



TOWN OF EAST HAMPTON
Planning and Zoning Commission
1-860-267-7450
www.easthamptonct.gov

PZC -23-012
Date 5/3/2023

Fee Paid \$4360
Check # _____
Rec'd. By _____

LOCATION 37 South Main St

MAP 20 BLK 51 LOT 27

PROJECT NAME Hampton Village

ZONE HOD

APPLICANT Michael Bakaj
ADDRESS po. box 264 Lebanon, CT 06249

PHONE 860-234-1376
EMAIL mbakaj@snet.net

CONTACT PERSON _____

PHONE _____
EMAIL _____

OWNER Same
ADDRESS _____

PHONE _____
EMAIL _____

SURVEYOR/ENGINEER Mark Reynolds
ADDRESS 63 Norwich Ave, #202, Colchester CT 06415

PHONE 860-516-0033
EMAIL markreynoldsengineer@gmail.com

ATTORNEY _____
ADDRESS _____

PHONE _____
EMAIL _____

APPLICATION TYPE (application must be completed in FULL in order to be accepted)

- 1. SUBDIVISION /RESUBDIVISION /CONSERVATION SUBDIVISION NO. OF LOTS 22
- 3. SITE PLAN MODIFICATION Residential _____ Commercial _____
- 4. SPECIAL PERMIT--SECTION _____ OF THE ZONING REGS. FOR _____
- 5. ZONE CHANGE--FROM _____ TO _____
- 6. AMENDMENT TO ZONING REGULATIONS
- 7. LAKE POCOTOPAUG PROTECTION AREA _____
- 8. ACTIVE ADULT NO OF UNITS _____
- 7. OTHER (DESCRIBE) HOD - 33 Units on 22 Lots

APPLICATION REQUIREMENTS: This application and 10 sets of plans shall be submitted to the Land Use Office and shall be received by the Commission at the next regularly scheduled meeting. (see meeting schedule for deadline dates)

A complete application shall consist of an application, fees, maps /plans(A-2 survey) ,engineers report including drainage calculations and watershed calculations(pre and post), bond estimates, hydrology report, environmental studies, waiver requests and traffic study where applicable

Preliminary discussions are highly recommended for subdivisions 5 lots & over and for larger Special Permit Applications
Abutters notice receipts (green cards) must be handed in to the Planning Office prior to the meeting

APPLICANTS SIGNATURE [Signature] DATE 5-3-23

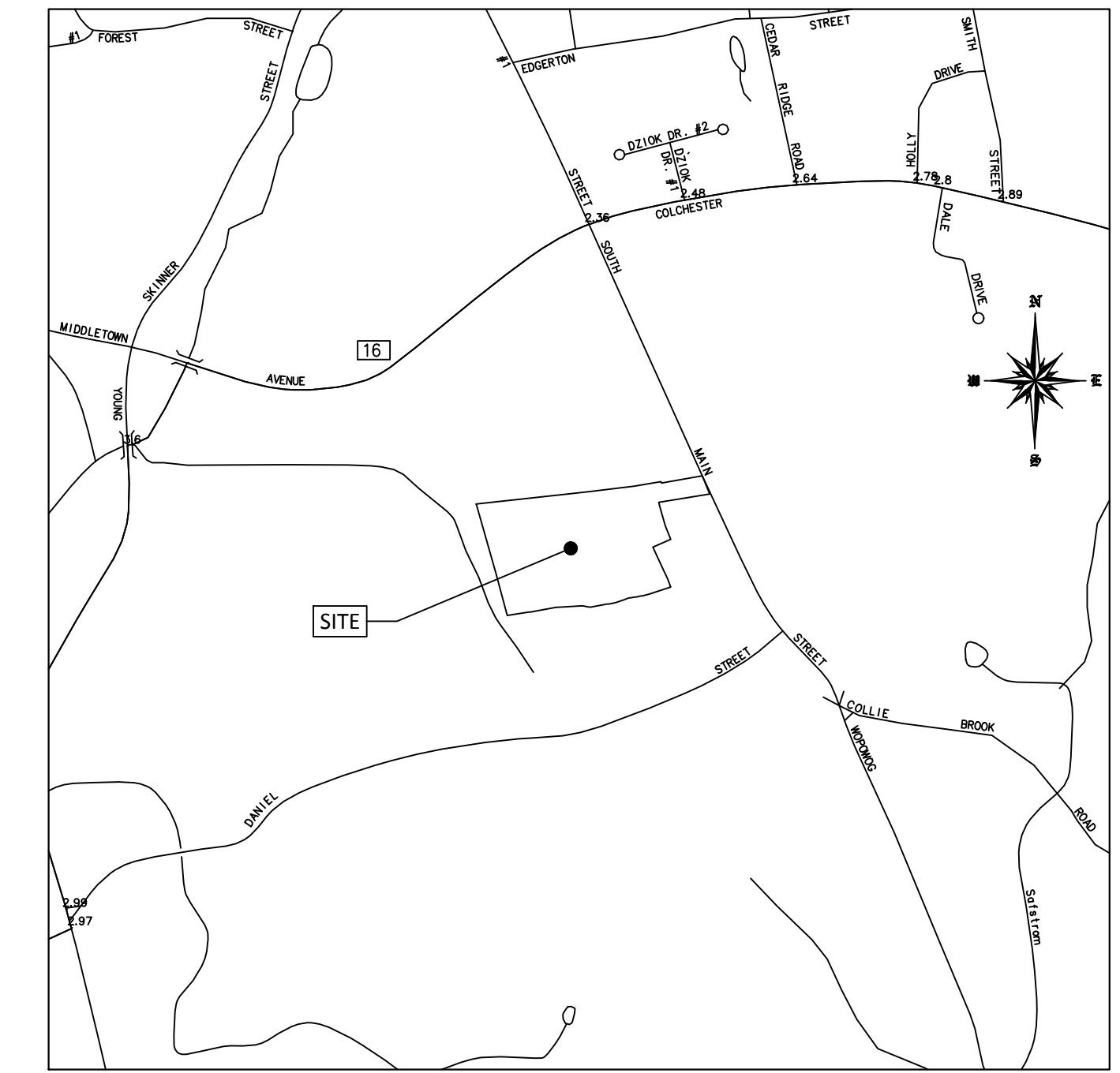
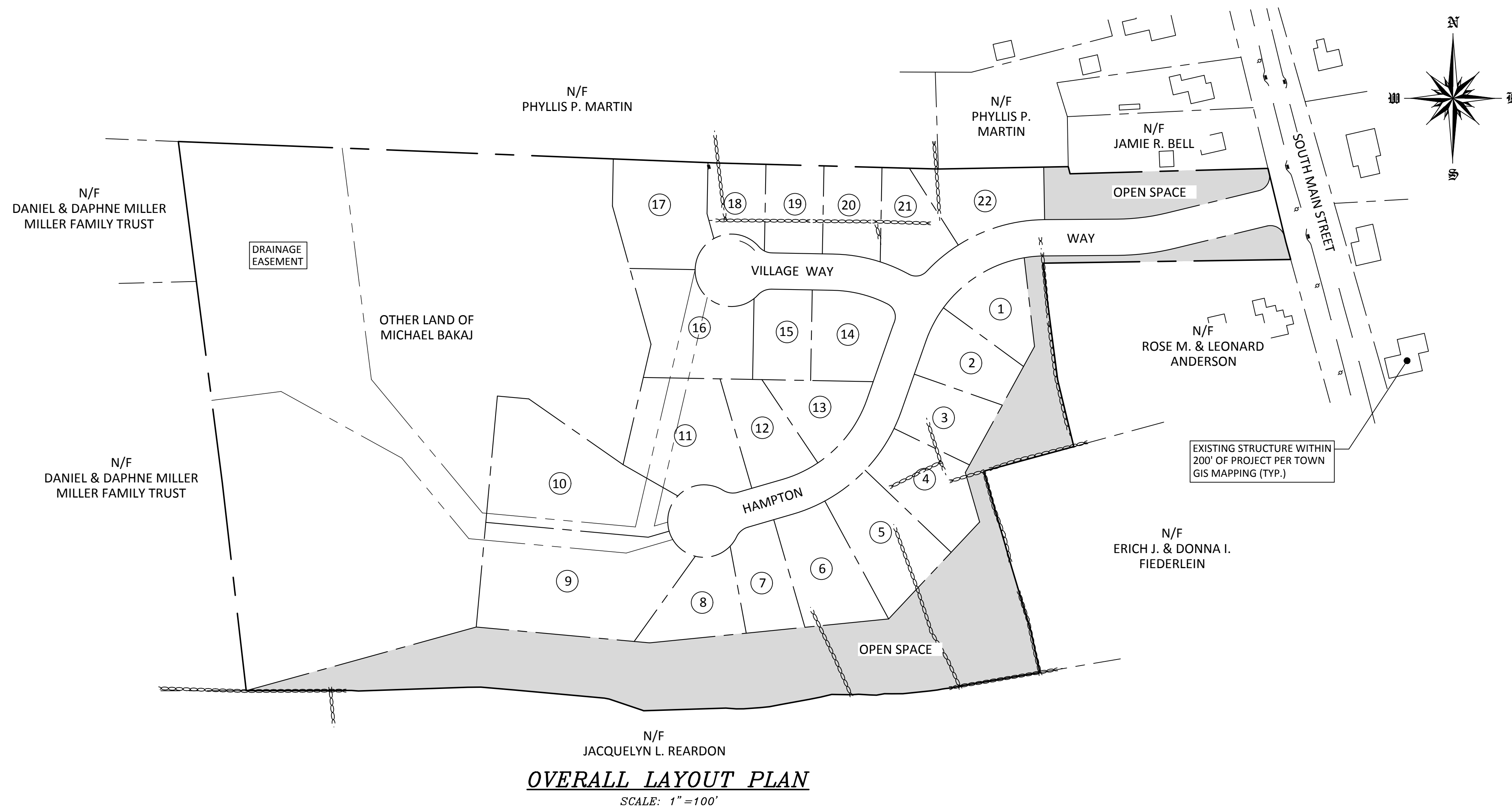
OWNER'S SIGNATURE [Signature] DATE 5-3-23

The owner and applicant hereby grant the East Hampton Planning and Zoning Commission and/or it's agents permission to enter upon the property to which the application is requested for the purpose of inspection and enforcement of the Zoning Regulations and Subdivision Regulations of the Town of East Hampton.

HOUSING OPPORTUNITY DEVELOPMENT SUBDIVISION HAMPTON VILLAGE

37 SOUTH MAIN STREET EAST HAMPTON, CONNECTICUT

PREPARED FOR
BAKAJ CONSTRUCTION LLC



OWNER:
MICHAEL BAKAJ
PO BOX 264
LEBANON, CT. 06249

APPLICANT:
BAKAJ CONSTRUCTION LLC
1269 EXETER ROAD
LEBANON, CT. 06249

NUMBER OF PROPOSED LOTS: 22
ZONE: HOD
TOTAL PARCEL AREA = 878,530 S.F.
TOTAL NUMBER OF PROPOSED UNITS: 33 (11 SINGLE / 11 DUPLEX)
NUMBER OF AFFORDABLE UNITS @ 80% MEDIAN = 5 (15.15%)
NUMBER OF AFFORDABLE UNITS @ 60% MEDIAN = 5 (15.15%)
REQUIRED OPEN SPACE (15%) = 131,780 S.F.
PROVIDED OPEN SPACE: 141,619 S.F. (16.1%)
WETLAND AREA: 72,555 S.F.
DEVELOPABLE AREA: 805,975 S.F.

TABLE OF CONTENTS

SHEET 1	COVER SHEET
SHEET 2	BOUNDARY & EXISTING CONDITIONS PLAN
SHEET 3 & 4	SUBDIVISION PLAN
SHEET 5 & 6	TOPOGRAPHIC MAP
SHEET 7 & 8	EROSION CONTROL PLAN
SHEET 9 & 11	PLAN & PROFILES
SHEET 12	EROSION CONTROL NOTES & DETAILS
SHEET 13 - 15	GENERAL NOTES & DETAILS

APPROVED
PLANNING AND ZONING
COMMISSION
EAST HAMPTON, CT

DATE: _____
SIGNED: _____

RECEIVED
7.5.2023
East Hampton
Land Use Dept.

ROB HELLSTROM
LAND SURVEYING LLC
32 MAIN STREET
HEBRON, CT., 06248
(860) 228-9853
hellstromsurveying@yahoo.com
WWW.RHLSCT.COM

Mailing Address:
P.O. BOX 378
HEBRON, CT. 06248

CIVIL ENGINEERING CONSULTANTS
63 NORWICH AVENUE
COLCHESTER, CT
(860) 516-0033

RES
Reynolds Engineering Services, LLC

COVER SHEET
PROJECT TITLE: HAMPTON VILLAGE
37 SOUTH MAIN STREET
EAST HAMPTON, CT.
PREPARED FOR: BAKAJ CONSTRUCTION LLC
37 SOUTH MAIN STREET
EAST HAMPTON, CT.

Drawing date: 7/26/2021
Drawing Scale: AS NOTED

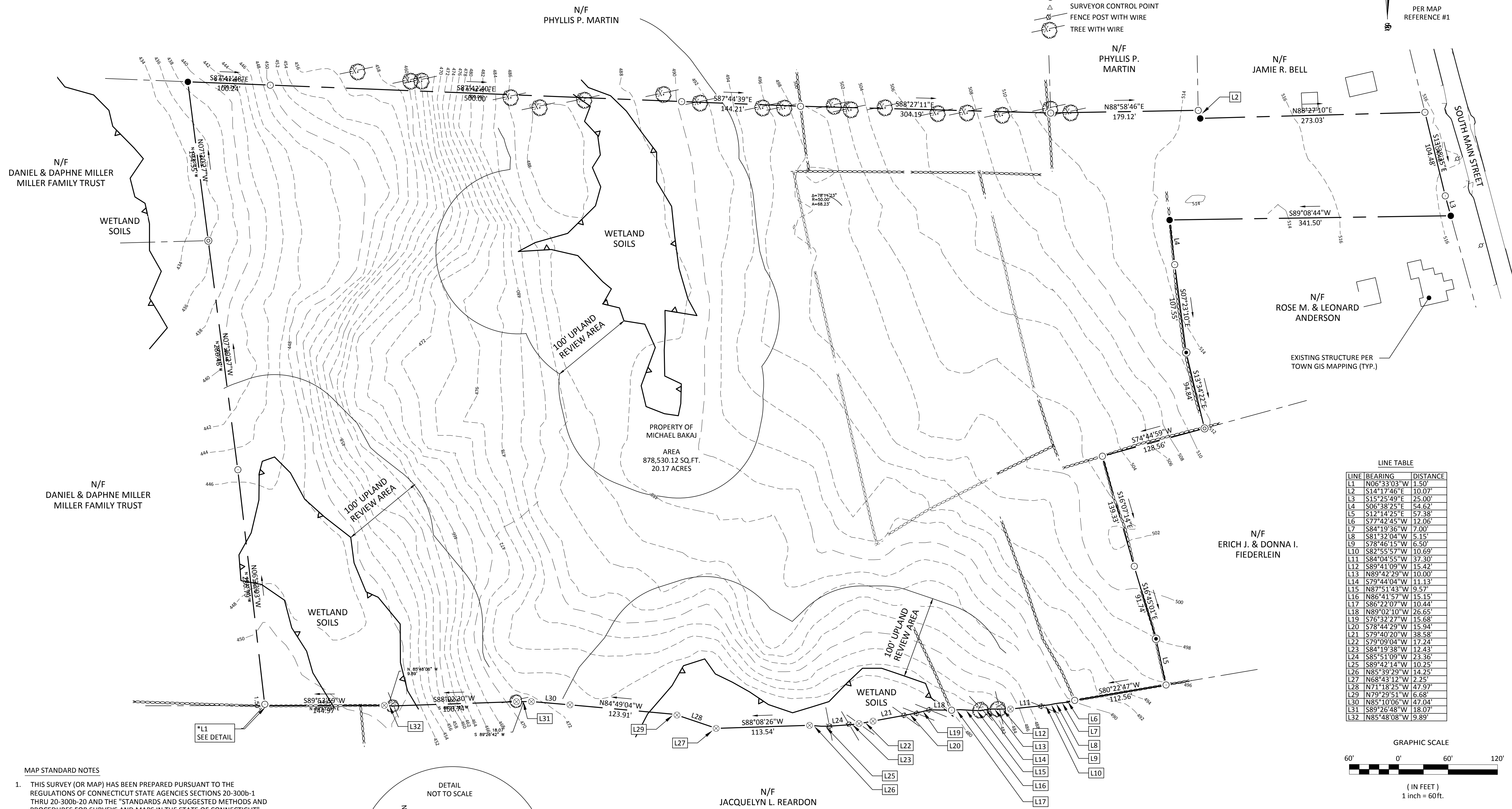
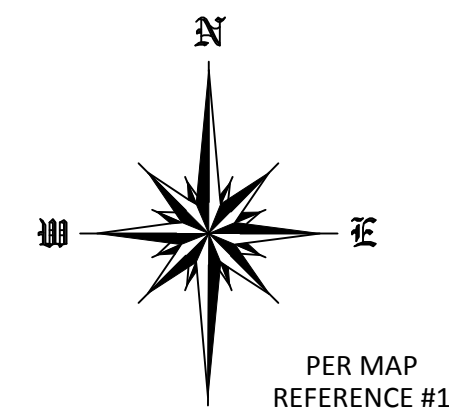
Rev.	Date	Revision	By
1.	3/29/23	REVISED LAYOUT FOR H.O.D. ZONE	SAM
2.	5/03/23	EASEMENTS & DETAILS	SAM
3.	7/05/23	REVIEW COMMENTS	SAM

Designed By: MAR
Drawn By: SAM
Checked By: MAR
CAD File: 21-106

Drawing #: 1 OF 15
Job #: 21-106

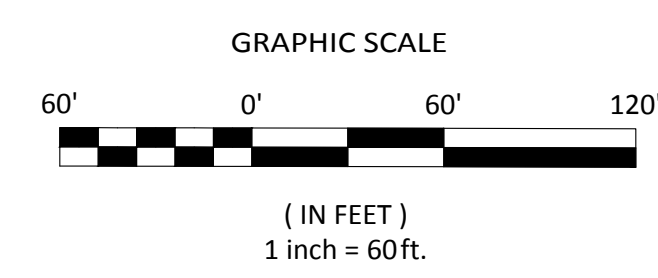
LEGEND

- PROPERTY LINE
- STONE WALL
- - - ZONE LINE
- X - X - WIRE FENCE REMAINS
- UTILITY POLE
- IRON PIN OR PIPE FOUND
- ANGLE POINT
- MONUMENT FOUND
- IRON PIN SET 5/8" REBAR
- DRILL HOLE SET
- DRILL HOLE FOUND
- SURVEYOR CONTROL POINT
- FENCE POST WITH WIRE
- TREE WITH WIRE



LINE TABLE

LINE	BEARING	DISTANCE
L1	N06°33'03\"/>	



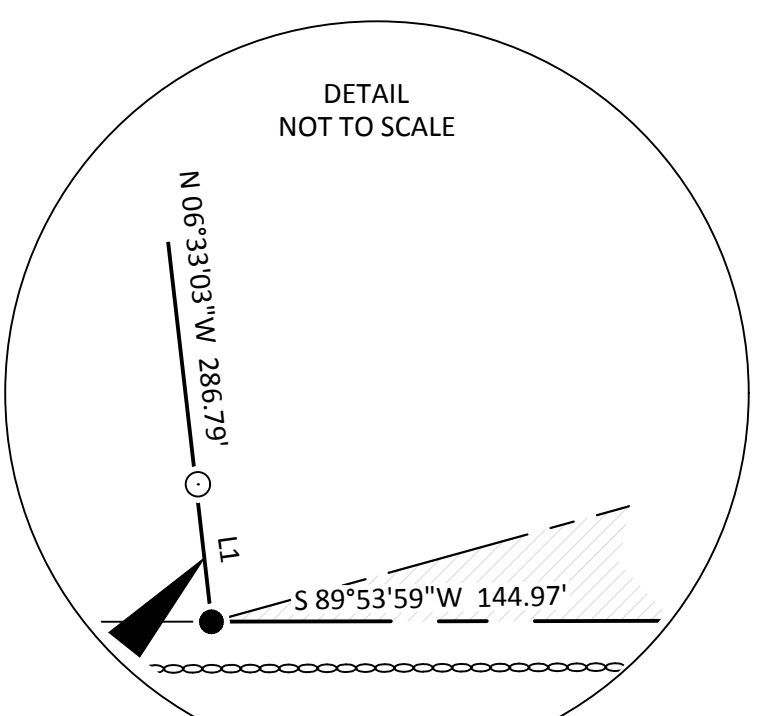
MAP STANDARD NOTES

- THIS SURVEY (OR MAP) HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019.

TYPE OF SURVEY: PROPERTY SURVEY
 BOUNDARY DETERMINATION CATEGORY: RESURVEY
 HORIZONTAL ACCURACY CLASS: "A-2"

MAP REFERENCES:

- "PLAN OF LAND TO BE CONVEYED TO DANIEL A. MILLER BELLTOWN PLACE ASSESSOR'S MAP 20, BLOCK 51, LOT 27, PREPARED FOR RELLETIER DEVELOPMENT CP., LLC, FOR PROPERTY LOCATED AT SOUTH MAIN STREET, TOWN OF EAST HAMPTON, CONNECTICUT", DATED: 01-22-2008, SCALE: 1"=80', BY DUTTON ASSOCIATES, LLC.



I have delineated state of Connecticut wetlands and watercourses present on the subject site and have reviewed this plan and it is my opinion that the limits of the wetlands and watercourses depicted hereon are representative of those delineated in the field.

Richard Snarski

APPROVED
 PLANNING AND ZONING
 COMMISSION
 EAST HAMPTON, CT

DATE: _____
 SIGNED: _____

NOTE
 *SOUTHERLY PROPERTY LINE HELD PER MAP REFERENCE #1.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

THIS DRAWING IS NOT VALID UNLESS IT BEARS AN ORIGINAL INK SIGNATURE AND EMBOSSED SEAL.

ROBERT W. HELLSTROM, L.S. #13626

ROB HELLSTROM
LAND SURVEYING LLC
 32 MAIN STREET
 HEBRON, CT., 06248
 (860) 228-9853
 hellstromsurveying@yahoo.com
 WWW.RHLSCT.COM

Mailing Address:
 P.O. BOX 378
 HEBRON, CT. 06248

Overall Boundary & Existing Conditions
 HAMPTON VILLAGE
 37 SOUTH MAIN STREET
 EAST HAMPTON, CT.
 PREPARED FOR: BAKAJ CONSTRUCTION LLC
 37 SOUTH MAIN STREET
 EAST HAMPTON, CT.

CIVIL ENGINEERING CONSULTANTS
 63 NORWICH AVENUE
 COLCHESTER, CT
 (860) 516-0033
RES
 Reynolds Engineering Services, LLC

Designed By: MAR
 Drawn By: SAM
 Checked By: MAR
 CAD File: 21-106

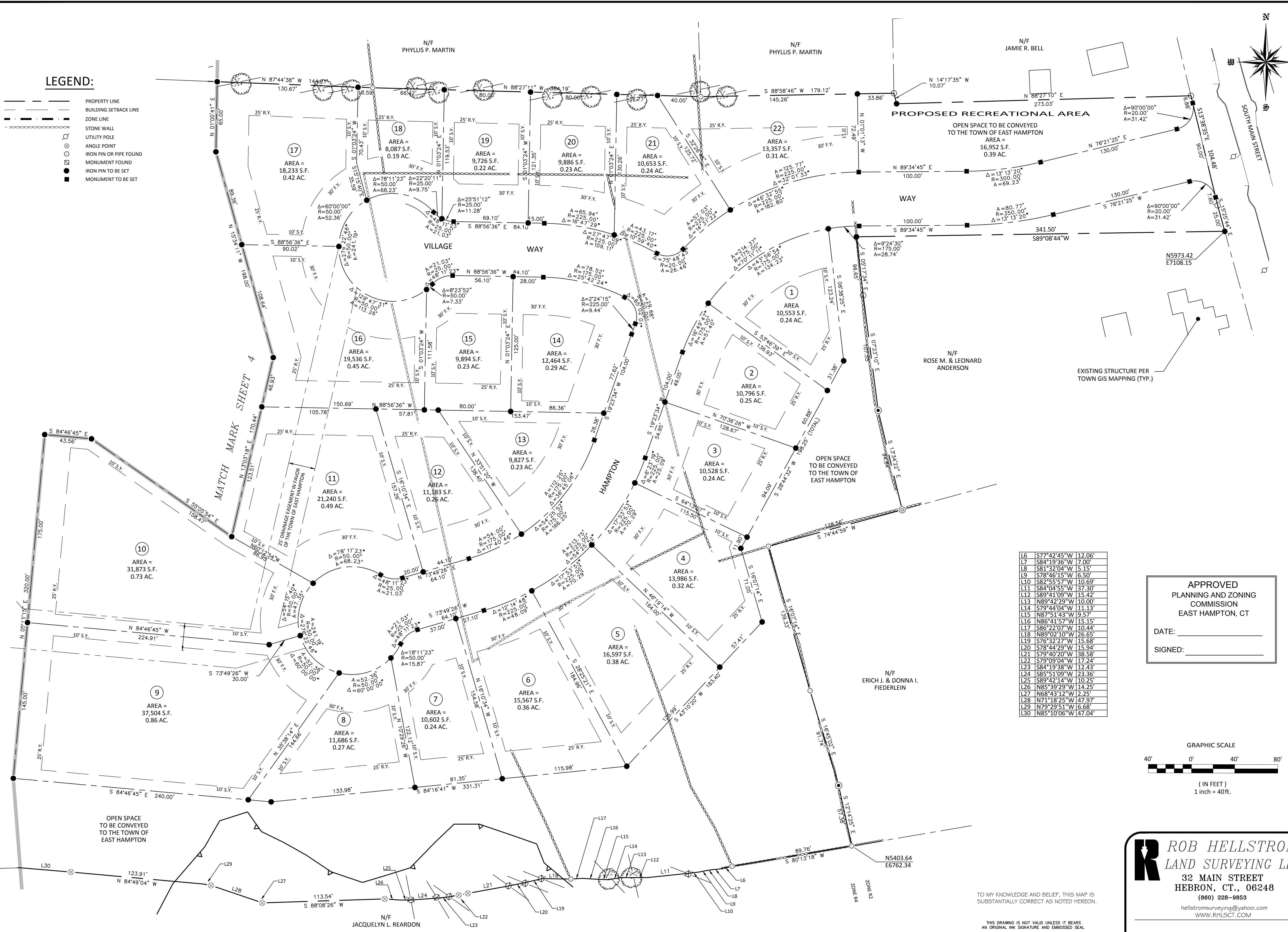
Drawing Scale: 1"=60'
 Drawing date: 7/26/2021

Rev.	Date	By	Revision
1.	3/29/23	SAM	REVISED LAYOUT FOR H.O.D. ZONE
2.	5/03/23	SAM	EASEMENTS & DETAILS
3.	7/05/23	SAM	REVIEW COMMENTS

Drawing #: 2 OF 15
 Job #: 21-106

LEGEND:

- PROPERTY LINE
- - - BUILDING SETBACK LINE
- - - ZONE LINE
- STONE WALL
- UTILITY POLE
- ANGLE POINT
- IRON PIN OR PIPE FOUND
- IRON PIN TO BE SET
- MONUMENT TO BE SET

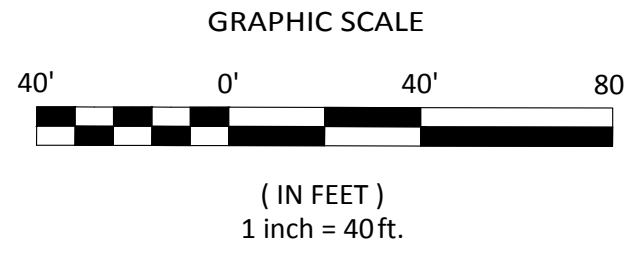


L6	S77°42'45" W	12.06'
L7	S84°19'36" W	7.00'
L8	S81°32'04" W	5.15'
L9	S78°46'15" W	6.50'
L10	S82°55'57" W	10.69'
L11	S84°04'55" W	37.30'
L12	S89°41'09" W	15.42'
L13	N89°42'29" W	10.00'
L14	S79°44'04" W	11.13'
L15	N87°51'43" W	9.57'
L16	N86°41'57" W	15.15'
L17	S86°22'07" W	10.44'
L18	N89°02'10" W	26.65'
L19	S76°32'27" W	15.68'
L20	S78°44'29" W	15.94'
L21	S79°40'20" W	38.58'
L22	S79°09'04" W	17.24'
L23	S84°19'38" W	12.43'
L24	S85°51'09" W	23.36'
L25	S89°42'14" W	10.25'
L26	N85°39'29" W	14.25'
L27	N68°43'12" W	2.25'
L28	N71°18'25" W	47.97'
L29	N79°29'51" W	6.68'
L30	N85°10'06" W	47.04'

APPROVED
PLANNING AND ZONING
COMMISSION
EAST HAMPTON, CT

DATE: _____

SIGNED: _____



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hellstromsurveying@yahoo.com
WWW.RHLSCT.COM

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HEBRON, CT. 06248

Designed By: MAR
Drawn By: SAM
Checked By: MAR
CAD File: 21-106

Drawing Scale: 1" = 40'

Drawing date: 7/26/2021

Rev.	Date	By	Revision
1.	3/29/23	SAM	REVISED LAYOUT FOR H.O.D. ZONE EASEMENTS & DETAILS
2.	5/03/23	SAM	REVIEW COMMENTS
3.	7/05/23	SAM	REVIEW COMMENTS

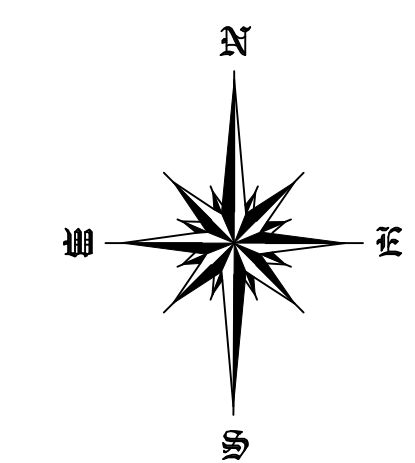
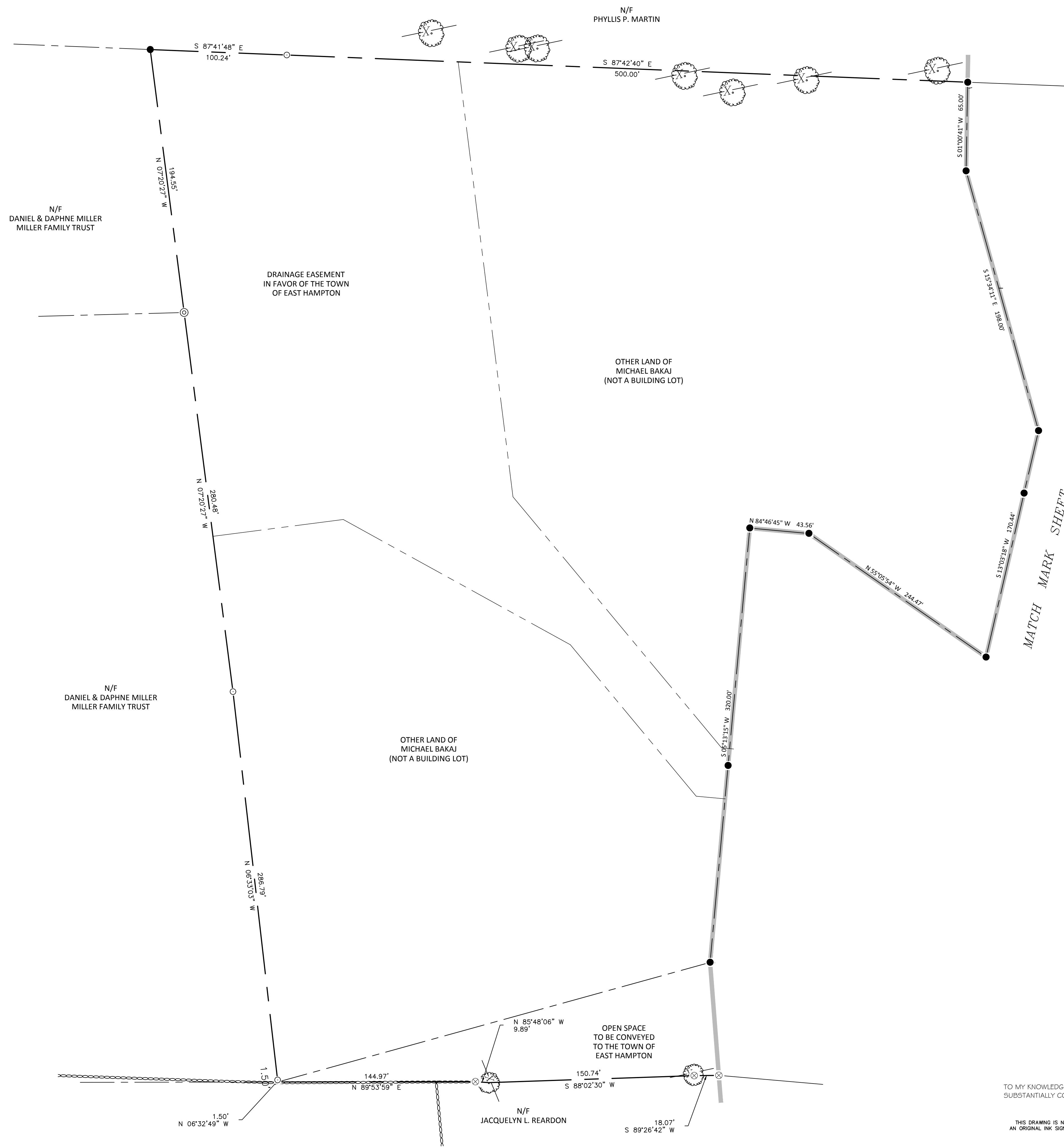
SUBDIVISION PLAN
HAMPTON VILLAGE
37 SOUTH MAIN STREET
EAST HAMPTON, CT.

PREPARED FOR: **BAKAJ CONSTRUCTION LLC**
37 SOUTH MAIN STREET
EAST HAMPTON, CT.

CIVIL ENGINEERING CONSULTANTS
63 NORWICH AVENUE
COLCHESTER, CT
(860) 516-0033



Drawing #: 3 OF 15
Job #: 21-106

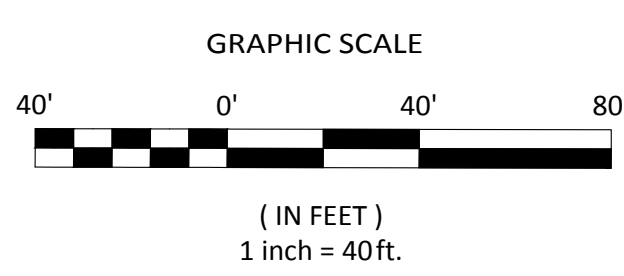


LEGEND:

---	PROPERTY LINE
- - -	BUILDING SETBACK LINE
---	ZONE LINE
---	STONE WALL
○	UTILITY POLE
○	ANGLE POINT
○	IRON PIN OR PIPE FOUND
○	MONUMENT FOUND
○	IRON PIN TO BE SET
■	MONUMENT TO BE SET

APPROVED
PLANNING AND ZONING
COMMISSION
EAST HAMPTON, CT

DATE: _____
SIGNED: _____



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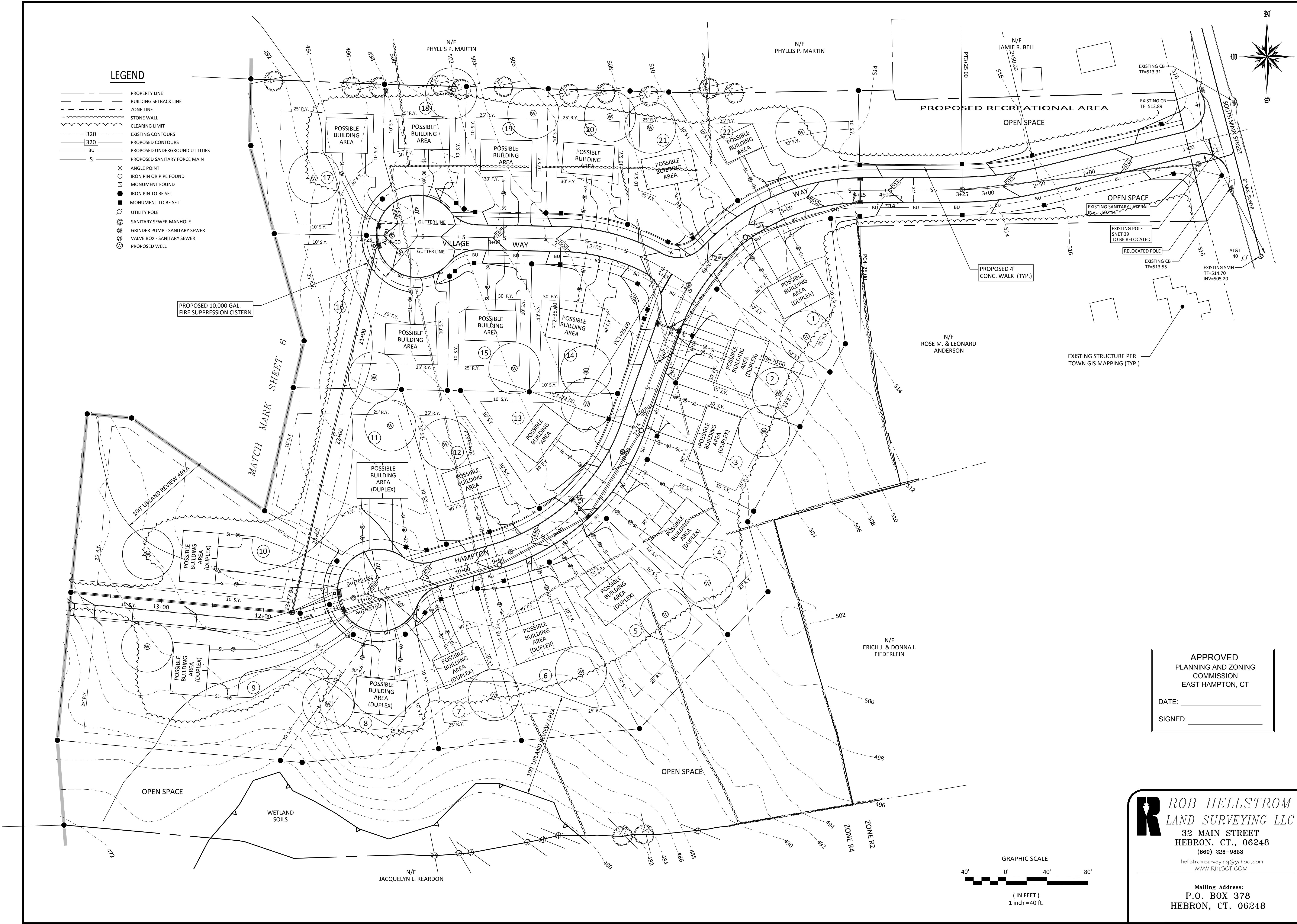
ROB HELLSTROM
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hellstromsurveying@yahoo.com
WWW.RHLSCT.COM

Mailing Address:
P.O. BOX 378
HEBRON, CT. 06248

Designed By: MAR	Drawing Scale: 1" = 40'	Drawing date: 7/26/2021	SUBDIVISION PLAN	PROJECT TITLE: HAMPTON VILLAGE 37 SOUTH MAIN STREET EAST HAMPTON, CT.	CIVIL ENGINEERING CONSULTANTS 63 NORWICH AVENUE COLCHESTER, CT (860) 516-0033	Drawing #: 4 OF 15
Drawn By: SAM						
Checked By: MAR	Revision	Date	By	Prepared For:		
	1. REVISED LAYOUT FOR H.O.D. ZONE EASEMENTS & DETAILS	3/29/23	SAM	BAKAJ CONSTRUCTION LLC		
	2. REVIEW COMMENTS	5/03/23	SAM	37 SOUTH MAIN STREET		
	3. REVIEW COMMENTS	7/05/23	SAM	EAST HAMPTON, CT.		
CAD File: 21-106						Job #: 21-106

LEGEND

- PROPERTY LINE
- - - BUILDING SETBACK LINE
- ZONE LINE
- STONE WALL
- CLEARING LIMIT
- - - EXISTING CONTOURS
- - - PROPOSED CONTOURS
- BU --- PROPOSED UNDERGROUND UTILITIES
- S --- PROPOSED SANITARY FORCE MAIN
- ⊙ ANGLE POINT
- ⊙ IRON PIN OR PIPE FOUND
- ⊙ MONUMENT FOUND
- IRON PIN TO BE SET
- ⊙ MONUMENT TO BE SET
- ⊙ UTILITY POLE
- ⊙ SANITARY SEWER MANHOLE
- ⊙ GRINDER PUMP - SANITARY SEWER
- ⊙ VALVE BOX - SANITARY SEWER
- ⊙ PROPOSED WELL



Designed By: MAR
 Drawn By: SAM
 Checked By: MAR
 CAD File: 21-106

Drawing Scale: 1" = 40'

Rev.	Date	By	Revision
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2.	5/03/23	SAM	REVIEW COMMENTS
3.	7/05/23	SAM	REVIEW COMMENTS

Drawing date: 7/26/2021

TOPOGRAPHIC MAP
HAMPTON VILLAGE
 37 SOUTH MAIN STREET
 EAST HAMPTON, CT.

PREPARED FOR: **BAKAJ CONSTRUCTION LLC**
 37 SOUTH MAIN STREET
 EAST HAMPTON, CT.

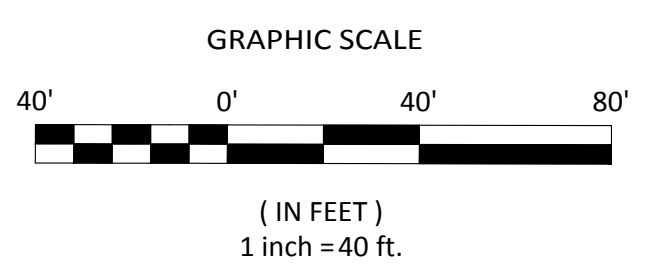
CIVIL ENGINEERING CONSULTANTS
 63 NORWICH AVENUE
 COLCHESTER, CT
 (860) 516-0033

RES
 Reynolds Engineering Services, LLC

Drawing #: 5 OF 15
 Job #: 21-106

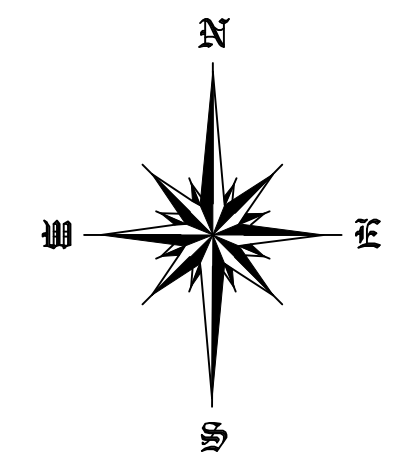
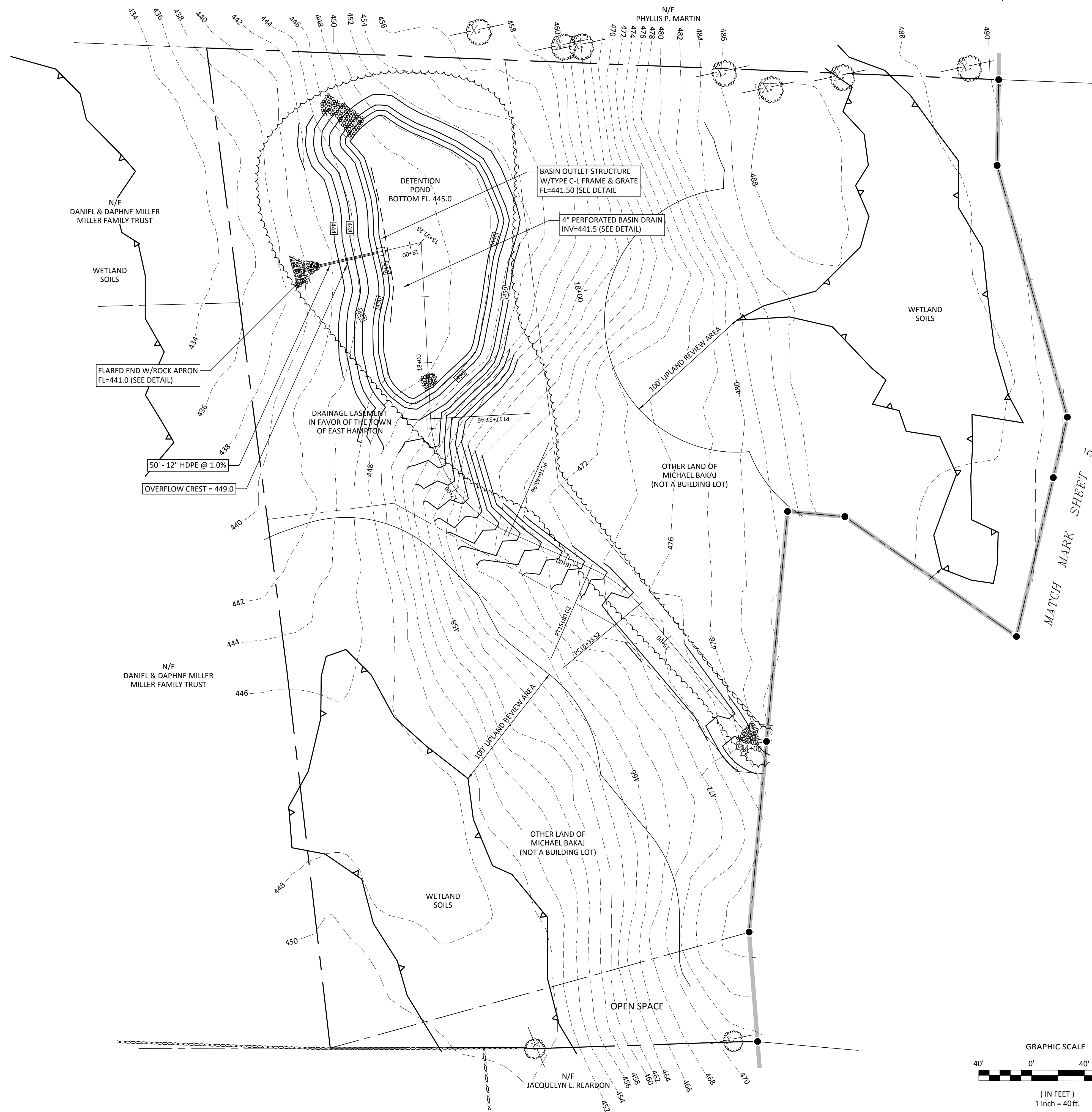
APPROVED
 PLANNING AND ZONING
 COMMISSION
 EAST HAMPTON, CT

DATE: _____
 SIGNED: _____



ROB HELLSTROM
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 32 MAIN STREET
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 hellstromsurveying@yahoo.com
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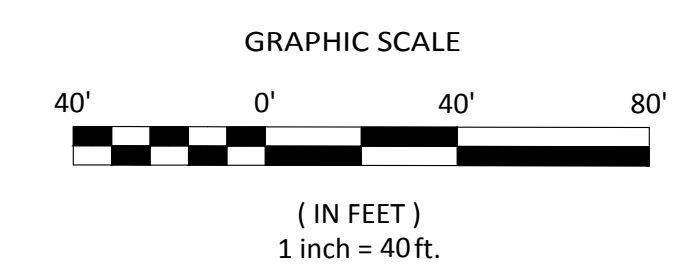


- LEGEND**
- PROPERTY LINE
 - BUILDING SETBACK LINE
 - ZONE LINE
 - - - STONE WALL
 - - - CLEARING LIMIT
 - - - EXISTING CONTOURS
 - - - PROPOSED CONTOURS
 - - - BU
 - - - PROPOSED UNDERGROUND UTILITIES
 - - - PROPOSED SANITARY FORCE MAIN
 - ⊗ ANGLE POINT
 - IRON PIN OR PIPE FOUND
 - ⊠ MONUMENT FOUND
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 - MONUMENT TO BE SET
 - UTILITY POLE
 - ⊙ SANITARY SEWER MANHOLE
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 - ⊖ VALVE BOX - SANITARY SEWER
 - ⊙ PROPOSED WELL

APPROVED
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Checked By:	MAR
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Drawing Scale:		1" = 40'
Rev.	Date	By
1.	3/29/23	SAM
2.	5/03/23	SAM
3.	7/05/23	SAM

TOPOGRAPHIC MAP

PROJECT TITLE: HAMPTON VILLAGE
 37 SOUTH MAIN STREET
 EAST HAMPTON, CT.

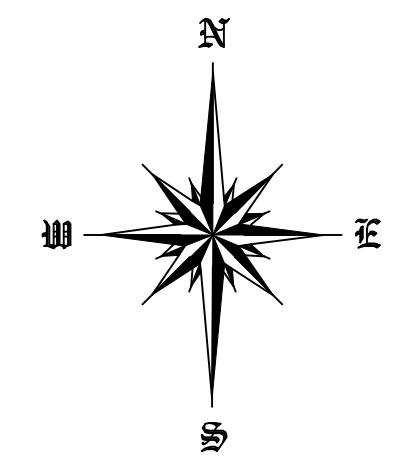
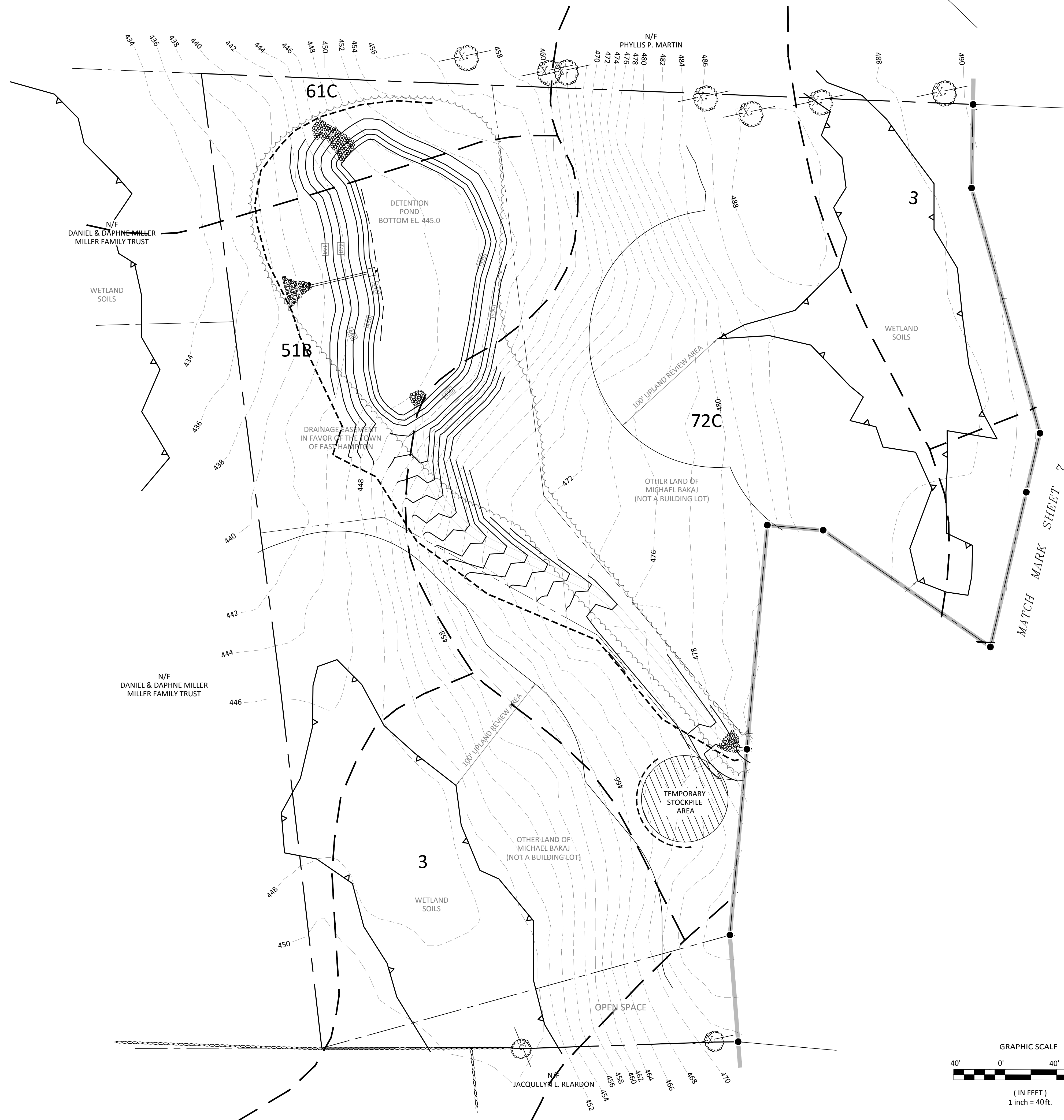
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CIVIL ENGINEERING CONSULTANTS
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RES
 Reynolds Engineering Services, LLC

Drawing #:
6 OF 15

Job #: 21-106



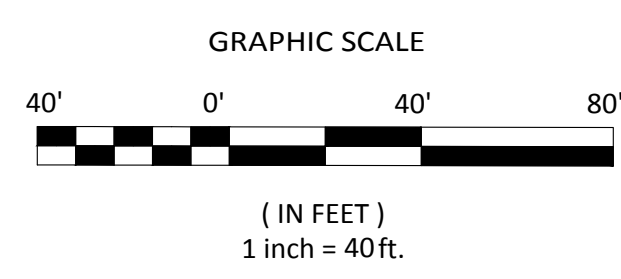
LEGEND

---	PROPERTY LINE
- - - -	BUILDING SETBACK LINE
- - - -	ZONE LINE
—●—●—	STONE WALL
—▲—▲—	CLEARING LIMIT
---	EXISTING CONTOURS
---	PROPOSED CONTOURS
---	PROPOSED UNDERGROUND UTILITIES
---	SILT FENCE
⊗	ANGLE POINT
⊙	IRON PIN OR PIPE FOUND
⊚	MONUMENT FOUND
●	IRON PIN TO BE SET
○	UTILITY POLE

APPROVED
 PLANNING AND ZONING
 COMMISSION
 EAST HAMPTON, CT

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MAR

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2.	5/03/23	EASEMENTS & DETAILS
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E & S CONTROL PLAN

PROJECT TITLE: **HAMPTON VILLAGE**
 37 SOUTH MAIN STREET
 EAST HAMPTON, CT.

