COURTROOM
1 MUNICIPAL PLAZA
BEACON, NY 12508
AND LIVE VIA ZOOM

Len Warner
Karen Quiana
Kevin Byrne
Jill Reynolds
J. Randall Williams
Chair John Gunn

January 10, 2023
7:00 PM
Planning Board Agenda

Regular Meeting

1. Continue public hearing on application for Special Use Permit and Site Plan Approval, hotel and event space, 1113 Wolcott Avenue, submitted by Prophecy Theater, LLC (adjourned until February 15, 2023 at the request of the applicant)
2. Continue Public Hearing for SEQRA environmental review on application for Subdivision Approval, 12 Highland Place, submitted by Lori Joseph Builders, Inc.
3. Continue review of application for Concept Plan Approval, Beacon HIP Lofts and Studios, Front Street, submitted by Beacon HIP Lofts LLC and referred to Planning Board by City Council
4. Continue review of application for Site Plan Approval and Subdivision (lot merger) Approval, Mixed-Use Commercial and Residential, 393 Fishkill Ave, 397 Fishkill Ave, and 7 Conklin St, submitted by 397 Fishkill Ave LLC
5. Review application for Subdivision Approval, 3-lot residential, 44 Kent Street, submitted by Hardy Homes, LLC (adjourned at the request of the applicant)

Miscellaneous Business

Architectural Review

City of Beacon Planning Board Agenda
01/10/2023

Title:

Continue public hearing on application for Special Use Permit and Site Plan Approval, hotel and event space, 1113 Wolcott Avenue, submitted by Prophecy Theater, LLC (adjourned until February 15, 2023 at the request of the applicant)

ATTACHMENTS

12-27-22 1113 Wolcott Avenue - Request for Adjournment to February 15 20223 PB Meeting Agenda(5504655.3).pdf

CUDDY +FEDER LLP

445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
T 914 761 1300
F 914 761 5372
cuddyfeder.com

Taylor M. Palmer, Esq.
tpalmer@cuddyfeder.com

December 27, 2022

VIA E-MAIL

Hon. John Gunn
And Members of the Planning Board
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Application for Site Plan and Special Permit Approval
Request for Adjournment to the Planning Board's February 15, 2023 Meeting Agenda
Premises: 1113 Wolcott Avenue, Beacon, New York 12508

Dear Chairman Gunn and Members of the Planning Board:

On behalf of Prophecy Theater LLC (the "Applicant"), the owner of the above-referenced Premises, this letter is submitted in connection with the Applicant's pending Application for Site Plan and Special Permit Approval to adaptively re-use the Premises for a hotel and accessory conference/event space and café. We respectfully request that the Planning Board adjourn the above captioned matter that is currently scheduled for a continued Public Hearing at this Board's January 10, 2023 meeting Agenda, and that the matter be placed on the Planning Board's February 15, 2023 meeting Agenda for a continued Public Hearing and continued review.

As this Board is aware, the Applicant was advised at the Board's October meeting Agenda that the City would be retaining an independent sound consultant to review the Applicant's proposal. The Board later retained Noise Consultancy, LLC, who issued several comments on the Application in a memorandum dated December 8, 2022 (the "Sound Comments Memorandum"). The Applicant has retained a sound consultant, B. Laing Associates, Inc., to further review and respond to the Sound Comments Memorandum in advance of the Planning Board's continued review of the Application. The forthcoming response will be in addition to the Applicant's previously submitted August 29, 2022 Sound Level Report and September 12, 2022 Response to Sound Comments Memorandum. Accordingly, this adjournment will also allow time for this Board to consider same.

The Applicant looks forward to appearing at this Board's February 15, 2023 meeting Agenda for the continued Public Hearing. In the meantime, please do not hesitate to contact us with any questions regarding the Application. Thank you for your consideration.

Very truly yours,

Taylor M. Palmer
cc: Jennifer L. Gray, Esq.; Prophecy Theater LLC; Allison Fausner, Esq.

City of Beacon Planning Board Agenda
01/10/2023

Title:

Continue Public Hearing for SEQRA environmental review on application for Subdivision Approval, 12 Highland Place, submitted by Lori Joseph Builders, Inc.

ATTACHMENTS

1-Highland PLace Subdivision-COVER SHEET_2022-1227.pdf

2-Highland Place-EXISTING CONDITIONS_2022-1227.pdf

3-Highland Place-SUBDIVISION PLAT_2022-1227.pdf

4-Highland PLace-SUBDIVISION PLAN_2022-1227.pdf

5-Highland Place-GRADING & UTILITY PLAN_2022-1227.pdf

6-Highland PLace-EROSION & SEDIMENT CONTROL_2022-1227.pdf

7-Highland PLace-CONSTRUCTION DETAILS_2022-1227.pdf

8-Highland PLace-CONSTRUCTION DETAILS (2)_2022-1227.pdf

City of Beacon_12 Highland Place Subdivision Cover Letter_2022-1227.pdf

EXHIBIT A-BEACON LADDER TRUCK TRACKING_12 HIGHLAND PLACE_2022-1227.pdf

Exhibit B - City of Beacon_12 Highland Place Subdivision Response Letter_2022-1129.pdf

Engineer Review 12 Highland Place 01-05-23.pdf

12 Highland Public Comment Lyons.pdf

12 Highland Public Comment McCredo.pdf

Planner Review Highland Pl Sub 1.6.23.pdf

12 Highland Public Comment McCredo 2.pdf

12 Highland Public Comment Thomas.pdf

12 Higland Place - SEAF Parts 2 and 3 (4873-7869-2936.1).pdf

12 Highland Street - Subdivision_SEQRA Negative Declaration (4873-8339-3074.4).pdf

12 Highland Place - KB Memo re Frontage and Access - 2023 01 09 (4856-2208-3144.1).pdf

12 Highland Public Comment Cerchiara.pdf

12 Highland Public Comment McCredo 3.pdf

Public Comment McCredo Image 1.jpg

Public Comment McCredo Image 2.pdf

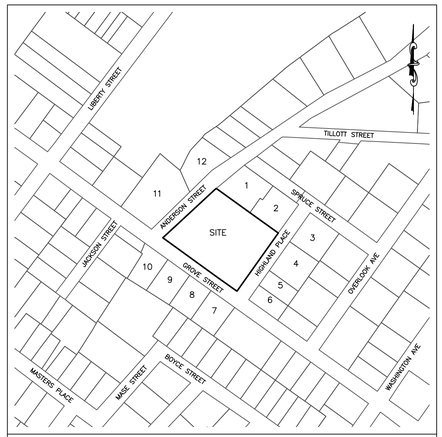
HIGHLAND PLACE SUBDIVISION

RESIDENTIAL SUBDIVISION

12 HIGHLAND PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

PARCEL INFORMATION:
TAX ID: 6054-31-306777
TOTAL LOT AREA: ±1.07 ACRES
ZONING DISTRICT: R1-10 & R1-5

PROJECT INFORMATION:	
PARCEL OWNER:	GARY JOSEPH, XXX, BEACON NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	12 HIGHLAND PLACE, BEACON NY 12508
TAX PARCEL ID:	6054-31-306777
PARCEL AREA:	±1.07 ACRES
WATER SUPPLY:	PROPOSED MUNICIPAL
SEWAGE DISPOSAL:	PROPOSED MUNICIPAL



SITE LOCATION MAP SCALE: 1" = 400'

ADJOINING OWNERS (WITHIN 100 FEET):
PARCEL: OWNER & ADDRESS
1. HOWARD BANICK, 18 MEAD AVENUE, BEACON NY 12508
2. ANNE THOMAS, 22 HIGHLAND PLACE, BEACON NY 12508
3. EVERETT GIFFORD, 21 HIGHLAND PLACE, BEACON NY 12508
4. JASON MCREDO, 11 HIGHLAND PLACE, BEACON NY 12508
5. PAUL LYONS, 7 HIGHLAND PLACE, BEACON NY 12508
6. ANNE GUAQUIE, 64 GROVE STREET, BEACON NY 12508
7. SANDRA FITZGERALD, 14 GARDEN PLACE, BEACON NY 12508
8. PATRICIA KOMISAR, 43 GROVE STREET, BEACON NY 12508
9. CARLTON GOOD, 39 GROVE STREET, BEACON NY 12508
10. AHLENA LEON, 31 GROVE STREET, BEACON NY 12508
11. MEREDITH HEUER, 24 GROVE STREET, BEACON NY 12508
12. CITY OF BEACON SCHOOL DISTRICT, 10 EDUCATION DRIVE, BEACON NY 12508

PROJECT ENGINEER:
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN STREET
BEACON, NEW YORK 12508
PH: 845-440-6926
F: 845-440-6637

OWNER/APPLICANT:
GARY JOSEPH
LORI JOSEPH BUILDERS, INC.
1 EAST MAIN STREET
BEACON, NEW YORK 12508
PH: 845-416-1808

PROJECT SURVEYOR:
BRENDAN JOHNSON, PLS
10 MEADOW LANE
PLEASANT VALLEY, NEW YORK 12569
PH: 845-380-0528

DRAWING INDEX:

SHEET 1: COVER SHEET (CV-1)
SHEET 2: EXISTING CONDITIONS & REMOVALS PLAN (XC-1)
SHEET 3: PRELIMINARY SUBDIVISION PLAT (PT-1)
SHEET 4: SUBDIVISION PLAN (SP-1)
SHEET 5: GRADING & UTILITY PLAN (GU-1)
SHEET 6: EROSION & SEDIMENT CONTROL PLAN (ESC-1)
SHEET 7: CONSTRUCTION DETAILS (CD-1)
SHEET 8: CONSTRUCTION DETAILS (CD-2)

OWNER'S CONSENT:
THE UNDERSIGNED OWNER OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
GARY JOSEPH DATE

DCDBCH APPROVAL BLOCK
DUTCHESS COUNTY DEPARTMENT OF HEALTH
POUGHKEESPIE, NEW YORK

RECOMMENDED FOR APPROVAL BY:

_____

THIS IS TO CERTIFY THAT THE PROPOSED ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL FOR THE RESIDENTIAL SUBDIVISION TO BE KNOWN AS

HIGHLAND PLACE SUBDIVISION

IN THE CITY OF BEACON WERE APPROVED ON_____ IN ACCORDANCE WITH PLANS ON FILE IN THE OFFICE OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH. CONSENT IS HEREBY GIVEN TO THE FILING OF THE MAP ON WHICH THIS ENDORSEMENT APPEARS IN THE OFFICE OF THE COUNTY CLERK OF DUTCHESS COUNTY IN ACCORDANCE WITH THE PROVISIONS OF ARTICLE 11 TITLE 2 OF THE NEW YORK STATE PUBLIC HEALTH LAW AND ARTICLE 17 TITLE 15 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW, AND ARTICLE 11 OF THE DUTCHESS COUNTY SANITARY CODE.

_____
SUPERVISING PUBLIC HEALTH ENGINEER

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	7/26/22	PER PLANNING BOARD COMMENTS	CMB				
2	8/29/22	PER PLANNING BOARD COMMENTS	CMB				
3	9/27/22	PER PLANNING BOARD COMMENTS	CMB				
4	10/14/22	NO CHANGE THIS SHEET	CMB				
5	11/29/22	NO CHANGE THIS SHEET	CMB				
6	12/27/22	NO CHANGE THIS SHEET	CMB				

Dig Safely. New York Call 811 before you dig

STATE OF NEW YORK MICHAEL A. BODENDORF 084468 LICENSED PROFESSIONAL ENGINEER
SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

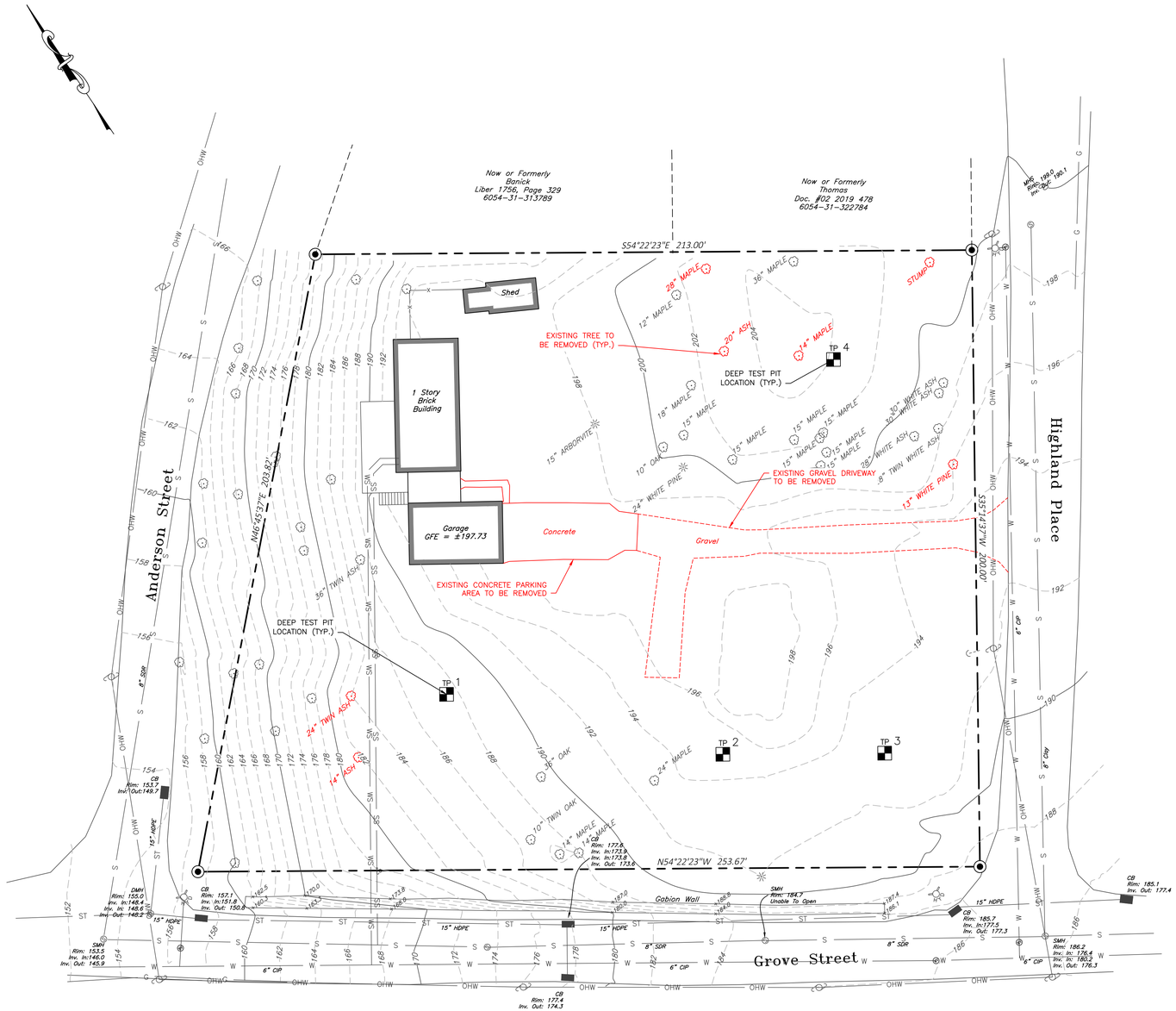
COVER SHEET

HIGHLAND PLACE SUBDIVISION

12 HIGHLAND PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-306777

JOB #:	2022:011
DATE:	6/28/2022
SCALE:	AS SHOWN
TITLE:	CV-1
SHEET:	1 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



EXISTING CONDITIONS & REMOVALS PLAN

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- ZONING DISTRICT BOUNDARY
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- CO EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- ST EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- CB EXISTING CATCH BASIN

SURVEY REFERENCE:

1. "BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED FOR JOSEPH" DATED JUNE 6, 2022 AS PREPARED BY BRENDAN JOHNSON PLS. (845) 380-0528.

SURVEY NOTES:

1. COPYRIGHT JOHNSON SURVEYING. ALL RIGHTS RESERVED. REPRODUCTION OR COPYING OF THIS DOCUMENT MAY BE A VIOLATION OF COPYRIGHT LAW UNLESS PERMISSION OF THE AUTHOR AND / OR COPYRIGHT HOLDER IS OBTAINED.
2. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
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4. CERTIFICATIONS ON THIS BOUNDARY SURVEY MAP SIGNIFY THAT THE MAP WAS PREPARED IN ACCORDANCE WITH THE CURRENT EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC. THE CERTIFICATION IS LIMITED TO PERSONS FOR WHOM THE BOUNDARY SURVEY MAP IS PREPARED, TO THE TITLE COMPANY, TO THE GOVERNMENTAL AGENCY, AND TO THE LENDING INSTITUTION LISTED ON THIS BOUNDARY SURVEY MAP.
5. THE CERTIFICATIONS HEREIN ARE NOT TRANSFERABLE.
6. THE LOCATION OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS ARE NOT ALWAYS KNOWN AND OFTEN MUST BE ESTIMATED. IF ANY UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS EXIST OR ARE SHOWN, THE IMPROVEMENTS OR ENCROACHMENTS ARE NOT COVERED BY THIS CERTIFICATE.
7. SUBJECT TO THE FINDINGS OF A CURRENT TITLE SEARCH.
8. SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.
9. SUBJECT TO ANY RIGHT, TITLE OR INTEREST THE PUBLIC MAY HAVE FOR HIGHWAY USE.
10. BEARINGS AND NORTH SHOWN HEREON ARE REFERENCED TO NAD 83-NY EAST USING NYSNET RTN GPS.
11. CONTOUR INTERVAL IS TWO FOOT. ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD 88 USING NYSNET RTN GPS.

DEEP TEST HOLE TABLE:

DEEP TEST HOLE RESULTS ESTABLISHED ON AUGUST 25, 2022 AND DIRECTED BY HLD.

TP1: 3" TOPSOIL, 3"-84" SAND-GRAVELLY LOAM. BEDROCK AT 84".
TP2: 4" TOPSOIL, 4"-48" SAND-GRAVELLY LOAM. BEDROCK AT 48".
TP3: 3" TOPSOIL, 3"-94" SANDY-SILTY LOAM. BEDROCK SHELF (SOUTH SIDE) AT 72".
TP4: 2" TOPSOIL. BEDROCK AT 2".

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	7/26/22	PER PLANNING BOARD COMMENTS	CMB				
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6	12/27/22	NO CHANGE THIS SHEET	CMB				

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STATE OF NEW YORK MICHAEL A. BOSENKOV LICENSED PROFESSIONAL ENGINEER GB4468

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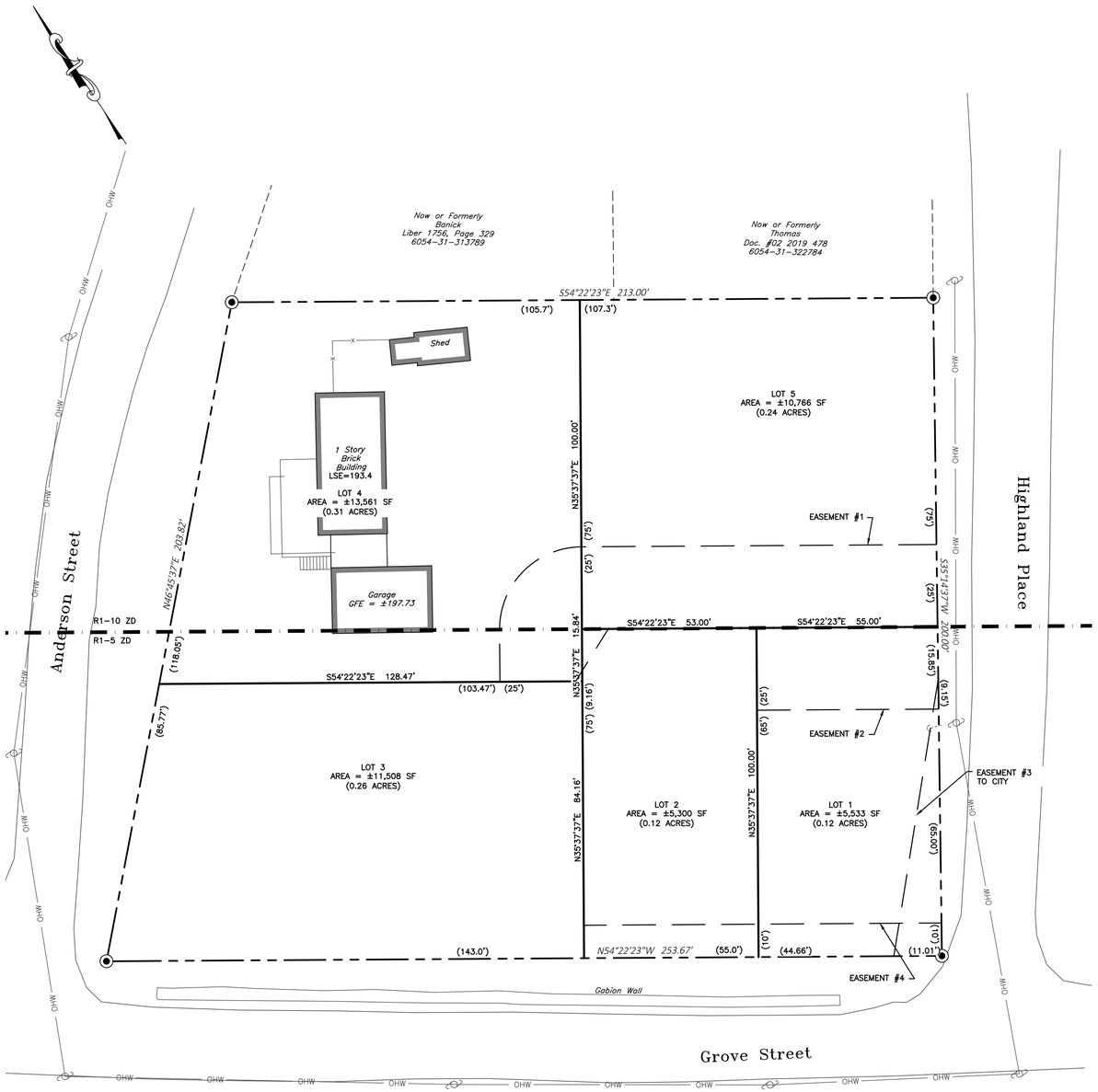
EXISTING CONDITIONS & REMOVALS PLAN

HIGHLAND PLACE SUBDIVISION

12 HIGHLAND PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-306777

JOB #:	2022:011
DATE:	6/28/2022
SCALE:	1" = 20'
TITLE:	XC-1
SHEET:	2 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



SUBDIVISION PLAT
SCALE: 1" = 20'

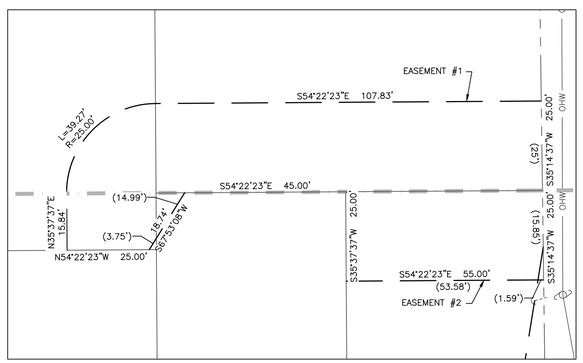
GRAPHIC SCALE

20 0 10 20 40 80

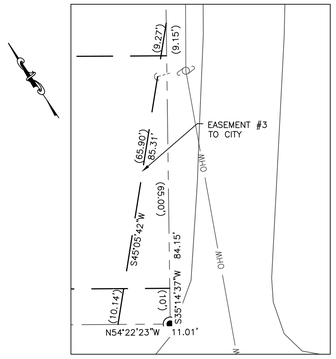
(IN FEET)
1 inch = 20 ft.

LEGEND:

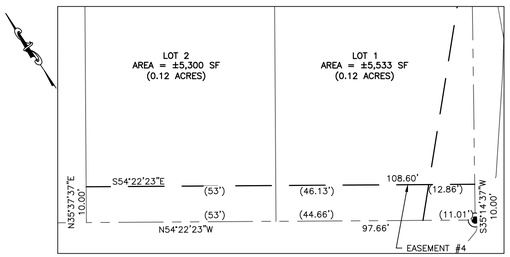
- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- ZONING DISTRICT BOUNDARY
- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- PROPOSED EASEMENT



EASEMENT #1 & #2
SCALE: 1" = 20'



EASEMENT #3
SCALE: 1" = 20'



EASEMENT #4
SCALE: 1" = 20'

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON FEBRUARY 16, 2022.

BY: _____
BRENDAN JOHNSON, P.L.S. *N.Y. State Lic. no. 50031*

SCHEDULE OF REGULATIONS (R1-5 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:				
PARAMETER	REQUIREMENT	LOT #1	LOT #2	LOT #3
LOT AREA:	5,000 SQUARE FEET MIN	5,533 S.F.	5,300 S.F.	11,508 S.F.
LOT WIDTH:	50 FEET MINIMUM	55 FEET	53 FEET	84.16 FEET
LOT DEPTH:	100 FEET MINIMUM	100 FEET	100 FEET	128.47 FEET

SCHEDULE OF REGULATIONS (R1-10 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:			
PARAMETER	REQUIREMENT	LOT 4	LOT 5
LOT AREA:	10,000 SQFT MIN./UNIT	±13,561 SQFT	±10,766 SQFT
LOT WIDTH:	85 FEET MINIMUM	±115.8 FEET	±100 FEET
LOT DEPTH:	100 FEET MINIMUM	±105.7 FEET	±107.3 FEET

SURVEY REFERENCE:
1. "BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED FOR JOSEPH" DATED JUNE 6, 2022 AS PREPARED BY BRENDAN JOHNSON PLS. (845) 380-0528.

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11. CONTOUR INTERVAL IS TWO FOOT. ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD 88 USING NYSNET RTN GPS.

TOTAL PARCEL AREA:
±46,669 SF OR 1.071 ACRES

TAX MAP REFERENCE:
CITY OF BEACON 6054-31-306777

FLOOD BOUNDARY:
SUBJECT PARCEL IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANGE FLOODPLAIN) PER PANEL 36027C0464E DATED MAY 2, 2012.

WETLAND NOTE:
NO NYSDEC OR FEDERAL WETLANDS WERE FOUND ONSITE.

SUBDIVISION NOTES:
1. EASEMENT #1 IS AN ACCESS AND UTILITY EASEMENT OVER LOTS 2, 3, 4 AND 5 FOR ACCESS TO LOTS 3 AND 4, & UNDERGROUND UTILITIES TO LOT 4.
2. EASEMENT #2 IS AN ACCESS AND UTILITY EASEMENT OVER LOT 1 FOR THE BENEFIT OF LOT 2.
3. EASEMENT #3 IS A UTILITY EASEMENT OVER LOT 1 FOR THE BENEFIT OF THE CITY OF BEACON.
4. EASEMENT #4 IS A UTILITY EASEMENT OVER LOT 1 FOR THE BENEFIT OF LOT 2 AS WELL AS AN ACCESS EASEMENT OVER LOTS 1 & 2 FOR A SIDEWALK BENEFITING LOTS 1, 2 & 3.
5. THE SUBDIVISION CONTAINS A SHARED DRIVEWAYS WHICH THE CITY OF BEACON HAS NO RESPONSIBILITY TO MAINTAIN, PROVIDE SERVICE FOR, NOR MAKE ANY IMPROVEMENTS TO; ALL SUCH COSTS SHALL BE BORNE BY THE PROPERTY OWNERS USING SAID DRIVEWAYS IN ACCORDANCE WITH THE TERMS OF A MAINTENANCE DECLARATION OR AGREEMENT.

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____ SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____ BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	7/26/22	PER PLANNING BOARD COMMENTS	CMB				
2	8/29/22	PER PLANNING BOARD COMMENTS	CMB				
3	9/27/22	PER PLANNING BOARD COMMENTS	CMB				
4	10/14/22	PER PLANNING BOARD COMMENTS	CMB				
5	11/29/22	PER PLANNING BOARD COMMENTS	CMB				
6	12/27/22	REVISED PER UPDATED LAYOUT	CMB				

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PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
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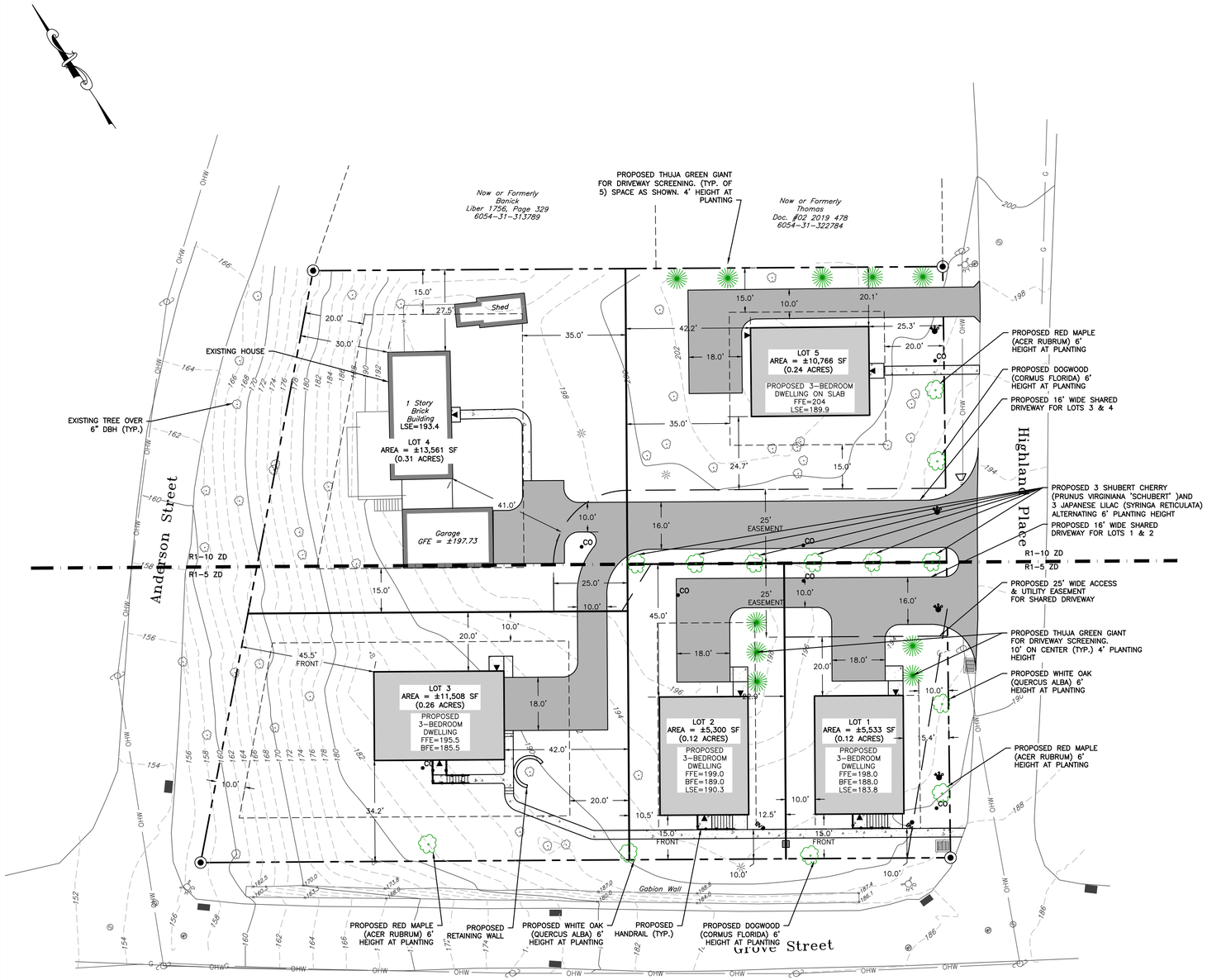
PRELIMINARY SUBDIVISION PLAT

HIGHLAND PLACE SUBDIVISION

12 HIGHLAND PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-306777

JOB #:	2022:011
DATE:	6/28/2022
SCALE:	1" = 20'
TITLE:	PT-1
SHEET:	3 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



SUBDIVISION PLAN
SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- ZONING DISTRICT BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- EXISTING WATER LINE
- EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- EXISTING CATCH BASIN
- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- PROPOSED EASEMENT
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED STORM WATER LINE
- PROPOSED ROOF LEADER LINE
- PROPOSED FOOTING DRAIN LINE
- PROPOSED YARD DRAIN
- PROPOSED BACKFLOW PREVENTION DEVICE
- PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED ENTRY DOOR LOCATION

SCHEDULE OF REGULATIONS (R1-5 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT	LOT #1	LOT #2	LOT #3
LOT AREA:	5,000 SQUARE FEET MIN	5,533 S.F.	5,300 S.F.	11,508 S.F.
LOT WIDTH:	50 FEET MINIMUM	55 FEET	53 FEET	84.16 FEET
LOT DEPTH:	100 FEET MINIMUM	100 FEET	100 FEET	128.47 FEET
YARD SETBACKS (RESIDENTIAL USE):				
FRONT YARD:	10 FEET MINIMUM	15 FEET	15 FEET	45.5 FEET
SIDE YARD:	10 FEET MINIMUM	10 FEET	10.5 FEET	20 FEET
REAR YARD:	20 FEET MINIMUM	20* FEET	45 FEET	42 FEET
MAX. BUILDING HEIGHT:	MAX 35 FEET, 2.5 STORIES	≤35 FEET	≤35 FEET	≤35 FEET
MAX. BUILDING COVERAGE:	40% MAX	±22%	±23%	±12%
DWELLING UNITS PER LOT:	MAX 1	1	1	1

* MEASUREMENT TAKEN TO EASEMENT.

SCHEDULE OF REGULATIONS (R1-10 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT	LOT 4	LOT 5
LOT AREA:	10,000 SQFT MIN./UNIT	±13,561 SQFT	±10,766 SQFT
LOT WIDTH:	85 FEET MINIMUM	±115.8 FEET	±100 FEET
LOT DEPTH:	100 FEET MINIMUM	±105.7 FEET	±107.3 FEET
YARD SETBACKS (RESIDENTIAL USE):			
FRONT YARD:	20 FEET	32.2 FEET	25.3 FEET
SIDE YARD:	15 FEET	15 FEET	20.1 FEET
REAR YARD:	35 FEET MINIMUM	41.0* FEET	42.2 FEET
MAX. BUILDING HEIGHT:	35 FT, 2.5 STORIES	≤35 FEET	≤35 FEET
MAX. BUILDING COVERAGE:	25% MAX.	±14%	±11%
MAX. UNITS/BUILDING:	1 MAX	1	1

* MEASUREMENT TAKEN TO EASEMENT.

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	7/26/22	PER PLANNING BOARD COMMENTS	CMB				
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6	12/27/22	REVISED PER UPDATED LAYOUT	CMB				

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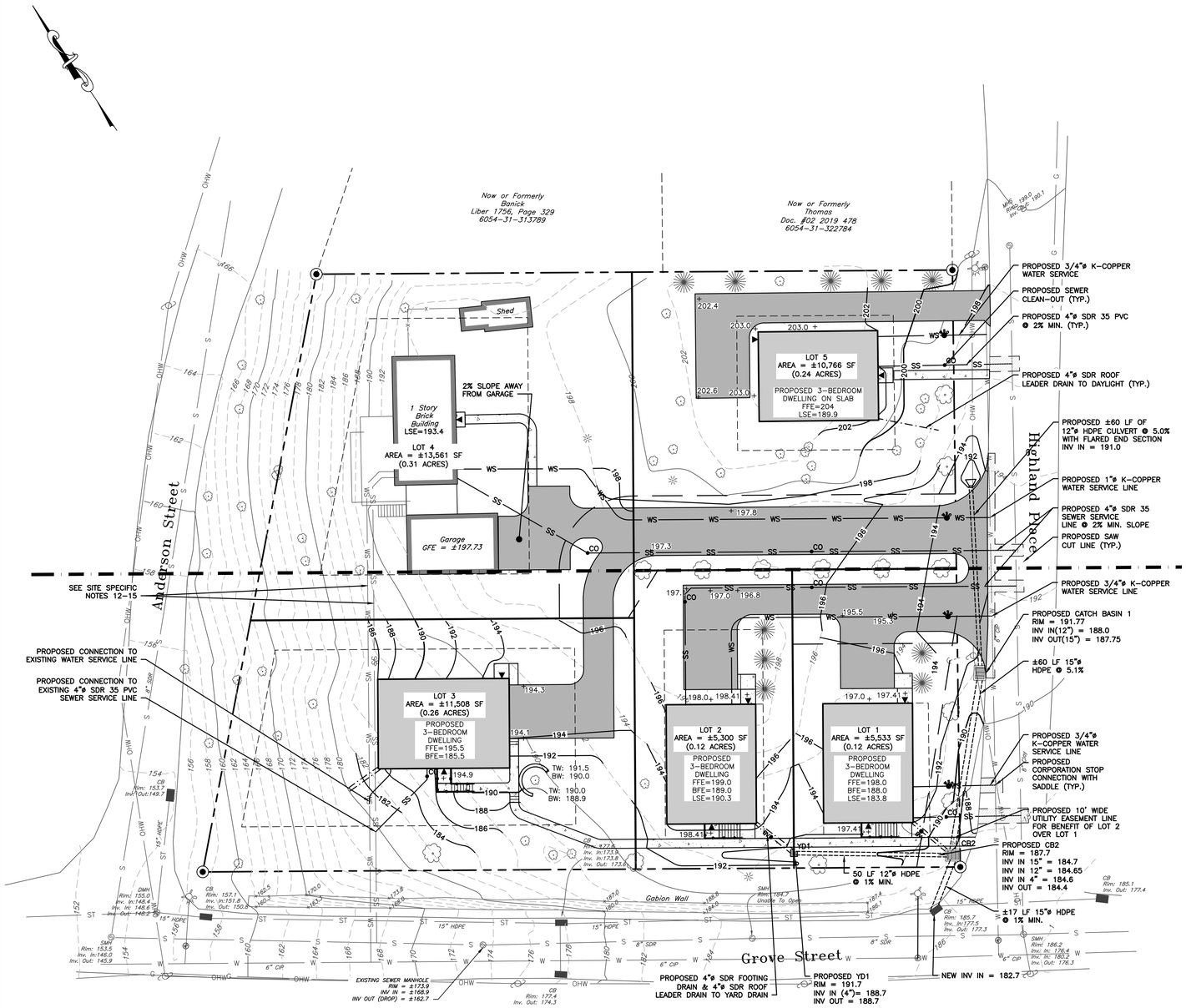
SUBDIVISION PLAN

HIGHLAND PLACE SUBDIVISION

12 HIGHLAND PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-306777

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GRADING & UTILITY PLAN

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- ZONING DISTRICT BOUNDARY
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- CO EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- RL EXISTING ROOF LEADER
- EXISTING CATCH BASIN
- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- PROPOSED EASEMENT
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- CO PROPOSED SEWER CLEAN OUT
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- FD PROPOSED FOOTING DRAIN LINE
- PROPOSED YARD DRAIN
- BV PROPOSED BACKFLOW PREVENTION DEVICE
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED ENTRY DOOR LOCATION

UTILITY NOTES:

1. ALL WATER & SEWER CONNECTIONS SHALL COMPLY WITH CITY WATER AND SEWER DISTRICT REQUIREMENTS.
2. THE PROPOSED BUILDING SHALL BE SET AT SUCH ELEVATION TO ENSURE GRAVITY FLOW FROM THE RAW SEWER LINE TO THE POINT OF CONNECTION WITH THE EXISTING SEWER MAIN, WHILE MAINTAINING PROPER EARTH COVER ABOVE ALL PIPING.
3. NO CELLAR, ROOF, OR FOOTING DRAINS SHALL BE DISCHARGED INTO THE SANITARY SEWER SYSTEM.
4. LOTS 1 AND 2 SHALL HAVE SUMP PUMPS WITHIN THE BASEMENTS. THE SUMP PUMPS SHALL BE DISCHARGED TO THE PROPOSED DRAINAGE STRUCTURES ON EACH LOT.

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS (IF APPLICABLE), WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE LINES.
2. THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
3. THE PROPOSED LOT SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES.
4. THE WATER SERVICE LINE AND METER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. THE WATER SERVICE LINE SHALL BE 3/4"ø K-COPPER ON LOTS 1, 3 & 5. LOTS 2 & 4 SHALL BE 1"ø K-COPPER.
6. THE SEWER SERVICE LINE SHALL BE 4"ø SDR 35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN (MINIMUM OF ¼" PER FOOT SHALL BE MAINTAINED).
7. A ROAD OPENING PERMIT SHALL BE REQUIRED FOR THE INSTALLATION OF THE PROPOSED WATER AND SEWER SERVICES FOR THE NEW LOT. STREET CLOSURE FOR WATER AND SEWER SERVICE CONNECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. THE PROPOSED DRIVEWAY SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE.
9. ROOF LEADER CONNECTIONS TO BE MINIMUM 4"ø PVC OR HDPE @ 2.0% MIN. AND DIRECTED TOWARDS THE PROPOSED STORMWATER SYSTEM.
10. SUMP PUMP TO BE PROVIDED FOR FOOTING DRAINS, IF NECESSARY ON PROPOSED LOTS 1, 2 AND 5. THE TYPE OF PUMP AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT. BACKFLOW PREVENTION DEVICES SHALL BE PLACED ON THE FOOTING DRAINS TO PREVENT BACKFLOW INTO THE FOOTING DRAIN.
11. THE PROPOSED DRIVEWAY SIGHT DISTANCE SHALL BE IN COMPLIANCE WITH THE CITY OF BEACON'S 192-9(B) CODE AND THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS. THE STATE UTILIZES THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) GUIDELINES FOR INTERSECTION SIGHT DISTANCES. FOR ROADS WITH A SPEED LIMIT OF 30 MPH, AASHTO DESIGN TABLES CALL FOR A SIGHT DISTANCE OF 290 FEET TO THE LEFT AND 335 FEET TO THE RIGHT. THE MEASURED SIGHT DISTANCE IS AS FOLLOWS:

    PROPOSED LOT 1 & LOT 2: SLSD LEFT = ±247 FEET TO THE 90° TURN WITHIN HIGHLAND PLACE. SLSD RIGHT = 111 FEET TO THE INTERSECTION WITH GROVE STREET. SLSD RIGHT = ±111 FEET TO THE INTERSECTION WITH GROVE STREET.STOPPING SIGHT DISTANCE (SSD) WAS OBSERVED TO BE ±233 FEET WHEN APPROACHING THE PROPOSED DRIVEWAY FROM THE NORTH ON HIGHLAND PLACE.

    PROPOSED LOT 3 & LOT 4: SLSD LEFT = ±223 FEET TO THE 90° TURN WITHIN HIGHLAND PLACE.SLSD RIGHT = ±136 FEET TO THE INTERSECTION WITH GROVE STREET.STOPPING SIGHT DISTANCE (SSD) WAS OBSERVED TO BE ±209 FEET WHEN APPROACHING THE PROPOSED DRIVEWAY FROM THE NORTH ON HIGHLAND PLACE.

    PROPOSED LOT 5: SLSD LEFT = ±133 FEET TO THE 90° TURN WITHIN HIGHLAND PLACE. SLSD RIGHT = ±210 FEET TO THE INTERSECTION WITH GROVE STREET.STOPPING SIGHT DISTANCE (SSD) WAS OBSERVED TO BE ±124 FEET WHEN APPROACHING THE PROPOSED DRIVEWAY FROM THE NORTH ON HIGHLAND PLACE.

    THE SLSD LEFT AND RIGHT FOR ALL DRIVEWAYS, AS WELL AS SSD FOR LOT 5 ARE LESS THAN THE MINIMUM REQUIRED SIGHT DISTANCE; HOWEVER, THE MEASUREMENTS ARE TO A SHARP 90° TURN WITHIN HIGHLAND PLACE LOOKING LEFT, AND A ROAD INTERSECTION WITH GROVE STREET TO THE RIGHT. APPROACHING VEHICLES CANNOT BE TRAVELING AT THE POSTED SPEED LIMIT WHILE BEING ABLE TO NAVIGATE THESE TURNS. THEREFORE, THE DESIGN SPEED LIMITS ARE LOWER THAN 30 M.P.H. AT THE TURN/INTERSECTION, AND WILL LIKELY NOT REACH 30 M.P.H. AT THE DRIVEWAY LOCATIONS DUE TO THE SHORT STRETCH OF ROAD.
12. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS, STORM SEWER LINES, SANITARY MANHOLES, SEWER LINES, WATERLINES, AND UNDERGROUND UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS.
13. THE CONTRACTOR SHALL EXCAVATE TEST PITS ON PROPOSED LOT 3 AT THE PROPOSED CONNECTION POINTS WITH THE EXISTING WATER AND SEWER SERVICE LINES FROM PROPOSED LOT 4 TO VERIFY THE LOCATION AND DEPTHS OF THE EXISTING LINES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER OF ANY CONFLICTS OR OTHER ISSUES WITH THE SERVICE LINES.
14. THE NEW SERVICE LINES FOR PROPOSED LOT 4 SHALL BE CONSTRUCTED AND PLACED INTO SERVICE PRIOR TO DISCONTINUATION OF THE EXISTING WATER AND SEWER SERVICE LINES.
15. THE EXISTING PORTION OF THE WATER AND SEWER SERVICE LINES ON PROPOSED LOT 3 SHALL BE REMOVED UP TO THE PROPERTY LINE WITH LOT 4 AND ABANDONED IN PLACE ON PROPOSED LOT 4 AFTER THE NEW CONNECTIONS ARE MADE TO THE SERVICE LINES.
16. IF ROCK IS ENCOUNTERED DURING EXCAVATION, IT SHALL BE REMOVED BY MECHANICAL MEANS. NO BLASTING SHALL BE PERMITTED WITHOUT APPROVAL FROM THE BUILDING DEPARTMENT. LOT 5 DWELLING SHALL BE CONSTRUCTION ON SLAB.
17. THE APPLICANT/APPLICANT'S PLUMBER SHALL ACQUIRE WATER METERS AND MXU UNITS (SIGNAL SENDING AND RECEIVING UNIT) FOR THE AMI SYSTEM (ADVANCED METERING INFRASTRUCTURE) FROM THE CITY OF BEACON WATER DEPARTMENT. THE MXU UNIT SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING AND SHALL BE LOCATED 2 TO 3 FEET ABOVE THE EXTERIOR GROUND ELEVATION.

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
2. WATER, SEWER AND STORM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED FOLLOWING SITE PLAN APPROVAL. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES.
3. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE, LOCATION, DEPTH AND CONDITION OF ALL UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
4. THE CONTRACTOR SHALL CONSTRUCT ALL IMPROVEMENTS AS SHOWN ON PLANS. ANY FIELD CONDITIONS THAT MAY RESULT IN A VARIATION FROM THE PLAN SET SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IN WRITING. VARIATIONS FROM THE PLAN WITHOUT APPROVAL FROM THE ENGINEER WILL BE CONSIDERED DEFICIENT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ON-SITE OR OFF-SITE DAMAGES TO VEGETATION OR PROPERTY CAUSED BY HIS OPERATIONS. SUCH DAMAGES SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS COST TO THE SATISFACTION OF THE ENGINEER, PROPERTY OWNER OR AGENCY HAVING JURISDICTION.
6. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL KEEP THE SITE IN A CLEAN AND ORDERLY MANNER.
8. THE CONTRACTOR SHALL NOT INTERRUPT EXISTING ACCESS OR OPERATIONS FOR THE REMAINDER OF THE SITE.

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

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REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
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5	11/29/22	PER PLANNING BOARD COMMENTS	CMB				
6	12/27/22	REVISED PER UPDATED LAYOUT	CMB				

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STATE OF NEW YORK · MICHAEL A. BOSBOOM · 084465 · LICENSED PROFESSIONAL ENGINEER

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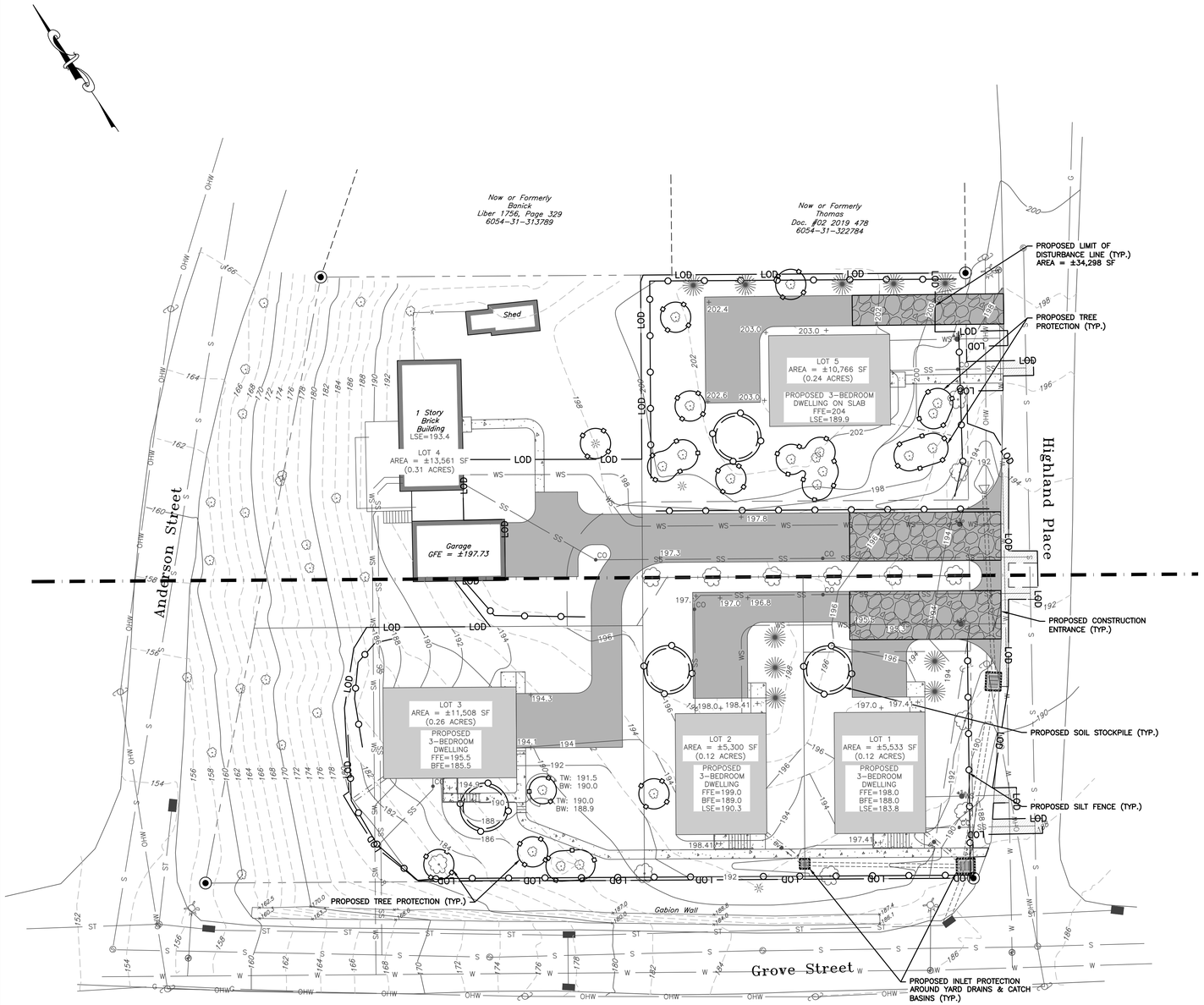
GRADING & UTILITY PLAN

HIGHLAND PLACE SUBDIVISION

12 HIGHLAND PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-306777

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EROSION & SEDIMENT CONTROL PLAN

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LEGEND:

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- PROPOSED BACKFLOW PREVENTION DEVICE
- PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED ENTRY DOOR LOCATION
- PROPOSED SILT FENCE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE
- PROPOSED TREE PROTECTION

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.
2. ALL STORMWATER MANAGEMENT STRUCTURES (E.G. CATCH BASINS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. CATCH BASINS SHALL BE CLEANED WHEN SEDIMENT DEPTH REACHES A MAXIMUM OF ONE-HALF THE AVAILABLE SUMP DEPTH.
3. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
4. ANY PILE OF POTENTIALLY EROSIVE MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.
5. PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THIS PLAN.
6. AREAS UNDERGOING CLEARING OR GRADING AND WHERE WORK IS DELAYED OR COMPLETED AND WILL NOT BE REDISTURBED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE COVER WITHIN 14 DAYS.
7. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY STANDARD METHODS OF LIGHTLY WATERING ALL EXPOSED SOIL AND RAPIDLY STABILIZING THE REGRADED AREAS WITH TOPSOIL, LOAM AND/OR SEEDING.
8. THE CITY ENGINEER AND PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE START OF ANY SITE WORK, AND BY SUCH NOTIFICATION, SHALL BE PROVIDED WITH THE NAME AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR RESPONSIBLE FOR SUCH WORK.
9. THE CITY AND/OR ITS REPRESENTATIVES MAY INSPECT EROSION AND SEDIMENT CONTROL PRACTICES ON THE SITE DURING CONSTRUCTION AND RECOMMEND THAT THE CONTRACTOR INSTALL ADDITIONAL EROSION CONTROL MEASURES IF DEEMED NECESSARY TO PROTECT ANY UNDISTURBED AREAS OF THE SITE. ANY SUCH REQUESTS SHALL BE MADE DIRECTLY TO THE CONTRACTOR AND QUALIFIED PROFESSIONAL AND FOLLOWED UP WITH A WRITTEN NOTIFICATION TO THE DEVELOPER. IN ADDITION, THE PROJECT ENGINEER SHALL BE CONSULTED ON ANY SPECIAL ADDITIONS OR DELETIONS OF EROSION CONTROL MEASURES WARRANTED BY CHANGING FIELD CONDITIONS.
10. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT A DEWATERING PIT IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL TO FILTER WATER FOR PUMPING TO A SUITABLE LOCATION.
11. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE:
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. REGRADE PAD AS NEEDED FOR RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE AS DIRECTED BY PROJECT ENGINEER.

SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

SOIL STOCKPILE:
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCKPILE. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.

DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORKS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

INDIANA BAT PROTECTION NOTES:

1. TREE CLEARING SHALL BE RESTRICTED TO THE PERIOD BETWEEN OCTOBER 1 AND MARCH 31.
2. THE LIMITS OF DISTURBANCE SHALL BE DEMARCATED BY INSTALLING ORANGE CONSTRUCTION FENCE FOR THE GENERAL IMPROVEMENT AND INFRASTRUCTURE CONSTRUCTION ACTIVITIES AND FOR THE INDIVIDUAL LOT CONSTRUCTION. THESE LIMITS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
3. DUST CONTROL DURING CONSTRUCTION SHALL BE IMPLEMENTED. THIS INCLUDES USE OF CONSTRUCTION ENTRANCES, APPLYING LIGHT WATER, AND ESTABLISHING VEGETATION.
4. STREET LIGHTS ARE NOT PERMITTED. RESIDENTIAL LIGHTING SHALL BE DIRECTED DOWNWARD TO REDUCE IMPACTS TO BATS FORAGING FOR FOOD.

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	7/26/22	PER PLANNING BOARD COMMENTS	CMB				
2	8/29/22	PER PLANNING BOARD COMMENTS	CMB				
3	9/27/22	PER PLANNING BOARD COMMENTS	CMB				
4	10/14/22	NO CHANGE THIS SHEET	CMB				
5	11/29/22	PER PLANNING BOARD COMMENTS	CMB				
6	12/27/22	REVISED PER UPDATED LAYOUT	CMB				

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STATE OF NEW YORK MICHAEL A. BOURDON 084466 LICENSED PROFESSIONAL ENGINEER

SEAL

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PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

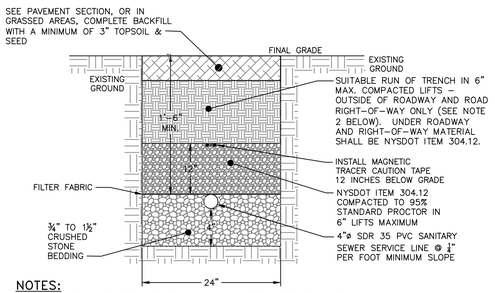
EROSION & SEDIMENT CONTROL PLAN

HIGHLAND PLACE SUBDIVISION

12 HIGHLAND PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-306777

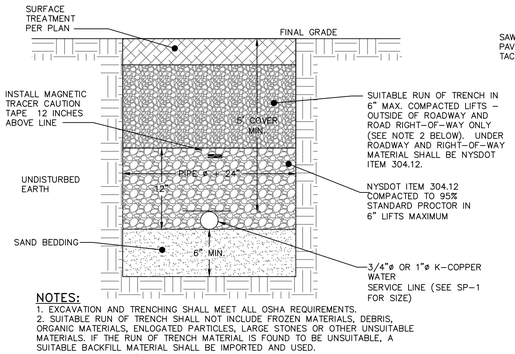
JOB #: 2022:011
DATE: 6/28/2022
SCALE: 1" = 20'
TITLE: ESC-1
SHEET: 6 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



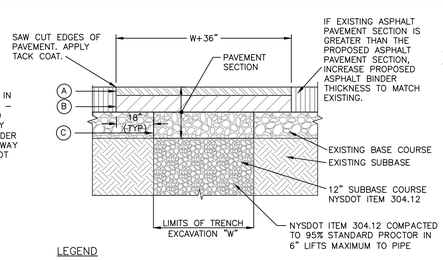
NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.
4. IF WATER SERVICE AND SEWER SERVICE LINE CROSSINGS ARE NEEDED, PROVIDE 18" OF VERTICAL SEPARATION

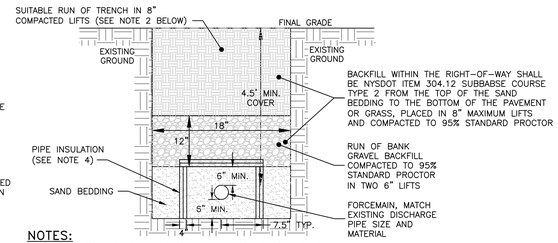
WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



LEGEND
(A) 1.5" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE F1
(B) 3.0" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE F9
(C) 3.0" ASPHALT BASE COURSE– NYSDOT TYPE F9

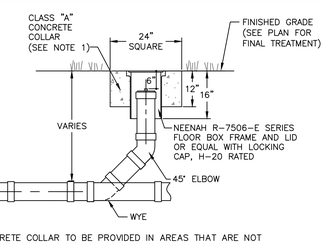
NOTES:
1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.
5. ALL SEAMS SHALL BE SEALED.

PAVEMENT RESTORATION DETAIL
NOT TO SCALE



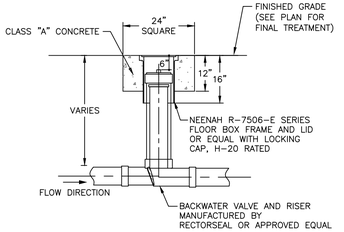
NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. CONTRACTOR TO VERIFY ALL PIPE CROSSINGS PRIOR TO CONSTRUCTION (E.G., WATER SERVICES, SEWER SERVICES, GAS LINES, ETC.).
4. WHERE MINIMUM 4.5' COVER REQUIREMENT CANNOT BE MET, PROVIDE PIPE INSULATION BOARD CERTIFOAM 40 OR APPROVED EQUAL, CLOSED CELL EXTRUDED POLYSTYRENE FOAM MEETING ASTM C578 TYPE VI WITH MINIMUM 40 PSI COMPRESSIVE STRENGTH PER ASTM D1621, 0.1% MAXIMUM WATER ABSORPTION PER ASTM C272. PROVIDE TWO 2" THICK BOARDS, OVERLAP ALL INSULATION BOARD JOINTS.

SUMP PUMP FORCEMAIN TRENCH DETAIL
NOT TO SCALE

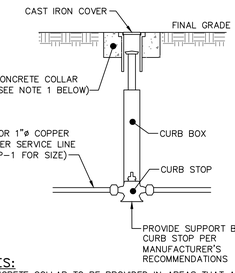


NOTES:
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.

CLEANOUT DETAIL
NOT TO SCALE

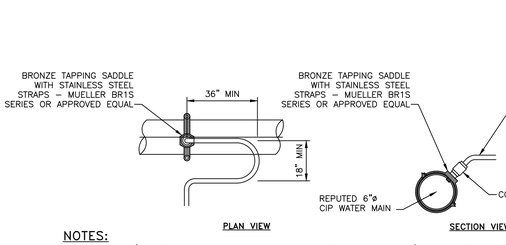


BACKWATER VALVE FOR FOOTING DRAIN DETAIL
NOT TO SCALE



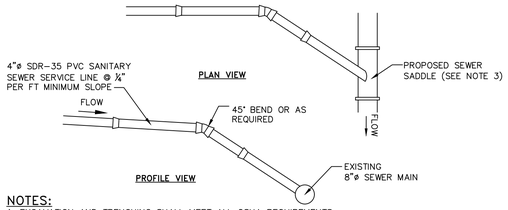
NOTES:
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.
2. CURB STOP TO BE COMPRESSION TYPE BY MUELLER.
3. AREA AROUND CURB BOX TO BE BACKFILLED WITH GRAVELLY MATERIAL.

WATER SHUT–OFF VALVE DETAIL
NOT TO SCALE



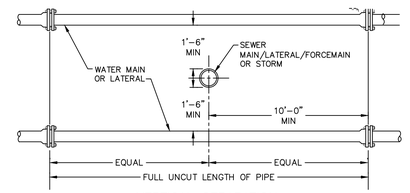
NOTES:
1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL 5' MIN. WATER MAIN DEPTH).
2. CORPORATION STOP TO BE COMPRESSION TYPE BY MUELLER.
3. WATER SERVICE LINE TO HAVE A 'GOOSENECK' NEAR CORPORATION STOP.
4. CORPORATION STOP TO BE INSTALLED IN THE UPPER HALF OF THE WATER MAIN AT AN ANGLE OF APPROXIMATELY 45° FROM HORIZONTAL.
5. THE CONTRACTOR SHALL INSTALL A FULL BODIED STAINLESS STEEL TAPPING SLEEVE AT THE PROPOSED WATER SERVICE LOCATION.

WATER SERVICE CONNECTION DETAIL
NOT TO SCALE

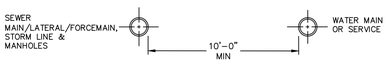


NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. TAPPING SADDLE FOR CONNECTION OF THE PROPOSED SERVICE LINE TO THE EXISTING SEWER MAIN TO BE A 4" PREDCO HUB TAP SADDLE – MODEL #HTS4/E.

SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



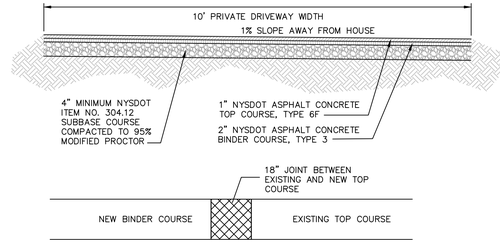
VERTICAL SEPARATION



HORIZONTAL SEPARATION

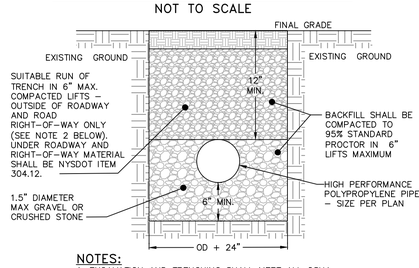
NOTE:
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

WATER LINE SEPARATION DETAIL
NOT TO SCALE



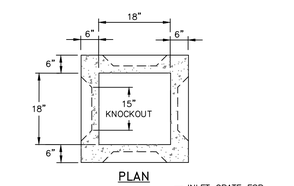
PLAN VIEW

PAVED DRIVEWAY SECTION DETAIL
NOT TO SCALE



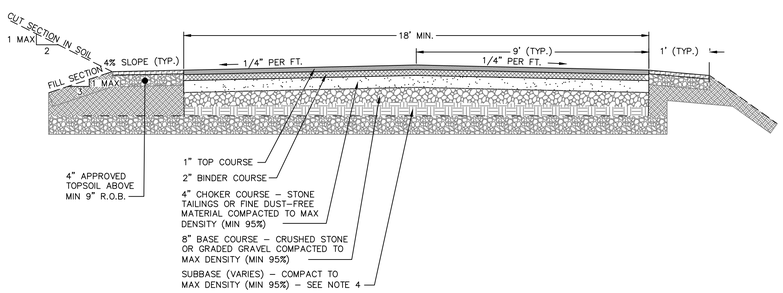
NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

STORM LINE TRENCH DETAIL
NOT TO SCALE



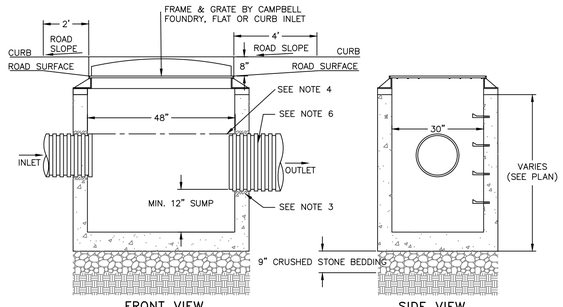
NOTES:
1. YARD INLET BASINS SHALL BE PRE CAST REINFORCED CONCRETE SHALL HAVE A MINIMUM 28–DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND SHALL BE IN CONFORMANCE WITH ASTM 478–68. WALLS AND BASE SHALL BE ONE PIECE CONSTRUCTION. YARD INLET BASIN SHOWN BY EXPANDED SUPPLY PRODUCTS (ESP), 3330 ROUTE 9, COLD SPRING, NY (845) 265–3771.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE BASIN AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATERTIGHT.
4. PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
5. BACKFILL USING SELECT MATERIAL, COMPACTED IN 6" LIFTS.
6. SUMP SHALL BE 12".
7. FRAMES AND GRATES SHALL BE SET IN A FULL BED OF MORTAR.

PRE–CAST CONCRETE YARD INLET DETAIL
NOT TO SCALE



NOTES:
1. 1' WIDE SHOULDERS TO BE ITEM 4 COMPACTED TO MAX DENSITY (MIN 95%).
2. RIGHT OF WAY WIDTH = 50' (EXCEPT FOR TURNING AREAS).
3. WHERE GRADE ALTERATION IS REQUIRED, SUBBASE SHALL BE SUPPLEMENTED WITH ITEM 4 COMPACTED TO MAX DENSITY (MIN 95%).

CITY OF BEACON PRIVATE ROAD SECTION
SCALE: NOT TO SCALE



NOTES:
1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATERTIGHT.
4. PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
5. CATCH BASINS WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.
6. HDPE PIPE SHALL BE PROVIDED WITH WATERTIGHT CONNECTIONS. ADS MODEL N12 WT IB OR APPROVED EQUAL.

CATCH BASIN DETAIL
NOT TO SCALE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____ 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	7/26/22	PER PLANNING BOARD COMMENTS	CMB				
2	8/29/22	PER PLANNING BOARD COMMENTS	CMB				
3	9/27/22	PER PLANNING BOARD COMMENTS	CMB				
4	10/14/22	NO CHANGE THIS SHEET	CMB				
5	11/29/22	NO CHANGE THIS SHEET	CMB				
6	12/27/22	NO CHANGE THIS SHEET	CMB				

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STATE OF NEW YORK MICHAEL A. BOBERSKY 084468 LICENSED PROFESSIONAL ENGINEER
SEAL

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PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926
F: 845–440–6637

CONSTRUCTION DETAILS

HIGHLAND PLACE SUBDIVISION

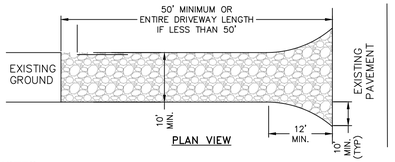
12 HIGHLAND PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054–31–306777

JOB #: 2022:011
DATE: 6/28/2022
SCALE: AS SHOWN
TITLE: CD–1
SHEET: 7 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

GENERAL RETAINING WALL NOTES:

1. PROPOSED RETAINING WALL TO BE UNILOCK CONCORD WALL XL OR ESTATE WALL (SEE PLAN AND PROFILE SHEETS). ALL WALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
2. THE CONTRACTOR SHALL VERIFY MATERIAL COLORS WITH THE OWNER.
3. LEVELING BASE IS THE COMPACTED GRANULAR SOIL, OR IF SPECIFIED IN THE CONSTRUCTION DOCUMENTS AN UNREINFORCED CONCRETE FOOTING, PLACED BENEATH THE FIRST COURSE OF SEGMENTAL RETAINING WALL UNITS.
   - 3.1. THE LEVELING BASE MATERIAL SHALL BE NON-FROST SUSCEPTIBLE, WELL GRADED, COMPACTED ANGULAR GRAVEL-SAND MIXTURE (GW AS PER ASTM D2487).
4. DRAINAGE FILL IS A FREE DRAINING AGGREGATE WITH HIGH PERMEABILITY PLACED DIRECTLY BEHIND THE MODULAR CONCRETE UNITS. THIS WILL INCLUDE A DRAINAGE PIPE AND MAY BE SEPARATED FROM OTHER FILL WITH A SUITABLE GEOTEXTILE FILTER.
   - 4.1. THE DRAINAGE FILL SHALL BE A FREE DRAINING ANGULAR, GRAVEL MATERIAL OF UNIFORM PARTICLE SIZE SMALLER THAN 1 INCH AND GREATER THAN 1/4 INCH. THE DRAINAGE FILL SHALL BE SEPARATED FROM THE REINFORCED FILL OR RETAINED FILL BY A SPECIFIED GEOTEXTILE FILTER.
5. DRAINAGE PIPE IS A PERFORATED PIPE USED TO CARRY WATER, COLLECTED FROM WITHIN THE SEGMENTAL RETAINING WALL, TO OUTLETS, TO PREVENT PORE WATER PRESSURES FROM BUILDING UP WITHIN THE SEGMENTAL RETAINING WALL AND SPECIFICALLY BEHIND THE SEGMENTAL RETAINING WALL UNITS.
   - 5.1. THE DRAINAGE PIPE SHALL BE A PERFORATED CORRUGATED POLYETHYLENE OR PERFORATED PVC PIPE, WITH A MINIMUM DIAMETER OF 4 INCHES, PROTECTED BY A GEOTEXTILE FILTER TO PREVENT THE MIGRATION OF SOIL PARTICLES INTO THE DRAINAGE PIPE.
6. GEOTEXTILE FILTER IS A PERMEABLE PLANAR POLYMER STRUCTURE THAT WILL ALLOW THE PASSAGE OF WATER FROM ONE SOIL MEDIUM TO ANOTHER WHILE PREVENTING THE MIGRATION OF FINE PARTICLES THAT MIGHT CLOG THE DOWNSTREAM FILL. SELECTION OF A GEOTEXTILE FILTER IS BASED ON THE CHARACTERISTICS OF THE DIFFERENT SOILS USED IN AND SURROUNDING THE SEGMENTAL RETAINING WALL.
   - 6.1. THE GEOTEXTILE FILTER SHALL BE NEEDLE PUNCHED NONWOVEN (FOR DRAINAGE AND SEPARATION) BY ADS OR APPROVED EQUAL.
7. DESIGN ASSUMPTIONS:
   - 7.1. THE FOUNDATION SOILS WILL PRODUCE ACCEPTABLE TOTAL AND DIFFERENTIAL SETTLEMENT GIVEN THE APPLIED LOAD OF THE SEGMENTAL RETAINING WALL.
   - 7.2. THE MAXIMUM GROUNDWATER ELEVATION IS AT LEAST 2/3 X H (HEIGHT) BELOW THE BASE OF THE SEGMENTAL RETAINING WALL.
   - 7.3. THERE WILL BE NO HYDROSTATIC PRESSURE WITHIN OR BEHIND THE SEGMENTAL RETAINING WALL.
   - 7.4. THE SURROUNDING STRUCTURES WILL NOT EXERT ANY ADDITIONAL LOADING ON THE SEGMENTAL RETAINING WALL.
   - 7.5. THERE ARE NO STRUCTURES (UTILITIES SUCH AS GAS/WATER MAINS, STORM SEWERS, ELECTRICAL/COMMUNICATIONS CABLES, ETC) TO BE PLACED WITHIN OR BELOW THE REINFORCED FILL DURING OR AFTER CONSTRUCTION. (NOT APPLICABLE – NO REINFORCED FILL THIS PROJECT).
8. IF UNEXPECTED SOURCES OF WATER ARE IDENTIFIED (E.G., A HIGHER WATER TABLE OR WEEPING SOIL LAYERS), ADDITIONAL DRAINAGE STRUCTURES MAY BE REQUIRED (E.G., BLANKET DRAINS OR CHIMNEY DRAINS). THE SPECIFIC DETAILS WILL NEED TO BE DETERMINED BY THE DESIGN ENGINEER. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IF UNEXPECTED SOURCES OF WATER ARE IDENTIFIED DURING INITIAL EXCAVATION.
9. GENERAL INSTALLATION GUIDES ILLUSTRATING PROPER METHODS AND TECHNIQUES FOR GOOD CONSTRUCTION ARE AVAILABLE TO THE INSTALLER FROM RISI STONE SYSTEMS OR THE SEGMENTAL RETAINING WALL MANUFACTURER UPON REQUEST.
10. CONSTRUCTION: SITE PREPARATION.
    - 10.1. COMPLY WITH ALL CURRENT FEDERAL, STATE, AND LOCAL REGULATIONS FOR EXECUTION OF THE WORK, INCLUDING LOCAL BUILDING CODES AND EXCAVATION REGULATIONS. PROVIDE EXCAVATION SUPPORT AS REQUIRED TO MAINTAIN STABILITY OF THE AREA DURING EXCAVATION AND SEGMENTAL RETAINING WALL CONSTRUCTION AND TO PROTECT EXISTING STRUCTURES, UTILITIES, LANDSCAPE FEATURES, PROPERTY OR IMPROVEMENTS.
    - 10.2. PRIOR TO GRADING OR EXCAVATION OF THE SITE, CONFIRM THE LOCATION OF THE SEGMENTAL RETAINING WALL AND ALL UNDERGROUND FEATURES, INCLUDING UTILITY LOCATIONS WITHIN THE AREA OF CONSTRUCTION. ENSURE SURROUNDING STRUCTURES ARE PROTECTED FROM EFFECTS OF SEGMENTAL RETAINING WALL EXCAVATION.
    - 10.3. COORDINATE INSTALLATION OF UNDERGROUND UTILITIES WITH SEGMENTAL RETAINING WALL INSTALLATION.
    - 10.4. CONTROL SURFACE WATER DRAINAGE AND PREVENT INUNDATION OF THE SEGMENTAL RETAINING WALL CONSTRUCTION AREA DURING THE CONSTRUCTION PROCESS.
    - 10.5. THE FOUNDATION SOIL SHALL BE EXCAVATED OR FILLED AS REQUIRED TO THE GRADES AND DIMENSIONS SHOWN ON THE PLAN.
    - 10.6. THE FOUNDATION SOIL SHALL BE PROOF ROLLED AND EXAMINED BY THE GENERAL REVIEW ENGINEER TO ENSURE THAT IT MEETS THE MINIMUM STRENGTH REQUIREMENTS SPECIFIED IN THE CONSTRUCTION DOCUMENTS. IF UNACCEPTABLE FOUNDATION SOIL IS ENCOUNTERED, THE GENERAL REVIEW ENGINEER SHOULD CONTACT THE DESIGN ENGINEER TO DISCUSS OPTIONS AND DETERMINE THE MOST APPROPRIATE COURSE OF ACTION.
    - 10.7. IN CUT SITUATIONS, THE NATIVE SOIL SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN IN THE CONSTRUCTION DOCUMENTS AND REMOVED FROM THE SITE OR STOCKPILED FOR REUSE AS REINFORCED OR RETAINED FILL AS IDENTIFIED ON THE PLAN. CARE SHOULD BE TAKEN NOT TO CONTAMINATE OR OVERLY SATURATE THE STOCKPILED FILL MATERIAL.
11. CONSTRUCTION: INSTALLING DRAINAGE SYSTEM.
    - 11.1. THE APPROVED GEOTEXTILE FILTER SHALL BE SET AGAINST THE BACK OF THE FIRST SEGMENTAL RETAINING WALL UNIT, OVER THE PREPARED FOUNDATION SOIL EXTENDING TOWARDS THE BACK OF THE EXCAVATION, UP THE EXCAVATION FACE AND EVENTUALLY OVER THE TOP OF THE DRAINAGE FILL TO THE BACK OF THE SEGMENTAL RETAINING WALL UNITS NEAR THE TOP OF THE WALL OR AS SHOWN ON THE PLAN. GEOTEXTILE OVERLAPS SHALL BE A MINIMUM OF 1 FOOT AND SHALL BE SHINGLED DOWN THE FACE OF THE EXCAVATION IN ORDER TO PREVENT THE MIGRATION OF PARTICLES FROM ONE FILL TYPE TO ANOTHER.
    - 11.2. THE DRAINAGE PIPE SHALL BE PLACED AS SHOWN ON THE PLAN, IN ACCORDANCE WITH THE OVERALL DRAINAGE PLAN FOR THE SITE. THE MAIN COLLECTION DRAIN PIPE SHALL BE A MINIMUM OF 4 INCHES IN DIAMETER. THE PIPE SHALL BE LAID TO ENSURE GRAVITY FLOW OF WATER FROM THE REINFORCED FILL. CONNECT DRAINAGE COLLECTION PIPE AT A STORM SEWER CATCH BASIN OR DAYLIGHT ALONG SLOPE AT AN ELEVATION LOWER THAN LOWEST POINT OF PIPE, EVERY 50 FEET MAXIMUM.
    - 11.3. IF OTHER SOURCES OF WATER ARE DISCOVERED DURING EXCAVATION OR ANTICIPATED, REFER TO NOTE 8 ABOVE.
12. CONSTRUCTION: INSTALLING SEGMENTAL RETAINING WALL UNITS.
    - 12.1. THE BOTTOM ROW OF SEGMENTAL RETAINING WALL UNITS SHALL BE PLACED ON THE LEVELING BASE AS SHOWN IN THE CONSTRUCTION DOCUMENTS. THE UNITS SHALL BE PLACED IN THE MIDDLE OF THE LEVELING BASE. CARE SHALL BE TAKEN TO ENSURE THAT THE SEGMENTAL RETAINING WALL UNITS ARE ALIGNED PROPERLY, LEVELED FROM SIDE TO SIDE AND FRONT TO BACK AND ARE IN COMPLETE CONTACT WITH THE LEVELING BASE.
    - 12.2. THE SEGMENTAL RETAINING WALL UNITS ABOVE THE BOTTOM COURSE SHALL BE PLACED TO INTERCONNECT THE SHEAR KEY AND THEN PUSHED FORWARD, CREATING THE SPECIFIED BATTER OF THE SEGMENTAL RETAINING WALL FACE.
    - 12.3. THE SEGMENTAL RETAINING WALL UNITS SHALL BE SWEPT CLEAN BEFORE PLACING ADDITIONAL COURSES TO ENSURE THAT NO DIRT, CONCRETE OR OTHER FOREIGN MATERIALS BECOME LODGED BETWEEN SUCCESSIVE LIFTS OF THE SEGMENTAL RETAINING WALL UNITS.
    - 12.4. SUCCESSIVE COURSES SHALL BE PLACED TO CREATE A RUNNING BOND PATTERN WITH THE EDGE OF ALL UNITS BEING APPROXIMATELY ALIGNED WITH THE MIDDLE OF THE UNIT IN THE COURSE BELOW IT. CUT SEGMENTAL RETAINING WALL UNITS MAY NEED TO BE PLACED TO ENSURE THE VERTICAL LINE BETWEEN ADJACENT SEGMENTAL RETAINING WALL UNITS REMAINS WITHIN THE MIDDLE THIRD OF THE SEGMENTAL RETAINING WALL UNIT BELOW.
    - 12.5. WHERE APPLICABLE, A MAXIMUM OF 3 COURSES OF SEGMENTAL RETAINING WALL UNITS CAN BE PLACED ABOVE THE LEVEL OF THE REINFORCED FILL AT ANY TIME.
    - 12.6. THE INSTALLER SHALL CHECK THE LEVEL OF SEGMENTAL RETAINING WALL UNITS WITH EACH LIFT TO ENSURE THAT NO GAPS ARE FORMED BETWEEN SUCCESSIVE LIFTS THAT MAY AFFECT THE PERFORMANCE OF THE SEGMENTAL RETAINING WALL.
    - 12.7. CARE SHALL BE TAKEN TO ENSURE THAT THE SEGMENTAL RETAINING WALL UNITS AND GEOSYNTHETIC REINFORCEMENT, WHERE APPLICABLE, ARE NOT DAMAGED DURING HANDLING AND PLACEMENT.
    - 12.8. NO HEAVY EQUIPMENT, FOR COMPACTION, FILL PLACEMENT OR OTHER, SHALL BE ALLOWED WITHIN 3 FEET OF THE BACK OF THE SEGMENTAL RETAINING WALL UNITS.
13. CONSTRUCTION: DRAINAGE FILL.
    - 13.1. THE DRAINAGE FILL WILL BE PLACED BEHIND THE SEGMENTAL RETAINING WALL UNITS WITH A MINIMUM WIDTH OF 1 FOOT AND SEPARATED FROM OTHER SOILS USING THE SPECIFIED GEOTEXTILE FILTER. DUE TO SITE CONSTRAINTS, THE DRAINAGE FILL MINIMUM WIDTH IS 6 INCHES FOR THIS PROJECT).
    - 13.2. DRAINAGE FILL SHALL BE PLACED BEHIND THE SEGMENTAL RETAINING WALL FACING IN MAXIMUM LIFTS OF 6 INCHES AND COMPACTED TO A MINIMUM DENSITY OF 95% STANDARD PROCTOR.
14. CONSTRUCTION: SECURE COPING.
    - 14.1. COPING UNITS SHALL BE SECURED TO THE TOP OF THE SEGMENTAL RETAINING WALL WITH TWO 3/8 INCH BEADS OF CONCRETE ADHESIVE POSITIONED 2 INCHES IN FRONT AND BEHIND THE TONGUE OF THE LAST COURSE OF SEGMENTAL RETAINING WALL UNITS.



PLAN VIEW

NOTES:
1. STONE SIZE – USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS – NOT LESS THAN SIX (6) INCHES.
3. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
4. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
5. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

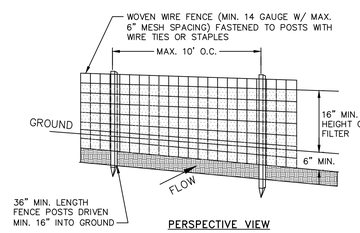
STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

NOTES:
1. REFER TO RETAINING WALL NOTES, THIS SHEET.

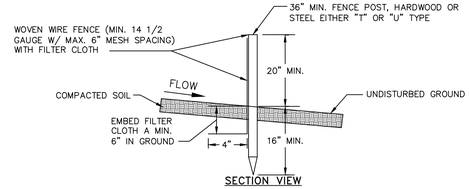
SEGMENTAL RETAINING WALL DETAIL – GRAVITY WALL SECTION
NOT TO SCALE

NOTES:
1. TREES TO REMAIN NOTED ON EXISTING CONDITIONS PLAN.
2. NOT ALL TREES TO REMAIN REQUIRE PROTECTION. TREE PROTECTION TO BE UTILIZED ON TREES WHERE CONSTRUCTION TRAFFIC WOULD COMPACT THE ROOT ZONE OF THE TREE.

TEMPORARY TREE PROTECTION DETAIL
NOT TO SCALE



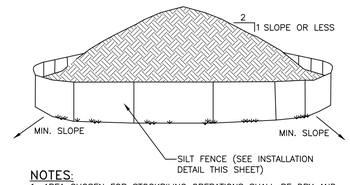
PERSPECTIVE VIEW



SECTION VIEW

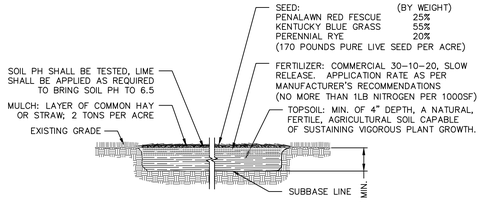
NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
NOT TO SCALE

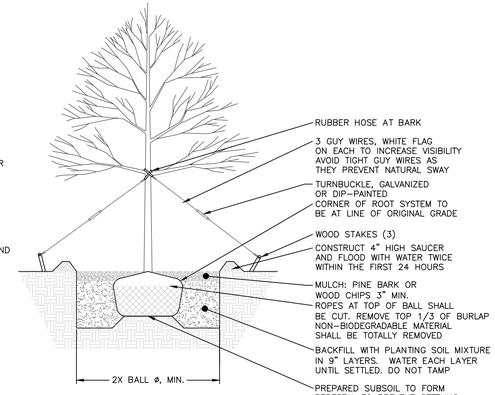


NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE



TOPSOIL SEED, FERTILIZER AND MULCH DETAIL
NOT TO SCALE



NOTES:
1. PROPOSED TREES TO BE RED MAPLE. REFER TO SHEET 4 PLANS FOR LOCATIONS.

TREE PLANTING DETAIL
NOT TO SCALE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____ SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	7/26/22	PER PLANNING BOARD COMMENTS	CMB				
2	8/29/22	PER PLANNING BOARD COMMENTS	CMB				
3	9/27/22	PER PLANNING BOARD COMMENTS	CMB				
4	10/14/22	NO CHANGE THIS SHEET	CMB				
5	11/29/22	NO CHANGE THIS SHEET	CMB				
6	12/27/22	NO CHANGE THIS SHEET	CMB				

Dig Safely. New York Call 811 before you dig

STATE OF NEW YORK MICHAEL A. BERGMANN 084466 LICENSED PROFESSIONAL ENGINEER

SEAL

HUDSON LAND DESIGN
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

CONSTRUCTION DETAILS

HIGHLAND PLACE SUBDIVISION

12 HIGHLAND PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-306777

JOB #:	2022:011
DATE:	6/28/2022
SCALE:	AS SHOWN
TITLE:	CD-2
SHEET:	8 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

HUDSON
LAND DESIGN

Civil & Environmental Engineering Consultants
174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)
13 Chambers Street, Newburgh, NY 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com

December 27, 2022

Hon. John Gunn, Chairman
City of Beacon Planning Board
1 Municipal Plaza
Beacon, New York 12508

Re: 12 Highland Place Residential Subdivision – Supplemental Submission
Lori Joseph Builders, Inc. (Applicant)
12 Highland Place
Tax Parcel: 6054-31-306777, ±1.07 ac.
City of Beacon, New York

Dear Chairman Gunn and Members of the Planning Board:

On behalf of Lori Joseph Builders ("the Applicant") for the above-referenced project, Hudson Land Design ("HLD") respectfully submits this letter in furtherance of the Applicant's pending Application for Residential Subdivision Approval. In response to comments from the Board, its consultants and from the public, the Applicant re-adjusted the proposed layout for the zoning-compliant subdivision so that the project incorporates enhanced site access and landscaping, while also maintaining reduced impervious surface areas. The updates to the plans also ensure that the lots area and depth for Lots 1 and 2 are zoning-complaint, which was an issue created by the prior redesign that involved a private road layout, which has now been resolved.

For the Board's consideration, pursuant to our meeting with City Staff on December 13th to address the lot dimensions in conformance with City Code Section 195-22A.8, the wider private road has been eliminated, and a tree-lined driveway has been incorporated. *See* Enclosed Updated Subdivision Plat. Importantly, the lot layout and proposed site features that reduced impervious surface areas as noted in our November 29th submission to the Board remain consistent in this updated layout in terms of lot area, lot configuration and frontage.

Updated Subdivision Plat – Zoning-Compliant Layout and Enhanced Landscaping:

As noted, while the prior re-design was done in an effort to respond to a comment from the Board's consultants, it is respectfully submitted that the proposed tree-lined driveway – generally where the existing driveway is today – enhances the aesthetics of the project. The driveways also provide sufficient firematic and emergency vehicle access to the proposed lots. A Beacon ladder truck tracking template exhibit has been prepared demonstrating that the Beacon ladder truck can enter and exit the shared driveway while vehicles are parked on the east side of Highland Place. Therefore, there is no need to prohibit parking on the east side of Highland Place. As is also noted

in our November 29th submission, there are also existing fire hydrants located at three (3) of the four (4) corners of the property, including at the southeasterly and northeasterly property lines along Highland Place, as well as on the northwesterly property line off of Anderson Street. These fire hydrants are also shown on the plans for reference.

As requested by the City Planner, we have also documented the tree removal and tree planting plan for the project. As updated, the proposed shared driveway layout requires the removal of six (6) trees with 8" or greater breast height diameter. This is slightly lower than the seven (7) that would have been removed for the proposed private road configuration. The current plan also proposes to plant 23 new trees, which is 7 more trees than the 16 trees that were proposed in the private road layout. We would also note that the original layout proposed to remove up to 24 trees with 8" or greater breast height diameter, so this current updated proposal took these comments into consideration. The current layout also proposes additional replacement shade and evergreen trees around the perimeter of the lots, as well as a row of shade trees in between the shard driveways for lots 1 & 2 and 3 & 4.

The proposed shared driveway layout has also been refined from the original submitted layout back in June. Driveway parking areas have been reduced in width and length wherever possible. As a result, the submitted layout reduces the proposed impervious area by 906 square feet from the original shared driveway layout. The proposed house footprints have remained the same between the private road and shared driveway layouts. To address the zoning-compliance issues created by the larger private road, which has been improved by the tree-lined driveways, the updated layout only results in a *de minimis* increase of about 443 square feet of total impervious area from the private road layout. As noted, this is still a reduction from the original layout – and it is important to note that the project proposes extensive drainage improvements and includes the planting of new trees as well. The proposed drainage infrastructure includes three catch basins and culvert piping. The proposed drainage system collects runoff from the proposed impervious and impervious surfaces of the subdivision, where in existing conditions, runoff from the paved driveway drains toward Highland Place uncontrolled. Two of the catch basins are proposed along Highland Place that will improve drainage conditions along the west side of Highland place, as well as collect the runoff generated by the new driveways preventing runoff from entering the road. The proposed drainage system mitigates any potential impacts associated with additional impervious surfaces. The City' Engineer has also indicated that the existing drainage system constructed in 2003 along Highland Place and Grove Street has adequate capacity to handle additional runoff generated from the site. The City's water and sewer infrastructure has adequate capacity to handle the additional dwellings.

Lastly, to update the Board since our November 29th submission, the Applicant has also made further contact with the nearby property owners that are included on the public hearing notice list in order to further discuss the project and any potential concerns. In addition to previously meeting with available residents along Highland Place, the Applicant held two (2) informal meetings on Wednesday, November 30, 2022, and Saturday, December 10, 2022.

Based upon the foregoing, we respectfully submit that the current tree-lined driveway plan adequately addresses any potentially significant adverse environmental impacts through the mitigation proposed, and is similar in scale to the previous private road layout that was being considered for a Negative Declaration at the Board's October meeting Agenda. Further, the proposed subdivision is consistent with the character of the neighborhood.

Our November 29, 2022 response letter is also included with this submission since that submittal was withdrawn. Please find attached for continued review:

- 5 copies of the revised subdivision plan set (8 sheets)
- 5 copies of Exhibit A Beacon ladder truck tracking exhibit, and
- 5 copies of Exhibit B November 29, 2022 response to comments letter.

The Applicant looks forward to appearing at the Board's January 10, 2023 meeting Agenda for the continued SEQR public hearing. The Applicant respectfully requests that the Board consider closing the SEQR public hearing and scheduling the Subdivision public hearing for the Board's February meeting Agenda. In the meantime, the posted public hearing signage at the property has been updated for the January meeting accordingly.

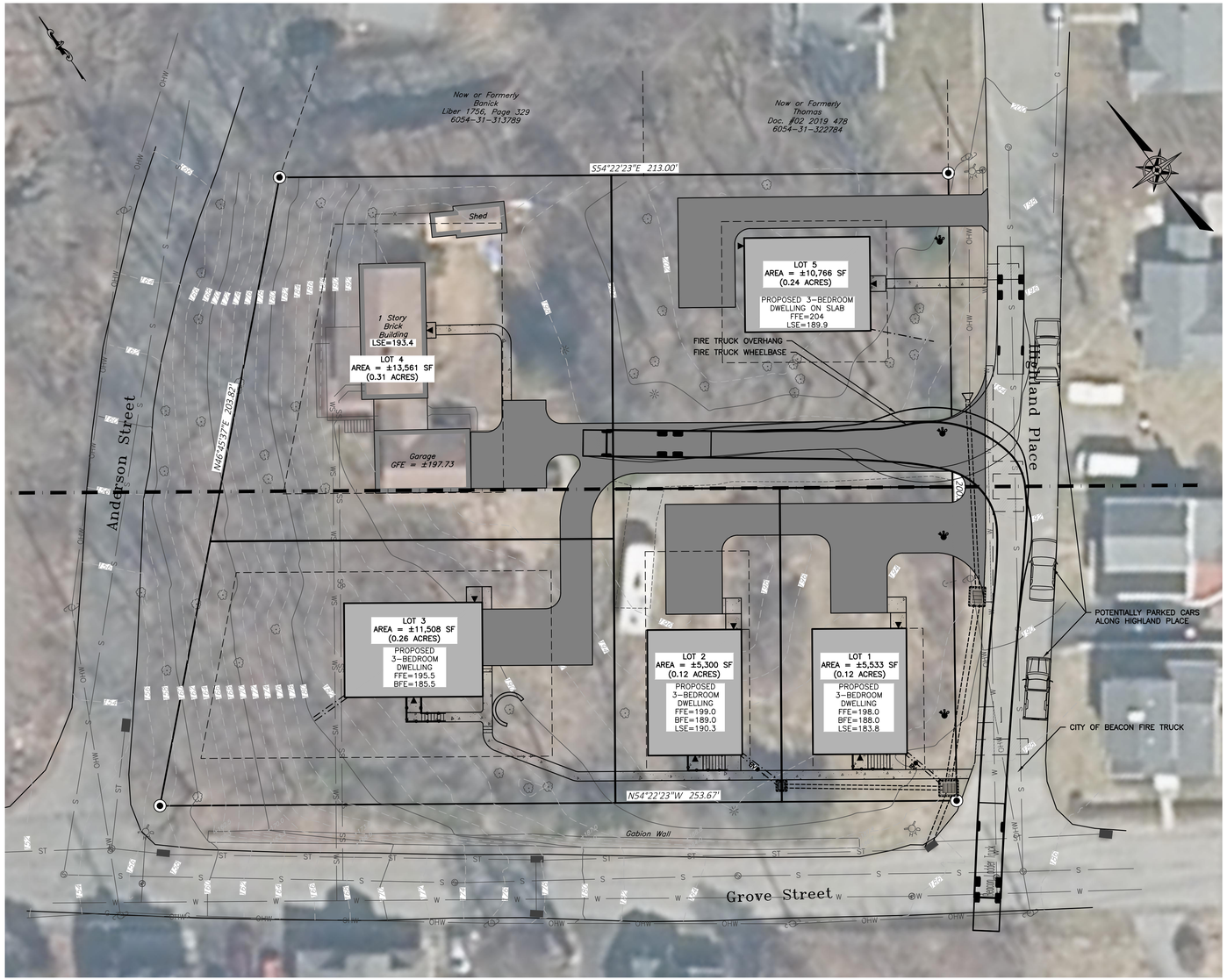
Thank you for your attention to this matter. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,



Michael A. Bodendorf, P.E.
Principal

cc: Lori Joseph Builders, Inc.
Taylor M. Palmer, Esq., Cuddy + Feder LLP
Bruce Flower, City of Beacon Building Inspector
Jennifer L. Gray, Esq., Keane & Beane P.C.
John Russo, P.E., Lanc & Tully Engineering and Surveying, P.C.
John Clarke, AICP, John Clarke Planning and Design
Daniel G. Koehler, P.E. (HLD file)



FIRE TRUCK MANEUVERING EXHIBIT:

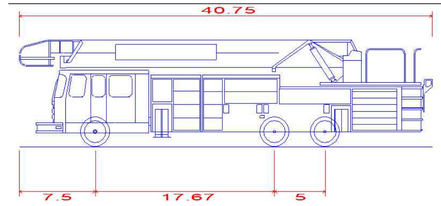
SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PROJECT INFORMATION:	
PARCEL OWNER:	GARY JOESEPH, XXX, BEACON NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	12 HIGHLAND PLACE, BEACON NY 12508
TAX PARCEL ID:	6054-31-306777
PARCEL AREA:	±1.07-ACRES
WATER SUPPLY:	PROPOSED MUNICIPAL
SEWAGE DISPOSAL:	PROPOSED MUNICIPAL



Beacon Ladder Truck	
Overall Length	40.750ft
Overall Width	8.330ft
Overall Body Height	10.505ft
Min Body Ground Clearance	0.935ft
Track Width	8.417ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	34.830ft

BEACON LADDER TRUCK

SCALE: NOT TO SCALE

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	12/27/22	REVISED PER UPDATED PLAN	MAB				

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

FIRE TRUCK MANEUVERING EXHIBIT

HIGHLAND PLACE SUBDIVISION

12 HIGHLAND PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-306777

JOB #:	2022:011
DATE:	11/14/2022
SCALE:	1" = 20'
TITLE:	VEH-01
SHEET:	1 OF 1

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Civil & Environmental Engineering Consultants
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13 Chambers Street, Newburgh, NY 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com

November 29, 2022

Hon. John Gunn, Chairman
City of Beacon Planning Board
1 Municipal Plaza
Beacon, New York 12508

Re: 12 Highland Place Residential Subdivision
Lori Joseph Builders, Inc. (Applicant)
12 Highland Place
Tax Parcel: 6054-31-306777, ±1.07 ac.
City of Beacon, New York

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above-referenced project, Hudson Land Design ("HLD") respectfully submits this letter and the referenced enclosures in response to John Clarke Planning and Design's November 6, 2022 comment letter, and Lanc & Tully's November 1, 2022 comment letter (the "Comment Letters"). For the benefit of the Board, we have also incorporated written responses to the public comments that the Applicant received at the public hearings on this Project.

Accordingly, below please find below point-by-point responses to the Comment Letters and in response to the public comments received to date.

John Clarke Planning and Design November 6, 2022 Comment Letter

1. The bulk table and yard setbacks have been adjusted to reflect the recent Code changes as recommended by your office.
2. Comment noted.

Lanc & Tully November 1, 2022 Comment Letter

General Comments

1. Comment noted. A maintenance agreement for the private road will be provided by the Applicant's Attorney in a future submittal following the completion of the SEQR environmental review process for this Unlisted Action.
2. Comment noted. A bond estimate will be provided in a future submittal following the completion of the SEQR environmental review process.

3. Comment noted. Easement descriptions will be provided in a future submittal following the completion of the SEQR environmental review process.
4. The note has been added as note #17 under Site Specific Notes on sheet 5 (GU-1).
5. The Applicant does not intend to provide porches on the proposed dwellings; however, the front yard setbacks have recently been reduced by the City Council in all R1 districts. The minimum front setback in the R1-5 is now 10 feet and 20 feet in the R1-10 district. This allows for an additional 5 feet for any covered porch portion of the dwelling.
6. Comment noted. *See* response to comment #5 above.

Sheet 4 of 8:

1. Additional evergreen screening trees have been added to enhance and ensure adequate screening is provided along the northern property line between Lot 5 and the Thomas Parcel.

Sheet 5 of 8:

1. CB-1 has been relocated further down Highland Place and no longer conflicts with the existing utility pole. Inverts on the catch basin have been updated to reflect this change.

Emergency Vehicle Access

In response to the Planning Board's recommendation, we have prepared an emergency vehicle tracking plan that illustrates how a Beacon Ladder Truck can enter and exit the proposed private road while vehicles are parked on-street on the opposite side of Highland Place. *See* the enclosed Maneuvering Exhibit. Notably, the private road flare radii were increased slightly to further accommodate this type of movement and to further enhance firematic and emergency vehicle access to the site from Highland Place. Based upon the Maneuvering Exhibit, prohibiting parking on the east side of Highland Place would not be required and there is no impact to existing parking on-street conditions on Highland Place. Additionally, please note that the Maneuvering Exhibit was sent to the Building Inspector for review and recommendation from the Fire Chief. Copies of the Maneuvering Exhibit and HLD's correspondence to the Building Inspector are included with this submission.

As this Board is also aware, there are existing fire hydrants located at three (3) of the four (4) corners of the property, including at the southeasterly and northeasterly property lines along Highland Place, as well as on the northwesterly property line off of Anderson Street. These fire hydrants are also shown on the plans for reference. Taken together, it is respectfully submitted that the private road has been designed to ensure that adequate emergency vehicle access is provided, at that the project *will not* create any significant adverse environmental impacts.

Informational Meeting with Neighbors and Nearby Property Owners:

In addition to the changes that the Applicant has made to the plans in response to comments during the subdivision review and in the SEQR environmental review process with the Board to date, which includes the additional changes noted herein, the Applicant has also made further contact with the nearby property owners that are included on the public hearing notice list in order to further discuss the project and any potential concerns. In addition to previously meeting with available residents along Highland Place, the Applicant sent the enclosed letter to the list of nearby property owners that received the public hearing notice to schedule an informal meeting to further discuss any concerns. As is detailed in the enclosed letter, two (2) meeting dates were scheduled, including: Wednesday, November 30, 2022, and Saturday, December 3, 2022. *See* enclosed Letter to Nearby Property Owners. To date, the Applicant has only received two (2) responses to this

letter. We look forward to providing a further update to the Board after the meetings take place and at the continued public hearing on the project.

The Record Demonstrates That There are No Potentially "Significant" Adverse Environmental Impacts from the Proposed As-of-Right Residential Subdivision:

Where a project will have no "significant" adverse impacts on the environment, the Lead Agency *must* prepare a Negative Declaration.[1] The proposed as-of-right residential subdivision is considered an "Unlisted" action under SEQRA, as it does not constitute any of the actions included on the State's Type II and Type I lists.[2] Accordingly, the Applicant and its consultants have prepared responses to the Comment Letters and to address public comments; updated and revised the proposed plans and presented at multiple meetings and Public Hearings to assist the Board in preparing a record that shows that a "hard look" has been taken, and that, based on the particular facts and circumstances of the case, the Proposed Action *will not* have a potentially "significant" adverse impact on the environment.

Even if an Unlisted action could *potentially* have significant adverse environmental impacts, if the proposal is subsequently modified to incorporate measures that assure that potentially significant adverse impacts will not occur, a Negative Declaration is authorized for an Unlisted Action. For the Board's further consideration, as discussed at prior meetings regarding the Project, below is a list of just some of the ways that the Project has been refined in response to comments from the Board, the Board's consultants and from the public:

1) Reduced the amount of proposed curb cuts from 3 to 1;
2) Reduced the amount of proposed impervious surfaces (driveways, etc.);
3) Reduced the amount trees over 8" caliper diameter to be removed;
4) Reduced the amount of potential rock removal by raising proposed structures and utilities;
5) Added additional drainage structures along Highland Place;
6) Added additional landscaped screening and buffering from 1 proposed tree in the original proposal to 16 trees in the current updated proposal;
7) Designed the lot sizes to be consistent with the lots in the area with input from the Planning Board's consultants;
8) Adjusted the emergency vehicle access, and
9) Added sidewalks internal to the site plan based on public and Planning Board comments.

For the Board's further consideration, please also see the enclosed Layout Comparison Exhibit, which highlights the significant project changes that reflect the suggested refinements to the building program, site layout, access and impervious coverages identified during the review process.

Additionally, as recommended by this Board, the Applicant made additional outreach to nearby property owners to further discuss the project and any related comments. Accordingly, the

[1] *See* SEQR Handbook, pg. 76.

[2] 6 NYCRR §§ 617.2(al) (""Unlisted action" means all actions not identified as a Type I or Type II action in this Part"); 617.4(b) (Type I List); 617.5(c) (Type II List).

Applicant respectfully submits that a Negative Declaration is justified in this case, based upon these principles and the mitigative measures employed for this as-of-right residential subdivision proposal.

At this time in the review of the updated subdivision plans, and as will be more fully discussed at the Planning Board's December 13th meeting Agenda, the record demonstrates that the Project will not result in any potentially significant adverse environmental impacts, and thus clearly supports the adoption of a Negative Declaration.

Conclusion & List of Enclosures:

For the Board's consideration, in support of this Application please find five (5) hard copies of the revised subdivision set consisting of 8 sheets for review. Also included are five (5) copies of the Maneuvering Exhibit, Layout Comparison Exhibit, Correspondence to the Building Inspector and Fire Chief Regarding Emergency Access and the Outreach Letter sent to the neighbors of the project.

We look forward to appearing at your December 13, 2022, meeting Agenda to further discuss the Project, and we respectfully request that the Planning Board consider closing the SEQR public hearing and making its Determination of Significance, and further that the Board consider opening and closing the Subdivision Public Hearing.

In the meantime, for record of proceedings in this matter, the SEQR public hearing signage on the property has been updated to indicate that the continued public hearing will take place on December 13, 2022. Thank you for your consideration of the enclosed. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,

Michael A. Bodendorf, P.E.
Principal

cc: Lori Joseph Builders, Inc. (w/ attachments)
Taylor M. Palmer, Esq., Cuddy + Feder LLP (via e-mail only)
Daniel G. Koehler, P.E. (HLD file)

LANC & TULLY
Engineering and Surveying, P.C.

January 5, 2023

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12508

RE: 12 Highland Place
5-Lot Subdivision
Tax No. 6054-31-306777
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding a 5-lot subdivision of the parcel located at 12 Highland Place:

- Correspondence from Hudson Land Design dated December 27, 2022.
- Response correspondence from Hudson Land Design dated November 29, 2022.
- Plan titled "Fire Truck Maneuvering Exhibit – Highland Place Subdivision", with the latest revision date of December 27, 2022, as prepared by Hudson Land Design.
- Plan set titled "Highland Place Subdivision" as prepared by Hudson Land Design and consisting of the following sheets, all having the latest revision date of December 27, 2022:
  - Sheet 1 of 8 – Cover Sheet (CV-1)
  - Sheet 2 of 8 – Existing Conditions & Removal Plan (XC-1)
  - Sheet 3 of 8 – Preliminary Subdivision Plat (PT-1)
  - Sheet 4 of 8 – Subdivision Plan (SP-1)
  - Sheet 5 of 8 – Grading & Utility Plan
  - Sheet 6 of 8 – Erosion & Sediment Control Plan (ESC-1)
  - Sheet 7 of 8 – Construction Details (CD-1)
  - Sheet 8 of 8 – Construction Details (CD-2)

The proposed project entails the subdivision of a 46,669± square foot (1.071 acres) parcel located at 12 Highland Place into 5 lots. Previously the subdivision was designed to incorporate a private road to service 4 of the 5 lots, whereas the recently submitted plans are now showing two common driveways to service two lots each and a single driveway to service the remaining lot. The proposed lots ranging in size from 5,300 square feet to 13,330 square feet in size. The existing parcel (proposed Lot 4) has a single-family

residence, detached garage, and shed located on it at this time, which are proposed to remain. The parent parcel is bisected by a Zoning line, with the southern portion of the site being in the R1-5 Zone and the northerly portion of the site being in the R1-10 Zone.

Based on our review of the above plans, we would like to offer the following comments:

General Comments:

1. As Common Driveways are proposed for the project, the Applicant will need to prepare and submit for review a maintenance declaration or agreement for each of the common driveways. The maintenance agreement should also account for utilities that may be installed under the common driveways.

2. As a condition of approval, the Applicant shall provide the City of Beacon with a performance guarantee and inspection fees as stated in Section 195-15 & 16, of the City Code for all public improvements to be constructed as part of the project. The project engineer shall submit a cost estimate for the prosed public improvements for review, as the project progresses.

3. Documents and descriptions for the proposed easements shall be provided for review. ***Applicant notes that these will be provided as part of a future submission.***

Sheet 3 of 8:

1. Note No. 1 under "Subdivision Notes" should be revised to reflect the actual lots that the easement crosses over. Lot 3 should not be listed, as the easement ends at the property line for Lot 3.

2. The need for Easement No. 1 to cross the corner of Lot 2 is unclear and appears that it is not required. The applicant's consultant should review this and determine the need for the easement across Lot 2. If it is not required, then the easement should be removed, and Note No. 1 under the "Subdivision Notes" further revised to eliminate Lot 2 from the statement.

3. Applicant should consider providing additional plantings along the northerly boundary line between proposed Lot 5 and the Thomas parcel, to improve screening between the existing residence and that of the proposed residence.

Sheet 4 of 8:

1. The width of the common driveways at the point of intersection with Highland Place is excessive and should be reduced.

Sheet 5 of 8:

1. It is recommended that an additional sewer cleanout be provided on the new sewer service line on Lot 3 prior to its bend to allow for connection to the existing sanitary service line.

2. Grading on the common driveways should be done in such a way so as to shed water towards the storm drainage collection system on either side of the common drives at the intersection with Highland Place.

Sheet 7 of 8:

1. As the project is no longer proposing to construct a private road, the "City of Beacon Private Road Section" detail should be removed from the plan.

2. A Common Driveway construction detail shall be added to the plan.

3. The "Catch Basin Detail" shall include a note that castings shall be "Domestically Made" if they are to be owned by the City of Beacon.

This completes our review at this time. Further comments may be provided based on future submissions. **A written response letter addressing each of the above comments should be provided with the next submission.** If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,

LANC & TULLY, P.C.

John Russo, P.E.

cc: John Clarke, Planner
Jennifer Gray, Esq.
Bruce Flower, Building Inspector

Amanda Caputo

From: Paul M Lyons <paullyons@optonline.net>
Sent: Sunday, January 8, 2023 8:38 PM
To: Amanda Caputo
Subject: 12 Highland Place subdivision

Hi,my name is Paul Lyons. I live at 7 Highland Place. I will not be able to attend the planning board meeting on Tuesday January 10th. I would like this email to be forwarded to each of the board members and also be part of Tuesday's minutes.
This is a letter I wrote to Gary and his associates upon invitation to a meeting. I believe the meeting was November 30, 2022.

I'm responding to the letter I received about the propose meeting discussing the project at 12 Highland Pl.
I talked to Gary last week, and as far as I can tell Gary is not willing to change anything about the project. I believe our big beef is the amount of houses that are proposed.
I've already talked to a few of the neighbors and we don't see the point of the meeting. We already know what you're proposing and we're against it as the proposal stands and that's not going to change. We're against the five lots and Gary isn't willing to move off of that.
On a personal note and I'm gonna be blunt. I think this meeting is insulting. I believe this is a stunt so you can show the board how you tried to reach out to us and tried to work with us. When in fact you're not willing to change anything, please tell me that I'm wrong. When the board asked you to work with the neighborhood I'm not sure that's what they meant.
Thank you
Paul Lyons

I did go to the meeting and it was exactly what I thought, a stunt. I asked Gary if he would eliminate one of the lots. His answer was no I wouldn't make any money. We all know that is not true. It's about the amount of money he would make. I asked them why are we having this meeting and their answer was because the board asked us to. Not because they were willing to work with the neighborhood.
I also think this comes down to opinion, the boards opinion. I believe you have the option and the right to change this using city code(Environment Quality Code 107-4(6) in part it states existing patterns of population concentration,distribution or growth an existing community or neighborhood character.
I think it's a lot to ask for this neighborhood to absorb this many houses. Remember, you also approve the subdivision on 67 Grove St., which is also within 250 feet of our houses.
Does this proposal make Beacon a better place to live ? Does it make our neighborhood better, I think not. I would like to believe this isn't about dollars and cents. but I'm afraid that's exactly what this about. I just hope the board is thinking about our quality of life. I beg you not to approve the subdivision as it stands.
Thank you
Paul Lyons

Sent from my iPhone

Amanda Caputo

From: Jodi McCredo <jodimccredo@gmail.com>
Sent: Thursday, January 5, 2023 5:27 PM
To: Amanda Caputo
Subject: Fwd: 12 Highland

Hi Amanda,

Happy new year! Please send this to the planning board before the next meeting. Thanks!

Hello Planning Board members both returning and new, and happy new year!

I am resending this email that was sent back in November because it still applies and we still deserve answers to these questions. I looked at the new proposal and it still doesn't address the basic issue that this is simply too many homes for this space with this frontage. Changing the plan from a private road back to three driveways still leaves the issues of parking, maintenance and neighbor issues resulting from shared responsibility, space concerns for 5 garbage cans and 5 recycling cans having to come out into the same area every week, and the potential and likely damages caused by building 4 houses on a parcel that couldn't handle an attempt at a sidewalk without damaging surrounding property before the city had to abandon the project. It leaves all of the issues that the entire neighborhood had with the previous plan, plus adds back the original problems stated by the city engineer when this version of the plan was first presented.

I noticed that the developer's Beacon Ladder Truck Maneuvering Exhibit shows three cars parked on the east side of Highland showing that there is no need to remove parking on the east side of the street, but the glaringly obvious issue here is that this exhibit shows no cars parked on the west side of Highland. There are often cars parked on both sides of this street on a normal day currently, so why submit an exhibit showing four additional homes and somehow fewer cars? Obviously this won't work with cars parked on both sides of the street, which was the original issue. Removing parking from the west side of the street just means that the new residents will have to park on the east side and, especially with the recent suggestion of removing parking from the extremely unsafe hill on Grove, that leaves the rest of us with no place to park. There are currently 3-4 cars parked at my house on any given day, and next year my daughter will be driving and we'll have 5. The assumption that each of these large homes will only have two cars parked in their driveways in 2023 is simply unrealistic. I understand what the requirements are, but again they don't account for two additional houses with no frontage and therefore no street parking for those homes.

I also wanted to reiterate my comment about lot sizes in our area since it did come up at the last planning board meeting that the lot sizes fit with the existing community since it is an R1-5 district.

I wanted to take this opportunity to remind you that this property is actually split between R1-5 and R1-10, and that the vast majority of Highland Place, in fact every other property on the street except for one other, is entirely in R1-10 zoning. I would not have brought this up but since lot sizes were mentioned at the last meeting I thought I should clarify because what was said at the meeting is not representative of what our neighborhood actually looks like.

Proposed lots 1 and lot 2 at 12 Highland are currently laid out at .12 acres each. The following are the lot sizes of the properties surrounding it.

11 Highland Pl. (directly across the street) - .22 acres
22 Highland Pl. - (adjacent property) .21 acres
21 Highland Pl - (directly across from 22 HIghland) .23 acres

24 Grove Street - (directly across the street) .478 acres
23 Anderson - (adjacent property) .21 acres
25 Anderson - .41 acres
16 Spruce Street - .39 acres

More importantly, when we say that this doesn't fit with the character of our community, **lot sizes are not the issue.** As I have mentioned in all of my public comments, this would be a very different situation if the proposed 5 lot subdivision actually had the frontage and access that it was claiming. **If this property were twice as long and half as wide and could line up all of the houses side by side, or if there were houses actually fronting and accessing Anderson and/or Grove, it would not be creating this unsafe and unjustified burden on Highland Place.** It is out of character to create a five lot private road on such a small street, and I am not aware of anything like what is proposed here existing anywhere in Beacon. It would also be out of character to allow easements for shared driveways to cram in multiple flag properties. The comprehensive plan specifically states that the city should "preserve the existing density and settlement pattern of established neighborhoods." Private roads and shared driveways do exactly the opposite. It simply isn't right to put the entire burden of a project this size on a street as small as Highland, and there is nothing in our code that says that a developer has the right to a private road, easements, or shared driveways just to make this work for the developer at the detriment of the community.

We keep hearing that this proposal fits with the zoning, but that is a very narrow view of our many zoning laws. Yes, the physical space is there, but the frontage is not. It does not preserve the existing density, it will have a negative impact on the environment, safety, traffic, parking, and settlement pattern, and it is not good for the convenience, health, safety and welfare of the City. There is absolutely no reason that this developer can't build up the three lots that he has the frontage for and still make a huge profit. He is choosing instead to maximize his profits at the expense of the community. This proposal is not right for this lot. The city council cannot spot zone problematic properties such as this one. Planning boards exist to catch these specific exceptions and put a stop to them before the harm is done. Please protect our community.

Thank you,

Jodi McCredo
11 Highland Place

---------- Forwarded message ---------
From: **Jodi McCredo** <jodimccredo@gmail.com>
Date: Tue, Nov 22, 2022 at 5:31 PM
Subject: 12 Highland
To: <jGunn@beaconny.gov>, <jReynolds@beaconny.gov>, Kevin Byrne <kByrne@beaconny.gov>, <kQuiana@beaconny.gov>, <lWarner@beaconny.gov>, <rwilliams@beaconny.gov>

Last email for today - I promise. I also want to sincerely thank all of you for your time and commitment to our city. I know that this is a tough job and I truly appreciate the work that you do and the due diligence that you put in.
These were my comments from the last planning board meeting that were not yet addressed. I am asking that each of these issues be addressed before any decisions are made.
Thank you and I hope you all have a great Thanksgiving!

- The zoning that would allow for five houses to exist on this property assumes that this property has the required frontage and access on both Grove and Anderson to not put the entire burden of this project on Highland Street. If that were the case, I would be home watching a movie with my kids tonight and wondering what my new neighbors will be like. Unfortunately, this property obviously has no real frontage or access on either of those streets or a private road that will destroy the quality of life on Highland Place would never have been suggested. It is this kind of exception to the rule that makes planning boards so important. There is no clear reason to approve an entire community to be built off of a tiny street, but if you do it will set a dangerous precedent for developers to do the same all over this city.

- 20 years ago the City of Beacon realized that the hill on Grove was a dangerous problem and that's why the attempt was made to build a sidewalk which, as you know, failed miserably and required the building of a wall along Grove to mitigate the damage and effectively removing actual access to the property on that side. At the time, the owners of 12 HIghland were told that due to this their land was not buildable. They were very open about this when they sold their property to the applicant, who replied that it wasn't a problem because he was simply buying the house to give to his son. **What changed since then that this property that couldn't handle a sidewalk can suddenly support 4 new houses?**

- Highland Street is 22 feet wide in this area and the average SUV is 5 ½ feet and the average pickup truck is 6 ½ feet. With an SUV and a pickup truck, both common in our neighborhood, parked on either side that leaves less than 10 feet in between, in good weather. In the winter with snow on both sides left from the plows which would reduce that space to 8 feet, or less since people generally leave enough room to open their doors. The average garbage truck is 8 feet wide. **How will our garbage trucks get down our block all winter?** City of Beacon fire engines are 8 ½ feet wide. How will they get down our block, much less be able to turn onto this private road if necessary? On garbage day, how will this work with 5 garbage cans and 5 recycling cans all sitting out along our street. Pickup in our neighborhood is on Friday, which means that often the cans sit out all weekend when people go away. What will this look like on our block when our children are playing, riding their bikes, and walking their dogs on our streets with no sidewalks and no room to safely move around all of these newly created hazards?

- Our city code clearly states

195-22
Private roads.
A.
General requirements.
(5)

The right-of-way reserved for all private roads shall not be less than 50 feet in width; rights-of-way for cul-de-sacs shall not be less than 120 feet in diameter. If the private road contains utilities that are to be publicly owned and maintained, then an easement shall be granted to the City of Beacon over the entire right-of-way reserved for the private road.
Highland Place is less than half of the required right of way width.
The code also states
“Where a subdivision borders an existing street which is narrower than the recommended right-of-way width as specified for such streets in this chapter, or where a subdivision borders an existing street planned for widening or realignment in such a way as to require the use of some land in the subdivision, the Planning Board may require the subdivision plat to show such areas which shall be marked "Reserved for Street Realignment (or Widening) Purposes." Land reserved for such purposes may not be counted in satisfying yard or area requirements of the Zoning chapter.”

- 6. The City Planning Board **shall not** approve the use of a private road in any subdivision if it is determined that the use of said private road is not consistent with the health, safety, welfare and convenience of the proposed users of the road and the people of the City in general.

This is OBVIOUSLY not consistent with our health, safety, welfare and convenience and therefore, according to our code, should not be approved.

- The applicant states that the impact on traffic is minimal due and would not create a significant increase in traffic. That is simply not rational when we are talking about doubling the amount of homes, and therefore cars, on this street. The applicant cites the Institute of Transportation Engineers, who on their own website state that their objectives include traffic calming for “increasing the quality of life;
- incorporating the preferences and requirements of the people using the area (e.g., working, playing, residing) along the street(s), or at intersection(s);
- creating safe and attractive streets”

This project accomplishes the exact opposite of that objective by making this street overcrowded and unsafe for playing.

- The applicant states that The Proposed Action is generally consistent with the Comprehensive Plan. I know that some of you were on the comprehensive plan committee, thank you for that. As you obviously know, the plan states as one of its goals “preserve the existing density and settlement pattern of established neighborhoods”. Creating maximum density on a lot by creating a private community off of a private road is certainly not preserving the existing density and settlement pattern of our established neighborhood.

- The applicant states that The Proposed Action is generally consistent with the City Zoning Code. I've already stated why that is false in regards to the private road. In addition, our code states

§ 195-20
Minimum requirements; general standards.
A.
The Planning Board, in considering an application for the subdivision of land, shall be guided by the following considerations and standards, which standards shall be deemed to be the minimum requirements for the convenience, health, safety and welfare of the City.
#4 in these standards is "Frontage on improved streets. -The area proposed to be subdivided shall have frontage on **and direct access to** a street duly placed on the Official Map, and if such street is not improved to the satisfaction of the Planning Board, such improvements shall be a condition of subdivision approval." Highland Place would have to be significantly improved and widened for this subdivision to be safe, convenient, and good for the welfare of the people who live there.

- 5 flag lots off of one road are not only difficult to sell and horrible for surrounding property value, they also create countless issues between neighbors. How much of the city's time and resources will be taken up when one homeowner doesn't have the money on hand for required maintenance, or when they disagree on plowing services. The city has approved subdivisions in the past that ended up costing the taxpayers money including at least one from this very developer that included storm sewers that were supposed to be private and maintained by homeowners before drainage issues forced the city to take ownership on our dime. Once these properties are sold, **whose responsibility is it to make sure that the maintenance agreement is enforced?** How do we know that homeowners will have funds available for surprise repairs? What happens when a sewer clogs and requires a neighbor's driveway to be dug up? **Who is responsible for arbitrating all of these issues as they arise?**

- How realistic is the area of disturbance designated for this project? Due to its size and location, it should require a stormwater pollution prevention plan. Because of the steep slopes surrounding the site, failure to keep Stormwater Pollution Prevention Plan measures inspected could result in a torrent of mud laden water flowing out of the site and into the catch basins and Fishkill Creek. I want to add to this that the representative for the project said that this is not necessary because it is not a commercial property but I have not been able to find anything in our code that distinguishes between commercial and residential for this issue. The same representative, when asked how many total trees would need to be cut down, shrugged and offhandedly said 25-30 (going from memory, might be slightly off on the number) and brush and bushes. This is a significant disturbance to this area and it is important to know exactly how much of a disturbance there will be and how it

will affect the surrounding homes, especially in light of all of the damage that was already done by the attempt at the sidewalk.

- This is a significant project and the true impacts from it won't be known for years. We do know that it isn't consistent with the comprehensive plan. We do know that it is not consistent with our zoning code. We do know that this project creates significant safety concerns both for the residents of the immediate area and the children walking to Forrestal Elementary School. We do know that this project creates an alarming precedent for small communities to pop up all over Beacon, creating dangerous and unnecessary congestion in our neighborhoods. We do know that this project will significantly decrease the quality of life for all residents in the area. We do know that more than 200 of your neighbors have signed a petition urging you not to allow this to happen.

WIth all of the safety and environmental impacts that I have stated our city code makes it clear that this planning board has not only the authority but an obligation to say no to this project. Your community is watching, and we are counting on you.

****

Again, I appreciate your time and attention to this matter and I hope you all have a great Thanksgiving. On a personal note, mine will mostly be spent hoping that it isn't the last one I get to have in the home that I love, but will have to leave if this city allows everything I love about where I live to be destroyed. Many of my neighbors have been so upset about this that they can't even bring themselves to attend the planning board meetings anymore because they can't sleep for days after. The decision that you make here will affect a lot of lives, and despite what has been said at previous meetings this is entirely your decision. The zoning does not give the right to flag properties, private roads, shared driveways, and easements. These are all at the discretion of the planning board and after everything that you have heard publically and a petition signed by more than 200 community members (https://chng.it/cdhZgF5P) you are more than justified in saying no to this. Our community is in your hands.

Thank you,

Jodi McCredo

John Clarke Planning and Design jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: January 6, 2023
Re: **12 Highland Place Subdivision**

I have reviewed a December 27, 2022 cover letter and a November 29, 2022 response letter from Hudson Land Design, a December 27, 2022 Fire Truck Maneuvering Exhibit, and an 8-sheet Subdivision Plan set, dated December 27, 2022.

Proposal

The applicant is proposing to subdivide a 1.07-arcre parcel with one existing house into five lots for the construction of four additional houses. Proposed Lot 1 has 5,533 square feet, Lot 2 has 5,300 square feet, Lot 3 has 11,508 square feet, Lot 4 with the existing house has 13,561 square feet, and Lot 5 has 10,766 square feet. The parcel is split by the R1-5 and R1-10 zoning districts.

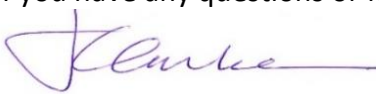
Comments and Recommendations

1. It was determined that the measurement to the proposed private road right-of-way submitted in previous months made several lots non-compliant in terms of lot area. The current shared driveway plan addresses that zoning compliance issue.

2. The Schedule of Regulations table on Sheet 4 has the Lot 4 front yard listed as 30.2 feet, which is slightly different than the setback dimension shown on the lot layout.

3. The Sheet 8 tree planting note should be corrected to omit reference to a specific tree species, given the variety of trees being proposed.

If you have any questions or need additional information, please feel free to contact me.



John Clarke, Beacon Planning Consultant

c: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
Arthur R. Tully, P.E., City Engineer
John Russo, P.E., City Engineer
Daniel G. Koehler, P.E., Project Engineer

Amanda Caputo

Subject: FW: 12 Highland

From: Jodi McCredo <jodimccredo@gmail.com>
Sent: Monday, January 9, 2023 6:55 PM
To: Amanda Caputo <acaputo@beaconny.gov>
Subject: Re: 12 Highland

Please forward this to the planning board as well -

Upon looking closer at the submitted rendering for fire truck access I also noticed that, aside from the fact that it shows no cars parked on the west side of the street, it has the cars on the east side practically on my front lawn. According to this rendering, the only way for a fire truck to maneuver down either of those driveways the only cars parked on Highland would have to have two tires on my grass. I suppose that's what they're expecting the new occupants of these five homes to do. This would make it impossible for access in the winter when the snow plows leave at least 6 inches of snow on each side of the road. The engineer for this project commented that it would be safer for the fire trucks to stay out on Highland by the hydrant. That doesn't work when a family is trapped on the second floor of a house fire in winter with no means of getting down due to the ladders being unable to reach the home.

This project does not work in this space.

Jodi McCredo

Amanda Caputo

From: anrejoth@aol.com
Sent: Tuesday, January 10, 2023 11:24 AM
To: Amanda Caputo
Subject: Joseph Highland Place Subdivision Public Hearing

Follow Up Flag: Follow up
Flag Status: Flagged

Planning Board Members:

I am physically incapable of attending the public hearing due to a fall. I requests my comments be read at tonight's meeting.

Beacon is a CITY not a village or hamlet. The Planning Board should not allow a private drive to serve a new subdivision. Mr. Joseph should construct a new public street.. This would allow homes to be placed with usable frontage on a street. It would also eliminate the need for access and utility easements which are never a good plan for a new subdivision.
Homes on the new street would have an address on the street,,receive mail delivery, have garbage collection and be able to accommodate emergency vehicles. The Gabion Wall would then be at the back of the lots.

Lot next to my house:

Rock is present 2" under ground. What is Mr. Joseph's plan for the large outcropping of rock above ground which covers a large portion of the lot.

Anne Thomas
22 Highland Place

Agency Use Only [If applicable]

Project: 12 Highland Place

Date: 1-10-23

Short Environmental Assessment Form
Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.
Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	☑	☐
2. Will the proposed action result in a change in the use or intensity of use of land?	☑	☐
3. Will the proposed action impair the character or quality of the existing community?	☑	☐
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	☑	☐
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	☑	☐
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	☑	☐
7. Will the proposed action impact existing: a. public / private water supplies?	☑	☐
b. public / private wastewater treatment utilities?	☑	☐
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	☑	☐
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	☑	☐
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☑	☐
11. Will the proposed action create a hazard to environmental resources or human health?	☑	☐

PRINT FORM

Agency Use Only [If applicable]

Project: 12 Highland Place

Date: 1-10-23

Short Environmental Assessment Form
Part 3 Determination of Significance

For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

See attached.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

☑ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

City of Beacon Planning Board	1-10-23
Name of Lead Agency	Date
John Gunn	Chairman
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT FORM

ATTACHMENT TO
NEGATIVE DECLARATION
REASONS SUPPORTING DETERMINATION

APPLICATION FOR SUBDIVISION APPROVAL
FOR 12 HIGHLAND PLACE

Parcel No. 6054-31-306777

CONCLUSIONS

This Part 3 analysis has been prepared to address all relevant areas of environmental concern as identified in the review by the Planning Board. This Part 3 analysis will discuss and explain the analysis of the potential impacts, and why a particular element of the proposed action will not result in a significant adverse environmental impact. Such analysis is appropriately set forth in Part 3, even if the potential impact was identified as "none" or "small." Based upon a review of Parts 1 and 2 of the Short Environmental Assessment Form (EAF) and all other application materials that were submitted in support of the Proposed Action, along with reports from City staff and consultants, information from involved and interested agencies, and information from the public, the Planning Board, acting as Lead Agency, provides the following rationale for its SEQRA Determination.

Project Description:

The Proposed Action is the subdivision of a 1.07-acre parcel with one existing house into five lots for the construction of four additional houses. Proposed Lot 1 will have 5,533 square feet, Lot 2 has 5,300 square feet, Lot 3 has 11,508 square feet, Lot 4 with the existing house has 13,561 square feet, and Parcel 5 has 10,766 square feet. The property is located at 12 Highland Place in the R1-5 and R1-10 Zoning Districts on property known and designated on the Tax Map as Parcel No. 6054-31-306777 (the "Property").

The Proposed Action is an Unlisted action. The Planning Board circulated its Notice of Intent to act as Lead Agency and received no objections.

Summary of Rationale for Negative Declaration

The Proposed Action will not result in any significant adverse impacts on the environment. In summary:

- **Impact on Land: The Proposed Action will not have a significant adverse environmental impact as a result of any physical change to the project site.**

  The project site is located in the R1-5 and R1-10 Zoning Districts and is currently improved with a single family dwelling. The parent parcel is bisected by the zoning boundary one with the southern portion of the parcel located in the R1-5 district and the northern portion located in the R1-10 district.

The Proposed Action would involve the subdivision of the existing lot and the construction of 4 new single-family dwellings with typical grading and site work associated with such construction. There are no wetlands, water bodies or other environmentally sensitive areas on the Property. The west side of the Property has a steep slope but no disturbance is proposed on the slope. The subdivision plat has been designed so that each of the 4 lots on which the new single-family dwellings will be located wholly within either the R1-5 district or the R1-10 district. Lots 1, 2 and 3 are proposed to be wholly within the R1-5 district and Lot 5 is proposed to be located wholly within the R1-10 district. Lot 4 will retain the existing single-family dwelling, garage and shed and will be bisected by the zoning boundary line so that the southern 15 feet of the lot is located in the R1-5 district and the balance of the lot is located in the R1-10 district.

The depth to bedrock is approximately 2 feet where the house on Lot 5 is proposed. As a result, the proposed single-family dwelling on Lot 5 has been adjusted to be constructed as a slab on grade. Based on the results of the Deep Test Holes performed on August 25, 2022 it is not expected that a significant amount of rock will be encountered during construction of the proposed dwelling on Lots 3. To further mitigate against the potential for hitting rock on Lots 1 and 2, the proposed grade on those lots has been raised but there remains a potential that 2-3 feet of rock may be encountered during construction of the dwellings on Lots 1 and 2 (Lot 3 was already at an elevation that would not require rock removal based on the soil testing). On Sheet 4 of 7, Note 16 states that, "If rock is encountered during excavation, it shall be removed by mechanical means. No blasting shall be permitted without approval from the Building Department. Lot 5 dwelling shall be construction on slab." No on-site rock processing is proposed, nor shall it be permitted on-site. Further, the Applicant has agreed to not engage in any rock removal on the weekends.

The Proposed Action will not have a significant adverse environmental impact as a result of physical changes to the Property.

- **Impact on Geological Features: The Proposed Action will not have a significant adverse environmental impact on any unique or unusual land forms on the site.**

There are no unique geological features on the Property.

- **Impacts on Surface Water and Groundwater: The Proposed Action will not have a significant adverse environmental impact on surface or groundwater quality or quantity.**

Residential land uses are generally not associated with the discharge of contaminants into aquifers or other groundwater sources. There will be no bulk storage of petroleum or chemicals on-site. The Project includes the implementation of erosion and sediment controls during construction and connections to the City's storm sewer. Stormwater runoff from the buildings and other impervious surfaces will be directed toward the existing and proposed stormwater catch basins on Highland Place and Grove Street. The proposed drainage infrastructure includes three catch basins and culvert piping. The proposed drainage system collects runoff from the proposed impervious and impervious surfaces of the subdivision, where in existing conditions, runoff from the paved driveway drains toward Highland Place uncontrolled. Two of the catch basins are proposed along Highland Place that will improve drainage conditions

along the west side of Highland Place, as well as collect the runoff generated by the new driveways preventing runoff from entering the road. The storm drainage infrastructure in the vicinity of the Project was replaced in 2002 with additional catch basins and larger pipe sizes. The system is adequately sized to accept stormwater from the Project. Impervious surfaces proposed for the Project have been reduced from that which was originally proposed.

The Project does not include or require wastewater discharged to groundwater.

The Project will be connected to the existing public water distribution and sanitary sewer systems. Adequate water supply and sewer capacity exist for these additional flows.

For these reasons, the Proposed Action will not result in any significant adverse impact to surface or groundwater quality or quantity.

- **Impact on Flooding: The Proposed Action will not have a significant adverse environmental impact on or alter drainage flows or patterns, or surface water runoff.**

  According to the Short EAF the Property is not located within a regulated flood plain and there are no wetlands. The Project includes the implementation of erosion and sediment controls, plus post-construction discharge of stormwater drainage into the City's storm sewer. For these reasons and those stated above, the Proposed Action will not have a significant adverse impact on drainage flows or patterns, or surface water runoff.

Impact on Air: The Proposed Action will not have a significant adverse environmental impact on air quality.

Construction activities associated with grading and excavation could result in temporary air quality impacts. Air quality in the area, however, is not expected to be significantly impacted by project construction because the construction activities will be temporary and confined to the Property. Construction vehicles will emit certain air pollutants through engine exhaust. There is also the potential for fugitive dust to be created during the construction period from site preparation activities, including removal of existing impervious surfaces and vegetation, and site grading. Fugitive dust emissions will be mitigated by wetting and stabilizing soils to suppress dust generation. Other dust suppression methods will include the spraying of soil stockpiles during dry periods and covering trucks carrying solid and other dry materials. These unavoidable short term impacts to air quality will cease upon project completion. Construction will be conducted in accordance with all applicable federal, state and local codes. It is anticipated that nearby properties will experience temporary fugitive dust and an elevation in vehicle emissions from construction vehicles throughout occasional periods during construction of the proposed project. This is a temporary, construction-related, unavoidable impact that is not significant.

For these reasons, the Proposed Action will not have a significant adverse environmental impact on air quality.

- **Impact on Plants and Animals: The Proposed Action will not have a significant adverse environmental impact on flora or fauna.**

The EAF indicates that the Property may contain or serve as habitat for the Indiana Bat. Pursuant to NYSDEC recommendations, removal of trees greater than four (4) inches in diameter at the Project Site will take place between October 1 and March 31 during the bat hibernation period to avoid the removal of trees which may be utilized by Indiana Bats as roosting trees.

As originally proposed, 24 regulated trees (8" dbh or greater) were to be removed from the site. Through revisions to the plans, the number of trees to be removed was reduced from 24 to 6. In addition, 23 trees (shade and evergreen) are proposed to be planted including several along Highland Place and Grove Street.

For these reasons, the Proposed Action will not have a significant adverse environmental impact on flora or fauna.

- **Impact on Agricultural Resources: The Proposed Action will not have a significant adverse environmental impact on agricultural resources.**

There are no agricultural resources in the vicinity of the Property.

- **Impact on Aesthetic Resources: The Proposed Action will not have a significant adverse environmental impact on aesthetic resources.**

The Proposed Action will not result in the obstruction, elimination or significant screening of one or more officially designated scenic views. The Proposed Action is visible from the surrounding streets but no designated scenic views are impacted.

For these reasons, the Proposed Action will not have a significant adverse environmental impact on aesthetic resources.

- **Impact on Historic and Archeological Resources: The Proposed Action will not have a significant adverse environmental impact on historic or archeological resources.**

The subdivision of the Property in an existing residential neighborhood will not have a significant adverse impact on historic or archeological resources. There are no historic resources in the immediate vicinity of the Site and the nature of the area as a developed suburban neighborhood makes impacts to archeological resources unlikely and not significant.

For these reasons, the Proposed Action will not have a significant adverse impact on historic or agricultural resources.

- **Impact on Open Space and Recreation: The Proposed Action will not have a significant adverse environmental impact on open space and recreation.**

The area of the Proposed Action is not designated as open space by the City of Beacon. The Proposed Action will not result in the loss of a current or future recreational resource, eliminate significant open space, or result in loss of an area now used informally by the

community as an open space resource. A recreation set aside or fee may be required which will be used for the future need for park and recreational opportunities in the City of Beacon.

For these reasons, the Proposed Action will not have a significant adverse impact on open space and recreation.

- **Impact on Critical Environmental Areas: The Proposed Action will not have a significant adverse environmental impact on Critical Environmental Areas.**

The Proposed Action is not located in a Critical Environmental Area.

- **Impact on Transportation: The Proposed Action will not have a significant adverse environmental impact on transportation.**

The construction of 4 new single family homes will not result in a significant adverse traffic impact. Based on the Institute of Transportation Engineers, the Project would generate 5 vehicle trips in the AM peak hour and 5-6 trips in the PM peak hour. Generally, a project generating fewer than 100 trips in a peak hour is not considered to be a significant increase in traffic.

Furthermore, a City of Beacon ladder truck tracking template exhibit submitted by the Applicant demonstrates that the ladder truck can enter and exit the shared driveway while vehicles are parked on the east side of Highland Place.

- **Impact on Energy: The Proposed Action will not have a significant adverse environmental impact on energy.**

The existing energy infrastructure will adequately serve the additional demand associated with four additional single family homes. The Proposed Action does not require a new, or an upgrade to any existing substation. For these reasons, the Proposed Action will not have a significant adverse impact on energy.

- **Impact on Noise, Odor and Light: The Proposed Action will not have a significant adverse environmental impact as a result of objectionable odors, noise or light.**

The Proposed Action is not anticipated to generate any noxious odors. Outdoor lighting will be consistent with typical residential lighting. Noise impacts associated with the proposed Project will be limited to temporary impacts generated during construction. Temporary noise impacts associated with construction will be mitigated by limiting construction activities to the hours between 7:00 a.m. and 7:00 p.m. If rock is encountered during excavation, it shall be removed by mechanical means. No blasting shall be permitted without approval from the Building Department and no on-site rock processing shall be permitted. Such activities shall be performed in accordance with all applicable state and local requirements. In addition, there will be no significant noise impacts post-construction.

For these reasons, the Proposed Action will not have a significant adverse environmental impact as a result of objectionable odors, noise or light.

- **Impact on Human Health: The Proposed Action will not have a significant adverse environmental impact on human health from exposure to new or existing sources of contaminants.**

  Residential land uses are generally not associated with significant adverse impacts on human health from exposure to new or existing sources of contaminants. The Short EAF indicates that the site is within 2,000 feet of the remediation site known as C314118 in the NYSDEC Environmental Remediation database. Site C314118 is classified as requiring no further remediation action at this time.

  For these reasons, the Proposed Action will not have a significant adverse environmental impact on human health from exposure to new or existing sources of contaminants.

- **Consistency with Community Plans and Community Character: The Proposed Action is not inconsistent with adopted community plans and community character.**

  The Proposed Action is generally consistent with the Comprehensive Plan and City Zoning Code, will not have a significant impact on municipal services, and is consistent with the character of the existing neighborhood. The proposed lots comply with the minimum lot sizes for the respective zoning districts in which the lots are located. Further, fire truck access diagrams were reviewed by the Planning Board to confirm fire and emergency access to each of the proposed lots. The proposed development is consistent with the prevailing development patterns for the area surrounding the property.

Based upon this information and the information in the Short Environmental Assessment Form and all other documents and information in the record, the Planning Board finds that the Proposed Action will not have any significant adverse impacts upon the environment. This Negative Declaration indicates that no environmental impact statement need be prepared and that the SEQRA process is complete.

Adopted: January 10, 2023
Beacon, New York

Motion by _____, seconded by _____:

Kevin Byrne	Voting:	Len Warner	Voting: EXCUSED
David Jensen	Voting:	Randall Williams	Voting:
Karen Quiana	Voting:	John Gunn, Chairman	Voting:
Jill Reynolds	Voting:		

Approved/Denied:

KEANE & BEANE P.C.
ATTORNEYS AT LAW

- **Main Office**
  445 Hamilton Avenue
  White Plains, NY 10601
  Phone 914.946.4777
  Fax 914.946.6868
- **Mid-Hudson Office**
  200 Westage Business Center
  Fishkill, NY 12524
  Phone 845.896.0120
- **New York City Office**
  99 Madison Avenue
  New York, NY 10016
  Phone 646.794.5747

MEMORANDUM

TO: **City of Beacon Planning Board**

FROM: **Jennifer L. Gray, Esq.**
Keane & Beane, P.C.

RE: **12 Highland Place –**
Relevant City Code Provisions for Lot and Driveway Design

DATE: **January 9, 2023**

The following list of provisions from the City of Beacon Code is provided to assist the Planning Board in its review and analysis of the proposed 5-lot subdivision at 12 Highland Place. Concerns regarding code-compliant frontage and access to the proposed lots has been raised in public comments. Accordingly, the following list focuses on frontage and access to the proposed lots and is not intended to be an exhaustive list of all provisions of the City of Beacon Code that may be relevant to the pending application.

1. **Section 195-20.B** – "**Frontage on improved streets**. The area proposed to be subdivided shall have frontage on and direct access to a street duly placed on the Official Map, and if such street is not improved to the satisfaction of the Planning Board, such improvements shall be a condition of subdivision approval."

Each of the proposed lots has *frontage* on a street placed on the Official Map. Each of the proposed lots also has *direct access* to a street placed on the Official Map. "Direct access" includes access via easement over common driveway. Section 195-20.B of the City Code is similar to NYS General City Law § 36 which requires a proposed structure to have access to a suitably improved street on an Official Map prior to the issuance of a building permit. For purposes of compliance with that statute, Courts have held that access via easement is acceptable if the physical access to a mapped street over the easement area is sufficient for emergency access.

Lot 1 – Frontage on Highland Place and Grove Street; Direct access to Highland Place
Lot 2 – Frontage on Grove Street; Direct access to Highland Place via easement over common driveway
Lot 3 – Frontage on Grove Street and Anderson Street; Direct access to Highland Place via easement over common driveway

Lot 4 – Frontage on Anderson Street; Direct access to Highland Place via easement over common driveway
Lot 5 – Frontage on Highland Place; Direct access on Highland Place

2. **Section 195-24.A** – "**Lot and driveway arrangement**. The lot arrangement shall be such that there will be no foreseeable difficulty, for reasons of topography or other conditions, in securing building permits to build on all lots in compliance with the Zoning chapter, and the County Health Department regulations, and in providing driveway access to buildings on such lots from an approved street or private road in compliance with the driveway requirements of the Zoning chapter. Subject to the provision of access easements and a maintenance declaration or agreement suitable to the City Attorney, which documents shall be filed with the deeds to the subject lots, the Planning Board may approve the use of a common driveway for a maximum of two lots, if the Board determines that the use of said common driveway is more beneficial to the safety, welfare or convenience of the proposed users of the driveway and/or the people of the City in general than would be the case with separate driveways."

All proposed lots and driveways must be laid out in a way that will not cause difficulties in securing a building permit. Difficulties could arise in terms of physical conditions of the site, compliance with the zoning code, compliance with County Health Department requirements, or driveway access from "an approved street or private road" in compliance with the City's driveway requirements. Regarding driveway access, Section 195-24.A specifically authorizes the Planning Board to allow the use of common driveways for up to two lots if the Board determines the common driveway is "*more beneficial to the safety, welfare or convenience of the proposed users of the driveway and/or the people of the City in general than would be the case with separate driveways.*"

Common driveway access from Highland Place (an approved street) is proposed for Lots 2, 3 and 4.

3. **Section 195-24.I – Common Driveways.**

"(1) The developer and/or owner shall design and construct all common driveways within the limits of the right-of-way with sufficient sight distance and with a grade of no more than one-half inch per foot from the curbline or edge of roadway pavement to a point 20 feet from the curbline or edge of roadway pavement. The minimum width of the driveway pavement at the curbline or street line shall be 16 feet. At locations where individual driveways branch off from the common driveway, these driveways shall be a minimum of 10 feet in width.
(2) All common driveways shall be graded to the satisfaction of the Street Superintendent and City Engineer prior to the surfacing of such driveways.

(3) The common driveway surface shall be constructed of a dust-free surface material and shall be six inches in depth.
(4) Common driveways shall be permitted in residential districts when approved by the Planning Board. In determining the appropriateness of a common driveway, the Planning Board shall consider whether it will minimize adverse environmental effects on the site, the length of the road, overall density, proposed offset of driveways, road grades and center line radius, setback requirements, and all other generally accepted planning standards."

Common driveways are subject to approval by the Planning Board. In determining whether to approve a common driveway, the Planning Board "*shall consider whether it will minimize adverse environmental effects on the site, the length of the road, overall density, proposed offset of driveways, road grades and center line radius, setback requirements, and all other generally accepted planning standards*."

4. **223-12.G – "Required street frontage**. No building permit shall be issued for any structure unless the lot upon which that structure is to be built has the required frontage on a street, private road or highway, as defined herein, which frontage, *except in the case of a common driveway*, provides the actual access to such structure, and which street, private road or highway shall have been suitably improved to the satisfaction of the Planning Board or a performance bond posted therefor as provided in § 36 of the General City Law (Chapter 21 of the Consolidated Laws) of New York State." (*emphasis added*)

Each lot must have frontage on a street, private road or highway. Except in the case of a lot accessed by a common driveway, that frontage must provide the actual access to the proposed structure. Lots 2, 3 and 4 have frontage on a street, but that frontage does not provide actual access to the structure (Lot 4 – Anderson Street; Lot 3 – Anderson Street and Grove Street; Lot 2 – Grove Street). Instead, pursuant to the exception permitted by Section 223-12.G, actual access is derived over a common driveway to Highland Place.

Amanda Caputo

From: Tom Cerchiara <fattiretom@gmail.com>
Sent: Tuesday, January 10, 2023 3:06 PM
To: Amanda Caputo
Subject: 12 Highland Place Comment

My name is Tom Cerchiara, and I reside at 10 Tillott Street here in Beacon. I will not be able to attend the January 10 public hearing, so please add this email a part of the record.

Dear Chairman Gunn, and members of the planning board. I do not have any concerns about the proposed subdivision at 12 Highland Place as currently designed so long as it complies with the City of Beacon zoning code.

Thanks you,

Tom Cerchiara

10 Tillott Street

Beacon, NY 12508

Amanda Caputo

From: Jodi McCredo <jodimccredo@gmail.com>
Sent: Tuesday, January 10, 2023 3:50 PM
To: Amanda Caputo
Subject: One more
Attachments: Kids walking to school on Grove.pdf; Real parking with fire truck acess attempt.jpg

Hi Amanda,

This was sent to me from a Highland Place resident who hasn't come to any meetings but wanted this submitted.

The photo shows how unsafe it is for children trying to walk to school this morning and having to wait for cars to pass them on Grove because there is no sidewalk and little room for two way traffic even without any cars parked.

The other sheet shows what the applicant's submission for the fire truck accessibility would realistically look like the way cars would actually park. This doesn't account for snow or the garbage and recycling cans that would be at the ends of the driveways.

Thank you.

City of Beacon Planning Board Agenda
01/10/2023

Title:

Continue review of application for Concept Plan Approval, Beacon HIP Lofts and Studios, Front Street, submitted by Beacon HIP Lofts LLC and referred to Planning Board by City Council

ATTACHMENTS

221223_TIS_Final.pdf

Beacon HIP Lofts and Studios_1A Report.pdf

City of Beacon_HIP HLD Response Letter_2022-1227.pdf

HIP LOFTS & STUDIOS RESIDENTIAL DEVELOPMENT CALCULATION PLAN_3_221227.pdf

L221227_Comment Response Letter_Beacon Lofts & Studios.pdf

Sheet 1_Site Plan_Planning Board Submission_3_221227.pdf

Sheet 2_Existing Conditions_Survey_Planning Board Submission_3_221227.pdf

Sheet 3_Building Plans_Planning Board Submission_3_221227.pdf

Sheet 4_Landscape Plan_Planning Board Submission_3_221227.pdf

Sheet 5_GRADING & UTILITY PLAN_3_221227.pdf

SHEET 6_-EROSION & SEDIMENT CONTROL PLAN_3_221227.pdf

SHEET 7_SITE DETAILS_3_221227.pdf

SHEET 8_STORM DETAILS_3_221227.pdf

SHEET 9_WATER DETAILS_3_221227.pdf

SHEET 10_SEWER DETAILS_3_221227.pdf

SHEET 11_E&SC DETAILS_3_221227.pdf

Engineer review Beacon HIP Lofts & Studios 01-05-23.pdf

Creighton Manning Review Beacon HIP Lofts & Studios_Rev 1.pdf

Planner Review PB HIP Lofts Concept Plan 1.6.23.pdf

Colliers
Engineering
& Design

Traffic Impact Study

December 23, 2022

Beacon HIP Lofts & Studio/Beacon Self Storage
Front Street at Mill Street
City of Beacon, Dutchess County, New York

Prepared for:

Beacon Lofts & Storage
16 Squadron Boulevard
New City, NY 10956

Prepared by:



Richard G. D'Andrea, P.E., PTOE
New York Professional Engineer
License No. 090241

Colliers Engineering & Design
400 Columbus Avenue
Suite 180E
Valhalla New York 10595
Main: 877 627 3772
Colliersengineering.com

Project No. 21005078B

Colliers Engineering & Design

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I. Introduction

A. Project Description and Location

(Figure No. 1)

This report has been prepared to evaluate the potential traffic impacts associated with the proposed Beacon HIP Lofts & Studio development ("the Project"), which is planned to be developed on the property located on the south side of Front Street west of Mill Street/Mason Circle in the City of Beacon, Dutchess County, New York. The site is proposed to consist of 28 Loft style residential units and 30,000 sq. ft. of artist studio space in a live-work type environment similar to the existing Beacon HIP Lofts located on the east side of Mason Circle. As shown on Figure No. 1, access to the development is proposed via an access connection from Mason Circle and another access connection to Front Street. The Project is proposed to be provided 95 parking spaces, which satisfies the minimum number of required parking spaces as specified by the City of Beacon Code.

In addition to the HIP Lofts expansion, we are aware of the potential for a future self-storage development at the east end of Front Street that could include up to 70,000 sq. ft. of self-storage space to be developed by the Beacon HIP Lofts Applicant/Owner. This potential development has also been analyzed as part of the study.

A Design Year of 2025 has been utilized in completing the traffic analysis in order to evaluate future traffic conditions associated with this proposed development.

B. Scope of Study

This study has been prepared to identify current and future traffic operating conditions on the surrounding roadway network and to assess the potential traffic impacts of the Project.

All available traffic count data for the study area intersections were obtained from previous reports prepared by our office. These data were supplemented with new traffic counts collected by representatives of Colliers Engineering & Design CT, P.C. These data were also compared to count data obtained from the New York State Department of Transportation (NYSDOT). Together these data were utilized to establish the 2022 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site.

The 2022 Existing Traffic Volumes were then projected to the 2025 Design Year to take into account background traffic growth. In addition, traffic for other specific potential or approved developments in the area were estimated and then added to the Projected Traffic Volumes to obtain the 2025 No-Build Traffic Volumes.

Estimates were then made of the potential traffic that the proposed HIP Lofts & Studio development would generate during each of the peak hours (see Section III-C for further discussion). The resulting site generated traffic volumes were then added to the roadway system and combined with the 2025 No-Build Traffic Volumes resulting in the 2025 Build Traffic Volumes.

The Existing, No-Build and Build Traffic Volumes were then compared to roadway capacities based on the procedures from the Highway Capacity Manual to determine existing and future Levels of Service and operating conditions. Recommendations for improvements were made where necessary to serve the existing and/or future traffic volumes.

In addition, a separate analysis was conducted to analyze the future impacts of the potential Beacon Self-Storage facility. This analysis followed similar procedures as outlined above.

II. Existing Roadway and Traffic Descriptions

A. Description of Existing Roadways

As shown on Figure No. 1, the proposed residential development will be accessed from both Mason Circle and Front Street via two separate driveway connections. The following is a brief description of the roadways located within the study area. In addition, Section III-F provides a further description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service and any recommended improvements for each of the study area intersections. Appendix "D" contains copies of the capacity analyses which indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. NYS Route 52 (Fishkill Avenue)

NYS Route 52 (Fishkill Avenue) is classified as an urban minor arterial roadway under jurisdiction of the City of Beacon. It traverses in a generally northeast/southwest direction throughout the City of Beacon and into the Town of Fishkill. In the immediate vicinity of the site, NYS Route 52 is a two-lane roadway with paved shoulders and curbing. There is a sidewalk present along the northwest side of the roadway with a striped crosswalk crossing both Route 52 and Mill Street at the intersection, which is currently controlled by a flashing traffic signal. The posted speed limit in this area is 30 MPH and there is no on-street parking permitted along the roadway.

It should also be noted that the City of Beacon has an ongoing project for the Rehabilitation of Teller Avenue and Fishkill Avenue (PIN 8757.80 & PIN 8757.30) that is currently under development. Based on the May 2022 Final Plans for this project, the improvements to Fishkill Avenue in the immediate vicinity of Mill Street will include new curbing, sidewalk, drainage improvements, roadway resurfacing and restriping, and new roadway signage. The City project also includes the removal of the existing flashing traffic signal at the Mill Street intersection and installation of a new three-color actuated traffic signal.

2. Mill Street/Mason Circle

Mill Street is a two-lane local roadway under the jurisdiction of the City of Beacon. The roadway traverses in a generally north/south direction and has a total roadway width of approximately 26 feet. It begins at its intersection with NYS Route 52 intersects with Lydia Drive and Front Street at unsignalized intersections and continues south of Front Street as Mason Circle where it provides access to the existing Beacon HIP Lofts & Storage Development. There are sidewalks present on both sides of the roadway as well as on-street parking provided on the west side of the roadway. The sidewalks terminate north of Lydia Drive approximately 85 ft. south of Fishkill Avenue. Although not posted, the speed limit on Mill Street is 30 MPH. It should be noted that the pavement along Mill Street, which was previously in very poor condition, has recently been resurfaced by the owners of the Beacon HIP Lofts, to support the existing developments as well as future development proposals indicated herein.

3. **Front Street**

   Front Street is a local roadway under the jurisdiction of the City of Beacon that traverses in a generally northeast/southwest direction and has a total roadway width of approximately 18 ft. west of Mill Street and 22 ft. east of Mill Street feet. The roadway has no centerline striping or sidewalks present. The speed limit on Front Street in 30 MPH.

