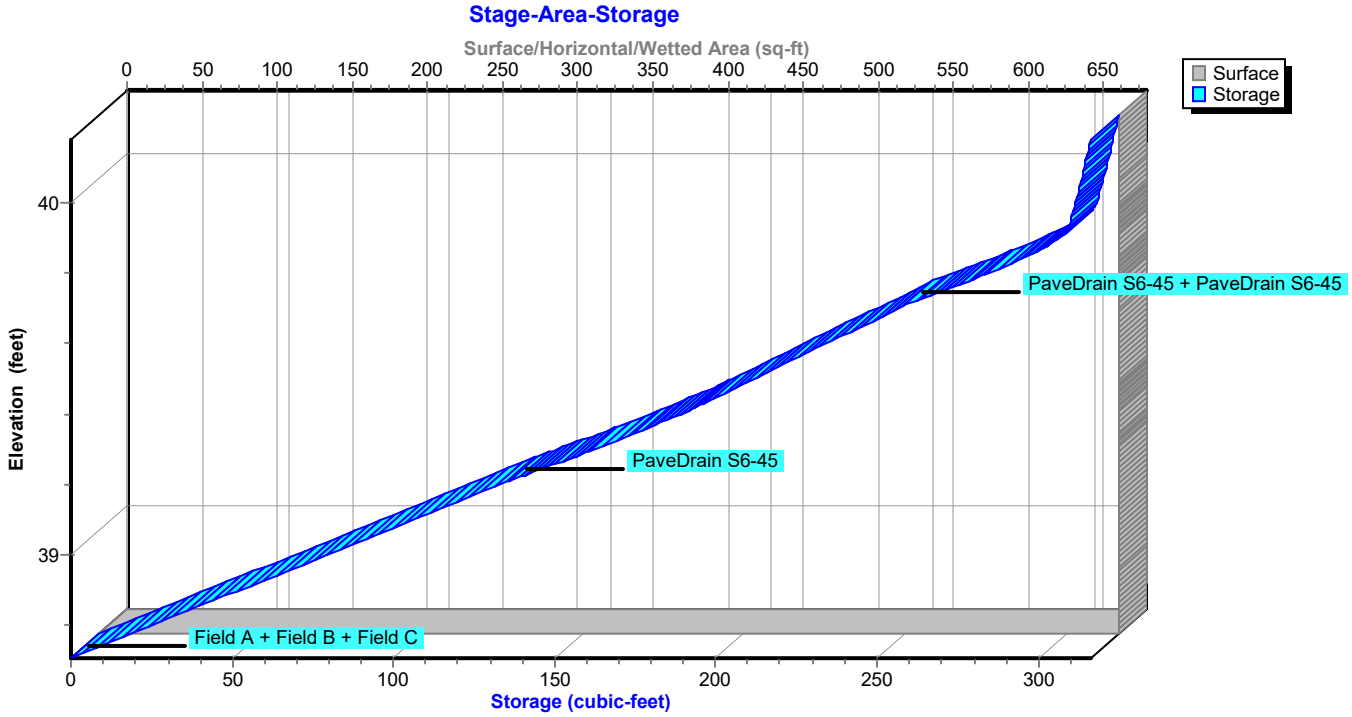
48 Chambers
2.6 cy Field
1.8 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST



Pond 34P: PERMEABLE PAVEMENT EAST

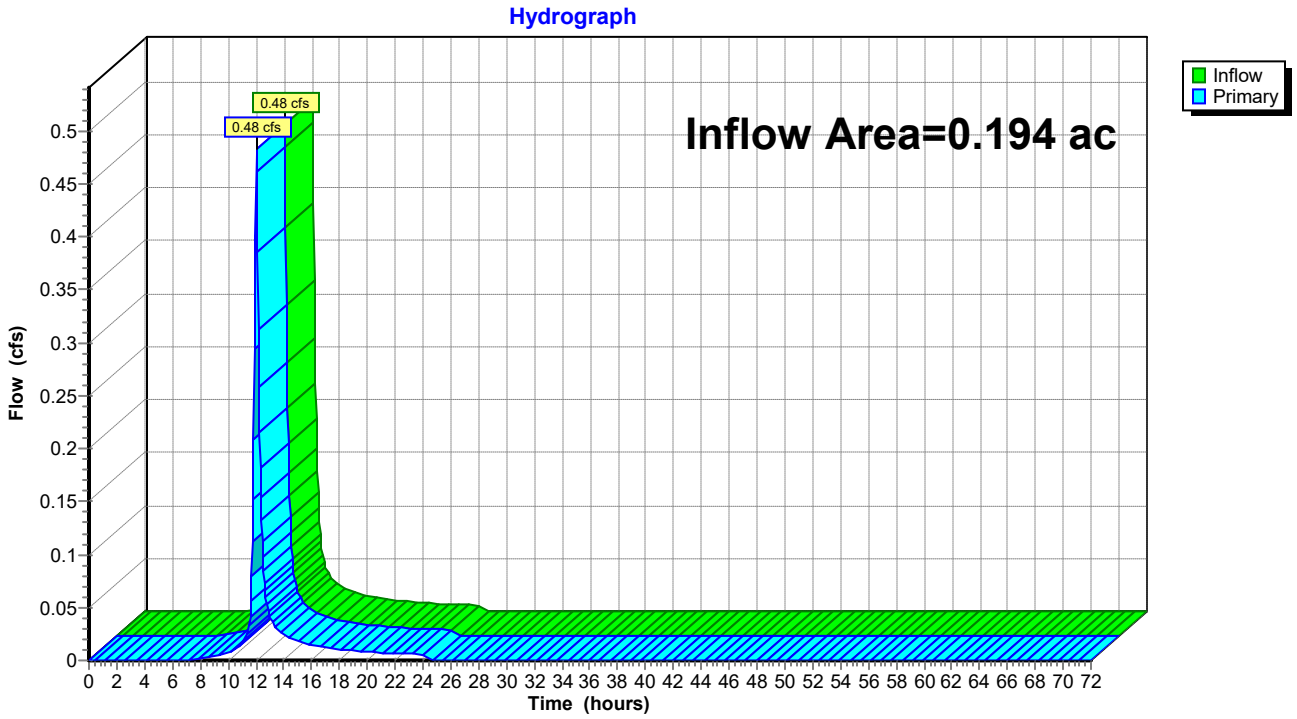


Summary for Link 23L: Study Point 1

Inflow Area = 0.194 ac, 7.58% Impervious, Inflow Depth = 2.09" for 2-YR event
Inflow = 0.48 cfs @ 12.02 hrs, Volume= 0.034 af
Primary = 0.48 cfs @ 12.02 hrs, Volume= 0.034 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 23L: Study Point 1

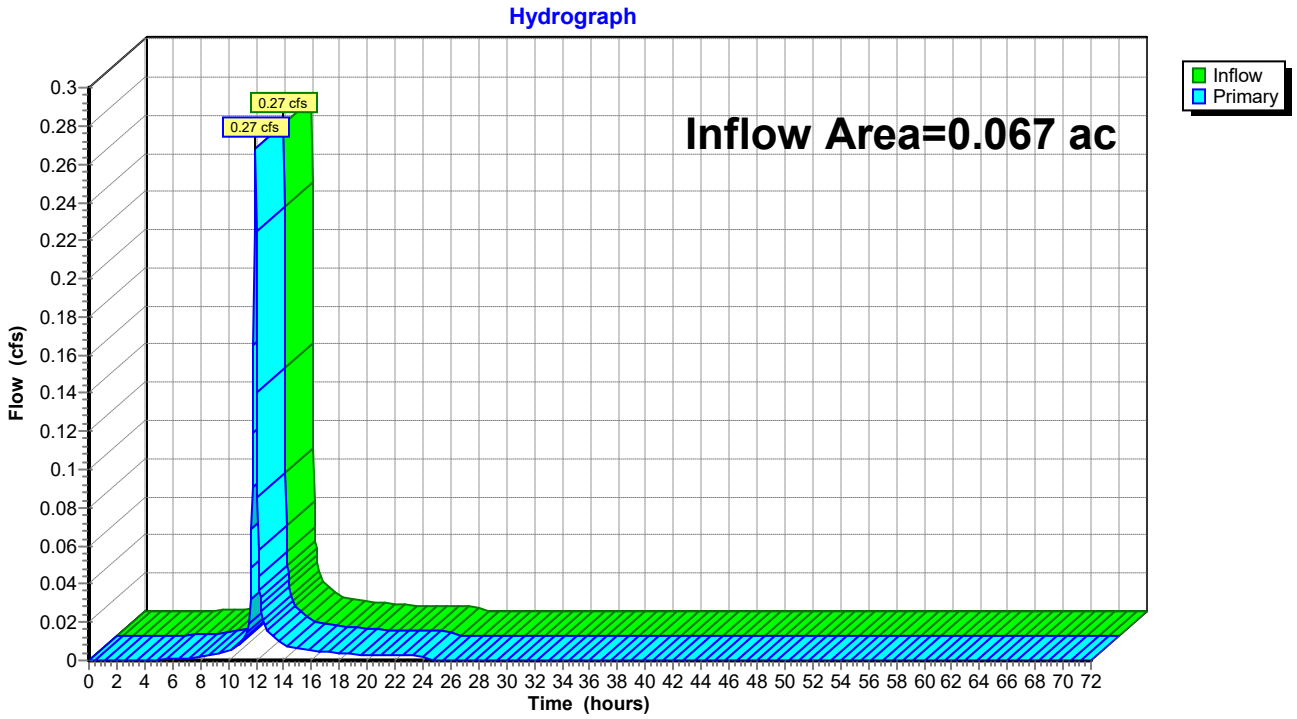


Summary for Link 24L: Study Point 2

Inflow Area = 0.067 ac, 52.55% Impervious, Inflow Depth = 2.54" for 2-YR event
Inflow = 0.27 cfs @ 11.95 hrs, Volume= 0.014 af
Primary = 0.27 cfs @ 11.95 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 24L: Study Point 2



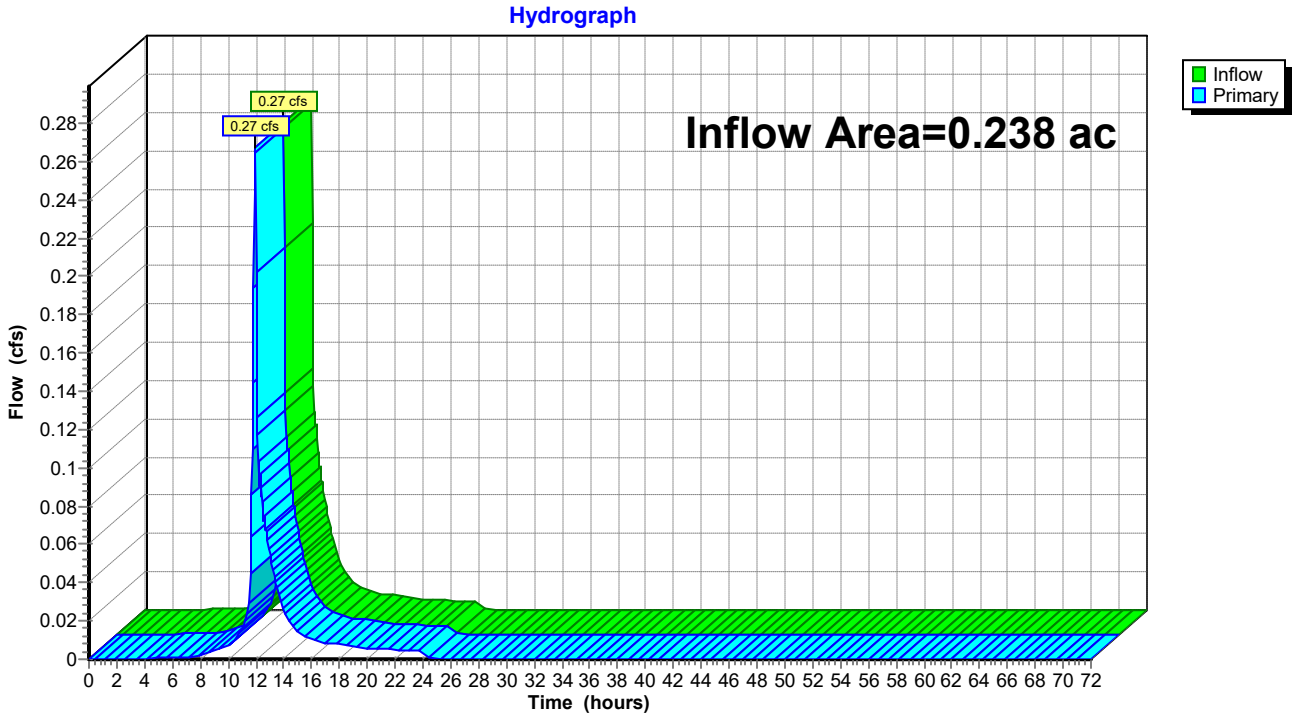
Summary for Link 26L: STUDY POINT 1

Inflow Area = 0.238 ac, 83.20% Impervious, Inflow Depth = 1.27" for 2-YR event
Inflow = 0.27 cfs @ 11.94 hrs, Volume= 0.025 af
Primary = 0.27 cfs @ 11.94 hrs, Volume= 0.025 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Fixed water surface Elevation= 37.68'

Link 26L: STUDY POINT 1

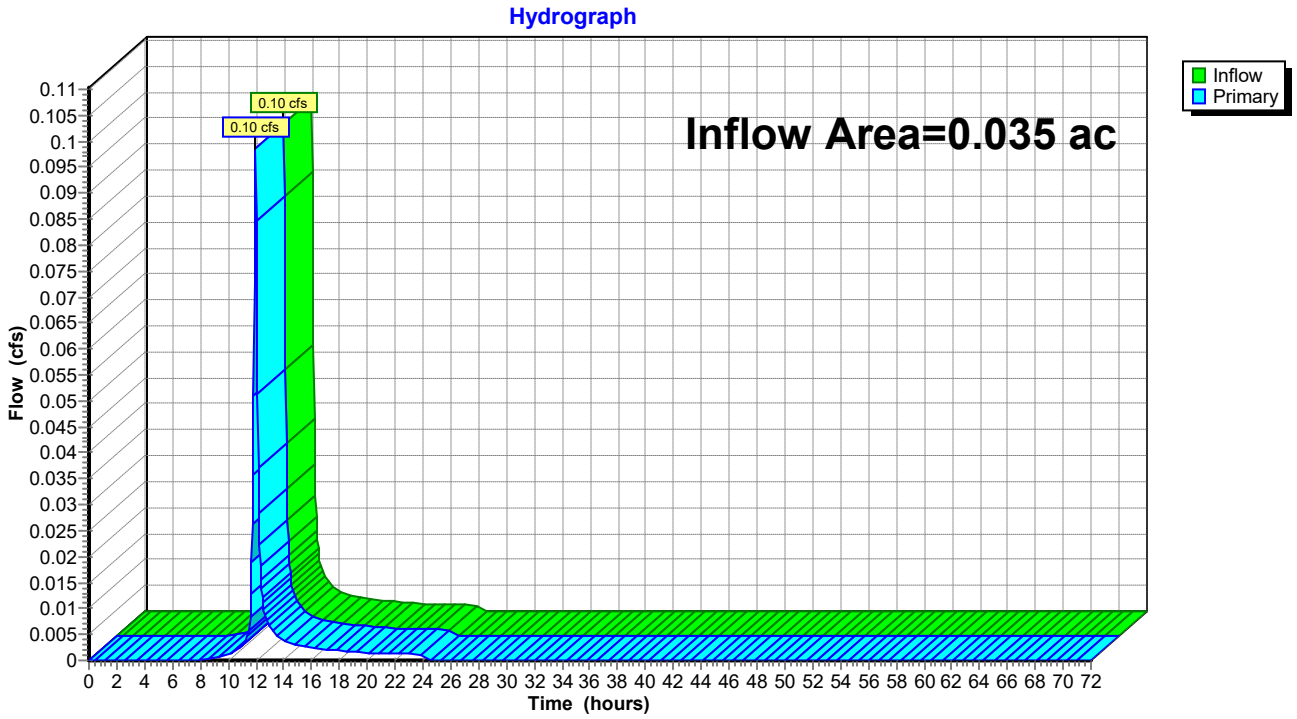


Summary for Link 27L: STUDY POINT 2

Inflow Area = 0.035 ac, 78.77% Impervious, Inflow Depth = 1.93" for 2-YR event
Inflow = 0.10 cfs @ 11.98 hrs, Volume= 0.006 af
Primary = 0.10 cfs @ 11.98 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 27L: STUDY POINT 2



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA1 - STUDY POINT 1 Runoff Area=8,470 sf 7.58% Impervious Runoff Depth=3.85"
Flow Length=197' Tc=8.6 min CN=87 Runoff=0.87 cfs 0.062 af

Subcatchment 2S: DA2 - STUDY POINT 2 Runoff Area=2,902 sf 52.55% Impervious Runoff Depth=4.38"
Flow Length=209' Tc=3.4 min CN=92 Runoff=0.45 cfs 0.024 af

Subcatchment 23S: DA2 Runoff Area=1,287 sf 91.38% Impervious Runoff Depth=4.49"
Flow Length=42' Slope=0.0050 '/' Tc=1.0 min CN=93 Runoff=0.23 cfs 0.011 af

Subcatchment 24S: DA3 Runoff Area=733 sf 87.45% Impervious Runoff Depth=4.27"
Flow Length=23' Slope=0.0050 '/' Tc=0.6 min CN=91 Runoff=0.13 cfs 0.006 af

Subcatchment 26S: DA4 Runoff Area=1,511 sf 94.51% Impervious Runoff Depth=4.72"
Flow Length=41' Slope=0.0050 '/' Tc=1.0 min CN=95 Runoff=0.27 cfs 0.014 af

Subcatchment 27S: DA5 Runoff Area=692 sf 87.72% Impervious Runoff Depth=4.27"
Flow Length=44' Slope=0.0050 '/' Tc=1.1 min CN=91 Runoff=0.12 cfs 0.006 af

Subcatchment 30S: DA9 Runoff Area=165 sf 81.82% Impervious Runoff Depth=4.83"
Flow Length=74' Tc=1.1 min CN=96 Runoff=0.03 cfs 0.002 af

Subcatchment 31S: DA6 - PERMEABLE Runoff Area=2,452 sf 80.26% Impervious Runoff Depth=3.75"
Flow Length=108' Tc=4.3 min CN=86 Runoff=0.32 cfs 0.018 af

Subcatchment 33S: DA7 - PERMEABLE Runoff Area=1,930 sf 85.18% Impervious Runoff Depth=4.06"
Flow Length=124' Slope=0.0054 '/' Tc=2.3 min CN=89 Runoff=0.30 cfs 0.015 af

Subcatchment 38S: DA8 Runoff Area=1,512 sf 78.77% Impervious Runoff Depth=3.65"
Flow Length=77' Tc=5.0 min CN=85 Runoff=0.18 cfs 0.011 af

Subcatchment 39S: DA1 Runoff Area=1,604 sf 64.34% Impervious Runoff Depth=2.88"
Flow Length=158' Tc=32.0 min CN=77 Runoff=0.05 cfs 0.009 af

Pond 20P: PERMEABLE PAVEMENT NORTH Peak Elev=39.71' Storage=372 cf Inflow=0.32 cfs 0.018 af
Discarded=0.02 cfs 0.018 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.018 af

Pond 23P: PLANTER BOX 2 Peak Elev=40.92' Storage=93 cf Inflow=0.13 cfs 0.006 af
Outflow=0.03 cfs 0.006 af

Pond 24P: PLANTER BOX 1 Peak Elev=42.01' Storage=186 cf Inflow=0.23 cfs 0.011 af
Outflow=0.04 cfs 0.011 af

Pond 25P: PLANTER BOX 3 Peak Elev=39.08' Storage=36 cf Inflow=0.27 cfs 0.014 af
Outflow=0.24 cfs 0.014 af

Pond 26P: PLANTER BOX 4 Peak Elev=38.39' Storage=16 cf Inflow=0.12 cfs 0.006 af
Outflow=0.10 cfs 0.006 af

Pond 31P: (new Pond) Peak Elev=40.21' Storage=0.001 af Inflow=0.03 cfs 0.002 af
Discarded=0.00 cfs 0.001 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.002 af

Pond 32P: CURB INLET 1 Peak Elev=38.17' Inflow=0.34 cfs 0.020 af
Outflow=0.34 cfs 0.020 af

Pond 33P: CURB INLET 2 Peak Elev=38.35' Inflow=0.34 cfs 0.020 af
Outflow=0.34 cfs 0.020 af

Pond 34P: PERMEABLE PAVEMENT EAST Peak Elev=40.16' Storage=316 cf Inflow=0.30 cfs 0.015 af
Discarded=0.01 cfs 0.015 af Primary=0.01 cfs 0.000 af Outflow=0.02 cfs 0.015 af

Link 23L: Study Point 1 Inflow=0.87 cfs 0.062 af
Primary=0.87 cfs 0.062 af

Link 24L: Study Point 2 Inflow=0.45 cfs 0.024 af
Primary=0.45 cfs 0.024 af

Link 26L: STUDY POINT 1 Inflow=0.42 cfs 0.045 af
Primary=0.42 cfs 0.045 af

Link 27L: STUDY POINT 2 Inflow=0.18 cfs 0.011 af
Primary=0.18 cfs 0.011 af

Total Runoff Area = 0.534 ac Runoff Volume = 0.177 af Average Runoff Depth = 3.97"
48.45% Pervious = 0.259 ac 51.55% Impervious = 0.275 ac

Summary for Subcatchment 1S: DA1 - STUDY POINT 1

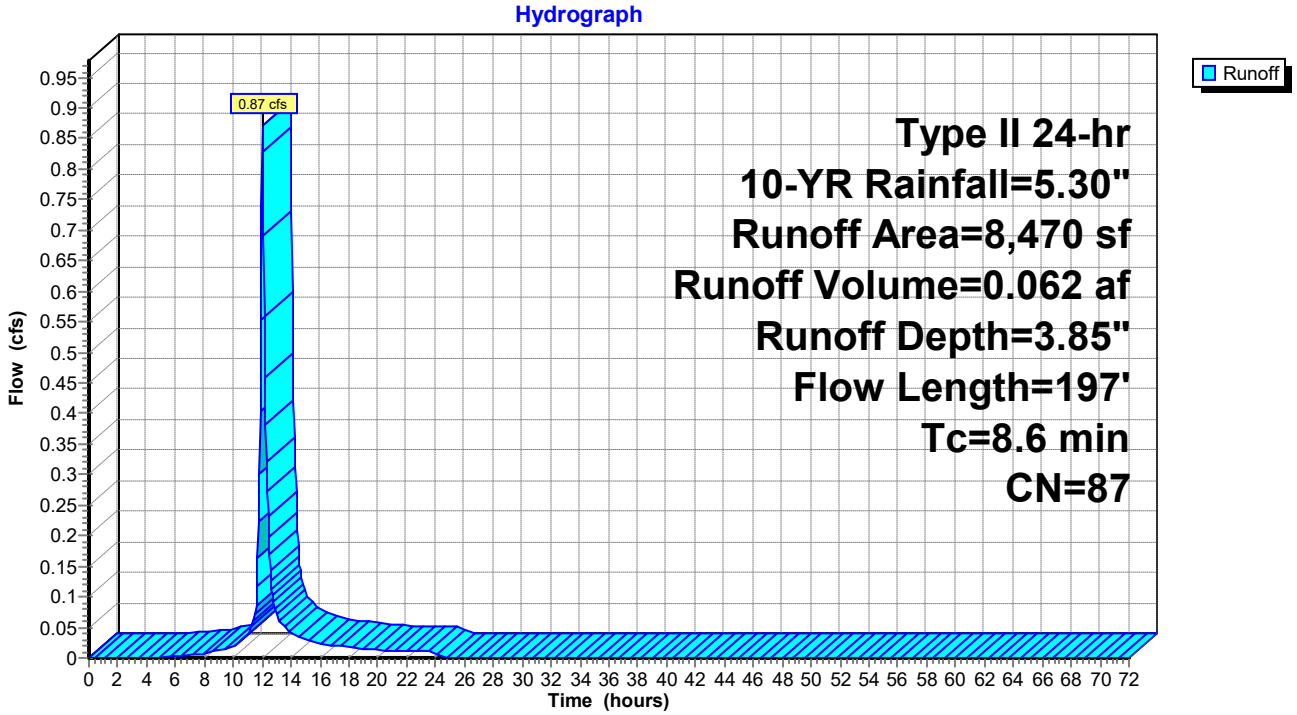
Runoff = 0.87 cfs @ 12.01 hrs, Volume= 0.062 af, Depth= 3.85"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
7,828	86	Woods/grass comb., Poor, HSG D
642	98	Paved parking, HSG D
8,470	87	Weighted Average
7,828		92.42% Pervious Area
642		7.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0160	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
2.2	93	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.4	54	0.0140	2.40		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
8.6	197	Total			

Subcatchment 1S: DA1 - STUDY POINT 1



Summary for Subcatchment 2S: DA2 - STUDY POINT 2

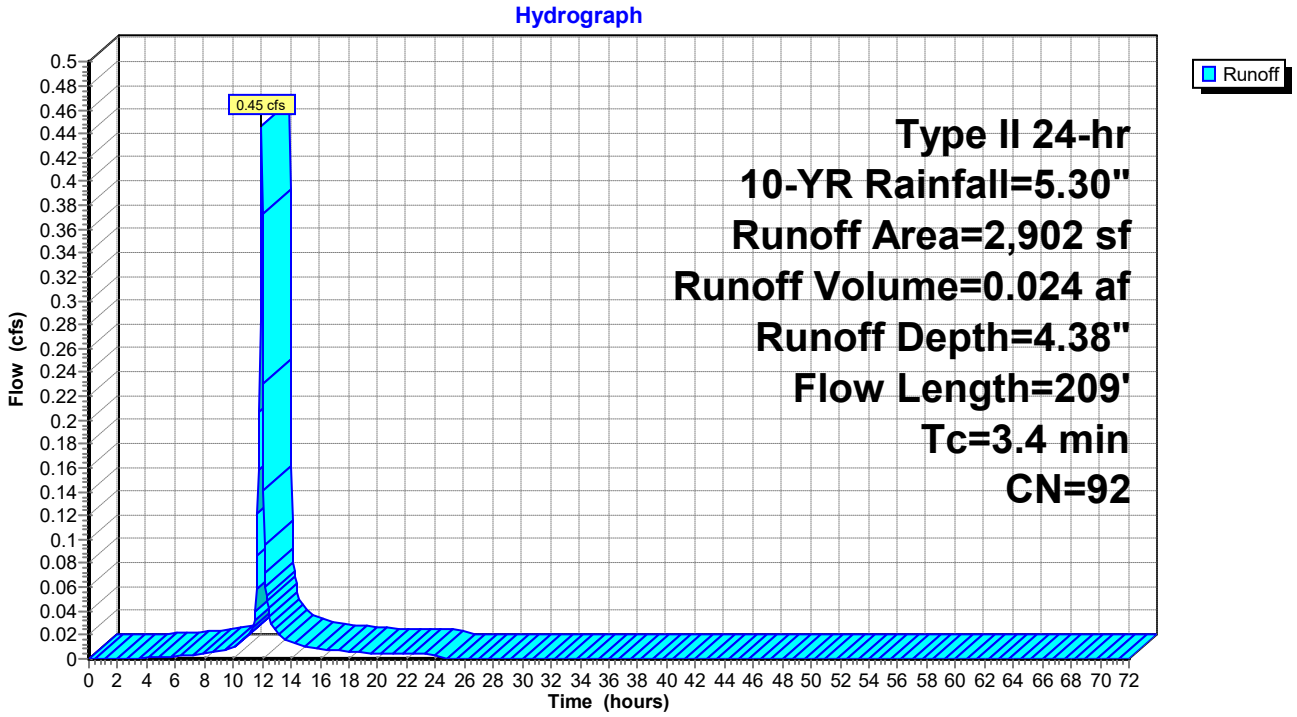
Runoff = 0.45 cfs @ 11.95 hrs, Volume= 0.024 af, Depth= 4.38"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
1,377	86	Woods/grass comb., Poor, HSG D
1,525	98	Paved parking, HSG D
2,902	92	Weighted Average
1,377		47.45% Pervious Area
1,525		52.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	100	0.0054	0.84		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
1.4	109	0.0040	1.28		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.4	209	Total			

Subcatchment 2S: DA2 - STUDY POINT 2



Summary for Subcatchment 23S: DA2

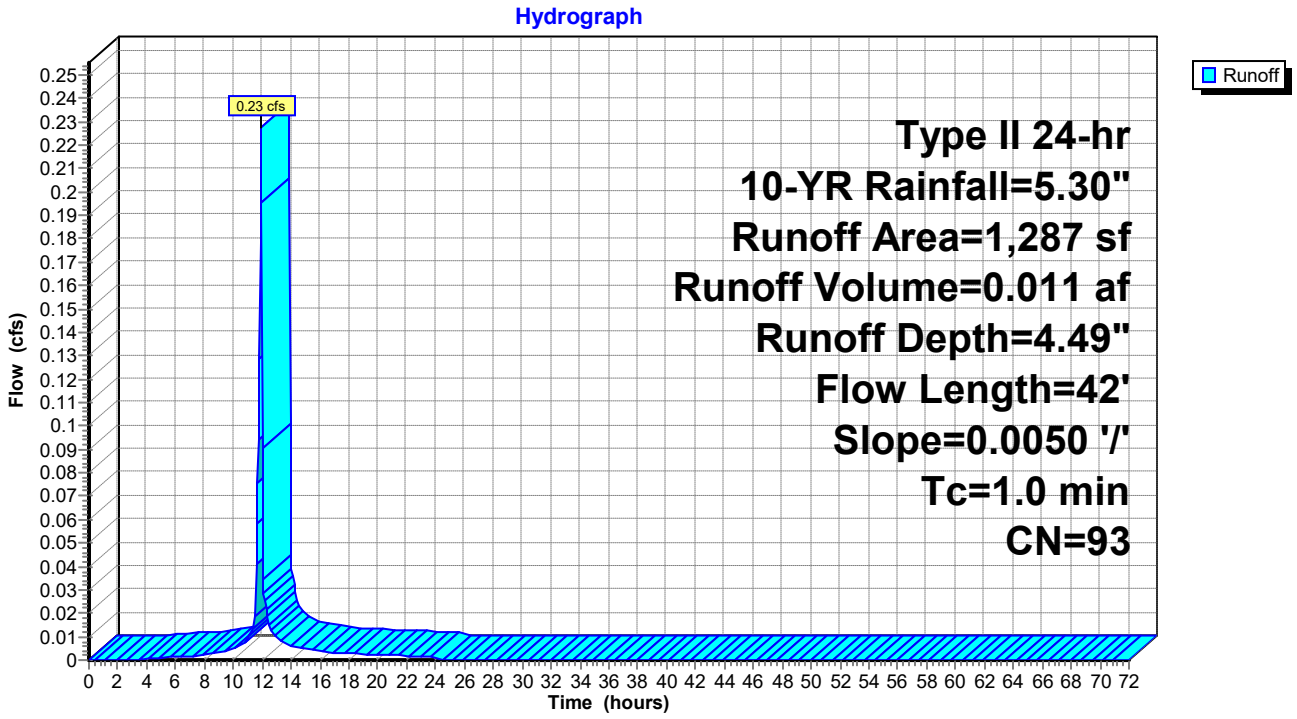
Runoff = 0.23 cfs @ 11.91 hrs, Volume= 0.011 af, Depth= 4.49"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
1,153	98	Roofs, HSG D
111	39	Pasture/grassland/range, Good, HSG A
23	98	Unconnected pavement, HSG D
1,287	93	Weighted Average
111		8.62% Pervious Area
1,176		91.38% Impervious Area
23		1.96% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	42	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 23S: DA2



Summary for Subcatchment 24S: DA3

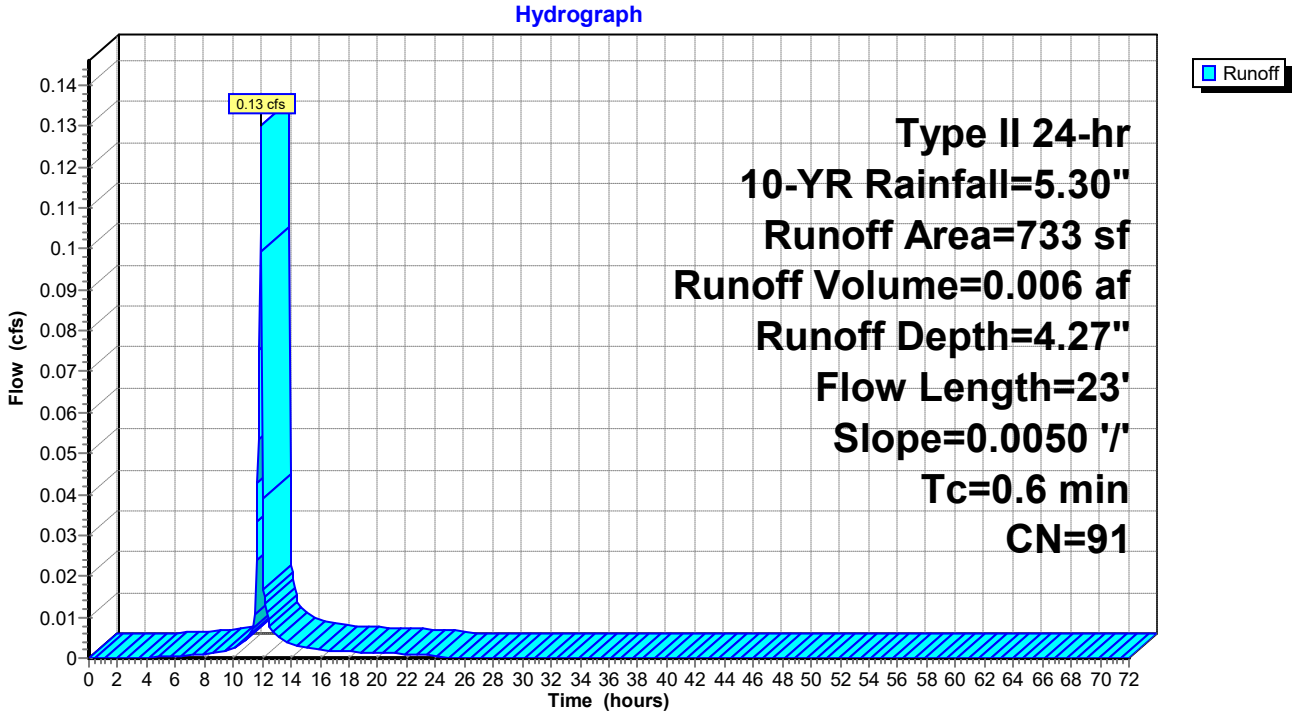
Runoff = 0.13 cfs @ 11.90 hrs, Volume= 0.006 af, Depth= 4.27"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
620	98	Roofs, HSG D
92	39	Pasture/grassland/range, Good, HSG A
21	98	Unconnected pavement, HSG D
733	91	Weighted Average
92		12.55% Pervious Area
641		87.45% Impervious Area
21		3.28% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	23	0.0050	0.61		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 24S: DA3



Summary for Subcatchment 26S: DA4

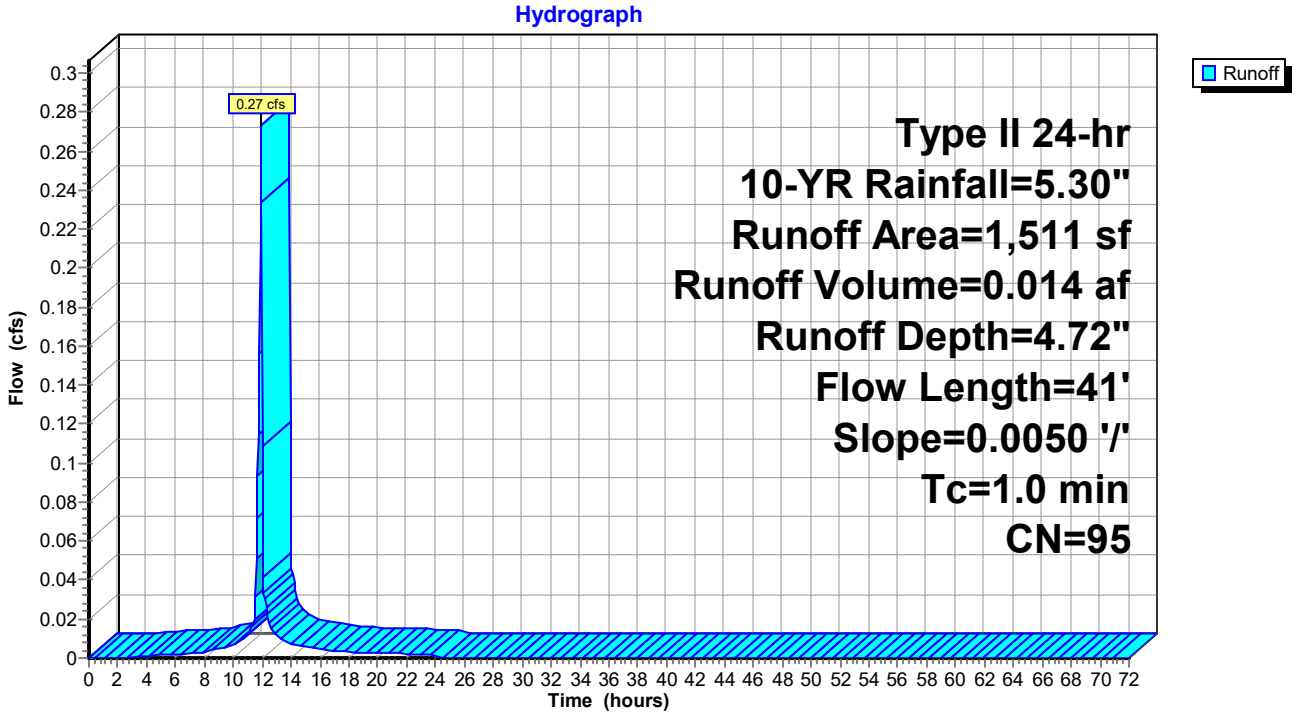
Runoff = 0.27 cfs @ 11.90 hrs, Volume= 0.014 af, Depth= 4.72"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
1,409	98	Roofs, HSG D
83	39	Pasture/grassland/range, Good, HSG A
19	98	Unconnected pavement, HSG D
1,511	95	Weighted Average
83		5.49% Pervious Area
1,428		94.51% Impervious Area
19		1.33% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	41	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 26S: DA4



Summary for Subcatchment 27S: DA5

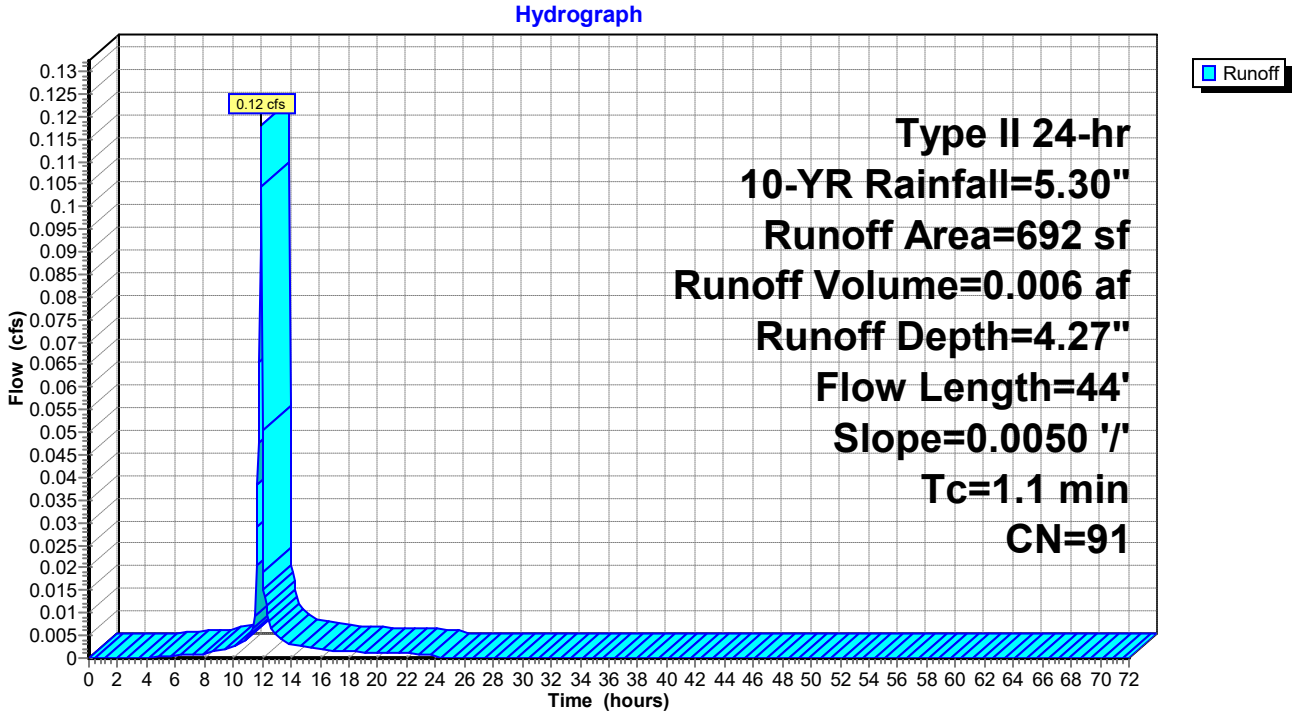
Runoff = 0.12 cfs @ 11.91 hrs, Volume= 0.006 af, Depth= 4.27"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
588	98	Roofs, HSG D
85	39	Pasture/grassland/range, Good, HSG A
19	98	Unconnected pavement, HSG D
692	91	Weighted Average
85		12.28% Pervious Area
607		87.72% Impervious Area
19		3.13% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	44	0.0050	0.69		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 27S: DA5



Summary for Subcatchment 30S: DA9

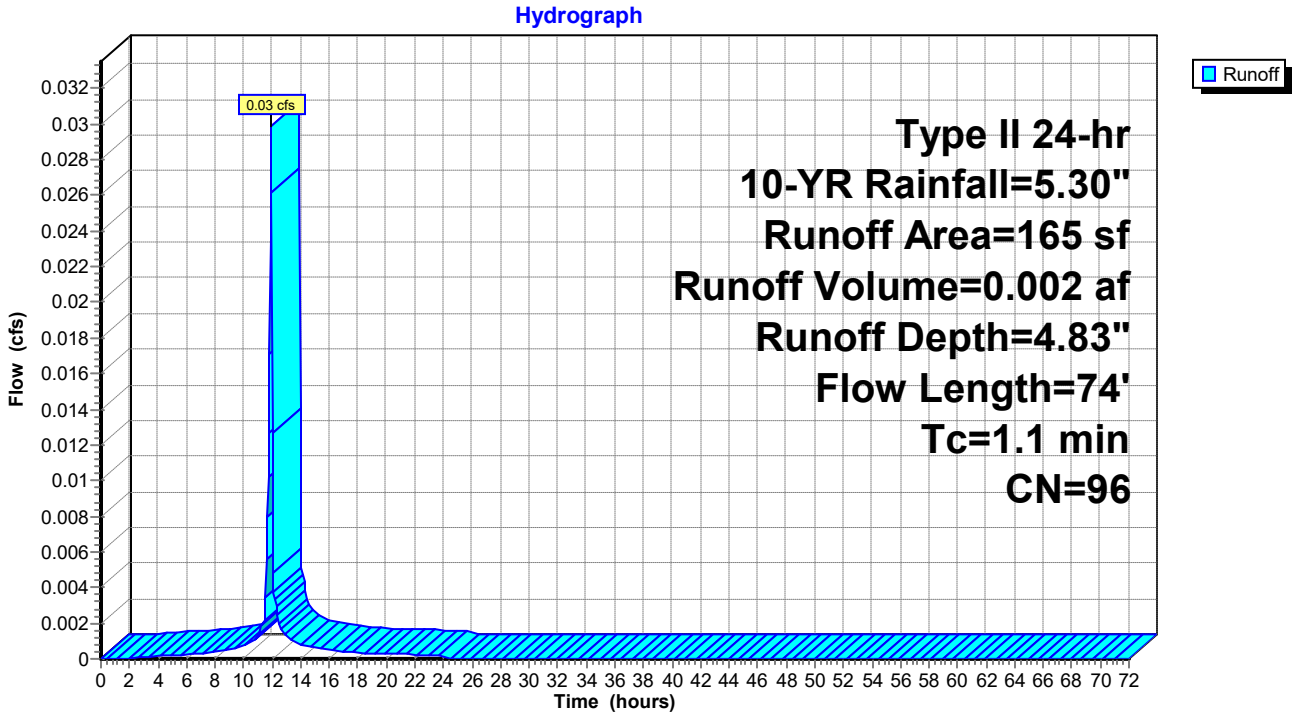
Runoff = 0.03 cfs @ 11.91 hrs, Volume= 0.002 af, Depth= 4.83"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
135	98	Paved parking, HSG C
30	86	<50% Grass cover, Poor, HSG C
165	96	Weighted Average
30		18.18% Pervious Area
135		81.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	27	0.0165	1.01		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.7	47	0.0141	1.06		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
1.1	74	Total			

Subcatchment 30S: DA9



Summary for Subcatchment 31S: DA6 - PERMEABLE PAVEMENT NORTH

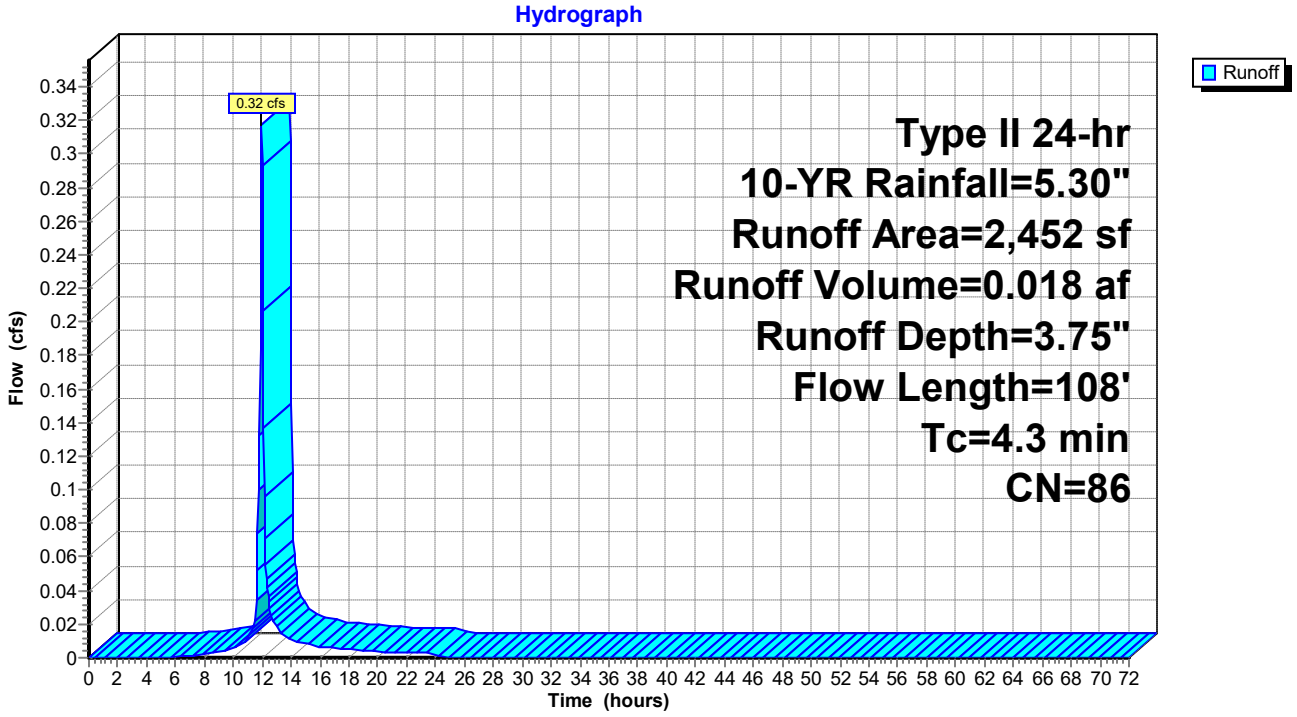
Runoff = 0.32 cfs @ 11.96 hrs, Volume= 0.018 af, Depth= 3.75"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
1,040	98	Paved parking, HSG D
928	98	Unconnected pavement, HSG D
484	39	>75% Grass cover, Good, HSG A
2,452	86	Weighted Average
484		19.74% Pervious Area
1,968		80.26% Impervious Area
928		47.15% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	7	0.0033	0.05		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.8	93	0.0057	0.85		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.2	8	0.0014	0.76		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
4.3	108	Total			

Subcatchment 31S: DA6 - PERMEABLE PAVEMENT NORTH



Summary for Subcatchment 33S: DA7 - PERMEABLE PAVEMENTEAST

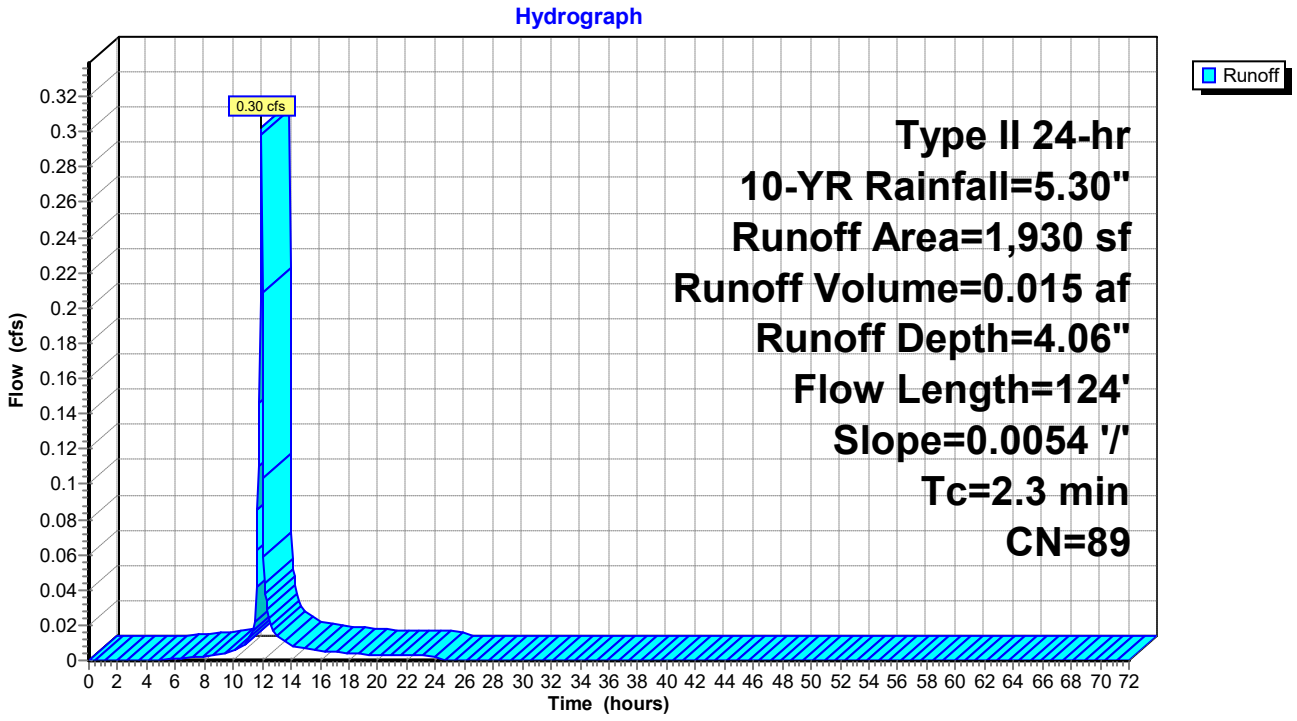
Runoff = 0.30 cfs @ 11.94 hrs, Volume= 0.015 af, Depth= 4.06"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
286	39	>75% Grass cover, Good, HSG A
1,644	98	Unconnected pavement, HSG D
1,930	89	Weighted Average
286		14.82% Pervious Area
1,644		85.18% Impervious Area
1,644		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	100	0.0054	0.84		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.3	24	0.0054	1.49		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.3	124	Total			