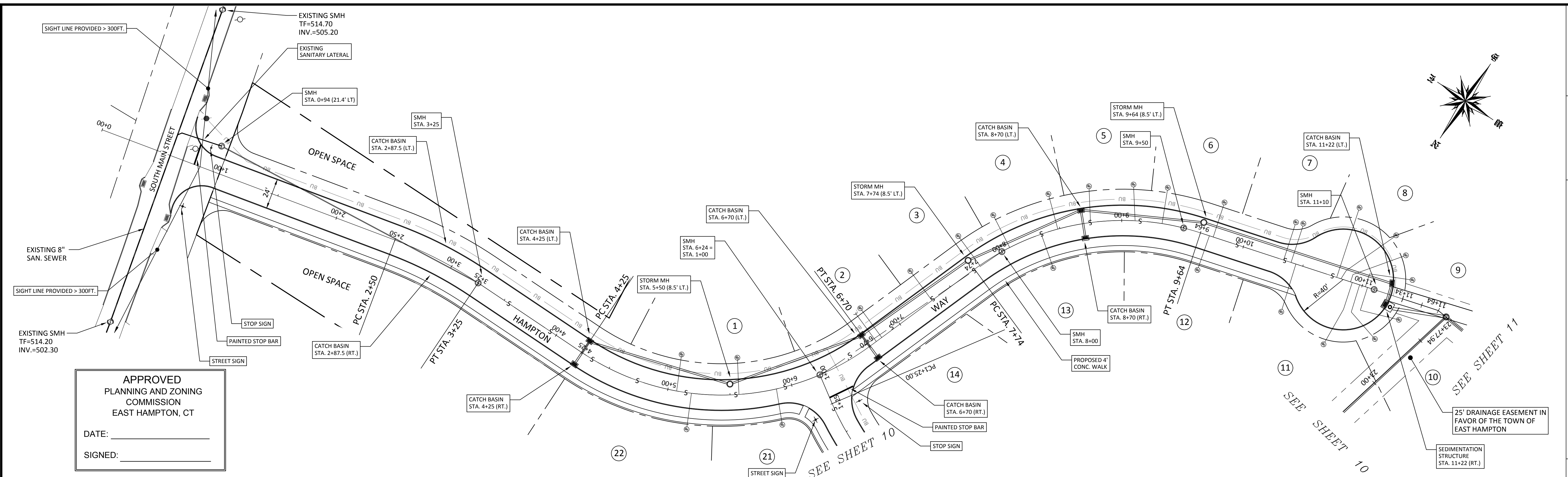
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Drawing #:
8 OF 15

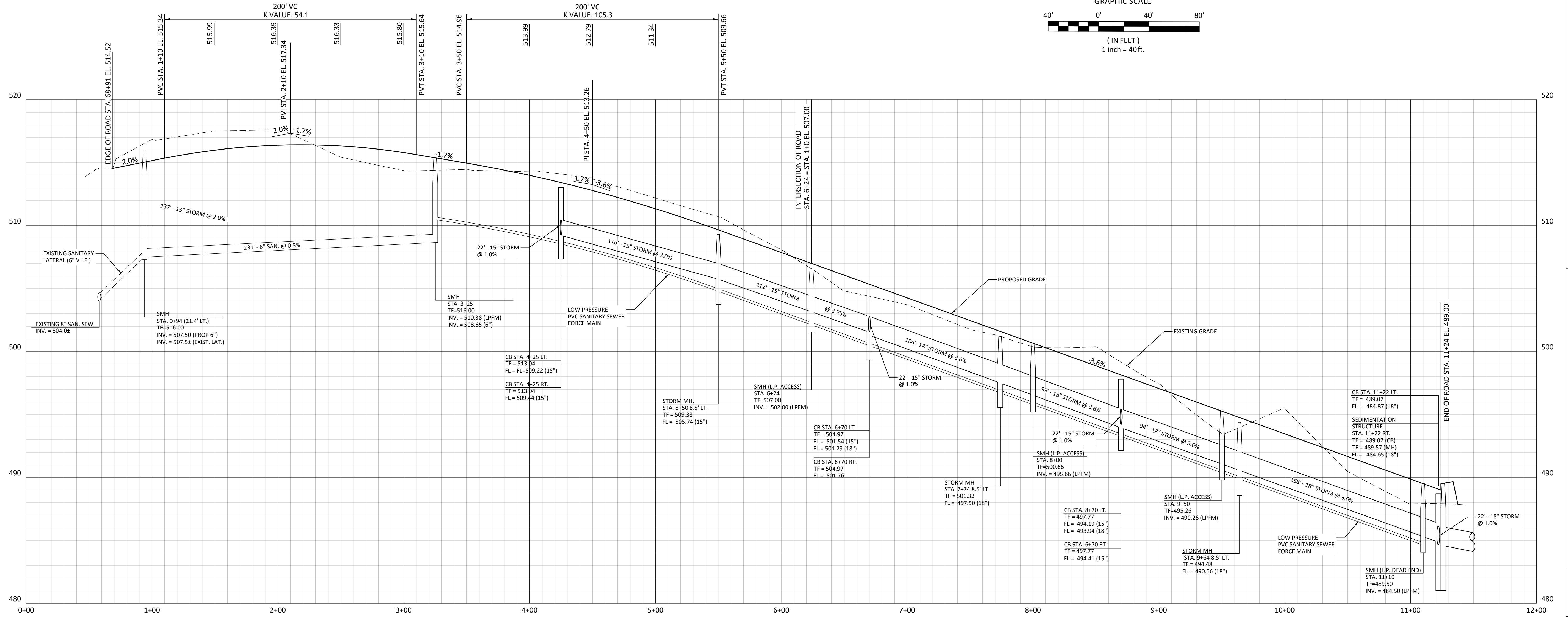
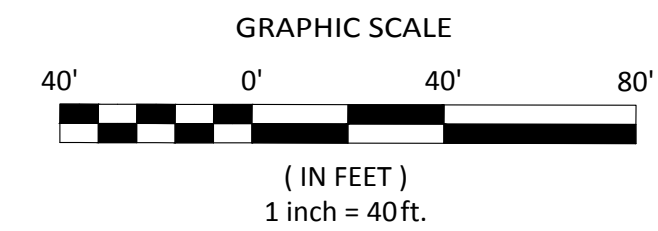
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APPROVED
PLANNING AND ZONING
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EAST HAMPTON, CT

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SIGNED: _____



SCALE:
1" = 40' (HORIZONTAL)
1" = 4' (VERTICAL)

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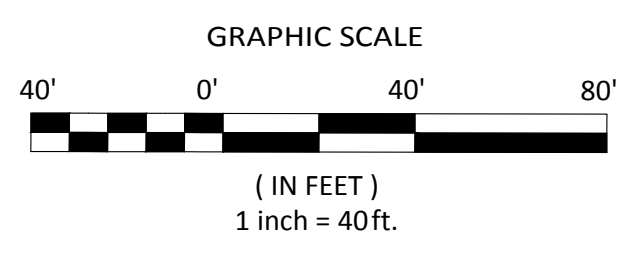
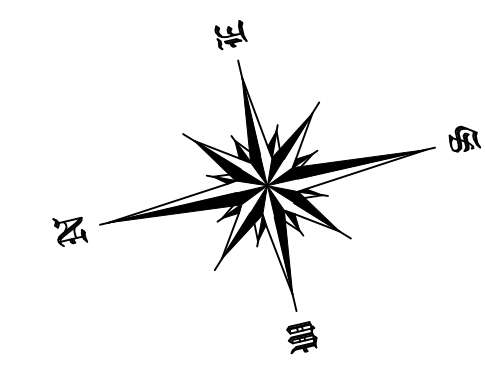
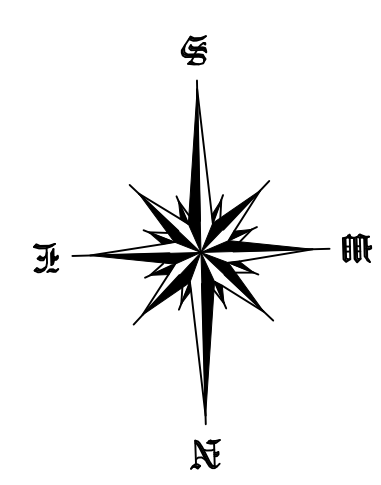
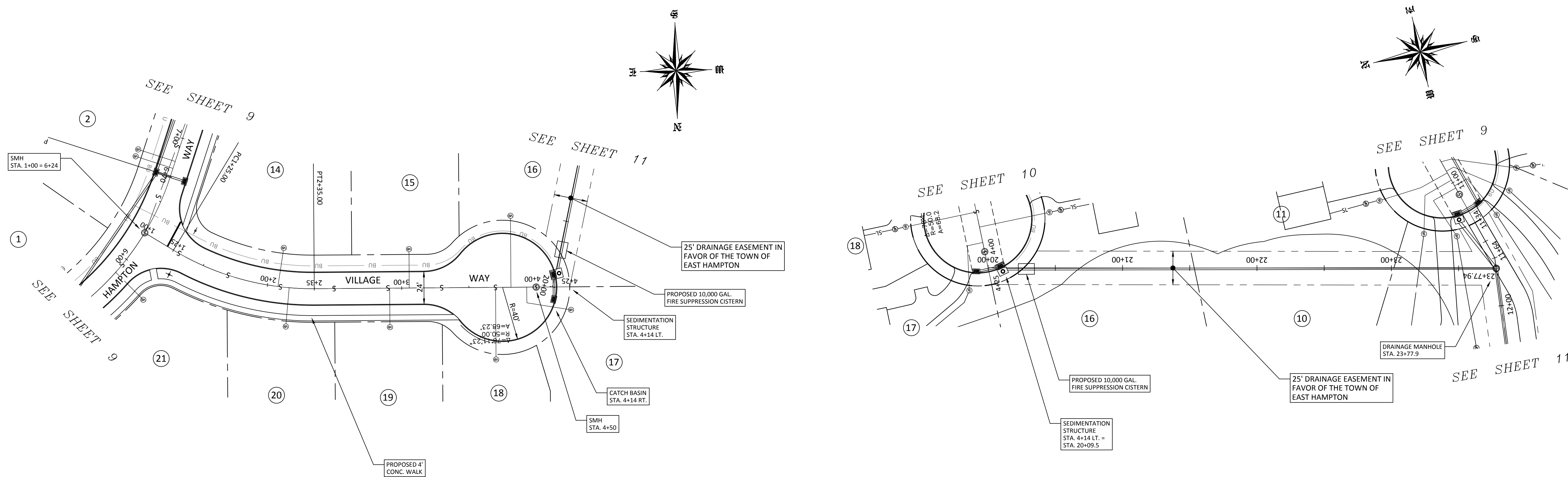
PREPARED FOR: **BAKAJ CONSTRUCTION LLC**
37 SOUTH MAIN STREET
EAST HAMPTON, CT.

CIVIL ENGINEERING CONSULTANTS
63 NORWICH AVENUE
COLCHESTER, CT
(860) 516-0033

RES
Reynolds Engineering Services, LLC

Drawing #:
9 OF 15

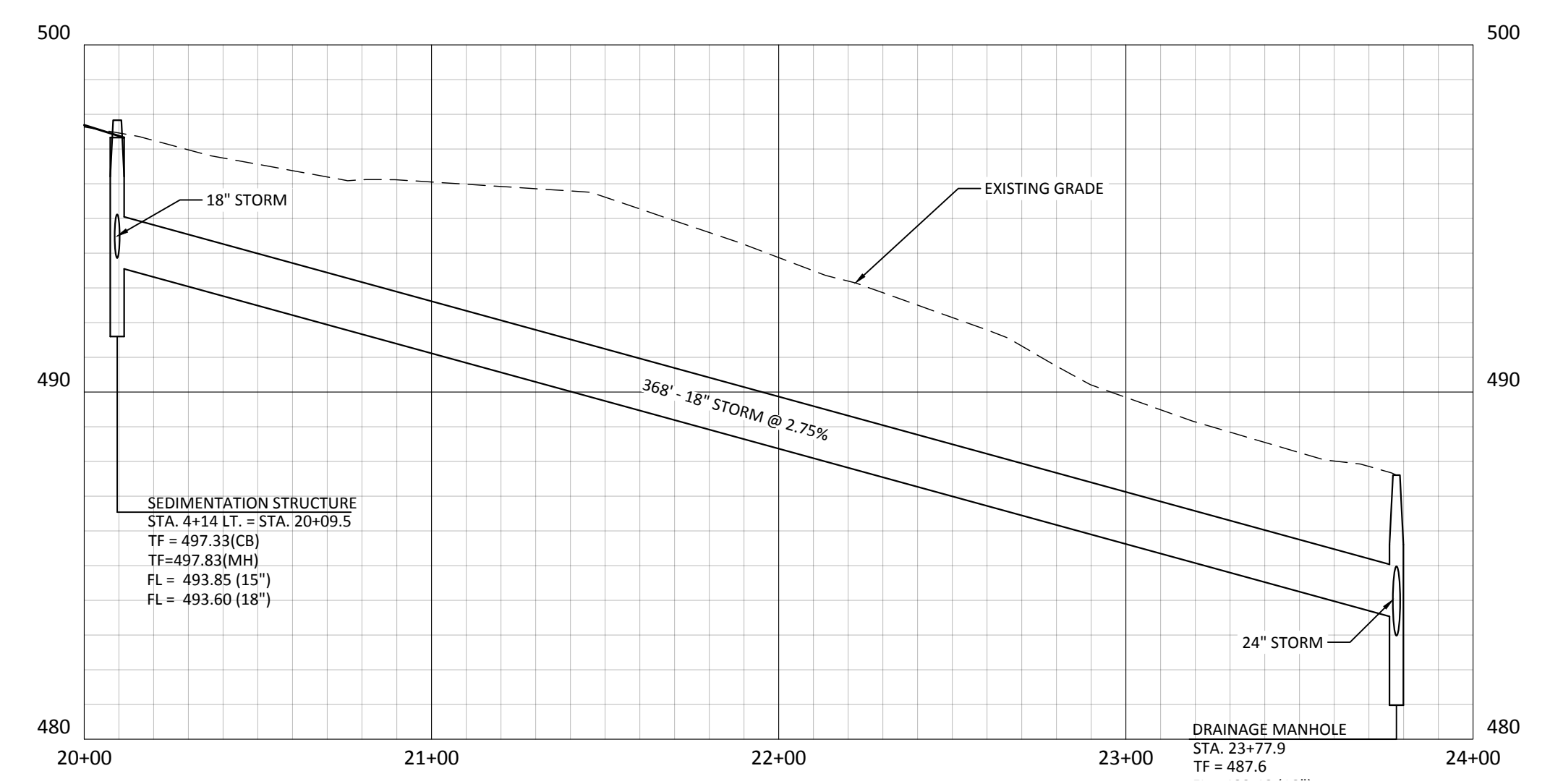
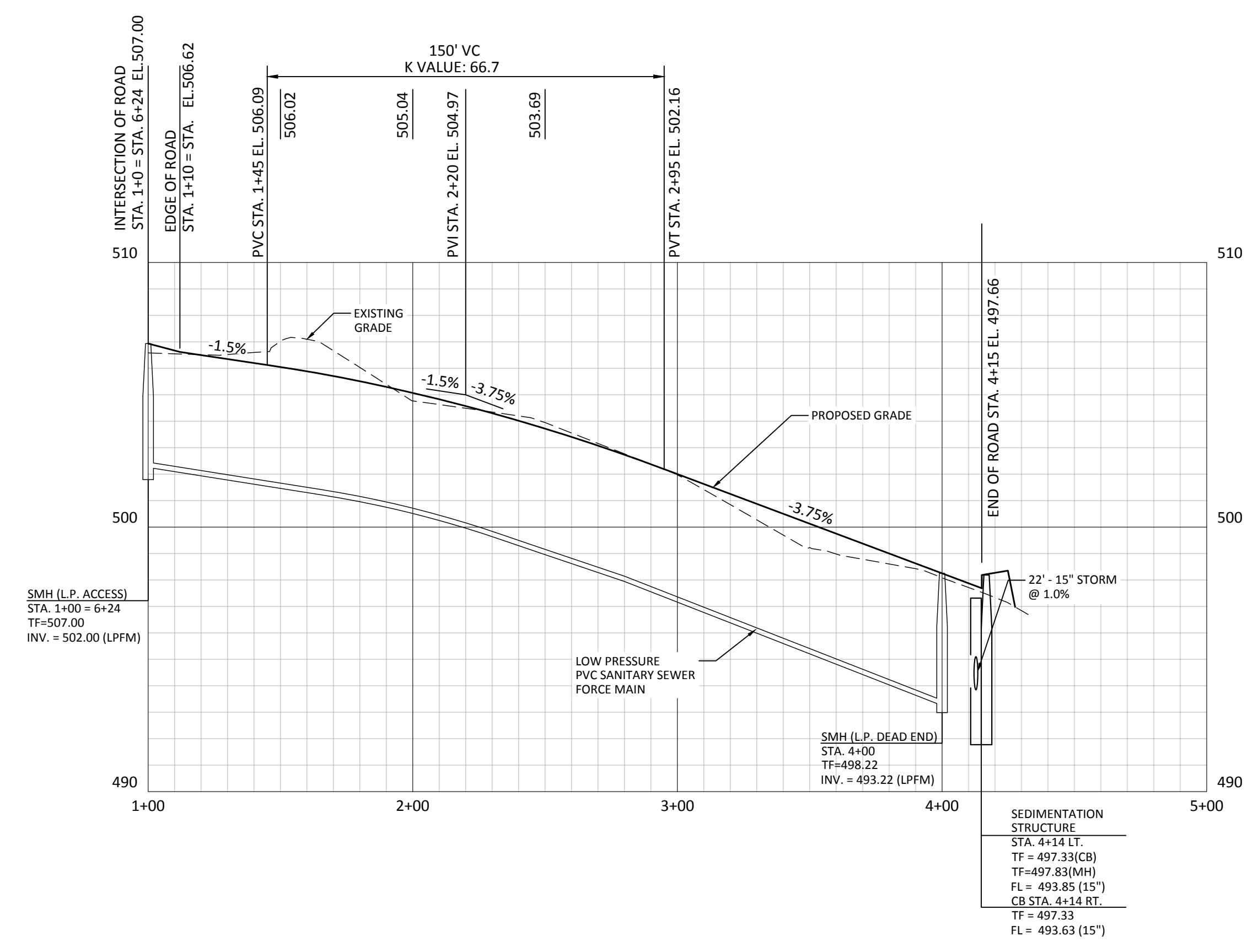
Job #: 21-106



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PLANNING AND ZONING
COMMISSION
EAST HAMPTON, CT

DATE: _____

SIGNED: _____



SCALE:
1" = 40' (HORIZONTAL)
1" = 4' (VERTICAL)

Drawing Scale: 1" = 40'		Drawing date: 7/26/2021	By SAM
Revision		Checked By: MAR	
1. REVISED LAYOUT FOR H.O.D. ZONE		CAD File: 21-106	
2. EASEMENTS & DETAILS			
3. REVIEW COMMENTS			
DATE		DATE	
1. 3/29/23		3/29/23	
2. 5/03/23		5/03/23	
3. 7/05/23		7/05/23	
DESIGNED BY: MAR		DRAWN BY: SAM	
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10 OF 15		JOB NO.:	
21-106		JOB #:	

PLAN & PROFILE

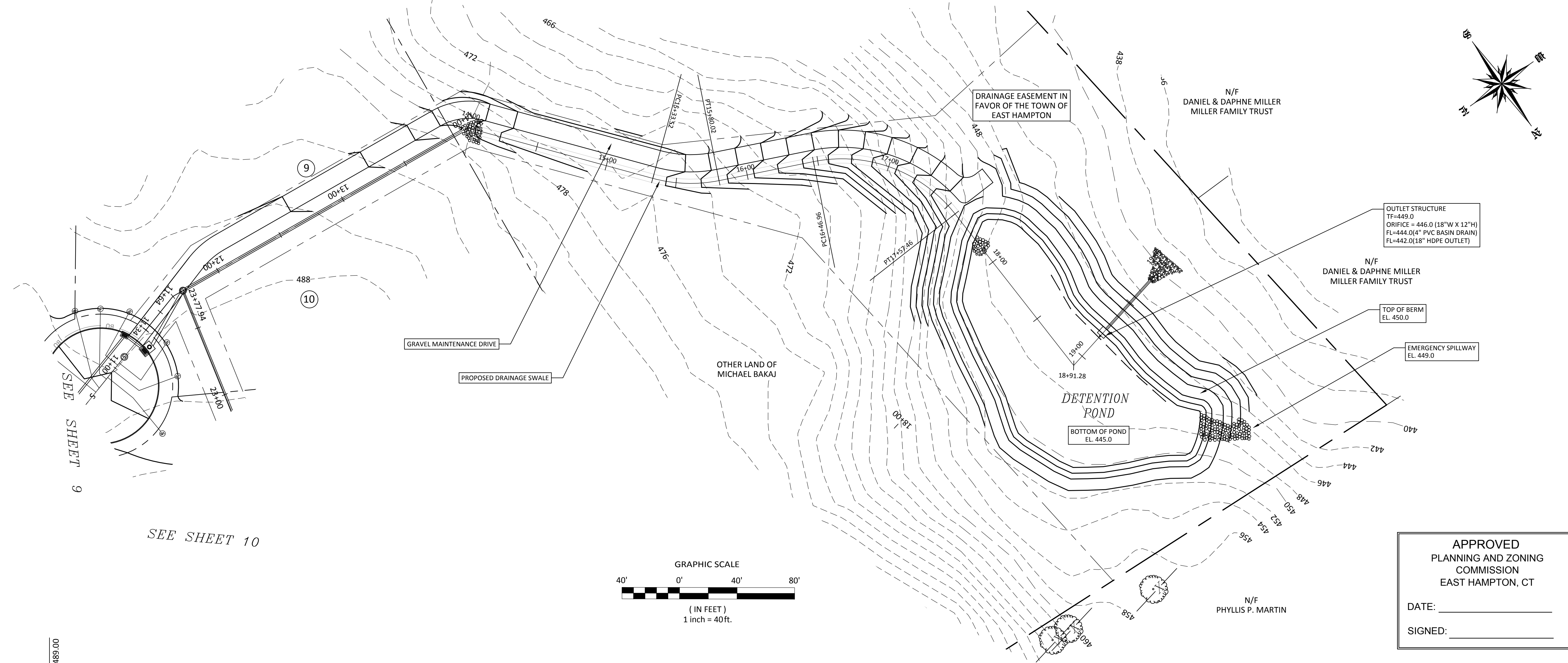
PROJECT TITLE: HAMPTON VILLAGE
37 SOUTH MAIN STREET
EAST HAMPTON, CT.

PREPARED FOR: BAKAJ CONSTRUCTION LLC
37 SOUTH MAIN STREET
EAST HAMPTON, CT.

CIVIL ENGINEERING CONSULTANTS

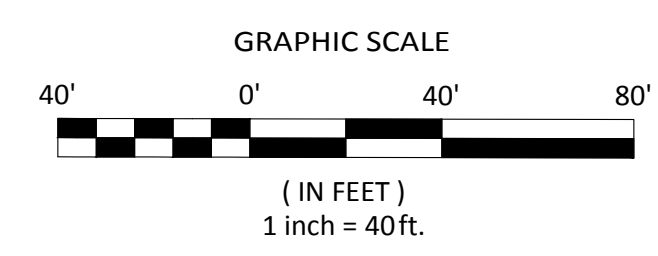
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SEE SHEET 9

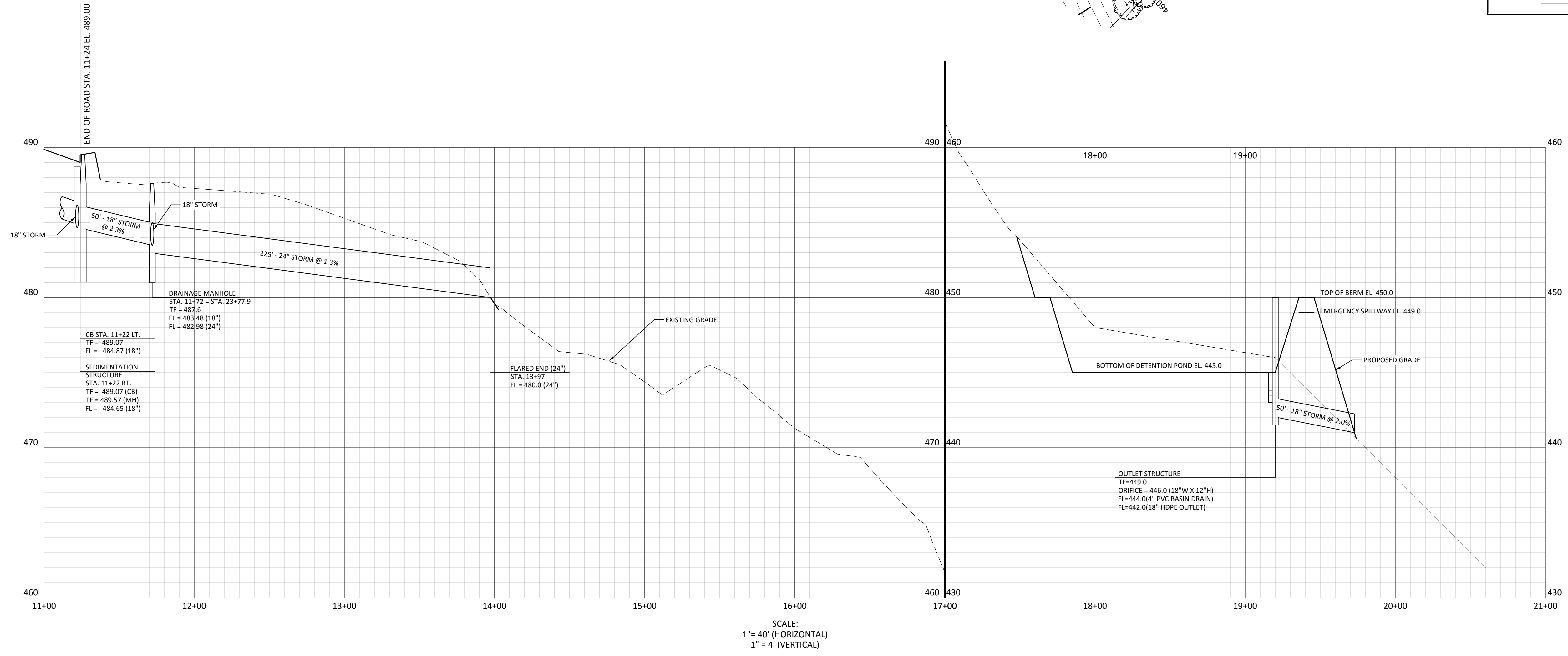
SEE SHEET 10



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EAST HAMPTON, CT

DATE: _____

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SCALE:
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1" = 4' (VERTICAL)

Designed By:
MAR

Drawn By:
SAM

Checked By:
MAR

CAD File:
21-106

Drawing Scale:
1" = 40'

Rev.	Date	Revision	By
1.	3/29/23	REVISED LAYOUT FOR H.O.D. ZONE EASEMENTS & DETAILS	SAM
2.	5/03/23	EASEMENTS & DETAILS	SAM
3.	7/05/23	REVIEW COMMENTS	SAM

PLAN & PROFILE

PROJECT TITLE: **HAMPTON VILLAGE**
37 SOUTH MAIN STREET
EAST HAMPTON, CT.

PREPARED FOR: **BAKAJ CONSTRUCTION LLC**
37 SOUTH MAIN STREET
EAST HAMPTON, CT.

CIVIL ENGINEERING CONSULTANTS
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Drawing #:
11 OF 15

Job #:
21-106

SOIL EROSION AND SEDIMENT CONTROL MEASURES

A.) APPROVAL REQUIRED TO START CONSTRUCTION

NO CONSTRUCTION SHALL TAKE PLACE ON THIS PROPERTY UNTIL THE HEREIN STATED EROSION AND SEDIMENT CONTROL HAS BEEN REVIEWED AND CERTIFIED BY THE EAST HAMPTON PUBLIC WORKS DIRECTOR OR ITS DESIGNATED AGENT(S).

B.) DESCRIPTION OF PROPOSED DEVELOPMENT

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF APPROXIMATELY 1,400 L.F. OF ROADWAY TO SERVE RESIDENTIAL LOTS. THE SITE ON WHICH THE CONSTRUCTION WILL OCCUR IS A WOODED AREA. CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING FOR THE ROADWAY, DRAINAGE IMPROVEMENTS AND EXCAVATION OF A RETENTION/DETENTION BASIN.

C.) GENERAL SEQUENCE OF DEVELOPMENT

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION AS MAY BE REQUIRED DURING THE CONSTRUCTION OF THE PROJECT. IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSES, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT INsofar AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS, AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT INsofar AS POSSIBLE, EROSION ON THE SITE. NO SITE DEVELOPMENT FOR A LOT SHALL BEGIN UNTIL THE HEREIN STATED SOIL EROSION AND SEDIMENT CONTROL PLAN HAS BEEN CERTIFIED AND THOSE CONTROL MEASURES SCHEDULED FOR INSTALLATION PRIOR TO SITE DEVELOPMENT HAVE BEEN INSTALLED AND ARE FUNCTIONAL.

D.) ROADWAY DEVELOPMENT

AFTER INSTALLING EROSION AND SEDIMENTATION CONTROLS, AREAS OF DISTURBANCE SHALL BE CLEARED BY PLACING STUMPAGE AND DEBRIS IN DESIGNATED STOCKPILE AREAS FOR OFFSITE DISPOSAL. TOPSOIL SHALL BE STRIPPED AND ALSO PLACED IN STOCKPILE AREAS TO BE USED FOR ON SITE LOAMING. INSTALLATION OF STORM DRAINAGE SHALL BEGIN BY EXCAVATING THE DETENTION PONDS AND PLACING A TEMPORARY 2' STONE BERM AROUND THE OUTLET STRUCTURES UTILIZING THE PONDS AS SEDIMENTATION BASINS DURING CONSTRUCTION. OUTLET PROTECTION AND SEDIMENTATION CONTROL SHALL BE PUT IN PLACE IMMEDIATELY UPON INSTALLATION OF STORM DRAINAGE. ALL DISTURBED AREAS ARE TO BE STABILIZED, LOAMED & SEEDED IMMEDIATELY AFTER FINAL GRADING. EROSION AND SEDIMENTATION CONTROLS SHALL REMAIN AND BE MAINTAINED UNTIL SITE HAS STABILIZED AND VEGETATION HAS BEEN ESTABLISHED. ADDITIONAL MEASURES MAY BE REQUIRED TO ADDRESS FIELD CONDITIONS AS ORDERED BY THE TOWN OF STAFFORD OR ITS DESIGNATED AGENT(S). ALL EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION PRACTICES SHALL BE AS DESCRIBED HEREIN AND FURTHER DETAILED IN THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" (REVISED 2002) AND AMENDMENTS, AS PUBLISHED BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION.

E.) LAND GRADING

THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA.

- THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2 : 1)

- THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2 : 1)

- THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1 : 4)

- NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE, OR WASH UPON THE PREMISES OF ANOTHER OWNER, OR UPON ADJACENT WETLANDS, WATERCOURSES, OR WATERBODY.

DEVELOPMENT SCHEDULE

IT IS ANTICIPATED THAT GRADING AND CONSTRUCTION ACTIVITIES WILL BEGIN FALL 2020.

1. INSTALL EROSION AND SEDIMENT CONTROL STRUCTURES.
2. ROUGH GRADE ROADWAY
3. INSTALL DRAINAGE FEATURES.
4. INSTALL ROADWAY.
5. LOAM, SEED AND MULCH LANDSCAPE AREAS.
6. REMOVE EROSION AND SEDIMENT CONTROL.

I. GENERAL EROSION AND SEDIMENTATION CONTROL NOTES (SEE II. & III. FOR SPECIFIED CONSTRUCTION MEASURE)

THIS CONSTRUCTION PLAN PROPOSES EROSION CONTROL MEASURES WHICH WILL PERFORM ONE OR MORE OF THE FOLLOWING FUNCTIONS: MINIMIZATION OF SOIL EXPOSURE, CONTROL OF RUNOFF, SHIELDING OF THE SOILS AND BUILDING OF THE SOILS. PROPER EROSION MANAGEMENT WILL MINIMIZE THE EROSION, BUT IT MUST BE UNDERSTOOD THAT ONLY 'REASONABLE' EROSION CONTROL CAN BE EXPECTED. THUS, EVEN WITH THE BEST PLAN, SOME EROSION MUST BE ANTICIPATED. SEDIMENTATION CONTROLS ARE THE SECONDARY LINE OF DEFENSE ON THE CONSTRUCTION SITE.

DURING THE COURSE OF SITE CONSTRUCTION WEEKLY INSPECTIONS OF ALL EROSION AND SEDIMENTATION MEASURES WILL BE CONDUCTED BY A QUALIFIED EROSION AND SEDIMENTATION CONTROL PROFESSIONAL AND REPORTS FILED WITH THE CITY'S AGENT.

WATER GENERATED SEDIMENT IS A SERIOUS PROBLEM WHEN NATURAL VEGETATION IS REMOVED OR ALTERED, FOR THIS REASON, A RECOMMENDATION FOR MINIMAL SITE DISTURBANCE TO EXISTING VEGETATION AND SOIL IS PROPOSED. MINIMAL SOIL EXPOSURE NOT ONLY ENTAILS DEMARCATING SITE DISTURBANCE LIMITS, BUT ALSO INVOLVES THE STAGING OF GRADING AND SUBSEQUENT REV OF DISTURBED AREAS, SO THAT THE LEAST AMOUNT OF SOIL SURFACE IS EXPOSED AT ANY ONE TIME.

RUNOFF SHALL BE CONTROLLED BY THE INTERCEPTION, DIVERSION AND SAFE DISPOSAL PRECIPITATION RUNOFF SHALL ALSO BE CONTROLLED BY THE STAGING OF CONSTRUCTION ACTIVITY AND THE PRESERVATION OF NATURAL VEGETATION WHENEVER POSSIBLE. THE BINDING OF SOIL PARTICLES TO MAKE THEM LESS SUSCEPTIBLE TO REMOVAL BY RAIN SPLASH OR RUNOFF BY THE USE OF NATURAL AND PHYSICAL 'BINDERS' (MULCHES AND FABRICS) MAY BE REQUIRED AS DIRECTED BY THE ENGINEER OR THE CITY'S AGENT.

TO PREVENT SEDIMENT FROM LEAVING THE SITE, TURBID SURFACE RUNOFF SHALL BE DIVERTED THROUGH 'LEVEL SPREADER' DEVICES. TEMPORARY LEVEL SPREADER DEVICES SHALL BE CREATED BY PLACING ENGINEERING FABRIC DOWN GRADIENT OF SOIL DISTURBING ACTIVITIES. THUS FLOW WILL BE DISPERSED OVER A WIDE AREA AND FILTERED BY THE FABRIC. THE FENCE SHALL FOLLOW THE EXISTING CONTOURS WITH THE ENDS OF THE FENCE TURNED UPHILL TO PREVENT END CUTTING. FILTER FABRIC USED AS SILT FENCE AND NOT PLACED ON CONTOUR SHOULD HAVE 'WINGS' AT INTERVALS OF NO GREATER THAN 100 FEET TO INTERRUPT FLOWS PARALLEL TO THE FENCE. TECHNIQUES SUCH AS 'WINGED' FABRIC SILT FENCE CHECK DAMS, HAY BALES INSTALLED AND MAINTAINED AROUND ALL CATCH BASINS, FABRIC SILT FENCE /LEVEL SPREADERS AND SEDIMENTATION PONDS MAY BE USED.

DUST CONTROL, IF DETERMINED TO BE REQUIRED DURING THE WEEKLY INSPECTIONS, SHALL BE ACHIEVED BY THE APPLICATION OF ANIONIC OR CATIONIC ASPHALT EMULSIONS, LATEX EMULSION OR RESIN IN WATER. FOR APPLICATION RATES AND DILUTION REQUIREMENTS, REFER TO MANUFACTURER'S GUIDELINES. THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST, BUT WATER SHALL NOT BE EXCLUSIVELY USED.

IN AN EFFORT TO REDUCE THE POTENTIAL FOR TRACKING MUD OF THE SITE, COARSE STONE TRACKING PADS AND IMMEDIATE CONSTRUCTION OF GRAVEL SUBBASE FOR ROADWAYS WILL MINIMIZE ANY OFF-SITE TRACKING. ACCUMULATED DIRT TRACKED ONTO EXISTING ROADWAYS SHALL BE REMOVED BY SHOVEL AND BROOM AT THE END OF EACH WORK DAY.

BEFORE AND AFTER EACH STORM EVENT AND ONCE EVERY DAY, ALL SEDIMENT AND EROSION CONTROLS WILL BE INSPECTED BY THE ENGINEER OR ENVIRONMENTAL SUPERVISOR. ANY CORRECTIVE MEASURES TO MITIGATE ENVIRONMENTAL CONCERNS WILL BE ORDERED AT THAT TIME. THERE WILL BE 150 FT. OF SILT FENCE WITH THE REQUIRED POSTS ON HAND FOR EMERGENCY SITUATIONS.

EXCAVATIONS WHICH MUST BE DEWATERED WILL BE PUMPED INTO AN ACTIVE DRAINAGE SYSTEM. BOTH THE INLET AND OUTLET OF THE PUMPS SHOULD BE FILTERED AND PROTECTED FROM SURGE ACTION. IN THE EVENT ON CONFLICT BETWEEN THESE PLANS AND OTHER REGULATIONS, THE MORE STRINGENT SHALL APPLY.

II. CONSTRUCTION SEQUENCE AND DETAILED EROSION CONTROL MEASURES

1. A REGISTERED LAND SURVEYOR SHALL FIELD STAKE THE CENTER LINE OF THE NEW ACCESS ROAD.
2. UPON COMPLETION OF THE FIELD STAKING, EXISTING TREES WHICH ARE TO BE SAVED ARE TO BE FLAGGED AND PROTECTED. ALL REMAINING VEGETATION INCLUDING OVERHANGING LIMBS FROM TREES TO BE SAVED SHALL BE CHIPPED AND SUCH CHIPS STORED IN NON-GRADED AREAS ALONG THE RIGHT OF WAY FOR FUTURE USE AS MULCH. CORD WOOD AND/OR TIMBER FROM APPROPRIATE CLEARED AREAS SHALL BE REMOVED FROM THE SITE. EROSION AND SEDIMENT MEASURES SHALL BE INSTALLED AS APPROPRIATE PRIOR TO ANY SITE DISTURBANCE.
3. STUMPING SHALL COMMENCE ALONG THE PROPOSED ACCESS ROAD WITHIN AREAS STAKED BY THE SURVEYOR AND CLEARED IN TASK 2 ABOVE. LOAM SHALL BE STRIPPED FROM THE CLEARED AREA AND STOCKPILED JUST OUTSIDE THE ROADWAY GRADING LIMITS AT INTERVALS NOT EXCEEDING 300 FEET, AND RINGED WITH HAY BALES ON THE DOWN GRADIENT SIDE OF THE STOCKPILE UPON STRIPPING THE BALANCE OF THE ROADWAY. THE ANTI-TRACKING PAD SHALL BE INSTALLED. THIS ANTI-TRACKING PAD SHALL BE MAINTAINED AND REPLACED AS NECESSARY WHEN NO LONGER EFFECTIVE IN PREVENTING TRACKING OF MATERIALS OFF SITE.
4. THE ROADWAY SHALL BE BROUGHT TO ROUGH GRADE AND SILT FENCE CHECK DAMS SHALL BE PLACED IN THE GUTTERS OF THE CROWNED PAVEMENT AT 100' INTERVALS (MAXIMUM), AS SHOWN UPON THE PLAN, OR MORE FREQUENTLY AS REQUIRED AND DIRECTED BY THE ENGINEER.
5. ROADWAY SHOULDERS IN BOTH CUT AND FILL AREAS SHALL BE FINE GRADED IN ACCORDANCE WITH 'III GENERAL NOTES'.
6. UNDERGROUND UTILITIES (GAS, SEWER, TELEPHONE, ELECTRIC AND CABLE) SHALL BE INSTALLED NEXT.
7. FOLLOWED BY THE PLACEMENT OF THE PROCESS GRVEL BASE, AND BITUMINOUS PAVEMENT. THE SHOULDERS OF THE ROADWAY SHALL BE FINE GRADED, LOAM AND SEEDED, AS SPECIFIED UNDER 'IV. GENERAL NOTES'.

III. SITE DEVELOPMENT

IN ADDITION TO THE RECOMMENDATIONS FOR THE INDIVIDUAL PHASES OF THE DEVELOPMENT, THE FOLLOWING PROCEDURES SHALL APPLY TO INDIVIDUAL STRUCTURES BEING DEVELOPED.

1. THE LIMITS OF DISTURBANCE SHALL BE ESTABLISHED IN THE FIELD FOR EACH PROPOSED RESIDENTIAL STRUCTURE. MAXIMUM DISTURBANCE LIMITS OF 25-35 FT BEYOND THE PHYSICAL DIMENSIONS OF THE STRUCTURE AND RELATED APPURTENANCES IS RECOMMENDED.
2. TOPSOIL AND EXCAVATED SUBSOIL FROM THE FOUNDATION AREA SHALL BE STOCKPILED WITHIN THE AREA OF DISTURBANCE IF NOT USED FOR ON SITE REGRADING. EACH STOCKPILE SHALL BE ADEQUATELY RINGED ON THE DOWN GRADIENT SIDE WITH SEDIMENT CONTROL MATERIALS (i.e. HAY BALES AND/OR FABRIC FENCE).
3. ANY ADDITIONAL STOCKPILING OF LUMBER AND BUILDING MATERIALS SHALL BE CONFINED TO THE AREA OF DISTURBANCE. SIMILARLY, VEHICULAR MOVEMENT SHALL BE DIRECTED TO ESTABLISHED PARKING AREAS.
4. ONCE THE PROPOSED STRUCTURE IS ENCLOSED , ALL EFFORTS SHALL BE MADE TO COMPLETE ON SITE IMPROVEMENTS SUCH AS UTILITIES, FOOTING DRAINS, DRIVEWAYS, ETC. THERE AFTER ALL RAW SOIL AREAS SURROUNDING THE SITES SHALL BE FINE GRADED AND MULCHED.

IV. GENERAL NOTES

SEED BED PREPARATION

FINE GRADE AND RAKE SOIL SURFACE TO REMOVE STONES LARGER THAN 2-INCH IN DIAMETER. INSTALL NEEDED EROSION CONTROL DEVICES SUCH AS SURFACE WATER DIVERSIONS. APPLY LIMESTONE AT A MINIMUM RATE OF 2 TONS PER ACRE OR 40 LBS. PER 1,000 SQUARE FEET. FERTILIZE WITH 10-10-10 AT THE RATE OF 300 LBS. PER ACRE OR 7.5 LBS. PER 1,000 SQUARE FEET. WORK LIME AND FERTILIZER INTO SOIL UNIFORMLY TO A DEPTH OF 4 INCHES WITH A WISK, SPRINGTOOTH HARRROW OR OTHER SUITABLE EQUIPMENT FOLLOWING THE CONTOUR LINES.

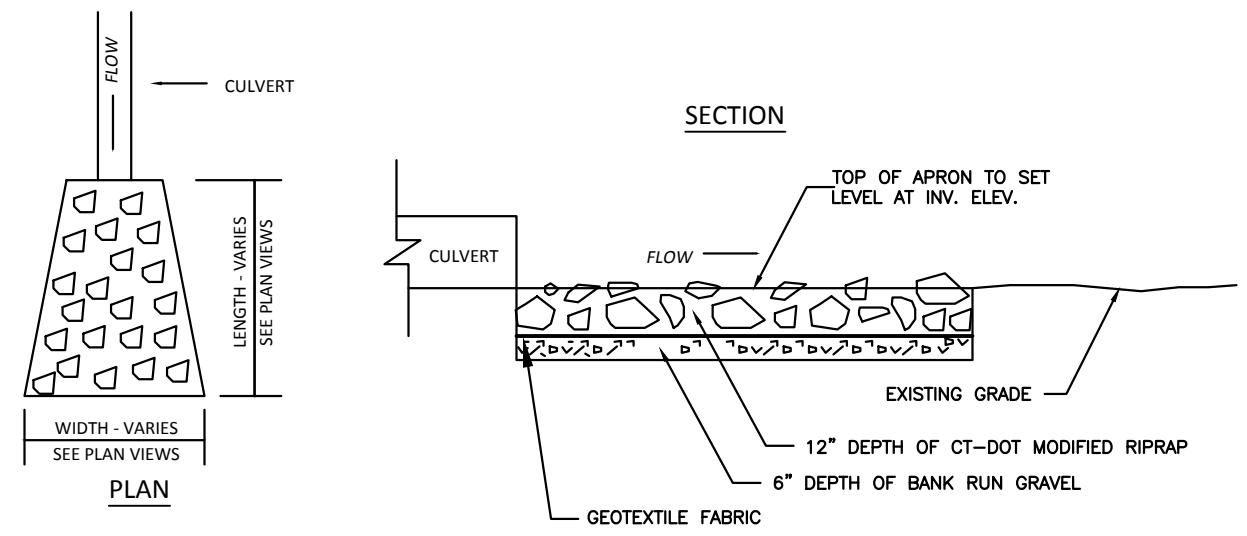
SEED APPLICATION

APPLY GRASS SEE MIXTURE BY HAND, CYCLONE SEEDER OR HYDROSEEDER. INCREASE SEED MIXTURE BY 10 PERCENT IF HYDROSEEDING. LIGHTLY DRAG OR ROLL THE SEEDED SURFACE TO COVER SEED. SEEDING SHOULD BE DONE BETWEEN APRIL 1 AND JUNE 1, OR BETWEEN AUGUST 15 AND OCTOBER 15. IF SEEDING CANNOT BE DONE DURING THESE TIMES, REPEAT MULCHING PROCEDURE UNTIL SUCH TIMES AS SEEDING CAN TAKE PLACE. THE TYPE OF SEED MIXTURE SHALL BE DETERMINED FROM FIGURES 6-2 AND 6-3 OF THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL".

MULCHING

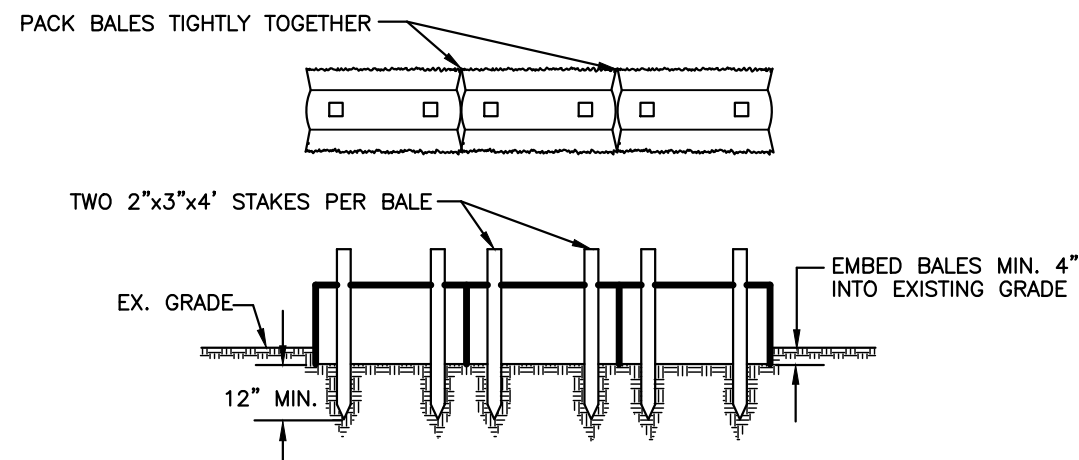
IMMEDIATELY FOLLOWING SEEDING, MULCH THE SEEDED SURFACE WITH STRAW OR HAY AT A RATE OF 1.5 TO 2 TONS PER ACRE. SPREAD MULCH BY HAND OR MULCH BLOWER. PUNCH MULCH INTO SOIL SURFACE WITH TRACK MACHINE OR DISH HARRROW SET STRAIGHT. MULCH MATERIAL SHOULD BE 'SET' INTO SOIL SURFACE APPROXIMATELY 2-3 INCHES.

DURING CONSTRUCTION IT SHALL BE THE RESPONSIBILITY OF OWNER TO INSURE THE IMPLEMENTATION OF THIS EROSION AND SEDIMENT CONTROL PLAN. A BI - WEEKLY INSPECTION OF THE SITE SHALL BE PERFORMED TO INSURE COMPLIANCE WITH THIS SEDIMENT AND EROSION PLAN. A BI - WEEKLY INSPECTION REPORT SHALL BE SUBMITTED TO THE CITY'S AGENT. THIS RESPONSIBILITY INCLUDES INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PROPERTIES ENGAGED ON THE SITE OF REQUIREMENTS AND OBJECTIVES OF THIS PLAN, NOTIFYING THE CITY'S AGENT OF ANY TRANSFERS OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF AND WHEN TITLE OF LAND IS TRANSFERRED.

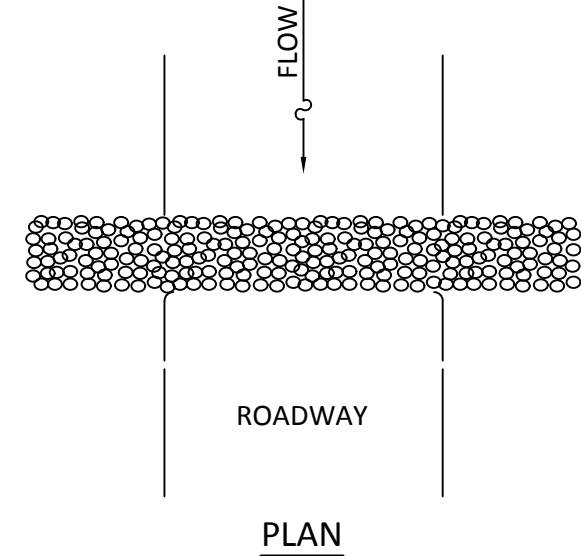


ROCK APRON DETAIL
NOT TO SCALE

ROCK APRON TABLE		
APRON	LENGTH (ft.)	WIDTH (ft.)
1	15	8

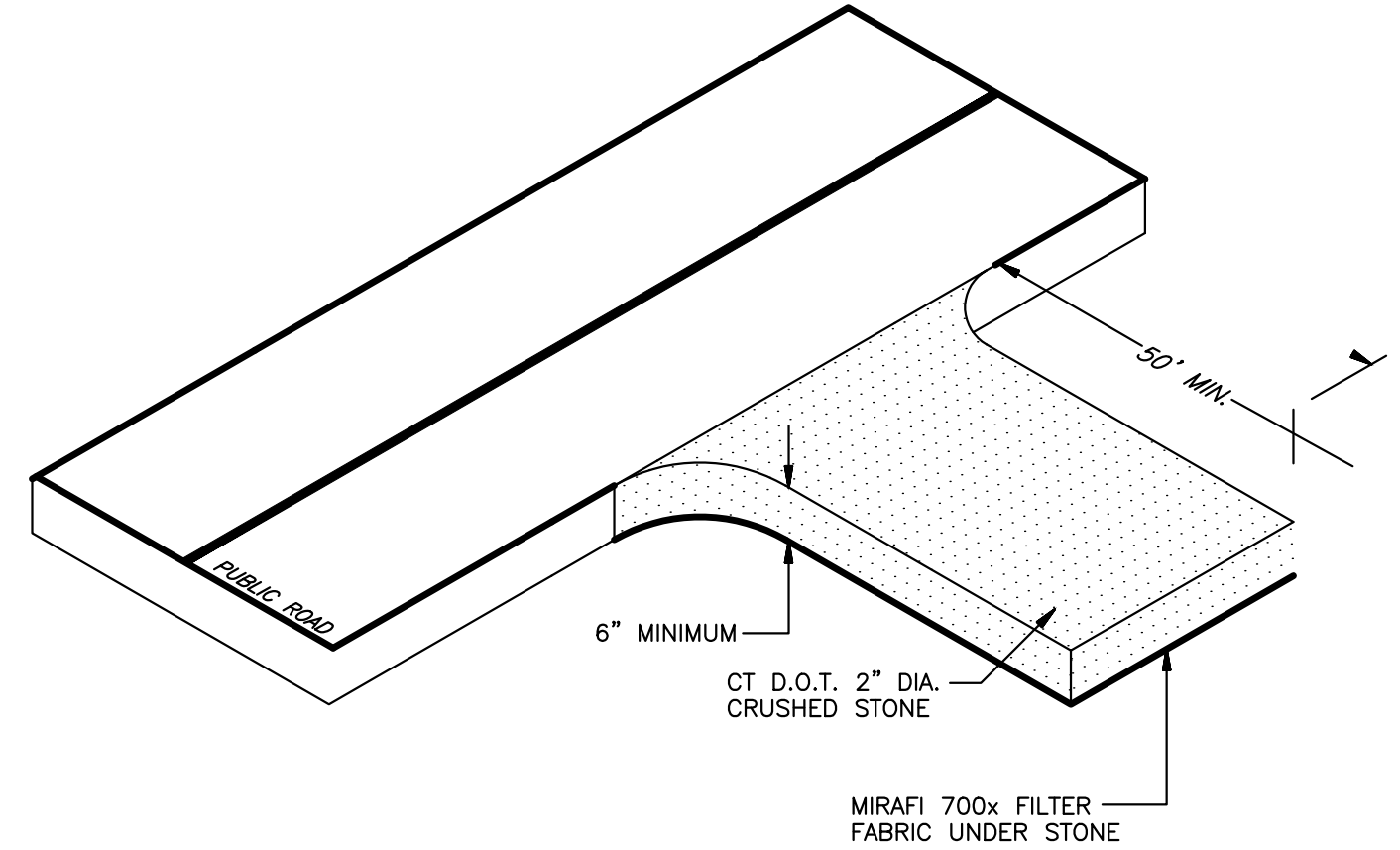


HAYBALE BARRIER
NOT TO SCALE



STONE BARRIER
NOT TO SCALE

- NOTE:**
1. INSTALLATION REQUIREMENTS
 - a. THE STONE SHALL BE PILED TO A NATURAL ANGLE OF REPOSE WITH THE HEIGHT OF AT LEAST 2 FEET.
 - b. THE BARRIER SHALL BE CONSTRUCTED SO WATER CANNOT BYPASS THE BARRIER AROUND THE ENDS.
 2. MAINTENANCE
 - a. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
 - b. THE BARRIER SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.