B. 2022 Existing Traffic Volumes

(Figures No. 2, 3 and 4, Appendix F)

Manual traffic counts were collected by representatives of Colliers Engineering & Design CT, P.C. on Thursday October 27 and Saturday October 29, 2022, for the Weekday AM, PM and Saturday Peak Hours to determine the existing traffic volume conditions at the study area intersections. These traffic counts were then compared to traffic volume data from previous traffic studies conducted by our office and to traffic volume data available from the New York State Department of Transportation (NYSDOT) for the NYS Route 52 corridor. Based on this information, the 2022 Existing Traffic Volumes were established for the Weekday Peak AM and Weekday Peak PM Hours at the following study area intersections.

- NYS Route 52 (Fishkill Avenue) and Mill Street
- Mill Street and Front Street

Based upon a review of the traffic counts, the peak hours were generally identified as follows:

- Weekday Peak AM Hour 7:45 AM – 8:45 AM
- Weekday Peak PM Hour 4:15 PM – 5:15 PM
- Saturday Peak Hour 12:15 PM – 1:15 PM

The resulting Year 2022 Existing Traffic Volumes are shown on Figures No. 2, 3 and 4 contained in Appendix A for the Weekday Peak AM Hour, Weekday Peak PM and Saturday Peak Hours, respectively. The relevant traffic volume data is also included in Appendix F for reference.

III. Evaluation of Future Traffic Conditions

A. 2025 No-Build Traffic Volumes

(Figure No. 5 through 13)

The 2022 Existing Traffic Volumes were increased by a growth factor of 1.0% per year to account for general background growth resulting in the 2025 Projected Traffic Volumes which are shown on Figures No. 5, 6 and 7 for each of the Peak Hours. In addition, traffic from other specific approved or potential developments in the area including the currently under construction Building 16 of the existing and previously approved Beacon HIP Lofts development, the approved 25 Townsend Street development and the proposed Beacon Views and 393-397 Conklin Street developments were identified. The resulting traffic volumes associated with these other developments are shown on Figures No. 8, 9 and 10 for each of the peak hours. These volumes were added to the 2025 Projected Traffic Volumes resulting in the 2025 No-Build Traffic Volumes which are shown on Figures No. 11, 12 and 13 for the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours, respectively.

It should be noted that the traffic volumes associated with the Building 16 of the HIP Lofts development has been based on the existing observed traffic generation at the existing HIP Lofts development as observed during the peak hours traffic counts. Further discussion of the existing traffic generation and traffic generation rates is provided in Section III.B below. The existing traffic generation rates for the Beacon HIP Lofts development were applied to the 87 proposed loft units in Building 16 and applied to the roadway network based on similar arrival and departure distributions to those discussed in Section III.C below.

B. Site Generated Traffic Volumes

(Table No. 1 and 1A)

Estimates of the amount of traffic to be generated by the proposed development during each of the peak hours were developed based on information published by the Institute of Transportation Engineers (ITE) as contained in the report entitled "Trip Generation", 11th Edition, 2021, based on Land Use Category 220 – Multifamily Housing (Low-Rise) and Land Use Category 822 – Strip Retail Plaza. The ITE data does not provide a comparable land use to the proposed Artist Studio space proposed as part of the development, therefore the Strip Retail Plaza land use was utilized as the most similar land use for which data is available. The use of the Strip Retail Plaza land use likely provides an overly conservative analysis of future operating conditions with the Project. Table No. 1 summarizes the trip generation rates and corresponding site generated traffic volumes for the Weekday Peak AM, Weekday Peak PM Hours and Saturday Peak Hours. It should also be noted that the Project is anticipated to provide a live-work environment which will likely reduce the overall traffic generation, however no credit has been taken for this in the analysis providing a somewhat conservative analysis of future traffic conditions.

While the ITE data has been utilized to estimate the traffic to be generated by the Project, it is anticipated that the actual traffic generation will be similar to the existing Beacon HIP Lofts facility on a per residential unit basis. The existing Beacon Hip Lofts traffic generation during each of the peak hours identified is summarized in Table No. 1A. The traffic generation volumes are based on the total traffic volumes to and from Mason Circle and to and from Front Street east of Mill Street during each of the peak hours. The associated traffic generation rates based on the existing 85 occupied residential units are also identified in the table. These rates were then applied to the proposed 28-unit development which indicates significantly lower traffic generation volumes than identified by the ITE traffic generation estimates contained in Table No. 1. As noted above these traffic generation rates were also applied to the currently under construction 87 units contained in Building 16 included as part of the 2025 No-Build Traffic Volumes

C. Arrival/Departure Distribution

(Figures No. 14 and 15)

It was necessary to establish arrival and departure distributions to assign the site generated traffic volumes to the surrounding roadway network. Based on a review of the Existing Traffic Volumes and existing travel patterns to and from the existing HIP Lofts development, the distributions were identified. The anticipated arrival and departure distributions are shown on Figures No. 14 and 15, respectively.

D. 2025 Build Conditions Traffic Volumes

(Figures No. 16 through 21)

The site generated traffic volumes were assigned to the roadway network based on the arrival and departure distributions referenced above. The resulting site generated traffic volumes for each of the study area intersections are shown on Figures No. 16, 17 and 18 for each of the peak hours, respectively. The site generated traffic volumes were then added to the 2025 No-Build Traffic Volumes to obtain the 2025 Build Traffic Volumes. The resulting 2025 Build Traffic Volumes are shown on Figures No. 19, 20 and 21 for the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours, respectively.

E. Description of Analysis Procedures

(Appendix C)

It was necessary to perform capacity analyses in order to determine existing and future traffic operating conditions at the study area intersections. The following is a brief description of the analysis method utilized in this report:

1. Signalized Intersection Capacity Analysis

The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the Highway Capacity Manual, 6th Edition, dated 2016, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Levels of Service. A Level of Service “A” represents the best condition and a

Level of Service "F" represents the worst condition. A Level of Service "C" is generally used as a design standard while a Level of Service "D" is acceptable during peak periods. A Level of Service "E" represents an operation near capacity. In order to identify an intersection's Level of Service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection.

2. **Unsignalized Intersection Capacity Analysis**

   The unsignalized intersection capacity analysis method utilized in this report was also performed in accordance with the procedures described in the Highway Capacity Manual, 6th Edition, dated 2016. The procedure is based on total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. The average total delay for any particular critical movement is a function of the service rate or capacity of the approach and the degree of saturation. In order to identify the Level of Service, the average amount of vehicle delay is computed for each critical movement to the intersection.

Additional information concerning signalized and unsignalized Levels of Service can be found in Appendix C of this report.

F. Results of Analysis

(Table No. 2)

Capacity analyses which take into consideration appropriate truck percentages, pedestrian activity, roadway grades and other factors were performed at the study area intersections utilizing the procedures described above to determine the Levels of Service and average vehicle delays. Summarized below are a description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service as well as any recommended improvements.

Table No. 2 summarizes the results of the capacity analysis for the 2022 Existing, 2025 No-Build and 2025 Build Conditions. Appendix D contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. **NYS Route 52 (Fishkill Avenue) and Mill Street**

   NYS Route 52 (Fishkill Avenue) and Mill Street intersect at a "T" type intersection controlled by a flashing traffic signal with the Mill Street approach under stop control. All approaches consist of one lane. In the vicinity of the site there is a railroad that runs parallel with NYS Route 52 and crosses over Mill Street at its intersection with NYS Route 52. This rail line crossing creates a short vertical curve immediately south of Route 52 that may cause vertical clearance issues for larger vehicles and a sign is posted at the intersection indicating this. In addition, there is a sidewalk along the northwest side of Route 52 with a striped pedestrian crossing of Route 52 on the east side of Mill Street and a striped pedestrian crossing of Mill Street. There are no existing sidewalks on the Mill Street side of the intersection. The traffic count data indicated minimal existing pedestrian activity at the intersection.

Capacity analysis was conducted for this intersection utilizing the 2022 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at a Level of Service "C" for vehicles exiting Mill Street during each of the peak hours.

The capacity analysis was recomputed using the 2025 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to continue to experience a Level of Service "C" or better during the AM Peak Hours under future conditions. During the Weekday PM and Saturday Peak hours, the intersection would operate at a Level of Service "F" future conditions with the Project under its current configuration.

As previously indicated the City of Beacon has an ongoing project for the Rehabilitation of Teller Avenue and Fishkill Avenue (PIN 8757.80 & PIN 8757.30) that is currently under development. This project includes removal of the existing flashing traffic signal at the Mill Street intersection and installation of a new three-color actuated traffic signal. In addition, sidewalks will be constructed along the northwest side of Route 52 with a new striped crossing of the roadway and a new pedestrian curb ramp on the Mill Street side of the roadway. The plan does not include any pedestrian activated signals for the crossing or a restriping of the existing pedestrian crossing of Mill Street.

The capacity analysis was recomputed with the anticipated signalization of the intersection as proposed under the City's project. The capacity analysis results summarized in Table No. 2 indicate that the intersection will operate at an overall Level of Service "A" under all conditions and peak hours with a Level of Service "B" experienced for vehicles exiting Mill Street.

2. **Mill Street and Front Street**

Mill Street and Front Street intersect at a "T" type intersection. All approaches consist of one lane and there currently is no posted traffic control at the intersection. For the purposes of the analysis, this intersection was analyzed as an All-Way stop intersection.

Capacity analysis was conducted for this intersection utilizing the 2022 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "A" during each of the Peak Hours.

The capacity analysis was recomputed using the 2025 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to continue to experience a Level of Service "A" during each of the peak hours.

It is recommended that all "Stop" signs (MUTCD Sign No. R1-1) and solid white stop bars be installed on all approaches to this intersection as part of the Project.

G. Analysis of Potential Future Self-Storage Facility

(Figures No. 22 through 29, Table No. 1B & 2B, Appendix E)

As previously indicated, in addition to the proposed Beacon HIP Lofts & Studio project, we are aware that there is the potential for an additional future self-storage facility to be construction along the south side of Front Street immediately east of the existing Beacon Self-Storage facility. This self-storage facility would be an extension of the existing facility and would include up to 70,000 sq. ft. of self-storage space. A separate analysis of the potential traffic impacts of this potential development along with the proposed Beacon HIP Lofts & Studio project has been conducted following similar procedures to those described above.

Estimates of the amount of traffic to be generated by the potential self-storage facility were developed based on ITE data for Land Use Category 151 – Mini-Warehouse. Table No. 1B, contained in Appendix E, summarizes the trip generation rates and corresponding site generated traffic volumes for the Weekday Peak AM, Weekday Peak PM Hours and Saturday Peak Hours associated with the self-storage facility.

The site generated traffic volumes were assigned to the roadway network based on similar arrival and departure distributions referenced above. The specific arrival and departure distributions for the self-storage facility are shown on Figures No. 22 and 23, respectively, contained in Appendix E. The resulting site generated traffic volumes associated with the self-storage facility for each of the study area intersections are shown on Figures No. 24, 25 and 26 for each of the peak hours, respectively. The site generated traffic volumes were then added to the 2025 Build Traffic Volumes previously identified to obtain the 2025 Build Traffic Volumes with Self-Storage. The resulting 2025 Build Traffic Volumes with Self-Storage are shown on Figures No. 27, 28 and 29 for the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours, respectively.

The capacity analyses were recomputed for each of the study area intersections under the 2025 Build with Self-Storage conditions. These capacity analysis results are summarized in Table No. 2B, contained in Appendix E, and indicate that the intersections will operate at similar Levels of Service to those previously identified indicating that the Self-Storage facility will not have any significant additional impact on the study area intersection and traffic operations in the vicinity of the Site.

IV. Beacon HIP Lofts & Studio Parking

(Table P-1 & P-2)

The Project is proposed to be served by 95 total parking spaces based on the initial Site Plans. The City of Beacon Zoning Code Section 223-26.F requires parking to be provided at a ratio of 1 space for each dwelling unit, plus 1/4 space for each bedroom for the proposed Loft residential units and at a rate of 1 space for each 500 square feet of gross floor space for the Artist Studio Space. Based on the City of Beacon Code the Project is required to provide 35 parking Spaces for the 28 Loft residential units and 60 parking spaces for the 30,000 sq. ft. of Artist Studio space for a total of 95 required parking spaces.

While the Project proposes to provide parking that satisfies the minimum required number of parking spaces based on the City of Beacon Zoning Code, it is likely that this will result in the site providing an excess of parking on the Site since residential and commercial uses typically have differing time periods of peak parking demand. Therefore, a shared parking analysis was conducted to determine the actual anticipated parking demand for the Project. This analysis takes into account the hourly variations in parking demand throughout the day for each use to determine the total Project parking demand on an hourly basis for both a typical Weekday and a typical Saturday. The shared parking analyses, which are provide in Tables P-1 and P-2, contained in Appendix B, utilize the City of Beacon Code parking ratios along with hourly parking demand data as provide by the Institute of Transportation Engineers in their publication entitled **Parking Generation Manual, 5th Edition**. The hourly parking demand data is based on ITE Land Use Category 220 – Multifamily Housing (Low-Rise) and Land Use Category 820 – Shopping Center. Similar to the traffic generation estimates previously discussed, the ITE data does not provide a comparable land use to the proposed Artist Studio space proposed as part of the development, therefore the Shopping Center land use was utilized as the most similar land use for which data is available.

The shared parking analyses indicate that the Project will result in a Weekday peak parking demand of 76 parking spaces and a Saturday Peak Parking Demand of 84 parking spaces. It is likely that the peak parking demand will actually be somewhat lower than identified given the anticipated live-work nature of the development which is not necessarily accounted for in the shared parking analysis. Based on this analysis it is recommended that 15 parking spaces be land-banked such that they area for the spaces is set aside but the spaces not paved as part of the initial construction and if future demand after occupancy dictates the need for those spaces they could be paved at a later date. This land-banking of parking spaces is subject to the review and approval of the City of Beacon Planning Board.

V. Summary and Conclusion

Based on the above analysis, similar Levels of Service and delays will be experienced at the area intersections under the future No-Build and future Build Conditions. Thus, the HIP Lofts & Studio development traffic is not expected to cause any significant impact in overall operation. It is recommended that the following items be considered for implementation by the Applicant as part of the Project:

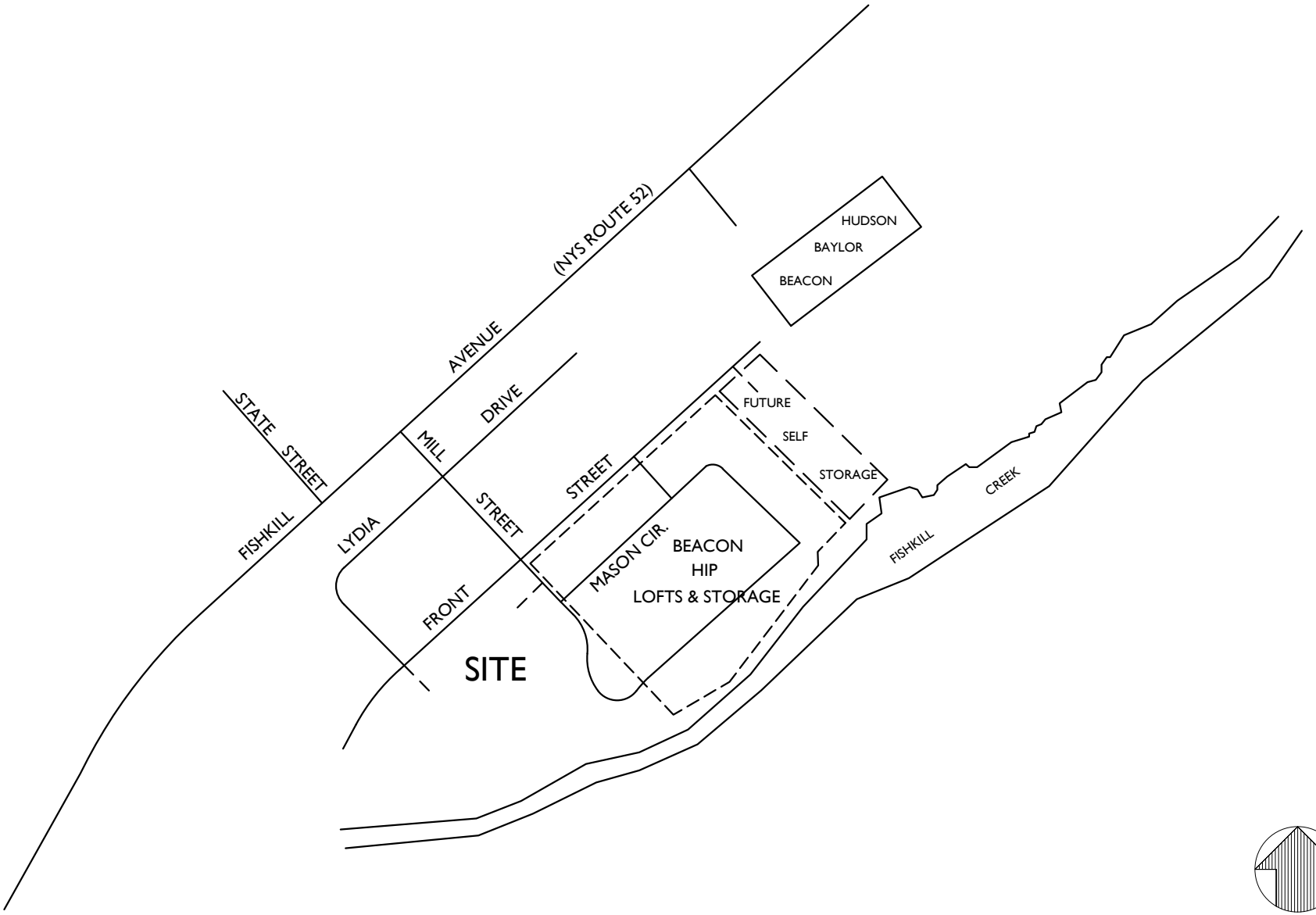
- Install "Stop" signs (MUTCD Sign No. R1-1) and solid white stop bars on all approaches at the intersection of Mill Street and Front Street.
- Install "Stop" signs (MUTCD Sign No. R1-1) and solid white stop bars on the Lydia Street approaches at its intersection will Mill Street

These items should be implemented for both the Beacon HIP Lofts and potential future Self-Storage facility.

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Traffic Impact Study

Appendix A | Traffic Figures



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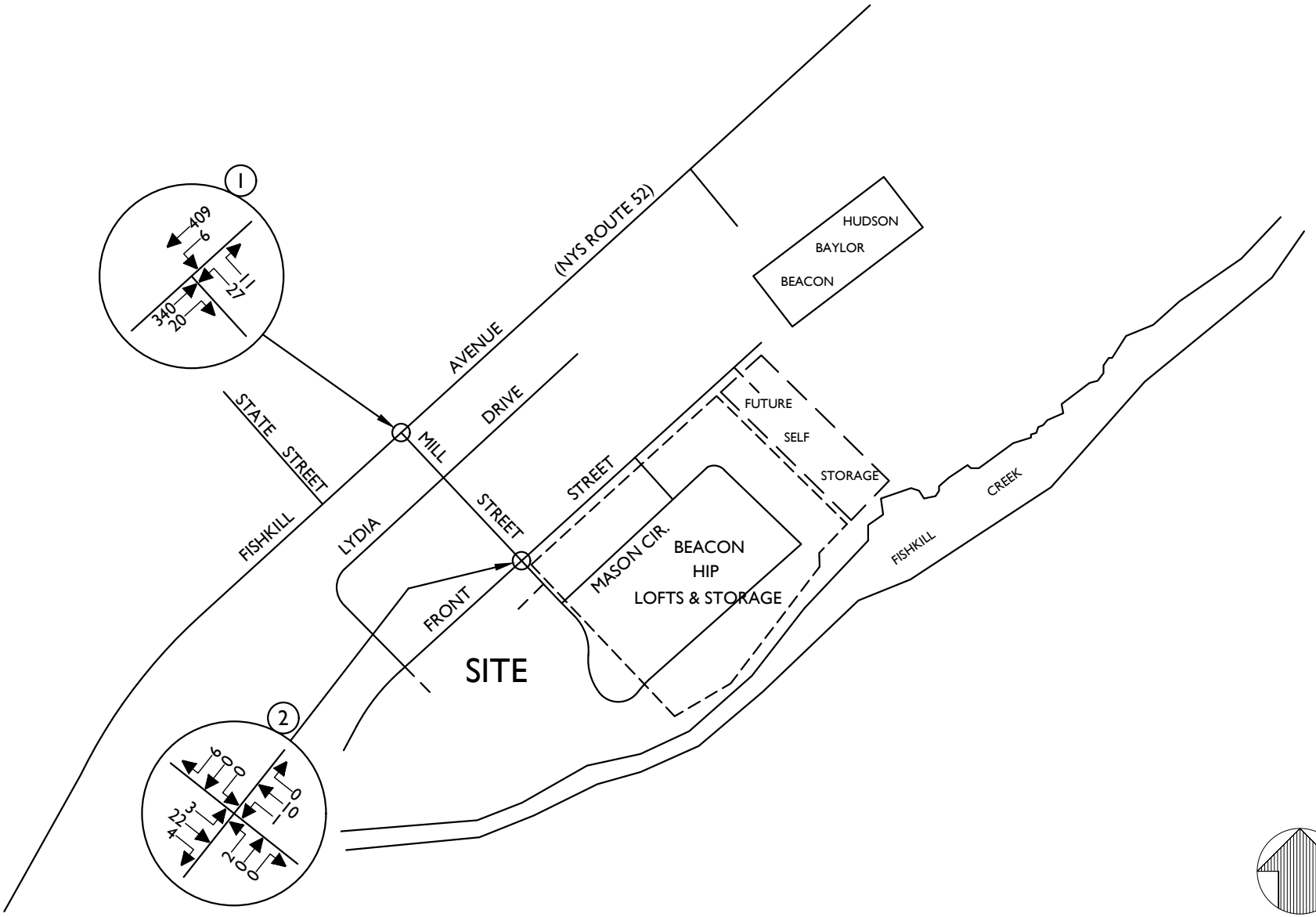
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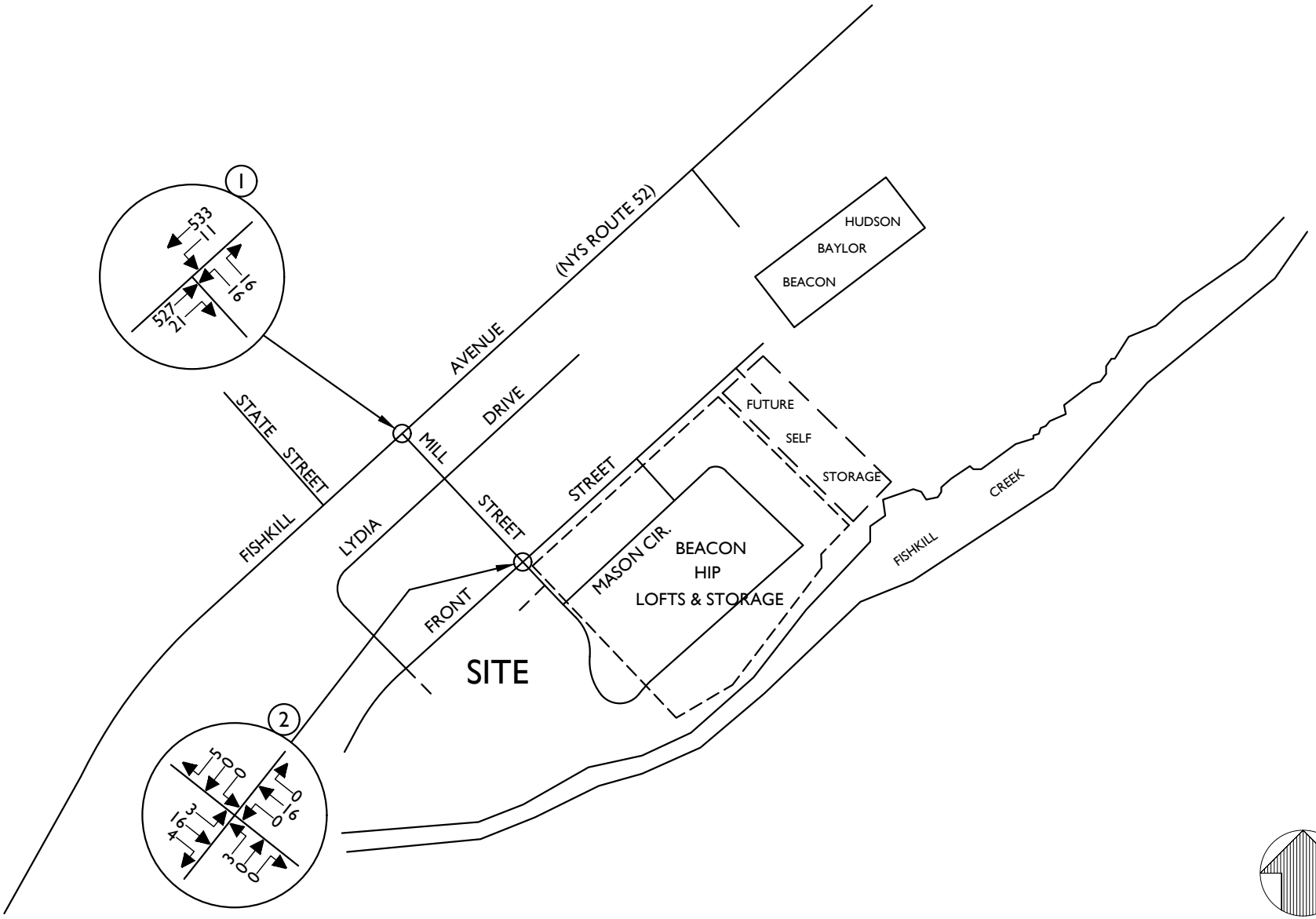
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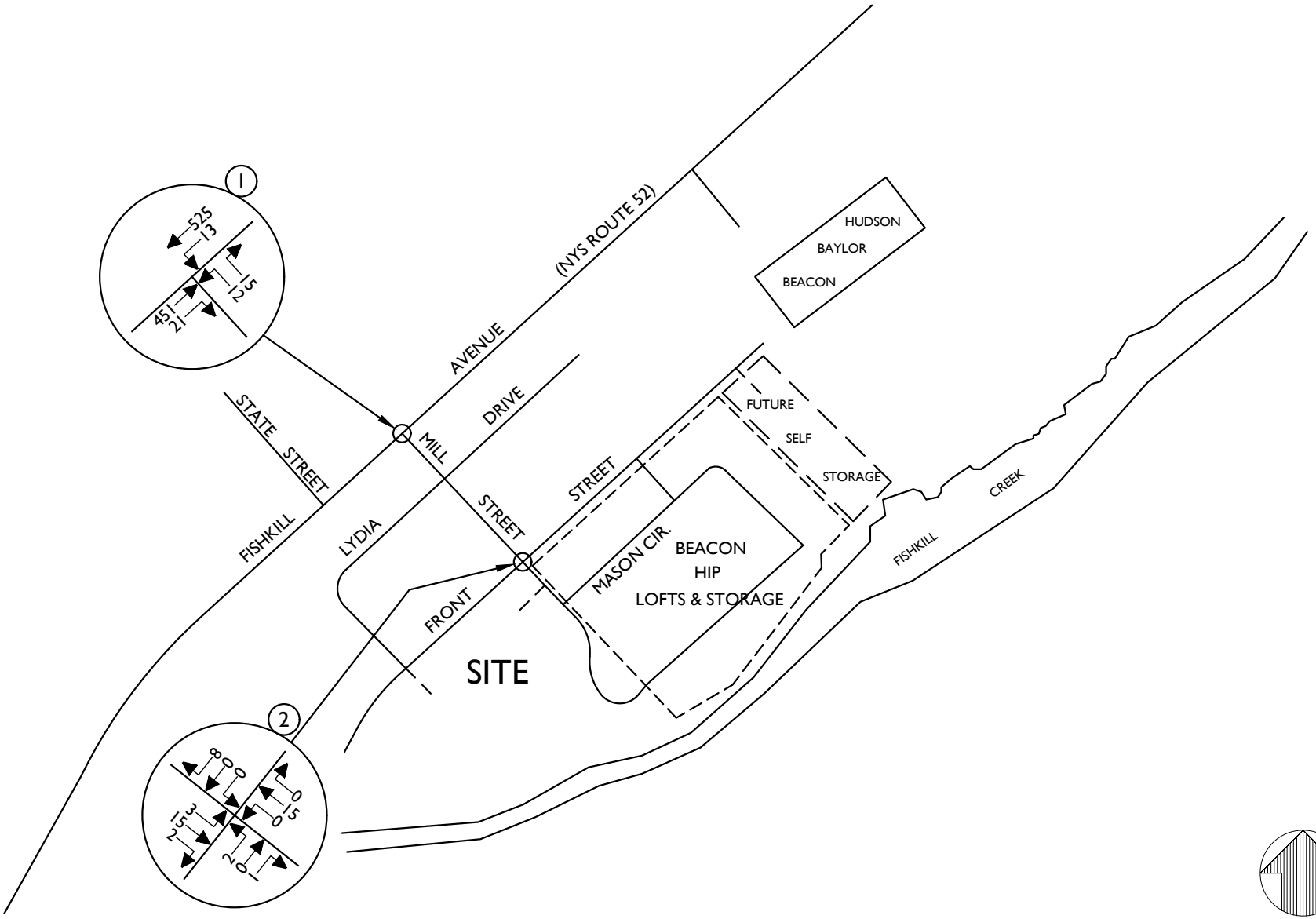
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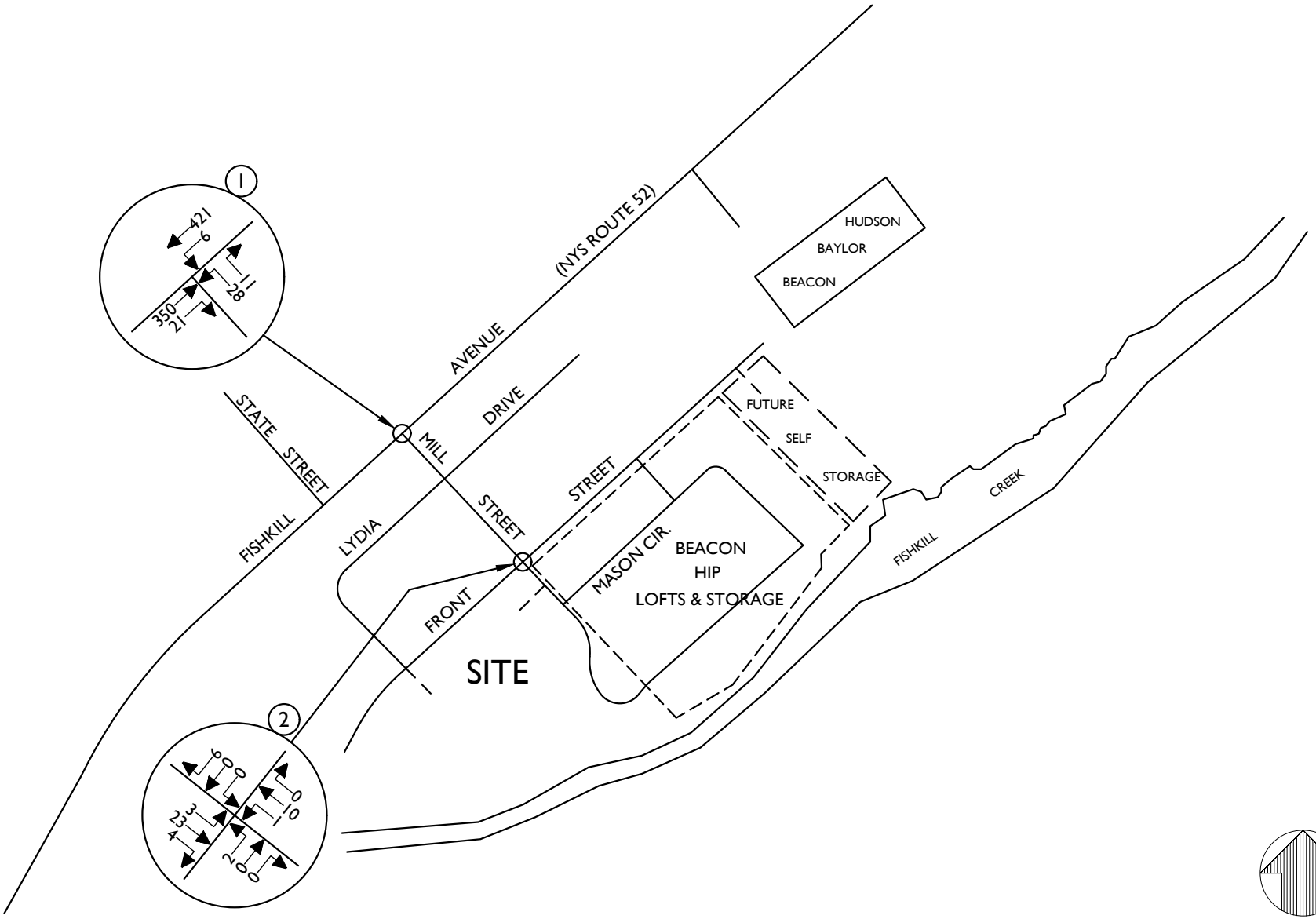
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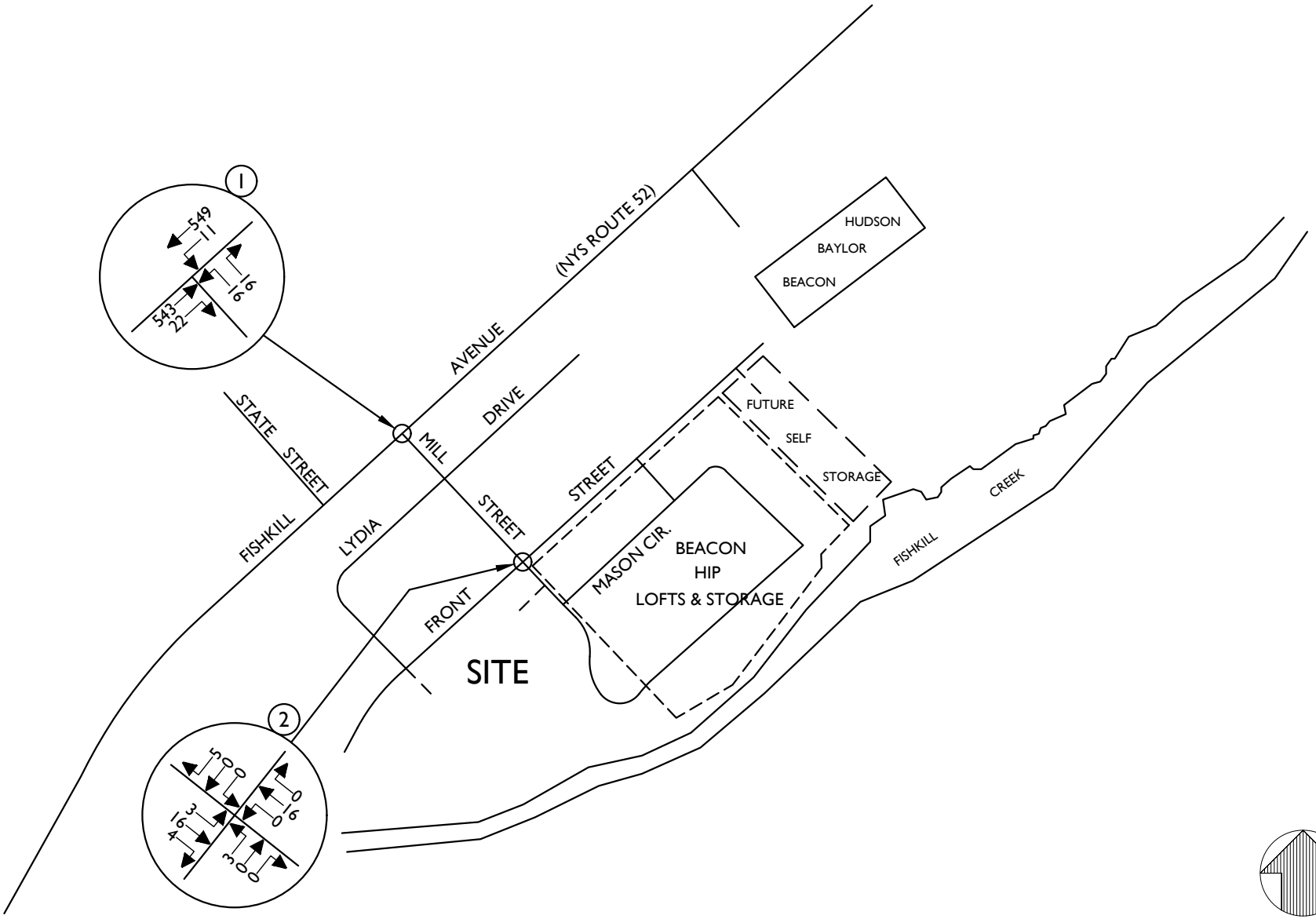
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2025 PROJECTED TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER: 5

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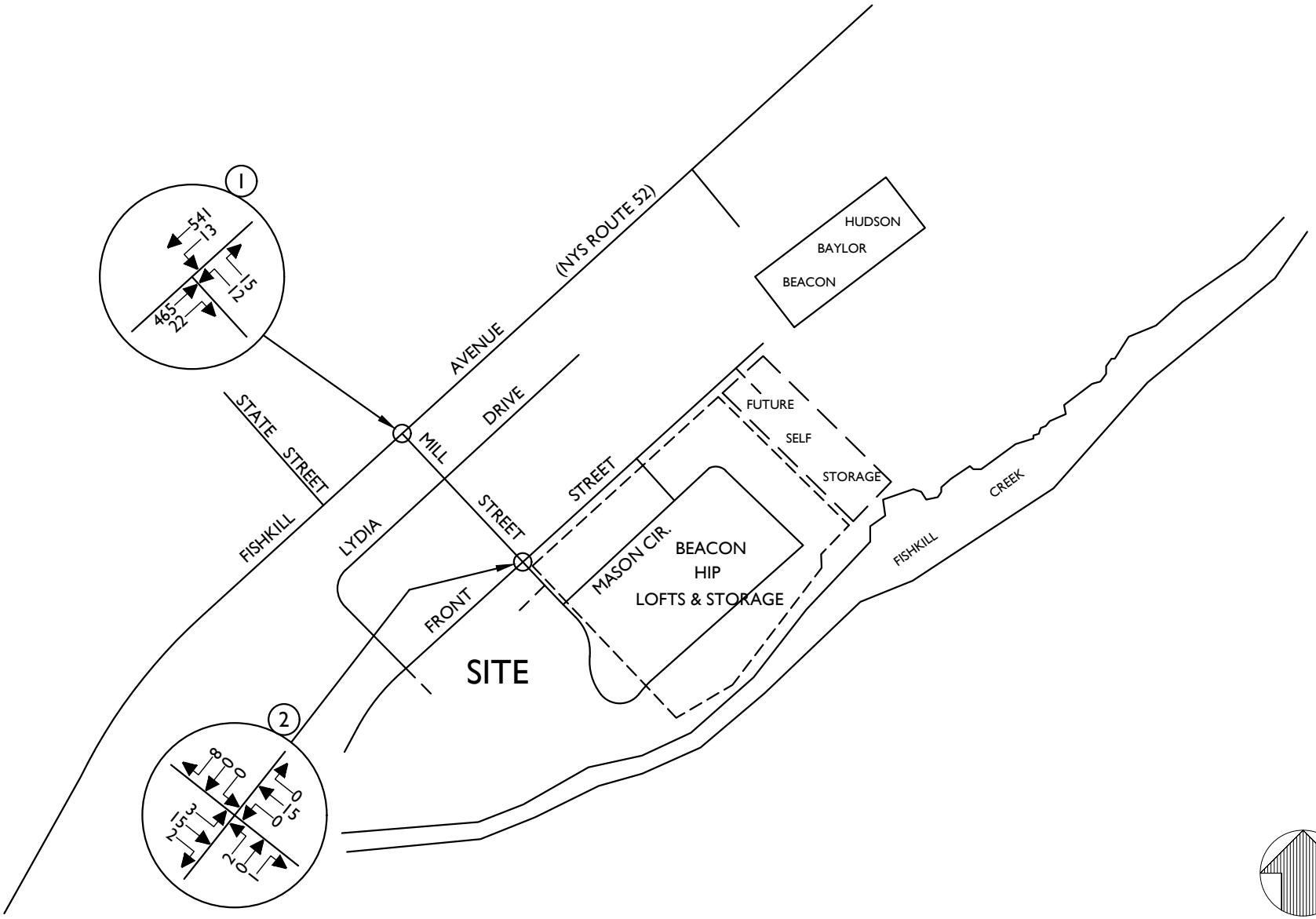
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SHEET TITLE: FIELD BOOK: XX PAGE: XX

2025 PROJECTED TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER: 6

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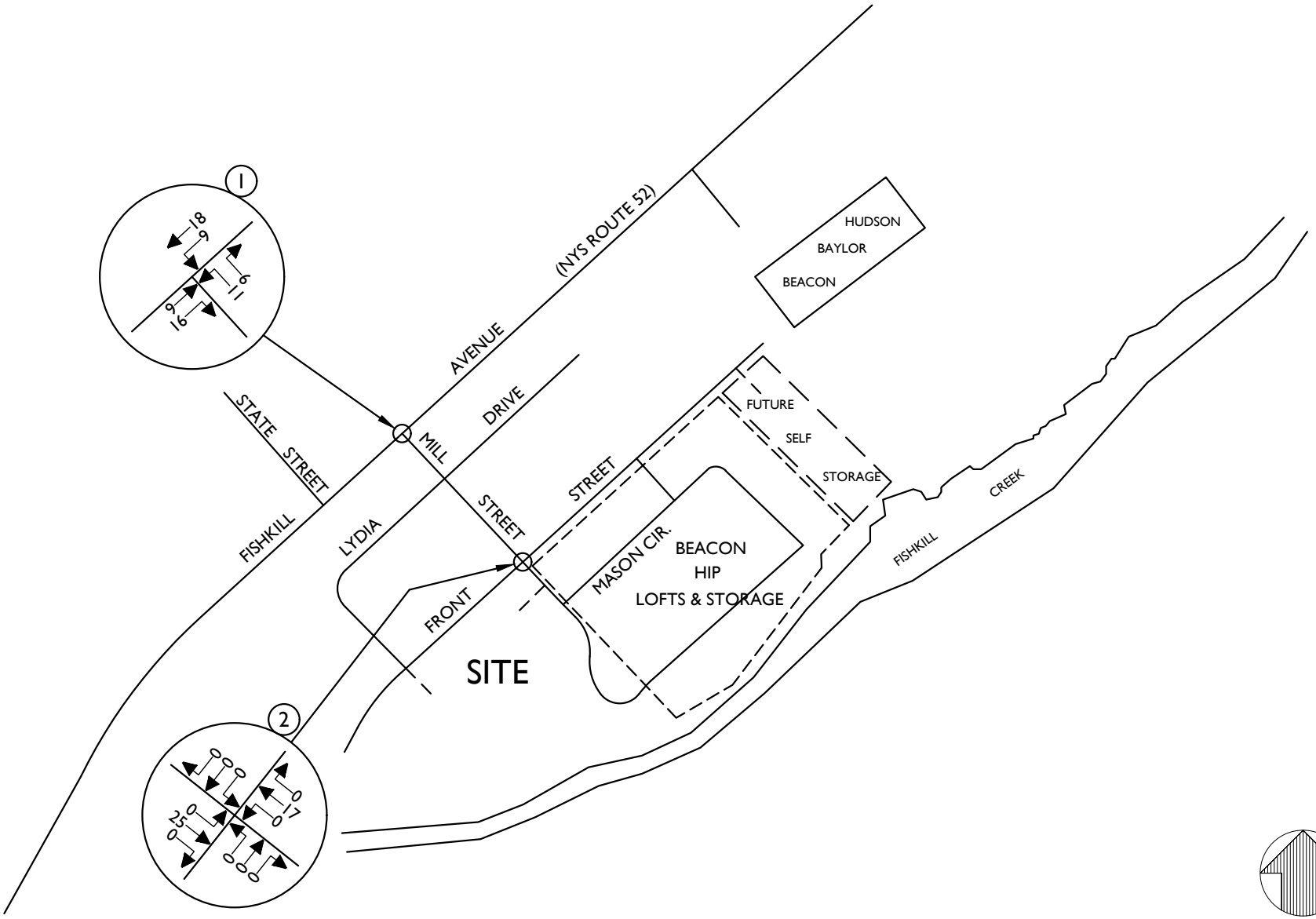
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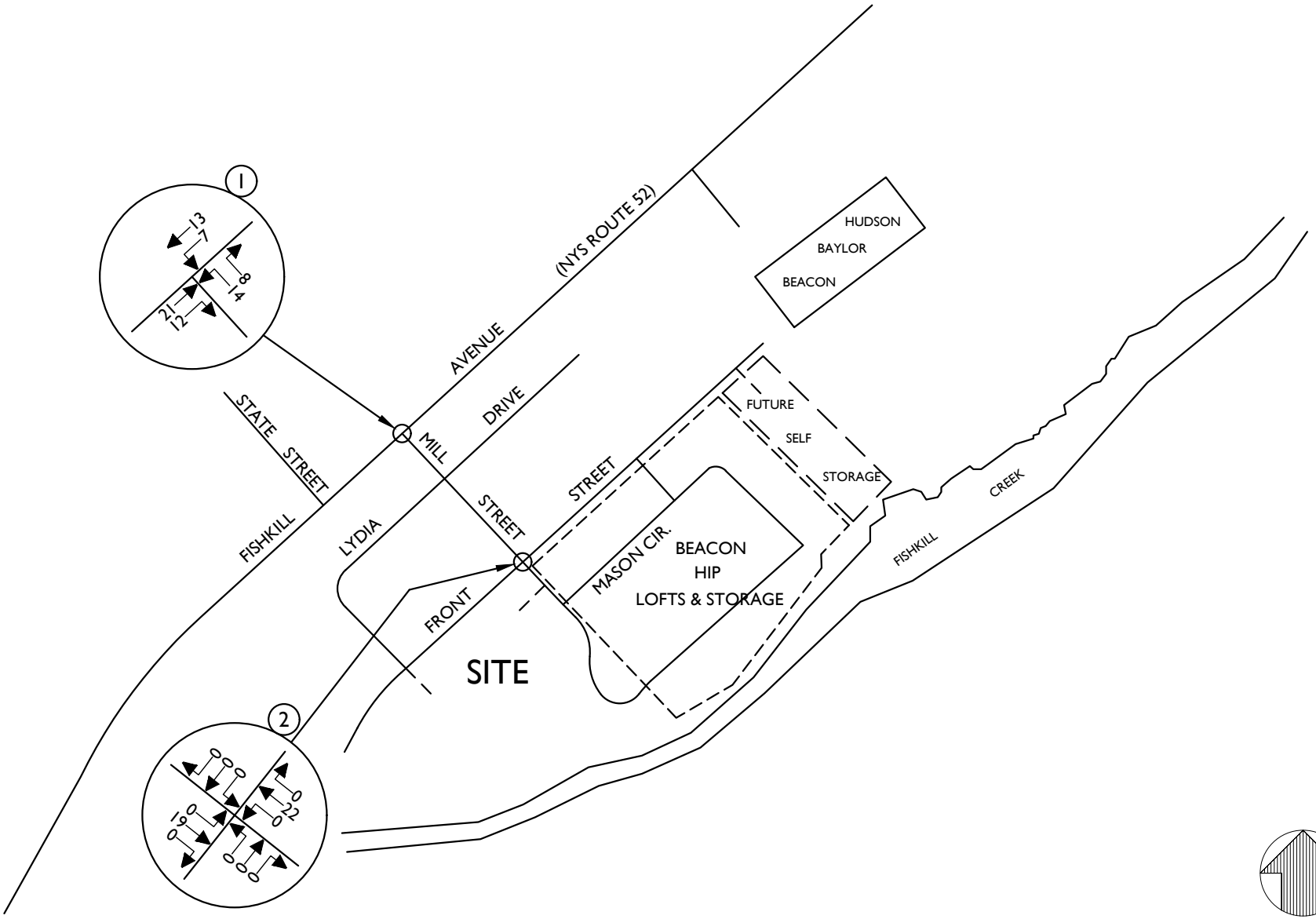
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SHEET TITLE: 2025 PROJECTED TRAFFIC VOLUMES WEEKEND PEAK SAT HOUR
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 7

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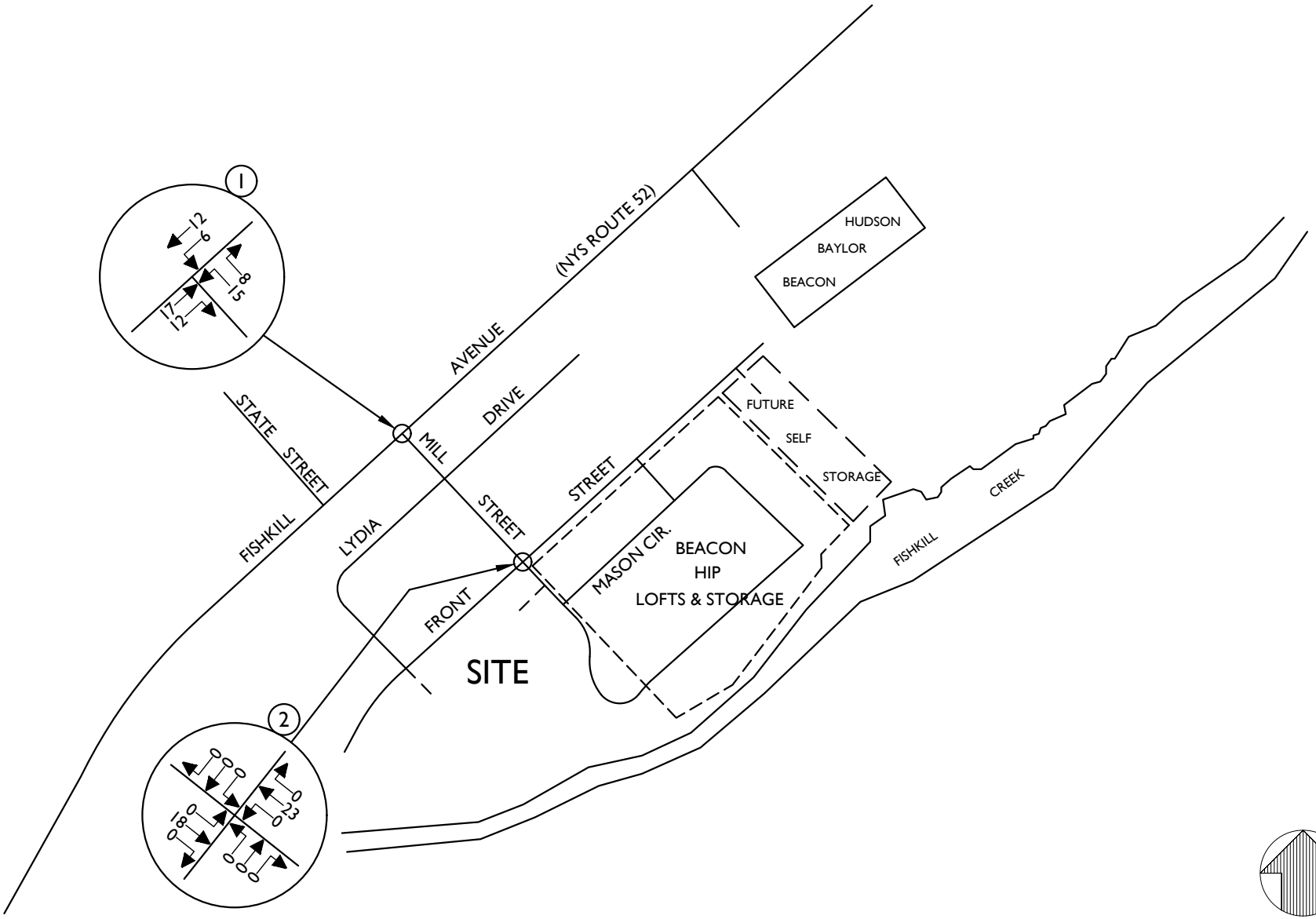
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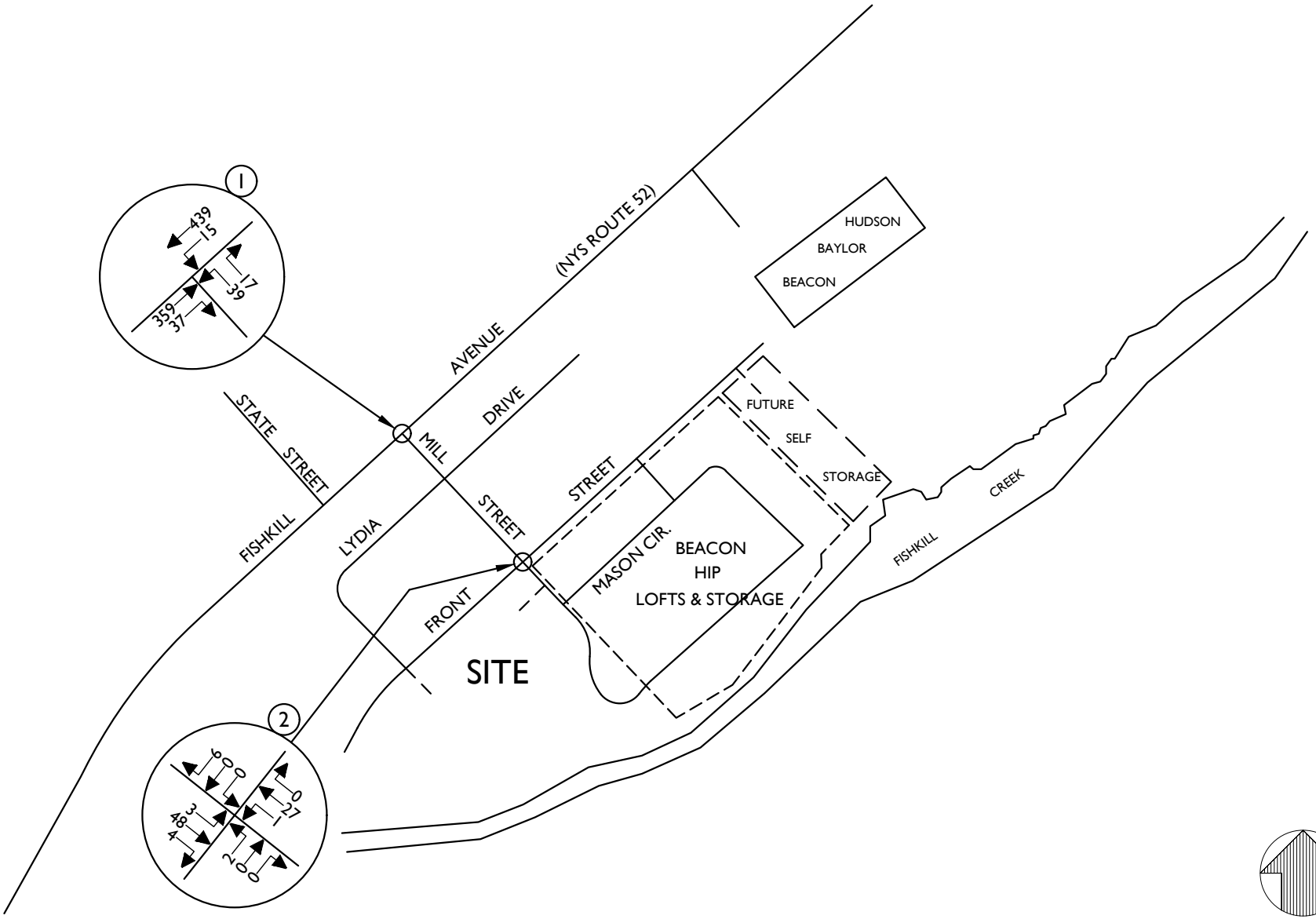
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SHEET TITLE: OTHER DEVELOPMENT TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 9

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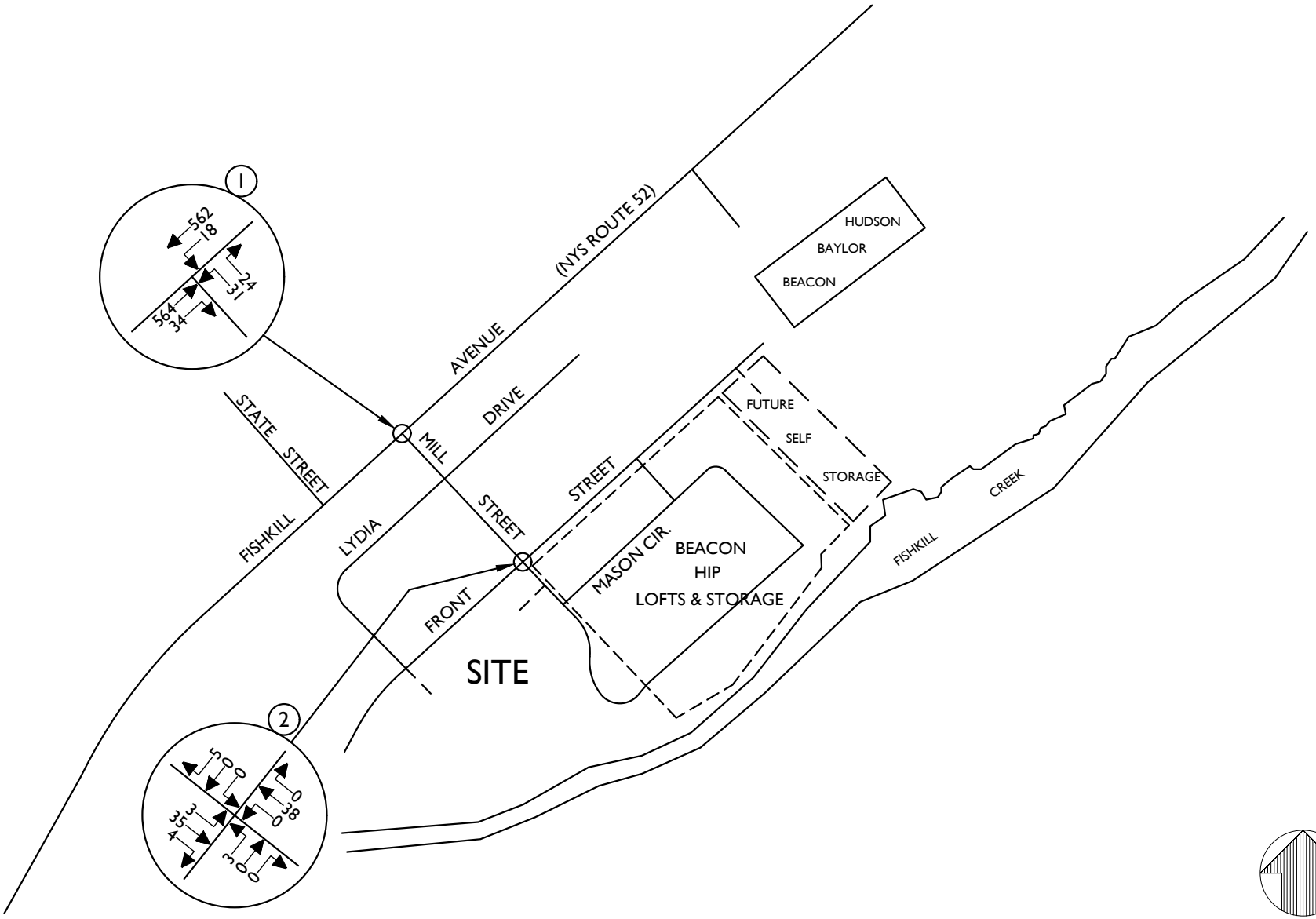
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FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 11

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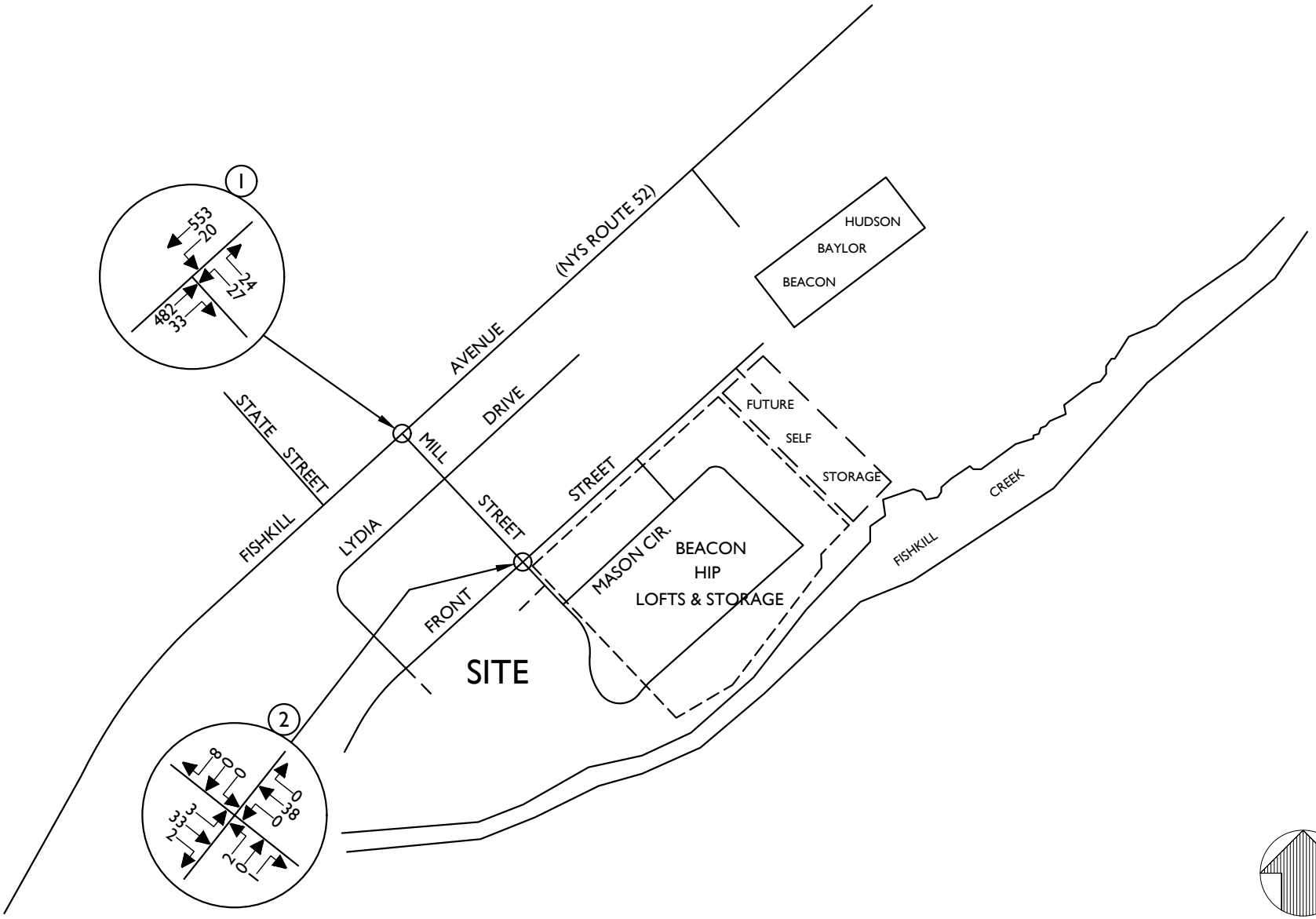
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SHEET TITLE: 2025 NO-BUILD TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 12

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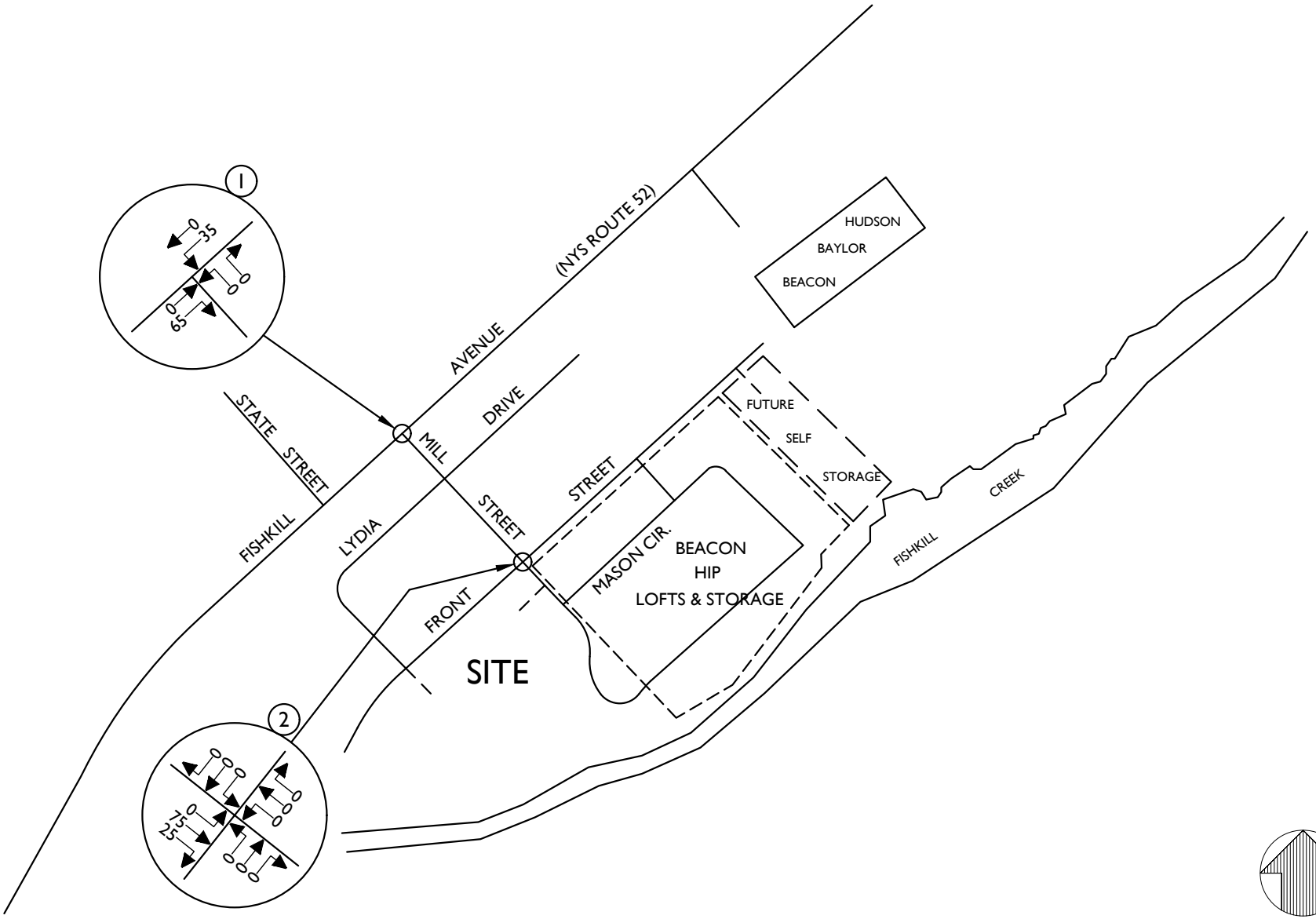
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FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 13

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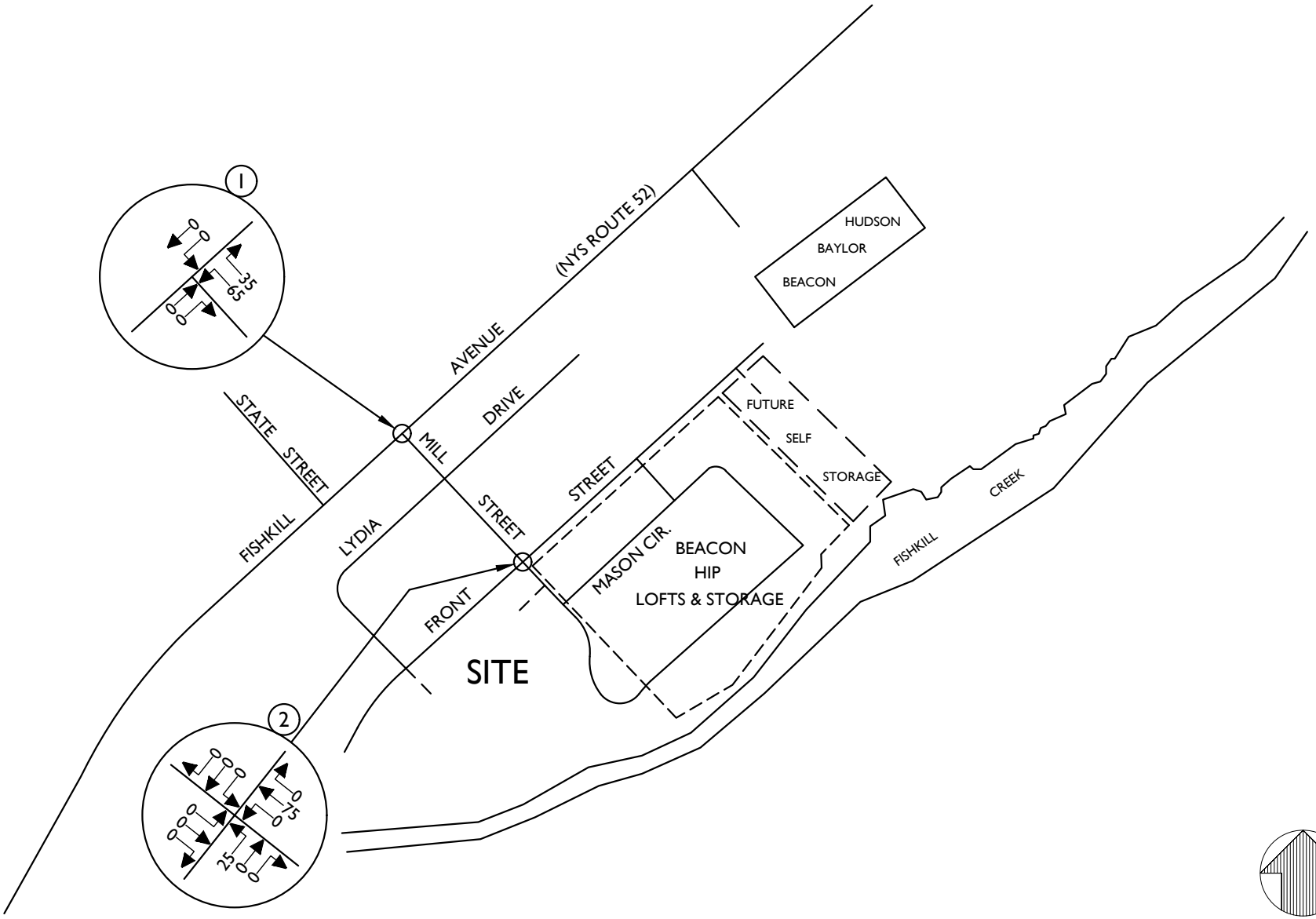
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SHEET TITLE: ARRIVAL DISTRIBUTION (ALL VALUES ARE EXPRESSED AS %)
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 14

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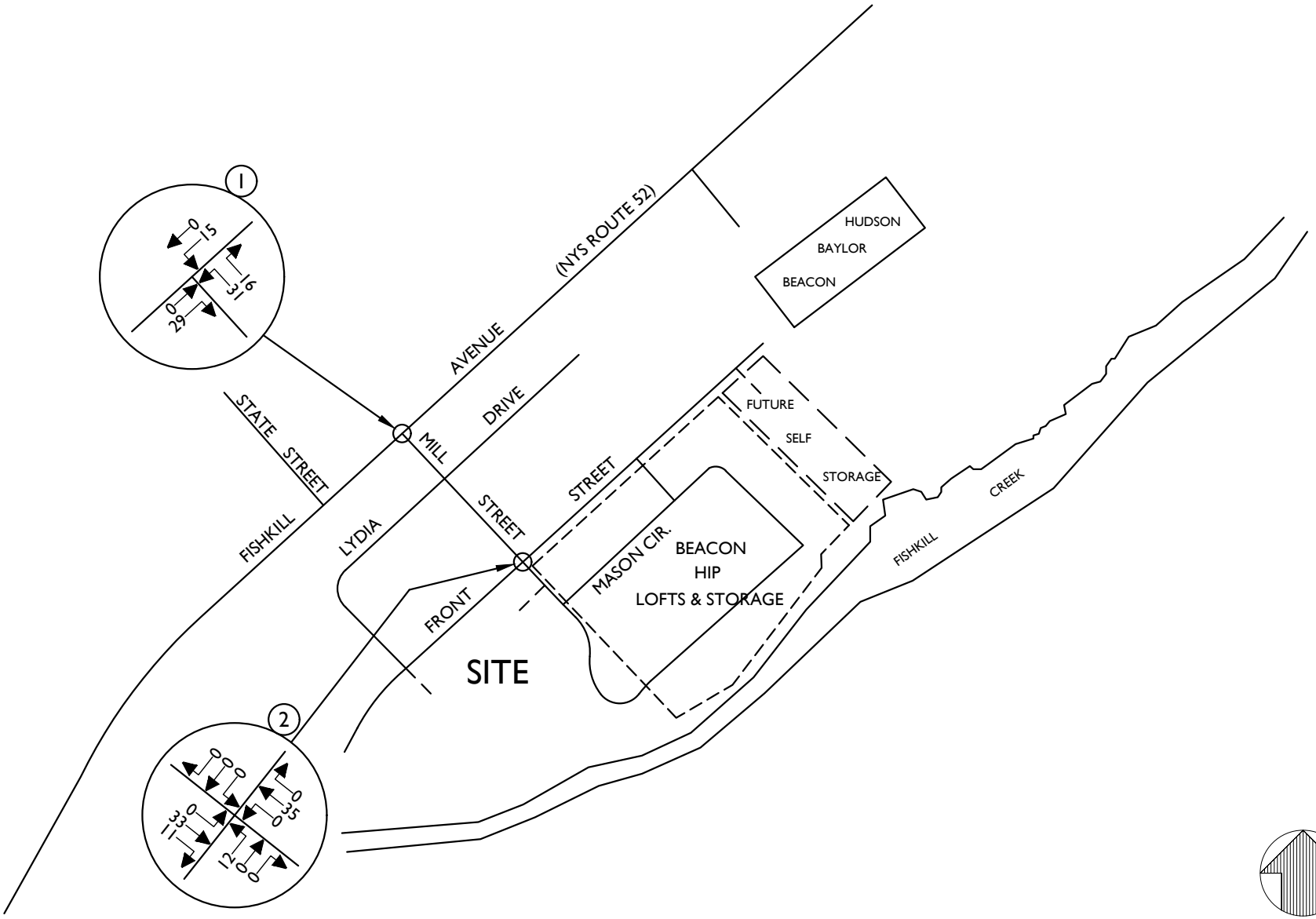
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SHEET TITLE: DEPARTURE DISTRIBUTION (ALL VALUES ARE EXPRESSED AS %)
FIELD BOOK: XX PAGE: XX

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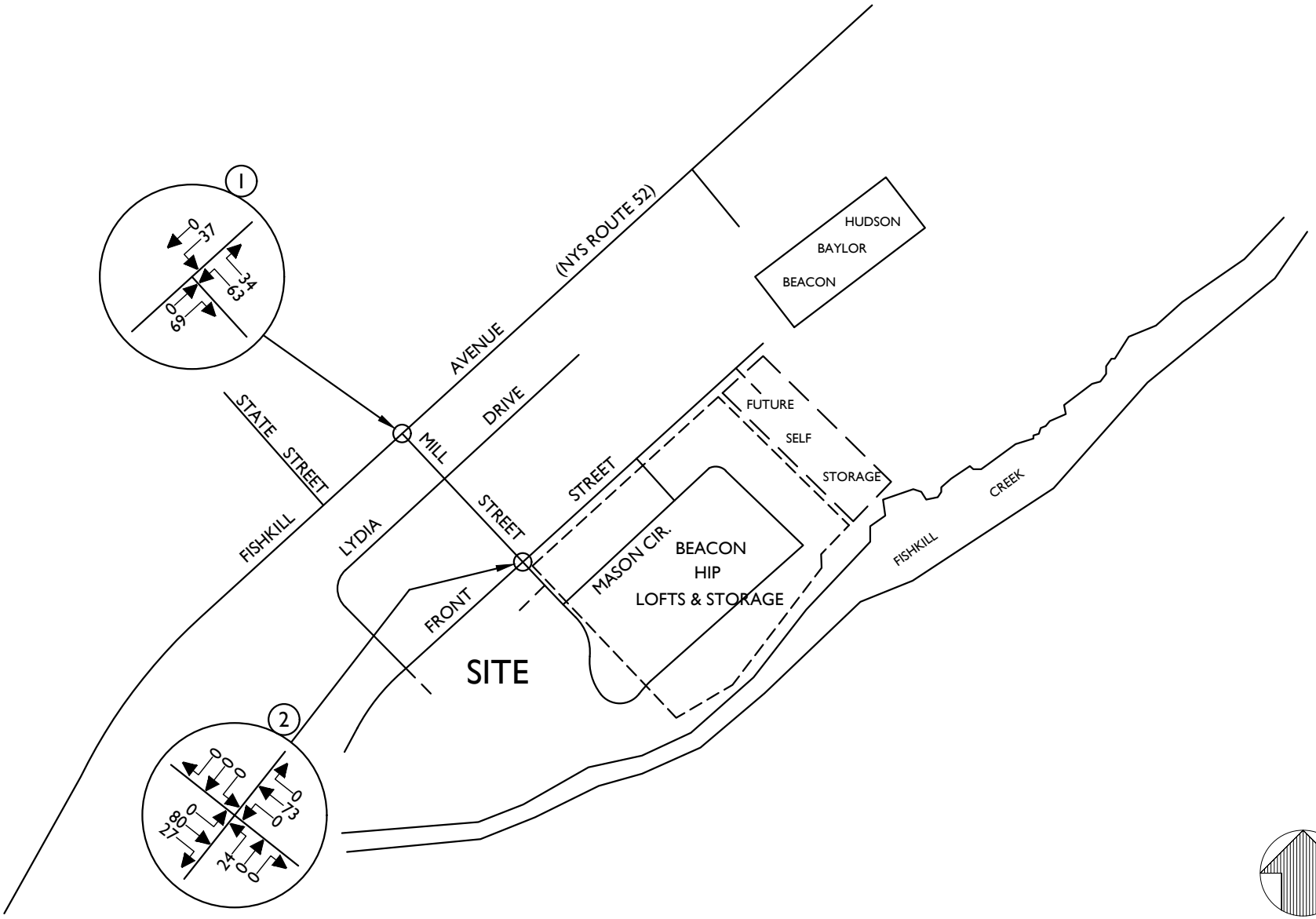
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SHEET TITLE: SITE GENERATED TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR

FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 16

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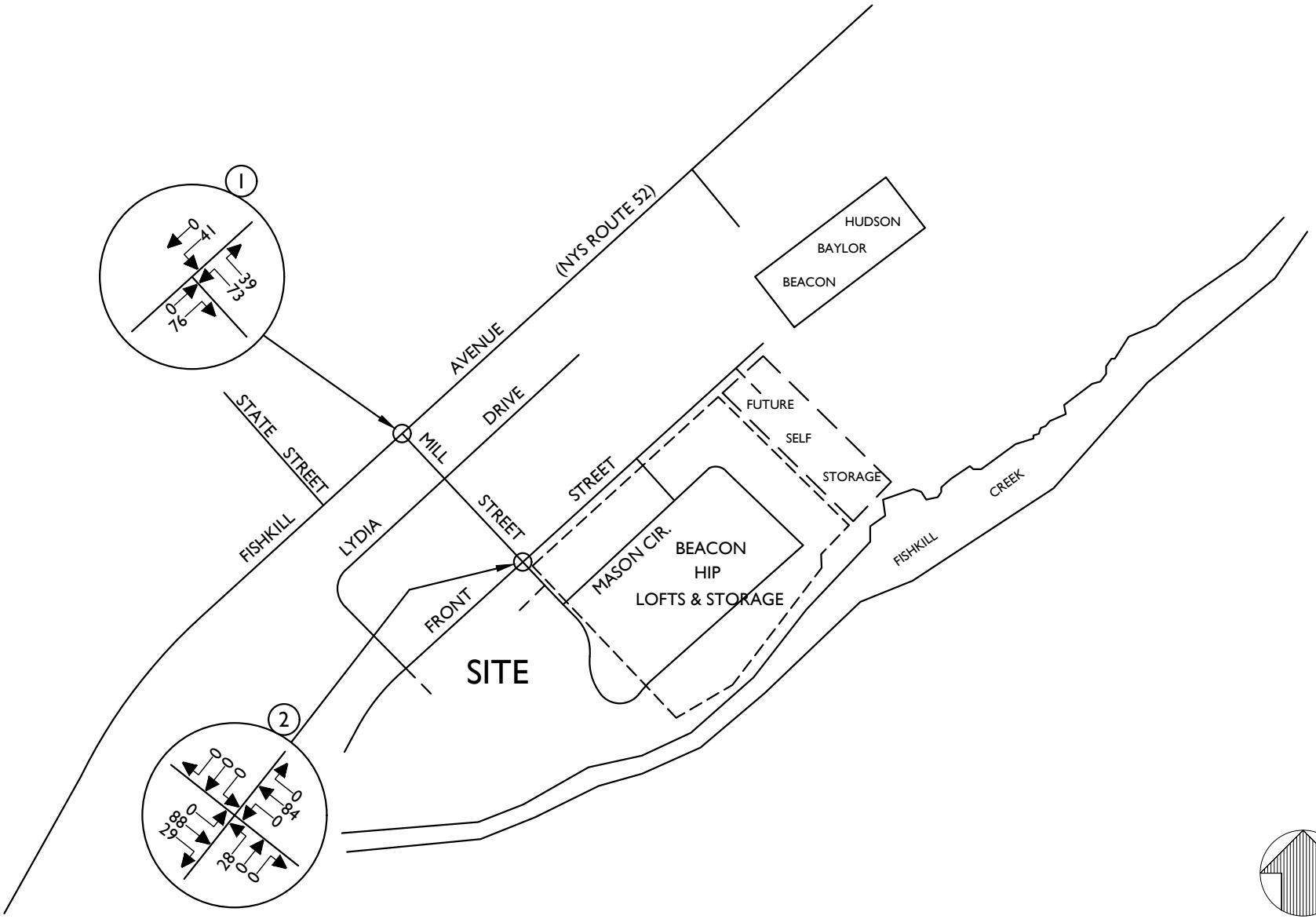
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FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 17

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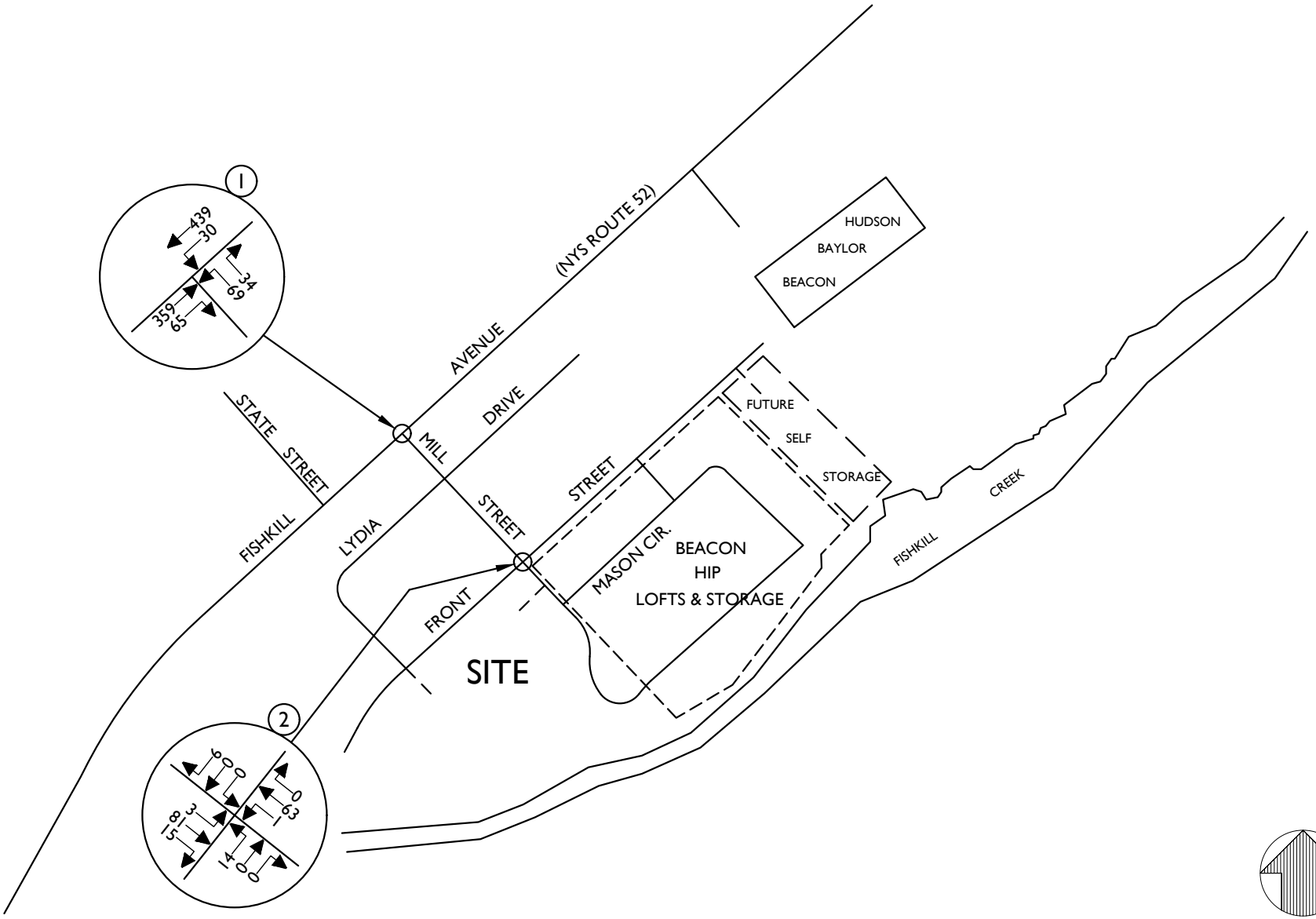
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SHEET TITLE: SITE GENERATED TRAFFIC VOLUMES WEEKEND PEAK SAT HOUR
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 18

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BEACON HIP LOFTS & STUDIO AND BEACON SELF STORAGE

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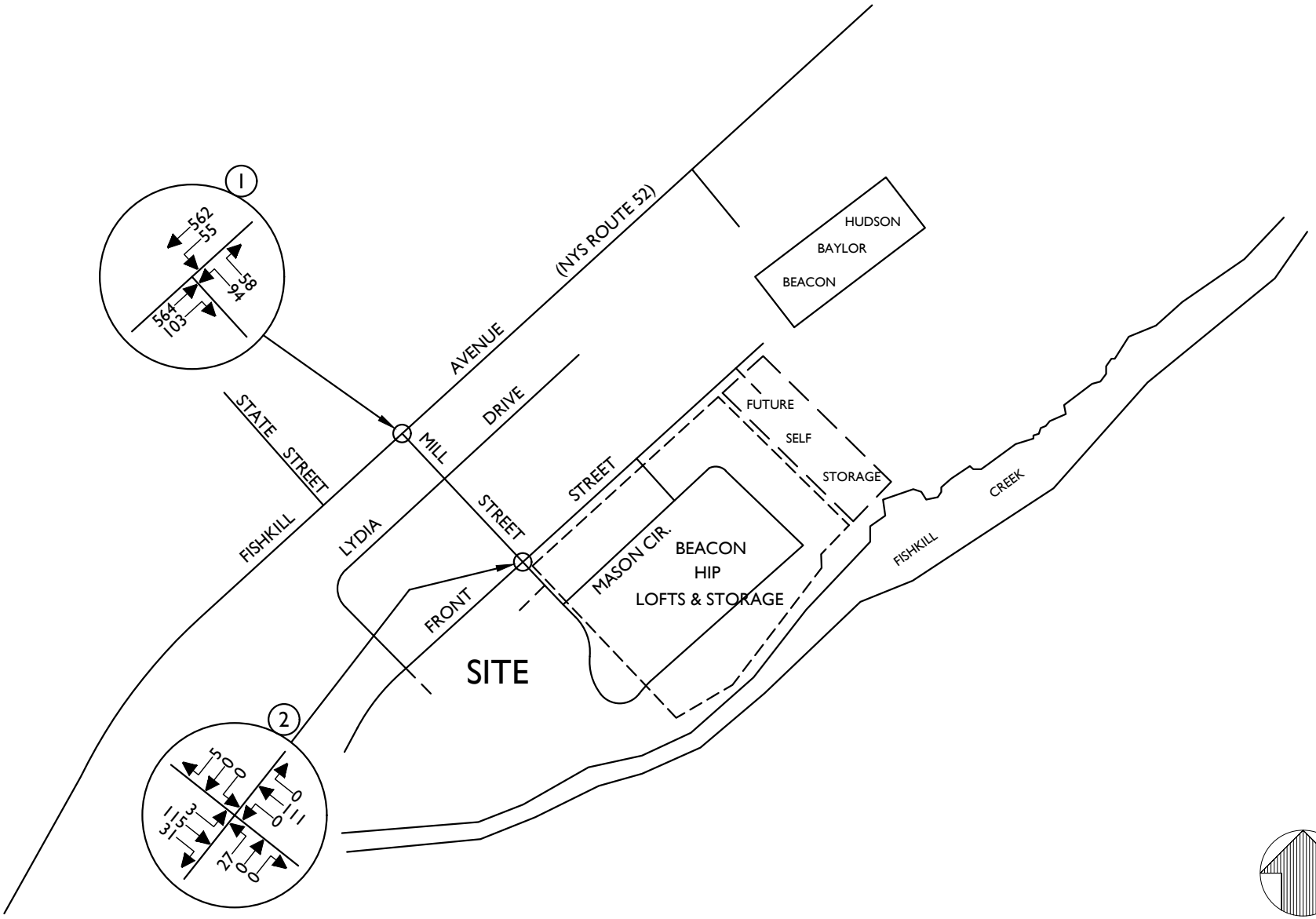
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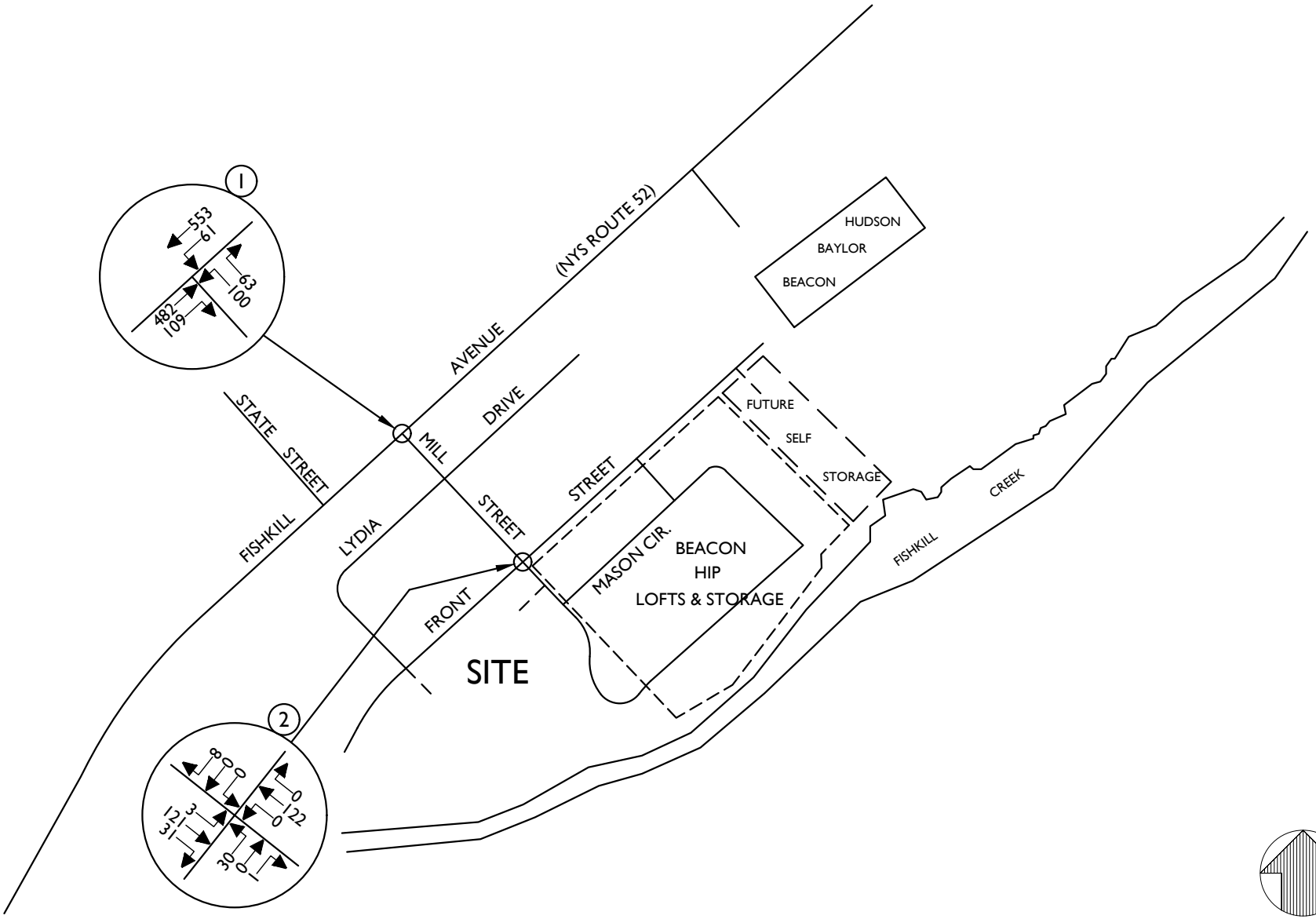
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SHEET TITLE: 2025 BUILD TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 20



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SHEET TITLE: 2025 BUILD TRAFFIC VOLUMES WEEKEND PEAK SAT HOUR

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Traffic Impact Study

Appendix B | Tables

Table No. 1
Hourly Trip Generation Rates (HTGR) and
Anticipated Site Generated Traffic Volumes

Beacon HIP Lofts, LLC City of Beacon, NY	Entry		Exit	
	HTGR[1]	Volume	HTGR1	HTGR[1]
Residential (28 Units)				
Peak AM Hour	0.29	8	0.86	24
Peak PM Hour	0.75	21	0.43	12
Saturday Peak Hour	0.57	16	0.57	16
Artist Studio (30,000 Sq. Ft.)				
Peak AM Hour	1.20	36	0.77	23
Peak PM Hour	2.83	85	2.83	85
Saturday Peak Hour	3.37	101	3.20	96
Total				
Peak AM Hour	-	44	-	47
Peak PM Hour	-	106	-	97
Saturday Peak Hour	-	117	-	112

NOTES:

1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 11TH EDITION, 2021. ITE LAND USE CODE - 220 - MULTIFAMILY HOUSE (LOW-RISE) AND ITE LAND USE CODE - 822 - STRIP RETAIL PLAZA.

Table No. 1A
Hourly Trip Generation Rates (HTGR) and
Anticipated Site Generated Traffic Volumes

Beacon HIP Lofts, LLC City of Beacon, NY	Entry		Exit	
	HTGR	Volume	HTGR1	HTGR[1]
Existing Beacon HIP Lofts[1] (85 Units)				
Peak AM Hour	0.29	25	0.20	17
Peak PM Hour	0.22	19	0.25	21
Saturday Peak Hour	0.27	23	0.22	19
Proposed HIP Lofts[2] (28 Units)				
Peak AM Hour	0.29	9	0.20	6
Peak PM Hour	0.22	7	0.25	7
Saturday Peak Hour	0.27	8	0.22	7

NOTES:

1) THE TRAFFIC VOLUMES AND HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON PEAK HOUR COUND DATA COLLECTED AT THE INTERSECTION OF MILL STREET/FULTON STREET ON THURSDAY OCTOBER 27, 2022 AND SATURDAY OCTOBER 29, 2022.

2) PROPOSED HIP LOFTS GENERATION BASED ON APPLICATION OF HTGR RATES TO THE 28 PROPOSED RESIDENTIAL UNITS.

Table No. 2
Level of Service Summary Table
Weekday Peak AM Hour

				2022 Existing			2025 No-Build			2025 Build			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Fishkill Avenue (NYS Route 52) & Mill Street**	**Unsignalized**											
	Mill Street	NWB	LR	0.11	C	16.6	0.19	C	19.0	0.37	C	24.1	5.1
	Fishkill Avenue (NYS Route 52)	SWB	TR	0.01	A	8.5	0.02	A	8.7	0.03	A	8.9	0.2
	With Traffic Signal												
	Mill Street	NWB	LR	-	-	-	0.18	A	8.6	0.34	A	9.5	0.9
	Fishkill Avenue (NYS Route 52)	NEB	TR	-	-	-	0.59	A	6.7	0.62	A	6.8	0.1
	Fishkill Avenue (NYS Route 52)	WB	L	-	-	-	0.55	A	6.6	0.56	A	6.6	0.0
		Overall		**-**	**-**	**-**	**-**	**A**	**6.8**	**-**	**A**	**7**	**0.2**
2	**Front Street & Mill Street**	**Unsignalized**											
	Mill Street	SEB	LTR	0.04	A	7.1	0.08	A	7.3	0.14	A	7.6	0.3
	Mill Street	NWB	LTR	0.02	A	7.1	0.04	A	7.2	0.10	A	7.5	0.3
	Front Street	NEB	LTR	0.00	A	7.3	0.00	A	7.4	0.02	A	7.7	0.3
	Front Street	SWB	LTR	0.01	A	6.5	0.01	A	6.6	0.01	A	6.8	0.2
		Overall		**-**	**A**	**7.0**	**-**	**A**	**7.2**	**-**	**A**	**7.5**	**0.3**

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

Table No. 2
Level of Service Summary Table
Weekday Peak PM Hour

				2022 Existing			2025 No-Build			2025 Build			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Fishkill Avenue (NYS Route 52) & Mill Street**	**Unsignalized**											
	Mill Street	NWB	LR	0.13	C	20.7	0.27	D	27.7	0.98	F	119.8	92.1
	Fishkill Avenue (NYS Route 52)	SWB	TR	0.01	A	8.8	0.02	A	9.0	0.07	A	9.5	0.5
	With Traffic Signal												
	Mill Street	NWB	LR	-	-	-	0.21	B	10.5	0.58	B	14.7	4.2
	Fishkill Avenue (NYS Route 52)	NEB	TR	-	-	-	0.71	A	7.0	0.72	A	7.0	0.0
	Fishkill Avenue (NYS Route 52)	WB	L	-	-	-	0.61	A	6.4	0.68	A	6.6	0.2
		Overall		**-**	**-**	**-**	**-**	**A**	**6.9**	**-**	**A**	**7.6**	**0.7**
2	**Front Street & Mill Street**	**Unsignalized**											
	Mill Street	SEB	LTR	0.04	A	7.1	0.07	A	7.3	0.25	A	8.5	1.2
	Mill Street	NWB	LTR	0.03	A	7.2	0.07	A	7.4	0.20	A	8.4	1.0
	Front Street	NEB	LTR	0.01	A	7.3	0.01	A	7.4	0.06	A	8.3	0.9
	Front Street	SWB	LTR	0.01	A	6.5	0.01	A	6.6	0.01	A	7.3	0.7
		Overall		**-**	**A**	**7.1**	**-**	**A**	**7.3**	**-**	**A**	**8.4**	**1.1**

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

Table No. 2
Level of Service Summary Table
Saturday Peak Hour

				2022 Existing			2025 No-Build			2025 Build			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Fishkill Avenue (NYS Route 52) & Mill Street**	**Unsignalized**											
	Mill Street	NWB	LR	0.09	C	17.9	0.21	C	23.0	0.93	F	101.3	78.3
	Fishkill Avenue (NYS Route 52)	SWB	TR	0.01	A	8.5	0.02	A	8.7	0.07	A	9.2	0.5
	With Traffic Signal												
	Mill Street	NWB	LR	-	-	-	0.18	B	10.0	0.57	B	14.1	4.1
	Fishkill Avenue (NYS Route 52)	NEB	TR	-	-	-	0.64	A	6.6	0.67	A	6.8	0.2
	Fishkill Avenue (NYS Route 52)	WB	L	-	-	-	0.61	A	6.6	0.67	A	7.0	0.4
		Overall		**-**	**-**	**-**	**-**	**A**	**6.8**	**-**	**A**	**7.7**	**0.9**
2	**Front Street & Mill Street**	**Unsignalized**											
	Mill Street	SEB	LTR	0.02	A	7.0	0.05	A	7.2	0.19	A	8.0	0.8
	Mill Street	NWB	LTR	0.02	A	7.1	0.05	A	7.3	0.16	A	8.1	0.8
	Front Street	NEB	LTR	0.00	A	7.0	0.00	A	7.1	0.05	A	8.0	0.9
	Front Street	SWB	LTR	0.01	A	6.4	0.01	A	6.5	0.01	A	7.1	0.6
		Overall		**-**	**A**	**6.9**	**-**	**A**	**7.2**	**-**	**A**	**8.0**	**0.8**

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

TABLE P-1
SHARED PARKING ANALYSIS
WEEKDAY

Use		Lofts		Artist Studio		Total Peak
Size		28 Units		30,000 Sq. Ft.		Demand Per
Code Required Parking		35 Spaces		60 Spaces		Hour
Time of Day		% of Peak	Parking	% of Peak	Parking	Parking
Start	End	Demand	Spaces	Demand	Spaces	Spaces
12:00 AM	1:00 AM	100%	35	0%	-	35
1:00 AM	2:00 AM	100%	35	0%	-	35
2:00 AM	3:00 AM	100%	35	0%	-	35
3:00 AM	4:00 AM	100%	35	0%	-	35
4:00 AM	5:00 AM	100%	35	0%	-	35
5:00 AM	6:00 AM	97%	34	0%	-	34
6:00 AM	7:00 AM	90%	32	0%	-	32
7:00 AM	8:00 AM	77%	27	0%	-	27
8:00 AM	9:00 AM	56%	20	15%	9	29
9:00 AM	10:00 AM	45%	16	32%	20	36
10:00 AM	11:00 AM	40%	14	54%	33	47
11:00 AM	12:00 PM	37%	13	71%	43	56
12:00 PM	1:00 PM	36%	13	99%	60	73
1:00 PM	2:00 PM	36%	13	100%	60	73
2:00 PM	3:00 PM	37%	13	90%	54	67
3:00 PM	4:00 PM	43%	16	83%	50	66
4:00 PM	5:00 PM	45%	16	81%	49	65
5:00 PM	6:00 PM	55%	20	84%	51	71
6:00 PM	7:00 PM	66%	24	86%	52	76
7:00 PM	8:00 PM	73%	26	80%	48	74
8:00 PM	9:00 PM	77%	27	63%	38	65
9:00 PM	10:00 PM	86%	31	42%	26	57
10:00 PM	11:00 PM	92%	33	15%	9	42
11:00 PM	12:00 AM	97%	34	0%	-	34
				Peak Parking Demand		76

TABLE P-2
SHARED PARKING ANALYSIS
WEEKEND

Use		Lofts		Artist Studio		Total Peak
Size		28 Units		30,000 Sq. Ft.		Demand Per
Code Required Parking		35 Spaces		60 Spaces		Hour
Time of Day		% of Peak	Parking	% of Peak	Parking	Parking
Start	End	Demand	Spaces	Demand	Spaces	Spaces
12:00 AM	1:00 AM	100%	35	0%	-	35
1:00 AM	2:00 AM	100%	35	0%	-	35
2:00 AM	3:00 AM	100%	35	0%	-	35
3:00 AM	4:00 AM	100%	35	0%	-	35
4:00 AM	5:00 AM	100%	35	0%	-	35
5:00 AM	6:00 AM	100%	35	0%	-	35
6:00 AM	7:00 AM	98%	35	0%	-	35
7:00 AM	8:00 AM	96%	34	0%	-	34
8:00 AM	9:00 AM	92%	33	27%	17	50
9:00 AM	10:00 AM	80%	28	46%	28	56
10:00 AM	11:00 AM	78%	28	67%	41	69
11:00 AM	12:00 PM	71%	25	85%	51	76
12:00 PM	1:00 PM	68%	24	95%	57	81
1:00 PM	2:00 PM	65%	23	100%	60	83
2:00 PM	3:00 PM	65%	23	98%	59	82
3:00 PM	4:00 PM	68%	24	92%	56	80
4:00 PM	5:00 PM	70%	25	86%	52	77
5:00 PM	6:00 PM	73%	26	79%	48	74
6:00 PM	7:00 PM	77%	27	71%	43	70
7:00 PM	8:00 PM	81%	29	69%	42	71
8:00 PM	9:00 PM	82%	29	60%	36	65
9:00 PM	10:00 PM	86%	31	51%	31	62
10:00 PM	11:00 PM	87%	31	38%	23	54
11:00 PM	12:00 AM	92%	33	0%	-	33
				Peak Parking Demand		83

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Traffic Impact Study

Appendix C | Level of Service Standards

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Level of Service Standards

Level of Service for Signalized Intersections

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

- **LOS A** describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
- **LOS B** describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
- **LOS C** describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.
- **LOS D** describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.
- **LOS E** describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long.
- **LOS F** describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

The Level of Service Criteria for signalized intersections are given in Exhibit 19-8 from the *Highway Capacity Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 19-8 LOS by Volume-to-Capacity Ratio

Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

For approach-based and intersection wide assessments, LOS is defined solely by control delay.

Level of Service Criteria For Two-Way Stop-Controlled (TWSC) Unsignalized Intersections

Level of Service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. LOS is not defined for the intersection as a whole or for major-street approaches.

The Level of Service Criteria for TWSC unsignalized intersections are given in Exhibit 20-2 from the Highway Capacity Manual, 6th Edition published by the Transportation Research Board.

Exhibit 20-2 LOS by Volume-to-Capacity Ratio

Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

The LOS criteria apply to each lane on a given approach and to each approach on the minor street.
LOS is not calculated for major-street approaches or for the intersection as a whole.

As Exhibit 20-2 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The Level of Service Criteria for unsignalized intersections are somewhat different from the criteria for signalized intersections.

Level of Service Criteria For All-Way Stop-Controlled (AWSC) Unsignalized Intersections

The Levels of Service (LOS) for all-way stop-controlled (AWSC) intersections are given in Exhibit 21-8. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

The Level of Service Criteria for AWSC unsignalized intersections are given in Exhibit 21-8 from the *Highway* Capacity *Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 21-8 LOS by Volume-to-Capacity Ratio

Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

For approaches and intersection wide assessment, LOS is defined solely by control delay.

Colliers Engineering & Design

Traffic Impact Study

Appendix D | Capacity Analysis



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	27	11	340	20	6	409
Future Volume (vph)	27	11	340	20	6	409
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.959		0.993			
Flt Protected	0.966					0.999
Satd. Flow (prot)	1496	0	1761	0	0	1801
Flt Permitted	0.966					0.999
Satd. Flow (perm)	1496	0	1761	0	0	1801
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)		1			1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	18%	7%	10%	33%	5%
Adj. Flow (vph)	28	12	358	21	6	431
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	0	379	0	0	437
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Int Delay, s/veh	0.8

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	27	11	340	20	6	409
Future Vol, veh/h	27	11	340	20	6	409
Conflicting Peds, #/hr	0	1	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	18	7	10	33	5
Mvmt Flow	28	12	358	21	6	431

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	813	371	0	0	380	0
Stage 1	370	-	-	-	-	-
Stage 2	443	-	-	-	-	-
Critical Hdwy	7.04	6.68	-	-	4.43	-
Critical Hdwy Stg 1	6.04	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.536	3.462	-	-	2.497	-
Pot Cap-1 Maneuver	301	621	-	-	1027	-
Stage 1	653	-	-	-	-	-
Stage 2	597	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	298	620	-	-	1026	-
Mov Cap-2 Maneuver	298	-	-	-	-	-
Stage 1	652	-	-	-	-	-
Stage 2	592	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	16.6	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	351	1026	-
HCM Lane V/C Ratio	-	-	0.114	0.006	-
HCM Control Delay (s)	-	-	16.6	8.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	22	4	1	10	0	2	0	0	0	0	6
Future Volume (vph)	3	22	4	1	10	0	2	0	0	0	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.982									0.865	
Flt Protected		0.995			0.996			0.950				
Satd. Flow (prot)	0	2000	0	0	1628	0	0	1577	0	0	1028	0
Flt Permitted		0.995			0.996			0.950				
Satd. Flow (perm)	0	2000	0	0	1628	0	0	1577	0	0	1028	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)				1		1			1	1		
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	50%
Adj. Flow (vph)	4	29	5	1	13	0	3	0	0	0	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	0	0	14	0	0	3	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	22	4	1	10	0	2	0	0	0	0	6
Future Vol, veh/h	3	22	4	1	10	0	2	0	0	0	0	6
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	50
Mvmt Flow	4	29	5	1	13	0	3	0	0	0	0	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.1	7.1	7.3	6.5
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	100%	9%	10%	0%
Vol Thru, %	0%	91%	76%	0%
Vol Right, %	0%	0%	14%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	11	29	6
LT Vol	2	1	3	0
Through Vol	0	10	22	0
RT Vol	0	0	4	6
Lane Flow Rate	3	14	38	8
Geometry Grp	1	1	1	1
Degree of Util (X)	0.003	0.016	0.041	0.007
Departure Headway (Hd)	4.23	3.997	3.9	3.425
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	847	899	922	1044
Service Time	2.252	2.006	1.905	1.447
HCM Lane V/C Ratio	0.004	0.016	0.041	0.008
HCM Control Delay	7.3	7.1	7.1	6.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0.1	0

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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	39	17	359	37	15	439
Future Volume (vph)	39	17	359	37	15	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.959		0.987			
Flt Protected	0.966					0.998
Satd. Flow (prot)	1495	0	1748	0	0	1790
Flt Permitted	0.966					0.998
Satd. Flow (perm)	1495	0	1748	0	0	1790
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)		1			1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	18%	7%	10%	33%	5%
Adj. Flow (vph)	41	18	378	39	16	462
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	0	417	0	0	478
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Int Delay, s/veh	1.3

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	39	17	359	37	15	439
Future Vol, veh/h	39	17	359	37	15	439
Conflicting Peds, #/hr	0	1	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	18	7	10	33	5
Mvmt Flow	41	18	378	39	16	462

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	893	400	0	0	418	0
Stage 1	399	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Critical Hdwy	7.04	6.68	-	-	4.43	-
Critical Hdwy Stg 1	6.04	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.536	3.462	-	-	2.497	-
Pot Cap-1 Maneuver	267	596	-	-	993	-
Stage 1	630	-	-	-	-	-
Stage 2	561	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	261	595	-	-	992	-
Mov Cap-2 Maneuver	261	-	-	-	-	-
Stage 1	629	-	-	-	-	-
Stage 2	549	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	19	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	315	992	-
HCM Lane V/C Ratio	-	-	0.187	0.016	-
HCM Control Delay (s)	-	-	19	8.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0	-

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	48	4	1	27	0	2	0	0	0	0	6
Future Volume (vph)	3	48	4	1	27	0	2	0	0	0	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.990									0.865	
Flt Protected		0.997			0.999			0.950				
Satd. Flow (prot)	0	2020	0	0	1633	0	0	1577	0	0	1028	0
Flt Permitted		0.997			0.999			0.950				
Satd. Flow (perm)	0	2020	0	0	1633	0	0	1577	0	0	1028	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)				1		1			1	1		
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	50%
Adj. Flow (vph)	4	62	5	1	35	0	3	0	0	0	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	0	0	36	0	0	3	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	48	4	1	27	0	2	0	0	0	0	6
Future Vol, veh/h	3	48	4	1	27	0	2	0	0	0	0	6
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	50
Mvmt Flow	4	62	5	1	35	0	3	0	0	0	0	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.2	7.4	6.6
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	100%	4%	5%	0%
Vol Thru, %	0%	96%	87%	0%
Vol Right, %	0%	0%	7%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	28	55	6
LT Vol	2	1	3	0
Through Vol	0	27	48	0
RT Vol	0	0	4	6
Lane Flow Rate	3	36	71	8
Geometry Grp	1	1	1	1
Degree of Util (X)	0.003	0.041	0.078	0.008
Departure Headway (Hd)	4.325	4.011	3.946	3.52
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	823	894	911	1009
Service Time	2.373	2.028	1.957	1.567
HCM Lane V/C Ratio	0.004	0.04	0.078	0.008
HCM Control Delay	7.4	7.2	7.3	6.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0.1	0.3	0

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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	69	34	359	65	30	439
Future Volume (vph)	69	34	359	65	30	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.955		0.979			
Flt Protected	0.968					0.997
Satd. Flow (prot)	1487	0	1731	0	0	1773
Flt Permitted	0.968					0.997
Satd. Flow (perm)	1487	0	1731	0	0	1773
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)		1			1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	18%	7%	10%	33%	5%
Adj. Flow (vph)	73	36	378	68	32	462
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	0	446	0	0	494
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	69	34	359	65	30	439
Future Vol, veh/h	69	34	359	65	30	439
Conflicting Peds, #/hr	0	1	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	18	7	10	33	5
Mvmt Flow	73	36	378	68	32	462

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	939	414	0	0	447	0
Stage 1	413	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Critical Hdwy	7.04	6.68	-	-	4.43	-
Critical Hdwy Stg 1	6.04	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.536	3.462	-	-	2.497	-
Pot Cap-1 Maneuver	248	585	-	-	967	-
Stage 1	619	-	-	-	-	-
Stage 2	539	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	237	584	-	-	966	-
Mov Cap-2 Maneuver	237	-	-	-	-	-
Stage 1	618	-	-	-	-	-
Stage 2	515	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	24.1	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	295	966	-
HCM Lane V/C Ratio	-	-	0.368	0.033	-
HCM Control Delay (s)	-	-	24.1	8.9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.6	0.1	-

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	81	15	1	63	0	14	0	0	0	0	6
Future Volume (vph)	3	81	15	1	63	0	14	0	0	0	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980									0.865	
Flt Protected		0.998			0.999			0.950				
Satd. Flow (prot)	0	2002	0	0	1633	0	0	1577	0	0	1028	0
Flt Permitted		0.998			0.999			0.950				
Satd. Flow (perm)	0	2002	0	0	1633	0	0	1577	0	0	1028	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)				1		1			1	1		
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	50%
Adj. Flow (vph)	4	105	19	1	82	0	18	0	0	0	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	128	0	0	83	0	0	18	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	81	15	1	63	0	14	0	0	0	0	6
Future Vol, veh/h	3	81	15	1	63	0	14	0	0	0	0	6
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	50
Mvmt Flow	4	105	19	1	82	0	18	0	0	0	0	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	7.5	7.7	6.8
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	100%	2%	3%	0%
Vol Thru, %	0%	98%	82%	0%
Vol Right, %	0%	0%	15%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	14	64	99	6
LT Vol	14	1	3	0
Through Vol	0	63	81	0
RT Vol	0	0	15	6
Lane Flow Rate	18	83	129	8
Geometry Grp	1	1	1	1
Degree of Util (X)	0.023	0.094	0.141	0.008
Departure Headway (Hd)	4.504	4.078	3.956	3.709
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	784	876	904	946
Service Time	2.594	2.117	1.989	1.805
HCM Lane V/C Ratio	0.023	0.095	0.143	0.008
HCM Control Delay	7.7	7.5	7.6	6.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.5	0



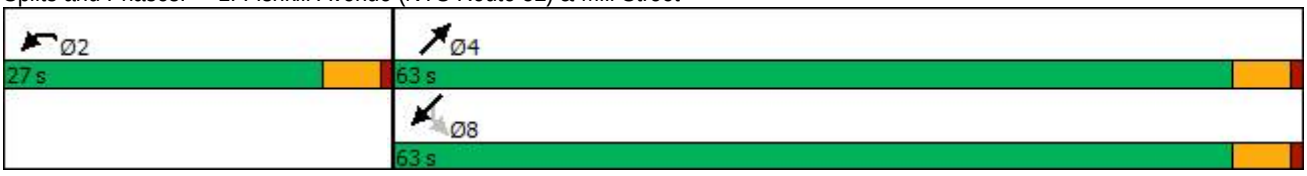
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	39	17	359	37	15	439
Future Volume (vph)	39	17	359	37	15	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99					1.00
Frt	0.959		0.987			
Flt Protected	0.966					0.998
Satd. Flow (prot)	1484	0	1748	0	0	1790
Flt Permitted	0.966					0.979
Satd. Flow (perm)	1484	0	1748	0	0	1756
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	18		12			
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)		1			1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	18%	7%	10%	33%	5%
Adj. Flow (vph)	41	18	378	39	16	462
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	0	417	0	0	478
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2		2		1	2
Detector Template					Left	
Leading Detector (ft)	83		83		20	83
Trailing Detector (ft)	-5		-5		0	-5
Detector 1 Position(ft)	-5		-5		0	-5
Detector 1 Size(ft)	40		40		20	40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)	43		43			43
Detector 2 Size(ft)	40		40			40
Detector 2 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0		0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	2		4			8
Permitted Phases					8	
Detector Phase	2		4		8	8
Switch Phase						

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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	23.0		23.0		22.5	22.5
Total Split (s)	27.0		63.0		63.0	63.0
Total Split (%)	30.0%		70.0%		70.0%	70.0%
Maximum Green (s)	22.0		58.0		58.0	58.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	Min		None		None	None
Walk Time (s)	7.0		7.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	1		1			
v/c Ratio	0.16		0.55			0.63
Control Delay	9.5		10.3			12.1
Queue Delay	0.0		0.0			0.0
Total Delay	9.5		10.3			12.1
Queue Length 50th (ft)	5		38			48
Queue Length 95th (ft)	28		146			177
Internal Link Dist (ft)	321		545			698
Turn Bay Length (ft)						
Base Capacity (vph)	1111		1748			1756
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.05		0.24			0.27

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 33.3	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Fishkill Avenue (NYS Route 52) & Mill Street



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Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	39	17	359	37	15	439
Future Volume (veh/h)	39	17	359	37	15	439
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1788	1580	1796	1752	1411	1826
Adj Flow Rate, veh/h	41	18	378	39	16	462
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	18	7	10	33	5
Cap, veh/h	225	99	643	66	157	715
Arrive On Green	0.20	0.20	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1122	492	1601	165	23	1781
Grp Volume(v), veh/h	60	0	0	417	478	0
Grp Sat Flow(s),veh/h/ln	1642	0	0	1767	1804	0
Q Serve(g_s), s	0.8	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	4.6	5.3	0.0
Prop In Lane	0.68	0.30		0.09	0.03	
Lane Grp Cap(c), veh/h	330	0	0	709	872	0
V/C Ratio(X)	0.18	0.00	0.00	0.59	0.55	0.00
Avail Cap(c_a), veh/h	1437	0	0	4076	4247	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.3	0.0	0.0	5.9	6.1	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.6	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.6	0.0	0.0	6.7	6.6	0.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	60		417			478
Approach Delay, s/veh	8.6		6.7			6.6
Approach LOS	A		A			A

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	10.0	15.1	15.1
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	58.0	58.0
Max Q Clear Time (g_c+I1), s	2.8	6.6	7.3
Green Ext Time (p_c), s	0.2	2.3	2.8

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

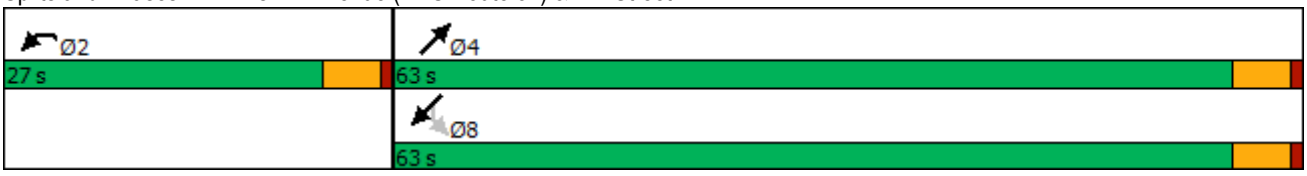
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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	69	34	359	65	30	439
Future Volume (vph)	69	34	359	65	30	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99					1.00
Frt	0.955		0.979			
Flt Protected	0.968					0.997
Satd. Flow (prot)	1476	0	1731	0	0	1773
Flt Permitted	0.968					0.954
Satd. Flow (perm)	1476	0	1731	0	0	1697
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	26		20			
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)		1			1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	18%	7%	10%	33%	5%
Adj. Flow (vph)	73	36	378	68	32	462
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	0	446	0	0	494
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2		2		1	2
Detector Template					Left	
Leading Detector (ft)	83		83		20	83
Trailing Detector (ft)	-5		-5		0	-5
Detector 1 Position(ft)	-5		-5		0	-5
Detector 1 Size(ft)	40		40		20	40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)	43		43			43
Detector 2 Size(ft)	40		40			40
Detector 2 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0		0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	2		4			8
Permitted Phases					8	
Detector Phase	2		4		8	8
Switch Phase						

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	23.0		23.0		22.5	22.5
Total Split (s)	27.0		63.0		63.0	63.0
Total Split (%)	30.0%		70.0%		70.0%	70.0%
Maximum Green (s)	22.0		58.0		58.0	58.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	Min		None		None	None
Walk Time (s)	7.0		7.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	1		1			
v/c Ratio	0.28		0.57			0.65
Control Delay	11.8		10.5			12.6
Queue Delay	0.0		0.0			0.0
Total Delay	11.8		10.5			12.6
Queue Length 50th (ft)	11		45			56
Queue Length 95th (ft)	48		155			188
Internal Link Dist (ft)	321		545			698
Turn Bay Length (ft)						
Base Capacity (vph)	985		1731			1697
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.11		0.26			0.29

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 35.7	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Fishkill Avenue (NYS Route 52) & Mill Street





Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	69	34	359	65	30	439
Future Volume (veh/h)	69	34	359	65	30	439
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1788	1580	1796	1752	1411	1826
Adj Flow Rate, veh/h	73	36	378	68	32	462
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	18	7	10	33	5
Cap, veh/h	214	106	610	110	172	708
Arrive On Green	0.20	0.20	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1085	535	1482	267	53	1721
Grp Volume(v), veh/h	110	0	0	446	494	0
Grp Sat Flow(s),veh/h/ln	1635	0	0	1748	1774	0
Q Serve(g_s), s	1.5	0.0	0.0	5.2	0.1	0.0
Cycle Q Clear(g_c), s	1.5	0.0	0.0	5.2	5.6	0.0
Prop In Lane	0.66	0.33		0.15	0.06	
Lane Grp Cap(c), veh/h	323	0	0	720	880	0
V/C Ratio(X)	0.34	0.00	0.00	0.62	0.56	0.00
Avail Cap(c_a), veh/h	1407	0	0	3964	4066	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.8	0.0	0.0	5.9	6.1	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.9	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.7	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.5	0.0	0.0	6.8	6.6	0.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	110		446			494
Approach Delay, s/veh	9.5		6.8			6.6
Approach LOS	A		A			A

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	10.0	15.5	15.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	58.0	58.0
Max Q Clear Time (g_c+I1), s	3.5	7.2	7.6
Green Ext Time (p_c), s	0.4	2.6	3.0

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	16	16	527	21	11	533
Future Volume (vph)	16	16	527	21	11	533
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932		0.995			
Flt Protected	0.976					0.999
Satd. Flow (prot)	1558	0	1853	0	0	1858
Flt Permitted	0.976					0.999
Satd. Flow (perm)	1558	0	1853	0	0	1858
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	9%	2%
Adj. Flow (vph)	17	17	555	22	12	561
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	0	577	0	0	573
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Int Delay, s/veh	0.7

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	16	16	527	21	11	533
Future Vol, veh/h	16	16	527	21	11	533
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	9	2
Mvmt Flow	17	17	555	22	12	561

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1151	566	0	0	577	0
Stage 1	566	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Critical Hdwy	7.02	6.52	-	-	4.19	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.281	-
Pot Cap-1 Maneuver	181	500	-	-	963	-
Stage 1	517	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	178	500	-	-	963	-
Mov Cap-2 Maneuver	178	-	-	-	-	-
Stage 1	517	-	-	-	-	-
Stage 2	496	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	20.7	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	263	963	-
HCM Lane V/C Ratio	-	-	0.128	0.012	-
HCM Control Delay (s)	-	-	20.7	8.8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	16	4	0	16	0	3	0	0	0	0	5
Future Volume (vph)	3	16	4	0	16	0	3	0	0	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.976									0.865	
Flt Protected		0.994						0.950				
Satd. Flow (prot)	0	1985	0	0	1573	0	0	1577	0	0	1511	0
Flt Permitted		0.994						0.950				
Satd. Flow (perm)	0	1985	0	0	1573	0	0	1577	0	0	1511	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)	6			6		12			6	12		6
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	24	6	0	24	0	4	0	0	0	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	0	0	24	0	0	4	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	16	4	0	16	0	3	0	0	0	0	5
Future Vol, veh/h	3	16	4	0	16	0	3	0	0	0	0	5
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles, %	2	2	2	2	6	2	2	2	2	2	2	2
Mvmt Flow	4	24	6	0	24	0	4	0	0	0	0	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.1	7.2	7.3	6.5
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	100%	0%	13%	0%
Vol Thru, %	0%	100%	70%	0%
Vol Right, %	0%	0%	17%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	16	23	5
LT Vol	3	0	3	0
Through Vol	0	16	16	0
RT Vol	0	0	4	5
Lane Flow Rate	4	24	34	7
Geometry Grp	1	1	1	1
Degree of Util (X)	0.005	0.027	0.037	0.007
Departure Headway (Hd)	4.242	4.05	3.895	3.438
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	844	888	923	1040
Service Time	2.265	2.057	1.902	1.462
HCM Lane V/C Ratio	0.005	0.027	0.037	0.007
HCM Control Delay	7.3	7.2	7.1	6.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0.1	0.1	0

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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	31	24	564	34	18	562
Future Volume (vph)	31	24	564	34	18	562
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.942		0.992			
Flt Protected	0.972					0.998
Satd. Flow (prot)	1568	0	1848	0	0	1855
Flt Permitted	0.972					0.998
Satd. Flow (perm)	1568	0	1848	0	0	1855
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	9%	2%
Adj. Flow (vph)	33	25	594	36	19	592
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	0	630	0	0	611
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Int Delay, s/veh	1.4

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	31	24	564	34	18	562
Future Vol, veh/h	31	24	564	34	18	562
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	9	2
Mvmt Flow	33	25	594	36	19	592

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1242	612	0	0	630	0
Stage 1	612	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Critical Hdwy	7.02	6.52	-	-	4.19	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.281	-
Pot Cap-1 Maneuver	157	469	-	-	919	-
Stage 1	489	-	-	-	-	-
Stage 2	478	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	152	469	-	-	919	-
Mov Cap-2 Maneuver	152	-	-	-	-	-
Stage 1	489	-	-	-	-	-
Stage 2	463	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	27.7	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	216	919	-
HCM Lane V/C Ratio	-	-	0.268	0.021	-
HCM Control Delay (s)	-	-	27.7	9	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	1	0.1	-

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	35	4	0	38	0	3	0	0	0	0	5
Future Volume (vph)	3	35	4	0	38	0	3	0	0	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.987									0.865	
Flt Protected		0.997						0.950				
Satd. Flow (prot)	0	2014	0	0	1573	0	0	1577	0	0	1511	0
Flt Permitted		0.997						0.950				
Satd. Flow (perm)	0	2014	0	0	1573	0	0	1577	0	0	1511	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)	6			6		12			6	12		6
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	52	6	0	57	0	4	0	0	0	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	62	0	0	57	0	0	4	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	35	4	0	38	0	3	0	0	0	0	5
Future Vol, veh/h	3	35	4	0	38	0	3	0	0	0	0	5
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles, %	2	2	2	2	6	2	2	2	2	2	2	2
Mvmt Flow	4	52	6	0	57	0	4	0	0	0	0	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.4	7.4	6.6
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	100%	0%	7%	0%
Vol Thru, %	0%	100%	83%	0%
Vol Right, %	0%	0%	10%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	38	42	5
LT Vol	3	0	3	0
Through Vol	0	38	35	0
RT Vol	0	0	4	5
Lane Flow Rate	4	57	63	7
Geometry Grp	1	1	1	1
Degree of Util (X)	0.005	0.064	0.069	0.007
Departure Headway (Hd)	4.346	4.07	3.955	3.542
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	819	883	908	1001
Service Time	2.398	2.083	1.968	1.595
HCM Lane V/C Ratio	0.005	0.065	0.069	0.007
HCM Control Delay	7.4	7.4	7.3	6.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0.2	0.2	0

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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	94	58	564	103	55	562
Future Volume (vph)	94	58	564	103	55	562
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.949		0.979			
Flt Protected	0.970					0.996
Satd. Flow (prot)	1576	0	1824	0	0	1844
Flt Permitted	0.970					0.996
Satd. Flow (perm)	1576	0	1824	0	0	1844
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	9%	2%
Adj. Flow (vph)	99	61	594	108	58	592
Shared Lane Traffic (%)						
Lane Group Flow (vph)	160	0	702	0	0	650
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	13

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	94	58	564	103	55	562
Future Vol, veh/h	94	58	564	103	55	562
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	9	2
Mvmt Flow	99	61	594	108	58	592

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1356	648	0	0	702	0
Stage 1	648	-	-	-	-	-
Stage 2	708	-	-	-	-	-
Critical Hdwy	7.02	6.52	-	-	4.19	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.281	-
Pot Cap-1 Maneuver	131	446	-	-	864	-
Stage 1	467	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	118	446	-	-	864	-
Mov Cap-2 Maneuver	118	-	-	-	-	-
Stage 1	467	-	-	-	-	-
Stage 2	391	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	119.8	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	164	864	-
HCM Lane V/C Ratio	-	-	0.976	0.067	-
HCM Control Delay (s)	-	-	119.8	9.5	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	7.5	0.2	-

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	115	31	0	111	0	27	0	0	0	0	5
Future Volume (vph)	3	115	31	0	111	0	27	0	0	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.972									0.865	
Flt Protected		0.999						0.950				
Satd. Flow (prot)	0	1987	0	0	1573	0	0	1577	0	0	1511	0
Flt Permitted		0.999						0.950				
Satd. Flow (perm)	0	1987	0	0	1573	0	0	1577	0	0	1511	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)	6			6		12			6	12		6
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	172	46	0	166	0	40	0	0	0	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	222	0	0	166	0	0	40	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	115	31	0	111	0	27	0	0	0	0	5
Future Vol, veh/h	3	115	31	0	111	0	27	0	0	0	0	5
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles, %	2	2	2	2	6	2	2	2	2	2	2	2
Mvmt Flow	4	172	46	0	166	0	40	0	0	0	0	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.4	8.3	7.3
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	100%	0%	2%	0%
Vol Thru, %	0%	100%	77%	0%
Vol Right, %	0%	0%	21%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	111	149	5
LT Vol	27	0	3	0
Through Vol	0	111	115	0
RT Vol	0	0	31	5
Lane Flow Rate	40	166	222	7
Geometry Grp	1	1	1	1
Degree of Util (X)	0.056	0.196	0.248	0.009
Departure Headway (Hd)	4.981	4.255	4.022	4.224
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	723	832	878	852
Service Time	2.982	2.343	2.109	2.226
HCM Lane V/C Ratio	0.055	0.2	0.253	0.008
HCM Control Delay	8.3	8.4	8.5	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.7	1	0

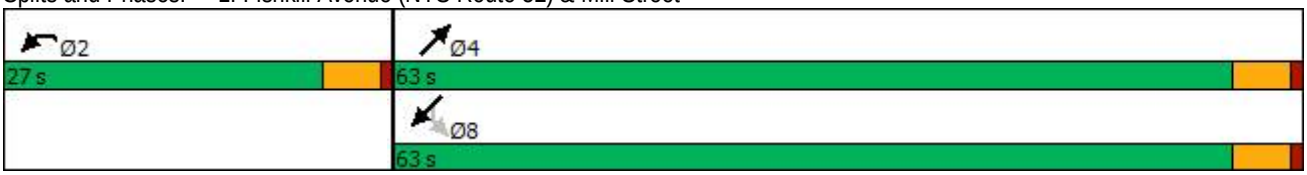
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	31	24	564	34	18	562
Future Volume (vph)	31	24	564	34	18	562
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.942		0.992			
Flt Protected	0.972					0.998
Satd. Flow (prot)	1568	0	1848	0	0	1855
Flt Permitted	0.972					0.974
Satd. Flow (perm)	1568	0	1848	0	0	1810
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	25		7			
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	9%	2%
Adj. Flow (vph)	33	25	594	36	19	592
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	0	630	0	0	611
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2		2		1	2
Detector Template					Left	
Leading Detector (ft)	83		83		20	83
Trailing Detector (ft)	-5		-5		0	-5
Detector 1 Position(ft)	-5		-5		0	-5
Detector 1 Size(ft)	40		40		20	40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)	43		43			43
Detector 2 Size(ft)	40		40			40
Detector 2 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0		0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	2		4			8
Permitted Phases					8	
Detector Phase	2		4		8	8
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	23.0		23.0		23.0	23.0

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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Total Split (s)	27.0		63.0		63.0	63.0
Total Split (%)	30.0%		70.0%		70.0%	70.0%
Maximum Green (s)	22.0		58.0		58.0	58.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	Min		None		None	None
Walk Time (s)	7.0		7.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	1		1			
v/c Ratio	0.16		0.70			0.69
Control Delay	10.6		12.3			12.4
Queue Delay	0.0		0.0			0.0
Total Delay	10.6		12.3			12.4
Queue Length 50th (ft)	5		68			67
Queue Length 95th (ft)	31		240			236
Internal Link Dist (ft)	321		545			698
Turn Bay Length (ft)						
Base Capacity (vph)	1019		1833			1796
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.06		0.34			0.34

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 37.1	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Fishkill Avenue (NYS Route 52) & Mill Street



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Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	31	24	564	34	18	562
Future Volume (veh/h)	31	24	564	34	18	562
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1817	1817	1870	1870	1767	1870
Adj Flow Rate, veh/h	33	25	594	36	19	592
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	9	2
Cap, veh/h	160	122	833	50	139	869
Arrive On Green	0.17	0.17	0.48	0.48	0.48	0.48
Sat Flow, veh/h	921	697	1746	106	21	1821
Grp Volume(v), veh/h	59	0	0	630	611	0
Grp Sat Flow(s),veh/h/ln	1646	0	0	1851	1842	0
Q Serve(g_s), s	0.9	0.0	0.0	7.7	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	0.0	7.7	7.3	0.0
Prop In Lane	0.56	0.42		0.06	0.03	
Lane Grp Cap(c), veh/h	287	0	0	884	1008	0
V/C Ratio(X)	0.21	0.00	0.00	0.71	0.61	0.00
Avail Cap(c_a), veh/h	1262	0	0	3742	3780	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.1	0.0	0.0	5.9	5.8	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	1.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	1.1	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.5	0.0	0.0	7.0	6.4	0.0
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	59		630			611
Approach Delay, s/veh	10.5		7.0			6.4
Approach LOS	B		A			A

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	10.0	18.7	18.7
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	58.0	58.0
Max Q Clear Time (g_c+I1), s	2.9	9.7	9.3
Green Ext Time (p_c), s	0.2	4.0	3.9

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

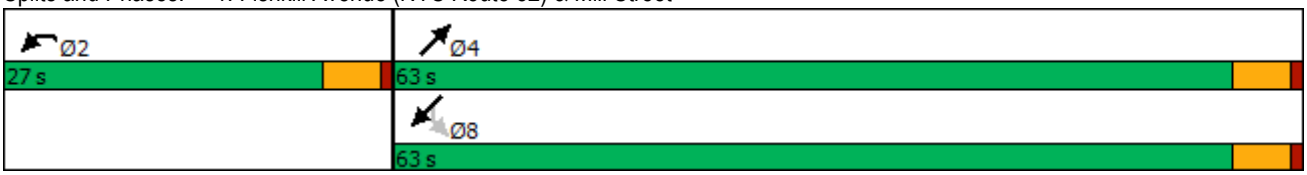
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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	94	58	564	103	55	562
Future Volume (vph)	94	58	564	103	55	562
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.949		0.979			
Flt Protected	0.970					0.996
Satd. Flow (prot)	1576	0	1824	0	0	1844
Flt Permitted	0.970					0.868
Satd. Flow (perm)	1576	0	1824	0	0	1607
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	33		20			
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	9%	2%
Adj. Flow (vph)	99	61	594	108	58	592
Shared Lane Traffic (%)						
Lane Group Flow (vph)	160	0	702	0	0	650
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2		2		1	2
Detector Template					Left	
Leading Detector (ft)	83		83		20	83
Trailing Detector (ft)	-5		-5		0	-5
Detector 1 Position(ft)	-5		-5		0	-5
Detector 1 Size(ft)	40		40		20	40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)	43		43			43
Detector 2 Size(ft)	40		40			40
Detector 2 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0		0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	2		4			8
Permitted Phases					8	
Detector Phase	2		4		8	8
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	23.0		23.0		23.0	23.0

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Total Split (s)	27.0		63.0		63.0	63.0
Total Split (%)	30.0%		70.0%		70.0%	70.0%
Maximum Green (s)	22.0		58.0		58.0	58.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	Min		None		None	None
Walk Time (s)	7.0		7.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	1		1			
v/c Ratio	0.42		0.72			0.76
Control Delay	17.9		12.6			15.2
Queue Delay	0.0		0.0			0.0
Total Delay	17.9		12.6			15.2
Queue Length 50th (ft)	26		101			101
Queue Length 95th (ft)	92		273			282
Internal Link Dist (ft)	321		545			698
Turn Bay Length (ft)						
Base Capacity (vph)	854		1766			1555
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.19		0.40			0.42

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 45.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Fishkill Avenue (NYS Route 52) & Mill Street





Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	94	58	564	103	55	562
Future Volume (veh/h)	94	58	564	103	55	562
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1817	1817	1870	1870	1767	1870
Adj Flow Rate, veh/h	99	61	594	108	58	592
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	9	2
Cap, veh/h	172	106	822	150	152	808
Arrive On Green	0.17	0.17	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1017	627	1540	280	67	1512
Grp Volume(v), veh/h	161	0	0	702	650	0
Grp Sat Flow(s),veh/h/ln	1654	0	0	1820	1579	0
Q Serve(g_s), s	3.0	0.0	0.0	9.9	1.6	0.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	9.9	11.5	0.0
Prop In Lane	0.61	0.38		0.15	0.09	
Lane Grp Cap(c), veh/h	280	0	0	972	959	0
V/C Ratio(X)	0.58	0.00	0.00	0.72	0.68	0.00
Avail Cap(c_a), veh/h	1079	0	0	3131	2914	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.9	0.0	0.0	6.0	5.8	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	1.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	1.4	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	0.0	0.0	7.0	6.6	0.0
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	161		702			650
Approach Delay, s/veh	14.7		7.0			6.6
Approach LOS	B		A			A

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	10.7	23.0	23.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	58.0	58.0
Max Q Clear Time (g_c+I1), s	5.0	11.9	13.5
Green Ext Time (p_c), s	0.7	4.7	4.5

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	12	15	451	21	13	525
Future Volume (vph)	12	15	451	21	13	525
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.926		0.994			
Flt Protected	0.978					0.999
Satd. Flow (prot)	1510	0	1852	0	0	1858
Flt Permitted	0.978					0.999
Satd. Flow (perm)	1510	0	1852	0	0	1858
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)	3			3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	7%	2%	2%	8%	2%
Adj. Flow (vph)	13	16	475	22	14	553
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	0	497	0	0	567
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Int Delay, s/veh	0.6

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	12	15	451	21	13	525
Future Vol, veh/h	12	15	451	21	13	525
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	7	2	2	8	2
Mvmt Flow	13	16	475	22	14	553

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1073	489	0	0	500	0
Stage 1	489	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Critical Hdwy	7.02	6.57	-	-	4.18	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-	2.272	-
Pot Cap-1 Maneuver	204	546	-	-	1034	-
Stage 1	568	-	-	-	-	-
Stage 2	506	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	199	545	-	-	1032	-
Mov Cap-2 Maneuver	199	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	494	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	17.9	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	307	1032	-
HCM Lane V/C Ratio	-	-	0.093	0.013	-
HCM Control Delay (s)	-	-	17.9	8.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	15	2	0	15	0	2	0	1	0	0	8
Future Volume (vph)	3	15	2	0	15	0	2	0	1	0	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.987						0.955			0.865	
Flt Protected		0.993						0.968				
Satd. Flow (prot)	0	2006	0	0	1558	0	0	1162	0	0	1511	0
Flt Permitted		0.993						0.968				
Satd. Flow (perm)	0	2006	0	0	1558	0	0	1162	0	0	1511	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)	4			1		5			1	5		4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	7%	2%	2%	2%	100%	2%	2%	2%
Adj. Flow (vph)	3	16	2	0	16	0	2	0	1	0	0	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	21	0	0	16	0	0	3	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Intersection Delay, s/veh	6.9
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	15	2	0	15	0	2	0	1	0	0	8
Future Vol, veh/h	3	15	2	0	15	0	2	0	1	0	0	8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	7	2	2	2	100	2	2	2
Mvmt Flow	3	16	2	0	16	0	2	0	1	0	0	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	7.1	7	6.4
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	67%	0%	15%	0%
Vol Thru, %	0%	100%	75%	0%
Vol Right, %	33%	0%	10%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	15	20	8
LT Vol	2	0	3	0
Through Vol	0	15	15	0
RT Vol	1	0	2	8
Lane Flow Rate	3	16	22	9
Geometry Grp	1	1	1	1
Degree of Util (X)	0.004	0.019	0.024	0.008
Departure Headway (Hd)	3.942	4.057	3.938	3.405
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	910	886	913	1052
Service Time	1.958	2.063	1.943	1.421
HCM Lane V/C Ratio	0.003	0.018	0.024	0.009
HCM Control Delay	7	7.1	7	6.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0.1	0.1	0

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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	27	24	482	33	20	553
Future Volume (vph)	27	24	482	33	20	553
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.936		0.991			
Flt Protected	0.974					0.998
Satd. Flow (prot)	1526	0	1846	0	0	1855
Flt Permitted	0.974					0.998
Satd. Flow (perm)	1526	0	1846	0	0	1855
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)	3			3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	7%	2%	2%	8%	2%
Adj. Flow (vph)	28	25	507	35	21	582
Shared Lane Traffic (%)						
Lane Group Flow (vph)	53	0	542	0	0	603
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Int Delay, s/veh	1.2

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	27	24	482	33	20	553
Future Vol, veh/h	27	24	482	33	20	553
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	7	2	2	8	2
Mvmt Flow	28	25	507	35	21	582

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1155	528	0	0	545	0
Stage 1	528	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Critical Hdwy	7.02	6.57	-	-	4.18	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-	2.272	-
Pot Cap-1 Maneuver	180	517	-	-	995	-
Stage 1	542	-	-	-	-	-
Stage 2	480	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	174	516	-	-	993	-
Mov Cap-2 Maneuver	174	-	-	-	-	-
Stage 1	541	-	-	-	-	-
Stage 2	464	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	23	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	253	993	-
HCM Lane V/C Ratio	-	-	0.212	0.021	-
HCM Control Delay (s)	-	-	23	8.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.8	0.1	-

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	33	2	0	38	0	2	0	1	0	0	8
Future Volume (vph)	3	33	2	0	38	0	2	0	1	0	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.993						0.955			0.865	
Flt Protected		0.996						0.968				
Satd. Flow (prot)	0	2024	0	0	1558	0	0	1162	0	0	1511	0
Flt Permitted		0.996						0.968				
Satd. Flow (perm)	0	2024	0	0	1558	0	0	1162	0	0	1511	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)	4			1		5			1	5		4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	7%	2%	2%	2%	100%	2%	2%	2%
Adj. Flow (vph)	3	36	2	0	42	0	2	0	1	0	0	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	41	0	0	42	0	0	3	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	33	2	0	38	0	2	0	1	0	0	8
Future Vol, veh/h	3	33	2	0	38	0	2	0	1	0	0	8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	7	2	2	2	100	2	2	2
Mvmt Flow	3	36	2	0	42	0	2	0	1	0	0	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.2	7.3	7.1	6.5
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	67%	0%	8%	0%
Vol Thru, %	0%	100%	87%	0%
Vol Right, %	33%	0%	5%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	38	38	8
LT Vol	2	0	3	0
Through Vol	0	38	33	0
RT Vol	1	0	2	8
Lane Flow Rate	3	42	42	9
Geometry Grp	1	1	1	1
Degree of Util (X)	0.004	0.047	0.046	0.008
Departure Headway (Hd)	4.018	4.072	3.971	3.48
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	888	883	905	1024
Service Time	2.055	2.081	1.981	1.517
HCM Lane V/C Ratio	0.003	0.048	0.046	0.009
HCM Control Delay	7.1	7.3	7.2	6.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0.1	0.1	0

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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	100	63	482	109	61	553
Future Volume (vph)	100	63	482	109	61	553
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.948		0.975			
Flt Protected	0.970					0.995
Satd. Flow (prot)	1545	0	1816	0	0	1843
Flt Permitted	0.970					0.995
Satd. Flow (perm)	1545	0	1816	0	0	1843
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)	3			3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	7%	2%	2%	8%	2%
Adj. Flow (vph)	105	66	507	115	64	582
Shared Lane Traffic (%)						
Lane Group Flow (vph)	171	0	622	0	0	646
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	12.5

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	100	63	482	109	61	553
Future Vol, veh/h	100	63	482	109	61	553
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	7	2	2	8	2
Mvmt Flow	105	66	507	115	64	582

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1281	568	0	0	625	0
Stage 1	568	-	-	-	-	-
Stage 2	713	-	-	-	-	-
Critical Hdwy	7.02	6.57	-	-	4.18	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-	2.272	-
Pot Cap-1 Maneuver	148	489	-	-	928	-
Stage 1	516	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	132	488	-	-	926	-
Mov Cap-2 Maneuver	132	-	-	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	386	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	101.3	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	184	926	-
HCM Lane V/C Ratio	-	-	0.932	0.069	-
HCM Control Delay (s)	-	-	101.3	9.2	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	7.3	0.2	-

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	121	31	0	122	0	30	0	1	0	0	8
Future Volume (vph)	3	121	31	0	122	0	30	0	1	0	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.973						0.996			0.865	
Flt Protected		0.999						0.954				
Satd. Flow (prot)	0	1989	0	0	1558	0	0	1534	0	0	1511	0
Flt Permitted		0.999						0.954				
Satd. Flow (perm)	0	1989	0	0	1558	0	0	1534	0	0	1511	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)	4			1		5			1	5		4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	7%	2%	2%	2%	100%	2%	2%	2%
Adj. Flow (vph)	3	133	34	0	134	0	33	0	1	0	0	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	170	0	0	134	0	0	34	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	121	31	0	122	0	30	0	1	0	0	8
Future Vol, veh/h	3	121	31	0	122	0	30	0	1	0	0	8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	7	2	2	2	100	2	2	2
Mvmt Flow	3	133	34	0	134	0	33	0	1	0	0	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	8.1	8	7.1
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	97%	0%	2%	0%
Vol Thru, %	0%	100%	78%	0%
Vol Right, %	3%	0%	20%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	122	155	8
LT Vol	30	0	3	0
Through Vol	0	122	121	0
RT Vol	1	0	31	8
Lane Flow Rate	34	134	170	9
Geometry Grp	1	1	1	1
Degree of Util (X)	0.045	0.157	0.189	0.01
Departure Headway (Hd)	4.776	4.222	3.993	4.033
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	754	842	889	893
Service Time	2.777	2.289	2.06	2.034
HCM Lane V/C Ratio	0.045	0.159	0.191	0.01
HCM Control Delay	8	8.1	8	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	0.7	0



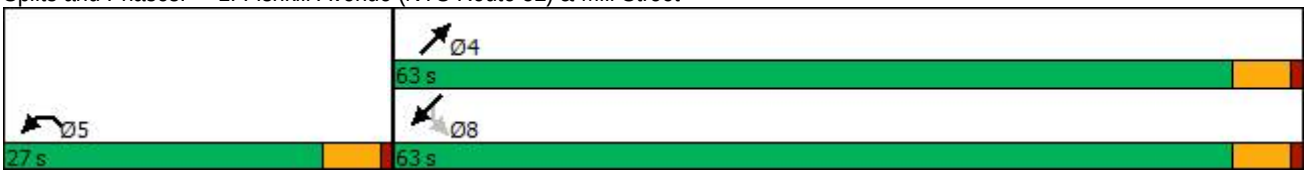
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	27	24	482	33	20	553
Future Volume (vph)	27	24	482	33	20	553
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		1.00			
Frt	0.936		0.991			
Flt Protected	0.974					0.998
Satd. Flow (prot)	1526	0	1843	0	0	1855
Flt Permitted	0.974					0.974
Satd. Flow (perm)	1520	0	1843	0	0	1811
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	25		8			
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)	3			3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	7%	2%	2%	8%	2%
Adj. Flow (vph)	28	25	507	35	21	582
Shared Lane Traffic (%)						
Lane Group Flow (vph)	53	0	542	0	0	603
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2		2		1	2
Detector Template					Left	
Leading Detector (ft)	83		83		20	83
Trailing Detector (ft)	-5		-5		0	-5
Detector 1 Position(ft)	-5		-5		0	-5
Detector 1 Size(ft)	40		40		20	40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)	43		43			43
Detector 2 Size(ft)	40		40			40
Detector 2 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0		0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	5		4			8
Permitted Phases					8	
Detector Phase	5		4		8	8
Switch Phase						

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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	23.0		23.0		23.0	23.0
Total Split (s)	27.0		63.0		63.0	63.0
Total Split (%)	30.0%		70.0%		70.0%	70.0%
Maximum Green (s)	22.0		58.0		58.0	58.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	Min		None		None	None
Walk Time (s)	7.0		7.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	3		3			
v/c Ratio	0.15		0.61			0.69
Control Delay	10.2		10.3			12.3
Queue Delay	0.0		0.0			0.0
Total Delay	10.2		10.3			12.3
Queue Length 50th (ft)	4		53			64
Queue Length 95th (ft)	28		193			232
Internal Link Dist (ft)	321		545			698
Turn Bay Length (ft)						
Base Capacity (vph)	1005		1832			1801
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.05		0.30			0.33

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 36.6	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Fishkill Avenue (NYS Route 52) & Mill Street



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Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	27	24	482	33	20	553
Future Volume (veh/h)	27	24	482	33	20	553
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1817	1743	1870	1870	1781	1870
Adj Flow Rate, veh/h	28	25	507	35	21	582
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	7	2	2	8	2
Cap, veh/h	155	138	798	55	144	839
Arrive On Green	0.18	0.18	0.46	0.46	0.46	0.46
Sat Flow, veh/h	846	755	1729	119	25	1817
Grp Volume(v), veh/h	54	0	0	542	603	0
Grp Sat Flow(s),veh/h/ln	1632	0	0	1848	1841	0
Q Serve(g_s), s	0.8	0.0	0.0	6.3	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	6.3	7.2	0.0
Prop In Lane	0.52	0.46		0.06	0.03	
Lane Grp Cap(c), veh/h	299	0	0	854	983	0
V/C Ratio(X)	0.18	0.00	0.00	0.64	0.61	0.00
Avail Cap(c_a), veh/h	1275	0	0	3808	3855	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.7	0.0	0.0	5.8	6.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.8	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.0	0.0	0.0	6.6	6.6	0.0
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	54		542			603
Approach Delay, s/veh	10.0		6.6			6.6
Approach LOS	B		A			A

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	10.2	18.0	18.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	58.0	58.0
Max Q Clear Time (g_c+I1), s	2.8	8.3	9.2
Green Ext Time (p_c), s	0.2	3.2	3.8

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

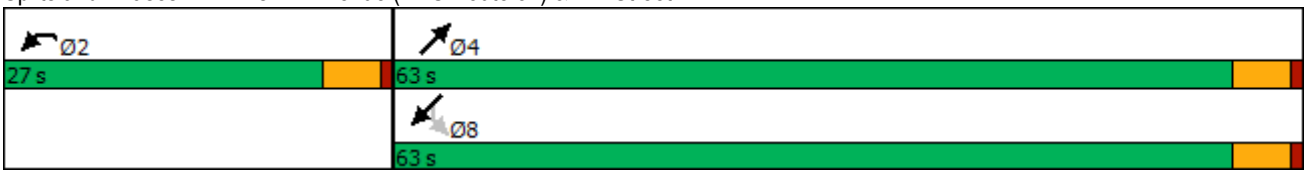
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Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	100	63	482	109	61	553
Future Volume (vph)	100	63	482	109	61	553
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.99			
Frt	0.948		0.975			
Flt Protected	0.970					0.995
Satd. Flow (prot)	1545	0	1807	0	0	1843
Flt Permitted	0.970					0.900
Satd. Flow (perm)	1538	0	1807	0	0	1667
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	33		26			
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)	3			3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	7%	2%	2%	8%	2%
Adj. Flow (vph)	105	66	507	115	64	582
Shared Lane Traffic (%)						
Lane Group Flow (vph)	171	0	622	0	0	646
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2		2		1	2
Detector Template					Left	
Leading Detector (ft)	83		83		20	83
Trailing Detector (ft)	-5		-5		0	-5
Detector 1 Position(ft)	-5		-5		0	-5
Detector 1 Size(ft)	40		40		20	40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)	43		43			43
Detector 2 Size(ft)	40		40			40
Detector 2 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0		0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	2		4			8
Permitted Phases					8	
Detector Phase	2		4		8	8
Switch Phase						

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	23.0		23.0		23.0	23.0
Total Split (s)	27.0		63.0		63.0	63.0
Total Split (%)	30.0%		70.0%		70.0%	70.0%
Maximum Green (s)	22.0		58.0		58.0	58.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	Min		None		None	None
Walk Time (s)	7.0		7.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	3		3			
v/c Ratio	0.45		0.65			0.74
Control Delay	18.4		10.9			14.2
Queue Delay	0.0		0.0			0.0
Total Delay	18.4		10.9			14.2
Queue Length 50th (ft)	28		85			101
Queue Length 95th (ft)	99		224			267
Internal Link Dist (ft)	321		545			698
Turn Bay Length (ft)						
Base Capacity (vph)	833		1750			1614
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.21		0.36			0.40

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 45.3	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Fishkill Avenue (NYS Route 52) & Mill Street





Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	100	63	482	109	61	553
Future Volume (veh/h)	100	63	482	109	61	553
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1817	1743	1870	1870	1781	1870
Adj Flow Rate, veh/h	105	66	507	115	64	582
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	7	2	2	8	2
Cap, veh/h	184	116	761	173	162	799
Arrive On Green	0.18	0.18	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1006	632	1475	334	83	1548
Grp Volume(v), veh/h	172	0	0	622	646	0
Grp Sat Flow(s),veh/h/ln	1647	0	0	1809	1631	0
Q Serve(g_s), s	3.2	0.0	0.0	8.4	2.3	0.0
Cycle Q Clear(g_c), s	3.2	0.0	0.0	8.4	10.7	0.0
Prop In Lane	0.61	0.38		0.18	0.10	
Lane Grp Cap(c), veh/h	301	0	0	934	961	0
V/C Ratio(X)	0.57	0.00	0.00	0.67	0.67	0.00
Avail Cap(c_a), veh/h	1090	0	0	3157	2991	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.4	0.0	0.0	5.9	6.1	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	1.3	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.1	0.0	0.0	6.8	7.0	0.0
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	172		622			646
Approach Delay, s/veh	14.1		6.8			7.0
Approach LOS	B		A			A

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	11.1	22.2	22.2
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	58.0	58.0
Max Q Clear Time (g_c+I1), s	5.2	10.4	12.7
Green Ext Time (p_c), s	0.7	4.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

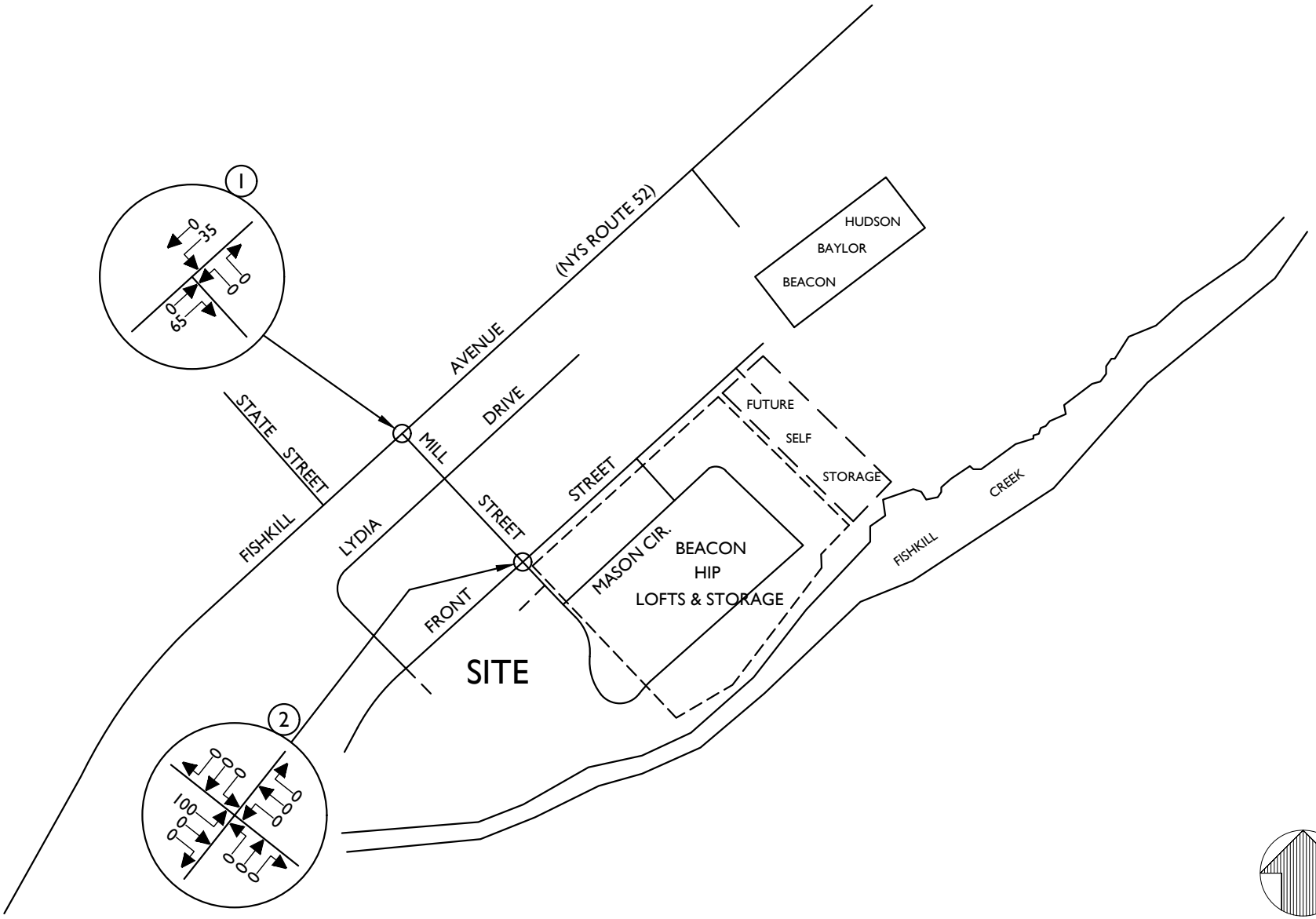
Notes

User approved volume balancing among the lanes for turning movement.