Subcatchment 33S: DA7 - PERMEABLE PAVEMENTEAST



Summary for Subcatchment 38S: DA8

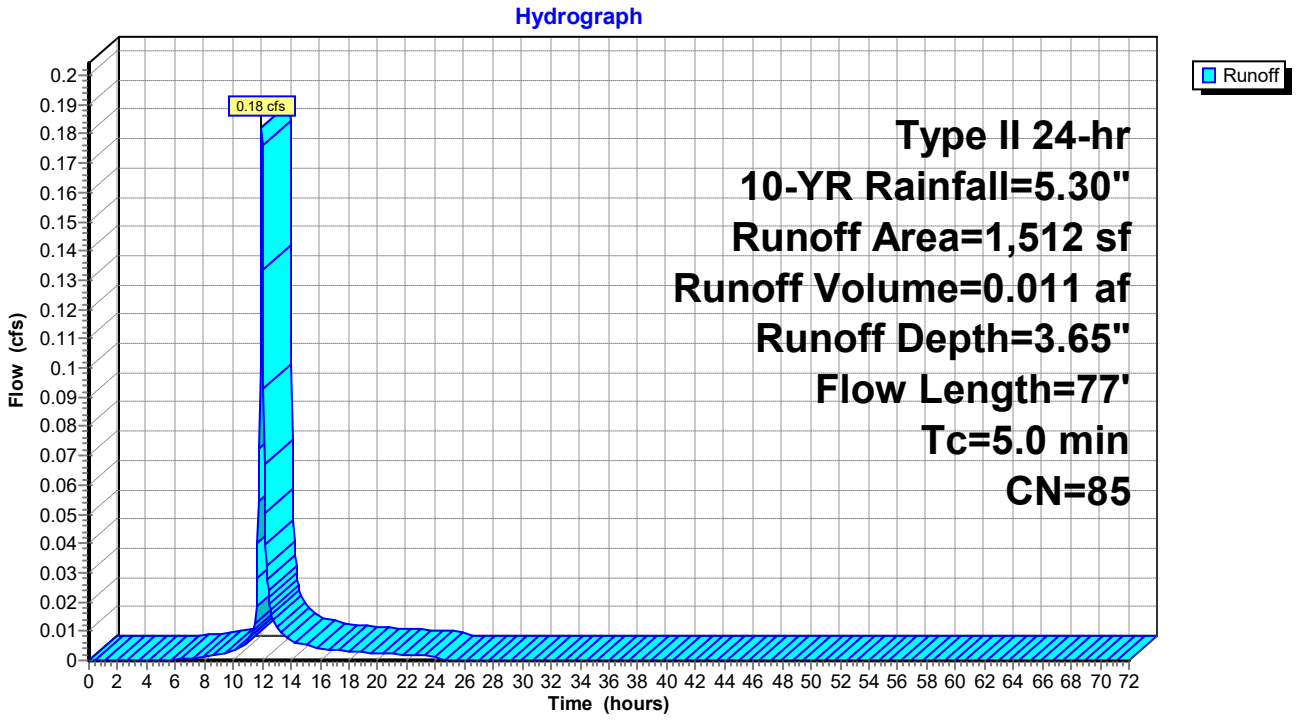
Runoff = 0.18 cfs @ 11.97 hrs, Volume= 0.011 af, Depth= 3.65"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
1,191	98	Unconnected pavement, HSG D
321	39	>75% Grass cover, Good, HSG A
1,512	85	Weighted Average
321		21.23% Pervious Area
1,191		78.77% Impervious Area
1,191		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	6	0.0010	0.03		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.7	71	0.0040	0.70		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
5.0	77	Total			

Subcatchment 38S: DA8



Summary for Subcatchment 39S: DA1

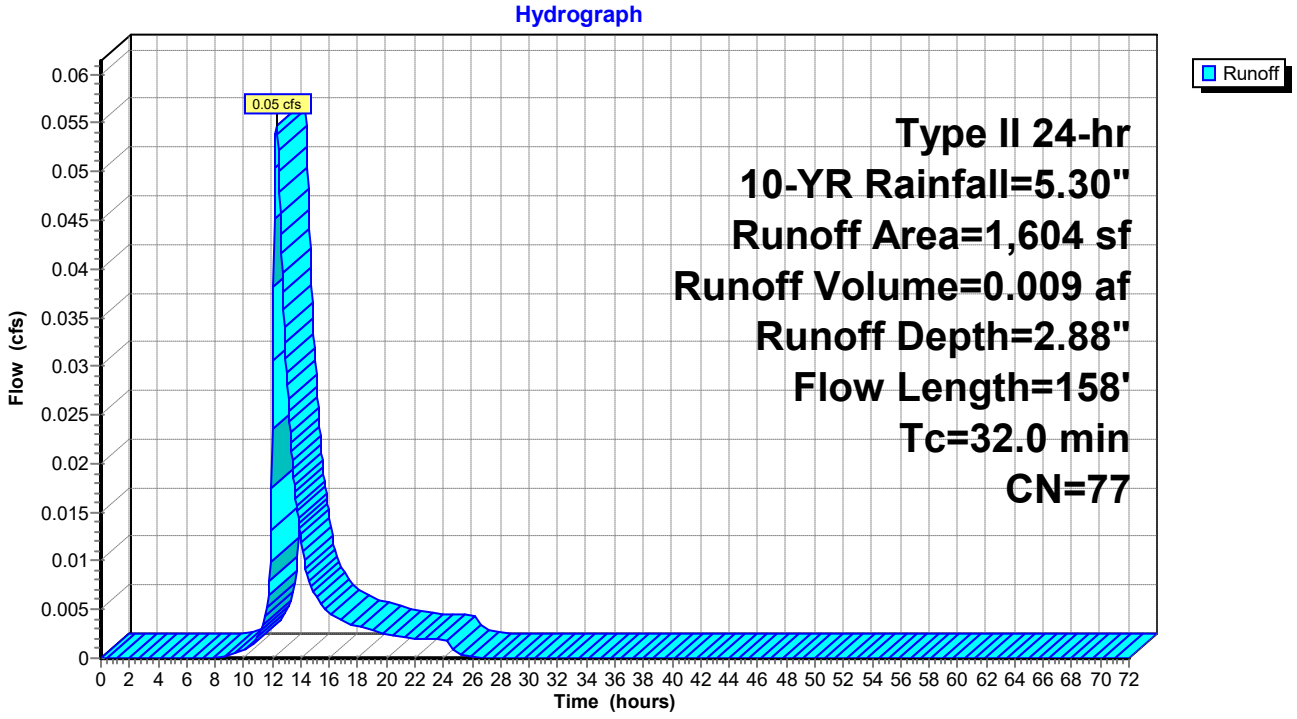
Runoff = 0.05 cfs @ 12.30 hrs, Volume= 0.009 af, Depth= 2.88"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YR Rainfall=5.30"

Area (sf)	CN	Description
1,032	98	Unconnected pavement, HSG D
572	39	>75% Grass cover, Good, HSG A
1,604	77	Weighted Average
572		35.66% Pervious Area
1,032		64.34% Impervious Area
1,032		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.5	100	0.0010	0.05		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
0.2	11	0.0141	0.83		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.3	47	0.0141	2.41		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
32.0	158	Total			

Subcatchment 39S: DA1



Summary for Pond 20P: PERMEABLE PAVEMENT NORTH

Inflow Area = 0.056 ac, 80.26% Impervious, Inflow Depth = 3.75" for 10-YR event
Inflow = 0.32 cfs @ 11.96 hrs, Volume= 0.018 af
Outflow = 0.02 cfs @ 13.30 hrs, Volume= 0.018 af, Atten= 95%, Lag= 80.5 min
Discarded = 0.02 cfs @ 13.30 hrs, Volume= 0.018 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.71' @ 13.30 hrs Surf.Area= 1,001 sf Storage= 372 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 234.3 min (1,034.5 - 800.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.82'	403 cf	**23.00'W x 43.50'L x 1.47'H Field A** 1,467 cf Overall - 460 cf Embedded = 1,008 cf x 40.0% Voids
#2A	39.82'	103 cf	**PaveDrain S6-45** x 1075 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 25 Rows of 43 Chambers
#3B	38.82'	18 cf	**4.67'W x 9.50'L x 1.47'H Field B** -Impervious 65 cf Overall - 19 cf Embedded = 46 cf x 40.0% Voids
#4B	39.82'	4 cf	**PaveDrain S6-45** x 45 Inside #3 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 5 Rows of 9 Chambers
		528 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.82'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.19'	**43.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.02 cfs @ 13.30 hrs HW=39.71' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.82' TW=37.68' (Dynamic Tailwater)
↑—**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 20P: PERMEABLE PAVEMENT NORTH - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

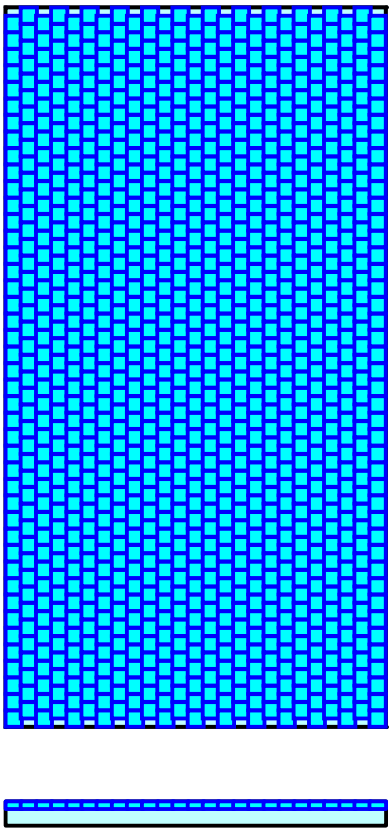
43 Chambers/Row x 1.00' Long = 43.00' Row Length +0.50' Row Offset = 43.50' Base Length
25 Rows x 12.0" Wide - 1.0" Nesting x 24 = 23.00' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

1,075 Chambers x 0.1 cf = 102.6 cf Chamber Storage
1,075 Chambers x 0.4 cf = 459.9 cf Displacement

1,467.4 cf Field - 459.9 cf Chambers = 1,007.5 cf Stone x 40.0% Voids = 403.0 cf Stone Storage

Chamber Storage + Stone Storage = 505.7 cf = 0.012 af
Overall Storage Efficiency = 34.5%
Overall System Size = 43.50' x 23.00' x 1.47'

1,075 Chambers
54.3 cy Field
37.3 cy Stone



Pond 20P: PERMEABLE PAVEMENT NORTH - Chamber Wizard Field B

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

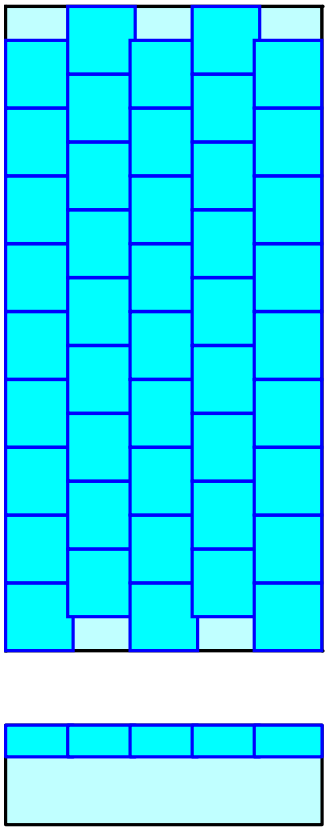
9 Chambers/Row x 1.00' Long = 9.00' Row Length +0.50' Row Offset = 9.50' Base Length
5 Rows x 12.0" Wide - 1.0" Nesting x 4 = 4.67' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

45 Chambers x 0.1 cf = 4.3 cf Chamber Storage
45 Chambers x 0.4 cf = 19.3 cf Displacement

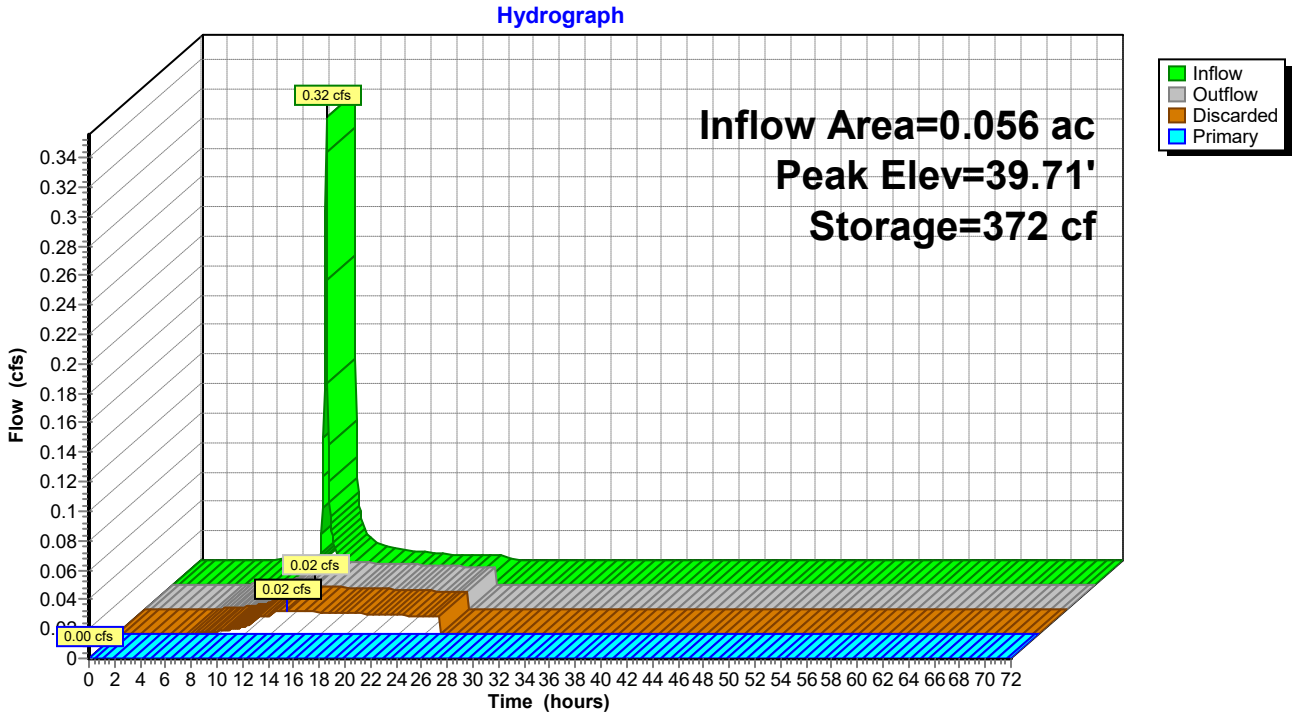
65.0 cf Field - 19.3 cf Chambers = 45.8 cf Stone x 40.0% Voids = 18.3 cf Stone Storage

Chamber Storage + Stone Storage = 22.6 cf = 0.001 af
Overall Storage Efficiency = 34.8%
Overall System Size = 9.50' x 4.67' x 1.47'

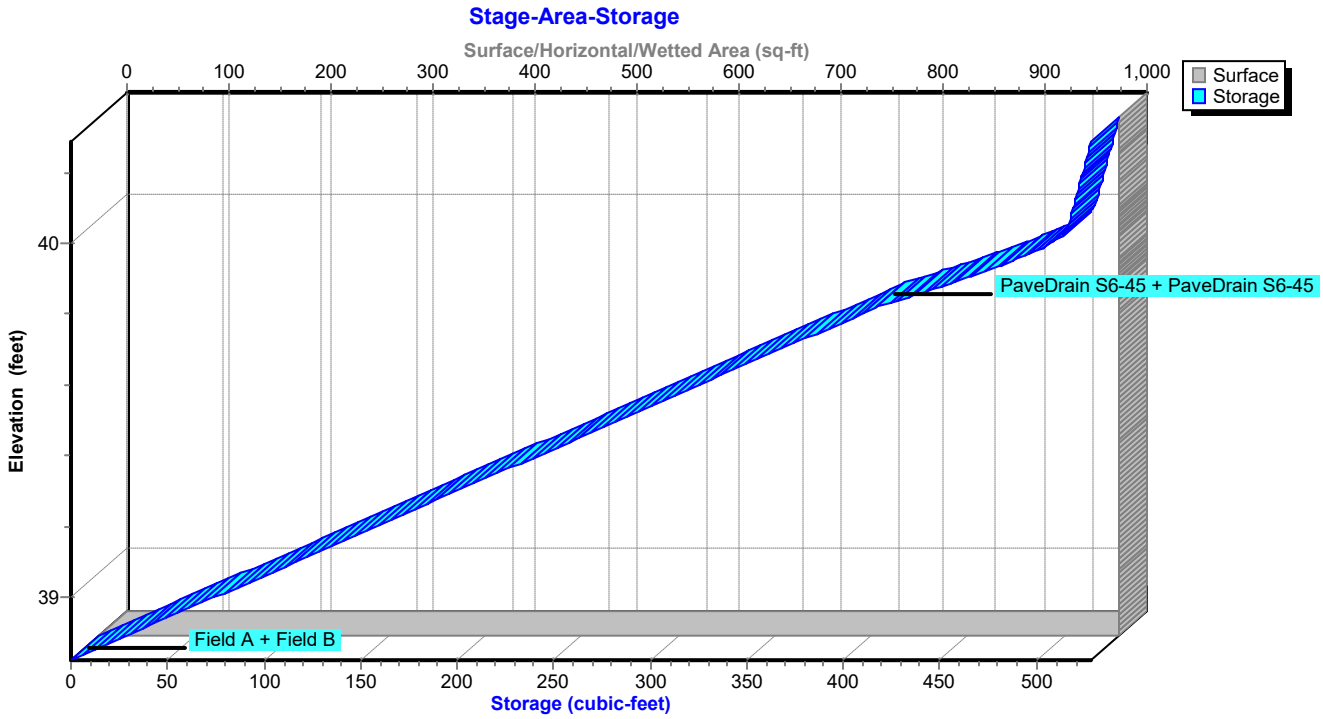
45 Chambers
2.4 cy Field
1.7 cy Stone



Pond 20P: PERMEABLE PAVEMENT NORTH



Pond 20P: PERMEABLE PAVEMENT NORTH



Summary for Pond 23P: PLANTER BOX 2

Inflow Area = 0.017 ac, 87.45% Impervious, Inflow Depth = 4.27" for 10-YR event
Inflow = 0.13 cfs @ 11.90 hrs, Volume= 0.006 af
Outflow = 0.03 cfs @ 12.03 hrs, Volume= 0.006 af, Atten= 79%, Lag= 7.8 min
Primary = 0.03 cfs @ 12.03 hrs, Volume= 0.006 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 40.92' @ 12.03 hrs Surf.Area= 92 sf Storage= 93 cf

Plug-Flow detention time= 53.3 min calculated for 0.006 af (97% of inflow)
Center-of-Mass det. time= 36.6 min (813.6 - 777.0)

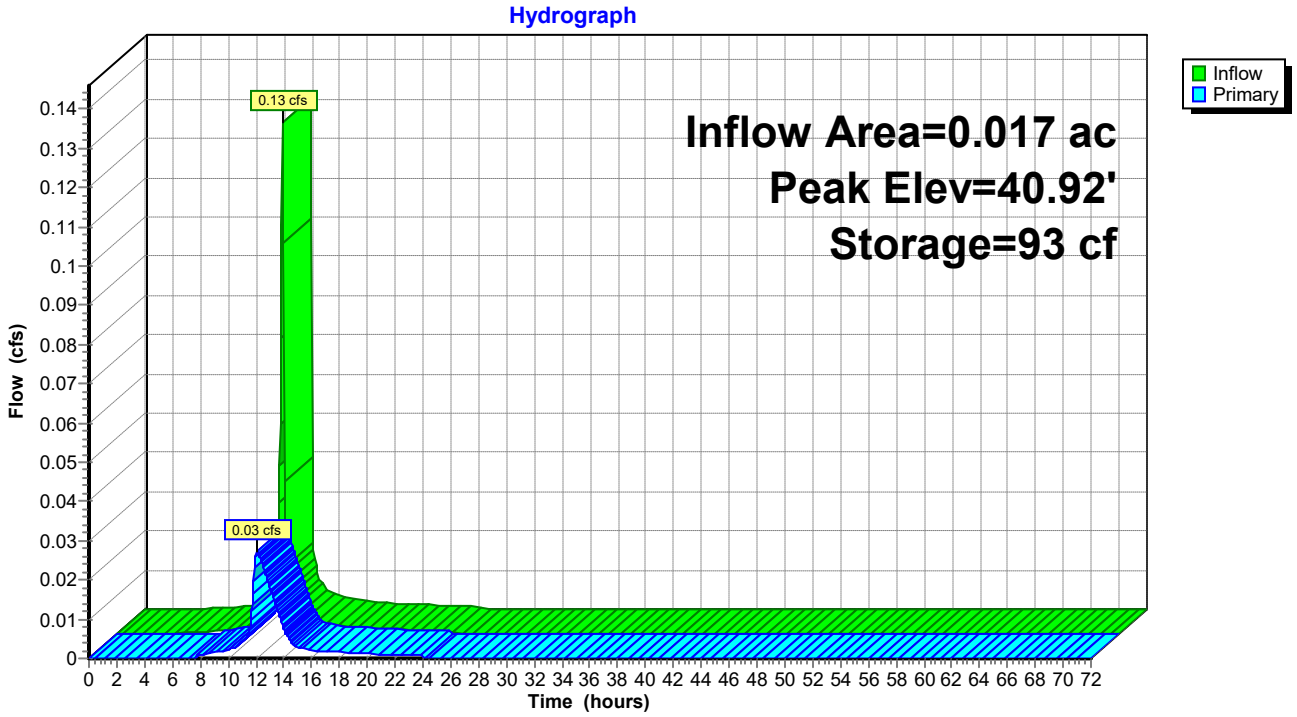
Volume	Invert	Avail.Storage	Storage Description
#1	38.40'	2,745 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
38.40	92	0.0	0	0
38.41	92	40.0	0	0
41.92	92	40.0	129	130
41.93	92	100.0	1	130
42.92	92	100.0	91	222
43.42	10,000	100.0	2,523	2,745

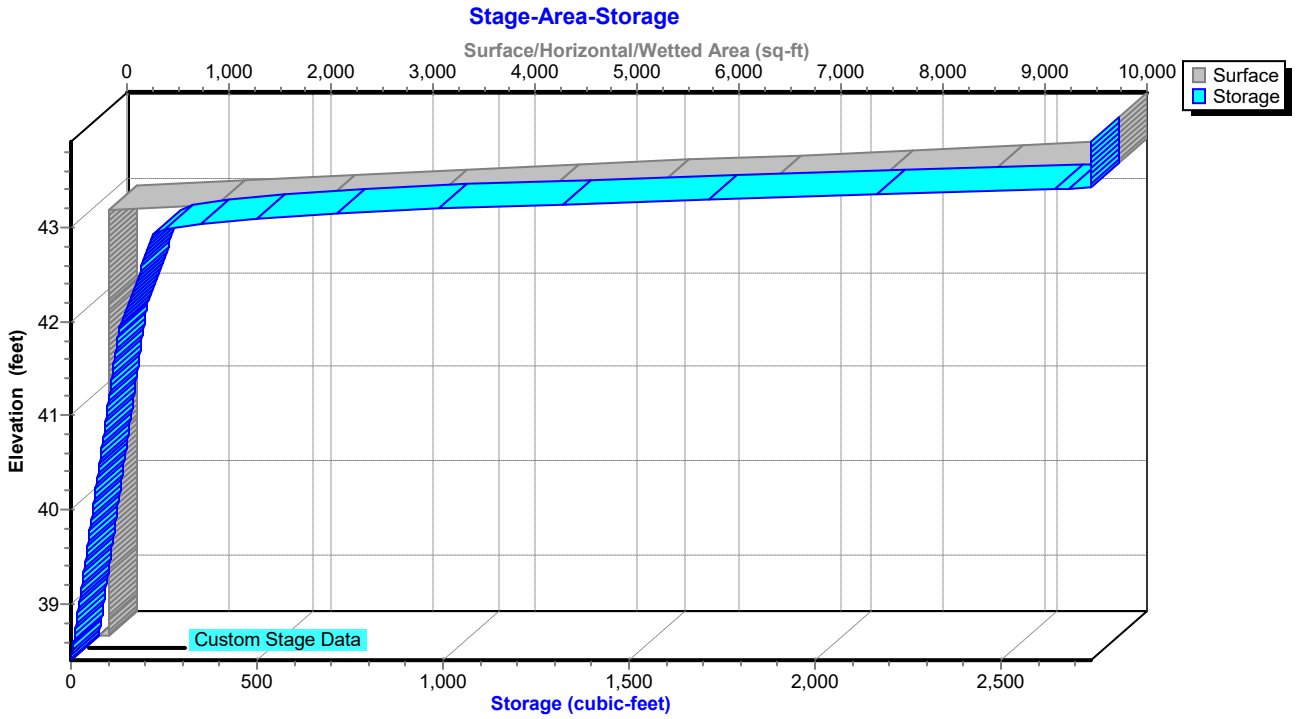
Device	Routing	Invert	Outlet Devices
#1	Primary	37.75'	**12.0" Round Culvert** L= 106.5' Ke= 0.500 Inlet / Outlet Invert= 37.75' / 37.60' S= 0.0014 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	38.42'	**4.0" Round Culvert** L= 8.6' Ke= 0.500 Inlet / Outlet Invert= 38.42' / 37.75' S= 0.0779 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 2	38.59'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	43.41'	**7.5' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.03 cfs @ 12.03 hrs HW=40.92' TW=37.68' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.03 cfs of 4.86 cfs potential flow)
  - **2=Culvert** (Passes 0.03 cfs of 0.64 cfs potential flow)
    - **3=Orifice/Grate** (Orifice Controls 0.03 cfs @ 7.34 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 23P: PLANTER BOX 2



Pond 23P: PLANTER BOX 2



Summary for Pond 24P: PLANTER BOX 1

Inflow Area = 0.030 ac, 91.38% Impervious, Inflow Depth = 4.49" for 10-YR event
Inflow = 0.23 cfs @ 11.91 hrs, Volume= 0.011 af
Outflow = 0.04 cfs @ 12.05 hrs, Volume= 0.011 af, Atten= 85%, Lag= 8.7 min
Primary = 0.04 cfs @ 12.05 hrs, Volume= 0.011 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 42.01' @ 12.05 hrs Surf.Area= 111 sf Storage= 186 cf

Plug-Flow detention time= 63.9 min calculated for 0.011 af (98% of inflow)
Center-of-Mass det. time= 52.2 min (821.3 - 769.1)

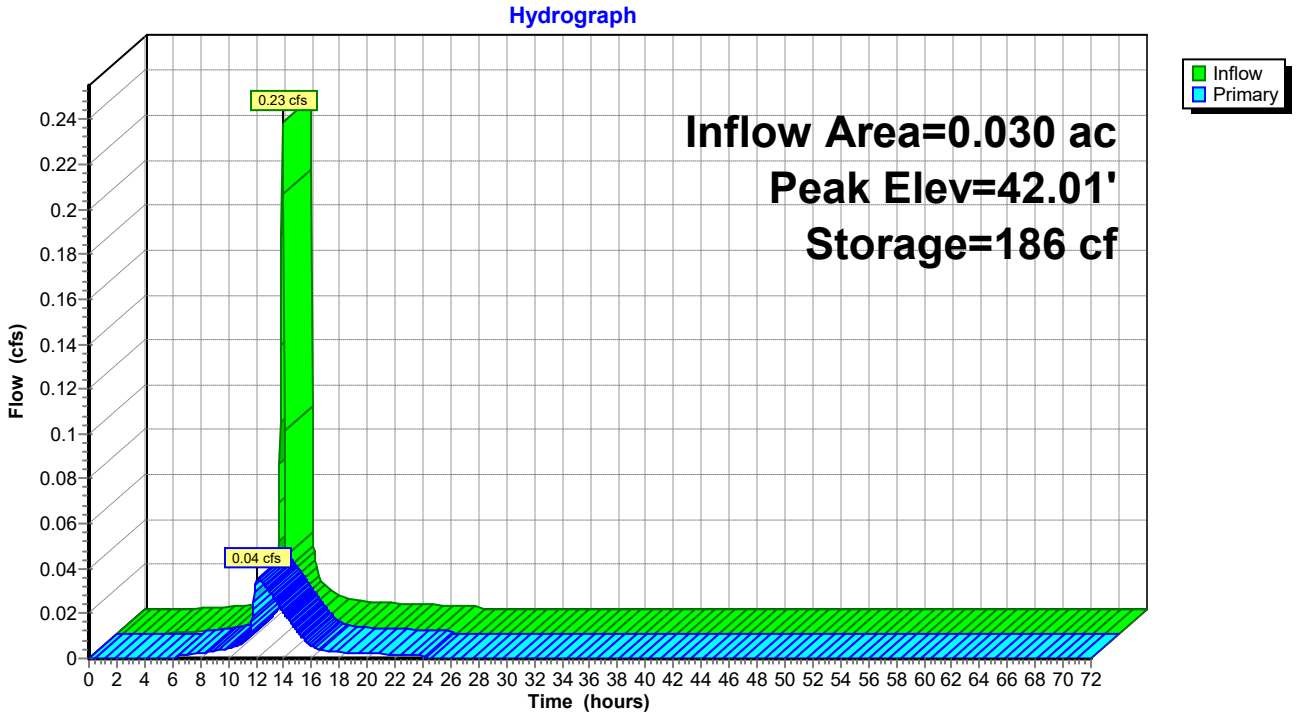
Volume	Invert	Avail.Storage	Storage Description
#1	37.92'	2,818 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.92	111	0.0	0	0
37.93	111	40.0	0	0
41.95	111	40.0	178	179
41.96	111	100.0	1	180
42.95	111	100.0	110	290
43.45	10,000	100.0	2,528	2,818

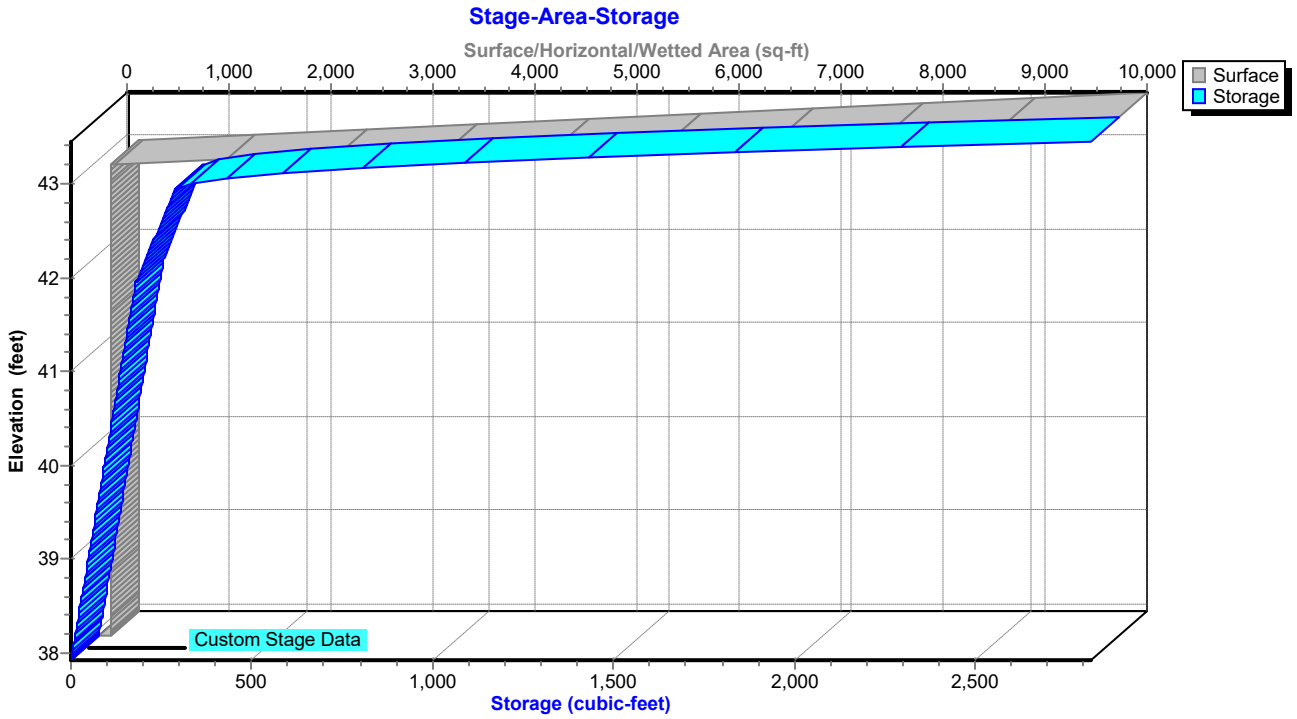
Device	Routing	Invert	Outlet Devices
#1	Primary	37.73'	**12.0" Round Culvert** L= 87.6' Ke= 0.500 Inlet / Outlet Invert= 37.73' / 37.60' S= 0.0015 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	37.95'	**4.0" Round Culvert** L= 4.8' Ke= 0.500 Inlet / Outlet Invert= 37.95' / 37.73' S= 0.0458 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 2	38.12'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	42.95'	**7.5' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.04 cfs @ 12.05 hrs HW=42.01' TW=37.68' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.04 cfs of 6.25 cfs potential flow)
  - **2=Culvert** (Passes 0.04 cfs of 0.83 cfs potential flow)
    - **3=Orifice/Grate** (Orifice Controls 0.04 cfs @ 9.50 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 24P: PLANTER BOX 1



Pond 24P: PLANTER BOX 1



Summary for Pond 25P: PLANTER BOX 3

Inflow Area = 0.035 ac, 94.51% Impervious, Inflow Depth = 4.72" for 10-YR event
Inflow = 0.27 cfs @ 11.90 hrs, Volume= 0.014 af
Outflow = 0.24 cfs @ 11.94 hrs, Volume= 0.014 af, Atten= 13%, Lag= 2.0 min
Primary = 0.24 cfs @ 11.94 hrs, Volume= 0.014 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.08' @ 11.94 hrs Surf.Area= 83 sf Storage= 36 cf

Plug-Flow detention time= 6.3 min calculated for 0.014 af (100% of inflow)
Center-of-Mass det. time= 6.1 min (765.2 - 759.0)

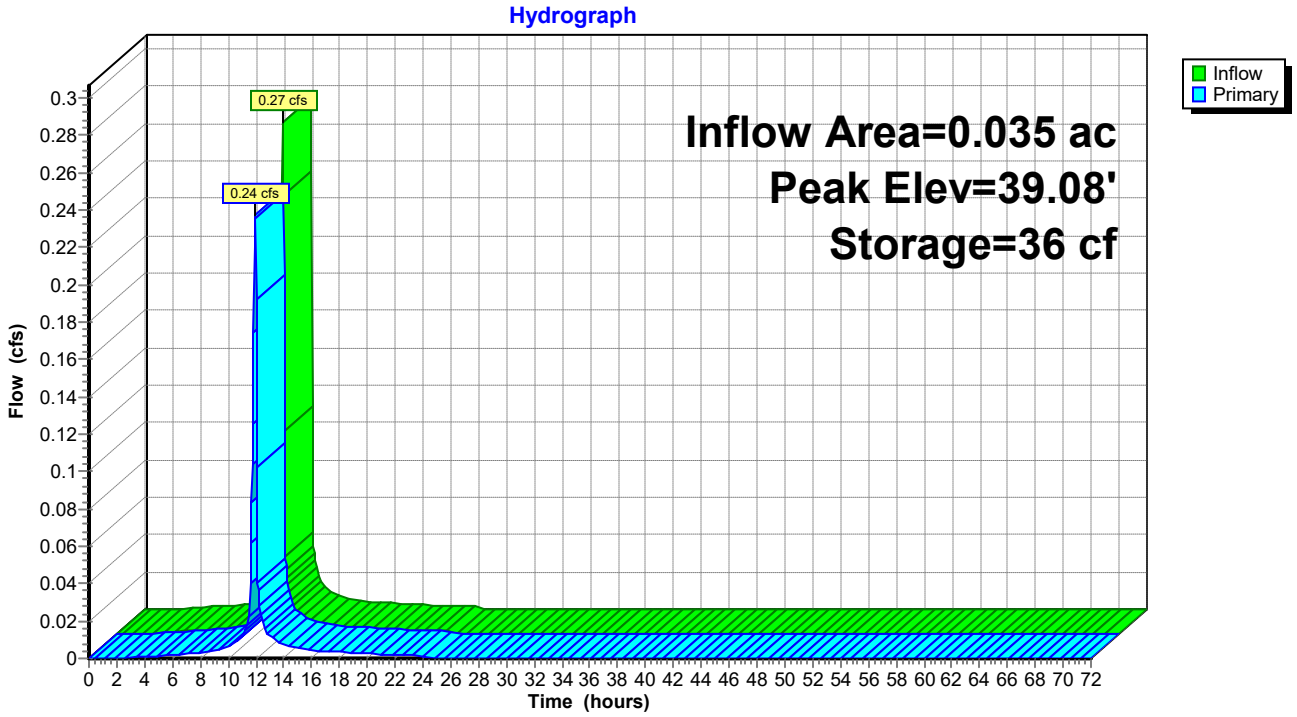
Volume	Invert	Avail.Storage	Storage Description
#1	37.99'	2,667 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.99	83	0.0	0	0
38.00	83	40.0	0	0
41.14	83	40.0	104	105
41.15	83	100.0	1	105
41.64	83	100.0	41	146
42.14	10,000	100.0	2,521	2,667

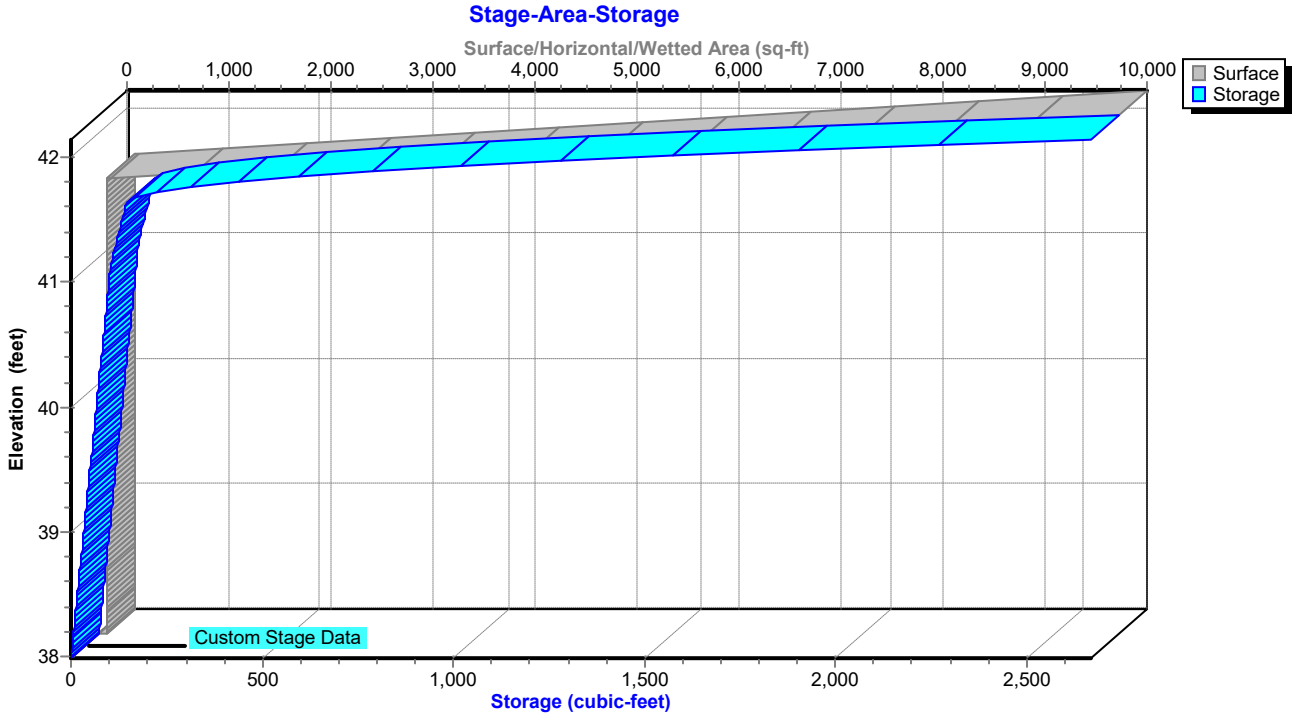
Device	Routing	Invert	Outlet Devices
#1	Primary	38.00'	**4.0" Round Culvert** L= 52.5' Ke= 0.500 Inlet / Outlet Invert= 38.00' / 37.94' S= 0.0011 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#2	Device 1	38.00'	**4.0" Round Culvert** L= 4.9' Ke= 0.500 Inlet / Outlet Invert= 38.00' / 38.00' S= 0.0000 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 1	38.17'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	41.64'	**8.7' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.23 cfs @ 11.94 hrs HW=39.04' TW=38.35' (Dynamic Tailwater)
- **1=Culvert** (Outlet Controls 0.23 cfs @ 2.60 fps)
  - **2=Culvert** (Passes < 0.35 cfs potential flow)
  - **3=Orifice/Grate** (Passes < 0.01 cfs potential flow)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 25P: PLANTER BOX 3



Pond 25P: PLANTER BOX 3



Summary for Pond 26P: PLANTER BOX 4

Inflow Area = 0.016 ac, 87.72% Impervious, Inflow Depth = 4.27" for 10-YR event
Inflow = 0.12 cfs @ 11.91 hrs, Volume= 0.006 af
Outflow = 0.10 cfs @ 11.92 hrs, Volume= 0.006 af, Atten= 11%, Lag= 0.8 min
Primary = 0.10 cfs @ 11.92 hrs, Volume= 0.006 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.39' @ 11.96 hrs Surf.Area= 85 sf Storage= 16 cf

Plug-Flow detention time= 16.1 min calculated for 0.006 af (100% of inflow)
Center-of-Mass det. time= 12.7 min (790.5 - 777.8)

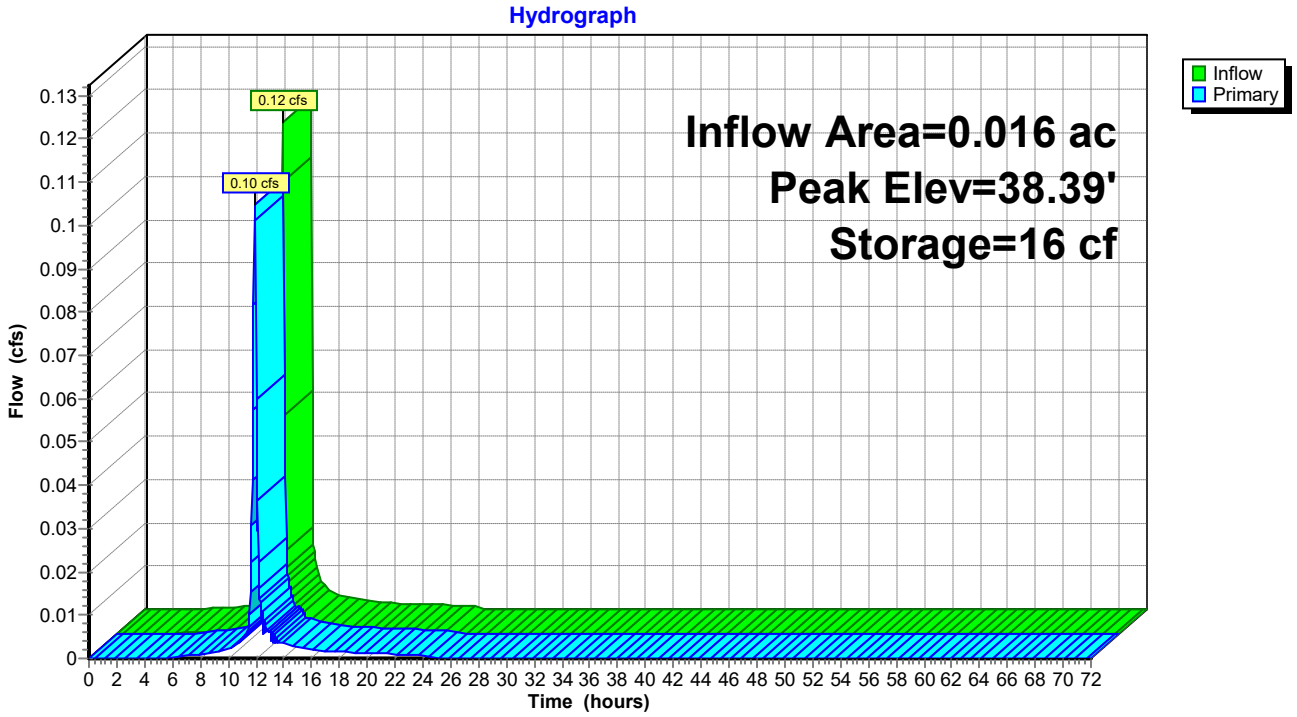
Volume	Invert	Avail.Storage	Storage Description
#1	37.91'	2,682 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.91	85	0.0	0	0
37.92	85	40.0	0	0
41.40	85	40.0	118	119
41.41	85	100.0	1	120
41.90	85	100.0	42	161
42.40	10,000	100.0	2,521	2,682

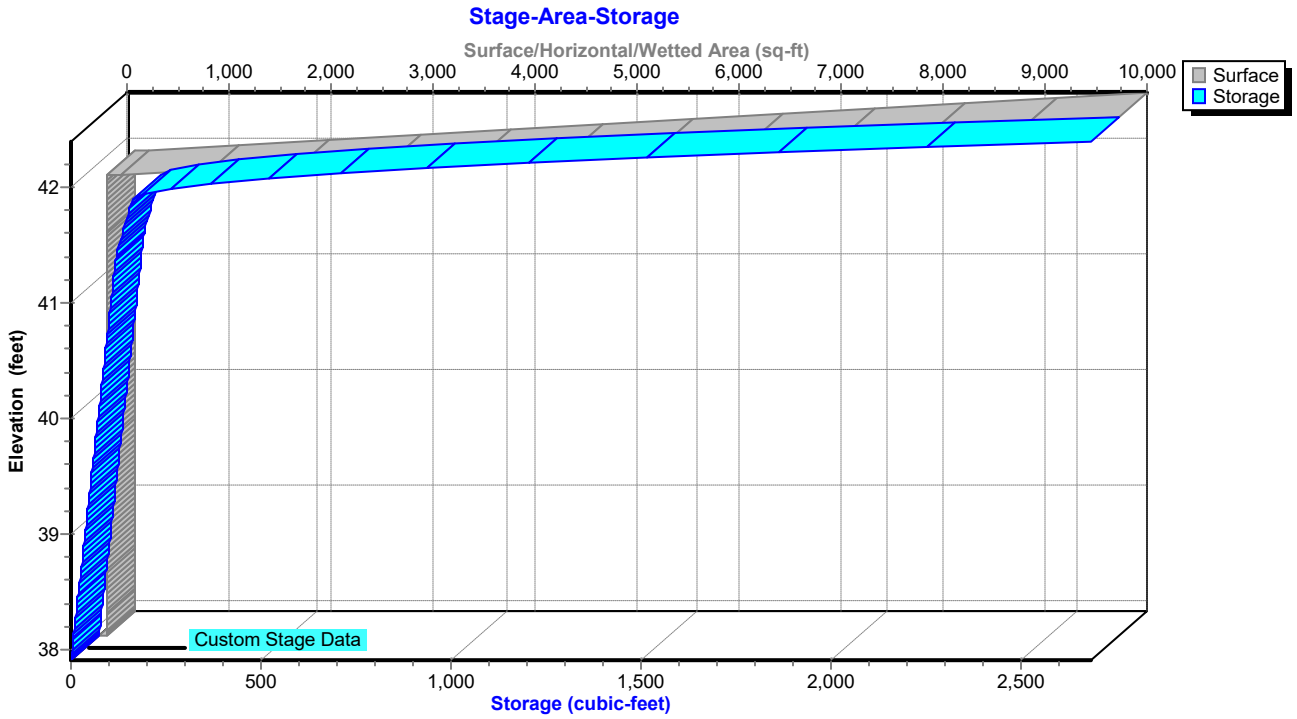
Device	Routing	Invert	Outlet Devices
#1	Primary	37.94'	**4.0" Round Culvert** L= 9.5' Ke= 0.500 Inlet / Outlet Invert= 37.94' / 37.93' S= 0.0011 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#2	Device 1	37.94'	**4.0" Round Culvert** L= 4.3' Ke= 0.500 Inlet / Outlet Invert= 37.94' / 37.94' S= 0.0000 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 1	38.11'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	41.90'	**8.7' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.06 cfs @ 11.92 hrs HW=38.36' TW=38.34' (Dynamic Tailwater)
- **1=Culvert** (Inlet Controls 0.06 cfs @ 0.71 fps)
  - **2=Culvert** (Passes < 0.06 cfs potential flow)
  - **3=Orifice/Grate** (Passes < 0.00 cfs potential flow)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 26P: PLANTER BOX 4



Pond 26P: PLANTER BOX 4



Summary for Pond 31P: (new Pond)

Inflow Area = 0.004 ac, 81.82% Impervious, Inflow Depth = 4.83" for 10-YR event
Inflow = 0.03 cfs @ 11.91 hrs, Volume= 0.002 af
Outflow = 0.00 cfs @ 12.36 hrs, Volume= 0.002 af, Atten= 90%, Lag= 26.9 min
Discarded = 0.00 cfs @ 12.35 hrs, Volume= 0.001 af
Primary = 0.00 cfs @ 12.36 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 40.21' @ 12.35 hrs Surf.Area= 0.001 ac Storage= 0.001 af

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 269.7 min (1,023.0 - 753.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.74'	0.001 af	**2.83'W x 21.50'L x 1.47'H Field A** 0.002 af Overall - 0.001 af Embedded = 0.001 af x 40.0% Voids
#2A	39.74'	0.000 af	**PaveDrain S6-45** x 63 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 3 Rows of 21 Chambers
		0.001 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.74'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.21'	**24.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.00 cfs @ 12.35 hrs HW=40.21' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 12.36 hrs HW=40.21' TW=37.68' (Dynamic Tailwater)
↑—**2=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.09 fps)