CONSTRUCTION ENTRANCE
NOT TO SCALE

APPROVED
PLANNING AND ZONING
COMMISSION
EAST HAMPTON, CT

DATE: _____

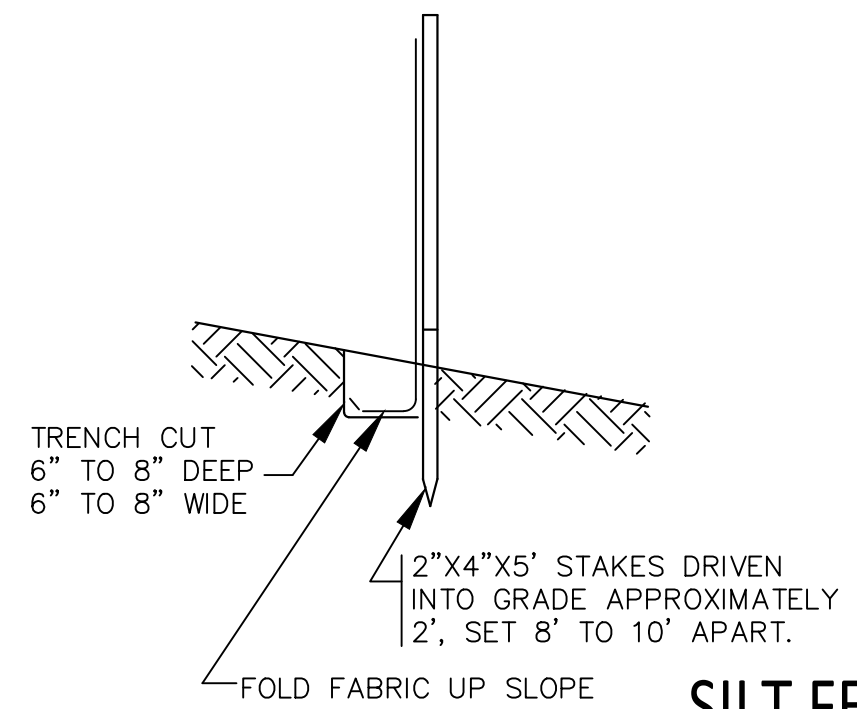
SIGNED: _____

LOT DEVELOPMENT EROSION & SEDIMENT CONTROL NOTES:

1. ALL EROSION & SEDIMENT CONTROL MEASURES TO BE CONSTRUCTED AS DETAILED AND SPECIFIED IN THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL JANUARY 2002 AS AMENDED.
2. ALL EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION, PROPERLY MAINTAINED DURING CONSTRUCTION AND REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN PROPERLY STABILIZED. AFTER INSTALLATION OF THE INITIALLY PRESCRIBED MEASURES, ADDITIONAL MEASURES MAY BE REQUIRED TO ADDRESS FIELD CONDITIONS AS ORDERED BY THE STATE OF CONNECTICUT DOT AND THE TOWN OF EAST HAMPTON OR ITS DESIGNATED AGENT(S).
3. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED. THE EXPOSURE SHOULD BE THE SHORTEST PERIOD OF TIME. WHEN NECESSARY TEMPORARY VEGETATION AND OR MULCHING SHOULD BE USED TO PROTECT EXPOSED AREAS. FINAL VEGETATION SHOULD BE INSTALLED AS SOON AS POSSIBLE. WHEREVER FEASIBLE NATURAL VEGETATION SHOULD BE RETAINED AND PROTECTED.
4. THE STOCKPILING OF BUILDING MATERIALS SHALL BE WITHIN THE AREA OF DISTURBANCE.
5. SEEDBED PREPARATION: FINE GRADE AND RAKE SOIL TO REMOVE ANY STONES LARGER THAN 2 INCHES. INSTALL ANY NEEDED EROSION CONTROL DEVICES SUCH AS SURFACE WATER DIVERSIONS. APPLY LIMESTONE AT A RATE OF TWO TONS PER ACRE OR 90 POUNDS PER 1000 SQUARE FEET. FERTILIZE WITH 10-10-10 AT A RATE OF 11 POUNDS PER 100 SQUARE FEET. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF FOUR INCHES.
6. SEED APPLICATION: APPLY SHADE TOLERANT GRASS MIXTURE BY HAND, CYCLONE SEEDER OR HYDROSEEDER. SEEDING SHALL BE DONE BETWEEN APRIL 1 AND JUNE 1 OR BETWEEN AUGUST 15 AND SEPTEMBER 1. IF SEEDING CANNOT BE DONE DURING THESE TIMES, REPEAT MULCHING PROCEDURE UNTIL SEED CAN BE DONE.
7. ESTABLISH PERMANENT VEGETATION USING A SEED MIXTURE OF:

KENTUCKY BLUEGRASS	20 LBS/ACRE
CREeping RED FESCUE	20 LBS/ACRE
PERENNIAL RYE GRASS	5 LBS/ACRE
TOTAL	45 LBS/ACRE

 THE RECOMMENDED DATES FOR SEEDING ARE APRIL 1 THROUGH JUNE 1 AND AUGUST 15 THROUGH SEPTEMBER 1.
8. MULCHING: IMMEDIATELY FOLLOWING SEEDING, MULCH THE SEEDED SURFACE WITH STRAW OR HAY AT A RATE OF 1.5 TO 2 TONS PER ACRE. MULCH SHALL BE SPREAD BY HAND OR WITH A MULCH BLOWER. PUNCH MULCH INTO SOIL SURFACE APPROXIMATELY TWO TO THREE INCHES.



SILT FENCE INSTALLATION
NOT TO SCALE

- NOTES:**
1. SEDIMENT CONTROL FABRIC TO BE A WOVEN POLYPROPYLENE MATERIAL TREATED TO RESIST DEGRADATION FROM EXPOSED SUNLIGHT.
 2. ACCEPTABLE SILT SCREEN FABRIC- "PROPEX SILT STOP" BY AMOCO FABRICS CO.
 3. AFTER FOLDING FABRIC EDGE, BACKFILL TRENCH WITH ORIGINAL SOIL.

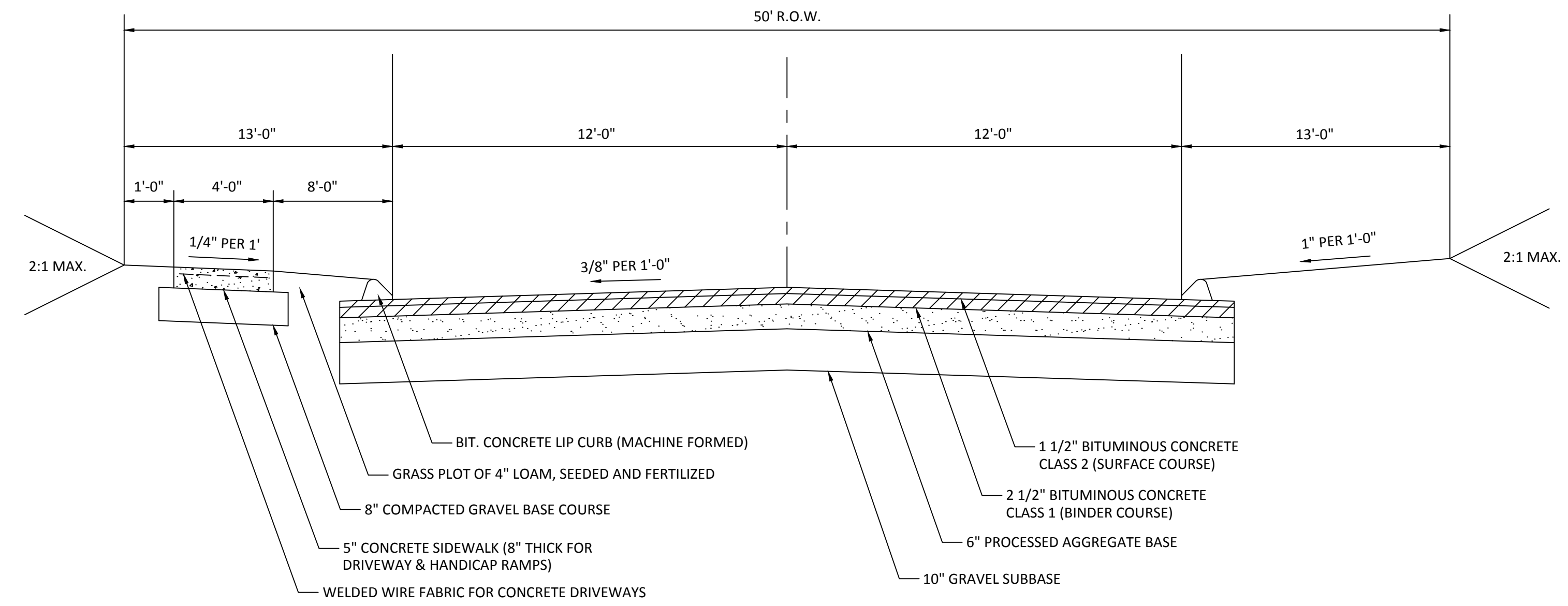
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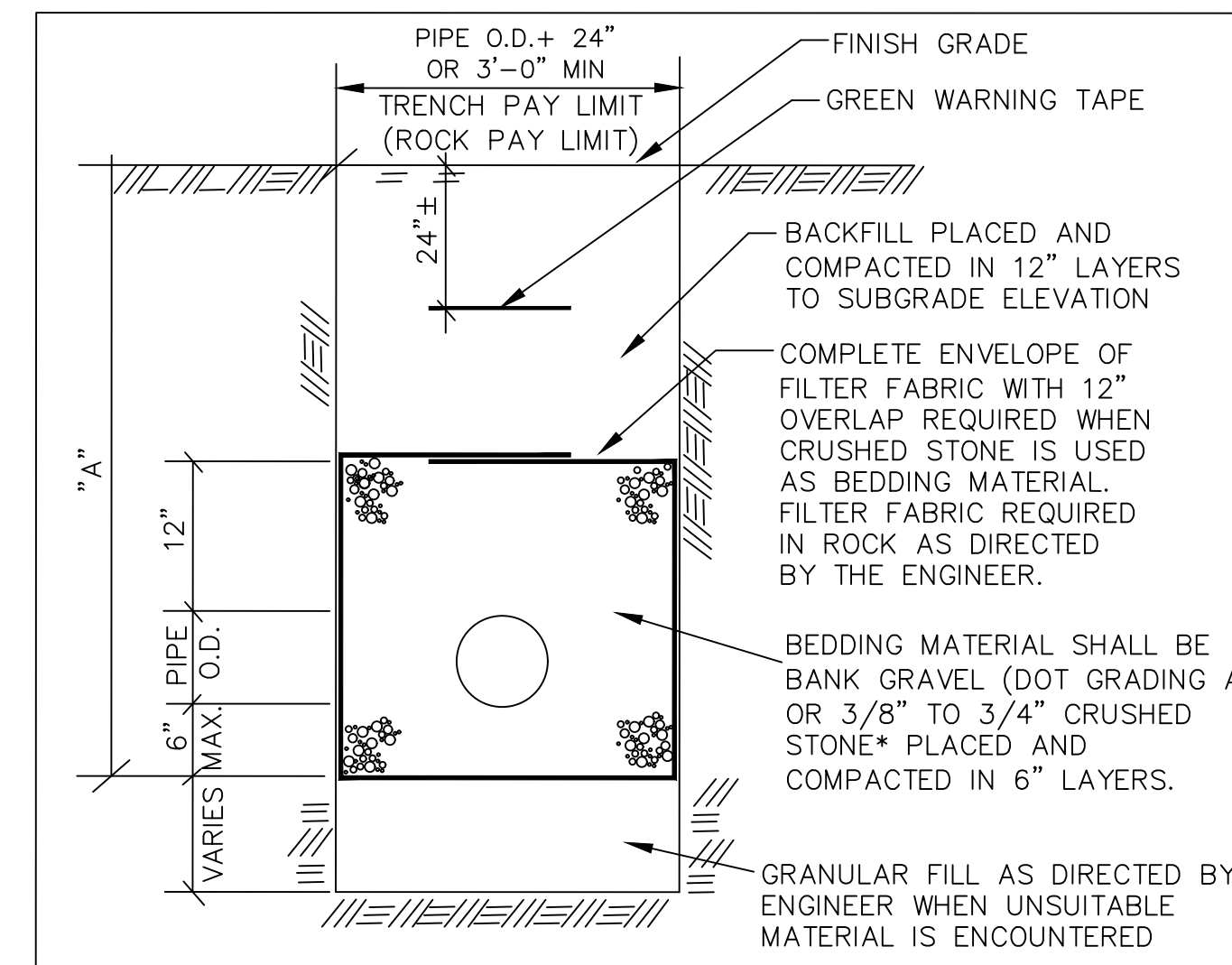
Drawing Scale: AS NOTED	Drawing date: 7/26/2021	E & S CONTROL NOTES AND DETAILS	Designed By: MAR
Revision REVISED LAYOUT FOR H.O.D. ZONE EASEMENTS & DETAILS REVIEW COMMENTS	By SAM SAM SAM	PROJECT TITLE: HAMPTON VILLAGE 37 SOUTH MAIN STREET EAST HAMPTON, CT.	Drawn By: SAM
Date 3/29/23 5/03/23 7/05/23	Checked By: MAR	PREPARED FOR: BAKAJ CONSTRUCTION LLC 37 SOUTH MAIN STREET EAST HAMPTON, CT.	CAD File: 21-106
CIVIL ENGINEERING CONSULTANTS 63 NORWICH AVENUE COLCHESTER, CT (860) 516-0033		Reynolds Engineering Services, LLC	Drawing #: 12 OF 15
Job #: 21-106			

GENERAL NOTES:

1. LIMITS OF DISTURBANCE: Upon approval of individual site plan development, the limit of disturbance shall be established in the field for each proposed structure. Disturbance limits shall be 25-35 feet beyond the proposed building and shall be bounded by staked hay bales or silt fence.
2. EROSION CONTROLS: Area to be disturbed shall be bounded by staked hay bales or silt fence. All erosion controls, including silt fence and anti-tracking pad shall be installed and inspected by the Land use ZEO and Wetland Agenda prior to stumps being pulled, grubbing, or excavation. The ZEO and Wetland Agent may modify the erosion control requirement based on field conditions so as to adequately control erosion and siltation from the site.
3. TREES CLEARED: Trees shall be cleared and cut to length and stacked or removed from the site. Then the pulling of stumps, grubbing and/or excavation shall begin.
4. DRIVEWAY: Driveway and shoulder shall be stripped, graded as shown on plan, and graveled. Driveway shoulders shall be stabilized immediately upon grading, either by diverting runoff, mulching, or seeding and hay bales, silt fence or other approved measures the same day that cuts are made.
6. TOPSOIL: All topsoil shall be stripped and saved in area as shown on the plan or as approved by the Planner and Wetland Agent. Topsoil shall not be removed from the site except as in compliance with the Zoning Regulations.
7. CONSTRUCTION & DISTURBED AREA: Excavation and construction shall commence following inspection and approval of erosion control and construction of the driveway. The disturbed area shall be so as to contain runoff within the lot to the greatest extent possible.
8. SITES IN WINTER: When a site will be open during the winter months, rough grading and 4-6 inch mulching must occur prior to construction in order to minimize erosion and uncontrolled runoff.
9. DRAINS: Foundation and curtain drains shall be installed as shown on the approved plan. Any changes to the location of the drains or the additions of any drains shall be approved by the Wetlands Agenda prior to installation.
10. COMPLETE SITE WORK: Finish grading shall occur as soon as possible on all lots where there is potential for erosion and for degradation of wetlands and watercourses. Lots shall be finish graded, seeded with perennial grasses suitable for the respective amount of sun or shade and mulched prior to Certificate of Zoning Compliance.
11. FINAL STABILIZATION: Erosion controls shall be maintained on the lot as long as they are needed to control erosion and sedimentation.
12. E&S CONTROLS: All E&S controls shall be inspected on a daily basis and maintained as necessary until all disturbed areas are permanently re-vegetated or otherwise stabilized.

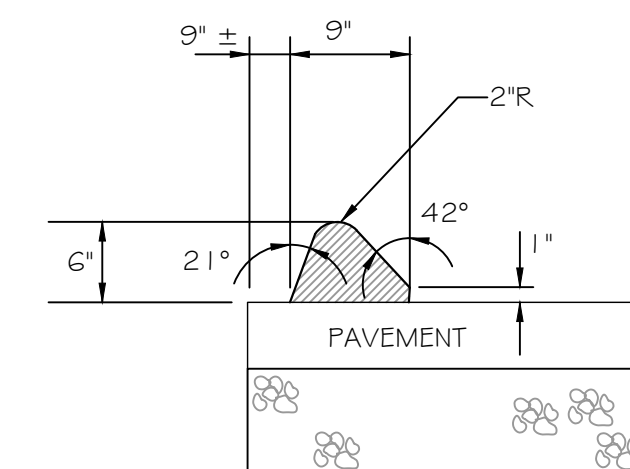


TYPICAL STREET CROSS SECTION LAYOUT
NOT TO SCALE



* CRUSHED STONE SHALL BE USED WHENEVER "A" IS GREATER THAN 15' AND PVC PIPE IS USED.

TYPICAL TRENCH DETAIL (SANITARY SEWER)
NOT TO SCALE

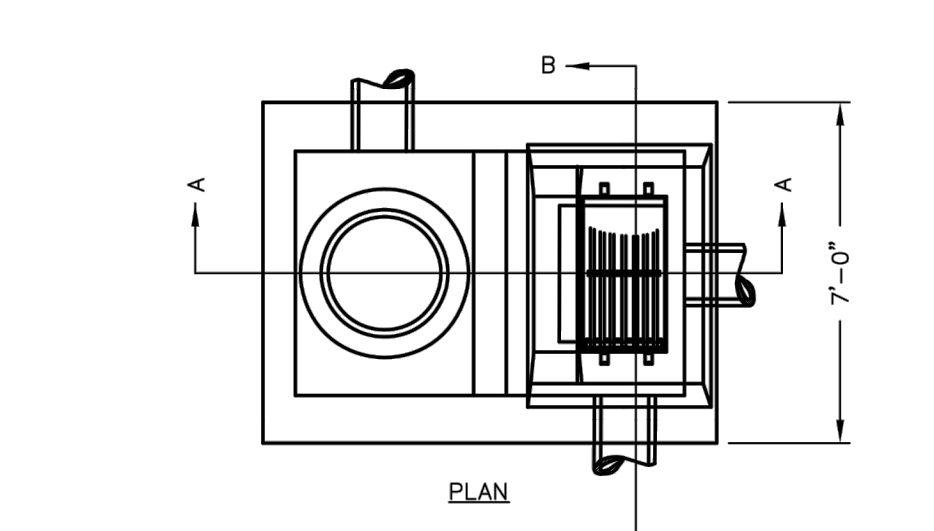


BITUMINOUS CONCRETE LIP CURB
NOT TO SCALE

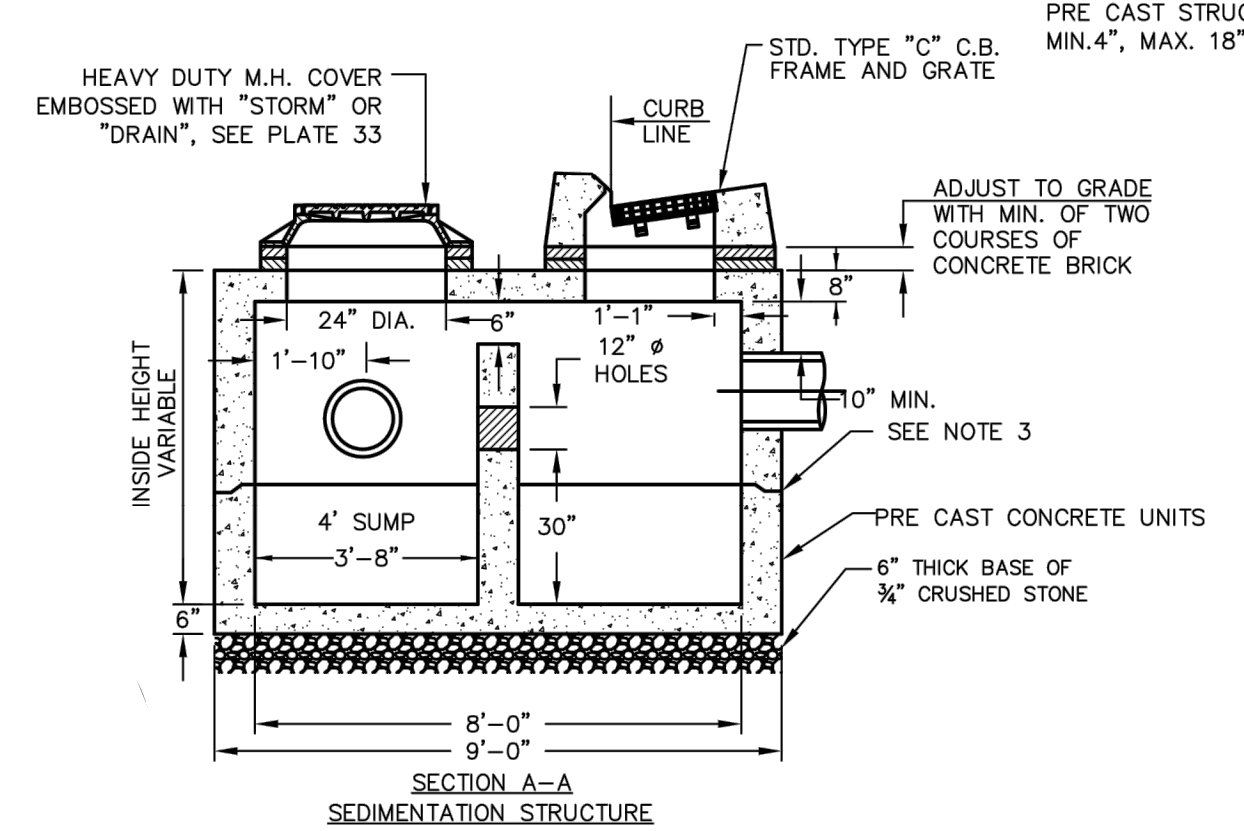
APPROVED
PLANNING AND ZONING
COMMISSION
EAST HAMPTON, CT
DATE: _____
SIGNED: _____

ROB HELLSTROM
LAND SURVEYING LLC
32 MAIN STREET
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(860) 228-9853
hellstromsurveying@yahoo.com
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P.O. BOX 378
HEBRON, CT. 06248

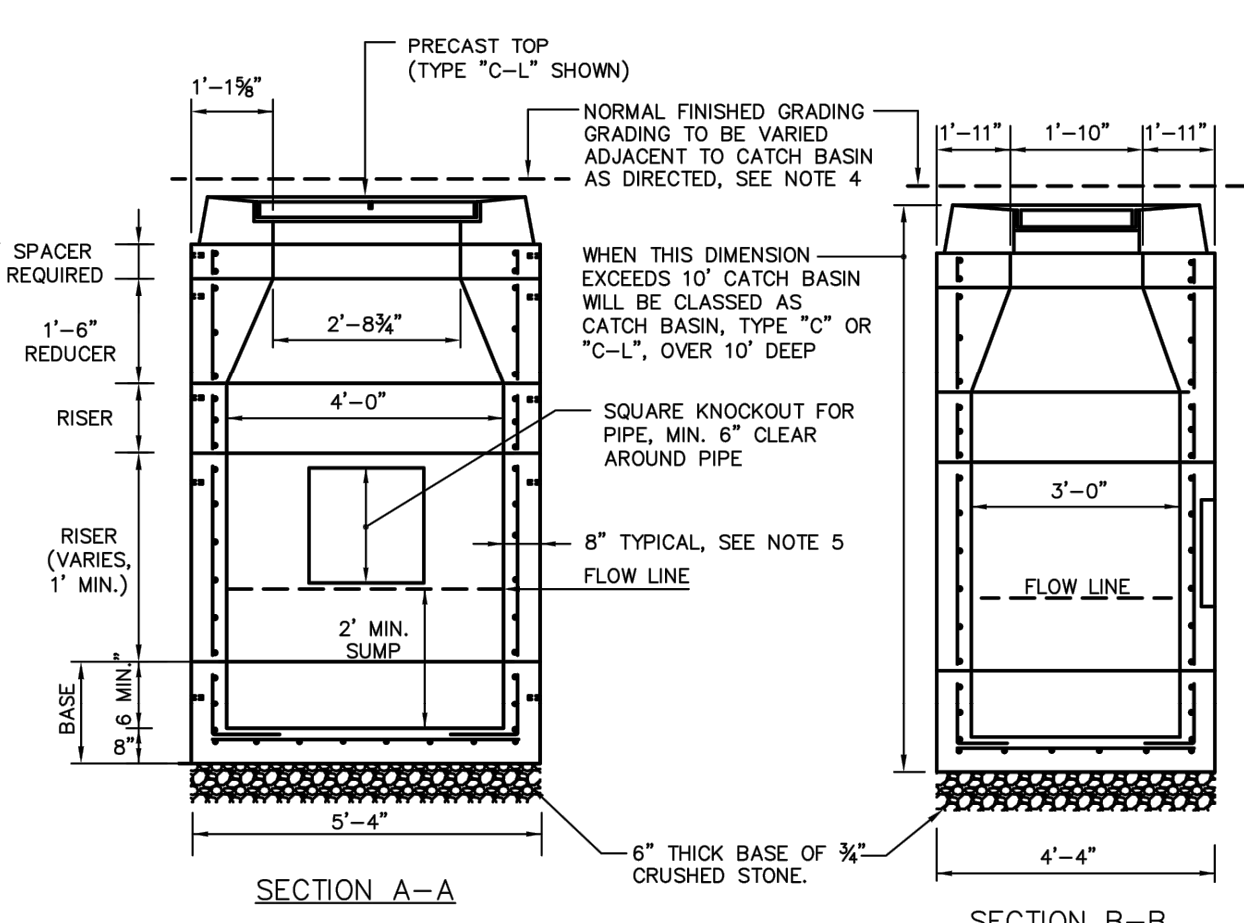
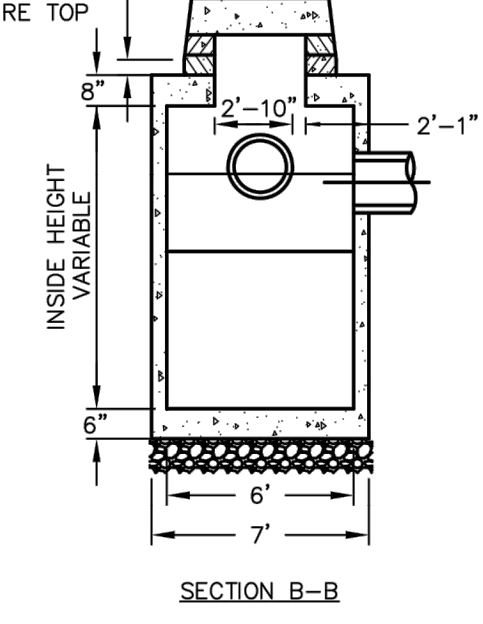
Designed By: MAR		Drawing Scale: AS NOTED	
Drawn By: SAM		Revision	
Checked By: MAR		1. REVISED LAYOUT FOR H.O.D. ZONE	
CAD File: 21-106		2. EASEMENTS & DETAILS	
		3. REVIEW COMMENTS	
		By SAM	
		Date 3/29/23	
		1. 5/03/23	
		2. 7/05/23	
		3.	
GENERAL NOTES AND DETAILS		PROJECT TITLE: HAMPTON VILLAGE	
		37 SOUTH MAIN STREET	
		EAST HAMPTON, CT.	
		PREPARED FOR: BAKAJ CONSTRUCTION LLC	
		37 SOUTH MAIN STREET	
		EAST HAMPTON, CT.	
CIVIL ENGINEERING CONSULTANTS		RES	
63 NORWICH AVENUE		Reynolds Engineering Services, LLC	
COLCHESTER, CT			
(860) 516-0033			
Drawing #:		13 OF 15	
Job #:		21-106	



- NOTES:**
1. BAFFLE CONSTRUCTION TO BE OF CAST MATERIAL WITH THRU HOLES ABOVE OUTLET FLOW LINE OR MORTARED CEMENT BLOCKS WITH WEEP HOLES ABOVE OUTLET FLOW LINE.
 2. ADJUST M.H. FRAME TO SUIT REQUIRED FIELD HEIGHT.
 3. CONSTRUCTION JOINT - SEALED WITH 1" DIA. BUTYL RUBBER OR ACCEPTABLE EQUIVALENT
 4. DESIGN LOADING - AASHTO HS20-44.
 5. STEEL REINFORCEMENT - ASTM A-615-75, GRADE 60, 2" MIN. COVER.
 6. CONCRETE MINIMUM STRENGTH - 5,000 P.S.I. @ 28 DAYS.
 7. MAXIMUM HEIGHT OF EACH ADDITIONAL PIECE 4'-0".
 8. MAXIMUM INSIDE HEIGHT FOR 2 PIECE CHAMBER 8'-0".
 9. ROOF AND SIDE WALL OPENINGS AS SPECIFIED.
 10. STRUCTURE TO BE INSTALLED IN AN "OFFLINE" CONFIGURATION WITH DIVERSION MANHOLES AS PER TOWN PUBLIC IMPROVEMENT STANDARDS.

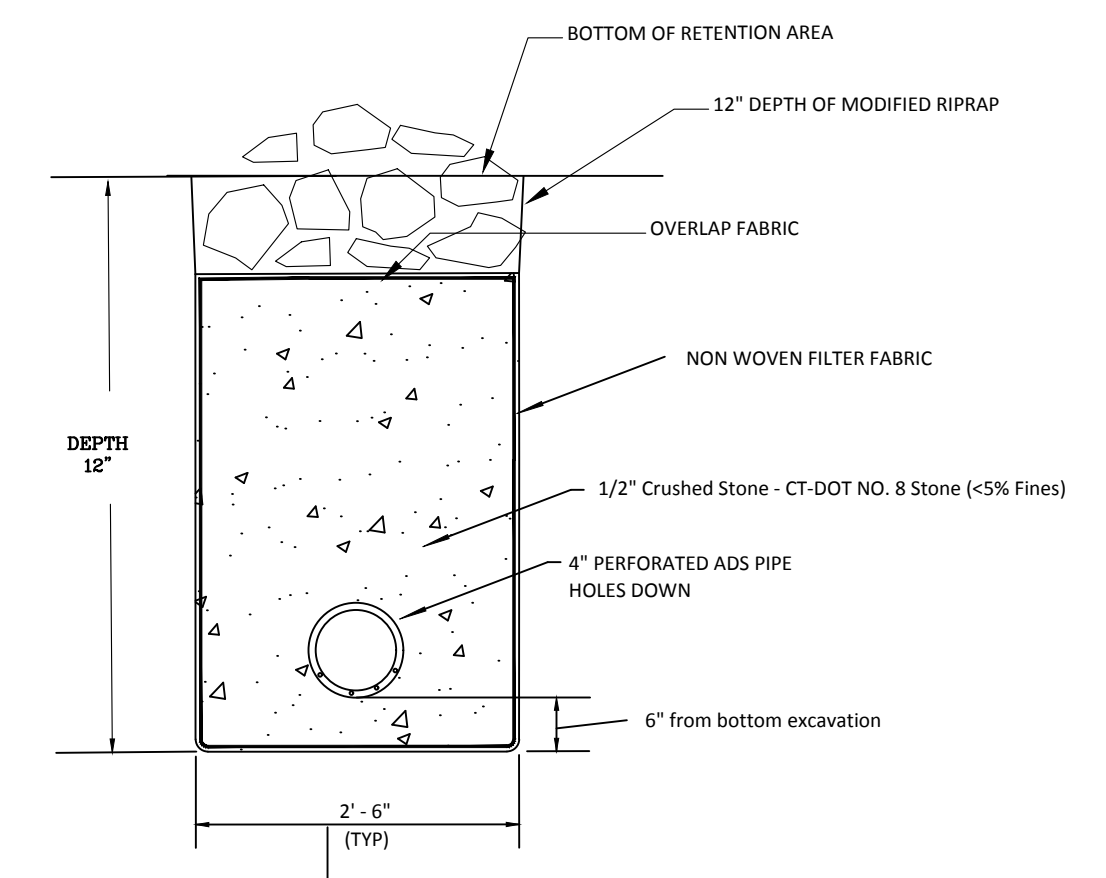


SEDIMENTATION STRUCTURE DETAIL
NOT TO SCALE

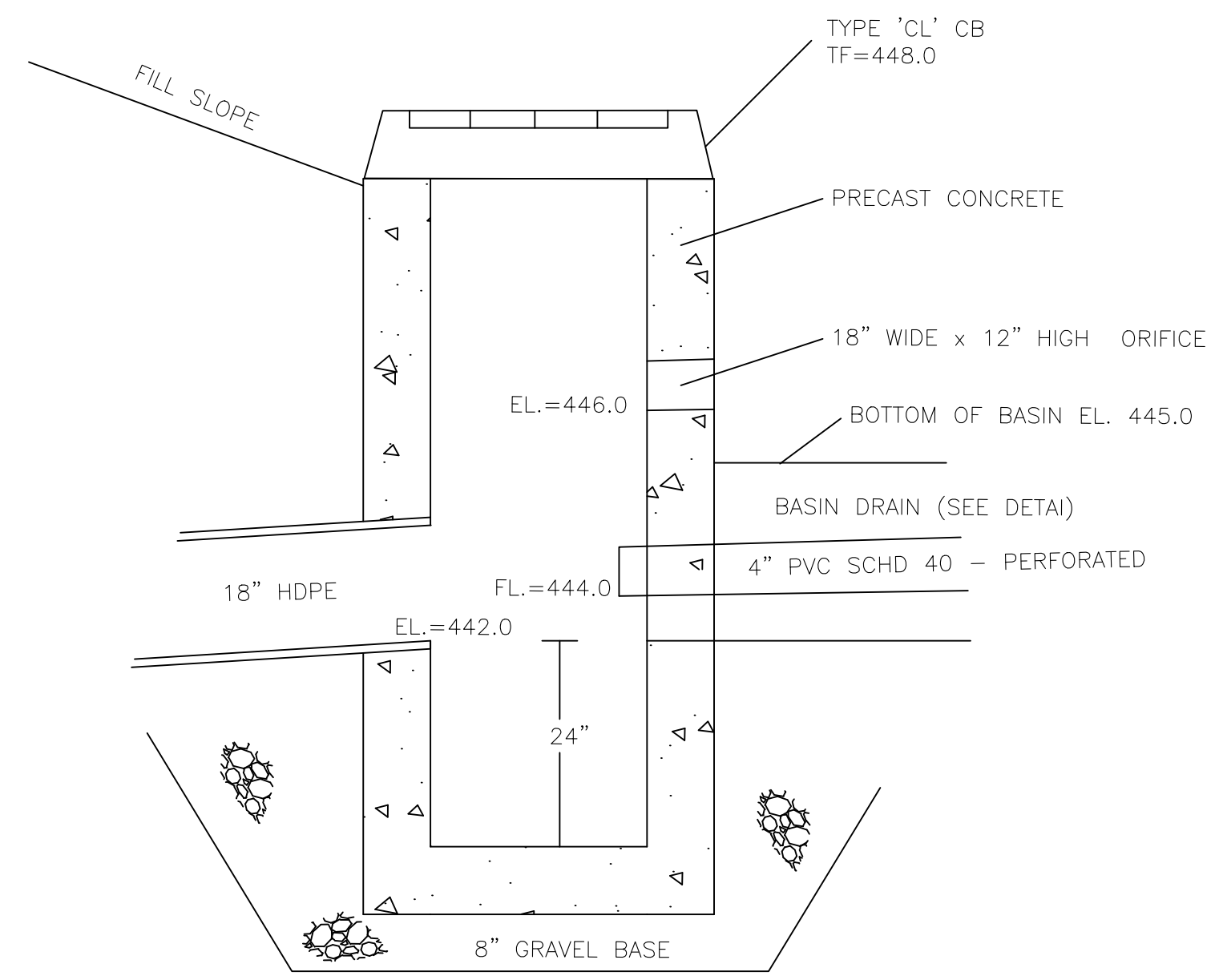


CATCH BASIN DETAIL
NOT TO SCALE

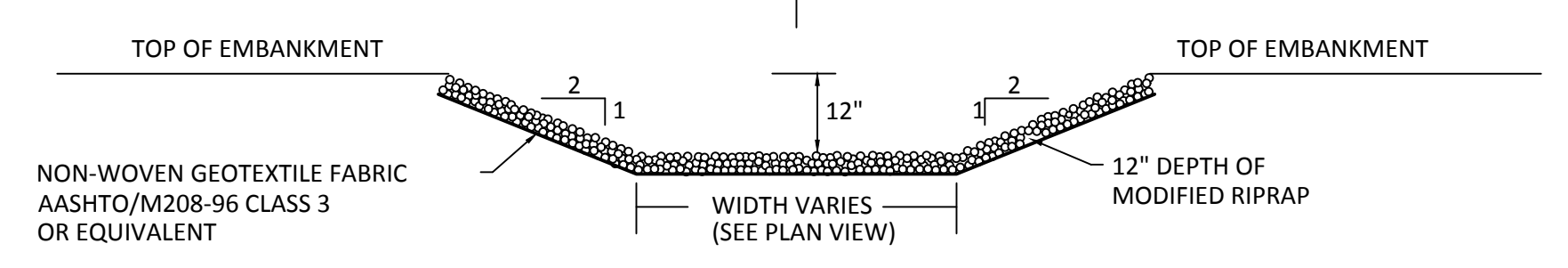
1. ALL CATCH BASINS SHALL CONFORM TO CONDOT STANDARD DETAIL SHEETS HW-507_1 AND HW-507_04 EXCEPT AS OTHERWISE NOTED ON THIS DETAIL. DOUBLE GRATE CATCH BASINS SHALL CONFORM TO CONDOT STANDARD SHEETS HW-507_05 AND HW-507_06.
2. PRECAST CATCH BASIN TOPS MUST BE PROPERLY ALIGNED AS SHOWN AND SHALL CONFORM TO CONDOT STANDARD DETAIL SHEETS HW-507_07. CAPE COD CATCH BASIN TOPS SHALL HAVE AN OPEN THROAT.
3. ALL FRAMES AND GRATES SHALL BE GALVANIZED. FOR DETAILS OF FRAMES AND GRATES, SEE CONDOT STANDARD DETAIL SHEET HW-507_08.
4. WHEN TYPE "C" CATCH BASINS ARE CONSTRUCTED IN PAVEMENT, THE NORMAL CUTTER OF THE ROADWAY SHALL BE VARIED TO PROVIDE AN ADDITIONAL 2-INCH DEEPENED GUTTER AT THE CATCH BASIN.
5. WALL THICKNESS TO BE 12 INCHES WHEN HEIGHT OF STRUCTURE EXCEEDS 10 FEET FROM TOP OF FRAME TO BOTTOM OF BASE. THICKER WALLS APPLY ONLY TO PORTION OF STRUCTURE BELOW 10' DEEP.
6. PRECAST RISER SECTIONS SHALL NEVER HAVE CORNER PIPE ENTRIES. WHEN PIPE ALIGNMENT CANNOT BE CHANGED, A ROUND STRUCTURE SHALL BE USED PER CONDOT DETAIL HW-507_04.
7. CATCH BASINS LEFT ABOVE THE FINISHED GUTTER GRADE FOR THE WINTER MUST BE PROPERLY SHIMMED FOR FLOWING AS SHOWN IN PLATE 4.
8. MORTAR MIX SHALL NOT CONTAIN LIME.
9. ENDS OF PIPE SHALL BE SAWCUT FLUSH WITH INSIDE WALLS.
10. IF CONCRETE MASONRY UNITS ARE USED THE FOLLOWING ADDITIONAL REQUIREMENTS SHALL BE MET:
 - MAXIMUM CORBEL SHALL NOT EXCEED 2 INCHES;
 - WHERE NECESSARY, BLOCKS MAY BE CUT OR CONCRETE BRICK USED (NO RED BRICK PERMITTED);
 - CORNERS SHALL BE SQUARE, COURSES LEVEL, AND JOINTS PROPERLY STAGGERED;
 - VOIDS IN EXTERIOR WALLS SHALL BE GROUTED, AND CORBELS SHALL BE WEDGED.



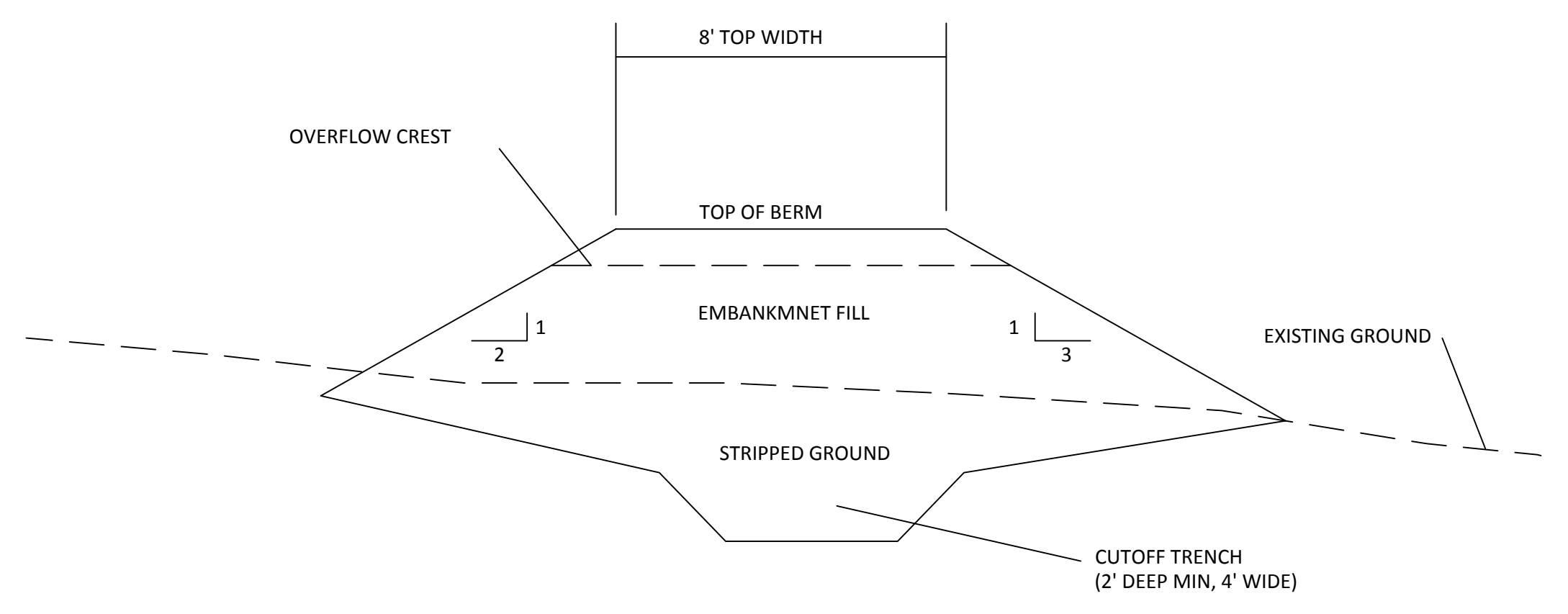
BASIN DRAIN DETAIL
NOT TO SCALE



BASIN OUTLET STRUCTURE DETAIL
NOT TO SCALE

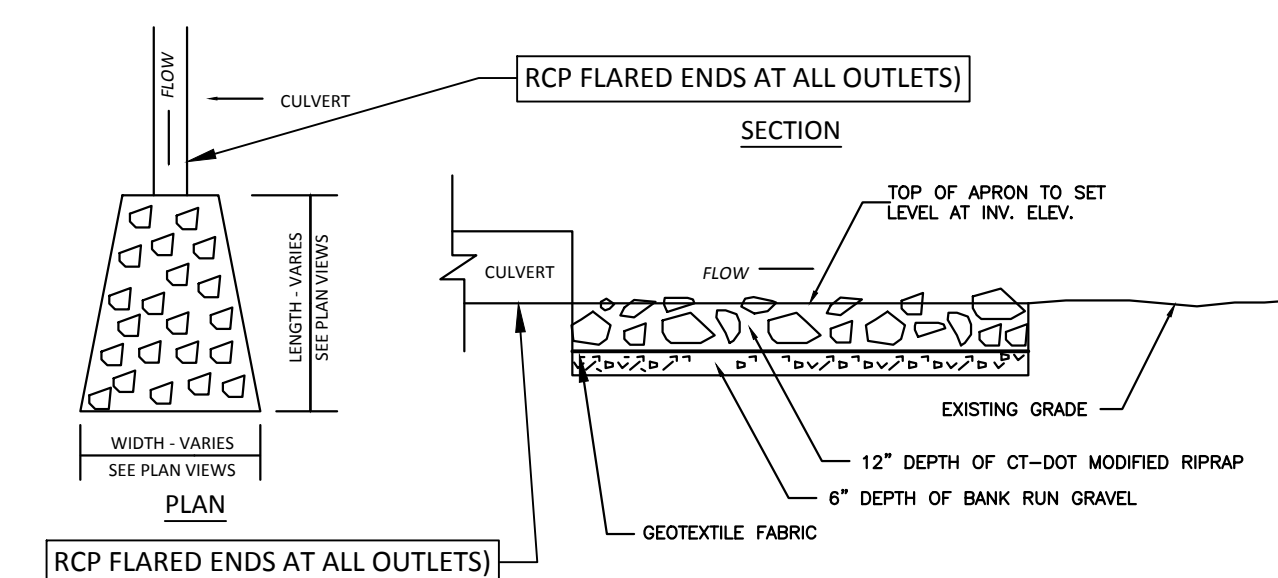


ROCK LINED SPILLWAY
NOT TO SCALE



EMBANKMENT CROSS SECTION FOR RETENTION AREA
(NOT TO SCALE)

- NOTES:**
1. THE FOUNDATION FOR THE EMBANKMENT SHALL BE STRIPPED TO REMOVE VEGETATION, ORGANIC SOILS AND UNSUITABLE SUB SOILS.
 2. THE STRIPPED FOUNDATION SHALL BE SCARIFIED PARALLEL TO THE AXIS OF THE FILL.
 3. THE EMBANKMENT FILL SHALL SUITABLE SILTY SANDS (USCS SM).
 4. EMBANKMENT FILL SHALL CONTAIN NO STONE GRATER THAN 3" AND SHALL MEET THE FOLLOWING GRADATION:
 - #4 SIEVE 75-90% PASSING BY WEIGHT
 - #10 SIEVE 65-90% PASSING BY WEIGHT
 - #40 SIEVE 50-85% PASSING BY WEIGHT
 - #200 SIEVE 10-50% PASSING BY WEIGHT
 5. PRIOR TO EMBANKMENT FILL PLACEMENT, REPRESENTATIVE SAMPLES OF THE PROPOSED BORROW MATERIAL SHALL BE TESTED BY A QUALIFIED SOIL TESTING LABORATORY TO DETERMINE THE OPTIMUM MOISTURE CONTENT AND MAXIMUM DENSITY.
 6. THE EMBANKMENT FILL SHALL BE PLACED IN A MAXIMUM LIFT THICKNESS OF NINE INCHES.
 7. DURING PLACEMENT OF THE EMBANKMENT FILL, THE MOISTURE CONTENT OF THE MATERIALS BEING PLACED SHALL BE MAINTAINED WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT.
 8. THE EMBANKMENT FILL SHALL BE COMPACTED AS NECESSARY TO A MINIMUM OF 95% MAXIMUM DENSITY BY ASTM D 1557, MODIFIED PROCTOR.



ROCK APRON DETAIL
NOT TO SCALE

ROCK APRON TABLE		
APRON	LENGTH (ft.)	WIDTH (ft.)
FE 1	9	12

APPROVED
PLANNING AND ZONING
COMMISSION
EAST HAMPTON, CT

DATE: _____

SIGNED: _____

ROB HELLSTROM
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(860) 228-9853
hellstromsurveying@yahoo.com
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Mailing Address:
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Designed By: MAR
Drawn By: SAM
Checked By: MAR
CAD File: 21-106

Drawing Scale: AS NOTED

Rev.	Date	By	Revision
1.	3/29/23	SAM	REVISED LAYOUT FOR H.O.D. ZONE EASEMENTS & DETAILS
2.	5/03/23	SAM	REVIEW COMMENTS
3.	7/05/23	SAM	REVIEW COMMENTS

GENERAL NOTES AND DETAILS

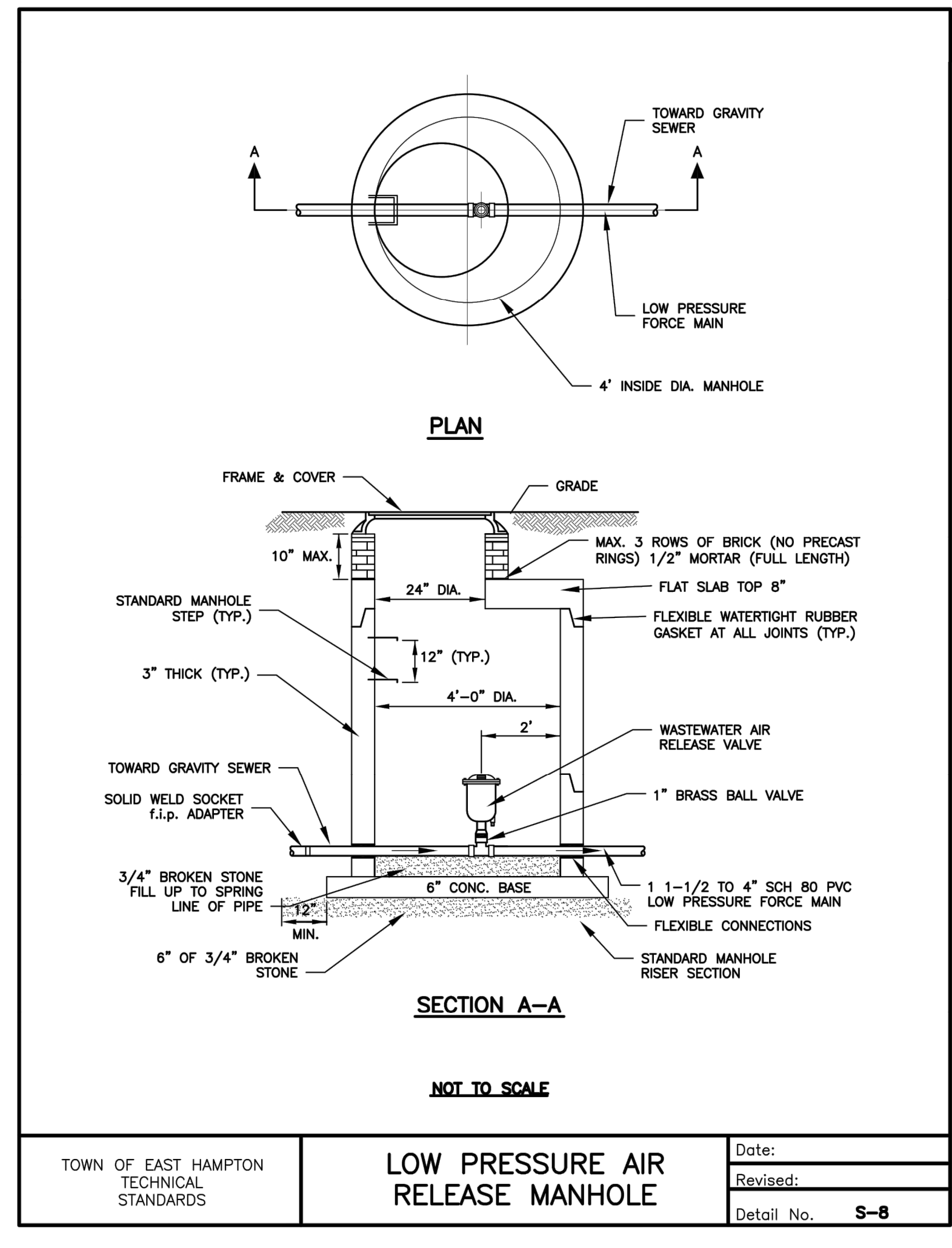
PROJECT TITLE: **HAMPTON VILLAGE**
37 SOUTH MAIN STREET
EAST HAMPTON, CT.

PREPARED FOR: **BAKAJ CONSTRUCTION LLC**
37 SOUTH MAIN STREET
EAST HAMPTON, CT.