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Traffic Impact Study

Appendix E | Potential Future Self-Storage Analysis



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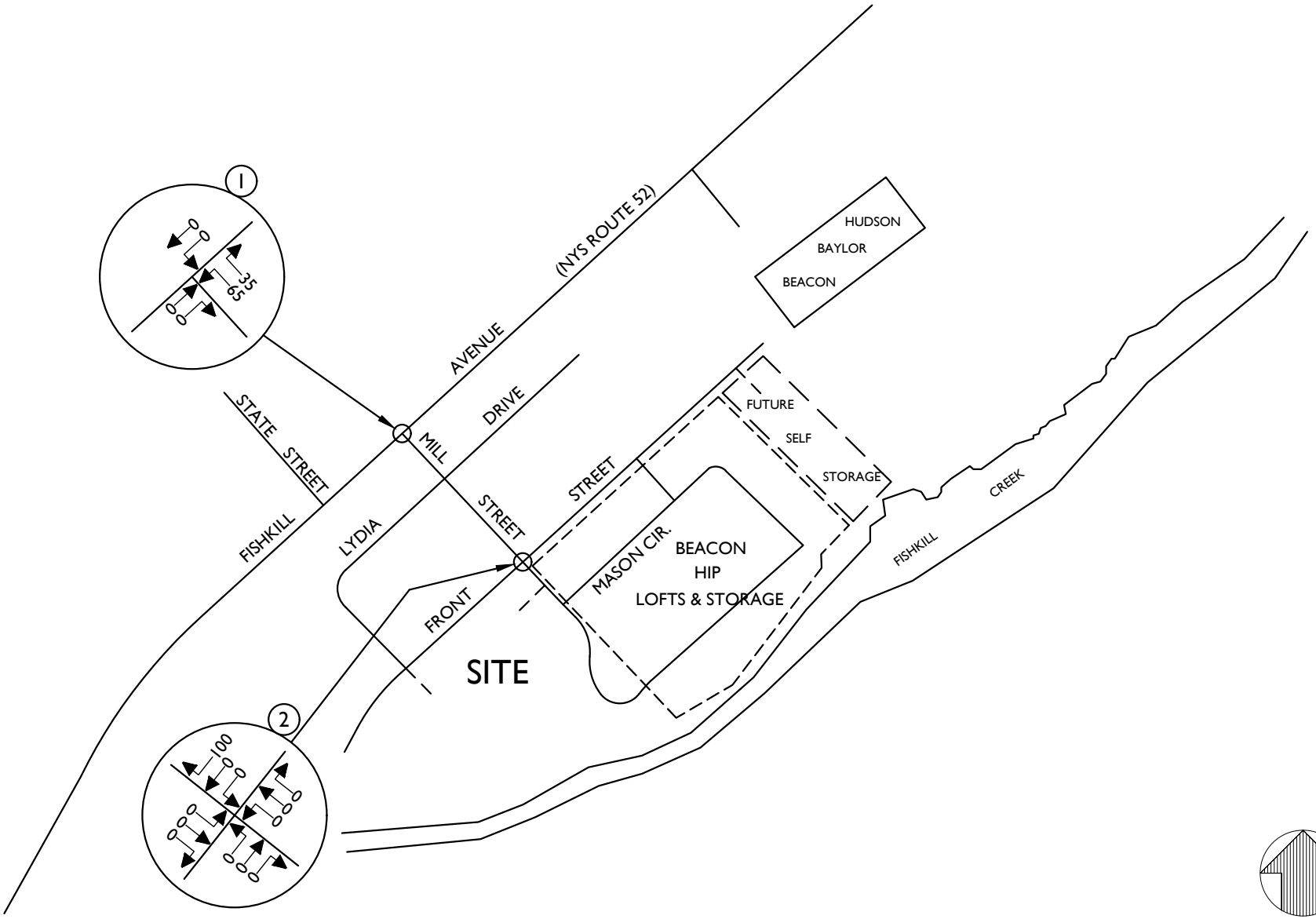
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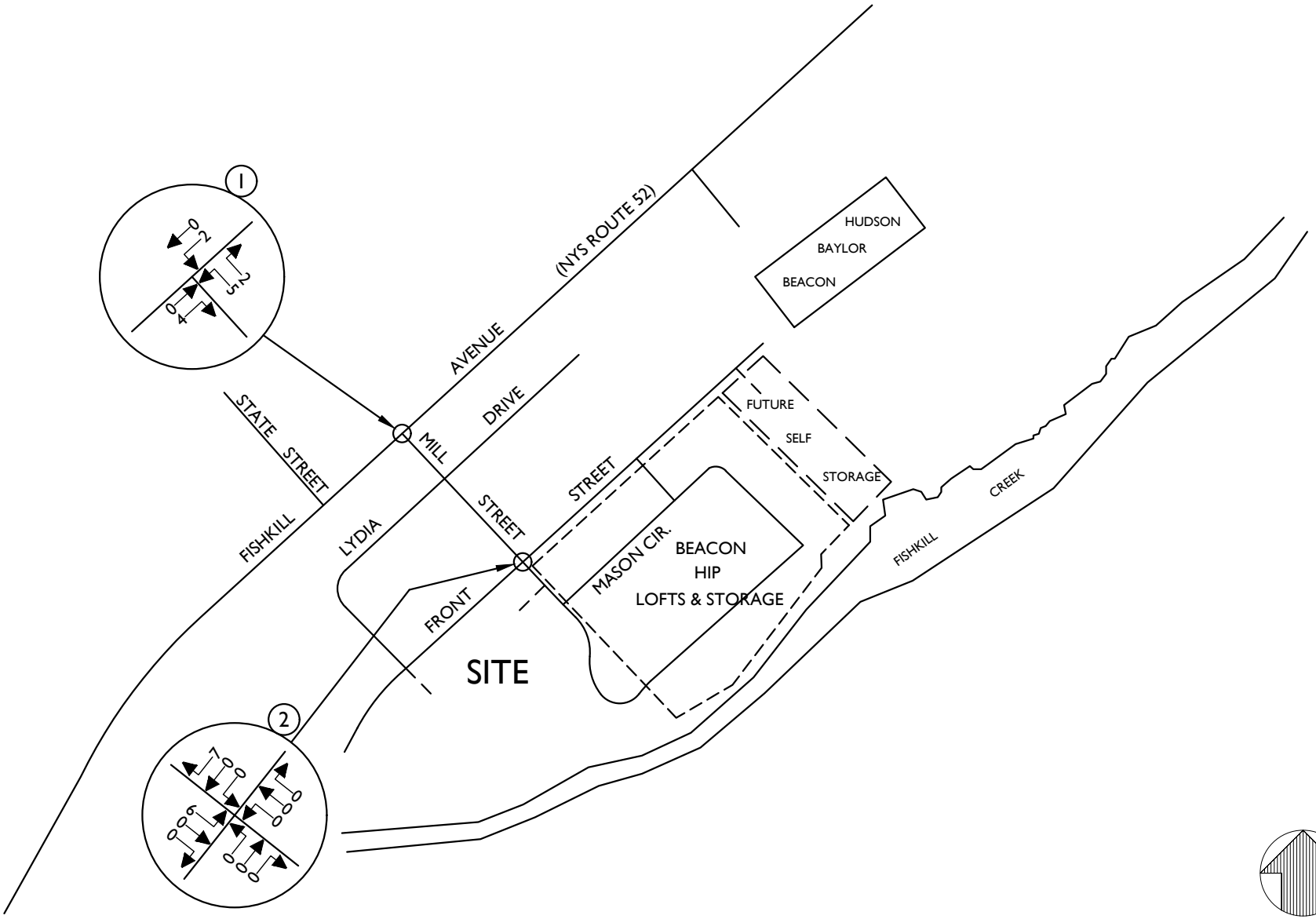
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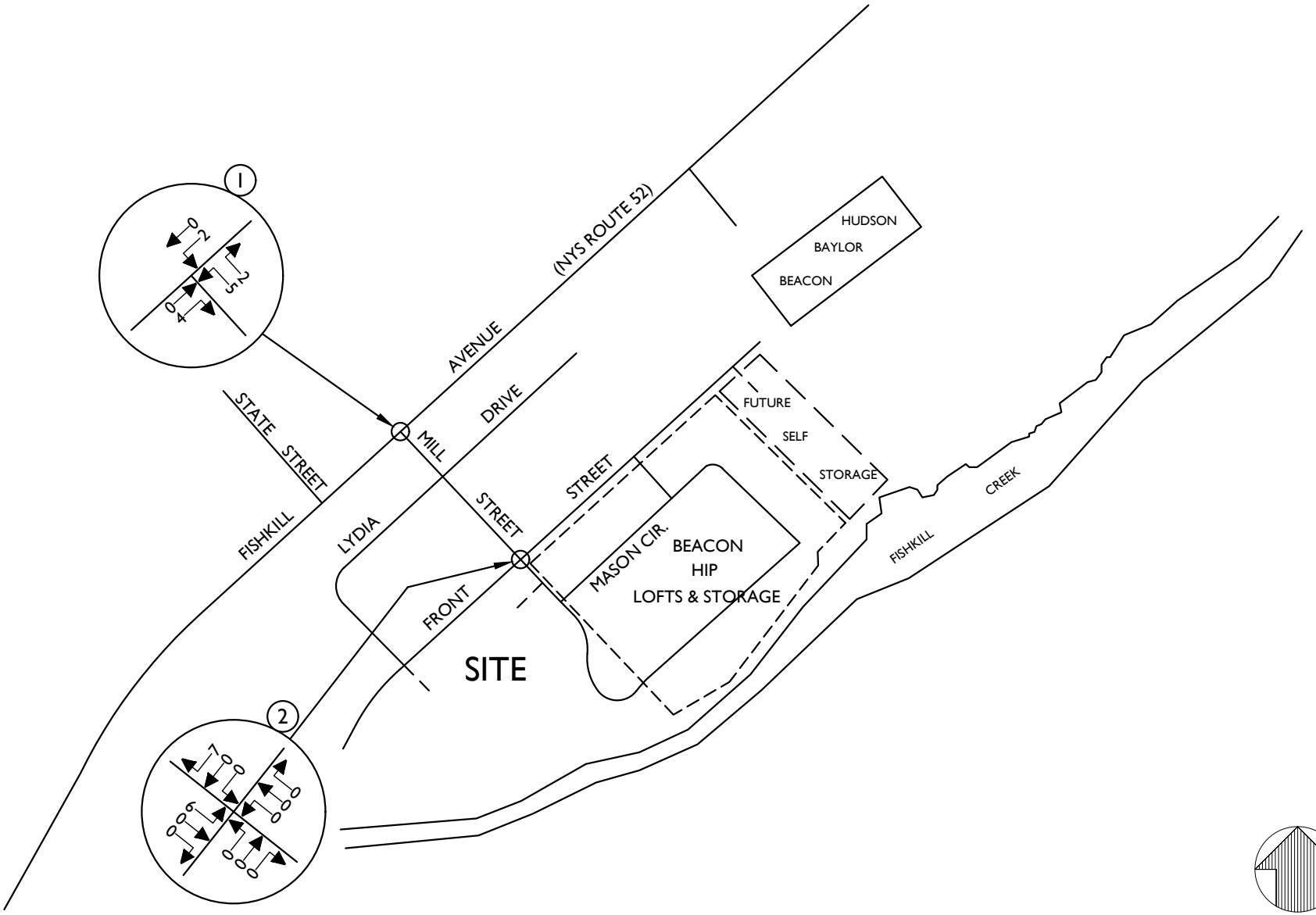
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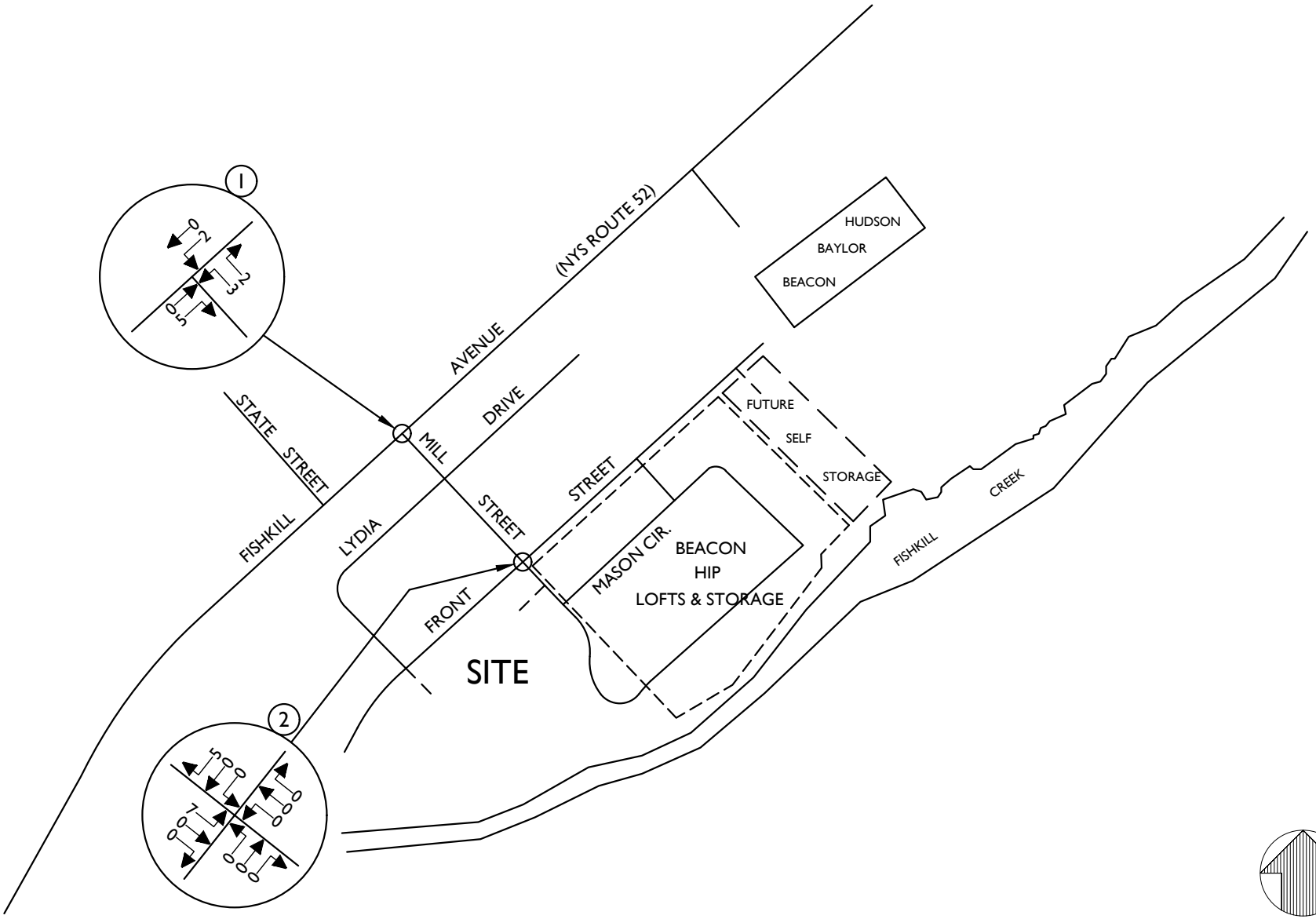
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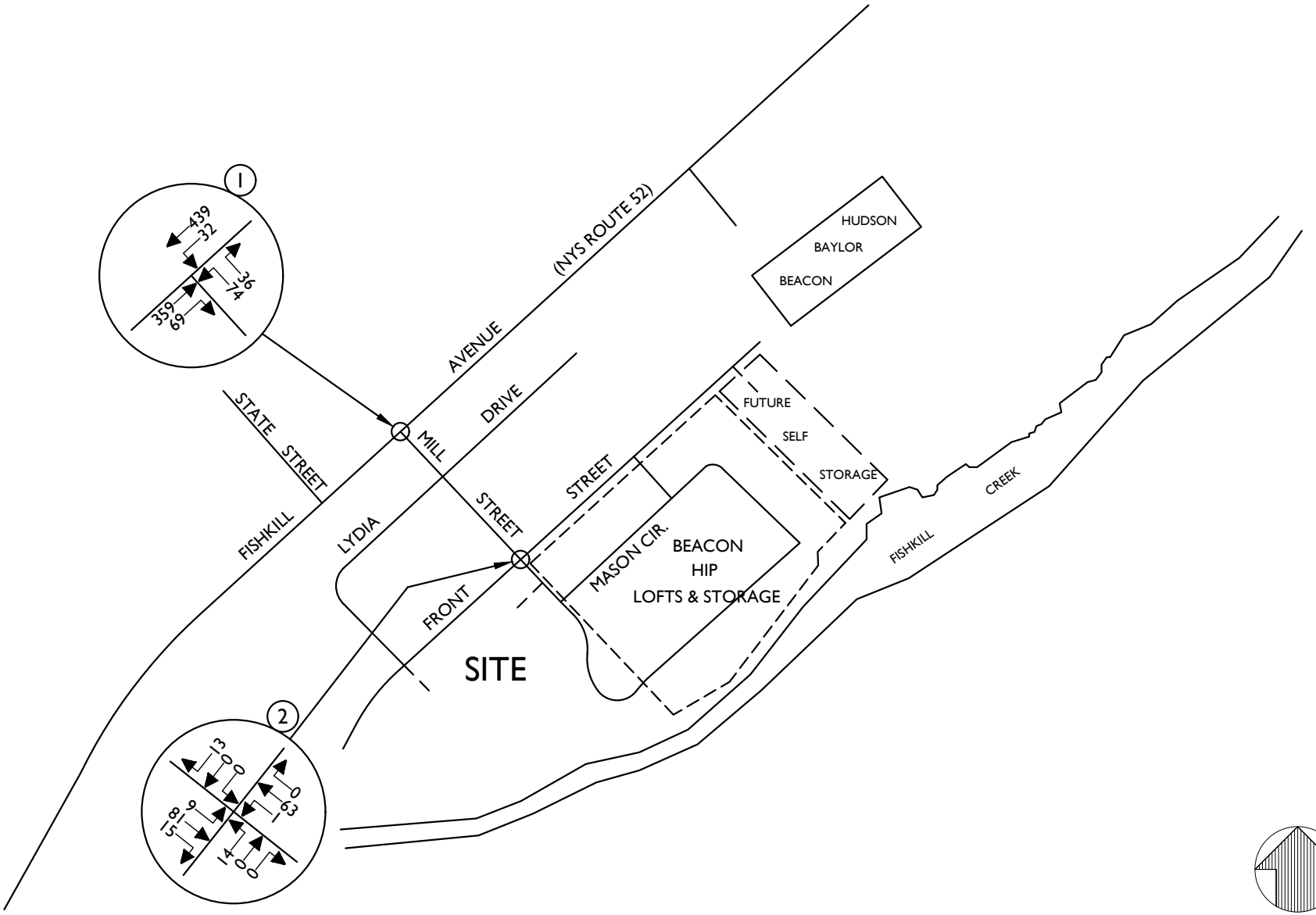
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PROJECT NUMBER: 21005078B
DRAWING NAME: 221223RH_FIGURE

SHEET TITLE: SITE GENERATED TRAFFIC VOLUMES WEEKEND PEAK SAT HOUR (W/ FUTURE SELF STORAGE)
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 26

\AcPublish_17648\221223RH_FIGURE.dwg\26 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

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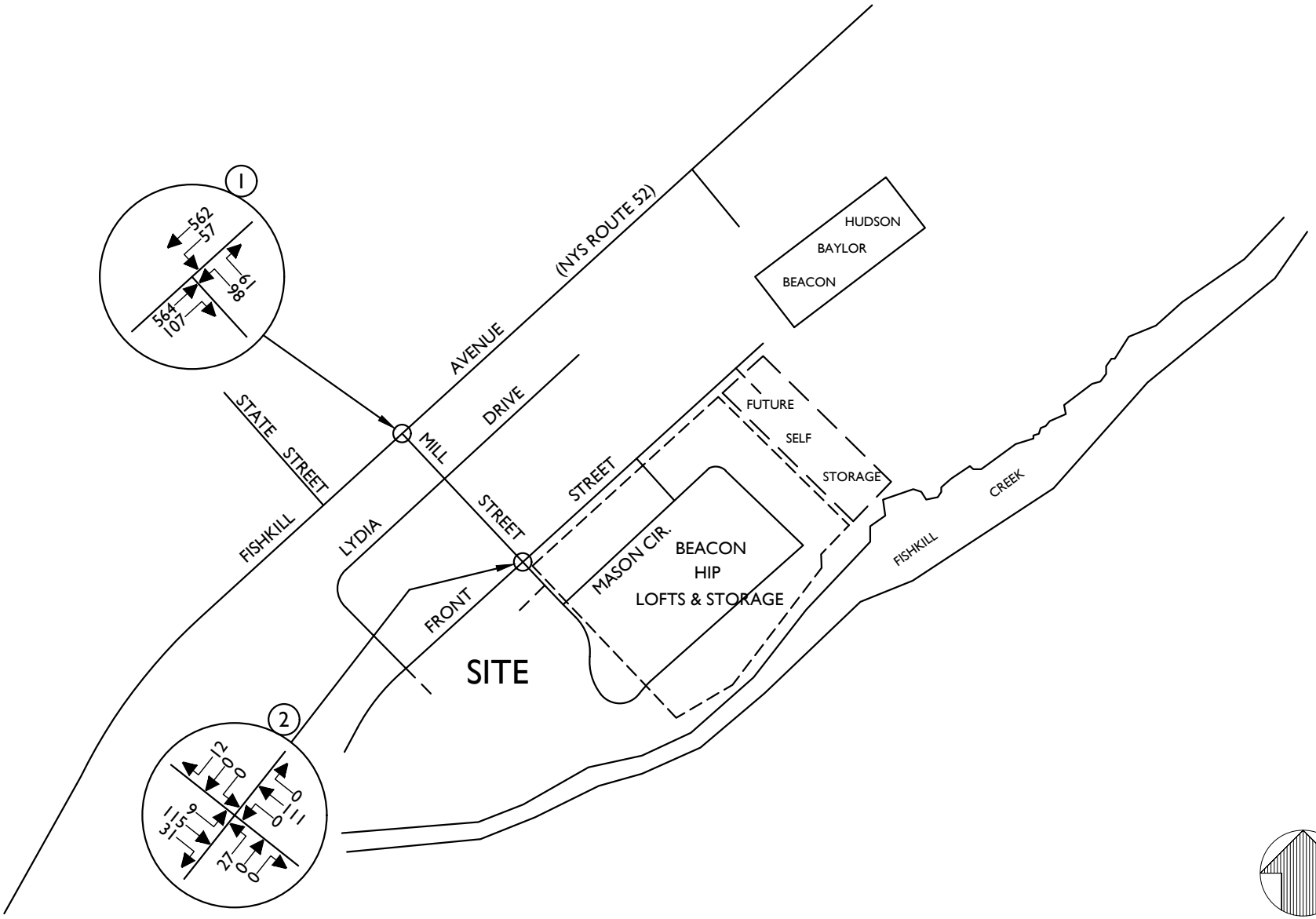
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	12/23/22	R.H.	R.D.G.

PROJECT NUMBER: 21005078B
DRAWING NAME: 221223RH_FIGURE

SHEET TITLE: 2025 BUILD TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR (W/ FUTURE SELF STORAGE)
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 27



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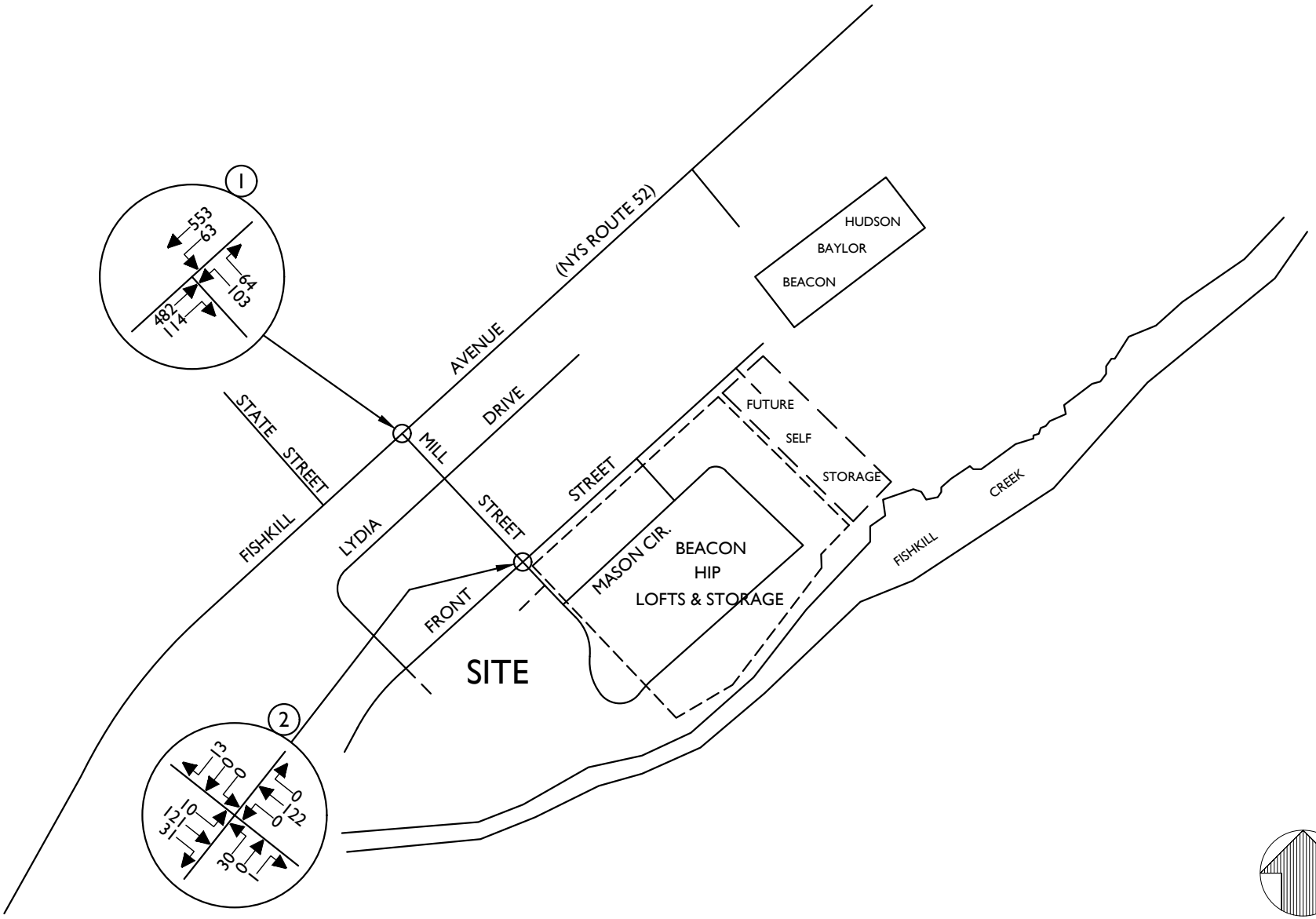
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	12/23/22	R.H.	R.D.G.

PROJECT NUMBER: 21005078B
DRAWING NAME: 221223RH_FIGURE

SHEET TITLE: 2025 BUILD TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR (W/ FUTURE SELF STORAGE)
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 28

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TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	12/23/22	R.H.	R.D.G.

PROJECT NUMBER: 21005078B
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SHEET TITLE: 2025 BUILD TRAFFIC VOLUMES WEEKEND PEAK SAT HOUR (W/ FUTURE SELF STORAGE)
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 29

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Table No. 1B
Hourly Trip Generation Rates (HTGR) and
Anticipated Site Generated Traffic Volumes

Beacon HIP Lofts, LLC City of Beacon, NY	Entry		Exit	
	HTGR[1]	Volume	HTGR1	HTGR[1]
Self Storage (70,000 Sq. Ft.)				
Peak AM Hour	0.09	6	0.10	7
Peak PM Hour	0.09	6	0.10	7
Saturday Peak Hour	0.10	7	0.07	5

NOTES:

1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 11TH EDITION, 2021. ITE LAND USE CODE - 220 - MULTIFAMILY HOUSE AND ITE LAND USE CODE - 710 - OFFICE.

Table No. 2B
Level of Service Summary Table
Weekday Peak AM Hour

				2022 Existing			2025 No-Build			2025 Build W/Self Storage			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Fishkill Avenue (NYS Route 52) & Mill Street**	**Unsignalized**											
	Mill Street	NWB	LR	0.11	C	16.6	0.19	C	19.0	0.40	D	25.3	6.3
	Fishkill Avenue (NYS Route 52)	SWB	TR	0.01	A	8.5	0.02	A	8.7	0.04	A	8.9	0.2
	With Traffic Signal												
	Mill Street	NWB	LR	-	-	-	0.18	A	8.6	0.36	A	9.6	1.0
	Fishkill Avenue (NYS Route 52)	NEB	TR	-	-	-	0.59	A	6.7	0.63	A	6.8	0.1
	Fishkill Avenue (NYS Route 52)	WB	L	-	-	-	0.55	A	6.6	0.56	A	6.6	0.0
		Overall		**-**	**-**	**-**	**-**	**A**	**6.8**	**-**	**A**	**7.0**	**0.2**
2	**Front Street & Mill Street**	**Unsignalized**											
	Mill Street	SEB	LTR	0.04	A	7.1	0.08	A	7.3	0.15	A	7.7	0.4
	Mill Street	NWB	LTR	0.02	A	7.1	0.04	A	7.2	0.10	A	7.6	0.4
	Front Street	NEB	LTR	0.00	A	7.3	0.00	A	7.4	0.02	A	7.7	0.3
	Front Street	SWB	LTR	0.01	A	6.5	0.01	A	6.6	0.02	A	6.9	0.3
		Overall		**-**	**A**	**7.0**	**-**	**A**	**7.2**	**-**	**A**	**7.6**	**0.4**

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

Table No. 2B
Level of Service Summary Table
Weekday Peak PM Hour

				2022 Existing			2025 No-Build			2025 Build W/Self Storage			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Fishkill Avenue (NYS Route 52) & Mill Street**	**Unsignalized**											
	Mill Street	NWB	LR	0.13	C	20.7	0.27	D	27.7	1.03	F	136.6	108.9
	Fishkill Avenue (NYS Route 52)	SWB	TR	0.01	A	8.8	0.02	A	9.0	0.07	A	9.5	0.5
	With Traffic Signal												
	Mill Street	NWB	LR	-	-	-	0.21	B	10.5	0.58	B	14.3	3.8
	Fishkill Avenue (NYS Route 52)	NEB	TR	-	-	-	0.71	A	7.0	0.67	A	6.8	-0.2
	Fishkill Avenue (NYS Route 52)	WB	L	-	-	-	0.61	A	6.4	0.68	A	7.0	0.6
		Overall		**-**	**-**	**-**	**-**	**A**	**6.9**	**-**	**A**	**7.8**	**0.9**
2	**Front Street & Mill Street**	**Unsignalized**											
	Mill Street	SEB	LTR	0.04	A	7.1	0.07	A	7.3	0.27	A	8.6	1.3
	Mill Street	NWB	LTR	0.03	A	7.2	0.07	A	7.4	0.2	A	8.4	1.0
	Front Street	NEB	LTR	0.01	A	7.3	0.01	A	7.4	0.06	A	8.3	0.9
	Front Street	SWB	LTR	0.01	A	6.5	0.01	A	6.6	0.02	A	7.3	0.7
		Overall		**-**	**A**	**7.1**	**-**	**A**	**7.3**	**-**	**A**	**8.5**	**1.2**

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

Table No. 2B
Level of Service Summary Table
Saturday Peak Hour

				2022 Existing			2025 No-Build			2025 Build W/Self Storage			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Fishkill Avenue (NYS Route 52) & Mill Street**	**Unsignalized**											
	Mill Street	NWB	LR	0.09	C	17.9	0.21	C	23.0	0.97	F	111.9	88.9
	Fishkill Avenue (NYS Route 52)	SWB	TR	0.01	A	8.5	0.02	A	8.7	0.07	A	9.2	0.5
	With Traffic Signal												
	Mill Street	NWB	LR	-	-	-	0.18	B	10.0	0.58	B	14.3	4.3
	Fishkill Avenue (NYS Route 52)	NEB	TR	-	-	-	0.64	A	6.6	0.67	A	6.8	0.2
	Fishkill Avenue (NYS Route 52)	WB	L	-	-	-	0.61	A	6.6	0.68	A	7.0	0.4
		Overall		**-**	**-**	**-**	**-**	**A**	**6.8**	**-**	**A**	**7.8**	**1.0**
2	**Front Street & Mill Street**	**Unsignalized**											
	Mill Street	SEB	LTR	0.02	A	7.0	0.05	A	7.2	0.20	A	8.1	0.9
	Mill Street	NWB	LTR	0.02	A	7.1	0.05	A	7.3	0.16	A	8.1	0.8
	Front Street	NEB	LTR	0.00	A	7.0	0.00	A	7.1	0.05	A	8.0	0.9
	Front Street	SWB	LTR	0.01	A	6.4	0.01	A	6.5	0.02	A	7.1	0.6
		Overall		**-**	**A**	**6.9**	**-**	**A**	**7.2**	**-**	**A**	**8.1**	**0.9**

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	74	36	359	69	32	439
Future Volume (vph)	74	36	359	69	32	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.956		0.978			
Flt Protected	0.967					0.997
Satd. Flow (prot)	1487	0	1729	0	0	1772
Flt Permitted	0.967					0.997
Satd. Flow (perm)	1487	0	1729	0	0	1772
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)		1			1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	18%	7%	10%	33%	5%
Adj. Flow (vph)	78	38	378	73	34	462
Shared Lane Traffic (%)						
Lane Group Flow (vph)	116	0	451	0	0	496
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	74	36	359	69	32	439
Future Vol, veh/h	74	36	359	69	32	439
Conflicting Peds, #/hr	0	1	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	18	7	10	33	5
Mvmt Flow	78	38	378	73	34	462

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	946	417	0	0	452	0
Stage 1	416	-	-	-	-	-
Stage 2	530	-	-	-	-	-
Critical Hdwy	7.04	6.68	-	-	4.43	-
Critical Hdwy Stg 1	6.04	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.536	3.462	-	-	2.497	-
Pot Cap-1 Maneuver	246	582	-	-	963	-
Stage 1	617	-	-	-	-	-
Stage 2	537	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	234	581	-	-	962	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	511	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	25.3	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	291	962	-
HCM Lane V/C Ratio	-	-	0.398	0.035	-
HCM Control Delay (s)	-	-	25.3	8.9	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	1.8	0.1	-

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	9	81	15	1	63	0	14	0	0	0	0	13
Future Volume (vph)	9	81	15	1	63	0	14	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.981									0.865	
Flt Protected		0.996			0.999			0.950				
Satd. Flow (prot)	0	2000	0	0	1633	0	0	1577	0	0	1028	0
Flt Permitted		0.996			0.999			0.950				
Satd. Flow (perm)	0	2000	0	0	1633	0	0	1577	0	0	1028	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)				1		1			1	1		
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	50%
Adj. Flow (vph)	12	105	19	1	82	0	18	0	0	0	0	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	136	0	0	83	0	0	18	0	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	81	15	1	63	0	14	0	0	0	0	13
Future Vol, veh/h	9	81	15	1	63	0	14	0	0	0	0	13
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	50
Mvmt Flow	12	105	19	1	82	0	18	0	0	0	0	17
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.6	7.7	6.9
HCM LOS	A	A	A	A

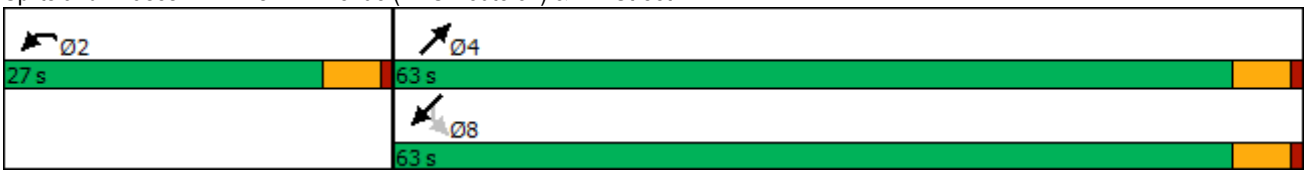
Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	100%	2%	9%	0%
Vol Thru, %	0%	98%	77%	0%
Vol Right, %	0%	0%	14%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	14	64	105	13
LT Vol	14	1	9	0
Through Vol	0	63	81	0
RT Vol	0	0	15	13
Lane Flow Rate	18	83	136	17
Geometry Grp	1	1	1	1
Degree of Util (X)	0.023	0.095	0.151	0.018
Departure Headway (Hd)	4.525	4.1	3.989	3.826
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	779	869	896	941
Service Time	2.624	2.146	2.026	1.826
HCM Lane V/C Ratio	0.023	0.096	0.152	0.018
HCM Control Delay	7.7	7.6	7.7	6.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.5	0.1

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	74	36	359	69	32	439
Future Volume (vph)	74	36	359	69	32	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99					1.00
Frt	0.956		0.978			
Flt Protected	0.967					0.997
Satd. Flow (prot)	1476	0	1729	0	0	1772
Flt Permitted	0.967					0.950
Satd. Flow (perm)	1476	0	1729	0	0	1688
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	26		22			
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)		1			1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	18%	7%	10%	33%	5%
Adj. Flow (vph)	78	38	378	73	34	462
Shared Lane Traffic (%)						
Lane Group Flow (vph)	116	0	451	0	0	496
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2		2		1	2
Detector Template					Left	
Leading Detector (ft)	83		83		20	83
Trailing Detector (ft)	-5		-5		0	-5
Detector 1 Position(ft)	-5		-5		0	-5
Detector 1 Size(ft)	40		40		20	40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)	43		43			43
Detector 2 Size(ft)	40		40			40
Detector 2 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0		0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	2		4			8
Permitted Phases					8	
Detector Phase	2		4		8	8
Switch Phase						

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	23.0		23.0		22.5	22.5
Total Split (s)	27.0		63.0		63.0	63.0
Total Split (%)	30.0%		70.0%		70.0%	70.0%
Maximum Green (s)	22.0		58.0		58.0	58.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	Min		None		None	None
Walk Time (s)	7.0		7.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	1		1			
v/c Ratio	0.30		0.57			0.65
Control Delay	12.2		10.5			12.7
Queue Delay	0.0		0.0			0.0
Total Delay	12.2		10.5			12.7
Queue Length 50th (ft)	13		47			57
Queue Length 95th (ft)	52		157			189
Internal Link Dist (ft)	321		545			698
Turn Bay Length (ft)						
Base Capacity (vph)	975		1729			1688
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.12		0.26			0.29

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 36	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Fishkill Avenue (NYS Route 52) & Mill Street





Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	74	36	359	69	32	439
Future Volume (veh/h)	74	36	359	69	32	439
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1788	1580	1796	1752	1411	1826
Adj Flow Rate, veh/h	78	38	378	73	34	462
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	18	7	10	33	5
Cap, veh/h	215	105	604	117	174	708
Arrive On Green	0.20	0.20	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1091	531	1463	283	57	1713
Grp Volume(v), veh/h	117	0	0	451	496	0
Grp Sat Flow(s),veh/h/ln	1636	0	0	1745	1769	0
Q Serve(g_s), s	1.6	0.0	0.0	5.2	0.2	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	5.2	5.6	0.0
Prop In Lane	0.67	0.32		0.16	0.07	
Lane Grp Cap(c), veh/h	322	0	0	721	881	0
V/C Ratio(X)	0.36	0.00	0.00	0.63	0.56	0.00
Avail Cap(c_a), veh/h	1404	0	0	3948	4042	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.9	0.0	0.0	6.0	6.1	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.9	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.7	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.6	0.0	0.0	6.8	6.6	0.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	117		451			496
Approach Delay, s/veh	9.6		6.8			6.6
Approach LOS	A		A			A

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	10.0	15.6	15.6
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	58.0	58.0
Max Q Clear Time (g_c+I1), s	3.6	7.2	7.6
Green Ext Time (p_c), s	0.5	2.6	3.0

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	98	61	564	107	57	562
Future Volume (vph)	98	61	564	107	57	562
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.948		0.978			
Flt Protected	0.970					0.995
Satd. Flow (prot)	1575	0	1822	0	0	1842
Flt Permitted	0.970					0.995
Satd. Flow (perm)	1575	0	1822	0	0	1842
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	9%	2%
Adj. Flow (vph)	103	64	594	113	60	592
Shared Lane Traffic (%)						
Lane Group Flow (vph)	167	0	707	0	0	652
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	15.4

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	98	61	564	107	57	562
Future Vol, veh/h	98	61	564	107	57	562
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	9	2
Mvmt Flow	103	64	594	113	60	592

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1363	651	0	0	707	0
Stage 1	651	-	-	-	-	-
Stage 2	712	-	-	-	-	-
Critical Hdwy	7.02	6.52	-	-	4.19	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.281	-
Pot Cap-1 Maneuver	130	444	-	-	860	-
Stage 1	466	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	116	444	-	-	860	-
Mov Cap-2 Maneuver	116	-	-	-	-	-
Stage 1	466	-	-	-	-	-
Stage 2	387	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	136.6	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	162	860	-
HCM Lane V/C Ratio	-	-	1.033	0.07	-
HCM Control Delay (s)	-	-	136.6	9.5	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	8.3	0.2	-

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	9	115	31	0	111	0	27	0	0	0	0	12
Future Volume (vph)	9	115	31	0	111	0	27	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.973									0.865	
Flt Protected		0.997						0.950				
Satd. Flow (prot)	0	1985	0	0	1573	0	0	1577	0	0	1511	0
Flt Permitted		0.997						0.950				
Satd. Flow (perm)	0	1985	0	0	1573	0	0	1577	0	0	1511	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)	6			6		12			6	12		6
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	13	172	46	0	166	0	40	0	0	0	0	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	231	0	0	166	0	0	40	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	115	31	0	111	0	27	0	0	0	0	12
Future Vol, veh/h	9	115	31	0	111	0	27	0	0	0	0	12
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles, %	2	2	2	2	6	2	2	2	2	2	2	2
Mvmt Flow	13	172	46	0	166	0	40	0	0	0	0	18
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.4	8.3	7.3
HCM LOS	A	A	A	A

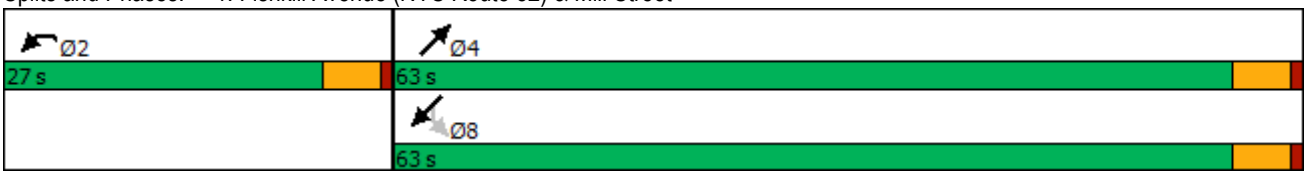
Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	100%	0%	6%	0%
Vol Thru, %	0%	100%	74%	0%
Vol Right, %	0%	0%	20%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	111	155	12
LT Vol	27	0	9	0
Through Vol	0	111	115	0
RT Vol	0	0	31	12
Lane Flow Rate	40	166	231	18
Geometry Grp	1	1	1	1
Degree of Util (X)	0.056	0.197	0.26	0.021
Departure Headway (Hd)	5.018	4.28	4.053	4.248
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	718	825	872	847
Service Time	3.019	2.378	2.146	2.25
HCM Lane V/C Ratio	0.056	0.201	0.265	0.021
HCM Control Delay	8.3	8.4	8.6	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.7	1	0.1

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	98	61	564	107	57	562
Future Volume (vph)	98	61	564	107	57	562
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.948		0.978			
Flt Protected	0.970					0.995
Satd. Flow (prot)	1575	0	1822	0	0	1842
Flt Permitted	0.970					0.858
Satd. Flow (perm)	1575	0	1822	0	0	1588
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	33		21			
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	9%	2%
Adj. Flow (vph)	103	64	594	113	60	592
Shared Lane Traffic (%)						
Lane Group Flow (vph)	167	0	707	0	0	652
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2		2		1	2
Detector Template					Left	
Leading Detector (ft)	83		83		20	83
Trailing Detector (ft)	-5		-5		0	-5
Detector 1 Position(ft)	-5		-5		0	-5
Detector 1 Size(ft)	40		40		20	40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)	43		43			43
Detector 2 Size(ft)	40		40			40
Detector 2 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0		0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	2		4			8
Permitted Phases					8	
Detector Phase	2		4		8	8
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	23.0		23.0		23.0	23.0

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Total Split (s)	27.0		63.0		63.0	63.0
Total Split (%)	30.0%		70.0%		70.0%	70.0%
Maximum Green (s)	22.0		58.0		58.0	58.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	Min		None		None	None
Walk Time (s)	7.0		7.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	1		1			
v/c Ratio	0.44		0.72			0.76
Control Delay	18.9		12.5			15.3
Queue Delay	0.0		0.0			0.0
Total Delay	18.9		12.5			15.3
Queue Length 50th (ft)	28		105			105
Queue Length 95th (ft)	100		274			285
Internal Link Dist (ft)	321		545			698
Turn Bay Length (ft)						
Base Capacity (vph)	835		1755			1529
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.20		0.40			0.43

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 46.3	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Fishkill Avenue (NYS Route 52) & Mill Street





Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	103	64	482	114	63	553
Future Volume (veh/h)	103	64	482	114	63	553
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1817	1743	1870	1870	1781	1870
Adj Flow Rate, veh/h	108	67	507	120	66	582
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	7	2	2	8	2
Cap, veh/h	186	116	760	180	162	795
Arrive On Green	0.18	0.18	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1011	627	1461	346	85	1529
Grp Volume(v), veh/h	176	0	0	627	648	0
Grp Sat Flow(s),veh/h/ln	1648	0	0	1807	1615	0
Q Serve(g_s), s	3.3	0.0	0.0	8.6	2.5	0.0
Cycle Q Clear(g_c), s	3.3	0.0	0.0	8.6	11.1	0.0
Prop In Lane	0.61	0.38		0.19	0.10	
Lane Grp Cap(c), veh/h	304	0	0	939	957	0
V/C Ratio(X)	0.58	0.00	0.00	0.67	0.68	0.00
Avail Cap(c_a), veh/h	1072	0	0	3099	2923	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.6	0.0	0.0	6.0	6.2	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.3	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.3	0.0	0.0	6.8	7.0	0.0
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	176		627			648
Approach Delay, s/veh	14.3		6.8			7.0
Approach LOS	B		A			A

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	11.2	22.6	22.6
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	58.0	58.0
Max Q Clear Time (g_c+I1), s	5.3	10.6	13.1
Green Ext Time (p_c), s	0.8	4.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	121	31	0	122	0	30	0	1	0	0	13
Future Volume (vph)	10	121	31	0	122	0	30	0	1	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974						0.996			0.865	
Flt Protected		0.997						0.954				
Satd. Flow (prot)	0	1987	0	0	1558	0	0	1534	0	0	1511	0
Flt Permitted		0.997						0.954				
Satd. Flow (perm)	0	1987	0	0	1558	0	0	1534	0	0	1511	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)	4			1		5			1	5		4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	7%	2%	2%	2%	100%	2%	2%	2%
Adj. Flow (vph)	11	133	34	0	134	0	33	0	1	0	0	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	178	0	0	134	0	0	34	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	121	31	0	122	0	30	0	1	0	0	13
Future Vol, veh/h	10	121	31	0	122	0	30	0	1	0	0	13
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	7	2	2	2	100	2	2	2
Mvmt Flow	11	133	34	0	134	0	33	0	1	0	0	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	8.1	8	7.1
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	97%	0%	6%	0%
Vol Thru, %	0%	100%	75%	0%
Vol Right, %	3%	0%	19%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	122	162	13
LT Vol	30	0	10	0
Through Vol	0	122	121	0
RT Vol	1	0	31	13
Lane Flow Rate	34	134	178	14
Geometry Grp	1	1	1	1
Degree of Util (X)	0.045	0.158	0.199	0.016
Departure Headway (Hd)	4.803	4.238	4.017	4.053
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	750	838	883	888
Service Time	2.804	2.309	2.086	2.054
HCM Lane V/C Ratio	0.045	0.16	0.202	0.016
HCM Control Delay	8	8.1	8.1	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	0.7	0

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	103	64	482	114	63	553
Future Volume (vph)	103	64	482	114	63	553
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.948		0.974			
Flt Protected	0.970					0.995
Satd. Flow (prot)	1546	0	1814	0	0	1842
Flt Permitted	0.970					0.995
Satd. Flow (perm)	1546	0	1814	0	0	1842
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)	3			3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	7%	2%	2%	8%	2%
Adj. Flow (vph)	108	67	507	120	66	582
Shared Lane Traffic (%)						
Lane Group Flow (vph)	175	0	627	0	0	648
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	14

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	103	64	482	114	63	553
Future Vol, veh/h	103	64	482	114	63	553
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	7	2	2	8	2
Mvmt Flow	108	67	507	120	66	582

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1287	570	0	0	630	0
Stage 1	570	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Critical Hdwy	7.02	6.57	-	-	4.18	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-	2.272	-
Pot Cap-1 Maneuver	146	488	-	-	924	-
Stage 1	515	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	130	487	-	-	922	-
Mov Cap-2 Maneuver	130	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	382	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	111.9	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	181	922	-
HCM Lane V/C Ratio	-	-	0.971	0.072	-
HCM Control Delay (s)	-	-	111.9	9.2	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	7.8	0.2	-

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	121	31	0	122	0	30	0	1	0	0	13
Future Volume (vph)	10	121	31	0	122	0	30	0	1	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974						0.996			0.865	
Flt Protected		0.997						0.954				
Satd. Flow (prot)	0	1987	0	0	1558	0	0	1534	0	0	1511	0
Flt Permitted		0.997						0.954				
Satd. Flow (perm)	0	1987	0	0	1558	0	0	1534	0	0	1511	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)	4			1		5			1	5		4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	7%	2%	2%	2%	100%	2%	2%	2%
Adj. Flow (vph)	11	133	34	0	134	0	33	0	1	0	0	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	178	0	0	134	0	0	34	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	121	31	0	122	0	30	0	1	0	0	13
Future Vol, veh/h	10	121	31	0	122	0	30	0	1	0	0	13
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	7	2	2	2	100	2	2	2
Mvmt Flow	11	133	34	0	134	0	33	0	1	0	0	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	8.1	8	7.1
HCM LOS	A	A	A	A

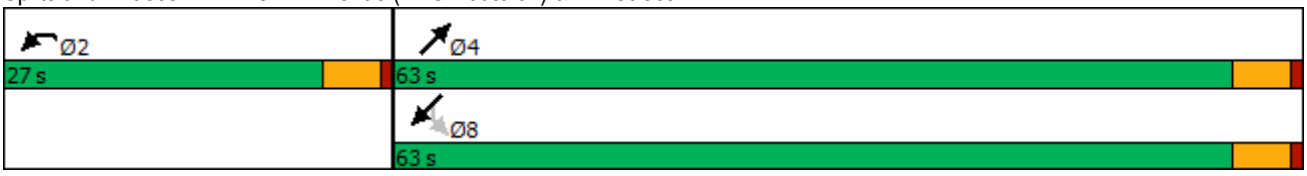
Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	97%	0%	6%	0%
Vol Thru, %	0%	100%	75%	0%
Vol Right, %	3%	0%	19%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	122	162	13
LT Vol	30	0	10	0
Through Vol	0	122	121	0
RT Vol	1	0	31	13
Lane Flow Rate	34	134	178	14
Geometry Grp	1	1	1	1
Degree of Util (X)	0.045	0.158	0.199	0.016
Departure Headway (Hd)	4.803	4.238	4.017	4.053
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	750	838	883	888
Service Time	2.804	2.309	2.086	2.054
HCM Lane V/C Ratio	0.045	0.16	0.202	0.016
HCM Control Delay	8	8.1	8.1	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	0.7	0

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	103	64	482	114	63	553
Future Volume (vph)	103	64	482	114	63	553
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12
Grade (%)	3%		0%			0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.99			
Frt	0.948		0.974			
Flt Protected	0.970					0.995
Satd. Flow (prot)	1546	0	1805	0	0	1842
Flt Permitted	0.970					0.896
Satd. Flow (perm)	1539	0	1805	0	0	1659
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	33		27			
Link Speed (mph)	30		40			40
Link Distance (ft)	401		625			778
Travel Time (s)	9.1		10.7			13.3
Confl. Peds. (#/hr)	3			3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	7%	2%	2%	8%	2%
Adj. Flow (vph)	108	67	507	120	66	582
Shared Lane Traffic (%)						
Lane Group Flow (vph)	175	0	627	0	0	648
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.02	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2		2		1	2
Detector Template					Left	
Leading Detector (ft)	83		83		20	83
Trailing Detector (ft)	-5		-5		0	-5
Detector 1 Position(ft)	-5		-5		0	-5
Detector 1 Size(ft)	40		40		20	40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)	43		43			43
Detector 2 Size(ft)	40		40			40
Detector 2 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0		0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	2		4			8
Permitted Phases					8	
Detector Phase	2		4		8	8
Switch Phase						

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	23.0		23.0		23.0	23.0
Total Split (s)	27.0		63.0		63.0	63.0
Total Split (%)	30.0%		70.0%		70.0%	70.0%
Maximum Green (s)	22.0		58.0		58.0	58.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	Min		None		None	None
Walk Time (s)	7.0		7.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	3		3			
v/c Ratio	0.46		0.65			0.74
Control Delay	18.9		10.9			14.2
Queue Delay	0.0		0.0			0.0
Total Delay	18.9		10.9			14.2
Queue Length 50th (ft)	29		87			102
Queue Length 95th (ft)	103		227			270
Internal Link Dist (ft)	321		545			698
Turn Bay Length (ft)						
Base Capacity (vph)	825		1745			1603
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.21		0.36			0.40

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 45.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Fishkill Avenue (NYS Route 52) & Mill Street





Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	103	64	482	114	63	553
Future Volume (veh/h)	103	64	482	114	63	553
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.99		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1817	1743	1870	1870	1781	1870
Adj Flow Rate, veh/h	108	67	507	120	66	582
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	7	2	2	8	2
Cap, veh/h	186	116	760	180	162	795
Arrive On Green	0.18	0.18	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1011	627	1461	346	85	1529
Grp Volume(v), veh/h	176	0	0	627	648	0
Grp Sat Flow(s),veh/h/ln	1648	0	0	1807	1615	0
Q Serve(g_s), s	3.3	0.0	0.0	8.6	2.5	0.0
Cycle Q Clear(g_c), s	3.3	0.0	0.0	8.6	11.1	0.0
Prop In Lane	0.61	0.38		0.19	0.10	
Lane Grp Cap(c), veh/h	304	0	0	939	957	0
V/C Ratio(X)	0.58	0.00	0.00	0.67	0.68	0.00
Avail Cap(c_a), veh/h	1072	0	0	3099	2923	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.6	0.0	0.0	6.0	6.2	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.3	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.3	0.0	0.0	6.8	7.0	0.0
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	176		627			648
Approach Delay, s/veh	14.3		6.8			7.0
Approach LOS	B		A			A

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	11.2	22.6	22.6
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	58.0	58.0
Max Q Clear Time (g_c+I1), s	5.3	10.6	13.1
Green Ext Time (p_c), s	0.8	4.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	121	31	0	122	0	30	0	1	0	0	13
Future Volume (vph)	10	121	31	0	122	0	30	0	1	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	9	12	12	9	12	12	10	12
Grade (%)		-6%			5%			2%			-1%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974						0.996			0.865	
Flt Protected		0.997						0.954				
Satd. Flow (prot)	0	1987	0	0	1558	0	0	1534	0	0	1511	0
Flt Permitted		0.997						0.954				
Satd. Flow (perm)	0	1987	0	0	1558	0	0	1534	0	0	1511	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			203			348			719	
Travel Time (s)		9.1			4.6			7.9			16.3	
Confl. Peds. (#/hr)	4			1		5			1	5		4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	7%	2%	2%	2%	100%	2%	2%	2%
Adj. Flow (vph)	11	133	34	0	134	0	33	0	1	0	0	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	178	0	0	134	0	0	34	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.88	0.96	1.03	1.18	1.03	1.01	1.16	1.01	0.99	1.09	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	121	31	0	122	0	30	0	1	0	0	13
Future Vol, veh/h	10	121	31	0	122	0	30	0	1	0	0	13
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	7	2	2	2	100	2	2	2
Mvmt Flow	11	133	34	0	134	0	33	0	1	0	0	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	SE	NW	NE	SW
Opposing Approach	NW	SE	SW	NE
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SW	NE	SE	NW
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SW	NW	SE
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	8.1	8	7.1
HCM LOS	A	A	A	A

Lane	NELn1	NWLn1	SELn1	SWLn1
Vol Left, %	97%	0%	6%	0%
Vol Thru, %	0%	100%	75%	0%
Vol Right, %	3%	0%	19%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	122	162	13
LT Vol	30	0	10	0
Through Vol	0	122	121	0
RT Vol	1	0	31	13
Lane Flow Rate	34	134	178	14
Geometry Grp	1	1	1	1
Degree of Util (X)	0.045	0.158	0.199	0.016
Departure Headway (Hd)	4.803	4.238	4.017	4.053
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	750	838	883	888
Service Time	2.804	2.309	2.086	2.054
HCM Lane V/C Ratio	0.045	0.16	0.202	0.016
HCM Control Delay	8	8.1	8.1	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	0.7	0

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Traffic Impact Study

Appendix F | Traffic Volume Data

Colliers Engineering & Design

400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

File Name : 1-NYS_ROUTE_52_AT_MILL_ST-THUR_1010272_10-27-2022
Site Code :
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Groups Printed- Lights - Buses - Trucks - Pedestrians

	NYS ROUTE 52 From North					MILL ST From East					NYS ROUTE 52 From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30 AM	0	48	0	0	48	2	0	2	0	4	1	35	0	0	36	0	0	0	0	0	88
06:45 AM	0	68	0	0	68	2	0	4	0	6	1	48	0	0	49	0	0	0	0	0	123
Total	0	116	0	0	116	4	0	6	0	10	2	83	0	0	85	0	0	0	0	0	211
07:00 AM	0	99	1	0	100	1	0	1	0	2	4	66	0	1	71	0	0	0	0	0	173
07:15 AM	0	100	4	0	104	3	0	2	0	5	3	75	0	0	78	0	0	0	0	0	187
07:30 AM	0	65	1	0	66	0	0	5	0	5	7	82	0	0	89	0	0	0	0	0	160
07:45 AM	0	109	0	0	109	4	0	10	0	14	5	80	0	0	85	0	0	0	0	0	208
Total	0	373	6	0	379	8	0	18	0	26	19	303	0	1	323	0	0	0	0	0	728
08:00 AM	0	108	3	0	111	3	0	4	0	7	5	85	0	0	90	0	0	0	0	0	208
08:15 AM	0	97	2	1	100	3	0	4	0	7	6	87	0	0	93	0	0	0	0	0	200
08:30 AM	0	95	1	0	96	1	0	9	0	10	4	88	0	0	92	0	0	0	0	0	198
08:45 AM	0	95	4	0	99	2	0	3	0	5	10	89	0	1	100	0	0	0	0	0	204
Total	0	395	10	1	406	9	0	20	0	29	25	349	0	1	375	0	0	0	0	0	810
09:00 AM	0	82	4	0	86	4	0	3	0	7	10	84	0	0	94	0	0	0	0	0	187
09:15 AM	0	70	3	0	73	5	0	4	0	9	0	76	0	0	76	0	0	0	0	0	158
09:30 AM	0	74	2	0	76	4	0	3	0	7	4	73	0	0	77	0	0	0	0	0	160
09:45 AM	0	79	2	0	81	0	0	5	0	5	4	82	0	0	86	0	0	0	0	0	172
Total	0	305	11	0	316	13	0	15	0	28	18	315	0	0	333	0	0	0	0	0	677
Grand Total	0	1189	27	1	1217	34	0	59	0	93	64	1050	0	2	1116	0	0	0	0	0	2426
Apprch %	0	97.7	2.2	0.1		36.6	0	63.4	0		5.7	94.1	0	0.2		0	0	0	0		
Total %	0	49	1.1	0	50.2	1.4	0	2.4	0	3.8	2.6	43.3	0	0.1	46	0	0	0	0	0	
Lights	0	1144	23	0	1167	30	0	58	0	88	61	987	0	0	1048	0	0	0	0	0	2303
% Lights	0	96.2	85.2	0	95.9	88.2	0	98.3	0	94.6	95.3	94	0	0	93.9	0	0	0	0	0	94.9
Buses	0	16	0	0	16	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	31
% Buses	0	1.3	0	0	1.3	0	0	0	0	0	0	1.4	0	0	1.3	0	0	0	0	0	1.3
Trucks	0	29	4	0	33	4	0	1	0	5	3	48	0	0	51	0	0	0	0	0	89
% Trucks	0	2.4	14.8	0	2.7	11.8	0	1.7	0	5.4	4.7	4.6	0	0	4.6	0	0	0	0	0	3.7
Pedestrians	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	3
% Pedestrians	0	0	0	100	0.1	0	0	0	0	0	0	0	0	100	0.2	0	0	0	0	0	0.1

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400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

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	NYS ROUTE 52 From North					MILL ST From East					NYS ROUTE 52 From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	**109**	0	0	109	**4**	0	**10**	0	**14**	5	80	0	0	85	0	0	0	0	0	**208**
08:00 AM	0	108	**3**	0	**111**	3	0	4	0	7	5	85	0	0	90	0	0	0	0	0	208
08:15 AM	0	97	2	**1**	100	3	0	4	0	7	**6**	87	0	0	**93**	0	0	0	0	0	200
08:30 AM	0	95	1	0	96	1	0	9	0	10	4	**88**	0	0	92	0	0	0	0	0	198
Total Volume	0	409	6	1	416	11	0	27	0	38	20	340	0	0	360	0	0	0	0	0	814
% App. Total	0	98.3	1.4	0.2		28.9	0	71.1	0		5.6	94.4	0	0		0	0	0	0		
PHF	.000	.938	.500	.250	.937	.688	.000	.675	.000	.679	.833	.966	.000	.000	.968	.000	.000	.000	.000	.000	.978
Lights	0	388	4	0	392	9	0	26	0	35	18	317	0	0	335	0	0	0	0	0	762
% Lights	0	94.9	66.7	0	94.2	81.8	0	96.3	0	92.1	90.0	93.2	0	0	93.1	0	0	0	0	0	93.6
Buses	0	8	0	0	8	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	15
% Buses	0	2.0	0	0	1.9	0	0	0	0	0	0	2.1	0	0	1.9	0	0	0	0	0	1.8
Trucks	0	13	2	0	15	2	0	1	0	3	2	16	0	0	18	0	0	0	0	0	36
% Trucks	0	3.2	33.3	0	3.6	18.2	0	3.7	0	7.9	10.0	4.7	0	0	5.0	0	0	0	0	0	4.4
Pedestrians	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Pedestrians	0	0	0	100	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

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400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
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Groups Printed- Lights - Buses - Trucks - Pedestrians

	NYS ROUTE 52 From North					MILL ST From East					NYS ROUTE 52 From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
03:00 PM	0	121	3	2	126	1	0	5	0	6	5	132	0	0	137	0	0	0	0	0	269
03:15 PM	0	120	1	1	122	5	0	4	0	9	9	119	0	0	128	0	0	0	0	0	259
03:30 PM	0	135	4	0	139	1	0	2	0	3	4	135	0	0	139	0	0	0	0	0	281
03:45 PM	0	123	4	0	127	4	0	7	0	11	2	132	0	0	134	0	0	0	0	0	272
Total	0	499	12	3	514	11	0	18	0	29	20	518	0	0	538	0	0	0	0	0	1081
04:00 PM	0	131	3	1	135	2	0	5	0	7	5	106	0	0	111	0	0	0	0	0	253
04:15 PM	0	148	5	0	153	5	0	8	0	13	1	129	0	0	130	0	0	0	0	0	296
04:30 PM	0	121	3	0	124	5	0	2	0	7	7	136	0	0	143	0	0	0	0	0	274
04:45 PM	0	143	2	0	145	3	0	1	0	4	5	117	0	0	122	0	0	0	0	0	271
Total	0	543	13	1	557	15	0	16	0	31	18	488	0	0	506	0	0	0	0	0	1094
05:00 PM	0	121	1	0	122	3	0	5	0	8	8	145	0	0	153	0	0	0	0	0	283
05:15 PM	0	129	6	0	135	3	0	5	0	8	6	124	0	0	130	0	0	0	0	0	273
05:30 PM	0	108	3	0	111	2	0	7	0	9	4	104	0	0	108	0	0	0	0	0	228
05:45 PM	0	161	2	0	163	0	0	3	0	3	2	88	0	0	90	0	0	0	0	0	256
Total	0	519	12	0	531	8	0	20	0	28	20	461	0	0	481	0	0	0	0	0	1040
06:00 PM	0	118	2	0	120	4	0	7	0	11	6	133	0	0	139	0	0	0	0	0	270
06:15 PM	0	124	4	0	128	1	0	6	0	7	8	123	0	0	131	0	0	0	0	0	266
Grand Total	0	1803	43	4	1850	39	0	67	0	106	72	1723	0	0	1795	0	0	0	0	0	3751
Apprch %	0	97.5	2.3	0.2		36.8	0	63.2	0		4	96	0	0		0	0	0	0		
Total %	0	48.1	1.1	0.1	49.3	1	0	1.8	0	2.8	1.9	45.9	0	0	47.9	0	0	0	0	0	
Lights	0	1779	42	0	1821	39	0	67	0	106	71	1690	0	0	1761	0	0	0	0	0	3688
% Lights	0	98.7	97.7	0	98.4	100	0	100	0	100	98.6	98.1	0	0	98.1	0	0	0	0	0	98.3
Buses	0	6	0	0	6	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	16
% Buses	0	0.3	0	0	0.3	0	0	0	0	0	0	0.6	0	0	0.6	0	0	0	0	0	0.4
Trucks	0	18	1	0	19	0	0	0	0	0	1	23	0	0	24	0	0	0	0	0	43
% Trucks	0	1	2.3	0	1	0	0	0	0	0	1.4	1.3	0	0	1.3	0	0	0	0	0	1.1
Pedestrians	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
% Pedestrians	0	0	0	100	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

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400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
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	NYS ROUTE 52 From North					MILL ST From East					NYS ROUTE 52 From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	**148**	**5**	0	**153**	**5**	0	**8**	0	**13**	1	129	0	0	130	0	0	0	0	0	**296**
04:30 PM	0	121	3	0	124	5	0	2	0	7	7	136	0	0	143	0	0	0	0	0	274
04:45 PM	0	143	2	0	145	3	0	1	0	4	5	117	0	0	122	0	0	0	0	0	271
05:00 PM	0	121	1	0	122	3	0	5	0	8	**8**	**145**	0	0	**153**	0	0	0	0	0	283
Total Volume	0	533	11	0	544	16	0	16	0	32	21	527	0	0	548	0	0	0	0	0	1124
% App. Total	0	98	2	0		50	0	50	0		3.8	96.2	0	0		0	0	0	0		
PHF	.000	.900	.550	.000	.889	.800	.000	.500	.000	.615	.656	.909	.000	.000	.895	.000	.000	.000	.000	.000	.949
Lights	0	527	10	0	537	16	0	16	0	32	21	518	0	0	539	0	0	0	0	0	1108
% Lights	0	98.9	90.9	0	98.7	100	0	100	0	100	100	98.3	0	0	98.4	0	0	0	0	0	98.6
Buses	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Buses	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Trucks	0	5	1	0	6	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	15
% Trucks	0	0.9	9.1	0	1.1	0	0	0	0	0	0	1.7	0	0	1.6	0	0	0	0	0	1.3
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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400 Columbus Avenue Suite 180 E
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Groups Printed- Lights - Buses - Trucks - Pedestrians

	NYS ROUTE 52 From North					MILL ST From East					NYS ROUTE 52 From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	113	2	0	115	2	0	3	0	5	2	108	0	1	111	0	0	0	0	0	231
11:15 AM	0	108	4	0	112	1	0	4	0	5	6	131	0	0	137	0	0	0	0	0	254
11:30 AM	0	116	3	0	119	1	0	8	0	9	4	129	0	0	133	0	0	0	0	0	261
11:45 AM	0	112	0	0	112	3	0	7	0	10	4	82	0	0	86	0	0	0	0	0	208
Total	0	449	9	0	458	7	0	22	0	29	16	450	0	1	467	0	0	0	0	0	954
12:00 PM	0	116	1	4	121	4	0	4	0	8	3	116	0	0	119	0	0	0	0	0	248
12:15 PM	0	147	3	0	150	4	0	3	0	7	3	105	0	3	111	0	0	0	0	0	268
12:30 PM	0	126	4	0	130	4	0	0	0	4	6	126	0	0	132	0	0	0	0	0	266
12:45 PM	0	117	4	0	121	6	0	4	0	10	5	108	0	0	113	0	0	0	0	0	244
Total	0	506	12	4	522	18	0	11	0	29	17	455	0	3	475	0	0	0	0	0	1026
01:00 PM	0	135	2	0	137	1	0	5	0	6	7	112	0	0	119	0	0	0	0	0	262
01:15 PM	0	110	1	0	111	3	0	4	0	7	4	95	0	0	99	0	0	0	0	0	217
01:30 PM	0	135	3	0	138	6	0	4	0	10	6	94	0	0	100	0	0	0	0	0	248
01:45 PM	0	146	3	0	149	2	0	2	0	4	3	104	0	0	107	0	0	0	0	0	260
Total	0	526	9	0	535	12	0	15	0	27	20	405	0	0	425	0	0	0	0	0	987
Grand Total	0	1481	30	4	1515	37	0	48	0	85	53	1310	0	4	1367	0	0	0	0	0	2967
Apprch %	0	97.8	2	0.3		43.5	0	56.5	0		3.9	95.8	0	0.3		0	0	0	0		
Total %	0	49.9	1	0.1	51.1	1.2	0	1.6	0	2.9	1.8	44.2	0	0.1	46.1	0	0	0	0	0	
Lights	0	1469	29	0	1498	35	0	46	0	81	51	1297	0	0	1348	0	0	0	0	0	2927
% Lights	0	99.2	96.7	0	98.9	94.6	0	95.8	0	95.3	96.2	99	0	0	98.6	0	0	0	0	0	98.7
Buses	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
% Buses	0	0.2	0	0	0.2	0	0	0	0	0	0	0.2	0	0	0.1	0	0	0	0	0	0.2
Trucks	0	9	1	0	10	2	0	2	0	4	2	11	0	0	13	0	0	0	0	0	27
% Trucks	0	0.6	3.3	0	0.7	5.4	0	4.2	0	4.7	3.8	0.8	0	0	1	0	0	0	0	0	0.9
Pedestrians	0	0	0	4	4	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	8
% Pedestrians	0	0	0	100	0.3	0	0	0	0	0	0	0	0	100	0.3	0	0	0	0	0	0.3

Colliers Engineering & Design

400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

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	NYS ROUTE 52 From North					MILL ST From East					NYS ROUTE 52 From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:15 PM																					
12:15 PM	0	**147**	3	0	**150**	4	0	3	0	7	3	105	0	**3**	111	0	0	0	0	0	**268**
12:30 PM	0	126	**4**	0	130	4	0	0	0	4	6	**126**	0	0	**132**	0	0	0	0	0	266
12:45 PM	0	117	4	0	121	**6**	0	4	0	**10**	5	108	0	0	113	0	0	0	0	0	244
01:00 PM	0	135	2	0	137	1	0	**5**	0	6	**7**	112	0	0	119	0	0	0	0	0	262
Total Volume	0	525	13	0	538	15	0	12	0	27	21	451	0	3	475	0	0	0	0	0	1040
% App. Total	0	97.6	2.4	0		55.6	0	44.4	0		4.4	94.9	0	0.6		0	0	0	0		
PHF	.000	.893	.813	.000	.897	.625	.000	.600	.000	.675	.750	.895	.000	.250	.900	.000	.000	.000	.000	.000	.970
Lights	0	521	12	0	533	14	0	12	0	26	21	444	0	0	465	0	0	0	0	0	1024
% Lights	0	99.2	92.3	0	99.1	93.3	0	100	0	96.3	100	98.4	0	0	97.9	0	0	0	0	0	98.5
Buses	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
% Buses	0	0.2	0	0	0.2	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0.2
Trucks	0	3	1	0	4	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	11
% Trucks	0	0.6	7.7	0	0.7	6.7	0	0	0	3.7	0	1.3	0	0	1.3	0	0	0	0	0	1.1
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	3
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.6	0	0	0	0	0	0.3

Colliers Engineering & Design

400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

File Name : 2-MILL_ST_AT_FRONT_ST-THUR_1010279_10-27-2022
Site Code :
Start Date : 10/27/2022
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Groups Printed- Lights - Buses - Trucks - Pedestrians

	FRONT ST From North					MILL ST From East					FRONT ST From South					MILL ST From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
06:45 AM	0	0	0	0	0	1	3	0	0	4	0	0	1	0	1	0	0	0	0	0	5
Total	0	0	0	0	0	1	5	0	0	6	0	0	1	0	1	0	0	0	0	0	7
07:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	1	2	0	0	3	5
07:15 AM	0	0	0	1	1	0	2	0	0	2	0	0	1	0	1	0	4	2	0	6	10
07:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	2	3	2	0	7	9
07:45 AM	4	0	0	0	4	0	2	0	0	2	0	0	3	0	3	0	4	0	0	4	13
Total	5	0	0	1	6	0	5	0	0	5	0	0	6	0	6	3	13	4	0	20	37
08:00 AM	4	0	0	0	4	0	1	0	1	2	0	0	0	0	0	0	2	3	0	5	11
08:15 AM	0	0	0	0	0	0	1	0	1	2	0	0	1	0	1	0	1	2	0	3	6
08:30 AM	2	0	0	0	2	0	4	1	0	5	0	0	2	0	2	1	2	1	0	4	13
08:45 AM	1	0	0	0	1	0	1	0	1	2	0	0	0	0	0	3	9	1	0	13	16
Total	7	0	0	0	7	0	7	1	3	11	0	0	3	0	3	4	14	7	0	25	46
09:00 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	9	1	0	10	13
09:15 AM	3	0	0	0	3	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	7
09:30 AM	2	0	0	0	2	0	3	0	1	4	0	0	0	0	0	0	4	2	1	7	13
09:45 AM	0	0	0	0	0	0	4	0	1	5	0	0	0	1	1	0	4	0	0	4	10
Total	5	0	0	0	5	0	12	0	2	14	0	0	0	1	1	0	19	3	1	23	43
Grand Total	17	0	0	1	18	1	29	1	5	36	0	0	10	1	11	7	46	14	1	68	133
Apprch %	94.4	0	0	5.6		2.8	80.6	2.8	13.9		0	0	90.9	9.1		10.3	67.6	20.6	1.5		
Total %	12.8	0	0	0.8	13.5	0.8	21.8	0.8	3.8	27.1	0	0	7.5	0.8	8.3	5.3	34.6	10.5	0.8	51.1	
Lights	12	0	0	0	12	1	28	1	0	30	0	0	10	0	10	7	43	12	0	62	114
% Lights	70.6	0	0	0	66.7	100	96.6	100	0	83.3	0	0	100	0	90.9	100	93.5	85.7	0	91.2	85.7
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	5	0	0	0	5	0	1	0	0	1	0	0	0	0	0	0	3	2	0	5	11
% Trucks	29.4	0	0	0	27.8	0	3.4	0	0	2.8	0	0	0	0	0	0	6.5	14.3	0	7.4	8.3
Pedestrians	0	0	0	1	1	0	0	0	5	5	0	0	0	1	1	0	0	0	1	1	8
% Pedestrians	0	0	0	100	5.6	0	0	0	100	13.9	0	0	0	100	9.1	0	0	0	100	1.5	6

Colliers Engineering & Design

400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

File Name : 2-MILL_ST_AT_FRONT_ST-THUR_1010279_10-27-2022
Site Code :
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	FRONT ST From North					MILL ST From East					FRONT ST From South					MILL ST From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:30 AM																					
08:30 AM	2	0	0	0	2	0	**4**	**1**	0	**5**	0	0	**2**	0	**2**	1	2	**1**	0	4	13
08:45 AM	1	0	0	0	1	0	1	0	**1**	2	0	0	0	0	0	**3**	**9**	1	0	**13**	**16**
09:00 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	9	1	0	10	13
09:15 AM	**3**	0	0	0	**3**	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	7
Total Volume	6	0	0	0	6	0	10	1	1	12	0	0	2	0	2	4	22	3	0	29	49
% App. Total	100	0	0	0		0	83.3	8.3	8.3		0	0	100	0		13.8	75.9	10.3	0		
PHF	.500	.000	.000	.000	.500	.000	.625	.250	.250	.600	.000	.000	.250	.000	.250	.333	.611	.750	.000	.558	.766
Lights	3	0	0	0	3	0	10	1	0	11	0	0	2	0	2	4	22	3	0	29	45
% Lights	50.0	0	0	0	50.0	0	100	100	0	91.7	0	0	100	0	100	100	100	100	0	100	91.8
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
% Trucks	50.0	0	0	0	50.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.1
Pedestrians	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
% Pedestrians	0	0	0	0	0	0	0	0	100	8.3	0	0	0	0	0	0	0	0	0	0	2.0

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400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

File Name : 2-MILL_ST_AT_FRONT_ST-THUR_1010279_10-27-2022
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Groups Printed- Lights - Buses - Trucks - Pedestrians

	FRONT ST From North					MILL ST From East					FRONT ST From South					MILL ST From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
03:00 PM	0	0	0	1	1	0	2	0	2	4	0	0	0	0	0	0	5	0	7	12	17
03:15 PM	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	1	3	0	2	6	11
03:30 PM	1	0	0	0	1	0	2	0	1	3	0	0	0	0	0	0	2	0	4	6	10
03:45 PM	2	0	0	0	2	0	2	0	0	2	0	0	1	0	1	1	3	1	2	7	12
Total	5	0	0	1	6	0	9	0	3	12	0	0	1	0	1	2	13	1	15	31	50
04:00 PM	2	0	0	0	2	0	3	0	3	6	0	0	0	0	0	2	2	0	0	4	12
04:15 PM	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	1	0	4	0	5	12
04:30 PM	1	0	0	0	1	0	3	0	0	3	0	0	1	0	1	1	4	0	0	5	10
04:45 PM	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	4	2	0	6	11
Total	6	0	0	0	6	0	15	0	3	18	0	0	1	0	1	4	10	6	0	20	45
05:00 PM	2	0	0	3	5	0	3	0	0	3	0	0	1	0	1	1	2	1	0	4	13
05:15 PM	1	0	0	2	3	0	4	0	4	8	0	0	1	0	1	2	8	0	0	10	22
05:30 PM	0	0	0	1	1	0	6	0	2	8	0	0	1	0	1	1	2	0	0	3	13
05:45 PM	0	0	0	0	0	0	3	0	1	4	0	0	0	0	0	0	3	0	0	3	7
Total	3	0	0	6	9	0	16	0	7	23	0	0	3	0	3	4	15	1	0	20	55
06:00 PM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	2	0	0	2	9
06:15 PM	1	0	0	0	1	0	5	1	0	6	0	0	0	0	0	1	8	0	0	9	16
Grand Total	15	0	0	7	22	0	52	1	13	66	0	0	5	0	5	11	48	8	15	82	175
Apprch %	68.2	0	0	31.8		0	78.8	1.5	19.7		0	0	100	0		13.4	58.5	9.8	18.3		
Total %	8.6	0	0	4	12.6	0	29.7	0.6	7.4	37.7	0	0	2.9	0	2.9	6.3	27.4	4.6	8.6	46.9	
Lights	15	0	0	0	15	0	50	1	0	51	0	0	5	0	5	11	48	7	0	66	137
% Lights	100	0	0	0	68.2	0	96.2	100	0	77.3	0	0	100	0	100	100	100	87.5	0	80.5	78.3
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	3
% Trucks	0	0	0	0	0	0	3.8	0	0	3	0	0	0	0	0	0	0	12.5	0	1.2	1.7
Pedestrians	0	0	0	7	7	0	0	0	13	13	0	0	0	0	0	0	0	0	15	15	35
% Pedestrians	0	0	0	100	31.8	0	0	0	100	19.7	0	0	0	0	0	0	0	0	100	18.3	20

Colliers Engineering & Design

400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

File Name : 2-MILL_ST_AT_FRONT_ST-THUR_1010279_10-27-2022
Site Code :
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	FRONT ST From North					MILL ST From East					FRONT ST From South					MILL ST From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	**2**	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	4	**2**	0	6	11
05:00 PM	2	0	0	**3**	**5**	0	3	0	0	3	0	0	**1**	0	**1**	1	2	1	0	4	13
05:15 PM	1	0	0	2	3	0	4	0	**4**	**8**	0	0	1	0	1	**2**	**8**	0	0	**10**	**22**
05:30 PM	0	0	0	1	1	0	**6**	0	2	8	0	0	1	0	1	1	2	0	0	3	13
Total Volume	5	0	0	6	11	0	16	0	6	22	0	0	3	0	3	4	16	3	0	23	59
% App. Total	45.5	0	0	54.5		0	72.7	0	27.3		0	0	100	0		17.4	69.6	13	0		
PHF	.625	.000	.000	.500	.550	.000	.667	.000	.375	.688	.000	.000	.750	.000	.750	.500	.500	.375	.000	.575	.670
Lights	5	0	0	0	5	0	15	0	0	15	0	0	3	0	3	4	16	3	0	23	46
% Lights	100	0	0	0	45.5	0	93.8	0	0	68.2	0	0	100	0	100	100	100	100	0	100	78.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Trucks	0	0	0	0	0	0	6.3	0	0	4.5	0	0	0	0	0	0	0	0	0	0	1.7
Pedestrians	0	0	0	6	6	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	12
% Pedestrians	0	0	0	100	54.5	0	0	0	100	27.3	0	0	0	0	0	0	0	0	0	0	20.3

Colliers Engineering & Design

400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

File Name : 2-MILL_ST_AT_FRONT_ST-SAT_1010281_10-29-2022
Site Code :
Start Date : 10/29/2022
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Groups Printed- Lights - Buses - Trucks - Pedestrians

	FRONT ST From North					MILL ST From East					FRONT ST From South					MILL ST From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	1	0	0	1	2	0	0	0	0	0	0	0	1	0	1	1	4	0	0	5	8
11:15 AM	0	0	0	0	0	0	4	0	1	5	0	0	0	1	1	0	2	1	1	4	10
11:30 AM	3	0	0	0	3	0	5	0	1	6	1	0	0	0	1	1	4	1	0	6	16
11:45 AM	2	0	0	0	2	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	10
Total	6	0	0	1	7	0	13	0	2	15	1	0	1	1	3	2	14	2	1	19	44
12:00 PM	2	0	0	2	4	0	5	0	0	5	1	0	0	0	1	1	1	1	0	3	13
12:15 PM	1	0	0	2	3	0	5	0	0	5	0	0	0	0	0	0	2	1	0	3	11
12:30 PM	2	0	0	0	2	0	1	0	1	2	0	0	1	0	1	1	8	0	0	9	14
12:45 PM	3	0	0	0	3	0	4	0	0	4	0	0	1	0	1	0	4	1	0	5	13
Total	8	0	0	4	12	0	15	0	1	16	1	0	2	0	3	2	15	3	0	20	51
01:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	1	0	0	3	4
01:15 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	8
01:30 PM	3	0	0	0	3	0	6	0	0	6	0	0	0	0	0	0	2	2	0	4	13
01:45 PM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	1	4	0	0	5	9
Total	4	0	0	0	4	0	14	0	0	14	0	0	0	0	0	3	11	2	0	16	34
Grand Total	18	0	0	5	23	0	42	0	3	45	2	0	3	1	6	7	40	7	1	55	129
Apprch %	78.3	0	0	21.7		0	93.3	0	6.7		33.3	0	50	16.7		12.7	72.7	12.7	1.8		
Total %	14	0	0	3.9	17.8	0	32.6	0	2.3	34.9	1.6	0	2.3	0.8	4.7	5.4	31	5.4	0.8	42.6	
Lights	17	0	0	0	17	0	40	0	0	40	1	0	3	0	4	7	38	7	0	52	113
% Lights	94.4	0	0	0	73.9	0	95.2	0	0	88.9	50	0	100	0	66.7	100	95	100	0	94.5	87.6
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	1	0	0	0	1	0	2	0	0	2	1	0	0	0	1	0	2	0	0	2	6
% Trucks	5.6	0	0	0	4.3	0	4.8	0	0	4.4	50	0	0	0	16.7	0	5	0	0	3.6	4.7
Pedestrians	0	0	0	5	5	0	0	0	3	3	0	0	0	1	1	0	0	0	1	1	10
% Pedestrians	0	0	0	100	21.7	0	0	0	100	6.7	0	0	0	100	16.7	0	0	0	100	1.8	7.8

Colliers Engineering & Design

400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

File Name : 2-MILL_ST_AT_FRONT_ST-SAT_1010281_10-29-2022
Site Code :
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	FRONT ST From North					MILL ST From East					FRONT ST From South					MILL ST From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	2	0	0	**2**	**4**	0	**5**	0	0	**5**	**1**	0	0	0	**1**	**1**	1	**1**	0	3	13
12:15 PM	1	0	0	2	3	0	5	0	0	5	0	0	0	0	0	0	2	1	0	3	11
12:30 PM	2	0	0	0	2	0	1	0	**1**	2	0	0	**1**	0	1	1	**8**	0	0	**9**	**14**
12:45 PM	**3**	0	0	0	3	0	4	0	0	4	0	0	1	0	1	0	4	1	0	5	13
Total Volume	8	0	0	4	12	0	15	0	1	16	1	0	2	0	3	2	15	3	0	20	51
% App. Total	66.7	0	0	33.3		0	93.8	0	6.2		33.3	0	66.7	0		10	75	15	0		
PHF	.667	.000	.000	.500	.750	.000	.750	.000	.250	.800	.250	.000	.500	.000	.750	.500	.469	.750	.000	.556	.911
Lights	8	0	0	0	8	0	14	0	0	14	0	0	2	0	2	2	15	3	0	20	44
% Lights	100	0	0	0	66.7	0	93.3	0	0	87.5	0	0	100	0	66.7	100	100	100	0	100	86.3
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	2
% Trucks	0	0	0	0	0	0	6.7	0	0	6.3	100	0	0	0	33.3	0	0	0	0	0	3.9
Pedestrians	0	0	0	4	4	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5
% Pedestrians	0	0	0	100	33.3	0	0	0	100	6.3	0	0	0	0	0	0	0	0	0	0	9.8

NYSDOT VOLUME DATA SUMMARY

ROADWAY: NYS ROUTE 52 (FISHKILL AVENUE)
SEGMENT: FROM VERPLANK AVENUE TO PROSPECT STREET
LOCATION: 125' E OF LINCOLN AVE
START DATE OF COUNT: Monday, May 13, 2019
NYSDOT COUNT STATION: 828612
FUNCTIONAL CLASS: 16 - URBAN MINOR ARTERIAL
FACTOR GROUP: 30
SEASONAL FACTOR: 1.089

TIME PERIOD		DIRECTIONAL VOLUMES		TOTAL VOLUME
START	FINISH	EASTBOUND	WESTBOUND	
12:00 AM	1:00 AM	23	23	46
1:00 AM	2:00 AM	13	13	26
2:00 AM	3:00 AM	6	8	14
3:00 AM	4:00 AM	14	8	22
4:00 AM	5:00 AM	27	19	46
5:00 AM	6:00 AM	70	41	111
6:00 AM	7:00 AM	184	120	304
7:00 AM	8:00 AM	382	241	623
8:00 AM	9:00 AM	345	326	671
9:00 AM	10:00 AM	292	268	560
10:00 AM	11:00 AM	289	272	561
11:00 AM	12:00 PM	298	301	599
12:00 PM	1:00 PM	329	319	648
1:00 PM	2:00 PM	306	323	629
2:00 PM	3:00 PM	373	348	721
3:00 PM	4:00 PM	389	388	777
4:00 PM	5:00 PM	392	404	796
5:00 PM	6:00 PM	398	491	889
6:00 PM	7:00 PM	365	406	771
7:00 PM	8:00 PM	268	274	542
8:00 PM	9:00 PM	171	197	368
9:00 PM	10:00 PM	114	136	250
10:00 PM	11:00 PM	76	83	159
11:00 PM	12:00 AM	47	57	104
AVERAGE WEEKDAY DAILY TRAFFIC		**5171**	**5066**	**10237**
	AADT	**4748**	**4652**	**9400**

NOTES:

1) DATA SOURCE: NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) TRAFFIC DATA VIEWER AVERAGE WEEKDAY VOLUMES

NYSDOT CLASSIFICATION DATA SUMMARY

ROADWAY: NYS ROUTE 52 (FISHKILL AVENUE)
SEGMENT: FROM VERPLANK AVENUE TO PROSPECT STREET
LOCATION: 125' E OF LINCOLN AVE
START DATE OF COUNT: Monday, May 13, 2019
NYSDOT COUNT STATION: 828612
FUNCTIONAL CLASS: 16 - URBAN MINOR ARTERIAL
FACTOR GROUP: 30

VEHICLE CLASS	DIRECTIONAL VOLUMES		TOTAL VEHICLES	TOTAL AXLES
	EASTBOUND	WESTBOUND		
F1	13	10	23	46
F2	4387	4248	8635	17270
F3	587	498	1085	2170
F4	26	16	42	105
F5	101	69	170	340
F6	14	10	24	72
F7	0	0	0	0
F8	6	2	8	28
F9	3	1	4	20
F10	0	0	0	0
F11	0	0	0	0
F12	0	0	0	0
F13	0	0	0	0
AVERAGE WEEKDAY TOTAL	**5137**	**4854**	**9991**	**20051**

	EASTBOUND	WESTBOUND	TOTAL
% TRUCKS & BUSES (F3 - F13)	14%	12%	13%
% HEAVY VEHICLES (F4 - F13)	3%	2%	2%
% F3 - F7	3%	2%	2%
% F8 - F13	0%	0%	0%
% F1	0%	0%	0%
% F2	85%	88%	86%
% F3	11%	10%	11%
% F4	1%	0%	0%
% F5 - F7	2%	2%	2%

VEHICLE CLASSIFICATION CODES:

- **F1** MOTORCYCLES
- **F2** AUTOS (INCLUDING THOSE HAULING TRAILERS)
- **F3** 2 AXLE, 4-TIRE PICKUPS, VANS, MOTORHOMES (INCLUDING THOSE HAULING TRAILERS)
- **F4** BUSES
- **F5** 2 AXLE, 6-TIRE SINGLE UNIT TRUCKS
- **F6** 3 AXLE SINGLE UNIT TRUCKS
- **F7** 4 OR MORE AXLE SINGLE UNIT TRUCKS
- **F8** 4 OR LESS AXLE VEHICLES, ONE UNIT IS A TRUCK
- **F9** 5 AXLE DOUBLE UNIT VEHICLES, ONE UNIT IS A TRUCK
- **F10** 6 OR MORE AXLE DOUBLE UNIT VEHICLES, ONE UNIT IS A TRUCK
- **F11** 5 OR LESS AXLE MULTI-UNIT TRUCKS
- **F12** 6 AXLE MULTI UNIT TRUCKS
- **F13** 7 OR MORE AXLE MULTI-UNIT TRUCKS

NOTES:

1) DATA SOURCE: NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) TRAFFIC DATA VIEWER AVERAGE WEEKDAY VOLUMES

NYSDOT SPEED DATA SUMMARY

ROADWAY: NYS ROUTE 52 (FISHKILL AVENUE)
SEGMENT: FROM VERPLANK AVENUE TO PROSPECT STREET
LOCATION: 125' E OF LINCOLN AVE
START DATE OF COUNT: Monday, May 13, 2019
NYSDOT COUNT STATION: 828612
FUNCTIONAL CLASS: 16 - URBAN MINOR ARTERIAL
POSTED SPEED LIMIT: 30
FACTOR GROUP: 30

SPEEDS (MPH)	DIRECTIONAL VOLUMES		TOTAL VOLUME
	EASTBOUND	WESTBOUND	
0 - 20.0	84	109	193
20.1 - 25.0	214	372	586
25.1 - 30.0	936	1840	2776
30.1 - 35.0	2435	2074	4509
35.1 - 40.0	1244	435	1679
40.1 - 45.0	197	42	239
45.1 - 50.0	19	2	21
50.1 - 55.0	0	0	0
55.1 - 60.0	0	0	0
60.1 - 65.0	0	0	0
65.1 - 70.0	0	0	0
70.1 - 75.0	0	0	0
75.1 - 80.0	0	0	0
80.1+	0	0	0
UNCLASSIFIED	0	0	0
AVERAGE SPEED (MPH)	**31**	**29**	**30**
50TH PERCENTILE SPEED (MPH)	**33**	**30**	**32**
85TH PERCENTILE SPEED (MPH)	**38**	**34**	**36**

NOTES:

1) DATA SOURCE: NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) TRAFFIC DATA VIEWER AVERAGE WEEKDAY VOLUMES

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PHASE 1A LITERATURE SEARCH AND SENSITIVITY ASSESSMENT

BEACON HIP LOFTS AND STUDIOS PROJECT

FRONT STREET AND MASON CIRCLE
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

PREPARED FOR:

BEACON HIP LOFTS, LLC
16 SQUADRON BOULEVARD
NEW CITY NY 10956

H·C·S
Hudson Cultural Services
PO BOX 124
LAGRANGEVILLE NEW YORK 12540

NOVEMBER 2022

MANAGEMENT SUMMARY

SHPO Project Review Number (if available):

Involved State and Federal Agencies:

Phase of Survey: **Phase 1A Literature Search & Sensitivity Assessment**

Location Information:

Location: **Front Street and Mason Circle**

Minor Civil Division: **City of Beacon**

County: **Dutchess County**

USGS Quadrangle: **2019 Wappingers Falls**, **NY** Q**uadrangle**

Survey Area (English & Metric)

Length: **540'/164.63 m**

Width: **355'/108.23 m**

Number of Acres (Project Parcel): **±3.55 acres** (**1.44 h**)

Archaeological Survey Overview

Number & Interval of Shovel Tests: **N/A**

Number & Size of Units: N/A

Width of Plowed Strips: N/A

Surface Survey Transect Interval: N/A

Results of Archaeological Survey

Number & name of precontact sites identified: 0

Number & name of historic sites identified: 0

Number & name of sites recommended for Phase II/Avoidance: 0

Report Author (s): **Beth Selig**, **MA**, **RPA**.

Date of Report: **November 17**, **2022**

HCS Project: **22–10–648**

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I. Phase 1A Literature Search and Sensitivity Assessment

A. Beacon HIP Lofts and Studios Project Description

In October of 2022, Hudson Cultural Services (HCS) was retained by Beacon HIP Lofts, LLC to complete a Phase 1A Literature Search and Sensitivity of the Beacon HIP Lofts and Studios Project in the City of Beacon, Dutchess County, New York.

The purpose of the Phase 1 Cultural Resources Survey is to determine whether previously identified cultural resources (historic and archeological sites) are located within the boundaries of the proposed project, and to evaluate the potential for previously unidentified cultural resources to be located within the boundaries of the Project Parcel of Potential Effect (APE). All work was completed in accordance with *the Standards for Cultural Resource Investigations and the Curation of Archeological Collections* published by the New York Archeological Council (NYAC) and recommended for use by New York State Office of Parks, Recreation and Historic Preservation (OPRHP). The report has been prepared according to New York State OPRHP's Phase 1 Archaeological Report Format Requirements, established in 2005.

The background research as well as the cultural and environmental overviews were completed by Julia Pergolizzi and Beth Selig, MA, RPA, President and Principal Investigator with HCS. A project site visit was conducted on November 8, 2022 to observe and photograph existing conditions within the Project Parcel. The information gathered during the walkover reconnaissance is included in the relevant sections of the report.

The Beacon HIP Lofts and Studios Project site (Project Parcel) consists of a ± 3.55 acres (1.44 h) parcel (Project Parcel) located on the southeastern side of Front Street, in the City of Beacon. The property is currently an open field, with the Greenway Trail running along its northeastern and southwestern perimeters. The landscape within the Project Parcel is generally level, with some sloping at the edges of the property. This portion of the Property is currently used as a construction materials laydown area for on-going construction on the adjacent lot.

The proposed undertaking involves the construction of a two story building, which will house commercial artist studios as well as residential lofts, and the addition of a parking lot with 95 spaces. The undertaking will be located within the existing Beacon Lofts Property, which is within the boundaries of the National Register Eligible Groveville Historic District. The historic district is comprised of nineteenth century factory buildings and its related tenements and work housing. The current mixed use complex consists of nineteenth century and twenty-first century apartment buildings. In 2019 an existing mill building was removed due to its structural instability, and in 2021 a new structure was constructed in its place.

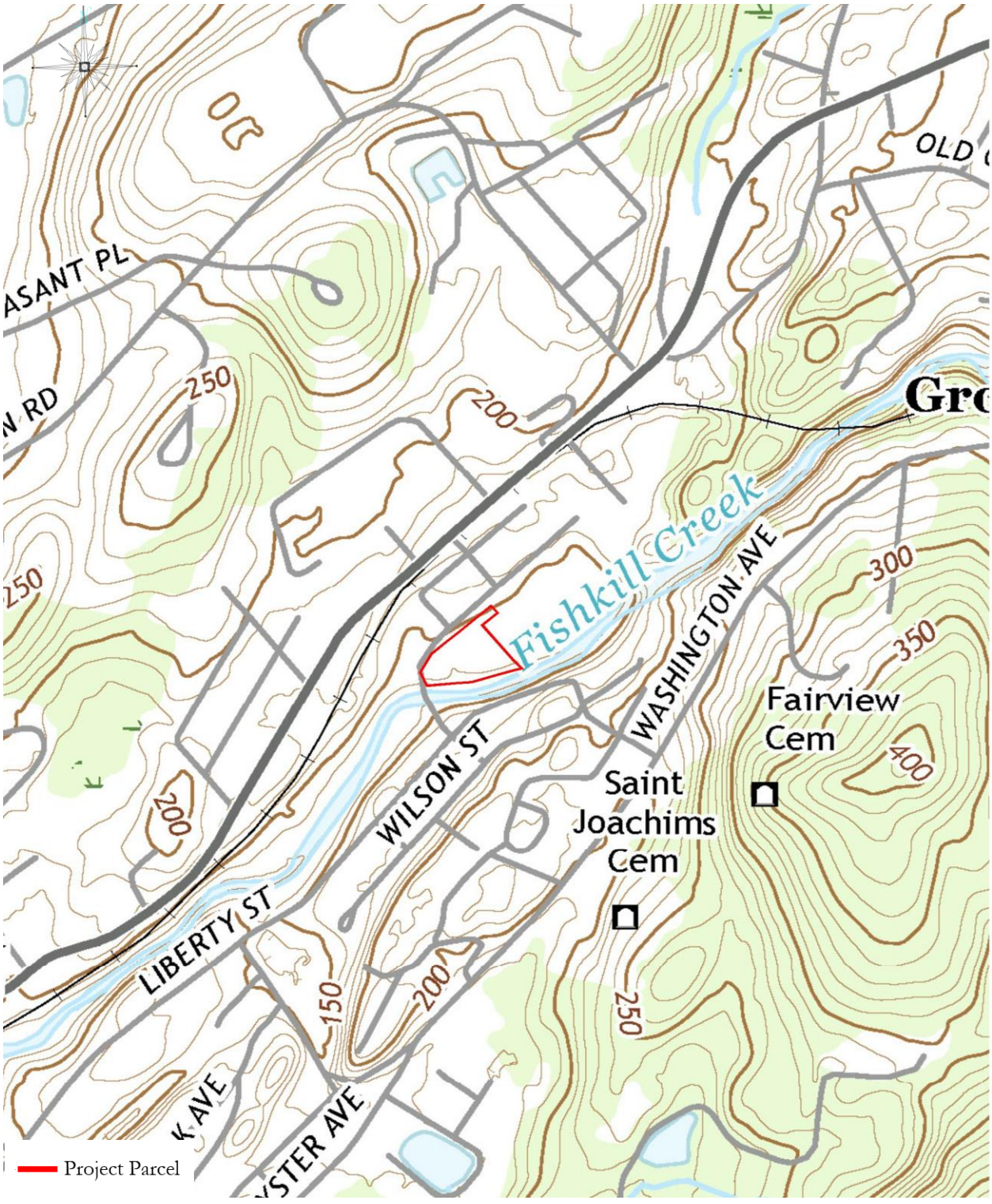


Figure 1: 2019 USGS Topographical Map. Wappingers Falls NY Quadrangle. 7.5 Minute Series. (Source: USGS.gov.) Scale: 1" =980'.

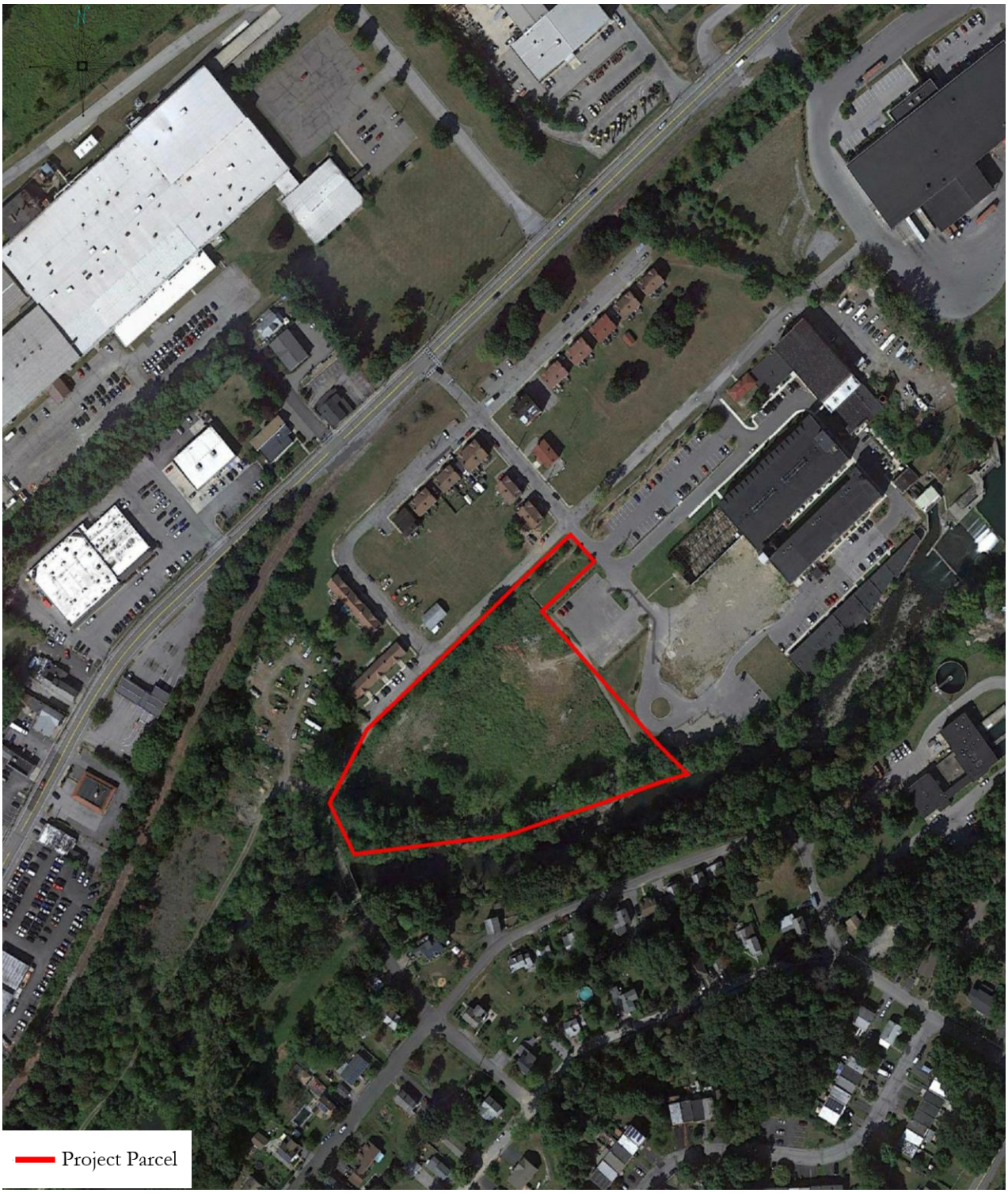


Figure 2: 2019 Aerial Image showing the Project Parcel. (Source: Google Earth.) Scale: 1" =240'.



Photo 1: The Project Parcel is primarily an open field with tall grasses. View to the northwest from Fishkill Creek.



Photo 2: The existing Beacon Lofts building borders the Project Parcel to the northeast. View to the southeast from the Mason Circle parking area.



Photo 3: Fishkill Creek runs along the southern boundary of the Project Parcel. View to the south.



Photo 4: A walking path runs along the perimeter of the Project Parcel. View to the west-southwest, with Fishkill Creek in the left of the photo and the Project Parcel on the right.



Photo 5: The landscape within the parcel has been profoundly disturbed throughout the Parcel. View to the west.



Photo 6: View to the east-northeast across the Project Parcel. The landscape has been graded and leveled.

B. Environmental Conditions

The landscape within the Project Parcel consists of an open field, in a suburban residential area. The elevation at the center of the parcel is 144' (22.4 m) Above Mean Sea Level (AMSL). Elevations rise from the northern edge of Fishkill Creek north to Front Street.

Ecology

The Project Parcel lies in a vegetation zone where the Northern Hardwood Forest Zone meets the Appalachian Oak Forest Zone. In the Northern Hardwood Forest Zone, sugar maple, birch, beech and hemlock are the predominant trees in this type of forest (Bailey 1995). In the Appalachian Oak Forest Zone, tall, broad-leafed deciduous trees predominate, particularly Red Oak and White Oak. The wooded areas of the site contain trees with diameters that suggest relatively recent reforestation, probably within the last 30 to 50 years.

Geology

The Project Parcel is situated within the Ridge and Valley physiographic province, which extends from Lake Champlain to Alabama. The portion of the Ridge and Valley Province in which the Project Parcel is located is specifically identified as the Taconic Allochthon, bordered on the east by the Manhattan Prong and on the west by the Great Valley province (Schuberth, 1968).

The Hudson Highlands area is a northeast-southwest trending band of igneous and metamorphic rocks, which extend from New England through New York, crossing the Hudson River in the vicinity of Cold Spring and West Point. Because of their structural origin and their durability, the Hudson Highlands reach a higher elevation than the physiographic provinces that border them, such as the Hudson-Mohawk Lowlands to the north and the Piedmont Triassic Lowlands to the south. The Hudson Highlands are almost entirely blanketed by a thin layer of glacial till, with frequent bedrock outcrops. Outwash sand and gravel occupy some of the river and stream valleys that border and run through the Highlands (Spectra 2004: Appendix C).

Drainage

Drainage on the site is into Fishkill Creek which is located to the southeast of the Project Parcel. Numerous precontact sites have been identified adjacent to Fishkill Creek, a tributary of the Hudson River.

Soils

Soil surveys provide a general characterization of the types and depths of soils that are found in an area. The Soil Survey's mapped boundaries are considered approximate, as they generally correspond poorly to the actual boundaries of landforms and soils types within an area. The Natural Resources Conservation Service indicates that the soils within the Project Parcel are Udorthents, smoothed, which consists of areas from which soil material has been excavated, and nearby areas in which this material has been deposited. The soils within the Project Parcel consist of gravelly loam and are characterized as made lands (Table 1).



Figure 3: Aerial Image showing soil units within the Project Parcel. (Source: Natural Resources Conservation Service.) Scale: 1" =125'.

Table 1: Soil Unit Descriptions (Natural Resources Conservation Service)

Map Symbol	Map Unit	Soil Horizons & Texture	Slope	Drainage	Landform
Ud	Udorthents, smoothed	H1 - 0 to 4 inches: gravelly loam H2 - 4 to 70 inches: very gravelly loam	0 to 8%	Well drained	Made lands

C. Recorded Archaeological Sites and Surveys

To gather information on the history of the Project Parcel and the surrounding region, HCS consulted historical documents and maps available at the Library of Congress, David Rumsey Cartography Associates and the New York Public Library. On November 1, 2022 HCS reviewed the combined site files of the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) and the New York State Museum (NYSM) for information regarding previously recorded archeological sites within one mile (1.6 km) of Project Parcel. HCS also consulted regional precontact sources (e.g. Beauchamp 1900; Parker 1920; Ritchie 1980; Ritchie and Funk 1973) for descriptions of regional archeological sites.

Previously Recorded Archaeological Sites

Seven archaeological sites have been previously identified within a one mile radius of the Project Parcel. The sites are summarized in the Table below.

Table 2: Previously Recorded Archaeological Sites within 1- mile radius

Site Number	**Site Name**	**Distance from Project Parcel**	**Time Period**	**Site Type Materials Recovered**
02741.000343	Groveville Mill	750' / 228.6 m	Historic	Post 1930 concrete foundation
02741.000015	Jarvis Site	5000' / 1.5 km	Historic	Appears on 1798 map, may have been destroyed by construction of Beacon High School
02741.000345	Matteawan Company	5000' / 1.5 km	Historic	Constructed 1814. Area not accessible, no materials recovered.
02716.000019	Leacote Stone Water Tower 1925	2640' / 0.8 km	Historic	Original water tower
NYSM 6621	AC Parker Dutchess	350' / 106.7 m	Historic	Traces of occupation
NYSM 7856	AC Parker Dutchess 13A	3960' / 1.2 km	Precontact	Burial site, location of several precontact cemeteries.
NYSM 9055	AC Parker Dutchess	5000' / 1.5 km	Precontact	Reference to a Wappinger Village site located near Castle Point.

Previously Completed Archaeological Surveys

As part of the research for this project, surveys completed for sites in the general area were consulted. Four surveys have been completed by professional archaeologists within a one mile radius of the Project Parcel. These surveys were completed for both municipal undertakings as well as residential developments. These surveys did not identify any archaeological sites.

D. National Register Eligible/Listed Sites

The OPRHP files were reviewed to identify structures on or in the vicinity of the Project Parcel that have been listed on the National Register of Historic Places or identified as National Register Eligible. The Project Parcel is located within the boundaries of the Groveville Mill Historic District, a National Register Eligible District.

The district consists of a nineteenth century factory and its related tenement buildings that provided factory worker housing. The property operated in the mid twentieth century as a carpet factory, but then in the late 1970s became vacant, standing empty through the end of the twentieth century. In 2012, the current owners purchased the property and began renovating and restoring the buildings. The buildings are currently residential apartments, artist studios, controlled storage and offices.

The proposed Project includes constructing a new multi-use building within the property, to the south of the historic mill buildings. The proposed design is smaller in massing and lower in elevation making it compatible within the historic district.

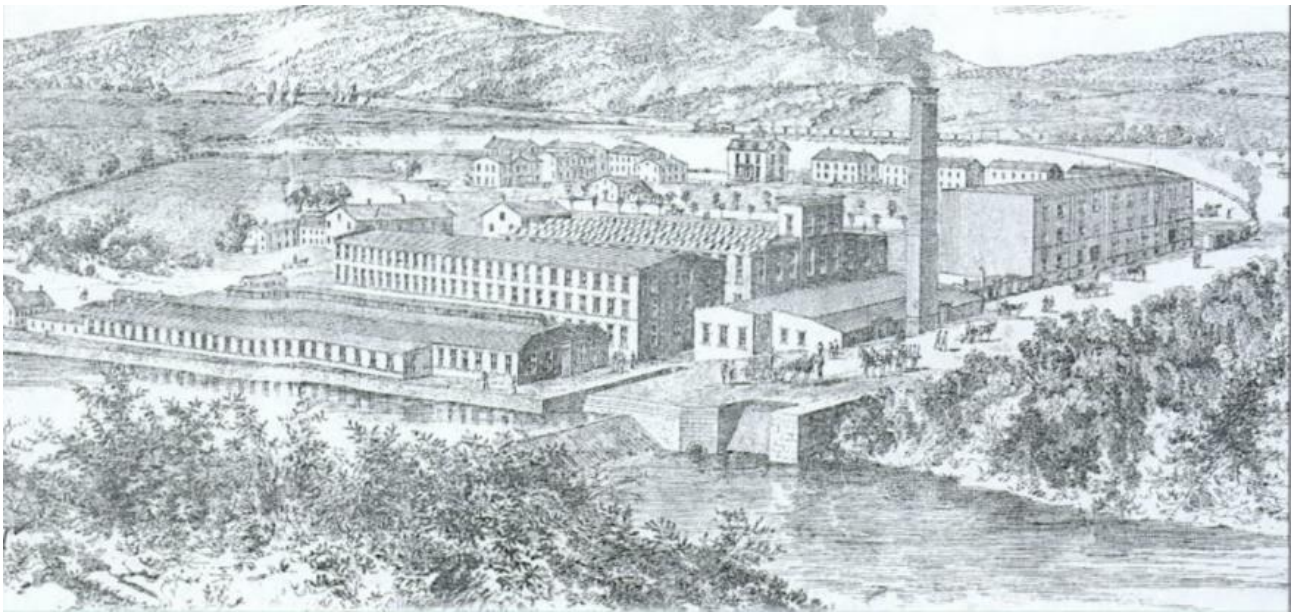


Figure 4: Groveville Mills, circa 1879. (Source: Robert Murphy, *History of Beacon* 1998)



Photo 7: Weeds and similar vegetation exists throughout most of the Project Parcel. View to the northeast.



Photo 8: Residential properties border the Project Parcel to the north and northwest. View to the northwest.



Photo 9: A pump house is located in the southwestern portion of the Project Parcel. View to the north.



Photo 10: Bridge (no longer in use) over Fishkill Creek is located to southwest of the Project Parcel. View to the southwest.



Photo 11: View east along the walking path located on the banks of Fishkill Creek in the southern portion of the Project Parcel



Photo 12: View to the northeast of the residential structures located outside the northwestern boundary the Project Parcel.



Photo 13: View to the southeast across the Project Parcel towards Fishkill Creek.



Photo 14: View to the east-southeast across the Project Parcel. The existing Beacon Lofts buildings are to the left in the photo.



Photo 15: View to the northeast along Front Street, with the Project Parcel to the southeast.



Photo 16: View to the east toward existing Beacon Lofts, from the northern portion of the Project Parcel.



Photo 17: The landscape ascends to the north along the northwestern edge of the Project Parcel, leading up to Front Street. View to the southwest.



Photo 18: View to the southeast across Project Parcel, towards Fishkill Creek.

E. Native American Context

The earliest known human occupation in Dutchess County dates to the Paleoindian Period (c. 10000 BC). Several sites from the Paleoindian period have been found in the Lower Hudson Valley, but the population density appears to have been low (Funk 1976). During the Archaic period, (4500 BC–1300 BC) there are indications that Dutchess County had a much larger population. Small mobile groups established seasonal camps, focusing on the Hudson River. The remains of many of these camps have been destroyed by the late nineteenth and mid-twentieth century suburban and commercial development of the region. The Woodland period, which followed the Archaic period and lasted until the Contact period, (1000 BC to AD 1600), saw continued expansion of the seasonal migration of Native Americans throughout the Dutchess County area.

Arthur Parker, in his statewide survey, identified sites and villages along the major waterways within Dutchess County. Numerous village sites, shell midden sites and large camps were reported in the region, particularly along the Hudson River. Large habitation sites dating to the Late Woodland and Early Contact periods have been identified along the banks of the Hudson River (Parker 1920). Parker identified the landscape in the area around the confluence of the Fishkill Creek and the Hudson River as being a large village. Other villages were located to the north along the banks of the Hudson River.

During the seventeenth century, Fishkill and Beacon were part of the territory inhabited by the Wappinger, an Algonquin speaking Indigenous group. The Wappinger were part of the Munsee Nation, which also included the smaller community groups known as the Minisink, Esopus, Hackensack, Raritan and Neversink. They were associated with the Lenape/Delaware and Mahican groups through related language and neighboring territory (Abel 2019).

Throughout the eighteenth century, the relationships among the European settlers and the Native American's ranged from collaborative to outright warfare. By the close of the Revolutionary War, nearly all the Native Nations had been removed from the Dutchess County region. This occurred through US government led land confiscation, the spread of disease, warfare and forcible relocation to Indian Reservation land in Stockbridge Massachusetts.

F. Historic Context

The Project Parcel falls within a landscape that was originally part of the 85,000 acre Rombout Patent, which was granted to Francis Rombout, Gulian Verplanck, and Stephanus Van Cortland in 1685. The land was originally purchased from the Wappingers Indians for real estate speculation. As payment, the Wappingers received one hundred royals and trade items such as wampum, bars of lead, tobacco, guns, powder, cloth, kettles and horses (Smith 1882).

The patent was soon after divided into three sections. The southernmost section includes the City of Beacon and what is now the Fishkill Correctional Facility. It was inherited by Catherine Brett, Francis Rombout's only child. Madam Brett and her husband built a house around 1709, which still stands in Beacon and is listed on the National Register.

Following her husband's death, Madam Brett was instrumental in developing the Beacon area. She established mills and encouraged settlers from western Long Island and elsewhere to build houses. Among the early families to purchase land from Madame Brett were the Van Wyck, Swartwout, Wiltse, Hasbrouck, DuBois and Verplanck families.

The City of Beacon was formed in 1913 from the villages of Fishkill Landing and Matteawan (Lamson 1937). The name Beacon is derived from nearby Beacon Mountain (known in the Colonial period as "The Grand Sachem"), upon which patriots would light signal fires to warn of British movements during the American Revolution (Verplanck 1909). The Project Parcel is located in the former hamlet of Groveville, which sat north of Fishkill Creek between Matteawan to the west and Fishkill to the east.

During the nineteenth century, Matteawan was an important manufacturing center in the Middle Hudson Valley. The Matteawan Manufacturing Company was founded in 1812 and engaged in the cotton milling industry. Another important textile factory was the Glenham Mill, which produced woolen goods from 1823 through the 1870s. The mill's most active period was during the Civil War, which spurred a huge demand for indigo blue goods for the Union Army. The factory was greatly enlarged, and scores of tenement houses for workers were built (Hasbrouck 1909). Other factories were built along Fishkill Creek, including the Wiccapee Company, the Fishkill Landing Machine Company and several brickyards. Manufacturing was still a vital part of the local economy as late as the mid-twentieth century; in the 1960s the City of Beacon represented 7% of Dutchess County's labor force, but had over 11 % of the county's industrial jobs (Hudson River Valley Commission 1970).

After the Civil War, the railroad facilitated the growth of a summer resort industry in the Beacon area. The National Register listed Mount Beacon Incline Railway was built in 1902 to shuttle passengers via an electric cable railway, to hotels at the top of Beacon Mountain. A Colonial period roadway, the "Old Road" laid for Madame Brett between the Hudson River and the eastern limits of her landholdings, linked villages along Fishkill Creek (Hasbrouck 1909). The "Old Road" ran on the high ground north of the stream, and is now New York State Route 52.

GROVEVILLE MILLS

The history of the Groveville Mills site dates to the late eighteenth and early nineteenth century when the property was owned by Abraham Dubois. Dubois operated a grist mill along Fishkill Creek, which he sold to Samuel Upton in 1820. Upton tore down the existing grist mill and built a larger one. He also built a stone fulling mill. Between 1830 and 1840, Upton sold the property, which also included six acres of land, to Peter Cromwell and Epenetus Crosby.

Shortly thereafter, Cromwell and Crosby sold the property to the Glenham Co., who converted it to a woolen mill and did carding, spinning and weaving. The Glenham Company also owned a much larger fulling mill to the north along Fishkill Creek (Smith 1882).

The Glenham Company operated its mills with varying degrees of success until the onset of the Civil War, when the demand for indigo blue goods to clothe the army became so great that the company was compelled to enlarge their mills. It was during this period that the many tenement buildings were built on the property. Unfortunately, the cost of building the tenement housing as well as the new factory buildings depleted the company's capital. The Glenham Company was unable to withstand the financial panic in the 1870s, and in 1873 filed for bankruptcy (Hasbrouck 1909).

The property was sold by B. Platt Carpenter, the commissioner of the bankruptcy filings, to A.T. Stewart, a noted dry goods merchant from New York City. The sale included the original Glenham factory, approximately one hundred tenements and a farm belonging to the Roger's family. In addition, the conveyance of property included the former Rocky Glen Cotton Mills and the factory at Groveville. Mr.

Stewart kept the mills in Glenham in operation, but demolished the existing mills at Groveville, and in 1876 Stewart built extensive carpet factories at Groveville.

In addition to the new factory buildings at Groveville, Stewart built Italianate-style worker housing located to the north of the factory buildings. In addition to the residential structures on the property, Stewart constructed a bridge over Fishkill Creek to connect the factory property to the residential community of Matteawan, where many of the mill workers lived (Hasbrouck 1909). Stewart died in 1876, leaving the operation of the mills to his friend Judge Henry Hilton, who oversaw the mills as well as Stewart's personal affairs. Later, Stewart's sons managed the property. In the 1880's the Groveville Carpet Mill Complex employed over 700 people. The Carpet factory closed on the eve of the 1893 financial panic, and moved its operations to Yonkers (Smith 1882).

Hasbrouck (1909) reports at the time of his writing of Dutchess County's history that the machinery at the Groveville Mills had been sold for junk and the buildings remained unoccupied. This is shown on the 1904 Sanborn Fire Insurance Map of the property. By 1912 the Sanborn maps indicate that the factory was occupied by the Glenham Embroidery Company. The property changed hands multiple times in the early twentieth century, from the Beacon Bronze Co. in 1922, the Beacon Rayon Fabrics Co. in 1935, and the Groveville Furniture Company in 1937, to the Lewittes Furniture Company in 1939. Lewittes Furniture Company operated at Groveville Mills until 1962 (Murphy 2003). By the 1970s the factory was manufacturing carpets, however that lasted only a short time. The Building Inventory site form on file at OPRHP indicates that in 1979, when the form was completed, the property was owned by the Beacon Piece Dye Company, and that the factory buildings were vacant. Despite the vacancy of the factory buildings the residential properties were occupied. The property was purchased in 2012 by the current owners.

Cartographic Research

HCS examined historical maps of Dutchess County to identify possible structures, previous road alignments and other landscape features or alterations that could affect the likelihood that archeological and/or historic resources could be located within the Project Parcel. These maps are included in this report, with the boundaries of the Project Parcel superimposed. Nineteenth century maps frequently lack the accuracy of location and scale present in modern surveys. As a result of this common level of inaccuracy on the historic maps, the location of the Project Parcel is drafted relative to the roads, structures, and other features as they are drawn, and should be regarded as approximate. The historic maps included in this report depict the sequence of road construction and settlement/development in the vicinity of the Project Parcel.



Figure 5: 1850 J.C. Sidney Map *of Dutchess County, New York.* (Source: Library of Congress) Scale: 1"=1800'.

The earliest map examined is the 1850 J.C. Sidney *Map of Dutchess County, New York*. The project area on the northern side of Fishkill Creek on the southern extent of the hamlet of Glenham. This map shows a woolen factory within the vicinity of the project area. Abraham Dubois is shown as owning a property to the northwest of the wool factory. The woolen factory is shown as two structures. Despite the proximity of the Dubois properties along Fishkill Avenue, this mill was owned by Cromwell and Crosby or by the Glenham Company. The date the Glenham Company purchased the mill is not mentioned in the written histories of the mill.



Figure 6: 1858 Bachman & Corey. *Atlas of Dutchess County New York.* (Source: Library of Congress) Scale: 1"=1350'.

The 1858 Bachman & Corey *Atlas of Dutchess County* shows that the woolen factory now includes three structures located on the northern side of Fishkill Creek. Like the previous map, the ownership of the mill property is not indicated, but is either the Cromwell and Crosby or the Glenham Company. This map shows that the Abraham Dubois farm along Fishkill Avenue is now the Du Boise and Rogers property.



Figure 7: 1867 Beers, F.W. *Atlas of New York and Vicinity Town of Fishkill Dutchess County*. (Source: David Rumsey Cartography Associates) Scale: 1"=1200'.

The 1867 Beers Map shows that the Woolen factory has been expanded, with a number of buildings located along Mill Street and a large factory building located to the southwest of Mill Street. This map does not identify the ownership of the buildings, but they are shown with in the hamlet of Glenham. The written histories (Hasbrouck 1909) indicate that the Glenham Company had acquired the former Cromwell and Cosby mill by 1862. This map shows the A. & C. Rogers farm located on the northern side of Fishkill Avenue, as well as the A.D. Rogers farm. Portions of the Rogers Farm were later acquired by A.T. Stewart when he purchased the property in 1843.

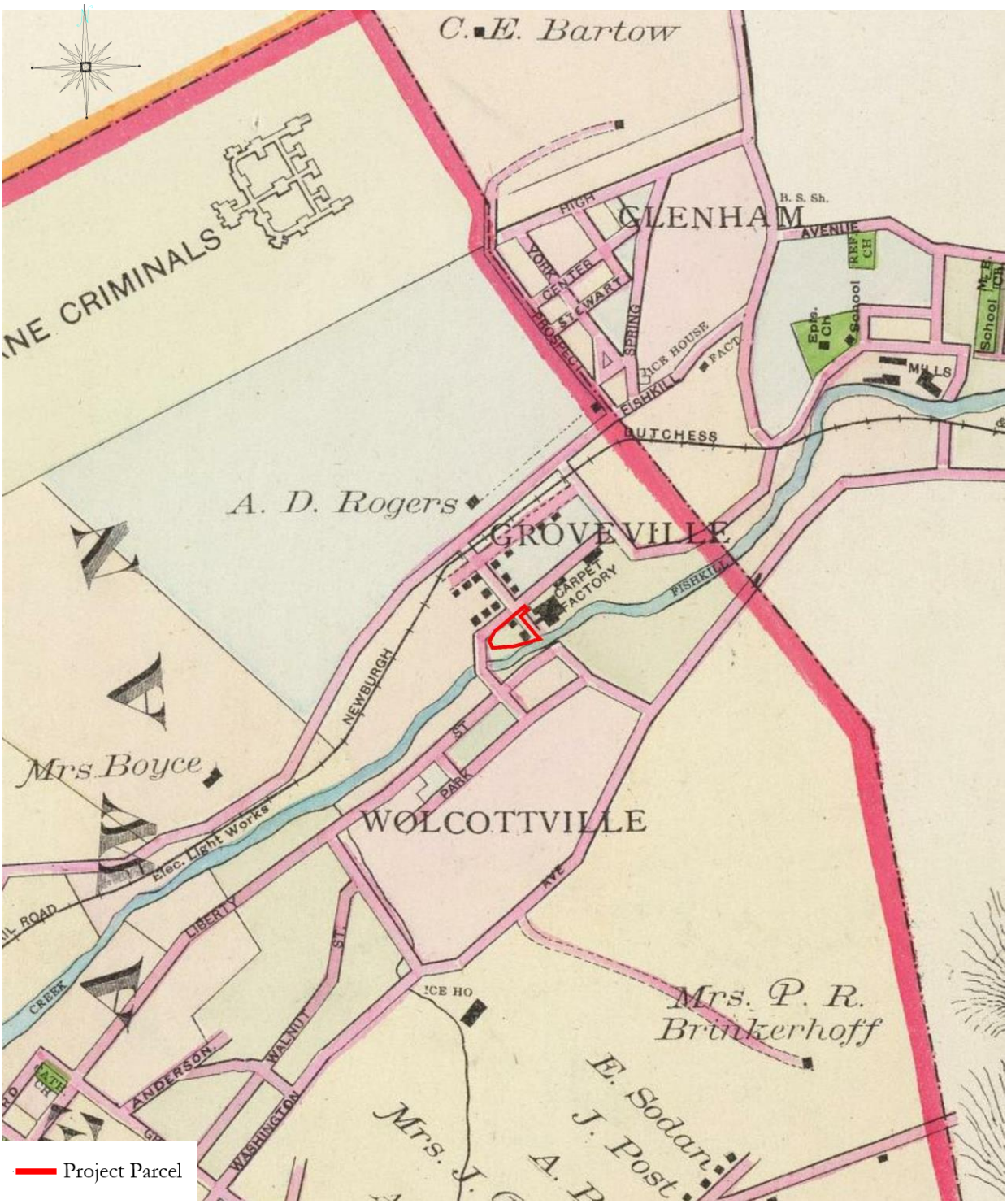


Figure 8: 1891 Beers Atlas *of the Hudson River New York City to Troy.* (Source: David Rumsey Cartography Associates) Scale: 1"=2160'.

By 1891 there have been significant changes to the property, including the construction of Front Street and Lydia Drive as well as the extension of Front Street across Fishkill Creek. The structures shown on the 1876 map fronting along Fishkill Avenue have been removed, and additional residential properties have been built along the new roads. The factory building is shown along Mill Street and is identified as a Carpet Factory. This map indicates that this complex of buildings is located in a hamlet identified as Groveville.

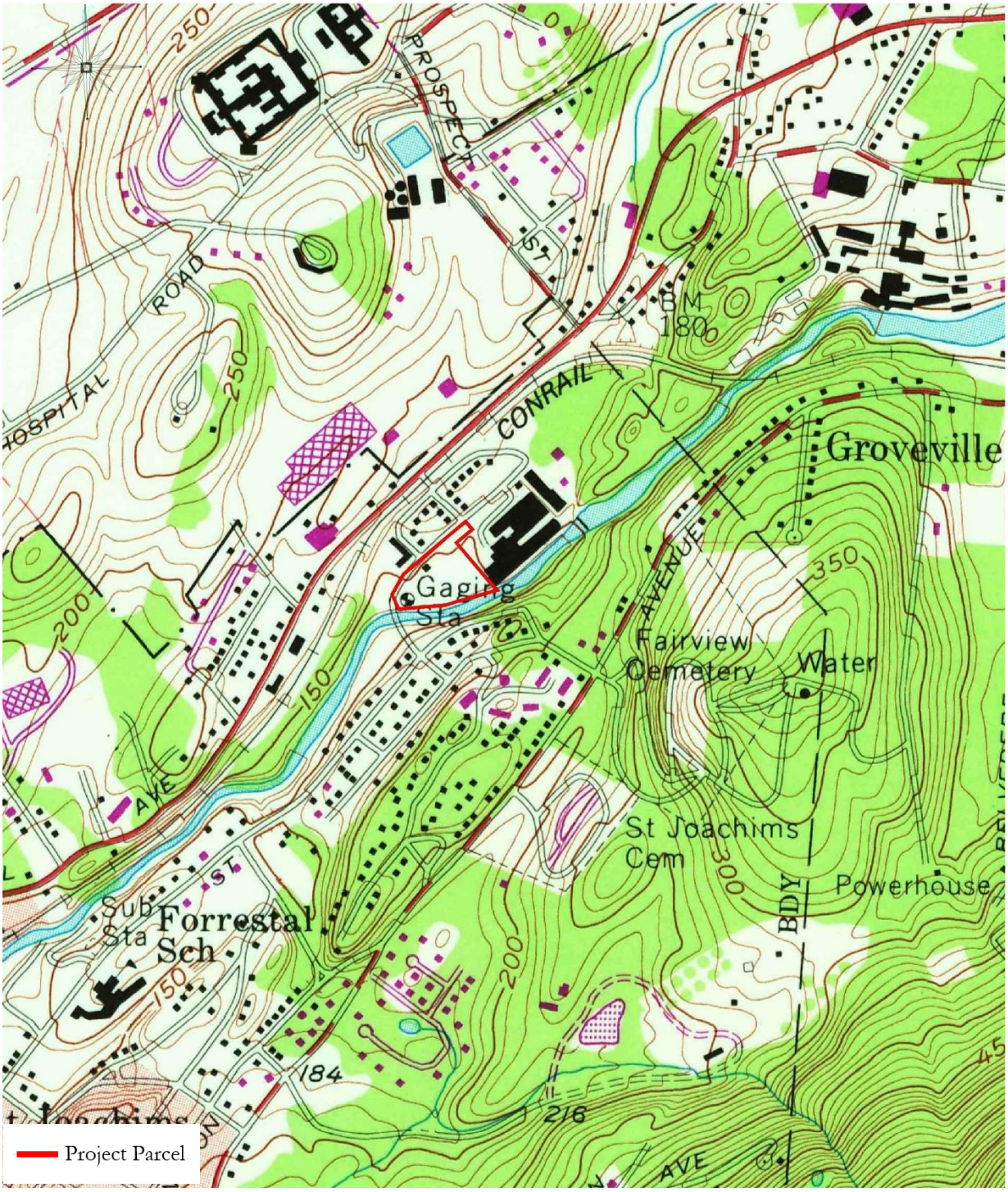


Figure 9: 1956 Wappingers Falls Topographical Maps. 7.5 Minute Series (Source: USGS.gov) Scale: 1"=1080'.

The 1956 topographical map shows that the Groveville mill factories have been expanded, and occupy the present day building footprint. The residential structures are shown to the north of Front Street. The Groveville Mill Dam is visible within Fishkill Creek, to the east of the factory buildings. A gauging station is shown in the southwestern portion of the Project Parcel.



Figure 10: 1955 Aerial Image. Dutchess County, New York. (Source: Dutchess County Parcel Access) Scale: 1"=180'.

The 1955 aerial image shows the factory buildings within the within the Groveville complex. There are no structures shown within the Project Parcel, which appears to be a mix of open and graded land.



Figure 11: 1974 Aerial Image. Dutchess County, New York. (Source: Dutchess County Parcel Access) Scale: 1"=185'.

The 1974 aerial image shows that that there is soil movement occurring within the Project Parcel. A series of trails and paths lead through the parcel to the gauging station in the southwestern corner.

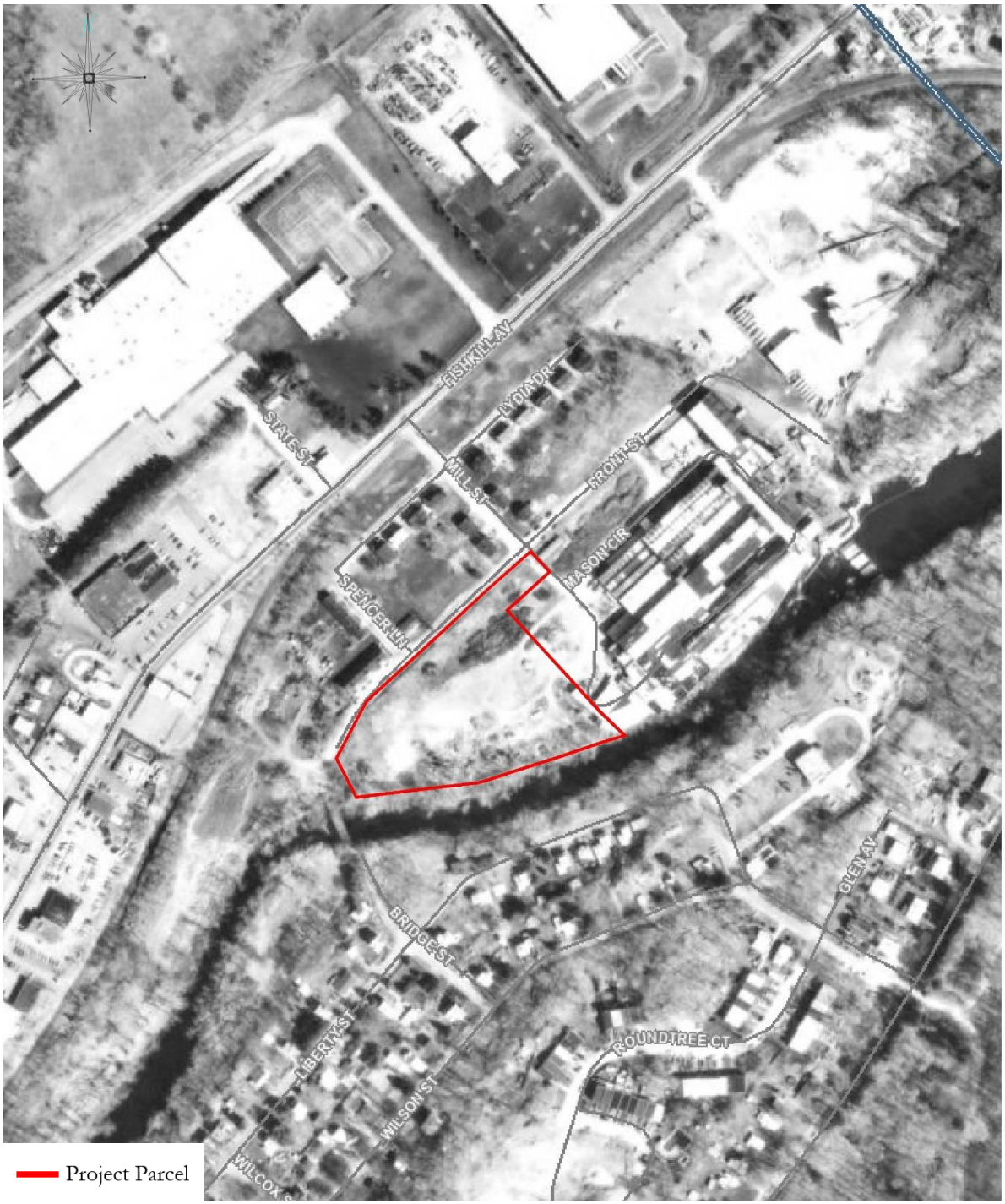


Figure 12: 1990 Aerial Image. Dutchess County, New York. (Source: Dutchess County Parcel Access) Scale: 1"=385'.

The 1990 aerial image shows that that the Project Parcel has been graded. Soil piles are located near Fishkill Creek and to the north near Front Street. The bank of Fishkill Creek is shown as wooded.

G. Assessment of Sensitivity for Cultural Resources

Precontact Period Sensitivity

Precontact period archaeological sensitivity of an area is based primarily on proximity to previously documented Precontact archeological sites, known Precontact period resources, and physiographic characteristics, such as topography and proximity to freshwater. Two previously identified precontact archaeological sites have been identified within the vicinity of the Project Parcel. In addition, the proximity of the Project Parcel to Fishkill Creek heightens the precontact sensitivity of the property. The property has experienced commercial development for nearly 200 years. The disturbances created by the industrial development has eliminated precontact potential of the property.

Historic Sensitivity

Cartographic research confirmed that the property has been occupied by industrial mills and factory structures throughout the nineteenth and twentieth century. In addition, the early to mid-nineteenth century buildings were removed prior to the construction of a carpet mill in the 1870's. The carpet mill was expanded at the turn of the century. The manufacturing structures were again expanded in the 1950s and once more in the 1970s. The property was listed as National Register Eligible in 1979.

The Groveville Mill Historic District is unique as a surviving example of integrated work housing in a factory setting in the Hudson Valley. While the residents on the property did not necessarily work at the factory, the buildings were occupied by local working class families through the twentieth century.

The Beacon Lofts project has retained the integrity of the property in the overall redevelopment concept, and has maintained the nineteenth century model of providing work space and housing within the same complex. The proposed undertaking consists of constructing a multi-purpose structure to the west of a new apartment building within the existing Beacon Lofts complex. The Parcel has experienced significant soil movement in the nineteenth and twentieth century. Therefore the Parcel is not considered to be sensitive for historic resources.

H. Summary and Recommendations

The proposed undertaking involves the construction of a two story building, which will house commercial artist studios as well as residential lofts, and the addition of a parking lot with 95 spaces. The location of the proposed structure has been profoundly disturbed by ongoing construction and development within the parcel and adjacent to its boundaries.

It is therefore the recommendation of HCS that no further archaeological investigations are warranted for the Beacon HIP Lofts and Studios Project.

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Civil & Environmental Engineering Consultants
174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)
13 Chambers Street, Newburgh, NY 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com

December 27, 2022

Hon. John Gunn, Chairman
City of Beacon Planning Board
1 Municipal Plaza
Beacon, NY 12508

Re: Beacon Lofts & Studios (Vacant Parcel)
Front Street
Tax Parcel: 6055-04-535128, ±3.5 ac.
City of Beacon, NY

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has revised the plan set in response to Lanc & Tully's (L&T) November 3, 2022 comment letter, and John Clarke Planning and Design's November 6, 2022 comment letter. Below is a point-by-point response to the comments received. Please note that Aryeh Siegel has responded to John Clarke Planning and Design's comments under separate cover. Below is a point-by-point response to the L&T comments received.

Lanc & Tully November 3, 2022 Comment Letter

General Comments

1. Comment noted. A Flood Development Permit will be applied for at building permit.
2. The first floor has been set to elev. 148.2, which is two feet above the flood elevation of 146.2 at the north end of the parcel.
3. Fill is proposed within the floodplain, or "floodway fringe", but not in the floodway. In accordance with Figure 1, page 104 of the 2012 FEMA flood study for Fishkill Creek, the flood study states: *"The area between the floodway and 1-percent annual chance of floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation of the 1-percent annual chance flood by more than 1.0 foot at any point."* The proposal does not call for fill beyond or within the floodway line. Therefore, by definition of FEMA code, the new development will not increase the 100-year flood (1-percent annual chance) elevation by more than 1 foot. In addition, previous development on the adjacent parcel to the north consisted of rebuilding existing buildings within the same footprints. Site grading was generally at the same elevation as previous elevations prior to the 2012 study. No fill was proposed within the regulated floodway boundary on the previous project(s). Therefore, the cumulative effect of

existing development will not increase the water surface elevation more than 1.0 foot at any location.

4. Comment noted. A sewer transportation corporation will be formed.
5. Comment noted. An application to the DCDBCH for their approval will be submitted once a SEQR determination has been made.
6. Comment noted. We continue to gather pump station information and data from the site superintendent. We understand from conversations from the site superintendent that odor control has been installed in the pump station.
7. We will set up a meeting with the City's Building Inspector to review fire access on the revised plan. It is noted that access is now provided on the south side of the building via an extension of the parking lot.
8. Comment noted. Colliers Engineering & Design has been retained, and their analysis and parking study is provided with this submission.
9. The Applicant has recently repaved Mill Street from the train tracks into the site. Mill street measures between 29 & 30 feet-wide curb-to-curb. Therefore, the paved surface is in new condition, and it is at adequate width to support the project. Please see the Traffic Impact Study prepared by Colliers Engineering & Design for further information.
10. We have reached out to the City of Beacon Water Department to confirm that there is adequate capacity for the project. We will forward a response to the planning board once received.
11. The stormwater management facilities have been moved out of the floodway. They now consist of a proposed underground infiltration system beneath parking lot for parking lot drainage, and a proposed infiltration basin for roof runoff behind the building. The SW facilities provide water quality volume (WQv) treatment and runoff reduction (RRv) in accordance with the NYS Stormwater Design Manual. The 1-year storm is expected to fully infiltrate pending infiltration testing, thereby meeting the CPv requirement. A downstream analysis has been performed demonstrating that detention of the 10-year and 100-year storms is not required. The site is located near the end of the Fishkill Creek watershed. The peak flow of Fishkill Creek at the site occurs a much later time than the peak flow associated with the site itself. Detaining the 10-year and 100-year storms could result in the peak flows occurring at the same time. Therefore, it is better to allow the 10-year and 100-year flows outlet un-detained so the peak flow of the site occurs before the peak flow of Fishkill Creek. This also known as "beat the peak" flow of the stream.
12. Aryeh Siegel has met with members of the Greenway Trail Committee (GTC), and has agreed to allow the GTC to provide input for portions of the trail as the project design moves forward.
13. The requested note has been added to sheet 5 of the revised plan set.

Sheet 1 of 11

1. Aryeh Siegel has responded to this comment under separate cover.
2. Aryeh Siegel has responded to this comment under separate cover.
3. Aryeh Siegel has responded to this comment under separate cover.
4. Aryeh Siegel has responded to this comment under separate cover.

Sheet 2 of 11

1. Aryeh Siegel has responded to this comment under separate cover.
2. Aryeh Siegel has responded to this comment under separate cover.
3. Aryeh Siegel has responded to this comment under separate cover.
4. Aryeh Siegel has responded to this comment under separate cover.

Sheet 3 of 11

1. Aryeh Siegel has responded to this comment under separate cover.
2. Aryeh Siegel has responded to this comment under separate cover.

Sheet 4 of 11

1. Aryeh Siegel has responded to this comment under separate cover.
2. Aryeh Siegel has responded to this comment under separate cover.

Sheet 5 of 11

3. Spot elevations have been added along the front curb line as well as other portion of the parking lot. Spot elevations that do not decipher if they are top of curb or bottom of curb are bottom of curb.

4. The catch basin has been relocated out of the trash enclosure.

5. The landscaping has been removed from sheet 5 of the plan set.

6. The rear of the building has been re-graded to provide a larger useable grass area outside the common entry door.

7. The LSE has been added to sheet 5 of the revised plan set.

8. The maintenance access route to the proposed infiltration basin will be via the greenway trail. If this is not acceptable, we can work out an easement with the adjacent property owner that would access from the circular turn-around.

9. The roof leaders will be directed to the infiltration basin. We are coordinating the location of the downspouts with the project architect, and therefore will be provided in a future submittal.

10. The existing sewer line and manholes are called out to be removed in their entirety on sheet 5.

11. Stairs are proposed within the retaining wall. They are labeled on sheet 5.

12. The water service line and wet tap size are labeled on sheet 5.

13. Two accessible curb ramps are now shown on the sidewalk in front of the building.

14. The landscaping plan is being revised. Proposed landscaping will be removed from the access easement to the pump station.

15. The requested note has been added to the Post Construction Notes on sheet 5.

Sheet 6 of 11 (Erosion & Sediment Control)

1. A proposed stone outlet sediment trap is now shown on the plans with diversion ditches leading to it. A detail is provided on sheet 11 and calculations are provided at the end of Appendix F within the revised SWPPP report.

Stormwater Pollution Prevention Plan (SWPPP)

1. Comment noted. The stormwater facilities have been moved out of the floodway. The revised SWPPP reflects this condition.
2. Soil testing will be conducted and coordinated with the City Engineer's office when weather allows. It is noted that the soil types on this parcel are same as what is on the adjacent developed parcel. Infiltration testing was conducted previously on the developed parcel which revealed very good infiltration rates. We expect similar results on the project site.

John Clarke Planning & Design November 6, 2022 Comment Letter

1. The Residential Development Calculation Plan has been corrected with appropriate unit requirement of 3,960 sqft per unit. The total acreage used in the calculations does not include the parcel surrounding the pump station, as it cannot be used as useable area. The acreage on sheet 1 of the plan set includes that parcel. The acreage on the plan can be adjusted in future submittals to exclude the pump station parcel if the board sees fit to do so.

The following items submitted for continued review:

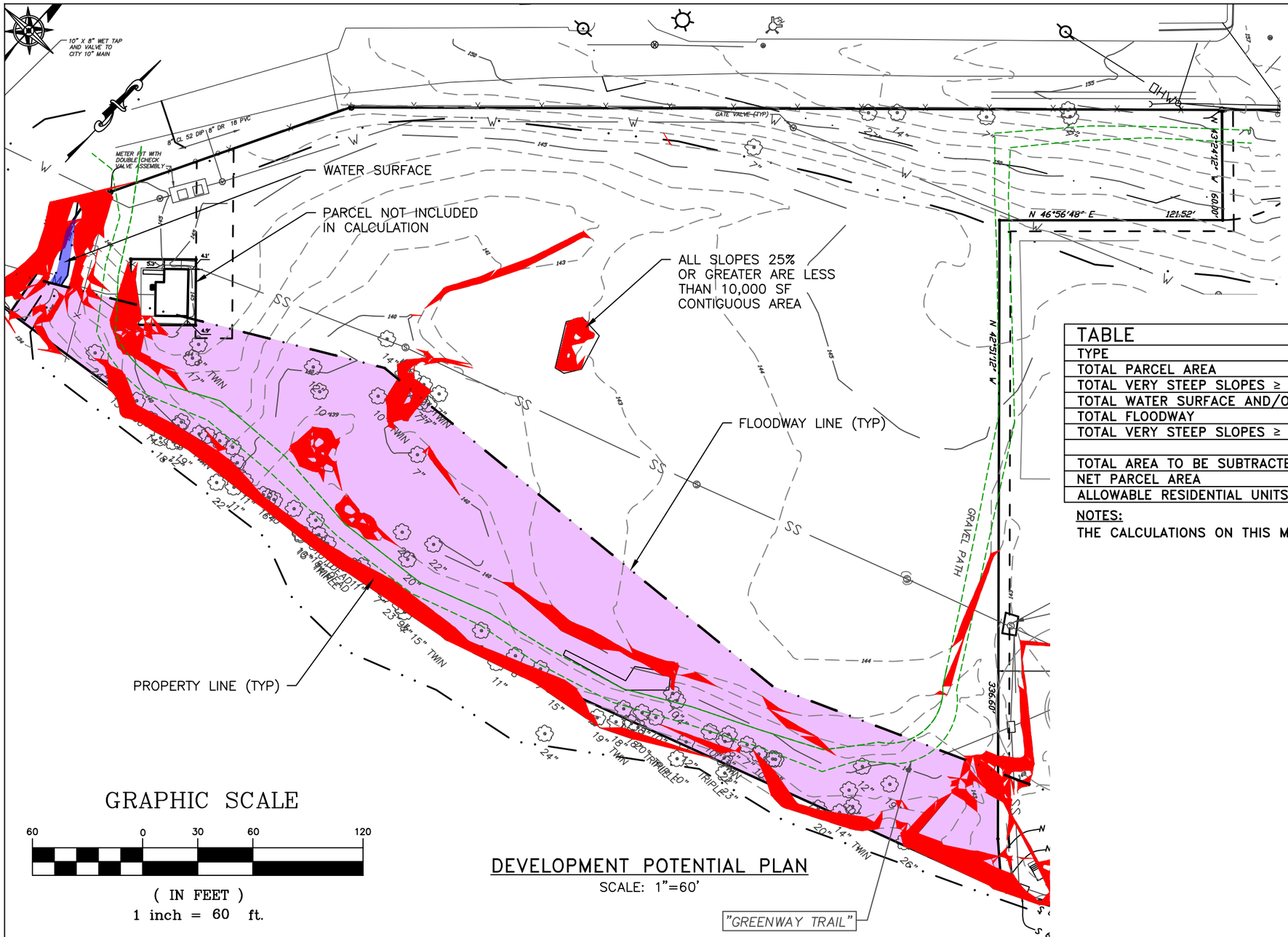
- Five (5) copies of a full set of plan sheets 5 through 11;
- Five (5) copies of the Traffic Impact Study;
- Five (5) copies of the Phase IA Archaeological Study;
- Five (5) copies of the revised Residential Development Calculation Plan and
- Three (3) copies of a revised SWPPP report.

We look forward to discussing this project at your January 10, 2023 planning board meeting. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,

Michael A. Bodendorf, P.E.
Principal

cc: Beacon HIP Lofts and Storage
Aryeh Siegel
Daniel G. Koehler, P.E. (HLD file)



GRAPHIC SCALE

60 0 30 60 120

(IN FEET)
1 inch = 60 ft.

DEVELOPMENT POTENTIAL PLAN

SCALE: 1"=60'

TABLE		
TYPE	COLOR	AREA
TOTAL PARCEL AREA		153,428 SF
TOTAL VERY STEEP SLOPES ≥ 25%		6,970 SF
TOTAL WATER SURFACE AND/OR WETLAND		180 SF
TOTAL FLOODWAY		40,603 SF
TOTAL VERY STEEP SLOPES ≥ 25% WITH 10,000 SF CONTIGUOUS AREA		0 SF
TOTAL AREA TO BE SUBTRACTED FROM PARCEL AREA	N/A	40,783 SF
NET PARCEL AREA	N/A	112,645 SF
ALLOWABLE RESIDENTIAL UNITS = NET PARCEL AREA / 3,960 SF PER UNIT	N/A	28 UNITS

NOTES:
THE CALCULATIONS ON THIS MAP ARE IN ACCORDANCE WITH §223-41.14B.