Pond 31P: (new Pond) - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

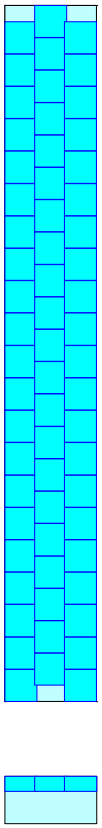
21 Chambers/Row x 1.00' Long = 21.00' Row Length +0.50' Row Offset = 21.50' Base Length
3 Rows x 12.0" Wide - 1.0" Nesting x 2 = 2.83' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

63 Chambers x 0.1 cf = 6.0 cf Chamber Storage
63 Chambers x 0.4 cf = 27.0 cf Displacement

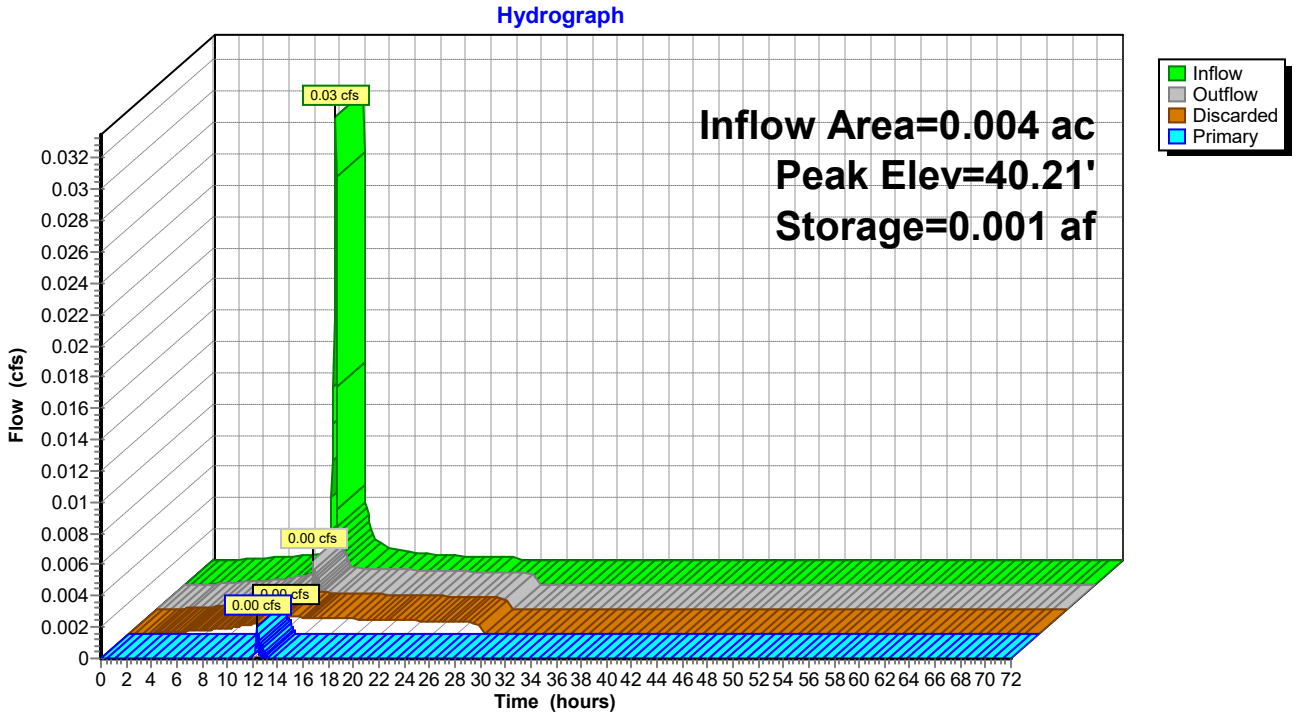
89.3 cf Field - 27.0 cf Chambers = 62.4 cf Stone x 40.0% Voids = 25.0 cf Stone Storage

Chamber Storage + Stone Storage = 31.0 cf = 0.001 af
Overall Storage Efficiency = 34.7%
Overall System Size = 21.50' x 2.83' x 1.47'

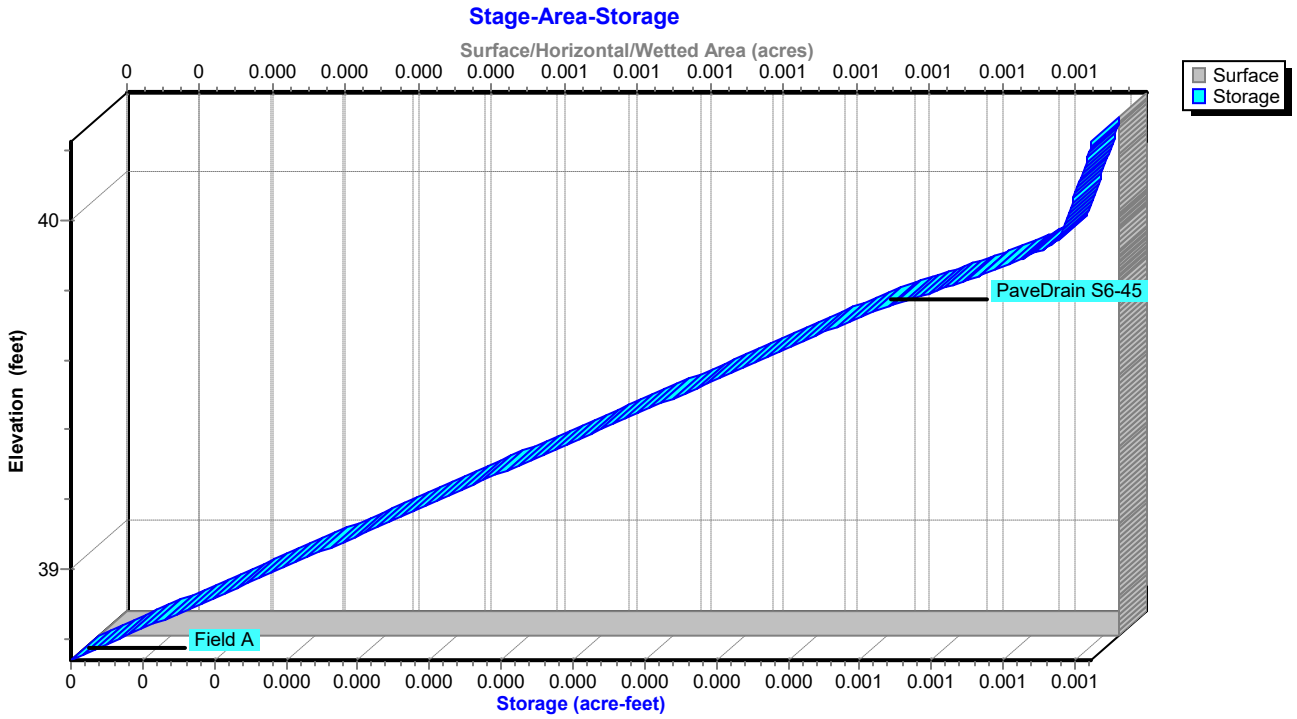
63 Chambers
3.3 cy Field
2.3 cy Stone



Pond 31P: (new Pond)



Pond 31P: (new Pond)



Summary for Pond 32P: CURB INLET 1

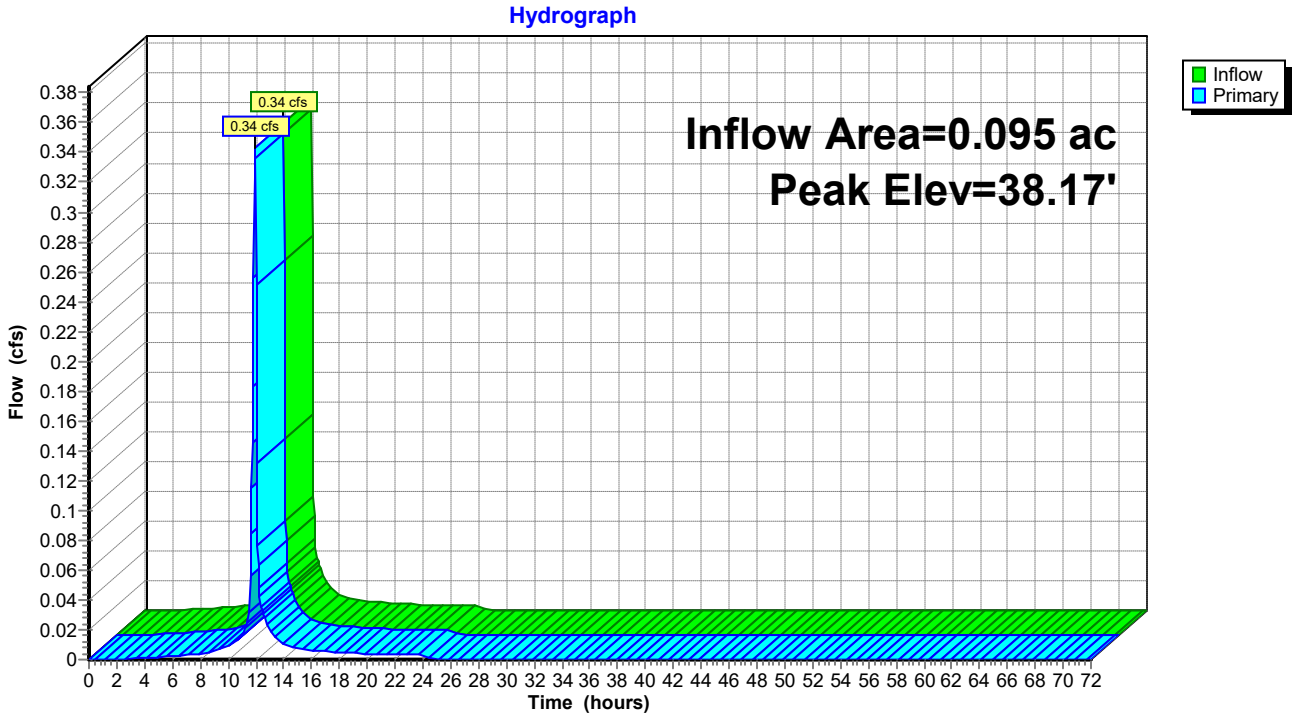
Inflow Area = 0.095 ac, 89.02% Impervious, Inflow Depth = 2.47" for 10-YR event
Inflow = 0.34 cfs @ 11.93 hrs, Volume= 0.020 af
Outflow = 0.34 cfs @ 11.93 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min
Primary = 0.34 cfs @ 11.93 hrs, Volume= 0.020 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.17' @ 11.93 hrs

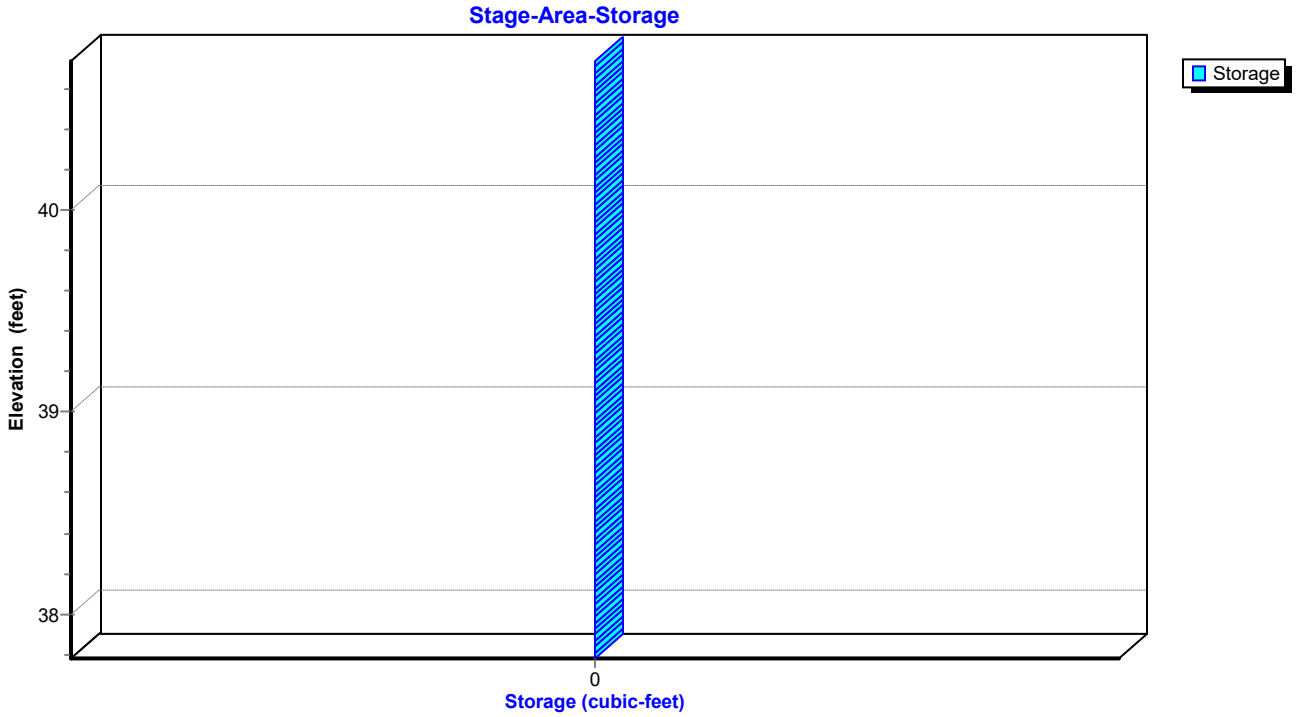
Device	Routing	Invert	Outlet Devices
#1	Primary	37.78'	**12.0" Round Culvert** L= 25.1' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 37.78' / 37.75' S= 0.0012 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Primary	40.40'	**66.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=0.33 cfs @ 11.93 hrs HW=38.16' TW=37.68' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.33 cfs @ 1.80 fps)
2=Orifice/Grate (Controls 0.00 cfs)

Pond 32P: CURB INLET 1



Pond 32P: CURB INLET 1



Summary for Pond 33P: CURB INLET 2

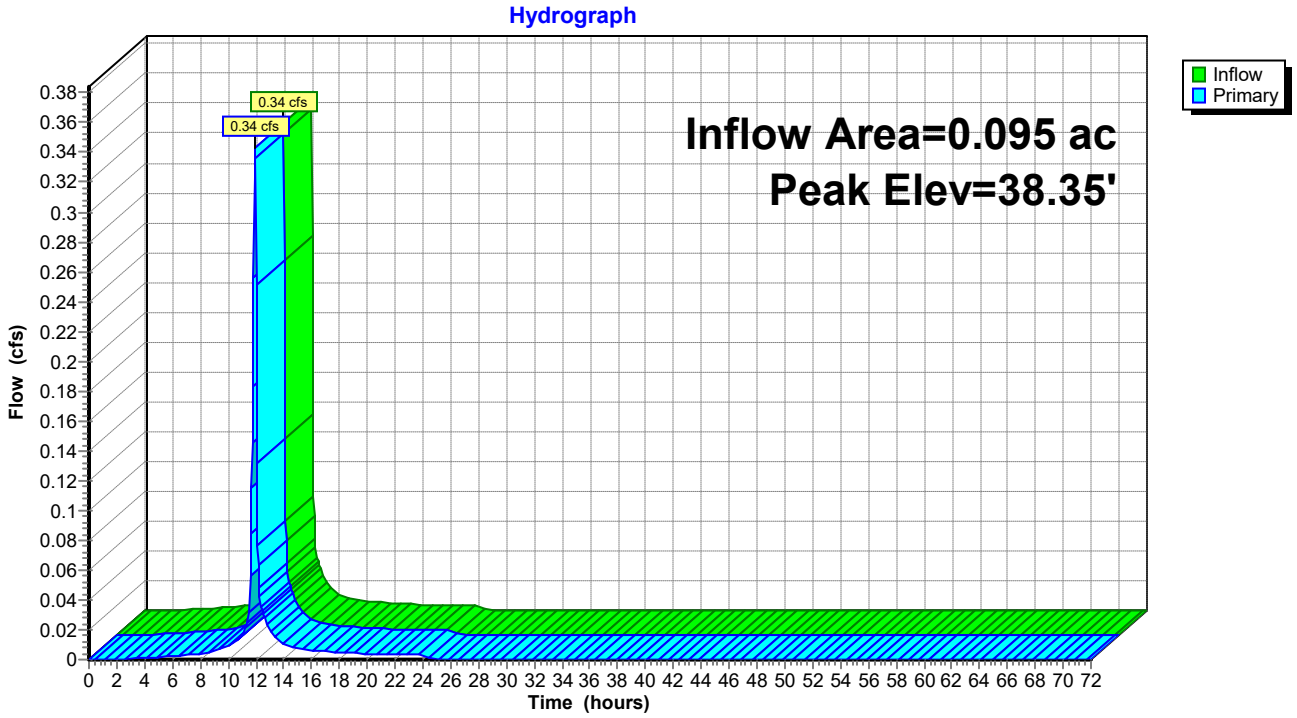
Inflow Area = 0.095 ac, 89.02% Impervious, Inflow Depth = 2.47" for 10-YR event
Inflow = 0.34 cfs @ 11.93 hrs, Volume= 0.020 af
Outflow = 0.34 cfs @ 11.93 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min
Primary = 0.34 cfs @ 11.93 hrs, Volume= 0.020 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.35' @ 11.94 hrs

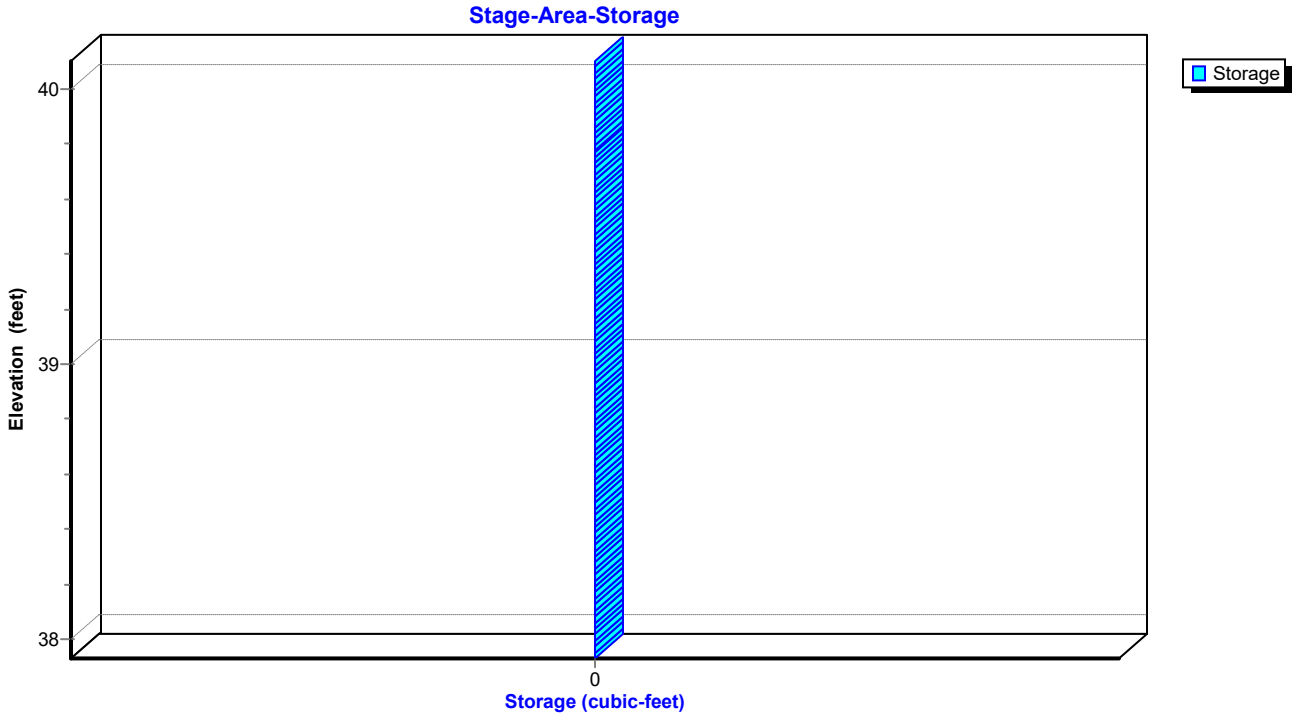
Device	Routing	Invert	Outlet Devices
#1	Primary	37.93'	**12.0" Round Culvert** L= 102.9' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 37.93' / 37.78' S= 0.0015 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Primary	39.77'	**66.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=0.32 cfs @ 11.93 hrs HW=38.34' TW=38.16' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.32 cfs @ 1.51 fps)
2=Orifice/Grate (Controls 0.00 cfs)

Pond 33P: CURB INLET 2



Pond 33P: CURB INLET 2



Summary for Pond 34P: PERMEABLE PAVEMENT EAST

Inflow Area = 0.044 ac, 85.18% Impervious, Inflow Depth = 4.06" for 10-YR event
Inflow = 0.30 cfs @ 11.94 hrs, Volume= 0.015 af
Outflow = 0.02 cfs @ 12.52 hrs, Volume= 0.015 af, Atten= 93%, Lag= 35.2 min
Discarded = 0.01 cfs @ 12.50 hrs, Volume= 0.015 af
Primary = 0.01 cfs @ 12.52 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 40.16' @ 12.50 hrs Surf.Area= 679 sf Storage= 316 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 268.0 min (1,055.1 - 787.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.71'	200 cf	**5.58'W x 88.50'L x 1.47'H Field A** 725 cf Overall - 226 cf Embedded = 499 cf x 40.0% Voids
#2A	39.71'	50 cf	**PaveDrain S6-45** x 528 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 6 Rows of 88 Chambers
#3B	38.71'	28 cf	**7.42'W x 18.50'L x 0.97'H Field B** 133 cf Overall - 62 cf Embedded = 71 cf x 40.0% Voids
#4B	39.21'	14 cf	**PaveDrain S6-45** x 144 Inside #3 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 8 Rows of 18 Chambers
#5C	38.71'	20 cf	**5.58'W x 8.50'L x 1.47'H Field C** 70 cf Overall - 21 cf Embedded = 49 cf x 40.0% Voids
#6C	39.71'	5 cf	**PaveDrain S6-45** x 48 Inside #5 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 6 Rows of 8 Chambers
		316 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard
Storage Group C created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.71'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.16'	**88.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 12.50 hrs HW=40.16' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.01 cfs)

Primary OutFlow Max=0.01 cfs @ 12.52 hrs HW=40.16' TW=38.06' (Dynamic Tailwater)
↑—**2=Sharp-Crested Rectangular Weir** (Weir Controls 0.01 cfs @ 0.10 fps)

Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

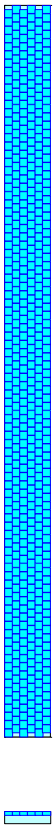
88 Chambers/Row x 1.00' Long = 88.00' Row Length +0.50' Row Offset = 88.50' Base Length
6 Rows x 12.0" Wide - 1.0" Nesting x 5 = 5.58' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

528 Chambers x 0.1 cf = 50.4 cf Chamber Storage
528 Chambers x 0.4 cf = 225.9 cf Displacement

724.7 cf Field - 225.9 cf Chambers = 498.8 cf Stone x 40.0% Voids = 199.5 cf Stone Storage

Chamber Storage + Stone Storage = 250.0 cf = 0.006 af
Overall Storage Efficiency = 34.5%
Overall System Size = 88.50' x 5.58' x 1.47'

528 Chambers
26.8 cy Field
18.5 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field B

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

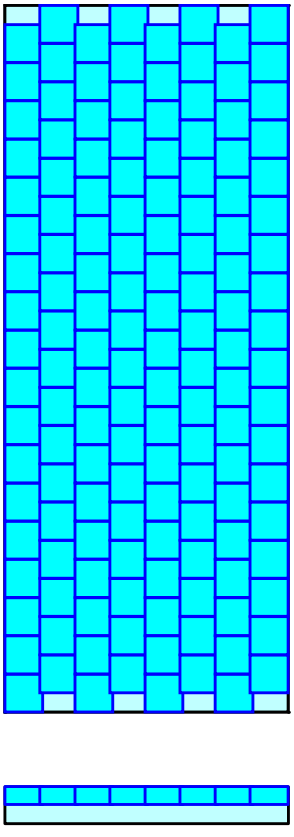
18 Chambers/Row x 1.00' Long = 18.00' Row Length +0.50' Row Offset = 18.50' Base Length
8 Rows x 12.0" Wide - 1.0" Nesting x 7 = 7.42' Base Width
6.0" Base + 5.6" Chamber Height = 0.97' Field Height

144 Chambers x 0.1 cf = 13.7 cf Chamber Storage
144 Chambers x 0.4 cf = 61.6 cf Displacement

132.6 cf Field - 61.6 cf Chambers = 71.0 cf Stone x 40.0% Voids = 28.4 cf Stone Storage

Chamber Storage + Stone Storage = 42.2 cf = 0.001 af
Overall Storage Efficiency = 31.8%
Overall System Size = 18.50' x 7.42' x 0.97'

144 Chambers
4.9 cy Field
2.6 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field C

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

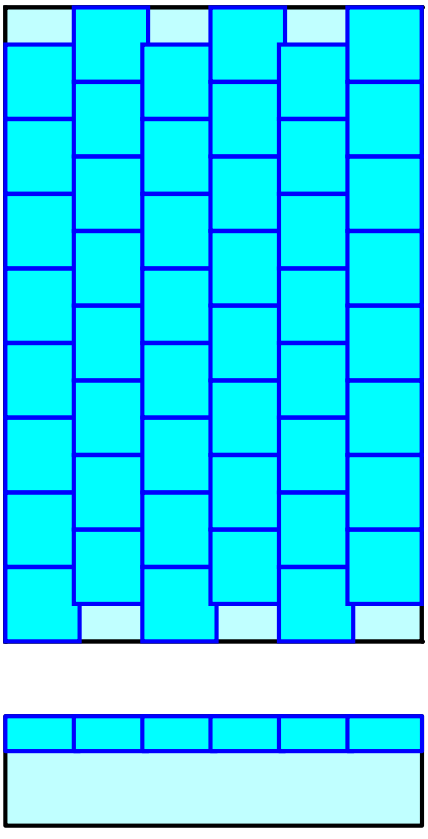
8 Chambers/Row x 1.00' Long = 8.00' Row Length +0.50' Row Offset = 8.50' Base Length
6 Rows x 12.0" Wide - 1.0" Nesting x 5 = 5.58' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

48 Chambers x 0.1 cf = 4.6 cf Chamber Storage
48 Chambers x 0.4 cf = 20.5 cf Displacement

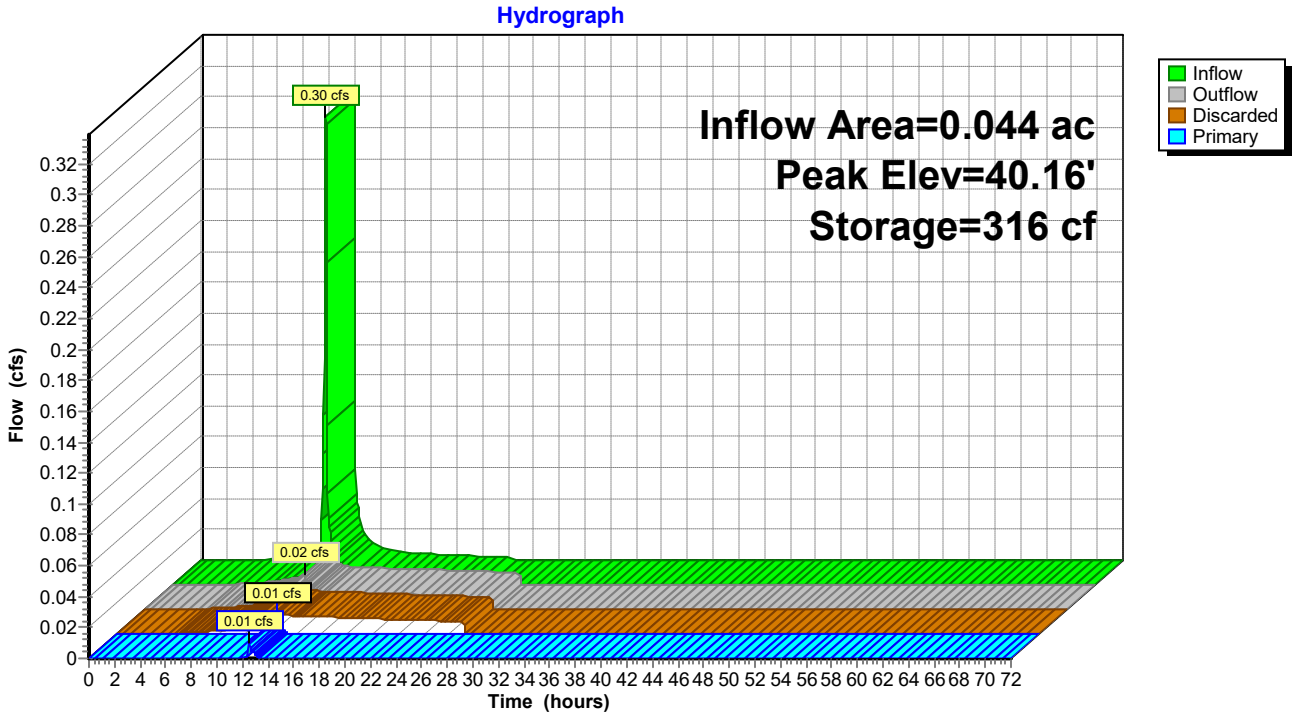
69.6 cf Field - 20.5 cf Chambers = 49.1 cf Stone x 40.0% Voids = 19.6 cf Stone Storage

Chamber Storage + Stone Storage = 24.2 cf = 0.001 af
Overall Storage Efficiency = 34.8%
Overall System Size = 8.50' x 5.58' x 1.47'

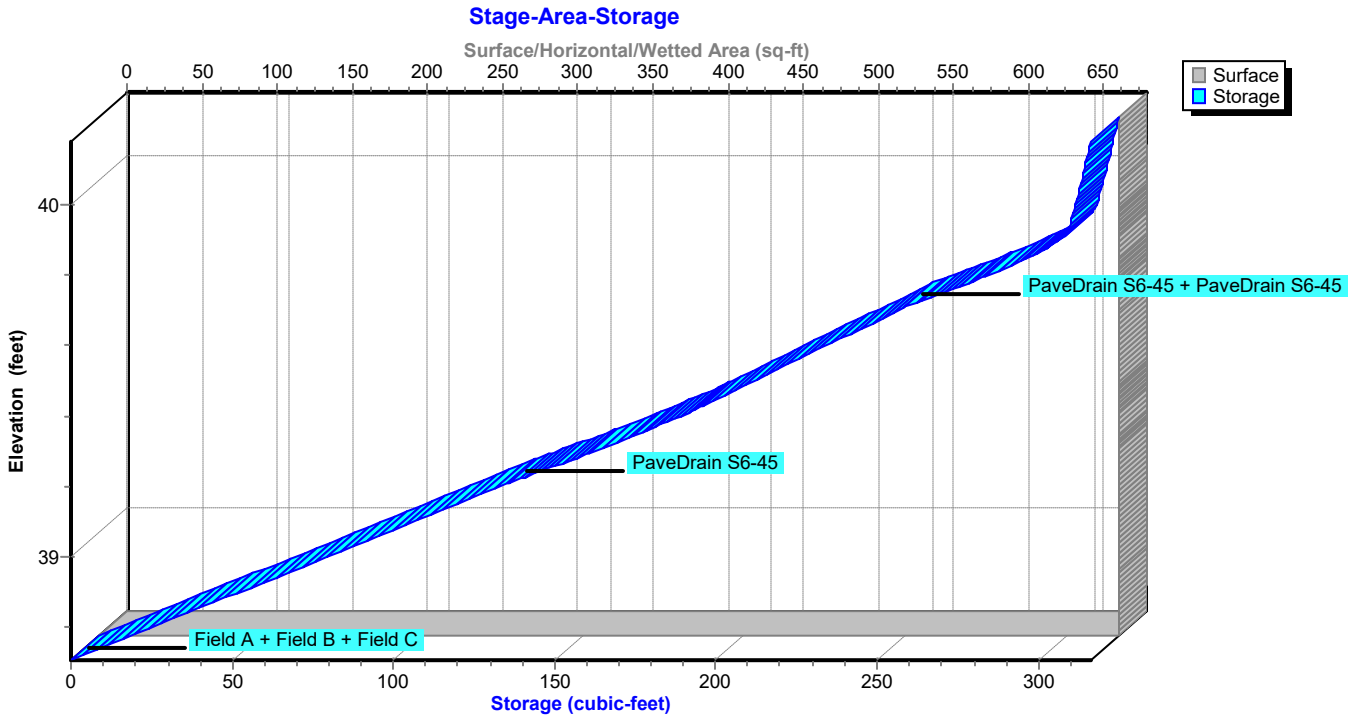
48 Chambers
2.6 cy Field
1.8 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST



Pond 34P: PERMEABLE PAVEMENT EAST

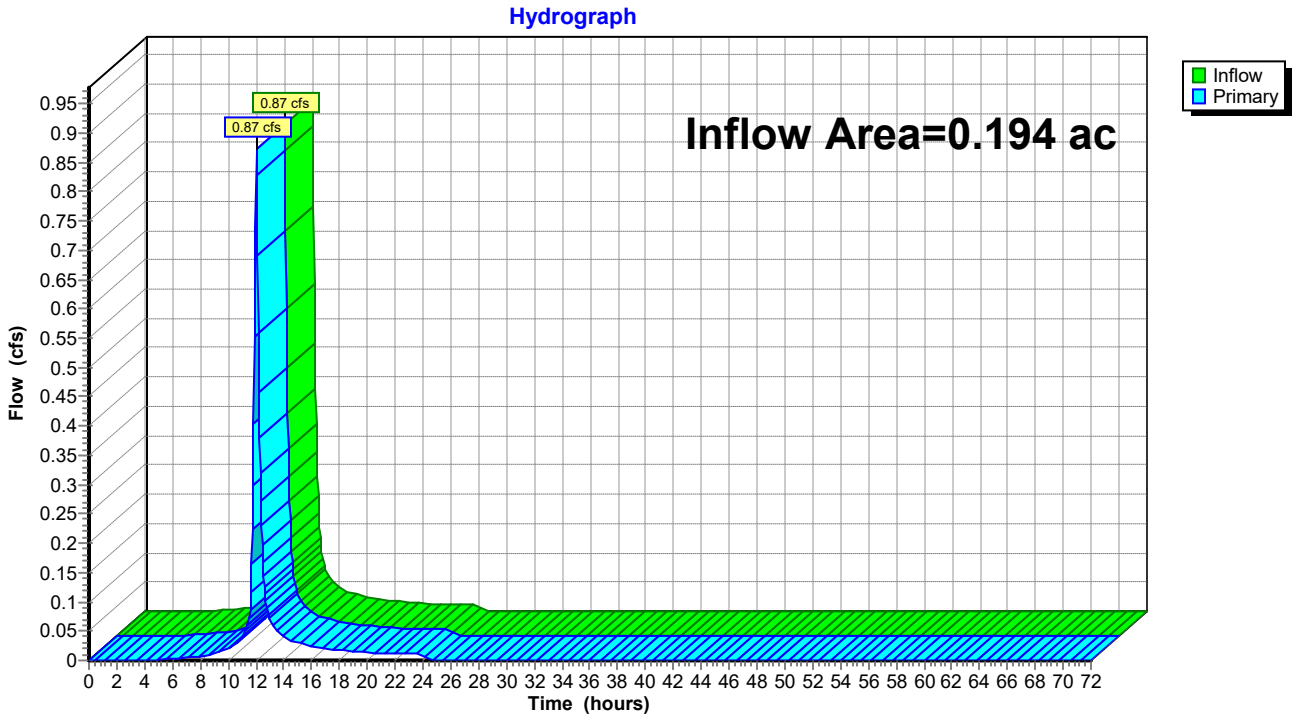


Summary for Link 23L: Study Point 1

Inflow Area = 0.194 ac, 7.58% Impervious, Inflow Depth = 3.85" for 10-YR event
Inflow = 0.87 cfs @ 12.01 hrs, Volume= 0.062 af
Primary = 0.87 cfs @ 12.01 hrs, Volume= 0.062 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 23L: Study Point 1

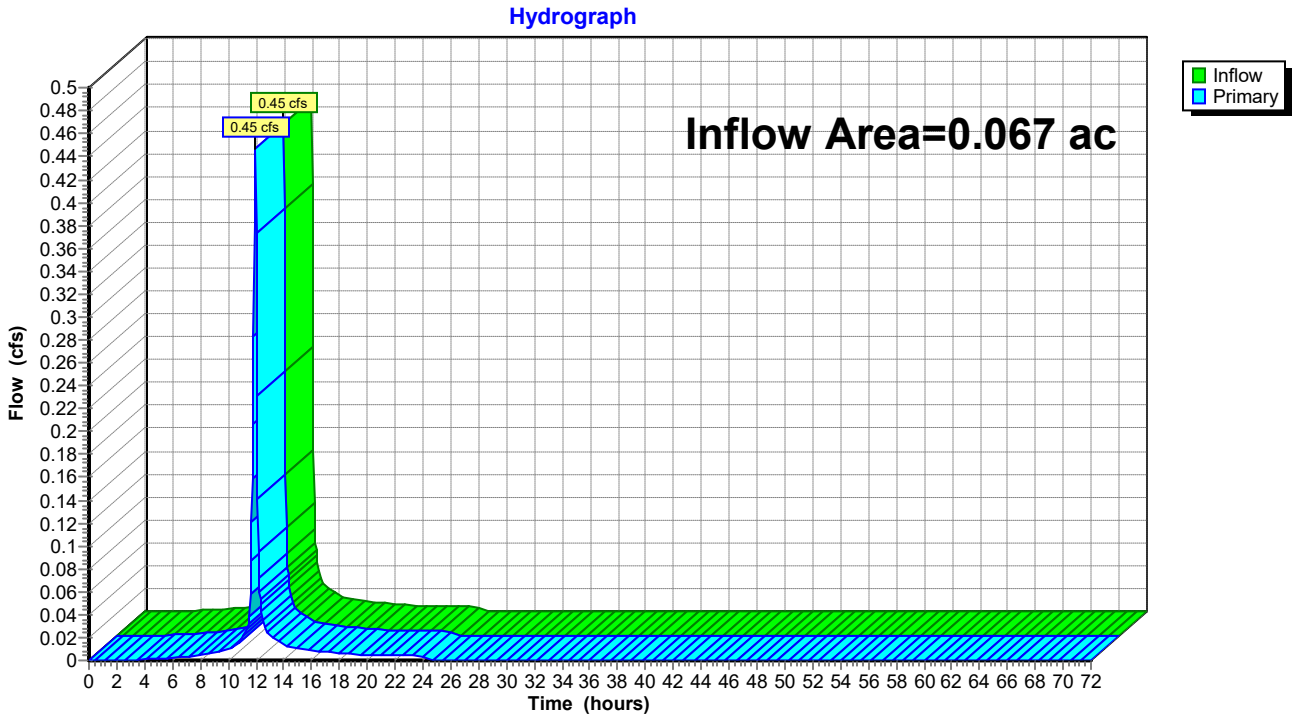


Summary for Link 24L: Study Point 2

Inflow Area = 0.067 ac, 52.55% Impervious, Inflow Depth = 4.38" for 10-YR event
Inflow = 0.45 cfs @ 11.95 hrs, Volume= 0.024 af
Primary = 0.45 cfs @ 11.95 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 24L: Study Point 2



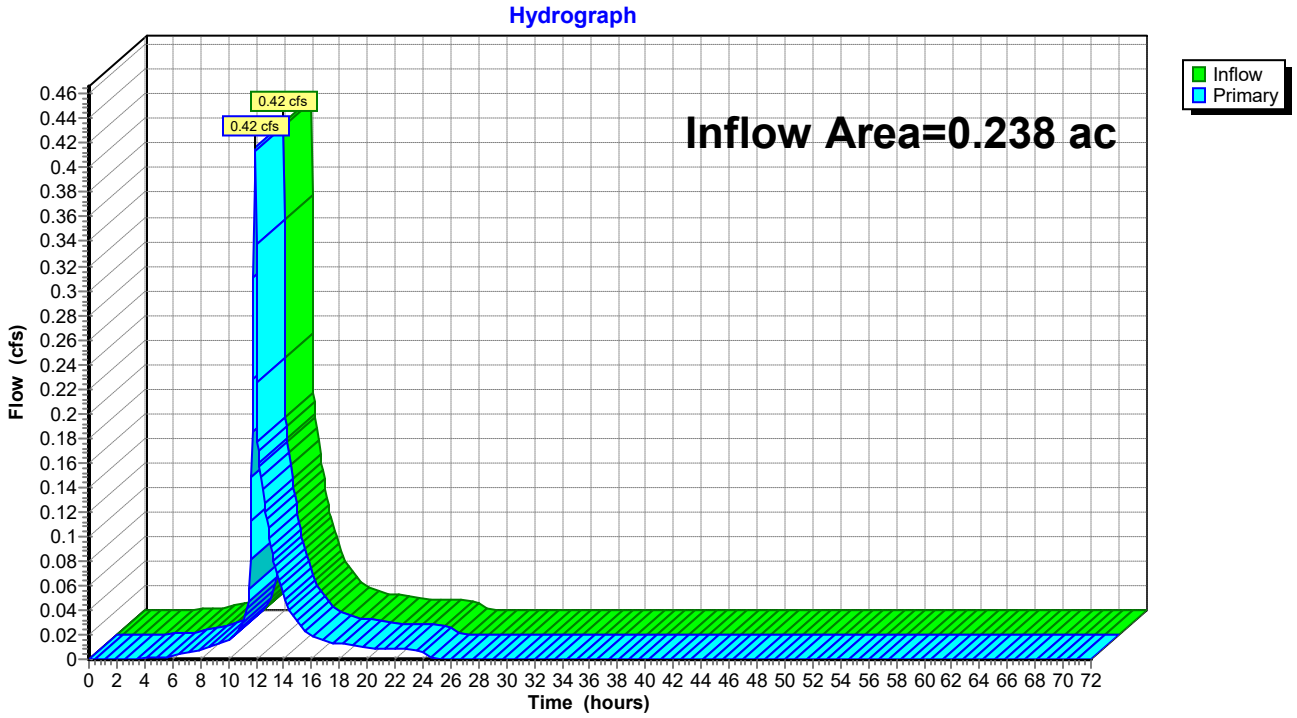
Summary for Link 26L: STUDY POINT 1

Inflow Area = 0.238 ac, 83.20% Impervious, Inflow Depth = 2.27" for 10-YR event
Inflow = 0.42 cfs @ 11.94 hrs, Volume= 0.045 af
Primary = 0.42 cfs @ 11.94 hrs, Volume= 0.045 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Fixed water surface Elevation= 37.68'

Link 26L: STUDY POINT 1

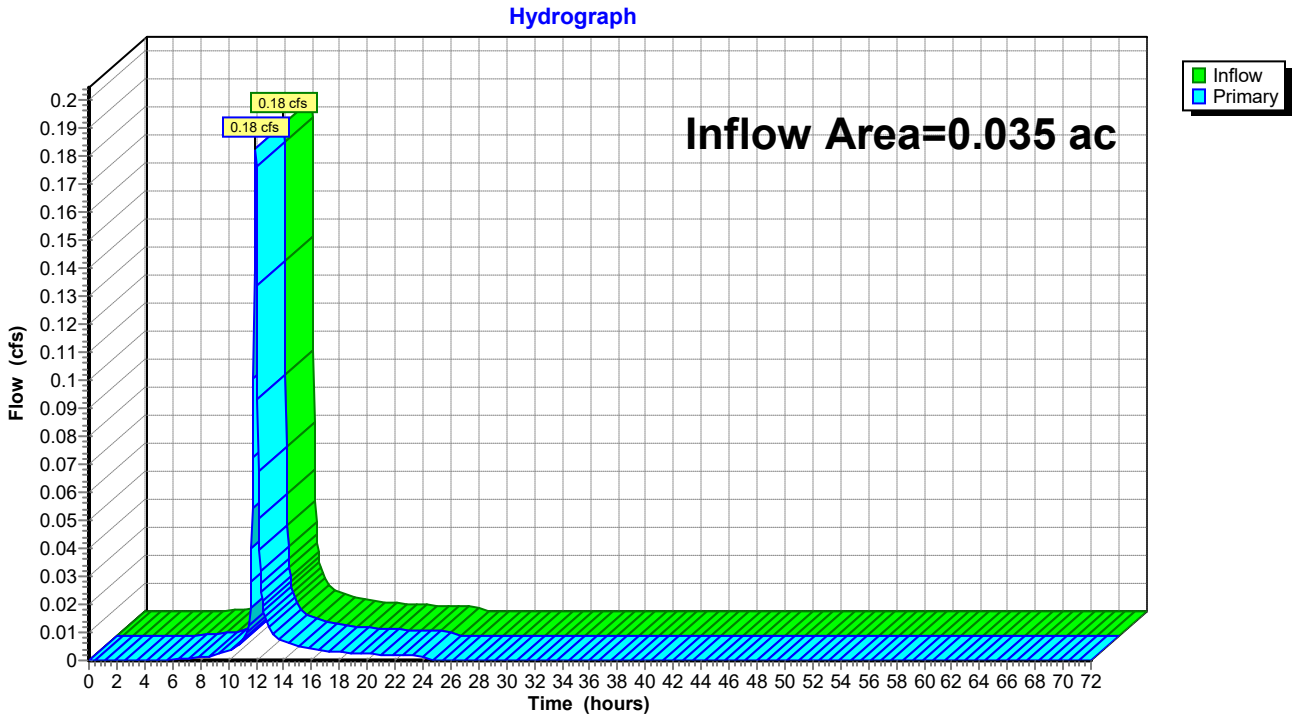


Summary for Link 27L: STUDY POINT 2

Inflow Area = 0.035 ac, 78.77% Impervious, Inflow Depth = 3.65" for 10-YR event
Inflow = 0.18 cfs @ 11.97 hrs, Volume= 0.011 af
Primary = 0.18 cfs @ 11.97 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 27L: STUDY POINT 2



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA1 - STUDY POINT 1 Runoff Area=8,470 sf 7.58% Impervious Runoff Depth=6.06"
Flow Length=197' Tc=8.6 min CN=87 Runoff=1.34 cfs 0.098 af

Subcatchment 2S: DA2 - STUDY POINT 2 Runoff Area=2,902 sf 52.55% Impervious Runoff Depth=6.65"
Flow Length=209' Tc=3.4 min CN=92 Runoff=0.66 cfs 0.037 af

Subcatchment 23S: DA2 Runoff Area=1,287 sf 91.38% Impervious Runoff Depth=6.77"
Flow Length=42' Slope=0.0050 '/' Tc=1.0 min CN=93 Runoff=0.33 cfs 0.017 af

Subcatchment 24S: DA3 Runoff Area=733 sf 87.45% Impervious Runoff Depth=6.53"
Flow Length=23' Slope=0.0050 '/' Tc=0.6 min CN=91 Runoff=0.19 cfs 0.009 af

Subcatchment 26S: DA4 Runoff Area=1,511 sf 94.51% Impervious Runoff Depth=7.00"
Flow Length=41' Slope=0.0050 '/' Tc=1.0 min CN=95 Runoff=0.40 cfs 0.020 af

Subcatchment 27S: DA5 Runoff Area=692 sf 87.72% Impervious Runoff Depth=6.53"
Flow Length=44' Slope=0.0050 '/' Tc=1.1 min CN=91 Runoff=0.18 cfs 0.009 af

Subcatchment 30S: DA9 Runoff Area=165 sf 81.82% Impervious Runoff Depth=7.12"
Flow Length=74' Tc=1.1 min CN=96 Runoff=0.04 cfs 0.002 af

Subcatchment 31S: DA6 - PERMEABLE Runoff Area=2,452 sf 80.26% Impervious Runoff Depth=5.94"
Flow Length=108' Tc=4.3 min CN=86 Runoff=0.49 cfs 0.028 af

Subcatchment 33S: DA7 - PERMEABLE Runoff Area=1,930 sf 85.18% Impervious Runoff Depth=6.29"
Flow Length=124' Slope=0.0054 '/' Tc=2.3 min CN=89 Runoff=0.46 cfs 0.023 af

Subcatchment 38S: DA8 Runoff Area=1,512 sf 78.77% Impervious Runoff Depth=5.83"
Flow Length=77' Tc=5.0 min CN=85 Runoff=0.28 cfs 0.017 af

Subcatchment 39S: DA1 Runoff Area=1,604 sf 64.34% Impervious Runoff Depth=4.91"
Flow Length=158' Tc=32.0 min CN=77 Runoff=0.09 cfs 0.015 af

Pond 20P: PERMEABLE PAVEMENT NORTH Peak Elev=40.20' Storage=524 cf Inflow=0.49 cfs 0.028 af
Discarded=0.02 cfs 0.025 af Primary=0.13 cfs 0.003 af Outflow=0.14 cfs 0.028 af

Pond 23P: PLANTER BOX 2 Peak Elev=42.09' Storage=145 cf Inflow=0.19 cfs 0.009 af
Outflow=0.03 cfs 0.009 af

Pond 24P: PLANTER BOX 1 Peak Elev=42.94' Storage=289 cf Inflow=0.33 cfs 0.017 af
Outflow=0.04 cfs 0.016 af

Pond 25P: PLANTER BOX 3 Peak Elev=39.84' Storage=61 cf Inflow=0.40 cfs 0.020 af
Outflow=0.33 cfs 0.020 af

Pond 26P: PLANTER BOX 4 Peak Elev=38.61' Storage=24 cf Inflow=0.18 cfs 0.009 af
Outflow=0.17 cfs 0.009 af

Pond 31P: (new Pond) Peak Elev=40.25' Storage=0.001 af Inflow=0.04 cfs 0.002 af
Discarded=0.00 cfs 0.002 af Primary=0.08 cfs 0.001 af Outflow=0.08 cfs 0.002 af

Pond 32P: CURB INLET 1 Peak Elev=38.39' Inflow=0.82 cfs 0.035 af
Outflow=0.82 cfs 0.035 af

Pond 33P: CURB INLET 2 Peak Elev=38.61' Inflow=0.82 cfs 0.035 af
Outflow=0.82 cfs 0.035 af

Pond 34P: PERMEABLE PAVEMENT EAST Peak Elev=40.17' Storage=316 cf Inflow=0.46 cfs 0.023 af
Discarded=0.01 cfs 0.018 af Primary=0.44 cfs 0.006 af Outflow=0.46 cfs 0.023 af

Link 23L: Study Point 1 Inflow=1.34 cfs 0.098 af
Primary=1.34 cfs 0.098 af

Link 24L: Study Point 2 Inflow=0.66 cfs 0.037 af
Primary=0.66 cfs 0.037 af

Link 26L: STUDY POINT 1 Inflow=1.00 cfs 0.079 af
Primary=1.00 cfs 0.079 af

Link 27L: STUDY POINT 2 Inflow=0.28 cfs 0.017 af
Primary=0.28 cfs 0.017 af

Total Runoff Area = 0.534 ac Runoff Volume = 0.275 af Average Runoff Depth = 6.18"
48.45% Pervious = 0.259 ac 51.55% Impervious = 0.275 ac