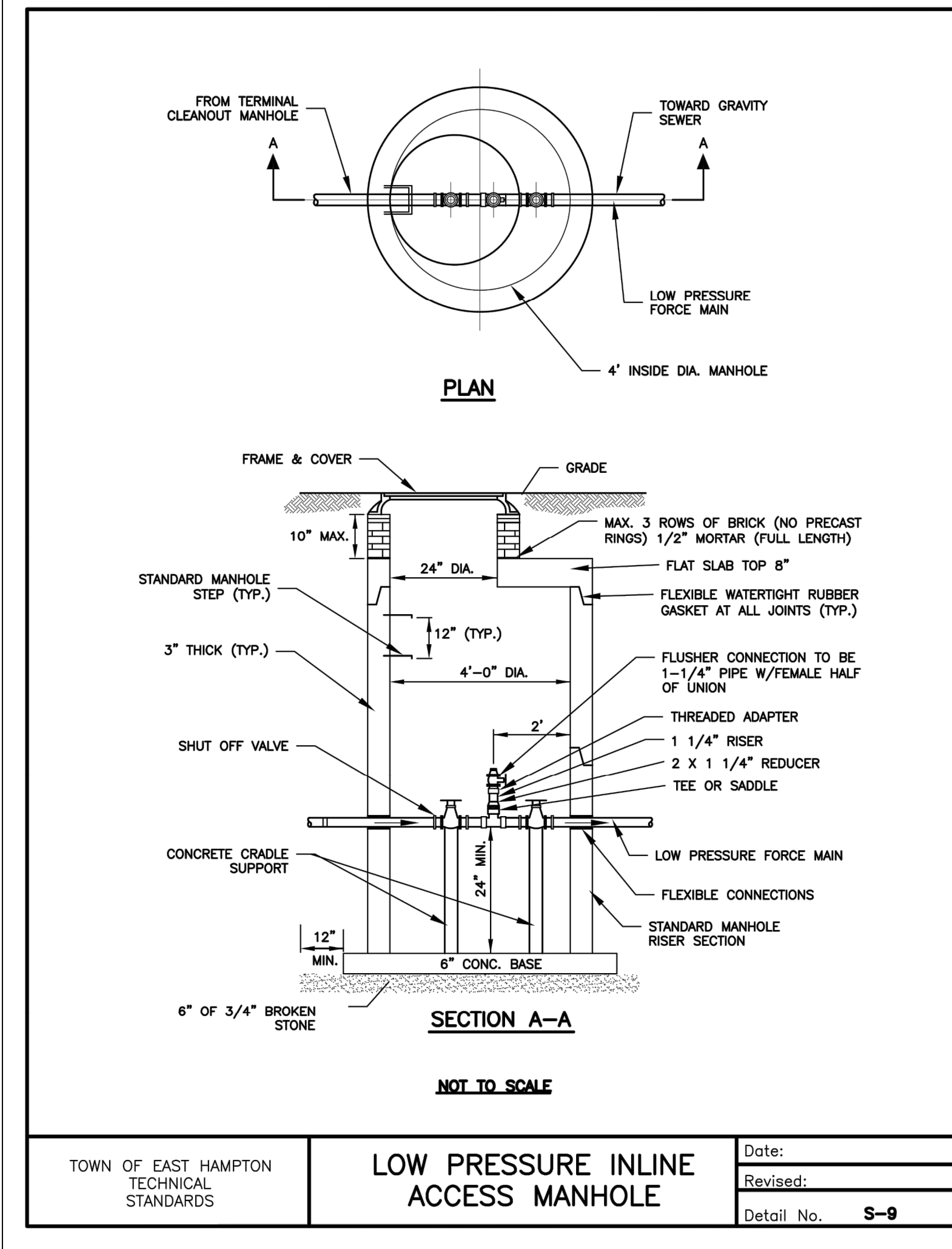
CIVIL ENGINEERING CONSULTANTS
63 NORWICH AVENUE
COLCHESTER, CT
(860) 516-0033

RES
Reynolds Engineering Services, LLC

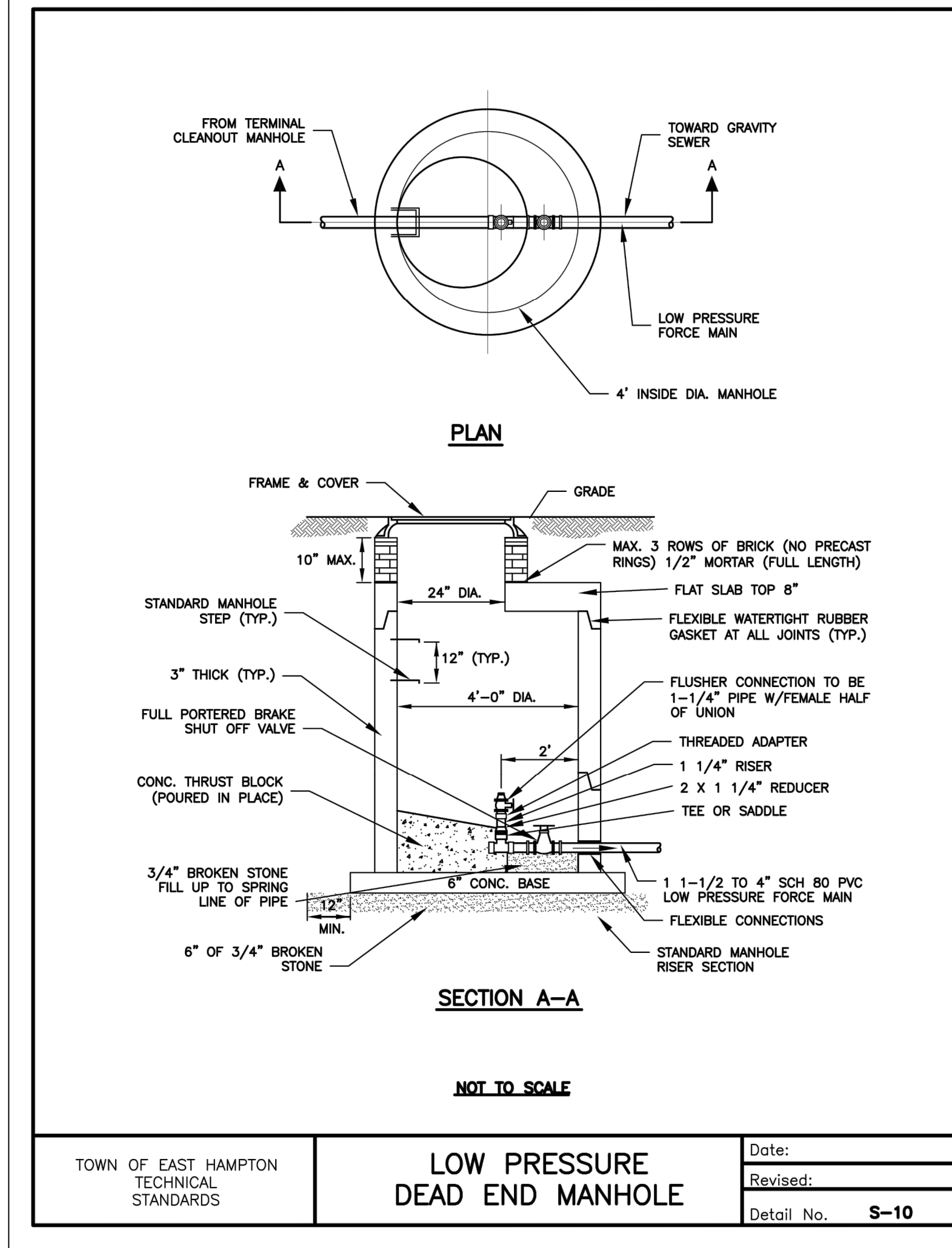
Drawing #: 14 OF 15
Job #: 21-106



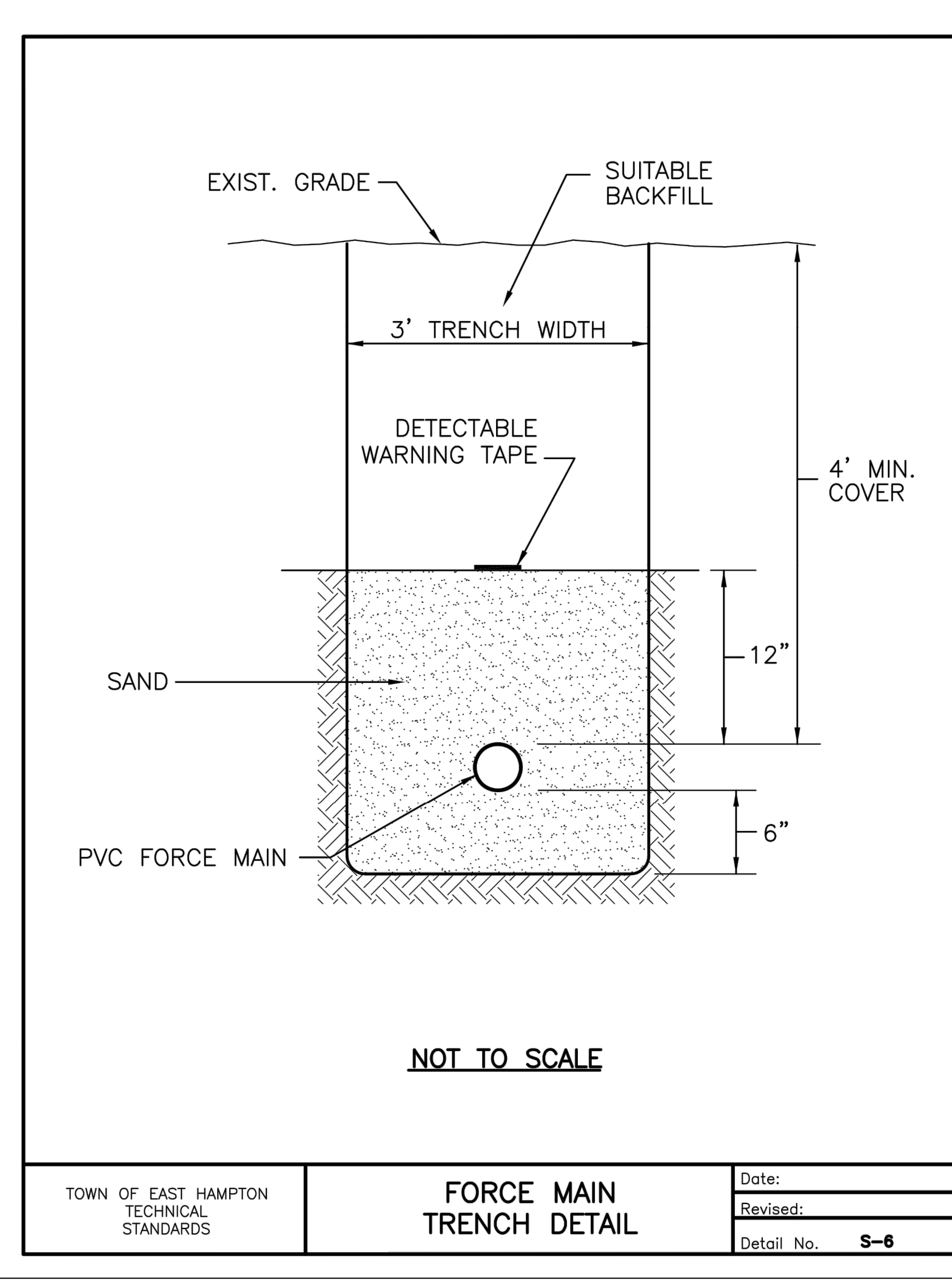
TOWN OF EAST HAMPTON TECHNICAL STANDARDS
LOW PRESSURE AIR RELEASE MANHOLE
 Date: _____
 Revised: _____
 Detail No. **S-8**



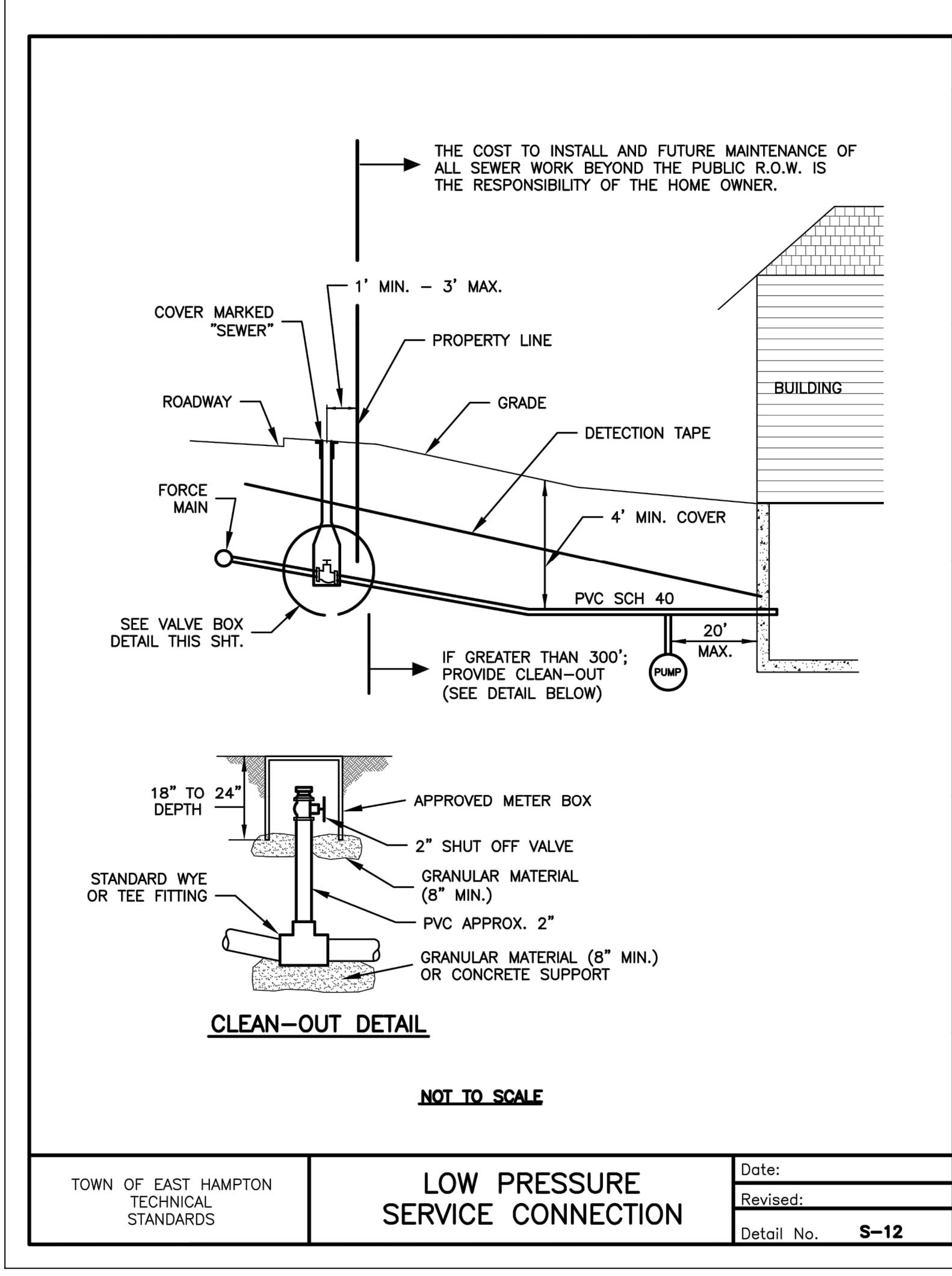
TOWN OF EAST HAMPTON TECHNICAL STANDARDS
LOW PRESSURE INLINE ACCESS MANHOLE
 Date: _____
 Revised: _____
 Detail No. **S-9**



TOWN OF EAST HAMPTON TECHNICAL STANDARDS
LOW PRESSURE DEAD END MANHOLE
 Date: _____
 Revised: _____
 Detail No. **S-10**



TOWN OF EAST HAMPTON TECHNICAL STANDARDS
FORCE MAIN TRENCH DETAIL
 Date: _____
 Revised: _____
 Detail No. **S-6**



TOWN OF EAST HAMPTON TECHNICAL STANDARDS
LOW PRESSURE SERVICE CONNECTION
 Date: _____
 Revised: _____
 Detail No. **S-12**

APPROVED
 PLANNING AND ZONING
 COMMISSION
 EAST HAMPTON, CT
 DATE: _____
 SIGNED: _____

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DESIGNED BY: MAR
 DRAWN BY: SAM
 CHECKED BY: MAR
 CAD FILE: 21-106

DRAWING SCALE: AS NOTED

Rev.	Date	By	REVISION
1.	3/29/23	SAM	REVISED LAYOUT FOR H.O.D. ZONE EASEMENTS & DETAILS
2.	5/03/23	SAM	REVIEW COMMENTS
3.	7/05/23	SAM	REVIEW COMMENTS

GENERAL NOTES AND DETAILS

PROJECT TITLE: **HAMPTON VILLAGE**
 37 SOUTH MAIN STREET
 EAST HAMPTON, CT.

PREPARED FOR: **BAKAJ CONSTRUCTION LLC**
 37 SOUTH MAIN STREET
 EAST HAMPTON, CT.

CIVIL ENGINEERING CONSULTANTS
 63 NORWICH AVENUE
 COLCHESTER, CT
 (860) 516-0033

RES
 Reynolds Engineering Services, LLC

Drawing #: 15 OF 15
 Job #: 21-106



REYNOLDS ENGINEERING SERVICES, LLC

63 Norwich Avenue ♦ Colchester, CT 06415 ♦ Ph. (860) 465-7419 Fax (860) 456-1356
Suite 202

May 1, 2023

Michael Bakaj
Po Box 264
Lebanon, CT 06249

RE: **DRAINAGE DESIGN REPORT**
Hampton Village – HOD Subdivision
37 South Main Street
East Hampton, Connecticut
Proj. No. 21-106

Gentlemen:

Pursuant to your request, the following design report was prepared to address the drainage design proposed for the subdivision plan at 37 South Main Street, East Hampton, Connecticut.

Existing Conditions

The subject parcel (LOT) is approximately 20.2 acres and is located in the Town of East Hampton to the west of South Main Street. The property is predominantly wooded with areas of light woods and brush. The upland soils on the site and in the area of study are predominantly USDA Sutton, Canton and Charlton Series, moderately well drained with moderate runoff potential. There are also areas of wetlands on the site and immediately to the west and south.

The majority of the site drains toward the west to a wetland system on designated open space property. A portion of the site (Watershed E2) drains toward the south to an area of wetlands. For analysis, the site has been divided into 2 watershed areas with 2 points of analysis.

Watershed Area E1:

A wooded, 11.5-acre portion of the site forms a watershed that drains to a wetland system east of the site. An analysis point (DP-1) is designated for this watershed. The peak rate of runoff from the 11.5-acre drainage area was estimated using the TR-20 Method, (see attached computation sheets).

Watershed Area E2:

A wooded, 8.7-acre portion of the site forms a watershed that drains to a wetland system east of the site. An analysis point (DP-2) is designated for this watershed. The peak rate of runoff from the 8.7-acre drainage area was estimated using the TR-20 Method, (see attached computation sheets).

Analysis Point	Existing Condition Peak Rate of Runoff (cfs)				
	2-year	10-year	25-year	50-year	100-year
DPE1	1.1	6.4	11.0	14.8	19.2
DPE2	0.8	4.2	7.3	9.8	12.7

Proposed Conditions

The proposed development of the site consists of the construction of 22 residences with driveways from the proposed roads as shown on the plan entitled, "Hampton Village – HOD Subdivision, 37 South Main Street, East Hampton, Connecticut", sheets 1-15, dated 7/26/21, revised to 5/3/23. The proposed grading of the site includes a stormwater retention area to store excess storm runoff and maintain the existing drainage patterns on the site.

The proposed catch basin systems associated with the proposed roads will direct and convey storm water runoff from the roads to the retention area. The retention area has been located so as to closely follow the drainage patterns and watersheds discussed in the Existing Conditions section. The watershed areas associated with each of the storm water discharge areas were delineated. The stormwater discharge anticipated from each post development watershed was estimated. The results of these calculations are presented below.

The proposed retention area is designed to slow the velocity of runoff, encourage infiltration, and convey it toward the design point. The proposed retention area has been sized to store the increase in peak runoff due to the development estimated for the 100-year return period and convey it along the existing drainage paths.

Rock aprons are proposed to protect the pipe outlet from erosion. In addition, the rock apron will reduce the velocity of runoff exiting the drainage pipes to minimize impacts to the downstream areas.

Watershed Area PE1:

A 16.2-acre watershed that drains to a wetland system west of the site. An analysis point (DP-1) is designated for this watershed. The watershed was divided into 3 subwatershed areas for analysis.

Subwatershed Area PE1A (6.4 acres):

Includes areas of lot development and road runoff. Storm water runoff from this watershed is directed to a storm water retention area. Discharges from the retention area flow overland to Design Point #1. The retention basin is designed to encourage the infiltration of storm water runoff from the impervious areas and maintain the current drainage pattern.

Subwatershed Area PE1B (5.5 acres):

Includes areas of undeveloped woods and lot development. Storm water runoff from this watershed flows overland to the retention area.

Subwatershed Area PE1C (4.2 acres):

Includes areas of undeveloped woods. Storm water runoff from this watershed flows overland to Design Point #1.

The peak rate of runoff from the 16.2 acre drainage area was estimated using the TR-20 Method, (see attached computation sheets).

Watershed Area PE2:

A predominantly undeveloped, wooded 4.1-acre watershed that drains to a wetland system south of the site. An analysis point (DP-2) is designated for this watershed.

The peak rate of runoff from the 4.1-acre drainage area was estimated using the TR-20 Method, (see attached computation sheets).

Analysis Point	Proposed Condition Peak Rate of Runoff (cfs)				
	2-year	10-year	25-year	50-year	100-year
DPP1	0.9	2.9	6.0	8.5	10.8
DPP2	0.6	3.4	5.7	8.0	10.4

Conclusion:

The proposed development will not significantly change drainage patterns on the site. The catch basin system will collect, convey, retain and distribute stormwater runoff along existing drainage paths. Excess storm water runoff will be conveyed to the proposed stormwater retention area.

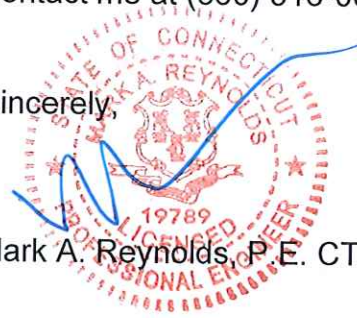
The proposed retention area is a stable outlet for the proposed drainage system. Further, the proposed rock aprons will reduce the velocity of runoff exiting the drainage system, thus minimizing impacts to the areas downstream.

The proposed development will not adversely impact the drainage of surface runoff on the site or in the surrounding area.

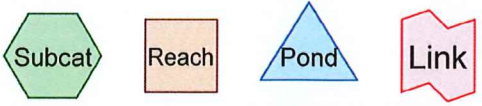
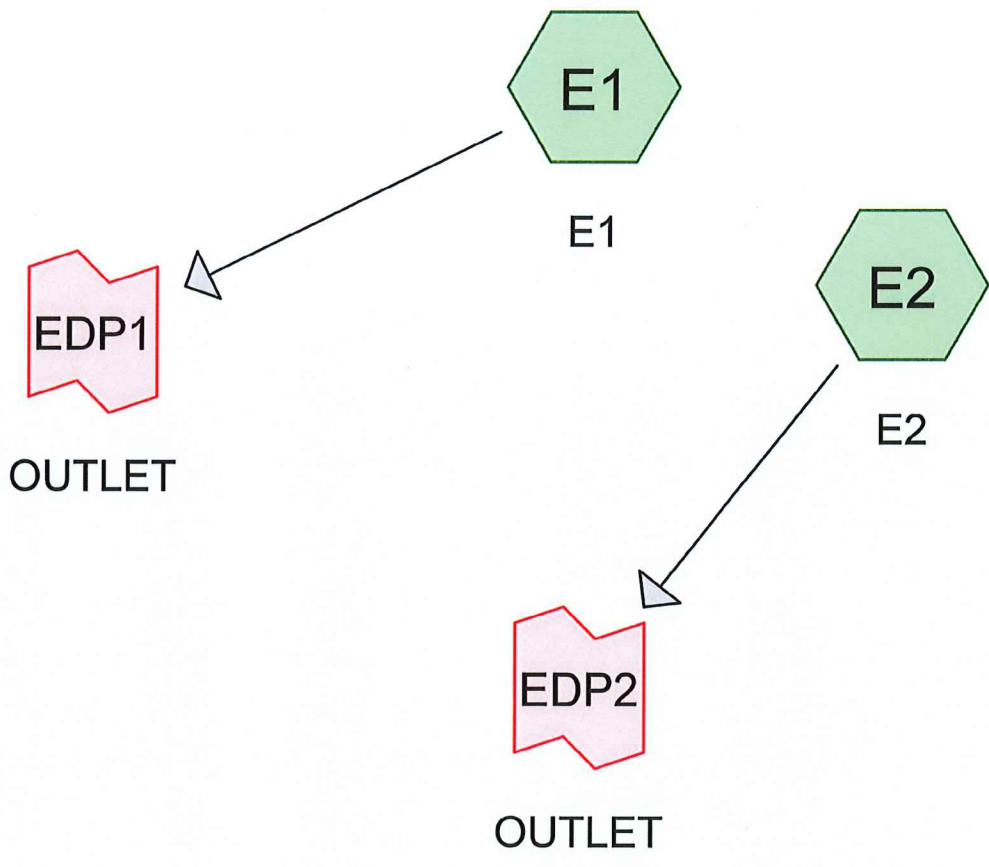
If you have any questions, please contact me at (860) 516-0033.

Sincerely,

Mark A. Reynolds, P.E. CT #19789



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MAY 03 2023
TIME _____



Routing Diagram for HV_EX
Prepared by Reynolds Engineering Svcs, LLC, Printed 5/3/2023
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HV_EX

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
20.200	55	Woods, Good, HSG B (E1, E2)
20.200	55	TOTAL AREA

HV_EX

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
20.200	HSG B	E1, E2
0.000	HSG C	
0.000	HSG D	
0.000	Other	
20.200		TOTAL AREA

HV_EX

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	20.200	0.000	0.000	0.000	20.200	Woods, Good	E1, E2
0.000	20.200	0.000	0.000	0.000	20.200	TOTAL AREA	

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

Subcatchment E1: E1

Runoff Area=11.500 ac 0.00% Impervious Runoff Depth>0.26"
Flow Length=1,120' Tc=34.8 min CN=55 Runoff=1.14 cfs 0.246 af

Subcatchment E2: E2

Runoff Area=8.700 ac 0.00% Impervious Runoff Depth>0.25"
Flow Length=1,100' Tc=45.1 min CN=55 Runoff=0.76 cfs 0.185 af

Link EDP1: OUTLET

Inflow=1.14 cfs 0.246 af
Primary=1.14 cfs 0.246 af

Link EDP2: OUTLET

Inflow=0.76 cfs 0.185 af
Primary=0.76 cfs 0.185 af

Total Runoff Area = 20.200 ac Runoff Volume = 0.431 af Average Runoff Depth = 0.26"
100.00% Pervious = 20.200 ac 0.00% Impervious = 0.000 ac



HV_EX

Type III 24-hr 2 YR Rainfall=3.39"

Prepared by Reynolds Engineering Svcs, LLC

Printed 5/3/2023

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Page 6

Summary for Subcatchment E1: E1

Runoff = 1.14 cfs @ 12.72 hrs, Volume= 0.246 af, Depth> 0.26"

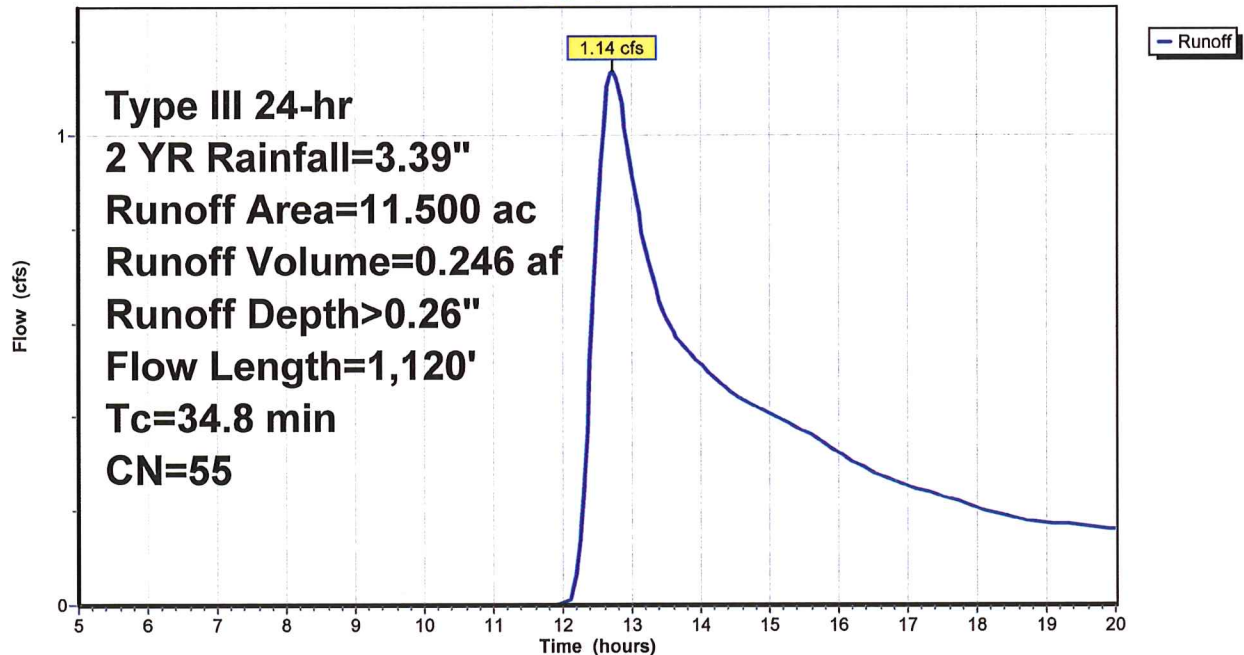
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.39"

Area (ac)	CN	Description
11.500	55	Woods, Good, HSG B
11.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.9	100	0.0200	0.08		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
9.8	600	0.0420	1.02		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
4.1	420	0.1190	1.72		Shallow Concentrated Flow, SC2 Woodland Kv= 5.0 fps
34.8	1,120	Total			

Subcatchment E1: E1

Hydrograph



Summary for Subcatchment E2: E2

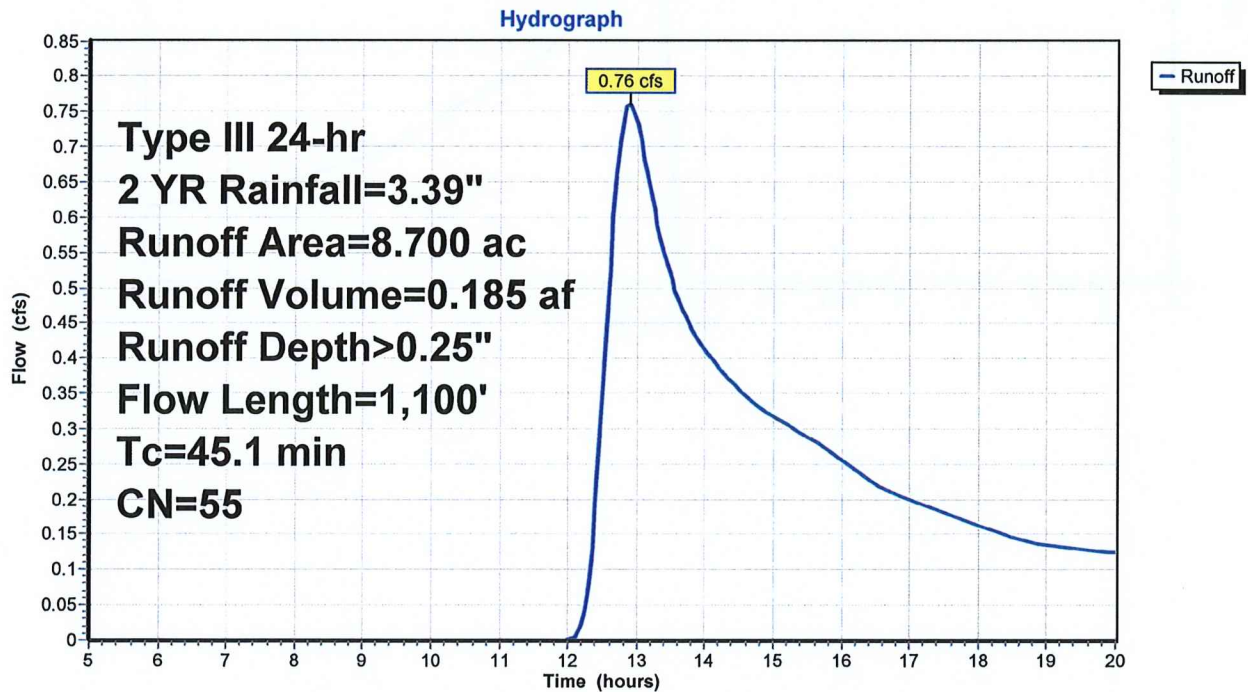
Runoff = 0.76 cfs @ 12.88 hrs, Volume= 0.185 af, Depth> 0.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.39"

Area (ac)	CN	Description
8.700	55	Woods, Good, HSG B
8.700		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.5	100	0.0100	0.06		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
17.6	1,000	0.0360	0.95		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
45.1	1,100	Total			

Subcatchment E2: E2



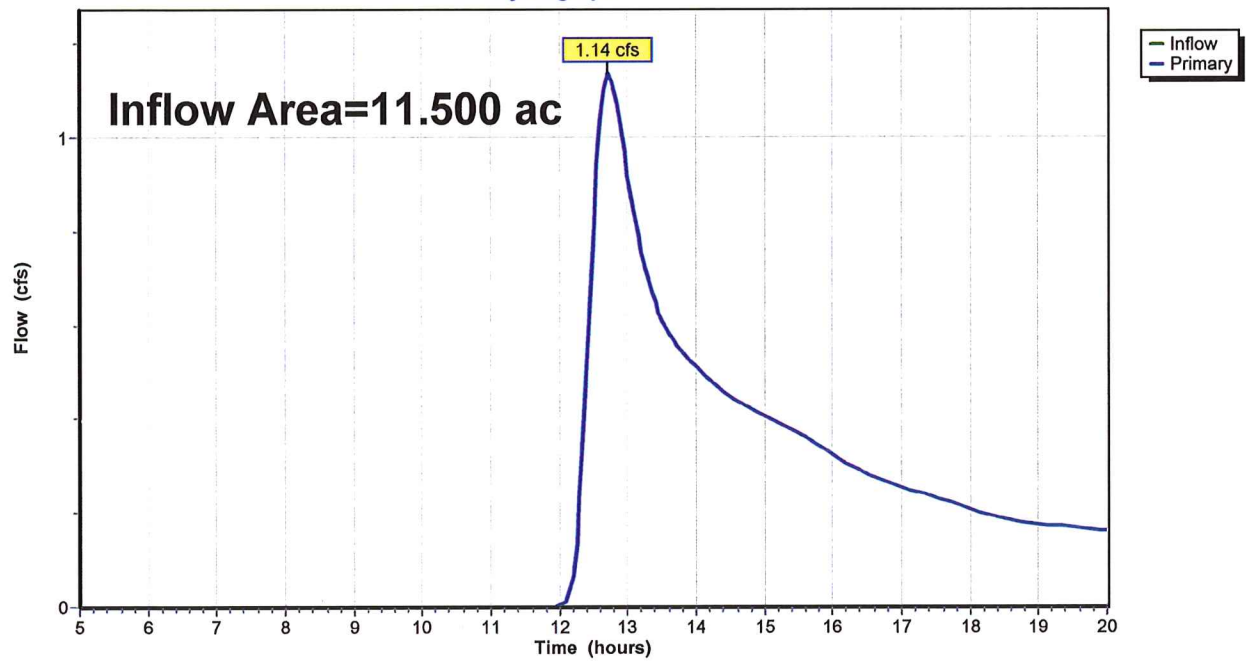
Summary for Link EDP1: OUTLET

Inflow Area = 11.500 ac, 0.00% Impervious, Inflow Depth > 0.26" for 2 YR event
Inflow = 1.14 cfs @ 12.72 hrs, Volume= 0.246 af
Primary = 1.14 cfs @ 12.72 hrs, Volume= 0.246 af, Atten= 0%, Lag= 0.0 min

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

Link EDP1: OUTLET

Hydrograph



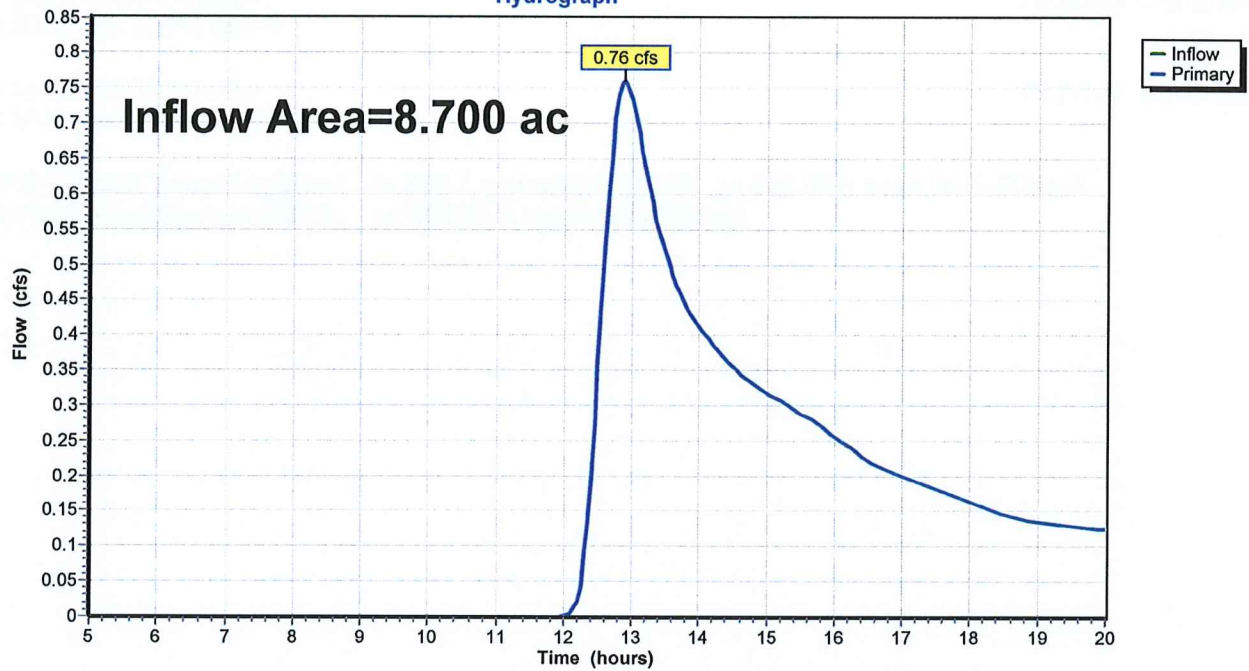
Summary for Link EDP2: OUTLET

Inflow Area = 8.700 ac, 0.00% Impervious, Inflow Depth > 0.25" for 2 YR event
Inflow = 0.76 cfs @ 12.88 hrs, Volume= 0.185 af
Primary = 0.76 cfs @ 12.88 hrs, Volume= 0.185 af, Atten= 0%, Lag= 0.0 min

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

Link EDP2: OUTLET

Hydrograph



HV_EX

Type III 24-hr 10 YR Rainfall=5.19"

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Page 10

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

Subcatchment E1: E1

Runoff Area=11.500 ac 0.00% Impervious Runoff Depth>0.95"
Flow Length=1,120' Tc=34.8 min CN=55 Runoff=6.36 cfs 0.906 af

Subcatchment E2: E2

Runoff Area=8.700 ac 0.00% Impervious Runoff Depth>0.94"
Flow Length=1,100' Tc=45.1 min CN=55 Runoff=4.20 cfs 0.682 af

Link EDP1: OUTLET

Inflow=6.36 cfs 0.906 af
Primary=6.36 cfs 0.906 af

Link EDP2: OUTLET

Inflow=4.20 cfs 0.682 af
Primary=4.20 cfs 0.682 af

Total Runoff Area = 20.200 ac Runoff Volume = 1.588 af Average Runoff Depth = 0.94"
100.00% Pervious = 20.200 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment E1: E1

Runoff = 6.36 cfs @ 12.57 hrs, Volume= 0.906 af, Depth> 0.95"

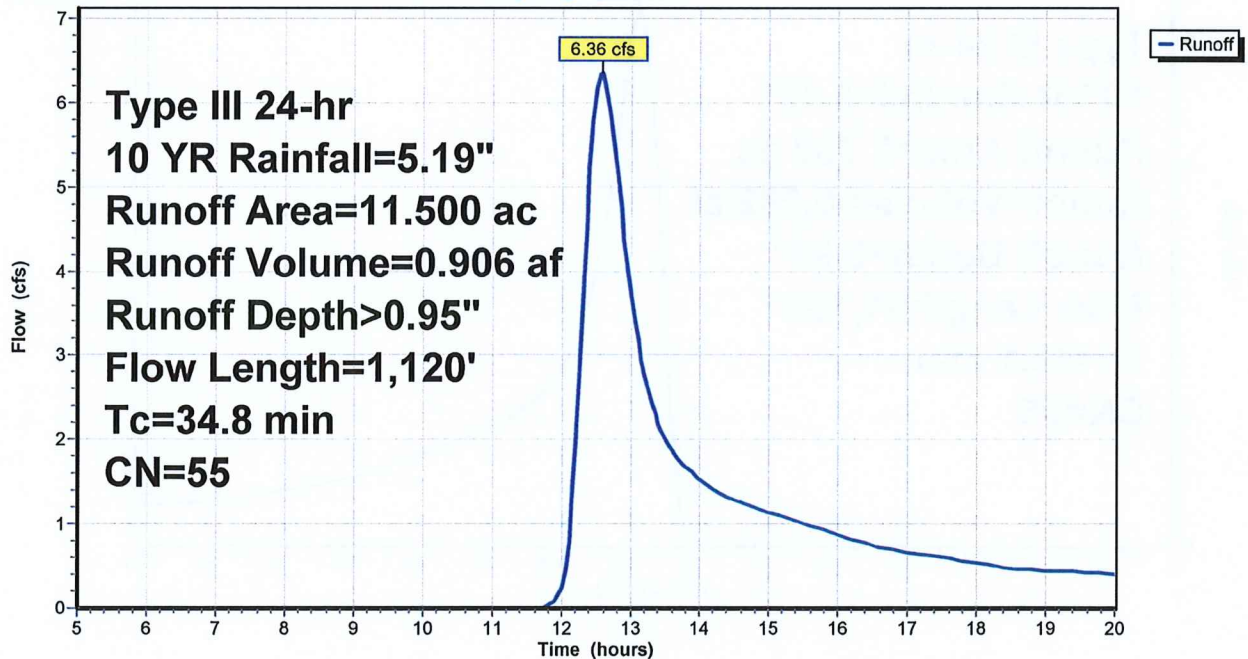
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 YR Rainfall=5.19"

Area (ac)	CN	Description
11.500	55	Woods, Good, HSG B
11.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.9	100	0.0200	0.08		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
9.8	600	0.0420	1.02		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
4.1	420	0.1190	1.72		Shallow Concentrated Flow, SC2 Woodland Kv= 5.0 fps
34.8	1,120	Total			

Subcatchment E1: E1

Hydrograph



Summary for Subcatchment E2: E2

Runoff = 4.20 cfs @ 12.72 hrs, Volume= 0.682 af, Depth> 0.94"

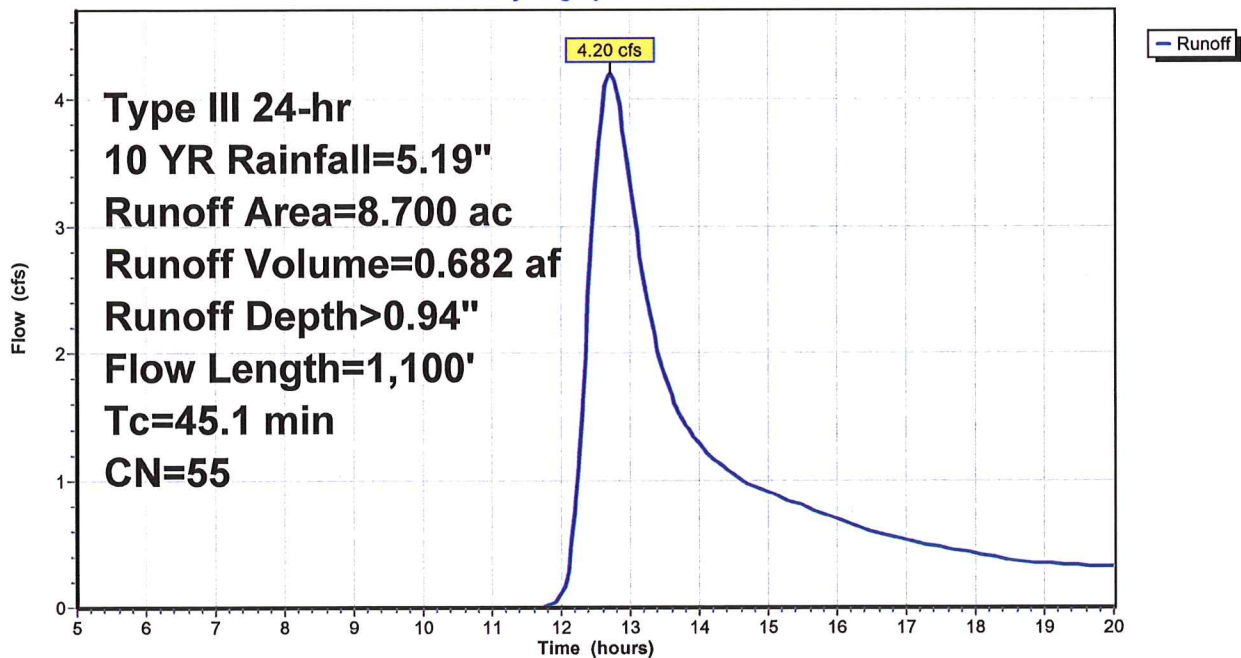
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 YR Rainfall=5.19"

Area (ac)	CN	Description
8.700	55	Woods, Good, HSG B
8.700		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.5	100	0.0100	0.06		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
17.6	1,000	0.0360	0.95		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
45.1	1,100	Total			

Subcatchment E2: E2

Hydrograph



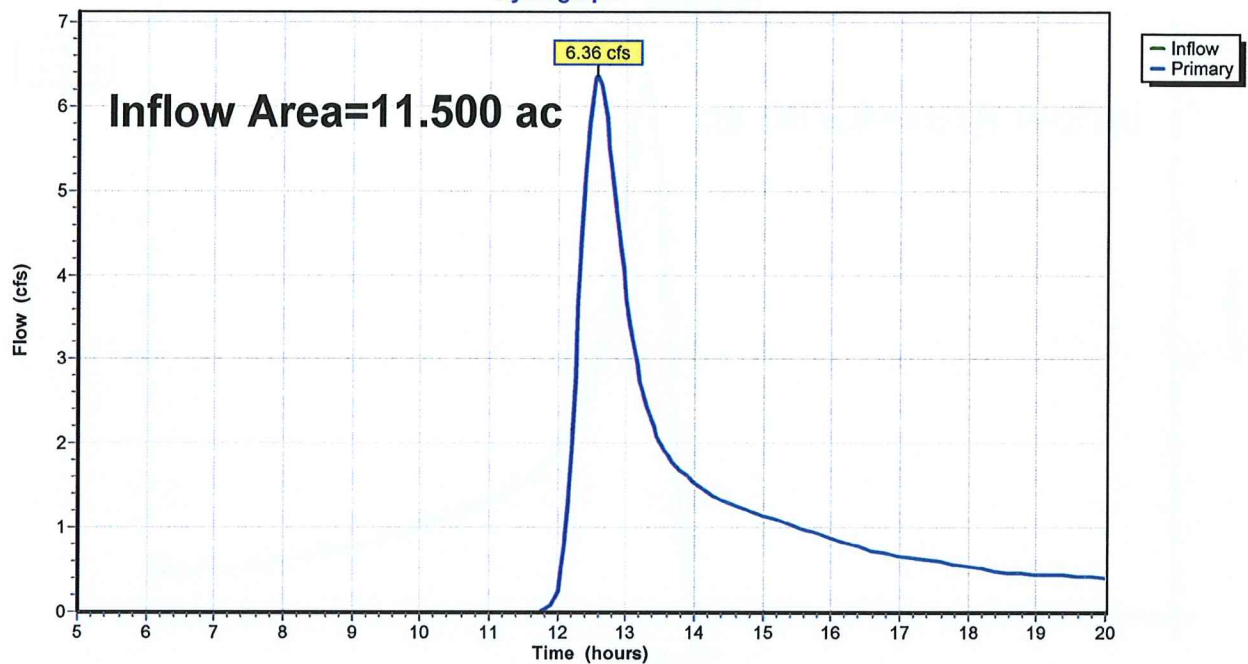
Summary for Link EDP1: OUTLET

Inflow Area = 11.500 ac, 0.00% Impervious, Inflow Depth > 0.95" for 10 YR event
Inflow = 6.36 cfs @ 12.57 hrs, Volume= 0.906 af
Primary = 6.36 cfs @ 12.57 hrs, Volume= 0.906 af, Atten= 0%, Lag= 0.0 min

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

Link EDP1: OUTLET

Hydrograph



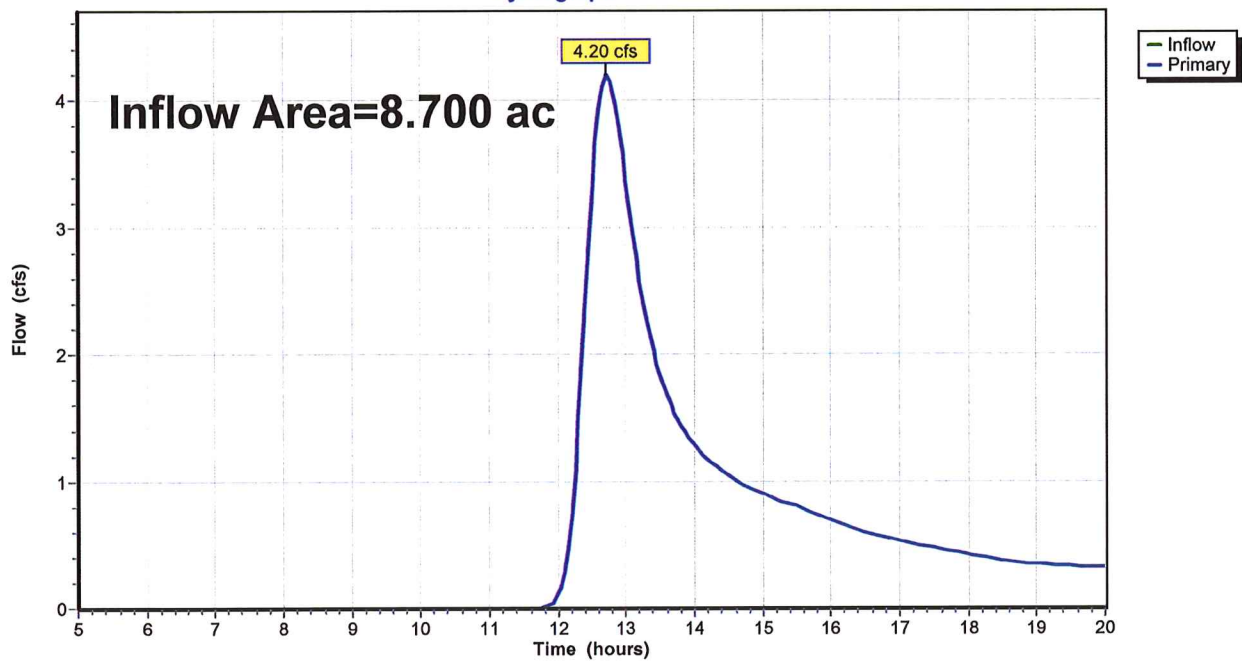
Summary for Link EDP2: OUTLET

Inflow Area = 8.700 ac, 0.00% Impervious, Inflow Depth > 0.94" for 10 YR event
Inflow = 4.20 cfs @ 12.72 hrs, Volume= 0.682 af
Primary = 4.20 cfs @ 12.72 hrs, Volume= 0.682 af, Atten= 0%, Lag= 0.0 min

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

Link EDP2: OUTLET

Hydrograph



HV_EX

Type III 24-hr 25 YR Rainfall=6.32"

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Page 15

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

Subcatchment E1: E1

Runoff Area=11.500 ac 0.00% Impervious Runoff Depth>1.52"
Flow Length=1,120' Tc=34.8 min CN=55 Runoff=10.98 cfs 1.457 af

Subcatchment E2: E2

Runoff Area=8.700 ac 0.00% Impervious Runoff Depth>1.51"
Flow Length=1,100' Tc=45.1 min CN=55 Runoff=7.26 cfs 1.096 af

Link EDP1: OUTLET

Inflow=10.98 cfs 1.457 af
Primary=10.98 cfs 1.457 af

Link EDP2: OUTLET

Inflow=7.26 cfs 1.096 af
Primary=7.26 cfs 1.096 af

Total Runoff Area = 20.200 ac Runoff Volume = 2.553 af Average Runoff Depth = 1.52"
100.00% Pervious = 20.200 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment E1: E1

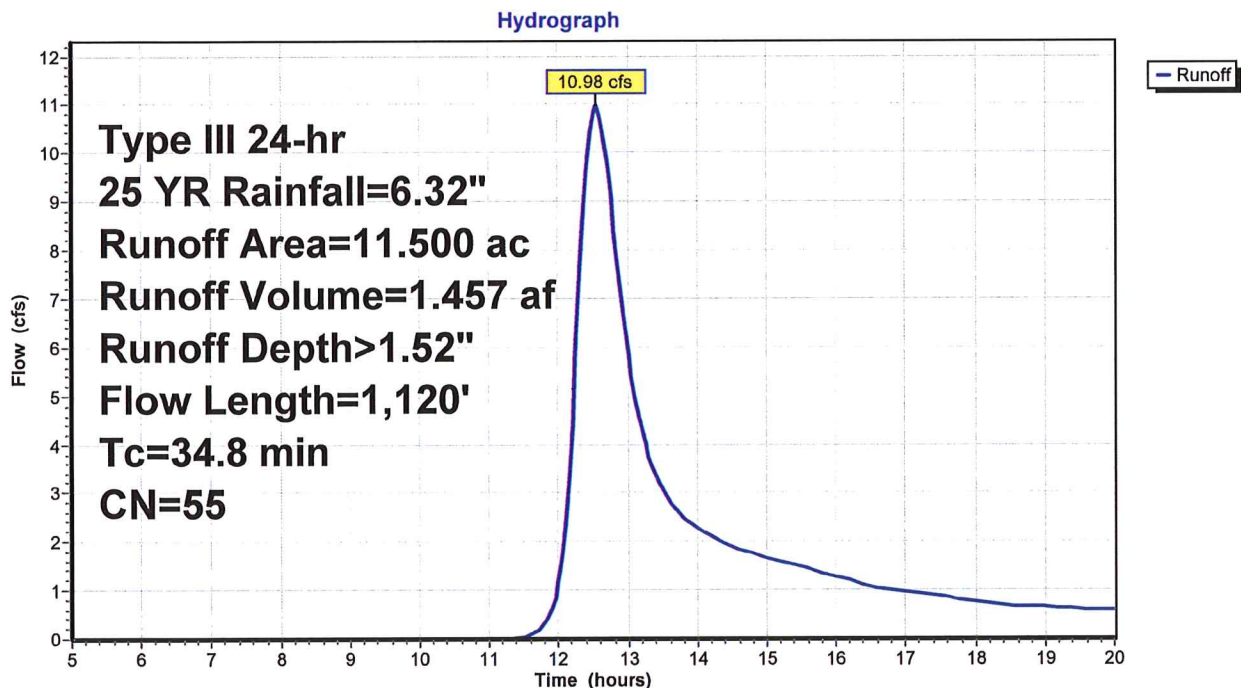
Runoff = 10.98 cfs @ 12.54 hrs, Volume= 1.457 af, Depth> 1.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 YR Rainfall=6.32"

Area (ac)	CN	Description
11.500	55	Woods, Good, HSG B
11.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.9	100	0.0200	0.08		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
9.8	600	0.0420	1.02		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
4.1	420	0.1190	1.72		Shallow Concentrated Flow, SC2 Woodland Kv= 5.0 fps
34.8	1,120	Total			

Subcatchment E1: E1



Summary for Subcatchment E2: E2

Runoff = 7.26 cfs @ 12.69 hrs, Volume= 1.096 af, Depth> 1.51"

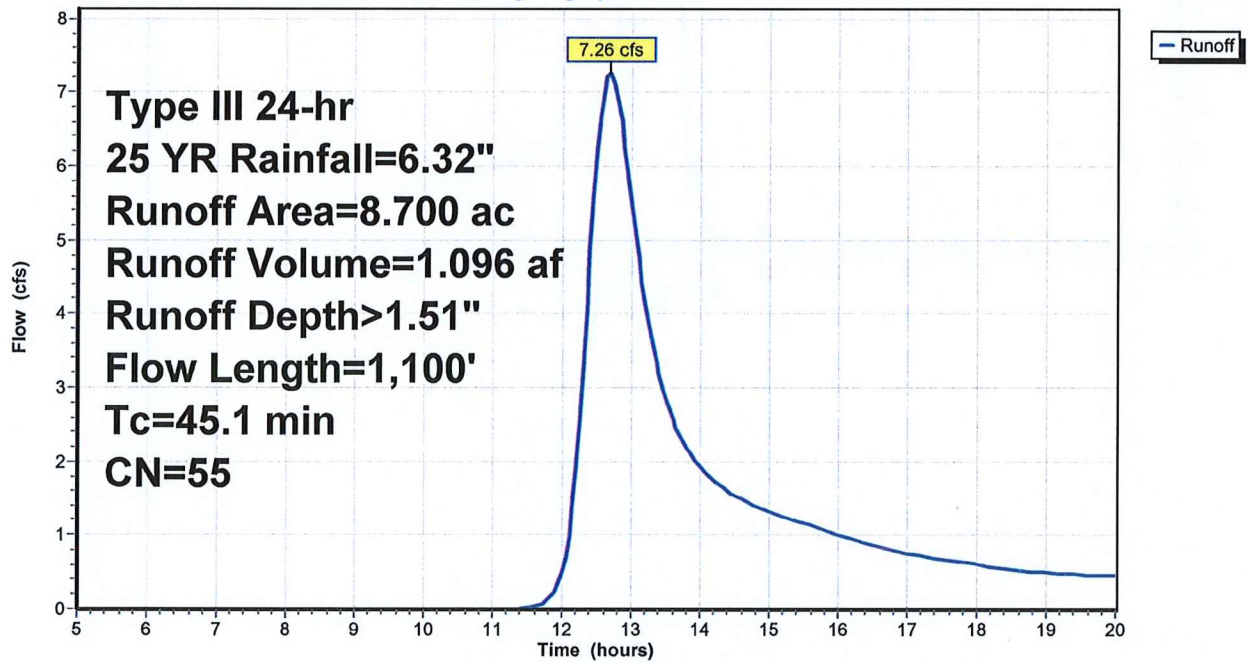
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=6.32"