DRAWN BY: CMB CHECKED BY: MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY
1	12/27/22	PER PLANNING BOARD COMMENTS	CMB

STATE OF NEW YORK · MICHAEL A. BODENDORF · LICENSED PROFESSIONAL ENGINEER · 084466

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

DEVELOPMENT POTENTIAL PLAN

BEACON HIP LOFTS & STUDIOS

FRONT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-04-535128

JOB #: 2013:003
DATE: 10/25/2022
SCALE: 1" = 60'
TITLE: DP-1
SHEET: 1 OF 1

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

ARYEH SIEGEL
ARCHITECT

John Gunn - Planning Board Chairman
City of Beacon
One Municipal Plaza
Beacon, NY 12508

Re: Beacon HIP Lofts & Studios (Vacant Parcel)
Planning Board Application
Response to Comment Letters

December 27, 2022

Dear Chairman Gunn and Members of the Planning Board,

Please find below the Applicant's response to John Clarke Planning & Design comments in his Memorandum dated November 6, 2022 and in Lanc & Tully's Memorandum dated November 3, 2022 regarding the Beacon HIP Lofts & Studios application. Hudson Land Design will provide a separate letter in response to Engineering comments.

John Clarke Planning & Design Comment Responses:

1. Comment acknowledged. Hudson Land Design will coordinate overall acreage and the area per unit requirement.

2. The existing conditions plan shows was updated to show existing trees over 6" in diameter based on recent survey information. The current configuration of the Greenway Trail has been shown on this plan. The location of adjacent structures, driveways and parking along the edge of the subject parcel is shown.

3. Comment acknowledged. Flood issues will be addressed.

4. Comment acknowledged. A traffic report is included with this submission. The archeological report is also included.

5. Comment acknowledged. The pedestrian circulation system will be reviewed and updated as appropriate.

6. The traffic engineer retained by the Applicant is developing a parking analysis to demonstrate the feasibility of providing land-banked parking.

7. The parking has been updated to provide 4 ADA spaces near the front entries.

8. A Landscape Plan with a plant list and planting notes has been provided with this submission.

84 Mason Circle | ajs@ajsarch.com | *Tel* 845 838 2490
Beacon, New York 12508 | www.ajsarch.com | *Fax* 845 838 2657

Lanc & Tully Comment Responses:

Sheet 1 of 11 – Site Plan

1. The Site Plan shows the floodway line and the 100 year floodplain line.
2. The plan indicates the floor elevation of the proposed building
3. A note was added to show where survey information was acquired.
4. The site plan shows the roadway along the front of the project. The existing conditions plan shows additional information regarding the existing roads.

Sheet 2 of 11 – Existing Conditions Survey

1. A note was added to show where survey information was acquired.
2. The existing conditions survey shows the floodway line and the 100 year floodplain line with darkened lines for legibility
3. The existing conditions survey shows the roadway along the front of the project.
4. The existing conditions survey shows easements that cross the parcel

Sheet 3 of 11 – Landscape Plan

1. The landscape designer will provide additional information on the size of trees and the planting times when the project comes before the Planning Board for site plan review after the City Council reviews for the Concept Plan
2. See note 1 above.

Sheet 4 of 11 – Building Plans

1. The location of the mechanical room is called out on the 1st floor plan. The room has been preliminarily sized for the sprinkler room.
2. It appears that the other comments in this section relate to Hudson Land Design's Grading and Utility Plan, and not to the Building Plans. Hudson Land Design will respond to these comments.

Please refer to Hudson Land Design's response letter for additional responses.

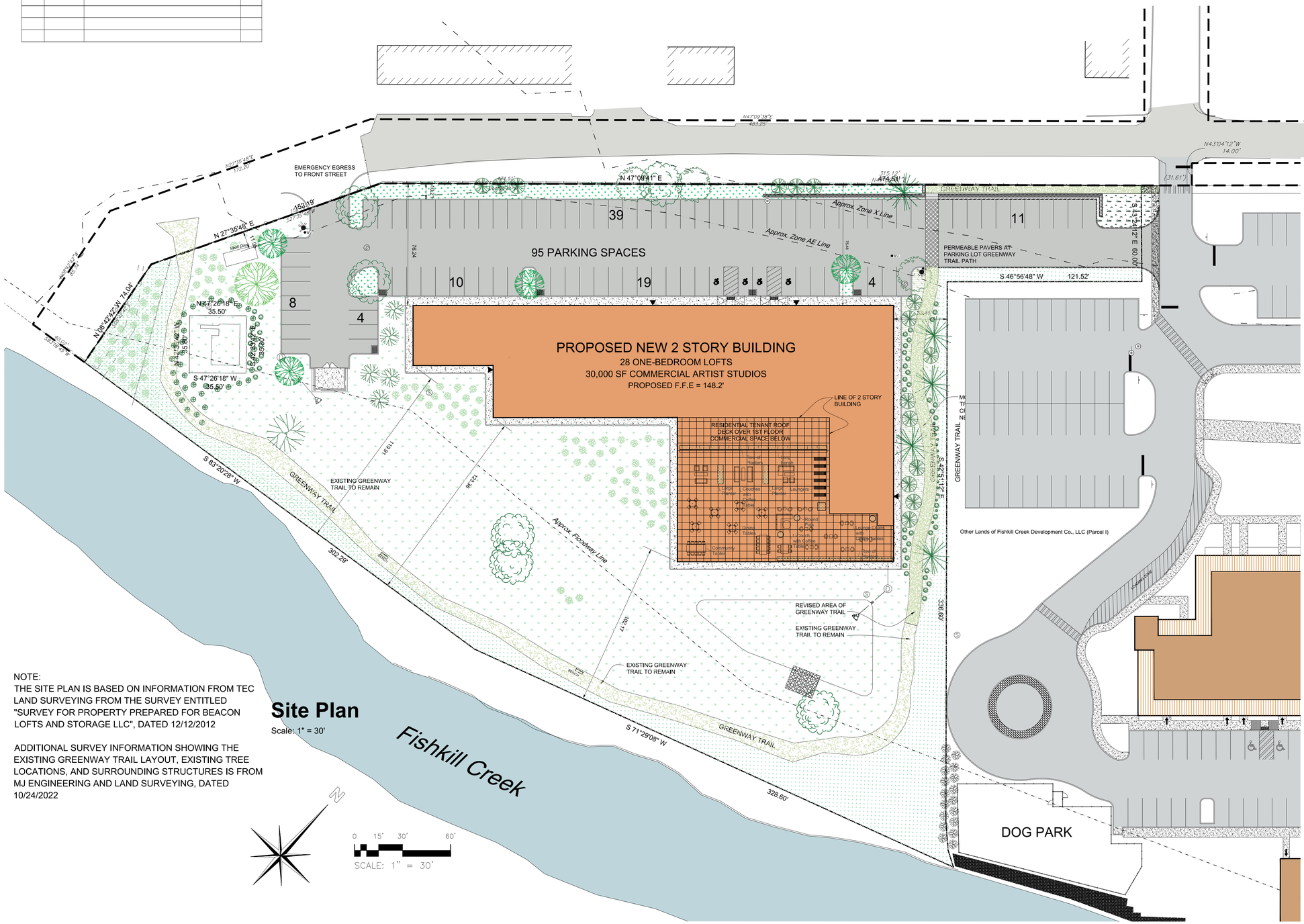
Thank you. Please let me know if you have any questions.

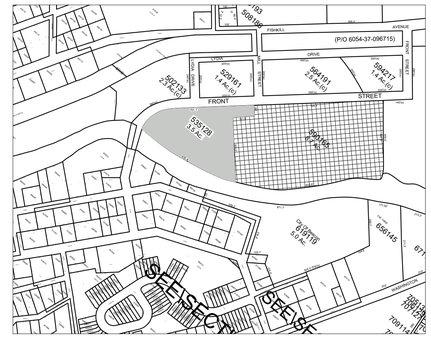
Sincerely,
Aryeh Siegel
Aryeh Siegel, Architect

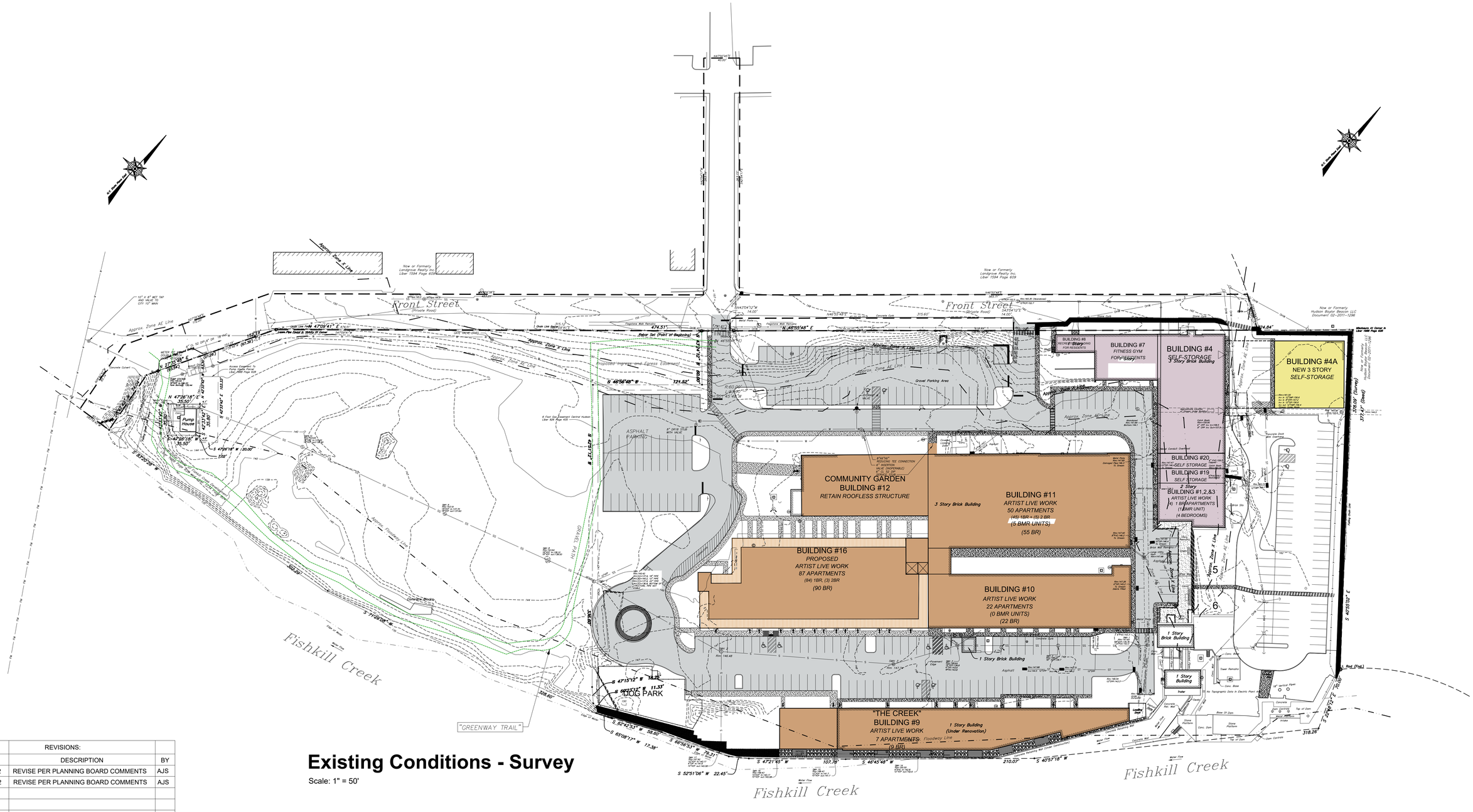
		REVISIONS:	
NO.	DATE	DESCRIPTION	BY
1	10/25/22	REVISE PER PLANNING BOARD COMMENTS	AJS
2	12/27/22	REVISE PER PLANNING BOARD COMMENTS	AJS

Zoning Regulations Table

	Required Setbacks			Proposed Setbacks			Minimum frontage on public street right-of-way	Proposed frontage on public street right-of-way	Minimum Site Area	Existing Site Area	Maximum Residential Development Potential	Proposed Number of Residential Units	Required Commercial Space	Proposed Commercial Space	Maximum Dwelling Size	Proposed Dwelling Size	Maximum Building Coverage	Proposed Building Coverage	Minimum Open Space	Proposed Open Space	Maximum Building Height	Proposed Building Height	Minimum setback from and buffer width along Fishkill Creek	Proposed setback from and buffer width along Fishkill Creek
	Front	Side	Rear	Front	Side	Rear																		
Zoning District																								
FCD	12'	12'	12'	75.5'	33.4'	102.2'	50 feet	507.5 feet	2 acres	3.55 acres	39	28	25%	58%	2,000 sf	1,055 sf max	35%	20%	30%	80%	3 stories / 40'	2 stories / 40'	An average of 50 feet, but not less than 25 feet at any point	102' minimum



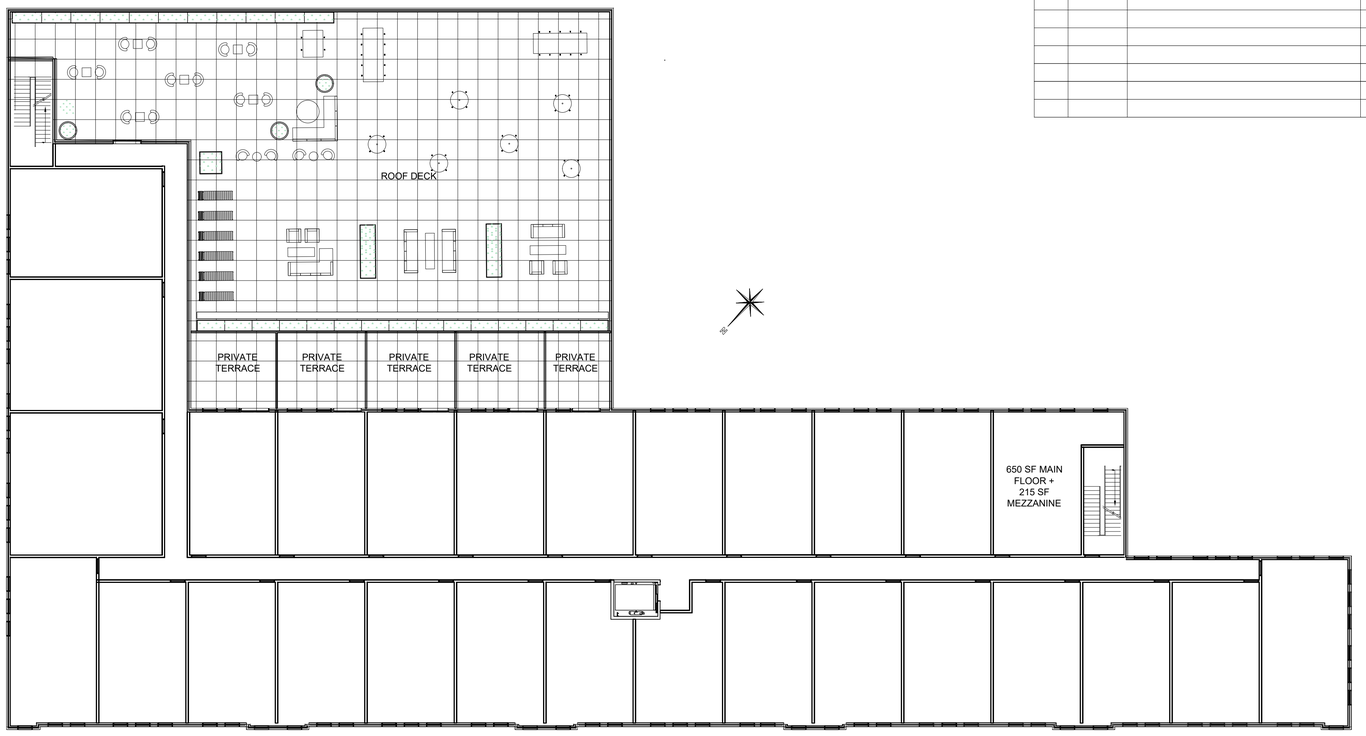



Front Street
(Private Road)
Front Street
(Private Road)
Approx. Zone AE Line
Approx. Zone X Line
Approx. Floodplain Line
Approx. Floodway Line
Approx. Zone A Line
Approx. Zone AE Line
Approx. Zone X Line
Approx. Zone AE Line
Approx. Zone AE Line
Approx. Zone X Line
Approx. Zone AE Line
Approx. Zone X Line
Approx. Zone AE Line
Approx. Zone X

		REVISIONS:	
NO.	DATE	DESCRIPTION	BY
1	10/25/22	REVISE PER PLANNING BOARD COMMENTS	AJS
2	12/27/22	REVISE PER PLANNING BOARD COMMENTS	AJS

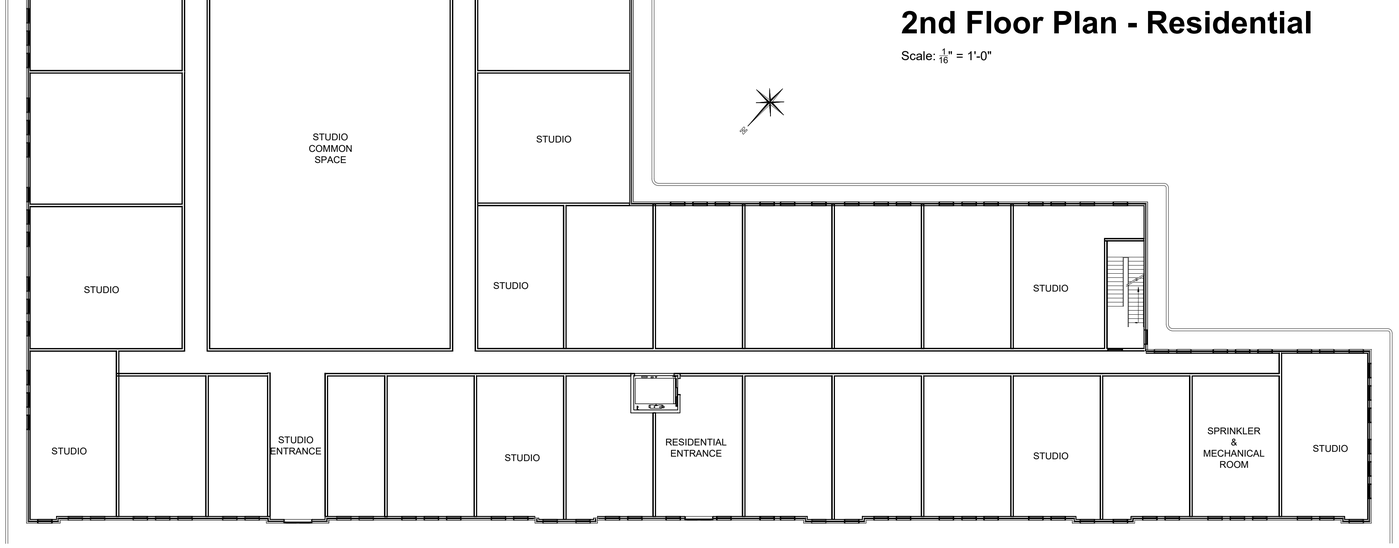


View



2nd Floor Plan - Residential

Scale: $\frac{1}{16}$" = 1'-0"



1st Floor Plan - Commercial

Scale: $\frac{1}{16}$" = 1'-0"



View

Site Plan Application

Sheet 4 of 11 - Building Plans & Images

Owner:
Fishkill Creek Development Corp.
16 Squadron Boulevard
New City NY 10956

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

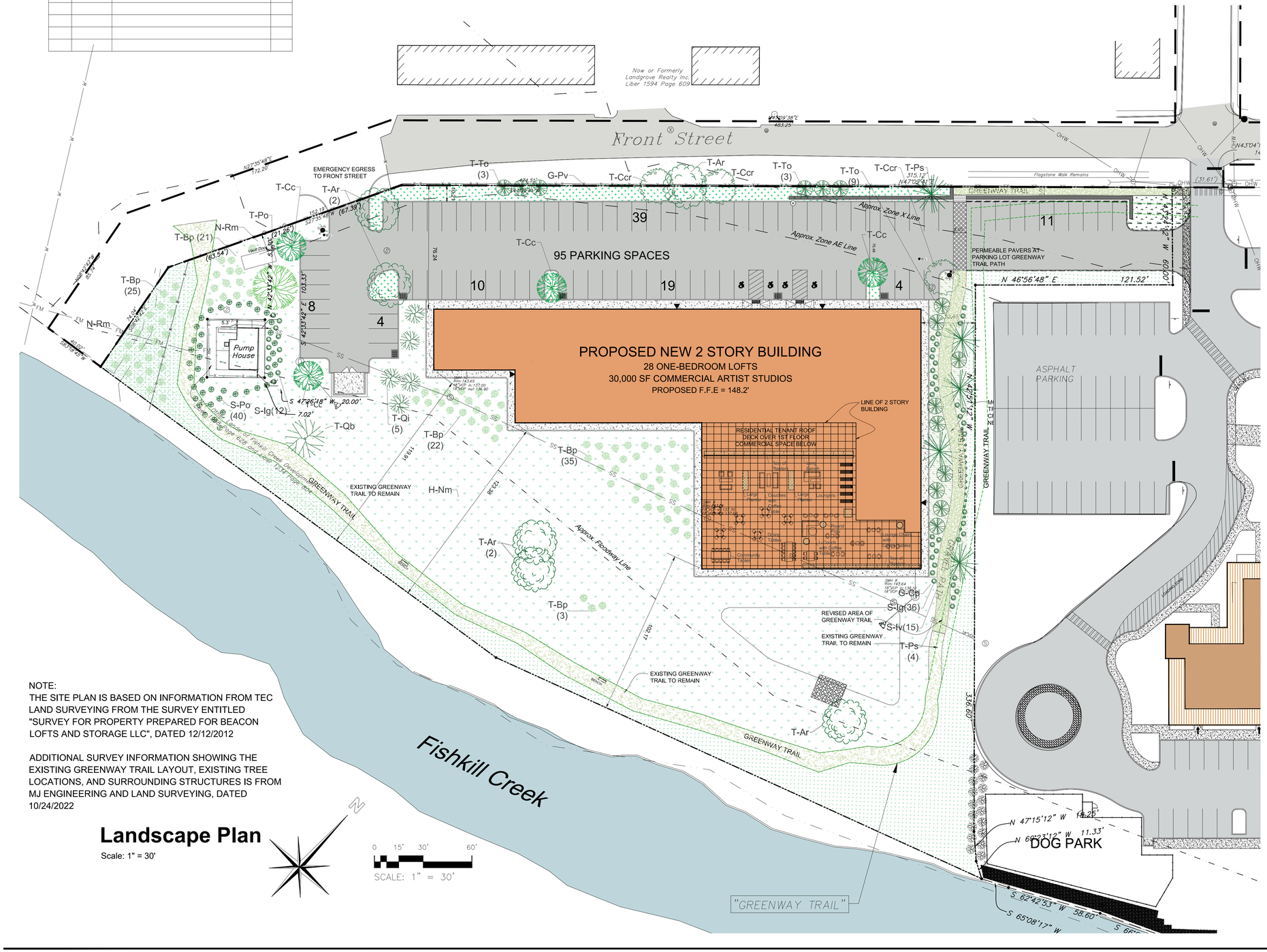
Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
TEC Surveying
831 Route 52, Suite 2C
Fishkill, New York 12524

Landscape Design:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

Beacon HIP Lofts and Studios
Beacon, New York
Scale: 1" = 20'
May 21, 2022

		REVISIONS:	
NO.	DATE	DESCRIPTION	BY
1	10/25/22	REVISE PER PLANNING BOARD COMMENTS	AJS
2	12/27/22	REVISE PER PLANNING BOARD COMMENTS	AJS



NOTE:
THE SITE PLAN IS BASED ON INFORMATION FROM TEC LAND SURVEYING FROM THE SURVEY ENTITLED "SURVEY FOR PROPERTY PREPARED FOR BEACON LOFTS AND STORAGE LLC", DATED 12/12/2012

ADDITIONAL SURVEY INFORMATION SHOWING THE EXISTING GREENWAY TRAIL LAYOUT, EXISTING TREE LOCATIONS, AND SURROUNDING STRUCTURES IS FROM MJ ENGINEERING AND LAND SURVEYING, DATED 10/24/2022

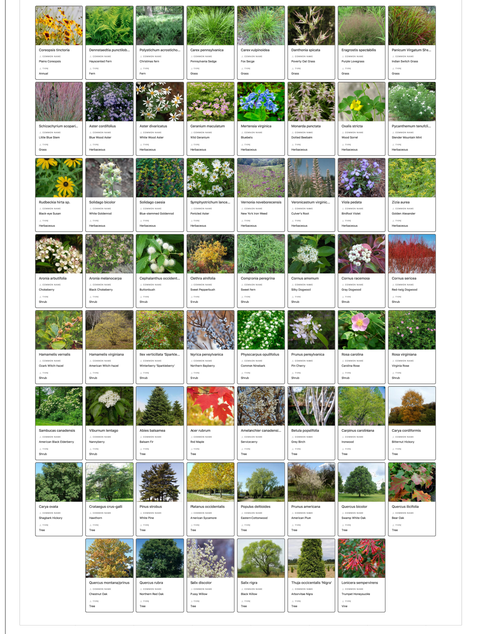
Landscape Plan

Scale: 1" = 30'

Planting Schedule

Symbol	Quantity	Type	Botanical Name	Common Name	Size	Planting Time
TREES						
T-Ab	1	Tree	Abies balsamea	Balsam Fir	6'	spring/Fall
T-Ar	6	Tree	Acer rubrum	Red Maple	1"	spring/Fall
T-Ac	1	Tree	Amelanchier canadensis	Serviceberry	5-6'	spring/Fall
T-Bp	106	Tree	Betula populifolia	Grey Birch	bare root 2'	spring/Fall
T-Cc	2	Tree	Carpinus caroliniana	Ironwood	1"	spring/Fall
T-Cco	1	Tree	Carya cordiformis	Bitternut Hickory	1"	spring/Fall
T-Co	1	Tree	Carya ovata	Shagbark Hickory	1"	spring/Fall
T-Ccr	3	Tree	Crataegus crus-galli	Hawthorn	6-7'	spring/Fall
T-Py	5	Tree	Pinus strobus	White Pine	7-8'	spring/Fall
T-Pa	1	Tree	Platanus occidentalis	American Sycamore	1"	spring/Fall
T-Pd	1	Tree	Populus deltoides	Eastern Cottonwood	1"	spring/Fall
T-Qb	1	Tree	Quercus bicolor	Swamp White Oak	1"	spring/Fall
T-Qi	5	Tree	Quercus ilicifolia	Bear Oak	1"	spring/Fall
T-Qm	1	Tree	Quercus montana/prinus	Chestnut Oak	1"	spring/Fall
T-Qr	1	Tree	Quercus rubra	Northern Red Oak	1"	spring/Fall
T-Sd	1	Tree	Salix discolor	Pussy Willow	3 gal	spring/Fall
T-Sn	1	Tree	Salix nigra	Black Willow	1"	spring/Fall
T-To	15	Tree	Thuja occidentalis 'nigra'	Arborvitae	5-6'	spring/Fall
SHRUBS						
S-Aa	1	Shrub	Aronia arbutifolia	Chokeberry	3 gal	Spring/Fall
S-Am	1	Shrub	Aronia melanocarpa	Black Chokeberry	3 gal	Spring/Fall
S-Ce	1	Shrub	Cephalanthus occidentalis	Buttonbush	3 gal	Spring/Fall
S-Ca	1	Shrub	Clethra alnifolia	Sweet Pepperbush	3 gal	Spring/Fall
S-Cp	1	Shrub	Comptonia peregrina	Sweet Fern	1 gal	Spring/Fall
S-Cam	1	Shrub	Cornus amomum	Silky Dogwood	3 gal	Spring/Fall
S-Cr	1	Shrub	Cornus racemosa	Gray Dogwood	3 gal	Spring/Fall
S-Cs	1	Shrub	Cornus sericea	Red-twig Dogwood	3 gal	Spring/Fall
S-Hv	1	Shrub	Hamamelis vernalis	Ozark Witch-hazel	7 gal	Spring/Fall
S-Hvi	1	Shrub	Hamamelis virginiana	American Witch-hazel	5-6'	Spring/Fall
S-Ig	48	Shrub	Ilex glabra	Inkberry	5 gal	Spring/Fall
S-Iv	15	Shrub	Ilex verticillata 'Sparkleberry'	Winterberry 'Sparkleberry'	5 gal	Spring/Fall
S-Mp	1	Shrub	Myrica pensylvanica	Northern Bayberry	5 gal	Spring/Fall
S-Po	21	Shrub	Physocarpus opulifolius	Common Ninebark	5 gal	Spring/Fall
S-Pp	1	Shrub	Prunus pensylvanica	Pin Cherry	7 gal	Spring/Fall
S-Rc	1	Shrub	Rosa carolina	Carolina Rose	3 gal	Spring/Fall
S-Rv	1	Shrub	Rosa virginiana	Virginia Rose		Spring/Fall
S-Sc	1	Shrub	Sambucus canadensis	American Black Elderberry	3 gal	Spring/Fall
S-Vl	1	Shrub	Viburnum lentago	Nannyberry	7 gal	Spring/Fall
VINES						
V-Ls	1	Vine	Lonicera sempervirens	Trumpet Honeysuckle	1 gal	Spring/Fall
WILDFLOWERS						
H-Ac	1	Herb	Aster cordifolius	Blue Wood Aster	plug	Spring/Sum/Fall
H-Ad	1	Herb	Aster divaricatus	White Wood Aster	plug	Spring/Sum/Fall
H-Gm	1	Herb	Geranium maculatum	Wild Geranium	plug	Spring/Sum/Fall
H-Mv	1	Herb	Mertensia virginica	Bluebells	plug	Spring/Sum/Fall
H-Mp	1	Herb	Monarda punctata	Dotted Beebalm	plug	Spring/Sum/Fall
H-Os	1	Herb	Oxalis stricta	Wood Sorrel	plug	Spring/Sum/Fall
H-Pt	1	Herb	Pycanthemum tenufolium	Slender Mountain Mint	plug	Spring/Sum/Fall
H-Rh	1	Herb	Rudbeckia hirta sp.	Black-eye Susan	plug	Spring/Sum/Fall
H-Sb	1	Herb	Solidago bicolor	White Goldenrod	plug	Spring/Sum/Fall
H-Sc	1	Herb	Solidago caesia	Blue-stemmed Goldenrod	plug	Spring/Sum/Fall
H-Sl	1	Herb	Symphyotrichum lanceolatum	Panicled Aster	plug	Spring/Sum/Fall
H-Vn	1	Herb	Vernonia noveboracensis	New York Iron Weed	plug	Spring/Sum/Fall
H-Vv	1	Herb	Veronicastrum virginicum	Culver's Root	plug	Spring/Sum/Fall
H-Vp	1	Herb	Viola pedata	Birdfoot Violet	plug	Spring/Sum/Fall
H-Za	1	Herb	Zizia aurea	Golden Alexander	plug	Spring/Sum/Fall
GRASSES						
G-Cp	1	Grass	Carex pennsylvanica	Pennsylvania Sedge	plug	Spring/Fall
G-Cv	1	Grass	Carex vulpinoidea	Fox Sedge	plug	Spring/Fall
G-Ds	1	Grass	Danthonia spicata	Poverty Oat Grass	plug	Spring/Sum/Fall
G-Es	1	Grass	Eragrostis spectabilis	Purple Lovegrass	plug	Spring/Sum/Fall
G-Pv	1	Grass	Panicum Virgatum Shenandoah	Indian Switch Grass	plug	Spring/Sum/Fall
G-Ss	1	Grass	Schizachyrium scoparium	Little Blue Stem	plug	Spring/Fall
G-EG	1	Grass	Eco Grass Lawn Alternative	Fescue Mix	Seed	Spring/Fall
FERNS						
F-Dp	1	Fern	Dennstaedtia punctilobula	Hayscented Fern	1 gal	Spring/Fall
F-Pa	1	Fern	Polystichum acrostichoides	Christmas fern	1 gal	Spring/Fall
ANNUALS						
A-Cl	1	Annual	Coreopsis tinctoria	Plains Coreopsis	Seed	Spring/Sum/Fall
	1	Annual	Covercrops to stabilize soil	Wheat in Fall/Oat in Spring	Seed	Any Season
SEED MIXES						
M-WM	1	Mix	Woodland Mix			
M-DRMM	1	Mix	Deer Resistant Meadow Mix			
M-BM	1	Mix	Bioretention Mix			
M-CBRM	1	Mix	Creek-Bank Restoration Mix			

Illustrated Plant List



Site Plan Application

Sheet 3 of 11 - Landscape Plan

Owner:
Fishkill Creek Development Corp.
16 Squadron Boulevard
New City NY 10956

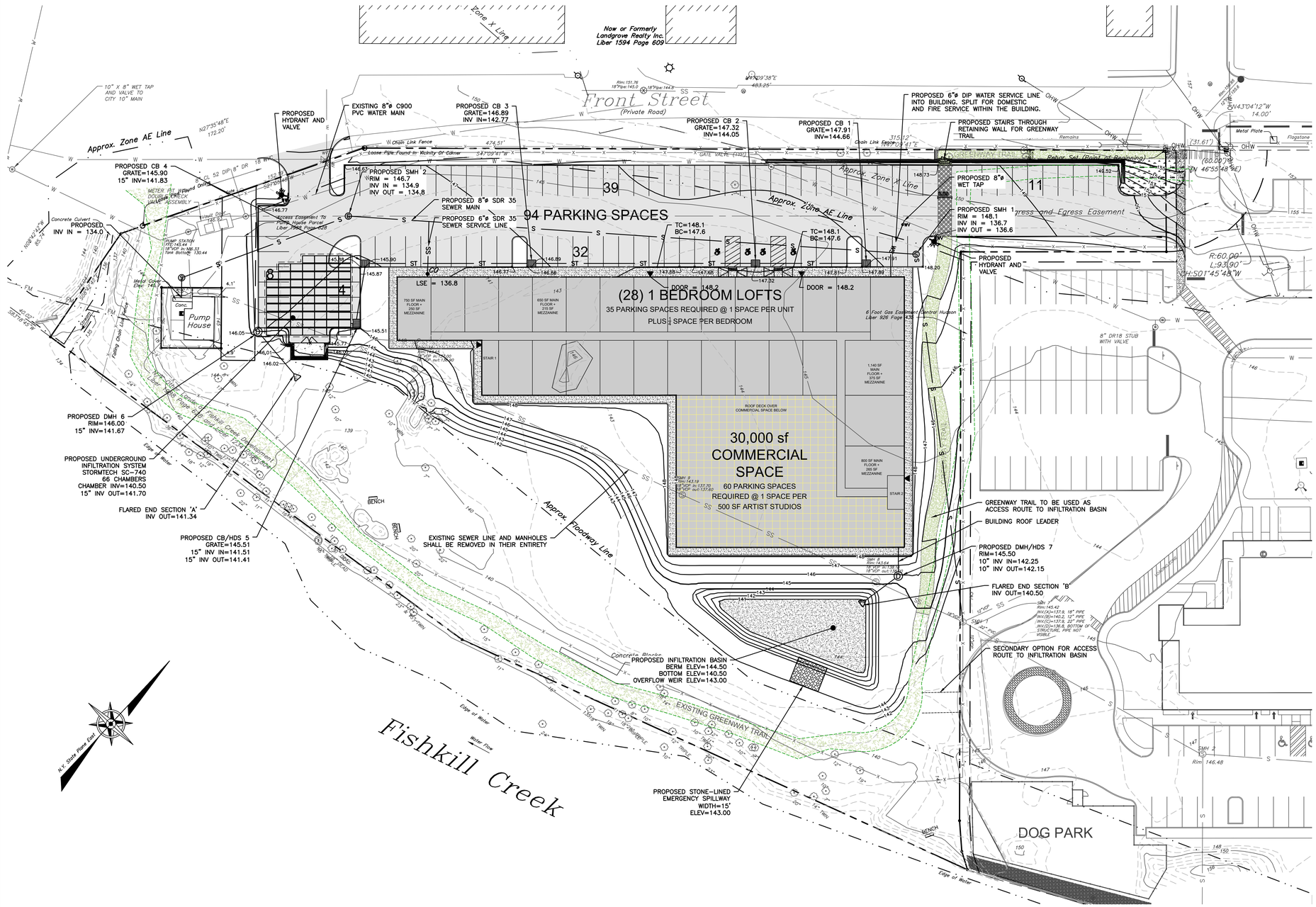
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
TEC Surveying
831 Route 52, Suite 2C
Fishkill, New York 12524

Landscape Design:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

Beacon HIP Lofts and Studios
Beacon, New York
Scale: 1" = 30'
May 21, 2022



GRADING & UTILITY PLAN
SCALE: 1" = 30'

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PROJECT INFORMATION:	
PARCEL OWNER:	BEACON HIP LOFTS, LLC, 39 FRONT STREET BEACON, NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	FRONT STREET BEACON, NY 12508
TAX PARCEL ID:	6055-04-535128
PARCEL AREA:	±3.5-ACRES
WATER SUPPLY:	MUNICIPAL
SEWAGE DISPOSAL:	MUNICIPAL

EXISTING UNDERGROUND UTILITY NOTES:

1. CONTRACTOR SHALL DIG TEST PITS TO VERIFY LOCATION, SIZE AND PIPE MATERIAL OF EXISTING UNDERGROUND UTILITIES. IF ANY EXISTING UTILITIES ARE NOT IN THE LOCATION WHERE THEY ARE SHOWN ON THE PLAN, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.

INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

PRE-TREATMENT FOREBAYS AND PLUNGE POOLS:

PRE-TREATMENT FOREBAYS OR PLUNGE POOLS SHALL BE INSPECTED ANNUALLY FOR OVERALL PERFORMANCE AND SEDIMENT ACCUMULATION. SEDIMENT SHALL BE REMOVED WHEN SEDIMENT ACCUMULATION REACHES 50% OF THE DESIGN CAPACITY VOLUME. INSPECTION CHECKLISTS FOR INFILTRATION, PEA-GRAVEL DIAPHRAGMS AND SEDIMENT FOREBAYS ARE INCLUDED IN APPENDIX O.

INFILTRATION BASIN:

THE INFILTRATION BASIN SHALL BE INSPECTED MONTHLY FOR SEDIMENT AND DEBRIS ACCUMULATION. INFLOW PIPES, OUTLET STRUCTURES AND SPILLWAYS SHOULD ALSO BE INSPECTED FOR SEDIMENT AND DEBRIS MONTHLY. ANY ACCUMULATED SEDIMENT OR DEBRIS SHOULD BE REMOVED AS NECESSARY. PLANTINGS SHALL BE INSPECTED MONTHLY FOR HEIGHT, FERTILIZER, QUANTITY AND UNAUTHORIZED INVASIVE OR INAPPROPRIATE SPECIES. AFTER STORM EVENTS, THE INFILTRATION BASIN DEWATERING DURATION SHOULD ALSO BE MONITORED. THE BASIN FLOOR SHALL BE MOWED AS REQUIRED; HOWEVER, THE GRASS HEIGHT SHALL NOT EXCEED 18". SEDIMENT SHALL BE CLEANED OUT OF THE INFILTRATION BASIN ANNUALLY.

VEGETATED SWALES:

VEGETATED SWALES SHALL BE INSPECTED MONTHLY FOR SEDIMENT AND DEBRIS ACCUMULATION, COVERAGE AND HEALTH OF VEGETATION, AND EVIDENCE OF EROSION. ANY ACCUMULATED SEDIMENT AND DEBRIS SHOULD BE REMOVED AS NECESSARY. GRASS SHOULD BE KEPT NO SHORTER THAN 4"-HIGH. ANY ERODED AREAS OF DEAD VEGETATION SHALL BE REPAIRED AS NECESSARY. DEWATERING SHALL BE MONITORED ON A MONTHLY BASIS.

GENERAL CONSTRUCTION NOTES:

1. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED PRIOR TO CONSTRUCTION. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES.

2. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.

3. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS & STORM SEWER LINES, SANITARY MANHOLES & SEWER LINES, WATERLINES AND OTHER UNDERGROUND UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS.

4. PIPE CONNECTIONS TO ALL CATCH BASINS SHALL BE MADE WATERTIGHT, WITH PARTICULAR ATTENTION BEING PAID TO CONNECTIONS LOCATED WITHIN 10 FEET OF SEWER MAINS (AND SERVICE LATERALS).

POST CONSTRUCTION NOTES:

1. UPON COMPLETION OF CONSTRUCTION OF THE STORMWATER FACILITIES, AS-BUILT DRAWINGS OF ALL STORMWATER PRACTICES AND AN OPERATION AND MAINTENANCE PLAN MANUAL SHALL BE PROVIDED TO THE APPLICANT AND THE CITY OF BEACON.

FLOODPLAIN NOTES:

1. THE PARCEL LIES WITHIN THE 100-YEAR FLOODPLAIN AS DEFINED BY A 2012 FLOOD STUDY PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).
2. THE 100-YEAR FLOOD ELEVATION AT THE NORTH END OF THE PARCEL IS AT 146.2 FEET ABOVE MEAN SEA LEVEL (AMSL). THE FIRST FLOOR ELEVATION IS SET AT 148.2 IN ACCORDANCE WITH CHAPTER 123 OF THE BEACON CODE.

WATER METER NOTES:

THE APPLICANT/APPLICANT'S PLUMBER SHALL ACQUIRE WATER METERS AND MXU UNITS (SIGNAL SENDING AND RECEIVING UNIT) FOR THE AMI SYSTEM (ADVANCED METERING INFRASTRUCTURE) FROM THE CITY OF BEACON WATER DEPARTMENT. THE MXU UNIT SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING AND SHALL BE LOCATED 2 TO 3 FEET ABOVE THE EXTERIOR GROUND ELEVATION.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	10/25/22	ADDED SHEET	LGP				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

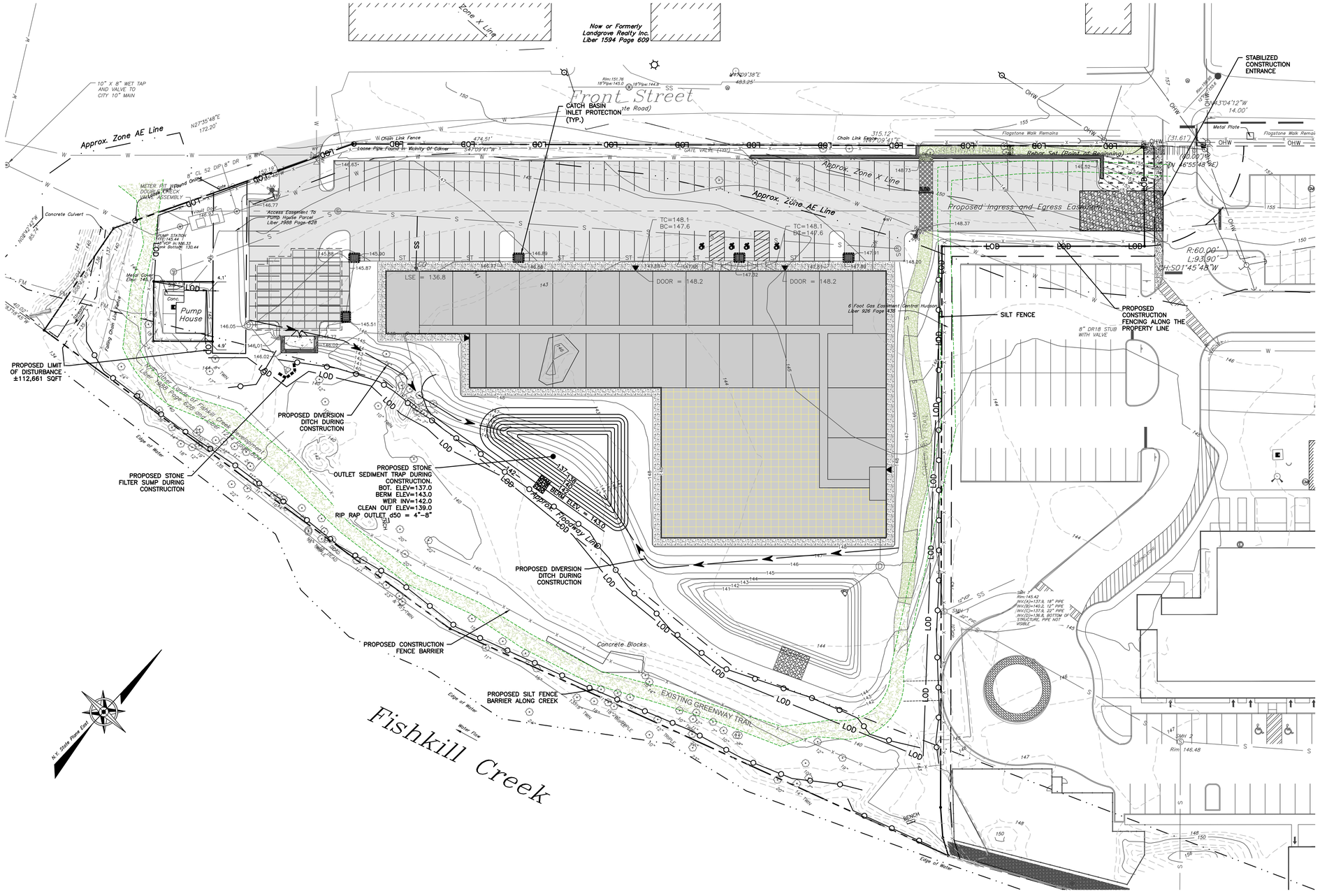
GRADING & UTILITY PLAN

BEACON HIP LOFTS & STUDIOS

FRONT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-04-535128

JOB #:	2013:003
DATE:	5/21/22
SCALE:	1" = 30'
TITLE:	GU-1
SHEET:	5 OF 11

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.
2. ALL STORMWATER MANAGEMENT STRUCTURES (E.G. CATCH BASINS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. CATCH BASINS SHALL BE CLEANED WHEN SEDIMENT DEPTH REACHES A MAXIMUM OF ONE-HALF THE AVAILABLE SUMP DEPTH.
3. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
4. ANY PILE OF POTENTIALLY EROSIVE MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.
5. PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THE DETAILS SHEET.
6. AREAS UNDERGOING CLEARING OR GRADING AND WHERE WORK IS DELAYED OR COMPLETED AND WILL NOT BE REDISTURBED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE COVER WITHIN 14 DAYS.
7. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY STANDARD METHODS OF LIGHTLY WATERING ALL EXPOSED SOIL AND RAPIDLY STABILIZING THE REGRADED AREAS WITH TOPSOIL, LOAM AND/OR SEEDING.
8. THE TOWN ENGINEER AND PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE START OF ANY SITE WORK, AND BY SUCH NOTIFICATION, SHALL BE PROVIDED WITH THE NAME AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR RESPONSIBLE FOR SUCH WORK.
9. THE TOWN AND/OR ITS REPRESENTATIVES MAY INSPECT EROSION AND SEDIMENT CONTROL PRACTICES ON THE SITE DURING CONSTRUCTION AND RECOMMEND THAT THE CONTRACTOR INSTALL ADDITIONAL EROSION CONTROL MEASURES IF DEEMED NECESSARY TO PROTECT ANY UNDISTURBED AREAS OF THE SITE. ANY SUCH REQUESTS SHALL BE MADE DIRECTLY TO THE CONTRACTOR AND QUALIFIED PROFESSIONAL AND FOLLOWED UP WITH A WRITTEN NOTIFICATION TO THE DEVELOPER. IN ADDITION, THE PROJECT ENGINEER SHALL BE CONSULTED ON ANY SPECIAL ADDITIONS OR DELETIONS OF EROSION CONTROL MEASURES WARRANTED BY CHANGING FIELD CONDITIONS. THE NOTICE OF INTENT (NOI) MAY NEED TO BE UPDATED AS A RESULT OF THE CHANGES.
10. THE CONTRACTOR/OWNER SHALL MAINTAIN A RECORD OF ALL EROSION AND SEDIMENT CONTROL INSPECTION REPORTS AT THE SITE IN A LOG BOOK. THE SITE LOG BOOK SHALL BE MAINTAINED ON SITE AND BE MADE AVAILABLE TO THE PERMITTING AUTHORITY. THE OWNER/CONTRACTOR SHALL, ON A MONTHLY BASIS, POST AT THE SITE A SUMMARY OF THE SITE INSPECTION ACTIVITIES IN A PUBLICLY ACCESSIBLE LOCATION.
11. THE OWNER SHALL FILE A NOI WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES AND A NOTICE OF TERMINATION (NOT) WITH THE NYSDEC FOLLOWING CONSTRUCTION ACTIVITIES.
12. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT A DEWATERING PIT IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL TO FILTER WATER FOR PUMPING TO A SUITABLE LOCATION.
13. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED PER THE APPROVAL OF THE TOWN ENGINEER AND QUALIFIED PROFESSIONAL.

EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 30'

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	10/25/22	ADDED SHEET	LGP				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				

STATE OF NEW YORK MICHAEL A. BODENDORF 085469 LICENSED PROFESSIONAL ENGINEER

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

EROSION & SEDIMENT CONTROL PLAN

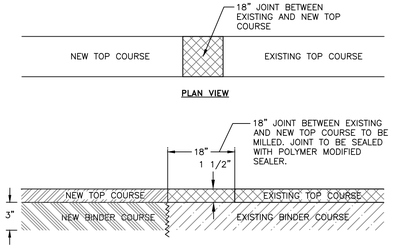
BEACON HIP LOFTS & STUDIOS

FRONT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-04-535128

JOB #:	2013:003
DATE:	5/21/22
SCALE:	1" = 30'
TITLE:	ESC-1
SHEET:	6 OF 11

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

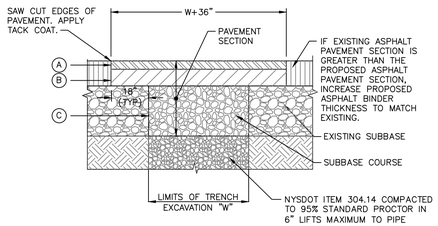
SITE DETAILS



NOTES:

1. 3" BINDER COURSE AND 1½" TOP COURSE TO BE USED FOR RESTORATION OF PAVEMENT WITHIN CITY ROADS.
2. EXCAVATIONS ARE TO BE SAW CUT SMOOTH, ALL EDGES TACK COATED, AND ALL SEAMS SEALED WITH A HOT POLYMER MODIFIED CRACK SEALANT.
3. IF EXISTING ASPHALT PAVEMENT DEPTH IS GREATER THAN THE PROPOSED ASPHALT PAVEMENT SECTION, INCREASE PROPOSED ASPHALT BINDER THICKNESS TO MATCH EXISTING.

MILLED KEYWAY DETAIL
NOT TO SCALE



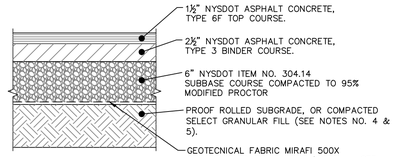
LEGEND

(A) 1-1/2" ASPHALT CONCRETE TOP COURSE- NYSDOT TYPE 6F
(B) 2 1/2" ASPHALT CONCRETE BINDER COURSE- NYSDOT TYPE 3
(C) 6" GRANULAR SUBBASE COURSE- NYSDOT ITEM 304.14

NOTES:

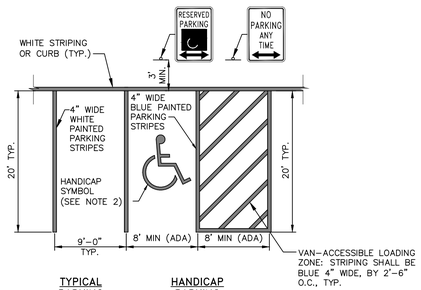
1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.

PAVEMENT RESTORATION DETAIL
NOT TO SCALE



NOTES:
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002.
2. SUBGRADE SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS.
3. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
5. IT IS EXPECTED THAT THE EXISTING SITE SUB-SOILS ARE SAND AND GRAVEL IN NATURE (CALIFORNIA BEARING RATIO RANGE BETWEEN 40 AND 80) . IF UNSUITABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR POSSIBLE MODIFICATIONS TO THE PAVEMENT DETAIL.

PAVEMENT SECTION DETAIL
NOT TO SCALE



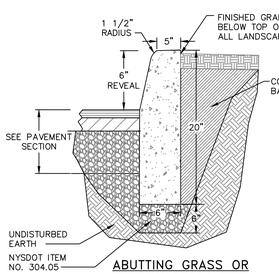
TYPICAL PARKING STRIPING

HANDICAP PARKING STRIPING

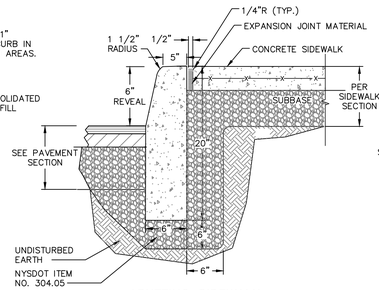
NOTES:

1. ALL DIMENSIONS SUBJECT TO CURRENT MUNICIPALITY ZONING AND SITE REGULATIONS.
2. PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE WITH NYSDOT AND ADA STANDARDS.
3. IF PARKING ABUTS A SIDEWALK, THEN THE REGULATORY SIGNS SHALL BE PLACED BEHIND THE SIDEWALK.

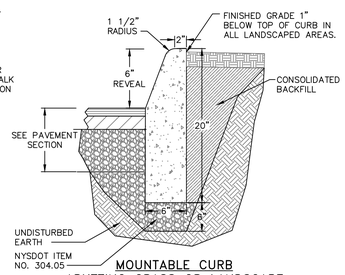
PARKING AND STRIPING DETAIL
NOT TO SCALE



ABUTTING GRASS OR LANDSCAPE



ABUTTING SIDEWALK

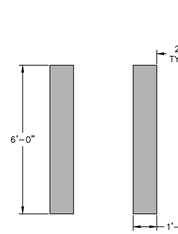


MOUNTABLE CURB ABUTTING GRASS OR LANDSCAPE

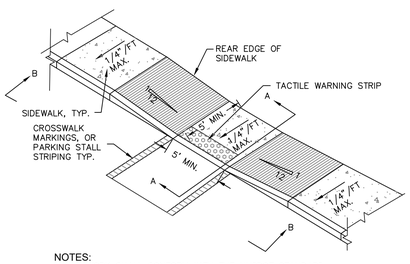
NOTES:

1. CONCRETE CURB SHALL BE 4,000 PSI CAST-IN-PLACE, AND IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 609.
2. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL BE PLACED AT 10 FOOT INTERVALS.
3. FOR MOUNTABLE CURBS ABUTTING SIDEWALK OR OTHER HARDSCAPE, REFER TO "ABUTTING SIDEWALK" DETAIL.

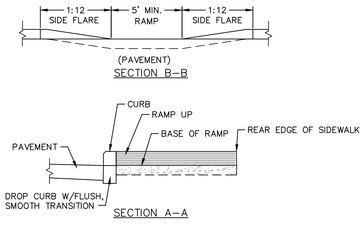
CAST-IN-PLACE CONCRETE CURB DETAIL
NOT TO SCALE



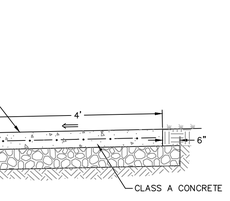
PAINTED CROSSWALK DETAIL
NOT TO SCALE



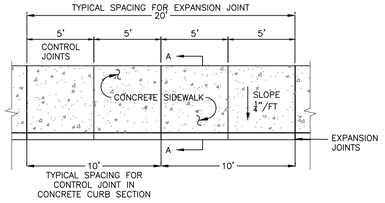
NOTES:
1. ALL WORK SHALL CONFORM WITH THE NYSDOT STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS DATED, JANUARY 2, 2002 AND ALL ADDENDA THERETO; SPECIFICALLY SECTION 608- SIDEWALKS, DRIVEWAYS, AND BICYCLE PATHS.
2. SLOPE RAMP AND SIDE FLARES AS INDICATED IN THE PLANS OR AS ORDERED BY THE ENGINEER.
3. TACTILE WARNING STRIPS SHALL BE PROVIDED ON ALL RAMPS IN ACCORDANCE W/ ADA REQUIREMENTS.



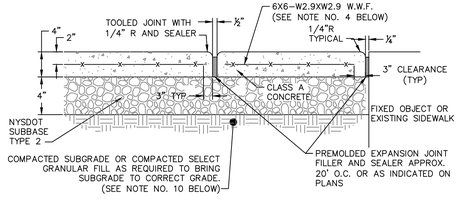
ACCESSIBLE PEDESTRIAN RAMP DROP CURB DETAIL
NOT TO SCALE



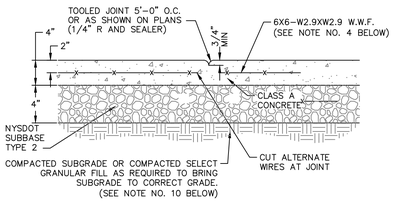
SECTION A-A



PLAN



EXPANSION JOINT



CONTROL JOINT

NOTES:

1. 10' SPACING OF CONTROL JOINTS SHALL BE USED FOR CAST IN PLACE CONCRETE CURBS.
2. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002, AND ALL ADDENDA THERETO; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
3. ALL CONCRETE SHALL BE 3,500 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
5. ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
6. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
7. JOINTS SHALL NOT BE SAW CUT.
8. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEBOND" SB-7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
9. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
10. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMATION WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH SECTION 608-SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	10/25/22	ADDED SHEET	LGP				
2	12/27/22	NO CHANGE THIS SHEET	CMB				

STATE OF NEW YORK · MICHAEL A. BOSCHER · 084466 · LICENSED PROFESSIONAL ENGINEER

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

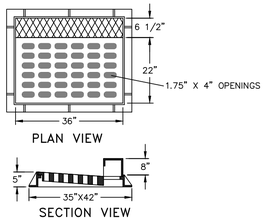
SITE DETAILS

BEACON HIP LOFTS & STUDIOS

FRONT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-04-535128

JOB #: 2013:003
DATE: 5/21/22
SCALE: AS SHOWN
TITLE: CD-1
SHEET: 7 OF 11

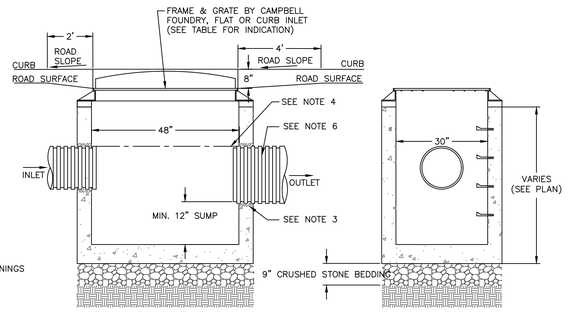
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



NOTES:

1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
2. ALL CATCH BASINS TO RECEIVE CURB INLETS UNLESS OTHERWISE NOTED.

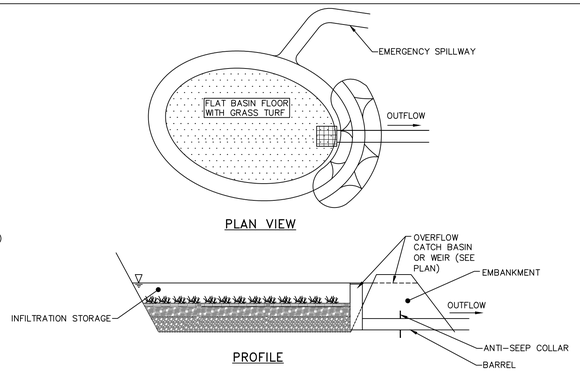
CAST IRON STORMWATER CURB INLET GRATE DETAIL
NOT TO SCALE



NOTES:

1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATERTIGHT.
4. PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
5. CATCH BASINS WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.
6. HDPE PIPE SHALL BE PROVIDED WITH WATERTIGHT CONNECTIONS. ADS MODEL N12 WT IB OR APPROVED EQUAL.

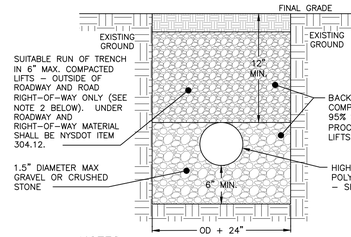
CATCH BASIN DETAIL
NOT TO SCALE



NOTES:

1. THE INFILTRATION BASIN SHALL NOT SERVE AS A SEDIMENT TRAP DURING CONSTRUCTION AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITY.
2. RELATIVELY LIGHT TRACKED EQUIPMENT IS RECOMMENDED FOR CONSTRUCTION PURPOSES TO AVOID COMPACTION OF THE BASIN FLOOR.
3. A HIGHLY POROUS SURFACE TEXTURE SHALL BE RETAINED ALONG THE BASIN FLOOR, ESPECIALLY WITHIN THE AREA IDENTIFIED AS BEING USED FOR INFILTRATION.
4. ESTABLISH DENSE VEGETATION ON THE BASIN SIDE SLOPES AND FLOOR TO PREVENT EROSION AND SLOUGHING AND TO PROVIDE A NATURAL MEANS OF MAINTAINING RELATIVELY HIGH INFILTRATION RATES. GRASSES OF THE FESCUE FAMILY (ALTAI FESCUE, WESTERN FESCUE OR RED FESCUE) ARE SPECIFIED ON THIS PLAN, PRIMARILY DUE TO THEIR ADAPTABILITY TO DRY SANDY SOILS, DROUGHT RESISTANCE, HARDINESS, AND ABILITY TO WITHSTAND BRIEF INUNDATIONS. FESCUE WILL ALSO ALLOW FOR LONG INTERVALS BETWEEN MOWINGS, WHICH SHALL OCCUR TWICE PER YEAR MINIMUM, TYPICALLY IN JUNE AND SEPTEMBER IS SATISFACTORY.
5. THE BERMS SHALL BE SUFFICIENTLY COMPACTED AND OF SUCH MATERIAL TO PREVENT SEEPAGE.

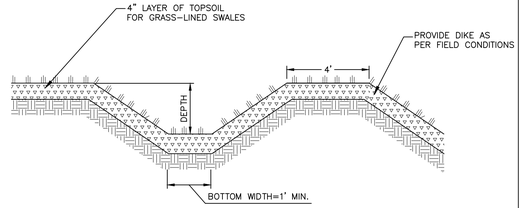
TYPICAL INFILTRATION BASIN DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

STORM LINE TRENCH DETAIL
NOT TO SCALE

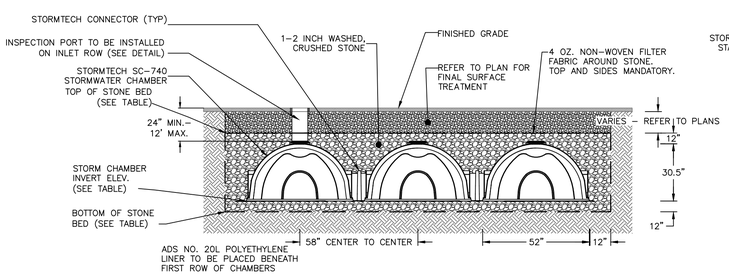


SECTION VIEW

NOTES:

1. MINIMUM 1' DEPTH AND 1' WIDTH FOR ALL SWALES.
2. SWALE SHALL BE SEEDED WITH FAST GERMINATING RYE 15 TO 25 POUNDS PER 1,000 SQUARE FEET AND MULCHED.

TEMPORARY GRASS LINED SWALE/DIKE DETAIL
NOT TO SCALE

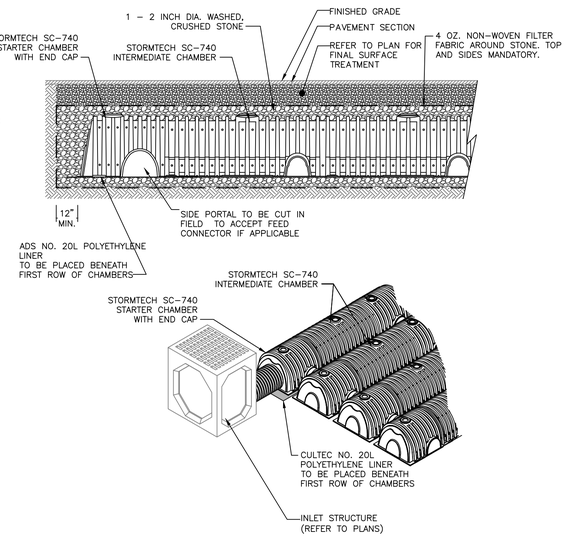


SECTION VIEW

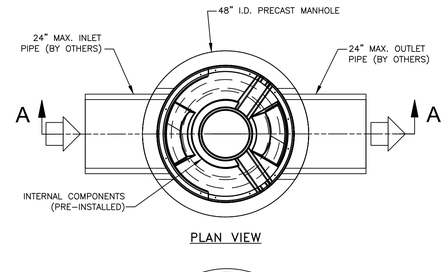
NOTES:

1. STORMTECH SC-740 CHAMBERS BY ADS, INC. OF HILLIARD, OH. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH ADS INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
2. THE BED OF THE SYSYTEM FOOTPRINT SHALL BE LAID NEARLY LEVEL.
3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12" MANIFOLD WITH TEE CONNECTIONS BY STORMTECH OR EQUAL.
4. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IF SUBSURFACE CONDITIONS IN THE AREAS OF THE INFILTRATOR TRENCHES IS NOT CONSISTENT WITH THE TEST PIT OR PERCOLATION DATA (E.G. GROUNDWATER OR BEDROCK ENCOUNTERED, SOIL PROPERTIES ARE NOT CONSISTENT, ETC.).
5. REFER TO THE INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES NOTES ON THE GRADING SHEET.

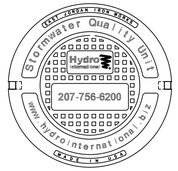
BOTTOM OF STONE BED ELEVATION	CHAMBER INVERT	TOP OF STONE BED ELEVATION	STONE BED FOOTPRINT	STONE BED DIMENSIONS	NO. OF CHAMBERS
140.0	140.5	143.5	2,403 S.F.	81.94'X30.0'	66



UNDERGROUND INFILTRATION/DETENTION SYSTEM DETAIL
NOT TO SCALE



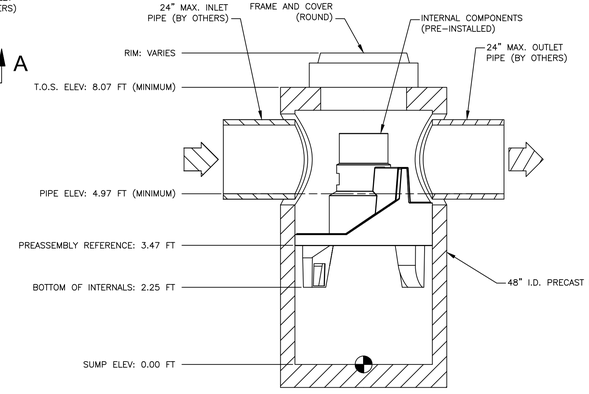
PLAN VIEW



HYDRO FRAME AND COVER (INCLUDED)

PRODUCT SPECIFICATION:

1. PEAK HYDRAULIC FLOW: 18.0 CFS.
2. MINIMUM SEDIMENT STORAGE CAPACITY: 0.7 CUBIC YARD.
3. MAXIMUM INLET/OUTLET PIPE DIAMETERS: 24".
4. THE TREATMENT SYSTEM SHALL USE AN INDUCED VORTEX TO SEPARATE POLLUTANTS FROM STORMWATER RUN OFF.
5. FOR MORE PRODUCT INFORMATION INCLUDING REGULATORY ACCEPTANCES, PLEASE VISIT HTTPS://HYDRO-INT.COM/EN/PRODUCTS/FIRST-DEFENSE



SECTION A-A

GENERAL NOTES:

1. GENERAL ARRANGEMENT DRAWINGS ONLY. CONTACT HYDRO INTERNATIONAL FOR SITE SPECIFIC DRAWINGS.
2. THE DIAMETER OF THE INLET AND OUTLET PIPES MAY BE NO MORE THAN 24".
3. MULTIPLE INLET PIPES POSSIBLE (REFER TO PROJECT PLAN).
4. INLET/OUTLET PIPE ANGLE CAN VARY TO ALIGN WITH DRAINAGE NETWORK (REFER TO PROJECT PLANS).
5. PEAK FLOW RATE AND MINIMUM HEIGHT LIMITED BY AVAILABLE COVER AND PIPE DIAMETER.
6. LARGER SEDIMENT STORAGE CAPACITY MAY BE PROVIDED WITH A DEEPER SUMP DEPTH.

WATER QUALITY UNIT DETAIL
HYDRO INTERNATIONAL MODEL FDHC-4
NOT TO SCALE

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	10/25/22	ADDED SHEET	LGP				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				

STATE OF NEW YORK · MICHAEL A. BOGDANOFF · 084465 · LICENSED PROFESSIONAL ENGINEER

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HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

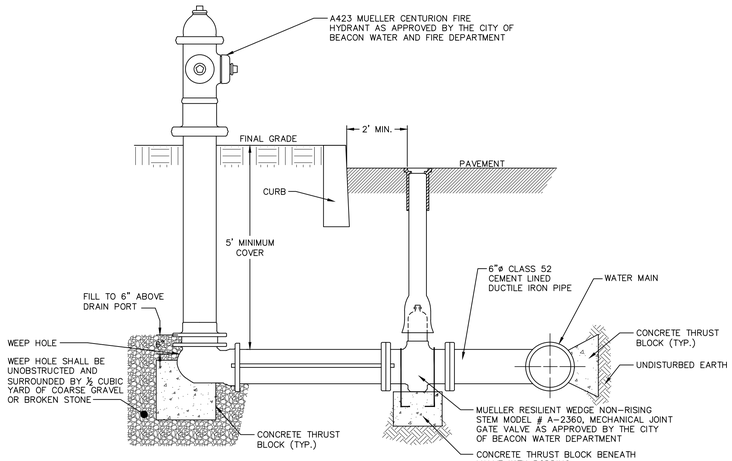
STORMWATER DETAILS

BEACON HIP LOFTS & STUDIOS

FRONT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-04-535128

JOB #:	2013:003
DATE:	5/21/22
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SHEET:	8 OF 11

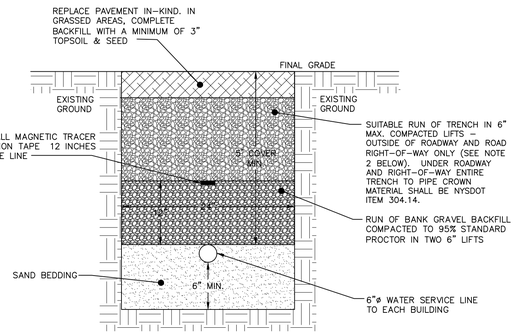
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NOTES:

1. THE GATE VALVE SHALL BE LOCATED THIRTY SIX (36) INCHES FROM THE HYDRANT CENTER LINE.
2. ½" STEEL TIE RODS TO BE PROVIDED BETWEEN THE GATE VALVE AND THE HYDRANT.
3. ALL HYDRANTS SHALL BE PAINTED RED IN ACCORDANCE WITH NFPA AND CITY OF BEACON SPECIFICATIONS.

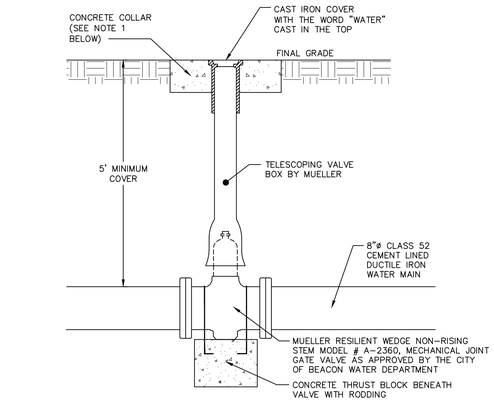
HYDRANT DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.

WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:

1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.

GATE VALVE DETAIL
NOT TO SCALE

WATER NOTES:

1. THE PROPOSED APARTMENT BUILDINGS ARE TO BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER SYSTEM. INSTALLATION OF ALL COMPONENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY CODE, CHAPTER 219.
2. REFER TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH STANDARD NOTES FOR ADDITIONAL PERTINENT INFORMATION.
3. THE WATER MAIN SHALL BE INSTALLED, PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C600 (SEE NOTES BELOW).
4. THE DUTCHESS COUNTY DEPARTMENT OF HEALTH, CITY OF BEACON WATER OPERATOR, AND THE CERTIFYING PROFESSIONAL ENGINEER SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF THE WATER MAIN INSTALLATION.
5. THE WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C651 (SEE NOTES BELOW).
6. WATER MAIN MATERIAL SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON PIPE WITH MECHANICAL JOINTS AND SHALL MEET THE REQUIREMENTS OF AWWA C150 AND ANSI A21.51.
7. MEGALUG RESTRAINING SYSTEMS SHALL BE USED AT ALL FITTINGS, VALVES AND HYDRANTS (SEE SCHEDULE ON SHEET 14).
8. GATE VALVES SHALL BE MUELLER RESILIENT WEDGE, NON-RISING STEM, MECHANICAL JOINT.
9. HYDRANTS SHALL BE A-423 MUELLER CENTURION, WITH A MUELLER GATE VALVE BEFORE THE HYDRANT.
10. SERVICE LINES SHALL BE 6"ø CL 52 DIP, UNLESS OTHERWISE NOTED ON THE PLAN.
11. THE CONTRACTOR SHALL VERIFY THE EXISTING WATER MAIN MATERIAL AND BE PREPARED TO PROVIDE A SPECIAL COUPLING FOR CONNECTION OF THE PROPOSED DUCTILE IRON WATER MAIN.
12. A PRESSURE REDUCING VALVE SHALL BE INSTALLED FOR EACH NEW TOWNHOME, WATTS MODEL 25AUB-Z3 OR EQUAL AS APPROVED BY THE CITY OF BEACON WATER DEPARTMENT.
13. THE CITY OF BEACON SHALL OWN, OPERATE AND MAINTAIN THE WATER MAIN THROUGHOUT THE SITE, INCLUDING ALL APPURTENANCES.
14. THE HOA OR OWNER SHALL ANNUALLY EXERCISE ALL WATER VALVES.

WATER MAIN PRESSURE & LEAKAGE TESTING

GENERAL: ALL PIPING SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF AWWA C600, EXCEPT AS ADDED OR AMENDED BELOW:
1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR ANY AND ALL REQUIRED PIPE TAPS FOR TESTING, AND AS NECESSARY FOR TESTING AS SPECIFIED. EQUIPMENT WILL BE SUCH THAT THE ENGINEER MAY INSTALL HIS OWN PRESSURE GAUGE.
2. A PRESSURE TEST AND LEAKAGE TEST ARE REQUIRED FOR ALL PIPE.
3. TESTING TO BE PERFORMED ONLY AFTER PARTIAL OR COMPLETE BACKFILL AND RESTRAINT BLOCKING (USING HIGH EARLY CEMENT) HAS HAD 36 HOURS TO CURE OR BLOCKING USING STANDARD CEMENT HAS HAD 7 DAYS TO CURE.
4. THE MAIN SHALL BE PARTIALLY BACKFILLED OR BRACED AGAINST MOVEMENT DURING THE TEST. ALL AIR MUST BE BLED OUT OF THE SECTION TO BE TESTED. IF NECESSARY, CONTRACTOR SHALL INSTALL CORPORATION STOPS AT THE HIGH POINTS, FOR BLOW-OFFS. AFTER ALL AIR HAS BEEN EXPELLED, THE CORPORATION COCKS SHALL BE CLOSED AND THE PRESSURE TEST APPLIED. AFTER EXAMINATION OF EXPOSED PARTS OF THE SYSTEM, THE TEST PRESSURE SHALL BE INCREASED TO 1 1/2 TIMES THE NORMAL PRESSURE, BASED UPON THE ELEVATION OF THE LOWEST POINT IN THE LINE OR SECTION UNDER THE TEST, BUT SUCH PRESSURE SHALL NOT BE LESS THAN 150 PSI NOR MORE THAN 200 PSI, AND EXPOSED PARTS AGAIN EXAMINED. THE MINIMUM DURATION OF THE LEAKAGE TEST SHALL BE TWO (2) HOURS.
5. ALLOWABLE SYSTEM LEAKAGE AS SPECIFIED IN THE REFERENCED STANDARDS. IF LEAKAGE IN SYSTEM IS GREATER THAN ALLOWABLE, CONTRACTOR WILL LOCATE AND REPAIR SYSTEM AT HIS EXPENSE AND RETEST, CONTINUE TO TEST AND REPAIR THE SYSTEM UNTIL LEAKAGE IS WITHIN ACCEPTABLE LIMITS.
6. NO DUCTILE IRON PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE IS GREATER THAN THAT DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{SD\,P}{148{,}000}$$

WHERE
L = LEAKAGE IN GALLONS PER HOUR
S = LENGTH OF PIPE TESTED, IN FEET
D = NOMINAL DIAMETER OF PIPE IN INCHES
P = AVERAGE TEST PRESSURE DURING LEAKAGE TEST, IN PSI (GAUGE)

WATERMAIN DISINFECTION & TESTING

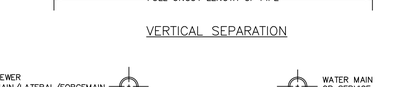
1. THE CONTRACTOR SHALL NOTIFY THE CITY OF BEACON WATER DEPARTMENT PRIOR TO TESTING AND SHALL ALSO COORDINATE HIS ACTIONS WITH THE CITY ENGINEER SO AS TO AVOID UNDUE DISTURBANCE OF THE WATER SUPPLY TO ANY EXISTING USERS.
2. THE CONTRACTOR SHALL INFORM THE DESIGN ENGINEER'S AND CITY ENGINEER'S OFFICE A MINIMUM OF 24 HOURS PRIOR TO TESTING SUCH THAT WITNESSING CAN TAKE PLACE AND PROPER CERTIFICATIONS CAN BE ISSUED.
3. ALL NEWLY INSTALLED WATER MAINS SHALL BE FLUSHED AT A MINIMUM VELOCITY OF 2.5 FT/SECOND BEFORE AND AFTER DISINFECTION.
4. ALL WATER LINES SHALL BE DISINFECTED USING THE PROCEDURES DESCRIBED IN THE LATEST EDITION OF AWWA C651 SPECIFICATIONS FOR DISINFECTION OF WATER LINES (WITH THE EXCEPTION OF THE TABLET METHOD). WATER ENTERING THE NEW MAIN SHALL RECEIVE A DOSE OF CHLORINE FED AT A CONSTANT RATE SUCH THAT THE WATER WILL HAVE NOT LESS THAN 25 MG/L FREE CHLORINE. CHLORINE APPLICATION SHALL NOT CEASE UNTIL THE ENTIRE MAIN IS FILLED WITH HEAVILY CHLORINATED WATER.
5. DISINFECTED WATER SHALL REMAIN IN THE NEWLY INSTALLED WATER LINE FOR A MINIMUM OF 24 HOURS. AFTER THIS RETENTION PERIOD, THE HEAVILY CHLORINATED WATER SHALL BE FLUSHED FROM THE MAIN UNTIL CHLORINE MEASUREMENTS SHOW A CONCENTRATION IN THE WATER LEAVING THE MAIN HAS NO HIGHER THAN THAT GENERALLY PREVAILING IN THE SYSTEM. AT SUCH TIME, BACTERIOLOGICAL SAMPLING FOR SUBMITTAL TO STATE HEALTH LABORATORIES SHALL BE PERFORMED BY THE CONTRACTOR.
6. WATER SAMPLES SHALL BE TESTED FOR TOTAL COLIFORM, TPC (HETEROTROPHIC PLATE COUNT), TURBIDITY & COLOR.
7. CONTRACTOR WILL CONTINUE FLUSHING AND DISINFECTION OPERATION UNTIL ACCEPTABLE BACTERIOLOGICAL RESULTS ARE OBTAINED. TWO (2) SUCCESSIVE SAMPLES ARE TO BE TAKEN AT TWENTY-FOUR (24) HOUR INTERVALS.
8. THE ENVIRONMENT INTO WHICH THE HEAVILY CHLORINATED WATER IS TO BE DISCHARGED SHALL BE INSPECTED, AND IF THERE IS ANY LIKELIHOOD THAT THE CHLORINATED DISCHARGE WILL CAUSE DAMAGE, THEN A REDUCING AGENT SHALL BE APPLIED TO THE WATER TO BE WASTED TO THOROUGHLY NEUTRALIZE THE CHLORINE RESIDUAL IN THE WATER. PERMITS MAY BE REQUIRED. THE CITY ENGINEER SHALL BE NOTIFIED PRIOR TO DISPOSAL OF HIGHLY CHLORINATED WATER.



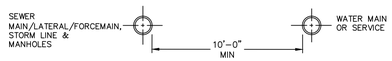
NOTES:

1. WHEN THE ELEVATION OF THE SANITARY OR STORM SEWER CAN NOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER SERVICE LINE OR MAIN SHALL BE RELOCATED TO PROVIDE THIS REQUIRED SEPARATION OR RECONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATERMAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AWAY FROM THE SEWER AS POSSIBLE.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. THE RELOCATED WATER MAIN/SERVICE LINE SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA, NYSDOH AND DCDOH STANDARDS.
4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE PAVEMENT RESTORATION DETAIL.
5. ALL REPLACED WATERMAIN SHALL BE 12"ø CLASS 52 DUCTILE IRON.

WATER LINE OFFSET DETAIL
NOT TO SCALE



VERTICAL SEPARATION

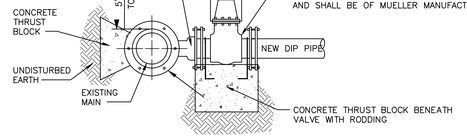


HORIZONTAL SEPARATION

NOTE:

1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

WATER LINE SEPARATION DETAIL
NOT TO SCALE



NOTES:

1. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2-INCH SQUARE-OPERATING NUT PAINTED RED.
2. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
3. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H-615, AND T-2630 RESPECTIVELY.

TAPPING SLEEVE DETAIL
NOT TO SCALE

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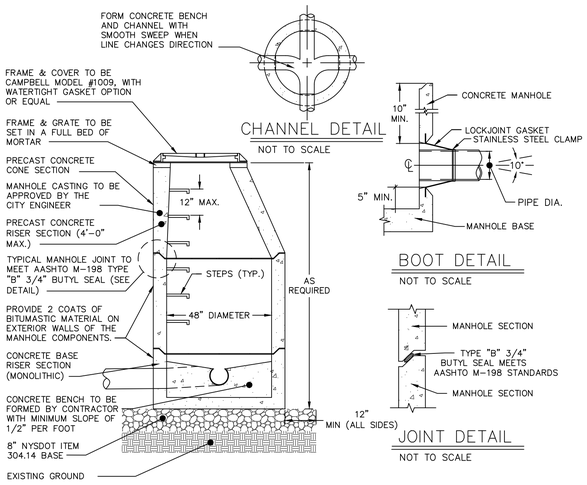
WATER DETAILS

BEACON HIP LOFTS & STUDIOS

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NOTES:

1. PIPE CONNECTION TO BE STANDARD "LOCKJOINT" BOOT 5" OFF BASE OF MANHOLE (SEE DETAIL).

2. CONCRETE STRENGTH OF MANHOLE COMPONENTS TO BE 4000 PSI @ 28 DAYS IN ACCORDANCE WITH ASTM C-478-86.

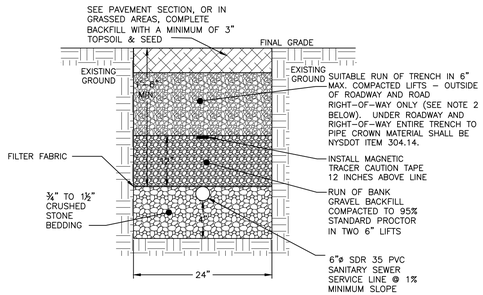
3. STEEL REINFORCMENT OF MANHOLE COMPONENTS TO MEET ASTM A615-A497 REQUIREMENTS.

4. LOADING OF MANHOLE COMPONENTS TO MEET H-20 REQUIREMENTS.

5. CONCRETE USED IN MANHOLE COMPONENTS TO CONTAIN 6% AIR ENTRAINMENT.

6. 4' MAXIMUM FROM MANHOLE TO PIPE JOINT.

PRE-CAST CONCRETE SANITARY MANHOLE DETAIL
NOT TO SCALE

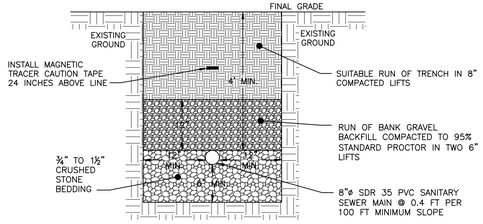


NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



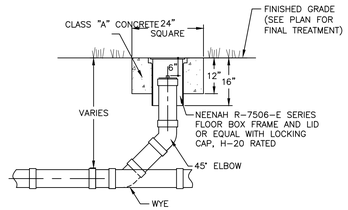
NOTES:

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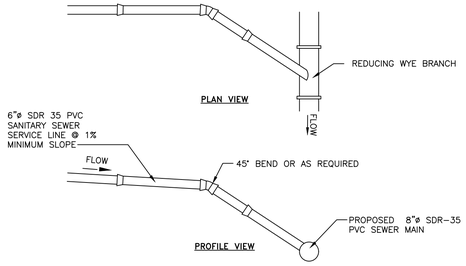
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3. SEWER MAIN MATERIAL SHALL BE 8" DIAMETER SDR-26 PVC BELL AND SPIGOT GRAVITY SEWER PIPE, WITH GASTIGHT AND WATERTIGHT JOINTS.

SANITARY SEWER MAIN TRENCH DETAIL
NOT TO SCALE



CLEANOUT DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE

SANITARY SEWER NOTES:

1. THE PROPOSED APARTMENTS ARE TO BE SERVED BY THE CITY OF BEACON MUNICIPAL SEWER SYSTEM. INSTALLATION OF ALL COMPONENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY CODE, CHAPTER 179.
2. REFER TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH STANDARD NOTES FOR ADDITIONAL PERTINENT INFORMATION.
3. THE DUTCHESS COUNTY DEPARTMENT OF HEALTH, CITY OF BEACON CHIEF SEWER OPERATOR, AND THE CERTIFYING PROFESSIONAL ENGINEER SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF THE SEWER MAIN INSTALLATION.
4. SEWER MAIN MATERIAL SHALL BE 8" DIAMETER SDR-35 OR SDR-26 PVC BELL AND SPIGOT GRAVITY SEWER PIPE, WITH GASTIGHT AND WATERTIGHT JOINTS.
5. SEWER MAIN SHALL BE LAID IN STRAIGHT ALIGNMENT. MANHOLES SHALL BE CONSTRUCTED AT ALL CHANGES IN SLOPE, ALIGNMENT OR AT INTERVALS NOT EXCEEDING 400 LINEAR FEET. STRAIGHT ALIGNMENT SHALL BE VERIFIED BY DEFLECTION TESTING.
6. THE SEWER MAIN SHALL BE INSTALLED AND TESTED FOR EXFILTRATION PRIOR TO BEING PERMITTED TO OPERATE. ALL NEW SANITARY SEWER GRAVITY LINES SHALL PASS A LOW PRESSURE AIR TEST IN ACCORDANCE WITH ASTM C-828 AT A PRESSURE OF 3.5 PSI.
7. MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH ASTM C-1244. IF PRESSURE DROP EXCEEDS THE SPECIFIED AMOUNT, THE NECESSARY REPAIRS OR REPLACEMENTS REQUIRED SHALL BE MADE TO REDUCE THE PRESSURE DROP TO WITHIN THE SPECIFIED LIMIT, AND THE TESTS SHALL BE REPEATED UNTIL THE REQUIREMENT IS MET.
8. SERVICE LATERALS SHALL BE 6" DIAMETER SDR-35 PVC WITH A MINIMUM SLOPE OF 1%, UNLESS OTHERWISE NOTED ON THE PLAN.
9. ALL SANITARY SEWER MAINS AND MANHOLES UP TO, BUT NOT INCLUDING, THE EXISTING CONNECTION MANHOLE ON BRANCH STREET SHALL BE OWNED, OPERATED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

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STATE OF NEW YORK · MICHAEL A. BOSENSPIKER · 085405 · LICENSED PROFESSIONAL ENGINEER

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
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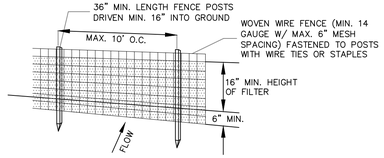
SEWER DETAILS

BEACON HIP LOFTS & STUDIOS

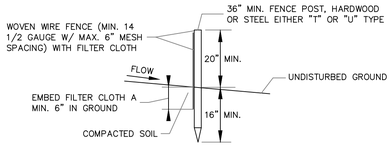
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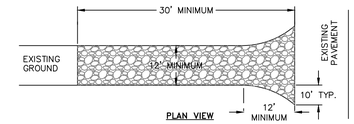
PERSPECTIVE VIEW



SECTION VIEW

NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
NOT TO SCALE



NOTES:
1) STONE SIZE – USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.

2) LENGTH – NOT LESS THAN 30 FEET FOR A SINGLE RESIDENCE LOT.

3) THICKNESS – NOT LESS THAN SIX (6) INCHES.

4) WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.

5) GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

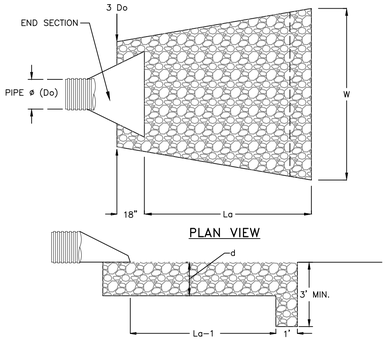
6) SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.

7) MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

8) WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

9) PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

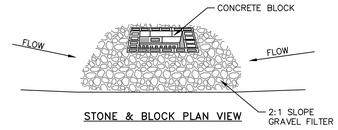


NOTES:
1. SIZING INFORMATION TAKEN FROM FIGURE 5B.12 (PAGE 5B.25) AND/OR FIGURE 5B.13 (PAGE 5B.26) OF THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" 2005 EDITION.
2. RIPRAP SHALL BE COMPOSED OF A WELL-GRADED MIXTURE OF STONE SIZE SO THAT 50% OF THE PIECES SHALL BE LARGER, BY WEIGHT, THAN THE SPECIFIED d50. THE LARGEST STONE SIZE SHALL BE 1.5 TIMES d50.
3. THE MINIMUM THICKNESS OF THE RIPRAP LAYER SHALL BE 1.5 TIMES THE MAXIMUM STONE DIAMETER FOR d50 OF 15 INCHES OR LESS; AND 1.2 TIMES THE MAXIMUM STONE SIZE FOR d50 GREATER THAN 15 INCHES.
4. A LAYER OF FILTER FABRIC (THICKNESS 20-60 MILS, GRAB STRENGTH 90-120 LBS, SHALL CONFORM TO ASTM D-1777 AND ASTM D-1682) SHALL BE PLACED BETWEEN THE RIPRAP AND THE UNDERLYING SOIL SURFACE. FILTER FABRIC SHALL HAVE A MINIMUM 1' OVERLAP AT ALL SEEMS.

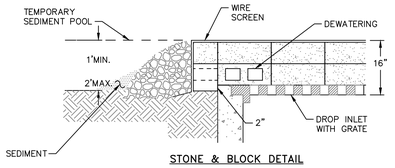
ROCK OUTLET PROTECTION DETAIL
NOT TO SCALE

OUTLET PIPE ID	PIPE ø	3Do	W	La	d	d50 RIPRAP SIZE
FES A	15 INCHES	3.75 FEET	9.5 FEET	8 FEET	14 INCHES	6 INCHES
FES B	15 INCHES	3.75 FEET	9.5 FEET	8 FEET	14 INCHES	6 INCHES

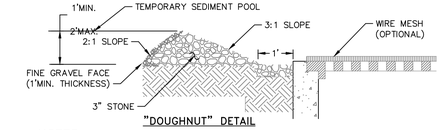
ROCK OUTLET PROTECTION TABLE
NOT TO SCALE



STONE & BLOCK PLAN VIEW



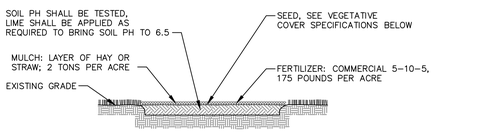
STONE & BLOCK DETAIL



"DOUGHNUT" DETAIL

NOTES:
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

CATCH BASIN INLET PROTECTION DETAIL
NOT TO SCALE



NOTES:
1. TOPSOIL, SEED, MULCH, AND FERTILIZE DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.
2. SEED MIXTURE FOR USE ON LAWNS IN SUNNY AREAS:

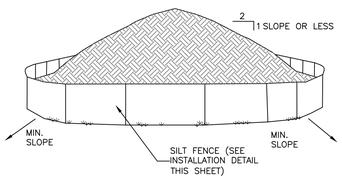
65% KENTUCKY BLUE GRASS BLEND	114 POUNDS PER ACRE
20% PERENNIAL RYEGRASS	35 POUNDS PER ACRE
15% FINE FESCUE	26 POUNDS PER ACRE
	175 POUNDS PER ACRE

3. SEED MIXTURE FOR USE IN SHADY AREAS:

80% BLEND OF SHADE TOLERANT KENTUCKY BLUEGRASS	138 POUNDS PER ACRE
20% FINE FESCUE	37 POUNDS PER ACRE
	175 POUNDS PER ACRE

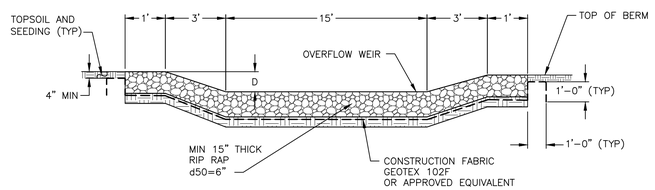
4. SEED BETWEEN APRIL 1ST AND MAY 15TH OR AUGUST 15TH AND OCTOBER 15TH. SEEDING MAY OCCUR BETWEEN MAY 15TH AND AUGUST 15TH IF ADEQUATE IRRIGATION IS PROVIDED.
5. TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN 20%. TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

TOPSOIL, SEED AND MULCH DETAIL
NOT TO SCALE



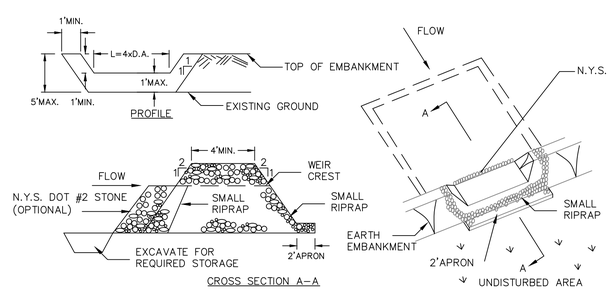
NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE



NOTES:
1. RIP RAP OUTLET PROTECTION SHALL BE 15" OF LIGHT STONE FILLING. STONE FILLING SIZE d50=6", RIVER ROCK MAY BE SUBSTITUTED FOR ANGULAR STONE.

INFILTRATION BASIN EMERGENCY OVERFLOW WEIR DETAIL
NOT TO SCALE



OPTION: A ONE FOOT LAYER OF N.Y.S. DOT #2 STONE MAY BE PLACED ON THE UPSTREAM SIDE OF THE RIPRAP INPLACE OF THE EMBEDDED FILTER CLOTH.

CONSTRUCTION SPECIFICATIONS

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1' THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. IT SHALL BE PLACED ON SITE AND STABILIZED.
6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
8. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

MAXIMUM DRAINAGE AREA 5 ACRES

BASIN I.D.	CONTRIBUTING AREA (AC)	BERM ELEVATION (FT)	BOTTOM ELEVATION (FT)	WEIR CREST INVERT (FT)	BERM WIDTH (FT)	STORAGE REQUIRED (CUFT)	STORAGE PROVIDED (CUFT)	CLEANOUT ELEVATION (FT)
A	2.60	143.0	137.0	142.0	4'	9,360	11,263	139.0

STONE OUTLET SEDIMENT TRAP DETAIL
NOT TO SCALE

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	10/25/22	ADDED SHEET	LGP				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

EROSION & SEDIMENT CONTROL DETAILS

BEACON HIP LOFTS & STUDIOS

FRONT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-04-535128

JOB #: 2013:003
DATE: 5/21/22
SCALE: AS SHOWN
TITLE: CD-5
SHEET: 11 OF 11

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

LANC & TULLY
Engineering and Surveying, P.C.

January 5, 2023

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12508

RE: Beacon HIP Lofts & Studios
Multi-Use Building
Tax No. 6055-04-535128
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding a multi-family residential and commercial artist/artisan studio units located along Front Street:

- Correspondence dated December 27, 2022, from Aryeh Siegel, Architect.
- Correspondence dated December 27, 2022, from Hudson Land Design.
- Report titled "Phase1A Literature Search and Sensitivity Assessment – Beacon HIP Lofts and Studios Project", dated November 2022, as prepared by Hudson Cultural Services.
- Report titled "Stormwater Pollution Prevention Plan for Beacon HIP Lofts and Studios", dated October 25, 2022, as prepared by Hudson Land Design.
- Traffic Impact Study titled "Beacon HIP Lofts & Studio/Beacon Self Storage, dated December 23, 2022, as prepared by Colliers Engineering & Design.
- Plan titled "Development Potential Plan – Beacon HIP Lofts & Studios", with the latest revision date of December 27, 2022, as prepared by Hudson Land Design.
- Plan set titled "Beacon HIP Lofts & Studios", consisting of sheets 1 of 11 through 11, with the latest revision date of December 27, 2022, as prepare by Aryeh Seigel, Architect and Hudson Land Design.

The proposed project entails the construction of a building consisting of 30,000 square feet of artist/artisan studios and 28 loft apartments on the 2nd story on a 3.5± acre parcel located along the Fishkill Creek, with the southern portion of the parcel being located within the Floodway, and a majority of the parcel being located within the 100-year flood plain. The project is located in the FCD (Fishkill Creek Development) Zone and is also within the HDLO (Historic District and Landmark Overlay) Zone.

Based on our review of the above documents and plans, we would like to offer the following comments:

General Comments:

1. As the project site is located within the floodplain, the applicant will need to secure a Floodplain Development Permit in accordance with Section 123-12 of the City of Beacon Code. ***Applicant notes that a Flood Development Permit will be applied for at building permit.***

2. The building shall be designed, and the first-floor elevation established, in accordance with Chapter 123 of the City of Beacon Code and that of FEMA regulations. ***In accordance with Section 123-16 of the City Code, the applicant has established the first-floor elevation to be 148.2, which is 2 feet higher than the flood elevation of 146.2.***

3. Section 123-14, paragraph B(1)(a) of the City of Beacon Code states that the applicant shall demonstrate that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any location. ***As the applicant has pointed out, the FEMA studies and FEMA regulations do state "The area between the floodway and 1-percent annual chance floodplain (100-year) boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation of the 1-percent annual chance flood by more than 1-foot at any point."***

4. The applicant will need to form a sewer transportation corporation, as a sewer system that collects sewage from multiple parcels is required to be either owned and operated by a municipality or by a sewer transportation corporation in accordance with NYSDEC standards. ***Applicant notes that a sewer transportation corporation will be formed.***

5. Except for direct connection service lines, new water distribution piping, sewer collection piping and modifications to the sewage pump station will require approval from the Dutchess County Department of Health. ***Applicant notes that application to the Dutchess County Department of Health will be made once a SEQR determination has been made.***

6. An analysis of the existing sanitary sewer pump station will be required to show that it will be able to handle the additional sewer flows. The study shall also look at the condition of the existing pump station and force main that serves the existing site as well as the proposed project. We would further recommend that the applicant look at providing odor control for sewage conveyed from this pump station, as the City of Beacon has received odor complaints with regards to the receiving structure located at Bridge & Liberty Streets where sewage from the pump station is conveyed to. ***Applicant notes that they are in the process of gathering information and data, and that based upon conversations with the site superintendent, odor control has been installed in the pump station.***

The applicant should collect additional data as to they type of odor control system installed, and when the system was installed.

7. The project's consultant should meet with the City's Building Inspector and Fire Chief to discuss compliance with Section 503 and Appendix "D" of the 2020 NYS Fire Code with regards to fire apparatus access roads, and the possible needs for aerial fire apparatus access roads since the building is over 30 foot in height. ***Applicant's consultant has noted that they will setup a meeting with the City's Building Department to review.***

8. The applicant should prepare an assessment of Front Street along the front of the project site, starting at Mill Street, to assess the existing condition of the road and to determine what improvements may be required along the road to support the proposed project, such as widening, paving, etc. Based upon a recent site visit, that portion of Front Street that heads to the west of Mill Street is in very poor condition, with varying widths. It should also be noted that parking for the last residential building located along Front Street, adjacent to Spencer Lane, extends out into Front Street. As the plans show the parking lot having and entrance/exit on the west side of the parking lot, Front Street should be improved to allow for two-way traffic, without impacting the parking for the residential building along Front Street.

9. The applicant should confirm with the City of Beacon Water & Sewer Department that they have sufficient water to service the proposed project and have sufficient capacity within the sewer system to accept the flows from the proposed project.

10. The plan should be referred to the Greenway Trail Committee for their review and input. ***The applicant notes that the project architect has met with members of the Greenway Trail Committee.*** The applicant should provide the Planning Board with any comments and/or concerns that were raised by the committee members.

Sheet 1 of 11 (Site Plan):

1. The site plan shall show the existing roadway along the front of the entire project, as well as the roads approaching the project. The plan should be updated to show Spencer Lane, as well as the remainder of Front Street as it runs towards the old bridge. Additional detailed information should be provided along the residential building along Front Street, such as curbing, sidewalks, parking stalls, etc.

Sheet 2 of 11 (Existing Conditions Survey):

1. See Comment No. 1 above for Sheet 1. This would also apply to this sheet and all other sheets in the plan set.

2. The plan should show all easements that may cross the parcel.

3. It appears that a portion of the traffic circle constructed on the adjacent site crosses over on to the project parcel. It is recommended that an easement be provided on the project parcel site in favor of the adjacent site for this traffic circle.

Sheet 3 of 11 (Landscape Plan):

1. The planting schedule table shall be revised to list the size of the trees to be planted. The table should also be revised so that it is not "fuzzy" in nature and text is not so light.

2. The landscaping presented on the east side of the building shall be provided with callouts as to what is proposed to be planted. Leader lines for from callouts to landscaping symbols should be darkened so it is clear what each symbol represents.

3. Proposed landscaping on the east side of the building shall be adjusted to ensure that trees are not planted over or in close proximity to the proposed sewer line to be routed along the side of the building.

Sheet 4 of 11 (Building Plans & Images):

1. As the proposed use of the building is mixed use, a backflow prevention device shall be provided on the water system prior to the water service line branching out within the building.

Sheet 5 of 11 (Grading & Utility Plan):

1. A maintenance access route should be provided around the proposed stormwater facility to allow for the proper maintenance of the facility in the future. The plan is showing the possibility of access being obtained from the adjacent parcel. This may be a preferable route instead of over the greenway trail, as it will have less impact on the proposed landscaping along the greenway trail and impacts on pedestrians waling the trail. We would recommend that the applicant seeker an easement from the adjacent parcel for access to their proposed infiltration basin.

2. The location of roof leaders should be shown on the plans and where they will drain to. ***Applicant notes that this is currently being coordinated with the project architect.***

3. The access easement to the pump house on the western side of the parcel is now shown to have trees planted within it. The access easement should remain clear of all structures and plantings to allow for access to the pump house to allow for proper maintenance and repair. ***Applicant notes that landscaping plan is being adjusted to remove plantings from access easement.***

4. The Post Construction Notes shall also include a note that an as-built for the utilities (water, sewer & storm drainage) shall be prepared and provided to the applicant and City of Beacon, as well as for the stormwater facilities proposed.

Stormwater Pollution Prevention Plan (SWPPP):

1. We are in the process of reviewing the submitted SWPPP and will provide comments to the applicant's engineer once our review has been completed.

2. As the applicant is proposing infiltration systems on site to handle water quality and runoff reduction from the site, soil testing will need to be performed for these proposed systems. The applicant's engineer should contact the City Engineer's office to set up a joint site meeting to allow for witnessing of soil testing.

This completes our review at this time. Further comments may be provided based on future submissions. **A written response letter addressing each of the above comments should be provided with the next submission.** If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,

LANC & TULLY, P.C.

John Russo, P.E.

cc: John Clarke, Planner
Jennifer Gray, Esq.
Bruce Flower, Building Inspector

January 5, 2023

Mr. John Gunn, Chairman
Beacon Planning Board
City of Beacon City Hall
1 Municipal Plaza
Beacon, NY 12508

RE: Site Plan and Traffic Study Review #1 for **Proposed Beacon HIP Lofts & Studio/Beacon Self Storage,** Front Street at Mill Street, City of Beacon, Dutchess County, New York; CM Project No. 121-295

Dear Mr. Gunn:

Creighton Manning Engineering, LLP (CM) has reviewed the documents listed below in connection with the proposed HIP Lofts and Studio development:

- Site Plan prepared by Hudson Land Design Professional Engineering P.C., dated May 21, 2022
- Traffic Impact Study (TIS) prepared by Colliers Engineering & Design, dated December 23, 2022

The subject site, which is presently vacant, is located along Front Street on the west side of Mason Circle. The proposed project consists of the construction of a two-story building with 28 one-bedroom lofts and a 30,000-square-foot space for artist studios. The site will provide 95 off-street parking spaces inclusive of four ADA-accessible spaces, which meets the City of Beacon zoning requirements. Site access will be provided via full movement driveway on Mason Circle. A secondary driveway is also proposed on Front Street at the western end of the site. The TIS also provides an analysis of the 70,000-square-foot self-storage facility expansion on the lot adjacent to the project site. We offer the following comments:

<u>Site Plan</u>

1. Based on the TIS, the driveway on Front Street will be full-movement. There does not appear to be issues with the full-movement configuration, but the Site Plan should be corrected for clarity.
2. CM recommends that the two parking spaces adjacent to the proposed greenway trail crossing in the parking lot be relocated in order to increase visibility of pedestrians on the crosswalk. Furthermore, CM recommends that a raised crosswalk be considered.
3. CM notes that there is trash enclosure proposed in the parking lot. CM recommends a truck circulation exhibit be provided so the route can be reviewed.
4. It is recommended that the project provide connections with one or both existing sidewalks along Mill Street.
5. Given the mixed-use nature of the project, how will the off-street parking operate? Will parking spaces be assigned to residents and patrons/employees of the retail spaces? If so, please delineate this on the plan and detail any applicable signs.
6. Will the site be providing any electric vehicle charging spaces and/or bicycle racks/storage?

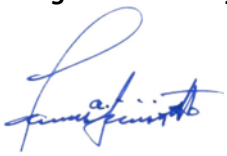
<u>Traffic Impact & Parking Study</u>

1. CM agrees with the ITE land use codes (LUCs) referenced by Colliers in developing the trip generation of the proposed development. The LUCs include 220 “Multifamily Housing (Low-Rise) and 822 “Strip Retail Plaza”. Based on these LUCs the development is expected to generate 91 total trips during the weekday AM peak hour, 203 total trips during the weekday PM peak hour, and 229 total trips during the Saturday midday peak hour. CM agrees that utilizing LUC 822 provides a conservative analysis. For instance, if a general office use occupied the space, it would potentially generate a maximum of 61 trips.

2. CM acknowledges that the traffic figures are not intended to depict the exact roadway geometry. However, please confirm whether the development will actually create a four-legged intersection at Front Street/Spencer Lane with the construction of the new driveway as shown on the traffic figure.
3. CM agrees with the value shown on Figures 14 and 15 for arrival and departure distributions.
4. The traffic forecasts account for a background growth rate of +1% per year as well as the following other developments:
    - Building 16 of the Beacon HIP Lofts
    - 25 Townsend Street
    - Beacon Views
    - 393-397 Conklin Street
5. As noted in the TIS, the Fishkill Avenue/Mill Street intersection currently operates under two-way stop-control with supplemental flashing yellow and red signals. As part of PIN 8757.80 and 8757.30, the intersection will be improved with a three-color actuated traffic signal. At this time, the signal timings for this proposed signal have not been determined. Therefore, Colliers based its No-Build and Build analyses on a 100-second cycle length, which is a reasonable assumption for an intersection of this size and configuration. The analysis indicates that with the signalization of the intersection, it will operate at an acceptable LOS B or better.
6. CM agrees with the findings of the analysis indicating that the Front Street/Mill Street intersection will operate at an acceptable level of service in the No-Build conditions and will continue to do so in the Build conditions.
7. The site will be supported by 95 parking spaces, which meets the City of Beacon zoning requirements.
8. CM agrees with the findings of the shared parking analysis, which indicates that the required parking is higher than the potential demand. CM agrees that spaces could be land banked for any unforeseen demand. Land banking spaces is an accepted practice that would allow for the development to proceed with a reduced number of paved parking spaces in favor of more greenspace. Once the development is completed and occupied and if the actual demand is higher than the number of built spaces, those land banked spaces can be constructed.
9. CM agrees with the ITE LUC 151 “Mini-Warehouse” referenced by Colliers in developing the trip generation of the proposed self-storage facility. Based on the LUC the self-storage facility is expected to generate 13 total trips during the weekday AM peak hour, 13 total trips during the weekday PM peak hour, and 12 total trips during the Saturday midday peak hour.
10. CM acknowledges that the study intersections will continue to operate at an acceptable LOS in the Build condition when self-storage facility start it is operations.

If you have any questions about the above comments, please do not hesitate to contact our office at (914) 800-9201. In an effort to make the comment-response process as efficient as possible, we are available to attend a meeting via Zoom to discuss the project and the issues raised in this letter.

Respectfully,
Creighton Manning Engineering, LLP



Frank A. Filiciotto, PE
Associate



Starke W. Hipp, PE
Project Engineer

\\CME-FILE01\Company\Projects\2021\121-295 Beacon - 2021 Traffic Reviews\Working\Correspondence\Beacon HIP Lofts & Studios\Beacon HIP Lofts & Studios_Rev 1.docx

John Clarke Planning and Design jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: January 6, 2023
Re: **Beacon HIP Lofts, Concept Plan SEQRA Review and Recommendation to the City Council**

I have reviewed December 27, 2022 response letters from Aryeh Siegel and Hudson Land Design, December 27, 2022 updated Development Potential Plan from Hudson Land Design, November 2022 Phase 1A Literature Search and Sensitivity Assessment by Hudson Cultural Services, December 23, 2022 Traffic Impact Study by Colliers Engineering and Design, and an 11-sheet Site Plan set, dated December 27, 2022.

Proposal
The applicant is proposing to construct a multi-use building with a total of 30,000 square feet of 1st-floor artist/artisan studios and 28 loft apartments on the 2nd floor. The proposed project is on a 3.5-acre undeveloped parcel in the Fishkill Creek Development (FCD) district and within the Historic District and Landmark Overlay (HDLO) zone. An existing Greenway Trail is also on the parcel.

Comments and Recommendations
The process for project review in the FCD district under Section 223-41.13 requires City Council approval of the Concept Plan. The Council has referred the plans to the Planning Board for a SEQRA review and determination, as well as an advisory recommendation on the Concept Plan. After a Concept Plan approval by the Council, more specific architectural, landscaping, lighting, and engineering details should be covered by the Planning Board during the subsequent Site Plan and Architectural Review Board approval process. For the initial Concept Plan review, the applicant will need to address the following:

1. The total parcel area shown on the Sheet 1 Zoning Summary Table should match the square footage on the Development Potential Plan, which excludes the pump station parcel. The resulting allowable residential unit count is 28. This number should be included in the Zoning Regulations Table under maximum residential development potential.

2. The Existing Conditions sheet should include the species and size of any existing trees over 6 inches in diameter that may be affected by the new construction and any of those trees that may be removed.

3. The east side of the parcel is in the regulatory floodway and almost all of the rest of the site is in the 100-year floodplain, so the proposed building will need to comply with Chapter 123, Flood Damage Prevention. Potential flood displacement issues will need to be discussed for the SEQRA review and for a future floodplain development permit.

4. The Site Plan should provide a complete pedestrian circulation system with connections to adjoining properties, the Mill Street sidewalks, and Greenway Trail.

5. The Traffic Impact Study provided a parking analysis estimating 80 necessary spaces, which primarily considers different peak usage times from the two primary uses (see page 10 and

Tables P-1 and P-2). This 15-space deduction seems fairly conservative, given the additional potential for apartment residents in both the proposed building and neighboring housing to want to use the studios in this new structure on the site. A survey of the existing tenants in the adjacent live-work apartments could provide more information in estimating peak parking demand. A lower shared parking requirement is permitted under Section 223-26C(6) and land-banked parking is an option under 223-26E, particularly for the entry parking spaces near Mill Street.

6. Although a detailed Landscape Plan is not necessary for Concept Plan approval, the Sheet 3 plan should show any existing individual or groups of trees to be retained and include a legend for any color patterns. Section 223-26 C(3) also requires one 3-inch caliper tree within the parking area for each 10 spaces. Additional trees could be used to break-up the 39-space row of proposed parking.

If you have any questions or need additional information, please feel free to email me.

John Clarke, Beacon Planning Consultant

c: Bruce Flower, Building Inspector
Nicholas M. Ward-Willis, Esq., City Attorney
Arthur R. Tully, P.E., City Engineer
John Russo, P.E., City Engineer
Aryeh Siegel, Project Architect
Michael Bodendorf, P.E., Project Engineer

City of Beacon Planning Board Agenda
01/10/2023

Title:

Continue review of application for Site Plan Approval and Subdivision (lot merger) Approval, Mixed-Use Commercial and Residential, 393 Fishkill Ave, 397 Fishkill Ave, and 7 Conklin St, submitted by 397 Fishkill Ave LLC

ATTACHMENTS

3-1302-00075_00001 (WQC) SEQR LA.pdf

12-27-22 393 & 397 Fishkill Avenue Supplemental PB Submisison Cover Letter.pdf

12-27-22 393 & 397 Fishkill Supplemental PB Submission with Exhibits, Plans & Plat.pdf

397 Fishkill Avenue_1 of 1_Lot Line Removal Plat.pdf

Exhibit A - Full EAF.pdf

Exhibit B - Response to Comments Memorandum prepared by Aryeh J. Siegel dated December 27, 2022.pdf

Exhibit C - Response to Comments Memo prepared by Hudson Land Design dated December 27, 2022.pdf

Exhibit D - SHPO No Impact Letter.pdf

Exhibit E - I&I Report.pdf

Exhibit F - Drainage Report.pdf

Ibat fact Sheet_March 2018.pdf

NYS Historic Preservation_effect_finding_no_impact.pdf

Site Plan - Sheets 1-8 12-27-22.pdf

Engineer review 397 Fishkill Ave 01-04-23.pdf

Planner Review PB 393 Fishkill Av 1.6.23.pdf

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 3
21 South Putt Corners Road, New Paltz, NY 12561-1620
P: (845) 256-3054 | F: (845) 255-4659
www.dec.ny.gov

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

December 15, 2022

VIA EMAIL

City of Beacon Planning Board
John Gunn
Chairperson
cityofbeacon@beaconny.gov

Re: 397 FISHKILL AVE SITE PLAN
City of Beacon, Dutchess County
DEC ID: 3-1302-00075/00001
SEQR Lead Agency Response

Dear City of Beacon Planning Board,

The Department of Environmental Conservation (DEC or Department) received your State Environmental Quality Review Act (SEQR) Lead Agency Coordination on November 22nd, 2022. The proposal involves the merging of three lots, and the construction of a new mixed-use building comprised of 12 apartments and 3,500 square feet of commercial space, along with associated site improvements. The project site is located on 397 Fishkill Ave, 393 Fishkill Ave, and 7 Conklin St in Beacon. The Department has no objection to the City of Beacon Planning Board serving as lead agency for this project. Based on our review of the submitted materials, including the EAF, we offer the following comments:

PROTECTION OF WATERS STREAM DISTURBANCE

There are no waterbodies that appear on our regulatory maps at the location you identified. Therefore, if there is a stream or pond outlet present at the site with year-round flow, it assumes the classification of the watercourse into which it feeds, and a Protection of Waters permit may or may not be required to disturb its bed or banks. If there is a stream or pond outlet present at the site that runs intermittently (seasonally), it is not protected, and a Protection of Waters permit would not be required to disturb its bed or banks.

If a permit is not required, please note, however, you are still responsible for ensuring that work shall not pollute any stream or waterbody. Care shall be taken to stabilize any disturbed areas promptly after construction, and all necessary precautions shall be taken to prevent contamination of the stream or waterbody by silt, sediment, fuels, solvents, lubricants, or any other pollutant associated with the project.

FRESHWATER WETLANDS

Your project/site is not within a New York State-protected Freshwater Wetland. However, please contact your town officials and the United States Army Corps of Engineers in New York City, telephone (917) 790-8411, for any permitting they might require.

WATER QUALITY CERTIFICATION

If the US Army Corps of Engineers requires a permit pursuant to Section 404 of the Clean Water Act for the discharge to fill in Waters of the U.S., then a Section 401 Water Quality Certification (WQC) will be required. Issuance of these certifications is delegated in New York State to DEC. If the project qualifies for a Nationwide Permit, it may be eligible for coverage under a DEC Blanket WQC. Coverage under a Blanket requires compliance with all conditions for the corresponding Nationwide Permit. For more information and to view the DEC Blanket WQCs, please visit https://www.dec.ny.gov/permits/6546.html. A determination on Corps jurisdiction and Nationwide Permit eligibility is likely necessary for a DEC jurisdictional determination.

STATE-LISTED SPECIES

DEC has reviewed the State's Natural Heritage records. We have determined that the site is located within or near record(s) of the following state-listed species:

Name	Status
Indiana Bat (*Myotis sodalis*)	Endangered

A permit is required for the incidental taking of any species listed as "endangered" or "threatened", which can include removal of habitat. Tree removal associated with this project should occur within the appropriate time of the year work window, October 1 through March 31, to avoid direct impacts to individuals and the need for an Article 11 take permit. If tree clearing cannot be completed within the acceptable time of year restriction, further review will be required.

The absence of data does not necessarily mean that other rare or state-listed species, natural communities or significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) STORMWATER

If the overall project will disturb over one acre of land, the project sponsor must obtain coverage under the current SPDES General Permit for Stormwater Discharge from Construction Activity (GP-0-20-001), and a Stormwater Pollution Prevention Plan (SWPPP) must be developed which conforms to requirements of the General Permit. Authorization for coverage under this SPDES General Permit is not granted until the Department issues all other necessary DEC permits.

As the site is within a Municipal Separate Storm Sewer System (MS4) community, the SWPPP must be reviewed and accepted by the municipality, and the MS4 Acceptance

Form submitted with the SWPPP and the application for coverage, in accordance with the application instructions.

LOCAL WATERFRONT REVITALIZATION PLAN

The project site is located within the City of Beacon Local Waterfront Revitalization Plan (LWRP) area. The municipality will determine if further coordination is required.

CULTURAL RESOURCES

We have reviewed the statewide inventory of archaeological resources maintained by the New York State Museum and the New York State Office of Parks, Recreation, and Historic Preservation. These records indicate that the project is located within an area considered to be sensitive with regard to archaeological resources.

For more information, please visit the New York State Office of Historic Preservation website at http://www.nysparks.com/shpo/.

OTHER

Other permits from this Department or other agencies may be required for projects conducted on this property now or in the future. Also, regulations applicable to the location subject to this determination occasionally are revised and you should, therefore, verify the need for permits if your project is delayed or postponed. This determination regarding the need for permits will remain effective for a maximum of one year unless you are otherwise notified. More information about DEC permits may be found at our website, www.dec.ny.gov, under “Regulatory” then “Permits and Licenses.” Application forms may be downloaded at http://www.dec.ny.gov/permits/6081.html.

Please feel free to contact this office if you have questions regarding the above information. Thank you.

Sincerely,

Glennys A. Romero Medina

Digitally signed by Glennys A. Romero Medina
Date: 2022.12.15 12:40:57 -05'00'

Glennys Romero Medina
Division of Environmental Permits
Region 3, Telephone No. (845)256-2250
Glennys.RomeroMedina@dec.ny.gov

Enclosure: Indiana Bat Project Review Fact Sheet

ecc: 397 Fishkill Avenue LLC, Applicant

CUDDY +FEDER LLP

445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
T 914 761 1300
F 914 761 5372
cuddyfeder.com

Taylor M. Palmer, Esq.
tpalmer@cuddyfeder.com

December 27, 2022

VIA E-MAIL
AND HAND DELIVERY
Hon. John Gunn
And Members of the Planning Board
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Application for Lot Line Adjustment (Subdivision/Lot Merger) & Site Plan Approval for Proposed Mixed-Use Commercial & Residential Building – Supplemental Submission
Premises: 393 & 397 Fishkill Avenue and 7 Conklin Street, Beacon, New York
Tax IDs: (6055-80-392032, 6055-80-399035 & 6055-80-394041)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of 397 Fishkill Avenue, LLC and 393 Fishkill Avenue, LLC (the "Applicant"), the owners of the above-referenced Premises,[1] we respectfully submit this letter and the referenced enclosures in support of the Application for a Subdivision (lot merger) and Site Plan Approval (collectively the "Application"), proposing to redevelop the Premises for a proposed mixed-use building that will be comprised of commercial space on the first floor and twelve (12) apartments on the upper floors (the "Project").

Since last appearing before the Planning Board on December 13th, the Applicant has further refined and improved the building program in response to the comments contained in the memoranda prepared by the City's consultants. The Applicant has also prepared several engineering reports for the Board's consideration, as detailed further below.

THE PROPOSED MIXED-USE DEVELOPMENT – ADDITIONAL SITE PLAN REFINEMENTS:

As this Board is aware, the Applicant is proposing to construct a zoning-compliant mixed-use building and associated off-street parking on the Premises. The proposed new building program includes a three (3)-story mixed-use development comprising twelve (12) apartments and

[1] Note: The owners for the lots comprising the Premises are as follows: 393 Fishkill Avenue – 393 Fishkill Avenue, LLC; 397 Fishkill Avenue – 397 Fishkill Avenue, LLC; and 7 Conklin Street – 397 Fishkill Avenue, LLC.

approximately 3,500 square feet of commercial space. The proposed building will include six (6) apartments on both the second and third floors and commercial space on the first floor with a potential mix of office and retail uses.[2] The expanded off-street parking area that will be located behind the new building will be accessed via an existing driveway off of Conklin Street and will include thirty-four (34) off-street parking spaces.

As is more fully detailed on the enclosed updated Site Plan Set and will be discussed at the Board's January 10th meeting Agenda, the Applicant made the following minor refinements to the building program:

1) The building footprint was modified to provide twenty (20) foot side yard setbacks on *both* sides of the building. These modifications maintain the parking layout and ADA-compliant accessibility. ADA accessible route maps are now provided in the Site Plan Set;

2) The proposed free-standing sign was relocated to the corner of the Fishkill Avenue-Conklin Street intersection to avoid conflict with the drainage system; and

3) A landscaping plan and plant list was established that beautifies the landscape for commercial and residential tenants, visitors, and passerby traffic; provides a greenspace for tenants to work and relax outside; and creates a living fence along Fishkill Avenue and green screen along the northwestern property line.

SEQRA ENVIRONMENTAL REVIEW STATUS: ENGINEERING REPORTS & SHPO CORRESPONDENCE:

As the Planning Board is aware, at the Board's November 9th meeting, the Board announced its intent to serve as Lead Agency overseeing the SEQRA environmental review of the Project.[3] We understand the Planning Board circulated its notice of intent to serve as Lead Agency along with

[2] Note: One (1) of the apartments will be a Below Market Rate ("BMR") unit, in accordance with the City's Affordable-Workforce Housing local law, which requires ten percent (10%) of the apartments to be BMR units.

[3] Note: The NYS DEC provided a letter dated December 15, 2022, not objecting to the Planning Board serving as Lead Agency for the SEQRA review. Notably, the NYS DEC's letter incorrectly identifies that the Premises is located in the City of Beacon's Local Waterfront Revitalization Program ("LWRP") area. The Premises *is not* located in the City's LWRP and therefore a LWRP Consistency Determination is not required for this Application.

the Full Environmental Assessment Form ("EAF") on November 18, 2022. For the Board's consideration in connection with its continuing environmental review and for the record of proceedings, enclosed please find a copy of the revised Full EAF for the Project, which is annexed hereto as **Exhibit A.**[4]

In connection with the proposed mixed-use development, the Applicant's engineering consultant, Hudson Land Design Professional Engineering, P.C., has prepared Infiltration and Inflow Investigation ("I&I Report") and Drainage Report, annexed hereto as **Exhibit E and Exhibit F**, respectively. As is further detailed therein, the I&I Report's interior and exterior investigation revealed no illicit connections from the buildings located at 393 & 397 Fishkill Avenue to the City of Beacon's sanitary sewer collection system.[5] The Drainage Report's analysis concluded that the addition of a stormwater management system would cause increases in the peak runoff rate, and therefore no stormwater management system is proposed. The Drainage Report further found that the existing storm drainage systems located beneath Fishkill Avenue are capable of passing up to the 50-year design flood, including the slight increase due to the proposed Project.

Lastly, the Applicant is pleased to share with this Board the New York State Office of Parks, Recreation, and Historic Preservation ("SHPO") has determined that the Project *will not* have an impact on historic or cultural resources. *See* **Exhibit D** – SHPO No Impact Letter, dated December 16, 2022.

RESPONSES TO COMMENTS MEMORANDA:

In addition to the foregoing updates to the Site Plan Set, the Applicant respectfully submits the following memoranda prepared by its consultants providing annotated responses to the applicable comments noted in the memoranda prepared by the City's Engineering Consultant, Lanc & Tully, dated December 8, 2022 (the "Engineering Comments Memorandum") and the City's Planning Consultant, John Clarke Planning and Design, dated December 9, 2022 (the "Planning Comments Memorandum"):[6]

---

[4] Note: The Full EAF has been revised in response to the Planning Board consultant's recent engineering comments memorandum, dated December 8, 2022, in order to provide clarity on the expansion of existing uses.

[5] Note: The I&I Report will be updated in a future submission following investigation of the 7 Conklin Street property.

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- Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated December 27, 2022, (the "Architect Response to Comments Memorandum"). *See* **Exhibit B** – Architect Response to Comments Memorandum; and
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INDEX OF ENCLOSURES:

In support of this Application, please find five (5) copies of the following documents:

Exhibit A: Revised Full Environmental Assessment Form;

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the two (2) outstanding comments (Site Plan Comments 1 & 3), first, we understand the City will be completing all work under the Fishkill Avenue rehabilitation project and, furthermore, given that Fishkill Avenue is a City-owned and maintained roadway, any work within that right-of-way would require a City Road Opening Permit and not a New York State Department of Transportation Highway Work Permit. Second, in a future submission a sight distance triangle will be shown on the Site Plan Set indicating the area for existing and proposed landscaping to be maintained to ensure the required intersection sight distance is provided.

In further support of this Application, we respectfully submit the updated Site Plan Set entitled "Site Plan Application", prepared by Hudson Land Design Professional Engineering, P.C. and Aryeh Siegel, Architect, dated October 21, 2022, last revised December 27, 2022 numbered and titled as follows (unless otherwise noted):[7]

- Sheet 1 of 8 – Site Plan;
- Sheet 2 of 8 – Building Plans & Views;
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Also enclosed, please find a copy of the Preliminary Subdivision Plat entitled "Lot Line Removal Plat: Revision to Filed Map 9719", prepared by Hudson Land Design Professional Engineering, P.C., dated December 27, 2022, which shows the proposed lot merger and the resultant extinguishment of the existing access and parking easement from prior Filed Map 9719.

The Applicant looks forward to continuing its review of the Project with the Board at the January 10th meeting for the Site Plan and Subdivision Application. If the Board sees fit, the Applicant respectfully requests that the Planning Board consider scheduling the joint Site Plan & Subdivision/SEQRA public hearing for the Board's February 15, 2023 meeting Agenda.[8]

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[7] Note: The building elevations will be revised by the project architect in accordance with the building program modifications (i.e., twenty (20) foot side yard setbacks) in a forthcoming submission.

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In the meantime, should the Board or City Staff have any questions, please do not hesitate to contact me. Thank you in advance for your consideration of the enclosed.

Very truly yours,

Taylor M. Palmer

Enclosures

cc: Jennifer L. Gray, Esq.
John Clarke Planning and Design
Lanc & Tully, P.C.
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CUDDY +FEDER LLP

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VIA E-MAIL
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Hudson Land Design Professional Engineering, P.C.
Colliers Engineering & Design, P.C.
Allison Fausner, Esq.

Exhibit A

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: 397 Fishkill Avenue, LLC – Application for Site Plan & Lot Line Adjustment Approval		
Project Location (describe, and attach a general location map): 397 Fishkill Avenue, 393 Fishkill Avenue and 7 Conklin Street, Beacon NY, 12508		
Brief Description of Proposed Action (include purpose or need): Application for Site Plan and Lot Line Adjustment (Subdivision) approval to merge three (3) lots and construct a new mixed-use building comprised of twelve (12) apartments and 3,500 sq. ft. of commercial space in place of the existing office/mixed-use, residential and multi-family residential uses on the collective properties. The site will provide off-street parking facilities with a driveway connection to Conklin Street where access to the properties already provided.		
Name of Applicant/Sponsor: 397 Fishkill Avenue, LLC & 393 Fishkill Avenue, LLC	Telephone: 845-765-8881 E-Mail: Jhaug@letteriohaug.com	
Address: 397 & 393 Fishkill Avenue		
City/PO: Beacon	State: NY	Zip Code: 12508
Project Contact (if not same as sponsor; give name and title/role): Taylor Palmer, Esq., Cuddy & Feder LLP (Attorney for the Applicant)	Telephone: 914-761-1300 E-Mail: tpalmer@cuddyfeder.com	
Address: 445 Hamilton Avenue, Fl. 14		
City/PO: White Plains	State: NY	Zip Code: 10601
Property Owner (if not same as sponsor): 7 Conklin Street LLC (Owner: 7 Conklin Street; Contract Vendee: 397 Fishkill Avenue, LLC)	Telephone: 843-422-7717 E-Mail:	
Address: 105 Sedgman Court		
City/PO: Cary	State: NC	Zip Code: 27511

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☐Yes ☑No		
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Lotline Adjustment (Subdivision) Site Plan	October 2022
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☑Yes ☐No	Building Department – Building Permit	March 2023
e. County agencies ☐Yes ☑No		
f. Regional agencies ☐Yes ☑No		
g. State agencies ☐Yes ☑No		
h. Federal agencies ☐Yes ☑No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☑Yes ☐No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐Yes ☑No

If Yes, identify the plan(s):

_____

_____

_____

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

_____

_____

_____

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
GB - General Business

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site?

C.4. Existing community services.

a. In what school district is the project site located? Beacon City School District

b. What police or other public protection forces serve the project site?
Beacon City Police, NY State Police, Dutchess County Sherriff

c. Which fire protection and emergency medical services serve the project site?
Beacon Fire Department

d. What parks serve the project site?
Several City of Beacon Parks

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Commercial on lowest floor, Residential on upper floors

b. a. Total acreage of the site of the proposed action? 0.62 acres
b. Total acreage to be physically disturbed? +/-0.60 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.62 acres

c. Is the proposed action an expansion of an existing project or use? (See footnote 1 below) ☑ Yes ☐ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % 600%; 185% Units: resi units; commercial s.f.

d. Is the proposed action a subdivision, or does it include a subdivision? ☑ Yes ☐ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
Merge three lots into one
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? 1
iv. Minimum and maximum proposed lot sizes? Minimum 0.62 Maximum 0.62

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 12 months
ii. If Yes:
- Total number of phases anticipated
- Anticipated commencement date of phase 1 (including demolition) month year
- Anticipated completion date of final phase month year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

Footnotes:
1. residential units: 2 existing, 12 total proposed - 600% increase
commercial floor area: 2,402 square feet existing, 4,453 square feet total proposed - 185% increase

f. Does the project include new residential uses? ☑ Yes ☐ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				12 total units
At completion of all phases				12 total units

g. Does the proposed action include new non-residential construction (including expansions)? ☑ Yes ☐ No

If Yes,

i. Total number of structures 1

ii. Dimensions (in feet) of largest proposed structure: <35' height; +/-55' width; and +/-175' length

iii. Approximate extent of building space to be heated or cooled: 16,737 (gross) square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☑ No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐ Yes ☑ No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐ Yes ☐ No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No
If Yes, describe:

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No
If Yes:

- acres of aquatic vegetation proposed to be removed:
- expected acreage of aquatic vegetation remaining after project completion:
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):
- proposed method of plant removal:
- if chemical/herbicide treatment will be used, specify product(s):

v. Describe any proposed reclamation/mitigation following disturbance:

c. Will the proposed action use, or create a new demand for water? ☑Yes ☐No
If Yes:

i. Total anticipated water usage/demand per day: 1,770* gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☑Yes ☐No
If Yes:

- Name of district or service area: City of Beacon
- Does the existing public water supply have capacity to serve the proposal? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No
- Do existing lines serve the project site? ☑Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☑No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project:
- Source(s) of supply for the district:

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☑No
If, Yes:

- Applicant/sponsor for new district:
- Date application submitted or anticipated:
- Proposed source(s) of supply for new district:

v. If a public water supply will not be used, describe plans to provide water supply for the project:
N/A

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑Yes ☐No
If Yes:

i. Total anticipated liquid waste generation per day: 1,770* gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):
Sanitary Wastewater

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑Yes ☐No
If Yes:

- Name of wastewater treatment plant to be used: Beacon City Wastewater Treatment Plant
- Name of district: City of Beacon
- Does the existing wastewater treatment plant have capacity to serve the project? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No

* 12 bedrooms @ 110 gpd/br plus assumed 30 employees @ 15 gpd/employee

- Do existing sewer lines serve the project site? ☑ Yes ☐ No
- Will a line extension within an existing district be necessary to serve the project? ☐ Yes ☑ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐ Yes ☑ No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

N/A

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

None proposed

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐ Yes ☑ No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐ Yes ☐ No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐ Yes ☐ No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☑ Yes ☐ No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

None

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

None

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

Furnaces for heating of building

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐ Yes ☑ No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☐ No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

_____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

65,000 kWh (Assumes annual 14.5 kWh per square foot)

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

Local Grid including suppliers such as Central Hudson Gas and Electric

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7 AM to 5 PM
- Saturday: 9 AM to 5 PM
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: 8 AM to 5 PM (commercial)**
- Saturday: 24/7 **
- Sunday: 24/7 **
- Holidays: 24/7 **

** 24 hours per day, 7 days per week for residential

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Construction Vehicles and Activities (during construction), 7 AM to 5 PM weekdays, 9 AM to 5 PM Saturdays

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: Landscaped screening is proposed pursuant to the Applicant's landscaping plan.

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Parking area lighting, building mounted lighting at entrances

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☑ Yes ☐ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: 5 tons per month (unit of time)
- Operation : 2 tons per month (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: Recycling of useful materials
- Operation: Recycling - paper, plastic, metals

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: Roll-off dumpster
- Operation: Solid waste and recycling containers

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☑ Urban ☑ Industrial ☑ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Residential multi-family

ii. If mix of uses, generally describe:

mixed-uses consistent with the GB District

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.32	0.45	+0.13
• Forested	0	0	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0	0	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
• Wetlands (freshwater or tidal)	0	0	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: Grassed Areas	0.30	0.17	-0.13

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

Wingate at Beacon; Hedgewood Home for Adults

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☑ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No

☐ Yes – Spills Incidents database Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☑ No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☐ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? ~2*** feet

b. Are there bedrock outcroppings on the project site? ☑ Yes ☐ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? 3 %

c. Predominant soil type(s) present on project site:

NwC	48 %
Ud	40 %
Ur	12 %

d. What is the average depth to the water table on the project site? Average: >6.5*** feet

e. Drainage status of project site soils:
- ☑ Well Drained: 100 % of site
- ☐ Moderately Well Drained: _____ % of site
- ☐ Poorly Drained _____ % of site

f. Approximate proportion of proposed action site with slopes:
- ☑ 0-10%: 79 % of site
- ☑ 10-15%: 13 % of site
- ☑ 15% or greater: 8 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

i. Name of aquifer: _____

*** Per USGS Soils Mapping Information

m. Identify the predominant wildlife species that occupy or use the project site:
Squirrels
Local birds
Raccoons

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation): _____
ii. Source(s) of description or evaluation: _____
iii. Extent of community/habitat:
- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No
If Yes:
i. Species and listing (endangered or threatened):
Indiana Bat

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No
If Yes:
i. Species and listing:

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No
If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No
If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No
i. If Yes: acreage(s) on project site? _____
ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No
If Yes:
i. CEA name: _____
ii. Basis for designation: _____
iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: HH-26 Hudson Highlands State Park; HH-27 Dutchess Junction

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Scenic Areas of Statewide Significance

iii. Distance between project and resource: +/-1 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

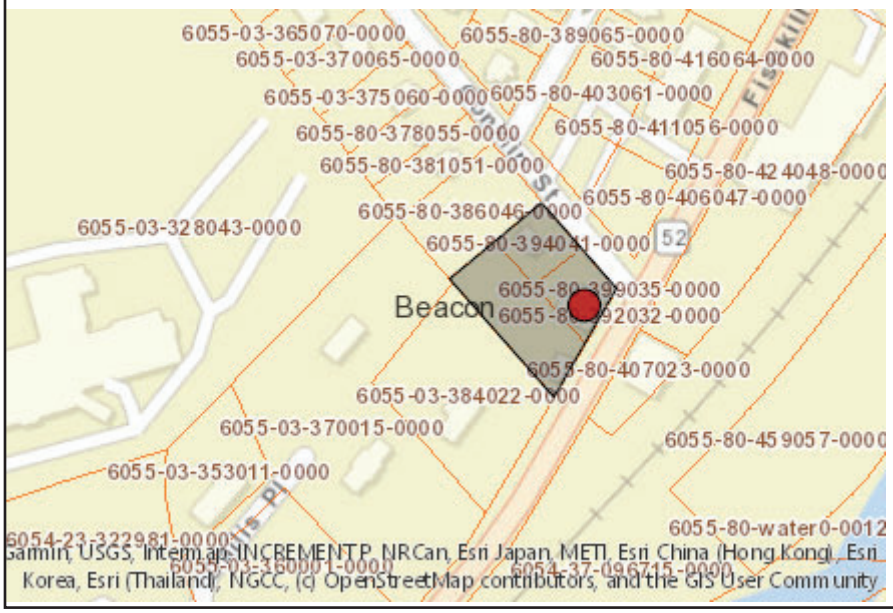
G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Daniel G. Koehler, P.E., Hudson Land Design Date 11/16/2022 rev. 12/27/2022

Signature _____ Title Project Engineer

PRINT FORM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	Yes
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Indiana Bat

E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

Exhibit B

ARYEH SIEGEL
ARCHITECT

John Gunn - Planning Board Chairman
City of Beacon
One Municipal Plaza
Beacon, NY 12508

Re: 393-397 Fishkill Avenue, Beacon, New York
Site Plan Application – Responses to Comments

December 27, 2022

Dear Chairman Gunn and Members of the Planning Board,

Below please find our responses to the comments included in John Clarke Planning and Design's Memorandum, dated December 9, 2022. Please refer to Hudson Land Design's response letter regarding Lanc & Tully's letter dated December 8, 2022.

John Clarke Planning and Design Comment Responses:

1. Comment acknowledged. The Applicant will consider privacy fencing to shield the parking lot from adjoining residential neighbors.

2. Comment acknowledged. This submission includes a landscaping plan with a planting list and notes. We also include a lighting plan noting compliance with Beacon standards. The building elevations will be forthcoming in the next submittal, per the building footprint revisions noted in Item 3 below.

3. The building footprint has been modified to provide 20 foot side yard setbacks on both sides.

4. Comment acknowledged. The parking layout will be reviewed to maximize maneuverability at the southernmost parking space

Lanc & Tully Comment Responses:

General Comments

1. Please refer to Hudson Land Design's letter for responses to the General Comments

Please refer to Hudson Land Design's and Colliers Engineering letters for responses to additional engineering comments.

84 Mason Circle | ajs@ajsarch.com | *Tel* 845 838 2490
Beacon, New York 12508 | www.ajsarch.com | *Fax* 845 838 2657

Sheet 1 of 7 - Site Plan

1. The plan has been updated to show the retaining wall
2. The sign location has been modified to avoid conflict with the drainage structure
3. Note 2 on the plan notes that the sign will be submitted to the Building Department for review and approval
4. The landscaping plan will be coordinated with the snow storage area.

Sheet 2 of 7 - Building Plans

1. The 1st floor plan shows the location of the mechanical room, and has been preliminarily sized to the backflow prevention and fire sprinkler assembly.

Please refer to Hudson Land Design's letter for additional responses.

Thank you. Please let me know if you have any questions.

Sincerely,



Aryeh Siegel
Aryeh Siegel, Architect

Exhibit C

HUDSON LAND DESIGN

Civil & Environmental Engineering Consultants
174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)
13 Chambers Street, Newburgh, NY 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com

December 27, 2022

Chairman John Gunn & Members of the City of Beacon Planning Board
1 Municipal Plaza
Beacon, NY 12508

Re: Application for Lot Line Adjustment (Subdivision/Lot Merger) & Site Plan Approval
Proposed Mixed-Use Commercial & Residential Building
393 & 397 Fishkill Avenue & 7 Conklin Street
Tax Parcels: 6055-80-392032, 6055-80-399035 & 6055-80-394041, ±0.62 acre total
City of Beacon, NY

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has revised the plans in response to John Clarke Planning and Design's December 9, 2022 comment letter, and Lanc & Tully's December 8, 2022 comment letter. Responses to public comments is also provided in this letter. The Project Architect, Aryeh Siegel, has responded to the John Clarke memo. Below is a point-by-point response to the Lanc & Tully comment letter.

Lanc & Tully December 8, 2022 Comment Letter

SEQRA Comments

1. The response to D.1.c has been revised to provide clarity of the numbers presented.

General Comments

2. Comment noted. The existing conditions plan shows the road and sidewalk per the survey, and the plan sheets show the revised configuration that was scaled from the WSP plan set. Our proposed utilities are shown on Conklin Street to avoid conflict with that capital improvement project. We have added notes with regard to the abandonment of certain utilities prior to the Fishkill Avenue Improvement Project. We have also made note to a new sewer service to serve the existing building if it is still in use. There will need to be continued coordination with the capital project and this proposal prior to either commencing.
3. An I&I study and report for the two buildings along Fishkill Avenue is complete and attached. The report will be modified (or a separate report will be issued) after the building at 7 Conklin Street is studied. The property at 7 Conklin Street is now under control of the project applicant so the study will commence in the near future.

4. A pre versus post stormwater analysis is provided with this submittal.
5. This latest set of submitted plans will be forwarded to Emergency Services for input.
6. Five test pits were conducted at the site on December 21, 2022 based on the current grading. Test pits were advanced to a depth below subgrade or until refusal by bedrock. Based on the results, there will be limited or no rock removal on the west side of the project. We expect some rock removal on the east side of the project near the rock outcrop areas identified on the maps. Rock removal notes have been added to the grading and utility plan.
7. A subdivision plat is included in this submittal.
8. The architect's sheets include additional detail, including a lighting and landscaping plan.
9. An ADA accessible route inset map has been provided on the grading and utility plan.
10. We anticipate using a redi-rock type of retaining wall which does not require reinforcement. Test pit side walls were near vertical and stable; therefore, we believe that these walls can be constructed without the need for coordinating with the adjacent property owners. Retaining wall notes have been added to the grading and utility sheet to address the design and construction certification.

Sheet 1 (Site Plan) and Sheet 2 (Building plan)

Refer to the response letter from Aryeh Siegel, architect.

Sheet 4 of 8 – Existing Conditions & Demolition:

1. The existing freestanding sign is to be removed and replaced with a new freestanding sign as shown on the architect's Site Plan.
2. Rock outcrop locations have been added to the plan. The size of the mains is provided on the plans. Existing storm sewer sizes are provided per the WSP plans. These have been generally confirmed by this office. Notation on pipe changes per the WSP plan are also provided. The trees are shown on the plan.
3. The utility abandonment note has been modified as requested.
4. The utility abandonment note has been modified as requested.
5. The tree clearing restriction ahs been added (Demolition Note 22).

Sheet 5 of 8 – Grading & Utility:

1. Page C-3 of the referenced manual notes that 6" raw sewer lines can be set at minimum slope of 1%. We prefer to maintain that flexibility in the event of unknown conflicts.
2. The LSE has been added.
3. The location of the moved utility pole and sign has been shown.
4. Several top and bottom retaining wall elevations have been provided.
5. The wet tap has been called out and the valve is shown.
6. The proposed catch basin rim elevations are provided.
7. The proposed stormwater pipe inverts are provided.
8. A monolithic curb and sidewalk detail has been provided for the Conklin Street sidewalk.

Sheet 7 of 8 – Construction Details:

1. The pavement restoration detail for Conklin Street has been revised.
2. The pavement restoration detail for Utility work in Fishkill Avenue has been revised.

Finally, it is acknowledged that the recreation area on the west side of the proposed building is not shown on the engineering plans at this time. The area will be incorporated into the next plan submittal assuming that the Planning Board endorses the area as generally shown. For the Planning Board's consideration, we envision that there would need to be retaining walls and steps in order to make the area work as laid out by the architect. At that time, fine grading on the east and south side of the building will also be provided. The south side will need to assume final elevations following the construction of the Fishkill Avenue improvements, which have already been taken into consideration in setting the first floor elevation.

We look forward to continuing the review process with the Planning Board. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,



Daniel G. Koehler, P.E.
Principal

cc: 397 Fishkill Avenue LLC & 393 Fishkill Avenue LLC, Applicant (via email)
Aryeh Siegel, Project Architect (via email)
Cuddy + Feder LLP, Project Attorney (via email)
Michael A. Bodendorf, P.E. (HLD file)

Exhibit D

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

December 16, 2022

John Gunn
Chairman
City of Beacon Planning Board
One Municipal Plaza, Suite One
Beacon, NY 12508

Re: DEC
397 Fishkill Avenue, LLC - Application for Site Plan & Lot Line Adjustment Approval
393-397 Fishkill Avenue, Beacon, NY 12508
22PR08660

Dear John Gunn:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

rev: J. Carter

Exhibit E

HUDSON LAND DESIGN

Civil & Environmental Engineering Consultants
174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)
13 Chambers Street, Newburgh, New York 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com

December 27, 2022

Mr. John Gunn, Chairman, & Members of the City of Beacon Planning Board
1 Municipal Center
Beacon, NY 12508

Re: Infiltration and Inflow Investigation
Proposed Mixed-Use Commercial & Residential Building
393 & 397 Fishkill Avenue & 7 Conklin Street
Tax Parcels: 6055-80-392032, 6055-80-399035 & 6055-80-394041
City of Beacon, NY

Dear Chairman Gunn & Members of the Planning Board,

Hudson Land Design (HLD) has completed an infiltration and inflow investigation at the above referenced parcel as required by the City of Beacon. The investigation was conducted on December 21, 2022 at the existing commercial buildings located at 393 & 397 Fishkill Avenue in the City of Beacon. The residential building located at 7 Conklin Street will be investigated and incorporated into a future revision to this I&I report.

The first phase of the study consisted of an exterior inspection of the buildings to determine the disposition of roof drainage. Both 393 and 397 Fishkill Avenue buildings have portions of roof runoff that are not collected by gutter and simply discharge to the surface at the roof drip line. Where gutters are present at both buildings, the downspouts convey the roof runoff to the surface and not into any underground piping.

The second phase of the study consisted of inspecting the interior of the building to determine if there are any illicit connections to the building's sewer lines from sump pumps, floor drains and the like. HLD personnel were not able to observe the interior sanitary sewer plumbing as the buildings do not have basements or accessible crawl spaces. During the inspection of the interior of each building, there was no evidence of any sump pumps or illicit connections to the sanitary sewer.

HLD did not find any illicit connections from the buildings located at 393 & 397 Fishkill Avenue to the City of Beacon's sanitary sewer collection system.

Should you have any questions, please feel free to call me at 845-440-6926.

Sincerely,



Daniel G. Koehler, P.E.
Principal

cc: 397 Fishkill Avenue LLC & 393 Fishkill Avenue LLC, Applicant (via email)
Aryeh Siegel, Project Architect (via email)
Cuddy + Feder LLP, Project Attorney (via email)
Michael A. Bodendorf, P.E. (HLD file)

Exhibit F

Drainage Report
for
397 Fishkill Avenue

Prepared for:
397 Fishkill Avenue, LLC
397 Fishkill Avenue
Beacon, NY 12508

December 27, 2022



HUDSON
LAND DESIGN

Prepared by:
Hudson Land Design Professional Engineering, P.C.
174 Main Street
Beacon, NY 12508
Ph: (845) 440-6926

TABLE OF CONTENTS

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2.0 METHODOLOGY AND REGULATORY COMPLIANCE 1

3.0 SOIL CONDITIONS 1

4.0 EXISTING DRAINAGE CONDITIONS 2

5.0 PROPOSED DRAINAGE CONDITIONS 3

6.0 DRAINAGE ANALYSIS CONCLUSIONS 4

7.0 EROSION AND SEDIMENT CONTROL 5

APPENDICES

APPENDIX A: DRAINAGE MAPS
APPENDIX B: SUPPORTING DATA
APPENDIX C: HYDROLOGIC MODELING
APPENDIX D: HYDROGRAPH COMPARISON & PIPE SIZING

1.0 INTRODUCTION

The 397 Fishkill Avenue project is located on the northwest side of Fishkill Avenue at intersection with Conklin Street in the City of Beacon, Dutchess County, New York. The project is located parcels are located within the GB zoning district and has a tax map designation of 6055-80-399035, 392032, & 394041, totaling ±0.62 acres. The parcels currently have two commercial buildings and a two-family residential building. The project proposes to consolidate the three parcels and replace the existing buildings with a mixed-use building which includes residential and commercial uses and an onsite parking area.

Fishkill Avenue is a NYSDOT road and there are currently plans to resurface, restore, and rehabilitate the road. The proposed stormwater collection system at the site has been designed to connect to the improvements storm drainage system using the Final Plans dated May 2022 from the NYSDOT.

2.0 METHODOLOGY AND REGULATORY COMPLIANCE

The proposed project will result a total 0.65 acres of disturbance, and therefore is not subject to the requirements of NYSDEC GP-0-20-001 General Permit for Construction Activities. Pre-development vs. post-development drainage analysis for the project was performed to evaluate stormwater runoff patterns and demonstrate that the post-development runoff rates to the existing stormwater discharge points will not have adverse impacts.

The proposed stormwater collection system will connect to the storm drainage system in Fishkill Avenue that is under the jurisdiction of the NYSDOT. NYSDOT review and approval for the proposed storm connection will be required.

Runoff calculations were performed utilizing HydroCAD® version 10.00 published by HydroCAD Software Solutions, LLC. The software utilizes the principles of TR-55 and TR-20 to generate unit hydrographs. Rainfall events are generated utilizing Soil Conservation Service (SCS) Type III, 24-hour rainfall event for Dutchess County, NY. The Type III rainfall depths for the 1-Year, 2-Year, 5-Year, 10-Year, 25-Year, 50-Year, and 100-Year rainfall events are 2.61, 3.16, 3.96, 4.70, 5.89, 7.00, and 8.34 inches, respectively. Rainfall data can be found in Appendix B of this report.

3.0 SOIL CONDITIONS

A review of the Soil Survey of Dutchess County indicates that there are three types of soil present on the project site and its associated contributing drainage area. Supporting information has been provided in Appendix B. Table I below summarizes the characteristics of the soil types present within the drainage area.

Table I: Soil Types

Map Unit	Soil Names	Water Table (ft)	Bedrock	Hydrologic Soil Group
NwC	Nassau-Cardigan complex, rolling, very rocky	>80 inches	Nassau: 10-20 inches; Cardigan: 20-40 inches	C
Ud	Udorthents, smoothed	36-72 inches	>80 inches	A
Ur	Urban land	N/A	N/A	N/A

Source: websoilsurvey.sc.egov.usda.gov

4.0 EXISTING DRAINAGE CONDITIONS

4.1 Design Points

Design Points represent the location where the majority of runoff from an area exits the site. The same design point is identified in post-development conditions, so that a comparison can be made between the pre-development and post-development conditions. One design point for the project area was selected, and as follows:

Table II - Stormwater Design/Discharge Point

Stormwater Discharge Point	
SDP	**Description**
1	Connection to existing NYSDOT storm drainage system at Fishkill Avenue

4.2 Existing Watershed Areas

Runoff from the project area during existing conditions can be divided in the following subcatchments:

Subcatchment 1 is comprised of 2.85 acres of onsite and offsite area tributary to the NYSDOT storm drainage system on the northwest side of Fishkill Avenue prior to crossing the road to the discharge point. This area includes the site, the surrounding residential and commercial areas, and roads. The majority of soils in this subcatchment area are hydrologic soil group D, urban land has been assumed to be hydrologic soil group D. Drainage generally flows southwest toward Fishkill Avenue and is collected by the NYSDOT storm drainage system in Fishkill Avenue and conveyed to SDP1.

4.3 Existing Runoff Rates

Runoff rates for existing conditions have been calculated at the designated SDP and summarized in Table III as follows:

Table III: Existing Runoff Rates (cfs)

Drainage Area	1-Year	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
DA 1	4.92	6.33	8.39	10.29	13.32	16.12	19.41

Unit hydrograph analysis results for pre-development conditions have been included as Appendix C.

5.0 PROPOSED DRAINAGE CONDITIONS

5.1 Developed Watershed Area

The proposed project results in a total of approximately 0.65 acres of disturbance due to the construction of the building and parking. The site was divided into two subcatchments. Alternate modeling has been completed that includes an underground stormwater detention system between the site and the discharge to the existing manhole.

Subcatchment 10 is comprised of 2.40 acres of offsite area outside of the area that is collected by the onsite stormwater system. This area includes the surrounding residential and commercial areas and roads. The majority of soils in this subcatchment area are hydrologic soil group D, urban land has been assumed to be hydrologic soil group D. Drainage patterns are unchanged from existing conditions. Drainage generally flows southwest toward Fishkill Avenue and is collected by the NYSDOT storm drainage system in Fishkill Avenue and conveyed to SDP1.

Subcatchment 11 is comprised of 0.48 acres of onsite area that is tributary to the proposed stormwater collection system. This area includes the building roof, parking area, and surrounding lawn area, along with a small offsite area above the parking area. The soils in this this subcatchment area are hydrologic soil groups A and D. Drainage generally flows west into the parking area where it is collected by a proposed catch basin and conveyed to SDP1. A new storm drainage connection will be made to the existing manhole in the NYSDOT right-of-way. A stormwater design including a potential underground stormwater detention area was also evaluated.

5.2 Proposed Runoff Rates

Runoff rates for proposed conditions have been calculated for each of the drainage areas and are summarized in Table IV as follows:

Table IV: Proposed Runoff Rates

Drainage Area	1-Year	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
DA 10	4.15	5.34	7.07	8.67	11.22	13.59	16.36
DA 11	1.07	1.36	1.77	2.15	2.75	3.31	3.96

Unit hydrograph analysis results for post-development conditions have been included as Appendix C.