Summary for Subcatchment 1S: DA1 - STUDY POINT 1

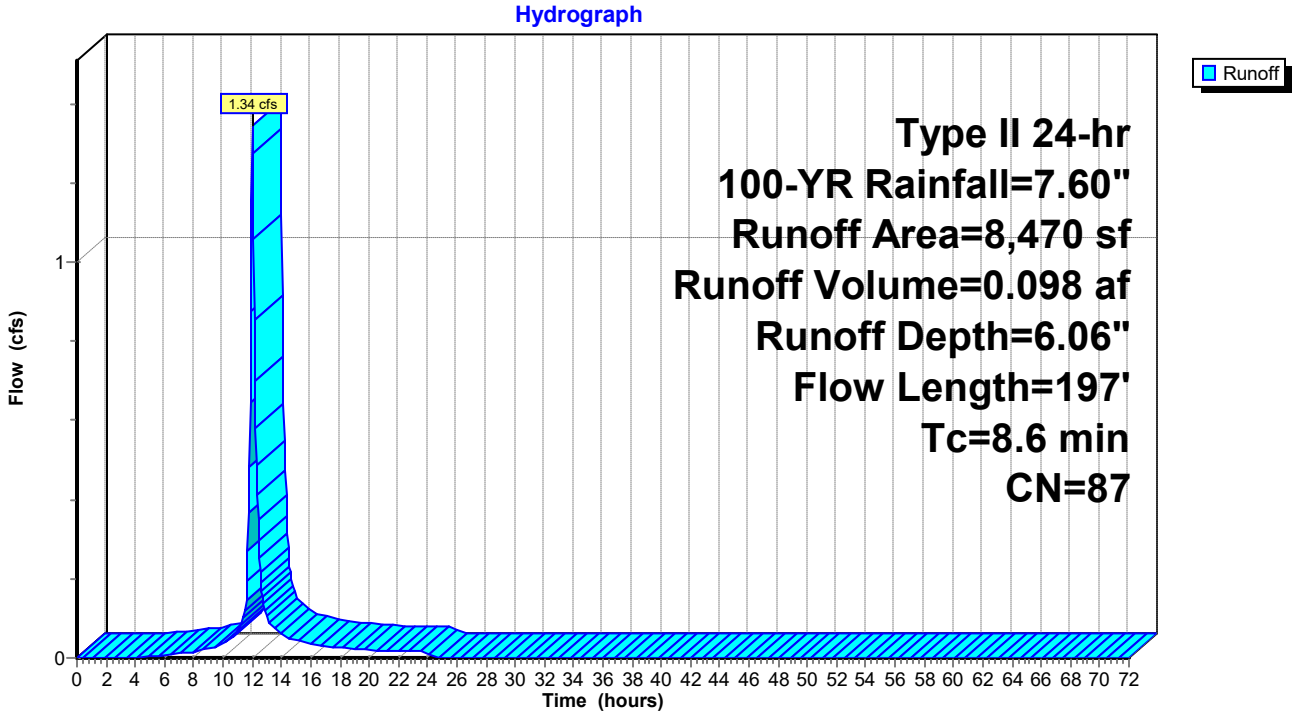
Runoff = 1.34 cfs @ 12.01 hrs, Volume= 0.098 af, Depth= 6.06"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
7,828	86	Woods/grass comb., Poor, HSG D
642	98	Paved parking, HSG D
8,470	87	Weighted Average
7,828		92.42% Pervious Area
642		7.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0160	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
2.2	93	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.4	54	0.0140	2.40		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
8.6	197	Total			

Subcatchment 1S: DA1 - STUDY POINT 1



Summary for Subcatchment 2S: DA2 - STUDY POINT 2

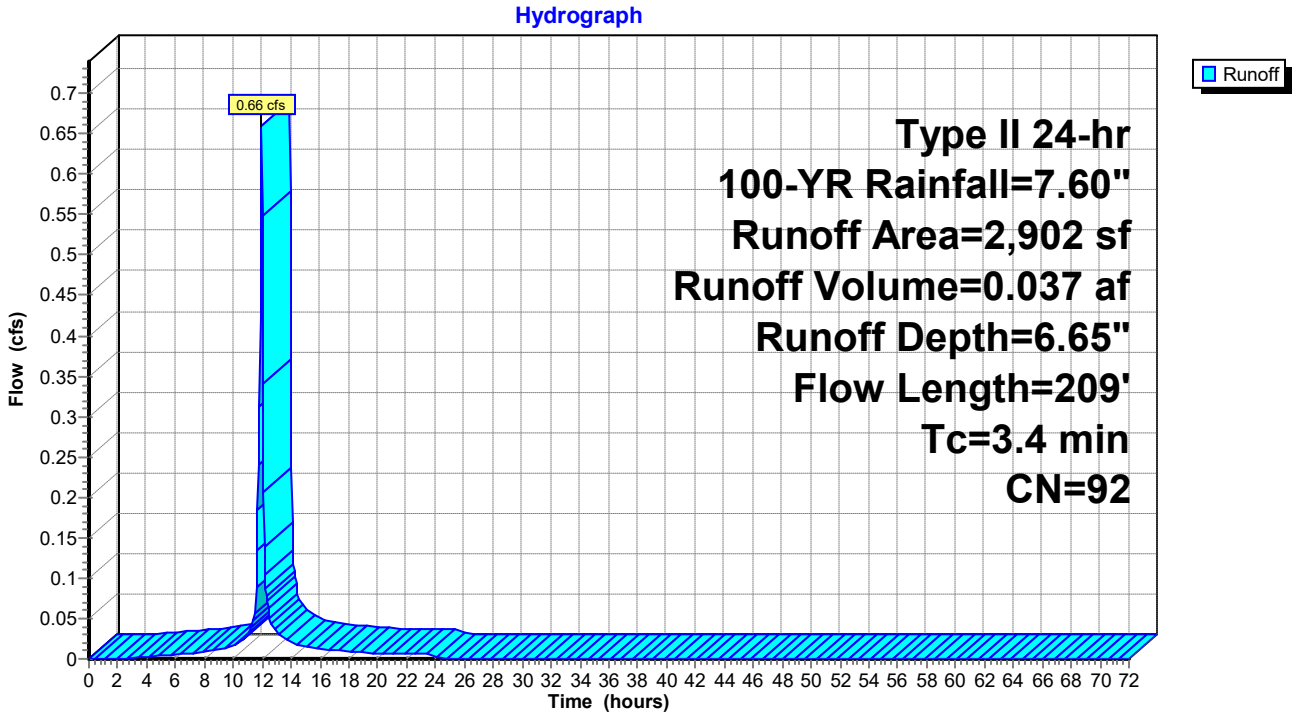
Runoff = 0.66 cfs @ 11.95 hrs, Volume= 0.037 af, Depth= 6.65"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
1,377	86	Woods/grass comb., Poor, HSG D
1,525	98	Paved parking, HSG D
2,902	92	Weighted Average
1,377		47.45% Pervious Area
1,525		52.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	100	0.0054	0.84		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
1.4	109	0.0040	1.28		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.4	209	Total			

Subcatchment 2S: DA2 - STUDY POINT 2



Summary for Subcatchment 23S: DA2

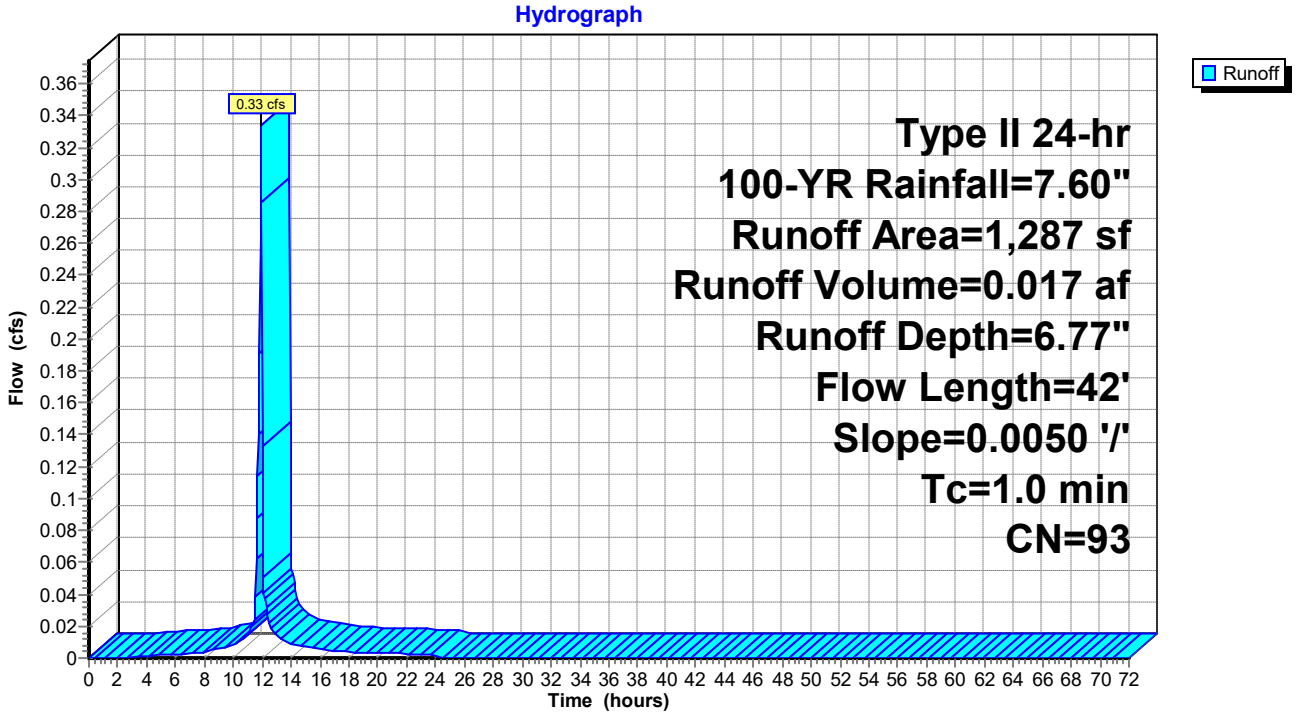
Runoff = 0.33 cfs @ 11.90 hrs, Volume= 0.017 af, Depth= 6.77"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
1,153	98	Roofs, HSG D
111	39	Pasture/grassland/range, Good, HSG A
23	98	Unconnected pavement, HSG D
1,287	93	Weighted Average
111		8.62% Pervious Area
1,176		91.38% Impervious Area
23		1.96% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	42	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 23S: DA2



Summary for Subcatchment 24S: DA3

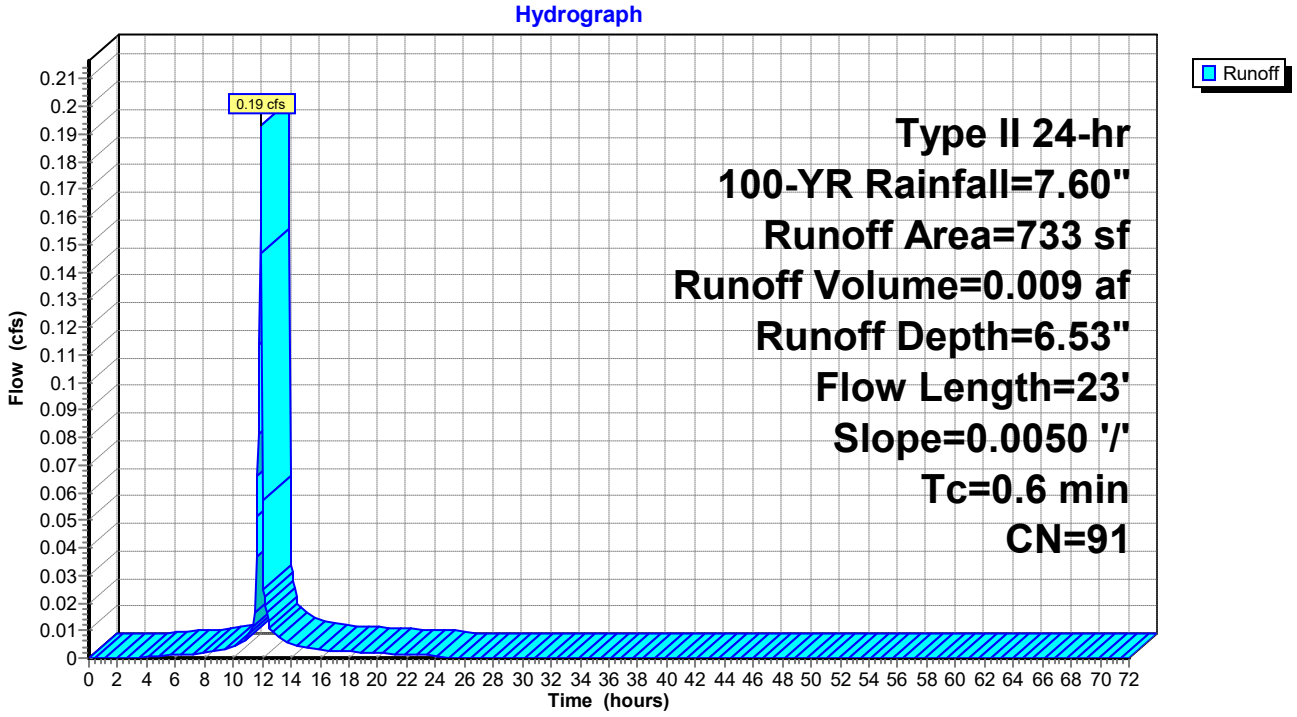
Runoff = 0.19 cfs @ 11.90 hrs, Volume= 0.009 af, Depth= 6.53"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
620	98	Roofs, HSG D
92	39	Pasture/grassland/range, Good, HSG A
21	98	Unconnected pavement, HSG D
733	91	Weighted Average
92		12.55% Pervious Area
641		87.45% Impervious Area
21		3.28% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	23	0.0050	0.61		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 24S: DA3



Summary for Subcatchment 26S: DA4

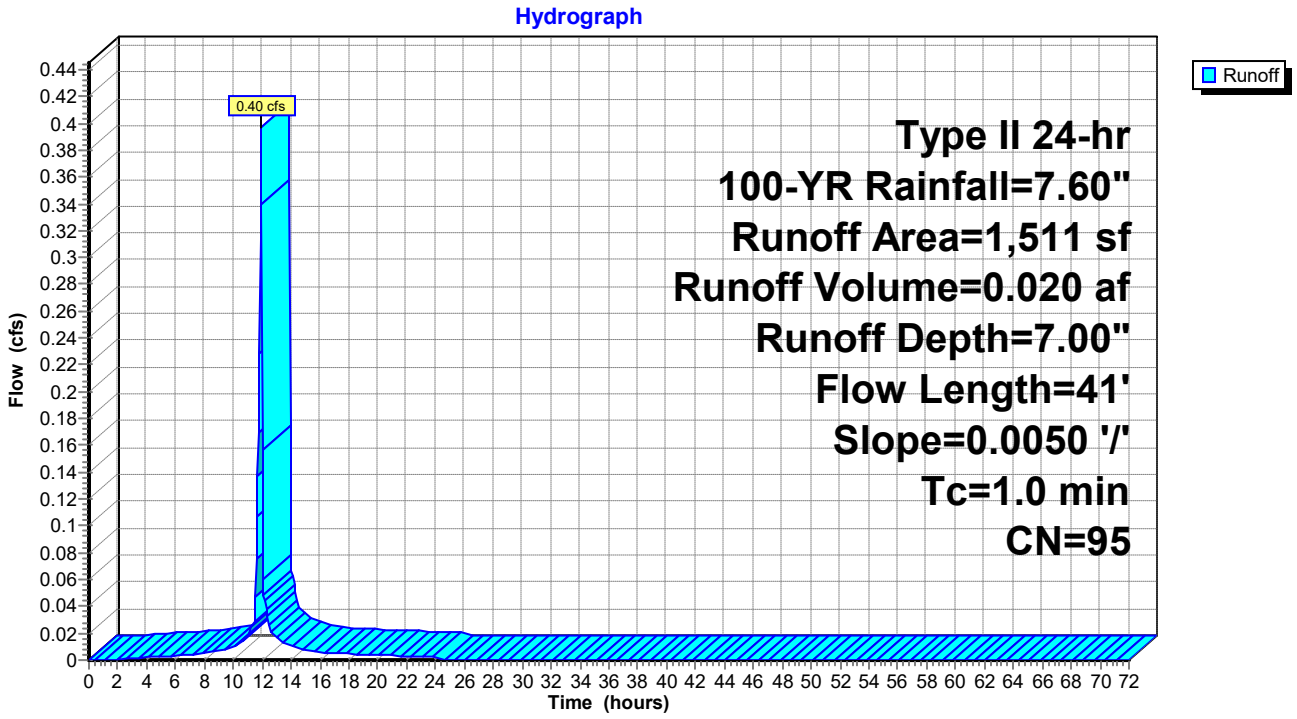
Runoff = 0.40 cfs @ 11.90 hrs, Volume= 0.020 af, Depth= 7.00"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
1,409	98	Roofs, HSG D
83	39	Pasture/grassland/range, Good, HSG A
19	98	Unconnected pavement, HSG D
1,511	95	Weighted Average
83		5.49% Pervious Area
1,428		94.51% Impervious Area
19		1.33% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	41	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 26S: DA4



Summary for Subcatchment 27S: DA5

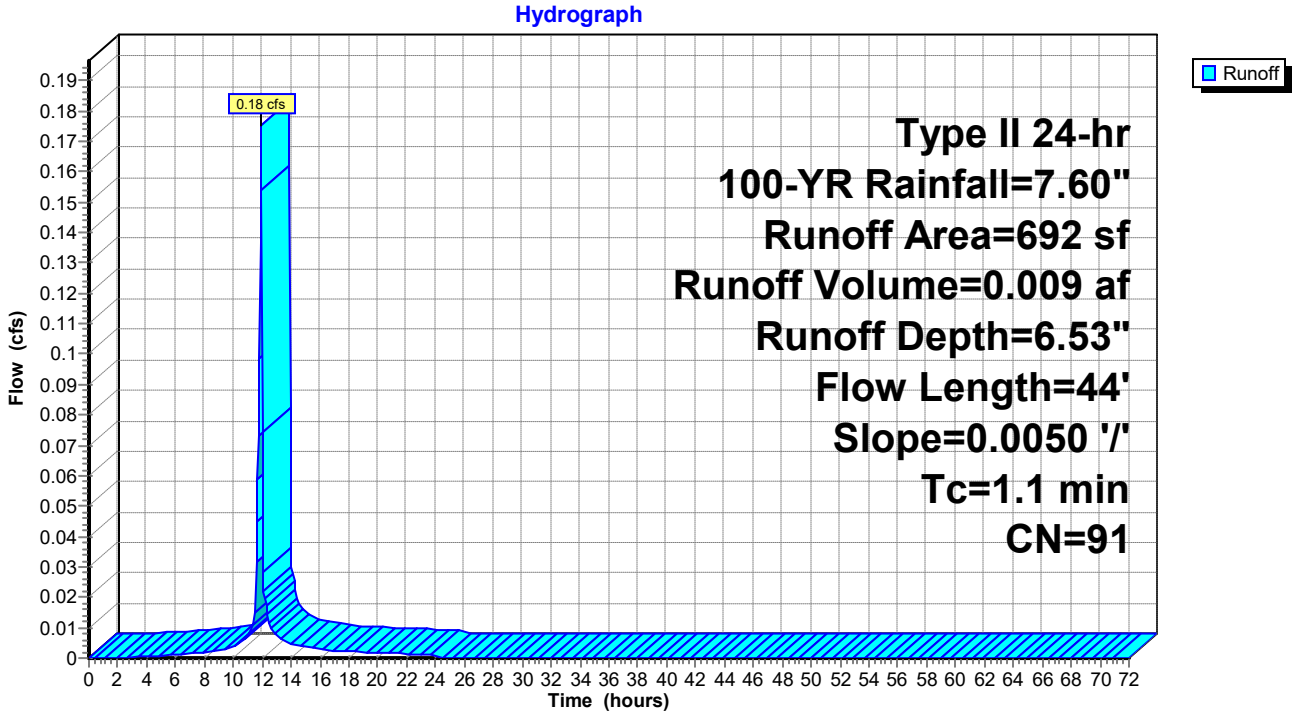
Runoff = 0.18 cfs @ 11.91 hrs, Volume= 0.009 af, Depth= 6.53"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
588	98	Roofs, HSG D
85	39	Pasture/grassland/range, Good, HSG A
19	98	Unconnected pavement, HSG D
692	91	Weighted Average
85		12.28% Pervious Area
607		87.72% Impervious Area
19		3.13% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	44	0.0050	0.69		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"

Subcatchment 27S: DA5



Summary for Subcatchment 30S: DA9

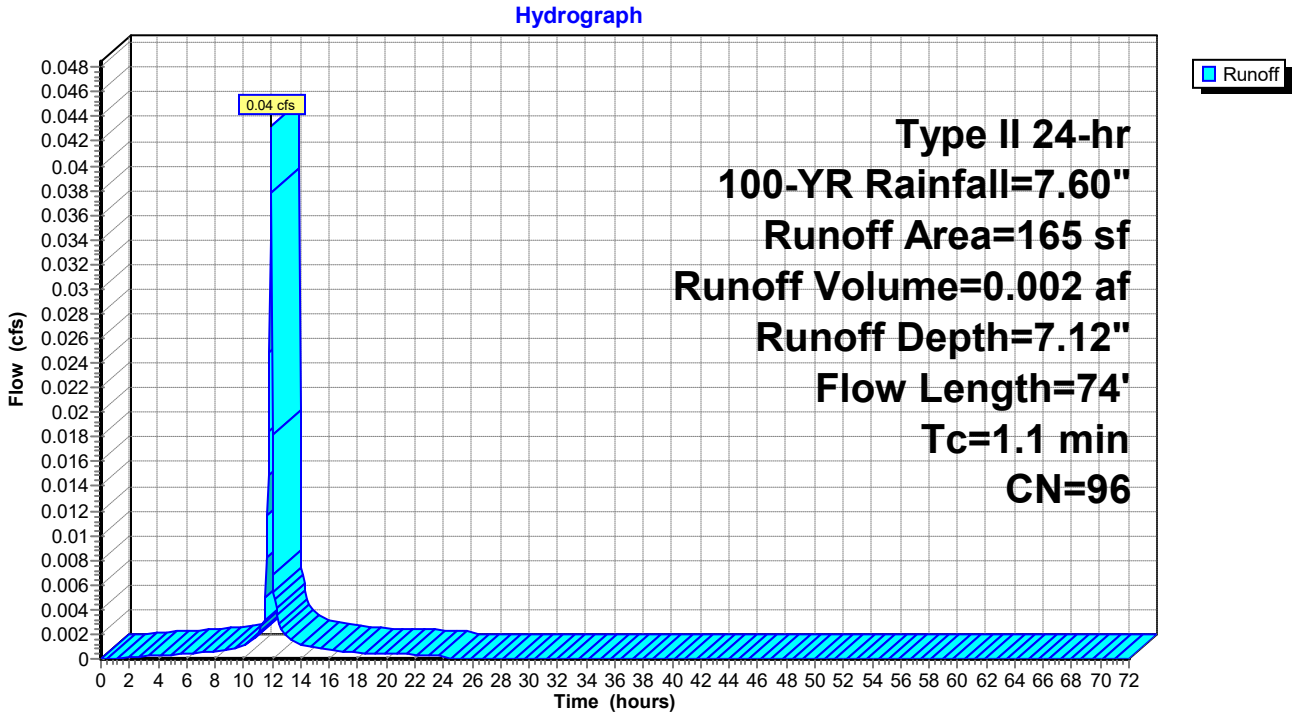
Runoff = 0.04 cfs @ 11.91 hrs, Volume= 0.002 af, Depth= 7.12"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
135	98	Paved parking, HSG C
30	86	<50% Grass cover, Poor, HSG C
165	96	Weighted Average
30		18.18% Pervious Area
135		81.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	27	0.0165	1.01		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.7	47	0.0141	1.06		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
1.1	74	Total			

Subcatchment 30S: DA9



Summary for Subcatchment 31S: DA6 - PERMEABLE PAVEMENT NORTH

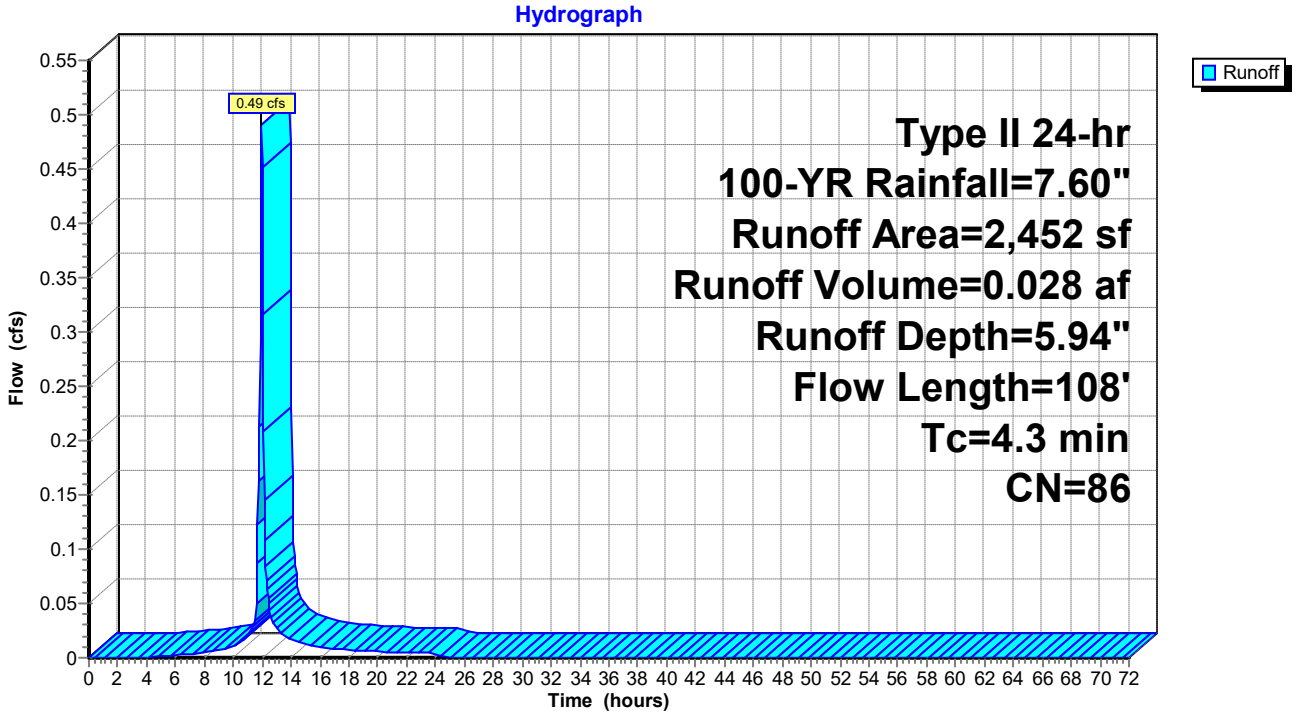
Runoff = 0.49 cfs @ 11.96 hrs, Volume= 0.028 af, Depth= 5.94"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
1,040	98	Paved parking, HSG D
928	98	Unconnected pavement, HSG D
484	39	>75% Grass cover, Good, HSG A
2,452	86	Weighted Average
484		19.74% Pervious Area
1,968		80.26% Impervious Area
928		47.15% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	7	0.0033	0.05		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.8	93	0.0057	0.85		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.2	8	0.0014	0.76		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
4.3	108	Total			

Subcatchment 31S: DA6 - PERMEABLE PAVEMENT NORTH



Summary for Subcatchment 33S: DA7 - PERMEABLE PAVEMENTEAST

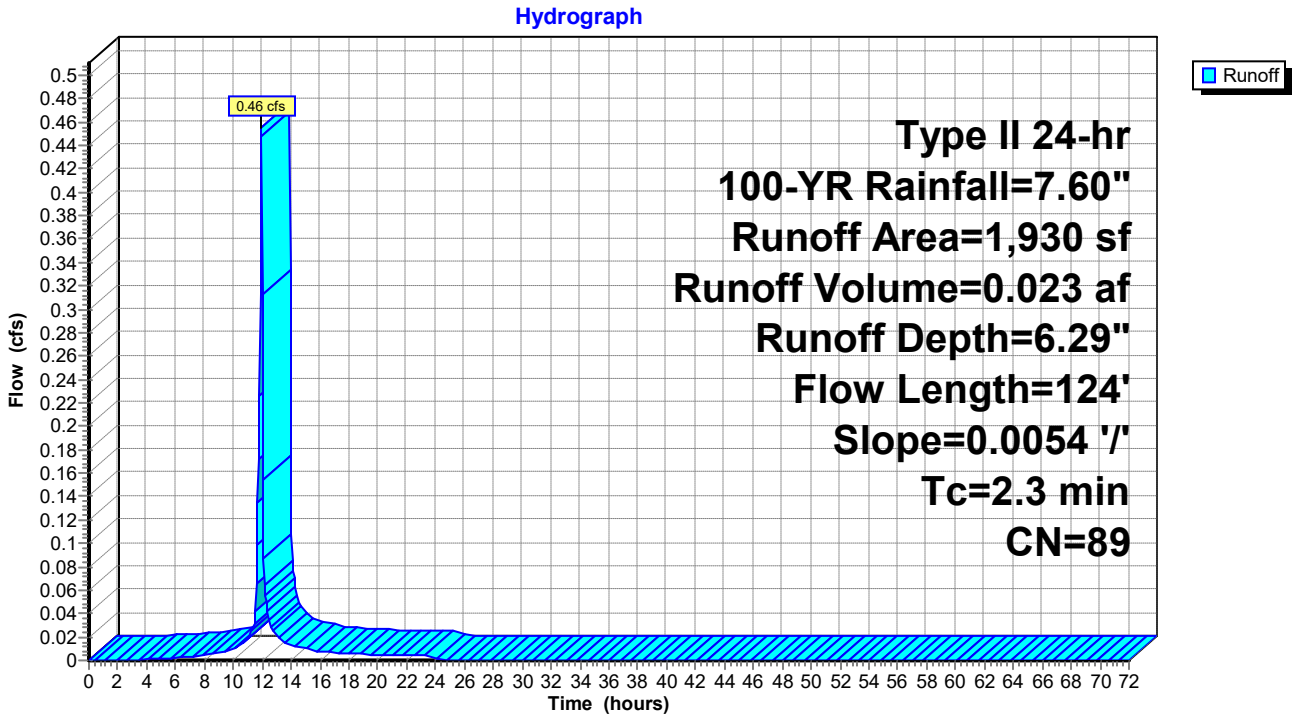
Runoff = 0.46 cfs @ 11.93 hrs, Volume= 0.023 af, Depth= 6.29"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
286	39	>75% Grass cover, Good, HSG A
1,644	98	Unconnected pavement, HSG D
1,930	89	Weighted Average
286		14.82% Pervious Area
1,644		85.18% Impervious Area
1,644		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	100	0.0054	0.84		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
0.3	24	0.0054	1.49		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.3	124	Total			

Subcatchment 33S: DA7 - PERMEABLE PAVEMENTEAST



Summary for Subcatchment 38S: DA8

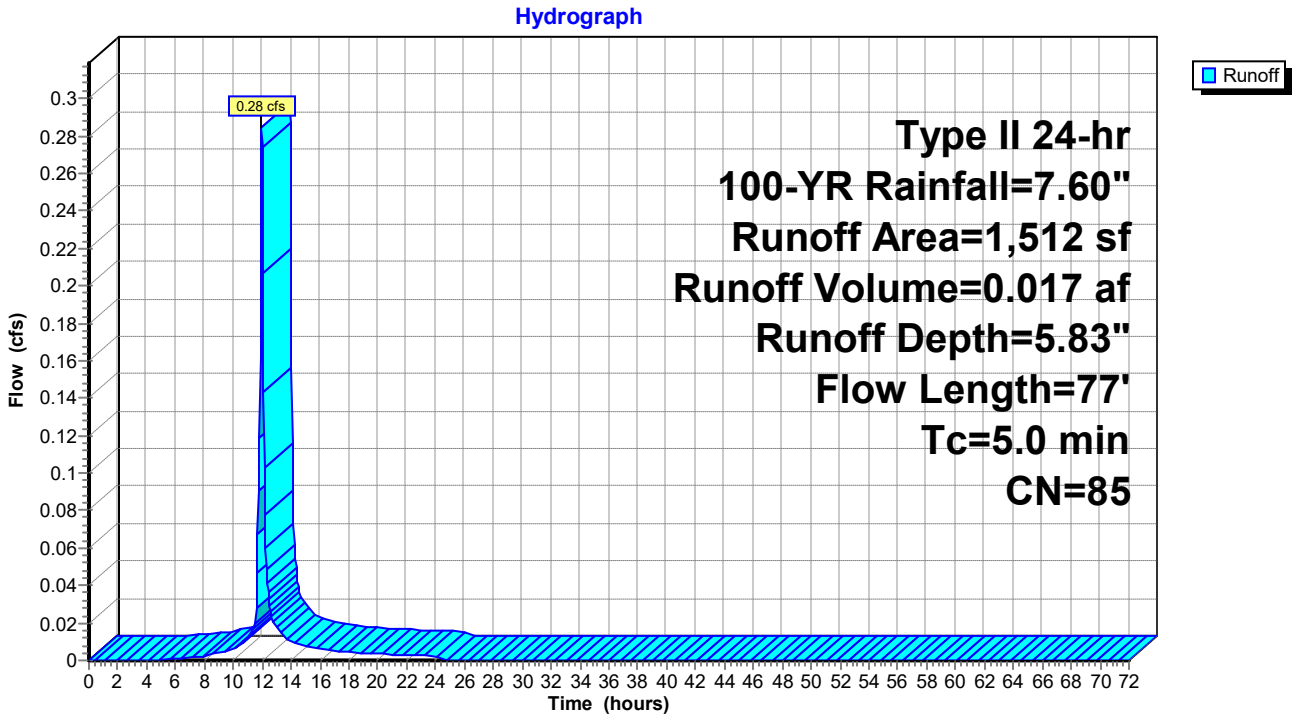
Runoff = 0.28 cfs @ 11.97 hrs, Volume= 0.017 af, Depth= 5.83"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
1,191	98	Unconnected pavement, HSG D
321	39	>75% Grass cover, Good, HSG A
1,512	85	Weighted Average
321		21.23% Pervious Area
1,191		78.77% Impervious Area
1,191		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	6	0.0010	0.03		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
1.7	71	0.0040	0.70		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.40"
5.0	77	Total			

Subcatchment 38S: DA8



Summary for Subcatchment 39S: DA1

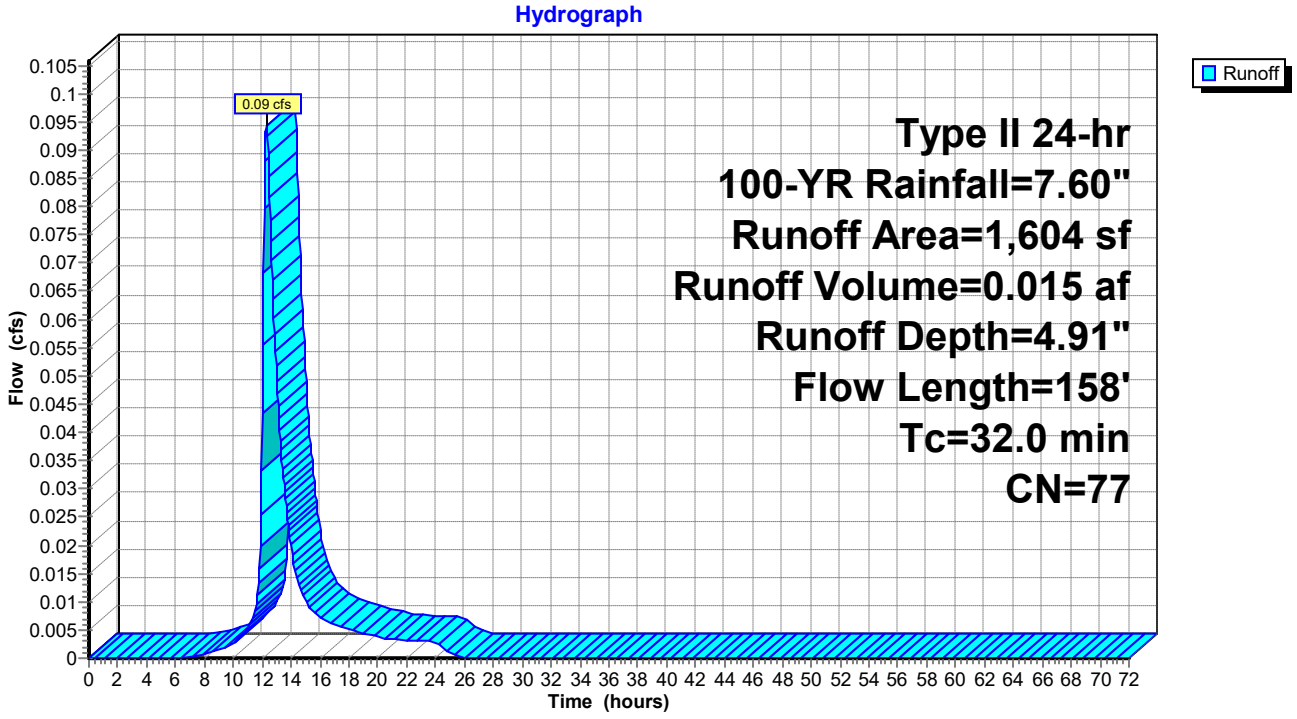
Runoff = 0.09 cfs @ 12.30 hrs, Volume= 0.015 af, Depth= 4.91"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-YR Rainfall=7.60"

Area (sf)	CN	Description
1,032	98	Unconnected pavement, HSG D
572	39	>75% Grass cover, Good, HSG A
1,604	77	Weighted Average
572		35.66% Pervious Area
1,032		64.34% Impervious Area
1,032		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.5	100	0.0010	0.05		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.40"
0.2	11	0.0141	0.83		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.3	47	0.0141	2.41		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
32.0	158	Total			

Subcatchment 39S: DA1



Summary for Pond 20P: PERMEABLE PAVEMENT NORTH

Inflow Area = 0.056 ac, 80.26% Impervious, Inflow Depth = 5.94" for 100-YR event
Inflow = 0.49 cfs @ 11.96 hrs, Volume= 0.028 af
Outflow = 0.14 cfs @ 12.17 hrs, Volume= 0.028 af, Atten= 71%, Lag= 12.5 min
Discarded = 0.02 cfs @ 12.15 hrs, Volume= 0.025 af
Primary = 0.13 cfs @ 12.17 hrs, Volume= 0.003 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 40.20' @ 12.15 hrs Surf.Area= 1,001 sf Storage= 524 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 284.3 min (1,071.6 - 787.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.82'	403 cf	**23.00'W x 43.50'L x 1.47'H Field A** 1,467 cf Overall - 460 cf Embedded = 1,008 cf x 40.0% Voids
#2A	39.82'	103 cf	**PaveDrain S6-45** x 1075 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 25 Rows of 43 Chambers
#3B	38.82'	18 cf	**4.67'W x 9.50'L x 1.47'H Field B** -Impervious 65 cf Overall - 19 cf Embedded = 46 cf x 40.0% Voids
#4B	39.82'	4 cf	**PaveDrain S6-45** x 45 Inside #3 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 5 Rows of 9 Chambers
		528 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.82'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.19'	**43.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.02 cfs @ 12.15 hrs HW=40.20' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=0.11 cfs @ 12.17 hrs HW=40.20' TW=37.68' (Dynamic Tailwater)
↑—**2=Sharp-Crested Rectangular Weir** (Weir Controls 0.11 cfs @ 0.30 fps)

Pond 20P: PERMEABLE PAVEMENT NORTH - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

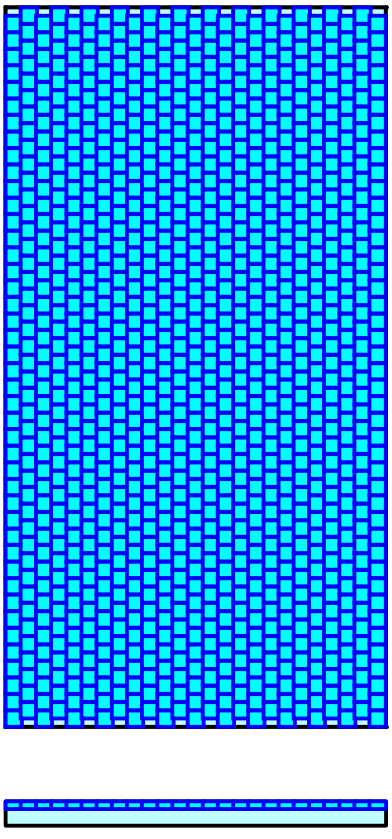
43 Chambers/Row x 1.00' Long = 43.00' Row Length +0.50' Row Offset = 43.50' Base Length
25 Rows x 12.0" Wide - 1.0" Nesting x 24 = 23.00' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

1,075 Chambers x 0.1 cf = 102.6 cf Chamber Storage
1,075 Chambers x 0.4 cf = 459.9 cf Displacement

1,467.4 cf Field - 459.9 cf Chambers = 1,007.5 cf Stone x 40.0% Voids = 403.0 cf Stone Storage

Chamber Storage + Stone Storage = 505.7 cf = 0.012 af
Overall Storage Efficiency = 34.5%
Overall System Size = 43.50' x 23.00' x 1.47'

1,075 Chambers
54.3 cy Field
37.3 cy Stone



Pond 20P: PERMEABLE PAVEMENT NORTH - Chamber Wizard Field B

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

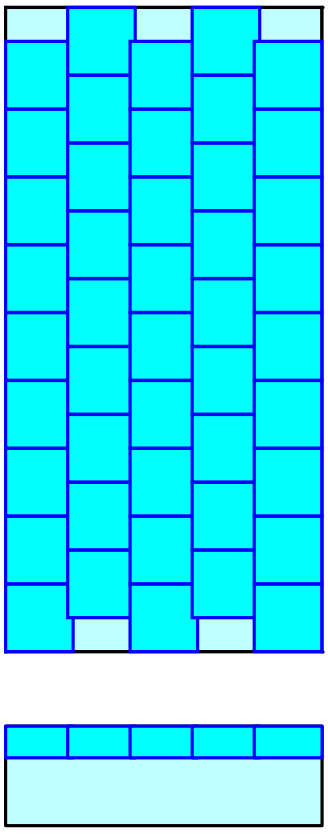
9 Chambers/Row x 1.00' Long = 9.00' Row Length +0.50' Row Offset = 9.50' Base Length
5 Rows x 12.0" Wide - 1.0" Nesting x 4 = 4.67' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

45 Chambers x 0.1 cf = 4.3 cf Chamber Storage
45 Chambers x 0.4 cf = 19.3 cf Displacement

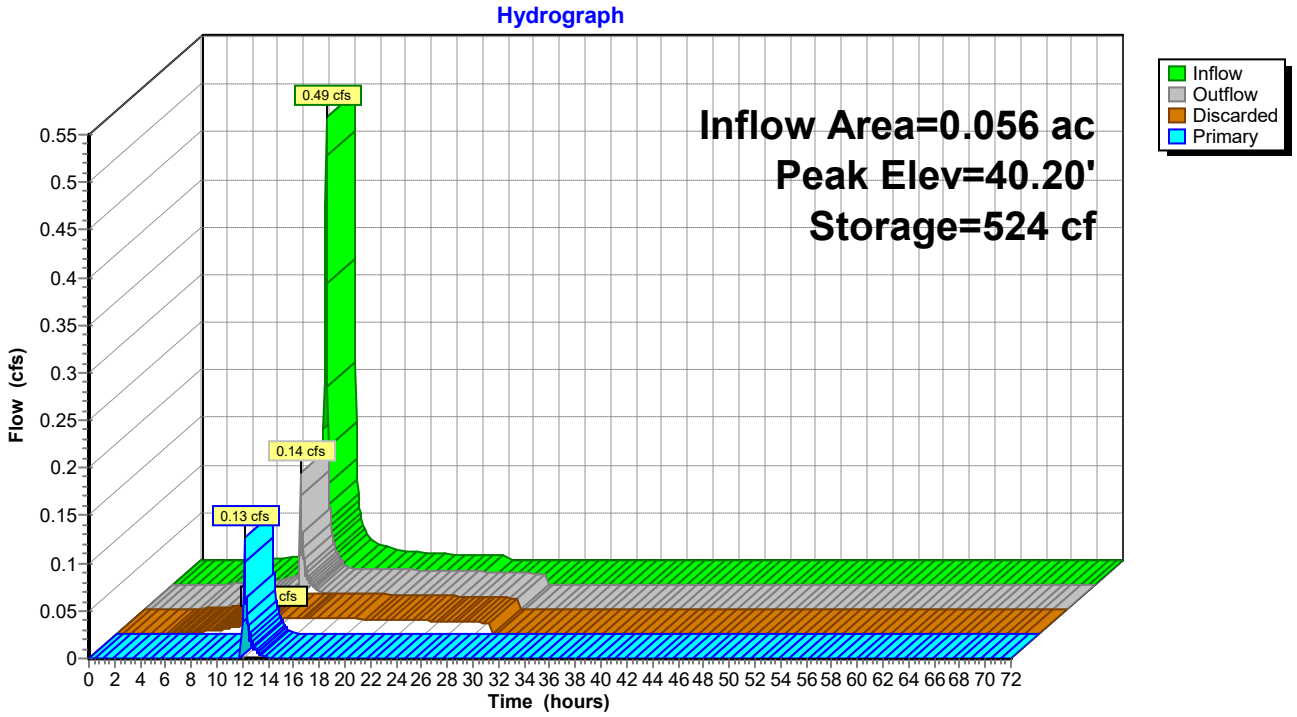
65.0 cf Field - 19.3 cf Chambers = 45.8 cf Stone x 40.0% Voids = 18.3 cf Stone Storage

Chamber Storage + Stone Storage = 22.6 cf = 0.001 af
Overall Storage Efficiency = 34.8%
Overall System Size = 9.50' x 4.67' x 1.47'

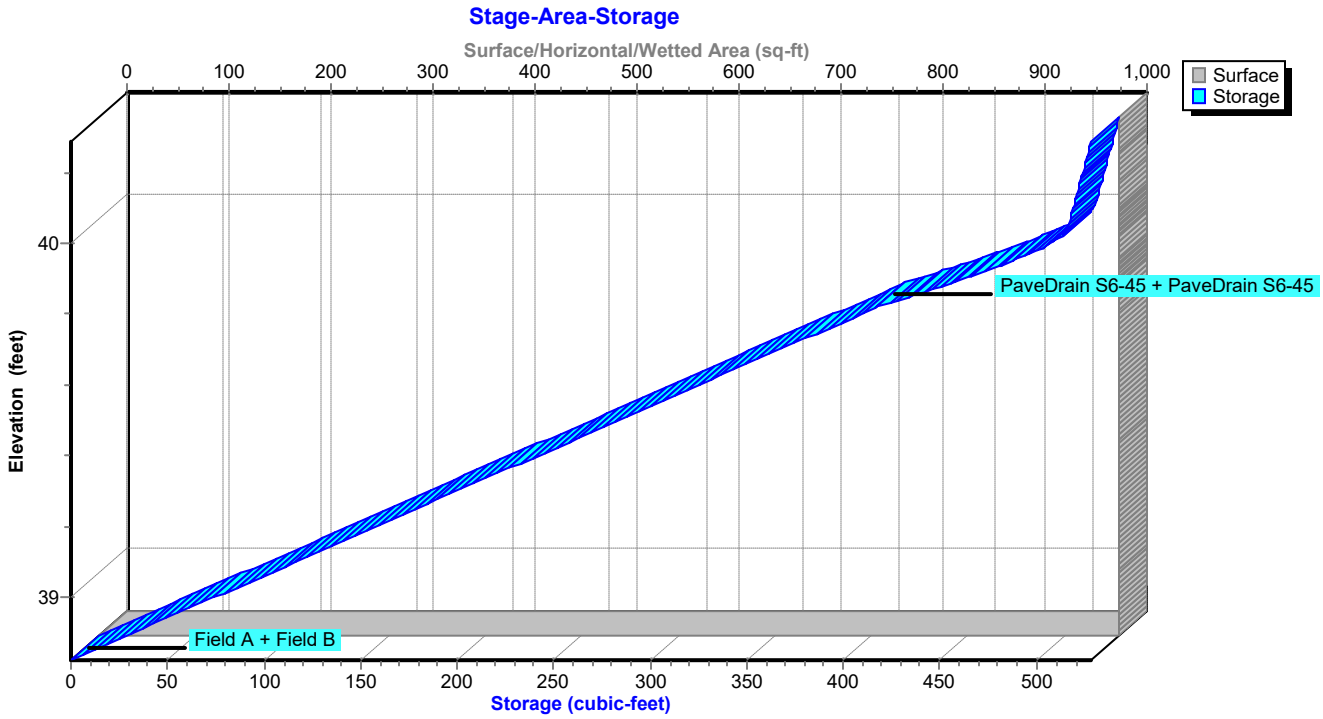
45 Chambers
2.4 cy Field
1.7 cy Stone



Pond 20P: PERMEABLE PAVEMENT NORTH



Pond 20P: PERMEABLE PAVEMENT NORTH



Summary for Pond 23P: PLANTER BOX 2

Inflow Area = 0.017 ac, 87.45% Impervious, Inflow Depth = 6.53" for 100-YR event
Inflow = 0.19 cfs @ 11.90 hrs, Volume= 0.009 af
Outflow = 0.03 cfs @ 12.05 hrs, Volume= 0.009 af, Atten= 83%, Lag= 9.0 min
Primary = 0.03 cfs @ 12.05 hrs, Volume= 0.009 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 42.09' @ 12.05 hrs Surf.Area= 92 sf Storage= 145 cf

Plug-Flow detention time= 53.2 min calculated for 0.009 af (98% of inflow)
Center-of-Mass det. time= 41.9 min (807.8 - 765.9)