Area (ac)	CN	Description
8.700	55	Woods, Good, HSG B
8.700		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.5	100	0.0100	0.06		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
17.6	1,000	0.0360	0.95		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
45.1	1,100	Total			

Subcatchment E2: E2

Hydrograph



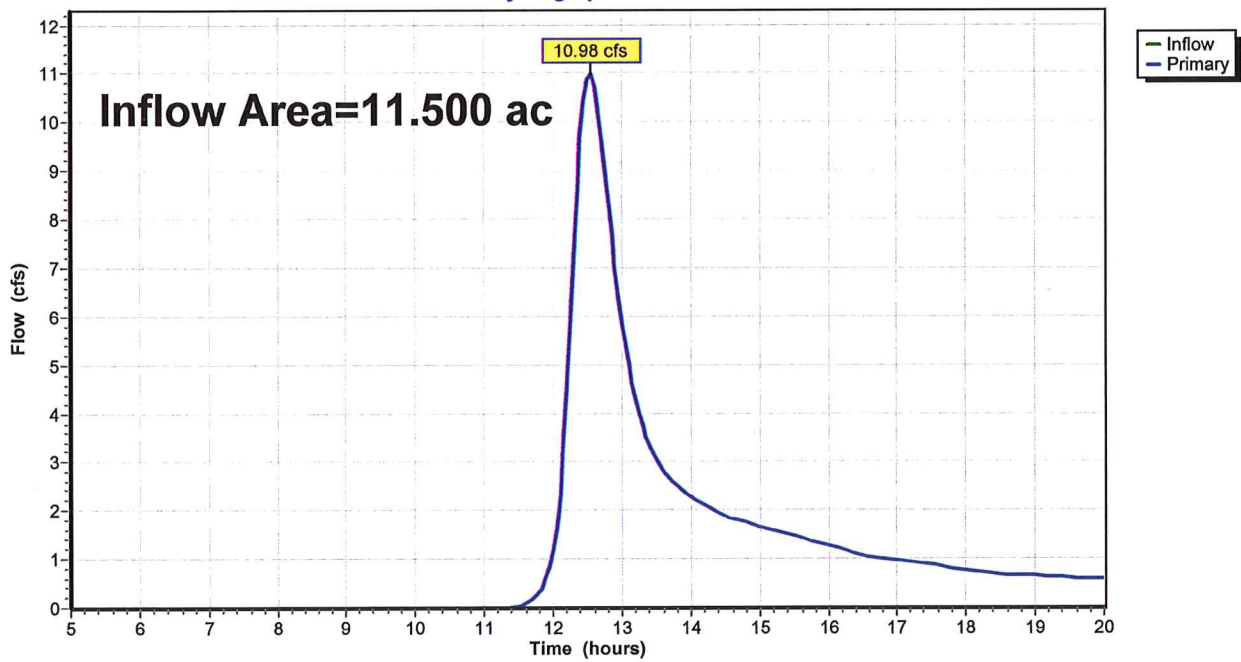
Summary for Link EDP1: OUTLET

Inflow Area = 11.500 ac, 0.00% Impervious, Inflow Depth > 1.52" for 25 YR event
Inflow = 10.98 cfs @ 12.54 hrs, Volume= 1.457 af
Primary = 10.98 cfs @ 12.54 hrs, Volume= 1.457 af, Atten= 0%, Lag= 0.0 min

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

Link EDP1: OUTLET

Hydrograph



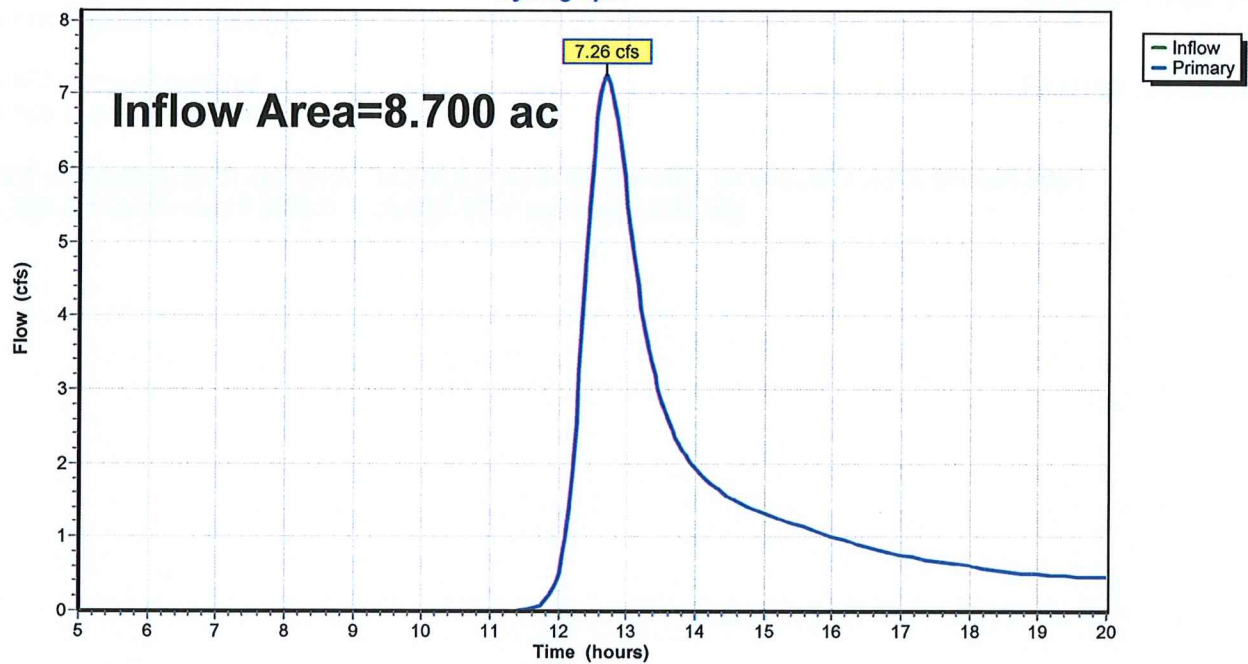
Summary for Link EDP2: OUTLET

Inflow Area = 8.700 ac, 0.00% Impervious, Inflow Depth > 1.51" for 25 YR event
Inflow = 7.26 cfs @ 12.69 hrs, Volume= 1.096 af
Primary = 7.26 cfs @ 12.69 hrs, Volume= 1.096 af, Atten= 0%, Lag= 0.0 min

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

Link EDP2: OUTLET

Hydrograph



HV_EX

Type III 24-hr 50 YR Rainfall=7.15"

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Page 20

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

Subcatchment E1: E1

Runoff Area=11.500 ac 0.00% Impervious Runoff Depth>1.99"
Flow Length=1,120' Tc=34.8 min CN=55 Runoff=14.78 cfs 1.911 af

Subcatchment E2: E2

Runoff Area=8.700 ac 0.00% Impervious Runoff Depth>1.98"
Flow Length=1,100' Tc=45.1 min CN=55 Runoff=9.78 cfs 1.438 af

Link EDP1: OUTLET

Inflow=14.78 cfs 1.911 af
Primary=14.78 cfs 1.911 af

Link EDP2: OUTLET

Inflow=9.78 cfs 1.438 af
Primary=9.78 cfs 1.438 af

Total Runoff Area = 20.200 ac Runoff Volume = 3.349 af Average Runoff Depth = 1.99"
100.00% Pervious = 20.200 ac 0.00% Impervious = 0.000 ac

HV_EX

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Type III 24-hr 50 YR Rainfall=7.15"

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Page 21

Summary for Subcatchment E1: E1

Runoff = 14.78 cfs @ 12.53 hrs, Volume= 1.911 af, Depth> 1.99"

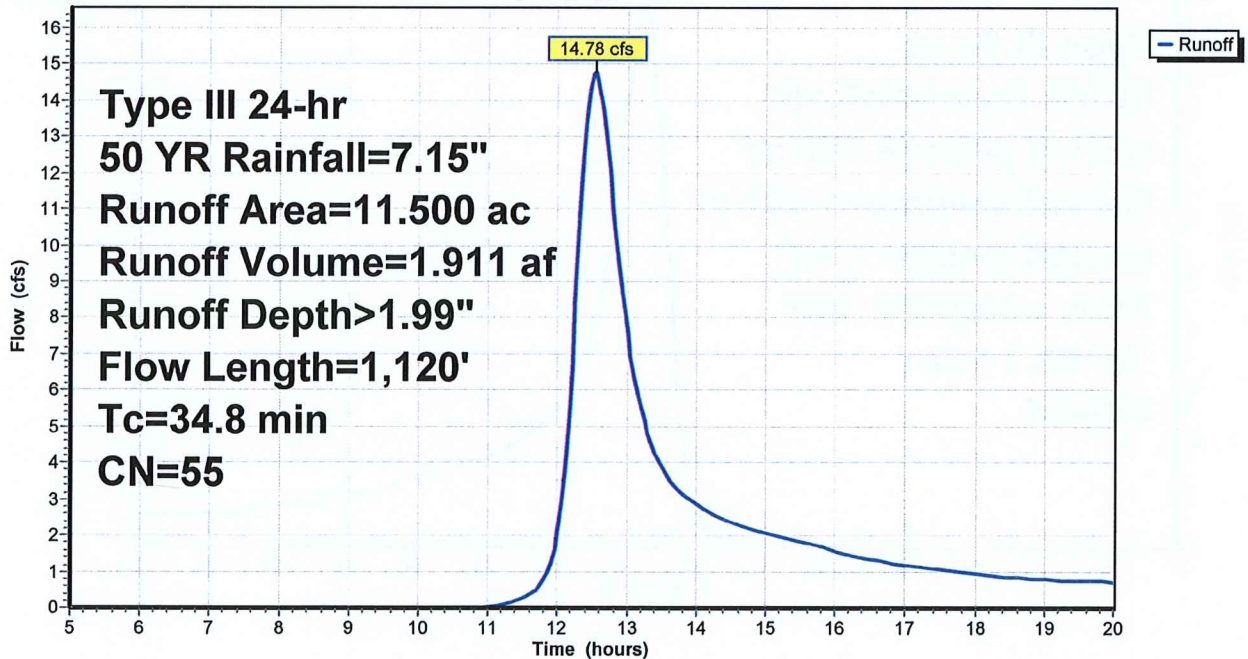
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.15"

Area (ac)	CN	Description
11.500	55	Woods, Good, HSG B
11.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.9	100	0.0200	0.08		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
9.8	600	0.0420	1.02		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
4.1	420	0.1190	1.72		Shallow Concentrated Flow, SC2 Woodland Kv= 5.0 fps
34.8	1,120	Total			

Subcatchment E1: E1

Hydrograph



HV_EX

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Type III 24-hr 50 YR Rainfall=7.15"

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Page 22

Summary for Subcatchment E2: E2

Runoff = 9.78 cfs @ 12.68 hrs, Volume= 1.438 af, Depth> 1.98"

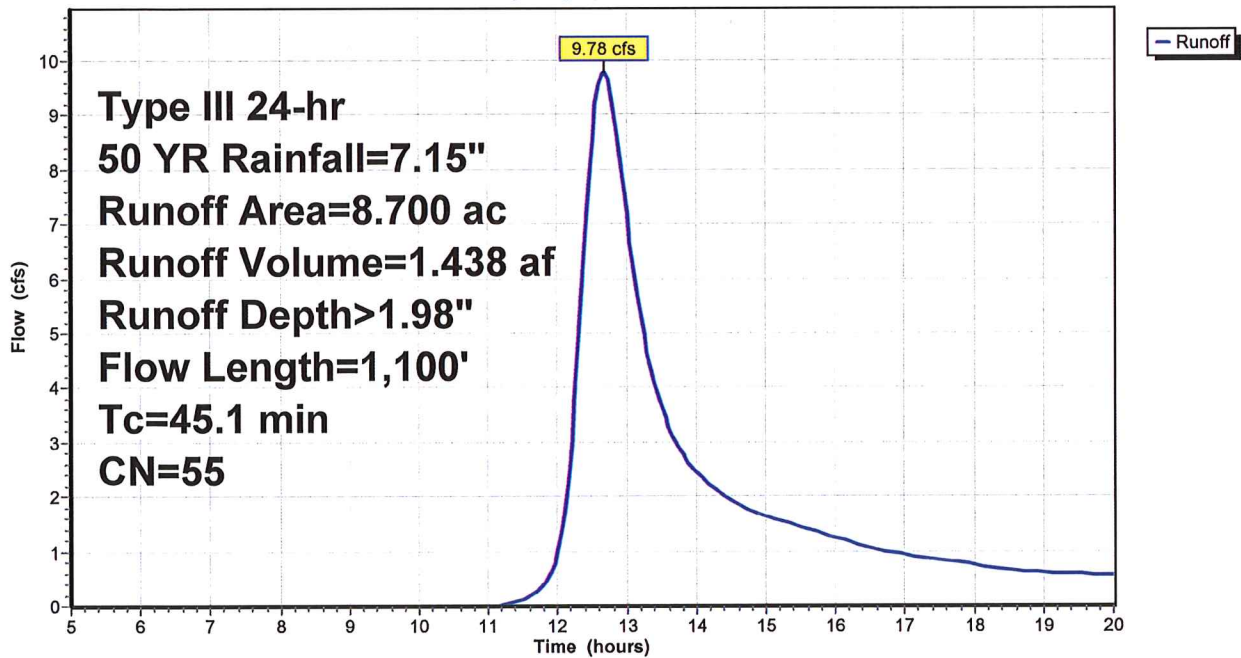
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.15"

Area (ac)	CN	Description
8.700	55	Woods, Good, HSG B
8.700		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.5	100	0.0100	0.06		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
17.6	1,000	0.0360	0.95		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
45.1	1,100	Total			

Subcatchment E2: E2

Hydrograph



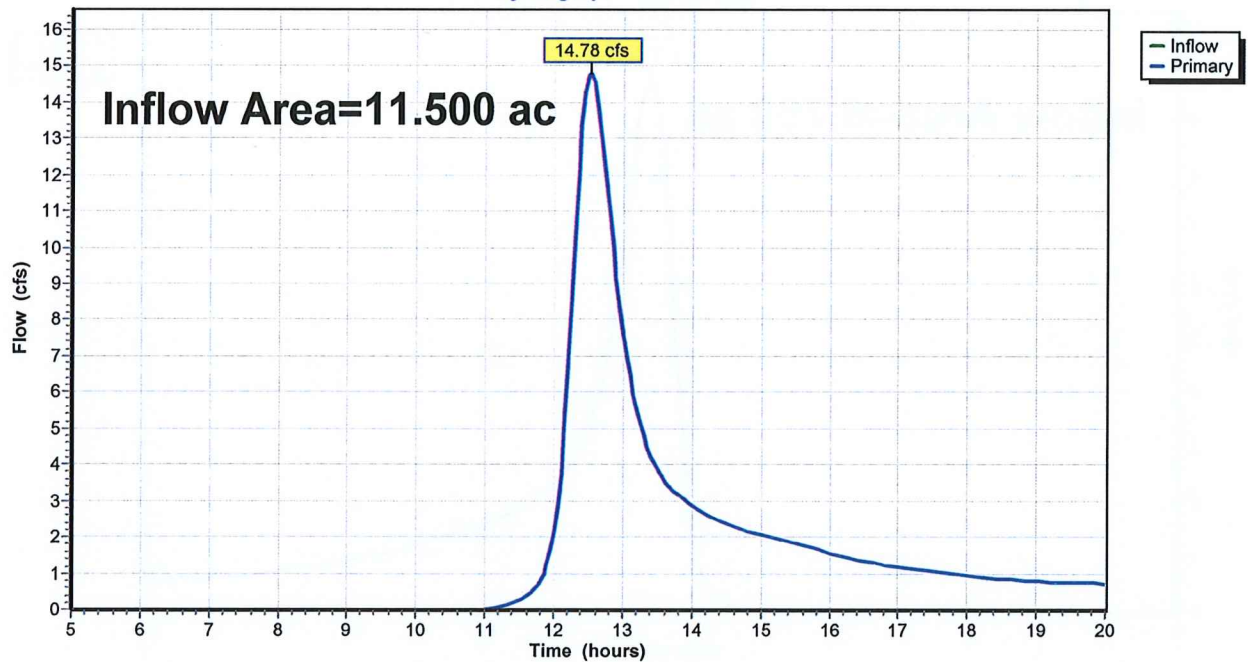
Summary for Link EDP1: OUTLET

Inflow Area = 11.500 ac, 0.00% Impervious, Inflow Depth > 1.99" for 50 YR event
Inflow = 14.78 cfs @ 12.53 hrs, Volume= 1.911 af
Primary = 14.78 cfs @ 12.53 hrs, Volume= 1.911 af, Atten= 0%, Lag= 0.0 min

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

Link EDP1: OUTLET

Hydrograph



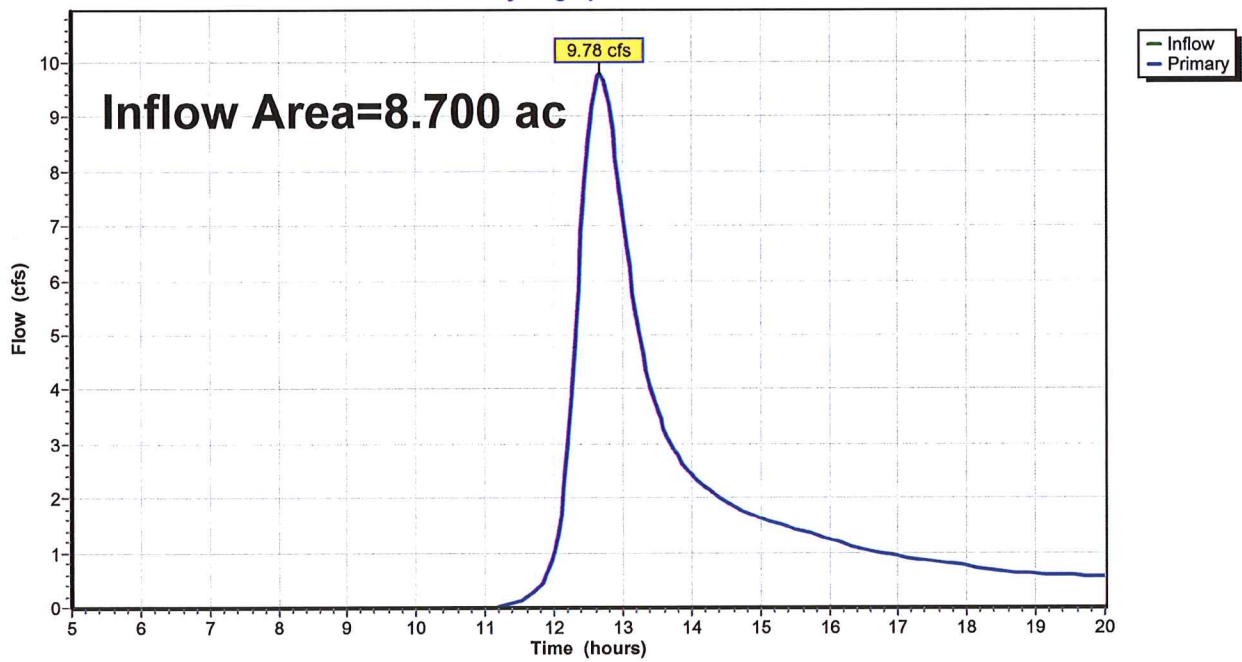
Summary for Link EDP2: OUTLET

Inflow Area = 8.700 ac, 0.00% Impervious, Inflow Depth > 1.98" for 50 YR event
Inflow = 9.78 cfs @ 12.68 hrs, Volume= 1.438 af
Primary = 9.78 cfs @ 12.68 hrs, Volume= 1.438 af, Atten= 0%, Lag= 0.0 min

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

Link EDP2: OUTLET

Hydrograph



HV_EX

Type III 24-hr 100 YR Rainfall=8.05"

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Page 25

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

Subcatchment E1: E1

Runoff Area=11.500 ac 0.00% Impervious Runoff Depth>2.55"
Flow Length=1,120' Tc=34.8 min CN=55 Runoff=19.21 cfs 2.440 af

Subcatchment E2: E2

Runoff Area=8.700 ac 0.00% Impervious Runoff Depth>2.53"
Flow Length=1,100' Tc=45.1 min CN=55 Runoff=12.70 cfs 1.837 af

Link EDP1: OUTLET

Inflow=19.21 cfs 2.440 af
Primary=19.21 cfs 2.440 af

Link EDP2: OUTLET

Inflow=12.70 cfs 1.837 af
Primary=12.70 cfs 1.837 af

Total Runoff Area = 20.200 ac Runoff Volume = 4.278 af Average Runoff Depth = 2.54"
100.00% Pervious = 20.200 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment E1: E1

Runoff = 19.21 cfs @ 12.52 hrs, Volume= 2.440 af, Depth> 2.55"

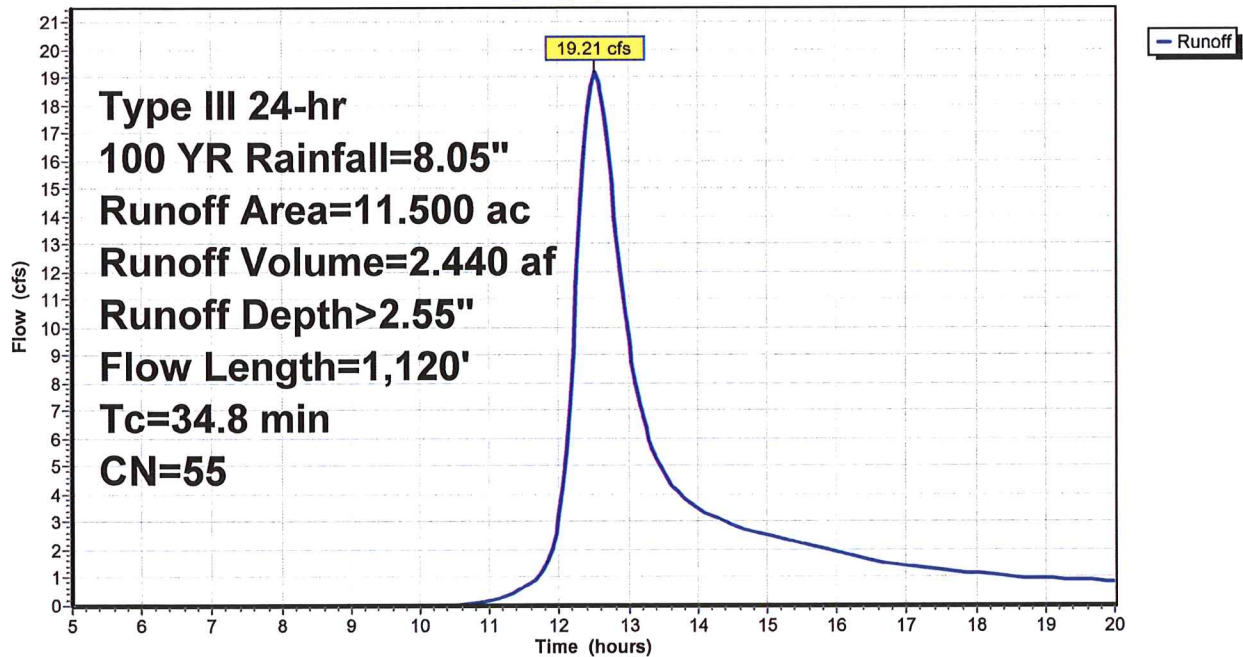
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100 YR Rainfall=8.05"

Area (ac)	CN	Description
11.500	55	Woods, Good, HSG B
11.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.9	100	0.0200	0.08		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
9.8	600	0.0420	1.02		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
4.1	420	0.1190	1.72		Shallow Concentrated Flow, SC2 Woodland Kv= 5.0 fps
34.8	1,120	Total			

Subcatchment E1: E1

Hydrograph



Summary for Subcatchment E2: E2

Runoff = 12.70 cfs @ 12.66 hrs, Volume= 1.837 af, Depth> 2.53"

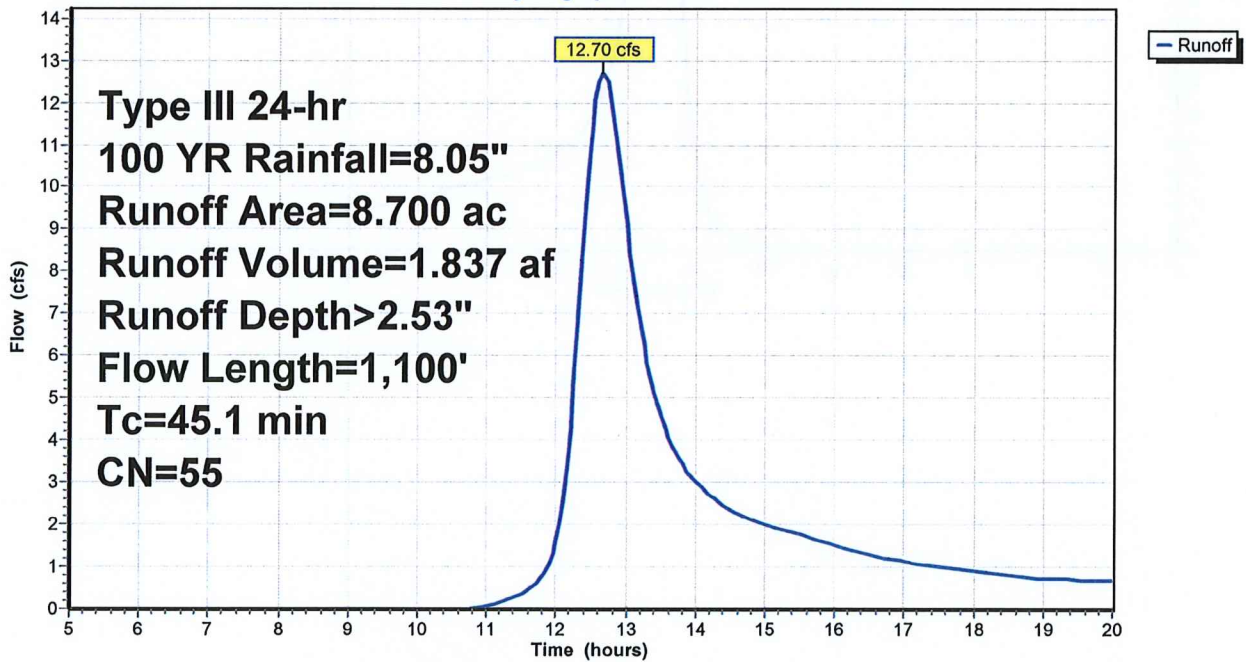
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.05"

Area (ac)	CN	Description
8.700	55	Woods, Good, HSG B
8.700		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.5	100	0.0100	0.06		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
17.6	1,000	0.0360	0.95		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
45.1	1,100	Total			

Subcatchment E2: E2

Hydrograph



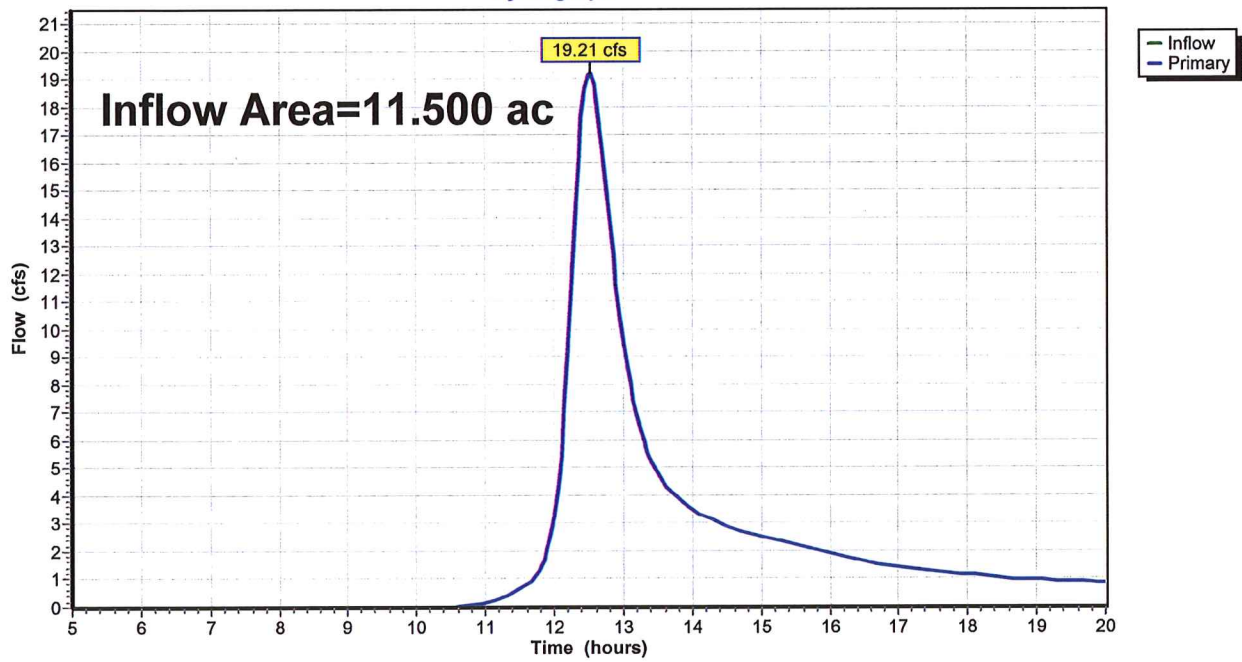
Summary for Link EDP1: OUTLET

Inflow Area = 11.500 ac, 0.00% Impervious, Inflow Depth > 2.55" for 100 YR event
Inflow = 19.21 cfs @ 12.52 hrs, Volume= 2.440 af
Primary = 19.21 cfs @ 12.52 hrs, Volume= 2.440 af, Atten= 0%, Lag= 0.0 min

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

Link EDP1: OUTLET

Hydrograph



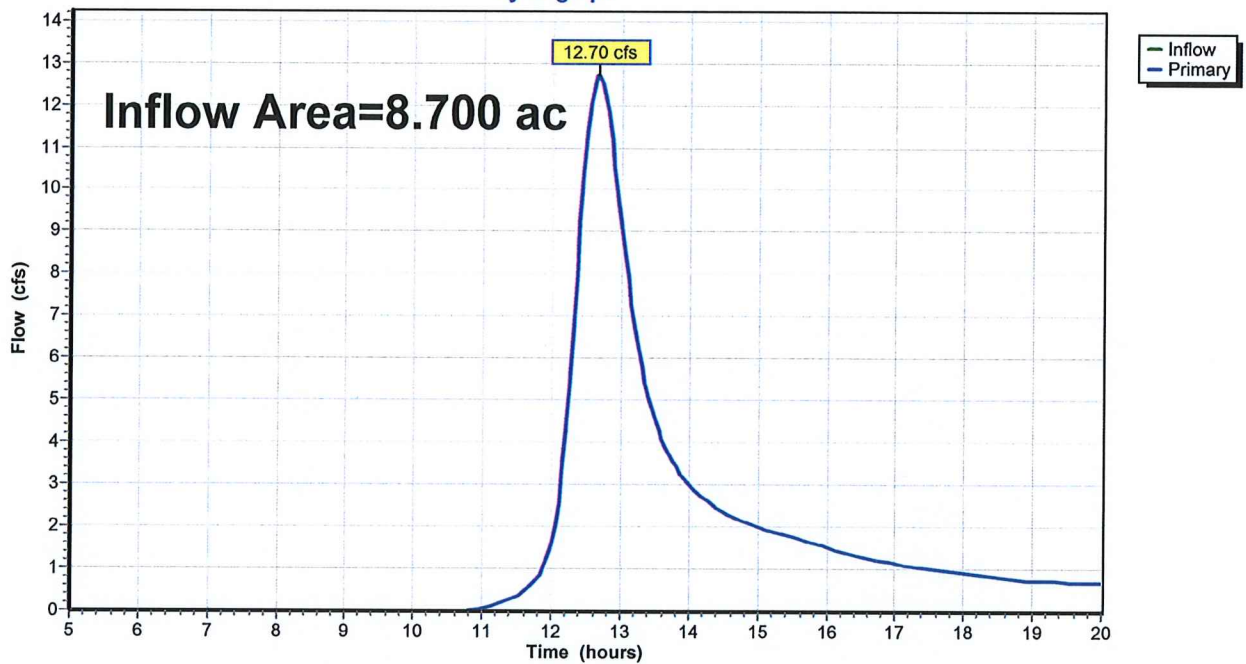
Summary for Link EDP2: OUTLET

Inflow Area = 8.700 ac, 0.00% Impervious, Inflow Depth > 2.53" for 100 YR event
Inflow = 12.70 cfs @ 12.66 hrs, Volume= 1.837 af
Primary = 12.70 cfs @ 12.66 hrs, Volume= 1.837 af, Atten= 0%, Lag= 0.0 min

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

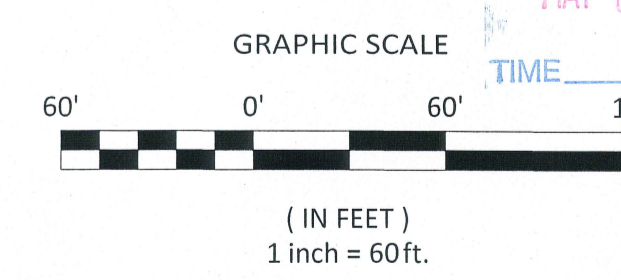
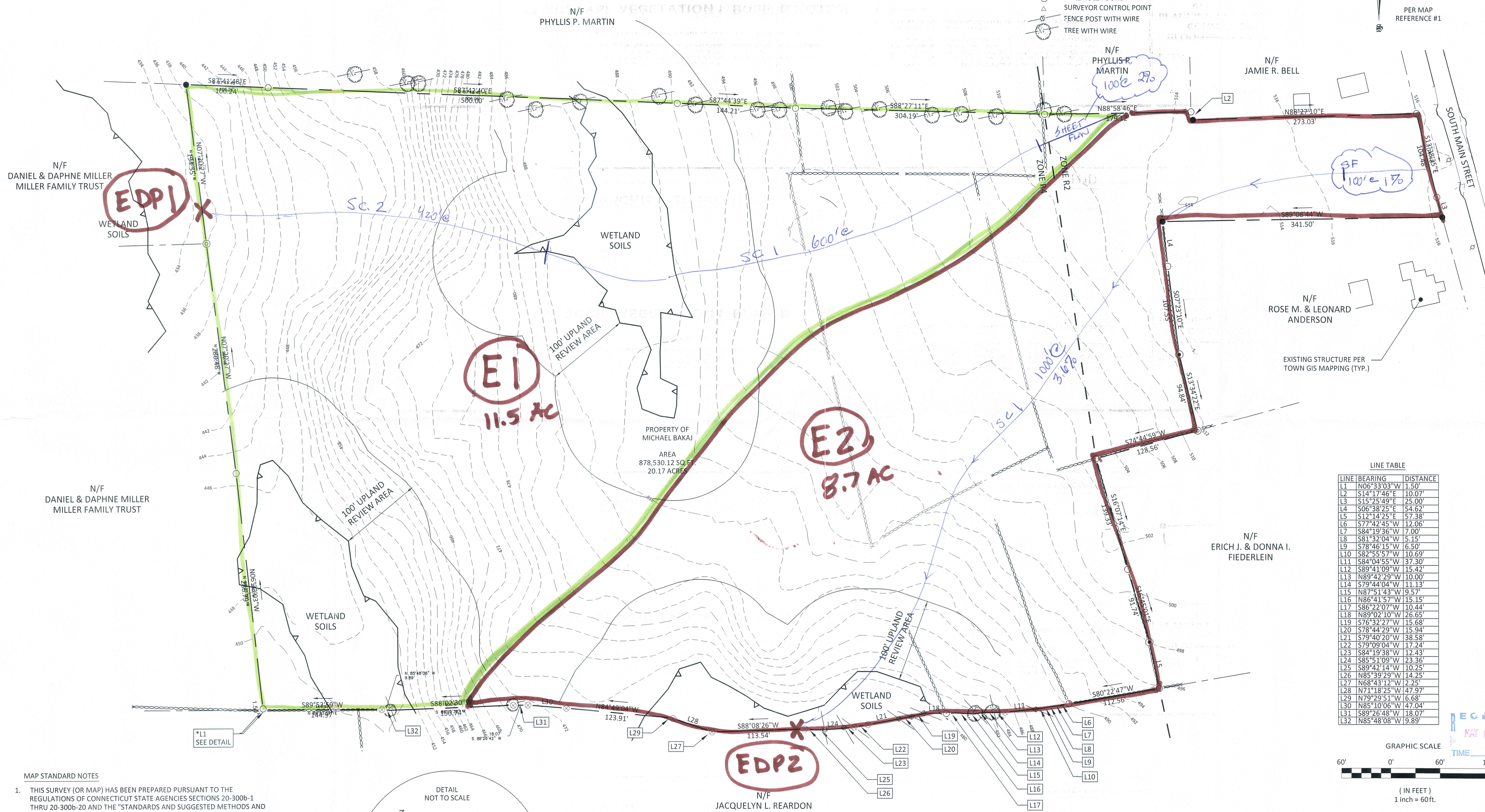
Link EDP2: OUTLET

Hydrograph



LEGEND

- PROPERTY LINE
- STONE WALL
- - - ZONE LINE
- X X X WIRE FENCE REMAINS
- ○ ○ UTILITY POLE
- ○ ○ IRON PIN OR PIPE FOUND
- ○ ○ ANGLE POINT
- ○ ○ MONUMENT FOUND
- ○ ○ IRON PIN SET 5/8" REBAR
- ○ ○ DRILL HOLE SET
- ○ ○ DRILL HOLE FOUND
- ○ ○ SURVEYOR CONTROL POINT
- ○ ○ FENCE POST WITH WIRE
- ○ ○ TREE WITH WIRE



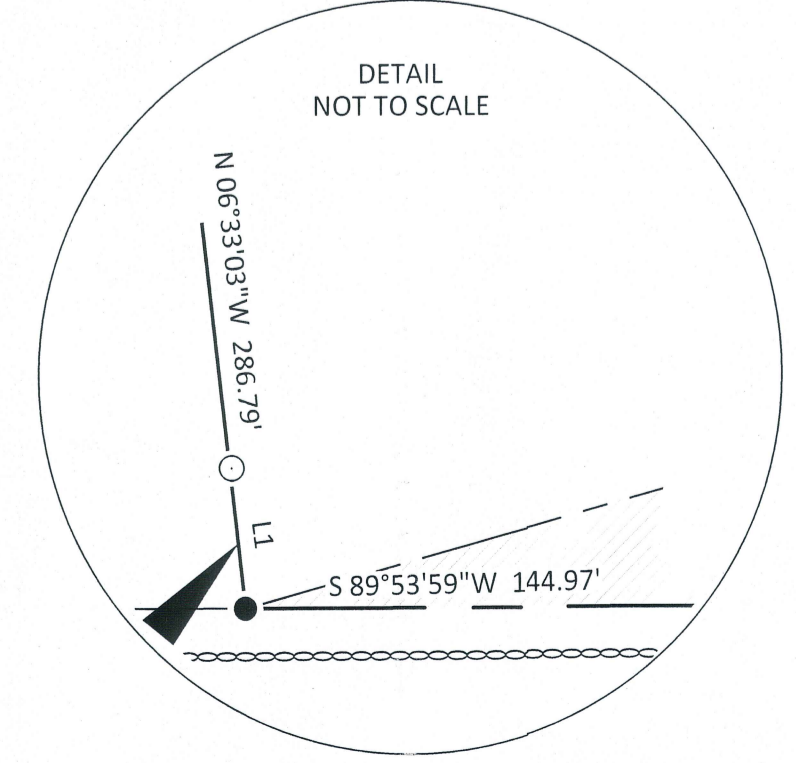
MAP STANDARD NOTES

- THIS SURVEY (OR MAP) HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019.

TYPE OF SURVEY: PROPERTY SURVEY
 BOUNDARY DETERMINATION CATEGORY: RESURVEY
 HORIZONTAL ACCURACY CLASS: "A-2"

MAP REFERENCES:

- "PLAN OF LAND TO BE CONVEYED TO DANIEL A. MILLER BELLTOWN PLACE ASSessor's MAP 20, BLOCK 51, LOT 27, PREPARED FOR PELLETIER DEVELOPMENT CP, LLC, FOR PROPERTY LOCATED AT SOUTH MAIN STREET, TOWN OF EAST HAMPTON, CONNECTICUT", DATED: 01-22-2008, SCALE: 1"=80', BY DUTTON ASSOCIATES, LLC.



I have delineated state of Connecticut wetlands and watercourses present on the subject site and have reviewed this plan and it is my opinion that the limits of the wetlands and watercourses depicted hereon are representative of those delineated in the field.

Richard Snarski

APPROVED
 PLANNING AND ZONING
 COMMISSION
 EAST HAMPTON, CT

DATE: _____
 SIGNED: _____

NOTE
 *SOUTHERLY PROPERTY LINE HELD PER MAP REFERENCE #1.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

THIS DRAWING IS NOT VALID UNLESS IT BEARS AN ORIGINAL INK SIGNATURE AND EMBOSSED SEAL.

ROBERT W. HELLSTROM, L.S. #13626

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 HEBRON, CT. 06248

EXISTING CONDITIONS DRAINAGE MAP
OVERALL BOUNDARY & EXISTING CONDITIONS
 Drawing Scale: 1"=60'
 Drawing date: 7/26/2021
 Project Title: HAMPTON VILLAGE
 37 SOUTH MAIN STREET
 EAST HAMPTON, CT.
 Prepared for: BAKAJ CONSTRUCTION LLC
 37 SOUTH MAIN STREET
 EAST HAMPTON, CT.

RES
 CIVIL ENGINEERING CONSULTANTS
 63 NORWICH AVENUE
 COLCHESTER, CT
 (860) 516-0033

Reynolds Engineering Services, LLC

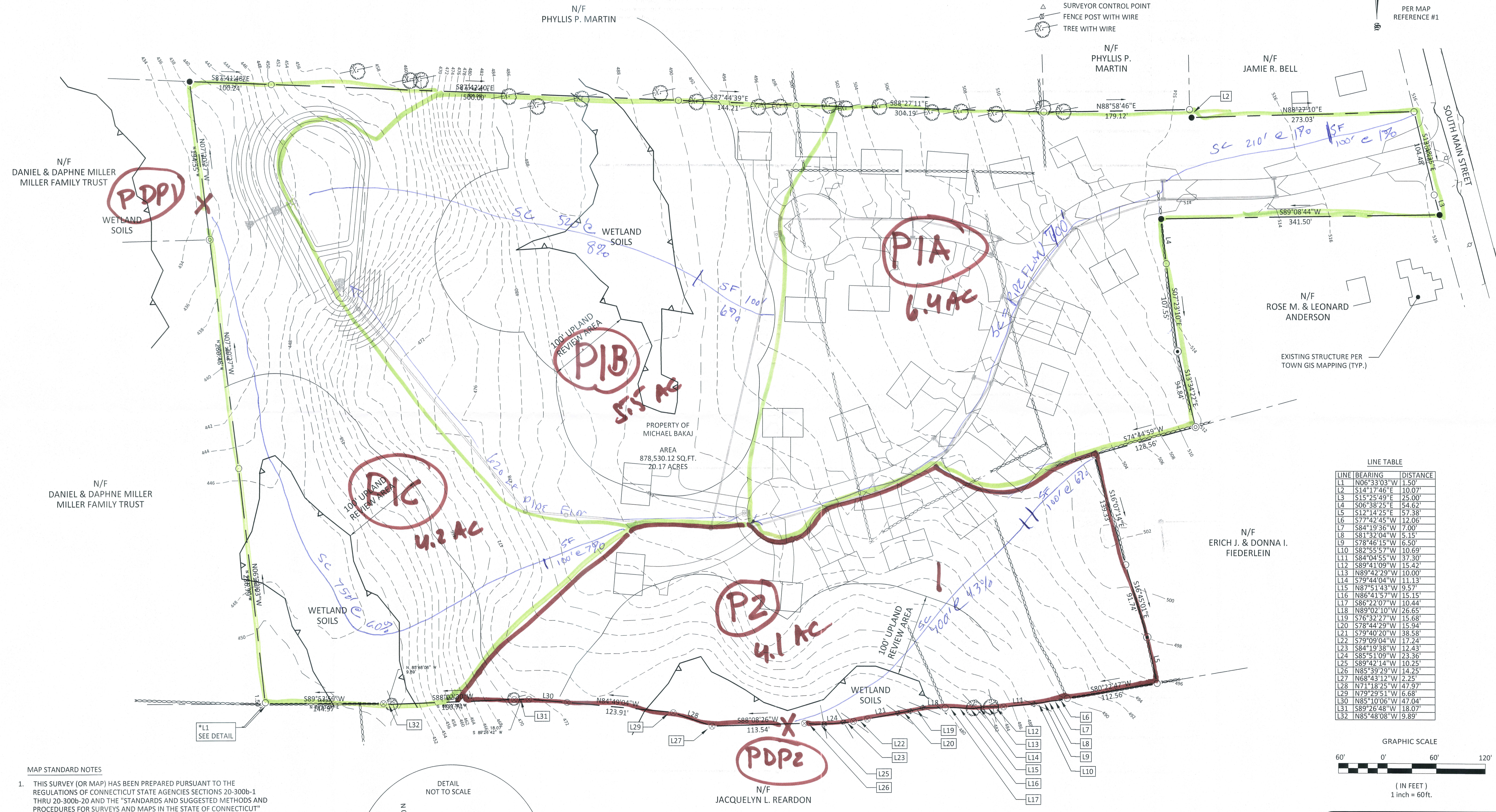
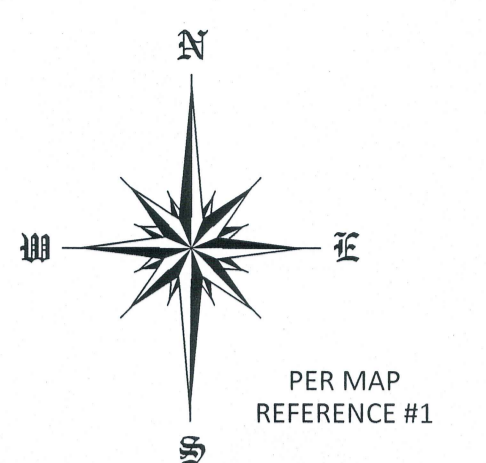
Drawing #: 2 OF 15
 Job #: 21-106

Designed By: MAR
 Drawn By: SAM
 Checked By: MAR
 CAD File: 21-106

Revision

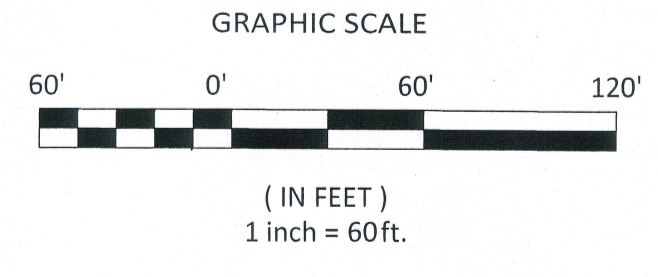
Rev.	Date	By	Revised Layout For
1.	3/29/23	SAM	REVISED LAYOUT FOR H.O.D. ZONE EASEMENTS & DETAILS
2.	5/03/23	SAM	EASEMENTS & DETAILS

- LEGEND**
- PROPERTY LINE
 - - - - STONE WALL
 - - - - ZONE LINE
 - - - - WIRE FENCE REMAINS
 - UTILITY POLE
 - IRON PIN OR PIPE FOUND
 - ANGLE POINT
 - MONUMENT FOUND
 - IRON PIN SET 5/8" REBAR
 - DRILL HOLE SET
 - DRILL HOLE FOUND
 - SURVEYOR CONTROL POINT
 - FENCE POST WITH WIRE
 - TREE WITH WIRE



LINE TABLE

LINE	BEARING	DISTANCE
L1	N06°33'03"W	1.50'
L2	S14°17'46"E	10.07'
L3	S15°25'49"E	25.00'
L4	S06°38'25"E	54.62'
L5	S12°14'25"E	57.38'
L6	S77°42'45"W	12.06'
L7	S84°19'36"W	7.00'
L8	S81°32'04"W	5.15'
L9	S78°46'15"W	6.50'
L10	S82°55'57"W	10.69'
L11	S84°04'55"W	37.30'
L12	S89°41'09"W	15.42'
L13	N89°42'29"W	10.00'
L14	S79°44'04"W	11.13'
L15	N87°51'43"W	9.57'
L16	N86°41'57"W	15.15'
L17	S86°22'07"W	10.44'
L18	N89°02'10"W	26.65'
L19	S76°32'27"W	15.68'
L20	S78°44'29"W	15.94'
L21	S79°40'20"W	38.58'
L22	S79°09'04"W	17.24'
L23	S84°19'38"W	12.43'
L24	S85°51'09"W	23.36'
L25	S89°42'14"W	10.25'
L26	N85°39'29"W	14.25'
L27	N68°43'13"W	2.25'
L28	N71°18'25"W	47.97'
L29	N79°29'51"W	6.68'
L30	N85°10'06"W	47.04'
L31	S89°26'48"W	18.07'
L32	N85°48'08"W	19.89'



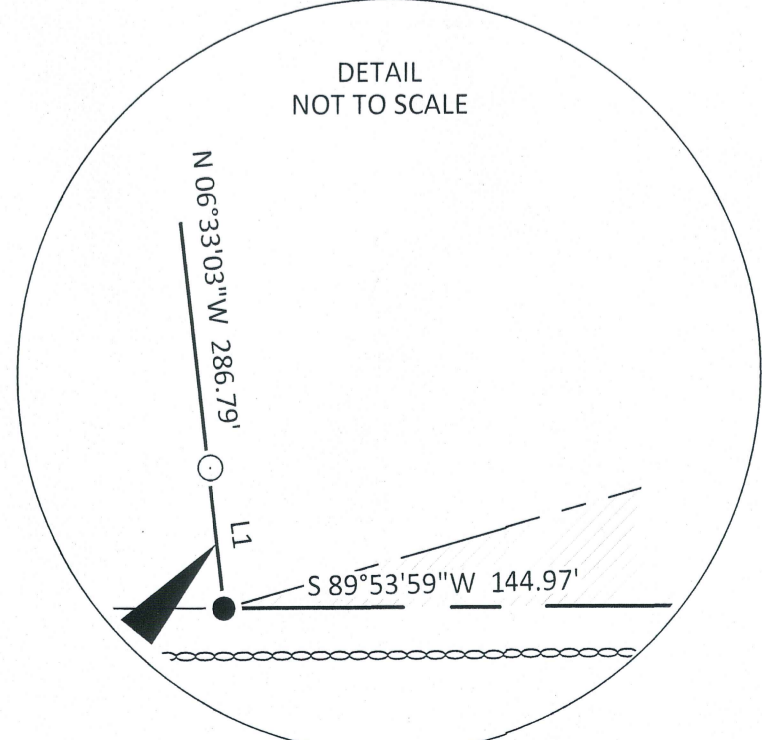
MAP STANDARD NOTES

1. THIS SURVEY (OR MAP) HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019.

TYPE OF SURVEY: PROPERTY SURVEY
 BOUNDARY DETERMINATION CATEGORY: RESURVEY
 HORIZONTAL ACCURACY CLASS: "A-2"

MAP REFERENCES:

1. "PLAN OF LAND TO BE CONVEYED TO DANIEL A. MILLER BELLTOWN PLACE ASSASSOR'S MAP 20, BLOCK 51, LOT 27, PREPARED FOR PELLETIER DEVELOPMENT CP, LLC, FOR PROPERTY LOCATED AT SOUTH MAIN STREET, TOWN OF EAST HAMPTON, CONNECTICUT", DATED: 01-22-2008, SCALE: 1"=60', BY DUTTON ASSOCIATES, LLC.



I have delineated state of Connecticut wetlands and watercourses present on the subject site and have reviewed this plan and it is my opinion that the limits of the wetlands and watercourses depicted hereon are representative of those delineated in the field.