6.0 DRAINAGE ANALYSIS CONCLUSIONS

The stormwater runoff rates at Design Points under pre-development and post-development conditions are summarized below.

Table V: Proposed Runoff Rates Comparison

SDP	1-Year	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
Pre	4.92	6.33	8.39	10.29	13.32	16.12	19.41
Post	4.99	6.41	8.47	10.37	13.41	16.22	19.52
Post w/detention	5.07	6.50	8.60	10.51	13.53	16.33	19.65

The runoff rates at the Design Point shows a slight increase during all analyzed storms. The addition of an onsite detention system increases the peak runoff rates at the Design Point. This is due to the site being at downstream end of the larger watershed. The detention system causes the peak runoff rate to be delayed and overlap with the peak runoff rate of the larger watershed, causing a larger increase in the runoff peak. Comparison hydrographs showing the relationship between the overall watershed and the site and the overall watershed with a detention system are included in Appendix D.

The project is proposing a new connection to a NYSDOT storm drainage manhole in the Fishkill Avenue right-of-way. Chapter 8 of the Highway Design Manual includes guidance for proposed connections to the NYSDOT's stormwater drainage system. Section 8.2.3.2 of the manual includes guidance:

> *Generally, a retention or detention system is necessary to restrict the flow rate of a development's drainage discharge to the pre-development rate. In situations where the development is discharging near the downstream end of a relatively large drainage area, an undetained connection may be appropriate. This allows the increased flow from the development to pass downstream prior to the peak flow from the watershed. Detention in these situations can actually increase the watershed peak flow. Proper analysis of the watershed's characteristics is necessary.*

Test pits at site have revealed bedrock within 5 feet of the ground surface along Fishkill Avenue with outcrops along Conklin Street making underground detention or infiltration not feasible. The provided analysis shows that addition of a stormwater management system will cause increases in the peak runoff rate, therefore no stormwater management system is proposed.

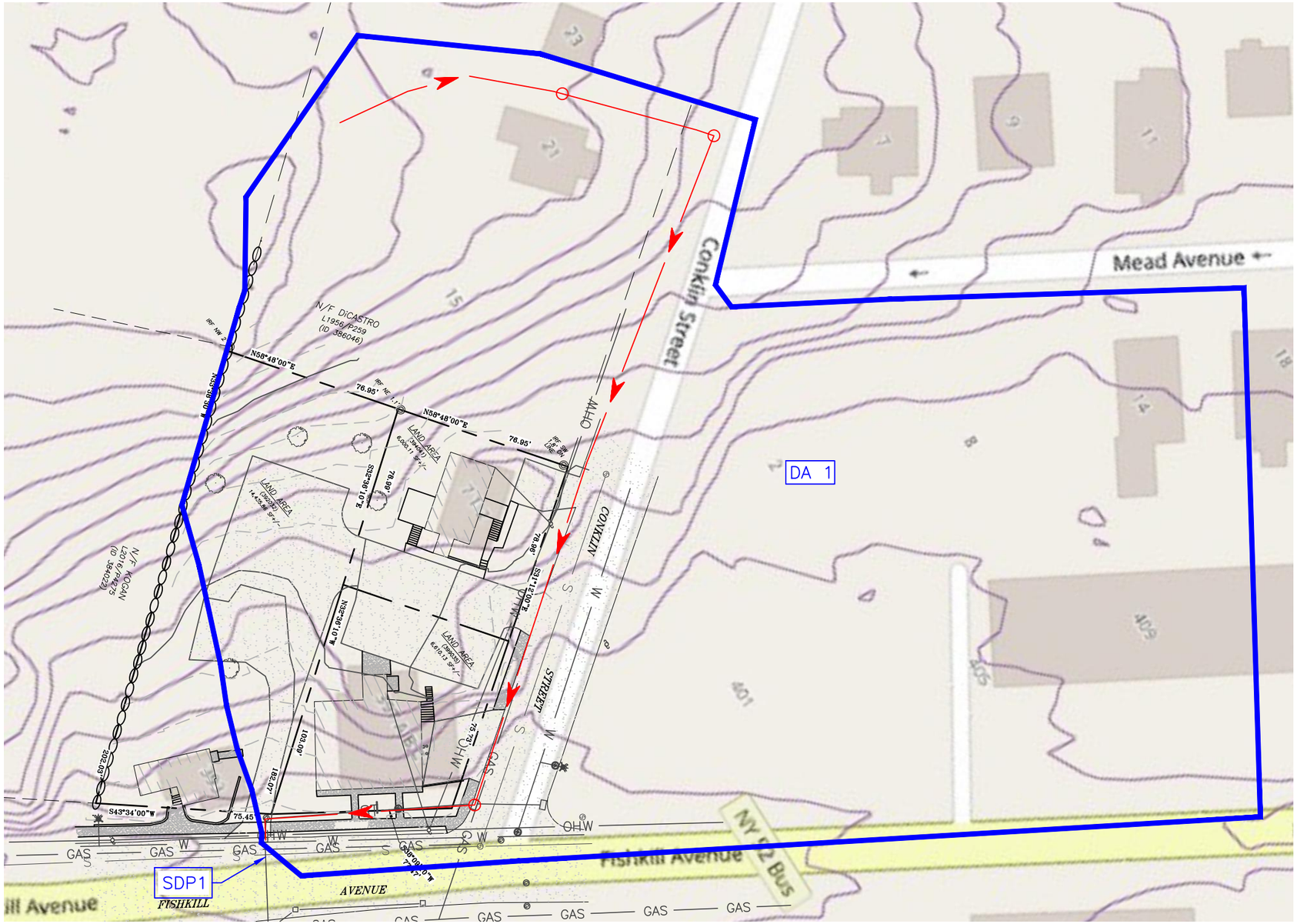
Storm drainage systems located on minor arterials, such as Fishkill Avenue, must be designed to the 5-year design flood frequency and the 25-year design flood if no overflow relief to the system is available. An analysis of the outlet pipe beneath Fishkill Avenue shows that it is capable of passing up to the 50-year design flood, including the slight increase due to the proposed development. Pipe sizing calculations are included in Appendix D.

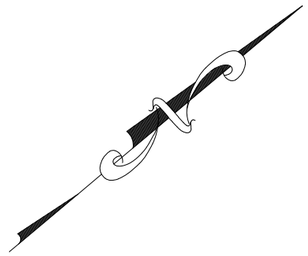
7.0 EROSION AND SEDIMENT CONTROL

Contractors shall adhere to the temporary and permanent erosion control measures as indicated on the plan. Repairs shall be made as necessary to remain in compliance with the New York State Standards and Specifications for Erosion and Sediment Control, 2016. The site plans include detailed erosion and sediment control practices for this project.

APPENDIX A

DRAINAGE MAPS





GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

DRAWN BY: CMB	CHECKED BY: MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

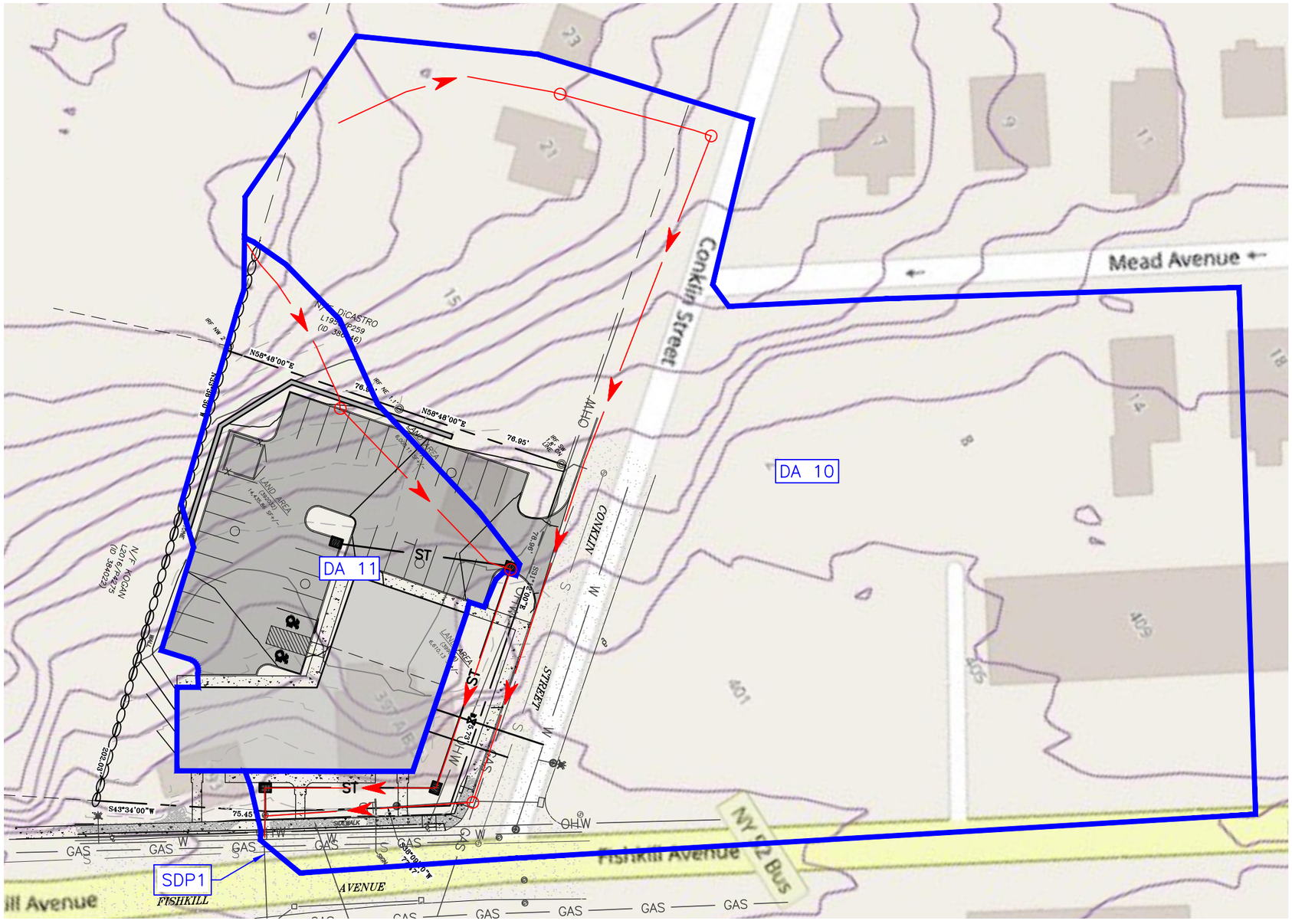
PRE-DEVELOPMENT CONDITIONS MAP

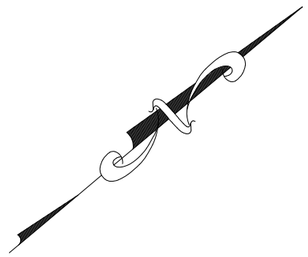
397 FISHKILL AVENUE

397 FISHKILL AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032, 399035, & 394041

JOB #:	2022:015
DATE:	12/27/22
SCALE:	1" = 50'
TITLE:	DR-1
SHEET:	1 OF 2

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION L





GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

1 inch = 50 ft.

DRAWN BY: CMB	CHECKED BY: MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

POST-DEVELOPMENT CONDITIONS MAP

397 FISHKILL AVENUE

397 FISHKILL AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032, 399035, & 394041

JOB #:	2022:015
DATE:	12/27/22
SCALE:	1" = 50'
TITLE:	DR-2
SHEET:	2 OF 2

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION L

APPENDIX B

SUPPORTING DATA

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New York
Location	
Longitude	73.953 degrees West
Latitude	41.510 degrees North
Elevation	0 feet
Date/Time	Fri, 16 Dec 2022 15:08:10 -0500

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.33	0.50	0.62	0.82	1.02	1.26	**1yr**	0.88	1.19	1.44	1.77	2.15	2.61	2.96	**1yr**	2.31	2.85	3.29	3.96	4.59	**1yr**
2yr	0.39	0.59	0.74	0.98	1.23	1.53	**2yr**	1.06	1.43	1.75	2.14	2.61	3.16	3.57	**2yr**	2.80	3.43	3.93	4.64	5.29	**2yr**
5yr	0.46	0.71	0.89	1.19	1.52	1.91	**5yr**	1.31	1.76	2.20	2.70	3.28	3.96	4.52	**5yr**	3.51	4.35	5.00	5.78	6.53	**5yr**
10yr	0.51	0.80	1.02	1.38	1.79	2.27	**10yr**	1.55	2.07	2.62	3.21	3.90	4.70	5.40	**10yr**	4.16	5.20	6.00	6.83	7.68	**10yr**
25yr	0.60	0.95	1.21	1.67	2.23	2.85	**25yr**	1.92	2.55	3.30	4.06	4.92	5.89	6.85	**25yr**	5.21	6.59	7.64	8.52	9.50	**25yr**
50yr	0.68	1.09	1.39	1.95	2.63	3.39	**50yr**	2.27	3.00	3.93	4.83	5.85	7.00	8.20	**50yr**	6.19	7.89	9.17	10.07	11.18	**50yr**
100yr	0.77	1.25	1.61	2.28	3.11	4.03	**100yr**	2.68	3.52	4.68	5.77	6.97	8.31	9.83	**100yr**	7.36	9.45	11.03	11.92	13.15	**100yr**
200yr	0.88	1.43	1.85	2.66	3.68	4.80	**200yr**	3.17	4.15	5.59	6.88	8.31	9.88	11.78	**200yr**	8.75	11.32	13.26	14.10	15.49	**200yr**
500yr	1.05	1.74	2.26	3.28	4.60	6.04	**500yr**	3.97	5.14	7.05	8.69	10.48	12.43	14.97	**500yr**	11.00	14.39	16.94	17.63	19.23	**500yr**

Lower Confidence Limits

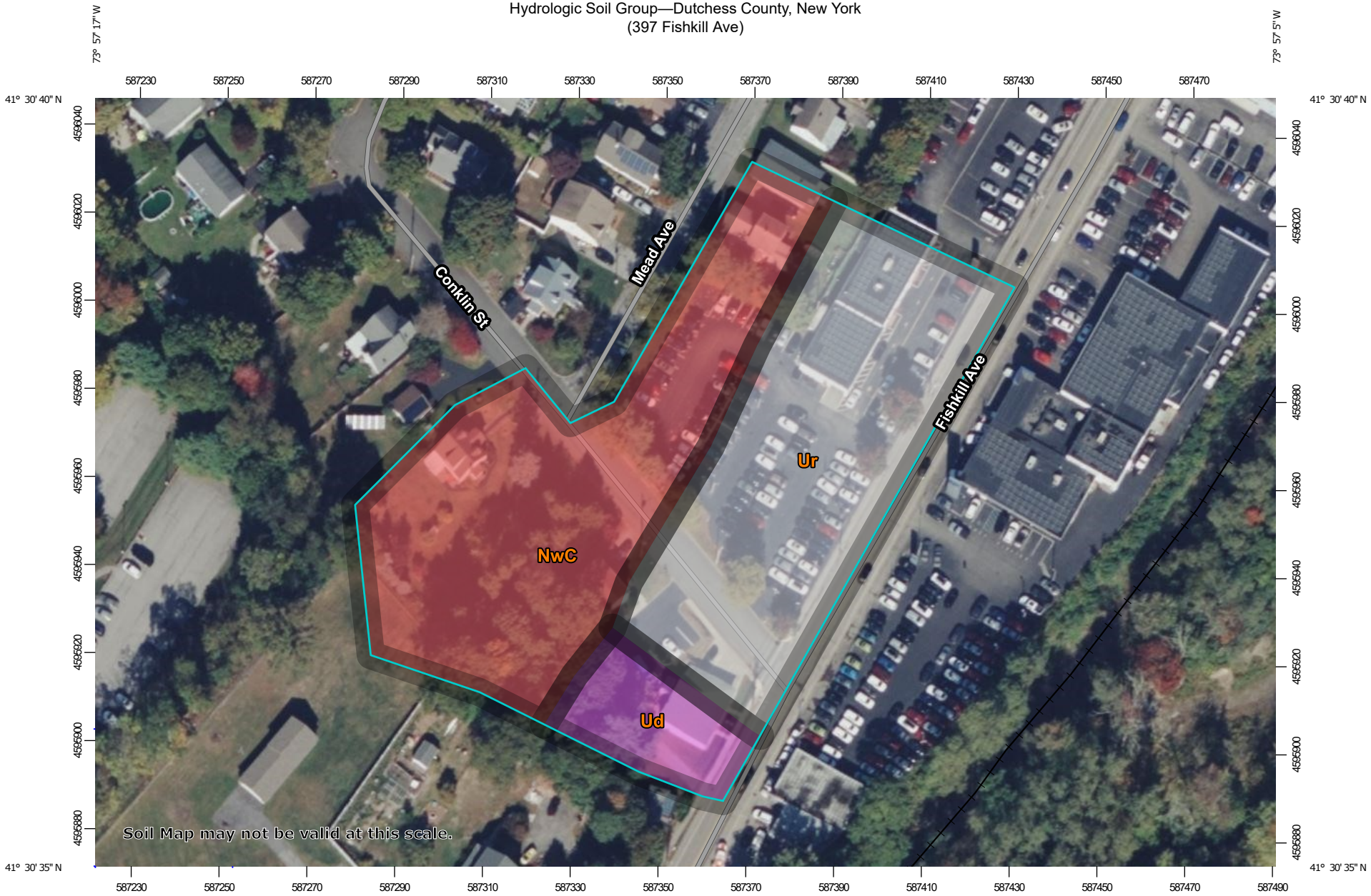
	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.43	0.53	0.71	0.88	1.08	**1yr**	0.76	1.06	1.24	1.60	2.01	2.07	2.35	**1yr**	1.83	2.26	2.48	3.21	4.15	**1yr**
2yr	0.37	0.58	0.71	0.96	1.19	1.41	**2yr**	1.02	1.38	1.61	2.05	2.58	3.07	3.45	**2yr**	2.72	3.31	3.78	4.47	5.13	**2yr**
5yr	0.42	0.65	0.81	1.11	1.41	1.65	**5yr**	1.22	1.62	1.88	2.41	3.00	3.65	4.16	**5yr**	3.23	4.00	4.56	5.27	6.06	**5yr**
10yr	0.47	0.72	0.89	1.25	1.62	1.85	**10yr**	1.39	1.81	2.11	2.71	3.37	4.12	4.81	**10yr**	3.65	4.63	5.24	5.96	6.87	**10yr**
25yr	0.54	0.82	1.03	1.47	1.93	2.13	**25yr**	1.66	2.09	2.45	3.04	3.93	4.83	5.83	**25yr**	4.27	5.60	6.29	6.99	8.12	**25yr**
50yr	0.61	0.92	1.15	1.65	2.22	2.38	**50yr**	1.92	2.32	2.77	3.40	4.42	5.46	6.75	**50yr**	4.83	6.49	7.22	7.88	9.23	**50yr**
100yr	0.68	1.03	1.30	1.87	2.57	2.67	**100yr**	2.22	2.61	3.12	3.79	4.99	6.13	7.83	**100yr**	5.42	7.53	8.30	8.86	10.49	**100yr**
200yr	0.78	1.17	1.48	2.14	2.99	2.98	**200yr**	2.58	2.92	3.53	4.25	5.64	6.82	9.12	**200yr**	6.04	8.77	9.53	9.96	11.94	**200yr**
500yr	0.93	1.38	1.77	2.58	3.66	3.48	**500yr**	3.16	3.40	4.17	4.95	6.65	7.87	11.15	**500yr**	6.96	10.72	11.46	11.59	14.18	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.36	0.56	0.68	0.91	1.12	1.36	**1yr**	0.97	1.33	1.53	1.96	2.42	2.82	3.19	**1yr**	2.50	3.07	3.55	4.24	4.93	**1yr**
2yr	0.40	0.62	0.76	1.04	1.28	1.54	**2yr**	1.10	1.50	1.74	2.25	2.80	3.33	3.70	**2yr**	2.95	3.56	4.10	4.83	5.48	**2yr**
5yr	0.49	0.76	0.94	1.29	1.64	1.95	**5yr**	1.42	1.91	2.25	2.89	3.66	4.26	4.89	**5yr**	3.77	4.70	5.42	6.30	7.02	**5yr**
10yr	0.58	0.89	1.11	1.54	2.00	2.36	**10yr**	1.72	2.31	2.74	3.53	4.49	5.20	6.02	**10yr**	4.60	5.79	6.73	7.71	8.49	**10yr**
25yr	0.72	1.10	1.37	1.95	2.57	3.04	**25yr**	2.22	2.97	3.57	4.74	5.88	6.77	7.95	**25yr**	5.99	7.64	8.97	10.09	10.95	**25yr**
50yr	0.85	1.29	1.61	2.32	3.12	3.70	**50yr**	2.69	3.62	4.35	5.84	7.21	8.29	9.80	**50yr**	7.34	9.42	11.17	12.39	13.28	**50yr**
100yr	1.01	1.52	1.91	2.76	3.78	4.50	**100yr**	3.26	4.39	5.31	7.21	8.84	10.15	12.07	**100yr**	8.98	11.60	13.92	15.22	16.11	**100yr**
200yr	1.19	1.79	2.27	3.28	4.58	5.45	**200yr**	3.95	5.33	6.48	8.88	10.83	12.44	14.88	**200yr**	11.01	14.31	17.35	18.72	19.55	**200yr**
500yr	1.49	2.22	2.86	4.15	5.90	7.05	**500yr**	5.09	6.89	8.43	11.74	14.18	16.32	19.61	**500yr**	14.45	18.85	23.25	24.65	25.25	**500yr**

Powered by ACIS
Northeast Regional Climate Center

Hydrologic Soil Group—Dutchess County, New York
(397 Fishkill Ave)



Map Scale: 1:1,230 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 15 30 60 90

Feet
0 50 100 200 300

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

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Lines

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Points

A
A/D
B
B/D
C
C/D
D
Not rated or not available

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 1:24,000.

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: Dutchess County, New York
Survey Area Data: Version 19, Sep 10, 2022

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

Date(s) aerial images were photographed: Oct 8, 2020—Oct 14, 2020

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
NwC	Nassau-Cardigan complex, rolling, very rocky	D	1.3	47.5%
Ud	Udorthents, smoothed	A	0.2	8.7%
Ur	Urban land		1.2	43.8%
Totals for Area of Interest			**2.8**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

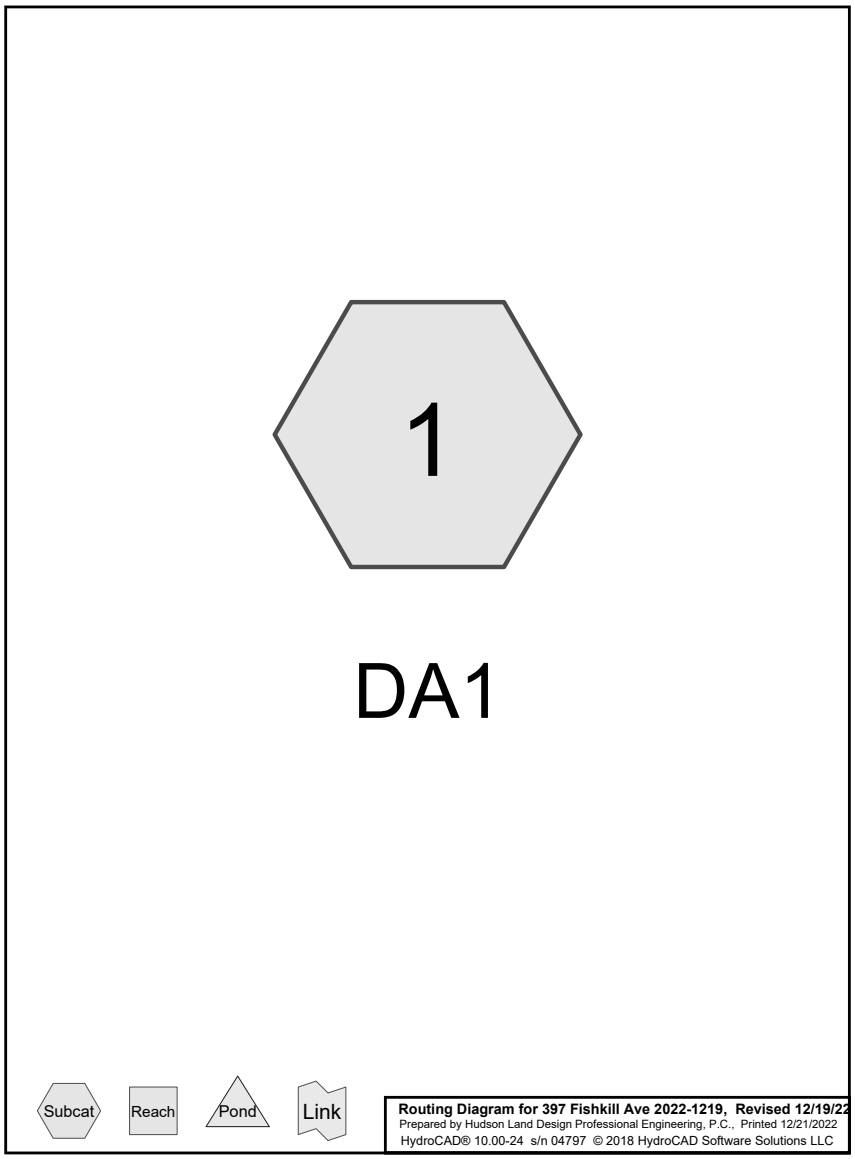
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX C

HYDROLOGIC MODELING



Summary for Subcatchment 1: DA1

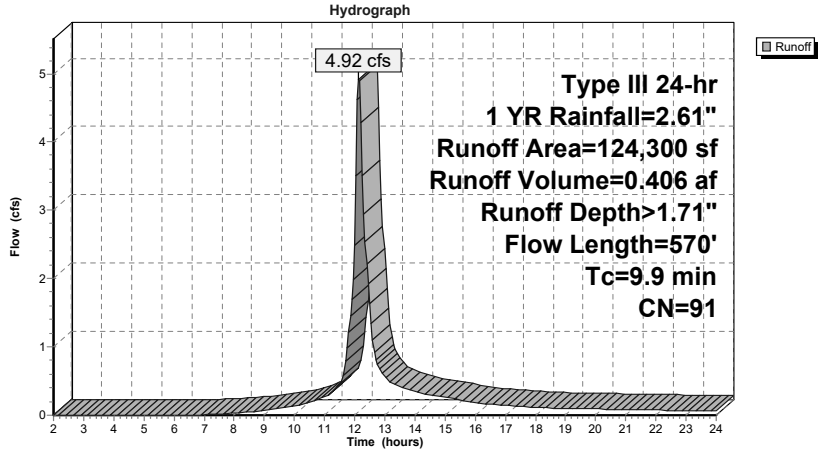
Runoff = 4.92 cfs @ 12.14 hrs, Volume= 0.406 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 YR Rainfall=2.61"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

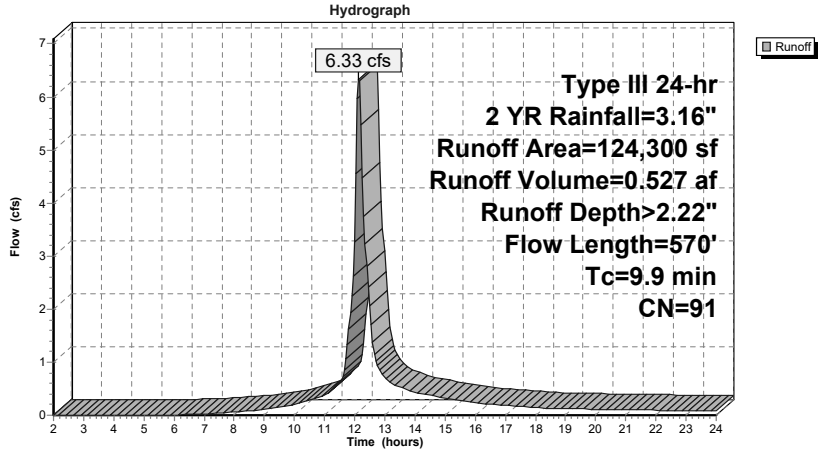
Runoff = 6.33 cfs @ 12.14 hrs, Volume= 0.527 af, Depth> 2.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.16"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

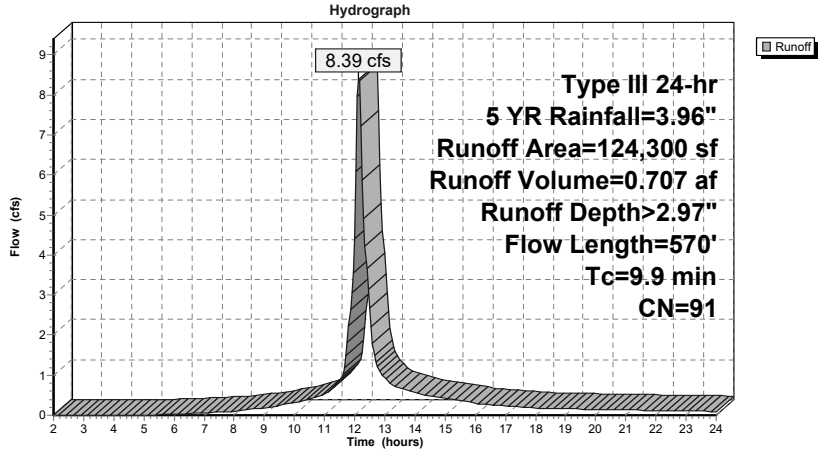
Runoff = 8.39 cfs @ 12.14 hrs, Volume= 0.707 af, Depth> 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 5 YR Rainfall=3.96"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

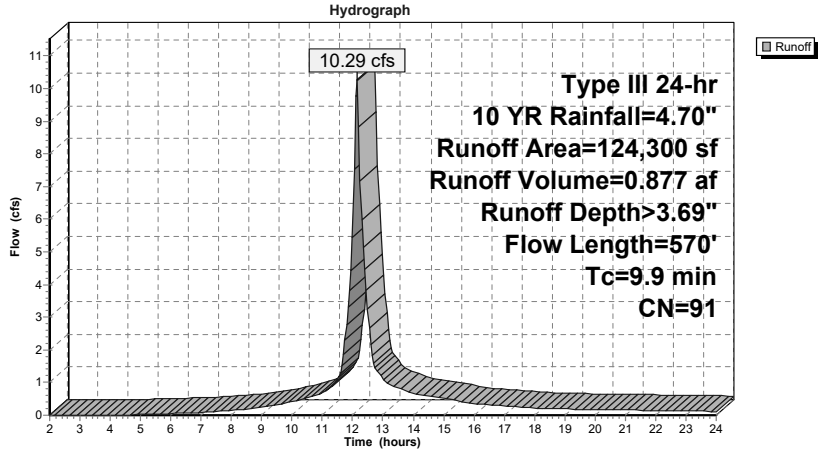
Runoff = 10.29 cfs @ 12.14 hrs, Volume= 0.877 af, Depth> 3.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YR Rainfall=4.70"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

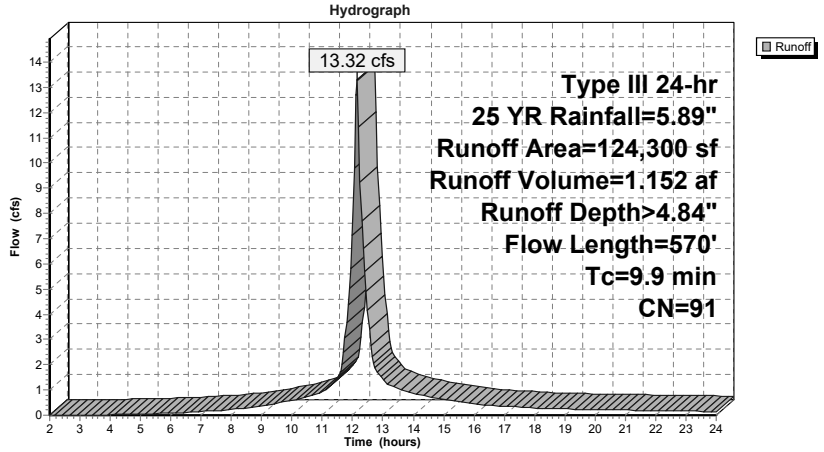
Runoff = 13.32 cfs @ 12.14 hrs, Volume= 1.152 af, Depth> 4.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=5.89"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

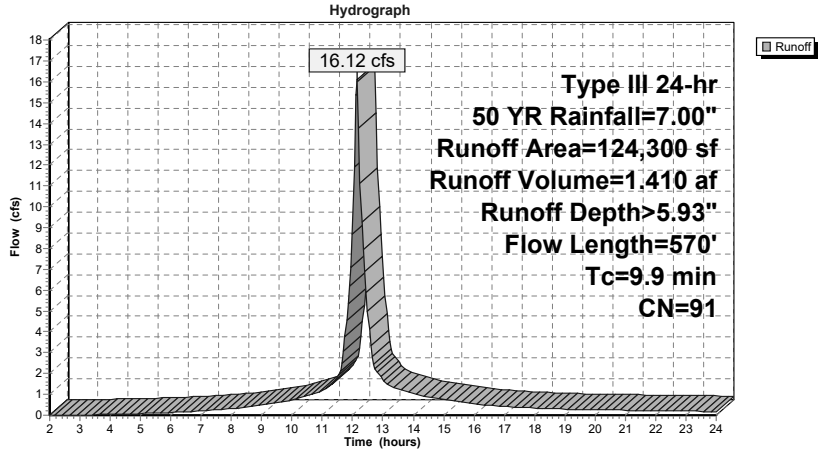
Runoff = 16.12 cfs @ 12.14 hrs, Volume= 1.410 af, Depth> 5.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.00"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

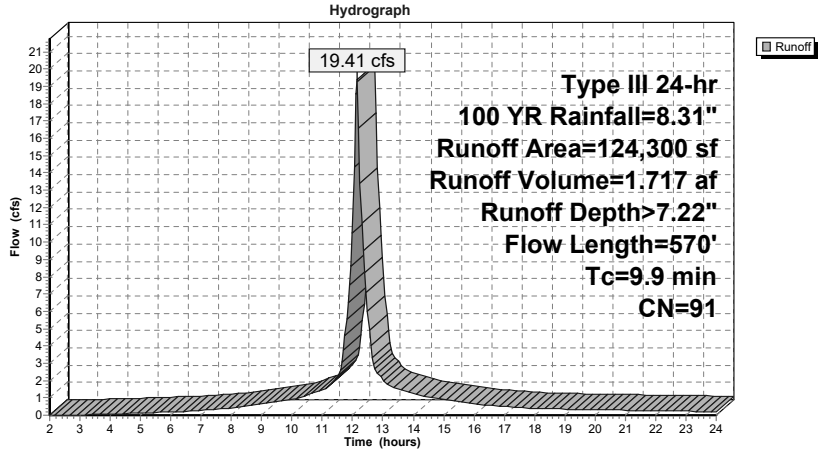
Runoff = 19.41 cfs @ 12.14 hrs, Volume= 1.717 af, Depth> 7.22"

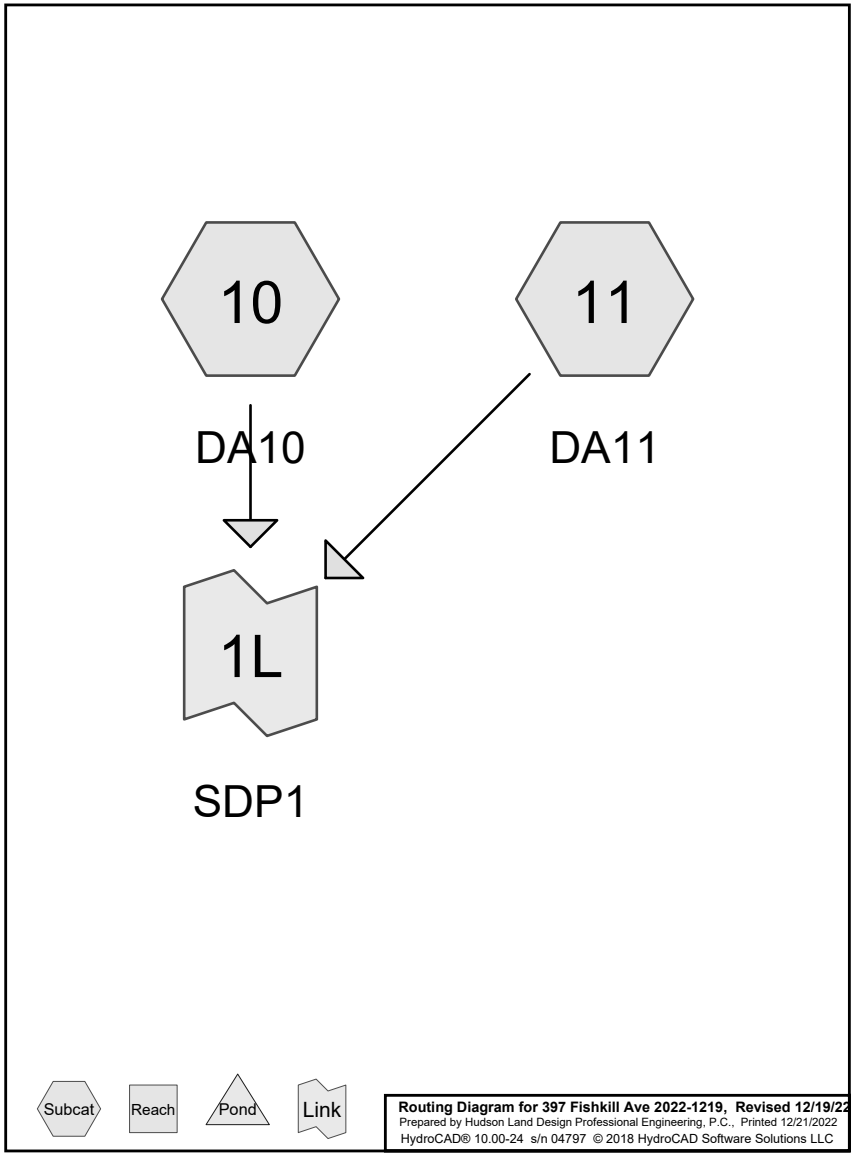
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.31"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1





Summary for Subcatchment 10: DA10

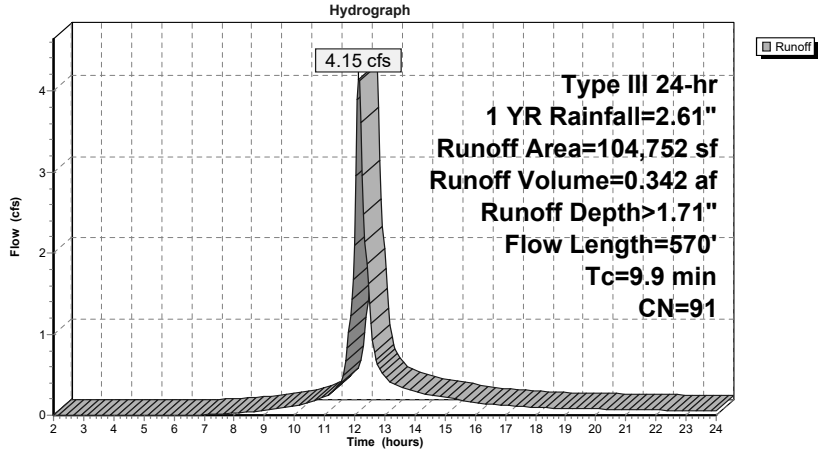
Runoff = 4.15 cfs @ 12.14 hrs, Volume= 0.342 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 YR Rainfall=2.61"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

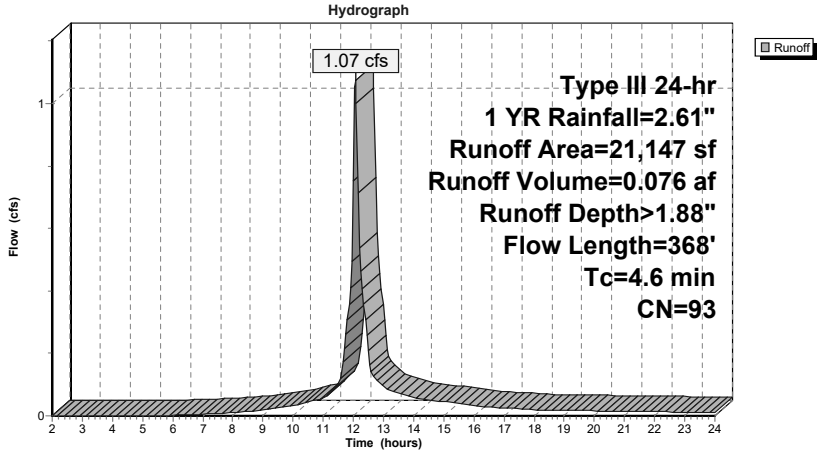
Runoff = 1.07 cfs @ 12.07 hrs, Volume= 0.076 af, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 YR Rainfall=2.61"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

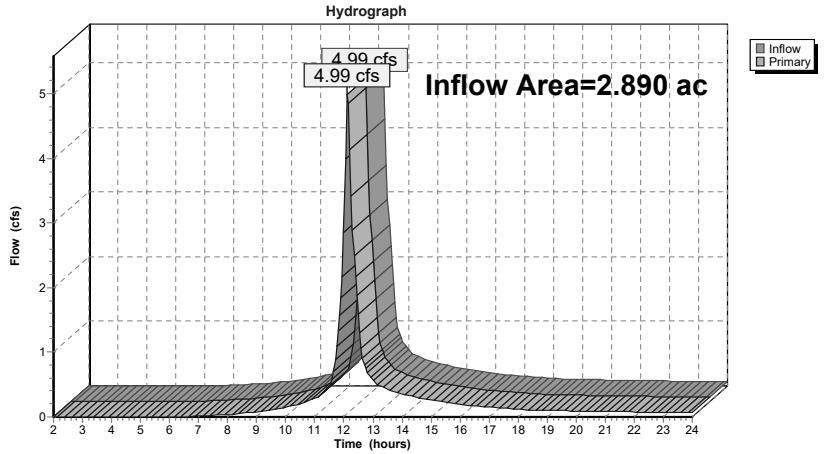


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 1.74" for 1 YR event
Inflow = 4.99 cfs @ 12.12 hrs, Volume= 0.418 af
Primary = 4.99 cfs @ 12.12 hrs, Volume= 0.418 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

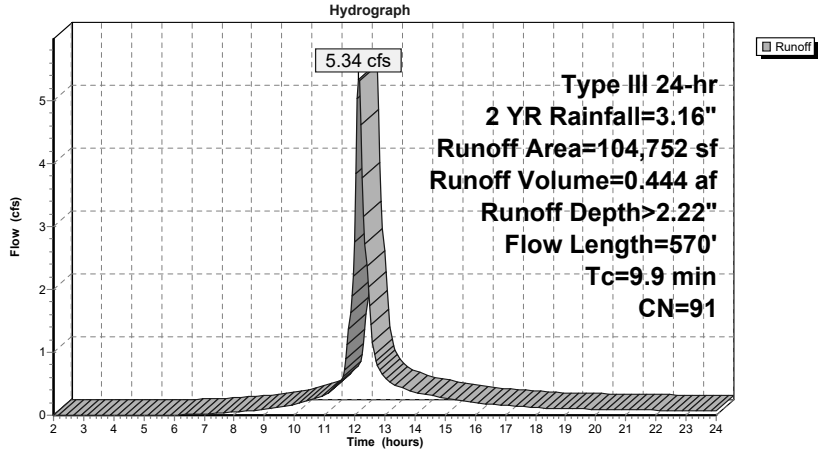
Runoff = 5.34 cfs @ 12.14 hrs, Volume= 0.444 af, Depth> 2.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.16"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

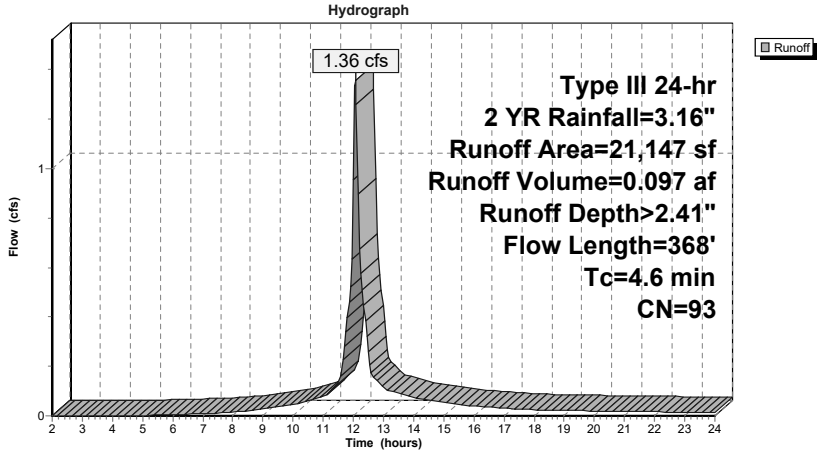
Runoff = 1.36 cfs @ 12.07 hrs, Volume= 0.097 af, Depth> 2.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.16"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

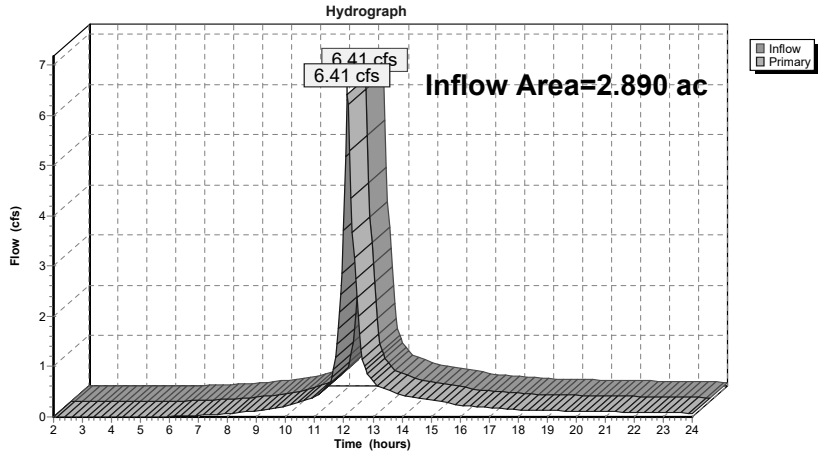


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 2.25" for 2 YR event
Inflow = 6.41 cfs @ 12.12 hrs, Volume= 0.542 af
Primary = 6.41 cfs @ 12.12 hrs, Volume= 0.542 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

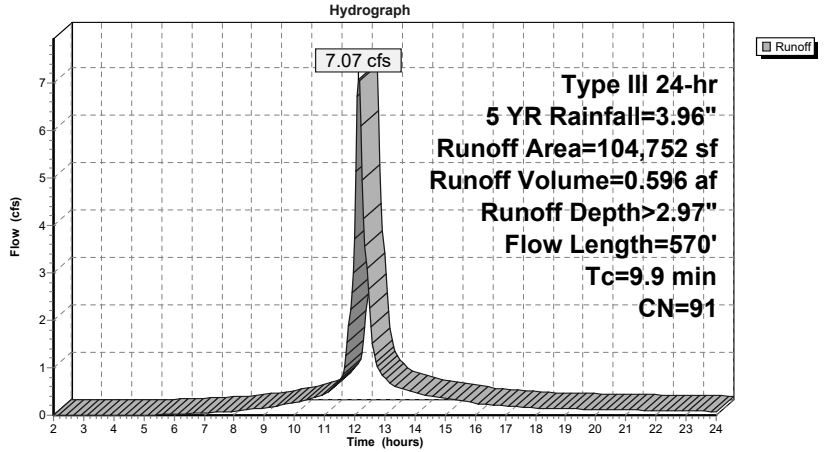
Runoff = 7.07 cfs @ 12.14 hrs, Volume= 0.596 af, Depth> 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 5 YR Rainfall=3.96"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

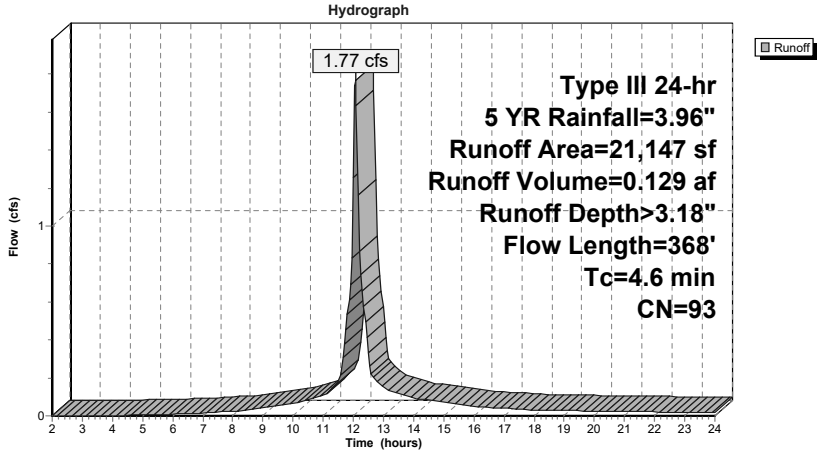
Runoff = 1.77 cfs @ 12.07 hrs, Volume= 0.129 af, Depth> 3.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 5 YR Rainfall=3.96"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

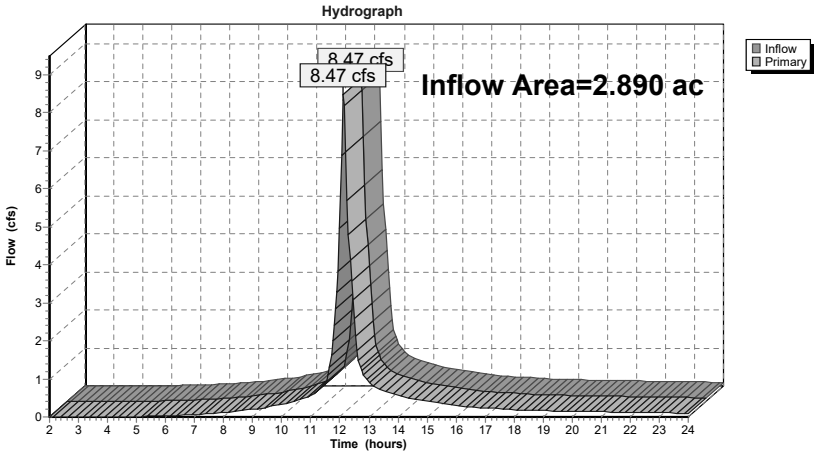


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 3.01" for 5 YR event
Inflow = 8.47 cfs @ 12.12 hrs, Volume= 0.725 af
Primary = 8.47 cfs @ 12.12 hrs, Volume= 0.725 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

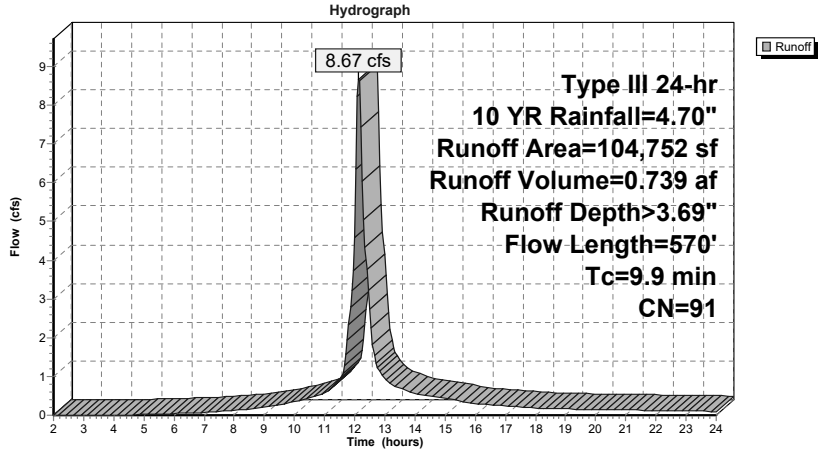
Runoff = 8.67 cfs @ 12.14 hrs, Volume= 0.739 af, Depth> 3.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YR Rainfall=4.70"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

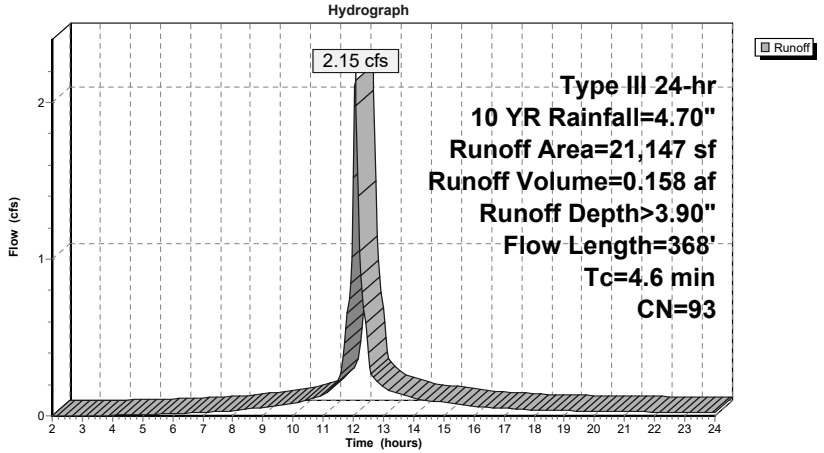
Runoff = 2.15 cfs @ 12.07 hrs, Volume= 0.158 af, Depth> 3.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YR Rainfall=4.70"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

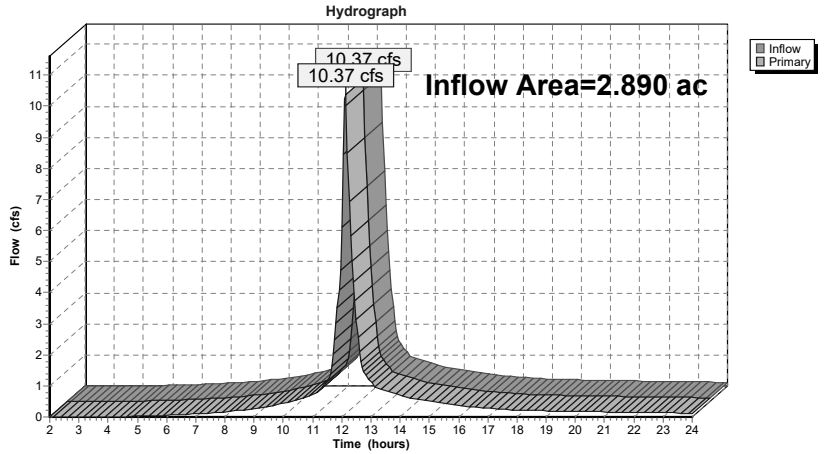


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 3.72" for 10 YR event
Inflow = 10.37 cfs @ 12.12 hrs, Volume= 0.897 af
Primary = 10.37 cfs @ 12.12 hrs, Volume= 0.897 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

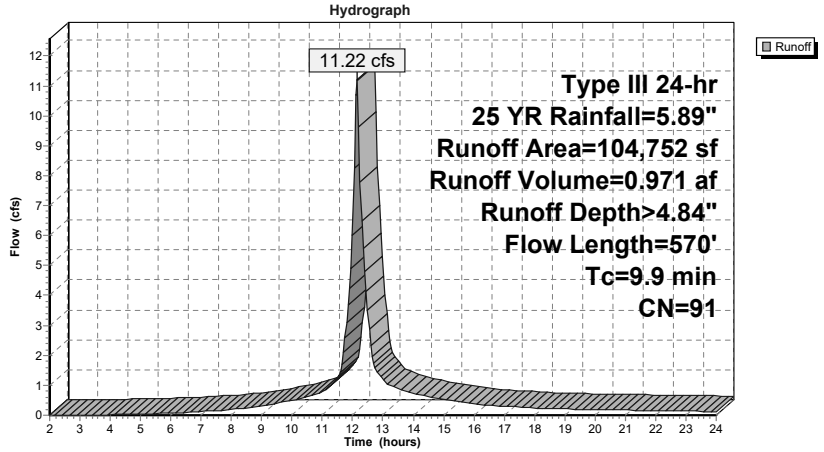
Runoff = 11.22 cfs @ 12.14 hrs, Volume= 0.971 af, Depth> 4.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=5.89"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

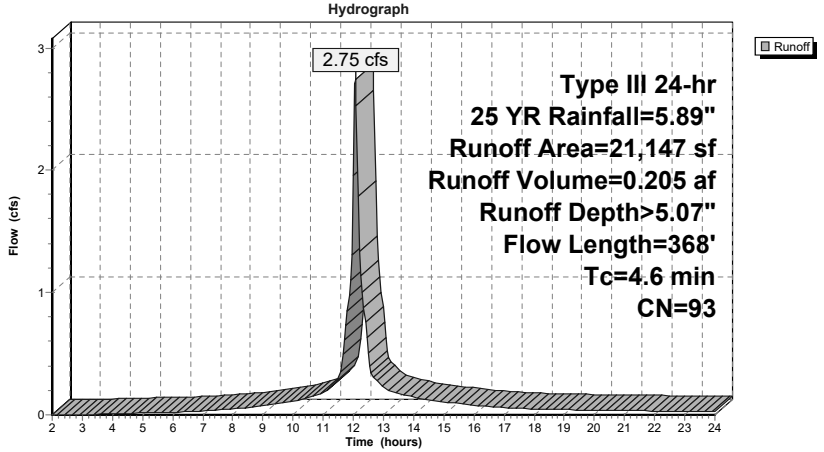
Runoff = 2.75 cfs @ 12.07 hrs, Volume= 0.205 af, Depth> 5.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=5.89"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

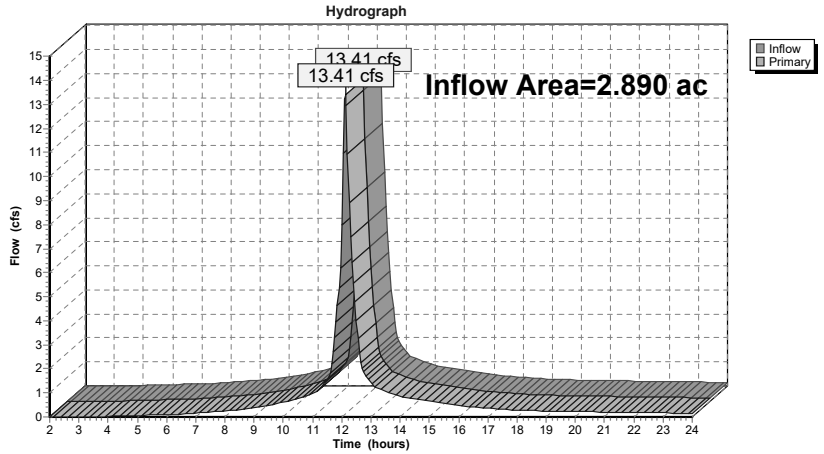


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 4.88" for 25 YR event
Inflow = 13.41 cfs @ 12.12 hrs, Volume= 1.176 af
Primary = 13.41 cfs @ 12.12 hrs, Volume= 1.176 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

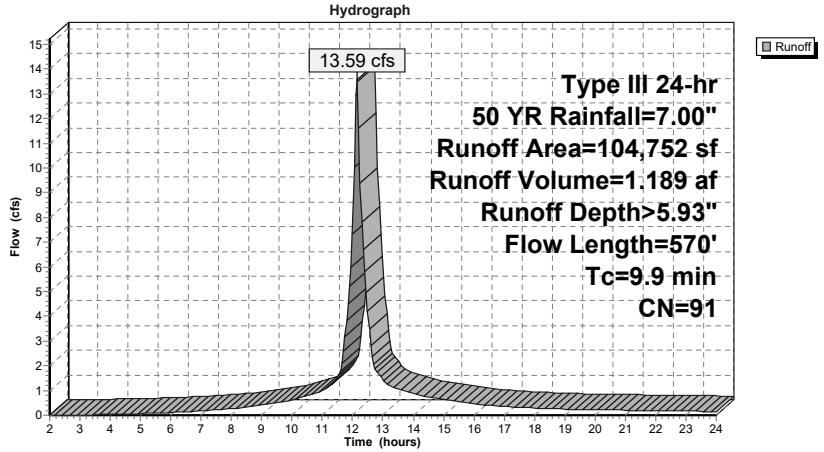
Runoff = 13.59 cfs @ 12.14 hrs, Volume= 1.189 af, Depth> 5.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.00"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

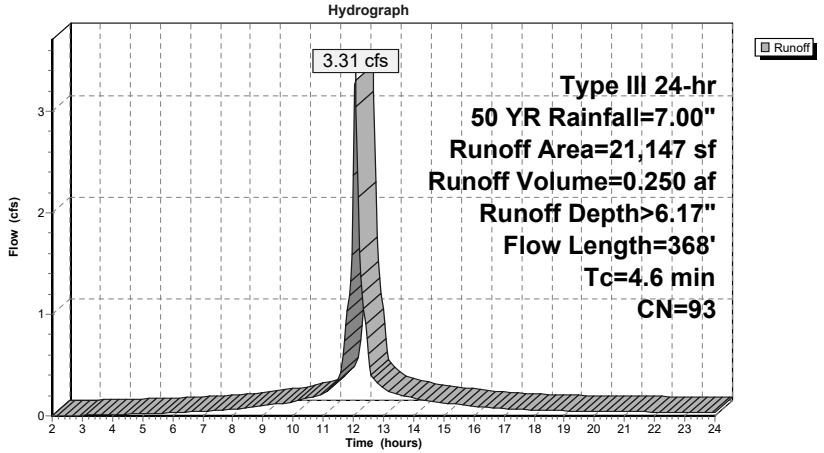
Runoff = 3.31 cfs @ 12.07 hrs, Volume= 0.250 af, Depth> 6.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.00"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

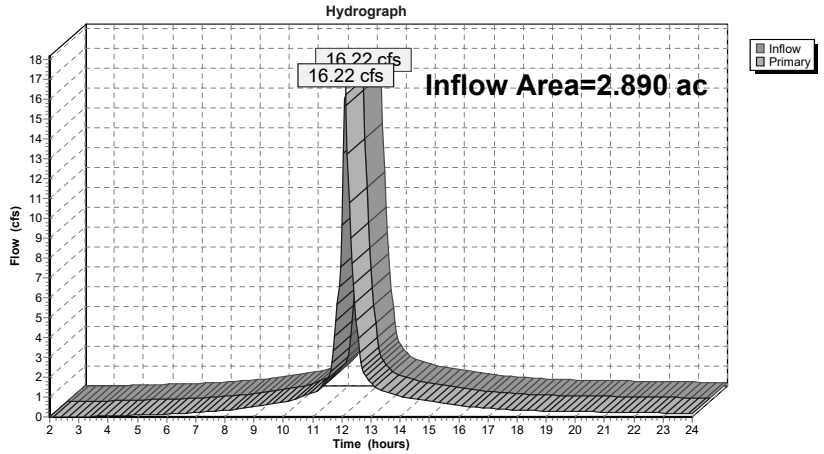


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 5.97" for 50 YR event
Inflow = 16.22 cfs @ 12.12 hrs, Volume= 1.438 af
Primary = 16.22 cfs @ 12.12 hrs, Volume= 1.438 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

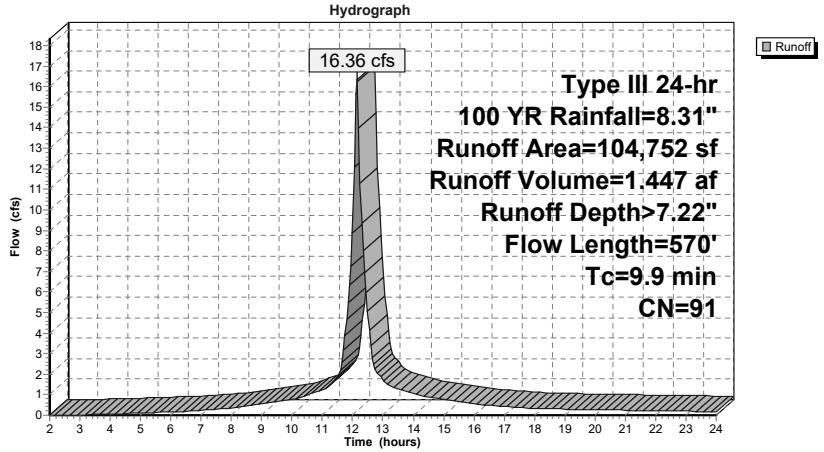
Runoff = 16.36 cfs @ 12.14 hrs, Volume= 1.447 af, Depth> 7.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.31"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

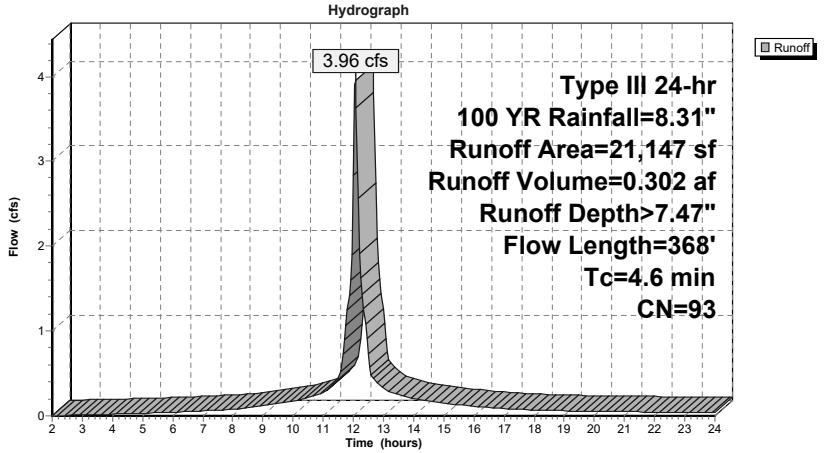
Runoff = 3.96 cfs @ 12.06 hrs, Volume= 0.302 af, Depth> 7.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.31"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

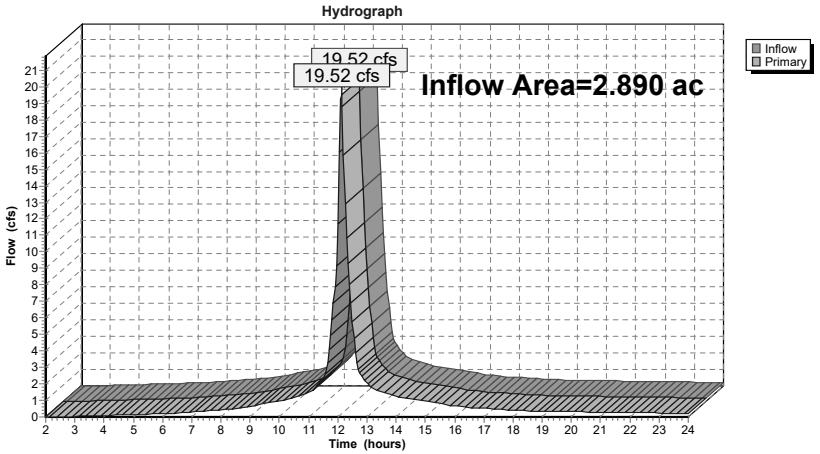


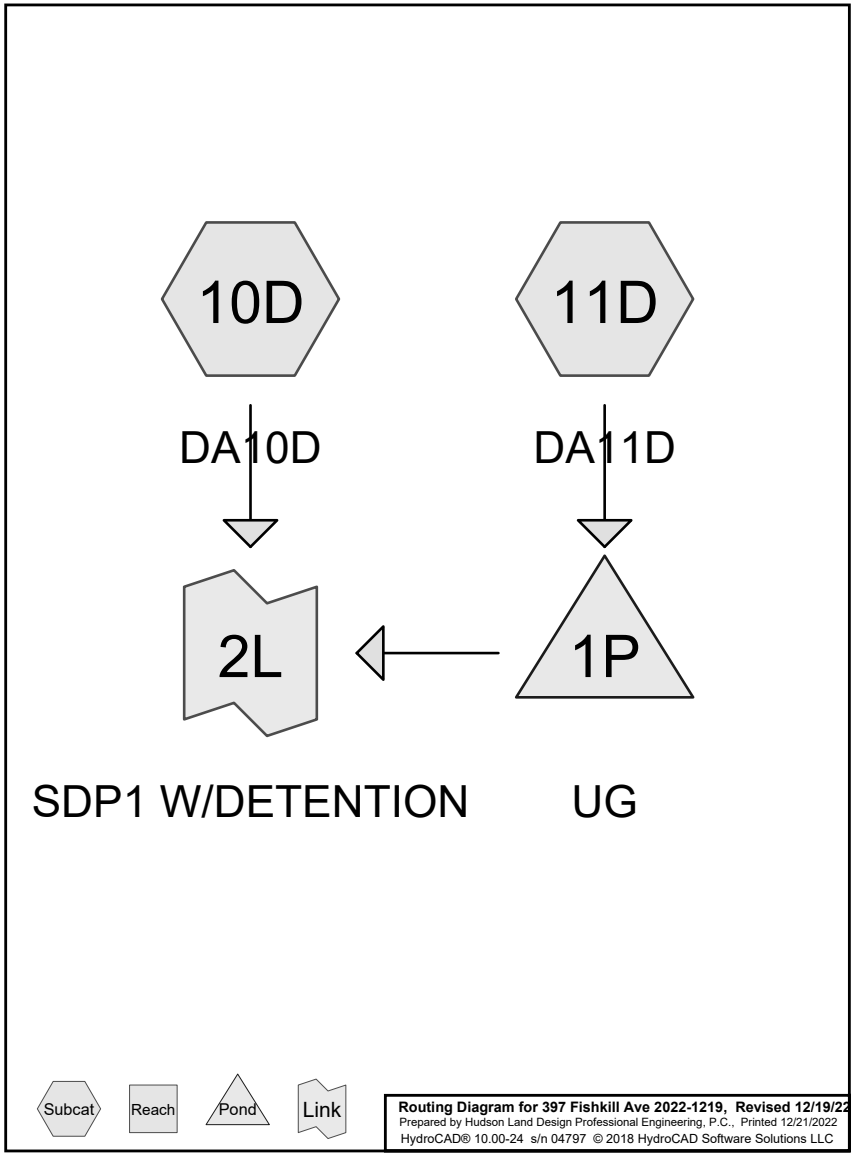
Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 7.26" for 100 YR event
Inflow = 19.52 cfs @ 12.12 hrs, Volume= 1.749 af
Primary = 19.52 cfs @ 12.12 hrs, Volume= 1.749 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1





Summary for Subcatchment 10D: DA10D

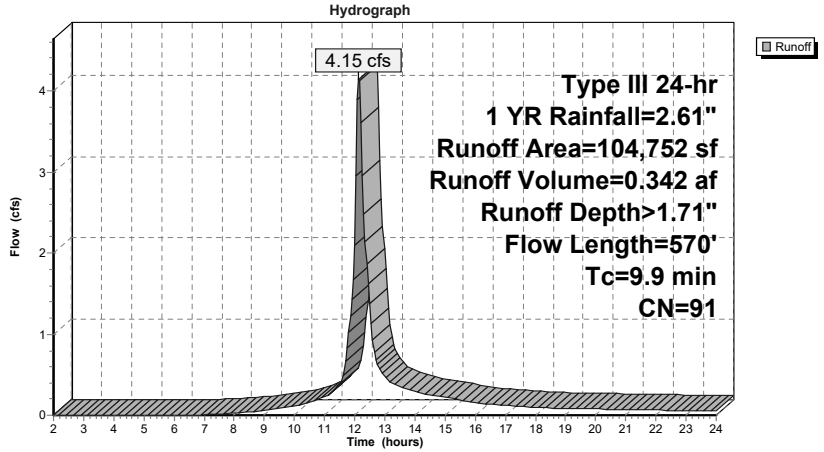
Runoff = 4.15 cfs @ 12.14 hrs, Volume= 0.342 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 YR Rainfall=2.61"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

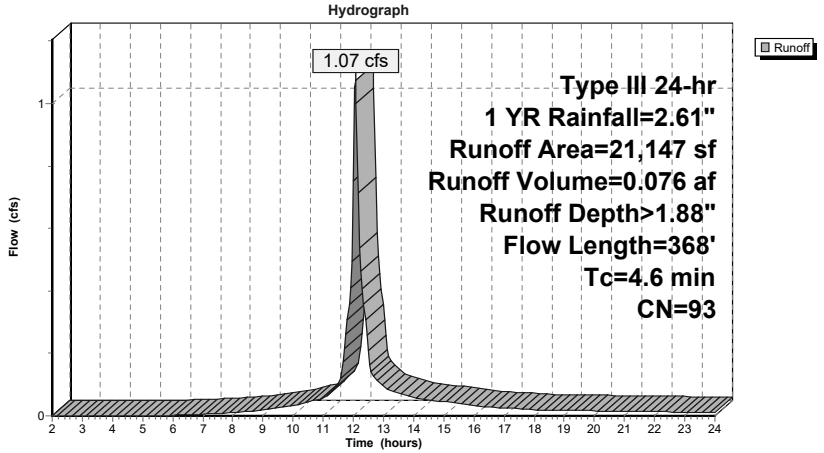
Runoff = 1.07 cfs @ 12.07 hrs, Volume= 0.076 af, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 YR Rainfall=2.61"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 1.88" for 1 YR event
Inflow = 1.07 cfs @ 12.07 hrs, Volume= 0.076 af
Outflow = 1.00 cfs @ 12.10 hrs, Volume= 0.074 af, Atten= 7%, Lag= 2.2 min
Primary = 1.00 cfs @ 12.10 hrs, Volume= 0.074 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 488.41' @ 12.10 hrs Surf.Area= 379 sf Storage= 272 cf

Plug-Flow detention time= 29.9 min calculated for 0.074 af (97% of inflow)
Center-of-Mass det. time= 14.0 min (812.3 - 798.3)

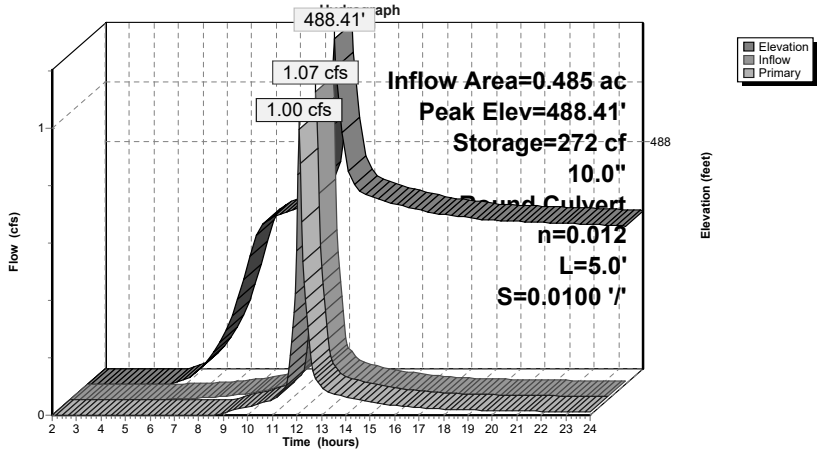
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

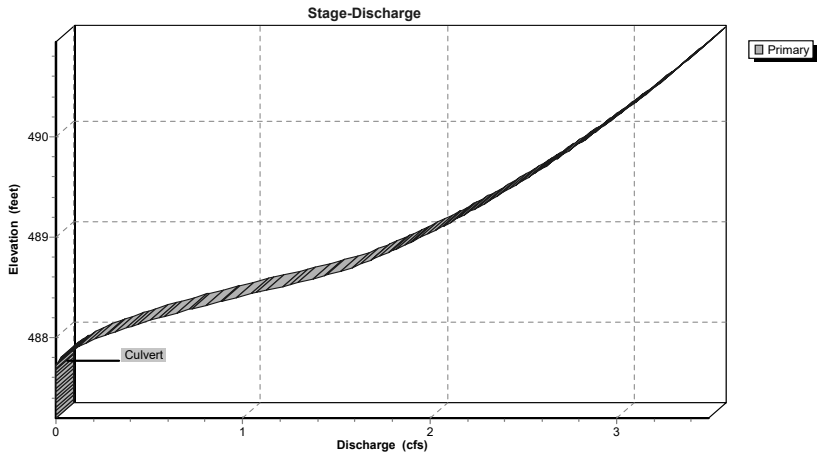
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=0.99 cfs @ 12.10 hrs HW=488.41' (Free Discharge)
└**1=Culvert** (Barrel Controls 0.99 cfs @ 2.68 fps)

Pond 1P: UG



Pond 1P: UG

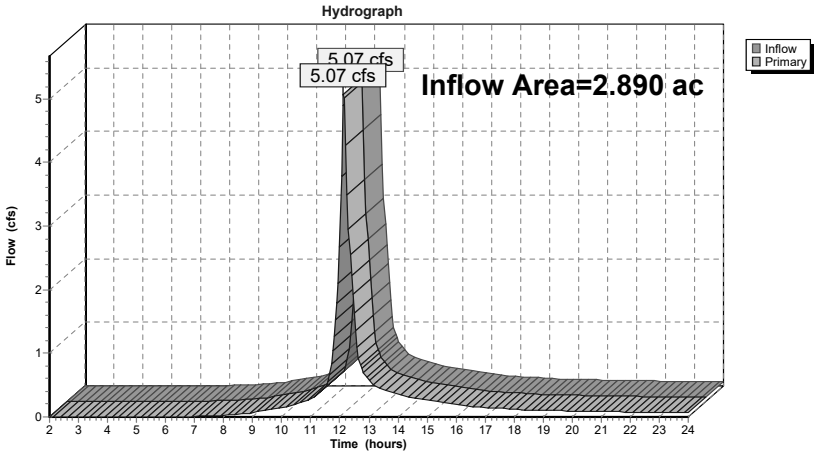


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 1.73" for 1 YR event
Inflow = 5.07 cfs @ 12.13 hrs, Volume= 0.416 af
Primary = 5.07 cfs @ 12.13 hrs, Volume= 0.416 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

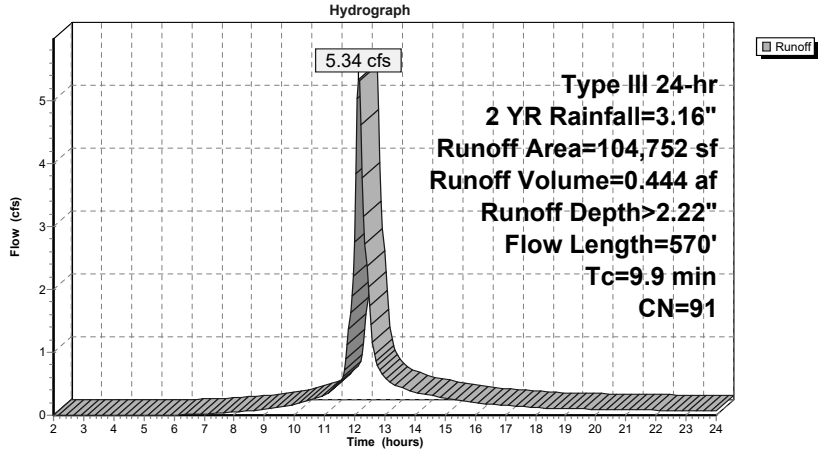
Runoff = 5.34 cfs @ 12.14 hrs, Volume= 0.444 af, Depth> 2.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.16"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

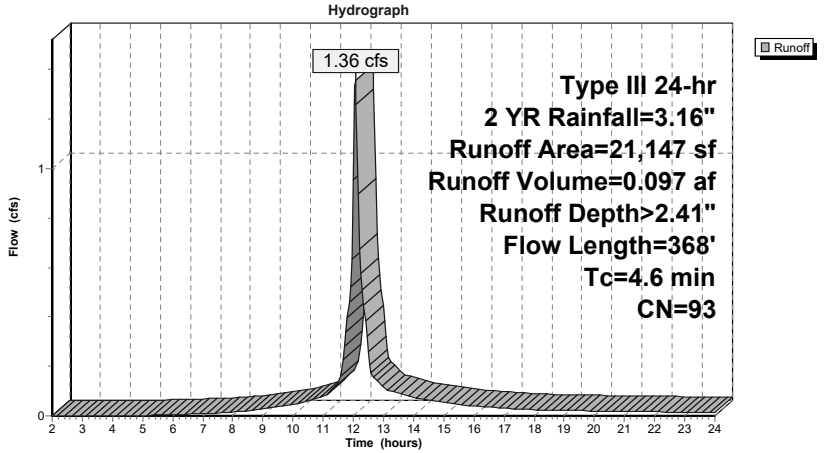
Runoff = 1.36 cfs @ 12.07 hrs, Volume= 0.097 af, Depth> 2.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.16"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 2.41" for 2 YR event
Inflow = 1.36 cfs @ 12.07 hrs, Volume= 0.097 af
Outflow = 1.26 cfs @ 12.10 hrs, Volume= 0.095 af, Atten= 7%, Lag= 2.1 min
Primary = 1.26 cfs @ 12.10 hrs, Volume= 0.095 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 488.54' @ 12.10 hrs Surf.Area= 379 sf Storage= 304 cf

Plug-Flow detention time= 25.8 min calculated for 0.095 af (98% of inflow)
Center-of-Mass det. time= 12.6 min (804.1 - 791.5)

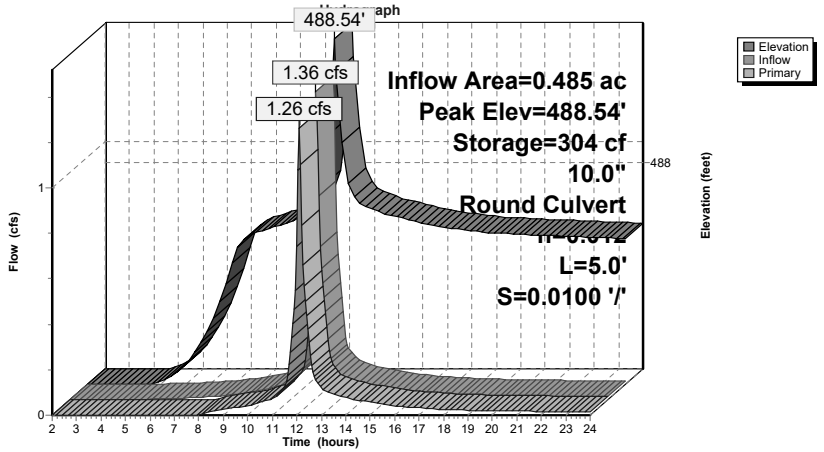
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

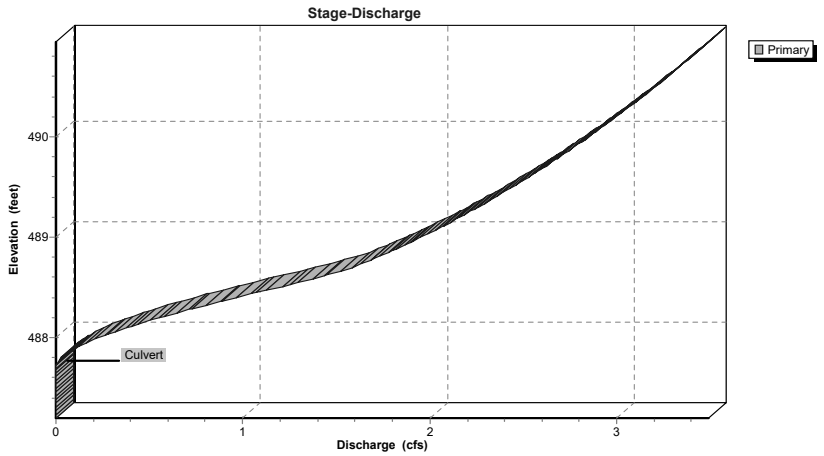
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=1.26 cfs @ 12.10 hrs HW=488.53' (Free Discharge)
└**1=Culvert** (Barrel Controls 1.26 cfs @ 2.86 fps)

Pond 1P: UG



Pond 1P: UG

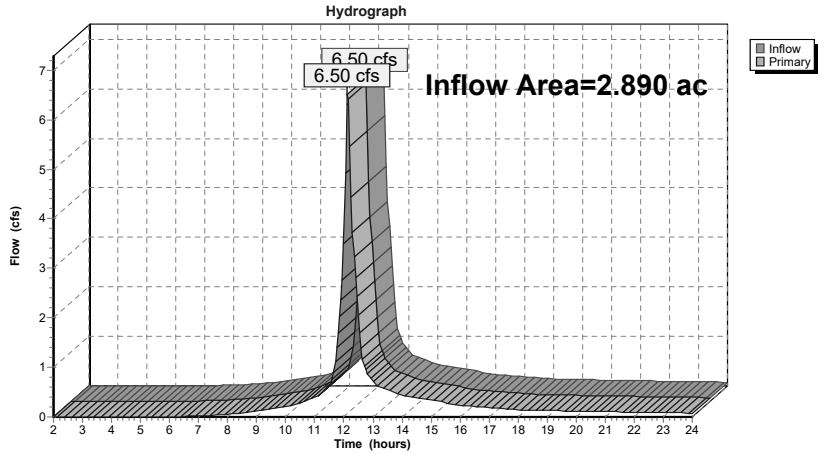


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 2.24" for 2 YR event
Inflow = 6.50 cfs @ 12.13 hrs, Volume= 0.540 af
Primary = 6.50 cfs @ 12.13 hrs, Volume= 0.540 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

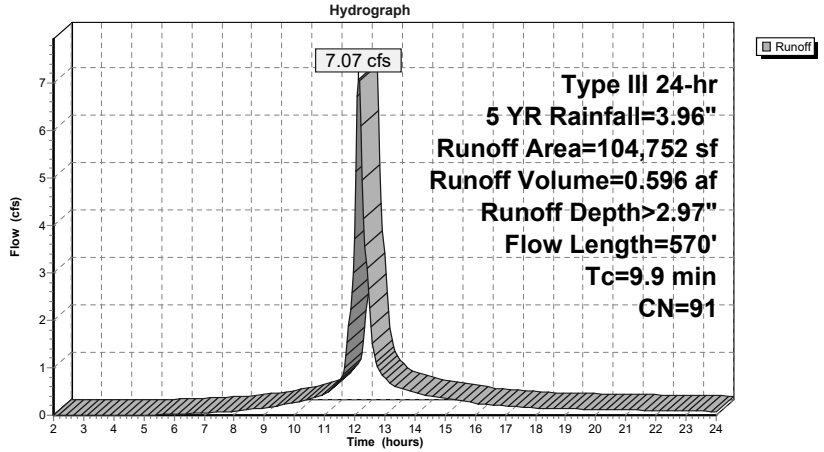
Runoff = 7.07 cfs @ 12.14 hrs, Volume= 0.596 af, Depth> 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 5 YR Rainfall=3.96"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

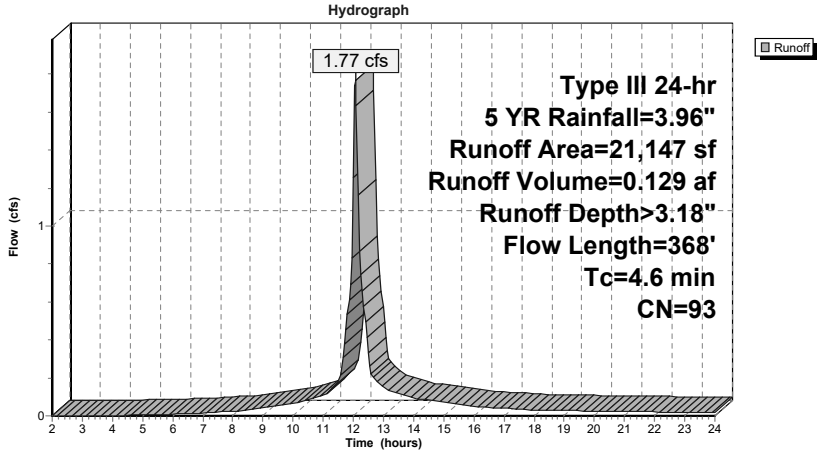
Runoff = 1.77 cfs @ 12.07 hrs, Volume= 0.129 af, Depth> 3.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 5 YR Rainfall=3.96"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 3.18" for 5 YR event
Inflow = 1.77 cfs @ 12.07 hrs, Volume= 0.129 af
Outflow = 1.62 cfs @ 12.10 hrs, Volume= 0.126 af, Atten= 9%, Lag= 2.2 min
Primary = 1.62 cfs @ 12.10 hrs, Volume= 0.126 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 488.73' @ 12.10 hrs Surf.Area= 379 sf Storage= 353 cf

Plug-Flow detention time= 21.6 min calculated for 0.126 af (98% of inflow)
Center-of-Mass det. time= 11.2 min (795.1 - 783.9)

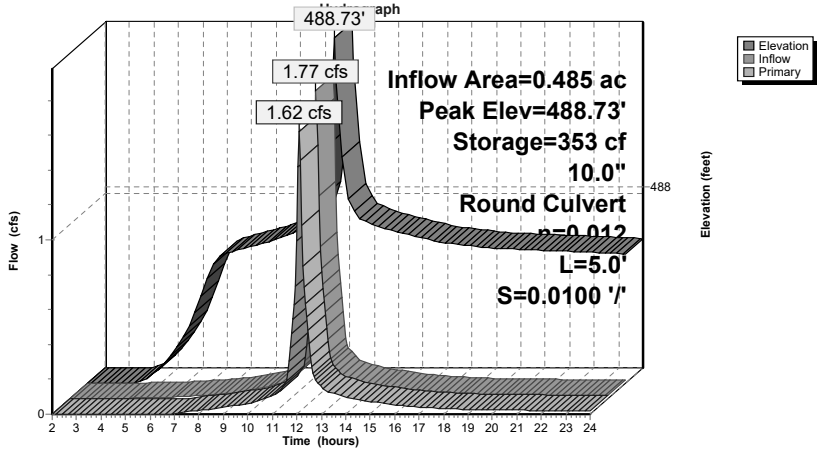
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

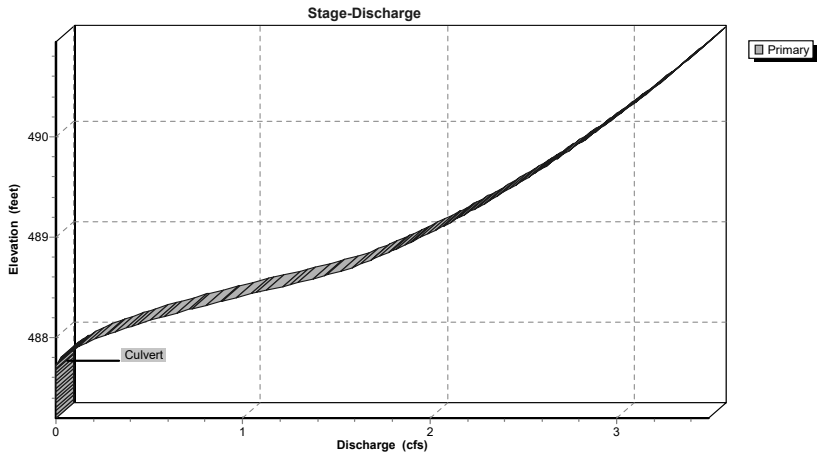
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=1.61 cfs @ 12.10 hrs HW=488.72' (Free Discharge)
└**1=Culvert** (Inlet Controls 1.61 cfs @ 2.96 fps)

Pond 1P: UG



Pond 1P: UG

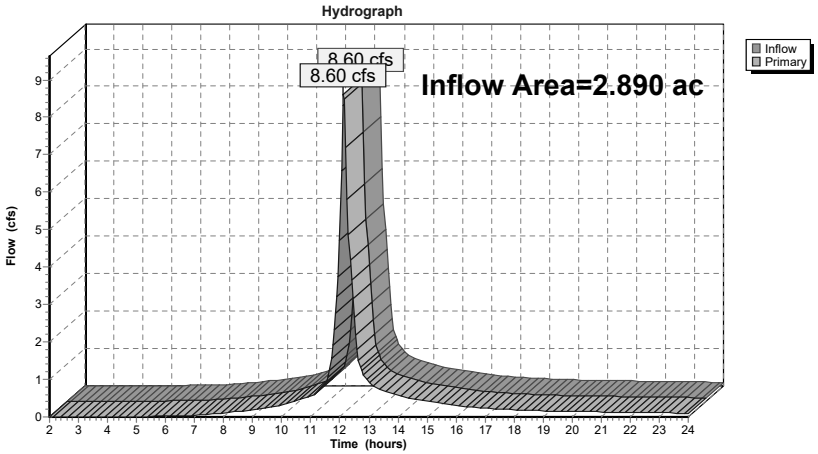


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 3.00" for 5 YR event
Inflow = 8.60 cfs @ 12.13 hrs, Volume= 0.723 af
Primary = 8.60 cfs @ 12.13 hrs, Volume= 0.723 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

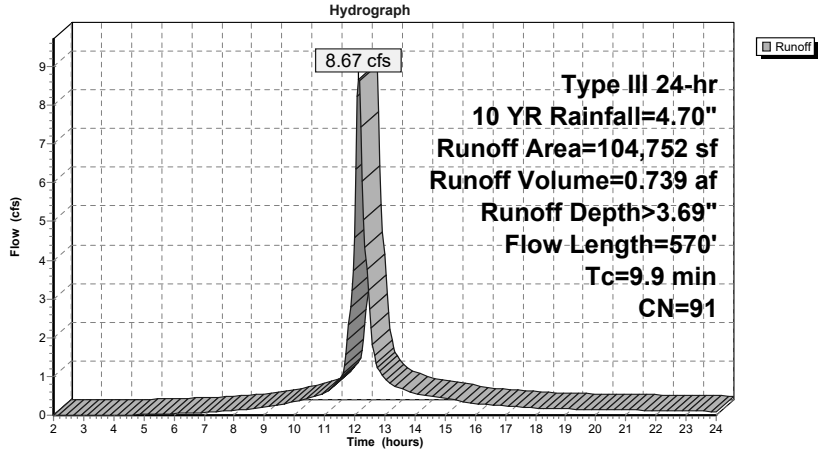
Runoff = 8.67 cfs @ 12.14 hrs, Volume= 0.739 af, Depth> 3.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YR Rainfall=4.70"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

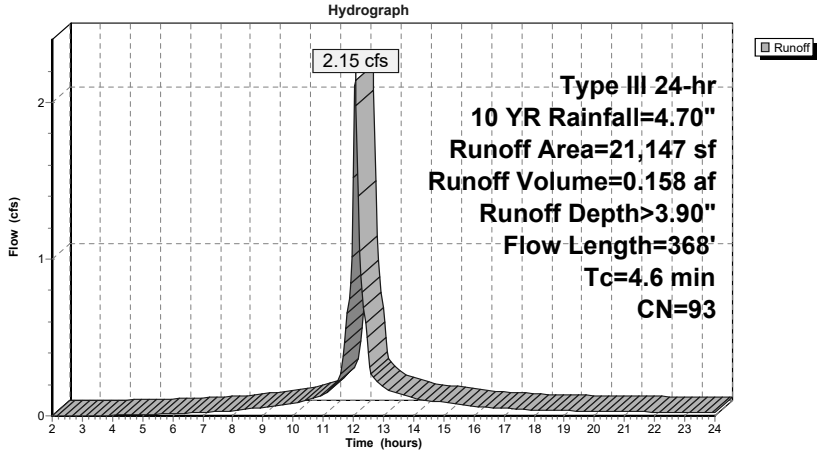
Runoff = 2.15 cfs @ 12.07 hrs, Volume= 0.158 af, Depth> 3.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YR Rainfall=4.70"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 3.90" for 10 YR event
Inflow = 2.15 cfs @ 12.07 hrs, Volume= 0.158 af
Outflow = 1.90 cfs @ 12.11 hrs, Volume= 0.156 af, Atten= 11%, Lag= 2.5 min
Primary = 1.90 cfs @ 12.11 hrs, Volume= 0.156 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 488.96' @ 12.11 hrs Surf.Area= 379 sf Storage= 412 cf

Plug-Flow detention time= 18.9 min calculated for 0.155 af (98% of inflow)
Center-of-Mass det. time= 10.2 min (788.7 - 778.5)

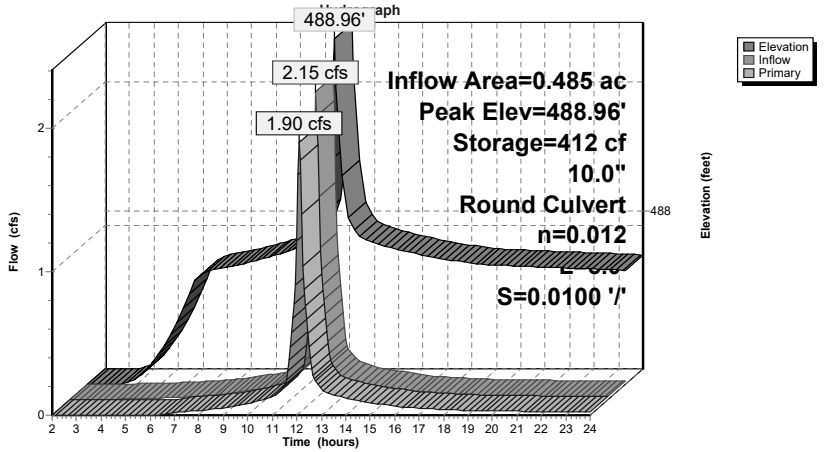
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

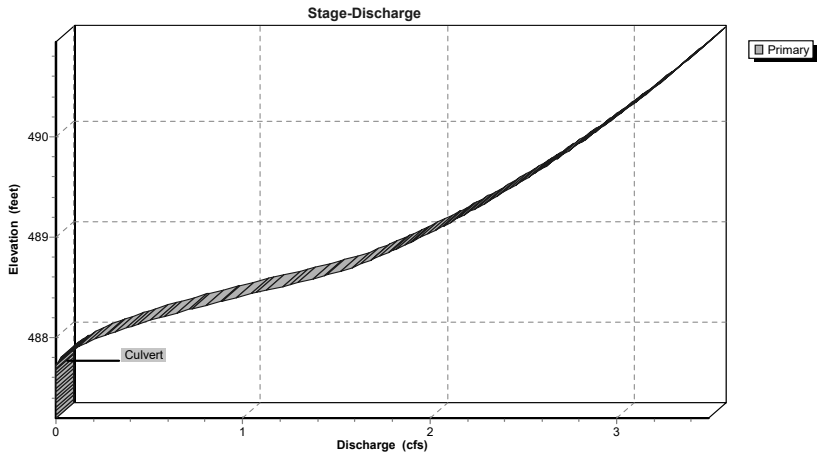
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=1.88 cfs @ 12.11 hrs HW=488.94' (Free Discharge)
└**1=Culvert** (Inlet Controls 1.88 cfs @ 3.45 fps)

Pond 1P: UG



Pond 1P: UG

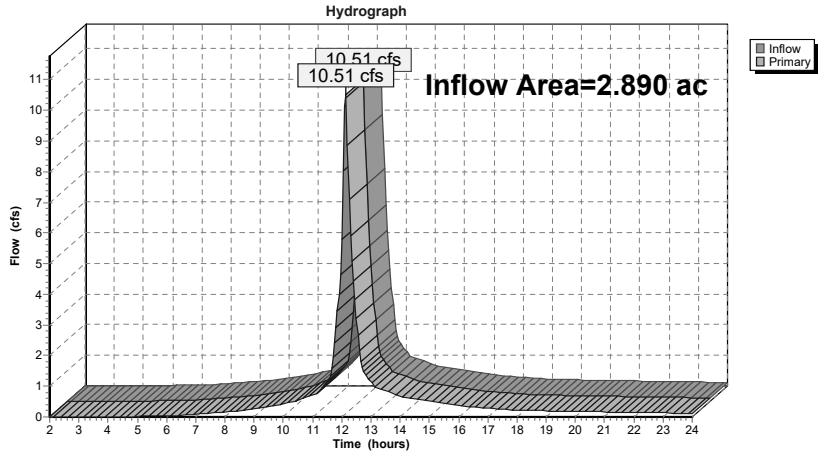


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 3.71" for 10 YR event
Inflow = 10.51 cfs @ 12.13 hrs, Volume= 0.894 af
Primary = 10.51 cfs @ 12.13 hrs, Volume= 0.894 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

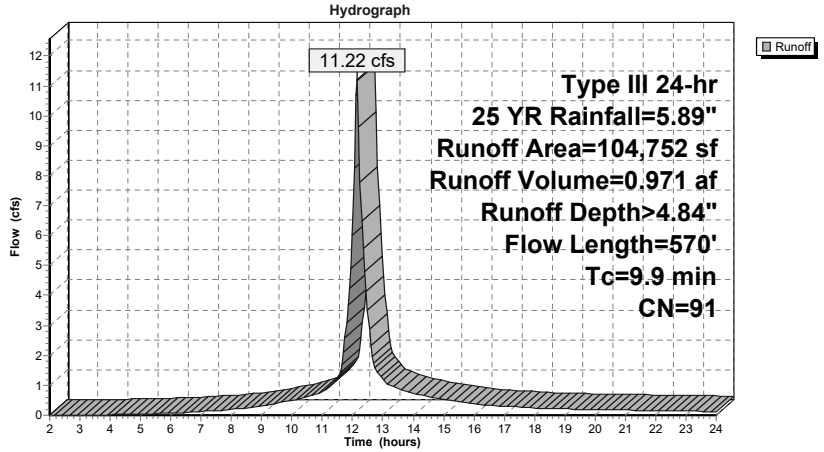
Runoff = 11.22 cfs @ 12.14 hrs, Volume= 0.971 af, Depth> 4.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=5.89"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

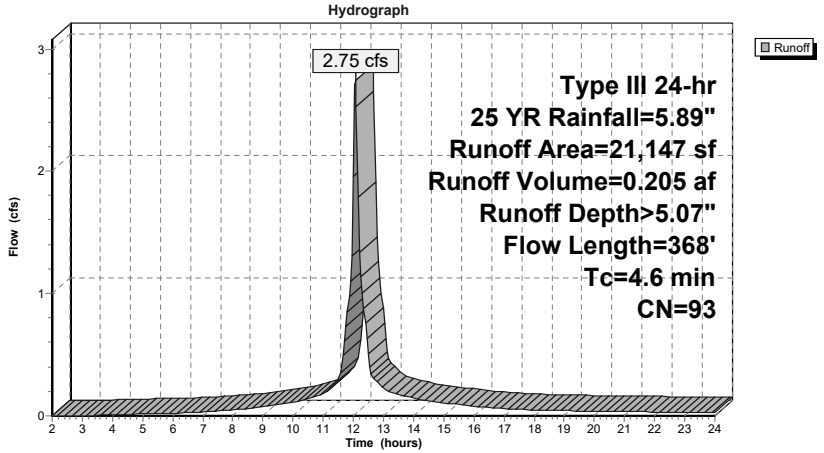
Runoff = 2.75 cfs @ 12.07 hrs, Volume= 0.205 af, Depth> 5.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=5.89"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 5.07" for 25 YR event
Inflow = 2.75 cfs @ 12.07 hrs, Volume= 0.205 af
Outflow = 2.36 cfs @ 12.11 hrs, Volume= 0.203 af, Atten= 14%, Lag= 2.9 min
Primary = 2.36 cfs @ 12.11 hrs, Volume= 0.203 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 489.41' @ 12.11 hrs Surf.Area= 379 sf Storage= 521 cf

Plug-Flow detention time= 16.1 min calculated for 0.203 af (99% of inflow)
Center-of-Mass det. time= 9.1 min (781.0 - 771.9)

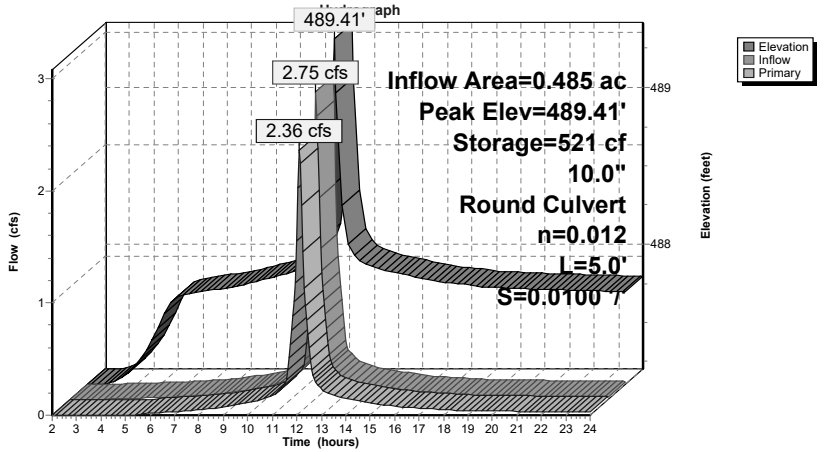
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

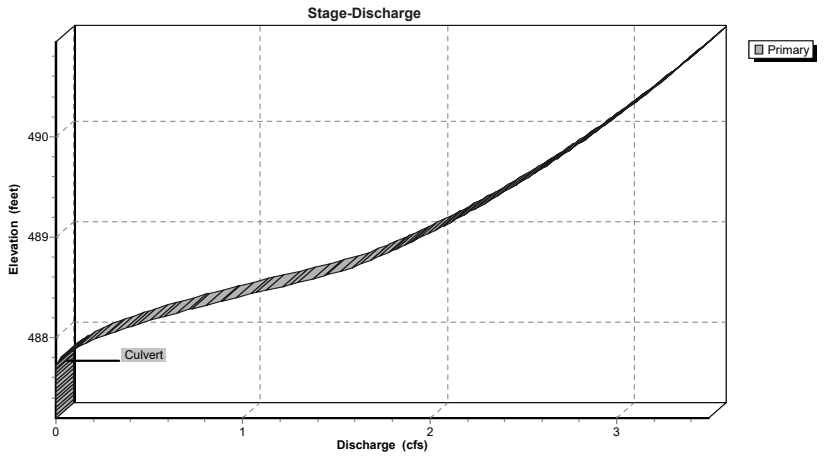
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=2.32 cfs @ 12.11 hrs HW=489.37' (Free Discharge)
└**1=Culvert** (Inlet Controls 2.32 cfs @ 4.25 fps)

Pond 1P: UG



Pond 1P: UG

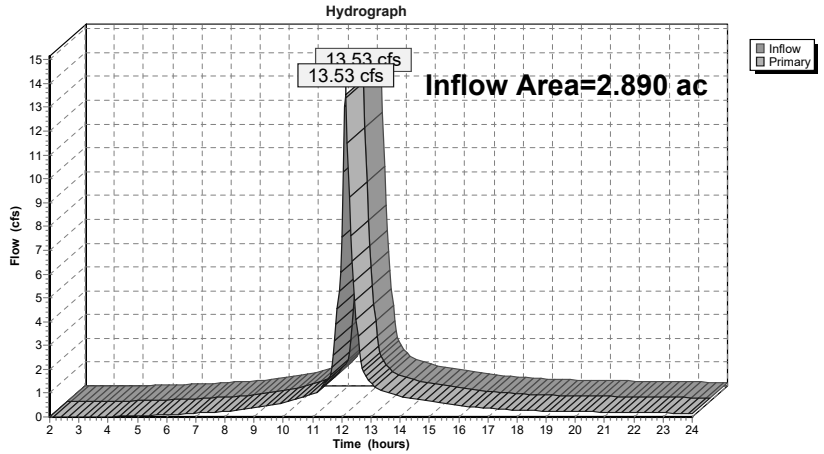


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 4.87" for 25 YR event
Inflow = 13.53 cfs @ 12.13 hrs, Volume= 1.173 af
Primary = 13.53 cfs @ 12.13 hrs, Volume= 1.173 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

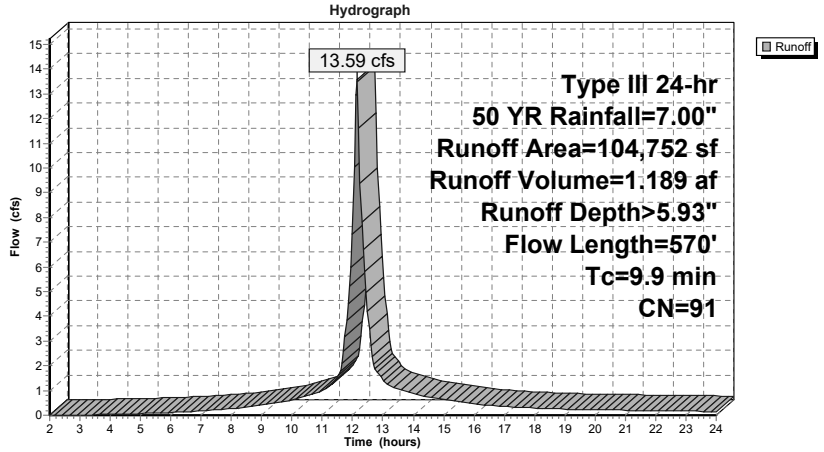
Runoff = 13.59 cfs @ 12.14 hrs, Volume= 1.189 af, Depth> 5.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.00"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

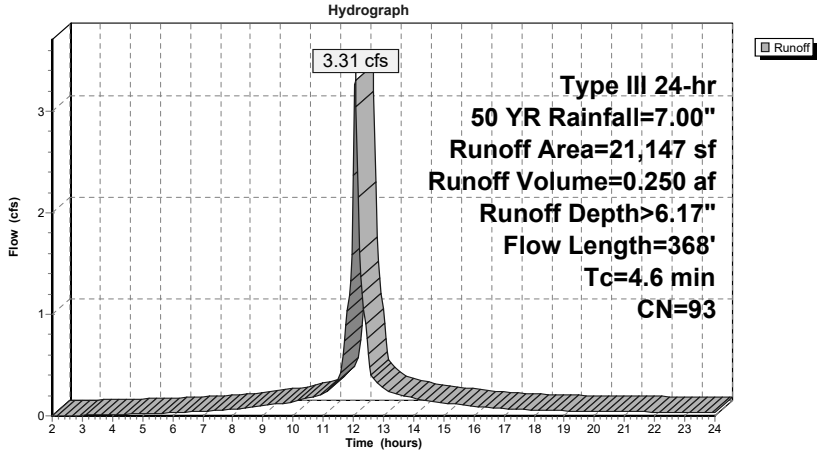
Runoff = 3.31 cfs @ 12.07 hrs, Volume= 0.250 af, Depth> 6.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.00"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 6.17" for 50 YR event
Inflow = 3.31 cfs @ 12.07 hrs, Volume= 0.250 af
Outflow = 2.80 cfs @ 12.12 hrs, Volume= 0.247 af, Atten= 15%, Lag= 3.0 min
Primary = 2.80 cfs @ 12.12 hrs, Volume= 0.247 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 489.93' @ 12.12 hrs Surf.Area= 379 sf Storage= 631 cf

Plug-Flow detention time= 14.3 min calculated for 0.247 af (99% of inflow)
Center-of-Mass det. time= 8.3 min (775.5 - 767.2)

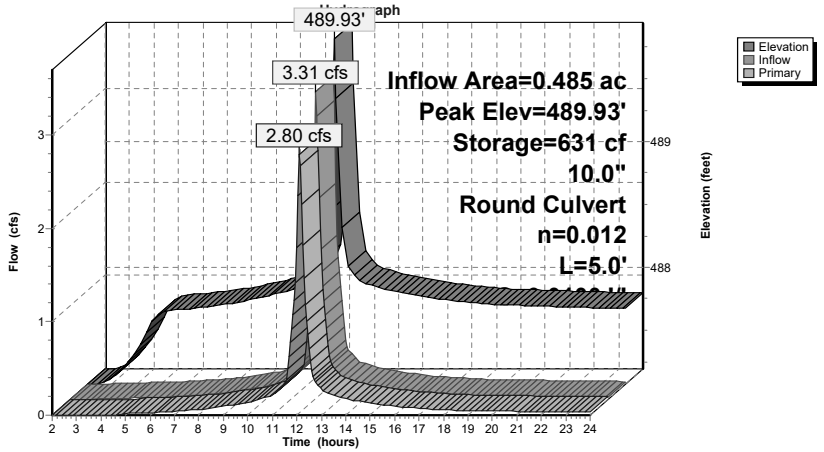
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

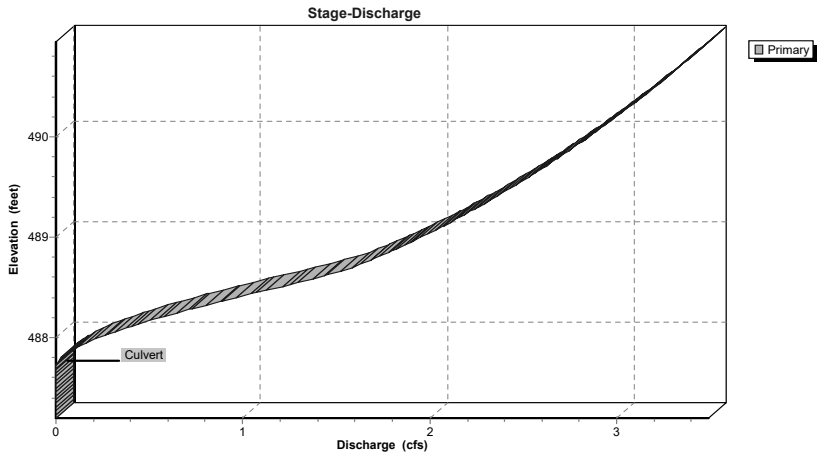
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=2.74 cfs @ 12.12 hrs HW=489.87' (Free Discharge)
└**1=Culvert** (Inlet Controls 2.74 cfs @ 5.03 fps)

Pond 1P: UG



Pond 1P: UG

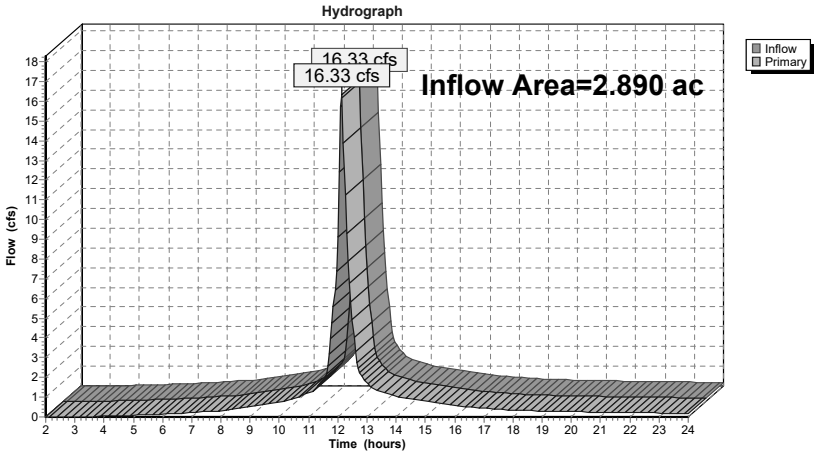


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 5.96" for 50 YR event
Inflow = 16.33 cfs @ 12.13 hrs, Volume= 1.436 af
Primary = 16.33 cfs @ 12.13 hrs, Volume= 1.436 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

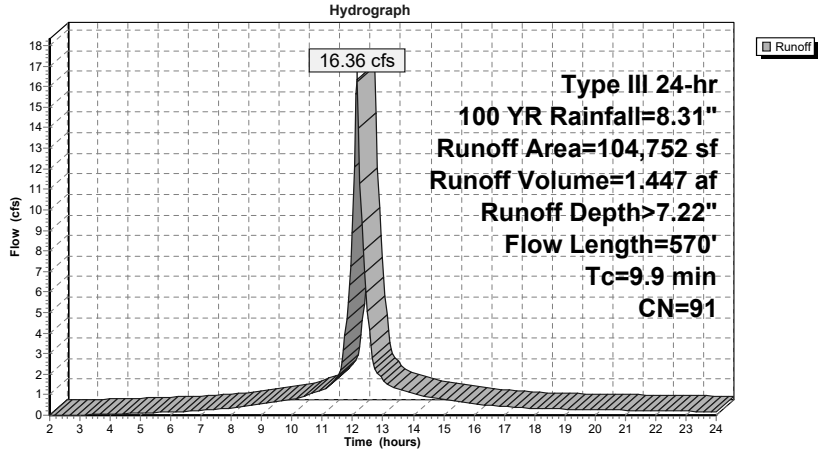
Runoff = 16.36 cfs @ 12.14 hrs, Volume= 1.447 af, Depth> 7.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.31"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

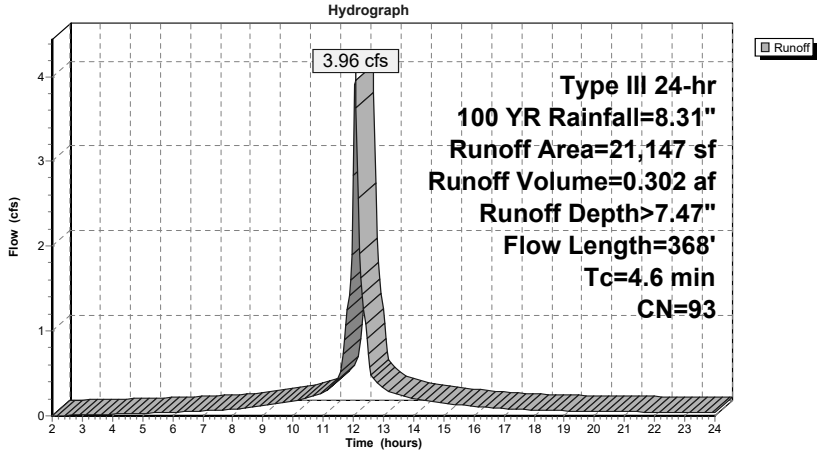
Runoff = 3.96 cfs @ 12.06 hrs, Volume= 0.302 af, Depth> 7.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.31"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 7.47" for 100 YR event
Inflow = 3.96 cfs @ 12.06 hrs, Volume= 0.302 af
Outflow = 3.38 cfs @ 12.12 hrs, Volume= 0.300 af, Atten= 15%, Lag= 3.0 min
Primary = 3.38 cfs @ 12.12 hrs, Volume= 0.300 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 490.76' @ 12.12 hrs Surf.Area= 379 sf Storage= 760 cf

Plug-Flow detention time= 12.9 min calculated for 0.300 af (99% of inflow)
Center-of-Mass det. time= 7.6 min (770.4 - 762.8)

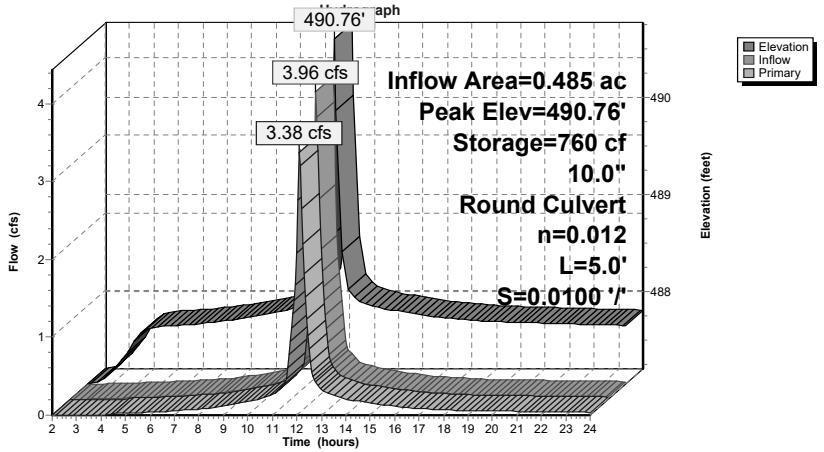
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

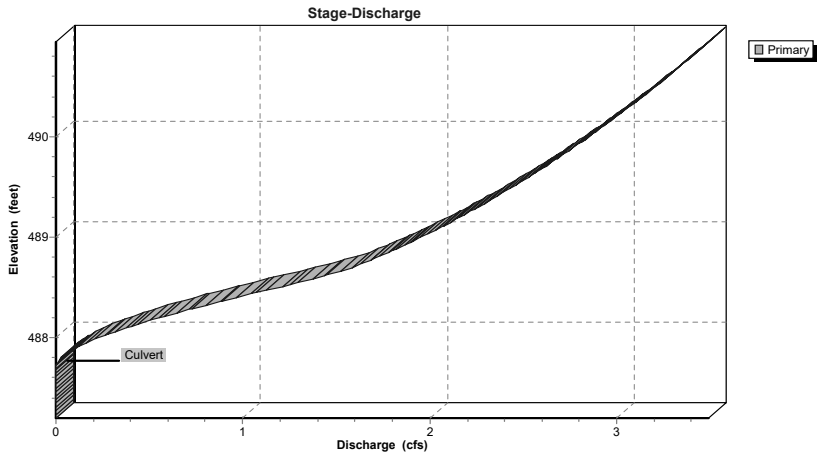
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=3.30 cfs @ 12.12 hrs HW=490.65' (Free Discharge)
└**1=Culvert** (Inlet Controls 3.30 cfs @ 6.05 fps)

Pond 1P: UG



Pond 1P: UG

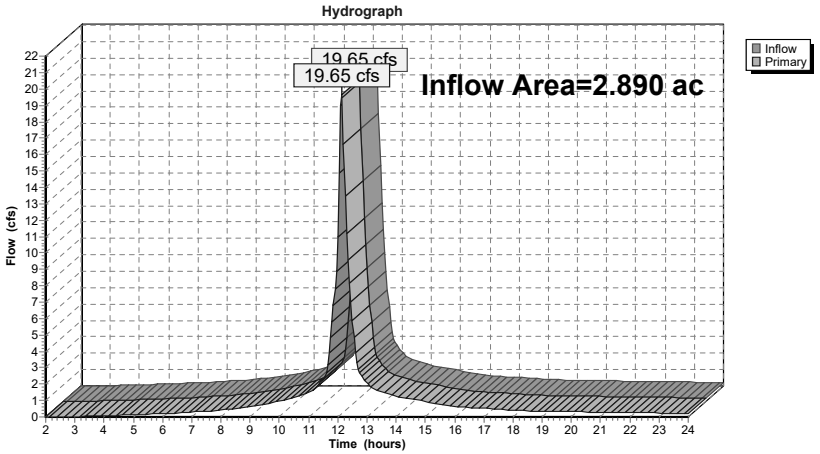


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 7.25" for 100 YR event
Inflow = 19.65 cfs @ 12.13 hrs, Volume= 1.747 af
Primary = 19.65 cfs @ 12.13 hrs, Volume= 1.747 af, Atten= 0%, Lag= 0.0 min

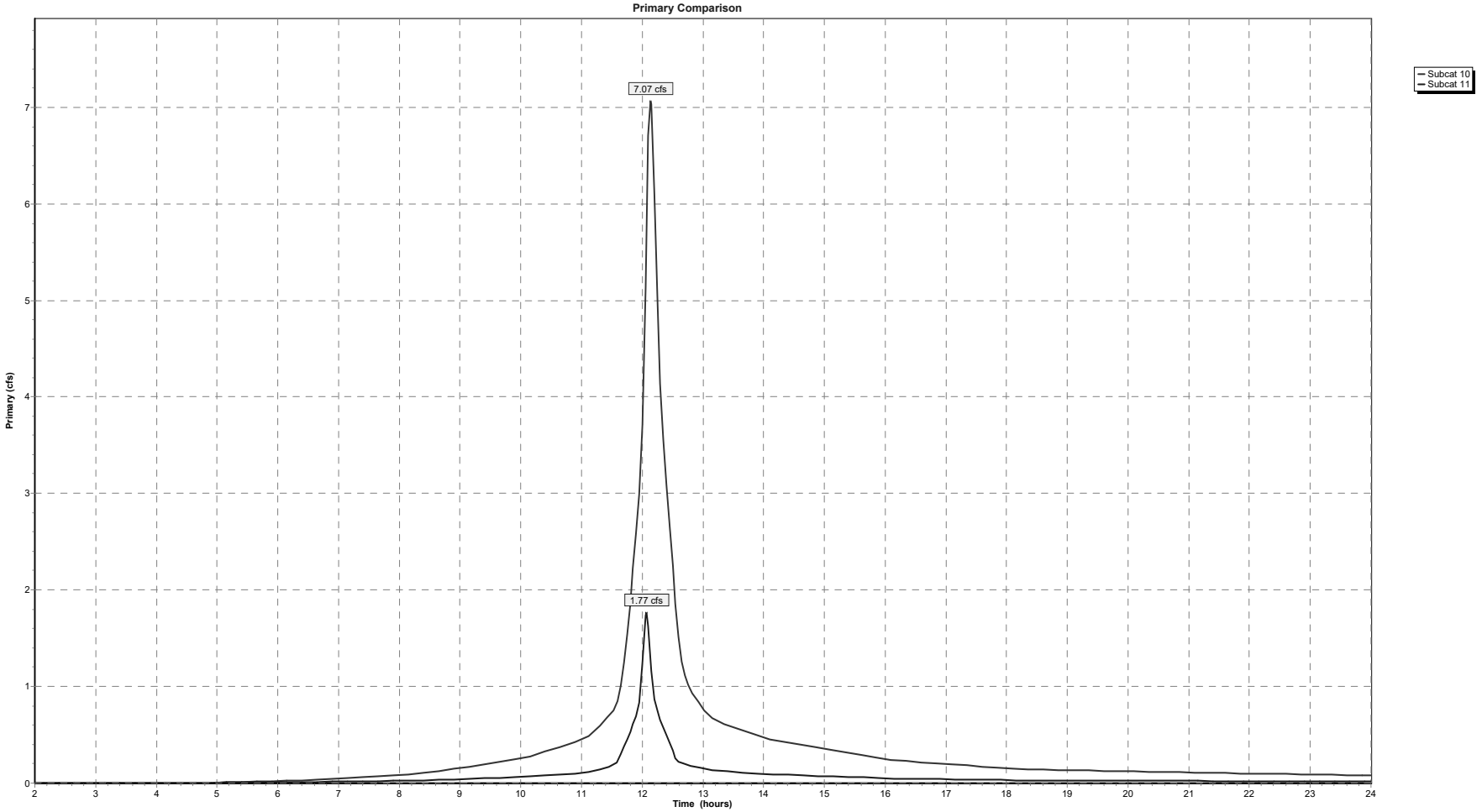
Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



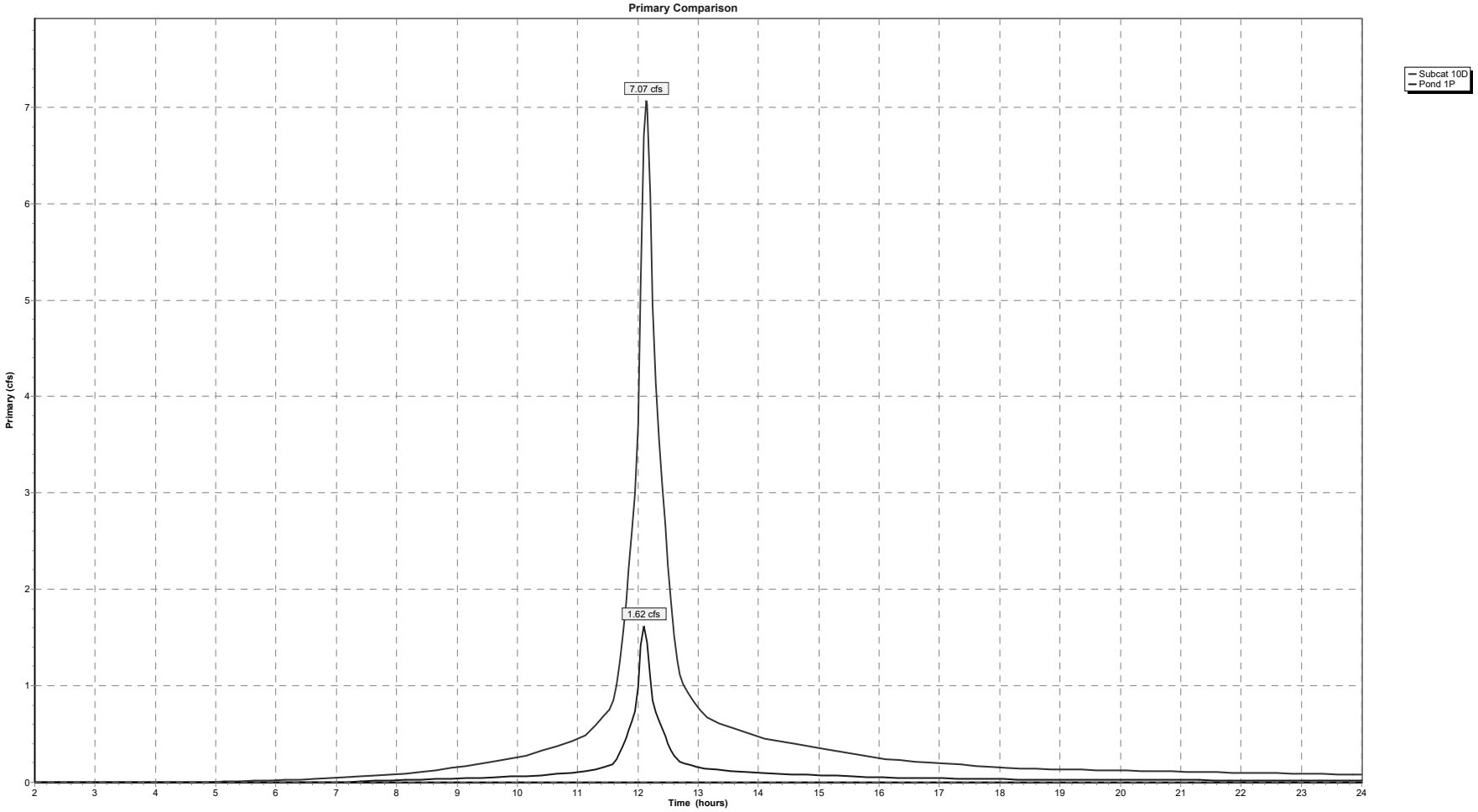
APPENDIX D

HYDROGRAPH COMPARISON & PIPE SIZING


Primary Comparison
7.07 cfs
1.77 cfs
Subcat 10
Subcat 11
Primary (cfs)
Time (hours)
0
1
2
3
4
5
6
7
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

397 Fishkill Ave 2022-1219
Prepared by Hudson Land Design Professional Engineering, P.C.
HydroCAD® 10.00-24 s/n 04797 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr 5 YR Rainfall=3.96"
Revised 12/19/22 Printed 12/21/2022



Culvert Report

Storm Pipe Under Fishkill Ave.

Invert Elev Dn (ft)	=	173.79
Pipe Length (ft)	=	38.00
Slope (%)	=	0.50
Invert Elev Up (ft)	=	173.98
Rise (in)	=	18.0
Shape	=	Circular
Span (in)	=	18.0
No. Barrels	=	1
n-Value	=	0.012
Culvert Type	=	Circular Culvert
Culvert Entrance	=	Smooth tapered inlet throat
Coeff. K,M,c,Y,k	=	0.534, 0.555, 0.0196, 0.9, 0.2

Embankment

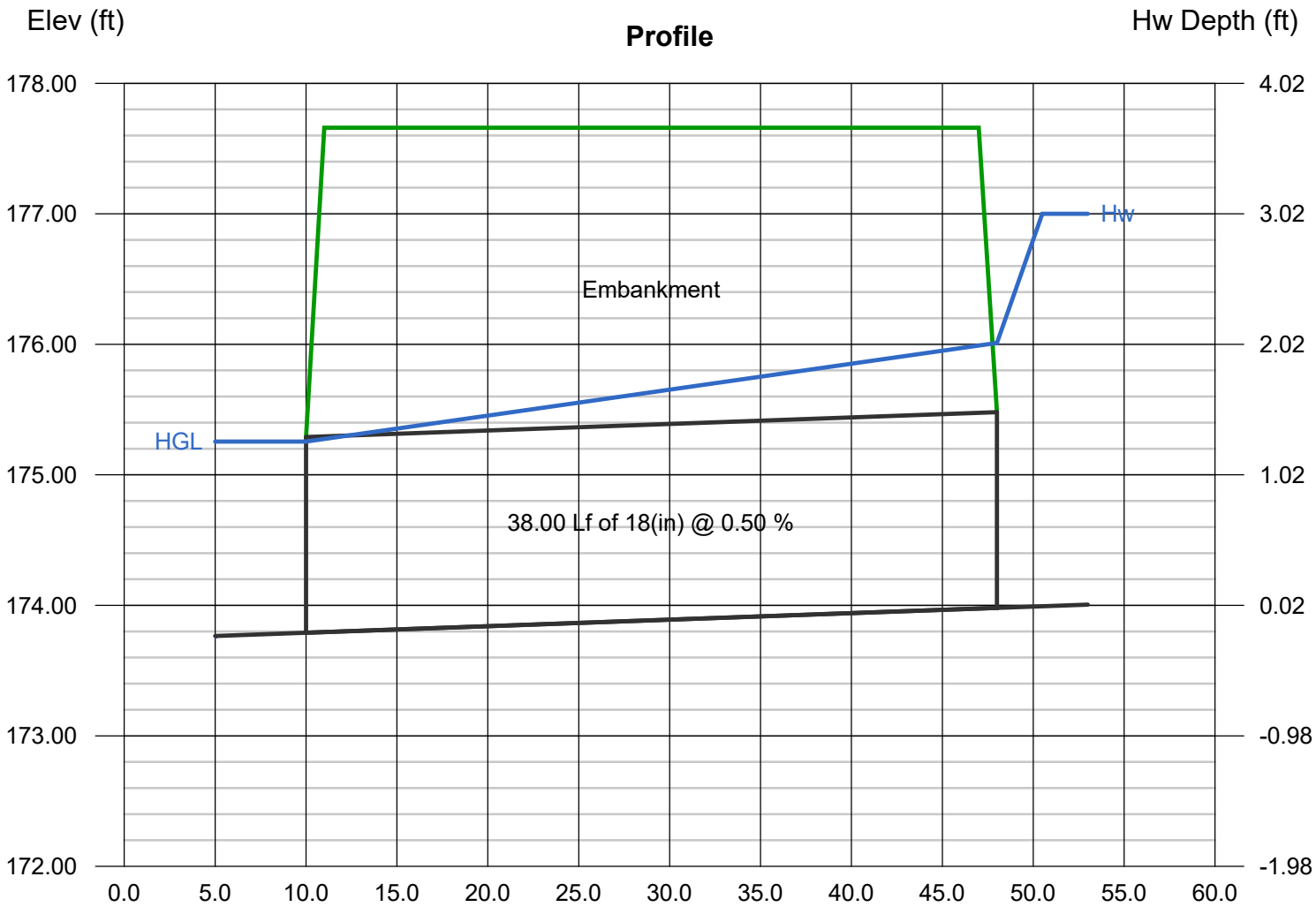
Top Elevation (ft)	=	177.66
Top Width (ft)	=	36.00
Crest Width (ft)	=	25.00

Calculations

Qmin (cfs)	=	16.33
Qmax (cfs)	=	16.33
Tailwater Elev (ft)	=	(dc+D)/2

Highlighted

Qtotal (cfs)	=	16.33
Qpipe (cfs)	=	16.33
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	9.30
Veloc Up (ft/s)	=	9.24
HGL Dn (ft)	=	175.25
HGL Up (ft)	=	176.01
Hw Elev (ft)	=	177.00
Hw/D (ft)	=	2.01
Flow Regime	=	Inlet Control



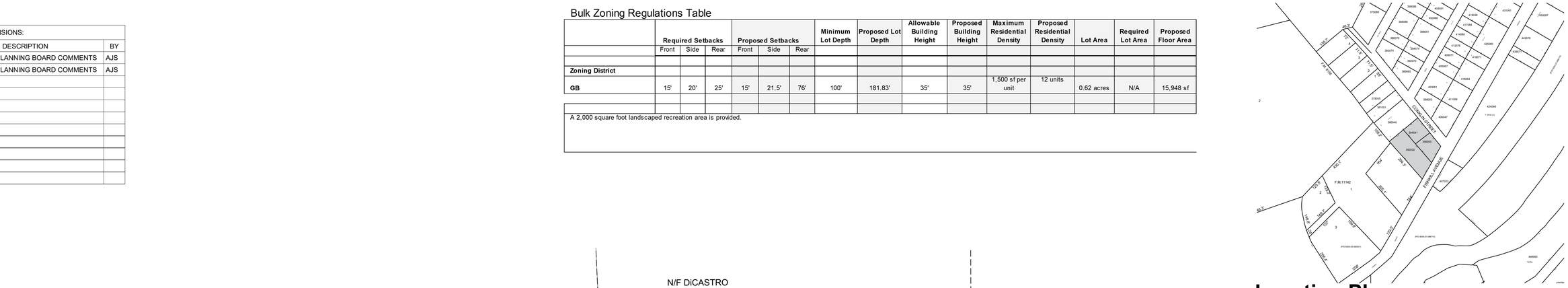
Site Plans

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	11/29/22	REVISED PER PLANNING BOARD COMMENTS	AJS
2	12/27/22	REVISED PER PLANNING BOARD COMMENTS	AJS

Bulk Zoning Regulations Table

	Required Setbacks			Proposed Setbacks			Minimum Lot Depth	Proposed Lot Depth	Allowable Building Height	Proposed Building Height	Maximum Residential Density	Proposed Residential Density	Lot Area	Required Lot Area	Proposed Floor Area
	Front	Side	Rear	Front	Side	Rear									
Zoning District															
GB	15'	20'	25'	15'	21.5'	76'	100'	181.83'	35'	35'	1,500 sf per unit	12 units	0.62 acres	N/A	15,948 sf

A 2,000 square foot landscaped recreation area is provided.



APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

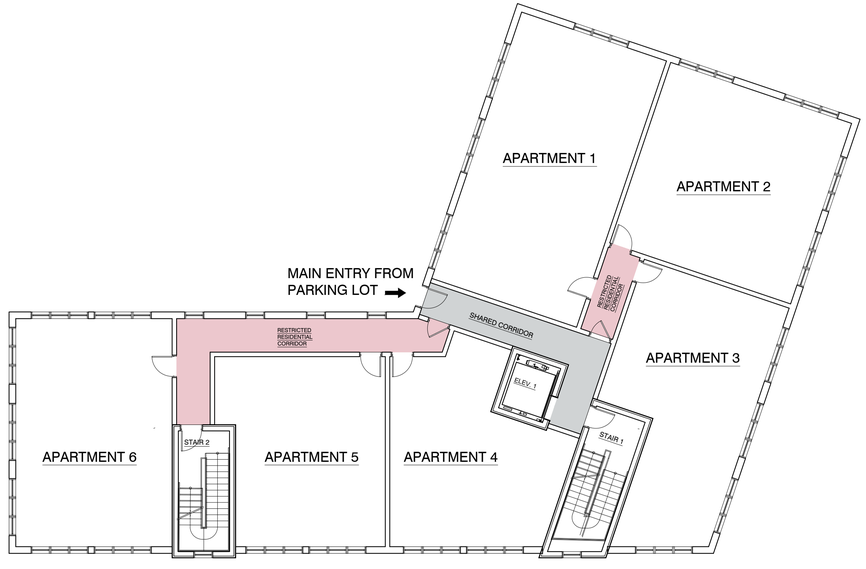
_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

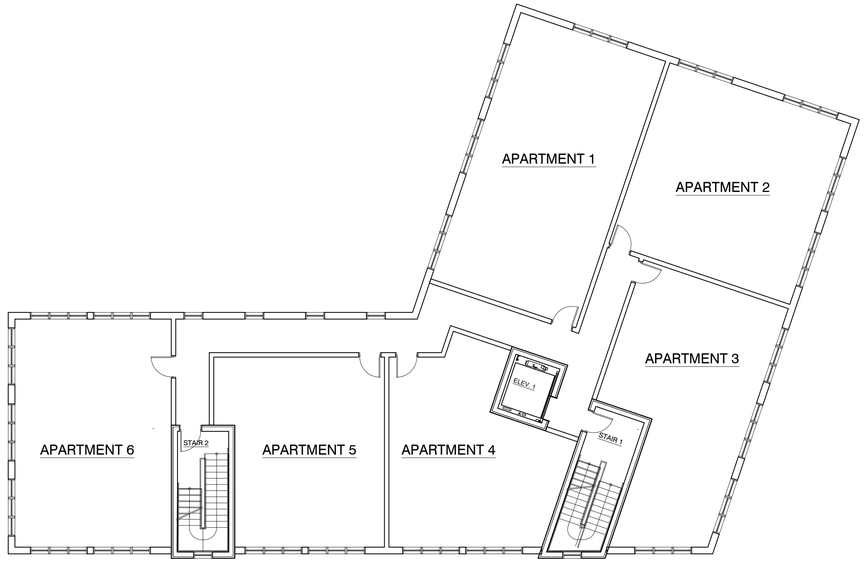


View From Fishkill Avenue



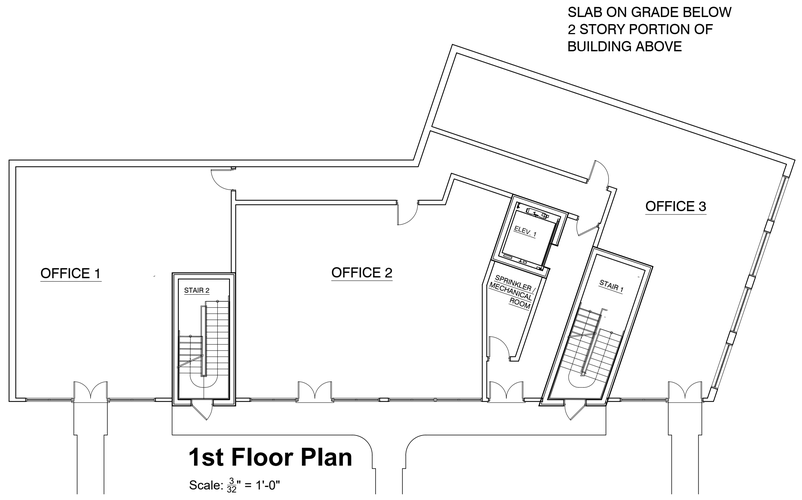
2nd Floor Plan

Scale: $\frac{3}{32}$" = 1'-0"



3rd Floor Plan

Scale: $\frac{3}{32}$" = 1'-0"



1st Floor Plan

Scale: $\frac{3}{32}$" = 1'-0"

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	11/29/22	NO CHANGE	AJS
2	12/27/22	REVISED PER PLANNING BOARD COMMENTS	AJS

Site Plan Application

Sheet 2 of 8 - Building Plans

Owner:
Jordan Haug
397 Fishkill Avenue
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

397 Fishkill Avenue
Beacon, New York
Scale: $\frac{1}{8}$" = 1'-0"
October 21,2022

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	11/29/22	REVISED PER PLANNING BOARD COMMENTS	AJS
2	12/27/22	REVISED PER PLANNING BOARD COMMENTS	AJS





POLE MOUNTED LIGHT (L1A)
GREENSHINE "L30" ARM MOUNTED 3000K LED FIXTURE. LOW GLARE CUTOFF SHIELD, DARK SKY COMPLIANT. CRI 80-100 RANGE. COLOR: BLACK. PHOTOCELL CONTROL. OR APPROVED EQUAL. MOUNTING HEIGHT ON BUILDING = 10 FEET

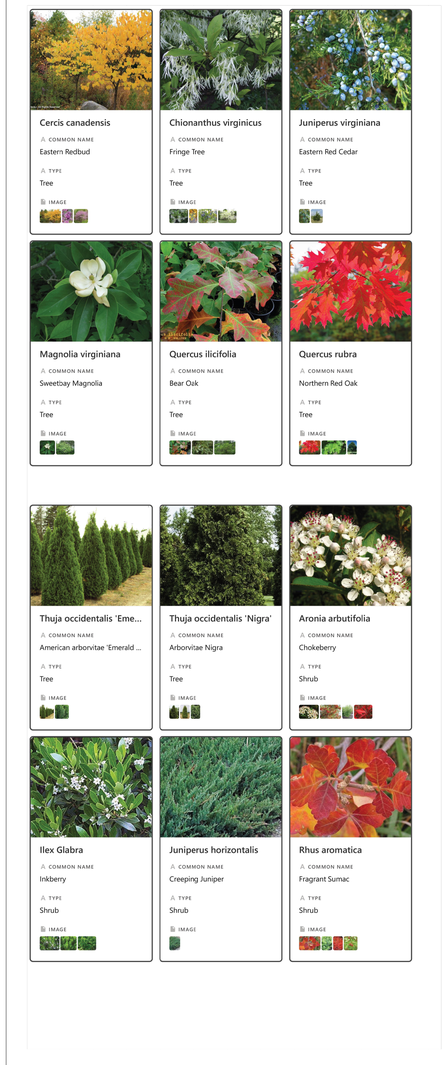


WALL MOUNTED HOUSE LIGHT (L2)

HUBBARDTON FORGE WALL MOUNTED FIXTURE. MODEL "Hood Outdoor Dark Sky Wall Sconce", 60W, 2700K. CRI 80-100 RANGE. COLOR: COASTAL BLACK, OR APPROVED EQUAL. MOUNTING HEIGHT = 7 FEET. NOTE THAT THE MANUFACTURER DOES NOT PROVIDE FOOTCANDLE DIAGRAMS FOR THIS FIXTURE

NOTE: ALL EXTERIOR LIGHTING ON THE SITE SHALL BE DIRECTED AND/OR SHIELDED SO AS NOT TO CAUSE ANY OBJECTIONABLE GLARE OBSERVABLE FROM NEIGHBORING STREETS AND PROPERTIES. THE SOURCE (BULBS) OF SUCH LIGHTING SHALL NOT BE VISIBLE FROM SAID NEIGHBORING STREETS AND PROPERTIES. PHOTOMETRIC DIAGRAMS ARE SHOWN WITH SHIELDED CONDITIONS.

Illustrated Plant List



Planting and Landscape Notes

PLANTING and LANDSCAPE NOTES

1. Contractors shall enter and exit site through pre-approved routes only.
2. No non-native plant species shall be introduced onto the site. All species shall be indigenous to the northeast region of North America.
3. If a straight specie is specified, no cultivars will be accepted without prior approval of designer.
4. No plants will be accepted that display mechanical injury, disease or specie irregularities.
5. Soil shall be prepped by removing all construction debris, loose roots and stones larger than 3".
6. All plants must be labeled when delivered to site.
7. Areas to be planted shall be marked and labeled by designer.
8. All plant locations and orientations in the field require approval from designer and owner prior to installation.
9. Test tree-pit for drainage before planting. Do not plant tree in pit if water is still evident after one hour. Contact site engineer or landscape designer if this condition is encountered.
10. All tree-planting to be coordinated with as-built utilities. Trees to be located minimum of 5' from active lines.
11. All trees shall be ball and burlap unless otherwise specified on Plant List.
12. Each new tree hole tree shall be twice the width of the rootball.
13. Burlap, wire, cords, ties and any wrapping materials must be removed from all rootballs before backfilling.
14. Plant all plants so top of rootball is slightly above surrounding soil(small and large plants)
15. No planting shall be done in muddy, rainy or frozen conditions.
16. All plants calling for "Overflowing" in the notes shall not be accepted by designer if plants are thin.
17. If planting is delayed for more than 3 hours after delivery, set plants in shade. Protect from weather and mechanical damage. Keep roots moist and cover with mulch.
18. Contractors shall leave site neat and orderly during course of project, and store materials and equipment in owner-approved locations away from all trees and plants. Store all unplanted plant material away from damaging sun.
19. If site conditions conflict with intended design, contractor shall alert Owner and designer.
20. No substitutions are to be made without the written or verbal consent of landscape designer and owner.
21. Create a size-specific water-well around each plant, 3' from center of tree, and mulch from the outside. Do not mulch crown.
22. Water thoroughly after planting each plant. Water schedule to be determined.
23. Spray for deer if planted in fall. Sometimes bucks mark their territory with their antlers.
24. Keep planting areas weed-free until plant is established.
25. Eco Lawn seeding shall be implemented by contractor familiar with this specie mix and with the process and approved by designer. This is not the same as casting contractor grass seed.
26. Pervious/Permeable Pavers and associated grass seeding shall be installed by contractor with experience in this process. This process requires establishment maintenance, in order to succeed.
27. Bermed areas shall be built with designer directing construction.
28. Street tree and surrounding tree-pit shall be installed by contractor experienced with these materials and approved by designer.
29. All plants require regular watering for the first two seasons to succeed.



Landscape & Lighting Plan

Scale: 1" = 20'

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

Site Plan Application

Sheet 3 of 8 - Landscaping & Lighting Plan

Owner:
Jordan Haug
397 Fishkill Avenue
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

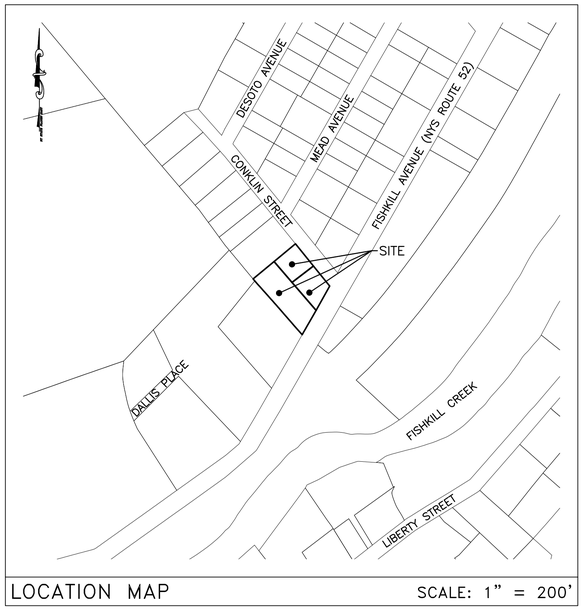
397 Fishkill Avenue
Beacon, New York
Scale: 1" = 20'
October 21,2022

SCHEDULE OF REGULATIONS (GB ZONING DISTRICT):	
PARAMETER	REQUIREMENT
LOT AREA:	N/A
LOT AREA PER UNIT:	1,500 SQFT MINIMUM
LOT WIDTH:	N/A
LOT DEPTH:	100 FEET MINIMUM
YARD SETBACKS (RESIDENTIAL USE):	
FRONT YARD:	15 FEET MINIMUM
SIDE YARD:	20 FEET MINIMUM
REAR YARD:	25 FEET MINIMUM
MAX. BUILDING HEIGHT:	35 FT MAX.
MAX. BUILDING COVERAGE:	N/A
MAX. UNITS/BUILDING:	N/A

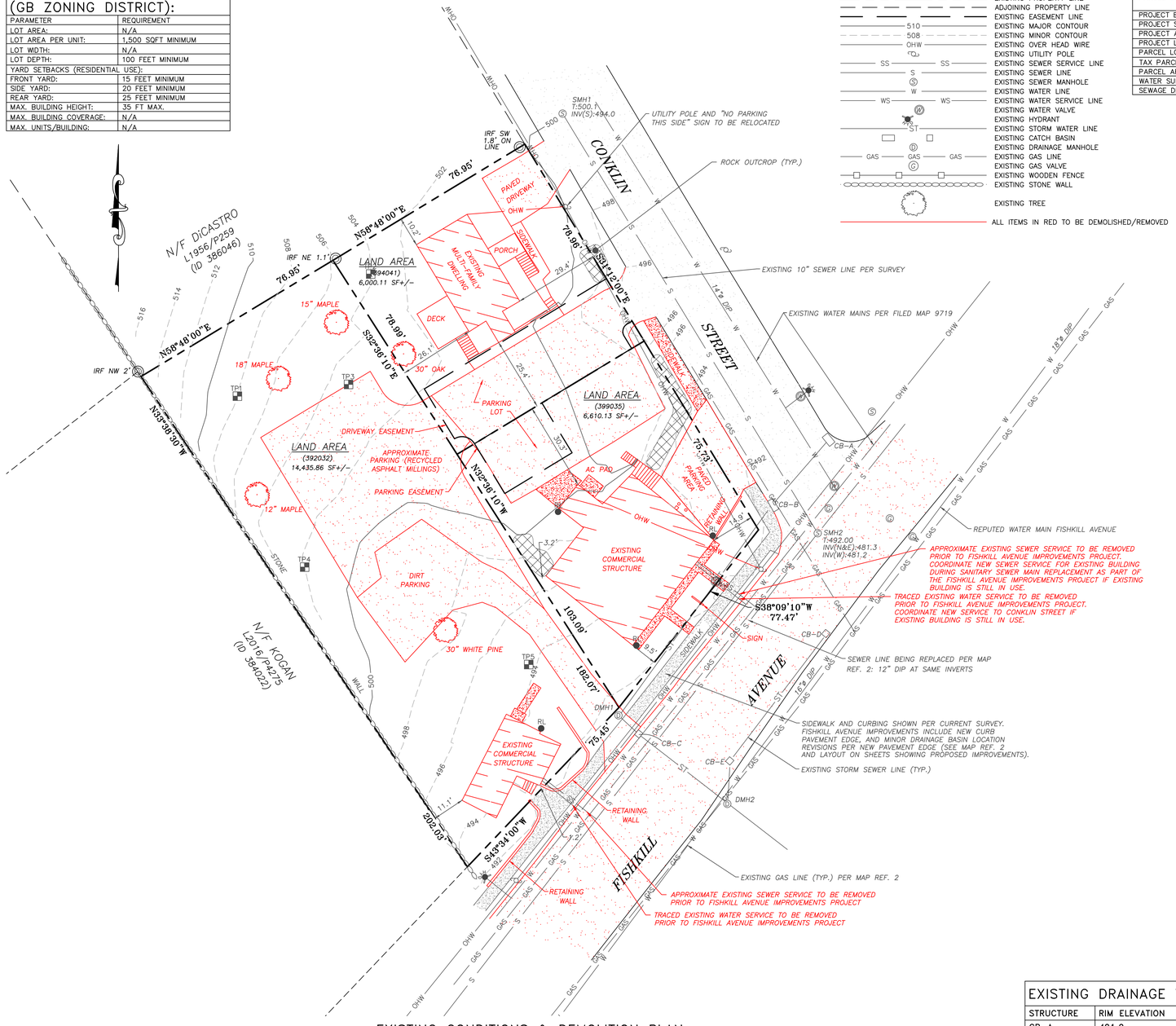
LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- 510 EXISTING MAJOR CONTOUR
- 508 EXISTING MINOR CONTOUR
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WATER VALVE
- EXISTING HYDRANT
- ST EXISTING STORM WATER LINE
- EXISTING CATCH BASIN
- EXISTING DRAINAGE MANHOLE
- GAS EXISTING GAS LINE
- EXISTING GAS VALVE
- EXISTING WOODEN FENCE
- EXISTING STONE WALL
- EXISTING TREE
- ALL ITEMS IN RED TO BE DEMOLISHED/REMOVED

PROJECT INFORMATION:	
PARCEL OWNER:	397 FISHKILL AVE LLC.; 397 FISHKILL AVE, BEACON NY 12508 & 393 FISHKILL AVE LLC; 397 FISHKILL AVE, BEACON NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PROJECT SURVEYOR:	STEVEN J. GREEN P.L.S., PO BOX 534, GOSHEN, NY 10924
PROJECT ARCHITECT:	ARYEH SIEGEL, 84 MASON CIRCLE, BEACON, NY 12508
PROJECT LANDSCAPE DESIGN:	LANDSCAPE RESTORATIONS, 7 CREEK DRIVE, BEACON, NY 12508
PARCEL LOCATION:	397 & 393 FISHKILL AVE, 7 CONKLIN ST, BEACON NY 12508
TAX PARCEL ID:	6055-80-399035 (0.15 AC) & 392032 (0.33 AC) & 394041 (0.14 AC)
PARCEL AREA:	±0.62-ACRES TOTAL
WATER SUPPLY:	MUNICIPAL – CITY OF BEACON
SEWAGE DISPOSAL:	MUNICIPAL – CITY OF BEACON



LOCATION MAP SCALE: 1" = 200'



EXISTING CONDITIONS & DEMOLITION PLAN
SCALE: 1" = 20'
GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

MAP REFERENCES:

1. BOUNDARY AND TOPOGRAPHICAL SURVEY PER "SURVEY FOR JORDAN HAUG" AS PREPARED BY STEVEN J. GREEN, P.L.S. DATED MAY 29, 2022 AND UPDATED IN NOVEMBER 2022 TO PROVIDE SANITARY SEWER INVERT ELEVATIONS.
2. SANITARY SEWER RIM AND INVERT ELEVATIONS AND DRAINAGE STRUCTURE RIM ELEVATIONS PROVIDED BY MAP REFERENCE 1. DRAINAGE PIPE AND INVERT INFORMATION TAKEN FROM A PLAN SET ENTITLED "RESURFACING, RESTORATION AND REHABILITATION TELLER AVENUE AND FISHKILL AVENUE (WOLCOTT AVENUE/NYS ROUTE 9D TO BEACON CITY LINE)" AS PREPARED BY WSP DATED MAY 2022. INVERT ELEVATIONS ADJUSTED TO PROJECT SURVEYOR'S DATUM OF 500 FEET. GAS MAIN LOCATIONS SHOWN PER THE WSP PLAN SET.
3. WATER MAIN SHOWN HEREON PER A MAP ENTITLED LOT LINE REALIGNMENT FOR GARY VILLANO PREPARED BY PETER R. HUSTIS, L.L.S. DATED AUGUST 13, 1991 AND LAST REVISED MAY 26, 1993 AND FILED AT THE DUTCHESS COUNTY CLERK'S OFFICE ON JUNE 8, 1993 AS FILED MAP 9719

SURVEY NOTES:

1. PROPERTY LINE AS SHOWN ARE BASED ON DEEDS OF RECORD AND FILED MAPS.
2. THIS IS AN ACCURATE SURVEY COMPLETED IN THE FIELD MAY 2022.
3. SUBJECT TO ALL EASEMENTS AND/OR AGREEMENTS THAT THE PUBLIC UTILITY COMPANIES MAY HAVE.
4. ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE AN ORIGINAL OF THE LAND SURVEYOR'S SEAL OR HIS/HER HER EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.
5. SUBJECT TO ALL RIGHT OF WAY TAKINGS NOT SHOWN OR FOUND IN COUNTY OR TOWN RECORDS.
6. DATUM: 500.00'.