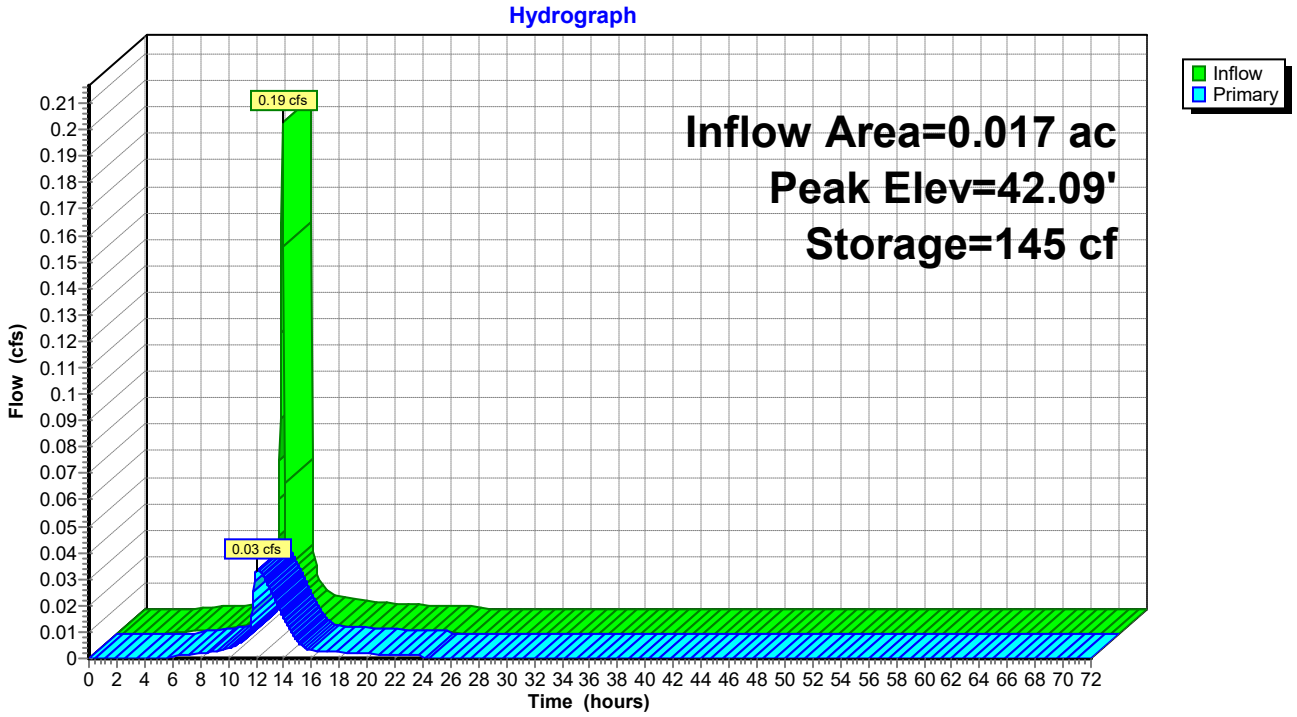
Volume	Invert	Avail.Storage	Storage Description
#1	38.40'	2,745 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
38.40	92	0.0	0	0
38.41	92	40.0	0	0
41.92	92	40.0	129	130
41.93	92	100.0	1	130
42.92	92	100.0	91	222
43.42	10,000	100.0	2,523	2,745

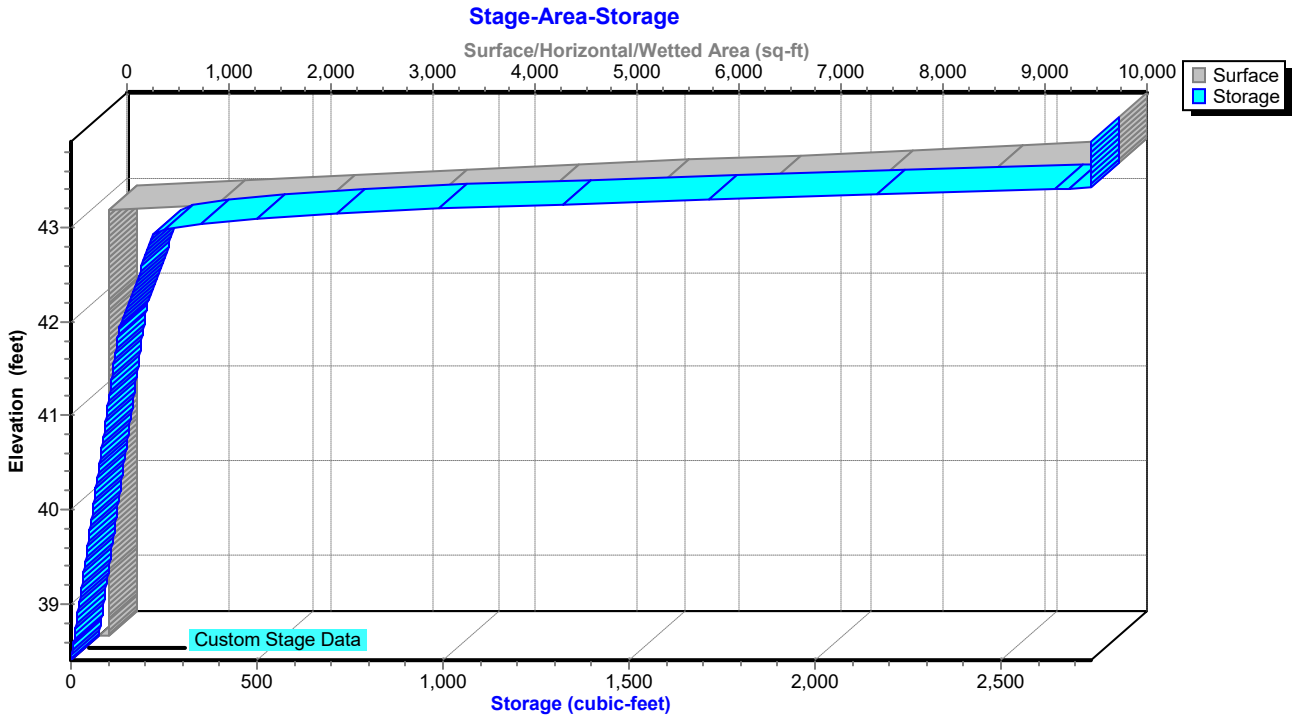
Device	Routing	Invert	Outlet Devices
#1	Primary	37.75'	**12.0" Round Culvert** L= 106.5' Ke= 0.500 Inlet / Outlet Invert= 37.75' / 37.60' S= 0.0014 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	38.42'	**4.0" Round Culvert** L= 8.6' Ke= 0.500 Inlet / Outlet Invert= 38.42' / 37.75' S= 0.0779 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 2	38.59'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	43.41'	**7.5' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.03 cfs @ 12.05 hrs HW=42.09' TW=37.68' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.03 cfs of 5.97 cfs potential flow)
  - **2=Culvert** (Passes 0.03 cfs of 0.79 cfs potential flow)
    - **3=Orifice/Grate** (Orifice Controls 0.03 cfs @ 9.01 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 23P: PLANTER BOX 2



Pond 23P: PLANTER BOX 2



Summary for Pond 24P: PLANTER BOX 1

Inflow Area = 0.030 ac, 91.38% Impervious, Inflow Depth = 6.77" for 100-YR event
Inflow = 0.33 cfs @ 11.90 hrs, Volume= 0.017 af
Outflow = 0.04 cfs @ 12.14 hrs, Volume= 0.016 af, Atten= 88%, Lag= 13.8 min
Primary = 0.04 cfs @ 12.14 hrs, Volume= 0.016 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 42.94' @ 12.14 hrs Surf.Area= 111 sf Storage= 289 cf

Plug-Flow detention time= 74.3 min calculated for 0.016 af (99% of inflow)
Center-of-Mass det. time= 66.3 min (825.2 - 759.0)

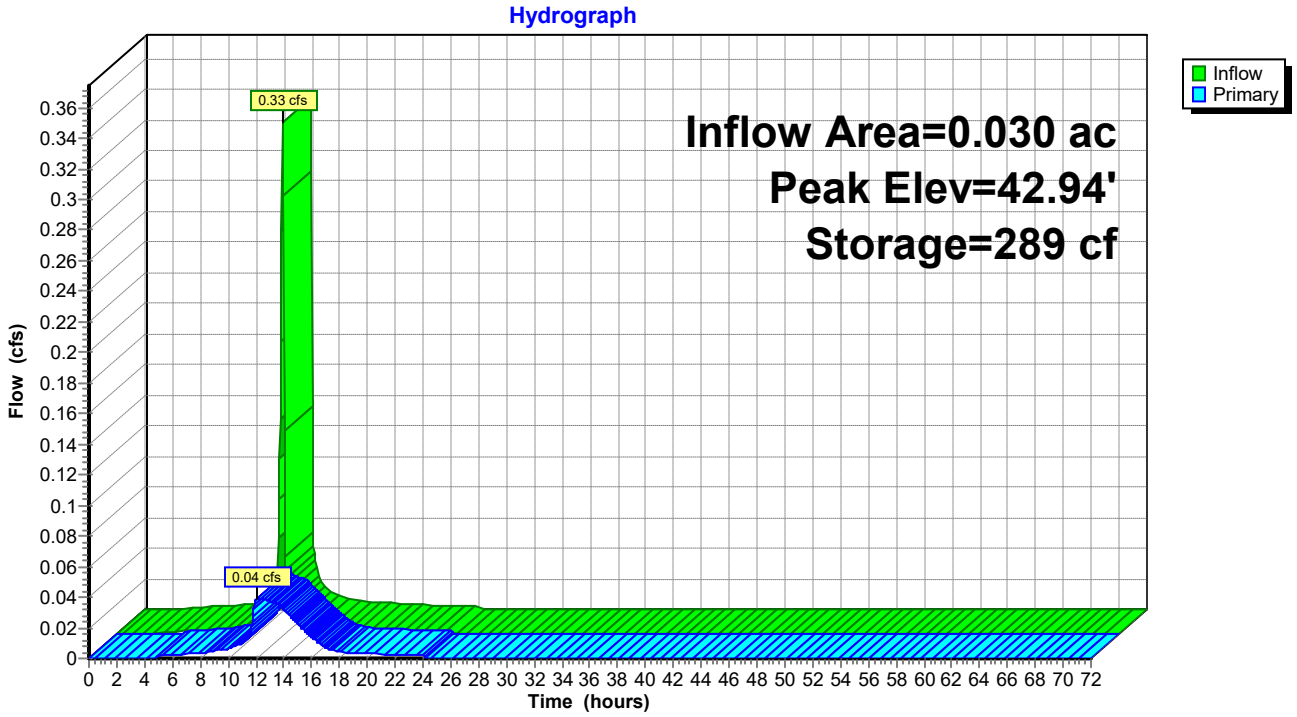
Volume	Invert	Avail.Storage	Storage Description
#1	37.92'	2,818 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.92	111	0.0	0	0
37.93	111	40.0	0	0
41.95	111	40.0	178	179
41.96	111	100.0	1	180
42.95	111	100.0	110	290
43.45	10,000	100.0	2,528	2,818

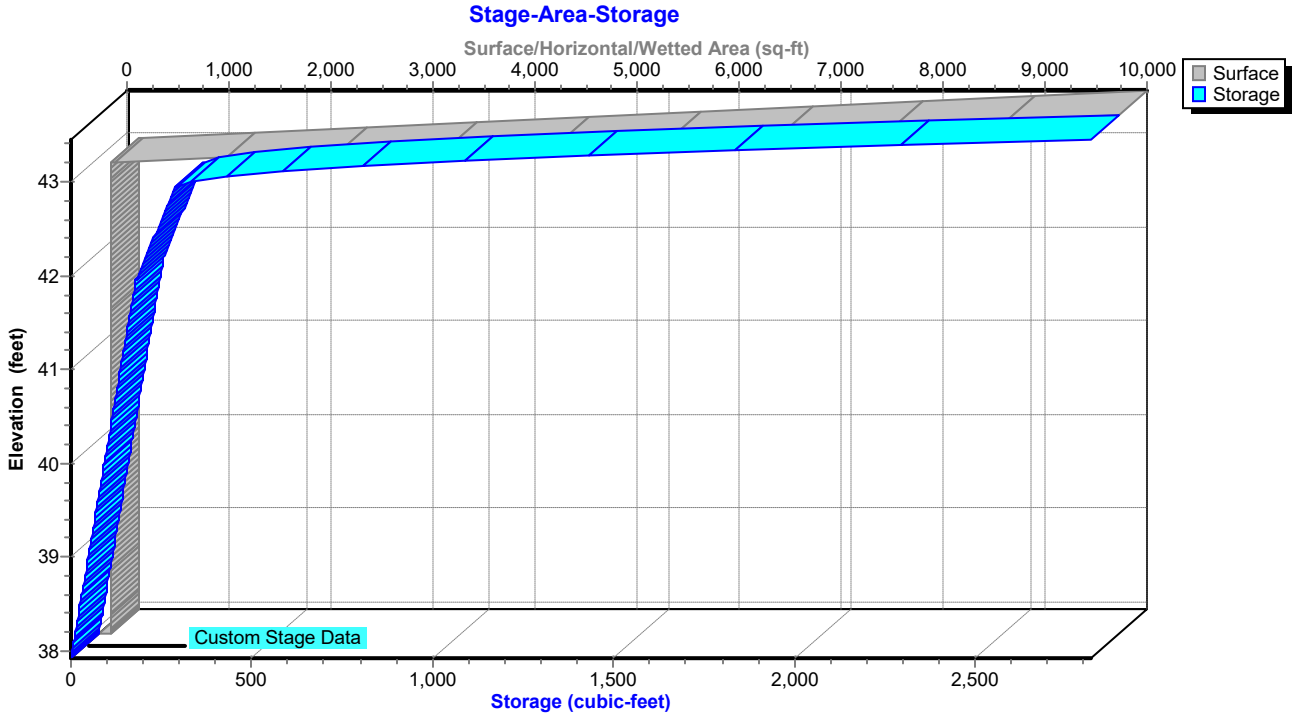
Device	Routing	Invert	Outlet Devices
#1	Primary	37.73'	**12.0" Round Culvert** L= 87.6' Ke= 0.500 Inlet / Outlet Invert= 37.73' / 37.60' S= 0.0015 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	37.95'	**4.0" Round Culvert** L= 4.8' Ke= 0.500 Inlet / Outlet Invert= 37.95' / 37.73' S= 0.0458 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 2	38.12'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	42.95'	**7.5' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.04 cfs @ 12.14 hrs HW=42.94' TW=37.68' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.04 cfs of 7.05 cfs potential flow)
  - **2=Culvert** (Passes 0.04 cfs of 0.92 cfs potential flow)
    - **3=Orifice/Grate** (Orifice Controls 0.04 cfs @ 10.57 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 24P: PLANTER BOX 1



Pond 24P: PLANTER BOX 1



Summary for Pond 25P: PLANTER BOX 3

Inflow Area = 0.035 ac, 94.51% Impervious, Inflow Depth = 7.00" for 100-YR event
Inflow = 0.40 cfs @ 11.90 hrs, Volume= 0.020 af
Outflow = 0.33 cfs @ 11.94 hrs, Volume= 0.020 af, Atten= 18%, Lag= 2.3 min
Primary = 0.33 cfs @ 11.94 hrs, Volume= 0.020 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 39.84' @ 11.95 hrs Surf.Area= 83 sf Storage= 61 cf

Plug-Flow detention time= 6.5 min calculated for 0.020 af (100% of inflow)
Center-of-Mass det. time= 5.4 min (755.7 - 750.3)

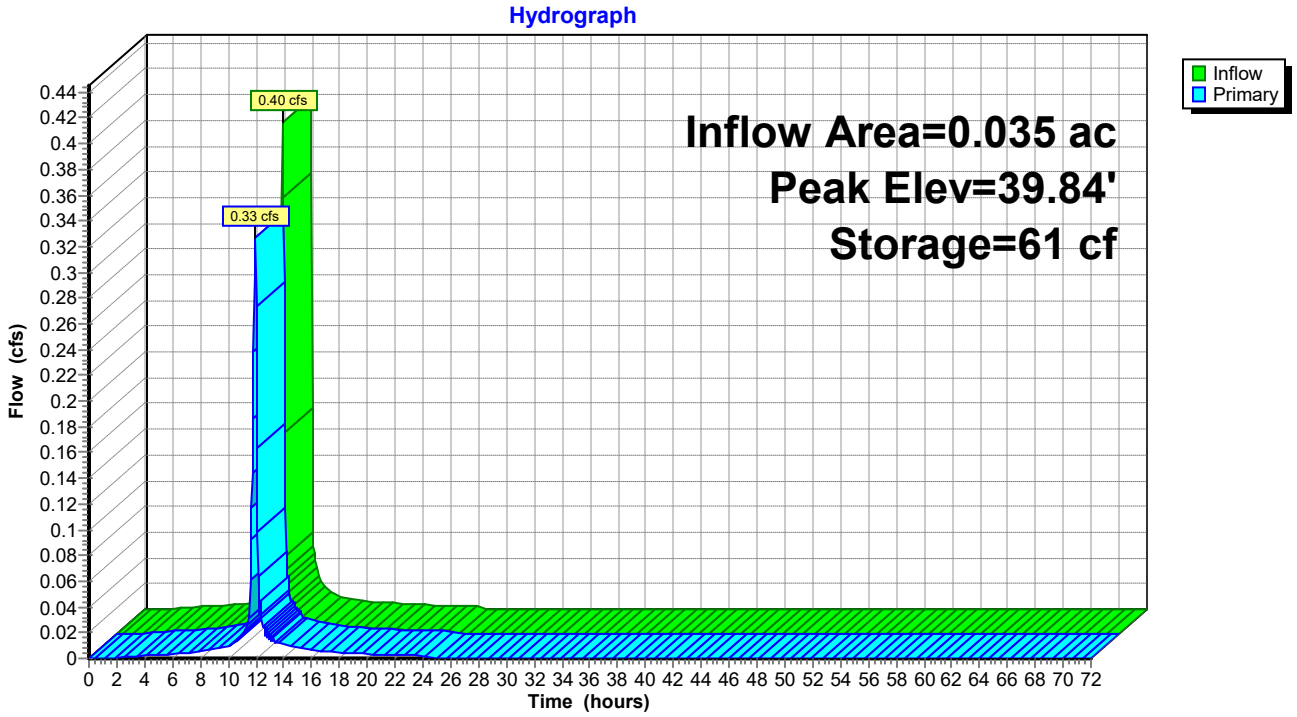
Volume	Invert	Avail.Storage	Storage Description
#1	37.99'	2,667 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.99	83	0.0	0	0
38.00	83	40.0	0	0
41.14	83	40.0	104	105
41.15	83	100.0	1	105
41.64	83	100.0	41	146
42.14	10,000	100.0	2,521	2,667

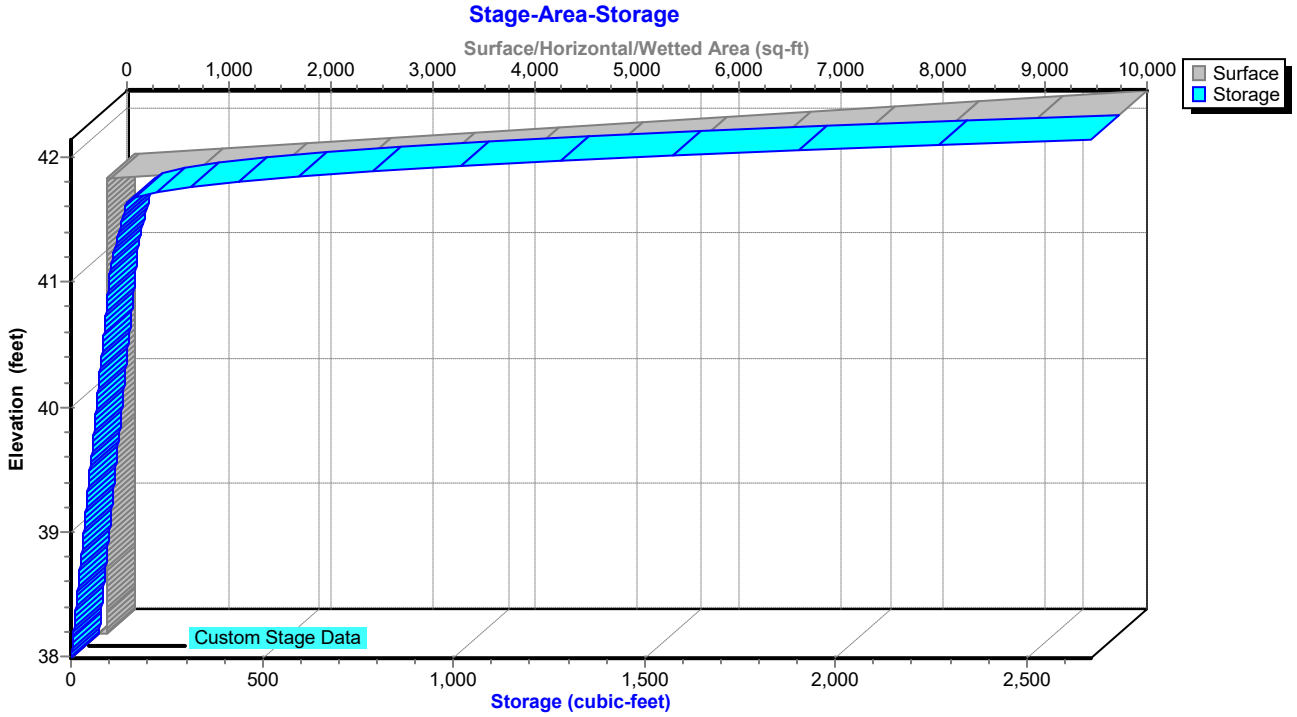
Device	Routing	Invert	Outlet Devices
#1	Primary	38.00'	**4.0" Round Culvert** L= 52.5' Ke= 0.500 Inlet / Outlet Invert= 38.00' / 37.94' S= 0.0011 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#2	Device 1	38.00'	**4.0" Round Culvert** L= 4.9' Ke= 0.500 Inlet / Outlet Invert= 38.00' / 38.00' S= 0.0000 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 1	38.17'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	41.64'	**8.7' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.31 cfs @ 11.94 hrs HW=39.80' TW=38.53' (Dynamic Tailwater)
- **1=Culvert** (Outlet Controls 0.31 cfs @ 3.52 fps)
  - **2=Culvert** (Passes < 0.47 cfs potential flow)
  - **3=Orifice/Grate** (Passes < 0.02 cfs potential flow)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 25P: PLANTER BOX 3



Pond 25P: PLANTER BOX 3



Summary for Pond 26P: PLANTER BOX 4

Inflow Area = 0.016 ac, 87.72% Impervious, Inflow Depth = 6.53" for 100-YR event
Inflow = 0.18 cfs @ 11.91 hrs, Volume= 0.009 af
Outflow = 0.17 cfs @ 11.93 hrs, Volume= 0.009 af, Atten= 6%, Lag= 1.1 min
Primary = 0.17 cfs @ 11.93 hrs, Volume= 0.009 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.61' @ 12.03 hrs Surf.Area= 85 sf Storage= 24 cf

Plug-Flow detention time= 13.2 min calculated for 0.009 af (100% of inflow)
Center-of-Mass det. time= 10.7 min (777.3 - 766.7)

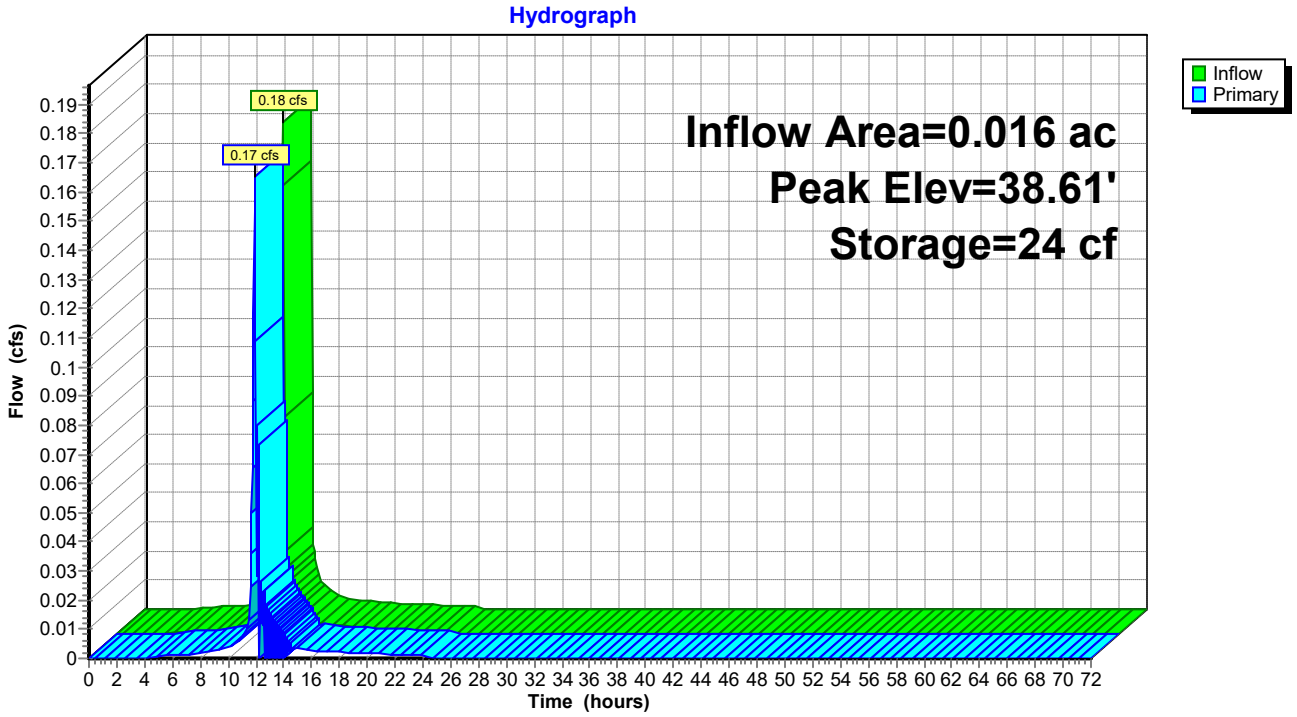
Volume	Invert	Avail.Storage	Storage Description
#1	37.91'	2,682 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.91	85	0.0	0	0
37.92	85	40.0	0	0
41.40	85	40.0	118	119
41.41	85	100.0	1	120
41.90	85	100.0	42	161
42.40	10,000	100.0	2,521	2,682

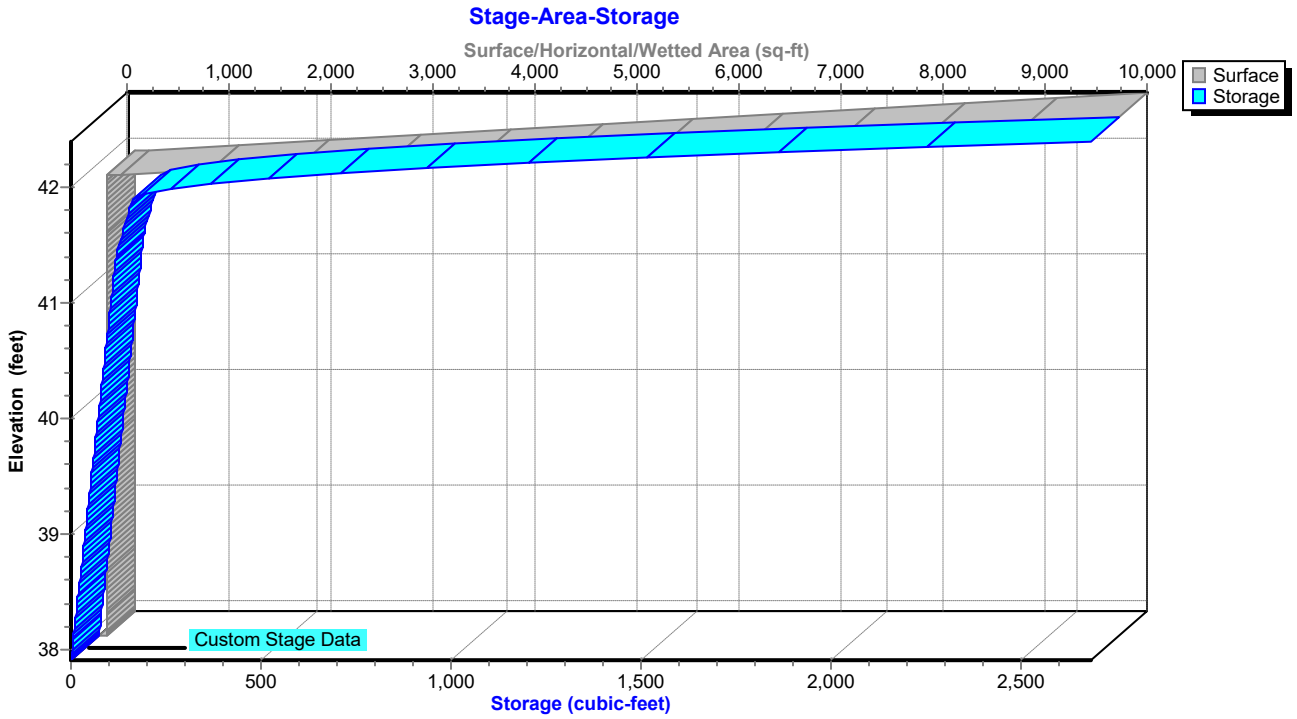
Device	Routing	Invert	Outlet Devices
#1	Primary	37.94'	**4.0" Round Culvert** L= 9.5' Ke= 0.500 Inlet / Outlet Invert= 37.94' / 37.93' S= 0.0011 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#2	Device 1	37.94'	**4.0" Round Culvert** L= 4.3' Ke= 0.500 Inlet / Outlet Invert= 37.94' / 37.94' S= 0.0000 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.09 sf
#3	Device 1	38.11'	**0.1" Horiz. Orifice/Grate X 68.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	41.90'	**8.7' long x 0.50' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.08 cfs @ 11.93 hrs HW=38.51' TW=38.48' (Dynamic Tailwater)
- **1=Culvert** (Inlet Controls 0.08 cfs @ 0.88 fps)
  - **2=Culvert** (Passes < 0.08 cfs potential flow)
  - **3=Orifice/Grate** (Passes < 0.00 cfs potential flow)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 26P: PLANTER BOX 4



Pond 26P: PLANTER BOX 4



Summary for Pond 31P: (new Pond)

Inflow Area = 0.004 ac, 81.82% Impervious, Inflow Depth = 7.12" for 100-YR event
Inflow = 0.04 cfs @ 11.91 hrs, Volume= 0.002 af
Outflow = 0.08 cfs @ 11.95 hrs, Volume= 0.002 af, Atten= 0%, Lag= 2.6 min
Discarded = 0.00 cfs @ 11.93 hrs, Volume= 0.002 af
Primary = 0.08 cfs @ 11.95 hrs, Volume= 0.001 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 40.25' @ 11.93 hrs Surf.Area= 0.001 ac Storage= 0.001 af

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 220.0 min (965.5 - 745.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.74'	0.001 af	**2.83'W x 21.50'L x 1.47'H Field A** 0.002 af Overall - 0.001 af Embedded = 0.001 af x 40.0% Voids
#2A	39.74'	0.000 af	**PaveDrain S6-45** x 63 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 3 Rows of 21 Chambers
		0.001 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.74'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.21'	**24.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.00 cfs @ 11.93 hrs HW=40.21' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.08 cfs @ 11.95 hrs HW=40.22' TW=37.68' (Dynamic Tailwater)
↑—**2=Sharp-Crested Rectangular Weir** (Weir Controls 0.08 cfs @ 0.33 fps)

Pond 31P: (new Pond) - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

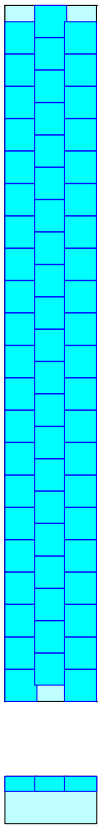
21 Chambers/Row x 1.00' Long = 21.00' Row Length +0.50' Row Offset = 21.50' Base Length
3 Rows x 12.0" Wide - 1.0" Nesting x 2 = 2.83' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

63 Chambers x 0.1 cf = 6.0 cf Chamber Storage
63 Chambers x 0.4 cf = 27.0 cf Displacement

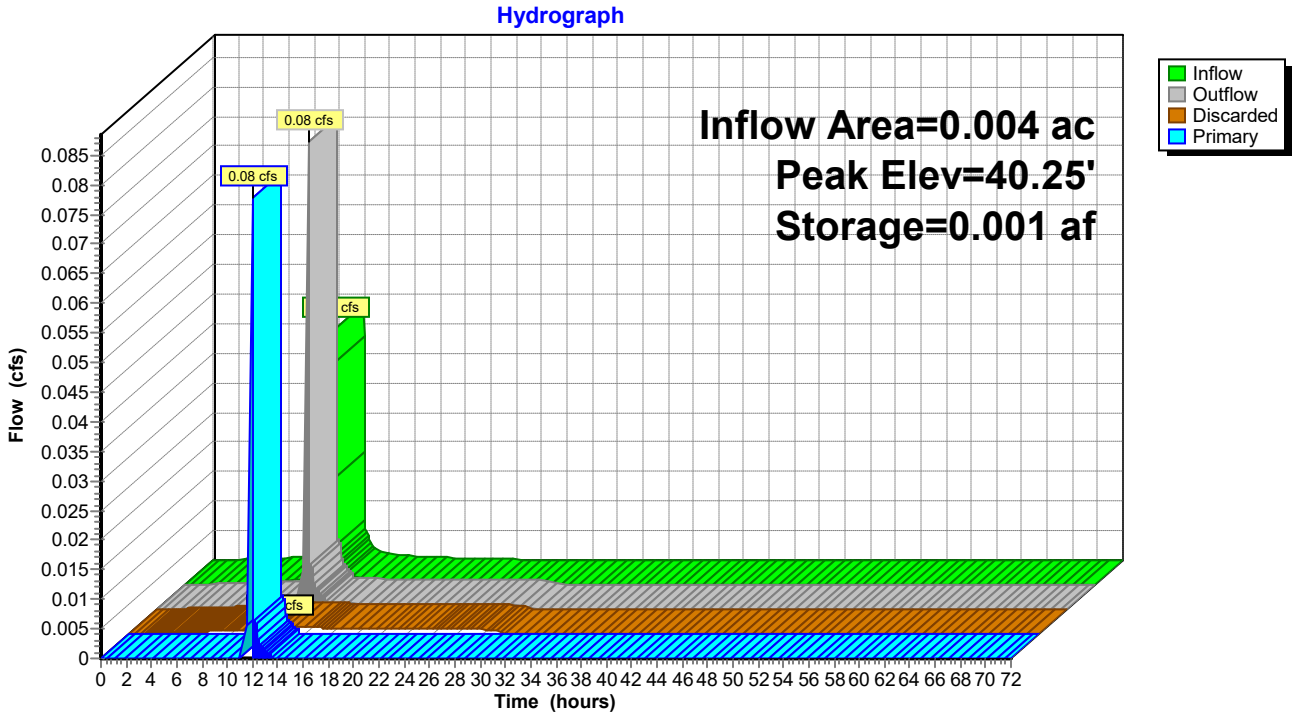
89.3 cf Field - 27.0 cf Chambers = 62.4 cf Stone x 40.0% Voids = 25.0 cf Stone Storage

Chamber Storage + Stone Storage = 31.0 cf = 0.001 af
Overall Storage Efficiency = 34.7%
Overall System Size = 21.50' x 2.83' x 1.47'

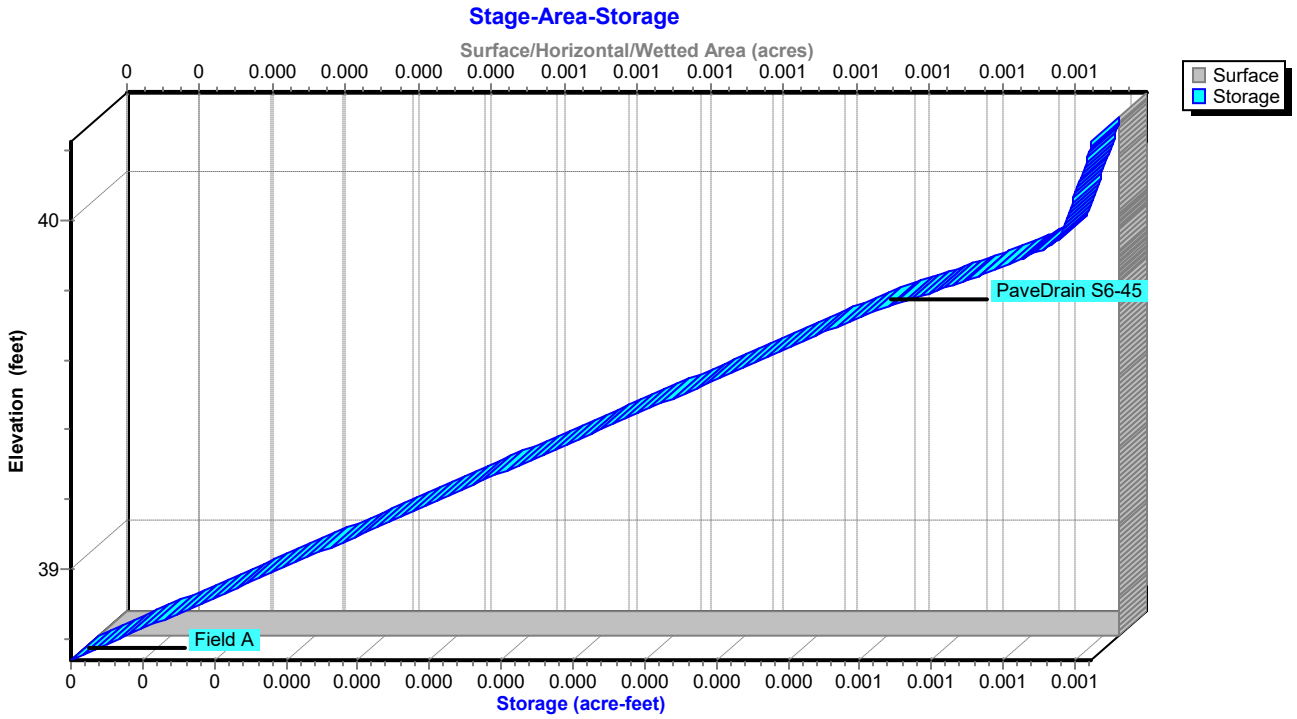
63 Chambers
3.3 cy Field
2.3 cy Stone



Pond 31P: (new Pond)



Pond 31P: (new Pond)



Summary for Pond 32P: CURB INLET 1

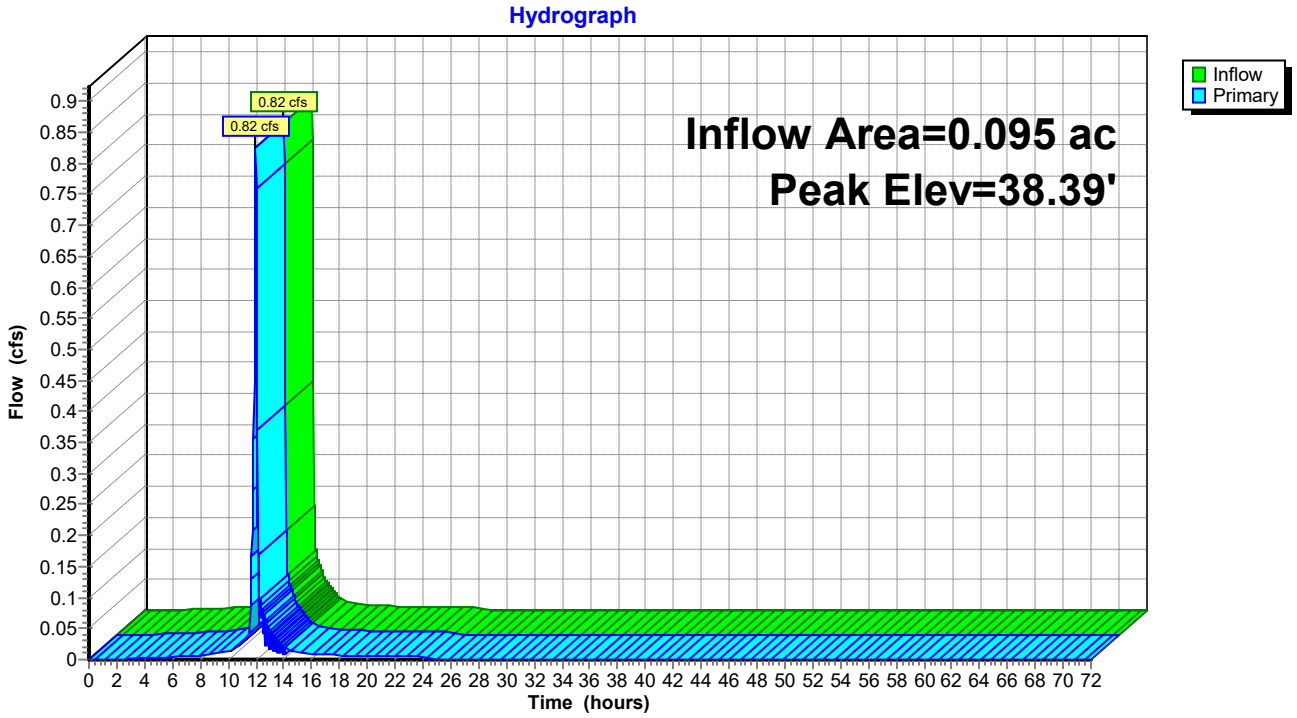
Inflow Area = 0.095 ac, 89.02% Impervious, Inflow Depth = 4.37" for 100-YR event
Inflow = 0.82 cfs @ 11.97 hrs, Volume= 0.035 af
Outflow = 0.82 cfs @ 11.97 hrs, Volume= 0.035 af, Atten= 0%, Lag= 0.0 min
Primary = 0.82 cfs @ 11.97 hrs, Volume= 0.035 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.39' @ 11.97 hrs

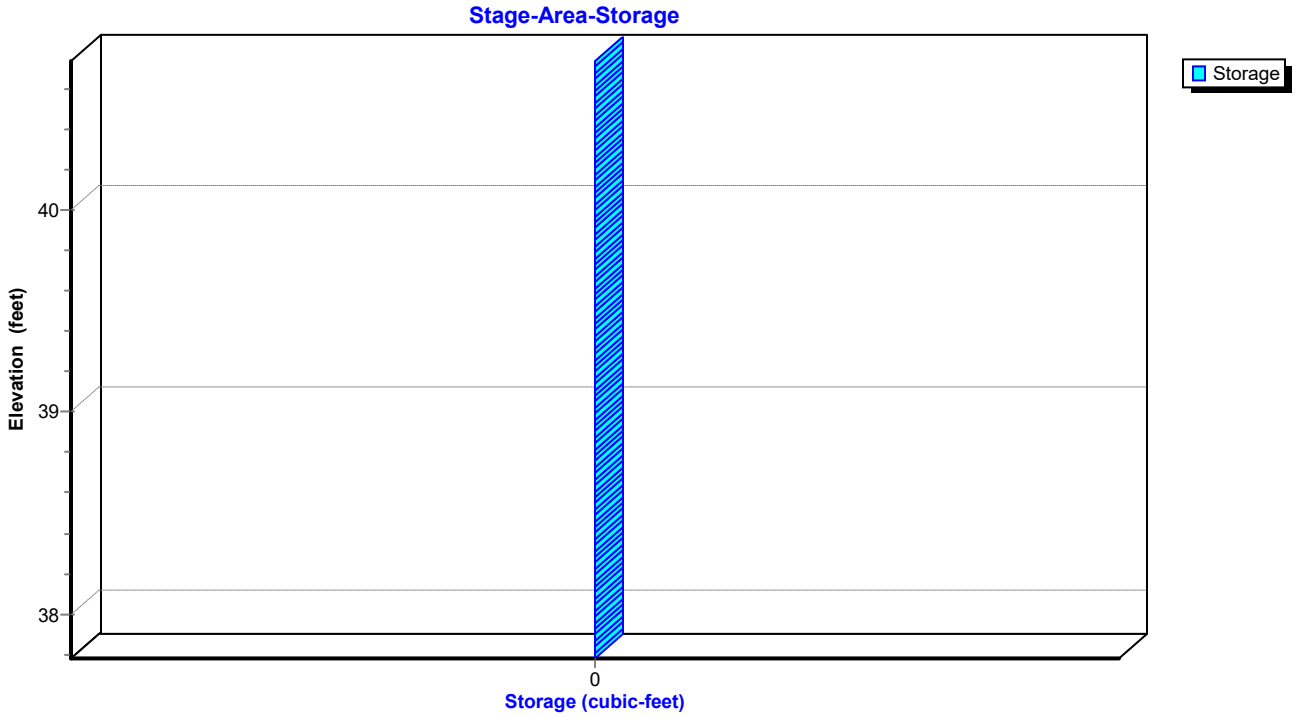
Device	Routing	Invert	Outlet Devices
#1	Primary	37.78'	**12.0" Round Culvert** L= 25.1' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 37.78' / 37.75' S= 0.0012 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Primary	40.40'	**66.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=0.78 cfs @ 11.97 hrs HW=38.37' TW=37.68' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.78 cfs @ 2.32 fps)
2=Orifice/Grate (Controls 0.00 cfs)

Pond 32P: CURB INLET 1



Pond 32P: CURB INLET 1



Summary for Pond 33P: CURB INLET 2

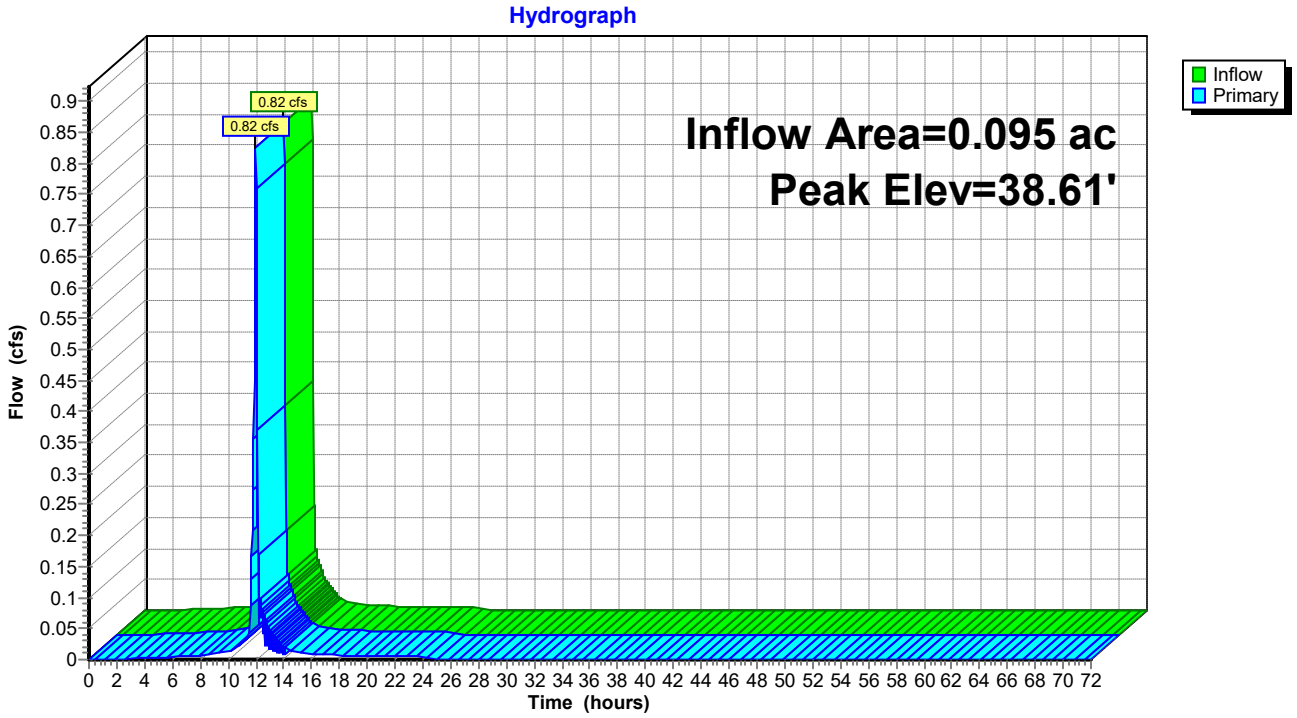
Inflow Area = 0.095 ac, 89.02% Impervious, Inflow Depth = 4.37" for 100-YR event
Inflow = 0.82 cfs @ 11.97 hrs, Volume= 0.035 af
Outflow = 0.82 cfs @ 11.97 hrs, Volume= 0.035 af, Atten= 0%, Lag= 0.0 min
Primary = 0.82 cfs @ 11.97 hrs, Volume= 0.035 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 38.61' @ 11.99 hrs

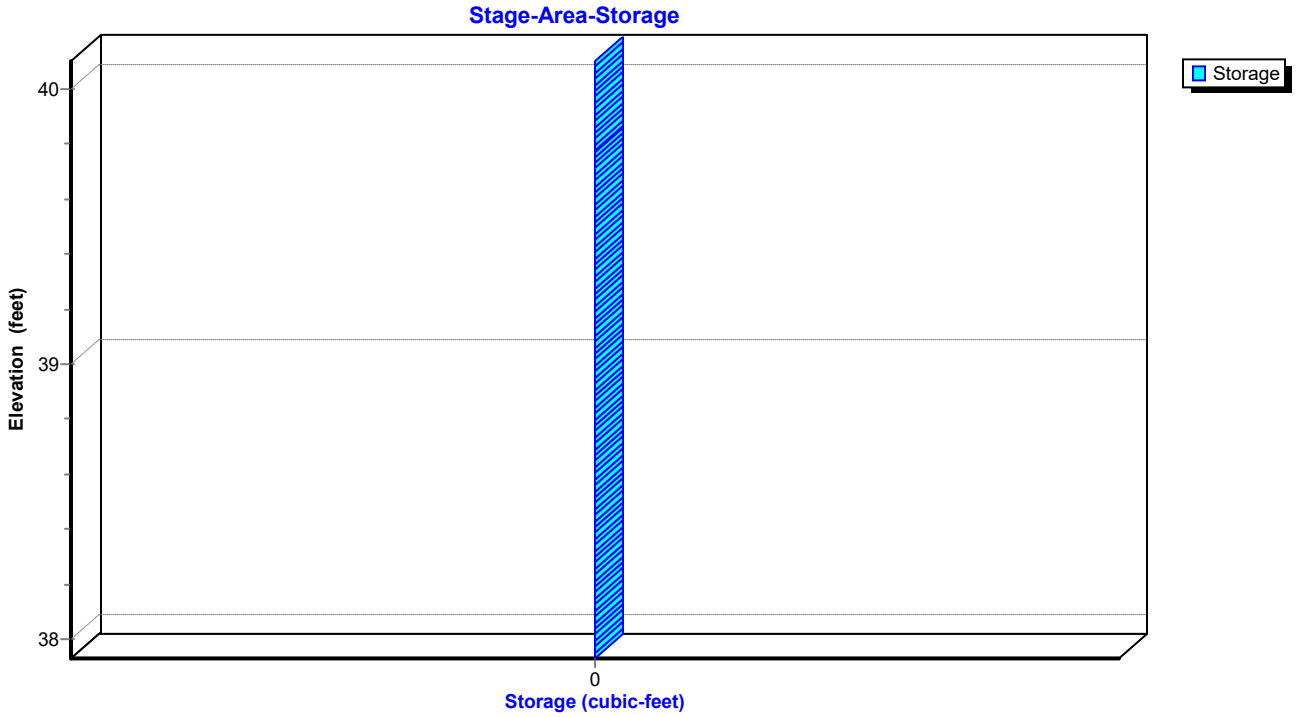
Device	Routing	Invert	Outlet Devices
#1	Primary	37.93'	**12.0" Round Culvert** L= 102.9' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 37.93' / 37.78' S= 0.0015 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 0.79 sf
#2	Primary	39.77'	**66.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=0.67 cfs @ 11.97 hrs HW=38.57' TW=38.37' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.67 cfs @ 1.81 fps)
2=Orifice/Grate (Controls 0.00 cfs)