Richard Snarski

APPROVED
 PLANNING AND ZONING
 COMMISSION
 EAST HAMPTON, CT

DATE: _____

SIGNED: _____

NOTE
 *SOUTHERLY PROPERTY LINE HELD PER MAP REFERENCE #1.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

THIS DRAWING IS NOT VALID UNLESS IT BEARS AN ORIGINAL INK SIGNATURE AND EMBOSSED SEAL

ROBERT W. HELLSTROM, L.S. #13626

Designed By: MAR
 Drawn By: SAM
 Checked By: MAR
 CAD File: 21-106

Drawing Scale: 1"=60'

Drawing date: 7/26/2021

Rev.	Date	By	Revision
1.	3/29/23	SAM	REVISED LAYOUT FOR F.L.O.D. ZONE
2.	5/09/23	SAM	EASEMENTS & DETAILS

OVERALL BOUNDARY & EXISTING CONDITIONS

PROJECT TITLE: HAMPTON VILLAGE
 37 SOUTH MAIN STREET EAST HAMPTON, CT

PREPARED FOR: BAKAJ CONSTRUCTION LLC
 37 SOUTH MAIN STREET EAST HAMPTON, CT

CIVIL ENGINEERING CONSULTANTS
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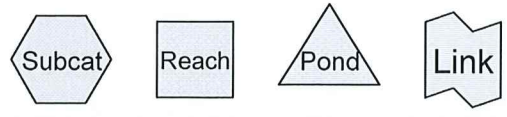
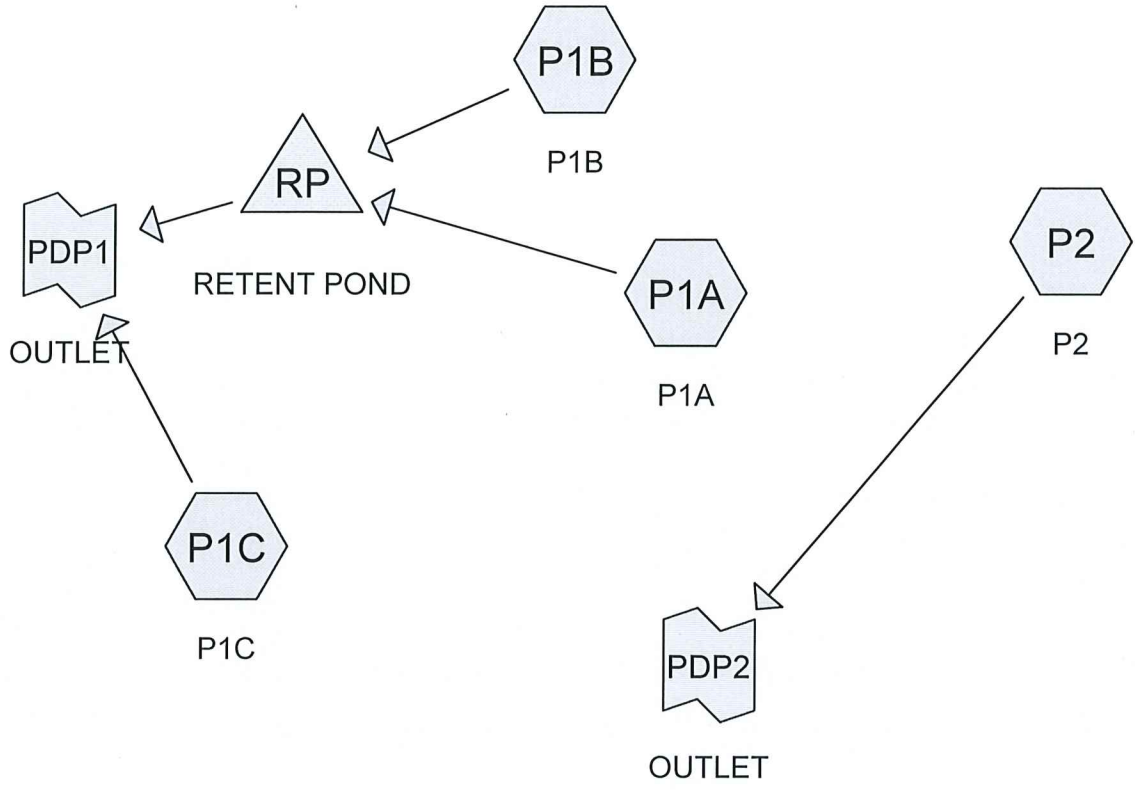
RES
 Reynolds Engineering Services, LLC

Drawing #: 2 OF 15
 Job #: 21-106

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Routing Diagram for HV_PRO
Prepared by Reynolds Engineering Svcs, LLC, Printed 5/3/2023
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HV_PRO

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
6.400	75	1/4 acre lots, 38% imp, HSG B (P1A)
18.400	55	Woods, Good, HSG B (P1B, P1C, P2)
24.800	60	TOTAL AREA

HV_PRO

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
24.800	HSG B	P1A, P1B, P1C, P2
0.000	HSG C	
0.000	HSG D	
0.000	Other	
24.800		TOTAL AREA

HV_PRO

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	6.400	0.000	0.000	0.000	6.400	1/4 acre lots, 38% imp	P1A
0.000	18.400	0.000	0.000	0.000	18.400	Woods, Good	P1B, P1C, P2
0.000	24.800	0.000	0.000	0.000	24.800	TOTAL AREA	

HV_PRO

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	P1A	0.00	0.00	1,320.0	0.0600	0.012	15.0	0.0	0.0

HV_PRO

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Type III 24-hr 2 YR Rainfall=3.39"

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Page 6

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

Subcatchment P1A: P1A Runoff Area=6.400 ac 38.00% Impervious Runoff Depth>1.11"
Flow Length=1,630' Tc=24.9 min CN=75 Runoff=5.42 cfs 0.594 af

Subcatchment P1B: P1B Runoff Area=5.500 ac 0.00% Impervious Runoff Depth>0.26"
Flow Length=620' Tc=19.5 min CN=55 Runoff=0.67 cfs 0.119 af

Subcatchment P1C: P1C Runoff Area=4.200 ac 0.00% Impervious Runoff Depth>0.26"
Flow Length=850' Tc=32.2 min CN=55 Runoff=0.43 cfs 0.090 af

Subcatchment P2: P2 Runoff Area=8.700 ac 0.00% Impervious Runoff Depth>0.25"
Flow Length=1,100' Tc=64.0 min CN=55 Runoff=0.63 cfs 0.182 af

Pond RP: RETENT POND Peak Elev=444.25' Storage=17,932 cf Inflow=6.00 cfs 0.713 af
Outflow=0.50 cfs 0.343 af

Link PDP1: OUTLET Inflow=0.93 cfs 0.433 af
Primary=0.93 cfs 0.433 af

Link PDP2: OUTLET Inflow=0.63 cfs 0.182 af
Primary=0.63 cfs 0.182 af

Total Runoff Area = 24.800 ac Runoff Volume = 0.985 af Average Runoff Depth = 0.48"
90.19% Pervious = 22.368 ac 9.81% Impervious = 2.432 ac

Summary for Subcatchment P1A: P1A

Runoff = 5.42 cfs @ 12.37 hrs, Volume= 0.594 af, Depth> 1.11"

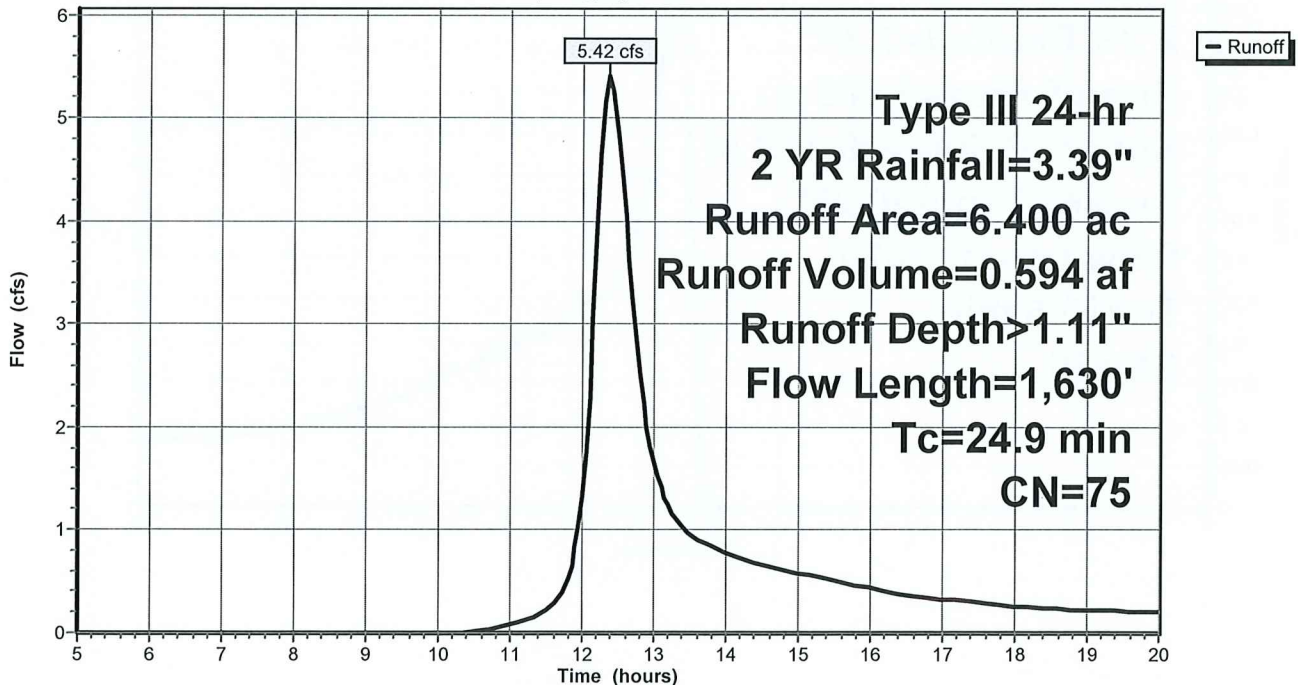
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 YR Rainfall=3.39"

Area (ac)	CN	Description
6.400	75	1/4 acre lots, 38% imp, HSG B
3.968		62.00% Pervious Area
2.432		38.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.3	100	0.0100	0.09		Sheet Flow, SF Grass: Dense n= 0.240 P2= 3.39"
5.0	210	0.0100	0.70		Shallow Concentrated Flow, SC1 Short Grass Pasture Kv= 7.0 fps
1.6	1,320	0.0600	13.97	17.14	Pipe Channel, PIPE 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
24.9	1,630	Total			

Subcatchment P1A: P1A

Hydrograph



Summary for Subcatchment P1B: P1B

Runoff = 0.67 cfs @ 12.51 hrs, Volume= 0.119 af, Depth> 0.26"

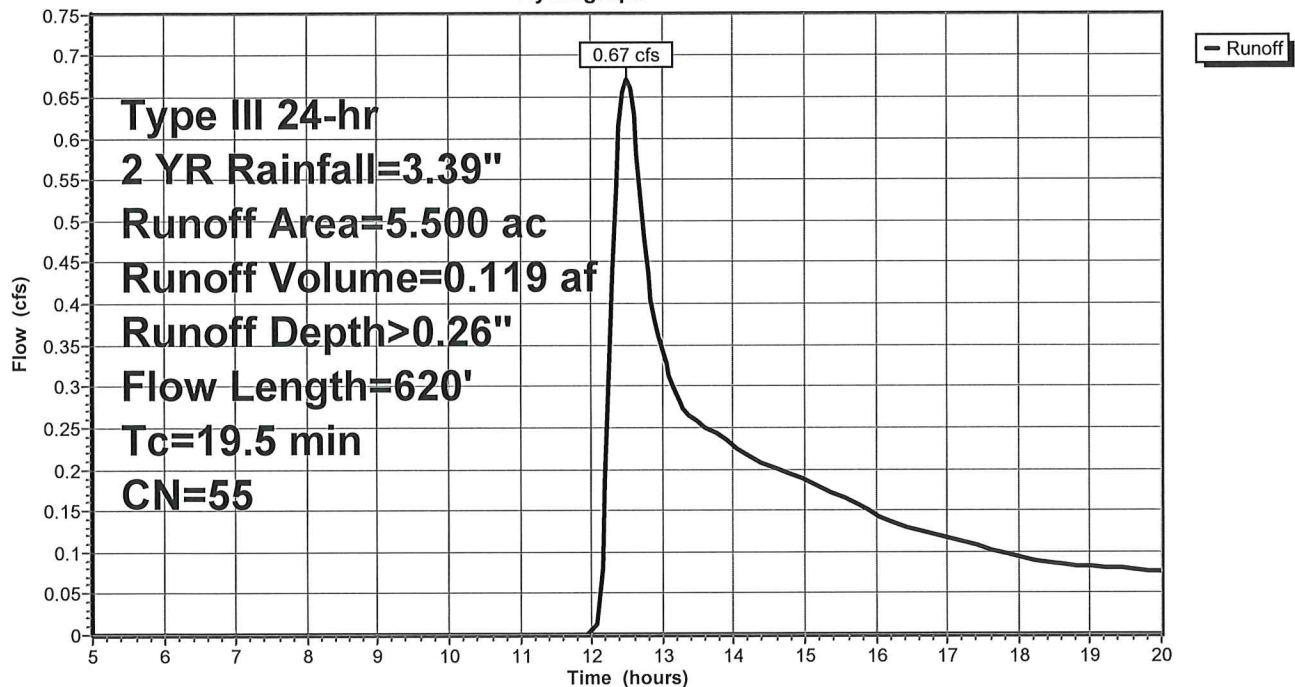
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 YR Rainfall=3.39"

Area (ac)	CN	Description
5.500	55	Woods, Good, HSG B
5.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
6.1	520	0.0800	1.41		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
19.5	620	Total			

Subcatchment P1B: P1B

Hydrograph



Summary for Subcatchment P1C: P1C

Runoff = 0.43 cfs @ 12.68 hrs, Volume= 0.090 af, Depth> 0.26"

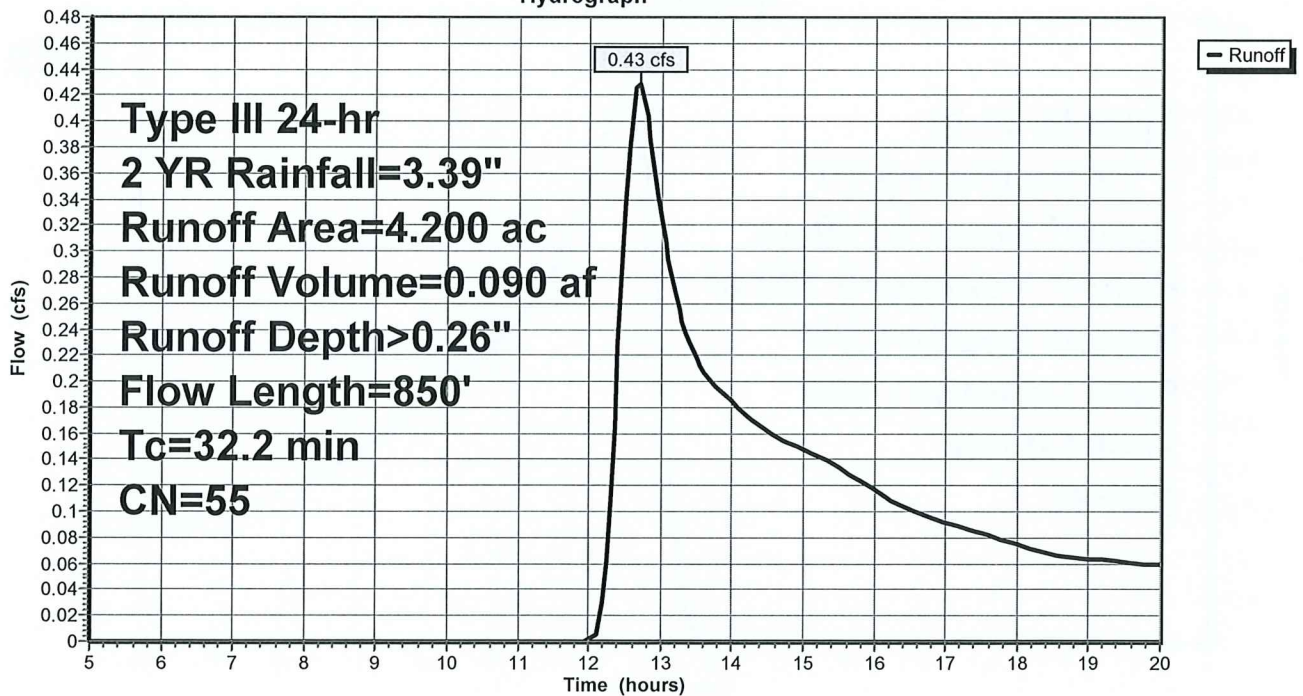
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 YR Rainfall=3.39"

Area (ac)	CN	Description
4.200	55	Woods, Good, HSG B
4.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.0	100	0.0700	0.08		Sheet Flow, SF Woods: Dense underbrush n= 0.800 P2= 3.39"
10.2	750	0.0600	1.22		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
32.2	850	Total			

Subcatchment P1C: P1C

Hydrograph



Summary for Subcatchment P2: P2

Runoff = 0.63 cfs @ 13.19 hrs, Volume= 0.182 af, Depth> 0.25"

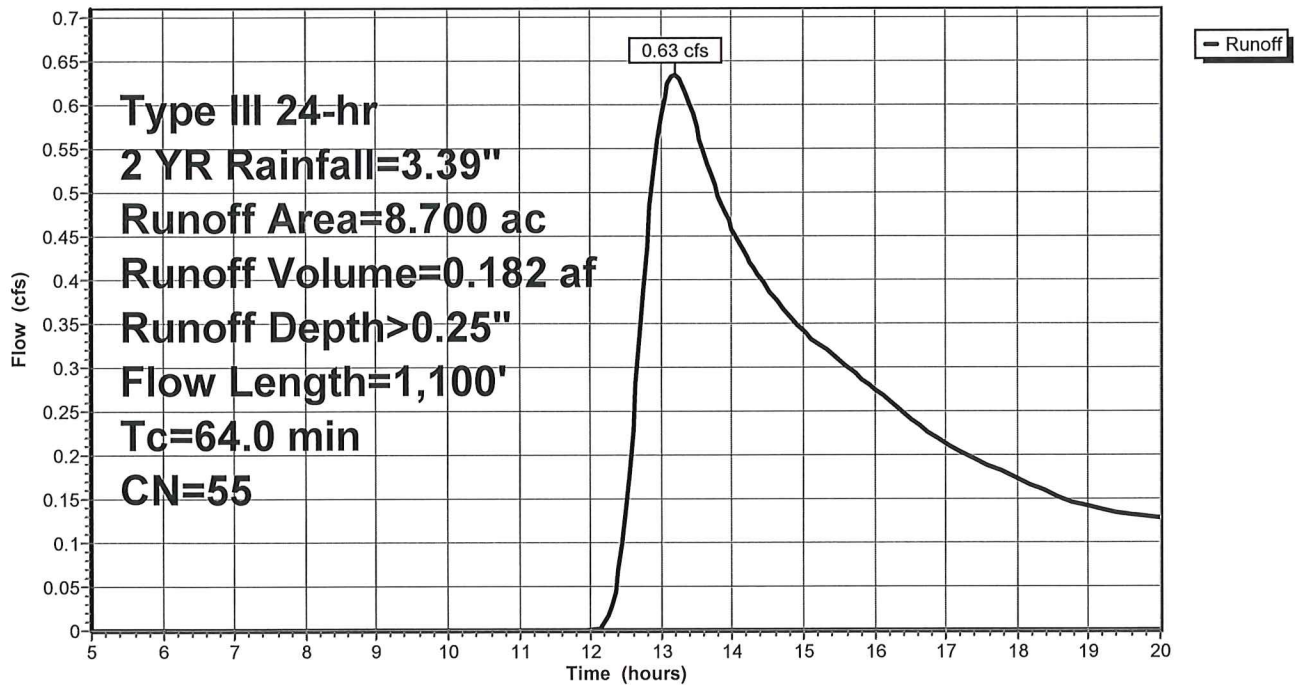
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 YR Rainfall=3.39"

Area (ac)	CN	Description
8.700	55	Woods, Good, HSG B
8.700		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
47.9	100	0.0100	0.03		Sheet Flow, SF Woods: Dense underbrush n= 0.800 P2= 3.39"
16.1	1,000	0.0430	1.04		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
64.0	1,100	Total			

Subcatchment P2: P2

Hydrograph



Summary for Pond RP: RETENT POND

Inflow Area = 11.900 ac, 20.44% Impervious, Inflow Depth > 0.72" for 2 YR event
 Inflow = 6.00 cfs @ 12.39 hrs, Volume= 0.713 af
 Outflow = 0.50 cfs @ 12.05 hrs, Volume= 0.343 af, Atten= 92%, Lag= 0.0 min
 Primary = 0.50 cfs @ 12.05 hrs, Volume= 0.343 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 444.25' @ 16.45 hrs Surf.Area= 15,071 sf Storage= 17,932 cf

Plug-Flow detention time= 207.5 min calculated for 0.342 af (48% of inflow)
 Center-of-Mass det. time= 114.5 min (952.2 - 837.7)

Volume	Invert	Avail.Storage	Storage Description
#1	443.00'	122,953 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
443.00	13,695	0	0
449.00	20,318	102,039	102,039
450.00	21,510	20,914	122,953

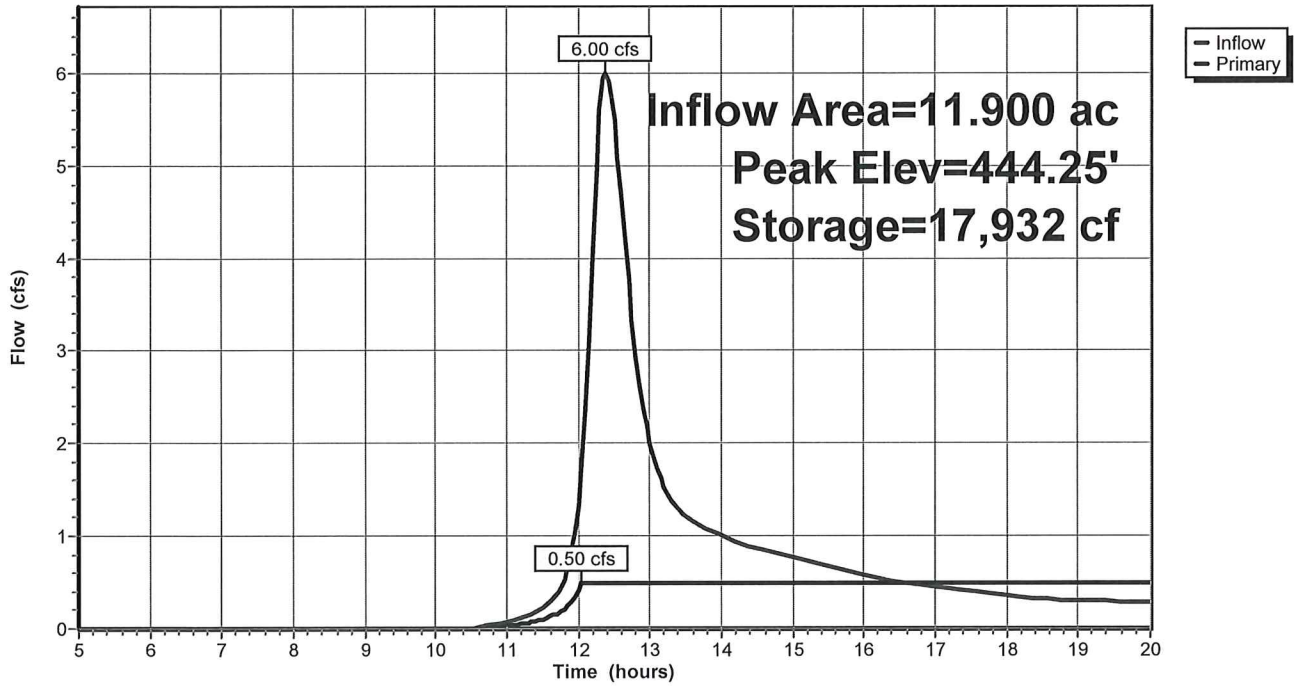
Device	Routing	Invert	Outlet Devices
#1	Primary	449.00'	8.0' long x 8.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#2	Primary	443.00'	0.50 cfs Trench Drain when above 442.00'
#3	Primary	445.00'	12.0" W x 6.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.50 cfs @ 12.05 hrs HW=443.07' (Free Discharge)

- 1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)
- 2=Trench Drain (Exfiltration Controls 0.50 cfs)
- 3=Orifice/Grate (Controls 0.00 cfs)

Pond RP: RETENT POND

Hydrograph



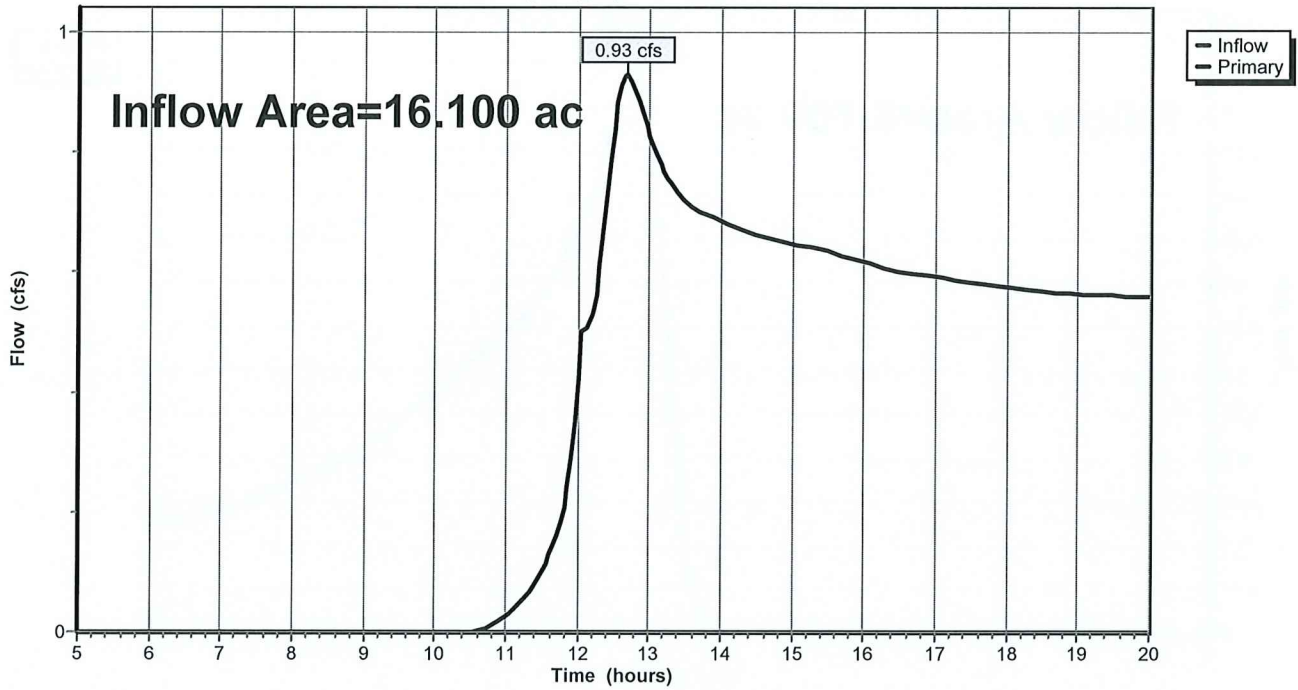
Summary for Link PDP1: OUTLET

Inflow Area = 16.100 ac, 15.11% Impervious, Inflow Depth > 0.32" for 2 YR event
Inflow = 0.93 cfs @ 12.68 hrs, Volume= 0.433 af
Primary = 0.93 cfs @ 12.68 hrs, Volume= 0.433 af, Atten= 0%, Lag= 0.0 min

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

Link PDP1: OUTLET

Hydrograph



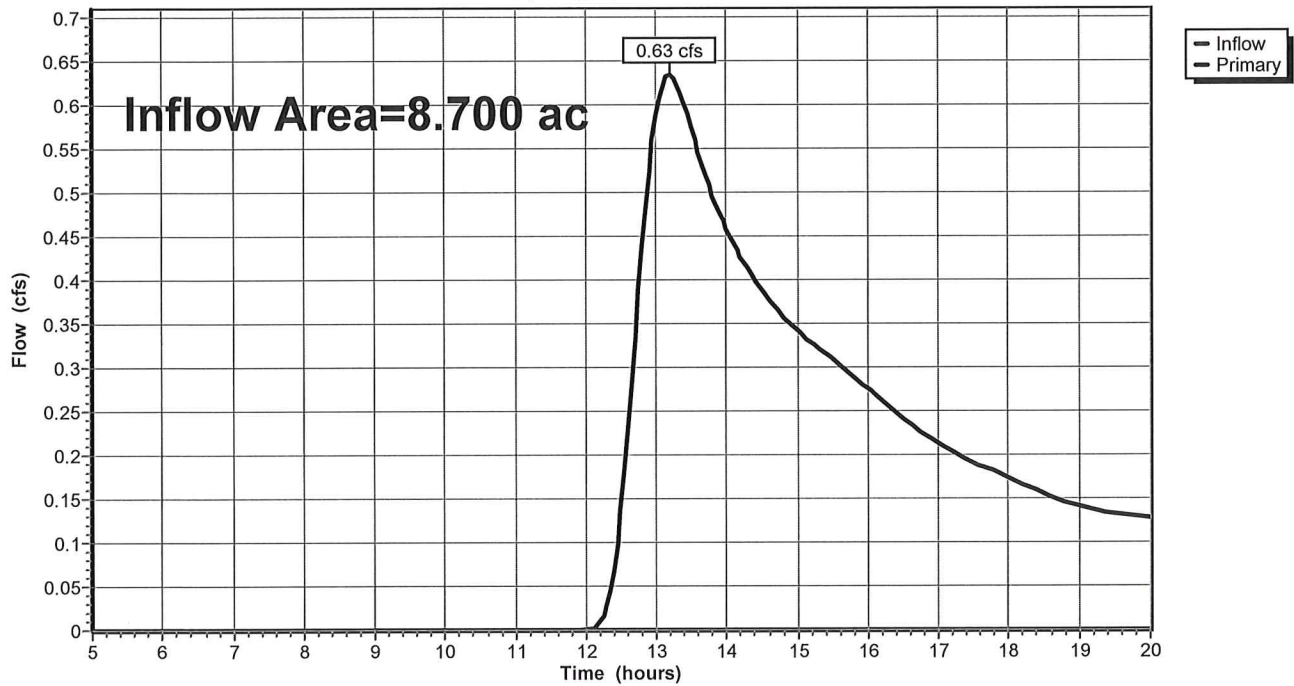
Summary for Link PDP2: OUTLET

Inflow Area = 8.700 ac, 0.00% Impervious, Inflow Depth > 0.25" for 2 YR event
Inflow = 0.63 cfs @ 13.19 hrs, Volume= 0.182 af
Primary = 0.63 cfs @ 13.19 hrs, Volume= 0.182 af, Atten= 0%, Lag= 0.0 min

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

Link PDP2: OUTLET

Hydrograph



HV_PRO

Type III 24-hr 10 YR Rainfall=5.19"

Prepared by Reynolds Engineering Svcs, LLC

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Page 15

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

Subcatchment P1A: P1A	Runoff Area=6.400 ac 38.00% Impervious Runoff Depth>2.40" Flow Length=1,630' Tc=24.9 min CN=75 Runoff=11.93 cfs 1.281 af
Subcatchment P1B: P1B	Runoff Area=5.500 ac 0.00% Impervious Runoff Depth>0.95" Flow Length=620' Tc=19.5 min CN=55 Runoff=3.86 cfs 0.437 af
Subcatchment P1C: P1C	Runoff Area=4.200 ac 0.00% Impervious Runoff Depth>0.95" Flow Length=850' Tc=32.2 min CN=55 Runoff=2.41 cfs 0.332 af
Subcatchment P2: P2	Runoff Area=8.700 ac 0.00% Impervious Runoff Depth>0.93" Flow Length=1,100' Tc=64.0 min CN=55 Runoff=3.41 cfs 0.674 af
Pond RP: RETENT POND	Peak Elev=445.66' Storage=40,354 cf Inflow=15.76 cfs 1.718 af Outflow=2.02 cfs 0.968 af
Link PDP1: OUTLET	Inflow=2.91 cfs 1.299 af Primary=2.91 cfs 1.299 af
Link PDP2: OUTLET	Inflow=3.41 cfs 0.674 af Primary=3.41 cfs 0.674 af

Total Runoff Area = 24.800 ac Runoff Volume = 2.724 af Average Runoff Depth = 1.32"
90.19% Pervious = 22.368 ac 9.81% Impervious = 2.432 ac

Summary for Subcatchment P1A: P1A

Runoff = 11.93 cfs @ 12.35 hrs, Volume= 1.281 af, Depth> 2.40"

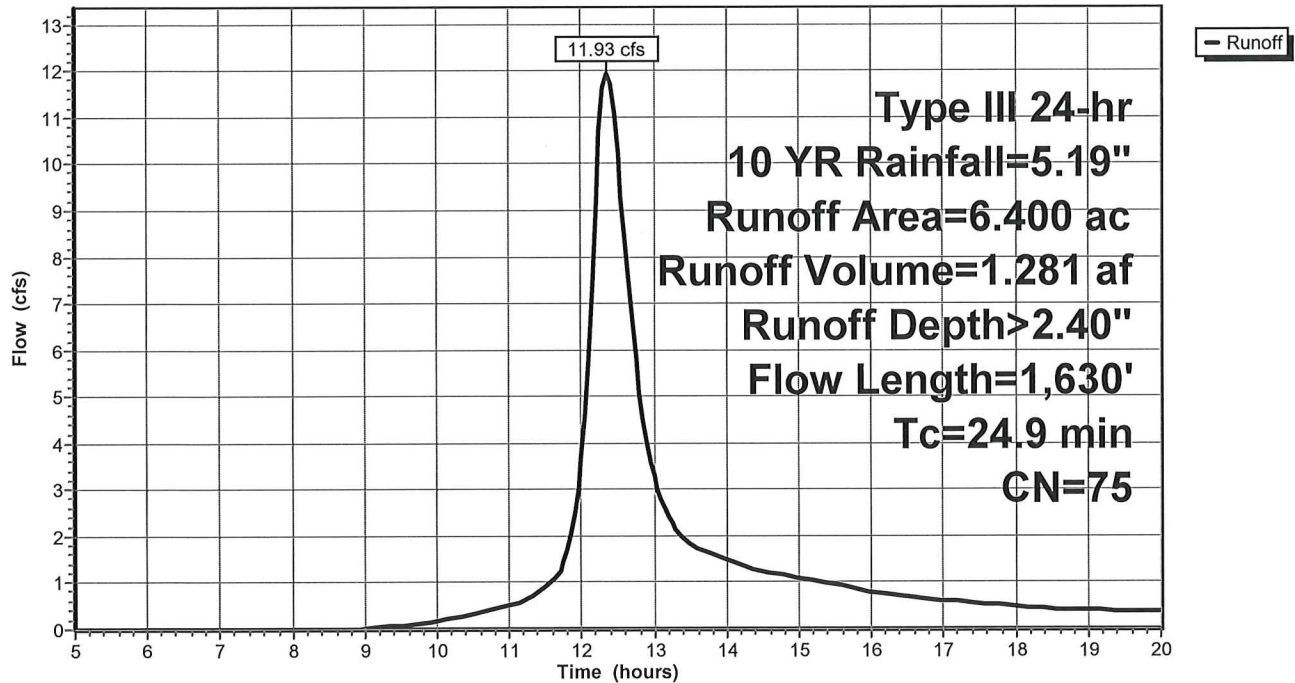
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 YR Rainfall=5.19"

Area (ac)	CN	Description
6.400	75	1/4 acre lots, 38% imp, HSG B
3.968		62.00% Pervious Area
2.432		38.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.3	100	0.0100	0.09		Sheet Flow, SF Grass: Dense n= 0.240 P2= 3.39"
5.0	210	0.0100	0.70		Shallow Concentrated Flow, SC1 Short Grass Pasture Kv= 7.0 fps
1.6	1,320	0.0600	13.97	17.14	Pipe Channel, PIPE 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
24.9	1,630	Total			

Subcatchment P1A: P1A

Hydrograph



Summary for Subcatchment P1B: P1B

Runoff = 3.86 cfs @ 12.32 hrs, Volume= 0.437 af, Depth> 0.95"

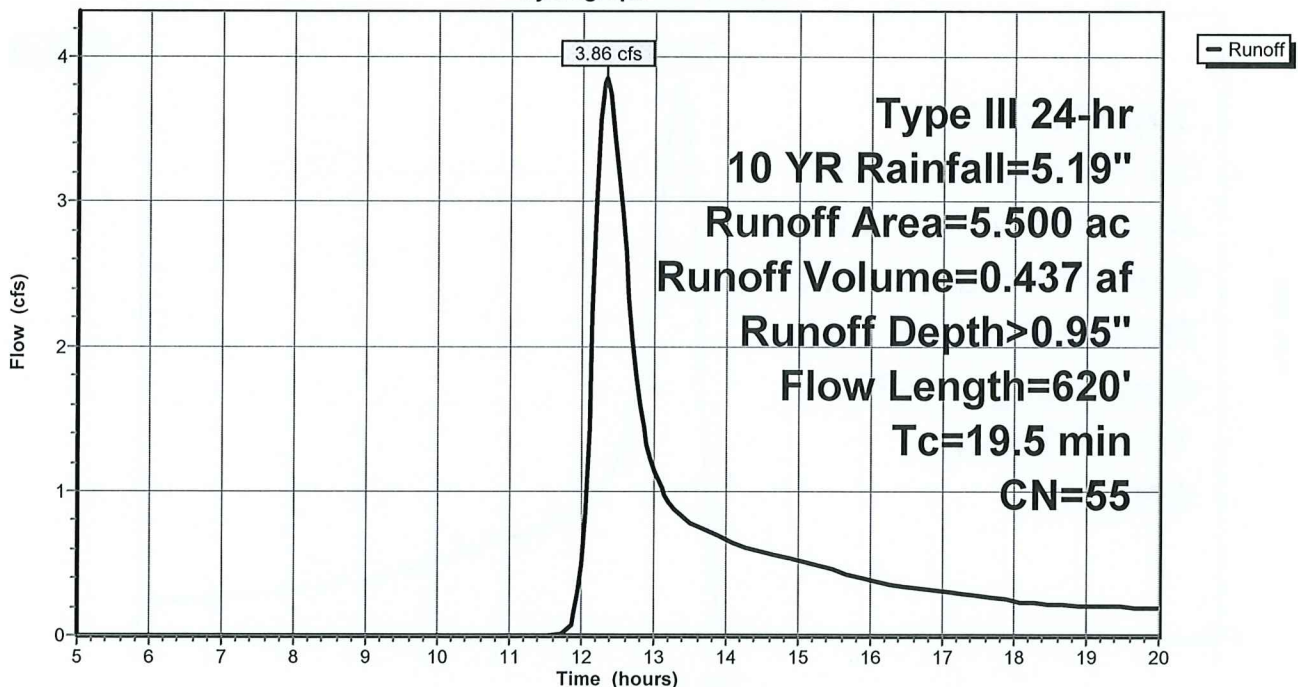
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 YR Rainfall=5.19"

Area (ac)	CN	Description
5.500	55	Woods, Good, HSG B
5.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
6.1	520	0.0800	1.41		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
19.5	620	Total			

Subcatchment P1B: P1B

Hydrograph



Summary for Subcatchment P1C: P1C

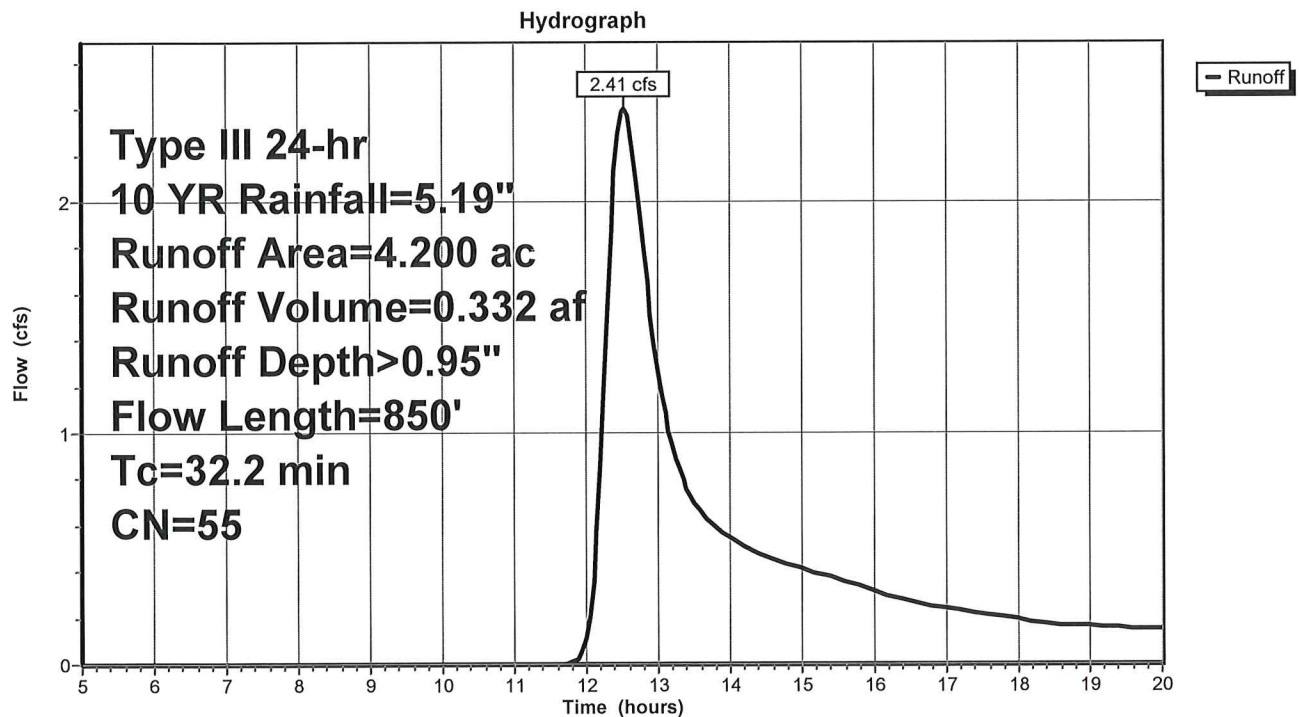
Runoff = 2.41 cfs @ 12.53 hrs, Volume= 0.332 af, Depth> 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 YR Rainfall=5.19"

Area (ac)	CN	Description
4.200	55	Woods, Good, HSG B
4.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.0	100	0.0700	0.08		Sheet Flow, SF Woods: Dense underbrush n= 0.800 P2= 3.39"
10.2	750	0.0600	1.22		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
32.2	850	Total			

Subcatchment P1C: P1C



Summary for Subcatchment P2: P2

Runoff = 3.41 cfs @ 13.00 hrs, Volume= 0.674 af, Depth> 0.93"

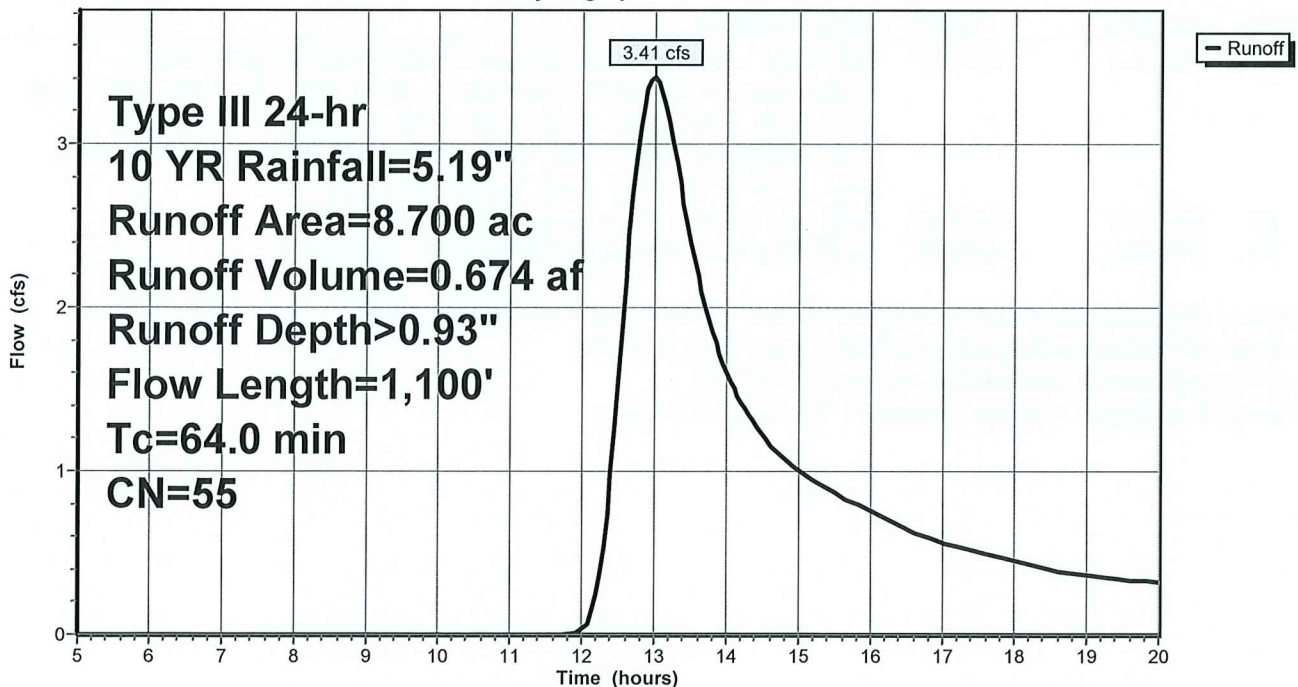
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 YR Rainfall=5.19"

Area (ac)	CN	Description
8.700	55	Woods, Good, HSG B
8.700		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
47.9	100	0.0100	0.03		Sheet Flow, SF Woods: Dense underbrush n= 0.800 P2= 3.39"
16.1	1,000	0.0430	1.04		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
64.0	1,100	Total			

Subcatchment P2: P2

Hydrograph



Summary for Pond RP: RETENT POND

Inflow Area = 11.900 ac, 20.44% Impervious, Inflow Depth > 1.73" for 10 YR event
 Inflow = 15.76 cfs @ 12.35 hrs, Volume= 1.718 af
 Outflow = 2.02 cfs @ 14.16 hrs, Volume= 0.968 af, Atten= 87%, Lag= 108.7 min
 Primary = 2.02 cfs @ 14.16 hrs, Volume= 0.968 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 445.66' @ 14.16 hrs Surf.Area= 16,633 sf Storage= 40,354 cf

Plug-Flow detention time= 189.6 min calculated for 0.968 af (56% of inflow)
 Center-of-Mass det. time= 107.4 min (927.8 - 820.4)

Volume	Invert	Avail.Storage	Storage Description
#1	443.00'	122,953 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
443.00	13,695	0	0
449.00	20,318	102,039	102,039
450.00	21,510	20,914	122,953

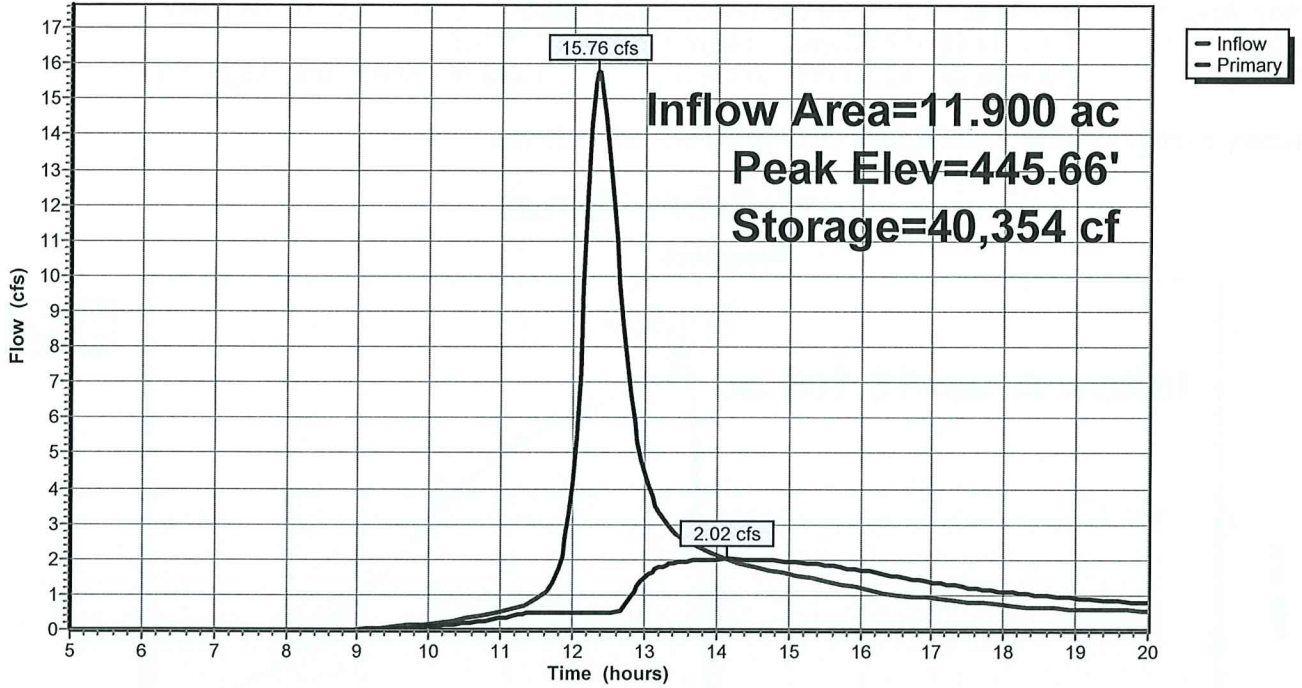
Device	Routing	Invert	Outlet Devices
#1	Primary	449.00'	8.0' long x 8.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#2	Primary	443.00'	0.50 cfs Trench Drain when above 442.00'
#3	Primary	445.00'	12.0" W x 6.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.02 cfs @ 14.16 hrs HW=445.66' (Free Discharge)

- 1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)
- 2=Trench Drain (Exfiltration Controls 0.50 cfs)
- 3=Orifice/Grate (Orifice Controls 1.52 cfs @ 3.04 fps)

Pond RP: RETENT POND

Hydrograph



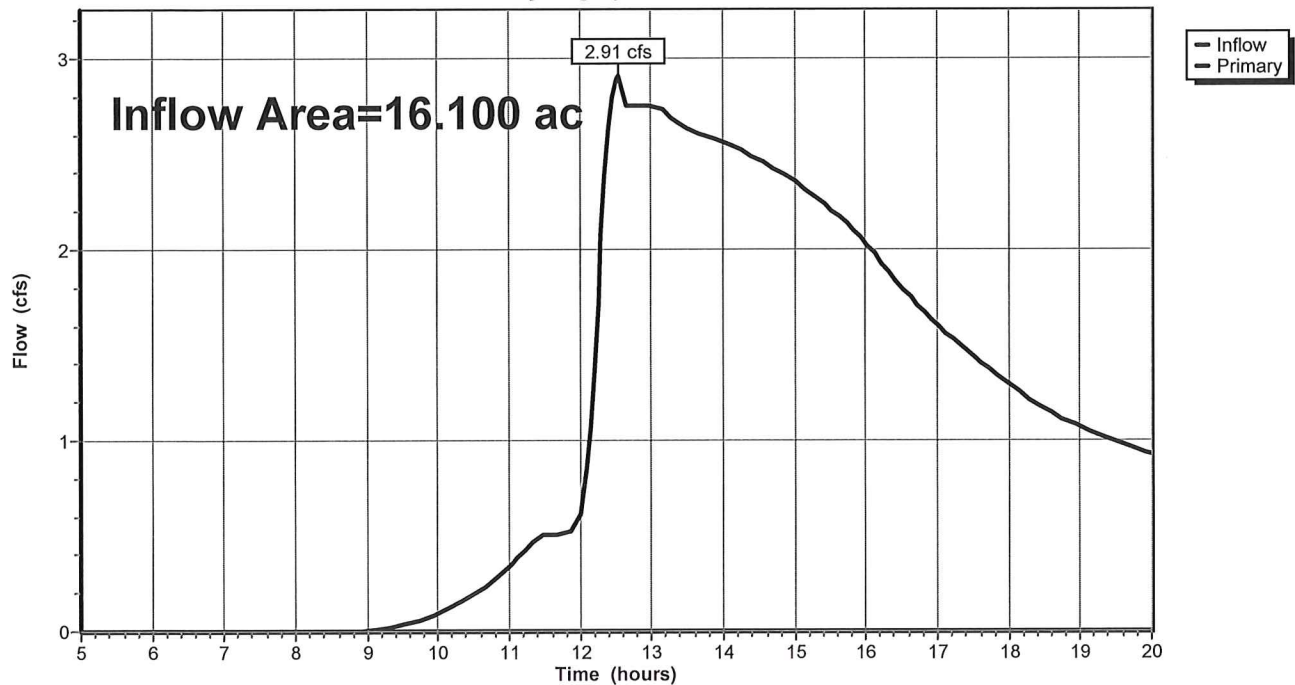
Summary for Link PDP1: OUTLET

Inflow Area = 16.100 ac, 15.11% Impervious, Inflow Depth > 0.97" for 10 YR event
Inflow = 2.91 cfs @ 12.53 hrs, Volume= 1.299 af
Primary = 2.91 cfs @ 12.53 hrs, Volume= 1.299 af, Atten= 0%, Lag= 0.0 min

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

Link PDP1: OUTLET

Hydrograph



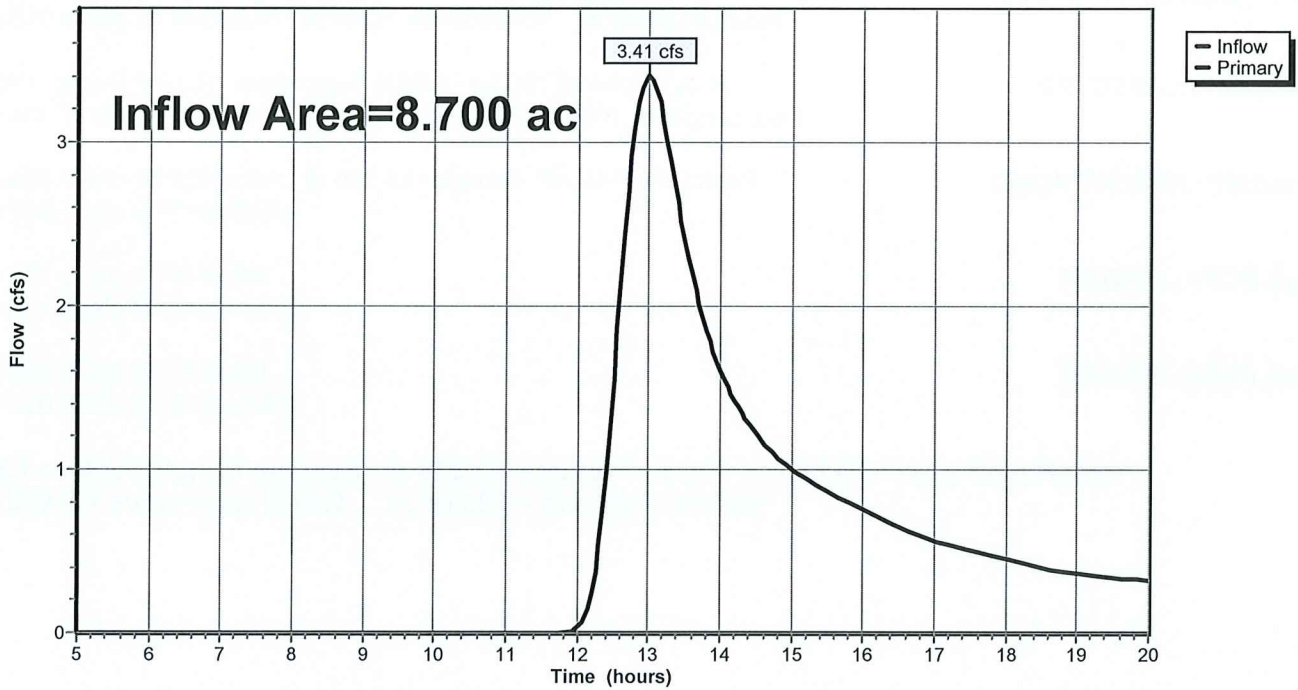
Summary for Link PDP2: OUTLET

Inflow Area = 8.700 ac, 0.00% Impervious, Inflow Depth > 0.93" for 10 YR event
Inflow = 3.41 cfs @ 13.00 hrs, Volume= 0.674 af
Primary = 3.41 cfs @ 13.00 hrs, Volume= 0.674 af, Atten= 0%, Lag= 0.0 min

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

Link PDP2: OUTLET

Hydrograph



HV_PRO

Type III 24-hr 25 YR Rainfall=6.24"