LOT CONSOLIDATION & EASEMENT NOTES:

1. CONCURRENT WITH THE SITE PLAN APPLICATION IS A LOT CONSOLIDATION PLAN, CONSOLIDATING THE THREE EXISTING TAX PARCELS INTO A SINGLE TAX PARCEL BY REMOVING ALL INTERIOR LOT LINES.
2. THE EXISTING PARKING AND DRIVEWAY EASEMENTS ARE TO BE EXTINGUISHED AS PART OF THE LOT CONSOLIDATION PROCESS. THE EASEMENTS ARE DESCRIBED IN NOTE 4 OF A MAP ENTITLED LOT LINE REALIGNMENT FOR GARY VILLANO PREPARED BY PETER R. HUSTIS, L.L.S. DATED AUGUST 13, 1991 AND LAST REVISED MAY 26, 1993 AND FILED AT THE DUTCHESS COUNTY CLERK'S OFFICE ON JUNE 8, 1993 AS FILED MAP 9719, AS FOLLOWS:
   THE OWNER OF LOT NO. 1, ITS SUCCESSORS AND ASSIGNS, IS GRANTING A PARKING EASEMENT CONSISTING OF 3 PARKING SPACES (TO BE MARKED 1, 2 AND 3) TO THE OWNER OF LOT NO. 2, ITS SUCCESSORS AND ASSIGNS. ALSO, THE OWNER OF LOT NO. 2 IS GRANTING THE OWNER OF LOT NO. 1 A DRIVEWAY EASEMENT FOR INGRESS AND EGRESS TO THE PROPOSED PARKING AREA ON LOT NO. 1.

DEMOLITION NOTES:

1. BUILDING/STRUCTURE TO BE DEMOLISHED ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE NOT TO BE DEMOLISHED AS PART OF THIS WORK. PRIOR TO DEMOLISHING ANY BUILDINGS/STRUCTURES, THE CONTRACTOR SHALL PERFORM A PRE-DEMOLITION SURVEY IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS GOVERNING THE DISPOSAL OF SOLID WASTE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS BY THE AUTHORITY HAVING JURISDICTION. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS.
2. CONFORM TO APPLICABLE CODE FOR DEMOLITION OF STRUCTURES, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING.
3. DISPOSAL AND STORAGE OF DEBRIS.
4. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
5. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
6. NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNER.
7. PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
8. LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
9. DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
10. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
11. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSES.
12. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS.
13. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
14. ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
15. FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
16. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATION.
17. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
18. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
19. USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, SUCH AS ICE, FLOODING, AND POLLUTION.
20. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
21. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITIONS.
22. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.
23. CUTTING OF TREES CAN ONLY OCCUR DURING NOVEMBER 1ST TO MARCH 31ST TIME FRAME.

UTILITY ABANDONMENT NOTES:

1. EXISTING WATER AND SEWER SERVICES TO BE ABANDONED IN ACCORDANCE WITH CITY OF BEACON WATER & SEWER DEPARTMENT REQUIREMENTS.
2. ANY WATER SERVICE TO BE ABANDONED SHALL BE AT THE CORPORATION VALVE BY CLOSING OF THE CORPORATION VALVE, DISCONNECTION OF THE EXISTING SERVICE LINE TO THE CORPORATION VALVE AND CAPPING OF THE CORPORATION VALVE.
3. THE EXISTING UTILITIES THAT SERVICE THE EXISTING BUILDINGS FROM FISHKILL AVENUE SHALL BE ABANDONED PRIOR TO RECONSTRUCTION OF FISHKILL AVENUE IN 2023.

EXISTING DRAINAGE TABLE:					
STRUCTURE	RIM ELEVATION	INV (N)*	INV (E)*	INV (S)*	INV (W)*
CB-A	491.9	12": 489.90	---	12": 489.84	---
CB-B	491.3	12": 488.71	---	18": 488.32	---
CB-C	491.1	18": 487.33	---	18": 487.42	---
CB-D	491.6	---	---	12": 490.25	---
CB-E	491.3	12": 489.66	---	12": 489.79	---
DMH1	491.5	12": 487.53	12": 487.37	---	---
DMH2	491.1	UNKNOWN	UNKNOWN	---	UNKNOWN

* PER MAP REFERENCE #2 – SURVEYOR UNABLE TO VERIFY IN FIELD DUE TO EXCESSIVE SEDIMENT BUILD-UP

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REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	11/29/22	PER PLANNING BOARD COMMENTS	CMB				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

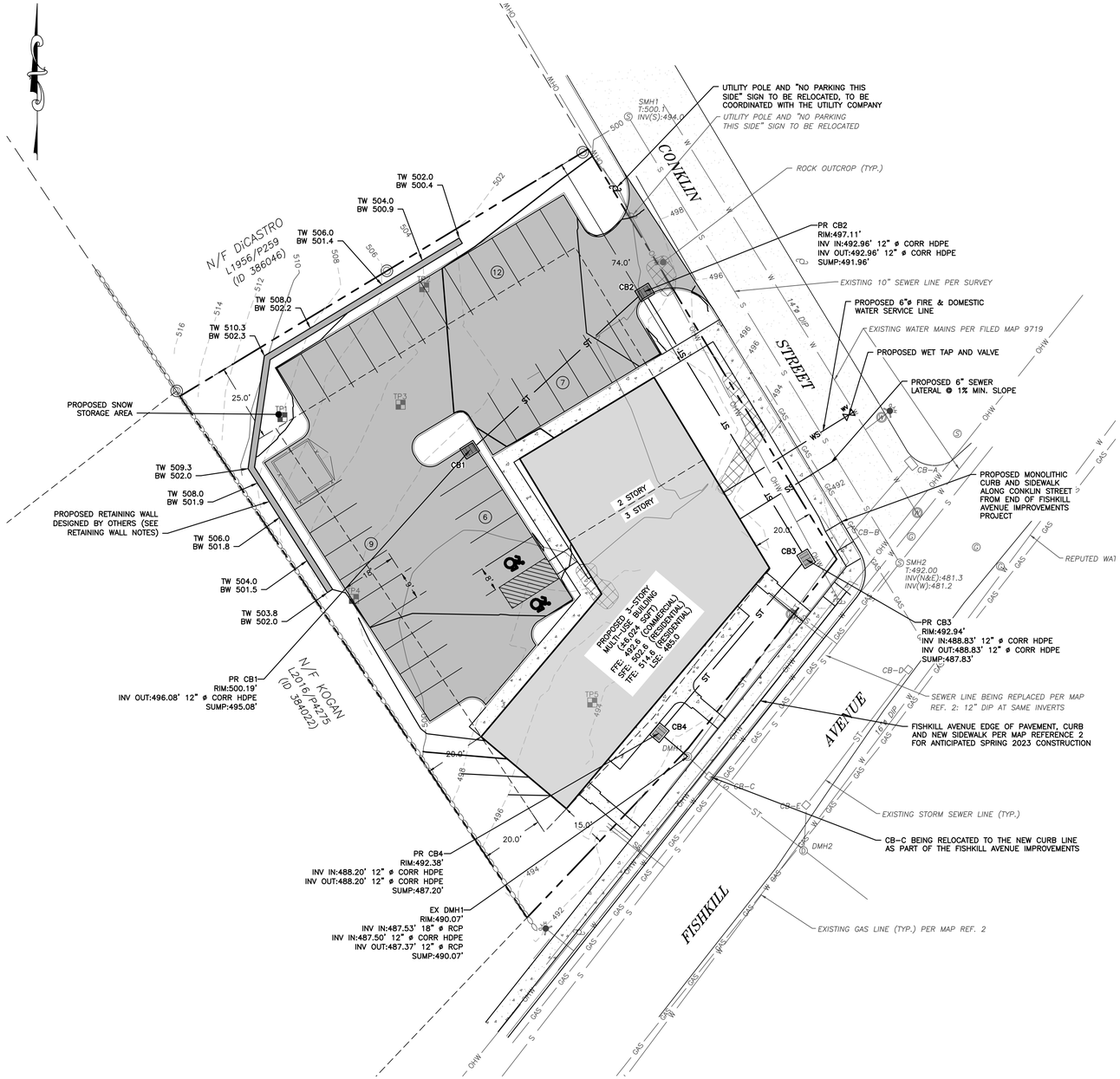
EXISTING CONDITIONS & DEMOLITION PLAN

397 FISHKILL AVENUE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032 & 399035

JOB #: 2022:015
DATE: 10/21/2022
SCALE: 1" = 20'
TITLE: XC-1
SHEET: 4 OF 8

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GRADING & UTILITY PLAN

SCALE: 1" = 20'

GRAPHIC SCALE

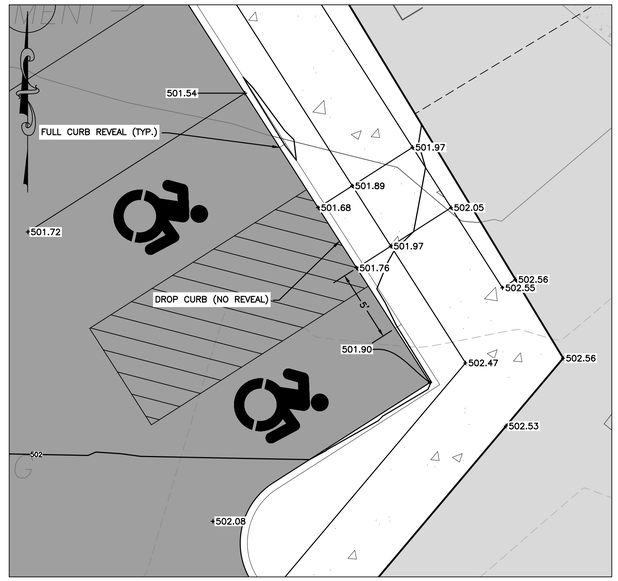
20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- 510 EXISTING MAJOR CONTOUR
- 508 EXISTING MINOR CONTOUR
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WATER VALVE
- EXISTING HYDRANT
- ST EXISTING STORM WATER LINE
- EXISTING CATCH BASIN
- EXISTING DRAINAGE MANHOLE
- GAS EXISTING GAS LINE
- EXISTING GAS VALVE
- EXISTING WOODEN FENCE
- EXISTING STONE WALL

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S PROPOSED SEWER LINE
- SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W PROPOSED WATER LINE
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED GATE VALVE



ADA ACCESSIBLE ROUTE PLAN

SCALE: 1" = 5'

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

EXISTING DRAINAGE TABLE:					
STRUCTURE	RIM ELEVATION	INV (N)*	INV (E)*	INV (S)*	INV (W)*
CB-A	491.9	12": 489.90	---	12": 489.84	---
CB-B	491.3	12": 488.71	---	18": 488.32	---
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CB-E	491.3	12": 489.66	---	12": 489.79	---
DMH1	491.5	12": 487.53	12": 487.37	---	---
DMH2	491.1	UNKNOWN	UNKNOWN	---	UNKNOWN

* PER MAP REFERENCE #2
CERTAIN PIPES SHOWN ARE PROPOSED AS PART OF THE FISHKILL AVENUE IMPROVEMENTS

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS, WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE AND DRAINAGE LINES.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL DRAINAGE, SANITARY SEWER, WATER AND GAS LINES AND STRUCTURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
3. THE PROPOSED BUILDING AND ADDITION SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES. AS SUCH, THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
4. THE WATER SERVICE LINE AND METER FOR EACH UNIT SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. THE NEW WATER SERVICE LINE TO THE NEW BUILDING SHALL BE 6"ø DIP, SUBJECT TO THE MEP ENGINEER'S CALCULATIONS AND VERIFICATION.
6. THE SEWER SERVICE LINE SHALL BE 6"ø SDR-35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN (MINIMUM OF 1% SHALL BE MAINTAINED).
7. STREET CLOSURE FOR WATER, SEWER AND GAS SERVICE CONNECTIONS AND DRIVEWAY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS. A PLAN SHALL BE IN PLACE FOR MAINTENANCE AND PROTECTION OF TRAFFIC.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. MAIN STREET AND CROSS STREET SHALL BE KEPT CLEAN AND SWEPT DURING CONSTRUCTION.
9. SUMP PUMPS TO BE PROVIDED FOR FOOTING DRAINS, AS REQUIRED. THE TYPES OF PUMPS AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT. ALL SUMP PUMPS SHALL DISCHARGE TO DAYLIGHT, OR TO THE CITY OF BEACON DRAINAGE SYSTEM. SUMP PUMPS ARE NOT PERMITTED TO DISCHARGE TO THE CITY OF BEACON SANITARY SEWER SYSTEM.
10. THE APPLICANT/APPLICANT'S PLUMBER SHALL ACQUIRE WATER METERS AND MXU UNITS (SIGNAL SENDING AND RECEIVING UNIT) FOR THE AMI SYSTEM (ADVANCED METERING INFRASTRUCTURE) FROM THE CITY OF BEACON WATER DEPARTMENT. THE MXU UNIT SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING AND SHALL BE LOCATED 2 TO 3 FEET ABOVE THE EXTERIOR GROUND ELEVATION.

ADA CONSTRUCTION NOTES:

1. ADA ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE MUST COMPLY WITH ALL APPLICABLE STATE AND LOCAL ACCESSIBILITY LAWS AND REGULATIONS AND THE CURRENT ADA STANDARDS. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE FROM PARKING SPACE OR PEDESTRIAN ACCESS TO POINTS OF ACCESSIBLE BUILDING INGRESS/OR EGRESS, MUST COMPLY WITH ADA REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
   - 1.1. PARKING SPACES AND PARKING AISLES – SLOPE SHALL NOT EXCEED 1:48 IN ANY DIRECTION.
   - 1.2. CURB RAMPS – SLOPE MUST NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET.
   - 1.3. LANDINGS – MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:48 IN ANY DIRECTION.
   - 1.4. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE – MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL. THE SLOPE MUST BE NO GREATER THAN 1:20 IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:48 IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20, ADA RAMP STANDARDS MUST BE MET WITH A MAXIMUM SLOPE OF 1:12, FOR A MAXIMUM RISE OF 30 INCHES. RAMPS MUST HAVE ADA HAND RAILS AND LANDINGS AT BOTH THE TOP AND BOTTOM OF EACH RAMP, WITH CROSS SLOPES NO MORE THAN 1:48 IN ANY DIRECTION.
   - 1.5. DOORWAYS – MUST HAVE A LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:48 AND MUST BE NO LESS THAN 60 INCHES LONG.
2. WHEN THE PROPOSED CONSTRUCTION INCLUDES CONNECTION TO EXISTING ADA COMPONENTS, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN. NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF THERE ARE ANY DISCREPANCIES OR FIELD CONDITIONS THAT DIFFER FROM WHAT IS SHOWN BEFORE COMMENCING WORK. CONSTRUCTED IMPROVEMENTS MUST COMPLY WITH THE MAXIMUM AND MINIMUM ADA REQUIREMENTS.
3. THE CONTRACTOR MUST VERIFY THE SLOPES OF THE FORMWORK PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.

SOIL TESTING NOTES:

TEST PITS WERE DIRECTED AND OBSERVED BY HUDSON LAND DESIGN PERSONNEL ON DECEMBER 21, 2022. THE INTENT OF THE TEST PITS WAS TO GENERALLY DETERMINE THE ELEVATION OF BEDROCK BASED ON CURRENTLY PROPOSED GRADING AND NOT FOR GEOTECHNICAL OR STRUCTURAL PURPOSES.

TP-1:
TOTAL DEPTH: 9'-6"
± 3' SANDY LOAM WITH EVIDENCE OF PREVIOUS FILL/SPOIL
± 3' VERY TIGHT SANDY/GRAVELLY LOAM
REMAINDER SANDY LOAM
NO BEDROCK

TP-2:
TOTAL DEPTH: 6'-6"
± 2.5' SANDY LOAM
± 3' VERY TIGHT SANDY/GRAVELLY LOAM
REMAINDER SANDY LOAM
NO BEDROCK

TP-3:
TOTAL DEPTH: 6'-0"
± 4' SANDY LOAM WITH EVIDENCE OF PREVIOUS FILL/SPOIL
REMAINDER SANDY LOAM
BEDROCK @ 6'

TP-4:
TOTAL DEPTH: 4'-0"
± 4' SANDY LOAM
NO BEDROCK

TP-5:
TOTAL DEPTH: 5'-0"
± 5' SANDY LOAM
BEDROCK @ 5'

SPECIAL ROCK REMOVAL NOTES:

1. ROCK REMOVAL IS ANTICIPATED ON THE EAST SIDE OF THE SITE FOR DRIVEWAY AND DRAINAGE CONSTRUCTION. ROCK REMOVAL ASSOCIATED WITH CONSTRUCTION ACTIVITIES SHALL BE VIA MECHANICAL MEANS (E.G. HYDRAULIC HAMMERING). THESE MEASURES SHALL BE IMPLEMENTED ONLY ON WEEKDAYS BETWEEN THE HOURS OF 8:00 AM AND 4:00 PM.
2. IF THE ROCK ENCOUNTERED DURING CONSTRUCTION IS TOO HARD TO BE REMOVED BY MECHANICAL MEANS, BLASTING MAY BE CONSIDERED. HOWEVER, THERE SHALL BE NO BLASTING WITHOUT PRIOR APPROVAL FROM THE CITY OF BEACON BUILDING DEPARTMENT AFTER PREPARATION OF A BLASTING PLAN. ANY BLASTING REQUIRED SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL STANDARDS.

RETAINING WALL NOTES:

1. ALL RETAINING WALLS SHOWN ON THIS PLAN SHALL BE DESIGNED BY A NEW YORK STATE LICENSED ENGINEER AND PLANS SHALL BE SUBMITTED TO THE BEACON BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
2. UPON COMPLETION OF THE CONSTRUCTION OF THE RETAINING WALL, THE DESIGN ENGINEER SHALL PROVIDE CERTIFICATION TO THE CITY OF BEACON BUILDING DEPARTMENT THAT THE WALL WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED DESIGN PLANS.

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DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	11/29/22	SHEET ADDED	CMB				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				

STATE OF NEW YORK – DANIEL G. KOGAN – 085716 – LICENSED PROFESSIONAL ENGINEER

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

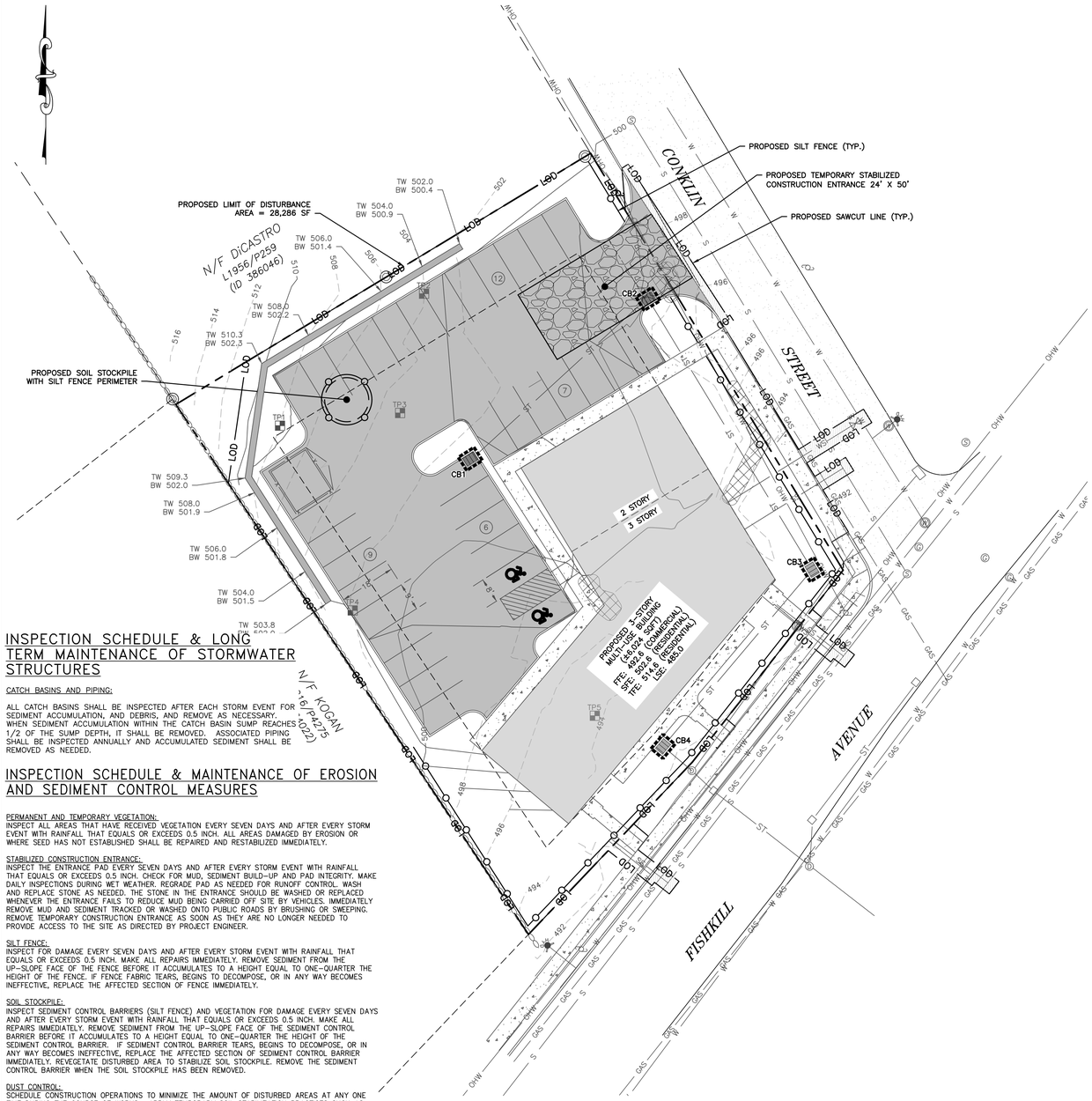
GRADING & UTILITY PLAN

397 FISHKILL AVE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032 & 399035

JOB #:	2022:015
DATE:	7/7/2022
SCALE:	AS SHOWN
TITLE:	GU-1
SHEET:	5 OF 8

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INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE:
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. REGRADE PAD AS NEEDED FOR RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE AS DIRECTED BY PROJECT ENGINEER.

SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

SOIL STOCKPILE:
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCKPILE. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.

DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORKS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

DEWATERING PITS:
(IF REQUIRED) – INSPECT DAILY DURING OPERATION FOR CLOGGING OR OVERFLOW. CLEAR INLET AND DISCHARGE PIPES OF OBSTRUCTIONS. IF A FILTER MATERIAL BECOMES CLOGGED WITH SEDIMENT, PIT SHALL BE DISMANTLED AND NEW PITS SHALL BE CONSTRUCTED AS NEEDED.

CATCH BASINS:
ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

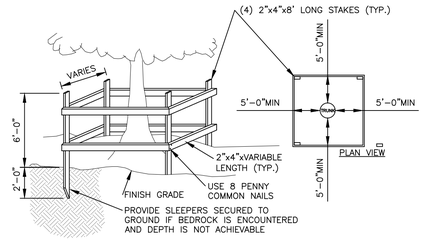
(IN FEET)
1 inch = 20 ft.

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LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
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- 510 EXISTING MAJOR CONTOUR
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- W EXISTING WATER LINE
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- ST EXISTING STORM WATER LINE
- EXISTING CATCH BASIN
- EXISTING DRAINAGE MANHOLE
- GAS EXISTING GAS LINE
- EXISTING GAS VALVE
- EXISTING WOODEN FENCE
- EXISTING STONE WALL

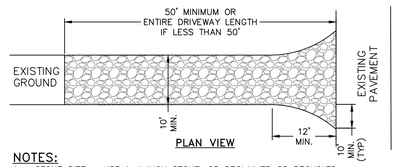
- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
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- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W PROPOSED WATER LINE
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED GATE VALVE
- PROPOSED SILT FENCE
- LOD PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE



NOTES:
1. TREES TO REMAIN NOTED ON EXISTING CONDITIONS PLAN.
2. NOT ALL TREES TO REMAIN REQUIRE PROTECTION. TREE PROTECTION TO BE UTILIZED ON TREES WHERE CONSTRUCTION TRAFFIC WOULD COMPACT THE ROOT ZONE OF THE TREE.

TEMPORARY TREE PROTECTION DETAIL

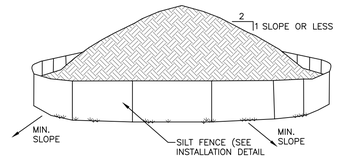
NOT TO SCALE



NOTES:
1. STONE SIZE – USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS – NOT LESS THAN SIX (6) INCHES.
3. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
4. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
5. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

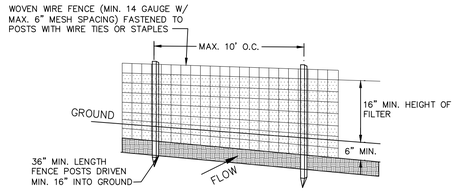
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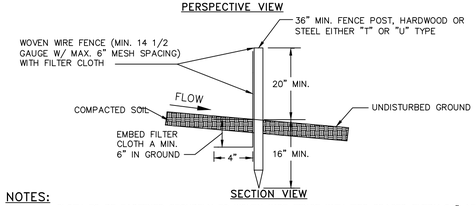


NOTES:
1. 1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

TEMPORARY SOIL STOCKPILE DETAIL

NOT TO SCALE

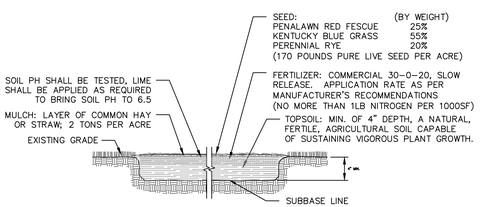




NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

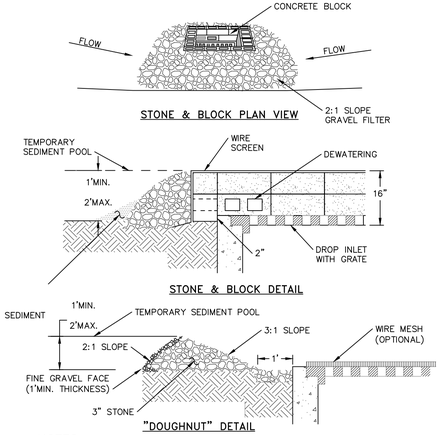
SILT FENCE DETAIL

NOT TO SCALE



TOPSOIL SEED, FERTILIZER AND MULCH DETAIL

NOT TO SCALE



NOTES:
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE.

CATCH BASIN INLET PROTECTION DETAIL

NOT TO SCALE

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	11/29/22	SHEET ADDED	CMB				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				

SEAL

HUDSON LAND DESIGN
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

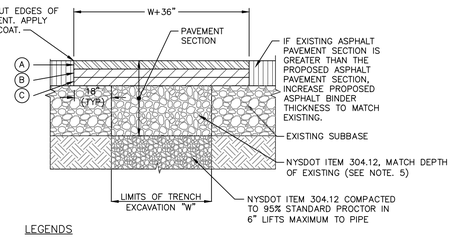
EROSION & SEDIMENT CONTROL PLAN

397 FISHKILL AVE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032 & 399035

JOB #:	2022:015
DATE:	7/7/2022
SCALE:	1" = 20'
TITLE:	ESC-1
SHEET:	6 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



LEGENDS

CONKLIN STREET RESTORATION COURSES:

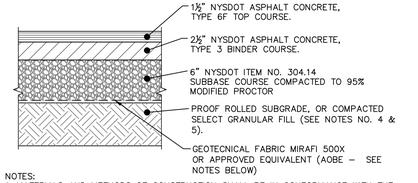
(A) 1–1/2" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE 6F
(B) 3–1/2" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE 3
(C) NO ASPHALTIC BASE COURSE

FISHKILL AVENUE RESTORATION COURSES:

(A) 1–1/2" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE 6F
(B) 2–1/2" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE 3
(C) 8" ASPHALTIC BASE COURSE– NYSDOT TYPE 1 (4" LIFTS)

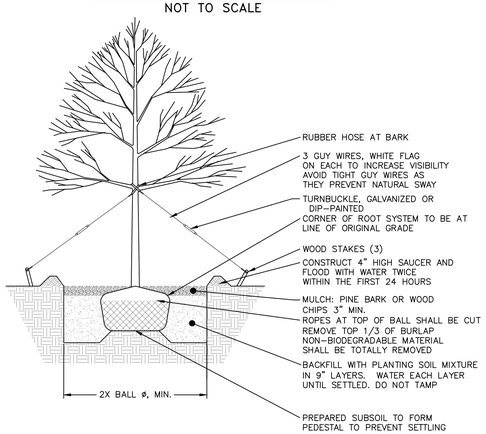
NOTES:
1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE IN TWO 4" LIFTS.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.
5. PROVIDE 10" GRANULAR SUBBASE COURSE – NYSDOT ITEM 304.12 FOR CONKLIN STREET RESTORATION.

PAVEMENT RESTORATION DETAIL
NOT TO SCALE

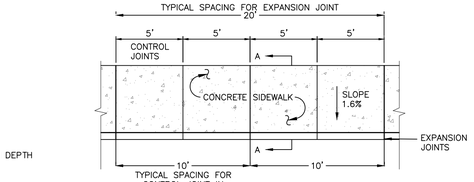


NOTES:
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002.
2. SUBGRADE SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS.
3. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407–TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
5. IT IS EXPECTED THAT THE EXISTING SITE SUB–SOILS ARE SAND AND GRAVEL IN NATURE (CALIFORNIA BEARING RATIO RANGE BETWEEN 40 AND 80). IF UNSUITABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR POSSIBLE MODIFICATIONS TO THE PAVEMENT DETAIL.

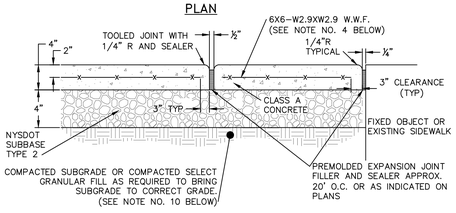
PAVEMENT SECTION DETAIL
NOT TO SCALE



TREE PLANTING DETAIL
NOT TO SCALE



PLAN

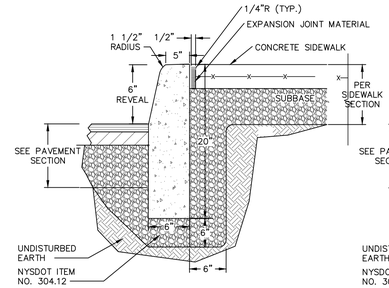


NOTES:

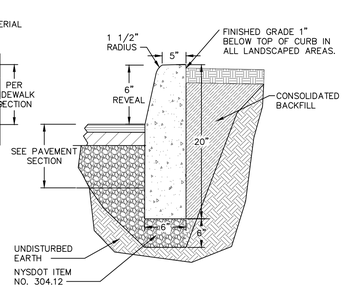
EXPANSION JOINT

1. 10' SPACING OF CONTROL JOINTS SHALL BE USED FOR CAST IN PLACE CONCRETE CURBS.
2. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002, AND ALL ADDENDA THERETO; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
3. ALL CONCRETE SHALL BE 4,000 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
5. ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
6. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
7. JOINTS SHALL NOT BE SAW CUT.
8. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEBOND" SB–7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
9. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
10. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMATION WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH SECTION 608–SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
12. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE



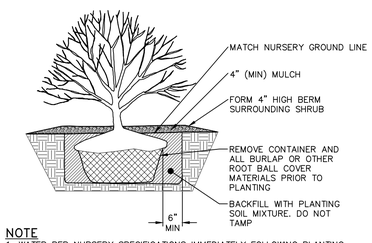
ABUTTING SIDEWALK



ABUTTING GRASS OR LANDSCAPE

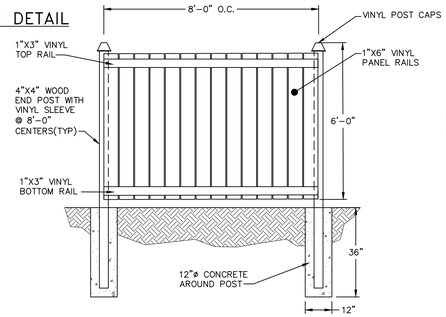
NOTES:
1. CONCRETE CURB SHALL BE 4,000 PSI CAST–IN–PLACE, AND IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 609.
2. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL BE PLACED AT 10 FOOT INTERVALS.
3. FOR MOUNTABLE CURBS ABUTTING SIDEWALK OR OTHER HARDSCAPE, REFER TO "ABUTTING SIDEWALK" DETAIL.
4. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

CAST–IN–PLACE CONCRETE CURB DETAIL
NOT TO SCALE



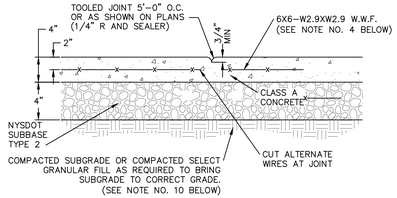
NOTE
1. WATER PER NURSERY SPECIFICATIONS IMMEDIATELY FOLLOWING PLANTING.
2. DETAIL IS FOR BOTH BALL & BURLAPPED OR CONTAINERED SHRUBS.

SHRUB PLANTING DETAIL
NOT TO SCALE

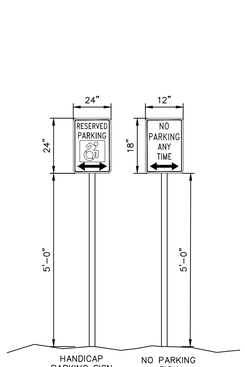


VINYL STOCKADE FENCE DETAIL
NOT TO SCALE

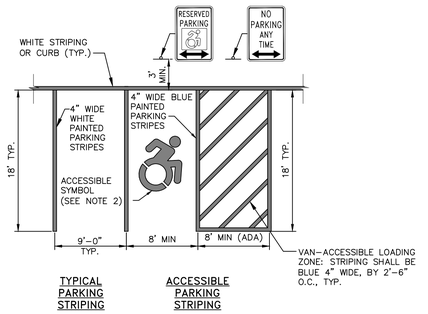
SECTION A–A



CONTROL JOINT



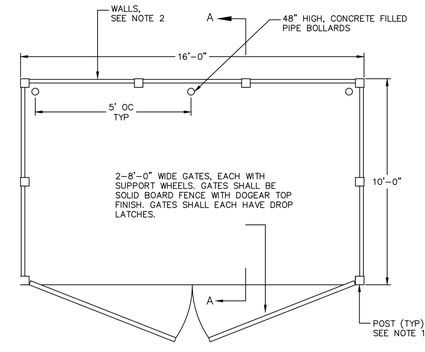
SIGN DETAILS
NOT TO SCALE



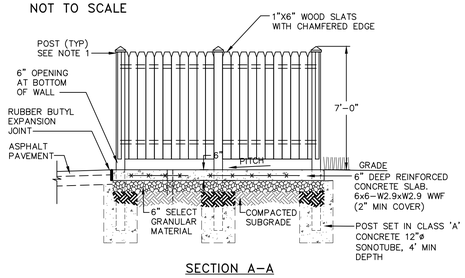
TYPICAL PARKING STRIPING — ACCESSIBLE PARKING STRIPING

NOTES:
1. ALL DIMENSIONS SUBJECT TO CURRENT MUNICIPALITY ZONING AND SITE REGULATIONS.
2. PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE WITH NYSDOT AND ADA STANDARDS.
3. IF PARKING ABUTS A SIDEWALK, THEN THE REGULATORY SIGNS SHALL BE PLACED BEHIND THE SIDEWALK.
4. PARALLEL SPACES SHALL BE 10'W X 20'L.

PARKING AND STRIPING DETAIL
NOT TO SCALE



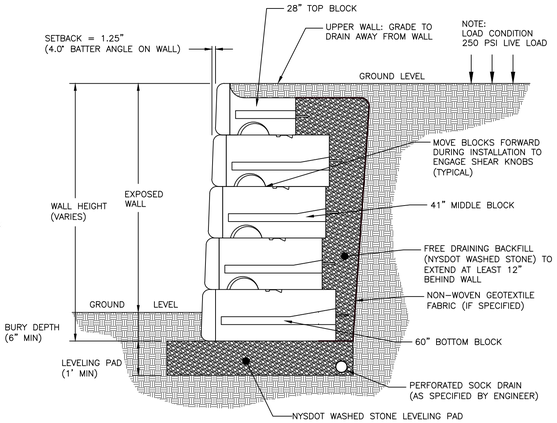
PLAN



SECTION A–A

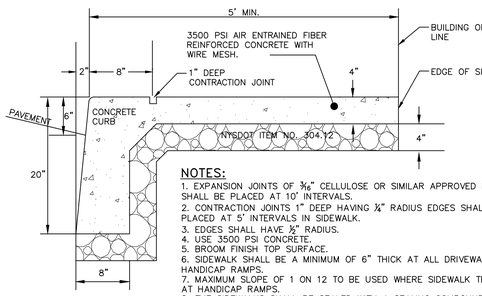
NOTES
1. POSTS SHALL HAVE A DECORATIVE CAP, CONSISTENT WITH THE ARTS & CRAFTS STYLE, AS APPROVED BY OWNER. POST SPACING SHALL BE AS REQUIRED BY WALL CONSTRUCTION.
2. WALLS OF DUMPSTER ENCLOSURE SHALL BE A SOLID WOOD PRIVACY FENCING NATURAL STAIL OR PAINT TO COMPLEMENT BUILDING.

TRASH ENCLOSURE DETAILS
NOT TO SCALE



NOTES:
1. RETAINING WALL MANUFACTURED BY REDI–ROCK OR APPROVED EQUAL.
2. THIS DETAIL FOR SITE PLAN APPROVAL ONLY TO SHOW GENERAL WALL ASSEMBLY.
3. THE WALL DESIGN SHALL BE PREPARED BY A NYS LICENSED ENGINEER, AND THE DESIGN SHALL BE SUBMITTED TO THE CITY OF BEACON BUILDING DEPARTMENT FOR REVIEW.
4. UPON COMPLETION OF CONSTRUCTION OF THE RETAINING WALL, THE DESIGN ENGINEER SHALL PROVIDE CERTIFICATION TO THE CITY OF BEACON BUILDING DEPARTMENT THAT THE WAL WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED DESIGN PLANS.

TYPICAL REDI–ROCK GRAVITY WALL
NOT TO SCALE



NOTES:
1. EXPANSION JOINTS OF 3/8" CELLULOSE OR SIMILAR APPROVED MATERIAL SHALL BE PLACED AT 10' INTERVALS.
2. CONTRACTION JOINTS 1" DEEP HAVING ¼" RADIUS EDGES SHALL BE PLACED AT 5' INTERVALS IN SIDEWALK.
3. EDGES SHALL HAVE ½" RADIUS.
4. USE 3500 PSI CONCRETE.
5. BROOM FINISH TOP SURFACE.
6. SIDEWALK SHALL BE A MINIMUM OF 6" THICK AT ALL DRIVEWAYS AND HANDICAP RAMPS.
7. MAXIMUM SLOPE OF 1 ON 12 TO BE USED WHERE SIDEWALK TERMINATES AT HANDICAP RAMPS.
8. THE SIDEWALKS SHALL BE SEALED WITH A SEALING COMPOUND TO PROTECT AGAINST DE–ICING AGENTS.

MONOLITHIC CURB AND SIDEWALK DETAIL FOR SIDEWALKS ALONG CITY STREET
NOT TO SCALE

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	11/29/22	SHEET ADDED	CMB				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				



SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926
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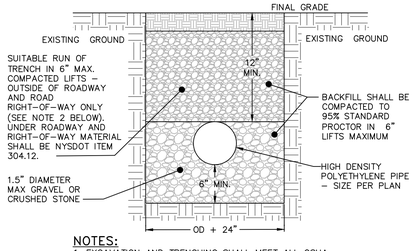
CONSTRUCTION DETAILS

397 FISHKILL AVE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055–80–392032 & 399035

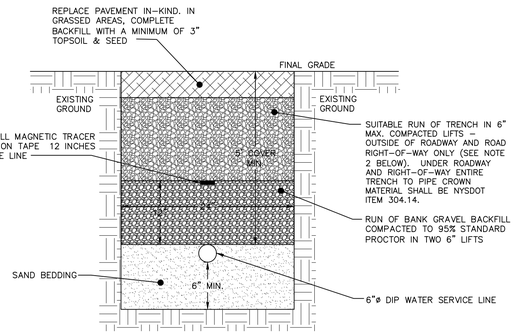
JOB #:	2022:015
DATE:	7/7/2022
SCALE:	AS SHOWN
TITLE:	CD–1
SHEET:	7 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



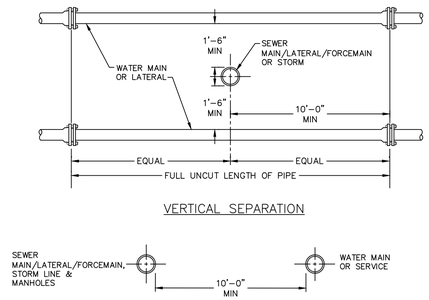
NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

STORM LINE TRENCH DETAIL
NOT TO SCALE



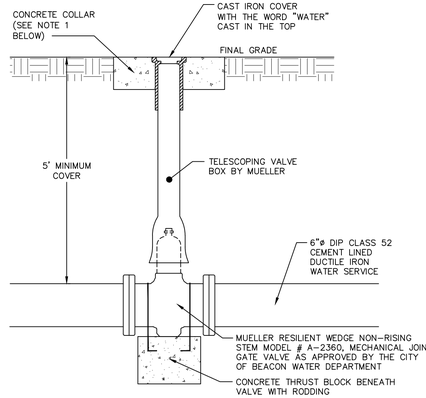
NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.
4. SPLIT FIRE SERVICE AND POTABLE WATER INTERIOR OF THE BUILDING AND PROVIDE ALL NECESSARY BACKFLOW PREVENTION DEVICES PER CITY OF BEACON REQUIREMENTS.

WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



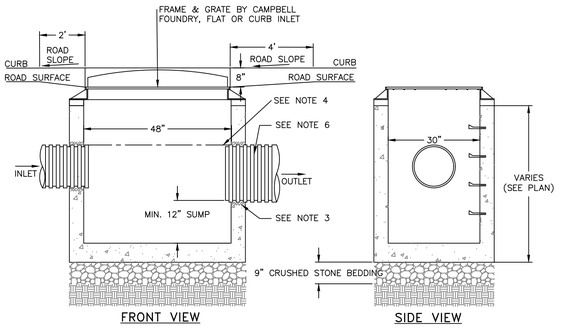
NOTE:
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

WATER LINE SEPARATION DETAIL
NOT TO SCALE



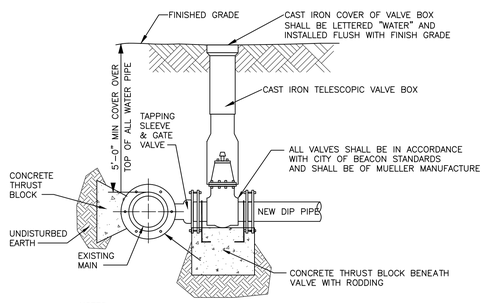
NOTES:
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.

GATE VALVE DETAIL
NOT TO SCALE



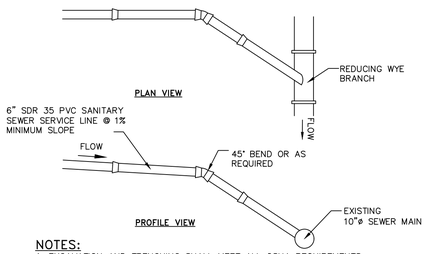
NOTES:
1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATERTIGHT.
4. PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
5. CATCH BASINS WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.
6. HDPE PIPE SHALL BE PROVIDED WITH WATERTIGHT CONNECTIONS. ADS MODEL N12 WT IB OR APPROVED EQUAL.

CATCH BASIN DETAIL
NOT TO SCALE



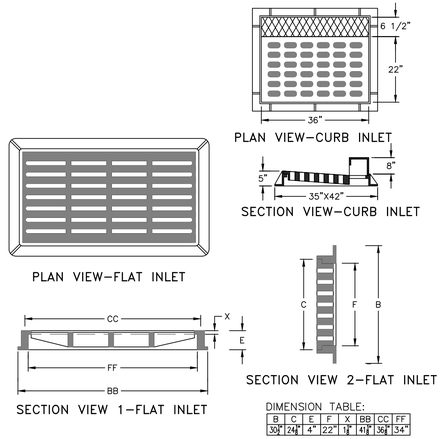
NOTES:
1. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2–INCH SQUARE–OPERATING NUT PAINTED RED.
2. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
3. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H–615, AND T–2630 RESPECTIVELY.

TAPPING SLEEVE DETAIL
NOT TO SCALE



NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. TAPPING SADDLE FOR CONNECTION OF THE PROPOSED SERVICE LINE TO THE EXISTING SEWER MAIN TO BE A 6" PREDCO HUB TAP SADDLE.

SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



DIMENSION TABLE:

B	C	E	F	X	BB	CC	FF
30"	24"	4"	22"	1"	41"	36"	34"

NOTES:
1. HEAVY DUTY RECTANGULAR STORMWATER FLAT INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 3433, OR APPROVED EQUAL.
2. HEAVY DUTY RECTANGULAR STORMWATER CURB INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
3. ALL CASTINGS LOCATED IN THE CITY RIGHT–OF–WAY SHALL BE DOMESTICALLY MADE.

CAST IRON STORMWATER FLAT AND CURB INLET GRATE DETAIL
NOT TO SCALE

DRAWN BY: CMB | CHECKED BY: DGK

REVISIONS:

NO.	DATE	DESCRIPTION	BY
1	11/29/22	SHEET ADDED	CMB
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB

REVISIONS:

NO.	DATE	DESCRIPTION	BY

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926
F: 845–440–6637

CONSTRUCTION DETAILS

397 FISHKILL AVE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055–80–392032 & 399035

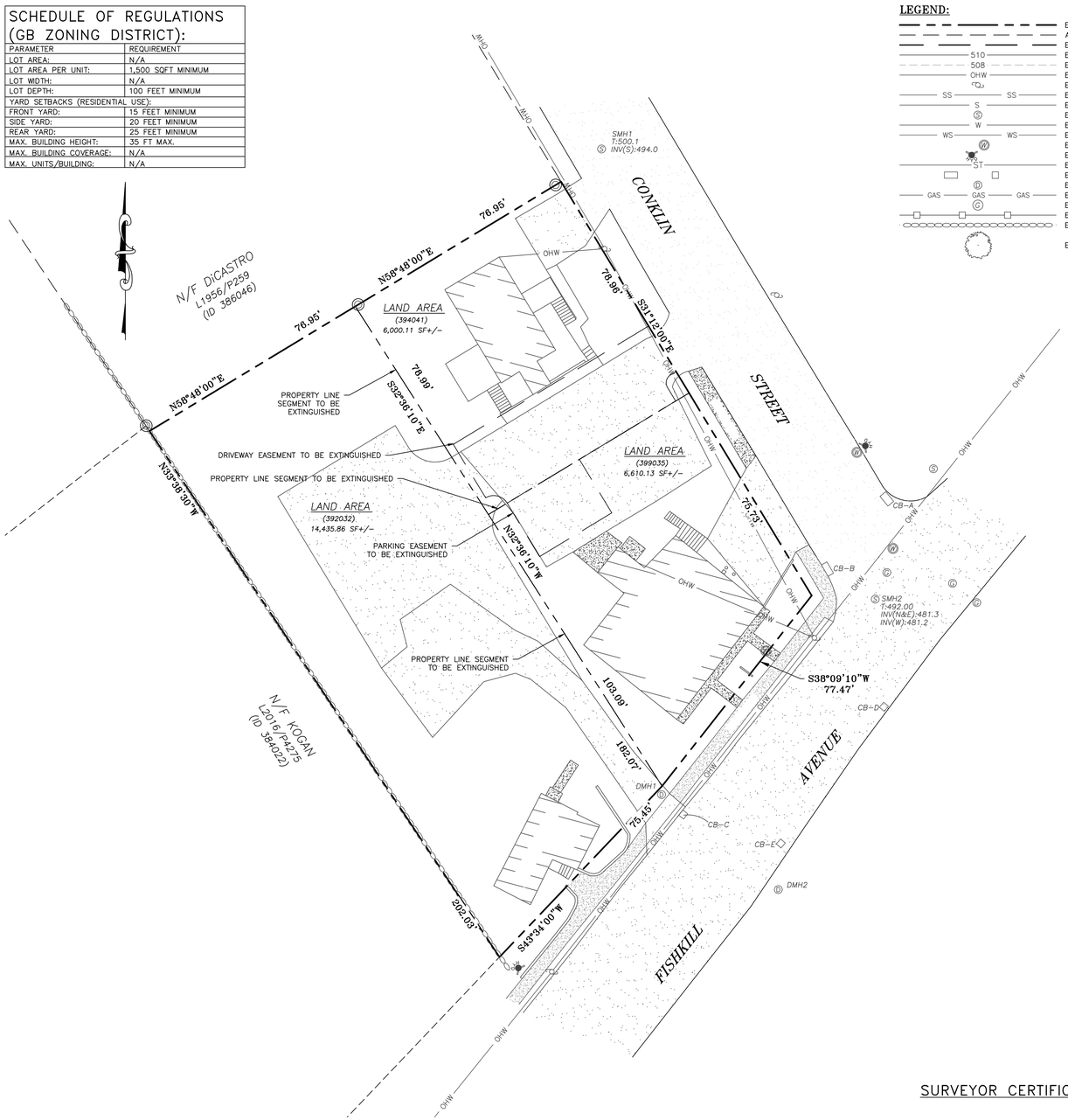
JOB #: 2022:015
DATE: 7/7/2022
SCALE: AS SHOWN
TITLE: CD–2
SHEET: 8 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

Preliminary Subdivision Plat

SCHEDULE OF REGULATIONS (GB ZONING DISTRICT):

PARAMETER	REQUIREMENT
LOT AREA:	N/A
LOT AREA PER UNIT:	1,500 SQFT MINIMUM
LOT WIDTH:	N/A
LOT DEPTH:	100 FEET MINIMUM
YARD SETBACKS (RESIDENTIAL USE):	
FRONT YARD:	15 FEET MINIMUM
SIDE YARD:	20 FEET MINIMUM
REAR YARD:	25 FEET MINIMUM
MAX. BUILDING HEIGHT:	35 FT MAX.
MAX. BUILDING COVERAGE:	N/A
MAX. UNITS/BUILDING:	N/A



LOTLINE REMOVAL PLAT

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- 510 EXISTING MAJOR CONTOUR
- 508 EXISTING MINOR CONTOUR
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WATER VALVE
- EXISTING HYDRANT
- ST EXISTING STORM WATER LINE
- EXISTING CATCH BASIN
- EXISTING DRAINAGE MANHOLE
- GAS EXISTING GAS LINE
- EXISTING GAS VALVE
- EXISTING WOODEN FENCE
- EXISTING STONE WALL
- EXISTING TREE

PROJECT INFORMATION:

PARCEL OWNER:	397 FISHKILL AVE LLC; 397 FISHKILL AVE, BEACON NY 12508 & 393 FISHKILL AVE LLC; 397 FISHKILL AVE, BEACON NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PROJECT SURVEYOR:	STEVEN J. GREEN P.L.S., PO BOX 534, GOSHEN, NY 10924
PROJECT ARCHITECT:	ARYEH SIEGEL, 84 MASON CIRCLE, BEACON, NY 12508
PROJECT LANDSCAPE DESIGN:	LANDSCAPE RESTORATIONS, 7 CREEK DRIVE, BEACON, NY 12508
PARCEL LOCATION:	397 & 393 FISHKILL AVE, 7 CONKLIN ST, BEACON NY 12508
TAX PARCEL ID:	6055-80-399035 (0.15 AC) & 392032 (0.33 AC) & 394041 (0.14 AC)
PARCEL AREA:	±0.62-ACRES TOTAL
WATER SUPPLY:	MUNICIPAL - CITY OF BEACON
SEWAGE DISPOSAL:	MUNICIPAL - CITY OF BEACON



LOCATION MAP SCALE: 1" = 200'

MAP REFERENCES:

1. BOUNDARY AND TOPOGRAPHICAL SURVEY PER "SURVEY FOR JORDAN HAUG" AS PREPARED BY STEVEN J. GREEN, P.L.S. DATED MAY 29, 2022 AND UPDATED IN NOVEMBER 2022 TO PROVIDE SANITARY SEWER INVERT ELEVATIONS.

SURVEY NOTES:

1. PROPERTY LINE AS SHOWN ARE BASED ON DEEDS OF RECORD AND FILED MAPS.
2. THIS IS AN ACCURATE SURVEY COMPLETED IN THE FIELD MAY 2022.
3. SUBJECT TO ALL EASEMENTS AND/OR AGREEMENTS THAT THE PUBLIC UTILITY COMPANIES MAY HAVE.
4. ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE AN ORIGINAL OF THE LAND SURVEYOR'S SEAL OR HIS/HER HER EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.
5. SUBJECT TO ALL RIGHT OF WAY TAKINGS NOT SHOWN OR FOUND IN COUNTY OR TOWN RECORDS.

LOT CONSOLIDATION & EASEMENT NOTES:

1. THE INTENT F THIS PLAN IS TO CONSOLIDATE THE THREE EXISTING TAX PARCELS INTO A SINGLE TAX PARCEL BY REMOVING ALL INTERIOR LOT LINES, CONCURRENT WITH A SITE PLAN APPLICATION BEFORE THE CITY OF BEACON PLANNING BOARD.
2. THE EXISTING PARKING AND DRIVEWAY EASEMENTS ARE TO BE EXTINGUISHED AS PART OF THE LOT CONSOLIDATION PROCESS. THE EASEMENTS ARE DESCRIBED IN NOTE 4 OF A MAP ENTITLED LOT LINE REALIGNMENT FOR GARY VILLANO PREPARED BY PETER R. HUSTIS, L.L.S. DATED AUGUST 13, 1991 AND LAST REVISED MAY 26, 1993 AND FILED AT THE DUTCHESS COUNTY CLERK'S OFFICE ON JUNE 8, 1993 AS FILED MAP 9719, AS FOLLOWS:
THE OWNER OF LOT NO. 1, ITS SUCCESSORS AND ASSIGNS, IS GRANTING A PARKING EASEMENT CONSISTING OF 3 PARKING SPACES (TO BE MARKED 1, 2 AND 3) TO THE OWNER OF LOT NO. 2, ITS SUCCESSORS AND ASSIGNS. ALSO, THE OWNER OF LOT NO. 2 IS GRANTING THE OWNER OF LOT NO. 1 A DRIVEWAY EASEMENT FOR INGRESS AND EGRESS TO THE PROPOSED PARKING AREA ON LOT NO. 1.

OWNER'S CONSENT:

THE UNDERSIGNED OWNER OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____

JORDAN HAUG DATE

393 FISHKILL AVE. LLC

397 FISHKILL AVE. LLC

SURVEYOR CERTIFICATION:

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON MAY 29, 2022.

BY:_____

DCDOH STANDARD NOTE:

FOR PERMISSION TO FILE

THIS PLAN DOES NOT CONSTITUTE A REALTY SUBDIVISION AS DEFINED BY ARTICLE XI, TITLE II, SECTION 1115 OF THE PUBLIC HEALTH LAW OF THE STATE OF NEW YORK, AND ARTICLE XI OF THE DUTCHESS COUNTY SANITARY CODE. PERMISSION IS HEREBY GRANTED FOR THE FILING OF THIS MAP WITH THE CLERK OF DUTCHESS COUNTY. APPROVAL FOR ARRANGEMENTS FOR WATER SUPPLY AND/OR SEWAGE DISPOSAL IS NEITHER SOUGHT NOR GRANTED.

_____ _____

AUTHORIZED REPRESENTATIVE OF THE COMMISSIONER OF HEALTH DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

STATE OF NEW YORK DANIEL G. KOGAN 082716 LICENSED PROFESSIONAL ENGINEER 2017

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

LOT LINE REMOVAL PLAT
REVISION TO FILED MAP 9719
397 FISHKILL AVENUE

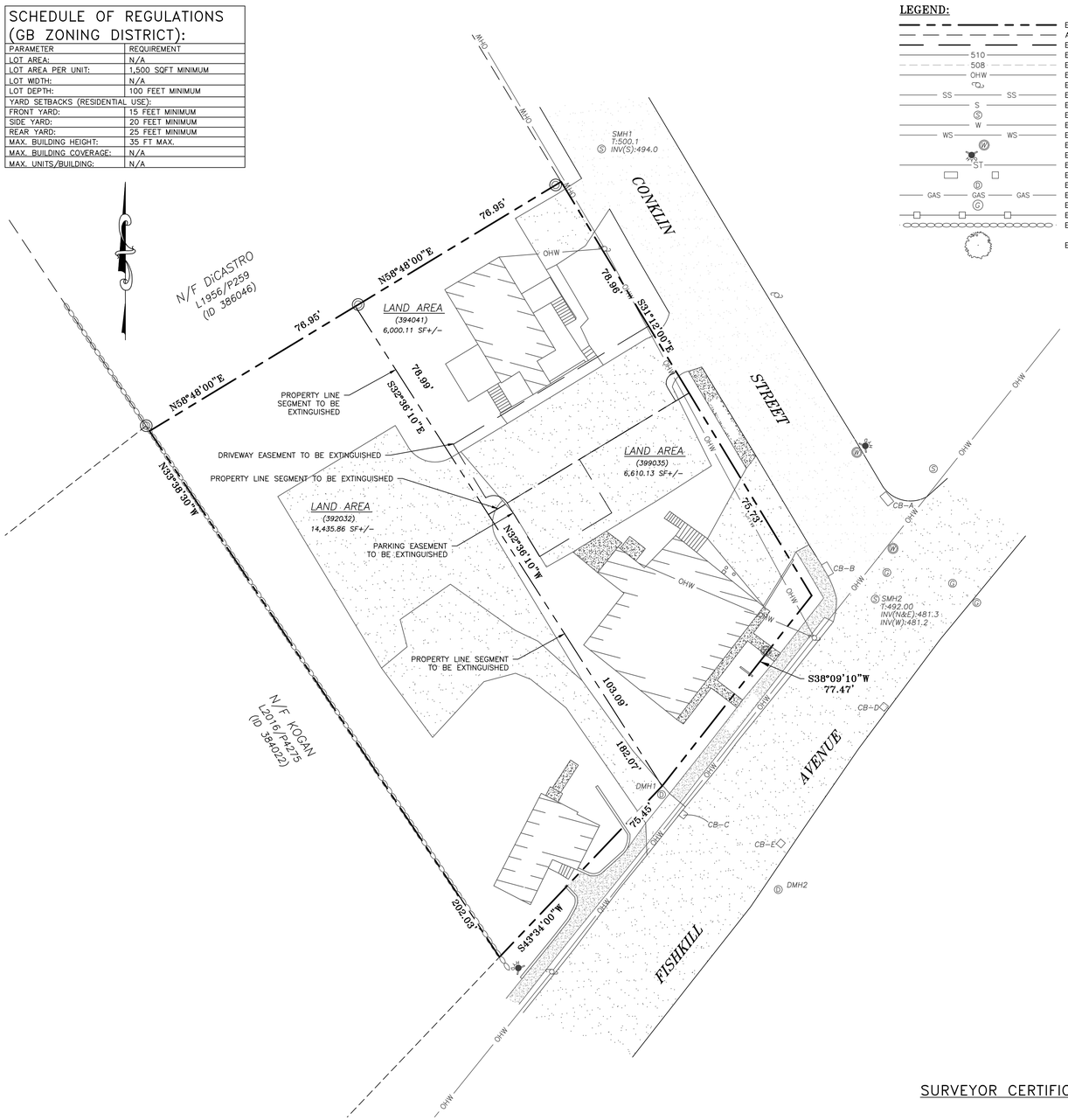
397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032 & 399035

JOB #:	2022:015
DATE:	12/27/2022
SCALE:	1" = 20'
TITLE:	PT-1
SHEET:	1 OF 1

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

SCHEDULE OF REGULATIONS (GB ZONING DISTRICT):

PARAMETER	REQUIREMENT
LOT AREA:	N/A
LOT AREA PER UNIT:	1,500 SQFT MINIMUM
LOT WIDTH:	N/A
LOT DEPTH:	100 FEET MINIMUM
YARD SETBACKS (RESIDENTIAL USE):	
FRONT YARD:	15 FEET MINIMUM
SIDE YARD:	20 FEET MINIMUM
REAR YARD:	25 FEET MINIMUM
MAX. BUILDING HEIGHT:	35 FT MAX.
MAX. BUILDING COVERAGE:	N/A
MAX. UNITS/BUILDING:	N/A



LOTLINE REMOVAL PLAT

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

LEGEND:

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- ADJOINING PROPERTY LINE
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- GAS EXISTING GAS LINE
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- EXISTING WOODEN FENCE
- EXISTING STONE WALL
- EXISTING TREE

PROJECT INFORMATION:

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TAX PARCEL ID:	6055-80-399035 (0.15 AC) & 392032 (0.33 AC) & 394041 (0.14 AC)
PARCEL AREA:	±0.62-ACRES TOTAL
WATER SUPPLY:	MUNICIPAL - CITY OF BEACON
SEWAGE DISPOSAL:	MUNICIPAL - CITY OF BEACON



LOCATION MAP SCALE: 1" = 200'

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OWNER'S CONSENT:

THE UNDERSIGNED OWNER OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____

JORDAN HAUG DATE

393 FISHKILL AVE. LLC

397 FISHKILL AVE. LLC

SURVEYOR CERTIFICATION:

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON MAY 29, 2022.

BY:_____

DCDOH STANDARD NOTE:

FOR PERMISSION TO FILE

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_____ _____

AUTHORIZED REPRESENTATIVE OF THE COMMISSIONER OF HEALTH DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

STATE OF NEW YORK DANIEL G. KOGAN 082716 LICENSED PROFESSIONAL ENGINEER 2017

SEAL

HUDSON LAND DESIGN

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
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LOT LINE REMOVAL PLAT
REVISION TO FILED MAP 9719
397 FISHKILL AVENUE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032 & 399035

JOB #:	2022:015
DATE:	12/27/2022
SCALE:	1" = 20'
TITLE:	PT-1
SHEET:	1 OF 1

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: 397 Fishkill Avenue, LLC – Application for Site Plan & Lot Line Adjustment Approval		
Project Location (describe, and attach a general location map): 397 Fishkill Avenue, 393 Fishkill Avenue and 7 Conklin Street, Beacon NY, 12508		
Brief Description of Proposed Action (include purpose or need): Application for Site Plan and Lot Line Adjustment (Subdivision) approval to merge three (3) lots and construct a new mixed-use building comprised of twelve (12) apartments and 3,500 sq. ft. of commercial space in place of the existing office/mixed-use, residential and multi-family residential uses on the collective properties. The site will provide off-street parking facilities with a driveway connection to Conklin Street where access to the properties already provided.		
Name of Applicant/Sponsor: 397 Fishkill Avenue, LLC & 393 Fishkill Avenue, LLC	Telephone: 845-765-8881 E-Mail: Jhaug@letteriohaug.com	
Address: 397 & 393 Fishkill Avenue		
City/PO: Beacon	State: NY	Zip Code: 12508
Project Contact (if not same as sponsor; give name and title/role): Taylor Palmer, Esq., Cuddy & Feder LLP (Attorney for the Applicant)	Telephone: 914-761-1300 E-Mail: tpalmer@cuddyfeder.com	
Address: 445 Hamilton Avenue, Fl. 14		
City/PO: White Plains	State: NY	Zip Code: 10601
Property Owner (if not same as sponsor): 7 Conklin Street LLC (Owner: 7 Conklin Street; Contract Vendee: 397 Fishkill Avenue, LLC)	Telephone: 843-422-7717 E-Mail:	
Address: 105 Sedgman Court		
City/PO: Cary	State: NC	Zip Code: 27511

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☐Yes ☑No		
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Lotline Adjustment (Subdivision) Site Plan	October 2022
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☑Yes ☐No	Building Department – Building Permit	March 2023
e. County agencies ☐Yes ☑No		
f. Regional agencies ☐Yes ☑No		
g. State agencies ☐Yes ☑No		
h. Federal agencies ☐Yes ☑No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☑Yes ☐No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐Yes ☑No

If Yes, identify the plan(s):

_____

_____

_____

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

_____

_____

_____

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
GB - General Business

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site?

C.4. Existing community services.

a. In what school district is the project site located? Beacon City School District

b. What police or other public protection forces serve the project site?
Beacon City Police, NY State Police, Dutchess County Sherriff

c. Which fire protection and emergency medical services serve the project site?
Beacon Fire Department

d. What parks serve the project site?
Several City of Beacon Parks

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Commercial on lowest floor, Residential on upper floors

b. a. Total acreage of the site of the proposed action? 0.62 acres
b. Total acreage to be physically disturbed? +/-0.60 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.62 acres

c. Is the proposed action an expansion of an existing project or use? (See footnote 1 below) ☑ Yes ☐ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % 600%; 185% Units: resi units; commercial s.f.

d. Is the proposed action a subdivision, or does it include a subdivision? ☑ Yes ☐ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
Merge three lots into one
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? 1
iv. Minimum and maximum proposed lot sizes? Minimum 0.62 Maximum 0.62

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 12 months
ii. If Yes:
- Total number of phases anticipated
- Anticipated commencement date of phase 1 (including demolition) month year
- Anticipated completion date of final phase month year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

Footnotes:
1. residential units: 2 existing, 12 total proposed - 600% increase
commercial floor area: 2,402 square feet existing, 4,453 square feet total proposed - 185% increase

f. Does the project include new residential uses? ☑ Yes ☐ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				12 total units
At completion of all phases				12 total units

g. Does the proposed action include new non-residential construction (including expansions)? ☑ Yes ☐ No

If Yes,

i. Total number of structures 1

ii. Dimensions (in feet) of largest proposed structure: <35' height; +/-55' width; and +/-175' length

iii. Approximate extent of building space to be heated or cooled: 16,737 (gross) square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☑ No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐ Yes ☑ No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐ Yes ☐ No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No
If Yes, describe:

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No
If Yes:

- acres of aquatic vegetation proposed to be removed:
- expected acreage of aquatic vegetation remaining after project completion:
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):
- proposed method of plant removal:
- if chemical/herbicide treatment will be used, specify product(s):

v. Describe any proposed reclamation/mitigation following disturbance:

c. Will the proposed action use, or create a new demand for water? ☑Yes ☐No
If Yes:

i. Total anticipated water usage/demand per day: 1,770* gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☑Yes ☐No
If Yes:

- Name of district or service area: City of Beacon
- Does the existing public water supply have capacity to serve the proposal? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No
- Do existing lines serve the project site? ☑Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☑No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project:
- Source(s) of supply for the district:

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☑No
If, Yes:

- Applicant/sponsor for new district:
- Date application submitted or anticipated:
- Proposed source(s) of supply for new district:

v. If a public water supply will not be used, describe plans to provide water supply for the project:
N/A

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑Yes ☐No
If Yes:

i. Total anticipated liquid waste generation per day: 1,770* gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):
Sanitary Wastewater

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑Yes ☐No
If Yes:

- Name of wastewater treatment plant to be used: Beacon City Wastewater Treatment Plant
- Name of district: City of Beacon
- Does the existing wastewater treatment plant have capacity to serve the project? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No

* 12 bedrooms @ 110 gpd/br plus assumed 30 employees @ 15 gpd/employee

- Do existing sewer lines serve the project site? ☑ Yes ☐ No
- Will a line extension within an existing district be necessary to serve the project? ☐ Yes ☑ No

  If Yes:
  - Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐ Yes ☑ No

If Yes:
- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

N/A

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

None proposed

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐ Yes ☑ No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐ Yes ☐ No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐ Yes ☐ No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☑ Yes ☐ No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

None

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

None

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

Furnaces for heating of building

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐ Yes ☑ No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☐ No

ii. In addition to emissions as calculated in the application, the project will generate:
- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

_____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

65,000 kWh (Assumes annual 14.5 kWh per square foot)

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

Local Grid including suppliers such as Central Hudson Gas and Electric

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7 AM to 5 PM
- Saturday: 9 AM to 5 PM
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: 8 AM to 5 PM (commercial)**
- Saturday: 24/7 **
- Sunday: 24/7 **
- Holidays: 24/7 **

** 24 hours per day, 7 days per week for residential

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Construction Vehicles and Activities (during construction), 7 AM to 5 PM weekdays, 9 AM to 5 PM Saturdays

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: Landscaped screening is proposed pursuant to the Applicant's landscaping plan.

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Parking area lighting, building mounted lighting at entrances

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe:

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities:

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☑ Yes ☐ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: 5 tons per month (unit of time)
- Operation : 2 tons per month (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: Recycling of useful materials
- Operation: Recycling - paper, plastic, metals

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: Roll-off dumpster
- Operation: Solid waste and recycling containers

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☑ Urban ☑ Industrial ☑ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Residential multi-family

ii. If mix of uses, generally describe:

mixed-uses consistent with the GB District

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.32	0.45	+0.13
• Forested	0	0	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0	0	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
• Wetlands (freshwater or tidal)	0	0	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: Grassed Areas	0.30	0.17	-0.13

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

Wingate at Beacon; Hedgewood Home for Adults

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☑ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No

☐ Yes – Spills Incidents database Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☑ No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☐ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? ~2*** feet

b. Are there bedrock outcroppings on the project site? ☑ Yes ☐ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? 3 %

c. Predominant soil type(s) present on project site:

NwC	48 %
Ud	40 %
Ur	12 %

d. What is the average depth to the water table on the project site? Average: >6.5*** feet

e. Drainage status of project site soils:
- ☑ Well Drained: 100 % of site
- ☐ Moderately Well Drained: _____ % of site
- ☐ Poorly Drained _____ % of site

f. Approximate proportion of proposed action site with slopes:
- ☑ 0-10%: 79 % of site
- ☑ 10-15%: 13 % of site
- ☑ 15% or greater: 8 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

i. Name of aquifer: _____

*** Per USGS Soils Mapping Information

m. Identify the predominant wildlife species that occupy or use the project site:
Squirrels
Local birds
Raccoons

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation): _____
ii. Source(s) of description or evaluation: _____
iii. Extent of community/habitat:
- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No
If Yes:
i. Species and listing (endangered or threatened): _____
Indiana Bat

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No
If Yes:
i. Species and listing: _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No
If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No
If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No
i. If Yes: acreage(s) on project site? _____
ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No
If Yes:
i. CEA name: _____
ii. Basis for designation: _____
iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: HH-26 Hudson Highlands State Park; HH-27 Dutchess Junction

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Scenic Areas of Statewide Significance

iii. Distance between project and resource: +/-1 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

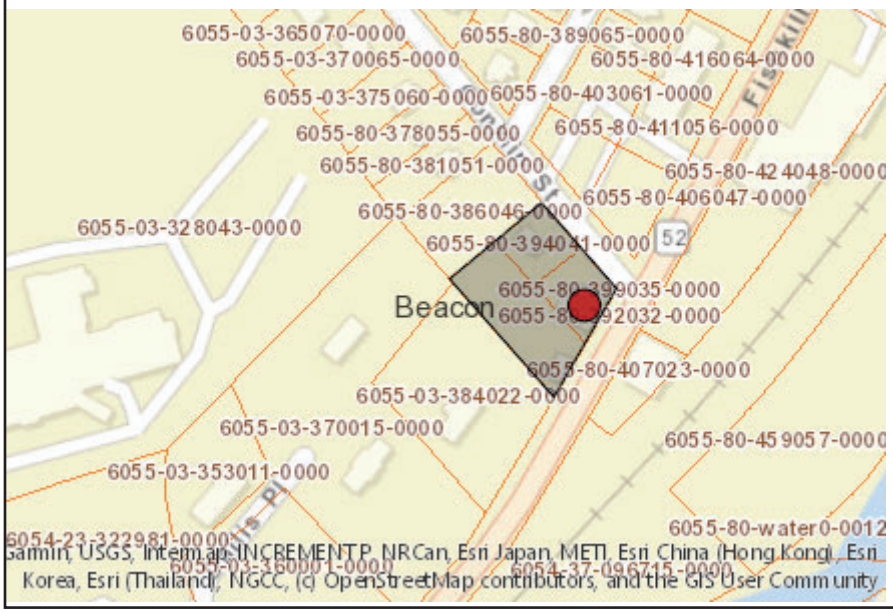
G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Daniel G. Koehler, P.E., Hudson Land Design Date 11/16/2022 rev. 12/27/2022

Signature _____ Title Project Engineer

PRINT FORM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	Yes
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Indiana Bat

E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

ARYEH SIEGEL
ARCHITECT

John Gunn - Planning Board Chairman
City of Beacon
One Municipal Plaza
Beacon, NY 12508

Re: 393-397 Fishkill Avenue, Beacon, New York
Site Plan Application – Responses to Comments

December 27, 2022

Dear Chairman Gunn and Members of the Planning Board,

Below please find our responses to the comments included in John Clarke Planning and Design's Memorandum, dated December 9, 2022. Please refer to Hudson Land Design's response letter regarding Lanc & Tully's letter dated December 8, 2022.

John Clarke Planning and Design Comment Responses:

1. Comment acknowledged. The Applicant will consider privacy fencing to shield the parking lot from adjoining residential neighbors.

2. Comment acknowledged. This submission includes a landscaping plan with a planting list and notes. We also include a lighting plan noting compliance with Beacon standards. The building elevations will be forthcoming in the next submittal, per the building footprint revisions noted in Item 3 below.

3. The building footprint has been modified to provide 20 foot side yard setbacks on both sides.

4. Comment acknowledged. The parking layout will be reviewed to maximize maneuverability at the southernmost parking space

Lanc & Tully Comment Responses:

General Comments

1. Please refer to Hudson Land Design's letter for responses to the General Comments

Please refer to Hudson Land Design's and Colliers Engineering letters for responses to additional engineering comments.

84 Mason Circle | ajs@ajsarch.com | *Tel* 845 838 2490
Beacon, New York 12508 | www.ajsarch.com | *Fax* 845 838 2657

Sheet 1 of 7 - Site Plan

1. The plan has been updated to show the retaining wall
2. The sign location has been modified to avoid conflict with the drainage structure
3. Note 2 on the plan notes that the sign will be submitted to the Building Department for review and approval
4. The landscaping plan will be coordinated with the snow storage area.

Sheet 2 of 7 - Building Plans

1. The 1st floor plan shows the location of the mechanical room, and has been preliminarily sized to the backflow prevention and fire sprinkler assembly.

Please refer to Hudson Land Design's letter for additional responses.

Thank you. Please let me know if you have any questions.

Sincerely,



Aryeh Siegel
Aryeh Siegel, Architect

Civil & Environmental Engineering Consultants
174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)
13 Chambers Street, Newburgh, NY 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com

December 27, 2022

Chairman John Gunn & Members of the City of Beacon Planning Board
1 Municipal Plaza
Beacon, NY 12508

Re: Application for Lot Line Adjustment (Subdivision/Lot Merger) & Site Plan Approval
Proposed Mixed-Use Commercial & Residential Building
393 & 397 Fishkill Avenue & 7 Conklin Street
Tax Parcels: 6055-80-392032, 6055-80-399035 & 6055-80-394041, ±0.62 acre total
City of Beacon, NY

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has revised the plans in response to John Clarke Planning and Design's December 9, 2022 comment letter, and Lanc & Tully's December 8, 2022 comment letter. Responses to public comments is also provided in this letter. The Project Architect, Aryeh Siegel, has responded to the John Clarke memo. Below is a point-by-point response to the Lanc & Tully comment letter.

Lanc & Tully December 8, 2022 Comment Letter

SEQRA Comments

1. The response to D.1.c has been revised to provide clarity of the numbers presented.

General Comments

2. Comment noted. The existing conditions plan shows the road and sidewalk per the survey, and the plan sheets show the revised configuration that was scaled from the WSP plan set. Our proposed utilities are shown on Conklin Street to avoid conflict with that capital improvement project. We have added notes with regard to the abandonment of certain utilities prior to the Fishkill Avenue Improvement Project. We have also made note to a new sewer service to serve the existing building if it is still in use. There will need to be continued coordination with the capital project and this proposal prior to either commencing.
3. An I&I study and report for the two buildings along Fishkill Avenue is complete and attached. The report will be modified (or a separate report will be issued) after the building at 7 Conklin Street is studied. The property at 7 Conklin Street is now under control of the project applicant so the study will commence in the near future.

4. A pre versus post stormwater analysis is provided with this submittal.
5. This latest set of submitted plans will be forwarded to Emergency Services for input.
6. Five test pits were conducted at the site on December 21, 2022 based on the current grading. Test pits were advanced to a depth below subgrade or until refusal by bedrock. Based on the results, there will be limited or no rock removal on the west side of the project. We expect some rock removal on the east side of the project near the rock outcrop areas identified on the maps. Rock removal notes have been added to the grading and utility plan.
7. A subdivision plat is included in this submittal.
8. The architect's sheets include additional detail, including a lighting and landscaping plan.
9. An ADA accessible route inset map has been provided on the grading and utility plan.
10. We anticipate using a redi-rock type of retaining wall which does not require reinforcement. Test pit side walls were near vertical and stable; therefore, we believe that these walls can be constructed without the need for coordinating with the adjacent property owners. Retaining wall notes have been added to the grading and utility sheet to address the design and construction certification.

Sheet 1 (Site Plan) and Sheet 2 (Building plan)

Refer to the response letter from Aryeh Siegel, architect.

Sheet 4 of 8 – Existing Conditions & Demolition:

1. The existing freestanding sign is to be removed and replaced with a new freestanding sign as shown on the architect's Site Plan.
2. Rock outcrop locations have been added to the plan. The size of the mains is provided on the plans. Existing storm sewer sizes are provided per the WSP plans. These have been generally confirmed by this office. Notation on pipe changes per the WSP plan are also provided. The trees are shown on the plan.
3. The utility abandonment note has been modified as requested.
4. The utility abandonment note has been modified as requested.
5. The tree clearing restriction ahs been added (Demolition Note 22).

Sheet 5 of 8 – Grading & Utility:

1. Page C-3 of the referenced manual notes that 6" raw sewer lines can be set at minimum slope of 1%. We prefer to maintain that flexibility in the event of unknown conflicts.
2. The LSE has been added.
3. The location of the moved utility pole and sign has been shown.
4. Several top and bottom retaining wall elevations have been provided.
5. The wet tap has been called out and the valve is shown.
6. The proposed catch basin rim elevations are provided.
7. The proposed stormwater pipe inverts are provided.
8. A monolithic curb and sidewalk detail has been provided for the Conklin Street sidewalk.

Sheet 7 of 8 – Construction Details:

1. The pavement restoration detail for Conklin Street has been revised.
2. The pavement restoration detail for Utility work in Fishkill Avenue has been revised.

Finally, it is acknowledged that the recreation area on the west side of the proposed building is not shown on the engineering plans at this time. The area will be incorporated into the next plan submittal assuming that the Planning Board endorses the area as generally shown. For the Planning Board's consideration, we envision that there would need to be retaining walls and steps in order to make the area work as laid out by the architect. At that time, fine grading on the east and south side of the building will also be provided. The south side will need to assume final elevations following the construction of the Fishkill Avenue improvements, which have already been taken into consideration in setting the first floor elevation.

We look forward to continuing the review process with the Planning Board. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,



Daniel G. Koehler, P.E.
Principal

cc: 397 Fishkill Avenue LLC & 393 Fishkill Avenue LLC, Applicant (via email)
Aryeh Siegel, Project Architect (via email)
Cuddy + Feder LLP, Project Attorney (via email)
Michael A. Bodendorf, P.E. (HLD file)

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

December 16, 2022

John Gunn
Chairman
City of Beacon Planning Board
One Municipal Plaza, Suite One
Beacon, NY 12508

Re: DEC
397 Fishkill Avenue, LLC - Application for Site Plan & Lot Line Adjustment Approval
393-397 Fishkill Avenue, Beacon, NY 12508
22PR08660

Dear John Gunn:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

rev: J. Carter

HUDSON LAND DESIGN

Civil & Environmental Engineering Consultants
174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)
13 Chambers Street, Newburgh, New York 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com

December 27, 2022

Mr. John Gunn, Chairman, & Members of the City of Beacon Planning Board
1 Municipal Center
Beacon, NY 12508

Re: Infiltration and Inflow Investigation
Proposed Mixed-Use Commercial & Residential Building
393 & 397 Fishkill Avenue & 7 Conklin Street
Tax Parcels: 6055-80-392032, 6055-80-399035 & 6055-80-394041
City of Beacon, NY

Dear Chairman Gunn & Members of the Planning Board,

Hudson Land Design (HLD) has completed an infiltration and inflow investigation at the above referenced parcel as required by the City of Beacon. The investigation was conducted on December 21, 2022 at the existing commercial buildings located at 393 & 397 Fishkill Avenue in the City of Beacon. The residential building located at 7 Conklin Street will be investigated and incorporated into a future revision to this I&I report.

The first phase of the study consisted of an exterior inspection of the buildings to determine the disposition of roof drainage. Both 393 and 397 Fishkill Avenue buildings have portions of roof runoff that are not collected by gutter and simply discharge to the surface at the roof drip line. Where gutters are present at both buildings, the downspouts convey the roof runoff to the surface and not into any underground piping.

The second phase of the study consisted of inspecting the interior of the building to determine if there are any illicit connections to the building's sewer lines from sump pumps, floor drains and the like. HLD personnel were not able to observe the interior sanitary sewer plumbing as the buildings do not have basements or accessible crawl spaces. During the inspection of the interior of each building, there was no evidence of any sump pumps or illicit connections to the sanitary sewer.

HLD did not find any illicit connections from the buildings located at 393 & 397 Fishkill Avenue to the City of Beacon's sanitary sewer collection system.

Should you have any questions, please feel free to call me at 845-440-6926.

Sincerely,



Daniel G. Koehler, P.E.
Principal

cc: 397 Fishkill Avenue LLC & 393 Fishkill Avenue LLC, Applicant (via email)
Aryeh Siegel, Project Architect (via email)
Cuddy + Feder LLP, Project Attorney (via email)
Michael A. Bodendorf, P.E. (HLD file)

Drainage Report
for
397 Fishkill Avenue

Prepared for:
397 Fishkill Avenue, LLC
397 Fishkill Avenue
Beacon, NY 12508

December 27, 2022



Prepared by:
Hudson Land Design Professional Engineering, P.C.
174 Main Street
Beacon, NY 12508
Ph: (845) 440-6926

TABLE OF CONTENTS

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3.0 SOIL CONDITIONS 1

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7.0 EROSION AND SEDIMENT CONTROL 5

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APPENDIX B: SUPPORTING DATA
APPENDIX C: HYDROLOGIC MODELING
APPENDIX D: HYDROGRAPH COMPARISON & PIPE SIZING

1.0 INTRODUCTION

The 397 Fishkill Avenue project is located on the northwest side of Fishkill Avenue at intersection with Conklin Street in the City of Beacon, Dutchess County, New York. The project is located parcels are located within the GB zoning district and has a tax map designation of 6055-80-399035, 392032, & 394041, totaling ±0.62 acres. The parcels currently have two commercial buildings and a two-family residential building. The project proposes to consolidate the three parcels and replace the existing buildings with a mixed-use building which includes residential and commercial uses and an onsite parking area.

Fishkill Avenue is a NYSDOT road and there are currently plans to resurface, restore, and rehabilitate the road. The proposed stormwater collection system at the site has been designed to connect to the improvements storm drainage system using the Final Plans dated May 2022 from the NYSDOT.

2.0 METHODOLOGY AND REGULATORY COMPLIANCE

The proposed project will result a total 0.65 acres of disturbance, and therefore is not subject to the requirements of NYSDEC GP-0-20-001 General Permit for Construction Activities. Pre-development vs. post-development drainage analysis for the project was performed to evaluate stormwater runoff patterns and demonstrate that the post-development runoff rates to the existing stormwater discharge points will not have adverse impacts.

The proposed stormwater collection system will connect to the storm drainage system in Fishkill Avenue that is under the jurisdiction of the NYSDOT. NYSDOT review and approval for the proposed storm connection will be required.

Runoff calculations were performed utilizing HydroCAD® version 10.00 published by HydroCAD Software Solutions, LLC. The software utilizes the principles of TR-55 and TR-20 to generate unit hydrographs. Rainfall events are generated utilizing Soil Conservation Service (SCS) Type III, 24-hour rainfall event for Dutchess County, NY. The Type III rainfall depths for the 1-Year, 2-Year, 5-Year, 10-Year, 25-Year, 50-Year, and 100-Year rainfall events are 2.61, 3.16, 3.96, 4.70, 5.89, 7.00, and 8.34 inches, respectively. Rainfall data can be found in Appendix B of this report.

3.0 SOIL CONDITIONS

A review of the Soil Survey of Dutchess County indicates that there are three types of soil present on the project site and its associated contributing drainage area. Supporting information has been provided in Appendix B. Table I below summarizes the characteristics of the soil types present within the drainage area.

Table I: Soil Types

Map Unit	Soil Names	Water Table (ft)	Bedrock	Hydrologic Soil Group
NwC	Nassau-Cardigan complex, rolling, very rocky	>80 inches	Nassau: 10-20 inches; Cardigan: 20-40 inches	C
Ud	Udorthents, smoothed	36-72 inches	>80 inches	A
Ur	Urban land	N/A	N/A	N/A

Source: websoilsurvey.sc.egov.usda.gov

4.0 EXISTING DRAINAGE CONDITIONS

4.1 Design Points

Design Points represent the location where the majority of runoff from an area exits the site. The same design point is identified in post-development conditions, so that a comparison can be made between the pre-development and post-development conditions. One design point for the project area was selected, and as follows:

Table II - Stormwater Design/Discharge Point

Stormwater Discharge Point	
SDP	**Description**
1	Connection to existing NYSDOT storm drainage system at Fishkill Avenue

4.2 Existing Watershed Areas

Runoff from the project area during existing conditions can be divided in the following subcatchments:

Subcatchment 1 is comprised of 2.85 acres of onsite and offsite area tributary to the NYSDOT storm drainage system on the northwest side of Fishkill Avenue prior to crossing the road to the discharge point. This area includes the site, the surrounding residential and commercial areas, and roads. The majority of soils in this subcatchment area are hydrologic soil group D, urban land has been assumed to be hydrologic soil group D. Drainage generally flows southwest toward Fishkill Avenue and is collected by the NYSDOT storm drainage system in Fishkill Avenue and conveyed to SDP1.

4.3 Existing Runoff Rates

Runoff rates for existing conditions have been calculated at the designated SDP and summarized in Table III as follows:

Table III: Existing Runoff Rates (cfs)

Drainage Area	1-Year	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
DA 1	4.92	6.33	8.39	10.29	13.32	16.12	19.41

Unit hydrograph analysis results for pre-development conditions have been included as Appendix C.

5.0 PROPOSED DRAINAGE CONDITIONS

5.1 Developed Watershed Area

The proposed project results in a total of approximately 0.65 acres of disturbance due to the construction of the building and parking. The site was divided into two subcatchments. Alternate modeling has been completed that includes an underground stormwater detention system between the site and the discharge to the existing manhole.

Subcatchment 10 is comprised of 2.40 acres of offsite area outside of the area that is collected by the onsite stormwater system. This area includes the surrounding residential and commercial areas and roads. The majority of soils in this subcatchment area are hydrologic soil group D, urban land has been assumed to be hydrologic soil group D. Drainage patterns are unchanged from existing conditions. Drainage generally flows southwest toward Fishkill Avenue and is collected by the NYSDOT storm drainage system in Fishkill Avenue and conveyed to SDP1.

Subcatchment 11 is comprised of 0.48 acres of onsite area that is tributary to the proposed stormwater collection system. This area includes the building roof, parking area, and surrounding lawn area, along with a small offsite area above the parking area. The soils in this this subcatchment area are hydrologic soil groups A and D. Drainage generally flows west into the parking area where it is collected by a proposed catch basin and conveyed to SDP1. A new storm drainage connection will be made to the existing manhole in the NYSDOT right-of-way. A stormwater design including a potential underground stormwater detention area was also evaluated.

5.2 Proposed Runoff Rates

Runoff rates for proposed conditions have been calculated for each of the drainage areas and are summarized in Table IV as follows:

Table IV: Proposed Runoff Rates

Drainage Area	1-Year	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
DA 10	4.15	5.34	7.07	8.67	11.22	13.59	16.36
DA 11	1.07	1.36	1.77	2.15	2.75	3.31	3.96

Unit hydrograph analysis results for post-development conditions have been included as Appendix C.

6.0 DRAINAGE ANALYSIS CONCLUSIONS

The stormwater runoff rates at Design Points under pre-development and post-development conditions are summarized below.

Table V: Proposed Runoff Rates Comparison

SDP	1-Year	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
Pre	4.92	6.33	8.39	10.29	13.32	16.12	19.41
Post	4.99	6.41	8.47	10.37	13.41	16.22	19.52
Post w/detention	5.07	6.50	8.60	10.51	13.53	16.33	19.65

The runoff rates at the Design Point shows a slight increase during all analyzed storms. The addition of an onsite detention system increases the peak runoff rates at the Design Point. This is due to the site being at downstream end of the larger watershed. The detention system causes the peak runoff rate to be delayed and overlap with the peak runoff rate of the larger watershed, causing a larger increase in the runoff peak. Comparison hydrographs showing the relationship between the overall watershed and the site and the overall watershed with a detention system are included in Appendix D.

The project is proposing a new connection to a NYSDOT storm drainage manhole in the Fishkill Avenue right-of-way. Chapter 8 of the Highway Design Manual includes guidance for proposed connections to the NYSDOT's stormwater drainage system. Section 8.2.3.2 of the manual includes guidance:

> *Generally, a retention or detention system is necessary to restrict the flow rate of a development's drainage discharge to the pre-development rate. In situations where the development is discharging near the downstream end of a relatively large drainage area, an undetained connection may be appropriate. This allows the increased flow from the development to pass downstream prior to the peak flow from the watershed. Detention in these situations can actually increase the watershed peak flow. Proper analysis of the watershed's characteristics is necessary.*

Test pits at site have revealed bedrock within 5 feet of the ground surface along Fishkill Avenue with outcrops along Conklin Street making underground detention or infiltration not feasible. The provided analysis shows that addition of a stormwater management system will cause increases in the peak runoff rate, therefore no stormwater management system is proposed.

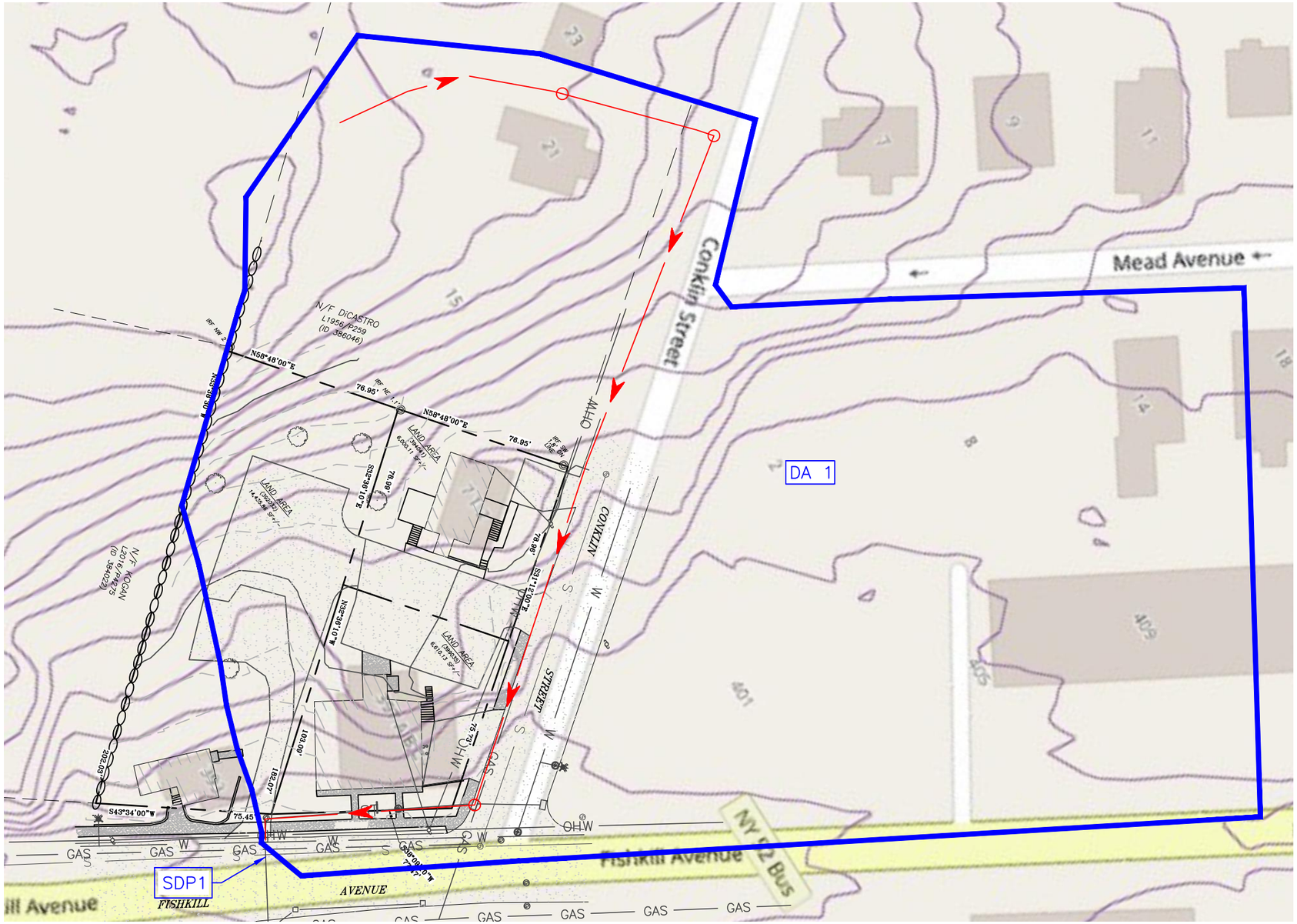
Storm drainage systems located on minor arterials, such as Fishkill Avenue, must be designed to the 5-year design flood frequency and the 25-year design flood if no overflow relief to the system is available. An analysis of the outlet pipe beneath Fishkill Avenue shows that it is capable of passing up to the 50-year design flood, including the slight increase due to the proposed development. Pipe sizing calculations are included in Appendix D.

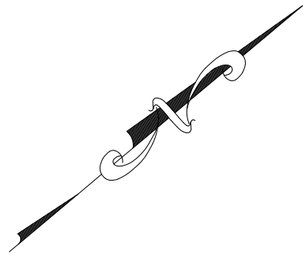
7.0 EROSION AND SEDIMENT CONTROL

Contractors shall adhere to the temporary and permanent erosion control measures as indicated on the plan. Repairs shall be made as necessary to remain in compliance with the New York State Standards and Specifications for Erosion and Sediment Control, 2016. The site plans include detailed erosion and sediment control practices for this project.

APPENDIX A

DRAINAGE MAPS





GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

DRAWN BY: CMB CHECKED BY: MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

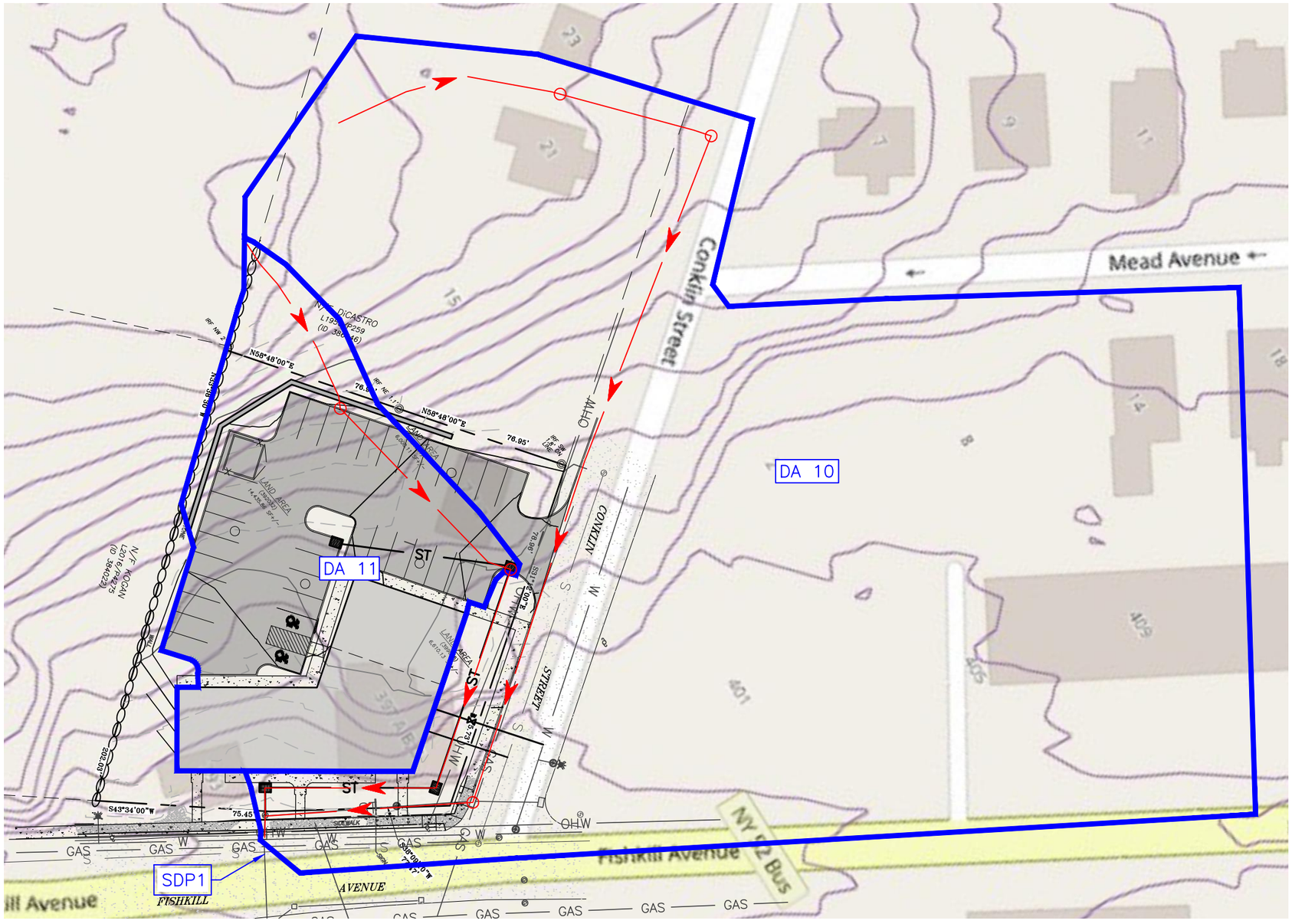
PRE-DEVELOPMENT CONDITIONS MAP

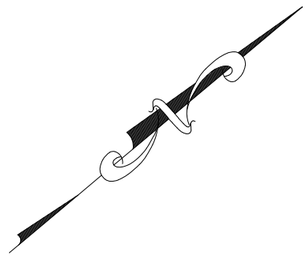
397 FISHKILL AVENUE

397 FISHKILL AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032, 399035, & 394041

JOB #:	2022:015
DATE:	12/27/22
SCALE:	1" = 50'
TITLE:	DR-1
SHEET:	1 OF 2

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GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

1 inch = 50 ft.

DRAWN BY: CMB CHECKED BY: MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

POST-DEVELOPMENT CONDITIONS MAP

397 FISHKILL AVENUE

397 FISHKILL AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032, 399035, & 394041

JOB #:	2022:015
DATE:	12/27/22
SCALE:	1" = 50'
TITLE:	DR-2
SHEET:	2 OF 2

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APPENDIX B

SUPPORTING DATA

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New York
Location	
Longitude	73.953 degrees West
Latitude	41.510 degrees North
Elevation	0 feet
Date/Time	Fri, 16 Dec 2022 15:08:10 -0500

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.33	0.50	0.62	0.82	1.02	1.26	**1yr**	0.88	1.19	1.44	1.77	2.15	2.61	2.96	**1yr**	2.31	2.85	3.29	3.96	4.59	**1yr**
2yr	0.39	0.59	0.74	0.98	1.23	1.53	**2yr**	1.06	1.43	1.75	2.14	2.61	3.16	3.57	**2yr**	2.80	3.43	3.93	4.64	5.29	**2yr**
5yr	0.46	0.71	0.89	1.19	1.52	1.91	**5yr**	1.31	1.76	2.20	2.70	3.28	3.96	4.52	**5yr**	3.51	4.35	5.00	5.78	6.53	**5yr**
10yr	0.51	0.80	1.02	1.38	1.79	2.27	**10yr**	1.55	2.07	2.62	3.21	3.90	4.70	5.40	**10yr**	4.16	5.20	6.00	6.83	7.68	**10yr**
25yr	0.60	0.95	1.21	1.67	2.23	2.85	**25yr**	1.92	2.55	3.30	4.06	4.92	5.89	6.85	**25yr**	5.21	6.59	7.64	8.52	9.50	**25yr**
50yr	0.68	1.09	1.39	1.95	2.63	3.39	**50yr**	2.27	3.00	3.93	4.83	5.85	7.00	8.20	**50yr**	6.19	7.89	9.17	10.07	11.18	**50yr**
100yr	0.77	1.25	1.61	2.28	3.11	4.03	**100yr**	2.68	3.52	4.68	5.77	6.97	8.31	9.83	**100yr**	7.36	9.45	11.03	11.92	13.15	**100yr**
200yr	0.88	1.43	1.85	2.66	3.68	4.80	**200yr**	3.17	4.15	5.59	6.88	8.31	9.88	11.78	**200yr**	8.75	11.32	13.26	14.10	15.49	**200yr**
500yr	1.05	1.74	2.26	3.28	4.60	6.04	**500yr**	3.97	5.14	7.05	8.69	10.48	12.43	14.97	**500yr**	11.00	14.39	16.94	17.63	19.23	**500yr**

Lower Confidence Limits

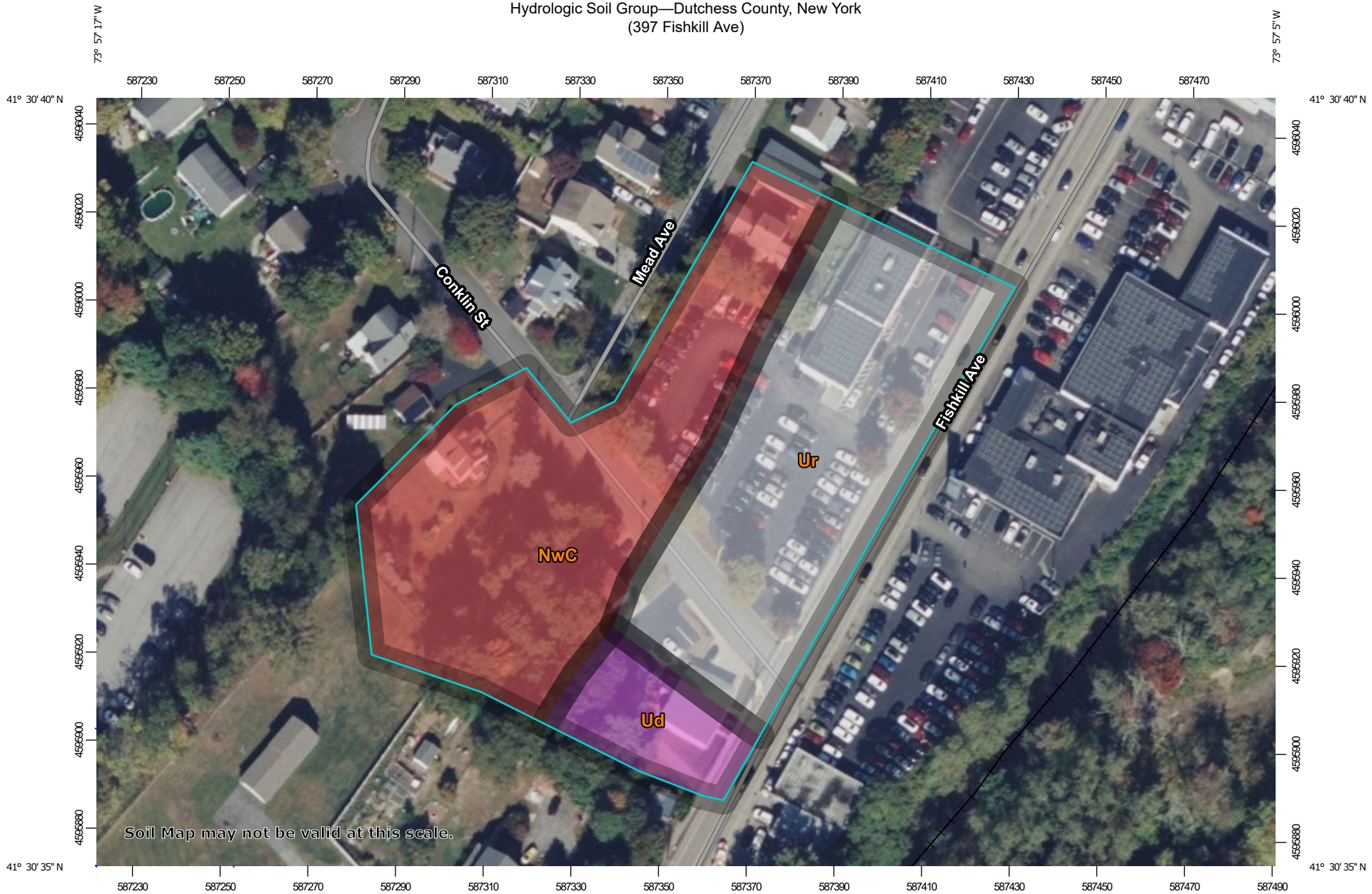
	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.43	0.53	0.71	0.88	1.08	**1yr**	0.76	1.06	1.24	1.60	2.01	2.07	2.35	**1yr**	1.83	2.26	2.48	3.21	4.15	**1yr**
2yr	0.37	0.58	0.71	0.96	1.19	1.41	**2yr**	1.02	1.38	1.61	2.05	2.58	3.07	3.45	**2yr**	2.72	3.31	3.78	4.47	5.13	**2yr**
5yr	0.42	0.65	0.81	1.11	1.41	1.65	**5yr**	1.22	1.62	1.88	2.41	3.00	3.65	4.16	**5yr**	3.23	4.00	4.56	5.27	6.06	**5yr**
10yr	0.47	0.72	0.89	1.25	1.62	1.85	**10yr**	1.39	1.81	2.11	2.71	3.37	4.12	4.81	**10yr**	3.65	4.63	5.24	5.96	6.87	**10yr**
25yr	0.54	0.82	1.03	1.47	1.93	2.13	**25yr**	1.66	2.09	2.45	3.04	3.93	4.83	5.83	**25yr**	4.27	5.60	6.29	6.99	8.12	**25yr**
50yr	0.61	0.92	1.15	1.65	2.22	2.38	**50yr**	1.92	2.32	2.77	3.40	4.42	5.46	6.75	**50yr**	4.83	6.49	7.22	7.88	9.23	**50yr**
100yr	0.68	1.03	1.30	1.87	2.57	2.67	**100yr**	2.22	2.61	3.12	3.79	4.99	6.13	7.83	**100yr**	5.42	7.53	8.30	8.86	10.49	**100yr**
200yr	0.78	1.17	1.48	2.14	2.99	2.98	**200yr**	2.58	2.92	3.53	4.25	5.64	6.82	9.12	**200yr**	6.04	8.77	9.53	9.96	11.94	**200yr**
500yr	0.93	1.38	1.77	2.58	3.66	3.48	**500yr**	3.16	3.40	4.17	4.95	6.65	7.87	11.15	**500yr**	6.96	10.72	11.46	11.59	14.18	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.36	0.56	0.68	0.91	1.12	1.36	**1yr**	0.97	1.33	1.53	1.96	2.42	2.82	3.19	**1yr**	2.50	3.07	3.55	4.24	4.93	**1yr**
2yr	0.40	0.62	0.76	1.04	1.28	1.54	**2yr**	1.10	1.50	1.74	2.25	2.80	3.33	3.70	**2yr**	2.95	3.56	4.10	4.83	5.48	**2yr**
5yr	0.49	0.76	0.94	1.29	1.64	1.95	**5yr**	1.42	1.91	2.25	2.89	3.66	4.26	4.89	**5yr**	3.77	4.70	5.42	6.30	7.02	**5yr**
10yr	0.58	0.89	1.11	1.54	2.00	2.36	**10yr**	1.72	2.31	2.74	3.53	4.49	5.20	6.02	**10yr**	4.60	5.79	6.73	7.71	8.49	**10yr**
25yr	0.72	1.10	1.37	1.95	2.57	3.04	**25yr**	2.22	2.97	3.57	4.74	5.88	6.77	7.95	**25yr**	5.99	7.64	8.97	10.09	10.95	**25yr**
50yr	0.85	1.29	1.61	2.32	3.12	3.70	**50yr**	2.69	3.62	4.35	5.84	7.21	8.29	9.80	**50yr**	7.34	9.42	11.17	12.39	13.28	**50yr**
100yr	1.01	1.52	1.91	2.76	3.78	4.50	**100yr**	3.26	4.39	5.31	7.21	8.84	10.15	12.07	**100yr**	8.98	11.60	13.92	15.22	16.11	**100yr**
200yr	1.19	1.79	2.27	3.28	4.58	5.45	**200yr**	3.95	5.33	6.48	8.88	10.83	12.44	14.88	**200yr**	11.01	14.31	17.35	18.72	19.55	**200yr**
500yr	1.49	2.22	2.86	4.15	5.90	7.05	**500yr**	5.09	6.89	8.43	11.74	14.18	16.32	19.61	**500yr**	14.45	18.85	23.25	24.65	25.25	**500yr**

Powered by ACIS
Northeast Regional Climate Center

Hydrologic Soil Group—Dutchess County, New York
(397 Fishkill Ave)



Map Scale: 1:1,230 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 15 30 60 90

Feet
0 50 100 200 300

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

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Lines

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Points

A
A/D
B
B/D
C
C/D
D
Not rated or not available

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 1:24,000.

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: Dutchess County, New York
Survey Area Data: Version 19, Sep 10, 2022

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

Date(s) aerial images were photographed: Oct 8, 2020—Oct 14, 2020

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
NwC	Nassau-Cardigan complex, rolling, very rocky	D	1.3	47.5%
Ud	Udorthents, smoothed	A	0.2	8.7%
Ur	Urban land		1.2	43.8%
Totals for Area of Interest			**2.8**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

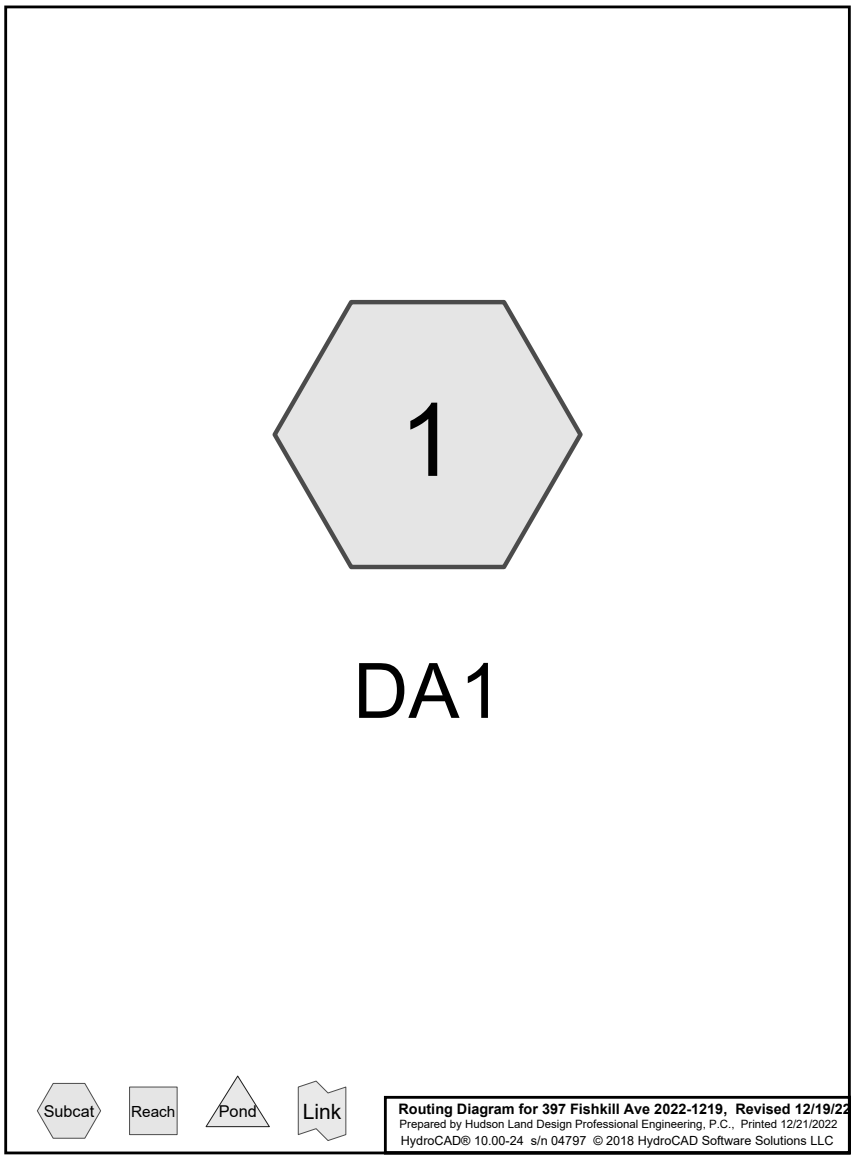
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX C

HYDROLOGIC MODELING



Summary for Subcatchment 1: DA1

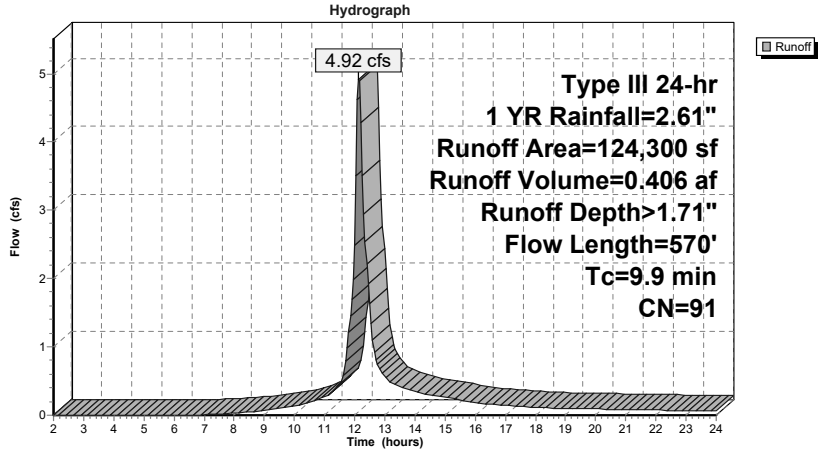
Runoff = 4.92 cfs @ 12.14 hrs, Volume= 0.406 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 YR Rainfall=2.61"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

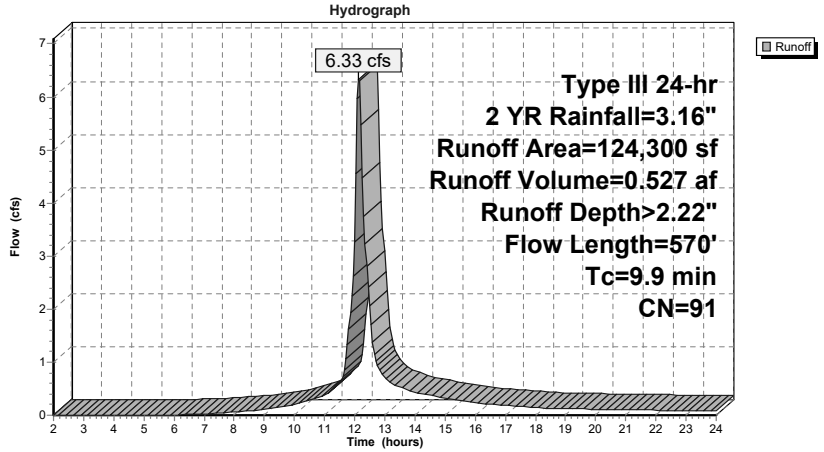
Runoff = 6.33 cfs @ 12.14 hrs, Volume= 0.527 af, Depth> 2.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.16"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

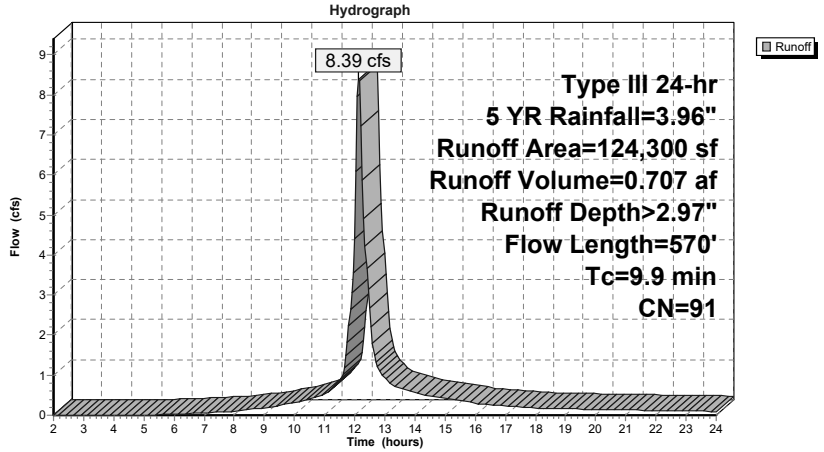
Runoff = 8.39 cfs @ 12.14 hrs, Volume= 0.707 af, Depth> 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 5 YR Rainfall=3.96"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

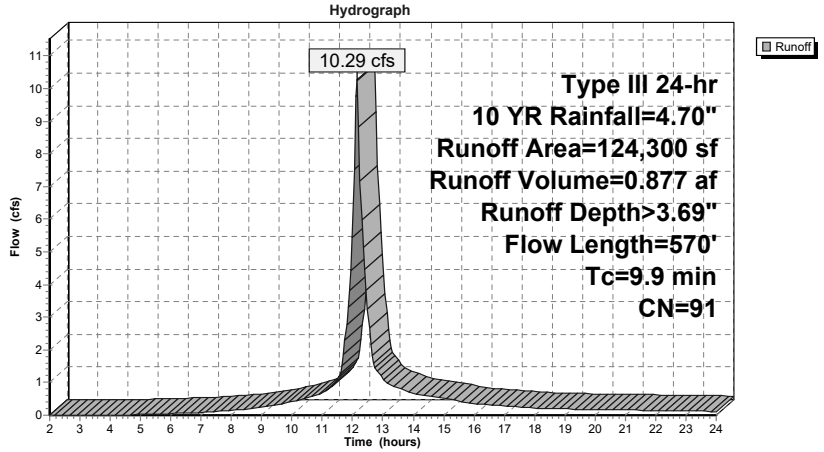
Runoff = 10.29 cfs @ 12.14 hrs, Volume= 0.877 af, Depth> 3.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YR Rainfall=4.70"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

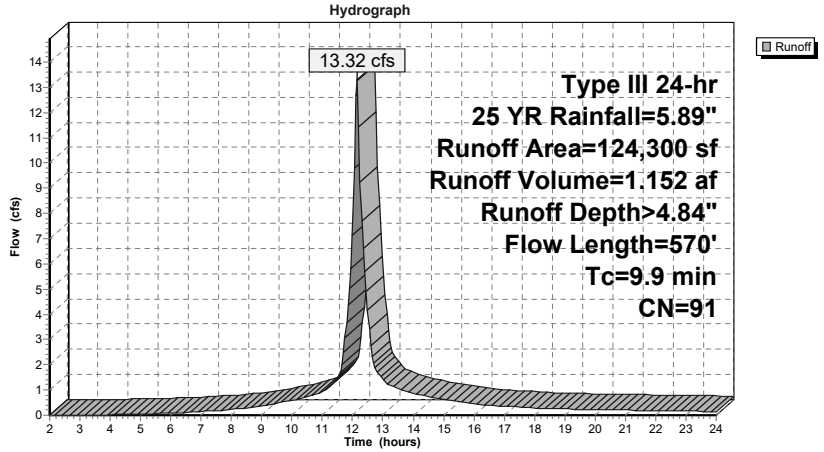
Runoff = 13.32 cfs @ 12.14 hrs, Volume= 1.152 af, Depth> 4.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=5.89"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

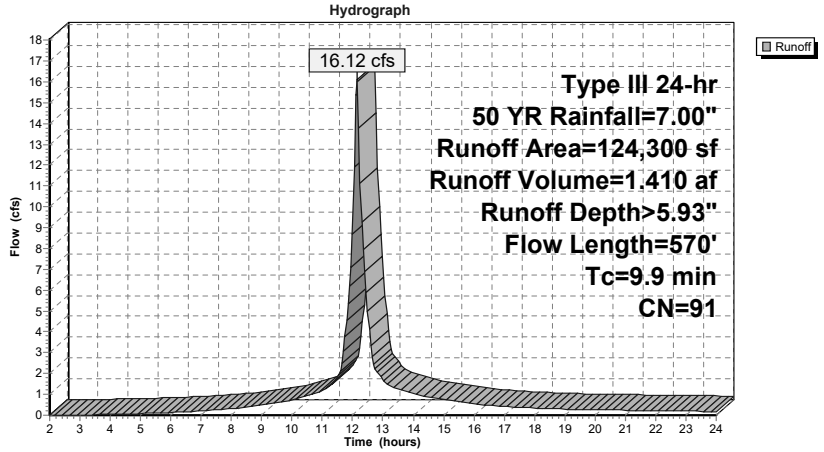
Runoff = 16.12 cfs @ 12.14 hrs, Volume= 1.410 af, Depth> 5.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.00"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

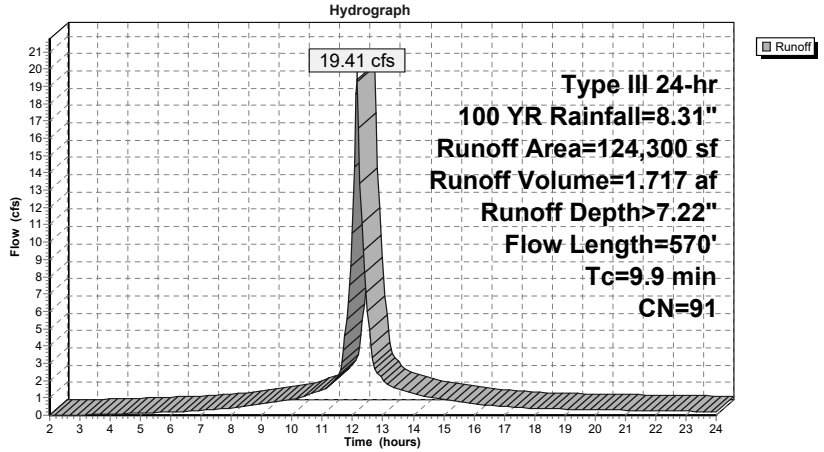
Runoff = 19.41 cfs @ 12.14 hrs, Volume= 1.717 af, Depth> 7.22"

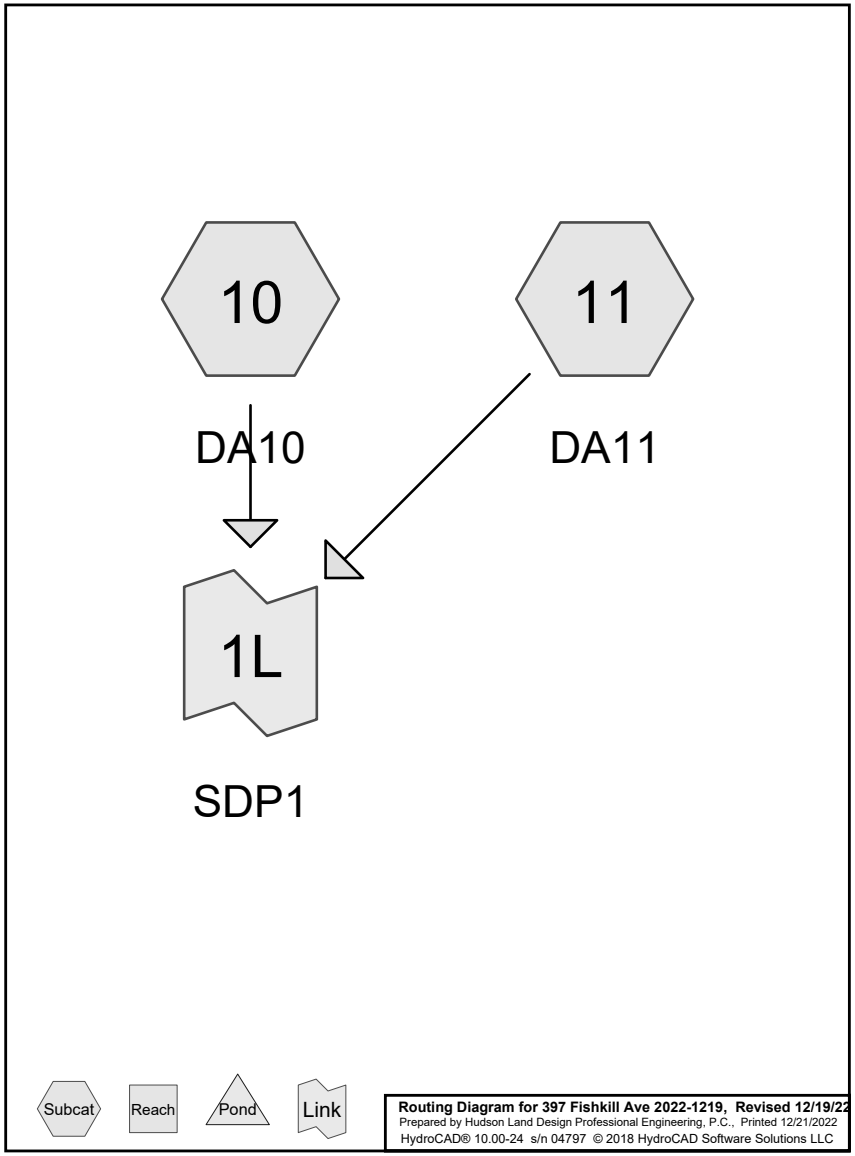
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.31"

Area (sf)	CN	Description
72,967	98	Paved parking, HSG A
23,683	84	50-75% Grass cover, Fair, HSG D
1,508	49	50-75% Grass cover, Fair, HSG A
3,381	76	Gravel roads, HSG A
1,900	72	Dirt roads, HSG A
20,861	82	Woods/grass comb., Fair, HSG D
124,300	91	Weighted Average
51,333		41.30% Pervious Area
72,967		58.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 1: DA1





Summary for Subcatchment 10: DA10

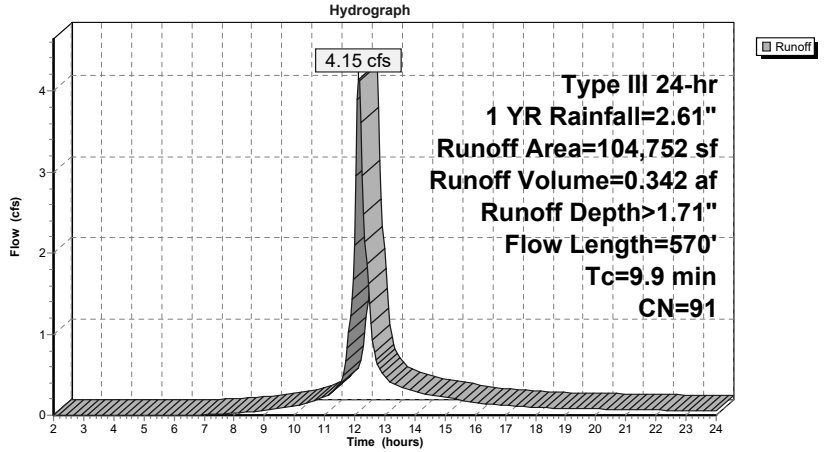
Runoff = 4.15 cfs @ 12.14 hrs, Volume= 0.342 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 YR Rainfall=2.61"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

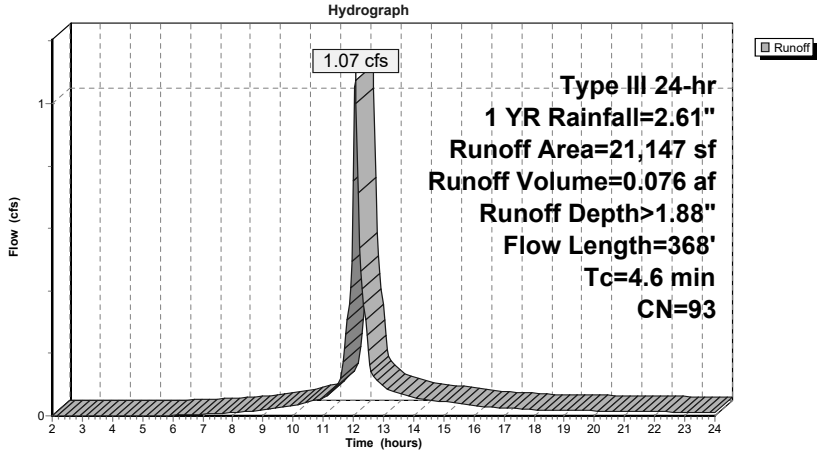
Runoff = 1.07 cfs @ 12.07 hrs, Volume= 0.076 af, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 YR Rainfall=2.61"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

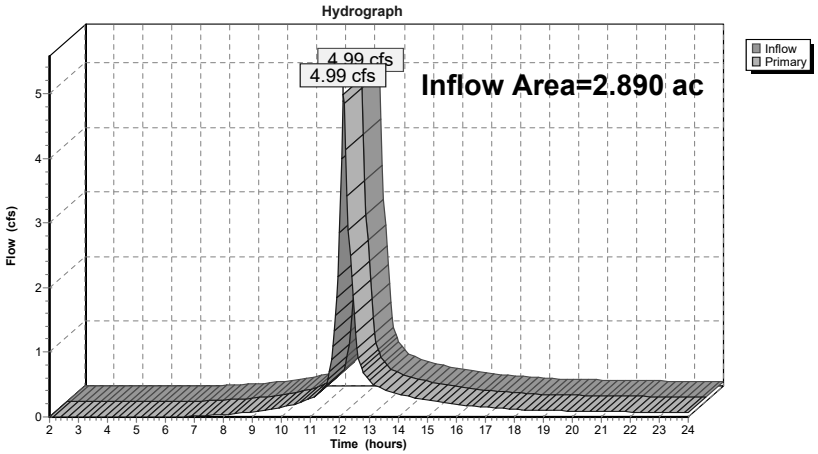


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 1.74" for 1 YR event
Inflow = 4.99 cfs @ 12.12 hrs, Volume= 0.418 af
Primary = 4.99 cfs @ 12.12 hrs, Volume= 0.418 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

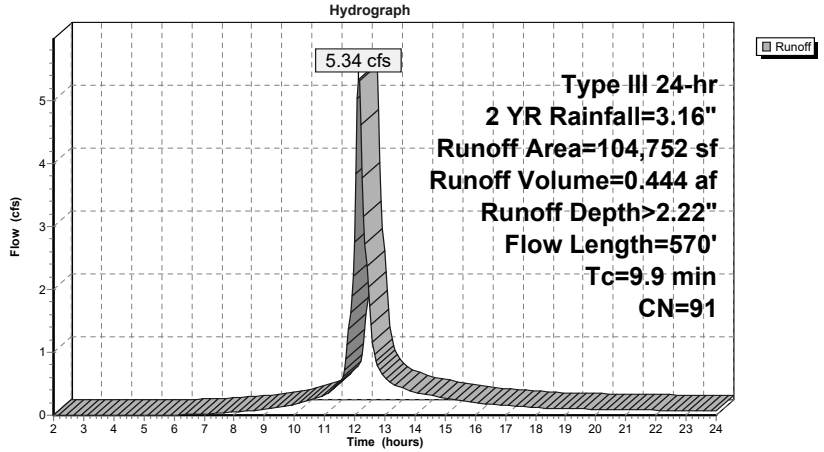
Runoff = 5.34 cfs @ 12.14 hrs, Volume= 0.444 af, Depth> 2.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.16"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

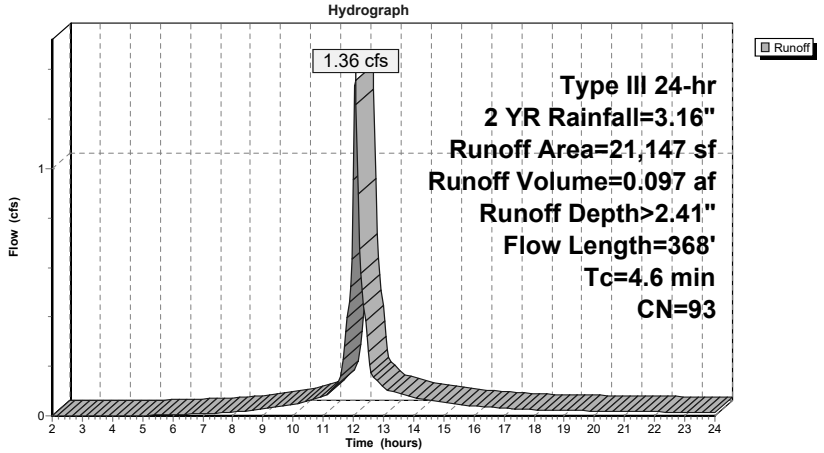
Runoff = 1.36 cfs @ 12.07 hrs, Volume= 0.097 af, Depth> 2.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.16"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

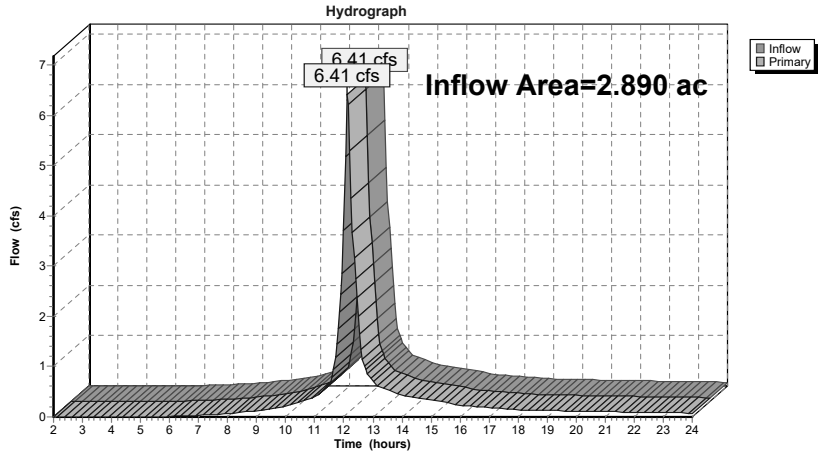


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 2.25" for 2 YR event
Inflow = 6.41 cfs @ 12.12 hrs, Volume= 0.542 af
Primary = 6.41 cfs @ 12.12 hrs, Volume= 0.542 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

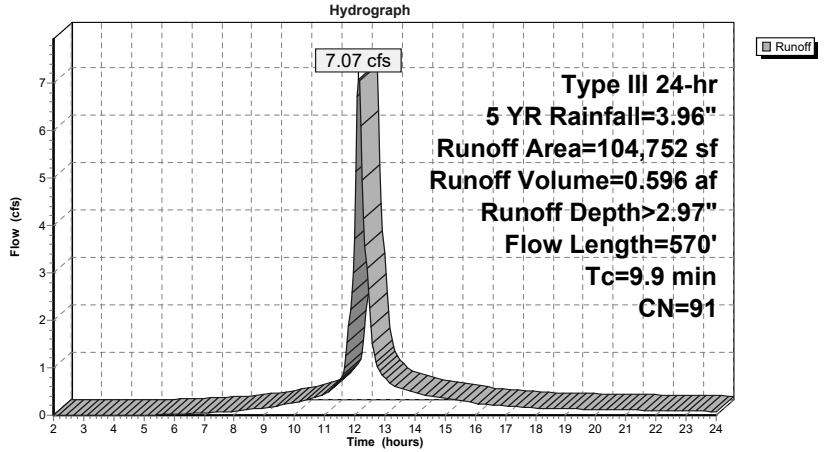
Runoff = 7.07 cfs @ 12.14 hrs, Volume= 0.596 af, Depth> 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 5 YR Rainfall=3.96"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

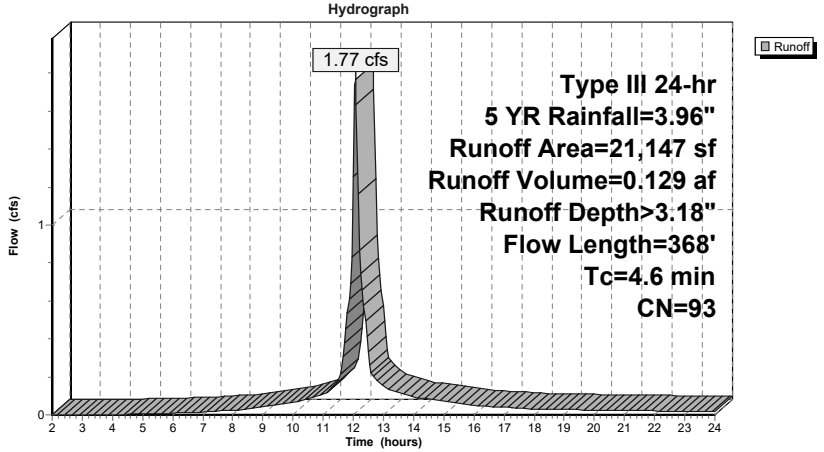
Runoff = 1.77 cfs @ 12.07 hrs, Volume= 0.129 af, Depth> 3.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 5 YR Rainfall=3.96"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

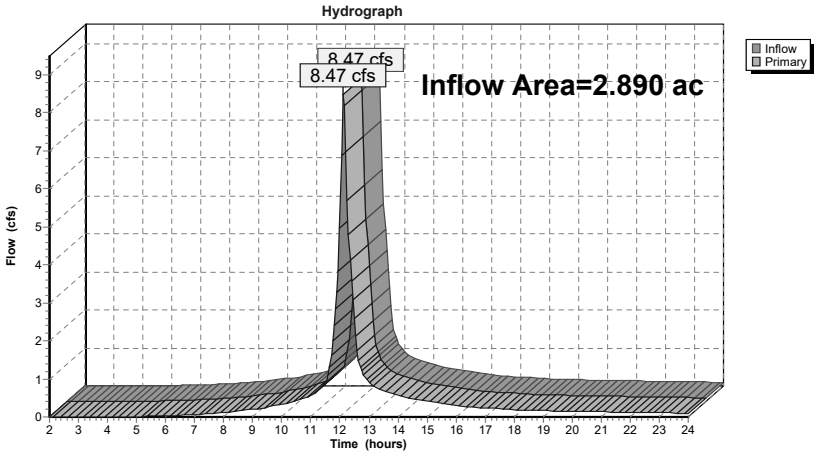


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 3.01" for 5 YR event
Inflow = 8.47 cfs @ 12.12 hrs, Volume= 0.725 af
Primary = 8.47 cfs @ 12.12 hrs, Volume= 0.725 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

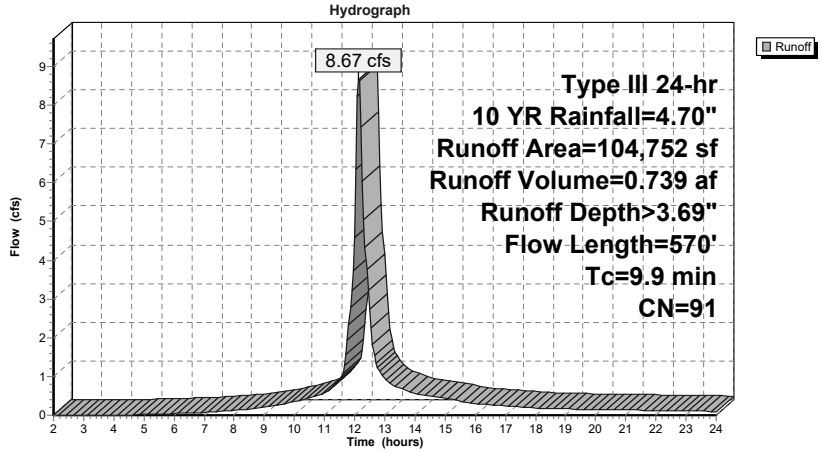
Runoff = 8.67 cfs @ 12.14 hrs, Volume= 0.739 af, Depth> 3.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YR Rainfall=4.70"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

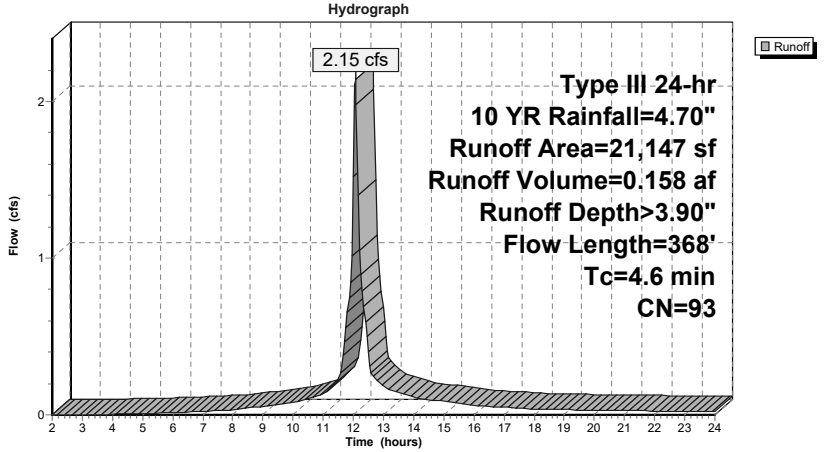
Runoff = 2.15 cfs @ 12.07 hrs, Volume= 0.158 af, Depth> 3.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YR Rainfall=4.70"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

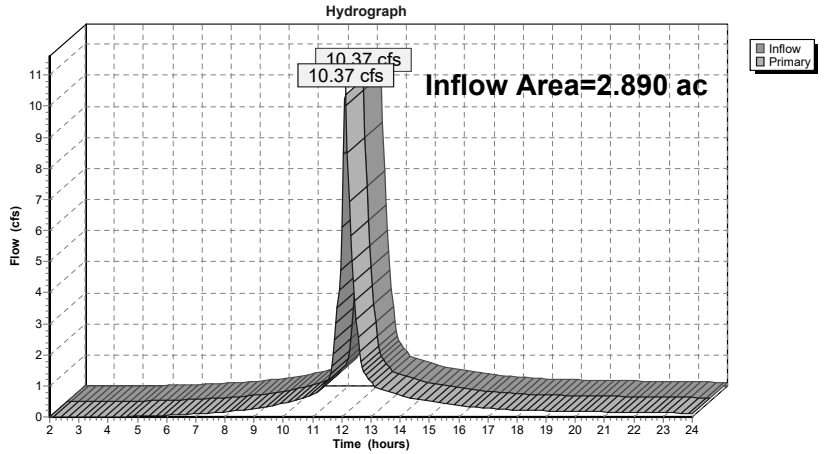


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 3.72" for 10 YR event
Inflow = 10.37 cfs @ 12.12 hrs, Volume= 0.897 af
Primary = 10.37 cfs @ 12.12 hrs, Volume= 0.897 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

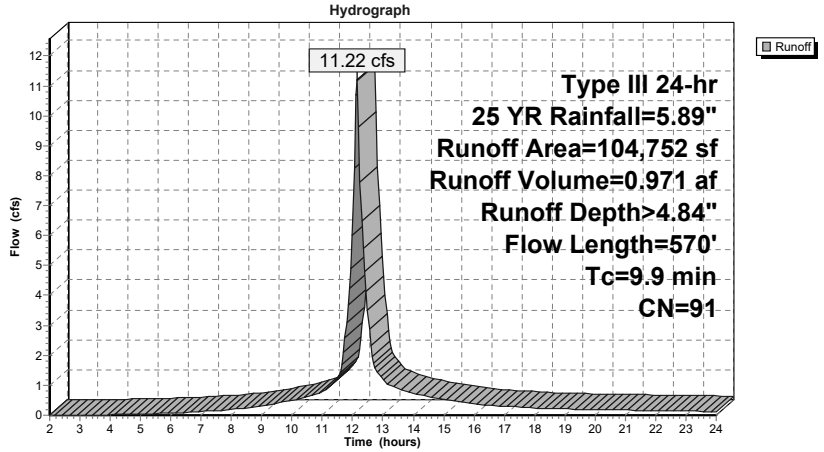
Runoff = 11.22 cfs @ 12.14 hrs, Volume= 0.971 af, Depth> 4.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=5.89"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

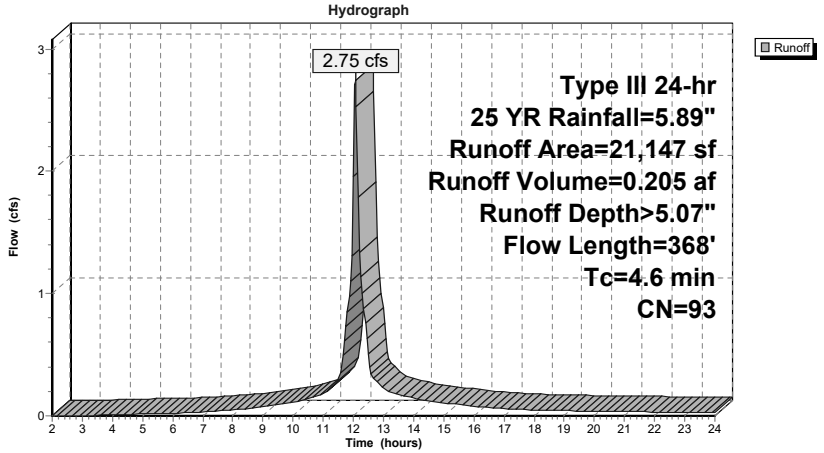
Runoff = 2.75 cfs @ 12.07 hrs, Volume= 0.205 af, Depth> 5.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=5.89"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

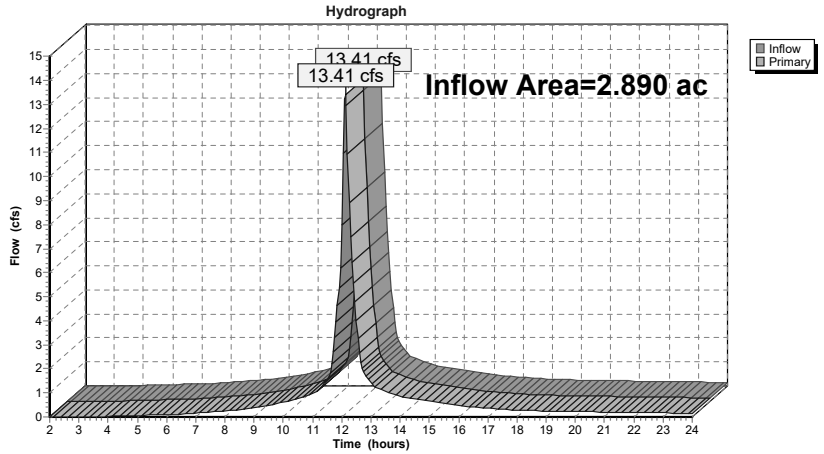


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 4.88" for 25 YR event
Inflow = 13.41 cfs @ 12.12 hrs, Volume= 1.176 af
Primary = 13.41 cfs @ 12.12 hrs, Volume= 1.176 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

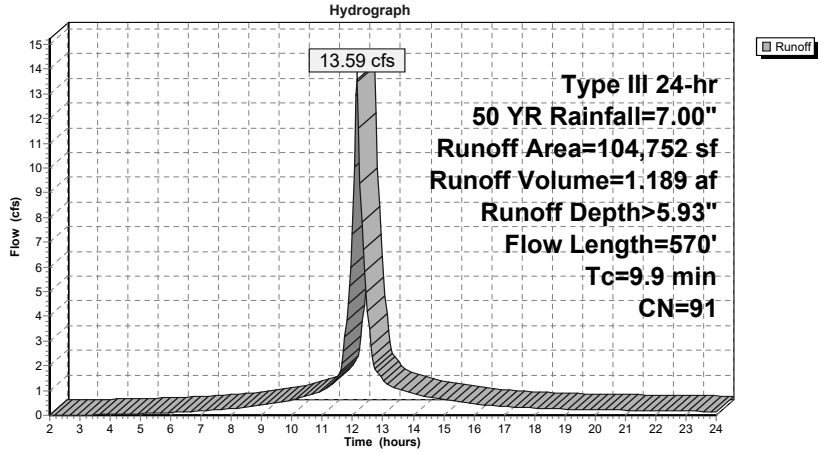
Runoff = 13.59 cfs @ 12.14 hrs, Volume= 1.189 af, Depth> 5.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.00"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

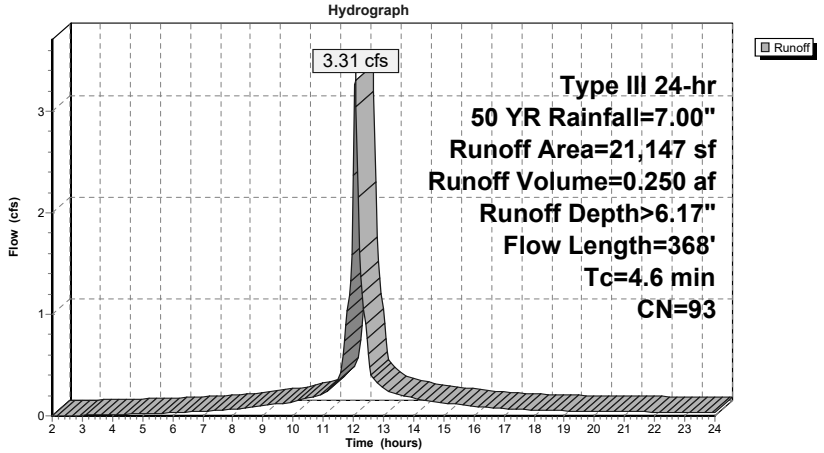
Runoff = 3.31 cfs @ 12.07 hrs, Volume= 0.250 af, Depth> 6.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.00"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

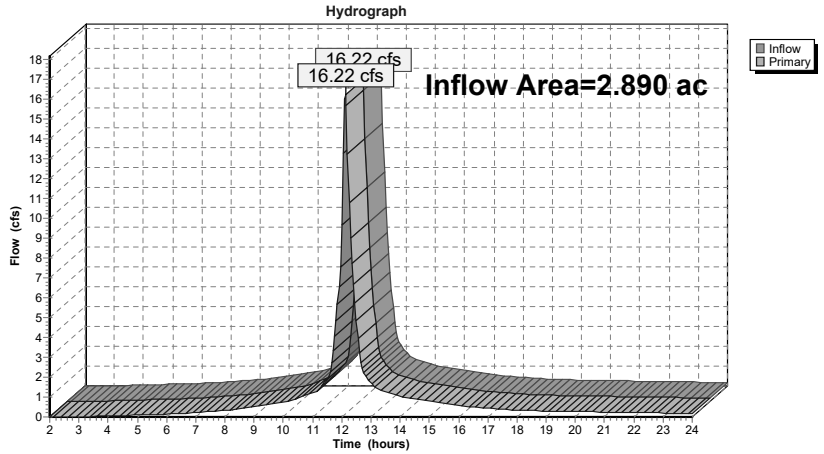


Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 5.97" for 50 YR event
Inflow = 16.22 cfs @ 12.12 hrs, Volume= 1.438 af
Primary = 16.22 cfs @ 12.12 hrs, Volume= 1.438 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1



Summary for Subcatchment 10: DA10

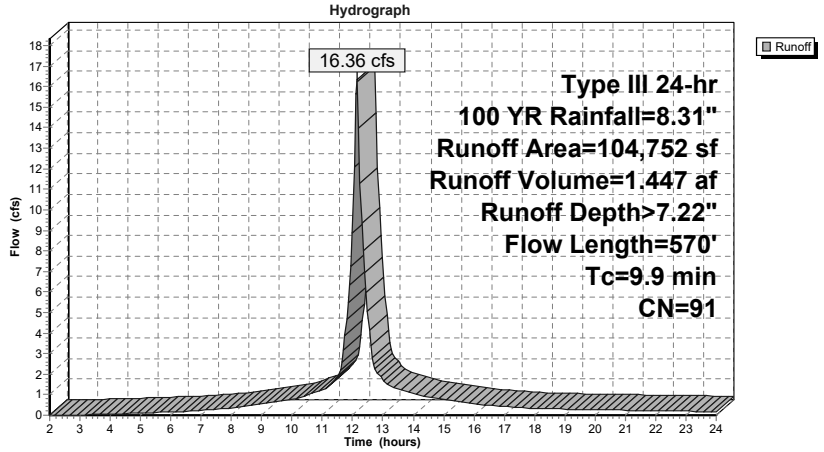
Runoff = 16.36 cfs @ 12.14 hrs, Volume= 1.447 af, Depth> 7.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.31"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