Pond 33P: CURB INLET 2



Pond 33P: CURB INLET 2



Summary for Pond 34P: PERMEABLE PAVEMENT EAST

Inflow Area = 0.044 ac, 85.18% Impervious, Inflow Depth = 6.29" for 100-YR event
Inflow = 0.46 cfs @ 11.93 hrs, Volume= 0.023 af
Outflow = 0.46 cfs @ 11.99 hrs, Volume= 0.023 af, Atten= 0%, Lag= 3.1 min
Discarded = 0.01 cfs @ 12.00 hrs, Volume= 0.018 af
Primary = 0.44 cfs @ 11.99 hrs, Volume= 0.006 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 40.17' @ 12.00 hrs Surf.Area= 679 sf Storage= 316 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 211.2 min (986.4 - 775.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	38.71'	200 cf	**5.58'W x 88.50'L x 1.47'H Field A** 725 cf Overall - 226 cf Embedded = 499 cf x 40.0% Voids
#2A	39.71'	50 cf	**PaveDrain S6-45** x 528 Inside #1 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 6 Rows of 88 Chambers
#3B	38.71'	28 cf	**7.42'W x 18.50'L x 0.97'H Field B** 133 cf Overall - 62 cf Embedded = 71 cf x 40.0% Voids
#4B	39.21'	14 cf	**PaveDrain S6-45** x 144 Inside #3 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 8 Rows of 18 Chambers
#5C	38.71'	20 cf	**5.58'W x 8.50'L x 1.47'H Field C** 70 cf Overall - 21 cf Embedded = 49 cf x 40.0% Voids
#6C	39.71'	5 cf	**PaveDrain S6-45** x 48 Inside #5 Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf 6 Rows of 8 Chambers
		316 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard
Storage Group C created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.71'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 36.00'
#2	Primary	40.16'	**88.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 12.00 hrs HW=40.17' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.01 cfs)

Primary OutFlow Max=0.39 cfs @ 11.99 hrs HW=40.17' TW=38.58' (Dynamic Tailwater)
↑—**2=Sharp-Crested Rectangular Weir** (Weir Controls 0.39 cfs @ 0.36 fps)

Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field A

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

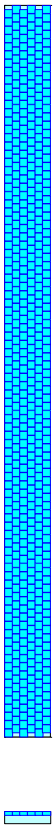
88 Chambers/Row x 1.00' Long = 88.00' Row Length +0.50' Row Offset = 88.50' Base Length
6 Rows x 12.0" Wide - 1.0" Nesting x 5 = 5.58' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

528 Chambers x 0.1 cf = 50.4 cf Chamber Storage
528 Chambers x 0.4 cf = 225.9 cf Displacement

724.7 cf Field - 225.9 cf Chambers = 498.8 cf Stone x 40.0% Voids = 199.5 cf Stone Storage

Chamber Storage + Stone Storage = 250.0 cf = 0.006 af
Overall Storage Efficiency = 34.5%
Overall System Size = 88.50' x 5.58' x 1.47'

528 Chambers
26.8 cy Field
18.5 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field B

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

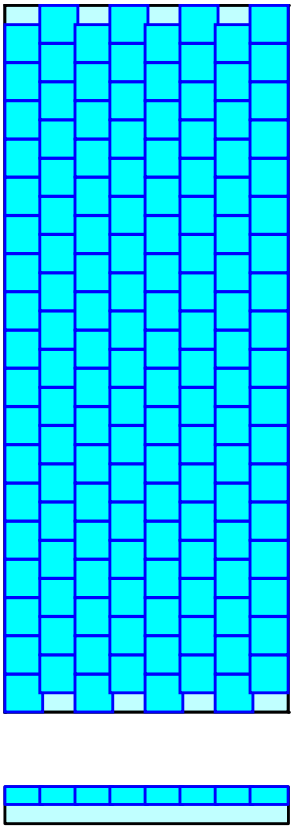
18 Chambers/Row x 1.00' Long = 18.00' Row Length +0.50' Row Offset = 18.50' Base Length
8 Rows x 12.0" Wide - 1.0" Nesting x 7 = 7.42' Base Width
6.0" Base + 5.6" Chamber Height = 0.97' Field Height

144 Chambers x 0.1 cf = 13.7 cf Chamber Storage
144 Chambers x 0.4 cf = 61.6 cf Displacement

132.6 cf Field - 61.6 cf Chambers = 71.0 cf Stone x 40.0% Voids = 28.4 cf Stone Storage

Chamber Storage + Stone Storage = 42.2 cf = 0.001 af
Overall Storage Efficiency = 31.8%
Overall System Size = 18.50' x 7.42' x 0.97'

144 Chambers
4.9 cy Field
2.6 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST - Chamber Wizard Field C

Chamber Model = PaveDrain S6-45 (PaveDrain 12x12 Block with gap storage)
Inside= 7.1"W x 5.6"H => 0.10 sf x 1.00'L = 0.1 cf
Outside= 12.0"W x 5.6"H => 0.43 sf x 1.00'L = 0.4 cf

12.0" Wide - 1.0" Nesting = 11.0" C-C Row Spacing

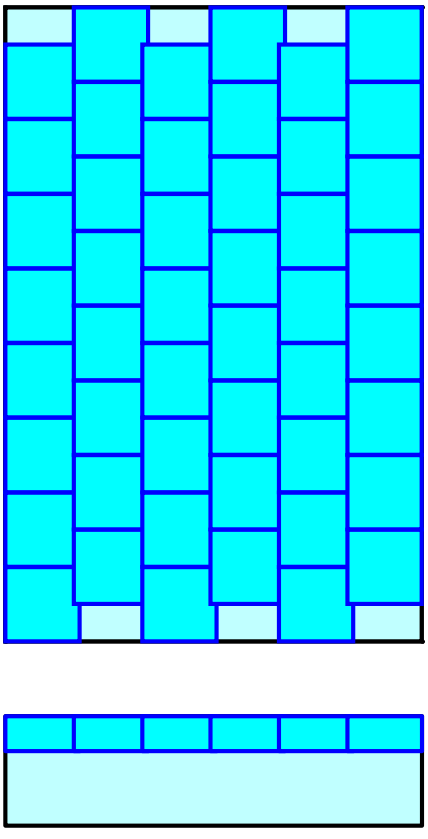
8 Chambers/Row x 1.00' Long = 8.00' Row Length +0.50' Row Offset = 8.50' Base Length
6 Rows x 12.0" Wide - 1.0" Nesting x 5 = 5.58' Base Width
12.0" Base + 5.6" Chamber Height = 1.47' Field Height

48 Chambers x 0.1 cf = 4.6 cf Chamber Storage
48 Chambers x 0.4 cf = 20.5 cf Displacement

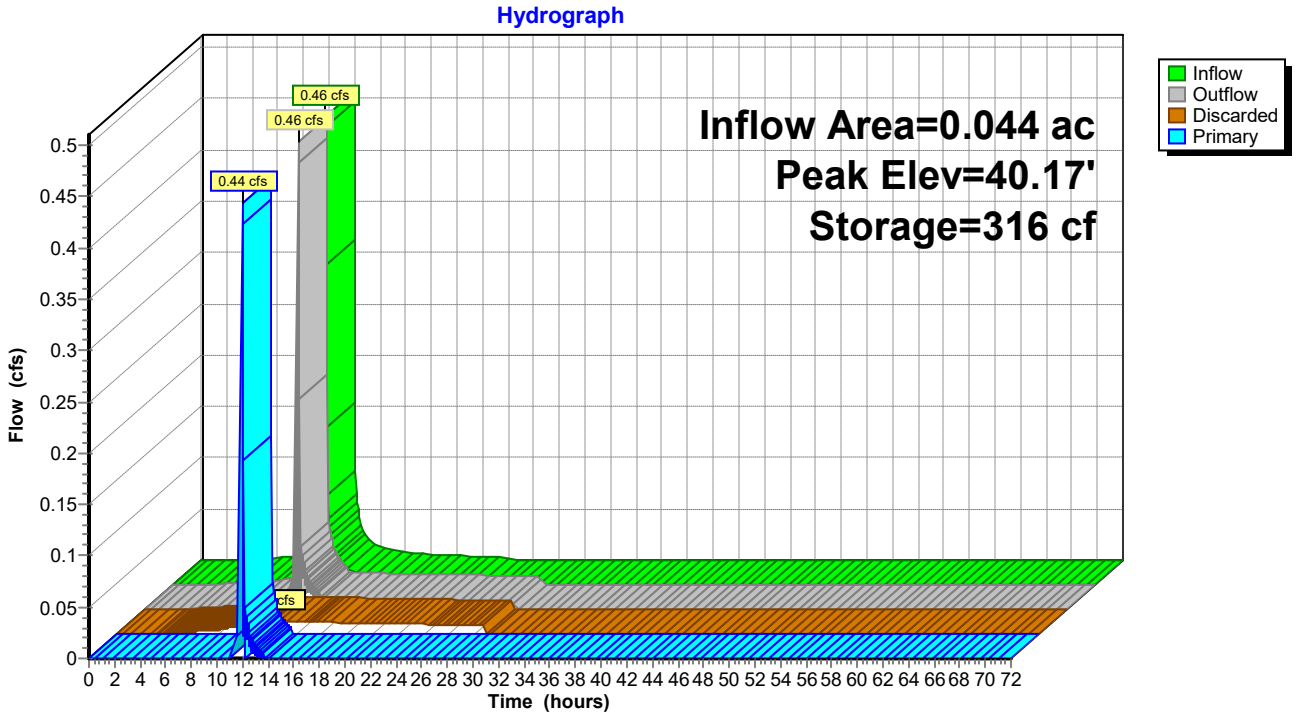
69.6 cf Field - 20.5 cf Chambers = 49.1 cf Stone x 40.0% Voids = 19.6 cf Stone Storage

Chamber Storage + Stone Storage = 24.2 cf = 0.001 af
Overall Storage Efficiency = 34.8%
Overall System Size = 8.50' x 5.58' x 1.47'

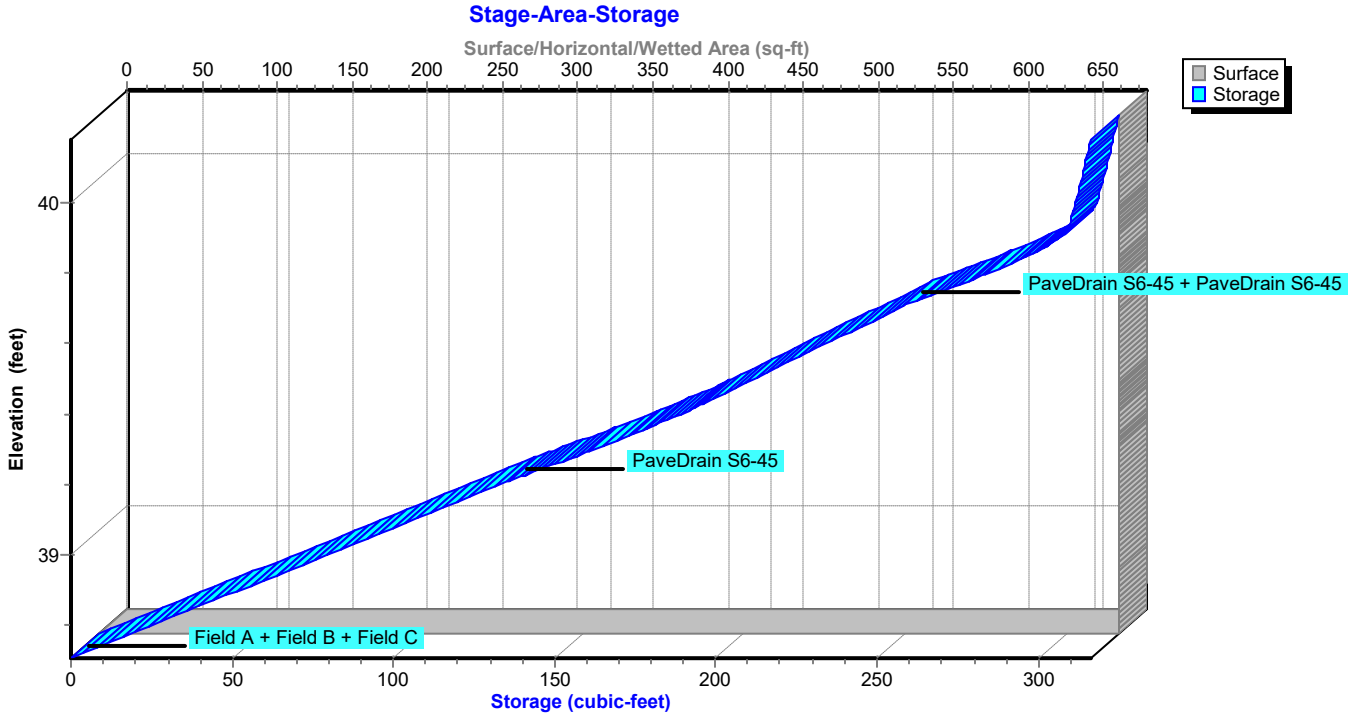
48 Chambers
2.6 cy Field
1.8 cy Stone



Pond 34P: PERMEABLE PAVEMENT EAST



Pond 34P: PERMEABLE PAVEMENT EAST

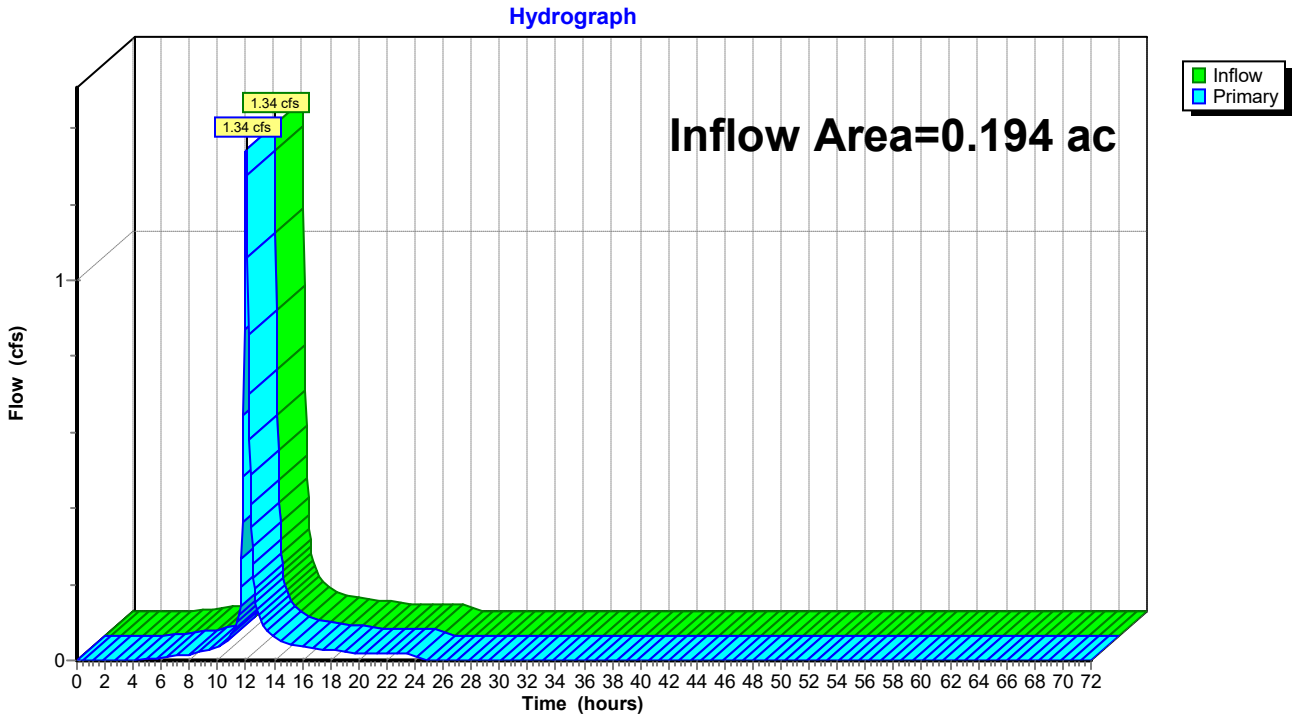


Summary for Link 23L: Study Point 1

Inflow Area = 0.194 ac, 7.58% Impervious, Inflow Depth = 6.06" for 100-YR event
Inflow = 1.34 cfs @ 12.01 hrs, Volume= 0.098 af
Primary = 1.34 cfs @ 12.01 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 23L: Study Point 1

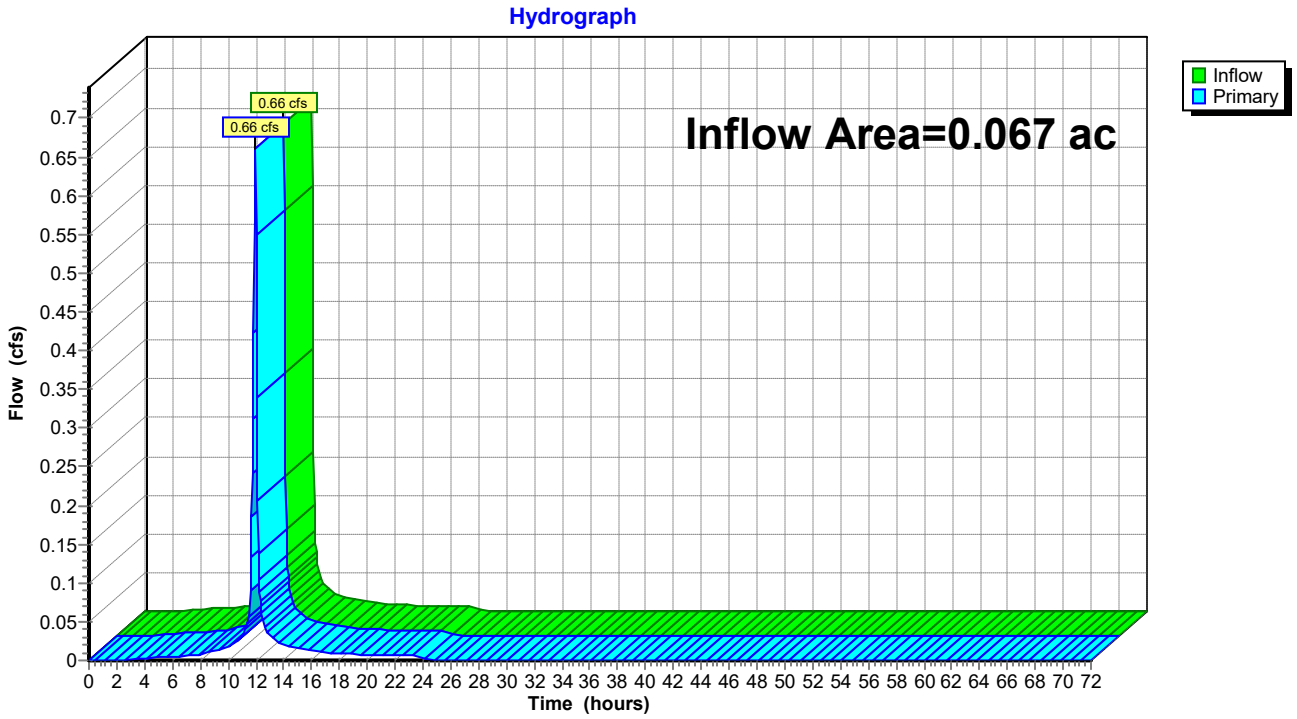


Summary for Link 24L: Study Point 2

Inflow Area = 0.067 ac, 52.55% Impervious, Inflow Depth = 6.65" for 100-YR event
Inflow = 0.66 cfs @ 11.95 hrs, Volume= 0.037 af
Primary = 0.66 cfs @ 11.95 hrs, Volume= 0.037 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 24L: Study Point 2



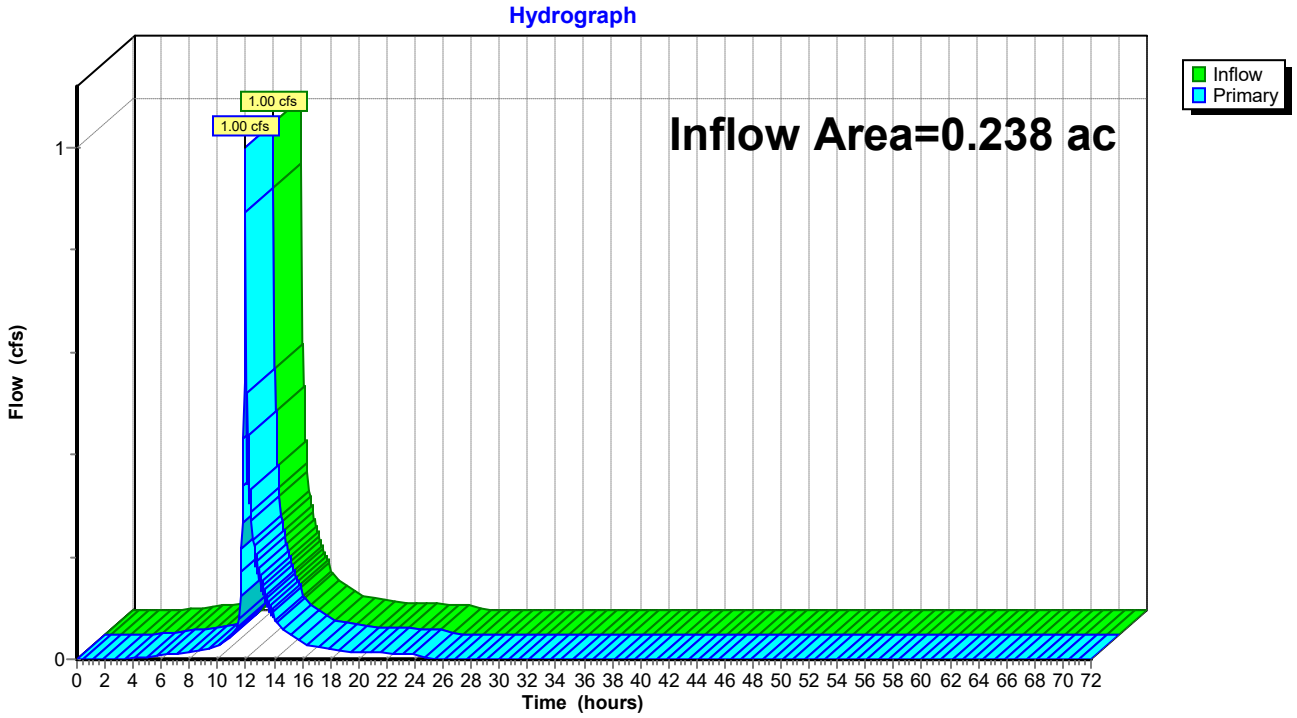
Summary for Link 26L: STUDY POINT 1

Inflow Area = 0.238 ac, 83.20% Impervious, Inflow Depth = 3.96" for 100-YR event
Inflow = 1.00 cfs @ 11.97 hrs, Volume= 0.079 af
Primary = 1.00 cfs @ 11.97 hrs, Volume= 0.079 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Fixed water surface Elevation= 37.68'

Link 26L: STUDY POINT 1

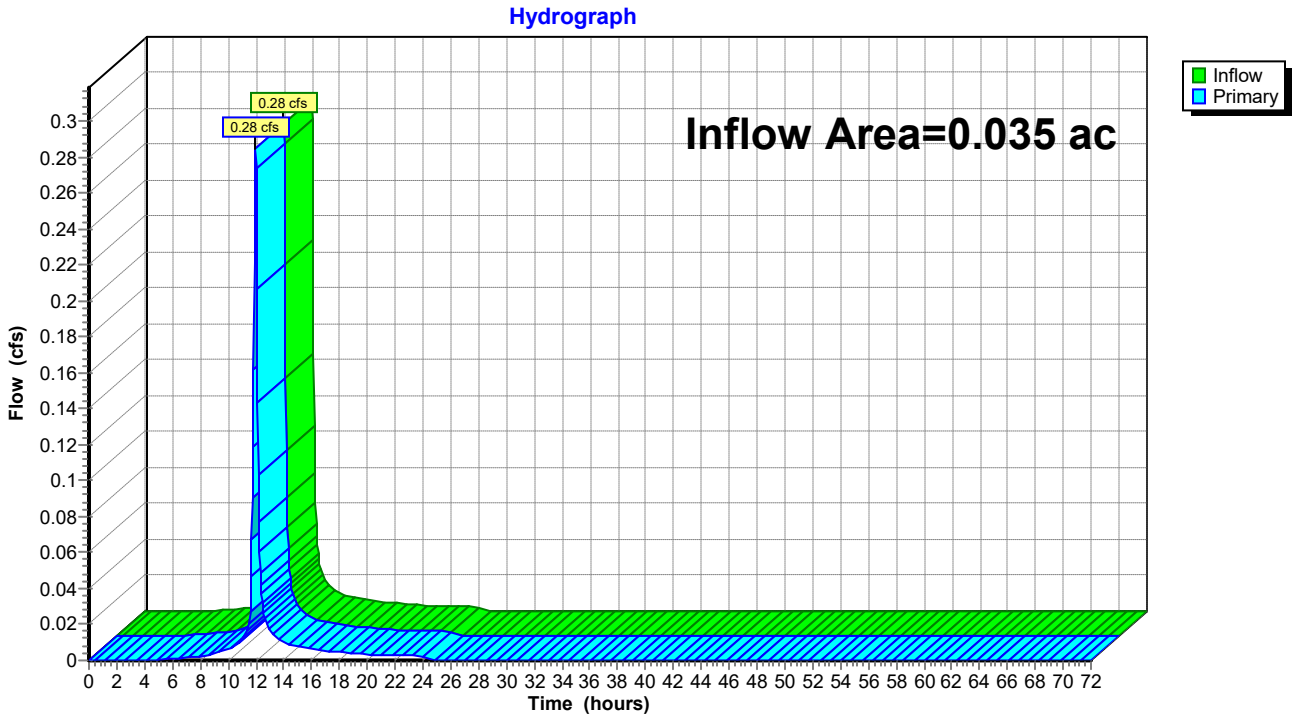


Summary for Link 27L: STUDY POINT 2

Inflow Area = 0.035 ac, 78.77% Impervious, Inflow Depth = 5.83" for 100-YR event
Inflow = 0.28 cfs @ 11.97 hrs, Volume= 0.017 af
Primary = 0.28 cfs @ 11.97 hrs, Volume= 0.017 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 27L: STUDY POINT 2



SECTION 5 – SOIL REPORTS

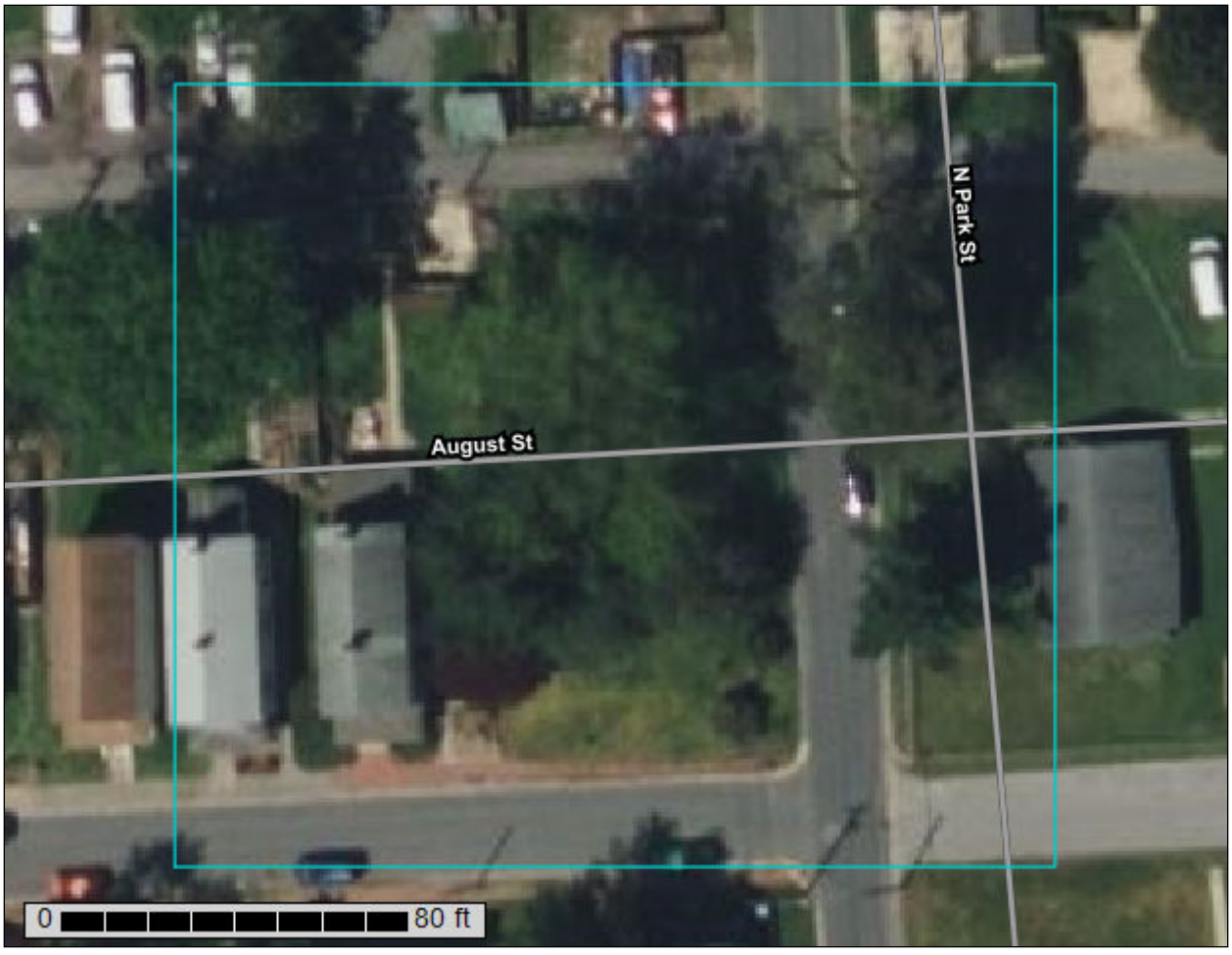
United States Department of Agriculture

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.

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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.

Custom Soil Resource Report
Soil Map

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 18, Aug 27, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 1, 2021—Oct 1, 2021

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
FgcA	Fallsington loams, 0 to 2 percent slopes, Mid-Altlantic Coastal Plain	0.8	99.6%
HfA	Hambrook-Sassafras complex, 0 to 2 percent slopes	0.0	0.4%
Totals for Area of Interest		**0.8**	**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

FgcA—Fallsington loams, 0 to 2 percent slopes, Mid-Altlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2s96t
Elevation: 10 to 70 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: Farmland of statewide importance

Map Unit Composition

Fallsington, undrained, and similar soils: 38 percent
Fallsington, drained, and similar soils: 37 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fallsington, Undrained

Setting

Landform: Drainageways, flats, depressions, swales
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Parent material: Loamy fluviomarine deposits

Typical profile

Oe - 0 to 2 inches: mucky peat
A - 2 to 10 inches: loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: 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 high (0.01 to 1.98 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 2.3 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): 5w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Description of Fallsington, Drained

Setting

Landform: Flats, depressions, swales
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: 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 high (0.01 to 1.98 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 2.3 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Minor Components

Hammonton

Percent of map unit: 7 percent
Landform: Flats, drainageways
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear
Hydric soil rating: No

Woodstown

Percent of map unit: 7 percent
Landform: Flats, fluviomarine terraces, depressions, broad interstream divides
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Othello

Percent of map unit: 6 percent
Landform: Depressions, swales, drainageways, flats
Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Marshyhope

Percent of map unit: 5 percent
Landform: Depressions, flats, drainageways
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: No

HfA—Hambrook-Sassafras complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1vh08
Elevation: 0 to 330 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: All areas are prime farmland

Map Unit Composition

Hambrook and similar soils: 41 percent
Sassafras and similar soils: 39 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hambrook

Setting

Landform: Fluviomarine terraces, flats, depressions
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave

Typical profile

Ap - 0 to 10 inches: sandy loam
BE - 10 to 14 inches: loam
Bt - 14 to 28 inches: sandy clay loam
BC - 28 to 65 inches: loamy sand
2Cg - 65 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)

Depth to water table: About 42 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Sassafras

Setting

Landform: Knolls, fluviomarine terraces, flats, low hills
Landform position (three-dimensional): Riser, dip
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear

Typical profile

Ap - 0 to 9 inches: sandy loam
E - 9 to 15 inches: sandy loam
Bt - 15 to 30 inches: loam
BC - 30 to 37 inches: sandy loam
C - 37 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 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): 1
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Woodstown

Percent of map unit: 10 percent
Landform: Depressions, flats
Landform position (three-dimensional): Dip
Hydric soil rating: No

Mattapex

Percent of map unit: 5 percent
Landform: Flats, depressions
Landform position (three-dimensional): Dip
Hydric soil rating: No

Ingleside

Percent of map unit: 5 percent
Landform: Flats
Landform position (three-dimensional): Talf
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

TOWN OF EASTON

14 South Harrison Street
Easton, Maryland 21601

May 1, 2024

Dear Resident,

The Easton Planning Commission (Commission) will hold a public meeting on **Thursday, May 16, 2024 at 1:00 p.m**. in the Easton Town Council Chambers located on the second floor of 14 South Harrison Street. The Town of Easton Zoning Ordinance requires that owners of property located within 400 feet of a parcel on which certain types of applications are pending be given notice of upcoming meetings or hearings. If you are a tenant in or an owner of a multi-unit building, please distribute or post this notice in a visible location for all other tenants or owners to view. If you are a tenant of a rental property, please notify the property owner that this notice letter has been distributed to their property. Notice has also been sent to the Star Democrat, a sign has been posted at the subject property and the hearing agenda has been posted on the Town of Easton website: http://eastonmd.gov/.

This letter is sent to inform you that Rauch Inc. (Applicant) has filed application 2024 - 1178 on behalf of Chesapeake Community Development LLC to request Sketch Site Plan approval to develop a single 2-story mansion apartment with a total of 7 units. The property is located at 521 and 523 August Street also known as Tax Map 0103, Grid 0EA, Parcel 1028, Lots 2 and 3. At their January 22, 2024 meeting, the Historic District Commission granted a Certificate of Appropriateness for the proposed redevelopment plan.

Copies of the proposed application are on file and available for public review in the Town's Planning Office at 14 South Harrison Street between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday. **In addition, digital copies will be available for review one week prior to the scheduled meeting via the Town's website at** https://www.eastonmd.gov/129/Agendas-Minutes. If you have any questions regarding this application, please contact the Planning Office at (410) 822-1943 or via email at ssmith@eastonMD.gov.

Samantha N. Smith

Samantha N. Smith, Administrative Specialist
Planning & Zoning Department
410-822-1943 ssmith@eastonMD.gov

APG Media of Chesapeake, LLC

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

INVOICE
04/29/24

Cust. AcctID:		Creation Date:	**04/29/24**
		Ad Date:	**05/01/24**
		Class:	
Name:	**Joanne Drummer**	Ad ID:	
Company:	**TOWN OF EASTON (L)**	Words:	
Address:	**PO Box 520**	Lines:	
	EASTON, MD 21601	Agate Lines:	
		Depth:	
		Inserts:	
		Blind Box:	
Telephone:	**(410) 822-2525**		
Description:	**Planning Comm Meeting**		

Other Charges:		Total:	
Discount:			
Surcharge:		Paid Amount:	
Credits:			
Bill Depth:		Amount Due:	

CREDIT CARD DETAILS

PT	CT	CN	Number	Exp.	Amnt.

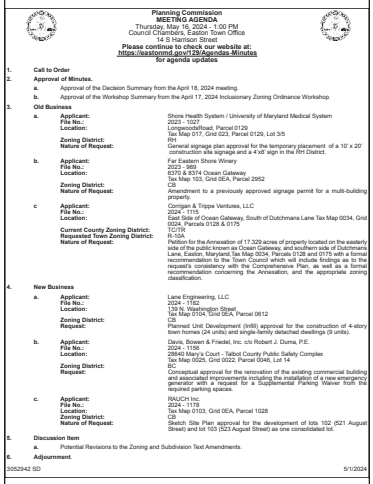
Publication	Start	Stop	Inserts
The Star Democrat	05/01/24	05/01/24	1

Ad Note:

Sign posted on May 1, 2024

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!



Planning Commission
MEETING AGENDA
Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street
Please continue to check our website at:
https://eastonmd.gov/129/Agendas-Minutes
for agenda updates

1. **Call to Order**
2. **Approval of Minutes.**
   a. Approval of the Decision Summary from the April 18, 2024 meeting.
   b. Approval of the Workshop Summary from the April 17, 2024 Inclusionary Zoning Ordinance Workshop.
3. **Old Business**
   a. **Applicant:** Shore Health System / University of Maryland Medical System
      File No.: 2023 - 1027
      Location: Longwoods Road, Parcel 0129
      Tax Map 017, Grid 023, Parcel 0129, Lot 3/5
      Zoning District: RH
      Nature of Request: General signage plan approval for the temporary placement of a 10' x 20' construction site signage and a 4'x8' sign in the RH District.
   b. **Applicant:** Far Eastern Shore Winery
      File No.: 2023 - 999
      Location: 8370 & 8374 Ocean Gateway
      Tax Map 103, Grid 9EA, Parcel 2952
      Zoning District: CB
      Nature of Request: Amendment to a previously approved signage permit for a multi-building property.
   c **Applicant:** Corrigan & Trippe Ventures, LLC
      File No.: 2024 - 1115
      Location: East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
      Current County Zoning District: A
      Requested Town Zoning District: R-10A
      Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland; Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.
4. **New Business**
   a. **Applicant:** Lane Engineering, LLC
      File No.: 2024 - 1162
      Location: 139 N. Washington Street
      Tax Map 0104, Grid 9EA, Parcel 0812
      Zoning District: CB
      Request: Planned Unit Development (infill) approval for the construction of 4-story town homes (24 units) and single-family detached dwellings (9 units).
   b. **Applicant:** Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
      File No.: 2024 - 1156
      Location: 28640 Mary's Court - Talbot County Public Safety Complex
      Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
      Zoning District: BC
      Request: Conceptual approval for the renovation of the existing commercial building and associated improvements including the installation of a new emergency generator and a request for a Supplemental Parking Waiver from the required parking spaces.
   c. **Applicant:** RAUCH Inc.
      File No.: 2024 - 1179
      Location: Tax Map 0103, Grid 0EA, Parcel 1028
      Zoning District: CB
      Nature of Request: Sketch Site Plan approval for the development of lots 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot.
5. **Discussion Item**
   a. Potential Revisions to the Zoning and Subdivision Text Amendments.
6. **Adjournment.**

3052942 SD 5/1/2024

APG Media of Chesapeake, LLC

INVOICE
05/06/24

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

Cust. AcctID:		Creation Date:	**05/06/24**
		Ad Date:	**05/08/24**
		Class:	
Name:	**Joanne Drummer**	Ad ID:	
Company:	**TOWN OF EASTON (L)**	Words:	
Address:	**PO Box 520**	Lines:	
	EASTON, MD 21601	Agate Lines:	
		Depth:	
		Inserts:	
		Blind Box:	
Telephone:	**(410) 822-2525**		
Description:	**Planning Comm Meeting**		

Other Charges:		Total:	
Discount:			
Surcharge:		Paid Amount:	
Credits:			
Bill Depth:		Amount Due:	

CREDIT CARD DETAILS

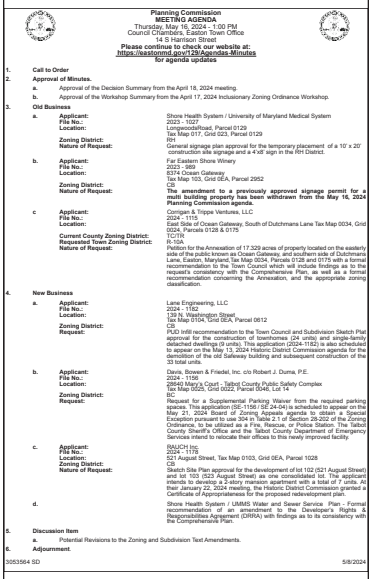
PT	CT	CN	Number	Exp.	Amnt.

Publication	Start	Stop	Inserts
The Star Democrat	05/08/24	05/08/24	1

Ad Note:

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!



Planning Commission
MEETING AGENDA
Thursday, May 16, 2024 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street

Please continue to check our website at:
https://eastonmd.gov/139/Agendas-Minutes
for agenda updates

1. **Call to Order**
2. **Approval of Minutes.**
   a. Approval of the Decision Summary from the April 18, 2024 meeting.
   b. Approval of the Workshop Summary from the April 17, 2024 Inclusionary Zoning Ordinance Workshop.
3. **Old Business**
   a. **Applicant:** Shore Health System / University of Maryland Medical System
      File No.: 2023 - 1027
      Location: Longwoods Road, Parcel 0129
      Tax Map 017, Grid 023, Parcel 0129
      Zoning District: RH
      Nature of Request: General signage plan approval for the temporary placement of a 10' x 20' construction site signage and a 4'x8' sign in the RH District.
   b. **Applicant:** Far Eastern Shore Winery
      File No.: 2023 - 989
      Location: 8374 Ocean Gateway
      Tax Map 103, Grid 0EA, Parcel 2952
      Zoning District: CB
      Nature of Request: **The amendment to a previously approved signage permit for a multi building property has been withdrawn from the May 16, 2024 Planning Commission agenda.**
   c **Applicant:** Corrigan & Trippe Ventures, LLC
      File No.: 2024 - 1115
      Location: East Side of Ocean Gateway, South of Dutchmans Lane Tax Map 0034, Grid 0024, Parcels 0128 & 0175
      Current County Zoning District: IL
      Requested Town Zoning District: IL-10A
      Nature of Request: Petition for the Annexation of 17.329 acres of property located on the easterly side of the public known as Ocean Gateway, and southern side of Dutchmans Lane, Easton, Maryland, Tax Map 0034, Parcels 0128 and 0175 with a formal recommendation to the Town Council which will include findings as to the request's consistency with the Comprehensive Plan, as well as a formal recommendation concerning the Annexation, and the appropriate zoning classification.
4. **New Business**
   a. **Applicant:** Lane Engineering, LLC
      File No.: 2024 - 1162
      Location: 139 N. Washington Street
      Tax Map 0104, Grid 0EA, Parcel 0612
      Zoning District: RR
      Request: PUD Infill recommendation to the Town Council and Subdivision Sketch Plat approval for the construction of townhomes (24 units) and single-family detached dwellings (9 units). This application (2024-1162) is also scheduled to appear on the May 13, 2024 Historic District Commission agenda for the demolition of the old Safeway building and subsequent construction of the 33 total units.
   b. **Applicant:** Davis, Bowen & Friedel, Inc. c/o Robert J. Duma, P.E.
      File No.: 2024 - 1156
      Location: 28640 Mary's Court - Talbot County Public Safety Complex
      Tax Map 0025, Grid 0022, Parcel 0046, Lot 14
      Zoning District: BC
      Request: Request for a Supplemental Parking Waiver from the required parking spaces. This application (SE-1156 / SE 24-04) is scheduled to appear on the May 21, 2024 Board of Zoning Appeals agenda to obtain a Special Exception pursuant to use 304 in Table 2.1 of Section 28-202 of the Zoning Ordinance, to be utilized as a Fire, Rescue, or Police Station. The Talbot County Sheriff's Office and the Talbot County Department of Emergency Services intend to relocate their offices to this newly improved facility.
   c. **Applicant:** RAUCH Inc
      File No.: 2024 - 1179
      Location: 521 August Street, Tax Map 0103, Grid 0EA, Parcel 1028
      Zoning District: CB
      Nature of Request: Sketch Site Plan approval for the development of lot 102 (521 August Street) and lot 103 (523 August Street) as one consolidated lot. The applicant intends to develop a 2-story mansion apartment with a total of 7 units. At their January 22, 2024 meeting, the Historic District Commission granted a Certificate of Appropriateness for the proposed redevelopment plan.
   d. Shore Health System / UMMS Water and Sewer Service Plan - Formal recommendation of an amendment to the Developer's Rights & Responsibilities Agreement (DRRA) with findings as to its consistency with the Comprehensive Plan.
5. **Discussion Item**
   a. Potential Revisions to the Zoning and Subdivision Text Amendments.
6. **Adjournment.**

3053564 SD 5/8/2024

TOWN OF EASTON

Planning & Zoning Department

STAFF MEMORANDUM

TO: EASTON PLANNING AND ZONING COMMISSION

FROM: LYNN B. THOMAS, JR., AICP
TOWN PLANNER

DATE: MAY 8, 2024

SUBJECT: PROPOSED AMENDED DEVELOPMENT RIGHTS AND RESPONSIBILITIES AGREEMENT

One of the items on your May Meeting Agenda is a proposed revised Development Rights and Responsibilities Agreement (DRRA) for the new Hospital. There is an existing executed DRRA by and between the Town and Shore Health Systems, Inc., which was created pursuant to the original approval of the new hospital. Shore Health is proposing to amend this document. The proposed revised document is attached.

DRRA's are provided for in the Zoning Code through the provisions of Article XV. The Planning Commission's role is laid out in Section 28-1504. It essentially states that any DRRA petition shall be referred to the Planning Commission for "...a determination of whether the proposed agreement is consistent with the Town's Comprehensive Plan."

The purpose of a DRRA is described in an article entitled ***Development Rights and Responsibility Agreements: The Give and Take of Development, (found at https://www.jdsupra.com/legalnews/development-rights-and-responsibility-93649/)*** as follows:

> Under Maryland law, the rights of a land developer to develop property for commercial or residential uses generally do not "vest" until there is some visible, lawful, construction on the property. Of course, development of a property takes time, and intervening market conditions can have a significant impact on the timing, financial viability, and ultimate development of a

property. As a way to provide protections from uncertainties, both to the developer and to the local government, Maryland adopted laws to allow for land developers to enter into a Development Rights and Responsibility Agreement ("DRRA") with the local government having jurisdiction over the land where the proposed development is located. The DRRA is a contract between the developer and government to govern the future development of the property and the rights of both parties, and to provide greater predictability, certainty and assurances to both parties.

Generally speaking, the advantage to entering into a DRRA for the developer is protection against potential changes to development rules and regulations, and for the local government, is assurance that the improvements proposed will be provided.

Ryan Showalter will be present at your meeting and can answer any specific questions about the document, what has changed, and why, but generally speaking, the proposed changes are (1) removal of much of the language concerning the provision of various community facilities/infrastructure with the intent to instead address them in a separate Public Works Agreement as the specifics of those details are worked out, and (2) the extension of the Term of the DRRA. The term was 30 years from the date the original DRRA was signed which was 2014. Given that it has been almost 10 years, Shore Health requests that the term be extended to 30 years from when the Amendment to the DRRA is signed.

Given the following circumstances, the staff believes the DRRA is consistent with the Comprehensive Plan:

- It was found as such leading up to the document executed in 2014 and little, if anything, has changed related to the development of the site since that time.

- The Comprehensive Plan was, in fact, amended prior to the 2014 approval, to specifically account for the relocation of the Hospital to this site. Prior to that, the site was shown as beyond our Growth Boundary. We amended the Growth Boundary's location to include the Hospital (and Community Center) and much of the Plan explicitly contemplates the development of the Hospital (see, for example, water and sewer discussion in the Municipal Growth Element of the Plan).

- You have recently approved the new site plan for the Hospital, which on some level includes a finding that the project is consistent with the Plan.

For these reasons, staff recommends that you determine the DRRA is consistent with the Comprehensive Plan.

FIRST AMENDMENT TO

DEVELOPMENT RIGHTS AND RESPONSIBILITIES AGREEMENT

By and Between

TOWN OF EASTON,

TALBOT COUNTY, MARYLAND

and

SHORE HEALTH SYSTEM, INC.

FIRST AMENDMENT TO
DEVELOPMENT RIGHTS AND RESPONSIBILITIES AGREEMENT

THIS FIRST AMENDMENT TO DEVELOPMENT RIGHTS AND RESPONSIBILITIES AGREEMENT ("**First Amendment**") is made and entered into this ___ day of _____, 2024, by and between SHORE HEALTH SYSTEM, INC., a Maryland corporation ("**SHS**"), the TOWN OF EASTON, a municipal corporation, organized and existing under the laws of the State of Maryland ("**Town**"), and TALBOT COUNTY, MARYLAND, a Maryland charter county ("**County**").

RECITALS

This First Amendment is entered into based upon the following facts:

A. The Town, County and SHS entered into a Development Rights and Responsibilities Agreement dated October 14, 2014, which is recorded among the Land Records in Liber MAS 2206, folio 266 ("**DRRA**").

B. Town, County and SHS desire to amend the DRRA and proceedings have been taken in accordance with the Development Agreement Statute, Town Enabling Law and County Enabling Law.

C. Town, County and SHS acknowledge and agree that the provisions of this First Amendment are fair, just and reasonable and the assurances provided by this First Amendment provide the certainty that is needed for SHS to make the long-term commitments involved in developing the Property and providing the benefits to Town, County and the general public.

D. In satisfaction of the requirements of Section 28-1504 of the Town Code, the Town Planning Commission considered the First Amendment at its May 16, 2024 meeting and by letter dated _____made a recommendation that the First Amendment is consistent with the Town Comprehensive Plan.

E. On _____ __, 2024, the Town Council held a duly advertised public hearing on this First Amendment in accordance with the Town Enabling Law, and approved this Agreement on _____ __, 2024 by Resolution No. _____ ("**Town First Amendment Resolution**"), a copy of which is attached hereto as Exhibit FA-2. The Town First Amendment Resolution contains a statement, with references to specific provisions of applicable law, regulations or plans, that the proposed development is consistent with the applicable development regulations and the Town Comprehensive Plan.

F. In satisfaction of the requirements of Section 50-5 of the County Code, on _____ __, 2024, the County Planning Commission held public meetings regarding this First Amendment and issued a recommendation that the First Amendment is consistent with the County Comprehensive Plan, which recommendation is memorialized as Resolution No. 24-___ and attached hereto as Exhibit FA-3.

G. On _____ __, 2024, the County Council held a duly advertised public hearing on this First Amendment in accordance with the County Enabling Law, and approved this First Amendment on _____ __, 2024 by Resolution No. ___ ("**County First Amendment Resolution**"), a copy of which is attached hereto as Exhibit FA-4. The County First Amendment Resolution contains a statement, with references to specific provisions of applicable law, regulations or plans, that the proposed development is consistent with the applicable development regulations and the County Comprehensive Plan.

H. The DRRA, as modified by this First Amendment, is intended to be, and should be construed as, a Development Rights and Responsibilities Agreement within the meaning of the Development Agreement Statute and the Enabling Ordinance. Town, County and SHS have taken all actions mandated by and have fulfilled all requirements set forth in the Development Agreement Statute and the Enabling Ordinance, including requirements for notice, public hearings, findings, votes, and other procedural matters.