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Page 24

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

Subcatchment P1A: P1A Runoff Area=6.400 ac 38.00% Impervious Runoff Depth>3.23"
Flow Length=1,630' Tc=24.9 min CN=75 Runoff=16.04 cfs 1.724 af

Subcatchment P1B: P1B Runoff Area=5.500 ac 0.00% Impervious Runoff Depth>1.49"
Flow Length=620' Tc=19.5 min CN=55 Runoff=6.50 cfs 0.682 af

Subcatchment P1C: P1C Runoff Area=4.200 ac 0.00% Impervious Runoff Depth>1.48"
Flow Length=850' Tc=32.2 min CN=55 Runoff=4.02 cfs 0.518 af

Subcatchment P2: P2 Runoff Area=8.700 ac 0.00% Impervious Runoff Depth>1.45"
Flow Length=1,100' Tc=64.0 min CN=55 Runoff=5.70 cfs 1.054 af

Pond RP: RETENT POND Peak Elev=446.48' Storage=54,270 cf Inflow=22.42 cfs 2.406 af
Outflow=3.16 cfs 1.604 af

Link PDP1: OUTLET Inflow=6.03 cfs 2.122 af
Primary=6.03 cfs 2.122 af

Link PDP2: OUTLET Inflow=5.70 cfs 1.054 af
Primary=5.70 cfs 1.054 af

Total Runoff Area = 24.800 ac Runoff Volume = 3.978 af Average Runoff Depth = 1.92"
90.19% Pervious = 22.368 ac 9.81% Impervious = 2.432 ac

Summary for Subcatchment P1A: P1A

Runoff = 16.04 cfs @ 12.35 hrs, Volume= 1.724 af, Depth> 3.23"

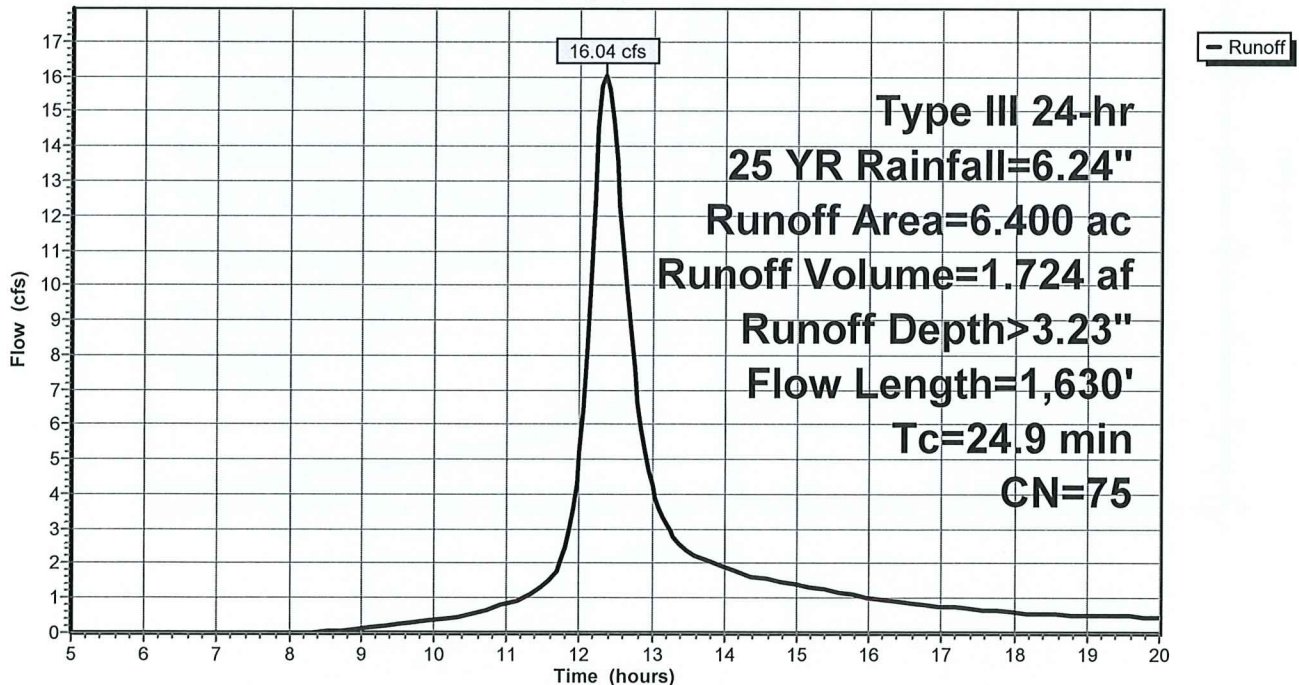
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 YR Rainfall=6.24"

Area (ac)	CN	Description
6.400	75	1/4 acre lots, 38% imp, HSG B
3.968		62.00% Pervious Area
2.432		38.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.3	100	0.0100	0.09		Sheet Flow, SF Grass: Dense n= 0.240 P2= 3.39"
5.0	210	0.0100	0.70		Shallow Concentrated Flow, SC1 Short Grass Pasture Kv= 7.0 fps
1.6	1,320	0.0600	13.97	17.14	Pipe Channel, PIPE 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
24.9	1,630	Total			

Subcatchment P1A: P1A

Hydrograph



Summary for Subcatchment P1B: P1B

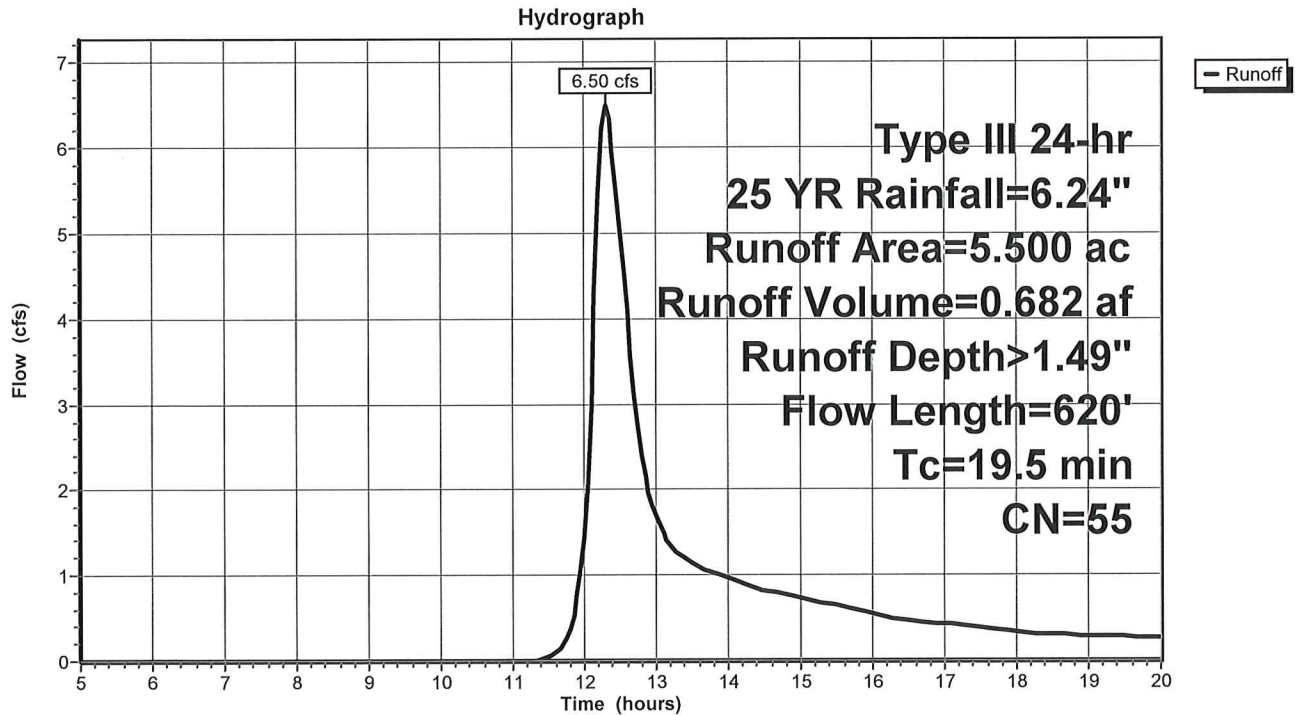
Runoff = 6.50 cfs @ 12.31 hrs, Volume= 0.682 af, Depth> 1.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 YR Rainfall=6.24"

Area (ac)	CN	Description
5.500	55	Woods, Good, HSG B
5.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
6.1	520	0.0800	1.41		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
19.5	620	Total			

Subcatchment P1B: P1B



Summary for Subcatchment P1C: P1C

Runoff = 4.02 cfs @ 12.51 hrs, Volume= 0.518 af, Depth> 1.48"

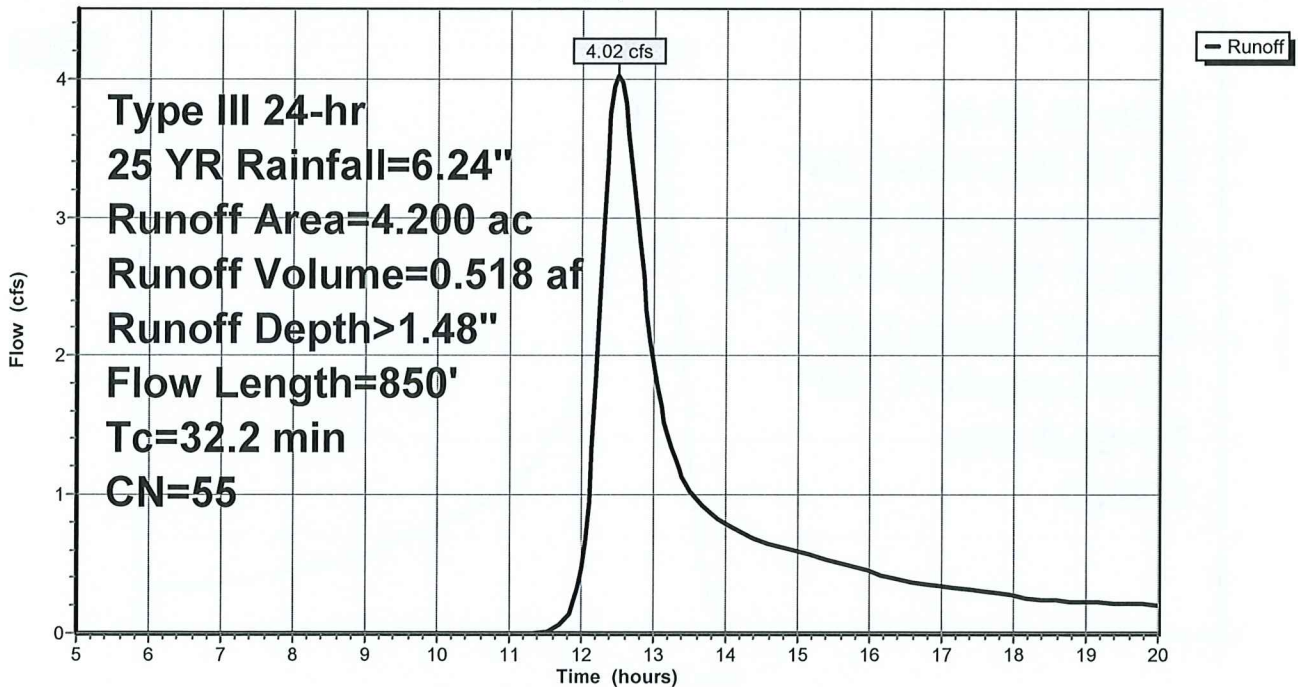
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 YR Rainfall=6.24"

Area (ac)	CN	Description
4.200	55	Woods, Good, HSG B
4.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.0	100	0.0700	0.08		Sheet Flow, SF Woods: Dense underbrush n= 0.800 P2= 3.39"
10.2	750	0.0600	1.22		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
32.2	850	Total			

Subcatchment P1C: P1C

Hydrograph



Summary for Subcatchment P2: P2

Runoff = 5.70 cfs @ 12.96 hrs, Volume= 1.054 af, Depth> 1.45"

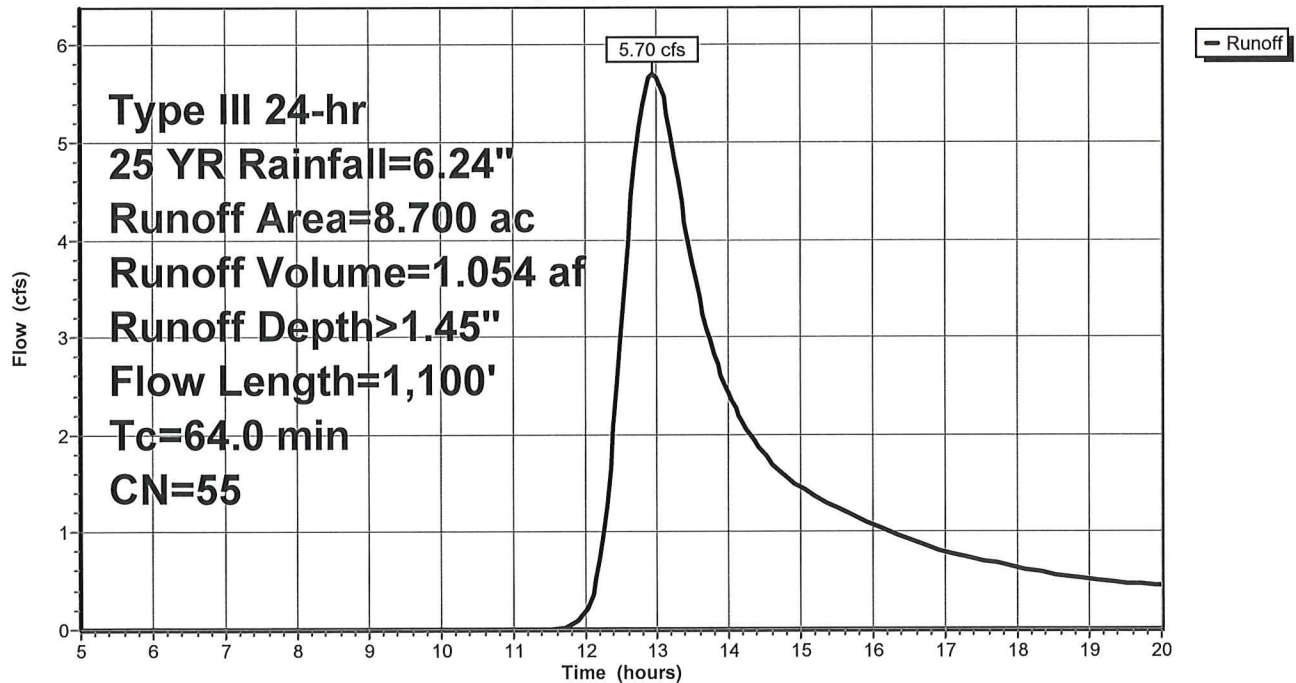
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 YR Rainfall=6.24"

Area (ac)	CN	Description
8.700	55	Woods, Good, HSG B
8.700		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
47.9	100	0.0100	0.03		Sheet Flow, SF Woods: Dense underbrush n= 0.800 P2= 3.39"
16.1	1,000	0.0430	1.04		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
64.0	1,100	Total			

Subcatchment P2: P2

Hydrograph



Summary for Pond RP: RETENT POND

Inflow Area = 11.900 ac, 20.44% Impervious, Inflow Depth > 2.43" for 25 YR event
 Inflow = 22.42 cfs @ 12.33 hrs, Volume= 2.406 af
 Outflow = 3.16 cfs @ 13.73 hrs, Volume= 1.604 af, Atten= 86%, Lag= 84.0 min
 Primary = 3.16 cfs @ 13.73 hrs, Volume= 1.604 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 446.48' @ 13.73 hrs Surf.Area= 17,532 sf Storage= 54,270 cf

Plug-Flow detention time= 183.1 min calculated for 1.604 af (67% of inflow)
 Center-of-Mass det. time= 111.6 min (925.3 - 813.6)

Volume	Invert	Avail.Storage	Storage Description
#1	443.00'	122,953 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
443.00	13,695	0	0
449.00	20,318	102,039	102,039
450.00	21,510	20,914	122,953

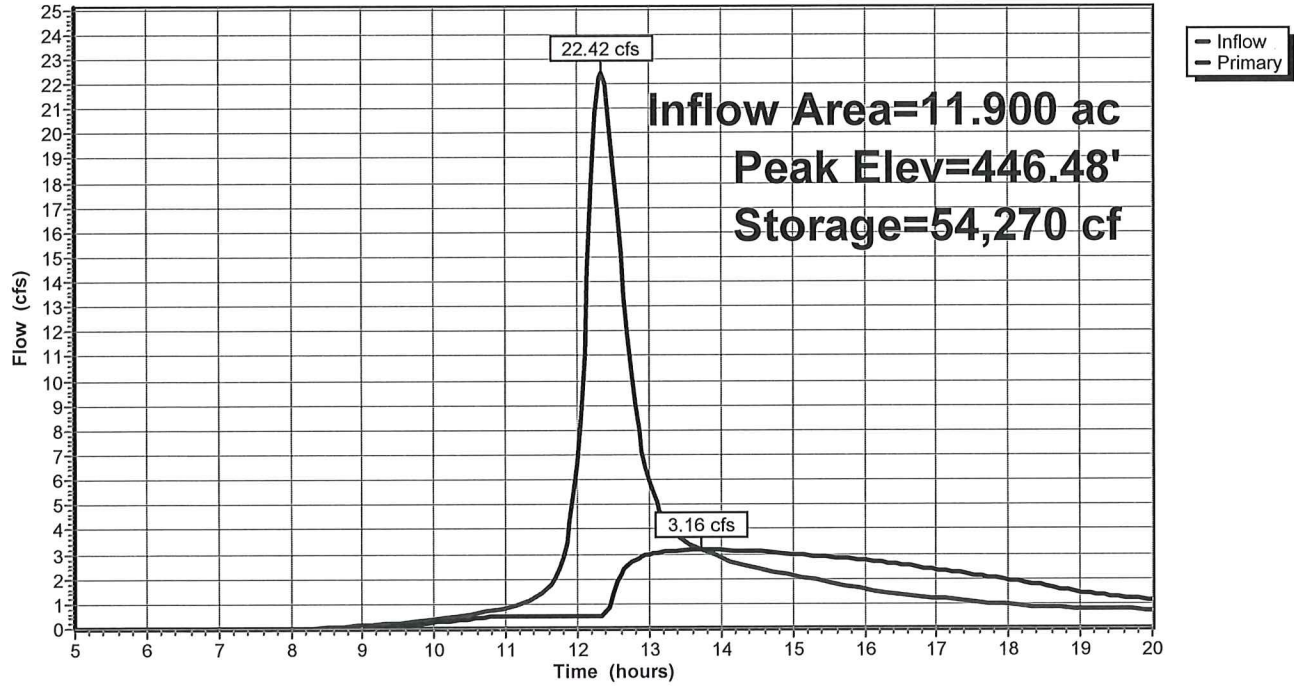
Device	Routing	Invert	Outlet Devices
#1	Primary	449.00'	8.0' long x 8.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#2	Primary	443.00'	0.50 cfs Trench Drain when above 442.00'
#3	Primary	445.00'	12.0" W x 6.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=3.16 cfs @ 13.73 hrs HW=446.48' (Free Discharge)

- 1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)
- 2=Trench Drain (Exfiltration Controls 0.50 cfs)
- 3=Orifice/Grate (Orifice Controls 2.66 cfs @ 5.32 fps)

Pond RP: RETENT POND

Hydrograph



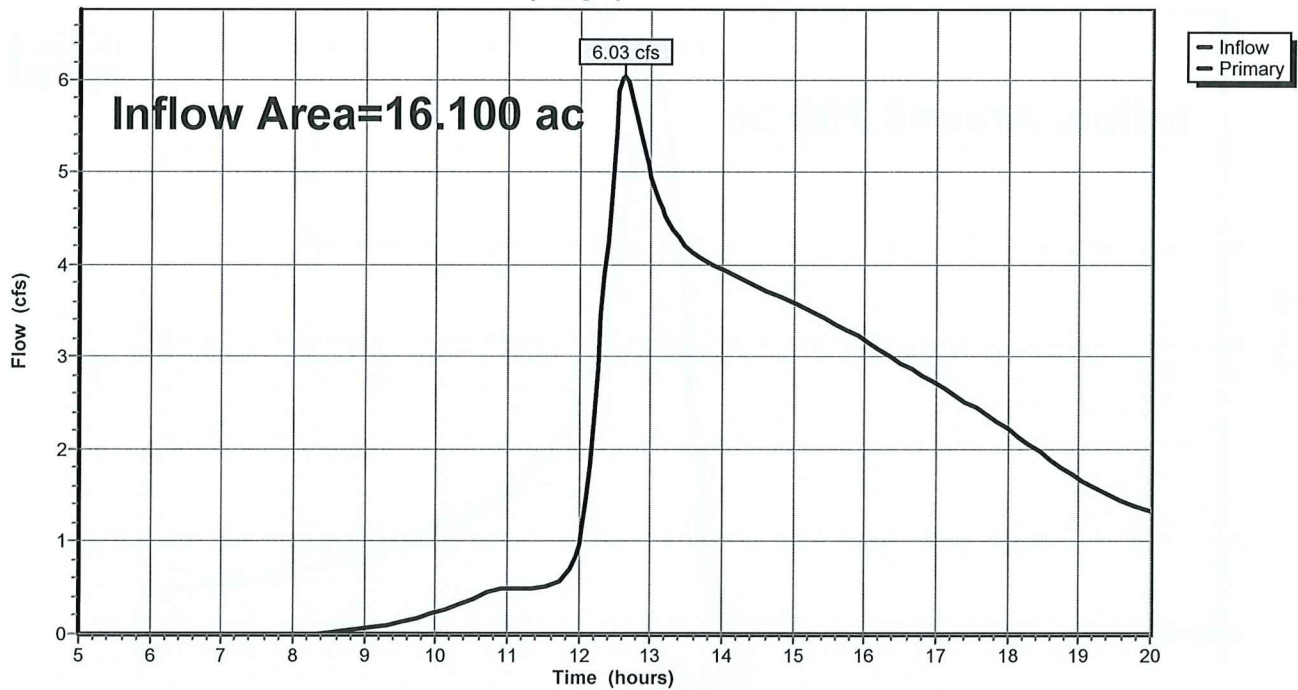
Summary for Link PDP1: OUTLET

Inflow Area = 16.100 ac, 15.11% Impervious, Inflow Depth > 1.58" for 25 YR event
Inflow = 6.03 cfs @ 12.62 hrs, Volume= 2.122 af
Primary = 6.03 cfs @ 12.62 hrs, Volume= 2.122 af, Atten= 0%, Lag= 0.0 min

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

Link PDP1: OUTLET

Hydrograph



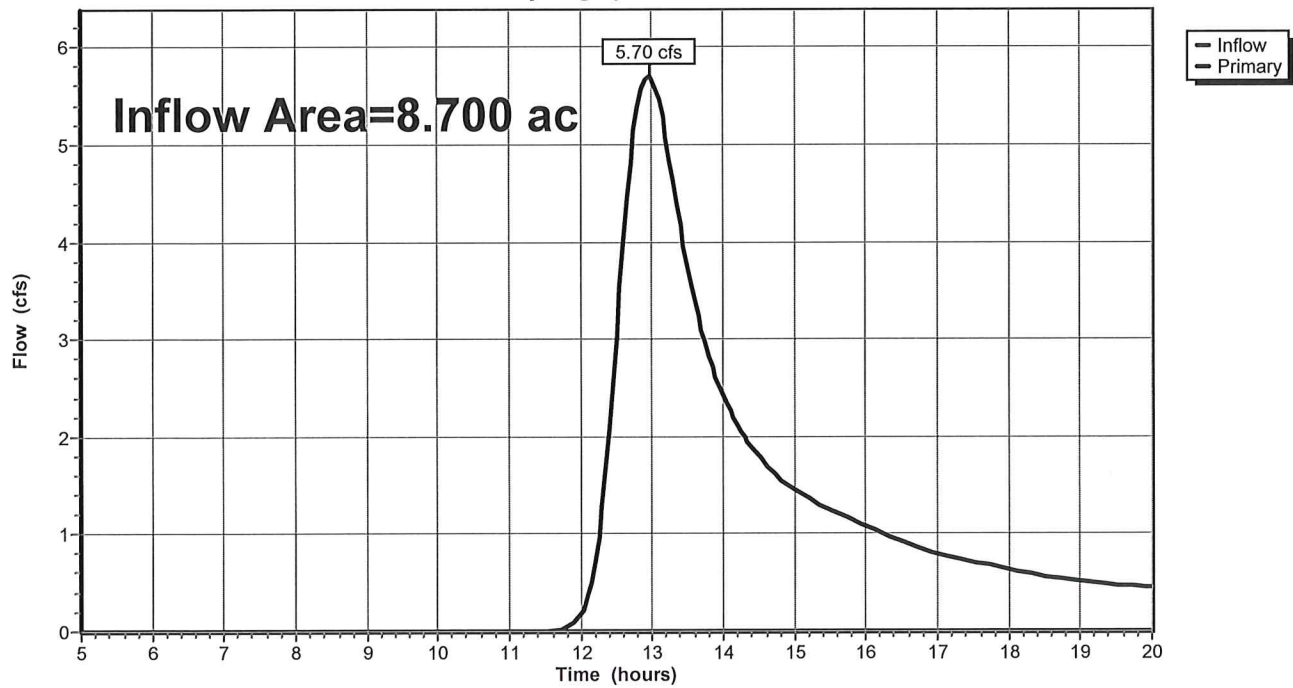
Summary for Link PDP2: OUTLET

Inflow Area = 8.700 ac, 0.00% Impervious, Inflow Depth > 1.45" for 25 YR event
Inflow = 5.70 cfs @ 12.96 hrs, Volume= 1.054 af
Primary = 5.70 cfs @ 12.96 hrs, Volume= 1.054 af, Atten= 0%, Lag= 0.0 min

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

Link PDP2: OUTLET

Hydrograph



HV_PRO

Type III 24-hr 50 YR Rainfall=7.15"

Prepared by Reynolds Engineering Svcs, LLC

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Page 33

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

Subcatchment P1A: P1A	Runoff Area=6.400 ac 38.00% Impervious Runoff Depth>3.98" Flow Length=1,630' Tc=24.9 min CN=75 Runoff=19.68 cfs 2.123 af
Subcatchment P1B: P1B	Runoff Area=5.500 ac 0.00% Impervious Runoff Depth>2.01" Flow Length=620' Tc=19.5 min CN=55 Runoff=9.06 cfs 0.920 af
Subcatchment P1C: P1C	Runoff Area=4.200 ac 0.00% Impervious Runoff Depth>2.00" Flow Length=850' Tc=32.2 min CN=55 Runoff=5.59 cfs 0.699 af
Subcatchment P2: P2	Runoff Area=8.700 ac 0.00% Impervious Runoff Depth>1.96" Flow Length=1,100' Tc=64.0 min CN=55 Runoff=7.95 cfs 1.424 af
Pond RP: RETENT POND	Peak Elev=447.32' Storage=69,427 cf Inflow=28.55 cfs 3.044 af Outflow=3.96 cfs 2.151 af
Link PDP1: OUTLET	Inflow=8.49 cfs 2.850 af Primary=8.49 cfs 2.850 af
Link PDP2: OUTLET	Inflow=7.95 cfs 1.424 af Primary=7.95 cfs 1.424 af

Total Runoff Area = 24.800 ac Runoff Volume = 5.167 af Average Runoff Depth = 2.50"
90.19% Pervious = 22.368 ac 9.81% Impervious = 2.432 ac

Summary for Subcatchment P1A: P1A

Runoff = 19.68 cfs @ 12.34 hrs, Volume= 2.123 af, Depth> 3.98"

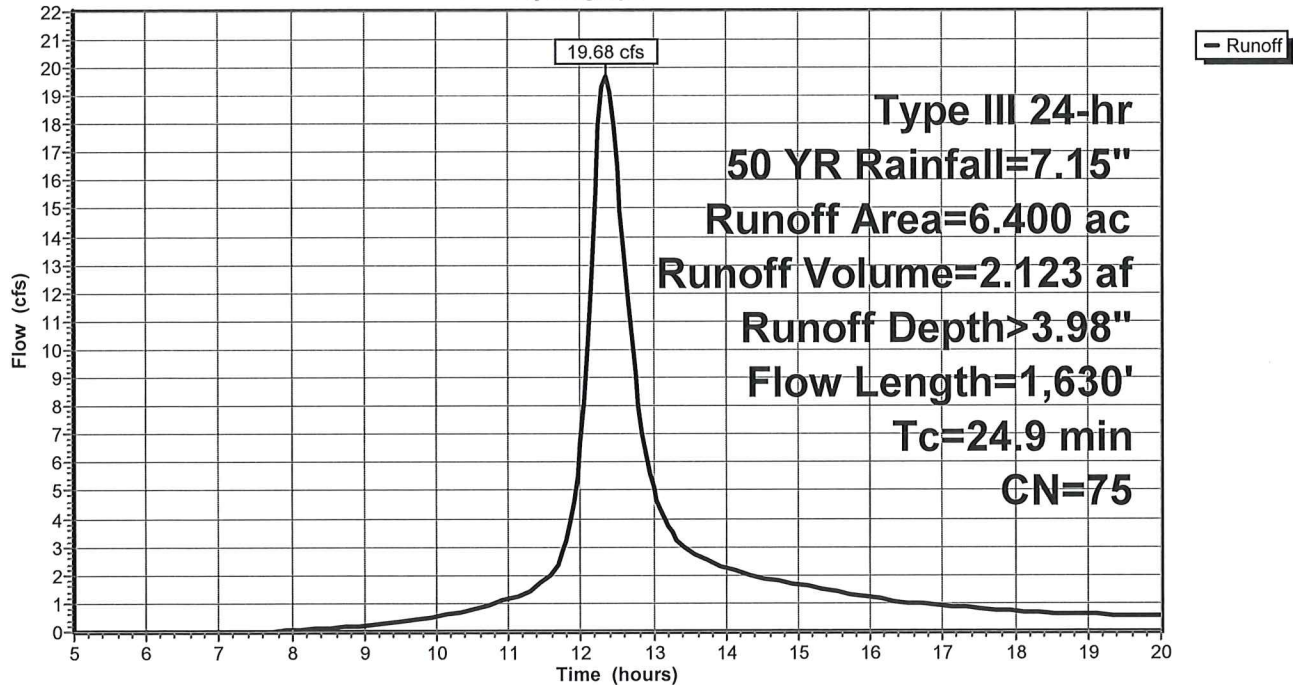
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 YR Rainfall=7.15"

Area (ac)	CN	Description
6.400	75	1/4 acre lots, 38% imp, HSG B
3.968		62.00% Pervious Area
2.432		38.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.3	100	0.0100	0.09		Sheet Flow, SF Grass: Dense n= 0.240 P2= 3.39"
5.0	210	0.0100	0.70		Shallow Concentrated Flow, SC1 Short Grass Pasture Kv= 7.0 fps
1.6	1,320	0.0600	13.97	17.14	Pipe Channel, PIPE 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
24.9	1,630	Total			

Subcatchment P1A: P1A

Hydrograph



Summary for Subcatchment P1B: P1B

Runoff = 9.06 cfs @ 12.30 hrs, Volume= 0.920 af, Depth> 2.01"

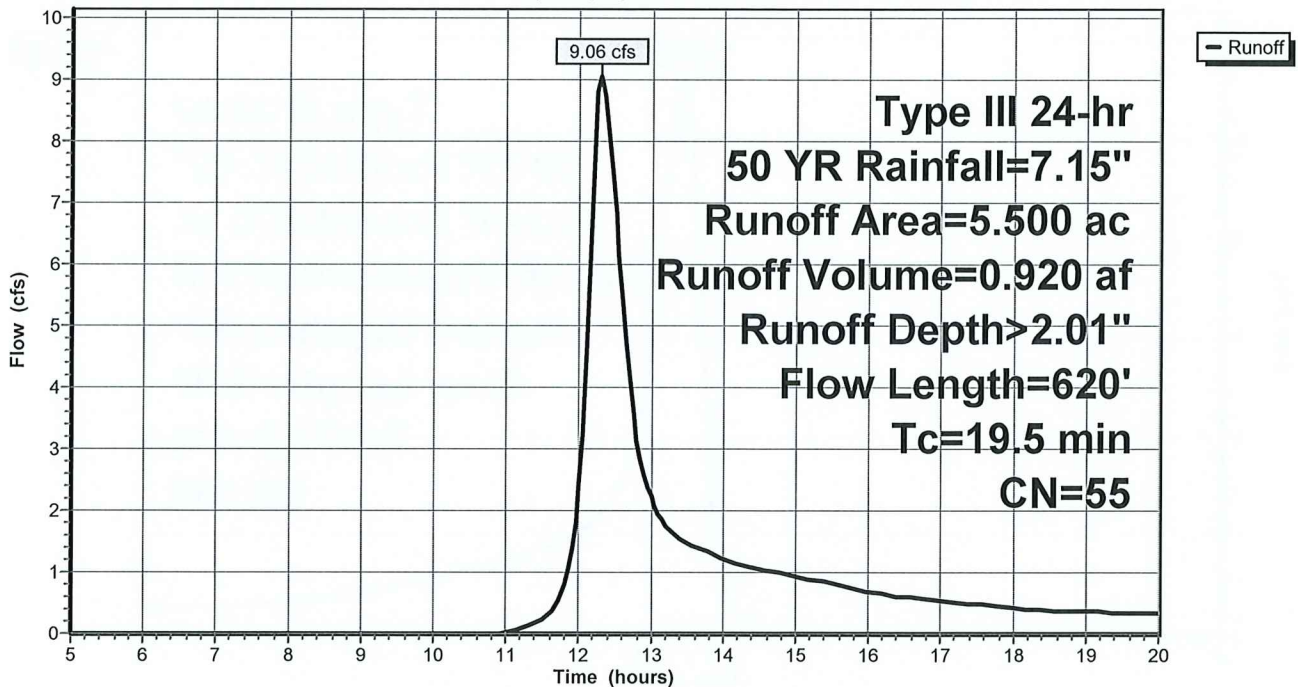
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 YR Rainfall=7.15"

Area (ac)	CN	Description
5.500	55	Woods, Good, HSG B
5.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
6.1	520	0.0800	1.41		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
19.5	620	Total			

Subcatchment P1B: P1B

Hydrograph



Summary for Subcatchment P1C: P1C

Runoff = 5.59 cfs @ 12.49 hrs, Volume= 0.699 af, Depth> 2.00"

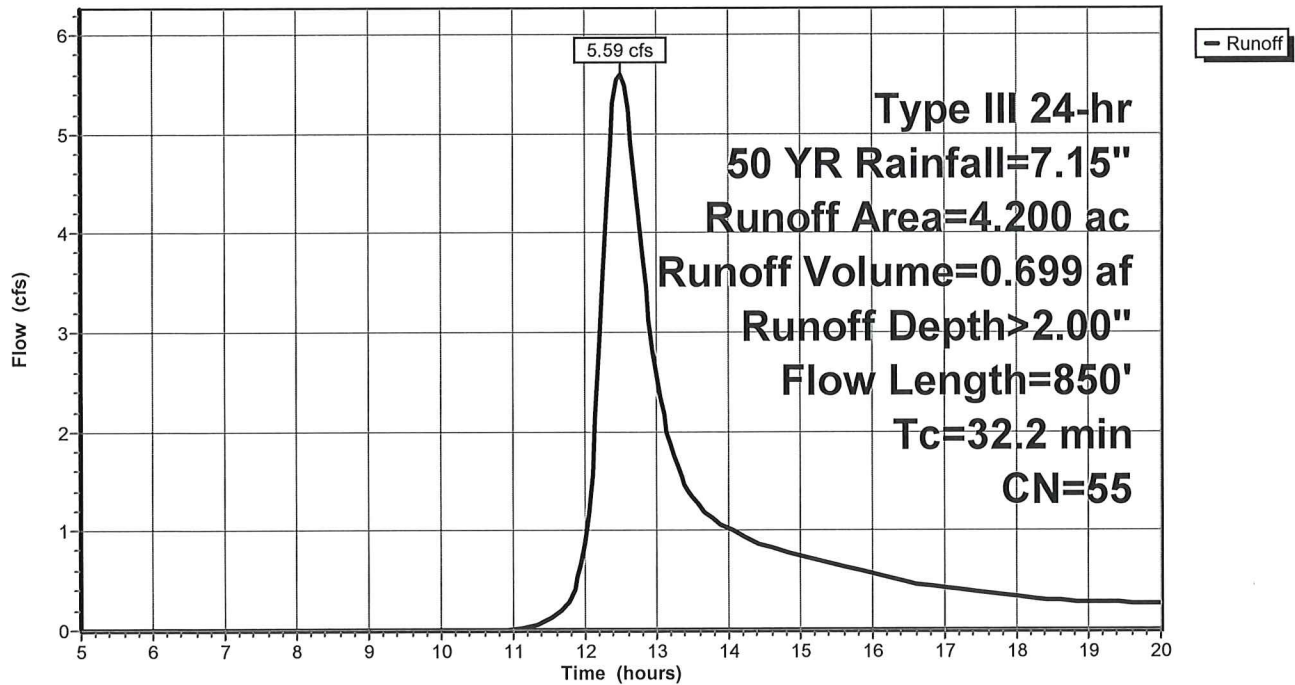
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 YR Rainfall=7.15"

Area (ac)	CN	Description
4.200	55	Woods, Good, HSG B
4.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.0	100	0.0700	0.08		Sheet Flow, SF Woods: Dense underbrush n= 0.800 P2= 3.39"
10.2	750	0.0600	1.22		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
32.2	850	Total			

Subcatchment P1C: P1C

Hydrograph



Summary for Subcatchment P2: P2

Runoff = 7.95 cfs @ 12.93 hrs, Volume= 1.424 af, Depth> 1.96"

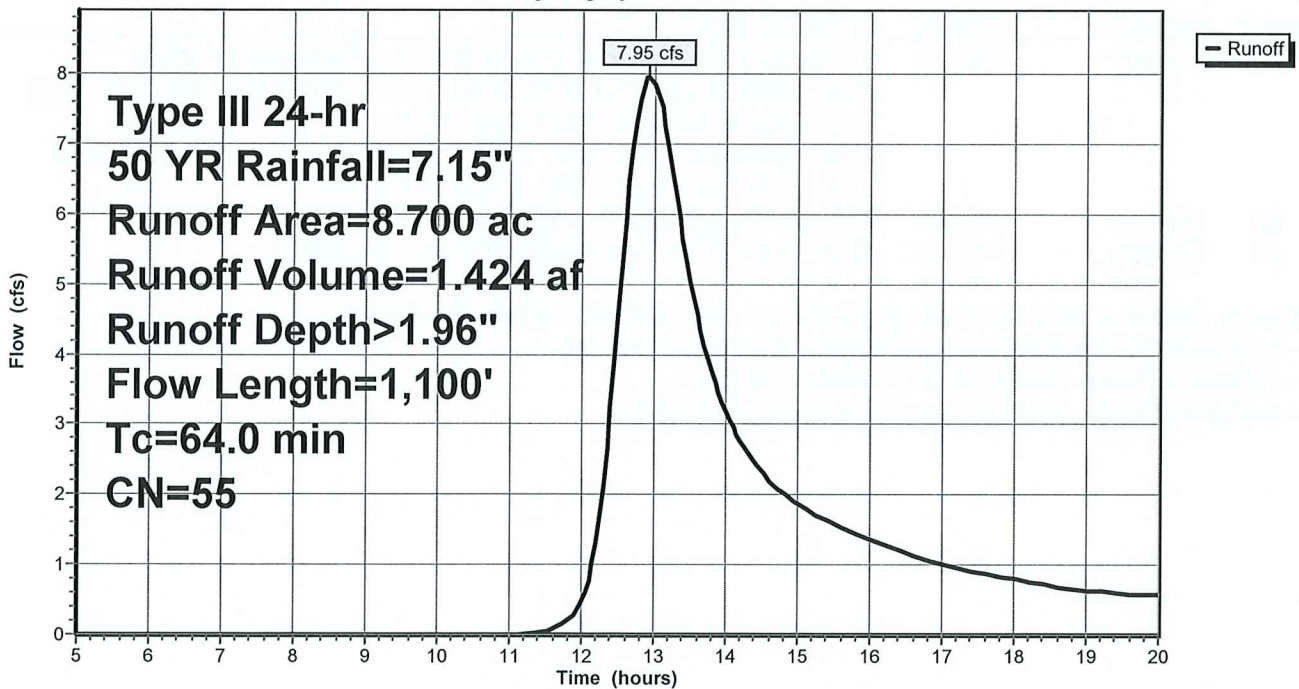
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 YR Rainfall=7.15"

Area (ac)	CN	Description
8.700	55	Woods, Good, HSG B
8.700		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
47.9	100	0.0100	0.03		Sheet Flow, SF Woods: Dense underbrush n= 0.800 P2= 3.39"
16.1	1,000	0.0430	1.04		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
64.0	1,100	Total			

Subcatchment P2: P2

Hydrograph



Summary for Pond RP: RETENT POND

Inflow Area = 11.900 ac, 20.44% Impervious, Inflow Depth > 3.07" for 50 YR event
 Inflow = 28.55 cfs @ 12.33 hrs, Volume= 3.044 af
 Outflow = 3.96 cfs @ 13.67 hrs, Volume= 2.151 af, Atten= 86%, Lag= 80.8 min
 Primary = 3.96 cfs @ 13.67 hrs, Volume= 2.151 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 447.32' @ 13.67 hrs Surf.Area= 18,461 sf Storage= 69,427 cf

Plug-Flow detention time= 189.2 min calculated for 2.151 af (71% of inflow)
 Center-of-Mass det. time= 123.0 min (931.9 - 808.9)

Volume	Invert	Avail.Storage	Storage Description
#1	443.00'	122,953 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
443.00	13,695	0	0
449.00	20,318	102,039	102,039
450.00	21,510	20,914	122,953

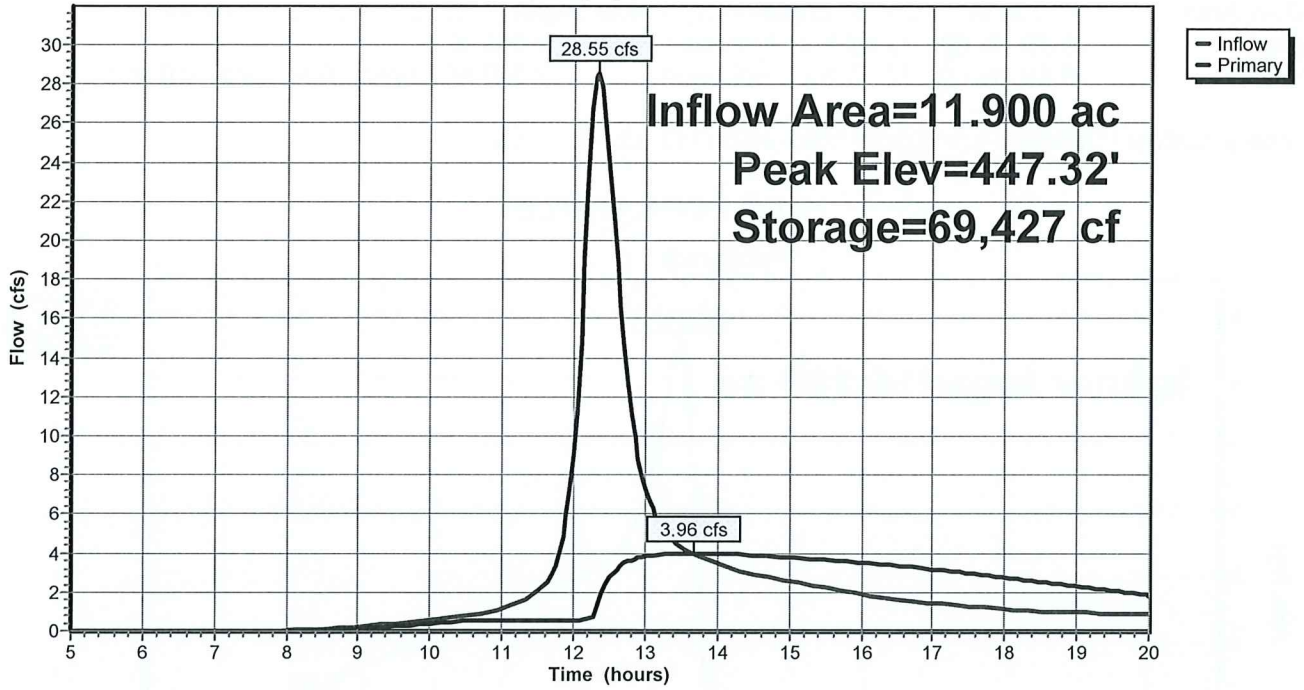
Device	Routing	Invert	Outlet Devices
#1	Primary	449.00'	8.0' long x 8.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#2	Primary	443.00'	0.50 cfs Trench Drain when above 442.00'
#3	Primary	445.00'	12.0" W x 6.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=3.96 cfs @ 13.67 hrs HW=447.32' (Free Discharge)

- 1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)
- 2=Trench Drain (Exfiltration Controls 0.50 cfs)
- 3=Orifice/Grate (Orifice Controls 3.46 cfs @ 6.92 fps)

Pond RP: RETENT POND

Hydrograph



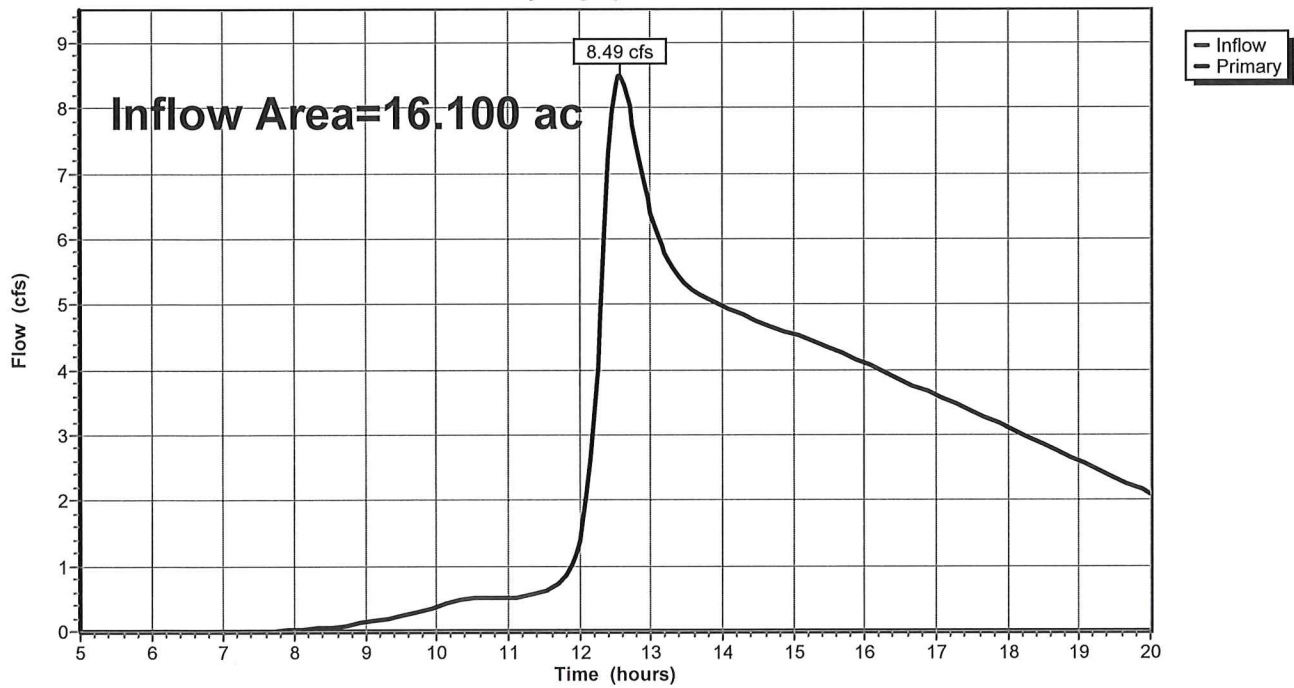
Summary for Link PDP1: OUTLET

Inflow Area = 16.100 ac, 15.11% Impervious, Inflow Depth > 2.12" for 50 YR event
Inflow = 8.49 cfs @ 12.56 hrs, Volume= 2.850 af
Primary = 8.49 cfs @ 12.56 hrs, Volume= 2.850 af, Atten= 0%, Lag= 0.0 min

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

Link PDP1: OUTLET

Hydrograph



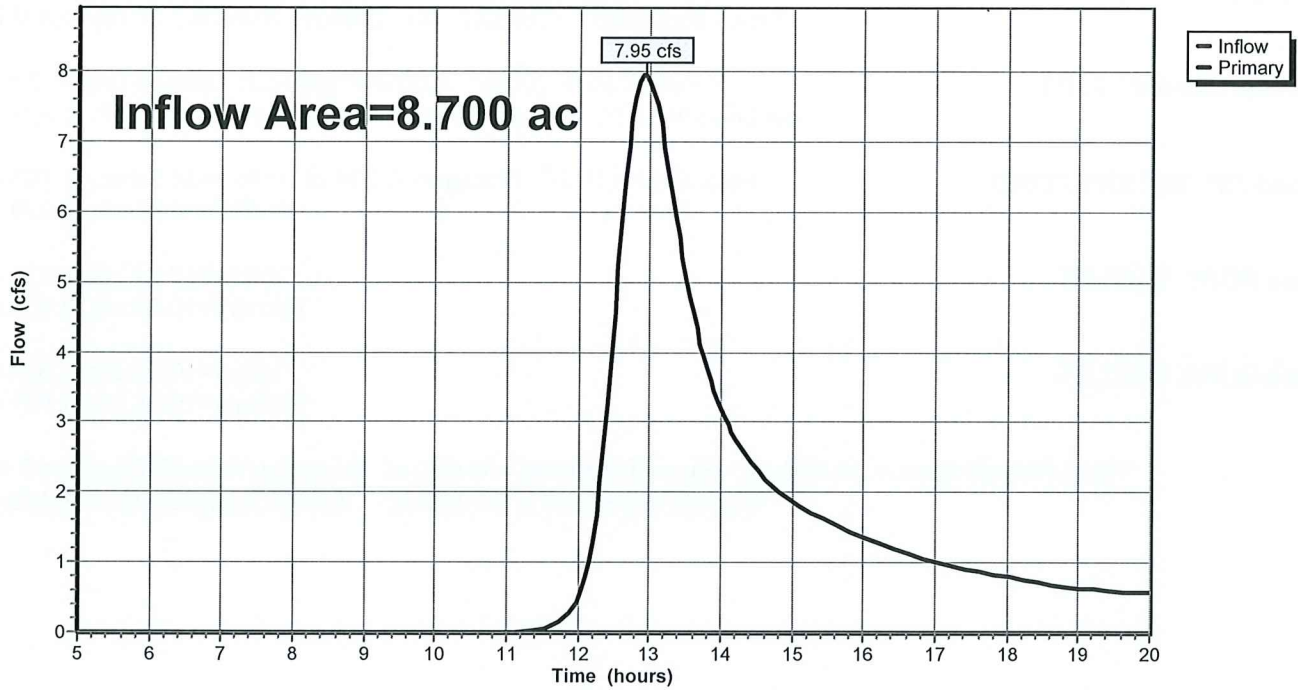
Summary for Link PDP2: OUTLET

Inflow Area = 8.700 ac, 0.00% Impervious, Inflow Depth > 1.96" for 50 YR event
Inflow = 7.95 cfs @ 12.93 hrs, Volume= 1.424 af
Primary = 7.95 cfs @ 12.93 hrs, Volume= 1.424 af, Atten= 0%, Lag= 0.0 min

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

Link PDP2: OUTLET

Hydrograph



HV_PRO

Type III 24-hr 100 YR Rainfall=8.05"

Prepared by Reynolds Engineering Svcs, LLC

Printed 5/3/2023

HydroCAD® 10.00-20 s/n 10191 © 2017 HydroCAD Software Solutions LLC

Page 42

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

Subcatchment P1A: P1A Runoff Area=6.400 ac 38.00% Impervious Runoff Depth>4.74"
Flow Length=1,630' Tc=24.9 min CN=75 Runoff=23.33 cfs 2.528 af

Subcatchment P1B: P1B Runoff Area=5.500 ac 0.00% Impervious Runoff Depth>2.56"
Flow Length=620' Tc=19.5 min CN=55 Runoff=11.78 cfs 1.175 af

Subcatchment P1C: P1C Runoff Area=4.200 ac 0.00% Impervious Runoff Depth>2.55"
Flow Length=850' Tc=32.2 min CN=55 Runoff=7.26 cfs 0.892 af

Subcatchment P2: P2 Runoff Area=8.700 ac 0.00% Impervious Runoff Depth>2.51"
Flow Length=1,100' Tc=64.0 min CN=55 Runoff=10.35 cfs 1.821 af

Pond RP: RETENT POND Peak Elev=448.20' Storage=86,234 cf Inflow=34.92 cfs 3.703 af
Outflow=4.64 cfs 2.639 af

Link PDP1: OUTLET Inflow=10.84 cfs 3.531 af
Primary=10.84 cfs 3.531 af

Link PDP2: OUTLET Inflow=10.35 cfs 1.821 af
Primary=10.35 cfs 1.821 af

Total Runoff Area = 24.800 ac Runoff Volume = 6.417 af Average Runoff Depth = 3.10"
90.19% Pervious = 22.368 ac 9.81% Impervious = 2.432 ac

Summary for Subcatchment P1A: P1A

Runoff = 23.33 cfs @ 12.34 hrs, Volume= 2.528 af, Depth> 4.74"

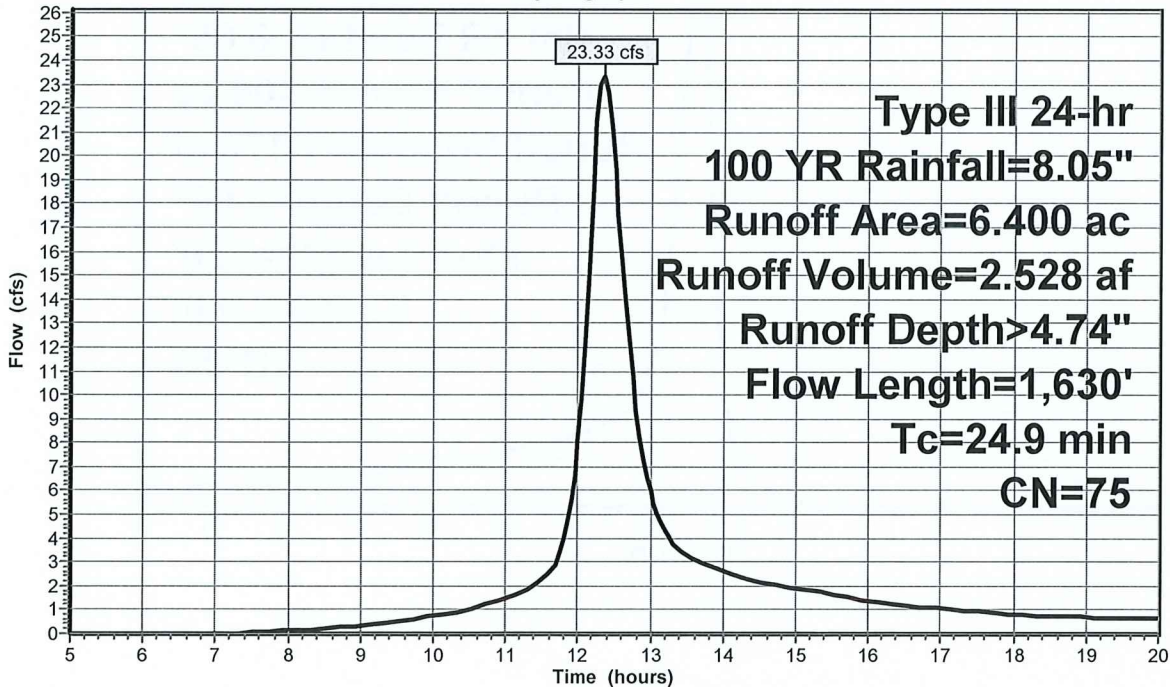
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100 YR Rainfall=8.05"