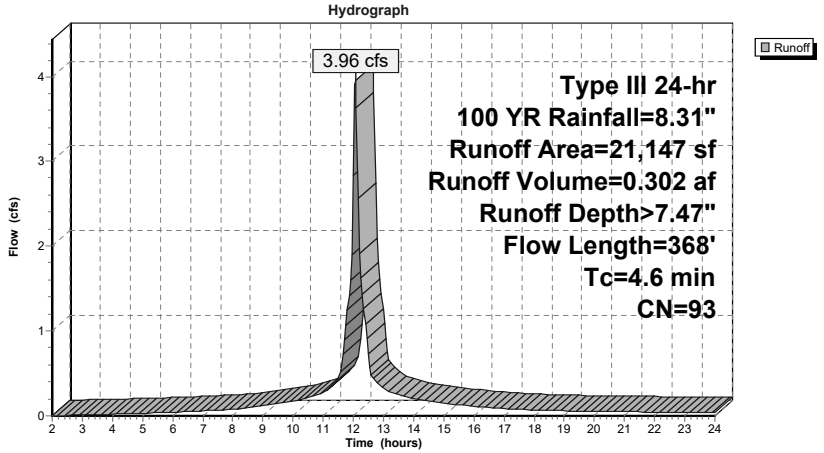
Runoff = 3.96 cfs @ 12.06 hrs, Volume= 0.302 af, Depth> 7.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.31"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11: DA11

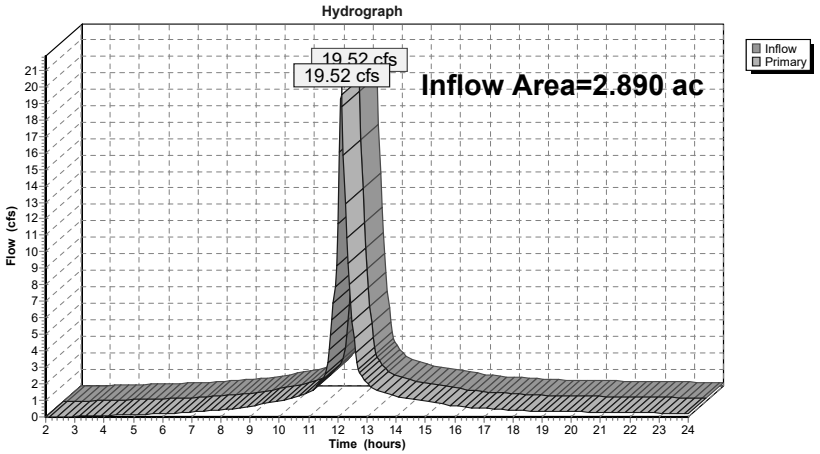


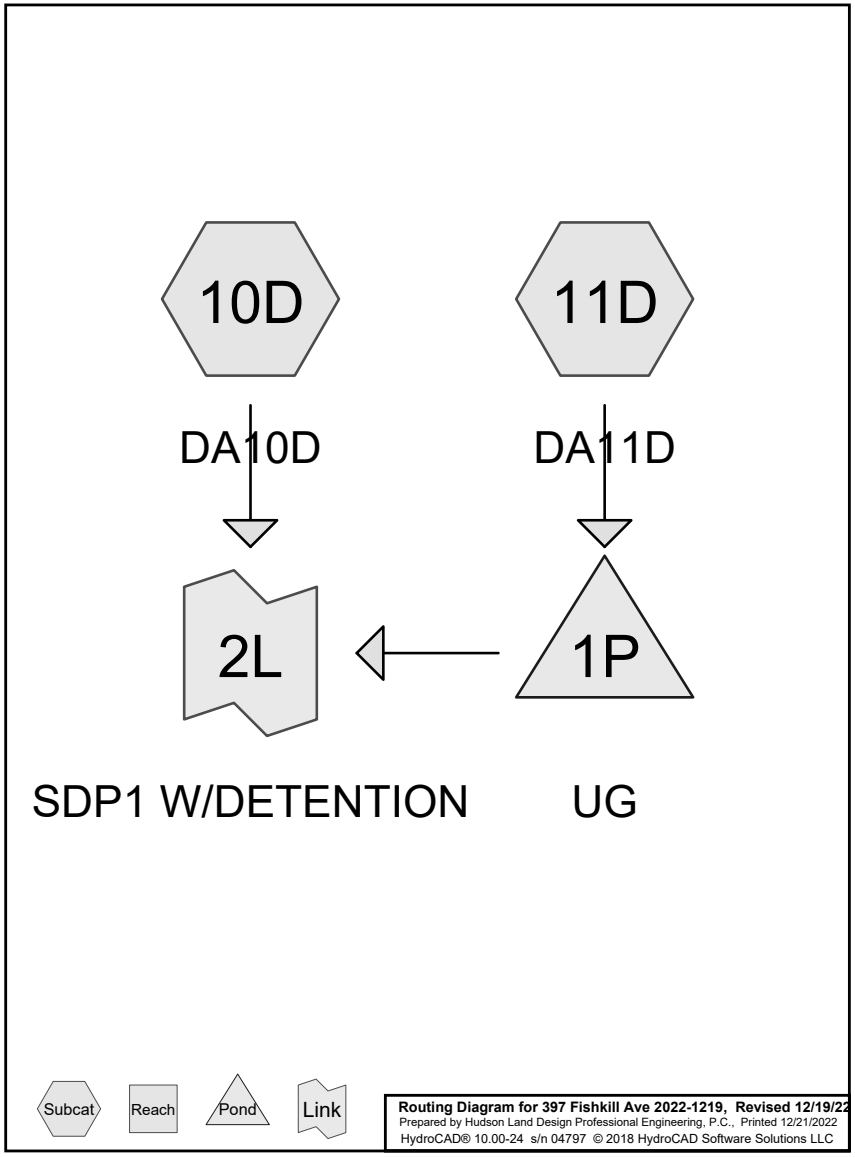
Summary for Link 1L: SDP1

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 7.26" for 100 YR event
Inflow = 19.52 cfs @ 12.12 hrs, Volume= 1.749 af
Primary = 19.52 cfs @ 12.12 hrs, Volume= 1.749 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 1L: SDP1





Summary for Subcatchment 10D: DA10D

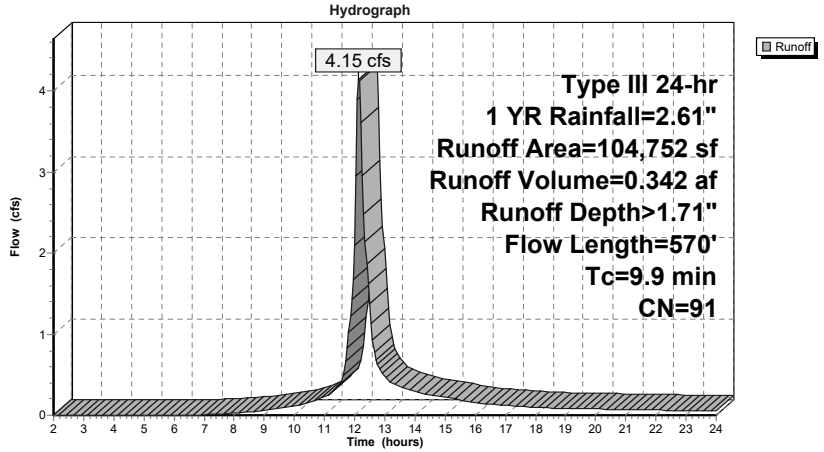
Runoff = 4.15 cfs @ 12.14 hrs, Volume= 0.342 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 YR Rainfall=2.61"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

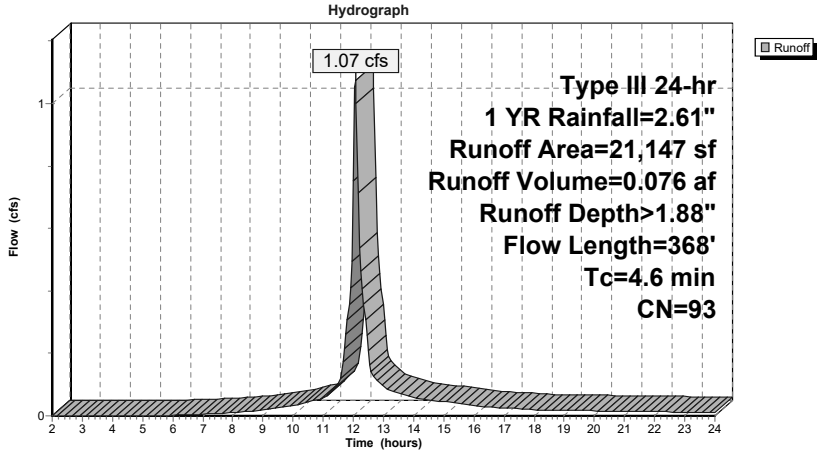
Runoff = 1.07 cfs @ 12.07 hrs, Volume= 0.076 af, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 YR Rainfall=2.61"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 1.88" for 1 YR event
Inflow = 1.07 cfs @ 12.07 hrs, Volume= 0.076 af
Outflow = 1.00 cfs @ 12.10 hrs, Volume= 0.074 af, Atten= 7%, Lag= 2.2 min
Primary = 1.00 cfs @ 12.10 hrs, Volume= 0.074 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 488.41' @ 12.10 hrs Surf.Area= 379 sf Storage= 272 cf

Plug-Flow detention time= 29.9 min calculated for 0.074 af (97% of inflow)
Center-of-Mass det. time= 14.0 min (812.3 - 798.3)

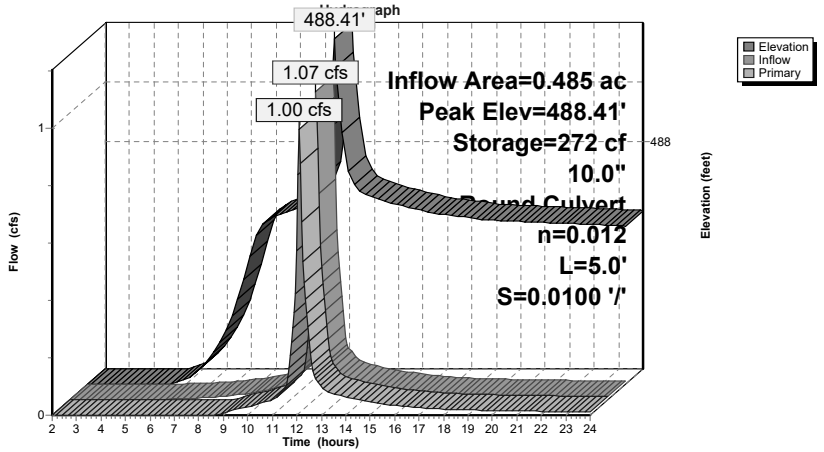
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

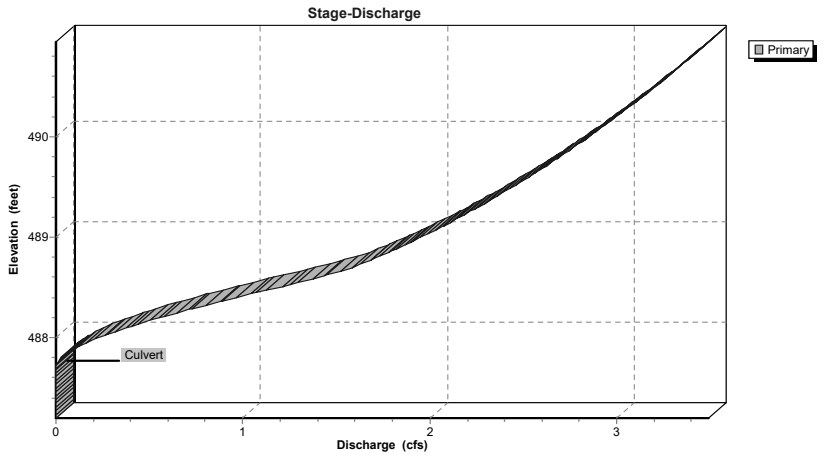
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=0.99 cfs @ 12.10 hrs HW=488.41' (Free Discharge)
└**1=Culvert** (Barrel Controls 0.99 cfs @ 2.68 fps)

Pond 1P: UG



Pond 1P: UG

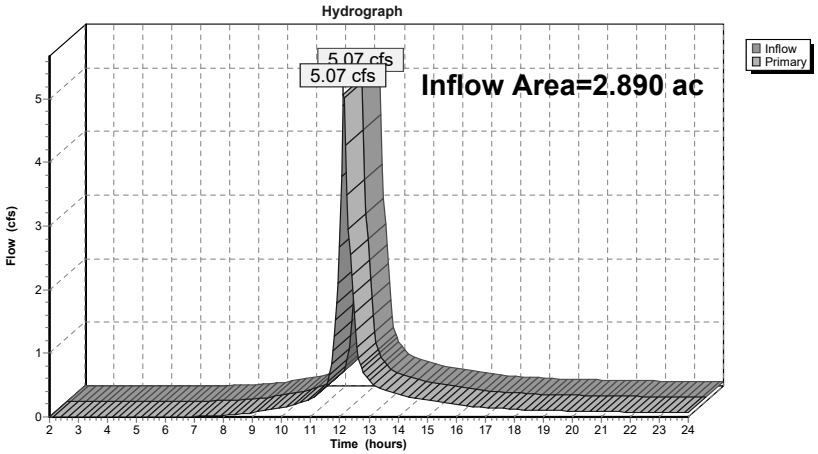


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 1.73" for 1 YR event
Inflow = 5.07 cfs @ 12.13 hrs, Volume= 0.416 af
Primary = 5.07 cfs @ 12.13 hrs, Volume= 0.416 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

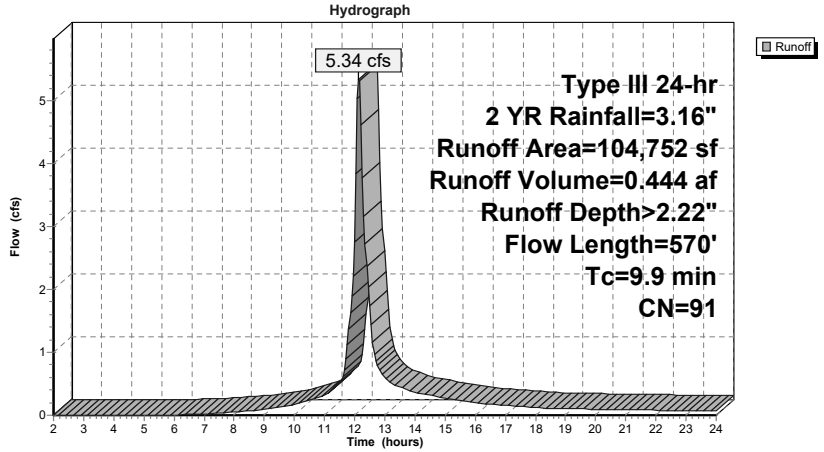
Runoff = 5.34 cfs @ 12.14 hrs, Volume= 0.444 af, Depth> 2.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.16"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

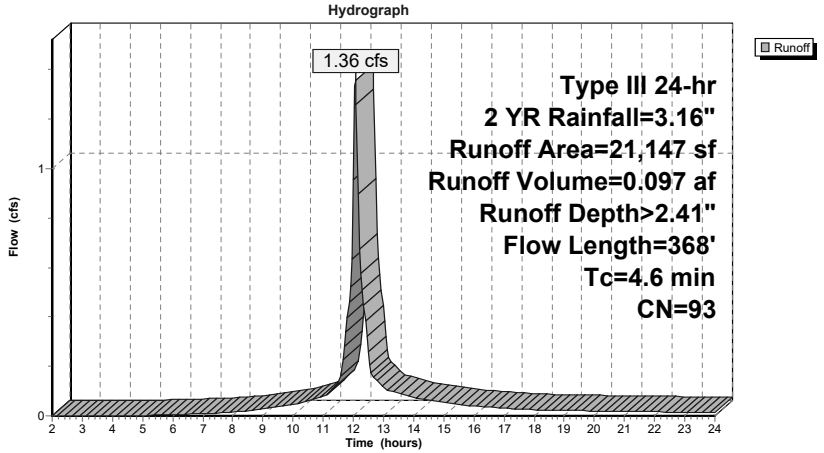
Runoff = 1.36 cfs @ 12.07 hrs, Volume= 0.097 af, Depth> 2.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YR Rainfall=3.16"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 2.41" for 2 YR event
Inflow = 1.36 cfs @ 12.07 hrs, Volume= 0.097 af
Outflow = 1.26 cfs @ 12.10 hrs, Volume= 0.095 af, Atten= 7%, Lag= 2.1 min
Primary = 1.26 cfs @ 12.10 hrs, Volume= 0.095 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 488.54' @ 12.10 hrs Surf.Area= 379 sf Storage= 304 cf

Plug-Flow detention time= 25.8 min calculated for 0.095 af (98% of inflow)
Center-of-Mass det. time= 12.6 min (804.1 - 791.5)

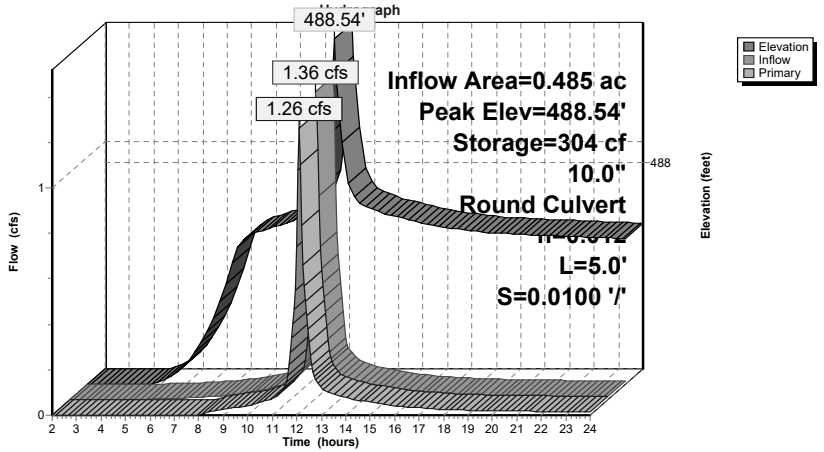
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

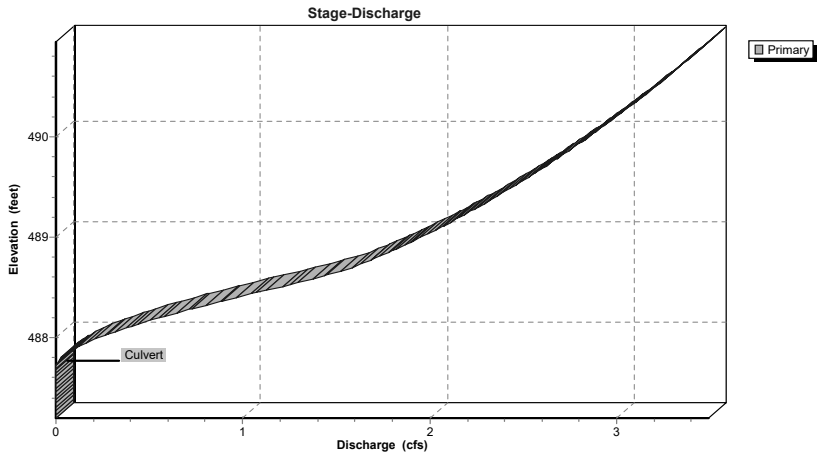
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=1.26 cfs @ 12.10 hrs HW=488.53' (Free Discharge)
└**1=Culvert** (Barrel Controls 1.26 cfs @ 2.86 fps)

Pond 1P: UG



Pond 1P: UG

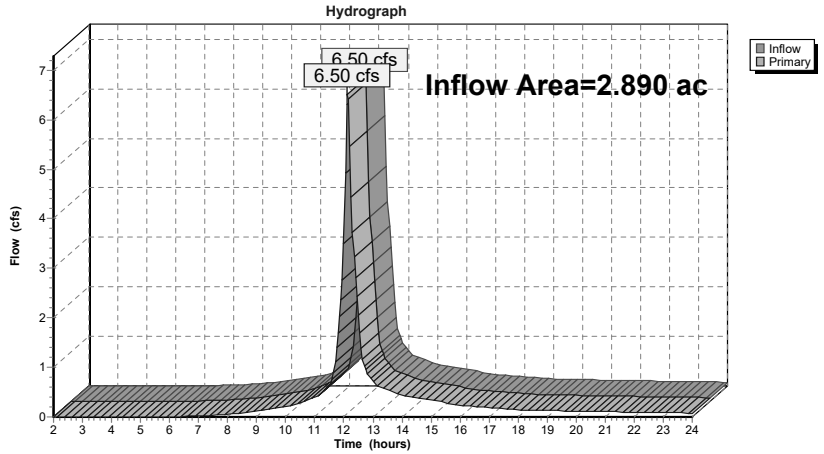


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 2.24" for 2 YR event
Inflow = 6.50 cfs @ 12.13 hrs, Volume= 0.540 af
Primary = 6.50 cfs @ 12.13 hrs, Volume= 0.540 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

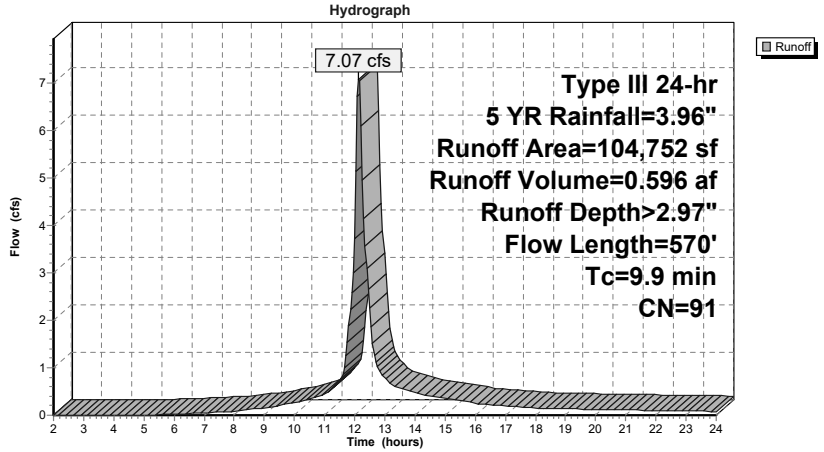
Runoff = 7.07 cfs @ 12.14 hrs, Volume= 0.596 af, Depth> 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 5 YR Rainfall=3.96"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

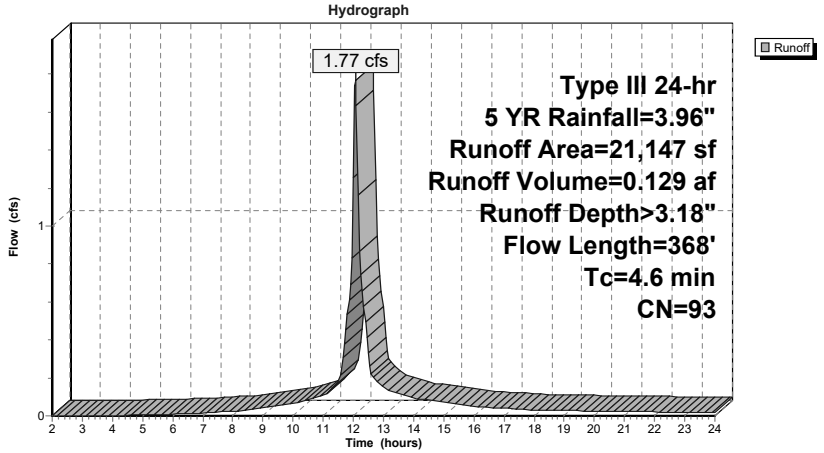
Runoff = 1.77 cfs @ 12.07 hrs, Volume= 0.129 af, Depth> 3.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 5 YR Rainfall=3.96"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 3.18" for 5 YR event
Inflow = 1.77 cfs @ 12.07 hrs, Volume= 0.129 af
Outflow = 1.62 cfs @ 12.10 hrs, Volume= 0.126 af, Atten= 9%, Lag= 2.2 min
Primary = 1.62 cfs @ 12.10 hrs, Volume= 0.126 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 488.73' @ 12.10 hrs Surf.Area= 379 sf Storage= 353 cf

Plug-Flow detention time= 21.6 min calculated for 0.126 af (98% of inflow)
Center-of-Mass det. time= 11.2 min (795.1 - 783.9)

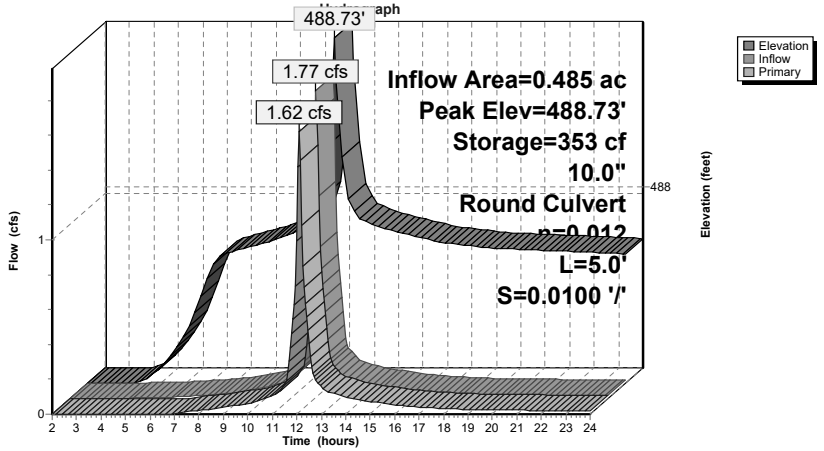
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

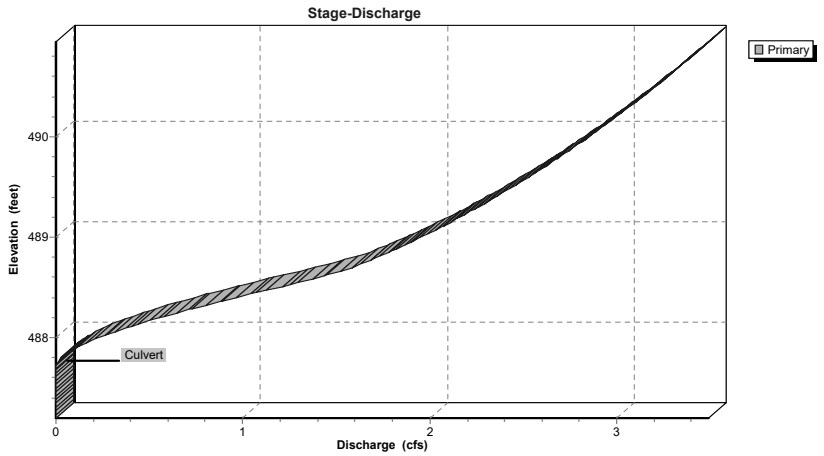
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=1.61 cfs @ 12.10 hrs HW=488.72' (Free Discharge)
1=Culvert (Inlet Controls 1.61 cfs @ 2.96 fps)

Pond 1P: UG



Pond 1P: UG

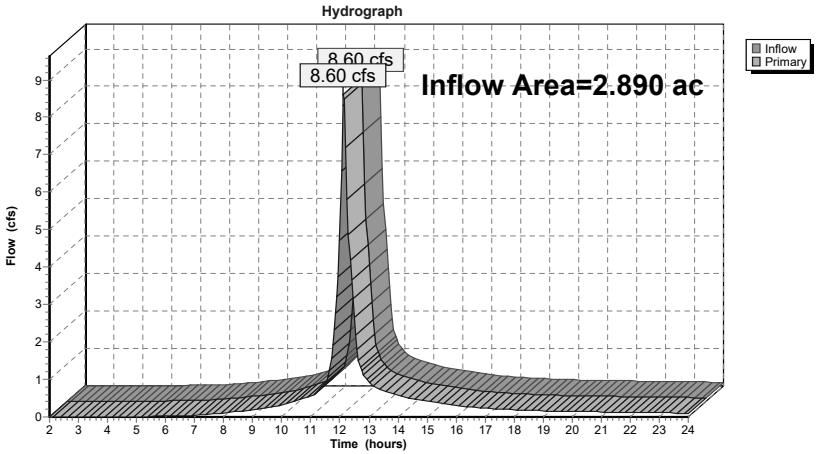


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 3.00" for 5 YR event
Inflow = 8.60 cfs @ 12.13 hrs, Volume= 0.723 af
Primary = 8.60 cfs @ 12.13 hrs, Volume= 0.723 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

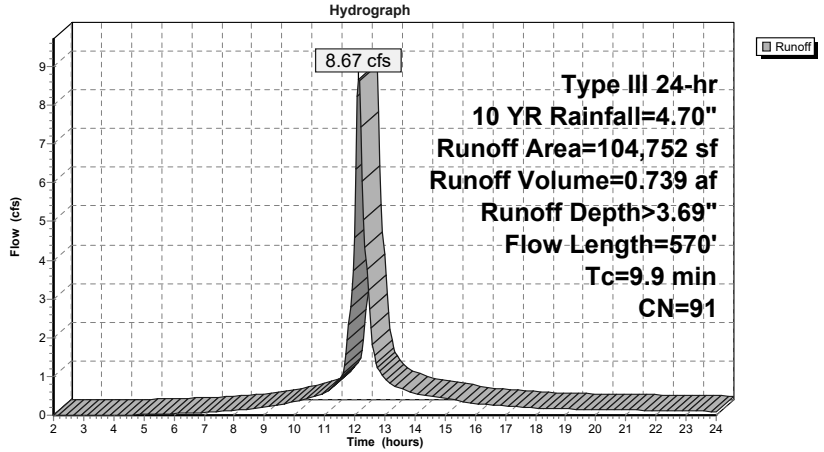
Runoff = 8.67 cfs @ 12.14 hrs, Volume= 0.739 af, Depth> 3.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YR Rainfall=4.70"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

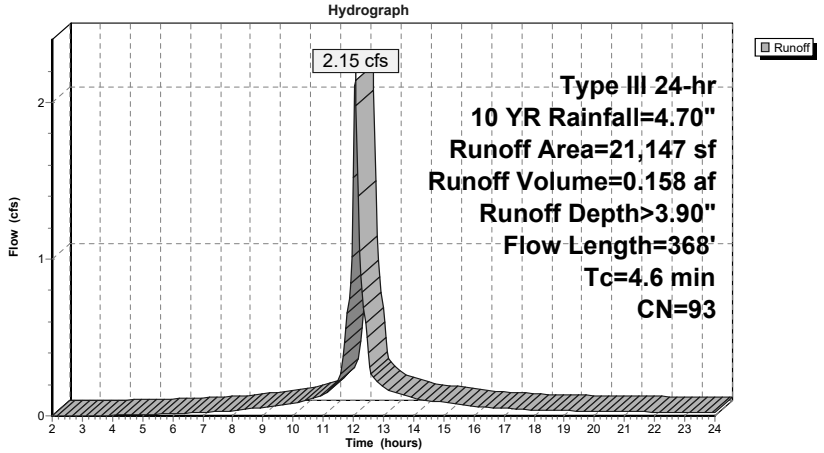
Runoff = 2.15 cfs @ 12.07 hrs, Volume= 0.158 af, Depth> 3.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YR Rainfall=4.70"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 3.90" for 10 YR event
Inflow = 2.15 cfs @ 12.07 hrs, Volume= 0.158 af
Outflow = 1.90 cfs @ 12.11 hrs, Volume= 0.156 af, Atten= 11%, Lag= 2.5 min
Primary = 1.90 cfs @ 12.11 hrs, Volume= 0.156 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 488.96' @ 12.11 hrs Surf.Area= 379 sf Storage= 412 cf

Plug-Flow detention time= 18.9 min calculated for 0.155 af (98% of inflow)
Center-of-Mass det. time= 10.2 min (788.7 - 778.5)

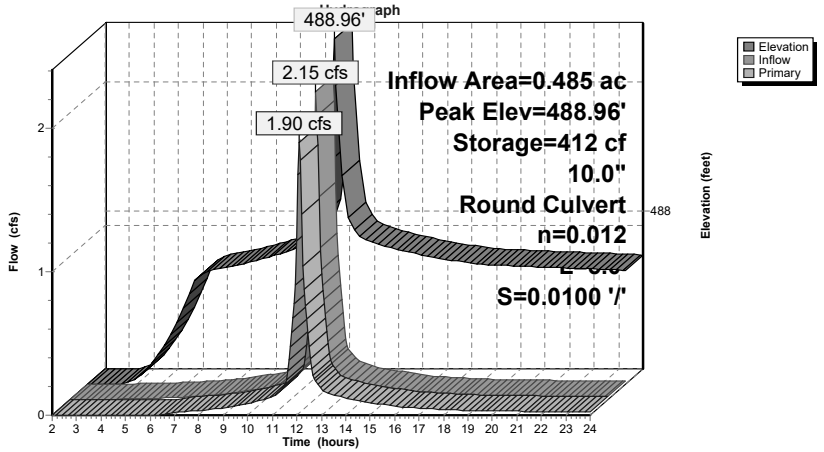
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

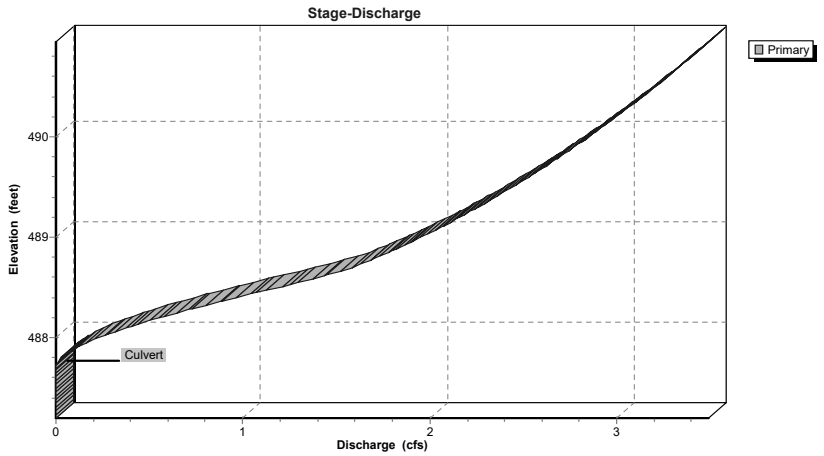
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=1.88 cfs @ 12.11 hrs HW=488.94' (Free Discharge)
└**1=Culvert** (Inlet Controls 1.88 cfs @ 3.45 fps)

Pond 1P: UG



Pond 1P: UG

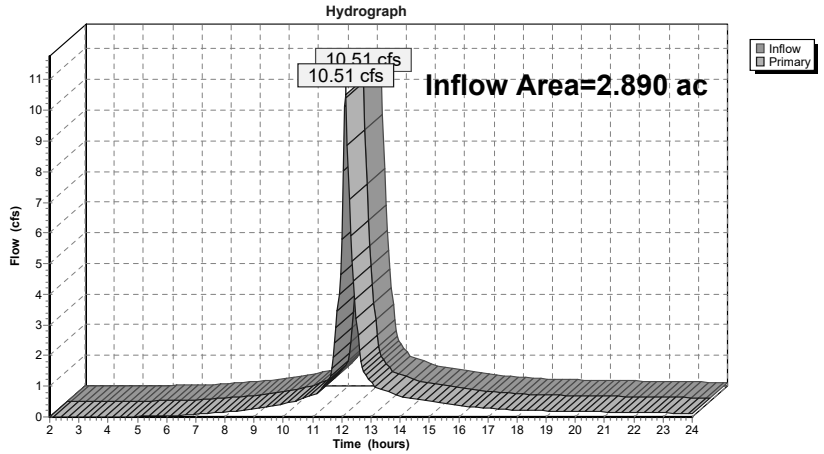


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 3.71" for 10 YR event
Inflow = 10.51 cfs @ 12.13 hrs, Volume= 0.894 af
Primary = 10.51 cfs @ 12.13 hrs, Volume= 0.894 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

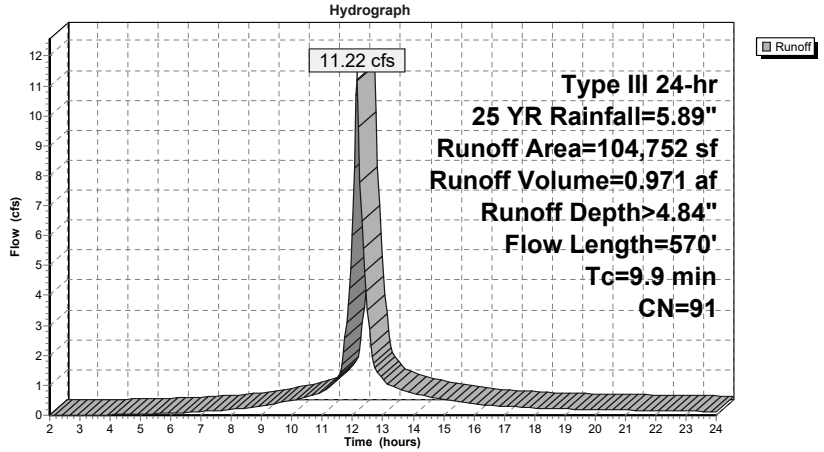
Runoff = 11.22 cfs @ 12.14 hrs, Volume= 0.971 af, Depth> 4.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=5.89"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

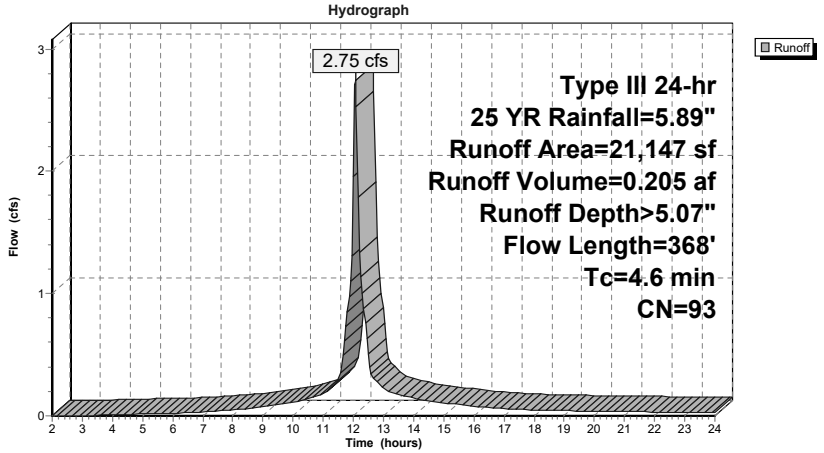
Runoff = 2.75 cfs @ 12.07 hrs, Volume= 0.205 af, Depth> 5.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YR Rainfall=5.89"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 5.07" for 25 YR event
Inflow = 2.75 cfs @ 12.07 hrs, Volume= 0.205 af
Outflow = 2.36 cfs @ 12.11 hrs, Volume= 0.203 af, Atten= 14%, Lag= 2.9 min
Primary = 2.36 cfs @ 12.11 hrs, Volume= 0.203 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 489.41' @ 12.11 hrs Surf.Area= 379 sf Storage= 521 cf

Plug-Flow detention time= 16.1 min calculated for 0.203 af (99% of inflow)
Center-of-Mass det. time= 9.1 min (781.0 - 771.9)

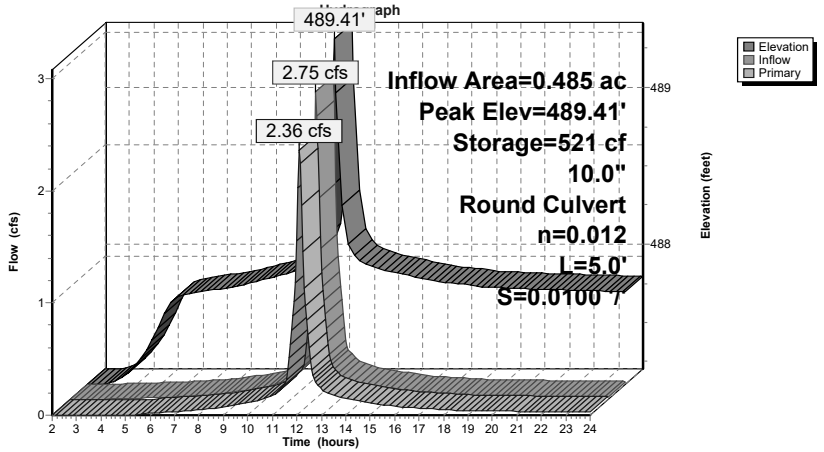
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

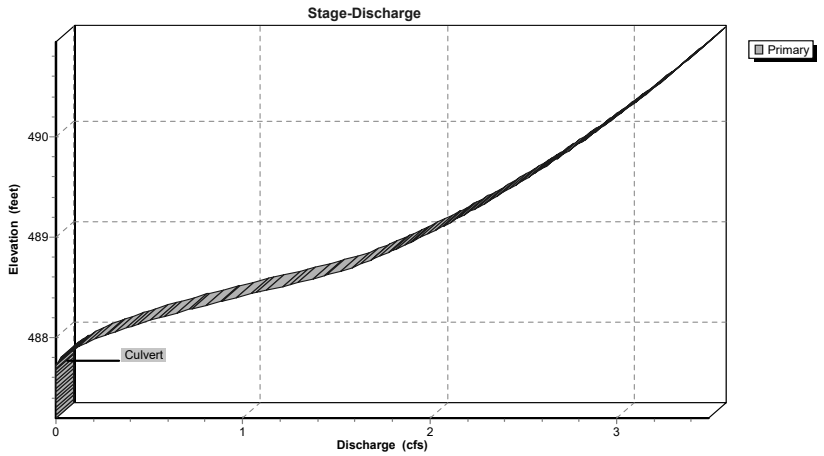
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=2.32 cfs @ 12.11 hrs HW=489.37' (Free Discharge)
└**1=Culvert** (Inlet Controls 2.32 cfs @ 4.25 fps)

Pond 1P: UG



Pond 1P: UG

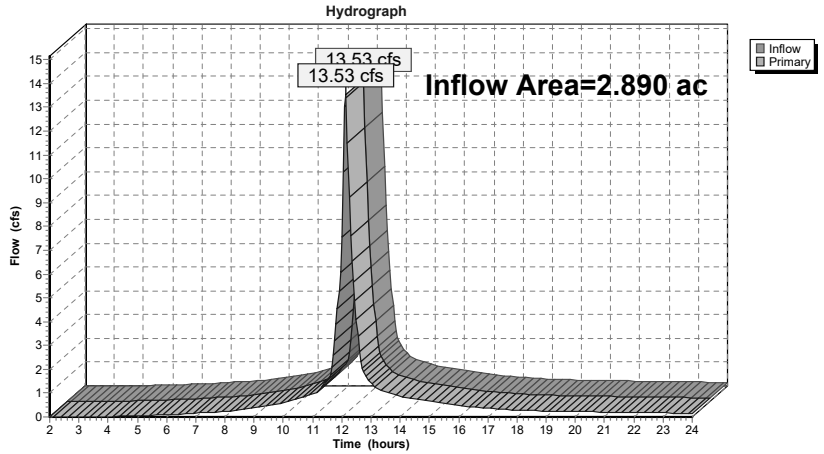


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 4.87" for 25 YR event
Inflow = 13.53 cfs @ 12.13 hrs, Volume= 1.173 af
Primary = 13.53 cfs @ 12.13 hrs, Volume= 1.173 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

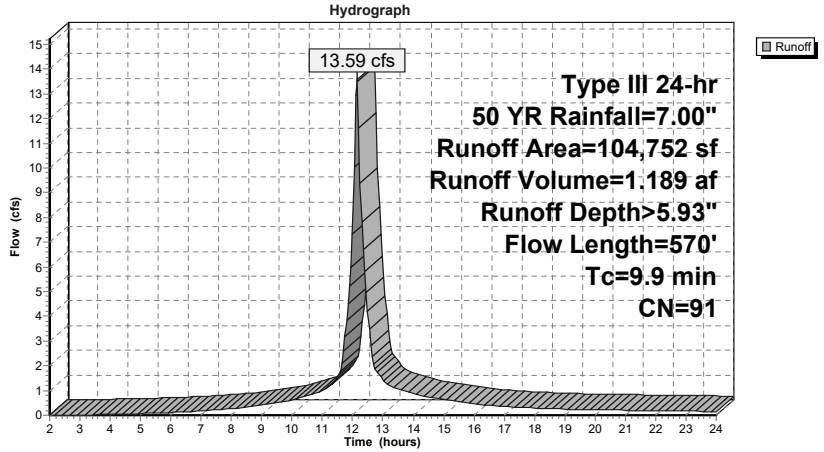
Runoff = 13.59 cfs @ 12.14 hrs, Volume= 1.189 af, Depth> 5.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.00"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

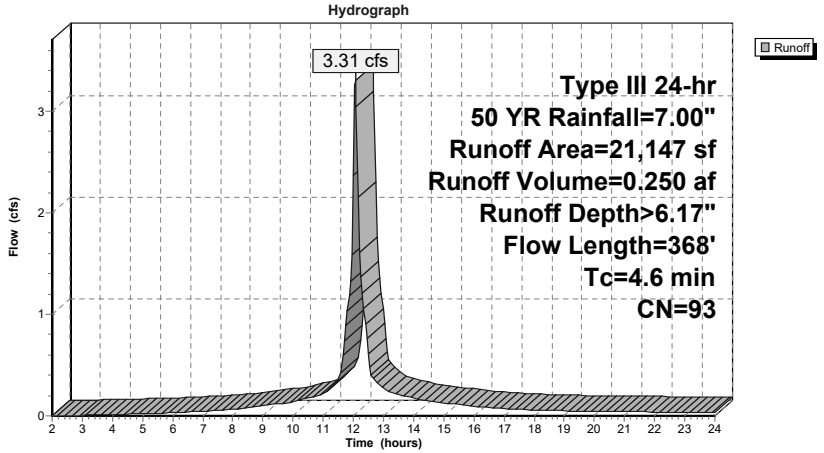
Runoff = 3.31 cfs @ 12.07 hrs, Volume= 0.250 af, Depth> 6.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YR Rainfall=7.00"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 6.17" for 50 YR event
Inflow = 3.31 cfs @ 12.07 hrs, Volume= 0.250 af
Outflow = 2.80 cfs @ 12.12 hrs, Volume= 0.247 af, Atten= 15%, Lag= 3.0 min
Primary = 2.80 cfs @ 12.12 hrs, Volume= 0.247 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 489.93' @ 12.12 hrs Surf.Area= 379 sf Storage= 631 cf

Plug-Flow detention time= 14.3 min calculated for 0.247 af (99% of inflow)
Center-of-Mass det. time= 8.3 min (775.5 - 767.2)

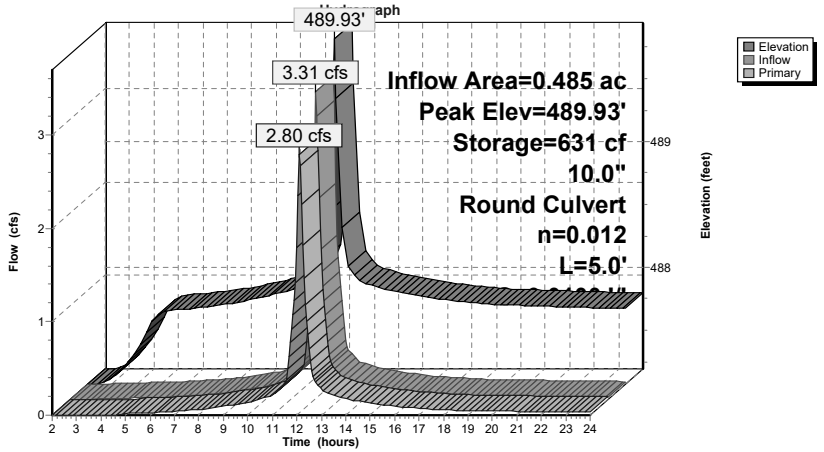
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

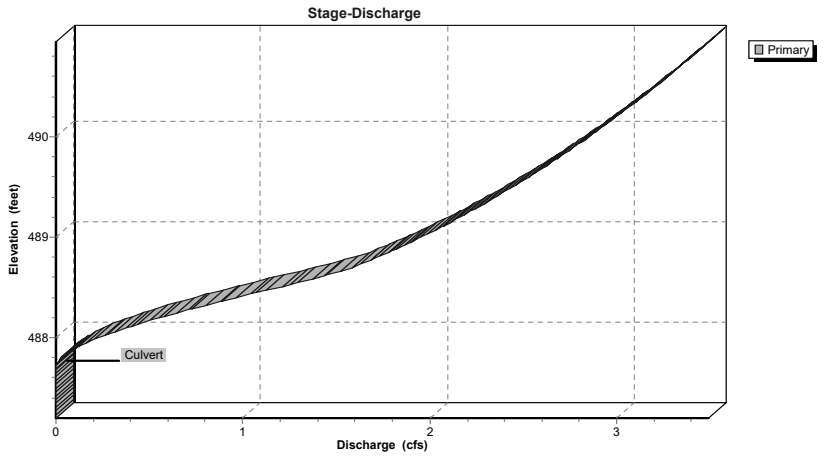
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=2.74 cfs @ 12.12 hrs HW=489.87' (Free Discharge)
└**1=Culvert** (Inlet Controls 2.74 cfs @ 5.03 fps)

Pond 1P: UG



Pond 1P: UG

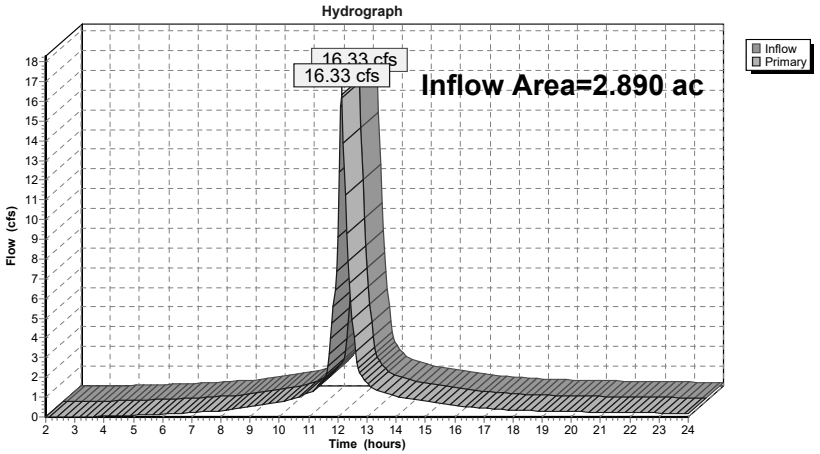


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 5.96" for 50 YR event
Inflow = 16.33 cfs @ 12.13 hrs, Volume= 1.436 af
Primary = 16.33 cfs @ 12.13 hrs, Volume= 1.436 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

Link 2L: SDP1 W/DETENTION



Summary for Subcatchment 10D: DA10D

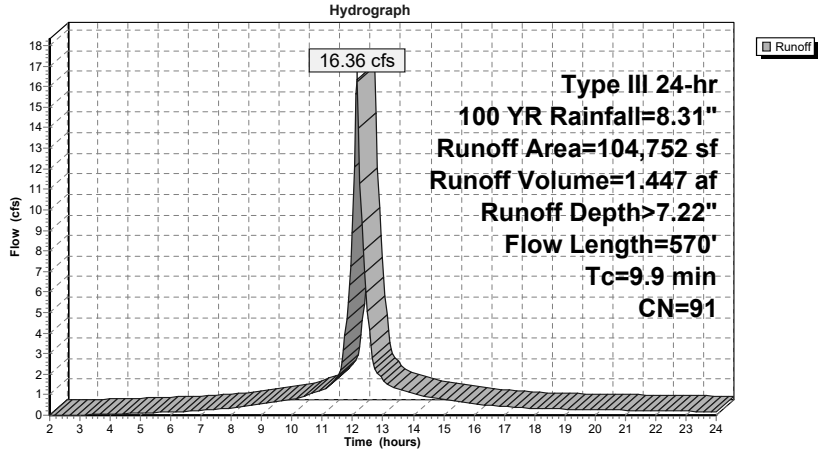
Runoff = 16.36 cfs @ 12.14 hrs, Volume= 1.447 af, Depth> 7.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.31"

Area (sf)	CN	Description
52,510	98	Paved parking, HSG A
37,208	84	50-75% Grass cover, Fair, HSG D
604	49	50-75% Grass cover, Fair, HSG A
14,430	82	Woods/grass comb., Fair, HSG D
104,752	91	Weighted Average
52,242		49.87% Pervious Area
52,510		50.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.0350	0.21		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.6	67	0.0750	1.92		**Shallow Concentrated Flow, S2** Short Grass Pasture Kv= 7.0 fps
1.1	304	0.0530	4.67		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.3	99	0.0100	6.44	11.38	**Pipe Channel, S4** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
9.9	570	Total			

Subcatchment 10D: DA10D



Summary for Subcatchment 11D: DA11D

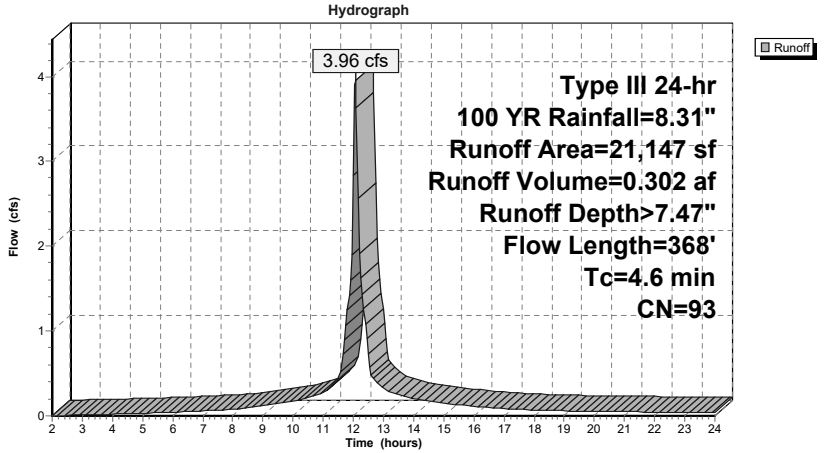
Runoff = 3.96 cfs @ 12.06 hrs, Volume= 0.302 af, Depth> 7.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 YR Rainfall=8.31"

Area (sf)	CN	Description
14,513	98	Paved parking, HSG A
4,585	84	50-75% Grass cover, Fair, HSG D
2,049	79	Woods/grass comb., Good, HSG D
21,147	93	Weighted Average
6,634		31.37% Pervious Area
14,513		68.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	82	0.1340	0.35		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.4	102	0.0450	4.31		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	184	0.0350	10.67	13.09	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
4.6	368	Total			

Subcatchment 11D: DA11D



Summary for Pond 1P: UG

Inflow Area = 0.485 ac, 68.63% Impervious, Inflow Depth > 7.47" for 100 YR event
Inflow = 3.96 cfs @ 12.06 hrs, Volume= 0.302 af
Outflow = 3.38 cfs @ 12.12 hrs, Volume= 0.300 af, Atten= 15%, Lag= 3.0 min
Primary = 3.38 cfs @ 12.12 hrs, Volume= 0.300 af

Routing by Stor-Ind method, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 490.76' @ 12.12 hrs Surf.Area= 379 sf Storage= 760 cf

Plug-Flow detention time= 12.9 min calculated for 0.300 af (99% of inflow)
Center-of-Mass det. time= 7.6 min (770.4 - 762.8)

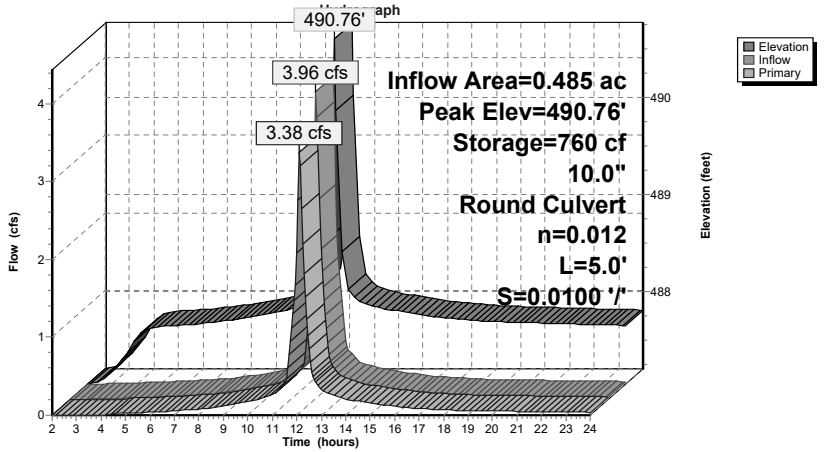
Volume	Invert	Avail.Storage	Storage Description
#1A	487.20'	421 cf	**6.25'W x 60.58'L x 3.75'H Field A** 1,420 cf Overall - 368 cf Embedded = 1,052 cf x 40.0% Voids
#2A	487.70'	368 cf	**ADS_StormTech SC-740 +Cap** x 8 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		788 cf	Total Available Storage

Storage Group A created with Chamber Wizard

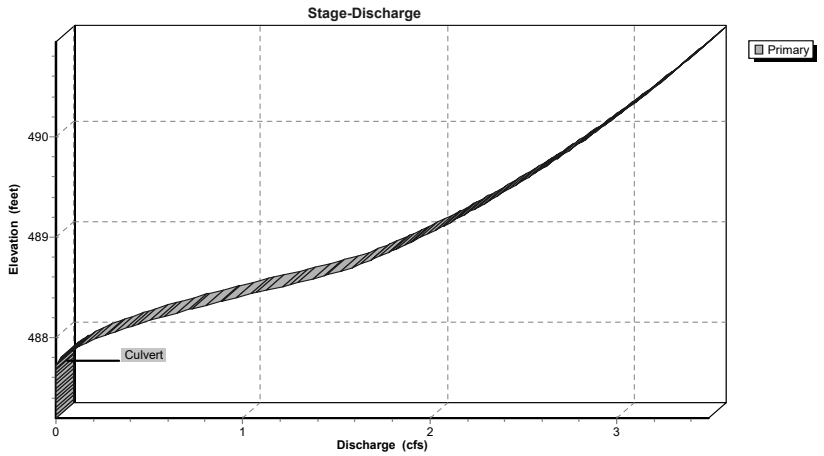
Device	Routing	Invert	Outlet Devices
#1	Primary	487.70'	**10.0" Round Culvert** L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 487.70' / 487.65' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=3.30 cfs @ 12.12 hrs HW=490.65' (Free Discharge)
└**1=Culvert** (Inlet Controls 3.30 cfs @ 6.05 fps)

Pond 1P: UG



Pond 1P: UG

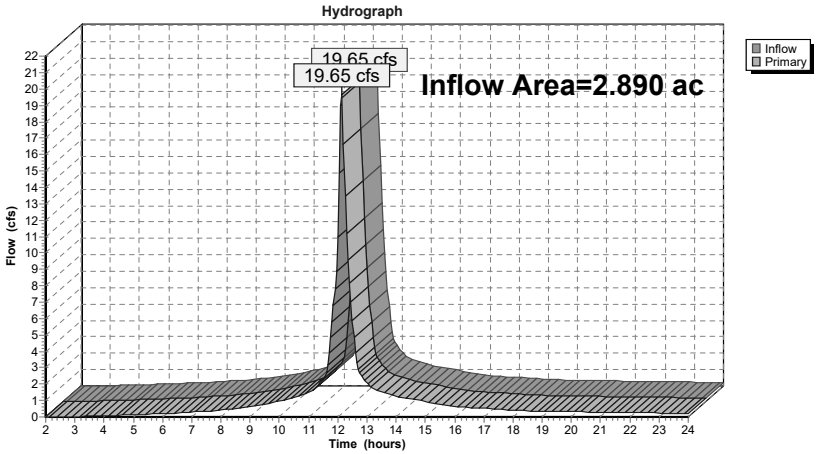


Summary for Link 2L: SDP1 W/DETENTION

Inflow Area = 2.890 ac, 53.24% Impervious, Inflow Depth > 7.25" for 100 YR event
Inflow = 19.65 cfs @ 12.13 hrs, Volume= 1.747 af
Primary = 19.65 cfs @ 12.13 hrs, Volume= 1.747 af, Atten= 0%, Lag= 0.0 min

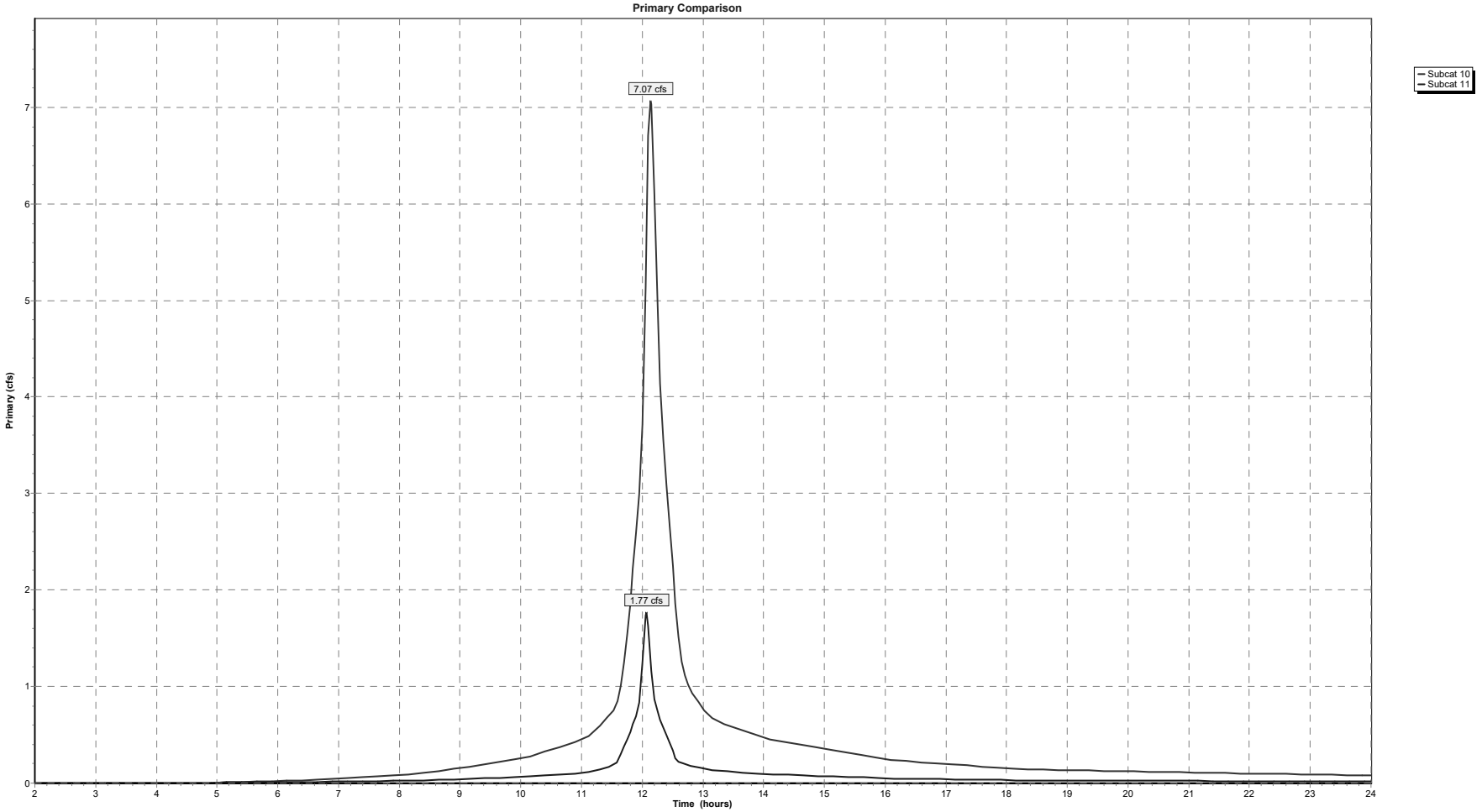
Primary outflow = Inflow, Time Span= 2.00-24.00 hrs, dt= 0.05 hrs

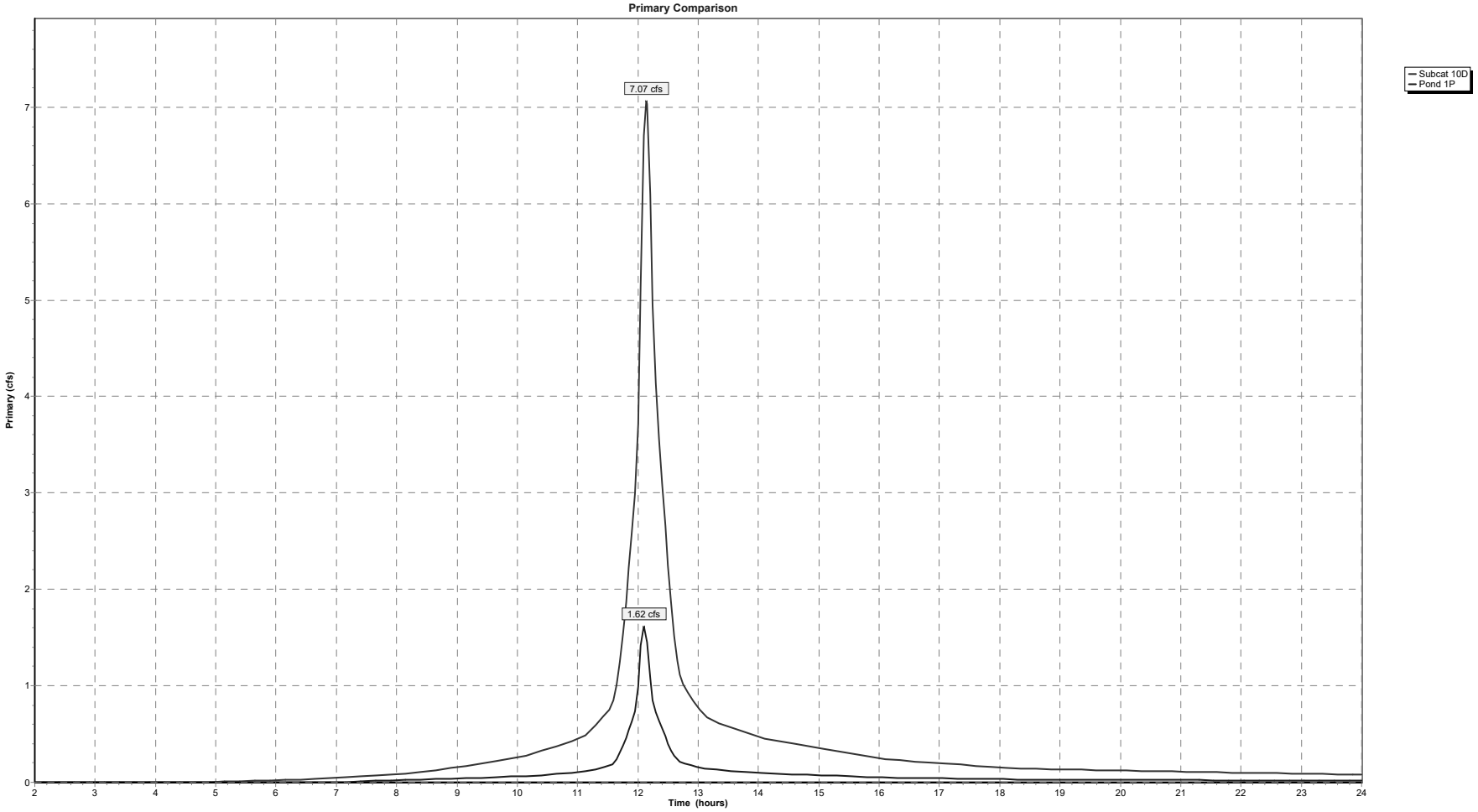
Link 2L: SDP1 W/DETENTION



APPENDIX D

HYDROGRAPH COMPARISON & PIPE SIZING


Primary Comparison
7.07 cfs
1.77 cfs
Subcat 10
Subcat 11
Primary (cfs)
Time (hours)
0
1
2
3
4
5
6
7
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24


Primary Comparison
Primary (cfs)
Time (hours)
7.07 cfs
1.62 cfs
Subcat 10D
Pond 1P
0
1
2
3
4
5
6
7
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

Culvert Report

Storm Pipe Under Fishkill Ave.

Invert Elev Dn (ft)	=	173.79
Pipe Length (ft)	=	38.00
Slope (%)	=	0.50
Invert Elev Up (ft)	=	173.98
Rise (in)	=	18.0
Shape	=	Circular
Span (in)	=	18.0
No. Barrels	=	1
n-Value	=	0.012
Culvert Type	=	Circular Culvert
Culvert Entrance	=	Smooth tapered inlet throat
Coeff. K,M,c,Y,k	=	0.534, 0.555, 0.0196, 0.9, 0.2

Embankment

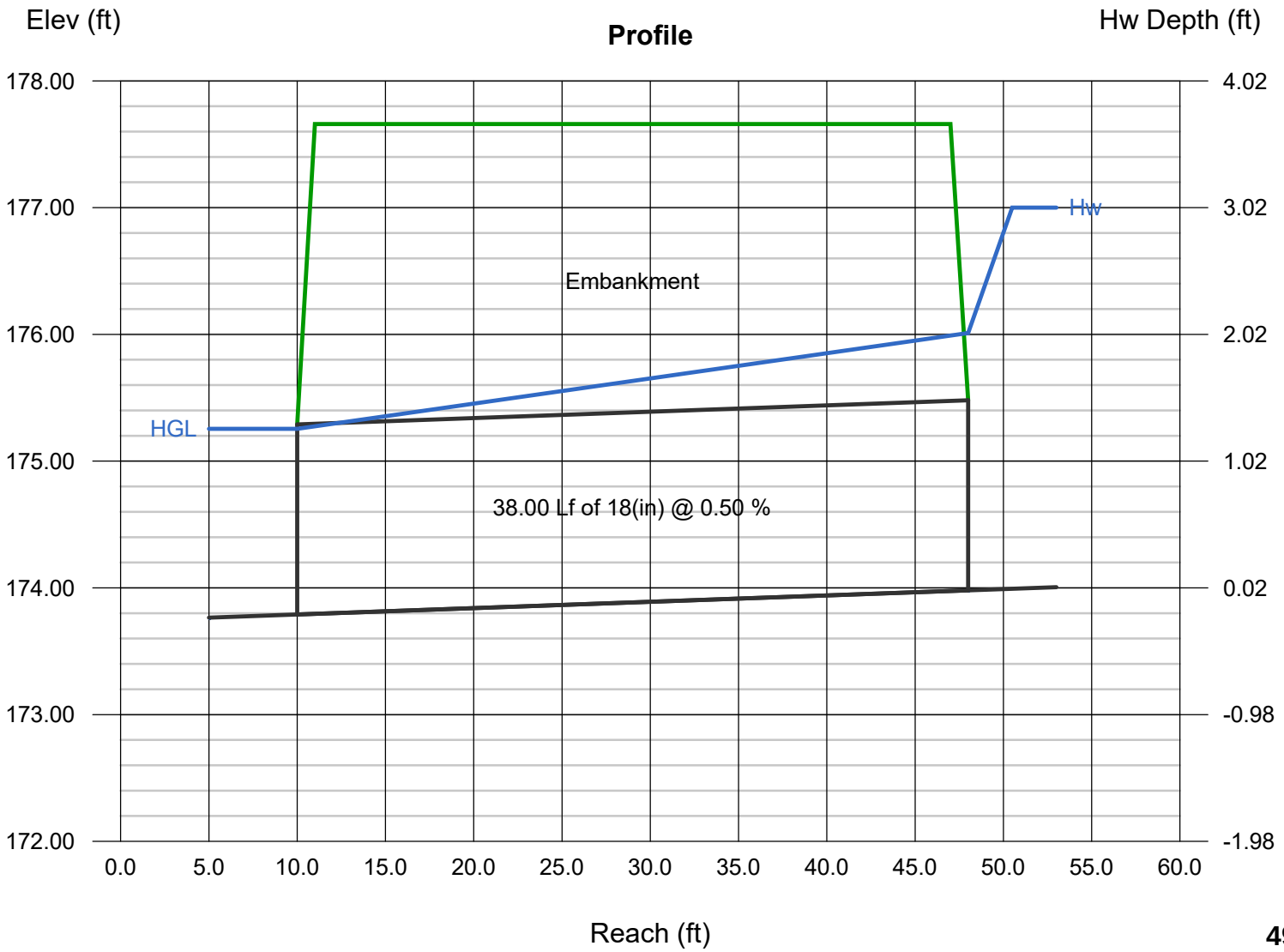
Top Elevation (ft)	=	177.66
Top Width (ft)	=	36.00
Crest Width (ft)	=	25.00

Calculations

Qmin (cfs)	=	16.33
Qmax (cfs)	=	16.33
Tailwater Elev (ft)	=	(dc+D)/2

Highlighted

Qtotal (cfs)	=	16.33
Qpipe (cfs)	=	16.33
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	9.30
Veloc Up (ft/s)	=	9.24
HGL Dn (ft)	=	175.25
HGL Up (ft)	=	176.01
Hw Elev (ft)	=	177.00
Hw/D (ft)	=	2.01
Flow Regime	=	Inlet Control



Indiana Bat Project Review Fact Sheet
New York Field Office

The following fact sheet is intended to provide information to assist project sponsors, as well as any involved Federal and State agencies, with the review of activities that occur within the likely range of the Indiana bat (*Myotis sodalis*) within the State of New York. This fact sheet can be used to assist with compliance with the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). **PLEASE NOTE - this fact sheet does not apply to wind development projects as they involve many unique considerations.** Contact the U.S. Fish and Wildlife Service (Service) directly for technical assistance for wind projects. In addition, information on evaluating impacts from wind projects on Indiana bats can be found at http://www.fws.gov/midwest/endangered/mammals/inba/WindEnergyGuidance.html.

Background

The Indiana bat is federally- and New York State-listed as an endangered species with a range that extends from the Midwest to northeastern and southeastern parts of the United States. Additional information on Indiana bat occurrences can be found at http://ecos.fws.gov and https://www.fws.gov/northeast/nyfo/es/NYSpecies.htm.

The Indiana bat typically hibernates in caves/mines in the winter and roosts under bark or in tree crevices in the spring, summer, and fall. Suitable potential summer roosting habitat is characterized by trees (dead, dying, or alive) or snags with exfoliating bark, or containing cracks or crevices that could potentially be used by Indiana bats as a roost. The minimum size roost tree observed to date is 2.5 inches diameter breast height (d.b.h.) for males and 4.3 inches d.b.h. for females. However, maternity colonies generally use trees greater than or equal to 9 inches d.b.h. Overall, roost tree structure appears to be more important to Indiana bats than a particular tree species or habitat type. Females appear to be more habitat specific than males presumably because of the warmer temperature requirements associated with gestation and rearing of young. As a result, they are generally found at lower elevations than males may be found. Roosts are warmed by direct exposure to solar radiation, thus trees exposed to extended periods of direct sunlight are preferred over those in shaded areas. However, shaded roosts may be preferred in very hot conditions. As larger trees afford a greater thermal mass for heat retention, they appear to be preferred over smaller trees. Additional information on potentially suitable summer habitat can be found in the Draft Indiana Bat Recovery Plan (Service 2007) at http://www.fws.gov/northeast/nyfo/es/IndianaBatapr07.pdf and at http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html

Streams associated with floodplain forests, and impounded water bodies (ponds, wetlands, reservoirs, etc.) where abundant supplies of flying insects are likely found, provide preferred foraging habitat for Indiana bats, some of which may fly up to 2-5 miles from upland roosts on a regular basis. Indiana bats also forage within the canopy of upland forests, over clearings with early successional vegetation (*e.g.*, old fields), along the borders of croplands, along wooded fencerows, and over farm ponds in pastures (Service 2007). While Indiana bats appear to forage in a wide variety of habitats, they seem to tend to stay fairly close to tree cover.

Threats include disease (white-nose syndrome), habitat loss or degradation, human disturbance, contaminants, and collision with wind turbines.

Indiana Bat Project Review Fact Sheet
New York Field Office

Evaluation of Presence or Probable Absence

To determine whether the proposed project site may be occupied by the Indiana bat, the Service recommends the following analytical approach[1]:

Step 1. Is the proposed project within an area[2] identified by the Service as known or likely to contain Indiana bats?
- No: No further coordination regarding the Indiana bat is necessary at this time.
- Yes: Proceed to Step 2.

Step 2. Is there existing information regarding probable presence/absence of Indiana bats (*e.g.*, proximity to hibernacula, prior summer netting/acoustics)[3]?
- No: Proceed to Step 3.
- Yes: Document existing information and coordinate with the Service.

Step 3. Is there any suitable Indiana bat habitat[4] present within the proposed action project area?
- No: No further coordination regarding the Indiana bat is necessary at this time.
- Yes: Determine whether the proposed project involves any effects to Indiana bats.

Determination of Effects

Determine for each project whether effects to Indiana bats or their habitat are expected. If there are impacts to habitat while bats are not present, assess the scale and scope of those impacts to determine whether bats returning in the spring may be affected.

For example, consider whether a project may result in temporary or permanent increases in noise, vibration, dust, chemical use, lighting, vehicle use, and general levels of human activity. Also, consider whether a project may result in temporary or permanent loss, degradation, and/or fragmentation of roosting, foraging, swarming, commuting, or wintering habitat.

Certain transportation projects have already been evaluated and processes developed in accordance with a Rangewide Consultation and Conservation Strategy: https://www.fws.gov/Midwest/endangered/section7/fhwa/

Surveys for Indiana Bats

Should suitable Indiana bat habitat be present and should the proposed project have the potential for impacting Indiana bats, coordinate with the Service to determine whether 1) assuming presence or 2) conducting surveys[5] is the best approach. Due to the limited time frame when bat surveys can be completed and in order to avoid project delays, it is strongly recommended that the project sponsor (or involved Federal agency) contact the Service as early as possible during

[1] This reflects our current understanding but future studies may require a revision to this guidance.
[2] https://ecos.fws.gov/ipac/
[3] http://www.fws.gov/northeast/nyfo/es/NYSpecies.htm and http://www.dec.ny.gov/animals/38801.html
[4] http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html
[5] http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html

project planning to determine if surveys or additional avoidance and/or minimization measures are appropriate. Should Indiana bat presence be detected, the Service should be contacted immediately for further assistance in determining whether your action may impact Indiana bats. If no bats are detected after protocol surveys, submit the results as soon as possible for our review in accordance with the timeframes agreed upon during the review of the survey scope of work.

Conservation Measures

Conservation measures are designed to minimize the likelihood of adverse impacts or result in beneficial effects to Indiana bats from projects. The following guidance represents general recommendations that may be incorporated into the proposed project design as appropriate.

Project Siting

- Avoid removing or damaging documented roosts or trees surrounding roosts.
- Avoid impacts to forest patches with documented roosts/foraging use (*e.g.*, forest within 0.25 mile of known roosts).
- Minimize impacts to all forest patches.
- Maintain forest patches and forested connections (*e.g.*, hedgerows, riparian corridors) between patches.
- Maintain natural vegetation between forest patches/connections and developed areas.
- Maintain at least 35%[6] of forest habitat within maternity colony home range[7].
- Restore and/or protect on- and off-site habitat.
- Avoid impacting potential roost trees to the greatest extent practicable
    - Retain standing live trees that have exfoliating (separated from cambium) bark.
    - Retain black locust, shellbark, shagbark, and bitternut hickories as possible, regardless of size or condition (live, dead, or dying).
    - Retain standing snags as much as possible regardless of species.

Project Construction

- When >10 miles from a P3 or P4 hibernaculum or >20 miles from a P1 or P2 hibernaculum[8], but within the summer range of the Indiana bat, the clearing of potential roost trees, generally ≥4 inches should occur from October 1 through March 31[9].
- When <10 miles from a P3 or P4 hibernaculum or <20 miles from a P1 or P2 hibernaculum, clearing should be conducted from October 31 to March 31.
- Use bright flagging/fencing to demarcate trees to be cleared.

[6] Minimum % forest cover within Indiana bat maternity colony home range (NYSDEC unpublished data)

[7] For explanation of how to delineate Indiana bat maternity colony home range, please see the Indiana Bat Section 7 and Section 10 Guidance for Wind Energy Projects document located at http://www.fws.gov/midwest/Endangered/mammals/inba/index.html

[8] See Service 2007 for definitions of Priority 1-4 hibernacula. Contact the NYFO for information regarding the closest hibernaculum to your project

[9] Site specific information may allow for deviations from the listed dates. Also, there may be cases (*e.g.*, very small number of trees) when we believe the likelihood of impacts is low regardless of when tree removal occurs.

Project Operations/Maintenance

- Minimize lighting impacts (*e.g.*, limit number of lights, direct lights downward, fully shield lights, use motion sensors or timers).
- Conduct activities in a manner that will minimize impacts to potential drinking water sources for bats.

As we better understand a given proposed project, including any proposed conservation measures for Indiana bats, we may have additional recommendations. Project sponsors should seek assistance from the Service to develop these measures.

Information to Provide to the Service

The project's environmental documents should identify project activities that might result in impacts to the Indiana bat or their habitat. Information on any potential impacts and the results of any recommended habitat analyses or surveys for the Indiana bat should be provided to the New York Field Office and will be used to evaluate potential impacts to the Indiana bat and/or their habitat, and to determine the need for further coordination or consultation pursuant to the ESA. We encourage the project sponsor to submit these materials as early in the planning process as possible to all appropriate parties (e.g., involved Federal/State agencies, the New York State Department of Environmental Conservation, Service).

Specifically, the following information should be provided:

- whether a Federal agency is involved or not;
- a detailed project description;
- a map of the proposed project area with coarse vegetation cover types (*e.g.*, emergent wetland, open field) in acres;
- a summary table of current vs. proposed future acreage of each cover type;
- provide number or acreage of trees proposed for removal and timing of removal;
- an overlay of the project on the vegetation map;
- a description of the forested area onsite, including the type of forest (*e.g.*, oak-hickory), approximate stand age, and presence of dead or live trees with split branches or trunks or exfoliating bark;
- photographs representative of all cover types on the site and encompassing views of the entire site;
- a topographic map with the project area identified; and
- a summary of proposed conservation measures.

References:

U.S. Fish and Wildlife Service. 2007. Indiana Bat (*Myotis sodalis*) Draft Recovery Plan: First Revision. U.S. Fish and Wildlife Service, Fort Snelling, MN. 258 pp.

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

December 16, 2022

John Gunn
Chairman
City of Beacon Planning Board
One Municipal Plaza, Suite One
Beacon, NY 12508

Re: DEC
397 Fishkill Avenue, LLC - Application for Site Plan & Lot Line Adjustment Approval
393-397 Fishkill Avenue, Beacon, NY 12508
22PR08660

Dear John Gunn:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

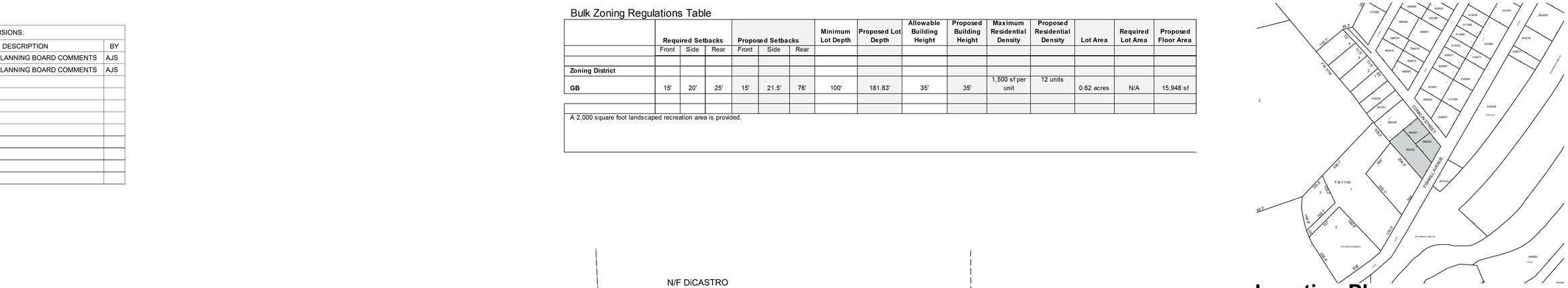
rev: J. Carter

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	11/29/22	REVISED PER PLANNING BOARD COMMENTS	AJS
2	12/27/22	REVISED PER PLANNING BOARD COMMENTS	AJS

Bulk Zoning Regulations Table

	Required Setbacks			Proposed Setbacks			Minimum Lot Depth	Proposed Lot Depth	Allowable Building Height	Proposed Building Height	Maximum Residential Density	Proposed Residential Density	Lot Area	Required Lot Area	Proposed Floor Area
	Front	Side	Rear	Front	Side	Rear									
Zoning District															
GB	15'	20'	25'	15'	21.5'	76'	100'	181.83'	35'	35'	1,500 sf per unit	12 units	0.62 acres	N/A	15,948 sf

A 2,000 square foot landscaped recreation area is provided.



Location Plan

1" = 200'

Zoning Summary

Zoning District:	GB
Tax Map No.:	6055-80-399035 & -6055-80-392032 & 6055-80-394041
Lot Area:	0.62 Acres (Total combined lot area)
Building Footprint:	6,124 SF
Historical Overlay District:	No
Parking Overlay District:	No
Existing Use:	Office / Commercial / Multi Family Residential
Proposed Use:	Commercial / Multi Family Residential

Parking & Loading

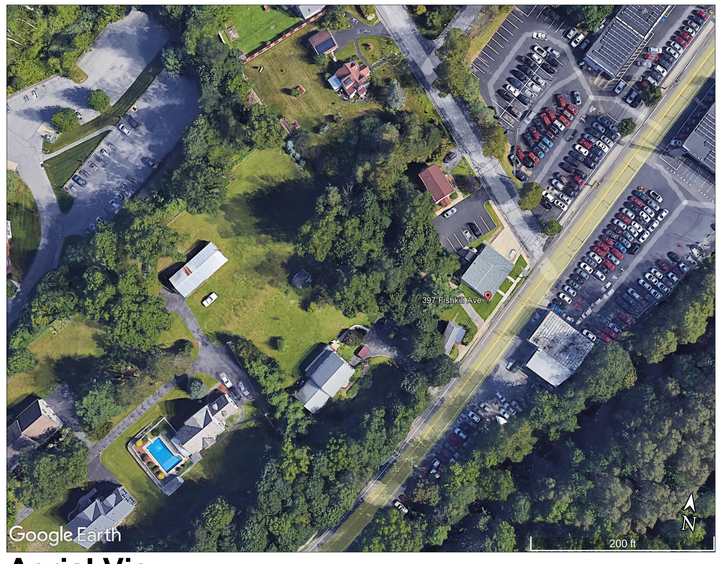
Use & Parking Requirements	Proposed Area	Current Parking Requirement
Residential		
(1) space per unit + ¼ space per bedroom	(12) One Bedroom Apartments	15 parking spaces
Commercial		
1 space per 200 square feet	3,500 sf	18 parking spaces
Total Required		**33 parking spaces**
Total Provided		**34 parking spaces**

Notes:

1. Commercial hours are 7am – 10pm, Monday through Sunday, inclusive.
2. A freestanding sign is shown on the plans. The sign will be submitted to the Beacon Building Department for review and approval.
3. The project will comply with the 10% below-market-rate requirements in Article IVB, Affordable-Workforce Housing. There will be one Below Market Rate unit
4. Refuse pick-up will be limited to off-peak hours.
5. All landscaping shown on the Site Plan shall be maintained in a vigorous growing condition for the duration of the use and shall be trimmed so as to not interfere with pedestrian use of the sidewalk. All plant not so maintained shall be replaced with new plants of comparable size and quality at the beginning of the next immediately following growing season in compliance with the Site Plan, at the sole cost and expense of the property owner.

Index of Drawings

Sheet 1 of 8	Site Plan
Sheet 2 of 8	Building Plans & Views
Sheet 3 of 8	Building Plans & Views
Sheet 4 of 8	Existing Conditions & Demolition Plan XC-1
Sheet 5 of 8	Grading & Utility Plan GU-1
Sheet 6 of 8	Erosion & Sediment Control Plan ESC-1
Sheet 7 of 8	Construction Details CD-1
Sheet 8 of 8	Construction Details CD-2



Aerial View

Scale: Not to Scale

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

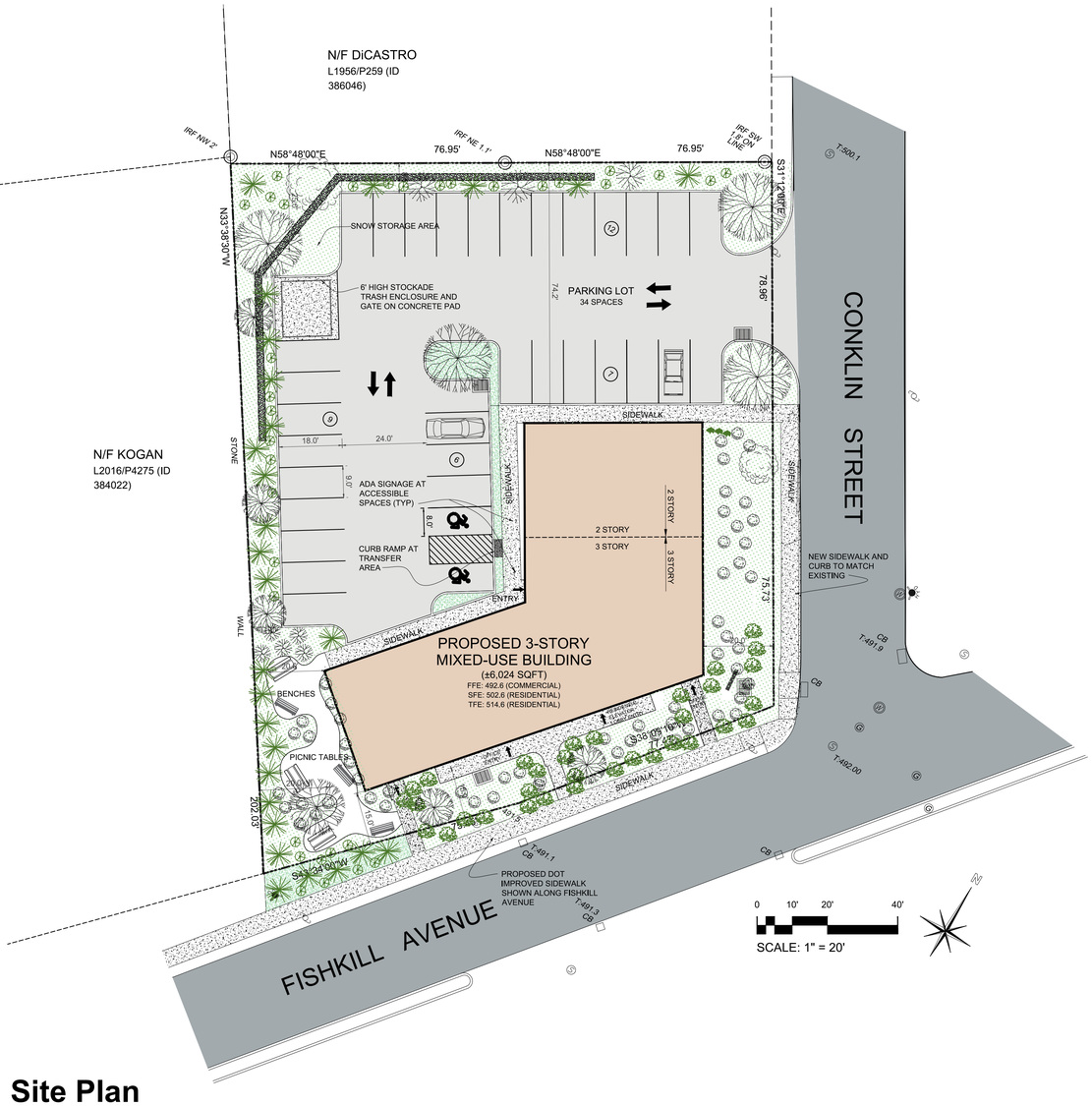
_____ DAY OF _____, 20_____ SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____ BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.



Site Plan

Scale: 1" = 20'

Site Plan Application

Sheet 1 of 8 - Site Plan

Owner:
Jordan Haug
397 Fishkill Avenue
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

397 Fishkill Avenue

Beacon, New York
Scale: 1" = 20'
October 21,2022

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

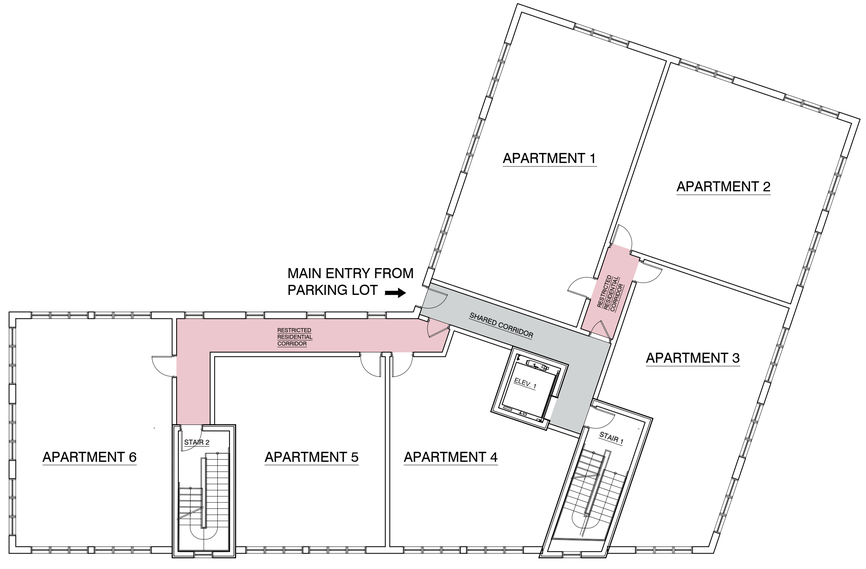
_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.



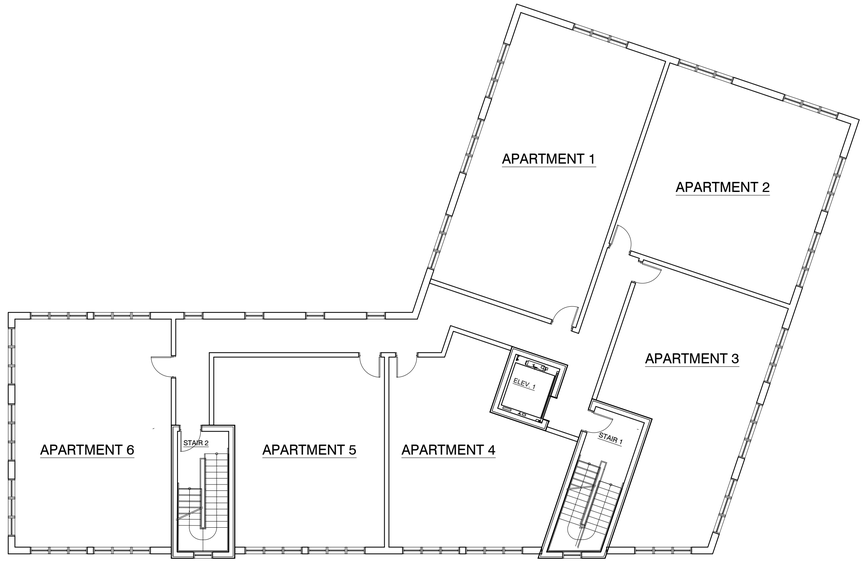
View From Fishkill Avenue



2nd Floor Plan

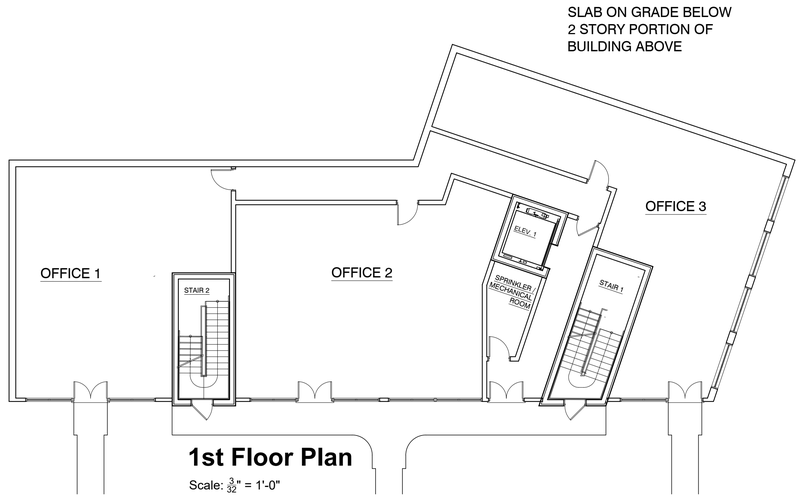
Scale: $\frac{3}{32}$" = 1'-0"

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	11/29/22	NO CHANGE	AJS
2	12/27/22	REVISED PER PLANNING BOARD COMMENTS	AJS



3rd Floor Plan

Scale: $\frac{3}{32}$" = 1'-0"



1st Floor Plan

Scale: $\frac{3}{32}$" = 1'-0"

Site Plan Application

Sheet 2 of 8 - Building Plans

Owner:
Jordan Haug
397 Fishkill Avenue
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

397 Fishkill Avenue
Beacon, New York
Scale: $\frac{1}{8}$" = 1'-0"
October 21,2022

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	11/29/22	REVISED PER PLANNING BOARD COMMENTS	AJS
2	12/27/22	REVISED PER PLANNING BOARD COMMENTS	AJS





POLE MOUNTED LIGHT (L1A)
GREENSHINE "L30" ARM MOUNTED 3000K LED FIXTURE. LOW GLARE CUTOFF SHIELD, DARK SKY COMPLIANT. CRI 80-100 RANGE. COLOR: BLACK. PHOTOCELL CONTROL. OR APPROVED EQUAL. MOUNTING HEIGHT ON BUILDING = 10 FEET

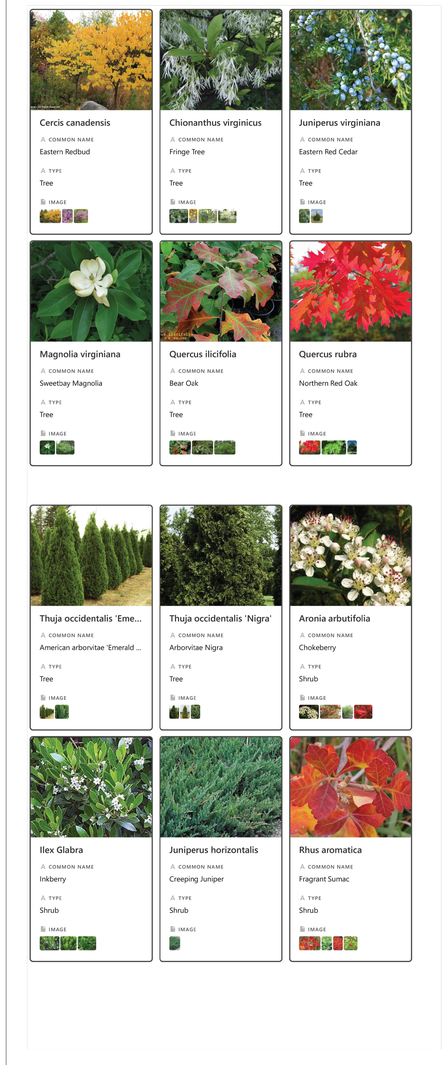


WALL MOUNTED HOUSE LIGHT (L2)

HUBBARDTON FORGE WALL MOUNTED FIXTURE. MODEL "Hood Outdoor Dark Sky Wall Sconce", 60W, 2700K. CRI 80-100 RANGE. COLOR: COASTAL BLACK, OR APPROVED EQUAL. MOUNTING HEIGHT = 7 FEET. NOTE THAT THE MANUFACTURER DOES NOT PROVIDE FOOTCANDLE DIAGRAMS FOR THIS FIXTURE

NOTE: ALL EXTERIOR LIGHTING ON THE SITE SHALL BE DIRECTED AND/OR SHIELDED SO AS NOT TO CAUSE ANY OBJECTIONABLE GLARE OBSERVABLE FROM NEIGHBORING STREETS AND PROPERTIES. THE SOURCE (BULBS) OF SUCH LIGHTING SHALL NOT BE VISIBLE FROM SAID NEIGHBORING STREETS AND PROPERTIES. PHOTOMETRIC DIAGRAMS ARE SHOWN WITH SHIELDED CONDITIONS.

Illustrated Plant List



Planting and Landscape Notes

PLANTING and LANDSCAPE NOTES

1. Contractors shall enter and exit site through pre-approved routes only.
2. No non-native plant species shall be introduced onto the site. All species shall be indigenous to the northeast region of North America.
3. If a straight specie is specified, no cultivars will be accepted without prior approval of designer.
4. No plants will be accepted that display mechanical injury, disease or specie irregularities.
5. Soil shall be prepped by removing all construction debris, loose roots and stones larger than 3".
6. All plants must be labeled when delivered to site.
7. Areas to be planted shall be marked and labeled by designer.
8. All plant locations and orientations in the field require approval from designer and owner prior to installation.
9. Test tree-pit for drainage before planting. Do not plant tree in pit if water is still evident after one hour. Contact site engineer or landscape designer if this condition is encountered.
10. All tree-planting to be coordinated with as-built utilities. Trees to be located minimum of 5' from active lines.
11. All trees shall be ball and burlap unless otherwise specified on Plant List.
12. Each new tree hole tree shall be twice the width of the rootball.
13. Burlap, wire, cords, ties and any wrapping materials must be removed from all rootballs before backfilling.
14. Plant all plants so top of rootball is slightly above surrounding soil(small and large plants)
15. No planting shall be done in muddy, rainy or frozen conditions.
16. All plants calling for "Overflowing" in the notes shall not be accepted by designer if plants are thin.
17. If planting is delayed for more than 3 hours after delivery, set plants in shade. Protect from weather and mechanical damage. Keep roots moist and cover with mulch.
18. Contractors shall leave site neat and orderly during course of project, and store materials and equipment in owner-approved locations away from all trees and plants. Store all unplanted plant material away from damaging sun.
19. If site conditions conflict with intended design, contractor shall alert Owner and designer.
20. No substitutions are to be made without the written or verbal consent of landscape designer and owner.
21. Create a size-specific water-well around each plant, 3' from center of tree, and mulch from the outside. Do not mulch crown.
22. Water thoroughly after planting each plant. Water schedule to be determined.
23. Spray for deer if planted in fall. Sometimes bucks mark their territory with their antlers.
24. Keep planting areas weed-free until plant is established.
25. Eco Lawn seeding shall be implemented by contractor familiar with this specie mix and with the process and approved by designer. This is not the same as casting contractor grass seed.
26. Pervious/Permeable Pavers and associated grass seeding shall be installed by contractor with experience in this process. This process requires establishment maintenance, in order to succeed.
27. Bermed areas shall be built with designer directing construction.
28. Street tree and surrounding tree-pit shall be installed by contractor experienced with these materials and approved by designer.
29. All plants require regular watering for the first two seasons to succeed.



Landscape & Lighting Plan

Scale: 1" = 20'

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

Site Plan Application

Sheet 3 of 8 - Landscaping & Lighting Plan

Owner:
Jordan Haug
397 Fishkill Avenue
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

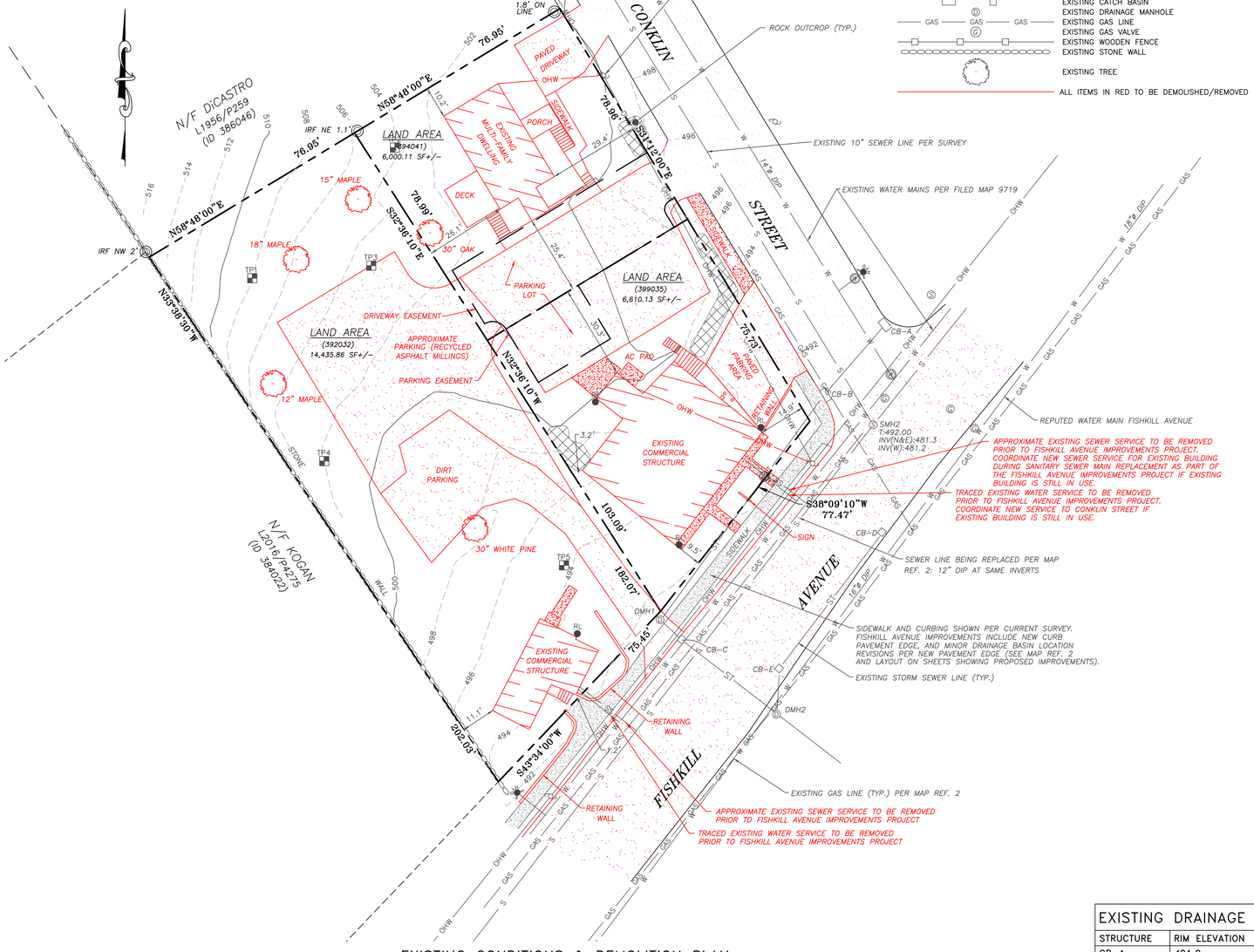
397 Fishkill Avenue
Beacon, New York
Scale: 1" = 20'
October 21,2022

SCHEDULE OF REGULATIONS (GB ZONING DISTRICT):	
PARAMETER	REQUIREMENT
LOT AREA:	N/A
LOT AREA PER UNIT:	1,500 SQFT MINIMUM
LOT WIDTH:	N/A
LOT DEPTH:	100 FEET MINIMUM
YARD SETBACKS (RESIDENTIAL USE):	
FRONT YARD:	15 FEET MINIMUM
SIDE YARD:	20 FEET MINIMUM
REAR YARD:	25 FEET MINIMUM
MAX. BUILDING HEIGHT:	35 FT MAX.
MAX. BUILDING COVERAGE:	N/A
MAX. UNITS/BUILDING:	N/A

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- 510 EXISTING MAJOR CONTOUR
- 508 EXISTING MINOR CONTOUR
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WATER VALVE
- EXISTING HYDRANT
- ST EXISTING STORM WATER LINE
- EXISTING CATCH BASIN
- EXISTING DRAINAGE MANHOLE
- GAS EXISTING GAS LINE
- EXISTING GAS VALVE
- EXISTING WOODEN FENCE
- EXISTING STONE WALL
- EXISTING TREE
- ALL ITEMS IN RED TO BE DEMOLISHED/REMOVED

PROJECT INFORMATION:	
PARCEL OWNER:	397 FISHKILL AVE LLC.; 397 FISHKILL AVE, BEACON NY 12508 & 393 FISHKILL AVE LLC; 397 FISHKILL AVE, BEACON NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PROJECT SURVEYOR:	STEVEN J. GREEN P.L.S., PO BOX 534, GOSHEN, NY 10924
PROJECT ARCHITECT:	ARYEH SIEGEL, 84 MASON CIRCLE, BEACON, NY 12508
PROJECT LANDSCAPE DESIGN:	LANDSCAPE RESTORATIONS, 7 CREEK DRIVE, BEACON, NY 12508
PARCEL LOCATION:	397 & 393 FISHKILL AVE, 7 CONKLIN ST, BEACON NY 12508
TAX PARCEL ID:	6055-80-399035 (0.15 AC) & 392032 (0.33 AC) & 394041 (0.14 AC)
PARCEL AREA:	±0.62-ACRES TOTAL
WATER SUPPLY:	MUNICIPAL – CITY OF BEACON
SEWAGE DISPOSAL:	MUNICIPAL – CITY OF BEACON



EXISTING CONDITIONS & DEMOLITION PLAN

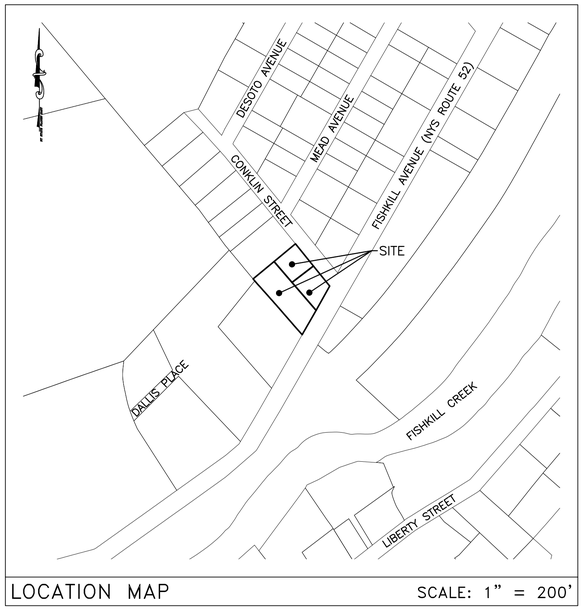
SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.



LOCATION MAP SCALE: 1" = 200'

MAP REFERENCES:

1. BOUNDARY AND TOPOGRAPHICAL SURVEY PER "SURVEY FOR JORDAN HAUG" AS PREPARED BY STEVEN J. GREEN, P.L.S. DATED MAY 29, 2022 AND UPDATED IN NOVEMBER 2022 TO PROVIDE SANITARY SEWER INVERT ELEVATIONS.
2. SANITARY SEWER RIM AND INVERT ELEVATIONS AND DRAINAGE STRUCTURE RIM ELEVATIONS PROVIDED BY MAP REFERENCE 1. DRAINAGE PIPE AND INVERT INFORMATION TAKEN FROM A PLAN SET ENTITLED "RESURFACING, RESTORATION AND REHABILITATION TELLER AVENUE AND FISHKILL AVENUE (WOLCOTT AVENUE/NYS ROUTE 9D TO BEACON CITY LINE)" AS PREPARED BY WSP DATED MAY 2022. INVERT ELEVATIONS ADJUSTED TO PROJECT SURVEYOR'S DATUM OF 500 FEET. GAS MAIN LOCATIONS SHOWN PER THE WSP PLAN SET.
3. WATER MAIN SHOWN HEREON PER A MAP ENTITLED LOT LINE REALIGNMENT FOR GARY VILLANO PREPARED BY PETER R. HUSTIS, L.L.S. DATED AUGUST 13, 1991 AND LAST REVISED MAY 26, 1993 AND FILED AT THE DUTCHESS COUNTY CLERK'S OFFICE ON JUNE 8, 1993 AS FILED MAP 9719

SURVEY NOTES:

1. PROPERTY LINE AS SHOWN ARE BASED ON DEEDS OF RECORD AND FILED MAPS.
2. THIS IS AN ACCURATE SURVEY COMPLETED IN THE FIELD MAY 2022.
3. SUBJECT TO ALL EASEMENTS AND/OR AGREEMENTS THAT THE PUBLIC UTILITY COMPANIES MAY HAVE.
4. ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE AN ORIGINAL OF THE LAND SURVEYOR'S SEAL OR HIS/HER HER EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.
5. SUBJECT TO ALL RIGHT OF WAY TAKINGS NOT SHOWN OR FOUND IN COUNTY OR TOWN RECORDS.
6. DATUM: 500.00'.

LOT CONSOLIDATION & EASEMENT NOTES:

1. CONCURRENT WITH THE SITE PLAN APPLICATION IS A LOT CONSOLIDATION PLAN, CONSOLIDATING THE THREE EXISTING TAX PARCELS INTO A SINGLE TAX PARCEL BY REMOVING ALL INTERIOR LOT LINES.
2. THE EXISTING PARKING AND DRIVEWAY EASEMENTS ARE TO BE EXTINGUISHED AS PART OF THE LOT CONSOLIDATION PROCESS. THE EASEMENTS ARE DESCRIBED IN NOTE 4 OF A MAP ENTITLED LOT LINE REALIGNMENT FOR GARY VILLANO PREPARED BY PETER R. HUSTIS, L.L.S. DATED AUGUST 13, 1991 AND LAST REVISED MAY 26, 1993 AND FILED AT THE DUTCHESS COUNTY CLERK'S OFFICE ON JUNE 8, 1993 AS FILED MAP 9719, AS FOLLOWS:
   THE OWNER OF LOT NO. 1, ITS SUCCESSORS AND ASSIGNS, IS GRANTING A PARKING EASEMENT CONSISTING OF 3 PARKING SPACES (TO BE MARKED 1, 2 AND 3) TO THE OWNER OF LOT NO. 2, ITS SUCCESSORS AND ASSIGNS. ALSO, THE OWNER OF LOT NO. 2 IS GRANTING THE OWNER OF LOT NO. 1 A DRIVEWAY EASEMENT FOR INGRESS AND EGRESS TO THE PROPOSED PARKING AREA ON LOT NO. 1.

DEMOLITION NOTES:

1. BUILDING/STRUCTURE TO BE DEMOLISHED ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE NOT TO BE DEMOLISHED AS PART OF THIS WORK. PRIOR TO DEMOLISHING ANY BUILDINGS/STRUCTURES, THE CONTRACTOR SHALL PERFORM A PRE-DEMOLITION SURVEY IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS GOVERNING THE DISPOSAL OF SOLID WASTE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS BY THE AUTHORITY HAVING JURISDICTION. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS.
2. CONFORM TO APPLICABLE CODE FOR DEMOLITION OF STRUCTURES, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING.
   DISPOSAL AND STORAGE OF DEBRIS.
3. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
4. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
5. NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNER.
6. PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
7. LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
8. DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
9. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
10. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSES.
11. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS.
12. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
13. ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
14. FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
15. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATION.
16. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
17. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
18. USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, SUCH AS ICE, FLOODING, AND POLLUTION.
19. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
20. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITIONS.
21. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.
22. CUTTING OF TREES CAN ONLY OCCUR DURING NOVEMBER 1ST TO MARCH 31ST TIME FRAME.

UTILITY ABANDONMENT NOTES:

1. EXISTING WATER AND SEWER SERVICES TO BE ABANDONED IN ACCORDANCE WITH CITY OF BEACON WATER & SEWER DEPARTMENT REQUIREMENTS.
2. ANY WATER SERVICE TO BE ABANDONED SHALL BE AT THE CORPORATION VALVE BY CLOSING OF THE CORPORATION VALVE, DISCONNECTION OF THE EXISTING SERVICE LINE TO THE CORPORATION VALVE AND CAPPING OF THE CORPORATION VALVE.
3. THE EXISTING UTILITIES THAT SERVICE THE EXISTING BUILDINGS FROM FISHKILL AVENUE SHALL BE ABANDONED PRIOR TO RECONSTRUCTION OF FISHKILL AVENUE IN 2023.

EXISTING DRAINAGE TABLE:					
STRUCTURE	RIM ELEVATION	INV (N)*	INV (E)*	INV (S)*	INV (W)*
CB-A	491.9	12": 489.90	---	12": 489.84	---
CB-B	491.3	12": 488.71	---	18": 488.32	---
CB-C	491.1	18": 487.33	---	18": 487.42	---
CB-D	491.6	---	---	12": 490.25	---
CB-E	491.3	12": 489.66	---	12": 489.79	---
DMH1	491.5	12": 487.53	12": 487.37	---	---
DMH2	491.1	UNKNOWN	UNKNOWN	---	UNKNOWN

* PER MAP REFERENCE #2 – SURVEYOR UNABLE TO VERIFY IN FIELD DUE TO EXCESSIVE SEDIMENT BUILD-UP

Dig Safely. New York Call 811 before you dig

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	11/29/22	PER PLANNING BOARD COMMENTS	CMB				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

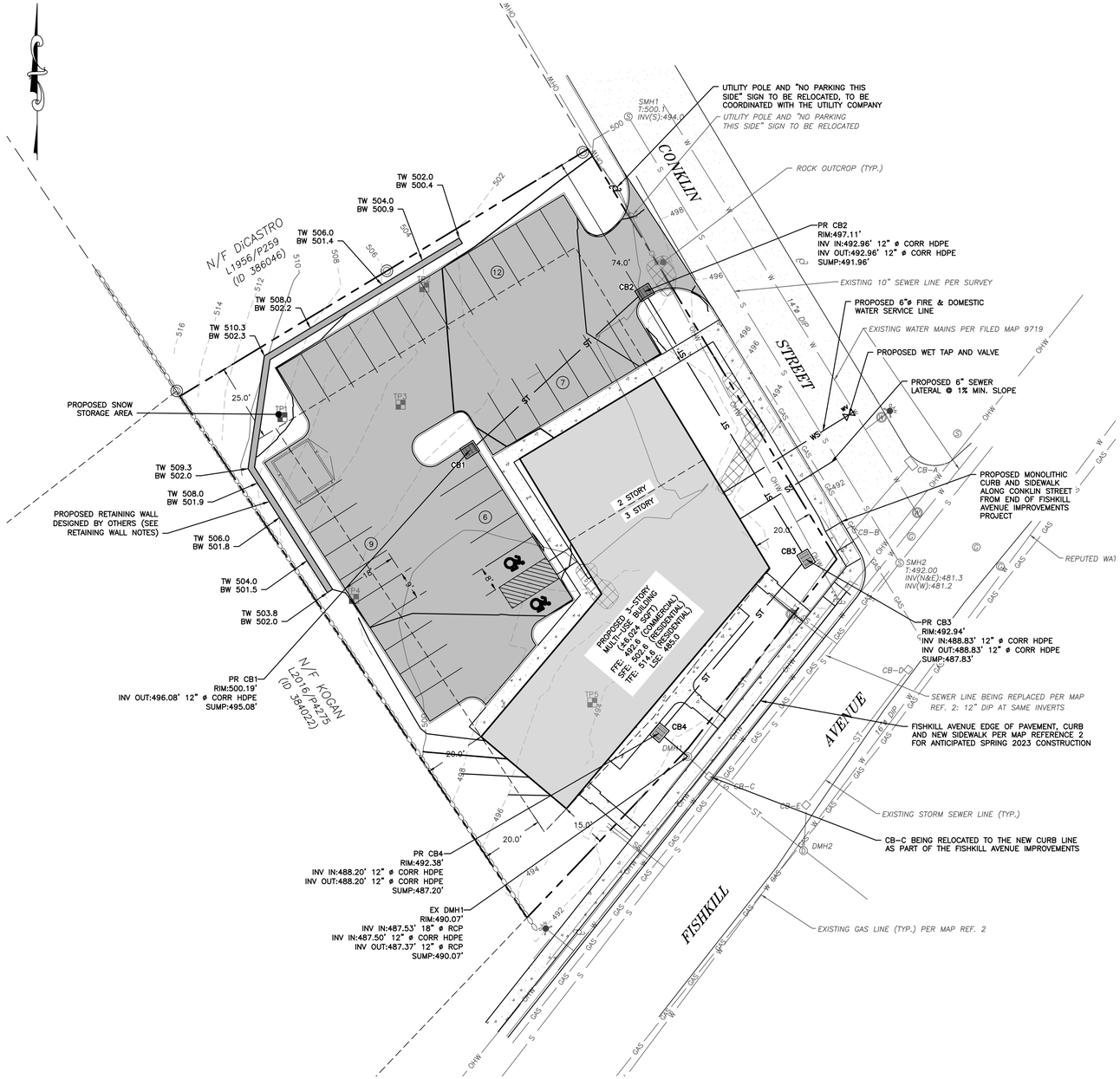
EXISTING CONDITIONS & DEMOLITION PLAN

397 FISHKILL AVENUE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032 & 399035

JOB #:	2022:015
DATE:	10/21/2022
SCALE:	1" = 20'
TITLE:	XC-1
SHEET:	4 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



GRADING & UTILITY PLAN

SCALE: 1" = 20'

GRAPHIC SCALE

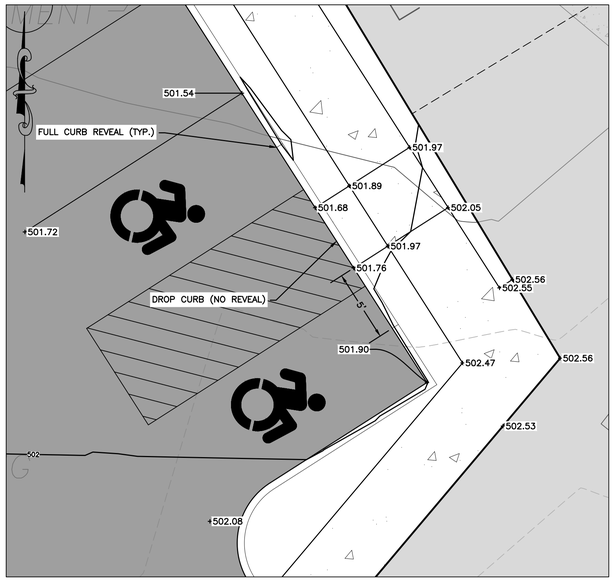
20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- 510 EXISTING MAJOR CONTOUR
- 508 EXISTING MINOR CONTOUR
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WATER VALVE
- EXISTING HYDRANT
- ST EXISTING STORM WATER LINE
- EXISTING CATCH BASIN
- EXISTING DRAINAGE MANHOLE
- GAS EXISTING GAS LINE
- EXISTING GAS VALVE
- EXISTING WOODEN FENCE
- EXISTING STONE WALL

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S PROPOSED SEWER LINE
- SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W PROPOSED WATER LINE
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED GATE VALVE



ADA ACCESSIBLE ROUTE PLAN

SCALE: 1" = 5'

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

EXISTING DRAINAGE TABLE:

STRUCTURE	RIM ELEVATION	INV (N)*	INV (E)*	INV (S)*	INV (W)*
CB-A	491.9	12": 489.90	---	12": 489.84	---
CB-B	491.3	12": 488.71	---	18": 488.32	---
CB-C	491.1	18": 487.33	---	18": 487.42	---
CB-D	491.6	---	---	12": 490.25	---
CB-E	491.3	12": 489.66	---	12": 489.79	---
DMH1	491.5	12": 487.53	12": 487.37	---	---
DMH2	491.1	UNKNOWN	UNKNOWN	---	UNKNOWN

* PER MAP REFERENCE #2
CERTAIN PIPES SHOWN ARE PROPOSED AS PART OF THE FISHKILL AVENUE IMPROVEMENTS

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS, WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE AND DRAINAGE LINES.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL DRAINAGE, SANITARY SEWER, WATER AND GAS LINES AND STRUCTURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
3. THE PROPOSED BUILDING AND ADDITION SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES. AS SUCH, THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
4. THE WATER SERVICE LINE AND METER FOR EACH UNIT SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. THE NEW WATER SERVICE LINE TO THE NEW BUILDING SHALL BE 6"ø DIP, SUBJECT TO THE MEP ENGINEER'S CALCULATIONS AND VERIFICATION.
6. THE SEWER SERVICE LINE SHALL BE 6"ø SDR-35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN (MINIMUM OF 1% SHALL BE MAINTAINED).
7. STREET CLOSURE FOR WATER, SEWER AND GAS SERVICE CONNECTIONS AND DRIVEWAY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS. A PLAN SHALL BE IN PLACE FOR MAINTENANCE AND PROTECTION OF TRAFFIC.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. MAIN STREET AND CROSS STREET SHALL BE KEPT CLEAN AND SWEPT DURING CONSTRUCTION.
9. SUMP PUMPS TO BE PROVIDED FOR FOOTING DRAINS, AS REQUIRED. THE TYPES OF PUMPS AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT. ALL SUMP PUMPS SHALL DISCHARGE TO DAYLIGHT, OR TO THE CITY OF BEACON DRAINAGE SYSTEM. SUMP PUMPS ARE NOT PERMITTED TO DISCHARGE TO THE CITY OF BEACON SANITARY SEWER SYSTEM.
10. THE APPLICANT/APPLICANT'S PLUMBER SHALL ACQUIRE WATER METERS AND MXU UNITS (SIGNAL SENDING AND RECEIVING UNIT) FOR THE AMI SYSTEM (ADVANCED METERING INFRASTRUCTURE) FROM THE CITY OF BEACON WATER DEPARTMENT. THE MXU UNIT SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING AND SHALL BE LOCATED 2 TO 3 FEET ABOVE THE EXTERIOR GROUND ELEVATION.

ADA CONSTRUCTION NOTES:

1. ADA ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE MUST COMPLY WITH ALL APPLICABLE STATE AND LOCAL ACCESSIBILITY LAWS AND REGULATIONS AND THE CURRENT ADA STANDARDS. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE FROM PARKING SPACE OR PEDESTRIAN ACCESS TO POINTS OF ACCESSIBLE BUILDING INGRESS/OR EGRESS, MUST COMPLY WITH ADA REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
   - 1.1. PARKING SPACES AND PARKING AISLES – SLOPE SHALL NOT EXCEED 1:48 IN ANY DIRECTION.
   - 1.2. CURB RAMPS – SLOPE MUST NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET.
   - 1.3. LANDINGS – MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:48 IN ANY DIRECTION.
   - 1.4. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE – MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL. THE SLOPE MUST BE NO GREATER THAN 1:20 IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:48 IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20, ADA RAMP STANDARDS MUST BE MET WITH A MAXIMUM SLOPE OF 1:12, FOR A MAXIMUM RISE OF 30 INCHES. RAMPS MUST HAVE ADA HAND RAILS AND LANDINGS AT BOTH THE TOP AND BOTTOM OF EACH RAMP, WITH CROSS SLOPES NO MORE THAN 1:48 IN ANY DIRECTION.
   - 1.5. DOORWAYS – MUST HAVE A LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:48 AND MUST BE NO LESS THAN 60 INCHES LONG.
2. WHEN THE PROPOSED CONSTRUCTION INCLUDES CONNECTION TO EXISTING ADA COMPONENTS, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN. NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF THERE ARE ANY DISCREPANCIES OR FIELD CONDITIONS THAT DIFFER FROM WHAT IS SHOWN BEFORE COMMENCING WORK. CONSTRUCTED IMPROVEMENTS MUST COMPLY WITH THE MAXIMUM AND MINIMUM ADA REQUIREMENTS.
3. THE CONTRACTOR MUST VERIFY THE SLOPES OF THE FORMWORK PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.

SOIL TESTING NOTES:

TEST PITS WERE DIRECTED AND OBSERVED BY HUDSON LAND DESIGN PERSONNEL ON DECEMBER 21, 2022. THE INTENT OF THE TEST PITS WAS TO GENERALLY DETERMINE THE ELEVATION OF BEDROCK BASED ON CURRENTLY PROPOSED GRADING AND NOT FOR GEOTECHNICAL OR STRUCTURAL PURPOSES.

TP-1:
TOTAL DEPTH: 9'-6"
± 3' SANDY LOAM WITH EVIDENCE OF PREVIOUS FILL/SPOIL
± 3' VERY TIGHT SANDY/GRAVELLY LOAM
REMAINDER SANDY LOAM
NO BEDROCK

TP-2:
TOTAL DEPTH: 6'-6"
± 2.5' SANDY LOAM
± 3' VERY TIGHT SANDY/GRAVELLY LOAM
REMAINDER SANDY LOAM
NO BEDROCK

TP-3:
TOTAL DEPTH: 6'-0"
± 4' SANDY LOAM WITH EVIDENCE OF PREVIOUS FILL/SPOIL
REMAINDER SANDY LOAM
BEDROCK @ 6'

TP-4:
TOTAL DEPTH: 4'-0"
± 4' SANDY LOAM
NO BEDROCK

TP-5:
TOTAL DEPTH: 5'-0"
± 5' SANDY LOAM
BEDROCK @ 5'

SPECIAL ROCK REMOVAL NOTES:

1. ROCK REMOVAL IS ANTICIPATED ON THE EAST SIDE OF THE SITE FOR DRIVEWAY AND DRAINAGE CONSTRUCTION. ROCK REMOVAL ASSOCIATED WITH CONSTRUCTION ACTIVITIES SHALL BE VIA MECHANICAL MEANS (E.G. HYDRAULIC HAMMERING). THESE MEASURES SHALL BE IMPLEMENTED ONLY ON WEEKDAYS BETWEEN THE HOURS OF 8:00 AM AND 4:00 PM.
2. IF THE ROCK ENCOUNTERED DURING CONSTRUCTION IS TOO HARD TO BE REMOVED BY MECHANICAL MEANS, BLASTING MAY BE CONSIDERED. HOWEVER, THERE SHALL BE NO BLASTING WITHOUT PRIOR APPROVAL FROM THE CITY OF BEACON BUILDING DEPARTMENT AFTER PREPARATION OF A BLASTING PLAN. ANY BLASTING REQUIRED SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL STANDARDS.

RETAINING WALL NOTES:

1. ALL RETAINING WALLS SHOWN ON THIS PLAN SHALL BE DESIGNED BY A NEW YORK STATE LICENSED ENGINEER AND PLANS SHALL BE SUBMITTED TO THE BEACON BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
2. UPON COMPLETION OF THE CONSTRUCTION OF THE RETAINING WALL, THE DESIGN ENGINEER SHALL PROVIDE CERTIFICATION TO THE CITY OF BEACON BUILDING DEPARTMENT THAT THE WALL WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED DESIGN PLANS.

Dig Safely. New York: Call 811 before you dig

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	11/29/22	SHEET ADDED	CMB				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				

STATE OF NEW YORK – DANIEL G. KOGAN – 085716 – LICENSED PROFESSIONAL ENGINEER

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

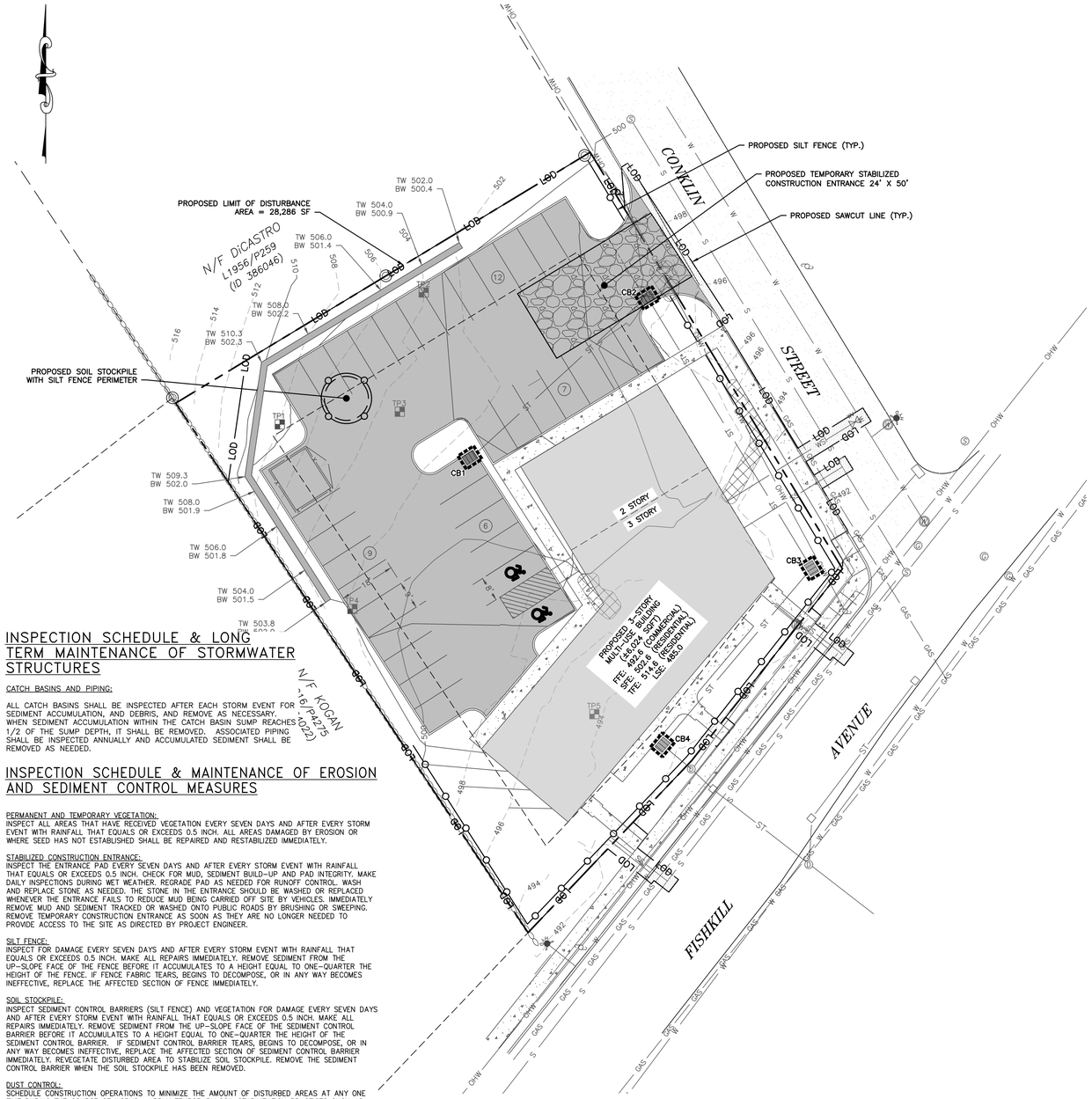
GRADING & UTILITY PLAN

397 FISHKILL AVE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032 & 399035

JOB #:	2022:015
DATE:	7/7/2022
SCALE:	AS SHOWN
TITLE:	GU-1
SHEET:	5 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE:
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. REGRADE PAD AS NEEDED FOR RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE AS DIRECTED BY PROJECT ENGINEER.

SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

SOIL STOCKPILE:
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCKPILE. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.

DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORKS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

DEWATERING PITS:
(IF REQUIRED) – INSPECT DAILY DURING OPERATION FOR CLOGGING OR OVERFLOW. CLEAR INLET AND DISCHARGE PIPES OF OBSTRUCTIONS. IF A FILTER MATERIAL BECOMES CLOGGED WITH SEDIMENT, PIT SHALL BE DISMANTLED AND NEW PITS SHALL BE CONSTRUCTED AS NEEDED.

CATCH BASINS:
ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

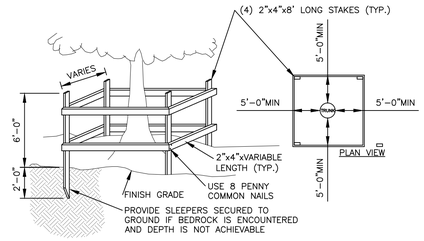
(IN FEET)
1 inch = 20 ft.

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LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING MAJOR CONTOUR (510)
- EXISTING MINOR CONTOUR (508)
- EXISTING OVER HEAD WIRE (OHW)
- EXISTING UTILITY POLE
- EXISTING SEWER SERVICE LINE (SS)
- EXISTING SEWER LINE (S)
- EXISTING SEWER MANHOLE
- EXISTING WATER LINE (W)
- EXISTING WATER SERVICE LINE (WS)
- EXISTING WATER VALVE
- EXISTING HYDRANT
- EXISTING STORM WATER LINE (ST)
- EXISTING CATCH BASIN
- EXISTING DRAINAGE MANHOLE
- EXISTING GAS LINE (GAS)
- EXISTING GAS VALVE
- EXISTING WOODEN FENCE
- EXISTING STONE WALL

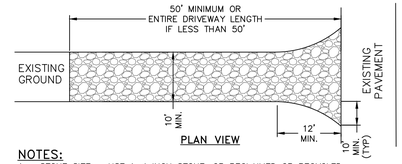
- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- PROPOSED MAJOR CONTOUR (250)
- PROPOSED MINOR CONTOUR (252)
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- PROPOSED SEWER LINE (S)
- PROPOSED SEWER SERVICE LINE (SS)
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- PROPOSED STORM WATER LINE (ST)
- PROPOSED ROOF LEADER LINE (RL)
- PROPOSED ROOF LEADER
- PROPOSED WATER LINE (W)
- PROPOSED WATER SERVICE LINE (WS)
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED GATE VALVE
- PROPOSED SILT FENCE
- PROPOSED LIMIT OF DISTURBANCE (LOD)
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE



NOTES:
1. TREES TO REMAIN NOTED ON EXISTING CONDITIONS PLAN.
2. NOT ALL TREES TO REMAIN REQUIRE PROTECTION. TREE PROTECTION TO BE UTILIZED ON TREES WHERE CONSTRUCTION TRAFFIC WOULD COMPACT THE ROOT ZONE OF THE TREE.

TEMPORARY TREE PROTECTION DETAIL

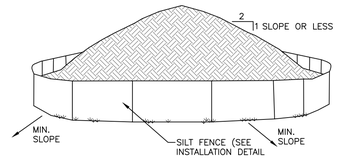
NOT TO SCALE



NOTES:
1. STONE SIZE – USE 1–4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS – NOT LESS THAN SIX (6) INCHES.
3. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
4. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
5. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
7. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

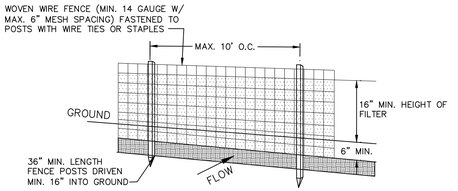
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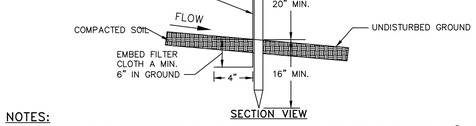


NOTES:
1. 1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

TEMPORARY SOIL STOCKPILE DETAIL

NOT TO SCALE

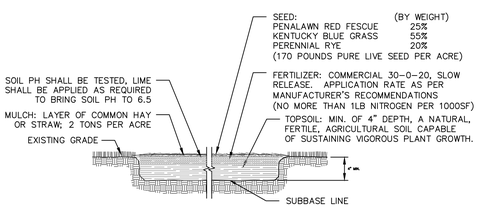




NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

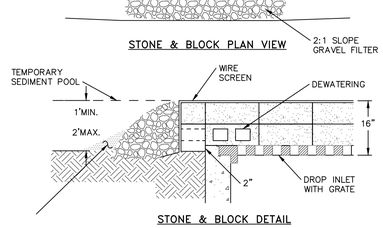
SILT FENCE DETAIL

NOT TO SCALE



TOPSOIL SEED, FERTILIZER AND MULCH DETAIL

NOT TO SCALE



NOTES:
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2–3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE.

CATCH BASIN INLET PROTECTION DETAIL

NOT TO SCALE

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	11/29/22	SHEET ADDED	CMB				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				

SEAL

HUDSON LAND DESIGN
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

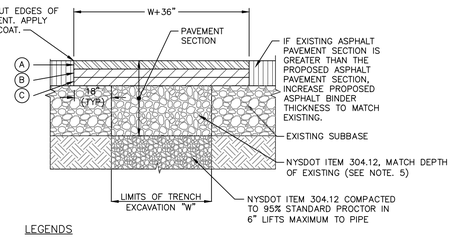
EROSION & SEDIMENT CONTROL PLAN

397 FISHKILL AVE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-392032 & 399035

JOB #:	2022:015
DATE:	7/7/2022
SCALE:	1" = 20'
TITLE:	ESC-1
SHEET:	6 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



LEGENDS

CONKLIN STREET RESTORATION COURSES:

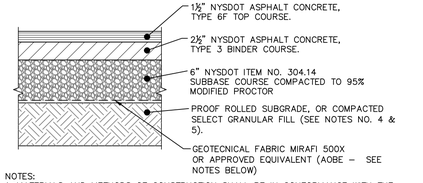
(A) 1–1/2" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE 6F
(B) 3–1/2" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE 3
(C) NO ASPHALTIC BASE COURSE

FISHKILL AVENUE RESTORATION COURSES:

(A) 1–1/2" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE 6F
(B) 2–1/2" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE 3
(C) 8" ASPHALTIC BASE COURSE– NYSDOT TYPE 1 (4" LIFTS)

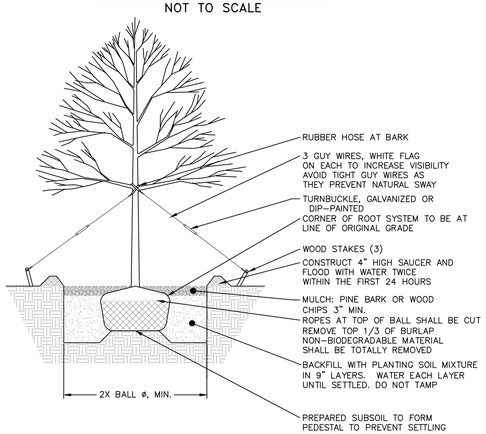
NOTES:
1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE IN TWO 4" LIFTS.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.
5. PROVIDE 10" GRANULAR SUBBASE COURSE – NYSDOT ITEM 304.12 FOR CONKLIN STREET RESTORATION.

PAVEMENT RESTORATION DETAIL
NOT TO SCALE

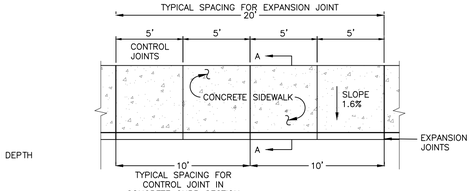


NOTES:
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002.
2. SUBGRADE SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS.
3. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407–TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
5. IT IS EXPECTED THAT THE EXISTING SITE SUB–SOILS ARE SAND AND GRAVEL IN NATURE (CALIFORNIA BEARING RATIO RANGE BETWEEN 40 AND 80). IF UNSUITABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR POSSIBLE MODIFICATIONS TO THE PAVEMENT DETAIL.

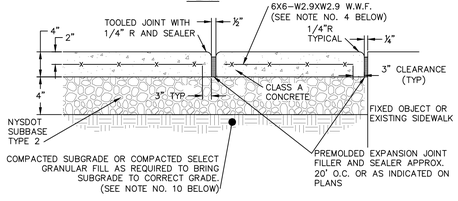
PAVEMENT SECTION DETAIL
NOT TO SCALE



TREE PLANTING DETAIL
NOT TO SCALE



PLAN

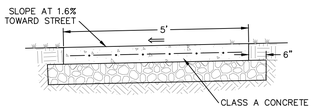


NOTES:

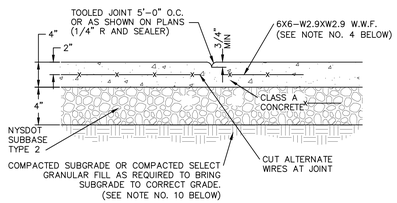
EXPANSION JOINT

1. 10' SPACING OF CONTROL JOINTS SHALL BE USED FOR CAST IN PLACE CONCRETE CURBS.
2. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002, AND ALL ADDENDA THERETO; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
3. ALL CONCRETE SHALL BE 4,000 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
5. ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
6. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
7. JOINTS SHALL NOT BE SAW CUT.
8. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEBOND" SB–7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
9. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
10. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMATION WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH SECTION 608–SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
12. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

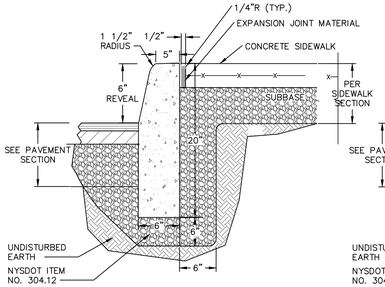
CONCRETE SIDEWALK DETAIL
NOT TO SCALE



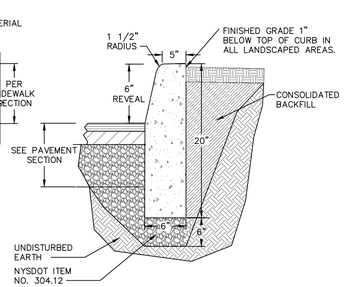
SECTION A–A



CONTROL JOINT



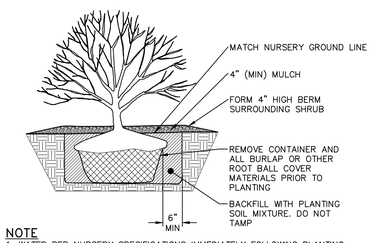
ABUTTING SIDEWALK



ABUTTING GRASS OR LANDSCAPE

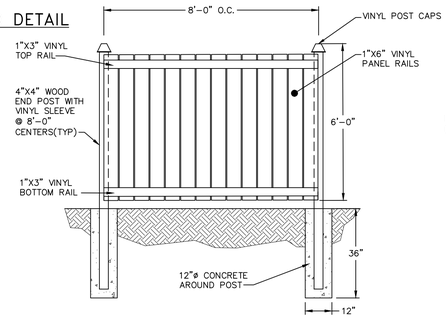
NOTES:
1. CONCRETE CURB SHALL BE 4,000 PSI CAST–IN–PLACE, AND IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 609.
2. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL BE PLACED AT 10 FOOT INTERVALS.
3. FOR MOUNTABLE CURBS ABUTTING SIDEWALK OR OTHER HARDSCAPE, REFER TO "ABUTTING SIDEWALK" DETAIL.
4. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

CAST–IN–PLACE CONCRETE CURB DETAIL
NOT TO SCALE

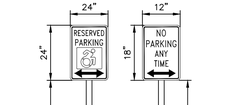


NOTE
1. WATER PER NURSERY SPECIFICATIONS IMMEDIATELY FOLLOWING PLANTING.
2. DETAIL IS FOR BOTH BALL & BURLAPPED OR CONTAINERED SHRUBS.

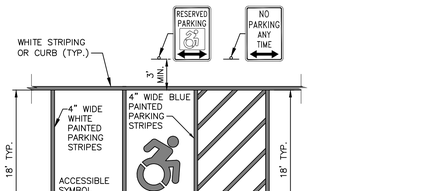
SHRUB PLANTING DETAIL
NOT TO SCALE



VINYL STOCKADE FENCE DETAIL
NOT TO SCALE



SIGN DETAILS
NOT TO SCALE

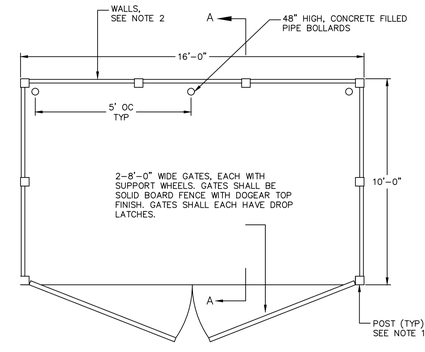


TYPICAL PARKING STRIPING

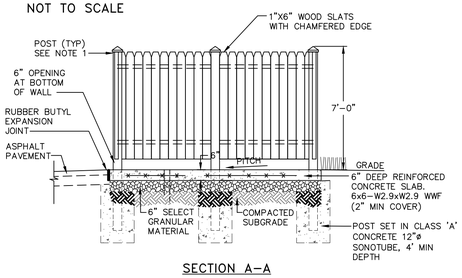
ACCESSIBLE PARKING STRIPING

NOTES:
1. ALL DIMENSIONS SUBJECT TO CURRENT MUNICIPALITY ZONING AND SITE REGULATIONS.
2. PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE WITH NYSDOT AND ADA STANDARDS.
3. IF PARKING ABUTS A SIDEWALK, THEN THE REGULATORY SIGNS SHALL BE PLACED BEHIND THE SIDEWALK.
4. PARALLEL SPACES SHALL BE 10'W X 20'L.

PARKING AND STRIPING DETAIL
NOT TO SCALE



PLAN



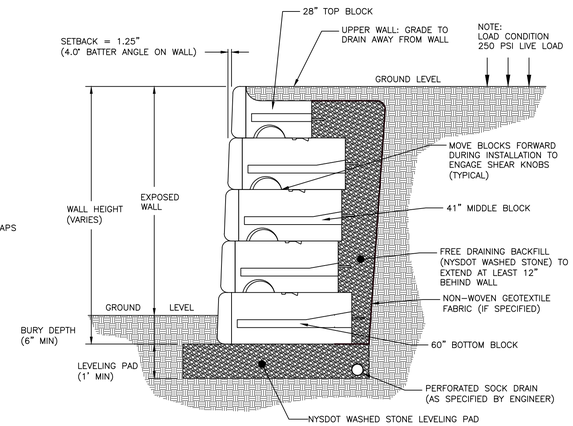
SECTION A–A

NOTES

1. POSTS SHALL HAVE A DECORATIVE CAP, CONSISTENT WITH THE ARTS & CRAFTS STYLE, AS APPROVED BY OWNER. POST SPACING SHALL BE AS REQUIRED BY WALL CONSTRUCTION.

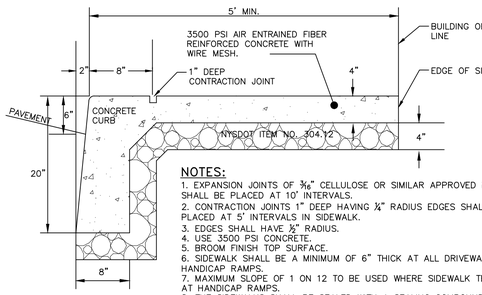
2. WALLS OF DUMPSTER ENCLOSURE SHALL BE A SOLID WOOD PRIVACY FENCING NATURAL STAIL OR PAINT TO COMPLEMENT BUILDING.

TRASH ENCLOSURE DETAILS
NOT TO SCALE



NOTES:
1. RETAINING WALL MANUFACTURED BY REDI–ROCK OR APPROVED EQUAL.
2. THIS DETAIL FOR SITE PLAN APPROVAL ONLY TO SHOW GENERAL WALL ASSEMBLY.
3. THE WALL DESIGN SHALL BE PREPARED BY A NYS LICENSED ENGINEER, AND THE DESIGN SHALL BE SUBMITTED TO THE CITY OF BEACON BUILDING DEPARTMENT FOR REVIEW.
4. UPON COMPLETION OF CONSTRUCTION OF THE RETAINING WALL, THE DESIGN ENGINEER SHALL PROVIDE CERTIFICATION TO THE CITY OF BEACON BUILDING DEPARTMENT THAT THE WAL WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED DESIGN PLANS.

TYPICAL REDI–ROCK GRAVITY WALL
NOT TO SCALE



NOTES:
1. EXPANSION JOINTS OF 3/8" CELLULOSE OR SIMILAR APPROVED MATERIAL SHALL BE PLACED AT 10' INTERVALS.
2. CONTRACTION JOINTS 1" DEEP HAVING ¼" RADIUS EDGES SHALL BE PLACED AT 5' INTERVALS IN SIDEWALK.
3. EDGES SHALL HAVE ½" RADIUS.
4. USE 3500 PSI CONCRETE.
5. BROOM FINISH TOP SURFACE.
6. SIDEWALK SHALL BE A MINIMUM OF 6" THICK AT ALL DRIVEWAYS AND HANDICAP RAMPS.
7. MAXIMUM SLOPE OF 1 ON 12 TO BE USED WHERE SIDEWALK TERMINATES AT HANDICAP RAMPS.
8. THE SIDEWALKS SHALL BE SEALED WITH A SEALING COMPOUND TO PROTECT AGAINST DE–ICING AGENTS.

MONOLITHIC CURB AND SIDEWALK DETAIL FOR SIDEWALKS ALONG CITY STREET
NOT TO SCALE

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	11/29/22	SHEET ADDED	CMB				
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB				



SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926
F: 845–440–6637

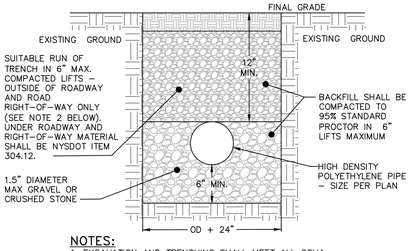
CONSTRUCTION DETAILS

397 FISHKILL AVE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055–80–392032 & 399035

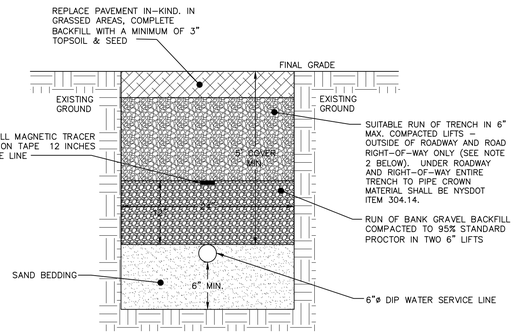
JOB #:	2022:015
DATE:	7/7/2022
SCALE:	AS SHOWN
TITLE:	CD–1
SHEET:	7 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



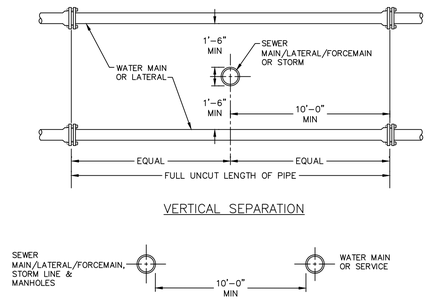
NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

STORM LINE TRENCH DETAIL
NOT TO SCALE



NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.
4. SPLIT FIRE SERVICE AND POTABLE WATER INTERIOR OF THE BUILDING AND PROVIDE ALL NECESSARY BACKFLOW PREVENTION DEVICES PER CITY OF BEACON REQUIREMENTS.

WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE

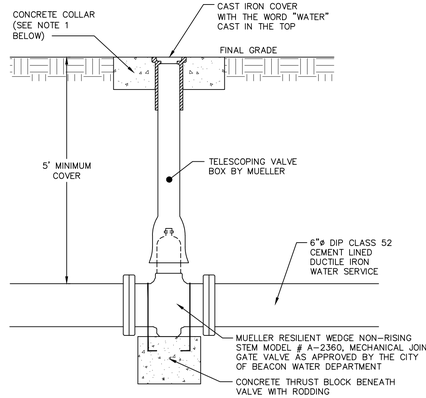


VERTICAL SEPARATION

HORIZONTAL SEPARATION

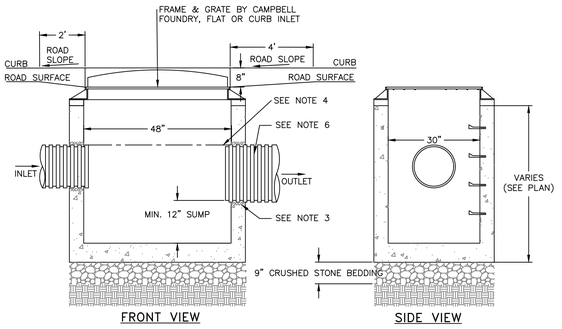
NOTE:
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

WATER LINE SEPARATION DETAIL
NOT TO SCALE



NOTES:
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.