I. All parties entered into this First Amendment voluntarily and in consideration of the benefits of and the rights and obligations of the parties.

NOW, THEREFORE, in consideration of the foregoing recitals, which are not merely prefatory but are hereby incorporated into and made a part of this First Amendment, and the mutual covenants and agreements set forth below, and other good and valuable consideration, the receipt and sufficiency of which the parties hereby acknowledge, Town, County and SHS hereby agree as follows:

AGREEMENT

1. RECITALS. The recitals above are incorporated herein as material terms of this First Amendment.

2. DEFINED TERMS. For all purposes of this First Amendment, except as otherwise expressly provided or if the context otherwise requires, terms and phrases used in this First Amendment shall have the meaning as defined in the DRRA. Paragraph 1.1 of the DRRA is hereby amended as follows:

…

1.1.20. "**Existing Land Use Regulations**" means Land Use Regulations in effect on the Effective Date in which rights are intended to be vested under this Agreement. The Existing Land Use Regulations are identified below, attached hereto as exhibits for future reference and incorporated herein. With respect to the Town, the Existing Land Use Regulations include the following:

(a) 2010 Comprehensive Plan, as adopted by Resolution No. 5958;

(b) Zoning Ordinance, **effective December 5, 2021,** as amended by and up to and including Ordinance No. **803~~614~~**;

(c) Subdivision regulations, **effective December 12, 2023,** as amended by and up to and including Ordinance No. **804~~549~~**;

(d) Stormwater Management regulations, as amended by and up to and including Ordinance No. **643~~571~~**; and

(e) Forest Conservation regulations, as amended by and up to and including Ordinance No. **718~~584~~**.

With respect to the County, the Existing Land Use Regulations include the following:

1. Comprehensive Plan, **effective August 6, 2016, as adopted by ~~as amended by and up to or including Resolution No. 176 and~~** Bill No. **1329~~1178~~**; and

2. Comprehensive Water and Sewer Plan, as amended by and up to or including Resolution No. **~~199~~336**.

…

1.1.26. "**Initial Plat**" means the subdivision plat prepared by Daft McCune Walker Inc. entitled "PLAT OF SUBDIVISION, LOTS 1 THROUGH 7, PARCEL A, AND REVISED TAX PARCEL 38", dated October 8, 2014, last revised October 9, 2014 and **~~intended to be~~** recorded among the Plat Records of Talbot County, Maryland **in Plat Cabinet MAS 83, pages 458 through 464, inclusive~~hereafter~~**. The Initial Plat is incorporated herein by reference, and a reduced copy of the Initial Plat is attached hereto as Exhibit ___.

…

1.1.39. "**Pump Station/Substation Parcel**" means the area or parcel of land described in Paragraph 5.4 and depicted by Exhibit ___**, or such alternative parcel(s) as may be agreed by the parties pursuant to one or more public works agreements**.

3. EXHIBITS. Exhibits referenced herein but not attached hereto shall be the same as included in the DRRA. The following exhibits are attached hereto and incorporated herein and amend, replace and restate in their entirety the corresponding Exhibit of the DRRA:

FA-E[1]	Existing Development Approvals
FA-F	Existing and Required Development Approvals and Permits
FA-H	Legal Description of Property
FA-I	Partial Assumption and Novation Agreement Form
FA-R	Estoppel Certificate Form
FA-T	Traffic Study Summary

The following exhibits are attached hereto and incorporated herein and added to the list of Exhibits referenced by Paragraph 1.2 of the DRRA:

FA-1	Town Planning Commission Recommendation
FA-2	Town First Amendment Resolution
FA-3	County Planning Commission Resolution
FA-4	County First Amendment Resolution

[1] Exhibits to this First Amendment are referenced as (FA-#) to differentiate them from exhibits to the original DRRA.

4. PRECEDENCE. If the terms and conditions of this First Amendment conflict with any of the terms of the DRRA, the terms and conditions of this First Amendment shall take precedence, shall prevail and shall be binding upon Town, County and SHS.

5. PARTIES. Paragraph 2.1 of the DRRA is hereby amended as follows:

2.1. Parties; Capacities. The parties to this Agreement are the Town, County, and SHS. The County **initially** entered into this Agreement in several capacities and for several purposes: (i) in its governmental capacity under and for the purposes set forth in Chapter 50 of the County Code; (ii) in its capacity as the fee simple owner of the Property to consent to the imposition of this Agreement on the title to the Property for the purposes for which DRRAs are intended under the Development Agreement Statute; and (iii) for the purpose of agreeing to the terms, provisions, rights and obligations related to certain Public Facilities to be provided by the Town, County, and SHS and SHS-Successors. The Town entered into this Agreement in its governmental capacity: (i) under and for the purposes set forth in Article XV of the Town Zoning Ordinance, and (ii) for the purpose of agreeing to the terms, provisions, rights and obligations related to certain Public Facilities, including road improvements to be provided by SHS or SHS-Successors and public utility improvements and extensions to be provided by the Town, County, SHS and SHS-Successors. **SHS entered into this Agreement as the contract purchaser and intended developer of the Property. Prior to the First Amendment, the County transferred the Property to SHS, with the exception of Lot 7.**

6. PARTIES. Paragraphs 2.2 and 2.2.1 of the DRRA are hereby amended and restated in their entirety as follows:

2.2. Property. The real property that is subject to this Agreement consists of portions of Talbot County Tax Map 17, Parcel 129, containing in aggregate 199.149 acres, more or less, which land area is more specifically depicted as Lots 1, 2, 3, 5 and 7 by the Initial Plat (Exhibit Error! Reference source not found.**) and more particularly described by Exhibit ___, except that upon dedication of any portion(s) of such lots to the Town or County, such portion(s) shall automatically be released from this Agreement and all rights and obligations hereunder.**

2.2.1. The entities having the equitable and legal interests (including lienholders) in the Property as of the Execution Date are the County, which is the owner of Lot 7, and SHS, which is the owner of Lots 1, 2, 3 and 5.

7. EXTENSION OF TERM. Paragraphs 2.5.1 and 2.5.2 of the DRRA are hereby amended to extend the term of the rights and obligations established by the DRRA as follows:

2.5.1. *Term*. Except as to those provisions of this Agreement that specifically provide for a longer duration, the term of this Agreement shall commence on the Effective Date and shall continue **until the thirtieth (30th) anniversary of the date of recordation of the First Amendment among the County Land Records** ~~**for a period of thirty (30) years thereafter**~~, unless this Term is modified, extended, or terminated pursuant to the provisions of this Agreement.

2.5.2. *Justification*. Parties acknowledge and agree that the Term of the Agreement**, as extended by the First Amendment,** is justified by the: (i) substantial economic investment made by SHS and SHS-Successors for the development of a new hospital and medical campus, (ii) construction of extensive public and private infrastructure by the Parties, (iii) uncertainty of future market demands and political pressures, (iv) public purposes to be advanced by Development of the Property in accordance with the Existing Land Use Regulations, and (v) expectations of the Parties.

8. UPDATED NOTICE ADDRESSES. Pursuant to Paragraph 2.8 of the DRRA, the parties acknowledge and agree that all notices to the parties under the DRRA shall be sent to the following addresses unless the same are hereafter supplemented or revised:

Notices and communications to SHS shall be addressed to, and delivered at, the following addresses:

Shore Health System, Inc.
219 S. Washington Street
Easton, Maryland 21601
Telephone (410) 822-1000
Attn: Kenneth Kozel, President

with copies to:
University of Maryland Medical System Corp.
250 West Pratt Street, Suite 2400
Baltimore, Maryland 21201
Telephone: (410) 328-1635
Attn: Aaron Rabinowitz, Vice President & General Counsel

SHS - DRRA
c/o McAllister, DeTar, Showalter & Walker LLC
100 N. West Street
Easton, Maryland 21601
Telephone (410) 820-0259
Attn: Ryan Showalter, Esq.

Notices and communications to the Town shall be addressed to, and delivered at, the following addresses:

Town of Easton
14 S. Harrison Street
Easton, Maryland 21601
Telephone (410) 822-2525
Attn: Mayor and Town Manager

with a copy to:
Ewing, Dietz, Fountain & Kehoe, P.A.
16 S. Washington Street
Easton, Maryland 21601
Telephone (410) 822-1988

Attn: Sharon VanEmburgh, Esq.

Notices and communications to the County shall be addressed to, and delivered at, the following addresses:

Talbot County	*with a copy to:*
11 N. Washington Street	Talbot County Attorney
Easton, Maryland 21601	11 N. Washington Street
Telephone (410) 770-8001	Easton, Maryland 21601
Attn: President, County Council	Telephone (410) 770-8093
	Attn: Patrick Thomas, Esq.

9. REPRESENTATIONS, WARRANTIES AND CERTIFICATIONS. Each Party hereby confirms that the representations, warranties and certifications set forth in Article 3 of the DRRA are accurate as of the date of execution of this First Amendment, except as amended as follows:

3.3 County. The County hereby makes the following representations, warranties and covenants to and with SHS and the Town as of the Execution Date:

…

(c) *Ownership of Property*. The County hereby certifies that it is the owner of legal and equitable interests in ~~**Property**~~**Lots 6 (Water Tower Parcel) and 7 (Pump Station/Substation Parcel) as depicted by the Initial Subdivision Plat**.

3.4 SHS. SHS hereby makes the following representations, warranties and covenants to and with the Town and County as of the Execution Date:

…

(a) *Ownership of Property*. SHS hereby certifies that it ~~**has exercised and is the contract purchaser under the SHS Options**~~**is the owner of the legal and equitable interests in the Property**.

10. WATER TOWER IMPROVEMENTS. Paragraph 5.3 of the DRRA is hereby amended as follows:

5.3 Water Tower Parcel. ~~**Based on a water supply study of the Town water system completed by Whitman, Requardt & Associates, LLP and a related report entitled "Final Technical Memorandum No. 2 ?????" and dated _____, 2024May 8, 2012, elevated water storage improvements are not necessary for initial phases of the development on the Property, but are anticipated to be required to provide fire protection flows for future phases of development.**~~ **Elevated water storage improvements will be required to support fire protection flow requirements at some stage of development of the Property.** The specific trigger or timing of and responsibility for construction and costs of such improvements will be evaluated and discussed by SHS and the Town, from time to time, as Development of the Property progresses. **Promptly upon recordation of this First Amendment, the County**~~**SHS**~~ shall **initiate legislation to**

dedicate to the Town, in fee simple, a parcel of land **consisting of 1.0 acres, more or less, and designated as Lot 6 by the Initial Subdivision Plat** for construction of an elevated water storage tank~~, which parcel contains 1.0 acres, more or less, and is depicted by Exhibit K~~ ("**Water Tower Parcel**"). ~~The Water Tower Parcel is subject to the SHS Options and shall be dedicated to the Town by SHS concurrent with its acquisition of the Property.~~ **SHS acknowledges and agrees that Lot 3 and Lot 5 are subject to a variable width** ~~Such dedication shall include for the benefit of the Town a forty (40) foot wide~~drainage, utility and access easement that extends across the Property between Hailem School Road and Medical Center Parkway **for the benefit of the Water Tower Parcel**. The Hailem School Road access located at the western terminus of such easement shall be limited to Town utility purposes and may not be used for access to Development on the Property without express approval by the County. The Water Tower Parcel shall also be subject to a forty (40) foot wide drainage, utility and access easement as depicted by **the Initial Subdivision Plat**~~Exhibit K~~.

11. PUMP STATION PARCEL. Paragraph 5.4 of the DRRA is hereby amended as follows:

5.4. Pump Station~~/Substation~~ Parcel. SHS shall **subdivide and** dedicate to the Town, in fee simple, a parcel of land for construction of a wastewater pump station ~~and an electric mini-substation~~, which parcel **shall be configured, sized and located as agreed by SHS and Town** ~~contains 1.253 acres, more or less, and is depicted by Exhibit L~~ ("**Pump Station~~/Substation~~ Parcel**"). ~~The Pump Station/Substation Parcel is subject to the SHS Options and shall be dedicated to the Town by SHS with its acquisition of the Property.~~ Such dedication shall include a thirty (30) foot wide drainage and utility easement that authorizes the construction, maintenance and operation of drainage and utility improvements (sewer, water, gas, ~~telephone~~**communication fiber** and electric) ~~in the location depicted by Exhibit L. The Pump Station/Substation Parcel shall be accessed from Hiners Lane. The Hiners Lane access shall be limited to Town utility purposes and may not be used for access to Development on the Property without express approval by the County.~~ **Promptly upon recordation of this First Amendment, the County shall initiate legislation to convey to SHS Lot 7 (as depicted by the Initial Subdivision Plat), which parcel is intended by the Parties to be consolidated with Lot 1 as developable land, since such Lot 7 is no longer needed as a site for a pump station or electric substation in light of this Paragraph 5.4 and Paragraph 5.5.**

12. SUBSTATION PARCEL(S). The DRRA is hereby amended to include the following text as new Paragraph 5.5:

5.5. Substation Parcel(s). On such timing as may be agreed by the Town and SHS, SHS shall dedicate to the Town one or more easement(s) or parcel(s) for construction of the electrical substation required to provide the Permanent Primary Electrical System Extension ("Substation Parcel(s)") including any necessary access

easements. The location and size of the Substation Parcel shall be agreed upon by SHS and Town. In the event that it is determined that dedication of the parcel is desired, SHS shall subdivide and create the parcel for conveyance.

13. **HAILEM SCHOOL ROAD IMPROVEMENTS.** Paragraph 6.3.3 of the DRRA is hereby amended as follows:

6.3.3. *Hailem School Road*. Initial phase(s) of Development are not planned to include the construction of road access to Hailem School Road. Unless and until SHS or SHS-Successors provide any improvements required by this Paragraph 6.3.3, access to Hailem School Road from the Property shall be restricted to agricultural access and access to serve only the **Substation Parcel(s) and the** Water Tower Parcel. Future improvements along Hailem School Road may be required to accommodate Development of the Property. SHS or SHS-Successors shall construct improvements to Hailem School Road that are necessary to mitigate the incremental traffic impact resulting from Development of the Property (considering then existing traffic conditions) and required by generally applicable and legally enforceable County and Town rules, regulations, ordinances and standards at SHS' or SHS-Successors' expense, except to the extent public funding is acquired for such purposes, in accordance with applicable standards and specifications of the County. The Town agrees to use its best efforts to support SHS or SHS-Successors in obtaining, and the County agrees to cooperate with SHS and SHS-Successors in timely completing, all required reviews and permits related to Hailem School Road improvements required by the County and Town to accommodate Development of the Property so long as said reviews and permits are consistent with Development approvals granted by the Town and/or County for the Property. All future access to Hailem School Road shall comply with all generally applicable and legally enforceable provisions of the County road ordinance. ~~**Not later than conveyance of Parcel "B" by the County pursuant to the SHS Options, SHS shall dedicate or cause to be dedicated to the County, or the County shall reserve to itself from such conveyance, a fee simple interest in a strip of land for future road widening, drainage and utility improvements along the full length of the Property frontage on Hailem School Road for a width of fifty (50) feet measured east from the existing road centerline.**~~ The foregoing qualification regarding road access to Hailem School Road shall not serve as an absolute limitation on the construction of such access, but makes construction and use of any such access subject to any applicable and legally enforceable County requirements and SHS and SHS-Successors agree to obtain advance County approval of any such access according to such requirements.

14. **NEW COMMUNITY CENTER ENTRANCE.** Paragraphs 6.3.6 and 6.3.7 of the DRRA are hereby amended as follows:

6.3.6. *New Regional Medical Center Entrance and Route 50 Frontage*. Subject to the conditions precedent set forth in Paragraph 6.3.7, the County shall transfer to SHS that **part,** parcel~~**, or portion**~~ of land ~~**located at 10028 Ocean Gateway, Easton, Maryland, Tax Map 0017, Parcel 0038**~~ identified as "Medical Center Drive, (Commercial Local

Street), S~~RC~~**HA** Plat 59033**, Variable Width Right of Way**" and "Land **Intended** to be D**edicated**~~onated~~ to the State Highway Administration, 3.968 acres±**, SHA Plat # 59033**" by the Initial Plat **("Entrance Parcel")**, for construction of the new Regional Medical Center entrance ("**New RMC Entrance**") and deceleration lanes for US Route 50. The land to be conveyed by the County for the New RMC Entrance is also identified on the State of Maryland Department of Transportation, State Highway Administration, State Roads Commission Plat Number 59033, dated June 29, 2012, which is incorporated by reference herein.

6.3.7. *New Community Center Entrance.* **Promptly upon recordation of this First Amendment, t**~~T~~he County **shall initiate legislation to convey the Entrance Parcel to SHS in exchange for SHS' construction of a new entrance to the Talbot Community Center, the details of which shall be memorialized in one or more public works agreements between SHS, County and Town.**~~**shall have no obligation to transfer or convey to SHS any interest in or to any part, parcel, or portion of land to be used for the New RMC Entrance, until the following conditions precedent have occurred to the County's reasonable satisfaction:**~~

~~**(a) SHS, at its sole cost and expense, shall obtain all required permits for and construct a new entrance to the Talbot County Community Center ("New TCCC Entrance") in accordance with plans paid for by SHS, reviewed and accepted by the County, and prepared by Daft McCune Walker, Inc. entitled, "Entrance Relocation Plan for Talbot County Community Center", dated October 10, 2012, last revised October 15, 2012, which plans are incorporated by reference herein (collectively, the "TCCC Plans"). The TCCC Plans have been accepted in concept by the County prior to execution of this Agreement. In addition to the TCCC Plans and any specifications referred to or incorporated therein, SHS shall prepare separate specifications ("TCCC Specifications") for construction of the New TCCC Entrance, which shall be submitted to the County within one hundred twenty (120) days prior to commencement of construction of the New TCCC Entrance, and the County shall respond to such submittal within thirty (30) days thereafter, by accepting the TCCC Specifications or identifying with particularity the County's concerns or objections thereto. As a condition of the license granted by the County to SHS pursuant to sub-paragraph 6.3.7(c) below, final TCCC Plans and TCCC Specifications shall have been accepted by the County not later than thirty (30) days prior to commencement of construction of the New TCCC Entrance.**~~

~~**SHS's obligation shall include all costs of any kind, nature, or description, including design, engineering, permitting, bonding, insurance, site work, construction, landscaping, construction management, administration, inspection, changes, change orders, unknown conditions, and contingencies. It shall also include a warranty for the use and benefit of the County, in form and content acceptable to the County, for a period of one year following the County's acceptance and commencement of general public use of the New TCCC Entrance, and a separate warranty guaranteeing survival of all landscaping for two complete calendar years commencing upon completion of all required landscaping.**~~

(b) SHS shall be solely responsible for construction and completion of the work in accordance with the Construction Documents (defined below) as approved by the County and Town. The County shall have the right to review and approve, in its reasonable discretion, all final designs, plans, drawings, specifications, bid documents, contracts, subcontracts, changes, phasing, schedules, change orders, inspection reports (collectively, the "Construction Documents") for the New TCCC Entrance, which Construction Documents shall be consistent with the TCCC Plans, which have been approved and accepted by the County. Construction of the New TCCC Entrance shall also comply with all applicable Town Codes, standards, specifications and other requirements. The County shall be authorized to retain qualified construction inspectors, firms, or agencies to review, monitor, inspect, and approve or disapprove the Construction Documents and the work performed by SHS or its agents, contractors, or subcontractors on the New TCCC Entrance and water and sewer infrastructure extending from Rt. 662 to the Community Center to the extent SHS is providing the same to accommodate water and sewer service to the Community Center. The County's actual inspection costs shall be reimbursed by SHS at a cost not to exceed $500 per work day from commencement of the New TCCC Entrance through Completion thereof, and the County agrees to cooperate with SHS, including reasonable consideration of engaging inspectors otherwise working on the Property, to minimize inspection costs while still providing the County with assurances that the New TCCC Entrance is constructed in accordance with this Agreement and all applicable construction standards otherwise required by law.

SHS' bid documents shall include construction of water and sewer infrastructure to extend the Property Water Facilities and Property Wastewater Facilities to the vicinity of the Community Center in accordance with Paragraph 7.6.

(c) The County and SHS shall jointly identify and designate the portions of lands owned by the County that must be accessed or disturbed by SHS or its Representatives (defined below) in connection with the construction of the New TCCC Entrance ("License Area"). At a minimum, the License Area shall include all lands located within the Limit of Disturbance or "LOD" designated by the erosion control plans of the TCCC Plans. In consideration of SHS' agreement to construct the New TCCC Entrance, the County hereby grants to SHS a license ("License"): (1) to enter upon and use the License Area in connection with the construction of the New TCCC Entrance; (ii) to construct the New TCCC Entrance in accordance with this Agreement upon the License Area; and (iii) to use existing roadways, driveways and pedestrian ways located on the Talbot County Community Center property for vehicular and pedestrian ingress and egress to and from the License Area. SHS and its construction managers, consultants, architects, engineers, contractors and subcontractors retained in connection with the New TCCC Entrance (collectively, "Representatives") shall be permitted to use this License.

At all times during the term of the License, SHS shall, at its own cost and expense, be responsible for the actions and personal property of SHS and its

~~**Representatives on the License Area. Prior to Completion of the New TCCC Entrance, SHS shall repair any damage to the improvements, personal property, grounds, and facilities upon the Talbot County Community Center property caused by SHS' or its Representatives' use of the License Area, including grading or regarding and establishment or reestablishment of all lawn and landscaping. Prior to termination of the License, SHS shall promptly remove any and all temporary structures, facilities and improvements, including, without limitation, all tools, materials and equipment used or stored and any trash or debris remaining on the License Area and restore all disturbed areas to their former condition or as shown on the TCCC Plans. The License shall terminate upon Completion of all activities depicted by the TCCC Plans, including the County's written approval and acceptance of New TCCC Entrance and County approval of the demolition and stabilization of the existing TCCC access to Route 50.**~~

~~**SHS shall not use or permit uses upon the License Area that unreasonably interfere with access to or operation of the Talbot County Community Center. The County and SHS shall cooperate to effect the construction of the New TCCC Entrance in a manner that provides vehicular access to the northern and southern Talbot County Community Center entrance doors at all times. Consistent with the TCCC Plans sequence of construction, the existing TCCC access to Route 50 shall not be obstructed or demolished before the New TCCC Entrance is complete, accepted by the County, and open for public use. SHS shall advise the County of construction schedule changes for the New TCCC Entrance and shall adhere to the construction schedule in the Construction Documents unless changed by the County, which consent shall not be unreasonably withheld. County shall be responsible for communications with the public regarding access and circulation pattern changes during construction. The intent of SHS and County is to cooperate in order to prevent unreasonable impairment of the use, operation, occupancy or enjoyment of, or ingress to or egress from the Talbot County Community Center, while recognizing that construction of the New TCCC Entrance and closure of the existing Route 50 access may cause temporary but unavoidable adverse impacts upon the Talbot County Community Center which the parties shall seek to minimize and mitigate through construction management and public communication.**~~

~~**(d) Upon Completion by SHS of the New TCCC Entrance in accordance with the TCCC Plans and TCCC Specifications and applicable Town codes, standards, and design criteria and acceptance by the County, the County shall advertise the proposed disposition of land set forth in Paragraph 6.3.6 to be transferred to SHS for the New RMC Entrance in accordance with the requirements of Article 25A § 5B, Md. Ann. Code, and, upon finding that the parts, parcels, or portions of land are no longer needed for public use for access to the Community Center or as part of the Community Center property, County shall transfer and convey such parts, parcels, or portions of land to SHS.**~~

~~**(e) Not later than the conveyance provided for in subparagraph (d) above, the County shall also establish a license over portions of the County's**~~

~~**remaining property, including Rt. 50 frontage of the Hog Neck Golf Course, for access and temporary disturbance by SHS, its contractors, agents and representatives as necessary to facilitate construction of the New RMC Entrance and related improvements to Route 50, including accecleration and deceleration lanes and drainage and stormwater improvements. Such license shall be established pursuant to the same procedure and subject to terms comparable to those described in subparagraph (c) for the New TCCC Entrance.**~~

15. **WATER SYSTEM.** Paragraph 7.2.1 of the DRRA is hereby amended as follows:

7.2.1 *Water System*. The Town water system shall be extended to serve the Property~~, the Community Center,~~ and such other areas, if any, as determined pursuant to Paragraph 7.3 ("**Water System Extension**"). All components of the Water System Extension shall be sized to accommodate the flows and capacities reserved under Paragraph 7.3. The Water System Extension shall include the following:

(i) 12" water mains that extend to the southwestern and southeastern areas of the Property ~~**(in the locations designated by Exhibits O and P as the limits of 12" water lines constructed by SHS or the "Property Water Facilities" as defined below)**~~ from existing Town water mains generally located in the vicinity of Easton Utilities' Goldsborough Sewage Pump Station and the intersection of Airport Road and Route 662, respectively;

(ii) all other components, improvements, equipment and appurtenances as required by applicable Town standards and MDE design criteria; and

(iii) additional components, improvements, equipment and appurtenances not required by Town standards but requested by any Party **pursuant to one or more public works agreement(s) between the Parties**~~**pursuant to Paragraph 7.4, subject to the provisions of Paragraphs 7.4 and 7.7 regarding cost responsibilities**~~.

The anticipated alignment of the off-site Water System Extension and the specific locations of the northern termini of the Water System Extension, which are the connection points between the Water System Extension and the Property Water Facilities (defined below) **shall be memorialized by one or more public works agreements between the Parties**~~**are depicted and described by the plans attached as Exhibits M-P**~~.

16. **WASTEWATER SYSTEM.** Paragraph 7.2.2 of the DRRA is hereby amended as follows:

7.2.2 *Wastewater System*. The Town sewer system shall be extended to serve the Property~~, the Community Center,~~ and such other areas as **set forth in one or more public works agreement(s) between the Parties**~~**determined pursuant to Paragraphs 7.3 and 7.4, if any**~~ ("**Wastewater System Extension**"). All components of the Wastewater System Extension shall be sized to accommodate the flows and capacities reserved under Paragraph 7.3. The Wastewater System Extension shall include the following:

(i) a pump station sized, designed and located to accommodate flows from the entire Property and the Community Center property **as set forth in one or more public works agreement(s) between the Parties**~~**determined via gravity flow considering existing topography and all other flows provided for under this Agreement. The pumps and electrical components shall be covered by manufacturers' warranties or extended warranties that extend until one year after issuance by the Town of the first certificate of occupancy for a hospital constructed on the Property**~~;

(ii) connection of the Property Wastewater Facilities (defined below) at the ~~**southern**~~ property line of the Pump Station~~**/Substation**~~ Parcel to the wet well of the pump station;

(iii) a ~~**12"**~~ forcemain extending from the Pump Station to the Town's existing collection system, as depicted by plans approved by the County, Town, and MDE to accommodate the flows determined under this Agreement;

(iv) all other components, improvements, equipment and appurtenances as required by applicable Town standards and MDE design criteria as depicted by plans approved by the County, Town and MDE, such as pump station monitoring, control and backup power generation systems; and

(v) additional components, improvements, equipment and appurtenances requested by any Party pursuant to Paragraph 7.4 but not required by Town standards, subject to the provisions of Paragraphs 7.4 and 7.7 regarding cost responsibility.

The anticipated on-site and off-site alignment of the Wastewater System Extension **shall be memorialized by one or more public works agreement(s) between the Parties**~~**are depicted and described by the plans attached as Exhibits M-O**~~.

17. UTILITY TIMEFRAMES. Paragraph 7.4 of the DRRA is hereby amended as follows:

7.4 Design & Construction Responsibilities, Coordination and Timeframes. The Parties shall cooperate in connection with the design of all utility infrastructure for their mutual benefit. **Details regarding the coordination, timeframes, design and construction responsibilities for all utility infrastructure shall be memorialized by one or more public works agreement(s) between the Parties.**~~**When and as available, SHS shall circulate to Town and County plans and/or exhibits that confirm the locations and inverts of the various connection points between the pipe and conduit systems to be constructed by SHS and those to be constructed by Town or County. All Parties shall construct such utility system components in accordance with approved plans. The County shall be responsible for extending all utility lines from the Pump Station to the southern boundary of the Pump Station/Substation Parcel and pay its respective share of the cost to extend the forcemain to the tie-in point of the existing Town facilities. Notwithstanding the foregoing, the second or later Party to extend or construct its portion of a utility system component to a point of connection shall be responsible for verifying the precise location of the system component to which it must connect and for making and testing such connection in accordance with applicable standards and requirements and sound engineering and construction practices.**~~

~~SHS, SHS-Successors and Town shall cooperate with the County, at no expense to SHS, SHS-Successors or Town, in connection with all grant or loan applications for public funding for water and sewer infrastructure. SHS, SHS-Successors and Town shall have no liability for repayment of any grants or loans undertaken by the County.~~

~~The County shall complete its bid and procurement procedures for the Extensions on such timing as required to satisfy its obligations hereunder. The County's obligation to construct the Extensions shall be triggered upon the occurrence of all of the following (the date of which shall be the "Trigger Date"): (i)SHS' acquisition of the Property, (ii) issuance of a final decision approving the Certificate of Need authorizing construction of a hospital containing at least 100 licensed beds on the Property, and (iii) issuance by the Town of the first grading, foundation, building or other permit authorizing work associated with construction of such hospital. The eastern components of the Water System Extension shall be complete and available for connection to the Property Water Facilities and operation thereof on or before three (3) months after the Trigger Date. The western components of the Water System Extension shall be complete and available for connection to the Property Water Facilities (as depicted by Exhibit P) and operation thereof on or before fifteen (15) months after the Trigger Date. The Wastewater System Extension shall be complete and available for connection to the Property Wastewater Facilities and operation thereof on or before fifteen (15) months after the Trigger Date.~~

~~The Temporary Electric Service (defined below) shall be complete and available for service to the Property on or before four (4) months after the Trigger Date, provided that SHS files a complete and approved application for electric service with Easton Utilities and pays all fees and/or contributions in accordance with the applicable tariff by two (2) prior to the Trigger Date and provided that all easements necessary to provide the Initial Electric System Extension are provided to Easton Utilities by the Trigger Date. The Gas System Extension (defined below) shall be complete and available for service and connection to the Property Gas Facilities (defined below) on or before sixteen (16) months after the Trigger Date provided that SHS files a complete and approved application for gas service with Easton Utilities and pays all fees and/or contributions in accordance with the applicable tariff by the Trigger Date. The Permanent Electric System Extension (defined below) shall be complete and available for service to the Property on or before fourteen (14) months after the Trigger Date provided that SHS files a complete and approved application for electric service with Easton Utilities and pays all fees and/or contributions in accordance with the applicable tariff by the Trigger Date. Upon completion of each such improvement and satisfactory inspection by Town, such improvements shall be dedicated or conveyed to Town and shall thereafter be owned, operated and maintained by Town. The foregoing deadlines for provision of electric or gas services by Easton Utilities shall be extended on a day-for-day basis for each day that the respective application(s) for service are delivered or are not completed after the aforementioned submittal deadlines.~~

7.4.1 Design and Right-of-Way Responsibility. County retained Easton Utilities to design the pump station and Extensions to the southern Property lines, and Easton Utilities provided 90% drawings to the County in April 2010, and final construction plans to the County in February, 2011. Except as provided in the following paragraph, County has fulfilled its design responsibilities for the Extensions. County shall be responsible for the permitting of the Extensions, except for specific components of the Extensions requested by another Party under Paragraphs 7.2.1(iii) or 7.2.2(v), which specific components shall be designed, permitted, and funded by the Party requesting the same. The County shall also be responsible for identifying, surveying and obtaining all right-of-ways necessary for construction of the Extensions from the boundaries of the Property to the appropriate connection points within the existing Town utility systems, which right-of-ways or easements shall be conveyed to the Town by instrument(s) recorded among the Land Records of Talbot County within three months following the Effective Date. All off-site right-of-ways required for the Extensions shall be obtained and/or confirmed by the County in sufficient time to permit the County to satisfy the deadlines set forth in Paragraph 7.4, and shall be for the benefit of the Town. If County is unable to obtain off-site easements and rights-of-way as may be necessary, the Town shall assist the County in accordance with Paragraph 9.1.

The County shall apply for all construction permits and approvals from MDE and such other agencies as may be required for construction of the Extensions in a manner and on such timing as necessary to satisfy its obligations hereunder.

7.4.2 Design Coordination Timeframe. All requests hereunder for capacity reservation or specific system components or modifications have been communicated to the Party responsible for such design.

7.4.3 Construction Responsibility. County shall construct the Extensions in accordance with plans approved by SHS, Town and County. Between SHS and the County, the last Party to construct their portion of the water system infrastructure in the vicinity of the connection points between the Property Water Facilities and the Water System Extension shall be responsible for connecting and testing the connection of these two segments of the water system. County shall be responsible for connection of the Property Wastewater Facilities (defined below) to the pump station provided that SHS has terminated the Property Wastewater Facilities on the Pump Station Parcel prior to construction of the pump station wet well. County shall construct the improvements required by Paragraph 7.6 in accordance with plans approved by County, Town and SHS. Notwithstanding the foregoing, if SHS constructs the new alignment of Route 662 prior to the County's construction of the Extensions, SHS shall install sleeve(s) under the new road to accommodate road crossing(s) of the Extensions. SHS shall construct the improvements required by Paragraph 7.5 in accordance with plans approved by the Town. Division of responsibilities for construction of gas and electric system improvements are addressed in Paragraphs 7.4, 7.11, 7.12 and 7.13, respectively.

~~**7.4.4 Cooperation by Town and County to Facilitate Timely Completion. Each Party hereto shall support the other Parties and promptly respond to requests for information, coordination, interpretation of codes or standards or other requests for assistance to facilitate the timely and efficient coordination and construction of utilities for the Property.**~~

18. WATER & SEWER IMPROVEMENTS. Paragraph 7.5 of the DRRA is hereby amended as follows:

7.5 Property Water Distribution and Wastewater Collection Improvements. SHS or SHS-Successors shall construct water distribution facilities within the Property and extending from the Water System Extension as necessary for Development of the Property in accordance with construction plans approved by Town~~**, the general location of initial phases of which is depicted by Exhibit M**~~. Such improvements shall consist of a system of pipes, water mains, laterals, service lines, hydrants, feeders, regulators, fixtures, connections and attachments, meters and such other appurtenances necessary or proper for the purposes of distributing or supplying water for domestic, commercial and fire protection purposes and for any other purposes (excluding, at SHS' election, irrigation) for which water may be used by or on the Property (collectively, the "**Property Water Facilities**"). ~~**The Property Water Facilities include, without limitation, a 16" water line stubbed to and terminated with a valve at the southern boundary of the 40' drainage, utility and access easement located on the Water Tower Parcel, as generally depicted by Exhibits K and P.**~~

SHS or SHS-Successors shall construct the wastewater collection systems and facilities within the Property as necessary to convey wastewater flows from Development of the Property by gravity to the Pump Station~~**/Substation**~~ Parcel in accordance with construction plans approved by the Town~~**, the general location of initial phases of which is depicted by Exhibit M**~~. Such improvements shall consist of a system of pipes, wastewater mains, laterals, manholes, connections and attachments and such other appurtenances necessary or proper for the purposes of collecting and transporting wastewater generated within the Property to the Pump Station~~**/Substation**~~ Parcel (collectively, the "**Property Wastewater Facilities**"). ~~**SHS shall design and construct the Property Wastewater Facilities to be capable of conveying wastewater flows from the Community Center property to the Pump Station/Substation Parcel by gravity at a volume not to exceed that reserved in Paragraph 7.3.1.2. The depth of the Property Wastewater Facilities shall be limited to that necessary to provide gravity service to the Property and the Community Center as depicted by Exhibit M, the invert elevation for future connection to MH9 shall be 48.3±.**~~

19. WATER & SEWER IMPROVEMENTS. Paragraph 7.6 of the DRRA is deleted in its entirety:

~~**7.6 Community Center Water and Wastewater Improvements. County shall construct all water improvements required to connect the Community Center to the Property Water Facilities in accordance with construction plans approved by the Town. Such improvements shall include an 8" water line and a system of water pipes, mains, laterals, hydrants, regulators, fixtures, connections and attachments, meters and such other appurtenances necessary or proper for the purposes of supplying water for domestic, commercial and fire protection purposes for the Community Center at a volume not to exceed that reserved pursuant to Paragraph 7.3.1.2.**~~

~~**SHS is responsible for the cost of constructing an 8" water line stub, terminated with a valve, onto the TCCC Expansion Parcel as depicted by Exhibit M. SHS is also responsible for the cost of constructing and capping an 8" gravity sewer line onto the TCCC Expansion Parcel as depicted by Exhibit M. In addition to the foregoing, SHS will extend water and sewer lines across the TCCC Expansion Parcel in conjunction with its construction activities for the New TCCC Entrance. Such extensions shall terminate at locations approved by SHS and County. These extensions will be priced as an option by SHS' contractor and the costs of extending these lines beyond the stubs depicted on Exhibit M shall be credited against SHS' obligations to County under Paragraph 7.7.3. The County shall be responsible for connection of the Community Center to the water and sewer lines constructed by SHS. Upon connection to the Town sewer system, the County shall be responsible for abandonment of the existing septic system. Subject to Health Department approval, the Community Center may elect to continue to use the existing well servicing the Community Center and the well and septic system servicing the County's existing concession stand, without any requirement to connect to the Town water and wastewater systems.**~~

20. **UTILITY DEDICATIONS.** Paragraph 7.7 of the DRRA is hereby amended as follows:

7.7. Cost Allocation and Responsibility. **Allocation of costs and responsibilities for construction of utilities to serve Development of the Property shall be memorialized by one or more public works agreement(s) between the Town and SHS, and, if applicable, the County.**

~~**7.7.1. County. County previously paid for the initial design of the Extensions. Subject to the defined contribution by SHS for the cost of consolidating the DMW design of the forcemain with plans previously prepared for the County, County shall be responsible for the cost of design and right-of-way evaluation and acquisition in accordance with Paragraph 7.4.1. County shall be responsible for the cost of constructing Extensions sized only to provide the capacity reserved under Paragraph 7.3.1 ("Primary Extensions Cost"), which shall be determined in accordance with Paragraph 7.7.6. County shall also be responsible for the costs of design and construction of any component(s) of the Extensions requested by County under Paragraphs 7.2.1(iii) or 7.2.2(v). County shall also be responsible for the costs**~~

~~of design, connection to the water and sewer stubs constructed by SHS, and construction of the improvements described by Paragraph 7.6.~~

~~7.7.2. Town. Town shall be responsible for the cost of design and construction of any component(s) of the Extensions requested by Town under Paragraphs 7.2.1(iii) or 7.2.2(v). In addition, to the extent that the Town requires certain components of the Extensions to be designed, located, oversized or constructed in a manner to facilitate or accommodate future expansion, the Town shall be responsible only for the increased costs of materials associated with such requirement(s).~~

~~7.7.3. SHS. SHS shall be responsible for the actual incremental cost of increasing the flow capacity of the Extensions beyond the flow capacity reserved under Paragraph 7.3.1 to include the flow capacity reserved under Paragraph 7.3.3 ("Incremental Extensions Cost"). SHS shall also be responsible for the costs of design and construction of any component(s) of the Extensions requested by SHS under Paragraphs 7.2.1(iii) or 7.2.2(v). SHS shall also be responsible for the costs of design and construction of the improvements described by Paragraph 7.5.~~

~~7.7.4. Third Parties. In the event the Extensions include additional capacity under Paragraphs 7.3.1, 7.3.2.1 or 7.3.3 or if the Extensions serve parcels lying outside the Property and the Community Center through use of any portion of the infrastructure paid for by County, the County shall be entitled to reimbursement from the owner of such other parcel(s) served by this infrastructure for a pro-rata portion of the costs County incurred to extend water and sewer infrastructure, whether from the general fund, loans, or any combination of funding sources, excluding grants. The Town and County agree to cooperate and negotiate in good faith to evaluate the legal authority, formula, and administrative processes for such reimbursement.~~

~~7.7.5. Future Water Tower. Based on a water supply study of the Town water system completed by Whitman, Requardt & Associates, LLP and a related report entitled "Final Technical Memorandum No. 2" and dated May 8, 2012, the Town agreed not to require additional water storage to meet the projected water demands and fire flow requirements for initial phases of construction on the Property. The timing and allocation of responsibility for the construction and cost of any future water tower on the Property shall be discussed and resolved between the Town, SHS and SHS-Successors in the future.~~

~~7.7.6. Determination of Primary Extensions Costs and Incremental Extensions Costs Between SHS and County. The Primary Extensions Costs and Incremental Extensions Costs shall be determined by the County's bid process associated with construction of the Extensions. The County shall include in its bid requests alternative specifications reasonably acceptable to County and SHS that require bidders to price the Wastewater System Extension with two substitutions: (1) changing the pipe size to construct an 8" diameter forcemain instead of a 12"~~

~~**diameter forcemain, and (2) installation of pump(s) sized to accommodate only the flows required by Paragraph 7.3.1, rather than installation of pump(s) sized to accommodate flows required by Paragraphs 7.3.1 and 7.3.3. Except for the forcemain pipe diameter and pump capacity, all other aspects and components of the Wastewater System Extension shall remain the same. The Primary Extensions Costs shall be equal to the cost of the Water System Extension plus the bid price submitted by the contractor selected by the County for the Wastewater System Extension with the two aforementioned substitutions. The Incremental Extensions Costs shall be equal to the actual bid price accepted by the County for the Wastewater System Extension less the alternative bid price provided by the same contractor for the Wastewater System Extension with the two aforementioned substitutions.**~~

21. **IRRIGATION WELLS.** Paragraph 7.8 of the DRRA is hereby amended as follows:

7.8 Irrigation Well(s). Town and County agree that, subject to applicable State laws and permitting requirements, SHS and SHS-Successors may design, permit, drill, construct, operate and maintain all well(s) required to serve the irrigation water demands of the Property pursuant to applicable rules, regulations, and permits. The location and timing of drilling or construction and the manner, extent and frequency of use of such well(s) shall be at the discretion of SHS and SHS-Successors subject to applicable permits**, except that no irrigation wells shall be permitted in the Magothy or Upper Patapsco aquifers**. No such well(s) or any system connected thereto may be connected to the Town water system or any facility connected to the Town water system.

22. **UTILITY DEDICATIONS.** Paragraph 7.10 of the DRRA is hereby amended as follows:

7.10. Dedication to Town. The Water Facilities, Wastewater Facilities, all duct banks **intended for use by the Town**~~**described by Paragraph 7.12 (subject to certain express reservations)**~~, Gas System Extension~~**(defined below)**~~, and all easements necessary to provide utility service to the Property by the Town shall be conveyed to and accepted by Town upon completion of construction of such facility(s), in accordance with the policies and procedures typically applicable to such dedications.

23. **GAS SYSTEM EXTENSION.** Paragraph 7.11 of the DRRA is hereby amended as follows:

7.11. Gas System Extension. **Gas service, if any, for development of the Property shall be provided by the Town, with responsibilities for system improvements and extensions to be determined in accordance with the applicable tariff and memorialized by one or more public works agreement(s) between the Town and SHS** ~~**Pursuant to Paragraph 7.4, the Town shall construct a 6-inch H.P. 60 PSI gas main from the gate station on Dover Road to a point immediately west of**~~

~~Maryland Route 662 at the southernmost corner of the Property, which location is generally depicted by Exhibits M and O~~ ("**Gas System Extension**"). **~~SHS shall be responsible for engaging a qualified contractor as per Easton Utilities requirements to extend the 6-inch gas main under and then along the east side of relocated Route 662 as generally depicted by Exhibits M and O. SHS shall provide connections to the new hospital central energy plant and valve "T"s for future buildings. SHS shall also construct a 2-inch feed to the southern boundary of the Pump Station/Substation Parcel. The County shall be responsible for connection of the pump station's emergency generator to the 2-inch line installed and capped by SHS at the Pump Station/Substation Parcel boundary. The Town shall provide interruptible gas service to the Property in accordance with the applicable tariff and under the terms of a "special contract" to be negotiated between SHS and Town and subject to approval by the Public Service Commission.~~**

24. DUCT BANKS. Paragraph 7.12 of the DRRA is hereby amended as follows:

7.12. Property Duct Bank. The design, location, quality and responsibility for construction of duct banks in connection with the development of the Property shall be **memorialized by one or more public works agreement(s) between the Town and SHS. ~~SHS shall construct duct banks on the Property for use by the Town, SHS and others as generally depicted by Exhibits M-O, and. The duct bank extending along the west side of the entire length of relocated Route 662 shall consist of twelve (12) 6" conduits, all of which shall be available for use by Town for electric, fiber optic and broadband TV cable, and shall include manholes every 1,000 feet. SHS shall construct, at its expense, a duct bank from Route 662 to the southern boundary of the Pump Station/Substation Parcel consisting of three (3) 6" conduits and two (2) 4" conduits. County shall be responsible for extending this duct bank across the Pump Station/Substation Parcel to the substation and pump station, as agreed by Town and County. SHS shall construct an additional duct bank consisting of seven (7) 4" conduits, four (4) of which will be made available to Verizon while the remaining three (3) will remain available for use by SHS or its assigns or designees for future needs. Unless otherwise agreed by SHS and Town, SHS shall construct an additional duct bank consisting of six (6) 6" conduits, which shall extend along the northern boundary of the Property from Hailem School Road to the central energy plant as generally depicted by Exhibits M and O. All duct banks shall be protected by concrete backfill at road crossings in accordance with applicable Town standards. The foregoing duct banks will be dedicated to Town, subject to SHS' right to use of the three ducts reserved for SHS or its assigns and four ducts reserved for Verizon.~~**

25. ELECTRIC SERVICE. Paragraph 7.13 of the DRRA is hereby amended as follows:

7.13. Electric Service and System Extension. **Electric service for development of the Property shall be provided by the Town, with responsibilities for system improvements and extensions to be determined in accordance with the applicable**

tariff and memorialized by one or more public works agreement(s) between the Town and SHS. ~~**Town shall provide temporary electric service (1000A, 480V, 3 Phase) to within one-hundred (100) feet of the proposed central energy plant ("Temporary Electric Service"). SHS shall notify the Town of the location of the terminus for such temporary electric service at least four (4) months prior to the completion deadline for the Initial Electric System Extension as provided by Section 7.4.**~~

~~**Town shall extend primary 25 KV electric service to the Property from its existing Mini Sub 3 through an underground duct bank system, with the costs thereof to be assessed in accordance with applicable tariffs and Paragraph 7.4. All off-site duct construction shall be constructed by the Town. Within the Property, the Town shall provide and install the electrical cable and system components within the duct system installed by SHS pursuant to Paragraph 7.12. The duct bank located on the Property shall be complete with pull strings and accepted by Town at least five (5) months prior to the Town's deadline for completion of the Permanent Electric Service as provided by Section 7.4. The Town's deadline for completion of Permanent Electric System Extension shall be extended on a day-for-day basis for each day that SHS' completion of the duct bank required for such extension is delayed. Town shall relocate the existing 8.3 KV electrical system located adjacent to Route 662 upon SHS' completion and acceptance by Town of the duct bank components required for such work and shall complete such relocation within 90 days of completion of the duct bank. SHS' contribution to Easton Utilities towards the total cost of relocating the 8.3 KV components, if any, shall be determined in accordance with the applicable tariff and generally applicable policies of the Town. Additionally, in accordance with Paragraph 7.4, Town shall extend a redundant 25KV service line from its existing Substation # 3 overhead to the northern Property corner at Hailem School Road and shall provide and install the electrical cable and system components from Hailem School Road to the central energy plant with the costs thereof to be assessed in accordance with applicable tariffs and Paragraph 7.4. This service is large and requires a special investment for delivery of service and will require a special contract. Extensions of the primary and redundant 25KV electric lines to the central energy plant are collectively referred to as the "Permanent Electric System Extension".**~~

26. **EASEMENTS**. Paragraph 9.1 of the DRRA is hereby amended as follows:

9.1 Easements. SHS (for itself and SHS-Successors), County and Town agree to grant to each other upon request and at no cost rights-of-way or easements over their respective properties in the event that such rights-of-way or easements shall be necessary for the installation, maintenance, replacement and/or removal of infrastructure related to the Development of the Property, including without limitation, roads, sidewalks, utility lines, and drainage improvements, provided the use of such easements will not interfere with the owner's use and enjoyment of the subject property, and except that the Town does not agree to grant easements over its property for competing utilities or services. If SHS or the County is unable to obtain off-site easements and rights-of-way as may be necessary

for extension of utilities to serve Section One of the Property, the Town agrees to assist such Party in obtaining such easements and rights-of-way. If necessary, to the extent the Town has the legal authority, the Town agrees to institute and process condemnation proceedings to acquire such easements and rights-of-way, the costs of which shall be paid **as established by one or more public works agreement(s) between the Parties~~by the County if required pursuant to Paragraph 7.7.1 or otherwise by SHS~~**.

27. RECORDATION OF FIRST AMENDMENT. This First Amendment shall be recorded in the County Land Records within twenty (20) days of the last date of execution of this First Amendment at SHS' expense.

28. ENTIRE AGREEMENT; INCORPORATION BY REFERENCE. The Agreement, as amended by this First Amendment, constitutes the entire understanding between the Parties with respect to the transactions contemplated by the Agreement, and all prior oral or written understandings, representations and statements are merged into the Agreement except the Annexation Agreement. All exhibits and other document attached to this First Amendment are incorporated herein by reference for the purposes set forth herein.

29. NO PARTY DEEMED DRAFTER. The final language of this First Amendment Agreement is the result of extensive negotiations. Each Party has thoroughly reviewed this Agreement and has had the advice of counsel prior to execution hereof, and no Party shall be deemed to be the drafter of the First Amendment for purposes of judicial construction.

30. COUNTERPARTS. This First Amendment may be executed by the Parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties had executed the same instrument.

31. RATIFICATION OF DRRA. Except as expressly modified herein, all terms and conditions of the DRRA shall remain in full force and effect.

REMAINDER OF PAGE INTENTIONALLY BLANK

IN WITNESS WHEREOF, the Town, County and SHS have executed this Agreement under seal on the dates set forth below.

ATTEST: **TOWN OF EASTON**

_____ By: _____(SEAL)
Donald J. Richardson, Town Manager Megan J.M. Cook, Mayor

_____
Approved as to form and legal sufficiency
by Sharon VanEmburgh, Esq., Town Attorney

STATE OF MARYLAND, COUNTY OF TALBOT, TO WIT:

I HEREBY CERTIFY, that on this _____ day of _____, 2024, before me, a Notary Public of the State aforesaid, personally appeared *Megan J.M. Cook*, who acknowledged herself to be the Mayor of the TOWN OF EASTON, a Maryland municipal corporation, known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing Agreement, and acknowledged that she executed the same for the purposes therein contained as the fully authorized agent of said Town of Easton.

WITNESS my hand and Notarial Seal.

_____
My Commission expires: _____ Notary Public

SIGNATURES CONTINUE ON FOLLOWING PAGES

ATTEST:

TALBOT COUNTY, MARYLAND

_____
Clay Stamp, County Manager

By: _____(SEAL)
Chuck Callahan, President
Talbot County Council

_____
Approved as to form and legal sufficiency
by Patrick Thomas, Esq., County Attorney

STATE OF MARYLAND, COUNTY OF TALBOT, TO WIT:

I HEREBY CERTIFY, that on this _____ day of _____, 2024, before me, the subscriber, a Notary Public of the State of Maryland, personally appeared *Chuck Callahan*, who acknowledged himself to be the President of the TALBOT COUNTY COUNCIL, the chief executive of Talbot County, Maryland, a charter county and political subdivision of the State of Maryland, and that he as such President, being authorized so to do, executed the foregoing Agreement for the purposes therein contained by signing the name of said Talbot County, Maryland, by himself as President.