Area (ac)	CN	Description
6.400	75	1/4 acre lots, 38% imp, HSG B
3.968		62.00% Pervious Area
2.432		38.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.3	100	0.0100	0.09		Sheet Flow, SF Grass: Dense n= 0.240 P2= 3.39"
5.0	210	0.0100	0.70		Shallow Concentrated Flow, SC1 Short Grass Pasture Kv= 7.0 fps
1.6	1,320	0.0600	13.97	17.14	Pipe Channel, PIPE 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
24.9	1,630	Total			

Subcatchment P1A: P1A

Hydrograph



Summary for Subcatchment P1B: P1B

Runoff = 11.78 cfs @ 12.29 hrs, Volume= 1.175 af, Depth> 2.56"

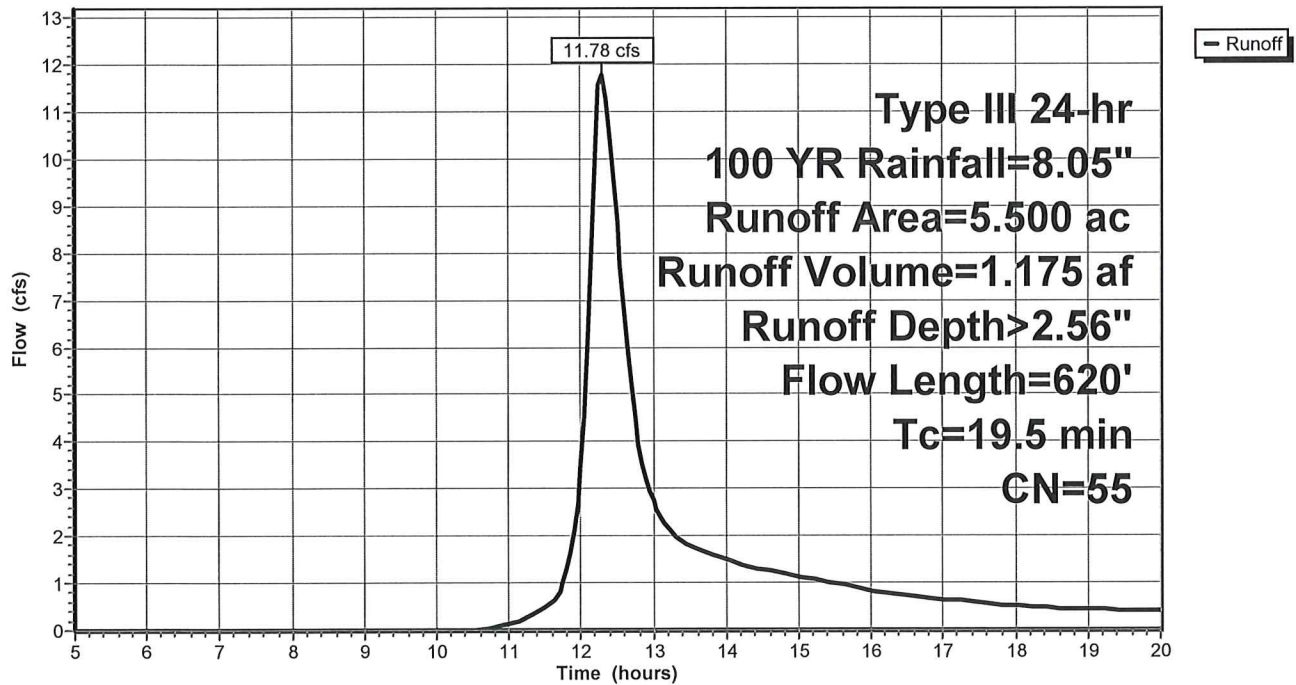
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100 YR Rainfall=8.05"

Area (ac)	CN	Description
5.500	55	Woods, Good, HSG B
5.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, SF Woods: Light underbrush n= 0.400 P2= 3.39"
6.1	520	0.0800	1.41		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
19.5	620	Total			

Subcatchment P1B: P1B

Hydrograph



Summary for Subcatchment P1C: P1C

Runoff = 7.26 cfs @ 12.48 hrs, Volume= 0.892 af, Depth> 2.55"

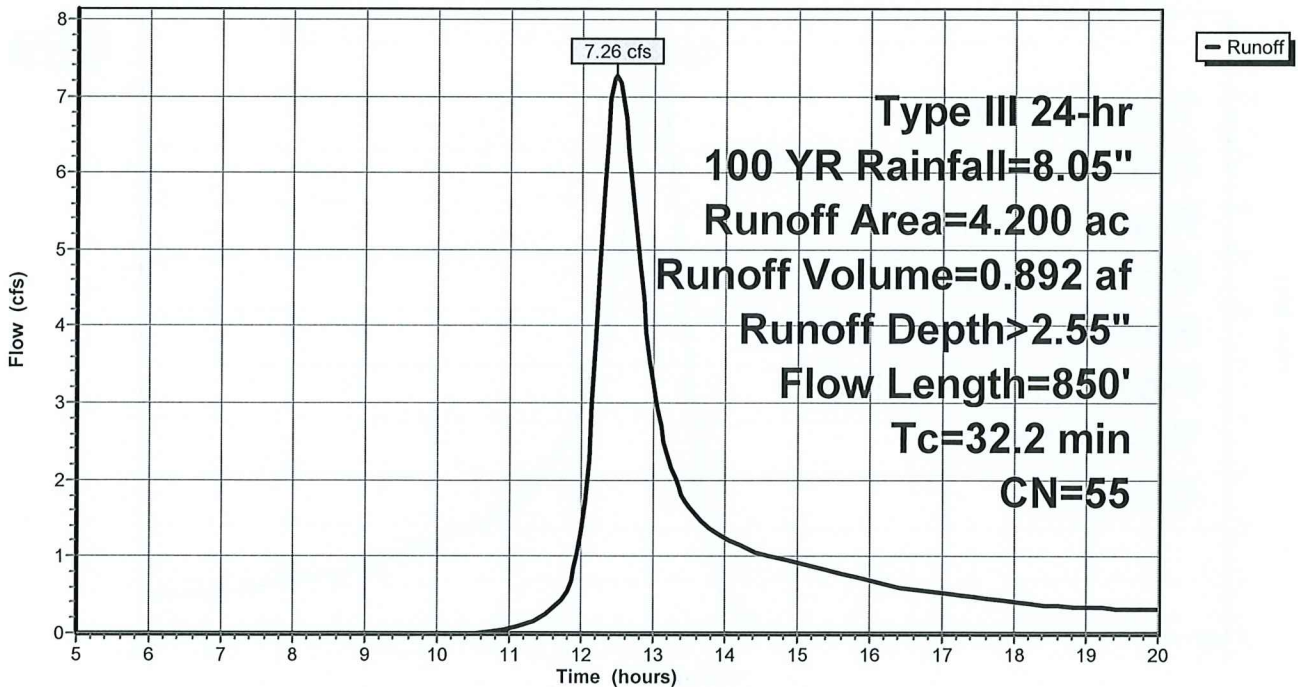
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100 YR Rainfall=8.05"

Area (ac)	CN	Description
4.200	55	Woods, Good, HSG B
4.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.0	100	0.0700	0.08		Sheet Flow, SF Woods: Dense underbrush n= 0.800 P2= 3.39"
10.2	750	0.0600	1.22		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
32.2	850	Total			

Subcatchment P1C: P1C

Hydrograph



Summary for Subcatchment P2: P2

Runoff = 10.35 cfs @ 12.91 hrs, Volume= 1.821 af, Depth> 2.51"

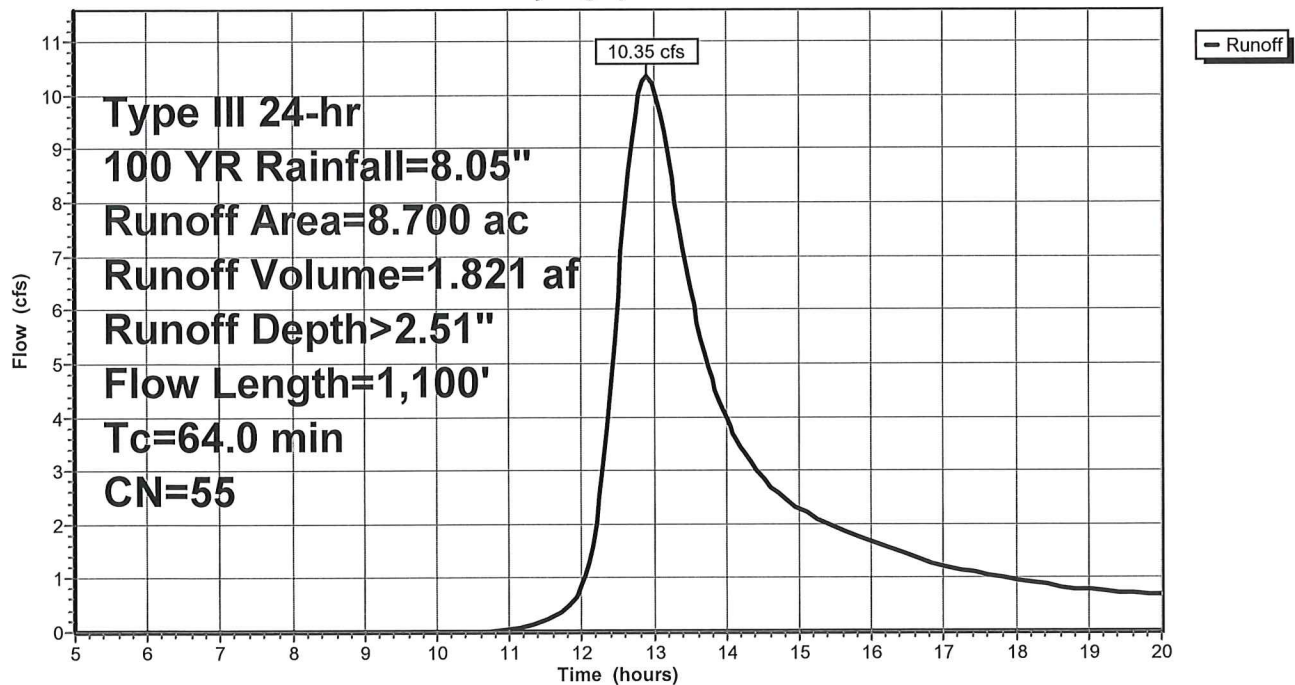
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100 YR Rainfall=8.05"

Area (ac)	CN	Description
8.700	55	Woods, Good, HSG B
8.700		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
47.9	100	0.0100	0.03		Sheet Flow, SF Woods: Dense underbrush n= 0.800 P2= 3.39"
16.1	1,000	0.0430	1.04		Shallow Concentrated Flow, SC Woodland Kv= 5.0 fps
64.0	1,100	Total			

Subcatchment P2: P2

Hydrograph



Summary for Pond RP: RETENT POND

Inflow Area = 11.900 ac, 20.44% Impervious, Inflow Depth > 3.73" for 100 YR event
 Inflow = 34.92 cfs @ 12.32 hrs, Volume= 3.703 af
 Outflow = 4.64 cfs @ 13.70 hrs, Volume= 2.639 af, Atten= 87%, Lag= 82.6 min
 Primary = 4.64 cfs @ 13.70 hrs, Volume= 2.639 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 448.20' @ 13.70 hrs Surf.Area= 19,440 sf Storage= 86,234 cf

Plug-Flow detention time= 196.0 min calculated for 2.639 af (71% of inflow)
 Center-of-Mass det. time= 130.9 min (935.8 - 804.9)

Volume	Invert	Avail.Storage	Storage Description
#1	443.00'	122,953 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
443.00	13,695	0	0
449.00	20,318	102,039	102,039
450.00	21,510	20,914	122,953

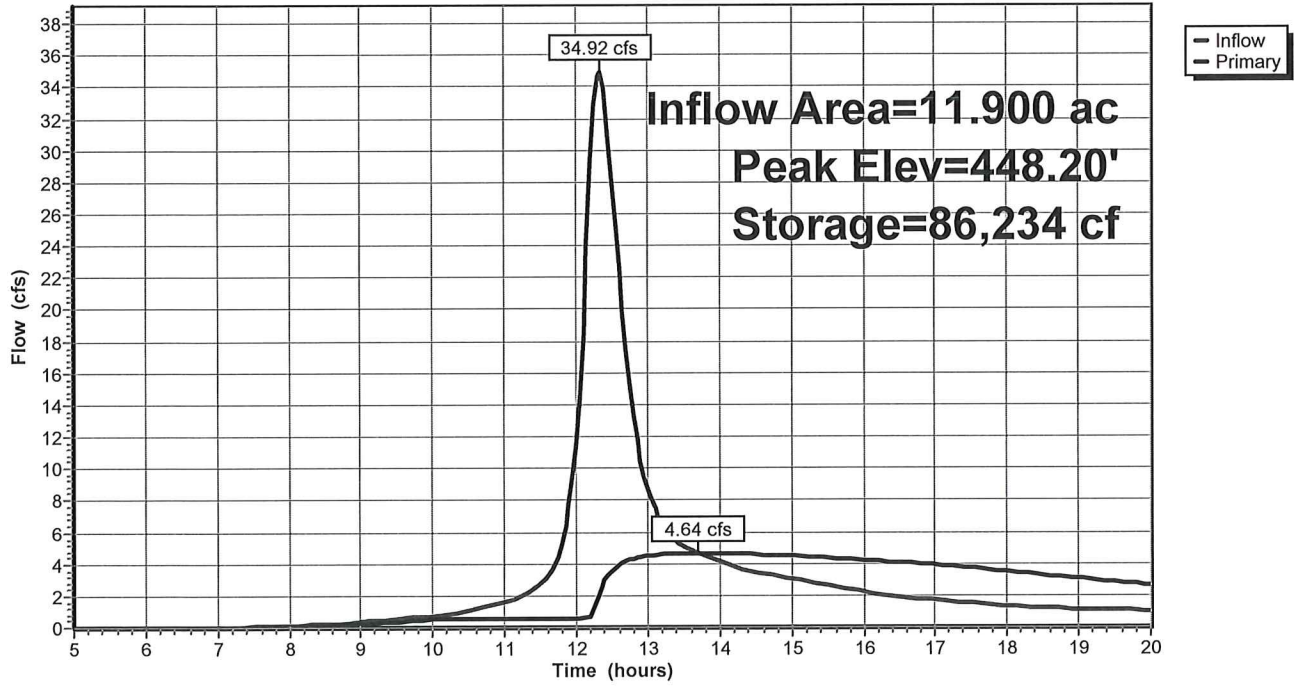
Device	Routing	Invert	Outlet Devices
#1	Primary	449.00'	8.0' long x 8.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#2	Primary	443.00'	0.50 cfs Trench Drain when above 442.00'
#3	Primary	445.00'	12.0" W x 6.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=4.64 cfs @ 13.70 hrs HW=448.20' (Free Discharge)

- └─1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)
- └─2=Trench Drain (Exfiltration Controls 0.50 cfs)
- └─3=Orifice/Grate (Orifice Controls 4.14 cfs @ 8.27 fps)

Pond RP: RETENT POND

Hydrograph

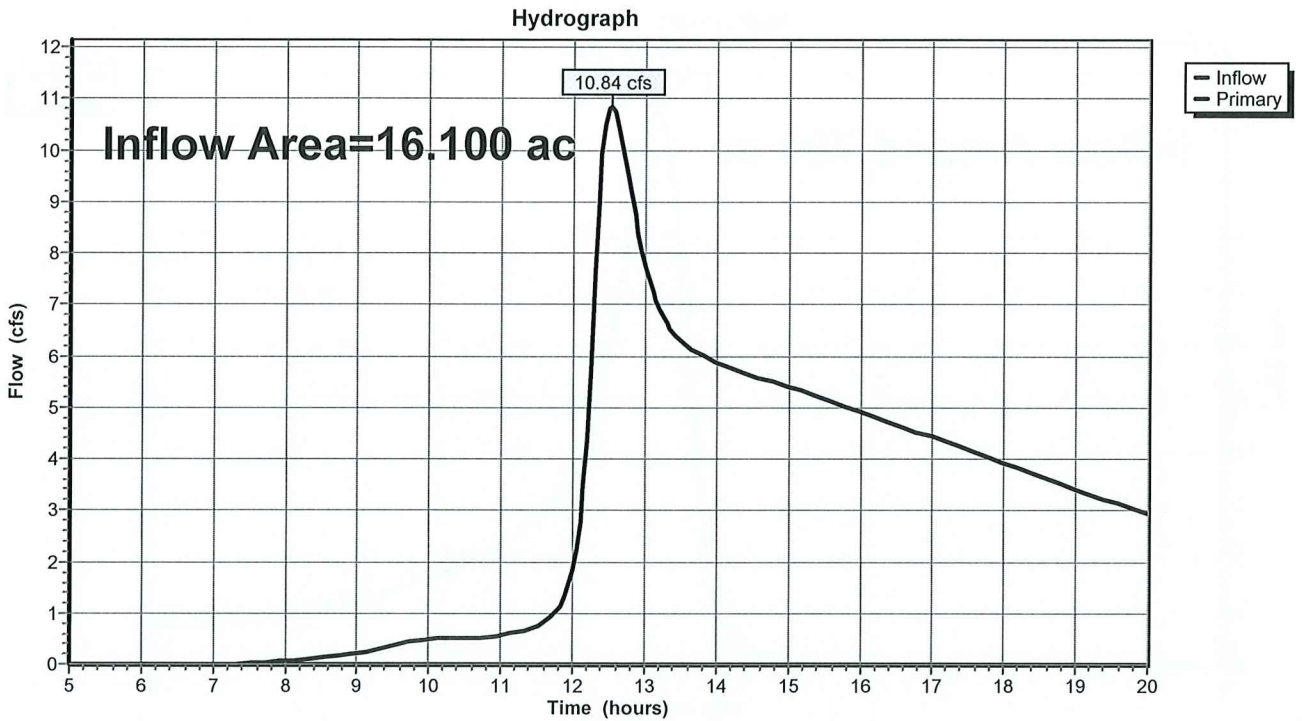


Summary for Link PDP1: OUTLET

Inflow Area = 16.100 ac, 15.11% Impervious, Inflow Depth > 2.63" for 100 YR event
Inflow = 10.84 cfs @ 12.53 hrs, Volume= 3.531 af
Primary = 10.84 cfs @ 12.53 hrs, Volume= 3.531 af, Atten= 0%, Lag= 0.0 min

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

Link PDP1: OUTLET



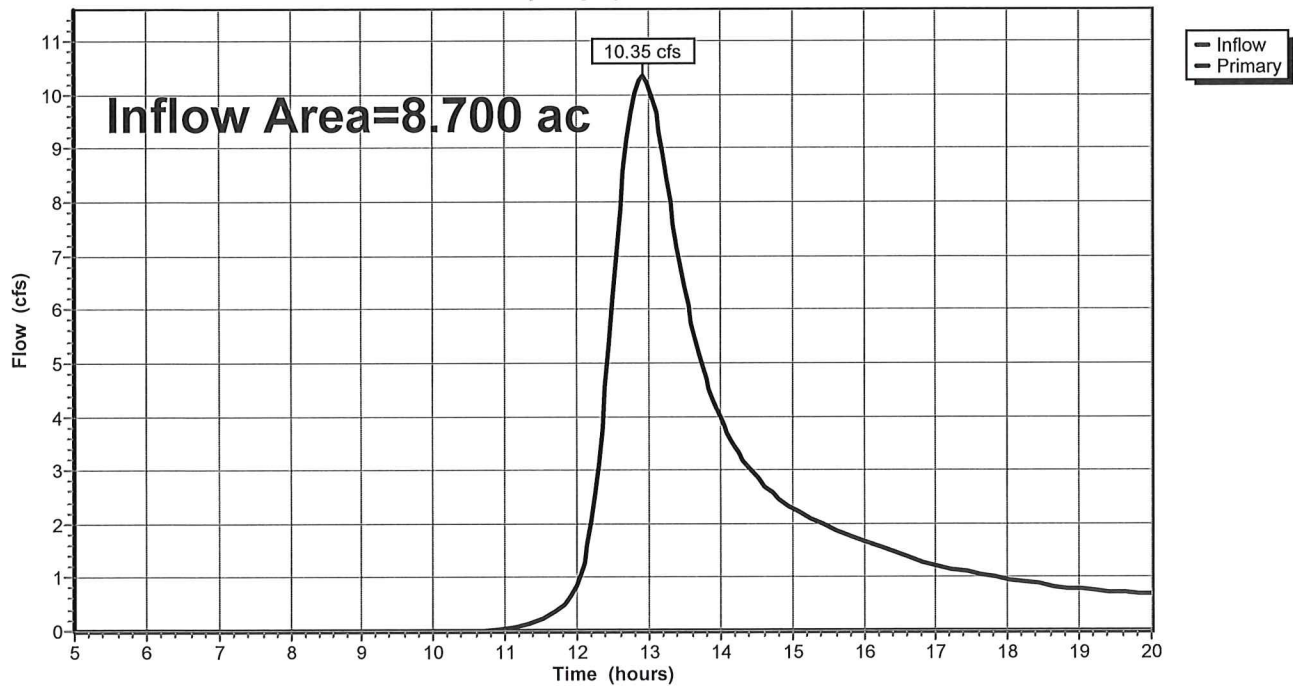
Summary for Link PDP2: OUTLET

Inflow Area = 8.700 ac, 0.00% Impervious, Inflow Depth > 2.51" for 100 YR event
Inflow = 10.35 cfs @ 12.91 hrs, Volume= 1.821 af
Primary = 10.35 cfs @ 12.91 hrs, Volume= 1.821 af, Atten= 0%, Lag= 0.0 min

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

Link PDP2: OUTLET

Hydrograph





NOAA Atlas 14, Volume 10, Version 3
 Location name: East Hampton, Connecticut, USA*
 Latitude: 41.5629°, Longitude: -72.495°
 Elevation: m/ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerals](#)

RECEIVED
 MAY 03 2023
 TIME _____

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.334 (0.259-0.419)	0.405 (0.314-0.509)	0.521 (0.402-0.656)	0.617 (0.473-0.781)	0.749 (0.557-0.989)	0.849 (0.619-1.14)	0.953 (0.676-1.33)	1.07 (0.719-1.52)	1.24 (0.801-1.82)	1.38 (0.870-2.06)
10-min	0.473 (0.367-0.594)	0.574 (0.444-0.721)	0.738 (0.569-0.930)	0.874 (0.671-1.11)	1.06 (0.789-1.40)	1.20 (0.877-1.62)	1.35 (0.957-1.88)	1.52 (1.02-2.16)	1.75 (1.14-2.58)	1.95 (1.23-2.92)
15-min	0.557 (0.432-0.699)	0.675 (0.523-0.848)	0.868 (0.670-1.09)	1.03 (0.789-1.30)	1.25 (0.929-1.65)	1.41 (1.03-1.91)	1.59 (1.13-2.22)	1.78 (1.20-2.54)	2.06 (1.34-3.04)	2.29 (1.45-3.44)
30-min	0.761 (0.590-0.955)	0.922 (0.714-1.16)	1.19 (0.915-1.49)	1.40 (1.08-1.78)	1.70 (1.27-2.25)	1.93 (1.41-2.60)	2.17 (1.54-3.03)	2.43 (1.64-3.47)	2.82 (1.82-4.14)	3.13 (1.98-4.69)
60-min	0.965 (0.749-1.21)	1.17 (0.906-1.47)	1.50 (1.16-1.89)	1.78 (1.37-2.26)	2.16 (1.61-2.85)	2.45 (1.79-3.30)	2.75 (1.95-3.84)	3.09 (2.08-4.39)	3.57 (2.31-5.25)	3.96 (2.51-5.94)
2-hr	1.28 (0.998-1.59)	1.53 (1.20-1.91)	1.95 (1.52-2.45)	2.30 (1.78-2.90)	2.78 (2.09-3.85)	3.14 (2.31-4.21)	3.52 (2.52-4.90)	3.97 (2.68-5.60)	4.62 (3.00-6.74)	5.16 (3.28-7.68)
3-hr	1.49 (1.17-1.85)	1.79 (1.40-2.22)	2.27 (1.77-2.83)	2.67 (2.07-3.34)	3.22 (2.43-4.21)	3.63 (2.68-4.85)	4.07 (2.93-5.64)	4.58 (3.10-6.45)	5.35 (3.49-7.78)	6.00 (3.82-8.88)
6-hr	1.91 (1.51-2.35)	2.28 (1.81-2.82)	2.90 (2.29-3.59)	3.41 (2.67-4.24)	4.11 (3.13-5.34)	4.63 (3.45-6.15)	5.19 (3.77-7.16)	5.86 (3.99-8.18)	6.87 (4.49-9.89)	7.72 (4.92-11.3)
12-hr	2.37 (1.90-2.90)	2.85 (2.28-3.50)	3.64 (2.90-4.47)	4.29 (3.39-5.30)	5.19 (3.97-6.70)	5.86 (4.39-7.72)	6.58 (4.80-9.00)	7.43 (5.08-10.3)	8.72 (5.72-12.4)	9.81 (6.28-14.3)
24-hr	2.79 (2.25-3.39)	3.39 (2.73-4.13)	4.38 (3.51-5.34)	5.19 (4.14-6.37)	6.32 (4.88-8.10)	7.15 (5.41-9.37)	8.05 (5.92-11.0)	9.15 (6.28-12.6)	10.8 (7.12-15.3)	12.3 (7.87-17.7)
2-day	3.13 (2.54-3.77)	3.85 (3.13-4.66)	5.04 (4.08-6.11)	6.03 (4.85-7.34)	7.39 (5.76-9.44)	8.39 (6.41-11.0)	9.49 (7.06-12.9)	10.9 (7.48-14.8)	13.0 (8.60-18.3)	14.9 (9.61-21.3)
3-day	3.39 (2.78-4.08)	4.19 (3.42-5.04)	5.49 (4.47-6.63)	6.57 (5.32-7.97)	8.06 (6.31-10.3)	9.15 (7.02-11.9)	10.4 (7.74-14.0)	11.9 (8.20-16.1)	14.3 (9.45-20.0)	16.4 (10.6-23.3)
4-day	3.64 (2.99-4.36)	4.49 (3.68-5.38)	5.87 (4.80-7.06)	7.02 (5.69-8.48)	8.60 (6.75-10.9)	9.76 (7.51-12.7)	11.0 (8.27-14.9)	12.7 (8.76-17.1)	15.2 (10.1-21.2)	17.4 (11.3-24.7)
7-day	4.33 (3.58-5.15)	5.27 (4.36-6.29)	6.82 (5.61-8.15)	8.10 (6.62-9.74)	9.87 (7.79-12.4)	11.2 (8.63-14.4)	12.6 (9.46-16.9)	14.4 (9.99-19.3)	17.2 (11.4-23.7)	19.6 (12.7-27.5)
10-day	5.02 (4.17-5.95)	6.02 (5.00-7.15)	7.66 (6.33-9.13)	9.02 (7.41-10.8)	10.9 (8.63-13.6)	12.3 (9.51-15.7)	13.8 (10.3-18.3)	15.6 (10.9-20.8)	18.4 (12.3-25.3)	20.9 (13.5-29.2)
20-day	7.20 (6.04-8.48)	8.28 (6.93-9.76)	10.0 (8.38-11.9)	11.5 (9.53-13.7)	13.5 (10.8-16.7)	15.0 (11.7-18.9)	16.6 (12.4-21.6)	18.4 (12.9-24.3)	21.0 (14.1-28.6)	23.1 (15.1-32.1)
30-day	9.04 (7.62-10.6)	10.2 (8.56-11.9)	12.0 (10.1-14.1)	13.5 (11.2-16.0)	15.6 (12.5-19.1)	17.2 (13.4-21.4)	18.8 (14.0-24.1)	20.5 (14.5-26.9)	22.9 (15.4-30.9)	24.7 (16.1-34.0)
45-day	11.3 (9.62-13.2)	12.5 (10.6-14.6)	14.4 (12.1-16.9)	16.0 (13.4-18.8)	18.2 (14.6-22.0)	19.8 (15.5-24.4)	21.5 (16.0-27.1)	23.1 (16.4-30.1)	25.2 (17.0-33.8)	26.6 (17.4-36.5)
60-day	13.3 (11.3-15.4)	14.5 (12.3-16.9)	16.4 (13.9-19.2)	18.1 (15.2-21.2)	20.3 (16.3-24.5)	22.1 (17.2-27.0)	23.8 (17.7-29.8)	25.3 (18.0-32.9)	27.2 (18.4-36.4)	28.5 (18.6-38.9)

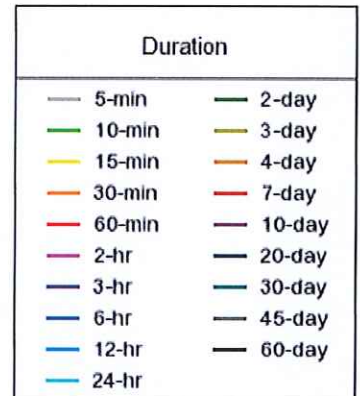
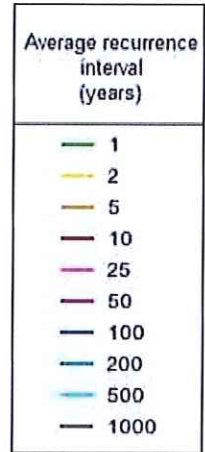
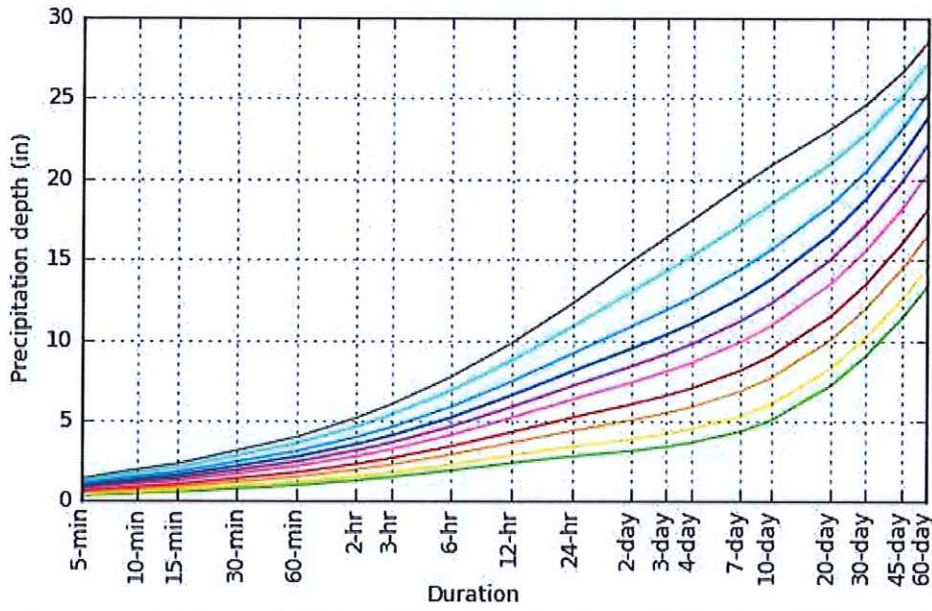
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

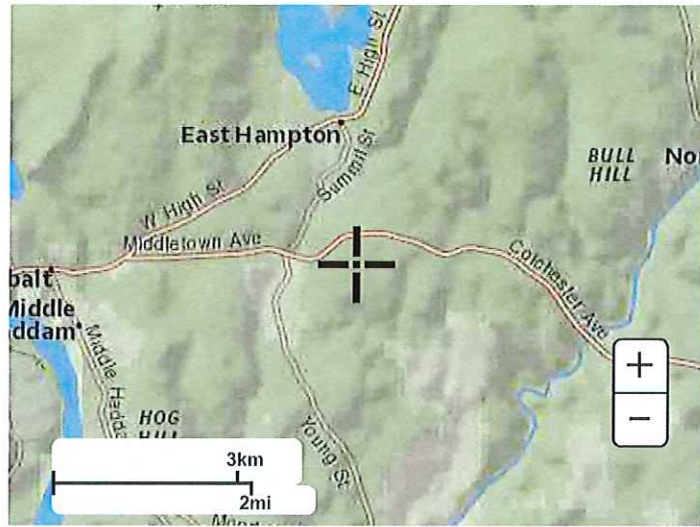
SCANNED

PDS-based depth-duration-frequency (DDF) curves
 Latitude: 41.5629°, Longitude: -72.4950°



Maps & aerials

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial

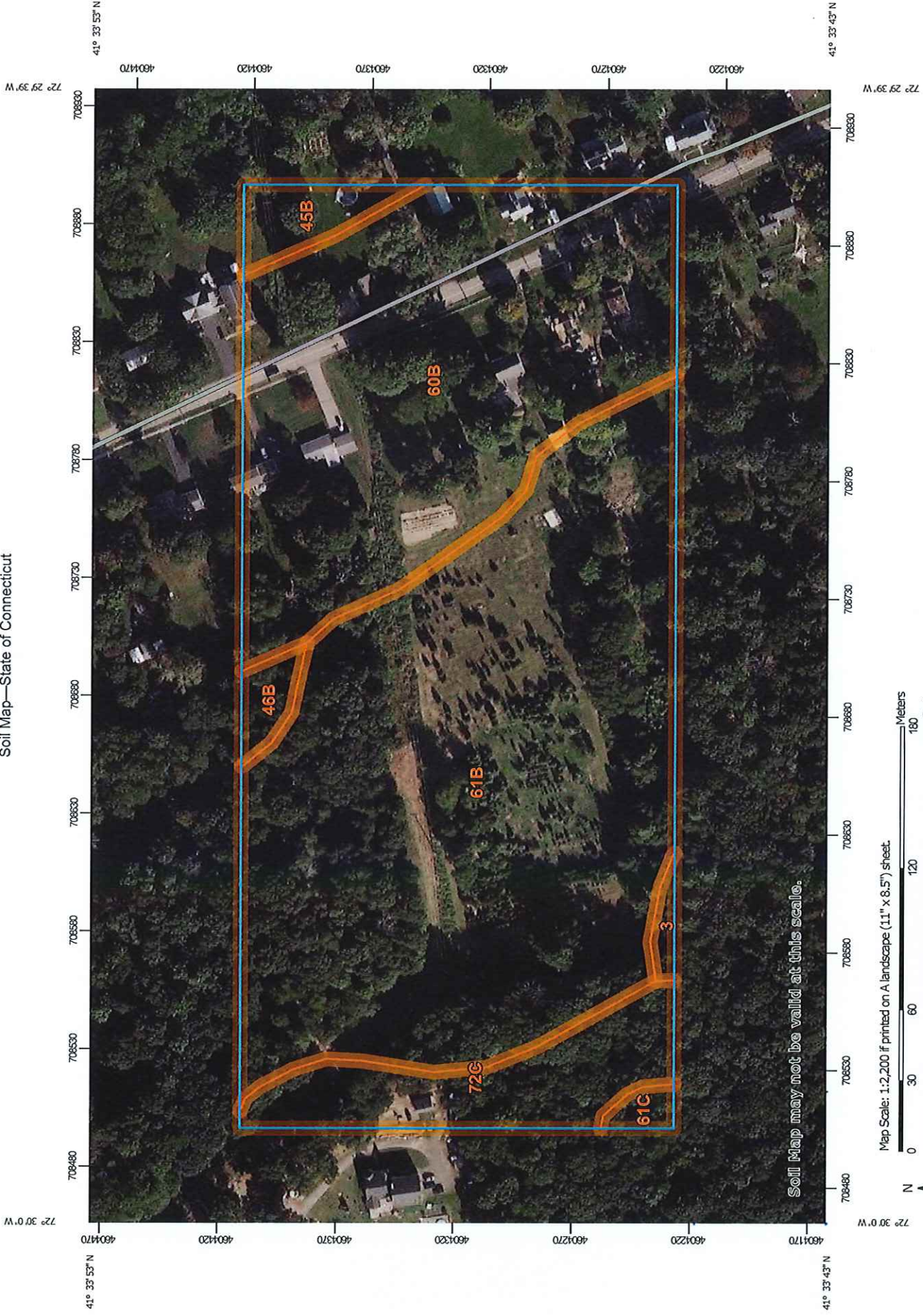


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[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

Soil Map—State of Connecticut



Soil Map may not be valid at this scale.

Map Scale: 1:2,200 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

-  Area of Interest (AOI)
-  Area of Interest (AOI)
-  Soils
-  Soil Map Unit Polygons
-  Soil Map Unit Lines
-  Soil Map Unit Points
-  Special Point Features
-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features
-  Water Features
-  Streams and Canals
-  Transportation
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
-  Background
-  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
 Survey Area Data: Version 22, Sep 12, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 14, 2022—Oct 6, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	0.1	0.5%
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	0.4	2.1%
46B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	0.2	1.1%
60B	Canton and Charlton fine sandy loams, 3 to 8 percent slopes	6.3	34.5%
61B	Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony	9.7	53.3%
61C	Canton and Charlton fine sandy loams, 8 to 15 percent slopes, very stony	0.1	0.6%
72C	Nipmuck-Brookfield complex, 3 to 15 percent slopes, very rocky	1.4	7.8%
Totals for Area of Interest		18.3	100.0%

From: [DeCarli, Jeremy](#)
To: [pbz-counter](#)
Subject: FW: Subdivision Application
Date: Wednesday, May 17, 2023 10:18:59 AM
Attachments: [Request for Environmental Health Services.pdf](#)
[image001.png](#)

Hello Jeremy, Mike and Mark,

Jeremy, in response to your inquiry to your email concerning the 22 Lots off of South Main Street, I provide the following:

- I need a Chatham Health District Request for Environmental Health Services Form (Please see the attachment) filled out along with payment of \$880.00 (\$40.00 per Lot), payable to the Chatham Health District, along with;
- A hard copy of the plans to review. I cannot and will not review any pdf plans, as I need scaled drawings to conduct my review:
 - I need to review the proposed well locations in relation to the any and all external and or below grade sewer ejector pumps. There must be a minimum of a 75' separation between the two;
 - I cannot tell if all the lots will be gravity feed or Grinder Pumps will be installed;
 - I cannot tell if the well radius shown is 25' or 75',
 - Will there be a main sewer pump vault installed for the entire property to be pumped to the sewer main line off of South Main Street;
 - What is the proposed status of the approximately 7 drilled wells for the previous subdivision;
- When I have received both of the above items, I will conduct my review in a timely manner to try to meet your requested end date of June 7, 2023.

If I can be of assistance, I can be reached at jim.karrenberg@chathamhealth.org by phone at 860-537-7214 in Colchester, Monday, Wednesday and Friday or at 860-365-0884 Ext. 106 in East Hampton, Tuesday and Thursday.

Sincerely,

James G. Karrenberg, R.S.

James G. Karrenberg, R.S.
Chatham Health District

From: DeCarli, Jeremy <jdecarli@easthamptonct.gov>
Sent: Monday, May 15, 2023 3:06 PM
To: Fire Marshal <firemarshal@easthamptonct.gov>; Woessner, Dennis <dwoessner@easthamptonct.gov>; Walsh, Matthew <mwalsh@easthamptonct.gov>; Clayton, Scott <sclayton@easthamptonct.gov>; Jim Karrenberg <jim.karrenberg@chathamhealth.org>; Hall, Jeremy <jhall@easthamptonct.gov>
Cc: pbz-counter <pbz-counter@easthamptonct.gov>
Subject: Subdivision Application

Good Afternoon,

The East Hampton Planning and Zoning Commission has received an application for subdivision at property located at 37 South Main Street. The current proposal is for a development consisting of 33 homes on 22 lots (11 single family units and 11 duplexes). Please see the attached plans and provide any feedback you may have.

It would be appreciated if comments can be sent back prior to June 7, so that the engineer has time to incorporate any changes prior to the Commissions next review on July 5.

If you have any questions or want printed plan sets, please feel free to reach out to me.

Thank you,

Jeremy

Jeremy DeCarli, AICP, CZEO
Planning & Zoning Official
Town of East Hampton
1 Community Drive
East Hampton, CT 06424
T: 860-267-7450
E: jdecarli@easthamptonct.gov
www.easthamptonct.gov

Office Hours:

M,W,Th: 8:00am – 4:00pm
T: 8:00am – 6:30pm
Fri: 8:00am – 12:30pm

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From: [Mark Reynolds](#)
To: [Jim Karrenberg](#)
Cc: [DeCarli, Jeremy](#); mbakaj@snet.net; [pbz-counter](#); [Fire Marshal](#); [Woessner, Dennis](#); [Walsh, Matthew](#); [Clayton, Scott](#); [Hall, Jeremy](#)
Subject: Re: Subdivision Application
Date: Wednesday, May 17, 2023 1:04:59 PM
Attachments: [Outlook-hlstku3s.png](#)
[Document_20230517_0001.pdf](#)

CAUTION:

This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. Remember to hover over any links and if you suspect the email is not legitimate or a phishing email, please contact Tom McMahon at x3363.

Hi Jim,

Everything that you need to conduct your review will be provided in short order.

1. The request form is attached to this email.
2. Mike will bring a check for the fee to you in Colchester.
3. I will have a hard copy of the plan delivered to you in Colchester tomorrow.
4. We understand the required separation distances. We have provided 75'. The proposed design is a low pressure sewer system with a force main running under the road. This system will pump to a new sewer manhole and then sewer will flow by gravity to the existing system in South Main Street. Generally the plan is grinder pumps in the front of each house and wells in the rear. This configuration will eliminate any potential conflicts between any part of the sewer and the proposed wells.
5. The existing wells will be maintained to the extent possible. Any of these wells that do not meet separating distances will be abandoned in accordance with Health Department standards.
6. Be assured that all of these lots can meet health department requirements with regard to wells and we will provide all the information you need to make this determination.

Mark Reynolds

[Professional Engineer](#)

Reynolds Engineering Services, LLC

[63 Norwich Avenue](#)

[Suite 202](#)

[Colchester, CT 06415](#)

[860-516-0033](tel:860-516-0033)

On Tue, May 16, 2023 at 7:04 PM Jim Karrenberg <jim.karrenberg@chathamhealth.org> wrote:

Hello Jeremy, Mike and Mark,

Jeremy, in response to your inquiry to your email concerning the 22 Lots off of South Main Street, I provide the following:

- **I need a Chatham Health District Request for Environmental Health Services**

Form (Please see the attachment) filled out along with payment of \$880.00 (\$40.00 per Lot), payable to the Chatham Health District, along with;

- **A hard copy of the plans to review. I cannot and will not review any pdf plans, as I need scaled drawings to conduct my review:**
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Sincerely,

James G. Karrenberg, R.S.

**James G. Karrenberg, R.S.
Chatham Health District**

From: DeCarli, Jeremy <jdecarli@easthamptonct.gov>

Sent: Monday, May 15, 2023 3:06 PM

To: Fire Marshal <firemarshal@easthamptonct.gov>; Woessner, Dennis <dwoessner@easthamptonct.gov>; Walsh, Matthew <mwalsh@easthamptonct.gov>; Clayton, Scott <sclayton@easthamptonct.gov>; Jim Karrenberg <jim.karrenberg@chathamhealth.org>; Hall, Jeremy <jhall@easthamptonct.gov>

Cc: pbz-counter <pbz-counter@easthamptonct.gov>

Subject: Subdivision Application

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If you have any questions or want printed plan sets, please feel free to reach out to me.

Thank you,

Jeremy

Jeremy DeCarli, AICP, CZEO

Planning & Zoning Official

Town of East Hampton

1 Community Drive

East Hampton, CT 06424

T: 860-267-7450

E: jdecarli@easthamptonct.gov

www.easthamptonct.gov

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May 17, 2023

Mr. Mark Reynolds, PE
Reynolds Engineering Services, LLC
63 Norwich Ave.
Colchester, CT 06415
markreynoldsenineer@gmail.com

Re: HOD Subdivision Application #PZC-23-012
Plan Set Dated 7/26/2021 updated to 5/3/2023

Dear Mr. Reynolds,

I have conducted a review of the application for an HOD Subdivision in accordance with Section 6.3 of the Zoning Regulations at 37 South Main Street. Below are my comments.

General Notes

1. Submit an application to the Chatham Health District for approval.
2. Submit an application and plans to the WPCA.
3. Due to the fact that more than 5 acres will be disturbed, this project will require an application to CT DEEP for a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. Once received, please submit a copy of the permit.
4. I have referred the plans to various departments in Town. As comments are received, they will be forwarded to you.
5. The project lies in an area shown in the CT DEEP Natural Diversity Database (NDDDB) which could potentially house endangered or threatened species. Please provide proof that a NDDDB Environmental Review request was made to CT DEEP and provide their response when available.
6. Please submit estimated construction costs of all parts of the project that will be publicly owned, along with a performance bond estimate calculated in accordance with Section 9.1.E of the Zoning Regulations.
7. When a bond is submitted, please provide a draft Developers Agreement to accompany the performance bond. If needed, my department can provide a model agreement.
8. Please provide information on the future ownership of the Open Space and how it will be conveyed.
9. Will an HOA be established? If so, please provide draft declaration documents.
10. The final plan set will require the signature of the Surveyor, Engineer, and Soil Scientist.
11. Please provide a Housing Affordability Plan in accordance with Section 6.3.S.8.

Plan Considerations

1. Lots 9, 10, and 17 do not appear to meet the minimum lot frontage of 50 feet as required in Section 6.3.H.
2. Please provide a location for mailboxes, along with a vehicle pull off for pick-up and delivery.
3. Please provide a location for an underground fire suppression tank.
4. Will there be an entrance sign to the subdivision? If so, please provide location and proposed sign mock-up.
5. Please consider changing the name of "Hampton Way" as East Hampton already contains a "Hampton Court"
6. The plan should include an access drive to the stormwater basin.

7. The development schedule on sheet 12 indicates a construction schedule beginning in fall 2020. Please revise.
8. Please show sight line distances at the intersection of the new proposed road and South Main Street.
9. Please consider extending the sidewalk along South Main Street to the property line. A sidewalk exists approximately 400 feet to the north and the Town may consider connecting the two in the future.
10. Please show ADA compliant sidewalk ramps and crosswalks at appropriate locations (intersections, etc) and include a construction detail of the ramps.
11. Please indicate location of traffic control signage and pavement markings. Details showing compliant breakaway posts and heights should be included.
12. If a fence will be installed surrounding the detention basin, please include the location on the plans.
13. If any street lighting is proposed, please indicate locations and provide details on the fixtures to be used.
14. Please provide approval blocks for the IWWA and PZC on the cover sheet. The approval block for the PZC can be removed from all other sheets.

Stormwater and Erosion and Sedimentation Control Plans

1. Erosion control fencing needs to be included down-gradient of the area where the stormwater pipe will be installed between the two cul-de-sacs.
2. A temporary soil stockpile is shown on sheet 8 as being outside the limits of clearing. Please either change the limits of clearing, or relocate the stockpile area.
3. The General Erosion and Sedimentation Control notes on sheet 12 indicate that a third party will be retained to monitor conditions during construction. Please provide contact information for the proposed third party.
4. The General Erosion and Sedimentation Control notes on sheet 12 reference check dams to control turbid water during construction. No check dams are present on the plans.
5. Sheet 12 includes a detail for stone barriers, however, no stone barriers appear on the plan.
6. On Sheet 8, the bottom elevation of the stormwater basin is shown to be 443. However, on sheet 11, the profile indicates the bottom of the basin lies at elevation 465. This discrepancy is throughout, including top of berm, etc. Drainage manholes include a similar discrepancy between pages 8 and 11. Please rectify.
7. Please indicate where construction stormwater will be directed. Will the stormwater basin be constructed first, or are temporary sediment ponds being used? If so, where and how will they be maintained?
8. In the General Notes on Page 13 "Wetland Agenda" appears multiple times when it should read "Wetland Agent." This includes Note #2, line 3, and Note #9, line 3.
9. References to hay bales should be revised to straw bales as hay bales can encourage spreading of invasive species.

In addition to the items above, you will receive a review from the Town's engineer, Barton & Loguidice. Once all revisions have been made, please submit an updated plan set.

Thank you,



Jeremy DeCarli
Planning & Zoning Official

From: [Walsh, Matthew](#)
To: [DeCarli, Jeremy](#)
Subject: Re: 37 South Main
Date: Monday, June 26, 2023 2:06:52 PM
Attachments: [image001.png](#)
[Outlook-zk1iyppp.png](#)

Hi Jeremy

I have reviewed the plans and comments for the development at 37 South main Street. My comments are below.

1. The proposed detention basin is in a remote location of the property. This causes major issues for future maintenance due to lack of access to the basin. Please find and alternative location for the basin which provides better access. or revise plans to show a wide graded access road that allows truck and equipment access to the basin.
2. The storm manhole at station 13+50 is to deep at nearly 10'. Revise all drainage runs and structures to be less than 6' deep as typical.
3. The detention basin as designed has no emergency spillway.
4. The detention basin is shown in an area of a 12' cut. it is also located at the bottom of a steep slope. It is questionable if there will be any capacity for storm water storage in the basin due to ground water and overland runoff from the slope. Please redesign the basin in a different area of the project.
5. Identify on the plans all pipe material types.
6. Sidewalks should be configured to meet ADA requirements. Show crosswalks and accessible walks as required.
7. please submit revised plans for further review.

Matthew Walsh P.E.
Director of Public Works
Tree Warden
1 Public Works Drive
East Hampton, CT 06424
860-267-4747



May 24, 2023

Mr. Jeremy DeCarli, AICP, CZEO
Office of Planning & Zoning Official
Town of East Hampton
1 Community Drive
East Hampton, CT 06424

Re: HOD Subdivision Application #PZC-23-012
37 South Main Street, East Hampton, CT
Plans dated through 5/3/23; Drainage Report (May 1, 2023) and associated HydroCAD
calculations printed 5/3/2023

Dear Mr. DeCarli:

Barton & Loguidice, LLC has completed an engineering review of the proposed subdivision particularly concerning stormwater and erosion control. We offer the following:

Stormwater and Erosion Control:

1. Provide watershed maps for the existing and the proposed conditions and include the time of concentration paths. The total area analyzed should be the same for both conditions.
2. Show the design analysis points on the watershed maps and confirm the descriptions in the drainage report describing the direction of flow for the existing conditions.
3. Please confirm the proposed watershed areas. The area described in the drainage report for area PE2 does not match the area used in the analysis and the total for PE1 appears to be 16.1 acres. Also confirm the input information for the time of concentration calculations because "Woods with dense underbrush" was used in the proposed conditions and "Woods with light underbrush" in the existing condition.
4. The grading and storm drainage design for the proposed development should maintain existing flow patterns as much as possible. The pre and post development stormwater review should be revised to represent the four existing design points that appear to receive runoff (Each wetland soil area: 1. Interior to the parcel; 2. Along the southern property line; 3. The southwest corner of site and 4. Offsite wetlands to the northwest) to ensure no increase for each area.
5. Submit Water Quality Volume/Flow calculations and provide treatment(s) sized accordingly.
6. Submit the proposed storm drainage pipe sizing analysis.
7. Provide storm outlet riprap apron sizing calculations and label accordingly on the plans.
8. Label the required elevations/inverts on the Basin Outlet Structure Detail.

9. Recommend providing additional groundwater recharge opportunities for proposed stormwater.
10. Consider outletting the stormwater from Village Way into a swale or level spreader outlet rather than piping and combining flow with the remainder of the roadway to increase opportunities for infiltration and maintain current drainage patterns.
11. Recommend alternative design(s) for retention/detention to minimize length of piping and disturbance required in the northwest corner of the site. The current design directs the majority of the proposed impervious surface flow to outlet at the northwest corner of the site which currently receives only a small portion of the existing flow from the site.
12. The proposed detention basin includes a cut of up to 7 feet for the bottom. Soil testing should be conducted to determine the high groundwater elevation and suitability of the soils in the area.
13. Consider utilizing shallower retention area(s) that provide infiltration for groundwater recharge and peak flow attenuation.
14. The contour label for the sediment forebay appears to be incorrect.
15. As noted in comments from Jeremy DeCarli, please confirm the lengths of piping, manhole locations, stationing as well as elevations and inverts shown on the plan & profile sheets.
16. Review the catch basin locations and spacing. Eliminate catch basins if possible in accordance with gutter flow, distance from high points and as needed at proposed roadway intersection with Village Way. Consider storm manholes to accommodate roadway curvature if catch basins not warranted. Recommend modifying the cul-de-sac grading to include only one grated structure at a low point (double grate if necessary) to minimize future town maintenance.
17. The E&S Control plans should include locations and sizing calculations for temporary sedimentation basins/traps. Provide a detail on the plans.

General Comments:

1. Additional proposed grading should be included on the plans to show swales and grade to drain flow arrows to eliminate flow across adjacent properties as much as possible. For the interior lots (11-16), it is recommended to provide a swale along the common rear property line to outlet toward the wetlands and away from the lower lots.
2. Recommend including intersection grading with spot grades and flow direction arrows at the road intersection with South Main Street and with Village Way to ensure flow of stormwater and no ponding of water.
3. A note should be added to the subdivision plan on the two areas of "other land of Michael Bakaj" that these are not approved building lots. Note that these two areas of land as shown become landlocked with no existing roadway frontage.
4. Recommend including the required Height, Area and Yard Requirements chart for 2. Single-Family Detached dwellings on Subdivided Lots on the subdivision plan as well as the maximum Coverage by Impervious Surfaces and the calculated total for the development.

Mr. Jeremy DeCarli
May 24, 2023



Page 3

5. Provide information to address the minimum requirement of two parking spaces per dwelling unit.
6. Provide proposed provisions for social/recreational facilities with this development in accordance with Section 6.3.F.2. and strategies for energy-efficient patterns of development (Section 6.3.F.4.).
7. It is recommended that a note be added to the plans regarding the subdivision regulations requirement that the subdivider shall be responsible for the maintenance of proposed stormwater detention structures (Section VIII 4.).

If you have any questions regarding the above, please contact me at (860) 633-8770.

Sincerely,

A handwritten signature in blue ink that reads "Denise P. Lord".

Denise P. Lord, P.E.
Lead Engineer