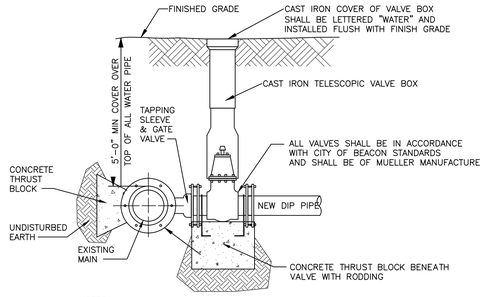
GATE VALVE DETAIL
NOT TO SCALE



FRONT VIEW SIDE VIEW

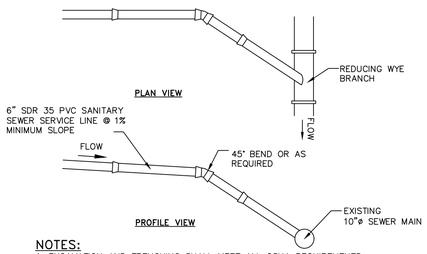
NOTES:
1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATERTIGHT.
4. PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
5. CATCH BASINS WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.
6. HDPE PIPE SHALL BE PROVIDED WITH WATERTIGHT CONNECTIONS. ADS MODEL N12 WT IB OR APPROVED EQUAL.

CATCH BASIN DETAIL
NOT TO SCALE



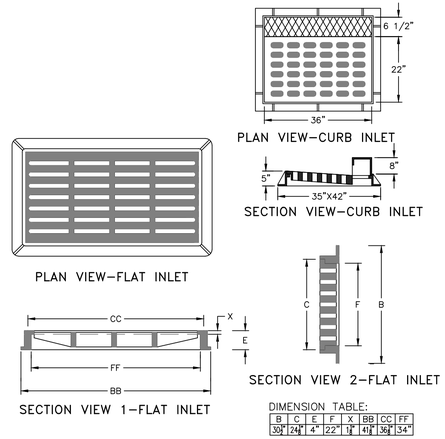
NOTES:
1. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2–INCH SQUARE–OPERATING NUT PAINTED RED.
2. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
3. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H–615, AND T–2630 RESPECTIVELY.

TAPPING SLEEVE DETAIL
NOT TO SCALE



NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. TAPPING SADDLE FOR CONNECTION OF THE PROPOSED SERVICE LINE TO THE EXISTING SEWER MAIN TO BE A 6" PREDCO HUB TAP SADDLE.

SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



DIMENSION TABLE:

B	C	E	F	X	BB	CC	FF
30"	24"	4"	22"	1"	41"	36"	34"

NOTES:
1. HEAVY DUTY RECTANGULAR STORMWATER FLAT INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 3433, OR APPROVED EQUAL.
2. HEAVY DUTY RECTANGULAR STORMWATER CURB INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
3. ALL CASTINGS LOCATED IN THE CITY RIGHT–OF–WAY SHALL BE DOMESTICALLY MADE.

CAST IRON STORMWATER FLAT AND CURB INLET GRATE DETAIL
NOT TO SCALE

DRAWN BY: CMB | CHECKED BY: DGK

REVISIONS:

NO.	DATE	DESCRIPTION	BY
1	11/29/22	SHEET ADDED	CMB
2	12/27/22	PER PLANNING BOARD COMMENTS	CMB

REVISIONS:

NO.	DATE	DESCRIPTION	BY

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926
F: 845–440–6637

CONSTRUCTION DETAILS

397 FISHKILL AVE

397 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055–80–392032 & 399035

JOB #: 2022:015
DATE: 7/7/2022
SCALE: AS SHOWN
TITLE: CD–2
SHEET: 8 OF 8

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LANC & TULLY
Engineering and Surveying, P.C.

January 4, 2023

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12508

RE: 397 Fishkill Avenue
City of Beacon
Tax Map Nos. 6055-80-392032, 399035 & 394041

Dear Mr. Gunn:

My office has received the following in regard to the 397 Fishkill Avenue Site Plan and Subdivision:

- Cover letter dated December 27, 2022, from Cuddy & Feder, LLP.
- Response correspondence dated December 27, 2022, from Aryeh Siegel, Architect.
- Response correspondence dated December 27, 2022, from Hudson Land Design.
- Revised Full Environmental Assessment Form dated December 27, 2022.
- Correspondence from NYS Parks, Recreation and Historic Preservation, dated December 16, 2022.
- Infiltration and Inflow Investigation dated December 27, 2022, as prepared by Hudson Land Design.
- Drainage Report for 397 Fishkill Avenue, dated December 27, 2022, as prepared by Hudson Land Design.
- Plan titled "Lot Line Removal Plat – Revision to Filed Map 9719 – 397 Fishkill Avenue", dated December 27, 2022, as prepared by Hudson Land Design.
- Plan set titled "397 Fishkill Avenue" consisting of the following plans:
  - Sheet 1 of 8 titled "Site Plan", with the latest revision date of December 27, 2022, as prepared by Aryeh Siegel, Architect.
  - Sheet 2 of 8 titled "Building Plans", with the latest revision date of December 27, 2022, as prepared by Aryeh Siegel, Architect.
  - Sheet 3 of 8 titled "Landscape & Lighting Plan", with the latest revision date of December 27, 2022, as prepared by Aryeh Siegel, Architect and Landscape Restorations.
  - Sheet 4 of 8 titled "Existing Conditions & Demolition Plan", with the latest revision date of December 27, 2022, as prepared by Hudson Land Design.
  - Sheet 5 of 8 titled "Grading & Utility Plan", with the latest revision date of December 27, 2022, as prepared by Hudson Land Design.

- Sheet 6 of 8 titled "Erosion & Sediment Control Plan", with the latest revision date of December 27, 2022, as prepared by Hudson Land Design.
- Sheet 7 of 8 titled "Construction Details", with the latest revision date of December 27, 2022, as prepared by Hudson Land Design.
- Sheet 8 of 8 titled "Construction Details", with the latest revision date of December 27, 2022, as prepared by Hudson Land Design.

The proposed project is located at the intersection of Fishkill Avenue and Conklin Street and is in the General Business (GB) Zone. The project entails the merging of three (3) parcels into a single parcel, the demolition of the existing buildings on the parcels, and the construction of a 6,024 square foot mixed-use commercial and residential building to provide for 12 residential units and 3,500 square feet of commercial space. Based upon our review of the above referenced documents and plans, we offer the following comments:

General Comments:

1. The applicant should be aware that starting in the spring of 2023 Fishkill Avenue will be under construction as part of a state project and will include the installation and/or replacement of some utilities, installation of new sidewalks and curbing, and repaving of the road. The applicant will be required to have all utilities that may be proposed out to Fishkill Avenue installed prior to the installation of the new sidewalks, curbs and re-paving of the road, along with the abandonment of existing utilities within Fishkill Avenue. The applicant may wish to consider running any proposed utilities out to Conklin Street, if possible, to avoid any conflicts with the proposed construction on Fishkill Avenue. ***Applicant has acknowledged this and is proposing all utilities to service the project from Conklin Street.***

2. The applicant's consultant should conduct an Inflow & Infiltration (I&I) study of the existing sites and provide certification to the City of Beacon that the site currently has no illegal cross-connections between the existing site and the City's sanitary sewer system. Possible cross-connections that should be looked at would be roof-leaders, sump pumps, existing site drains, etc. If any cross-connections are found, a report should be submitted as to the findings, the volume of I&I being introduced into the sanitary sewer collection system, and the proposed remediation for the cross-connection(s) found. The plans should also clearly show the proposed remediation as outlined in the report, if any is required. ***Applicant's consultant has performed an I&I study on the commercial buildings located at 393 & 397 Fishkill Avenue, but notes that the report is to be updated once the I&I study has been completed for the residential building located at 7 Conklin Street.*** Based upon the I&I studies conducted on the two (2) commercial buildings, no illegal connections were found entering the City's sanitary sewer collection system, but we will wait for the revised report once they study has been completed for 7 Conklin Street.

3. The plans should be submitted to Emergency Services for any input or concerns they may have so that they can be addressed as the project progresses. The applicant should coordinate with the City of Beacon Building Department for submission and review by Emergency Services.

4. As rock outcroppings have been observed on site, it is recommended that soil testing be conducted at the site to determine the depth to rock at various locations on the site to establish the amount of rock to be removed. Additional information shall also be provided as to how rock will be removed from the site. ***The applicant has excavated 5 test pits along the west and north side of the site, with three of the test pits showing no bedrock, and the remainder showing depth to rock at 5 to 6 feet.*** As only one of the excavations occurred within the proposed building area, we would recommend another test pit be excavated in the area of the existing parking lot behind the 397 building in the area of the 2-story portion of the building, so as to allow for verification of depth to rock in this area.

5. An ADA accessible ramp construction detail shall be provided on the plans for the proposed ramp from the parking area. The detail should note the maximum grades allowed for said accessible ramp, as well as noting whether detectable pads will be placed at the front of the ramp.

Preliminary Subdivision Plat:

1. Note No. 1 under "Survey Notes" should be revised, as it states the property lines are based upon deeds and filed maps, whereas Note No. 1 under "Map References" states that the boundary lines are based upon an actual field survey prepared by Steven Green, P.L.S.

2. The plan shall provide the metes and bounds for the existing property line running between 397 Fishkill Avenue and 7 Conklin Street.

Sheet 1 of 8 – Site Plan:

1. Within the building on the plan, it is noted that the square footage of the building is 6,024 square feet, but the "Zoning Summary" notes the footprint to be 6,124 square feet. The correct square footage of the building footprint should be provided in both locations.

2. As previously noted, the proposed landscaping shown on the plan shall be coordinated with the proposed retaining wall and snow storage area. At present, there are two trees proposed directly on top of the wall. There is also concern with the proposed trees to be planted within the 3-foot grass strip between the proposed retaining wall and parking lot. Is there sufficient room for these trees, and will these trees extend out into the parking stalls impeding parking?

Sheet 3 of 8 – Landscaping & Lighting Plan:

1. See comment No. 2 above for Sheet 1 of 8.

2. A landscaping planting schedule shall be provided on the plan identifying each of the proposed plantings, along with the number of each planting to be installed.

3. The location of proposed trees on the east and south side of the building shall be coordinated with the utility plan to ensure trees are not planted over the proposed drainage lines and water and sewer services.

4. A light pole is located directly at the apex of the snow storage area, creating a conflict for the contractor to place snow into this area. The location of the light pole should be adjusted to allow for clear access to the snow storage area.

5. Construction details shall be added to the plans for the proposed light pole bases, showing size, depth, and all other pertinent information.

Sheet 5 of 8 – Grading & Utility:

1. The plan notes the size of the watermain within Conklin Street to be 14" diameter ductile iron pipe. The size and material of the line within Conklin Street should be verified with the City of Beacon Water Department.

This completes our review at this time. Further comments may be forth coming based upon future submissions. **A written response letter addressing each of the above comments should be provided with the next submission.** If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,

LANC & TULLY, P.C.

John Russo, P.E.

Cc: John Clarke, Planner
Jennifer Gray, Esq.
Bruce Flower, Building Inspector

John Clarke Planning and Design jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: January 6, 2023
Re: **393-397 Fishkill Avenue and 7 Conklin Street Site Plan and Subdivision**

I have reviewed the December 27, 2022 cover letter from Cuddy+Feder, December 27, 2022 response letters from Aryeh Siegel and Hudson Land Design, December 27, 2022 revised Full EAF Part 1, December 16, 2022 letter from the NYS Office of Parks, Recreation and Historic Preservation, December 27, 2022 Lot Line Removal Plat, and an 8-sheet Site Plan set, dated December 27, 2022.

Proposal
The applicant is proposing to construct a 3-story, mixed-use building in the General Business (GB) district, including 3,500 square feet of first floor commercial space and 12 apartments. Three adjoining lots with combined 0.62 acres will be merged through the subdivision approval process.

Comments and Recommendations

1. The Sheet 1 Zoning Regulations Table should correct the proposed side yard setback to 20 feet.

2. The Sheet 2 floor plans should be modified to reflect the slightly narrower building width caused by the larger side yard setback.

3. Future submissions should include building elevations with major dimensions, materials, and colors noted.

4. The Landscaping Plan should include a symbol legend and planting schedule, showing species names, totals, and planting sizes. Section 223-26 C(3) requires that three trees in the parking area must be a minimum 3-inch caliper.

5. It would be difficult to back out of the southernmost parking space. The trash enclosure could be moved a few feet toward the rear, shifting the row of parking spaces to allow more room for backing out of this space.

6. Sheet 7 has a vinyl stockade fence detail, but its location is not apparent on the plans.

If you have any questions or need additional information, please feel free to contact me.

John Clarke, Beacon Planning Consultant

c: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
Arthur R. Tully, P.E., City Engineer
John Russo, P.E., City Engineer
Taylor Palmer, Esq., Project Attorney
Aryeh Siegel, Project Architect

City of Beacon Planning Board Agenda
01/10/2023

Title:

Review application for Subdivision Approval, 3-lot residential, 44 Kent Street, submitted by Hardy Homes, LLC (adjourned at the request of the applicant)

ATTACHMENTS

44 Kent Street Deed.pdf

44 Kent Street-Contract of Sale.pdf

2019_Subdivision_Application-City of Beacon (Executed).pdf

City of Beacon_Hardisty Subdivision Cover Letter_2022-1227.pdf

I&I Report- Hardisty Subdivision_2022-1227.pdf

Permission Letter from current owner of 44 Kent St. (Jeffry Diaz).pdf

Short EAF_44 Kent Street (Executed).pdf

Subdvision Plan Set_44 Kent Street_1 of 7_CV-1.pdf

Subdvision Plan Set_44 Kent Street_2 of 7_XC-1.pdf

Subdvision Plan Set_44 Kent Street_3 of 7_PL-1.pdf

Subdvision Plan Set_44 Kent Street_4 of 7_SP-1.pdf

Subdvision Plan Set_44 Kent Street_5 of 7_ESC-1.pdf

Subdvision Plan Set_44 Kent Street_6 of 7_CD-1.pdf

Subdvision Plan Set_44 Kent Street_7 of 7_CD-2.pdf

Engineer Review 44 Kent Street Subdiv 01-05-23.pdf

Planner Review PB Kent St Sub 1.6.23.pdf

Jeffry P. Diaz 12/20/22

2671 NY 22 Unit B

Patterson NY 12563

I Jeffry P Diaz, owner of the property at 44 Kent st beacon ny 12508, grant permission to Hardy Homes 5 S. Wodenethe Dr. Beacon ny 12508 prmission to apply for a subdivision of the above mentioned property.

Jeffry P. Diaz

Deed

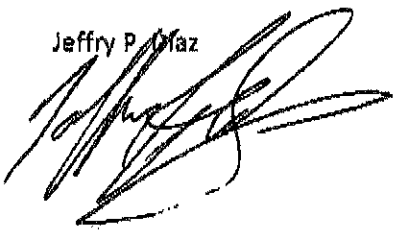
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Jeffry P. Diaz



CHB 3P 60 140 200

WARRANTY DEED

THIS INDENTURE, made as of the 5th day of November, 2021,

BETWEEN, **Patricia Bromberg**, having an address of 405 Drew Lane, Carmel, New York 10512

Grantor, on the one hand, and

Jeffry Diaz, having an address of 2671 Route 22, Patterson, New York 12563

Grantee, on the other,

WITNESSETH, that the Grantor for no consideration, does hereby grant and release unto the Grantee, the Grantor's entire interest in the premises described below:

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the

Schedule "A" Attached

TOGETHER with all right, title, and interest, if any, of the Grantor in and to any streets and road abutting the above described premises to the center lines thereof;

TOGETHER with the appurtenances and all the estate and rights of the Grantors in and to said premises;

TO HAVE AND TO HOLD the premises herein granted unto the Grantee, the heirs or successors and assigns of the Grantee forever.

AND the Grantors covenant as follows: that said Grantors are seized of the said premises in fee simple, and have good right to convey the same; that the Grantee shall quietly enjoy the said premises; that the said premises are free from encumbrances, except as aforesaid; that the Grantors will execute or procure any further necessary assurance of the title to said premises; and that said Grantors will forever warrant the title to said premises.

Grantors, in compliance with Section 13 of the Lien Law, covenant that Grantors will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The words "Grantor" and Grantee" shall be construed, as applicable, as if those words also read as the singular or plural thereof.

IN WITNESS WHEREOF, the Grantors have duly executed this deed the day and year first above written.

Patricia Bromberg

Patricia Bromberg

STATE OF NEW YORK)
)ss.:
COUNTY OF PUTNAM)

On the 5th day of November, in the year 2021, before me, the undersigned, a Notary Public in and for said State, personally appeared, **Patricia Bromberg**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her capacity, and that by her signature on the instrument, the individual, or the person on behalf of whom the individual acted, executed the instrument.

Noreen K Scaperotti

Notary Public

NOREEN K SCAPEROTTI
NOTARY PUBLIC-STATE OF NEW YORK
No. 02SC6333467
Qualified In Putnam County
My Commission Expires 11-23-2023

County of Dutchess
City of Beacon

SBL: 6054-21-041931-0000

RECORD AND RETURN TO:

Noreen K. Scaperotti, Esq.
73 Gleneida Avenue
Carmel, New York 10512
(845) 661-7540

Schedule "A"

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the City of Beacon, County of Dutchess and State of New York bounded and described as follows:

BEGINNING on the southwest side of Kent Street at the northerly corner of land formerly of Michael Dillon, distant about one hundred feet from Alice (at present called Eliza) Street and running thence SOUTHWESTERLY along the line of land formerly of Michael Dillon one hundred seventeen feet, seven inches; thence NORTHWESTERLY one hundred feet thence NORTHEASTERLY one hundred fifteen feet, one inch to Kent street land and thence SOUTHEASTERLY along Kent Street one hundred feet to the place of beginning, being known and designated as lots numbers thirty-two and thirty-three on a map of Schultz Estate, made by Sidney Scofield, Surveyor, dated March 1, 1869 and filed in the Office of the Clerk of the County of Dutchess.

ALSO all that other lot of land situate in Matteawan (at present City of Beacon), aforesaid, on the southwesterly side of Kent Street and designated on the said map as lot number thirty-one; said lot being fifty feet front and rear and about one hundred fourteen feet deep.

Said premises also described in accordance with a survey made by John D. MacAvery, P.L.S., dated December 10, 1992 as follows:

Beginning at a point on the westerly street boundary of Kent Street, 100 feet from the intersection of the northerly boundary of Eliza Street and the westerly boundary of Kent Street being on the division line of Jackson on the southeast and the herein described parcel on the northwest, thence along said Kent Street boundary N 34-30-00 W 150.00 feet to a point on the division line of Delancy on the northwest and the herein described parcel on the southeast. Thence along said line S 55-30-00 W, 113.66 feet to a point on the division line of Capitano on the southwest and the herein described parcel on the northeast, thence along said line of lands of Young and Taylor S 33-00-10 E, 150.05 feet to a point on the division line of Hudson Valley SCKD on the Southeast and the herein described parcel on the northwest, thence along said line and along lands of Jackson, N 55-30-00 E 117.58 feet to the point of beginning.

Subject to covenants, easements, restrictions and rights of way of record, if any.

BEING and intended to be the same premises conveyed by Junus Sela to Robert G. Leitner by deed dated January 26, 1995 and recorded in the Dutchess County Clerk's Office on February 10, 1995 in liber 1957 and page 258.

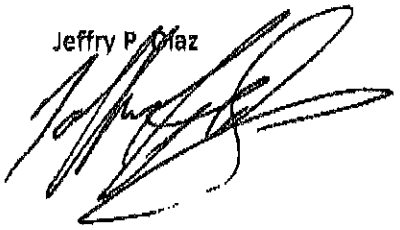
Jeffry P. Diaz 12/20/22

2671 NY 22 Unit B

Patterson NY 12563

I Jeffry P Diaz, owner of the property at 44 Kent St beacon ny 12508, grant permission to Hardy Homes 5 S. Wodenethe Dr. Beacon ny 12508 prmission to apply for a subdivision of the above mentioned property.

Jeffry P Diaz



C/B 3p 60 140 200

WARRANTY DEED

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BETWEEN, **Patricia Bromberg**, having an address of 405 Drew Lane, Carmel, New York 10512

Grantor, on the one hand, and

Jeffry Diaz, having an address of 2671 Route 22, Patterson, New York 12563

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AND the Grantors covenant as follows: that said Grantors are seized of the said premises in fee simple, and have good right to convey the same; that the Grantee shall quietly enjoy the said premises; that the said premises are free from encumbrances, except as aforesaid; that the Grantors will execute or procure any further necessary assurance of the title to said premises; and that said Grantors will forever warrant the title to said premises.

Grantors, in compliance with Section 13 of the Lien Law, covenant that Grantors will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The words "Grantor" and Grantee" shall be construed, as applicable, as if those words also read as the singular or plural thereof.

IN WITNESS WHEREOF, the Grantors have duly executed this deed the day and year first above written.

Patricia Bromberg

Patricia Bromberg

STATE OF NEW YORK)
)ss.:
COUNTY OF PUTNAM)

On the 5th day of November, in the year 2021, before me, the undersigned, a Notary Public in and for said State, personally appeared, **Patricia Bromberg**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her capacity, and that by her signature on the instrument, the individual, or the person on behalf of whom the individual acted, executed the instrument.

Noreen K Scaperotti

Notary Public

NOREEN K SCAPEROTTI
NOTARY PUBLIC-STATE OF NEW YORK
No. 02SC6333467
Qualified In Putnam County
My Commission Expires 11-23-2023

County of Dutchess
City of Beacon

SBL: 6054-21-041931-0000

RECORD AND RETURN TO:

Noreen K. Scaperotti, Esq.
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BEING and intended to be the same premises conveyed by Junus Sela to Robert G. Leitner by deed dated January 26, 1995 and recorded in the Dutchess County Clerk's Office on February 10, 1995 in liber 1957 and page 258.

Jointly prepared by the Real Property Section of the New York State Bar Association, the New York State Land Title Association, the Committee on Real Property Law of the Association of the Bar of the City of New York and the Committee on Real Property Law of the New York County Lawyers' Association.

CONSULT YOUR LAWYER BEFORE SIGNING THIS INSTRUMENT

WARNING:
NO REPRESENTATION IS MADE THAT THIS FORM OF CONTRACT FOR THE SALE AND PURCHASE OF REAL ESTATE COMPLIES WITH SECTION 5-702 OF THE GENERAL OBLIGATIONS LAW (PLAIN LANGUAGE).

NOTE: FIRE AND CASUALTY LOSSES AND CONDEMNATION.
This contract form does not provide for what happens in the event of fire, or other casualty loss or condemnation before the title closing. Unless different provision is made in this contract, Section 5-1311 of the General Obligations Law will apply. One part of that law makes a Purchaser responsible for fire and casualty loss upon taking possession of the Premises before the title closing.

Residential Contract of Sale

Contract of Sale made as of **August , 2022** BETWEEN
JEFFRY DIAZ
Address: **2671 Route 22, Unit B, Patterson, NY 12563**

Social Security Number / Fed. I.D. No(s):
hereinafter called Seller and
HARDY HOMES, LLC
Address: **5 South Wodenethe Drive, Beacon NY 12508**

Social Security Number / Fed. I.D. No(s):
hereinafter called Purchaser.

The parties hereby agree as follows:

1. **PREMISES:** Seller shall sell and convey ther ~~with all buildings and improvements thereon~~ d on a separate page marked Schedule A, annexed as:

Contract

Street Address: **44 KENT STREET, BEA**

Tax Map Designation: **130200-6054-21-04**

Together with Seller's ownership and rig eet or highway, opened or proposed, adjoining t g any right of Seller to any unpaid award by r or any damage to the Premises by reason of ch r shall deliver at no additional cost to Purchaser, ter, on demand, any documents that Purchaser may reasonably require for the ch title and the assignment and collection of such award or damages.

~~2. PERSONAL PROPERTY: This sale also includes all fixtures and articles of personal property now attached or appurtenant to the Premises, unless specifically excluded below. Seller represents and warrants that at Closing they will be paid for and owned by Seller, free and clear~~

Jointly prepared by the Real Property Section of the New York State Bar Association, the New York State Land Title Association, the Committee on Real Property Law of the Association of the Bar of the City of New York and the Committee on Real Property Law of the New York County Lawyers' Association.

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HARDY HOMES, LLC
Address: **5 South Wodenethe Drive, Beacon NY 12508**

Social Security Number / Fed. I.D. No(s):
hereinafter called Purchaser.

The parties hereby agree as follows:

1. **PREMISES:** Seller shall sell and convey and Purchaser shall purchase the property~~, together with all buildings and improvements thereon (collectively the Premises)~~, more fully described on a separate page marked Schedule A, annexed hereto and made a part hereof and also known as:

Street Address: **44 KENT STREET, BEACON, NY 12508**

Tax Map Designation: **130200-6054-21-041931**

Together with Seller's ownership and rights, if any, to land lying in the bed of any street or highway, opened or proposed, adjoining the Premises to the center line thereof, including any right of Seller to any unpaid award by reason of any taking by condemnation and/or for any damage to the Premises by reason of change of grade of any street or highway. Seller shall deliver at no additional cost to Purchaser, at Closing (as hereinafter defined), or thereafter, on demand, any documents that Purchaser may reasonably require for the conveyance of such title and the assignment and collection of such award or damages.

~~2. **PERSONAL PROPERTY:** This sale also includes all fixtures and articles of personal property now attached or appurtenant to the Premises, unless specifically excluded below. Seller represents and warrants that at Closing they will be paid for and owned by Seller, free and clear~~

of all liens and encumbrances, except any existing mortgage to which this sale may be subject. They include, but are not limited to, plumbing, heating, lighting and cooking fixtures, chandeliers, bathroom and kitchen cabinets and counters, mantels, door mirrors, switch plates and door hardware, venetian blinds, window treatments, shades, screens, awnings, storm windows, storm doors, window boxes, mail box, TV aerials, weather vane, flagpole, pumps, shrubbery, fencing, outdoor statuary, shed, dishwasher, washing machine, clothes dryer, garbage disposal unit, range/oven, built in microwave oven, refrigerator, freezer, air conditioning equipment and installations, wall to wall carpeting and built ins not excluded below (*strike out inapplicable items*). **ALL IN AS IS CONDITION AND AS PRESENTLY EXISTS.**

Excluded from this sale are furniture and household furnishings,

3. **PURCHASE PRICE:** The purchase price is **$ 450,000.00**
payable as follows:

(a) on the signing of this contract, by Purchaser's check payable to the Escrowee (as hereinafter defined), subject to collection, the receipt of which is hereby acknowledged, to be held in escrow pursuant to paragraph 6 of this contract (the Down payment): **$ 20,000.00**

(b) by allowance for the principal amount unpaid on the existing mortgage on the date hereof, payment of which Purchaser shall assume by joiner in the deed: $

(c) by a purchase money note and mortgage from Purchaser to Seller: $

(d) balance at Closing in accordance with paragraph 7: **$ 430,000.00**

4. **EXISTING MORTGAGE:** (*Delete if inapplicable*) If this sale is subject to an existing mortgage as indicated in paragraph 3(b) above:

(a) The Premises shall be conveyed subject to the continuing lien of the existing mortgage, which is presently payable, with interest at the rate of _____ percent per annum, in monthly installments of $ _____ which include principal, interest and escrow amounts, if any, and with any balance of principal being due and payable on

(b) To the extent that any required payments are made on the existing mortgage between the date hereof and Closing which reduce the unpaid principal amount thereof below the amount shown in paragraph 3(b), then the balance of the price payable at Closing under paragraph 3(d) shall be increased by the amount of the payments of principal. Seller represents and warrants that the amount shown in paragraph 3(b) is substantially correct and agrees that only payments required by the existing mortgage will be made between the date hereof and Closing.

(c) If there is a mortgagee escrow account, Seller shall assign it to Purchaser, if it can be assigned, and in that case Purchaser shall pay the amount in the escrow account to Seller at Closing.

(d) Seller shall deliver to Purchaser at Closing a certificate dated not more than 30 days before Closing signed by the holder of the existing mortgage, in form for recording, certifying the amount of the unpaid principal, the date to which interest has been paid and the amounts, if any, claimed to be unpaid for principal and interest, itemizing the same. Seller shall pay the fees for recording such certificate. If the holder of the existing mortgage is a bank or other institution as defined in Section 274-a of the Real Property Law (AInstitutional Lender@), it may, instead of the certificate, furnish a letter signed by a duly authorized officer, employee or agent, dated not more than 30 days before Closing, containing the same information.

(e) Seller represents and warrants that (i) Seller has delivered to Purchaser true and complete copies of the existing mortgage, the note secured thereby and any extensions and modifications thereof, (ii) the existing mortgage is not now, and at the time of Closing will not be, in default, and (iii) the existing mortgage does not contain any provision that permits the holder of the mortgage to require its immediate payment in full or to change any other term thereof by reason of the sale or conveyance of the Premises.

5. **PURCHASE MONEY MORTGAGE:** (*Delete if inapplicable*) ~~If there is to be a purchase money mortgage as indicated in paragraph 3(e) above:~~

~~(a) The purchase money note and mortgage shall be drawn by the attorney for Seller in the form attached or, if not, in the standard form adopted by the New York State Land Title Association. Purchaser shall pay at Closing the mortgage recording tax, recording fees and the attorney's fees in the amount of $ _____ for its preparation.~~

~~(b) The purchase money note and mortgage shall also provide that its subject and subordinate to the lien of the existing mortgage and any extensions, modifications, replacements or consolidations of the existing mortgage, provided that (i) the interest rate thereof shall not be greater than _____ percent per annum and the total debt service thereunder shall not be greater than $ _____ per annum, and (ii) if the principal amount thereof shall exceed the amount of principal owing and unpaid on the existing mortgage at the time of placing such new mortgage or consolidated mortgage, the excess be paid to the holder of such purchase money mortgage in reduction of the principal thereof. The purchase money mortgage shall also provide that such payment to the holder thereof shall not alter or affect the regular installments, if any, of principal payable thereunder and that the holder thereof will, on demand and without charge therefor, execute, acknowledge and deliver any agreement or agreements further to effectuate such subordination.~~

6. **DOWNPAYMENT IN ESCROW:** (a) Seller's attorney (Escrowee) shall hold the Downpayment for Seller's account in escrow in a segregated bank account at **Chase Bank, 1455 Veterans Memorial Highway, Islandia, New York 11749,** until Closing or sooner termination of this contract and shall pay over or apply the Downpayment in accordance with the terms of this paragraph. Escrowee shall hold the Downpayment in an interest-bearing account for the benefit of the parties. If interest is held for the benefit of the parties, it shall be paid to the party entitled to the Downpayment and the party receiving the interest shall pay any income taxes thereon. If interest is not held for the benefit of the parties, the Downpayment shall be placed in an IOLA account or as otherwise permitted or required by law. The Social Security or Federal Identification numbers of the parties shall be furnished to Escrowee upon request. At Closing, the Downpayment shall be paid by Escrowee to Seller. If for any reason Closing does not occur and either party gives Notice (as defined in paragraph 25) to Escrowee demanding payment of the Downpayment, Escrowee shall give prompt Notice to the other party of such demand. If Escrowee does not receive Notice of objection from such other party to the proposed payment within 10 business days after the giving of such Notice, Escrowee is hereby authorized and directed to make such payment. If Escrowee does receive such Notice of objection within such 10 day period or if for any other reason Escrowee in good faith shall elect not to make such payment, Escrowee shall continue to hold such amount until otherwise directed by Notice from the parties to this contract or a final, nonappealable judgment, order or decree of a court. However, Escrowee shall have the right at any time to deposit the Downpayment and the interest thereon with the clerk of a court in the country in which the Premises are located and shall give Notice of such deposit to Seller and Purchaser. Upon such deposit or other disbursement in accordance with the terms of this paragraph, Escrowee shall be relieved and discharged of all further obligations and responsibilities hereunder.

(b) The parties acknowledge that, although Escrowee is holding the Downpayment for Seller's account, for all other purposes Escrowee is acting solely as a stakeholder at their request and for their convenience and that Escrowee shall not be liable to either party for any act or omission on its part unless taken or suffered in bad faith or in willful disregard of this contract or involving gross negligence on the part of Escrowee. Seller and Purchaser jointly and severally agree to defend, indemnify and hold Escrowee harmless from and against all costs, claims and expenses (including reasonable attorneys' fees) incurred in connection with the performance of Escrowee's duties hereunder, except with respect to actions or omissions taken or suffered by Escrowee in bad faith or in willful disregard of this contract or involving gross negligence on the part of Escrowee.

(c) Escrowee may act or refrain from acting in respect of any matter referred to herein in full reliance upon and with the advice of counsel which may be selected by it (including any member of its firm) and shall be fully protected in so acting or refraining from action upon the advice of such counsel.

(d) Escrowee acknowledges receipt of the Downpayment by check subject to collection and Escrowee's agreement to the provisions of this paragraph by signing in the place indicated on the signature page of this contract.

(e) Escrowee or any member of its firm shall be permitted to act as counsel for Seller in any dispute as to the disbursement of the Downpayment or any other dispute between the parties whether or not Escrowee is in possession of the Downpayment and continues to act as Escrowee.

7. **ACCEPTABLE FUNDS:** All money payable under this contract, unless otherwise specified, shall be paid by:

(a) Cash, but not over $1,000.00;

(b) Good certified check of Purchaser drawn on or official check issued by any bank, savings bank, trust company or savings and loan association having a banking office in the State of New York, unendorsed and payable to the order of Seller, or as Seller may otherwise direct upon not less than 3 business days notice to Purchaser;

(c) As to money other than the purchase price payable to Seller at Closing, uncertified check of Purchaser up to the amount of **FIVE HUNDRED DOLLARS ($500.00)**; and

(d) As otherwise agreed to in writing by Seller or Seller's attorney.

8. **MORTGAGE CONTINGENCY:** *(Delete if inapplicable)* ** **SEE RIDER ATTACHED HERETO**~~**The obligations of Purchaser hereunder are conditioned upon issuance on or before , (the "Commitment Date") of a written commitment from any Institutional Lender pursuant to which such Institutional Lender agrees to make a first mortgage loan, other than a VA, FHA or other governmentally insured loan, to Purchaser, at Purchaser's sole cost and expense, of $ or such lesser sum as Purchaser shall be willing to accept, at the prevailing fixed rate of interest not to exceed or initial adjustable rate of interest not to exceed for a term of at least years and on other customary commitment terms, whether or not conditional upon any factors other than an appraisal satisfactory to the Institutional Lender. Purchaser shall (a) make prompt application to an Institutional Lender for such mortgage loan, (b) furnish accurate and complete information regarding Purchaser and members of Purchaser's family, as required, (c) pay all fees, points and charges required in connection with such application and loan, (d) pursue such application with diligence, (e) cooperate in good faith with such Institutional Lender to obtain such commitment and (f) promptly give Notice to Seller of the name and address of each Institutional Lender to which Purchaser has made such application. Purchaser shall comply with all requirements of such commitment (or of any other commitment accepted by Purchaser) and shall furnish Seller with a copy thereof promptly after receipt thereof. If such commitment is not issued on or before the Commitment Date, then, unless Purchaser has accepted a commitment that does not comply with the requirements set forth above, Purchaser may cancel this contract by giving Notice to Seller within 5 business days after the Commitment Date, in which case this contract shall be deemed cancelled and thereafter neither party shall have any further rights against, or obligations or liabilities to, the other by reason of this contract, except that the Downpayment shall be promptly refunded to Purchaser and except as set forth in paragraph 27. If Purchaser fails to give notice of cancellation or if Purchaser shall accept a commitment that does not comply with the terms set forth above, then Purchaser shall be deemed to have waived Purchaser's right to cancel this contract and to receive a refund of the Downpayment by reason of the contingency contained in this paragraph.~~

9. **PERMITTED EXCEPTIONS:** The Premises are sold and shall be conveyed subject to:

(a) Zoning and subdivision laws and regulations, and landmark, historic or wetlands designation, provided that they are not violated by the existing buildings and improvements erected on the property or their use;

(b) Consents for the erection of any structures on, under or above any streets on which the Premises abut;

(c) Encroachments of stoops, areas, cellar steps, trim, cornices and fences, if any, upon any street or highway, fences;

(d) Real estate taxes that are a lien, but are not yet due and payable; and
(e) The other matters, if any, including a survey exception, set forth in a Rider attached.

10. **GOVERNMENTAL VIOLATIONS AND ORDERS**: (a) Seller shall comply with all notes or notices of violations of law or municipal ordinances, orders or requirements noted or issued as of the date hereof by any governmental department having authority as to lands, housing, buildings, fire, health, environmental and labor conditions affecting the Premises. The Premises shall be conveyed free of them at Closing. Seller shall furnish Purchaser with any authorizations necessary to make the searches that could disclose these matters.

11. **SELLER'S REPRESENTATION**:(a) Seller represents and warrants to Purchaser that:
(i) The Premises abut or have a right of access to a public road;
(ii) Seller is the sole owner of the Premises and has the full right, power and authority to sell, convey and transfer the same in accordance with the terms of this contract;
(iii) Seller is not a "foreign person", as that term is defined for purposes of the Foreign Investment in Real Property Tax Act, Internal Revenue Code ("IRC") Section 1445, as amended, and the regulations promulgated thereunder (collectively "FIRPTA");
~~(iv) The Premises are not affected by any exemptions or abatements of taxes; and~~
(v) Seller has been known by no other name for the past ten years, except
(b) Seller covenants and warrants that all of the representations and warranties set forth in this contract shall be true and correct at Closing.
(c) Except as otherwise expressly set forth in this contract, none of Seller's covenants, representations, warranties or other obligations contained in this contract shall survive Closing.

12. **CONDITION OF PROPERTY**: Purchaser acknowledges and represents that Purchaser is fully aware of the physical condition and state of repair of the Premises and of all other property included in this sale, based on Purchaser's own inspection and investigation thereof, and that Purchaser is entering into this contract based solely upon such inspection and investigation and not upon any information, data, statements or representations, written or oral, as to the physical condition, state of repair, use, cost of operation or any other matter related to the Premises or the other property included in the sale, given or made by Seller or its representatives, and shall accept the same "as is" in their present condition and state of repair, subject to reasonable use, wear, tear and natural deterioration between the date hereof and the date of Closing (except as otherwise set forth in paragraph 16(f)), without any reduction in the purchase price or claim of any kind for any change in such condition by reason thereof subsequent to the date of this contract. Purchaser and its authorized representatives shall have the right, at reasonable times and upon reasonable notice (by telephone or otherwise) to Seller, to inspect the Premises before Closing.

13. **INSURABLE TITLE**: Seller shall give and Purchaser shall accept such title as **ANY REPUTABLE TITLE INSURANCE COMPANY WHICH** shall be willing to approve and insure in accordance with its standard form of title policy approved by the New York State Insurance Department, subject only to the matters provided for in this contract.

14. **CLOSING, DEED AND TITLE:** (a) "Closing" means the settlement of the obligations of Seller and Purchaser to each other under this contract, including the payment of the purchase price to Seller, and the delivery to Purchaser of a **BARGAIN AND SALE DEED WITH COVENANTS AGAINST GRANTORS ACTS** deed in proper statutory short form for record, duly executed and acknowledged, so as to convey to Purchaser fee simple title to the Premises, free of all encumbrances, except as otherwise herein stated. The deed shall contain a covenant by Seller as required by subd. 5 of Section 13 of the Lien Law.
(b) If Seller is a corporation, it shall deliver to Purchaser at the time of Closing (i) a resolution of its Board of Directors authorizing the sale and delivery of the deed, and (ii) a certificate by the Secretary or Assistant Secretary of the corporation certifying such resolution and setting forth facts showing that the transfer is in conformity with the requirements of Section 909 of the Business Corporation Law. The deed in such case shall contain a recital sufficient to establish compliance with that Section.

15. **CLOSING DATE AND TIME:** Closing shall take place at the office of **THE LENDING INSTITUTION'S ATTORNEY'S OFFICE OR AT SELLERS' ATTORNEY'S OFFICE IN DUTCHESS COUNTY** at **2:00 P.M.** o'clock on **OR ABOUT December 30, 2022.**

16. **CONDITIONS AT CLOSING:** This contract and Purchaser's obligation to purchase the Premises are also subject to and conditioned upon the fulfillment of the following conditions precedent:

(a) The accuracy, as of the date of Closing, of the representations and warranties of Seller made in this contract.

~~(b) The delivery by Seller to Purchaser of a valid and subsisting Certificate of Occupancy or other required certificate of compliance, or evidence that none was required, covering the building(s) and all of the other improvements located on the property authorizing their use as a one-family dwelling at the date of Closing.~~

(c) The delivery by Seller to Purchaser of a duly executed and sworn affidavit (in form prescribed by law) claiming exemption of the sale contemplated hereby, if such be the case, under Article 3 1 -B of the Tax Law of the State of New York and the Regulations promulgated thereunder, as the same may be amended from time to time (collectively the "Gains Tax Law"); or if such sale shall not be exempt under the Gains Tax Law, Seller and Purchaser agree to comply in a timely manner with the requirements of the Gains Tax Law and, at Closing, Seller shall deliver to Purchaser (i) an official return showing no tax due, or (ii) an official return accompanied by a certified or official bank check drawn on a New York State banking institution payable to the order of the New York State Department of Taxation and Finance in the amount of the tax shown to be due thereon. Seller shall (x) pay promptly any additional tax that may become due under the Gains Tax Law, together with interest and penalties thereon, if any, which may be assessed or become due after Closing, and/or execute any other documents that may be required in respect thereof, and (y) indemnify, defend and save Purchaser harmless from and against any of the foregoing and any damage, liability, cost or expense (including reasonable attorneys' fees) which may be suffered or incurred by Purchaser by reason of the nonpayment thereof. The provisions of this subparagraph (c) shall survive Closing.

(d) The delivery by Seller to Purchaser of a certification stating that Seller is not a foreign person, which certification shall be in the form then required by FIRPTA. If Seller fails to deliver the aforesaid certification or if Purchaser is not entitled under FIRPTA to rely on such certification, Purchaser shall deduct and withhold from the purchase price a sum equal to 10% thereof (or any lesser amount permitted by law) and shall at Closing remit the withheld amount with the required forms to the Internal Revenue Service.

(e) The delivery of the Premises ~~and all building(s) and improvements comprising a part thereof in broom clean condition~~, vacant and free of leases or tenancies, ~~together with keys to the Premises.~~

~~(f) All plumbing (including water supply and septic systems, if any), heating and air conditioning, if any, electrical and mechanical systems, equipment and machinery in the building located on the property and all appliances which are included in this sale being in working order as of the date of Closing.~~

~~(g) If the Premises are a one or two family house, delivery by the parties at Closing of affidavits in compliance with state and local law requirements to the effect that there is installed in the Premises a smoke detecting alarm device and carbon monoxide detectors.~~

(h) The delivery by the parties of any other affidavits required as a condition of recording the deed.

17. **DEED, TRANSFER, AND RECORDING TAXES:** At Closing, certified or official bank checks payable to the order of the appropriate State, City or County officer in the amount of any applicable transfer and/or recording tax payable by reason of the delivery or recording of the deed or mortgage, if any, shall be delivered by the party required by law or by this contract to pay such transfer and/or recording tax, together with any required tax returns duly executed and sworn to, and such party shall cause any such checks and returns to be delivered to the appropriate officer promptly after Closing. The obligation to pay any additional tax or deficiency and any interest or penalties thereon shall survive Closing.

18. **APPORTIONMENTS AND OTHER ADJUSTMENTS; WATER METER AND INSTALLMENTS ASSESSMENTS**: (a) To the extent applicable, the following shall be apportioned as of midnight of the day before the day of Closing:

(i) taxes, water charges and sewer rents, on the basis of the fiscal period for which assessed; (ii) fuel; (iii) interest on the existing mortgage; (iv) premiums on existing transferable insurance policies and renewals of those expiring prior to Closing; (v) vault charges; (vi) rents as and when collected.

(b) If Closing shall occur before a new tax rate is fixed, the apportionment of taxes shall be upon the basis of the tax rate for the immediately preceding fiscal period applied to the latest assessed valuation.

(c) If there is a water meter on the Premises, Seller shall furnish a reading to a date not more than 30 days before Closing and the unfixed meter charge and sewer rent, if any, shall be apportioned on the basis of such last reading.

(d) If at the date of Closing the Premises are affected by an assessment which is or may become payable in annual installments, and the first installment is then a lien, or has been paid, then for the purposes of this contract all the unpaid installments shall be considered due and shall be paid by Seller at or prior to Closing.

(e) Any errors or omissions in computing apportionments or other adjustments at Closing shall be corrected within a reasonable time following Closing. This subparagraph shall survive Closing.

19. **ALLOWANCE FOR UNPAID TAXES**: Seller has the option to credit Purchaser as an adjustment to the purchase price with the amount of any unpaid taxes, assessments, water charges and sewer rents, together with any interest and penalties thereon to a date not less than five business days after Closing, provided that official bills therefor computed to said date are produced at Closing.

20. **USE OF PURCHASE PRICE TO REMOVE ENCUMBRANCES**: If at Closing there are other liens or encumbrances that Seller is obligated to pay or discharge, Seller may use any portion of the cash balance of the purchase price to pay or discharge them, provided Seller shall simultaneously deliver to Purchaser at Closing instruments in recordable form and sufficient to satisfy such liens or encumbrances of record, together with the cost of recording or filing said instruments. As an alternative Seller may deposit sufficient monies with the title insurance company employed by Purchaser acceptable to and required by it to assure their discharge, but only if the title insurance company will insure Purchaser's title clear of the matters or insure against their enforcement out of the Premises and will insure Purchaser's Institutional Lender clear of such matters. Upon notice (by telephone or otherwise), given not less than 3 business days before Closing, Purchaser shall provide separate certified or official bank checks as requested to assist in clearing up these matters.

21. **TITLE EXAMINATIONS; SELLER'S INABILITY TO CONVEY; LIMITATIONS OF LIABILITY**: (a) Purchaser shall order an examination of title in respect of the Premises from a title company licensed or authorized to issue title insurance by the New York State Insurance Department or any agent for such title company promptly after the execution of this contract or, if this contract is subject to the mortgage contingency set forth in paragraph 8, after a mortgage commitment has been accepted by Purchaser. Purchaser shall cause a copy of the title report and of any additions thereto to be delivered to the attorneys) for Seller promptly after receipt thereof.

(b) (i) If at the date of Closing Seller is unable to transfer title to Purchaser in accordance with this contract, or Purchaser has other valid grounds for refusing to close, whether by reason of liens, encumbrances or other objections to title or otherwise (herein collectively called "Defects"), other than those subject to which Purchaser is obligated to accept title hereunder or which Purchaser may have waived and other than those which Seller has herein expressly agreed to remove, remedy or discharge and if Purchaser shall be unwilling to waive the same and to close title without abatement of the purchase price, then, except as hereinafter set forth, Seller shall have the right, at Seller's sole election, either to take such action as Seller may deem advisable to remove, remedy, discharge or comply with such Defects or to cancel this contract; (ii) if Seller elects to take action to remove, remedy or comply with such Defects, Seller shall be

entitled from time to time, upon Notice to Purchaser, to adjourn the date for Closing hereunder for a period or periods not exceeding 60 days in the aggregate (but not extending beyond the date upon which Purchaser's mortgage commitment, if any, shall expire), and the date for Closing shall be adjourned to a date specified by Seller not beyond such period. If for any reason whatsoever, Seller shall not have succeeded in removing, remedying or complying with such Defects at the expiration of such adjournment(s), and if Purchaser shall still be unwilling to waive the same and to close title without abatement of the purchase price, then either party may cancel this contract by Notice to the other given within 10 days after such adjourned date; (iii) notwithstanding the foregoing, the existing 'mortgage (unless this sale is subject to the same) and any matter created by Seller after the date hereof shall be released, discharged or otherwise cured by Seller at or prior to Closing.

(c) If this contract is cancelled pursuant to its terms, other than as a result of Purchaser's default, this contract shall terminate and come to an end, and neither party shall have any further rights, obligations or liabilities against or to the other hereunder or otherwise, except that: (i) Seller shall promptly refund or cause the Escrowee to refund the Downpayment to Purchaser and, unless cancelled as a result of Purchaser's default or pursuant to paragraph 8, to reimburse Purchaser for the net cost of examination of title, including any appropriate additional charges related thereto, and the net cost, if actually paid or incurred by Purchaser, for updating the existing survey of the Premises or of a new survey, and (ii) the obligations under paragraph 27 shall survive the termination of this contract.

22 **AFFIDAVITS AS TO JUDGMENTS, BANKRUPTCIES, ETC.** If a title examination discloses judgments, bankruptcies or other returns against persons having names the same as or similar to that of Seller, Seller shall deliver an affidavit at Closing showing that they are not against Seller.

23. **DEFAULT AND REMEDIES**: (a) If Purchaser defaults hereunder, Seller's sole remedy shall be to receive and retain the Downpayment as liquidated damages, it being agreed that Seller's damages in case of Purchaser's default might be impossible to ascertain and that the Downpayment constitutes a fair and reasonable amount of damages under the circumstances and is not a penalty.

(b) If Seller defaults hereunder, Purchaser shall have such remedies as Purchaser shall be entitled to at law or in equity, including, but not limited to, specific performance.

24. **PURCHASERS' LIEN**: All money paid on account of this contract, and the reasonable expenses of examination of title to the Premises and of any survey and survey inspection charges, are hereby made liens on the Premises, but such liens shall not continue after default by Purchaser under this contract.

25. **NOTICES**: Any notice or other communication ("Notice") shall be in writing and either (a) sent by either of the parties hereto or by their respective attorneys who are hereby authorized to do so on their behalf or by the Escrowee, by registered or certified mail, postage prepaid, or email

(b) delivered in person or by overnight courier, with receipt acknowledged, to the respective addresses given in this contract for the party and the Escrowee, to whom the Notice is to be given, or to such other address as such party or Escrowee shall hereafter designate by Notice given to the other party or parties and the Escrowee pursuant to this paragraph. Each Notice mailed shall be deemed given on the third business day following the date of mailing the same, except that any notice to Escrowee shall be deemed given only upon receipt by Escrowee and each Notice delivered in person or by overnight courier shall be deemed given when delivered.

26. **NO ASSIGNMENTS**: This contract may not be assigned by Purchaser without the prior written consent of Seller in each instance and any purported assignments) made without such consent shall be void.

~~27. **BROKER**: Seller and Purchaser each represents and warrants to the other that it has not dealt with any broker in connection with this sale other than (ABroker@) and Seller shall pay Broker any commission earned pursuant to a separate agreement between Seller and Broker.~~

~~Seller and Purchaser shall indemnify and defend each other against any costs, claims and expenses, including reasonable attorneys' fees, arising out of the breach on their respective parts of any representation or agreement contained in this paragraph. The provisions of this paragraph shall survive Closing or, if Closing does not occur, the termination of this contract.~~ SEE RIDER ATTACHED

28. **MISCELLANEOUS**: (a) All prior understandings, agreements, representations and warranties, oral or written, between Seller and Purchaser are merged in this contract; it completely expresses their full agreement and has been entered into after full investigation, neither party relying upon any statement made by anyone else that is not set forth in this contract.

(b) Neither this contract nor any provision thereof may be waived, changed or cancelled except in writing. This contract shall also apply to and bind the heirs, distributees, legal representatives, successors and permitted assigns of the respective parties. The parties hereby authorize their respective attorneys to agree in writing to any changes in dates and time periods provided for in this contract.

(c) Any singular word or term herein shall also be read as in the plural and the neuter shall include the masculine and feminine gender, whenever the sense of this contract may require it.

(d) The captions in this contract are for convenience of reference only and in no way define, limit or describe the scope of this contract and shall not be considered in the interpretation of this contract or any provision hereof.

(e) This contract shall not be binding or effective until duly executed and delivered by Seller and Purchaser.

(f) Seller and Purchaser shall comply with IRC reporting requirements, if applicable. This subparagraph shall survive Closing.

(g) Each party shall, at any time and from time to time, execute, acknowledge where appropriate and deliver such further instruments and documents and take such other action as may be reasonably requested by the other in order to carry out the intent and purpose of this contract. This subparagraph shall survive Closing.

(h) This contract is intended for the exclusive benefit of the parties hereto and, except as otherwise expressly provided herein, shall not be for the benefit of, and shall not create any rights in, or be enforceable by, any other person or entity.

IN WITNESS WHEREOF, this contract has been duly executed by the parties hereto.

HARDY HOMES, LLC

JEFFREY DIAZ, Seller

By: Imma Hardisty, Purchaser

Attorney for Sellers:
BARBARA O'MALLEY, ESQ.
DAVIS & FERBER, LLP
1345 Motor Parkway
Islandia, NY 11749

Phone: **(631) 543-2900**
Fax: **(631) 543-2987**

Attorney for Purchasers:
PAUL B. SUPPLE, ESQ.
LYONS & SUPPLE, LLP
5 Cliff Street
Beacon, NY 12508

Phone: **(845) 831-1234**

Receipt of the Downpayment is acknowledged and the undersigned agrees to act in accordance with the provisions of paragraph 6 above.

BARBARA O'MALLEY, ESQ., Escrowee

JEFFRY DIAZ

TO

HARDY HOMES

Section: **6054**
Block: **21**
Lot: **041931**

RIDER TO
CONTRACT OF SALE

DATE: AUGUST , 2022

SELLERS: JEFFRY DIAZ

PURCHASER: HARDY HOMES, LLC

PREMISES: 44 KENT STREET, BEACON, NY 12508

1. In addition to any other subject clauses herein contained, said premise are sold subject to (1) any state of facts an accurate survey may show, provided same does not render title unmarketable; and (2) covenants, restrictions, utility agreements or easements of record, if any, still in force and effect, provided same does not prohibit the maintenance and/or use of existing structures; and variations between fences, hedges, retaining walls, etc. and the record lines, same shall not be deemed to render title unmarketable.

2. No representation is made as to the condition of the premises or any part thereof. The Purchasers have inspected the premises and it is specifically understood and agreed that the premises are being sold and accepted in "AS IS" condition.

3. The Purchasers warrant and represent that they have not dealt with any real estate broker in connection with the purchase of the premises listed hereinabove other than **BHHS HUDSON VALLEY PROPERTIES**, listing broker and **SAMS REALTY**, selling broker, and agrees to indemnify the Seller against any liability Seller may sustain to any broker as a result of Purchasers' breach of said warranty and representation, including costs, expenses and reasonable legal fees incurred. This provision shall survive delivery of the deed.

4. Within 48 hours of the time fixed for closing, the Seller will permit the Purchasers to make an inspection of the premises, said inspection to be made at reasonable hours and only by appointment.

5. Purchasers shall apply for a title search and report within 7 days after receipt of the fully executed contract of sale. A copy of the title report shall be forwarded to Seller's attorney upon receipt and in no event shall be furnished to Seller's attorney later than fifteen (15) days prior to the on or about date set for the closing of title. Seller shall be entitled to a reasonable adjournment of closing to remove any objection or violation found on the title examination.

6. The parties agree that if for any reason whatsoever, except Seller's willful default, Seller is unable to deliver to Purchasers a good and insurable title in accordance with the provisions of this contract, and subject to the matters set forth in this contract, Seller shall

not be required to bring any action or proceeding or otherwise incur any expense to render the title to the premises insurable. In the event that Seller cannot deliver to Purchasers good and insurable title as stated above, Seller may rescind this contract and upon returning to the Purchasers herein the sum paid on the signing of this contract and the net title company expenses for the examination of the title to the premises, all further liability on the part of the Seller hereunder shall cease and terminate and this contract shall become and be canceled and of no further force and effect, and the Seller shall not be liable for any other costs or damages whatsoever.

7. The acceptance of the Deed by the Purchaser shall be deemed full performance and discharge of every agreement and obligation on the part of Seller and Seller shall have no liability after the closing of title for any obligation, statement or representation of Seller set forth in this contract unless it is accompanied by a statement that it shall survive the closing of title.

The parties also agree that the delivery of the Deed conveying Title is deemed to be conditioned upon the collection of any funds, certified bank or otherwise from the Purchaser or their Lending Institution. The Seller's acceptance of uncertified, certified or bank funds from the Purchaser or their Lending Institution, shall in no way relieve the Purchaser of his obligation to pay the balance of the monies due at closing in the event said funs turn out to be uncollectable. The parties hereby agree that that the Deed shall be deemed to have been delivered in Escrow pending collection of the funds represented by the checks. Should said funds not be collected within seven (7) days after closing, the Deed, and the Premises, shall be returned to the Seller and the Purchaser shall vacate the Premises immediately. This paragraph shall survive delivery of the Deed.

8. This contract may not be assigned without the written consent of the Seller.

9. The parties agree that any notices pursuant to this contract may be given to the parties' respective attorneys.

10. The amount paid on signing of this contract (the "down payment") shall be held in a non-interest bearing IOLA escrow account at Chase Bank, 1455 Veterans Highway, Islandia, New York 11749, by Seller's attorneys, Davis & Ferber, LLP (the "Escrow Agent),until closing of title or default by Purchasers.

The down payment will be held by the Escrow Agent according to the following terms and conditions:

(a) If the premises are conveyed to Purchasers in accordance with this contract, the Escrow Agent will deliver the down payment to the Seller at the closing of title and such down payment shall be credited to the purchase price.

(b) If the conveyance of the premises does not occur because Purchasers default in performing Purchasers' obligations under this contract, then the Escrow Agent will

deliver the down payment to the Seller as liquidated damages.

If the closing of title does not take place on the date specified in the contract (or after an adjourned closing date) and any dispute arises as to the rights of the Seller or Purchasers to the down payment, the escrow agent may release the down payment to the Seller if the Purchasers have not commenced an action within the State of New York within sixty (60) days of notice from Seller's attorney of a breach of contract. If Purchasers have commenced a timely action, the Escrow Agent has the option to (1) retain the down payment in its special account pending either a settlement of the dispute or a final determination of the rights of the respective parties to the down payment made by a court of competent jurisdiction, or (2) disburse the down payment in accordance with the joint instructions of Purchasers and Seller, or (3) deposit the down payment with the Clerk of the Court in which such litigation is pending and, thereupon, the Escrow Agent shall stand fully relieved and discharged of any further liability or duties hereunder.

The Escrow Agent shall not be liable for any action taken or omitted by it in good faith and believed by it to be authorized or within the rights or powers conferred upon it by this Paragraph. The Escrow Agent shall not be liable for any error of judgment or for any mistake of fact or law except its own gross negligence or willful misconduct.

11. The Purchasers agree that should they default under the terms of this contract the Seller's attorney is authorized to release, as liquidated damages, the down payment from escrow, and the Purchasers release the Seller's attorney from any liability for making said release.

12. For the purpose of this contract and rider, the use of the singular shall include the plural and vice versa, and the use of the masculine shall include the feminine and vice versa.

13. This contract is binding upon the heirs, executors, administrators, and successors of the respective parties.

14. In the event that the check given as down payment shall be dishonored for any reason by the bank upon which it is drawn, then the Seller, in addition to any other rights and remedies which he might have, may at his option, declare this contract null and void and upon such notice in writing to the Purchasers' attorney, the Seller shall be relieved and released from all of the obligations hereunder.

15. Any inconsistencies between the provisions of this rider and the printed provisions of the contract shall be resolved in favor of this rider.

16. The Seller is not bound by the provisions of this contract until they have signed this contract and accordingly the Seller may remove the property from sale to the Purchasers.

17. Counterparts and Signatures-The parties will endeavor to agree that both facsimile and/or PDF signature pages shall be binding and shall be considered as part of the original Agreement and that this document may be executed in counterparts.

18. Due to the national health pandemic, all parties will endeavor to agree to reasonable adjournments and extensions of timelines, including time to obtain a mortgage commitment and closing dates, as reasonably requested. Notwithstanding the foregoing, either party can cancel this contract if title is unable to close, due to the pandemic, within the timelines set forth in Paragraph 15 of the Standard Form contract.

19. Both Parties hereby agree that if either Seller or Purchaser must commence litigation to enforce their rights under this contract, that the losing party will be held solely responsible to pay the prevailing party's reasonable legal fees, court costs and any and all expenses incident to said litigation.

20. In the event of the Purchaser's title company charges the Seller a "pick-up fee" for the satisfaction of any existing lien, or more than the charge of the County Clerk in which the property is located for the recording of the satisfaction of mortgage, the Seller shall not be responsible to pay more than $200.00 for a "pick-up "fee, nor more than the County Clerk's actual fee for recording. Purchaser agrees to pay any portion of the "pick-up fee" more than $200.00 and recording charges more than the County Clerk's actual charges.

21. Subject to the subject parcel being approved for a 2 lot subdivision by the City of Beacon.

HARDY HOMES, LLC

JEFFREY DIAZ, Seller

By: Donna Hardisty
Purchaser

PURCHASER'S RIDER TO CONTRACT

BETWEEN: HARDY HOMES LLC, Purchaser

AND: ~~JEFFREY~~ DIAZ, Seller

Notwithstanding anything to the contrary contained in agreement between the above parties of which this rider is hereby made part, the purchasers agree with the sellers, as follows:

1. TITLE

1.1 TITLE INSURANCE

The sellers shall give and the purchasers shall accept a title such as any reputable title company will approve and insure.

1.2 AFFIDAVIT AS TO JUDGMENT, ETC.

If a search of the title discloses judgments, bankruptcies or other liens against other persons having names the same or similar to that of the sellers, the sellers will, on request, deliver to the purchasers an affidavit showing that such judgments, bankruptcies or other liens are not against the sellers.

2. SURVEY

The premises are sold and are to be conveyed subject to any state of facts that an accurate survey may disclose, provided the same does not disclose substantial diminution of land area from that described or any condition that would otherwise render title unmarketable.

3. TENANCY

The property herein shall be conveyed free of all tenancies, except as specifically provided for elsewhere in this agreement.

4. MODIFICATIONS TO CONTRACT

The base contract is hereby amended as follows:

4.1 Purchasers name corrected to Hardy Homes, LLC

4.2 Paragraph 15 Closing date to be on/or about Dec 30, 2022

4.3 Paragraph 29 is added to reflect that this Purchaser's Rider is attached to and made part of the base Contract of Sale.

5. UNDERGROUND STORAGE TANKS(USTs)

Seller represents that to the best of Seller's knowledge and belief that:
There are no underground oil tanks servicing the premises; Seller never abandoned an oil tank at the premises; Seller has no actual knowledge of a prior owner abandoning an oil tank at the premises;Seller has no actual knowledge of a prior owner removing an in ground oil tank from the premises; and Seller has no actual knowledge of an in ground oil tank leaking at the premises.

6. CONSTRUCTION OF LANGUAGE IN RIDER

This rider is intended to supplement and amend the underlying agreement of sale between Seller and Purchaser bearing even date herewith. Any difference or ambiguity between the underlying agreement and other rider(s) and this rider shall be resolved in favor of this rider, notwithstanding that it is not signed by the parties hereto.

Jeffrey Diaz

By: DocuSigned by: Donna Hardisty Hardy Homes, LLC
A97C03EAF693413...

Hardy Homes, LLC

APPLICATION FOR SUBDIVISION APPROVAL

Submit to Planning Board Secretary, One Municipal Plaza, Suite One, Beacon, New York 12508

IDENTIFICATION OF APPLICANT

Name: Hardy Homes, LLC. (Contact- Paul Hardisty)

Address: 5 South Wodenethe Drive
Beacon, NY, 12508

Signature: Paul Hardisty

Date: 12-24-22

Phone: (914) 649-9534

(For Official Use Only)

	Date	Initials
Preliminary Application Rec'd		
Application Fee:		
Public Hearing		
Preliminary Plat Approved:		
Final Plat Approved:		
Recreation Fee:		
Performance Bond:		

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: Daniel G. Koehler P.E.

Address: 174 Main Street
Beacon, NY 12508

Phone: (845) 440-6926

Fax: (845) 440-6637

Email address: DKoehler@HudsonLandDesign.com

IDENTIFICATION OF SUBJECT PROPERTY:

Subdivision name or identifying title:
Hardisty Subdivision

Street which property abuts: Kent Street

Current Tax Map Designation: Section 6054 Block 21 Lot(s) 041931

Property ~~(does)~~ (does not) connect directly into a (State) (County) highway.

Land in subdivision ~~(is)~~ (is not) within 500 feet of a Municipal boundary.

Total area of property is +/- 0.398 acres

ITEMS TO ACCOMPANY THIS APPLICATION

a. One electronic and five (5) **folded** copies of a subdivision plat showing the location of the subject property and the proposed development with respect to neighboring properties and developments.

b. An application fee, payable to the City of Beacon, computed per the attached fee schedule.

c. An initial escrow amount, payable to the City of Beacon, as set forth in the attached fee schedule.

APPLICATION FEES

Site Plan	**Residential $500 + $250 per dwelling unit** **Commercial $500 + $250 per 1,000 s.f.**
Special Use Permit	**Residential $500 + $250 per dwelling unit** **Commercial $500 + $250 per 1,000 s.f.**
Subdivision	**$ 750 for 2-4 lots + $100 per lot** **$1,000 for 5 or more lots + $300 per lot**
Zoning Board of Appeals	**Use Variance $500** **Area Variance $250** **Interpretation $250**

ESCROW FEES

ALL SUBDIVISIONS, AND RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

No. of Lots or Dwelling Units	Initial Deposit	Depleted to	Replenishment
1-5 (including lot-line realignment)	$ 2,500	$ 1,000	Current bills + $1,000
6-15	$ 7,500	$ 2,500	Current bills + $1,000
Over 15	$ 15,000	$ 5,000	Current bills + $5,000

NON-RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

	Initial Deposit	Depleted to	Replenishment
Existing Buildings/Change of Use with no site development	$ 1,500	$ 1,000	Current bills + $500
Up to 3,000 s.f. gross floor area	$ 2,500	$ 1,000	Current bills + $1,000
3,000 to 10,000 s.f. gross floor area	$ 2,500 + $0.50 per sq.ft. over 3,000	$ 2,500	Current bills + $2,500
Over 10,000 s.f. gross floor area	$ 7,500 + $0.50 per sq.ft. over 10,000	$ 2,500	Current bills + $2,500

ZONING

* *if required by Chairman*	Initial Deposit	Depleted to	Replenishment
Use Variance*	$ 1,000	$500	Current bills + $500
Area Variance*	$ 1,000	$500	Current bills + $500
Interpretation*	$ 1,000	$500	Current bills + $500

ARCHITECTURAL REVIEW OR CERTIFICATE OF APPROPRIATENESS ***(if not currently before PB)***

* *if required by Chairman*	Initial Deposit	Depleted to	Replenishment
Single Family House*	$500	$250	Current bills + $250
All others*	$500	$250	Current bills + $250

APPLICATION PROCESSING RESTRICTION LAW

Affidavit of Property Owner

Property Owner: Hardy Homes, LLC.- contract vendee

If owned by a corporation, partnership or organization, please list names of persons holding over 5% interest.
Paul Hardisty, Donna Hardisty

List all properties in the City of Beacon that you hold a 5% interest in:
5 South Wodenethe Drive, Beacon, NY 12508 & 412 Main Street, Beacon, NY 12508. (properties owned by the contract vendee).

Applicant Address: 5 South Wodenethe Drive, Beacon, NY 12508

Project Address: 44 Kent Street, Beacon, NY 12508

Project Tax Grid # 6054-21-041931

Type of Application Subdivision for existing property

Please note that the property owner is the applicant. "Applicant" is defined as any individual who owns at least five percent (5%) interest in a corporation or partnership or other business.

I, Paul Hardisty, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

1. No violations are pending for ANY parcel owned by me situated within the City of Beacon — X
2. Violations are pending on a parcel or parcels owned by me situated within the City of Beacon —
3. ALL tax payments due to the City of Beacon are current — X
4. Tax delinquencies exist on a parcel or parcels owned by me within the City of Beacon —
5. Special Assessments are outstanding on a parcel or parcels owned by me in the City of Beacon —
6. ALL Special Assessments due to the City of Beacon on any parcel owned by me are current — X

Paul Hardisty
Signature of Owner

President
Title if owner is corporation

Office Use Only:	NO	YES	Initial
Applicant has violations pending for ANY parcel owned within the City of Beacon (Building Dept.)	___	___	____
ALL taxes are current for properties in the City of Beacon are current (Tax Dept.)	___	___	____
ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing)	___	___	____

CITY OF BEACON
PRELIMINARY SUBDIVISION PLAT
AND CONSTRUCTION PLANS SPECIFICATION FORM

Name of Application: Hardisty Subdivision

PRELIMINARY SUBDIVISION PLAT	**YES**	**NO**
The preliminary plat shall be clearly marked "Preliminary Plat", shall be drawn to a convenient scale but not less than 1" = 100', and shall contain the following information:	X	
Proposed subdivision name or identifying title, name, and address of property owner and subdivider (if other than owner), name and address of the surveyor and/or engineer preparing the plan, scale, approximate true North point, and date.	X	
The approximate location and dimensions of all property lines, the total acreage of the proposed subdivision, the location of any zoning, special district or municipal boundary lines affecting the subdivision, and the names of owners of record of properties adjoining and directly across the street from proposed subdivision.	X	
The location of all existing structures and pertinent features, including railroads, water bodies, water courses, wetlands, rock outcroppings, wooded areas, major trees, and stone walls, that may influence the design of the subdivision, plus accurate topography at a vertical contour interval of not more than two (2) feet. The topographic data shall be determined by field survey unless the Planning Board specifically waives this requirement and/or permits the substitution of topographic information obtained from other sources determined satisfactory for the particular case.	X	
The location and status of existing streets or private roads, easements and rights-of-way (if any), proposals for the layout of new streets or private roads (including widths and approximate curve radii) and any proposed easements, rights-of-way and/or reservations.	X	
The names of existing streets or private roads and proposed names for new streets or private roads.	X	
The proposed arrangement of lots, including identifying numbers and approximate area and dimensions of each.	X	
Location, size and nature of any area proposed to be reserved for park purposes.	X	
A site location sketch, at a scale of one inch equals 400 feet, showing the general situation within 1,000 feet of the applicant's property with respect to surrounding properties, streets and private roads.	X	
Where the preliminary plat includes only a portion of an applicant's contiguous holding, the applicant shall also indicate, on a sketch at a scale of not less than one inch equals 200 feet, the probable future street or private road system, lot arrangement and location of park and other reservations for the remaining portion of the tract. Such sketch shall be for the purpose of guiding the Planning Board in reviewing the proposed preliminary plat and shall include topographic data with a vertical contour interval of not more than five feet plus any other information determined necessary by the Planning Board.	X	
Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board.	X	

PRELIMINARY CONSTRUCTION PLANS	YES	NO
The preliminary construction plans shall be drawn at the same scale as the preliminary plat and shall include the following information:		
Location and sizes of any existing water, sewer storm drainage and other utility lines and structures within and nearby the proposed subdivision.	X	
The proposed system for the provision of water supply and fire protection facilities, sewage disposal, stormwater drainage, and other utility services.	X	
Proposed street or private road profiles and cross-sections showing the approximate grade of proposed streets or private roads, the relationship of existing to proposed grades, and the proposed grades, and the proposed vertical curvature along the center line of all new streets or private roads.	N/A	
Location of all existing and proposed monuments and other subdivision improvements.	X	
Such additional information as may be required by this chapter, the Zoning chapter, or the Planning Board.	X	

CITY OF BEACON
FINAL SUBDIVISION PLAT
AND CONSTRUCTION PLANS SPECIFICATION FORM

Name of Application: Hardisty Subdivision

FINAL SUBDIVISION PLAT	**YES**	**NO**
The final subdivision plat shall be drawn clearly and legibly on transparent tracing cloth with black waterproof ink, at a scale no smaller than one inch equals 100 feet but preferably at a scale of one inch equals 50 feet. The sheet size shall not exceed 36 inches by 48 inches. If the size of proposed subdivision required a drawing larger than this, two or more sheets may be submitted, with match lines clearly indicated, and an index map shall be prepared on the same size sheet.	X	
The final plat shall contain the following information:		
Proposed subdivision name or identifying title, name, and address of owner of record and of subdivider (if other than owner), certification and seal of the registered engineer or licensed land surveyor who prepared the plat, names of the owners of record of adjoining properties and of properties directly across the street or private road, graphic scale, approximate true North point, and date.	X	
The location and dimensions of all boundary lines of the proposed subdivision, and all existing and proposed streets, private roads, lot lines, easements and rights-of-way, with sufficient data to readily determine the location, bearing and length of all such lines and to reproduce such lines upon the ground.	X	
The names of all existing and proposed streets and private roads.	X	
The locations of all water bodies and watercourses.	N/A	
The location of all existing buildings, including identification of all buildings to be removed as a condition of plat approval.	X	
The total acreage included in the entire subdivision, and the identification number and acreage of all lots and land reservations within the proposed subdivision.	X	
Location of all existing and proposed monuments.	X	
A site location map, at a scale of one inch equals 400 feet, showing the location of the subject property with respect to neighboring properties, streets and private roads.	X	
Notations explaining any drainage, sight slope, street widening, park area or other reservations or easements, including any self-imposed restrictions or covenants.	X	
Endorsement of approval by the Dutchess County Health Department.	TBP	
Plan for the provisional delivery of mail, as approved by the local postmaster.	TBP	
Endorsement of the owner as follows: "Approved for filing: _____ _____" Owner Date	X	

FINAL SUBDIVISION PLAT *(continued)*	**YES**	**NO**
Form for endorsement by Planning Board Chairman as follows: "Approved by Resolution of the Planning Board of the City of Beacon, New York, on the _____ day of _____, 20_____, subject to All requirements and conditions of said Resolution. Any change, erasure, modification or revision of this plat, as approved, shall void this approval. Signed this _____ day of _____, 20_____, by _____, Chairman _____, Secretary In absence of the Chairman or Secretary, the Acting Chairman or Acting Secretary Respectively may sign in this place.	X	
Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board.	X	
Stormwater pollution prevention plan. A stormwater pollution prevention plan consistent with the requirements of Chapter 190 and with the terms of preliminary plan approval shall be required for final subdivision plat approval. The SWPPP shall meet the performance and design criteria and standards in Chapter 190, Article II. The approved final subdivision plat shall be consistent with the provisions of Chapter 190.	N/A	

FINAL CONSTRUCTION PLANS	**YES**	**NO**
Final construction plans and profiles shall be prepared for all proposed streets, private roads and other required improvements. Plans shall be drawn at the same scale as the final plat and on the same size sheets, but not on the same sheets. The following information shall be shown:		
Plans and profiles showing the location and a typical cross-section of street and/or private road pavements including curbs and gutters, sidewalks, manholes and catch basins; the location of street or private road trees, lighting and signs; the location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains and fire hydrants; the location and size of all water, gas or other underground utilities or structures; and the location and design of any other required improvements.		
Profiles showing existing and proposed elevations along the center line of all streets and private roads. Where a proposed street or private road intersects an existing street or private road, the elevation along the center line of the existing street or private road within 100 feet of intersection, shall be shown. All elevations must be referred to established U.S. Government of approved local benchmarks, where they exist within ½ mile of the boundary of the subdivision.		
The Planning Board may require, where steep slopes exist, cross-sections showing existing and proposed elevations of all new streets and private roads every 100 feet at five points on a line at right angles to the center line of the street or private road, said elevation points to be at the center line of the street or private road, each property line, and points 30 feet inside each property line.		
Location, size, elevation and other appropriate description of any existing facilities which will be connected to proposed facilities and utilities within the subdivision.		

FINAL CONSTRUCTION PLANS *(continued)*		
Where the design of the subdivision requires the regarding of land, the regarding of land, the regraded contours shall be shown along with estimates of the quantity of material to be added or removed and the proposed measures to be implemented by the subdivider to rehabilitate the disturbed area or areas.		
Title of all sheets, name, address, signature and seal of licensed engineer preparing the construction plans, the date prepared, including revisions dates if any, approximate true North point, scale, and consecutive numbering as sheet _____ of _____.		
A notation of approval, on all sheets as follows "Approved by: _____ Paul Hardisty Owner and _____ Planning Board Chairman _____ 12-24-22 Date" _____ Date"		
Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board.		

For all items marked "NO" above, please explain below why the required information has not been provided:

All items marked "NO" are not applicable to this particular application.

Applicant/Sponsor Name: Hardy Homes, LLC. (President- Paul Hardisty)

Signature: _____

Date: _____

FOR OFFICE USE ONLY
Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 • http://cityofbeacon.org/

INDIVIDUAL DISCLOSURE FORM

(This form must accompany every land use application and every application for a building permit or certificate of occupancy submitted by any person(s))

Disclosure of the names and addresses of all persons) filing a land-use application with the City is required pursuant to Section 223-62 of the City Code of the City of Beacon. Applicants shall submit supplemental sheets for any additional information that does not fit within the below sections, identifying the Section being supplemented.

SECTION A

Name of Applicant: _____

Address of Applicant: _____

Telephone Contact Information: _____

SECTION B. List all owners of record of the subject property or any part thereof.

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.

SECTION B. Is any owner of record an officer, elected or appointed, or employee of the City of Beacon or related, by marriage or otherwise, to a City Council member, planning board member, zoning board of appeals member or employee of the City of Beacon ?

☐ **YES** ☐ **NO**

If yes, list every Board, Department, Office, agency or other position with the City of Beacon with which a party has a position, unpaid or paid, or relationship and identify the agency, title, and date of hire.

Agency	Title	Date of Hire, Date Elected, or Date Appointed	Position or Nature of Relationship

SECTION C. If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application.

SECTION D. Have the present owners entered into a contract for the sale of all or any part of the subject property and, if in the affirmative, please provide a duplicate original or photocopy of the fully and complete contract of sale, including all riders, modifications and amendments thereto.

☐ **YES** ☐ **NO**

I, _____ being first duly sworn, according to law, deposes and says that the statements made herein are true, accurate, and complete.

(Print) _____

(Signature) _____

FOR OFFICE USE ONLY
Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 • http://cityofbeacon.org/

ENTITY DISCLOSURE FORM

(This form must accompany every land use application and every application for a building permit or certificate of occupancy submitted by any entity)

Disclosure of the names and addresses of all persons or entities owning any interest or controlling position of any Limited Liability Company, Partnership, Limited Partnership, Joint Venture, Corporation or other business entity (hereinafter referred to as the "Entity") filing a land-use application with the City is required pursuant to Section 223-61.4 of the City Code of the City of Beacon. If any Member of the Entity is not a natural person, then the names and addresses as well as all other information sought herein must be supplied about the non-natural person member of that Entity, including names, addresses and Formation filing documents. Applicants shall submit supplemental sheets for any additional information that does not fit within the below sections, identifying the Section being supplemented.

SECTION A.

IF AFFIANT IS A PARTNERSHIP, JOINT VENTURE OR OTHER BUSINESS ENTITY, EXCEPT A CORPORATION:

Name of Entity	Address of Entity
Hardy Homes, LLC.	5 South Wodenethe Drive, Beacon, NY, 12508
Place where such business entity was created Dutchess County	Official Registrar's or Clerk's office where the documents and papers creating entity were filed NYS Department of State, Albany, NY
Date such business entity or partnership was created 10/19/2001	Telephone Contact Information (914) 649-9534

IF AFFIANT IS A CORPORATION:

Name of Entity	Telephone Contact Information
Principal Place of Business of Entity	Place and Date of incorporation
Method of Incorporation	Official place where the documents and papers of incorporation were filed

SECTION B. List all persons, officers, limited or general partners, directors, members, shareholders, managers, and any others with any interest, mortgage, encumbrance or other interest (recorded or unrecorded) in or with the above referenced

Entity. List all persons to whom corporate stock has been pledged, mortgaged or encumbered and with whom any agreement has been made to pledge, mortgage or encumber said stock. Use a supplemental sheet to list additional persons.

Name	Resident Address	Resident Telephone Number	Nature and Extent of Interest
Paul Hardisty	5 South Wodenethe Drive Beacon, NY 12508	(914) 649-9534	50% Ownership
Donna Hardisty	5 South Wodenethe Drive Beacon, NY 12508	(845) 831-0344	50% Ownership

SECTION C. List all owners of record of the subject property or any part thereof.

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.
Jeffry P. Diaz	2671 Route 22, Patterson, NY 12563	Unknown	11/05/2021- sale of property	11/05/2021; filed with the Dutchess County Clerk's Office.

SECTION D. Is any owner, of record or otherwise, an officer, director, stockholder, agent or employee of any person listed in Section B-C?

☐ **YES** ☒ **NO**

Name	Employer	Position

SECTION E. Is any party identified in Sections A- C an officer, elected or appointed, or employee of the City of Beacon or related, by marriage or otherwise, to a City Council member, planning board member, zoning board of appeals member or employee of the City of Beacon ?

☐ ☒

YES **NO**

If yes, list every Board, Department, Office, agency or other position with the City of Beacon with which a party has a position, unpaid or paid, or relationship and identify the agency, title, and date of hire.

Agency	**Title**	**Date of Hire, Date Elected, or Date Appointed**	**Position or Nature of Relationship**

SECTION F. Was any person referred to in Sections A-D known by any other name within five (5) years preceding the date of the application?

☐ **YES** ☒ **NO**

Current Name	**Other Names**

SECTION G. List the names and addresses of each person, business entity, partnership and corporation in the chain of title of the subject premises for the five (5) years next preceding the date of the application.

Name	**Address**

SECTION H. If the applicant is not a record owner of the subject property, describe the applicant's interest in the subject property and the relationship the applicant has to the record owner(s) of the subject property.

The applicant, Hardy Homes LLC., wishes to purchase the property in order to develop it for residential use (through the subdivision of the lot and the construction of new residences). The applicant is in a contract with the property's current owner. The applicant's relationship to the property's owner is contract vendee.

SECTION I. If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application. Any sensitive or confidential information may be redacted from the contract prior to production.

SECTION J.

1. Where the record owner or contract vendee is a corporation, the following additional information shall be submitted**:**

Name of the Corporation	Telephone Contact Information
Principal Business Address	Place and Date of Incorporation
Method of Incorporation	Official place where the documents and papers of incorporation were filed

2. Please provide the following information for every incorporator, officer, director and shareholder of the corporation.

Name	**Residence or business address**	**Telephone number**

3. Have any shares of the stock of the corporation or of any stockholder been pledged, mortgaged or encumbered?

☐ **YES** ☐ **NO**

If so, please list the name and address of each person having, holding, owning or claiming any such interest.

Name	**Address**

SECTION K. Have the present owners entered into a contract for the sale of all or any part of the subject property and, if in the affirmative, please provide a duplicate original or photocopy of the fully and complete contract of sale, including all riders, modifications and amendments thereto.

☒ **YES** ☐ **NO**

I, Paul Hardisty being first duly sworn, according to law, deposes and says that I am (Title) President/Owner, an active and qualified member of the Hardy Homes, LLC., a business duly authorized by law to do business in the State of New York, and that the statements made herein are true, accurate, and complete.

(Print) Paul Hardisty

(Signature) _____

HUDSON
LAND DESIGN

Civil & Environmental Engineering Consultants
174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)
13 Chambers Street, Newburgh, NY 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com

December 27, 2022

Hon. John Gunn, Chairman
City of Beacon Planning Board
1 Municipal Plaza
Beacon, NY 12508

Re: 44 Kent Street Subdivision
Hardy Homes, LLC. (Applicant)
44 Kent Street
Tax Parcel: 6054-21-041931, ±0.39 ac.
City of Beacon, NY

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) is pleased to submit a subdivision application with a copy of the deed, short EAF, and preliminary subdivisions plans, to the City of Beacon planning board for initial review. We have also included documentation that explains the agreement between the property's current owner and the Applicant in regard to the site's ownership including a letter of permission from the owner allowing the Applicant to submit a subdivision review to the City of Beacon Planning Board.

The proposed project is located at 44 Kent Street, consists of 0.39 acres and is located in the R1-5 residential zoning district, in the City of Beacon, NY. The existing property currently contains a single-family dwelling with driveway access and frontage on Kent Street.

The Applicant wishes to subdivide the lot into three (3) residential building lots. The existing structures will be demolished, and three (3) new single-family dwellings will be constructed, one for each of the new lots.

Proposed Lots 1, 2 and 3 are located within the R1-5 zoning district and have been designed to meet the requirements of the R1-5 district.

All of the Proposed Lots will have an individual private driveway to provide access from Kent Street. Yard drains will be provided along the new subdivision lines separating the Proposed Lots. The proposed yard drains will be connected to two (2) existing catch basins located on Kent Street and grading along the lots has been developed to direct surface flow towards the drains. The drainage lines will necessitate a 10' wide utility easement, evenly divided between the adjoining lots, to extend 5 feet into each lot from the proposed subdivision line.

The existing service lines will be discontinued and abandoned. New service lines will be installed for each of the new residences to provide a private connection to the water and sewer mains on Kent Street.

Five (5) hard copies of a preliminary subdivision set consisting of 7 sheets and a short EAF are provided with this submission for review. Also included with this submission is a Subdivision Application, a copy of the deed, an application check for $1,050, and an initial escrow check for $2,500, a permission letter from the property's current owner and the contract of sale between the owner and applicant. A full set of plans, EAF, Application and cover letter are provided with the digital submission package.

We look forward to discussing this project, establishing lead agency and setting a SEQR public hearing at your January 2023 planning board meeting. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,



Daniel G. Koehler, P.E.
Principal

cc: Hardy Homes, LLC. (w/ attachments)
Robert V. Oswald, L.S., Project Surveyor (via email)
Michael A. Bodendorf, P.E. (HLD file)

Civil & Environmental Engineering Consultants
174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)
13 Chambers Street, Newburgh, New York 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com

December 27, 2022

Mr. John Gunn, Chairman, & Members of the City of Beacon Planning Board
1 Municipal Center
Beacon, NY 12508

Re: Infiltration and Inflow Investigation
Hardisty Subdivision
Tax ID: 6054-21-041931 (±0.398 Acres Total)
City of Beacon, New York

Dear Chairman Gunn & Members of the Planning Board,

Hudson Land Design (HLD) has completed an infiltration and inflow investigation at the above referenced parcel as required by the City of Beacon. The investigation was conducted on October 19, 2022 at the existing residence located at 44 Kent Street in the City of Beacon, which consists of a two-story framed building.

The first phase of the study consisted of an exterior inspection of the building to determine the location of roof leader discharge points. In total, the existing two-story building has 8 sets of gutters, one which frames three sides of the street facing porch's roof, 1 along 2nd story roof along the residence's east side (street facing side), 2 along the building's north side and 4 along the building's west side (rear facing side).

The 2nd floor roof gutter that runs along the building's north side collects the rainwater intercepted by the second-floor roof and conveys it westerly towards the back end of the residence. A roof leader on the western end of the 2nd floor northern gutter discharges the collected rain onto a the first-floor roof along the northwest corner of the building. All the other gutters around the building have a dedicated roof leader that discharges the intercepted rainwater onto the ground surrounding the residence. None of the roof leaders found connect to an underground collection system.

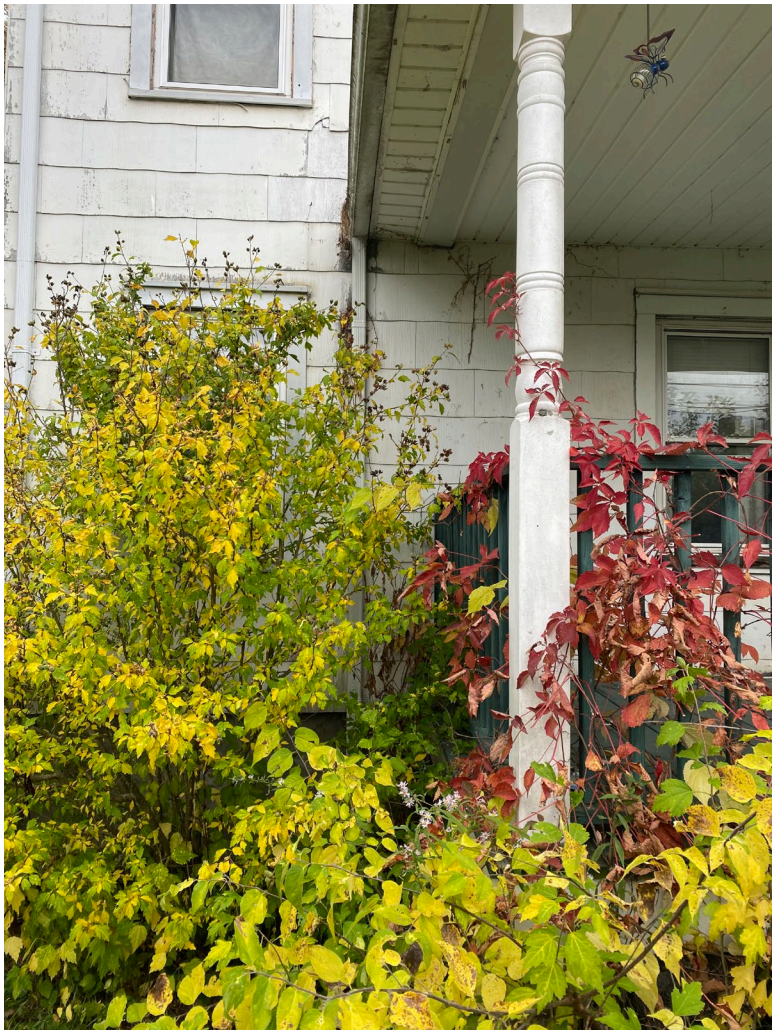
View of the second floor and first floor gutters along the residence's north side.



View of the second floor and first floor gutter along the west (rear) side of the buildings. All roof leaders discharge directly onto the ground.



View of southern roof leader for the gutters around the front porch.



The second phase of the study consisted of inspecting the interior of the building to determine if there are any illicit connections to the building's sewer lines from sump pumps, floor drains and the like. HLD personnel were able to observe the interior sanitary sewer plumbing including the point where the sanitary sewer lines within the house converged into the raw sewage outlet for the residence. The raw sewage outlet is located central to the residence on the basement level. After inspecting the lines going into the outlet, it appears that no other connections except for sanitary sewage are connected to any of the lines. The raw sewage outlet goes directly down into the ground of the basement and is assumed to then direct northeast towards the existing sewer lines on Kent Street. Please see the pictures below for reference. No sump pumps were found during the inspection of the basement's level.

View of the raw sewage outlet connection near the basement's west end.



HLD did not find any illicit connections from the building located at 44 Kent Street to the City of Beacon's sanitary sewer collection system.

Should you have any questions, please feel free to call me at 845-440-6926.

Sincerely,



Daniel G. Koehler, P.E.

cc: Hardy Homes, LLC. (via email)
Michael A. Bodendorf, P.E. (HLD file)

Jeffry P. Diaz

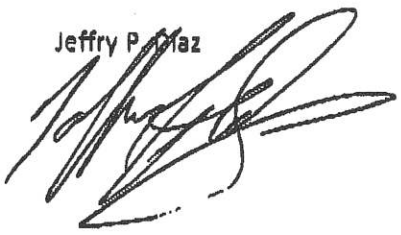
12/20/22

2671 NY 22 Unit B

Patterson NY 12563

I Jeffry P Diaz, owner of the property at 44 Kent St beacon ny 12508, grant permission to Hardy Homes 5 S. Wodenethe Dr. Beacon ny 12508 prmission to apply for a subdivision of the above mentioned property.

Jeffry P. Diaz



premission from current owner

Jeffry P. Diaz

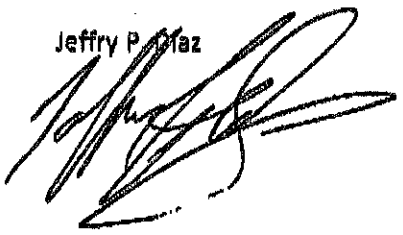
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2671 NY 22 Unit B

Patterson NY 12563

I Jeffry P Diaz, owner of the property at 44 Kent St beacon ny 12508, grant permission to Hardy Homes 5 S. Wodenethe Dr. Beacon ny 12508 prmission to apply for a subdivision of the above mentioned property.

Jeffry P Diaz



Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information

Name of Action or Project:

Hardisty Subdivision

Project Location (describe, and attach a location map):

44 Kent Street, Beacon, NY 12508

Brief Description of Proposed Action:

The applicant wishes to subdivide the existing property at 44 Kent Street (Tax ID # 6054-21-041931) into 3 new residential lots. The existing single-family residence, driveway and any other structures on the property will be demolished/razed and 3 new single-family residences will be constructed, one per each of the new lots. Each of the new lots will have its own private driveway allowing access from Kent Street, and new water & sewer service connections to infrastructure in Kent Street.

Name of Applicant or Sponsor:	Telephone: (914) 649-9534
Hardy Homes, LLC.- Paul Hardisty & Donna Hardisty (contacts)	E-Mail: smartinvestment20@yahoo.com

Address:

5 South Wodenethe Drive

City/PO:	State:	Zip Code:
Beacon	New York	12508

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: City of Beacon Planning Board- Subdivision Approval	☐	☑

3. a. Total acreage of the site of the proposed action? +/- 0.40 acres
   b. Total acreage to be physically disturbed? +/- 0.40 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? +/- 0.40 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☑ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☐ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		
If Yes, identify: _____	☑	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation services available at or near the site of the proposed action?	☐	☑
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☐	☑

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies: _____ _____	☐	☑

	NO	YES
10. Will the proposed action connect to an existing public/private water supply?		
If No, describe method for providing potable water: _____ _____	☐	☑

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment: _____ _____	☐	☑

	NO	YES
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☑	☐
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	☐	☑

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☑	☐
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☑	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☑ Urban ☐ Suburban

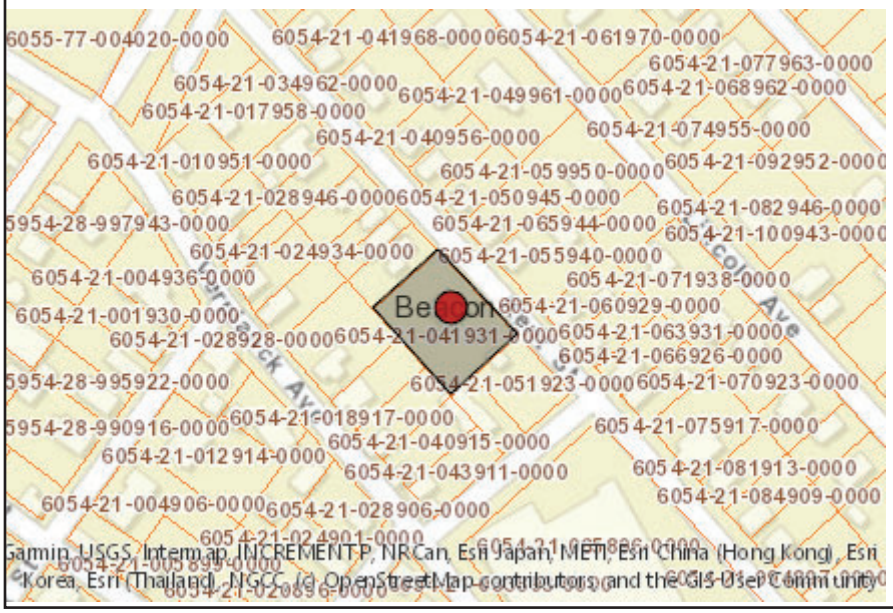
	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Indiana Bat	☐	☑
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	☐	☑
a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☑
If Yes, briefly describe: Stormwater flow will be directed towards the proposed stormwater conveyance system (yard drains) that discharge to the existing catch basins on Kent Street. The driveways are graded to drain toward the gutter along Kent Street.		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: The site is located within 2,000 feet of NYSDEC remediation sites B00130- Classification C (Completed), and C314118- Classification N (No Further Action at This Time). Please see attached Remediation Database Reports for sites listed	☐	☑

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: Daniel G. Koehler, P.E. Date: 12/19/2022

Signature: Title: Engineer for Applicant

PRINT FORM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Indiana Bat
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	Yes

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Environmental Site Remediation Database Search Details

Site Record

Document Repository

Site-related documents are available for review through the DECInfo Locator on line at DECInfoLocator

Administrative Information

Site Name: Churchill Mills
Site Code: C314118
Program: Brownfield Cleanup Program
Classification: N *
EPA ID Number:

Location

DEC Region: 3
Address: 1 East Main Street
City: Beacon Zip: 12508
County: Dutchess
Latitude: 41.502233333
Longitude: -73.9628
Site Type:
Estimated Size: 3.36 Acres

Site Owner(s) and Operator(s)

Current Owner Name: EAST MAIN MILLS, LLC
Current Owner(s) Address: 18 EAST 22ND STREET
NEW YORK,NY, 10010

Site Document Repository

Name: HOWLAND PUBLIC LIBRARY
Address: 313 MAIN STREET
BEACON,NY 12508

Site Description

The Church Hill Mills Site is +/- 3.36 acres, made up of 4 parcels and is located in the City of Beacon, Dutchess County. The site is bounded by Tioranda Avenue to the northeast, East Main Street to the north, the Fishkill Creek to the east and south, and Churchill Street to the southwest. The site is

currently vacant and has previously been utilized in part for various industrial uses including hat manufacturing, aluminum anodizing, woodworking and auto parts salvaging. Contaminants which are known or suspected to affect the soil, groundwater, sedimement and/or soil gases include petroleum, SVOCs, metals and PCBs. The BCP application was approved in 2007. The remedial investigation work plan was approved in December 2007. After two schedule extensions, the Volunteer has terminated the BCA without implementing the investigation work plan.

Site Environmental Assessment

Contaminants which are known or suspected to affect the soil, groundwater, sedimement and/or soil gases are petroleum, SVOCs, metals and PCBs.

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* **Class N Sites:** "DEC offers this information with the caution that the amount of information provided for Class N sites is highly variable, not necessarily based on any DEC investigation, sometimes of unknown origin, and sometimes is many years old. Due to the preliminary nature of this information, significant conclusions or decisions should not be based solely upon this summary."

For more Information: E-mail Us

Refine This Search

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Environmental Site Remediation Database Search Details

Site Record

Document Repository

Site-related documents are available for review through the DECInfo Locator on line at DECInfoLocator

Administrative Information

Site Name: Brunetto Cheese
Site Code: B00130
Program: Environmental Restoration Program
Classification: C
EPA ID Number:

Location

DEC Region: 3
Address: 33 North Cedar Street
City: Beacon (c) Zip: 12508-
County: Dutchess
Latitude: 41.50738511
Longitude: -73.96901823
Site Type:
Estimated Size: 1.4 Acres

Site Owner(s) and Operator(s)

Site Description

The City of Beacon's State assistance application for the Brunetto Cheese Site Environmental Restoration Project was approved by NYSDEC on February 18, 1999. The former Brunetto Cheese Facility is a 1.43 acre property located at 33 North Cedar Street in the City of Beacon, Dutchess County. The buildings that previously occupied the site were historically used for milk processing, including cheese production up until the early 1990s. The site area is serviced by municipal water and sewer service. Cleanup of the Brunetto Cheese site began in 1998 when the City contracted to have the onsite buildings demolished. This activity led to the discovery and subsequent removal, by the City, of five underground storage tanks between July and September 1998 (NYSDEC Spill No. 98-04-

763 was assigned to the site). The tanks ranged in capacity from 750 gallons to 10,000 gallons and contained fuel oil or gasoline which was found to be leaking into the surrounding soils. Following removal of the tanks, 1,327 tons of petroleum-contaminated soil were stockpiled onsite. This soil was removed from the site in September 1999 for thermal treatment. Post-excavation samples and visual observations indicated additional contaminated areas with free product present. Further excavation of these areas commenced in February 2000 as an element of the Site Investigation (SI). An additional 942 tons of petroleum-impacted soil were removed and sent offsite for thermal treatment. Based on the results of the SI, previous investigations, and the Interim Remedial Measures (contaminated soil removals) conducted at the site, a “no further action” remedy was the selected alternative for the site as detailed in the October 2000 Record of Decision. Development of this property began in 2004. In late August 2004, while excavating the property for a foundation for a new home, contaminated soils were uncovered in the southeastern portion of the property. The DEC was notified and a DEC spill contractor, was called out to address the contamination. A total of 278 tons of contaminated soil was excavated, stockpiled on-site, and taken offsite for proper treatment/ disposal. All post-excavation samples were below soil cleanup goals for unrestricted use (TAGM 4046).

Contaminants of Concern (Including Materials Disposed)

Contaminant Name/Type

Site Environmental Assessment

This property was contaminated with fuel oil and gasoline which was found to be leaking into the surrounding soils from the former on-site underground storage tanks. All tanks and contaminated soils have been removed from the site.

Site Health Assessment

No complete exposure pathways currently exist at this site.

For more Information: E-mail Us

Refine This Search

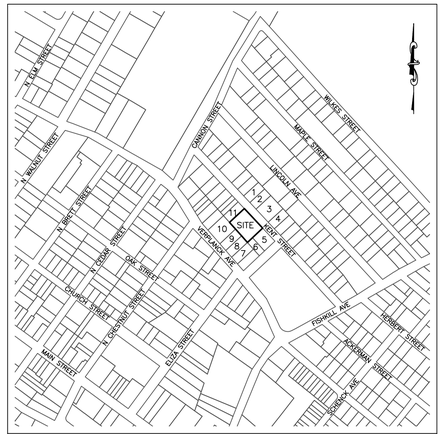
HARDISTY SUBDIVISION

RESIDENTIAL SUBDIVISION

44 KENT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

PROJECT INFORMATION:	
PARCEL OWNER:	HARDY HOMES, LLC., 5 SOUTH WODENETHE DRIVE BEACON, NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	44 KENT STREET BEACON, NY 12508
TAX PARCEL ID:	6054-21-041931
PARCEL AREA:	±0.4-ACRES
WATER SUPPLY:	MUNICIPAL
SEWAGE DISPOSAL:	MUNICIPAL

PARCEL INFORMATION:
TAX ID: 6054-21-041931
TOTAL LOT AREA: ±0.4 ACRES
ZONING DISTRICT: R1-5



SITE LOCATION MAP SCALE: 1" = 400'

ADJOINING OWNERS (WITHIN 100 FEET):
PARCEL: OWNER & ADDRESS
1. REBECCA BARDES, 32 BANK STREET, COLD SPRING NY 10516
2. HAROLD HULSE, 57 KENT STREET, BEACON NY 12508
3. SILVIA SORIA PATINA, 55 KENT STREET, BEACON NY 12508
4. HSING HUI HUANG, 333 4TH STREET, BROOKLYN NY 11215
5. PHILLIP L JACKSON, 36 KENT STREET, BEACON NY 12508
6. NANCY S EHRLICH, 90 ELIZA STREET, BEACON NY 12508
7. BERNARD ENG, 160 VERPLANCK AVE, BEACON NY 12508
8. KIMBERLY BLANCHARD, 156 VERPLANCK AVE, BEACON NY 12508
9. JOHN LEINUNG, 150 VERPLANCK AVE, BEACON NY 12508
10. JAMES PETTY 146 VERPLANCK AVE, BEACON NY 12508
11. CYNTHIA J. KONZEN, 52 KENT STREET, BEACON NY 12508

DRAWING INDEX:
SHEET 1: COVER SHEET (CV-1)
SHEET 2: EXISTING CONDITIONS & DEMOLITION PLAN (XC-1)
SHEET 3: PRELIMINARY SUBDIVISION PLAT (PT-1)
SHEET 4: SUBDIVISION PLAN (SP-1)
SHEET 5: EROSION & SEDIMENT CONTROL PLAN (ESC-1)
SHEET 6: CONSTRUCTION DETAILS (CD-1)
SHEET 7: CONSTRUCTION DETAILS (CD-2)

PROJECT ENGINEER:
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN STREET
BEACON, NEW YORK 12508
PH: 845-440-6926
F: 845-440-6637

OWNER/APPLICANT:
HARDY HOMES, LLC.
5 SOUTH WODENETHE DRIVE
BEACON, NEW YORK 12508
PH: 914-649-9534

PROJECT SURVEYOR:
ROBERT V. OSWALD, L.S.
175 WALSH ROAD
LAGRANGEVILLE, NEW YORK 12540
PH: 845-226-1315

OWNER'S CONSENT:
THE UNDERSIGNED OWNER OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
PAUL HARDISTY DATE
HARDY HOMES, LLC.

DCDOH STANDARD NOTE:

FOR PERMISSION TO FILE
THIS PLAN DOES NOT CONSTITUTE A REALTY SUBDIVISION AS DEFINED BY ARTICLE XI, TITLE II, SECTION 1115 OF THE PUBLIC HEALTH LAW OF THE STATE OF NEW YORK, AND ARTICLE XI OF THE DUTCHESS COUNTY SANITARY CODE. PERMISSION IS HEREBY GRANTED FOR THE FILING OF THIS MAP WITH THE CLERK OF DUTCHESS COUNTY. APPROVAL FOR ARRANGEMENTS FOR WATER SUPPLY AND/OR SEWAGE DISPOSAL IS NEITHER SOUGHT NOR GRANTED.

_____ _____
AUTHORIZED REPRESENTATIVE OF THE COMMISSIONER OF HEALTH DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

Dig Safely. New York Call 811 before you dig

STATE OF NEW YORK DANIEL G. KOBYLA 082716 LICENSED PROFESSIONAL ENGINEER
SEAL

HUDSON LAND DESIGN
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

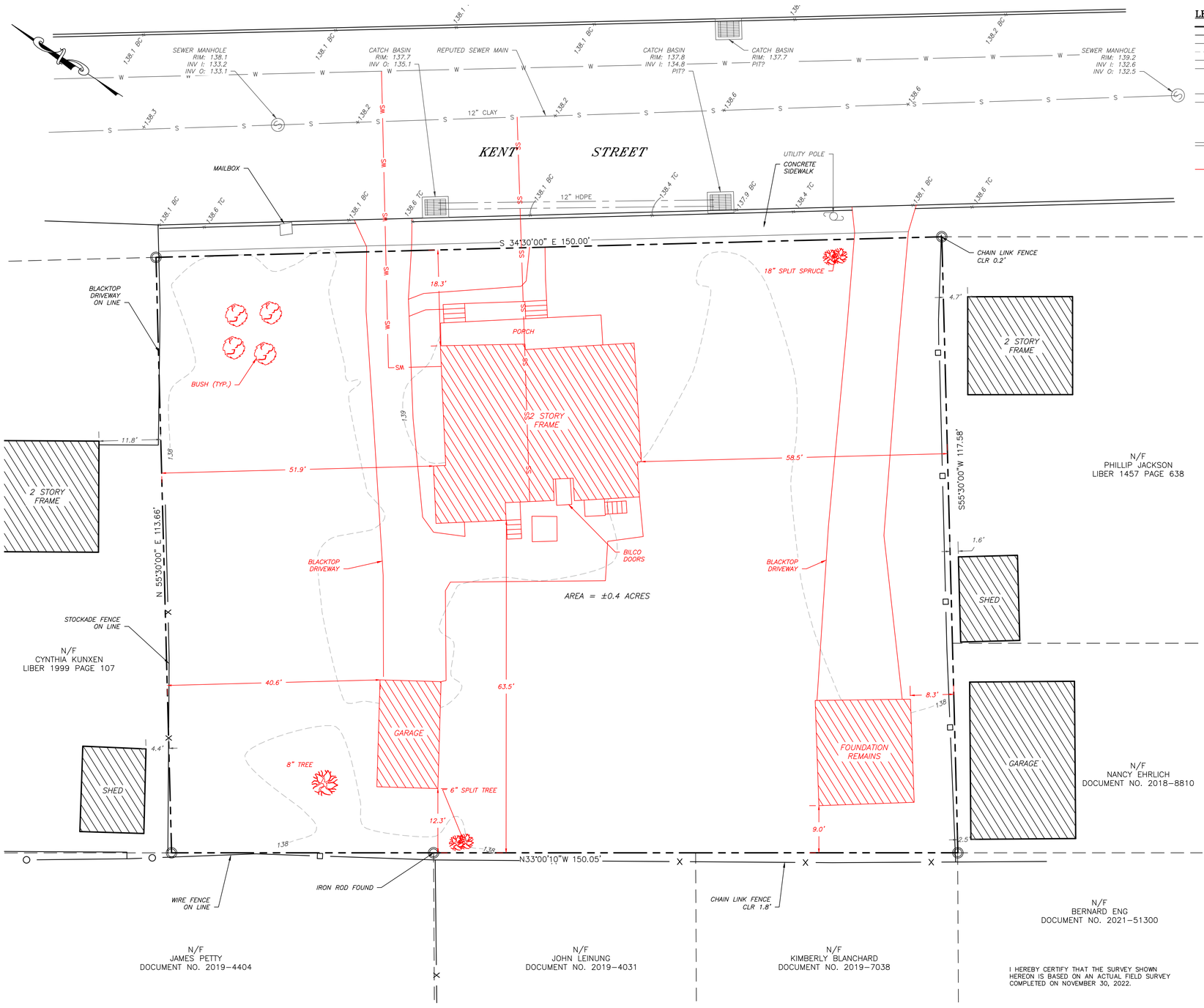
COVER SHEET

HARDISTY SUBDIVISION

44 KENT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-041931

JOB #:	2022:033
DATE:	12/2/2022
SCALE:	AS SHOWN
TITLE:	CV-1
SHEET:	1 OF 7

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- EXISTING WATER LINE
- EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- EXISTING CATCH BASIN
- PROPOSED DEMOLITION

PROJECT INFORMATION:

PARCEL OWNER:	ANTHONY HARDISTY, 5 SOUTH WODENETHE DRIVE BEACON, NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	44 KENT STREET BEACON, NY 12508
TAX PARCEL ID:	6054-21-041931
PARCEL AREA:	±0.4-ACRES
WATER SUPPLY:	MUNICIPAL
SEWAGE DISPOSAL:	MUNICIPAL

MAP REFERENCE:

1. "MAP OF SURVEY FOR THE LANDS OF HARDY HOMES" DATED NOVEMBER 30, 2022 AS PREPARED BY ROBERT V. OSWALD L.S. (845) 226-6436.

DEMOLITION NOTES:

1. BUILDING/STRUCTURE TO BE DEMOLISHED ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE NOT TO BE DEMOLISHED AS PART OF THIS WORK. PRIOR TO DEMOLISHING ANY BUILDINGS/STRUCTURES, THE CONTRACTOR SHALL PERFORM A PRE-DEMOLITION SURVEY IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS GOVERNING THE DISPOSAL OF SOLID WASTE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS BY THE AUTHORITY HAVING JURISDICTION. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS.
2. CONFORM TO APPLICABLE CODE FOR DEMOLITION OF STRUCTURES, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING, DISPOSAL AND STORAGE OF DEBRIS.
3. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
4. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
5. NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNER.
6. PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
7. LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
8. DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
9. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
10. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSES.
11. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS.
12. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
13. ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
14. FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
15. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATION.
16. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
17. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
18. USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, SUCH AS ICE, FLOODING, AND POLLUTION.
19. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
20. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITIONS.
21. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON NOVEMBER 30, 2022.

BY: _____
Robert V. Oswald , L.L.S. N.Y. State Lic. no. 50031

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

EXISTING CONDITIONS & DEMOLITION PLAN
SCALE: 1" = 10'
GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

Dig Safely. New York Call 811 before you dig

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

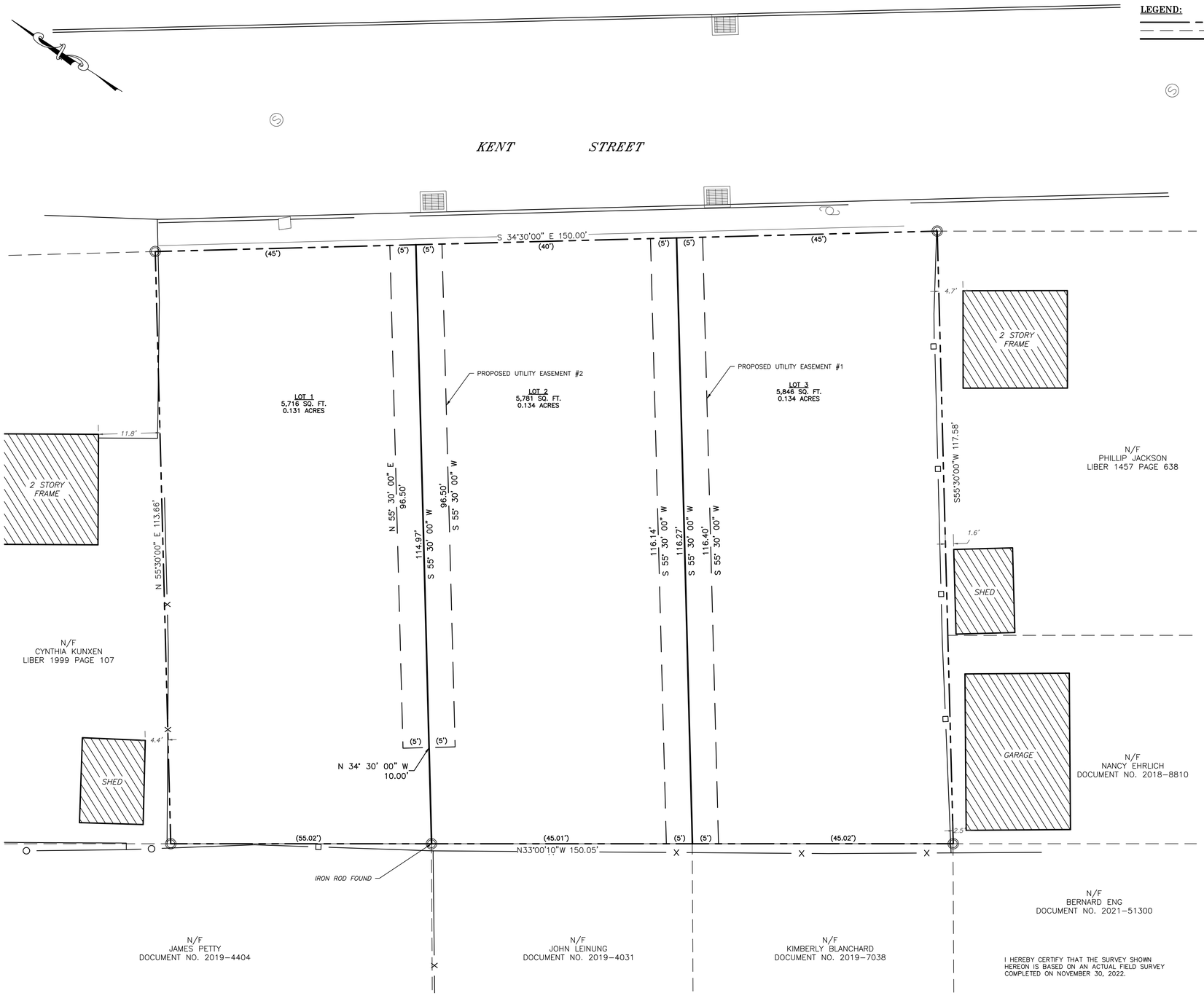
EXISTING CONDITIONS & DEMOLITION PLAN

HARDISTY SUBDIVISION

44 KENT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-041931

JOB #: 2022:033
DATE: 12/2/2022
SCALE: 1" = 10'
TITLE: XC-1
SHEET: 2 OF 7

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



LEGEND:

EXISTING PROPERTY LINE
ADJOINING PROPERTY LINE
PROPOSED PROPERTY LINE

SCHEDULE OF REGULATIONS (R1-5 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT	LOT 1	LOT 2	LOT 3
LOT AREA:	5,000 SQFT MIN./UNIT	±5,716 SQFT	±5,781 SQFT	±5,846 SQFT
LOT WIDTH:	50 FEET MINIMUM	±50 FEET	±50 FEET	±50 FEET
LOT DEPTH:	100 FEET MINIMUM	±113 FEET	±115 FEET	±116 FEET

MAP REFERENCE:

1. "MAP OF SURVEY FOR THE LANDS OF HARDY HOMES" DATED NOVEMBER 30, 2022 AS PREPARED BY ROBERT V. OSWALD LS. (845) 226-6436.

TOTAL PARCEL AREA:

±17,424 S.F. OR ± 0.40 ACRE

TAX MAP REFERENCE:

CITY OF BEACON 6054-21-041931

FLOOD BOUNDARY:

SUBJECT PARCEL IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANGE FLOODPLAIN) PER PANEL 36027C0464E DATED MAY 2, 2012.

WETLAND NOTE:

NO NYSDEC OR FEDERAL WETLANDS WERE FOUND ONSITE.

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON NOVEMBER 30, 2022.

BY: _____
Robert V. Oswald , L.L.S.
N.Y. State Lic. no. 50031

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

SUBDIVISION PLAT
SCALE: 1" = 10'
GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

Dig Safely. New York Call 811 before you dig

STATE OF NEW YORK DANIEL G. ROSENBERG LICENSED PROFESSIONAL ENGINEER 082716
SEAL

HUDSON LAND DESIGN

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
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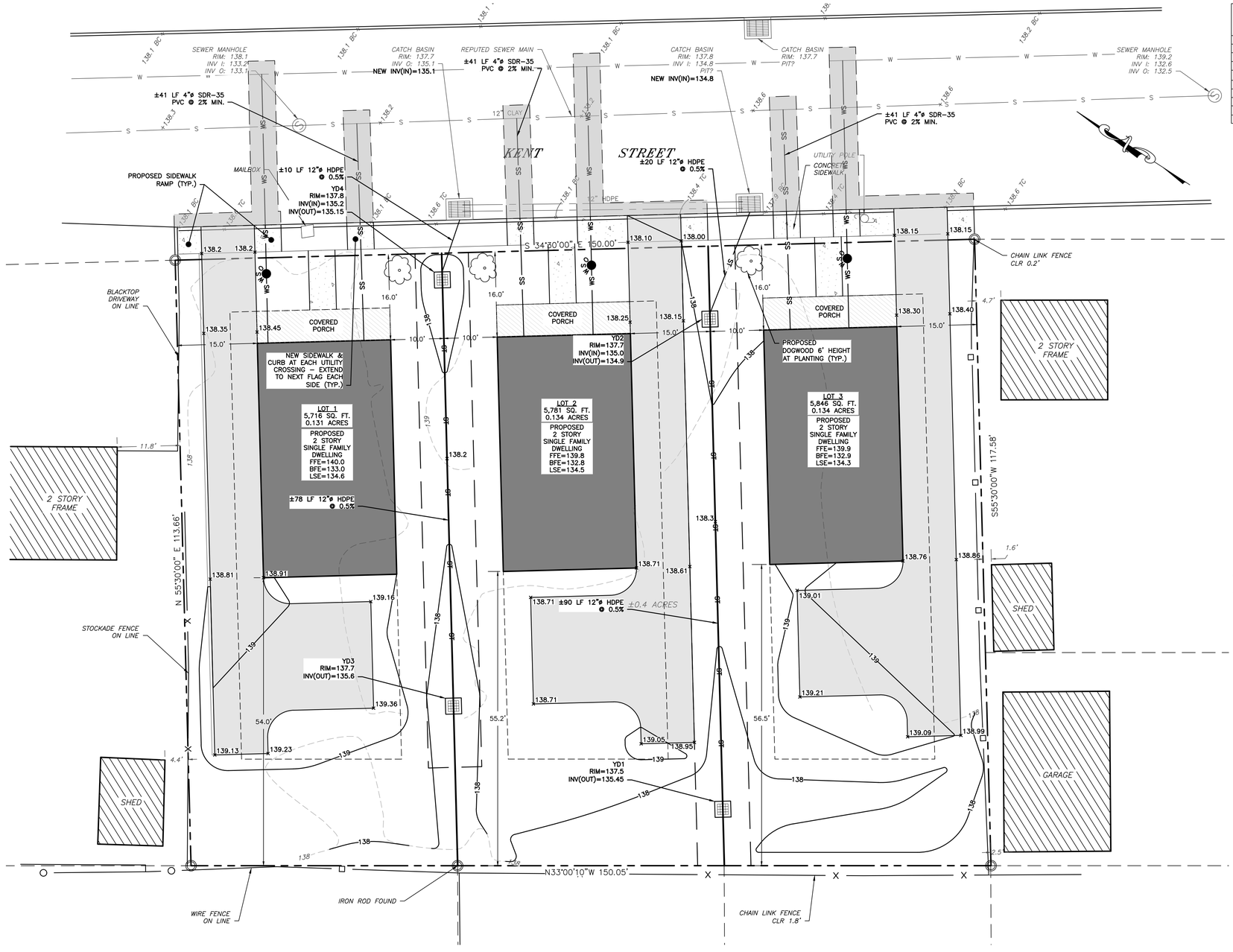
PRELIMINARY SUBDIVISION PLAT

HARDISTY SUBDIVISION

44 KENT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-041931

JOB #:	2022:033
DATE:	12/2/2022
SCALE:	1" = 10'
TITLE:	PL-1
SHEET:	3 OF 7

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



SCHEDULE OF REGULATIONS (R1-5 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT	EXISTING	LOT 1	LOT 2	LOT 3
LOT AREA:	5,000 SQFT MIN./UNIT	±17,343 SQFT	±5,716 SQFT	±5,781 SQFT	±5,846 SQFT
LOT WIDTH:	50 FEET MINIMUM	±150 FEET	±50 FEET	±50 FEET	±50 FEET
LOT DEPTH:	100 FEET MINIMUM	±113 FEET	±113 FEET	±115 FEET	±116 FEET
YARD SETBACKS (RESIDENTIAL USE):					
FRONT YARD:	10 FEET	±18.3 FEET	±10 FEET	±10 FEET	±10 FEET
SIDE YARD:	10 FEET	±51.9 FEET	±35.4 FEET	±10 FEET	±10 FEET
REAR YARD:	20 FEET MINIMUM	±63.5 FEET	±54.0 FEET	±55.2 FEET	±56.5 FEET
MAX. BUILDING HEIGHT:	35 FT, 2.5 STORIES	<2.5 STORIES	<2.5 STORIES	<2.5 STORIES	<2.5 STORIES
MAX. UNITS/BUILDING:	1 MAX	1	1	1	1

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE ACTUAL LOCATIONS OF THE GAS, WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE LINES.
2. THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
3. THE PROPOSED LOTS SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES.
4. THE WATER SERVICE LINE AND METER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. KENT STREET LANE CLOSURE FOR WATER SERVICE CONNECTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS.
6. ELECTRIC SERVICE FOR THE PROPOSED HOUSE SHALL BE UNDERGROUND (IF AVAILABLE), OR CONNECTED TO THE NEAREST OVERHEAD CONNECTION POINT.
7. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
8. PER CITY GUIDELINES, THE REQUIRED SIGHT DISTANCES SHALL MEET OR EXCEED THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS. THE STATE UTILIZES THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) GUIDELINES FOR INTERSECTION SIGHT DISTANCES. FOR ROADS WITH A SPEED LIMIT OF 30 MPH, AASHTO DESIGN TABLES CALL FOR A SIGHT DISTANCE OF 290 FEET TO THE LEFT AND 335 FEET TO THE RIGHT. THE SHORTEST LINE OF SIGHT TO THE LEFT FROM THE PROPOSED DRIVEWAY HAS BEEN FIELD MEASURED TO BE 421 FEET FROM LOT 1 DRIVEWAY TO THE INTERSECTION WITH CANAAN STREET. THE LINE OF SIGHT TO THE RIGHT HAS BEEN FIELD MEASURED TO BE 490 FEET FROM LOT 3 DRIVEWAY.
9. SUMP PUMP TO BE PROVIDED FOR FOOTING DRAIN ON THE NEW BUILDINGS. THE TYPES OF PUMP AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT. A BACK FLOW PREVENTER SHALL BE PROVIDED ON THE FOOTING DRAIN. SUMP PUMP DISCHARGE TO THE STORMWATER SYSTEM ONLY.
10. ROOF DRAINAGE FOR ALL NEW BUILDINGS SHALL BE DIRECTED TO THE PROPOSED STORM SYSTEM.
11. IF ROCK IS ENCOUNTERED DURING EXCAVATION, IT SHALL BE REMOVED BY MECHANICAL MEANS. NO BLASTING SHALL BE PERMITTED WITHOUT APPROVAL FROM THE BUILDING DEPARTMENT.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- EXISTING WATER LINE
- EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- EXISTING CATCH BASIN
- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- PROPOSED SEWER LINE
- PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- PROPOSED STORM WATER LINE
- PROPOSED ROOF LEADER LINE
- PROPOSED YARD DRAIN
- PROPOSED ROOF LEADER
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

SUBDIVISION PLAN
SCALE: 1" = 10'
GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

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SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

SUBDIVISION PLAN

HARDISTY SUBDIVISION

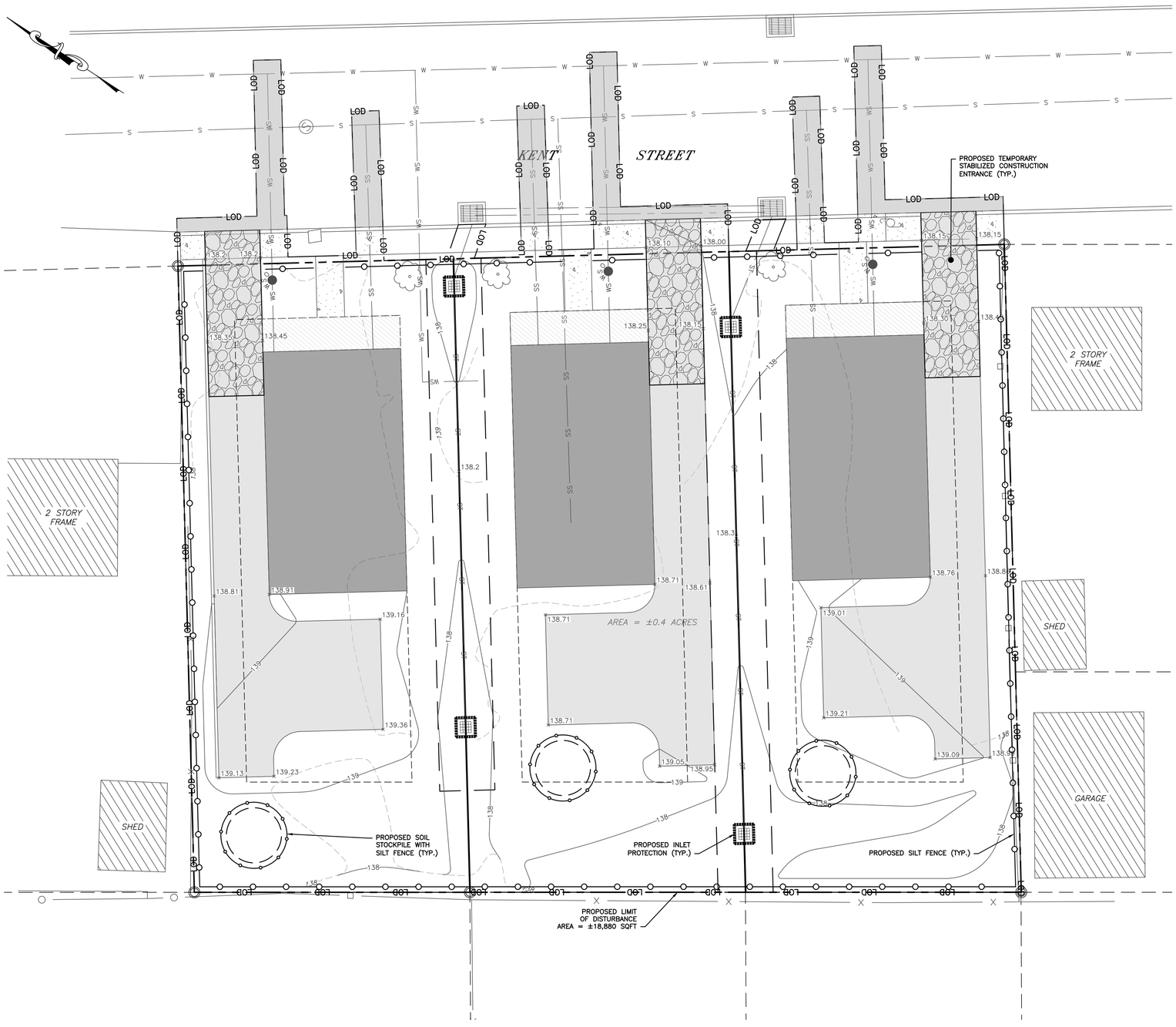
44 KENT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-041931

JOB #:	2022:033
DATE:	12/2/2022
SCALE:	1" = 10'
TITLE:	SP-1
SHEET:	4 OF 7

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- EXISTING CATCH BASIN
- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S PROPOSED SEWER LINE
- SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED YARD DRAIN
- PROPOSED ROOF LEADER
- W PROPOSED WATER LINE
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED SILT FENCE
- LOD PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE



DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

EROSION & SEDIMENT CONTROL PLAN
SCALE: 1" = 10'
GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

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STATE OF NEW YORK DANIEL G. ROSENBERG LICENSED PROFESSIONAL ENGINEER 082716
SEAL

HUDSON LAND DESIGN
HUDSON LAND DESIGN PROFESSIONAL ENGINEERING P.C.
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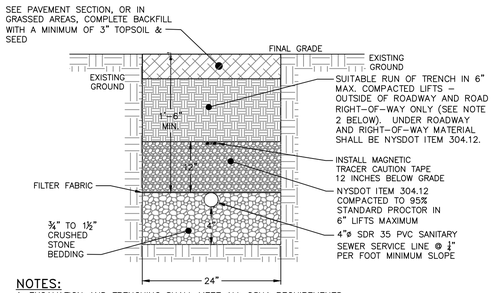
EROSION & SEDIMENT CONTROL PLAN

HARDISTY SUBDIVISION

44 KENT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-041931

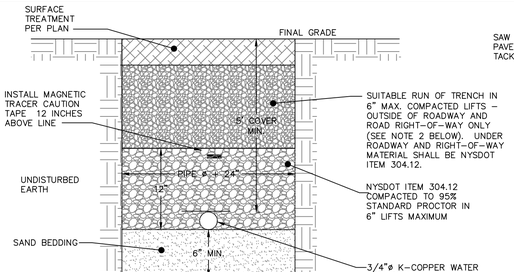
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DATE:	12/2/2022
SCALE:	1" = 10'
TITLE:	ESC-1
SHEET:	5 OF 7

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



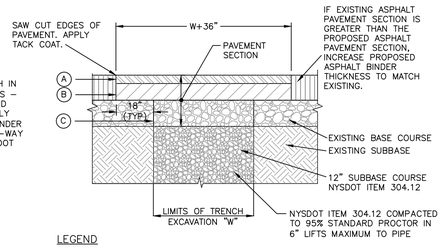
NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.
4. IF WATER SERVICE AND SEWER SERVICE LINE CROSSINGS ARE NEEDED, PROVIDE 18" OF VERTICAL SEPARATION

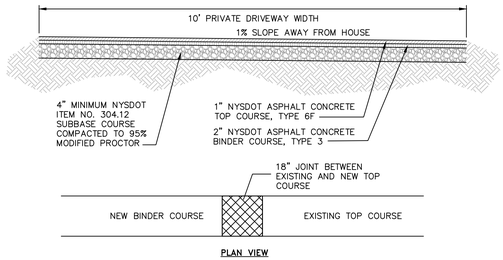
WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



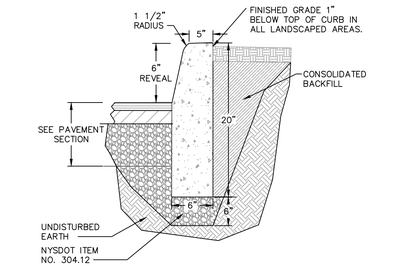
LEGEND
- (A) 1.5" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE F1
- (B) 3.0" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE F9
- (C) 3.0" ASPHALT BASE COURSE– NYSDOT TYPE F9

NOTES:
1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.

PAVEMENT RESTORATION DETAIL
NOT TO SCALE



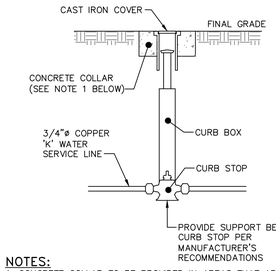
PAVED DRIVEWAY SECTION DETAIL
NOT TO SCALE



ABUTTING GRASS OR LANDSCAPE

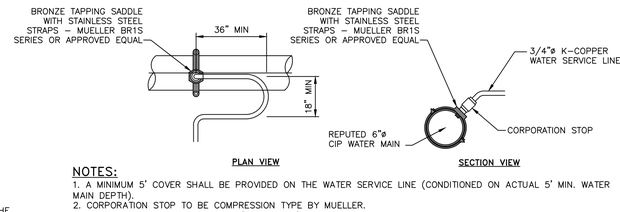
NOTES:
1. CONCRETE CURB SHALL BE 4,000 PSI CAST–IN–PLACE, AND IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 609.
2. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL BE PLACED AT 10 FOOT INTERVALS.
3. FOR MOUNTABLE CURBS ABUTTING SIDEWALK OR OTHER HARDSCAPE, REFER TO "ABUTTING SIDEWALK" DETAIL.
4. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

CAST–IN–PLACE CONCRETE CURB DETAIL
NOT TO SCALE



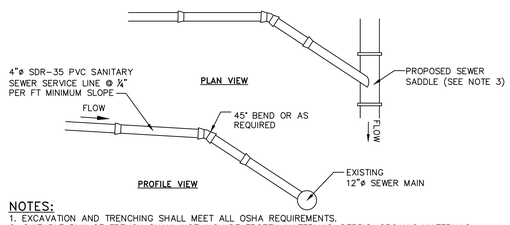
NOTES:
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.
2. CURB STOP TO BE COMPRESSION TYPE BY MUELLER.
3. AREA AROUND CURB BOX TO BE BACKFILLED WITH GRAVELLY MATERIAL.

WATER SHUT–OFF VALVE DETAIL
NOT TO SCALE



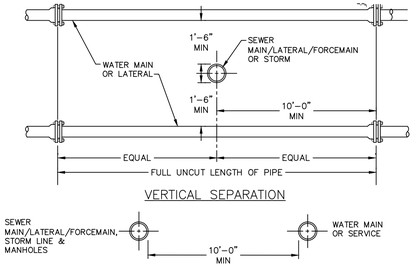
NOTES:
1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL 5' MIN. WATER MAIN DEPTH).
2. CORPORATION STOP TO BE COMPRESSION TYPE BY MUELLER.
3. WATER SERVICE LINE TO HAVE A 'GOOSENECK' NEAR CORPORATION STOP.
4. CORPORATION STOP TO BE INSTALLED IN THE UPPER HALF OF THE WATER MAIN AT AN ANGLE OF APPROXIMATELY 45° FROM HORIZONTAL.
5. THE CONTRACTOR SHALL INSTALL A FULL BODIED STAINLESS STEEL TAPPING SLEEVE AT THE PROPOSED WATER SERVICE LOCATION.

WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



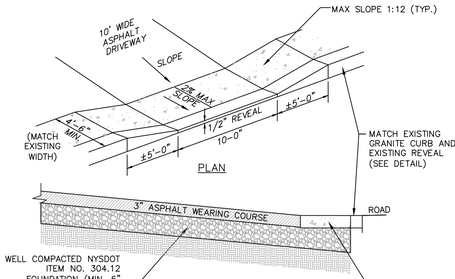
NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. TAPPING SADDLE FOR CONNECTION OF THE PROPOSED SERVICE LINE TO THE EXISTING SEWER MAIN TO BE A 4" PREDCO HUB TAP SADDLE – MODEL #HTS4/E.

SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



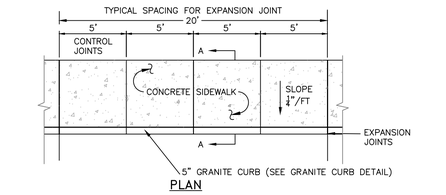
NOTE:
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

WATER LINE SEPARATION DETAIL
NOT TO SCALE

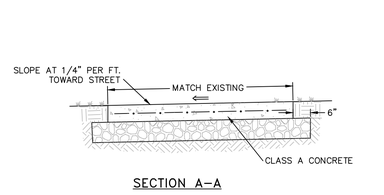


NOTE:
1. RESEED AND STABILIZE GRASS AREAS AFTER ASPHALT AND CONCRETE INSTALLATION.

DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE



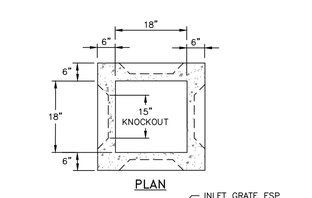
EXPANSION JOINT



CONTROL JOINT

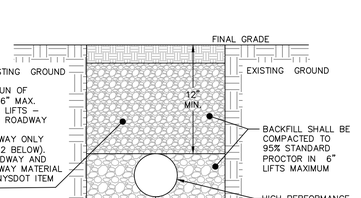
NOTES:
1. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST REVISION.
2. ALL CONCRETE SHALL BE 4,000 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
5. ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
6. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
7. JOINTS SHALL NOT BE SAW CUT.
8. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEBOND" SB–7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
9. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
10. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMATION WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH SECTION 608–SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
12. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE



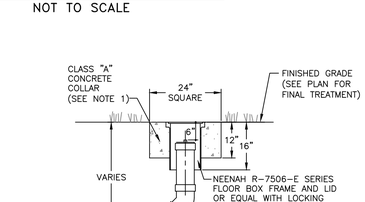
NOTES:
1. YARD INLET BASINS SHALL BE PRE CAST REINFORCED CONCRETE SHALL HAVE A MINIMUM 28–DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND SHALL BE IN CONFORMANCE WITH ASTM 478–68. WALLS AND BASE SHALL BE ONE PIECE CONSTRUCTION. YARD INLET BASIN SHOWN BY EXPANDED SUPPLY PRODUCTS (ESP), 3330 ROUTE 9, COLD SPRING, NY (845) 265–3771.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE BASIN AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATERTIGHT.
4. PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
5. BACKFILL USING SELECT MATERIAL, COMPACTED IN 6" LIFTS.
6. SUMP SHALL BE 12".
7. FRAMES AND GRATES SHALL BE SET IN A FULL BED OF MORTAR.

PRE–CAST CONCRETE YARD INLET DETAIL
NOT TO SCALE



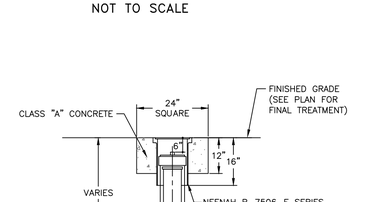
NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

STORM LINE TRENCH DETAIL
NOT TO SCALE



NOTES:
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.

CLEANOUT DETAIL
NOT TO SCALE



BACKWATER VALVE FOR FOOTING DRAIN DETAIL
NOT TO SCALE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

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PROFESSIONAL ENGINEERING P.C.
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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926
F: 845–440–6637

CONSTRUCTION DETAILS

HARDISTY SUBDIVISION

44 KENT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054–21–041931

JOB #:	2022:033
DATE:	12/2/2022
SCALE:	AS SHOWN
TITLE:	CD–1
SHEET:	6 OF 7

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.
2. ALL STORMWATER MANAGEMENT STRUCTURES (E.G. CATCH BASINS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. CATCH BASINS SHALL BE CLEANED WHEN SEDIMENT DEPTH REACHES A MAXIMUM OF ONE-HALF THE AVAILABLE SUMP DEPTH.
3. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
4. ANY PILE OF POTENTIALLY EROSIVE MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.
5. PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THIS PLAN.
6. AREAS UNDERGOING CLEARING OR GRADING AND WHERE WORK IS DELAYED OR COMPLETED AND WILL NOT BE REDISTURBED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE COVER WITHIN 14 DAYS.
7. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY STANDARD METHODS OF LIGHTLY WATERING ALL EXPOSED SOIL AND RAPIDLY STABILIZING THE REGRADED AREAS WITH TOPSOIL, LOAM AND/OR SEEDING.
8. THE CITY ENGINEER AND PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE START OF ANY SITE WORK, AND BY SUCH NOTIFICATION, SHALL BE PROVIDED WITH THE NAME AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR RESPONSIBLE FOR SUCH WORK.
9. THE CITY AND/OR ITS REPRESENTATIVES MAY INSPECT EROSION AND SEDIMENT CONTROL PRACTICES ON THE SITE DURING CONSTRUCTION AND RECOMMEND THAT THE CONTRACTOR INSTALL ADDITIONAL EROSION CONTROL MEASURES IF DEEMED NECESSARY TO PROTECT ANY UNDISTURBED AREAS OF THE SITE. ANY SUCH REQUESTS SHALL BE MADE DIRECTLY TO THE CONTRACTOR AND QUALIFIED PROFESSIONAL AND FOLLOWED UP WITH A WRITTEN NOTIFICATION TO THE DEVELOPER. IN ADDITION, THE PROJECT ENGINEER SHALL BE CONSULTED ON ANY SPECIAL ADDITIONS OR DELETIONS OF EROSION CONTROL MEASURES WARRANTED BY CHANGING FIELD CONDITIONS.
10. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT A DEWATERING PIT IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL TO FILTER WATER FOR PUMPING TO A SUITABLE LOCATION.
11. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

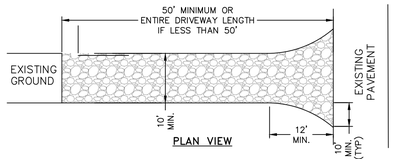
PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE:
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. REGRADE PAD AS NEEDED FOR RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE AS DIRECTED BY PROJECT ENGINEER.

SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

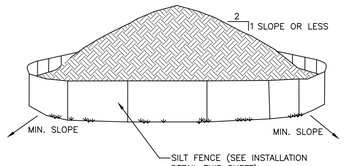
SOIL STOCKPILE:
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCKPILE. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.

DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORKS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.



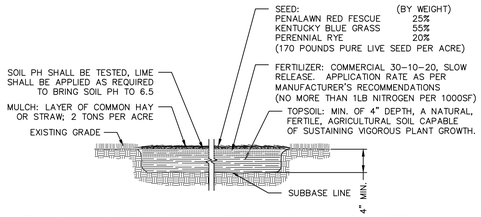
NOTES:
1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS - NOT LESS THAN SIX (6) INCHES.
3. WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
4. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
5. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

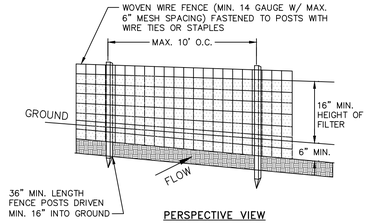


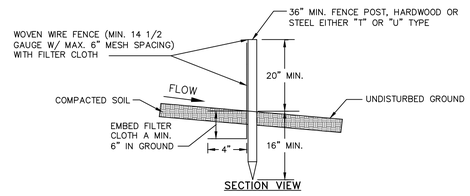
NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE



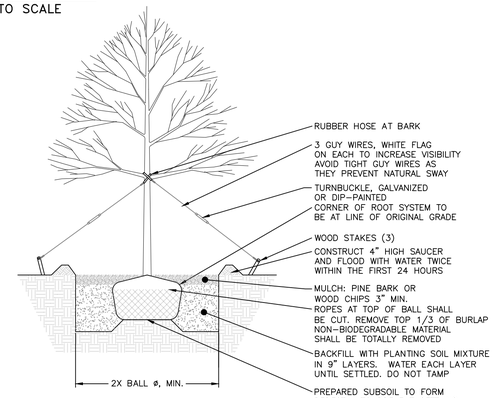
TOPSOIL SEED, FERTILIZER AND MULCH DETAIL
NOT TO SCALE





NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
NOT TO SCALE



NOTES:
1. PROPOSED TREES TO BE RED MAPLE. REFER TO SHEET 2 PLANS FOR LOCATIONS.

TREE PLANTING DETAIL
NOT TO SCALE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____ 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

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F: 845-440-6637

CONSTRUCTION DETAILS

HARDISTY SUBDIVISION

44 KENT STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-041931

JOB #: 2022:033
DATE: 12/2/2022
SCALE: AS SHOWN
TITLE: CD-2
SHEET: 7 OF 7

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

LANC & TULLY
Engineering and Surveying, P.C.

January 5, 2023

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12508

RE: 44 Kent Street
Hardisty Subdivision
City of Beacon
Tax Map No. 6054-21-041931

Dear Mr. Gunn:

My office has received the following in regard to the above application:

- Cover letter dated December 27, 2022 from Hudson Land Design.
- Application for Subdivision Approval
- Copy of the parcel deed dated November 5, 2021.
- Short Environmental Assessment Form dated December 19, 2022.
- Infiltration & Inflow (I&I) report dated December 27, 2022, as prepared by Hudson Land Design.
- October 25, 2022, from Cuddy & Feder, LLP.
- Plan set titled "Hardisty Subdivision", dated December 2, 2022, and consisting of the following plans as prepared by Hudson Land Design:
  - Sheet 1 of 7 titled "Cover Sheet"
  - Sheet 2 of 7 titled "Existing Conditions & Demolition Plan"
  - Sheet 3 of 7 titled "Preliminary Subdivision Plat"
  - Sheet 4 of 7 titled "Subdivision Plan"
  - Sheet 5 of 7 titled "Erosion & Sediment Control Plan"
  - Sheet 6 of 7 titled "Construction Details"
  - Sheet 7 of 7 titled "Construction Details"

The proposed project is located at 44 Kent Street and is in the R1-5 Zone. The project entails the demolition of the existing structures on the parcel and the division of the single 0.39± acre parcel into 3 new single-family residential parcels, with each of the proposed parcels being greater than 5,000 square feet in area. Based upon our review of the above referenced documents and plans, we offer the following comments:

General Comments:

1. The applicant's consultant performed an Infiltration & Inflow (I&I) study of the subject parcel and found that there were no illegal connections to the City's sanitary sewer collection system.

2. Based upon a 1928 plan titled "Plan and Drainage Area of Asylum Brook Storm Sewer", it appears that there is a large diameter storm sewer line that runs through the parcel on the south side of the site. The applicant's consultant should investigate this further, as the catch basins located in Kent Street, and shown on the plans, are incomplete as to relevant information as to pipe sizes, pipe depths, and where pipes are running to and from on the two basins located on the south side of the parcel. The plans shall be updated to reflect this information, as well as where the storm sewer line runs through the parcel. An easement, 20-foot in width minimum, shall be provided over this storm sewer line as it crosses through the parcel, along with notes being added to the plan that no permanent structures or fences may be constructed over this storm sewer line. The location of the storm sewer line may have will have an impact on the layout and configuration of the proposed subdivision.

3. The plans shall be updated to reflect the size and pipe material of the water main within Kent Street. The applicant's consultant should contact the City of Beacon Water Department to obtain this information.

4. Maintenance agreements shall be prepared for the proposed drainage systems to be installed between the lots and provided to the Planning Board

Sheet 2 of 7:

1. Additional notes shall be provided on the plans as to how the existing water service and sanitary sewer service that service the existing dwelling are to be abandoned.

Sheet 3 of 7:

1. Plan shall be updated to reflect the required easement for the existing large diameter storm sewer line running through the parcel.

2. Additional notes shall be added to the plan as to who benefits from each of the proposed utility easements shown on the plan.

3. The utility easement across Lot 3 should be revised based upon how the drainage line runs across the corner of the parcel to the existing storm water structure within Kent Street.

Sheet 4 of 7:

1. The front yard setback should be measured to the covered porch, not the dwelling unit.

2. As there are a number of sections of the existing sidewalk that will be removed and replace for the new utility services and driveway aprons, we would recommend a new monolithic curb and sidewalk be installed along the length of the project.

3. The applicant should consider providing some landscaping along the north boundary of proposed Lot 1 and the southerly boundary of proposed Lot 3 to provide some visual buffering between the proposed project and the existing residences.

4. Although Note No. 10 states that roof leaders will be directed towards storm water systems, the plan shall show where roof leaders will discharge to. From each of the dwellings.

5. The plan shall show where footing drains will drain to.

6. Consideration should be given to re-grading the drive and area behind the proposed residence on Lot 1 so that it drains towards the proposed yard basin, and not towards the adjacent parcel. This should also be considered for Lot 3.

7. The plan shall note the size and material of the proposed water services.

8. Due to the number of trenches to be excavated across Kent Street for utilities, we would recommend that the applicant's consultant contact the Highway Superintendent as to whether additional paving may be required in relationship to what is currently proposed for just trench restorations.

9. The City of Beacon is in the process of upgrading the water meters to an Advanced Metering Infrastructure (AMI) system, which consists of a water meter and an MXU unit (signal sending and receiving unit). As such, the City of Beacon has requested that a note be added to the plan stating "The applicant/applicant's plumber shall acquire water meters and MXU units for the AMI system from the City of Beacon Water Department. The MXU unit shall be installed on the exterior of the building and shall be located 2 to 3 feet above the exterior ground elevation."

Sheet 6 of 7:

1. The plan includes a detail titled "Backwater Valve for Footing Drain". If these are proposed, then their location should be shown on the plans. If these valves are not proposed for the project, then the detail should be removed from the plan.

2. The "Sanitary Sewer Service Line Trench" detail shall be revised to note the use of NYSDOT Item No. 304.12 under the pipe within the road right-of-way.

3. A monolithic curb and sidewalk detail shall be provided on the plan.

This completes our review at this time. Further comments may be forth coming based upon future submissions. **A written response letter addressing each of the above comments should be provided with the next submission.** If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,

LANC & TULLY, P.C.

John Russo, P.E.

Cc: John Clarke, Planner
Jennifer Gray, Esq.
Bruce Flower, Building Inspector

John Clarke Planning and Design jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: January 6, 2023
Re: **44 Kent Street Subdivision**

I have reviewed a December 27, 2022 cover letter from Hudson Land Design, December 24, 2022 Subdivision Application, December 19, 2022 Short EAF Part 1, and a 7-sheet Subdivision Plan set, dated December 2, 2022.

Proposal
The applicant is proposing to demolish an existing two-family house on a 0.398-arcre parcel and subdivide into three lots for the construction of three new houses. The parcel is in the R1-5 zoning district.

Comments and Recommendations

1. For Sheet 1, it would be helpful to include a map or aerial photo, showing the context location of buildings on adjacent lots.

2. There are three existing trees over 6 inches in diameter on the parcel that do not appear to conflict with the proposed new houses or driveways and could be saved.

3. The applicant and Board should consider additional tree plantings beyond the three small dogwoods proposed along the sidewalk frontage.

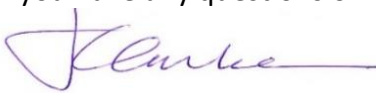
4. On Sheet 4, the Schedule of Regulations table has an incorrect side yard distance for Lot 1 and should include maximum building coverages, now 40% in the R1-5 district.

5. For Sheet 4, the sidewalks should continue across the driveways.

6. The rear parking areas are not deep enough to allow a standard car to back up and turn around.

7. The tree planting note on Sheet 7 refers to a different species and sheet number.

If you have any questions or need additional information, please feel free to contact me.



John Clarke, Beacon Planning Consultant

c: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
Arthur R. Tully, P.E., City Engineer
John Russo, P.E., City Engineer
Daniel G. Koehler, P.E., Project Engineer

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 3
21 South Putt Corners Road, New Paltz, NY 12561-1620
P: (845) 256-3054 | F: (845) 255-4659
www.dec.ny.gov

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

December 15, 2022

VIA EMAIL

City of Beacon Planning Board
John Gunn
Chairperson
cityofbeacon@beaconny.gov

Re: 397 FISHKILL AVE SITE PLAN
City of Beacon, Dutchess County
DEC ID: 3-1302-00075/00001
SEQR Lead Agency Response

Dear City of Beacon Planning Board,

The Department of Environmental Conservation (DEC or Department) received your State Environmental Quality Review Act (SEQR) Lead Agency Coordination on November 22nd, 2022. The proposal involves the merging of three lots, and the construction of a new mixed-use building comprised of 12 apartments and 3,500 square feet of commercial space, along with associated site improvements. The project site is located on 397 Fishkill Ave, 393 Fishkill Ave, and 7 Conklin St in Beacon. The Department has no objection to the City of Beacon Planning Board serving as lead agency for this project. Based on our review of the submitted materials, including the EAF, we offer the following comments:

PROTECTION OF WATERS STREAM DISTURBANCE

There are no waterbodies that appear on our regulatory maps at the location you identified. Therefore, if there is a stream or pond outlet present at the site with year-round flow, it assumes the classification of the watercourse into which it feeds, and a Protection of Waters permit may or may not be required to disturb its bed or banks. If there is a stream or pond outlet present at the site that runs intermittently (seasonally), it is not protected, and a Protection of Waters permit would not be required to disturb its bed or banks.

If a permit is not required, please note, however, you are still responsible for ensuring that work shall not pollute any stream or waterbody. Care shall be taken to stabilize any disturbed areas promptly after construction, and all necessary precautions shall be taken to prevent contamination of the stream or waterbody by silt, sediment, fuels, solvents, lubricants, or any other pollutant associated with the project.

FRESHWATER WETLANDS

Your project/site is not within a New York State-protected Freshwater Wetland. However, please contact your town officials and the United States Army Corps of Engineers in New York City, telephone (917) 790-8411, for any permitting they might require.

WATER QUALITY CERTIFICATION

If the US Army Corps of Engineers requires a permit pursuant to Section 404 of the Clean Water Act for the discharge to fill in Waters of the U.S., then a Section 401 Water Quality Certification (WQC) will be required. Issuance of these certifications is delegated in New York State to DEC. If the project qualifies for a Nationwide Permit, it may be eligible for coverage under a DEC Blanket WQC. Coverage under a Blanket requires compliance with all conditions for the corresponding Nationwide Permit. For more information and to view the DEC Blanket WQCs, please visit https://www.dec.ny.gov/permits/6546.html. A determination on Corps jurisdiction and Nationwide Permit eligibility is likely necessary for a DEC jurisdictional determination.

STATE-LISTED SPECIES

DEC has reviewed the State's Natural Heritage records. We have determined that the site is located within or near record(s) of the following state-listed species:

Name	Status
Indiana Bat (*Myotis sodalis*)	Endangered

A permit is required for the incidental taking of any species listed as "endangered" or "threatened", which can include removal of habitat. Tree removal associated with this project should occur within the appropriate time of the year work window, October 1 through March 31, to avoid direct impacts to individuals and the need for an Article 11 take permit. If tree clearing cannot be completed within the acceptable time of year restriction, further review will be required.

The absence of data does not necessarily mean that other rare or state-listed species, natural communities or significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) STORMWATER

If the overall project will disturb over one acre of land, the project sponsor must obtain coverage under the current SPDES General Permit for Stormwater Discharge from Construction Activity (GP-0-20-001), and a Stormwater Pollution Prevention Plan (SWPPP) must be developed which conforms to requirements of the General Permit. Authorization for coverage under this SPDES General Permit is not granted until the Department issues all other necessary DEC permits.

As the site is within a Municipal Separate Storm Sewer System (MS4) community, the SWPPP must be reviewed and accepted by the municipality, and the MS4 Acceptance

Form submitted with the SWPPP and the application for coverage, in accordance with the application instructions.

LOCAL WATERFRONT REVITALIZATION PLAN

The project site is located within the City of Beacon Local Waterfront Revitalization Plan (LWRP) area. The municipality will determine if further coordination is required.

CULTURAL RESOURCES

We have reviewed the statewide inventory of archaeological resources maintained by the New York State Museum and the New York State Office of Parks, Recreation, and Historic Preservation. These records indicate that the project is located within an area considered to be sensitive with regard to archaeological resources.

For more information, please visit the New York State Office of Historic Preservation website at http://www.nysparks.com/shpo/.

OTHER

Other permits from this Department or other agencies may be required for projects conducted on this property now or in the future. Also, regulations applicable to the location subject to this determination occasionally are revised and you should, therefore, verify the need for permits if your project is delayed or postponed. This determination regarding the need for permits will remain effective for a maximum of one year unless you are otherwise notified. More information about DEC permits may be found at our website, www.dec.ny.gov, under “Regulatory” then “Permits and Licenses.” Application forms may be downloaded at http://www.dec.ny.gov/permits/6081.html.

Please feel free to contact this office if you have questions regarding the above information. Thank you.

Sincerely,

Glennys A. Romero Medina

Digitally signed by Glennys A. Romero Medina
Date: 2022.12.15 12:40:57 -05'00'

Glennys Romero Medina
Division of Environmental Permits
Region 3, Telephone No. (845)256-2250
Glennys.RomeroMedina@dec.ny.gov

Enclosure: Indiana Bat Project Review Fact Sheet

ecc: 397 Fishkill Avenue LLC, Applicant