AS WITNESS my hand and Notarial seal.

_____
Notary Public

My commission expires: _____

SIGNATURES CONTINUE ON FOLLOWING PAGE

ATTEST: **SHORE HEALTH SYSTEM, INC.**

_____ By: _____(SEAL)
Kenneth D. Kozel, President and CEO

STATE OF MARYLAND, COUNTY OF TALBOT, TO WIT:

I HEREBY CERTIFY, that on this ____ day of _____, 2024, before me, a Notary Public of the aforesaid State, personally appeared *Kenneth D. Kozel*, President and CEO of SHORE HEALTH SYSTEM, INC., who was known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing Agreement, and acknowledged that he executed the same for the purposes therein contained as the fully authorized agent of said Shore Health System, Inc.

WITNESS my hand and Notarial Seal.

_____
My Commission expires: _____ Notary Public

I hereby certify this Agreement was prepared by or under the supervision of the undersigned, an attorney admitted to practice by the Supreme Court of Maryland.

_____
Ryan D. Showalter, Esq.

EXHIBIT FA-E

EXISTING AND REQUIRED DEVELOPMENT APPROVALS AND PERMITS

Existing Development Approvals and Permits

1. Establishment of Regional Healthcare District for the Property;
2. Sketch site plan approval for the Hospital issued October, 2023;
3. Maryland Department of the Environment nontidal wetlands permit;
4. Subdivision plat recorded in Plat Cabinet MAS 83, pages 458 through 464, inclusive (Initial Plat);
5. Forest conservation approval for the Property issued in conjunction with approval of the Initial Plat;
6. Sewer and/or water reservations or allocations as set forth in Paragraph 7.2.3 of the DRRA; and
7. Talbot County Bill 1231 vacating the portion of Rt. 662 to be transferred to the County following completion of the new Rt. 662 alignment.

Required Development Approvals and Permits

1. State Highway Administration access and/or improvements construction permits;
2. Maryland Department of the Environment nontidal wetlands permit;
3. Final site plan approval for all phases of the Project;
4. Subdivision plat(s) consolidating Lots 1 and 7, establishing the Substation Parcel, Pump Station Parcel and all subsequent phases of the Project;
5. Supplemental sewer and/or water reservations or allocations;
6. Variances;
7. Special exceptions;
8. Street abandonments/vacations;
9. Stormwater management plan approvals;
10. Sediment and erosion control approvals;
11. Grading permits;
12. Building permits; and
13. Occupancy certificates.

EXHIBIT FA-G

PLAT SHOWING PROPERTY

The attached plat is a reduced-scale copy of the subdivision plat prepared by Daft McCune Walker Inc. entitled "PLAT OF SUBDIVISION, LOTS 1 THROUGH 7, PARCEL A, AND REVISED TAX PARCEL 38", dated October 8, 2014, last revised October 9, 2014 and ~~**intended to be**~~ recorded among the Plat Records of Talbot County, Maryland **in Plat Cabinet MAS 83, pages 458 through 464, inclusive**~~**hereafter**~~, which full-scale record plat is incorporated herein by reference.

EXHIBIT FA-H

LEGAL DESCRIPTION OF PROPERTY

The Property subject to this Agreement consists of Lots 1, 2, 3, **5** and ~~**75**~~ as depicted and described by the Initial Plat**, which Initial Plat is incorporated herein for**~~**. Such Property is**~~ more particular~~**ly**~~ descri~~**bed**~~**ptions thereof** by metes and bounds, courses and distances ~~**by the following legal descriptions prepared by Daft, McCune & Walker, Inc., attached hereto and incorporated herein:**~~

~~**1. Proposed Lot 1 as Laid Out and Shown On a Plat Entitled "Plat of Subdivision, Lots 1 through 7, Parcel A, and Revised Parcel 38" Intended to be Recorded Among the Land Records of Talbot County, Maryland, P/O Tax Map 17, Parcel 75 12.538 Acre Parcel, West of MD Rte. 50, East of Longwoods Road, Talbot County, Maryland;**~~

~~**2. Proposed Lot 2 as Laid Out and Shown on a Plat Entitled "Plat of Subdivision, Lots 1 through 7, Parcel A, and revised Parcel 38" Intended to be Recorded Among the Land Records of Talbot County, Maryland, P/O Tax Map 17, Parcel 75, 19.800 Acres, West of MD Rte. 50, East of Longwoods Road, Talbot County, Maryland;**~~

~~**3. Proposed Lot 3 as Laid Out and Shown on a Plat Entitled "Plat of Subdivision, Lots 1 through 7, Parcel A, and Revised Parcel 38" Intended to be Recorded Among the Land Records of Talbot County, Maryland, P/O Tax Map 17, Parcels 75 and 129, 77.074 Acre Parcel, West of MD Rte. 50, East of Hailem School Road, Talbot County, Maryland; and**~~

4. ~~**Proposed Lot 5 as Laid Out and Shown on a Plat Entitled "Plat of Subdivision, Lots 1 through 7, Parcel A, and Revised Parcel 38" Intended to be Recorded Among the Land Records of Talbot County, Maryland, P/O Tax Map 17, Parcel 129, 89.710 Acre Parcel, West of MD Rte. 50, East of Hailem School Road, Talbot County, Maryland**~~.

EXHIBIT FA-I

PARTIAL ASSIGNMENT, ASSUMPTION AND NOVATION AGREEMENT FORM

THIS PARTIAL ASSIGNMENT, ASSUMPTION AND NOVATION AGREEMENT ("**Agreement**") is entered by and between Shore Health System, Inc., a Maryland corporation ("**SHS**"), Town of Easton, a Maryland municipal corporation ("**Town**"), Talbot County, Maryland, a Maryland charter county ("**County**") and _____, a _____ _____ ("**SHS-Assignee**").

Recitals

A. SHS, Town and County entered into a Development Rights and Responsibilities Agreement ~~**("Development Agreement"), which is**~~ dated October 14, 2014 and ~~**which is**~~ recorded among the Land Records of Talbot County at Liber **MAS 2206**~~___~~, folio **266**~~___~~ **, as amended by a First Amendment to Development Rights and Responsibilities Agreement dated _____ , 2024 and recorded at Liber , folio (collectively, the "Development Agreement")**. Pursuant to the Development Agreement, SHS agreed to develop certain property more particularly described in the Development Agreement ("**Subject Property**") subject to certain conditions and obligations set forth in the Development Agreement.

B. SHS desires to assign a portion of its respective interests under the Development Agreement to SHS-Assignee under a written agreement dated _____ __, 20__ as to that portion of the Subject Property identified and described in Attachment 1, which is attached hereto and incorporated herein by this reference ("**Assigned Property**").

C. Pursuant to Paragraphs 2.6.1 and 2.6.3 of the Development Agreement, SHS-Assignee agrees to assume all of SHS' obligations and be subject to all of the provisions of the Development Agreement with respect to the Assigned Property and Town and County agree to release SHS with respect to the Assigned Property.

D. Town and County acknowledge and agree that SHS-Assignee and SHS have complied with the requirements of Paragraph 2.6.3. of the Development Agreement.

NOW, THEREFORE, SHS, Town, County and Assignee hereby agree as follows:

1. With respect to the Assigned Property, SHS-Assignee hereby assumes all of the burdens and obligations of SHS under the Development Agreement, and agrees to assume and fully perform all of the duties and obligations of SHS under the Development Agreement, and to be subject to all the terms and conditions thereof, it being the express intention and agreement of SHS, SHS-Assignee, Town and County that, upon the execution of this Agreement, SHS-Assignee shall become substituted for SHS under the Development Agreement with respect to the Assigned Property and SHS shall be released from all obligations related to the Assigned Property.

2. All of the covenants, terms and conditions set forth herein shall be binding upon and shall inure to the benefit of the parties hereto and to their respective heirs, personal representatives, successors and assigns.

3. The Town and County may rely upon this Agreement in consenting to the assignment of rights to and assumption of obligations by the Assignee, and the release of SHS from obligations, relating to the Assigned Property hereunder.

4. This Agreement shall be recorded among the Land Records of Talbot County, Maryland.

5. The individuals executing this Agreement represent and warrant that they have the right, power, and legal capacity, and authority to enter into and to execute this Agreement on behalf of the respective legal entities of SHS, SHS-Assignee, Town and County.

6. The Recitals above are incorporated herein as material terms of this Agreement.

[*This form is included in this Agreement solely as a resource and does not preclude the Parties from revising this form or adding additional or special provisions, rights and obligations pertaining to any particular assignments*]

IN WITNESS WHEREOF, the parties do hereby agree to the full performance of the terms set forth herein.

SHS

By: _____
Name/Title: _____
Date: _____

SHS-ASSIGNEE

By: _____
Name/Title: _____
Date: _____

TOWN

By: _____
Name/Title: _____
Date: _____

COUNTY

By: _____
Name/Title: _____
Date: _____

[ACKNOWLEDGMENTS ATTACHED]

ATTACHMENT 1

LOCATION AND LEGAL DESCRIPTION OF THE PORTION OF THE PROPERTY ASSIGNED ("ASSIGNED PROPERTY")

EXHIBIT FA-R

FORM OF ESTOPPEL CERTIFICATE

Date: _____, 20__

To: _____
_____

Re: *Development Rights and Responsibilities Agreement, dated October 14, 2014, executed by Shore Health System, Inc. ("SHS"), Town of Easton ("Town") and Talbot County, Maryland ("County") recorded at Liber* ***MAS 2206*** *folio* ***266*** *in the Land Records of Talbot County, Maryland***, as amended by a First Amendment dated _____ __, 2024 and recorded at Liber ____, folio _____ (collectively, the** *"Development Agreement").*

Ladies/Gentlemen:

In accordance with the Development Agreement, [SHS/the Town/the County] has the authority to certify, as of the date hereof, the following. Capitalized terms herein will have the meanings assigned to them in the Development Agreement unless otherwise defined herein:

5. The Parcel covered by this Estoppel Certificate is depicted by Exhibit "A" attached hereto and is referred to herein as the "Parcel".

6. The Development Agreement is in full force and effect with respect to the Parcel and has not been amended, modified or supplemented in any way except as follows: (if none, so indicate):

a. ___; and
b. ___.

7. [SHS/the Town/the County] has not sent any notices of default to the [SHS/the Town/the County] or [SHS/the Town/the County] of the Parcel under the Development Agreement which remain uncured, except as follows (if none, so indicate):

a. ___; and
b. ___.

8. This Estoppel Certificate is made by [SHS/the Town/the County] and may be relied upon by the addressee in its capacity as a lender related to or secured by the Parcel or as a purchaser or lessee of the Parcel, as applicable. The undersigned has authority to execute this Estoppel Certificate on behalf of [SHS/the Town/the County].

Respectfully,

[SHS/ Town / County]

By: _____
Name, Title: _____

EXHIBIT FA-T

TRAFFIC STUDY

A "Traffic Impact Analysis, Shore Health System Medial Campus, Talbot County, Maryland", prepared by The Traffic Group and dated May 12, 2010 has been reviewed by the Town, County and SHA and approved by SHA.

In response to comments and questions by Town and County staff, The Traffic Group reviewed additional intersections as described in a letter report addressed to Zach Smith, Town of Easton entitled "Supplement to Traffic Impact Analysis dated May 12, 2010", dated September 28, 2010.

To further evaluate potential impacts on County Roads, the County Department of Public Works engaged Wallace, Montgomery & Associates, LLC ("**WMA**") to review the Traffic Impact Analysis prepared by The Traffic Group. WMA's conclusions are summarized in a report entitled "Traffic Impact Analysis, Shore Health System Medial Campus, Easton, Maryland" and dated May 2011.

The foregoing were reviewed and confirmed by a "Traffic Impact Analysis, University of Maryland Medical System, Easton Hospital" prepared by The Traffic Group, dated November 15, 2023 and revised February 9, 2024.

These four traffic impact analyses are referred to collectively as the "**Traffic Study**". Complete copies of the Traffic Study, including all appendices, are on file with the Town and County. The Traffic Group analyses were evaluated by SHA to determine the nature and extent of transportation improvements to State highways required by Development of the Property as described in such reports. The Traffic Study was reviewed by the Town and County to determine the traffic impacts on County and Town roads from build-out of Section One using then-current projections. The parties acknowledge and agree that the Traffic Study was not intended to and shall not be interpreted or applied to limit uses or Development of the Property.

EXHIBIT FA-1

TOWN PLANNING COMMISSION LETTER

EXHIBIT FA-2

TOWN FIRST AMENDMENT RESOLUTION

EXHIBIT FA-3

COUNTY PLANNING COMMISSION RESOLUTION

EXHIBIT FA-4

COUNTY FIRST AMENDMENT RESOLUTION

TOWN OF EASTON

Planning & Zoning Department

STAFF MEMORANDUM

TO: EASTON PLANNING AND ZONING COMMISSION

FROM: LYNN B. THOMAS, JR., AICP
TOWN PLANNER

DATE: MAY 6, 2024

SUBJECT: PROPOSED ZONING CODE AMENDMENTS - FOLLOW-UP

The Commission will recall that potential Zoning Code amendments were presented and discussed at your March meeting. At that time, you assigned each proposed change to one of several categories. One of which were for proposed changes identified as so-called "no-brainers" and the others which were categorized such that additional research and/or discussion was requested. For simplicity sake, I have lumped all of the latter together here. Here then are the various proposed amendments, beginning with the "No-Brainers":

1. **Add definitions for sheds, swimming pools, and patios -** We have no definitions for these common structures and given that they have unique standards (e.g., setbacks) it is important to establish precisely what each term encompasses. In addition, the ordinance needs to specify whether, and to what extent, we may allow encroachment of patios into setbacks.

   Shed - a small accessory structure used to store items related to or used in connection with a residence.

   Swimming pool - any artificial structure, basin, chamber or tank, except a private spa, either above or below ground, which is used or intended to be used for the primary

purpose of swimming, diving, wading or recreational bathing. A swimming pool includes all associated equipment, structures and facilities located within a common enclosure. A unit used in conjunction with the private practice of a physician or physical therapist is not a swimming pool.

Patio - an uncovered horizontal structure with a surface height, at any point, no greater than two feet (2') above grade, intended for use as an outdoor amenity space.

2. **Removal of "Tree of Heaven" as a suitable street tree -**

This is a highly invasive species and not appropriate for planting generally ,or specifically as a Street Tree.

Currently Tree of Heaven is listed in Section 28-1014.3 under the exceptions to the acceptable plant species list, indicating it is "suitable as street tree only." If we want to prohibit its use under any scenario, we simply need to change that note to read "Not suitable in any location." This is consistent with several other species on this list (e.g., Bradford Pear, or Black Honey locust).

I also understand that there is a desire to address the osage orange in the same manner. Just like the tree of heaven, it is currently listed as "suitable as street trees only." Banning it everywhere would be accomplished identical to what is proposed for the tree of heaven above.

3. **Reducing the site triangle distance for some zones and clarifying whether an alley and street corner is considered an intersection**

There is some thought amongst staff that rather than using a blanket standard, sight triangles should be determined by the design speed of the street, the type of traffic control at the intersection, and the location of the travel ways from the edge of buildings at the corners, at least on urban streets. In any event, the AASHTO Green Book addresses the determination of clear sight triangles and the Town Engineer's Standard Details may also provide additional requirements and guidance. Any changes to the site triangle distance or intersection design in general will require close coordination with the Town Engineer.

Attachment 3 is a more detailed and context-specific version of this standard from St. Petersburg, FL. I think this might be what we are looking for, although the distances used there may not necessarily be the same as we would adopt.

4. **Re-visit restaurant use types to allow more flexibility for hybrid take out/eat in restaurants -**
   The current zoning code lists four types of restaurants: Fast Food, Carry Out/Deli, Night Club, and Sit Down. It does not particularly describe a sit-down restaurant with carry out service, which has become almost commonplace since the COVID Pandemic. This is occasionally an issue with regards to the question of the use and more commonly when trying to determine the appropriate parking requirement.

   I am not sure this is as much of an issue for the use table as it is (or could be) for parking requirements, at least if we assume that carryout is an acceptable activity associated with any type of restaurant. Beyond parking, what is the impact difference for a restaurant that does a moderate carry-out business vs one that does little or none?

   Our parking standards for the various restaurant uses are currently fairly consistent, with a minimum ratio of 1 space per 100 sf GFA and maximum of 1 per 50 for all types except carry-out (which is 1 per 300 and 1 per 200). Given this and the caveat in the paragraph above, I am not sure there is a need to change anything, unless you want to build in flexibility for relief from the minimum parking requirements for any restaurant type when a "significant" portion of the business is anticipated to come from carry-out service. This could obviously be a basis for a parking waiver, but building in administrative flexibility might be appropriate in this specific scenario.

5. **Removing "Parking Districts" from code -** This is an outdated reference to an old code and an old practice whereby businesses located within a defined geographic area could pay a fee in lieu of providing required off-street parking. It was eliminated probably 20 years ago so the reference should be removed from the Zoning Code.

   This will be accomplished (hopefully!) with a simple Search and Delete command.

6. **Revisit minimum parking space requirements -** This is simply a suggestion to look at national standards to make sure we are not out of sync with contemporary recommendations.

   One of the hottest trends in Planning circles currently involves drastic changes to parking standards, highlighted by a handful of communities who have eliminated parking minimums altogether. Such communities have decided to allow parking to be determined by market forces rather than (potentially) prescriptive formulas, many of

which are based on national averages and may be subject to changes in business operations or characteristics over time that are not reflected in the standards.

Our parking ratios were fairly comprehensively updated with the last comprehensive Zoning Code Update in 2021.As such, barring a significant across-the-board change such as that described above, I do not see the need for changes to our parking standards. If there are any specific uses you have concerns about, I will be happy to do some additional research to see what other communities impose.

7. **Change language for parking space dimensions -**
Are our dimensional requirements for parking spaces appropriate?

The dimensional requirements for parking spaces are found in Table 10.1, which is copied below:

Table 10.1

Angle	Minimum Stall Width (W)	Minimum Stall Length (L)	Minimum Aisle Width (Maneuvering Space) (A)
90°	9 feet	18 feet **	24 feet (25')
60°	9 feet	18 feet **	18 feet one-way (16') 22 feet two-way (20')
45°	9 feet	18 feet **	16 feet one-way (12') 22 feet two-way (19')
30°	9 feet	18 feet **	14 feet one-way (12') 22 feet two-way (19')
Parallel	8 feet	22 feet	16 feet one-way 22 feet two-way

** - *Vehicle Overhang: Up to two (2) feet of vehicle overhang into any planter area is allowed provided the planter is a minimum of six feet wide, in this situation the minimum required depth of the parking stall may be reduced by up to two 2 feet When utilizing this option, curbing shall be utilized at the edge of the paved area, rather than wheel stops.*

The standards highlighted in yellow are the recommendations from the 21st Century Land Development Code, a source I frequently reference. The Commission should discuss whether or not they are in favor of changing these (or any other) of our standards. If so, the actual change is easy to make.

8. **Conflicting statements in Article 12 -** Check this section for internal conflicts regarding non-conformities. Also, consider changing from 6 months to 12 consecutive months for a

nonconforming use to be considered to be abandoned unless the use was disrupted due to repair or remodeling.

WIth regards to the time frame for abandonment, that would be a very straightforward change to Section 28-1201 E, as follows:

> E. Any non-conforming use, including the non-conforming use of a lot, parcel or structure that is discontinued or abandoned for a period of ~~six (6) months~~, one (1) year, shall not be resumed thereafter and any future use of lot, parcel, or structure shall conform to the provisions of this Ordinance. Any structure that is moved for any reason for any distance by the owner, shall be required to conform to the regulations for the zoning district in which it is located after it is moved. In the case of any dispute as to whether a non-conforming use is abandoned or discontinued, the burden of proof shall be upon the property owner.

9. **Map Corrections -**
    a. Waterside Village is indicated as CG rather than PUD
    b. Parcel on Creamery and another on Wrightson behind the Seafood Market/Deli are both shown as CG but should have been changed to CB in 2021 Update.
    c. Elliott Road Apartment site in now PUD
    d. Gannon Range site is now PUD
    e. Should we consider changing the base zoning of any part of the properties in the general vicinity of the ill-fated Mansion Apartment on August Street? They are now CB. Was suggested at the meeting that they should be residential, even though until 2021 they were Industrial (I-1).

I think items a through d speak for themselves and simply need to be changed. Item e is potentially subject to further discussion, although so long as the properties in question are also within the PR Overlay, the base zoning is not terribly important except that if it is a residential classification, that does potentially limit the scope/scale of any proposed commercial use. Otherwise, essentially anything can be proposed, subject to site plan approval.

10. **MXW window and door placement standards. -** There is a seemingly contradictory statement that Zach Smith identified that says "The uses on the ground floor shall be visible from and/or accessible to the street through the use of windows and doors on at least 50% of the length of the first floor street frontage. At least 60% or more than 90% of the total surface area of the front elevation shall be in public entrances and windows (including retail display windows)." 28-312.4.4

This is seemingly easy. We just need to decide which provision we would like to see be the standard and eliminate the other (or, figure out a way to clearly distinguish between the two).

11. **MXW LEED standard is outdated -**
    Simply need to change LEED Bronze to LEED Certified.

This is definitely easy and, again, a simple Search and Replace will hopefully fix this issue.

12. **Clean up usage of the terms single-family attached and townhomes -** are these synonymous or is there a difference and if so, what is it and does that affect how each is treated on the use table?

Just a guess, but I am thinking that the term "single-family attached" was originally used in the Zoning Code to disassociate this type of housing from multi-family and the process and/or stigma that was at one time, rightly or wrongly, associated with such uses. I would like to think we have generally moved beyond that now and would favor simply referring to the use as Townhouses or Townhomes. They are, afterall, included amongst the Missing Middle Housing Options. If you agree, this would be another Search and Replace fix, although in this case it would be a fairly extensive one.

Next are the potential amendments that were identified as needing some level of additional discussion. A number of them deal with various issues associated with the Sign Regulations and you specifically grouped those together, so I will include those next:

13. **Revised internal illumination standards for signage -** The current illumination standards for signs are somewhat limited for internal illumination. They are as follows:
    i. Individual backlit letters which are silhouetted against a softly illuminated wall;

    ii. Individual letters with translucent faces, containing soft lighting elements inside each letter; and

    iii. Metal-faced box signs with cut-out letters and soft-glow fluorescent tubes.

    The most common form of internal illumination involves something like item iii, but rarely with metal-faced signs. Instead, they are generally a plastic-like material. They are very common and unless we want to create an even larger number of non-conforming signs, we should probably legitimize them by expressly allowing them in this list, and if we do want to prohibit them, the Code should more clearly make such a statement. There may also be a middle-ground and if so, we should specify what that is. One example of

this is from the City of Alexandria, VA who prohibits internally illuminated translucent ***rectangular*** panel signs (but allows them in other shapes). If the Commission is interested in adding this as a possibility, I suggest we add to this session, something like the following:

iv. Translucent panel signs that are non rectangular in shape.

14. **Revised language regarding signage not being located above the eave line -** The Ordinance currently addresses this issue by stating that:

    B. Wall signs shall not be mounted higher than the eave line or top of the parapet wall of the building and no portions of the sign shall extend beyond the ends of the wall to which it is attached.

    This poses an issue because there are certain roof types where a wall sign would seem appropriate, but are precluded based on this language. A front-facing gable (a la at the Amish Market) is one example. If that is the only configuration where we believe an exception is warranted, the solution may be as simple as revising the language above to something like:
    B. Wall signs shall not be mounted higher than the eave line or top of the parapet wall of the building and no portions of the sign shall extend beyond the ends of the wall to which it is attached. Such signs may extend above the eave line on facades with a front-facing gable roof,in which case such signs shall not extend above the top of the gable.

15. **Removal of fuel price regulations for freestanding signs -** There is actually a State Law that also regulates fuel price signs and our local zoning regulations appear to be at conflict with them. We should either make them consistent, or perhaps eliminate our regulation and simply allow the State law (whatever it is at any given moment) to apply.

The State Law is found in **Maryland Code BUSINESS REGULATION § 10-315 - Advertising signs.** The current Zoning Code allows such signs, but limits them in size to 3 square feet. As I read this State Law, it does not regulate size (and in fact, indicates that such signs are exempt from local zoning number or area limitations), but rather simply requires such signs to be "readable by passing motorists." I think the simplest fix to this issue is something like the following:

H. Signs affixed to the top or sides of an operable fuel dispensing pump ~~shall not exceed three (3) square feet in area~~, per the standards of MD Code Business Regulation Section 10-315, provided such sign ~~and~~ shall only display instructional or price information, and shall not include advertising copy pertaining to any product, sale or promotion.

16. **Freestanding signs where a solid base isn't practical -** Our sign regulations currently require freestanding signs to be constructed on a solid base that is at least as wide as the sign face. We make exceptions in the CB (Central Business) District out of recognition that there likely is insufficient room to accommodate an otherwise permitted freestanding sign given the small lot sizes and the degree to which these lots are usually covered. These properties may have, for example, a post-mounted sign or a projecting sign. Some property-owners in the CG Zoning District have suggested that site constraints limit their ability to comply with this standard as well.

Before adopting changes that grant such relief, I think it is important to determine whether this is actually a widespread problem or relatively isolated to a few properties, possibly with unique circumstances. If the former, it may be legitimate to consider offering some form of relief, but if the latter, that is the textbook example of a Variance for such relief.

I frankly am skeptical that properties in the CG Zoning District are constrained to the point that they cannot locate a sign in conformance with our Regulations. I suspect that instead, they simply do not want to, either for reasons related to cost or a perceived competitive disadvantage. Unless you think our signs standards are too onerous I do not recommend relief in the CG similar to what we offer in the CB. If you want to consider any form of relief, perhaps it is to allow the replacement of a non-conforming sign with one that may not necessarily fully comply with today's regulations, but moves the sign closer (and the more you can detail what that entails, the better).

The remainder of the proposed changes were identified as appropriate for additional discussion, but not sign-related in nature. They are:

17. **Donation Centers -** The proposal that initiated this round of amendments is attached, as prepared by the representative from Planet Aid. If you have been by Giant and seen the "Donation Center" at the far end of the parking lot (next to the main entrance drive between Wal*Mart and the Shopping Center), over the course of the last several months, you will know what they are seeking to legitimize.

18. **Additional differentiation criteria for single family homes -** The current Supplemental Standards for Single Family Detached home differentiation, is as follows:

a. Calculations of Differences in Appearance

1. Differences in bulk and massing shall be reviewed for two (2) lots on either side of the proposed unit on the same side of the street.

2. Where lots are interrupted by an intervening street, parkland or similar feature of at least fifty (50) feet in width, no review shall be necessary.

3. The proposed unit shall be considered different from any vacant lot for which no building permit has been issued without requiring further documentation.

b. Differentiation

The proposed unit shall differ from each other house in at least two (2) of the five criteria listed below, unless the units differ with respect to the number of full stories (#2) then only #2 is required.

1. The unit is a different housing type.

    a. Single-family detached;

    b. Zero lot line (where allowed);

    c. Single-family attached; or

    d. Single-family detached rotated ninety (90) degrees (i.e. the narrower façade fronts the street as opposed to the wider façade).

2. The unit differs in the number of full stories.

3. The unit is served by a different type of garage.

    a. Front-load garage;

    b. Side-load garage;

    c. Rear-load garage;

    d. Detached garage;

    e. Carport; or

f. No Garage.

4. The unit has a different roof type

   a. Gable

   b. Hip;

   c. Gambrel

   d. Mansard;

   e. Roof types a through d rotated ninety (90) degrees; or

   f. Flat.

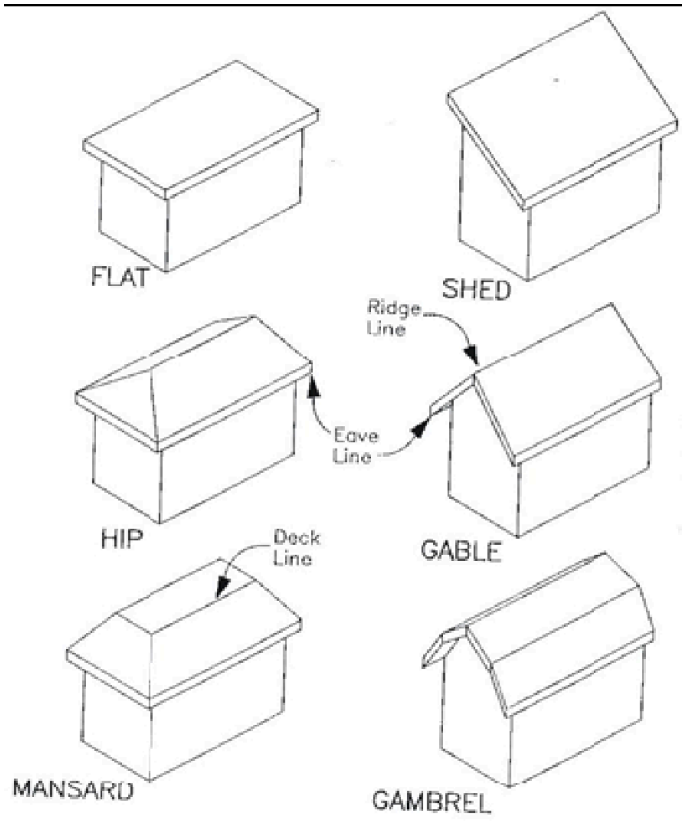


Figure 10.1 Sample Roof Types

5. The unit has variation in the articulation of the front façade.

   a. Garage setback from the front façade of at least four (4) feet;

b. Covered, open walled porch of at least six (6) feet in depth extending at least thirty-three (33) percent of the width of the front façade; or

c. Other articulation of the front façade at least four (4) feet in depth, extending at least thirty-three (33) percent of the width of the front façade.

6. Although not required, differentiation in color between adjacent homes is strongly encouraged.

I would like to add more options for folks to choose from, and if we add enough, require compliance with more of them (e.g., 3 of 7 rather than 2 of 5). Some possibilities:

7. Different cladding materials.
8. Different window sizing and groupings.
9. Difference in number of dormers.
10. Addition of a bay window that projects a minimum of one foot from the front wall, as measured from the ground up.
11. Change of roof pitch of at least two units of change as measured by a roof's vertical rise over its horizontal span (e., 6/12 pitch to 8/12 pitch).

19. **More specifics on what driveway materials are dust free and resistant to erosion -** We have received several requests for gravel driveways, presumably to reduce costs. The zoning ordinance states that "all off-street parking facilities shall be constructed of dust-free materials, have a surface resistant to erosion, drained so as to prevent damage to abutting properties or public streets, and maintained properly by the owner". Historically, gravel and stone were considered to satisfy this standard. More recently, we have interpreted this standard to exclude gravel and crushed aggregate. This prohibition is due to gravel spilling out into the rights-of-way. This is bad for seniors, wheelchairs, and people with physical disabilities or limited mobility. In addition, gravel is eventually compacted and considered an impervious surface (people have made the argument that gravel driveways are good for stormwater infiltration). More consideration and clarification for this standard needs to be made. For example, do we continue to prohibit, but allow exceptions for gravel parking areas for agriculturally-zoned properties, temporary and overflow parking areas, or for areas devoted to commercial vehicle storage? In addition, discussion should be held with the Town Engineer regarding any other equivalent and acceptable paving material(s).

Here is the language in question along with a suggested revision (to at least initiate the discussion):

All off-street parking facilities shall be constructed of dust-free materials, have a surface resistant to erosion, drained so as to prevent damage to abutting properties or public streets, and maintained properly by the owner. Dust free material shall include concrete or bituminous surface. Semi-pervious materials, such as permeable pavers, porous asphalt, porous concrete, grass-crete, or gravel-crete may be be used for residential driveways, vehicle storage areas, designated employee parking areas, or parking spaces provided in excess of the maximum parking requirement (subject to an approved Parking waiver). Any other parking or maneuvering space may utilize semi-pervious materials subject to Planning Commission approval. All off-street parking areas shall be constructed in accordance with the construction specifications as may be developed and maintained by the Town Engineer. Surfaces in areas designated as accessible parking and/or accessible pedestrian paths shall meet all applicable federal and State of Maryland standards.

20. **Food trucks -** The Zoning Code regulates Food Trucks (mobile food uses) on private property. Although food trucks on public property (e.g., on streets or in government-owned parks or parking lots) are also common, those would be regulated in other parts of the Town Code. Currently food trucks on private property are only permitted in limited circumstances:
    a. At an active construction site (the idea being they could provide a lunch option to construction workers).
    b. In association with an approved Special Event (e.g., ABC Store is Having Customer Appreciation Day and as part of the celebration, Food Trucks will be present).
    c. In the Planned Redevelopment District on a site that bears some connection to the principal use (e.g., Four Sisters sells products from their store and Rise Up sells menu items to compliment the coffee shop).

    Along with short-term rentals, Food Trucks are probably the issue I get asked about the most and people are surprised/disappointed by how limiting our rules are. Arguments for allowing them more generally are that they provide more variety in food selection, they provide some lower cost options, they bring a sense of vibrancy to an area, and they can be a way for prospective restaurateurs to get established before moving on to a traditional brick-and-mortar business. The arguments against, in the past, have been primarily two-fold. First, some say they promote a "carnival atmosphere" that Easton has long sought to avoid. Second, there is concern about the impact food trucks may have on traditional restaurants. If the Commission is of a mind that there is a role for more food

trucks in Easton, I believe the two primary objections can be addressed with appropriate supplemental standards.

I believe there are several different variations of food truck uses. One is when food trucks set-up in specified locations, usually on-street, in a public parking lot, or in a park. Here in Easton at least, this scenario would not be regulated by the Zoning Code as it does not specifically address uses in the public realm. Another scenario is when a private property owner wants to establish them permanently or semi-permanently either independently or in conjunction with existing use on the property. This scenario is currently limited to item c above. If you are open to expanding the options for this scenario, I think we would simply delete the phrase "In the Planned Redevelopment District" and say something like "Where indicated as permitted in the Table of Permissible Uses…" You can then maintain the requirement of a connection to the principal use, or delete it and essentially allow a food truck to operate the same as a brick and mortar establishment. A third scenario is one where multiple food trucks are set up on a site. This could be on a permanent basis or Temporarily (and perhaps in association with some special event). Some jurisdictions refer to this by terms such as "Food Truck Court."

I would like the Commission to discuss this issue and indicate the direction they would like to go before proposing something (if anything) for this item.

21. **Parking standards for single-family detached -** Since at least 1976, the parking requirement for single-family detached houses has been two spaces, and the Code has indicated that a driveway with minimum dimensions of 10' by 35' shall be deemed adequate for meeting that requirement. There has been discussion at some of your more recent subdivision reviews concerning the overall appropriateness of this standard. Issues raised include:
    - Garages should count as parking spaces (they never have on the basis that there is no guarantee that they won't become filled up with the homeowners "stuff" and thus not be available for parking).
    - If a driveway of 10' x 35' cannot be provided (or the homeowner does not want to provide it) are there other arrangements that are appropriate and if so, what are the dimensional requirements for them? This is increasingly an issue where we are encouraging houses to be built closer to the street (i.e., with 15' setbacks) and still allowing front-loaded garages.
    - On-street parking should count. The short answer to why it does not is that this is an off-street parking requirement. However, this is now being viewed by many (especially new urbanists and like-minded planners) as a particularly suburban

standard that is detrimental to supporting or reinstating a more urban design in communities. In fact, one of my New Urbanist resources recommends subtracting the amount of on-street parking fronting single family housing, from the required off-street parking. Presumably in most cases this will satisfy the requirement. See also attached discussion from the Form Based Codes book that Tal Bone bequeathed me when he left the Commission. There are a number of good points/observations.

We seem to have multiple options for addressing this issue, depending on how much additional flexibility you want to allow. Starting with the issue of allowing garage space to count as the required parking, while I have not found a jurisdiction which expressly says that garage parking does or does not count, it is in some cases implied. For example, one jurisdiction that I found stipulates that "enclosed space" (which I take to mean a garage and perhaps a carport) may be counted towards the required parking provided that an a[ron is constructed adjacent to the garage that is equal to the width of the garage and a minimum of 20' deep. I presume this is a safeguard against the garage space being filled with "stuff" and thus unable to accommodate vehicles. Another jurisdiction goes even further by actually requiring "a minimum of two (2) enclosed parking spaces with a minimum driveway width of sixteen (16) feet." This jurisdiction also couples this requirement with standards that preclude a front-loaded garage that extends closer to the street than the house does.

I think the solution to this issue may be to build on the existing language and add as many additional options for compliance as you deem appropriate, as follows, for example:

J. Single-family and duplex units may satisfy their off-street parking requirements utilizing any combination of the following options:

(1) A driveway ten (10) feet wide and thirty-five (35) feet long shall be deemed sufficient parking space, for single family or each unit in a duplex.

(2) Space within a structure (e.g.,a garage or carport) may be used towards the satisfaction of the parking requirement provided that a parking apron that is at least as wide as the structure and extends a minimum of 20' away from the structure, is constructed immediately adjacent to said structure.

(3) A parking pad of at least 9' x 18' per space is provided on-site.

(4) ??? (Other options? On-street parking allowance?)

22. **Backing into the Street from a Parking Space** - Another standard that has been part of our regulations since, at least, 1976, is one which states: " All off-street parking spaces, other than for a single family or duplex dwelling, which requires vehicles to back into a public road, street or highway are prohibited." We are finding that this can pose a challenge for infill projects, specifically for potential Missing Middle Housing projects. A thought for consideration - perhaps the limiting factor should not be the use, but rather the type of street onto which such backing would occur. I offer as Exhibit A, the parking lot behind Town Hall, which has a lot more cars backing onto this (admittedly busy) side street than would occur at a MMH type, and yet in 34 years at the Town (most of which has been in an office overlooking this parking lot) I have not witnessed a single accident on this street.

As a starting point for this discussion, I offer the following suggested revision:

> D. All off-street parking space~~s, other than for a single family or duplex dwelling,~~ which requires vehicles to back into a public road, street or highway, other than a residential street (as classified by the Easton Subdivision Regulations) are prohibited.

I would largely defer to Rick on this, but we may also need to consider deleting (or revising) the following standard in conjunction with any changes to item D, above:

> I. No parking spaces except those proposed for single family or duplex residences shall have direct access to a public way.

23. **Clarifying intrusions into easements vs setbacks** - The Code allows for exceptions for certain structures or features to extend into the Building Setback. This is generally not an issue, but it can be when the intrusion is also into//over an easement, which is not uncommon. The beginning of that section along with suggested clarifying language is:

SECTION 28 – 1006 OTHER EXCEPTIONS TO SETBACK REQUIREMENTS

Provided they do not encroach upon any recorded easements, the following features may project into required setbacks as hereinafter set forth.

24. **Subdivision Amendment** - In addition to the foregoing potential Zoning Code Amendments, there is one revision needed to the Subdivision Regulations. In Section

409 (e) Acknowledgements and Notations, we need to add the following required plat note:

A UTILITIES DISTRIBUTION RIGHT-OF-WAY AND EASEMENT IS HEREBY DEDICATED TO THE TOWN OF EASTON IN AND OVER STRIPS OF LAND TEN (10) FEET IN WIDTH ALONG THOSE BOUNDARY LINES CONTIGUOUS TO ANY STREET OR ALLEY AND FIVE (5) FEET IN WIDTH ON EACH SIDE OF SIDE LOT LINES.

Early in the discussion phase of the last Subdivision Regulations Update, this note was flagged for discussion as to whether it was necessary as the preliminary plat standards require that the Applicant shows the proposed location of all rights-of-way and easements. In further discussion with Easton Utilities it was determined that this language is needed and should have been left in the Regulations. Unfortunately, when I cleaned up the document, apparently instead of simply removing the highlighting of this statement, I instead deleted it. The correction is simply to just add the statement back in, where it was and just as stated in the previous version of the document.

Attachment 1 - Proposed Donation Center Text Amendment

1. Donation Bins

a. No person or other legal entity shall place or maintain any Donation Bin on the premises open to the public except when issued a permit by the Building Inspection Division in accordance with this section.

b. All Donation Bins shall be appropriately located so as not to interfere with sight triangles, on-site circulation, required setbacks, landscaping, parking and any other requirements that have been imposed as part of the site plan approval for the property, and shall be placed on a concrete or paved surface.

c. The Donation Bin shall be of a type that is enclosed by use of a receiving door and locked so that the contents of the bin may not be accessed by anyone other than those responsible for the retrieval of the contents.

d. The Donation Bin shall not cover a ground surface area in excess of thirty-one (31) square feet, nor be more than seven (7) feet in height.

e. Donation Bins must be maintained and kept in good repair. The Donation Bins area shall be maintained in a safe, orderly condition. Donation bins shall have no rust, peeling paint or graffiti. The areas around the Donation Bin must be kept clean and free of garbage and debris on the premises where the Donation Bin is located. Each Donation Bin shall be regularly emptied of its contents so that it does not overflow.

f. There shall be no more than two Donation Bins per property.

g. A permit for a Donation Bin shall be required. The permit shall be issued by the Building Inspection Division, but can only be granted in compliance with the following:

i. The Donation Bin is owned by a duly registered organization in good standing in the State of Maryland. The applicant shall submit a statement of declaration of whether the organization is “for profit” or “not for profit”. A “not for profit” must submit proof of the organization’s 501 c (3) designation and a “for profit” must submit proof of the organization’s tax ID as well as name and address of the owner;

ii. Each duly registered non profit organization shall be permitted to have a maximum of eight (8) Donation Bins within the Town of Easton;

iii. The type, size and location of the Donation Bin comply with this subsection;

iv. The applicant submits a leWer of authority/permission from the property owners upon which the Donation Bin is proposed to be located;

v. The name, address and telephone number of the organization is displayed on each Donation Bin;

vi. The general use of any donations or funds raised from the sale of the donations are displayed on each Donation Bin. If the organization is "for profit" the Donation Bin shall be labeled "For Profit" and "Not tax Deductible"; and

vii. All information required to be displayed on the Donation Bin shall be in leWering not smaller than one and a half (1.5) inches tall and must be in contrasting color with the background.

2. Donation Centers

Donation Center – A variation of a Donation Bin that is larger, equipped with lights and monitored via security camera 24 hours per day, seven days per week.

a. Except as hereby modified, Donation Centers shall comply with all Supplemental Standards applicable to Donation Bins.

b. Donation Centers shall not cover a ground surface area in excess of one hundred sixty (160) square feet, nor be more than eight (8) feet in height, exclusive of equipment installed on top of the Donation Center.

c. The Donation Center shall be equipped with lights to provide a safe environment for any citizen who wishes to donate items after dark.

d. The Donation Center shall be equipped and maintained in working condition with 24/7 video monitoring.

e. The Donation Center shall be attended and/or serviced by the organization operating the Donation Center at least three times per week.

f. The Donation Center may not occupy more than four off-street parking spaces.

g. Donation Centers shall be placed on the property of vacant businesses or the parking area of businesses with a clearly demonstrable excess of parking. Such Centers may also be located outside of parking lots on such sites. In either case, such Centers shall be located so as to not interfere with traffic and circulation of the establishment.

h. Donation Centers established at the site of vacant businesses shall cease to operate at said site within 30 days of the Application of a Use and Occupancy permit for the property, unless the new business owner agrees to the continuation

of the Donation Center and can demonstrate that the locational criteria specified in item g above will continue to be satisfied.

i. There shall be no more than one (1) Donation Center within a one (1) mile radius.

j. Any given property may have one (1) Donation Center or two (2) Donation Bins.

Attachment 2 - Form-Based Codes Parking Commentary

(See March Mmeo)

VISIBILITY TRIANGLE REQUIREMENTS

Pedestrians and motorists passing through traffic intersections must be able to see clearly around corners in order to avoid collisions. Clear visibility at intersections of streets, alleys, driveways and sidewalks is a matter of safety.

The ability to see around corners can be impaired by the growth of trees, plants, vehicle parking and even fence installations. Visibility triangle rules require that certain areas of the private property and the abutting City right-of-way be maintained and clear of visibility obstructions.

VISIBILITY TRIANGLE RULES

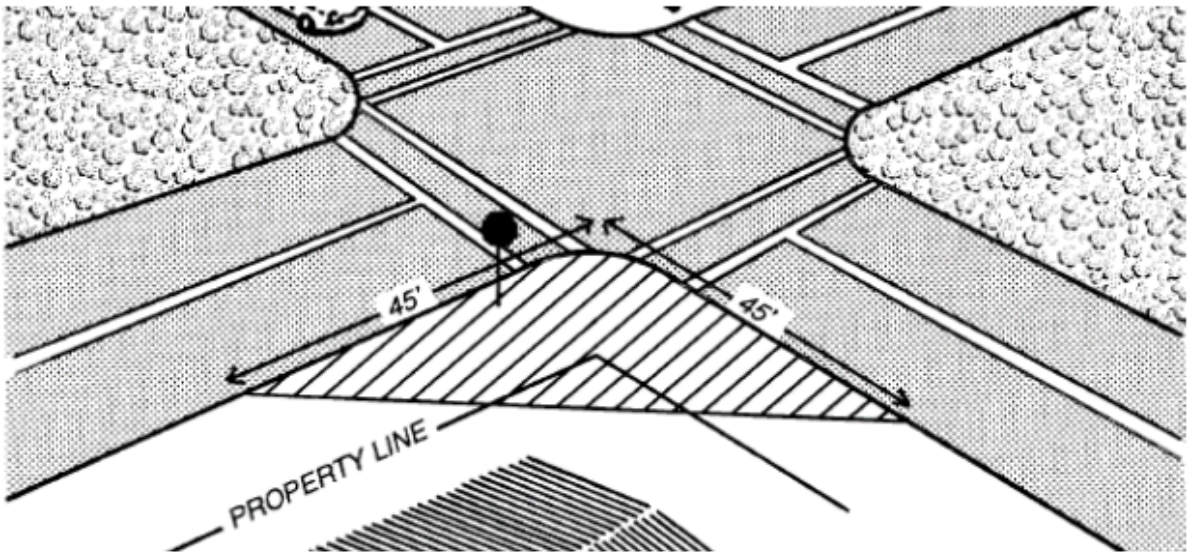
In the measured visibility triangle, the following restrictions apply:

- **No structures** can be placed except fences, walls or berms not higher than three feet
- **No motor vehicle**, trailer or other equipment is allowed to park, stand or stop
- **No vegetation** can be planted or allowed to grow **higher than three feet**, except for one tree on the private property and two trees in the City right-of-way with any tree having **branches no lower than eight feet**

VISIBILITY TRIANGLE DESCRIPTIONS & DIAGRAMS

STREET INTERSECTION

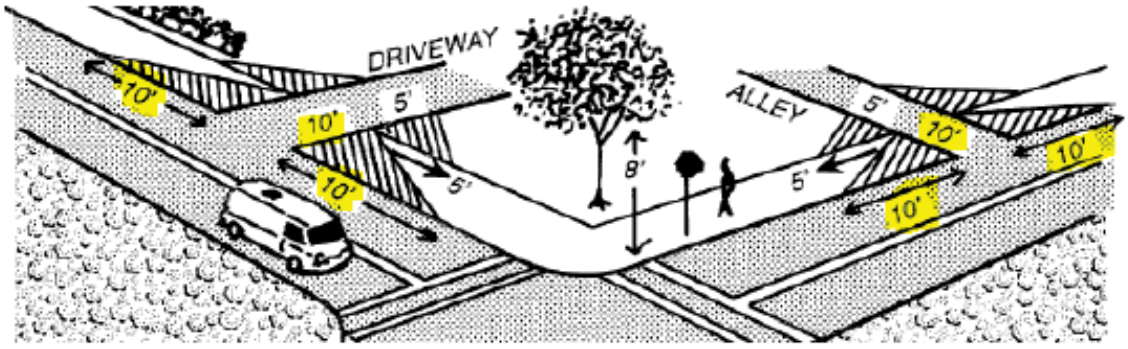
The visibility triangle for a street intersection is a triangle with 45-foot sides, starting at the corner where two curb lines intersect and extending out away from this corner intersection, but still following curb lines.



VISIBILITY TRIANGLE REQUIREMENTS

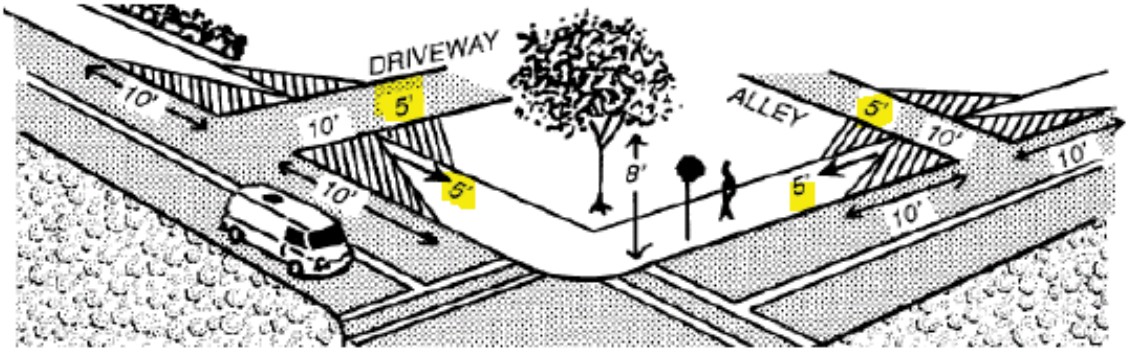
INTERSECTIONS OF ALLEYS OR DRIVEWAYS WITH STREETS

The visibility triangle for intersections of alleys or driveway with streets is a triangle with 10-foot sides extending from the intersection of the curb line but following the edge of the alley or driveway



INTERSECTIONS OF ALLEYS OR DRIVEWAYS WITH SIDEWALKS

The visibility triangle for intersections of alleys or driveways with sidewalks is a triangle with five foot sides extending from the intersection formed using the edge of the sidewalk furthest from the street and the edge of the alley or driveway



EXCEPTIONS

As of April 17, 1998, any lawfully constructed structure (any structure built with a City Building Permit and having received a final approved inspection) is grandfathered and does not have to comply with visibility triangle requirements.

Other visibility triangle exemptions include:

- Benches
- Fire hydrants
- Government signs
- Sign posts
- Traffic control devices
- Utility control devices
- Utility poles

Two types of Zoning Districts – DC (Downtown Center) and CCT-2 (Corridor Commercial Traditional-2) – are not subject to the visibility triangle regulations. This is because many of the existing buildings were allowed to be built years ago, partially in the triangle area, in addition to there being large numbers of traffic signal-controlled intersections which do not require the same degree of visibility.

Regardless of visibility triangle regulations, property owners must take responsibility to trim trees, plants and grass on their property and in the City right-of-way that abuts their property in order to comply with City Codes. Also, in the City right-of-way, property owners must obtain a minor easement and permit from the City's Engineering and Capital Improvements Department to build any structure of any height (for example, a fence).